ISSN: 0090-1423

National Library of Medicine

CUMULATED INDEX MEDICUS

VOLUME 30, 1989

SUBJECT INDEX Sp-Z

U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES
Public Health Service
National Institutes of Health

NATIONAL LIBRARY OF MEDICINE
8600 Rockville Pike
Bethesda, Maryland 20894

NIH Publication No. 90-259

National Library of Medicine Cataloging in Publication

ZW
1
I384

Cumulated Index medicus. -- Vol. 1 (Jan.-Dec.1960)-
.-- Chicago : American Medical Association ;
Washington, D.C. : Supt. of Docs., U.S. G.P.O.
[distributor], 1961-
v.
Vols. for 1965- issued by the National Library of Medicine.
Continues: Quarterly cumulative Index medicus.
Annual cumulation of the monthly issues of Index medicus.
Vols. for 1971-1978 issued as DHEW publication ; no. (NIH) 72-259, etc.; for 1979- as NIH publication ; no. 80-259, etc.
Issues for 1967- include Bibliography of medical reviews.
ISSN 0090-1423 = Cumulated Index medicus.

1. Bibliography of Medicine 2. Medicine - indexes I. American Medical Association. II. National Library of Medicine (U.S.). III. Bibliography of medical reviews IV. Index medicus V. Series: DHEW publication ; no. (NIH) 72-259, etc. VI. Series: NIH publication ; no. 80-259, etc.

© *All or portions of this publication are protected against copying or other reproduction outside of the United States in accordance with the provisions of Article II of the Universal Copyright Convention.*



This book is printed on acid-free paper for permanence.

Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through September 30, 1990

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

CUMULATED INDEX MEDICUS

CONTENTS

Book 1

Preface v
Index Medicus Citation Format vii
Introduction
Materials Indexed viii
The Indexing Operation viii
Subject Heading Changes ix
Arrangement ix
Subject Section ix
Author Section x
Bibliography of Medical Reviews xi
Access to Articles Cited xi
Interlibrary Loan Policy xii
Other Resources xiv
Regional Medical Libraries xiv
Foreign MEDLARS/MEDLINE Centers xv

MEDICAL SUBJECT HEADINGS (Contents) I-3

JOURNALS INDEXED Abbreviation Listing 1019
Full Title Listing 1097

Book 2 Subject Index A 1165

Book 3 Subject Index B-Ch 2485

Book 4 Subject Index Ci-Ep 3882

Book 5 Subject Index Eq-He 5284

Book 6 Subject Index Hi-Lh 6726

Book 7 Subject Index Li-Na 7976

Book 8 Subject Index Ne-Po 9289

Book 9 Subject Index Pr-So 10686

Book 10 Subject Index Sp-Z 12093

Book 11 Author Index A-D 13463

Book 12 Author Index E-J 14900

Book 13 Author Index K-M 16186

Book 14 Author Index N-Sh 17515

Book 15 Author Index Si-Z 18817

Book 16 Bibliography of Medical Reviews 20067

clarification of the origin of cultured soy at the molecular level] Zakharova ES, et al. **Dokl Akad Nauk SSSR** 1989 May-Jun;306(1):210-4 **(Rus)**

IMMUNOLOGY

Asthma epidemics and soybean in Cartagena (Spain) [letter] Hernando L, et al. **Lancet** 1989 Mar 4;1(8636):502

Case-control study of serum immunoglobulin-E antibodies reactive with soybean in epidemic asthma. Sunyer J, et al. **Lancet** 1989 Jan 28;1(8631):179-82

METABOLISM

Phytoalexin synthesis in soybean: purification and reconstitution of cytochrome P450 3,9-dihydroxypterocarpan 6a-hydroxylase and separation from cytochrome P450 cinnamate 4-hydroxylase. Kochs G, et al. **Arch Biochem Biophys** 1989 Sep;273(2):543-53

Effects of cholesterol-free, semipurified diets containing different levels of casein or soy protein on distribution of cholesterol and protein among serum lipoproteins of rabbits. Hrabek-Smith JM, et al. **Atherosclerosis** 1989 Apr; 76(2-3):125-30

Accumulation of polychlorobiphenyl congeners and p,p'-DDE at environmental concentrations by corn and beans. Shane LA, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):38-46

Comparative metabolic behavior and interrelationships of Tc and S in soybean plants. Cataldo DA, et al. **Health Phys** 1989 Aug;57(2):281-7

Soy-based infant milk formulas and passive intestinal permeability [letter] Weaver LT. **Lancet** 1989 May 6; 1(8645):1023-4

[Experimental 3-month study of safety of textured soybeans Becsei] Tóth K, et al. **Vopr Pitan** 1988 May-Jun;(3):38-41 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Identification of Bradyrhizobium nod genes involved in host-specific nodulation. Deshmane N, et al. **J Bacteriol** 1989 Jun;171(6):3324-30

The nucleotide sequence of a soybean mosaic virus coat protein-coding region and its expression in Escherichia coli, Agrobacterium tumefaciens and tobacco callus. Eggenberger AL, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1853-60

Defense strategies of soybean against the fungus Phytophthora megasperma f.sp. glycinea: a molecular analysis. Ebel J, et al. **Trends Biochem Sci** 1988 Jan; 13(1):23-7 (27 ref.)

PHYSIOLOGY

Bacterium release into host cells of nitrogen-fixing soybean nodules: the symbiosome membrane comes from three sources. Roth LE, et al. **Eur J Cell Biol** 1989 Jun; 49(1):13-23

Cytoplasmic membrane systems involved in bacterium release into soybean nodule cells as studied with two Bradyrhizobium japonicum mutant strains. Roth LE, et al. **Eur J Cell Biol** 1989 Jun;49(1):24-32

RADIATION EFFECTS

Cytological effects of Tc on young soybean plants. Neel JW, et al. **Health Phys** 1989 Aug;57(2):289-98

TOXICITY

Pancreatic growth after partial resection of normal and enlarged pancreas in rats fed soya flour. Oates PS, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G670-5

Mutagenic and anti-mutagenic properties of meju and other Korean food products from fermented soybeans. Rapp NS, et al. **Yonsei Med J** 1988;29(2):117-23

UTILIZATION

Soybean utilization in Africa: making a place for a new food. Weingartner KE, et al. **Food Nutr (Roma)** 1987;13(2):21-8

SPACE FLIGHT

see related
EXTRATERRESTRIAL ENVIRONMENT
SEALED CABIN ECOLOGY
WEIGHTLESSNESS

Inhibited interferon production after space flight. Sonnenfeld G, et al. **Acta Microbiol Hung** 1988;35(4):411-6

New facets of space medicine. Igarashi M. **Acta Otolaryngol Suppl (Stockh)** 1988;458:103-7

Ground-based training for the stimulus rearrangement encountered during spaceflight. Reschke MF, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;460:87-93

Pre- and postflight (D-1) postural control in tilting environments. Bles W, et al. **Adv Otorhinolaryngol** 1988; 42:13-7

Caloric testing of the vestibular function during orbital flight. Clarke AH, et al. **Adv Otorhinolaryngol** 1988;42:31-5

Vestibulo-ocular reflex and optokinetic nystagmus in microgravity. Clément G, et al. **Adv Otorhinolaryngol** 1988; 42:1-4

Determinants of space perception in space flight. Mittelstaedt H. **Adv Otorhinolaryngol** 1988;42:18-23

Spaceflight affects the 1-g postrotatory vestibulo-ocular reflex. Oman CM, et al. **Adv Otorhinolaryngol** 1988;42:5-8

Studies of the horizontal vestibulo-ocular reflex in spaceflight. Thornton WE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):943-9 (46 ref.)

Deploying and testing an expandable surgical chamber in microgravity [letter] **Aviat Space Environ Med** 1989 Jul; 60(7):715

1989 abstracts, scientific papers and posters. Annual scientific meeting, Aerospace Medical Association. May 7-11, 1989, Washington, DC. **Aviat Space Environ Med** 1989 May; 60(5):477-519

Thermal comparison of aircrew clothing aboard OV-10 aircraft. Constable R, et al. **Aviat Space Environ Med** 1988 Dec;59(12):1190-2

Space motion sickness during 24 flights of the space shuttle. Davis JR, et al. **Aviat Space Environ Med** 1988 Dec; 59(12):1185-9

Ocular torsion in upright and tilted positions during hypo- and hypergravity of parabolic flight. Diamond SG, et al. **Aviat Space Environ Med** 1988 Dec;59(12):1158-62

Decompression sickness and bubble formation in females exposed to a simulated 7.8 psia suit environment. Dixon GA, et al. **Aviat Space Environ Med** 1988 Dec; 59(12):1146-9

Programmed environment management of confined microsocieties. Emurian HH. **Aviat Space Environ Med** 1988 Oct;59(10):976-80

Becoming a flight surgeon. Gallé-Tessonneau JR. **Aviat Space Environ Med** 1988 Dec;59(12):1198-202

Soviet space flight: the human element. Garshnek V. **Aviat Space Environ Med** 1989 Jul;60(7):695-705

Prediction of physical workload in reduced gravity. Goldberg JH, et al. **Aviat Space Environ Med** 1988 Dec; 59(12):1150-7

Central serous chorioretinopathy in U.S. Air Force aviators: a review. Green RP Jr, et al. **Aviat Space Environ Med** 1988 Dec;59(12):1170-5

The 1988 Louis H. Bauer lecture: the civil space program: theme and variations. Grey J. **Aviat Space Environ Med** 1989 Feb;60(2):176-9

Space vehicle approach velocity judgments under simulated visual space conditions. Haines RF. **Aviat Space Environ Med** 1989 Feb;60(2):145-51

Cases from the aerospace medicine residents' teaching file. Case #28. An aviator with exertional migraines [clinical conference] Katchen MS. **Aviat Space Environ Med** 1988 Dec;59(12):1203-4

Cholesterol in serum lipoprotein fractions after spaceflight. Leach CS, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1034-7

Deploying and testing an expandable surgical chamber in microgravity [published erratum appears in Aviat Space Environ Med 1989 Jul;60(7):715] Markham SM, et al. **Aviat Space Environ Med** 1989 Jan;60(1):76-9

Human mononuclear cell function after 4 degrees C storage during 1-G and microgravity conditions of spaceflight. Meehan R, et al. **Aviat Space Environ Med** 1989 Jul; 60(7):644-8

Erythrocyte agglutination in microgravity. Morehead RT, et al. **Aviat Space Environ Med** 1989 Mar;60(3):235-40

Vitamin D metabolites and bioactive parathyroid hormone levels during Spacelab 2. Morey-Holton ER, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1038-41

Fatal pulmonary decompression sickness: a case report. Neubauer JC, et al. **Aviat Space Environ Med** 1988 Dec; 59(12):1181-4

Interpersonal and group-behavior skills training for crews on space station. Nicholas JM. **Aviat Space Environ Med** 1989 Jun;60(6):603-8

Assessing applicants to the NASA flight program for their renal stone-forming potential. Pak CY, et al. **Aviat Space Environ Med** 1989 Feb;60(2):157-61

An assessment on the choice of a physician for the proposed United States manned space station, Freedom (2) [letter] Raford P. **Aviat Space Environ Med** 1989 May;60(5):473

Analysis of sleep on Shuttle missions. Santy PA, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1094-7

Behavioural science and outer space research. Taylor AJ. **Aviat Space Environ Med** 1989 Aug;60(8):815-6

Period prevalence of acute neck injury in U.S. Air Force pilots exposed to high G forces. Vanderbeek RD. **Aviat Space Environ Med** 1988 Dec;59(12):1176-80

Human tolerance to 100% oxygen at 9.5 psia during five daily simulated 8-hour EVA exposures. Webb JT, et al. **Aviat Space Environ Med** 1989 May;60(5):415-21

Locomotor problems of supersonic aviation and astronautics. Remes P. **Baillieres Clin Rheumatol** 1989 Apr;3(1):111-9 (40 ref.)

Behavioral science space contributions. Harris PR. **Behav Sci** 1989 Jul;34(3):207-27 (70 ref.)

Aggregation of red cells in disease: some deductions and speculations based on results of "ARC" experiment on the space shuttle "Discovery" STS 51-C. Dintenfass L. **Biorheology** 1988;25(1-2):65-76

Bone maturation and quality of bone material in rats flown on the space shuttle Spacelab-3 Mission'. Simmons DJ, et al. **Bone Miner** 1986 Dec;1(6):485-93

Protein and collagen content of rat skeletal muscle following space flight. Martin TP. **Cell Tissue Res** 1988 Oct; 254(1):251-3

Environmental stressors during space flight: potential effects on body temperature. Jauchem JR. **Comp Biochem Physiol [A]** 1988;91(3):425-9 (86 ref.)

Manifesto of space medicine: the next dermatologic frontier. Toback AC, et al. **J Am Acad Dermatol** 1989 Mar; 20(3):489-95

Influence of spaceflight on rat skeletal muscle. Martin TP, et al. **J Appl Physiol** 1988 Nov;65(5):2318-25

A prototype gas exchange monitor for exercise stress testing aboard NASA Space Station. Orr JA, et al. **J Appl Physiol** 1989 Jan;66(1):492-7

Diagnostic and treatment support for the NASA space program astronauts. Grams RR, et al. **J Med Syst** 1989 Apr;13(2):89-93

Aerospace nursing: the new frontier. Polk-Walker GC. **J Prof Nurs** 1989 Jul-Aug;5(4):224-30

Pharmaceutical production in space? The case of the USA. Goodrich JN, et al. **Med Sci Law** 1989 Jul;29(3):233-41

Space sickness on earth [letter] Ockels WJ, et al. **Nature** 1989 Aug 31;340(6236):681-2

Effect of weightlessness on some indices of brain development (results of residence of pregnant rats aboard the Cosmos-1514 biosatellite and investigation of subsequent development of their offspring on earth). Olenev SN, et al. **Neurosci Behav Physiol** 1989 May-Jun; 19(3):191-5

Effects of space travel on reproduction. Warren MP. **Obstet Gynecol Surv** 1989 Feb;44(2):85-8 (30 ref.)

Altered sensory-motor control of the head as an etiological factor in space-motion sickness. Lackner JR, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):784-6

Digestive reactions to simulated and real space flight. Groza P. **Physiologie** 1988 Oct-Dec;25(4):207-31

Histochemical alterations in the digestive tract of rats after 13 days of flight in the "Cosmos 1887" biosatellite. Groza P, et al. **Physiologie** 1989 Jan-Mar;26(1):3-6

Continuing studies of "cells" flight hardware. Duke J, et al. **Physiologist** 1989 Feb;32(1 Suppl):S57-8

Responses to changed perfusion pressure in working muscles--factors to be considered in exercise testing in space flights? Eiken O. **Physiologist** 1989 Feb;32(1 Suppl):S12-5

Changes in kidney response to ADH under hypogravity: rat models and possible mechanisms. Ivanova LN, et al. **Physiologist** 1989 Feb;32(1 Suppl):S16-8

Studies of space adaptation syndrome in experiments on primates performed on board of soviet biosatellite "Cosmos-1887". Kozlovskaya IB, et al. **Physiologist** 1989 Feb;32(1 Suppl):S45-8

Immunocompetent cells producing humoral mediators of bone tissue mineral metabolism during space flight simulation. Lesniak AT, et al. **Physiologist** 1989 Feb;32(1 Suppl):S53-6

Biochemical and histochemical observations of vastus medialis from rats flown in Cosmos 1887 (experiment K608). Musacchia XJ, et al. **Physiologist** 1989 Feb;32(1 Suppl):S21-2

The effect of microgravity on the reproductive function of male-rats. Serova LV, et al. **Physiologist** 1989 Feb;32(1 Suppl):S29-30

The life sciences program at the NASA Ames Research Center: an overview. Vernikos-Danellis J, et al. **Physiologist** 1989 Feb;32(1 Suppl):S1-4

Otolith-spinal reflex testing on Spacelab-1 and D-1. Watt DG, et al. **Physiologist** 1989 Feb;32(1 Suppl):S49-52

Significance of light and social cues in the maintenance of temporal organization in man. Winget CM, et al. **Physiologist** 1989 Feb;32(1 Suppl):S94-5

The health maintenance facility for space station. Pool SL. **Rinsho Byori** 1988 May;36(5):592-7

Space coloristics. Vasyutin VV, et al. **Sci Am** 1989 Jul; 261(1):84-90

Pharmacology in space. Part 1. Influence of adaptive changes on pharmacokinetics. Lathers CM, et al. **Trends Pharmacol Sci** 1989 May;10(5):193-200 (21 ref.)

Pharmacology in space. Part 2. Controlling motion sickness. Lathers CM, et al. **Trends Pharmacol Sci** 1989 Jun; 10(6):243-50 (29 ref.)

Storage of platelets in earth orbit. Effect of gravity and the formulation of plastic storage containers on platelet IgG and C3. Szymanski IO, et al. **Vox Sang** 1989;57(2):116-9

[Medical aspects of space flight] Dambrink JH, et al. **Ned Tijdschr Geneeskd** 1989 Feb 25;133(8):395-400 (42 ref.) **(Dut)**

[Injuries caused by parasailing] Geyer M, et al. **Unfallchirurg** 1989 Jul;92(7):346-51 (Eng. Abstr.) **(Ger)**

[Assessment of fitness for airplane and ship travel] Wirth J, et al. **Z Arztl Fortbild (Jena)** 1988;82(13):631-4 **(Ger)**

[Morphometry of giant multipolar neurons of the brain stem reticular formation in rats on board the Kosmos-1667 biosatellite] Belichenko PV, et al. **Biull Eksp Biol Med** 1989 May;107(5):618-20 (Eng. Abstr.) **(Rus)**

[Ultrastructural changes in transverse striated muscles under the influence of space flight factors] Pozdniakov OM, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):746-9 (Eng. Abstr.) **(Rus)**

[Effect of space flight autiorthostatic hypokinesia of various durations on blood insulin level] Afonin BV. **Kosm Biol Aviakosm Med** 1989 May-Jun;23(3):77-9 **(Rus)**

[Status of the synapses of the end brain of rats exposed to the factors of space flight] Antipov VV, et al.

Kosm Biol Aviakosm Med 1988 Jul-Aug;22(4):54-61 (Eng. Abstr.) (Rus)
[Effect of actoprotectors on the work capacity of operators during modeling of various factors of space flight] Bobkov IuG, et al. Kosm Biol Aviakosm Med 1988 Sep-Oct; 22(5):20-3 (Eng. Abstr.) (Rus)
[The reproductive function of male rats following space flight on the Cosmos-1667 biosatellite] Denisova LA, et al. Kosm Biol Aviakosm Med 1988 Nov-Dec;22(6):58-63 (Eng. Abstr.) (Rus)
[Preliminary results of studies of the cardiovascular system in members of the 2d expedition in the Mir orbital station] Egorov AD, et al. Kosm Biol Aviakosm Med 1988 Nov-Dec;22(6):51-8 (Eng. Abstr.) (Rus)
[Status of cardiodynamics in long-term weightlessness] Egorov AD, et al. Kosm Biol Aviakosm Med 1988 Jul-Aug; 22(4):19-26 (Eng. Abstr.) (Rus)
[Space motion sickness] Gorgiladze GI, et al. Kosm Biol Aviakosm Med 1989 May-Jun;23(3):4-14 (82 ref.) (Eng. Abstr.) (Rus)
[Phenomenology and mechanisms of changes in the basic functions of the human body in weightlessness] Grigor'ev AI, et al. Kosm Biol Aviakosm Med 1988 Nov-Dec; 22(6):4-17 (0 ref.) (Eng. Abstr.) (Rus)
[The Cosmos biosatellite: achievements and research outlook] Il'in EA. Kosm Biol Aviakosm Med 1988 Nov-Dec; 22(6):41-51 (25 ref.) (Eng. Abstr.) (Rus)
[Radiation safety in space flights in the Intercosmos program] Kovalev EE, et al. Kosm Biol Aviakosm Med 1988 Nov-Dec;22(6):36-41 (19 ref.) (Eng. Abstr.) (Rus)
[Hemodynamics in monkeys in the initial period of adaptation to weightlessness] Krotov VP, et al. Kosm Biol Aviakosm Med 1988 Sep-Oct;22(5):33-9 (Eng. Abstr.) (Rus)
[Effectiveness of urine-preserving agents used in water reclamation systems] Lebedeva TE, et al. Kosm Biol Aviakosm Med 1989 Jan-Feb;23(1):70-4 (Eng. Abstr.) (Rus)
[Structural resistance of receptor organs of the vestibular apparatus to the factors of space flight] Lychakov DV. Kosm Biol Aviakosm Med 1988 Jul-Aug;22(4):13-9 (40 ref.) (Eng. Abstr.) (Rus)
[Biological life support systems for man] Meleshko GI, et al. Kosm Biol Aviakosm Med 1988 Nov-Dec;22(6):30-6 (Eng. Abstr.) (Rus)
[From Vostok to Mir: psychological aspects] Miasnikov VI. Kosm Biol Aviakosm Med 1988 Nov-Dec;22(6):17-23 (0 ref.) (Eng. Abstr.) (Rus)
[Habitability and life support systems] Nefedov IuG, et al. Kosm Biol Aviakosm Med 1988 Nov-Dec;22(6):23-9 (0 ref.) (Eng. Abstr.) (Rus)
[Effect of short-term space flights on physiological properties and composition of myofibrillar proteins of the skeletal muscles of rats] Oganov VS, et al. Kosm Biol Aviakosm Med 1988 Jul-Aug;22(4):50-4 (Eng. Abstr.) (Rus)
[Hygienic aspects of wash water reclamation systems] Pak ZP, et al. Kosm Biol Aviakosm Med 1989 Jan-Feb; 23(1):67-70 (Eng. Abstr.) (Rus)
[The first experience using soft contact lenses during long-term space flights] Pliasova-Bakulina IA, et al. Kosm Biol Aviakosm Med 1989 May-Jun;23(3):32-4 (Eng. Abstr.) (Rus)
[Homeostatic reactions of the blood of experimental rats after "Kosmos-1667" flight] Popova IA, et al. Kosm Biol Aviakosm Med 1988 Sep-Oct;22(5):39-42 (Eng. Abstr.) (Rus)
[Collagen metabolism in the skin and bone tissue of rats after a 7-day space flight] Pospishilova I, et al. Kosm Biol Aviakosm Med 1989 Mar-Apr;23(2):44-8 (Eng. Abstr.) (Rus)
[Effect of space flight on the levels of volatile metabolites in the exhaled air of astronauts] Savina VP, et al. Kosm Biol Aviakosm Med 1988 Jul-Aug;22(4):47-50 (Eng. Abstr.) (Rus)
[Effect of weightlessness on the reproductive system of mammals] Serova LV. Kosm Biol Aviakosm Med 1989 Mar-Apr;23(2):11-6 (62 ref.) (Eng. Abstr.) (Rus)
[Changes in the jaws of rats after a 7-day flight on "Kosmos-1667"] Volozhin AI, et al. Kosm Biol Aviakosm Med 1989 Jan-Feb;23(1):83-6 (Rus)
[The functional status of the human operator. Assessment and prognosis] Kogan AB, et al. Probl Kosm Biol 1988; 58:1-212 (Rus)
[The immune system under extreme conditions. Space immunology] Konstantinova IV. Probl Kosm Biol 1988; 59:1-288 (Rus)
[Characteristics of the adaptive restructurings of the digestive system during exposure to the factors of space flight] Smirnov KV. Vestn Akad Med Nauk SSSR 1989;(1):85-9 (Eng. Abstr.) (Rus)
[Results of biomedical studies from space flights] Debijadi R. Vojnosanit Pregl 1989 Jan-Feb;46(1):38-46 (Scr)

ECONOMICS

Human space flight [letter] Robertson DF. Nature 1989 Mar 2;338(6210):10

HISTORY

Biomedical engineering in the early U.S. aerospace program. Greatbatch W. Aviat Space Environ Med 1989 Aug; 60(8):811-4
Observations on the physical effects of flying. 1917 [classical article] Schurmeier HL. Aviat Space Environ Med 1989 Feb;60(2):180-2

INSTRUMENTATION

The effects of window shape and reticle presence on performance in a vertical alignment task. Rosenberg EL, et al. Aviat Space Environ Med 1989 Jun;60(6):543-9
Prototype ventilator and alarm algorithm for the NASA space station. Brunner JX, et al. J Clin Monit 1989 Apr; 5(2):90-9
[Accidents with the "paraglider"] Lang TH, et al. Sportverletz Sportschaden 1988 Sep;2(3):115-9 (Eng. Abstr.) (Ger)
[Results of the measurement of changes in the force of galactic cosmic radiation dose during the 21st solar activity cycle on the "Prognoz" space probe] Andropov EA, et al. Kosm Biol Aviakosm Med 1988 Sep-Oct;22(5):92-3 (Rus)
[Effectiveness of oxygen equipment as a means of the life support system during space flights] Cherniakov IN. Kosm Biol Aviakosm Med 1989 Jan-Feb;23(1):11-6 (52 ref.) (Eng. Abstr.) (Rus)

SPACE MEDICINE see AEROSPACE MEDICINE

SPACE PERCEPTION

Gender differences in patterns of spatial ability, environmental cognition, and math and English achievement in late adolescence. Pearson JL, et al. Adolescence 1989 Summer;24(94):421-31
Memory for spatial location in children, adults, and mentally retarded persons. Ellis NR, et al. Am J Ment Retard 1989 Mar;93(5):521-6
Temporal and spatial constructs in projective processes. Crisp P. Am J Psychoanal 1989 Jun;49(2):159-68
Left hemisphere superiority for visuospatial functions in left-handers. Marzi CA, et al. Behav Brain Res 1988 Sep 15;30(2):183-92
Development of visual and tactile rod orientation in children. Meerwaldt JD, et al. Behav Brain Res 1988 Sep 15; 30(2):145-9
Genetic influences on spatial ability: transmission in an extended kindred. Smalley SL, et al. Behav Genet 1989 Mar;19(2):229-40
Perceptual spatial frequency--orientation surface: psychophysics and line element theory. Treutwein B, et al. Biol Cybern 1989;60(4):285-95
Impossible objects and the things we do first in vision. Cowie RI. Br J Psychol 1988 Aug;79 (Pt 3):321-38
Sex differences in the lateralization of spatial abilities: a spatial component analysis of extreme group scores. Bowers CA, et al. Brain Cogn 1988 Oct;8(2):165-77
Pure agraphia and Gerstmann's syndrome as a visuospatial-language dissociation: an experimental case study. Levine DN, et al. Brain Lang 1988 Sep;35(1):172-96
Location errors in tachistoscopic recognition: guesses, probe errors, or spatial confusions? Butler BE, et al. Can J Psychol 1987 Sep;41(3):339-50
Spatial constraints on the voluntary control of attention across visual space. Kiefer RJ, et al. Can J Psychol 1987 Dec;41(4):474-89
Failures to confirm the spatial-frequency hypothesis: fatal blow or healthy complication. Sergent J. Can J Psychol 1987 Dec;41(4):412-28
Locomotor experience: a facilitator of spatial cognitive development. Kermoian R, et al. Child Dev 1988 Aug; 59(4):908-17
Associations of timing of puberty, spatial ability, and lateralization in adult women. Newcombe N, et al. Child Dev 1989 Feb;60(1):246-54
Spatial learning in rats: correlation with cortical choline acetyltransferase and improvement with NGF following NBM damage. Mandel RJ, et al. Exp Neurol 1989 Jun; 104(3):208-17
Visuospatial disorders and related lesions of the brain. Ruessmann K, et al. Int J Neurosci 1989 Jun;46(3-4):123-6
Children's expressions of spatial knowledge. Allen GL, et al. J Exp Child Psychol 1989 Aug;48(1):114-30
Judgments of quantity and conservation of quantity: the area of a rectangle. Lautrey J, et al. J Exp Child Psychol 1989 Apr;47(2):193-209
Expectancies and memory for spatiotemporal events in 5-month-old infants. Smith PH, et al. J Exp Child Psychol 1989 Apr;47(2):210-35
Representing statics as forces in equilibrium. Freyd JJ, et al. J Exp Psychol [Gen] 1988 Dec;117(4):395-407
Aiming error under transformed spatial mappings suggests a structure for visual-motor maps. Cunningham HA. J Exp Psychol [Hum Percept] 1989 Aug;15(3):493-506
Perceptual learning of spatiotemporal events: evidence from an unfamiliar modality. Epstein W, et al. J Exp Psychol [Hum Percept] 1989 Feb;15(1):28-44
Mental curve tracing with elementary stimuli. Pringle R, et al. J Exp Psychol [Hum Percept] 1988 Nov;14(4):716-28
Subjective hierarchies in spatial memory. McNamara TP, et al. J Exp Psychol [Learn Mem Cogn] 1989 Mar;15(2):211-27
Orientation specificity in spatial memory: what makes a path different from a map of the path? Presson CC, et al. J Exp Psychol [Learn Mem Cogn] 1989 Sep;15(5):887-97
Effects of adult age and working memory on reasoning and spatial abilities. Salthouse TA, et al. J Exp Psychol [Learn Mem Cogn] 1989 May;15(3):507-16
Identification reaction time as a function of target and field object orientation. Borresen CR. J Gen Psychol 1989 Jan; 116(1):17-24
Remembering faces and drawings: a test of Hasher & Zacks' model of automatic processing in a Turkish sample. Ozekes M, et al. J Gerontol 1989 Jul;44(4):P122-3
Independent processing of suprathreshold spatial gratings as a function of their separation in spatial frequency. Thomas JP. J Opt Soc Am [A] 1989 Jul;6(7):1102-11
Do artificial limbs become part of the user? New evidence. McDonnell PM, et al. J Rehabil Res Dev 1989 Spring; 26(2):17-24
Temporally graded, age-related impairments in spatial memory in the rat. Aitken DH, et al. Neurobiol Aging 1989 May-Jun;10(3):273-6
The relationship between laterality and numerical and spatial ability. French CC, et al. Neuropsychologia 1989; 27(7):1019-22
Relationship of lateral eye movements recorded in the dark to verbal and spatial question types. Raine A, et al. Neuropsychologia 1988;26(6):937-41
Visuo-spatial processing in parkinsonians. Stelmach GE, et al. Neuropsychologia 1989;27(4):485-93
The horizontal-vertical illusion and knowledge of results. Brosvic GM, et al. Percept Mot Skills 1988 Oct;67(2):463-9
Age and sex differences in representation of horizontality among children in India. De Lisi R, et al. Percept Mot Skills 1989 Jun;68(3 Pt 1):971-84
Relation of cognitive operational performance to comprehension and production of dimensional adjectives. Layton TL, et al. Percept Mot Skills 1989 Aug;69(1):51-8
Change at puberty in spatioperceptual strategy on the rod-and-frame test. Nyborg H. Percept Mot Skills 1988 Aug;67(1):129-30
Relationships between experiences, processing style, and sex-related differences in performance on spatial tests. Olson DM, et al. Percept Mot Skills 1986 Apr;62(2):447-60
Influence of phenomenal time on perceived space. Russo G, et al. Percept Mot Skills 1989 Jun;68(3 Pt 1):971-84
Alleys on an extensive apparent frontoparallel plane: a second experiment. Indow T, et al. Perception 1988;17(5):647-66
Characteristic views and the visual inspection of simple faceted and smooth objects: 'tetrahedra and potatoes'. Perrett DI, et al. Perception 1988;17(6):703-20
Circular vection is independent of stimulus eccentricity. Post RB. Perception 1988;17(6):737-44
On Thompson's inverted-face phenomenon (research note). Rock I. Perception 1988;17(6):815-7
Sources of error in the Piagetian water-level task. Sommerville D, et al. Perception 1988;17(2):249-54
The effect of feature uncertainty on spatial discriminations. Vogels R, et al. Perception 1988;17(5):565-77
Two-dimensional tilt illusions induced by orthogonal plaid patterns: effects of plaid motion, orientation, spatial separation, and spatial frequency. Wenderoth P, et al. Perception 1989;18(1):25-38
Points and endpoints: a size/spacing constraint for dot grouping. Zucker SW, et al. Perception 1988;17(2):229-47
Creativity and the homospatial process. Experimental studies. Rothenberg A. Psychiatr Clin North Am 1988 Sep; 11(3):443-59
The acquisition of spatial knowledge under conditions of temporospatial discontinuity. Allen GL. Psychol Res 1988; 50(3):183-90
Interactions between area and numerosity. Vos PG, et al. Psychol Res 1988;50(3):148-54
Mental representations of spatial and nonspatial relations. McNamara TP, et al. Q J Exp Psychol [A] 1989 May; 41(2):215-33
Perception of spatial order in extrafoveal vision. Saarinen J. Scand J Psychol 1988;29(3-4):162-7
Spatial frequency and orientation tuning of spatial visual mechanisms in human albinos. Wilson HR, et al. Vision Res 1988;28(9):991-9
[Visuo-spatial neglect after cerebral hemisphere stroke and evaluation of related neuropsychologic techniques] Fan JZ. Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1988 Dec; 21(6):336-9, 384-5 (Eng. Abstr.) (Chi)
[Spatial orientation of attention: results and theories] Possamaï CA. Can J Psychol 1986 Dec;40(4):388-413 (90 ref.) (Eng. Abstr.) (Fre)

DRUG EFFECTS

Parallel modifications of spatial memory performances, exploration patterns, and hippocampal theta rhythms in fornix-damaged rats: reversal by oxotremorine. Maho C, et al. Behav Neurosci 1988 Aug;102(4):601-4
Spatial performance is severely impaired in rats with combined reduction of serotonergic and cholinergic transmission. Richter-Levin G, et al. Brain Res 1989 Jan 16;477(1-2):404-7
Four-arm radial open maze (FAROM) as a tool for assessing the effect of atropine in spatial memory of the rats. Dhume RA, et al. Indian J Physiol Pharmacol 1989 Jan-Mar; 33(1):1-9
Retention of a spatial task after intraperitoneal, subcutaneous or intravenous injections of equal doses of atropine. Rauch TM, et al. Life Sci 1988;43(23):1913-20

Spatial learning of visual 'nonsense figures' during experimental ethanol intoxication. Cohen MJ, et al. **Percept Mot Skills** 1989 Apr;68(2):599–606

Hemicholinium-3 impairs spatial learning and the deficit is reversed by cholinomimetics. Hagan JJ, et al. **Psychopharmacology (Berlin)** 1989;98(3):347–56

Immediate and long-lasting effects of MK-801 on motor activity, spatial navigation in a swimming pool and EEG in the rat. Whishaw IQ, et al. **Psychopharmacology (Berlin)** 1989;98(4):500–7

PHYSIOLOGY

Spatial coordination of compensatory eye movements in vertebrates: form and function. Graf W. **Acta Biol Hung** 1988;39(2–3):279–90 (30 ref.)

Estimating the duration of gratings under masking and nonmasking conditions. Stoyanova Y, et al. **Acta Physiol Pharmacol Bulg** 1988;14(2):71–4

Pre- and postflight (D-1) postural control in tilting environments. Bles W, et al. **Adv Otorhinolaryngol** 1988; 42:13–7

Determinants of space perception in space flight. Mittelstaedt H. **Adv Otorhinolaryngol** 1988;42:18–23

The relative effect of saccular and somatosensory information on spatial perception and control. Mittelstaedt H, et al. **Adv Otorhinolaryngol** 1988;42:24–30

The Glenn A. Fry award lecture: the "spatial grain" of the amblyopic visual system. Levi DM. **Am J Optom Physiol Opt** 1988 Oct;65(10):767–86 (58 ref.)

Representation of three-dimensional space in the vestibular, oculomotor, and visual systems. A symposium of the Bárány Society. Bologna, Italy, June 3, 1987. Proceedings. **Ann N Y Acad Sci** 1988;545:1–263

Optimal estimator model for human spatial orientation. Borah J, et al. **Ann N Y Acad Sci** 1988;545:51–73 (45 ref.)

Representation of three-dimensional space in the vestibular, oculomotor, and visual systems. Concluding remarks. Cohen B. **Ann N Y Acad Sci** 1988;545:239–47 (36 ref.)

Representation of three-dimensional space in the vestibular, oculomotor, and visual systems. Introduction. Henn V. **Ann N Y Acad Sci** 1988;545:1–9 (20 ref.)

Gravitational effects on nystagmus and on perception of orientation. Lackner JR, et al. **Ann N Y Acad Sci** 1988; 545:93–104

Spatial disorientation in Alzheimer's disease. Henderson VW, et al. **Arch Neurol** 1989 Apr;46(4):391–4

The effects of window shape and reticle presence on performance in a vertical alignment task. Rosenberg EL, et al. **Aviat Space Environ Med** 1989 Jun;60(6):543–9

Patterns of lateralization and performance levels for verbal and spatial tasks in congenital androgen deficiency. Cappa SF, et al. **Behav Brain Res** 1988 Dec 1;31(2):177–83

Spatial cognitive maps: differential role of parietal cortex and hippocampal formation. DiMattia BD, et al. **Behav Neurosci** 1988 Aug;102(4):471–80

Learning in rats with caudate-putamen lesions: unimpaired classical conditioning and beneficial effects of redundant stimulus cues on instrumental and spatial learning deficits. Mitchell JA, et al. **Behav Neurosci** 1988 Aug;102(4):504–14

Spatial and temporal contrast sensitivity in hemianopia. A comparative study of the sighted and blind hemifields. Hess RF, et al. **Brain** 1989 Aug;112 (Pt 4):871–94

Preserved topographical memory following right temporal lobectomy. Beatty WW, et al. **Brain Cogn** 1988 Aug; 8(1):67–76

Color and spatial error in block design in stone-age Auca Indians: ecological underuse of occipital-parietal system in men and of frontal lobes in women. Pontius AA. **Brain Cogn** 1989 May;10(1):54–75

Spatial coding of visually guided arm movements in primate motor cortex. Georgopoulos AP. **Can J Physiol Pharmacol** 1988 Apr;66(4):518–26

Computational studies of the extraction of visual spatial information from binocular and motion cues. Hildreth EC. **Can J Physiol Pharmacol** 1988 Apr;66(4):464–77 (116 ref.)

Representation of three-dimensional visual space in the cerebral cortex. Maunsell JH. **Can J Physiol Pharmacol** 1988 Apr;66(4):478–87 (95 ref.)

Interhemispheric transfer of spatial tactile information in callosal agenesis and partial commissurotomy. Jeeves MA, et al. **Cortex** 1988 Dec;24(4):601–4

The role of short-term visuo-spatial memory in control of rapid multi-joint prehensive movements. Kohler J, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):189–95

Perception of the immediate extrapersonal space through proprioceptive inputs. Hocherman S, et al. **Exp Brain Res** 1988;73(2):256–62

Analysis of spatial structure in eccentric vision. Saarinen J, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):293–6

The relation between horizontality and rod-and-frame and vestibular navigational performance. Sholl MJ. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan;15(1):110–25

Age-related differences in three-dimensional spatial memory. Cherry KE, et al. **J Gerontol** 1989 Jan;44(1):P16–22

Spatial contrast sensitivity in benign intracranial hypertension. Bulens C, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1323–9

Hippocampal place cells: stereotypy and plasticity. Breese CR, et al. **J Neurosci** 1989 Apr;9(4):1097–111

Deficits in response space following unilateral striatal dopamine depletion in the rat. Brown VJ, et al. **J Neurosci** 1989 Mar;9(3):983–9

The organization of spatial coding in the hippocampus: a study of neural ensemble activity. Eichenbaum H, et al. **J Neurosci** 1989 Aug;9(8):2764–75

Hippocampal neurons in the monkey with activity related to the place in which a stimulus is shown. Rolls ET, et al. **J Neurosci** 1989 Jun;9(6):1835–45

Common cortical and subcortical targets of the dorsolateral prefrontal and posterior parietal cortices in the rhesus monkey: evidence for a distributed neural network subserving spatially guided behavior. Selemon LD, et al. **J Neurosci** 1988 Nov;8(11):4049–68

Postnatal development of the spatial contrast sensitivity of X- and Y-cells in the kitten retinogeniculate pathway. Tootle JS, et al. **J Neurosci** 1989 Apr;9(4):1325–40

Spatial and behavioral correlates of hippocampal neuronal activity. Wiener SI, et al. **J Neurosci** 1989 Aug;9(8):2737–63

Spatial waveform discrimination following higher-harmonic adaptation. Greenlee MW, et al. **J Opt Soc Am [A]** 1988 Oct;5(10):1744–8

Spatial-frequency tuning as a function of temporal frequency and stimulus motion. Henning GB. **J Opt Soc Am [A]** 1988 Aug;5(8):1362–73

Spatial contrast sensitivity: effects of age, test-retest, and psychophysical method. Higgins KE, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2173–80

Analysis of the development of spatial contrast sensitivity in monkey and human infants. Movshon JA, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2166–72

Global spatiochromatic mechanism accounting for luminance variations in contrast sensitivity functions. Rohaly AM, et al. **J Opt Soc Am [A]** 1989 Feb;6(2):312–7

Component analysis of spatial and spectral patterns in multispectral images. II. Entropy minimization. Sasaki K, et al. **J Opt Soc Am [A]** 1989 Jan;6(1):73–9

Aging and luminance-adaptation effects on spatial contrast sensitivity. Sloane ME, et al. **J Opt Soc Am [A]** 1988 Dec; 5(12):2181–90

Why are some spatial discriminations independent of contrast? Smith BG, et al. **J Opt Soc Am [A]** 1989 May; 6(5):713–24

Threshold and suprathreshold spatiotemporal response throughout adulthood. Tulunay-Keesey U, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2191–200

Line-separation discrimination curve in the human fovea: smooth or segmented? Westheimer G. **J Opt Soc Am [A]** 1984 Jun;1(6):683–4

Spatial disorientation in PD [letter] Taylor A, et al. **Neurology** 1989 Jun;39(6):879–80

Parietal lobe mechanisms of spatial attention: modality-specific or supramodal? Farah MJ, et al. **Neuropsychologia** 1989;27(4):461–70

Detection of low spatial frequencies: a single filter or multiple filters? Hess RF, et al. **Ophthalmic Physiol Opt** 1988; 8(4):378–85

Interaction of spatial perception, vestibular function, and exercise in young school age boys with learning disabilities. Byl NN, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):727–38

Nucleus basalis lesions impair memory in rats trained on nonspatial and spatial discrimination tasks. Santucci AC, et al. **Physiol Behav** 1989 May;45(5):1025–31

Spatial selectivity of rat hippocampal neurons: dependence on preparedness for movement. Foster TC, et al. **Science** 1989 Jun 30;244(4912):1580–2

Operant measurements of contrast sensitivity in infant macaque monkeys during normal development. Boothe RG, et al. **Vision Res** 1988;28(3):387–96

Orientation and spatial frequency selectivity of adaptation to color and luminance gratings. Bradley A, et al. **Vision Res** 1988;28(7):841–56

Large-scale relative localization across spatial frequency channels. Burbeck CA. **Vision Res** 1988;28(7):857–9

Visually perceived eye level and perceived elevation of objects: linearly additive influences from visual field pitch and from gravity. Matin L, et al. **Vision Res** 1989; 29(3):315–24

Comparison of contrast responses across spatial mechanisms. Swanson WH, et al. **Vision Res** 1988;28(3):457–9

The visual assessment of the spatial location of a bright bar. Toet A, et al. **Vision Res** 1988;28(6):721–37

Development of spatiotemporal mechanisms in infant vision. Wilson HR. **Vision Res** 1988;28(5):611–28

[Improved objective visual assessment with visual evoked cortical potentials by rapid pattern stimuli sequences of different spatial frequency] Hajek A, et al. **Fortschr Ophthalmol** 1988;85(5):550–4 (Eng. Abstr.) (Ger)

[Distribution of spatial attention in position recognition] Kumada T, et al. **Shinrigaku Kenkyu** 1988 Jun;59(2):99–105 (Eng. Abstr.) (Jpn)

[How do we remember when and where?] Murata K, et al. **Shinrigaku Kenkyu** 1988 Oct;59(4):248–51 (Eng. Abstr.) (Jpn)

[Evoked potentials to spatially structured stimuli in early ontogeny] Fil'chikova LI, et al. **Fiziol Cheloveka** 1988 Jan–Feb;14(1):58–64 (Rus)

[Neuromuscular and psychic components of spatial orientation (on the 70th birthday of F.D. Gorbov)] Giurdzhian AA. **Kosm Biol Aviakosm Med** 1988 Nov–Dec; 22(6):86–95 (Rus)

[Development of spatial orientation during pilot training] Ivanov VV, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug; 22(4):31–5 (Eng. Abstr.) (Rus)

[The problem of information control in the pilot's reliability in extreme conditions] Ponomarenko VA, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):16–21 (Eng. Abstr.) (Rus)

[Effect of weightlessness on the functions of perception and the reproduction of gravitational vertical in response to optokinetic stimulation] Sokolov AI, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):24–7 (Eng. Abstr.) (Rus)

[Hemispheric lateralization of the visual-spatial function in chronic alcoholic intoxication in humans] Ivashchenko OI, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):419–26 (Eng. Abstr.) (Rus)

SPACE-TIME CLUSTERING

see related

DISEASE OUTBREAKS

A cluster analysis of institutionalized mentally retarded individuals [published erratum appears in Am J Ment Retard 1989 Sep;94(2):118] Silverstein AB, et al. **Am J Ment Retard** 1989 Jul;94(1):1–5; discussion 6–11

Reflections on "A Cluster Analysis of institutionalized mentally retarded individuals". Silverstein AB, et al. **Am J Ment Retard** 1989 Jul;94(1):12–4

Clustering of teenage suicides after television news stories about suicides: a reconsideration. Kessler RC, et al. **Am J Psychiatry** 1988 Nov;145(11):1379–83

Assessing the significance of the correlation between two spatial processes. Clifford P, et al. **Biometrics** 1989 Mar; 45(1):123–34

Spatial and temporal analysis of disease occurrence for detection of clustering. Raubertas RF. **Biometrics** 1988 Dec;44(4):1121–9

A variation on single-stage cluster sampling used in a survey of elderly people in Shanghai [letter] Levy PS, et al. **Int J Epidemiol** 1988 Dec;17(4):931–3

An examination of three spatial disease clustering methodologies. Shaw GM, et al. **Int J Epidemiol** 1988 Dec; 17(4):913–9

Nagging doubt, public opinion offer obstacles to ending 'cluster' studies [news] Raymond C. **JAMA** 1989 Apr 28; 261(16):2297–8

Clusters of environmental disease. Wartenberg D. **N J Med** 1988 Nov;85(11):946–9

Suicide clusters: a critical review. Gould MS, et al. **Suicide Life Threat Behav** 1989 Spring;19(1):17–29 (49 ref.)

SPACER DNA see **DNA, RIBOSOMAL**

SPANISH AMERICANS see **HISPANIC AMERICANS**

SPARGANOSIS

[Cerebral sparganosis mansoni—report of two cases] Yamashita K, et al. **No To Shinkei** 1989 Feb;41(2):199–203 (20 ref.) (Eng. Abstr.) (Jpn)

DIAGNOSIS

Sparganosis of the brain. Case report. Anegawa S, et al. **J Neurosurg** 1989 Aug;71(2):287–9

Sparganosis of the spinal cord. Case report. Fung CF, et al. **J Neurosurg** 1989 Aug;71(2):290–2

[Ocular Manson's plerocercoid disease (OMPD)] Pang YJ, et al. **Yen Ko Hsueh Pao** 1987 Sep;3(3):160–2 (Eng. Abstr.) (Chi)

PARASITOLOGY

Ocular sparganosis: a cause of subconjunctival tumor and deafness. Kittiponghansa S, et al. **Trop Med Parasitol** 1988 Sep;39(3):247–8

PATHOLOGY

[Human sparganosis. A clinical case] Festa V, et al. **Minerva Chir** 1989 Mar 31;44(6):1033–5 (14 ref.) (Eng. Abstr.) (Ita)

SPARGANUM

PHYSIOLOGY

Ocular sparganosis: a cause of subconjunctival tumor and deafness. Kittiponghansa S, et al. **Trop Med Parasitol** 1988 Sep;39(3):247–8

SPARID FISH see **PERCIFORMES**

SPARSOMYCIN see under **ANTIBIOTICS, ANTINEOPLASTIC**

SPARTEINE

The photophysical properties of some C15 lupine alkaloids: sparteine, lupanine, thermospine, and alpha-diplospartyrine. Halpern AM, et al. **Photochem Photobiol** 1989 Jan;49(1):33–6

ANALOGS & DERIVATIVES

Gas chromatographic determination of sparteine and 2- and 5-dehydrosparteine in plasma and urine. Schellens JH, et

al. J Chromatogr 1988 Sep 23;431(1):203–9

ANALYSIS

Gas chromatographic determination of sparteine and 2- and 5-dehydrosparteine in plasma and urine. Schellens JH, et al. J Chromatogr 1988 Sep 23;431(1):203–9

Subnanogram GC/NPD method for the determination of sparteine in biological fluids. Kintz P, et al. Methods Find Exp Clin Pharmacol 1989 Feb;11(2):115–8

BLOOD

Sparteine oxidation polymorphism: phenotyping by measurement of sparteine and its dehydrometabolites in plasma. Paar WD, et al. Eur J Clin Pharmacol 1989; 36(6):555–60

METABOLISM

Xenobiotic and endobiotic inhibitors of cytochrome P-450dbl function, the target of the debrisoquine/sparteine type polymorphism. Fonne-Pfister R, et al. Biochem Pharmacol 1988 Oct 15;37(20):3829–35

Mephenytoin and sparteine oxidation: genetic polymorphisms in Denmark. Dr∅hse A, et al. Br J Clin Pharmacol 1989 May;27(5):620–5

Substantial rise in sparteine metabolic ratio during haloperidol treatment. Gram LF, et al. Br J Clin Pharmacol 1989 Feb;27(2):272–5

Apparent mendelian recessive inheritance of sparteine metabolism in an extended Japanese family [letter] Chiba K, et al. Eur J Clin Pharmacol 1988;34(6):661–2

Use of quinidine inhibition to define the role of the sparteine/debrisoquine cytochrome P450 in metoprolol oxidation by human liver microsomes. Otton SV, et al. J Pharmacol Exp Ther 1988 Oct;247(1):242–7

Influence of enzyme induction and inhibition on the oxidation of nifedipine, sparteine, mephenytoin and antipyrine in humans as assessed by a "cocktail" study design. Schellens JH, et al. J Pharmacol Exp Ther 1989 May;249(2):638–45

Thin-layer chromatographic screening test for polymorphic sparteine oxidation. Ebner T, et al. Ther Drug Monit 1989; 11(2):214–6

[Stereospecific hydroxylation of (+)-sparteine (pachycarpine) in the rat] Ebner T, et al. Arch Pharm (Weinheim) 1989 Jul;322(7):399–403 (Eng. Abstr.) (Ger)

PHARMACOKINETICS

The influence of the sparteine/debrisoquin phenotype on the disposition of flecainide. Mikus G, et al. Clin Pharmacol Ther 1989 May;45(5):562–7

Clinical significance of the sparteine/debrisoquine oxidation polymorphism. Brøsen K, et al. Eur J Clin Pharmacol 1989; 36(6):537–47

Benzbromarone biotransformation is not related to polymorphic oxidation of sparteine. Walter-Sack I, et al. Klin Wochenschr 1988 Nov 1;66(21):1097–8

PHARMACOLOGY

Sparteine sulfate prevalently stimulates B rather than A cell secretion in obese subjects. Paolisso G, et al. Horm Metab Res 1988 Oct;20(10):658–9

Effect of sparteine and quinidine on the metabolism of methoxyphenamine by Cunninghamella bainieri. Foster BC, et al. Xenobiotica 1989 Apr;19(4):445–52

URINE

Further analysis of sparteine oxidation in a Japanese population and comparison with data observed in different ethnic populations. Horai Y, et al. Xenobiotica 1988 Sep; 18(9):1077–84

SPARUS see PERCIFORMES

SPASM

see related
MUSCLE CRAMP
MYOTONIA

[A case of unilateral masticatory spasm without hemifacial atrophy] Yoshii K, et al. No To Shinkei 1989 Apr; 41(4):343–6 (5 ref.) (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Recurrent opisthotonus associated with anaesthesia [letter] Hopkins CS. Anaesthesia 1988 Oct;43(10):904

Masseter muscle spasm, succinylcholine, and strabismus surgery [letter] Schwartz N, et al. Anesthesiology 1988 Oct; 69(4):635–6

Postoperative opisthotonus following the use of propofol. Strowbridge NF. J R Army Med Corps 1989 Jun; 135(2):79–80

COMPLICATIONS

Aortocoronary saphenous vein graft spasm inducing ventricular fibrillation. Webb JG, et al. Am Heart J 1989 Feb;117(2):485–6

The association of hemifacial spasm and facial pain. Perkin GD, et al. J Neurol Neurosurg Psychiatry 1989 May; 52(5):663–5 (20 ref.)

Renal artery spasm: a cause of acute renal failure following abdominal surgery for neuroblastoma. Ogita S, et al. J Pediatr Surg 1989 Feb;24(2):215–7

Spasm of the near reflex associated with metabolic encephalopathy. Moster ML, et al. Neurology 1989 Jan; 39(1):150

[Nodding spasm] Rodriguez Pereira R. Ned Tijdschr Geneeskd 1988 Nov 19;132(47):2158–9 (Eng. Abstr.) (Dut)

DIAGNOSIS

Underdosage with succinylcholine may lead to incorrect diagnosis of masseter spasm in children [letter] Meakin G. Anesthesiology 1988 Dec;69(6):1025–7

Chest pain and intercostal spasm [letter] Blumer I. Hosp Pract [Off] 1989 May 30;24(5A):13

Accommodative spasm [letter] Lopez P. J Am Optom Assoc 1988 Dec;59(12):921

[The significance of functional vasospasms] Gasser P. Dtsch Med Wochenschr 1989 Jan 20;114(3):107–15 (58 ref.) (Ger)

[Facial paraspasm] Arzumanian AM. Sov Med 1988;(8):87–90 (Rus)

DRUG THERAPY

Botulinum toxin injections in the treatment of blepharospasm, hemifacial spasm, and eyelid fasciculations. Kraft SP, et al. Can J Neurol Sci 1988 Aug;15(3):276–80

Re: Nocturnal diaphoresis and coronary artery spasm [letter] Cheng TO. Cleve Clin J Med 1988 Nov–Dec;55(6):565

The effect of intravesically administered Cetiprin on bladder spasms after transurethral resection of the prostate. A double-blind randomized study. Henriksen LO, et al. Int Urol Nephrol 1988;20(5):497–500

Localized injections of botulinum toxin for the treatment of focal dystonia and hemifacial spasm. Brin MF, et al. Mov Disord 1987;2(4):237–54

Treatment of muscle spasms with oral dantrolene sodium. Christian JM. Oral Surg Oral Med Oral Pathol 1989 Mar; 67(3):268–70

[Treatment of facial spasm and strabismus with oculinum] Garraud L. Bull Soc Ophtalmol Fr 1988 Nov; 88(11):1315–20 (Fre)

ETIOLOGY

Is there a relationship between masseteric muscle spasm and malignant hyperpyrexia? Christian AS, et al. Br J Anaesth 1989 May;62(5):540–4

Cranial dystonia, blepharospasm and hemifacial spasm: clinical features and treatment, including the use of botulinum toxin. Kraft SP, et al. Can Med Assoc J 1988 Nov 1;139(9):837–44 (68 ref.)

Entrapment of venous catheter following inferior vena caval spasm. Dalvi BV, et al. Cathet Cardiovasc Diagn 1989 Jul; 17(3):161–3

Reversible arterial spasm in an adolescent with primary oxalosis. van Damme-Lombaerts R, et al. Clin Nephrol 1988 Oct;30(4):235–8 (9 ref.)

Hemifacial spasm associated with epidermoid tumors of the cerebellopontine angle. Auger RG, et al. Neurology 1989 Apr;39(4):577–80

Hemifacial spasm due to intracranial tumor. An international survey of botulinum toxin investigators. Sprik C, et al. Ophthalmology 1988 Aug;95(8):1042–5

The clinical features of spasms in patients with a cervical cord injury. Kawamura J, et al. Paraplegia 1989 Jun; 27(3):222–6

Atypical spasmus nutans as an initial sign of thalamic neoplasm. Baram TZ, et al. Pediatr Neurol 1986 Nov–Dec; 2(6):375–6

Facial spasm from lacunar infarction of the thalamic ventrolateral nucleus [letter] Toda T, et al. Stroke 1989 Sep;20(9):1289–90

[Fiberoptic bronchoscopy (letter)] Wisborg T. Ugeskr Laeger 1988 Nov 7;150(45):2759 (Dan)

[Hemifacial spasm disclosing neurinoma of the hypoglossal nerve] Pou Serradell A, et al. Rev Neurol (Paris) 1988; 144(12):820–2 (10 ref.) (Eng. Abstr.) (Fre)

[Stiff-man syndrome: new light on the etiology (editorial)] Braham J. Harefuah 1989 Apr 2;116(7):391–2 (Heb)

[Clinical and electromyographic features of "intermittent tonic facial spasm" due to acoustic neurinoma. Report of two cases] Sugiura Y, et al. Neurol Med Chir (Tokyo) 1988 Dec;28(12):1198–202 (Eng. Abstr.) (Jpn)

[Spasm of the cerebral arteries in angiographic studies in relation to the duration of bleeding from the aneurysm] Zaręba A, et al. Neurol Neurochir Pol 1988 Sep–Oct; 22(5):439–43 (Eng. Abstr.) (Pol)

GENETICS

Familial hemifacial spasm. Friedman A, et al. Mov Disord 1989;4(3):213–8

A familial syndrome of infantile optic atrophy, movement disorder, and spastic paraplegia. Costeff H, et al. Neurology 1989 Apr;39(4):595–7

PHYSIOPATHOLOGY

The myth of skeletal muscle spasm [editorial] Johnson EW. Am J Phys Med Rehabil 1989 Feb;68(1):1

Cimetropium bromide: in vitro and in vivo evaluation of spasmolytic activity on human and dog colon. Sagrada A, et al. Digestion 1989;42(3):143–50

Ephaptic transmission in hemifacial spasm: a single-fiber EMG study. Sanders DB. Muscle Nerve 1989 Aug; 12(8):690–4

Blink reflex excitability cycle in hemifacial spasm. Valls-Sole J, et al. Neurology 1989 Aug;39(8):1061–6

PREVENTION & CONTROL

Nitropaste for prevention and relief of vascular spasm. Erba M, et al. AJNR 1989 Jan–Feb;10(1):155–6

REHABILITATION

[Patients with apoplexy treated with silicone bandaging of the toes] Katz L, et al. Ugeskr Laeger 1988 Nov 28; 150(48):2971–2 (Eng. Abstr.) (Dan)

SURGERY

Retrosigmoidal approach in otoneurological surgery. Wang PZ. Chin Med J [Engl] 1988 Jun;101(6):456–7

Transtympanic surgery for hemifacial spasm—an electrophysiological study. Youngs R, et al. Clin Otolaryngol 1988 Oct;13(5):331–3

[Relationship between angiographical manifestations and operative findings in 100 cases of hemifacial spasm] Baba T, et al. No Shinkei Geka 1988 Nov;16(12):1355–62 (Eng. Abstr.) (Jpn)

[Surgical treatment of spasmodic torticollis: effectiveness of microvascular decompression] Nagata K, et al. No To Shinkei 1989 Jan;41(1):97–102 (18 ref.) (Eng. Abstr.) (Jpn)

THERAPY

Intravascular embolization of a cerebellar arteriovenous malformation for treatment of hemifacial spasm. Yang PJ, et al. AJNR 1989 Mar–Apr;10(2):403–5

Management of facial spasm with Clostridium botulinum toxin, type A (Oculinum) [see comments] Biglan AW, et al. Arch Otolaryngol Head Neck Surg 1988 Dec; 114(12):1407–12 (39 ref.). Comment in: Arch Otolaryngol Head Neck Surg 1989 Jul;115(7):882

Restoration of micturition using microelectric current in experimentally induced spastic urinary bladder in rabbits. Karoutas G, et al. Exp Neurol 1988 Dec;102(3):333–9

[Treatment of blepharospasm and hemifacial spasm with botulinum A toxin (Oculinum)] Iwashige H, et al. Nippon Ganka Gakkai Zasshi 1988 Oct;92(10):1637–43 (Eng. Abstr.) (Jpn)

SPASM, ESOPHAGEAL see ESOPHAGEAL SPASM, DIFFUSE

SPASMOLYTICS see PARASYMPATHOLYTICS

SPASMOPHILIA see TETANY

SPASMS, INFANTILE

Infantile spasms: a retrospective study of 89 cases. Feng YK, et al. Acta Paediatr Jpn Overseas Ed 1987 Feb;29(1):77–83

Magnetic resonance imaging and fundus findings in a patient with Aicardi's syndrome. Gloor P, et al. Arch Ophthalmol 1989 Jun;107(6):922–3

Aicardi syndrome—a case report. Wang JH, et al. Chung Hua I Hsueh Tsa Chih 1989 Feb;43(2):135–40

[Infantile spasms] Klar A, et al. Harefuah 1989 Apr 16; 116(8):416–9 (44 ref.) (Heb)

CHEMICALLY INDUCED

Intraventricular nafcillin-induced seizures in a neonate. Brozanski BS, et al. Pediatr Neurol 1988 May–Jun; 4(3):188–90

COMPLICATIONS

Startle disease: an avoidable cause of sudden infant death [letter] Vigevano F, et al. Lancet 1989 Jan 28;1(8631):216

Septo-optic dysplasia with infantile spasms. Kuriyama M, et al. Pediatr Neurol 1988 Jan–Feb;4(1):62–5

Aicardi syndrome associated with an embryonal carcinoma. Tagawa T, et al. Pediatr Neurol 1989 Jan–Feb;5(1):45–7 (14 ref.)

[West's syndrome and/or early autistic manifestations] Delwarde M, et al. Psychiatr Enfant 1988;31(2):413–44 (Eng. Abstr.) (Fre)

CONGENITAL

Cerebral venous thrombosis as a cause of neonatal seizures. Wong VK, et al. Pediatr Neurol 1987 Jul–Aug;3(4):235–7

DIAGNOSIS

Development of West syndrome in a patient with Reye syndrome: a case study. Garcia de Alba GO, et al. Clin Electroencephalogr 1989 Apr;20(2):86–90

MRI findings in early infantile epileptic encephalopathy with suppression-burst. Konishi H, et al. Jpn J Psychiatry Neurol 1988 Sep;42(3):609–10

Aicardi syndrome with holoprosencephaly and cleft lip and palate. Sato N, et al. Pediatr Neurol 1987 Mar–Apr; 3(2):114–6

Benign complex partial epilepsies in infancy. Watanabe K, et al. **Pediatr Neurol** 1987 Jul–Aug;3(4):208–11

DRUG THERAPY

Recent advances in infantile spasms research in Finland. Riikonen R. **Acta Paediatr Jpn Overseas Ed** 1987 Feb; 29(1):70–6 (29 ref.)
Preliminary report of a multi–center study on the West syndrome. Nolte R, et al. **Brain Dev** 1988;10(4):236–42
Can barbiturate anaesthesia cure infantile spasms? Riikonen R, et al. **Brain Dev** 1988;10(5):300–4
Infantile spasms. Hrachovy RA, et al. **Cleve Clin J Med** 1989; 56 Suppl Pt 1:S10–6; dicussion S40–2 (83 ref.)
Home use of rectal diazepam to prevent status epilepticus in children with convulsive disorders. Camfield CS, et al. **J Child Neurol** 1989 Apr;4(2):125–6
The effect of ACTH on dopamine beta–hydroxylase activity in cerebrospinal fluid of epileptic children. Suzuki H, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):646–7
Trial of a minimum doses of L–dopa (0.5 mg/kg/day) on intractable epilepsy associated with tuberous sclerosis. Uchiyama A, et al. **Jpn J Psychiatry Neurol** 1988 Sep; 42(3):584–5
Treatment of infantile spasms with high–dose ACTH: efficacy and plasma levels of ACTH and cortisol. Snead OC 3d, et al. **Neurology** 1989 Aug;39(8):1027–31
Treatment of infantile spasms with valproic acid. Soetomenggolo TS. **Paediatr Indones** 1988 Jan–Feb; 28(1–2):20–6
Short term effects of valproate on infantile spasms. Dyken PR, et al. **Pediatr Neurol** 1985 Jan–Feb;1(1):34–7
Valproate hepatotoxicity: two new cases, a summary of others, and recommendations. Fenichel GM, et al. **Pediatr Neurol** 1985 Mar–Apr;1(2):109–13 (31 ref.)
Computed tomography in infantile spasms: effects of hormonal therapy. Glaze DG, et al. **Pediatr Neurol** 1986 Jan–Feb;2(1):23–7
[Administration of high doses of B6 in age–related epileptic encephalopathies] Zouhar A, et al. **Cesk Neurol Neurochir** 1989 Jan;52(1):28–31 (Eng. Abstr.) **(Cze)**

ETIOLOGY

Etiology and treatment of infantile spasms: current concepts, including the role of DPT immunization. Millichap JG. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):54–60
Neonatal asphyxia and subsequent epilepsy—a prospective study. Yamashita S, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):565–6
Recent advances in the diagnosis, treatment, and prognosis of neonatal seizures. Legido A, et al. **Pediatr Neurol** 1988 Mar–Apr;4(2):79–86 (62 ref.)
Seizures and infarction in neonates with persistent pulmonary hypertension. Scher MS, et al. **Pediatr Neurol** 1986 Nov–Dec;2(6):332–9
[Lipoma of the corpus callosum in an infant with seizures] Peter M, et al. **Monatsschr Kinderheilkd** 1989 Mar; 137(3):165–7 (Eng. Abstr.) **(Ger)**
[Age–related incidence of cerebral seizures in childhood and infancy] Laubichler W, et al. **Nervenarzt** 1989 Jan; 60(1):43–7 **(Ger)**
[Effect of the cholinergic system on EEG–detected paroxysmal activity in West syndrome] Rektor I, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):46–8 (Eng. Abstr.) **(Rus)**

GENETICS

Transient neonatal hyperglycinemia. Schiffmann R, et al. **Ann Neurol** 1989 Feb;25(2):201–3
Serologic HLA typing in infantile spasms. Hrachovy RA, et al. **Epilepsia** 1988 Nov–Dec;29(6):817–9
Aicardi syndrome in two sisters. Molina JA, et al. **J Pediatr** 1989 Aug;115(2):282–3
Benign familial neonatal seizures: clinical and electroencephalographic characteristics. Shevell MI, et al. **Pediatr Neurol** 1986 Sep–Oct;2(5):272–5

PHYSIOPATHOLOGY

The West syndrome: developmental aspects [published erratum appears in Acta Paediatr Jpn Overseas Ed 1987 Feb;29(1):following 62] Ohtahara S, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):61–9
Lack of clinical–EEG effects of naloxone injection on infantile spasms. Nalin A, et al. **Childs Nerv Syst** 1988 Dec; 4(6):365–6
A patient with infantile spasms and low homovanillic acid levels in cerebrospinal fluid: L–dopa dependent seizures? Sugie H, et al. **Eur J Pediatr** 1989 Jun;148(7):667–8
An investigation on the borderland of severe myoclonic epilepsy in infancy. Ogino T, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):554–5
Lennox–Gastaut syndrome. Considerations in its concept and categorization. Ohtahara S. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):535–42 (25 ref.)
Infantile spasms. Hrachovy RA, et al. **Pediatr Clin North Am** 1989 Apr;36(2):311–29 (93 ref.)
Cassette electroencephalographic recording of neonates with apneic episodes. Bridgers SL, et al. **Pediatr Neurol** 1985 Jul–Aug;1(4):219–22
Long term cassette EEG monitoring of childhood seizures. Duchowny MS, et al. **Pediatr Neurol** 1985 Jan–Feb; 1(1):38–41
Infantile spasms: ictal phenomena. King DW, et al. **Pediatr Neurol** 1985 Jul–Aug;1(4):213–8
[Epilepsy and spike potentials in dyscephaly] Fehlow P. **Z Arztl Fortbild (Jena)** 1988;82(17):827–8 (14 ref.) **(Ger)**

PSYCHOLOGY

Neurobehavioral anomalies in neonates with seizures. Emory EK, et al. **J Clin Exp Neuropsychol** 1989 Mar;11(2):231–40

RADIOGRAPHY

Primary thalamic and caudate hemorrhage in term neonates presenting with seizures. Adams C, et al. **Pediatr Neurol** 1988 May–Jun;4(3):175–7

SPASTIC PARAPARESIS see **PARAPARESIS, TROPICAL SPASTIC**

SPASTIC PARAPLEGIA see **PARAPLEGIA**

SPASTIC PARAPLEGIA, HEREDITARY see under **NEUROPATHIES, HEREDITARY MOTOR AND SENSORY**

SPASTICITY, MUSCLE see **MUSCLE SPASTICITY**

SPATIAL BEHAVIOR

Animal cognition: the representation of space, time and number. Gallistel CR. **Annu Rev Psychol** 1989;40:155–89 (134 ref.)
Spatial representations and sensorimotor transformations. The IXth International Symposium of the Centre de Recherche en Sciences Neurologiques, Université de Montréal. Montréal (Québec), May 28–29, 1987. Proceedings. **Can J Physiol Pharmacol** 1988 Apr; 66(4):427–539
Visual control of displacement at slow speeds. Mestre D. **Hum Factors** 1988 Dec;30(6):663–75
EEG activity during performance of cognitive tasks demanding verbal and/or spatial processing. Gutiérrez S, et al. **Int J Neurosci** 1988 Sep;42(1–2):149–55
Effects of preschool environments on nonverbal social behavior: toddlers' interpersonal distances to teachers and classmates change with environmental density, classroom design, and parent–child interactions. Burgess JW, et al. **J Child Psychol Psychiatry** 1989 Mar;30(2):261–76
Children's expressions of spatial knowledge. Allen GL, et al. **J Exp Child Psychol** 1989 Aug;48(1):114–30
Sensorimotor representations for pointing to targets in three–dimensional space. Soechting JF, et al. **J Neurophysiol** 1989 Aug;62(2):582–94
Errors in pointing are due to approximations in sensorimotor transformations. Soechting JF, et al. **J Neurophysiol** 1989 Aug;62(2):595–608
Human interaction and personal boundaries. Scott AL. **J Psychosoc Nurs Ment Health Serv** 1988 Aug;26(8):23–7 (11 ref.)
The visual evoked potentials and the spatial vision in old people. Ponte F, et al. **Metab Pediatr Syst Ophthalmol** 1989; 12(1–3):37–42
Thigmotaxis as a test for anxiolytic activity in rats. Treit D, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):959–62
Training–dependent decay in performance produced by the neuroleptic cis(Z)–flupentixol on spatial navigation by rats in a swimming pool. Whishaw IQ, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):211–20
Agitation and touch in the nursing home. Marx MS, et al. **Psychol Rep** 1989 Jun;64(3 Pt 2):1019–26
[Optimal strategies of spatial distribution: the Olli effect] Gorban' AN, et al. **Zh Obshch Biol** 1989 Jan–Feb; 50(1):16–21 (Eng. Abstr.) **(Rus)**
[Characteristics of the role of spatial memory in the choice reactions of white rats] Grigorian GE, et al. **Zh Vysh Nerv Deiat** 1989 Mar–Apr;39(2):259–66 (Eng. Abstr.) **(Rus)**
[Hemispheric participation in the shaping of spatial–motor asymmetry in visual recognition in rats] Udalova GP, et al. **Zh Vysh Nerv Deiat** 1988 May–Jun;38(3):467–74 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Low doses of atropine sulfate impair retention of a well–learned spatial task. Rauch TM, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):219–28
The effect of pirenzepine on spatial learning in the Morris Water Maze. Hunter AJ, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):519–23
[Spatial–temporal structure of the organization of goal–directed behavior under the action of delta 9–tetrahydrocannabinol] Machula AI, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):12–7 (Eng. Abstr.) **(Rus)**
[Comparison of the effects of thyroliberin and ACTH4–7 PGP on the learning of rats during the solving of spatial orientation tasks] Chepurnova NE, et al. **Fiziol Zh SSSR** 1989 May;75(5):677–83 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Apparent contrast of spatially and temporally sampled gratings. Radil T, et al. **Acta Neurobiol Exp (Warsz)** 1988; 48(6):283–93
Brain transplants enhance rather than reduce the impairment of spatial memory and olfaction in bulbectomized rats. Amemori T, et al. **Behav Neurosci** 1989 Feb;103(1):61–70
Effects of opioid microinjections into the medial septal area on spatial memory in rats. Bostock E, et al. **Behav Neurosci** 1988 Oct;102(5):643–52
Differential ontogeny of working memory and reference memory in the rat. Green RJ, et al. **Behav Neurosci** 1989 Feb;103(1):98–105
Aging and atropine effects on spatial navigation in the Morris water task. Lindner MD, et al. **Behav Neurosci** 1988 Oct; 102(5):621–34
Effect of low–intensity hippocampal stimulation on spatial versus working memory in rats. Parker TW, et al. **Behav Neurosci** 1988 Oct;102(5):653–61
Differential effects of hippocampal ablations on dispositional and representational memory in the rat. Thomas GJ, et al. **Behav Neurosci** 1988 Oct;102(5):635–42
The role of cortical sympathetic ingrowth in the behavioral effects of nucleus basalis magnocellularis lesions. Harrell LE, et al. **Brain Res** 1988 Dec 6;474(2):353–8
Recovery from perseverative behavior after entorhinal cortex lesions in rats. Ramirez JJ, et al. **Brain Res** 1988 Aug 30; 459(1):153–6
Raphe cells grafted into the hippocampus can ameliorate spatial memory deficits in rats with combined serotonergic/cholinergic deficiencies. Richter–Levin G, et al. **Brain Res** 1989 Jan 23;478(1):184–6
The role of the hippocampal–nucleus accumbens pathway in radial–arm maze performance. Schacter GB, et al. **Brain Res** 1989 Aug 14;494(2):339–49
Transplantation of embryonic ventral forebrain grafts to the neocortex of rats with bilateral lesions of nucleus basalis magnocellularis ameliorates a lesion–induced deficit in spatial memory. Welner SA, et al. **Brain Res** 1988 Oct 25; 463(1):192–7
Heterosis and resistance to DFP effects on spatial learning in C57BL X DBA hybrids. Upchurch M, et al. **Brain Res Bull** 1988 Sep;21(3):499–503
A functional analysis of the collicular output pathways: a dissociation of deficits following lesions of the dorsal tegmental decussation and the ipsilateral collicular efferent bundle in the Mongolian gerbil. Ellard CG, et al. **Exp Brain Res** 1988;71(2):307–19
Place memory and scene memory: effects of fornix transection in the monkey. Gaffan D, et al. **Exp Brain Res** 1989;74(1):202–12
The effects of reverse monocular deprivation in monkeys. I. Psychophysical experiments. Harwerth RS, et al. **Exp Brain Res** 1989;74(2):327–47
A comparative analysis of the role of fornix and cingulate cortex in memory: rats. Markowska AL, et al. **Exp Brain Res** 1989;74(1):187–201
Effects of fornix transection and cingulate cortical ablation on spatial memory in rhesus monkeys. Murray EA, et al. **Exp Brain Res** 1989;74(1):173–86
Influences of lesions of parietal cortex on visual spatial attention in humans. Petersen SE, et al. **Exp Brain Res** 1989;76(2):267–80
The variety of relations between spatial frequency and reaction time. Meek P, et al. **Int J Neurosci** 1989 Mar; 45(1–2):55–69
Activity of hippocampal formation neurons in the monkey related to a conditional spatial response task. Miyashita Y, et al. **J Neurophysiol** 1989 Mar;61(3):669–78
A homing procedure for studying spatial memory in immature and adult rodents. Schenk F. **J Neurosci Methods** 1989 Jan;26(3):249–58
Aging and the physiology of spatial memory. Barnes CA. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):563–8 (66 ref.)
Preservation and loss of spatial memory in aged rats and humans: implications for the analysis of memory dysfunction in dementia. Beatty WW. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):557–61 (34 ref.)
An age–related spatial learning deficit: choline uptake distinguishes "impaired" and "unimpaired" rats. Gallagher M, et al. **Neurobiol Aging** 1988 Jul–Aug;9(4):363–9
Spatial learning deficits in old rats: a model for memory decline in the aged. Gallagher M, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):549–56 (47 ref.)
Aging and spatial cognition. Olton DS. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):569–70
Electric activity in the neocortex of freely moving young and aged rats. Buzsáki G, et al. **Neuroscience** 1988 Sep; 26(3):735–44
Spatial learning and memory processes: the search for their neurobiological mechanisms in the rat. Barnes CA. **Trends Neurosci** 1988 Apr;11(4):163–9 (62 ref.)
Representation in the hippocampus: what do hippocampal neurons code? [news] Eichenbaum H, et al. **Trends Neurosci** 1988 Jun;11(6):244–8 (30 ref.)
[Caffeine and EEG mapping: effects of visuo–spatial task in healthy volunteers] Etevenon P, et al. **Neurophysiol Clin** 1988 Aug;18(4):355–67 (Eng. Abstr.) **(Fre)**

SPECIALISM

Specialty choice in occupational therapy. Ezersky S, et al. **Am J Occup Ther** 1989 Apr;43(4):227–33

Early intervention: issues in specialization. Hanft BE. **Am J Occup Ther** 1989 Jul;43(7):431–4

Not by age alone: gerontology as a specialty in occupational therapy. Hasselkus BR, et al. **Am J Occup Ther** 1989 Feb; 43(2):77–9

Subspecialty training in alcoholism and drug abuse [editorial] Galanter M. **Am J Psychiatry** 1989 Jan;146(1):8–9

Commentary. Generalism and specialism revisited: the case of neurology. Menken M. **Health Aff (Millwood)** 1988 Winter;7(5):115–23

The practice of internal medicine: can we keep the specialty in it? [editorial] Roehrig CB. **Hosp Pract [Off]** 1989 Aug 15;24(8):12, 15

Should dermatologists read their own slides? [letter] Spigel GT. **Int J Dermatol** 1989 May;28(4):276–7

Characteristics of senior medical students planning to subspecialize in child psychiatry. Haviland MG, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Jul;27(4):404–7

A coming unity crisis in veterinary medicine? Antelyes J. **J Am Vet Med Assoc** 1989 Jun 15;194(12):1712–3

A critical analysis of swine medicine in American veterinary schools. Backstrom L. **J Am Vet Med Assoc** 1989 Feb 15; 194(4):502–7

Factors influencing the evolution of theriogenology. Bartlett DE. **J Am Vet Med Assoc** 1989 Jul 1;195(1):51–5

Specialty practice—some legal considerations. Hannah HW. **J Am Vet Med Assoc** 1989 Feb 1;194(3):354–5

At least do no harm [editorial] Hudacek AG. **J Bone Joint Surg [Am]** 1989 Apr;71(4):479–80

Should you be reading JMPT? [letter] Kell PM. **J Manipulative Physiol Ther** 1988 Aug;11(4):332

Subspecialization and general urology. Hinman F Jr. **J Urol** 1989 Mar;141(3):482–5

Professionalism and the radiologic technologist [editorial] Nielson ER. **Radiol Technol** 1988 Sep–Oct;60(1):59–60

The route to subspecialty accreditation. Redman HC. **Radiology** 1989 Sep;172(3 Pt 2):893–4

The move towards specialist professional qualifications. Lucke JN. **Vet Rec** 1989 May 6;124(18):493–4

[The physiology of higher nervous activity (the neurobiological bases of behavior). A draft program for university biology departments and for examinations on the candidate degree minimum qualification in the specialty] Batuev AS. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec; 38(6):1174–8 **(Rus)**

HISTORY

Autonomous profession or medical specialty: the stomatological movement and American dentistry. Gevitz N. **Bull Hist Med** 1988 Fall;62(3):407–28

TRENDS

Do we need more generalists? Ginzberg E. **Acad Med** 1989 Sep;64(9):495–7

Veterinary clinical nutrition: a new veterinary medical specialty. Remillard RL, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1238–40

[Perspectives of maxillary surgery in Switzerland] Spiessl B. **Helv Chir Acta** 1989 Apr;55(6):953–8 (Eng. Abstr.) **(Ger)**

[Occupational fields of AIDS specialists in the public health office] Mayer W. **Off Gesundheitswes** 1989 Jul;51(7):327–30 (Eng. Abstr.) **(Ger)**

[Developments in pediatric surgery] Berg U. **Z Arztl Fortbild (Jena)** 1988;82(16):775–8 **(Ger)**

[Pediatric bronchopneumonology at the present time—need and limits for a subspecialty] Wunderlich P, et al. **Z Erkr Atmungsorgane** 1988;171(2):101–2 **(Ger)**

[General medicine as a profession. From philological impossibility to specialty in its own right] Christie F, et al. **Tidsskr Nor Laegeforen** 1988 Oct 25;108(29B):2581–5 **(Nor)**

SPECIALTIES, DENTAL

In re: "The specialty of orthodontics" [letter; comment] **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):25A, 27A–28A. **Comment on:** Am J Orthod Dentofacial Orthop 1988 Nov;94(5):443

"Error" or test? [letter] Pollack BR. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):41A

Specialization in dentistry'. **Br Dent J** 1988 Sep 24; 165(6):201–2

Specialisation in dentistry'[letter] Allen WR. **Br Dent J** 1989 Mar 25;166(6):197

Specialisation in dentistry' [letter] Broadway RT. **Br Dent J** 1988 Dec 24;165(12):421

Specialisation in dentistry. Farrell S. **Br Dent J** 1989 Jan 21;166(2):34

What is specialist practice and how would it work? James DW. **Br Dent J** 1989 Jul 8;167(1):41–2

Specialisation in dentistry'[letter] Mason D. **Br Dent J** 1988 Oct 22;165(8):278

EDUCATION

The place of postgraduate education and specialisation. Winter GB. **Br Dent J** 1988 Aug 6;165(3):100–1

STANDARDS

[Improvement in the quality of training of specialists in oral medicine—a most important link in improving dental care for the population] **Stomatologiia (Mosk)** 1989 Jan–Feb; 68(1):4–6 **(Rus)**

SPECIALTIES, MEDICAL

Whose turf is imaging? Professional responsibility for imaging procedures in hospital practice [letter; comment] Harrington DP. **AJR** 1989 Mar;152(3):652. **Comment on:** AJR Am J Roentgenol 1988 Aug;151(2):261–2

Whose turf is imaging? Professional responsibility for imaging procedures in hospital practice [letter] Soto B, et al. **AJR** 1989 Jan;152(1):199

Formation of a single primary care specialty [editorial] Saultz JW. **Am Fam Physician** 1989 Apr;39(4):108–10

The future of subspecialty training in pediatrics. Kappy MS. **Am J Dis Child** 1988 Nov;142(11):1209–12

Factors influencing physicians' preventive practices. Maheux B, et al. **Am J Prev Med** 1989 Jul–Aug;5(4):201–6

The preventive medicine physician: a national study. Pearson RJ, et al. **Am J Prev Med** 1988 Sep–Oct;4(5):289–97

Personal characteristics, career plans, and specialty choices of medical students elected to Alpha Omega Alpha. Babbott D, et al. **Arch Intern Med** 1989 Mar;149(3):576–80

Smoking cessation counseling by resident physicians in internal medicine, family practice, and pediatrics. Kenney RD, et al. **Arch Intern Med** 1988 Nov;148(11):2469–73

Rheumatologic rehabilitation: a special interest for physiatrists? Nicholas JJ, et al. **Arch Phys Med Rehabil** 1988 Dec;69(12):1057

Sexual difficulties. A general practice speciality. Richardson JD. **Aust Fam Physician** 1989 Mar;18(3):200–4 (16 ref.)

Vocational training outcomes. Follow up of vocational training participants 1972–1984. Rowe L. **Aust Fam Physician** 1989 Jan;18(1):41–3

Recertification of specialists [letter] Brudenell M. **BMJ** 1989 Feb 18;298(6671):455

Characteristics of early adopters of end-user online searching in the health professions. Marshall JG. **Bull Med Libr Assoc** 1989 Jan;77(1):48–55

The infectious disease physician—future tense? McGowan JE Jr. **Bull N Y Acad Med** 1988 Jul–Aug;64(6):449–55

Exemplary family physicians and consultants: empirical definition of contemporary medical practice. Langley GR, et al. **Can Med Assoc J** 1989 Aug 15;141(4):301–7

Effect on ICU mortality of a full-time critical care specialist. Brown JJ, et al. **Chest** 1989 Jul;96(1):127–9

From the president: STFM. Reflections on generalism in medicine. Colwill JM. **Fam Med** 1988 Nov–Dec; 20(6):405–6, 462

Specialty choice by medical students: recent graduate follow-up survey at the University of Washington. Greer T, et al. **Fam Med** 1989 Mar–Apr;21(2):127–31

Specialist imperialism [letter] Volpintesta EJ. **Hosp Pract [Off]** 1989 Jun 15;24(6):16

Ob/gyns top other specialties in admissions. Koska MT. **Hospitals** 1988 Nov 5;62(21):106–7

Surgeons lead specialties in practice size. Koska MT. **Hospitals** 1989 Sep 20;63(18):74

Evolution of the infectious diseases practitioner. Ervin FR. **Infect Control Hosp Epidemiol** 1988 Nov;9(11):508–9

The private practice of infectious diseases—a current assessment. Morrison AJ Jr. **Infect Control Hosp Epidemiol** 1988 Oct;9(10):437–9

The advantages and disadvantages of subspecialization. Jansen RP. **Int J Gynaecol Obstet** 1988 Oct;27(2):293–6

Differences in attitudes toward patients among medical specialties. Roskin G, et al. **Int J Psychiatry Med** 1988; 18(3):223–33

A declaration of interdependence [editorial] Levitt SH. **Invest Radiol** 1988 Dec;23(12):940

Scholarship and the specialty of radiology. Maruyama Y. **Invest Radiol** 1989 Jul;24(7):577

Specialty differences in the treatment of asthma. Freund DA, et al. **J Allergy Clin Immunol** 1989 Sep;84(3):401–6

Consultation/referral patterns [letter] Heiligman RM. **J Am Board Fam Pract** 1988 Jul–Sep;1(3):224–5

Factors influencing career development: do men and women differ? Cohen M, et al. **J Am Med Wom Assoc** 1988 Sep–Oct;43(5):142, 147–54

The professional attitudes and practice characteristics of male and female specialists. Maheux B, et al. **J Am Med Wom Assoc** 1989 Sep–Oct;44(5):154–8

Who should do syringe liposculpturing? [editorial] Fournier PF. **J Dermatol Surg Oncol** 1988 Oct;14(10):1055–6

Toward the resolution of generalist–specialist boundary issues [editorial] Geyman JP. **J Fam Pract** 1989 Apr;28(4):399–400

Generalist–specialist boundary [letter] Volpintesta EJ. **J Fam Pract** 1989 Aug;29(2):135

Whither the specialist in infection? [letter] Maxwell S. **J Infect** 1989 Jul;19(1):75

Georgia Thoracic Society statement. Suggested guidelines for hospital privileges in ventilator management. **J Med Assoc Ga** 1988 Jul;77(7):577

Substance abuse units taught by four specialties in medical schools and residency programs. Davis AK, et al. **J Med Educ** 1988 Oct;63(10):739–46

Palliative medicine: on the way to becoming a recognized discipline. Calman KC. **J Palliat Care** 1988 May; 4(1–2):12–4

A generalist team with specialist consultants is preferable. Chekryn J, et al. **J Palliat Care** 1988 May;4(1–2):44–6

Palliative care: special and deserving of specialty status. Levy MH. **J Palliat Care** 1988 May;4(1–2):19–22

Defining palliative care as a specialty could do more harm than good! Librach SL. **J Palliat Care** 1988 May; 4(1–2):23–4

Is palliative care a discipline? Scott DH. **J Palliat Care** 1988 May;4(1–2):10–1

Palliative medicine: a new approach. Ventafridda V. **J Palliat Care** 1988 May;4(1–2):15

Career change: in quest of a controllable lifestyle. Schwartz RW, et al. **J Surg Res** 1989 Sep;47(3):189–92

The vascular war [letter] **JAMA** 1989 Jun 23–30; 261(24):3550–1

Choice of specialty: it's money that matters in the USA [letter] **JAMA** 1989 Sep 22–29;262(12):1630

Hepatology: a coming of age [editorial] Czaja AJ. **Mayo Clin Proc** 1989 Apr;64(4):473–4

Trauma—another subspecialty in anesthesiology? Heckel CG. **Md Med J** 1988 Sep;37(9):715–6

Careers in medicine [letter] Biggs JS. **Med J Aust** 1988 Nov 7;149(9):512

Physician income, expenses, and fees: how do you compare? Carter SD. **Minn Med** 1988 Dec;71(12):780–2

The O & G Society: an experiment in postgraduate education [letter] Brenner B, et al. **N Z Med J** 1989 Mar 8; 102(863):113–4

Referral by general practitioners to specialists in other board areas [letter] Holmes A. **N Z Med J** 1989 Mar 22; 102(864):141

Coping with persistent pain: a comparison of persistent pain sufferers in a specialty pain clinic and in a family practice clinic. Crook J, et al. **Pain** 1988 Aug;34(2):175–84

Pediatric emergency medicine: a developing subspecialty. Li M, et al. **Pediatrics** 1989 Aug;84(2):336–42

What is a specialist, anyway? [editorial] Todd JW. **Practitioner** 1987 Nov 9;231(1438):1423–4

Health education: the role and functions of the specialist and the generalist. Cleary HP. **Rev Saude Publica** 1988 Feb; 22(1):64–72

Dial-a-doc. Beardsley TM. **Sci Am** 1988 Mar;258(3):34–5

Intolerance of ambiguity in students entering medical school. DeForge BR, et al. **Soc Sci Med** 1989;28(8):869–74

Internal medicine as a specialty [letter] Harmon GE. **South Med J** 1989 Aug;82(8):1065

Specialization in neurosurgery. Hoffman HJ. **Surg Neurol** 1989 Aug;32(2):165

Symptoms and selection bias: the influence of selection towards specialist care on the relationship between symptoms and diagnoses. Knottnerus JA, et al. **Theor Med** 1989 Mar;10(1):67–81

Is there room for "transplantation medicine" as a medical discipline in its own right? Land W. **Transpl Int** 1988 Apr; 1(1):43–6

Consultation patterns in an urban hospital setting. Bienia R, et al. **Va Med** 1989 Sep;116(9):371–3

More on dismemberment [letter] Alexander E Jr. **West J Med** 1989 Aug;151(2):208–9

Theoretical surgery: a new specialty in operative medicine. Lorenz W, et al. **World J Surg** 1989 May–Jun;13(3):292–9

[Sexually transmitted diseases—a separate specialty?] Lomholt G. **Nord Med** 1989;104(8–9):232–3 (Eng. Abstr.) **(Dan)**

[Appropriate practice by specialists] Casparie AF. **Ned Tijdschr Geneeskd** 1989 Jan 28;133(4):151–2 **(Dut)**

[The discharge letter (letter)] Gerritsen RM. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):314 **(Dut)**

[A special consultation; a closer look at 'second opinion'] Holdrinet RS. **Ned Tijdschr Geneeskd** 1989 Jul 1; 133(26):1310–3 **(Dut)**

[The letter of discharge] van Beusekom JA, et al. **Ned Tijdschr Geneeskd** 1988 Dec 17;132(51):2315–6 **(Dut)**

[Clinical and theoretical research] Pyhtinen J. **Duodecim** 1989;105(10):956 **(Fin)**

[The training of anesthesiologists in Europe. The training of anesthesiologists and its duration] Heyde G, et al. **Cah Anesthesiol** 1988 Sep;36(5):395–8 **(Fre)**

[Information dissemination by specialty periodicals] Anschütz F. **Versicherungsmedizin** 1989 Mar 1;41(2):29 **(Ger)**

[Medical waste. I. Microbiologic studies of wastes of various specialties at a large and small hospital in comparison to housekeeping waste] Jager E, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):343–64 (Eng. Abstr.) **(Ger)**

[Clinical nutrition as a medical specialty] Berner Y. **Harefuah** 1989 Feb 15;116(4):218–20 (27 ref.) **(Heb)**

[Role perception of medical residents in relation to hospital size and specialty] Notzer N, et al. **Harefuah** 1989 Mar 15;116(6):328–30 (Eng. Abstr.) **(Heb)**

[A new model for specialist training in Norway. Is it possible to use the eye model for other specialties?] Aasved H. **Tidsskr Nor Laegeforen** 1988 Nov 20;108(32):2953–4 (Eng. Abstr.) **(Nor)**

[Consultation as a work form] Hjortdahl P, et al. **Tidsskr Nor Laegeforen** 1988 Oct 25;108(29B):2613–6 **(Nor)**

[The professional orientation of troop physicians] Dronov VN, et al. **Voen Med Zh** 1989 Mar;(3):18–20 **(Rus)**

[Organization of the work of specialist physicians in a district military hospital in a troop unit] Vissarionov VF.

Voen Med Zh 1988 Jun;(6):25–6 (Rus)
[The role and place of physiotherapy among other medical disciplines in the current stage of the development of higher medical education] Shnipas PA, et al.
Vopr Kurortol Fizioter Lech Fiz Kult 1988 May–Jun;(3):69–70 (Rus)
[Preference in the choice of medical specialties in 1982–1987] de la Fuente de Hoz L, et al. Gac Sanit 1988 Nov–Dec;2(9):276–80 (Eng. Abstr.) (Spa)
[The referral of patients from primary to specialized care] Llobera Cànaves J. Gac Sanit 1988 Nov–Dec;2(9):271–5 (Eng. Abstr.) (Spa)
[Informative guide for the resident physician in anesthesiology and resuscitation. Directors Board of the Spanish Society of Anaesthesiology–Resuscitation and Pain Therapy] Rev Esp Anestesiol Reanim 1989 Mar–Apr;36(2):98–101 (Spa)
[Characteristics of physician graduates from Chilean universities. Promotions 1978–1982. Part II. Employment and perceptions about improving, income and other relevant aspects of the professional activity] Ugalde H, et al. Rev Med Chil 1987 Dec;115(12):1195–204 (Eng. Abstr.) (Spa)
[Injured knees are not the only task of physicians dealing with sports medicine] Forsslund M. Lakartidningen 1989 May 24;86(21):2024 (Swe)

ECONOMICS

Will this man's formula revolutionize medicine? [interview by Michele Robinson] Hsiao WC. Hospitals 1988 Nov 20;62(22):67–9, 71–2
High-tech specialties generate top dollars. Koska MT. Hospitals 1988 Oct 20;62(20):72, 74
Dollar impact of RVS: AMA study. Koska MT. Hospitals 1989 Jan 5;63(1):61
Revenues per admission rise for all specialties. Koska MT. Hospitals 1988 Nov 20;62(22):74
Hsiao's relative value scale shifts MD incomes, but not utilization. Robinson ML. Hospitals 1988 Nov 5;62(21):22, 26
Young physicians and changes in medical practice characteristics between 1975 and 1987. Willke RJ, et al. Inquiry 1989 Spring;26(1):84–99
RBRVS debate continues [editorial] Alberts ME. Iowa Med 1989 Jun;79(6):291
RBRVS: four perspectives. Hammons T, et al. Iowa Med 1989 Jun;79(6):268–73
Relative cost differences among physicians' specialty practices. Becker ER, et al. JAMA 1988 Oct 28;260(16):2397–402
Cross-specialty linkage of resource-based relative value scales. Linking specialties by services and procedures of equal work. Braun P, et al. JAMA 1988 Oct 28;260(16):2390–6
Evaluation and management services in the Resource-Based Relative Value Scale. Braun P, et al. JAMA 1988 Oct 28;260(16):2409–17
A method for estimating the preservice and postservice work of physicians' services. Dunn D, et al. JAMA 1988 Oct 28;260(16):2371–8
Resource-based relative values. An overview. Hsiao WC, et al. JAMA 1988 Oct 28;260(16):2347–53
Measurement and analysis of intraservice work. Hsiao WC, et al. JAMA 1988 Oct 28;260(16):2361–70
Results, potential effects, and implementation issues of the Resource-Based Relative Value Scale. Hsiao WC, et al. JAMA 1988 Oct 28;260(16):2429–38
Extrapolation of measures of work for surveyed services to other services. Kelly NL, et al. JAMA 1988 Oct 28;260(16):2379–84

HISTORY

A historical perspective on sleep disorders medicine. Sassin JF, et al. Psychiatr Clin North Am 1987 Dec;10(4):517–23
[Soviet memorial medals dedicated to the scientists of the Academy of Medical Sciences of the USSR and its scientific institutions] Barshtein IuA.
Vestn Akad Med Nauk SSSR 1989;(2):87–95 (Rus)
[The training and utilization of gynecology specialists during World War II] Tsvelev IuV, et al. Voen Med Zh 1988 Sep;(9):73–4 (Rus)

MANPOWER

Research in choice of medical specialty: a review of the literature 1977–87. Mowbray RM. Aust N Z J Med 1989 Aug;19(4):389–99 (100 ref.)

ORGANIZATION & ADMINISTRATION

[The scientific organization of the work of a military medical specialist] Melekhov PA, et al. Voen Med Zh 1988 Sep;(9):13–4 (Rus)

STANDARDS

Licensure: competence to do what? [letter] Aitken GS. Can Med Assoc J 1989 Mar 1;140(5):498
Standards of medical care for patients with diabetes mellitus. Diabetes Care 1989 May;12(5):365–8
A bill of rights [editorial] Robbins DC. Diabetes Care 1989 May;12(5):371
Emergency medicine—a house that Jack is building? [letter] Taylor TK. Med J Aust 1989 Aug 21;151(4):235
Accreditation of specialty residency programmes in Canada. Maudsley RF. Med Teach 1989;11(1):93–8
The care of diabetic patients by ophthalmologists in New York State. Olsen CL, et al. Ophthalmology 1989 Jun;96(6):739–45
Recertification [editorial] Bingham HG.
Plast Reconstr Surg 1988 Dec;82(6):1074
[The need of specialized services for patients receiving ambulatory care] Pliasunov AK, et al. Sov Zdravookhr 1988;(12):23–5 (Eng. Abstr.) (Rus)

TRENDS

Further reflections on merging specialties [letter] Smith CW Jr. Am Fam Physician 1989 May;39(5):36, 48, 52
The new woman physician: her growing numbers are not yet represented in organized medicine. American Medical Association. Hawaii Med J 1988 Sep;47(9):444–5
Recent developments in pathology residency training programs [letter] Faix JD. Hum Pathol 1989 Sep;20(9):922
The prestige of dermatologists. Are they "last among equals"? Rosoff SM, et al. Int J Dermatol 1989 Jul–Aug;28(6):377–80
Concerns about fragmentation of adult cardiology [news] Conti CR. J Am Coll Cardiol 1989 Aug;14(2):532–3
Is clinical medicine being replaced by commercial medicine [editorial] Mehta PJ, et al. J Assoc Physicians India 1988 May;36(5):301
Should there be a merger to a single primary care specialty for the 21st century? An affirmative view. Perkoff GT. J Fam Pract 1989 Aug;29(2):185–8
Should there be a merger to a single primary care specialty for the 21st century? An opposing view. Scherger JE. J Fam Pract 1989 Aug;29(2):189–90
The public's health care paradigm is shifting: medicine must swing with it. Freymann JG. J Gen Intern Med 1989 Jul–Aug;4(4):313–9
The context of the paradigm shift [editorial] Sheps CG. J Gen Intern Med 1989 Jul–Aug;4(4):356–7
Whither the specialist in infection? [letter] Ellis ME. J Infect 1989 May;18(3):293–4
Whither the specialist in infection? Wilkins EG. J Infect 1989 Jan;18(1):25–7
Trends in evolution of specialty choice. Comparison of US medical school graduates in 1983 and 1987. Babbott D, et al. JAMA 1989 Apr 28;261(16):2367–73
Do radiologists control imaging studies? Survey results from 198 academic institutions. Levin DC, et al. Radiology 1989 Mar;170(3 Pt 1):879–81
Political trends in vascular and interventional radiology: a randomized survey. Smith TP, et al. Radiology 1989 Mar;170(3 Pt 2):941–4
Transfusion medicine. The maturing of a specialty. Chernoff AI. Transfusion 1988 Nov–Dec;28(6):509–10
On dismemberment of the corpus of medicine. Watts MS. West J Med 1989 May;150(5):578
[Use of the materialistic-dialectic method in original work exemplified by the relation of primary medical care and specialized management] Kober R.
Z Arztl Fortbild (Jena) 1989;83(6):327–9 (8 ref.) (Ger)
[Internal pathology in trauma—an important branch of internal medicine and military medicine] Gembitskiĭ EV. Klin Med (Mosk) 1989 May;67(5):3–9 (Rus)
[Nuclear cardiology—a continuously developing discipline] Rosfors S. Lakartidningen 1989 Jul 26;86(30–31):2589 (Swe)

SPECIALTIES, NURSING

Forensic nurse examiners [letter] Lynch VA. Am J Nurs 1989 Feb;89(2):176
Transplanted to Saudi Arabia. Nicholls PH. Am J Nurs 1989 Aug;89(8):1048–50
Too much togetherness can be stifling [editorial] Palmer PN. AORN J 1989 Feb;49(2):471–2
Belonging to a specialty nursing association is not enough [editorial] Palmer PN. AORN J 1989 Jun;49(6):1511–2
Graduate specialization in nursing informatics. Heller BR, et al. Comput Nurs 1989 Mar–Apr;7(2):68–77
Patient data management systems (PDMS). Computer technology for critical care nurses. Milholland K. Comput Nurs 1988 Nov–Dec;6(6):237–43
Specialty nursing. Boss BJ. J Neurosci Nurs 1989 Aug;21(4):213–5
Political power for neuroscience nurses. Hinkle J, et al. J Neurosci Nurs 1989 Feb;21(1):9–13
Specialization in adult health/medical surgical nursing: what does it mean? Kitchens EK, et al. J Nurs Educ 1989 May;28(5):221–6
Aerospace nursing: the new frontier. Polk-Walker GC. J Prof Nurs 1989 Jul–Aug;5(4):224–30
Rehabilitation. Nurs Clin North Am 1989 Mar;24(1):161–296
Community liaison nursing. An expanded role for the rehabilitation nurse. Giberstone T. Nurs Clin North Am 1989 Mar;24(1):165–70
Home health care and rehabilitation nursing. Jaffe KB. Nurs Clin North Am 1989 Mar;24(1):171–8
Direct Medicaid/Medicare reimbursement to NPs sought [news] Nurse Pract 1989 Apr;14(4):7
Newborn screening for sickle cell disease and other hemoglobinopathies. Nursing perspective. Earles A. Pediatrics 1989 May;83(5 Pt 2):901–2

MANPOWER

Seizing the initiative [editorial] Carlson RW. Heart Lung 1989 Sep;18(5):433–5

STANDARDS

The certification process. History and significance for addictions nursing practice. Nelson N.
Nurs Clin North Am 1989 Mar;24(1):151–9

TRENDS

Trauma nursing: past, present, and future. Trimble P, et al. Md Med J 1988 Jul;37(7):547–50

SPECIALTIES, SURGICAL

A census of patients waiting for treatment or consultation in surgical specialties in an English health region. Donaldson LJ, et al. Community Med 1989 Feb;11(1):13–20
Fascination with the mystery of new life in utero. Michejda M, et al. Fetal Ther 1986;1(1):3–7
Surgical insurrection [letter; comment] Robb J. Lancet 1989 Jan 14;1(8629):104. Comment on: Lancet 1988 Oct 15;2(8616):884–5

ECONOMICS

Resource-based relative values for invasive procedures performed by eight surgical specialties. Hsiao WC, et al. JAMA 1988 Oct 28;260(16):2418–24

HISTORY

Specialization, surgery, and the Sydney Bulletin. Egan B. Aust N Z J Surg 1988 Dec;58(12):983–7

STANDARDS

Structure of examinations of trainees in surgery [letter] Chalmers J. Ann R Coll Surg Engl 1989 Jul;71(4 Suppl):58–9
Surgical examinations [letter] Chisholm GD, et al. Lancet 1989 Jun 24;1(8652):1454

TRENDS

Visceral interchange. Jaffe BM. Am J Surg 1989 Jan;157(1):2–5
Fragmentation in general surgery. The case of head and neck surgery. Friedmann P. Arch Surg 1989 Sep;124(9):1013–4
New and still emerging field of fetal medicine [editorial] Koop CE. Fetal Ther 1986;1(1):1–2
[The status and means for the further improvement of specialized surgical care] Lisitsyn KM. Voen Med Zh 1988 Aug;(8):3–7 (Rus)

SPECIALTY BOARDS see under CERTIFICATION

SPECIES SPECIFICITY

Behavioral responses to novelty and structural variation of the hippocampus in mice. I. Quantitative-genetic analysis of behavior in the open-field. Crusio WE, et al.
Behav Brain Res 1989 Feb 1;32(1):75–80
Behavioral responses to novelty and structural variation of the hippocampus in mice. II. Multivariate genetic analysis. Crusio WE, et al. Behav Brain Res 1989 Feb 1;32(1):81–8
Differences in open-field behavior and in learning tasks between two rat strains differing in their reactivity to stressors. Gilad GM, et al. Behav Brain Res 1989 Feb 1;32(1):89–93
Adrenocorticoid receptor binding in the rat hippocampus: strain-dependent covariations with arousal and habituation to novelty. Patacchioli FR, et al. Behav Brain Res 1989 Jul 1;33(3):287–300
MR/Har and MNRA/Har Maudsley rat strains: differences in acoustic startle habituation. Commissaris RL, et al.
Behav Genet 1988 Nov;18(6):663–9
Inheritance of burrow building in Peromyscus. Dawson WD, et al. Behav Genet 1988 May;18(3):371–82
Substrain divergence in C3H inbred mice. Heimrich B, et al. Behav Genet 1988 Nov;18(6):671–4
Strain differences of the light-dark preference in inbred rats. Matsuo M, et al. Behav Genet 1989 May;19(3):457–66
Studies into the mechanisms of strain differences in hippocampus-related behaviors. Pick CG, et al.
Behav Genet 1989 Mar;19(2):315–25
Rats (Rattus norvegicus) selectively bred to differ in avoidance behavior also differ in response to novelty stress, in glycemic conditioning, and in reward contrast. Flaherty CF, et al. Behav Neural Biol 1989 Mar;51(2):145–64
Strain differences in the inhibition of infanticide in male mice (Mus musculus). Kennedy HF, et al. Behav Neural Biol 1988 Nov;50(3):349–53
Ontogeny of activity in inbred and random-bred strains of mice: effects of scopolamine. Bond NW.
Behav Neurosci 1988 Dec;102(6):887–93
Acoustic startle response in young and aging C57BL/6J and CBA/J mice. Parham K, et al. Behav Neurosci 1988 Dec;102(6):881–6
Induction of an appetite for sodium in rats that show no spontaneous preference for sodium chloride solution—the Fischer 344 strain. Rowland NE, et al. Behav Neurosci 1988 Dec;102(6):961–8
Stressor-provoked behavioral changes in six strains of mice.

Shanks N, et al. **Behav Neurosci** 1988 Dec;102(6):894–905
Cryptopsychobiology: the appearance, disappearance, and reappearance of a species-typical action pattern during early development. Smotherman WP, et al.
Behav Neurosci 1989 Apr;103(2):246–53
Inter-specific analysis of Drosophila alcohol dehydrogenase by an immunoenzymatic assay using monoclonal antibodies. Fibla J, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):638–46
Evolution of vertebrate motor systems for acoustic and electric communication: peripheral and central elements. Bass AH. **Brain Behav Evol** 1989;33(4):237–47 (74 ref.)
Size and shape of the cerebral cortex in mammals. II. The cortical volume. Hofman MA. **Brain Behav Evol** 1988; 32(1):17–26 (35 ref.)
Comparative study of brain morphology in ants. Jaffe K, et al. **Brain Behav Evol** 1989;33(1):25–33
The brain of the basking shark (Cetorhinus maximus). Kruska DC. **Brain Behav Evol** 1988;32(6):353–63
A cyto-architectonic description of the thalamus of the tammar wallaby, Macropus eugenii. Mayner L.
Brain Behav Evol 1989;33(6):342–55
Evolution of spinal nerve number in anuran larvae. Nishikawa K, et al. **Brain Behav Evol** 1989;33(1):15–24
Variation in neuromuscular activity during prey capture by trophic specialists and generalists (Pisces: Labridae). Sanderson SL. **Brain Behav Evol** 1988;32(5):257–68
Correlations of cerebral indices for 'extra' cortical parts and ecological variables in primates. Sawaguchi T.
Brain Behav Evol 1988;32(3):129–40
Central projections of the nervus terminalis in lampreys, lungfishes, and bichirs. von Bartheld CS, et al.
Brain Behav Evol 1988;32(3):151–9
Gross morphology and evolution of the mechanoreceptive lateral-line system in teleost fishes. Webb JF.
Brain Behav Evol 1989;33(1):34–53 (146 ref.)
Connections of the corpus cerebelli in the green sunfish and the common goldfish: a comparison of perciform and cypriniform teleosts. Wullimann MF, et al.
Brain Behav Evol 1988;32(5):293–316
The antibody response of normal mice to immunization with single-stranded DNA of various species origin. Gilkeson GS, et al. **Clin Immunol Immunopathol** 1989 Jun; 51(3):362–71
Alarm call responsivity of mallard ducklings: VIII. Interaction between developmental history and behavioral context. Blaich CF, et al. **Dev Psychobiol** 1989 Apr; 22(3):203–10
Development of antipredator responses in snakes: IV. Interspecific and intraspecific differences in habituation of defensive behavior. Herzog HA Jr, et al.
Dev Psychobiol 1989 Jul;22(5):489–508
Mouse strain variation in Ly-24 (Pgp-1) expression by peripheral T cells and thymocytes: implications for T cell differentiation. Lynch F, et al. **Eur J Immunol** 1989 Feb; 19(2):223–9
Species identification of blood and bloodstains by enzyme-linked immunosorbent assay (ELISA) using anti-human immunoglobulin kappa light chain monoclonal antibody. Yamamoto Y, et al. **Forensic Sci Int** 1989 Jan; 40(1):85–95
A blind reanalysis of a random subset of NCI bioassay studies: do rats predict mice? Sanathanan LP, et al.
Fundam Appl Toxicol 1989 Feb;12(2):191–201
The vessels of the stria vascularis: quantitative comparison of three rodent species. Carlisle L, et al. **Hear Res** 1989 Mar;38(1–2):111–7
Perinatal anti-androgen treatment and genotype affect the mesotelencephalic dopamine system and behavior in mice. Vadász C, et al. **Horm Behav** 1988 Dec;22(4):528–39
Identification of genus-specific epitopes on the outer membrane complexes of Chlamydia trachomatis and Chlamydia psittaci immunotypes 1 and 2. Mondesire RR, et al. **Infect Immun** 1989 Sep;57(9):2914–8
Endotoxic-lipopolysaccharide-specific binding proteins on lymphoid cells of various animal species: association with endotoxin susceptibility. Roeder DJ, et al. **Infect Immun** 1989 Apr;57(4):1054–8
Morphology of the cochlear nerve in Sprague-Dawley and brown Norway rats. Hoeffding V, et al.
J Acoust Soc Am 1988 Dec;84(6):2067–9
Detection and discrimination of synthetic English vowels by Old World monkeys (Cercopithecus, Macaca) and humans. Sinnott JM. **J Acoust Soc Am** 1989 Aug;86(2):557–65
Cytogenetic evidence for a fifth species within the taxon Anopheles dirus in Thailand. Baimai V, et al.
J Am Mosq Control Assoc 1988 Sep;4(3):333–8
Is the Horaana strain of the Culex pipiens group Culex pipiens pallens? Ishii T, et al. **J Am Mosq Control Assoc** 1988 Sep; 4(3):305–9
Host feeding patterns of Anopheles culicifacies species A and B. Joshi H, et al. **J Am Mosq Control Assoc** 1988 Sep; 4(3):248–51
Epidemiologic evidence for the development of serovar-specific immunity after gonococcal infection. Plummer FA, et al. **J Clin Invest** 1989 May;83(5):1472–6
Host preference of phlebotomine sandflies in and around Delhi. Mukhopadhyay AK, et al. **J Commun Dis** 1987 Dec; 19(4):408–11
Comparison of the physical characteristics of grooming in two species of macaques (Macaca nemestrina and M. radiata). Boccia ML. **J Comp Psychol** 1989 Jun; 103(2):177–83
CER suppression, passive-avoidance learning, and stress-induced suppression of drinking in the Syracuse high- and low-avoidance strains of rats (Rattus norvegicus). Brush FR, et al. **J Comp Psychol** 1988 Dec; 102(4):337–49
A developmental-genetic analysis of aggressive behavior in mice (Mus musculus): III. Behavioral mediation by heightened reactivity or immobility? Gariépy JL, et al.
J Comp Psychol 1988 Dec;102(4):392–9
A fundamental distinction in the analysis and interpretation of behavior. Hirsch J, et al. **J Comp Psychol** 1988 Dec; 102(4):372–7 (30 ref.)
Running-wheel avoidance learning in rats (Rattus norvegicus): effects of contingencies and comparisons of different strains. Iso H, et al. **J Comp Psychol** 1988 Dec; 102(4):350–71
Species-specific auditory preference of bobwhite quail chicks (Colinus virginianus) is altered by social interaction with siblings. Lickliter R. **J Comp Psychol** 1989 Sep;103(3):221–6
Song frequency as a cue for recognition of species and individuals in the field sparrow (Spizella pusilla). Nelson DA. **J Comp Psychol** 1989 Jun;103(2):171–6
Contextual conditioning and the control of copulatory behavior by species-specific sign stimuli in male Japanese quail. Domjan M, et al. **J Exp Psychol [Anim Behav]** 1989 Apr;15(2):147–53
Species-specific structural differences in the alpha 1 + alpha 2 domains determine the frequency of murine cytotoxic T cell precursors stimulated by human and murine class I molecules. Engelhard VH, et al. **J Immunol** 1988 Sep 15;141(6):1835–9
Murine natural suppressor cells in the newborn, in bone marrow, and after cyclophosphamide. Genetic variations and dependence on IFN-gamma. Maier T, et al.
J Immunol 1989 Jul 15;143(2):491–8
Transfusion induces blood donor-specific suppressor cells. Quigley RL, et al. **J Immunol** 1989 Jan 15;142(2):463–70
Tumor necrosis factor-alpha as a proliferative signal for an IL-2-dependent T cell line: strict species specificity of action. Ranges GE, et al. **J Immunol** 1989 Feb 15; 142(4):1203–8
Production of murine monoclonal antibodies against a liver-specific, species cross-reactive antigen in the liver-specific lipoprotein (LSP) preparation. McSorley CG, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):161–6
Analysis of guinea pig leukocyte antigens using interspecies T cell hybrids. Schäfer H, et al. **J Immunol Methods** 1989 Mar 31;118(2):169–77
Species variation in neutrophil biochemistry and function. Styrt B. **J Leukoc Biol** 1989 Jul;46(1):63–74 (143 ref.)
Alpha-2 adrenergic receptor binding in platelets and brains of nervous and normal pointer dogs. Klein E, et al.
J Psychiatr Res 1988;22(4):241–7
Visual cortical kindling in rabbit—consideration of difference between species. Jibiki I, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):345–50
Species-related differences of blood coagulation on polymer surfaces, evaluated by means of thrombelastography. Schulze T, et al. **Life Support Syst** 1983;1 Suppl 1:231–4
Species variation in transcription factor IIIA. Gaskins CJ, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):781–94
The butterfly fauna of Mona Island, Puerto Rico. Smith DS, et al. **P R Health Sci J** 1988 Aug;7(2):202–3
Self from nonself discrimination in single-celled eukaryotes. Luporini P, et al. **Parassitologia** 1986 Aug-Dec; 28(2–3):123–30
Species-specific effects of chronic nerve stimulation upon tibialis anterior muscle in mouse, rat, guinea pig, and rabbit. Simoneau JA, et al. **Pflugers Arch** 1988 Jul;412(1–2):86–92
The spontaneously hypertensive rat's preference for salted foods. Bertino M, et al. **Physiol Behav** 1988;44(3):285–9
Tail-pinch elicited eating in rats (Rattus norvegicus) and hamsters (Mesocricetus auratus). Meadows P, et al.
Physiol Behav 1988;43(4):429–33
Regulation of intakes of water and NaCl solutions in Fischer 344 rats: contrasts and comparisons between strains. Rowland NE, et al. **Physiol Behav** 1988;44(4–5):461–7
The effects of intradimensional and extradimensional shifts on visual discrimination learning in humans and non-human primates. Roberts AC, et al. **Q J Exp Psychol [B]** 1988 Nov;40(4):321–41
Component analyses differentiate between exploratory behaviour of spontaneously hypertensive rats and Wistar Kyoto rats in a two-compartment free-exploration open field. Moser MB, et al. **Scand J Psychol** 1988;29(3–4):200–6
Responsiveness and somatotopic organization of anterior parietal field 3b and adjoining cortex in newborn and infant monkeys. Krubitzer LA, et al. **Somatosens Mot Res** 1988; 6(2):179–205
Diagnostic restriction fragment patterns of DNA from the four isomorphic species of Anopheles dirus.
Yasothornsrikul S, et al.
Southeast Asian J Trop Med Public Health 1988 Dec; 19(4):703–8
Multivariate measures of similarity and niche overlap. Lu RP, et al. **Theor Popul Biol** 1989 Feb;35(1):1–21
Pregraft donor strain transfusions of blood and red blood cells fail to decrease the rate of rejection of rodent foetal pancreas allografts. Hibberd AD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2721–2
Comparison of CD4 and CD8 T cell reactivity in high-responder and low-responder strain combinations in the rat. McConnell MV, et al. **Transplant Proc** 1989 Apr; 21(2):3294–5
Abrogation or exacerbation of graft-versus-host disease by transfusing hematopoietic stem cell donors with recipient-specific blood. Muirhead DY. **Transplant Proc** 1988 Dec;20(6):1090–1
Characteristics of alloreactive rat T cell lines established from low and high rejecting orthotopic liver transplants. Ruiz P, et al. **Transplant Proc** 1989 Apr;21(2):3286–8
Specificity of pancreatic islet allograft rejection in mixed strain rat islet transplants. Sutton R, et al.
Transplant Proc 1989 Feb;21(1 Pt 3):2680–1
Comparison of rats with mice concerning the response of lipid metabolism to dietary fats. Beynen AC, et al.
Z Ernahrungswiss 1988 Sep;27(3):143–9
[Organization of the retina: structure/function relations and a species comparison of retinal ganglion cells] Peichl L. **Fortschr Ophthalmol** 1989;86(1):47–53 (Eng. Abstr.) (Ger)
[Morphologic characteristics of neuroglioform cells in the visual cortex of various mammals (rat, guinea pig, alticola and cat). A Golgi study] Hedlich A. **J Hirnforsch** 1988; 29(6):709–15 (Eng. Abstr.) (Ger)
[The natural occurrence of odd numbered fatty acids in animals and in the human] Diedrich M, et al.
Z Gesamte Hyg 1989 Feb;35(2):74–7 (Eng. Abstr.) (Ger)

SPECIESISM see **ANIMAL WELFARE**

SPECIFIC PATHOGEN FREE see under **GERM-FREE LIFE**

SPECIFICITY see **SENSITIVITY AND SPECIFICITY (EPIDEMIOLOGY)**

SPECIMEN HANDLING

Special report: perils, problems, and minimum requirements in shipping pathology slides. Rosen PP.
Am J Clin Pathol 1989 Mar;91(3):348–54
The influence of blood sample preparation on measured levels of morphine and its major metabolites. Hoskin PJ, et al.
Ann Clin Biochem 1989 Mar;26 (Pt 2):182–4
Heparin and suspected Sanfillipo syndrome [letter] Henderson MJ, et al. **Arch Dis Child** 1989 Apr;64(4):633–4
Effect of storage temperature on concentrations of digoxin-like immunoreactive factor(s) in plasma [letter] Krivoy N, et al. **Clin Chem** 1989 May;35(5):895–6
Simplified quantification of urinary protein excretion in children. Elises JS, et al. **Clin Nephrol** 1988 Oct;30(4):225–9
Decrease of urine creatinine in vitro in spinal cord injury patients. Kaw DG, et al. **Clin Nephrol** 1988 Oct;30(4):216–9
Problems in measuring human leucocyte cation content: effects of cell preparation and handling. Main J, et al.
Clin Sci 1989 Aug;77(2):157–60
Diagnostic efficacy of a nasotracheal protected specimen brush in patients with suspected bacterial pneumonia. Gong H Jr, et al. **Diagn Microbiol Infect Dis** 1988 Oct; 11(2):87–100
Recovery of Campylobacter from human faeces stored at 4 degrees C. Ladrón de Guevara C, et al.
Epidemiol Infect 1989 Apr;102(2):281–5
Semen manipulation: improved sperm recovery and function with a two-layer Percoll gradient. McClure RD, et al.
Fertil Steril 1989 May;51(5):874–7
A quality assurance program for human immunodeficiency virus seropositivity screening of dried-blood spot specimens. Hannon WH, et al.
Infect Control Hosp Epidemiol 1988 Aug;9(8):361
Quantitative analysis of wide-field specular microscopy. II. Precision of sampling from the central corneal endothelium. Hirst LW, et al. **Invest Ophthalmol Vis Sci** 1989 Sep; 30(9):1972–9
Fourth Symposium on Handling of Environmental and Biological Samples in Chromatography. Basle, April 27–29, 1988. Proceedings. **J Chromatogr** 1988 Dec 2;456(1):1–249
Sample preparation for biomedical analysis. McDowall RD.
J Chromatogr 1989 Aug 11;492:3–58 (161 ref.)
Transportation of gastric biopsies in a biphasic Campylobacter pylori media [letter] Westblom TU, et al.
J Clin Gastroenterol 1989 Aug;11(4):483–4
Recovery of Bordetella pertussis from nasopharyngeal swabs [letter] Hoppe JE. **J Clin Microbiol** 1989 Mar;27(3):595–6
Evaluation of human immunodeficiency virus seroprevalence in population surveys using pooled sera. Kline RL, et al.
J Clin Microbiol 1989 Jul;27(7):1449–52
Limited usefulness of quantitative culture of blood drawn through the device for diagnosis of intravascular-device-related bacteremia. Paya CV, et al.
J Clin Microbiol 1989 Jul;27(7):1431–3
Volume determination of TEM specimens containing particles or precipitates. Hare TM, et al.
J Electron Microsc Tech 1988 Sep;10(1):1–6
Bacterial contamination rates in voided urine collections in girls. Lohr JA, et al. **J Pediatr** 1989 Jan;114(1):91–3
Bacterial contamination rates for non-clean-catch and clean-catch midstream urine collections in uncircumcised boys. Saez-Llorens X, et al. **J Pediatr** 1989 Jan;114(1):93–5
Evaluation of the whole blood lymphocyte transformation assay for scrub typhus exposure: adaptability to field sample collection. Lim TS, et al. **Jpn J Med Sci Biol** 1988 Apr;

41(2):57–68
An evaluation of a new commercial urine transport system. Matthews SC. **Med Lab Sci** 1987 Oct;44(4):341–4
Impairment of autopsy histology by organ washing—a myth. Cotton DW, et al. **Med Sci Law** 1988 Oct;28(4):319–23
Pediatric specimen collection for chemical analysis. Rutledge JC. **Pediatr Clin North Am** 1989 Feb;36(1):37–47
Preparation and shipping of Onchocerca volvulus material. Walter RD. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:447
[Selection and preparation of connective tissue for isolation of their components for purposes of medical and scientific research] Klen R. **Cesk Farm** 1988 Jul;37(6):281–2 (Cze)
[Morphometry of the heterogenic distribution of tissue components] Löw O. **Gegenbaurs Morphol Jahrb** 1989; 135(1):133–6 (11 ref.) (Eng. Abstr.) (Ger)
[HIV diagnostic tests. Handling HIV in laboratories] Yoshihara N. **Rinsho Byori** 1988 Jul;Spec No 78:14–20 (Jpn)
[A lyophilizer of histologic samples] Krivobok GK, et al. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):75–7 (Rus)

ADVERSE EFFECTS

Transvaginal oocyte aspiration and pelvic infection [letter] Børlum KG, et al. **Lancet** 1989 Jul 1;2(8653):53

INSTRUMENTATION

A new glass device for semen collection. Skandhan KP. **Acta Eur Fertil** 1988 Nov–Dec;19(6):337–8
Cytological diagnosis of endometrial cancer and preinvasive endometrial lesions. A comparison of the Endo–Pap sampler with fractional curettage. Bistoletti P, et al. **Acta Obstet Gynecol Scand** 1988;67(4):343–5
The measurement of IgE in tear fluid: a comparison of collection by sponge or capillary. Tuft SJ, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):301–5
Diagnosis of nosocomial bacterial pneumonia in intubated patients undergoing ventilation: comparison of the usefulness of bronchoalveolar lavage and the protected specimen brush [published erratum appears in Am J Med 1989 Feb;86(2):258] Chastre J, et al. **Am J Med** 1988 Oct; 85(4):499–506
Nylon brush improves collection of cervical cytologic specimens. Dotters DJ, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):814–9
Clinical improvements of specific seminal deficiencies via intercourse with a seminal collection device versus masturbation. Zavos PM, et al. **Fertil Steril** 1989 Jan; 51(1):190–3
Detecting Chlamydia trachomatis by direct immunofluorescence using a Cytobrush sampling technique [published erratum appears in Genitourin Med 1989 Jan;65(1):62] Ciotti RA, et al. **Genitourin Med** 1988 Aug; 64(4):245–6
Specimen chambers for critical point drying for scanning electron microscopy. Hess WM, et al. **J Electron Microsc Tech** 1988 Apr;8(4):443–4
Containment system for the preparation of vitrified–hydrated virus specimens. Jeng TW, et al. **J Electron Microsc Tech** 1988 Apr;8(4):343–8
Two improvements of Polaron quick freezing slammer. Lupu F, et al. **J Electron Microsc Tech** 1987 Nov;7(3):235–6
Simple metabolic bed for paediatric use [letter] Puntis JW, et al. **Lancet** 1989 Apr 1;1(8640):722–3
Simplifying urine collection from infants and children without losing accuracy. Suri S. **MCN** 1988 Nov–Dec; 13(6):438–41
Rapid transfer of small volumes of serum into microplates. Rawlinson J, et al. **Med Lab Sci** 1989 Jan;46(1):86–8
Transcervical uterine cultures with a new endometrial suction curette: a comparison of three sampling methods in postpartum endometritis. Martens MG, et al. **Obstet Gynecol** 1989 Aug;74(2):273–6
Tips of the trade #9. An easy technique for obtaining cancellous bone graft from bulk sources. Mauerhan DR. **Orthop Rev** 1989 Feb;18(2):239–40
Evaluation of serum separator tubes as a mail transport device in primary health care. Sandberg S, et al. **Scand J Prim Health Care** 1988 Nov;6(4):251–4
[News about cytodiagnosis in the field of gynecologic oncology] Skalka R, et al. **Cesk Gynekol** 1988 Aug; 53(7):503–6 (Cze)
[Scheduled urine collection using disposable diapers with an acoustic signal emitter] Ballauff A, et al. **Klin Padiatr** 1988 Sep–Oct;200(5):414–8 (Eng. Abstr.) (Ger)

METHODS

The 'tape-method': a new and simple method for quantitative culture of Pityrosporum yeasts. Wikler JR, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):445–9
Colloid osmotic pressure of interstitial fluid in rat subcutis and skeletal muscle: comparison of various wick sampling techniques. Wiig H, et al. **Acta Physiol Scand** 1988 Jun; 133(2):167–75
Processing of skeletal remains. A medical examiner's perspective. Howard JD, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):258–64
Molecular diagnosis of genital human papillomavirus infection: comparison of two methods used to collect exfoliated cervical cells. Vermund SH, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):304–8
Urine sampling in ambulatory women: midstream clean-catch versus catheterization. Walter FG, et al. **Ann Emerg Med** 1989 Feb;18(2):166–72
Human microvessel endothelial cell isolation and vascular graft sodding in the operating room. Williams SK, et al. **Ann Vasc Surg** 1989 Apr;3(2):146–52
Use of bar code labels on collection tubes for specimen management in the clinical laboratory. Tilzer LL, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1200–2
Histopathologic examination of material from angioplasty balloon catheters used in vivo in human coronary arteries. Sprecher DL, et al. **Atherosclerosis** 1989 Feb; 75(2–3):237–44
Effects of preparative procedures and of cell activation on flow of white cells through micropore filters. Nash GB, et al. **Br J Haematol** 1988 Oct;70(2):171–6
A technique for collecting saliva from the cattle-tick Boophilus microplus (Canestrini, 1887) using chemical stimulation. Environmental and temporal influences on secretion yield. Bechara GH, et al. **Braz J Med Biol Res** 1988;21(3):479–84
Correlating Streptococcus mutans with dental caries in young children using a clinically applicable microbiological method. Weinberger SJ, et al. **Caries Res** 1989;23(5):385–8
Effect of time, temperature and anticoagulants on in vitro complement activation: consequences for collection and preservation of samples to be examined for complement activation. Mollnes TE, et al. **Clin Exp Immunol** 1988 Sep; 73(3):484–8
Collecting urine for microalbumin assay. Hutchison AS, et al. **Diabetic Med** 1988 Sep;5(6):527–32 (57 ref.)
Sampling methods for monitoring changes in gonococcal populations. Bindayna KM, et al. **Epidemiol Infect** 1989 Aug;103(1):203–9
Methods for isolation of Bordetella pertussis from patients with whooping cough. Hoppe JE. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):616–20 (29 ref.)
Gram stain and culture of morning and 24 h sputum in the diagnosis of bacterial exacerbation of chronic bronchitis: a dogma disputed. Medici TC, et al. **Eur Respir J** 1988 Dec;1(10):923–8
New isolation method of retina and interphotoreceptor matrix. Uehara F, et al. **Exp Eye Res** 1989 Aug;49(2):305–9
Influence of storing urogenital specimens at –20 degrees C before testing by enzyme amplified immunoassay (IDEIA) to detect Chlamydia trachomatis antigen. Bygdeman S, et al. **Genitourin Med** 1989 Apr;65(2):92–5
Papanicolaou smear [letter] Ruffin MT 4th. **J Am Board Fam Pract** 1988 Jul–Sep;1(3):225–6
Sensitive, selective, and rapid procedure for the identification of ecgonine methyl ester in urine [letter] Vasiliades J. **J Anal Toxicol** 1989 Mar–Apr;13(2):127
Improved procedure for surface analysis of explanted intraocular lenses by combined light microscopy and scanning electron microscopy. Stacholy J, et al. **J Cataract Refract Surg** 1989 Mar;15(2):215–7
Experience with the Salivette and some findings concerning its applicability for the determination of salivary components. Arglebe C. **J Clin Chem Clin Biochem** 1989 Apr;27(4):247–8
Procedures for saliva sampling. Haeckel R. **J Clin Chem Clin Biochem** 1989 Apr;27(4):246–7
Nasopharyngeal swabs and nasopharyngeal aspirates equally effective for the diagnosis of viral respiratory disease in hospitalized children. Frayha H, et al. **J Clin Microbiol** 1989 Jun;27(6):1387–9
Effect of differences in specimen processing and passage technique on recovery of Chlamydia trachomatis. Jones RB, et al. **J Clin Microbiol** 1989 May;27(5):894–8
Efficacy of duplicate genital specimens and repeated testing for confirming positive results for chlamydiazyme detection of Chlamydia trachomatis antigen. Kellogg JA, et al. **J Clin Microbiol** 1989 Jun;27(6):1218–21
Cytobrush in collection of cervical specimens for detection of Chlamydia trachomatis. Moncada J, et al. **J Clin Microbiol** 1989 Aug;27(8):1863–6
Potential transport medium for Campylobacter pylori [letter] Owen RJ, et al. **J Clin Pathol** 1988 Dec;41(12):1337–8
The effect of sequential sampling on crevicular fluid volume and enzyme activity. Lamster IB, et al. **J Clin Periodontol** 1989 Apr;16(4):252–8
Controlled environment vitrification system: an improved sample preparation technique. Bellare JR, et al. **J Electron Microsc Tech** 1988 Sep;10(1):87–111
Spin drying for scanning electron microscopy sample preparation. Doucet RG, et al. **J Electron Microsc Tech** 1989 May;12(1):58–9
The use of specimen tilt in transmission electron microscopy of the central nervous system. Milroy AM, et al. **J Electron Microsc Tech** 1988 Sep;10(1):67–76
Artifacts introduced by ion milling in Al–Li–Cu alloys. Singh AK, et al. **J Electron Microsc Tech** 1988 Apr;8(4):355–61
Sample preparation technique for transmission electron microscopy of thin films on sapphire. Summerville MK, et al. **J Electron Microsc Tech** 1989 May;12(1):56–7
Testosterone concentrations in testicular interstitial fluid collected with a push–pull cannula or by drip–collection from adult rats given testosterone or aminoglutethimide. Maddocks S, et al. **J Endocrinol** 1989 May;121(2):303–9
Simple samples for diagnosing influenza [letter] Westmoreland D, et al. **J Infect** 1989 Mar;18(2):196–8
Factors influencing the intestinal intubation in Thai adult volunteers. Pitisuttithum P, et al. **J Med Assoc Thai** 1988 Jul;71(7):351–4
Collection of urine specimens in general practice: to clean or not to clean? Bradbury SM. **J R Coll Gen Pract** 1988 Aug;38(313):363–5
Factitious microcalcifications in breast biopsy material: laboratory-induced error by use of tattoo powder for specimen mammography. Lager DJ, et al. **J Surg Oncol** 1989 Apr;40(4):281–2
A simple method of canine pancreatic islet isolation and intrahepatic transplantation. van der Vliet JA, et al. **J Surg Res** 1989 Feb;46(2):129–34
Anatomy teaching may benefit from combination of tissue preparation, imaging, animation [news] Marwick C. **JAMA** 1988 Nov 18;260(19):2779, 2783
Non-invasive sampling method for detecting Chlamydia trachomatis [letter] Caul EO, et al. **Lancet** 1988 Nov 26; 2(8622):1246–7
Effect on hormone levels of heat treatment for inactivation of human immunodeficiency virus in plasma. Middleton DG. **Med Lab Sci** 1988 Jan;45(1):94–6
Posturination time and specific gravity in infants' diapers. Stebor AD. **Nurs Res** 1989 Jul–Aug;38(4):244–5
A new method for collecting urine directly from the ureter in conscious unrestrained rats. Horst PJ, et al. **Renal Physiol Biochem** 1988 Nov–Dec;11(6):325–31
Aspiration cytology in kidney transplants: the method of processing affects the diagnosis. Harfmann P, et al. **Transplant Proc** 1989 Aug;21(4):3728–9
A method for mounting specimens for scanning electron microscopy. Konig G. **Trends Genet** 1988 Sep;4(9):270
Small collection techniques in the channel catfish during prolonged pharmacokinetic experiments. Kitzman JV, et al. **Vet Hum Toxicol** 1988;30 Suppl 1:12–3
The morphology of the denuded epidermal basal cell layer of the hairless mouse after different preparation methods. A scanning and transmission electron microscopical study. Glasø M, et al. **Virchows Arch [B]** 1989;57(3):181–94
[Principles of handling frozen material in biopsy pathology] Capek P, et al. **Cesk Patol** 1989 Mar;25(1):61–3 (Cze)
[Manipulation of conjunctival grafts: the cardboard method] George JL, et al. **Bull Soc Ophtalmol Fr** 1988 Mar; 88(3):389–90 (Fre)
[Crevicular fluid. II: Collection] Tessier JF, et al. **Can Dent Assoc J** 1988 Aug;54(8):611–5 (55 ref.) (Eng. Abstr.) (Fre)
[Histologic study of Campylobacter pylori: role of fixation (letter)] Flejou JF, et al. **Gastroenterol Clin Biol** 1989 Mar; 13(3):316–7 (Fre)
[The collection of sperm in men unable to ejaculate] Bustillo M. **Rev Fr Gynecol Obstet** 1988 Oct;83(10):593–5 (Eng. Abstr.) (Fre)
[Technical artifacts in biopsy of the oral cavity. I. Clinical and histopathologic aspects] Lolli R, et al. **Minerva Stomatol** 1989 Jan;38(1):37–45 (Eng. Abstr.) (Ita)
[Histologic specimen preparation methods for eyeballs and the labyrinth] Mizoguchi H, et al. **Kaibogaku Zasshi** 1989 Apr;64(2):164–71 (Jpn)
[Endomyocardial biopsy: technique and processing of specimen] Sekiguchi M, et al. **Kokyu To Junkan** 1988 Nov; 36(11):1155–63 (Jpn)
[Use of formalin-fixed specimens and paraffin blocks in electron microscopic studies of breast tumors] Mroczka B, et al. **Patol Pol** 1988 Apr–Jun;39(2):143–8 (Pol)
[Determining the optimal technics of fixing breast tumor specimens for electron microscopic studies] Mroczka B, et al. **Patol Pol** 1988 Apr–Jun;39(2):136–42 (Eng. Abstr.) (Pol)
[Lateral cervical puncture for myelography and cerebrospinal fluid collection: technical note] Rosaitti SL, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):397–400 (Eng. Abstr.) (Por)
[A method of fixation of the membranous labyrinth for microscopic studies] Burak GG. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):78–81 (Rus)
[Preparation of histotopographic goiter sections and endometrium scrapes for relevant instant diagnosis] Golubburt NN, et al. **Arkh Patol** 1989;51(5):74–5 (Eng. Abstr.) (Rus)
[A procedure for producing film preparations of serous mesothelial integument for histologic examination] Karpovskiĭ AB. **Arkh Patol** 1989;51(5):72–3 (Eng. Abstr.) (Rus)
[A transportation medium for obligate anaerobic bacteria based on meat peptone broth] Pashkov EP, et al. **Lab Delo** 1988;(8):67–9 (Eng. Abstr.) (Rus)
[The effect of the method of collecting lacrimal fluid on its composition] Terekhina NA, et al. **Lab Delo** 1989;(6):27–30 (Eng. Abstr.) (Rus)
[A comparative assessment of sampling methods for pinworm eggs from household objects] Pavlova NG, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):88–9 (Eng. Abstr.) (Rus)

STANDARDS

Is it mandatory to examine synovial fluids promptly after arthrocentesis? Kerolous G, et al. **Arthritis Rheum** 1989 Mar;32(3):271–8
Approved recommendation (1988) on the theory of reference values. Part 3. Preparation of individuals and collection of specimens for the production of reference values.

Solberg HE, et al. **Clin Chim Acta** 1988 Oct 31;177(3):S3–11
Storage of breath H2 in vacutainer and gaseous contamination [letter] Zheng JJ, et al. **Gastroenterology** 1989 Mar;96(3):958–9
Handling blood and body fluids in your clinical laboratory [news] **J Okla State Med Assoc** 1988 Oct;81(10):639
Screening for breast cancer [letter] Sinclair RA, et al. **Lancet** 1988 Nov 19;2(8621):1198
[Random sample planning in morphometry] Rother P, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):121–4 (10 ref.) (Eng. Abstr.) (Ger)
[Urinary enzyme diagnosis—a suggestion for the definition of preanalytic conditions] Schulze G, et al. **Z Med Lab Diagn** 1988;29(7):381–6 (Eng. Abstr.) (Ger)
[Testing specimens of Soviet filter paper for the transport of material relevant to studies on the detection of beta-hemolytic streptococci] Eshchina AS, et al. **Lab Delo** 1988;(7):57–60 (Eng. Abstr.) (Rus)

VETERINARY

Escherichia coli infection or contamination? [letter] Biberstein EL, et al. **Am J Vet Res** 1988 Sep;49(9):1645
Collection of bronchoalveolar lavage fluid in cats, using an endotracheal tube. Hawkins EC, et al. **Am J Vet Res** 1989 Jun;50(6):855–9
Urine cup for collection of urine from cows [published erratum appears in J Dairy Sci 1988 Dec;71(12):3595] Fellner V, et al. **J Dairy Sci** 1988 Aug;71(8):2250–5
A technique for chronic catheterization of the cisterna magna in rabbits. Glue P, et al. **Lab Anim Sci** 1988 Dec;38(6):740–2
The effect of handling methods on subsequent plasma progesterone levels in sheep. Mukasa-Mugerwa E, et al. **Vet Res Commun** 1989;13(1):75–9
Application of a new, simple method for quantitative collection of 24-hour urines in small laboratory animals: determination of basal excretion of proteins, creatinine, urea, electrolytes, and of free steroids. Fenske M. **Z Versuchstierkd** 1989;32(2):65–70
An improved technique for sampling bronchial secretions from normal calves. Hajer R, et al. **Zentralbl Veterinarmed [A]** 1988 Dec;35(10):739–43
[Comparison of 4 technics for collecting bacteria on cement, asbestos-cement and steel in hen-breeding buildings] Maris P. **Ann Rech Vet** 1988;19(3):181–5 (Eng. Abstr.) (Fre)
[Advice as to the safety precautions for handling infectious material in a veterinary practice laboratory] Böhm R, et al. **Tierarztl Prax** 1988;16(4):431–5 (8 ref.) (Eng. Abstr.) (Ger)
[A model of a rat cage for the collection of urine free of fecal matter] Wesslau C, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(1):59–61 (Eng. Abstr.) (Ger)

SPECT see **TOMOGRAPHY, EMISSION COMPUTED**

SPECTACLES see **EYEGLASSES**

SPECTINOMYCIN see **ACTINOSPECTACIN**

SPECTRIN

The influence of experimental conditions on the spectrin-hemoglobin interaction. Vincentelli J, et al. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):63–6
Contributions of the beta-subunit to spectrin structure and function. Coleman TR, et al. **Cell Motil Cytoskeleton** 1989; 12(4):248–63
Spectrin and related molecules. Goodman SR, et al. **CRC Crit Rev Biochem** 1988;23(2):171–234 (389 ref.)
Structural basis for the high activation energy of spectrin self-association. Morris SA, et al. **FEBS Lett** 1989 Feb 13; 244(1):68–70
Primary structure of the brain alpha-spectrin [published erratum appears in J Cell Biol 1989 Mar;108(3):following 1175] Wasenius VM, et al. **J Cell Biol** 1989 Jan;108(1):79–93
Quantitative detection of rapid motions in spectrin by NMR. Fung LW, et al. **Life Sci** 1989;44(11):735–40

ANALYSIS

Actin-associated proteins and fibronectin in the fetal human inner ear. Anniko M, et al. **Am J Otolaryngol** 1989 Mar-Apr;10(2):99–109
The detection of a spectrin-like protein in Trypanosoma cruzi with a polyclonal antibody. Alcina A, et al. **Cell Biol Int Rep** 1988 Nov;12(11):979–85
Functional diversity among spectrin isoforms. Coleman TR, et al. **Cell Motil Cytoskeleton** 1989;12(4):225–47 (249 ref.)
Immunocytochemical studies of spectrin in hamster cardiac tissue. Messina DA, et al. **Cell Motil Cytoskeleton** 1989; 12(3):139–49
The cortical actin-membrane cytoskeleton of unfertilized sea urchin eggs: analysis of the spatial organization and relationship of filamentous actin, nonfilamentous actin, and egg spectrin. Bonder EM, et al. **Dev Biol** 1989 Aug; 134(2):327–41
Drosophila spectrin: the membrane skeleton during embryogenesis. Pesacreta TC, et al. **J Cell Biol** 1989 May; 108(5):1697–709
Spectrin-like proteins in the paraflagellar rod structure of Trypanosoma brucei. Schneider A, et al. **J Cell Sci** 1988 Jun;90 (Pt 2):307–15
Co-localization of the myelin-associated glycoprotein and the microfilament components, F-actin and spectrin, in Schwann cells of myelinated nerve fibres. Trapp BD, et al. **J Neurocytol** 1989 Feb;18(1):47–60
Distribution of analogues of spectrin, fodrin and protein 4.1 in rat spermatogenic cells. De Cesaris P, et al. **Prog Clin Biol Res** 1989;296:149–52
Presence of brain spectrin in dendrites of mammalian brain: technical factors involved in immunocytochemical detection. Ivy GO, et al. **Synapse** 1988;2(3):329–33
[Interactions between subunits of the erythrocyte spectrin molecule—heat dissociation of the spectrin molecule] Yoshino H. **Rinsho Byori** 1987 Nov;Spec No 74:18–26 (26 ref.) (Jpn)

DEFICIENCY

Impaired echinocytic transformation of ankyrin- and spectrin-deficient erythrocytes in mice. Reinhart WH, et al. **Am J Hematol** 1988 Dec;29(4):195–200

DRUG EFFECTS

The effects of p-mercuribenzenesulfonate on purified spectrin and actin. Clark SJ, et al. **Biochim Biophys Acta** 1988 Nov 23;957(2):243–53

GENETICS

Severe hemolysis and red cell fragmentation caused by the combination of a spectrin mutation with a thrombotic microangiopathy. Jarolim P, et al. **Am J Hematol** 1989 Sep; 32(1):50–6
Spectrin-alpha I/61: a new structural variant of alpha-spectrin in a double-heterozygous form of hereditary pyropoikilocytosis. Lawler J, et al. **Blood** 1988 Oct; 72(4):1412–5
Sp alpha I/78: a mutation of the alpha I spectrin domain in a white kindred with HE and HPP phenotypes. Lecomte MC, et al. **Blood** 1989 Aug 15;74(3):1126–33
Spectrin Tunis (Sp alpha I/78), an elliptocytogenic variant, is due to the CGG——TGG codon change (Arg——Trp) at position 35 of the alpha I domain. Morlé L, et al. **Blood** 1989 Aug 1;74(2):828–32
Molecular basis of Sp alpha I/65 hereditary elliptocytosis in North Africa: insertion of a TTG triplet between codons 147 and 149 in the alpha-spectrin gene from five unrelated families. Roux AF, et al. **Blood** 1989 Jun;73(8):2196–201
The B subunit of coagulation factor XIII is linked to renin and the Duffy blood group to alpha-spectrin on human chromosome 1. Griffiths LR, et al. **Hum Hered** 1989; 39(2):107–9
Physical mapping of a family of interferon-activated genes, serum amyloid P-component, and alpha-spectrin on mouse chromosome 1. Kingsmore SF, et al. **Immunogenetics** 1989; 30(3):169–74
Presence of erythroid and nonerythroid spectrin transcripts in human lens and cerebellum. Yoon SH, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1860–6
Cloning and analysis of cDNA clones for rat kidney alpha-spectrin. Hong WJ, et al. **J Biol Chem** 1989 Aug 5;264(22):12758–64
Malaria, hereditary elliptocytosis, and pyropoikilocytosis [letter] Facer CA. **Lancet** 1989 Apr 22;1(8643):897
Xba I polymorphisms in the 5' region of human erythrocyte alpha spectrin gene (Spna). Kotula L, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10950
Chromosomal location of three spectrin genes: relationship to the inherited hemolytic anemias of mouse and man. Birkenmeier CS, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8121–5
Interferons as gene activators: a cluster of six interferon-activatable genes is linked to the erythroid alpha-spectrin locus on murine chromosome 1. Opdenakker G, et al. **Virology** 1989 Aug;171(2):568–78
[Research on genetic abnormality in the hemolytic form of hereditary elliptocytosis with homozygosity for the spectrin alpha I/74 variant] Garbarz M, et al. **C R Acad Sci [III]** 1989;308(2):43–8 (Eng. Abstr.) (Fre)

IMMUNOLOGY

Autoantibodies against spectrin in rats. Berti G, et al. **Boll Soc Ital Biol Sper** 1989 Jan;65(1):29–36
Spectrin autoantibodies in normal human serum and in polyclonal blood grouping sera. Ballas SK. **Br J Haematol** 1989 Jan;71(1):137–9

METABOLISM

Proteolysis of spectrin by trypsin and pronase in the presence of phospholipid suspensions. Sikorski AF, et al. **Acta Biochim Pol** 1988;35(2):71–81
Interaction of spectrin with hydrophobic agaroses. Sikorski AF. **Acta Biochim Pol** 1988;35(1):19–27
Effect of erythrocyte spectrin on actin self-association. Tilley L, et al. **Aust J Biol Sci** 1987;40(1):27–36
Calcium-induced cleavage and breakdown of spectrin in the rat lens. Truscott RJ, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1472–7
Reaction of Se with SH groups in spectrin is involved in the stabilization of erythrocyte membrane skeleton. Yang FY, et al. **Biochem Int** 1989 Jun;18(6):1085–91
Mechanism of spectrin degradation induced by phenylhydrazine in intact human erythrocytes. Arduini A, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):1–6
The spectrin-actin junction of erythrocyte membrane skeletons. Bennett V. **Biochim Biophys Acta** 1989 Jan 18; 988(1):107–21 (153 ref.)
Association of hemin with protein 4.1 as compared to spectrin and actin. Solar I, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):199–204
The spectrin network as a barrier to lateral diffusion in erythrocytes. A percolation analysis. Saxton MJ. **Biophys J** 1989 Jan;55(1):21–8
Lesions of entorhinal cortex produce a calpain-mediated degradation of brain spectrin in dentate gyrus. II. Anatomical studies. Ivy G, et al. **Brain Res** 1988 Sep 6; 459(2):233–40
Stimulation of NMDA receptors induces proteolysis of spectrin in hippocampus. Seubert P, et al. **Brain Res** 1988 Sep 13;460(1):189–94
Ischemia triggers NMDA receptor-linked cytoskeletal proteolysis in hippocampus. Seubert P, et al. **Brain Res** 1989 Jul 17;492(1–2):366–70
Lesions of entorhinal cortex produce a calpain-mediated degradation of brain spectrin in dentate gyrus. I. Biochemical studies. Seubert P, et al. **Brain Res** 1988 Sep 6;459(2):226–32
Brain spectrin(240/235) and brain spectrin(240/235E): conservation of structure and location within mammalian neural tissue. Riederer BM, et al. **Brain Res Bull** 1988 Oct; 21(4):607–16
Activation induces a rapid reorganization of spectrin in lymphocytes. Lee JK, et al. **Cell** 1988 Dec 2;55(5):807–16
Weak interaction of spectrin with phosphatidylcholine-phosphatidylserine multilayers: a 2H and 31P NMR study. Bitbol M, et al. **FEBS Lett** 1989 Feb 13;244(1):217–22
Characterization of the calmodulin-binding site of nonerythroid alpha-spectrin. Recombinant protein and model peptide studies. Leto TL, et al. **J Biol Chem** 1989 Apr 5;264(10):5826–30
Calcium/calmodulin inhibits direct binding of spectrin to synaptosomal membranes. Steiner JP, et al. **J Biol Chem** 1989 Feb 15;264(5):2783–91
Ankyrin-independent membrane protein-binding sites for brain and erythrocyte spectrin. Steiner JP, et al. **J Biol Chem** 1988 Oct 5;263(28):14417–25
An unusual beta-spectrin associated with clustered acetylcholine receptors. Bloch RJ, et al. **J Cell Biol** 1989 Feb;108(2):481–93
Rapid phosphorylation and reorganization of ezrin and spectrin accompany morphological changes induced in A-431 cells by epidermal growth factor. Bretscher A. **J Cell Biol** 1989 Mar;108(3):921–30
Membrane-cytoskeleton dynamics in rat parietal cells: mobilization of actin and spectrin upon stimulation of gastric acid secretion. Mercier F, et al. **J Cell Biol** 1989 Feb;108(2):441–53
Intrahippocampal colchicine injection results in spectrin proteolysis. Seubert P, et al. **Neuroscience** 1989; 31(1):195–202
Na,K-ATPase co-distributes with ankyrin and spectrin in renal tubular epithelial cells. Kashgarian M, et al. **Prog Clin Biol Res** 1988;268B:245–50
Calmodulin stimulates the degradation of brain spectrin by calpain. Seubert P, et al. **Synapse** 1987;1(1):20–4

PHYSIOLOGY

Asymmetric distribution of phospholipids in spectrin-poor erythrocyte vesicles. Calvez JY, et al. **Biochemistry** 1988 Jul 26;27(15):5666–70
[Possible role of spectrin in thermohemolysis of erythrocytes] Iamalkina IV, et al. **Biofizika** 1988 Jul-Aug;33(4):626–8 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Abnormal erythrocyte membrane cytoskeleton structure in chronic myelogenous leukaemia. Basu J, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):121–6

SPECTROFLUOROMETRY see **SPECTROMETRY, FLUORESCENCE**

SPECTROMETRY, FLUORESCENCE

Fluorescence derivatization in high-performance liquid chromatography. Ohkura Y, et al. **Adv Chromatogr** 1989; 29:221–58 (182 ref.)
Spectral diagnosis of atherosclerosis using an optical fiber laser catheter. Richards-Kortum R, et al. **Am Heart J** 1989 Aug;118(2):381–91
Bioanalytical applications of fluorescence spectroscopy. Bright FV. **Anal Chem** 1988 Sep 15;60(18):1031A–1039A (30 ref.)
A simple quantitative method of estimation of cell-intactness based on ethidium bromide fluorescence. Dey CS, et al. **Biochem Int** 1988 Aug;17(2):367–74
Interaction of diacylglycerols with phosphatidylcholine vesicles as studied by differential scanning calorimetry and fluorescence probe depolarization. Ortiz A, et al. **Biochemistry** 1988 Dec 13;27(25):9030–6
Fluorescence and mass spectral evidence for the formation of benzo[a]pyrene anti-diol-epoxide-DNA and -hemoglobin adducts in humans. Weston A, et al.

Carcinogenesis 1989 Feb;10(2):251–7

A second generation global analysis program for the recovery of complex inhomogeneous fluorescence decay kinetics. Beechem JM. **Chem Phys Lipids** 1989 Jun;50(3–4):237–51

Fluorescence correlation spectroscopy for detecting submicroscopic clusters of fluorescent molecules in membranes. Palmer AG 3d, et al. **Chem Phys Lipids** 1989 Jun;50(3–4):253–70

Time-resolved immunofluorometry of follitropin in serum. Khosravi MJ, et al. **Clin Chem** 1989 Jan;35(1):181

Enhancement of sensitivity of fluorescence line narrowing spectrometry for detection of carcinogen–DNA adducts. Jankowiak R, et al. **IARC Sci Publ** 1988;(89):372–7

International Union of Pure and Applied Chemistry Organic Chemistry Division Commission on Photochemistry. Reference materials for fluorescence measurement. Eaton DF. **J Photochem Photobiol [B]** 1988 Dec;2(4):523–31

Gigahertz frequency–domain fluorometry: resolution of complex decays, picosecond processes and future developments. Lakowicz JR, et al. **J Photochem Photobiol –B–** 1988 Nov;2(3):295–311 (45 ref.)

Change in laser–induced arterial fluorescence during ablation of atherosclerotic plague. Cutruzzola FW, et al. **Lasers Surg Med** 1989;9(2):109–116

Microspectrofluorometric evaluation of single– and double–stranded DNA in short–term cultured human glioma cells. Itoh Y, et al. **Neurol Res** 1989 Mar;11(1):14–6

[Chemofluorometry in the differential diagnosis of pulmonary tuberculosis] Autenshlius AI, et al. **Probl Tuberk** 1988; (7):25–9 (Eng. Abstr.) **(Rus)**

[Comparison of spectrophotometric and fluorimetric methods of determination of galactocerebroside–beta–D–galactosidase in leukocytes] Gusina NB, et al. **Vopr Med Khim** 1988 Jul–Aug; 34(4):129–31 (Eng. Abstr.) **(Rus)**

INSTRUMENTATION

An integrating averager of microspectrofluorometric signals. Dwyer TM. **Brain Res Bull** 1989 Mar;22(3):583–90

The use of Fura–2 to estimate myoplasmic [Ca2+] in human skeletal muscle. Iaizzo PA, et al. **Cell Calcium** 1989 Apr; 10(3):151–8

High–performance optical filters for fluorescence analysis. Marcus DA. **Cell Motil Cytoskeleton** 1988;10(1–2):62–70

New method for spectrofluorometer monochromator wavelength calibration. Paladini AA, et al. **J Biochem Biophys Methods** 1988 Sep;17(1):61–6

Simple modification of a commercial flow cytometer to triple laser excitation. Simultaneous five–color fluorescence detection. Woronicz JD, et al. **J Immunol Methods** 1989 Jun 21;120(2):291–6

Subattomole amino acid analysis by capillary zone electrophoresis and laser–induced fluorescence. Cheng YF, et al. **Science** 1988 Oct 28;242(4878):562–4

[Natural fluorescence of nuclear cataract lenses and melanomas of the eye] Lohmann W, et al. **Fortschr Ophthalmol** 1989;86(1):23–5 (Eng. Abstr.) **(Ger)**

METHODS

Separation and o–phthaldehyde fluorometric determination of 5–hydroxy– and 5–methoxyindoleamines by thin–layer chromatography: selected applications. Arqué JM, et al. **Anal Biochem** 1988 Oct;174(1):275–9

Determination of malonaldehyde in oxidized lipids by the Hantzsch fluorometric method. Kikugawa K, et al. **Anal Biochem** 1988 Nov 1;174(2):512–21

Fluorometric assay of DNA in cartilage explants using Hoechst 33258. Kim YJ, et al. **Anal Biochem** 1988 Oct; 174(1):168–76

Dithiothreitol and amino acids interfere with the fluorometric determination of glutathione with orthophthaldehyde. Scaduto RC Jr. **Anal Biochem** 1988 Oct;174(1):265–70

Multicomponent fluorometric analysis using a fiber–optic probe. Bright FV, et al. **Anal Chem** 1989 Jul 15; 61(14):1510–3

Vibrational spectroscopy in the ultraviolet via Gd3+ fluorescence: application to biological systems. MacGregor RB Jr. **Arch Biochem Biophys** 1989 Oct;274(1):312–6

Measurements of fluorescence lifetimes by use of a hybrid time–correlated and multifrequency phase fluorometer. Hedstrom J, et al. **Biochemistry** 1988 Aug 23;27(17):6203–8

Lifetime distributions and anisotropy decays of indole fluorescence in cyclohexane/ethanol mixtures by frequency–domain fluorometry. Gryczynski I, et al. **Biophys Chem** 1988 Dec;32(2–3):173–85

Padé–Laplace method for analysis of fluorescence intensity decay. Bajzer Z, et al. **Biophys J** 1989 Jul;56(1):79–93

Particle counting by fluorescence correlation spectroscopy. Simultaneous measurement of aggregation and diffusion of molecules in solutions and in membranes. Meyer T, et al. **Biophys J** 1988 Dec;54(6):983–93

Fluorescence spectral resolution of myelin basic protein conformers in complexes with lysophosphatidylcholine. Cavatorta P, et al. **Cell Biophys** 1988 Dec;13(3):201–15

Vesiculation of bovine erythrocyte membranes: two methods of quantification. Gaczynska M, et al. **Cytobios** 1988; 55(220):17–20

Device for measuring native fluorescence of lenses. Lohmann W, et al. **J Biochem Biophys Methods** 1988 Oct;17(2):155–8

Determination of catecholamines in human plasma by high–performance liquid chromatography: comparison between a new method with fluorescence detection and an established method with electrochemical detection. van der Hoorn FA, et al. **J Chromatogr** 1989 Jan 27; 487(1):17–28

Fluorescence intensity analysis through simplex optimization in flow cytometry. Takase K, et al. **J Immunol Methods** 1989 Mar 10;118(1):129–38

A rapid fluorometric assay for the determination of keratinocyte proliferation in vitro. Stadler R, et al. **J Invest Dermatol** 1989 Oct;93(4):532–4

A fluorometric assay for acetylcholine with picomole sensitivity. MacDonald RC. **J Neurosci Methods** 1989 Jul; 29(1):73–6

Indo–1 measurements of intracellular free calcium in the hippocampal slice: complications of labile NADH fluorescence. Sick TJ, et al. **J Neurosci Methods** 1989 May; 28(1–2):125–32

Time–resolved fluorescence in photobiology. Schneckenburger H, et al. **J Photochem Photobiol –B–** 1988 Jul;2(1):1–19 (64 ref.)

Interpretation of fluorescence correlation spectroscopy and photobleaching recovery in terms of molecular interactions. Elson EL, et al. **Methods Cell Biol** 1989;30:307–32 (48 ref.)

An oil–well method for time–resolved microfluorescence assays. Rüegg JC, et al. **Pflugers Arch** 1989 Sep; 414(5):597–9

Single–molecule fluorescence detection: autocorrelation criterion and experimental realization with phycoerythrin. Peck K, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4087–91

A new in vitro method using fura–2 for the quantification of endothelial cell injury. Abe M, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):69–74

Site–selective excitation: a new dimension in protein and membrane spectroscopy. Demchenko AP. **Trends Biochem Sci** 1988 Oct;13(10):374–7 (21 ref.)

SPECTROMETRY, GAMMA

INSTRUMENTATION

Spectrum analysis programme applicable to environmental factors. Forgó C. **Sante Publique (Bucur)** 1988 Oct–Dec; 31(4):337–41

SPECTROMETRY, MASS see **SPECTRUM ANALYSIS, MASS**

SPECTROMETRY, MASS–GAS CHROMATOGRAPHY see **MASS FRAGMENTOGRAPHY**

SPECTROMETRY, PARTICLE–INDUCED X–RAY EMISSION see **SPECTROMETRY, X–RAY EMISSION**

SPECTROMETRY, PROTON–INDUCED X–RAY EMISSION see **SPECTROMETRY, X–RAY EMISSION**

SPECTROMETRY, X–RAY EMISSION

Metal composition analysis of hydrogenase from Thiocapsa roseopersicina by proton induced X–ray emission spectroscopy. Bagyinka C, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):422–6

Postischemic changes of calcium and endogenous antagonist in the rat hippocampus studied by proton–induced X–ray emission analysis. Tsuda T, et al. **Brain Res** 1989 Apr 10; 484(1–2):228–33

Tissue and phantom materials characterisation by scattering for in vivo XRF and mineralometric techniques. Tartari A, et al. **Phys Med Biol** 1989 May;34(5):617–23

INSTRUMENTATION

X–ray fluorescence: issues surrounding the application of a new tool for measuring burden of lead. Hu H, et al. **Environ Res** 1989 Aug;49(2):295–317

Quantitative Chemical Characterization of Polymer Surfaces using E.S.C.A.—methodological aspects. Lautier A, et al. **Life Support Syst** 1983;1 Suppl 1:266–70

[An automated device for x–ray fluorescence analysis and its use in space and clinical medicine] Biriukov EG, et al. **Med Radiol (Mosk)** 1988 Oct;33(10):64–9 (Eng. Abstr.) **(Rus)**

METHODS

Biological monitoring of toxic metals in urine by simultaneous inductively coupled plasma–atomic emission spectrometry. Lo FB, et al. **Am Ind Hyg Assoc J** 1989 May;50(5):245–51

A generalised algorithm for spectral reconstruction in Compton spectroscopy with corrections for coherent scattering. Matscheko G, et al. **Phys Med Biol** 1989 Jul; 34(7):835–41

133Xe for the x–ray fluorescence assessment of gold in vivo. Scott J, et al. **Phys Med Biol** 1988 Jul;33(7):859–64

Development of a validation test for self–reported abstinence from smokeless tobacco products: preliminary results. Robertson JB, et al. **Prev Med** 1988 Jul;17(4):496–502

[X–ray fluorescent analytic determination of extracellular fluid in malignant tumors and adiposity] Berdov BA, et al. **Radiobiol Radiother (Berl)** 1988;29(4):475–80 (Eng. Abstr.) **(Ger)**

[The prospects for using x–ray fluorescent analysis in vivo in the diagnosis of thyroid diseases] Tomashevskil IO, et al. **Probl Endokrinol (Mosk)** 1988 Nov–Dec;34(6):86–93 (79 ref.) **(Rus)**

SPECTROMETRY, X–RAY EMISSION, ELECTRON MICROSCOPIC see **ELECTRON PROBE MICROANALYSIS**

SPECTROMETRY, X–RAY EMISSION, ELECTRON PROBE see **ELECTRON PROBE MICROANALYSIS**

SPECTROMETRY, X–RAY FLUORESCENCE see **SPECTROMETRY, X–RAY EMISSION**

SPECTROPHOTOMETRY

Simultaneous determination of hemoglobin and coproporphyrin by second derivative differential spectrophotometry: application to the diagnosis of meconium aspiration. Ficheux H, et al. **Clin Chim Acta** 1989 Jun 15;182(1):53–61

Quantitative analysis of absorption spectra and application to the characterization of ligand binding curves. Duggleby RG, et al. **Experientia** 1989 Jan 15;45(1):87–92

Microbiological assay versus spectrophotometry for determination of rifampicin in urine. George J, et al. **Indian J Lepr** 1988 Jan;60(1):47–52

A spectrophotometric assay for lipid peroxides in serum lipoproteins using a commercially available reagent. el–Saadani M, et al. **J Lipid Res** 1989 Apr;30(4):627–30

Statistical effects in the absorption and optical activity of particulate suspensions. Bustamante C, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8482–6

A rapid screening technique for detection of diosgenin through in situ cytophotometry. Kundu AK, et al. **Stain Technol** 1988 Nov;63(6):369–72

The development of spectrophotometry: fortuitous inventions for steroid biochemistry. Kochakian CD. **Trends Biochem Sci** 1988 Sep;13(9):359–62

[Quantifying vital staining of the corneal endothelium by photometry] Hartmann C, et al. **Fortschr Ophthalmol** 1988; 85(6):672–4 (Eng. Abstr.) **(Ger)**

[Method and clinical significance of cerebrospinal fluid spectrophotometry] Müller FA, et al. **Nervenarzt** 1989 May;60(5):255–61 (Eng. Abstr.) **(Ger)**

[Determination of plasma volume by a new method of spectrophotometric reading for use in the study of hemodynamics in pregnancy] Bancheri C, et al. **Minerva Ginecol** 1988 Apr;40(4):287–90 (Eng. Abstr.) **(Ita)**

[Spectrophotometric determination of oleanolic acid and saponins from quinoa (Chenopodium quinoa Willd, Kancolla variety)] Peñafiel CC, et al. **Arch Latinoam Nutr** 1988 Mar;38(1):113–31 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

The effect of fluorescein on various light–dependent blood glucose analyzers. Norman ME, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):496–7

Methods of producing radionuclides for spectrometric gamma–ray sources and their standardization—2. Europium–152. Danilenko VN, et al. **Int J Rad Appl Instrum [A]** 1989;40(8):711–3

Simple fibre optic spectrophotometric cell for pH determination. Besar SS, et al. **J Biomed Eng** 1989 Mar; 11(2):151–6

External quality assessment of absorbance measurements on spectral and spectral–line photometers. Rönle G, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):323–9

A portable scanning reflectance spectrophotometer using visible wavelengths for the rapid measurement of skin pigments. Feather JW, et al. **Phys Med Biol** 1989 Jul; 34(7):807–20

[Use of a charge–coupled device array camera in reflectance spectroscopy of the blood. 2: Determination of the indocyanine green concentration] Pahl R, et al. **Biomed Tech (Berlin)** 1988 Nov;33(11):255–60 (Eng. Abstr.) **(Ger)**

[Determination of bilirubin in capillary plasma by a direct photometric method (DPM, bilirubinometer) and the chemical determination of bilirubin in the bilirubin determination (2,5–dichlorophenyldiazonium method) in serum of venous blood samples] Schlebusch H, et al. **Klin Padiatr** 1988 Jul–Aug;200(4):330–4 (Eng. Abstr.) **(Ger)**

[Possibilities for the assembly of a cuvette tempering system for a spectral photometer of the SPECORD, VSU–2 and SPEKOL type] Hofmann J, et al. **Z Med Lab Diagn** 1989; 30(5):292–3 **(Ger)**

[A method of determining the thickness of a histologic section using a spectrophotometer] Nalivalko AM, et al. **Arkh Patol** 1988;50(8):80–1 (Eng. Abstr.) **(Rus)**

[Spectrophotometric determination of oxygen–dissociating properties of hemoglobin] Strubitskil IV, et al. **Lab Delo** 1988;(12):11–3 (Eng. Abstr.) **(Rus)**

METHODS

The spectrophotometric determination of nanomole quantities of chloride in plant tissue. Allen CR, et al. **Anal Biochem** 1988 Aug 15;173(1):54–8

Quantification of albumin in cerebrospinal fluid. Bonate PL. **Anal Biochem** 1988 Nov 15;175(1):300–4

An optical method for the determination of the isotopic composition of 1H2O/2H2O mixtures: Eu3+ luminescence lifetimes. Cornwall EH, et al. **Anal Biochem** 1988 Nov 15; 175(1):59–62

A spectrophotometric method for determination of catalase activity in small tissue samples. Johansson LH, et al. **Anal Biochem** 1988 Oct;174(1):331–6

Spectrophotometric determination of hydrazine, hydrazides, and their mixtures with trinitrobenzenesulfonic acid. Qi XY, et al. **Anal Biochem** 1988 Nov 15;175(1):139–44

Coronaspray nebulization and ionization of liquid samples for ion mobility spectrometry. Shumate CB, et al. **Anal Chem** 1989 Mar 15;61(6):601–6

A spectrophotometric assay for 6-phosphogluconolactonase involving the use of immobilized enzymes to prepare the labile 6-phosphoglucono-delta-lactone substrate. Moir RD, et al. **Biochem J** 1988 Nov 15;256(1):69–73

Objective measurement of surfactant irritation by fiber optic spectroscopy. Crowe DM, et al. **Contact Dermatitis** 1988 Sep;19(3):192–4

A spectrophotometric method for determining the stream sample core diameter of a flow cytometer. Blume P. **Cytometry** 1989 May;10(3):351–3

New spectrophotometric method for continuous recording of the spleen exonuclease activity. Dolapchiev LB, et al. **J Biochem Biophys Methods** 1988 Nov;17(3):207–13

Determination of intracellular pH in the in vitro hippocampal slice preparation by transillumination spectrophotometry of neutral red. Sick TJ, et al. **J Neurosci Methods** 1989 Feb;27(1):25–34

Spectrophotometric determination of copper in foods, feedingstuffs and plants: a comparison between the glyoxal bis(4-phenyl-3-thiosemicarbazone) and bathocuproine disulphonate methods. Jiménez AM, et al. **Z Gesamte Hyg** 1989 Mar;35(3):143–5

Spectrophotometric determination of methyl alcohol in the atmosphere. Tyras H. **Z Gesamte Hyg** 1989 Feb;35(2):96–7

[A spectrophotometric method for determining n-butanol] Bonev N. **Probl Khig** 1988;13:129–34 (Eng. Abstr.) **(Bul)**

[A preliminary investigation of the linear combination method of absorbances] Sun HT, et al. **Yao Hsueh Hsueh Pao** 1988 May;23(5):375–82 (Eng. Abstr.) **(Chi)**

[Studies on the determination of PA activity level in plasma using euglobulin fraction] Soma M, et al. **Rinsho Byori** 1988 Aug;36(8):957–61 **(Jpn)**

[Assay methods for superoxide dismutase] Oyanagui Y. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2906–13 **(Jpn)**

[Spectrophotometric method for determining the stability of lysosomes from animal tissues depending on the hydrogen ion concentration] Siatkin SP, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):184–6 (Eng. Abstr.) **(Rus)**

SPECTROPHOTOMETRY, ATOMIC ABSORPTION

Atomic absorption spectrometric determination of selenium in human blood components. Hansson L, et al. **Clin Chem** 1989 Apr;35(4):537–40

Improved determination of vanadium in biological fluids by electrothermal atomic absorption spectrometry. Ishida O, et al. **Clin Chem** 1989 Jan;35(1):127–30

Problems involving the use of aspiration flame atomic absorption spectroscopy in the estimation of metals in plasma, serum or whole blood. Haider S, et al. **JPMA** 1989 Jan;39(1):17–8

INSTRUMENTATION

[The pharmacokinetics of light-protective agents by photoacoustic spectroscopy] Kölmel KF, et al. **Hautarzt** 1988 Nov;39(11):731–5 (Eng. Abstr.) **(Ger)**

[Use of the Soviet LT-2 lamp in an atomic absorption spectrometer manufactured in East Germany] Mitchenkov VT, et al. **Lab Delo** 1989;(6):67 (Eng. Abstr.) **(Rus)**

METHODS

Fourier transform atomic absorption flame spectrometry with continuum source excitation. Glick MR, et al. **Anal Chem** 1989 Aug 1;61(15):1694–7

Continuum source atomic absorption spectrometry in a graphite furnace with photodiode array detection. Jones BT, et al. **Anal Chem** 1989 Aug 1;61(15):1670–4

The effect of experimental parameters on the cold-vapor mercury atomic absorption determination. Speciation analysis of sulfhydryl-bound mercury. Daniels RS, et al. **J Anal Toxicol** 1989 Jul-Aug;13(4):214–7

[Determination of microelements in human hair using an atomic absorption spectrophotometer] Iudina TV, et al. **Lab Delo** 1989;(6):74–5 **(Rus)**

STANDARDS

[Problems in serum aluminum determination by atomic absorption spectrometry] Ishida O, et al. **Nippon Jinzo Gakkai Shi** 1988 Jun;30(6):749–56 (Eng. Abstr.) **(Jpn)**

SPECTROPHOTOMETRY, INFRARED

Solving mysteries using infrared spectrometry and chromatography. Brown DJ, et al. **Anal Chem** 1988 Sep 1;60(17):1005A–1011A

Magnetic resonance and near infrared spectroscopy for investigation of perinatal hypoxic-ischaemic brain injury. Wyatt JS, et al. **Arch Dis Child** 1989 Jul;64(7):953–63 (40 ref.)

Infrared spectroscopy of a single cell—the human erythrocyte. Dong A, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):752–6

Fourier transform infrared spectroscopic investigation of rhodopsin structure and its comparison with bacteriorhodopsin. Haris PI, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):160–7

An infrared spectroscopic study of the thermotropic phase behavior of phosphatidylcholines containing omega-cyclohexyl fatty acyl chains. Mantsch HH, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):42–9

Infrared immunoassay. Ismail AA, et al. **Clin Biochem** 1989 Aug;22(4):297–9

Secondary structure of diphtheria toxin and its fragments interacting with acidic liposomes studied by polarized infrared spectroscopy. Cabiaux V, et al. **J Biol Chem** 1989 Mar 25;264(9):4928–38

Microanalysis in histopathology. Levison DA. **J Pathol** 1989 Feb;157(2):95–7 (14 ref.)

[In vivo analysis of the skin by Fourier-transformed infrared spectroscopy] Pretelli ED, et al. **C R Acad Sci [III]** 1988; 307(11):623–6 (Eng. Abstr.) **(Fre)**

[Analysis of calculi with infrared spectroscopy] Heil W, et al. **Internist (Berlin)** 1988 Dec;29(12):818–23 **(Ger)**

[Study of calcium oxalate crystalluria by infrared analysis] Tozuka K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1669–72 (Eng. Abstr.) **(Jpn)**

INSTRUMENTATION

A CCD spectrophotometer to quantitate the concentration of chromophores in living tissue utilising the absorption peak of water at 975 nm. Cope M, et al. **Adv Exp Med Biol** 1989;248:33–40

Blood glucose measurement by infrared spectroscopy. Zeller H, et al. **Int J Artif Organs** 1989 Feb;12(2):129–35

Gas chromatography with Fourier transform infrared spectrometry for biomedical applications. Lacroix B, et al. **J Chromatogr** 1989 Aug 11;492:109–36 (92 ref.)

System for long-term measurement of cerebral blood and tissue oxygenation on newborn infants by near infra-red transillumination. Cope M, et al. **Med Biol Eng Comput** 1988 May;26(3):289–94

[Laser spectroscopy in the newborn infant—initial experiences] Schmidt S, et al. **Z Geburtshilfe Perinatol** 1989 Jan-Feb;193(1):24–8 (Eng. Abstr.) **(Ger)**

METHODS

Optical spectroscopy. Pre-mammography marker. Egan RL, et al. **Acta Radiol** 1988 Sep-Oct;29(5):497–503

Multicomponent analysis of near-infrared spectra of anesthetized rat head: (I). Estimation of component spectra by principal component analysis. Araki R, et al. **Adv Exp Med Biol** 1989;248:3–10

Quantitation of pathlength in optical spectroscopy. Delpy DT, et al. **Adv Exp Med Biol** 1989;248:41–6

Fourier transform infrared (FTIR) spectroscopy for monitoring airborne gases and vapors of industrial hygiene concern. Ying LS, et al. **Am Ind Hyg Assoc J** 1989 Jul; 50(7):354–9

Evaluation of the applicability of fourier transform infrared (FTIR) spectroscopy for quantitation of the components of airborne solvent vapors in air. Ying LS, et al. **Am Ind Hyg Assoc J** 1989 Jul;50(7):360–5

A technique for monitoring mammalian cell growth and inhibition in situ via Fourier transform infrared spectroscopy. Hutson TB, et al. **Anal Biochem** 1988 Nov 1;174(2):415–22

FT-IR microscopy of endochondral ossification at 20 mu spatial resolution [published erratum appears in Calcif Tissue Int 1989 Jul;45(1):62] Mendelsohn R, et al. **Calcif Tissue Int** 1989 Jan;44(1):20–4

[Quantitative and qualitative control of amiodarone tablets by direct reflectometry of the near infrared rays] Jensen R, et al. **Ann Pharm Fr** 1988;46(5):313–21 (Eng. Abstr.) **(Fre)**

SPECTROPHOTOMETRY, ULTRAVIOLET

UV resonance Raman studies of molecular structure and dynamics: applications in physical and biophysical chemistry. Asher SA. **Annu Rev Phys Chem** 1988;39:537–88 (115 ref.)

Glass transition of deoxymyoglobin probed by optical absorption spectroscopy. Kushida T, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):948–53

A comment on the evaluation of equilibrium constants for alpha-tocopherol interactions with fatty acids by absorbance in the ultraviolet region. Sugata S, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):385–6

Quantitation of interaction between cytochrome P-450scc and adrenodoxin—analysis in the median UV-region by second derivative spectroscopy. Shkumatov VM, et al. **Chem Biol Interact** 1988;68(1-2):71–83

Laser dentistry: root canal diagnostic technique based on ultraviolet-induced fluorescence spectroscopy. Pini R, et al. **Lasers Surg Med** 1989;9(4):358–61

METHODS

A continuous spectrophotometric assay for the enzymatic marker glucose 6-phosphatase. Stio M, et al. **Anal Biochem** 1988 Oct;174(1):32–7

Continuous spectrophotometric assays for cytosolic epoxide hydrolase. Wixtrom RN, et al. **Anal Biochem** 1988 Oct; 174(1):291–9

Analysis of trifluralin and other dinitroaniline herbicide residues by zero-order and derivative ultraviolet spectrophotometry. Traore S, et al. **Analyst** 1989 May; 114(5):609–13

Improved method for continuous UV monitoring in high-speed counter-current chromatography. Oka H, et al. **J Chromatogr** 1989 Jul 28;475:229–35

[Spectrophotometric determination of the protein concentration in solutions] Fedenko VS, et al. **Biol Nauki** 1989;(4):108–12 (Eng. Abstr.) **(Rus)**

[A micromethod of UV-spectrophotometry of diene conjugates] Kolosova NG, et al. **Lab Delo** 1988;(9):73–4 **(Rus)**

[A rapid method of isolating a phenothiazine derivatives from cadaveric specimens] Salomatin EM. **Sud Med Ekspert** 1989 Jan-Mar;32(1):39–41 (Eng. Abstr.) **(Rus)**

SPECTROSCOPY see **SPECTRUM ANALYSIS**

SPECTROSCOPY, MAGNETIC RESONANCE see **NUCLEAR MAGNETIC RESONANCE**

SPECTROSCOPY, MOSSBAUER

Zero-field Mössbauer studies of diferric human transferrin [published erratum appears in Biochem Biophys Res Commun 1989 Apr 14;160(1):417] Kilár F, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):755–61

Mössbauer and EPR studies of the binuclear iron center in ribonucleotide reductase from Escherichia coli. A new iron-to-protein stoichiometry. Lynch JB, et al. **J Biol Chem** 1989 May 15;264(14):8091–6

[Gamma resonance velocimetry of the eye] Astakhov IuS, et al. **Vestn Oftalmol** 1989 May-Jun;105(3):59–62 (Eng. Abstr.) **(Rus)**

SPECTROSCOPY, NUCLEAR MAGNETIC RESONANCE see **NUCLEAR MAGNETIC RESONANCE**

SPECTRUM ANALYSIS

Adsorption of proteins onto glass surfaces and its effect on the intensity of circular dichroism spectra. Wu CS, et al. **Anal Biochem** 1989 Feb 15;177(1):178–82

Analytical applications of polarimetry, optical rotatory dispersion, and circular dichroism. Purdie N, et al. **Anal Chem** 1989 Jan 15;61(2):77A–89A

Hydrodynamic and circular dichroic analysis of mammary-derived growth inhibitor (MDGI). Behlke J, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):363–70

Conformation of the alpha form of human calcitonin gene-related peptide (CGRP) in aqueous solution as determined by circular dichroism spectroscopy. Manning MC. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):388–92

Secondary structures of rat lipolytic enzymes: circular dichroism studies and relation to hydrophobic moments. Roberts IM, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):95–101

pH-dependent forms of the ferryl haem in myoglobin peroxide analysed by variable-temperature magnetic circular dichroism. Foote N, et al. **Biochem J** 1989 Jul 15; 261(2):515–22

Spectroscopic analysis of chlorophyll model complexes: methyl ester ClFe(III)pheophorbides. Andersson LA, et al. **Biochim Biophys Acta** 1989 May 8;974(2):163–79

Membrane-phorbol ester interactions monitored by circular dichroism. Frézard F, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):316–20

Scope and limitations of rotating-frame nuclear Overhauser enhancement spectroscopy applied to oligosaccharides. Breg J, et al. **Carbohydr Res** 1988 Nov 15;183(1):19–34

Effect of phlebotomy on the ferritin iron content in the rat liver as determined morphometrically with the use of electron energy loss spectroscopy. Cleton MI, et al. **Cell Tissue Res** 1989 Jun;256(3):601–5

The interactions between MnO2+/Mn3+ complexes and ascorbates. A pulse radiolysis study. Cabelli DE. **Free Radic Biol Med** 1989;6(2):171–7

Application of prewhitening to AR spectral estimation of EEG. Birch GE, et al. **IEEE Trans Biomed Eng** 1988 Aug; 35(8):640–5

Pulse radiolysis of catalase in solution. I. Reactions of O2- with catalase and its compound I. Gębicka L, et al. **Int J Radiat Biol** 1989 Jan;55(1):45–50

One-electron reduction of 5-deazalumiflavin in aqueous solution: a pulse radiolysis study. Heelis PF, et al. **Int J Radiat Biol** 1989 Apr;55(4):557–62

Diffuse reflectance pulse radiolysis of solid DNA: the effect of hydration. O'Neill P, et al. **Int J Radiat Biol** 1989 Apr; 55(4):531–7

The role of sulphur peptide functions in free radical transfer: a pulse radiolysis study. Prütz WA, et al. **Int J Radiat Biol** 1989 Apr;55(4):539–56

Role of the superoxide anion in the oxidative activation of the new antitumor drug BD40: a radiolysis study. Sekaki A, et al. **Int J Radiat Biol** 1989 Jun;55(6):901–11

Near-ultraviolet circular dichroism of bovine high molecular weight alpha-crystallin. Liang J, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2065–8

Identification of cocaine in cocaine–lidocaine mixtures ("rock cocaine") and other illicit cocaine preparations using derivative absorption spectroscopy. Arufe-Martinez MI, et al. **J Anal Toxicol** 1988 Jul–Aug;12(4):192–6

Electron transfer process in cytochrome oxidase after pulse radiolysis. Kobayashi K, et al. **J Biol Chem** 1989 May 15; 264(14):7976–80

Molecular spectroscopy in forensic residue analysis: a general overview of reliability, applicability and cost effectiveness. Stephany RW. **J Chromatogr** 1989 Apr 7;489(1):3–9

Spectral analysis of the masseter and anterior temporalis: an assessment of reliability for use in the clinical situation. Barker GR, et al. **J Oral Rehabil** 1989 May;16(3):309–13

Spectral analysis of pendular waveforms in congenital nystagmus. Reccia R, et al. **Ophthalmic Res** 1989; 21(2):83–92

X-ray crystallography and the spectroscopic imperative: the story of the [3Fe–4S] clusters. George GN, et al. **Trends Biochem Sci** 1988 Oct;13(10):369–70 (22 ref.)

Electron-beam-induced spectroscopies with high spatial resolution. Selected papers from the NSF/CNRS workshop. Aussois, France, 28 February–5 March 1988. **Ultramicroscopy** 1989 Apr 1;28(1–4):1–368

The diagnosis of minor to moderate atherosclerotic lesions in the carotid artery bifurcation by means of spectral broadening combined with the direct detection of flow disturbances using a multi-gate pulsed Doppler system. van Merode T, et al. **Ultrasound Med Biol** 1988;14(6):459–64

[Spectrum analysis of occipital EEG during visual evoked potential in multiple sclerosis (preliminary results)] Franck H, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):459–61 (Eng. Abstr.) **(Fre)**

[Evaluation of the contribution of various types of movement of protein globules into effects observed using the Rayleigh scattering of Mössbauer radiation or the Mössbauer absorption spectroscopy] Krupianskii IuF, et al. **Biofizika** 1988 May–Jun;33(3):401–6 (Eng. Abstr.) **(Rus)**

[A study of the effect of solvent composition and viscosity on the molecular dynamics of human serum albumin using Rayleigh scattering of Mössbauer radiation] Kurinov IV, et al. **Biofizika** 1988 May–Jun;33(3):407–12 (Eng. Abstr.) **(Rus)**

INSTRUMENTATION

Compton spectroscopy in the diagnostic x-ray energy range. I. Spectrometer design. Matscheko G, et al. **Phys Med Biol** 1989 Feb;34(2):185–97

Compton spectroscopy in the diagnostic x-ray energy range. II. Effects of scattering material and energy resolution. Matscheko G, et al. **Phys Med Biol** 1989 Feb;34(2):199–208

Measurement of absolute energy spectra from a clinical CT machine under working conditions using a Compton spectrometer. Matscheko G, et al. **Phys Med Biol** 1989 Feb; 34(2):209–22

A corrected double-deflection electron spectrometer equipped with a parallel recording system. Haider M. **Ultramicroscopy** 1989 Apr 1;28(1–4):190–200

A real-time autoregressive spectrum analyzer for Doppler ultrasound signals. Schlindwein FS, et al. **Ultrasound Med Biol** 1989;15(3):263–72

[Use of a CCD array camera for reflectance spectrometry of blood. 1. Determination of hematocrit-independent oxygen saturation using a new evaluation procedure] Pahl R, et al. **Biomed Tech (Berlin)** 1988 Oct;33(10):240–6 (Eng. Abstr.) **(Ger)**

METHODS

Laser analytical spectrometry based on optical phase conjugation by degenerate four-wave mixing in a flowing liquid analyte cell. Wu ZQ, et al. **Anal Chem** 1989 May 1;61(9):998–1001

Image analysis microspectroscopy of senile plaque capillary amyloid in Alzheimer's disease. A preliminary study. Pappolla MA. **Arch Pathol Lab Med** 1989 Aug; 113(8):866–71

In situ optical spectroscopy of some systems of biological interest. Balasubramanian D. **Biosci Rep** 1988 Dec; 8(6):497–508

Computer-aided analysis of infrared, circular dichroism and absorption spectra. Galat A. **Comput Appl Biosci** 1986 Sep; 2(3):201–5

Spectral mapping of the electrocardiogram with Fourier transform for identification of patients with sustained ventricular tachycardia and coronary artery disease. Haberl R, et al. **Eur Heart J** 1989 Apr;10(4):316–22

Novel 1H–31P heteronuclear coherence transfer spectroscopy based on spin locking MLEV-17 and its application to signal assignment for a short DNA fragment. Hiroaki H, et al. **FEBS Lett** 1989 Feb 13;244(1):43–6

Direct carboxyhemoglobin determination by derivative spectroscopy. López-Rivadulla M, et al. **Forensic Sci Int** 1989 Mar;40(3):261–6

Separation and indirect detection of alkyl sulfonates and sulfates. Pietrzyk DJ, et al. **J Chromatogr Sci** 1989 Aug; 27(8):485–90

Energy filtered STEM imaging of thick biological sections. Colliex C, et al. **J Microsc** 1989 Jan;153 (Pt 1):1–21

Measurement of attenuation and mean scatterers' spacing by ultrasound spectroscopy. Jenderka KV. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):196–8

Ultrasound spectroscopy: a completion of the B-scan–sonography. Millner R. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):186–7

Reproducibility of the Early Cataract Detector (Kowa ECD 2000). Datiles M, et al. **Ophthalmic Surg** 1988 Sep; 19(9):664–6

A modified x-ray spectra reconstruction technique [published erratum appears in Phys Med Biol 1989 Apr;34(4):539] Archer BR, et al. **Phys Med Biol** 1988 Dec;33(12):1399–406

Test of circular dichroism (CD) methods for crambin and CD-assisted secondary structure prediction of its homologous toxins. Teeter MM, et al. **Proteins** 1988; 4(4):262–73

Effects of pulse shaping in laser spectroscopy and nuclear magnetic resonance. Warren WS. **Science** 1988 Nov 11; 242(4880):878–84 (50 ref.)

Separation of overlapping core edges in electron energy loss spectra by multiple-least-squares fitting. Leapman RD, et al. **Ultramicroscopy** 1988;26(4):393–403

[A classification of crackles by the linear predictive coding method] Maeda Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):587–93 (Eng. Abstr.) **(Jpn)**

[Important concepts and technology in the study of vision: measurement of ultrafast reactions by pulsed-lasers] Ohtani H, et al. **Tanpakushitsu Kakusan Koso** 1989 May; 34(5):683–91 **(Jpn)**

[Important concepts and technology in the study of visions: action spectroscopy and the Okazaki large spectrograph] Watanabe M. **Tanpakushitsu Kakusan Koso** 1989 May; 34(5):692–703 **(Jpn)**

[Applications of photoacoustic spectroscopy to the quantitative analysis of drugs in dosage form] Nakai Y, et al. **Yakugaku Zasshi** 1988 Nov;108(11):1107–9 (Eng. Abstr.) **(Jpn)**

[Possibilities of laser-endoscopic spectrum analysis in laryngology] Preobrazhenskiĭ NA, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):44–6 (Eng. Abstr.) **(Rus)**

STANDARDS

Corrections for secondary relaxation in exponentially programmed field-flow fractionation. Hansen ME, et al. **Anal Chem** 1988 Jul 15;60(14):1434–42

SPECTRUM ANALYSIS, MASS

Mass-spectrometry analysis of modern low flow anesthesia systems. Rolly G, et al. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):187–8

Mass spectra of prostaglandins and related products. Pace-Asciak CR. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 18:1–565

Substance P as a transglutaminase substrate: identification of the reaction products by fast atom bombardment mass spectrometry. Porta R, et al. **Anal Biochem** 1988 Aug 1; 172(2):499–503

Chemical ionization of laser-desorbed neutrals in a Fourier transform mass spectrometer. Amster IJ, et al. **Anal Chem** 1989 Jan 15;61(2):184–6

The Shroud of Turin. Warner M. **Anal Chem** 1989 Jan 15; 61(2):101A–103A

Proceedings of the International Symposium on Applied Mass Spectrometry in the Health Sciences. Barcelona, Spain, 28–30 September 1987. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):1–482

Contributions of mass spectrometry to peptide and protein structure. Biemann K. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):99–111 (38 ref.)

Why do doping control labs need a tandem mass spectrometer? de Jong EG, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):75–80

The use of mass spectrometry in assessing the physiological states in preterm and term infants. Fennessey PV, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):63–5

Hydrogenation of quinone compounds during secondary ion mass spectra measurement. Ishihara Y, et al. **J Antibiot (Tokyo)** 1989 Jan;42(1):49–53

Mass spectroscopic analysis of excimer laser ablated material from human corneal tissue. Kermani O, et al. **J Cataract Refract Surg** 1988 Nov;14(6):638–41

Fifth (Montreux) Symposium on Liquid Chromatography–Mass Spectrometry, Supercritical Fluid Chromatography–Mass Spectometry and Tandem Mass Spectometry. Freiburg i.Br. (F.R.G.), November 2–4, 1988. Proceedings. **J Chromatogr** 1989 Jul 14;474(1):1–343

Pyrolysis mass spectrometry as a method for inter-strain discrimination of Candida albicans. Magee JT, et al. **J Gen Microbiol** 1988 Oct;134 (Pt 10):2841–7

[Mass spectometry and personal computer in the study of pulmonary gas exchange] Maselli R, et al. **Arch Monaldi Mal Torace** 1987 Jul–Aug;42(4):315–25 (Eng. Abstr.) **(Ita)**

INSTRUMENTATION

Effect of primary beam energy on the secondary ion sputtering efficiency of liquid secondary ionization mass spectrometry in the 5–30-keV range. Aberth WH, et al. **Anal Chem** 1988 Jul 15;60(14):1426–8

Ion retardation and collision-induced dissociation in the thermospray ion source. Bencsath FA, et al. **Anal Chem** 1988 Jul 1;60(13):1323–9

Plasma desorption mass spectrometry: coming of age. Cotter RJ. **Anal Chem** 1988 Jul 1;60(13):781A–793A (80 ref.)

Comparison of relative quasi-molecular ion yields for 8-keV ion and 252Cf fission fragment bombardment. Ens W, et al. **Anal Chem** 1988 Aug 1;60(15):1494–8

Characterization of benzodiazepine drugs by ion mobility spectrometry. Lawrence AH. **Anal Chem** 1989 Feb 15; 61(4):343–9

Analysis of high molecular weight samples on a double-focusing magnetic sector instrument by supercritical fluid chromatography/mass spectrometry. Reinhold VN, et al. **Anal Chem** 1988 Dec 15;60(24):2719–22

Consecutive reaction monitoring in a four-sector mass spectrometer: MS4 and one step beyond. Tomer KB, et al. **Anal Chem** 1988 Oct 15;60(20):2232–6

On-line fast atom bombardment analysis of dynamic biological systems. Caprioli RM. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):35–9

Use of a microchannel array detector in a four-sector tandem mass spectrometer. Hill JA, et al. **Biomed Environ Mass Spectrom** 1988 Aug;17(2):147–51

Velocity compaction time-of-flight mass spectrometer for mass range 1000–10,000 mu. Muga ML. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):131–2

Applications of fast atom bombardment and tandem mass spectrometry. Tomer KB, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):473–6

In-depth limitation of the Lamma 500 for the in situ localization of organic compounds in biological embedded tissue samples. Van Vaeck L, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):113–9

Microbore high-performance liquid chromatography–mass spectrometry for the analysis of proteolytic digests by continuous-flow fast-atom bombardment mass spectrometry. Caprioli RM, et al. **J Chromatogr** 1988 Jun 29;443:355–62

Liquid chromatography–mass spectrometry coupling and its application in pharmaceutical research. Vekey K, et al. **J Chromatogr** 1989 Mar 17;488(1):73–85 (49 ref.)

Packed-column supercritical fluid chromatography/mass spectrometry via a two-stage momentum separator. Edlund PO, et al. **J Chromatogr Sci** 1989 Jun;27(6):274–82

Imaging and relative quantification of 127I in human thyroid follicles by analytical ion microscope: characterization of benign thyroid epithelial tumors. Fragu P, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):304–9

An automated mechanism for protection of mass spectrometry sampling tubing. Carlon GC, et al. **J Clin Monit** 1988 Oct;4(4):264–6

Accuracy of a central mass spectrometer system at high respiratory frequencies. Scamman FL. **J Clin Monit** 1988 Jul;4(3):227–9

Can the Raman scattering analyzer compete with mass spectrometers: an affirmative reply. Westenskow DR, et al. **J Clin Monit** 1989 Jan;5(1):34–6

The Spectralab-M quadrupole medical mass spectrometer. Beatty PC. **J Med Eng Technol** 1988 Nov–Dec;12(6):265–72

Countercurrent chromatography meets MS. Lee YW, et al. **Nature** 1989 Mar 2;338(6210):91–2

Protein chemists gain a new analytical tool [news] Barinaga M. **Science** 1989 Oct 6;246(4926):32–3

METHODS

The use of plasma desorption time-of-flight mass spectrometry to screen for products of prohormone processing in crude tissue extracts. Andrews PC, et al. **Anal Biochem** 1988 Oct;174(1):23–31

The analysis of recombinant interleukin-2 by thermospray liquid chromatography–mass spectrometry. Blackstock WP, et al. **Anal Biochem** 1988 Nov 15;175(1):319–26

Purification and characterization of low-molecular-weight beef heart proteolipids: use of fast atom bombardment–mass spectrometry for identification. Boyot P, et al. **Anal Biochem** 1988 Aug 15;173(1):75–85

Direct analysis of glycolipids on thin-layer plates by matrix-assisted secondary ion mass spectrometry: application for glycolipid storage disorders. Kushi Y, et al. **Anal Biochem** 1988 Nov 15;175(1):167–76

Mass spectrometric evaluation of synthetic peptides for deletions and insertions. Merrifield RB, et al. **Anal Biochem** 1988 Nov 1;174(2):399–414

Detection of tetrodotoxin by thin-layer chromatography/fast atom bombardment mass spectrometry. Nagashima Y, et al. **Anal Biochem** 1988 Nov 15;175(1):258–62

Analysis of phenylthiohydantoin amino acid mixtures for sequencing by thermospray liquid chromatography/mass spectrometry. Pramanik BC, et al. **Anal Biochem** 1988 Nov 15;175(1):305–18

Influence of sample concentration and adsorption time on

the yield of biomolecule ions in plasma desorption mass spectrometry. Craig AG, et al. **Anal Chem** 1989 Feb 15; 61(4):375–82

Comparison of pneumatic nebulization and hydride generation inductively coupled plasma mass spectrometry for isotopic analysis of selenium. Janghorbani M, et al. **Anal Chem** 1989 Apr 1;61(7):701–8

Desorption chemical ionization, thermospray, and fast atom bombardment mass spectrometry of dihydropyridine in equilibrium with pyridinium salt–type redox systems. Prókai L, et al. **Anal Chem** 1989 Aug 1;61(15):1723–8

On–line electrochemistry/thermospray/tandem mass spectrometry as a new approach to the study of redox reactions: the oxidation of uric acid. Volk KJ, et al. **Anal Chem** 1989 Aug 1;61(15):1709–17

A "screened" electrostatic ion trap for enhanced mass resolution, mass accuracy, reproducibility, and upper mass limit in Fourier transform ion cyclotron resonance mass spectrometry. Wang M, et al. **Anal Chem** 1989 Jun 1; 61(11):1288–93

Quantitative analysis of low molecular weight polar compounds by continuous flow liquid secondary ion tandem mass spectrometry. Wang TC, et al. **Anal Chem** 1989 May 1;61(9):1013–6

Hartley transform ion cyclotron resonance mass spectrometry. Williams CP, et al. **Anal Chem** 1989 Mar 1;61(5):428–31

The analysis of trichothecenes in wheat and human plasma samples by chemical ionization tandem mass spectrometry. Kostianinen R, et al. **Arch Environ Contam Toxicol** 1989 May–Jun;18(3):356–64

Tandem mass spectrometry applied to protein structure problems. Biemann K. **Biochem Soc Trans** 1989 Feb; 17(1):237–43 (23 ref.)

Novel sample preparation for analysis by electron capture negative ionization mass spectrometry. Watson JT, et al. **Biochem Soc Trans** 1989 Feb;17(1):254–7 (14 ref.)

Novel fast atom bombardment mass spectrometric procedures for glycoprotein analysis. Dell A, et al. **Biochimie** 1988 Nov;70(11):1435–44

Tandem mass spectrometry study of urinary alkylated purines. Farmer PB. **Biomed Environ Mass Spectrom** 1988 Aug;17(2):143–5

Negative ion fast atom bombardment mass spectrometry of oligodeoxynucleotide carbamate analogs. Griffin D, et al. **Biomed Environ Mass Spectrom** 1988 Aug;17(2):105–11

Laser–desorption/Laser–ionization mass spectrometry of biomolecules. Grotemeyer J, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):143–9

Potassium ion ionization of desorbed species (K+IDS): a rapid method for the screening of urine for organic acidemias. Kassel DB, et al. **Biomed Environ Mass Spectrom** 1988 Sep;17(3):221–8

Californium–252 plasma desorption mass spectrometry of aminoglycoside antibiotics. Khan AH, et al. **Biomed Environ Mass Spectrom** 1988 Oct;17(4):329–35

The determination of the amino acid sequence in the fast atom bombardment mass spectra of dipeptides. Kulik W, et al. **Biomed Environ Mass Spectrom** 1988 Sep;17(3):173–80

Diagnostic positive and negative ion fast atom bombardment mass spectrometry of low–molecular–weight ammonium compounds of marine origin. Larsen C, et al. **Biomed Environ Mass Spectrom** 1988 Sep;17(3):187–91

A simple desalting procedure for fast atom bombardment mass spectrometry. Moon DC, et al. **Biomed Environ Mass Spectrom** 1988 Sep;17(3):229–37

Sample preparation dependent fragmentation in 252–Cf plasma desorption mass spectrometry of the polycyclic antibiotic, niain. Nielsen PF, et al. **Biomed Environ Mass Spectrom** 1988 Aug;17(2):137–41

Rapid sample throughput for biomedical stable isotope tracer studies. Preston T, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):229–35

3–Nitrobenzyl alcohol has wide applicability as a matrix for FAB–MS. Sweetman BJ, et al. **Biomed Environ Mass Spectrom** 1988 Oct;17(4):337–40

Characterization of acyl–linked glucuronides by electron impact and fast atom bombardment mass spectrometry. van Breemen RB, et al. **Biomed Environ Mass Spectrom** 1988 Aug;17(2):97–103

Structural characterization of drugs and oxygenated metabolites by laser microprobe mass spectrometry (LAMMA). Van Vaeck L, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):121–9

Quantitative analysis of fatty acid methyl esters by capillary gas chromatography with flame–ionization detection: quadrupole and sector mass spectrometer. Koza T, et al. **Folia Microbiol (Praha)** 1989;34(2):165–9

Ionization of penem beta–lactam antibiotics using thermospray (filament–on) mass spectrometry. Das PR, et al. **J Antibiot (Tokyo)** 1988 Sep;41(9):1268–71

Utility of solution electrochemistry mass spectrometry for investigating the formation and detection of biologically important conjugates of acetaminophen. Getek TA, et al. **J Chromatogr** 1989 Jul 14;474(1):245–56

Applicability of continuous–flow fast atom bombardment liquid chromatography–mass spectrometry in bioanalysis. Dextromethorphan in plasma. Kokkonen P, et al. **J Chromatogr** 1989 Jul 14;474(1):59–68

Ester and related derivatives of ring N–pentafluorobenzylated 5–hydroxymethyluracil. Hydrolytic stability, mass spectral properties, and trace detection by gas chromatography–electron–capture detection, gas chromatography–electron–capture negative ion mass spectrometry, and moving–belt liquid chromatography–electron–capture negative ion mass spectrometry. Kresbach GM, et al. **J Chromatogr** 1989 Aug 4;476:423–38

Liquid chromatography–mass spectrometry of trace compounds with a moving–belt interface and multi–dimensional chromatography. Luijten W, et al. **J Chromatogr** 1989 Jul 14;474(1):265–73

Analysis of drug residues in tissue by combined supercritical–fluid extraction–supercritical–fluid chromatography–mass spectrometry–mass spectrometry. Ramsey ED, et al. **J Chromatogr** 1989 Mar 3;464(2):353–64

Manual and automated enrichment procedures for biological samples using lipophilic gels. Uusijärvi J, et al. **J Chromatogr** 1989 Mar 17;488(1):87–104 (97 ref.)

Liquid chromatographic–mass spectrometric studies on rifamycin antibiotics. Vékey K, et al. **J Chromatogr** 1989 Jul 14;474(1):317–27

Characterization of solution–phase and gas–phase reactions in on–line electrochemistry–thermospray tandem mass spectrometry. Volk KJ, et al. **J Chromatogr** 1989 Jul 14; 474(1):231–43

Rapid localization of carbon 14–labeled molecules in biological samples by ion mass microscopy. Hindie E, et al. **J Histochem Cytochem** 1989 Feb;37(2):135–8

The mass spectrometer as a detector for high–performance liquid chromatography: problems of interfacing. Games DE, et al. **Monogr Endocrinol** 1988;30:235–56 (98 ref.)

Ion microscopy: a new approach for subcellular localization of labelled molecules. Hindie E, et al. **Scanning Microsc** 1988 Dec;2(4):1821–9

Electrospray ionization for mass spectrometry of large biomolecules. Fenn JB, et al. **Science** 1989 Oct 6; 246(4926):64–71 (25 ref.)

Liquid secondary ion MS: an emerging technique. Gaskell SJ. **Trends Pharmacol Sci** 1988 Apr;9(4):119–20

SPECTRUM ANALYSIS, MASS–GAS
CHROMATOGRAPHY see MASS **FRAGMENTOGRAPHY**

SPECTRUM ANALYSIS, RAMAN

Multicomponent suppression of fluorescent interferants using phase–resolved Raman spectroscopy [letter] Bright FV. **Anal Chem** 1988 Aug 1;60(15):1622–3

UV resonance Raman studies of molecular structure and dynamics: applications in physical and biophysical chemistry. Asher SA. **Annu Rev Phys Chem** 1988;39:537–88 (115 ref.)

Raman spectroscopic measurement of base stacking in solutions of adenosine, AMP, ATP, and oligoadenylates. Weaver JL, et al. **Biochemistry** 1988 Dec 13; 27(25):8899–903

Perturbation of binary phospholipid mixtures by melittin: a fluorescence and raman spectroscopy study. Lafleur M, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):85–92

Resonance Raman studies of hydroporphyrins and chlorophylls. Schick GA, et al. **Biochim Biophys Acta** 1987; 895(2):127–54 (154 ref.)

Axial coordination of ferric Aplysia myoglobin. Rousseau DL, et al. **J Biol Chem** 1989 May 15;264(14):7878–81

Laser Raman spectroscopic study of hereditary cataractous lenses in ICR/f–strain rat. Mizuno A, et al. **Jpn J Ophthalmol** 1988;32(3):281–7

INSTRUMENTATION

Application of surface–enhanced resonance Raman scattering spectroscopy to the analysis of covalently modified electrode surfaces. Kaul BB, et al. **Anal Chem** 1988 Aug 1;60(15):1580–6

Near–infrared Fourier transform Raman spectroscopy using fiber–optic assemblies. Lewis EN, et al. **Anal Chem** 1988 Dec 15;60(24):2658–61

Clinical evaluation of a Raman scattering multiple gas analyzer for the operating room. Westenskow DR, et al. **Anesthesiology** 1989 Feb;70(2):350–5

Can the Raman scattering analyzer compete with mass spectrometers: an affirmative reply. Westenskow DR, et al. **J Clin Monit** 1989 Jan;5(1):34–6

METHODS

Mixture analysis and quantitative determination of nitrogen–containing organic molecules by surface–enhanced Raman spectrometry. Laserna JJ, et al. **Anal Chem** 1989 Aug 1;61(15):1697–701

[Use of Raman spectroscopy for studying lens opacities in clinical practice] Barańska H, et al. **Klin Oczna** 1988 Oct; 90(10):333–6 (Eng. Abstr.) (Pol)

SPEECH

see related
VERBAL BEHAVIOR

Controlling auditory hallucinations [letter] Erickson GD. **Am J Psychiatry** 1989 Mar;146(3):406–7

Ventricle–brain ratio and alogia in 19 young patients with chronic negative and positive schizophrenia. Moscarelli M, et al. **Am J Psychiatry** 1989 Feb;146(2):257–8

Speech manifestations in lateralization of temporal lobe seizures. Gabr M, et al. **Ann Neurol** 1989 Jan;25(1):82–7

The corpus callosum is larger with right–hemisphere cerebral speech dominance. O'Kusky J, et al. **Ann Neurol** 1988 Sep; 24(3):379–83

Anterior speech region. Asymmetry and weight–surface correlation. Albanese E, et al. **Arch Neurol** 1989 Mar; 46(3):307–10

Divided attention, as measured by dichotic speech performance, in dementia of the Alzheimer type. Grady CL, et al. **Arch Neurol** 1989 Mar;46(3):317–20

1988 ASHA annual convention. November 18–21, 1988, Boston. Abstracts. **ASHA** 1988 Oct;30(10):1–221

1989 ASHA annual convention. American Speech–Language–Hearing Association. November 17–20, 1989, St. Louis. Abstracts. **ASHA** 1989 Oct;31(10):1–189

Development of language and communication skills in hearing–impaired children. **ASHA Monogr** 1987 Oct; (26):1–158

Communication skills of young hearing–impaired children. Geffner D, et al. **ASHA Monogr** 1987 Oct;(26):36–46 (25 ref.)

Development of language and communication skills in hearing–impaired children. Introduction. Levitt H, et al. **ASHA Monogr** 1987 Oct;(26):1–8

A speaking adaptor for a tracheostomy tube [letter] Wee M. **Br J Anaesth** 1988 Oct;61(4):516

Compensatory articulation in a subject with total glossectomy. Morrish EC. **Br J Disord Commun** 1988 Apr; 23(1):13–22

Impaired grammar with normal fluency and phonology. Implications for Broca's aphasia. Nadeau SE. **Brain** 1988 Oct;111 (Pt 5):1111–37

Anticipatory coarticulation in aphasia: acoustic and perceptual data. Katz WF. **Brain Lang** 1988 Nov; 35(2):340–68

Maternal depression and motherese: temporal and intonational features. Bettes BA. **Child Dev** 1988 Aug; 59(4):1089–96

Changes in articulation and resonance after tongue flap closure of palatal fistulas: case reports. Kummer AW, et al. **Cleft Palate J** 1989 Jan;26(1):51–5

Perceptions of appearance and speech by adolescent patients with cleft lip and palate and by their parents. Strauss RP, et al. **Cleft Palate J** 1988 Oct;25(4):335–42

Preparing presentations: how to make yours a hit (Part 1). Mitchell D, et al. **Dimens Health Serv** 1988 Sep;65(6):32–4

Effect of text complexity on connected discourse tracking rate. Hochberg I, et al. **Ear Hear** 1989 Jun;10(3):192–9

XXIst Congress of the International Association of Logopedics and Phoniatrics. Prague, August 6–10, 1989. Abstracts. **Folia Phoniatr (Basel)** 1989;41(4–5):155–248

Speaking fundamental frequency characteristics of normal Swedish subjects obtained by glottal frequency analysis. Pegoraro Krook MI. **Folia Phoniatr (Basel)** 1988; 40(2):82–90 (41 ref.)

Automatic speech recognition—can it improve the man–machine interface in medical expert systems? Landau JA, et al. **Int J Biomed Comput** 1989 Jul;24(2):111–7

Comparison of oral, written and audio–visually based information as preparation for intravenous pyelography. Hjelm–Karlsson K. **Int J Nurs Stud** 1989;26(1):53–68

Some considerations on control of continuous processes by speech. Cremers GB, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):158–61

Acoustic analysis of compensatory articulation in children. Baum SR, et al. **J Acoust Soc Am** 1988 Nov;84(5):1662–8

Acoustic–phonetic characteristics of speech produced in noise and while wearing an oxygen mask. Bond ZS, et al. **J Acoust Soc Am** 1989 Feb;85(2):907–12

Data labeling and sampling effects in harmonics–to–noise ratios. Cox NB, et al. **J Acoust Soc Am** 1989 May; 85(5):2165–78

The acoustical input impedance of excised human lungs—measurements and model matching. Hudde H, et al. **J Acoust Soc Am** 1989 Aug;86(2):475–92

Acoustic properties and perception of stop consonant release transients. Repp BH, et al. **J Acoust Soc Am** 1989 Jan; 85(1):379–96

Dynamic specification of coarticulated vowels spoken in sentence context. Strange W. **J Acoust Soc Am** 1989 May; 85(5):2135–53

The communicative role of a highly frequent repeated utterance in the conversations of an autistic boy. Coggins TE, et al. **J Autism Dev Disord** 1988 Dec;18(4):687–94

Maternal speech to verbal and higher functioning versus nonverbal and lower functioning autistic children. Konstantareas MM, et al. **J Autism Dev Disord** 1988 Dec; 18(4):647–56

Language training with autistic children using four different modes of presentation. Layton TL. **J Commun Disord** 1988 Aug;21(4):333–50

A study of correlates of speech production performance—an ecological approach. Weisel A, et al. **J Commun Disord** 1989 Feb;22(1):1–11

Speech and language development in children with acquired subglottic stenosis. Sell D, et al. **J Laryngol Otol Suppl** 1988;17:35–8 (19 ref.)

That's easy for you to say: action identification and speech fluency. Vallacher RR, et al. **J Pers Soc Psychol** 1989 Feb; 56(2):199–208

Mumbling. A defense mechanism in therapy resistance.

McHale MD. **J Psychosoc Nurs Ment Health Serv** 1988 Sep;26(9):27–30

Referential communication by aphasic and nonaphasic adults. Busch CR, et al. **J Speech Hear Disord** 1988 Nov; 53(4):475–82

Speech production deficits in developmental dyslexia. Catts HW. **J Speech Hear Disord** 1989 Aug;54(3):422–8

Turn exchange characteristics of SLI children's simultaneous and nonsimultaneous speech. Craig HK, et al. **J Speech Hear Disord** 1989 Aug;54(3):334–47

The relationship of stuttering severity and treatment length to temporal measures of stutterers' perceptually fluent speech. Healey EC, et al. **J Speech Hear Disord** 1989 Aug; 54(3):313–9

Nonfluencies of preschool stutterers and conversational partners: observing reciprocal relationships. Meyers SC. **J Speech Hear Disord** 1989 Feb;54(1):106–12

Acoustic phonetic effects of two types of verbal feedback in dysarthric subjects. Till JA, et al. **J Speech Hear Disord** 1988 Nov;53(4):449–58

Key word signing: listeners' classification of signed and spoken narratives. Windsor J, et al. **J Speech Hear Disord** 1989 Aug;54(3):374–82

Maternal question use predicts later language development in specific-language-disordered children. Yoder PJ. **J Speech Hear Disord** 1989 Aug;54(3):347–55

Rule invention in the acquisition of morphology revisited: a case of transparent semantic mapping. Camarata SM, et al. **J Speech Hear Res** 1988 Sep;31(3):425–31

A note on the variability of timing control. Crystal TH, et al. **J Speech Hear Res** 1988 Sep;31(3):497–502

The automatic extraction of pitch perturbation using microcomputers: some methodological considerations. Deem JF, et al. **J Speech Hear Res** 1989 Sep;32(3):689–97

Early speech production of children with cleft palate. Estrem T, et al. **J Speech Hear Res** 1989 Mar;32(1):12–23

Anticipatory and carry-over nasal coarticulation in the speech of children and adults. Flege JE. **J Speech Hear Res** 1988 Dec;31(4):525–36

Acoustic and perceptual analysis of word-initial stop consonants in phonologically disordered children. Forrest K, et al. **J Speech Hear Res** 1988 Sep;31(3):449–59

Difference of susceptibility to delayed auditory feedback between stutterers and nonstutterers. Fukawa T, et al. **J Speech Hear Res** 1988 Sep;31(3):475–9

The interrelationship of measures related to vocal function, speech rate, and laryngeal appearance in elderly women. Linville SE, et al. **J Speech Hear Res** 1989 Jun;32(2):323–30

Some effects of variations in response time latency on speech rate, interruptions, and fluency in children's speech. Newman LL, et al. **J Speech Hear Res** 1989 Sep; 32(3):635–44

Statistical differentiation of tracheoesophageal speech produced under four prosthetic/occlusion speaking conditions. Pauloski BR, et al. **J Speech Hear Res** 1989 Sep;32(3):591–9

Acoustic and physiological reaction times of stutterers and nonstutterers. Peters HF, et al. **J Speech Hear Res** 1989 Sep;32(3):668–80

A comparison of stutterers' and nonstutterers' affective, cognitive, and behavioral self-reports. Watson JB. **J Speech Hear Res** 1988 Sep;31(3):377–85

Spontaneous speaking fundamental frequency of 6-year-old black children. Wheat MC, et al. **J Speech Hear Res** 1988 Dec;31(4):723–5

English compound versus non-compound noun phrases in discourse: an acoustic and perceptual study. Farnetani E, et al. **Lang Speech** 1988 Apr–Jun;31 (Pt 2):157–80

The narrative styles of normal first and third grade children. Klecan-Aker JS, et al. **Lang Speech** 1987 Jul–Sep;30 (Pt 3):251–62

Maidese versus motherese—is the language input of child and adult caregivers similar? Nwokah EE. **Lang Speech** 1987 Jul–Sep;30 (Pt 3):213–37

Difference in second-formant transitions between aspirated and unaspirated stop consonants preceding [a] Repp BH, et al. **Lang Speech** 1987 Apr–Jun;30 (Pt 2):115–29

Adolescents' narrative use of orientations and codas. Sleight CC. **Lang Speech** 1987 Apr–Jun;30 (Pt 2):169–80

Stomal complications and airflow line problems of the Communi-Trach I cuffed talking tracheotomy tube. Leder SB, et al. **Laryngoscope** 1989 Feb;99(2):194–6

Temporal and perceptual characteristics of tracheoesophageal voice. Williams SE, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):846–50

Principles of automatic processing of speech signals and their application in medical technology and for aids for handicapped. Mangold H. **Med Prog Technol** 1988; 14(1):39–56

Twelve tips for using a public address system. Leiper JM. **Med Teach** 1988;10(3–4):273–6

A Middle Palaeolithic human hyoid bone. Arensburg B, et al. **Nature** 1989 Apr 27;338(6218):758–60

Limits on bilingualism. Cutler A, et al. **Nature** 1989 Jul 20; 340(6230):229–30

Multiple factors affect speech communication in the work place. Casali JG. **Occup Health Saf** 1989 Jul;58(7):32–4, 36, 40–2

Effects of chronic cerebellar stimulation (CCS) setting on the gait and speech of a spastic cerebral palsy adult. Hershler C, et al. **PACE** 1989 May;12(5):861–9

Cloze analysis in schizophrenic speech: scoring method and raters' education. Maher BA, et al. **Percept Mot Skills** 1988 Dec;67(3):911–8

Articulatory organization: from phonology to speech signals. **Phonetica** 1988;45(2–4):77–198

A multidimensional scaling study of esophageal vowels. Fox RA, et al. **Phonetica** 1988;45(1):30–42

'Metrical' factors in the scaling of sentence-initial accent peaks. Ladd DR, et al. **Phonetica** 1987;44(4):238–45

Paralinguistic variation and invariance in the characteristic frequencies of vowels. Traunmüller H. **Phonetica** 1988; 45(1):1–29

Research note on racially based audience-centered anxiety. Scudder JN, et al. **Psychol Rep** 1988 Aug;63(1):305–6

Gesture, speech, and computational stages: a reply to McNeill. Butterworth B, et al. **Psychol Rev** 1989 Jan; 96(1):168–74

A straight path–to where? Reply to Butterworth and Hadar. McNeill D. **Psychol Rev** 1989 Jan;96(1):175–9

The effect of verbalization of cognitive processes on clinical decision making. Henry SB, et al. **Res Nurs Health** 1989 Jun;12(3):187–93

International cooperation in Europe in the fields of audiology and phoniatrics. Plath P. **Scand Audiol Suppl** 1988;28:111–3

Speech results in CLP patients operated on with a von Langenbeck palatal closure. Myklebust O, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):71–4

[Auditory perception errors in verbal apraxia: indications of the nature of the disorder] van der Merwe A, et al. **S Afr J Commun Disord** 1988;35:45–54 (Eng. Abstr.) **(Afr)**

[A study on verbal fluency in patients with cerebral infarction] Xu SL. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Aug; 21(4):204–7, 254 (Eng. Abstr.) **(Chi)**

[Early right posterior cerebral hemispheric lesion and right speech dominance in 2 right-handed female patients] Bancaud J, et al. **Rev Neurol (Paris)** 1989;145(1):31–6 (28 ref.) (Eng. Abstr.) **(Fre)**

[The dialectic of glottogenesis—a contribution to the foundation of biolinguistics] Scharf JH. **Gegenbaurs Morphol Jahrb** 1988;134(5):647–65 (Eng. Abstr.) **(Ger)**

[Electroacoustic test of the voice of laryngectomized and rehabilitated patients with tracheo-esophageal prosthesis] Motta G, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 20:131–9 (16 ref.) (Eng. Abstr.) **(Ita)**

[Elderly patients with traumatic intracerebral hematoma who talk and deteriorate] Sibata S, et al. **No Shinkei Geka** 1989 Feb;17(2):177–80 (Eng. Abstr.) **(Jpn)**

[Sex difference in susceptibility to delayed auditory feedback in oral reading tasks] Fukawa T, et al. **Shinrigaku Kenkyu** 1988 Aug;59(3):144–50 (Eng. Abstr.) **(Jpn)**

[Synthetic speech and its perception in complex acoustic conditions] Tarasenko GI, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):35–41 (Eng. Abstr.) **(Rus)**

[The alternating speech test in the evaluation of central disorders of the hearing system] Kuks EN, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):10–3 (Eng. Abstr.) **(Rus)**

[Neuropsychological differentiation of specific dyslexia in children] Glezerman TB, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):63–8 (Eng. Abstr.) **(Rus)**

[A psycholinguistic method in the complex differential diagnostic examination of patients with abdominal pain syndromes] Vanchakova NP, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):124–9 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Recognition of low-level alcohol intoxication from speech signal. Klingholz F, et al. **J Acoust Soc Am** 1988 Sep; 84(3):929–35

Changes of speech activity in depressed patients under pharmacotherapy. Renfordt E. **Pharmacopsychiatry** 1989 Feb;22 Suppl 1:2–4

PHYSIOLOGY

Treatment of patients with cleft palate in consideration of nasal breathing and speech [letter] Finkelstein Y, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):750–1

Using phonation time to estimate vital capacity in amyotrophic lateral sclerosis. Hillel AD, et al. **Arch Phys Med Rehabil** 1989 Aug;70(8):618–20

Parkinsonian deficits in serial multiarticulate movements for speech. Connor NP, et al. **Brain** 1989 Aug;112 (Pt 4):997–1009

Severe nonfluency in aphasia. Role of the medial subcallosal fasciculus and other white matter pathways in recovery of spontaneous speech. Naeser MA, et al. **Brain** 1989 Feb; 112 (Pt 1):1–38

Regional cerebral blood flow for singers and nonsingers while speaking, singing, and humming a rote passage. Formby C, et al. **Brain Lang** 1989 May;36(4):690–8

EEG alpha asymmetry in dyslexics during speaking and block design tasks. Galin D, et al. **Brain Lang** 1988 Nov; 35(2):241–53

Perception and production of tone in aphasia. Gandour J, et al. **Brain Lang** 1988 Nov;35(2):201–40

The postnatal development of the motor speech area: a preliminary study. Simonds RJ, et al. **Brain Lang** 1989 Jul; 37(1):42–58

Digital, labial, and velopharyngeal reaction times in normal speakers. Dalston RM, et al. **Cleft Palate J** 1988 Jul; 25(3):203–9

An electromyographic study of the musculus uvulae. Kuehn DP, et al. **Cleft Palate J** 1988 Oct;25(4):348–55

The effects of Le Fort I osteotomy with maxillary movement on articulation, resonance, and velopharyngeal function. Kummer AW, et al. **Cleft Palate J** 1989 Jul;26(3):193–9; discussion 199–200

Commissurotomy subjects show lateralized difference between manual and oral responding. Pechstedt PH. **Cortex** 1989 Jun;25(2):325–30

Effects of velar resistance on speech aerodynamics. Laine T, et al. **Eur J Orthod** 1989 Feb;11(1):52–8

Sensorimotor characteristics of speech motor sequences. Gracco VL, et al. **Exp Brain Res** 1989;75(3):586–98

Mechanoreceptive afferent activity in the infraorbital nerve in man during speech and chewing movements. Johansson RS, et al. **Exp Brain Res** 1988;72(1):209–14

Intraoral speech pressures after experimental loss of velar resistance. Morr KE, et al. **Folia Phoniatr (Basel)** 1988; 40(6):284–9

Blood pressure, heart rate, and heart rhythm changes in patients with heart disease during talking. Freed CD, et al. **Heart Lung** 1989 Jan;18(1):17–22

Distribution of short-term rms levels in conversational speech. Cox RM, et al. **J Acoust Soc Am** 1988 Sep; 84(3):1100–4

On the measurement of glottal flow. Cranen B, et al. **J Acoust Soc Am** 1988 Sep;84(3):888–90

The development of skill in producing word-final English stops: kinematic parameters [published erratum appears in J Acoust Soc Am 1989 Jul;86(1):431] Flege JE. **J Acoust Soc Am** 1988 Nov;84(5):1639–52

Effects of speaking rate on tongue position and velocity of movement in vowel production. Flege JE. **J Acoust Soc Am** 1988 Sep;84(3):901–16

Kinematic, acoustic, and perceptual analyses of connected speech produced by parkinsonian and normal geriatric adults. Forrest K, et al. **J Acoust Soc Am** 1989 Jun; 85(6):2608–22

Analysis of vocal tract parameters in parkinsonian speech. Gath I, et al. **J Acoust Soc Am** 1988 Nov;84(5):1628–34

The acoustical input impedance of excised human lungs—measurements and model matching. Hudde H, et al. **J Acoust Soc Am** 1989 Aug;86(2):475–92

Performance characterization of human pitch control system: an acoustic approach. Jafari M, et al. **J Acoust Soc Am** 1989 Mar;85(3):1322–8

Predictors of subsyllabic durations in speech motor control. Keller E. **J Acoust Soc Am** 1989 Jan;85(1):322–6

The cricothyroid muscle in voicing control. Löfqvist A, et al. **J Acoust Soc Am** 1989 Mar;85(3):1314–21

Patterns of interarticulator phasing and their relation to linguistic structure [published erratum appears in J Acoust Soc Am 1989 Apr;85(4):1788] Nittrouer S, et al. **J Acoust Soc Am** 1988 Nov;84(5):1653–61

Articulatory dynamics of loud and normal speech. Schulman R. **J Acoust Soc Am** 1989 Jan;85(1):295–312

Kinematic and electromyographic responses to perturbation of the jaw. Shaiman S. **J Acoust Soc Am** 1989 Jul; 86(1):78–88

The influence of final-syllable position on the vowel and word duration of deaf talkers. Tye-Murray N, et al. **J Acoust Soc Am** 1989 Jan;85(1):313–21

Effects of noise on speech production: acoustic and perceptual analyses. Van Summers W, et al. **J Acoust Soc Am** 1988 Sep;84(3):917–28

F1 structure provides information for final-consonant voicing. Van Summers W. **J Acoust Soc Am** 1988 Aug; 84(2):485–92

Pseudo-three-dimensional reconstruction of ultrasonic images of the tongue. Watkin KL, et al. **J Acoust Soc Am** 1989 Jan;85(1):496–9

Abdominal muscle activity during speech production. Hoit JD, et al. **J Appl Physiol** 1988 Dec;65(6):2656–64

Timing factors in the coordination of speech movements. Gracco VL. **J Neurosci** 1988 Dec;8(12):4628–39

Surface EMG and related measures in normal and vocally hyperfunctional speakers. Redenbaugh MA, et al. **J Speech Hear Disord** 1989 Feb;54(1):68–73

Cephalometric and cineradiographic study of deviant resonance in hearing-impaired speakers. Subtelny J, et al. **J Speech Hear Disord** 1989 May;54(2):249–63

Using simultaneous photodetection and nasometry to monitor velopharyngeal behavior during speech. Dalston RM. **J Speech Hear Res** 1989 Mar;32(1):195–202

Accuracy of pressure-flow estimates of velopharyngeal orifice size in an analog model and human subjects. Guyette TW, et al. **J Speech Hear Res** 1988 Dec;31(4):537–48

Unisensory and bisensory processing skills of children having misarticulations and normally speaking peers. Hetrick RD, et al. **J Speech Hear Res** 1988 Dec;31(4):575–81

Characteristics of speech breathing in young women. Hodge MM, et al. **J Speech Hear Res** 1989 Sep;32(3):466–80

Speech breathing in women. Hoit JD, et al. **J Speech Hear Res** 1989 Jun;32(2):353–65

Variations in velar position over time: a nasal videoendoscopic study. Karnell MP, et al. **J Speech Hear Res** 1988 Sep;31(3):417–24

An analysis of velopharyngeal timing in normal adult speakers using a microcomputer based photodetector system. Keefe MJ, et al. **J Speech Hear Res** 1989 Mar; 32(1):39–48
Intraoral pressure, nasal pressure and airflow rate in cleft palate speech. Laine T, et al. **J Speech Hear Res** 1988 Sep; 31(3):432–7
Surface recordings of respiratory muscle activity during speech: some preliminary findings. McFarland DH, et al. **J Speech Hear Res** 1989 Sep;32(3):657–67
Task-specific organization of activity in human jaw muscles. Moore CA, et al. **J Speech Hear Res** 1988 Dec;31(4):670–80
The emergence of phonetic segments: evidence from the spectral structure of fricative-vowel syllables spoken by children and adults. Nittrouer S, et al. **J Speech Hear Res** 1989 Mar;32(1):120–32
Coordination of aerodynamic and phonatory processes in fluent speech utterances of stutterers. Peters HF, et al. **J Speech Hear Res** 1988 Sep;31(3):352–61
Lip movement in apraxia of speech. Robin DA, et al. **J Speech Hear Res** 1989 Sep;32(3):512–23
Monitoring vocal fold abduction through vocal fold contact area. Rothenberg M, et al. **J Speech Hear Res** 1988 Sep; 31(3):338–51
Laryngeal configuration and constriction during two types of whispering. Solomon NP, et al. **J Speech Hear Res** 1989 Mar;32(1):161–74
The speech regulating system: temporal and aerodynamic responses to velopharyngeal inadequacy. Warren DW, et al. **J Speech Hear Res** 1989 Sep;32(3):566–75
Mandible and hyoid bone movements during speech. Westbury JR. **J Speech Hear Res** 1988 Sep;31(3):405–16
Stress and intonation in the speech of hearing-impaired Hebrew-speaking children. Frank Y, et al. **Lang Speech** 1987 Oct–Dec;30 (Pt 4):339–56
Stimulus considerations in narrative analysis of normal third grade children. Klecan-Aker JS, et al. **Lang Speech** 1987 Jan–Mar;30 (Pt 1):13–24
Syntactic clause boundaries, speech timing, and stuttering frequency in adult stutterers. Klouda GV, et al. **Lang Speech** 1987 Jul–Sep;30 (Pt 3):263–76
Contrastive stress, intonation, and stuttering frequency. Klouda GV, et al. **Lang Speech** 1988 Jan–Mar;31 (Pt 1):3–20
Cognitive anatomy. The descent of the larynx? [news] Marshall JC. **Nature** 1989 Apr 27;338(6218):702–3
Speech chronemics--a hidden dimension of speech. Theoretical background, measurement and clinical validity. Krüger HP. **Pharmacopsychiatry** 1989 Feb;22 Suppl 1:5–12 (71 ref.)
Affective state and voice: results of a pilot study with six depressive patients. Stassen HH, et al. **Pharmacopsychiatry** 1989 Feb;22 Suppl 1:17–22
Vocal behavior and psychopathology. Wallbott HG. **Pharmacopsychiatry** 1989 Feb;22 Suppl 1:13–6 (21 ref.)
Articulatory organization: from phonology to speech signals. **Phonetica** 1988;45(2–4):77–198
Some notes on syllable structure in articulatory phonology. Browman CP, et al. **Phonetica** 1988;45(2–4):140–55
Palatoglossus activity during nasal/nonnasal vowels of Hindi. Dixit RP, et al. **Phonetica** 1987;44(4):210–26
Two magnetic methods for articulatory measurements. Panagos G, et al. **Phonetica** 1987;44(4):197–209
Kinematic characteristics of postvocalic labial stop consonants produced by children and adults. Smith BL, et al. **Phonetica** 1987;44(4):227–37
Paralinguistic variation and invariance in the characteristic frequencies of vowels. Traunmüller H. **Phonetica** 1988; 45(1):1–29
Physiological activation of the human cerebral cortex during auditory perception and speech revealed by regional increases in cerebral blood flow. Lassen NA, et al. **Scand Audiol Suppl** 1988;30:173–6
Pleiotropy and preadaptation in the evolution of human language capacity. Aoki K, et al. **Theor Popul Biol** 1989 Apr;35(2):181–94
[Follow-up of children screened at 4 years of age through school age with particular attention the evaluation of speech function] Biering-Sørensen M, et al. **Ugeskr Laeger** 1989 May 15;151(20):1240–4 (Eng. Abstr.) **(Dan)**
[The measurement of lingual pressure during phonation and deglutition: methods and initial results] Maillard-Salin G, et al. **Orthod Fr** 1987;58 Pt 2:869–74 (Eng. Abstr.) **(Fre)**
[The effect of respiration on speech motor reaction time] Schönle PW, et al. **Folia Phoniatr (Basel)** 1988;40(3):123–7 **(Ger)**
[Remarks on the contribution "Changes in the voice in Lombard reflex" by A. Lamprecht in Laryng. Rhinol. Otol. 67 (1988) 350 (letter)] Klingholz F. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):661–2 **(Ger)**
[The generalization of speech reactions to various instructions] Burlakov IuA. **Biol Nauki** 1988;(8):57–61 (Eng. Abstr.) **(Rus)**
[Eye movements during stuttering while reading aloud] Karpov BA. **Fiziol Cheloveka** 1988 Jan–Feb;14(1):50–7 **(Rus)**

SPEECH ACOUSTICS see under **SPEECH**

SPEECH, ALARYNGEAL

see related
LARYNX, ARTIFICIAL

Voice evaluation of myomucosal shunt after total laryngectomy: comparison with esophageal speech. Brasnu D, et al. **Am J Otolaryngol** 1989 Jul–Aug;10(4):267–72
Tracheoesophageal puncture for voice restoration after extended laryngopharyngectomy. Juarbe C, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):356–9
Surgical voice restoration following laryngectomy: the tracheo-oesophageal fistula technique (Singer-Blom). Perry A. **Br J Disord Commun** 1988 Apr;23(1):23–30
Esophageal intelligibility training: back consonants and clusters. Mase-Goldman D, et al. **J Commun Disord** 1988 Dec;21(6):437–45
Comparison of ratings of four artificial larynges. Pindzola RH, et al. **J Commun Disord** 1988 Dec;21(6):459–67
Speech acceptability and olfaction in laryngectomees. Tatchell RH, et al. **J Commun Disord** 1989 Feb;22(1):35–47
Subtotal laryngectomy with myomucosal shunt. Chandrachud HR, et al. **J Laryngol Otol** 1989 May; 103(5):504–7
Perception of stop consonants produced by esophageal and tracheoesophageal speakers. Gomyo Y, et al. **J Otolaryngol** 1989 Jun;18(4):184–8
Muscle repair for esophageal speech. Watanabe H, et al. **J R Soc Health** 1988 Aug;108(4):119–20, 118
Clinical modification of the tracheostoma breathing valve for voice restoration. Doyle PC, et al. **J Speech Hear Disord** 1989 May;54(2):189–92
Listeners' perceptions of consonants produced by esophageal and tracheoesophageal talkers. Doyle PC, et al. **J Speech Hear Disord** 1988 Nov;53(4):400–7
Comparisons of perceptual and acoustic characteristics of tracheoesophageal and excellent esophageal speech. Sedory SE, et al. **J Speech Hear Disord** 1989 May;54(2):209–14
A multidimensional scaling study of esophageal vowels. Fox RA, et al. **Phonetica** 1988;45(1):30–42
[A preliminary radiologic observation on the mechanism of esophageal speech] Gu WZ. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Oct; 22(5):268–70 (Eng. Abstr.) **(Chi)**
[Speech rehabilitation for laryngectomees] Chang P, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;42(1):23–8 (Eng. Abstr.) **(Chi)**
[The voice without vocal cords] Pech C, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(4):373–7 (Eng. Abstr.) **(Fre)**
[The concept of comprehensively oriented rehabilitation of laryngectomized patients] Pascher W, et al. **HNO** 1989 Mar;37(3):92–5 (Eng. Abstr.) **(Ger)**
[The comprehensively oriented complex rehabilitation of laryngectomized patients] Röhrs M, et al. **HNO** 1989 Mar; 37(3):96–9 (Eng. Abstr.) **(Ger)**
[Early rehabilitation of laryngectomized patients with the electrolarynx?] Röhrs M, et al. **HNO** 1989 Mar;37(3):100–3 (Eng. Abstr.) **(Ger)**
[Ultrasound diagnosis of the phoniatric performance of laryngectomized patients] Böhme G. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):651–6 (Eng. Abstr.) **(Ger)**
[Electroacoustic test of the voice of laryngectomized and rehabilitated patients with tracheo-esophageal prosthesis] Motta G, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 20:131–9 (16 ref.) (Eng. Abstr.) **(Ita)**

INSTRUMENTATION

Prosthetic vocal rehabilitation in laryngectomees using the Groningen prosthesis. Van de Heyning P, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 20:117–21 (16 ref.)
Air shunting efficiency of tracheoesophageal puncture prostheses. Weinberg B. **Acta Otorhinolaryngol Ital** 1988; 8 Suppl 20:69–77 (24 ref.)
Statistical differentiation of tracheoesophageal speech produced under four prosthetic/occlusion speaking conditions. Pauloski BR, et al. **J Speech Hear Res** 1989 Sep;32(3):591–9
[Surgery of phonatory neoglottis and prosthesis in rehabilitation of the voice after total laryngectomy] Staffieri A, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 20:49–55 (10 ref.) (Eng. Abstr.) **(Ita)**
[A newly constructed silent speech ventilator increases the quality of life of patients with cannulations] Andersson G, et al. **Lakartidningen** 1989 May 31;86(22):2096–7 **(Swe)**

METHODS

Speech rehabilitation in laryngectomees with tracheo-oesophageal fistulas and prostheses. Hall JG, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:119–21
Voice restoration following laryngectomy: the role of primary versus secondary tracheoesophageal puncture. Wenig BL, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):70–3
A British experience of surgical voice restoration as a primary procedure. Milford CA, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec; 114(12):1419–21
Simple mucodermal tracheoesophageal shunt method for voice restoration. Saito H, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):494–6
Tracheoesophageal procedures and voice restoration [letter] Singer MI. **Arch Otolaryngol Head Neck Surg** 1989 May; 115(5):633
The Lombard effect on alaryngeal speech. Zeine L, et al. **J Commun Disord** 1988 Sep;21(5):373–83
Perception of stop consonants produced by esophageal and tracheoesophageal speakers. Gomyo Y, et al. **J Otolaryngol** 1989 Jun;18(4):184–8
Surgical treatment of pharyngoesophageal spasm. Baugh RF, et al. **Laryngoscope** 1988 Oct;98(10):1124–6
Speech restoration and complications of primary versus secondary tracheoesophageal puncture following total laryngectomy. Maniglia AJ, et al. **Laryngoscope** 1989 May; 99(5):489–91
Voice restoration after laryngopharyngoesophagectomy. Wenig BL, et al. **Otolaryngol Head Neck Surg** 1989 Jul; 101(1):11–3
[Vocal rehabilitation after total laryngectomy by musculomucous tracheo-esophageal fistula. Results apropos of 27 cases] Brasnu D, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):449–52 (Eng. Abstr.) **(Fre)**
[Voice restoration after total laryngectomy by tracheoesophageal fistula] Lacau St Guily J, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(5):360–3 (Eng. Abstr.) **(Fre)**
[Vocal rehabilitation with tracheo-esophageal prosthesis: protocol adopted by the Naples School. III—Contribution of the speech therapist] Motta G, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 20:97–106 (7 ref.) (Eng. Abstr.) **(Ita)**
[A new designed reed-fistula method] Kikawada T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):887–94 (Eng. Abstr.) **(Jpn)**
[Total functional laryngectomy and fistuloplasties. Preliminary results] Mallea I, et al. **An Otorrinolaringol Ibero Am** 1988;15(4):443–50 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

Effects of listener sophistication on judgements of tracheoesophageal talker intelligibility. Doyle PC, et al. **J Commun Disord** 1989 Apr;22(2):105–13

SPEECH ARTICULATION TESTS see under **SPEECH PRODUCTION MEASUREMENT**

SPEECH DISCRIMINATION see **SPEECH PERCEPTION**

SPEECH DISCRIMINATION TESTS

Evaluation of pure tone and speech discrimination changes in Usher's syndrome. Meyer DH, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):364–8
Magnitude estimations of the intelligibility and quality of speech in noise. Studebaker GA, et al. **Ear Hear** 1988 Oct; 9(5):259–67
The effect of varying the amplitude-frequency response on the masked speech-reception threshold of sentences for hearing-impaired listeners. van Dijkhuizen JN, et al. **J Acoust Soc Am** 1989 Aug;86(2):621–8
Word recognition functions for the CID W-22 test in multitalker noise for normally hearing and hearing-impaired subjects. Beattie RC. **J Speech Hear Disord** 1989 Feb;54(1):20–32
Speech spectrum considerations and speech intelligibility predictions in hearing aid evaluations. Pavlovic CV. **J Speech Hear Disord** 1989 Feb;54(1):3–8
Perception of voiceless fricatives by children with a functional articulation disorder. Rvachew S, et al. **J Speech Hear Disord** 1989 May;54(2):193–208
Effect of three conditions of predictability on word-recognition performance. Craig CH. **J Speech Hear Res** 1988 Dec;31(4):588–92
Natural alteration of speaking rate: the effect on passage comprehension by listeners over 75 years of age. Schmitt JF, et al. **J Speech Hear Res** 1989 Jun;32(2):445–50
Speech tracking in the evaluation of a multichannel cochlear prosthesis. Jenkins H, et al. **Laryngoscope** 1989 Mar; 99(3):245–51
Listening rate and comprehension as a function of preference for and exposure to time-altered speech. Gade PA, et al. **Percept Mot Skills** 1989 Apr;68(2):531–8

METHODS

Hearing aid evaluation using psychoacoustical proximity between Japanese monosyllables. Hosoi H, et al. **Audiology** 1989;28(3):171–8
Use of the Connected Speech Test (CST) with hearing-impaired listeners. Cox RM, et al. **Ear Hear** 1988 Aug;9(4):198–207
Development of the Speech Intelligibility Rating (SIR) test for hearing aid comparisons. Cox RM, et al. **J Speech Hear Res** 1989 Jun;32(2):347–52
[Experiences with the distorted Freiburg Speech Test—diagnosis and rehabilitation of hearing disorders] Dieroff HG, et al. **Laryngorhinootologie** 1989 Jul; 68(7):372–8 (Eng. Abstr.) **(Ger)**

STANDARDS

Roeser disagrees with validity of VASC screening technique

[letter] Roeser RJ. **J Sch Health** 1988 Sep;58(7):266

SPEECH DISORDERS

see related

VELOPHARYNGEAL INSUFFICIENCY

Delayed speech in children [editorial] Hall D. **BMJ** 1988 Nov 19;297(6659):1281–2

XXIst Congress of the International Association of Logopedics and Phoniatrics. Prague, August 6–10, 1989. Abstracts. **Folia Phoniatr (Basel)** 1989;41(4–5):155–248

Articulatory adequacy in dysarthric speakers: a comparison of judging formats. Yorkston KM, et al. **J Commun Disord** 1988 Aug;21(4):351–61

A unique association of short stature, dysmorphic features, and speech impairment (Floating–Harbor syndrome). Robinson PL, et al. **J Pediatr** 1988 Oct;113(4):703–6

Perception of voiceless fricatives by children with a functional articulation disorder. Rvachew S, et al. **J Speech Hear Disord** 1989 May;54(2):193–208

CHEMICALLY INDUCED

Hypotension and neurological sequelae following intramuscular midazolam [letter] Matson AM, et al. **Anaesthesia** 1988 Oct;43(10):896

Dysarthria after large doses of intravenous diazepam. Ishikawa T, et al. **Jpn J Psychiatry Neurol** 1988 Dec; 42(4):759–61

Exacerbation of aluminium encephalopathy after treatment with desferrioxamine. McCauley J, et al. **Nephrol Dial Transplant** 1989;4(2):110–4

CLASSIFICATION

Dysfluency isn't always stuttering [letter] Culatta R, et al. **J Speech Hear Disord** 1988 Nov;53(4):486–8

COMPLICATIONS

Language and speech disorders in children attending a day psychiatric programme. Kotsopoulos A, et al. **Br J Disord Commun** 1987 Dec;22(3):227–36

Speech dysfunction of obstructive sleep apnea. A discriminant analysis of its descriptors. Fox AW, et al. **Chest** 1989 Sep;96(3):589–95

Voice perturbations of children with perceived nasality and hoarseness. Zajac DJ, et al. **Cleft Palate J** 1989 Jul; 26(3):226–31; discussion 231–2

Empirical classification of speech/language impairment in children. II. Behavioral characteristics. Beitchman JH, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan; 28(1):118–23

Ganser symptoms, dissociation, and dysprosody. Feinstein A, et al. **J Nerv Ment Dis** 1988 Nov;176(11):692–3

[Alternate red nucleus syndrome (Claude variant). Apropos of a case report] Sténuit AA, et al. **Rev Med Brux** 1989 May;10(5):173–6 (Eng. Abstr.) **(Fre)**

[A disorder with low serum copper level, dementia, dysarthria, gait disturbance and involuntary movements] Ono S, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):433–6 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Accurate non-word spelling despite congenital inability to speak: phoneme–grapheme conversion does not require subvocal articulation. Bishop DV, et al. **Br J Psychol** 1989 Feb;80 (Pt 1):1–13

DIAGNOSIS

Psychometric characteristics in patients with frontal lobe degeneration of non–Alzheimer type. Johanson A, et al. **Arch Gerontol Geriatr** 1989 Mar;8(2):129–37

Addressing service delivery in remote/rural areas. Chezik KH, et al. **ASHA** 1989 Jan;31(1):52–5

The influence of speaking rate on articulatory hypokinesia in parkinsonian dysarthria. Caligiuri MP. **Brain Lang** 1989 Apr;36(3):493–502

Empirical classification of speech/language impairment in children. I. Identification of speech/language categories. Beitchman JH, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):112–7

Stop consonant production in isolated and repeated syllables in Parkinson's disease. Connor NP, et al. **Neuropsychologia** 1989;27(6):829–38

[Quantitative analysis of characteristics of dysarthric speech based on sound spectrography] Odajima N, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1046–53 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

The effect of bromocriptine on speech dysfunction in patients with diffuse brain injury (akinetic mutism). Crismon ML, et al. **Clin Neuropharmacol** 1988 Oct;11(5):462–6

EPIDEMIOLOGY

Month of birth of non-speaking children [letter] Burd L. **Dev Med Child Neurol** 1988 Oct;30(5):685–6

[Basic disorders in human communication] Peñaloza-López Y, et al. **Salud Publica Mex** 1989 Jan–Feb;31(1):106–16 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Distinguishing and improving dysarthria due to facial weakness [letter] Starr A. **Arch Neurol** 1989 Feb;46(2):125

Distinguishing and improving dysarthria due to facial weakness [letter] Starr A. **Arch Neurol** 1988 Oct; 45(10):1061

Speech characteristics in patients with hypohidrotic ectodermal dysplasia. Coston GN, et al. **Birth Defects** 1988; 24(2):229–34

Communication disorders in Legionnaires' disease. Mackenzie C. **Br J Disord Commun** 1987 Dec;22(3):253–62

Long-term speech and language disorders subsequent to closed head injury in children. Jordan FM, et al. **Brain Inj** 1988 Jul–Sep;2(3):179–85

Clinical aspects of mental retardation. The chief complaint. Montgomery TR. **Clin Pediatr (Phila)** 1988 Nov; 27(11):529–31

Verbal auditory agnosia in children [letter] Rapin I. **Dev Med Child Neurol** 1988 Oct;30(5):685

Speech defects as an unusual complication of adenotonsillectomy. Obiako MN. **Ear Nose Throat J** 1988 Oct;67(10):752–4

Aphasic status epilepticus. Primavera A, et al. **Eur Neurol** 1988;28(5):255–7

Speech in children with hearing disorders: diagnostics, treatment and rehabilitation. Sedláček K. **Folia Phoniatr (Basel)** 1989;41(2–3):145–52 (0 ref.)

Evaluation of the child with deafness or delayed speech. Coplan J. **Indian J Pediatr** 1988 May–Jun;55(3):372–8 (25 ref.)

Maternal interaction and language development in children with and without speech-related anomalies. Wasserman GA, et al. **J Commun Disord** 1988 Aug;21(4):319–31

Thalamic aphasia. A conceptional critique. Bruyn RP. **J Neurol** 1989 Jan;236(1):21–5 (33 ref.)

Speech and language in maltreated children: response to McCauley and Swisher (1987) [letter] Sparks SN. **J Speech Hear Disord** 1989 Feb;54(1):124–6

Psycholinguistic diagnostic methods for focal cerebellar lesions. Babkina TI. **Neurosci Behav Physiol** 1988 Jul–Aug; 18(4):357–60

[A study on speech disorders in acute cerebrovascular disease] Wang XD. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Aug; 21(4):201–3, 254 (Eng. Abstr.) **(Chi)**

[Distal infarction of the left superior cerebellar artery presenting with dysarthria and unsteadiness] Amarenco P, et al. **Rev Neurol (Paris)** 1988;144(6–7):459–61 (Eng. Abstr.) **(Fre)**

[Dysarthria–clumsy hand syndrome caused by cerebellar infarction] Tougeron A, et al. **Rev Neurol (Paris)** 1988; 144(10):596–7 (Eng. Abstr.) **(Fre)**

[Dysarthrophonia of Parkinson syndrome] Ackermann H, et al. **Fortschr Neurol Psychiatr** 1989 Apr;57(4):149–60 (150 ref.) (Eng. Abstr.) **(Ger)**

[Nasal speech with special reference to a submucous cleft palate] Johannsen HS, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):599–602 (Eng. Abstr.) **(Ger)**

[Iterative dysarthria in Parkinson disease] Machetanz J, et al. **Nervenarzt** 1988 Sep;59(9):559–61 (27 ref.) (Eng. Abstr.) **(Ger)**

[Paramedian thalamic and midbrain infarcts associated with palilalia] Yasuda Y, et al. **Rinsho Shinkeigaku** 1989 Feb; 29(2):186–90 (Eng. Abstr.) **(Jpn)**

[The effect of clefts of the lips and the hard and soft palate on the otolaryngologic organs in patients treated in the area of north Bačka] Gubás J, et al. **Med Pregl** 1988; 41(11–12):491–3 (Eng. Abstr.) **(Scr)**

HISTORY

Speech and hearing science in ancient India—a review of Sanskrit literature. Savithri SR. **J Commun Disord** 1988 Aug;21(4):271–317

NURSING

The behavioral consequences of a communication intervention on institutionalized residents with aphasia and dysarthria. Buckwalter KC, et al. **Arch Psychiatr Nurs** 1988 Oct;2(5):289–95

PATHOLOGY

[Pringle's adenoma of the sebaceous glands combined with vitiligo and logoneurosis] Alziatulov RF. **Vestn Dermatol Venerol** 1989;(4):69–70 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Right-hemisphere speech, callosal size, perinatal brain insult, and schizophrenia [letter] Nasrallah HA. **Ann Neurol** 1989 Aug;26(2):290–1

Perceived articulatory adequacy and velopharyngeal function in dysarthric speakers. Yorkston KM, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):313–7

What is developmental verbal dyspraxia? **ASHA** 1989 Apr; 31(4):42

Patterns and location of velopharyngeal valving problems: atypical findings on video nasopharyngoscopy. Witzel MA, et al. **Cleft Palate J** 1989 Jan;26(1):63–7

Hemispheric dominance: its development and relation to speech disorders. Kertesz A. **Folia Phoniatr (Basel)** 1989; 41(2–3):61–88 (195 ref.)

Kinematic, acoustic, and perceptual analyses of connected speech produced by parkinsonian and normal geriatric adults. Forrest K, et al. **J Acoust Soc Am** 1989 Jun; 85(6):2608–22

The acoustic signature for intelligibility test words. Weismer G, et al. **J Acoust Soc Am** 1988 Oct;84(4):1281–91

Nasal airflows in parkinsonian speakers. Hoodin RB, et al. **J Commun Disord** 1989 Jun;22(3):169–80

VOT and dysarthria: a descriptive study. Morris RJ. **J Commun Disord** 1989 Feb;22(1):23–33

Acoustic phonetic effects of two types of verbal feedback in dysarthric subjects. Till JA, et al. **J Speech Hear Disord** 1988 Nov;53(4):449–58

Acoustic and perceptual analysis of word-initial stop consonants in phonologically disordered children. Forrest K, et al. **J Speech Hear Res** 1988 Sep;31(3):449–59

[Velopharyngeal insufficiency. Anatomo-physiological aspects] Wellens W. **Acta Otorhinolaryngol Belg** 1988; 42(4):463–76 (Eng. Abstr.) **(Fre)**

[Real-time analysis of orofacial movements using electromagnetic articulography] Schönle PW, et al. **Biomed Tech (Berlin)** 1989 Jun;34(6):126–30 (Eng. Abstr.) **(Ger)**

[Interhemispheric asymmetry in the mechanisms of nonaphasic disorders of the speech functions] Lokhov MI. **Fiziol Cheloveka** 1988 Jan–Feb;14(1):38–42 (26 ref.) **(Rus)**

[Reactivity of rolandic rhythm in children with a general speech development disorder] Viatleva OA, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):58–63 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Intravelar veloplasty: a prospective study. Marsh JL, et al. **Cleft Palate J** 1989 Jan;26(1):46–50

Speech and language screening of children from birth to 6 years of age. Steckol KF. **J Ky Med Assoc** 1988 Sep; 86(9):503–6

PSYCHOLOGY

Crossed aprosodia in strongly dextral patients. Ross ED, et al. **Arch Neurol** 1989 Feb;46(2):206–9

Poverty of speech in schizophrenia and depression during in-patient and post-hospital periods. Ragin AB, et al. **Br J Psychiatry** 1989 Jan;154:52–7

Auditory temporal pattern learning in children with speech and language impairments. Robin DA, et al. **Brain Lang** 1989 May;36(4):604–13

The role of the school psychologist in the examination of complex language disorders. Werder H. **Int J Rehabil Res** 1988;11(1):21–8

Listeners' perceptions of nonspeech characteristics of normal and dysarthric children. Lass NJ, et al. **J Commun Disord** 1988 Sep;21(5):385–91

Communicative performance of adolescents with severe speech impairment: influence of context. Dalton BM, et al. **J Speech Hear Disord** 1989 Aug;54(3):403–21

Prediction of fine motor skills of children having language and speech disorders. Sommers RK. **Percept Mot Skills** 1988 Aug;67(1):63–72

[Verbal or nonverbal diagnosis of intelligence in speech-handicapped children] Wochnik M. **Folia Phoniatr (Basel)** 1988;40(3):111–6 **(Ger)**

REHABILITATION

Two augmentative communication systems for speechless disabled patients. Newman GC, et al. **Am J Occup Ther** 1989 Aug;43(8):529–34

Immediate tracheoesophageal puncture for voice restoration in laryngopharyngeal resection. Lau WF, et al. **Am J Surg** 1988 Oct;156(4):269–72

Deinstitutionalization: its effect on the delivery of speech-language-hearing services for persons with mental retardation and developmental disabilities. **ASHA** 1989 Mar;31(3):84–7

Laryngectomy. Support starts pre-op and goes on. Goldberg B. **ASHA** 1989 Apr;31(4):65

Development and preliminary evaluation of two speech communication aids. Deliege RJ, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):18–22

A comparison of symbol transparency in nonspeaking persons with intellectual disabilities. Mirenda P, et al. **J Speech Hear Disord** 1989 May;54(2):131–40

Rehabilitation of communication impairment in dystonia musculorum deformans. Shahar E, et al. **Pediatr Neurol** 1987 Mar–Apr;3(2):97–100

Development of hearing and speech services in the Kuwait-Arabian Gulf. Kapur YP. **Scand Audiol Suppl** 1988; 28:91–3

SURGERY

Changes in articulation and resonance after tongue flap closure of palatal fistulas: case reports. Kummer AW, et al. **Cleft Palate J** 1989 Jan;26(1):51–5

Improvement of speech intelligibility by a secondary operation to mobilize the tongue after glossectomy. Michi K, et al. **J Craniomaxillofac Surg** 1989 May;17(4):162–6

Muscle repair for esophageal speech. Watanabe H, et al.

J R Soc Health 1988 Aug;108(4):119–20, 118

THERAPY

Services in the schools. Serving school children. Finding solutions and rewards in the educational setting. ASHA 1989 Jan;31(1):37–43

The roles of speech-language pathologists in service delivery to infants, toddlers, and their families. ASHA 1989 May; 31(5):31

Communication-based services for infants, toddlers, and their families. ASHA 1989 May;31(5):32–4, 94

Augmentative communication services in the schools. Blackstone SW. ASHA 1989 Jan;31(1):61–4

Speech-language pathology and the regular education initiative. Dublinske S. ASHA 1989 Jan;31(1):47–9

Software that works in school settings. A framework for choosing the right program. Schetz KF, et al. ASHA 1989 Jan;31(1):65–8

Issues in school services. Can I be all things to all people? Work R. ASHA 1989 Jan;31(1):57–8

Replacing maladaptive speech with verbal labeling responses: an analysis of generalized responding. Foxx RM, et al. J Appl Behav Anal 1988 Winter;21(4):411–7

Within-clinic versus outside-of-clinic self-monitoring of articulation to promote generalization. Koegel RL, et al. J Speech Hear Disord 1988 Nov;53(4):392–9

Long-term treatment of severe dysarthria: a case study. Simpson MB, et al. J Speech Hear Disord 1988 Nov; 53(4):433–40

The role of the speech language pathologist in the management of dysphagia. Logemann JA. Otolaryngol Clin North Am 1988 Nov;21(4):783–8 (28 ref.)

[Combined therapy of speech and behavior disorders! Dr. med. H. Amorosa, Munich, confirms the success of an endangered interdisciplinary treatment (interview)] Amorosa H. Fortschr Med 1989 Jun 10;107(17):20–1 (Ger)

[Cognitive-behavioral treatment of language disorders. Technic and clinical cases] Meluzzi A, et al. Minerva Psichiatr 1988 Jul-Sep;29(3):157–60 (Eng. Abstr.) (Ita)

SPEECH, ESOPHAGEAL see under SPEECH, ALARYNGEAL

SPEECH INTELLIGIBILITY

see related
SPEECH PRODUCTION MEASUREMENT

Interlist equivalence of the word intelligibility by picture identification test administered in broad-band noise. Chermak GD, et al. Audiology 1988;27(6):324–33

Speech audiometry using an adaptive method. Haughton PM. Br J Audiol 1989 May;23(2):117–21

Speech results of cleft palate surgery: two methods of assessment. Bagnall AD, et al. Br J Plast Surg 1988 Sep; 41(5):488–95

A comparison of the speech results after early and delayed hard palate closure; a preliminary report. Harding A, et al. Br J Plast Surg 1989 Mar;42(2):187–92

The Connected Speech Test version 3: audiovisual administration. Cox RM, et al. Ear Hear 1989 Feb; 10(1):29–32

Importance weighted audibility and the recognition of hearing aid-processed speech. Studebaker GA, et al. Ear Hear 1989 Apr;10(2):101–8

Norms for disproportionate loss in speech intelligibility. Yellin MW, et al. Ear Hear 1989 Aug;10(4):231–4

Listeners' perceptions of normal and voice-disordered children. Ruscello DM, et al. Folia Phoniatr (Basel) 1988; 40(6):290–6

The intelligibility of synthesized speech in data inquiry systems. Marics MA, et al. Hum Factors 1988 Dec; 30(6):719–32

Segmental intelligibility of synthetic speech produced by rule. Logan JS, et al. J Acoust Soc Am 1989 Aug;86(2):566–81

Some effects of talker variability on spoken word recognition. Mullennix JW, et al. J Acoust Soc Am 1989 Jan; 85(1):365–78

The acoustic signature for intelligibility test words. Weismer G, et al. J Acoust Soc Am 1988 Oct;84(4):1281–91

Effects of listener sophistication on judgements of tracheoesophageal talker intelligibility. Doyle PC, et al. J Commun Disord 1989 Apr;22(2):105–13

Esophageal intelligibility training: back consonants and clusters. Mase-Goldman D, et al. J Commun Disord 1988 Dec;21(6):437–45

Improvement of speech intelligibility by a secondary operation to mobilize the tongue after glossectomy. Michi K, et al. J Craniomaxillofac Surg 1989 May;17(4):162–6

Perception of stop consonants produced by esophageal and tracheoesophageal speakers. Gomyo Y, et al. J Otolaryngol 1989 Jun;18(4):184–8

Listeners' perceptions of consonants produced by esophageal and tracheoesophageal talkers. Doyle PC, et al. J Speech Hear Disord 1988 Nov;53(4):400–7

Development of the Speech Intelligibility Rating (SIR) test for hearing aid comparisons. Cox RM, et al. J Speech Hear Res 1989 Jun;32(2):347–52

The importance of consonant-vowel intensity ratio in the intelligibility of voiceless consonants. Freyman RL, et al. J Speech Hear Res 1989 Sep;32(3):524–35

Temporal changes in word revisions by children and adults. Paul-Brown D, et al. J Speech Hear Res 1988 Dec; 31(4):630–9

Speaking clearly for the hard of hearing. III: An attempt to determine the contribution of speaking rate to differences in intelligibility between clear and conversational speech. Picheny MA, et al. J Speech Hear Res 1989 Sep;32(3):600–3

Criterion validity of speech intelligibility rating-scale procedures for the hearing-impaired population. Samar VJ, et al. J Speech Hear Res 1988 Sep;31(3):307–16

Improved hearing and improved speech [letter] Dellon AL. Plast Reconstr Surg 1989 Aug;84(2):369–70

Speech results of the Zürich approach in the treatment of unilateral cleft lip and palate. Van Demark DR, et al. Plast Reconstr Surg 1989 Apr;83(4):605–13

Speech intelligibility in difficult signal/noise circumstances. Kiukaanniemi H, et al. Scand Audiol Suppl 1988;30:215–8

PHYSIOLOGY

Detection of target phonemes in spontaneous and read speech. Mehta G, et al. Lang Speech 1988 Apr-Jun;31 (Pt 2):135–56

SPEECH PATHOLOGY

Inside the National Office. Public Information Department. ASHA 1988 Sep;30(9):19–20

AIDS/HIV: implications for speech-language pathologists and audiologists. ASHA 1989 Jun-Jul;31(6-7):33–8

Constructing a competitive proposal. Catlett C. ASHA 1989 Feb;31(2):70–2

Speech-language pathologists, audiologists, and HMOs: status & outlook. Cornett BS. ASHA 1988 Sep;30(9):64–7

Marketing your services. Speak with sense. Foxman CA. ASHA 1988 Sep;30(9):46–7

Obtaining grant funding: ten steps to success. Gelatt JP. ASHA 1989 Feb;31(2):67–9

Marketing your services. Quality sells. Griffin KM. ASHA 1988 Sep;30(9):48–51

Marketing your services. President's page. Holley SC. ASHA 1988 Sep;30(9):37–8

Working in the public schools and loving it [editorial] Kahler LB. ASHA 1989 Jan;31(1):44, 60

Private practitioners in public schools. An alternative that works. Lenkner MA, et al. ASHA 1989 Jan;31(1):59–60

Status of communication services in nursing homes in New York State. Lubinski R, et al. ASHA 1988 Sep;30(9):69–72

Aseptic technique: a procedure for preventing disease transmission in the practice environment. McMillan MO, et al. ASHA 1988 Nov;30(11):35–7

Speech-language pathology in a psychiatric setting [interview by L. Hummel] Prizant B. ASHA 1989 Jun-Jul; 31(6-7):91–6

Marketing your services. Case study 5. State association makes May a year-round event. Shanoff CS. ASHA 1988 Sep;30(9):33–5

Speech-language pathologists in the schools. Shewan CM. ASHA 1989 Jan;31(1):56

Marketing your services. Case study 3. A hospital capitalizes on opportunities. Signer MB. ASHA 1988 Sep;30(9):29–31

Marketing your services. Case study 4. A clinic profits from board members' help. Signer MB. ASHA 1988 Sep; 30(9):31–3

ASHA: status and identity. Silverman SR. ASHA 1989 Jun-Jul;31(6-7):83–5

Private practice: no apology needed. Smith FS. ASHA 1989 Jun-Jul;31(6-7):81–2

The hidden challenge in counseling. Stone JR, et al. ASHA 1989 Jun-Jul;31(6-7):27–31

In search of qualities: invited comment on Eastwood's 'Qualitative research'. Aylwin S. Br J Disord Commun 1988 Aug;23(2):185–7

Qualitative research: an additional research methodology for speech pathology? Eastwood J. Br J Disord Commun 1988 Aug;23(2):171–84

Further comment on Eastwood's 'Qualitative research'. Levy P. Br J Disord Commun 1988 Aug;23(2):189

The role of the speech and language clinician on a multidisciplinary team. Giddan JJ, et al. Child Psychiatry Hum Dev 1989 Spring;19(3):180–5

Bonferroni's bound—a control of significance level errors in speech pathology and audiology research. Kass CV, et al. S Afr J Commun Disord 1988;35:75–7

ECONOMICS

Projects of national significance: assisting members through funded programs. Bruskin DM. ASHA 1989 Feb;31(2):73–5

Matching ideas and funds [editorial] Sparks RD. ASHA 1989 Feb;31(2):77, 99

EDUCATION

Accreditation of educational programs. ASHA 1989 Jun-Jul; 31(6-7):41–6

Mental retardation and developmental disabilities curriculum guide for speech-language pathologists and audiologists. ASHA 1989 Mar;31(3):94–6

Competencies for speech-language-pathologists providing services in augmentative communication. ASHA 1989 Mar; 31(3):107–10

Preparation models for the supervisory process in speech-language pathology and audiology. ASHA 1989 Mar;31(3):97–106

Lack of attendance at AIDS miniseminar. Coombs PT. ASHA 1989 Feb;31(2):65

The unification model. Cunningham DR, et al. ASHA 1989 Sep;31(9):87–9

Back to school. Everyone wins. Fagan E. ASHA 1989 Jan; 31(1):45–6

Who's isolated? [letter] Garner BA. ASHA 1989 May;31(5):3

The need for multicultural literacy. Herer GR. ASHA 1989 Sep;31(9):79

Multicultural professional education. Hunter SL, et al. ASHA 1989 Sep;31(9):76–7

Research funding reports from communication sciences and disorders programs. Shewan CM, et al. ASHA 1989 May; 31(5):27

Professional education and communication disorders. Spriestersbach DC. ASHA 1989 Jun-Jul;31(6-7):77–8

HISTORY

Recollections from a pioneer. Van Riper C. ASHA 1989 Jun-Jul;31(6-7):72–3

INSTRUMENTATION

Computer usage on the rise. Shewan CM. ASHA 1989 Feb; 31(2):35

LEGISLATION & JURISPRUDENCE

1988 policy issues and activities in the states. Lynch C. ASHA 1988 Dec;30(12):45–8

Involvement in the legislative process through the state association. Wolf KE, et al. ASHA 1989 Apr;31(4):37–8, 78

MANPOWER

Utilization and employment of speech-language pathology supportive personnel with underserved populations. ASHA 1988 Nov;30(11):55–6

Dissecting ASHA's membership: current counts. ASHA 1989 Apr;31(4):39

ORGANIZATION & ADMINISTRATION

Marketing your services. The business of grantseeking. Gelatt JR. ASHA 1988 Sep;30(9):43–5

Marketing your services. Strategies that work. Matthews CB. ASHA 1988 Sep;30(9):22–5

Marketing your services. Case study 2. A school system wins with team players. Signer MB. ASHA 1988 Sep;30(9):27–9

Marketing your services. Case study 1. A private practitioner prepares for PL 99-457. Straub SA. ASHA 1988 Sep; 30(9):26–7

STANDARDS

Service requires ethics, excellence. Herer GR. ASHA 1989 Jun-Jul;31(6-7):87

Evaluation of the requirements for the Certificates of Clinical Competence in Speech-Language Pathology and Audiology. Lingwall JB. ASHA 1988 Sep;30(9):75–8

STATISTICS & NUMERICAL DATA

Survey of ASHA members holding dual certification. Goldberg DM. ASHA 1989 Apr;31(4):29–31

TRENDS

One lover's quarrel revisited. The state of the profession. Cooper EB. ASHA 1989 Feb;31(2):79–82

ASHA interviews Gilbert R. Herer, 1989 President [interview] Herer GR. ASHA 1989 Jan;31(1):30–4

The new ASHA: preparing for the future. Holley SC. ASHA 1988 Dec;30(12):19–22

1988 omnibus survey. Adaptation and progress in times of change. Shewan CM. ASHA 1988 Aug;30(8):27–30

SPEECH PERCEPTION

Revealing hidden competencies: a new method for studying language comprehension in children with motor impairments. Cauley KM, et al. Am J Ment Retard 1989 Jul;94(1):53–63

Telephone speech comprehension with use of the nucleus cochlear implant. Cohen NL, et al. Ann Otol Rhinol Laryngol Suppl 1989 Aug;142:8–11

Phoneme perception via hearing aids with and without compression and the role of temporal resolution. Dreschler WA. Audiology 1989;28(1):49–60

Binaural speech discrimination under noise in hearing-impaired listeners. Kumar KV, et al. Aviat Space Environ Med 1988 Oct;59(10):932–6

The effect of attitude on benefit obtained from hearing aids. Brooks DN. Br J Audiol 1989 Feb;23(1):3–11

An audiovisual test of hearing disability using free-field sentences in noise. Day GA, et al. Br J Audiol 1988 Aug; 22(3):179–82

Problems of the hearing impaired in Poland. Golabek W, et al. Br J Audiol 1989 Feb;23(1):73–5

Stimulus intensity, attentional instructions, and the ear advantage during dichotic listening. Bloch MI, et al. Brain Cogn 1989 Jan;9(1):136–48

Processing of pragmatic and facial affective information by patients with closed-head injuries. Braun CM, et al.

Brain Inj 1989 Jan–Mar;3(1):5–17
Assessment of distractibility in auditory comprehension after traumatic brain injury. Kewman DG, et al. **Brain Inj** 1988 Apr–Jun;2(2):131–7
On–line sensitivity to local and long–distance syntactic dependencies in Broca's aphasia. Baum SR. **Brain Lang** 1989 Aug;37(2):327–38
Auditory agnosia: apperceptive or associative disorder? Buchtel HA, et al. **Brain Lang** 1989 Jul;37(1):12–25
Discourse in aphasia: integration deficits in processing reference. Chapman SB, et al. **Brain Lang** 1989 May; 36(4):651–68
Processing of lexical ambiguities: a comment on Milberg, Blumstein, and Dworetzky (1987). Hagoort P. **Brain Lang** 1989 Feb;36(2):335–48
Contextual influences in aphasia: effects of predictive versus nonpredictive narratives. Hough MS, et al. **Brain Lang** 1989 Feb;36(2):325–34
A developmental study of the auditory Stroop effect. Jerger S, et al. **Brain Lang** 1988 Sep;35(1):86–104
Recognizing orally spelled words: an analysis of procedures shared with reading and spelling. Katz RB. **Brain Lang** 1989 Aug;37(2):201–19
Anticipatory coarticulation in aphasia: acoustic and perceptual data. Katz WF. **Brain Lang** 1988 Nov; 35(2):340–68
Postaccess processes in the open vs. closed class distinction. Matthei EH, et al. **Brain Lang** 1989 Feb;36(2):163–80
Reaction time methodology and the aphasic patient: a reply to Hagoort (1988). Milberg W, et al. **Brain Lang** 1989 Feb; 36(2):349–53
An auditory Stroop effect for pitch, loudness, and time. Morgan AL, et al. **Brain Lang** 1989 May;36(4):592–603
Expectancy effects: cost–benefit analysis of monaurally and dichotically presented speech. Murray J, et al. **Brain Lang** 1988 Sep;35(1):105–18
Appreciation of indirect requests by left– and right–brain–damaged patients: the effects of verbal context and conventionality of wording. Weylman ST, et al. **Brain Lang** 1989 May;36(4):580–91
Dichotic listening performance, cognitive ability, and cerebral organization. Bryden MP. **Can J Psychol** 1986 Dec;40(4):445–56
Location confusions in visual information processing. Dixon P, et al. **Can J Psychol** 1988 Sep;42(3):378–94
Speech perception in severely disabled and average reading children. Werker JF, et al. **Can J Psychol** 1987 Mar; 41(1):48–61
The development of speech act comprehension in mentally retarded individuals and nonretarded children. Abbeduto L, et al. **Child Dev** 1988 Dec;59(6):1460–72
Children's use of a verbal–nonverbal consistency principle to infer truth and lying. Rotenberg KJ, et al. **Child Dev** 1989 Apr;60(2):309–22
Voice fundamental frequency as an auditory supplement to the speechreading of sentences. Boothroyd A, et al. **Ear Hear** 1988 Dec;9(6):306–12
Perception of speech pattern contrasts from auditory presentation of voice fundamental frequency. Boothroyd A. **Ear Hear** 1988 Dec;9(6):313–21
Word identification performance in the presence of competing speech and noise in learning disabled adults. Chermak GD, et al. **Ear Hear** 1989 Apr;10(2):90–3
Tactile presentation of voice fundamental frequency as an aid to the speechreading of sentences. Hanin L, et al. **Ear Hear** 1988 Dec;9(6):335–41
Tactile presentation of voice fundamental frequency as an aid to the perception of speech pattern contrasts. Hnath–Chisolm T, et al. **Ear Hear** 1988 Dec;9(6):329–34
Perception of frequency contours via temporal and spatial tactile transforms. Hnath–Chisolm T, et al. **Ear Hear** 1988 Dec;9(6):322–8
Speech understanding in the elderly. Jerger J, et al. **Ear Hear** 1989 Apr;10(2):79–89
Evidence of echoic memory with a multichannel cochlear prosthesis. Jerger S, et al. **Ear Hear** 1988 Oct;9(5):231–6
A wearable multichannel tactile display of voice fundamental frequency. Yeung E, et al. **Ear Hear** 1988 Dec;9(6):342–50
Responses of neonates to parents' and others' voices. Ockleford EM, et al. **Early Hum Dev** 1988 Nov;18(1):27–36
Auditory feedback and writing: learning disabled and nondisabled students. Espin CA, et al. **Except Child** 1988 Sep;55(1):45–51
Speaker race identification of North American Indian children. Mencel E, et al. **Folia Phoniatr (Basel)** 1988; 40(4):175–82
Listeners' perceptions of normal and voice–disordered children. Ruscello DM, et al. **Folia Phoniatr (Basel)** 1988; 40(6):290–6
Multiple perceptions of word relationships: evidence of adolescent competence. Secord W, et al. **Folia Phoniatr (Basel)** 1988;40(4):197–204
Modeling the perception of concurrent vowels: vowels with the same fundamental frequency. Assmann PF, et al. **J Acoust Soc Am** 1989 Jan;85(1):327–38
Illusory continuity of interrupted speech: speech rate determines durational limits. Bashford JA Jr, et al. **J Acoust Soc Am** 1988 Nov;84(5):1635–8
Speech perception in children with histories of recurrent otitis media. Clarkson RL, et al. **J Acoust Soc Am** 1989 Feb;85(2):926–33
Application of an auditory model to speech recognition. Cohen JR. **J Acoust Soc Am** 1989 Jun;85(6):2623–9
Comments on "Speech Understanding and Aging". Jerger J, et al. **J Acoust Soc Am** 1989 Mar;85(3):1352–4
Duration of frication noise required for identification of English fricatives. Jongman A. **J Acoust Soc Am** 1989 Apr; 85(4):1718–25
Could temporal order differences underlie 2–month–olds' discrimination of English voicing contrasts? Jusczyk PW, et al. **J Acoust Soc Am** 1989 Apr;85(4):1741–9
Perceptual differences between vowels located in a limited phonetic space. Kewley–Port D, et al. **J Acoust Soc Am** 1989 Apr;85(4):1726–40
A note on "Information conveyed by vowels". Ladefoged P. **J Acoust Soc Am** 1989 May;85(5):2223–4
Revisiting stop–consonant perception for two–formant stimuli. Ohde RN. **J Acoust Soc Am** 1988 Oct;84(4):1551–5
Burying straw men in imaginary graves: a reply to Kewley–Port, Watson, and Foyle (1988). Pastore RE. **J Acoust Soc Am** 1988 Dec;84(6):2262–70
Detectability of words and nonwords in two kinds of noise. Repp BH, et al. **J Acoust Soc Am** 1988 Nov;84(5):1929–32
Detection and discrimination of synthetic English vowels by Old World monkeys (Cercopithecus, Macaca) and humans. Sinnott JM. **J Acoust Soc Am** 1989 Aug;86(2):557–65
Speech masking. II: Simultaneous masking thresholds under "naturalistic" listening conditions. Spiegel M. **J Acoust Soc Am** 1988 Dec;84(6):2033–44
Comparison of various modes of presenting sentence materials in tests of speech perception in noise. Theodoridis GC, et al. **J Acoust Soc Am** 1988 Dec;84(6):2270–2
Some remarks on Pastore (1988). Watson CS, et al. **J Acoust Soc Am** 1988 Dec;84(6):2266–70
Different mechanisms of ipsilateral and contralateral ear extinction in aphasic patients. Bouma A, et al. **J Clin Exp Neuropsychol** 1988 Dec;10(6):709–26
Effect of simulated hearing loss on speech sounds perception. Schear JM, et al. **J Clin Exp Neuropsychol** 1988 Oct; 10(5):597–602
Effects of mode of presentation on head–injured patients' recall of narrative information. Agresti AA, et al. **J Clin Psychol** 1989 Mar;45(2):270–6
Effects of listener sophistication on judgements of tracheoesophageal talker intelligibility. Doyle PC, et al. **J Commun Disord** 1989 Apr;22(2):105–13
The Lombard effect on alaryngeal speech. Zeine L, et al. **J Commun Disord** 1988 Sep;21(5):373–83
Young children's understanding of the say–mean distinction in referential speech. Mitchell P, et al. **J Exp Child Psychol** 1989 Jun;47(3):467–90
Examination of perceptual reorganization for nonnative speech contrasts: Zulu click discrimination by English–speaking adults and infants. Best CT, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):345–60
Lexical effects on the phonetic categorization of speech: the role of acoustic structure. Burton MW, et al. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):567–75
Context effects in two–month–old infants' perception of labiodental/interdental fricative contrasts. Levitt A, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):361–8
Effects of speaking rate and lexical status on phonetic perception. Miller JL, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):369–78
Central and peripheral representation of whispered and voiced speech. Samuel AG. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):379–88
Perceptual organization and precategorical acoustic storage. Frankish C. **J Exp Psychol [Learn Mem Cogn]** 1989 May; 15(3):469–79
Evidence for auditory temporal distinctiveness: modality effects in order and frequency judgments. Glenberg AM, et al. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct; 14(4):728–39
Immediate serial recall of mixed–modality lists. Greene RL. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar;15(2):266–74
Effects of talker variability on recall of spoken word lists. Martin CS, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jul;15(4):676–84
Influence of sentence context on speech perception in young and older adults. Hutchinson KM. **J Gerontol** 1989 Mar; 44(2):P36–44
Age and decision strategies in running memory for speech: effects of prosody and linguistic structure. Wingfield A, et al. **J Gerontol** 1989 Jul;44(4):P106–13
Lay people's judgements of storytellers as mentally retarded or not retarded. Kernan KT, et al. **J Ment Defic Res** 1989 Apr;33 (Pt 2):149–57
Verb processing during sentence comprehension: contextual impenetrability. Shapiro LP, et al. **J Psycholinguist Res** 1989 Mar;18(2):223–43
Speech perception using combinations of auditory, visual, and tactile information. Blamey PJ, et al. **J Rehabil Res Dev** 1989 Winter;26(1):15–24
Comprehension of monologues and dialogues by aphasic listeners. Katsuki–Nakamura J, et al. **J Speech Hear Disord** 1988 Nov;53(4):408–15
Multisensory speech perception by profoundly hearing–impaired children. Lynch MP, et al. **J Speech Hear Disord** 1989 Feb;54(1):57–67
Vibrotactile perception of segmental features of speech: a comparison of single–channel and multichannel instruments. Carney AE. **J Speech Hear Res** 1988 Sep; 31(3):438–48
Effect of three conditions of predictability on word–recognition performance. Craig CH. **J Speech Hear Res** 1988 Dec;31(4):588–92
Fine–grained auditory discrimination in normal children and children with language–learning problems. Elliott LL, et al. **J Speech Hear Res** 1989 Mar;32(1):112–9
Acoustic and perceptual analysis of word–initial stop consonants in phonologically disordered children. Forrest K, et al. **J Speech Hear Res** 1988 Sep;31(3):449–59
The importance of consonant–vowel intensity ratio in the intelligibility of voiceless consonants. Freyman RL, et al. **J Speech Hear Res** 1989 Sep;32(3):524–35
A modified speech tracking procedure as a communicative performance measure. Matthies ML, et al. **J Speech Hear Res** 1988 Sep;31(3):394–404
Temporal–phonemic processing skills in adult stutterers and nonstutterers. Meyers SC, et al. **J Speech Hear Res** 1989 Jun;32(2):274–80
Synthetic and natural speech preferences of male and female listeners in four age groups [published erratum appears in J Speech Hear Res 1989 Sep;32(3):703] Mirenda P, et al. **J Speech Hear Res** 1989 Mar;32(1):175–83
Evaluation of two speech enhancement techniques to improve intelligibility for hearing–impaired adults. Montgomery AA, et al. **J Speech Hear Res** 1988 Sep; 31(3):386–93
Evaluation of a technique for training new speech contrasts: generalization across voices, but not word–position or task. Morosan DE, et al. **J Speech Hear Res** 1989 Sep; 32(3):501–11
Effects of decision variables on stimulus dominance in dichotic listening. Niccum N, et al. **J Speech Hear Res** 1989 Mar;32(1):184–8
Frequency discrimination ability and stop–consonant identification in normally hearing and hearing–impaired subjects. Ochs MT, et al. **J Speech Hear Res** 1989 Mar; 32(1):133–42
Perceptual categorization and consistency of synthesized (r–w) continua by adults, normal children and (r)–misarticulating children. Ohde RN, et al. **J Speech Hear Res** 1988 Dec;31(4):556–68
Prosodic and segmental aspects of speech perception with the House/3M single–channel implant. Rosen S, et al. **J Speech Hear Res** 1989 Mar;32(1):93–111
Effects of transition length on the perception of stop consonants by children and adults. Sussman JE, et al. **J Speech Hear Res** 1989 Mar;32(1):151–60
Direct magnitude estimation and equal appearing interval scaling of vowel roughness. Toner MA, et al. **J Speech Hear Res** 1989 Mar;32(1):78–82
The relation between vowel recognition and measures of frequency resolution. Turner CW, et al. **J Speech Hear Res** 1989 Mar;32(1):49–58
Judgments of disfluency by mothers of stuttering and normally fluent children. Zebrowski PM, et al. **J Speech Hear Res** 1989 Sep;32(3):625–34
Hemispheric specialization for speech and non–verbal stimuli in Chinese and French Canadian subjects. Cohen H, et al. **Neuropsychologia** 1989;27(2):241–5
Perception of time–altered monosyllables in a specific group of phonologically disordered children. DeMarco S, et al. **Neuropsychologia** 1989;27(5):753–7
Dichotic listening indices of right hemisphere semantic processing. Ely PW, et al. **Neuropsychologia** 1989; 27(7):1007–15
A signal processing component to Broca's aphasia functor deficits. Harris RA, et al. **Neuropsychologia** 1989; 27(5):599–605
Dichotic listening in 126 left–handed children: ear advantages, familial sinistrality and sex differences. Hugdahl K, et al. **Neuropsychologia** 1989;27(7):999–1006
An investigation of lexical ambiguity in Broca's aphasics using an auditory lexical priming technique. Katz WF. **Neuropsychologia** 1988;26(5):747–52
Relationship of lateral eye movements recorded in the dark to verbal and spatial question types. Raine A, et al. **Neuropsychologia** 1988;26(6):937–41
Sex differences in change over time in perceptual asymmetry. Wexler BE, et al. **Neuropsychologia** 1988;26(6):943–6
Effect of directed attention on cerebral asymmetries in stuttering adults. Blood GW, et al. **Percept Mot Skills** 1986 Apr;62(2):351–5
Association between paired subtests of auditory sequential memory administered to preschool children. Chermak GD, et al. **Percept Mot Skills** 1989 Feb;68(1):255–8
Learning disabled students' performance on visual and auditory spelling tests. Ferre L, et al. **Percept Mot Skills** 1989 Feb;68(1):114
Listening rate and comprehension as a function of preference for and exposure to time–altered speech. Gade PA, et al. **Percept Mot Skills** 1989 Apr;68(2):531–8
Visual superiority effect in televised prevention of victimization programs for preschool children. Ginsburg HJ, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1179–82
Gifted children and Visual Aural Digit Span test performance. Knoff HM. **Percept Mot Skills** 1986 Apr; 62(2):391–6
Effects of time–compression on feature and frequency discrimination in aged listeners. Rastatter M, et al. **Percept Mot Skills** 1989 Apr;68(2):367–72
Speech Sounds Perception Test: nonrandom response locations form a logical fallacy in structure. Reddon JR,

et al. **Percept Mot Skills** 1989 Aug;69(1):235–40
Stressed vowel perception in word recognition. Small LH, et al. **Percept Mot Skills** 1989 Feb;68(1):179–85
Influences of contextual and local temporal information on perception of a stop consonant after [s]. Bailey PJ. **Phonetica** 1988;45(1):56–69
Classification of basic fundamental frequency patterns using discriminant functions. Demenko G, et al. **Phonetica** 1987; 44(4):246–57
A multidimensional scaling study of esophageal vowels. Fox RA, et al. **Phonetica** 1988;45(1):30–42
Perception of Indonesian vowels spoken in context. van Zanten E. **Phonetica** 1988;45(1):43–55
Within-channel selection and event-related potentials during selective auditory attention. Okita T. **Psychophysiology** 1989 Mar;26(2):127–39
Psychoacoustic abilities of subjects with unilateral and bilateral cochlear hearing impairments and their relationship to the ability to understand speech. Glasberg BR, et al. **Scand Audiol Suppl** 1989;32:1–25
Is chronicity a function of the relationship between the person and the auditory hallucination? Benjamin LS. **Schizophr Bull** 1989;15(2):291–310
The impact of education about schizophrenia on relatives varying in expressed emotion. Cozolino LJ, et al. **Schizophr Bull** 1988;14(4):675–87
Hearing voices. Romme MA, et al. **Schizophr Bull** 1989; 15(2):209–16
Dichotic listening and recall in schizophrenia and mania. Wielgus MS, et al. **Schizophr Bull** 1988;14(4):689–700
[A battery of tests for evaluating minimal speech perception. Initial experimental results] Lokker R, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(2):109–16 (Eng. Abstr.) (Fre)
[The phenomenon of verbal transformation: study of the rhythm of presentation of auditory material and attention of the subjects] Debigaré J. **Can J Psychol** 1988 Sep; 42(3):364–77 (Eng. Abstr.) (Fre)
[Evaluation of speech perception in cochlear implant patients] Eisenwort B, et al. **Folia Phoniatr (Basel)** 1988; 40(2):74–81 (Eng. Abstr.) (Ger)
[Speech processing in pathologic hearing. On the status of research] Sendlmeier WF. **Folia Phoniatr (Basel)** 1988; 40(5):218–43 (56 ref.) (Eng. Abstr.) (Ger)
[Psychophysical data and speech comprehension after 2 years with the Clark/Nucleus prosthesis] Battmer RD, et al. **HNO** 1988 May;36(5):188–92 (Eng. Abstr.) (Ger)
[Auditory and communication learning in patients with cochlear implants] Bucher PO, et al. **HNO** 1989 Jun; 37(6):250–4 (Eng. Abstr.) (Ger)
[Electronic noise compensation for improving speech discrimination in airplane pilots] Matschke RG, et al. **Laryngorhinootologie** 1989 Feb;68(2):101–9 (Eng. Abstr.) (Ger)
[The effect of auditory feedback on the perception of verbal behavior in dynamic group psychotherapy] Salz M, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Mar; 41(3):144–50 (Eng. Abstr.) (Ger)
[Visual and tactile recognition of words of various lengths and lexical occurrence] Prosser S, et al. **Acta Otorhinolaryngol Ital** 1988 Mar–Apr;8(2):165–74 (Eng. Abstr.) (Ita)

DRUG EFFECTS

The effects of antipsychotic drugs and symptomatology on perceptual asymmetry in schizophrenia. Carr V, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1531–7
Stimulus processing during apparent unconsciousness in anesthetized volunteers. Bonke B, et al. **Percept Mot Skills** 1986 Apr;62(2):587–91

PHYSIOLOGY

Laterality for visual-spatial processing in two language-trained chimpanzees (Pan troglodytes). Hopkins WD, et al. **Behav Neurosci** 1989 Apr;103(2):227–34
Duplex perception: some initial findings concerning its neural basis. Cranney J, et al. **Brain Cogn** 1989 Jan;9(1):48–56
The effect of thalamic stimulation in processing of verbal stimuli in dichotic listening tasks: a case study. Bhatnager SC, et al. **Brain Lang** 1989 Feb;36(2):236–51
A comparison of hemispheric asymmetries in speech-related brain potentials of autistic and dysphasic children. Dawson G, et al. **Brain Lang** 1989 Jul;37(1):26–41
Perception and production of tone in aphasia. Gandour J, et al. **Brain Lang** 1988 Nov;35(2):201–40
Regional cerebral blood flow during comprehension and speech (in cerebrally healthy subjects). Lechevalier B, et al. **Brain Lang** 1989 Jul;37(1):1–11
Sentence comprehension following agenesis of the corpus callosum. Sanders RJ. **Brain Lang** 1989 Jul;37(1):59–72
Right hemisphere EEG sensitivity to speech. Segalowitz SJ, et al. **Brain Lang** 1989 Aug;37(2):220–31
Auditory agnosia with relative sparing of speech perception. Lambert J, et al. **Cortex** 1989 Mar;25(1):71–82
Open-set speech recognition in children with a single-channel cochlear implant. Berliner KI, et al. **Ear Hear** 1989 Aug;10(4):237–42
Speech sound discrimination pre- and posttympanostomy: a clinical case report. DeMarco S, et al. **Ear Hear** 1989 Feb;10(1):64–7
Word recognition by 50 patients fitted with the Symbion multichannel cochlear implant. Dorman MF, et al. **Ear Hear** 1989 Feb;10(1):44–9
Identification of synthetic vowels by patients using the Symbion multichannel cochlear implant. Dorman MF, et al. **Ear Hear** 1989 Feb;10(1):40–3
Assessing speech recognition in noise for listeners with a signal processor hearing aid. Klein AJ. **Ear Hear** 1989 Feb; 10(1):50–7
Word recognition skills of children and adults in background noise. Papso CF, et al. **Ear Hear** 1989 Aug;10(4):235–6
The effects of "noise suppression" hearing aids on consonant recognition in speech-babble and low-frequency noise. Tyler RS, et al. **Ear Hear** 1989 Aug;10(4):243–9
Selective listening modifies activity of the human auditory cortex. Hari R, et al. **Exp Brain Res** 1989;74(3):463–70
Brain responses to semantic anomaly in natural, continuous speech. O'Halloran JP, et al. **Int J Psychophysiol** 1988 Nov; 6(4):243–54
Cues for intervocalic /t/ and /d/ in children and adults. Allen GD, et al. **J Acoust Soc Am** 1988 Sep;84(3):868–75
On the role of the amplitude of the fricative noise in the perception of place of articulation in voiceless fricative consonants. Behrens S, et al. **J Acoust Soc Am** 1988 Sep; 84(3):861–7
Interactive factors in consonant confusion patterns. Bell TS, et al. **J Acoust Soc Am** 1989 Jan;85(1):339–46
Single-channel vibrotactile supplements to visual perception of intonation and stress. Bernstein LE, et al. **J Acoust Soc Am** 1989 Jan;85(1):397–405
The timbre of sung bowels. Bloothooft G, et al. **J Acoust Soc Am** 1988 Sep;84(3):847–60
Duration discrimination of speech and tonal complex stimuli by normally hearing and hearing-impaired listeners. Bochner JH, et al. **J Acoust Soc Am** 1988 Aug; 84(2):493–500
Speech perception studies using a multichannel electrotactile speech processor, residual hearing, and lipreading. Cowan RS, et al. **J Acoust Soc Am** 1989 Jun;85(6):2593–607
An auditory basis for the stimulus-length effect in the perception of stops and glides. Diehl RL, et al. **J Acoust Soc Am** 1989 May;85(5):2154–64
Auditory/phonetic categorization with the Symbion multichannel cochlear implant. Dorman MF, et al. **J Acoust Soc Am** 1988 Aug;84(2):501–10
Auditory filter characteristics and consonant recognition for hearing-impaired listeners. Dubno JR, et al. **J Acoust Soc Am** 1989 Apr;85(4):1666–75
Stop-consonant recognition for normal-hearing listeners and listeners with high-frequency hearing loss. I: The contribution of selected frequency regions. Dubno JR, et al. **J Acoust Soc Am** 1989 Jan;85(1):347–54
Stop-consonant recognition for normal-hearing listeners and listeners with high-frequency hearing loss. II: Articulation index predictions. Dubno JR, et al. **J Acoust Soc Am** 1989 Jan;85(1):355–64
Responses of "high-spontaneous" auditory-nerve fibers to consonant-vowel syllables in noise. Geisler CD, et al. **J Acoust Soc Am** 1989 Apr;85(4):1639–52
Auditory-perceptual interpretation of the vowel. Miller JD. **J Acoust Soc Am** 1989 May;85(5):2114–34 (84 ref.)
Some effects of talker variability on spoken word recognition. Mullennix JW, et al. **J Acoust Soc Am** 1989 Jan; 85(1):365–78
Identification of vowels in quiet, noise, and reverberation: relationships with age and hearing loss. Nábělek AK. **J Acoust Soc Am** 1988 Aug;84(2):476–84
Static, dynamic, and relational properties in vowel perception. Nearey TM. **J Acoust Soc Am** 1989 May; 85(5):2088–113 (115 ref.)
Acoustic properties and perception of stop consonant release transients. Repp BH, et al. **J Acoust Soc Am** 1989 Jan; 85(1):379–96
Dynamic specification of coarticulated vowels spoken in sentence context. Strange W. **J Acoust Soc Am** 1989 May; 85(5):2135–53
Evolving theories of vowel perception. Strange W. **J Acoust Soc Am** 1989 May;85(5):2081–7 (54 ref.)
Evaluation of two voice-separation algorithms using normal-hearing and hearing-impaired listeners. Stubbs RJ, et al. **J Acoust Soc Am** 1988 Oct;84(4):1236–49
Synthetic vowel studies on cochlear implant patients. Tong YC, et al. **J Acoust Soc Am** 1988 Sep;84(3):876–87
Perceptual studies on cochlear implant patients with early onset of profound hearing impairment prior to normal development of auditory, speech, and language skills. Tong YC, et al. **J Acoust Soc Am** 1988 Sep;84(3):951–62
Effects of noise on speech production: acoustic and perceptual analyses. Van Summers W, et al. **J Acoust Soc Am** 1988 Sep;84(3):917–28
Interhemispheric disconnection effects in multiple sclerosis. Lindeboom J, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1445–7
Conflicting and cooperating cues: perception of cues to final consonant voicing by infants and adults. Eilers R, et al. **J Speech Hear Res** 1989 Jun;32(2):307–16
Reverberation, masking, filtering, and level effects on speech recognition performance. Loven FC, et al. **J Speech Hear Res** 1988 Dec;31(4):681–95
Nonacoustic contributions to the perception of fluent speech. Austin NJ, et al. **Lang Speech** 1988 Jan–Mar;31 (Pt 1):21–41
English compound versus non-compound noun phrases in discourse: an acoustic and perceptual study. Farnetani E, et al. **Lang Speech** 1988 Apr–Jun;31 (Pt 2):157–80
Perception of temporal and spectral information in French vowels. Gottfried TL, et al. **Lang Speech** 1988 Jan–Mar; 31 (Pt 1):57–75
Detection of target phonemes in spontaneous and read speech. Mehta G, et al. **Lang Speech** 1988 Apr–Jun;31 (Pt 2):135–56
Changes in perceptual asymmetry with the menstrual cycle. Altemus M, et al. **Neuropsychologia** 1989;27(2):233–40
Evidence for subgroups of adextrals based on speech lateralization and cognitive patterns. Kimura D, et al. **Neuropsychologia** 1989;27(7):977–86
Frequency analysis of electromyographically measured covert speech behavior. Dollins AB, et al. **Pavlov J Biol Sci** 1989 Jan–Mar;24(1):27–30
Patterns of covert speech behavior and phonetic coding. McGuigan FJ, et al. **Pavlov J Biol Sci** 1989 Jan–Mar; 24(1):19–26
Some relationships between hearing aid frequency response and speech discrimination of profoundly deaf children. Pilot study. Dyrlund O. **Scand Audiol** 1988;17(4):201–5
Speech recognition scores and ABR in cochlear impairment. Rawool VW. **Scand Audiol** 1989;18(2):113–7
A specialization for speech perception? [letter; comment] Kluender KR, et al. **Science** 1989 Jun 30;244(4912):1530. **Comment on:** Science 1989 Jan 27;243(4890):489–94
A specialization for speech perception [see comments] Liberman AM, et al. **Science** 1989 Jan 27;243(4890):489–94 (31 ref.). **Comment in:** Science 1989 Jun 30;244(4912):1530
[Unilateral transitory autophony caused by opening the eustachian tube] Berendes J. **HNO** 1988 May;36(5):212–3 (Ger)
[Role of structures of the left and right hemispheres in the perception of the prosodic characteristics of speech (clinico-experimental study)] Meerson IaA, et al. **Fiziol Cheloveka** 1988 Sep–Oct;14(5):777–85 (Rus)
[Synthetic speech and its perception in complex acoustic conditions] Tarasenko GI, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):35–41 (Eng. Abstr.) (Rus)
[Study of binaural interaction in sensorineural hearing loss in children in the light of electroacoustic correction of hearing] Belov IM, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):59–63 (Eng. Abstr.) (Rus)
[Ontogenetic aspects of individual characteristics of functional brain asymmetry in the perception of emotions] Zaitseva KA, et al. **Zh Evol Biokhim Fiziol** 1989 May–Jun; 25(3):406–9 (Eng. Abstr.) (Rus)
[Neuropsychological differentiation of specific dyslexia in children] Glezerman TB, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):63–8 (Eng. Abstr.) (Rus)
[Sex differences of functional lateralization in the perception of verbal and emotional information in ontogeny] Dmitrieva ES, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun; 38(3):411–8 (Eng. Abstr.) (Rus)

SPEECH PRODUCTION MEASUREMENT

Interrelationships among the speech and language measures. Levitt H. **ASHA Monogr** 1987 Oct;(26):123–39
Intrahemispheric sex differences in the functional representation of language and praxic functions in normal individuals. Lewis RS, et al. **Brain Cogn** 1989 Mar; 9(2):238–43
Characterizing sentence intonation in a right hemisphere-damaged population. Behrens SJ. **Brain Lang** 1989 Aug;37(2):181–200
The effects of right and left hemiparkinsonism on prosody. Blonder LX, et al. **Brain Lang** 1989 Feb;36(2):193–207
The influence of speaking rate on articulatory hypokinesia in parkinsonian dysarthria. Caligiuri MP. **Brain Lang** 1989 Apr;36(3):493–502
The disruption of sentence production: some dissociations. Caramazza A, et al. **Brain Lang** 1989 May;36(4):625–50
Discourse in aphasia: integration deficits in processing reference. Chapman SB, et al. **Brain Lang** 1989 May; 36(4):651–68
Dysprosody in Broca's aphasia: a case study. Gandour J, et al. **Brain Lang** 1989 Aug;37(2):232–57
Idiosyncratic strategies in sentence production: a case report. Gandour J, et al. **Brain Lang** 1989 May;36(4):614–24
The role of callosal connections in speech prosody. Klouda GV, et al. **Brain Lang** 1988 Sep;35(1):154–71
Variation in the pattern of omissions and substitutions of grammatical morphemes in the spontaneous speech of so-called agrammatic patients. Miceli G, et al. **Brain Lang** 1989 Apr;36(3):447–92
Dissociation of inflectional and derivational morphology. Miceli G, et al. **Brain Lang** 1988 Sep;35(1):24–65
Spontaneous speech in aphasia: a correlational study. Vermeulen J, et al. **Brain Lang** 1989 Feb;36(2):252–74
Evidence of coarticulation in Arabic. Stromsta C, et al. **Folia Phoniatr (Basel)** 1988;40(4):183–9
Production deficiencies in elicited language but not in the spontaneous verbalizations of hyperactive children. Zentall SS. **J Abnorm Child Psychol** 1988 Dec;16(6):657–73
Articulatory dynamics of loud and normal speech. Schulman R. **J Acoust Soc Am** 1989 Jan;85(1):295–312
The relationship between cluster and liquid simplification and sentence length, age, and IQ in Down's syndrome children. Crosley PA, et al. **J Commun Disord** 1989 Jun;22(3):151–68

Harsh voice: vocal effort perceptual ratings and spectral noise levels of hearing-impaired children. Thomas-Kersting C, et al. **J Commun Disord** 1989 Apr;22(2):125-35

Stress in time. Kelly MH, et al.
J Exp Psychol [Hum Percept] 1988 Aug;14(3):389-403

Selected temporal aspects of coordination during fluent speech of young stutterers. Conture EG, et al.
J Speech Hear Res 1988 Dec;31(4):640-53

Anticipatory and carry-over nasal coarticulation in the speech of children and adults. Flege JE.
J Speech Hear Res 1988 Dec;31(4):525-36

Perceptual categorization and consistency of synthesized (r-w) continua by adults, normal children and (r)-misarticulating children. Ohde RN, et al.
J Speech Hear Res 1988 Dec;31(4):556-68

Constancy of relative timing for stutterers and nonstutterers. Prosek RA, et al. **J Speech Hear Res** 1988 Dec;31(4):654-8

Stop consonant production in isolated and repeated syllables in Parkinson's disease. Connor NP, et al.
Neuropsychologia 1989;27(6):829-38

Acoustic evidence of aberrant velocities in stutterers' fluent speech. Pindzola RH. **Percept Mot Skills** 1986 Apr; 62(2):399-405

Speech chronemics--a hidden dimension of speech. Theoretical background, measurement and clinical validity. Krüger HP. **Pharmacopsychiatry** 1989 Feb;22 Suppl 1:5-12 (71 ref.)

[From agrammatism to dyssyntaxia: longitudinal study of a case of agrammatism] Dordain M, et al.
Folia Phoniatr (Basel) 1988;40(6):277-83 (Eng. Abstr.) (Fre)

INSTRUMENTATION

[The assessment of quantitative speaking voice production. The speaking voice field in the singing voice field] Hacki T. **Folia Phoniatr (Basel)** 1988;40(4):190-6 (Eng. Abstr.) (Ger)

METHODS

Speech results of cleft palate surgery: two methods of assessment. Bagnall AD, et al. **Br J Plast Surg** 1988 Sep; 41(5):488-95

Criterion validity of speech intelligibility rating-scale procedures for the hearing-impaired population. Samar VJ, et al. **J Speech Hear Res** 1988 Sep;31(3):307-16

The Indiana Speech Training Aid (ISTRA). I: Comparisons between human and computer-based evaluation of speech quality. Watson CS, et al. **J Speech Hear Res** 1989 Jun; 32(2):245-51

SPEECH RECEPTION THRESHOLD TEST see under **SPEECH DISCRIMINATION TESTS**

SPEECH SOUNDS see **PHONETICS**

SPEECH THERAPY

see related
VOICE TRAINING

Aphasic victim as investigator. Wender D. **Arch Neurol** 1989 Jan;46(1):91-2

Knowledge and skills needed by speech-language pathologists providing services to dysphagic patients/clients. **ASHA** 1989 May;31(5):35-8

The child who stutters: theory and therapy in the 1980s. Debney SJ, et al. **Aust Paediatr J** 1988 Oct;24(5):273-4 (9 ref.)

Interdisciplinary activity between occupational therapists and speech language pathologists. Edwards S, et al.
J Allied Health 1989 Summer;18(4):375-87

Management strategies for developmental apraxia of speech: a review of literature. Pannbacker M.
J Commun Disord 1988 Sep;21(5):363-71 (43 ref.)

Factors affecting language recovery in aphasic stroke patients receiving speech therapy [letter] Lendrem W, et al.
J Neurol Neurosurg Psychiatry 1988 Aug;51(8):1103-4

[The role of linguistic training on the recovery of phonic function following repair of cleft palate] Zhao JS.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Mar;4(1):60-1 (Chi)

[Use of speech therapy in pediatric practice] Gérard C, et al. **Ann Pediatr (Paris)** 1989 Mar;36(3):199-204 (Eng. Abstr.) (Fre)

[Falling in with the big bad wolf, the usefulness of speaking without saying anything] Fourmond G.
Rev Laryngol Otol Rhinol (Bord) 1988;109(4):321-3 (Eng. Abstr.) (Fre)

[Speech therapy and psychosomatics: a double language] Marvaud J. **Rev Laryngol Otol Rhinol (Bord)** 1988; 109(4):307-10 (Eng. Abstr.) (Fre)

INSTRUMENTATION

A different design of palatal lift appliance: review and case reports. Spratley MH, et al. **Aust Dent J** 1988 Dec; 33(6):491-5

METHODS

What shall we do with 'medial' sounds? French A.
Br J Disord Commun 1988 Apr;23(1):41-50

Replacing maladaptive speech with verbal labeling responses: an analysis of generalized responding. Foxx RM, et al.
J Appl Behav Anal 1988 Winter;21(4):411-7

Training parents to use the natural language paradigm to increase their autistic children's speech. Laski KE, et al.
J Appl Behav Anal 1988 Winter;21(4):391-400

Producing speech use in nonverbal autistic children by reinforcing attempts. Koegel RL, et al.
J Autism Dev Disord 1988 Dec;18(4):525-38

The efficacy of PACE in the remediation of naming deficits. Li EC, et al. **J Commun Disord** 1988 Dec;21(6):491-503

Speech training aids for hearing-impaired individuals: I. Overview and aims. Bernstein LE, et al.
J Rehabil Res Dev 1988 Fall;25(4):53-62

Speech training aids for hearing-impaired individuals: II. Configuration of the Johns Hopkins aids. Ferguson JB, et al. **J Rehabil Res Dev** 1988 Fall;25(4):63-8

Speech training aids for hearing-impaired individuals: III. Preliminary observations in the clinic and childrens' homes. Mahshie JJ, et al. **J Rehabil Res Dev** 1988 Fall;25(4):69-82

Maximal opposition approach to phonological treatment. Gierut JA. **J Speech Hear Disord** 1989 Feb;54(1):9-19

Within-clinic versus outside-of-clinic self-monitoring of articulation to promote generalization. Koegel RL, et al.
J Speech Hear Disord 1988 Nov;53(4):392-9

Tabletop versus microcomputer-assisted speech management: stabilization phase. Shriberg LD, et al.
J Speech Hear Disord 1989 May;54(2):233-48

Long-term treatment of severe dysarthria: a case study. Simpson MB, et al. **J Speech Hear Disord** 1988 Nov; 53(4):433-40

A preliminary analysis of the ameliorative effects of time-out from speaking on stuttering. James JE, et al.
J Speech Hear Res 1989 Sep;32(3):604-10

The role of the speech language pathologist in the management of dysphagia. Logemann JA.
Otolaryngol Clin North Am 1988 Nov;21(4):783-8 (28 ref.)

[Current status of stuttering therapy in preschool and school-age children in the Federal Republic of Germany: results of a questionnaire study among therapists and analysis of the literature] Johannsen HS, et al.
Folia Phoniatr (Basel) 1989;41(1):10-22 (Eng. Abstr.) (Ger)

[Vocal rehabilitation with tracheo-esophageal prosthesis: protocol adopted by the Naples School. III--Contribution of the speech therapist] Motta G, et al.
Acta Otorhinolaryngol Ital 1988;8 Suppl 20:97-106 (7 ref.) (Eng. Abstr.) (Ita)

[Organization of the treatment of stuttering in a logopedics kindergarten using the methods of therapeutic physical exercise] Gusarova AE. **Pediatriia** 1988;(5):91-3 (Rus)

[Stammering: a new approach to its treatment] Lokhov MI, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):68-73 (Eng. Abstr.) (Rus)

PSYCHOLOGY

[Cognitive study on vocal rehabilitation in laryngectomized patients] Motta G, et al. **Acta Otorhinolaryngol Ital** 1988; 8 Suppl 20:23-35 (47 ref.) (Eng. Abstr.) (Ita)

SPEECHREADING see **LIPREADING**

SPERM see **SPERMATOZOA**

SPERM AGGLUTINATION

A direct immunofluorescence test for the detection of sperm surface bound antibodies. Comparison with sperm agglutination test, indirect IF test and MAR test. Francavilla F, et al. **Andrologia** 1988 Nov-Dec; 20(6):477-83

Characterization of sperm agglutinating monoclonal antibody and purification of the human sperm antigen. Yan YC, et al. **Int J Fertil** 1986 Mar-Apr;31(1):77-85

[Detection of anti-spermatozoa antibodies by the immunobead assay (IBA) in sperm autoagglutination] Radwan J, et al. **Ginekol Pol** 1988 Oct;59(10):628-31 (Eng. Abstr.) (Pol)

DRUG EFFECTS

Local hydrocortisone treatment of sperm-agglutinating antibodies in infertile women. Ulčová-Gallová Z, et al. **Int J Fertil** 1988 Nov-Dec;33(6):421-5

SPERM BANKS see under **TISSUE BANKS**

SPERM CAPACITATION

Microphotometric study on cytochrome oxidase and lactate dehydrogenase activities in mouse spermatozoa during maturation and in vivo and in vitro capacitation. Ferrandi B, et al. **Acta Histochem (Jena)** 1989;85(1):1-8

Angiotensin converting enzyme from capacitated rabbit spermatozoa: two distinct forms. Singh US, et al.
Andrologia 1988 Jul-Aug;20(4):322-5

Zona-free hamster egg penetration assay: prognostic indicator in an IVF program. Nahhas F, et al.
Arch Androl 1989;23(1):33-7

The effect of moderate epididymal aging on the kinetics of the acrosome reaction and fertilizing ability of hamster spermatozoa. Cuasnicu PS, et al. **Biol Reprod** 1989 May; 40(5):1067-73

Capacitation of bovine spermatozoa by oviduct fluid. Parrish JJ, et al. **Biol Reprod** 1989 May;40(5):1020-5

Temporal changes in motility parameters related to acrosomal status: identification and characterization of populations of hyperactivated human sperm. Robertson L, et al. **Biol Reprod** 1988 Nov;39(4):797-805

Phorbol esters stimulate cyclic adenosine 3',5'-monophosphate accumulation in hamster spermatozoa during in vitro capacitation. Visconti PE, et al.
Biol Reprod 1989 Feb;40(2):223-31

Sperm from tw32/+ mice: capacitation is normal, but hyperactivation is premature and nonhyperactivated sperm are slow. Olds-Clarke P. **Dev Biol** 1989 Feb;131(2):475-82

Variation of movement characteristics with washing and capacitation of spermatozoa. I. Univariate statistical analysis and detection of sperm hyperactivation. Ginsburg KA, et al. **Fertil Steril** 1989 May;51(5):869-73

Evaluation of assay conditions for the zona-free hamster ova bioassay of boar sperm fertility. Berger T, et al.
Gamete Res 1988 Jan;19(1):101-11

A quantitative assay for capacitation: evaluation of multiple sperm penetration through the zona pellucida of salt-stored hamster eggs. Boatman DE, et al. **Gamete Res** 1988 Jan; 19(1):19-29

Kinetics of spontaneous and induced acrosomal loss in human sperm incubated under capacitating and noncapacitating conditions. Byrd W, et al. **Gamete Res** 1989 Jan; 22(1):109-22

Glycoconjugates of the human sperm surface: distribution and alterations that accompany capacitation in vitro. Cross NL, et al. **Gamete Res** 1987 Jan;16(1):23-35

Cholesterol efflux from bovine sperm: II. Effect of reducing sperm cholesterol on penetration of zona-free hamster and in vitro matured bovine ova. Ehrenwald E, et al.
Gamete Res 1988 Aug;20(4):413-20

Cholesterol efflux from bovine sperm. I. Induction of the acrosome reaction with lysophosphatidylcholine after reducing sperm cholesterol. Ehrenwald E, et al.
Gamete Res 1988 Jun;20(2):145-57

Use of salt-stored zonae pellucidae for assessing rabbit sperm capacitation for in vitro fertilization. Fayrer-Hosken RA, et al. **Gamete Res** 1987 Jul;17(3):191-201

Metabolic and surface events in fertilization. Fraser LR, et al. **Gamete Res** 1988 Aug;20(4):491-519 (165 ref.)

Capacitation potential of the fallopian tube: a study involving surgical insemination and the subsequent incidence of polyspermy. Hunter RH, et al. **Gamete Res** 1988 Nov; 21(3):255-66

Identification of sterol acceptors that stimulate cholesterol efflux from human spermatozoa during in vitro capacitation. Langlais J, et al. **Gamete Res** 1988 Jun; 20(2):185-201

Inhibition of adenosine-metabolizing enzymes modulates mouse sperm fertilizing ability: a changing role for endogenously generated adenosine during capacitation. Monks NJ, et al. **Gamete Res** 1988 Nov;21(3):267-76

Visualization and characterization of the acrosome reaction of human spermatozoa by immunolocalization with monoclonal antibody. Moore HD, et al. **Gamete Res** 1987 Jul;17(3):245-9

Calcium-binding proteins of boar spermatozoan plasma membranes: identification and partial characterization. Peterson RN, et al. **Gamete Res** 1989 May;23(1):49-60

Phospholipid composition of isolated guinea pig sperm outer acrosomal membrane and plasma membrane during capacitation in vitro. Stojanoff A, et al. **Gamete Res** 1988 Nov;21(3):297-311

Hamster sperm motility transformation during development of hyperactivation in vitro and epididymal maturation. Suarez SS. **Gamete Res** 1988 Jan;19(1):51-65

Changes in the distribution of intramembranous particles and filipin-reactive membrane sterols during in vitro capacitation of golden hamster spermatozoa. Suzuki F, et al. **Gamete Res** 1989 Jul;23(3):335-47

Egg-penetration ability and structural properties of human sperm prepared by Percoll-gradient centrifugation. Tanphaichitr N, et al. **Gamete Res** 1988 May;20(1):67-81

Zona pellucida penetration assay for capacitation of bovine sperm. Wheeler MB, et al. **Gamete Res** 1987 Nov; 18(3):237-50

Relationship between calcium, cyclic AMP, ATP, and intracellular pH and the capacity of hamster spermatozoa to express hyperactivated motility. White DR, et al.
Gamete Res 1989 Feb;22(2):163-77

Synchronous assay for human sperm capacitation and the acrosome reaction. De Jonge CJ, et al. **J Androl** 1989 May-Jun;10(3):232-9

Effects of in vitro incubation on a zona binding site found on murine spermatozoa. Boettger H, et al. **J Exp Zool** 1989 Jan;249(1):90-8

Accuracy of sperm characteristics in predicting the in vitro fertilizing capacity of semen. Comhaire FH, et al.
J In Vitro Fert Embryo Transf 1988 Dec;5(6):326-31

The hemizona assay (HZA): finding sperm that have the "right stuff" [editorial] Hodgen GD, et al.
J In Vitro Fert Embryo Transf 1988 Dec;5(6):311-3

Comparison of the in vitro fertilization rate by human sperm capacitated by multiple-tube swim-up and Percoll gradient centrifugation. Tanphaichitr N, et al.
J In Vitro Fert Embryo Transf 1988 Jun;5(3):119-22

In-vitro induction of capacitation of fresh and frozen spermatozoa of the Siberian tiger (Panthera tigris). Byers AP, et al. **J Reprod Fertil** 1989 Jul;86(2):599-607

Is a Ca2+ -ATPase involved in Ca2+ regulation during capacitation and the acrosome reaction of guinea-pig spermatozoa? Roldan ER, et al. **J Reprod Fertil** 1989 Jan; 85(1):297-308

Capacitation status of hamster spermatozoa in the oviduct at various times after mating. Smith TT, et al. **J Reprod Fertil** 1989 May;86(1):255-61

In vitro capacitation of spermatozoa in different strains of mice: the acrosome reaction. De Matos DG, et al. **Medicina (B Aires)** 1987;47(5):500-4

Maturation and capacitation of mammalian spermatozoa. Mohri H, et al. **Prog Clin Biol Res** 1989;294:53-62

[Comparative study of the lipid composition of seminal fluid and ovulatory peritoneal fluid in humans] Vignon F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(4):459-62 (Eng. Abstr.) (Fre)

[Species specific motility patterns of hyperactivated mammalian spermatozoa and quantitative analysis of the hyperactivation of bull spermatozoa] Blottner S, et al. **Andrologia** 1989 May-Jun;21(3):204-13 (Eng. Abstr.) (Ger)

[Characterizing the in vitro capacitation of motile bull sperm by the hyamine-induced acrosome reaction] Blottner S, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):285-92 (Eng. Abstr.) (Ger)

[Microinjection of spermatozoa into the oocyte. An experimental model for assisted conjugation in oligo-asthenozoospermia as a cause of sterility] Mettler L, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):625-9 (Eng. Abstr.) (Ger)

[Role of sperm passage through cervical mucus: fertilizing capacity tested by in vitro fertilization with zona-free hamster eggs] Ikuma K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):167-72 (Eng. Abstr.) (Jpn)

[Study on hypoosmotic swelling test for infertile male patients] Yoshino K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):149-53 (Eng. Abstr.) (Jpn)

[New aspects of old ideas about capacitation and the acrosomal reaction] Rosado A. **Arch Invest Med (Mex)** 1988 Jul-Sep;19(3):253-64 (64 ref.) (Eng. Abstr.) (Spa)

DRUG EFFECTS

Effect of steroid hormones and capacitation on membrane potential of human spermatozoa. Calzada L, et al. **Arch Androl** 1988;21(2):121-8

Effect of L-carnitine on motility and acrosome reaction of human spermatozoa. Deana R, et al. **Arch Androl** 1988; 21(3):147-53

Capacitation of hamster spermatozoa with the divalent cation chelators D-penicillamine, L-histidine, and L-cysteine in a protein-free culture medium. Andrews JC, et al. **Gamete Res** 1989 Jun;23(2):159-70

Direct contact is required between serum albumin and hamster spermatozoa for capacitation in vitro. Dow MP, et al. **Gamete Res** 1989 Jun;23(2):171-80

Strontium supports capacitation and the acrosome reaction in mouse sperm and rapidly activates mouse eggs. Fraser LR. **Gamete Res** 1987 Dec;18(4):363-74

In vitro capacitation and fertilizing ability of ejaculated rabbit sperm treated with lysophosphatidylcholine. Kim CK, et al. **Gamete Res** 1989 Feb;22(2):131-41

Chemical N-desulfation of heparin negates its ability to capacitate bovine spermatozoa. Miller DJ, et al. **Gamete Res** 1989 Aug;23(4):451-65

A computer-assisted assay for mouse sperm hyperactivation demonstrates that bicarbonate but not bovine serum albumin is required. Neill JM, et al. **Gamete Res** 1987 Oct; 18(2):121-40

Incubation of mouse sperm with lactate delays capacitation and hyperactivation and lowers fertilization levels in vitro. Neill JM, et al. **Gamete Res** 1988 Aug;20(4):459-73

Capacitation of bovine spermatozoa by lysophospholipids and trypsin. Wheeler MB, et al. **Gamete Res** 1989 Feb; 22(2):193-204

Effects of prolactin during preincubation of mouse spermatozoa on fertilizing capacity in vitro. Fukuda A, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):92-7

Calcium channel antagonists modulate the acrosome reaction but not capacitation in mouse spermatozoa. Fraser LR, et al. **J Reprod Fertil** 1989 May;86(1):223-33

[Disorders in male fertility during treatment with sulfasalazine (letter)] Heineman MJ, et al. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):463-4 (Dut)

SPERM COUNT

The "Lazymot" machine [letter]. Agrawal Y. **Andrologia** 1988 May-Jun;20(3):274

Andrological parameters in human semen of high (greater than or equal to 6 ml) and low (less than or equal to 1 ml) volume. Dickerman Z, et al. **Andrologia** 1989 Jul-Aug; 21(4):353-62

ATP content in human semen and sperm quality. Megory E, et al. **Arch Androl** 1987;19(3):243-7

Relationship between the coagulation-liquefaction property of human ejaculates and their volume, sperm count and motility. Mandal A, et al. **Clin Reprod Fertil** 1987 Dec; 5(6):367-71

DNA flow cytometry in sperm cells from unilaterally orchiectomized patients with testicular cancer before further treatment. Fossa SD, et al. **Cytometry** 1989 May; 10(3):345-50

General and anomalous sperm disappearance characteristics found in a large vasectomy series. Alderman PM. **Fertil Steril** 1989 May;51(5):859-62

Evaluation of the CellSoft automated semen analysis system in a routine laboratory setting. Mortimer D, et al. **Fertil Steril** 1988 Dec;50(6):960-8

Receiver-operating characteristics curves for semen analysis variables: methods for evaluating diagnostic tests of male gamete function. Peng HQ, et al. **Gamete Res** 1987 Jul; 17(3):229-36

Effect of mating on sperm distribution in the reproductive tract of the male rat. Ratnasooriya WD, et al. **Gamete Res** 1987 Jul;17(3):261-6

An evaluation of semen analysis and in-vitro tests of sperm function in the prediction of the outcome of intrauterine AIH. Bolton VN, et al. **Hum Reprod** 1989 Aug;4(6):674-9

Influence of system parameter settings on human sperm motility analysis using CellSoft. Mortimer D, et al. **Hum Reprod** 1988 Jul;3(5):621-5

Fertilization of human oocytes in capillary tubes with very small numbers of spermatozoa. van der Ven HH, et al. **Hum Reprod** 1989 Jan;4(1):72-6

Testicular volume and seminal fluid profile in fertile and infertile males in Ilorin, Nigeria. Sobowale OB, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):155-61

Relationship between the results of sperm analysis and GIFT. Rodriguez-Rigau LJ, et al. **J Androl** 1989 Mar-Apr; 10(2):139-44

Semen analysis of patients who had orchidopexy at or after seven years of age. Puri P, et al. **Lancet** 1988 Nov 5; 2(8619):1051-2

Copulation dynamics. Out for the sperm count. Harvey PH, et al. **Nature** 1989 Feb 9;337(6207):508-9 (18 ref.)

Relationship between the number of sperms and the rate of implantation in bitches inseminated into unilateral uterine horn. Tsutsui T, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):257-63

Changes in sperm motility, morphology and concentration induced by the swim-up procedure. Oettle EE, et al. **S Afr Med J** 1989 Jan 7;75(1):22-3

[Changes in the spermiogram after repeated ejaculation] Zvěrina J, et al. **Cesk Gynekol** 1988 Sep;53(8):573-6 (Eng. Abstr.) (Cze)

[Interpretation of the sperm count] Segalen J. **Rev Fr Gynecol Obstet** 1989 Feb;84(2):77-83 (Eng. Abstr.) (Fre)

[Hypospermia and the post-coital test] Abid R. **Tunis Med** 1987 Feb;65(2):109-14 (Eng. Abstr.) (Fre)

[Effect on fertility and on sperm cytology of treatment of varicocele: apropos of 117 controlled cases] Horchani A, et al. **Tunis Med** 1988 May;66(5):425-30 (Eng. Abstr.) (Fre)

[Andrological findings in adolescents with retractile testis] Raboch J, et al. **Andrologia** 1988 Sep-Oct;20(5):417-21 (Eng. Abstr.) (Ger)

[Dependence of spermatozoa motility on other ejaculate parameters] Mattheus A. **Dermatol Monatsschr** 1989; 175(2):95-9 (Eng. Abstr.) (Ger)

[Smoking and sperm quality in men undergoing fertility studies] Rui H, et al. **Tidsskr Nor Laegeforen** 1989 Feb 20;109(5):573-5 (Eng. Abstr.) (Nor)

[Sperm quality--a question on number, shape or content?] Kvist U, et al. **Nord Med** 1988;103(11):312-5 (Eng. Abstr.) (Swe)

DRUG EFFECTS

Reproductive effects of the anticancer drug cyclophosphamide in male rats at different ages. Velez de la Calle JF, et al. **Arch Androl** 1989;22(3):251-63

Effects of N,N'-methylene-bis-acrylamide (MBA) on mouse germ cells--sperm count and morphology, and testicular pathology. Sakamoto J, et al. **Arch Toxicol** 1988 Aug; 62(1):54-9

Improved sperm concentration, motility, and fertilization rates following Ficoll treatment of sperm in a human in vitro fertilization program. Bongso A, et al. **Fertil Steril** 1989 May;51(5):850-4

Evaluation of the effect of selective germ cell depletion on subsequent spermatogenesis and fertility in the rat. Ratnasooriya WD, et al. **Int J Androl** 1989 Feb;12(1):44-57

Acute effects and long-term sequelae of 1,3-dinitrobenzene on male reproduction in the rat. I. Sperm quality, quantity, and fertilizing ability. Linder RE, et al. **J Androl** 1988 Sep-Oct;9(5):317-26

[Quantitative studies of the interaction of polyvinylpyrrolidone iodine and spermatozoa] Pfannschmidt N, et al. **Z Hautkr** 1988 Nov 15;63(11):891-6 (Eng. Abstr.) (Ger)

INSTRUMENTATION

[Use of Makler counting chamber in semen analysis] Tomoyoshi T, et al. **Hinyokika Kiyo** 1988 Nov; 34(11):1931-3 (Eng. Abstr.) (Jpn)

METHODS

Automated semen analysis [letter] Mathur SM. **Fertil Steril** 1989 Aug;52(2):343-5

A technical note on diluting semen for the haemocytometric determination of sperm concentration. Mortimer D, et al. **Hum Reprod** 1989 Feb;4(2):166-8

VETERINARY

Numbers of Sertoli cells, quantitative rates of sperm production, and the efficiency of spermatogenesis in relation to the daily sperm output and seminal quality of young beef bulls. Berndtson WE, et al. **Am J Vet Res** 1989 Aug;50(8):1193-7

Seasonality of serum testosterone levels and sperm density in Tursiops truncatus. Schroeder JP, et al. **J Exp Zool** 1989 Mar;249(3):316-21

Relationship of intratesticular testosterone content of stallions to age, spermatogenesis, Sertoli cell distribution and germ cell-Sertoli cell ratios. Berndtson WE, et al. **J Reprod Fertil** 1989 Mar;85(2):511-8

Restricted water access time as a means of growth control in turkey tom breeder candidates. Leeson S, et al. **Poult Sci** 1988 Aug;67(8):1236-7

SPERM HEAD see under **SPERMATOZOA**

SPERM IMMOBILIZING AGENTS

ISOLATION & PURIFICATION

A human seminal plasma protein blocks the motility of human spermatozoa. Iwamoto T, et al. **J Urol** 1988 Nov; 140(5):1045-8

SPERM MATURATION

Microphotometric study on cytochrome oxidase and lactate dehydrogenase activities in mouse spermatozoa during maturation and in vivo and in vitro capacitation. Ferrandi B, et al. **Acta Histochem (Jena)** 1989;85(1):1-8

The bearing of epididymal function in strategies for in vitro fertilization and gamete intrafallopian transfer. Bedford JM. **Ann N Y Acad Sci** 1988;541:284-91

The role of epididymal factors in human sperm fertilizing ability. Blaquier JA, et al. **Ann N Y Acad Sci** 1988;541:292-6

Human spermatozoal nuclear maturity in normozoospermia and asthenozoospermia. Colleu D, et al. **Arch Androl** 1988; 21(3):155-62

Characterization of the maturation-associated galactose oxidase-sensitive glycoproteins of rat caudal sperm plasma membrane and epididymal fluid. Goldin BF, et al. **Arch Biochem Biophys** 1989 Apr;270(1):208-18

The major maturation glycoprotein found on rat cauda epididymal sperm surface is linked to the membrane via phosphatidylinositol. Moore A, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):460-8

Dynamics of the thiol status of rat spermatozoa during maturation: analysis with the fluorescent labeling agent monobromobimane. Shalgi R, et al. **Biol Reprod** 1989 May; 40(5):1037-45

Proteins of the acrosomal region in mouse sperm: immunological probes reveal post-testicular modifications. Lakoski K, et al. **Gamete Res** 1989 May;23(1):21-37

Changes of elemental concentrations around/on the rat sperm plasma membrane during maturation in the male genital tract. Ozawa Y, et al. **Gamete Res** 1987 Dec;18(4):311-8

Expression and topographical localization of cell surface fucosyltransferase activity during epididymal sperm maturation in the mouse. Ram PA, et al. **Gamete Res** 1989 Mar;22(3):321-32

Cytology of Lepidoptera. III. Giant cysts: a morphological trait of apyrene spermatogenesis in an Ephestia kuehniella strain. Wolf KW, et al. **Gamete Res** 1988 Jul;20(3):353-64

Results of microsurgical vasoepididymostomy: role of epididymis in sperm maturation. Silber SJ. **Hum Reprod** 1989 Apr;4(3):298-303

Functional ultrastructure of plasma membrane of spermatozoa during maturation and transport in reproductive tract. Hafez ES, et al. **Prog Clin Biol Res** 1989;296:255-60

Maturation and capacitation of mammalian spermatozoa. Mohri H, et al. **Prog Clin Biol Res** 1989;294:53-62

On the role of epididymal factors in sperm fertility. Blaquier JA, et al. **Reprod Nutr Dev** 1988;28(5):1209-16 (37 ref.)

The role of the epididymis during maturation of mammalian spermatozoa in vivo and in vitro. Moore HD, et al. **Reprod Nutr Dev** 1988;28(5):1217-24 (19 ref.)

Role of epididymis in sperm maturation. Silber SJ. **Urology** 1989 Jan;33(1):47-51

[Maturation of ram spermatozoa. Preliminary study of the flagellar movement characteristic of the transitory forms of the epididymal corpus] Chevrier C, et al. **Reprod Nutr Dev** 1988;28(5):1301-5 (Eng. Abstr.) (Fre)

[In vivo and in vitro fertilizing ability of immature human epididymal spermatozoa] Jardin A, et al. **Reprod Nutr Dev** 1988;28(5):1375-85 (Eng. Abstr.) (Fre)

[Acetylcarnitine and spermatozoa: relationship with epididymal maturation and motility in the boar and man] Jeulin C, et al. **Reprod Nutr Dev** 1988;28(5):1317-27 (Eng. Abstr.) (Fre)

DRUG EFFECTS

Mecobalamin promotes mouse sperm maturation. Oshio S, et al. **Andrologia** 1989 Mar-Apr;21(2):167-73

[The influence of chemical noxae on the sperm quality of boars used for insemination. 2. Mercury] Schulz O, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):610-7 (Eng. Abstr.)

(Ger)
[The effect of noxious chemicals on the sperm quality of boars used for insemination. 1. The fly control agent "omexan"] Schulz O, et al. **Arch Exp Veterinarmed** 1988 May;42(3):435–43 (Eng. Abstr.) (Ger)

SPERM MOTILITY

Results on postcoital and penetration test. Papp G, et al. **Acta Chir Hung** 1989;30(1):33–8

Studies on sperm survival and motility in the presence of cytotoxic sperm antibodies. Mathur S, et al. **Am J Reprod Immunol Microbiol** 1988 Jun;17(2):41–7

Identification and characterization of a human sperm antigen corresponding to sperm-immobilizing antibodies. Saji F, et al. **Am J Reprod Immunol Microbiol** 1988 Aug; 17(4):128–33

Computer assisted measurement in normal and pathological human semen, fresh and post swim-up technique. Calamera JC, et al. **Andrologia** 1989 Jul–Aug;21(4):340–5

Andrological parameters in human semen of high (greater than or equal to 6 ml) and low (less than or equal to 1 ml) volume. Dickerman Z, et al. **Andrologia** 1989 Jul–Aug; 21(4):353–62

Comparative study of two computerized semen motility analyzers. Gill HS, et al. **Andrologia** 1988 Sep–Oct; 20(5):433–40

Sperm motile efficiency (SME) of fresh spermatozoa in a hypotonic medium correlates with their cryosurvival in fertile men and infertility patients (predicting test). Glander HJ, et al. **Andrologia** 1989 Jul–Aug;21(4):363–9

Evaluation of sperm motility by optical diffractometry of spermatograms. Guerin JF, et al. **Andrologia** 1988 May–Jun; 20(3):202–10

Fluorescence supravital stain of human sperm: correlation with sperm motility measured by a transmembrane migration method. Hong CY, et al. **Andrologia** 1988 Nov–Dec;20(6):516–20

Intra-individual variation of sperm velocity, linearity, lateral head displacement and beat frequency in healthy volunteers. Knuth UA, et al. **Andrologia** 1988 May–Jun; 20(3):243–8

Effect of sperm motility on human in vitro fertilization. Bongso TA, et al. **Arch Androl** 1989;22(3):185–90

A computerized postcoital test sperm motility: comparison with clinical postcoital test and correlations with sperm antibodies. Daru J, et al. **Arch Androl** 1988;21(3):189–203

Corrected seminal fructose levels: index of secretory activity of seminal vesicles. Gonzales GF, et al. **Arch Androl** 1988; 21(2):135–42

Blood serotonin levels and male infertility. Gonzales GF, et al. **Arch Androl** 1989;22(1):85–9

Regulation of mammalian sperm motility. Lindemann CB, et al. **Arch Androl** 1989;23(1):1–22 (165 ref.)

Motility, heat, and lactate production in ejaculated bovine sperm. Hammerstedt RH, et al. **Arch Biochem Biophys** 1988 Oct;266(1):111–23

Anthraniloyl ATP, a fluorescent analog of ATP, as a substrate for dynein ATPase and flagellar motility. Inaba K, et al. **Arch Biochem Biophys** 1989 Oct;274(1):209–15

Coupling of a proton pump with superoxide radical–superoxide dismutase system in maturing mammalian spermatozoa and its association with sperm motility. Kumar GP, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):771–5

The effect of sulfhydryl oxidation on the morphology of immature hamster epididymal spermatozoa induced to acquire motility in vitro. Cornwall GA, et al. **Biol Reprod** 1988 Aug;39(1):141–55

Effect of measurement conditions on quantification of hyperactivated human sperm subpopulations by digital image analysis. Mack SO, et al. **Biol Reprod** 1989 Jun; 40(6):1162–9

Temporal changes in motility parameters related to acrosomal status: identification and characterization of populations of hyperactivated human sperm. Robertson L, et al. **Biol Reprod** 1988 Nov;39(4):797–805

Motility of rat spermatozoa at the site of fertilization. Shalgi R, et al. **Biol Reprod** 1988 Dec;39(5):1207–13

Computer-aided sperm analysis (CASA): image digitization and processing. Davis RO, et al. **Biomater Artif Cells Artif Organs** 1989;17(1):93–116

Predicting the fertilising ability of avian semen: comparison of a simple colourimetric test with other methods for predicting the fertilising ability of fowl semen. Chaudhuri D, et al. **Br Poult Sci** 1988 Dec;29(4):847–51

Relationship between plasma membrane mobility and substrate attachment in the crawling movement of spermatozoa from Caenorhabditis elegans. Pavalko FM, et al. **Cell Motil Cytoskeleton** 1988;11(1):16–23

Flagellar quiescence and transience of inactivation induced by rapid pH drop. Sato F, et al. **Cell Motil Cytoskeleton** 1988;10(3):374–9

Relationship between the coagulation-liquefaction property of human ejaculates and their volume, sperm count and motility. Mandal A, et al. **Clin Reprod Fertil** 1987 Dec; 5(6):367–71

Hamster sperm penetration of the zona pellucida: kinematic analysis and mechanical implications. Drobnis EZ, et al. **Dev Biol** 1988 Nov;130(1):311–23

Sperm from tw32/+ mice: capacitation is normal, but hyperactivation is premature and nonhyperactivated sperm are slow. Olds-Clarke P. **Dev Biol** 1989 Feb;131(2):475–82

Variation of movement characteristics with washing and capacitation of spermatozoa. I. Univariate statistical analysis and detection of sperm hyperactivation. Ginsburg KA, et al. **Fertil Steril** 1989 May;51(5):869–73

Seminal prolactin and its relationship to sperm motility in men. Gonzales GF, et al. **Fertil Steril** 1989 Mar; 51(3):498–503

Capacity of objectively assessed sperm motility characteristics in differentiating between semen of fertile and subfertile men. Hinting A, et al. **Fertil Steril** 1988 Oct; 50(4):635–9

Relationship of within-patient semen variability to outcome of intrauterine insemination. McGovern P, et al. **Fertil Steril** 1989 Jun;51(6):1019–23

Evaluation of the CellSoft automated semen analysis system in a routine laboratory setting. Mortimer D, et al. **Fertil Steril** 1988 Dec;50(6):960–8

Effect of peritoneal fluid on sperm motility and velocity distribution using objective measurements. Soldati G, et al. **Fertil Steril** 1989 Jul;52(1):113–9

Assessment of sperm motion characteristics from fertile and infertile men using a fully automated computer-assisted semen analyzer. Vantman D, et al. **Fertil Steril** 1989 Jan; 51(1):156–61

Sperm motion characteristics in men with isolated hypogonadotropic hypogonadism treated with gonadotropin. Vantman D, et al. **Fertil Steril** 1989 Jan; 51(1):162–6

Pregnancy rate is significantly higher in in vitro fertilization procedure with spermatozoa isolated from nonliquefying semen in which liquefaction is induced by alpha-amylase. Vermeiden JP, et al. **Fertil Steril** 1989 Jan;51(1):149–52

Role of glutathione peroxidase in protecting mammalian spermatozoa from loss of motility caused by spontaneous lipid peroxidation. Alvarez JG, et al. **Gamete Res** 1989 May; 23(1):77–90

Xenopus spermatozoon: is there any correlation between motility and oxygen consumption? Bernardini G, et al. **Gamete Res** 1988 Dec;21(4):403–8

Xenopus spermatozoon: correlation between shape and motility. Bernardini G, et al. **Gamete Res** 1988 Jun; 20(2):165–75

Studies of stallion sperm survival: preservation of progressive motility of stallion spermatozoa by low ionic strength media. Bize I, et al. **Gamete Res** 1988 Jun;20(2):215–22

Separation of motile human spermatozoa by means of a glass bead column. Daya S, et al. **Gamete Res** 1987 Aug; 17(4):375–80

Kinematics of hamster sperm during penetration of the cumulus cell matrix. Drobnis EZ, et al. **Gamete Res** 1988 Dec;21(4):367–83

Influence of image sampling frequency on the perceived movement characteristics of progressively motile human spermatozoa. Mortimer D, et al. **Gamete Res** 1988 Jul; 20(3):313–27

Receiver-operating characteristics curves for semen analysis variables: methods for evaluating diagnostic tests of male gamete function. Peng HQ, et al. **Gamete Res** 1987 Jul; 17(3):229–36

Effects of exposing bovine sperm to bovine serum albumin, or freeze-thawing, on sperm-bound amidase activity. Schenk JL, et al. **Gamete Res** 1987 Jul;17(3):213–9

Hamster sperm motility transformation during development of hyperactivation in vitro and epididymal maturation. Suarez SS. **Gamete Res** 1988 Jan;19(1):51–65

Influence of proteins in rat cauda epididymidal lumen fluid on cauda sperm motility. Turner TT, et al. **Gamete Res** 1987 Nov;18(3):267–78

Relationship between calcium, cyclic AMP, ATP, and intracellular pH and the capacity of hamster spermatozoa to express hyperactivated motility. White DR, et al. **Gamete Res** 1989 Feb;22(2):163–77

Human fertilization by micro-injection of immotile spermatozoa. Bongso TA, et al. **Hum Reprod** 1989 Feb; 4(2):175–9

The value of sperm swimming speed measurements in assessing the fertility of human frozen semen. Holt WV, et al. **Hum Reprod** 1989 Apr;4(3):292–7

Influence of system parameter settings on human sperm motility analysis using CellSoft. Mortimer D, et al. **Hum Reprod** 1988 Jul;3(5):621–5

Occurrence of several ecto-proteins on goat spermatozoal surface that may regulate flagellar motility. Majumder GC, et al. **Indian J Biochem Biophys** 1988 Feb–Apr; 25(1–2):215–8

Serum factors stimulate the motility of human spermatozoa. Akerlöf E, et al. **Int J Androl** 1989 Apr;12(2):124–30

Antisperm antibodies are more prevalent in men with low sperm motility. Barratt CL, et al. **Int J Androl** 1989 Apr; 12(2):110–16

Validation of a single-step procedure for the objective assessment of sperm motility characteristics. Hinting A, et al. **Int J Androl** 1988 Aug;11(4):277–87

Correlates of human sperm motility assessed by laser Doppler spectroscopy. Purvis K, et al. **Int J Androl** 1989 Feb; 12(1):10–6

Investigation of the cause of low sperm motility in asthenozoospermic patients by multiple quantitative tests. Yeung CH, et al. **Int J Androl** 1988 Aug;11(4):289–99

Flow cytometric analysis of human spermatozoa treated with antiserum to human seminal inhibin. Bandivdekar AH, et al. **Int J Fertil** 1989 Jan–Feb;34(1):74–7

Reappraisal of the postcoital test: a controlled study. Barnea ER, et al. **Int J Fertil** 1986 Mar–Apr;31(1):46–9

The influence of seminal plasma and polyaminic substances on the motility of isolated human sperm. Singer R, et al. **Int J Fertil** 1989 May–Jun;34(3):224–30

Evaluation of computerized analysis of sperm movement characteristics and differential sperm tail swelling patterns in predicting human sperm in vitro fertilizing capacity. Chan SY, et al. **J Androl** 1989 Mar–Apr;10(2):133–8

The relationship between the motility and morphology of spermatozoa in human semen. Morales P, et al. **J Androl** 1988 Jul–Aug;9(4):241–7

Relationship between the results of sperm analysis and GIFT. Rodriguez-Rigau LJ, et al. **J Androl** 1989 Mar–Apr; 10(2):139–44

Swim-over: an alternative method for harvesting motile spermatozoa. Bendvold E. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):107–10

Movement characteristics of ejaculated sperm from cynomolgus monkeys (Macaca fascicularis) analyzed by manual and automated computerized image analysis. Yeung CH, et al. **J Med Primatol** 1989;18(1):55–68

The mechanisms of reversible immobilization of fowl spermatozoa at body temperature. Ashizawa K, et al. **J Reprod Fertil** 1989 May;86(1):271–6

Isolation by using albumin columns of a cohort of fast-swimming human spermatozoa. Magnus O, et al. **J Reprod Fertil** 1988 Nov;84(2):579–84

Effect of castration on epididymal sperm storage in male musk shrews (Suncus murinus) and mice (Mus musculus). Rissman EF, et al. **J Reprod Fertil** 1989 May;86(1):219–22

Semen analysis of patients who had orchidopexy at or after seven years of age. Puri P, et al. **Lancet** 1988 Nov 5; 2(8619):1051–2

Seminal carnitine, epididymal function and spermatozoal motility. Bornman MS, et al. **S Afr Med J** 1989 Jan 7; 75(1):20–1

Changes in sperm motility, morphology and concentration induced by the swim-up procedure. Oettle EE, et al. **S Afr Med J** 1989 Jan 7;75(1):22–3

Influence of the swim-up procedure on acrosome damage induced by freezing human semen. Oettle EE, et al. **S Afr Med J** 1989 Jan 7;75(1):23–4

An assessment of framelapse videography of the effect of cryopreservation on human sperm motility. Wiswedel K, et al. **S Afr Med J** 1989 Jan 7;75(1):18–20

Direct measurements of sliding between outer doublet microtubules in swimming sperm flagella. Brokaw CJ. **Science** 1989 Mar 24;243(4898):1593–6

Distribution of spermatozoa in the genital tract of heifers inseminated with large numbers of abnormal spermatozoa. Larsson B. **Zentralbl Veterinarmed [A]** 1988 Dec; 35(10):721–8

[Intrauterine insemination in fertility disorders (letter)] Kremer J, et al. **Ned Tijdschr Geneeskd** 1989 Apr 22; 133(16):844–5 (Dut)

[Flagellar motility and movement of boar spermatozoa during epididymal transit] Bork K, et al. **Reprod Nutr Dev** 1988;28(5):1307–15 (Eng. Abstr.) (Fre)

[Maturation of ram spermatozoa. Preliminary study of the flagellar movemnent characteristic of the transitory forms of the epididymal corpus] Chevrier C, et al. **Reprod Nutr Dev** 1988;28(5):1301–5 (Eng. Abstr.) (Fre)

[Acetylcarnitine and spermatozoa: relationship with epididymal maturation and motility in the boar and man] Jeulin C, et al. **Reprod Nutr Dev** 1988;28(5):1317–27 (Eng. Abstr.) (Fre)

[Results of conjugal artificial insemination using Percoll] Barri PN, et al. **Rev Fr Gynecol Obstet** 1988 Oct; 83(10):587–91 (Eng. Abstr.) (Fre)

[Species specific motility patterns of hyperactivated mammalian spermatozoa and quantitative analysis of the hyperactivation of bull spermatozoa] Blottner S, et al. **Andrologia** 1989 May–Jun;21(3):204–13 (Eng. Abstr.) (Ger)

[The alteration of the motility rate of human spermatozoa and relationship to morphological quality.] Matachulat AN, et al. **Andrologia** 1989 Jan–Feb;21(1):83–92 (Eng. Abstr.) (Ger)

[Dependence of spermatozoa motility on other ejaculate parameters] Mattheus A. **Dermatol Monatsschr** 1989; 175(2):95–9 (Eng. Abstr.) (Ger)

[The effect of diluents, dose size and freezing speed on the survival rate of deep frozen stallion sperm] Heilemann C, et al. **DTW** 1988 Oct;95(9):369–71 (Eng. Abstr.) (Ger)

[Objective estimation of the motility of deep frozen cattle sperm by videomicrography and computer image analysis] Kolossa M, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(5):266–9 (Eng. Abstr.) (Ger)

[Motility of spermatozoa and its significance for fertilization in vivo and in vitro] Pusch HH, et al. **Gynakol Rundsch** 1988;28(3):150–6 (Eng. Abstr.) (Ger)

[Long-term effects of human seminal plasma from whole semen and from different fractions of split ejaculate on motility of human ejaculated spermatozoa] Sanada S, et al. **Hinyokika Kiyo** 1988 Nov;34(11):1965–72 (Eng. Abstr.) (Jpn)

[Studies on human spermatozoal acrosome using spermac stain in fertile and infertile men including two cases of round-headed spermatozoa] Satoh K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):562–8

(Eng. Abstr.) (Jpn)
[Identification of a human sperm antigen to infertile women's serum and follicular fluid with high sperm immobilizing activity] Ohashi K, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1989 Apr; 41(4):467–72 (Eng. Abstr.) (Jpn)
[Smoking and sperm quality in men undergoing fertility studies] Rui H, et al. Tidsskr Nor Laegeforen 1989 Feb 20;109(5):573–5 (Eng. Abstr.) (Nor)
[Periodicity of spermatozoa movement] Begma AA, et al. Biofizika 1988 Jul–Aug;33(4):637–41 (Eng. Abstr.) (Rus)
[Sperm characterization in patients with diabetes mellitus suffering from sexual disorders] Kozlov GI, et al.
Probl Endokrinol (Mosk) 1989 Mar–Apr;35(2):6–9 (Eng. Abstr.) (Rus)
[Status of the reproductive function in men with varicocele] Artifeksov SB, et al. Sov Med 1989;(5):111–3 (Rus)
[Evaluation of the motility of boar sperm using computer technics] Maszanyi L. Vet Med (Praha) 1989 Mar; 34(3):163–70 (Eng. Abstr.) (Slo)

DRUG EFFECTS

Effect of heparin on mouse sperm motility. Sliwa L. Acta Physiol Pol 1988 Sep–Dec;39(5–6):491–3
Josamycin concentration in human ejaculate and its influence on sperm motility—a contribution to antibiotic therapy in andrological patients. Schramm P, et al. Andrologia 1988 Nov–Dec;20(6):521–5
The effects of beta-adrenergic drugs on the human sperm motility in vitro. II. The effects of isoprenaline and fenoterol. Semczuk M. Andrologia 1988 Jul–Aug; 20(4):360–5
Trichomonas vaginalis: preliminary characterization of a sperm motility inhibiting factor. Jarecki-Black JC, et al. Ann Clin Lab Sci 1988 Nov–Dec;18(6):484–9
Effect of L-carnitine on motility and acrosome reaction of human spermatozoa. Deana R, et al. Arch Androl 1988; 21(3):147–53
Stimulation of motility and energy metabolism of spermatozoa from asthenozoospermic patients by 17 beta-estradiol. Idaomar M, et al. Arch Androl 1989; 22(3):197–202
Effect of ace-inhibitors, calmodulin antagonists, acetylcholine receptor blocking, and alpha receptor blocking agents on motility of human sperm. Placzek R, et al. Arch Androl 1988;21(1):1–10
Effect of cholinergic agents on human spermatozoa motility. Dwivedi C, et al. Biochem Med Metab Biol 1989 Aug; 42(1):66–70
The interaction of pH and cyclic adenosine 3',5'-monophosphate on activation of motility in Triton X-100 extracted bull sperm. Goltz JS, et al. Biol Reprod 1988 Dec;39(5):1129–36
Relaxin in the male. Weiss G. Biol Reprod 1989 Feb; 40(2):197–200 (31 ref.)
Calcium regulation of flagellar curvature and swimming pattern in triton X-100—extracted rat sperm. Lindemann CB, et al. Cell Motil Cytoskeleton 1988;10(3):420–31
The effect of some of the polyphenolic compounds on sperm motility in vitro: a structure-activity relationship. Kumar P, et al. Contraception 1989 May;39(5):531–9
Inhibitory effects of gossypol analogs on human sperm motility. Tanphaichitr N, et al. Contraception 1989 Jun; 39(6):687–97
The effect of glycerol-related osmotic changes on post-thaw motility and acrosomal integrity of ram spermatozoa. Fiser PS, et al. Cryobiology 1989 Feb;26(1):64–9
Improved sperm concentration, motility, and fertilization rates following Ficoll treatment of sperm in a human in vitro fertilization program. Bongso A, et al. Fertil Steril 1989 May;51(5):850–4
Improving penetrating capacity of spermatozoa with poor motility by addition of caffeine at coincubation with zona-free hamster ova. Cai XQ, et al. Fertil Steril 1989 Apr;51(4):719–21
Adverse effects of methylene blue on human sperm motility, components of human reproductive tract fluids, and mouse embryo cleavage. Coddington CC, et al. Fertil Steril 1989 Mar;51(3):480–5
Effect of nicotine on in vitro human sperm penetrability through cervical mucus and motility parameters. Crandall LA, et al. Fertil Steril 1989 Apr;51(4):722–4
Comparison of motility stimulants for cryopreserved human semen. Hammitt DG, et al. Fertil Steril 1989 Sep; 52(3):495–502
Effects of transglutaminase substrates and inhibitors on the motility of demembranated reactivated spermatozoa. de Lamirande E, et al. Gamete Res 1989 Feb;22(2):179–92
A computer-assisted assay for mouse sperm hyperactivation demonstrates that bicarbonate but not bovine serum albumin is required. Neill JM, et al. Gamete Res 1987 Oct; 18(2):121–40
Incubation of mouse sperm with lactate delays capacitation and hyperactivation and lowers fertilization levels in vitro. Neill JM, et al. Gamete Res 1988 Aug;20(4):459–73
Capacitation of bovine spermatozoa by lysophospholipids and trypsin. Wheeler MB, et al. Gamete Res 1989 Feb; 22(2):193–204
The inhibitory effect of gossypol on human sperm motility: relationship with time, temperature and concentration. Hong CY, et al. Hum Toxicol 1989 Jan;8(1):49–51
The effect of tumor necrosis factor on human sperm motility in vitro. Eisermann J, et al. J Androl 1989 Jul–Aug; 10(4):270–4
Purification and characterization of a sperm motility inhibitor in human seminal plasma. Iwamoto T, et al. J Androl 1988 Nov–Dec;9(6):377–83
Acute effects and long-term sequelae of 1,3-dinitrobenzene on male reproduction in the rat. I. Sperm quality, quantity, and fertilizing ability. Linder RE, et al. J Androl 1988 Sep–Oct;9(5):317–26
Flagellar movement in demembranated preparations of ejaculated fowl spermatozoa. Ashizawa K, et al. J Reprod Fertil 1989 May;86(1):263–70
Effects of extracellular ionized calcium, diltiazem and cAMP on motility of human spermatozoa. Aaberg RA, et al. J Urol 1989 May;141(5):1221–4
Recent observations on drugs and human fertility. Turner P. Postgrad Med J 1988 Aug;64(754):578–80 (18 ref.)
[The effect of forskolin on sperm motility. In vitro experiments with bull sperm] Fuchs U, et al. Andrologia 1989 May–Jun;21(3):293–6 (Eng. Abstr.) (Ger)
[The effect of relaxin on sperm motility. In vitro experiments with bull sperm] Fuchs U. Andrologia 1989 May–Jun; 21(3):297–300 (Eng. Abstr.) (Ger)
[Quantitative studies of the interaction of polyvinylpyrrolidone iodine and spermatozoa] Pfannschmidt N, et al. Z Hautkr 1988 Nov 15;63(11):891–6 (Eng. Abstr.) (Ger)
[The effect of the trypsin inhibitor aprotinin (Trasylol) and TLCK on the gelatinolytic activity of acrosin and the motility of rabbit sperm in vitro] Pakzad R. Z Mikrosk Anat Forsch 1989;103(1):8–13 (Eng. Abstr.) (Ger)

SPERM NUMBER see SPERM COUNT

SPERM-OVUM INTERACTIONS

Results on postcoital and penetration test. Papp G, et al. Acta Chir Hung 1989;30(1):33–8
Identification of a deoxyribonucleic acid allelic variant for beta 1-4 galactosyltransferase expression associated with male sperm binding/penetration infertility. Humphreys-Beher MG, et al. Am J Obstet Gynecol 1989 May;160(5 Pt 1):1160–5
Correlation of human spermatozoa heparin binding with the zona-free hamster egg in vitro penetration assay. Vasquez JM, et al. Am J Obstet Gynecol 1989 Jan;160(1):20–6
The effects of antibody sperm-egg interaction. Alexander NJ. Ann N Y Acad Sci 1988;541:317–23
Use of micromanipulation for increasing the efficiency of mammalian fertilization in vitro. Gordon JW. Ann N Y Acad Sci 1988;541:601–13
Mechanisms of signal transduction in mouse spermatozoa. Kopf GS. Ann N Y Acad Sci 1989;564:289–302
Ultrastructure of human unfertilized oocytes and polyspermic embryos in an IVF-ET program. Motta PM, et al. Ann N Y Acad Sci 1988;541:367–83
The biology of human sperm-zona pellucida interaction. Overstreet JW, et al. Ann N Y Acad Sci 1988;541:337–45
Molecular changes in the human zona pellucida associated with fertilization and human sperm-zona interactions. Shabanowitz RB, et al. Ann N Y Acad Sci 1988;541:621–32
Correlation of semen analysis and hypoosmotic swelling test with subsequent pregnancies. Check JH, et al. Arch Androl 1988;20(3):257–60
Bovine cervical mucus penetration by human spermatozoa: lack of association with conception. Marshburn PB, et al. Arch Androl 1989;22(1):29–34
Effect of sperm washing and swim-up on antibodies bound to sperm membrane: use of immunobead/sperm cervical mucus contact tests. Windt ML, et al. Arch Androl 1989; 22(1):55–9
Role of basic amino acids in the interaction of bindin with sulfated fucans. DeAngelis PL, et al. Biochemistry 1988 Oct 18;27(21):8189–94
Relationship between two types of mouse sperm surface sites that mediate binding of sperm to the zona pellucida. Benau DA, et al. Biol Reprod 1988 Sep;39(2):235–44
Receptor-mediated activation of detergent-solubilized guanylate cyclase. Bentley JK, et al. Biol Reprod 1988 Oct; 39(3):639–47
Zona pellucida-induced acrosome reaction in boar sperm. Berger T, et al. Biol Reprod 1989 Mar;40(3):525–30
Carbohydrate involvement in sperm-egg fusion in mice. Boldt J, et al. Biol Reprod 1989 Apr;40(4):887–96
Zona drilling increases the penetrability of rat oocytes matured in vitro. Vanderhyden BC, et al. Biol Reprod 1989 May;40(5):953–60
Mechanics of sperm-egg interaction at the zona pellucida. Baltz JM, et al. Biophys J 1988 Oct;54(4):643–54
Influence of antisperm antibodies on human sperm function. Aitken RJ, et al. Br J Urol 1988 Oct;62(4):367–73
Prognostic significance of the zona-free hamster egg test. Hargreave TB, et al. Br J Urol 1988 Dec;62(6):603–8
Sperm cells as vectors for introducing foreign DNA into eggs: genetic transformation of mice. Lavitrano M, et al. Cell 1989 Jun 2;57(5):717–23
Experimental reversal of the normal dorsal-ventral timing of blastopore formation does not reverse axis polarity in Xenopus laevis embryos. Black SD. Dev Biol 1989 Aug; 134(2):376–81
Genomic organization of a sex specific gene: the primary sperm receptor of the mouse zona pellucida. Chamberlin ME, et al. Dev Biol 1989 Jan;131(1):207–14
Hamster sperm penetration of the zona pellucida: kinematic analysis and mechanical implications. Drobnis EZ, et al. Dev Biol 1988 Nov;130(1):311–23
Relationship between the M42 antigen of mouse sperm and the acrosome reaction induced by ZP3. Leyton L, et al. Dev Biol 1989 Mar;132(1):174–8
Proteases released from Xenopus laevis eggs at activation and their role in envelope conversion. Lindsay LL, et al. Dev Biol 1989 Sep;135(1):202–11
Acrosome intact and acrosome-reacted human sperm can initiate binding to the zona pellucida. Morales P, et al. Dev Biol 1989 Jun;133(2):385–92
Polarity of sperm entry in the ascidian egg. Speksnijder JE, et al. Dev Biol 1989 May;133(1):180–4
Pitfalls of the zona-free hamster egg penetration test: protein source as a major variable. Bronson RA, et al. Fertil Steril 1988 Dec;50(6):851–4
Prognostic value of in vitro sperm penetration into hormonally standardized human cervical mucus. Eggert-Kruse W, et al. Fertil Steril 1989 Feb;51(2):317–23
A sperm-zona pellucida binding test and in vitro fertilization. Liu DY, et al. Fertil Steril 1989 Aug;52(2):281–7
Partial zona dissection of the human oocyte: a nontraumatic method using micromanipulation to assist zona pellucida penetration. Malter HE, et al. Fertil Steril 1989 Jan; 51(1):139–48
The long-term predictive value of the zona-free hamster ova sperm penetration assay. Margalioth EJ, et al. Fertil Steril 1989 Sep;52(3):490–4
Interrelationships among semen characteristics, antisperm antibodies, and cervical mucus penetration assays in infertile human couples. Menge AC, et al. Fertil Steril 1989 Mar;51(3):486–92
Validation of the hemizona assay in a monkey model: influence of oocyte maturational stages. Oehninger S, et al. Fertil Steril 1989 May;51(5):881–5
Acrosome reaction of human spermatozoa in zona-free hamster egg penetration test. Yang YS, et al. Fertil Steril 1988 Dec;50(6):954–9
Failure of spermatozoa from T/t mice to fertilize in vitro is overcome by zona drilling. Ahmad T, et al. Gamete Res 1989 Apr;22(4):369–73
Modification of the zona-free hamster ova bioassay of boar sperm fertility and correlation with in vivo fertility. Berger T, et al. Gamete Res 1989 Apr;22(4):385–97
Rhesus monkey sperm penetration into zona-free hamster ova: comparison of preparation and culture conditions. Binor Z, et al. Gamete Res 1988 Jan;19(1):91–9
A quantitative assay for capacitation: evaluation of multiple sperm penetration through the zona pellucida of salt-stored hamster eggs. Boatman DE, et al. Gamete Res 1988 Jan; 19(1):19–29
Behavior of sperm nuclei in intact and bisected metaphase II mouse oocytes fertilized in the presence of colcemid. Borsuk E, et al. Gamete Res 1988 Jul;20(3):365–76
Analysis of the first cell cycle in the cross between hamster eggs and human sperm. Brandriff BF, et al. Gamete Res 1989 Jul;23(3):299–308
Intracellular pH change does not appear as a prerequisite for triggering activation of Barnea candida (Mollusca, Pelecypoda) oocytes. Brassard M, et al. Gamete Res 1988 May;20(1):43–52
Morphological observations on sperm-egg interactions during in vivo fertilization in the dasyurid marsupial Sminthopsis crassicaudata. Breed WG, et al. Gamete Res 1988 Feb;19(2):131–49
Sperm morphology and storage in the female reproductive tract of the fat-tailed dunnart, Sminthopsis crassicaudata (Marsupialia: Dasyuridae). Breed WG, et al. Gamete Res 1989 May;23(1):61–75
Effect of liquid storage and cryopreservation of boar spermatozoa on acrosomal integrity and the penetration of zona-free hamster ova in vitro. Clarke RN, et al. Gamete Res 1987 Mar;16(3):193–204
Impaired ability of human spermatozoa to penetrate zona-free hamster oocytes: is a postacrosomal sheath anomaly involved? Courtot AM, et al. Gamete Res 1987 Jun;17(2):145–56
Ultrastructure of in vivo fertilization in the goat. Crozet N, et al. Gamete Res 1987 Oct;18(2):191–9
Homospermic versus heterospermic insemination of zona-free hamster eggs to assess fertility of fluorochrome-labeled acrosome-reacted bull spermatozoa. Davis AP, et al. Gamete Res 1987 Aug;17(4):343–54
Role for fucose-sulfate-rich carbohydrates in the penetration of zona-pellucida-free hamster eggs by hamster spermatozoa. Dravland JE, et al. Gamete Res 1988 Dec; 21(4):353–8
Kinematics of hamster sperm during penetration of the cumulus cell matrix. Drobnis EZ, et al. Gamete Res 1988 Dec;21(4):367–83
Cholesterol efflux from bovine sperm: II. Effect of reducing sperm cholesterol on penetration of zona-free hamster and in vitro matured bovine ova. Ehrenwald E, et al. Gamete Res 1988 Aug;20(4):413–20
Hemizona assay using salt-stored human oocytes: evaluation of zona pellucida capacity for binding human spermatozoa. Franken DR, et al. Gamete Res 1989 Jan;22(1):15–26
Metabolic and surface events in fertilization. Fraser LR, et

al. **Gamete Res** 1988 Aug;20(4):491–519 (165 ref.)

Polyclonal antibodies to a 32-kDa deglycosylated polypeptide from porcine zonae pellucidae will prevent human gamete interaction in vitro. Henderson CJ, et al. **Gamete Res** 1987 Nov;18(3):251–65

Binding of morphologically abnormal sperm to mouse egg zonae pellucidae in vitro. Kot MC, et al. **Gamete Res** 1987 Sep;18(1):57–66

Fertilization cone formation in starfish oocytes: the role of the egg cortex actin microfilaments in sperm incorporation. Kyozuka K, et al. **Gamete Res** 1988 Jul;20(3):275–85

Protein–carbohydrate complementarity in mammalian gamete recognition. Macek MB, et al. **Gamete Res** 1988 May;20(1):93–109 (97 ref.)

Effect of follicle somatic cells during pig oocyte maturation on egg penetrability and male pronucleus formation. Mattioli M, et al. **Gamete Res** 1988 Jun;20(2):177–83

Effect of in vitro storage of bovine spermatozoa on acrosomal integrity, proteolytic activity, binding, and initiation of penetration of oocytes. Miller BJ, et al. **Gamete Res** 1988 May;20(1):53–65

Visualization and characterization of the acrosome reaction of human spermatozoa by immunolocalization with monoclonal antibody. Moore HD, et al. **Gamete Res** 1987 Jul;17(3):245–9

Genetic analysis of sperm function in fertilization. Olds-Clarke P. **Gamete Res** 1988 Jun;20(2):241–64 (185 ref.)

Sperm–egg recognition and barriers to interspecies fertilization. O'Rand MG. **Gamete Res** 1988 Apr; 19(4):315–28 (95 ref.)

Identification, isolation, and properties of a plasma membrane protein involved in the adhesion of boar sperm to the porcine zona pellucida. Peterson RN, et al. **Gamete Res** 1989 May;23(1):103–18

Cytochemical study of intracellular calcium in hamster spermatozoa during the acrosome reaction. Ruknudin A. **Gamete Res** 1989 Apr;22(4):375–84

Status of the rat acrosome during sperm–zona pellucida interactions. Shalgi R, et al. **Gamete Res** 1989 Jan; 22(1):1–13

Sperm–egg interaction in the mouse using live and glutaraldehyde-fixed eggs. Soldani P, et al. **Gamete Res** 1987 Nov;18(3):225–35

Failure of hamster eggs fertilized in vitro to extrude the second polar body correlates with high levels of polyspermy. Stewart-Savage J, et al. **Gamete Res** 1987 Dec; 18(4):333–8

Egg–penetration ability and structural properties of human sperm prepared by Percoll–gradient centrifugation. Tanphaichitr N, et al. **Gamete Res** 1988 May;20(1):67–81

Zona pellucida penetration assay for capacitation of bovine sperm. Wheeler MB, et al. **Gamete Res** 1987 Nov; 18(3):237–50

Chromosome anomalies in human oocytes failing to fertilize after insemination in vitro. Bongso A, et al. **Hum Reprod** 1988 Jul;3(5):645–9

Effects of anti-sperm antibodies on human sperm ultrastructure and function. Bronson RA, et al. **Hum Reprod** 1989 Aug;4(6):653–7

Initial stages of sperm—egg interaction in a heterospecific system: fate of the post-acrosomal sheath and appearance of a particular material within the oocyte. Courtot AM, et al. **Hum Reprod** 1988 Jul;3(5):651–5

Human and bovine cervical mucus penetration as a test of sperm function for in-vitro fertilization. De Geyter C, et al. **Hum Reprod** 1988 Nov;3(8):948–54

An evaluation of the role of relaxin in the penetration of cervical mucus by spermatozoa. Harris MA, et al. **Hum Reprod** 1988 Oct;3(7):856–60

Human sperm–zona pellucida binding, sperm characteristics and in-vitro fertilization. Liu DY, et al. **Hum Reprod** 1989 Aug;4(6):696–701

The role of follicular fluid in inducing the acrosome reaction of human spermatozoa incubated in vitro. Mortimer D, et al. **Hum Reprod** 1989 Feb;4(2):169–74

The presence of zonae pellucidae influences fusion rates between spermatozoa and zona free hamster oocytes. van Kooij RJ, et al. **Hum Reprod** 1988 Aug;3(6):773–5

Multivariate discriminant analysis of the relationship between the hypo-osmotic swelling test and the in-vitro fertilizing capacity of human sperm. Chan SY, et al. **Int J Androl** 1988 Oct;11(5):369–78

Reorganization of the egg surface at fertilization. Longo FJ. **Int Rev Cytol** 1988;113:233–69 (268 ref.)

Novel alpha-D-mannosidase of rat sperm plasma membranes: characterization and potential role in sperm–egg interactions. Tulsiani DR, et al. **J Cell Biol** 1989 Sep; 109(3):1257–67

Influence of calcium on the true acrosome reaction and capacity of bull spermatozoa to penetrate oocytes in vitro. Didion BA, et al. **J Dairy Sci** 1989 Jun;72(6):1540–6

Effects of in vitro incubation on a zona binding site found on murine spermatozoa. Boettger H, et al. **J Exp Zool** 1989 Jan;249(1):90–8

Spermatolysins in Bufo arenarum: their activity on oocyte surface. Cabada MO, et al. **J Exp Zool** 1989 Feb; 249(2):229–34

Fertilization of zona-drilled mouse oocytes treated with a monoclonal antibody to the zona glycoprotein, ZP3. Conover JC, et al. **J Exp Zool** 1988 Jul;247(1):113–8

Evidence suggesting a role for sperm metalloendoprotease activity in penetration of zona-free hamster eggs by human sperm. Díaz-Pérez E, et al. **J Exp Zool** 1988 Nov; 248(2):213–21

Ascidian sperm penetration and the translocation of a cell surface glycosidase. Lambert CC. **J Exp Zool** 1989 Mar; 249(3):308–15

Cross-fertilization between Syrian and Chinese hamsters. Roldan ER, et al. **J Exp Zool** 1989 Jun;250(3):321–8

Acrosome-reacted guinea pig spermatozoa become fusion competent in the presence of extracellular potassium ions. Yanagimachi R, et al. **J Exp Zool** 1988 Dec;248(3):354–60

The hemizona assay (HZA): a predictor of human sperm fertilizing potential in in vitro fertilization (IVF) treatment. Franken DR, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):44–50

Blocking effect of sperm immobilizing antibodies on sperm penetration of human zonae pellucidae. Tsukui S, et al. **J In Vitro Fert Embryo Transf** 1988 Jun;5(3):123–8

Sperm binding to the pig zona pellucida and inhibition of binding by solubilized components of the zona pellucida. Berger T, et al. **J Reprod Fertil** 1989 Jul;86(2):559–65

Relationship between heparin binding characteristics and ability of human spermatozoa to penetrate hamster ova. Lalich RA, et al. **J Reprod Fertil** 1989 May;86(1):297–302

Human sperm chromosome complements after microinjection of hamster eggs. Martin RH, et al. **J Reprod Fertil** 1988 Sep;84(1):179–86

Penetration of bovine follicular oocytes by frozen–thawed spermatozoa in the presence of caffeine and heparin. Park CK, et al. **J Reprod Fertil** 1989 Jul;86(2):577–82

Capacitation status of hamster spermatozoa in the oviduct at various times after mating. Smith TT, et al. **J Reprod Fertil** 1989 May;86(1):255–61

Human oocyte–cumulus complexes stimulate the human acrosome reaction. Stock CE, et al. **J Reprod Fertil** 1989 Jul;86(2):723–30

Nucleic acid synthesis and development of human male pronucleus. Tesařík J, et al. **J Reprod Fertil** 1989 Jul; 86(2):549–58

Effect of a monoclonal anti-mouse sperm antibody (OBF13) on the interaction of mouse sperm with zona-free mouse and hamster eggs. Okabe M, et al. **J Reprod Immunol** 1988 Aug;13(3):211–9

On the role of epididymal factors in sperm fertility. Blaquier JA, et al. **Reprod Nutr Dev** 1988;28(5):1209–16 (37 ref.)

Fertilization in mammals. Wassarman PM. **Sci Am** 1988 Dec; 259(6):78–84 (5 ref.)

[The hamster test. Practical consequences] Koulischer L, et al. **Acta Urol Belg** 1989;57(1):77–81 (Eng. Abstr.) **(Fre)**

[In vivo and in vitro fertilizing ability of immature human epididymal spermatozoa] Jardin A, et al. **Reprod Nutr Dev** 1988;28(5):1375–85 (Eng. Abstr.) **(Fre)**

[Intravaginal culture and embryo transfer] Ranoux C, et al. **Rev Fr Gynecol Obstet** 1988 Oct;83(10):637–8 (Eng. Abstr.) **(Fre)**

[Microinjection of spermatozoa into the oocyte. An experimental model for assisted conjugation in oligo–asthenozoospermia as a cause of sterility] Mettler L, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):625–9 (Eng. Abstr.) **(Ger)**

[In vitro fertilization: a comparison with results of the hamster ova penetration test (HOPT)] Sterzik K, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):630–3 (Eng. Abstr.) **(Ger)**

[Motility of spermatozoa and its significance for fertilization in vivo and in vitro] Pusch HH, et al. **Gynakol Rundsch** 1988;28(3):150–6 (Eng. Abstr.) **(Ger)**

[Clinical pathology of hydatidiform mole] Romanowicz-Makowska H, et al. **Pol Tyg Lek** 1988 Sep 26;43(39):1270–3 **(Pol)**

[Injection of gene p53 into the pronuclei of mouse zygotes] Sergienko VG, et al. **Ontogenez** 1989 May–Jun;20(3):323–6 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

The effects of lymphokines and monokines on human sperm fertilizing ability in the zona-free hamster egg penetration test. Hill JA, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1154–9

Significance of D-mannose as a sperm receptor site on the zona pellucida in human fertilization. Mori K, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):207–11

Enzymatic alteration of the ability of mouse egg plasma membrane to interact with sperm. Boldt J, et al. **Biol Reprod** 1988 Aug;39(1):19–27

Physiological inducers of the acrosome reaction. Hoshi M, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:19–24 (15 ref.)

Sulfasalazine-induced abnormal sperm penetration [letter] Riley SA. **Dig Dis Sci** 1988 Nov;33(11):1498–9

Glucosamine enhanced sperm–egg binding but inhibited sperm–egg fusion in mouse. Okabe M, et al. **Experientia** 1989 Feb 15;45(2):193–4

Improving penetrating capacity of spermatozoa with poor motility by addition of caffeine at coincubation with zona-free hamster ova. Cai XQ, et al. **Fertil Steril** 1989 Apr;51(4):719–21

Effect of nicotine on in vitro human sperm penetrability through cervical mucus and motility parameters. Crandall LA, et al. **Fertil Steril** 1989 Apr;51(4):722–4

Effects of agents used for zona pellucida removal on hamster oocyte penetration by human spermatozoa. Hoshi K, et al. **Fukushima J Med Sci** 1988 Jun;34(1):1–9

Does phospholipase C inhibit fusion between hamster sperm and zona-free eggs? Clark JM, et al. **Gamete Res** 1988 Apr; 19(4):339–48

Strontium supports capacitation and the acrosome reaction in mouse sperm and rapidly activates mouse eggs. Fraser LR. **Gamete Res** 1987 Dec;18(4):363–74

Human sperm injection into the perivitelline space (SI–PVS) of hamster oocytes: effect of sperm pretreatment by calcium–ionophore A23187 and freezing–thawing on the penetration rate and polyspermy. Lassalle B, et al. **Gamete Res** 1988 Jul;20(3):301–11

Activation of Ca2+ channels during the acrosome reaction of sea urchin sperm is inhibited by inhibitors of chymotrypsin-like proteases. Matsumura K, et al. **Gamete Res** 1989 Jul;23(3):255–66

Incubation of mouse sperm with lactate delays capacitation and hyperactivation and lowers fertilization levels in vitro. Neill JM, et al. **Gamete Res** 1988 Aug;20(4):459–73

Ethanol inhibits human and hamster sperm penetration of eggs. Rogers BJ, et al. **Gamete Res** 1987 Feb;16(2):97–107

Effects of antimicrobial therapy on sperm–mucus interaction. Eggert-Kruse W, et al. **Hum Reprod** 1988 Oct;3(7):861–9

Analysis of the relationship between defective sperm function and the generation of reactive oxygen species in cases of oligozoospermia. Aitken RJ, et al. **J Androl** 1989 May–Jun; 10(3):214–20

Acute effects and long-term sequelae of 1,3-dinitrobenzene on male reproduction in the rat. I. Sperm quality, quantity, and fertilizing ability. Linder RE, et al. **J Androl** 1988 Sep–Oct;9(5):317–26

Cytochalasin D inhibits penetration of hamster eggs by guinea pig and human spermatozoa. Rogers BJ, et al. **J Androl** 1989 Jul–Aug;10(4):275–82

Failed fertilization during an in vitro fertilization cycle after oral ingestion of amantadine hydrochloride. Cowan BD, et al. **J In Vitro Fert Embryo Transf** 1988 Oct;5(5):282–5

Morpho-functional characteristics of the pre-embryo. Suzuki S, et al. **Prog Clin Biol Res** 1989;296:311–20

SPERM PENETRATION see **SPERM–OVUM INTERACTIONS**

SPERM TAIL see under **SPERMATOZOA**

SPERM TRANSPORT

Changes in sperm surface membrane and luminal protein fluid content during epididymal transit in the boar. Dacheux JL, et al. **Biol Reprod** 1989 Mar;40(3):635–51

Effect of daily spermatozoan production but not age on transit time of spermatozoa through the human epididymis. Johnson L, et al. **Biol Reprod** 1988 Nov;39(4):812–7

Human cervical mucus and its interaction with sperm: a fine-structural view. Yudin AI, et al. **Biol Reprod** 1989 Mar;40(3):661–71

Duration of epididymal sperm transit in hamster: an autoradiographic study. Hikim AP, et al. **Gamete Res** 1988 Apr;19(4):411–6

Factors regulating mammalian sperm migration through the female reproductive tract and oocyte vestments. Katz DF, et al. **Gamete Res** 1989 Apr;22(4):443–69 (150 ref.)

Quantitative comparison of the passage of homologous and heterologous spermatozoa through the uterotubal junction of the golden hamster. Smith TT, et al. **Gamete Res** 1988 Mar;19(3):227–34

Effects of male accessory sex glands on sperm transport, fertilization and embryonic loss in golden hamsters. Chow PH, et al. **Int J Androl** 1989 Apr;12(2):155–63

Effects of peristaltic and longitudinal wave motion of the channel wall on movement of micro-organisms: application to spermatozoa transport. Shukla JB, et al. **J Biomech** 1988; 21(11):947–54

Concentrations of spermatozoa in the vagina of heifers after deposition of semen in the uterine horns, uterine body or cervix. Gallagher GR, et al. **J Reprod Fertil** 1989 May; 86(1):19–25

Capacitation status of hamster spermatozoa in the oviduct at various times after mating. Smith TT, et al. **J Reprod Fertil** 1989 May;86(1):255–61

Transport of spermatozoa in the reproductive tract of the bitch: observations through uterine fistula. Tsutsui T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):560–5

Distribution of spermatozoa in the genital tract of heifers inseminated with large numbers of abnormal spermatozoa. Larsson B. **Zentralbl Veterinarmed [A]** 1988 Dec; 35(10):721–8

DRUG EFFECTS

Human relaxin stimulates human sperm penetration of bovine cervical mucus. Colon JM, et al. **Fertil Steril** 1989 Aug; 52(2):340–2

SPERMATIC CORD

Rhabdoid tumours of the spermatic cord. Kawanishi Y, et al. **Br J Urol** 1989 Apr;63(4):439–40

Metastasis to the spermatic cord as the first sign of bladder carcinoma. Ishida A, et al. **Hinyokika Kiyo** 1988 Jul; 34(7):1269–71

Myxoid liposarcoma of the spermatic cord. McFadden DW. **J Surg Oncol** 1989 Feb;40(2):132–4 (12 ref.)

Experimental chemotherapy and radiotherapy to paratesticular rhabdomyosarcoma. Motoyama T, et al.

J Urol 1989 Jan;141(1):187–9
Inflammatory malignant fibrous histiocytoma of the spermatic cord. Nistal M, et al. Urol Int 1988;43(3):188–92
Leiomyoma of spermatic cord with unusual features. Elmer EB, et al. Urology 1989 Mar;33(3):236–7
Spermatic cord metastasis from ureteral carcinoma. Komeda Y, et al. Urology 1988 Nov;32(5):449–50
[Spermatic cord sarcoma—case report and review of literature] Liu YT. Chung Hua Chung Liu Tsa Chih 1988 Nov;10(6):476–7 (17 ref.) (Eng. Abstr.) (Chi)
[Lipoma of the spermatic cord. Description of a case and review of the literature] Lerais JM, et al. J Radiol 1988 Oct;69(10):607–9 (20 ref.) (Eng. Abstr.) (Fre)
[Ureteral stenosis of a kidney transplant: a rare cause. Percutaneous nephroscopy of the transplant: an uncommon indication] Heritier P, et al. J Urol (Paris) 1988; 94(9–10):471–3 (6 ref.) (Eng. Abstr.) (Fre)
[Liposarcoma of the spermatic cord. Review of the literature. Apropos of a case of myxoid liposarcoma] Ntarundenga U, et al. J Urol (Paris) 1989;95(2):107–10 (15 ref.) (Eng. Abstr.) (Fre)
[Spermatic cord hematoma simulating torsion of testis in Henoch–Schönlein syndrome] Eyal I, et al. Harefuah 1989 Mar 1;116(5):260–1 (Eng. Abstr.) (Heb)
[Liposarcoma of the spermatic cord (presentation of a case)] Salerno L, et al. Ann Osp Maria Vittoria Torino 1987–88; 30(1):101–6 (Eng. Abstr.) (Ita)
[Metastatic tumor of the spermatic cord from gastric cancer] Kagawa S, et al. Hinyokika Kiyo 1988 May;34(5):892–4 (Eng. Abstr.) (Jpn)
[A case of leiomyoma of the spermatic cord] Kawashima K, et al. Hinyokika Kiyo 1988 Aug;34(8):1479–81 (11 ref.) (Eng. Abstr.) (Jpn)
[A case of fibrous pseudotumor of the spermatic cord] Kondoh N, et al. Hinyokika Kiyo 1988 Dec; 34(12):2197–200 (18 ref.) (Eng. Abstr.) (Jpn)
[Giant liposarcoma of the spermatic cord: a case report] Sone M, et al. Hinyokika Kiyo 1989 Jan;35(1):147–51 (23 ref.) (Eng. Abstr.) (Jpn)
[A giant lipoma of the spermatic cord] Orlov VA, et al. Khirurgiia (Mosk) 1988 Nov;(11):120–1 (Rus)
[Treatment of idiopathic hydrocele and cord cysts with sclerosing puncture of tetracycline] Miguélez García E, et al. Arch Esp Urol 1988 Sep;41(7):493–4 (Eng. Abstr.) (Spa)
[Parafunicular hemangiopericytoma] Spitale LS, et al. Arch Esp Urol 1989 Jan–Feb;42(1):63–5 (Eng. Abstr.) (Spa)

ABNORMALITIES

Congenital inguinal hernias associated with a rent in the common vaginal tunic in five foals. Spurlock GH, et al. J Am Vet Med Assoc 1988 Nov 1;193(9):1087–8

BLOOD SUPPLY

Vascular morphology of the golden hamster spermatic cord. Rerkamnuaychoke W, et al. Arch Histol Cytol 1989 May; 52(2):183–90
Investigations of arterio–venous anastomoses in the spermatic cords and blood supply, oxygen consumption and testosterone production of scrotal and abdominal testes in the pig. Noordhuizen–Stassen EN, et al. Int J Androl 1988 Dec;11(6):493–505
Arteriovenous malformation of the spermatic cord. Bumpers PM Jr, et al. J Urol 1989 Jan;141(1):103–4
Arteriovenous malformation of spermatic cord. Guz BV, et al. Urology 1989 May;33(5):427–8
[Blood gas analysis of varicocele, spermatic vein and peripheral vein] Yan CH. Chung Hua Wai Ko Tsa Chih 1989 Jan;27(1):37–8, 62 (Eng. Abstr.) (Chi)
[Intraoperative anterograde spermatic phlebography: its usefulness in the treatment of varicocele] Gibba A, et al. Minerva Urol Nefrol 1989 Jan–Mar;41(1):1–4 (Eng. Abstr.) (Ita)

PATHOLOGY

Burkitt lymphoma involving the epididymis and spermatic cord: sonographic and CT findings. Zwanger–Mendelsohn S, et al. AJR Am J Roentgenol 1989 Jul;153(1):85–6
Ultrasound appearances of malignant fibrous histiocytoma of the spermatic cord. A case report. Wise AG, et al. Australas Radiol 1988 Nov;32(4):512–4
Xanthogranuloma of the spermatic cord. Pak K, et al. Eur Urol 1988;15(3–4):277–80
Leiomyosarcoma of the spermatic cord. Case report and review of the literature. Racalbuto A, et al. Ital J Surg Sci 1988;18(3):279–85 (17 ref.)
Liposarcoma of the cord presenting at vasectomy counselling. Milner SM, et al. J R Army Med Corps 1989 Jun;135(2):86–7
Malignant fibrous histiocytoma of the spermatic cord. de Bruin MJ, et al. J Urol 1989 Jul;142(1):131–3 (17 ref.)
Isolated necrotizing granulomatous vasculitis of the spermatic cords. Karnauchow PN, et al. J Urol 1989 Feb; 141(2):379–81
Testicular carcinoma in situ associated with rhabdomyosarcoma of the spermatic cord. Nistal M, et al. J Urol 1989 Aug;142(2):358–60
Rhabdomyosarcoma of the funiculus. Solivetti FM, et al. JCU 1989 Sep;17(7):521–2

RADIOGRAPHY

Burkitt lymphoma involving the epididymis and spermatic cord: sonographic and CT findings. Zwanger–Mendelsohn S, et al. AJR Am J Roentgenol 1989 Jul;153(1):85–6
[Lymphography of the spermatic cord in the staging of testicular germinal tumors] Martinengo C, et al. G Ital Oncol 1988 Jan–Mar;8(1):41–4 (Eng. Abstr.) (Ita)

ULTRASTRUCTURE

[Vasectomy and vasovasostomy. II. Histological changes in the spermatic cord] López A, et al. Actas Urol Esp 1988 Jul–Aug;12(4):389–98 (44 ref.) (Eng. Abstr.) (Spa)

SPERMATIC CORD TORSION

Extravaginal testicular torsion. Sheridan WG, et al. Br J Clin Pract 1988 Mar;42(3):128–30 (28 ref.)
Torsion of the testis: a real emergency? Lawani J. East Afr Med J 1987 Oct;64(10):675–82
Old and new aspects of testicular torsion. Workman SJ, et al. Semin Urol 1988 May;6(2):146–57 (91 ref.)

CLASSIFICATION

A classification for intravaginal torsion of the testis. Ishizuka E, et al. Eur Urol 1988;15(1–2):108–12

COMPLICATIONS

Triorchidism with torsion. Crawford DS, et al. Br J Urol 1989 May;63(5):553–4
[The effect of unilateral testicular damage on the contralateral testis: an experimental study] Lin AT, et al. Chung Hua I Hsueh Tsa Chih 1987 Nov;40(5):437–42 (Eng. Abstr.) (Chi)

CONGENITAL

Intrauterine–neonatal torsion of the spermatic cord in an Ethiopian newborn: a case report. Bekele Z, et al. East Afr Med J 1987 Oct;64(10):694–6
[Torsion of the spermatic cord in utero. Description of a clinical case in the neonatal period] Calbi M, et al. Minerva Pediatr 1988 Mar;40(3):187–9 (Eng. Abstr.) (Ita)

DIAGNOSIS

Testicular ischemia: color Doppler sonographic findings in five patients. Middleton WD, et al. AJR Am J Roentgenol 1989 Jun;152(6):1237–9
Idiopathic scrotal haemorrhage in neonates. Davenport M, et al. BMJ 1989 Jun 3;298(6686):1492–3
Doppler ultrasonography in the diagnosis of acute scrotal pain [letter] Dixon JM. Br J Surg 1988 Dec;75(12):1277
Detection of testicular torsion by magnetic resonance imaging in a rat model. Landa HM, et al. J Urol 1988 Nov;140(5 Pt 2):1178–80
P-31 MR spectroscopy in assessing testicular torsion: rat model. Tzika AA, et al. Radiology 1989 Sep;172(3):753–7
Torsion of the spermatic cord. Simon LC. West Indian Med J 1989 Mar;38(1):54–7
[Testicular echography in torsion and epididymitis. Apropos of 2 cases] Abadou H, et al. J Radiol 1988 Oct;69(10):603–6 (Eng. Abstr.) (Fre)
[Does echography contribute to the diagnosis and treatment of acute unknown, tied or bilateral torsion of testis?] Bertrand P, et al. J Urol (Paris) 1988;94(9–10):455–7 (Eng. Abstr.) (Fre)
[Hydatid torsion as a cause of acute scrotum—clinical, sonographic and anatomic aspects] Kuber W, et al. Urologe [A] 1989 Jan;28(1):40–4 (Eng. Abstr.) (Ger)
[Spermatic cord hematoma simulating torsion of testis in Henoch–Schönlein syndrome] Eyal I, et al. Harefuah 1989 Mar 1;116(5):260–1 (Eng. Abstr.) (Heb)
[Torsion of the testis and its adnexae. Differential diagnosis of "acute scrotum" in childhood] Vincze J, et al. Orv Hetil 1988 Jul 3;129(27):1421–5 (50 ref.) (Eng. Abstr.) (Hun)
[Ultrasonics in testicular torsion] Roald HE, et al. Tidsskr Nor Laegeforen 1989 Apr 10;109(10):1071 (Eng. Abstr.) (Nor)

EPIDEMIOLOGY

Testicular torsion in Bristol: a 25–year review. Anderson JB, et al. Br J Surg 1988 Oct;75(10):988–92

ETIOLOGY

Traumatic testicular torsion: case report. Manson AL. J Trauma 1989 Mar;29(3):407–8 (11 ref.)
Trauma–induced testicular torsion: ultrasonographic features and pathologic correlation. Sanders LM, et al. JCU 1989 Sep;17(7):538–41
Contralateral testicular disease after unilateral testicular injury: current concepts. Tarter TH, et al. Semin Urol 1988 May;6(2):120–39 (181 ref.)

GENETICS

Familial torsion of the spermatic cord. Collins K, et al. J Urol 1989 Jan;141(1):128–9

PATHOLOGY

[Spermatic cord torsion: morphologic and functional study, with special reference to the Leydig cells] Sirvent JJ, et al. Actas Urol Esp 1988 Sep–Oct;12(5):443–8 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Effect of testicular torsion on contralateral testis and fertility in mature rats. Madgar I, et al. Arch Androl 1987; 19(3):237–41
The effect of unilateral experimental testicular torsion on spermatogenesis and fertility. Ryan PC, et al. Br J Urol 1988 Oct;62(4):359–66
Contralateral testicular blood flow during unilateral testicular torsion. Tanyel FC, et al. Br J Urol 1989 May;63(5):522–4

RADIONUCLIDE IMAGING

Acute scrotal pain in children: prospective study of diagnosis and management [published erratum appears in Can J Surg 1989 May;32(3):158] Anderson PA, et al. Can J Surg 1989 Jan;32(1):29–32
Incidental detection of obstructive uropathy during scrotal imaging. Elgazzar AH, et al. Clin Nucl Med 1988 Nov; 13(11):823–5
Spontaneous reduction of testicular torsion during scrotal imaging. Willgress ER, et al. Clin Nucl Med 1989 Jul; 14(7):540
Scintigraphy for the diagnosis of testicular torsion and differential diagnosis of acute intrascrotal processes. Romics I, et al. Int Urol Nephrol 1988;20(6):631–9
Spontaneously reduced testicular torsion. A pitfall in radionuclide scrotal imaging. Lowry PA, et al. Urology 1989 Feb;33(2):135–6

SURGERY

Intermittent torsion of the testis. Creagh TA, et al. BMJ 1988 Aug 20–27;297(6647):525–6
Orchiopexy for intravaginal testicular torsion. Ring–shaped fixation of the lower part of the testis. Ishizuka E, et al. Eur Urol 1989;16(4):295–7
Testicular salvage and age–related delay in the presentation of testicular torsion. Barada JH, et al. J Urol 1989 Sep; 142(3):746–8
Simple technique for testicular fixation in management of torsion. Douglas LL. Urology 1988 Oct;32(4):352–3
[A case of testicular torsion in the inguinal canal in a child] Zabolotnyi NS, et al. Klin Khir 1988;(6):74–5 (Rus)

THERAPY

Genitourinary imaging and procedures by the emergency physician. Neuwirth H, et al. Emerg Med Clin North Am 1989 Feb;7(1):1–28 (23 ref.)
Scrotal cooling and testicular torsion [letter] Boyarsky S. J Urol 1989 Apr;141(4):960

SPERMATIDS

ANALYSIS

A new species of enkephalin precursor mRNA with a distinct 5'–untranslated region in haploid germ cells. Yoshikawa K, et al. FEBS Lett 1989 Mar 27;246(1–2):193–6
Phosphorylation state of protamines 1 and 2 in human spermatids and spermatozoa. Prusiln FH, et al. Gamete Res 1987 Oct;18(2):179–90

CYTOLOGY

Synacrosomal formation after cell fusion of round spermatids of Xenopus laevis. Asakura S, et al. Exp Cell Res 1989 Apr;181(2):566–73
Spermiogenesis in the bluegill (Lepomis macrochirus): a study of cytoplasmic events including cell volume changes and cytoplasmic elimination [published errata appear in J Morphol 1988;198(3):381 and 1989 Feb;199(2):245] Sprando RL, et al. J Morphol 1988 Nov;198(2):165–77

DRUG EFFECTS

Inhalation exposure–rate of ethylene oxide affects the level of DNA breakage and unscheduled DNA synthesis in spermiogenic stages of the mouse Sega GA, et al. Mutat Res 1988 Nov–Dec;209(3–4):177–80

ENZYMOLOGY

Differential expression and subcellular localization for subunits of cAMP–dependent protein kinase during ram spermatogenesis. Pariset C, et al. J Cell Biol 1989 Sep; 109(3):1195–205

IMMUNOLOGY

Antigens recognized by monoclonal antibody to mouse acrosomal components differ in guinea pig spermatogenic cells and sperm. Gerton GL, et al. Biol Reprod 1988 Sep; 39(2):431–41

METABOLISM

Metabolism of round spermatids in the rat: effect of gossypol on the glucose transport. Nakamura M, et al. Andrologia 1988 Sep–Oct;20(5):411–6

Metabolism of round spermatids: gossypol induces uncoupling of respiratory chain and oxidative phosphorylation. Nakamura M, et al. **Biol Reprod** 1988 Nov;39(4):771–8

Nucleotide sequences and expression of cDNA clones for boar and bull transition protein 1 and its evolutionary conservation in mammals. Kremling H, et al. **Differentiation** 1989 Jun;40(3):184–90

DNA topoisomerase II activity in nonreplicating, transcriptionally inactive, chicken late spermatids. Roca J, et al. **EMBO J** 1989 Jun;8(6):1855–60

Protamine 3'-untranslated sequences regulate temporal translational control and subcellular localization of growth hormone in spermatids of transgenic mice. Braun RE, et al. **Genes Dev** 1989 Jun;3(6):793–802

The equivocal presence of nuclear androgen binding proteins in mammalian spermatids and spermatozoa. Frankel AI, et al. **J Steroid Biochem** 1989 Jul;33(1):71–9

PHYSIOLOGY

Mechanism for the removal of residual cytoplasm from spermatids during mouse spermiogenesis. Sakai Y, et al. **Anat Rec** 1989 Jan;223(1):43–8

Initiation of spermiogenesis in C. elegans: a pharmacological and genetic analysis. Shakes DC, et al. **Dev Biol** 1989 Jul; 134(1):189–200

Possible role of elongated spermatids in control of stage-dependent changes in the diameter of the lumen of the rat seminiferous tubule. Sharpe RM. **J Androl** 1989 Jul–Aug;10(4):304–10

Pachytene spermatocyte and round spermatid binding to Sertoli cells in vitro. Enders GC, et al. **J Cell Sci** 1988 May;90 (Pt 1):105–14

Spermiogenesis in the bullfrog (Rana catesbeiana): a study of cytoplasmic events including cell volume changes and cytoplasmic elimination. Sprando RL, et al. **J Morphol** 1988 Dec;198(3):303–19

Genetically haploid spermatids are phenotypically diploid. Braun RE, et al. **Nature** 1989 Jan 26;337(6205):373–6

RADIATION EFFECTS

Assessment of testicular function after acute and chronic irradiation: further evidence for an influence of late spermatids on Sertoli cell function in the adult rat. Pineau C, et al. **Endocrinology** 1989 Jun;124(6):2720–8

Radiation-induced diploid spermatids in mice. Hacker-Klom U, et al. **Int J Radiat Biol** 1989 May;55(5):797–806

ULTRASTRUCTURE

Co-existence of gametic and agametic seminiferous tubules in a chimeric mouse. A light- and electron-microscopic study. Hrudka F, et al. **Acta Anat (Basel)** 1989; 135(3):269–74

Light microscopic immunocytochemical study of fibrous sheath and outer dense fiber formation in the rat spermatid. Oko R, et al. **Anat Rec** 1989 Sep;225(1):46–55

Changes in chromatin structure of boar late spermatids to mature spermatozoa by using modification with dansyl chloride. Akama K, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):198–202

The consequences of actin disruption at Sertoli ectoplasmic specialization sites facing spermatids after in vivo exposure of rat testis to cytochalasin D. Russell LD, et al. **Biol Reprod** 1988 Aug;39(1):105–18

Changes in endoplasmic reticulum during spermiogenesis in the mouse. Nakamoto T, et al. **Cell Tissue Res** 1989 Aug; 257(2):279–84

Morphological evidence for calcium storage in the chromatoid body of rat spermatids. Andonov MD, et al. **Experientia** 1989 Apr 15;45(4):377–8

Formation of the ventral hooks on the sperm head of the plains mouse, Pseudomys australis. Flaherty SP, et al. **Gamete Res** 1987 Jun;17(2):115–29

Nuclear protein transitions in cuttle-fish spermiogenesis: immunocytochemical localization of a protein specific for the spermatid stage. Rousseaux-Prévost R, et al. **Gamete Res** 1988 Mar;19(3):277–90

Spermatogenesis and ultrastructural changes of spermatids during spermiogenesis in the cotton rat, Sigmodon hispidus. Kurohmaru M, et al. **Okajimas Folia Anat Jpn** 1988 Oct; 65(4):203–19

Nuclear changes during spermiogenesis in man and the monkey. Dadoune JP, et al. **Prog Clin Biol Res** 1989; 296:165–70 (15 ref.)

[Occurrence of germ cells in a cryptorchism testis in the adult] Blumer CF, et al. **Pathologe** 1989 Jan;10(1):3–11 **(Ger)**

SPERMATOBLASTS see SPERMATIDS

SPERMATOCELE

ETIOLOGY

[A case of bilateral spermatocele] Mizuo T, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1253–5 (10 ref.) (Eng. Abstr.) **(Jpn)**

SPERMATOCIDAL AGENTS

Comparative trial between two soft jelly capsules containing nonoxynol as spermicidal contraceptives. Bassol S, et al. **Contraception** 1989 Apr;39(4):409–18

Effect of certain volatile oils on ejaculated human spermatozoa. Buch JG, et al. **Indian J Med Res** 1988 Apr; 87:361–3

Spermicidal activity and chemical analysis of Pentapanax leschenaultii. Pant G, et al. **Planta Med** 1988 Oct;54(5):477

[Effect of gossypol acetate on the testicular HCG reactivity and its receptor in the rats] Fang L, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Sep;21(3):331–5 (Eng. Abstr.) **(Chi)**

[Vaginal tablets, pills and intrauterine devices. Study of their comparative pathogenicity] Levrier M. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):205–10 **(Fre)**

ADMINISTRATION & DOSAGE

Preventing AIDS [letter] Fourcroy J. **J Am Med Wom Assoc** 1988 Sep–Oct;43(5):130

ADVERSE EFFECTS

Allergic vaginitis, a possibly new syndrome. A case report. Ricer RE, et al. **J Reprod Med** 1988 Sep;33(9):781–3

PHARMACOLOGY

Inhibition kinetics of lactate dehydrogenase isoenzymes by gossypol acetic acid. Gupta GS, et al. **Biochem Int** 1988 Jul;17(1):25–34

Spermicidal effect of antagonists of platelet-activating factor. Harper MJ, et al. **Fertil Steril** 1989 May;51(5):890–5

Effect of gossypol acetic acid on spermatozoal ATPases activity and fertility in chicken. Mohan J, et al. **Indian J Exp Biol** 1988 Dec;26(12):1005–6

Reproductive endocrine function in gossypol-treated male rats. de Peyster A, et al. **Int J Fertil** 1988 Sep–Oct; 33(5):362–71

Selective release of the Treponema pallidum outer membrane and associated polypeptides with Triton X-114. Cunningham TM, et al. **J Bacteriol** 1988 Dec; 170(12):5789–96

Effect of gossypol on the thyroid in young rats. Rikihisa Y, et al. **J Comp Pathol** 1989 May;100(4):411–7

Ultrastructural observation on influence of gossypol on the hormone-secreting cells of pituitary-testis axis of rats. Yu MQ, et al. **J Tongji Med Univ** 1988;8(4):229–31

Variable sister-chromatid exchange response in human lymphocytes exposed in vitro to gossypol acetic acid. Best RG, et al. **Mutat Res** 1988 Oct;206(2):227–33

Activity of nonoxynol-9 against Chlamydia trachomatis. Ehret JM, et al. **Sex Transm Dis** 1988 Jul–Sep;15(3):156–7

In vitro evaluations of condoms with and without nonoxynol 9 as physical and chemical barriers against Chlamydia trachomatis, herpes simplex virus type 2, and human immunodeficiency virus. Judson FN, et al. **Sex Transm Dis** 1989 Apr–Jun;16(2):51–6

[Effects of gossypol acetic acid on heart mitochondrial membranes ATPase] Dou SJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):233–6 (Eng. Abstr.) **(Chi)**

[In vitro effect of nonoxynol-9 on herpes virus 1 and 2 and on other sexually transmitted micro-organisms] Del Piano M, et al. **Minerva Ginecol** 1988 Dec;40(12):709–14 (Eng. Abstr.) **(Ita)**

TOXICITY

Effects of gossypol acetic acid on the absorptive and digestive functions of rat intestine. Chadha S, et al. **Biochem Int** 1988 Dec;17(6):1117–33

SPERMATOCYTES

see related
SPERM MATURATION

ANALYSIS

A group of non-Y encoded Drosophila hydei primary spermatocyte nuclear glycoproteins exhibits epitopes depending on formation of Y chromosomal giant lampbrush loops. Tischendorf G, et al. **Chromosoma** 1989 Aug; 98(2):144–52

CYTOLOGY

Stimulation of spermatocyte development in prepubertal rats by the Sertoli cell steroid, 3 alpha-hydroxy-4-pregnen-20-one. Campbell SM, et al. **Biol Reprod** 1989 Apr;40(4):897–905

Pachytene spermatocyte proteins influence Sertoli cell function. Djakiew D, et al. **Biol Reprod** 1988 Dec; 39(5):1193–205

Differential elongation of autosomal pachytene bivalents related to their DNA content in human spermatocytes. Luciani JM, et al. **Chromosoma** 1988;97(1):19–25

Immunocytogenetics. III. Analysis of trivalent and multivalent configurations in mouse pachytene spermatocytes by human autoantibodies to synaptonemal complexes and kinetochores. Haaf T, et al. **Cytogenet Cell Genet** 1989;50(1):14–22

DRUG EFFECTS

Effects of D2O on the movement of chromosomes and the shortening of kinetochore spindle fibers in anaphase in dividing spermatocytes of the grasshopper, Mongolotettix japonicus. Sumitro SB, et al. **Cell Struct Funct** 1989 Jun; 14(3):345–52

Biological activity in the repopulating rat spermatocyte after the withdrawal of gossypol treatment: II. The activity for the synthesis of cellular and nuclear basic proteins. Ye BK, et al. **Contraception** 1989 Aug;40(2):243–50

Biological activity in the repopulating rat spermatocyte after the withdrawal of gossypol treatment: I. The activity for DNA synthesis. Zhang SF, et al. **Contraception** 1989 Aug; 40(2):233–42

Nitrilotriacetic acid (NTA) induces aneuploidy in Drosophila and mouse germ-line cells. Costa R, et al. **Environ Mol Mutagen** 1988;12(4):397–407

ENZYMOLOGY

Replicating premeiotic germ cells of the mouse contain a novel DNA primase stimulatory factor. Orlando P, et al. **Cell Differ Dev** 1989 Jul;27(2):129–36

Difference in the expression level of DNA polymerase beta among mouse tissues: high expression in the pachytene spermatocyte. Hirose F, et al. **Exp Cell Res** 1989 Mar; 181(1):169–80

METABOLISM

Lectin binding to rat spermatogenic cells: effects of different fixation methods and proteolytic enzyme treatment. Malmi R, et al. **Histochem J** 1988 May;20(5):276–82

S-phase-specific transcription regulatory elements are present in a replication-independent testis-specific H2B histone gene. Hwang I, et al. **Mol Cell Biol** 1989 Mar; 9(3):1005–13

PHYSIOLOGY

Use of seminiferous tubule segments to study stage specificity of unscheduled DNA synthesis in rat spermatogenic cells. Bentley KS, et al. **Environ Mol Mutagen** 1988;12(3):285–97

Pachytene spermatocyte and round spermatid binding to Sertoli cells in vitro. Enders GC, et al. **J Cell Sci** 1988 May;90 (Pt 1):105–14

RADIATION EFFECTS

DNA double-strand damage and repair following gamma-irradiation in isolated spermatogenic cells. Coogan TP, et al. **Mutat Res** 1988 Nov;194(3):183–91

The response of spermatogonia and spermatocytes of the Northern vole Microtus oeconomus to the induction of sex-chromosome nondisjunction, diploidy and chromosome breakage by X-rays and fast fission neutrons. Tates AD, et al. **Mutat Res** 1989 Jan;210(1):173–89

ULTRASTRUCTURE

Transformed spermatocytes constituting the ejaculate of an infertile man. Breucker H, et al. **Andrologia** 1988 Nov–Dec; 20(6):526–35

Effects of alcohol-drinking on mouse chromosomes. II. Sister-chromatid exchange and chromosome dissociation in male germ cells of mice administered ethanol. Hirai M. **Arukoru Kenkyuto Yakubutsu Ison** 1988 Sep;23(3):243–51

Univalent sex chromosomes in spermatocytes of Sxr-carrying mice. Mahadevaiah S, et al. **Chromosoma** 1988;97(2):145–53

Synaptonemal complexes in a subfertile man with a pericentric inversion in chromosome 21. Heterosynapsis without previous homosynapsis. Gabriel-Robez O, et al. **Cytogenet Cell Genet** 1988;48(2):84–7

Synaptonemal complex analysis of B-chromosome behavior in meiotic prophase I in the East-Asiatic mouse Apodemus peninsulae (Muridae, Rodentia). Kolomiets OL, et al. **Cytogenet Cell Genet** 1988;48(3):183–7

Paragonimus ohirai: identification of nucleolar organizer regions (NORs) and silver nitrate staining pattern in spermatogenesis. Hirai H. **Exp Parasitol** 1988 Dec; 67(2):281–6

Meiosis in Mesostoma ehrenbergii ehrenbergii. IV. Recombination nodules in spermatocytes and a test of the correspondence of late recombination nodules and chiasmata. Croft JA, et al. **Genetics** 1989 Feb;121(2):255–62

[Occurrence of germ cells in a cryptorchism testis in the adult] Blumer CF, et al. **Pathologe** 1989 Jan;10(1):3–11 **(Ger)**

SPERMATOGENESIS

Description of eight phases of spermiogenesis in the marmoset testis. Haider SG, et al. **Acta Anat (Basel)** 1989; 135(2):180–4

The onset of sperm production in pubertal boys. Relationship to gonadotropin excretion. Kulin HE, et al. **Am J Dis Child** 1989 Feb;143(2):190–3

Impaired spermatogenesis is not an obligate expression of receptor-defective androgen resistance. Pinsky L, et al. **Am J Med Genet** 1989 Jan;32(1):100–4

Numbers of Sertoli cells, quantitative rates of sperm production, and the efficiency of spermatogenesis in relation to the daily sperm output and seminal quality of young beef bulls. Berndtson WE, et al. **Am J Vet Res** 1989 Aug;50(8):1193–7

An ultrastructural and morphometric analysis of the Sertoli cell during the spermatogenic cycle of the rat. Kerr JB.

Anat Embryol (Berl) 1988;179(2):191–203
Morphological studies on prespermatogonia and pre-Sertoli cells in the testes of 6- to 11-day-old golden hamsters. Miething A. **Anat Embryol (Berl)** 1989;179(5):503–10
Changes in surface area and number of Leydig cells in relation to the 6 stages of the cycle of the human seminiferous epithelium. Paniagua R, et al. **Anat Embryol (Berl)** 1988;178(5):423–7
Immunogold distribution of actin during spermiogenesis in the rat, hamster, monkey, and human. Fouquet JP, et al. **Anat Rec** 1989 Jan;223(1):35–42
Mechanism for the removal of residual cytoplasm from spermatids during mouse spermiogenesis. Sakai Y, et al. **Anat Rec** 1989 Jan;223(1):43–8
Changes in the distribution of microtubules in rat Sertoli cells during spermatogenesis. Vogl AW. **Anat Rec** 1988 Sep; 222(1):34–41
A comparative study of the effects of non-union of testis and epididymis and cryptorchidism on testicular development and spermatogenesis in the rat. Johansen TE, et al. **Andrologia** 1988 May–Jun;20(3):189–201
Regulation of spermatogonial proliferation. De Rooij DG, et al. **Ann N Y Acad Sci** 1989;564:140–53 (57 ref.)
Sertoli cell–germ cell communication. Grootegoed JA, et al. **Ann N Y Acad Sci** 1989;564:232–42
Changes in dehydrodolichyl diphosphate synthase during spermatogenesis in the rat. Chen Z, et al. **Arch Biochem Biophys** 1988 Oct;266(1):98–110
Characterization of fucosyltransferase activity during mouse spermatogenesis: evidence for a cell surface fucosyltransferase. Cardullo RA, et al. **Biochemistry** 1989 Feb 21;28(4):1611–7
Poly(ADP-ribosylation) of nuclear proteins in rat testis correlates with active spermatogenesis. Quesada P, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):167–75
Nucleotide sequence of a cDNA encoding rat protamine and the haploid expression of the gene during rat spermatogenesis. Klemm U, et al. **Biol Chem Hoppe Seyler** 1989 Apr;370(4):293–301
Long day photoperiods and temperature of 20 degrees C induce spermatogenesis in blinded and non-blinded marbled newts during the period of testicular quiescence. Fraile B, et al. **Biol Reprod** 1988 Oct;39(3):649–55
Characterization of baboon testicular antigens using monoclonal anti-sperm antibodies. Isahakia MA. **Biol Reprod** 1988 Nov;39(4):889–99
Differential activity and synthesis of lactate dehydrogenase isozymes A (muscle), B (heart), and C (testis) in mouse spermatogenic cells. Li SS, et al. **Biol Reprod** 1989 Jan; 40(1):173–80
Heat-shock cognate protein (hsc71) and related proteins in mouse spermatogenic cells. Maekawa M, et al. **Biol Reprod** 1989 Apr;40(4):843–52
Disruption of spermatogenesis is associated with decreased concentration of immunoreactive arginine vasopressin in testicular fluid. Pomerantz DK, et al. **Biol Reprod** 1988 Oct;39(3):610–6
Flow cytometric quantification of rat spermatogenic cells after hypophysectomy and gonadotropin treatment. Toppari J, et al. **Biol Reprod** 1989 Mar;40(3):623–34
The effect of unilateral experimental testicular torsion on spermatogenesis and fertility. Ryan PC, et al. **Br J Urol** 1988 Oct;62(4):359–66
Germ cell function and hormonal status in patients with testicular cancer. Hansen PV, et al. **Cancer** 1989 Aug 15; 64(4):956–61
Recovery of sperm production after chemotherapy for osteosarcoma. Meistrich ML, et al. **Cancer** 1989 Jun 1; 63(11):2115–23
Changes in endoplasmic reticulum during spermiogenesis in the mouse. Nakamoto T, et al. **Cell Tissue Res** 1989 Aug; 257(2):279–84
Morphology of the bovine Sertoli cell during the spermatogenetic cycle. Wrobel KH, et al. **Cell Tissue Res** 1989 Jul;257(1):93–103
Expression of a novel histone 2B during mouse spermiogenesis. Moss SB, et al. **Dev Biol** 1989 May; 133(1):83–92
Mutations that disrupt the morphogenesis and localization of a sperm-specific organelle in Caenorhabditis elegans. Shakes DC, et al. **Dev Biol** 1989 Aug;134(2):307–16
Germ cell–Sertoli cell interactions: analysis of the biosynthesis and secretion of cyclic protein-2. Wright WW. **Dev Biol** 1988 Nov;130(1):45–56
The role of the mammalian Y chromosome in spermatogenesis. Burgoyne PS. **Development** 1987;101 Suppl:133–41
Growth hormone (GH) deprivation induced by passive immunization against rat GH-releasing factor delays sexual maturation in the male rat. Arsenijevic Y, et al. **Endocrinology** 1989 Jun;124(6):3050–9
Restoration of advanced spermatogenic cells in the experimentally regressed rat testis: quantitative relationship to testosterone concentration within the testis. Awoniyi CA, et al. **Endocrinology** 1989 Mar;124(3):1217–23
Use of seminiferous tubule segments to study stage specificity of unscheduled DNA synthesis in rat spermatogenic cells. Bentley KS, et al. **Environ Mol Mutagen** 1988;12(3):285–97
Molecular cloning of preproacrosin and analysis of its expression pattern in spermatogenesis. Adham IM, et al. **Eur J Biochem** 1989 Jul 1;182(3):563–8
Nuclear basic protein transition during sperm differentiation. Primary structure of the spermatid-specific protein S2 from the dog-fish Scylliorhinus caniculus. Chauvière M, et al. **Eur J Biochem** 1989 Mar 15;180(2):329–35
Intracellular distribution of poly(ADP-ribose) synthetase in rat spermatogenic cells. Concha II, et al. **Exp Cell Res** 1989 Feb;180(2):353–66
Chicken spermatogenesis is accompanied by a genomic-wide loss of DNA methylation. Rocamora N, et al. **FEBS Lett** 1989 Apr 24;247(2):415–8
New data confirming a circannual rhythm in spermatogenesis. Politoff L, et al. **Fertil Steril** 1989 Sep; 52(3):486–9
Role of temperature in regulation of spermatogenesis [letter] Zorgniotti AW. **Fertil Steril** 1988 Oct;50(4):677–8
Stereological studies on germ cell mitochondria of rat during spermatogenesis and spermiogenesis. Cieciura L, et al. **Folia Histochem Cytobiol** 1988;26(3):177–83
Testosterone and its effect on spermatogenesis in the Egyptian toad. Sabry I, et al. **Folia Morphol (Praha)** 1988; 36(3):290–5
Effect of vasectomy on spermatogenesis in the albino rat Mus norvegicus. Singh RP, et al. **Folia Morphol (Praha)** 1988; 36(3):260–3
Ultrastructure of the sperm and spermatogenesis and spermiogenesis of Dina lineata (Hirudinea, Erpobdellidae). Bonet S, et al. **Gamete Res** 1988 Feb;19(2):177–90
Differentiation of binuclear spermatozoa in mice. Burkhart JG, et al. **Gamete Res** 1989 Apr;22(4):399–410
Boar sperm surface glycoproteins: isolation, localization, and temporal expression during spermatogenesis. Klint M, et al. **Gamete Res** 1987 Jun;17(2):173–90
X-Y chromosome dissociation in mouse strains differing in efficiency of spermatogenesis: elevated frequency of univalents in pubertal males. Krzanowska H. **Gamete Res** 1989 Jul;23(3):357–65
Sperm tail differentiation in the nudibranch mollusc Hypselodoris tricolor (Gastropoda, Opisthobranchia). Medina A, et al. **Gamete Res** 1988 Jun;20(2):223–32
Protein carboxyl methyltransferase activity specific for age-modified aspartyl residues in mouse testes and ovaries: evidence for translation during spermiogenesis. O'Connor CM, et al. **Gamete Res** 1989 Mar;22(3):307–19
Nuclear protein transitions in cuttle-fish spermiogenesis: immunocytochemical localization of a protein specific for the spermatid stage. Rousseaux-Prévost R, et al. **Gamete Res** 1988 Mar;19(3):277–90
Intratesticular injection as a method to assess the potential toxicity of various agents and to study mechanisms of normal spermatogenesis. Russell LD, et al. **Gamete Res** 1987 May;17(1):43–56
Endocytic origin for periaxonemal vesicles along the flagellum during mouse spermiogenesis. Segretain D, et al. **Gamete Res** 1988 Dec;21(4):451–63
Impaired spermatogenesis in the finch hybrid L. castaneothorax by L. punctulata: transmission electron microscopy and genetic analysis. Swan MA, et al. **Gamete Res** 1987 Jun;17(2):157–71
Cytology of Lepidoptera. III. Giant cysts: a morphological trait of apyrene spermatogenesis in an Ephestia kuehniella strain. Wolf KW, et al. **Gamete Res** 1988 Jul;20(3):353–64
Ultrastructure of spermatogenesis in the sea star, Asterina minor. Yamagata A. **Gamete Res** 1988 Feb;19(2):215–25
Testosterone immunoreactivity in rainbow trout (Salmo gairdneri Richardson) testis. Schulz R, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):80–9
Cytogenetic studies on Cervus elaphus. II. Synaptonemal complexes and NOR activity during spermatogenesis. Lunghi R, et al. **Genetica** 1987 Oct 15;74(2):119–24
Developmental genetics of chromosome I spermatogenesis-defective mutants in the nematode Caenorhabditis elegans. L'Hernault SW, et al. **Genetics** 1988 Oct;120(2):435–52
Development of the seminiferous epithelium during and after treatment for acute lymphoblastic leukemia in childhood. Müller J, et al. **Horm Res** 1988;30(2-3):115–20
Role of adrenal in maintenance of spermatogenesis in rats. Saxena N, et al. **Indian J Exp Biol** 1988 Dec;26(12):932–6
Evaluation of the effect of selective germ cell depletion on subsequent spermatogenesis and fertility in the rat. Ratnasooriya WD, et al. **Int J Androl** 1989 Feb;12(1):44–57
Assessment of the role of Leydig cell products other than testosterone in spermatogenesis and fertility in adult rats. Sharpe RM, et al. **Int J Androl** 1988 Dec;11(6):507–23
A quantitative study of the effects of vasectomy on spermatogenesis in rats. McDonald SW, et al. **J Anat** 1988 Aug;159:219–25
Sampling intensities and replication requirements for detection of treatment effects on testicular function in bulls and stallions: a statistical assessment. Berndtson WE. **J Anim Sci** 1989 Jan;67(1):213–25
Dehydrodolichyl diphosphate synthase in Sertoli and spermatogenic cells of prepuberal rats. Chen Z, et al. **J Biol Chem** 1989 Mar 5;264(7):3849–53
Differential expression and subcellular localization for subunits of cAMP-dependent protein kinase during ram spermatogenesis. Pariset C, et al. **J Cell Biol** 1989 Sep; 109(3):1195–205
Method for showing human spermatogenesis using Arachis hypogaea (AHA) lectin. Jones CJ, et al. **J Clin Pathol** 1988 Sep;41(9):1017–8
Follicle-stimulating hormone and spermatogenesis in the adult male. Sharpe RM. **J Endocrinol** 1989 Jun;121(3):405–7 (33 ref.)
Molecular analyses of gene expression during sea star spermatogenesis. Boom JD, et al. **J Exp Zool** 1989 Jun; 250(3):312–20
Spermiogenesis in the bullfrog (Rana catesbeiana): a study of cytoplasmic events including cell volume changes and cytoplasmic elimination. Sprando RL, et al. **J Morphol** 1988 Dec;198(3):303–19
Spermiogenesis in the red-ear turtle (Pseudemys scripta) and the domestic fowl (Gallus domesticus): a study of cytoplasmic events including cell volume changes and cytoplasmic elimination. Sprando RL, et al. **J Morphol** 1988 Oct;198(1):95–118
Spermiogenesis in the bluegill (Lepomis macrochirus): a study of cytoplasmic events including cell volume changes and cytoplasmic elimination [published errata appear in J Morphol 1988;198(3):381 and 1989 Feb;199(2):245] Sprando RL, et al. **J Morphol** 1988 Nov;198(2):165–77
Relationship of intratesticular testosterone content of stallions to age, spermatogenesis, Sertoli cell distribution and germ cell–Sertoli cell ratios. Berndtson WE, et al. **J Reprod Fertil** 1989 Mar;85(2):511–8
Testicular migration, spermatogenesis, temperature regulation and environment of the sheath-tail bat, Taphozous georgianus. Jolly SE, et al. **J Reprod Fertil** 1988 Nov;84(2):447–55
Semen characteristics and testosterone profiles in ferrets kept in a long-day photoperiod, and the influence of hCG timing and sperm dilution medium on pregnancy rate after laparoscopic insemination. Wildt DE, et al. **J Reprod Fertil** 1989 May;86(1):349–58
Effects of long-term immunization against LHRH and androgen treatment on gonadal function. Ladd A, et al. **J Reprod Immunol** 1989 May;15(2):85–101
Human Sertoli–spermatogenic cell cocultures prepared from biopsies of cryptorchid testes performed during orchidopexy. Tres LL, et al. **J Urol** 1989 Apr;141(4):1003–9
The blood–testis barrier in lizards during the annual spermatogenic cycle. Cavicchia JC, et al. **Microsc Electron Biol Celular** 1988 Jun;12(1):73–87
Summary of the 10th NIH-sponsored Testis Workshop held in Baltimore, MD, U.S.A., December 8–11, 1988. Ritzén M. **Mol Cell Endocrinol** 1989 Jun;64(1):1–3
Testicular function of scrotal testes after the cryptorchidectomy in dogs with unilateral cryptorchidism. Kawakami E, et al. **Nippon Juigaku Zasshi** 1988 Dec; 50(6):1239–44
Spermatogenic function and fertility in unilateral cryptorchid dogs after orchiopexy and contralateral castration. Kawakami E, et al. **Nippon Juigaku Zasshi** 1988 Jun; 50(3):754–62
Spermatogenesis and ultrastructural changes of spermatids during spermiogenesis in the cotton rat, Sigmodon hispidus. Kurohmaru M, et al. **Okajimas Folia Anat Jpn** 1988 Oct; 65(4):203–19
Spermatogenesis and the fine structure of the mature spermatozoon in the free proglottis of Trilocularia acanthiaevulgaris (Cestoda, Tetraphyllidea). Mahendrasingam S, et al. **Parasitol Res** 1989;75(4):287–98
Insertional mutation in a transgenic mouse allelic with Purkinje cell degeneration. Krulewski TF, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3709–12
Nuclear changes during spermiogenesis in man and the monkey. Dadoune JP, et al. **Prog Clin Biol Res** 1989; 296:165–70 (15 ref.)
Distribution of analogues of spectrin, fodrin and protein 4.1 in rat spermatogenic cells. De Cesaris P, et al. **Prog Clin Biol Res** 1989;296:149–52
Post-meiotic gene expression during spermatogenesis. Hecht NB. **Prog Clin Biol Res** 1988;267:291–313 (47 ref.)
Fate of human germ cells after spermiation. Orlandini GE, et al. **Prog Clin Biol Res** 1989;296:215–20
Aspects of the dynamics and ultrastructure of mammalian spermatogenesis. Plöen L. **Prog Clin Biol Res** 1989; 296:141–8 (9 ref.)
Nuclear cytoplasmic exchange during spermatogenesis. Werner G, et al. **Prog Clin Biol Res** 1989;296:171–6
Mithun cross siri hybrids: cyto- and immunogenetic examinations and characterisation of abnormal spermatogenesis. Winter H, et al. **Res Vet Sci** 1988 Jul; 45(1):86–100
Polyorchidism with normal spermatogenesis, diagnosed preoperatively by ultrasound. A case report. Tammela TL, et al. **Scand J Urol Nephrol** 1989;23(1):71–3
Specific expression of nuclear proto-oncogenes before entry into meiotic prophase of spermatogenesis. Wolfes H, et al. **Science** 1989 Aug 18;245(4919):740–3
Proto-oncogene expression in germ cell development. Propst F, et al. **Trends Genet** 1988 Jul;4(7):183–7 (32 ref.)
Effect of dietary cholesterol on spermatogenesis. Gupta RS, et al. **Z Ernahrungswiss** 1988 Dec;27(4):236–43
[Quantitative detection of spermatogenesis cells and qualitative assessment of meiosis stages in the ejaculate of normo- and oligozoospermia] Weise W, et al. **Zentralbl Gynakol** 1988;110(14):877–83 (Eng. Abstr.) **(Ger)**
[Endocrinological profile of human spermatogenic impairment—evaluation of function of Leydig and Sertoli cells in vivo or in vitro studies] Okuyama A, et al. **Hinyokika Kiyo** 1988 Nov;34(11):1943–8 (Eng. Abstr.) **(Jpn)**
[Temperature influence on testicular function—effect of

temperature on DNA synthesis by human testis in-vitro] Nakamura M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1653–6 (Eng. Abstr.) (Jpn)

[The role of beta-glucuronidase in the activation of pheromone disrupting spermatogenesis in laboratory mice: evolution of the chemical signaling system in vertebrates] Novikov SN, et al. **Dokl Akad Nauk SSSR** 1988; 302(2):470–2 (Rus)

[Polynuclear genital cells in rat spermatogenesis in the normal state and after exposure to xenobiotics] Ivanov IuV. **Gig Tr Prof Zabol** 1989;(3):54–5 (Rus)

[Cytologic study of spermatogenesis in rats exposed to hypergravitation] Balkova. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):81–2 (Rus)

[Gonadotropic insufficiency in men with disorders of spermatogenesis] Potin VV, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):3–6 (Eng. Abstr.) (Rus)

[The role of disorders of mineralocorticoid function of the adrenal glands in the development of infertility in patients with left-side varicocele] Mazo EB, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):38–45 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Disruption of sustentacular (Sertoli) cell tight junctions and regression of spermatogenesis in vitamin-A-deficient rats. Huang HF, et al. **Acta Anat (Basel)** 1988;133(1):10–5

Dibromochloropropane (DBCP) effects on the reproductive function of the adult male rat. Leone M, et al. **Acta Eur Fertil** 1988 Mar–Apr;19(2):99–103

Quantitative assessment of the biological effects of follicle regulatory protein on dihydrotestosterone-maintained spermatogenesis in hypophysectomized rat. Ahmad N, et al. **Anat Rec** 1989 Aug;224(4):508–13

Reversible effects of long-term treatment with D-Trp6-LH-RH-microcapsules on pituitary-gonadal axis, spermatogenesis and prostate morphology in adolescent and adult dogs. Cavitte JC, et al. **Andrologia** 1988 May–Jun; 20(3):249–63

Effect of lithium chloride on spermatogenesis, testicular delta 5- 3 beta- and 17 beta-hydroxysteroid dehydrogenase activities in toad (Bufo melanostictus). Ghosh PK, et al. **Andrologia** 1989 May–Jun;21(3):199–203

Treatment with the gonadotropin-releasinghormone agonist buserelin to protect spermatogenesis against cytotoxic treatment in young men. Krause W, et al. **Andrologia** 1989 May–Jun;21(3):265–70

Testicular damage development in rats injected with dibromochloropropane (DBCP). Shemi D, et al. **Andrologia** 1988 Jul–Aug;20(4):331–7

Stimulation of spermatocyte development in prepubertal rats by the Sertoli cell steroid, 3 alpha-hydroxy-4-pregnen-20-one. Campbell SM, et al. **Biol Reprod** 1989 Apr;40(4):897–905

Effects of delivering different amounts of dihydrotestosterone by ceramic implants on the reproductive system of male rats. Benghuzzi HA, et al. **Biomed Sci Instrum** 1989; 25:179–89

Focal disruption of spermatogenesis in the testis of adult rats after a single administration of human chorionic gonadotrophin. Kerr JB, et al. **Cell Tissue Res** 1989 Jul; 257(1):163–9

Effect of melatonin on the spermatogenesis of Rana hexadactyla (Lesson). Kasinathan S, et al. **Endocrinol Jpn** 1988 Apr;35(2):255–60

Quantitative restoration of advanced spermatogenic cells in adult male rats made azoospermic by active immunization against luteinizing hormone or gonadotropin-releasing hormone. Awoniyi CA, et al. **Endocrinology** 1989 Sep; 125(3):1303–9

The effects of exogenously administered testosterone on spermatogenesis in intact and hypophysectomized rats. Sun YT, et al. **Endocrinology** 1989 Aug;125(2):1000–10

Maintenance of advanced spermatogenic cells in the adult rat testis: quantitative relationship to testosterone concentration within the testis. Zirkin BR, et al. **Endocrinology** 1989 Jun;124(6):3043–9

Effect of diclofenac sodium (Voltaren) on spermatogenesis of infertile oligospermic patients. Moskovitz B, et al. **Eur Urol** 1988;14(5):395–7

Induction of spermatogenesis in thalassaemia. De Sanctis V, et al. **Fertil Steril** 1988 Dec;50(6):969–75

A dose-response analysis of methoxychlor-induced alterations of reproductive development and function in the rat. Gray LE Jr, et al. **Fundam Appl Toxicol** 1989 Jan; 12(1):92–108

Induction of spermatogenesis and fertility in hypogonadotropic azoospermic men by intravenous pulsatile gonadotropin-releasing hormone (GnRH). Blumenfeld Z, et al. **Gynecol Endocrinol** 1988 Jun; 2(2):151–64

Quantitative analysis of spermatogonial germ cells in adult rats treated with oestradiol benzoate alone & in combination with testosterone propionate. Raychoudhury K, et al. **Indian J Med Res** 1988 Jun;87:609–14

Effects of gonadotropin-releasing hormone analogs on cis-platinum-induced spermatogenic damage. Handelsman DJ, et al. **Int J Androl** 1988 Oct;11(5):425–35

The effect of gossypol acetic acid on the different stages of the spermatogenic cycle in the rat. Kainz V, et al. **Int J Androl** 1988 Dec;11(6):533–46

Acute effects and long-term sequelae of 1,3-dinitrobenzene on male reproduction in the rat. II. Quantitative and qualitative histopathology of the testis. Hess RA, et al. **J Androl** 1988 Sep–Oct;9(5):327–42

Improvement of spermatogenesis after treatment with the antiestrogen tamoxifen in a man with the incomplete androgen insensitivity syndrome. Gooren L. **J Clin Endocrinol Metab** 1989 Jun;68(6):1207–10

Effect of feeding gossypol in cottonseed meal on growth, semen quality, and spermatogenesis of yearling Holstein bulls. Jimenez DA, et al. **J Dairy Sci** 1989 Jul;72(7):1866–75

Differential effects of FSH and testosterone on the maintenance of spermatogenesis in the adult hypophysectomized rat. Bartlett JM, et al. **J Endocrinol** 1989 Apr;121(1):49–58

Effect of aldrin on spermatogenesis, plasma gonadotrophins and testosterone, and testicular testosterone in the rat. Chatterjee S, et al. **J Endocrinol** 1988 Oct;119(1):75–81

Macrophage activation enhances the human chorionic gonadotrophin-induced disruption of spermatogenesis in the rat. Kerr JB, et al. **J Endocrinol** 1989 May;121(2):285–92

Reproductive effects of the anti-cancer drug procarbazine in male rats at different ages. Velez de la Calle JF, et al. **J Reprod Fertil** 1988 Sep;84(1):51–61

Flow cytometric analysis of effects of 1,3-dinitrobenzene on rat spermatogenesis. Evenson DP, et al. **J Toxicol Environ Health** 1989;28(1):81–98

Effect of 1,3-dinitrobenzene on prepubertal, pubertal, and adult mouse spermatogenesis. Evenson DP, et al. **J Toxicol Environ Health** 1989;28(1):67–80

Evaluation of reproductive parameters in adult male Wistar rats after subchronic exposure (gavage) to benomyl. Linder RE, et al. **J Toxicol Environ Health** 1988;25(3):285–98

Effect of procarbazine on sperm morphology in Syrian hamsters. Singh H, et al. **J Toxicol Environ Health** 1989; 27(1):107–21

Cytotoxic effects of benzene on mouse germ cells determined by flow cytometry. Spanò M, et al. **J Toxicol Environ Health** 1989;26(3):361–72

Reproductive toxicity of 2,4-toluenediamine in the rat. 3. Effects on androgen-binding protein levels, selected seminiferous tubule characteristics, and spermatogenesis. Varma SK, et al. **J Toxicol Environ Health** 1988; 25(4):435–51

A restudy of the efficacy of adriamycin in inducing dominant lethals in mouse spermatogonia stems cells. Generoso WM, et al. **Mutat Res** 1989 May;226(1):61–4

Effects of vinyl acetate and acetaldehyde on sperm morphology and meiotic micronuclei in mice. Lähdetie J. **Mutat Res** 1988 Nov;202(1):171–8

Chromosome aberrations in spermatogonia and sperm abnormalities in Curacron-treated mice. el Nahas SM, et al. **Mutat Res** 1989 Apr;222(4):409–14

Comment on mutagenicity of diethyl sulfate in mice and on germ-cell mutagenicity testing. Russell WL. **Mutat Res** 1989 Mar;225(3):127–9

Acrylamide binding to the DNA and protamine of spermiogenic stages in the mouse and its relationship to genetic damage. Sega GA, et al. **Mutat Res** 1989 Aug; 216(4):221–30

The effects of reserpine and LHRH or salmon GnRH analogues on gonadotropin release, ovulation and spermiation in common carp (Cyprinus carpio L.). Sokołowska M, et al. **Reprod Nutr Dev** 1988;28(4A):889–97

The reversibility of nitrobenzene-induced testicular toxicity: continuous monitoring of sperm output from vasocystotomized rats. Levin AA, et al. **Toxicology** 1988 Dec 30;53(2–3):219–30

Effects of long term GnRH analogue treatment on hormone levels and spermatogenesis in patients with carcinoma of the prostate. Lunglmayr G, et al. **Urol Res** 1988;16(4):315–9

[Intratesticular stimulation of spermatogenesis] Goriunov VG, et al. **Khirurgiia (Sofiia)** 1989;42(2):41–5 (Eng. Abstr.) (Bul)

[Paracrine regulation of testicular function] Demoulin A, et al. **Acta Urol Belg** 1989;57(1):47–58 (62 ref.) (Eng. Abstr.) (Fre)

[Modifications in spermatogenesis following antibiotic therapy] Timmermans LM. **Acta Urol Belg** 1989; 57(1):35–46 (Eng. Abstr.) (Fre)

[The influence of chemical noxae on the sperm quality of boars used for insemination. 2. Mercury] Schulz O, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):610–7 (Eng. Abstr.) (Ger)

[The effect of noxious chemicals on the sperm quality of boars used for insemination. 1. The fly control agent "omexan"] Schulz O, et al. **Arch Exp Veterinarmed** 1988 May;42(3):435–43 (Eng. Abstr.) (Ger)

[Reversible germ cell toxicity following aggressive chemotherapy in patients with testicular tumors: results of a prospective study] Kreuser ED, et al. **Klin Wochenschr** 1989 Apr 3;67(7):367–78 (Eng. Abstr.) (Ger)

[Hormonal contraception in the male] Randow H. **Z Arztl Fortbild (Jena)** 1989;83(1):5–9 (19 ref.) (Ger)

[Gossypol and other nonhormonal substances for the inhibition of male fertility] Glander HJ. **Zentralbl Gynakol** 1988;110(12):772–7 (Eng. Abstr.) (Ger)

[Varicocele: the effects of sclerotherapy on hemodynamics and spermatogenesis] Fuochi C, et al. **Radiol Med (Torino)** 1989 Mar;77(3):217–22 (Eng. Abstr.) (Ita)

[Effects of TJ-41 (Tsumura Hochu-ekki-to) on spermatogenic disorders in mice under current treatment with adriamycin] Sudo K, et al. **Nippon Yakurigaku Zasshi** 1988 Oct;92(4):251–61 (Eng. Abstr.) (Jpn)

[Antidopaminergic effect of metoclopramide on the rat testis and epididymis] Kamińska B. **Ann Acad Med Stetin** 1988; 34:69–86 (Eng. Abstr.) (Pol)

[Corticosteroid response and indolamine content of the mouse brain under the action of a pheromone, disrupting spermatogenesis] Pavlova MB, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):138–42 (Eng. Abstr.) (Rus)

[Hygienic evaluation of the gonadotoxic effect of mercury after its combined administration] Ermachenko AB. **Gig Sanit** 1988 Jun;(6):81–3 (Rus)

RADIATION EFFECTS

Attempted protection of spermatogenesis from single doses of gamma-irradiation in the androgen pretreated rat. Schlappack OK, et al. **Arch Androl** 1987;19(3):269–74

Protection from radiation-induced damage of spermatogenesis in the rhesus monkey (Macaca mulatta) by follicle-stimulating hormone. van Alphen MM, et al. **Cancer Res** 1989 Feb 1;49(3):533–6

The effect of 90Sr given to pregnant mice on spermatogenesis in the male offspring: a comparison with the effect on the ovaries in the female offspring. De Rooij DG, et al. **Int J Radiat Biol** 1989 Aug;56(2):151–9

DNA double-strand damage and repair following gamma-irradiation in isolated spermatogenic cells. Coogan TP, et al. **Mutat Res** 1988 Nov;194(3):183–91

X-ray- and mitomycin C (MMC)-induced chromosome aberrations in spermiogenic germ cells and the repair capacity of mouse eggs for the X-ray and MMC damage. Matsuda Y, et al. **Mutat Res** 1989 Mar;211(1):65–75

Evaluation of the genetic effects of 238Pu incorporated into mice. Pomerantseva MD, et al. **Mutat Res** 1989 Jun; 226(2):93–8

Protection from radiation-induced damage to spermatogenesis in the androgen pretreated rat. Schlappack OK, et al. **Radiother Oncol** 1988 Jul;12(3):219–24

[Effect of microwaves (460 MHz) on spermatogenesis, hormonal metabolism and immunity in patients with secondary sterility with exposure in the area of the adrenal projection] Karpukhin IV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug; (4):38–40 (Eng. Abstr.) (Rus)

SPERMATOGENESIS BLOCKING AGENTS

THERAPEUTIC USE

Lack of gonadal protection by medroxyprogesterone acetate-induced transient medical castration during chemotherapy for testicular cancer. Fossà SD, et al. **Br J Urol** 1988 Nov;62(5):449–53

SPERMATOGONIA see under **SPERMATOZOA**

SPERMATOZOA

see related
OLIGOSPERMIA

Spermatic granuloma. Diagnosis by fine needle aspiration cytology. Pérez-Guillermo M, et al. **Acta Cytol** 1989 Jan–Feb;33(1):1–5

Evaluating glass, polystyrene, and polypropylene containers for semen collection and sperm washing. Check JH, et al. **Arch Androl** 1988;20(3):251–5

Temporal appearance of seasonal changes in numbers of Sertoli cells, Leydig cells, and germ cells in stallions. Johnson L, et al. **Biol Reprod** 1989 May;40(5):994–9

Effect of cryoprotective diluent and method of freeze-thawing on survival and acrosomal integrity of ram spermatozoa. Pontbriand D, et al. **Cryobiology** 1989 Aug; 26(4):341–54

Embryonic development after microsurgical repair of polyspermic human zygotes. Malter HE, et al. **Fertil Steril** 1989 Sep;52(3):373–80

Human sperm selection by glass wool filtration and two-layer, discontinuous Percoll gradient centrifugation. Rhemrev J, et al. **Fertil Steril** 1989 Apr;51(4):685–90

Intrauterine insemination of washed husband's spermatozoa: a controlled study. te Velde ER, et al. **Fertil Steril** 1989 Jan;51(1):182–5

Fertilization by sperm injection in the rabbit. Keefer CL. **Gamete Res** 1989 Jan;22(1):59–69

The loss of Y-sperm in "sex ratio" (SR) males of Drosophila subobscura is compensated. Hauschteck-Jungen E, et al. **Genetics** 1987 Sep 30;74(1):27–30

Fertilization through spermatozoal microinjection: significance of acrosome reaction. Yamada K, et al. **Hum Reprod** 1988 Jul;3(5):657–61

Comparison of two techniques used to collect normal and motile sperm. Szerman-Joly E, et al. **Int J Androl** 1989 Jun;12(3):199–205

A demonstration of spermatozoa on vaginal swabs after complete destruction of the vaginal cell deposits. Iwasaki M, et al. **J Forensic Sci** 1989 May;34(3):659–64

Efficacy of one herbal product in prostatorrhoea and spermatorrhoea cases [letter] Mukherjee G, et al. **J Indian Med Assoc** 1989 Jan;87(1):19–20

Chronic hemospermia due to müllerian duct cyst: diagnosis by magnetic resonance imaging. Neustein P, et al. **J Urol** 1989 Sep;142(3):828

Major sperm protein genes from Onchocerca volvulus. Scott AL, et al. **Mol Biochem Parasitol** 1989 Sep;36(2):119–26

Male pronuclear formation by a boar spermatozoon with hairpin–curved tail in zona–free hamster egg. Yoshida M, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):428–30

Sperm measures and reproductive success. Institute for Health Policy Analysis Forum on Science, Health and Environmental Risk Assesement. Proceedings of a workshop. Queenstown, Maryland, January 11–13, 1988. **Prog Clin Biol Res** 1989;302:1–313

Influence of the swim–up procedure on acrosome damage induced by freezing human semen. Oettle EE, et al. **S Afr Med J** 1989 Jan 7;75(1):23–4

Further liaisons with sperm [letter] Birnstiel ML, et al. **Science** 1989 Jul 21;245(4915):243–4

"Dangerous" liaisons in cell biology [news] Dickson D. **Science** 1989 Jun 30;244(4912):1539–40

[Should one use fresh or frozen sperm in in–vitro fertilization with donors?] Englert Y, et al. **Acta Urol Belg** 1989; 57(1):83–91 (Eng. Abstr.) (Fre)

[Fertilization in vitro with frozen donor sperm after ovocyte stimulation with an LH–RH analog, HMG, and HCG using a short–term protocol] Sagot P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):677–85 (Eng. Abstr.) (Fre)

[Infection of the sperm in male sterility] Arvis G. **Rev Fr Gynecol Obstet** 1989 Feb;84(2):106–8 (Eng. Abstr.) (Fre)

[The collection of sperm in men unable to ejaculate] Bustillo M. **Rev Fr Gynecol Obstet** 1988 Oct;83(10):593–5 (Eng. Abstr.) (Fre)

[Intra–cervical homologous artificial insemination with fresh sperm and intrauterine artificial insemination after preparation of the sperm] Glissant M. **Rev Fr Gynecol Obstet** 1989 Feb;84(2):123–7 (20 ref.) (Eng. Abstr.) (Fre)

ABNORMALITIES

Effects of age and season on the type and occurrence of sperm abnormalities in Nubian bucks. Skalet LH, et al. **Am J Vet Res** 1988 Aug;49(8):1284–9

Lectin–binding sites in testis of men with acrosomeless round–headed spermatozoa. Wollina U, et al. **Andrologia** 1989 May–Jun;21(3):271–4

Infertility in 2 Murray Grey bulls associated with abaxial and swollen midpiece sperm defects. Peet RL, et al. **Aust Vet J** 1988 Nov;65(11):359–60

Coexistence of spermatozoa morphological abnormalities in the semen of potentially fertile men. Panidis D, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Dec;29(4):281–6

Morphogenesis of the decapitated and decaudated sperm defect in two brothers. Baccetti B, et al. **Gamete Res** 1989 Jun;23(2):181–8

Crater defect in human spermatozoa. Baccetti B, et al. **Gamete Res** 1989 Mar;22(3):249–55

Differentiation of binuclear spermatozoa in mice. Burkhart JG, et al. **Gamete Res** 1989 Apr;22(4):399–410

Impaired ability of human spermatozoa to penetrate zona–free hamster oocytes: is a postacrosomal sheath anomaly involved? Courtot AM, et al. **Gamete Res** 1987 Jun;17(2):145–56

Binding of morphologically abnormal sperm to mouse egg zonae pellucidae in vitro. Kot MC, et al. **Gamete Res** 1987 Sep;18(1):57–66

Fertilizing potential of acrosome–defective sperm following microsurgical injection into eggs. Lanzendorf S, et al. **Gamete Res** 1988 Apr;19(4):329–37

Freezing and thawing alter chromatin stability of ejaculated human spermatozoa: fluorescence acridine orange staining and Feulgen–DNA cytophotometric studies. Royere D, et al. **Gamete Res** 1988 Sep;21(1):51–7

Impaired spermatogenesis in the finch hybrid L. castaneothorax by L. punctulata: transmission electron microscopy and genetic analysis. Swan MA, et al. **Gamete Res** 1987 Jun;17(2):157–71

Effect of Y chromosome and H–2 complex derived from Japanese wild mouse on sperm morphology. Suh DS, et al. **Genet Res** 1989 Feb;53(1):17–9

Failure of fertilization in in vitro fertilization: the "occult" male factor. Oehninger S, et al. **J In Vitro Fert Embryo Transf** 1988 Aug;5(4):181–7

Chromosome aberrations in spermatogonia and sperm abnormalities in Curacron–treated mice. el Nahas SM, et al. **Mutat Res** 1989 Apr;222(4):409–14

Two cases of acrosome and folded tail abnormality in dog spermatozoa. Kawakami E, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1274–6

Male pronuclear formation by a boar spermatozoon with hairpin–curved tail in zona–free hamster egg. Yoshida M, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):428–30

Morphological defects of the acrosome in boar spermatozoa. Revell SG, et al. **Res Vet Sci** 1988 Sep;45(2):149–51

Distribution of spermatozoa in the genital tract of heifers inseminated with large numbers of abnormal spermatozoa. Larsson B. **Zentralbl Veterinarmed** [A] 1988 Dec; 35(10):721–8

Experimentally induced testicular alterations in boars: histological and ultrastructural findings. Malmgren L, et al. **Zentralbl Veterinarmed** [A] 1989 Jan;36(1):3–14

[Incidence of sister chromatid exchanges (SCEs) in idiopathic male sterility. Preliminary study] Rafat A, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(4):455–8 (Eng. Abstr.) (Fre)

[Evaluation of the probability of the occurrence of pregnancy during oligo–astheno–teratospermia] Barrière P, et al. **Rev Fr Gynecol Obstet** 1989 Feb;84(2):101–5 (19 ref.) (Eng. Abstr.) (Fre)

[Male infertility and intrauterine insemination with abnormal sperm] Emperaire JC. **Rev Fr Gynecol Obstet** 1989 Feb; 84(2):119–21 (Eng. Abstr.) (Fre)

[Etiologic evaluation of oligo–astheno–teratospermia] Rollet J. **Rev Fr Gynecol Obstet** 1989 Feb;84(2):91–5 (Eng. Abstr.) (Fre)

[Mutagenicity testing in the sperm head test/mouse and mutagenic potency of 2 disinfectants on the basis of peracetic acid and phenols, respectively] Koch S, et al. **Zentralbl Hyg Umweltmed** 1989 Aug;188(5):391–403 (Eng. Abstr.) (Ger)

[Bent sperm head as a cause of infertility] Lomeo AM, et al. **Minerva Ginecol** 1988 May;40(5):299–302 (Eng. Abstr.) (Ita)

ANALYSIS

Fine–structure genetic mapping of human chromosomes using the polymerase chain reaction on single sperm: experimental design considerations. Boehnke M, et al. **Am J Hum Genet** 1989 Jul;45(1):21–32

Correlation between defects in chromatin condensation of human spermatozoa stained by aniline blue and semen characteristics. Dadoune JP, et al. **Andrologia** 1988 May–Jun;20(3):211–7

No evidence of the existence of beta adrenoceptors in human sperm using radioligand binding technique. Falkay G, et al. **Andrologia** 1989 May–Jun;21(3):244–6

Sperm nuclear chromatin heterogeneity in infertile subjects. Foresta C, et al. **Andrologia** 1989 Jul–Aug;21(4):384–90

Use of the acridine orange staining on smears of human spermatozoa after heat–treatment: evaluation of the chromatin condensation. Roux C, et al. **Andrologia** 1989 May–Jun;21(3):275–80

Variations in elemental distribution in human spermatozoa. Sheppard BL, et al. **Andrologia** 1988 May–Jun;20(3):218–24

Molecular changes in the human zona pellucida associated with fertilization and human sperm–zona interactions. Shabanowitz RB, et al. **Ann N Y Acad Sci** 1988;541:621–32

Studies on Sephadex G–200 molecular sieving of bovine sperm head, midpiece, and tail. Arora N, et al. **Arch Exp Veterinarmed** 1988 May;42(3):370–7

Alkaline erythrosine B staining of sperm heads. Its possible significance and potential use. Benítez Bribiesca L, et al. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):275–82

Proacrosin activation in the presence of a 32–kDa protein from boar spermatozoa. Baba T, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1026–32

Identification of membrane antigens of goat epididymal spermatozoa. Chatterjee T, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):550–6

The major maturation glycoprotein found on rat cauda epididymal sperm surface is linked to the membrane via phosphatidylinositol. Moore A, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):460–8

Presence of RNA in the sperm nucleus. Pessot CA, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):272–8

Rat sperm protamine. Isolation and sequence analysis. Ammer H, et al. **Biol Chem Hoppe Seyler** 1988 Dec; 369(12):1301–6

Changes in sperm surface membrane and luminal protein fluid content during epididymal transit in the boar. Dacheux JL, et al. **Biol Reprod** 1989 Mar;40(3):635–51

Alteration of the spermatozoal glycocalyx and its effect on duration of fertility in the fowl (Gallus domesticus). Froman DP, et al. **Biol Reprod** 1989 Mar;40(3):615–21

Characterization of a 23 kDa sperm–binding polypeptide of the golden hamster epididymis. Hoos PC, et al. **Biol Reprod** 1988 Aug;39(1):131–40

Heat–shock cognate protein (hsc71) and related proteins in mouse spermatogenic cells. Maekawa M, et al. **Biol Reprod** 1989 Apr;40(4):843–52

Isolation, structure and protein composition of the perforatorium of rat spermatozoa. Oko R, et al. **Biol Reprod** 1988 Oct;39(3):673–87

Use of electrophoretic techniques and specific antibodies to analyse tubulin isotypes in rabbit testis and spermatozoa. Casale A. **Cell Biol Int Rep** 1989 Jun;13(6):537–46

The lipid content of epididymal spermatozoa of Rattus norvegicus. Adams CS, et al. **Comp Biochem Physiol [B]** 1977;58(4):409–11

Fatty chain composition of phospholipids in sea urchin spermatozoa. Mita M, et al. **Comp Biochem Physiol [B]** 1989;92(2):319–22

Changes in the phospholipid composition and phospholipid asymmetry of ram sperm plasma membranes after cryopreservation. Hinkovska–Galcheva V, et al. **Cryobiology** 1989 Feb;26(1):70–5

DNA flow cytometry in sperm cells from unilaterally orchiectomized patients with testicular cancer before further treatment. Fossà SD, et al. **Cytometry** 1989 May; 10(3):345–50

Widespread occurrence of calicin, a basic cytoskeletal protein of sperm cells, in diverse mammalian species. Paranko J, et al. **Differentiation** 1988 Jun;38(1):21–7

Calpactin–like proteins in human spermatozoa. Berruti G. **Exp Cell Res** 1988 Dec;179(2):374–84

Purification and immunocytolocalization of protein phi 0 from sperm cells of the echinoderm Holothuria tubulosa. Casas MT, et al. **Exp Cell Res** 1989 May;182(1):14–25

Primary structure of rabbit sperm protamine, the first protamine of its type with an aberrant N–terminal. Ammer H, et al. **FEBS Lett** 1988 Dec 19;242(1):111–6

Comparison of partial amino acid sequences of two protamine 2 variants from stallion sperm. Structural evidence that the variants are products of different genes. Pirhonen A, et al. **FEBS Lett** 1989 Feb 13;244(1):199–202

Intracellular localization of argyrophilic proteins in the maturing oocyte, fertilized egg, and spermatozoa of the starfish, Asterina pectinifera. Amikura RM, et al. **Gamete Res** 1987 Apr;16(4):291–301

The major component of the rat sperm fibrous sheath is a phosphoprotein. Brito M, et al. **Gamete Res** 1989 Feb; 22(2):205–17

Actin and calmodulin coexist in the equatorial segment of ejaculated boar sperm. Camatini M, et al. **Gamete Res** 1987 Jun;17(2):97–105

Characterization of actin isoforms in ejaculated boar spermatozoa. Casale A, et al. **Gamete Res** 1988 Jun; 20(2):133–44

Glycoconjugates of the human sperm surface: distribution and alterations that accompany capacitation in vitro. Cross NL, et al. **Gamete Res** 1987 Jan;16(1):23–35

DNA content of spermatozoa in different genetic lines of turkeys. Lamošová D, et al. **Gamete Res** 1988 Apr; 19(4):417–21

Characterization of the postacrosomal sheath of bovine spermatozoa. Olson GE, et al. **Gamete Res** 1988 Jul; 20(3):329–42

Identification, isolation, and properties of a plasma membrane protein involved in the adhesion of boar sperm to the porcine zona pellucida. Peterson RN, et al. **Gamete Res** 1989 May;23(1):103–18

Calcium–binding proteins of boar spermatozoan plasma membranes: identification and partial characterization. Peterson RN, et al. **Gamete Res** 1989 May;23(1):49–60

Attempted sexing of bovine spermatozoa by fractionation on a Percoll density gradient. Upreti GC, et al. **Gamete Res** 1988 May;20(1):83–92

Classification, inhibition, and specificity studies of the vitelline coat lysin from toad sperm. Yamasaki H, et al. **Gamete Res** 1988 Jul;20(3):287–300

Genetic analyses of restriction fragment length polymorphisms using high molecular weight DNA from sperm or lymphocytes embedded in agarose. Mage RG, et al. **Gene Anal Tech** 1988 Sep–Oct;5(5):94–6

Semen selenium content and sperm mitochondrial volume in human and some animal species. Saaranen M, et al. **Hum Reprod** 1989 Apr;4(3):304–8

Flow cytometric analysis of human spermatozoa treated with antiserum to human seminal inhibin. Bandivdekar AH, et al. **Int J Fertil** 1989 Jan–Feb;34(1):74–7

A simple, clinical assay to evaluate the acrosin activity of human spermatozoa. Kennedy WP, et al. **J Androl** 1989 May–Jun;10(3):221–31

Polyamine profiles in rat testis, germ cells and Sertoli cells during testicular maturation. Shubhada S, et al. **J Androl** 1989 Mar–Apr;10(2):145–51

Semenogelin, the predominant protein in human semen. Primary structure and identification of closely related proteins in the male accessory sex glands and on the spermatozoa. Lilja H, et al. **J Biol Chem** 1989 Jan 25; 264(3):1894–900

Identification and characterization of calmodulin–binding proteins in mammalian sperm flagella. Wasco WM, et al. **J Biol Chem** 1989 Mar 25;264(9):5104–11

Identification of rat testis galactosyl receptor using antibodies to liver asialoglycoprotein receptor: purification and localization on surfaces of spermatogenic cells and sperm. Abdullah M, et al. **J Cell Biol** 1989 Feb;108(2):367–75

G–proteins in mammalian gametes: an immunocytochemical study. Garty NB, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):21–31

Packaging of DNA in cricket sperm. A compact mode of DNA packaging. Suzuki M, et al. **J Mol Biol** 1988 Dec 5;204(3):653–61

The lurking sperm: vasectomy failures [letter] **JAMA** 1988 Dec 16;260(23):3433–4

Identification of cholesta–7,24–dien–3 beta–ol and desmosterol in hamster cauda epididymal spermatozoa. Awano M, et al. **Lipids** 1989 Jul;24(7):662–4

Complex dielectric constant of arginine–DNA and protamine–DNA aqueous systems at 10 GHz. Boinincontro A, et al. **Phys Med Biol** 1989 May;34(5):609–16

Analysis of B–G and immune response genes in the Iowa State University S1 chicken line by hybridization of sperm deoxyribonucleic acid with a major histocompatibility complex class II probe. Pitcovski J, et al. **Poult Sci** 1989 Jan;68(1):94–9

Cytochemical analysis of mammalian sperm membranes. Sinowatz F, et al. **Prog Histochem Cytochem** 1989; 19(4):1–74 (188 ref.)

[Immunocytological distribution of HP1 group protamines in human testes and ejaculated spermatozoa] Roux C, et al. **Bull Assoc Anat (Nancy)** 1987 Dec;71(215):65–9 (Eng.

Abstr.) (Fre)
[Acetylcarnitine and spermatozoa: relationship with epididymal maturation and motility in the boar and man] Jeulin C, et al. **Reprod Nutr Dev** 1988;28(5):1317–27 (Eng. Abstr.) (Fre)
[Histocytochemistry of lectin binding sites on epididymal sperm] Sinowatz F, et al. **Acta Histochem Suppl (Jena)** 1988; 36:159–68 (Ger)
[Light microscopic demonstration of lectin receptors on the surface of human spermatozoa] Roeser J, et al. **Andrologia** 1988 Jul–Aug;20(4):338–43 (Eng. Abstr.) (Ger)
[Gm/Km determination in sperm traces] Bässler G, et al. **Arch Kriminol** 1989 May–Jun;183(5–6):173–9 (Eng. Abstr.) (Ger)
[Sialic acid in boar sperm—the relation to qualitative and quantitative ejaculate parameters] Wemheuer WE, et al. **DTW** 1988 Jul–Aug;95(7):277–83 (Eng. Abstr.) (Ger)
[The effect of prostatitis on the spermiogram] Rageth JC, et al. **Helv Chir Acta** 1988 Jul;55(3):289–91 (Eng. Abstr.) (Ger)
[A new method for the evaluation of the integrity of the membranes of human spermatozoa] Giambersio AM, et al. **Minerva Ginecol** 1988 May;40(5):295–7 (Eng. Abstr.) (Ita)
[Sperm quality—a question on number, shape or content?] Kvist U, et al. **Nord Med** 1988;103(11):312–5 (Eng. Abstr.) (Swe)

ANATOMY & HISTOLOGY

Immunological relationships between specific sperm proteins and secretory polypeptides from seminal vesicles. Seitz J, et al. **Acta Histochem Suppl (Jena)** 1989;37:231–3
The relationship between the motility and morphology of spermatozoa in human semen. Morales P, et al. **J Androl** 1988 Jul–Aug;9(4):241–7

CYTOLOGY

The effect of semen processing on sperm morphology. Bornman MS, et al. **Andrologia** 1989 Mar–Apr;21(2):117–9
Andrological parameters in human semen of high (greater than or equal to 6 ml) and low (less than or equal to 1 ml) volume. Dickerman Z, et al. **Andrologia** 1989 Jul–Aug; 21(4):353–62
Immunocytochemical characterization of round cells in human semen using monoclonal antibodies and the APAAP-technique. Schöbel WA, et al. **Andrologia** 1989 Jul–Aug;21(4):370–6
Regulation of spermatogonial proliferation. De Rooij DG, et al. **Ann N Y Acad Sci** 1989;564:140–53 (57 ref.)
Fertilization in trypsin-treated oocytes. Kiessling AA, et al. **Ann N Y Acad Sci** 1988;541:614–20
Methods used to improve gamete efficiency. Marrs RP, et al. **Ann N Y Acad Sci** 1988;541:310–6
Microinjection of spermatozoa into oocytes. Mettler L, et al. **Ann N Y Acad Sci** 1988;541:591–600
Ultrasound-guided peritoneal oocyte and sperm transfer. Sharma V, et al. **Ann N Y Acad Sci** 1988;541:767–72
Sperm morphology: unstained and stained smears in fertile and infertile men. Ali JI, et al. **Arch Androl** 1989;22(3):191–5
Effect of calmodulin antagonists on calcium pump of ram spermatozoa plasma membrane. Breitbart H, et al. **Arch Androl** 1988;20(3):229–35
Proliferative activity of human spermatogonia from fetal period to senility measured by cytophotometric DNA quantification. Codesal J, et al. **Arch Androl** 1989; 22(3):209–15
Buoyancy and sedimentation of human X- and Y-bearing sperm. Kaneko S, et al. **Arch Androl** 1987;19(3):211–5
Correlation between sperm morphology, acrosin, and fertilization in an IVF program. Kruger TF, et al. **Arch Androl** 1988;20(3):237–41
Complete staining of human spermatozoa and immature germ cells combined with phase contrast microscopy. Michael AY, et al. **Arch Androl** 1987;19(3):217–21
Changes in distribution and staining reactivity of PAS-positive material in the mouse epididymal duct after efferent duct ligation. Abe K, et al. **Arch Histol Jpn** 1988 Dec;51(5):433–41
A simple quantitative method of estimation of cell-intactness based on ethidium bromide fluorescence. Dey CS, et al. **Biochem Int** 1988 Aug;17(2):367–74
Zona pellucida-induced acrosome reaction in boar sperm. Berger T, et al. **Biol Reprod** 1989 Mar;40(3):525–30
The effect of sulfhydryl oxidation on the morphology of immature hamster epididymal spermatozoa induced to acquire motility in vitro. Cornwall GA, et al. **Biol Reprod** 1988 Aug;39(1):141–55
The protein encoded by a murine male germ cell-specific transcript is a putative ATP-dependent RNA helicase. Leroy P, et al. **Cell** 1989 May 19;57(4):549–59
Sephadex G-200 column chromatographic studies on bubaline semen fractions. Arora N, et al. **Cell Mol Biol** 1988;34(3):239–46
The cell cycle of spermatogonial colony forming stem cells in the CBA mouse after neutron irradiation. Bootsma AL, et al. **Cell Tissue Kinet** 1988 Mar;21(2):105–13
Pachytene pairing in relation to sperm and oocyte numbers in a male-fertile reciprocal translocation in the mouse. Setterfield LA, et al. **Cytogenet Cell Genet** 1988;49(4):293–9
Induction of metaphase chromosome condensation in human sperm by Xenopus egg extracts. Lohka MJ, et al. **Exp Cell Res** 1988 Nov;179(1):303–9
The hypoosmotic swelling test as a useful adjunct to the semen analysis to predict fertility potential. Check JH, et al. **Fertil Steril** 1989 Jul;52(1):159–61
Transfer of human sperm into the perivitelline space of human oocytes after zona-drilling or zona-puncture. Ng SC, et al. **Fertil Steril** 1989 Jul;52(1):73–8
Are human spermatozoa separated on a Percoll density gradient safe for therapeutic use? Pickering SJ, et al. **Fertil Steril** 1989 Jun;51(6):1024–9
Xenopus spermatozoon: correlation between shape and motility. Bernardini G, et al. **Gamete Res** 1988 Jun; 20(2):165–75
Analysis of the first cell cycle in the cross between hamster eggs and human sperm. Brandriff BF, et al. **Gamete Res** 1989 Jul;23(3):299–308
Effects of semen preservation on boar spermatozoa head membranes. Buhr MM, et al. **Gamete Res** 1989 Aug; 23(4):441–9
A comparison of sperm morphology and silver nitrate staining characteristics in the domestic ferret and the black-footed ferret. Curry PT, et al. **Gamete Res** 1989 Jan; 22(1):27–36
Staining procedure to detect viability and the true acrosome reaction in spermatozoa of various species. Didion BA, et al. **Gamete Res** 1989 Jan;22(1):51–7
Selection and separation of X- and Y- chromosome-bearing mammalian sperm. Gledhill BL. **Gamete Res** 1988 Jul; 20(3):377–95 (96 ref.)
Flow sorting of X and Y chromosome-bearing mammalian sperm: activation and pronuclear development of sorted bull, boar, and ram sperm microinjected into hamster oocytes. Johnson LA, et al. **Gamete Res** 1988 Dec; 21(4):335–43
Flow sorting of X and Y chromosome-bearing spermatozoa into two populations. Johnson LA, et al. **Gamete Res** 1987 Jan;16(1):1–9
Flow cytometry of X and Y chromosome-bearing sperm for DNA using an improved preparation method and staining with Hoechst 33342. Johnson LA, et al. **Gamete Res** 1987 Jul;17(3):203–12
Cytochemical analysis of the anionic sites on the membrane of the stallion spermatozoa during the epididymal transit. López ML, et al. **Gamete Res** 1987 Dec;18(4):319–32
Acrosomal enzymes and ultrastructure of unfrozen and cryotreated human spermatozoa. Mack SR, et al. **Gamete Res** 1987 Dec;18(4):375–83
DNA synthesis following microinjection of heterologous sperm and somatic cell nuclei into hamster oocytes. Naish SJ, et al. **Gamete Res** 1987 Oct;18(2):109–20
Sea urchin testicular cells evaluated by fluorescence microscopy of unfixed tissue. Simpson MV, et al. **Gamete Res** 1987 Jun;17(2):131–44
Changes in the distribution of intramembranous particles and filipin-reactive membrane sterols during in vitro capacitation of golden hamster spermatozoa. Suzuki F, et al. **Gamete Res** 1989 Jul;23(3):335–47
Sperm chromosome analysis as a new system to test human X- and Y-sperm separation. Ueda K, et al. **Gamete Res** 1987 Jul;17(3):221–8
Formation of the cylindrical structure during the acrosome reaction of abalone spermatozoa. Usui N. **Gamete Res** 1987 Jan;16(1):37–45
Localization of NORs in spermatogonial metaphase chromosomes of six species of grasshoppers. Yadav JS, et al. **Genetica** 1987 Oct 15;74(2):155–60
Comparative study of the kinetics of the acrosome reaction and survival of human spermatozoa in various media. Pilikian S, et al. **Int J Androl** 1988 Dec;11(6):465–72
Differentiation of germ cells in seminiferous tubules transplanted to testes of germ cell-deficient mice of W/Wv and Sl/Sld genotypes. Kuroda H, et al. **J Cell Physiol** 1989 May;139(2):329–34
Spermiogenesis in the red-ear turtle (Pseudemys scripta) and the domestic fowl (Gallus domesticus): a study of cytoplasmic events including cell volume changes and cytoplasmic elimination. Sprando RL, et al. **J Morphol** 1988 Oct;198(1):95–118
Nuclear maturity and morphology of human spermatozoa selected by Percoll density gradient centrifugation or swim-up procedure. Le Lannou D, et al. **J Reprod Fertil** 1988 Nov;84(2):551–6
Cytogenetical analysis of the germ cell in the domestic drake and mule drake. Huang MC, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Oct;12(4):202–8
Meiotic inhibition: molecular control of meiosis. Proceedings from a symposium. Bethesda, Maryland, January 1987. Dedicated to Cornelia Post Channing. **Prog Clin Biol Res** 1988;267:1–401
Transient effect of daily injection of estrogen on spermatogonial mitosis in the rat. Hamasaki M, et al. **Prog Clin Biol Res** 1989;296:187–94
Post-meiotic gene expression during spermatogenesis. Hecht NB. **Prog Clin Biol Res** 1988;267:291–313 (47 ref.)
Changes in sperm motility, morphology and concentration induced by the swim-up procedure. Oettle EE, et al. **S Afr Med J** 1989 Jan 7;75(1):22–3
[The separation of viable X and Y chromosome-bearing spermatozoa in domestic animal species] Morell J, et al. **Tierarztl Prax** 1989;Suppl 4:35 (Ger)
[Long-term effects of human seminal plasma from whole semen and from different fractions of split ejaculate on motility of human ejaculated spermatozoa] Sanada S, et al. **Hinyokika Kiyo** 1988 Nov;34(11):1965–72 (Eng. Abstr.) (Jpn)
[Development of male germ cells in the fur seal (Callorhinus ursinus)] Ashchepkova LIu, et al. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):59–66 (Eng. Abstr.) (Rus)
[Polynuclear genital cells in rat spermatogenesis in the normal state and after exposure to xenobiotics] Ivanov IuV. **Gig Tr Prof Zabol** 1989;(3):54–5 (Rus)

DRUG EFFECTS

Significance of D-mannose as a sperm receptor site on the zona pellucida in human fertilization. Mori K, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):207–11
The effects of lead on the male rat reproductive system. Barratt CL, et al. **Andrologia** 1989 Mar–Apr;21(2):161–6
Suppression of lipid peroxidation in human spermatozoa by prostatic inhibin. Bandivdekar AH, et al. **Arch Androl** 1989; 22(3):217–21
Effect of L-carnitine on motility and acrosome reaction of human spermatozoa. Deana R, et al. **Arch Androl** 1988; 21(3):147–53
Stimulation of motility and energy metabolism of spermatozoa from asthenozoospermic patients by 17 beta-estradiol. Idaomar M, et al. **Arch Androl** 1989; 22(3):197–202
Effects of N,N'-methylene-bis-acrylamide (MBA) on mouse germ cells—sperm count and morphology, and testicular pathology. Sakamoto J, et al. **Arch Toxicol** 1988 Aug; 62(1):54–9
Protein-phosphate complexes as an inhibitor of iron-induced lipid peroxidation. Dawra RK, et al. **Biochem Int** 1989 Mar; 18(3):537–44
Receptor-mediated activation of detergent-solubilized guanylate cyclase. Bentley JK, et al. **Biol Reprod** 1988 Oct; 39(3):639–47
Calcium-induced modification of the acrosomal matrix in digitonin-permeabilized guinea pig spermatozoa. Noland TD, et al. **Biol Reprod** 1989 May;40(5):1057–66
Extrapolation of laboratory findings to risks from environmental exposures: male reproductive effects of ethylene oxide. Smith TJ. **Birth Defects** 1988;24(5):79–100 (30 ref.)
Antispermatogenic effect of embelin, a plant benzoquinone, on male albino rats in vivo and in vitro. Gupta S, et al. **Contraception** 1989 Mar;39(3):307–20
Heavy metals and human spermatozoa. III. The toxicity of copper ions for spermatozoa. Holland MK, et al. **Contraception** 1988 Dec;38(6):685–95
Effect of dihydrotestosterone on testicular and accessory gland function in male rhesus monkeys. Ramakrishnan PR, et al. **Contraception** 1989 Jul;40(1):111–27
In vitro spermicidal activity of parabens against human spermatozoa. Song BL, et al. **Contraception** 1989 Mar; 39(3):331–5
The effect of glycerol-related osmotic changes on post-thaw motility and acrosomal integrity of ram spermatozoa. Fiser PS, et al. **Cryobiology** 1989 Feb;26(1):64–9
The effects of acrylamide on mouse germ-line and somatic cell chromosomes. Backer LC, et al. **Environ Mol Mutagen** 1989;13(3):218–26
Long-term effects of triethylenemelamine exposure on mouse testis cells and sperm chromatin structure assayed by flow cytometry. Evenson DP, et al. **Environ Mol Mutagen** 1989; 14(2):79–89
Human relaxin stimulates human sperm penetration of bovine cervical mucus. Colon JM, et al. **Fertil Steril** 1989 Aug; 52(2):340–2
Suppression of sperm function by depot medroxyprogesterone acetate and testosterone enanthate in steroid male contraception. Wu FC, et al. **Fertil Steril** 1989 Apr;51(4):691–8
Action of gossypol on rat germinal cells. II. The acrosome. Baccetti B, et al. **Gamete Res** 1987 Jan;16(1):10–21
Inhibition of the human sperm acrosome reaction by proteinase inhibitors. De Jonge CJ, et al. **Gamete Res** 1989 Aug;23(4):387–97
Effect of cholesterol and phosphatidylcholine of different chain length on acrosome breakdown and fertilizing capacity of amphibian spermatozoa. Diaz Fontdevila MF, et al. **Gamete Res** 1988 Sep;21(1):59–70
Cholesterol efflux from bovine sperm. I. Induction of the acrosome reaction with lysophosphatidylcholine after reducing sperm cholesterol. Ehrenwald E, et al. **Gamete Res** 1988 Jun;20(2):145–57
Effect of solasodine on morphology, motility and glycolytic enzymes of buffalo bull spermatozoa. Kanwar U, et al. **Indian J Exp Biol** 1988 Dec;26(12):941–4
Effect of gossypol acetic acid on spermatozoal ATPases activity and fertility in chicken. Mohan J, et al. **Indian J Exp Biol** 1988 Dec;26(12):1005–6
Sperm immobilizing activity of betaine obtained from Malvaviscus conzattii flower extract. Pakrashi A, et al. **Indian J Med Res** 1988 Nov;88:458–60
Effect of selected metal ions on the motility and carbohydrate metabolism of ejaculated human spermatozoa. Kanwar U, et al. **Indian J Physiol Pharmacol** 1988 Jul–Sep; 32(3):195–201
The action of LPS porins and peptidoglycan fragments on human spermatozoa. Galdiero F, et al. **Infection** 1988;

16(6):349–53
Enhanced conception by stored porcine sperm stimulated with chloroquine. Egbunike GN. **Int J Androl** 1989 Feb; 12(1):80–4
Evaluation of the effect of selective germ cell depletion on subsequent spermatogenesis and fertility in the rat. Ratnasooriya WD, et al. **Int J Androl** 1989 Feb;12(1):44–57
Calmodulin–like protein in buffalo (Bubalus bubalis) seminal plasma and its effect on sperm Ca++, Mg++–ATPase. Sidhu KS, et al. **Int J Androl** 1989 Apr;12(2):148–54
Ethanol accelerates acrosomal loss in human spermatozoa. Alvarez JG, et al. **J Androl** 1988 Nov–Dec;9(6):357–66
Synchronous assay for human sperm capacitation and the acrosome reaction. De Jonge CJ, et al. **J Androl** 1989 May–Jun;10(3):232–9
Indomethacin and oxaprozin lower seminal prostaglandin levels but do not influence sperm motion characteristics and serum hormones of young healthy men in a placebo–controlled double–blind trial. Knuth UA, et al. **J Androl** 1989 Mar–Apr;10(2):108–19
Acute effects and long–term sequelae of 1,3–dinitrobenzene on male reproduction in the rat. I. Sperm quality, quantity, and fertilizing ability. Linder RE, et al. **J Androl** 1988 Sep–Oct;9(5):317–26
Effect of phenylephrine, ergonovine, oxytocin and norepinephrine as an extender ingredient on viability of bovine spermatozoa. Gallagher GR, et al. **J Anim Sci** 1989 Jun;67(6):1573–6
Effects of prolactin during preincubation of mouse spermatozoa on fertilizing capacity in vitro. Fukuda A, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):92–7
Calcium channel antagonists modulate the acrosome reaction but not capacitation in mouse spermatozoa. Fraser LR, et al. **J Reprod Fertil** 1989 May;86(1):223–33
Effect of heparin on the expression of calmodulin–binding proteins in bull spermatozoa. Leclerc P, et al. **J Reprod Fertil** 1989 Mar;85(2):615–22
Gossypol–induced modifications in the microenvironment of rat epididymal spermatozoa. Soufir JC, et al. **J Reprod Fertil** 1989 Jul;86(2):427–34
Evaluation of reproductive parameters in adult male Wistar rats after subchronic exposure (gavage) to benomyl. Linder RE, et al. **J Toxicol Environ Health** 1988;25(3):285–98
Effect of procarbazine on sperm morphology in Syrian hamsters. Singh H, et al. **J Toxicol Environ Health** 1989; 27(1):107–21
Clastogenic effects of cis–diamminedichloroplatinum. I. Induction of chromosomal aberrations in somatic and germinal cells of mice. Adler ID, et al. **Mutat Res** 1989 Mar;211(1):131–7
Activity of 1,1,1– and 1,1,3–trichloroacetones in a chromosomal aberration assay in CHO cells and the micronucleus and spermhead abnormality assays in mice. Blazak WF, et al. **Mutat Res** 1988 Dec;206(4):431–8
Induction of specific locus mutations in mouse spermatogonial stem cells by combined chemical X–ray treatments. Cattanach BM, et al. **Mutat Res** 1989 May; 212(1):91–101
Mutagenicity testing of vincristine sulfate in germ cells of male mice. Ehling UH, et al. **Mutat Res** 1988 Nov–Dec; 209(3–4):107–13
Towards an understanding of the nature and fitness of induced mutations in germ cells of mice: homozygous viability and heterozygous fitness effects of induced specific–locus, dominant cataract and enzyme–activity mutations. Favor J, et al. **Mutat Res** 1989 May;212(1):67–75
A restudy of the efficacy of adriamycin in inducing dominant lethals in mouse spermatogonia stems cells. Generoso WM, et al. **Mutat Res** 1989 May;226(1):61–4
Effects of vinyl acetate and acetaldehyde on sperm morphology and meiotic micronuclei in mice. Lähdetie J. **Mutat Res** 1988 Nov;202(1):171–8
Dosage–response relationships for methyl methanesulfonate in Drosophila melanogaster spermatozoa: DNA methylation per nucleotide vs. sex–linked recessive lethal frequency. Lee WR, et al. **Mutat Res** 1989 Apr; 211(2):243–57
Relative efficacy of short–term tests in detecting genotoxic effects of cadmium chloride in mice in vivo. Mukherjee A, et al. **Mutat Res** 1988 Oct;206(2):285–95
Congenital defects in the offspring of male mice treated with ethylnitrosourea. Nagao T. **Mutat Res** 1988 Nov; 202(1):25–33
Chromosome aberrations in spermatogonia and sperm abnormalities in Curacron–treated mice. el Nahas SM, et al. **Mutat Res** 1989 Apr;222(4):409–14
Comment on mutagenicity of diethyl sulfate in mice and on germ–cell mutagenicity testing. Russell WL. **Mutat Res** 1989 Mar;225(3):127–9
Chlorambucil effectively induces deletion mutations in mouse germ cells. Russell LB, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3704–8
FDA procedures and policies to estimate risks of injury to the male reproductive system. Flamm WG, et al. **Prog Clin Biol Res** 1989;302:21–9; discussion 30–2
Correlation of sperm and endocrine measures with reproductive success in rodents. Gray LE Jr, et al. **Prog Clin Biol Res** 1989;302:193–206; discussion 206–9 (29 ref.)
Association of sperm measures with reproductive outcome: National Toxicology Program studies in mice. Morrissey RE. **Prog Clin Biol Res** 1989;302:229–47; discussion 248–50
The use of multiple endpoints to define the mechanism of action of reproductive toxicants and germ cell mutagens. Working PK, et al. **Prog Clin Biol Res** 1989;302:211–27 (43 ref.)
Interleukin–1 alpha stimulation of spermatogonial proliferation in vivo. Pöllänen P, et al. **Reprod Fertil Dev** 1989;1(1):85–7
Early effects of gossypol on the testis and epididymis in the rat. Radigue C, et al. **Reprod Nutr Dev** 1988;28(5):1329–38
Effects of sodium azide on sea urchin embryos and gametes. Pagano G, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(6):363–76
Methylmercury– and mercuric–chloride–induced alterations in rat epididymal sperm. Chowdhury AR, et al. **Toxicol Lett** 1989 May;47(2):125–34
Premature acrosome reaction in spermatozoa from lead–exposed mice. Johansson L. **Toxicology** 1989 Feb; 54(2):151–62
In vitro changes in human spermatozoa exposed to gastric juice: laboratory findings as a support for forensic practice. Hooft P, et al. **Z Rechtsmed** 1988;101(1):41–4
[The effect of noxious chemicals on the sperm quality of boars used for insemination. 1. The fly control agent "omexan"] Schulz O, et al. **Arch Exp Veterinarmed** 1988 May;42(3):435–43 (Eng. Abstr.) (Ger)
[The influence of chemical noxae on the sperm quality of boars used for insemination. 2. Mercury] Schulz O, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):610–7 (Eng. Abstr.) (Ger)
[Mutagenicity testing in the sperm head test/mouse and mutagenic potency of 2 disinfectants on the basis of peracetic acid and phenols, respectively] Koch S, et al. **Zentralbl Hyg Umweltmed** 1989 Aug;188(5):391–403 (Eng. Abstr.) (Ger)
[Effect of polymer materials on the reproductive function of men] Bokov AN, et al. **Gig Sanit** 1988 Oct;(10):22–4 (Eng. Abstr.) (Rus)
[Use of olivomycin for the diagnosis of Ureaplasma infection of the sperm] Karpenko AE. **Vrach Delo** 1988 Jul; (7):109–11 (Eng. Abstr.) (Rus)
[Morphologic changes in sperm in experimental mice after the administration of phosmet and mancozeb] Jablonická A, et al. **Bratisl Lek Listy** 1988 Aug;89(8):611–4 (Eng. Abstr.) (Slo)

ENZYMOLOGY

Cytochrome oxidase and lactate dehydrogenase activities in peroxidized rabbit epididymal spermatozoa. Ferrandi B, et al. **Andrologia** 1989 May–Jun;21(3):215–22
Fluorescence microscopic detection of acrosin in different morphologic types of human spermatozoa. Francavilla S, et al. **Andrologia** 1988 Jul–Aug;20(4):344–50
Relationship of sperm acrosin activity to semen and clinical parameters in infertile patients. Gerhard I, et al. **Andrologia** 1989 Mar–Apr;21(2):146–54
Some properties of acid and alkaline phosphomonoesterases of chicken spermatozoa. Mohan J, et al. **Andrologia** 1989 Jan–Feb;21(1):29–34
Sperm adenylyl cyclase in young and middle–aged men. Rui H, et al. **Andrologia** 1989 Mar–Apr;21(2):131–5
Angiotensin converting enzyme from capacitated rabbit spermatozoa: two distinct forms. Singh US, et al. **Andrologia** 1988 Jul–Aug;20(4):322–5
Electrophoretic pattern of sorbitol dehydrogenase (E.C.1.1.1.14) in human seminal plasma and spermatozoa. Perea FJ, et al. **Ann Genet** 1989;32(1):33–5
Casein kinase II activity and polyamine–stimulated protein phosphorylation of cytosolic and plasma membrane proteins in bovine sperm. Chaudhry PS, et al. **Arch Biochem Biophys** 1989 May 15;271(1):98–106
Characterization of the maturation–associated galactose oxidase–sensitive glycoproteins of rat caudal sperm plasma membrane and epididymal fluid. Goldin BF, et al. **Arch Biochem Biophys** 1989 Apr;270(1):208–18
Biochemical and immunological characterization of the flagellar–associated regulatory subunit of a type II cyclic adenosine 5'–monophosphate–dependent protein kinase. Horowitz JA, et al. **Arch Biochem Biophys** 1989 May 1; 270(2):411–8
Immunodetectable galactosyltransferase is associated only with human spermatozoa of high buoyant density. Sullivan R, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):184–8
Subcellular localization of branched–chain amino acid aminotransferase and lactate dehydrogenase C4 in rat and mouse spermatozoa. Montamat EE, et al. **Biochem J** 1988 Nov 1;255(3):1053–6
Characterization of fucosyltransferase activity during mouse spermatogenesis: evidence for a cell surface fucosyltransferase. Cardullo RA, et al. **Biochemistry** 1989 Feb 21;28(4):1611–7
Metabolism of polyunsaturated fatty acids by an (n – 6)–lipoxygenase associated with human ejaculates. Oliw EH, et al. **Biochim Biophys Acta** 1989 Apr 26; 1002(3):283–91
Starfish acrosomal acid phosphatase: a cytochemical and biochemical study. Sousa M, et al. **Biol Cell** 1988; 63(1):101–4
The inhibition of boar acrosin amidase activity by sulfated polysaccharides. Urch UA, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):727–32
Differential activity and synthesis of lactate dehydrogenase isozymes A (muscle), B (heart), and C (testis) in mouse spermatogenic cells. Li SS, et al. **Biol Reprod** 1989 Jan; 40(1):173–80
The effect of spermine, spermidine and kallikrein on the triple adenosine triphosphatase enzyme activity of spermatozoa in males with oligoasthenozoospermia. Karacagil M, et al. **Br J Urol** 1989 Jan;63(1):84–6
Properties of acid beta–galactosidase from fowl spermatozoa. Droba M. **Br Poult Sci** 1988 Sep;29(3):555–62
Presence of ATPase and alkaline phosphatase activities in the starfish sperm acrosome. Sousa M, et al. **Cell Biol Int Rep** 1988 Dec;12(12):1049–54
Replicating premeiotic germ cells of the mouse contain a novel DNA primase stimulatory factor. Orlando P, et al. **Cell Differ Dev** 1989 Jul;27(2):129–36
Localization of bovine seminal plasma RNA–A BS1, on the surface of bovine spermatozoa. Shivaji S, et al. **Cell Mol Biol** 1989;35(3):285–91
The membrane form of guanylate cyclase. Garbers DL, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:993–1003
Lactate dehydrogenase isozymes in the spermatozoa of the domestic fowl, Gallus domesticus and turkey, Meleagris gallopavo. McIndoe WM, et al. **Comp Biochem Physiol [B]** 1978;61(3):433–7
Arylsulfatase of sea urchin sperm—distribution of arylsulfatase in the gonads and gametes of echinoderms. Moriya T, et al. **Comp Biochem Physiol [B]** 1979; 64(3):293–6
Locus determining the human sperm–specific lactate dehydrogenase, LDHC, is syntenic with LDHA. Edwards YH, et al. **Dev Genet** 1987;8(4):219–32
Intracellular distribution of poly(ADP–ribose) synthetase in rat spermatogenic cells. Concha II, et al. **Exp Cell Res** 1989 Feb;180(2):353–66
Sea urchin sperm creatine kinase: the flagellar isozyme is a microtubule–associated protein. Tombes RM, et al. **Exp Cell Res** 1988 Oct;178(2):307–17
The measurement of hyaluronidase activity in human spermatozoa by substrate slide assay and its clinical application. Hirayama T, et al. **Fertil Steril** 1989 Feb; 51(2):330–4
Low acrosin activity in a subgroup of men with idiopathic infertility dose not correlate with sperm density, percent motility, curvilinear velocity, or linearity. Koukoulis GN, et al. **Fertil Steril** 1989 Jul;52(1):120–7
Evidence for two forms of phospholipase A2 in human semen. Antaki P, et al. **Gamete Res** 1988 Mar;19(3):305–14
Evidence for sequential deployment of secretory enzymes during the normal acrosome reaction of guinea pig sperm in vitro. DiCarlantonio G, et al. **Gamete Res** 1988 Dec; 21(4):425–38
Activation of phospholipase A2 of human spermatozoa by proteases. Guérette P, et al. **Gamete Res** 1988 Feb; 19(2):203–14
Correlation between sperm creatine phosphokinase activity and sperm concentrations in normospermic and oligospermic men. Huszar G, et al. **Gamete Res** 1988 Jan; 19(1):67–75
Immunological approach to characterize proacrosin and various acrosin forms in boar and man by monoclonal antibodies. Kaufmann M, et al. **Gamete Res** 1987 Dec; 18(4):349–61
Acrosomal enzymes and ultrastructure of unfrozen and cryotreated human spermatozoa. Mack SR, et al. **Gamete Res** 1987 Dec;18(4):375–83
Expression and topographical localization of cell surface fucosyltransferase activity during epididymal sperm maturation in the mouse. Ram PA, et al. **Gamete Res** 1989 Mar;22(3):321–32
Characterization of cAMP–dependent protein kinase and its endogenous substrate proteins in ram testicular, cauda epididymal, and ejaculated spermatozoa. Wooten MW, et al. **Gamete Res** 1987 Jan;16(1):57–68
Arylsulphatase and acid phosphatase activity associated with developing and ripe spermatozoa of the mussel Mytilus edulis. Pipe RK, et al. **Histochem J** 1989 Jan;21(1):23–32
Acrosomal proteinase activity of human spermatozoa and relation of results to semen quality. Welker B, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:75–80
Phosphatidylcholine and phosphatidylethanolamine derivatives, membrane fluidity and changes in the lipolytic activity of ram spermatozoa plasma membranes during cryoconservation. Hinkovska–Galcheva V, et al. **Int J Biochem** 1988;20(8):867–71
Glutamic–oxaloacetic transaminase isozymes in human seminal plasma and sperm extracts. Mortimer D, et al. **Int J Fertil** 1988 Jul–Aug;33(4):291–5
Activation of phospholipase D by the fucose–sulfate glycoconjugate that induces an acrosome reaction in spermatozoa. Domino SE, et al. **J Biol Chem** 1989 Jun 5;264(16):9412–9
Outer arm dynein from trout spermatozoa. Purification, polypeptide composition, and enzymatic properties. Gatti JL, et al. **J Biol Chem** 1989 Jul 5;264(19):11450–7
Regulation of proacrosin conversion in isolated guinea pig sperm acrosomal apical segments. Noland TD, et al. **J Biol Chem** 1989 Aug 15;264(23):13586–90
Adenylate kinase activity in ejaculated bovine sperm flagella [published erratum appears in J Biol Chem 1989 Jul 15;264(20):12113] Schoff PK, et al. **J Biol Chem** 1989 Apr 15;264(11):6086–91

Plasma membrane association, purification, and partial characterization of mouse sperm beta 1,4-galactosyltransferase [published erratum appears in J Biol Chem 1989 Mar 5;264(7):4264] Shur BD, et al. **J Biol Chem** 1988 Nov 25;263(33):17706–14

Differential expression and subcellular localization for subunits of cAMP-dependent protein kinase during ram spermatogenesis. Pariset C, et al. **J Cell Biol** 1989 Sep; 109(3):1195–205

Novel alpha-D-mannosidase of rat sperm plasma membranes: characterization and potential role in sperm-egg interactions. Tulsiani DR, et al. **J Cell Biol** 1989 Sep; 109(3):1257–67

Spermatolysins in Bufo arenarum: their activity on oocyte surface. Cabada MO, et al. **J Exp Zool** 1989 Feb; 249(2):229–34

Evidence suggesting a role for sperm metalloendoprotease activity in penetration of zona-free hamster eggs by human sperm. Díaz-Pérez E, et al. **J Exp Zool** 1988 Nov; 248(2):213–21

Ascidian sperm penetration and the translocation of a cell surface glycosidase. Lambert CC. **J Exp Zool** 1989 Mar; 249(3):308–15

Localization of acrosomal enzymes in Arthropoda, Echinodermata and Vertebrata. Baccetti B, et al. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):385–9

[Duration of gelatinolytic activity of acrosomal proteinases of rabbit spermatozoa] Pakzad R, et al. **Acta Histochem (Jena)** 1988;84(2):235–40 (Eng. Abstr.) (Ger)

[Development of a test for sperm damage by measuring succinate dehydrogenase activity] Risse S. **Arch Exp Veterinarmed** 1988 Sep;42(5):769–76 (Eng. Abstr.) (Ger)

[Stability of selected sperm components in a mixture of sperm and vaginal secretions] Pawlowski R, et al. **Beitr Gerichtl Med** 1988;46:219–26 (Eng. Abstr.) (Ger)

[The gelatinolytic activity of the acrosomal proteinases of rabbit sperm in the female reproductive tract] Pakzad R. **Z Mikrosk Anat Forsch** 1988;102(6):1045–51 (Eng. Abstr.) (Ger)

[Determination of the activity of adenyl cyclase in the acrosome of guinea pig sperm] Reyes Fuentes A, et al. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):265–74 (Eng. Abstr.) (Spa)

GROWTH & DEVELOPMENT

Development of mitochondrial helical sheath in the middle piece of the mouse spermatid tail: regular dispositions and synchronized changes. Otani H, et al. **Anat Rec** 1988 Sep; 222(1):26–33

Development of spermatozoa in the rhea. Phillips DM, et al. **Anat Rec** 1989 Mar;223(3):276–82

Decrease in bicarbonate transport activities during epididymal maturation of porcine sperm. Okamura N, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1280–7

Sperm tail differentiation in the nudibranch mollusc Hypselodoris tricolor (Gastropoda, Opisthobranchia). Medina A, et al. **Gamete Res** 1988 Jun;20(2):223–32

IMMUNOLOGY

Immuno-bead test (IgG-IgA-IBT) in cervical mucus for the diagnosis of antisperm isoimmunization in female infertile patients with negative or doubtful PCT. Cimino C, et al. **Acta Eur Fertil** 1988 May–Jun;19(3):121–7

Comparison between immunobead test, indirect immunofluorescence and a quantitive ELISA for the diagnosis of antisperm antibodies. Fusi F, et al. **Acta Eur Fertil** 1989 Jan–Feb;20(1):23–7

Antisperm antibodies in young oral contraceptive users. Blum M, et al. **Adv Contracept** 1989 Mar;5(1):41–6

A prospective study on the lack of development of antisperm antibodies in women undergoing intrauterine insemination. Horvath PM, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):631–7

Sperm antibodies and infertility [letter] Shulman S. **Am J Obstet Gynecol** 1989 Aug;161(2):497–9

Failure of sperm-induced immunosuppression: association with antisperm antibodies in women. Witkin SS. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1166–8

Heterogeneity of antigenic determinants on human spermatozoa: relevance to antisperm antibody testing in infertile couples. Witkin SS, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1228–31

Relationship of antibodies to sperm head to etiology of infertility in patients undergoing in vitro fertilization/embryo transfer. Mandelbaum SL, et al. **Am J Reprod Immunol** 1989 Jan;19(1):3–5

Documentation of IgA1 and IgA2 antisperm antibodies within seminal fluid. Bronson RA, et al. **Am J Reprod Immunol Microbiol** 1988 Sep;18(1):7–10

Lack of correlation between the immunobead test and the enzyme-linked immunosorbent assay for sperm antibody detection. Clarke GN. **Am J Reprod Immunol Microbiol** 1988 Oct;18(2):44–6

Sperm antibodies and human fertilization. Clarke GN. **Am J Reprod Immunol Microbiol** 1988 Jun;17(2):65–71 (51 ref.)

Simple radioimmunobinding assay for quantitation of sperm antibodies of IgG immunoglobulin class. Clarke GN. **Am J Reprod Immunol Microbiol** 1988 Sep;18(1):1–6

Recent advances in defining human seminal plasma antigens using monoclonal antibodies. Isojima S. **Am J Reprod Immunol Microbiol** 1988 Aug;17(4):150–5

Antispermatozoal antibodies in three men with infertility due to congenital aplasia of the vasa deferentia. Kay DJ, et al. **Am J Reprod Immunol Microbiol** 1988 Jun;17(2):48–52

Studies on sperm survival and motility in the presence of cytotoxic sperm antibodies. Mathur S, et al. **Am J Reprod Immunol Microbiol** 1988 Jun;17(2):41–7

Special antigens on sperm from autoimmune infertile men. Mathur S, et al. **Am J Reprod Immunol Microbiol** 1988 May;17(1):5–13

Detection of antisperm antibodies on the surface of motile spermatozoa. Comparison of the immunobead binding technique (IBT) and the mixed antiglobulin reaction (MAR). Meinertz H, et al. **Am J Reprod Immunol Microbiol** 1988 Dec;18(4):120–3

Immunologic reactions involving sperm cells and preimplantation embryos. Menge AC, et al. **Am J Reprod Immunol Microbiol** 1988 Sep;18(1):17–20 (50 ref.)

Identification and characterization of a human sperm antigen corresponding to sperm-immobilizing antibodies. Saji F, et al. **Am J Reprod Immunol Microbiol** 1988 Aug; 17(4):128–33

Mechanisms of active suppression of the immune response to spermatozoa. Witkin SS. **Am J Reprod Immunol Microbiol** 1988 Jun;17(2):61–4 (36 ref.)

A direct immunofluorescence test for the detection of sperm surface bound antibodies. Comparison with sperm agglutination test, indirect IF test and MAR test. Francavilla F, et al. **Andrologia** 1988 Nov–Dec; 20(6):477–83

Infertility caused by antispermatozoal antibodies in the male experience from an intermittent high dose cortisone regimen. Fredricsson B. **Andrologia** 1988 May–Jun; 20(3):238–42

Characterization of two monoclonal antibodies raised against human testicular cells. Kurpisz M, et al. **Andrologia** 1988 Jul–Aug;20(4):304–10

Immunological usefulness of semen manipulation for artificial insemination homologous (AIH) in subjects with antisperm antibodies bound to sperm surface. Lenzi A, et al. **Andrologia** 1988 Jul–Aug;20(4):314–21

Identification of human spermatozoa antigens using monoclonal antibodies and the alkaline phosphatase anti-alkaline phosphatase-technique. Schöbel WA, et al. **Andrologia** 1989 Jan–Feb;21(1):35–41

Absence of BoLA class I antigens on bovine spermatozoa. Matoušek J, et al. **Anim Genet** 1989;20(1):65–70

The effects of antibody sperm-egg interaction. Alexander NJ. **Ann N Y Acad Sci** 1988;541:317–23

A computerized postcoital test sperm motility: comparison with clinical postcoital test and correlations with sperm antibodies. Daru J, et al. **Arch Androl** 1988;21(3):189–203

Antisperm antibodies detection with the immunobead test as viewed by TEM. Lenzi A, et al. **Arch Androl** 1988; 20(3):261–5

Sperm antibodies, semen quality, and male infertility. Pretorius E, et al. **Arch Androl** 1989;22(1):61–5

Effect of rapid dilution of semen on sperm-bound autoantibodies. Windt ML, et al. **Arch Androl** 1989; 22(3):227–31

Effect of sperm washing and swim-up on antibodies bound to sperm membrane: use of immunobead/sperm cervical mucus contact tests. Windt ML, et al. **Arch Androl** 1989; 22(1):55–9

Antigens recognized by monoclonal antibody to mouse acrosomal components differ in guinea pig spermatogenic cells and sperm. Gerton GL, et al. **Biol Reprod** 1988 Sep; 39(2):431–41

Post-vasectomy sperm autoimmunogens in the Lewis rat. Handley HH, et al. **Biol Reprod** 1988 Dec;39(5):1239–50

The influence of vasovasostomy on antisperm antibodies in rats. Herr JC, et al. **Biol Reprod** 1989 Feb;40(2):353–60

Characterization of baboon testicular antigens using monoclonal anti-sperm antibodies. Isahakia MA. **Biol Reprod** 1988 Nov;39(4):889–99

Clinical characteristics of subfertile men with antisperm antibodies. Iqbal PK, et al. **Br J Obstet Gynaecol** 1989 Jan; 96(1):107–10

Influence of antisperm antibodies on human sperm function. Aitken RJ, et al. **Br J Urol** 1988 Oct;62(4):367–73

Sperm auto-immunity associated with vasectomy, vasovasostomy and epididymovasostomy in Korean males. Lee HY, et al. **Clin Reprod Fertil** 1987 Dec;5(6):347–57

Relationship between the M42 antigen of mouse sperm and the acrosome reaction induced by ZP3. Leyton L, et al. **Dev Biol** 1989 Mar;132(1):174–8

Incorporation and dispersal of sperm surface antigens in plasma membranes of inseminated sea urchin (Arbacia punctulata) eggs and oocytes. Longo FJ. **Dev Biol** 1989 Jan;131(1):37–43

Detection of sperm-coating antigens immunologically related to a seminal protein in rat. Manco G, et al. **Eur J Cell Biol** 1988 Dec;47(2):270–4

The detection in human sera of antisperm antibodies reactive with FA-1, an evolutionarily conserved antigen, and with murine spermatozoa. Bronson RA, et al. **Fertil Steril** 1989 Sep;52(3):457–62

Oral immunization with sperm antigens: possible therapy for sperm antibodies? Congleton L, et al. **Fertil Steril** 1989 Jul;52(1):106–12

Correlation of sperm-bound immunoglobulins with impaired semen analysis in infertile men with varicoceles. Gilbert BR, et al. **Fertil Steril** 1989 Sep;52(3):469–73

Interrelationships among semen characteristics, antisperm antibodies, and cervical mucus penetration assays in infertile human couples. Menge AC, et al. **Fertil Steril** 1989 Mar;51(3):486–92

Clinical evaluation of the enzyme-linked immunosorbent assay (ELISA) kit for antisperm antibodies. Saji F, et al. **Fertil Steril** 1988 Oct;50(4):644–7

Antisperm antibodies [letter] Shulman S. **Fertil Steril** 1988 Dec;50(6):996–7

Ultrastructural mapping of a sperm plasma membrane autoantigen before and after the acrosome reaction. Esaguy N, et al. **Gamete Res** 1988 Apr;19(4):387–99

Inhibition of in vitro fertilization by mouse anti-mouse sperm sera and preliminary antigen identification. Hamilton MS, et al. **Gamete Res** 1987 Apr;16(4):311–7

Phagocytosis of sperm heads lacking the acrosomal process by unfertilized starfish oocytes. Kyozuka K, et al. **Gamete Res** 1988 Oct;21(2):127–34

Proteins of the acrosomal region in mouse sperm: immunological probes reveal post-testicular modifications. Lakoski K, et al. **Gamete Res** 1989 May;23(1):21–37

A protein family immunorelated to a sperm-binding protein and its regulation in human semen. Metafora S, et al. **Gamete Res** 1987 Mar;16(3):229–41

Effects of anti-sperm antibodies on human sperm ultrastructure and function. Bronson RA, et al. **Hum Reprod** 1989 Aug;4(6):653–7

In-vitro processing of sperm with autoantibodies and in-vitro fertilization results. de Almeida M, et al. **Hum Reprod** 1989 Jan;4(1):49–53

The SCMC test: a reliable monitor for antispermatozoal antibodies. Franken DR, et al. **Hum Reprod** 1988 Jul; 3(5):607–9

In vitro fertilization results from thirteen women with anti-sperm antibodies [letter] Harrison PE, et al. **Hum Reprod** 1988 Oct;3(7):922

Human sperm antigens corresponding to sperm-immobilizing antibodies in the sera of women with infertility of unknown cause: personal review of our recent studies. Isojima S. **Hum Reprod** 1989 Aug;4(6):605–12

In-vitro processing of sperm with autoantibodies: analysis of sperm populations. Jeulin C, et al. **Hum Reprod** 1989 Jan;4(1):44–8

Presence of sperm antibodies and association with viscosity of semen. Moulik S, et al. **Hum Reprod** 1989 Apr;4(3):290–1

Human antisperm antibodies. Gill TJ 3d. **Immunol Today** 1989 Mar;10(3):91

Production and characterization of monoclonal antibodies to human sperm specific antigens. Hegde UC, et al. **Indian J Exp Biol** 1988 Dec;26(12):917–21

Antigenicity on sperm surface of the rainbow trout Salmo gairdneri. Watanabe T, et al. **Indian J Exp Biol** 1988 May; 26(5):345–51

Seminal plasma & sperm antibody activity in vaginal fluid of infertile women. Gupta A, et al. **Indian J Med Res** 1988 Nov;88:421–6

Unexplained infertility and sperm antibodies. Suresh KP, et al. **Indian J Pathol Microbiol** 1987 Oct;30(4):361–7

Human seminal plasma suppresses delayed-type hypersensitivity responses to intravaginally deposited sheep red blood cells and sperm: separation of immunosuppressive factors. Lee HK, et al. **Int Arch Allergy Appl Immunol** 1989;88(4):412–9

Antisperm antibodies are more prevalent in men with low sperm motility. Barratt CL, et al. **Int J Androl** 1989 Apr; 12(2):110–16

Anejaculation following spinal cord injury does not induce sperm-agglutinating antibodies. Dahlberg A, et al. **Int J Androl** 1989 Feb;12(1):17–21

The incidence and influence upon fertility of antisperm antibodies in seminal fluid following vasectomy reversal. Matson PL, et al. **Int J Androl** 1989 Apr;12(2):98–103

Identification of sperm antigens that regulate fertility. Shaha C, et al. **Int J Androl** 1988 Dec;11(6):479–91

Immune factor and infertility. Chhabra S, et al. **Int J Fertil** 1989 Jul–Aug;34(4):259–61

Immunoperoxidase assay for detection of specific IgG and IgA antibodies to human spermatozoa in infertile women. Holcberg G, et al. **Int J Fertil** 1986 Mar–Apr;31(1):28–32, 39

Local hydrocortisone treatment of sperm-agglutinating antibodies in infertile women. Ulčová-Gallová Z, et al. **Int J Fertil** 1988 Nov–Dec;33(6):421–5

Characterization of sperm agglutinating monoclonal antibody and purification of the human sperm antigen. Yan YC, et al. **Int J Fertil** 1986 Mar–Apr;31(1):77–85

Monoclonal antibodies to a membrane glycoprotein induce the phosphorylation of histone H1 in sea urchin spermatozoa. Vacquier VD, et al. **J Cell Biol** 1988 Dec; 107(6 Pt 1):2021–7

Antibodies to rat Sertoli cell secretory proteins recognize antigenic sites in acrosome and tail of developing spermatids and sperm. Kierszenbaum AL, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):145–53

Changing localizations of site-specific sperm surface antigens during sea urchin fertilization. Nishioka D, et al.

J Exp Zool 1989 Jul;251(1):74–81

Results of in vitro fertilization in women with antisperm antibodies in serum, cervical mucus, and follicular fluid. Potashnik G, et al. J In Vitro Fert Embryo Transf 1988 Aug;5(4):199–201

Blocking effect of sperm immobilizing antibodies on sperm penetration of human zonae pellucidae. Tsukui S, et al. J In Vitro Fert Embryo Transf 1988 Jun;5(3):123–8

Monoclonal antibody localization of sperm surface antigen secreted by the epididymis of the baboon (Papio cynocephalus). Isahakia MA. J Reprod Fertil 1989 May; 86(1):51–8

Evaluation of a simplified adenosine triphosphate release cytotoxicity test for the detection of sperm antibodies in human serum. Hinting A, et al. J Reprod Immunol 1988 Jul;13(2):123–31

Sperm antibodies induced by anti-idiotype antibodies: a strategy in development of immunocontraceptive vaccines. Kuo CY, et al. J Reprod Immunol 1988 Aug;13(3):193–209

Effect of a monoclonal anti-mouse sperm antibody (OBF13) on the interaction of mouse sperm with zona-free mouse and hamster eggs. Okabe M, et al. J Reprod Immunol 1988 Aug;13(3):211–9

Association between recurrent spontaneous abortions and circulating IgG antibodies to sperm tails in women. Witkin SS, et al. J Reprod Immunol 1989 May;15(2):151–8

Reproducibility of the indirect immunobead assay for detecting sperm antibodies in serum. Franco JG Jr, et al. J Reprod Med 1989 Apr;34(4):259–63

Immunological status of patients before and after vasovasostomy as determined by the immunobead antisperm antibody test. Broderick GA, et al. J Urol 1989 Sep;142(3):752–5

Detection of testicular endocrine abnormalities and their correlation with serum antisperm antibodies in men following vasectomy. Fisch H, et al. J Urol 1989 May; 141(5):1129–32

The relationship of circulating antisperm antibodies to sperm surface antibodies in infertile men. Hellstrom WJ, et al. J Urol 1988 Nov;140(5):1039–44

IgG antisperm antibodies attached to sperm do not correlate with infertility following vasovasostomy. Newton RA. Microsurgery 1988;9(4):278–80

Antigenic homology between rat sperm tail polypeptides and Sertoli cell secretory proteins. Abdullah M, et al. Mol Cell Biochem 1988 Jun;81(2):165–76

HLA expression on sperm cell surface. Ohashi K, et al. Nippon Sanka Fujinka Gakkai Zasshi 1989 Apr;41(4):497–8

The biomorphological basis of antisperm immune reaction. Dondero F, et al. Prog Clin Biol Res 1989;296:249–54

Correlation of immune complexes with serum cytotoxic activity induced by antisperm cytophilic antibodies. Segal-Eiras A, et al. Rev Argent Microbiol 1984; 16(3):145–52

Seminal sialic acid in patients with auto-immunity to sperm [letter] du Toit D, et al. S Afr Med J 1988 Dec 3;74(11):591

Immune subfertility in men caused by anti-sperm antibodies. Hjort T. Scand J Urol Nephrol Suppl 1988;110:53–8

[Monoclonal antibodies Ki-Sp II-13 and VI-2 react with surface membrane of human spermatozoa.] Mettler L, et al. Andrologia 1989 Jan-Feb;21(1):55–65 (Eng. Abstr.) (Ger)

[Detection of sperm antibodies using the plate agglutination test and direct IgG antiglobulin reaction] Neumann J. Dermatol Monatsschr 1988;174(10):628–33 (Eng. Abstr.) (Ger)

[Spermatozoal antibodies in cervical mucus and in the luminal fluid of the uterus in sterile patients] Maas DH, et al. Geburtshilfe Frauenheilkd 1989 Mar;49(3):248–51 (Eng. Abstr.) (Ger)

[Immunologically induced fertility problems in man] Maroni E. Helv Chir Acta 1988 Jul;55(3):255–63 (Eng. Abstr.) (Ger)

[Incidence and significance of humoral antibodies in females with recurrent spontaneous abortions] Donat H, et al. Zentralbl Gynakol 1989;111(12):811–5 (Eng. Abstr.) (Ger)

[Cryptorchism and anti-spermatozoal autoimmunity] Dondero F, et al. Minerva Urol Nefrol 1988 Jul-Sep; 40(3):145–9 (Eng. Abstr.) (Ita)

[Identification of a human sperm antigen to infertile women's serum and follicular fluid with high sperm immobilizing activity] Ohashi K, et al. Nippon Sanka Fujinka Gakkai Zasshi 1989 Apr; 41(4):467–72 (Eng. Abstr.) (Jpn)

[Detection of anti-spermatozoa antibodies by the immunobead assay (IBA) in sperm autoagglutination] Radwan J, et al. Ginekol Pol 1988 Oct;59(10):628–31 (Eng. Abstr.) (Pol)

[2 forms of antigamete immunity in infertility of inflammatory origin and the level of regulatory T-lymphocytes] Chernyahov VP, et al. Akush Ginekol (Mosk) 1988 Aug; (8):34–7 (Eng. Abstr.) (Rus)

METABOLISM

Detection of cholecystokinin in spermatogenic cells. Persson H, et al. Acta Physiol Scand 1988 Dec;134(4):565–6

Correlation of human spermatozoa heparin binding with the zona-free hamster egg in vitro penetration assay. Vasquez JM, et al. Am J Obstet Gynecol 1989 Jan;160(1):20–6

An investigation on lipoperoxidation mechanisms in boar spermatozoa. Comaschi V, et al. Biochem Biophys Res Commun 1989 Feb 15;158(3):769–75

Polyphosphoinositide breakdown and subsequent exocytosis in the Ca2+/ionophore-induced acrosome reaction of mammalian spermatozoa. Roldan ER, et al. Biochem J 1989 Apr 15;259(2):397–406

Transport mechanism for calcium and phosphate in ram spermatozoa. Zarca A, et al. Biochim Biophys Acta 1988 Oct 20;944(3):351–8

Isolation of the boar sperm acrosin peptide released during the conversion of alpha-form into beta-form. Zelezná B, et al. Biol Chem Hoppe Seyler 1989 Apr;370(4):323–7

Relationship between two types of mouse sperm surface sites that mediate binding of sperm to the zona pellucida. Benau DA, et al. Biol Reprod 1988 Sep;39(2):235–44

Zona pellucida-induced acrosome reaction in boar sperm. Berger T, et al. Biol Reprod 1989 Mar;40(3):525–30

Identification of a major secretory glycoprotein from rat epididymis: interaction with spermatozoa. Iusem ND, et al. Biol Reprod 1989 Feb;40(2):307–16

Evidence for the regulation of fatty acid utilization in human sperm by docosahexaenoic acid. Jones RE, et al. Biol Reprod 1988 Aug;39(1):76–80

Spermatogenic cell-somatic cell interactions are required for maintenance of spermatogenic cell glutathione. Li LY, et al. Biol Reprod 1989 Feb;40(2):317–31

Dynamics of the thiol status of rat spermatozoa during maturation: analysis with the fluorescent labeling agent monobromobimane. Shalgi R, et al. Biol Reprod 1989 May; 40(5):1037–45

Calcium uptake by bovine epididymal spermatozoa is regulated by the redox state of the mitochondrial pyridine nucleotides. Vijayaraghavan S, et al. Biol Reprod 1989 Apr; 40(4):744–51

Phorbol esters stimulate cyclic adenosine 3',5'-monophosphate accumulation in hamster spermatozoa during in vitro capacitation. Visconti PE, et al. Biol Reprod 1989 Feb;40(2):223–31

Highly cooperative binding to DNA by a histone-like, sperm-specific protein from Spisula solidissima. Libertini LJ, et al. Biopolymers 1988 Sep;27(9):1459–77

Predicting the fertilising ability of avian semen: the development of an objective colourimetric method for assessing the metabolic activity of fowl spermatozoa. Chaudhuri D, et al. Br Poult Sci 1988 Dec;29(4):837–45

Predicting the fertilising ability of avian semen: comparison of a simple colourimetric test with other methods for predicting the fertilising ability of fowl semen. Chaudhuri D, et al. Br Poult Sci 1988 Dec;29(4):847–51

Quantitation of bovine sperm cytoplasmic calcium with Quin-2 and Fura-2: evidence that external calcium does not have direct access to the sperm cytoplasm. Vijayaraghavan S, et al. Cell Calcium 1989 May-Jun; 10(4):241–53

Radiorespirometric studies of carbohydrate metabolism by washed spermatozoa of various species. Kraft LA, et al. Comp Biochem Physiol [B] 1978;60(3):233–8

The amino terminal sequence of sea urchin sperm histone H1 and its phosphorylation by egg cytosol. Porter DC, et al. Comp Biochem Physiol [B] 1989;92(2):381–4

Gossypol inhibition of Ca++ uptake and Ca++-ATPase in human ejaculated spermatozoal plasma membrane vesicles. Kanwar U, et al. Contraception 1989 Apr; 39(4):431–45

Mitochondrial gene expression in male germ cells of the mouse. Alcivar AA, et al. Dev Biol 1989 Oct;135(2):263–71

Egg jelly induces the phosphorylation of histone H3 in spermatozoa of the sea urchin Arbacia punctulata. Vacquier VD, et al. Dev Biol 1989 May;133(1):111–8

Human oviductal fluid (hOF) proteins. IV. Evidence for hOF proteins binding to human sperm. Lippes J, et al. Fertil Steril 1989 Jan;51(1):89–94

Role of glutathione peroxidase in protecting mammalian spermatozoa from loss of motility caused by spontaneous lipid peroxidation. Alvarez JG, et al. Gamete Res 1989 May; 23(1):77–90

Binding of chemotactic peptide to the outer surface and to whole human spermatozoa with different affinity states. Ballesteros LM, et al. Gamete Res 1988 Jun;20(2):233–9

Xenopus spermatozoon: is there any correlation between motility and oxygen consumption? Bernardini G, et al. Gamete Res 1988 Dec;21(4):403–8

Cholesterol efflux from bovine sperm. I. Induction of the acrosome reaction with lysophosphatidylcholine after reducing sperm cholesterol. Ehrenwald E, et al. Gamete Res 1988 Jun;20(2):145–57

Cholesterol efflux from bovine sperm: II. Effect of reducing sperm cholesterol on penetration of zona-free hamster and in vitro matured bovine ova. Ehrenwald E, et al. Gamete Res 1988 Aug;20(4):413–20

Metabolic and surface events in fertilization. Fraser LR, et al. Gamete Res 1988 Aug;20(4):491–519 (165 ref.)

Dilauroylphosphatidylcholine liposome effects on the acrosome reaction and in vitro penetration of zona-free hamster eggs by bull sperm: II. A fertility assay for frozen-thawed semen. Graham JK, et al. Gamete Res 1987 Feb;16(2):147–58

Dilauroylphosphatidylcholine liposome effects on the acrosome reaction and in vitro penetration of zona-free hamster eggs by bull sperm: I. A fertility assay for fresh semen. Graham JK, et al. Gamete Res 1987 Feb; 16(2):133–45

Identification of sterol acceptors that stimulate cholesterol efflux from human spermatozoa during in vitro capacitation. Langlais J, et al. Gamete Res 1988 Jun; 20(2):185–201

Incorporation and fate of specific sperm plasma membrane components following insemination as revealed by ultrastructural immunocytochemistry. Longo FJ. Gamete Res 1989 Jun;23(2):215–28

Heparin and glutathione: physiological decondensing agents of human sperm nuclei. Reyes R, et al. Gamete Res 1989 May;23(1):39–47

Cytochemical study of intracellular calcium in hamster spermatozoa during the acrosome reaction. Ruknudin A. Gamete Res 1989 Apr;22(4):375–84

Phospholipid composition of isolated guinea pig sperm outer acrosomal membrane and plasma membrane during capacitation in vitro. Stojanoff A, et al. Gamete Res 1988 Nov;21(3):297–311

An influx of extracellular calcium is required for initiation of the human sperm acrosome reaction induced by human follicular fluid. Thomas P, et al. Gamete Res 1988 Aug; 20(4):397–411

Low molecular weight factor in bovine caudal epididymal fluid that stimulates calcium uptake in caput spermatozoa. Vijayaraghavan S, et al. Gamete Res 1988 Jul;20(3):343–52

Masking of sperm maturation antigen by sialic acid in the epididymis of the mouse. An immunohistochemical study. Toshimori K, et al. Histochemistry 1988;90(3):195–200

The spontaneous acrosome reaction of human spermatozoa incubated in vitro. Mortimer D, et al. Hum Reprod 1989 Jan;4(1):57–62

Sperm binding activity of rat uterine agglutinin. Chowdhury M, et al. Indian J Biochem Biophys 1988 Feb-Apr; 25(1-2):197–9

Influence of epididymal maturation on cyclic AMP levels in hamster spermatozoa. White DR, et al. Int J Androl 1989 Feb;12(1):29–43

Biotransformation of N-substituted aromatic compounds in mammalian spermatozoa. Nonoxidative formation of N-hydroxy-N-arylacetamides from nitroso aromatic compounds. Yoshioka T, et al. J Biol Chem 1989 Jul 25; 264(21):12432–8

Effects of in vitro incubation on a zona binding site found on murine spermatozoa. Boettiger H, et al. J Exp Zool 1989 Jan;249(1):90–8

Equilibrium binding of spermine and histamine to salmon sperm DNA and poly(dGdC). Winkle SA, et al. J Pharm Pharmacol 1988 Nov;40(11):809–11

Relationship between heparin binding characteristics and ability of human spermatozoa to penetrate hamster ova. Lalich RA, et al. J Reprod Fertil 1989 May;86(1):297–302

Cytochemical detection of receptors specific for N-linked oligosaccharides of glycoproteins in the membrane of the human spermatozoon and their distribution in the different zones of that membrane. de Cerezo JM, et al. J Reprod Immunol 1988 Dec;14(3):213–23

The equivocal presence of nuclear androgen binding proteins in mammalian spermatids and spermatozoa. Frankel AI, et al. J Steroid Biochem 1989 Jul;33(1):71–9

Concanavalin A binding sites on the surface of Drosophila melanogaster sperm: a fluorescence and ultrastructural study. Perotti ME, et al. J Ultrastruct Mol Struct Res 1988 Aug;100(2):173–82

Expression of heat shock proteins by isolated mouse spermatogenic cells. Allen RL, et al. Mol Cell Biol 1988 Aug;8(8):3260–6

Nucleotide sequence of the gene encoding zona pellucida glycoprotein ZP3—the mouse sperm receptor. Kinloch RA, et al. Nucleic Acids Res 1989 Apr 11;17(7):2861–3

Transcriptional activation of Xenopus class III genes in chromatin isolated from sperm and somatic nuclei. Wolffe AP. Nucleic Acids Res 1989 Jan 25;17(2):767–80

Magnetic resonance studies of intact human spermatozoa. Bahl S, et al. Physiol Chem Phys Med NMR 1988; 20(3):183–8

Histological study on seminal plasma absorption and spermiophagy in the epididymal region of domestic fowl. Nakai M, et al. Poult Sci 1989 Apr;68(4):582–9

Seminal proteins binding to spermatozoa. Aumüller G, et al. Prog Clin Biol Res 1989;296:241–8

[Interaction of disperse silica with the surface of bovine reproductive cell and seminal plasma] Galagan NP, et al. Ukr Biokhim Zh 1988 Sep-Oct;60(5):67–71 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Interaction of human immunodeficiency virus with human sperm in vitro. Bagasra O, et al. J Acquir Immune Defic Syndr 1988;1(5):431–5

Do sperm spread the AIDS virus? [news] Marx JL. Science 1989 Jul 7;245(4913):30

PARASITOLOGY

[Trichomonas vaginalis, epithelial cells, spermatozoa, and immunologic reactions. How and why an infection persists unchanged despite knowing an adequate drug therapy] Granucci C, et al. G Ital Chemioter 1988 Jan-Dec; 35(1-3):75–81 (Eng. Abstr.) (Ita)

PATHOLOGY

Seminal tract inflammation and male infertility. Correlations between leukospermia and clinical history, prostatic

cytology, conventional semen parameters, sperm viability and seminal plasma protein composition. Colpi GM, et al. **Acta Eur Fertil** 1988 Mar–Apr;19(2):69–77

Sperm motile efficiency (SME) of fresh spermatozoa in a hypotonic medium correlates with their cryosurvival in fertile men and infertility patients (predicting test). Glander HJ, et al. **Andrologia** 1989 Jul–Aug;21(4):363–9

Survival of human sperm following controlled- and noncontrolled-rate cryopreservation. Hammitt DG, et al. **Andrologia** 1989 Jul–Aug;21(4):311–7

Transient acrosomal hypoplasia of spermatozoa and male fertility. Sauer MV, et al. **Arch Androl** 1989;22(1):95–8

Pattern of compartmentation in human seminiferous tubules showing dislocation of spermatogonia. Bergmann M, et al. **Cell Tissue Res** 1989 Apr;256(1):183–90

Some studies of the antischistosomal drug, metrifonate. Shehata MM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):173–4

The effects of long term methotrexate therapy on the gonadal function and morphology. Koehler M, et al. **Endokrynol Pol** 1988;39(1):33–40

Use of a monoclonal antibody to evaluate integrity of the plasma membrane of stallion sperm. Blach EL, et al. **Gamete Res** 1988 Nov;21(3):233–41

Stability of sperm characteristics in men with disturbances in sperm quality. Purvis K, et al. **Int J Androl** 1989 Jun; 12(3):171–8

Diagnostic value of sperm function tests and routine semen analyses in fertile and infertile men. Wang C, et al. **J Androl** 1988 Nov–Dec;9(6):384–9

The number of spermatogonia in various congenital testicular disorders. Saito S, et al. **J Urol** 1989 May;141(5):1166–8

[The functioning of cryptorchid testes in puberty and adolescence] Raboch J, et al. **Cesk Pediatr** 1989 Jan; 44(1):33–5 **(Cze)**

[Reduced numbers of germinal cells in prepubertal patients with ectopic testes] Moll M, et al. **Ugeskr Laeger** 1988 Oct 10;150(41):2467–9 (Eng. Abstr.) **(Dan)**

[The alteration of the motility rate of human spermatozoa and relationship to morphological quality.] Matschulat AN, et al. **Andrologia** 1989 Jan–Feb;21(1):83–92 (Eng. Abstr.) **(Ger)**

[Quantitative detection of spermatogenesis cells and qualitative assessment of meiosis stages in the ejaculate of normo- and oligozoospermia] Weise W, et al. **Zentralbl Gynakol** 1988;110(14):877–83 (Eng. Abstr.) **(Ger)**

[Four cases of sperm invasion] Yamaguchi S, et al. **Hinyokika Kiyo** 1989 Feb;35(2):353–5 (Eng. Abstr.) **(Jpn)**

[Cytologic study of spermatogenesis in rats exposed to hypergravitation] Balkova. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):81–2 **(Rus)**

[Cyto–physiologic indicators of the status of the reproductive organs of male rats after 7-day immobilization stress and 7-day hypokinesia] Balkova OV. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):56–9 (Eng. Abstr.) **(Rus)**

[Sperm characterization in patients with diabetes mellitus suffering from sexual disorders] Kozlov GI, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):6–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Microphotometric study on cytochrome oxidase and lactate dehydrogenase activities in mouse spermatozoa during maturation and in vivo and in vitro capacitation. Ferrandi B, et al. **Acta Histochem (Jena)** 1989;85(1):1–8

Lipid peroxides, spermatozoa quality and activity of glutathione peroxidase in bull semen. Slaweta R, et al. **Acta Physiol Pol** 1988 May–Jun;39(3):207–14

Segregation analysis of translocations by the study of human sperm chromosome complements. Martin RH. **Am J Hum Genet** 1989 Apr;44(4):461–3

Direct segregation analysis of reciprocal translocations: a study of 283 sperm karyotypes from four carriers. Pellestor F, et al. **Am J Hum Genet** 1989 Apr;44(4):464–73

Bacteriology of the cervix in cases of infertility: effect on human and animal spermatozoa and role of elastase. Kaur M, et al. **Am J Reprod Immunol Microbiol** 1988 May; 17(1):14–7

Effect of lipid peroxidation upon human spermatic adenosinetriphosphate (ATP). Relationship with motility, velocity and linearity of the spermatozoa. Calamera JC, et al. **Andrologia** 1989 Jan–Feb;21(1):48–54

Intra-individual variation of sperm velocity, linearity, lateral head displacement and beat frequency in healthy volunteers. Knuth UA, et al. **Andrologia** 1988 May–Jun; 20(3):243–8

The role of in vitro fertilization in male infertility. Acosta A, et al. **Ann N Y Acad Sci** 1988;541:297–309

Mechanisms of signal transduction in mouse spermatozoa. Kopf GS. **Ann N Y Acad Sci** 1989;564:289–302

Effect of steroid hormones and capacitation on membrane potential of human spermatozoa. Calzada L, et al. **Arch Androl** 1988;21(2):121–8

Human spermatozoal nuclear maturity in normozoospermia and asthenozoospermia. Colleu D, et al. **Arch Androl** 1988; 21(3):155–62

Increased acrosome-reaction inducing activity of glycosaminoglycans by partial hydrolysis. Delgado NM, et al. **Arch Androl** 1987;19(3):223–8

Regulation of mammalian sperm motility. Lindemann CB, et al. **Arch Androl** 1989;23(1):1–22 (165 ref.)

ATP content in human semen and sperm quality. Megory E, et al. **Arch Androl** 1987;19(3):243–7

Artificial insemination with husband's sperm (AIH): techniques for sperm selection. Pardo M, et al. **Arch Androl** 1989;22(1):15–27 (51 ref.)

Effect of washing and suspension on penetration of human sperm into bovine cervical mucus. Shoham Z, et al. **Arch Androl** 1987;19(3):261–7

Intrauterine insemination with washed sperm. Szöllösi J, et al. **Arch Androl** 1989;23(1):71–6

Motility, heat, and lactate production in ejaculated bovine sperm. Hammerstedt RH, et al. **Arch Biochem Biophys** 1988 Oct;266(1):111–23

Anthraniloyl ATP, a fluorescent analog of ATP, as a substrate for dynein ATPase and flagellar motility. Inaba K, et al. **Arch Biochem Biophys** 1989 Oct;274(1):209–15

Remodeling of chromatin during male pronucleus formation in the sea urchin Tetrapygus niger. Imschenetzky M, et al. **Arch Biol Med Exp (Santiago)** 1988 Dec;21(3–4):409–16

Intrauterine insemination with washed capacitated sperm cells in the treatment of male factor, cervical factor and unexplained infertility. Mansour RT, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):151–4

Identification of calcium conducting channels in isolated boar sperm plasma membranes. Cox T, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):162–8

Coupling of a proton pump with superoxide radical–superoxide dismutase system in maturing mammalian spermatozoa and its association with sperm motility. Kumar GP, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):771–5

Steroid induced exocytosis: the human sperm acrosome reaction. Osman RA, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):828–33

Egg jelly triggers a calcium influx which inactivates and is inhibited by calmodulin antagonists in the sea urchin sperm. Guerrero A, et al. **Biochim Biophys Acta** 1989 Mar 27; 980(1):109–16

Purification and characterization of an anti-sticking factor from goat epididymal plasma that inhibits sperm—glass and sperm—sperm adhesions. Roy N, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):114–22

The effect of moderate epididymal aging on the kinetics of the acrosome reaction and fertilizing ability of hamster spermatozoa. Cuasnicu PS, et al. **Biol Reprod** 1989 May; 40(5):1067–73

Effect of daily spermatozoan production but not age on transit time of spermatozoa through the human epididymis. Johnson L, et al. **Biol Reprod** 1988 Nov;39(4):812–7

Temporal changes in motility parameters related to acrosomal status: identification and characterization of populations of hyperactivated human sperm. Robertson L, et al. **Biol Reprod** 1988 Nov;39(4):797–805

Mechanics of sperm–egg interaction at the zona pellucida. Baltz JM, et al. **Biophys J** 1988 Oct;54(4):643–54

Oviducal storage of spermatozoa in the turkey: its relevance to artificial insemination technology. Bakst MR. **Br Poult Sci** 1989 Jun;30(2):423–9 (30 ref.)

Current role of semen storage and artificial insemination in the turkey industry. van Wambeke F, et al. **Br Poult Sci** 1989 Jun;30(2):461–9

Physiological changes in fowl and turkey spermatozoa during in vitro storage. Wishart GJ. **Br Poult Sci** 1989 Jun; 30(2):443–54 (63 ref.)

Dangerous liaisons: spermatozoa as natural vectors for foreign DNA? Birnstiel ML, et al. **Cell** 1989 Jun 2; 57(5):701–2 (10 ref.)

Sperm cells as vectors for introducing foreign DNA into eggs: genetic transformation of mice. Lavitrano M, et al. **Cell** 1989 Jun 2;57(5):717–23

95 kd sperm proteins bind ZP3 and serve as tyrosine kinase substrates in response to zona binding. Leyton L, et al. **Cell** 1989 Jun 30;57(7):1123–30

A candidate gene family for the mouse t complex responder (Tcr) locus responsible for haploid effects on sperm function. Schimenti J, et al. **Cell** 1988 Oct 7;55(1):71–8

Physiological inducers of the acrosome reaction. Hoshi M, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:19–24 (15 ref.)

2-Chloro adenosine triphosphate as substrate for sea urchin axonemal movement. Omoto CK, et al. **Cell Motil Cytoskeleton** 1989;13(4):239–44

Hamster sperm penetration of the zona pellucida: kinematic analysis and mechanical implications. Drobnis EZ, et al. **Dev Biol** 1988 Nov;130(1):311–23

An adhesion-associated agonist from the zona pellucida activates G protein-promoted elevations of internal Ca2+ and pH that mediate mammalian sperm acrosomal exocytosis. Florman HM, et al. **Dev Biol** 1989 Sep; 135(1):133–46

Evidence that the voltage-dependent component in the fertilization process is contributed by the sperm. Iwao Y, et al. **Dev Biol** 1989 Aug;134(2):446–51

Relationship between the M42 antigen of mouse sperm and the acrosome reaction induced by ZP3. Leyton L, et al. **Dev Biol** 1989 Mar;132(1):174–8

Acrosome intact and acrosome-reacted human sperm can initiate binding to the zona pellucida. Morales P, et al. **Dev Biol** 1989 Jun;133(2):385–92

Sperm from tw32/+ mice: capacitation is normal, but hyperactivation is premature and nonhyperactivated sperm are slow. Olds-Clarke P. **Dev Biol** 1989 Feb;131(2):475–82

Fertilization in Discoglossus pictus (Anura). I. Sperm–egg interactions in distinct regions of the dimple and occurrence of a late stage of sperm penetration. Talevi R, et al. **Dev Biol** 1988 Dec;130(2):524–35

Microtubule and centrosome distribution during sheep fertilization. Le Guen P, et al. **Eur J Cell Biol** 1989 Apr; 48(2):239–49

Hypoosmotic sperm swelling test as a sperm function test [letter] Barratt CL, et al. **Fertil Steril** 1989 Feb;51(2):365–6

Pretreatment of sperm with human follicular fluid for borderline male infertility. Blumenfeld Z, et al. **Fertil Steril** 1989 May;51(5):863–8

Presence of immunoreactive beta-endorphin and calcitonin in human seminal plasma, and their relation to sperm physiology. Davidson A, et al. **Fertil Steril** 1989 May; 51(5):878–80

Induction of the human sperm acrosome reaction by human oocytes. De Jonge CJ, et al. **Fertil Steril** 1988 Dec; 50(6):949–53

The clinical value of conventional semen analysis. Dunphy BC, et al. **Fertil Steril** 1989 Feb;51(2):324–9

The relationship of sperm parameters to cycle fecundity in superovulated women undergoing intrauterine insemination. Horvath PM, et al. **Fertil Steril** 1989 Aug; 52(2):288–94

Success rate in gamete intrafallopian transfer using low and high concentrations of washed spermatozoa. Khan I, et al. **Fertil Steril** 1988 Dec;50(6):922–7

A sperm-zona pellucida binding test and in vitro fertilization. Liu DY, et al. **Fertil Steril** 1989 Aug;52(2):281–7

A human sperm-zona pellucida binding test using oocytes that failed to fertilize in vitro. Liu DY, et al. **Fertil Steril** 1988 Nov;50(5):782–8

Semen manipulation: improved sperm recovery and function with a two-layer Percoll gradient. McClure RD, et al. **Fertil Steril** 1989 May;51(5):874–7

Hemizona assay: assessment of sperm dysfunction and prediction of in vitro fertilization outcome. Oehninger S, et al. **Fertil Steril** 1989 Apr;51(4):665–70

Circannual rhythms of sperm parameters of fertile men. Saint Pol P, et al. **Fertil Steril** 1989 Jun;51(6):1030–3

Some thoughts on the postcoital test. Taymor ML, et al. **Fertil Steril** 1988 Nov;50(5):702–3

Acrosome reaction of human spermatozoa in zona-free hamster egg penetration test. Yang YS, et al. **Fertil Steril** 1988 Dec;50(6):954–9

Failure of spermatozoa from T/t mice to fertilize in vitro is overcome by zona drilling. Ahmad T, et al. **Gamete Res** 1989 Apr;22(4):369–73

Modification of the zona-free hamster ova bioassay of boar sperm fertility and correlation with in vivo fertility. Berger T, et al. **Gamete Res** 1989 Apr;22(4):385–97

Behavior of sperm nuclei in intact and bisected metaphase II mouse oocytes fertilized in the presence of colcemid. Borsuk E, et al. **Gamete Res** 1988 Jul;20(3):365–76

Kinetics of spontaneous and induced acrosomal loss in human sperm incubated under capacitating and noncapacitating conditions. Byrd W, et al. **Gamete Res** 1989 Jan; 22(1):109–22

Effect of liquid storage and cryopreservation of boar spermatozoa on acrosomal integrity and the penetration of zona-free hamster ova in vitro. Clarke RN, et al. **Gamete Res** 1987 Mar;16(3):193–204

Impaired ability of human spermatozoa to penetrate zona-free hamster oocytes: is a postacrosomal sheath anomaly involved? Courtot AM, et al. **Gamete Res** 1987 Jun;17(2):145–56

Sperm entry into zona-free oocytes in the hamster oviduct: implications for the mechanisms of acrosome reaction induction. Cuasnicu PS, et al. **Gamete Res** 1988 Sep; 21(1):85–91

The acrosome reaction in spermatozoa of the grey-headed flying fox (Pteropus poliocephalus: Chiroptera) exposes barbed subacrosomal material. Cummins JM, et al. **Gamete Res** 1988 Sep;21(1):11–22

Homospermic versus heterospermic insemination of zona-free hamster eggs to assess fertility of fluorochrome-labeled acrosome-reacted bull spermatozoa. Davis AP, et al. **Gamete Res** 1987 Aug;17(4):343–54

Separation of motile human spermatozoa by means of a glass bead column. Daya S, et al. **Gamete Res** 1987 Aug; 17(4):375–80

Assessment of the viability and fertilizing potential of cryopreserved bovine spermatozoa using dual fluorescent staining and two-flow cytometric systems. Ericsson SA, et al. **Gamete Res** 1989 Apr;22(4):355–68

Ultrastructural mapping of a sperm plasma membrane autoantigen before and after the acrosome reaction. Esaguy N, et al. **Gamete Res** 1988 Apr;19(4):387–99

Effects of in utero and in vitro incubation on the lipid-bound fatty acids and sterols of porcine spermatozoa. Evans RW, et al. **Gamete Res** 1987 Oct;18(2):153–62

Continuous live-dead discrimination of ram sperm during freezing. Fiser PS, et al. **Gamete Res** 1989 Mar;22(3):301–5

Strontium supports capacitation and the acrosome reaction in mouse sperm and rapidly activates mouse eggs. Fraser LR. **Gamete Res** 1987 Dec;18(4):363–74

Gamete processing in an environmental chamber: effect on in vitro fertilization outcome. Gwatkin RB, et al. **Gamete Res** 1989 Jun;23(2):229–32

The role of membrane-active lipids in the protection of ram

spermatozoa during cooling and storage. Holt WV, et al. **Gamete Res** 1988 Jan;19(1):77–89
Boar sperm surface glycoproteins: isolation, localization, and temporal expression during spermatogenesis. Klint M, et al. **Gamete Res** 1987 Jun;17(2):173–90
Ultrastructural localization of labeled acrosomal glycoproteins during in vivo fertilization in the rabbit. Kopecný V, et al. **Gamete Res** 1987 May;17(1):35–42
Phagocytosis of sperm heads lacking the acrosomal process by unfertilized starfish oocytes. Kyozuka K, et al. **Gamete Res** 1988 Oct;21(2):127–34
Fertilization cone formation in starfish oocytes: the role of the egg cortex actin microfilaments in sperm incorporation. Kyozuka K, et al. **Gamete Res** 1988 Jul;20(3):275–85
Sperm–engulfing response of sea urchin egg surfaces inseminated with acrosome–reacted starfish sperm. Kyozuka K, et al. **Gamete Res** 1988 Oct;21(2):169–77
Fertilization and development of mouse eggs injected under the zona pellucida with single spermatozoa treated to induce the acrosome reaction. Lacham O, et al. **Gamete Res** 1989 Jun;23(2):233–43
Fertilizing potential of acrosome–defective sperm following microsurgical injection into eggs. Lanzendorf S, et al. **Gamete Res** 1988 Apr;19(4):329–37
In vitro fertilization of hamster and human oocytes by microinjection of human sperm. Lassalle B, et al. **Gamete Res** 1987 Jan;16(1):69–78
Human sperm injection into the perivitelline space (SI–PVS) of hamster oocytes: effect of sperm pretreatment by calcium–ionophore A23187 and freezing–thawing on the penetration rate and polyspermy. Lassalle B, et al. **Gamete Res** 1988 Jul;20(3):301–11
A major secretory protein from rat seminal vesicle binds ejaculated spermatozoa. Manco G, et al. **Gamete Res** 1988 Sep;21(1):71–84
Activation of Ca2+ channels during the acrosome reaction of sea urchin sperm is inhibited by inhibitors of chymotrypsin–like proteases. Matsumura K, et al. **Gamete Res** 1989 Jul;23(3):255–66
Effect of follicle somatic cells during pig oocyte maturation on egg penetrability and male pronucleus formation. Mattioli M, et al. **Gamete Res** 1988 Jun;20(2):177–83
Effect of in vitro storage of bovine spermatozoa on acrosomal integrity, proteolytic activity, binding, and initiation of penetration of oocytes. Miller BJ, et al. **Gamete Res** 1988 May;20(1):53–65
Phosphodiesterase activity of mouse sperm incubated under conditions that modulate fertilizing potential in vitro. Monks NJ, et al. **Gamete Res** 1987 Sep;18(1):85–96
Visualization and characterization of the acrosome reaction of human spermatozoa by immunolocalization with monoclonal antibody. Moore HD, et al. **Gamete Res** 1987 Jul;17(3):245–9
A computer–assisted assay for mouse sperm hyperactivation demonstrates that bicarbonate but not bovine serum albumin is required. Neill JM, et al. **Gamete Res** 1987 Oct; 18(2):121–40
Human sperm nuclei can transform into condensed chromosomes in Xenopus egg extracts. Ohsumi K, et al. **Gamete Res** 1988 May;20(1):1–9
Genetic analysis of sperm function in fertilization. Olds–Clarke P. **Gamete Res** 1988 Jun;20(2):241–64 (185 ref.)
Apparent densities of spermatozoa of various mammalian species. Oshio S. **Gamete Res** 1988 Jun;20(2):159–64
Changes of elemental concentrations around/on the rat sperm plasma membrane during maturation in the male genital tract. Ozawa Y, et al. **Gamete Res** 1987 Dec;18(4):311–8
Sperm–sperm associations in the loris epididymis. Phillips DM, et al. **Gamete Res** 1987 Sep;18(1):17–25
Spontaneous continuous release of spermatozoa and its predawn surge in male passerine birds. Quay WB. **Gamete Res** 1987 Jan;16(1):83–92
Effects of exposing bovine sperm to bovine serum albumin, or freeze–thawing, on sperm–bound amidase activity. Schenk JL, et al. **Gamete Res** 1987 Jul;17(3):213–9
Status of the rat acrosome during sperm–zona pellucida interactions. Shalgi R, et al. **Gamete Res** 1989 Jan; 22(1):1–13
Partial characterization of a fraction from human follicular fluid that initiates the human sperm acrosome reaction in vitro. Siiteri JE, et al. **Gamete Res** 1988 May;20(1):25–42
Susceptibility of epididymal boar sperm to cold shock and protective action of phosphatidylcholine. Simpson AM, et al. **Gamete Res** 1987 Aug;17(4):355–73
Interactions of aged gametes: in vitro fertilization using in vitro–aged sperm and in vivo–aged ova in the mouse. Smith AL, et al. **Gamete Res** 1987 Jan;16(1):47–56
Different outcomes of sperm competition in right and left sides of the female reproductive tract revealed by thymidine–3H–labeled spermatozoa in the rat. Spinka M. **Gamete Res** 1988 Nov;21(3):313–21
Detection of acrosome–reacted toad sperm based on specific lectin binding to the inner acrosomal membrane. Takamune K. **Gamete Res** 1987 Nov;18(3):215–33
Epididymal sperm profiles in young adult, middle–aged, and testosterone–supplemented old rats. Taylor GT, et al. **Gamete Res** 1988 Apr;19(4):401–9
Gamete membrane fusion in hamster spermatozoa with reacted equatorial segment. Vigil P. **Gamete Res** 1989 Jun; 23(2):203–13
Zona pellucida penetration assay for capacitation of bovine sperm. Wheeler MB, et al. **Gamete Res** 1987 Nov; 18(3):237–50
Purification of the sperm–binding factor and identification of a sperm attack molecule from the egg of the sea urchin, Hemicentrotus pulcherrimus. Yoshida M, et al. **Gamete Res** 1987 Sep;18(1):1–16
Changes in binding of a 27–kilodalton chimpanzee cauda epididymal protein glycoprotein component to chimpanzee sperm. Young LG, et al. **Gamete Res** 1987 Oct;18(2):163–78
Ultrastructural studies of the early events of the human sperm acrosome reaction as initiated by human follicular fluid. Yudin AI, et al. **Gamete Res** 1988 May;20(1):11–24
Starfish sperm–oocyte jelly binding triggers functional changes in cortical granules. A study using acid phosphatase and ruthenium red ultrastructural histochemistry. Sousa M, et al. **Histochemistry** 1989; 90(5):353–7
The hypo–osmotic swelling test and the sperm mucus penetration test in determining fertilization of the human oocyte. Barratt CL, et al. **Hum Reprod** 1989 May;4(4):430–4
The gamete membrane fusion test to assay the fertilizing ability of human spermatozoa. Barros C, et al. **Hum Reprod** 1988 Jul;3(5):637–44
An evaluation of semen analysis and in–vitro tests of sperm function in the prediction of the outcome of intrauterine AIH. Bolton VN, et al. **Hum Reprod** 1989 Aug;4(6):674–9
Human and bovine cervical mucus penetration as a test of sperm function for in–vitro fertilization. De Geyter C, et al. **Hum Reprod** 1988 Nov;3(8):948–54
Repeated mid–cycle tests of in–vitro sperm penetration (Kremer tests) in healthy women during three menstrual cycles. Jonsson B, et al. **Hum Reprod** 1989 Aug;4(6):670–3
Human sperm–zona pellucida binding, sperm characteristics and in–vitro fertilization. Liu DY, et al. **Hum Reprod** 1989 Aug;4(6):696–701
Recovery of motile sperm using the migration–sedimentation technique in an in–vitro fertilization–embryo transfer programme. Lucena E, et al. **Hum Reprod** 1989 Feb; 4(2):163–5
The spontaneous acrosome reaction of human spermatozoa incubated in vitro. Mortimer D, et al. **Hum Reprod** 1989 Jan;4(1):57–62
The role of follicular fluid in inducing the acrosome reaction of human spermatozoa incubated in vitro. Mortimer D, et al. **Hum Reprod** 1989 Feb;4(2):169–74
The presence of zonae pellucidae influences fusion rates between spermatozoa and zona free hamster oocytes. van Kooij RJ, et al. **Hum Reprod** 1988 Aug;3(6):773–5
Acrosomal proteinase activity of human spermatozoa and relation of results to semen quality. Welker B, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:75–80
A mouse chromosome 17 gene encodes a testes–specific transcript with unusual properties. Sarvetnick N, et al. **Immunogenetics** 1989;30(1):34–41
Quantitative analysis of spermatogonial germ cells in adult rats treated with oestradiol benzoate alone & in combination with testosterone propionate. Raychoudhury K, et al. **Indian J Med Res** 1988 Jun;87:609–14
The role of free oxygen radicals and sperm function. Aitken RJ. **Int J Androl** 1989 Apr;12(2):95–7
Multivariate discriminant analysis of the relationship between the hypo–osmotic swelling test and the in–vitro fertilizing capacity of human sperm. Chan SY, et al. **Int J Androl** 1988 Oct;11(5):369–78
Male factors and the likelihood of pregnancy in infertile couples. I. Study of sperm characteristics. Jouannet P, et al. **Int J Androl** 1988 Oct;11(5):379–94
Comparative study of the kinetics of the acrosome reaction and survival of human spermatozoa in various media. Pilikian S, et al. **Int J Androl** 1988 Dec;11(6):465–72
Varicocelectomy: twenty–five years of experience. Dubin L, et al. **Int J Fertil** 1988 Jul–Aug;33(4):226–8, 231–5 (48 ref.)
Significance of reactive oxygen species and antioxidants in defining the efficacy of sperm preparation techniques. Aitken RJ, et al. **J Androl** 1988 Nov–Dec;9(6):367–76
Can the fertility potential of a seminal sample be predicted accurately? Amann RP. **J Androl** 1989 Mar–Apr; 10(2):89–98
Evaluation of computerized analysis of sperm movement characteristics and differential sperm tail swelling patterns in predicting human sperm in vitro fertilizing capacity. Chan SY, et al. **J Androl** 1989 Mar–Apr;10(2):133–8
Molecular basis of signalling in the spermatozoon. Garbers DL. **J Androl** 1989 Mar–Apr;10(2):99–107 (54 ref.)
Apparent fertility of human spermatozoa from the caput epididymidis. Silber SJ. **J Androl** 1989 Jul–Aug;10(4):263–9
Effects of glycerol concentration, equilibration time and temperature of glycerol addition on post–thaw viability of boar spermatozoa frozen in straws. Almlid T, et al. **J Anim Sci** 1988 Nov;66(11):2899–905
Long–term liquid storage of porcine spermatozoa separated using a discontinuous bovine serum albumin gradient. Estienne MJ, et al. **J Anim Sci** 1989 Jun;67(6):1497–502
Evidence that aggregation of mouse sperm receptors by ZP3 triggers the acrosome reaction. Leyton L, et al. **J Cell Biol** 1989 Jun;108(6):2163–8
Influence of calcium on the true acrosome reaction and capacity of bull spermatozoa to penetrate oocytes in vitro. Didion BA, et al. **J Dairy Sci** 1989 Jun;72(6):1540–6
Influence of germ cells upon transferrin secretion by rat Sertoli cells in vitro. Le Magueresse B, et al. **J Endocrinol** 1988 Sep;118(3):R13–6
Induction of the acrosome reaction in goat spermatozoa in simple physiological salt solution. Kusunoki H, et al. **J Exp Zool** 1989 Jun;250(3):346–8
Induction of the acrosome reaction in ejaculated goat spermatozoa by preincubation in chemically defined medium. Kusunoki H, et al. **J Exp Zool** 1989 Mar; 249(3):322–8
Seasonality of serum testosterone levels and sperm density in Tursiops truncatus. Schroeder JP, et al. **J Exp Zool** 1989 Mar;249(3):316–21
Energy transport and cell polarity: relationship of phosphagen kinase activity to sperm function. Tombes RM, et al. **J Exp Zool** 1989 Jul;251(1):82–90
Zona–induced acrosome reaction of hamster spermatozoa. Uto N, et al. **J Exp Zool** 1988 Oct;248(1):113–20
Acrosome–reacted guinea pig spermatozoa become fusion competent in the presence of extracellular potassium ions. Yanagimachi R, et al. **J Exp Zool** 1988 Dec;248(3):354–60
Accuracy of sperm characteristics in predicting the in vitro fertilizing capacity of semen. Comhaire FH, et al. **J In Vitro Fert Embryo Transf** 1988 Dec;5(6):326–31
Is the sperm–binding capability of the zona pellucida linked to its surface structure? A scanning electron microscopic study of human in vitro fertilization. Familiari G, et al. **J In Vitro Fert Embryo Transf** 1988 Jun;5(3):134–43
The hemizona assay (HZA): a predictor of human sperm fertilizing potential in in vitro fertilization (IVF) treatment. Franken DR, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):44–50
Determining the osmolality of seminal fluid aids in the rapid diagnosis of the fertilizing potential of spermatozoa. Gopalkrishman K, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):119–21
On the diagnostic value of the hypoosmotic sperm swelling test in an in vitro fertilization (IVF) program. Sjöblom P, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):41–3
Flagellar movement in demembranated preparations of ejaculated fowl spermatozoa. Ashizawa K, et al. **J Reprod Fertil** 1989 May;86(1):263–70
Seasonal changes of testis volume and sperm quality in adult fallow deer (Dama dama) and their relationship to the antler cycle. Gosch B, et al. **J Reprod Fertil** 1989 Jan; 85(1):7–17
Decreased sperm survivability in subfertile Delaware roosters as indicated by comparative and competitive fertilization. Kirby JD, et al. **J Reprod Fertil** 1989 Jul;86(2):671–7
Isolation by using albumin columns of a cohort of fast–swimming human spermatozoa. Magnus O, et al. **J Reprod Fertil** 1988 Nov;84(2):579–84
In–vitro fertilization of pig oocytes by frozen boar spermatozoa. Nagai T, et al. **J Reprod Fertil** 1988 Nov; 84(2):585–91
Cigarette smoking and human sperm quality assessed by laser–Doppler spectroscopy and DNA flow cytometry. Oldereid NB, et al. **J Reprod Fertil** 1989 Jul;86(2):731–6
Is a Ca2+ –ATPase involved in Ca2+ regulation during capacitation and the acrosome reaction of guinea–pig spermatozoa? Roldan ER, et al. **J Reprod Fertil** 1989 Jan; 85(1):297–308
Viable spermatozoa in the bladder after electroejaculation of lion–tailed macaques (Macaca silenus). Schaffer NE, et al. **J Reprod Fertil** 1989 Jul;86(2):767–70
Extended exposure to follicular fluid is required for significant stimulation of the acrosome reaction in human spermatozoa. Stock CE, et al. **J Reprod Fertil** 1989 May; 86(1):401–11
Estimation of the relative fertilizing ability of frozen chicken spermatozoa using a heterospermic competition method. Tajima A, et al. **J Reprod Fertil** 1989 Jan;85(1):1–5
Effects of metalloendoprotease substrates on the human sperm acrosome reaction. Thomas P, et al. **J Reprod Fertil** 1989 Jan;85(1):241–9
In vitro capacitation of spermatozoa in different strains of mice: the acrosome reaction. De Matos DG, et al. **Medicina (B Aires)** 1987;47(5):500–4
Antibodies to rat sperm tail polypeptides recognize Sertoli cell secretory proteins. Kierszenbaum AL, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):171–9
Paracrine control of immature Sertoli cells by adult germ cells, in the rat (an in vitro study). Cell–cell interactions within the testis. Le Magueresse B, et al. **Mol Cell Endocrinol** 1988 Jul;58(1):65–72
Molecular probes for general testicular and specific spermatogenic function. Krawetz SA, et al. **Mol Cell Probes** 1989 Jun;3(2):109–15
High–frequency nanometre–scale vibration in 'quiescent' flagellar axonemes. Kamimura S, et al. **Nature** 1989 Aug 10;340(6233):476–8
The effect of microgravity on the reproductive function of male–rats. Serova LV, et al. **Physiologist** 1989 Feb;32(1 Suppl):S29–30
Acrosome reaction of cock spermatozoa incubated with the perivitelline layer of the hen's ovum. Koyanagi F, et al. **Poult Sci** 1988 Dec;67(12):1770–4
Influence of damaged spermatozoa on the fertility of turkey semen stored 24 hours at 5 C. Sexton TJ. **Poult Sci** 1988 Oct;67(10):1483–5
Transient expression of the cholecystokinin gene in male germ cells and accumulation of the peptide in the acrosomal granule: possible role of cholecystokinin in fertilization. Persson H, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6166–70
Sperm measures and reproductive success. Institute for

Health Policy Analysis Forum on Science, Health and Environmental Risk Assessment. Proceedings of a workshop. Queenstown, Maryland, January 11–13, 1988. **Prog Clin Biol Res** 1989;302:1–313

The saga of human spermatozoa throughout the jungle of the female genital tract. Chretien FC. **Prog Clin Biol Res** 1989;296:263–72

The expression of oncogenes in germ cells. Cooper GM, et al. **Prog Clin Biol Res** 1988;267:275–89 (47 ref.)

Biological basis of in vitro tests of sperm function. Katz DF, et al. **Prog Clin Biol Res** 1989;302:95–103; discussion 104–6 (38 ref.)

Regulation of sperm function by guanine nucleotide–binding regulatory proteins (G–proteins). Kopf GS. **Prog Clin Biol Res** 1988;267:357–86 (78 ref.)

Calculation of the incidence of infertility in human populations from sperm measures using the two–distribution model. Meistrich ML. **Prog Clin Biol Res** 1989;302:275–85; discussion 286–90

Predicting reproductive outcome from sperm measurements in Swiss (CD–1) mice. Morris RW, et al. **Prog Clin Biol Res** 1989;302:253–70; discussion 271–3

Sem observations of the male reproductive tract with special reference to epithelial phagocytosis. Murakami M, et al. **Prog Clin Biol Res** 1989;296:207–14

Fate of human germ cells after spermiation. Orlandini GE, et al. **Prog Clin Biol Res** 1989;296:215–20

Issues in the prediction of human reproductive success from semen characteristics. Samuels SJ. **Prog Clin Biol Res** 1989; 302:291–5; discussion 296–7

Is the spermatogonium an androgen target cell? An histochemical, immunocytochemical and ultrastructural study in the rat. Sanfilippo S, et al. **Prog Clin Biol Res** 1989;296:177–85

cAMP–dependent regulatory processes in the acquisition and control of sperm flagellar movement. Tash JS, et al. **Prog Clin Biol Res** 1988;267:335–55 (80 ref.)

Nuclear cytoplasmic exchange during spermatogenesis. Werner G, et al. **Prog Clin Biol Res** 1989;296:171–6

Prostanoids in sperm function. Gottlieb C, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988;34(3):205–14 (113 ref.)

Inhibitory effect of homologous solubilized zona pellucida on rabbit in vitro fertilization. Dumont M, et al. **Reprod Nutr Dev** 1988;28(6A):1531–40

Direct measurements of sliding between outer doublet microtubules in swimming sperm flagella. Brokaw CJ. **Science** 1989 Mar 24;243(4898):1593–6

Effect of chemotherapy on semen characteristics of Balami rams infected with Anaplasma ovis. Kumi–Diaka J, et al. **Vet Res Commun** 1988;12(2–3):119–24

[Results of conjugal artificial insemination using Percoll] Barri PN, et al. **Rev Fr Gynecol Obstet** 1988 Oct; 83(10):587–91 (Eng. Abstr.) **(Fre)**

[Testing the fertility of the spermatozoa] Devaux A, et al. **Rev Fr Gynecol Obstet** 1989 Feb;84(2):85–90 (Eng. Abstr.) **(Fre)**

[The male factor in fertilization in vitro] Roulier R, et al. **Rev Fr Gynecol Obstet** 1989 Feb;84(2):135–7 (Eng. Abstr.) **(Fre)**

[Characterizing the in vitro capacitation of motile bull sperm by the hyamine–induced acrosome reaction] Blottner S, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):285–92 (Eng. Abstr.) **(Ger)**

[A simple method for the quantitative determination of sperm aggregation] Blottner S, et al. **Arch Exp Veterinarmed** 1989 May;43(3):455–61 (Eng. Abstr.) **(Ger)**

[The sperm quality of 4 boars during the assimilation of mycotoxin–containing feed (ochratoxin A) amd after changing the feed—a case study] Ewald C, et al. **Berl Munch Tierarztl Wochenschr** 1989 Aug 1;102(8):261–6 (Eng. Abstr.) **(Ger)**

[The effect of diluents, dose size and freezing speed on the survival rate of deep frozen stallion sperm] Hellemann C, et al. **DTW** 1988 Oct;95(9):369–71 (Eng. Abstr.) **(Ger)**

[Sperm function tests] Schmidt U. **Zentralbl Gynakol** 1988; 110(12):737–44 (36 ref.) (Eng. Abstr.) **(Ger)**

[WHO laboratory manual for the examination of human seminal fluid and the interaction between seminal fluid and cervix mucus] **Ann Ist Super Sanita** 1989;25(1 Suppl):1–67 **(Ita)**

[Role of sperm passage through cervical mucus: fertilizing capacity tested by in vitro fertilization with zona–free hamster eggs] Ikuma K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):167–72 (Eng. Abstr.) **(Jpn)**

[Fertilization in vitro—embryo transfer (IVF–ET). IV. Evaluation of sperm prepared and used for in vitro fertilization in humans] Radwan J, et al. **Ginekol Pol** 1988 May;59(5):257–62 (Eng. Abstr.) **(Pol)**

[Status of the reproductive function in men with varicocele] Artifeksov SB, et al. **Sov Med** 1989;(5):111–3 **(Rus)**

[New aspects of old ideas about capacitation and the acrosomal reaction] Rosado A. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):253–64 (64 ref.) (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

[In vivo and in vitro fertilizing ability of immature human epididymal spermatozoa] Jardin A, et al. **Reprod Nutr Dev** 1988;28(5):1375–85 (Eng. Abstr.) **(Fre)**

[Study on hypoosmotic swelling test for infertile male patients] Yoshino K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):149–53 (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

Automatic analysis of flow cytometric DNA histograms from irradiated mouse male germ cells. Lamparriello F, et al. **Cytometry** 1989 Jan;10(1):62–9 (18 ref.)

Relationship between cell cycle stage in the fertilized egg of mice and repair capacity for X–ray–induced damage in the sperm. Matsuda Y, et al. **Int J Radiat Biol** 1989 Sep;56(3):301–14

Influence of germ cells upon Sertoli cells during continuous low–dose rate gamma–irradiation of adult rats. Pinon–Lataillade G, et al. **Mol Cell Endocrinol** 1988 Jul; 58(1):51–63

DNA double–strand damage and repair following gamma–irradiation in isolated spermatogenic cells. Coogan TP, et al. **Mutat Res** 1988 Nov;194(3):183–91

A comparison of chromosomal aberrations induced by in vivo radiotherapy in human sperm and lymphocytes. Martin RH, et al. **Mutat Res** 1989 May;226(1):21–30

Repair capacity of fertilized mouse eggs for X–ray damage induced in sperm and mature oocytes. Matsuda Y, et al. **Mutat Res** 1989 Jan;210(1):35–47

Micronucleus formation in 2–cell embryos after in vitro X–irradiation of mouse spermatozoa. Pampfer S, et al. **Mutat Res** 1989 Jan;210(1):191–6

Genetic effects of 131I in reproductive cells of male mice. Shevchenko VA, et al. **Mutat Res** 1989 Jun;226(2):87–91

The response of spermatogonia and spermatocytes of the Northern vole Microtus oeconomus to the induction of sex–chromosome nondisjunction, diploidy and chromosome breakage by X–rays and fast fission neutrons. Tates AD, et al. **Mutat Res** 1989 Jan;210(1):173–89

The induction by ionizing radiation of chromosomal aberrations in rhesus monkey pre–meiotic germ cells: effects of dose rate and radiation quality. van Buul PP. **Mutat Res** 1989 Mar;225(3):83–9

Relative biological effectiveness of tritiated water to gamma radiation for germ line mutations. Byrne BJ, et al. **Radiat Res** 1989 Mar;117(3):469–79

A chimera embryo assay reveals a decrease in embryonic cellular proliferation induced by sperm from X–irradiated male mice. Obasaju MF, et al. **Radiat Res** 1989 May; 118(2):246–56

Dose–response studies on the spermatogonial stem cells of the rhesus monkey (Macaca mulatta) after X irradiation. van Alphen MM, et al. **Radiat Res** 1989 Sep;119(3):443–51

[Effect of microwave irradiation on spermatozoa of rat epididymis in vivo] Yue LM, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):257–60 (Eng. Abstr.) **(Chi)**

[Studies of induction of chromosome aberrations in rat spermatogonia after exposure to radon–222 and its degradation products] Rudnicki T, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jul–Oct;52(4–5):237–41 (Eng. Abstr.) **(Pol)**

TRANSPLANTATION

Pregnancy resulting from peritoneal ovum sperm transfer procedure. Gentry W, et al. **Fertil Steril** 1989 Jan; 51(1):179–81

ULTRASTRUCTURE

Co–existence of gametic and agametic seminiferous tubules in a chimeric mouse. A light– and electron–microscopic study. Hrudka F, et al. **Acta Anat (Basel)** 1989; 135(3):269–74

Ultrastructural changes in the rabbit epididymis following vasectomy and clip occlusion. Lohiya NK, et al. **Acta Eur Fertil** 1988 Jul–Aug;19(4):233–7

Role of epithelial clear cells of the rat epididymis in the disposal of the contents of cytoplasmic droplets detached from spermatozoa. Hermo L, et al. **Am J Anat** 1988 Oct; 183(2):107–24

Re: Pellestor et al. on sperm chromosomes [letter] Egozcue J, et al. **Am J Hum Genet** 1989 Sep;45(3):477

Automated image analysis of in vitro decondensation of human spermatozoa nuclei. III. Variable decondensation with and without incubation in the seminal fluid. Pasteur X, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):317–28

Morphological studies on prespermatogonia and pre–Sertoli cells in the testes of 6– to 11–day–old golden hamsters. Miething A. **Anat Embryol (Berl)** 1989;179(5):503–10

Ultrastructural morphometric data of human spermatozoa. Smith DC, et al. **Andrologia** 1988 Sep–Oct;20(5):396–403

Ultrastructure of human unfertilized oocytes and polyspermic embryos in an IVF–ET program. Motta PM, et al. **Ann N Y Acad Sci** 1988;541:367–83

Transient acrosomal hypoplasia of spermatozoa and male fertility. Sauer MV, et al. **Arch Androl** 1989;22(1):95–8

Changes in chromatin structure of boar late spermatids to mature spermatozoa by using modification with dansyl chloride. Akama K, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):198–202

The flagellar apparatus of spermatozoa in fish. Ultrastructure and evolution. Mattei X. **Biol Cell** 1988;63(2):151–8

Comparative analysis of proteins from the fibrous sheath and outer dense fibers of rat spermatozoa. Oko R. **Biol Reprod** 1988 Aug;39(1):169–82

Characterization of matrix domains of the hamster acrosome. Olson GE, et al. **Biol Reprod** 1988 Dec;39(5):1145–58

Interspecies differences in the stability of mammalian sperm nuclei assessed in vivo by sperm microinjection and in vitro by flow cytometry. Perreault SD, et al. **Biol Reprod** 1988 Aug;39(1):157–67

Sperm chromosome analysis to assess potential germ cell mosaicism. Brandriff B, et al. **Clin Genet** 1988 Aug; 34(2):85–9

Morphological changes in human spermatozoa as examined under scanning electron microscope after in vitro exposure to saponins isolated from Sapindus mukorossi. Dhar JD, et al. **Contraception** 1989 May;39(5):563–8

Electron microscopical studies of membrane injuries in blue fox spermatozoa subjected to the process of freezing and thawing. Hofmo PO, et al. **Cryobiology** 1989 Apr; 26(2):124–31

Mutations that disrupt the morphogenesis and localization of a sperm–specific organelle in Caenorhabditis elegans. Shakes DC, et al. **Dev Biol** 1989 Aug;134(2):307–16

Polarity of sperm entry in the ascidian egg. Speksnijder JE, et al. **Dev Biol** 1989 May;133(1):180–4

A birefringence, electron microscopy, and histochemical survey of chromosomal structure in the sperm nuclei of an echinothurid sea urchin, Araeosoma owstoni. Amemiya S, et al. **Exp Cell Res** 1988 Dec;179(2):446–53

Synacrosomal formation after cell fusion of round spermatids of Xenopus laevis. Asakura S, et al. **Exp Cell Res** 1989 Apr;181(2):566–73

Stereological studies on germ cell mitochondria of rat during spermatogenesis and spermiogenesis. Cieciura L, et al. **Folia Histochem Cytobiol** 1988;26(3):177–83

Evaluation of rodent sperm, vaginal cytology, and reproductive organ weight data from National Toxicology Program 13–week studies. Morrissey RE, et al. **Fundam Appl Toxicol** 1988 Aug;11(2):343–58

Association of sperm, vaginal cytology, and reproductive organ weight data with results of continuous breeding reproduction studies in Swiss (CD–1) mice. Morrissey RE, et al. **Fundam Appl Toxicol** 1988 Aug;11(2):359–71

Changes of elemental concentrations around and on the surface of fowl sperm membrane during maturation in the male reproductive tract and after in vitro storage. Ashizawa K, et al. **Gamete Res** 1988 Sep;21(1):23–8

Fine structure of the neck of epididymal spermatozoa of Schreiber's long–fingered bat (Chiroptera: Mammalia). Bernard RT, et al. **Gamete Res** 1988 Sep;21(1):41–50

Ultrastructure of the sperm and spermatogenesis and spermiogenesis of Dina lineata (Hirudinea, Erpobdellidae). Bonet S, et al. **Gamete Res** 1988 Feb;19(2):177–90

Sperm morphology and storage in the female reproductive tract of the fat–tailed dunnart, Sminthopsis crassicaudata (Marsupialia: Dasyuridae). Breed WG, et al. **Gamete Res** 1989 May;23(1):61–75

Sperm head structure of a murid rodent from southern Africa: the red veld rat Aethomys chrysophilus. Breed WG, et al. **Gamete Res** 1988 Feb;19(2):191–202

The acrosome reaction in spermatozoa of the grey–headed flying fox (Pteropus poliocephalus: Chiroptera) exposes barbed subacrosomal material. Cummins JM, et al. **Gamete Res** 1988 Sep;21(1):11–22

Staining procedure to detect viability and the true acrosome reaction in spermatozoa of various species. Didion BA, et al. **Gamete Res** 1989 Jan;22(1):51–7

Separation of human X and Y spermatozoa by free–flow electrophoresis. Engelmann U, et al. **Gamete Res** 1988 Feb; 19(2):151–60

Formation of the ventral hooks on the sperm head of the plains mouse, Pseudomys australis. Flaherty SP, et al. **Gamete Res** 1987 Jun;17(2):115–29

Fate of sperm tail components after incorporation into the hamster egg. Hiraoka J, et al. **Gamete Res** 1988 Apr; 19(4):369–80

Ultrastructure of the spermatozoon of Lepidogalaxias salamandroides and its phylogenetic significance. Leung LK. **Gamete Res** 1988 Jan;19(1):41–9

Membrane specializatioes associated with the acrosomal complex of sea urchin sperm as revealed by immunocytochemistry and freeze fracture replication. Longo FJ, et al. **Gamete Res** 1989 Aug;23(4):429–40

Analysis of the chromosome complement in outbred mouse sperm fertilizing in vitro. Martin–DeLeon PA. **Gamete Res** 1989 Jan;22(1):71–81

Outer acrosomal membrane of guinea pig spermatozoa: isolation and structural characterization. Olson GE, et al. **Gamete Res** 1987 May;17(1):77–94

Endocytic origin for periaxonemal vesicles along the flagellum during mouse spermiogenesis. Segretain D, et al. **Gamete Res** 1988 Dec;21(4):451–63

Isolation of a stable apical segment of the guinea pig sperm acrosome. Stojanoff A, et al. **Gamete Res** 1987 Aug; 17(4):321–32

Egg–penetration ability and structural properties of human sperm prepared by Percoll–gradient centrifugation. Tanphaichitr N, et al. **Gamete Res** 1988 May;20(1):67–81

Ultrastructure of spermatogenesis in the sea star, Asterina minor. Yamagata A. **Gamete Res** 1988 Feb;19(2):215–25

Segregation products of male mice doubly heterozygous for the RB(6.16) and RB (16.17) translocations: influence of sperm karyotype on fertilizing competence under varying mating frequencies. Zackowski JL, et al. **Gamete Res** 1989 Jan;22(1):93–107

Expression of fragile sites in human sperm and lymphocyte

chromosomes. Benet J, et al. **Hum Genet** 1989 Feb; 81(3):239–42
Fragile sites and breakpoints in constitutional rearrangements and in human sperm chromosomes. Fuster C, et al. **Hum Genet** 1989 Jul;82(4):330–4
Cytogenetic analysis of sperm from a male heterozygous for a 13;14 Robertsonian translocation. Martin RH. **Hum Genet** 1988 Dec;80(4):357–61
Human fertilization by micro-injection of immotile spermatozoa. Bongso TA, et al. **Hum Reprod** 1989 Feb; 4(2):175–9
Initial stages of sperm—egg interaction in a heterospecific system: fate of the post-acrosomal sheath and appearance of a particular material within the oocyte. Courtot AM, et al. **Hum Reprod** 1988 Jul;3(5):651–5
Acrosome separation from buffalo spermatozoa by chemical dissection. Meur SK, et al. **Indian J Exp Biol** 1988 Aug; 26(8):586–8
Ultrastructure of spermatozoa & non spermatozoal cells in human semen in genital tract infections. Gopalkrishnan K, et al. **Indian J Med Res** 1989 Jun;90:175–85
Two-dimensional gel electrophoretic analysis of rat sperm membrane interaction with cauda epididymal fluid. Hall JC, et al. **J Androl** 1989 Jan–Feb;10(1):64–76
A unique cytoskeleton associated with crawling in the amoeboid sperm of the nematode, Ascaris suum. Sepsenwol S, et al. **J Cell Biol** 1989 Jan;108(1):55–66
Reproductive abnormalities in canine fucosidosis. Taylor RM, et al. **J Comp Pathol** 1989 May;100(4):369–80
Use of membrane filters and osmium tetroxide etching in the preparation of sperm for scanning electron microscopy. van der Horst G, et al. **J Electron Microsc Tech** 1989 May; 12(1):65–70
In utero changes of the plasma membrane in the head region of the rat spermatozoa. Toyama Y. **J Electron Microsc (Tokyo)** 1989;38(2):148–54
Selective identification of the paternal mitochondrion in living sea urchin eggs and embryos by chlorotetracycline. Hinkley RE Jr, et al. **J Exp Zool** 1989 Jan;249(1):111–4
Sperm nuclear enlargement in fertilized hamster eggs is related to meiotic maturation of the maternal chromatin. Wright SJ, et al. **J Exp Zool** 1988 Aug;247(2):155–65
A new procedure for determining acrosomal status of very small numbers of human sperm. Morales P, et al. **J Histochem Cytochem** 1989 Aug;37(8):1291–2
Ultrastructural localizations of beta-microseminoprotein, a prostate-specific antigen, in human prostate and sperm: comparison with gamma-seminoprotein, another prostate-specific antigen. Ito Y, et al. **J Lab Clin Med** 1989 Sep;114(3):272–7
Conditions required for detection of specimen-specific SE-I secondary electrons in an analytical SEM. Apkarian RP. **J Microsc** 1989 May;154 (Pt 2):177–88
Effect of temperature on the fluidity of boar sperm membranes. Canvin AT, et al. **J Reprod Fertil** 1989 Mar; 85(2):533–40
Human oocyte-cumulus complexes stimulate the human acrosome reaction. Stock CE, et al. **J Reprod Fertil** 1989 Jul;86(2):723–30
Nucleic acid synthesis and development of human male pronucleus. Tesařík J, et al. **J Reprod Fertil** 1989 Jul; 86(2):549–58
Effect of procarbazine on sperm morphology in Syrian hamsters. Singh H, et al. **J Toxicol Environ Health** 1989; 27(1):107–21
Changes in the distribution of intramembranous particles and filipin-sterol complexes during epididymal maturation of golden hamster spermatozoa. Suzuki F. **J Ultrastruct Mol Struct Res** 1988 Jul;100(1):39–54
Morphological and functional reconsideration of the cytoplasmic bridges which connect male germ cells in snails. Yasuzumi F, et al. **J Ultrastruct Mol Struct Res** 1988 Jun;99(3):261–71
Spermatogenesis and the fine structure of the mature spermatozoon in the free proglottis of Trilocularia acanthiaevulgaris (Cestoda, Tetraphyllidea). Mahendrasingam S, et al. **Parasitol Res** 1989;75(4):287–98
Spermatozoa of the deep-sea cephalopod Vampyroteuthis infernalis Chun: ultrastructure and possible phylogenetic significance. Healy JM. **Philos Trans R Soc Lond [Biol]** 1989 Jun 30;323(1219):589–600
Distribution of analogues of spectrin, fodrin and protein 4.1 in rat spermatogenic cells. De Cesaris P, et al. **Prog Clin Biol Res** 1989;296:149–52
Ultrastructure of human germ cells in sex-indifferent gonad, in early fetal testis or ovary and in testicular cancers. Francavilla S, et al. **Prog Clin Biol Res** 1989;296:31–40
Functional ultrastructure of plasma membrane of spermatozoa during maturation and transport in reproductive tract. Hafez ES, et al. **Prog Clin Biol Res** 1989;296:255–60
Specific expression of nuclear proto-oncogenes before entry into meiotic prophase of spermatogenesis. Wolfes H, et al. **Science** 1989 Aug 18;245(4919):740–3
An improved technique for staining the head membranes of human spermatozoa. Isvarine A, et al. **Stain Technol** 1988 Jul;63(4):259–60
[Electron microscopy of spermatozoa. Indications and results] Hustin J, et al. **Acta Urol Belg** 1989;57(1):17–28 (Eng. Abstr.) (Fre)
[A cytogenetic study of human gametes] Sele B, et al. **Bull Assoc Anat (Nancy)** 1987 Dec;71(215):77–8 (Fre)
[Determination of restriction fragment length polymorphism in microscopically verified sperm findings] Josephi E, et al. **Beitr Gerichtl Med** 1988;46:207–12 (Eng. Abstr.) (Ger)
[Occurrence of germ cells in a cryptorchism testis in the adult] Blumer CF, et al. **Pathologe** 1989 Jan;10(1):3–11 (Ger)
[Ultrastructural analysis of human ejaculate from infertile subjects] Bairati A, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):47–58 (Eng. Abstr.) (Ita)
[Studies on human spermatozoal acrosome using spermac stain in fertile and infertile men including two cases of round-headed spermatozoa] Satoh K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):562–8 (Eng. Abstr.) (Jpn)
[Injection of gene p53 into the pronuclei of mouse zygotes] Sergienko VG, et al. **Ontogenez** 1989 May–Jun;20(3):323–6 (Eng. Abstr.) (Rus)
[The ultrastructure of bull sperm membranes prepared by freeze etching] Massanyi L, et al. **Vet Med (Praha)** 1989 Apr;34(4):213–22 (Eng. Abstr.) (Slo)
[Spermatogonia types in tepezcuintle (Cuniculus paca). Ultrastructural study] Ureña F, et al. **Rev Biol Trop** 1988 Nov;36(2A):325–8 (Eng. Abstr.) (Spa)

SPERMICIDAL AGENTS see **SPERMATOCIDAL AGENTS**

SPERMIDINE

ANALOGS & DERIVATIVES

The role of glutathionylspermidine and trypanothione in regulation of intracellular spermidine levels during growth of Crithidia fasciculata. Fairlamb AH. **Adv Exp Med Biol** 1988;250:667–74
Purification and structural characterization of in vitro synthesized (gamma-glutamyl) spermidine conjugates of a major protein secreted from the rat seminal vesicles. Porta R, et al. **Adv Exp Med Biol** 1988;250:403–9
Mechanism of antitumor activity of norspermidine, a structural homologue of spermidine. Sunkara PS, et al. **Adv Exp Med Biol** 1988;250:707–16
Antitumor activity of norspermidine, a structural homologue of the natural polyamine spermidine. Prakash NJ, et al. **Anticancer Res** 1988 Jul–Aug;8(4):563–8
A selective inhibitor of N8-acetylspermidine deacetylation in mice and HeLa cells without effects on histone deacetylation. Marchant P, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):128–36
Aortic stenosis produces hypertrophy of the rat heart without causing an accumulation of N1-acetylspermidine. Mezl VA, et al. **Biochem Cell Biol** 1988 Sep;66(9):1018–21
Studies of non-metabolizable polyamines that support growth of SV-3T3 cells depleted of natural polyamines by exposure to alpha-difluoromethylornithine. Nagarajan S, et al. **Biochem J** 1988 Sep 1;254(2):373–8
1,2-Dimethylhydrazine-induced alterations in N1-acetylspermidine levels in rat distal colonic mucosa: effects of 2-difluoromethylornithine. Halline AG, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):106–14
Premalignant alterations in rat colonic N1-acetylspermidine levels induced by 1,2-dimethylhydrazine: effects of a high corn oil dietary regimen. Halline AG, et al. **Biochim Biophys Acta** 1989 Mar 24;990(3):280–7
Increased formation of N1-acetylspermidine in human breast cancer. Persson L, et al. **Cancer Lett** 1989 May;45(2):83–6
Differential induction of spermidine/spermine N1-acetyltransferase in human lung cancer cells by the bis(ethyl)polyamine analogues. Casero RA Jr, et al. **Cancer Res** 1989 Jul 15;49(14):3829–33
Urinary excretion of N1-acetylspermidine and other acetylated and free polyamines in the 1,2-dimethylhydrazine model of experimental rat colon cancer. Halline AG, et al. **Cancer Res** 1989 Sep 1; 49(17):4721–3
1,2-Dimethylhydrazine-induced alterations in N1-acetylspermidine levels and spermidine N1-acetyltransferase activity in rat colonic mucosa. Halline AG, et al. **Cancer Res** 1989 Feb 1;49(3):633–8
Chelation of 238Pu(IV) in vivo by 3,4,3-LICAM(C): effects of ligand methylation and pH. Durbin PW, et al. **Health Phys** 1989 Jun;56(6):839–55
High-performance liquid chromatographic method for the determination of epsilon-(gamma-glutamyl)lysine and mono- and bis-gamma-glutamyl derivatives of putrescine and spermidine. Beninati S, et al. **J Chromatogr** 1988 Jun 29;443:329–35
Design and synthesis of inhibitors of N8-acetylspermidine deacetylase. Dredar SA, et al. **J Med Chem** 1989 May; 32(5):984–9
Spermexatin and spermexatol: new synthetic spermidine-based siderophore analogues. Sharma SK, et al. **J Med Chem** 1989 Feb;32(2):357–67
Production of N1-acetyl spermidine by renal cell tumors. Pine MJ, et al. **J Urol** 1989 Mar;141(3):651–5
Trypanothione is the primary target for arsenical drugs against African trypanosomes. Fairlamb AH, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2607–11

ANALYSIS

Polyamines in cerebral ischemia. Paschen W, et al. **Neurochem Pathol** 1988 Jul–Dec;9:1–20

BIOSYNTHESIS

Regulation of polyamine biosynthetic activity by spermidine and spermine analogs—a novel antiproliferative strategy. Porter CW, et al. **Adv Exp Med Biol** 1988;250:677–90 (57 ref.)
Spermidine synthesis by Pseudomonas sp. strain Kim, previously reported to lack this polyamine. Rosano CL, et al. **J Bacteriol** 1989 Feb;171(2):1223–4
Spermidine biosynthesis in Escherichia coli: promoter and termination regions of the speED operon. Xie QW, et al. **J Bacteriol** 1989 Aug;171(8):4457–65
[The role of the polyamine synthesis system in energy coupling in Escherichia coli] Tkachenko AG, et al. **Dokl Akad Nauk SSSR** 1989 Mar–Apr;305(1):219–22 (Rus)

BLOOD

Plasma spermidine and putrescine as markers of cancer management. Driessen O, et al. **Methods Find Exp Clin Pharmacol** 1989 Jan;11(1):11–6
[Spermidine radioimmunoassay in monitor of precancerous lesions of esophagus] Fan ZF. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):449–51 (Eng. Abstr.) (Chi)
[The character of quantitative changes in some parameters of polyamine metabolism of the blood in patients with chronic leukemia] Voronchikhina LD, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):74–7 (Eng. Abstr.) (Rus)

DIAGNOSTIC USE

Red blood cell polyamines as a diagnostic indicator of glioma presence and recurrence. Elworthy P, et al. **J Neurooncol** 1989 May;7(1):31–8

METABOLISM

Receptors involved in the nervous system regulation of polyamine metabolism in rat salivary glands. Ekström J, et al. **Acta Physiol Scand** 1989 Mar;135(3):255–61
Spermidine in mammalian lymphocytes and sea urchin embryos: uptake and labeling of macromolecules. Canellakis ZN. **Adv Exp Med Biol** 1988;250:423–34
The role of glutathionylspermidine and trypanothione in regulation of intracellular spermidine levels during growth of Crithidia fasciculata. Fairlamb AH. **Adv Exp Med Biol** 1988;250:667–74
Spermidine uptake by type II pulmonary epithelial cells in primary culture. Kameji R, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 1):C160–7
Polyamine metabolism in chronic lymphocytic leukemia. Canellakis ZN, et al. **Biochem Int** 1989 Apr;18(4):741–9
Polyamines in murine splenic lymphocytes. Marsh LL, et al. **Biochem Int** 1988 Dec;17(6):1071–8
Spermidine level and protein synthesis are coregulated in nonproliferating hepatocytes. Schulz WA, et al. **Biol Chem Hoppe Seyler** 1989 Jul;370(7):729–36
Compensatory route of spermidine acetylation and oxidation can supply sufficient putrescine for hepatic DNA synthesis at an early stage after partial hepatectomy in diaminopropane-treated rats. Sato Y, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):98–101
Cell-free synthesis of deoxyhypusine. Separation of protein substrate and enzyme and identification of 1,3-diaminopropane as a product of spermidine cleavage. Park MH, et al. **J Biol Chem** 1988 Oct 25;263(30):15264–9
Pulmonary alveolar macrophages express a polyamine transport system. Saunders NA, et al. **J Cell Physiol** 1989 Jun;139(3):624–31
Levels of polyamines, glutathione and glutathione-spermidine conjugates during growth of the insect trypanosomatid Crithidia fasciculata. Shim H, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):807–17
[Binding of polyamines by the double-helical DNA molecule in unfolded and compact forms] Slonitskiĭ SV, et al. **Mol Biol (Mosk)** 1989 Mar–Apr;23(2):507–17 (Eng. Abstr.) (Rus)
[Polyamines of lymphocytes in animals in an experimental tumor process] Zaletok SP, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):22–6 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Characteristics of spermidine uptake by isolated rat enterocytes. Kumagai J, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G905–10
Localization of spermidine uptake in rabbit lung slices. Saunders NA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C579–87
Serum effect on cellular uptake of spermidine, spergualin, 15-deoxyspergualin, and their metabolites by L5178Y cells. Kunimoto S, et al. **J Antibiot (Tokyo)** 1989 Jan;42(1):116–22

PHARMACOLOGY

Polyamine-dependent growth and calmodulin-regulated induction of ornithine decarboxylase. Ginty DD, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G342–8
Effect of spermidine on the development of bacteriophage SP6. Verma M. **Arch Biochem Biophys** 1989 Apr; 270(1):77–83

Polyamines are sufficient to drive the transport of the precursor of ornithine carbamoyltransferase into rat liver mitochondria: possible effect on mitochondrial membranes. Marcote MJ, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):287–93

Effects of spermine and spermidine on the inorganic pyrophosphatase of Streptococcus faecalis. Interactions between polyamines and inorganic pyrophosphate. Lahti R, et al. **Biochem J** 1989 Apr 1;259(1):55–9

Topological complexes between DNA and topoisomerase II and effects of polyamines. Pommier Y, et al. **Biochemistry** 1989 Feb 7;28(3):995–1002

Polyamine effects on DNA-directed RNA polymerases in the ciliate Tetrahymena thermophila. In vivo- and in vitro-experiments suggesting highly specific regulative interactions. Eichler W, et al. **Biol Chem Hoppe Seyler** 1989 May;370(5):451–66

The effect of spermine, spermidine and kallikrein on the triple adenosine triphosphatase enzyme activity of spermatozoa in males with oligoasthenozoospermia. Karacagil M, et al. **Br J Urol** 1989 Jan;63(1):84–6

Differential induction of spermidine/spermine N1-acetyltransferase in human lung cancer cells by the bis(ethyl)polyamine analogues. Casero RA Jr, et al. **Cancer Res** 1989 Jul 15;49(14):3829–33

Spermidine is necessary for, but not the only mediator of, linoleic acid-stimulated alpha-casein accumulation in mouse mammary epithelial cells. Levay-Young BK, et al. **Endocrinology** 1989 Sep;125(3):1513–8

Spermidine-dependent proteins are involved in the fusion of mouse alveolar macrophages induced by 1 alpha,25-dihydroxyvitamin D3 and interleukin 4. Tanaka H, et al. **Exp Cell Res** 1989 Jan;180(1):72–83

Type 3 fimbriae among enterobacteria and the ability of spermidine to inhibit MR/K hemagglutination. Gerlach GF, et al. **Infect Immun** 1989 Jan;57(1):219–24

Polyamines differentially modulate the transcription of growth-associated genes in human colon carcinoma cells. Celano P, et al. **J Biol Chem** 1989 May 25;264(15):8922–7

Polyamines differentially inhibit cyclic AMP-dependent protein kinase-mediated phosphorylation in the brain of the tobacco hornworm, Manduca sexta. Combest WL, et al. **J Neurochem** 1988 Nov;51(5):1581–91

PHYSIOLOGY

Polyamine oxidation down-regulates IL-2 production by human peripheral blood mononuclear cells. Flescher E, et al. **J Immunol** 1989 Feb 1;142(3):907–12

THERAPEUTIC USE

Hepatic mitochondrial membranolysis repairing by spermidine. Chandra R. **Int J Vitam Nutr Res** 1989; 59(2):113–6

URINE

Urinary polyamine levels in cancer patients treated with D,L-alpha-difluoromethylornithine, an inhibitor of polyamine biosynthesis. Horn Y, et al. **J Surg Oncol** 1989 Jul;41(3):177–82

[The fractional composition of polyamines in the urine of normal subjects] Voronchikhina LD, et al. **Lab Delo** 1988; (9):71–2 **(Rus)**

SPERMINE

Base only binding of spermine in the deep groove of the A-DNA octamer d(GTGTACAC). Jain S, et al. **Biochemistry** 1989 Mar 21;28(6):2360–4

Calcium and spermine interaction with phospholipid bilayers: a 15N NMR study. Akoka S, et al. **Biochimie** 1989 Jan; 71(1):137–44

Efficient gene transfer into mammalian primary endocrine cells with lipopolyamine-coated DNA. Behr JP, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6982–6

ANALOGS & DERIVATIVES

Studies of non-metabolizable polyamines that support growth of SV-3T3 cells depleted of natural polyamines by exposure to alpha-difluoromethylornithine. Nagarajan S, et al. **Biochem J** 1988 Sep 1;254(2):373–8

Selective regulation of S-adenosylmethionine decarboxylase activity by the spermine analogue 6-spermyne. Porter CW, et al. **Biochem J** 1988 Sep 1;254(2):337–42

Feedback regulation of polyamine synthesis in Ehrlich ascites tumor cells. Analysis using nonmetabolizable derivatives of putrescine and spermine. Holm I, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):239–48

Distribution of spermine in bacilli and lactic acid bacteria. Hamana K, et al. **Can J Microbiol** 1989 Apr;35(4):450–5

Role of the methylene backbone in the antiproliferative activity of polyamine analogues on L1210 cells. Bergeron RJ, et al. **Cancer Res** 1989 Jun 1;49(11):2959–64

Differential response to treatment with the bis(ethyl)polyamine analogues between human small cell lung carcinoma and undifferentiated large cell lung carcinoma in culture. Casero RA Jr, et al. **Cancer Res** 1989 Feb 1;49(3):639–43

Efficacy and toxicity of N,N',N",N"'-tetra(2,3,4-trihydroxybenzoyl)-spermine for decorporation of 239Pu from mice. Szot Z, et al. **Int J Radiat Biol** 1989 Jan;55(1):141–9

Effect of N1,N12-bis(ethyl)spermine and related compounds on growth and polyamine acetylation, content, and excretion in human colon tumor cells. Pegg AE, et al. **J Biol Chem** 1989 Jul 15;264(20):11744–9

Efficient gene transfer into mammalian primary endocrine cells with lipopolyamine-coated DNA. Behr JP, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6982–6

ANALYSIS

Interaction of polyamines with phospholipids: spermine and Ca2+ competition for phosphatidylserine containing liposomes. Tadolini B, et al. **Adv Exp Med Biol** 1988; 250:481–90

Distribution of spermine in bacilli and lactic acid bacteria. Hamana K, et al. **Can J Microbiol** 1989 Apr;35(4):450–5

Polyamines in cerebral ischemia. Paschen W, et al. **Neurochem Pathol** 1988 Jul–Dec;9:1–20

BIOSYNTHESIS

Regulation of polyamine biosynthetic activity by spermidine and spermine analogs—a novel antiproliferative strategy. Porter CW, et al. **Adv Exp Med Biol** 1988;250:677–90 (57 ref.)

BLOOD

[The character of quantitative changes in some parameters of polyamine metabolism of the blood in patients with chronic leukemia] Voronchikhina LD, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):74–7 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Red blood cell polyamines as a diagnostic indicator of glioma presence and recurrence. Elworthy P, et al. **J Neurooncol** 1989 May;7(1):31–8

METABOLISM

Receptors involved in the nervous system regulation of polyamine metabolism in rat salivary glands. Ekström J, et al. **Acta Physiol Scand** 1989 Mar;135(3):255–61

Bidirectional transport of spermine across the inner membrane of liver mitochondria. Toninello A, et al. **Adv Exp Med Biol** 1988;250:491–6 (17 ref.)

On the mechanism of spermine transport in liver mitochondria. Toninello A, et al. **J Biol Chem** 1988 Dec 25;263(36):19407–11

Equilibrium binding of spermine and histamine to salmon sperm DNA and poly(dGdC). Winkle SA, et al. **J Pharm Pharmacol** 1988 Nov;40(11):809–11

Molecular dynamics of spermine-DNA interactions: sequence specificity and DNA bending for a simple ligand. Feuerstein BG, et al. **Nucleic Acids Res** 1989 Sep 12; 17(17):6883–92

[Binding of polyamines by the double-helical DNA molecule in unfolded and compact forms] Slonitskii SV, et al. **Mol Biol (Mosk)** 1989 Mar–Apr;23(2):507–17 (Eng. Abstr.) **(Rus)**

[Polyamines of lymphocytes in animals in an experimental tumor process] Zaletok SP, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):22–6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Spermine inhibition of basal and stimulated adenylate cyclase is mediated by the inhibitory GTP-binding protein (Gi). Clo C, et al. **Adv Exp Med Biol** 1988;250:535–43

Effect of spermine on transfer RNA and transfer RNA-ribosome interactions. Kućan Z, et al. **Adv Exp Med Biol** 1988;250:525–33 (29 ref.)

Polyamine-dependent growth and calmodulin-regulated induction of ornithine decarboxylase. Ginty DD, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G342–8

Spermine, another specific allosteric activator of calcium uptake in rat liver mitochondria. Kröner H. **Arch Biochem Biophys** 1988 Nov 15;267(1):205–10

Modulation of glycogen synthase kinase activity of skeletal and smooth muscle casein kinase I by spermine. Hegazy MG, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):653–9

Polyamines are sufficient to drive the transport of the precursor of ornithine carbamoyltransferase into rat liver mitochondria: possible effect on mitochondrial membranes. Marcote MJ, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):287–93

Spermine antagonizes the binding of adriamycin to the inner membrane of heart mitochondria. Solaini G. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):791–8

Spermine stimulates RNA-dependent reverse transcriptase activity. Aoyama H. **Biochem Int** 1989 Jul;19(1):67–76

Sequence specificity in spermine-induced structural changes in CG-oligomers. Majumder K, et al. **Biochem Int** 1989 Feb;18(2):455–65

Effects of spermine and spermidine on the inorganic pyrophosphatase of Streptococcus faecalis. Interactions between polyamines and inorganic pyrophosphate. Lahti R, et al. **Biochem J** 1989 Apr 1;259(1):55–9

Topological complexes between DNA and topoisomerase II and effects of polyamines. Pommier Y, et al. **Biochemistry** 1989 Feb 7;28(3):995–1002

Inhibition of cyclic nucleotide phosphodiesterase and calcineurin by spermine, a calcium-independent calmodulin antagonist. Walters JD, et al. **Biochim Biophys Acta** 1988 Nov 2;957(1):138–42

Effects of spermine and magnesium ions on the aminoacylation of yeast tRNA(Tyr). Plohl M, et al. **Biochimie** 1988 May;70(5):637–44

Polyamine effects on DNA-directed RNA polymerases in the ciliate Tetrahymena thermophila. In vivo- and in vitro-experiments suggesting highly specific regulative interactions. Eichler W, et al. **Biol Chem Hoppe Seyler** 1989 May;370(5):451–66

The effect of spermine, spermidine and kallikrein on the triple adenosine triphosphatase enzyme activity of spermatozoa in males with oligoasthenozoospermia. Karacagil M, et al. **Br J Urol** 1989 Jan;63(1):84–6

The influence of polyunsaturated fatty acids on spermine inhibition of lipoperoxidation. Studies on liposomes prepared with microsomal and mitochondrial phospholipids of sea bass (Dicentrarchus labrax L.) and rat liver. Cabrini L, et al. **Comp Biochem Physiol [B]** 1989;93(3):647–51

Effect of spermine on the efficiency and fidelity of the codon-specific binding of tRNA to the ribosomes. Naranda T, et al. **Eur J Biochem** 1989 Jun 15;182(2):291–7

Mechanism of spermine action on plasma membrane sugar transport function of yeast Rhodotorula glutinis. Kumar P, et al. **Indian J Exp Biol** 1988 Nov;26(11):824–7

Polyamines differentially inhibit cyclic AMP-dependent protein kinase-mediated phosphorylation in the brain of the tobacco hornworm, Manduca sexta. Combest WL, et al. **J Neurochem** 1988 Nov;51(5):1581–91

Allosteric activation of brain mitochondrial Ca2+ uptake by spermine and by Ca2+: developmental changes. Jensen JR, et al. **J Neurochem** 1989 Oct;53(4):1173–81

Allosteric activation of brain mitochondrial Ca2+ uptake by spermine and by Ca2+: brain regional differences. Jensen JR, et al. **J Neurochem** 1989 Oct;53(4):1182–7

Stimulation of enzymatic activity in filament preparations of casein kinase II by polylysine, melittin, and spermine. Mamrack MD. **Mol Cell Biochem** 1989 Feb 21;85(2):147–57

Age-specific methylation of high-mobility-group proteins of the rat liver and its modulation by spermine and sodium butyrate. Thakur MK, et al. **Mutat Res** 1989 Mar; 219(2):107–11

[The effect of spermine on transport of Ca2+ ions in brain mitochondria] Karadzhov IuS, et al. **Biofizika** 1988 Nov–Dec;33(6):1001–5 (Eng. Abstr.) **(Rus)**

URINE

[The fractional composition of polyamines in the urine of normal subjects] Voronchikhina LD, et al. **Lab Delo** 1988; (9):71–2 **(Rus)**

SPERMINE SYNTHASE see under **TRANSFERASES**

SPERMIOCYTES see **SPERMATOCYTES**

SPERMOPHILUS see **SCIURIDAE**

SPHAERIALES see under **ASCOMYCETES**

SPHAEROPHORUS see **FUSOBACTERIUM**

SPHAEROPHORUS INFECTIONS see **FUSOBACTERIUM INFECTIONS**

SPHAEROPHORUS NECROPHORUS see **FUSOBACTERIUM NECROPHORUM**

SPHAGNUM see **PLANTS**

SPHENOID BONE

Fatal acute postoccrebellar hemorrhage due to an unsuspected spheno-occipital chordoma. Franquemont DW, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):1075–8

Giant cell tumour of the sphenoid bone—a case report. Raguveer CV, et al. **Indian J Pathol Microbiol** 1989 Jul; 32(3):243–5

[Meningioma of the sphenoid bone with involvement of the tympanic cavity] Gollmitzer W, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):657–9 (Eng. Abstr.) **(Ger)**

[Monostotic fibrous dysplasia of the sphenoidal bone presenting with visual disturbance during pregnancy] Okudera H, et al. **No To Shinkei** 1988 Aug;40(8):727–32 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Epignathic teratoma associated with craniopharyngeal canal [letter] Cohen R, et al. **AJNR** 1989 May–Jun;10(3):652

Basal transsphenoidal encephalocele: MR findings. Rice JF, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S79

The Tessier number 9 cleft. David DJ, et al. **Plast Reconstr Surg** 1989 Mar;83(3):520–7

ANATOMY & HISTOLOGY

Preserving the pterygoid plates in posterior repositioning of the LeFort I osteotomy. Hai HK, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):219–21

A pneumatized anterior clinoid mimicking an aneurysm on MR imaging. Report of two cases. Gean AD, et al. **J Neurosurg** 1989 Jul;71(1):128–32

INJURIES

Isolated basilar artery occlusion associated with a clivus fracture. Guha A, et al. **Can J Neurol Sci** 1989 Feb; 16(1):81–3

Basilar skull fractures in children. Liu–Shindo M, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):109–17

INNERVATION

Nerve pathways between the pterygopalatine ganglion and eye in cats. Lin T, et al. **Anat Rec** 1988 Sep;222(1):95–102

[Changes in the pterygopalatine and upper cervical sympathetic ganglia in experimental paranasal sinusitis] Spokoinaia VA. **Vestn Otorinolaringol** 1988 Sep–Oct; (5):18–22 (Eng. Abstr.) (Rus)

PATHOLOGY

Mucocele of the anterior clinoid process: CT and MR findings. Schwaighofer BW, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):501–3

Extra–articular ankylosis of the coronoid processes to the base of the skull. A case report. Karakasis D, et al. **J Craniomaxillofac Surg** 1989 Jan;17(1):46–9

RADIOGRAPHY

Mucocele of the anterior clinoid process: CT and MR findings. Schwaighofer BW, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):501–3

Transalar sphenoidal encephalocoeles: clinical and radiologic findings. Elster AD, et al. **Radiology** 1989 Jan;170(1 Pt 1):245–7

[Unusually localized osteosarcoma] Triebel HJ, et al. **ROFO** 1989 May;150(5):615–6 (Ger)

[X–ray changes in the pterygopalatine fossa in the diagnosis of tumors of the paranasal sinuses] Kossovol AL. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):34–9 (Eng. Abstr.) (Rus)

SURGERY

Nasal complication after transsphenoidal surgery for pituitary pathologies. Nabe–Nielsen J. **Acta Neurochir (Wien)** 1989; 96(3–4):122–5

Preoperative angiographical prediction of the necessity to removal of the anterior clinoid process in internal carotid–posterior communicating artery aneurysm surgery. Ochiai C, et al. **Acta Neurochir (Wien)** 1989;99(3–4):117–21

A new dural elevator for use during removal of the sphenoid wing. Technical note. Kobayashi S, et al. **J Neurosurg** 1988 Nov;69(5):793

Tension pneumocephalus after transsphenoidal surgery: case report. Altinörs N, et al. **Neurosurgery** 1988 Oct;23(4):516–8

[Modifications of Lefort I osteotomy. Pterygomaxillary disjunction by an inferior rotation of the maxilla] Precious DS, et al. **Rev Stomatol Chir Maxillofac** 1988;89(5):288–92 (Eng. Abstr.) (Fre)

SPHENOID SINUS

Sphenoid sinus mucocele. Stankiewicz JA. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):735–40

Magnetic resonance imaging of sphenoethmoid mucoceles. Eisele DW, et al. **Ear Nose Throat J** 1988 Oct;67(10):713, 716–8, 720 passim

Isolated sphenoid sinus disease. Pearlman SJ, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):716–20

Giant–cell neoplasm of the sphenoid sinus. Suster S, et al. **Mt Sinai J Med** 1989 Mar;56(2):118–22

Intracranial Aspergillus granuloma originating in the sphenoidal sinus—case report. Tsuboi K, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):1014–9 (23 ref.)

Ectopic prolactinoma within the sphenoid sinus. Heitzmann A, et al. **Neurosurgery** 1989 Feb;24(2):279–82

Bilateral compressive optic neuropathy secondary to bilateral sphenoethmoidal mucoceles. Newton N Jr, et al. **Ophthalmologica** 1989;198(1):13–9

Aspergillosis of sphenoid sinus presenting as a pituitary tumour. Tan KT, et al. **Singapore Med J** 1988 Aug; 29(4):410–2

[Mucoceles of the sphenoid sinus] Bourjat P, et al. **J Radiol** 1989 Jan;70(1):37–42 (Eng. Abstr.) (Fre)

[Trans–sphenoid meningoencephalocele as a cause of anterior hypophyseal lobe insufficiency] Braunsdorf WE. **Nervenarzt** 1989 Jul;60(7):441–3 (Ger)

[An autopsy case of malignant melanoma possibly originating in the sphenoid sinus] Shinbori T, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):636–42 (Eng. Abstr.) (Jpn)

[Cementoma of the nasal cavity and paranasal sinuses] Akopian RG, et al. **Vestn Otorinolaringol** 1988 Jul–Aug; (4):63–5 (Rus)

ANATOMY & HISTOLOGY

Marrow conversion before pneumatization of the sphenoid sinus: assessment with MR imaging. Aoki S, et al. **Radiology** 1989 Aug;172(2):373–5

[The capacity of the sphenoid sinus] Hajnič K. **Anat Anz** 1988;167(1):23–8 (Eng. Abstr.) (Ger)

[The sphenoid sinus, clinical anatomy of approaches to the pituitary region] Lang J, et al. **Gegenbaurs Morphol Jahrb** 1988;134(3):291–307 (Eng. Abstr.) (Ger)

PATHOLOGY

MR imaging of mucoceles of the sphenoid sinus. Dawson RC 3d, et al. **AJNR** 1989 May–Jun;10(3):613–4

Pathologic quiz case 2. Fibromyxoma of the ethmoidal sinus with secondary sphenoidal sinus mucocele. Alleva MD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul; 115(7):878–9, 881

Adult T–cell leukemia/lymphoma originating in the paranasal sinus. Inaki S, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1471–3

Embryonal rhabdomyosarcoma of the sphenoid sinus. Durham L, et al. **J Laryngol Otol** 1988 Sep;102(9):836–7

RADIOGRAPHY

Significance of CT and MR findings in sphenoid sinus disease. Digre KB, et al. **AJNR** 1989 May–Jun;10(3):603–6

Clinical radiology quiz. Hyperaerated sphenoid sinus. Som PM. **Am J Otolaryngol** 1989 May–Jun;10(3):217–9

Sphenochoanal polyp: CT findings. Hayes E, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):365–6

SURGERY

Transantral repair of cerebrospinal fluid fistulas using bone chips, Tisseel, fascia and plaster of Paris. Olofsson J, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:89–92

Percutaneous transnasal sphenoidotomy with sphenoid window. Towbin RB, et al. **AJNR** 1989 Jul–Aug; 10(4):845–7

Transsphenoidal surgery for pituitary tumors. Nicholson MW, et al. **Hawaii Med J** 1989 Feb;48(2):12, 15

Antro–ethmosphenoidectomy. Turnbull FM Jr, et al. **Int Surg** 1989 Jan–Mar;74(1):58–60 (15 ref.)

A modified incision for the trans–septal trans–sphenoidal approach to the pituitary. Baraka ME. **J Laryngol Otol** 1989 Jul;103(7):670–1

Intranasal sphenoethmoidectomy: 10–year experience and literature review. Stevens HE, et al. **J Otolaryngol** 1988 Aug;17(5):254–9

The endoscopic approach to the sphenoid sinus. Stankiewicz JA. **Laryngoscope** 1989 Feb;99(2):218–21

Pseudotumor of the sellar and parasellar areas. Gartman JJ Jr, et al. **Neurosurgery** 1989 Jun;24(6):896–901

Endoscopic total sphenoethmoidectomy. Schaefer SD. **Otolaryngol Clin North Am** 1989 Aug;22(4):727–32

SPHEROCYTES see under **ERYTHROCYTES, ABNORMAL**

SPHEROCYTOSIS, HEREDITARY

see related
ANEMIA, SIDEROBLASTIC

Hereditary spherocytosis. Boyd AS. **Am Fam Physician** 1989 Feb;39(2):167–72 (29 ref.)

Hereditary spherocytosis: a clinical experience. Santoso FX, et al. **Paediatr Indones** 1988 Jan–Feb;28(1–2):27–35

BLOOD

Relative iron deficiency in hereditary spherocytosis. Zanella A, et al. **Am J Hematol** 1989 Jun;31(2):81–6

What happens to the microspherocytosis of hereditary spherocytosis in folate deficiency? Blecher TE. **Clin Lab Haematol** 1988;10(4):403–8

Normal erythrocyte osmotic fragility in hereditary spherocytosis. Korones D, et al. **J Pediatr** 1989 Feb; 114(2):264–6

Effects of centrifugation on transmembrane water loss from normal and pathologic erythrocytes. Kaperonis AA, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):174–8

Aplastic crisis in occult hereditary spherocytosis caused by human parvovirus (HPV B19). Rappaport ES, et al. **South Med J** 1989 Feb;82(2):247–51

[Measurement of phospholipids in erythrocytes, plasma and platelets in a patient with hereditary spherocytosis] César JM, et al. **Sangre (Barc)** 1989 Aug;34(4):300–2 (Eng. Abstr.) (Spa)

COMPLICATIONS

Thrombotic thrombocytopenic purpura in an asplenic patient with hereditary spherocytosis: failure of plasmapheresis, antiplatelet therapy, and corticosteroids. Becton DL, et al. **Am J Pediatr Hematol Oncol** 1988 Spring;10(1):5–8

Human parvovirus B19–induced transient pancytopenia in a child with hereditary spherocytosis. Hanada T, et al. **Br J Haematol** 1988 Sep;70(1):113–5

Glucuronyl transferase deficiency and mild hereditary spherocytosis: effect of splenectomy. Eber SW, et al. **Eur J Pediatr** 1988 Aug;147(6):639–42

Transient pancytopenia as an initial manifestation of hereditary spherocytosis. A case report. Frick W, et al. **Mo Med** 1987 Feb;84(2):73–5

[A case from practice (125). Patient: Z. A., born 10–27–1921] Meili R. **Schweiz Rundsch Med Prax** 1988 Dec 27; 77(52):1439–40 (Ger)

[Parvovirus–induced aplastic crisis in a child with hereditary spherocytosis: studies on the mechanisms of hemopoietic suppression] Saitoh H, et al. **Rinsho Ketsueki** 1989 Mar; 30(3):366–70 (Eng. Abstr.) (Jpn)

[Pure red cell aplasia as the presenting form of hereditary spherocytosis] González Silva M, et al. **An Esp Pediatr** 1988 Sep;29(3):254–6 (Spa)

DIAGNOSIS

A modification of the 'pink test' may improve the diagnosis of hereditary spherocytosis [letter] Pinto L, et al. **Acta Haematol (Basel)** 1989;82(1):53–4

Modified osmotic fragility test for the laboratory diagnosis of hereditary spherocytosis. Judkiewicz L, et al. **Am J Hematol** 1989 Jun;31(2):136–7

The use of the technicon H1 in the diagnosis of hereditary spherocytosis. Pati AR, et al. **Clin Lab Haematol** 1989; 11(1):27–30

'Pink test' and osmotic fragility test for the diagnosis of hereditary spherocytosis: another view [letter] Judkiewicz L, et al. **Eur J Haematol** 1989 Feb;42(2):217

The Pink test in the diagnosis of hereditary spherocytosis [letter] Zerhouni F. **Eur J Haematol** 1988 Nov;41(5):510–1

[Hereditary spherocytosis first diagnosed upon the development of aplastic crisis; a case report] Aonuma K, et al. **Rinsho Ketsueki** 1989 Feb;30(2):266–70 (Eng. Abstr.) (Jpn)

ETIOLOGY

Hereditary elliptocytosis, spherocytosis and related disorders: consequences of a deficiency or a mutation of membrane skeletal proteins. Palek J. **Blood Rev** 1987 Sep;1(3):147–68 (124 ref.)

GENETICS

Occurrence of hereditary spherocytosis and beta thalassaemia in the same family: globin chain synthesis and visco diffractometric studies. Pautard B, et al. **Br J Haematol** 1988 Oct;70(2):239–45

PATHOLOGY

Morphologic and morphometric light and electron microscopic studies of the spleen in patients with hereditary spherocytosis and autoimmune haemolytic anaemia. Ferreira JA, et al. **Br J Haematol** 1989 Jun;72(2):246–53

[Usefulness of cytometry based on the diffraction of a laser beam in evaluating spherocytosis] Gilsanz F, et al. **Sangre (Barc)** 1989 Aug;34(4):263–6 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Hereditary spherocytosis. Boyd AS. **Am Fam Physician** 1989 Feb;39(2):167–72 (29 ref.)

SURGERY

Splenectomy in mild hereditary spherocytosis: is it worth the risk? Manno CS, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):300–3

SPHEROPLASTS

Development of an efficient spheroplast transformation procedure for S. thermophilus: the use of transfection to define a regeneration medium. Mercenier A, et al. **Biochimie** 1988 Apr;70(4):567–77

ANALYSIS

Preparation of RNA from unspheroplasted yeast cells (Saccharomyces cerevisiae). McEntee CM, et al. **Anal Biochem** 1989 Feb 1;176(2):303–6

DRUG EFFECTS

Mureidomycins A–D, novel peptidylnucleoside antibiotics with spheroplast forming activity. I. Taxonomy, fermentation, isolation and physico–chemical properties. Inukai M, et al. **J Antibiot (Tokyo)** 1989 May;42(5):662–6

Mureidomycins A–D, novel peptidylnucleoside antibiotics with spheroplast forming activity. II. Structural elucidation. Isono F, et al. **J Antibiot (Tokyo)** 1989 May; 42(5):667–73

Mureidomycins A–D, novel peptidylnucleoside antibiotics with spheroplast forming activity. III. Biological properties. Isono F, et al. **J Antibiot (Tokyo)** 1989 May; 42(5):674–9

ISOLATION & PURIFICATION

[Isolation of spheroplasts from Escherichia coli 85 for aspartate–ammonia–lyase localization] Shcherbakova VN, et al. **Prikl Biokhim Mikrobiol** 1988 May–Jun;24(3):400–4 (Eng. Abstr.) (Rus)

[Isolation and ultrastructure of Yersinia spheroplasts and protoplasts] Dzadzieva MF, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):3–5 (Eng. Abstr.) (Rus)

METABOLISM

Effects of Escherichia coli spheroplast formation on assays of H2 and adenosine triphosphate based ampicillin susceptibility tests. Hörnsten EG, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):171–5

Reconstitution of protein transport using broken yeast spheroplasts. Baker D, et al. **Methods Cell Biol** 1989; 31:127–41

PHYSIOLOGY

Progress in culture and subculture of spheroplasts and fastidious acid-fast bacilli isolated from intestinal tissues. Markesich DC, et al. **J Clin Microbiol** 1988 Aug; 26(8):1600-3

ULTRASTRUCTURE

Storage of spheroplasts at -70 degrees C for transfection with phi X174 RF DNA. Malling HV, et al. **Gene Anal Tech** 1987 Mar-Apr;4(2):23-6

SPHINCTEROPLASTY, TRANSDUODENAL see **SPHINCTEROTOMY, TRANSHEPATIC**

SPHINCTEROTOMY, TRANSDUODENAL see **SPHINCTEROTOMY, TRANSHEPATIC**

SPHINCTEROTOMY, TRANSHEPATIC

Interventional endoscopy in the pancreatobiliary tree. Dowsett JF, et al. **Am J Gastroenterol** 1988 Dec; 83(12):1328-36 (101 ref.)

Endoscopic sphincterotomy: a reappraisal. Simon DM, et al. **Am J Gastroenterol** 1989 Mar;84(3):213-9 (58 ref.)

Early postoperative endoscopic sphincterotomy for retained biliary stones. Bickerstaff KI, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):350-1

Common duct exploration or endoscopic sphincterotomy for choledocholithiasis? Worthley CS, et al. **Aust N Z J Surg** 1989 Mar;59(3):209-15

Papillotomy and functional disorders of the sphincter of Oddi. Krims PE, et al. **Endoscopy** 1988 Aug;20 Suppl 1:203-6 (32 ref.)

Endoscopic therapy of the sump syndrome. Polydorou A, et al. **Endoscopy** 1989 May;21(3):126-30

Biliary lithiasis: combined endoscopic and surgical treatment. Ponchon T, et al. **Endoscopy** 1989 Jan;21(1):15-8

Efficacy of chenodeoxycholic acid and ursodeoxycholic acid for lowering cholesterol saturation index of gallbladder in patients with a sphincterotomy. Meier PB, et al. **Gastroenterology** 1988 Dec;95(6):1595-600

Sphincterotomy and passage of glass beads [letter] Shaffer EA. **Gastroenterology** 1988 Dec;95(6):1692

A/S/G/E distinguished lecture--endoscopic therapy of pancreatic disease: a new horizon. Geenen JE. **Gastrointest Endosc** 1988 Sep-Oct;34(5):386-9

The team approach to biliary tract intervention: current status of combined percutaneous-endoscopic techniques. Kerr RM, et al. **Gastrointest Endosc** 1988 Sep-Oct;34(5):432-4 (15 ref.)

Induced current on the guide wire during sphincterotomy. Tucker RD, et al. **Gastrointest Endosc** 1989 Jan-Feb; 35(1):45-7

Late results of endoscopic sphincterotomy for bile duct stones in elderly patients with gall bladders in situ. Ingoldby CJ, et al. **Gut** 1989 Aug;30(8):1129-31

Is duodenal diverticulum a risk factor for sphincterotomy? Vaira D, et al. **Gut** 1989 Jul;30(7):939-42

Indications and results of sphincteroplasty in benign biliary diseases. Chiong H, et al. **Hepatogastroenterology** 1989 Jun; 36(3):140-2

Duodenoscopic sphincterotomy in a northern Indian hospital. Saraswat VA, et al. **Indian J Gastroenterol** 1989 Jan; 8(1):27-9

Endoscopic sphincterotomy [letter] Tandon R. **Indian J Gastroenterol** 1989 Jul;8(3):205-7

Treatment of biliary fistulas and cholelithiasis: is endoscopic sphincterotomy acceptable in the paediatric age group? Gökçora IH, et al. **Int Surg** 1989 Jan-Mar;74(1):51-4

Endoscopic papillosphincterotomy and surgical sphincteroplasty for the treatment of bile duct stones: a comparative analysis. Motta G, et al. **Ital J Surg Sci** 1989; 19(2):165-71

Endoscopic sphincterotomy in the management of benign and malignant extrahepatic biliary obstruction. Simmons TC, et al. **J Natl Med Assoc** 1989 Apr;81(4):421-9

Endoscopic sphincterotomy [letter] **Lancet** 1988 Nov 26; 2(8622):1259-60

Endoscopic sphincterotomy in acute gallstone pancreatitis [letter] **Lancet** 1988 Dec 3;2(8623):1314

Tissue sampling from the common bile duct through endoscopic retrograde cholangiopancreatography, endoscopic papillo(sphinctero)tomy and drainage in juxtapapillary malignancies. Pugliese V, et al. **Surg Endosc** 1987;1(2):83-7

Nasobiliary drainage following endoscopic sphincterotomy. A useful method of preventing and treating early complications. Ricci E, et al. **Surg Endosc** 1987;1(3):147-50

Transduodenal sphincteroplasty for impacted stone made unnecessary by electrohydraulic lithotripsy. Fan ST. **Surg Gynecol Obstet** 1989 Oct;169(4):363-4

[Lithiasis of the common bile duct and transduodenal papillosphincterotomy. Analysis of our cases] Nobili P, et al. **Minerva Chir** 1989 Mar 31;44(6):985-9 (Eng. Abstr.) **(Ita)**

[Transduodenal sphincteroplasty] Klimenko GA. **Khirurgiia (Mosk)** 1989 Jan;(1):47-53 (Eng. Abstr.) **(Rus)**

[Endoscopic papillosphincterotomy in acute surgical diseases of the biliary tract and pancreas] Sinev IuV, et al. **Klin Med (Mosk)** 1988 Aug;66(8):108-10 (Eng. Abstr.) **(Rus)**

[Results and indications of sphincteroplasty in the treatment of complicated biliary lithiasis] Mejuto FJ, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):256-8 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Bleeding following endoscopic sphincterotomy: angiographic management by transcatheter embolization. Saeed M, et al. **Gastrointest Endosc** 1989 Jul-Aug;35(4):300-3

Complications of endoscopic retrograde sphincterotomy: computed tomographic evaluation. Kuhlman JE, et al. **Gastrointest Radiol** 1989 Spring;14(2):127-32

Perforation of the common bile duct during endoscopic sphincterotomy: recognition on computed tomography and successful percutaneous treatment. Lambiase RE, et al. **Gastrointest Radiol** 1989 Spring;14(2):133-6

[Complications after papillosphincterotomy and the ways of their correction] Kochnev OS, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):87-91 **(Rus)**

METHODS

Endoscopic retrograde cholangiopancreatography (ERCP) and sphincterotomy (EST) after BII resection. Nordback I, et al. **Ann Chir Gynaecol** 1988;77(2):64-9 (22 ref.)

Fate of the gallbladder with cholelithiasis after endoscopic sphincterotomy for choledocholithiasis. Lamont DD, et al. **Can J Surg** 1989 Jan;32(1):15-8

Contribution of endoscopy to diagnosis and treatment of tumors of the ampulla of Vater. Ponchon T, et al. **Cancer** 1989 Jul 1;64(1):161-7

Long-term follow-up after endoscopic sphincterotomy (EST). Seifert E. **Endoscopy** 1988 Aug;20 Suppl 1:232-5

Early postoperative endoscopic sphincterotomy for retained common bile duct stones. Danilewitz MD. **Gastrointest Endosc** 1989 Jul-Aug;35(4):298-9

Endoscopic sphincterotomy in Billroth II patients: an improved method using a diathermic needle as sphincterotome and a nasobiliary drain as guide. Ricci E, et al. **Gastrointest Endosc** 1989 Jan-Feb;35(1):47-50

Endoscopic sphincterotomy in 1000 consecutive patients. Vaira D, et al. **Lancet** 1989 Aug 19;2(8660):431-4

Multidisciplinary approach to complex endoscopic biliary intervention. Chespak LW, et al. **Radiology** 1989 Mar;170(3 Pt 2):995-7

[1-step endoscopic laser papillosphincterotomy with endoscopic biliary drainage] Vladimirov B, et al. **Khirurgiia (Sofiia)** 1989;42(1):57-9 (Eng. Abstr.) **(Bul)**

[Sphincteroplasty: its value in the treatment of distal lithiasis of the choledochus] Chaib E, et al. **Arq Gastroenterol** 1988 Jul-Sep;25(3):145-8 (Eng. Abstr.) **(Por)**

SPHINGOGLYCOLIPIDS see **GLYCOSPHINGOLIPIDS**

SPHINGOLIPIDOSIS

DIAGNOSIS

[Sphingolipidosis. Recent progress in biochemical diagnosis. New pathogenic approaches] Vanier MT, et al. **Ann Biol Clin (Paris)** 1988;46(7):461-8 (58 ref.) (Eng. Abstr.) **(Fre)**

DRUG THERAPY

Evolution of enzyme replacement therapy for lipid storage diseases. Brady RO, et al. **Life Sci** 1974 Oct 1;15(7):1235-48 (44 ref.)

ENZYMOLOGY

Leukocyte and plasma N-laurylsphingosine deacylase (ceramidase) in Farber disease. Ben-Yoseph Y, et al. **Clin Genet** 1989 Jul;36(1):38-42

METABOLISM

Direct analysis of glycolipids on thin-layer plates by matrix-assisted secondary ion mass spectrometry: application for glycolipid storage disorders. Kushi Y, et al. **Anal Biochem** 1988 Nov 15;175(1):167-76

SPHINGOLIPIDS

Partitioning of exchangeable fluorescent phospholipids and sphingolipids between different lipid bilayer environments. Gardam MA, et al. **Biochemistry** 1989 Jan 24;28(2):884-93

Intermixing of dipalmitoylphosphatidylcholine with phospho- and sphingolipids bearing highly asymmetric hydrocarbon chains. Gardam M, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):319-25

ANALYSIS

Long chain fatty acid deficits in brain myelin sphingolipids of undernourished rat pups. Yeh YY. **Lipids** 1988 Dec; 23(12):1114-8

BIOSYNTHESIS

Inhibition of serine palmitoyltransferase in vitro and long-chain base biosynthesis in intact Chinese hamster ovary cells by beta-chloroalanine. Medlock KA, et al. **Biochemistry** 1988 Sep 6;27(18):7079-84

Warfarin administration reduces synthesis of sulfatides and other sphingolipids in mouse brain. Sundaram KS, et al. **J Lipid Res** 1988 Nov;29(11):1475-9

Sphingolipid biosynthesis by rat liver cells: effects of serine, fatty acids and lipoproteins. Messmer TO, et al. **J Nutr** 1989 Apr;119(4):534-8

METABOLISM

Rapid turnover of sphingosine synthesized de novo from [14C]serine by Chinese hamster ovary cells. Medlock KA, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):232-7

PHARMACOLOGY

Modulation of phosphorylase kinase activity by sphingolipids. Baltas LG, et al. **Biochem Int** 1989 Jul;19(1):99-106

Dexamethasone and sphingolipids inhibit concanavalin A stimulated glucose uptake in 3T3-L1 fibroblasts. Nelson DH, et al. **Endocr Res** 1988-89;14(4):305-18

PHYSIOLOGY

Protein kinase C regulation by sphingosine/lysosphingolipids. Bell RM, et al. **Cold Spring Harb Symp Quant Biol** 1988; 53 Pt 1:103-10 (67 ref.)

Functions of sphingolipids and sphingolipid breakdown products in cellular regulation. Hannun YA, et al. **Science** 1989 Jan 27;243(4890):500-7 (110 ref.)

SPHINGOMYELIN PHOSPHODIESTERASE see under **PHOSPHODIESTERASES**

SPHINGOMYELINS

Interaction of sphingomyelins and phosphatidylcholines with fluorescent dehydroergosterol. Schroeder F, et al. **Biochemistry** 1989 Jul 11;28(14):5992-6000

Spontaneous transfer between phospholipid bilayers of dehydroergosterol, a fluorescent cholesterol analog. Bar LK, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):109-12

Effect of the mitogenic lectin concanavalin A on the thermotropic behavior of glycosyl-free cationic lipids and their mixtures with zwitterionic lipids. Lüscher-Mattli M. **Biopolymers** 1989 Apr;28(4):799-817

Liquid membrane phenomenon in the biological actions of gonadal steroid hormones. Nagappa AN, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):350-5

ANALYSIS

Aortic intimal lipid content and serum lipoproteins in patients undergoing coronary by-pass surgery as related to clinical prognosis. Bondjers G, et al. **Atherosclerosis** 1988 Aug; 72(2-3):231-9

Usefulness of the lecithin/sphingomyelin ratio and uselessness of phosphatidylglycerol determinations in tracheal aspirates of preterm infants [letter] Wijnands JB, et al. **Clin Chem** 1989 Apr;35(4):706

Plasma membranes contain half the phospholipid and 90% of the cholesterol and sphingomyelin in cultured human fibroblasts. Lange Y, et al. **J Biol Chem** 1989 Mar 5; 264(7):3786-93

Phospholipids in amniotic fluid with special reference to the lecithin/sphingomyelin ratio. Touchstone JC, et al. **J Chromatogr** 1988 Jul 29;429:359-71 (37 ref.)

Lecithin:sphingomyelin ratio in the amniotic fluid of male and female fetuses. Zachman RD, et al. **J Reprod Med** 1989 Mar;34(3):203-6

Amniotic fluid lecithin/sphingomyelin ratio in high risk pregnancy. Ng HT, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Oct;12(4):247-51

[Critical evaluation of various methods of determining markers of fetal maturity in amniotic fluid] Möller U, et al. **Zentralbl Gynakol** 1988;110(24):1574-82 (Eng. Abstr.) **(Ger)**

[Diagnosis of pulmonary maturity in the fetus] Massobrio M, et al. **Ann Osp Maria Vittoria Torino** 1987-88;30(1):9-18 (Eng. Abstr.) **(Ita)**

BIOSYNTHESIS

Resynthesis of sphingomyelin from plasma-membrane phosphatidylcholine in BHK cells treated with Staphylococcus aureus sphingomyelinase. Allan D, et al. **Biochem J** 1988 Sep 15;254(3):765-71

Sidedness of ceramide-phosphoethanolamine synthesis on rat liver plasma membrane. Maurice A, et al. **Biochimie** 1989 Mar;71(3):373-8

Phorbol ester stimulates the synthesis of sphingomyelin in NIH 3T3 cells. A diminished response in cells transformed with human A-raf carrying retrovirus. Kiss Z, et al. **FEBS Lett** 1988 Nov 21;240(1-2):221-6

Thyrotropin-releasing hormone and phorbol esters stimulate sphingomyelin synthesis in GH3 pituitary cells. Evidence for involvement of protein kinase C. Kolesnick RN. **J Biol Chem** 1989 Jul 15;264(20):11688-92

BLOOD

Molecular species of glycerophospholipids and sphingomyelins of human erythrocytes: improved method of analysis. Myher JJ, et al. **Lipids** 1989 May;24(5):396-407

Molecular species of glycerophospholipids and sphingomyelins of human plasma: comparison to red blood cells. Myher JJ, et al. **Lipids** 1989 May;24(5):408-18

[Changes in phospholipid composition of high density lipoproteins in children as a possible precursor of the development of ischemic heart disease] Gerasimova EN, et al. **Kardiologiia** 1988 Sep;28(9):61–6 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Synthesis of pyrenesulfonylamido–sphingomyelin and its use as substrate for determining sphingomyelinase activity and diagnosing Niemann–Pick disease. Klar R, et al. **Clin Chim Acta** 1988 Sep 15;176(3):259–67

ISOLATION & PURIFICATION

Amniotic fluid phospholipids. Study of the cold acetone precipitation effect. Budria RJ, et al. **Clin Chim Acta** 1989 Feb 28;180(2):141–6

METABOLISM

Isolation of plasma membranes from cultured glioma cells and application to evaluation of membrane sphingomyelin turnover. Cook HW, et al. **Anal Biochem** 1988 Nov 1; 174(2):552–60

Divergent fate of unsaturated and saturated ceramides and sphingomyelins in rat liver and cells in culture. Stein O, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):175–82

Trifluoperazine stimulates the coordinate degradation of sphingomyelin and phosphatidylcholine in GH3 pituitary cells. Kolesnick RN, et al. **J Biol Chem** 1989 Aug 25; 264(24):14057–61

Lipid recycling between the plasma membrane and intracellular compartments: transport and metabolism of fluorescent sphingomyelin analogues in cultured fibroblasts. Koval M, et al. **J Cell Biol** 1989 Jun;108(6):2169–81

Evidence for both endogenous and exogenous sources of the sphingomyelin storage in lymphoid cell lines from patients with Niemann–Pick disease types A and B. Levade T, et al. **J Inherited Metab Dis** 1988;11(2):151–7

Utilization of high–density lipoprotein sphingomyelin by the developing and mature brain in the rat. Bentejac M, et al. **J Neurochem** 1989 May;52(5):1495–500

Uptake and utilization of double–labeled high–density lipoprotein sphingomyelin in isolated brain capillaries of adult rats. Homayoun P, et al. **J Neurochem** 1989 Oct; 53(4):1031–5

On the mechanism of sphingomyelin interaction with solubilized membrane proteins. Barak S, et al. **Membr Biochem** 1987–88;7(3):153–73

[Importance of fluorescent lipid substrates for the study of hereditary lysosomal lipidoses. Application to the diagnosis of Niemann–Pick disease] Douste–Blazy L, et al. **Bull Acad Natl Med (Paris)** 1988 Jun;172(6):807–13 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Effects of chronic injection of sphingomyelin–containing liposomes on lymphoid and non–lymphoid cells in the spleen. Transient suppression of marginal zone macrophages. Claassen E, et al. **Br J Exp Pathol** 1988 Dec; 69(6):865–75

Sialylation of lacto–N–neotetraosyl ceramide by a solubilized sialyltransferase(s) from chicken skeletal muscle: effect of phosphatidylcholine and sphingomyelin. Dasgupta S, et al. **Lipids** 1989 Jun;24(6):550–4

TOXICITY

Pseudomonas aeruginosa cytotoxin: the influence of sphingomyelin on binding and cation permeability increase in mammalian erythrocytes. Crowell KM, et al. **Toxicon** 1989;27(5):531–40

SPHINGOSINE

ADMINISTRATION & DOSAGE

Sphingosine inhibits phorbol ester–induced inflammation, ornithine decarboxylase activity, and activation of protein kinase C in mouse skin. Gupta AK, et al. **J Invest Dermatol** 1988 Nov;91(5):486–91

ANALOGS & DERIVATIVES

Infantile and fetal globoid cell leukodystrophy: analysis of galactosylceramide and galactosylsphingosine. Kobayashi T, et al. **Ann Neurol** 1988 Oct;24(4):517–22

Protein kinase C blockers and neutrophil receptors for leukotriene B4. O'Flaherty JT, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1456–60

Accumulation of lysosulfatide (sulfogalactosylsphingosine) in tissues of a boy with metachromatic leukodystrophy. Toda K, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):605–11

Lysosphingolipids and mitochondrial function. II. Deleterious effects of sphingosylphosphorylcholine. Strasberg PM, et al. **Biochem Cell Biol** 1988 Dec; 66(12):1322–32

Structural requirements for long–chain (sphingoid) base inhibition of protein kinase C in vitro and for the cellular effects of these compounds. Merrill AH Jr, et al. **Biochemistry** 1989 Apr 18;28(8):3138–45

The twitcher mouse: accumulation of galactosylsphingosine and pathology of the central nervous system. Tanaka K, et al. **Brain Res** 1989 Mar 20;482(2):347–50

Differential effects of long–chain (sphingoid) bases on the monocytic differentiation of human leukemia (HL–60) cells induced by phorbol esters, 1 alpha, 25–dihydroxyvitamin D3, or ganglioside GM3. Stevens VL, et al. **Cancer Res** 1989 Jun 15;49(12):3229–34

A facile enzymatic synthesis of sphingosine–1–phosphate and dihydrosphingosine–1–phosphate. Van Veldhoven PP, et al. **J Lipid Res** 1989 Apr;30(4):611–6

Lysosulfatide (galactosylsphingosine–3–O–sulfate) from metachromatic leukodystrophy and normal human brain. Rosengren B, et al. **J Neurochem** 1989 Apr;52(4):1035–41

Sphingosine and psychosine, suggested inhibitors of protein kinase C, inhibit LH effects in rat luteal cells. Sender Baum MG, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):127–35

ANALYSIS

A series of fluorescent N–acylsphingosines: synthesis, physical properties, and studies in cultured cells. Pagano RE, et al. **Biochemistry** 1988 Jun 14;27(12):4439–45

Free sphingosines in porcine epidermis. Wertz PW, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):213–7

BIOSYNTHESIS

Free sphingosine formation from endogenous substrates by a liver plasma membrane system with a divalent cation dependence and a neutral pH optimum. Slife CW, et al. **J Biol Chem** 1989 Jun 25;264(18):10371–7

METABOLISM

Rapid turnover of sphingosine synthesized de novo from [14C]serine by Chinese hamster ovary cells. Medlock KA, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):232–7

PHARMACOLOGY

Weak inhibition of protein kinase C coupled with various non–specific effects make sphingosine an unsuitable tool in platelet signal transduction studies. Krishnamurthi S, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):258–64

Modulation of protein kinase C and diverse cell functions by sphingosine—a pharmacologically interesting compound linking sphingolipids and signal transduction. Merrill AH Jr, et al. **Biochim Biophys Acta** 1989 Feb 9; 1010(2):131–9 (71 ref.)

Inhibition of the induction of ornithine decarboxylase activity by 12–O–tetradecanoylphorbol–13–acetate in mouse skin by sphingosine sulfate. Enkvetchakul B, et al. **Carcinogenesis** 1989 Feb;10(2):379–81

Sphingosine inhibits calmodulin–dependent enzymes. Jefferson AB, et al. **J Biol Chem** 1988 Oct 25; 263(30):15241–4

Sphingomyelinase action inhibits phorbol ester–induced differentiation of human promyelocytic leukemic (HL–60) cells. Kolesnick RN. **J Biol Chem** 1989 May 5; 264(13):7617–23

Insulin–stimulated hexose transport and glucose oxidation in rat adipocytes is inhibited by sphingosine at a step after insulin binding. Robertson DG, et al. **J Biol Chem** 1989 Apr 25;264(12):6773–9

Sphingosine inhibits phorbol 12–myristate 13–acetate–, but not serum–induced, activation of Na+/H+ exchange in mammalian cells. Gillies RJ, et al. **J Cell Physiol** 1989 Apr; 139(1):125–30

Dimethylsulfoxide modifies the sensitivity of BALB/c–3T3 cells to the activation of Na+/H+ exchange by phorbol esters. Martinez R, et al. **J Cell Physiol** 1989 Apr; 139(1):131–5

Sphingosine and psychosine, suggested inhibitors of protein kinase C, inhibit LH effects in rat luteal cells. Sender Baum MG, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):127–35

Sphingosine, an inhibitor of protein kinase C, suppresses the insulin–like effects of growth hormone in rat adipocytes. Smal J, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4705–9

PHYSIOLOGY

Protein kinase C regulation by sphingosine/lysosphingolipids. Bell RM, et al. **Cold Spring Harb Symp Quant Biol** 1988; 53 Pt 1:103–10 (67 ref.)

SPICES see **CONDIMENTS**

SPIDER BITE see **ARACHNIDISM**

SPIDER VENOMS see under **ARTHROPOD VENOMS**

SPIDERS

Life extension by dietary restriction in the bowl and doily spider, Frontinella pyramitela. Austad SN. **Exp Gerontol** 1989;24(1):83–92

Red–back spider–bites at Fremantle Hospital, 1982–1987. Jelinek GA, et al. **Med J Aust** 1989 Jun 19;150(12):693–5

Ophthalmia nodosa caused by tarantula hairs. Hered RW, et al. **Ophthalmology** 1988 Feb;95(2):166–9

Spiders in Brazil. Lucas S. **Toxicon** 1988;26(9):759–72 (51 ref.)

GENETICS

Features of the cell–free translation of a spider fibroin mRNA. Candelas GC, et al. **Biochem Cell Biol** 1989 Feb–Mar;67(2–3):173–6

Primary and secondary structure of the 18S ribosomal RNA of the bird spider Eurypelma californica and evolutionary relationships among eukaryotic phyla. Hendriks L, et al. **Eur J Biochem** 1988 Oct 15;177(1):15–20

METABOLISM

Allosteric oxygen–binding properties of reassembled tarantula (Eurypelma californicum) hemocyanin with incorporated apo– or met–subunits. Decker H, et al. **Biol Chem Hoppe Seyler** 1989 Jun;370(6):511–23

Hemocyanins in spiders. XXII. Range of allosteric interaction in a four–hexamer hemocyanin. Co–operativity and Bohr effect in dissociation intermediates. Savel–Niemann A, et al. **J Mol Biol** 1988 Nov 20;204(2):385–95

PHYSIOLOGY

Spectral sensitivity in jumping spiders (Araneae, Salticidae). Peaslee AG, et al. **J Comp Physiol [A]** 1989 Jan; 164(3):359–63

SPIN LABELS

see related

ELECTRON SPIN RESONANCE

Characterization of protein spin labeling by maleimide: evidence for nitroxide reduction. Perussi JR, et al. **Anal Biochem** 1988 Sep;173(2):289–95

Problems associated with spin trapping oxygen–centered free radicals in biological systems. Pou S, et al. **Anal Biochem** 1989 Feb 15;177(1):1–6 (42 ref.)

Exchange and shuttling of electrons by nitroxide spin labels. Nettleton DO, et al. **Arch Biochem Biophys** 1989 Jun; 271(2):414–23

Bis(sulfo–N–succinimidyl) [15N,2H16]doxyl–2–spiro–4'–pimelate, a stable isotope–substituted, membrane–impermeant bifunctional spin label for studies of the dynamics of membrane proteins: application to the anion–exchange channel in intact human erythrocytes. Anjaneyulu PS, et al. **Biochemistry** 1988 Sep 6;27(18):6844–51

Conformational changes of plasma fibronectin detected upon adsorption to solid substrates: a spin–label study. Narasimhan C, et al. **Biochemistry** 1989 Jun 13; 28(12):5041–6

Photochemistry of aqueous solutions of benzazolo[3,2–a]quinolinium salts. A spin–trapping study using 17O–enriched water and oxygen. Alegria AE, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):1–10

Behavior of spin labels in a variety of interdigitated lipid bilayers. Boggs JM, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):243–53

Spin trapping of lipid–derived radicals in liposomes. Feix JB, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):230–5

Spin–labeled analogues of ATP, ADP and AMP: substitutes for normal nucleotides in biochemical systems. Ubom GA, et al. **Biochim Biophys Acta** 1989 Jul 27;997(1–2):1–8

Effect of troxerutin and methionine on spin trapping of free oxy–radicals. Blasig IE, et al. **Biomed Biochim Acta** 1988; 47(10–11):S252–5

Detection of malignant hyperthermia susceptibility using a spin label technique on red blood cells. Ohnishi ST, et al. **Br J Anaesth** 1988 Nov;61(5):565–8

Spin trapping: ESR parameters of spin adducts [letter] DuBose CM, et al. **Free Radic Biol Med** 1988;5(1):55–6

Sonochemistry of nitrone spin traps in aqueous solutions. Evidence for pyrolysis radicals from spin traps. Kondo T, et al. **Free Radic Biol Med** 1989;7(3):259–68

Evaluation of dibromonitrosobenzene sulfonate as a spin trap in biological systems. Samuni A, et al. **Free Radic Biol Med** 1989;7(1):37–43

An artifact in the ESR spectrum obtained by spin trapping with DMPO. Makino K, et al. **Free Radic Res Commun** 1989;6(1):19–28

Rapid assessment of liposomal stability in blood by an aqueous nitroxide spin label. Chan HC, et al. **J Biochem Biophys Methods** 1989 Jun;18(4):271–6

Spin trapping of the superoxide anion: complications in the use of the water–soluble nitroso–aromatic reagent DBNBS. Mani V, et al. **J Biochem Biophys Methods** 1989 Mar; 18(2):91–6

A simple method for determination of rotational correlation times and separation of rotational and polarity effects from EPR spectra of spin–labeled biomolecules in a wide correlation time range. Steinhoff HJ. **J Biochem Biophys Methods** 1988 Dec;17(4):237–47

Inhibition of lipid peroxidation by spin labels. Relationships between structure and function. Nilsson UA, et al. **J Biol Chem** 1989 Jul 5;264(19):11131–5

In vivo pharmacokinetics by electron magnetic resonance spectroscopy. Berliner LJ, et al. **Magn Reson Med** 1989 Mar;9(3):430–4

Delivery of nitroxide spin label to cultured cells by liposomes. Chan HC, et al. **Magn Reson Med** 1988 Oct;8(2):160–70

Bone marrow uptake of liposome–entrapped spin label after liver blockade with empty liposomes. Federico M, et al. **Magn Reson Med** 1989 Jun;10(3):418–25

Spin probe reduction in cells and tissues. Kveder M, et al.

Magn Reson Med 1988 Nov;8(3):241–7
A spin–labelling Nobel? [letter] Zhdanov RI. **Nature** 1989 Jun 15;339(6225):500
Light–induced electrical effects in a liquid crystal BLM containing TCNQ. Salamon Z, et al. **Photochem Photobiol** 1988 Sep;48(3):281–7
Hyposmolar entrapping of a spin label into aged red cells. Lagercrantz C, et al. **Scand J Clin Lab Invest** 1988 Sep; 48(5):445–9
[Recent advances in spin labeled anticancer drugs] Wang YG, et al. **Yao Hsueh Hsueh Pao** 1988;23(10):792–8 (52 ref.) (Chi)
[Use of the spin label method for studying the structure of the brain membranes in cats with streptomycin poisoning] Maksina AG, et al. **Biol Nauki** 1988;(11):61–4 (Eng. Abstr.) (Rus)
[Sensitivity of human tumor heterografts to a spin–labelled rubomycin derivative] Konovalova NP, et al. **Eksp Onkol** 1988;10(4):54–9 (Eng. Abstr.) (Rus)
[Spin–label study of the reversible association of Ca–dependent ATPase in the sarcoplasmic reticulum membrane] Livshits VA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov–Dec;(6):857–65 (Eng. Abstr.) (Rus)
[Measurements of the time of rotational correlation of bovine serum albumin molecule using iodine and mercury–containing spin–labels] Arutiunian AE, et al. **Mol Biol (Mosk)** 1988 Jul–Aug;22(4):1045–61 (Eng. Abstr.) (Rus)

CHEMICAL SYNTHESIS

ESR and fluorescence studies on the adenine binding site of lectins using a spin–labeled analogue. Maliarik M, et al. **Biochemistry** 1989 Jan 24;28(2):912–7
Synthesis and purification of 5,5–dimethyl–1–pyrroline–N–oxide for biological applications. Janzen EG, et al. **Chem Biol Interact** 1989; 70(1–2):167–72
Synthesis of a spin–labeled phospholipid for studying membrane dynamics in intact mammalian cells. Joseph J, et al. **J Lipid Res** 1988 Aug;29(8):1101–4

IMMUNOLOGY

Line–shape analysis of NMR difference spectra of an anti–spin–label antibody. Frey T, et al. **Biochemistry** 1988 Jul 12;27(14):5161–5

METABOLISM

Metabolism in rat liver microsomes of the nitroxide spin probe tempol. Iannone A, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2581–6
Spin–label and fluorescence labeling studies of the thioester bonds in human alpha 2–macroglobulin. Zhao BL, et al. **Biochemistry** 1988 Jul 12;27(14):5304–8
Binding of spin–labeled clofibrate to lipoproteins. Olivier JL, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):515–24

PHARMACOLOGY

The effect of nitrone spin trapping agents on red cell glucose metabolism. Thornalley PJ, et al. **Free Radic Res Commun** 1985;1(2):111–7

TOXICITY

Spin–labeled phorbol esters and their interactions with cellular membranes. III. Skin irritant and tumor–promoting activities of spin–labeled phorbol–12,13–diesters and relationships to their particular structures. Sorg B, et al. **Carcinogenesis** 1988 Oct;9(10):1829–34

SPINA BIFIDA

Double split of notochord with massive prolapse of the gut. Pathak VB, et al. **J Pediatr Surg** 1988 Nov;23(11):1039–40
Proceedings of the Jerusalem meeting of the Society for Research into Hydrocephalus and Spina Bifida, 1988. **Z Kinderchir** 1988 Dec;43 Suppl 2:1–48
[Spina bifida. The French Language Society of Neurosurgery, 33rd annual congress. Deauville, June 1988] **Neurochirurgie** 1988;34 Suppl 1:1–103 (Fre)

CHEMICALLY INDUCED

Valproate and spina bifida. Oakeshott P, et al. **BMJ** 1989 May 13;298(6683):1300–1
Valproate, spina bifida, and birth defect registries [editorial] [see comments] **Lancet** 1988 Dec 17;2(8625):1404–5. **Comment in:** Lancet 1989 Feb 4;1(8632):278–9
Valproate and spina bifida [letter] **Lancet** 1989 Mar 18; 1(8638):611–2
Valproate, spina bifida, and birth defect registries [letter] Staunton H. **Lancet** 1989 Feb 18;1(8634):381

COMPLICATIONS

Spina bifida occulta and epidural anaesthesia. McGrady EM, et al. **Anaesthesia** 1988 Oct;43(10):867–9
Prevalence of spina bifida occulta in patients with functional disorders of the lower urinary tract and its relation to urodynamic and neurophysiological measurements. Fidas A, et al. **BMJ** 1989 Feb 11;298(6670):357–9
Spina bifida occulta and functional disorders of the lower urinary tract [letter] Hall PN, et al. **BMJ** 1989 Mar 18; 298(6675):755
The control of incontinence in spina bifida. Wishart GC, et al. **Br J Urol** 1989 Aug;64(2):204
Lumbosacral lipomas with spina bifida. Hirsch JF, et al. **Childs Nerv Syst** 1988 Dec;4(6):354–60
Occult spinal dysraphism in established congenital dislocation of the hip. Wilkinson JA, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):744–9
So–called tethered cervical spinal cord. Roth–Vargas AA, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):69–71
Intraspinal lipomas in infancy and childhood causing a tethered cord syndrome. Stolke D, et al. **Neurosurg Rev** 1988;11(1):59–65
Split notochord syndrome with dorsal enteric fistula and sacral agenesis. Kramer EL, et al. **Teratology** 1988 Jul; 38(1):1–3
[Orthopedic problems in children with spina bifida] Berard J. **Neurochirurgie** 1988;34 Suppl 1:67–75 (20 ref.) (Fre)
[Hepato–renal polycystosis, Marfan's syndrome and spina bifida occulta: a complex association. Description of a clinical case] Ortino O, et al. **Minerva Med** 1988 Dec; 79(12):1105–7 (Eng. Abstr.) (Ita)

DIAGNOSIS

Spina bifida occulta with atrophy of toes. Talwar S. **Indian J Lepr** 1988 Apr;60(2):306–8
Spina bifida occulta: early clinical and radiographic diagnosis. Horton D, et al. **J Okla State Med Assoc** 1989 Jan; 82(1):15–9
"Bullet"–shaped head in fetuses with spina bifida: a pointer to the spinal lesion. Chambers SE, et al. **JCU** 1988 Jan; 16(1):25–8
[Prenatal echographic diagnosis of spina bifida] Coicaud C. **Neurochirurgie** 1988;34 Suppl 1:35–9 (Fre)
[Diagnosis of spina bifida. Study of biochemical markers] Guibaud S, et al. **Neurochirurgie** 1988;34 Suppl 1:29–34 (18 ref.) (Fre)

ECONOMICS

Economic burden of spina bifida—United States, 1980–1990. **MMWR** 1989 Apr 21;38(15):264–7

EPIDEMIOLOGY

Time trends (1978–86) of anencephaly and spina bifida in four hospitals affiliated with the International Clearinghouse: a warning. Merlob P, et al. **Isr J Med Sci** 1989 Aug;25(8):441–4
The incidence of spina bifida occulta in a historic and a modern London population. Saluja PG. **J Anat** 1988 Jun; 158:91–3
Screening for congenital neural tube defects in a high–risk area: an epidemiological perspective. Stone DH, et al. **J Epidemiol Community Health** 1988 Sep;42(3):271–3
Incidence of anencephalus and spina bifida in Greece. Lekea V, et al. **Teratology** 1988 Oct;38(4):347–9

ETIOLOGY

[Fetal disease caused by sodium valproate. Apropos of a case (letter)] Haddad J, et al. **Arch Fr Pediatr** 1989 Jan;46(1):71 (5 ref.) (Fre)

GENETICS

Spina bifida and hydrocephalus: a population study over a 35–year period. Bamforth SJ, et al. **Am J Hum Genet** 1989 Feb;44(2):225–32
Dizygotic twinning in mothers of spina bifida [letter] Journel H, et al. **Am J Med Genet** 1989 Feb;32(2):257–9
Are 'upper' and 'lower' neural tube defects aetiologically different? [letter] Frecker MF, et al. **J Med Genet** 1988 Jul;25(7):503–4
A mouse model for neural tube defects: the curtailed (Tc) mutation produces spina bifida occulta in Tc/+ animals and spina bifida with meningomyelocele in Tc/t. Park CH, et al. **Teratology** 1989 Mar;39(3):303–12
[Spina bifida occulta and other neural tube defects. Genetic study and management] Robert E. **Neurochirurgie** 1988;34 Suppl 1:87–90 (Fre)

METABOLISM

Ambulation in the adolescent with spina bifida. II. Oxygen cost of mobility. Findley TW, et al. **Arch Phys Med Rehabil** 1988 Oct;69(10):855–61

PATHOLOGY

[Anatomo–pathology of 4 cases of anencephaly] Angeli G, et al. **Pathologica** 1988 Jul–Aug;80(1068):469–76 (Eng. Abstr.) (Ita)

PHYSIOPATHOLOGY

Neurological defects of the voiding reflex arcs in chronic urinary retention and their relation to spina bifida occulta. Fidas A, et al. **Br J Urol** 1989 Jan;63(1):16–20
Poor compliance early in filling in the neuropathic bladder. Weston PM, et al. **Br J Urol** 1989 Jan;63(1):28–31

PSYCHOLOGY

Patterns of impairment and disability related to social handicap in young people with cerebral palsy and spina bifida. Hirst M. **J Biosoc Sci** 1989 Jan;21(1):1–12
Relationships among life stress, perceived family environment, and the psychological distress of spina bifida adolescents. Murch RL, et al. **J Pediatr Psychol** 1989 Jun; 14(2):193–214
Disability parameters, chronic strain, and adaptation of physically handicapped children and their mothers. Wallander JL, et al. **J Pediatr Psychol** 1989 Mar; 14(1):23–42
Physical status and psychosocial adjustment in children with spina bifida. Wallander JL, et al. **J Pediatr Psychol** 1989 Mar;14(1):89–102
The social impact of childhood disablement. Bradshaw J. **Z Kinderchir** 1988 Dec;43 Suppl 2:5–11 (53 ref.)
[Spina bifida. Medical–social costs] Lebatard–Sartre R. **Neurochirurgie** 1988;34 Suppl 1:84–6 (Fre)

RADIOGRAPHY

Closed spinal dysraphism: analysis of clinical, radiological, and surgical findings in 104 consecutive patients. Scatliff JH, et al. **AJR Am J Roentgenol** 1989 May;152(5):1049–57
Symptomatic clasp–knife deformity of the spinous processes. Goobar JE, et al. **Spine** 1988 Aug;13(8):953–6

REHABILITATION

Orthopaedic Management of High–Level Spina Bifida. Early Walking Compared With Early Use of a Wheelchair [letter] Lynn MD. **J Bone Joint Surg [Am]** 1989 Jul;71(6):953
Orthopaedic management of high–level spina bifida. Early walking compared with early use of a wheelchair. Mazur JM, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):56–61
Effects of physical exercise on peripheral vision and learning in children with spina bifida manifesta. Krebs P, et al. **Percept Mot Skills** 1989 Feb;68(1):167–74
Spina bifida children in ordinary schools: handicap, attainment and behaviour. Tew BJ. **Z Kinderchir** 1988 Dec; 43 Suppl 2:46–8

SURGERY

Observations on spinal dysraphism. Tripathy P, et al. **J Indian Med Assoc** 1989 Mar;87(3):62–4
[Ethical assessment of dilemmas engendered by the selective treatment of the neonate with spina bifida] Hertogh CM. **Ned Tijdschr Geneeskd** 1988 Nov 5;132(45):2070–3 (Dut)
[Intraspinal lipoma with tethered cord syndrome in childhood] Zumkeller MB, et al. **Z Kinderchir** 1988 Dec; 43(6):384–90 (Eng. Abstr.) (Ger)
[Spinal dysraphia and disordered ascension of the spinal cord in adults] Zumkeller M, et al. **Z Orthop** 1989 May–Jun; 127(3):336–42 (Eng. Abstr.) (Ger)

THERAPY

[Prenatal management of anticipated spina bifida] Thoulon JM. **Neurochirurgie** 1988;34 Suppl 1:40–1 (Fre)

VETERINARY

Neuroradiographic diagnosis and surgical repair of tethered cord syndrome in an English bulldog with spina bifida and myeloschisis. Fingeroth JM, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1300–2

SPINA BIFIDA CYSTICA see **MENINGOMYELOCELE**

SPINAL ACCESSORY NERVE see **ACCESSORY NERVE**

SPINAL CANAL

Primary diagnosis of intraspinal echinococcosis by cytologic examination of cyst fluid [letter] Tavoulari–Chrysophaki KG, et al. **Acta Cytol** 1989 Jan–Feb;33(1):138–40
Clinical significance of traumatic pneumorrhachis [letter] Place JN, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):655
The epidural space [letter] Harrison GR. **Anaesthesia** 1989 Apr;44(4):361–2
A greengrocer's model of the epidural space [letter] Leighton BL. **Anesthesiology** 1989 Feb;70(2):368–9
Unusual trauma to spinal cord: case presentation. Rifkinson N, et al. **Bol Asoc Med P R** 1989 Apr;81(4):139–40
Gas in a spinal extradural cyst. Case report. Kumar R, et al. **J Neurosurg** 1989 Mar;70(3):486–8
Magnetic resonance imaging in myelocystoceles. Report of two cases. Peacock WJ, et al. **J Neurosurg** 1989 May; 70(5):804–7
Spinal canal extension of hyperalimentation catheter without neurologic sequela. Glasier CM, et al. **Pediatr Radiol** 1989; 19(3):206–7
The influence on spinal cord evoked potentials of chymopapain applied to the rat lumbar spine canal. Wehling P, et al. **Spine** 1989 Jan;14(1):65–7
[Haemophilus aphrophilus epidural abscess studied by nuclear magnetic resonance (letter)] Gaudin P, et al. **Ann Med Interne (Paris)** 1989;140(1):68–9 (13 ref.) (Fre)
[Transesophageal ultrasonography of the spinal canal] Funck M, et al. **Dtsch Med Wochenschr** 1989 Apr 7;114(14):529–33 (Eng. Abstr.) (Ger)
[Neurofibroma and meningioma of the spinal canal] Araszkiewicz H, et al. **Neurol Neurochir Pol** 1988 May–Jun; 22(3):264–7 (Eng. Abstr.) (Pol)
[Purulent epiduritis of the spine] Satalkin VN, et al.

Sov Med 1988;(9):108–9 (Rus)

ANATOMY & HISTOLOGY

Technical advantages of the paramedian approach for lumbar epidural puncture and catheter introduction. A study using epiduroscopy in autopsy subjects. Blomberg RG. Anaesthesia 1988 Oct;43(10):837–43

Anatomy of the epidural space [letter] Blomberg RG. Anesthesiology 1988 Nov;69(5):797

CT–epidurography and the anatomy of the human lumbar epidural space [letter] Huson A, et al. Anesthesiology 1988 Nov;69(5):797–8

Effect of C1–C2 rotation on canal size. Mazzara JT, et al. Clin Orthop 1988 Dec;(237):115–9

Age changes in the lumbar spinal and intervertebral canals. Twomey L, et al. Paraplegia 1988 Aug;26(4):238–49

The effect of flexion–extension motion of the lumbar spine on the capacity of the spinal canal. An experimental study. Dai LY, et al. Spine 1989 May;14(5):523–5

[The spinal periosteal layer and the fibrous sheath of the cervical spinal canal] Zadeh J, et al. Bull Assoc Anat (Nancy) 1989 Mar;73(220):45–7 (Eng. Abstr.) (Fre)

INJURIES

An attempt at self–decapitation: case report. Rosenfeld JV, et al. Injury 1988 Mar;19(2):115–6

Factors influencing the penetration of wires into the neural canal during segmental wiring. Zindrick MR, et al. J Bone Joint Surg [Am] 1989 Jun;71(5):742–50

Bullet within the spinal canal. Mann DC, et al. Orthop Rev 1989 Apr;18(4):453–7

[Effect of disorders of the afferent and sympathetic innervation on the structural organization of the osteoarticular system (experimental–morphologic study)] Stetsula VI, et al. Ortop Travmatol Protez 1988 Aug;(8):45–9 (Rus)

INNERVATION

[Terminal ramifications of the ventral branch of Th1 in postnatal development of man] Urbanowicz Z. Ann Univ Mariae Curie Sklodowska [Med] 1984;39:41–8 (Eng. Abstr.) (Pol)

METABOLISM

Distribution of 11C–labelled morphine and pethidine after spinal administration to Rhesus monkey. Gustafsson LL, et al. Acta Anaesthesiol Scand 1989 Feb;33(2):105–11

Spread of radiopaque dye in the thoracic epidural space. Slappendel R, et al. Anaesthesia 1988 Nov;43(11):939–42

Spread of local anesthetics in the epidural space. Yip WH, et al. Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1988 Aug;4(8):459–66

PARASITOLOGY

Recurring tetraparesis attributable to a heartworm in the epidural space of a dog. Blass CE, et al. J Am Vet Med Assoc 1989 Mar 15;194(6):787–8

PATHOLOGY

Gd–DTPA enhancement of posterior epidural scar: an experimental model. Ross JS, et al. AJNR 1989 Sep–Oct;10(5):1083–8

Gadolinium–DTPA–enhanced MR imaging of the postoperative lumbar spine: time course and mechanism of enhancement. Ross JS, et al. AJR 1989 Apr;152(4):825–34

The lumbar epidural space in patients examined with epiduroscopy. Blomberg RG, et al. Anesth Analg 1989 Feb;68(2):157–60

Spinal epidural hemangioma: a case report. Phuenpathom N, et al. J Med Assoc Thai 1988 Oct;71(10):572–4

Epidural adhesions after chymopapain chemonucleolysis. Austin RT, et al. J R Coll Surg Edinb 1989 Feb;34(1):30–2

Transabdominal ultrasound measurement of the lumbar spinal canal. Its value for evaluation of lumbar spinal stenosis. Tervonen O, et al. Spine 1989 Feb;14(2):232–5

[The value of polyglactin 910 in preventing peridural fibrosis and epiduro–arachnoiditis following laminectomy. Experimental study in rats] Guigui P, et al. Rev Chir Orthop 1988;74 Suppl 2:88–90 (Fre)

[The effect of x–ray contrast media on magnetic resonance tomography of the spinal canal] Sander B, et al. Rontgenblatter 1989 Aug;42(8):343–5 (Eng. Abstr.) (Ger)

[A case of malignant extrameningeal meningioma of the spinal canal with multiple metastases in a 17–year–old patient. Clinical and morphologic studies] Sobaniec W, et al. Neurol Neurochir Pol 1988 Sep–Oct;22(5):450–3 (Eng. Abstr.) (Pol)

PHYSIOLOGY

Cerebrospinal fluid contacting neurons and openings of the central canal in rabbits and monkeys—light and electron microscopic observation. Ikegami Y, et al. Bull Osaka Med Sch 1987 Jul;33(1):1–19

RADIOGRAPHY

Crohn's disease penetrating into the spinal canal. Sacher M, et al. Acta Paediatr Scand 1989 Jul;78(4):647–9

Lumbar spinal canal size of sciatica patients. Hurme M, et al. Acta Radiol 1989 Jul–Aug;30(4):353–7

Intraspinal air: a CT finding of epidural abscess. Kirzner H, et al. AJR 1988 Dec;151(6):1217–8

Dural ectasia is a common feature of the Marfan syndrome. Pyeritz RE, et al. Am J Hum Genet 1988 Nov;43(5):726–32

CT measurement of the normal cervical and lumbar spinal canal in Chinese. Zeng YL, et al. Chin Med J [Engl] 1988 Dec;101(12):898–900

CT demonstration of spinal epidural emphysema complicating bronchial asthma and violent coughing. Tsuji H, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):38–9

Dynamic changes in the dimensions of the lumbar spinal canal: an experimental study in vitro. Schönström N, et al. J Orthop Res 1989;7(1):115–21

Computed tomography of epidural fibrosis after discectomy: a comparison between symptomatic and asymptomatic patients. Cervellini P, et al. Neurosurgery 1988 Dec;23(6):710–3

Lumbar epidurography and epidural analgesia in cancer patients. Sjögren P, et al. Pain 1989 Mar;36(3):305–9

Significance of acute posttraumatic bony encroachment of the neural canal. Keene JS, et al. Spine 1989 Aug;14(8):799–802

Posterior epidural migration of extruded lumbar disk. Lichtor T. Surg Neurol 1989 Oct;32(4):311–2

[Peridurography: value and limitations] Gouezec H, et al. Cah Anesthesiol 1988 Nov;36(7):579–84 (Fre)

[Iohexol in studies of the spinal canal. Multicenter study] Bories J. J Radiol 1988 Nov;69(11):675–9 (15 ref.) (Eng. Abstr.) (Fre)

[Computed tomography in the diagnosis of lumbar disk herniation with eroded bony cortex] Kubo K, et al. Nippon Igaku Hoshasen Gakkai Zasshi 1988 Dec 25;48(12):1515–22 (Eng. Abstr.) (Jpn)

[Contrast examination of the spinal canal using zonography] Bryc S, et al. Ann Univ Marine Curie Sklodowska [Med] 1984;39:187–95 (Eng. Abstr.) (Pol)

[Postoperative evaluation by computed tomography of fractures and dislocations of the thoracolumbar spine] de Barros Filho TE, et al. Rev Hosp Clin Fac Med Sao Paulo 1988 Jul–Aug;43(4):203–5 (Eng. Abstr.) (Por)

RADIONUCLIDE IMAGING

Visualization of a pseudomeningocele on isotope cisternography. Tuvia J, et al. Clin Nucl Med 1988 Dec;13(12):889–91

SURGERY

Clinical results following enlargement of the cervical spinal canal by means of laminoplasty. Nakano N, et al. Nippon Seikeigeka Gakkai Zasshi 1988 Dec;62(12):1139–47

[Methods of rapid anterior vertebral canal dissection using a Gigli wire saw] Koshcher SI. Arkh Patol 1989;51(2):81–3 (Eng. Abstr.) (Rus)

SPINAL CORD

see related
CORDOTOMY
MYELOGRAPHY

Brain and spinal stimulation: how and to whom! Young RF. Clin Neurosurg 1989;35:429–47

Conformation therapy to improve the irradiation of the spinal axis. Tate T, et al. Int J Radiat Oncol Biol Phys 1989 Feb;16(2):505–10

Primary afferent depolarization and presynaptic inhibition in the mammalian spinal cord. Rudomin P. P R Health Sci J 1988 Aug;7(2):155–66 (82 ref.)

[Chronic medullary neuro–stimulation in lumbosacral spinal arachnoiditis] Fassio B, et al. Rev Chir Orthop 1988;74(5):473–9 (34 ref.) (Eng. Abstr.) (Fre)

ABNORMALITIES

MR imaging in the tethered spinal cord syndrome. Raghavan N, et al. AJR 1989 Apr;152(4):843–52

Sonography in newborns with cutaneous manifestations of spinal abnormalities. Nelson MD Jr, et al. Am Fam Physician 1989 Aug;40(2):198–203

Caudal deficiency sequence in 7q terminal deletion. Schrander–Stumpel C, et al. Am J Med Genet 1988 Jul;30(3):757–61 (10 ref.)

Caudal deficiency and asplenia anomalies in sibs. Fullana A, et al. Am J Med Genet Suppl 1986;2:23–9

An association of caudal malformations arising from a defect in the "axial mesoderm" developmental field. Gardner RJ, et al. Am J Med Genet Suppl 1986;2:37–44

Dimyelia, disastematomyelia, and diplomyelia [letter] Hori A. Clin Neuropathol 1988 Nov–Dec;7(6):314

MR imaging of the spine in children. Duthoy MJ, et al. Eur J Radiol 1988 Aug;8(3):188–95

Neuroradiographic diagnosis and surgical repair of tethered cord syndrome in an English bulldog with spina bifida and myeloschisis. Fingeroth JM, et al. J Am Vet Med Assoc 1989 May 1;194(9):1300–2

Heterotopic neurons in human spinal nerve roots: what is their clinical significance? Hori A. J Neurol 1988 Jul;235(6):348–51

Double split of notochord with massive prolapse of the gut. Pathak VB, et al. J Pediatr Surg 1988 Nov;23(11):1039–40

Neurourological implications of the changing approach in management of occult spinal lesions. Keating MA, et al. J Urol 1988 Nov;140(5 Pt 2):1299–301

Magnetic resonance imaging of pediatric spinal dysraphism. Rindahl MA, et al. Magn Reson Imaging 1989 Mar–Apr;7(2):217–24

The tethered spinal cord syndrome: a correlation of radiological features and peroperative findings in 30 patients. Merz JL, et al. Neuroradiology 1989;31(1):63–70

Cavernous malformations of the spinal cord. McCormick PC, et al. Neurosurgery 1988 Oct;23(4):459–63

Stenosis of the foramen magnum and rostral spinal canal, with spinal cord deformity, in Jeune's asphyxiating thoracic dystrophy. Knisely AS, et al. Pediatr Pathol 1989;9(3):299–305

Lumbar cutaneous hemangiomas as indicators of tethered spinal cords. Albright AL, et al. Pediatrics 1989 Jun;83(6):977–80

The morphogenesis of myeloschisis in the rat. Hung CF. Proc Natl Sci Counc Repub China [B] 1988 Jul;12(3):124–8

Urologic aspects of tethered cord. Flanigan RC, et al. Urology 1989 Jan;33(1):80–2

[The tethered cord syndrome] Beneš V Jr, et al. Cesk Pediatr 1986 Oct;41(10):608–11 (Eng. Abstr.) (Cze)

[Terminal cone traction syndrome. Attached cord and sacral lipoma] Lapras C, et al. Neurochirurgie 1988;34 Suppl 1:91–8 (Fre)

[Intramedullary mature teratoma associated with an attached cord and an intradural lipoma. Apropos of a surgically treated case. Review of the literature] Pelissou–Guyotat I, et al. Neurochirurgie 1988;34(3):205–9 (24 ref.) (Eng. Abstr.) (Fre)

[A rare cause of occult neuropathic bladder in children: the tethered cord syndrome] Campobasso P, et al. Pediatr Med Chir 1988 Nov–Dec;10(6):641–5 (Eng. Abstr.) (Ita)

[Studies on experimentally induced malformations of the spine and spinal cord: neuropathology of lumbosacral agenesis] Iwai K. Nippon Seikeigeka Gakkai Zasshi 1989 Jan;63(1):116–30 (Eng. Abstr.) (Jpn)

ANALYSIS

Application of the glycine labelling method to the cerebellum, hippocampus and spinal cord. Rojik I, et al. Acta Biol Hung 1987;38(3–4):393–407

Peptide neuroanatomy of adjuvant–induced arthritic inflammation in rat. Weihe E, et al. Agents Actions 1988 Dec;25(3–4):255–9

The distribution and biological effects of neuromedins B and U. Domin J, et al. Ann N Y Acad Sci 1988;547:391–403

Quantification of bombesin–like peptides in mammalian spinal cord. Go VL, et al. Ann N Y Acad Sci 1988;547:70–5

Neuromedin B and neuromedin Ca. Two mammalian bombesin–like peptides identified in porcine spinal cord and brain. Minamino N, et al. Ann N Y Acad Sci 1988;547:373–90

Presence of endothelin–1 in porcine spinal cord: isolation and sequence determination. Shinmi O, et al. Biochem Biophys Res Commun 1989 Jul 14;162(1):340–6

Identification of two taurine receptor subtypes on the primary afferent terminal of frog spinal cord. Kudo Y, et al. Br J Pharmacol 1988 Aug;94(4):1051–6

Cytoskeletal abnormalities in motor neuron disease. An immunocytochemical study. Leigh PN, et al. Brain 1989 Apr;112 (Pt 2):521–35

Radioimmunoassay for thyrotropin–releasing hormone precursor peptide, Lys–Arg–Gln–His–Pro–Gly–Arg–Arg. Mitsuma T, et al. Exp Clin Endocrinol 1989 Apr;93(1):53–60

Calcitonin gene–related peptide in the bullfrog, Rana catesbeiana: localization and vascular actions. Kline LW, et al. Gen Comp Endocrinol 1988 Oct;72(1):123–9

Fluorescence histochemical study of the localisation and distribution of beta–adrenergic receptor sites in the spinal cord and cerebellum of the chicken. Bondok AA, et al. J Anat 1988 Oct;160:167–74

Processing of thyrotropin–releasing hormone prohormone (pro–TRH) generates pro–TRH–connecting peptides. Identification and characterization of prepro–TRH–(160–169) and prepro–TRH–(178–199) in the rat nervous system. Bulant M, et al. J Biol Chem 1988 Nov 15;263(32):17189–96

Immunohistochemical localization of substance P, somatostatin, enkephalin, and serotonin in the spinal cord of the northern leopard frog, Rana pipiens. Adli DS, et al. J Comp Neurol 1988 Sep 1;275(1):106–16

Biochemical and immunocytochemical characterization of olfactory marker protein in the rodent central nervous system. Baker H, et al. J Comp Neurol 1989 Jul 8;285(2):246–61

GABA–immunoreactive neurons and terminals in the lateral cervical nucleus of the cat. Broman J, et al. J Comp Neurol 1988 Aug 22;274(4):467–82

Organization of calcitonin gene–related peptide–immunoreactive terminals in the primate dorsal horn. Carlton SM, et al. J Comp Neurol 1988 Oct 22;276(4):527–36

Anti–idiotypic antibodies as a tool for cytochemical identification of substance P receptors in the central nervous system. Conrath M, et al. J Histochem Cytochem 1988 Nov;36(11):1397–401

Sex–dependent and sex–independent distribution of the

beta-subunit of nerve growth factor in the central nervous and peripheral tissues of mice. Katoh-Semba R, et al. **J Neurochem** 1989 May;52(5):1559-65

Distribution of leukosialin (W3/13)-like immunoreactivity in the rat central nervous system. Losy J, et al. **J Neurocytol** 1989 Feb;18(1):71-6

Region-specific appearance of myelin constituents in the developing rat spinal cord. Schwab ME, et al. **J Neurocytol** 1989 Apr;18(2):161-9

The localisation of fibrin, fibronectin and class II major histocompatibility complex antigen in the spinal cord in chronic relapsing experimental allergic encephalomyelitis. Butter C, et al. **J Neuroimmunol** 1989 Mar;22(1):11-7

Detection of rabies virus RNA in the central nervous system of experimentally infected mice using in situ hybridization with RNA probes. Jackson AC, et al. **J Virol Methods** 1989 Jul;25(1):1-11

Immunohistochemical evidence for convergence of GABA-containing and glycine-containing axon terminals on single spinal motoneurons of the rat. Yoshida M, et al. **Kurume Med J** 1989;36(1):17-21

Aspects of the protein and the lipid composition of myelinoid Marchi-positive bodies from mammalian spinal cord. Corneliuson O, et al. **Neurochem Res** 1988 Dec; 13(12):1149-56

Presence of prolactin-like immunoreactivity and bioactivity in rat spinal cord. Emanuele NV, et al. **Neuroendocrinology** 1989 Mar;49(3):331-5

Strain differences in central nervous system concentrations of cholecystokinin between normotensive Wistar Kyoto (WKY) and spontaneously hypertensive (SH) rats. Shulkes A, et al. **Neuropeptides** 1989 Jul;14(1):59-64

Differential distribution of 5-hydroxytryptamine and substance P in synaptosomal vesicles of rat ventral spinal cord. Fried G, et al. **Neurosci Lett** 1988 Sep 12;91(3):315-20

Vimentin and glial fibrillary acidic protein filaments in radial glia of the adult urodele spinal cord. Zamora AJ, et al. **Neuroscience** 1988 Oct;27(1):279-88

Atrial natriuretic factor in the spinal cord of normotensive and hypertensive rats. Debinski W, et al. **Peptides** 1988 Sep-Oct;9(5):1101-5

Biochemical characterization of FMRF-NH2-like peptides in spinal cords of various mammalian species using specific radioimmunoassays. Majane EA, et al. **Peptides** 1988 Sep-Oct;9(5):1137-44

Heterogeneity of tachykinin-like immunoreactive peptides in rat spinal cord and dorsal root ganglia. Too HP, et al. **Peptides** 1989 Jan-Feb;10(1):25-30

Effects of carbon dioxide on extracellular potassium accumulation and volume in isolated frog spinal cord. Syková E, et al. **Pflugers Arch** 1988 Jul;412(1-2):183-7

Glutamate and substance P coexist in primary afferent terminals in the superficial laminae of spinal cord. De Biasi S, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7820-4

Establishment of highly specific radioimmunoassays for neurokinin A and neurokinin B and determination of tissue distribution of these peptides in rat central nervous system. Tateishi K, et al. **Regul Pept** 1989 Mar;24(3):245-57

Heterogeneity of glycine receptors and their messenger RNAs in rat brain and spinal cord. Akagi H, et al. **Science** 1988 Oct 14;242(4876):270-3

Immunocytochemical evidence for substance P and serotonin input to medullary bulbospinal adrenergic neurons. Nicholas AP, et al. **Synapse** 1988;2(6):569-76

[Atrial natriuretic polypeptide in the human and rat spinal cord] Xu D, et al. **Sheng Li Hsueh Pao** 1989 Feb; 41(1):49-55 (Eng. Abstr.) **(Chi)**

[Isolation of Ca2+ sensitive proteins linked to the membrane fraction of the brain cortex and the spinal cord in pigs] Regnouf F, et al. **C R Soc Biol (Paris)** 1989;183(1):48-59 (Eng. Abstr.) **(Fre)**

[Chemical neuroanatomy of the human spinal cord] Schoenen J. **Rev Neurol (Paris)** 1988;144(11):630-42 (60 ref.) (Eng. Abstr.) **(Fre)**

[Morphological studies of cholecystokinin-8, vasoactive intestinal polypeptide and gamma-aminobutyrate-containing neuron systems in the rat spinal cord: an immunohistochemical analysis] Fuji K. **Masui** 1988 Jun;37(6):678-90 (Eng. Abstr.) **(Jpn)**

[Study of the distribution of surface membrane glycoconjugates in spinal cord and spinal ganglia neurons cultured in a monolayer] Koval' LM, et al. **Dokl Akad Nauk SSSR** 1988;303(2):481-3 **(Rus)**

[Immunocytochemical study of the distribution of cytoskeletal proteins in cultured neurons of the spinal cord of mouse embryos] Skibo GG, et al. **Neirofiziologiia** 1988; 20(5):618-23 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

High-resolution MR of the spinal cord in humans and rats. Carvlin MJ, et al. **AJNR** 1989 Jan-Feb;10(1):13-7

MR imaging artifacts of the axial internal anatomy of the cervical spinal cord. Curtin AJ, et al. **AJR** 1989 Apr; 152(4):835-42

John Caffey award. MR imaging determination of the location of the normal conus medullaris throughout childhood. Wilson DA, et al. **AJR Am J Roentgenol** 1989 May;152(5):1029-32

A quantitative analysis of the development of the pyramidal tract in the cervical spinal cord in the rat. Gorgels TG, et al. **Anat Embryol (Berl)** 1989;179(4):377-85

The pattern of distribution of serotoninergic fibers in the anterior horn of the chick spinal cord. Homma S, et al. **Anat Embryol (Berl)** 1988;179(1):25-31

Do certain spinocerebellar neurons in lamina IX at lumbosacral levels send collaterals to peripheral nerves? A retrograde fluorescent double labeling study in the cat. Xu Q, et al. **Arch Ital Biol** 1988 Jun;126(3):179-92

Catecholaminergic innervation of the spinal cord in the North American opossum, Didelphis virginiana. Pindzola RR, et al. **Brain Behav Evol** 1988;32(5):281-92

Reptilian somatosensory midbrain: identification based on input from the spinal cord and dorsal column nucleus. Pritz MB, et al. **Brain Behav Evol** 1989;33(1):1-14

Spinal input to the parabrachial nucleus in the cat. Blomqvist A, et al. **Brain Res** 1989 Feb 20;480(1-2):29-36

Arborization of single axons of the spinal dorsolateral funiculus to the contralateral superficial dorsal horn. Cho HJ, et al. **Brain Res** 1989 Jan 16;477(1-2):344-9

Spino-diencephalic relays through the parabrachial nucleus in the cat. Ma W, et al. **Brain Res** 1989 Feb 20; 480(1-2):37-50

The cells of origin of the hypoglossal afferent nerves and central projections in the cat. Nazruddin, et al. **Brain Res** 1989 Jun 26;490(2):219-35

Routes of entry into the cerebellum of spinocerebellar axons from the lower part of the spinal cord. An experimental anatomical study in the cat. Grant G, et al. **Exp Brain Res** 1988;72(3):543-61

Projections from the rostral mesencephalic reticular formation to the spinal cord. An HRP and autoradiographical tracing study in the cat. Holstege G, et al. **Exp Brain Res** 1989;75(2):265-79

Collateral projections of neurons from the lower part of the spinal cord to anterior and posterior cerebellar termination areas. A retrograde fluorescent double labeling study in the cat. Xu Q, et al. **Exp Brain Res** 1988;72(3):562-76

Spinal cord localization and characterization of the neurons which give rise to the accessory phrenic nerve in the adult rat. DeVries KL, et al. **Exp Neurol** 1989 Apr;104(1):88-90

Organization of spinocerebellar projection map in three types of agranular cerebellum: Purkinje cells vs. granule cells as organizer element. Arsénio Nunes ML, et al. **J Comp Neurol** 1988 Jul 1;273(1):120-36

Demonstration of initial axon collaterals of cells of origin of the ventral spinocerebellar tract in the cat. Bras H, et al. **J Comp Neurol** 1988 Jul 22;273(4):584-92

Direct projection of the corticospinal tract to the superficial laminae of the spinal cord in the rat. Casale EJ, et al. **J Comp Neurol** 1988 Dec 8;278(2):275-86

The projection of the medial and posterior articular nerves of the cat's knee to the spinal cord. Craig AD, et al. **J Comp Neurol** 1988 Oct 8;276(2):279-88

Anatomical organization of long ascending propriospinal neurons in the cat spinal cord. English AW, et al. **J Comp Neurol** 1985 Oct 22;240(4):349-58

Somatotopic organization of inputs from the hand to the spinal gray and cuneate nucleus of monkeys with observations on the cuneate nucleus of humans. Florence SL, et al. **J Comp Neurol** 1989 Aug 1;286(1):48-70

Motor nuclei of peroneal muscles in the cat spinal cord. Horcholle-Bossavit G, et al. **J Comp Neurol** 1988 Nov 15; 277(3):430-40

Spinocerebellar projections from the lowest lumbar and sacral-caudal segments in the cat, as studied by anterograde transport of wheat germ agglutinin-horseradish peroxidase. Matsushita M. **J Comp Neurol** 1988 Aug 8;274(2):239-54

Survey of noncortical afferent projections to the basilar pontine nuclei: a retrograde tracing study in the rat. Mihailoff GA, et al. **J Comp Neurol** 1989 Apr 22; 282(4):617-43

Central distribution of cervical primary afferents in the rat, with emphasis on proprioceptive projections to vestibular, perihypoglossal, and upper thoracic spinal nuclei. Neuhuber WL, et al. **J Comp Neurol** 1989 Feb 8; 280(2):231-53

Descending pathways to the spinal cord: a comparative study of 22 mammals. Nudo RJ, et al. **J Comp Neurol** 1988 Nov 1;277(1):53-79

Origins of the descending spinal projections in petromyzontid and myxinoid agnathans. Ronan M. **J Comp Neurol** 1989 Mar 1;281(1):54-68

Origin of ascending and spinal pathways from the nucleus tegmenti pedunculopontinus in the rat. Spann BM, et al. **J Comp Neurol** 1989 May 1;283(1):13-27

Development of spinocerebellar afferents in the clawed toad, Xenopus laevis. van der Linden JA, et al. **J Comp Neurol** 1988 Nov 1;277(1):41-52

Organization of the motor nuclei in the cervical spinal cord of salamanders. Wake DB, et al. **J Comp Neurol** 1988 Dec 8;278(2):195-208

Origins of brainstem-spinal projections in the duck and goose. Webster DM, et al. **J Comp Neurol** 1988 Jul 22; 273(4):573-83

Central projections of the rat radial nerve investigated with transganglionic degeneration and transganglionic transport of horseradish peroxidase. Ygge J. **J Comp Neurol** 1989 Jan 8;279(2):199-211

Anatomical specificity of regenerated muscle sensory afferents in the spinal cord of the bullfrog. Peng YY, et al. **J Neurobiol** 1988 Dec;19(8):727-42

Intrinsic organization of the rat cutaneus trunci motor nucleus. Theriault E, et al. **J Neurophysiol** 1988 Aug; 60(2):463-77

Brain and spinal cord slice preparations. A selection of papers from the second international conference. June 15-17, 1988, Louisville, KY, U.S.A. **J Neurosci Methods** 1989 May; 28(1-2):1-154

Anatomical evidence for red nucleus projections to motoneuronal cell groups in the spinal cord of the monkey. Holstege G, et al. **Neurosci Lett** 1988 Dec 19; 95(1-3):97-101

The morphology of cat spinal neurons projecting to both the lateral cervical nucleus and the dorsal column nuclei. Lu GW, et al. **Neurosci Lett** 1989 Jun 5;101(1):29-34

Morphological evidence for newly discovered double projection spinal neurons. Lu GW, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):181-5

Ultrastructural evidence for direct monosynaptic rubrospinal connections to motoneurons in Macaca mulatta. Ralston DD, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):102-6

Synaptic formations of the corticospinal tract in the rat spinal cord. Miyabayashi T, et al. **Okajimas Folia Anat Jpn** 1988 Aug;65(2-3):117-39

Visceral nociceptive transmission at the spinal level: structural aspects. Sobrino Montalban JA. **P R Health Sci J** 1988 Aug;7(2):166-71 (46 ref.)

The new neuroanatomy of the spinal cord. Hughes JT. **Paraplegia** 1989 Apr;27(2):90-8 (35 ref.)

Spinal cord central echo complex: histoanatomic correlation. Nelson MD Jr, et al. **Radiology** 1989 Feb;170(2):479-81

End-structure of afferent axons injured in the peripheral and central nervous system. Fried K, et al. **Somatosens Mot Res** 1988;6(1):79-99

Medial, intralaminar, and lateral terminations of lumbar spinothalamic tract neurons: a fluorescent double-label study. Stevens RT, et al. **Somatosens Mot Res** 1989; 6(3):285-308

Norepinephrine throughout the spinal cord of the cat: I. Normal quantitative laminar and segmental distribution. Massari VJ, et al. **Synapse** 1988;2(3):258-65

Light and electron microscopical studies of the substance P innervation of the dorsal column nuclei and the lateral cervical nucleus in the primate. Westman J. **Ups J Med Sci** 1989;94(2):123-8

[Efferent and primary afferent neural pathways innervating the lower urinary tract of the cat. Part II. Primary afferent neural pathways] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):880-7 (Eng. Abstr.) **(Jpn)**

[Efferent and primary afferent neural pathways innervating the lower urinary tract of the cat. Part I. Efferent neural pathways] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):868-79 (Eng. Abstr.) **(Jpn)**

[Anatomo-functional features of the blood supply to the thoracic part of the canine spinal column] Larichev VB, et al. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):55-9 (Eng. Abstr.) **(Rus)**

[Morphologic analysis of the origin of spinal locomotor strip fibers in the cat] Berezovskii VK. **Neirofiziologiia** 1989; 21(3):327-35 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

The great radicular artery of Adamkiewicz in man. Demonstration of a possibility to predict its functional territory. Luyendijk W, et al. **Acta Neurochir (Wien)** 1988; 95(3-4):143-6

Spinal cord injury in rats: inability of nimodipine or anti-neutrophil serum to improve spinal cord blood flow or neurologic status. Holtz A, et al. **Acta Neurol Scand** 1989 Jun;79(6):460-7

Regulation of spinal cord blood flow in the rat as measured by quantitative autoradiography. Holtz A, et al. **Acta Physiol Scand** 1988 Aug;133(4):485-93

MR imaging of spinal cord arteriovenous malformations at 0.5 T: study of 34 cases. Dormont D, et al. **AJNR** 1988 Sep;9(5):833-8

Spinal cord infarction resulting from cardiac catheterization. Blankenship JC, et al. **Am J Med** 1989 Aug;87(2):239-40

Validation of laser-Doppler flowmetry in measurement of spinal cord blood flow. Lindsberg PJ, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H674-80

Regional blood flow in the brain and spinal cord of hypothermic rats. Sakamoto T, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H785-90

[14C]butanol distribution: a new method for measurement of spinal cord blood flow. Sakamoto T, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H953-9

Arterial supply to the spinal cord of dogs and cats. Caulkins SE, et al. **Am J Vet Res** 1989 Mar;50(3):425-30

Administration of bovine superoxide dismutase prevents sequelae of spinal cord ischemia in the rabbit. Cuevas P, et al. **Anat Embryol (Berl)** 1989;179(3):251-5

Effect of epidural lidocaine on spinal cord blood flow. Mitchell P, et al. **Anesth Analg** 1989 Mar;68(3):312-7

The influence of dextrose administration on neurologic outcome after temporary spinal cord ischemia in the rabbit. Drummond JC, et al. **Anesthesiology** 1989 Jan;70(1):64-70

Recurrent spinal cord ischemia due to abdominal aortic aneurysm--a case report. Desai HB, et al. **Angiology** 1989 Jul;40(7):682-7

Eicosanoids in deteriorating stroke. Review of studies on the rabbit spinal cord ischemia and reperfusion model. Feuerstein G. **Ann N Y Acad Sci** 1989;559:313-22

Hypoxic-ischemic spinal cord injury following perinatal

asphyxia. Clancy RR, et al. **Ann Neurol** 1989 Feb; 25(2):185–9

Spinal cord ischemia following elective aortoiliac reconstruction. Friedman SG, et al. **Ann Vasc Surg** 1988 Jul;2(3):295–7

Preoperative spinal cord arteriography in aneurysmal disease of the descending thoracic and thoracoabdominal aorta: preliminary results in 45 patients. Kieffer E, et al. **Ann Vasc Surg** 1989 Jan;3(1):34–46

Anterior spinal artery syndrome in systemic lupus erythematosus. Markusse HM, et al. **Br J Rheumatol** 1989 Aug;28(4):344–6

Effect of spinal cord ischemia on axonal transport of cholinergic enzymes in rabbit sciatic nerve. Malátová Z, et al. **Brain Res** 1989 Feb 27;481(1):31–8

A persistent defect in the blood–brain barrier after ventral funiculus lesion in adult cats: implications for CNS regeneration? Risling M, et al. **Brain Res** 1989 Aug 7; 494(1):13–21

Intrathecal dynorphin A administration causes pressor responses in rats associated with an increased resistance to spinal cord blood flow. Thornhill JA, et al. **Brain Res** 1989 Jun 19;490(1):174–7

Phenothiazines reduce ischemic damage to the central nervous system. Zivin JA, et al. **Brain Res** 1989 Mar 13; 482(1):189–93

Digital subtraction spinal cord angiography in patients undergoing thoracic aneurysm surgery. Fereshetian A, et al. **Cardiovasc Intervent Radiol** 1989 Jan–Feb;12(1):7–9

Selective arteriography of the spinal cord. A report of 17 cases. Xue P, et al. **Chin Med J [Engl]** 1988 Dec; 101(12):911–4

The effect of transposition of pedicled omentum to spinal cord ischemia segments. An animal experiment. Zhan MS, et al. **Chin Med J [Engl]** 1989 Mar;102(3):214–8

Paraplegia caused by local spinal cord ischemia. An animal spinal cord ischemia model. Zhan MS, et al. **Chin Med J [Engl]** 1989 Jan;102(1):28–33

Clinical manifestations of 9 patients with spinal arteriovenous malformations. Chang TW, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;42(6):469–74

Neurophysiological characteristics of spinal arteriovenous malformations. Schrader V, et al. **Electromyogr Clin Neurophysiol** 1989 Apr;29(3):169–77

Improvement of energy state and basic modifications of neuropathological damage in rabbits as a result of graded postischemic spinal cord reoxygenation. Mařšala M, et al. **Exp Neurol** 1989 Jul;105(1):93–103

Morphological and biochemical analysis of ischaemically induced anterograde degeneration of some rabbit spinal cord tracts. Mechírová E, et al. **Folia Morphol (Praha)** 1988; 36(4):381–94

Innervation of radicular and extraparenchymal arteries of spinal cord. Histochemical and immunohistochemical study in primate. Hegde SA, et al. **Histochemistry** 1988; 89(5):415–20

Does the artery of Adamkiewicz exist in the albino rat? Schievink WI, et al. **J Anat** 1988 Dec;161:95–101

Acute aortic thrombosis presenting as painless paraplegia. Bolduc ME, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):506–8

Prevention of spinal cord ischemia by monitoring spinal cord perfusion pressure and somatosensory evoked potentials. Maeda S, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug; 30(4):565–71

MR imaging of cervical spinal cord infarction. Brown E, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):920–2

Reduced protein kinase C activity in ischemic spinal cord. Kochhar A, et al. **J Neurochem** 1989 Sep;53(3):946–52

Spinal arteriovenous malformations and fistulae: clinical, neuroradiological and neurophysiological findings. Koenig E, et al. **J Neurol** 1989 Jul;236(5):260–6

A giant spinal aneurysm with cord and root compression. el Mahdi MA, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):532–5

Alterations in the corticomotor evoked potential following spinal cord ischemia. Simpson RK Jr, et al. **J Neurosci Methods** 1989 Jun;28(3):171–8

The effect of nimodipine and dextran on axonal function and blood flow following experimental spinal cord injury. Fehlings MG, et al. **J Neurosurg** 1989 Sep;71(3):403–16

Recanalization of spinal arteriovenous malformations following embolization. Hall WA, et al. **J Neurosurg** 1989 May;70(5):714–20

Hemodynamics of spinal dural arteriovenous fistulas. An intraoperative study. Hassler W, et al. **J Neurosurg** 1989 Mar;70(3):360–70

Management of spinal dural arteriovenous malformations. Morgan MK, et al. **J Neurosurg** 1989 Jun;70(6):832–6

The effect of hypothermia on regional spinal cord blood flow in rats. Sakamoto T, et al. **J Neurosurg** 1989 May; 70(5):780–4

Management of juvenile spinal AVM's by embolization and operative excision. Case report. Spetzler RF, et al. **J Neurosurg** 1989 Apr;70(4):628–32

Myelopathy due to intracranial dural arteriovenous fistulas draining intrathecally into spinal medullary veins. Report of three cases. Wrobel CJ, et al. **J Neurosurg** 1988 Dec; 69(6):934–9

Spinal cord injury in newborns from use of umbilical artery catheters: report of two cases and a review of the literature. Brown MS, et al. **J Perinatol** 1988 Spring;8(2):105–10 (19 ref.)

Arginine8–vasopressin reduces spinal cord blood flow after spinal subarachnoid injection in rats. Long JB, et al. **J Pharmacol Exp Ther** 1989 May;249(2):499–506

Intrathecal papaverine for the prevention of paraplegia after operation on the thoracic or thoracoabdominal aorta. Svensson LG, et al. **J Thorac Cardiovasc Surg** 1988 Nov; 96(5):823–9

Anterior spinal artery ischemia syndrome—a possible complication following surgery for the correction of scoliosis. Li HP, et al. **J Tongji Med Univ** 1988;8(3):182–5

The effect of hyperemia on spinal cord function after temporary thoracic aortic occlusion. Barone GW, et al. **J Vasc Surg** 1988 Oct;8(4):535–40

Effects of thoracic aortic occlusion and cerebrospinal fluid drainage on regional spinal cord blood flow in dogs: correlation with neurologic outcome. Bower TC, et al. **J Vasc Surg** 1989 Jan;9(1):135–44

Protecting the brain and spinal cord. Hollier LH. **J Vasc Surg** 1987 Mar;5(3):524–8 (20 ref.)

Spinal cord ischemia: an evaluation of pharmacologic agents in minimizing paraplegia after aortic occlusion. Kirshner DL, et al. **J Vasc Surg** 1989 Feb;9(2):305–8

Magnetic resonance imaging: failure to demonstrate spinal arteriovenous malformations in four patients. Shah DC, et al. **Mo Med** 1989 Sep;86(9):637–40

Intracerebral and spinal vascular malformation in a patient without hereditary haemorrhagic telangiectasia. Moss JG, et al. **Neuroradiology** 1989;31(3):280–1

Penetration of IgGs into the neuraxis of the neonatal rat. Hulsebosch CE, et al. **Neurosci Lett** 1989 Mar 13;98(1):13–8

Vasoconstrictor effects in spinal cord of the substance P antagonist [D-Arg, D-Trp7,9 Leu11]-substance P (Spantide) and somatostatin and interaction with thyrotropin releasing hormone. Freedman J, et al. **Neuroscience** 1988 Oct;27(1):267–78

Effect of hetastarch, mannitol, and phenylephrine on spinal cord blood flow following experimental spinal injury. Dyste GN, et al. **Neurosurgery** 1989 Feb;24(2):228–35

Hemodynamic assessment of the spinal cord arteriovenous malformation with intraoperative microvascular Doppler ultrasound: case report. Giller CA, et al. **Neurosurgery** 1989 Aug;25(2):270–5

Non-traumatic ischaemic myelopathy: a review of 25 cases. Kim SW, et al. **Paraplegia** 1988 Aug;26(4):262–72 (46 ref.)

Disturbances of micturition in patients with a spinal arteriovenous malformation. Murayama N, et al. **Paraplegia** 1989 Jun;27(3):212–6

Substance P antagonist–induced spinal cord vasoconstriction: effects of thyrotropin–releasing hormone and substance P agonists. Helke CJ, et al. **Peptides** 1988 Nov–Dec; 9(6):1307–15

Effect of chronic ethanol treatment and subsequent ischaemia on phospholipids and cholesterol in the rabbit spinal cord. Halát G, et al. **Physiol Bohemoslov** 1988;37(4):313–23

Dissociation of muscle action potentials and spinal somatosensory evoked potentials after ischemic damage of spinal cord. Machida M, et al. **Spine** 1988 Oct; 13(10):1119–24

Effects of peripheral nerve stimulation on the blood flow of the spinal cord and the nerve root. Takahashi K, et al. **Spine** 1988 Nov;13(11):1278–83

The effect of trimethaphan–induced hypotension on canine spinal cord blood flow. Measurement at different cord levels using radiolabelled microspheres. Wilton NC, et al. **Spine** 1988 May;13(5):490–3

Beta–endorphin in experimental canine spinal ischemia. De Riu PL, et al. **Stroke** 1989 Feb;20(2):233–8

Spinal cord blood flow and systemic blood pressure after experimental spinal cord injury in rats. Guha A, et al. **Stroke** 1989 Mar;20(3):372–7

Infarction of the medulla and cervical cord after fitness exercises. Pryse–Phillips W. **Stroke** 1989 Feb;20(2):292–4

Spinal cord blood flow measured by 14C–iodoantipyrine autoradiography during and after graded spinal cord compression in rats. Holtz A, et al. **Surg Neurol** 1989 May; 31(5):350–60

Arteriovenous malformation of the spinal cord. Three–dimensional reconstruction of the intramedullary abnormal vessels. Ishida T, et al. **Virchows Arch [A]** 1989; 414(6):497–502

[Experimental observations on spinal cord injury produced by electrifying the vessels of the cord in dogs] Zheng WJ. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):52–4, 63 (Eng. Abstr.) (Chi)

[The cervical vertebral venous plexus and anastomoses with the cranial venous sinuses] Zouaoui A, et al. **Bull Assoc Anat (Nancy)** 1987 Mar;71(212):7–13 (Eng. Abstr.) (Fre)

[Myelo–radicular involvement in a lumbar foramen disk hernia] Bataille B, et al. **Neurochirurgie** 1988;34(3):198–200 (Eng. Abstr.) (Fre)

[Ischemia of the anterior horn of the spinal cord] Mathe JF, et al. **Rev Neurol (Paris)** 1989;145(1):60–4 (28 ref.) (Eng. Abstr.) (Fre)

[MR tomography, CT and angiography of vascular malformations of the central nervous system] Harder T, et al. **ROFO** 1989 Feb;150(2):119–24 (Eng. Abstr.) (Ger)

[A case of polyneuropathy and ischemic lesion of the spinal arteries] Crippa S, et al. **G Clin Med** 1989 Jun–Jul; 70(6–7):469–71 (Ita)

[Experimental studies on the mechanism of spinal cord ischemia—the state of free radical scavengers] Nishibe M. **Hokkaido Igaku Zasshi** 1989 May;64(3):301–8 (Eng. Abstr.) (Jpn)

[A case of spinal arachnoid cyst associated with vascular anomaly and repeated transient paraparesis after surgery] Takeichi Y, et al. **Nippon Geka Hokan** 1988 Jul 1; 57(4):309–15 (Eng. Abstr.) (Jpn)

[Prevention of spinal cord ischemia during aortic cross–clamping of thoracic aorta—use of somatosensory evoked potential] Sekine S. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec; 36(12):2598–607 (Eng. Abstr.) (Jpn)

[A case of Klippel–Trénaunay–Weber syndrome associated with a short affected leg, spinal AVM and disseminated intravascular coagulation] Jyoichi T, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):678–9 (Jpn)

[Role of endogenous norepinephrine and effects of alpha– and beta–blockers in experimental spinal cord compression injury] Uehara H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov;62(11):1011–8 (Eng. Abstr.) (Jpn)

[Vascular structures of the spinal cord and spine—special reference to questions and discussions] Yoshizawa E. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):395–402 (Jpn)

[Problems in the embolization therapy of spinal arteriovenous malformation] Miyamoto S, et al. **No Shinkei Geka** 1988 Aug;16(9):1067–72 (Eng. Abstr.) (Jpn)

[Partially thrombosed radiculomeningeal arterio–venous fistula in spinomedullary junction] Oda Y, et al. **No Shinkei Geka** 1989 Jan;17(1):63–8 (Eng. Abstr.) (Jpn)

[Spinal artery angiography] Maehara T, et al. **Rinsho Hoshasen** 1988 Oct;33(11):1351–8 (Jpn)

[A typical syndrome of the sulco–commissural arteries] Szyrocka–Szwed K, et al. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):343–7 (Eng. Abstr.) (Pol)

[Comparative characteristics of adrenergic innervation of the cerebrospinal arteries of vertebrates and man] Pigolkin IuI. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):36–43 (Eng. Abstr.) (Rus)

[Long–term regional infusion of drugs into the arteries of the spine and spinal cord (experimental anatomical validation) (published erratum appears in Ortop Travmatol Protez 1988 Oct;(10):58)] Toporov GN, et al. **Ortop Travmatol Protez** 1988 Jul;(7):38–41 (Eng. Abstr.) (Rus)

[Pathogenetic therapy of traumatic diseases of the spinal cord] Murashkina LV, et al. **Sov Med** 1989;(5):41–4 (47 ref.) (Rus)

[Clinico–electromyographic indicators in patients with ischemic myelopathy] Sheludchenko FI, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):51–5 (Eng. Abstr.) (Rus)

[Neurologic manifestations of dissecting aneurysms of the aorta] Alvarez Sabín J, et al. **Med Clin (Barc)** 1989 Apr 1;92(12):447–9 (Eng. Abstr.) (Spa)

CYTOLOGY

Reticulospinal vasomotor neurons in the RVL mediate the somatosympathetic reflex. Morrison SF, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1084–97

Distribution of TRH–like immunoreactivity with special reference to coexistence with other neuroactive compounds. Hökfelt T, et al. **Ann N Y Acad Sci** 1989; 553:76–105 (151 ref.)

Localization and development of bombesin/GRP–like immunoreactivity in the rat central nervous system. Panula P, et al. **Ann N Y Acad Sci** 1988;547:54–69

Effects of chronic phenobarbital exposure on cultured mouse spinal cord neurons. Serrano EE, et al. **Ann Neurol** 1988 Sep;24(3):429–38

Lower motoneuron trophic factors and lower motoneuron death: effects and mechanisms. Raju TR, et al. **Anat Paediatr J** 1988;24 Suppl 1:48–9 (12 ref.)

Embryonic spinal cord neurons develop preferential cholinergic projections to sympathetic ganglia explanted from appropriate levels of the neuraxis. Chalazonitis A, et al. **Brain Res** 1989 Apr 17;485(1):115–24

Ventral and dorsal horn acetylcholinesterase neurons are maintained in organotypic cultures of postnatal rat spinal cord explants. Delfs J, et al. **Brain Res** 1989 May 29; 488(1–2):31–42

Astroglia–induced detachment of central neurons but astroglia–dependent growth of peripheral neurons in rat embryonic spinal cord primary cultures. Gilad GM, et al. **Brain Res** 1988 Aug 23;458(2):249–60

Androgen increases the number of cells in fetal mouse spinal cord cultures: implications for motoneuron survival. Hauser KF, et al. **Brain Res** 1989 Apr 17;485(1):157–64

Intraspinal sprouting after administration of nerve growth factor antibodies to neonatal rats. Hulsebosch CE, et al. **Brain Res** 1988 Oct 4;461(2):322–7

Are there bulbospinal catecholaminergic neurones in the guinea pig equivalent to the C1 cell group in the rat and rabbit? McLachlan EM, et al. **Brain Res** 1989 Mar 6; 481(2):274–85

Brainstem projections to cats' upper lumbar spinal cord: implications for abdominal muscle control. Miller AD, et al. **Brain Res** 1989 Jul 31;493(2):348–56

The pelvic innervation in the rat: different spinal origin and projections in Sprague–Dawley and Wistar rats. Pascual

JI, et al. **Brain Res** 1989 Feb 20;480(1-2):397-402

Spinally projecting noradrenergic neurons of the dorsolateral pontine tegmentum: a combined immunocytochemical and retrograde labeling study. Reddy VK, et al. **Brain Res** 1989 Jul 3;491(1):144-9

Reappraisal of projection levels of the corticospinal fibers in the cat, with special reference to the fibers descending through the dorsal funiculus: a WGA-HRP study. Satomi H, et al. **Brain Res** 1989 Jul 17;492(1-2):255-60

PNMT-containing catecholaminergic neurons are not necessarily adrenergic. Sved AF. **Brain Res** 1989 Feb 27; 481(1):113-8

Responses of spinal cord neurons following stimulation of A beta femoral-saphenous venous afferent fibers. Yates BJ, et al. **Brain Res** 1988 Jun 7;451(1-2):285-94

Characterization of dissociated monolayer cultures of human spinal cord. Erkman L, et al. **Brain Res Bull** 1989 Jan; 22(1):57-65

Localization of spinal cord preganglionic neurons innervating the superior cervical ganglion in the golden hamster. Reuss S, et al. **Brain Res Bull** 1989 Feb;22(2):289-93

Ascending projections of long descending propriospinal tract (LDPT) neurons. Skinner RD, et al. **Brain Res Bull** 1989 Feb;22(2):253-8

Spatial and temporal patterns of neurotrophic activities in rat adrenal medulla and cortex. Blottner D, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):243-53

Ontogeny of enkephalin- and VIP-containing neurons in dissociated cultures of embryonic mouse spinal cord and dorsal root ganglia. Eiden LE, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):141-50

Growth rate analysis of neurites extended from triploid spinal cord explants. Procento GM, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):243-9

SSEA-1 is a specific marker for the spinal sensory neuron lineage in the quail embryo and in neural crest cell cultures. Sieber-Blum M. **Dev Biol** 1989 Aug;134(2):362-75

Three-dimensional reconstruction of transmitter-identified central neurons by "en bloc" immunofluorescence histochemistry and confocal scanning microscopy. Brodin L, et al. **Exp Brain Res** 1988;73(2):441-6

Spinocervical neurons and dorsal horn neurons projecting to the dorsal column nuclei through the dorsolateral fascicle: a retrograde HRP study in the cat. Enevoldson TP, et al. **Exp Brain Res** 1989;75(3):621-30

Postsynaptic dorsal column neurons in the cat: a study with retrograde transport of horseradish peroxidase. Enevoldson TP, et al. **Exp Brain Res** 1989;75(3):611-20

Autoradiographic localization of binding sites for muscarinic and nicotinic agonists and antagonists on cultured astrocytes. Höeli E, et al. **Exp Brain Res** 1988;71(2):450-4

Distribution of corticospinal neurons with collaterals to the lower brain stem reticular formation in monkey (Macaca fascicularis). Keizer K, et al. **Exp Brain Res** 1989; 74(2):311-8

Individual cells in the raphe nuclei of the medulla oblongata in rat that contain immunoreactivities for both serotonin and enkephalin project to the spinal cord. Millhorn DE, et al. **Exp Brain Res** 1989;75(3):536-42

The effects of neonatal capsaicin treatment on the sensory innervation of the nipple and on the milk ejection reflex in the rat. Tasker JG, et al. **Exp Brain Res** 1988;73(1):32-8

Spinocerebellar neurons and propriospinal neurons in the cervical spinal cord: a fluorescent double-labeling study in the rat and the cat. Verburgh CA, et al. **Exp Brain Res** 1989;75(1):73-82

Tissue sections from the mature rat brain and spinal cord as substrates for neurite outgrowth in vitro: extensive growth on gray matter but little growth on white matter. Crutcher KA. **Exp Neurol** 1989 Apr;104(1):39-54

The connections from botzinger expiratory neurons to upper cervical inspiratory neurons in the cat. Mateika JH, et al. **Exp Neurol** 1989 May;104(2):138-46

Nucleolar extrusions and location of the Golgi apparatus in the caudal neurosecretory motoneurons of anurans (Amphibia). Chapra R. **Folia Morphol (Praha)** 1988; 36(4):395-402

Schwann cell myelination of the myelin deficient rat spinal cord following X-irradiation. Duncan ID, et al. **GLIA** 1988;1(3):233-9

Modulation of neuronal choline acetyltransferase activity by factors derived from cultures of non-neuronal cells from the CNS. Alderson RF, et al. **Int J Dev Neurosci** 1989; 7(3):309-22

Calcium-dependent regulation of phospholipase A2 and its inhibitors, including tetracaine, for acetylcholine receptor cluster formation in mouse myotubes co-cultured with spinal cord explant. Kimura M, et al. **Int J Dev Neurosci** 1987;5(2):127-33

In vitro evidence for a neurite growth-promoting activity in Trembler mouse serum. Koenig J, et al. **Int J Dev Neurosci** 1989;7(3):281-94

Neurotrophic action of leupeptin, a protease inhibitor on ventral spinal cord in culture. Iwasaki Y, et al. **Int J Neurosci** 1989 Jun;46(3-4):97-100

Neurotrophic action of bombesin on ventral spinal cord in culture. Iwasaki Y, et al. **Int J Neurosci** 1989 Apr; 45(3-4):195-8

Distribution of sympathetic preganglionic neurons and monoaminergic nerve terminals in the spinal cord of the rat. Anderson CR, et al. **J Comp Neurol** 1989 May 8; 283(2):269-84

Sympathetic and afferent somata projecting in hindlimb nerves and the anatomical organization of the lumbar sympathetic nervous system of the rat. Baron R, et al. **J Comp Neurol** 1988 Sep 15;275(3):460-8

Compartmental and topographical distributions of axons in nerves to the amphibian (Bufo marinus) glutaeus muscle. Brown DR, et al. **J Comp Neurol** 1989 Jun 8;284(2):231-41

Vasopressin and oxytocin systems in the brain and upper spinal cord of Macaca fascicularis. Caffé AR, et al. **J Comp Neurol** 1989 Sep 15;287(3):302-25

Ultrastructural analysis of dynorphin B-immunoreactive cells and terminals in the superficial dorsal horn of the deafferented spinal cord of the rat. Cho HJ, et al. **J Comp Neurol** 1989 Mar 8;281(2):193-205

Light microscopic observations on cat Renshaw cells after intracellular staining with horseradish peroxidase. I. The axonal systems. Lagerbäck PA, et al. **J Comp Neurol** 1985 Oct 22;240(4):359-67

Light microscopic observations on cat Renshaw cells after intracellular staining with horseradish peroxidase. II. The cell bodies and dendrites. Lagerbäck PA, et al. **J Comp Neurol** 1985 Oct 22;240(4):368-76

Morphological types of spinomesencephalic neurons in the marginal zone (lamina I) of the rat spinal cord, as shown after retrograde labelling with cholera toxin subunit B. Lima D, et al. **J Comp Neurol** 1989 Jan 8;279(2):327-39

Expression of c-fos protein in interneurons and projection neurons of the rat spinal cord in response to noxious somatic, articular, and visceral stimulation. Menétrey D, et al. **J Comp Neurol** 1989 Jul 8;285(2):177-95

Descending pathways to the spinal cord: II. Quantitative study of the tectospinal tract in 23 mammals. Nudo RJ, et al. **J Comp Neurol** 1989 Aug 1;286(1):96-119

Location of forelimb motoneurons in the Japanese toad (Bufo japonicus): a horseradish peroxidase study. Oka Y, et al. **J Comp Neurol** 1989 Aug 15;286(3):376-83

Glucocorticoid receptor-immunoreactivity in C1, C2, and C3 adrenergic neurons that project to the hypothalamus or to the spinal cord in the rat. Sawchenko PE, et al. **J Comp Neurol** 1989 Jul 1;285(1):107-16

Hormonal control of neuron number in sexually dimorphic spinal nuclei of the rat: III. Differential effects of the androgen dihydrotestosterone. Sengelaub DR, et al. **J Comp Neurol** 1989 Feb 22;280(4):637-44

Hormonal control of neuron number in sexually dimorphic spinal nuclei of the rat: I. Testosterone-regulated death in the dorsolateral nucleus. Sengelaub DR, et al. **J Comp Neurol** 1989 Feb 22;280(4):622-9

Hormonal control of neuron number in sexually dimorphic spinal nuclei of the rat: II. Development of the spinal nucleus of the bulbocavernosus in androgen-insensitive (Tfm) rats. Sengelaub DR, et al. **J Comp Neurol** 1989 Feb 22;280(4):630-6

The avian somatosensory system. I. Primary spinal afferent input to the spinal cord and brainstem in the pigeon (Columba livia). Wild JM. **J Comp Neurol** 1985 Oct 22; 240(4):377-95

Cells of origin of spinothalamic, spinotectal, spinoreticular and spinocerebellar pathways in the pigeon as studied by the retrograde transport of horseradish peroxidase. Necker R. **J Hirnforsch** 1989;30(1):33-43

Astrocytes from forebrain, cerebellum, and spinal cord differ in their responses to vasoactive intestinal peptide. Cholewinski AJ, et al. **J Neurochem** 1988 Nov; 51(5):1626-33

Transplantation of oligodendrocytes and Schwann cells into the spinal cord of the myelin-deficient rat. Duncan ID, et al. **J Neurocytol** 1988 Jun;17(3):351-60

Myosin heavy chain expression in human muscle cocultured with mouse spinal cord. Ecob-Prince M, et al. **J Neurol Sci** 1989 Apr;90(2):167-77

Excitatory neurotransmission activates voltage-dependent properties in neurons in spinal motor system of lamprey. Alford S, et al. **J Neurophysiol** 1989 Aug;62(2):334-41

Tachykinins modulate multiple ionic conductances in voltage-clamped rat spinal dorsal horn neurons. Murase K, et al. **J Neurophysiol** 1989 Apr;61(4):854-65

Differential effects of morphine and clonidine on visceral and cutaneous spinal nociceptive transmission in the rat. Ness TJ, et al. **J Neurophysiol** 1989 Jul;62(1):220-30

Effects of preventing reinnervation on axotomized spinal motoneurons in the cat. I. Motoneuron electrical properties. Pinter MJ, et al. **J Neurophysiol** 1989 Aug;62(2):311-24

Effects of preventing reinnervation on axotomized spinal motoneurons in the cat. II. Changes in group Ia synaptic function. Vanden Noven S, et al. **J Neurophysiol** 1989 Aug; 62(2):325-33

Effects of 5-hydroxytryptamine on the afterhyperpolarization, spike frequency regulation, and oscillatory membrane properties in lamprey spinal cord neurons. Wallén P, et al. **J Neurophysiol** 1989 Apr; 61(4):759-68

Effects of spatial and temporal dispersion of synaptic input on the time course of synaptic potentials. Walmsley B, et al. **J Neurophysiol** 1989 Apr;61(4):681-7

Membrane properties of rat substantia gelatinosa neurons in vitro. Yoshimura M, et al. **J Neurophysiol** 1989 Jul; 62(1):109-18

Naturally occurring cell death and differentiation of developing spinal motoneurons following axotomy. Farel PB. **J Neurosci** 1989 Jun;9(6):2103-13

Identification of motoneurons and interneurons in the spinal network for escapes initiated by the mauthner cell in goldfish. Fetcho JR, et al. **J Neurosci** 1988 Nov; 8(11):4192-213

Androgenic regulation of gap junctions between motoneurons in the rat spinal cord. Matsumoto A, et al. **J Neurosci** 1988 Nov;8(11):4177-83

Selective suppression of endogenous peroxidase activity: application for enhancing appearance of HRP-labeled neurons in vitro. Metz CB, et al. **J Neurosci Methods** 1989 Jan;26(3):181-8

Flow cytometric identification and purification of cells by ligand-induced changes in intracellular calcium. Schieren I, et al. **J Neurosci Methods** 1988 Nov;26(1):35-44

A possible spino (trigemino)-ponto-amygdaloid pathway for pain. Bernard JF, et al. **Neurosci Lett** 1989 May 22; 100(1-3):83-8

Cholinergic properties of embryonic chick sensory neurons. Bhave SV, et al. **Neurosci Lett** 1988 Sep 12;91(3):333-8

Pharmacological manipulation with the descending serotonergic system or transection of the mouse spinal cord has no effect on ependymal ultrastructure. Bjugn R, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):291-5

Rectospinal neurons: evidence for a direct projection from the enteric to the central nervous system in the rat. Doerffler-Melly J, et al. **Neurosci Lett** 1988 Oct 5; 92(2):121-5

Trophic effect of various neuropeptides on the cultured ventral spinal cord of rat embryo. Iwasaki Y, et al. **Neurosci Lett** 1989 Jul 3;101(3):316-20

Axon collaterals of spinocerebellar fibers terminate in the parabrachial nucleus of the rat. Kitamura T, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):24-9

Branching projections from subcoeruleus area neurons to medial preoptic area and cervical spinal cord revealed by double retrograde neuronal labeling. Leanza G, et al. **Neurosci Lett** 1989 Aug 14;103(1):11-6

Excitatory and inhibitory amino acids and peptide-induced responses in acutely isolated rat spinal dorsal horn neurons. Murase K, et al. **Neurosci Lett** 1989 Aug 14;103(1):56-63

Neuropeptide Y immunoreactivity is preferentially located in rat lumbar sexually dimorphic nuclei. Newton BW, et al. **Neurosci Lett** 1988 Nov 22;94(1-2):10-6

Existence of new dopaminergic terminal plexus in the rat spinal cord: assessment by immunohistochemistry using anti-dopamine serum. Yoshida M, et al. **Neurosci Lett** 1988 Nov 22;94(1-2):5-9

Spinal and supraspinal terminations of primary afferent fibers from the gastrocnemius-soleus muscle in the cat. Mense S, et al. **Neuroscience** 1988 Sep;26(3):1023-35

Vestibular projections to the spinal cord: the morphology of single vestibulospinal axons. Shinoda Y, et al. **Prog Brain Res** 1988;76:17-27 (43 ref.)

Synaptic connections in vitro: modulation of number and efficacy by electrical activity. Nelson PG, et al. **Science** 1989 May 5;244(4904):585-7

[Quantitative analysis of spinocerebellar tract neurons sending their axons to the anterior and posterior cerebellar lobes in the rat. A study using the horseradish peroxidase retrograde transport method] Kitamura T. **Nippon Ika Daigaku Zasshi** 1988 Aug;55(4):361-70 (Eng. Abstr.) **(Jpn)**

[Quantitative study of the reticular-motor neuronal contacts in the spinal cord of the lampern] Batueva IV, et al. **Neirofiziologiia** 1988;20(6):814-7 (Eng. Abstr.) **(Rus)**

[Morphological bases of motor neuron interaction in the isolated spinal cord of rat pups studied with horseradish peroxidase] Chmykhova NM, et al. **Neirofiziologiia** 1988; 20(3):340-50 (Eng. Abstr.) **(Rus)**

[Distribution of norepinephrine-containing neurons projecting to the parietal associative cortex and spinal cord in the cat locus coeruleus] Semeniutin AI, et al. **Neirofiziologiia** 1989;21(1):112-21 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Spinal cord cultured neurons: an in vitro model to study GABA synaptic pharmacology. Ticku M, et al. **Adv Biochem Psychopharmacol** 1988;45:151-9

Intrathecal somatostatin in cat and mouse studies on pain, motor behavior, and histopathology. Gaumann DM, et al. **Anesth Analg** 1989 May;68(5):623-32

Spinal analgesia with morphine and clonidine. Kitahata LM. **Anesth Analg** 1989 Mar;68(3):191-3

Intrathecal clonidine suppresses noxiously evoked activity of spinal wide dynamic range neurons in cats. Murata K, et al. **Anesth Analg** 1989 Aug;69(2):185-91

Antinociceptive interactions between alpha 2-adrenergic and opiate agonists at the spinal level in rodents. Ossipov MH, et al. **Anesth Analg** 1989 Mar;68(3):194-200

Intrathecal midazolam and fentanyl in the rat: evidence for different spinal antinociceptive effects [published erratum appears in Anesthesiology 1989 Sep;71(3):482] Serrao JM, et al. **Anesthesiology** 1989 May;70(5):780-6

Effect of sodium nitroprusside on spinal cord perfusion and paraplegia during aortic cross-clamping. Marini CP, et al. **Ann Thorac Surg** 1989 Mar;47(3):379-83

Presynaptic actions of beta-carboline on the spinal cord. Galindo JO, et al. **Arch Invest Med (Mex)** 1988 Apr-Jun; 19(2):149-56

Actions of the GABAB agonist, (-)-baclofen, on neurones in deep dorsal horn of the rat spinal cord in vitro. Allerton CA, et al. **Br J Pharmacol** 1989 Jan;96(1):29-38

Responses to 5-hydroxytryptamine evoked in the hemisected

spinal cord of the neonate rat. Connell LA, et al. **Br J Pharmacol** 1988 Aug;94(4):1101–14

Convulsant gamma–butyrolactones block GABA currents in cultured chick spinal cord neurons. Zorumski CF, et al. **Brain Res** 1989 Apr 10;484(1–2):102–10

Excitotoxicity, reflex responses, and evoked changes in extracellular potassium in the frog spinal cord. Zhang DX, et al. **Comp Biochem Physiol [C]** 1989;92(2):205–10

The neuropathology of leptophos in the hen: a chronologic study. Preissig SH, et al. **Environ Res** 1978 Oct;17(2):242–50

Antagonist profile of 6,7–dichloro–3–hydroxy–2–quinoxalinecarboxylate at excitatory amino acid receptors in the neonatal rat spinal cord. Birch PJ, et al. **Eur J Pharmacol** 1989 Apr 12; 163(1):127–31

6,7–Dinitro–quinoxaline–2,3–dion and 6–nitro,7–cyano–quinoxaline–2,3–dion antagonise responses to NMDA in the rat spinal cord via an action at the strychnine–insensitive glycine receptor. Birch PJ, et al. **Eur J Pharmacol** 1988 Oct 26;156(1):177–80

Direct stimulatory effect of calcitonin on [3H]5–hydroxytryptamine release from the rat spinal cord. Bourgoin S, et al. **Eur J Pharmacol** 1988 Oct 26; 156(1):13–23

Spinal beta–endorphin analgesia involves an interaction with local monoaminergic systems. Crisp T, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):211–7

5–HT3 receptor binding sites are on capsaicin–sensitive fibres in the rat spinal cord. Hamon M, et al. **Eur J Pharmacol** 1989 May 19;164(2):315–22

Production of wet–dog shakes in rats and down–regulation of spinal 5–HT2 receptors. Koshikawa N, et al. **Eur J Pharmacol** 1989 May 30;164(3):595–8

Intrathecal bradykinin acts presynaptically on spinal noradrenergic terminals to produce antinociception in the rat. Laneuville O, et al. **Eur J Pharmacol** 1989 Jan 17; 159(3):273–83

Pertussis toxin differentially reduces the efficacy of opioids to produce supraspinal analgesia in the mouse. Sánchez–Blázquez P, et al. **Eur J Pharmacol** 1988 Aug 2; 152(3):357–61

Dose–related neurochemical changes in the levels of gangliosides and glycogen in various regions of the rat brain and spinal cord following methyl parathion administration. Khan NA, et al. **Exp Pathol** 1988;35(1):61–5

Endothelin–1 depolarizes a ventral root potential in the newborn rat spinal cord. Yoshizawa T, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S216–7

Electrophysiological study of the effects of cardiodilatin 1–16 on the frog spinal cord in vitro. de Santis A, et al. **J Exp Zool** 1988 Jul;247(1):109–12

Beta–N–oxalylamino–L–alanine action on glutamate receptors. Ross SM, et al. **J Neurochem** 1989 Sep; 53(3):710–5

Muscimol, gamma–aminobutyric acidA receptors and excitatory amino acids in the mouse spinal cord. Aanonsen LM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1034–8

Prevention of phencyclidine–induced depression of the segmental reflex by L–3,4–dihydroxyphenylalanine in the rat spinal cord in vitro. Carp JS, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1048–53

Baclofen, gamma–aminobutyric acidB receptors and substance P in the mouse spinal cord. Hwang AS, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1026–33

Morphine antinociception in different strains of mice: relationship of supraspinal–spinal multiplicative interaction to tolerance. Roerig SC, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):603–8

Comparisons of descending pain inhibitory pathways activated by beta–endorphin and morphine as characterized by supraspinal and spinal antinociceptive interactions in mice. Roerig SC, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):1107–13

Morphine, capsaicin and K+ release purines from capsaicin–sensitive primary afferent nerve terminals in the spinal cord. Sweeney MI, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):447–54

Delayed neurotoxic effects of tri–o–tolyl phosphate in the European ferret. Stumpf AM, et al. **J Toxicol Environ Health** 1989;26(1):61–73

Central effects of the neurotropic mycotoxin fumitremorgin A in the rabbit (I). Effects on the spinal cord. Nishiyama M, et al. **Jpn J Pharmacol** 1989 Jun;50(2):167–73

Diazepam increases 5–hydroxyindole concentrations in rat brain and spinal cord. Fernstrom JD, et al. **Life Sci** 1974 Nov 1;15(9):1577–84

Spinal action of neurokinins producing cardiovascular responses in the conscious freely moving rat: evidence for a NK–1 receptor mechanism. Hassessian H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):649–54

Intrathecal administration of 5,6–DHT or 5,7–DHT reduces morphine and substance P–antinociceptive activity in the rat. Rodríguez FD, et al. **Neuropeptides** 1989 Feb–Mar; 13(2):139–46

Angiotensin II stimulates sympathetic output by a direct spinal action. Yashpal K, et al. **Neuropeptides** 1989 Jul; 14(1):21–9

Temperature–dependence of reflex transmission in the neonatal rat spinal cord, in vitro: influence on strychnine– and bicuculline–sensitive inhibition. Deshpande SB, et al. **Neuropharmacology** 1988 Oct;27(10):1033–7

Effects of depressant amino acids and antagonists on an in vitro spinal cord preparation from the adult rat. Long SK, et al. **Neuropharmacology** 1989 Jul;28(7):683–8

Effect of magnesium on depression of the monosynaptic reflex induced by 2–chloroadenosine or hypoxia in the isolated spinal cord of neonatal rats. Lloyd HG, et al. **Neurosci Lett** 1989 Jun 19;101(2):175–81

Inhibition of sexual reflexes by lumbosacral injection of a GABAB agonist in the male rat. Bitran D, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):657–66

Spinal vs. supraspinal sites of action of the alpha 2–adrenergic agonists clonidine and ST–91 on the acoustic startle reflex. Davis M, et al. **Pharmacol Biochem Behav** 1989 May; 33(1):233–40

Phencyclidine receptors and N–methyl–D–aspartate antagonism: electrophysiologic data correlates with known behaviours. Martin D, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):279–86

Inhibition of cyclic AMP production by alpha 2–adrenoceptor stimulation in the guinea–pig spinal cord slices. Uhlén S, et al. **Pharmacol Toxicol** 1988 Sep; 63(3):178–82

Intrathecal administration: methodological considerations. Hammond DL. **Prog Brain Res** 1988;77:313–20 (32 ref.)

Nicardipine after spinal cord compression in the lamb. Hitchon PW, et al. **Surg Neurol** 1989 Feb;31(2):101–10

Segmental synaptic depression caused by diisopropylphosphorofluoridate and sarin is reversed by thyrotropin–releasing hormone in the neonatal rat spinal cord. Das Gupta S, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):499–506

Changes in spinal cord reflexes following subchronic exposure to soman and sarin. Goldstein BD. **Toxicol Lett** 1989 Apr;47(1):1–8

[Effects of noradrenaline,glycine, gamma–aminobutyric acid and L–glutamic acid on spinal field potentials in the rat] Yang B, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):184–90 (Eng. Abstr.) **(Chi)**

[Early functional and structural changes in the nerve tissue following contact with chymopapain] Wehling P, et al. **Z Orthop** 1988 Dec;126(6):693–6 (Eng. Abstr.) **(Ger)**

[Furosemide depression of the dorsal root potentials and of the presynaptic inhibition of monosynaptic reflexes in the cat spinal cord] Ruchinskaia TIu, et al. **Neirofiziologiia** 1988;20(4):561–3 (Eng. Abstr.) **(Rus)**

[Action of l–DOPA and acidic amino acids on isolated neurons of spinal cord in the lamprey] Rusin KI, et al. **Neirofiziologiia** 1988;20(5):706–8 (Eng. Abstr.) **(Rus)**

[Characteristics of the effect of glycine and gamma–aminobutyric acid on the spinal cord neurons in the lamprey] Safronov BV, et al. **Neirofiziologiia** 1988; 20(6):823–5 (Eng. Abstr.) **(Rus)**

[Effect of strychnine and bicuculline on responses evoked by application of inhibitory mediators in neurons of the lamprey spinal cord] Safronov BV. **Neirofiziologiia** 1989; 21(1):133–5 (Eng. Abstr.) **(Rus)**

[Depression of penicillin–evoked seizure discharges of cerebrospinal neurons by magnesium ions] Kornilov OV, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):43–5 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Secretory activity in the floor plate neuroepithelium of the developing human spinal cord: morphological evidence. Tanaka O, et al. **Anat Rec** 1988 Oct;222(2):185–90

Tissue organization of the sclerotome in chick embryo. Andreotti L, et al. **Boll Soc Ital Biol Sper** 1988 Jan; 64(1):9–12

Observations about the early metameric segmentation of the paraxial structures in vertebral development. Panattoni GL, et al. **Boll Soc Ital Biol Sper** 1988 Jan;64(1):13–6

Age–dependent patterns and rates of neurite outgrowth from CNS neurons on Schwann cell–derived basal lamina and laminin substrata. Schinstine M, et al. **Brain Res** 1988 Sep 1;471(1):23–37

Somatostatin immunoreactive structures in the developing rat spinal cord. Ho RH. **Brain Res Bull** 1988 Jul; 21(1):105–16

The role of muscle in the development and differentiation of spinal motoneurons: in vitro studies. Henderson CE. **Ciba Found Symp** 1988;138:172–91 (27 ref.)

Neurotrophic interactions in the development of spinal cord motoneurons. Oppenheim RW, et al. **Ciba Found Symp** 1988;138:152–71 (33 ref.)

Glycosaminoglycans vary in accumulation along the neuraxis during spinal neurulation in the mouse embryo. Copp AJ, et al. **Dev Biol** 1988 Dec;130(2):573–82

Accumulation of basement membrane–associated hyaluronate is reduced in the posterior neuropore region of mutant (curly tail) mouse embryos developing spinal neural tube defects. Copp AJ, et al. **Dev Biol** 1988 Dec;130(2):583–90

Interferon induces astrocyte maturation causing an increase in cholinergic properties of cultured human spinal cord cells. Erkman L, et al. **Dev Biol** 1989 Apr;132(2):375–88

Early regional variations in motoneuron numbers arise by differential proliferation in the chick embryo spinal cord. Oppenheim RW, et al. **Dev Biol** 1989 Jun;133(2):468–74

The expression of rat homeobox–containing genes is developmentally regulated and tissue specific. Falzon M, et al. **Development** 1988 Jul;103(3):601–10

Segmental pattern of development of the hindbrain and spinal cord of the zebrafish embryo. Hanneman E, et al. **Development** 1988 May;103(1):49–58

Development and characterization of commissural interneurones in the spinal cord of Xenopus laevis embryos revealed by antibodies to glycine. Roberts A, et al. **Development** 1988 Jul;103(3):447–61

The formation of motor cell groups in the human embryonic spinal cord. Woźniak W, et al. **Folia Morphol (Warsz)** 1987; 46(1–2):91–7

Non–selective afferent innervation develops in embryonic mouse spinal cord–dorsal root ganglia explants chronically exposed to GM1 ganglioside. Baker RE, et al. **Int J Dev Neurosci** 1989;7(1):87–92

Axonal maturation in development—II. Immunofluorescence study of rat spinal cord and cerebellum with axon–specific neurofilament antibodies. Bignami A, et al. **Int J Dev Neurosci** 1987;5(1):29–37

Effects of trembler mouse serum and laminin on oligodendrocyte proliferation and differentiation in culture. Hantaz–Ambroise D, et al. **Int J Dev Neurosci** 1988; 6(3):289–99

Ganglioside potentiation of NGF–independent conditioned medium enhancement of neuritic outgrowth from spinal cord and ciliary ganglia explants. Spoerri PE, et al. **Int J Dev Neurosci** 1988;6(3):223–32

Responses of cholinergic markers to a pre– or a postsynaptic pharmacological blockage in the developing chick embryo spinal cord. Thiriet G, et al. **Int J Dev Neurosci** 1988; 6(3):309–16

Morphometric analyses of changes in cell shape in the neuroepithelium of mammalian embryos. Moore DC, et al. **J Anat** 1987 Dec;155:87–99

Ultrastructural evidence for the mitotic division of neurons in the anterior horn of the fetal rabbit in the later stages of gestation. Sturrock RR. **J Anat** 1987 Dec;155:63–75

Development of central projections of lumbosacral sensory neurons in the chick. Davis BM, et al. **J Comp Neurol** 1989 Jan 22;279(4):556–66

Onset and development of intersegmental projections in the chick embryo spinal cord. Oppenheim RW, et al. **J Comp Neurol** 1988 Sep 8;275(2):159–80

Generation patterns of four groups of cholinergic neurons in rat cervical spinal cord: a combined tritiated thymidine autoradiographic and choline acetyltransferase immunocytochemical study. Phelps PE, et al. **J Comp Neurol** 1988 Jul 22;273(4):459–72

Notochordal induction of cell wedging in the chick neural plate and its role in neural tube formation. Smith JL, et al. **J Exp Zool** 1989 Apr;250(1):49–62

Cell death of motoneurons in the chick embryo spinal cord. X. Synapse formation on motoneurons following the reduction of cell death by neuromuscular blockade. Okada A, et al. **J Neurobiol** 1989 Jun;20(4):219–33

A modified roller tube technique for organotypic cocultures of embryonic rat spinal cord, sensory ganglia and skeletal muscle. Braschler UF, et al. **J Neurosci Methods** 1989 Aug; 29(2):121–9

Expression and phosphorylation of the mid–sized neurofilament protein NF–M during chick spinal cord neurogenesis. Bennett GS, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):376–90

Gliogenesis in rat spinal cord: evidence for origin of astrocytes and oligodendrocytes from radial precursors. Hirano M, et al. **J Neurosci Res** 1988 Oct–Dec; 21(2–4):155–67

Projection–neurons that send axons through the lumbar spinal cord of the chick embryo are not obviously distributed in a segmentally repetitive pattern. Schlosser G, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):410–9

Chemotropic guidance of developing axons in the mammalian central nervous system. Tessier–Lavigne M, et al. **Nature** 1988 Dec 22–29;336(6201):775–8

Development of spinal substrate for nociception in man. Bijlani V, et al. **NIDA Res Monogr** 1988;87:167–79

Level of termination of the spinal cord during normal and abnormal fetal development. Govender S, et al. **S Afr Med J** 1989 May 20;75(10):484–7

[Interferon stimulates the expression of cholinergic properties in human spinal cord neurons in culture] Erkman L, et al. **Rev Neurol (Paris)** 1988;144(11):660–3 (Eng. Abstr.) **(Fre)**

[Electron cytochemical detection of carbohydrate determinants of surface membrane of cultured neurons] Skibo GG, et al. **Dokl Akad Nauk SSSR** 1988;300(4):971–3 **(Rus)**

ENZYMOLOGY

Distribution of carbonic anhydrase activity in the rat central nervous system, as revealed by a new semipermeable technique. Nógrádi A, et al. **Acta Histochem (Jena)** 1988; 84(2):153–62

Fluctuations of succinic dehydrogenase during morphine tolerance, dependence and withdrawals in the spinal cord and medulla oblongata of mice. Josephjohn K, et al. **Acta Neurol Belg** 1988 Nov–Dec;88(5):281–9

The structure and function of multispecies of protein kinase C. Ogita K, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:49–56 (32 ref.)

Molecular heterogeneity and differential expression of multiple protein kinase C subspecies in central nervous tissue. Shearman MS, et al. **Biochem Soc Trans** 1988 Aug; 16(4):460–3

Peroxidase activity at CNS nodes of Ranvier and in initial axon segments of lumbosacral alpha-motoneurons after intramuscular administration of horseradish peroxidase. Berthold CH, et al. **Brain Res** 1988 Jul 26;456(2):293–301

Peptidylglycine alpha-amidating monooxygenase activity in spinal cord, dorsal roots, and dorsal root ganglia of Macaca fascicularis. Graham L, et al. **Brain Res** 1989 Jul 10; 491(2):371–3

Direct adrenergic inputs to sacral autonomic neurons: using a double-immunostaining method at the light and electron microscopic levels. Kohno J, et al. **Brain Res** 1988 Sep 27;461(1):158–62

Aromatic L-amino acid decarboxylase-immunoreactive neurons in and around the cerebrospinal fluid-contacting neurons of the central canal do not contain dopamine or serotonin in the mouse and rat spinal cord. Nagatsu I, et al. **Brain Res** 1988 Dec 13;475(1):91–102

Distribution and regulation of 5 alpha-androstane-3 beta,17 beta-diol hydroxylase in the rat central nervous system. Warner M, et al. **Endocrinology** 1989 Jun;124(6):2699–706

Stimulation of choline acetyltransferase in spinal cord explants by limb mesenchyme. Muhlach WL, et al. **Int J Dev Neurosci** 1989;7(4):383–7

Limited proteolysis of bovine myelin basic protein by calcium-dependent proteinase from bovine spinal cord. Tsubata T, et al. **J Biochem (Tokyo)** 1989 Jan;105(1):23–8

A novel bovine spinal cord endoprotease with high specificity for dynorphin B. Silberring J, et al. **J Biol Chem** 1989 Jul 5;264(19):11082–6

Fluorescent histochemical localization of neutral endopeptidase-24.11 (enkephalinase) in the rat spinal cord. Back SA, et al. **J Comp Neurol** 1989 Feb 15;280(3):436–50

Distribution of reduced-nicotinamide-adenine-dinucleotide-phosphate diaphorase-positive cells and fibers in the cat central nervous system. Mizukawa K, et al. **J Comp Neurol** 1989 Jan 8;279(2):281–311

Choline acetyltransferase activities in single spinal motor neurons from patients with amyotrophic lateral sclerosis. Kato T. **J Neurochem** 1989 Feb;52(2):636–40

Enzyme translocation in the course of regeneration of central primary afferent terminals in the substantia gelatinosa of the adult rodent spinal cord. Knyihár-Csillik E, et al. **J Neurosci Res** 1989 Jan;22(1):74–82

Influence of the organophosphorus compound DFP on inhibitory motor systems and esterase activity in the spinal cord of cats. Chemnitius JM, et al. **Neurosci Res** 1989 Feb; 6(3):257–63

Resolution and purification of a neurofilament-specific kinase. Wible BA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):720–4

[Acetylcholinesterase activity, choline acetyltransferase and GABA immunoreactivity in the ventral horn of the spinal cord of rats during chromatolysis] Manolov S, et al. **Rev Neurol (Paris)** 1989;145(1):55–9 (21 ref.) (Eng. Abstr.) (Fre)

[Localization of alcohol and aldehyde dehydrogenases in the human spinal cord and brain] Motavkin PA, et al. **Arkh Anat Gistol Embriol** 1988 Nov;95(11):32–8 (Eng. Abstr.) (Rus)

[Lysosomal enzyme activity in the nerve tissue of various species of animals after administration of a neurotoxic pesticide aphos] Kuz'minskaia UA, et al. **Gig Sanit** 1988 Nov;(11):86–8 (Rus)

GROWTH & DEVELOPMENT

NE turnover in genetically hypertensive rats of Lyon strain. I. Brain nuclei. Sautel M, et al. **Am J Physiol** 1988 Oct; 255(4 Pt 2):H729–35

Postnatal maturation of primary afferent terminations in the substantia gelatinosa of the rat spinal cord. An electron microscopic study. Pignatelli D, et al. **Brain Res** 1989 Jul 3;491(1):33–44

Neurofilament and tubulin transport slows along the course of mature motor axons. Watson DF, et al. **Brain Res** 1989 Jan 16;477(1–2):225–32

Effects of neonatal hemispherectomy on location and number of corticospinal neurons in the rat. Huttenlocher PR, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):59–69

Identification of radial glial cells within the developing murine central nervous system: studies based upon a new immunohistochemical marker. Misson JP, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):95–108

The postnatal ontogeny of substance P-immunoreactive fibers in the sympathetic preganglionic nuclei of the rat. Newton BW, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):161–80

Postnatal redistribution of pericruciate motor cortical projections within the kitten spinal cord. Theriault E, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):219–37

Glycine receptor heterogeneity in rat spinal cord during postnatal development. Becker CM, et al. **EMBO J** 1988 Dec 1;7(12):3717–26

Cytoplasmic membrane elaborations in oligodendrocytes during myelination of spinal motoneuron axons. Waxman SG, et al. **GLIA** 1988;1(4):286–91

Formation of the central canal and dorsal glial septum in the spinal cord of the domestic cat. Böhme G. **J Anat** 1988 Aug;159:37–47

Extension of the critical period for developmental plasticity of the corticospinal pathway. Bregman BS, et al. **J Comp Neurol** 1989 Apr 15;282(3):355–70

The sprouting of saphenous nerve terminals in the spinal cord following early postnatal sciatic nerve section in the rat. Fitzgerald M. **J Comp Neurol** 1985 Oct 22;240(4):407–13

Plasticity of acid phosphatase (FRAP) afferent terminal fields and of dorsal horn cell growth in the neonatal rat. Fitzgerald M, et al. **J Comp Neurol** 1985 Oct 22; 240(4):414–22

Neuronal overload in the developing anuran lateral motor column in response to limb removal and thyroid hormone. Goldberg JF, et al. **J Comp Neurol** 1989 May 22; 283(4):578–86

Lumbar lateral motor column development in triploid Xenopus laevis. Sperry DG. **J Comp Neurol** 1988 Dec 15; 278(3):446–52

Identities, antigenic determinants, and topographic distributions of neurofilament proteins in the nervous systems of adult frogs and tadpoles of Xenopus laevis. Szaro BG, et al. **J Comp Neurol** 1988 Jul 15;273(3):344–58

Postnatal development of cat hind limb motoneurons. III: Changes in size of motoneurons supplying the triceps surae muscle. Ulfhake B, et al. **J Comp Neurol** 1988 Dec 1; 278(1):103–20

Postnatal development of cat hind limb motoneurons. I: Changes in length, branching structure, and spatial distribution of dendrites of cat triceps surae motoneurons. Ulfhake B, et al. **J Comp Neurol** 1988 Dec 1;278(1):69–87

Postnatal development of cat hind limb motoneurons. II: In vivo morphology of dendritic growth cones and the maturation of dendrite morphology. Ulfhake B, et al. **J Comp Neurol** 1988 Dec 1;278(1):88–102

Developmental plasticity of the rubrospinal tract in the North American opossum. Xu XM, et al. **J Comp Neurol** 1989 Jan 15;279(3):368–81

Ontogeny of adrenergic fibers in rat spinal cord in relationship to adrenal preganglionic neurons. Bernstein-Goral H, et al. **J Neurosci Res** 1988 Oct-Dec; 21(2–4):333–51

Critical period for androgenic regulation of soma size of sexually dimorphic motoneurons in rat lumbar spinal cord. Lee JH, et al. **Neurosci Lett** 1989 Mar 13;98(1):79–84

Selective incorporation of 2-deoxyglucose into the developing spinal cord in vitro in response to target tissue and substratum. Muhlach WL, et al. **Neurosci Lett** 1989 Jun 5;101(1):72–6

Perinatal modification of a sexually dimorphic motor nucleus in the spinal cord of the B6D2F1 house mouse. Wagner CK, et al. **Physiol Behav** 1989 Apr;45(4):831–5

Effect of implants prepared from tissue culture of dorsal root ganglion neurons and Schwann cells on growth of corticospinal fibers after spinal cord injury in neonatal rats. Kuhlengel KR. **Prog Brain Res** 1988;78:199–204

IMMUNOLOGY

Ia-expressing microglial cells in experimental allergic encephalomyelitis in rats. Konno H, et al. **Acta Neuropathol (Berl)** 1989;77(5):472–9

Avian spinal cord chimeras. Further studies on the neurological syndrome affecting the chimeras after birth. Kinutani M, et al. **Cell Differ Dev** 1989 Mar;26(2):145–62

Immunocytochemical evaluation of a cholinergic-specific ganglioside antigen (Chol-1) in the central nervous system of the rat. Obrocki J, et al. **Exp Brain Res** 1988;72(1):71–82

Double labeling of the paravertebral sympathetic C system in the bullfrog with antisera to LHRH and NPY. Horn JP, et al. **J Auton Nerv Syst** 1988 Jun;23(1):17–24

Autoimmunity and central nervous system regeneration in urodele amphibians. Margotta V, et al. **J Hirnforsch** 1989; 30(1):99–106

Anti-neural antibodies in leprosy sera: further characterization of the antigens. Benjamins JA, et al. **J Neuroimmunol** 1989 Feb;21(2–3):125–35

Lymphocyte proliferative response to glial cells in SJL/J mice immunized with rat whole spinal cord and rat myelin basic protein. Jewtoukoff V, et al. **J Neuroimmunol** 1989 Jan;21(1):81–6

METABOLISM

Lectin histochemistry of gangliosidosis. II. Neurovisceral tissues from patients with Sandhoff's disease. Alroy J, et al. **Acta Neuropathol (Berl)** 1988;76(4):359–65

Substance P receptors in the rat spinal cord: the effect of GTP and of chronic antidepressant treatment. Iverfeldt K, et al. **Acta Physiol Scand** 1988 Feb;132(2):175–9

Localization of the glycine receptors in the rat central nervous system: an immunocytochemical analysis. Murakami T, et al. **Adv Exp Med Biol** 1988;236:71–80

Abnormalities of polyamine biosynthesis in spinal cord of totally gastrectomized rats. Scalabrino G, et al. **Adv Exp Med Biol** 1988;250:365–78

Hypertension and alterations in central catecholamines after preoptic recess lesions. Van Huysse JW, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R487–93

Spinal cord distribution of 3H-morphine after intrathecal administration: relationship to analgesia. Nishio Y, et al. **Anesth Analg** 1989 Sep;69(3):323–7

Different 1.2 MAC combinations of nitrous oxide-enflurane cause unique cerebral and spinal cord metabolic responses in the rat. Cole DJ, et al. **Anesthesiology** 1989 May; 70(5):787–92

Distribution of 3H-morphine following lumbar subarachnoid injection in unanesthetized rabbits. Wang BC, et al. **Anesthesiology** 1989 May;70(5):817–24

Comparative metabolism and conformation of TRH and its analogues. Griffiths EC, et al. **Ann N Y Acad Sci** 1989; 553:217–31 (35 ref.)

TRH and TRH receptors in the spinal cord. Winokur A, et al. **Ann N Y Acad Sci** 1989;553:314–24 (59 ref.)

The neuroexcitotoxic amino acids glutamate and aspartate are altered in the spinal cord and brain in amyotrophic lateral sclerosis. Plaitakis A, et al. **Ann Neurol** 1988 Sep; 24(3):446–9

Peptide receptors on astrocytes: evidence for regional heterogeneity. Cholewinski AJ, et al. **Biochem Soc Trans** 1988 Aug;16(4):429–32

Calcium-dependent dynamic changes in the subcellular distribution of calmodulin in frog spinal cells. Adachi S, et al. **Brain Res** 1989 May 15;487(1):196–9

Altered levels of calcitonin gene-related peptide (CGRP)-like immunoreactivity of cat lumbar motoneurons after chronic spinal cord transection. Arvidsson U, et al. **Brain Res** 1989 Jun 12;489(2):387–91

Diazepam binding inhibitor-like immunoreactivity(51–70): distribution in human brain, spinal cord and peripheral tissues. Ball JA, et al. **Brain Res** 1989 Feb 13;479(2):300–5

The effect of an uptake inhibitor (dihydrokainate) on endogenous excitatory amino acids in the lamprey spinal cord as revealed by microdialysis. Brodin L, et al. **Brain Res** 1988 Aug 16;458(1):166–9

Induction of c-fos-like protein within the lumbar spinal cord and thalamus of the rat following peripheral stimulation. Bullitt E. **Brain Res** 1989 Jul 31;493(2):391–7

Segmental release of Met-enkephalin-like material from the spinal cord of rats, elicited by noxious thermal stimuli. Cesselin F, et al. **Brain Res** 1989 Apr 10;484(1–2):71–7

Long-lasting neurochemical and functional changes in rats induced by neonatal administration of substance P antiserum. De Felipe MC, et al. **Brain Res** 1989 Apr 24; 485(2):301–8

Binding of the neurotrophic peptide Org 2766 to rat spinal cord sections is affected by a sciatic nerve crush. Dekker AJ, et al. **Brain Res** 1989 Jan 16;477(1–2):327–31

Substance P receptors in the human spinal cord: decrease in amyotrophic lateral sclerosis. Dietl MM, et al. **Brain Res** 1989 Mar 27;483(1):39–49

Cutaneous stimuli releasing immunoreactive substance P in the dorsal horn of the cat. Duggan AW, et al. **Brain Res** 1988 Jun 7;451(1–2):261–73

Effect of intrathecal proctolin administration on the behaviour evoked by the thyrotrophin-releasing hormone (TRH) analogue (RX 77368) and the indoleamine, TRH, substance P and calcitonin gene-related peptide levels and choline acetyltransferase activity in the rat spinal cord. Fone KC, et al. **Brain Res** 1988 Sep 13;460(1):22–8

A comparison of the distributions of eight peptides in spinal cord from normal controls and cases of motor neurone disease with special reference to Onuf's nucleus. Gibson SJ, et al. **Brain Res** 1988 Dec 6;474(2):255–78

Age-dependent changes in brain glycine concentration and strychnine-induced seizures in the rat. Hunter C, et al. **Brain Res** 1989 Mar 20;482(2):247–51

Monoamines and related substances in brainstem and spinal cord of Lewis rats during the attack and recovery of experimental autoimmune encephalomyelitis. Krenger W, et al. **Brain Res** 1989 Jul 10;491(2):374–8

In vitro binding of [14C]acrylamide to neurofilament and microtubule proteins of rats. Lapadula DM, et al. **Brain Res** 1989 Feb 27;481(1):157–61

Neuropeptides in propriospinal neurones in the rat. Leah J, et al. **Brain Res** 1989 Aug 21;495(1):173–7

The pharmacological properties of GABA receptor-coupled chloride channels using 36Cl-influx in cultured spinal cord neurons. Leboullier PF, et al. **Brain Res** 1989 May 22; 487(2):205–14

Rat brain regional distribution and spinal cord neuronal pathway of FLFQPQRF-NH2, a mammalian FMRF-NH2-like peptide. Majane EA, et al. **Brain Res** 1989 Aug 7;494(1):1–12

Protein changes during anterograde-to-retrograde conversion of axonally transported vesicles. Martz D, et al. **Brain Res** 1989 Jan 2;476(1):199–203

Immobilization stress affects oxytocin and vasopressin levels in hypothalamic and extrahypothalamic sites. Miaskowski C, et al. **Brain Res** 1988 Aug 16;458(1):137–41

Somatostatin: evidence for a role in thermal nociception. Morton CR, et al. **Brain Res** 1989 May 29;488(1–2):89–96

Heterogeneity and properties of transformation of corticosteroid receptors in spinal cord and hippocampus. Moses DF, et al. **Brain Res** 1989 Mar 6;481(2):317–24

A quantitative analysis of the retrograde axonal transport of 4 different fluorescent dyes in peripheral sensory and motor neurons and lack of anterograde transport in the corticospinal system. Ogilvy CS, et al. **Brain Res** 1988 Dec 20;475(2):244–53

Calcitonin gene-related peptide modulates calcium mobilization in synaptosomes of rat spinal dorsal horn. Oku R, et al. **Brain Res** 1988 Dec 20;475(2):356–60

Histamine-immunoreactive nerve fibers in the mammalian spinal cord. Panula P, et al. **Brain Res** 1989 Apr 10; 484(1–2):234–9

Neurofilament gene expression following beta,beta'-iminodipropionitrile (IDPN) intoxication. Parhad IM, et al. **Brain Res** 1988 Dec;464(4):293–301

Tetanus toxin binding to mouse spinal cord cells: an

evaluation of the role of gangliosides in toxin internalization. Parton RG, et al. **Brain Res** 1988 Dec 13; 475(1):118–27

Effects of cervical spinal hemisection on dihydromorphine binding in brainstem and spinal cord in cat. Ramberg DA, et al. **Brain Res** 1989 Mar 27;483(1):61–7

A comparison of the effects of morphine on 5-HT metabolism in the periaqueductal gray, ventromedial medulla and medullary dorsal horn: in vivo electrochemical studies in freely moving rats. Rivot JP, et al. **Brain Res** 1989 Aug 21;495(1):140–4

Spinal kappa-opiate receptor involvement in the analgesia of pregnancy: effects of intrathecal nor-binaltorphimine, a kappa-selective antagonist. Sander HW, et al. **Brain Res** 1988 Dec 6;474(2):343–7

Cotransmitters: differential effects of serotonin (5-HT)-depleting drugs on levels of 5-HT and TRH and their receptors in rat brain and spinal cord. Sharif NA, et al. **Brain Res** 1989 Feb 20;480(1–2):365–71

A conformationally restricted analogue of L-glutamate, the (2S,3R,4S) isomer of L-alpha-(carboxycyclopropyl)glycine, activates the NMDA-type receptor more markedly than NMDA in the isolated rat spinal cord. Shinozaki H, et al. **Brain Res** 1989 Feb 20;480(1–2):355–9

Increase in extracellular potassium level in rat spinal dorsal horn induced by noxious stimulation and peripheral injury. Svoboda J, et al. **Brain Res** 1988 Aug 16;458(1):97–105

5-Hydroxytryptamine releases adenosine from primary afferent nerve terminals in the spinal cord. Sweeney M, et al. **Brain Res** 1988 Oct 18;462(2):346–9

Demonstration of calcitonin gene-related peptide immunoreactive axons contacting dynorphin A(1-8) immunoreactive spinal neurons in a rat model of peripheral inflammation and hyperalgesia. Takahashi O, et al. **Brain Res** 1988 Dec 13;475(1):168–72

Calcitonin gene-related peptide- and substance P-containing primary afferent fibers in the dorsal column of the rat. Tamatani M, et al. **Brain Res** 1989 Aug 21;495(1):122–30

The twitcher mouse: accumulation of galactosylsphingosine and pathology of the central nervous system. Tanaka K, et al. **Brain Res** 1989 Mar 20;482(2):347–50

Convergence of serotonin-, enkephalin- and substance P-like immunoreactive afferent fibers onto cat medullary dorsal horn projection neurons: a triple immunocytochemical staining technique combined with the retrograde HRP-tracing method. Tashiro T, et al. **Brain Res** 1989 Jul 10;491(2):360–5

Calcitonin gene-related peptide containing sympathetic preganglionic and sensory neurons projecting to the superior cervical ganglion of the rat. Yamamoto K, et al. **Brain Res** 1989 May 15;487(1):158–64

Autoradiographic study of mu and delta opioid binding sites and neutral endopeptidase-24.11 in rat after dorsal root rhizotomy. Zajac JM, et al. **Brain Res** 1989 Jan 16; 477(1–2):400–3

Brainstem location of serotonin neurons projecting to the caudal neurosecretory complex. Cohen SL, et al. **Brain Res Bull** 1989 Mar;22(3):481–7

Monoamines in the caudal neurosecretory complex: biochemistry and immunohistochemistry. McKeon TW, et al. **Brain Res Bull** 1988 Jul;21(1):37–42

An electron microscopic study of somatostatin immunoreactive structures in lamina II of the rat spinal cord. Rosenthal BM, et al. **Brain Res Bull** 1989 Feb; 22(2):439–51

GAP-43 gene expression during development: persistence in a distinctive set of neurons in the mature central nervous system. De la Monte SM, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):161–8

The ontogeny of substance P- and serotonin-like immunoreactivities in the sexually dimorphic cremaster nucleus of the rat spinal cord. Newton BW, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):227–42

Postnatal ontogeny of enkephalin fibers in spinal sympathetic nuclei. Romagnano MA, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):263–79

Spatial and temporal expression of phosphorylated and non-phosphorylated forms of neurofilament proteins in the developing nervous system of Xenopus laevis. Szaro BG, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):87–103

Temporal analysis of increases in c-fos, preprodynorphin and preproenkephalin mRNAs in rat spinal cord. Draisci G, et al. **Brain Res Mol Brain Res** 1989 Jul;6(1):31–7

Preproenkephalin gene expression in the rat spinal cord after noxious stimuli. Noguchi K, et al. **Brain Res Mol Brain Res** 1989 May;5(3):227–34

Adrenocorticoid action in the spinal cord: some unique molecular properties of glucocorticoid receptors. De Nicola AF, et al. **Cell Mol Neurobiol** 1989 Jun;9(2):179–92 (59 ref.)

Terminal processes of serotonin neurons in the caudal spinal cord of the molly, Poecilia latipinna, project to the leptomeninges and urophysis. Cohen SL, et al. **Cell Tissue Res** 1989 Mar;255(3):619–25

Immunohistochemical demonstration of calbindin-D 28K (CABP28K) in the spinal cord motoneurons of teleost fish. Denizot JP, et al. **Cell Tissue Res** 1988;254(3):629–34

Regulation of discrete sub-populations of transmitter-identified neurones after inhibition of electrical activity in cultures of mouse spinal cord. Foster GA, et al. **Cell Tissue Res** 1989 Jun;256(3):543–52

Calbindin immunoreactivity in the neurons of the spinal cord and dorsal root ganglion of the domestic fowl. Lunam CA. **Cell Tissue Res** 1989 Jul;257(1):149–53

An improved formula for the judgement of intrathecally produced IgG in the presence of blood brain barrier damage. Ohman S, et al. **Clin Chim Acta** 1989 May 31; 181(3):265–72

Cytochemistry of the trigeminal and dorsal root ganglia and spinal cord of the rat. Kai-Kai MA. **Comp Biochem Physiol [A]** 1989;93(1):183–93 (43 ref.)

Astrocyte overgrowth in the brain stem and spinal cord of mice affected by spinal atrophy, wobbler. Laage S, et al. **Dev Neurosci** 1988;10(3):190–8

Differential expression of human HOX-2 genes along the anterior-posterior axis in embryonic central nervous system. Giampaolo A, et al. **Differentiation** 1989 Jun; 40(3):191–7

Solubilization and reconstitution of the sodium-and-chloride-coupled glycine transporter from rat spinal cord. Lopez-Corcuera B, et al. **Eur J Biochem** 1989 May 1;181(2):519–24

Identification of 5-HT3 binding sites in rat spinal cord synaptosomal membranes. Glaum SR, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):287–90

Presynaptic alpha 2-adrenoceptors modulate the release of [3H]noradrenaline from rat spinal cord dorsal horn neurones. Reimann W, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):161–6

Immunohistochemical and behavioral analysis of spinal lesions induced by a substance P antagonist and protection by thyrotropin releasing hormone. Freedman J, et al. **Exp Brain Res** 1989;74(2):279–92

Structural requirements for activation of excitatory amino acid receptors in the rat spinal cord in vitro. Magnuson DS, et al. **Exp Brain Res** 1988;73(3):541–5

In vivo release of CCK-8 from the dorsal horn of the rat: inhibition by DAGOL. Rodríguez RE, et al. **FEBS Lett** 1989 Jul 3;250(2):215–7

Gangliosides of the mouse spinal cord: a comparison in in vivo and in vitro tissues. Baker RE, et al. **Int J Dev Neurosci** 1989;7(1):93–101

Vimentin-GFAP transition in primary dissociated cultures of rat embryo spinal cord. Bignami A, et al. **Int J Dev Neurosci** 1989;7(4):343–57

Kappa opiate agonists inhibit Ca2+ influx in rat spinal cord-dorsal root ganglion cocultures. Involvement of a GTP-binding protein. Attali B, et al. **J Biol Chem** 1989 Jan 5;264(1):347–53

Distribution of glycine receptor immunoreactivity in the spinal cord of the rat: cytochemical evidence for a differential glycinergic control of lamina I and V nociceptive neurons. Basbaum AI. **J Comp Neurol** 1988 Dec 15;278(3):330–6

Immunohistochemical localization of seven different peptides in the human spinal cord. Chung K, et al. **J Comp Neurol** 1989 Feb 1;280(1):158–70

Multiple opioid peptides and the modulation of pain: immunohistochemical analysis of dynorphin and enkephalin in the trigeminal nucleus caudalis and spinal cord of the cat. Cruz L, et al. **J Comp Neurol** 1985 Oct 22;240(4):331–48

Distribution of substance P and vasoactive intestinal polypeptide neurons in the chicken spinal cord, with notes on their postnatal development. Du F, et al. **J Comp Neurol** 1988 Dec 8;278(2):253–64

Distribution of corticotropin-releasing-factor-like immunoreactivity in brainstem of two monkey species (Saimiri sciureus and Macaca fascicularis): an immunohistochemical study. Foote SL, et al. **J Comp Neurol** 1988 Oct 8;276(2):239–64

Comparison of met-enkephalin, dynorphin A, and neurotensin immunoreactive neurons in the cat and rat spinal cords: II. Segmental differences in the marginal zone. Miller KE, et al. **J Comp Neurol** 1989 Jan 22;279(4):619–28

Immunohistochemical distribution of serotonin in spinal autonomic nuclei: I. Fiber patterns in the adult rat. Newton BW, et al. **J Comp Neurol** 1989 Jan 1;279(1):68–81

Immunohistochemical distribution of serotonin in spinal autonomic nuclei: II. Early and late postnatal ontogeny in the rat. Newton BW, et al. **J Comp Neurol** 1989 Jan 1;279(1):82–103

Morphological characterization of substance P-like immunoreactive glomeruli in the superficial dorsal horn of the rat spinal cord and trigeminal subnucleus caudalis: a quantitative study. Ribeiro-da-Silva A, et al. **J Comp Neurol** 1989 Mar 22;281(4):497–15

Distribution of tau proteins in the normal human central and peripheral nervous system. Trojanowski JQ, et al. **J Histochem Cytochem** 1989 Feb;37(2):209–15

Ganglionic, spinal cord and hypothalamic atrial natriuretic factor: its distribution, origin and possible role in spontaneously hypertensive rats. Kuchel O, et al. **J Hypertens Suppl** 1988 Dec;6(4):S279–81

Effects of two isomeric 1-aminoadamantanes on the membrane anisotropy and on alpha- and gamma-motoneurones excitability. Melzacka M, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):153–64

Effect of impact trauma on neurotransmitter and nonneurotransmitter amino acids in rat spinal cord. Demediuk P, et al. **J Neurochem** 1989 May;52(5):1529–36

Changes in amino acid contents in the spinal cord and brainstem of rats with experimental autoimmune encephalomyelitis. Honegger CG, et al. **J Neurochem** 1989 Aug;53(2):423–7

Source of methyl groups in brain and nerve tissue in the rat. Long M, et al. **J Neurochem** 1989 Feb;52(2):377–80

Release of acetylcholine from tissue slices of the rat nucleus basalis magnocellularis. Metcalf RH, et al. **J Neurochem** 1989 Apr;52(4):1143–8

Brain and spinal cord levels of histamine in Lewis rats with acute experimental autoimmune encephalomyelitis. Orr EL, et al. **J Neurochem** 1989 Jul;53(1):111–8

Alpha 2-adrenoceptors mediate inhibition of cyclic AMP production in the spinal cord after stimulation of cyclic AMP with forskolin but not after stimulation with capsaicin or vasoactive intestinal peptide. Uhlén S, et al. **J Neurochem** 1989 Mar;52(3):761–7

Glycine binding to rat cortex and spinal cord: binding characteristics and pharmacology reveal distinct populations of sites. White WF, et al. **J Neurochem** 1989 Aug;53(2):503–12

Decreased fatty acylation of myelin proteolipid protein in the twitcher mouse. Yoshimura T, et al. **J Neurochem** 1989 Mar;52(3):836–41

Monoamine-containing fiber plexuses in the spinal cord of guinea pigs during paralysis, recovery and relapse stages of chronic relapsing experimental allergic encephalomyelitis. White SR, et al. **J Neuroimmunol** 1989 May;22(3):211–21

Phosphorylation of neurofilaments is altered in amyotrophic lateral sclerosis. Manetto V, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):642–53

In situ hybridization analysis of myelin gene transcripts in developing mouse spinal cord. Jordan C, et al. **J Neurosci** 1989 Jan;9(1):248–57

A nerve terminal protein with a selective distribution in spinal cord and brain. Ritchie TC, et al. **J Neurosci** 1989 Aug; 9(8):2697–709

A quantitative study of the coexistence of peptides in varicosities within the superficial laminae of the dorsal horn of the rat spinal cord. Tuchscherer MM, et al. **J Neurosci** 1989 Jan;9(1):195–205

Early and late appearance of neurofilament phosphorylated epitopes in rat nervous system development: in vivo and in vitro study with monoclonal antibodies. Dahl D. **J Neurosci Res** 1988 Aug;20(4):431–41

Changes in free fatty acids, phospholipids, and cholesterol following impact injury to the rat spinal cord. Demediuk P, et al. **J Neurosci Res** 1989 May;23(1):95–106

Pre- and post-natal ontogeny of serotonergic projections to the rat spinal cord. Rajaofetra N, et al. **J Neurosci Res** 1989 Mar;22(3):305–21

Adenosine A1 and A2 receptors of the substantia gelatinosa are located predominantly on intrinsic neurons: an autoradiography study. Choca JI, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):757–64

Identification and characterization of [3H]nitrendipine binding sites in rat spinal cord. Gandhi VC, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):473–80

Relation between the therapeutic effect of moxibustion in treating arthralgia and SP and enkephalin in nervous tissues. Lu ZS, et al. **J Tradit Chin Med** 1989 Mar; 9(1):69–74

Further evidence for possible analgesic mechanism of electroacupuncture: effects on neuropeptides and serotonergic neurons in rat spinal cord. Tsai HY, et al. **Jpn J Pharmacol** 1989 Feb;49(2):181–5

A possible role for spinal noradrenaline in the mechanisms of 6-hydroxydopamine against pentylenetetrazol induced convulsions in rats. Abed WT. **Life Sci** 1988;43(22):1831–6

Alterations in spinal cord norepinephrine levels following experimentally produced trauma in normal and adrenalectomized cats. Schoultz TW, et al. **Life Sci** 1974 Oct 15;15(8):1485–95

Ca2+-mediated degradation of central nervous system (CNS) proteins: topographic and species variation. Banik NL, et al. **Metab Brain Dis** 1987 Jun;2(2):117–26

Intracellular transport and neuronal activation of phospholipid and glycoprotein synthesis during axonal regeneration of cranio-spinal nerves. Alberghina M, et al. **Mol Chem Neuropathol** 1989 Jun;10(3):137–55

The effect of selective type A or type B monoamine oxidase inhibition on the intrasynaptosomal deamination of (3H)serotonin in rat spinal cord tissue. Azzaro AJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):9–13

Effects of dorsal root section and occlusion of dorsal spinal artery on the neurotransmitter candidates in rat spinal cord. Fujita K, et al. **Neurochem Res** 1989 May;14(5):399–404

A re-examination of the Na+-independent binding of [3H]beta-alanine to rat brain stem-spinal cord. Orensanz LM, et al. **Neurochem Res** 1988 Dec;13(12):1133–8

TRH analog administration increases endogenous TRH levels in the central nervous system. Prasad C, et al. **Neuroendocrinology** 1989 Feb;49(2):219–22

Uptake of plasma IgG by CNS motoneurons: comparison of antineuronal and normal IgG. Fabian RH. **Neurology** 1988 Nov;38(11):1775–80

Modulation of [3H]DAGO binding by substance P (SP) and SP fragments in the mouse brain and spinal cord via MU1 interactions. Krumins SA, et al. **Neuropeptides** 1989 May-Jun;13(4):225–33

Release of immunoreactive somatostatin in the spinal dorsal horn of the cat. Morton CR, et al. **Neuropeptides** 1988 Nov-Dec;12(4):189–97

Lesions to ascending noradrenergic and serotonergic pathways modify antinociception produced by intracerebroventricular administration of morphine. Sawynok J, et al. **Neuropharmacology** 1989 Feb;28(2):141–7

Expression of glycine and other amino acid receptors by rat spinal cord mRNA in Xenopus oocytes. Akagi H, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):262–8

Alterations in serotonin binding sites after 5,7–dihydroxytryptamine treatment in the rat spinal cord. Brown LM, et al. **Neurosci Lett** 1989 Jul 17;102(1):103–7

Increase in endogenous 5–hydroxytryptamine levels modulates the central network underlying locomotion in the lamprey spinal cord. Christenson J, et al. **Neurosci Lett** 1989 May 22;100(1–3):188–92

Vasoactive intestinal polypeptide (VIP) immunoreactivity in the ependymal cells of the rat spinal cord. Chung K, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):1–6

Effect of apamin on local rates of glucose utilization in the brain and the spinal cord in rats. Cohen S, et al. **Neurosci Lett** 1988 Sep 12;91(3):253–8

Dietary calcium modulates spinal cord content of calcitonin gene–related peptide in the rat. DiPette DJ, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):335–40

Calcitonin gene–related peptide messenger RNA is expressed in sensory neurones of the dorsal root ganglia and also in spinal motoneurones in man and rat. Gibson SJ, et al. **Neurosci Lett** 1988 Sep 12;91(3):283–8

Reversal of the antinociceptive effects of intrathecally administered serotonin in the rat by a selective 5–HT3 receptor antagonist. Glaum SR, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):313–7

Effects of age on binding sites for calcitonin gene–related peptide in the rat central nervous system. Guidobono F, et al. **Neurosci Lett** 1989 Jul 17;102(1):20–6

Measurement of free radical scavengers in the spinal cord of rats with experimental autoimmune encephalomyelitis. Honegger CG, et al. **Neurosci Lett** 1989 Apr 10; 98(3):327–32

Ubiquitin deposits in anterior horn cells in motor neurone disease. Leigh PN, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):197–203

Evidence for colocalization of substance P and 5–hydroxytryptamine in spinally projecting neurons from the cat medulla oblongata. Marson L. **Neurosci Lett** 1989 Jan 2;96(1):54–9

Peripheral inflammation is associated with increased dynorphin immunoreactivity in both projection and local circuit neurons in the superficial dorsal horn of the rat lumbar spinal cord. Nahin RL, et al. **Neurosci Lett** 1989 Jan 30;96(3):247–52

Neonatal capsaicin treatment abolishes the modulations by opioids of substance P release from rat spinal cord slices. Pohl M, et al. **Neurosci Lett** 1989 Jan 2;96(1):102–7

Brain natriuretic peptides: differential localization of a new family of neuropeptides. Saper CB, et al. **Neurosci Lett** 1989 Jan 2;96(1):29–34

Effect of deafferentation on the levels of uric acid in the spinal cord of the rat. Weil–Fugazza J, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):181–6

Calcitonin gene–related peptide and chromogranin A: presence and intra–axonal transport in lumbar motor neurons in the rat, a comparison with synaptic vesicle antigens in immunohistochemical studies. Bööj S, et al. **Neuroscience** 1989;30(2):479–501

A detailed mapping of histamine H1–receptors in guinea–pig central nervous system established by autoradiography with [125I]iodobolpyramine. Bouthenet ML, et al. **Neuroscience** 1988 Aug;26(2):553–600

Intraspinal substance P–containing projections to the sympathetic preganglionic neuropil in pigeon, Columba livia: high–performance liquid chromatography, radioimmunoassay and electron microscopic evidence. Davis BM, et al. **Neuroscience** 1988 Aug;26(2):655–68

Development and distribution of enkephalin–immunoreactive elements in the chicken spinal cord. Du F, et al. **Neuroscience** 1988 Oct;27(1):251–66

Neurotensin receptors in the human spinal cord: a quantitative autoradiographic study. Faull RL, et al. **Neuroscience** 1989;29(3):603–13

Stimulus specificity of peripherally evoked substance P release from the rabbit dorsal horn in situ. Kuraishi Y, et al. **Neuroscience** 1989;30(1):241–50

Localization of substance P and enkephalin by immunohistochemistry in the spinal cord of human fetus. Luo CB, et al. **Neuroscience** 1988 Dec;27(3):989–93

Serotonergic projections to the spinal cord but not those to the olfactory bulb also contain substance P. A combined immunocytochemical and autoradiographic study following retrograde axonal transport of [3H]serotonin labeled products. Magoul R, et al. **Neuroscience** 1988 Sep; 26(3):959–69

Distribution in the rat central nervous system of acceptor sub–types for dendrotoxin, a K+ channel probe. Pelchen–Matthews A, et al. **Neuroscience** 1989;29(2):347–61

Distribution of neurons expressing calcitonin gene–related peptide mRNAs in the brain stem, spinal cord and dorsal root ganglia of rat and guinea–pig. Réthelyi M, et al. **Neuroscience** 1989;29(1):225–39

Characteristics and specific localization of receptors for atrial natriuretic peptides at non–neuronal cells in cultured mouse spinal cord cells. Simonnet G, et al. **Neuroscience** 1989; 29(1):189–99

Ultrastructural investigation of substance P–, leucine–enkephalin– and 5–hydroxytryptamine–like immunoreactive terminals in the area of cremaster motoneurons of the male rat. Wang BR, et al. **Neuroscience** 1989;28(3):711–23

Induction of the gene encoding pro–dynorphin by experimentally induced arthritis enhances staining for dynorphin in the spinal cord of rats. Weihe E, et al. **Neuroscience** 1989;31(1):77–95

Electrical stimulation of primary afferent A fibres does not reduce substance P release in the dorsal horn of the cat. Hutchison WD, et al. **Pain** 1989 Jun;37(3):357–63

Enhancement of dynorphin gene expression in spinal cord following experimental inflammation: stimulus specificity, behavioral parameters and opioid receptor binding. Iadarola MJ, et al. **Pain** 1988 Dec;35(3):313–26

Effects of lysergic acid diethylamide (LSD) and adjuvant–induced inflammation on desensitization to and metabolism of substance P in the mouse spinal cord. Larson AA, et al. **Pain** 1989 Jun;37(3):365–73

Behavioral and autonomic correlates of the tactile evoked allodynia produced by spinal glycine inhibition: effects of modulatory receptor systems and excitatory amino acid antagonists. Yaksh TL. **Pain** 1989 Apr;37(1):111–23

Buffer effects on high affinity [3H]–prazosin binding in brain and spinal cord. Herr DW, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):831–4

Functional interaction between GABA receptors and type I benzodiazepine recognition sites in the spinal cord of the rat. Longoni B, et al. **Pharmacol Res Commun** 1988 Dec; 20(12):1089–90

Binding of 3H–(3–MeHis2) thyrotropin–releasing hormone to spinal cord membranes of spontaneously hypertensive and Wistar–Kyoto normotensive rats. Bhargava HN, et al. **Pharmacology** 1988;37(6):349–55

Effect of inhibitors of gamma–glutamyl transpeptidase on the uptake of glutamate and aspartate into cultured astroglial cells from the glycogen body and cerebral hemispheres of the embryonic chick. Jankásková B, et al. **Physiol Bohemoslov** 1988;37(2):131–4

Regional concentrations of transmitter amino acids after spinal cord ischaemia in the rabbit. Martiniak J, et al. **Physiol Bohemoslov** 1989;38(3):275–81

The effect of morphine dependence and abstinence on opioid receptors in the cerebral cortex and spinal cord of the rat. Antkiewicz–Michaluk L, et al. **Pol J Pharmacol Pharm** 1988 Jan–Feb;40(1):11–6

5–HT1c receptor is a prominent serotonin receptor subtype in the central nervous system. Molineaux SM, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6793–7

Rapid turnover of microtubule–associated protein MAP2 in the axon revealed by microinjection of biotinylated MAP2 into cultured neurons. Okabe S, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4127–31

Spinal dorsal horn circuitry involved in the brain stem control of nociception. Ruda MA. **Prog Brain Res** 1988; 77:129–40 (67 ref.)

Allocation of newly synthesized proteins in spinal motoneurons. McIlwain DL, et al. **Rev Neurol (Paris)** 1988; 144(11):697–700

Clinical and experimental studies on permeability of tracers in normal spinal cord and syringomyelia. Ikata T, et al. **Spine** 1988 Jul;13(7):737–41

Phencyclidine and sigma receptors in rat spinal cord: binding characterization and quantitative autoradiography. Aanonsen LM, et al. **Synapse** 1989;4(1):1–10

[Influence of electroacupuncture and antagonism of electroacupuncture analgesia by naloxone on enkephalin–like immunoreactivity in guinea pig's adrenal and spinal cord] Wang XT, et al. **Chen Tzu Yen Chiu** 1988; 13(3):231–8 (Eng. Abstr.) (Chi)

[Changes in the content and composition of phospholipids in various portions of the spinal cord in patients with tuberculosis of the spine] Kruglova EE, et al. **Probl Tuberk** 1989;(6):55–9 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Regional distribution of rabies viral antigen in central nervous system of human encephalitic and paralytic rabies. Tirawatnpong S, et al. **J Neurol Sci** 1989 Aug;92(1):91–9

Identification of Theiler's virus infected cells in the central nervous system of the mouse during demyelinating disease. Aubert C, et al. **Microb Pathog** 1987 Nov;3(5):319–26

Class II–restricted T cell responses in Theiler's murine encephalomyelitis virus (TMEV)–induced demyelinating disease. II. Survey of host immune responses and central nervous system virus titers in inbred mouse strains. Clatch RJ, et al. **Microb Pathog** 1987 Nov;3(5):327–37

Susceptibility of C58 mice to paralytic disease induced by lactate dehydrogenase–elevating virus correlates with increased expression of endogenous retrovirus in motor neurons. Contag CH, et al. **Microb Pathog** 1988 Oct; 5(4):287–96

In vivo and in vitro models of demyelinating disease. XVII. The infectious process in athymic rats inoculated with JHM virus. Sorensen O, et al. **Microb Pathog** 1987 Feb;2(2):79–90

Human immunodeficiency virus type 1 in spinal cords of acquired immunodeficiency syndrome patients with myelopathy: expression and replication in macrophages. Eilbott DJ, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3337–41

Monoclonal antibody identification of a 100–kDa membrane protein in HeLa cells and human spinal cord involved in poliovirus attachment. Shepley MP, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7743–7

[Isolation of tick–borne encephalitis viruses from the cervical spinal cord in meningoencephalitis] Grešíková M, et al. **Bratisl Lek Listy** 1989 Apr;90(4):271–3 (Eng. Abstr.) (Slo)

PARASITOLOGY

Cerebrospinal nematodiasis in a goat herd. Kopcha M, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1439–42

PATHOLOGY

Competitive mechanisms of basic peptides inducing transganglionic degenerative atrophy. Tajti J, et al. **Acta Morphol Hung** 1988;36(1–2):7–14

Magnetic resonance (MR) imaging in the management of primary and secondary syringomyelic cavities, and of other cystic lesions of the spinal cord. Roosen N, et al. **Acta Neurochir Suppl (Wien)** 1988;43:13–6

Screening for neurotrophic disturbances in amyotrophic lateral sclerosis. Ebendal T, et al. **Acta Neurol Scand** 1989 Mar;79(3):188–93

Observations on demyelinating lesions induced by Theiler's virus in CBA mice. Blakemore WF, et al. **Acta Neuropathol (Berl)** 1988;76(6):581–9

Delayed myelopathy following lightning strike: a demyelinating process. Davidson GS, et al. **Acta Neuropathol (Berl)** 1988;77(1):104–8

Low–calcium, high–aluminum diet–induced motor neuron pathology in cynomolgus monkeys. Garruto RM, et al. **Acta Neuropathol (Berl)** 1989;78(2):210–9

Proliferation of rat intraspinal Schwann cells following tellurium intoxication. Hammang JP, et al. **Acta Neuropathol (Berl)** 1988;76(6):624–7

Chromatolytic neurons in Werdnig–Hoffmann disease contain phosphorylated neurofilaments. Lippa CF, et al. **Acta Neuropathol (Berl)** 1988;77(1):91–4

Evidence for sequential degeneration of the neurons in the intermediate zone of the spinal cord in amyotrophic lateral sclerosis: a topographic and quantitative investigation. Oyanagi K, et al. **Acta Neuropathol (Berl)** 1989;77(4):343–9

High resolution nuclear magnetic resonance imaging of the spinal cord in experimental demyelinating disease. Peerman GV, et al. **Acta Neuropathol (Berl)** 1988; 76(6):628–32

MR Imaging of the cervical cord in juvenile amyotrophy of distal upper extremity. Biondi A, et al. **AJNR** 1989 Mar–Apr;10(2):263–8

MR appearance of gray and white matter at the cervicomedullary region. Ho PS, et al. **AJNR** 1989 Sep–Oct;10(5):1051–5

Gd–DTPA–enhanced MR of suspected spinal multiple sclerosis. Larsson EM, et al. **AJNR** 1989 Sep–Oct; 10(5):1071–6

Importance of absence of CSF pulsation artifacts in the MR detection of significant myelographic block at 1.5 T. Quint DJ, et al. **AJNR** 1989 Sep–Oct;10(5):1089–95

Degeneration of the primary snout sensory afferents in the cervical spinal cords following the infraorbital nerve transection in some mammals. Chang CM, et al. **Anat Anz** 1988;166(1–5):43–51

Spinal cord and peripheral nerve pathology in AIDS: the roles of cytomegalovirus and human immunodeficiency virus. Grafe MR, et al. **Ann Neurol** 1989 Jun;25(6):561–6

Linkage to the Huntington's disease locus in a family with unusual clinical and pathological features. Zweig RM, et al. **Ann Neurol** 1989 Jul;26(1):78–84

Neurological disease associated with degenerative axonopathy of neonatal Holstein–Friesian calves. Harper PA, et al. **Aust Vet J** 1989 May;66(5):143–4, 145–6

Leucoencephalomyelopathy in Australian Rottweiler dogs. Slocombe RF, et al. **Aust Vet J** 1989 May;66(5):147–50

Evidence for multiple mechanisms responsible for 2,5–hexanedione–induced neuropathy. Lapadula DM, et al. **Brain Res** 1988 Aug 16;458(1):123–31

Degeneration patterns in the chicken central nervous system induced by ingestion of the organophosphorus delayed neurotoxin tri–ortho–tolyl phosphate. A silver impregnation study. Tanaka D Jr, et al. **Brain Res** 1989 Apr 10;484(1–2):240–56

Expression of the jimpy gene in the spinal cords of heterozygous female mice. 2. Oligodendroglial and endothelial cell hyperplasia. Bartlett WP, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):1–11

Immunohistochemical localization of human immunodeficiency viral antigens in formalin–fixed spinal cords with AIDS myelopathy. Rhodes RH, et al. **Clin Neuropathol** 1989 Jan–Feb;8(1):22–7

Aberrant myelinated neurites in the anterior horns of a patient with amyotrophic lateral sclerosis. Troost D, et al. **Clin Neuropathol** 1989 May–Jun;8(3):152–5

Significance of MRI–confirmed atrophy of the cranial spinal cord in Friedreich's ataxia. Wessel K, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):225–30

Gliosis in the spinal cords of rats with experimental allergic encephalomyelitis: immunostaining of carbonic anhydrase and vimentin in reactive astrocytes. Cammer W, et al. **GLIA** 1989;2(4):223–30

Spinal cord softenings of identifiable cause: anatomical and clinical features. Stoehr R, et al. **Ital J Neurol Sci** 1988

Aug;9(4):369–73
Thoracic myelopathy caused by cervicothoracic diastematomyelia. A case report. Ohwada T, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):296–9
Acute and chronic effects of the neurolytic agent ricin on dorsal root ganglia, spinal cord, and nerves. Pubols LM, et al. **J Comp Neurol** 1988 Sep 8;275(2):271–81
Lack of central sprouting of primary afferent fibers after ricin deafferentation. Pubols LM, et al. **J Comp Neurol** 1988 Sep 8;275(2):282–7
Spinocerebellar projections from the upper lumbar segments in the cat, as studied by anterograde transport of wheat germ agglutinin–horseradish peroxidase. Yaginuma H, et al. **J Comp Neurol** 1989 Mar 8;281(2):298–319
MR imaging in acute cervical spine trauma. Beers GJ, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):755–61
Lymphomatoid granulomatosis: clinical and histopathological report of a patient presenting with spinal cord involvement. Herderscheê D, et al. **J Neurol** 1988 Sep;235(7):432–4
Magnetic resonance imaging of spinal cord lesions in multiple sclerosis. Honig LS, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):459–66
Long–term in vitro turtle preparation for the study of spinal organization. Lennard PR, et al. **J Neurosci Methods** 1989 Aug;29(2):165–9
Neuropathology with spinal instrumentation. Coe JD, et al. **J Orthop Res** 1989;7(3):359–70
Familial ataxia with abnormal CSF, with special reference to an autopsy case from three affected siblings. Nakamura I, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):277–89
Tunisian severe childhood muscular dystrophy: a normal spinal cord and anterior horn neurons [letter] Ben Hamida M, et al. **Muscle Nerve** 1989 Feb;12(2):156
Spinal cord pathology in pediatric acquired immunodeficiency syndrome. Dickson DW, et al. **Neurology** 1989 Feb;39(2 Pt 1):227–35
Heterotopic neurons in spinal cord of patients with ALS. Kozlowski MA, et al. **Neurology** 1989 May;39(5):644–8
Progressive axonopathy: an inherited neuropathy of boxer dogs. An immunocytochemical study of the axonal cytoskeleton. Griffiths IR, et al. **Neuropathol Appl Neurobiol** 1989 Jan–Feb;15(1):63–74
Increased diameter of demyelinated axons in chronic multiple sclerosis of the spinal cord. Shintaku M, et al. **Neuropathol Appl Neurobiol** 1988 Nov–Dec;14(6):505–10
Amyotrophic lateral sclerosis (ALS) in a patient with dominating dementia. Matyja E, et al. **Neuropatol Pol** 1988; 26(1):87–95
Primary progressive cerebellar ataxia. Bradac GB, et al. **Neuroradiology** 1989;31(1):16–8
Percutaneous needle evaluation of intradural extramedullary lesions of the lumbar spine. Castillo M, et al. **Neuroradiology** 1988;30(6):551–5
Massive craniospinal collagen deposition after persistent postoperative intraventricular bleeding. Kim RC, et al. **Neurosurgery** 1989 May;24(5):771–5
Post–herpetic neuralgia: post–mortem analysis of a case. Watson CP, et al. **Pain** 1988 Aug;34(2):129–38
Spinal cord degeneration associated with type II decompression sickness: case report. Calder IM, et al. **Paraplegia** 1989 Feb;27(1):51–7
A case of post–traumatic syringomyelia. Neuropathological findings after 1 year of cystic drainage. Foo D, et al. **Paraplegia** 1989 Feb;27(1):63–9
Multiple sulfatase deficiency: bridge between neuronal storage diseases and leukodystrophies [published erratum appears in Pathology 1988 Oct;20(4):following 411] Kepes JJ, et al. **Pathology** 1988 Jul;20(3):285–91
Rett syndrome: spinal cord neuropathology. Oldfors A, et al. **Pediatr Neurol** 1988 May–Jun;4(3):172–4
A hypothesis for the pathogenesis of amyotrophic lateral sclerosis. Karpati G, et al. **Rev Neurol (Paris)** 1988; 144(11):672–5
Ion channels in MS–plaques. Moll C, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):27–9
Morphometry of the cervical spinal cord and its relation to pathology in cases with compression myelopathy. Fujiwara K, et al. **Spine** 1988 Nov;13(11):1212–6
Depth of intraspinal wire penetration during passage of sublaminar wires. Goll SR, et al. **Spine** 1988 May; 13(5):503–9
Canine GM2 gangliosidosis: morphological and biochemical analysis. Singer HS, et al. **Vet Pathol** 1989 Mar;26(2):114–20
Decreased number of alpha–motoneurons in the cervical intumescence of calves with arthrogryposis multiplex congenita of both thoracic limbs. Van Huffel X, et al. **Vet Res Commun** 1988;12(2–3):237–43
[An antenna support table for studying the spinal cord and spine by magnetic resonance] Doyon D, et al. **J Radiol** 1989 Jan;70(1):65–6 **(Fre)**
[Chronic spinal amyotrophy involving the upper limbs in young adults (O'Sullivan and McLeod syndrome). MRI study of the cervical spinal cord] Gaio JM, et al. **Rev Neurol (Paris)** 1989;145(2):163–8 (Eng. Abstr.) **(Fre)**
[Familial form of bulbo–spinal amyotrophy in the adult] Mikol J, et al. **Rev Neurol (Paris)** 1988;144(11):748–55 (Eng. Abstr.) **(Fre)**
[Amyotrophic lateral sclerosis. Physiopathology and experimental models. Chemical neuroanatomy of the human spinal cord: applications to pathologic cases including amyotrophic lateral sclerosis] Schoenen J. **Rev Neurol (Paris)** 1988;144(11):664–71 (34 ref.) (Eng. Abstr.) **(Fre)**
[Immunohistochemical demonstration of HIV–p24 antigen in formalin fixed and paraffin embedded brain and spinal cord tissue] Artigas J, et al. **Pathologe** 1989 Jan;10(1):61–3 **(Ger)**
[Morphology, clinical aspects and therapy of perinatal hypoxic central nervous system damage. A pedoneuropsychiatric follow–up analysis in relation to the neurohistologic spectrum of findings] Quandt J, et al. **Wien Med Wochenschr** 1989 Jun 30;139(12):288–92 (Eng. Abstr.) **(Ger)**
[Magnetic resonance study of lesions of the cervical spinal cord in multiple sclerosis] Dal Pozzo G, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):23–9 (Eng. Abstr.) **(Ita)**
[A clinical study on the morphological restoration of the spinal cord in cervical myelopathy by CT–myelography and ultrasonography] Kawakami N. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov;62(11):951–64 (Eng. Abstr.) **(Jpn)**
[Magnetic resonance imaging in multiple sclerosis: investigation of brain and spinal cord lesions] Kojima S, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):147–53 (Eng. Abstr.) **(Jpn)**
[Pathology of Clarke's nucleus in sporadic amyotrophic lateral sclerosis] Okamoto K, et al. **Rinsho Shinkeigaku** 1988 May;28(5):536–42 (Eng. Abstr.) **(Jpn)**
[Neuropathological studies of familial amyotrophic lateral sclerosis with special reference to systemic degeneration of dentato–rubral system and neuronal loss of Onuf's nuclei] Sakai M, et al. **Rinsho Shinkeigaku** 1988 Oct; 28(10):1197–205 (Eng. Abstr.) **(Jpn)**
[Three–dimensional distribution of spinal anterior horn cells in amyotrophic lateral sclerosis and Shy–Drager syndrome—a study of cytoarchitectonic feature] Terao S, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1178–87 (Eng. Abstr.) **(Jpn)**
[Clinico–morphologic manifestations of ossifying cerebrospinal arachnoiditis] Neretin VIa, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):19–21 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Interactions between noradrenergic and cholinergic mechanisms involved in spinal nociceptive processing. Gordh T Jr, et al. **Acta Anaesthesiol Scand** 1989 Jan; 33(1):39–47
The use of fetal mouse spinal cord–dorsal root ganglion explants to study the factors underlying selective connections in vitro. Baker RE. **Acta Biol Hung** 1988; 39(2–3):135–43 (33 ref.)
Spinal locomotion: a comparison of the kinematics and the electromyographic activity in the same animal before and after spinalization. Bélanger M, et al. **Acta Biol Hung** 1988; 39(2–3):151–4
The neuronal bases of locomotion in lamprey—in vitro studies of the brainstem–spinal cord. Grillner S, et al. **Acta Biol Hung** 1988;39(2–3):145–9 (38 ref.)
Synaptic connections between primary afferents and motoneurons in the spinal cord of anuran larvae. Shupliakov OV. **Acta Biol Hung** 1988;39(2–3):127–34
Motor mechanisms in the turtle spinal cord. Stein PS. **Acta Biol Hung** 1988;39(2–3):155–60 (36 ref.)
Cerebral and carotid haemodynamic changes following cervical spinal cord stimulation. An experimental study. Garcia–March G, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:102–4
Peripheral nerve autografts to the rat spinal cord: a study of the origin of regenerating fibres using fluorescent double labelling. Pallini R, et al. **Acta Neurochir Suppl (Wien)** 1988; 43:210–3
Spinal and central sensory conduction times in subjects aged between 20 and 60 years. D'Alpa F, et al. **Acta Neurol (Napoli)** 1988 Jun;10(3):193–9
Orienting reactions to light tactile stimuli after single and repeated partial spinal cord lesions in the cat. Danielsson I, et al. **Acta Physiol Scand** 1989 May;136(1):121–30
The role of tail skin temperature in the facilitation of the tail–flick reflex after spinal transection or interference with descending serotonergic neurotransmission. Eide PK, et al. **Acta Physiol Scand** 1989 Apr;135(4):427–33
Parabronchial oxygen extraction in ducks during selective cooling of the spinal cord. Johannesen H, et al. **Acta Physiol Scand** 1988 Apr;132(4):563–7
Afferent electrical stimulation of mesenteric nerves inhibits duodenal HCO3– secretion via a spinal reflex activation of the splanchnic nerves in the rat. Jönson C, et al. **Acta Physiol Scand** 1988 Aug;133(4):545–50
Spinoreticular cell responses to intrarenal injections of bradykinin. Ammons WS. **Am J Physiol** 1988 Dec;255(6 Pt 2):R994–1001
Determinants of arterial pressure after chronic spinal transection in rats. Osborn JW, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R666–73
Blockade of spinal pathways decreases pre– and postganglionic discharge differentially. Qu L, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R946–51
Urethral responses to sacral stimulation in chronic spinal dog. Walter JS, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R284–91
Somatosensory–evoked and spinal cord–evoked potentials in response to pudendal and tibial nerve stimulation in cats. Sims MH, et al. **Am J Vet Res** 1989 Apr;50(4):542–5
Artificial ventilation by means of electrical activation of the intercostal/accessory muscles alone in anesthetized dogs. DiMarco AF, et al. **Am Rev Respir Dis** 1989 Apr; 139(4):961–7
Spinal cord transmission of impulses during high spinal anesthesia as measured by cortical evoked potentials. Lang E, et al. **Anesth Analg** 1989 Jul;69(1):15–20
Sufentanil, morphine, met–enkephalin, and kappa–agonist (U–50,488H) inhibit substance P release from primary sensory neurons: a model for presynaptic spinal opioid actions. Chang HM, et al. **Anesthesiology** 1989 Apr; 70(4):672–7
Influence of TRH and TRH analogues RGH–2202 and DN–1417 on cultured ventral spinal cord neurons. Askanas V, et al. **Ann N Y Acad Sci** 1989;553:325–36
Descending catecholaminergic modulation of spinal cord reflexes in cat and rat. Barnes CD, et al. **Ann N Y Acad Sci** 1989;563:45–58 (42 ref.)
TRH–catecholamine interactions in brain and spinal cord. Bennett GW, et al. **Ann N Y Acad Sci** 1989;553:106–20
Functional interactions between TRH and 5–hydroxytryptamine (5–HT) and proctolin in rat brain and spinal cord. Marsden CA, et al. **Ann N Y Acad Sci** 1989; 553:121–34
Spatial transformation of horizontal linear acceleration by the cat vestibulospinal system. Schor RH. **Ann N Y Acad Sci** 1988;545:21–8 (19 ref.)
Spinal cord circuits for motor pettern selection in the turtle. Stein PS. **Ann N Y Acad Sci** 1989;563:1–10 (43 ref.)
Thyrotropin–releasing hormone (TRH) effects on spinal cord neuronal excitability. White SR, et al. **Ann N Y Acad Sci** 1989;553:337–50 (52 ref.)
Differential regulation of gamma–aminobutyric acid receptor channels by diazepam and phenobarbital. Twyman RE, et al. **Ann Neurol** 1989 Mar;25(3):213–20
Reticulospinal neurons in lamprey: transmitters, synaptic interactions and their role during locomotion. Brodin L, et al. **Arch Ital Biol** 1988 Oct;126(4):317–45 (134 ref.)
Injections of beta–adrenergic substances in the locus coeruleus affect the gain of vestibulospinal reflexes in decerebrate cats. D'Ascanio P, et al. **Arch Ital Biol** 1989 Jun;127(3):187–218
Inhibition of vestibulospinal reflexes during the episodes of postural atonia induced by unilateral lesion of the locus coeruleus in the decerebrate cat. D'Ascanio P, et al. **Arch Ital Biol** 1989 Mar;127(2):81–97
Inhibition of vestibulospinal reflexes following cholinergic activation of the dorsal pontine reticular formation. D'Ascanio P, et al. **Arch Ital Biol** 1988 Oct;126(4):291–316
Supraspinal inhibition of the two components of formalin–induced responses in rat dorsal horn neurons. Sotgiu ML. **Arch Ital Biol** 1989 Jun;127(3):219–23
Noradrenergic and serotonergic involvement in brief shock–induced analgesia in rats. Minor BG, et al. **Behav Neurosci** 1988 Dec;102(6):915–24
Neuronal and glial responses to hypoxia and hypercapnia. Lehmenkühler A, et al. **Biomed Biochim Acta** 1989; 48(2–3):S155–60
Activation of a bradykinin receptor in peripheral nerve and spinal cord in the neonatal rat in vitro. Dray A, et al. **Br J Pharmacol** 1988 Dec;95(4):1008–10
Head tilt produced by hemilabyrinthectomy does not depend on the direct vestibulospinal tracts. Fukushima K, et al. **Brain Behav Evol** 1988;32(3):181–6
Electrically induced locomotion in the in vitro brainstem–spinal cord preparation. Atsuta Y, et al. **Brain Res** 1988 Aug 1;470(2):309–12
Rapid migration of grafted cortical astrocytes from suspension grafts placed in host thoracic spinal cord. Bernstein JJ, et al. **Brain Res** 1989 Jul 10;491(2):205–11
Antisera to the ganglioside GM1 do not have anti–myelin or anti–axon activities in vitro. Bourdette DN, et al. **Brain Res** 1989 Jan 23;478(1):175–80
Morphological changes in spinal motor neurons giving rise to long–term regenerated sciatic nerve axons. Bowe CM, et al. **Brain Res** 1988 Oct 25;463(1):69–77
Evidence for the involvement of a descending cholinergic pathway in systemic morphine analgesia. Chiang CY, et al. **Brain Res** 1989 Jan 30;478(2):293–300
PHA–L can be transported anterogradely through fibers of passage. Cliffer KD, et al. **Brain Res** 1988 Aug 16; 458(1):185–91
Studies of peptidergic input to the lateral spinal nucleus. Cliffer KD, et al. **Brain Res** 1988 Sep 20;460(2):356–60
Spontaneous activity induced in isolated mouse spinal cord by high extracellular calcium and by low extracellular magnesium. Czéh G, et al. **Brain Res** 1989 Aug 21; 495(1):89–99
Lateralization and adaptation of a continuously variable behavior following lesions of a reticulospinal command neuron. DiDomenico R, et al. **Brain Res** 1988 Nov 8; 473(1):15–28
The role of spinal cord inputs in modulating the activity of reticulospinal neurons during fictive locomotion in the lamprey. Dubuc R, et al. **Brain Res** 1989 Mar 27; 483(1):196–200
The effects of 4–aminopyridine on the cat spinal cord: rhythmic antidromic discharges recorded from the dorsal roots. Dubuc R, et al. **Brain Res** 1989 Jul 10;491(2):335–48
The influence of opioid receptor subtypes on the processing

of nociceptive inputs in the spinal dorsal horn of the cat. Fleetwood-Walker SM, et al. **Brain Res** 1988 Jun 7; 451(1-2):213-26

Electrical stimulation of the rat ventral midbrain elicits antinociception via the dorsolateral funiculus. Guinan MJ, et al. **Brain Res** 1989 Apr 24;485(2):333-48

Development of the monosynaptic reflex pathway in the human spinal cord. Hakamada S, et al. **Brain Res** 1988 Aug 1;470(2):239-46

A physiological study of the monosynaptic reflex responses of cat spinal alpha-motoneurons after partial lumbosacral deafferentation. Hellgren J, et al. **Brain Res** 1989 May 29; 488(1-2):149-62

Activity of dorsal spinocerebellar tract neurones in the thoracic spinal cord in relation to respiratory movement. Hirai N, et al. **Brain Res** 1988 Dec 20;475(2):385-8

Excitatory action of a plant extract, stizolobic acid, in the isolated spinal cord of the rat. Ishida M, et al. **Brain Res** 1988 Nov 8;473(1):193-7

Acromelic acid is a much more potent excitant than kainic acid or domoic acid in the isolated rat spinal cord. Ishida M, et al. **Brain Res** 1988 Dec 6;474(2):386-9

Enkephalins modulate excitatory synaptic transmission in the superficial dorsal horn by acting at mu-opioid receptor sites. Jeftinija S. **Brain Res** 1988 Sep 20;460(2):260-8

Organelle changes in cat thoracic alpha- and gamma-motoneurons following axotomy. Johnson IP, et al. **Brain Res** 1989 Jun 12;489(2):400-5

Inhibition of spinal nociceptive transmission from the midbrain, pons and medulla in the rat: activation of descending inhibition by morphine, glutamate and electrical stimulation. Jones SL, et al. **Brain Res** 1988 Sep 20; 460(2):281-96

Phasic modulation of reticulospinal neurones during fictive locomotion and other types of spinal motor activity in lamprey. Kasicki S, et al. **Brain Res** 1989 Apr 10; 484(1-2):203-16

Relations between time-and frequency-domain measures of signal transmission from cutaneous afferents to dorsal horn neurons. Kuipers U, et al. **Brain Res** 1988 Oct 11; 462(1):154-9

Large enhancement of excitatory postsynaptic potentials and currents by thyrotropin-releasing hormone (TRH) in frog spinal motoneurones. Lacey G, et al. **Brain Res** 1989 May 29;488(1-2):80-8

The actions of two monoamines on spinal motoneurons from stimulation of the locus coeruleus in the cat. Lai YY, et al. **Brain Res** 1989 Apr 10;484(1-2):268-72

Electrophysiological identification of spinally projecting neurons in the lateral reticular nucleus of the rat. Liu RH, et al. **Brain Res** 1989 Mar 6;481(2):350-5

Involvement of adenosine in synaptic depression induced by a brief period of hypoxia in isolated spinal cord of neonatal rat. Lloyd HG, et al. **Brain Res** 1988 Oct 18;462(2):391-5

Brainstem command systems for locomotion in the lamprey: localization of descending pathways in the spinal cord. McClellan AD. **Brain Res** 1988 Aug 9;457(2):338-49

The pretectum as a site for relaying dorsal column input to thalamic VL neurons. Mackel R, et al. **Brain Res** 1989 Jan 2;476(1):135-9

Target regulation of the serotonin and substance P innervation of the sexually dimorphic cremaster nucleus. Newton BW, et al. **Brain Res** 1989 Apr 17;485(1):149-56

Further evidence in support of taurine as a mediator of synaptic transmission in the frog spinal cord. Padjen AL, et al. **Brain Res** 1989 May 29;488(1-2):288-96

Dorsal column input to cochlear neurons in decerebrate-decerebellate cats. Saadé NE, et al. **Brain Res** 1989 May 8;486(2):399-402

NMDA receptor activation by residual glutamate in glutamine preparations: a cautionary note regarding weak NMDA receptor agonists. Sands SB, et al. **Brain Res** 1989 Aug 21;495(1):193-7

Responses of cat muscle spindle afferents after short periods of denervation and reinnervation. Scott JJ. **Brain Res** 1988 Oct 4;461(2):381-3

Sensitization of cat dorsal horn neurons to innocuous mechanical stimulation after intradermal injection of capsaicin. Simone DA, et al. **Brain Res** 1989 May 1; 486(1):185-9

1-(2-Pyrimidinyl)piperazine antagonizes GABA-activated currents in cultured spinal neurones of the rat. Smith SM, et al. **Brain Res** 1989 Jul 31;493(2):366-7

N-methyl-D-aspartate antagonist applied to the spinal cord hindlimb enlargement reduces the amplitude of flexion reflex in the turtle. Stein PS, et al. **Brain Res** 1989 Feb 13;479(2):379-83

Electrophysiological studies on the spinal effects of dermorphin, an endogenous mu-opioid agonist. Sullivan AF, et al. **Brain Res** 1988 Sep 27;461(1):182-5

Cardiac responses to the microinjections of excitatory amino acids into the intermediolateral cell column of the rat spinal cord. Sundaram K, et al. **Brain Res** 1989 Mar 13; 482(1):12-22

Nerve section alters the interaction between C-fibre activity and intrathecal neuropeptides on the flexor reflex in rat. Wiesenfeld-Hallin Z. **Brain Res** 1989 Jun 5;489(1):129-36

The effects of intrathecal galanin and C-fiber stimulation on the flexor reflex in the rat. Wiesenfeld-Hallin Z, et al. **Brain Res** 1989 May 8;486(2):205-13

Chronic opioid antagonist treatment increases mu and delta receptor mediated spinal opioid analgesia. Yoburn BC, et al. **Brain Res** 1989 Apr 17;485(1):176-8

Single fibre motor evoked potentials to brain, spinal roots and nerve stimulation. Comparisons of the 'central' and 'peripheral' response jitter to magnetic and electric stimuli. Zarola F, et al. **Brain Res** 1989 Aug 28;495(2):217-24

NMDA antagonists and potentiation of NMDA-induced motoneuron depolarizations in the isolated frog spinal cord. Zhang DX, et al. **Brain Res** 1989 Jul 24;493(1):129-35

Intracellular injection of Ca2+ chelator does not affect spike repolarization of cat spinal motoneurons. Zhang L, et al. **Brain Res** 1988 Oct 11;462(1):174-80

Structural and functional analysis of raphe neurone implants into denervated rat spinal cord. Foster GA, et al. **Brain Res Bull** 1989 Jan;22(1):131-7

Formation of functional endplates by spinal axons regenerating through a peripheral nerve graft. A study in the adult rat. Horvat JC, et al. **Brain Res Bull** 1989 Jan; 22(1):103-14

Intraspinal transplants of serotonergic neurons in the adult rat. Privat A, et al. **Brain Res Bull** 1989 Jan;22(1):123-9

Mapping the effects of motor cortex stimulation on single neurons in the dorsal column nuclei in the rat: direct responses and afferent modulation. Shin HC, et al. **Brain Res Bull** 1989 Feb;22(2):245-52

Locomotion in rats transplanted with noradrenergic neurons. Yakovieff A, et al. **Brain Res Bull** 1989 Jan;22(1):115-21

Maintenance of discrete somatosensory maps in subcortical relay nuclei is dependent on an intact sensory cortex. Erzurumlu RS, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):302-8

Do the corticospinal and corticobulbar tracts mediate functions in the human newborn? Sarnat HB. **Can J Neurol Sci** 1989 May;16(2):157-60

The development of voltage-dependent ionic conductances in murine spinal cord neurones in culture. Krieger C, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1328-36

Mechanisms underlying the cardiovascular responses to intrathecal vasopressin administration in rats. Riphagen CL, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):269-75

Calcium-dependent, slow desensitization distinguishes different types of glutamate receptors. Zorumski CF, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):95-104

Extracellular pH and stimulated neurons. Syková E, et al. **Ciba Found Symp** 1988;139:220-35

The dorsal root reflex in isolated mammalian spinal cord. Bagust J, et al. **Comp Biochem Physiol [A]** 1989; 93(1):151-60

The physiological basis of transplantation of fetal catecholaminergic neurons in the transected spinal cord of the rat. Commissiong JW, et al. **Comp Biochem Physiol [A]** 1989;93(1):301-7

Characterization of deep dorsal horn neurones in the rat spinal cord in vitro: synaptic and excitatory amino acid induced excitations. King AE, et al. **Comp Biochem Physiol [A]** 1989;93(1):171-5

Amino acid pharmacology in a mature rat spinal cord preparation in vitro. Long SK. **Comp Biochem Physiol [A]** 1989;93(1):177-81

Diurnal rhythms in primate spinal reflexes and accompanying cortical somatosensory evoked potentials. Dowman R, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan; 72(1):69-80

Conduction properties of epidurally recorded spinal cord potentials following lower limb stimulation in man. Halonen JP, et al. **Electroencephalogr Clin Neurophysiol** 1989 May-Jun;74(3):161-74

Intra-operative unit recordings in the human dorsal horn with a simplified floating microelectrode. Jeanmonod D, et al. **Electroencephalogr Clin Neurophysiol** 1989 May; 72(5):450-4

Three transverse dipolar generators in the human cervical and lumbo-sacral dorsal horn: evidence from direct intraoperative recordings on the spinal cord surface. Jeanmonod D, et al. **Electroencephalogr Clin Neurophysiol** 1989 May-Jun; 74(3):236-40

Blockade of sustained repetitive action potentials in cultured spinal cord neurons by zonisamide (AD 810, CI 912), a novel anticonvulsant. Rock DM, et al. **Epilepsy Res** 1989 Mar-Apr;3(2):138-43

Behavioral classification of excitatory amino acid receptors in mouse spinal cord. Urca G, et al. **Eur J Pharmacol** 1988 Aug 24;153(2-3):211-20

Dipropylacetate-induced shaking behaviour in the rat: a role of spinal alpha 2-adrenoceptors. Van der Laan JW, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):197-205

Physiologic analysis of central motor pathways--simultaneous recording from multiple relaxed muscles. Ugawa Y, et al. **Eur Neurol** 1989;29(3):135-40

Neural control of limb coordination. II. Hatching and walking motor output patterns in the absence of input from the brain. Bekoff A, et al. **Exp Brain Res** 1989;74(3):609-17

Disturbances of motor output in a cat hindlimb muscle after acute dorsal spinal hemisection. Blaschak MJ, et al. **Exp Brain Res** 1988;71(2):377-87

Comparison of effects of monoamines on transmission in spinal pathways from group I and II muscle afferents in the cat. Bras H, et al. **Exp Brain Res** 1989;76(1):27-37

An investigation of local actions of ionophoretically applied DOPA in the spinal cord. Bras H, et al. **Exp Brain Res** 1988;71(2):447-9

Excitability of corticospinal neurons during tonic muscle contractions in man. Brouwer B, et al. **Exp Brain Res** 1989; 74(3):649-52

Vestibulospinal and reticulospinal interactions in the activation of back muscle EMG in the rat. Cottingham SL, et al. **Exp Brain Res** 1988;73(1):198-208

Control from the brainstem of synchrony of discharge between gamma motoneurones in the cat. Davey NJ, et al. **Exp Brain Res** 1988;72(2):249-63

Fast head tilt has only a minor effect on quick compensatory reactions during the regulation of stance and gait. Dietz V, et al. **Exp Brain Res** 1988;73(3):470-6

Monosynaptic excitation of medullary inspiratory neurons by bulbospinal inspiratory neurons of the ventral respiratory group in the cat. Ezure K, et al. **Exp Brain Res** 1989;74(3):501-11

Cobalt-complex ATP enhanced regeneration in the dorsal horn of the rat spinal cord. Ferencsik M, et al. **Exp Brain Res** 1989;76(2):409-16

Post-tetanic influences on primary afferent depolarization in the cat spinal cord. Gynther BD, et al. **Exp Brain Res** 1989; 74(2):365-74

Interference of vibrations with input transmission in dorsal horn and cuneate nucleus in man: a study of somatosensory evoked potentials (SEPs) to electrical stimulation of median nerve and fingers. Ibañez V, et al. **Exp Brain Res** 1989; 75(3):599-610

Time constants of facilitation and depression in Renshaw cell responses to random stimulation of motor axons. Laouris Y, et al. **Exp Brain Res** 1988;72(1):117-28

A comparison of homonymous and heteronymous connectivity in the spinal monosynaptic reflex arc of the cat. Lüscher HR, et al. **Exp Brain Res** 1989;74(3):480-92

Influences of morphology and topography of motoneurons and muscle spindle afferents on amplitude of single fiber excitatory postsynaptic potentials in cat. Lüscher HR, et al. **Exp Brain Res** 1989;74(3):493-500

Decrementing expiratory neurons of the Bötzinger complex. I. Response to lung inflation and axonal projection. Manabe M, et al. **Exp Brain Res** 1988;72(1):150-8

The organization of descending tectofugal pathways underlying orienting in the frog, Rana pipiens. I. Lateralization, parcellation, and an intermediate spatial representation. Masino T, et al. **Exp Brain Res** 1989; 75(2):227-44

The organization of descending tectofugal pathways underlying orienting in the frog, Rana pipiens. II. Evidence for the involvement of a tecto-tegmento-spinal pathway. Masino T, et al. **Exp Brain Res** 1989;75(2):245-64

A study of corticospinal remodelling using retrograde fluorescent tracers in rats. Reinoso BS, et al. **Exp Brain Res** 1989;74(2):387-94

Do muscle afferents contribute to the cervical response evoked by electrical stimulation of the median nerve in man? Reni L, et al. **Exp Brain Res** 1988;72(2):305-15

Interactions between Schwann cells and CNS axons following a delay in the normal formation of central myelin. Sims TJ, et al. **Exp Brain Res** 1989;75(3):513-22

Single medullary reticulospinal neurons exert postsynaptic inhibitory effects via inhibitory interneurons upon alpha-motoneurons innervating cat hindlimb muscles. Takakusaki K, et al. **Exp Brain Res** 1989;74(1):11-23

Properties and localization of the anterior semicircular canal-activated vestibulocollic neurons in the cat. Uchino Y, et al. **Exp Brain Res** 1988;71(2):345-52

Bulbospinal and intraspinal connections in normal and regenerated salamander spinal cord. Davis BM, et al. **Exp Neurol** 1989 Jan;103(1):41-51

The fate of prelabeled Clarke's column neurons after axotomy. McBride RL, et al. **Exp Neurol** 1988 Nov; 102(2):236-43

The descending inhibitory pathways. Their role in analgesia, after consideration of specific spinal adrenergic involvement. Biella G, et al. **Funct Neurol** 1989 Jan-Mar; 4(1):33-7 (34 ref.)

Sites of clonidine action to inhibit gut propulsion in mice: demonstration of a central component. Jiang Q, et al. **Gastroenterology** 1988 Nov;95(5):1265-71

Functional significance of subtypes of 5-HT receptors in the rat spinal reflex pathway. Nagano N, et al. **Gen Pharmacol** 1988;19(6):789-93

Electrical coupling between astrocytes and between oligodendrocytes studied in mammalian cell cultures. Kettenmann H, et al. **GLIA** 1988;1(1):64-73

Respiratory resetting induced by spinal cord stimulation in the cat. Speck DF. **J Appl Physiol** 1988 Oct;65(4):1572-8

Circulating atrial natriuretic factor activates vagal afferent inputs to paraventriculo-spinal neurones in the rat. Lovick TA, et al. **J Auton Nerv Syst** 1989 Mar;26(2):129-34

Effects of volume loading on paraventriculo-spinal neurones in the rat. Lovick TA, et al. **J Auton Nerv Syst** 1988 Dec; 25(2-3):135-40

Dermorphin inhibits micturition reflex in rats at a central site of action. Maggi CA, et al. **J Auton Nerv Syst** 1989 Feb;26(1):11-6

Tonic descending inhibition of the spinal cardio-sympathetic reflex in the cat. Müller UW, et al. **J Auton Nerv Syst** 1988 Aug;23(2):111-23

Effects of activating spinal alpha-adrenoreceptors on sympathetic nerve activity in the rat. Shi H, et al. **J Auton Nerv Syst** 1988 Jun;23(1):69-78

Spinal sympathetic conduction velocity in humans. Wallin BG, et al. **J Auton Nerv Syst** 1988 Oct;24(3):221-5

Spinal cord monitoring. Nash CL Jr, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):627–30 (40 ref.)

Preservation of spinal cord function and prevention of paralysis during aortic occlusion via veno–arterial bypass. Grossi EA, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb; 30(1):95–8

Agrin–related molecules are concentrated at acetylcholine receptor clusters in normal and aneural developing muscle. Fallon JR, et al. **J Cell Biol** 1989 Apr;108(4):1527–35

Colocalization of fixative–modified glutamate and glutaminase but not GAD in rubrospinal neurons. Beitz AJ, et al. **J Comp Neurol** 1988 Aug 8;274(2):265–79

Expansion of spinal cord primary sensory afferent projection following combined sciatic nerve resection and saphenous nerve crush: a horseradish peroxidase study in the adult rat. Molander C, et al. **J Comp Neurol** 1988 Oct 15; 276(3):436–41

The Behavior of Organisms: purposive behavior as a type of reflex. Timberlake W. **J Exp Anal Behav** 1988 Sep; 50(2):305–17 (48 ref.)

Catecholamine release by catecholamines in the eel does not require the presence of brain or anterior spinal cord. Hathaway CB, et al. **J Exp Zool** 1989 Mar;249(3):338–42

Developments for recording lumbosacral evoked potentials. Lucas M, et al. **J Med Eng Technol** 1988 Nov–Dec; 12(6):273–8

Conductance states activated by glycine and GABA in rat cultured spinal neurones. Smith SM, et al. **J Membr Biol** 1989 Apr;108(1):45–52

Kappa–opiate agonists inhibit adenylate cyclase and produce heterologous desensitization in rat spinal cord. Attali B, et al. **J Neurochem** 1989 Feb;52(2):360–9

Demyelination and remyelination in the dorsal funiculus of the rat spinal cord after heat injury. Sasaki M, et al. **J Neurocytol** 1989 Apr;18(2):225–39

High–voltage stimulation over the human spinal cord: sources of latency variation. Plassman BL, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):213–7

The origins of lumbosacral spinal evoked potentials [letter] Seyal M, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1600

Axonal sprouting after botulinum toxin does not elicit a histological axon reaction. Pamphlett R. **J Neurol Sci** 1988 Nov;87(2–3):175–85

Prelabeled red nucleus and sensorimotor cortex neurons of the rat survive 10 and 20 weeks after spinal cord transection. McBride RL, et al. **J Neuropathol Exp Neurol** 1989 Sep;48(5):568–76

Renal and somatic input to spinal neurons antidromically activated from the ventrolateral medulla. Ammons WS. **J Neurophysiol** 1988 Dec;60(6):1967–81

Lateral tegmental field neurons of cat medulla: a source of basal activity of raphespinal sympathoinhibitory neurons. Barman SM, et al. **J Neurophysiol** 1989 May;61(5):1011–24

Variance analysis of excitatory postsynaptic potentials in cat spinal motoneurons during posttetanic potentiation. Clamann HP, et al. **J Neurophysiol** 1989 Feb;61(2):403–16

Acute effects of spinal transection on EPSPs produced by single homonymous Ia–fibers in soleus alpha–motoneurons in the cat [published erratum appears in J Neurophysiol 1989 Mar;61(3):following Table of Contents] Cope TC, et al. **J Neurophysiol** 1988 Nov;60(5):1678–94

Rhythmic fluctuations of dorsal root potentials and antidromic discharges of primary afferents during fictive locomotion in the cat. Dubuc R, et al. **J Neurophysiol** 1988 Dec;60(6):2014–36

Cable properties of spinal cord motoneurons in adult and aged cats. Engelhardt JK, et al. **J Neurophysiol** 1989 Jan; 61(1):194–201

Unitary conductance changes at teleost Mauthner cell glycinergic synapses: a voltage–clamp and pharmacologic analysis. Faber DS, et al. **J Neurophysiol** 1988 Dec; 60(6):1982–99

Spinocervical tract neurons responsive to light mechanical stimulation of the raccoon forepaw. Hirata H, et al. **J Neurophysiol** 1989 Jan;61(1):138–48

Components of the responses of a population of DSCT neurons determined from single–unit recordings. Osborn CE, et al. **J Neurophysiol** 1989 Feb;61(2):447–55

Somatotopic organization of forelimb representation in cervical enlargement of raccoon dorsal horn. Pubols BH Jr, et al. **J Neurophysiol** 1989 Jan;61(1):126–37

Temporally dependent changes in response properties of dorsal horn neurons after dorsolateral funiculus lesions. Pubols LM, et al. **J Neurophysiol** 1988 Oct;60(4):1253–67

Vagal afferent modulation of spinal nociceptive transmission in the rat. Ren K, et al. **J Neurophysiol** 1989 Aug; 62(2):401–15

Facilitation and depression in the responses of spinal Renshaw cells to random stimulation of motor axons. Windhorst U, et al. **J Neurophysiol** 1988 Nov;60(5):1638–52

Memory traces in primate spinal cord produced by operant conditioning of H–reflex. Wolpaw JR, et al. **J Neurophysiol** 1989 Mar;61(3):563–72

Trifluoperazine blocks GABA–gated chloride currents in cultured chick spinal cord neurons. Yang J, et al. **J Neurophysiol** 1989 Feb;61(2):363–73

Primary afferent–evoked synaptic responses and slow potential generation in rat substantia gelatinosa neurons in vitro. Yoshimura M, et al. **J Neurophysiol** 1989 Jul; 62(1):96–108

Endogenous activation of glycine and NMDA receptors in lamprey spinal cord during fictive locomotion. Alford S, et al. **J Neurosci** 1989 Aug;9(8):2792–800

The medullary pacemaker nucleus is unnecessary for electroreceptor tuning plasticity in Sternopygus. Ferrari MB, et al. **J Neurosci** 1989 Apr;9(4):1354–61

Structure of the intraspinal projections of single, identified muscle spindle afferents from neck muscles of the cat. Keirstead SA, et al. **J Neurosci** 1988 Sep;8(9):3413–26

The development of sensorimotor synaptic connections in the lumbosacral cord of the chick embryo. Lee MT, et al. **J Neurosci** 1988 Jul;8(7):2530–43

The noradrenergic neurotoxin DSP–4 eliminates the coeruleospinal projection but spares projections of the A5 and A7 groups to the ventral horn of the rat spinal cord. Lyons WE, et al. **J Neurosci** 1989 May;9(5):1481–9

Involvement of excitatory amino acids in neurotransmission of inspiratory drive to spinal respiratory motoneurons. McCrimmon DR, et al. **J Neurosci** 1989 Jun;9(6):1910–21

Disuse–induced enhancement of Ia synaptic transmission in spinal motoneurons of the rat. Manabe T, et al. **J Neurosci** 1989 Jul;9(7):2455–61

Androgen regulates synaptic input to motoneurons of the adult rat spinal cord. Matsumoto A, et al. **J Neurosci** 1988 Nov;8(11):4168–76

Spinal cord segments containing key elements of the central pattern generators for three forms of scratch reflex in the turtle. Mortin LI, et al. **J Neurosci** 1989 Jul;9(7):2285–96

Motor activity in the isolated spinal cord of the chick embryo: synaptic drive and firing pattern of single motoneurons. O'Donovan MJ. **J Neurosci** 1989 Mar; 9(3):943–58

Activation of GABAB receptors causes presynaptic inhibition at synapses between muscle spindle afferents and motoneurons in the spinal cord of bullfrogs. Peng YY, et al. **J Neurosci** 1989 May;9(5):1502–15

Activation of GABAA receptors causes presynaptic and postsynaptic inhibition at synapses between muscle spindle afferents and motoneurons in the spinal cord of bullfrogs. Peng YY, et al. **J Neurosci** 1989 May;9(5):1516–22

Structural and functional properties of reticulospinal neurons in the early–swimming stage Xenopus embryo. van Mier P, et al. **J Neurosci** 1989 Jan;9(1):25–37

A cryogenic device for reversibly blocking transmission through small regions of the spinal cord white matter. Apkarian AV, et al. **J Neurosci Methods** 1989 Aug; 29(2):93–106

Cytological and cytochemical (RNA) studies on rubral neurons after unilateral rubrospinal tractotomy: the impact of GM1 ganglioside administration. Barron KD, et al. **J Neurosci Res** 1989 Mar;22(3):331–7

Reversibility and prevention of intraspinal peptidergic loss caused by sciatic nerve lesions. Di Giulio AM, et al. **J Neurosci Res** 1989 Jan;22(1):92–6

Carrier–mediated Cl– transport in cultured mouse oligodendrocytes. Hoppe D, et al. **J Neurosci Res** 1989 Aug;23(4):467–75

Different classes of cat spinal neurons display differential sensitivity to sodium pentobarbital. Paik KS, et al. **J Neurosci Res** 1989 May;23(1):107–15

Cell adhesion and neurite extension in response to two proteolytic fragments of laminin. Rogers SL, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):315–22

Effect of dorsal–column stimulation on gelatinosa and marginal neurons of cat spinal cord. Dubuisson D. **J Neurosurg** 1989 Feb;70(2):257–65

In vitro spinal cord conduction block during exposure to a xanthine oxidase/hypoxanthine system: noninvolvement of superoxide and hydrogen peroxide. Ridella SA, et al. **J Neurotrauma** 1989 Summer;6(1):1–11

Intracerebroventricular morphine decreases descending inhibitions acting on lumbar dorsal horn neuronal activities related to pain in the rat. Bouhassira D, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):332–42

Effect of acute or chronic administration of imipramine on spinal and supraspinal micturition reflexes in rats. Maggi CA, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):278–85

Presynaptic activation of the spinal serotonergic system in the rat by phencyclidine in vitro. Ohno Y, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):177–83

Assessment of the role of A1/A2 adenosine receptors mediating the purine antinociception, motor and autonomic function in the rat spinal cord. Sosnowski M, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):915–22

The supraspinal control of mammalian locomotion. Armstrong DM. **J Physiol (Lond)** 1988 Nov;405:1–37 (96 ref.)

Activation of feline spinal neurones by potentiated ventricular contractions and other mechanical cardiac stimuli. Blair RW, et al. **J Physiol (Lond)** 1988 Oct; 404:649–67

Prolonged noxious mechanical stimulation of the rat's tail: responses and encoding properties of dorsal horn neurones. Cervero F, et al. **J Physiol (Lond)** 1988 Oct;404:419–36

Bilateral inputs and supraspinal control of viscerosomatic neurones in the lower thoracic spinal cord of the cat. Cervero F, et al. **J Physiol (Lond)** 1988 Sep;403:221–37

Evidence that mid–lumbar neurones in reflex pathways from group II afferents are involved in locomotion in the cat. Edgley SA, et al. **J Physiol (Lond)** 1988 Sep;403:57–71

The dorsal column projection of muscle afferent fibres from the cat hindlimb. Fern R, et al. **J Physiol (Lond)** 1988 Jul; 401:97–113

The ascending projection of interneurones activated by group I muscle afferent fibres of the cat hindlimb. Fern R, et al. **J Physiol (Lond)** 1988 Nov;405:275–88

The dependence of motoneurone membrane potential on extracellular ion concentrations studied in isolated rat spinal cord. Forsythe ID, et al. **J Physiol (Lond)** 1988 Oct; 404:83–99

Group II–activated lumbosacral interneurones with an ascending projection to midlumbar segments of the cat spinal cord. Harrison PJ, et al. **J Physiol (Lond)** 1989; 408:561–70

Further evidence for synaptic actions of muscle spindle secondaries in the middle lumbar segments of the cat spinal cord. Harrison PJ, et al. **J Physiol (Lond)** 1988 Aug; 402:671–86

Descending influences on the cutaneous receptive fields of postsynaptic dorsal column neurones in the cat. Noble R, et al. **J Physiol (Lond)** 1989;408:167–83

Direct noninvasive monitoring of spinal cord motor function during thoracic aortic occlusion [letter] Tacker WA Jr, et al. **J Vasc Surg** 1989 Jan;9(1):177–8

Functional change in the 5–HT presynaptic receptor in spinal cord of aged rats. Murphy RM, et al. **Neurobiol Aging** 1989 Jan–Feb;10(1):95–7

Evaluation of spinal evoked potentials: a model for assessment of spinal cord function in isolation. Iyer V, et al. **Neurol Res** 1988 Dec;10(4):200–2

Position sense in the lateral funiculus? Lockard BI, et al. **Neurol Res** 1988 Jun;10(2):81–6

Involvement of spinal monoaminergic pathways in antinociception produced by substance P and neurotensin in rodents. Naranjo JR, et al. **Neuropharmacology** 1989 Mar; 28(3):291–8

Muscarinic pharmacology of the spinal cord of the neonatal rat in vitro. Newberry NR, et al. **Neuropharmacology** 1989 Feb;28(2):149–52

Baclofen antagonism by 4–amino–3–(5–methoxybenzo[b]furan–2–yl) butanoic acid in the cat spinal cord. Beattie DT, et al. **Neurosci Lett** 1989 May 22;100(1–3):292–4

Renal and cardiovascular afferent inputs to hypothalamic paraventriculo–spinal neurons. Caverson MM, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):167–72

Baclofen antagonism by 2–hydroxy–saclofen in the cat spinal cord. Curtis DR, et al. **Neurosci Lett** 1988 Sep 23; 92(1):97–101

Increased blood flow enhances axon regeneration after spinal transection. de la Torre JC, et al. **Neurosci Lett** 1988 Dec 5;94(3):269–73

Bradykinin–induced stimulation of afferent fibres is mediated through protein kinase C. Dray A, et al. **Neurosci Lett** 1988 Sep 12;91(3):301–7

Vestibular nucleus inputs to paramedian reticulospinal neurons in the cat. Elisevich K, et al. **Neurosci Lett** 1988 Aug 15;91(1):1–6

Raphé–produced excitation of spinal cord motoneurons in the cat. Fung SJ, et al. **Neurosci Lett** 1989 Aug 28; 103(2):185–90

Spinal projections to the dorsal column nuclei in pigeons. Funke K. **Neurosci Lett** 1988 Sep 12;91(3):295–300

Neural substrates for long–term habituation of the acoustic startle reflex in rats: a 2–deoxyglucose study. Gonzalez–Lima F, et al. **Neurosci Lett** 1989 Jan 16; 96(2):151–6

Dichotomizing unmyelinated afferents supplying pelvic viscera and perineum are rare in the sacral segments of the cat. Häbler HJ, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):119–24

Developmental alterations in thermal nociceptive threshold and the distribution of immunoreactive calcitonin gene–related peptide and substance P after neonatal administration of capsaicin in the rat. Hammond DL, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):57–62

Unit activity of ventral horn cells in spinal cord slices isolated from adult rats. Hirayama T, et al. **Neurosci Lett** 1988 Sep 12;91(3):343–8

Action of acetylcholine, muscarine, nicotine and antagonists on the membrane potential of astrocytes in cultured rat brainstem and spinal cord. Hösli L, et al. **Neurosci Lett** 1988 Oct 5;92(2):165–70

Thyrotropin releasing hormone (TRH) modified excitability of spinal cord dorsal horn cells. Jackson DA, et al. **Neurosci Lett** 1988 Oct 5;92(2):171–6

Excitatory transmission in the dorsal horn is in part mediated through APV–sensitive NMDA receptors. Jeftinija S. **Neurosci Lett** 1989 Jan 16;96(2):191–6

Chronically isolated lumbar half spinal cord, produced by hemisection and longitudinal myelotomy, generates locomotor activities of the ipsilateral hindlimb of the cat. Kato M. **Neurosci Lett** 1989 Mar 27;98(2):149–53

An in vitro preparation for studying motor pattern generation in the cerebellorubrospinal circuit of the turtle. Keifer J, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):123–8

Mismatches between peripheral receptor type and central projections after peripheral nerve regeneration. Koerber HR, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):67–72

Membrane channels activated by taurine in cultured mouse spinal cord neurons. Mathers DA, et al. **Neurosci Lett** 1989 Mar 27;98(2):229–33

Excitatory and inhibitory effects on human spinal motoneurones from magnetic brain stimulation. Mills KR. **Neurosci Lett** 1988 Dec 5;94(3):297–302

Differential innervation of specific motor neuron pools by serotoninergic fibers in the chick spinal cord. Okado N, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):29–32

Peculiarities of receptor–channel complexes for inhibitory mediators in the membranes of lamprey spinal cord neurones. Safronov BV, et al. **Neurosci Lett** 1989 Jul 17; 102(1):82–6

Inhibition of spinal nociceptive neurons by excitation of cell bodies or fibers of passage at various brainstem sites in the cat. Sandkühler J, et al. **Neurosci Lett** 1988 Oct 31; 93(1):67–72

The effects of lumbosacral deafferentation on pontine micturition centre–evoked voiding in the decerebrate cat. Shefchyk SJ. **Neurosci Lett** 1989 Apr 24;99(1–2):175–80

Hyperbaric pressure depresses potentiation of polysynaptic medullospinal reflexes in newborn rats. Tarasiuk A, et al. **Neurosci Lett** 1989 May 22;100(1–3):175–80

Pentobarbital and picrotoxin have reciprocal actions on single GABAA receptor channels. Twyman RE, et al. **Neurosci Lett** 1989 Jan 2;96(1):89–95

Memory traces in spinal cord produced by H-reflex conditioning: effects of post-tetanic potentiation. Wolpaw JR, et al. **Neurosci Lett** 1989 Aug 14;103(1):113–9

Non-competitive inhibition of GABA currents by phenothiazines in cultured chick spinal cord and rat hippocampal neurons. Zorumski CF, et al. **Neurosci Lett** 1988 Sep 23;92(1):86–91

Dendritic spikes in normal spinal motoneurons of cats. Fujita Y. **Neurosci Res** 1989 Apr;6(4):299–308

Comments on group II excitation in hindlimb motoneurones in high and low spinal cats. Hongo T, et al. **Neurosci Res** 1988 Aug;5(6):563–6

Motoneurons reinnervate skeletal muscle after ventral root implantation into the spinal cord of the cat. Cullheim S, et al. **Neuroscience** 1989;29(3):725–33

Electrophysiological characterization of putative C1 adrenergic neurons in the rat. Haselton JR, et al. **Neuroscience** 1989;30(1):199–214

Termination patterns of identified group II and III afferent fibres from deep tissues in the spinal cord of the cat. Hoheisel U, et al. **Neuroscience** 1989;28(2):495–507

Spinal lamina I projection neurons in the rat: collateral innervation of parabrachial area and thalamus. Hylden JL, et al. **Neuroscience** 1989;28(1):27–37

The responses recorded in vitro of deep dorsal horn neurons to direct and orthodromic stimulation in the young rat spinal cord. King AE, et al. **Neuroscience** 1988 Oct; 27(1):231–42

Enkephalin fibers synapse on cholinergic neurons in the rat sacral intermediolateral nucleus: a double-immunostaining at the light and electron microscopic levels. Kohno J, et al. **Neuroscience** 1989;28(2):487–94

Early and late components in cat Renshaw cell responses to random stimulation of motor axons: their differential sensitivity to preceding activation. Kokkoroyiannis T, et al. **Neuroscience** 1989;30(3):651–61

The relationship between coherence and nonlinear characteristics in Renshaw cell responses to random motor axon stimulation. Laouris Y, et al. **Neuroscience** 1989; 28(3):625–33

Excitatory effect of serotonin on pacemaker neurons in spinal cord cell culture. Legendre P, et al. **Neuroscience** 1989; 28(1):201–9

Tachykinins enhance the depression of spinal nociceptive neurons caused by cutaneously applied vibration in the cat. Salter MW, et al. **Neuroscience** 1988 Oct;27(1):243–9

Origin of motor evoked potentials in the rat [letter] Fehlings MG, et al. **Neurosurgery** 1989 Feb;24(2):299–300

Effect of colchicine on micturition reflex in rats. Zanoli P, et al. **Neurotoxicol Teratol** 1988 Nov–Dec;10(6):579–84

Primary afferent depolarization and presynaptic inhibition in the mammalian spinal cord. Rudomin P. **P R Health Sci J** 1988 Aug;7(2):155–66 (82 ref.)

Alteration of identified output synapses spared by axotomy. Titmus MJ, et al. **P R Health Sci J** 1988 Aug;7(2):181–2

Biostim '88. June 15–18, 1988, Monaco. Proceedings. **PACE** 1989 Apr;12(4 Pt 2):691–748

Epidural neurostimulation in the treatment of frostbite. Arregui R, et al. **PACE** 1989 Apr;12(4 Pt 2):713–7

Spinal cord electrical stimulation in severe angina pectoris: surgical technique, intraoperative physiology, complications, and side effects. Augustinsson LE. **PACE** 1989 Apr;12(4 Pt 2):693–4

Our experience with spinal cord stimulation (SCS) in peripheral vascular disease. Bracale GC, et al. **PACE** 1989 Apr;12(4 Pt 2):695–7

Spinal cord stimulation (SCS) in spastic hemiparesis. Cioni B, et al. **PACE** 1989 Apr;12(4 Pt 2):739–42

Spinal cord stimulation (SCS) in peripheral ischemic pain. Fiume D, et al. **PACE** 1989 Apr;12(4 Pt 2):698–704

Epidural spinal electrostimulatory system (ESES) in the management of diabetic foot and peripheral arteriopathies. Franzetti I, et al. **PACE** 1989 Apr;12(4 Pt 2):705–8

Effects of dorsal column spinal cord stimulation (DCS) on reversibility of neuronal function—experience of treatment for vegetative states. Kanno T, et al. **PACE** 1989 Apr;12(4 Pt 2):733–8

Beneficial effects of cervical spinal cord stimulation (cSCS) on patients with impaired consciousness: a preliminary report. Matsui T, et al. **PACE** 1989 Apr;12(4 Pt 2):718–25

The effects of cervical spinal cord stimulation (cSCS) on experimental stroke. Matsui T, et al. **PACE** 1989 Apr;12(4 Pt 2):726–32

Spinal cord stimulation (SCS) in deafferentation pain. Meglio M, et al. **PACE** 1989 Apr;12(4 Pt 2):709–12

Spinal cord stimulation for severely ischemic limbs. Sampère CT, et al. **PACE** 1989 Feb;12(2):273–9

Intrathecal opioids, potency and lipophilicity. McQuay HJ, et al. **Pain** 1989 Jan;36(1):111–5

Effects of tizanidine (DS 103–282) on dorsal horn convergent neurones in the rat. Villanueva L, et al. **Pain** 1988 Nov; 35(2):187–97

Effects of lesions to rat spinal cord lamina I cell projection pathways on reactions to acute and chronic noxious stimuli. Wall PD, et al. **Pain** 1988 Dec;35(3):327–39

Spinal cord regeneration: new experimental approach. Khalili AH, et al. **Paraplegia** 1988 Oct;26(5):310–6

Somatosensory evoked potentials: Part I. A review of neural generators and special considerations in pediatrics. Fagan ER, et al. **Pediatr Neurol** 1987 Jul–Aug;3(4):189–96 (55 ref.)

Functional corticotropin-releasing factor receptors in neonatal rat spinal cord. Bell JA, et al. **Peptides** 1988 Nov–Dec;9(6):1317–22

Changes in levels of the tripeptide Tyr–Gly–Gly as an index of enkephalin release in the spinal cord: effects of noxious stimuli and parenterally-active peptidase inhibitors. Llorens-Cortes C, et al. **Peptides** 1989 May–Jun; 10(3):609–14

Hindlimb paralytic effects of arginine vasopressin and related peptides following spinal subarachnoid injection in the rat. Long JB, et al. **Peptides** 1988 Nov–Dec;9(6):1335–44

Interactions of substance P antagonists with serotonin in the mouse spinal cord. Vaught JL, et al. **Peptides** 1988 Jul–Aug;9(4):909–13

Coerulospinal influence on recurrent inhibition of spinal motonuclei innervating antagonistic hindleg muscles of the cat. Fung SJ, et al. **Pflugers Arch** 1988 Sep;412(4):346–53

Influence of rubrospinal tract and the adjacent mesencephalic reticular formation on the activity of medullary respiratory neurons and the phrenic nerve discharge in the rabbit. Schmid K, et al. **Pflugers Arch** 1988 Nov;413(1):23–31

Stimulation-evoked changes in extracellular pH, calcium and potassium activity in the frog spinal cord. Chvátal A, et al. **Physiol Bohemoslov** 1988;37(3):203–12

Otolith-spinal reflex testing on Spacelab-1 and D-1. Watt DG, et al. **Physiologist** 1989 Feb;32(1 Suppl):S49–52

Central and peripheral bombesin modulation of bladder function in vivo. Nunan L, et al. **Proc West Pharmacol Soc** 1988;31:53–5

Vestibulospinal control of posture and locomotion. **Prog Brain Res** 1988;76:1–442

The role of gaze in compensation of vestibular disfunction: the gaze substitution hypothesis. Berthoz A. **Prog Brain Res** 1988;76:411–20 (54 ref.)

Mammalian root-spinal cord regeneration. Carlstedt T, et al. **Prog Brain Res** 1988;78:225–9 (20 ref.)

Noradrenergic and cholinergic mechanisms responsible for the gain regulation of vestibulospinal reflexes. D'Ascanio P, et al. **Prog Brain Res** 1988;76:361–74 (98 ref.)

Interaction between vestibulocollic and cervicocollic reflexes: automatic compensation of reflex gain by muscle afferents. Dutia MB. **Prog Brain Res** 1988;76:173–80 (12 ref.)

Synaptic mechanisms of interaction of lateral vestibulospinal neurons with some brainstem structures. Fanardjian VV, et al. **Prog Brain Res** 1988;76:45–60 (94 ref.)

Integration of vestibular and neck afferent signals in the central cervical nucleus. Hongo T, et al. **Prog Brain Res** 1988;76:155–62 (35 ref.)

Functional reinnervation of a denervated skeletal muscle of the adult rat by axons regenerating from the spinal cord through a peripheral nervous system graft. Horvat JC, et al. **Prog Brain Res** 1988;78:219–24

Descending cortical and tectal control of dorsal neck motoneurons via reticulospinal neurons in the cat. Iwamoto Y, et al. **Prog Brain Res** 1988;76:97–108 (44 ref.)

Convergence of macular vestibular and neck inputs on vestibulospinal and reticulospinal neurons projecting to the lumbosacral cord. Manzoni D. **Prog Brain Res** 1988; 76:145–54 (42 ref.)

The fine structure of chromaffin cell implants in the pain modulatory regions of the rat periaqueductal gray and spinal cord. Pappas GD, et al. **Prog Brain Res** 1988; 78:513–20

Dynamic and kinematic properties of the vestibulocollic and cervicocollic reflexes in the cat. Peterson BW, et al. **Prog Brain Res** 1988;76:163–72 (25 ref.)

Transplantation of fetal serotonin neurons into the transected spinal cord of adult rats: morphological development and functional influence. Privat A, et al. **Prog Brain Res** 1988; 78:155–66

Reinnervation of denervated skeletal muscle by central nerve fibers regenerating along replanted ventral roots. Smith KJ, et al. **Prog Brain Res** 1988;78:193–8

Effects of proprioceptive inputs on vestibulo-ocular and vestibulospinal mechanisms. Thoden U, et al. **Prog Brain Res** 1988;76:109–20 (63 ref.)

Convergence of neck and vestibular signals on spinal interneurons. Wilson VJ. **Prog Brain Res** 1988;76:137–43 (39 ref.)

Electrophysiology of benzodiazepine receptor ligands: multiple mechanisms and sites of action. Polc P. **Prog Neurobiol** 1988;31(5):349–423 (593 ref.)

Estimation of the projection frequencies of single inhibitory interneurones to motoneurones in the cat spinal cord. Harrison PJ, et al. **Q J Exp Physiol** 1989 Jan;74(1):79–82

Abnormal impulse discharge in primary afferent axons injured in the peripheral versus the central nervous system. Papir-Kricheli D, et al. **Somatosens Mot Res** 1988; 6(1):63–77

Compound muscle action potentials and spinal evoked potentials in experimental spine maneuver. Machida M, et al. **Spine** 1989 Jul;14(7):687–91

Effects of alpha 1 adrenoceptor activation on the excitability of primary afferent terminals of the sural nerve in the spinal cord of the cat. Calvillo O, et al. **Synapse** 1988;2(3):326–8

The GABAA receptor: new insights from single-channel recording. Mathers DA. **Synapse** 1987;1(1):96–101

Effect of agonist concentration on the lifetime of GABA-activated membrane channels in spinal cord neurons. Mathers DA, et al. **Synapse** 1988;2(6):627–32

Development of presynaptic specializations induced by basic polypeptide–coated latex beads in spinal cord cultures. Peng HB, et al. **Synapse** 1987;1(1):10–9

Epinephrine and norepinephrine modulate neuronal responses to excitatory amino acids and agonists in frog spinal cord. Wohlberg CJ, et al. **Synapse** 1987;1(2):202–7

The modulation of human reflexes during functional motor tasks. Stein RB, et al. **Trends Neurosci** 1988 Jul;11(7):328–32 (26 ref.)

A survey of current techniques in veterinary electrodiagnostics: EEG, spinal evoked and brainstem auditory evoked potential recording. Steiss JE. **Vet Res Commun** 1988;12(4–5):281–8

[A hypothesis on the mechanism underlying the formation of PSC—integration of the "periphery" and CNS under the domination of the substantial process proceeding along the channels] Hu XL, et al. **Chen Tzu Yen Chiu** 1987;12 Suppl 2:1–8 (39 ref.) (Eng. Abstr.) (Chi)

[Involvement of alpha 1-adrenergic receptors of the spinal cord in regulating cardiovascular activity] Zhu GQ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):191–5 (Eng. Abstr.) (Chi)

[Spinal cord pathways mediating somatosensory cortical electrical responses evoked by C fiber inputs] Weng HR, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):374–8 (Eng. Abstr.) (Chi)

[Electrophysiological properties of the cells in intermediolateral nucleus of neonatal rat spinal cord slices in vitro] Zhu Y, et al. **Sheng Li Hsueh Pao** 1989 Feb; 41(1):63–9 (Eng. Abstr.) (Chi)

[The efferent pathway of the hypothalamus and its functions] Han ZS, et al. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul; 19(3):222–5 (46 ref.) (Chi)

[The spinal catecholaminergic neuron system] Mao JR, et al. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):276–8 (25 ref.) (Chi)

[Advances in the origins of spinal field potentials] Zhao BY, et al. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):63–6 (50 ref.) (Chi)

[Transcranial and spinal stimulation of motor pathways using conventional stimulator] Kadaňka Z, et al. **Cesk Neurol Neurochir** 1989 Mar;52(2):110–9 (Eng. Abstr.) (Cze)

[Implication of spinal catecholaminergic pathways in sympathetic pressor responses] Elghozi JL, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:267–70 (Eng. Abstr.) (Fre)

[Stimulation of the spinal cord in peripheral vasculopathies] Meglio M. **J Mal Vasc** 1989;14(1):50–1 (Eng. Abstr.) (Fre)

[Results of electrostimulation of the spinal cord in Raynaud's disease and syndrome] Raso AM. **J Mal Vasc** 1989; 14(1):52–4 (Eng. Abstr.) (Fre)

[Results of peridural electrical stimulation of the spinal cord in 12 cases of arteritis of the legs] Rettori R, et al. **J Mal Vasc** 1989;14(3):267–8 (Fre)

[Electrophysiologic exploration of the human anterior horn. Clinical implications] Delwaide PJ. **Rev Neurol (Paris)** 1988;144(11):656–9 (37 ref.) (Eng. Abstr.) (Fre)

[Possible trophic role on the neuromuscular junction of a neuropeptide co-existing with acetylcholine in motor neurons of the spinal cord] Fontaine B, et al. **Rev Neurol (Paris)** 1989;145(3):194–200 (29 ref.) (Eng. Abstr.) (Fre)

[Interaction of transcranial magnetic stimulation and mechanical stimuli] Claus D, et al. **EEG EMG** 1988 Dec; 19(4):222–7 (Eng. Abstr.) (Ger)

[Long-term studies of the reproducibility of evoked spinal potentials from chronically implanted recording electrodes in the rat] Wehling P, et al. **EEG EMG** 1988 Sep; 19(3):158–60 (Eng. Abstr.) (Ger)

[Spinal and muscular evoked response following single stimulation of the motor cortex of the rat] Zileli M, et al. **EEG EMG** 1989 Jun;20(2):106–11 (Eng. Abstr.) (Ger)

[Computer-assisted model trials of cerebrospinal fluid dynamics of the craniospinal system] Meier U, et al. **Zentralbl Neurochir** 1988;49(3):233–7 (Eng. Abstr.) (Ger)

[Fentanyl reduces the inhibition of dorsal horn lamina V type neuronal activity induced by bradykinin injection into the femoral artery contralateral to the recording site] Nagasaka I, et al. **Masui** 1988 Jun;37(6):691–5 (Eng. Abstr.) (Jpn)

[An experimental study on conductive spinal cord action potentials evoked by direct stimulation of the spinal cord—pathway and source of conductive action potentials in the spinal cord] Soeda S.

Nippon Seikeigeka Gakkai Zasshi 1988 May;62(5):535–49 (Eng. Abstr.) (Jpn)
[Characteristics of the potential of the dorsal surface of the spinal cord in a chronic deficit of afferent influences] Makil EA, et al. Biol Nauki 1988;(6):49–54 (Eng. Abstr.) (Rus)
[The structural specificity of factors in the chemical regulation of muscle tonus at the spinal cord level] Vartanian GA, et al. Biull Eksp Biol Med 1989 Mar; 107(3):268–71 (Eng. Abstr.) (Rus)
[The activity of postural asymmetry factors in symmetrical sections of the rat spinal cord] Vartanian GA, et al. Biull Eksp Biol Med 1989 Apr;107(4):404–7 (Eng. Abstr.) (Rus)
[Characteristics of processes of excitation and inhibition of monosynaptic spinal reflexes after removal of the labyrinth] Grigorenko II. Fiziol Zh SSSR 1989 Apr;75(4):470–7 (Eng. Abstr.) (Rus)
[The reaction of cat cervical spine interneurons to stimulation of the parietal zone of the cortex] Koreniuk II. Fiziol Zh SSSR 1989 Apr;75(4):447–56 (Eng. Abstr.) (Rus)
[Effect of temperature on the spontaneous rhythmic activity of the neurons in the spinal centers of the frog lymphatic hearts] Rachinskaia TIu, et al. Fiziol Zh SSSR 1989 Feb; 75(2):212–7 (Eng. Abstr.) (Rus)
[Role of various regions of the spinal cord in generating spontaneous motor activity in the chick embryo] Baev KV, et al. Neirofiziologiia 1989;21(1):124–6 (Eng. Abstr.) (Rus)
[Changes in the electrical activity of spinal cord neurons of adrenalectomized rats under the effect of adrenal cortex hormones] Kapriian TK, et al. Neirofiziologiia 1989; 21(2):233–8 (Eng. Abstr.) (Rus)
[Propagation of the activity along the "stepping strip" of the spinal cord in the cat] Kazennikov OV, et al. Neirofiziologiia 1988;20(6):763–9 (Eng. Abstr.) (Rus)
[Effect of serotonin on the background activity of neurons in the isolated spinal cord semisegment of the rat] Khasabov SG, et al. Neirofiziologiia 1989;21(3):335–43 (Eng. Abstr.) (Rus)
[Effect of tractotomy on the reflex activity of the lumbar segment of the spinal cord severed after sectioning of the sciatic nerve in the rat] Makil EA, et al. Neirofiziologiia 1989;21(3):366–71 (Eng. Abstr.) (Rus)
[Influence of the efferent vestibular system on the vestibulo-spinal reflexes in the guinea pig] Marlinskii VV, et al. Neirofiziologiia 1989;21(1):78–86 (Eng. Abstr.) (Rus)
[Effect of dopamine on the background and evoked activity of interneurons from isolated spinal cord segments of newborn rats] Oksamitnyĭ VN, et al. Neirofiziologiia 1989; 21(1):7–16 (Eng. Abstr.) (Rus)
[Reaction of the respiratory musculature to electrical stimulation of the corticospinal tract] Smolin LN. Neirofiziologiia 1988;20(4):557–60 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Intra-operative spinal cord evoked potentials during cervical and lumbo-sacral microsurgical DREZ-tomy (MDT) for chronic pain and spasticity (preliminary data). Jeanmonod D, et al. Acta Neurochir Suppl (Wien) 1989;46:58–61
Spinal cord stimulation (SCS) in the treatment of postherpetic pain. Meglio M, et al. Acta Neurochir Suppl (Wien) 1989; 46:65–6
Pudendal nerve SEPs in myelopathies. D'Alpa F, et al. Acta Neurol (Napoli) 1987 Apr;9(2):139–46
Responses of thoracolumbar spinal neurons to renal artery occlusion. Ammons WS, et al. Am J Physiol 1989 Jun;256(6 Pt 2):H1515–23
Muscle afferent activity and its central projection in man. Burke D. Aust Paediatr J 1988;24 Suppl 1:109–12 (27 ref.)
Progressive degradation of serial grooming chains by descending decerebration. Berridge KC. Behav Brain Res 1989 Jul 1;33(3):241–53
Idiopathic constipation associated with impaired urethrovesical and sacral reflex function. Kerrigan DD, et al. Br J Surg 1989 Jul;76(7):748–51
Lack of relationship of conus reflexes to bladder function after spinal cord injury. Lucas MG, et al. Br J Urol 1989 Jan;63(1):24–7
Electrophysiological investigations in adoptively transferred experimental autoimmune encephalomyelitis in the Lewis rat. Heininger K, et al. Brain 1989 Apr;112 (Pt 2):537–52
Opioids induce postural asymmetry in spinal rat: the side of the flexed limb depends upon the type of opioid agonist. Bakalkin GYa, et al. Brain Res 1989 Feb 20;480(1–2):277–89
Involvement of nigrotecto-reticulospinal pathways in the iminodipropionitrile (IDPN) model of spasmodic dyskinesias: a 2-deoxy-D-[1-14C]glucose study in the rat. Cadet JL, et al. Brain Res 1989 Apr 10;484(1–2):57–64
Facilitation of the tail-flick reflex by noxious cutaneous stimulation in the rat: antagonism by a substance P analogue. Cridland RA, et al. Brain Res 1988 Oct 11; 462(1):15–21
Electrophysiological evidence for a tonic activity of the spinal cord intrinsic opioid systems in a chronic pain model. Lombard MC, et al. Brain Res 1989 Jan 16;477(1–2):48–56
Involvement of spinal noradrenergic system in the mechanism of an antinociceptive effect of delta-sleep-inducing peptide (DSIP). Nakamura A, et al. Brain Res 1989 Feb 20; 480(1–2):82–6
Characterization of superficial T13–L2 dorsal horn neurons encoding for colorectal distension in the rat: comparison with neurons in deep laminae. Ness TJ, et al. Brain Res 1989 May 8;486(2):301–9
The spinal antinociceptive actions of morphine metabolites morphine-6-glucuronide and normorphine in the rat. Sullivan AF, et al. Brain Res 1989 Mar 20;482(2):219–24
Sparing of skilled forelimb reaching and corticospinal projections after neonatal motor cortex removal or hemidecortication in the rat: support for the Kennard doctrine. Whishaw IQ, et al. Brain Res 1988 Jun 7; 451(1–2):97–114
Late flexion reflex in paraplegic patients. Evidence for a spinal stepping generator. Bussel B, et al. Brain Res Bull 1989 Jan;22(1):53–6 (22 ref.)
Epidemiology, physiopathology, and experimental therapeutics of acute spinal cord injury. Albin MS, et al. Crit Care Clin 1987 Jul;3(3):441–52 (93 ref.)
The spinal cord in motor disorders [editorial] Bax M. Dev Med Child Neurol 1988 Dec;30(6):709–10
Spastic cerebral palsy: possible spinal interneuronal contributions. Harrison A. Dev Med Child Neurol 1988 Dec;30(6):769–80 (78 ref.)
Impairment of spinal cord conduction velocity in diabetic rats. Carsten RE, et al. Diabetes 1989 Jun;38(6):730–6
Changes in spinal reflex excitability in brain-dead humans. Crenna P, et al. Electroencephalogr Clin Neurophysiol 1989 Sep;73(3):206–14
The relationships among the severity of spinal cord injury, motor and somatosensory evoked potentials and spinal cord blood flow. Fehlings MG, et al. Electroencephalogr Clin Neurophysiol 1989 Jul-Aug; 74(4):241–59
Epidurally recorded cervical spinal activity evoked by electrical and mechanical stimulation in pain patients. Hallström YT, et al. Electroencephalogr Clin Neurophysiol 1989 May-Jun; 74(3):175–85
Motor evoked responses recorded epidurally in a patient with Guillain-Barré syndrome. Zentner J, et al. Eur Arch Psychiatry Neurol Sci 1988;238(1):31–2
Chronic ergotamine abuse: evidence of functional impairment of long ascending spinal tracts. Ludolph AC, et al. Eur Neurol 1988;28(6):311–6
Changes in microglial cell numbers in the spinal cord dorsal horn following brachial plexus transection in the adult rat. Cova JL, et al. Exp Brain Res 1988;73(1):61–8
Inhibition of the responses of cat dorsal horn neurons to noxious skin heating by stimulation in medial or lateral medullary reticular formation. Pretel S, et al. Exp Brain Res 1988;72(1):51–62
Spinal cord lesions block seizures or delay their onset in myelin-deficient rats: evidence that generalized tonic seizures can be triggered by abnormal spinal cord activity. Rosenbluth J, et al. Exp Neurol 1989 Feb;103(2):154–7
Hypertension following intrathecal injection of cholinergic agonists in conscious rats: role of endogenous acetylcholine. Magrí V, et al. J Auton Nerv Syst 1988 Nov;25(1):69–77
Intraoperative detection of unilateral spinal cord dysfunction by somatosensory evoked potentials. Ashley RA, et al. J Miss State Med Assoc 1988 Nov;29(11):339–41
McArdle's sign in multiple sclerosis [letter] McArdle MJ. J Neurol Neurosurg Psychiatry 1988 Aug;51(8):1110
The pathophysiology of myelin basic protein-induced acute experimental allergic encephalomyelitis in the Lewis rat. Pender MP. J Neurol Sci 1988 Sep;86(2–3):277–89
Remyelination of central nervous system lesions in experimental genital herpes simplex virus infection. Soffer D, et al. J Neurol Sci 1988 Aug;86(1):83–95
Characterization of neurons responsive to noxious colorectal distension in the T13–L2 spinal cord of the rat. Ness TJ, et al. J Neurophysiol 1988 Oct;60(4):1419–38
Pathophysiology of the spinal cord studied in vitro. Somjen GG, et al. J Neurosci Methods 1989 May;28(1–2):35–46
Spinal cord stimulation in management of chronic pain. A 9-year experience. Meglio M, et al. J Neurosurg 1989 Apr; 70(4):519–24
Spinal segmental somatosensory evoked potentials in lumbosacral radiculopathies. Seyal M, et al. Neurology 1989 Jun;39(6):801–5
Chronic amitriptyline decreases autotomy following dorsal rhizotomy in rats. Abad F, et al. Neurosci Lett 1989 Apr 24;99(1–2):187–90
Antinociceptive effects of the 5-HT2 antagonist ritanserin in rats: evidence for an activation of descending monoaminergic pathways in the spinal cord. Barber A, et al. Neurosci Lett 1989 Apr 24;99(1–2):234–8
Microinjections of glutamate or morphine at coincident midbrain sites have different effects on nociceptive dorsal horn neurons in the rat. Carstens E, et al. Neurosci Lett 1988 Dec 19;95(1–3):185–91
Capsaicin desensitization of peripheral nociceptive fibres does not impair sensitivity to other noxious stimuli. Dray A, et al. Neurosci Lett 1989 Apr 24;99(1–2):50–4
B vitamins suppress spinal dorsal horn nociceptive neurons in the cat. Fu QG, et al. Neurosci Lett 1988 Dec 19; 95(1–3):192–7
Repeated exposure to sham testing procedures reduces reflex withdrawal and hot-plate latencies: attenuation of tonic descending inhibition? Gamble GD, et al. Neurosci Lett 1989 Jan 30;96(3):312–7
Electrophysiological evidence for a role of bradykinin in chemical nociception in the rat. Haley JE, et al. Neurosci Lett 1989 Feb 13;97(1–2):198–202
Tooth pulp stimulation advances both medullary off-cell pause and tail flick. Ramírez F, et al. Neurosci Lett 1989 May 22;100(1–3):153–6
Effects of hypovolemic hypotensive shock on somatosensory and motor evoked potentials. Haghighi SS, et al. Neurosurgery 1989 Feb;24(2):246–52
Spinal cord stimulation for relief of chronic pain in vasospastic disorders of the upper limbs. Robaina FJ, et al. Neurosurgery 1989 Jan;24(1):63–7
Long-term changes in discharge behaviour of cat dorsal horn neurones following noxious stimulation of deep tissues. Hoheisel U, et al. Pain 1989 Feb;36(2):239–47
Expansion of receptive fields of spinal lamina I projection neurons in rats with unilateral adjuvant-induced inflammation: the contribution of dorsal horn mechanisms. Hylden JL, et al. Pain 1989 May;37(2):229–43 (51 ref.)
Attempts to gauge the relative importance of pre- and postsynaptic effects of morphine on the transmission of noxious messages in the dorsal horn of the rat spinal cord. Lombard MC, et al. Pain 1989 Jun;37(3):335–45
Inflammation of the hind limb as a model of unilateral, localized pain: influence on multiple opioid systems in the spinal cord of the rat. Millan MJ, et al. Pain 1988 Dec; 35(3):299–312
Spinal recordings suggest that wide-dynamic-range neurons mediate sympathetically maintained pain. Roberts WJ, et al. Pain 1988 Sep;34(3):289–304
Identification of afferents contributing to sympathetically evoked activity in wide-dynamic-range neurons. Roberts WJ, et al. Pain 1988 Sep;34(3):305–14
Electrophysiological studies on the effects of opiates on dorsal horn nociceptive neurones at 51 atmospheres absolute. Smallman K, et al. Pain 1989 Jul;38(1):57–64
Automated spinal cord monitoring for spinal surgery. Imai M, et al. Paraplegia 1989 Jun;27(3):204–11
Some views on the influence of morphine on brain stem pain modulating neurons and descending controls acting on the spinal cord. Dickenson A. Prog Brain Res 1988;77:259–62 (18 ref.)
Tonic descending inhibition and spinal nociceptive transmission. Duggan AW, et al. Prog Brain Res 1988; 77:193–211 (103 ref.)
Effects of morphine given in the brain stem on the activity of dorsal horn nociceptive neurons. Gebhart GF, et al. Prog Brain Res 1988;77:229–43 (49 ref.)
Endogenous opioid peptides in the descending control of nociceptive responses of spinal dorsal horn neurons. Herz A, et al. Prog Brain Res 1988;77:263–73 (55 ref.)
Direct and indirect pathways to lamina I in the medulla oblongata and spinal cord of the cat. Holstege G. Prog Brain Res 1988;77:47–94 (151 ref.)
Electrophysiological evidence for the activation of descending inhibitory controls by nociceptive afferent pathways. Le Bars D, et al. Prog Brain Res 1988;77:275–99 (127 ref.)
Pharmacologic evidence for the modulation of nociception by noradrenergic neurons. Proudfit HK. Prog Brain Res 1988;77:357–70 (114 ref.)
Neuronal effects of controlled superfusion of the spinal cord with monoaminergic receptor antagonists in the cat. Sandkühler J, et al. Prog Brain Res 1988;77:321–7
Anatomy and physiology of descending control of nociceptive responses of dorsal horn neurons: comprehensive review. Willis WD Jr. Prog Brain Res 1988; 77:1–29 (183 ref.)
Serotonin receptor subtypes and the modulation of pain transmission. Zemlan FP, et al. Prog Brain Res 1988; 77:349–55 (33 ref.)
Fixed spinal cord: diagnosis with MR imaging. Levy LM, et al. Radiology 1988 Dec;169(3):773–8
Deficit of spinal cord glycine/strychnine receptors in inherited myoclonus of Poll Hereford calves. Gundlach AL, et al. Science 1988 Sep 30;241(4874):1807–10
Level diagnosis of cervical myelopathy using evoked spinal cord potentials. Satomi K, et al. Spine 1988 Nov; 13(11):1217–24
Electrophysiologic diagnosis of cervical OPLL myelopathy using evoked spinal cord potentials. Shinomiya K, et al. Spine 1988 Nov;13(11):1225–33
Epidural spinal cord stimulation in the management of reflex sympathetic dystrophy. Barolat G, et al. Stereotact Funct Neurosurg 1989;53(1):29–39
Effect of spinal cord stimulation on motor performances in hemiplegics. Cioni B, et al. Stereotact Funct Neurosurg 1989;52(1):42–52
Transcutaneous electrical nerve stimulation and spinal cord stimulation for pain relief in reflex sympathetic dystrophy. Robaina FJ, et al. Stereotact Funct Neurosurg 1989; 52(1):53–62
Spinal cord stimulation in deafferentation pain. Sánchez-Ledesma MJ, et al. Stereotact Funct Neurosurg 1989;53(1):40–5
Myoclonic dystonia: effective treatment by cervical cord stimulation. A case report. Groen RJ, et al. Surg Neurol 1989 Jul;32(1):72–4
Upper extremity dysfunction in children with myelomeningocele. Jacobs RA, et al. Z Kinderchir 1988 Dec;43 Suppl 2:19–21
[Changes in motor evoked potentials in experimental spinal cord injury] Yu CJ. Chung Hua I Hsueh Tsa Chih 1988

May;68(5):257–9, 18 (Eng. Abstr.) (Chi)
[Somatosensory evoked potentials monitoring during operation of the spinal cord] Tong B. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):402–5, 445 (Eng. Abstr.) (Chi)
[Spinal mechanism of the antispastic action of TRH in patients with amyotrophic lateral sclerosis] Morin C, et al. **Rev Neurol (Paris)** 1988;144(11):701–3 (Eng. Abstr.) (Fre)
[Monitoring of brain and spinal cord function during surgery and intensive care] Shimoji K, et al. **Masui** 1988 Nov; 37(11):1300–13 (23 ref.) (Jpn)
[A clinical study on intra-operative spinal cord monitoring with spinal evoked potentials for scoliosis] Imai K. **Nippon Seikeigeka Gakkai Zasshi** 1988 May;62(5):511–21 (Eng. Abstr.) (Jpn)
[Changes in the spinal evoked potential induced by lateral compression of the spinal cord in dogs] Nozawa M. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):131–45 (Eng. Abstr.) (Jpn)
[Central motor conduction time in amyotrophic lateral sclerosis and Shy–Drager syndrome] Kachi T, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):616–24 (Eng. Abstr.) (Jpn)
[changes in the microcirculation system during pain syndrome of spinal etiology] Kryzhanovskii GN, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):280–2 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Re: Danger in the use of hypofractionation [letter] Stevens GN. **Australas Radiol** 1988 Aug;32(3):410
Treatment of CNS tumours with conventional radiotherapy: the importance of dose & volume factors in tumour control & CNS radiation tolerance. Tiver K. **Australas Radiol** 1989 Feb;33(1):15–22 (101 ref.)
Volume effect in spinal cord [letter] Withers HR, et al. **Br J Radiol** 1988 Oct;61(730):973–5
Comment on the recent results of Hopewell, Morris and Dixon–Brown on radiation myelitis produced by irradiation of very short segments of rat spinal cord. Yaes RJ, et al. **Br J Radiol** 1988 Oct;61(730):967–9
Late nervous system disorders in cured malignant lymphoma: a clinical and neuropathological study. Vesterby A, et al. **Clin Neuropathol** 1988 May–Jun;7(3):134–8
Serial neuropsychological follow-up of a child following craniospinal irradiation. Bendersky M, et al. **Dev Med Child Neurol** 1988 Dec;30(6):816–20
Direct estimation of latent time for radiation injury in late-responding normal tissues: gut, lung, and spinal cord. Bentzen SM, et al. **Int J Radiat Biol** 1989 Jan;55(1):27–43
Radiation tolerance of the cervical spinal cord. McCunniff AJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar; 16(3):675–8
Myelin basic protein and magnetic resonance imaging for diagnosing radiation myelopathy. Rubin P, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1371–81
Linear–quadratic model isoeffect relations for proliferating tumor cells for treatment with multiple fractions per day. Yaes RJ. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):901–5
Systemic effects of low-power laser irradiation on the peripheral and central nervous system, cutaneous wounds, and burns. Rochkind S, et al. **Lasers Surg Med** 1989; 9(2):174–82
Definitive treatment to pyriform sinus with minimum cord exposure—a case report. Knister JR, et al. **Med Dosim** 1988 Mar;13(1):7–10
WR–2721, WR–77913 and WR–3689 radioprotection in the rat spinal cord. Spence AM, et al. **Pharmacol Ther** 1988; 39(1–3):89–91
Tolerance of spinal cord, lung and rectum after fractionated pions and X-rays. van der Kogel AJ, et al. **Strahlenther Onkol** 1989 Apr;165(4):286–9
[Late effect of intraoperative irradiation on spinal cord—experimental and clinical assessment] Iwakawa M. **Nippon Gan Chiryo Gakkai Shi** 1988 Jun 20;23(6):1290–9 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

Normal location of conus medullaris in childhood [letter] Balsam D, et al. **AJR Am J Roentgenol** 1989 Oct; 153(4):888–9
In situ fixation of the spinal cord using microwave radiation. Gower DJ, et al. **J Neurosurg** 1988 Nov;69(5):719–22
Dynamics of the spinal cord: an analysis of functional myelography by CT scan. Ishida Y, et al. **Neuroradiology** 1988;30(6):538–44
Microangiographic study of spinal cord injury and myelopathy. Shingu H, et al. **Paraplegia** 1989 Jun; 27(3):182–9
Complications of spinal cord arteriography: prospective assessment of risk for diagnostic procedures. Forbes G, et al. **Radiology** 1988 Nov;169(2):479–84

RADIONUCLIDE IMAGING

The radionuclide assessment of a system for slow intrathecal infusion of drugs. Hicks RJ, et al. **Clin Nucl Med** 1989 Apr;14(4):275–7

SECRETION

Thiorphan increases capsaicin–evoked release of substance P from slices of dorsal spinal cord of guinea pig. Geppetti P, et al. **Neurosci Lett** 1989 Aug 14;103(1):69–73

SURGERY

CT-guided percutaneous cordotomy. Kanpolat Y, et al. **Acta Neurochir Suppl (Wien)** 1989;46:67–8
The transoral approach to the anterior superior cervical spine. A review of 29 cases. Spetzler RF, et al. **Acta Neurochir Suppl (Wien)** 1988;43:69–74
Myelotomies for chronic pain. van Roost D, et al. **Acta Neurochir Suppl (Wien)** 1989;46:69–72 (14 ref.)
Mucking around with Peter Pan [letter] Landau WM. **Ann Neurol** 1988 Sep;24(3):464
Antitumor, nerve blocks and neuroablative therapies for cancer pain. Evans WO. **Indiana Med** 1989 Jun;82(6):446–8 (20 ref.)
Effect of acute and chronic spinal transection on evoked secretion of adrenal medullary catecholamines in the cat. Stoddard SL, et al. **J Auton Nerv Syst** 1988 Aug; 23(2):175–9
The transoral approach to the superior cervical spine. A review of 53 cases of extradural cervicomedullary compression. Hadley MN, et al. **J Neurosurg** 1989 Jul; 71(1):16–23
Lumboperitoneal shunt combined with myelotomy for treatment of syringohydromyelia. Park TS, et al. **J Neurosurg** 1989 May;70(5):721–7
A new insulated caudalis nucleus DREZ electrode. Technical note. Young JN, et al. **J Neurosurg** 1989 Feb;70(2):283–4
Experimental repair of spinal cord lesions by grafting from CNS to PNS. Brunelli G, et al. **J Reconstr Microsurg** 1988 Jul;4(4):245–50
Transplantation of adrenal medulla into spinal cord for pain relief: disappointing outcome [letter] Vaquero J, et al. **Lancet** 1988 Dec 3;2(8623):1315
Transoral removal of missile fragments from the C1–C2 area: report of four cases. Mangiardi JR, et al. **Neurosurgery** 1988 Aug;23(2):254–7
Operative procedure and results of expansive open-door laminoplasty. Hirabayashi K, et al. **Spine** 1988 Jul; 13(7):870–6
Effects of spinal cord lesioning on somatosensory and neurogenic-motor evoked potentials. Owen JH, et al. **Spine** 1989 Jul;14(7):673–82
Electrophysiological recordings during spinal surgery. Uematsu S, et al. **Stereotact Funct Neurosurg** 1989; 52(2–4):145–56
Laminotomy of the axis for surgical access to the cervical spinal cord. A case report. Fingeroth JM, et al. **Vet Surg** 1989 Mar–Apr;18(2):123–9
[Experimental study on the development of bladder and urethral dysfunction following suprasacral spinal cord transection in the cat] Nakamura H. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1032–9 (Eng. Abstr.) (Jpn)
[Transthoracic approaches to the lesions of thoracic cord and thoracic vertebrae] Hanakita J, et al. **No Shinkei Geka** 1988 Jun;16(7):837–43 (Eng. Abstr.) (Jpn)
[A syringoperitoneal shunt. A promising treatment in syringomyelia] Wester K, et al. **Tidsskr Nor Laegeforen** 1988 Sep 30;108(27):2275–8 (Eng. Abstr.) (Nor)
[Are reconstructive operations possible in cases of injuries of the spinal cord?] Iumashev GS, et al. **Ortop Travmatol Protez** 1989 Jan;(1):71–4 (39 ref.) (Rus)

TRANSPLANTATION

Maintenance of host medullary nucleus gracilis neurons after C3 homografting of fetal spinal cord into host fasciculus gracilis. Bernstein JJ, et al. **Brain Res** 1989 May 29; 488(1–2):180–5
Evidence for functional contact between cografted locus coeruleus and spinal cord in oculo: electrophysiological studies. Henschen AF, et al. **Brain Res** 1988 Nov 22; 474(1):66–74
Graft derived reafferentation of host spinal cord is not necessary for amelioration of lesion-induced deficits: possible role of migrating grafted astrocytes. Bernstein JJ, et al. **Brain Res Bull** 1989 Jan;22(1):139–46
Peripheral nerve regeneration in quail–chick spinal cord chimeras treated with oral ciclosporin. Uzman BG, et al. **Dev Neurosci** 1989;11(1):65–75
Human fetal spinal cord xenografts survive in the eye of athymic nude rat hosts. Henschen AF, et al. **Exp Brain Res** 1989;75(2):317–26
Thyrotropin releasing hormone augments growth of spinal cord transplants in oculo. Henschen A, et al. **Exp Neurol** 1988 Oct;102(1):125–9
Ultrastructure of spinal cord grafts with and without cografts of locus coeruleus in oculo. Inoue HK, et al. **Exp Neurol** 1988 Oct;102(1):109–20
Differentiation of substantia gelatinosa–like regions in intraspinal and intracerebral transplants of embryonic spinal cord tissue in the rat. Jakeman LB, et al. **Exp Neurol** 1989 Jan;103(1):17–33
Studies on embryonic transplants to the transected spinal cord of adult rats. Pallini R, et al. **J Neurosurg** 1989 Mar; 70(3):454–62
Nerve growth factor (NGF)-treated nitrocellulose enhances and directs the regeneration of adult rat dorsal root axons through intraspinal neural tissue transplants. Houle JD, et al. **Neurosci Lett** 1989 Aug 14;103(1):17–23
Myelin formation in myelin-deficient rat spinal cord following transplantation of normal fetal spinal cord. Rosenbluth J, et al. **Neurosci Lett** 1989 Feb 13; 97(1–2):35–40
Replacement of missing motoneurons by embryonic grafts in the rat spinal cord. Sieradzan K, et al. **Neuroscience** 1989; 31(1):115–30
Effect of target and non-target transplants on neuronal survival and axonal elongation after injury to the developing spinal cord. Bregman BS, et al. **Prog Brain Res** 1988;78:205–11
Intraocular spinal cord grafts: a model system for morphological and functional studies of spinal regeneration. Henschen A, et al. **Prog Brain Res** 1988;78:187–91
Noradrenaline-containing transplants in the adult spinal cord of mammals. Nornes HO, et al. **Prog Brain Res** 1988; 78:181–6 (33 ref.)
Human fetal cortices and spinal cord transplanted to the anterior chamber of immunodeficient nude rats: immunohistochemical studies. Olson L, et al. **Prog Brain Res** 1988;78:583–90
Transplantation of fetal spinal cord tissue into acute and chronic hemisection and contusion lesions of the adult rat spinal cord. Reier PJ, et al. **Prog Brain Res** 1988;78:173–9
Enhancement of adult dorsal root regeneration by embryonic spinal cord transplants. Tessler A, et al. **Prog Brain Res** 1988;78:213–8
Cross-species grafting and cell culture of rhesus monkey fetal spinal cord and cerebral cortex. Vaidya U, et al. **Prog Brain Res** 1988;78:167–72
Transplantation of cultured embryonic spinal cord grafts into the hemisected spinal cord of adult rabbits. Szeifert GT, et al. **Surg Neurol** 1989 Oct;32(4):273–80

ULTRASTRUCTURE

Ultrastructure and synaptic architecture of spinal motoneurons in the frog (Rana catesbeiana). Wang CL, et al. **Acta Anat (Basel)** 1989;134(1):1–11
Immunocytochemical and ultrastructural study of Lewy body–like hyaline inclusions in familial amyotrophic lateral sclerosis. Murayama S, et al. **Acta Neuropathol (Berl)** 1989; 78(2):143–52
Subpial glial limiting membrane of the cat spinal cord visualized by scanning electron microscopy. Sasaki H. **Anat Embryol (Berl)** 1989;179(6):533–40
Structural basis for three-dimensional coding in the vestibulospinal reflex. Morphology of single vestibulospinal axons in the cervical cord. Shinoda Y, et al. **Ann N Y Acad Sci** 1988;545:216–27 (28 ref.)
The ultrastructure of somatostatin–immunoreactive cell bodies, nerve fibers and terminals in the dorsal horn of rat spinal cord. Mizukawa K, et al. **Arch Histol Jpn** 1988 Dec;51(5):443–52
Evidence for unmyelinated sensory fibres in the posterior columns in man. Briner RP, et al. **Brain** 1988 Oct;111 (Pt 5):999–1007
Gap junctions between lateral spinal motoneurons in the rat. Matsumoto A, et al. **Brain Res** 1989 Aug 28;495(2):362–6
Fine structures of cerebrospinal fluid-contacting neurons with mitochondria-containing bulbs in the primate spinal cord. Morita F, et al. **Bull Osaka Med Sch** 1987 Oct; 33(2):117–27
Some ultrastructure and immunocytochemical findings taken as morphological basis for the gate control theory of pain mechanism. Ai MK, et al. **Chen Tzu Yen Chiu** 1988; 13(2):98–105
Ultrastructure of the mouse spinal cord ependyma. Bjugn R, et al. **J Anat** 1988 Oct;160:117–25
Ultrastructure of interneurons within motor nuclei of the thoracic region of the spinal cord of the adult cat. Johnson IP, et al. **J Anat** 1988 Dec;161:171–85
Changes in dorsal horn synaptic disc numbers following unilateral dorsal rhizotomy. Chung K, et al. **J Comp Neurol** 1989 May 22;283(4):568–77
Numbers of synapses in laminae I–IV of the rat dorsal horn. McNeill DL, et al. **J Comp Neurol** 1988 Dec 15; 278(3):453–60
Electron microscope study of Golgi-stained cells in lamina II of the rat spinal dorsal horn. Todd AJ. **J Comp Neurol** 1988 Sep 1;275(1):145–57
A no-moving-parts video rate laser beam scanning type 2 confocal reflected/transmission microscope. Goldstein S. **J Microsc** 1989 Feb;153 (Pt 2):RP1–2
Alterations of oligodendrocytes and demyelination in the spinal cord of patients with mitochondrial encephalomyopathy. Ohara S, et al. **J Neurol Sci** 1988 Aug; 86(1):19–29
Ultrastructural, morphometric, and immunocytochemical study of anterior horn cells in mice with "wasted" mutation. Lutsep HL, et al. **J Neuropathol Exp Neurol** 1989 Sep;48(5):519–33
Synaptic ultrastructure of functionally and morphologically characterized neurons of the superficial spinal dorsal horn of cat. Réthelyi M, et al. **J Neurosci** 1989 Jun;9(6):1846–63
Ultrastructure of axotomized alpha and gamma motoneurons in the cat thoracic spinal cord. Johnston IP, et al. **Neuropathol Appl Neurobiol** 1989 Mar–Apr;15(2):149–63
Ultrastructure of axons in disturbed CNS myelination in pt rabbit. Taraszewska A. **Neuropatol Pol** 1988;26(3):385–402

Electrotonic synapses in the spinal cord of mammals. Motorina MV. **Neurosci Behav Physiol** 1989 Jan–Feb; 19(1):72–8

Ultrastructural changes of synaptic glomeruli following intrathecal injection of distilled water to rats. Inomata K, et al. **Neuroscience** 1988 Dec;27(3):1001–5

Ultrastructural heterogeneity of spinal terminations in the cat inferior olive. Molinari HH. **Neuroscience** 1988 Nov; 27(2):425–35

Spatial distribution of pre- and postsynaptic sites of axon terminals in the dorsal horn of the frog spinal cord. Székely G, et al. **Neuroscience** 1989;29(1):175–88

Distribution of muscarinic cholinergic (mACh) receptors in the rat spinal cord: in vitro quantitative autoradiographic investigation. Mizukawa K, et al. **Okajimas Folia Anat Jpn** 1988 Dec;65(5):255–65

[Transmission electron microscopic studies of the organization of the ependymocytes in the central canal of the spinal cord of Cercopithecus nigroviridis (Pocock 1907), (Platyrrhina, Cercopithecoidea)] Meinel W, et al. **Gegenbaurs Morphol Jahrb** 1988;134(5):625–35 (Eng. Abstr.) **(Ger)**

[Ultrastructural changes in the axons of the central nervous system in experimental amyotrophic leukospongiosis] Poleshchuk NN, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):734–7 (Eng. Abstr.) **(Rus)**

[Effect of ischemia and recirculation on the ultrastructure of the ventral horns of the rabbit spinal cord and accumulation of calcium in motoneurons] Jalč P, et al. **Neirofiziologiia** 1989;21(2):267–9 (Eng. Abstr.) **(Rus)**

[Stereometric characteristics of the ultrastructure of presynaptic terminals in the dorsal horn of the cat spinal cord] Rusakov DA, et al. **Neirofiziologiia** 1989;21(3):403–10 (Eng. Abstr.) **(Rus)**

[Axonal projections of the cells of the dorsal ganglia in the lumbar segments of the spinal cord in tadpoles of the toad Xenopus laevis] Shupliakov OV. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):715–20 (Eng. Abstr.) **(Rus)**

[Changes in the motor neurons of the spinal cord after experimental procedures] Ruttkay-Nedecká E, et al. **Bratisl Lek Listy** 1988 Oct;89(10):789–92 (Eng. Abstr.) **(Slo)**

SPINAL CORD COMPRESSION

BLOOD

Experimental study of reflectance spectrophotometric analysis of the dog's dural sac—in the open decompressed state and after the application of external dural pressure. Tajima N, et al. **Paraplegia** 1989 Jun;27(3):198–203

CEREBROSPINAL FLUID

Importance of absence of CSF pulsation artifacts in the MR detection of significant myelographic block at 1.5 T. Quint DJ, et al. **AJNR** 1989 Sep–Oct;10(5):1089–95

COMPLICATIONS

Central nervous system involvement in non-Hodgkin's lymphoma (excluding Burkitt's lymphoma) in Ugandan Africans. Katongole-Mbidde E, et al. **East Afr Med J** 1988 Dec;65(12):838–46

Spinal cord compression in myelomatosis: response to chemotherapy alone. Sinoff CL, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):197–200

DIAGNOSIS

Cervicomedullary cord compression in young children with achondroplasia: value of comprehensive neurologic and respiratory evaluation. Reid CS, et al. **Basic Life Sci** 1988; 48:199–206

Magnetic resonance imaging in suspected metastatic spinal cord compression. Williams MP, et al. **Clin Radiol** 1989 May;40(3):286–90

MR imaging of compressive myelomalacia. Ramanauskas WL, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):399–404

Hereditary multiple exostoses and cervical cord compression: CT and MR studies. Tully RJ, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):330–3

Sensitivity and specificity of MRI in detecting malignant spinal cord compression and in distinguishing malignant from benign compression fractures of vertebrae. Li KC, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):547–56

MR demonstration of spontaneous acute epidural hematoma of the thoracic spine. Avrahami E, et al. **Neuroradiology** 1989;31(1):89–92

Further aspects of MR-signal enhancements in stenosis of the cervical spinal canal. MRI-investigations in correlation to clinical and cerebrospinal fluid (CSF) findings. Haupts M, et al. **Neuroradiology** 1988;30(6):545–6

Magnetic resonance imaging of lipomyelomeningocele and tethered cord. Brophy JD, et al. **Neurosurgery** 1989 Sep; 25(3):336–40

Titanium wire internal fixation for stabilization of injury of the cervical spine: clinical results and postoperative magnetic resonance imaging of the spinal cord. Geisler FH, et al. **Neurosurgery** 1989 Sep;25(3):356–62

Correlation between magnetic resonance imaging and surgical findings in the tethered spinal cord. Moufarrij NA, et al. **Neurosurgery** 1989 Sep;25(3):341–6

Spinal cord compression due to metastatic disease: diagnosis with MR imaging versus myelography. Carmody RF, et al. **Radiology** 1989 Oct;173(1):225–9

Chronic cervical cord compression: clinical significance of increased signal intensity on MR images. Takahashi M, et al. **Radiology** 1989 Oct;173(1):219–24

[D8–D9 dorsal herniated disk revealed by spinal cord compression (letter)] Besson I, et al. **Presse Med** 1988 Oct 15;17(35):1813 **(Fre)**

[An experimental model for the evaluation of pathologic changes in the spinal canal] Wehling P, et al. **Biomed Tech (Berlin)** 1988 Jun;33(6):136–40 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

A dose-response study of dexamethasone in a model of spinal cord compression caused by epidural tumor. Delattre JY, et al. **J Neurosurg** 1989 Jun;70(6):920–5

Pretreatment with alpha tocopherol enhances neurologic recovery after experimental spinal cord compression injury. Anderson DK, et al. **J Neurotrauma** 1988;5(1):61–7

Initial bolus of conventional versus high-dose dexamethasone in metastatic spinal cord compression. Vecht CJ, et al. **Neurology** 1989 Sep;39(9):1255–7

Methylprednisolone in spinal cord compression. Hitchon PW, et al. **Spine** 1989 Jan;14(1):16–22

Comparison of soluble dexamethasone sodium phosphate with free dexamethasone and indomethacin in treatment of experimental neoplastic spinal cord compression. Siegal T, et al. **Spine** 1988 Oct;13(10):1171–6

[Role of endogenous norepinephrine and effects of alpha- and beta-blockers in experimental spinal cord compression injury] Uehara H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov;62(11):1011–8 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Cervical myelopathy due to ossification of the posterior longitudinal ligament. De Bleecker J, et al. **Acta Neurol Belg** 1988 May–Jul;88(3):133–9

Leptomeningeal gliomatosis with spinal cord or cauda equina compression: a complication of supratentorial gliomas in adults. Delattre JY, et al. **Acta Neurol Scand** 1989 Feb; 79(2):133–9

Non-tropical pyomyositis in children—with report of severe neurological complications. Brik R, et al. **Acta Paediatr Scand** 1989 Mar;78(2):331–4

Spinal cord compression by unusual epidural air accumulation after continuous epidural analgesia [letter] Hirsch M, et al. **AJR Am J Roentgenol** 1989 Oct; 153(4):887–8

Endemic fluorosis with spinal cord compression. A case report and review. Fisher RL, et al. **Arch Intern Med** 1989 Mar;149(3):697–700

Neurofibromatosis with spinal paralysis due to arteriovenous fistula. Wada K, et al. **Arch Orthop Trauma Surg** 1989; 108(5):322–4

Spinal cord compression in small cell lung cancer: a retrospective study of 610 patients. Goldman JM, et al. **Br J Cancer** 1989 Apr;59(4):591–3

Spinal cord compression related to vertebral osteonecrosis. Feldmann JL, et al. **Clin Exp Rheumatol** 1988 Jul–Sep; 6(3):297–300

Chondroma of the cervical spine. Palaoglu S, et al. **Clin Neurol Neurosurg** 1988;90(3):253–5

Spinal cord compression caused by dual pathology: a close shave with Ockham's razor. Wright JF, et al. **Clin Radiol** 1988 Sep;39(5):558–9

Neurological deficits secondary to spinal deformities: their treatment and results in 13 patients. Cantore GP, et al. **Eur Neurol** 1989;29(4):181–5

Spinal epidural metastases. Stevenaert A, et al. **J Belge Radiol** 1988;71(4):475–82 (38 ref.)

Epidural compression from metastatic tumor with resultant paralysis. Ampil FL. **J Neurooncol** 1989 Jul;7(2):129–36

Foramen magnum syndrome from pseudogout of the atlanto-occipital ligament. Case report. Ciricillo SF, et al. **J Neurosurg** 1989 Jul;71(1):141–3

Myelopathy due to epidural varicose veins of the cervicothoracic junction. Case report. Dickman CA, et al. **J Neurosurg** 1988 Dec;69(6):940–1

Gas in a spinal extradural cyst. Case report. Kumar R, et al. **J Neurosurg** 1989 Mar;70(3):486–8

Chemotherapy as the initial treatment of spinal cord compression due to disseminated neuroblastoma. Sanderson IR, et al. **J Neurosurg** 1989 May;70(5):688–90

Solitary osteochondroma of the pedicle of L4 causing root compression. Case report. Spaziante R, et al. **J Neurosurg Sci** 1988 Oct–Dec;32(4):141–5

Metastatic malignant struma ovarii presenting as paraparesis from a spinal metastasis. McDougall IR, et al. **J Nucl Med** 1989 Mar;30(3):407–11

Cervico-medullary compression secondary to ochronotic arthritis affecting cranio-vertebral joints syndesmo-dental ochronotic arthritis. Sharma RR, et al. **J Postgrad Med** 1988 Oct;34(4):253–7

Scleroderma: dystrophic calcification with spinal cord compression [letter] Petrocelli AR, et al. **J Rheumatol** 1988 Nov;15(11):1733–5

Spinal cord compression after long-term etretinate [letter] Tfelt-Hansen P, et al. **Lancet** 1989 Aug 5;2(8658):325–6

Spinal epidural compression secondary to osteoblastic metastatic vertebral expansion. Hirschfeld A, et al. **Neurosurgery** 1988 Nov;23(5):662–5

Spinal cord compression by a unifocal eosinophilic granuloma: a case report of an adult with unusual roentgenological features. Kanterewicz E, et al. **Neurosurgery** 1988 Nov;23(5):666–8

Anterior decompression and stabilization of the spine in malignant disease. Moore AJ, et al. **Neurosurgery** 1989 May;24(5):713–7

Granulocytic sarcoma presenting as an epidural mass with cord compression. Ripp DJ, et al. **Neurosurgery** 1989 Jan; 24(1):125–8

Radiologic case study. Eosinophilic granuloma of the spine causing neurologic deficit. Kerr R. **Orthopedics** 1989 Feb; 12(2):309, 312–5

Intradural spinal hematoma in an infant with cystic fibrosis. Zochodne D, et al. **Pediatr Neurol** 1986 Sep–Oct;2(5):311–3

Pseudopseudohypoparathyroidism with spinal cord compression. Van Dop C, et al. **Pediatr Radiol** 1988; 18(5):429–31

Spinal cord compression due to carcinoid metastasis. Gray JA, et al. **Postgrad Med J** 1988 Sep;64(755):703–5

Treatment and prevention of spinal metastases of prostatic carcinoma with neurologic complications. Allain YM, et al. **Prog Clin Biol Res** 1989;303:353–68 (37 ref.)

Spinal cord compression in type I Gaucher disease. Hermann G, et al. **Radiology** 1989 Jan;170(1 Pt 1):147–8

Case report 545: Osteochondroma (osteocartilagenous exostosis) cervical spine with spinal cord compression. Tajima K, et al. **Skeletal Radiol** 1989;18(4):306–9 (14 ref.)

Vertebral hemangioma associated with spinal cord compression. Marymont JV, et al. **South Med J** 1988 Dec; 81(12):1586–7

Cervical spondylotic myelopathy: history and physical findings. Clark CR. **Spine** 1988 Jul;13(7):847–9

Monitoring of cervical spondylotic myelopathy. Cusick JF. **Spine** 1988 Jul;13(7):877–80

Acute massive dural compression secondary to methyl methacrylate replacement of a tumorous lumbar vertebral body. Dolin MG. **Spine** 1989 Jan;14(1):108–10

Cervical spondylotic myelopathy: natural history. LaRocca H. **Spine** 1988 Jul;13(7):854–5 (6 ref.)

Correlative anatomy of cervical spondylotic myelopathy. Parke WW. **Spine** 1988 Jul;13(7):831–7

Vertebral arch hemangioma producing spinal cord compression in pregnancy. Diagnosis by magnetic resonance imaging. Schwartz DA, et al. **Spine** 1989 Aug; 14(8):888–90

Current considerations in the management of neoplastic spinal cord compression. Siegal T, et al. **Spine** 1989 Feb; 14(2):223–8 (56 ref.)

Myelopathy secondary to spinal epidural lipomatosis. A case report. Soloniuk DS, et al. **Spine** 1989 Jan;14(1):119–22

Thoracic cord compression in Scheuermann's disease. Yablon JS, et al. **Spine** 1988 Aug;13(8):896–8

Spinal cord compression due to intradural extramedullary aspergilloma and cyst: a case report. Cravens G, et al. **Surg Neurol** 1989 Apr;31(4):315–8

Spinal cord compression caused by bilateral nerve root hypertrophy. Maurice-Williams RS, et al. **Surg Neurol** 1989 Jun;31(6):465–7

Malignant lymphoma of the posterior mediastinum with transverse myelopathy. Ando K, et al. **Thorac Cardiovasc Surg** 1989 Feb;37(1):58–60

Epidural lipomatosis after renal transplantation—complete recovery without surgery. Vazquez L, et al. **Transplantation** 1988 Nov;46(5):773–4

Midline communicating spinal extradural arachnoid cyst. Bhaskar M, et al. **West Indian Med J** 1988 Sep;37(3):175–8

[Neurologic complications in malignant lymphoma] Nedelcheva E, et al. **Vutr Boles** 1988;27(4):58–61 (Eng. Abstr.) **(Bul)**

[Spinal cord compression syndromes] Segers M, et al. **Acta Belg Med Phys** 1988 Oct–Dec;11(4):189–94 **(Dut)**

[Prevention of neurological symptoms due to atlanto-axial dislocation in persons with Down syndrome] Cremers MJ, et al. **Ned Tijdschr Geneeskd** 1988 Dec 17;132(51):2328–30 (Eng. Abstr.) **(Dut)**

[Compressive inflammatory epiduritis in ankylosing spondylitis (letter)] Dupuy M, et al. **Presse Med** 1989 May 13;18(19):984–5 **(Fre)**

[Intramedullary epidermoid cyst. Contribution of magnetic resonance imaging] Cornu P, et al. **Rev Neurol (Paris)** 1989; 145(3):248–50 (15 ref.) (Eng. Abstr.) **(Fre)**

[Conference at the Salpêtrière Hospital. June 1987. Progressive spastic paraparesis and dermatomyositis. Epidural lipomatosis during corticosteroid therapy of dermatomyositis] Haguenau M, et al. **Rev Neurol (Paris)** 1989;145(4):330–4 **(Fre)**

[Dorsal radiculo-myelopathy due to ossification of the yellow ligaments. Apropos of a case] Folinais D, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):595–9 **(Fre)**

[Dorsal spinal cord disease caused by ossification of the ligamentum flavum and D10–D11 posterior arthrosis] Renier JC, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep; 55(9):665–7 **(Fre)**

[Generalized amyloidosis revealed by vertebral compression] Tonnel F, et al. **Rev Rhum Mal Osteoartic** 1988 Nov; 55(11):907–9 **(Fre)**

[Diagnosis and differential diagnosis of spondylogenic cervical myelopathy] Matthes R, et al.

Z Arztl Fortbild (Jena) 1989;83(9):467–70 (Ger)
[Osteoporotic crush fracture causing spinal cord compression] Fried V, et al. Harefuah 1988 Nov 15; 115(10):274–6 (Eng. Abstr.) (Heb)
[Rheumatoid arthritis with cervical localization. Description of a case with neurological symptomatology and review of the literature] Abbiati C, et al. Minerva Med 1989 Jun; 80(6):603–7 (Eng. Abstr.) (Ita)
[Non ossifying fibroma with vertebral localization. Clinical case] Ruelle A, et al. Riv Neurol 1988 Jul–Aug;58(4):150–2 (Eng. Abstr.) (Ita)
[Aneurysmal cyst of the cervico–thoracic junction of the spine] Radek A, et al. Neurol Neurochir Pol 1988 Sep–Oct; 22(5):463–7 (Eng. Abstr.) (Pol)
[Spinal cord disorders in tuberculosis and osteomyelitis of the spine and their surgical treatment] Tikhodeev SA. Probl Tuberk 1988;(12):39–42 (Eng. Abstr.) (Rus)
[Neurologic syndromes in craniovertebral dysplasias] Lobzin VS, et al. Zh Nevropatol Psikhiatr 1988;88(9):12–6 (Eng. Abstr.) (Rus)
[Intramedullary echinococcosis in a 9–year–old child] Vetska P, et al. Zh Vopr Neirokhir 1989 Jan–Feb;(1):55–6 (Rus)
[Decompressive laminectomy in prostatic cancer: emergency treatment] Chéchile G, et al. Actas Urol Esp 1988 May–Jun; 12(3):278–80 (Eng. Abstr.) (Spa)
[Lumbosacral plexopathy caused by aneurysms of the abdominal aorta] Láinez JM, et al. Med Clin (Barc) 1989 Apr 1;92(12):462–4 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Spinal cord compression: a complication of silicone–coated Dacron dural grafts. Report of two cases. Gomez H, et al. Neurosurgery 1989 Jan;24(1):115–8

METABOLISM

Changes of nucleic acids after transversal spinal cord lesion. Kubík V, et al. Act Nerv Super (Praha) 1988 Dec; 30(4):294–6

MICROBIOLOGY

Primary spinal extradural hydatid cyst. Wani MA, et al. Neurosurgery 1989 Apr;24(4):631–2

PATHOLOGY

Quantification of cord deformation and dynamics during flexion and extension of the cervical spine using MR imaging. Condon BR, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):947–55
Acute myelopathy as the initial presentation of acute leukemia. Phanthumchinda K, et al. J Med Assoc Thai 1988 Jun;71(6):340–4
Morphometry of the cervical spinal cord and its relation to pathology in cases with compression myelopathy. Fujiwara K, et al. Spine 1988 Nov;13(11):1212–6
[A clinical study on the morphological restoration of the spinal cord in cervical myelopathy by CT–myelography and ultrasonography] Kawakami N. Nippon Seikeigeka Gakkai Zasshi 1988 Nov;62(11):951–64 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Methodological analysis of an experimental spinal cord compression model in the rat. Nyström B, et al. Acta Neurol Scand 1988 Dec;78(6):460–6
Spinal cord restitution following compression injuries in rats. Nyström B, et al. Acta Neurol Scand 1988 Dec;78(6):467–72
Silent period in spinal cord pathology. Jandolo B, et al. Electromyogr Clin Neurophysiol 1989 Apr;29(3):139–43
Impact and balloon compression models of the spinal cord. Hitchon PW, et al. J Am Paraplegia Soc 1988 Jul–Oct; 11(2):35–40 (26 ref.)
An animal model of epidural compression of the spinal cord. Arbit E, et al. Neurosurgery 1989 Jun;24(6):860–3
The pathophysiology of cervical spondylosis and myelopathy. Bohlman HH, et al. Spine 1988 Jul;13(7):843–6 (42 ref.)
Nicardipine after spinal cord compression in the lamb. Hitchon PW, et al. Surg Neurol 1989 Feb;31(2):101–10
Spinal cord blood flow measured by 14C–iodoantipyrine autoradiography during and after graded spinal cord compression in rats. Holtz A, et al. Surg Neurol 1989 May; 31(5):350–60
[Function of the long spinal cord pathways in cervical spinal stenosis—an electrophysiologic study] Masur H, et al. EEG EMG 1988 Dec;19(4):264–6 (Eng. Abstr.) (Ger)
[Changes in the spinal evoked potential induced by lateral compression of the spinal cord in dogs] Nozawa M. Nippon Seikeigeka Gakkai Zasshi 1989 Jan;63(1):131–45 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

A giant spinal aneurysm with cord and root compression. el Mahdi MA, et al. J Neurol Neurosurg Psychiatry 1989 Apr;52(4):532–5
Neuroradiology of cervical spondylotic myelopathy. Alker G. Spine 1988 Jul;13(7):850–3
[Transverse syndrome in aneurysmal bone cyst] Pittasch D, et al. Zentralbl Neurochir 1988;49(3):247–51 (Eng. Abstr.) (Ger)
[Radiological diagnosis of chronic spinal cord compressive lesion at thoraco–lumbar junction] Koyanagi I, et al. No Shinkei Geka 1988 Oct;16(11):1227–33 (Eng. Abstr.) (Jpn)
[Value of computerized tomography methods in diagnosing various diseases of the spine and spinal cord] Dmitriev AE, et al. Ortop Travmatol Protez 1989 May;(5):1–7 (Eng. Abstr.) (Rus)

RADIOTHERAPY

Palliative radiotherapy for metastatic malignant melanoma: brain metastases, bone metastases, and spinal cord compression. Rate WR, et al. Int J Radiat Oncol Biol Phys 1988 Oct;15(4):859–64
Role of radiotherapy in metastatic spinal cord compression: preliminary results from a prospective trial. Latini P, et al. Radiother Oncol 1989 Jul;15(3):227–33

SURGERY

The transoral approach to the anterior superior cervical spine. A review of 29 cases. Spetzler RF, et al. Acta Neurochir Suppl (Wien) 1988;43:69–74
Anterolateral uncoforaminotomy for cervical spondylotic myeloradiculopathy. Manabe S, et al. Acta Orthop Scand 1988 Dec;59(6):669–74
Carcinoid syndrome: the combined use of ketanserin and octreotide in the management of an acute crisis during anaesthesia. Hughes EW, et al. Anaesth Intensive Care 1989 Aug;17(3):367–70
Surgical management of cervicomedullary compression in achondroplastic patients. Carson B, et al. Basic Life Sci 1988;48:207–14
Surgical management of spinal epidural disease: an update. Rock JP, et al. Henry Ford Hosp Med J 1989;37(1):37–40
Cervical kyphosis and myelopathy. Treatment by anterior corpectomy and strut–grafting. Zdeblick TA, et al. J Bone Joint Surg [Am] 1989 Feb;71(2):170–82
The prognosis of surgery for cervical compression myelopathy. An analysis of the factors involved. Fujiwara K, et al. J Bone Joint Surg [Br] 1989 May;71(3):393–8
The transoral approach to the superior cervical spine. A review of 53 cases of extradural cervicomedullary compression. Hadley MN, et al. J Neurosurg 1989 Jul; 71(1):16–23
One–stage posterolateral decompression and stabilization for primary and metastatic vertebral tumors in the thoracic and lumbar spine. Shaw B, et al. J Neurosurg 1989 Mar; 70(3):405–10
Mechanical comparison of anterior spinal instrumentation in a burst fracture model. Bone LB, et al. J Orthop Trauma 1988;2(3):195–201
The role of surgical management for symptomatic spinal cord compression in patients with metastatic prostate cancer. Shoskes DA, et al. J Urol 1989 Aug;142(2):337–9
So–called tethered cervical spinal cord. Roth–Vargas AA, et al. Neurochirurgia (Stuttg) 1989 May;32(3):69–71
Acute cervical myelopathy from hereditary multiple exostoses: case report. Wen DY, et al. Neurosurgery 1989 Sep;25(3):472–5
Surgical management of tumor–related spinal instability. Magerl F, et al. Recent Results Cancer Res 1988;108:163–71
Biomechanical considerations in the surgical management of cervical spondylotic myelopathy. White AA 3d, et al. Spine 1988 Jul;13(7):856–60
Anterior surgery for cervical spondylotic myelopathy. Smith–Robinson, Cloward, and vertebrectomy. Whitecloud TS 3d. Spine 1988 Jul;13(7):861–3 (69 ref.)
[Anterior decompression and spinal stabilization in the treatment of dorsolumbar metastatic compression] Lesoin F, et al. Ann Chir 1989;43(3):215–9 (Eng. Abstr.) (Fre)
[Vertebragenic cervical myelopathy as a sequel of degenerative anterolisthesis] Hohmann D. Z Orthop 1988 May–Jun;126(3):353–7 (27 ref.) (Eng. Abstr.) (Ger)
[The injured cervical spine with and without lesions of the nerve structures. Clinical results of surgical therapy] Lang G, et al. Zentralbl Chir 1989;114(8):503–13 (Eng. Abstr.) (Ger)
[Tumor–induced medullary compression—experiences with 570 patients] Fried H, et al. Zentralbl Neurochir 1988; 49(4):270–2 (Eng. Abstr.) (Ger)
[A new surgical method for the surgical management of ventral compression of the thoracic spinal cord] Pásztor E. Orv Hetil 1988 Dec 4;129(49):2619–26 (37 ref.) (Eng. Abstr.) (Hun)
[Surgical treatment of ventral compression of the dorsal spine: retrospective study of advances in the course of the past decades (letter)] Riskó T. Orv Hetil 1989 Jul 2; 130(27):1465–6 (Hun)
[Pathogenetic aspects of decompression interventions in complicated injuries of the spine] Khvisiuk NI, et al. Ortop Travmatol Protez 1989 Jan;(1):28–32 (Eng. Abstr.) (Rus)
[A case of successful treatment of severe combined injuries of the spine and spinal cord] Polishchuk NE, et al. Ortop Travmatol Protez 1989 May;(5):50–1 (Rus)
[Substantiation of the use of terrilytin in the treatment of spinal cord disorders in tuberculous spondylitis] Bellendir EN, et al. Probl Tuberk 1989;(4):46–50 (Eng. Abstr.) (Rus)
[Anterior decompression and spondylodesis with polymer fixation in the treatment of injuries of the cervical vertebrae] Protsenko AI, et al. Sov Med 1989;(5):16–9 (Eng. Abstr.) (Rus)
[Results of the surgical treatment of patients with hematogenic osteomyelitis of the spine] Tikhodeev SA. Vestn Khir 1988 May;140(5):42–6 (Eng. Abstr.) (Rus)

THERAPY

Conservative management of spinal epidural hematoma in hemophilia. Narawong D, et al. Pediatr Neurol 1988 May–Jun;4(3):169–71
Embolization of solitary spinal metastases from renal cell carcinoma: alternative therapy for spinal cord or nerve root compression. O'Reilly GV, et al. Surg Neurol 1989 Apr; 31(4):268–71
[Treatment of spinal cord compression in multiple myeloma] Golenkov AK, et al. Sov Med 1988;(10):107–9 (Rus)

VETERINARY

Success for equine wobbler surgery [news] Aust Vet J 1989 Jan;66(1):suppl 8
Iohexol myelography in the horse. Burbidge HM, et al. Equine Vet J 1989 Sep;21(5):347–50
What is your diagnosis? Lysis of the vertebral body of C7, with a pathologic compression fracture and compression of the spinal cord at the level of C7. van Ee RT, et al. J Am Vet Med Assoc 1989 Jan 15;194(2):285–6
Clinical evaluation of three surgical methods for treatment of caudal cervical spondylomyelopathy of dogs. Bruecker KA, et al. Vet Surg 1989 May–Jun;18(3):197–203
[Posterior paresis/paralysis] Overduin L, et al. Tijdschr Diergeneeskd 1988 Nov 1;113(21):1203–6 (Dut)

SPINAL CORD DISEASES

Spinal epidural abscess. Siao P, et al. J Emerg Med 1988 Sep–Oct;6(5):391–6
[Spinal subdural abscess—report of a case and a review of the literature of 43 cases] Takenaka K, et al. No To Shinkei 1989 Apr;41(4):331–6 (28 ref.) (Eng. Abstr.) (Jpn)

CEREBROSPINAL FLUID

Cerebrospinal fluid immunoreactive substance P and somatostatin in neurological patients with peripheral and spinal cord disease. Cramer H, et al. Neuropeptides 1988 Oct;12(3):119–24

CHEMICALLY INDUCED

Spinal origin of human lead neuropathy: this paper marks the 150th anniversary of Paralysie de Plomb ou Saturnine by L. Tanquerel des Planches. Beritić T. Am J Ind Med 1989;15(6):643–56
Localization of dynorphin–induced neurotoxicity in rat spinal cord. Stewart P, et al. Life Sci 1989;44(20):1505–14
Folic acid therapy dangers. Senarath Yapa RS. Practitioner 1988 Sep 22;232(1454 (Pt 2)):987

COMPLICATIONS

Two cases of necrotizing myelopathy associated with malignancy caused by herpes simplex virus type 2. Iwamasa T, et al. Acta Neuropathol (Berl) 1989;78(3):252–7
Myelopathy, ascites and pleural effusion in systemic lupus erythematosus. Waga S, et al. Acta Paediatr Jpn Overseas Ed 1989 Feb;31(1):78–84
Pelvic abscess complicated by a subarachnoid fistula [letter] Chaloupka JC. AJR 1989 Feb;152(2):433
Chronic myelopathies associated with human T–lymphotropic virus type I. A clinical, serologic, and immunovirologic study of ten patients in France. Gout O, et al. Arch Neurol 1989 Mar;46(3):255–60
The urological manifestations of the tethered spinal cord. Kaplan WE, et al. J Urol 1988 Nov;140(5 Pt 2):1285–8
Neurourological implications of the changing approach in management of occult spinal lesions. Keating MA, et al. J Urol 1988 Nov;140(5 Pt 2):1299–301
Necrotizing myelopathy associated with hepatocellular carcinoma. Misumi H, et al. Jpn J Med 1988 Aug; 27(3):333–6
HTLV–I–associated myelopathy with adult T–cell leukemia. Kawai H, et al. Neurology 1989 Aug;39(8):1129–31
Brown Sequard syndrome secondary to soft tissue infection in a patient with acute lymphocyte leukemia. Khardori N, et al. Neuroradiology 1988;30(4):348–50
Subarachnoid hemorrhage from intraspinal intradural vertebral artery aneurysm: case report and review of the literature. Barnett GH. Neurosurgery 1989 May;24(5):753–5 (16 ref.)
Spontaneous remission of paralysis due to spinal extradural hematoma: case report. Emery DJ, et al. Neurosurgery 1988 Dec;23(6):762–4 (25 ref.)
Brown–Séquard syndrome associated with posttraumatic cervical epidural hematoma: case report and review of the literature. Zupruk GM, et al. Neurosurgery 1989 Aug; 25(2):278–80 (11 ref.)
Nontraumatic spinal intramedullary hemorrhage in an infant. Mutoh K, et al. Pediatr Neurol 1989 Jan–Feb;5(1):53–6
Progressive weakness in infancy and childhood. Lewis DW, et al. Pediatr Rev 1987 Jan;8(7):200–8 (10 ref.)
Spinal cord compression due to intradural extramedullary aspergilloma and cyst: a case report. Cravens G, et al. Surg Neurol 1989 Apr;31(4):315–8

[Treatment of neuromuscular dysfunction of the lower urinary tract in patients with acute lesions of the spinal cord (editorial)] Nordling J. **Ugeskr Laeger** 1989 Aug 7; 151(32):2005 **(Dan)**

[Dysautonomia of a lower limb, disclosing Brown–Sequard syndrome (letter)] Giroud M, et al. **Ann Med Interne (Paris)** 1989;140(1):74–5 **(Fre)**

[Intramedullary epidermoid cyst. Contribution of magnetic resonance imaging] Cornu P, et al. **Rev Neurol (Paris)** 1989; 145(3):248–50 (15 ref.) (Eng. Abstr.) **(Fre)**

[Transverse myelopathy and Gottron's sign associated with systemic lupus erythematosus in an elderly woman—a case report] Shimamoto Y, et al. **Nippon Ronen Igakkai Zasshi** 1988 May;25(3):309–15 (Eng. Abstr.) **(Jpn)**

[Kyphoscoliosis in intramedullary cysts and tumors of the spinal cord] Mikhailovskiĭ VS, et al. **Vrach Delo** 1989 May; (5):97–9 **(Rus)**

[Unusual pyramidal pathology syndrome] Baliasnyĭ MM, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):45–6 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Magnetic resonance (MR) imaging in the management of primary and secondary syringomyelic cavities, and of other cystic lesions of the spinal cord. Roosen N, et al. **Acta Neurochir Suppl (Wien)** 1988;43:13–6

Comparison of gradient–recalled–echo and T2–weighted spin–echo pulse sequences in intramedullary spinal lesions. Katz BH, et al. **AJNR** 1989 Jul–Aug;10(4):815–22

Acquired spinal subarachnoid cysts: evaluation with MR, CT myelography, and intraoperative sonography. Sklar E, et al. **AJNR** 1989 Sep–Oct;10(5):1097–104

Human T–lymphotropic virus type I–associated myelopathy presenting as spinocerebellar syndrome [letter] Iwasaki Y, et al. **Ann Neurol** 1989 Apr;25(4):419–20

Primary lateral sclerosis. A clinical diagnosis reemerges. Younger DS, et al. **Arch Neurol** 1988 Dec;45(12):1304–7

Lymphomatoid granulomatosis presenting as a progressive cervical cord lesion. Collins S, et al. **Aust N Z J Med** 1989 Apr;19(2):144–6

Prognosis of patients who present with an episode of myelopathy of unknown origin in Malaysia: a retrospective study of 52 patients. Tan CT. **Aust N Z J Med** 1989 Aug; 19(4):297–302

Magnetic resonance imaging of the CNS. Bradshaw JR, et al. **Bristol Med Chir J** 1988 May;103(2):13–8

Clinical applications of magnetic resonance imaging of the spine. Firooznia H, et al. **Bull N Y Acad Med** 1988 Nov; 64(8):941–52

Magnetic resonance imaging for the study of cervical myelopathy in rheumatoid arthritis. Chérié Lignière G, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):343–6

Motor evoked responses after lumbar spinal stimulation in patients with L5 or S1 radicular involvement. Tabaraud F, et al. **Electroencephalogr Clin Neurophysiol** 1989 Apr; 72(4):334–9

Trigemino–cervical reflex in pathology of the brain stem and of the first cervical cord segments. Rossi B, et al. **Electromyogr Clin Neurophysiol** 1989 Mar;29(2):67–71

Delayed short–latency somatosensory evoked potentials in premature diagnosis of medullar disturbances in cervical spondylosis. Rubio Esteban G, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):361–8

MR imaging of the spine in children. Duthoy MJ, et al. **Eur J Radiol** 1988 Aug;8(3):188–95

MR imaging of cervical spinal cord infarction. Brown E, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):920–2

Gadolinium–DTPA enhanced MR imaging of spinal dural arteriovenous fistulas. Terwey B, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):30–7

MR imaging of neurocysticercosis. Zee CS, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):927–34

Neurosarcoidosis: evaluation using computed tomography and magnetic resonance imaging. Cooper SD, et al. **J Comput Tomogr** 1988 Apr;12(2):96–9

MRI appearances of the CNS manifestations of Mycoplasma pneumoniae: a report of two cases. Francis DA, et al. **J Neurol** 1988 Sep;235(7):441–3

Radiological features of intradural epidermoid cysts. Contribution of MRI to the diagnosis. Gandon Y, et al. **J Neuroradiol** 1988;15(4):335–51 **(Eng, Fre)**

Sparganosis of the spinal cord. Case report. Fung CF, et al. **J Neurosurg** 1989 Aug;71(2):290–2

Nonoperative treatment of spinal epidural infections. Mampalam TJ, et al. **J Neurosurg** 1989 Aug;71(2):208–10

Transoesophageal ultrasound imaging of spinal canal and cord [letter] Daniel WG, et al. **Lancet** 1989 Apr 15; 1(8642):849–50

Cervical spine MR imaging using multislice gradient echo imaging: comparison with cardiac gated spin echo. Kulkarni MV, et al. **Magn Reson Imaging** 1988 Sep–Oct; 6(5):517–25

MR imaging of syringobulbia with giant syrinx. Abe K, et al. **Neuroradiology** 1988;30(5):442–3

Fixed spinal cord: diagnosis with MR imaging. Levy LM, et al. **Radiology** 1988 Dec;169(3):773–8

Spinal lesions: quantitative and qualitative temporal evolution of gadopentetate dimeglumine enhancement in MR imaging. Sze G, et al. **Radiology** 1989 Mar;170(3 Pt 1):849–56

Magnetic resonance imaging of the spine. Rossi DR, et al. **Semin Neurol** 1986 Mar;6(1):84–93 (23 ref.)

Level diagnosis of cervical myelopathy using evoked spinal cord potentials. Satomi K, et al. **Spine** 1988 Nov; 13(11):1217–24

Electrophysiologic diagnosis of cervical OPLL myelopathy using evoked spinal cord potentials. Shinomiya K, et al. **Spine** 1988 Nov;13(11):1225–33

[Pseudotumoral spinal cord dilatation during multiple sclerosis. 2 cases with magnetic resonance imaging] Lubetzki C, et al. **Rev Neurol (Paris)** 1989;145(3):239–42 (13 ref.) (Eng. Abstr.) **(Fre)**

[MR vs CT: which is the diagnostic advantage in neuroradiology] Cirillo S, et al. **Radiol Med (Torino)** 1988 Nov;76(5):390–8 (Eng. Abstr.) **(Ita)**

[Magnetic resonance study of lesions of the cervical spinal cord in multiple sclerosis] Dal Pozzo G, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):23–9 (Eng. Abstr.) **(Ita)**

[Magnetic resonance imaging findings of HTLV–I–associated myelopathy] Furukawa Y, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):154–8 (Eng. Abstr.) **(Jpn)**

[1000 MR examinations—a report and reflections] Schubiger O, et al. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun; 52(3):174–7 (Eng. Abstr.) **(Pol)**

[Current neurologic indications of magnetic resonance (II)] Muñoz González A, et al. **Med Clin (Barc)** 1989 Apr 1; 92(12):465–9 (32 ref.) **(Spa)**

DRUG THERAPY

Intrathecal baclofen for severe spinal spasticity. Penn RD, et al. **N Engl J Med** 1989 Jun 8;320(23):1517–21

Treatment of spastic paresis [editorial] Young RR. **N Engl J Med** 1989 Jun 8;320(23):1553–5

Preliminary observations on glycerol in spinal cord and root disease. Caplan LR. **Neurology** 1989 Jun;39(6):873

Methyl prednisolone in the treatment of acute spinal cord decompression sickness. Francis TJ, et al. **Undersea Biomed Res** 1989 Mar;16(2):165–74

EPIDEMIOLOGY

HTLV–1 myeloneuropathy in the Solomon Islands [letter] Ajdukiewicz A, et al. **N Engl J Med** 1989 Aug 31; 321(9):615–6

[Viral infections in medicine. 2. The history of discovery and clinico–epidemiology of HTLV–I–associated myelopathy (HAM)] Osame M, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1343–6 **(Jpn)**

ETIOLOGY

Iatrogenic intraspinal epidermoid tumour. Ersbak V, et al. **Acta Paediatr Scand** 1988 Sep;77(5):759

Electroencephalographic abnormalities in human T–cell lymphotropic virus type I–associated myelopathy. Yonenaga Y, et al. **Arch Neurol** 1989 May;46(5):513–6

Progressive neurological dysfunction during latent HIV infection. Jakobsen J, et al. **BMJ** 1989 Jul 22; 299(6693):225–8

Intraspinal epidermoid tumour: late complication of lumbar puncture. Gardner DJ, et al. **Can Med Assoc J** 1989 Aug 1;141(3):223–5

Myelomalacia as clinical presentation of acute leukemia. Avilés A, et al. **Clin Neurol Neurosurg** 1989;91(1):95–7

Spinal cord necrosis and paraplegia as complications of the intra–aortic balloon. Riggle KP, et al. **Crit Care Med** 1989 May;17(5):475–6 (8 ref.)

Effects of high dose intraperitoneal cytosine arabinoside on the radiation tolerance of the rat spinal cord. Menten J, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):131–4

HTLV–I–associated myelopathy: an overview. Igata A. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:181–6 (17 ref.)

In vitro modulation of lymphocyte proliferation by prednisolone and interferon–alpha in patients with HTLV–I–associated myelopathy (HAM). Ijichi S, et al. **J Neuroimmunol** 1989 Jul;23(2):175–8

Analysis of the provirus genome integrated in T cell lines established from the cerebrospinal fluid of patients with human T lymphotropic virus type I–associated myelopathy (HAM). Nishimura M, et al. **J Neuroimmunol** 1988 Nov; 20(1):33–7

Reversible acute and subacute myelopathy in patients with dural arteriovenous fistulas. Foix–Alajouanine syndrome reconsidered. Criscuolo GR, et al. **J Neurosurg** 1989 Mar; 70(3):354–9

Delayed tethered cord syndrome after myelomeningocele repair [letter] Wilden JN, et al. **J Neurosurg** 1989 May; 70(5):815–6

Myelopathy due to intracranial dural arteriovenous fistulas draining intrathecally into spinal medullary veins. Report of three cases. Wrobel CJ, et al. **J Neurosurg** 1988 Dec; 69(6):934–9

The effect of hyperemia on spinal cord function after temporary thoracic aortic occlusion. Barone GW, et al. **J Vasc Surg** 1988 Oct;8(4):535–40

Dissociation of AIDS–related vacuolar myelopathy and productive HIV–1 infection of the spinal cord. Rosenblum M, et al. **Neurology** 1989 Jul;39(7):892–6

Intraspinal lipomas in infancy and childhood causing a tethered cord syndrome. Stolke D, et al. **Neurosurg Rev** 1988;11(1):59–65

Myeloradiculopathy secondary to pseudogout in the cervical ligamentum flavum: case report. Gomez H, et al. **Neurosurgery** 1989 Aug;25(2):298–302

Spinal subarachnoid hematoma complicating lumbar puncture: diagnosis and management. Scott EW, et al. **Neurosurgery** 1989 Aug;25(2):287–92; discussion 292–3

Voiding dysfunction in patients with human T–lymphotropic virus type–1–associated myelopathy (HAM). Komine S, et al. **Paraplegia** 1989 Jun;27(3):217–21

Significance of spinal cord swelling in the prognosis of acute cervical spinal cord injury. Koyanagi I, et al. **Paraplegia** 1989 Jun;27(3):190–7

Human immunodeficiency virus type 1 in spinal cords of acquired immunodeficiency syndrome patients with myelopathy: expression and replication in macrophages. Eilbott DJ, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3337–41

Too much pressure? Are deep–water divers risking their bones and brains? Wright K. **Sci Am** 1989 Sep;261(3):36, 38

Post–traumatic lumbar extra–arachnoid mass with radiculopathy responding to conservative therapy in a patient with bilateral laminar fractures. Gupta KL, et al. **Spine** 1988 Aug;13(8):945–8

Cervical spondylotic myelopathy in the aged patient. A radiographic evaluation of the aging changes in the cervical spine and etiologic factors of myelopathy. Hayashi H, et al. **Spine** 1988 Jun;13(6):618–25

Tethered cord syndrome in the adult postoperative myelomeningocele patient. A case report. Logan SR, et al. **Spine** 1989 Aug;14(8):895–7

Comparison of the results of laminectomy and open–door laminoplasty for cervical spondylotic myeloradiculopathy and ossification of the posterior longitudinal ligament. Nakano N, et al. **Spine** 1988 Jul;13(7):792–4

Lower cervical spondylosis and myelopathy in adults with Down's syndrome. Olive PM, et al. **Spine** 1988 Jul; 13(7):781–4

Spinal cord involvement as the presenting symptom of acute monocytic leukemia [letter] Sugar O. **Surg Neurol** 1988 Nov;30(5):413

Polyradiculoneuropathy in transfusion–associated AIDS and dorsal root pathology. Alpert JN, et al. **Tex Med** 1989 Feb; 85(2):45–8

Experimental determination of latency, severity, and outcome in CNS decompression sickness. Francis TJ, et al. **Undersea Biomed Res** 1988 Nov;15(6):419–27

[Spinal cord involvement in acquired immunodeficiency syndrome] Le Noan H, et al. **Arch Anat Cytol Pathol** 1988; 36(5–6):206–11 (43 ref.) (Eng. Abstr.) **(Fre)**

[Cervical spondylotic myelopathies. Apropos of 121 cases. Prognostic value of sensitive symptoms] Bazin A, et al. **Neurochirurgie** 1988;34(5):328–37 (Eng. Abstr.) **(Fre)**

[Acute regressive myelopathy in infection with human immunodeficiency type 1 virus (letter)] Verstichel P, et al. **Presse Med** 1988 Sep 24;17(32):1653 **(Fre)**

[Magnetic resonance imaging of spinal cord injury—observation of cyst formation] Shakudo M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1475–7 (Eng. Abstr.) **(Jpn)**

[Spinal subarachnoid hemorrhage due to neurinoma of the cauda equina] Furuno M, et al. **No Shinkei Geka** 1989 May; 17(5):485–8 (14 ref.) (Eng. Abstr.) **(Jpn)**

[A case of myelopathy caused by calcified nodules of cervical ligamentum flavum] Koyama S, et al. **No Shinkei Geka** 1988 Sep;16(10):1179–85 (Eng. Abstr.) **(Jpn)**

[A case of repeated hematomyelia caused by cavernous hemangioma in the spinal cord] Moriuchi S, et al. **No Shinkei Geka** 1989 May;17(5):477–9 (Eng. Abstr.) **(Jpn)**

[Tethered cord syndrome of adult onset: report of a case and a review of the literature] Yamamura A, et al. **No Shinkei Geka** 1989 Jan;17(1):69–73 (25 ref.) (Eng. Abstr.) **(Jpn)**

[Acute myelogenous leukemia accompanied by HTLV–I associated myelopathy (HAM) caused by blood transfusion] Nasu T, et al. **Rinsho Ketsueki** 1989 Feb;30(2):245–50 (Eng. Abstr.) **(Jpn)**

[Flexion myelopathy due to tic of neck] Nomura T, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):177–9 (Eng. Abstr.) **(Jpn)**

[A case of HTLV–I associated myelopathy (HAM) complicated by mononeuritis multiplex] Ueta Y, et al. **Sangyo Ika Daigaku Zasshi** 1988 Dec 1;10(4):423–6 (Eng. Abstr.) **(Jpn)**

[Radiation injuries of the spinal cord] Baumöhl J, et al. **Cesk Radiol** 1988 Aug;42(4):275–80 (Eng. Abstr.) **(Slo)**

[Spinal subdural hematoma as a neurologic complication of cryoglobulinemia] Teruel JL, et al. **Arch Neurobiol (Madr)** 1988 Jul–Aug;51(4):204–6 (Eng. Abstr.) **(Spa)**

[Delay in the diagnosis of spinal cord neurological complications in patients with cancer] Alfaro A. **Med Clin (Barc)** 1988 Sep 24;91(9):338–40 **(Spa)**

[Posterolateral lesion syndrome of the spinal cord observed in multiple sclerosis] Hernández–Peniche J, et al. **Rev Invest Clin** 1969 Apr–Jun;21(2):185–93 (32 ref.) **(Spa)**

GENETICS

Familial clusters in human T–cell lymphotropic virus type

I-associated myelopathy [letter] Nakamura T, et al. **Arch Neurol** 1989 Mar;46(3):250–1

IMMUNOLOGY

[HTLV-I demonstrated in chronic progressive myelopathy (news)] Cousergue C. **Presse Med** 1988 Oct 8;17(34):1724 **(Fre)**

[An analysis of lymphocyte surface markers in HTLV-I-associated myelopathy (HAM)] Kuwasaki N, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1192–6 (Eng. Abstr.) **(Jpn)**

METABOLISM

Enhancement of preprotachykinin A gene expression by adjuvant-induced inflammation in the rat spinal cord: possible involvement of substance P-containing spinal neurons in nociception. Minami M, et al. **Neurosci Lett** 1989 Mar 13;98(1):105–10

Bone mineral content of the lumbar spine and lower extremities years after spinal cord lesion. Biering-Sørensen F, et al. **Paraplegia** 1988 Oct;26(5):293–301

MICROBIOLOGY

Characterization of HTLV-I in a T-cell line established from a patient with myelopathy. Nakamura T, et al. **Arch Neurol** 1989 Jan;46(1):35–7

Pathogenesis of scrapie is faster when infection is intraspinal instead of intracerebral. Kimberlin RH, et al. **Microb Pathog** 1987 Jun;2(6):405–15

Human immunodeficiency virus in vacuolar myelopathy of the acquired immunodeficiency syndrome [letter] Budka H, et al. **N Engl J Med** 1988 Dec 22;319(25):1667–8

Regional localization of virus in the central nervous system of mice persistently infected with murine coronavirus JHM. Perlman S, et al. **Virology** 1988 Oct;166(2):328–38

Two major subgroups of human T-cell leukemia virus-1 in Japan. Siomi H, et al. **Virus Genes** 1988 Jul;1(4):377–83

PARASITOLOGY

[Brief comments on the pathogenesis of spinal cysticercosis] Sperlescu A, et al. **Arq Neuropsiquiatr** 1989 Mar; 47(1):105–9 (Eng. Abstr.) **(Por)**

PATHOLOGY

A new type of neuronal cytoplasmic inclusion: histological, ultrastructural, and immunocytochemical studies. Lew EO, et al. **Acta Neuropathol (Berl)** 1989;77(6):599–604

Spinal pencil-shaped softening. Report of an autopsy case studied using a three-dimensional model. Kume A, et al. **Acta Pathol Jpn** 1989 Feb;39(2):135–40

X-linked recessive bulbospinal neuronopathy. A clinicopathological study. Sobue G, et al. **Brain** 1989 Feb; 112 (Pt 1):209–32

Peripheral white matter lesions of the spinal cord with changes in small arachnoid arteries in systemic lupus erythematosus. Nakano I, et al. **Clin Neuropathol** 1989 Mar-Apr;8(2):102–8

Morphological and biochemical analysis of ischaemically induced anterograde degeneration of some rabbit spinal cord tracts. Mechírová E, et al. **Folia Morphol (Praha)** 1988; 36(4):381–94

Spinal cord softenings of identifiable cause: anatomical and clinical features. Stoehr R, et al. **Ital J Neurol Sci** 1988 Aug;9(4):369–73

Retrograde pyramidal tract degeneration in a patient with cervical haematomyelia. Yamamoto T, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):382–6

The presence of lymphocytes in a toxically induced demyelinating process of the central nervous system. Graça DL. **Microsc Electron Biol Celular** 1988 Jun;12(1):17–21

Percutaneous needle evaluation of intradural extramedullary lesions of the lumbar spine. Castillo M, et al. **Neuroradiology** 1988;30(6):551–5

[An autopsy case of HTLV-I associated myelopathy (HAM)] Furuzono H, et al. **Rinsho Shinkeigaku** 1989 Mar; 29(3):349–54 (Eng. Abstr.) **(Jpn)**

[Ultrastructural changes in the axons of the central nervous system in experimental amyotrophic leukospongiosis] Poleshchuk NN, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):734–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Tibial nerve somatosensory evoked potentials in spinal cord hemisection. Bloom KK, et al. **Am J Phys Med Rehabil** 1989 Apr;68(2):59–65

Loss of evoked potentials during spinal surgery due to spinal cord hemorrhage. Shukla R, et al. **Ann Neurol** 1988 Aug; 24(2):272–5

Effect of transection on the blood-spinal cord barrier of the rat after isolation from descending sources. Noble LJ, et al. **Brain Res** 1989 May 22;487(2):299–310

Somatosensory evoked potentials in a patient with a cervical glioma and syrinx. Kaplan PW, et al. **Electroencephalogr Clin Neurophysiol** 1988 Dec;70(6):563–5

Hand H-reflex and short latency somatosensory evoked potentials (SSEPs): clinical evaluation in patients with cervical cord lesions. Ioku M, et al. **Electromyogr Clin Neurophysiol** 1988 Aug-Oct; 28(6):295–300

Electromyographic responses in leg muscles after electrical stimulation in myelopathy patients with tonic seizures. Nakashima K, et al. **Electromyogr Clin Neurophysiol** 1989 May-Jun;29(4):203–11

The utility of testing tactile perception of direction of scratch as a sensitive clinical sign of posterior column dysfunction in spinal cord disorders. Hankey GJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):395–8

Multimodality evoked potentials in HTLV-I associated myelopathy. Kakigi R, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1094–6

Central motor and sensory conduction in adrenoleukomyeloneuropathy, cerebrotendinous xanthomatosis, HTLV-1-associated myelopathy and tabes dorsalis. Ugawa Y, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1069–74

Use of somatosensory evoked potentials for intraoperative monitoring of cerebral and spinal cord function. Nuwer MR. **Neurol Clin** 1988 Nov;6(4):881–97 (46 ref.)

[Intradermal epidermoid cysts as a cause of refractory back pain in children] Heiskanen I, et al. **Duodecim** 1988; 104(21):1694–8 **(Fin)**

[Singular clinical form of intramedullary cavity revealed by a loss of proprioceptive sensation in the upper limbs] Penisson-Besnier I, et al. **Rev Neurol (Paris)** 1989; 145(2):148–51 (Eng. Abstr.) **(Fre)**

[Neurological causes of pain in the extremities] Ludin HP. **Schweiz Rundsch Med Prax** 1988 Sep 6;77(36):939–44 (Eng. Abstr.) **(Ger)**

[Autonomic functions in human T-lymphotropic virus type-I (HTLV-1) associated myelopathy] Senda Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):839–41 **(Jpn)**

[Scapular winging in cervical spondylotic myelopathy] Ando T, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1171–7 (Eng. Abstr.) **(Jpn)**

[Central sensory and motor conduction in adrenoleukodystrophy (ALD), cerebrotendinous xanthomatosis (CTX), HTLV-1-associated myelopathy (HAM) and tabes dorsalis] Ugawa Y, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):819–27 (Eng. Abstr.) **(Jpn)**

[Clinico-electromyographic indicators in patients with ischemic myelopathy] Sheludchenko FI, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):51–5 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[A clinical study on intra-operative spinal cord monitoring with spinal evoked potentials for scoliosis] Imai K. **Nippon Seikeigeka Gakkai Zasshi** 1988 May;62(5):511–21 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Symptomatic meningeal diverticula of the sacral nerve roots in a girl. A case report. Maiuri F, et al. **Acta Neurol (Napoli)** 1989 Feb;11(1):46–50

Intraspinal air: a CT finding of epidural abscess. Kirzner H, et al. **AJR** 1988 Dec;151(6):1217–8

Pseudolesion with nonionic contrast myelography. Poe BM, et al. **Comput Med Imaging Graph** 1988 Sep-Oct; 12(5):267–9

Iotrol: a new contrast medium for the subarachnoid space. Our clinical experience in myelography. Carella A, et al. **J Neuroradiol** 1988;15(4):373–80 **(Eng, Fre)**

[Spinal and sacro-iliac ankylosis suggesting ankylosing spondyloarthritis in progressive ossifying myositis (letter)] Crouzet J, et al. **Rev Rhum Mal Osteoartic** 1988 Nov; 55(11):966–7 **(Fre)**

[Arachnoid cysts: radiographic aspects. Presentation of 2 cases] Ravazzolo G, et al. **Chir Organi Mov** 1988 Apr-Jun; 73(2):157–60 (Eng. Abstr.) **(Ita)**

[Radiculography in the polyclinic] Eldevik P. **Tidsskr Nor Laegeforen** 1989 Mar 30;109(9):939 **(Nor)**

REHABILITATION

[Current problems of the rehabilitative therapy of diseases of the peripheral nervous system and spinal cord in spinal pathology] Strelkova NI. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep-Oct;(5):1–7 **(Rus)**

SURGERY

Proceedings of the 8th European Congress of Neurosurgery. Vol. 2: Spinal cord and spine pathologies. Basic research in neurosurgery. Barcelona, September 6-11, 1987. **Acta Neurochir Suppl (Wien)** 1988;43:1–213

The surgical management of cervical spondylotic radiculopathy and myelopathy. Herkowitz HN. **Clin Orthop** 1989 Feb;(239):94–108

Magnetic resonance imaging in patients with progressive myelopathy following spinal surgery. Avrahami E, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):176–81

Monitoring of short-latency somatosensory evoked potentials during surgery for cervical cord and posterior fossa lesions—changes in subcortical components. Urasaki E, et al. **Neurol Med Chir (Tokyo)** 1988 Jun;28(6):546–52

Noninvasive motor evoked potential monitoring during neurosurgical operations on the spinal cord. Zentner J. **Neurosurgery** 1989 May;24(5):709–12

The surgical management of cervical spinal stenosis, spondylosis, and myeloradiculopathy by means of the posterior approach. Epstein JA. **Spine** 1988 Jul;13(7):864–9

Surgical treatment for symptomatic spinal adhesive arachnoiditis. Shikata J, et al. **Spine** 1989 Aug;14(8):870–5

[Pneumonia as a postoperative complication in neurosurgery] Friedrich P. **Psychiatr Neurol Med Psychol Beih** 1988; 40:109–11 **(Ger)**

[A case of spinal arachnoid cyst associated with vascular anomaly and repeated transient paraparesis after surgery] Takeichi Y, et al. **Nippon Geka Hokan** 1988 Jul 1; 57(4):309–15 (Eng. Abstr.) **(Jpn)**

[Transthoracic approaches to the lesions of thoracic cord and thoracic vertebrae] Hanakita J, et al. **No Shinkei Geka** 1988 Jun;16(7):837–43 (Eng. Abstr.) **(Jpn)**

THERAPY

Percutaneous balloon myelotomy for treatment of hydromyelia: technical note. McConnell JR, et al. **AJNR** 1988 Sep;9(5):875–7

Update on interventional neuroradiology. Viñuela F, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):23–33 (73 ref.)

Management of spinal dural arteriovenous malformations. Morgan MK, et al. **J Neurosurg** 1989 Jun;70(6):832–6

Treatment of spontaneous cerebrospinal fluid leak with epidural blood patch. Case report. Rupp SM, et al. **J Neurosurg** 1989 May;70(5):808–10

Human T-lymphotropic virus type I(HTLV-I) associated myelopathy in Nagasaki: clinical features and treatment of 21 cases. Matsuo H, et al. **Jpn J Med** 1989 May-Jun; 28(3):328–34 (29 ref.)

Plasmapheresis in treatment of human T-lymphotropic virus type-I associated myelopathy. Matsuo H, et al. **Lancet** 1988 Nov 12;2(8620):1109–13

Long-term follow-up of immunomodulation in treatment of HTLV-I-associated myelopathy [letter] Matsuo H, et al. **Lancet** 1989 Apr 8;1(8641):790

Halo-body jacket immobilization in rheumatoid arthritis patients with cervical myelopathy. Nazaroff KS, et al. **Nurs Clin North Am** 1989 Mar;24(1):209–23

Transplantation of fetal spinal cord tissue into acute and chronic hemisection and contusion lesions of the adult rat spinal cord. Reier PJ, et al. **Prog Brain Res** 1988;78:173–9

Heliox treatment for spinal decompression sickness following air dives. Douglas JD, et al. **Undersea Biomed Res** 1988 Jul;15(4):315–9

[Clinical neurophysiology in intensive care neurology—current status of development] Zettler H, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:87–8 **(Ger)**

VETERINARY

Poliomyelomalacia, pancreatic necrosis, and cerebellar malacia in turkey poults. Frank RK, et al. **Avian Dis** 1988 Jul-Sep;32(3):574–82

Plasma and liver copper values in horses with equine degenerative myeloencephalopathy. Dill SG, et al. **Can J Vet Res** 1989 Jan;53(1):29–32

Distracted cervical spinal fusion for management of caudal cervical spondylomyelopathy in large-breed dogs. Ellison GW, et al. **J Am Vet Med Assoc** 1988 Aug 15;193(4):447–53

Intraspinal epidermoid cyst in a dog. Tomlinson J, et al. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1435–6

Equine degenerative myeloencephalopathy: a vitamin E deficiency that may be familial. Mayhew IG, et al. **J Vet Intern Med** 1987 Jan-Mar;1(1):45–50

SPINAL CORD INJURIES

Head and neck injuries. **Clin Sports Med** 1987 Jan;6(1):1–222

Acute spinal cord injury. **Crit Care Clin** 1987 Jul;3(3):441–697

Autonomic hyperreflexia, cesarean section and anesthesia. A case report. Brian JE Jr, et al. **J Reprod Med** 1988 Jul; 33(7):645–8

A piece of my mind. Come follow me. Profeta LM. **JAMA** 1988 Oct 21;260(15):2276

Pathogenesis of spinal cord injury and newer treatments. A review. Janssen L, et al. **Spine** 1989 Jan;14(1):23–32 (140 ref.)

BLOOD

Toxicology screening in acute spinal cord injury. Heinemann AW, et al. **Alcoholism (NY)** 1988 Dec;12(6):815–9

Rhythms of serum melatonin in patients with spinal lesions at the cervical, thoracic or lumbar region. Li Y, et al. **Clin Endocrinol (Oxf)** 1989 Jan;30(1):47–56

CEREBROSPINAL FLUID

Early changes in cerebrospinal fluid Ca2+ and FFA levels following experimental spinal cord injury. Fernandez E, et al. **Neurol Res** 1988 Jun;10(2):66–8

CLASSIFICATION

Classification of acute spinal cord injury, neurological evaluation, and neurosurgical considerations. Maroon JC, et al. **Crit Care Clin** 1987 Jul;3(3):655–77 (121 ref.)

COMPLICATIONS

Diencephalic syndrome following cervical spinal cord trauma. Iob I, et al. **Acta Neurochir (Wien)** 1989;

97(3–4):123–7
Altered ventricular repolarization in central sympathetic dysfunction associated with spinal cord injury. Lehmann KG, et al. **Am J Cardiol** 1989 Jun 15;63(20):1498–504
Heterotopic ossification pseudophlebitis. Yarkony GM, et al. **Am J Med** 1989 Sep;87(3):342–4
An unusual presentation of gluteal hematoma during anticoagulation therapy for deep venous thrombosis in spinal cord injury. Balmaseda MT Jr, et al. **Am J Phys Med Rehabil** 1988 Dec;67(6):261–3
Autonomic hyperreflexia in spinal cord injured patients during extracorporeal shock wave lithotripsy. Stowe DF, et al. **Anesth Analg** 1989 Jun;68(6):788–91
Quadriplegia from spinal cord injury in muscular dystrophy. Bloom KK, et al. **Arch Phys Med Rehabil** 1989 Aug; 70(8):642–3
Closed head injury in acute traumatic spinal cord injury: incidence and risk factors. Davidoff G, et al. **Arch Phys Med Rehabil** 1988 Oct;69(10):869–72
Burns after spinal cord injury. Formal C, et al. **Arch Phys Med Rehabil** 1989 May;70(5):380–1
Pyuria: its relationship to bacteriuria in spinal cord injured patients on intermittent catheterization. Gribble MJ, et al. **Arch Phys Med Rehabil** 1989 May;70(5):376–9
Risk factors for heterotopic ossification in spinal cord injury. Lal S, et al. **Arch Phys Med Rehabil** 1989 May;70(5):387–90
Collagen metabolite excretion as a predictor of bone- and skin-related complications in spinal cord injury. Rodriguez GP, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):442–4
Management of reflex sweating in spinal cord injured patients. Staas WE Jr, et al. **Arch Phys Med Rehabil** 1989 Jul;70(7):544–6
Urinary tract infection in spinal cord injury. Stover SL, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):47–54 (50 ref.)
Myoclonus in a patient with spinal cord transection. Possible involvement of the spinal stepping generator. Bussel B, et al. **Brain** 1988 Oct;111 (Pt 5):1235–45
Postcordotomy spontaneous dysesthesias in macaques: recurrence after spinal cord transection. Levitt M. **Brain Res** 1989 Feb 27;481(1):47–56
Spinal traumas: some postoperative complications in experimental animals. Das GD, et al. **Brain Res Bull** 1989 Jan;22(1):33–7
Management of life-threatening bradycardia in spinal cord injury. Abd AG, et al. **Chest** 1989 Mar;95(3):701–2
Resection of heterotopic ossification in patients with spinal cord injuries. Garland DE, et al. **Clin Orthop** 1989 May; (242):169–76
Spinal cord insults and heterotopic ossification in the pediatric population. Garland DE, et al. **Clin Orthop** 1989 Aug;(245):303–10
Management of spinal cord injury in the critical care setting. McVicar JP, et al. **Crit Care Clin** 1986 Oct;2(4):747–58 (62 ref.)
Evaluation of diagnostic criteria for bacteriuria in acutely spinal cord injured patients undergoing intermittent catheterization. Gribble MJ, et al. **Diagn Microbiol Infect Dis** 1988 Apr;9(4):197–206
Anejaculation following spinal cord injury does not induce sperm-agglutinating antibodies. Dahlberg A, et al. **Int J Androl** 1989 Feb;12(1):17–21
Lowering of maximum urethral pressure by (D-Met2, Pro5)-enkephalinamide in patients with neurogenic vesicourethral dysfunction due to spinal cord injury. Vaidyanathan S, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Feb;27(2):92–5
Long-term colonization of spinal cord injury patients with Klebsiella pneumoniae. Montgomerie JZ, et al. **J Clin Microbiol** 1989 Jul;27(7):1613–6
Autonomic hyperreflexia, cesarean section and anesthesia. A case report. Brian JE Jr, et al. **J Reprod Med** 1988 Jul; 33(7):645–8
Syndrome of intramedullary gunshot wound with incomplete neurologic deficit: case report. Hubschmann OR, et al. **J Trauma** 1988 Nov;28(11):1600–2
Disseminated intravascular coagulation associated with spinal cord laceration: a case report. Miller JD, et al. **J Trauma** 1989 Aug;29(8):1178–9
Bladder hypocompliance in the spinal cord injury population. Hackler RH, et al. **J Urol** 1989 Jun;141(6):1390–3
Re: Predictive criteria for failed sphincterotomy in spinal cord injury patients [letter] Zeidman EJ. **J Urol** 1988 Dec; 140(6):1554
Confirmation by magnetic resonance imaging of Bell's cruciate paralysis in a young child with Chiari type I malformation and minor head trauma. Erlich V, et al. **Neurosurgery** 1989 Jul;25(1):102–5
Electrophrenic respiration in patients with high quadriplegia. Sharkey PC, et al. **Neurosurgery** 1989 Apr;24(4):529–35
Comparing chronic pain from spinal cord injury to chronic pain of other origins. Cohen MJ, et al. **Pain** 1988 Oct; 35(1):57–63
The reflex sympathetic dystrophy syndrome associated with traumatic myelopathy: report of 5 cases. Cremer SA, et al. **Pain** 1989 May;37(2):187–92
Effects of bethanechol and adreno-blockers on thermoregulation in spinal cord injury. Berard EJ, et al. **Paraplegia** 1989 Feb;27(1):46–50
A case of post-traumatic syringomyelia. Neuropathological findings after 1 year of cystic drainage. Foo D, et al. **Paraplegia** 1989 Feb;27(1):63–9
Minitracheotomy in the early respiratory management of patients with spinal injuries. Gupta A, et al. **Paraplegia** 1989 Aug;27(4):269–77
Lower limb fractures in the chronic spinal cord injured patient. Ingram RR, et al. **Paraplegia** 1989 Apr;27(2):133–9
The clinical features of spasms in patients with a cervical cord injury. Kawamura J, et al. **Paraplegia** 1989 Jun; 27(3):222–6
Significance of spinal cord swelling in the prognosis of acute cervical spinal cord injury. Koyanagi I, et al. **Paraplegia** 1989 Jun;27(3):190–7
Nutritional support: a prophylaxis against stress bleeding after spinal cord injury. Kuric J, et al. **Paraplegia** 1989 Apr; 27(2):140–5
Long-term follow-up of spinal cord injury patients with vesicoureteral reflux [letter] Lindan R. **Paraplegia** 1988 Oct; 26(5):359
Pyomyositis in spinal cord injury patients. Midha M, et al. **Paraplegia** 1989 Aug;27(4):302–6
Reflex changes induced by clonidine in spinal cord injured patients. Nance PW, et al. **Paraplegia** 1989 Aug; 27(4):296–301
Acute intermittent arteriomesenteric occlusion of the duodenum (AIAOD) may rarely occur in SCI patients [letter] Ungar GH. **Paraplegia** 1989 Aug;27(4):321–2
The prevalence of hypertension, ischaemic heart disease and diabetes in traumatic spinal cord injured patients and amputees. Yekutiel M, et al. **Paraplegia** 1989 Feb; 27(1):58–62
Continuous monitoring of detrusor pressure in patients with a reflex urinary bladder after spinal cord injury. Thyberg M, et al. **Scand J Rehabil Med** 1989;21(2):115–21
Vesicourethral dysfunction in spinal cord injury and its management. Fam B, et al. **Semin Neurol** 1988 Summer; 8(2):150–5 (31 ref.)
Femoral obturator and sciatic neurectomy with iliacus and psoas muscle section for spasticity following spinal cord injury. Benzel EC, et al. **Spine** 1988 Aug;13(8):905–8
Acro-osteolysis of the fingers in a spinal cord injury patient. A case report. Marmolya G, et al. **Spine** 1989 Jan; 14(1):137–9
Infected Charcot spine following spinal cord injury. Mikawa Y, et al. **Spine** 1989 Aug;14(8):892–5
Renal calculi in spinal cord-injured patient: association with reflux, bladder stones, and foley catheter drainage. Hall MK, et al. **Urology** 1989 Sep;34(3):126–8
Posttraumatic syringomyelia. La Haye PA, et al. **West J Med** 1988 Jun;148(6):657–63
Central cervical spinal cord syndrome due to minor hyperextension injury. Peterson DI, et al. **West J Med** 1989 Jun;150(6):691–4
[Rehabilitation outcome of neurogenic bladder in lower spinal cord injured patients] Cheng PT, et al. **Chang Keng I Hsueh** 1988 Jun;11(2):116–9 (Eng. Abstr.) (Chi)
[Urologic findings after spinal injuries] Hanuš T, et al. **Rozhl Chir** 1988 Oct;67(10):645–53 (Eng. Abstr.) (Cze)
[Urologic examination and treatment of patients with acute injuries of the spinal medulla] Jeppesen LJ, et al. **Ugeskr Laeger** 1989 Aug 7;151(32):2019–21 (Eng. Abstr.) (Dan)
[Venous thrombosis in spinal and spinal cord injuries] Myllynen P, et al. **Duodecim** 1988;104(14):1059–62 (15 ref.) (Fin)
[Thoracolumbar or sacral epidural administration of clonidine in deafferentation pain: possibilities, limits and long-term follow-up] Farcot JM, et al. **Agressologie** 1989 Mar; 30(3):139–42 (Eng. Abstr.) (Fre)
[Thorburn's posture. A sign of lesion of the cervical cord] Renault F, et al. **Arch Fr Pediatr** 1989 Apr;46(4):273–5 (Eng. Abstr.) (Fre)
[The status of intermittent self catheterization in the long-term management of paraplegic patients] Göcking K, et al. **Z Urol Nephrol** 1988 Sep;81(9):575–80 (Eng. Abstr.) (Ger)
[Surgical interventions in the rehabilitation of the tetraplegic arm caused by vertebro-spinal cord injuries: general principles and critical review of various clinical cases] Costa P, et al. **Chir Organi Mov** 1988 Oct–Dec;73(4):351–5 (Eng. Abstr.) (Ita)
[Primary cancer of the vesical diverticulum in a patient with spinal cord injury: report of a case] Hayashi Y, et al. **Hinyokika Kiyo** 1989 Apr;35(4):675–9 (20 ref.) (Eng. Abstr.) (Jpn)
[Bladder deformity in traumatic spinal cord injury patients] Ogawa T, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1173–8 (Eng. Abstr.) (Jpn)
[Urinary N-acetyl-beta-D-glucosaminidase activity in acute pyelonephritis patients with spinal cord injuries] Uozumi J, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jan; 80(1):54–8 (Eng. Abstr.) (Jpn)
[Various therapeutic problems of patients with quadriplegia caused by "high" injury of the spinal cord in the cervical segment of the spine] Kiwerski J, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(5):362–7 (Eng. Abstr.) (Pol)
[Acute appendicitis in a patient with a traumatic break of the spinal cord] Bil'chuk AV, et al. **Klin Khir** 1988;(12):52–3 (Rus)
[Pathogenetic therapy of traumatic diseases of the spinal cord] Murashkina LV, et al. **Sov Med** 1989;(5):41–4 (47 ref.) (Rus)
[Electrophysiologic assessment of the spastic syndrome in patients with a traumatic lesion of the spinal cord] Beliaev VI. **Zh Nevropatol Psikhiatr** 1988;88(6):91–3 (Eng. Abstr.) (Rus)
[Urethral diverticulum. Complication in males with spinal cord lesions] Conejero Sugrañes J, et al. **Arch Esp Urol** 1989 Mar;42(2):132–7 (Eng. Abstr.) (Spa)

CONGENITAL

Congenital spinal cord haemangioblastoma: another cause of spinal cord section syndrome in the newborn. Roig M, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1091–3

DIAGNOSIS

Cervical spinal cord injury after traumatic breech delivery. Castillo M, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S99
MR imaging of spinal cord avulsion. Mathis JM, et al. **AJNR** 1988 Nov–Dec;9(6):1232–3
Use of titanium wire in cervical spine fixation as a means to reduce MR artifacts. Mirvis SE, et al. **AJNR** 1988 Nov–Dec;9(6):1229–31
Magnetic resonance imaging in amateur boxers. Jordan BD, et al. **Arch Neurol** 1988 Nov;45(11):1207–8
Management of acute spinal cord injury. Torres H, et al. **Chic Med Sch Q** 1970;30(1):12–22 (0 ref.)
Problems in writing injury assessment reports. Part III: Spinal injury and paraplegia: the third of a series. Hicks A. **East Afr Med J** 1988 Dec;65(12):862–6
MR imaging of the spine in children. Duthoy MJ, et al. **Eur J Radiol** 1988 Aug;8(3):188–95
Extension injuries of the neck [editorial] London PS. **Injury** 1987 Jul;18(4):223
Somatosensory evoked potentials for orthopaedic spine trauma. Bennett HL, et al. **J Orthop Trauma** 1989;3(1):11–8
Magnetic resonance imaging of acute spinal cord trauma: preliminary report. Cotler HB, et al. **J Orthop Trauma** 1988; 2(1):1–4
Identification of acute posttraumatic spinal cord cyst by magnetic resonance imaging: a case report and review of the literature. Gabriel KR, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):710–4
Thoracic spine injuries in victims of motorcycle accidents. Kupferschmid JP, et al. **J Trauma** 1989 May;29(5):593–6
Magnetic resonance imaging in acute spinal cord trauma. Kalfas I, et al. **Neurosurgery** 1988 Sep;23(3):295–9
Cervical spinal cord injury: the correlations of initial clinical features and blood gas analyses with early prognosis. Myllynen P, et al. **Paraplegia** 1989 Feb;27(1):19–26
1.5 tesla magnetic resonance imaging of acute spinal trauma. Kulkarni MV, et al. **Radiographics** 1988 Nov;8(6):1059–82
Clinical presentation of spinal cord concussion. Del Bigio MR, et al. **Spine** 1989 Jan;14(1):37–40
[Function of the affected cervical spine in head injuries] Mager JA, et al. **Rozhl Chir** 1989 Jun;68(6):431–8 (Eng. Abstr.) (Cze)
[Neonatal spinal cord injuries and magnetic resonance imaging] Bloom MC, et al. **Arch Fr Pediatr** 1988 Dec; 45(10):823–5 (Eng. Abstr.) (Fre)
[Magnetic resonance imaging of spinal cord injury—observation of cyst formation] Shakudo M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1475–7 (Eng. Abstr.) (Jpn)
[MRI findings of cervical cord injury. A case report of long-term follow-up] Iida T, et al. **No Shinkei Geka** 1988 Dec;16(13):1501–4 (Eng. Abstr.) (Jpn)

DRUG THERAPY

Spinal cord injury in rats: inability of nimodipine or anti-neutrophil serum to improve spinal cord blood flow or neurologic status. Holtz A, et al. **Acta Neurol Scand** 1989 Jun;79(6):460–7
TRH and diseases of the motor system. Munsat TL, et al. **Ann N Y Acad Sci** 1989;553:388–98 (79 ref.)
Effects of BW755C, a mixed cyclo-oxygenase-lipoxygenase inhibitor, following traumatic spinal cord injury in rats. Faden AI, et al. **Brain Res** 1988 Oct 25;463(1):63–8
TRH analog YM-14673 improves outcome following traumatic brain and spinal cord injury in rats: dose-response studies. Faden AI. **Brain Res** 1989 May 8;486(2):228–35
Neuroprotective effect of MK-801 and U-50488H after contusive spinal cord injury. Gómez-Pinilla F, et al. **Exp Neurol** 1989 May;104(2):118–24
N-methyl-D-aspartate antagonist MK801 improves outcome following traumatic spinal cord injury in rats: behavioral, anatomic, and neurochemical studies. Faden AI, et al. **J Neurotrauma** 1988;5(1):33–45
New pharmacological treatment of acute spinal cord trauma. Hall ED, et al. **J Neurotrauma** 1988;5(1):81–9 (30 ref.)
Effects of methyl prednisolone, dimethyl sulphoxide and naloxone in experimental spinal cord injuries in rats. Zileli M, et al. **Neurol Res** 1988 Dec;10(4):232–5
Effect of hetastarch, mannitol, and phenylephrine on spinal cord blood flow following experimental spinal injury. Dyste GN, et al. **Neurosurgery** 1989 Feb;24(2):228–35
Prostaglandin derivative PGBx improves neurologic recovery after ischemic spinal injury. Jacobs TP, et al. **Pharm Res** 1987 Apr;4(2):130–2

ECONOMICS

Costs of spinal cord injury in Australia. Walsh J. **Paraplegia** 1988 Dec;26(6):380–8

A new approach to catastrophic injury: spinal cord injury patients. Weingarden SI, et al. **Paraplegia** 1989 Aug; 27(4):314–8

EPIDEMIOLOGY

Unstable cervical spine injuries in rugby—a 20-year review. Williams P, et al. **Injury** 1987 Sep;18(5):329–32
The incidence of injury to the cervical spine in patients with craniocerebral injury. O'Malley KF, et al. **J Trauma** 1988 Oct;28(10):1476–8
A prospective study on acute spinal injuries. Zileli M, et al. **Neurosurg Rev** 1989;12(2):107–13
The disease pattern and causes of death of spinal cord injured patients in Japan. Nakajima A, et al. **Paraplegia** 1989 Jun; 27(3):163–71
A retrospective study on traumatic spinal cord injury in Beijing (1982–1986). Wang SQ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(2):113–5
Rugby injuries of the cervical spine and spinal cord—has the situation improved? Scher AT. **S Afr Med J** 1989 Jul 15;76(2):46
[Injuries of the cervical segment of the spinal cord in alcoholic intoxication. Preliminary report] Kiwerski J, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):14–9 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Neuroimaging of scuba diving injuries to the CNS. Warren LP Jr, et al. **AJR** 1988 Nov;151(5):1003–8
Tiger mauling: fatal spinal injury. Kohout MP, et al. **Aust N Z J Surg** 1989 Jun;59(6):505–6
Cervical spine injuries in road traffic crashes [editorial] Yeo JD. **Aust N Z J Surg** 1989 Jan;59(1):3
Unusual trauma to spinal cord: case presentation. Rifkinson N, et al. **Bol Asoc Med P R** 1989 Apr;81(4):139–40
Delayed neurological sequelae of high-tension electrical burns. Koller J, et al. **Burns** 1989 Jun;15(3):175–8
Rugby injuries of the spine and spinal cord. Scher AT. **Clin Sports Med** 1987 Jan;6(1):87–99
Extension injuries of the cervical spine resulting in tetraplegia. McMillan BS, et al. **Injury** 1987 Jul; 18(4):224–33
Histopathological changes in the spinal cord after 434 MHz microwave hyperthermia in the cervical region of the rat. Sminia P, et al. **Int J Hyperthermia** 1989 Jan–Feb; 5(1):85–98
Graded spinal cord injuries produced in rabbits with non-invasive microwave hyperthermia. Sutton CH. **J Am Paraplegia Soc** 1988 Jul–Oct;11(2):41–9
Spinal cord injury in newborns from use of umbilical artery catheters: report of two cases and a review of the literature. Brown MS, et al. **J Perinatol** 1988 Spring;8(2):105–10 (19 ref.)
Diving: occupation or physiological experiment? [editorial] Cox RA. **J R Soc Med** 1989 Feb;82(2):63
A freak accidental injury to the spinal cord. Koh KB, et al. **Med J Malaysia** 1988 Sep;43(3):246–9
Complications of fractures of the cervical spine in ankylosing spondylitis. Broom MJ, et al. **Spine** 1988 Jul;13(7):763–6
An experimental study on spinal cord traction effect. Fujita Y, et al. **Spine** 1989 Jul;14(7):698–705
Gunshot wounds to the spine associated with a perforated viscus. Roffi RP, et al. **Spine** 1989 Aug;14(8):808–11
The chronic local effects of subliminar wires. An animal model. Schrader WC, et al. **Spine** 1988 May;13(5):499–502
Spinal cord damage caused by rotation of a T-drain in a patient with syringoperitoneal shunt. Wester K, et al. **Surg Neurol** 1989 Mar;31(3):224–7
[Reaction of the nervous system to ionizing radiation (review of the literature)] Gus'kova AK, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):138–42 (25 ref.) **(Rus)**

HISTORY

Contributions by Brown-Séquard on spinal cord trauma and pathology. Andrés F. **Brain Res Bull** 1989 Jan;22(1):3–5

METABOLISM

Metabolic changes in rabbit spinal cord after trauma: magnetic resonance spectroscopy studies. Vink R, et al. **Ann Neurol** 1989 Jan;25(1):26–31
A model of radiation myelopathy in the rat. Pathology, regional capillary permeability changes and treatment with dexamethasone. Delattre JY, et al. **Brain** 1988 Dec;111 (Pt 6):1319–36
Distribution and time course of protein extravasation in the rat spinal cord after contusive injury. Noble LJ, et al. **Brain Res** 1989 Mar 13;482(1):57–66
Prodynorphin gene expression in spinal cord is enhanced after traumatic injury in the rat. Przewlocki R, et al. **Brain Res** 1988 Aug;464(1):37–41
Traumatic spinal cord injury in rabbits decreases intracellular free magnesium concentration as measured by 31P MRS. Vink R, et al. **Brain Res** 1989 Jun 19;490(1):144–7
Clinical pharmacokinetics in patients with spinal cord injuries. Segal JL, et al. **Clin Pharmacokinet** 1989 Aug; 17(2):109–29 (69 ref.)
Laminin distribution during corticospinal tract development and after spinal cord injury. Sosale A, et al. **Exp Neurol** 1988 Oct;102(1):14–22
Effect of impact trauma on neurotransmitter and nonneurotransmitter amino acids in rat spinal cord. Demediuk P, et al. **J Neurochem** 1989 May;52(5):1529–36
Changes in free fatty acids, phospholipids, and cholesterol following impact injury to the rat spinal cord. Demediuk P, et al. **J Neurosci Res** 1989 May;23(1):95–106
Spinal cord injury and the stress protein response. Gower DJ, et al. **J Neurosurg** 1989 Apr;70(4):605–11
Spinal cord sodium, potassium, calcium, and water concentration changes in rats after graded contusion injury. Kwo S, et al. **J Neurotrauma** 1989 Summer;6(1):13–24
Cellular and molecular recovery responses. Lucas JH, et al. **J Neurotrauma** 1988;5(3):223–5
Comparison of urinary urea nitrogen excretion and measured energy expenditure in spinal cord injury and nonsteroid-treated severe head trauma patients. Kolpek JH, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun; 13(3):277–80
Bone mineral content of the lumbar spine and lower extremities years after spinal cord lesion. Biering-Sørensen F, et al. **Paraplegia** 1988 Oct;26(5):293–301
Biochemical changes in skin composition in spinal cord injury: a possible contribution to decubitus ulcers. Rodriguez GP, et al. **Paraplegia** 1988 Oct;26(5):302–9
Leukotrienes in experimental spinal cord injury. Moreland DB, et al. **Surg Neurol** 1989 Apr;31(4):277–80
[Disorders of metabolism and their pathogenesis in patients with spinal cord injuries] Sytin LV, et al. **Ortop Travmatol Protez** 1989 May;(5):16–8 **(Rus)**

MICROBIOLOGY

The effects of antiperspirant on the perineal skin flora of patients with spinal cord injury. Montgomerie JZ, et al. **J Hosp Infect** 1988 Jul;12(1):43–9

MORTALITY

Cause of death for patients with spinal cord injuries. DeVivo MJ, et al. **Arch Intern Med** 1989 Aug;149(8):1761–6
Initial factors predicting survival in patients with a spinal cord injury. Daverat P, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):403–6

NURSING

Nursing consideration in acute spinal cord injury. Reed MA. **Crit Care Clin** 1987 Jul;3(3):679–91 (22 ref.)
Sexuality and spinal cord injury. Goddard LR. **J Neurosci Nurs** 1988 Aug;20(4):240–4 (20 ref.)
Management of spasticity in spinal cord injury: nursing concerns. Pettibone KA. **J Neurosci Nurs** 1988 Aug; 20(4):217–22 (14 ref.)
Sexual counseling standards for the spinal cord-injured. Spica MM. **J Neurosci Nurs** 1989 Feb;21(1):56–60

PATHOLOGY

Transsynaptic degeneration of motoneurones caudal to spinal cord lesions. Eidelberg E, et al. **Brain Res Bull** 1989 Jan; 22(1):39–45
A technique for necropsy evaluation of stenosis of the foramen magnum and rostral spinal canal in osteochondrodysplasia. Knisely AS, et al. **Hum Pathol** 1988 Dec;19(12):1372–5
An investigation of possible transynaptic neuronal degeneration in human spinal cord injury. Kaelan C, et al. **J Neurol Sci** 1988 Sep;86(2–3):231–7
Demyelination in spinal cord injury. Waxman SG. **J Neurol Sci** 1989 Jun;91(1–2):1–14 (74 ref.)
Cellular changes during repair of a cryogenic spinal cord injury in the rat: an electron microscopic study. West NR, et al. **J Neuropathol Exp Neurol** 1989 Jan;48(1):94–108
Adrenergic innervation of the striated muscle of the intrinsic external urethral sphincter from patients with lower motor spinal cord lesion. Crowe R, et al. **J Urol** 1989 Jan; 141(1):47–9
[Experimental observations on spinal cord injury produced by electrifying the vessels of the cord in dogs] Zheng WJ. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):52–4, 63 (Eng. Abstr.) **(Chi)**
[Unusual suicide caused by a stab wound in the neck] Klose W, et al. **Arch Kriminol** 1989 May–Jun;183(5–6):157–62 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Tibial nerve somatosensory evoked potentials in spinal cord hemisection. Bloom KK, et al. **Am J Phys Med Rehabil** 1989 Apr;68(2):59–65
Lower extremity manifestations of spasticity in chronic spinal cord injury. Little JW, et al. **Am J Phys Med Rehabil** 1989 Feb;68(1):32–6
Urethral responses to sacral stimulation in chronic spinal dog. Walter JS, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R284–91
The effect of fentanyl anesthesia and intrathecal naloxone on neurologic outcome following spinal cord injury in the rat. Cole DJ, et al. **Anesthesiology** 1989 Sep;71(3):426–30
Thyrotropin-releasing hormone and central nervous system trauma. Faden AI, et al. **Ann N Y Acad Sci** 1989;553:380–4 (23 ref.)
Nutritional status during the acute stage of spinal cord injury. Laven GT, et al. **Arch Phys Med Rehabil** 1989 Apr; 70(4):277–82
Spasticity in spinal cord injured patients: 2. Initial measures and long-term effects of surface electrical stimulation. Robinson CJ, et al. **Arch Phys Med Rehabil** 1988 Oct; 69(10):862–8
Lack of relationship of conus reflexes to bladder function after spinal cord injury. Lucas MG, et al. **Br J Urol** 1989 Jan;63(1):24–7
Spinal somatosensory evoked potentials in infants and children with spinal cord lesions. Kamimura N, et al. **Brain Dev** 1988;10(6):355–9
Spinal cord—recent work on trauma and recovery. Papers from a meeting, Paris, France, September 15–17, 1987. **Brain Res Bull** 1989 Jan;22(1):1–172
Effect of 4-aminopyridine on axonal conduction-block in chronic spinal cord injury. Blight AR. **Brain Res Bull** 1989 Jan;22(1):47–52
Nerve fibre regeneration across the PNS-CNS interface at the root-spinal cord junction. Carlstedt T, et al. **Brain Res Bull** 1989 Jan;22(1):93–102
Glial activity during axonal regrowth following cryogenic injury of rat spinal cord. Collins GH, et al. **Brain Res Bull** 1989 Jan;22(1):71–9
Prospects for axonal regrowth in spinal cord injury. Collins GH, et al. **Brain Res Bull** 1989 Jan;22(1):89–92
Spinal cord—recent work on trauma and recovery: introductory comments. Das GD, et al. **Brain Res Bull** 1989 Jan;22(1):1–2
Reactive astrocytes in lesioned rat spinal cord: effect of neural transplants. Predy R, et al. **Brain Res Bull** 1989 Jan; 22(1):81–7
Model for the study of plasticity of the human nervous system: features of residual spinal cord motor activity resulting from established post-traumatic injury. Dimitrijevic MR. **Ciba Found Symp** 1988;138:227–39 (10 ref.)
Biomechanics of spinal cord injury. Bunegin L, et al. **Crit Care Clin** 1987 Jul;3(3):453–70 (86 ref.)
Electrophysiological evaluation of the patient with acute spinal cord injury. Grundy BL, et al. **Crit Care Clin** 1987 Jul;3(3):519–48 (89 ref.)
Urological management in the patient with acute spinal cord injury. O'Donnell WF. **Crit Care Clin** 1987 Jul;3(3):599–617 (36 ref.)
The colon, anorectum, and spinal cord patient. A review of the functional alterations of the denervated hindgut. Longo WE, et al. **Dis Colon Rectum** 1989 Mar;32(3):261–7 (64 ref.)
The relationships among the severity of spinal cord injury, motor and somatosensory evoked potentials and spinal cord blood flow. Fehlings MG, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jul–Aug; 74(4):241–59
"Early" and "late" components of spinal evoked potentials in spinal cord trauma patients. Latash ML. **Electromyogr Clin Neurophysiol** 1988 May;28(4):175–81
Spectral analysis of the electromyogram (EMG) in spinal cord trauma patients: I: Different types of the EMG and corresponding spectra. Latash ML. **Electromyogr Clin Neurophysiol** 1988 Aug–Oct; 28(6):319–27 (27 ref.)
Spectral analysis of the electromyogram (EMG) in spinal cord trauma patients: II. Motor unit and interference EMG power spectra. Latash ML. **Electromyogr Clin Neurophysiol** 1988 Aug–Oct; 28(6):329–34
Body composition of patients with spinal cord injury. Nuhlicek DN, et al. **Eur J Clin Nutr** 1988 Sep;42(9):765–73
Correlative analyses of lesion development and functional status after graded spinal cord contusive injuries in the rat. Noble LJ, et al. **Exp Neurol** 1989 Jan;103(1):34–40
Spinal cord lesions block seizures or delay their onset in myelin-deficient rats: evidence that generalized tonic seizures can be triggered by abnormal spinal cord activity. Rosenbluth J, et al. **Exp Neurol** 1989 Feb;103(2):154–7
Validity of hydrodensitometry for determination of body composition in spinal injured subjects. George CM, et al. **Hum Biol** 1988 Oct;60(5):771–80
Symposium on spinal cord injury models. Presented at the 33rd annual meeting of the American Paraplegia Society. September 1987. **J Am Paraplegia Soc** 1988 Jul–Oct; 11(2):23–58
Mechanical factors in experimental spinal cord injury. Blight A. **J Am Paraplegia Soc** 1988 Jul–Oct;11(2):26–34 (40 ref.)
Impact and balloon compression models of the spinal cord. Hitchon PW, et al. **J Am Paraplegia Soc** 1988 Jul–Oct; 11(2):35–40 (26 ref.)
Axial tension model of spinal cord injury. Myklebust JB, et al. **J Am Paraplegia Soc** 1988 Jul–Oct;11(2):50–5
Neuronal and glial changes in the rat phrenic nucleus occurring within hours after spinal cord injury. Goshgarian HG, et al. **J Comp Neurol** 1989 Jun 22;284(4):519–33
Central axons in injured cat spinal cord recover electrophysiological function following remyelination by Schwann cells. Blight AR, et al. **J Neurol Sci** 1989 Jun; 91(1–2):15–34
The effect of nimodipine and dextran on axonal function and blood flow following experimental spinal cord injury. Fehlings MG, et al. **J Neurosurg** 1989 Sep;71(3):403–16
Regeneration and grafting. Bernstein JJ. **J Neurotrauma** 1988; 5(3):229–34
Strategies to increase nerve cell survival and enhance

recovery after injury. Gilad GM. **J Neurotrauma** 1988; 5(3):227–8

Interaction of contact velocity and cord compression in determining the severity of spinal cord injury. Kearney PA, et al. **J Neurotrauma** 1988;5(3):187–208

Spinal cord contusion in the rat: somatosensory evoked potentials as a function of graded injury. Raines A, et al. **J Neurotrauma** 1988;5(2):151–60

Mechanisms of cellular injury and death. Trump BF, et al. **J Neurotrauma** 1988;5(3):215–8

Secondary CNS injury. Young W. **J Neurotrauma** 1988; 5(3):219–21

Spinal cord lesions at different levels affect either the adrenergic or vasoactive intestinal polypeptide–immunoreactive nerves in the human urethra. Crowe R, et al. **J Urol** 1988 Dec;140(6):1412–4

The effect of early bladder stimulation on spinal shock: a preliminary report. el Rifaei A, et al. **J Urol** 1989 Apr; 141(4):1010–3

Effects of low- and moderate-intensity training in spinal cord–injured persons. Hooker SP, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):18–22

Central dysesthesia syndrome in spinal cord injury patients. Berić A, et al. **Pain** 1988 Aug;34(2):109–16

The sexuality of spinal cord injured women: physiology and pathophysiology. A review. Bérard EJ. **Paraplegia** 1989 Apr;27(2):99–112 (36 ref.)

Reproductive aspects in spinal cord injured males. Beretta G, et al. **Paraplegia** 1989 Apr;27(2):113–8

Bladder–neck opening test in spinal cord injury patients using a new i.v. alpha–blocking agent, alfuzosin. Cramer P, et al. **Paraplegia** 1989 Apr;27(2):119–24

Early prognostic factors for walking in spinal cord injuries. Daverat P, et al. **Paraplegia** 1988 Aug;26(4):255–61

The applied neurobiology of human spinal cord injury: a review. Kakulas A. **Paraplegia** 1988 Dec;26(6):371–9 (60 ref.)

The natural history of neurological recovery in patients with traumatic tetraplegia. Kiwerski J. **Paraplegia** 1989 Feb; 27(1):41–5

Injuries of the conus medullaris. Taylor TK, et al. **Paraplegia** 1988 Dec;26(6):393–400

Periodical, neurological–functional assessment for cervical cord injury. Tominaga S. **Paraplegia** 1989 Jun;27(3):227–36

Analysis of fibrogenic processes in denervated tissues of spinal cord injury patients. Diegelmann RF, et al. **Plast Reconstr Surg** 1989 Feb;83(2):309–14

Biomechanics of nonacute cervical spinal cord trauma. Panjabi M, et al. **Spine** 1988 Jul;13(7):838–42 (13 ref.)

Biomechanical analysis of experimental spinal cord injury and functional loss. Panjabi MM, et al. **Spine** 1988 Dec; 13(12):1365–70

Spinal cord blood flow and systemic blood pressure after experimental spinal cord injury in rats. Guha A, et al. **Stroke** 1989 Mar;20(3):372–7

[Changes in motor evoked potentials in experimental spinal cord injury] Yu CJ. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):257–9, 18 (Eng. Abstr.) **(Chi)**

[A study of sexual function in spinal cord injuries] Takasaka S. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):824–31 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Halothane, fentanyl/nitrous oxide, and spinal lidocaine protect against spinal cord injury in the rat. Cole DJ, et al. **Anesthesiology** 1989 Jun;70(6):967–72

Protection of rat spinal cord against contusion injury by new prostaglandin derivatives. Ohnishi ST, et al. **Arzneimittelforschung** 1989 Feb;39(2):236–9

Protective effect of vitamin E on spinal cord injury by compression and concurrent lipid peroxidation. Iwasa K, et al. **Free Radic Biol Med** 1989;6(6):599–606

The Savannah Head and Spinal Cord Injury Prevention Program. Barch AS, et al. **J Med Assoc Ga** 1989 Jun; 78(6):325–8

The National Head and Spinal Cord Injury Prevention Program. Eyster EF, et al. **J Med Assoc Ga** 1989 Jun; 78(6):333–8

Participation in prevention: the Georgia Head and Spinal Cord Injury Prevention Program. Tillman DC, et al. **J Med Assoc Ga** 1989 Jun;78(6):329–31

Towards the prevention of spinal–cord injury. Hardcastle PH. **Med J Aust** 1988 Nov 21;149(10):552–5 (15 ref.)

Oregon Head and Spinal Cord Injury Prevention Program and evaluation. Neuwelt EA, et al. **Neurosurgery** 1989 Mar; 24(3):453–8

Towards prevention of spinal cord injury: the role of a national register. Wigglesworth EC. **Paraplegia** 1988 Dec; 26(6):389–92

Charybdotoxin improves motor recovery of the rat after spinal cord injury. Ohnishi ST, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):187–91

The Centers for Disease Control program to prevent primary and secondary disabilities in the United States. Houk VN, et al. **Public Health Rep** 1989 May–Jun;104(3):226–31

Variability of somatosensory cortical evoked potential monitoring during spinal surgery. Lubicky JP, et al. **Spine** 1989 Aug;14(8):790–8

[Neurophysiological and biomechanical analysis of a gymnastics accident with high transverse paralysis. An example of a sports medicine research study in the area of prevention of sports accidents] Gebauer D, et al. **Sportverletz Sportschaden** 1987 Apr;1(1):53–8 (Eng. Abstr.) **(Ger)**

[An experimental study on preventive effect of vitamin E in spinal cord injury] Iwasa K, et al. **Nippon Seikeigeka Gakkai Zasshi** 1988 Aug;62(8):767–75 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Spinal cord injury and concomitant traumatic brain injury. Results of a longitudinal investigation. Richards JS, et al. **Am J Phys Med Rehabil** 1988 Oct;67(5):211–6

Sensation–seeking and traumatic spinal cord injury: case–control study. Mawson AR, et al. **Arch Phys Med Rehabil** 1988 Dec;69(12):1039–43

Spinal cord injured adolescents and young adults: the meaning of body changes. Dewis ME. **J Adv Nurs** 1989 May;14(5):389–96

Spinal cord injury and health locus of control beliefs. Frank RG, et al. **Paraplegia** 1989 Aug;27(4):250–6

Body image among 22 persons with acquired and congenital severe mobility impairment. Stensman R. **Paraplegia** 1989 Feb;27(1):27–35

RADIOGRAPHY

Cervical spine injury masquerading as a medical emergency. Barron MM. **Am J Emerg Med** 1989 Jan;7(1):54–6

Radiology of acute spinal trauma. Djang WT. **Crit Care Clin** 1987 Jul;3(3):495–518 (44 ref.)

Traumatic cervical radicular lesions. Boccanera L, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):293–300

Comparison of computerized tomography parameters of the cervical spine in normal control subjects and spinal cord–injured patients. Matsuura P, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):183–8

Clearing the cervical spine: initial radiologic evaluation [letter] **J Trauma** 1988 Nov;28(11):1609–10

Spinal cord injury without radiographic abnormality in children—the SCIWORA syndrome. Pang D, et al. **J Trauma** 1989 May;29(5):654–64

Retained intraspinal bullet—an illustrative case report. Doll M, et al. **Neurosurg Rev** 1989;12(1):67–70

Microangiographic study of spinal cord injury and myelopathy. Shingu H, et al. **Paraplegia** 1989 Jun; 27(3):182–9

Spinal cord birth injury: value of computed tomographic myelography. Adams C, et al. **Pediatr Neurol** 1988 Mar–Apr;4(2):105–9

RADIOTHERAPY

[Characteristics of the effect of a constant electromagnetic field on reparative processes in spinal cord injuries] Tkach EV, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):41–4 (Eng. Abstr.) **(Rus)**

REHABILITATION

Functional electrical stimulation and the rehabilitation of the spinal cord–injured patient. Petrofsky JS. **Adv Clin Rehabil** 1987;1:115–36 (43 ref.)

Mouth stick design for the client with spinal cord injury. Smith R. **Am J Occup Ther** 1989 Apr;43(4):251–5

Rehabilitation technology for standing and walking after spinal cord injury. Jaeger RJ, et al. **Am J Phys Med Rehabil** 1989 Jun;68(3):128–33 (50 ref.)

Rubber band as external assist device to provide simple grip for quadriplegic patients. Pham HN, et al. **Ann Plast Surg** 1988 Aug;21(2):180–2

Pediatric rehabilitation. 3. Disorders of the spinal cord: spinal cord injury, myelodysplasia. Badell A, et al. **Arch Phys Med Rehabil** 1989 May;70(5–S):S170–4 (48 ref.)

Environmental control unit utilization by high–level spinal cord injured patients. McDonald DW, et al. **Arch Phys Med Rehabil** 1989 Aug;70(8):621–3

Synergist erection system in the management of impotence secondary to spinal cord injury. Zasler ND, et al. **Arch Phys Med Rehabil** 1989 Sep;70(9):712–6

Ecological evaluation of a rehabilitative environment for spinal cord injured people: behavioural mapping and feedback. Kennedy P, et al. **Br J Clin Psychol** 1988 Sep; 27 (Pt 3):239–46

Rehabilitation in spinal cord injury. Keppler JP. **Crit Care Clin** 1987 Jul;3(3):637–54

Standing the spinal cord injured patient by electrical stimulation: refinement of a protocol for clinical use. Jaeger RJ, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):720–8

Use of functional electrical stimulation in the rehabilitation of patients with incomplete spinal cord injuries. Bajd T, et al. **J Biomed Eng** 1989 Mar;11(2):96–102

Care of spinal–cord–injured patients after the acute period. Levinson W, et al. **J Gen Intern Med** 1989 Jul–Aug; 4(4):336–48 (72 ref.)

An international track wheelchair with a center of gravity directional controller. Cooper RA. **J Rehabil Res Dev** 1989 Spring;26(2):63–70

Complications of penile prostheses in the spinal cord injury population. Collins KP, et al. **J Urol** 1988 Nov;140(5):984–5

The clinical application of aspiration deoxyribonucleic acid flow cytometry to neurologically impaired men entering an electroejaculation program. Hellstrom WJ, et al. **J Urol** 1989 Aug;142(2):309–12

Inequities/inequalities in the outcome of rehabilitation [letter] Epstein RS, et al. **Md Med J** 1988 Oct;37(10):759

Predictors of rehabilitation outcome among patients with SCI. Epstein RS, et al. **Md Med J** 1989 Jun;38(6):489–92

Education as the key to rehabilitation. Brillhart B, et al. **Nurs Clin North Am** 1989 Sep;24(3):675–80

Massive centrifugal multitrauma resulting in paralysis and limb loss. A report of 4 cases and discussion of the special problems in rehabilitation. Heim M, et al. **Orthop Rev** 1988 Mar;17(3):289–91

The quality of rehabilitation [editorial] Bromley I. **Paraplegia** 1989 Aug;27(4):249

The psychosocial approach to rehabilitation of the spinal cord injured patient. Judd FK, et al. **Paraplegia** 1988 Dec; 26(6):419–24

Patient and nursing staff perceptions of living and working on a spinal injuries unit. Krishnan KR, et al. **Paraplegia** 1988 Oct;26(5):287–92

Preliminary evaluation of a pressure clinic in a new spinal injuries unit. Rothery FA. **Paraplegia** 1989 Feb;27(1):36–40

Neck breathing: a form of voluntary respiration for the spine–injured ventilator–dependent quadriplegic child. Gilgoff IS, et al. **Pediatrics** 1988 Nov;82(5):741–5

Seat angles and support [letter] DonTigny RL. **Phys Ther** 1989 Jun;69(6):510

Functional electrical stimulation and lower extremity bracing for ambulation exercise of the spinal cord injured individual: a medically prescribed system. Phillips CA. **Phys Ther** 1989 Oct;69(10):842–9

Emission dysfunctions and current modes of treatment in neurogenic male infertility. Sösteen A. **Scand J Urol Nephrol Suppl** 1988;110:59–64

[Rehabilitation of spinal cord injuries] Kannisto M, et al. **Duodecim** 1989;105(2):166–73 (25 ref.) **(Fin)**

[Rehabilitation of patients suffering from closed spinal trauma with damage to the spinal cord] Molchanov VI, et al. **Vrach Delo** 1989 Feb;(2):85–8 (Eng. Abstr.) **(Rus)**

SURGERY

Closure of defects from pressure sores requiring proximal femoral resection. Klein NE, et al. **Ann Plast Surg** 1988 Sep;21(3):246–50

Anesthetic considerations in the patient with acute spinal cord injury. Babinski MF. **Crit Care Clin** 1987 Jul; 3(3):619–36 (66 ref.)

Stabilization procedures in the patient with acute spinal cord injury. Snowdy HA Jr, et al. **Crit Care Clin** 1987 Jul; 3(3):569–97 (68 ref.)

Studies on embryonic transplants to the transected spinal cord of adult rats. Pallini R, et al. **J Neurosurg** 1989 Mar; 70(3):454–62

Neurosurgical intervention in penetrating spinal trauma with associated visceral injury. Venger BH, et al. **J Neurosurg** 1989 Apr;70(4):514–8

Anesthetic management of the patient with spinal cord injury. Porter SS. **Kans Med** 1988 Nov;89(11):299–304 (10 ref.)

Outcome of laminectomy for civilian gunshot injuries of the terminal spinal cord and cauda equina: review of 88 cases. Cybulski GR, et al. **Neurosurgery** 1989 Mar;24(3):392–7

Titanium wire internal fixation for stabilization of injury of the cervical spine: clinical results and postoperative magnetic resonance imaging of the spinal cord. Geisler FH, et al. **Neurosurgery** 1989 Sep;25(3):356–62

Transoral removal of missile fragments from the C1–C2 area: report of four cases. Mangiardi JR, et al. **Neurosurgery** 1988 Aug;23(2):254–7

[Observations on the effect of omental transplantation to the traumatized spinal cord] Ma JK. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):48–51, 62–3 (Eng. Abstr.) **(Chi)**

[Experimental study on the treatment of spinal cord injury with transplantation of the greater omentum] Zheng WJ. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):93–5, 125 (Eng. Abstr.) **(Chi)**

[Fractures of the thoracolumbar spine. Surgical treatment using the Harrington–Luque method] Mosdal C, et al. **Ugeskr Laeger** 1989 Mar 20;151(12):766–70 (Eng. Abstr.) **(Dan)**

[The injured cervical spine with and without lesions of the nerve structures. Clinical results of surgical therapy] Lang G, et al. **Zentralbl Chir** 1989;114(8):503–13 (Eng. Abstr.) **(Ger)**

[Experiences and results in primary management of patients with traumatic paraplegia] Pätzug P. **Zentralbl Chir** 1989; 114(8):514–20 (Eng. Abstr.) **(Ger)**

[Effectiveness of local hypothermia in the complex treatment of patients with complicated injuries of the spine] Cherkashina ZA. **Ortop Travmatol Protez** 1989 May; (5):12–6 (Eng. Abstr.) **(Rus)**

[Are reconstructive operations possible in cases of injuries of the spinal cord?] Iumashev GS, et al. **Ortop Travmatol Protez** 1989 Jan;(1):71–4 (39 ref.) **(Rus)**

[Anastomosis of intercostal nerves with the roots of the cauda equina in the late stage of complicated trauma of the lower thoracic and lumbar spine] Iumashev GS, et al. **Ortop Travmatol Protez** 1988 Nov;(11):39–43 (Eng. Abstr.) **(Rus)**

[Hypothermia in spinal surgery] Khvisiuk NI, et al. **Ortop Travmatol Protez** 1989 May;(5):8–11 (Eng. Abstr.) **(Rus)**

[Remuscularization of the bladder in traumatic spinal cord disease] Serniak PS, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb; (1):37–41 (Eng. Abstr.) **(Rus)**

[Microsurgical reinnervation of the bladder in spinal cord lesions] Livshits AV, et al. **Zh Vopr Neirokhir** 1989 Mar–Apr;(2):44–8 (Eng. Abstr.) **(Rus)**

THERAPY

New methods of treatment of severely injured sciatic nerve and spinal cord. An experimental study. Rochkind S, et al. **Acta Neurochir Suppl (Wien)** 1988;43:91–3

Predictors of medical care utilization by independently living adults with spinal cord injuries. Meyers AR, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):471–6

Experience with the Brindley anterior sacral root stimulator. Robinson LQ, et al. **Br J Urol** 1988 Dec;62(6):553–7

Effect of a direct current field on axons after experimeatal spinal cord injury. Fehlings MG, et al. **Can J Surg** 1989 May;32(3):188–91

Management of cervical spine injuries [letter] **Can Med Assoc J** 1989 Jan 15;140(2):114–5

Critical care management of the patient with acute spinal cord injury. Gilbert J. **Crit Care Clin** 1987 Jul;3(3):549–67 (118 ref.)

Spinal cord injury—a systems approach: prevention, emergency medical services, and emergency room management. Green BA, et al. **Crit Care Clin** 1987 Jul; 3(3):471–93 (36 ref.)

The patient with critical neurological disease. Young B, et al. **Crit Care Clin** 1987 Jan;3(1):217–33 (72 ref.)

Modern concepts of therapy and management of spinal cord injuries. Woolsey RM. **Crit Rev Neurobiol** 1988;4(2):137–56 (81 ref.)

A comparison of pulmonary complications in spinal cord–injured patients treated with two modes of spinal immobilization. Borkowski C. **J Neurosci Nurs** 1989 Apr; 21(2):79–85

Modeling of therapeutic dialysis of cerebrospinal fluid by epidural cooling in spinal cord injuries. Goetz T, et al. **J Neurotrauma** 1988;5(2):139–50

Cervical spine immobilization of penetrating neck wounds in a hostile environment. Arishita GI, et al. **J Trauma** 1989 Mar;29(3):332–7

Treatment of acute penetrating injuries of the spine: a retrospective analysis. Simpson RK Jr, et al. **J Trauma** 1989 Jan;29(1):42–6

Acute management of cervical spinal cord injury. Geisler FH. **Md Med J** 1988 Jul;37(7):525–30

Short term efficacy of applied electric fields in the repair of the damaged rodent spinal cord: behavioral and morphological results. Politis MJ, et al. **Neurosurgery** 1988 Nov;23(5):582–8

The short-term effects of delayed application of electric fields in the damaged rodent spinal cord. Politis MJ, et al. **Neurosurgery** 1989 Jul;25(1):71–5

Spinal cord stimulation (SCS) in deafferentation pain. Meglio M, et al. **PACE** 1989 Apr;12(4 Pt 2):709–12

Management of spinal cord injury in Australia [editorial] Brown DJ. **Paraplegia** 1988 Dec;26(6):367–8

A swing to intermittent clean self-catheterisation as a preferred mode of management of the neuropathic bladder for the dextrous spinal cord patient. Hill VB, et al. **Paraplegia** 1988 Dec;26(6):405–12

Self-neglect of spinal injured patients. Macleod AD. **Paraplegia** 1988 Oct;26(5):340–9

Acute intermittent arteriomesenteric occlusion of the duodenum after use of Harrington's spinal instrumentation: case report. Ohry A, et al. **Paraplegia** 1988 Oct;26(5):350–4

Early mobilisation of patients with cervical cord injury using the halo brace device. Parry H, et al. **Paraplegia** 1988 Aug; 26(4):226–32

An appraisal of antibiotic policies for urinary tract infections in patients with spinal cord injuries undergoing long-term intermittent catheterisation. Stickler DJ, et al. **Paraplegia** 1988 Aug;26(4):215–25 (44 ref.)

Intermittent catheterisation versus percutaneous suprapubic cystostomy in the early management of traumatic spinal cord lesions [letter] Wyndaele JJ. **Paraplegia** 1988 Oct; 26(5):359–62

Effect of target and non-target transplants on neuronal survival and axonal elongation after injury to the developing spinal cord. Bregman BS, et al. **Prog Brain Res** 1988;78:205–11

Effect of implants prepared from tissue culture of dorsal root ganglion neurons and Schwann cells on growth of corticospinal fibers after spinal cord injury in neonatal rats. Kuhlengel KR. **Prog Brain Res** 1988;78:199–204

[Organization and management of a department for patients with paraplegia. Patient clientele during the first 2 years] Mosdal C, et al. **Ugeskr Laeger** 1989 Mar 20;151(12):770–3 (Eng. Abstr.) **(Dan)**

[Objective assessment of the regional muscle blood flow promoting effect of electrostimulation in paraplegic patients (studies with 201 thallium and 133 xenon)] Kainz A, et al. **Vasa Suppl** 1988;26:209–13 **(Ger)**

[Evolution in the management and the results of treatment of injuries of the cervical spine] Kiwerski J. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):267–73 (Eng. Abstr.) **(Pol)**

[Experimental and clinical basis of a method for electrostimulation in spinal cord damage] Butukhanov VV, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):5–8 (Eng. Abstr.) **(Rus)**

[Therapeutic electrostimulation of the spinal cord in spinal cord injuries] Medvedev SV, et al. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):48–9 **(Rus)**

URINE

Decrease of urine creatinine in vitro in spinal cord injury patients. Kaw DG, et al. **Clin Nephrol** 1988 Oct;30(4):216–9

SPINAL CORD NEOPLASMS

Intramedullary spinal schwannoma. Sharma SC, et al. **Indian Pediatr** 1989 Mar;26(3):290–2

Intramedullary spinal lipomas. Ratanalert S. **J Med Assoc Thai** 1989 Mar;72(3):179–83

International Symposium on Pediatric Neuro-Oncology. Seattle, Wash., June 1–3, 1989. Abstracts. **Pediatr Neurosci** 1988;14(3):145–67

Paraganglioma of the thoracic spinal cord with cerebrospinal fluid metastasis. Constantini S, et al. **Spine** 1989 Jun; 14(6):643–5

[Sarcoma of the retroperitoneal mesenchymal soft tissues and of the cord. Apropos of 9 cases] Zerbib M, et al. **Ann Urol (Paris)** 1989;23(3):242–5 (Eng. Abstr.) **(Fre)**

[Spinal cord tumors] Kurosa Y, et al. **Gan No Rinsho** 1989 Jan;Spec No:75–84 **(Jpn)**

[Report of a case of intracranial metastases from malignant spinal cord astrocytoma] Saitoh M, et al. **Rinsho Hoshasen** 1989 Feb;34(2):249–52 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Lipocortin-1 immunoreactivity in central and peripheral nervous system glial tumors. Johnson MD, et al. **Hum Pathol** 1989 Aug;20(8):772–6

BLOOD SUPPLY

Vascular response in experimental spinal cord gliomas of the rat. Kroh H, et al. **Zentralbl Allg Pathol** 1988;134(6):523–30

[Electron microscopic observations of blood vessels in ependymoma] Uematsu Y, et al. **No Shinkei Geka** 1988 Oct;16(11):1235–42 (Eng. Abstr.) **(Jpn)**

CEREBROSPINAL FLUID

Terminal deoxynucleotidyl transferase (TdT)-positive cells in cerebrospinal fluid and development of overt CNS leukemia: a 5-year follow-up study in 113 children with a TdT-positive leukemia or non-Hodgkin's lymphoma. Hooijkaas H, et al. **Blood** 1989 Jul;74(1):416–22

COMPLICATIONS

Lumbosacral lipomas with spina bifida. Hirsch JF, et al. **Childs Nerv Syst** 1988 Dec;4(6):354–60

Association of ganglioneuroblastoma with syringomyelia. Case report. Saltuari L, et al. **Clin Neurol Neurosurg** 1989; 91(2):139–43

Spinal cord compression caused by dual pathology: a close shave with Ockham's razor. Wright JF, et al. **Clin Radiol** 1988 Sep;39(5):558–9

Paraplegia due to epidural infiltration in a case of chronic lymphocytic leukemia. Lustman F, et al. **J Neurooncol** 1988 Nov;6(3):259–60

Chemotherapy as the initial treatment of spinal cord compression due to disseminated neuroblastoma. Sanderson IR, et al. **J Neurosurg** 1989 May;70(5):688–90

An unusual case presentation. Cellular schwannoma in pregnancy: an unusual cause of low back pain. Bardeguez A, et al. **J Perinatol** 1989 Mar;9(1):94–7

So-called tethered cervical spinal cord. Roth-Vargas AA, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):69–71

Intramedullary teratoma of the thoracic spinal cord associated with anomalies of the vertebrae and ribs—case report. Shimauchi M, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):1005–9

MRI and hydrocephalus in childhood. Britton J, et al. **Neuroradiology** 1988;30(4):310–4

Intraspinal lipomas in infancy and childhood causing a tethered cord syndrome. Stolke D, et al. **Neurosurg Rev** 1988;11(1):59–65

Intramedullary cavernous angioma with trigeminal neuralgia: a case report and review of the literature. Saito N, et al. **Neurosurgery** 1989 Jul;25(1):97–101 (19 ref.)

Spinal angiomas as a cause of non-traumatic paraplegia: case report. Chappel R, et al. **Paraplegia** 1988 Dec;26(6):425–30

Hemangioblastoma of the conus medullaris associated with cutaneous hemangioma. Michaud LJ, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):309–12

Diastematomyelia associated with ectopic renal tissue. Gaskill SJ, et al. **Pediatr Neurosci** 1988;14(2):108–11 (18 ref.)

Intraspinal melanotic arachnoid cyst and lipoma in neurocutaneous melanosis. Kasantikul V, et al. **Surg Neurol** 1989 Feb;31(2):138–41

Sacral chordoma and rehabilitative treatment of urinary disorders. Torelli T, et al. **Tumori** 1988 Aug 31;74(4):475–8

The neurofibromatosis Recklinghausen and its central manifestation. Braunsdorf WE. **Zentralbl Neurochir** 1988; 49(2):77–85

[Spinal cord compression syndromes] Segers M, et al. **Acta Belg Med Phys** 1988 Oct–Dec;11(4):189–94 **(Dut)**

[Combined medullary hemangioblastoma and syringomyelia in a patient with von Hippel-Lindau disease: pathological study] Pou Serradell A, et al. **Rev Neurol (Paris)** 1988; 144(6-7):456–8 (Eng. Abstr.) **(Fre)**

[Spinal myoclonias in spinal cord angioma. Diagnosis and therapy] Artmann H, et al. **Nervenarzt** 1989 May; 60(5):305–9 **(Ger)**

[Primary melanoblastoma as a cause of occlusive hydrocephalus] Vitzthum HE, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 May; 41(5):297–303 (Eng. Abstr.) **(Ger)**

[A new surgical method for the surgical management of ventral compression of the thoracic spinal cord] Pásztor E. **Orv Hetil** 1988 Dec 4;129(49):2619–26 (37 ref.) (Eng. Abstr.) **(Hun)**

[Subarachnoid hemorrhage due to spinal tumor. Case report] Hotta T, et al. **Neurol Med Chir (Tokyo)** 1988 May; 28(5):504–9 (50 ref.) (Eng. Abstr.) **(Jpn)**

[A case of repeated hematomyelia caused by cavernous hemangioma in the spinal cord] Moriuchi S, et al. **No Shinkei Geka** 1989 May;17(5):477–9 (Eng. Abstr.) **(Jpn)**

[An extramedullary spinal cord tumor associated with syringomyelia: a case report] Nishiura I, et al. **No Shinkei Geka** 1989 Feb;17(2):181–5 (Eng. Abstr.) **(Jpn)**

[Tethered cord syndrome of adult onset: report of a case and a review of the literature] Yamamura A, et al. **No Shinkei Geka** 1989 Jan;17(1):69–73 (25 ref.) (Eng. Abstr.) **(Jpn)**

[Kyphoscoliosis in intramedullary cysts and tumors of the spinal cord] Mikhallovskii VS, et al. **Vrach Delo** 1989 May; (5):97–9 **(Rus)**

CONGENITAL

Congenital spinal cord haemangioblastoma: another cause of spinal cord section syndrome in the newborn. Roig M, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1091–3

Spinal cord involvement in encephalocraniocutaneous lipomatosis. Alfonso I, et al. **Pediatr Neurol** 1986 Nov–Dec; 2(6):380–4

[Intraspinal lipoma with tethered cord syndrome in childhood] Zumkeller MB, et al. **Z Kinderchir** 1988 Dec; 43(6):384–90 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Spinal metastasis of a thyroglobulin-rich Hürthle cell carcinoma detected by fine needle aspiration. Light and electron microscopic study of an unusual case. Heimann A, et al. **Acta Cytol** 1989 Sep–Oct;33(5):639–44

Magnetic resonance (MR) imaging in the management of primary and secondary syringomyelic cavities, and of other cystic lesions of the spinal cord. Roosen N, et al. **Acta Neurochir Suppl (Wien)** 1988;43:13–6

Multiple spinal granulocytic sarcomas simulating neurofibromatosis. Eelkema E, et al. **AJNR** 1989 Sep–Oct; 10(5 Suppl):S42–4 (29 ref.)

Hamartomatous spinal cord lesion in neurofibromatosis. Katz BH, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S101

MR imaging of asymptomatic brainstem and spinal cord lesions in sisters with neurofibromatosis. Kim T, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S71–2

Intramedullary disease of the spine: diagnosis using gadolinium-DTPA-enhanced MR imaging. Sze G, et al. **AJR** 1988 Dec;151(6):1193–204

Contrast enhancement in spinal MR imaging. Breger RK, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):387–91

Gd-DTPA-enhanced MR imaging of spinal tumors. Parizel PM, et al. **AJR Am J Roentgenol** 1989 May;152(5):1087–96

Clinical applications of magnetic resonance imaging of the spine. Firooznia H, et al. **Bull N Y Acad Med** 1988 Nov; 64(8):941–52

Prognostic factors in the diagnosis and treatment of primary central nervous system lymphoma. Pollack IF, et al. **Cancer** 1989 Mar 1;63(5):939–47

Ultrasound in the diagnosis and management of spinal and sacral tumours. Ashford NS, et al. **Clin Radiol** 1988 Nov; 39(6):646–50

Central nervous system involvement in non-Hodgkin's lymphoma. Liang RH, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):703–10

MR imaging of the spine in children. Duthoy MJ, et al. **Eur J Radiol** 1988 Aug;8(3):188–95

Vertebral needle biopsy with CT scan monitoring. Bettelli G, et al. **Ital J Orthop Traumatol** 1989 Jun;15(2):231–6

Abdominal and flank pain as presenting symptoms of schwannoma. Neinstein LS. **J Adolesc Health Care** 1989 Mar;10(2):143–5

Three-dimensional FLASH imaging: applications with gadolinium-DTPA. Ross JS, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):547–52

Intraspinal tumors in children presenting primarily with hip symptoms: a report of three cases. Kumar SJ, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):529–31

Mycosis fungoides of the central nervous system. Makepeace AR, et al. **J R Soc Med** 1989 Feb;82(2):116–7

MR imaging of intraspinal tumors—capability in histological differentiation and compartmentalization of extramedullary tumors. Takemoto K, et al. **Neuroradiology** 1988; 30(4):303–9

Intramedullary dermoid tumor diagnosed with the assistance of magnetic resonance imaging. Graham DV, et al. **Neurosurgery** 1988 Dec;23(6):765–7

Papillary ependymoma of the cervical spinal cord [letter]

Vaquero J, et al. **Neurosurgery** 1989 Jan;24(1):140–1
Primary spinal intramedullary malignant melanoma: case report. Yamasaki T, et al. **Neurosurgery** 1989 Jul; 25(1):117–21
Progressive motor deterioration in a 2-year-old boy [clinical conference] Crosley CJ, et al. **Pediatr Neurosci** 1987; 13(6):323–30
MRI study of lumbosacral lipoma in children. Taviere V, et al. **Pediatr Radiol** 1989;19(5):316–20
Intradural spinal cord lesions: Gd-DTPA-enhanced MR imaging. Dillon WP, et al. **Radiology** 1989 Jan;170(1 Pt 1):229–37
Failure to diagnose conus ependymomas by magnetic resonance imaging. Epstein NE, et al. **Spine** 1989 Jan; 14(1):134–7
Gadolinium-DTPA enhancement of a recurrent intramedullary ependymoma: a case report. Baldwin H, et al. **Surg Neurol** 1989 Mar;31(3):220–3
[Panmedullary ependymoma. A case report] Lescoin F, et al. **Acta Neurol Belg** 1988 Aug–Oct;88(4):239–43 (Eng. Abstr.) **(Fre)**
[Diagnosis of spinal cord tumor in pediatric orthopedics] Forin V. **Arch Fr Pediatr** 1989 May;46(5):369–71 (Eng. Abstr.) **(Fre)**
[Intraspinal lipoma in an infant: a case report of MRI study] Nagane M, et al. **No Shinkei Geka** 1988 Nov;16(12):1411–5 (Eng. Abstr.) **(Jpn)**
[Localization of spinal tumors by MRI] Takahashi M, et al. **Rinsho Hoshasen** 1989 Feb;34(2):191–8 (Eng. Abstr.) **(Jpn)**
[Differential diagnosis of intraspinal neurinomas and meningiomas by means of a bayesian system] Iglesias JR, et al. **Arch Neurobiol (Madr)** 1988 Nov–Dec;51(6):333–41 **(Spa)**

DRUG THERAPY

Acute tumor lysis syndrome in non-Hodgkin lymphoma induced by dexamethasone. Dhingra K, et al. **Am J Hematol** 1988 Oct;29(2):115–6
Severe visual loss after a single dose of vincristine in a patient with spinal cord astrocytoma. Teichmann KD, et al. **J Ocul Pharmacol** 1988 Summer;4(2):117–21

EPIDEMIOLOGY

Neoplasms of the central nervous system in Norway. I. Quality control of the registration in the Norwegian Cancer Registry. Helseth A, et al. **APMIS** 1988 Nov;96(11):1002–8
Neoplasms of the central nervous system in Norway. IV. A population-based epidemiological study of meningiomas. Helseth A, et al. **APMIS** 1989 Jul;97(7):646–54
Tumours of the central nervous system in Chinese in Hong Kong: a histological review. Ng HK, et al. **Aust N Z J Surg** 1988 Jul;58(7):573–8

ETIOLOGY

Multiple sclerosis presenting as an intramedullary cervical cord tumor. Lammoglia FJ, et al. **Kans Med** 1989 Jul; 90(7):219–21, 228

GENETICS

Neurofibromatosis and other disorders among children with CNS tumors and their families. Baptiste M, et al. **Neurology** 1989 Apr;39(4):487–92
[Familial hemangioblastoma: morphological and ultrastructural study of 2 cases with spinal localization] Cerdá-Nicolás M, et al. **Arch Neurobiol (Madr)** 1988 Nov–Dec;51(6):352–8 (Eng. Abstr.) **(Spa)**

METABOLISM

Steroid receptors in human brain and spinal cord tumors. Kornblum JA, et al. **Neurosurgery** 1988 Aug;23(2):185–8

PATHOLOGY

Central nervous system lymphoma: primary lumbar nerve root infiltration. Toner GC, et al. **Acta Haematol (Basel)** 1989;81(1):44–7
Non-Hodgkin's lymphoma of the central nervous system after treatment of Hodgkin's disease. Miller DC, et al. **Am J Clin Pathol** 1989 Apr;91(4):481–5
Intraspinal tumours. Cole GF. **Arch Dis Child** 1988 Sep; 63(9):1007–9
Tumours of the central nervous system in Chinese in Hong Kong: a histological review. Ng HK, et al. **Aust N Z J Surg** 1988 Jul;58(7):573–8
Disseminated melanomatosis of the central nervous system and other organs: a case report. Iglesias-Rozas JR, et al. **Clin Neuropathol** 1989 Jan–Feb;8(1):11–5
Diffuse gliomatosis of the central nervous system with histological features of microgliomatosis. Ng HK. **Clin Neuropathol** 1988 Sep–Oct;7(5):266–70
Establishment and characterization of an intracerebrally transplanted tumor line, induced experimentally in the spinal cord. Mennel HD. **Exp Pathol** 1988;33(3):165–72
Acute myelopathy as the initial presentation of acute leukemia. Phanthumchinda K, et al. **J Med Assoc Thai** 1988 Jun;71(6):340–4
Ectopic midline spinal ganglion in diastematomyelia: a study of its connections. Ross GW, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1231–4
Diffuse cerebrospinal gliomatosis presenting as motor neuron disease for two years. Schmidbauer M, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):275–8
Percutaneous needle evaluation of intradural extramedullary lesions of the lumbar spine. Castillo M, et al. **Neuroradiology** 1988;30(6):551–5
Solitary cervical intra- and extramedullary schwannoma. Garen PD, et al. **Pathology** 1988 Jul;20(3):296–8
Primitive neuroectodermal tumor [letter] Gray ES. **Pediatr Pathol** 1989;9(1):106
Fragments of lipoma ascending to the brain. Cohen AR, et al. **Surg Neurol** 1989 Mar;31(3):215–9
Primary intraspinal dura mesenchymal chondrosarcoma. Lee ST, et al. **Surg Neurol** 1989 Jan;31(1):54–7 (7 ref.)
[Intramedullary mature teratoma associated with an attached cord and an intradural lipoma. Apropos of a surgically treated case. Review of the literature] Pelissou-Guyotat I, et al. **Neurochirurgie** 1988;34(3):205–9 (24 ref.) (Eng. Abstr.) **(Fre)**
[Spinal melanotic schwannoma: report of a case] Iizuka H, et al. **No Shinkei Geka** 1988 Sep;16(10):1199–205 (29 ref.) (Eng. Abstr.) **(Jpn)**
[Spinal intramedullary tumor with exophytic growth] Ishikawa T, et al. **No Shinkei Geka** 1988 Nov; 16(12):1339–45 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Epidemiology, physiopathology, and experimental therapeutics of acute spinal cord injury. Albin MS, et al. **Crit Care Clin** 1987 Jul;3(3):441–52 (93 ref.)
Somatosensory evoked potentials in a patient with a cervical glioma and syrinx. Kaplan PW, et al. **Electroencephalogr Clin Neurophysiol** 1988 Dec;70(6):563–5

PREVENTION & CONTROL

CNS relapse in children with acute lymphoblastic leukemia after cranial prophylaxis. Pai SK, et al. **Indian J Cancer** 1988 Sep;25(3):165–71

RADIOGRAPHY

Closed spinal dysraphism: analysis of clinical, radiological, and surgical findings in 104 consecutive patients. Scatliff JH, et al. **AJR Am J Roentgenol** 1989 May;152(5):1049–57
Selective arteriography of the spinal cord. A report of 17 cases. Xue P, et al. **Chin Med J [Engl]** 1988 Dec; 101(12):911–4
Ossification within a thoracic neurilemoma—a case report. Ou YC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug; 42(2):143–6
Subdural spinal lipoma with posterior fossa extension. Fan CJ, et al. **Clin Radiol** 1989 Jan;40(1):91–4 (14 ref.)
Teratoma of the spinal cord. A case report with CT scans. Hamabuchi M, et al. **J Bone Joint Surg [Br]** 1989 May; 71(3):390–2
[Computed tomographic metrizamide myelography of intraspinal tumors. Report of 38 cases] Zeng YL, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):272–4, 20 (Eng. Abstr.) **(Chi)**
[The widened CSF space sign–A useful CT sign for the diagnosis of spinal intradural extramedullary tumors] Shen WC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug; 87(8):814–22 (Eng. Abstr.) **(Chi)**
[Spinal subdural space-occupying lesions—hematomas] Grobovschek M, et al. **ROFO** 1989 Jan;150(1):20–5 (Eng. Abstr.) **(Ger)**
[Contrast examination of the spinal canal using zonography] Bryc S, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:187–95 (Eng. Abstr.) **(Pol)**

RADIOTHERAPY

Postoperative management of primary spinal cord ependymomas. Di Marco A, et al. **Acta Oncol** 1988; 27(4):371–5
Treatment of CNS involvement of non-Hodgkin's lymphoma with short-term cerebrospinal irradiation, high-dose chemotherapy, and autologous bone marrow transplantation. A case report of a 12-year-old patient. Ishii E, et al. **Am J Clin Oncol** 1989 Apr;12(2):132–6
Primary central nervous system lymphoma: long-term survival following treatment with radiation and methotrexate. Petursson SR. **Eur J Surg Oncol** 1989 Feb; 15(1):69–72
Charged particle radiotherapy for lesions encircling the brain stem or spinal cord. Castro JR, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):477–84
Postoperative radiotherapy of primary spinal cord tumors. Linstadt DE, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1397–403
Linear-quadratic model isoeffect relations for proliferating tumor cells for treatment with multiple fractions per day. Yaes RJ. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):901–5
Improved radiotherapy treatment planning for spinal cord tumors using gadolinium enhanced MR imaging. Griffin BR, et al. **Med Dosim** 1989;14(1):5–8
Role of radiotherapy in metastatic spinal cord compression: preliminary results from a prospective trial. Latini P, et al. **Radiother Oncol** 1989 Jul;15(3):227–33
Neutron therapy of low grade "pencil" gliomas of the spinal cord: a review of ten cases. Budach V, et al. **Strahlenther Onkol** 1989 Apr;165(4):315–9

SECONDARY

The incidence and distribution of spinal metastases in children with posterior fossa medulloblastomas. Stanley P, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):283–7
Intramedullary spinal cord metastasis. Lim SH, et al. **Ann Acad Med Singapore** 1989 May;18(3):324–5
Metastases from carcinoma of the breast involving the central nervous system. Leggett CA. **Aust N Z J Surg** 1989 Mar; 59(3):235–42
Gadolinium-enhanced MRI: a superior technique for the diagnosis of intraspinal metastases. Fredericks RK, et al. **Neurology** 1989 May;39(5):734–6
Acute aortic thrombosis causing sudden paraplegia in a patient with known thoraco-lumbar spinal metastasis: the diagnostic usefulness of magnetic resonance imaging. Moore MR, et al. **Neurosurgery** 1989 Jul;25(1):105–9
Unusual CNS and orbital metastases of neuroblastoma. Gallet BL, et al. **Pediatr Radiol** 1989;19(5):287–9
Malignant intraventricular meningioma with spinal metastasis through the cerebrospinal fluid. Kamiya K, et al. **Surg Neurol** 1989 Sep;32(3):213–8
Intramedullary spread of a cerebral oligodendroglioma. Van Velthoven V, et al. **Surg Neurol** 1988 Dec;30(6):476–81
[Late intramedullary metastases of a medulloblastoma with primary extramedullary seeded metastases—magnetic resonance tomographic detection using gadolinium-DTPA] Glathe S, et al. **Rontgenblatter** 1988 Dec;41(12):484–7 (Eng. Abstr.) **(Ger)**
[Spinal metastasis detected 11 years after initial treatment for pineal germ cell tumor. Case report] Kunishio K, et al. **Neurol Med Chir (Tokyo)** 1988 May;28(5):491–7 (Eng. Abstr.) **(Jpn)**
[Neurologic complications in acute leukemia and malignant lymphoma] Nowacki P, et al. **Pol Tyg Lek** 1988 Dec 12; 43(50):1611–4 **(Pol)**
[Delay in the diagnosis of spinal cord neurological complications in patients with cancer] Alfaro A. **Med Clin (Barc)** 1988 Sep 24;91(9):338–40 **(Spa)**

SURGERY

Microsurgical treatment of intramedullary spinal cord tumours. Fornari M, et al. **Acta Neurochir Suppl (Wien)** 1988;43:3–8
Microsurgical removal of intramedullary spinal cord tumours: report of 22 cases. Yasui T, et al. **Acta Neurochir Suppl (Wien)** 1988;43:9–12
Surgical treatment of subependymomas of the central nervous system. Report of 8 cases and review of the literature. Artico M, et al. **Acta Neurochir (Wien)** 1989;98(1–2):25–31 (21 ref.)
The great radicular artery of Adamkiewicz in man. Demonstration of a possibility to predict its functional territory. Luyendijk W, et al. **Acta Neurochir (Wien)** 1988; 95(3–4):143–6
Intraspinal pigmented schwannoma with malignant progression. Röyttä M, et al. **Acta Neurochir (Wien)** 1988; 95(3–4):147–54
Intramedullary mass lesions of the spinal cord. Naidu MR, et al. **Clin Neurol Neurosurg** 1989;91(2):135–8
Surgical management of spinal epidural disease: an update. Rock JP, et al. **Henry Ford Hosp Med J** 1989;37(1):37–40
Malignant astrocytomas of the spinal cord. Cohen AR, et al. **J Neurosurg** 1989 Jan;70(1):50–4
Cervical spinal intramedullary myxoma in childhood. Case report. Paşaoğlu A, et al. **J Neurosurg** 1988 Nov; 69(5):772–4
Sacrococcygeal myxopapillary ependymoma. Prins BA, et al. **Neth J Surg** 1989 Apr;41(2):47–8 (10 ref.)
The occurrence of different types of spinal tumours in one patient. A case report and review of the literature. Nishiura I, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):52–5 (21 ref.)
Cerebral and two spinal meningiomas removed from the same patient: case report. Kandel E, et al. **Neurosurgery** 1989 Sep;25(3):447–50
Spinal meningiomas: review of 174 operated cases. Solero CL, et al. **Neurosurgery** 1989 Aug;25(2):153–60 (43 ref.)
Subependymoma of the cervical spinal cord. Vaquero J, et al. **Neurosurgery** 1989 Apr;24(4):625–7
Noninvasive motor evoked potential monitoring during neurosurgical operations on the spinal cord. Zentner J. **Neurosurgery** 1989 May;24(5):709–12
Intramedullary cavernous angiomas. Zentner J, et al. **Surg Neurol** 1989 Jan;31(1):64–8
[Tumor-induced medullary compression—experiences with 570 patients] Fried H, et al. **Zentralbl Neurochir** 1988; 49(4):270–2 (Eng. Abstr.) **(Ger)**
[Spinal gliomas including ependymomas] Fried H, et al. **Zentralbl Neurochir** 1988;49(4):273–5 (Eng. Abstr.) **(Ger)**
[Multiple neurinoma of the spinal cord: case report] Hida K, et al. **No Shinkei Geka** 1988 Dec;16(13):1489–93 (22 ref.) (Eng. Abstr.) **(Jpn)**
[Intraoperative complications in neurosurgical patients operated on in a seated position (personal observations)] Kopliński A, et al. **Neurol Neurochir Pol** 1988 Jul–Aug; 22(4):352–5 (Eng. Abstr.) **(Pol)**
[Hemilaminectomy in the removal of spinal cord tumors] Oleshkevich FV, et al. **Zh Vopr Neirokhir** 1988 Nov–Dec; (6):30–2 (Eng. Abstr.) **(Rus)**

THERAPY

Interventional angiography in neuropediatrics. Beltramello A, et al. **Childs Nerv Syst** 1989 Apr;5(2):87–93 (20 ref.)

VETERINARY

Spontaneous tumours of the spinal cord in laboratory rats. Kaspareit–Rittinghausen J, et al. **J Comp Pathol** 1989 Feb; 100(2):209–15

Intraspinal dermoid cysts in a C57BL6 mouse. Nguyen HT. **Lab Anim Sci** 1988 Dec;38(6):739–40

Diagnostic exercise: paralysis in a Long–Evans rat. Skavlen PA, et al. **Lab Anim Sci** 1989 Jan;39(1):69–70

Spinal cord ependymoma in two young dogs. de Vries–Chalmers Hoynk van Papendrecht HR, et al. **Vet Q** 1988 Jul;10(3):205–10 (16 ref.)

SPINAL CORD SYPHILIS see TABES DORSALIS

SPINAL DISEASES

Epidural abscess: a review. Roos KL. **Indiana Med** 1988 Dec; 81(12):1015–9 (34 ref.)

[Diagnosis and treatment by orthopedic manipulation] Rekola K. **Duodecim** 1989;105(2):100–4 **(Fin)**

[Multiple calcifications of the intervertebral disks and other unusual anomalies in a neonatal case report of trisomy 13 syndrome (Patau's disease)] Perale R, et al. **Radiol Med (Torino)** 1988 Sep;76(3):230–2 **(Ita)**

[Pathology of the cervical spine in helicopter pilots (posture, etiopathogenesis, case series)] Castagliuolo PP, et al. **Riv Med Aeronaut Spaz** 1985 Jul–Sep;52(3):207–25 (Eng. Abstr.) **(Ita)**

CHEMICALLY INDUCED

[Neurologic complications caused by anticoagulants and fibrinolytic agents] Bewermeyer H, et al. **Nervenarzt** 1989 May;60(5):268–75 (Eng. Abstr.) **(Ger)**

[Regression of skeletal fluorosis following termination of non–occupational–induced exposure] Schmidt CW, et al. **Z Gesamte Inn Med** 1989 Apr 1;44(7):221–3 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Facet syndrome [letter; comment] Nagler W, et al. **Arch Phys Med Rehabil** 1989 Mar;70(3):249. **Comment on:** Arch Phys Med Rehabil 1988 Oct;69(10):880–91

Destructive spondylarthropathy and chronic renal failure [letter] Hurst NP, et al. **Arthritis Rheum** 1988 Oct; 31(10):1331

Frozen shoulder and cervical spine disease [letter] Hargreaves C, et al. **Br J Rheumatol** 1989 Feb;28(1):78–9

Spinal cord compression related to vertebral osteonecrosis. Feldmann JL, et al. **Clin Exp Rheumatol** 1988 Jul–Sep; 6(3):297–300

Intraosseous schwannoma of the cervical spine associated with skeletal fluorosis. Naidu MR, et al. **Clin Neurol Neurosurg** 1988;90(3):257–60

Severe cervical stenosis due to ossification of the posterior longitudinal ligament without neurological manifestations ("silent OPLL"). Merlini L, et al. **Ital J Neurol Sci** 1989 Feb;10(1):93–6

Familial myopathy with scapulohumeral distribution, rigid spine, cardiopathy and mitochondrial abnormality. Tanaka K, et al. **J Neurol** 1989 Jan;236(1):52–4

Cervico–medullary compression secondary to ochronotic arthritis affecting cranio–vertebral joints syndesmo–dental ochronotic arthritis. Sharma RR, et al. **J Postgrad Med** 1988 Oct;34(4):253–7

Cervical spine involvement in psoriatic arthritis [letter] Lassoued S, et al. **J Rheumatol** 1989 Feb;16(2):251–2

An examination of the association between vertebral deformities, physical disabilities and psychosocial problems. Ettinger B, et al. **Maturitas** 1988 Dec;10(4):283–96

Cervical spine and headaches [letter] Bellavance A, et al. **Neurology** 1989 Sep;39(9):1269–70

The cervical spine and headache. Edmeads J. **Neurology** 1988 Dec;38(12):1874–8

Nocardial spinal epidural abscess. Siao P, et al. **Neurology** 1989 Jul;39(7):996

Acute hydrocephalus in infectious spinal disorder. Firsching R, et al. **Neurosurg Rev** 1988;11(1):103–5

Manipulative therapy [letter] Powell TH. **Orthop Rev** 1987 Dec;16(12):963–4

Radiologic case study. Eosinophilic granuloma of the spine causing neurologic deficit. Kerr R. **Orthopedics** 1989 Feb; 12(2):309, 312–5

Paraplegia caused by spinal epidural abscess. Stephanides GC, et al. **Postgrad Med J** 1988 Aug;64(754):603–5

An orthopaedist talks about low back syndromes [interview] Devanny JR. **Semin Neurol** 1986 Dec;6(4):411–5

Clinical evaluation of patients with low back pain. Horenstein S. **Semin Neurol** 1986 Dec;6(4):376–84 (13 ref.)

Spontaneous spinal epidural hematoma complicating Paget's disease of the spine. Case report. Hanna JW, et al. **Spine** 1989 Aug;14(8):900–2

A comparison of anterior cervical fusion, cervical laminectomy, and cervical laminoplasty for the surgical management of multiple level spondylotic radiculopathy. Herkowitz HN. **Spine** 1988 Jul;13(7):774–80

Correlative anatomy of cervical spondylotic myelopathy. Parke WW. **Spine** 1988 Jul;13(7):831–7

Validity of clinical tests in the diagnosis of root compression in cervical disc disease. Viikari–Juntura E, et al. **Spine** 1989 Mar;14(3):253–7

[Backache in children and adolescents] Veraart BE. **Tijdschr Kindergeneeskd** 1988 Dec;56(6):279–88 (Eng. Abstr.) **(Dut)**

[Sciatica and medullary intermittent claudication] Feron F, et al. **Rev Med Liege** 1989 May 1;44(9):327–33 **(Fre)**

[Backache—causes, diagnosis and therapy] Hipp R, et al. **Fortschr Med** 1989 Jun 20;107(18):36, 39–40, 43–4, passim (8 ref.) (Eng. Abstr.) **(Ger)**

[Vertebral and spondylogenic syndromes] Brunner U, et al. **Schweiz Rundsch Med Prax** 1988 Sep 6;77(36):935–8 (Eng. Abstr.) **(Ger)**

[Diagnosis and differential diagnosis of spondylogenic cervical myelopathy] Matthes R, et al. **Z Arztl Fortbild (Jena)** 1989;83(9):467–70 **(Ger)**

[Sudden deafness and biometric function analysis of the cervical spine (published erratum appears in Z Orthop 1989 Mar–Apr;127(2):268)] Weh L, et al. **Z Orthop** 1988 Sep–Oct;126(5):539–46 (Eng. Abstr.) **(Ger)**

[Respiratory and circulatory disorders in patients with hematogenous osteomyelitis of the spine] Tikhodeev SA, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):35–8 (Eng. Abstr.) **(Rus)**

[Algodystrophy of skeletal muscles] Lautsevichus LZ, et al. **Klin Med (Mosk)** 1988 Oct;66(10):91–6 (Eng. Abstr.) **(Rus)**

[Clinical variants of the neurodystrophic syndrome of the muscles of the anterior abdominal wall in osteochondrosis of the spine] Veselovskiĭ VP, et al. **Klin Med (Mosk)** 1988 Jul;66(7):50–3 (Eng. Abstr.) **(Rus)**

[Spinal cord disorders in tuberculosis and osteomyelitis of the spine and their surgical treatment] Tikhodeev SA. **Probl Tuberk** 1988;(12):39–42 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Diagnostic approach in instability and irritative state of a "lumbar motion segment" following disc surgery—failed back surgery syndrome. Markwalder TM, et al. **Acta Neurochir (Wien)** 1989;99(1–2):51–7

MR imaging characteristics of tuberculous spondylitis vs vertebral osteomyelitis. Smith AS, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):399–405

Gradient–echo MR imaging of the cervical spine: evaluation of extradural disease. VanDyke C, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):393–8

Vertebral osteomyelitis. Koenker RM, et al. **Am Fam Physician** 1989 Mar;39(3):169–74 (20 ref.)

Particles from drill bit and metal suction tip friction distort magnetic resonance imaging. Groah L, et al. **AORN J** 1989 Mar;49(3):882–3

Schober's test (modified). Murtagh J. **Aust Fam Physician** 1989 Jul;18(7):849

Clinical applications of magnetic resonance imaging of the spine. Firooznia H, et al. **Bull N Y Acad Med** 1988 Nov; 64(8):941–52

Sensitivity of dual–photon absorptiometry in spinal osteoporosis. Pouilles JM, et al. **Calcif Tissue Int** 1988 Dec; 43(6):329–34

Magnetic resonance imaging of the spine. Berns DH, et al. **Clin Orthop** 1989 Jul;(244):78–100 (80 ref.)

Vertical settling in rheumatoid arthritis. Diagnostic value of the Ranawat and Redlund–Johnell methods. Kawaida H, et al. **Clin Orthop** 1989 Feb;(239):128–35

Imaging of degenerative disease of the cervical spine. Modic MT, et al. **Clin Orthop** 1989 Feb;(239):109–20

Evaluation and treatment of common spine and trunk problems. Weiker GG. **Clin Sports Med** 1989 Jul; 8(3):399–417 (17 ref.)

Magnetic resonance imaging in spinal disorders. Weisz GM, et al. **Int Orthop** 1988;12(4):331–4

Detection of prefracture spinal osteoporosis using bone mineral absorptiometry. Ross PD, et al. **J Bone Miner Res** 1988 Feb;3(1):1–11

Hemispherical spondyloscleorosis: MR appearance. Jensen ME, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):540–2

MR imaging of traumatic spinal arachnoid cyst. Mirich DR, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):862–5

Radiogenic cancer induction associated with spinal radiography: a quantitative analysis [see comments] Fickel TE. **J Manipulative Physiol Ther** 1988 Aug;11(4):255–60. **Comment in:** J Manipulative Physiol Ther 1989 Feb;12(1):60–2

Static and dynamic components of the chiropractic subluxation complex: a literature review [letter] Keating JC Jr, et al. **J Manipulative Physiol Ther** 1988 Oct; 11(5):443–5

MRI of the spine and spinal cord: infectious and inflammatory pathology. Appel B, et al. **J Neuroradiol** 1988;15(4):325–34 **(Eng, Fre)**

Intramedullary spinal Histoplasma granuloma. Case report. Voelker JL, et al. **J Neurosurg** 1989 Jun;70(6):959–61

Cervical disc calcification. Herring JA, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):613–6

'Benign thoracic pain' syndrome: role of magnetic resonance imaging in the detection and localization of thoracic disc disease. Bruckner FE, et al. **J R Soc Med** 1989 Feb; 82(2):81–3

Detection of bone marrow lesions [letter] Jensen KE. **Lancet** 1989 Apr 15;1(8642):843–4

Sensitivity and specificity of MRI in detecting malignant spinal cord compression and in distinguishing malignant from benign compression fractures of vertebrae. Li KC, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):547–56

Electrodiagnostics in cervical disk disease [letter] Wilkins DE. **Neurology** 1989 Aug;39(8):1136

Short TR, variable flip angle, gradient echo scans of the cervical spine: comparison of 2DFT and 3DFT techniques. Enzmann D, et al. **Neuroradiology** 1989;31(3):213–6

Intraspinal extension of an air cyst of the lung: case report. Andrews DW, et al. **Neurosurgery** 1989 Mar;24(3):414–7

Midline lumbar ganglion/synovial cyst mimicking an epidural tumor: case report and review of pathogenesis. Azzam CJ. **Neurosurgery** 1988 Aug;23(2):232–4 (35 ref.)

Occult intrasacral meningocele: clinical and radiographic diagnosis. Doty JR, et al. **Neurosurgery** 1989 Apr; 24(4):616–25

Clinical kinesiology: measurement techniques for spinal disorders. Allen ME. **Orthop Rev** 1988 Nov; 17(11):1097–104

Orthopaedic problems in children. Rooker G. **Practitioner** 1988 Nov 22;232(1459):1295–300

Coil holder and marker system for MR imaging of the total spine. Abrahams JJ, et al. **Radiology** 1989 Sep;172(3):869–71

Spinal lesions: quantitative and qualitative temporal evolution of gadopentetate dimeglumine enhancement in MR imaging. Sze G, et al. **Radiology** 1989 Mar;170(3 Pt 1):849–56

Criteria for classifying normal and degenerated lumbar intervertebral disks. Yu S, et al. **Radiology** 1989 Feb; 170(2):523–6

Streptococcus pneumoniae endocarditis presenting as an epidural abscess. Clark R, et al. **Rev Infect Dis** 1989 Mar–Apr;11(2):338–40

Magnetic resonance imaging of the spine. Rossi DR, et al. **Semin Neurol** 1986 Mar;6(1):84–93 (23 ref.)

Case report 530: Paget disease engrafted on congenitally fused cervical vertebrae (C3–C4). Geil GE, et al. **Skeletal Radiol** 1989;18(2):140–2

The diagnostic value of facet joint injections. Moran R, et al. **Spine** 1988 Dec;13(12):1407–10

Computed tomography and fluoroscopy guided anesthesia and steroid injection in facet syndrome. Murtagh FR. **Spine** 1988 Jun;13(6):686–9

A comparison between magnetic resonance imaging and scintigraphic bone imaging in the diagnosis of disc space infection in an animal model. Szypryt EP, et al. **Spine** 1988 Sep;13(9):1042–8

[Diagnosis and treatment of intraspinal hydatidosis] Zhu ZC. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):170–1, 191–2 (Eng. Abstr.) **(Chi)**

[Reflex sympathetic algodystrophy of the lower extremity with extension to the spine] Marcelli C, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):933–6 **(Fre)**

[Costo–vertebral arthrosis disclosed by pseudo–visceral pains] Roux C, et al. **Rev Rhum Mal Osteoartic** 1989 Feb; 56(2):191–5 **(Fre)**

[The nuclear magnetic resonance tomography course of intra– and extraspinal lumbar abscess formation] Krupp W, et al. **Nervenarzt** 1989 May;60(5):302–4 **(Ger)**

[Diagnosis of seronegative spondylarthropathies] Felder M. **Schweiz Rundsch Med Prax** 1988 Sep 6;77(36):954–7 (Eng. Abstr.) **(Ger)**

[Transabdominal lumbal ultrasonic tomometry—sonographic measurement of the lumbar spine] Hagen A, et al. **Ultraschall Med** 1988 Oct;9(5):240–5 (Eng. Abstr.) **(Ger)**

[The role of NMR in the diagnosis of lumbar disc pathology] Randelli M, et al. **Chir Organi Mov** 1988 Jan–Mar; 73(1):45–52 (Eng. Abstr.) **(Ita)**

[Cervical soft disc. Clinical analysis of 35 cases] Hanakita J, et al. **Neurol Med Chir (Tokyo)** 1988 Dec;28(12):1175–80 (Eng. Abstr.) **(Jpn)**

[Magnetic resonance imaging of diseased cervical and lumbar intervertebral discs] Kadoya S, et al. **Neurol Med Chir (Tokyo)** 1989 Feb;29(2):99–105 (Eng. Abstr.) **(Jpn)**

[A universal goniometer for measuring the mobility in the cervical segment of the spine] Savchenko VK, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):71–3 **(Rus)**

[Clinico–electromyographic assesment of early neurologic manifestations of osteochondrosis of the vertebral column] Macheret EL, et al. **Vrach Delo** 1988 Nov;(11):83–6 (Eng. Abstr.) **(Rus)**

[Psychopathologic characteristics of conditions simulating spinal diseases] Ostroglazov VG, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):77–81 (Eng. Abstr.) **(Rus)**

[Clinical aspects and the course of psychopathologic conditions simulating vertebrogenic pathology] Ostroglazov VG, et al. **Zh Nevropatol Psikhiatr** 1989; 89(5):82–6 (Eng. Abstr.) **(Rus)**

[Vertebral diseases in dock workers] Frković A, et al. **Arh Hig Rada Toksikol** 1988 Jun;39(2):235–40 (Eng. Abstr.) **(Scr)**

[Current neurologic indications of magnetic resonance (II)] Muñoz González A, et al. **Med Clin (Barc)** 1989 Apr 1; 92(12):465–9 (32 ref.) **(Spa)**

DRUG THERAPY

Vertebral osteomyelitis due to Haemophilus aphrophilus: treatment with ceftriaxone [letter] Nahass RG, et al. **J Infect Dis** 1989 Apr;159(4):811–2

[Possibilities of drug therapy for spinal diseases] Felder M. **Schweiz Rundsch Med Prax** 1988 Sep 6;77(36):949–53 (Eng. Abstr.) **(Ger)**

[Ketoprofen lysine treatment of painful manifestations of spinal osteoarthrosis] Memeo A, et al. **Clin Ter** 1988 Jul 31;126(2):119–22 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

Urinary lactic dehydrogenase isoenzyme analysis in children with spinal lesions. Yokochi K, et al. **Acta Paediatr Scand** 1989 Jul;78(4):588–91

EPIDEMIOLOGY

Orthopaedic diseases among transport workers. Luttmann A, et al. **Int Arch Occup Environ Health** 1988;61(3):197–205

Occurrence of spinal pain syndromes in a group of apparently healthy and physically fit sportsmen (orienteers). Van der Linden SM, et al. **Scand J Rheumatol** 1988;17(6):475–81

[Development and validation of a questionnaire in the study of spinal changes in a working population] Occhipinti E, et al. **Med Lav** 1988 Sep–Oct;79(5):390–402 (Eng. Abstr.) **(Ita)**

[Spinal hyperostosis and hyperostosis frontalis interna] Buratti L, et al. **Riv Med Aeronaut Spaz** 1985 Apr–Jun; 52(2):125–37 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Endemic fluorosis with spinal cord compression. A case report and review. Fisher RL, et al. **Arch Intern Med** 1989 Mar;149(3):697–700

Relevant principles in the management of spinal disorders in achondroplasia. O'Brien JP, et al. **Basic Life Sci** 1988; 48:293–8

Pneumococcal vertebral osteomyelitis presenting with an aseptic knee effusion in a child. Malleson PN, et al. **Clin Exp Rheumatol** 1988 Jul–Sep;6(3):325–8

Pitfalls of spinal deformities associated with neurofibromatosis in children. Crawford AH. **Clin Orthop** 1989 Aug;(245):29–42 (47 ref.)

Paraplegia after lumbar puncture. In an infant with previously undiagnosed hemophilia A. Treatment and peri-operative considerations. Faillace WJ, et al. **Clin Pediatr (Phila)** 1989 Mar;28(3):136–8

Increased rate of spinal trabecular bone loss in patients with inflammatory bowel disease. Motley RJ, et al. **Gut** 1988 Oct;29(10):1332–6

A model for studying intervertebral disc degeneration with magnetic resonance and a nucleotome. Nguyen CM, et al. **Invest Radiol** 1989 May;24(5):407–9

An unusual case infection following spinal surgery. Tsitsopoulos P, et al. **J Neurosurg Sci** 1988 Apr–Jun; 32(2):77–81

Spinal abnormalities in camptomelic dysplasia. Coscia MF, et al. **J Pediatr Orthop** 1989 Jan–Feb;9(1):6–14 (37 ref.)

Outcome studies, mortality versus quality of life [editorial] Kaufman RL. **J Rheumatol** 1989 Jul;16(7):857–9

Is empathy unhealthy? [letter] Thomson A. **N Z Med J** 1989 Sep 13;102(875):479

Iatrogenic intraspinal epidermoid tumor: myelo-CT and MRI diagnosis. Visciani A, et al. **Neuroradiology** 1989; 31(3):273–5

Spinal epidural abscess. A case report and literature review. Ferree BA, et al. **Orthop Rev** 1989 Jan;18(1):75–80 (25 ref.)

Spinal and radicular pain in pseudotumor cerebri. Murray RS, et al. **Pediatr Neurol** 1986 Mar–Apr;2(2):106–7

The role of infectious agents in the spondylarthropathies. Phillips PE. **Scand J Rheumatol** 1988;17(6):435–43 (50 ref.)

Spinal epidural abscess following steroid injection for sciatica. Case report. Chan ST, et al. **Spine** 1989 Jan; 14(1):106–8

Lower cervical spondylosis and myelopathy in adults with Down's syndrome. Olive PM, et al. **Spine** 1988 Jul; 13(7):781–4

Neuro-myopathic flexion deformities of the cervical spine. Simmons EH, et al. **Spine** 1988 Jul;13(7):756–62

[Acute osteoporosis in a breast-feeding vegetarian woman] Böstman L, et al. **Duodecim** 1988;104(12):937–40 **(Fin)**

[Disk collapse after nucleolysis with chymopapain] Jorgensen C, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):555–8 **(Fre)**

[Trabecular osteoporosis complicating unrecognized anorexia nervosa] Maugars Y, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):159–61 **(Fre)**

[Work posture and spinal changes in porphyry miners] Colombini D, et al. **Med Lav** 1988 May–Jun;79(3):223–33 (Eng. Abstr.) **(Ita)**

[Work posture and changes in the spine of coffin-carriers] Occhipinti E, et al. **Med Lav** 1988 Nov–Dec;79(6):452–9 (Eng. Abstr.) **(Ita)**

[Non-tuberculous infections of the spine] Beguiristáin JL, et al. **Rev Med Univ Navarra** 1987 Jul–Sep;31(3):149–52, 155–6, 159–61 (50 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

Autosomal dominant spondyloarthropathy [letter] Gaucher A, et al. **N Engl J Med** 1989 Apr 6;320(14):940–1

Osteomesopycnosis. A new case. Schmidt H, et al. **Pediatr Radiol** 1989;19(6–7):489–92

[Osteogenesis imperfecta and localized involvement of the spine: a peculiar form? Apropos of a familial case] Corsat JP, et al. **Rev Chir Orthop** 1989;75(2):120–4 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Antibacterial antibody pattern in seronegative spondyloarthropathies (SNSA). Lapadula G, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):385–90

[The state of immunity in patients with hematogenous osteomyelitis of the spine and femur (comparative characteristics)] Fishchenko VIa, et al. **Ortop Travmatol Protez** 1988 Sep;(9):29–32 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Skeletal brucellosis in Iraqi patients. al-Rawi TI, et al. **Ann Rheum Dis** 1989 Jan;48(1):77–9

Septicaemia due to Actinobacillus actinomycetemcomitans with endocarditis and spinal epidural abscess. Brisseau JM, et al. **J Infect** 1988 Sep;17(2):131–4

Aspergillus disc space infection: case report and review of the literature. Morgenlander JC, et al. **Neurosurgery** 1989 Jul;25(1):126–9 (14 ref.)

NURSING

Epidural abscesses of the spine: case comparisons. Gilliland K. **J Neurosci Nurs** 1989 Jun;21(3):185–9

PARASITOLOGY

Spinal toxocaral abscess [letter] Russegger L, et al. **Lancet** 1989 Aug 12;2(8659):398

PATHOLOGY

Symptomatic intraspinal ganglion cyst of the nerve root sheath. Hemmati M, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S100

Calcification of the nucleus pulposus with pathologic confirmation in a premature infant. Ho PS, et al. **AJNR** 1989 Jan–Feb;10(1):201–2

Spinal osteoporosis in men. Francis RM, et al. **Bone Miner** 1989 Mar;5(3):347–57

Change in vertebral shape in spinal osteoporosis. Hedlund LR, et al. **Calcif Tissue Int** 1989 Mar;44(3):168–72

Spinal osteomyelitis: unusual findings on magnetic resonance imaging. Michael AS, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):329–31

Ileocolonoscopy in seronegative spondylarthropathy. De Vos M, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):339–44

Surgical model of a chronic subluxation in rabbits. De Boer KF, et al. **J Manipulative Physiol Ther** 1988 Oct; 11(5):366–72

Nomenclatures of anatomical distortion of the spine: a comparison [letter] Milliron JR. **J Manipulative Physiol Ther** 1988 Aug;11(4):333–4

Symptomatic intraspinal genuine endodermal epithelial cyst. Shuangshoti S, et al. **J Med Assoc Thai** 1989 May; 72(5):295–301 (27 ref.)

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 24–1989. A 77-year-old man with back pain and acute inability to walk. **N Engl J Med** 1989 Jun 15;320(24):1610–8

[Role of magnetic resonance imaging in studies of the spine] Frocrain L, et al. **Rev Chir Orthop** 1988;74 Suppl 2:312–6 **(Fre)**

[Histochemical study of amyloid spondyloarthropathy in hemodialyzed patients] Sebert JL, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):121–2 **(Fre)**

[Kümmell-Verneuille syndrome, a rare, but important differential diagnostic disease] Engelmann L, et al. **Beitr Orthop Traumatol** 1988 Dec;35(12):604–12 (Eng. Abstr.) **(Ger)**

[The pathology of spinal diseases] Adler CP. **Radiologe** 1989 Apr;29(4):153–8 (17 ref.) (Eng. Abstr.) **(Ger)**

[Degeneration of the intervertebral disk] Tsiv'ian IaL, et al. **Ortop Travmatol Protez** 1988 Jun;(6):27–31 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Radio-functional analysis of the cervical spine using the Arlen method. A study of 699 subjects. Part One: Methodology. Kraemer M, et al. **J Neuroradiol** 1989; 16(1):48–64 **(Eng, Fre)**

Radio-functional analysis of the cervical spine using the Arlen method. A study of 699 subjects. Part Two: Paradoxical tilting of the atlas. Kraemer M, et al. **J Neuroradiol** 1989;16(1):65–74 **(Eng, Fre)**

A medical orthopaedist talks about low back syndromes [interview] Fraser D. **Semin Neurol** 1986 Dec;6(4):403–10

Lumbar myoelectric spectral analysis for endurance assessment. A comparison of normals with deconditioned patients. Mayer TG, et al. **Spine** 1989 Sep;14(9):986–91

[The evaluation of axial and locomotor function in clinical dis- ability] Soukka A, et al. **Duodecim** 1989;105(2):92–9 (43 ref.) **(Fin)**

[Abnormalities, aseptic necroses, disorders of function of the spine—its relation to capacity in performance sports] Schaetz P. **Z Arztl Fortbild (Jena)** 1989;83(2):67–72 **(Ger)**

[Electrophysiological evaluation of neurologic manifestations of disorders in the topography of the spinal motor segment] Gongal'skiĭ VV. **Ortop Travmatol Protez** 1988 Nov; (11):43–6 (Eng. Abstr.) **(Rus)**

[Cervical spondylosis in neck pain] Durán Sacristán H. **An R Acad Nac Med (Madr)** 1988;105(2):141–84 **(Spa)**

PREVENTION & CONTROL

[Fitness evaluation and preliminary occupational medicine examination in employment with increased mechanical stress on the spine] Blankenburg H, et al. **Beitr Orthop Traumatol** 1988 Jun;35(6):276–80 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Role of diskography after negative postmyelography CT scans [letter] Laros GS, et al. **AJNR** 1988 Nov–Dec; 9(6):1244

Diagnosis of vertebral osteomyelitis in a community hospital by using computed tomography. Abbey DM, et al. **Arch Intern Med** 1989 Sep;149(9):2029–35

C.T. measurement of spinal mineral—initial Australian experience using the U.C.S.F. phantom. Alcock MK, et al. **Australas Radiol** 1988 May;32(2):276–9

Osteomesopyknosis: benign axial osteosclerosis. Griffith TM, et al. **Br J Radiol** 1988 Oct;61(730):951–3

The relationship between pelvic, spinal and hip involvement in ankylosing spondylitis—one disease process or several? Calin A, et al. **Br J Rheumatol** 1988 Oct;27(5):393–5

Spinal epidural abscess. An infectious emergency. Case report and review. Rockney R, et al. **Clin Pediatr (Phila)** 1989 Jul;28(7):332–4 (4 ref.)

Radiology for back pain. Butt WP. **Clin Radiol** 1989 Jan; 40(1):6–10 (94 ref.)

Chronic atlanto-axial dislocation with spontaneous bony fusion. Heselson NG, et al. **Clin Radiol** 1988 Sep; 39(5):555–7

Fibrous dysplasia of the spine. Wright JF, et al. **Clin Radiol** 1988 Sep;39(5):523–7

Radiological perspective of vertebral column disease at Nyeri Provincial Hospital. Elias GD. **East Afr Med J** 1989 Apr; 66(4):285–8

Iotrolan, a nonionic dimeric contrast medium in myelography. Bien S, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:158–60

Radio-functional analysis of the cervical spine using the Arlen method. A study of 699 subjects. Part One: Methodology. Kraemer M, et al. **J Neuroradiol** 1989; 16(1):48–64 **(Eng, Fre)**

Radio-functional analysis of the cervical spine using the Arlen method. A study of 699 subjects. Part Two: Paradoxical tilting of the atlas. Kraemer M, et al. **J Neuroradiol** 1989;16(1):65–74 **(Eng, Fre)**

Gas-containing cyst in the epidural space [letter] Beatty RA. **J Neurosurg** 1989 Aug;71(2):306

Lumbar synovial cysts: report of eleven cases. Eyster EF, et al. **Neurosurgery** 1989 Jan;24(1):112–5

Expansile bone lesions of the vertebra. Kumar R, et al. **Radiographics** 1988 Jul;8(4):749–69

Bony overgrowths and abnormal calcifications about the spine. Jones MD, et al. **Radiol Clin North Am** 1988 Nov; 26(6):1213–34 (61 ref.)

Computed tomography in the evaluation of acute and chronic low back pain syndromes commonly seen. Archer CR, et al. **Semin Neurol** 1986 Dec;6(4):350–71 (28 ref.)

Neuroradiology of cervical spondylotic myelopathy. Alker G. **Spine** 1988 Jul;13(7):850–3

Gas-filled intraspinal synovial cyst. A case report. Fardon DF, et al. **Spine** 1989 Jan;14(1):127–9

Isolated spinous process deviation. A pitfall in the interpretation of AP radiographs of the lumbar spine. Van Schaik JP, et al. **Spine** 1989 Sep;14(9):970–6

[Non-infectious destructive spondyloarthropathy in chronic hemodialysis patients. 2 cases with lumbar localization] Vende B, et al. **Ann Radiol (Paris)** 1988;31(4):239–43 (Eng. Abstr.) **(Fre)**

[Risk and value of conventional myelography with reference to the radiation burden of the patient] Hentschel F. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jan;41(1):31–7 (Eng. Abstr.) **(Ger)**

[CT detection of a spinal fistula following tumor resection] Sievers KW, et al. **ROFO** 1989 Mar;150(3):360 **(Ger)**

[Ankylosing spondylitis: Andersson lesion] Sparenberg A, et al. **ROFO** 1989 Jun;150(6):744–5 **(Ger)**

[Roentgen morphology of the eburnated vertebral body—diagnostic and differential diagnostic problems] Krug B, et al. **Rontgenblatter** 1988 Aug;41(8):348–54 (Eng. Abstr.) **(Ger)**

[Long-term roentgenologic studies in peak performance javelin throwers] Neusel E, et al. **Sportverletz Sportschaden** 1987 Jun;1(2):76–80 (Eng. Abstr.) **(Ger)**

[The intravertebral vacuum phenomenon or gaseous dissection of the vertebral body] Torsello G, et al. **Radiol Med (Torino)** 1989 Jun;77(6):635–7 (Eng. Abstr.) **(Ita)**

[Computed tomography of intraspinal ganglion cysts and synovial cysts: our cases and review of the literature] Terae S, et al. **Rinsho Hoshasen** 1988 Jun;33(6):691–6 (24 ref.) (Eng. Abstr.) **(Jpn)**

[Value of computerized tomography methods in diagnosing various diseases of the spine and spinal cord] Dmitriev AE, et al. **Ortop Travmatol Protez** 1989 May;(5):1–7 (Eng.

Abstr.) (Rus)
[Differential x-ray diagnosis of tuberculosis and osteomyelitis of the spine in adults] Sovetova NA, et al. **Ortop Travmatol Protez** 1988 Nov;(11):27–34 (Eng. Abstr.) (Rus)
[Differential x-ray diagnosis of osteomyelitis of the spine] Andreeva VF, et al. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):68–74 (Eng. Abstr.) (Rus)
[Calcification of the intervertebral disk in children] Avellaneda Cortés J, et al. **An Esp Pediatr** 1988 Aug; 29(2):153–6 (10 ref.) (Eng. Abstr.) (Spa)

RADIONUCLIDE IMAGING

Spinal cerebrospinal fluid leak demonstrated by radioisotopic cisternography. Primeau M, et al. **Clin Nucl Med** 1988 Oct; 13(10):701–3
DUNCE: disc uptake, no calcification evident. Spencer RP, et al. **Clin Nucl Med** 1988 Dec;13(12):928–9
Preoperative indium-labeled white blood cell scintigraphy in suspected osteomyelitis of the axial skeleton. Wukich DK, et al. **Spine** 1988 Oct;13(10):1168–70
[The value of pinhole collimator imaging in the scintigraphic analysis of vertebral diseases] van Heerden BB, et al. **S Afr Med J** 1989 Mar 18;75(6):280–3 (Eng. Abstr.) (Afr)
[Skeletal scintigraphic findings in spinal diseases] Moser E. **Radiologe** 1989 Apr;29(4):164–9 (Eng. Abstr.) (Ger)

REHABILITATION

Spinal mobilisation and manipulation. Kenna C, et al. **Aust Fam Physician** 1989 Jun;18(6):630–1, 633, 637–8 passim
Treatment and functional restoration of the patient with back pain. Horenstein S. **Semin Neurol** 1986 Dec;6(4):390–402 (18 ref.)
[Physiatrics of the elderly as a special group] Isohanni A. **Duodecim** 1989;105(2):208–12 (Fin)
[Physiatric health promotion] Junnila SY. **Duodecim** 1989; 105(2):203–6 (Fin)
[Rehabilitation of spinal cord injuries] Kannisto M, et al. **Duodecim** 1989;105(2):166–73 (25 ref.) (Fin)
[Current problems of the rehabilitative therapy of diseases of the peripheral nervous system and spinal cord in spinal pathology] Strelkova NI. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):1–7 (Rus)

SURGERY

Hydatid disease affecting the vertebrae. Kaoutzanis M, et al. **Acta Neurochir (Wien)** 1989;98(1–2):60–5
Discectomies of the lower cervical spine using interbody biopolymer (B.O.P.) implants. Advantages in the treatment of complicated cervical arthrosis. A review of 150 cases. Lozes G, et al. **Acta Neurochir (Wien)** 1989;96(3–4):88–93
Role of corrosion in Harrington and Luque rods failure. Prikryl M, et al. **Biomaterials** 1989 Mar;10(2):109–17
Spinal epidural abscesses: surgery or conservative treatment? [letter] Leys D, et al. **Clin Neurol Neurosurg** 1988; 90(2):181–2
Percutaneous disc surgery. Shepperd JA, et al. **Clin Orthop** 1989 Jan;(238):43–9
Lumboperitoneal shunt combined with myelotomy for treatment of syringohydromyelia. Park TS, et al. **J Neurosurg** 1989 May;70(5):721–7
Long-term evaluation of cervical spine disorders following laminectomy. Alvisi C, et al. **J Neurosurg Sci** 1988 Jul–Sep; 32(3):109–12
Investigation of failed low back surgery [editorial] **Lancet** 1989 Apr 29;1(8644):939–40
Transthoracic repair of a traumatic subarachnoid–pleural fistula. Dosios T, et al. **Neurochirurgia (Stuttg)** 1989 May; 32(3):82–3
Anterior cervical discectomy with hydroxylapatite fusion. Senter HJ, et al. **Neurosurgery** 1989 Jul;25(1):39–42; discussion 42–3
The symptomatic incompetent cervical intervertebral disc. Vassilouthis J, et al. **Neurosurgery** 1989 Aug;25(2):232–9
Acute cervical myelopathy from hereditary multiple exostoses: case report. Wen DY, et al. **Neurosurgery** 1989 Sep;25(3):472–5
Spinal techniques. **Orthopedics** 1988 Oct;11(10):1363–502
The Wiltse pedicle screw fixation system. Guyer DW, et al. **Orthopedics** 1988 Oct;11(10):1455–60
A neurosurgeon looks at low back syndromes [interview] McDonald J. **Semin Neurol** 1986 Dec;6(4):416–24
The role of anterior lumbar fusion for internal disc disruption. Blumenthal SL, et al. **Spine** 1988 May;13(5):566–9
Treatment of hematogenous pyogenic vertebral osteomyelitis with anterior debridement and primary bone grafting. Emery SE, et al. **Spine** 1989 Mar;14(3):284–91
Cotrel–Dubousset instrumentation in adults. A preliminary report. Gurr KR, et al. **Spine** 1988 May;13(5):510–20
The failure of ethylene oxide gas-sterilized freeze-dried bone graft for thoracic and lumbar spinal fusion. Herron LD, et al. **Spine** 1989 May;14(5):496–500
Luque fixation to the sacral ala using the Dunn–McCarthy modification. McCarthy RE, et al. **Spine** 1989 Mar; 14(3):281–3
Complications with the variable spinal plating system. Whitecloud TS 3d, et al. **Spine** 1989 Apr;14(4):472–6
A critique of posterior lumbar interbody fusion: 12 years' experience with 250 patients. Rish BL. **Surg Neurol** 1989 Apr;31(4):281–9
[Current trends in surgery of the spine] Roy–Camille R. **Int Orthop** 1989;13(2):81–7 (21 ref.) (Eng. Abstr.) (Fre)
[Segmental posterior spinal osteosynthesis using the Luque–Dove technic] Kerboul B, et al. **J Chir (Paris)** 1989 Mar;126(3):193–8 (Eng. Abstr.) (Fre)
[Anterior medial approach in vertebrectomy of L1 and L2 with primary control of the aorta and the inferior vena cava] Lassale B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:67–70 (Fre)
[The Berlin halo-yoke system combination of external fixation and correction of the position of the cervical spine] Weber M, et al. **Beitr Orthop Traumatol** 1988 Jul; 35(7):306–14 (Eng. Abstr.) (Ger)
[Surgical therapy of backache] Opitz G, et al. **Fortschr Med** 1989 Jun 20;107(18):69–70, 73–4 (9 ref.) (Eng. Abstr.) (Ger)
[Pain following operations of the lumbar spine. The "failed back surgery syndrome"] Seelig W, et al. **Z Orthop** 1989 May–Jun;127(3):346–53 (Eng. Abstr.) (Ger)
[Memory spondylodesis of the lumbar spine—results following 76 operations] von Salis-Soglio GF. **Z Orthop** 1989 Mar–Apr;127(2):191–6 (Eng. Abstr.) (Ger)
[Anterolateral approach for thoracic disc disease. Report of six cases] Iwasaki Y, et al. **Neurol Med Chir (Tokyo)** 1988 Aug;28(8):798–801 (Eng. Abstr.) (Jpn)
[Spinal epidural abscess in a hemodialyzed patient. Case report] Shirakawa H, et al. **Neurol Med Chir (Tokyo)** 1988 Aug;28(8):828–32 (Eng. Abstr.) (Jpn)
[Transthoracic approaches to the lesions of thoracic cord and thoracic vertebrae] Hanakita J, et al. **No Shinkei Geka** 1988 Jun;16(7):837–43 (Eng. Abstr.) (Jpn)
[Postoperative analgesia using endolymphatic administration of promedol in children after spinal surgery] Ul'rikh EV, et al. **Vestn Khir** 1989 Jan;142(1):97–9 (Rus)
[Surgical treatment using microdissection of compressive lumbar pain syndrome caused by a herniated disk and degenerative diseases] Tadić R. **God Vojnomed Akad** 1987; 29:63–8 (Eng. Abstr.) (Ser)

THERAPY

The treatment of cervical spine disorders [editorial] Garfin SR, et al. **Clin Orthop** 1989 Feb;(239):2–3
Etofenamate and transcutaneous electrical nerve stimulation treatment of painful spinal syndromes. Coletta R, et al. **Int J Clin Pharmacol Res** 1988;8(4):295–8
Segmental spinal instrumentation. A study of the mechanical properties of materials used for subluminar fixation. Crawford RJ, et al. **Spine** 1989 Jun;14(6):632–5
[Orthomanual medicine (letter)] **Ned Tijdschr Geneeskd** 1989 Jul 1;133(26):1331–2 (Dut)
[The physiatric management of potential axial and locomotor diseases] Lilius G. **Duodecim** 1989;105(2):88–91 (Fin)
[The effectiveness of research on the treatment of refractory axial and locomotor disorders] Saloheimo E, et al. **Duodecim** 1989;105(2):214–21 (27 ref.) (Fin)
[Percutaneous injection of methyl-metacrylate in osteoporosis and severe vertebral osteolysis (Galibert's technic)] Lapras C, et al. **Ann Chir** 1989;43(5):371–6 (Eng. Abstr.) (Fre)
[Various criticisms of the article entitled "Scientific method of evaluation and treatment of spinal disorders in laborers" (letter)] Hobden R, et al. **Union Med Can** 1988 Nov–Dec; 117(6):341–3 (Fre)
[Physical therapy of vertebral and spondylogenic syndromes] Birrer E. **Schweiz Rundsch Med Prax** 1988 Sep 6; 77(36):945–8 (Eng. Abstr.) (Ger)
[Punctate transcutaneous electrical nerve stimulation in functional vertebragenic disorders and in migraine] Heydenreich A. **Z Gesamte Inn Med** 1988 Nov 15; 43(22):651–3 (Eng. Abstr.) (Ger)
[A semirigid corset in the treatment of lumbar disc arthrosis. Physiopathology, indications, limitations and counterindications. A clinical contribution] Lanciani P, et al. **Clin Ter** 1987 Nov 15;123(3):191–5 (Eng. Abstr.) (Ita)
[Prerequisites of manual therapy in spinal diseases] Khvisiuk NI, et al. **Ortop Travmatol Protez** 1988 Jun;(6):68–71 (Rus)
[Treatment of complications of lumbar osteochondrosis by injecting autologous blood into the disks] Margolin GA. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):45–7 (Rus)

VETERINARY

Progressive ankylosis in mice. An animal model of spondylarthropathy. I. Clinical and radiographic findings. Mahowald ML, et al. **Arthritis Rheum** 1988 Nov; 31(11):1390–9
Use of iohexol for myelography in the horse. Maclean AA, et al. **Equine Vet J** 1988 Jul;20(4):286–90
Fistulous withers in horses: 14 cases (1978–1987). Gaughan EM, et al. **J Am Vet Med Assoc** 1988 Oct 15;193(8):964–6
Parasparesis caused by epidural granuloma in a cat. Kraus KH, et al. **J Am Vet Med Assoc** 1989 Mar 15;194(6):789–90
Thoracic, abdominal, and vertebral actinomycosis. Diagnosis and long-term therapy in three dogs. Edwards DF, et al. **J Vet Intern Med** 1988 Oct–Dec;2(4):184–91
Vertebral osteomyelitis and suspected diskospondylitis in an Atlantic bottlenose dolphin (Tursiops truncatus). Alexander JW, et al. **J Wildl Dis** 1989 Jan;25(1):118–21
Spondyloarthropathy in gorillas. Rothschild BM, et al. **Semin Arthritis Rheum** 1989 May;18(4):267–76 (74 ref.)
Acupuncture versus surgery in canine thoracolumbar disc disease [letter] Janssens LA, et al. **Vet Rec** 1989 Mar 18; 124(11):283
Clinical evaluation of three surgical methods for treatment of caudal cervical spondylomyelopathy of dogs. Bruecker KA, et al. **Vet Surg** 1989 May–Jun;18(3):197–203
[Percutaneous partial diskectomy in the dog—an alternative to surgical disk fenestration] Küpper W, et al. **Tierarztl Prax** 1989;17(2):201–9 (Eng. Abstr.) (Ger)

SPINAL FLUID PRESSURE see **CEREBROSPINAL FLUID PRESSURE**

SPINAL FUSION

see related
LAMINECTOMY

Pulling versus guiding: a modification of retrograde guided intubation. Abou-Madi MN, et al. **Can J Anaesth** 1989 May; 36(3 Pt 1):336–9
Radiographic evidence of posterior lumbar interbody fusion with an emphasis on computed tomographic scanning. Lin PM. **Clin Orthop** 1989 May;(242):158–63
Occipitoatlantoaxial fusion utilizing a rectangular rod. Sakou T, et al. **Clin Orthop** 1989 Feb;(239):136–44
Spinal arthrodesis for severe spondylolisthesis in children and adolescents. A long-term follow-up study. Freeman BL 3d, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):594–8
Anterior spinal fusion for spondylolysis and isthmic spondylolisthesis. Long term results in adults. Cheng CL, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):264–7
Posterior cervical interspinous compression wiring and fusion for mid to low cervical spinal injuries. Benzel EC, et al. **J Neurosurg** 1989 Jun;70(6):893–9
Halo vest versus spinal fusion for cervical injury: evidence from an outcome study. Bucholz RD, et al. **J Neurosurg** 1989 Jun;70(6):884–92
Bone SPECT in patients with persistent back pain after lumbar spine surgery. Lusins JO, et al. **J Nucl Med** 1989 Apr;30(4):490–6
Quantitative histologic study of the influence of spinal instrumentation on lumbar fusions: a canine model. Farey ID, et al. **J Orthop Res** 1989;7(5):709–22
Undetected posttraumatic instability of "stable" thoracolumbar fractures. Keene JS, et al. **J Orthop Trauma** 1988;2(3):202–11
The use of acrylic bone cement for cervical fusion in patients with rheumatoid arthritis. Wilde GP, et al. **J R Soc Med** 1988 Sep;81(9):523–5
Hypotensive anesthesia for spinal fusion and Lugue spinal segmental instrumentation. Ting MC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec;26(4):427–30
The effect of the thermoplastic Minerva body jacket on cervical spine motion. Maiman D, et al. **Neurosurgery** 1989 Sep;25(3):363–7; discussion 367–8
Posterolateral fusion of the lumbar and lumbosacral spine—a review of long term results. Tajima N, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):262–8
Tomography of the posterior cervical spine fusion: a new concept. Ramthun SK, et al. **Radiol Technol** 1988 Sep–Oct; 60(1):27–31
Surgical management of tumor-related spinal instability. Magerl F, et al. **Recent Results Cancer Res** 1988;108:163–71
The role of anterior lumbar fusion for internal disc disruption. Blumenthal SL, et al. **Spine** 1988 May;13(5):566–9
Intrathecal morphine for spinal fusion in children. Dalens B, et al. **Spine** 1988 May;13(5):494–8
Comparison of disc space heights after anterior lumbar interbody fusion. Dennis S, et al. **Spine** 1989 Aug; 14(8):876–8
Functional activities in spinal muscular atrophy patients after spinal fusion. Furumasu J, et al. **Spine** 1989 Jul;14(7):771–5
Pulmonary function test study and after spinal fusion in young idiopathic scoliosis. Gagnon S, et al. **Spine** 1989 May;14(5):486–90
Clinical and radiological evaluation of lumbosacral motion below fusion levels in idiopathic scoliosis. Hayes MA, et al. **Spine** 1988 Oct;13(10):1161–7
The failure of ethylene oxide gas-sterilized freeze-dried bone graft for thoracic and lumbar spinal fusion. Herron LD, et al. **Spine** 1989 May;14(5):496–500
The Wiltse pedicle screw fixation system. Early clinical results. Horowitch A, et al. **Spine** 1989 Apr;14(4):461–7
Fusions and transfusions. An analysis of blood loss and autologous replacement during lumbar fusions. Johnson RG, et al. **Spine** 1989 Apr;14(4):358–62
Intraspinal narcotic analgesia. A comparison of two methods of postoperative pain relief. Johnson RG, et al. **Spine** 1989 Apr;14(4):363–6
Anterior stabilization, instrumentation, and decompression for post-traumatic kyphosis. Kostuik JP, et al. **Spine** 1989 Apr;14(4):379–86
Spinal bone density following spinal fusion. Lipscomb HJ, et al. **Spine** 1989 Apr;14(4):477–9
Spinal stenosis following anterior spinal fusion. A case report. Louw JA, et al. **Spine** 1988 Aug;13(8):952–3
Variability of somatosensory cortical evoked potential monitoring during spinal surgery. Lubicky JP, et al.

Spine 1989 Aug;14(8):790–8
1989 Volvo Award in basic science. Device-related osteoporosis with spinal instrumentation. McAfee PC, et al. **Spine** 1989 Sep;14(9):919–26
The syndrome of inappropriate antidiuretic hormone secretion and its effect on blood indices following spinal fusion. Mason RJ, et al. **Spine** 1989 Jul;14(7):722–6
Rationale for spinal fusion in lumbar spinal stenosis. Nasca RJ. **Spine** 1989 Apr;14(4):451–4
Results of L4–L5 disc excision alone versus disc excision and fusion. Vaughan PA, et al. **Spine** 1988 Jun;13(6):690–5
A critique of posterior lumbar interbody fusion: 12 years' experience with 250 patients. Rish BL. **Surg Neurol** 1989 Apr;31(4):281–9
[Decompression and fusion in flexion in the treatment of lumbar spinal stenosis] Jia LS.
Chung Hua Wai Ko Tsa Chih 1988 Apr;26(4):220–3, 255 (Eng. Abstr.) (Chi)
[Long-term results of the Harrington operation. Apropos of a series of 200 cases (1964–1986)] Gaubert J, et al.
Ann Chir 1989;43(3):195–202 (Eng. Abstr.) (Fre)
[Autotransfusion using Cell Saver III. Experience with 90 cases of surgery of the spine in childhood and adolescence] Gaudiche O, et al. **Cah Anesthesiol** 1988 Oct;36(6):451–7 (Eng. Abstr.) (Fre)
[Isoflurane-induced hypotension during spinal arthrodesis in the adolescent] Manach A, et al. **Cah Anesthesiol** 1989 May;37(3):181–6 (40 ref.) (Fre)
[Functional results in C1–C2 arthrodesis of fractures of the odontoid process] Mestdagh H, et al. **Rev Chir Orthop** 1988; 74 Suppl 2:307–10 (Fre)
[Autotransfusion and hemodilution in orthopedic surgery in children] Pouliquen-Evrard M, et al. **Rev Chir Orthop** 1989;75(1):11–8 (Eng. Abstr.) (Fre)
[Pharyngeal complications following ventral fusion operations of the cervical spine] Bernemann D, et al.
Laryngorhinootologie 1989 Feb;68(2):128–9 (Eng. Abstr.) (Ger)
[Segment changes in the cervical spine following cervical spondylodeses of unstable injuries] Mähring M.
Unfallchirurgie 1988 Oct;14(5):247–58 (Eng. Abstr.) (Ger)
[Indications and results of fusion operations of the upper cervical spine in chronic polyarthritis and psoriatic arthritis] Kühne JH, et al. **Z Orthop** 1988 Sep-Oct; 126(5):547–54 (Eng. Abstr.) (Ger)
[A complex method of preparing patients with scoliosis for surgical treatment] Przybylski J, et al.
Chir Narzadow Ruchu Ortop Pol 1988;53(5):368–72 (Eng. Abstr.) (Pol)

ADVERSE EFFECTS

Fatal intraoperative hemorrhage during spinal fusion surgery for osteogenesis imperfecta. Sperry K.
Am J Forensic Med Pathol 1989 Mar;10(1):54–9
Fatal air embolism in an adolescent with Duchenne muscular dystrophy during Harrington instrumentation. Lang SA, et al. **Anesth Analg** 1989 Jul;69(1):132–4
Air embolism during posterior spinal fusion. Frankel AS, et al. **Can J Anaesth** 1988 Sep;35(5):511–4
Operative neurological complications resulting from thoracic and lumbar spine internal fixation. Meyer PR Jr, et al.
Clin Orthop 1988 Dec;(237):125–31
Chylous leakage after arthrodesis using the anterior approach to the spine. Report of two cases. Shen YS, et al.
J Bone Joint Surg [Am] 1989 Sep;71(8):1250–1
Donor site pain from the ilium. A complication of lumbar spine fusion. Summers BN, et al.
J Bone Joint Surg [Br] 1989 Aug;71(4):677–80
Surgical and functional results of spine fusion in spinal muscular atrophy. Brown JC, et al. **Spine** 1989 Jul; 14(7):763–70
Long-term results of spinal instrumentation surgery for scoliosis five years or more after surgery, in patients over twenty-three years of age. Kitahara H, et al. **Spine** 1989 Jul;14(7):744–9
Low-back pain after lumbar fusion. Surgical and computed tomographic analysis. Lazsonen EM, et al. **Spine** 1989 Feb; 14(2):210–3
Cauda equina lesions following fusion in situ and decompressive laminectomy for severe spondylolisthesis. Four case reports. Maurice HD, et al. **Spine** 1989 Feb; 14(2):214–6
Postoperative lordoscoliosis causing extrinsic compression of the right main stem bronchus and respiratory insufficiency. A case report. Scuderi G, et al. **Spine** 1989 Jan;14(1):110–4
[Treatment using an epidural blood patch for cerebrospinal fluid fistulas] Barbera Alacreu M, et al.
Rev Esp Anestesiol Reanim 1988 May-Jun;35(3):161–4 (Eng. Abstr.) (Spa)

INSTRUMENTATION

Recurrence of deformity after removal of Harrington's fixation of spine fracture. Seventy-six cases followed for 2 years. Myllynen P, et al. **Acta Orthop Scand** 1988 Oct; 59(5):497–502
Harness for use during anterior cervical fusion [letter] Lloyd EL. **Anaesthesia** 1988 Nov;43(11):995
Cotrel-Dubousset instrumentation in neurofibromatosis spine curves. A preliminary report. Holt RT, et al.
Clin Orthop 1989 Aug;(245):19–23
Cotrel-Dubousset instrumentation in neurofibromatosis spinal problems. Shufflebarger HL. **Clin Orthop** 1989 Aug; (245):24–8
Spring alloplasty in the treatment of fractures of the thoracic and lumbar spines. A correlation of the results of treatment with the mechanism of injury. Kiwerski J. **Int Orthop** 1989; 13(1):33–7
Spinal fusion augmented by luque-rod segmental instrumentation for neuromuscular scoliosis. Broom MJ, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):32–44
Late neurological complications of Harrington-rod instrumentation. Hales DD, et al.
J Bone Joint Surg [Am] 1989 Aug;71(7):1053–7
Anterior Zielke instrumentation for spinal deformity in adults. Kostuik JP, et al. **J Bone Joint Surg [Am]** 1989 Jul; 71(6):898–912
Dwyer-Hartshill transpedicular fixation for spinal fusion. Mehdian H, et al. **J Bone Joint Surg [Br]** 1989 Aug; 71(4):689–91
An implant clamp for atlanto-axial fusion [letter] Benzel EC, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):291–2
Mechanical comparison of anterior spinal instrumentation in a burst fracture model. Bone LB, et al.
J Orthop Trauma 1988;2(3):195–201
Internal fixation of the unstable cervical spine using posterior Roy-Camille plates: preliminary report. Ebraheim NA, et al. **J Orthop Trauma** 1989;3(1):23–8
Halifax interlaminar clamps [letter] Holness RO, et al.
Neurosurgery 1988 Jul;23(1):127–8
Pedicle screw fixation—limitations [editorial] D'Ambrosia R.
Orthopedics 1989 Jul;12(7):935
Translaminar facet joint screws. Montesano PX, et al.
Orthopedics 1988 Oct;11(10):1393–7
Internal spinal skeletal fixation system. Thalgott JS, et al.
Orthopedics 1988 Oct;11(10):1465–8
Occipito-cervical fusion reinforced by Luque's segmental spinal instrumentation for rheumatoid diseases. Itoh T, et al. **Spine** 1988 Nov;13(11):1234–8
Analysis of the primary and compensatory curvatures following Zielke instrumentation for idiopathic scoliosis. Puno RM, et al. **Spine** 1989 Jul;14(7):738–43
Frontal plane and sagittal plane balance following Cotrel-Dubousset instrumentation for idiopathic scoliosis. Richards BS, et al. **Spine** 1989 Jul;14(7):733–7
Spine fusion in cerebral palsy with L-rod segmental spinal instrumentation. A comparison of single and two-stage combined approach with Zielke instrumentation. Swank SM, et al. **Spine** 1989 Jul;14(7):750–9
Multiple spinal fractures after scoliosis fusion with Harrington rods. Thomas R, et al. **Spine** 1989 May; 14(5):539–41
[CD-instrumentation in the treatment of spinal deformities] Dubousset J, et al. **Orthopade** 1989 Apr;18(2):118–27 (Eng. Abstr.) (Ger)
[Zielke ventral derotation spondylodesis] Giehl JP, et al.
Orthopade 1989 Apr;18(2):101–17 (Eng. Abstr.) (Ger)
[Segmental spinal instrumentation in neuromuscular scolioses] Luque ER. **Orthopade** 1989 Apr;18(2):128–33 (Eng. Abstr.) (Ger)
[Memory spondylodesis of the lumbar spine—results following 76 operations] von Salis-Soglio GF.
Z Orthop 1989 Mar-Apr;127(2):191–6 (Eng. Abstr.) (Ger)
[The first experience using C-D equipment in the surgical treatment of idiopathic scoliosis (preliminary report)] Przybylski J, et al. **Chir Narzadow Ruchu Ortop Pol** 1989; 54(1):8–13 (Eng. Abstr.) (Pol)
[Use of contractors in unstable fractures of the thoraco-lumbar spine] Szlachta Z, et al.
Chir Narzadow Ruchu Ortop Pol 1989;54(1):20–5 (Eng. Abstr.) (Pol)
[Surgical treatment of scoliosis using the Rodnianskil-Gupalov corrector] Zhdanov GM, et al.
Ortop Travmatol Protez 1988 Jun;(6):34–6 (Eng. Abstr.) (Rus)
[External instrumental fixation of the spine in the treatment of spinal diseases and injuries] Lavrov VN, et al.
Sov Med 1989;(4):35–8 (Eng. Abstr.) (Rus)
[Anterior metal spondylodesis in injuries of the cervical spine] Tikk AA. **Zh Vopr Neirokhir** 1988 Sep-Oct;(5):15–8 (Rus)
[New principles for treating vertebral injuries. Increased stability gives advantages] Karlström G, et al.
Lakartidningen 1989 Aug 23;86(34):2739–44 (Swe)

METHODS

Translaminar screw fixation in lumbar spine pathology. Technical note. Markwalder TM, et al.
Acta Neurochir (Wien) 1989;99(1-2):58–60
Treatment of cervical canal stenosis by decompression and anterior fusion. Kiwerski J. **Arch Orthop Trauma Surg** 1988; 107(6):354–6
Results of screw osteosynthesis in spondylolysis and low-grade spondylolisthesis. Winter M, et al.
Arch Orthop Trauma Surg 1989;108(2):96–9
Anterior cervical arthrodesis with heterologous bone graft and human fibrin glue in the surgical treatment of myelopathy due to spondylosis. Preliminary note. Fortuna A, et al. **Clin Neurol Neurosurg** 1988;90(2):125–9
Augmentation of spinal fusion with bone morphogenetic protein in dogs. Lovell TP, et al. **Clin Orthop** 1989 Jun; (243):266–74
Posterior transpedicular Zielke instrumentation of the lumbar spine. Simmons EH, et al. **Clin Orthop** 1988 Nov; (236):180–91
Complete removal of vertebrae for extirpation of tumors. A 20-year experience. Stener B. **Clin Orthop** 1989 Aug; (245):72–82
Stabilization procedures in the patient with acute spinal cord injury. Snowdy HA Jr, et al. **Crit Care Clin** 1987 Jul; 3(3):569–97 (68 ref.)
Bone formation and static changes in the thoracic spine at uni- or bilateral experimental spondylodesis with demineralized bone matrix (DBM). Ragni PC, et al.
Ital J Orthop Traumatol 1989 Jun;15(2):237–52
The status of arthrodesis of the cervical spine. Fielding JW.
J Bone Joint Surg [Am] 1988 Dec;70(10):1571–4 (21 ref.)
One-stage anterior cervical decompression and posterior stabilization with circumferential arthrodesis. A study of twenty-four patients who had a traumatic or a neoplastic lesion. McAfee PC, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):78–88
In situ arthrodesis without decompression for Grade-III or IV isthmic spondylolisthesis in adults who have severe sciatica. Peek RD, et al. **J Bone Joint Surg [Am]** 1989 Jan; 71(1):62–8
Long-term follow-up of fused and unfused idiopathic scoliosis. Edgar MA, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):712–6
Internal fixation for occipito-cervical fusion. Heywood AW, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):708–11
Surgical correction of myelomeningocele scoliosis: a critical appraisal of various spinal instrumentation systems. Ward WT, et al. **J Pediatr Orthop** 1989 May-Jun;9(3):262–8 (14 ref.)
Convex growth arrest for progressive congenital scoliosis due to hemivertebrae. Winter RB, et al.
J Pediatr Orthop 1988 Nov-Dec;8(6):633–8
The principles of bony spinal fusion. Kaufman HH, et al.
Neurosurgery 1989 Feb;24(2):264–70 (36 ref.)
Anterior cervical vertebrectomy and interbody fusion for multi-level spondylosis and ossification of the posterior longitudinal ligament. Kojima T, et al. **Neurosurgery** 1989 Jun;24(6):864–72
Anterior cervical discectomy with hydroxylapatite fusion. Senter HJ, et al. **Neurosurgery** 1989 Jul;25(1):39–42; discussion 42–3
Stabilization of atlantoaxial instability. Aprin H, et al.
Orthopedics 1988 Dec;11(12):1687–93
Two views of the use of methylmethacrylate for stabilization of the cervical spine. Clark CR, et al. **Orthopedics** 1989 Apr;12(4):589–96
Occipitocervical fusion for the unstable rheumatoid neck. Clark CR. **Orthopedics** 1989 Mar;12(3):469–73
Synthetic biomaterials for spinal fusion. Nasca RJ, et al.
Orthopedics 1989 Apr;12(4):543–8
Wiring techniques of the posterior cervical spine for the treatment of trauma. Stauffer ES. **Orthopedics** 1988 Nov; 11(11):1543–8
The use of banked femoral head bone allograft in spinal surgery. Paterson MP, et al. **S Afr J Surg** 1989 Jul; 27(3):89–92
Idiopathic scoliosis—treatment by pre-operative Risser's localiser cast followed by Harrington rodding and posterior spinal fusion. Koh KT, et al. **Singapore Med J** 1988 Jun; 29(3):219–21
Treatment of idiopathic scoliosis by preoperative localiser cast followed by Harrington rod fixation and posterior spinal fusion. Low YP. **Singapore Med J** 1988 Jun;29(3):197
Segmental ("floating") lumbar spine fusions. Brodsky AE, et al. **Spine** 1989 Apr;14(4):447–50
Anterior cervical fusion using the free vascularized fibular graft. Doi K, et al. **Spine** 1988 Nov;13(11):1239–44
Decompression and circumferential stabilization of unstable spinal fractures. Gertzbein SD, et al. **Spine** 1988 Aug; 13(8):892–5
Posterior plating of the cervical spine. A biomechanical comparison of different posterior fusion techniques. Gill K, et al. **Spine** 1988 Jul;13(7):813–6
Enhancement of lumbar spine fusion by use of translaminar facet joint screws. Jacobs RR, et al. **Spine** 1989 Jan; 14(1):12–5
Temporal analysis of vascularized and nonvascularized rib grafts in canine spine surgery. Shaffer JW, et al. **Spine** 1989 Jul;14(7):727–32
Posterior lumbar interbody fusion with facet-screw fixation. Stonecipher T, et al. **Spine** 1989 Apr;14(4):468–71
Reconstruction of the lumbar spine using AO DCP plate internal fixation. Thalgott JS, et al. **Spine** 1989 Jan; 14(1):91–5
Complications with the variable spinal plating system. Whitecloud TS 3d, et al. **Spine** 1989 Apr;14(4):472–6
Early results of spinal fusion using variable spine plating system. Zucherman J, et al. **Spine** 1988 May;13(5):570–9
[Anterior fusion by anterio-lateral approach in the treatment of atlanto-axial instability] Shi D, et al.
Chung Hua Wai Ko Tsa Chih 1988 Mar;26(3):141–2, 189 (Eng. Abstr.) (Chi)
[Intervertebral fusion of a lumbo-sacral segment with insertion of a rotated local bone block by anterio-lateral approach] Zhao DL, et al.
Chung Hua Wai Ko Tsa Chih 1988 Mar;26(3):136–8, 189 (Eng. Abstr.) (Chi)
[Prevention of neurologic dysfunction as a result of

atlanto–axial dislocation in persons with Down syndrome (letter)] Duyvendak HW, et al. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):465 (Dut)

[Results of atlantoaxial arthrodesis with posterior cerclage for fractures of the odontoid process. Apropos of 59 cases] Mestdagh H, et al. **Ann Chir** 1988;42(7):492–500 (31 ref.) (Eng. Abstr.) (Fre)

[Choice of a technic of stabilization in surgical treatment of recent fractures of the odontoid process. 90 cases] Autricque A, et al. **Neurochirurgie** 1988;34(6):410–9 (44 ref.) (Eng. Abstr.) (Fre)

[The double approach in recent cervical injury. Indications apropos of 15 cases and a review of the literature] Richaud J, et al. **Neurochirurgie** 1988;34(6):401–9 (33 ref.) (Eng. Abstr.) (Fre)

[Comparative study of bioactive calcium phosphate ceramics after implantation in spongy bone in dogs. Histologic, ultrastructural and electron probe microanalysis] Daculsi G, et al. **Rev Chir Orthop** 1989;75(2):65–71 (Eng. Abstr.) (Fre)

[Value of the anterior approach in the treatment of fractures of the thoracolumbar spine] Dehoux E, et al. **Rev Chir Orthop** 1988;74 Suppl 2:296–8 (Fre)

[Orthopedic treatment of fractures of the dorsolumbar and lumbar spine with recoil of the posterior corpus wall (burst fracture) without or with minor neurologic lesions] Goutallier D, et al. **Rev Chir Orthop** 1988;74 Suppl 2:77–83 (Fre)

[Spondylolisthesis with severe displacement in children and adolescents Results of 12 cases of posterior reduction fixation] Herman S, et al. **Rev Chir Orthop** 1988; 74(7):614–21 (Eng. Abstr.) (Fre)

[The results of posterolateral lumbosacral arthrodesis] Onimus M, et al. **Rev Chir Orthop** 1988;74 Suppl 2:94–8 (Fre)

[Role of osteosynthesis of the lumbar spine associated with the surgical treatment of narrow lumbar canal] Roy-Camille R, et al. **Rev Chir Orthop** 1988;74 Suppl 2:70–3 (Fre)

[Indications status and surgical treatment of spinal fractures. Attempt at a survey and determination of present status] Hermichen HG, et al. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:18–23 (Eng. Abstr.) (Ger)

[Results of surgical treatment of patients with ankylosing spondylarthritis] Schubert T, et al. **Beitr Orthop Traumatol** 1988 Jul;35(7):290–5 (Eng. Abstr.) (Ger)

[Stress stable spondylodesis in injuries of the lower cervical spine] Kalff R, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31 Suppl 1:179–85 (Eng. Abstr.) (Ger)

[Correction of Bechterew kyphosis] Böhm H, et al. **Orthopade** 1989 Apr;18(2):142–54 (Eng. Abstr.) (Ger)

[The surgical treatment of kyphosis with special reference to ventral bone span support] Krismer M, et al. **Orthopade** 1989 Apr;18(2):134–41 (Eng. Abstr.) (Ger)

[Fractures of the spine] Richter-Turtur M, et al. **Orthopade** 1989 Jun;18(3):164–70 (25 ref.) (Eng. Abstr.) (Ger)

[Follow-up studies and results of dorsal stabilization of unstable spinal fractures] Kunze K, et al. **Unfallchirurgie** 1989 Feb;15(1):48–53 (Eng. Abstr.) (Ger)

[Occipitocervical fusion in metastasis to the dens] Wozasek GE, et al. **Unfallchirurgie** 1988 Dec;14(6):320–3 (Eng. Abstr.) (Ger)

[Lumbar diskectomy without or with spondylodesis? Revival of an old dilemma] Benini A. **Z Orthop** 1989 May–Jun; 127(3):276–85 (73 ref.) (Eng. Abstr.) (Ger)

[Progression of Paget's disease of the spine 10 years following posterolateral spondylodesis] Hopf C, et al. **Z Orthop** 1989 Jan–Feb;127(1):47–50 (Eng. Abstr.) (Ger)

[Ventral interligamental–intercorporal spondylodesis in spondylolisthesis] Matzen KA. **Z Orthop** 1989 Jan–Feb; 127(1):39–46 (Eng. Abstr.) (Ger)

[Trends and results of treatment of spinal fractures] Plaue R. **Z Orthop** 1988 May–Jun;126(3):345–52 (Eng. Abstr.) (Ger)

[Comments on the contribution: initial results of surgical treatment of scoliosis with the Cotrel and Dubousset CD instruments by Ch. Hopf, H. H. Matthiass and J. Heine. Z. Orthop. 125 (1987) 347] Zielke K, et al. **Z Orthop** 1988 Dec;126(6):709–18 (Eng. Abstr.) (Ger)

[Demineralized bovine bone matrix as bone inducer in the preparation of vertebral arthrodeses: short–term study in rats] Guizzardi S, et al. **Boll Soc Ital Biol Sper** 1988 Dec; 64(12):1071–6 (Eng. Abstr.) (Ita)

[Free vascularized fibula graft applied to anterior body fusion of the cervical spine—clinical and experimental study] Sumiura S. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr; 63(4):308–19 (Eng. Abstr.) (Jpn)

[Outcome of the surgical treatment of spondylolisthesis] Ardashev IP, et al. **Ortop Travmatol Protez** 1989 May; (5):22–5 (Eng. Abstr.) (Rus)

[The Harrington method of treating scoliosis in adults: its biomechanical analysis and modification] Elizarov VG, et al. **Ortop Travmatol Protez** 1989 May;(5):26–9 (Eng. Abstr.) (Rus)

[Pathogenetic aspects of decompression interventions in complicated injuries of the spine] Khvisiuk NI, et al. **Ortop Travmatol Protez** 1989 Jan;(1):28–32 (Eng. Abstr.) (Rus)

[Long–term results of anterior spondylodesis of the middle and lower cervical vertebrae using transplants supplied with blood] Elizarov VG, et al. **Sov Med** 1988;(9):110–2 (Rus)

[Anterior decompression and spondylodesis with polymer fixation in the treatment of injuries of the cervical vertebrae] Protsenko AI, et al. **Sov Med** 1989;(5):16–9 (Eng. Abstr.) (Rus)

[Experimental substantiation and clinical evaluation of posterior spinal fusion using acryloxide] Bellendir EN, et al. **Vestn Khir** 1987 Dec;139(12):69–73 (Eng. Abstr.) (Rus)

[Intervertebral spondylodesis of mid– an lower–cervical vertebrae using blood–supplied transplants] Elizarov VG, et al. **Vestn Khir** 1989 Jan;142(1):41–5 (Eng. Abstr.) (Rus)

STANDARDS

A comparison of anterior cervical fusion, cervical laminectomy, and cervical laminoplasty for the surgical management of multiple level spondylotic radiculopathy. Herkowitz HN. **Spine** 1988 Jul;13(7):774–80

VETERINARY

Distracted cervical spinal fusion for management of caudal cervical spondylomyelopathy in large–breed dogs. Ellison GW, et al. **J Am Vet Med Assoc** 1988 Aug 15;193(4):447–53

SPINAL INJECTIONS see **INJECTIONS, SPINAL**

SPINAL INJURIES

Sudden death of a young wrestler during competition. Rontoyannis GP, et al. **Int J Sports Med** 1988 Oct; 9(5):353–5

CLASSIFICATION

[Classification and prognosis of spinal injuries] Wolter D. **Langenbecks Arch Chir** 1988;Suppl 2:237–43 (12 ref.) (Eng. Abstr.) (Ger)

COMPLICATIONS

Spinal epidural hematoma without lesion of the spine. Report of 4 cases. Calliauw L, et al. **Clin Neurol Neurosurg** 1988; 90(2):131–6

Sternal fractures associated with spinal injury. Jones HK, et al. **J Trauma** 1989 Mar;29(3):360–4

Microtrauma in the lumbar spine: a cause of low back pain. Yoganandan N, et al. **Neurosurgery** 1988 Aug;23(2):162–8

A case of post–traumatic syringomyelia. Neuropathological findings after 1 year of cystic drainage. Foo D, et al. **Paraplegia** 1989 Feb;27(1):63–9

Traumatic rotatory displacement of the lower cervical spine. Argenson C, et al. **Spine** 1988 Jul;13(7):767–73

Complications of fractures of the cervical spine in ankylosing spondylitis. Broom MJ, et al. **Spine** 1988 Jul;13(7):763–6

Dislocation of C1–C2 Down syndrome [editorial] Alexander E Jr. **Surg Neurol** 1989 Sep;32(3):247

[Venous thrombosis in spinal and spinal cord injuries] Myllynen P, et al. **Duodecim** 1988;104(14):1059–62 (15 ref.) (Fin)

[Osteoporotic crush fracture causing spinal cord compression] Fried V, et al. **Harefuah** 1988 Nov 15; 115(10):274–6 (Eng. Abstr.) (Heb)

[Surgical interventions in the rehabilitation of the tetraplegic arm caused by vertebro–spinal cord injuries: general principles and critical review of various clinical cases] Costa P, et al. **Chir Organi Mov** 1988 Oct–Dec;73(4):351–5 (Eng. Abstr.) (Ita)

[Calcitonin in acute pain due to vertebral fracture in osteoporosis. Cooperative study] Arinoviche R, et al. **Rev Med Chil** 1987 Nov;115(11):1039–43 (Eng. Abstr.) (Spa)

DIAGNOSIS

Measurement of bone by dual–photon absorptiometry (DPA) and dual–energy X–ray absorptiometry (DEXA). Mazess RB, et al. **Ann Chir Gynaecol** 1988;77(5–6):197–203 (50 ref.)

Vertebral morphometry in diagnosis of spinal fractures. Hedlund LR, et al. **Bone Miner** 1988 Oct;5(1):59–67

Subaxial injuries. Stauffer ES. **Clin Orthop** 1989 Feb; (239):30–9

Magnetic resonance imaging in spinal disorders. Weisz GM, et al. **Int Orthop** 1988;12(4):331–4

A comparison of single and multi–site BMC measurements for assessment of spine fracture probability. Wasnich RD, et al. **J Nucl Med** 1989 Jul;30(7):1166–71

1.5 tesla magnetic resonance imaging of acute spinal trauma. Kulkarni MV, et al. **Radiographics** 1988 Nov;8(6):1059–82

Vertebral compression fractures: distinction between benign and malignant causes with MR imaging. Yuh WT, et al. **Radiology** 1989 Jul;172(1):215–8

Magnetic resonance imaging of spinal injury. Tracy PT, et al. **Spine** 1989 Mar;14(3):292–301

[Spinal deviations in sports medicine practice] Korbelář P, et al. **Sportverletz Sportschaden** 1988 Jun;2(2):69–71 (Eng. Abstr.) (Ger)

ENZYMOLOGY

Urinary lactic dehydrogenase isoenzyme analysis in children with spinal lesions. Yokochi K, et al. **Acta Paediatr Scand** 1989 Jul;78(4):588–91

EPIDEMIOLOGY

Prevalence and types of injuries in aerobic dancers. Rothenberger LA, et al. **Am J Sports Med** 1988 Jul–Aug; 16(4):403–7

Osteoporosis and heredity. Gärdsell P, et al. **Clin Orthop** 1989 Mar;(240):164–7

The incidence of injury to the cervical spine in patients with craniocerebral injury. O'Malley KF, et al. **J Trauma** 1988 Oct;28(10):1476–8

Multiple–level noncontiguous spinal fractures. Powell JN, et al. **J Trauma** 1989 Aug;29(8):1146–50; discussion 1150–1

Rugby injuries of the cervical spine and spinal cord—has the situation improved? Scher AT. **S Afr Med J** 1989 Jul 15;76(2):46

The increased rate of fractures of the hip and spine in Alzheimer's patients [letter] Weisenberg LB, et al. **West J Med** 1989 Aug;151(2):206

ETIOLOGY

Is lactose malabsorption a risk factor in fractures of the elderly? Härmä M, et al. **Ann Chir Gynaecol** 1988; 77(5–6):180–3

Mild asymptomatic primary hyperparathyroidism is not a risk factor for vertebral fractures. Wilson RJ, et al. **Ann Intern Med** 1988 Dec 15;109(12):959–62

Cervical spinal deformity following craniotomy and upper cervical laminectomy for posterior fossa tumors in children. Steinbok P, et al. **Childs Nerv Syst** 1989 Feb;5(1):25–8

Rugby injuries of the spine and spinal cord. Scher AT. **Clin Sports Med** 1987 Jan;6(1):87–99

Analgesic effect of intranasal salmon calcitonin in the treatment of osteoporotic vertebral fractures. Pun KK, et al. **Clin Ther** 1989 Mar–Apr;11(2):205–9

Vertebral compression fracture following segmental spinal instrumentation. Shimazaki K, et al. **Kobe J Med Sci** 1988 Apr;34(2):71–5

Unsuspected damage to lumbar zygapophyseal (facet) joints after motor–vehicle accidents. Twomey LT, et al. **Med J Aust** 1989 Aug 21;151(4):210–2, 215–7

Pyogenic vertebral osteomyelitis after transcolonic gunshot wound. Miller BR, et al. **Milit Med** 1989 Feb;154(2):64–6

Gunshot wounds to the spine associated with a perforated viscus. Roffi RP, et al. **Spine** 1989 Aug;14(8):808–11

Spine fractures in winter sports. Reid DC, et al. **Sports Med** 1989 Jun;7(6):393–9 (24 ref.)

Prolactinoma in a middle–aged man with an osteoporotic fracture. Taylor SD, et al. **West J Med** 1989 Jul;151(1):80–2

[Fracture dislocation of the thoracic spine in ankylosing spondylitis. A case of spontaneous occurrence and an uncommon course] Papavasiliou V, et al. **Rev Chir Orthop** 1988;74(7):679–81 (Eng. Abstr.) (Fre)

[The vacuum phenomenon in osteoporotic vertebral fractures] Küffer G, et al. **ROFO** 1989 Mar;150(3):361–3 (Ger)

[Spinal changes in artistic gymnasts] Wismach J, et al. **Sportverletz Sportschaden** 1988 Sep;2(3):95–9 (Eng. Abstr.) (Ger)

[Mechanism of formation of spinal injuries] Andrelkin AB. **Sud Med Ekspert** 1989 Apr–Jun;32(2):12–4 (Eng. Abstr.) (Rus)

[Effect of background spinal changes on the development of injuries in flight personnel under G–loads] Poletaev RV. **Voen Med Zh** 1988 Nov;(11):43–5 (Rus)

METABOLISM

The relation between forearm and vertebral mineral density and fractures in postmenopausal women. Nordin BE, et al. **Bone Miner** 1988 Oct;5(1):21–33

PATHOLOGY

Comparison of the compression strength of human vertebral bodies with the mass and density of apatite: a study by 31P NMR spectroscopy. Brown CE, et al. **Clin Chem** 1988 Oct;34(10):2114–7

Multilevel spinal injuries. Incidence, distribution and neurological patterns. Gupta A, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):692–5

Unequal decrease in bone density of lumbar spine and ultradistal radius in Colles' and vertebral fracture syndromes. Eastell R, et al. **J Clin Invest** 1989 Jan; 83(1):168–74

Pathological studies and pathological principles on the management of extension injuries of the cervical spine. Kinoshita H, et al. **Paraplegia** 1989 Jun;27(3):172–81

[Examination of the spine within the scope of the forensic autopsy] Saternus KS. **Beitr Gerichtl Med** 1988;46:489–95 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Stiffness and strain energy criteria to evaluate the threshold of injury to an intervertebral joint. Yoganandan N, et al. **J Biomech** 1989;22(2):135–42

Biomechanics of cervical spine facetectomy and fixation techniques. Cusick JF, et al. **Spine** 1988 Jul;13(7):808–12

Biomechanical comparisons of spinal fracture models and the stabilizing effects of posterior instrumentations. Ferguson RL, et al. **Spine** 1988 May;13(5):453–60

Spinal stability and intersegmental muscle forces. A biomechanical model. Panjabi M, et al. **Spine** 1989 Feb; 14(2):194–200

Biomechanics of healing of posterior cervical spinal injuries in a canine model. Panjabi MM, et al. **Spine** 1988 Jul; 13(7):803–7

[Movement in the rehabilitation of axial and locomotor trauma] Alaranta H, et al. **Duodecim** 1989;105(2):193–201 (54 ref.) (Fin)

RADIOGRAPHY

Superior mediastinal widening from spine fractures mimicking aortic rupture on chest radiographs. Dennis LN, et al. **AJR** 1989 Jan;152(1):27–30

Interpreting the spinal X-ray: 1. Butt WP. **Br J Hosp Med** 1988 Jul;40(1):46–9, 51–4

The quadrangular fragment fracture. Roentgenographic features and treatment protocol. Favero KJ, et al. **Clin Orthop** 1989 Feb;(239):40–6

Radiology of acute spinal trauma. Djang WT. **Crit Care Clin** 1987 Jul;3(3):495–518 (44 ref.)

Spinal cord injury without radiographic abnormality in children—the SCIWORA syndrome. Pang D, et al. **J Trauma** 1989 May;29(5):654–64

Treatment of fractures of the vertebral limbus and spinal stenosis in five adolescents and five adults. Epstein NE, et al. **Neurosurgery** 1989 Apr;24(4):595–604

Quantitative computed tomography reflects vertebral fracture morbidity in osteopenic patients. Kaplan FS, et al. **Orthopedics** 1989 Jul;12(7):949–55

Diagnostic imaging of spinal trauma. Murphey MD, et al. **Radiol Clin North Am** 1989 Sep;27(5):855–72

Transverse posterior element fractures associated with torsion. Abel MS. **Skeletal Radiol** 1989;17(8):556–60

Radiographic evaluation of cervical spine injuries. Clark CR, et al. **Spine** 1988 Jul;13(7):742–7

Functional radiographic diagnosis of the cervical spine: flexion/extension. Dvorak J, et al. **Spine** 1988 Jul; 13(7):748–55

[CT investigation of spinal injury] Zhang XZ. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Aug; 22(4):227–30 (Eng. Abstr.) (Chi)

[CT of fractures and ligament ruptures of the 1st and 2d cervical vertebrae] Nepper-Rasmussen HJ, et al. **Ugeskr Laeger** 1989 May 1;151(18):1112–4 (Eng. Abstr.) (Dan)

[The assessment of stability in spinal fractures] Jend HH, et al. **ROFO** 1989 Jul;151(1):63–8 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

Bone scintigraphy in the evaluation of ejection injuries. Bury RF. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A16–7

REHABILITATION

[Current problems of the rehabilitative therapy of diseases of the peripheral nervous system and spinal cord in spinal pathology] Strelkova NI. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):1–7 (Rus)

SURGERY

Prognosis and treatment of cervical spine injuries with associated head trauma. Steudel WI, et al. **Acta Neurochir Suppl (Wien)** 1988;43:85–90

First Hungarian neurosurgical experiences with "Fixateur Interne" in the treatment of thoraco-lumbar spine injuries. Technical note. Pentelényi T, et al. **Acta Neurochir (Wien)** 1988;93(3–4):104–9

Anterior metal plate fixation in the treatment of unstable lower cervical spine injuries. Shoung HM, et al. **Acta Neurochir (Wien)** 1989;98(1–2):55–9

Treatment of asymptomatic gunshot injuries to the spine. Wigle RL. **Am Surg** 1989 Sep;55(9):591–5

Spinal fixation. Using the Steffee pedicle screw and plate system. Allison RE, et al. **AORN J** 1989 Apr;49(4):1016–9, 1022–4, 1026–30

Stabilization procedures in the patient with acute spinal cord injury. Snowdy HA Jr, et al. **Crit Care Clin** 1987 Jul; 3(3):569–97 (68 ref.)

Posterior cervical interspinous compression wiring and fusion for mid to low cervical spinal injuries. Benzel EC, et al. **J Neurosurg** 1989 Jun;70(6):893–9

Halo vest versus spinal fusion for cervical injury: evidence from an outcome study. Bucholz RD, et al. **J Neurosurg** 1989 Jun;70(6):884–92

Mechanical comparison of anterior spinal instrumentation in a burst fracture model. Bone LB, et al. **J Orthop Trauma** 1988;2(3):195–201

Update–1988. Current status of internal fixation of thoracolumbar fractures. Broom MJ, et al. **J Orthop Trauma** 1989;3(2):148–55 (40 ref.)

Posterior stabilization of cervical spine fractures and subluxations using plates and screws. Cooper PR, et al. **Neurosurgery** 1988 Sep;23(3):300–6

Anterior screw fixation of posteriorly displaced type II odontoid fractures. Geisler FH, et al. **Neurosurgery** 1989 Jul;25(1):30–7; discussion 37–8

The principles of bony spinal fusion. Kaufman HH, et al. **Neurosurgery** 1989 Feb;24(2):264–70 (36 ref.)

A new semirigid method for interpedicular fixation of the spine. Luque ER, et al. **Orthopedics** 1988 Oct; 11(10):1445–50

Thoracolumbar fracture dislocation: a study of 30 patients. Kinoshita H, et al. **Paraplegia** 1989 Aug;27(4):289–95

The AO spinal internal fixator. Esses SI. **Spine** 1989 Apr; 14(4):373–8

The neurological outcome following surgery for spinal fractures. Gertzbein SD, et al. **Spine** 1988 Jun;13(6):641–4

[Initial experience with transpedicular stabilization of spinal injuries using ridged plates] Vlach O, et al. **Acta Chir Orthop Traumatol Cech** 1988 Oct;55(5):418–25 (Eng. Abstr.) (Cze)

[Fractures of the thoracolumbar spine. Surgical treatment using the Harrington–Luque method] Mosdal C, et al. **Ugeskr Laeger** 1989 Mar 20;151(12):766–70 (Eng. Abstr.) (Dan)

[Current trends in surgery of the spine] Roy-Camille R. **Int Orthop** 1989;13(2):81–7 (21 ref.) (Eng. Abstr.) (Fre)

[Direct osteosynthesis of fractures of the odontoid process using a biodegradable implant (B.O.P.)] Lozes G, et al. **Neurochirurgie** 1988;34(5):355–8 (Eng. Abstr.) (Fre)

[True "thoracic" fractures] Argenson C, et al. **Rev Chir Orthop** 1988;74 Suppl 2:73–6 (Fre)

[Value of the anterior approach in the treatment of fractures of the thoracolumbar spine] Dehoux E, et al. **Rev Chir Orthop** 1988;74 Suppl 2:296–8 (Fre)

[Indications status and surgical treatment of spinal fractures. Attempt at a survey and determination of present status] Hermichen HG, et al. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:18–23 (Eng. Abstr.) (Ger)

[Modified transpeduncular spongiosa-plasty with osteotomy of the transverse process] Thielemann FW, et al. **Aktuel Traumatol** 1989 Apr;19(2):63–4 (Eng. Abstr.) (Ger)

[Fractures of the spine] Richter-Turtur M, et al. **Orthopade** 1989 Jun;18(3):164–70 (25 ref.) (Eng. Abstr.) (Ger)

[Follow-up studies and results of dorsal stabilization of unstable spinal fractures] Kunze K, et al. **Unfallchirurgie** 1989 Feb;15(1):48–53 (Eng. Abstr.) (Ger)

[Trends and results of treatment of spinal fractures] Plaue R. **Z Orthop** 1988 May–Jun;126(3):345–52 (Eng. Abstr.) (Ger)

[Experiences and results in primary management of patients with traumatic paraplegia] Pätzug P. **Zentralbl Chir** 1989; 114(8):514–20 (Eng. Abstr.) (Ger)

[Early experience with the use of the Halo device in the treatment of damage to the cervical spine] Veres R, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(1):15–23 (29 ref.) (Eng. Abstr.) (Hun)

[Transpedicular osteofixation in lower thoracic and lumbar spine instability] Bjerkreim I, et al. **Tidsskr Nor Laegeforen** 1988 Oct 20;108(29):2471–3 (Eng. Abstr.) (Nor)

[Postoperative evaluation by computed tomography of fractures and dislocations of the thoracolumbar spine] de Barros Filho TE, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jul–Aug; 43(4):203–5 (Eng. Abstr.) (Por)

[Effectiveness of local hypothermia in the complex treatment of patients with complicated injuries of the spine] Cherkashina ZA. **Ortop Travmatol Protez** 1989 May; (5):12–6 (Eng. Abstr.) (Rus)

[Pathogenetic aspects of decompression interventions in complicated injuries of the spine] Khvisiuk NI, et al. **Ortop Travmatol Protez** 1989 Jan;(1):28–32 (Eng. Abstr.) (Rus)

[Hypothermia in spinal surgery] Khvisiuk NI, et al. **Ortop Travmatol Protez** 1989 May;(5):8–11 (Eng. Abstr.) (Rus)

[External instrumental fixation of the spine in the treatment of spinal diseases and injuries] Lavrov VN, et al. **Sov Med** 1989;(4):35–8 (Eng. Abstr.) (Rus)

[Characteristics of the work organization of a specialized military field surgical hospital for head, neck and spinal wounds] Khil'ko VA, et al. **Voen Med Zh** 1988 Sep;(9):11–3 (Rus)

[New principles for treating vertebral injuries. Increased stability gives advantages] Karlström G, et al. **Lakartidningen** 1989 Aug 23;86(34):2739–44 (Swe)

THERAPY

Manual immobilization [letter] Blum FC. **Ann Emerg Med** 1989 Apr;18(4):427–8

Comparing the short-board technique [letter] Dick T. **Ann Emerg Med** 1989 Jan;18(1):115–6

Care of the multiply injured patient with cervical spine injury. Garfin SR, et al. **Clin Orthop** 1989 Feb;(239):19–29

A "closet DO" comes out for manipulation [letter] Norris SH. **Hosp Pract [Off]** 1989 Sep 30;24(9A):12–4

The design of a new spring-loaded tong-type caliper for cervical traction. Minns RJ, et al. **Injury** 1987 Mar; 18(2):137–8

A comparison of the Minerva and halo jackets for stabilization of the cervical spine. Benzel EC, et al. **J Neurosurg** 1989 Mar;70(3):411–4

Transpedicular screw fixation. Moran JM, et al. **J Orthop Res** 1989;7(1):107–14

Pull-off strength of gardner-Wells tongs from cadaveric crania. Krag MH, et al. **Spine** 1989 Mar;14(3):247–50

A biomechanical evaluation of cervical spinal stabilization methods in a bovine model. Static and cyclical loading. Sutterlin CE 3d, et al. **Spine** 1988 Jul;13(7):795–802

[First aid and diagnosis of spinal injuries] Muhr G. **Langenbecks Arch Chir** 1988;Suppl 2:233–6 (Eng. Abstr.) (Ger)

[Experience in the treatment of uncomplicated compression fractures of the spine] Efimov IS, et al. **Ortop Travmatol Protez** 1988 Nov;(11):54–5 (Rus)

VETERINARY

Questions conclusions on spinal fixation technique [letter] Smith GK. **Am J Vet Res** 1989 Feb;50(2):302

SPINAL MUSCULAR ATROPHY see MUSCULAR ATROPHY, SPINAL

SPINAL NEOPLASMS

Solitary plasmacytoma of the spine (a case report and review of literature). Mohan V, et al. **Australas Radiol** 1988 May; 32(2):272–5 (16 ref.)

Secondary chordoma of the mandible. Slee RW, et al. **Br J Oral Maxillofac Surg** 1989 Aug;27(4):346–9

Ganglioneuroma of the sacrum. Leeson MC, et al. **Clin Orthop** 1989 Sep;(246):102–5

Chondrosarcoma of the spine. Shives TC, et al. **J Bone Joint Surg [Am]** 1989 Sep;71(8):1158–65

Diagnosis and treatment of giant cell tumor in the thoracic spine. Yan SC, et al. **J Surg Oncol** 1989 Feb;40(2):128–31

Case report 544: Metastatic chordoma to humeri (originating in sacrum). Resnik CS, et al. **Skeletal Radiol** 1989; 18(4):303–5

[Spinal osteoid osteomas. Apropos of 4 cases] Guy G, et al. **Neurochirurgie** 1989;35(1):41–6 (47 ref.) (Eng. Abstr.) (Fre)

[Thoracic and lumbo-sacral spinal lipoma in an infant] Honda E, et al. **No Shinkei Geka** 1989 Feb;17(2):171–5 (Eng. Abstr.) (Jpn)

[Neurofibroma and meningioma of the spinal canal] Araszkiewicz H, et al. **Neurol Neurochir Pol** 1988 May–Jun; 22(3):264–7 (Eng. Abstr.) (Pol)

[Astrocytoma of the cervical spinal medulla continuous with a bulbar hemangioblastoma] Olvera-Rabiela JE, et al. **Gac Med Mex** 1988 Mar–Apr;124(3–4):131–3 (Spa)

CHEMICALLY INDUCED

Epidural lipomatosis after renal transplantation—complete recovery without surgery. Vazquez L, et al. **Transplantation** 1988 Nov;46(5):773–4

COMPLICATIONS

Intraosseous schwannoma of the cervical spine associated with skeletal fluorosis. Naidu MR, et al. **Clin Neurol Neurosurg** 1988;90(3):257–60

Chondroma of the cervical spine. Palaoglu S, et al. **Clin Neurol Neurosurg** 1988;90(3):253–5

Spinal cord compression caused by dual pathology: a close shave with Ockham's razor. Wright JF, et al. **Clin Radiol** 1988 Sep;39(5):558–9

Solitary osteochondroma of the pedicle of L4 causing root compression. Case report. Spaziante R, et al. **J Neurosurg Sci** 1988 Oct–Dec;32(4):141–5

Subarachnoid haemorrhage with acute cauda symptom due to spinal tumour. Kulali A, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):87–90

Solitary sacral osteochondroma compressing the cauda equina—case report. Hanakita J, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):1010–3 (14 ref.)

Impairment of vertebral artery flow caused by extrinsic lesions. George B, et al. **Neurosurgery** 1989 Feb; 24(2):206–14

Anterior decompression and stabilization of the spine in malignant disease. Moore AJ, et al. **Neurosurgery** 1989 May;24(5):713–7

Cordectomy for syringobulbo-myelia with sleep apnea secondary to a spinal extramedullary tumor: case report. Tokoro K, et al. **Neurosurgery** 1989 Jan;24(1):118–24

Vertebral compression fractures: distinction between benign and malignant causes with MR imaging. Yuh WT, et al. **Radiology** 1989 Jul;172(1):215–8

Case report 545: Osteochondroma (osteocartilagenous exostosis) cervical spine with spinal cord compression. Tajima K, et al. **Skeletal Radiol** 1989;18(4):306–9 (14 ref.)

Differential diagnosis of severe back pain using MRI. Abram SR, et al. **South Med J** 1988 Dec;81(12):1487–92

Vertebral hemangioma associated with spinal cord compression. Marymont JV, et al. **South Med J** 1988 Dec; 81(12):1586–7

Vertebral arch hemangioma producing spinal cord compression in pregnancy. Diagnosis by magnetic resonance imaging. Schwartz DA, et al. **Spine** 1989 Aug; 14(8):888–90

Current considerations in the management of neoplastic spinal cord compression. Siegal T, et al. **Spine** 1989 Feb; 14(2):223–8 (56 ref.)

Myelopathy secondary to spinal epidural lipomatosis. A case report. Soloniuk DS, et al. **Spine** 1989 Jan;14(1):119–22

Cervical osteochondroma (C2 level) with vertebral artery occlusion and second cervical nerve root irritation. George B, et al. **Surg Neurol** 1989 Jun;31(6):459–64

[A space-occupying hemorrhage following spinal anesthesia in the presence of an undiagnosed small spinal tumor (ependymoma)] Bredtmann RD, et al. **Reg Anaesth** 1989 Mar;12(2):38–40 (Eng. Abstr.) (Ger)

[Chance coincidence of spondylolisthesis and osteoid osteoma

of the spine--a case report] Molsberger A, et al. **Z Orthop** 1989 May-Jun;127(3):343-5 (Eng. Abstr.) **(Ger)**

[Transverse syndrome in aneurysmal bone cyst] Pittasch D, et al. **Zentralbl Neurochir** 1988;49(3):247-51 (Eng. Abstr.) **(Ger)**

[Monoradicular syndrome caused by tumors in the differential diagnosis of herniated disk] Donati D. **Chir Organi Mov** 1988 Jan-Mar;73(1):75-7 (Eng. Abstr.) **(Ita)**

[Non ossifying fibroma with vertebral localization. Clinical case] Ruelle A, et al. **Riv Neurol** 1988 Jul-Aug;58(4):150-2 (Eng. Abstr.) **(Ita)**

[Osteochondroma of the axis bulging into the peripharyngeal space and pharynx] Karnicki C. **Otolaryngol Pol** 1988; 42(5):375-7 (Eng. Abstr.) **(Pol)**

[Treatment of spinal cord compression in multiple myeloma] Golenkov AK, et al. **Sov Med** 1988;(10):107-9 **(Rus)**

[Osteoid osteoma as a cause of back pain of vertebral origin] Espino Aguilar R, et al. **An Esp Pediatr** 1989 Apr; 30(4):323-5 **(Spa)**

CONGENITAL

Nuclear magnetic resonance computerised tomography (NMR-CT) in early diagnosis of dumbbell neuroblastoma. Ogita S, et al. **Z Kinderchir** 1989 Apr;44(2):122-3

[Subcutaneous lipoma disclosing intradural lipoma] Bodemer C, et al. **Ann Dermatol Venereol** 1988;115(11):1130-2 **(Fre)**

DIAGNOSIS

Cytologic, cytochemical, immunocytochemical and ultrastructural diagnosis of a sacrococcygeal chordoma in a fine needle aspiration biopsy specimen. Plaza JA, et al. **Acta Cytol** 1989 Jan-Feb;33(1):89-92

MR imaging of a spinal epidermoid tumor. Hatfield MK, et al. **AJNR** 1989 Sep-Oct;10(5 Suppl):S95-6

The fat-cap sign: an aid to MR evaluation of extradural spinal tumors. Horner NB, et al. **AJNR** 1989 Sep-Oct;10(5 Suppl):S93

Preoperative evaluation of cervical radiculopathy and myelopathy by surface-coil MR imaging. Brown BM, et al. **AJR** 1988 Dec;151(6):1205-12

Gadolinium-DTPA-enhanced MR imaging of spinal neoplasms: preliminary investigation and comparison with unenhanced spin-echo and STIR sequences. Stimac GK, et al. **AJR** 1988 Dec;151(6):1185-92

Contrast enhancement in spinal MR imaging. Breger RK, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):387-91

Pott's disease masquerading as vertebral lymphoma. Stockdale AD, et al. **Br J Clin Pract** 1988 Sep;42(9):389-91

Clinical applications of magnetic resonance imaging of the spine. Firooznia H, et al. **Bull N Y Acad Med** 1988 Nov; 64(8):941-52

Hemangioma of bone. Moreno AJ, et al. **Clin Nucl Med** 1988 Oct;13(10):768-9

Skeletal metastases in liposarcoma detectable only by magnetic resonance imaging. Khurana JS, et al. **Clin Orthop** 1989 Jun;(243):204-7

Indications for the use of Gd-DTPA in MRI of the central nervous system. Experiences in patients with cerebral and spinal diseases. Bauer WM, et al. **Invest Radiol** 1988 Sep; 23 Suppl 1:S286-8

Osteoid osteoma of the vertebral body. A case report. Savarese A, et al. **Ital J Orthop Traumatol** 1989 Jun; 15(2):253-7 (13 ref.)

Primary Ewing's sarcoma of the spine: a rare location? Report of four cases. Lampaert A, et al. **J Belge Radiol** 1988;71(4):463-9

Radiologic screening for von Hippel-Lindau disease: the role of Gd-DTPA enhanced MR imaging of the CNS. Filling-Katz MR, et al. **J Comput Assist Tomogr** 1989 Sep-Oct;13(5):743-55

Sensitivity and specificity of MRI in detecting malignant spinal cord compression and in distinguishing malignant from benign compression fractures of vertebrae. Li KC, et al. **Magn Reson Imaging** 1988 Sep-Oct;6(5):547-56

Primary spinal medulloblastomas? Jaksche H, et al. **Neurosurg Rev** 1988;11(3-4):259-65

Midline lumbar ganglion/synovial cyst mimicking an epidural tumor: case report and review of pathogenesis. Azzam CJ. **Neurosurgery** 1988 Aug;23(2):232-4 (35 ref.)

Magnetic resonance imaging of lipomyelomeningocele and tethered cord. Brophy JD, et al. **Neurosurgery** 1989 Sep; 25(3):336-40

Spinal subependymoma presenting as an extramedullary tumor: case report. Matsumura A, et al. **Neurosurgery** 1988 Jul;23(1):115-7

Correlation between magnetic resonance imaging and surgical findings in the tethered spinal cord. Moufarrij NA, et al. **Neurosurgery** 1989 Sep;25(3):341-6

Granulocytic sarcoma presenting as an epidural mass with cord compression. Ripp DJ, et al. **Neurosurgery** 1989 Jan; 24(1):125-8

Case 10. Vertebral (thoracic) chordoma. **Radiographics** 1989 Jan;9(1):112-4

Epidural lipomatosis [see comments] Quint DJ, et al. **Radiology** 1988 Nov;169(2):485-90. **Comment in:** Radiology 1989 May;171(2):581-2

Adult neuroblastoma: a report of two cases. Krikke AP, et al. **ROFO** 1989 Feb;150(2):138-41

[Diagnosis and surgical strategy in 3 cases of benign and unusual tumors of the occipito-cervical skeleton] Chabannes J, et al. **Neurochirurgie** 1988;34(3):173-8 (Eng. Abstr.) **(Fre)**

[Radiological diagnosis of spinal tuberculosis--CT differentiation from metastatic spinal tumors] Shinzato J, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1543-8 (Eng. Abstr.) **(Jpn)**

[A case of malignant extrameningeal meningioma of the spinal canal with multiple metastases in a 17-year-old patient. Clinical and morphologic studies] Sobaniec W, et al. **Neurol Neurochir Pol** 1988 Sep-Oct;22(5):450-3 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Ketoconazole in initial management and treatment of metastatic prostate cancer to spine. Bamberger MH, et al. **Urology** 1988 Oct;32(4):301-3

[Ewing sarcoma and pregnancy] Feliu J, et al. **Med Clin (Barc)** 1988 May 28;91(1):25-7 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Bone necrosis and tumor induction following experimental intraoperative irradiation. Powers BE, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):559-67

Spinal epidural lipomatosis: a serious complication of iatrogenic Cushing's syndrome. Kaplan JG, et al. **Neurology** 1989 Aug;39(8):1031-4 (12 ref.)

Granulocytic sarcoma in childhood acute myelogenous leukemia. Brown LM, et al. **Pediatr Neurol** 1989 May-Jun; 5(3):173-8 (35 ref.)

PATHOLOGY

Primary spinal epidural lymphomas. Maiuri F, et al. **Acta Neurol (Napoli)** 1988 Jun;10(3):213-9 (27 ref.)

MR appearance of acquired spinal epidermoid tumors. De Pena CA, et al. **AJNR** 1989 Sep-Oct;10(5 Suppl):S97

Extranodal non-T-cell lymphoblastic lymphoma in adults. A report of two cases. Schwob VS, et al. **Am J Clin Pathol** 1988 Nov;90(5):602-5

Cytologic diagnosis of a chordoma without physaliforous cells. Thompson SK, et al. **Diagn Cytopathol** 1988; 4(2):144-7

Vertebral osteosarcoma. Tigani D, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):5-13

Spinal epidural hemangioma: a case report. Phuenpathom N, et al. **J Med Assoc Thai** 1988 Oct;71(10):572-4

Malignant histiocytosis with clinical presentation of compression of cauda equina. Shuangshoti S, et al. **J Med Assoc Thai** 1988 Aug;71(8):461-5

Ewing's sarcoma arising in the sacral epidural space: case report. Savitz MH, et al. **Mt Sinai J Med (NY)** 1988 Sep; 55(4):339-42 (7 ref.)

T-cell lymphoma in the CNS: clinical and pathologic features. Morgello S, et al. **Neurology** 1989 Sep; 39(9):1190-6

Radiation-induced schwannomas. Rubinstein AB, et al. **Neurosurgery** 1989 Jun;24(6):929-32

CT-guided biopsy of sacral metastatic carcinoma not visible on CT scan. Coombs RJ, et al. **Spine** 1988 May;13(5):588-9

Extraspinal ependymoma in the sacrococcygeal region. A case report with ultrastructural, immunohistochemical and cytophotometric studies. Sápi Z, et al. **Virchows Arch [A]** 1989;415(3):293-6

[Giant sacrococcygeal teratoma in adults] Harbon S, et al. **Ann Chir Plast Esthet** 1989;34(2):153-9 (36 ref.) (Eng. Abstr.) **(Fre)**

[Extra-medullary intradural melanotic tumor: apropos of a case of dorsal pigmented neurinoma. Review of the literature] Graziani N, et al. **Neurochirurgie** 1988; 34(3):210-7 (49 ref.) (Eng. Abstr.) **(Fre)**

[Terminal cone traction syndrome. Attached cord and sacral lipoma] Lapras C, et al. **Neurochirurgie** 1988;34 Suppl 1:91-8 **(Fre)**

[Cervical melanotic neurofibroma. Apropos of a case and a review of the literature] Lozes G, et al. **Neurochirurgie** 1989;35(1):47-51 (55 ref.) (Eng. Abstr.) **(Fre)**

[Chordomas and chordoma-like neoplasms] Gmür W, et al. **Pathologe** 1988 Sep;9(5):268-75 **(Ger)**

[Spinal changes in neurofibromatosis in children] Köhler B, et al. **ROFO** 1989 Aug;151(2):186-91 (Eng. Abstr.) **(Ger)**

[A rare course of retroperitoneal malignant histiocytosis with duodeno-retroperitoneal fistula] Lüders H, et al. **Z Gesamte Inn Med** 1989 Apr 15;44(8):249-50 (Eng. Abstr.) **(Ger)**

[Spinal epidural tumors without destructive bone change: clinical and radiological studies] Koyanagi I, et al. **No Shinkei Geka** 1988 Jul;16(8):953-8 (Eng. Abstr.) **(Jpn)**

[Extradural sacrococcygeal myxopapillary ependymoma] Shabanov MA. **Arkh Patol** 1988;50(8):67-70 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Dumb-bell ganglioneuroma of the spine misinterpreted as progressive idiopathic scoliosis. Case report. Bauer BL, et al. **Arch Orthop Trauma Surg** 1989;108(3):189-94

Osteoblastoma of the cervical spine. Case report. Grob D, et al. **Arch Orthop Trauma Surg** 1989;108(3):179-81

Presacral myelolipoma: case report with computed tomographic and angiographic findings. Chan YF, et al. **Aust N Z J Surg** 1988 May;58(5):432-4

Intraspinal lumbosacral lipoma: review of literature and report of three cases. Sharma S, et al. **Australas Radiol** 1988 May;32(2):207-13 (34 ref.)

Retroperitoneal liposarcoma simulating a prolapsed intervertebral disc. A case report. Saadeddin M, et al. **Int Orthop** 1989;13(2):125-8

Osteoid osteoma of the spine. Savini R, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):233-8

Primary osteosarcoma of the cervical spine: one case. Ben Miled K, et al. **J Neuroradiol** 1988;15(3):294-300 **(Eng, Fre)**

Computed tomography of lumbar apophyseal joint lipoma: report of three cases. Dietemann JL, et al. **Neuroradiology** 1989;31(1):60-2

Expansile bone lesions of the vertebra. Kumar R, et al. **Radiographics** 1988 Jul;8(4):749-69

Posterior lumbar apophyseal ring fracture simulating a mass lesion in computed tomograms. Kolin J, et al. **ROFO** 1989 Jul;151(1):114-5

Case report 516: Lumbar vertebral chordoma causing sclerosis of affected vertebra (3rd lumbar vertebra). Roddie M, et al. **Skeletal Radiol** 1989;17(8):611-3

[Efficacy of CT omnipaque myelography in the demonstration of intraspinal space-occupying diseases (report of 77 cases)] Wang YS. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb;23(1):11-3 (Eng. Abstr.) **(Chi)**

[Osteoid osteoma of the spine] Mespreuve M, et al. **J Belge Radiol** 1989 Apr;72(2):73-8 (Eng. Abstr.) **(Dut)**

[Benign osteoblastoma of the spine. Apropos of 4 cases with a case of spontaneous recovery] Collignon JC, et al. **Neurochirurgie** 1988;34(4):262-70 (Eng. Abstr.) **(Fre)**

[The value of various radiologic examination methods in studying benign osteoblastomas and osteoid osteomas of the spine. Apropos of 10 cases of osteoblastoma and 4 cases of osteoid osteoma] Roussouly P, et al. **Rev Chir Orthop** 1988;74 Suppl 2:316-9 **(Fre)**

[Lumbar spinous apophysis. An unusual location of osteoid osteoma] Carpentier E, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1001-3 **(Fre)**

[Lumbar neurinoma with corporeal-pedicle development. Apropos of a case] Lozes G, et al. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):333-5 **(Fre)**

[Idiopathic osteoporosis?] Montag M, et al. **Radiologe** 1989 Mar;29(3):151-2 **(Ger)**

[Diagnostic evaluation of full x-ray pictures and computed tomography of bone tumors of the spine] Krahe T, et al. **ROFO** 1989 Jan;150(1):13-9 (Eng. Abstr.) **(Ger)**

[Presentation of a case of spinal osteoid osteoma causing dorsal scoliosis. Role of high resolution CT] Piazza P, et al. **Acta Biomed Ateneo Parmense** 1988;59(1-2):13-7 (Eng. Abstr.) **(Ita)**

[Diagnostic value of CT in an unusual case of multiple myeloma] Gozzi G, et al. **Radiol Med (Torino)** 1988 Sep; 76(3):221-3 **(Ita)**

[Vertebral monostotic histiocytosis-X with intraspinal spread. Usefulness of CT] Gugliantini P, et al. **Radiol Med (Torino)** 1989 Jun;77(6):697-700 **(Ita)**

[Contrast examination of the spinal canal using zonography] Bryc S, et al. **Ann Univ Marise Curie Sklodowska [Med]** 1984;39:187-95 (Eng. Abstr.) **(Pol)**

[A case of neurilemmoma of the L5 spinal nerve root with a clinical and radiculographic picture of intervertebral disk prolapse] Styczyński T, et al. **Neurol Neurochir Pol** 1988 Jul-Aug;22(4):356-9 (Eng. Abstr.) **(Pol)**

[Difficulties of differential roentgeno-diagnosis of aneurysmal cysts and tumors of flat bones and the spine] Kalinichenko LV, et al. **Vopr Onkol** 1988;34(10):1166-71 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Hemangioma, a rare cause of photopenic lesion on skeletal imaging. Makhija M, et al. **Clin Nucl Med** 1988 Sep; 13(9):661-2

Significance of solitary spine abnormalities on technetium-99m bone imaging. Thivolle P, et al. **Clin Nucl Med** 1988 Jul;13(7):527-8

RADIOTHERAPY

131I-metaiodobenzylguanidine in the treatment of neuroblastoma at diagnosis. Mastrangelo R, et al. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):28-31

Halo-vest and radiotherapy. An alternative approach to cervical spine metastases. Grillo Ruggieri F, et al. **Panminerva Med** 1988 Apr-Jun;30(2):81-6

[Optimization of the radiotherapy dosage in vertebral metastases] Malinverni G, et al. **Radiol Med (Torino)** 1988 Oct;76(4):329-32 (Eng. Abstr.) **(Ita)**

[Radiotherapy of bone metastases from cervical cancer] Monzen Y, et al. **Gan No Rinsho** 1989 Mar;35(4):467-71 (Eng. Abstr.) **(Jpn)**

SECONDARY

Extensive spinal necrosis with spinal leptomeningeal

dissemination of cerebral astrocytoma. Case report. Yamaki T, et al. **Acta Neurochir (Wien)** 1988;93(3–4):146–8
The management of spinal epidural metastases. Brihaye J, et al. **Adv Tech Stand Neurosurg** 1988;16:121–76 (192 ref.)
Symptomatic spinal metastases. Perrin RG. **Am Fam Physician** 1989 May;39(5):165–72
Extrathoracic metastatic thymoma. A case report. Jose CC, et al. **Australas Radiol** 1988 Nov;32(4):500–2
Metastatic thymoma: case report. Stevens MJ, et al. **Australas Radiol** 1989 May;33(2):168–70
The detection of metastatic disease of the spine in oncology patients using MRI. Goddard P, et al. **Bristol Med Chir J** 1988 May;103(2):29–31
Spinal metastasis of pilocytic astrocytoma of the chiasma opticum. Kocks W, et al. **Childs Nerv Syst** 1989 Apr; 5(2):118–20
Magnetic resonance imaging in suspected metastatic spinal cord compression. Williams MP, et al. **Clin Radiol** 1989 May;40(3):286–90
Carcinoma oesophagus—an unusual presentation. Kapoor A, et al. **J Assoc Physicians India** 1989 Mar;37(3):235–7
Early MR demonstration of spinal metastases in patients with normal radiographs and CT and radionuclide bone scans. Avrahami E, et al. **J Comput Assist Tomogr** 1989 Jul–Aug; 13(4):598–602
False-negative bone scan in extensive metastatic disease: CT and MR findings. Mehta RC, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):717–9
Secondary ependymoma presenting as a presacral mass. Kolawole TM, et al. **J Comput Tomogr** 1988 Apr; 12(2):108–10
Carcinoid tumor with intradural spinal metastases. Rao KC, et al. **J Comput Tomogr** 1988 Oct;12(4):258–60
Metastatic malignant struma ovarii presenting as paraparesis from a spinal metastasis. McDougall IR, et al. **J Nucl Med** 1989 Mar;30(3):407–11
Renal uptake of technetium-99m methylene diphosphonate following therapeutic radiation for vertebral metastases. Titelbaum DS, et al. **J Nucl Med** 1989 Jun;30(6):1113–6
Pamidronate to reduce bone pain in normocalcaemic patient with disseminated prostatic carcinoma [letter] Masud T, et al. **Lancet** 1989 May 6;1(8645):1021–2
Percutaneous injection of orthopedic cement in metastatic vertebral lesions [letter] Kaemmerlen P, et al. **N Engl J Med** 1989 Jul 13;321(2):121
Spinal extradural metastasis from a medulloblastoma. Altinörs N, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):84–6
Indication for surgery of spinal metastases within the cervical region. Kashab M, et al. **Neurosurg Rev** 1988;11(1):95–7
Spinal epidural compression secondary to osteoblastic metastatic vertebral expansion. Hirschfeld A, et al. **Neurosurgery** 1988 Nov;23(5):662–5
Brainstem glioma with multiple intraspinal metastases during life: case report and review of the literature. Silbergeld D, et al. **Pediatr Neurosci** 1988;14(2):103–7 (44 ref.)
Spinal cord compression due to carcinoid metastasis. Gray JA, et al. **Postgrad Med J** 1988 Sep;64(755):703–5
Renal metastases shown by 99mTc-methylene diphosphonate scintigram which failed to detect vertebral metastases. Kreel L, et al. **Postgrad Med J** 1989 Jan;65(759):22–6
Treatment and prevention of spinal metastases of prostatic carcinoma with neurologic complications. Allain YM, et al. **Prog Clin Biol Res** 1989;303:353–68 (37 ref.)
Spinal cord compression due to metastatic disease: diagnosis with MR imaging versus myelography. Carmody RF, et al. **Radiology** 1989 Oct;173(1):225–9
A case report of bone metastases in Wilms' tumor: diagnostic aspects and a review of the literature. Lupi L, et al. **Rays** 1987 Sep–Dec;12(3):61–5 (16 ref.)
Variations in the incidence of vertebral bone metastases by irradiation of the internal mammary chain in breast cancer. Valentini V, et al. **Rays** 1988 Jan–Apr;13(1):83–8
Surgical management of tumor-related spinal instability. Magerl F, et al. **Recent Results Cancer Res** 1988;108:163–71
Thoracic disc herniation versus spinal metastases: optimizing diagnosis with magnetic resonance imaging. Goldberg AL, et al. **Skeletal Radiol** 1988;17(6):423–6
Malignant schwannoma (neurofibrosarcoma) metastatic to spine. Surgical decompression and stabilization. Cybulski GR, et al. **Spine** 1989 May;14(5):549–51
Surgical treatment of metastatic tumors of the spine. Manabe S, et al. **Spine** 1989 Jan;14(1):41–7
Bone scintigraphy in patients with breast cancer, pulmonary cancer, uterine cervix cancer, and prostatic cancer. Statistical study of spinal accumulation cases. Morishita S, et al. **Spine** 1989 Aug;14(8):784–9
Upper thoracic disk herniation secondary to vertebral metastases. Rosenblum B, et al. **Surg Neurol** 1989 Jun; 31(6):473–5
[Spinal metastasis of primary hepatocellular carcinoma—a case report] Yeh JH, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Aug;40(2):255–60 (Eng. Abstr.) **(Chi)**
[Anterior decompression and spinal stabilization in the treatment of dorsolumbar metastatic compression] Lesoin F, et al. **Ann Chir** 1989;43(3):215–9 (Eng. Abstr.) **(Fre)**
[The STIR sequence. Comparison with other MRI sequences and scintigraphy in detecting spinal metastases] Laissy JP, et al. **Ann Radiol (Paris)** 1989;32(3):178–85 (Eng. Abstr.) **(Fre)**
[Bone metastases in a case of trimorphic Wilm's tumor] Lupi L, et al. **Ann Radiol (Paris)** 1988;31(3):189–92 (Eng. Abstr.) **(Fre)**
[Occipitocervical fusion in metastasis to the dens] Wozasek GE, et al. **Unfallchirurgie** 1988 Dec;14(6):320–3 (Eng. Abstr.) **(Ger)**
[Fine needle puncture cytology in metastatic hepatocellular carcinoma] Wehle K, et al. **Z Gastroenterol** 1989 Apr; 27(4):225–7 (Eng. Abstr.) **(Ger)**
[Metastases of the spinal canal—clinical aspects and surgical results] Gräwe A, et al. **Zentralbl Neurochir** 1988; 49(4):340–3 (Eng. Abstr.) **(Ger)**
[Anterior rib strut grafting in the treatment of a malignant lesion of the thoracic spine under thoracotomy] Shirakusa T, et al. **Kyobu Geka** 1988 Dec;41(13):1040–5 (Eng. Abstr.) **(Jpn)**
[Paraplegia caused by metastatic testicular tumor] Furuhata A, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov; 79(11):1774–81 (Eng. Abstr.) **(Jpn)**
[Decompressive laminectomy in prostatic cancer: emergency treatment] Chéchile G, et al. **Actas Urol Esp** 1988 May–Jun; 12(3):278–80 (Eng. Abstr.) **(Spa)**
[Bone metastasis as the first manifestation of follicular carcinoma of the thyroid gland. Apropos of 1 case] Faubel Serra M, et al. **An Otorrinolaringol Ibero Am** 1989; 16(4):447–54 (Eng. Abstr.) **(Spa)**

SURGERY

Instrumentation surgery for primary tumors of the spine. Shikata J, et al. **Arch Orthop Trauma Surg** 1989; 108(3):144–9
Anterior rib strut grafting for the treatment of malignant lesions in the thoracic spine. Shirakusa T, et al. **Arch Orthop Trauma Surg** 1989;108(5):268–72
Dermoid tumours occurring at the site of previous meningocele repair. Pansey BK, et al. **Clin Neurol Neurosurg** 1988;90(2):137–40
Complete removal of vertebrae for extirpation of tumors. A 20-year experience. Stener B. **Clin Orthop** 1989 Aug; (245):72–82
One-stage anterior cervical decompression and posterior stabilization with circumferential arthrodesis. A study of twenty-four patients who had a traumatic or a neoplastic lesion. McAfee PC, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):78–88
Spondylectomy for malignant tumors of the spine. Sundaresan N, et al. **J Clin Oncol** 1989 Oct;7(10):1485–91
Neurosurgical experience with Nd:YAG laser. Wirth FP, et al. **J Med Assoc Ga** 1989 Mar;78(3):143–5
Hemangioblastomas of the central nervous system. A 10-year study with special reference to von Hippel–Lindau syndrome. Neumann HP, et al. **J Neurosurg** 1989 Jan; 70(1):24–30
One-stage posterolateral decompression and stabilization for primary and metastatic vertebral tumors in the thoracic and lumbar spine. Shaw B, et al. **J Neurosurg** 1989 Mar; 70(3):405–10
Hemangiopericytomas of the spinal canal. Report of four cases and review of literature. Grisoli F, et al. **J Neurosurg Sci** 1988 Apr–Jun;32(2):69–76 (28 ref.)
The transoropalatal approach to the atlantoaxial–clival region: considerations for the head and neck surgeon. Harris JP, et al. **Laryngoscope** 1989 May;99(5):467–74
The occurrence of different types of spinal tumours in one patient. A case report and review of the literature. Nishiura I, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):52–5 (21 ref.)
Intraspinal mesenchymal chondrosarcoma in a three-year-old boy. Reif J, et al. **Neurosurg Rev** 1987; 10(4):311–4
Transoral approach to extradural lesions of the lower clivus and upper cervical spine: an experience of 19 cases. Di Lorenzo N. **Neurosurgery** 1989 Jan;24(1):37–42
Combined treatment of osteosarcoma of the spine. Sundaresan N, et al. **Neurosurgery** 1988 Dec;23(6):714–9
Surgical approach to spine tumors. Weinstein JN. **Orthopedics** 1989 Jun;12(6):897–905 (25 ref.)
Posterior segmental spinal instrumentation (PSSI) with posterolateral decompression and debulking for metastatic thoracic and lumbar spine disease. Limitations of the technique. Bridwell KH, et al. **Spine** 1988 Dec; 13(12):1383–94
C2 neurofibroma. A case report. Clavel M. **Spine** 1988 May; 13(5):589–91
Acute massive dural compression secondary to methyl methacrylate replacement of a tumorous lumbar vertebral body. Dolin MG. **Spine** 1989 Jan;14(1):108–10
Prosthetic replacement surgery for cervical spine metastasis. Ono K, et al. **Spine** 1988 Jul;13(7):817–22
Axillary compression syndrome with neurapraxia due to operative positioning. Nambisan RN, et al. **Surgery** 1989 Mar;105(3):449–54
[Somatosensory evoked potentials monitoring during operation of the spinal cord] Tong B. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):402–5, 445 (Eng. Abstr.) **(Chi)**
[Results of surgical treatment of malignant tumors of the spine] Magerl F, et al. **Acta Chir Orthop Traumatol Cech** 1988 Oct;55(5):400–6 (Eng. Abstr.) **(Cze)**
[Basics of surgical treatment of spinal tumors] Vlach O, et al. **Acta Chir Orthop Traumatol Cech** 1988 Oct;55(5):407–17 (Eng. Abstr.) **(Cze)**
[Value of the antero-lateral bilateral approach to the cervical spine in malignant tumor pathology] Autricque A, et al. **Rev Chir Orthop** 1988;74 Suppl 2:303–7 **(Fre)**
[Chordoma of the cervical spine] Griffet J, et al. **Rev Chir Orthop** 1988;74 Suppl 2:299–301 **(Fre)**
[Anterior medial approach in vertebrectomy of L1 and L2 with primary control of the aorta and the inferior vena cava] Lassale B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:67–70 **(Fre)**
[Neurofibromatosis and spinal deformities—a case report] Pfeiffer U, et al. **Beitr Orthop Traumatol** 1988 Jul; 35(7):315–20 (Eng. Abstr.) **(Ger)**
[Pharyngeal complications following ventral fusion operations of the cervical spine] Bernemann D, et al. **Laryngorhinootologie** 1989 Feb;68(2):128–9 (Eng. Abstr.) **(Ger)**
[Giant cell tumors, aneurysmal bone cysts and osteoid osteomas of the spine] Hildebrandt G, et al. **Neurochirurgia (Stuttg)** 1988 Jul;31(4):107–13 (Eng. Abstr.) **(Ger)**
[The clinical aspects of neuroblastomas and ganglioneuromas with intraspinal involvement] Klimmer M, et al. **Z Kinderchir** 1988 Oct;43(5):343–6 (Eng. Abstr.) **(Ger)**
[Presacral tumor with sacral meningocele] Vogl D, et al. **Z Kinderchir** 1988 Oct;43(5):361–4 (Eng. Abstr.) **(Ger)**
[CT in the surgical planning in tumorous processes of the sacrum] Schratter M, et al. **Z Orthop** 1989 Jan–Feb; 127(1):32–8 (Eng. Abstr.) **(Ger)**
[Vertebral implant as a treatment principle in tumors and metastases of the thoracic and lumbar spine] Wuisman P, et al. **Z Orthop** 1989 Jan–Feb;127(1):25–31 (Eng. Abstr.) **(Ger)**
[Sarcomatous tumors of the spinal canal—clinical aspects and long-term results] Gräwe A, et al. **Zentralbl Neurochir** 1988;49(3):252–6 (Eng. Abstr.) **(Ger)**
[A case report of sacral chordoma] Lin Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):145–8 (Eng. Abstr.) **(Jpn)**
[Treatment and prognosis of sacrococcygeal chordoma—study of bone tumor registry in Japan] Osaka S, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr; 63(4):240–4 (Eng. Abstr.) **(Jpn)**
[1-stage sequential removal of a mediastinal–intravertebral neurinoma of the sandglass type] Velibekov ASh, et al. **Grudn Khir** 1988 Sep–Oct;(5):92–3 **(Rus)**

THERAPY

Methods of surgical stabilization for metastatic disease of the spine. Cybulski GR. **Neurosurgery** 1989 Aug;25(2):240–52 (95 ref.)
Metastatic pheochromocytoma of the cervical spine. Olson JJ, et al. **Spine** 1989 Mar;14(3):349–51
Dural mesenchymal chondrosarcoma of the lumbar spine. Case report. Di Lorenzo N, et al. **Surg Neurol** 1989 Jun; 31(6):470–2
Embolization of solitary spinal metastases from renal cell carcinoma: alternative therapy for spinal cord or nerve root compression. O'Reilly GV, et al. **Surg Neurol** 1989 Apr; 31(4):268–71
[Percutaneous injection of cement into metastatic vertebrae (letter)] Kaemmerlen P, et al. **Presse Med** 1989 May 13; 18(19):983–4 **(Fre)**

VETERINARY

Primary vertebral hemangiosarcoma in a dog. Parchman MB, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):79–81
What is your diagnosis? Lysis of the vertebral body of C7, with a pathologic compression fracture and compression of the spinal cord at the level of C7. van Ee RT, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):285–6
Vascular embolization of a vertebral chordoma in a Fischer 344 rat. Wimberly HC. **Lab Anim Sci** 1988 Oct;38(5):614–5
Multicentric schwannoma in a mature Holstein cow. Johnson RC, et al. **Vet Rec** 1988 Dec 17;123(25):649–50

SPINAL NERVE ROOTS

Anterolateral uncoforaminotomy for cervical spondylotic myeloradiculopathy. Manabe S, et al. **Acta Orthop Scand** 1988 Dec;59(6):669–74
Effects of microtubular transport blockade in peripheral nerve axons on chronic unallayable root pain. Pěničková V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 118:93–105
CT-guided nerve root block and ablation. Quinn SF, et al. **AJR** 1988 Dec;151(6):1213–6
Lumbar root compression secondary to epidural air. Kennedy TM, et al. **Anesth Analg** 1988 Dec;67(12):1184–6
Unilateral facet joint hypertrophy causing nerve root irritation [letter] Kirby NG, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4):267–8
Unilateral lumbar facet joint hypertrophy causing nerve root irritation. Wilde GP, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):307–10
The shoulder abduction relief sign in cervical radiculopathy. Fast A, et al. **Arch Phys Med Rehabil** 1989 May;70(5):402–3
The surgical management of cervical spondylotic radiculopathy and myelopathy. Herkowitz HN. **Clin Orthop** 1989 Feb;(239):94–108
Lumbar spinal stenosis syndrome. Petropoulos BP. **Clin Orthop** 1989 Sep;(246):70–80
Anterior cervical fractional interspace decompression for

treatment of cervical radiculopathy. A review of the first 66 cases. Snyder GM, et al. **Clin Orthop** 1989 Sep; (246):92–9

The H-reflex of the medial vastus muscle: a study in controls and patients with radiculopathy. Verhagen WI, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):421–5

A comparison between computerized tomography and myelography in radicular lumbar syndromes. Zirattu G, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):127–32

Chiropractic distractive decompression in treating pelvic pain and multiple system pelvic organic dysfunction. Browning JE. **J Manipulative Physiol Ther** 1989 Aug;12(4):265–74

Effects of excessive use of remaining muscle fibers in prior polio and LV lesion. Borg K, et al. **Muscle Nerve** 1988 Dec;11(12):1219–30

AAEE minimonograph #32: the electrophysiologic examination in patients with radiculopathies. Wilbourn AJ, et al. **Muscle Nerve** 1988 Nov;11(11):1099–114 (83 ref.)

Lumbar intervertebral disk herniation with a concomitant nerve root neurinoma at the same site. Case report and review of the literature. Albert FK, et al. **Neurochirurgia (Stuttg)** 1988 Nov;31(6):222–5 (25 ref.)

Neurophysiological diagnosis of C6, C7 and C8 root lesions. Klopčič–Spevak M. **Neurologija** 1988;37(3–4):29–40

Preliminary observations on glycerol in spinal cord and root disease. Caplan LR. **Neurology** 1989 Jun;39(6):873

Spinal segmental somatosensory evoked potentials in lumbosacral radiculopathies. Seyal M, et al. **Neurology** 1989 Jun;39(6):801–5

The role of thermography in the evaluation of lumbosacral radiculopathy. So YT, et al. **Neurology** 1989 Sep; 39(9):115–8

Myeloradiculopathy secondary to pseudogout in the cervical ligamentum flavum: case report. Gomez H, et al. **Neurosurgery** 1989 Aug;25(2):298–302

Anterolateral uncoforaminotomy for cervical spondylotic monoradiculopathy. Manabe S, et al. **No Shinkei Geka** 1989 Feb;17(2):153–8

Postsurgical epidural hematoma reproducing a lumbar radiculopathy. Earman WA, et al. **Orthop Rev** 1988 Dec; 17(12):1201–4

A comparison of anterior cervical fusion, cervical laminectomy, and cervical laminoplasty for the surgical management of multiple level spondylotic radiculopathy. Herkowitz HN. **Spine** 1988 Jul;13(7):774–80

Comparison of the results of laminectomy and open-door laminoplasty for cervical spondylotic myeloradiculopathy and ossification of the posterior longitudinal ligament. Nakano N, et al. **Spine** 1988 Jul;13(7):792–4

Validity of clinical tests in the diagnosis of root compression in cervical disc disease. Viikari-Juntura E, et al. **Spine** 1989 Mar;14(3):253–7

Cervical osteochondroma (C2 level) with vertebral artery occlusion and second cervical nerve root irritation. George B, et al. **Surg Neurol** 1989 Jun;31(6):459–64

Embolization of solitary spinal metastases from renal cell carcinoma: alternative therapy for spinal cord or nerve root compression. O'Reilly GV, et al. **Surg Neurol** 1989 Apr; 31(4):268–71

[Lumboradiculalgia and calcified disk hernia] L'Huillier F, et al. **J Radiol** 1988 Dec;69(12):763–6 (8 ref.) (Eng. Abstr.) (Fre)

[Chronic medullary neuro-stimulation in lumbosacral spinal arachnoiditis] Fassio B, et al. **Rev Chir Orthop** 1988; 74(5):473–9 (34 ref.) (Eng. Abstr.) (Fre)

[Neuro-rheumatologic manifestations in patients infected with the AIDS virus] Cherin P, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):519–21 (Eng. Abstr.) (Fre)

[Incidence of lumbalgia and lumboradiculralgia in private practice in France, their cost in hospitalization in the Assistance Publique of Paris] Chevallier J, et al. **Rev Rhum Mal Osteoartic** 1988 Oct;55(10):751–4 (Fre)

[Clinical deterioration following chemonucleolysis. Sequestration or neurotoxic complication?] Wehling P, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):72–6 (Eng. Abstr.) (Ger)

[Brachialgia of radicular origin aand its treatment] Markwalder TM. **Ther Umsch** 1988 Nov;45(11):757–62 (Eng. Abstr.) (Ger)

[Diagnosis and differential diagnosis of spondylogenic cervical myelopathy] Matthes R, et al. **Z Arztl Fortbild (Jena)** 1989;83(9):467–70 (Ger)

[Monoradicular syndrome caused by tumors in the differential diagnosis of herniated disk] Donati D. **Chir Organi Mov** 1988 Jan–Mar;73(1):75–7 (Eng. Abstr.) (Ita)

[Pathogenetic and clinical aspects of perineural Tarlov cysts] Kawiak W, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:69–73 (Eng. Abstr.) (Pol)

[Contractile function of the anterior tibial muscle of man at different stages of the denervation–reinnervation process] Bogdanov EI, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):395–7 (Eng. Abstr.) (Rus)

[The radicular syndrome in spondylolisthesis] Protsenko AI, et al. **Sov Med** 1988;(11):101–3 (Rus)

[Electromyographic findings in patients with the vertebral syndrome associated with polyneuropathy] Brenčič–Dlesk M, et al. **Reumatizam** 1987;34(1–6):21–3 (Eng. Abstr.) (Ser)

[Neurophysiologic study of lesions of the brachial root and brachial plexus] Jovičić A, et al. **Vojnosanit Pregl** 1988 Sep–Oct;45(5):334–9 (Eng. Abstr.) (Ser)

ABNORMALITIES

The intersegmental anastomoses between spinal nerve roots. Moriishi J, et al. **Anat Rec** 1989 May;224(1):110–6

ANATOMY & HISTOLOGY

MR and cryomicrotomy of C1 and C2 roots. Ho PS, et al. **AJNR** 1988 Sep;9(5):829–31

Heterotopic neurons in human spinal nerve roots: what is their clinical significance? Hori A. **J Neurol** 1988 Jul; 235(6):348–51

[The observation of the sensory neurons in the anterior roots of fetus spinal nerve] Zhang JH, et al. **Chen Tzu Yen Chiu** 1988;13(2):152–4, 166 (Eng. Abstr.) (Chi)

[The root of the brachial plexus from C4 and its fascicles in man] Urbanowicz Z. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:281–5 (Eng. Abstr.) (Pol)

BLOOD SUPPLY

A localized lumbar spinal root arteriovenous malformation presenting with radicular signs and symptoms. Gennuso R, et al. **Spine** 1989 May;14(5):543–6

Effects of peripheral nerve stimulation on the blood flow of the spinal cord and the nerve root. Takahashi K, et al. **Spine** 1988 Nov;13(11):1278–83

[Myelo-radicular involvement in a lumbar foramen disk hernia] Bataille B, et al. **Neurochirurgie** 1988;34(3):198–200 (Eng. Abstr.) (Fre)

CYTOLOGY

Ultrastructural analysis of dynorphin B-immunoreactive cells and terminals in the superficial dorsal horn of the deafferented spinal cord of the rat. Cho HJ, et al. **J Comp Neurol** 1989 Mar 8;281(2):193–205

DRUG EFFECTS

Dorsal radiculopathy resulting from podophyllin toxicity. Gorin F, et al. **Neurology** 1989 Apr;39(4):607–8

ENZYMOLOGY

Peptidylglycine alpha-amidating monooxygenase activity in spinal cord, dorsal roots, and dorsal root ganglia of Macaca fascicularis. Graham L, et al. **Brain Res** 1989 Jul 10; 491(2):371–3

GROWTH & DEVELOPMENT

Age changes in axon number along the cervical ventral spinal nerve roots in rats. Fraher JP, et al. **J Comp Neurol** 1989 Feb 8;280(2):171–82

INJURIES

Combined brachial root and plexus lesions—typical sequelae of motor-bike accidents. Hülser PJ. **Eur Arch Psychiatry Neurol Sci** 1988;237(5):304–6

Traumatic cervical radicular lesions. Boccanera L, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):293–300

METABOLISM

Distribution of 3H-morphine following lumbar subarachnoid injection in unanesthetized rabbits. Wang BC, et al. **Anesthesiology** 1989 May;70(5):817–24

Aspartate immunoreactive axons in normal rat L4 dorsal roots. Westlund KN, et al. **Brain Res** 1989 Jun 12; 489(2):347–51

Neurofilament phosphorylation in neuronal perikarya following axotomy: a study of rat spinal cord with ventral and dorsal root transection. Mansour H, et al. **J Comp Neurol** 1989 May 22;283(4):481–5

Treatment of spontaneous cerebrospinal fluid leak with epidural blood patch. Case report. Rupp SM, et al. **J Neurosurg** 1989 May;70(5):808–10

PATHOLOGY

Anatomical introduction to analgesia: correlation of activity of neurons of the superficial dorsal horn with pain and analgesia. Basbaum AI. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):45–6

Local pathological findings in experimental dorsal root entry zone lesions performed by mechanical section, laser and radiofrequency. A comparative study. Broseta J, et al. **Acta Neurochir Suppl (Wien)** 1988;43:198–204

Symptomatic meningeal diverticula of the sacral nerve roots in a girl. A case report. Maiuri F, et al. **Acta Neurol (Napoli)** 1989 Feb;11(1):46–50

Axonal degeneration and regeneration in sensory roots in a genital herpes model. Soffer D, et al. **Acta Neuropathol (Berl)** 1989;77(6):605–11

Symptomatic intraspinal ganglion cyst of the nerve root sheath. Hemmati M, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S100

Effect of experimental root sheath compression on dura. Haughton VM, et al. **Invest Radiol** 1989 Mar;24(3):204–5

Lumbar extradural arachnoid cyst presenting as a conus lesion in a man aged 77 years [letter] Winer JB, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):126

Spinal meningioma arising from a lumbar nerve root. Case report. Ng TH, et al. **J Neurosurg** 1989 Apr;70(4):646–8

Compression syndromes due to hypertrophic nerve roots in hereditary motor sensory neuropathy type I. Rosen SA, et al. **Neurology** 1989 Sep;39(9):1173–7

Redundant nerve roots of the cauda equina: clinical aspects and consideration of pathogenesis. Suzuki K, et al. **Neurosurgery** 1989 Apr;24(4):521–8

Intervertebral foramen venous obstruction. A cause of periradicular fibrosis? Hoyland JA, et al. **Spine** 1989 Jun; 14(6):558–68

The perpendicular nerve root sign. Rosenblum BR. **Spine** 1989 Jan;14(1):118–9

Spinal cord compression caused by bilateral nerve root hypertrophy. Maurice-Williams RS, et al. **Surg Neurol** 1989 Jun;31(6):465–7

[Neurinoma of the L3 spinal nerve root as a cause of stress-induced lumbo-ischialgias] Mayer HM, et al. **Sportverletz Sportschaden** 1988 Mar;2(1):35–8 (Eng. Abstr.) (Ger)

[Segment-by-segment histological analysis of the cervical part of the spinal cord, roots of the cerebrospinal nerves and ganglia in severe cranio-cerebral trauma] Taiushev KG. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):16–23 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Inflammatory and antiinflammatory effects of antidromic stimulation of dorsal roots in the rat. Pintér E, et al. **Agents Actions** 1988 Dec;25(3–4):240–2

Electrical localization of spinal roots for the treatment of spasticity by intrathecal alcohol injection. Chabal C, et al. **Anesth Analg** 1989 Apr;68(4):527–9

Somatosensory potentials evoked by magnetic stimulation of lumbar roots, cauda equina, and leg nerves. Tsuji S, et al. **Ann Neurol** 1988 Oct;24(4):568–73

Sonation of lumbar nerve roots as a diagnostic procedure in patients with sciatica. Reid DC, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):25–7

Performance of a weight-lifting task by normal and deafferented monkeys. Wylie RM, et al. **Behav Neurosci** 1989 Apr;103(2):273–82

Differential sensitivity of dorsal and ventral root activity to magnesium and 2-amino-5-phosphonovalerate (APV) in an isolated mammalian spinal cord preparation. Bagust J, et al. **Brain Res** 1989 Feb 6;479(1):138–44

Changes in extracellular calcium and magnesium and synaptic transmission in isolated mouse spinal cord. Czéh G, et al. **Brain Res** 1989 May 8;486(2):274–85

The effects of 4-aminopyridine on the cat spinal cord: rhythmic antidromic discharges recorded from the dorsal roots. Dubuc R, et al. **Brain Res** 1989 Jul 10;491(2):335–48

Unitary discharges in dorsal and ventral roots after the administration of 4-aminopyridine in the cat. Dubuc R, et al. **Brain Res** 1989 Jul 10;491(2):349–55

Autoradiographic study of mu and delta opioid binding sites and neutral endopeptidase-24.11 in rat after dorsal root rhizotomy. Zajac JM, et al. **Brain Res** 1989 Jan 16; 477(1–2):400–3

The dorsal root reflex in isolated mammalian spinal cord. Bagust J, et al. **Comp Biochem Physiol [A]** 1989; 93(1):151–60

Efferent and afferent fibres in human sacral ventral nerve roots: basic research and clinical implications. Schalow G. **Electromyogr Clin Neurophysiol** 1989 Jan–Feb;29(1):33–53 (104 ref.)

Dermatomal somatosensory evoked potentials of the lumbar and cervical roots. Method and normal values. Pop PH, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(1):22–7

Motor root mnemonic [letter] Webb CW. **Hosp Pract [Off]** 1988 Oct 15;23(10):17

Neural stimulation for control of voiding dysfunction: a preliminary report in 22 patients with serious neuropathic voiding disorders. Tanagho EA, et al. **J Urol** 1989 Aug; 142(2):340–5

Effects of dorsal root section and occlusion of dorsal spinal artery on the neurotransmitter candidates in rat spinal cord. Fujita K, et al. **Neurochem Res** 1989 May;14(5):399–404

Effects of some centrally acting muscle relaxants on spinal root potentials: a comparative study. Farkas S, et al. **Neuropharmacology** 1989 Feb;28(2):161–73

Excitatory transmitters, ventral root potentials and [K+]o in the isolated frog leg-spinal cord preparation. Holohean AM, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):173–8

Mammalian root-spinal cord regeneration. Carlstedt T, et al. **Prog Brain Res** 1988;78:225–9 (20 ref.)

Enhancement of adult dorsal root regeneration by embryonic spinal cord transplants. Tessler A, et al. **Prog Brain Res** 1988;78:213–8

Responses in human intercostal and truncal muscles to motor cortical and spinal stimulation. Gandevia SC, et al. **Respir Physiol** 1988 Sep;73(3):325–37

The role of spinal flexion and extension in changing nerve root compression in disc herniations. Schnebel BE, et al. **Spine** 1989 Aug;14(8):835–7

Scoliosis induced by anterior and posterior rhizotomy. Suk SI, et al. **Spine** 1989 Jul;14(7):692–7

[A method of electrical cervical motor root stimulation: effect of stimulation parameters and normal values] Schmid UD, et al. **EEG EMG** 1989 Mar;20(1):39–49 (Eng. Abstr.) (Ger)

[The Magendie law on spinal ventral and dorsal roots is still of current value] Hildebrand C, et al. **Lakartidningen** 1989 Jul 26;86(30–31):2597–9 (12 ref.) (Eng. Abstr.) (Swe)

PHYSIOPATHOLOGY

Electrophysiological investigations in adoptively transferred experimental autoimmune encephalomyelitis in the Lewis rat. Heininger K, et al. **Brain** 1989 Apr;112 (Pt 2):537–52

Nerve fibre regeneration across the PNS–CNS interface at the root–spinal cord junction. Carlstedt T, et al. **Brain Res Bull** 1989 Jan;22(1):93–102

Hemicranial attacks or permanent hemicrania—a sequel of upper cervical root compression. Jansen J, et al. **Cephalalgia** 1989 Jun;9(2):123–30

Somatosensory-evoked potentials in lumbar nerve root decompression. Gepstein R, et al. **Clin Orthop** 1989 Aug; (245):69–71

Magnetic stimulation in the diagnosis of lumbosacral radiculopathy. Chokroverty S, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):767–72

Changes in radicular function following low-back surgery. Blaauw G, et al. **J Neurosurg** 1988 Nov;69(5):649–52

Myasthenic U-shaped decrement in multifocal cervical radiculopathy. Gilchrist JM, et al. **Muscle Nerve** 1989 Jan; 12(1):64–6

The human cervical myotomes: an anatomical correlation between electromyography and CT/myelography. Katirji MB, et al. **Muscle Nerve** 1988 Oct;11(10):1070–3

Mechanism of pain caused by the nerve-root tension test in patients with sciatica. Xavier AV, et al. **Neurology** 1989 Apr;39(4):601–2

Myeloradiculopathy associated with wasp sting. Van Antwerpen CL, et al. **Pediatr Neurol** 1988 Nov–Dec; 4(6):379–80 (11 ref.)

Dermatomal monitoring for surgical correction of spondylolisthesis. A case report. Cohen BA, et al. **Spine** 1988 Oct;13(10):1125–8

[Hip–lumbar extensor tightness—equivalent of a nerve root irritation syndrome in the adolescent] Hähnel H, et al. **Beitr Orthop Traumatol** 1988 Jul;35(7):296–305 (Eng. Abstr.) (Ger)

[An experimental model for the evaluation of pathologic changes in the spinal canal] Wehling P, et al. **Biomed Tech (Berlin)** 1988 Jun;33(6):136–40 (Eng. Abstr.) (Ger)

[Findings in the peripheral motor system following stimulation of the motor nerve roots: polyradiculitis, amyotrophic lateral sclerosis and polyneuropathy] Ludolph AC, et al. **EEG EMG** 1988 Dec;19(4):255–9 (Eng. Abstr.) (Ger)

[Fractionated determination of central motor conduction times using stimulation of the cortex, spinal tract and spinal nerve roots: possibilities and limits] Meyer BU, et al. **EEG EMG** 1988 Dec;19(4):234–40 (Eng. Abstr.) (Ger)

[Cervicogenic headache. An over- or underdiagnosed headache syndrome?] Pfaffenrath V. **Fortschr Med** 1989 Mar 15;107(8):189–93 (27 ref.) (Eng. Abstr.) (Ger)

[Somatosensory evoked potentials following dermatome stimulation in comparison with nerve root stimulation in the diagnosis of root lesions] Simić A. **Nervenarzt** 1988 Nov;59(11):672–4 (Ger)

[Diagnosis of lumbosacral nerve root lesions using H-, T-reflex and somatosensory evoked potentials] Matthes R, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:69–71 (Ger)

[Pain and the spine. A review. 1. On the pathophysiology of radicular pain syndromes. Current concepts explaining pain in nerve entrapment syndromes] Wehling P, et al. **Z Orthop** 1989 Mar–Apr;127(2):197–201 (54 ref.) (Eng. Abstr.) (Ger)

[Piriformis syndrome. A contribution to the differential diagnosis of lumbago and coccygodynia] Reichel G, et al. **Zentralbl Neurochir** 1988;49(3):178–84 (Eng. Abstr.) (Ger)

RADIATION EFFECTS

[Effect of microwave irradiation and temperature on the spontaneous impulse activity of the ventral spinal roots in the frog] Pakhomov AG. **Neirofiziologiia** 1988;20(6):723–8 (Eng. Abstr.) (Rus)

RADIOGRAPHY

CT morphology of intrathecal lumbosacral nerve-root compression. Wilmink JT. **AJNR** 1989 Mar–Apr; 10(2):233–48

Outpatient lumbar radiculography: comparison of iopamidol and iohexol and a literature review. Davies AM, et al. **Br J Radiol** 1989 Aug;62(740):716–23 (50 ref.)

Diagnosis of lumbar disc protrusion. A comparison between magnetic resonance imaging and radiculography. Szypryt EP, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):717–22

CT features of sarcoid infiltration of a lumbosacral nerve root. Baron B, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):364–5

A giant spinal aneurysm with cord and root compression. el Mahdi MA, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):532–5

Combined contrast studies in lumbar spine diseases. Myelography (peridurography) and nerve root infiltration. Kikuchi S, et al. **Spine** 1988 Nov;13(11):1327–31

[X-ray computed tomography of lumbosacral roots and primary hypertrophic neuritis (Dejerine–Sottas disease)] Mas JL, et al. **Rev Neurol (Paris)** 1989;145(3):215–20 (Eng. Abstr.) (Fre)

[The spontaneous course of disk prolapse in lumbar root compression syndrome. A CT-controlled prospective study] Schultz U, et al. **Nervenarzt** 1988 Nov;59(11):661–8 (Ger)

[Radiculography using the digital subtraction technic] Voigt K, et al. **Radiologe** 1988 Nov;28(11):507–10 (Eng. Abstr.) (Ger)

[A case of neurilemmoma of the L5 spinal nerve root with a clinical and radiculographic picture of intervertebral disk prolapse] Styczyński T, et al. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):356–9 (Eng. Abstr.) (Pol)

SURGERY

Clinical use of nociceptive flexion reflex recording in the evaluation of functional neurosurgical procedures. García-Larrea L, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:53–7

Intra-operative spinal cord evoked potentials during cervical and lumbo-sacral microsurgical DREZ-tomy (MDT) for chronic pain and spasticity (preliminary data). Jeanmonod D, et al. **Acta Neurochir Suppl (Wien)** 1989;46:58–61

Somatosensory evoked potentials in cerebral palsy after partial dorsal root rhizotomy. Kundi M, et al. **Arch Neurol** 1989 May;46(5):524–7

Selective posterior rhizotomy: a long-term follow-up study. Arens LJ, et al. **Childs Nerv Syst** 1989 Jun;5(3):148–52

The status of dorsal root entry zone lesions in 1987. Nashold BS Jr, et al. **Clin Neurosurg** 1989;35:422–8

Iatrogenic lumbar meningocoel after excision of a neurofibroma [letter] Ward PJ. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):410–1

Evaluation of microvascular decompression and partial sensory rhizotomy in 252 cases of trigeminal neuralgia. Bederson JB, et al. **J Neurosurg** 1989 Sep;71(3):359–67

Microsurgical DREZ-lesion in the treatment of deafferentation pain. Esposito S, et al. **J Neurosurg Sci** 1988 Jul–Sep;32(3):113–5

The occurrence of different types of spinal tumours in one patient. A case report and review of the literature. Nishiura I, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):52–5 (21 ref.)

Drez lesions for brachial plexus injury [letter] Sindou M. **Neurosurgery** 1988 Oct;23(4):528

Microsurgical DREZ-otomy for the treatment of spasticity and pain in the lower limbs. Sindou M, et al. **Neurosurgery** 1989 May;24(5):655–70

Use of the 'H' reflex recovery curve in selective posterior rhizotomy. Storrs BB, et al. **Pediatr Neurosci** 1988; 14(3):120–3

The surgical management of cervical spinal stenosis, spondylosis, and myeloradiculopathy by means of the posterior approach. Epstein JA. **Spine** 1988 Jul;13(7):864–9

[Clinical aspects and diagnosis of lumbosacral perineural cysts] Prestar FJ. **Neurochirurgia (Stuttg)** 1989 Jan; 32(1):21–4 (Eng. Abstr.) (Ger)

[Indications and results of sensory rhizotomy in cicatricial lumbar radiculitis syndromes] Kocks W, et al. **Zentralbl Neurochir** 1988;49(4):336–9 (Eng. Abstr.) (Ger)

[Differentiated high-frequency rhizotomy in trigeminal neuralgia] Ogleznev KIa, et al. **Zh Vopr Neirokhir** 1989 Mar–Apr;(2):38–41 (Eng. Abstr.) (Rus)

TRANSPLANTATION

Motoneurons reinnervate skeletal muscle after ventral root implantation into the spinal cord of the cat. Cullheim S, et al. **Neuroscience** 1989;29(3):725–33

Reinnervation of denervated skeletal muscle by central nerve fibers regenerating along replanted ventral roots. Smith KJ, et al. **Prog Brain Res** 1988;78:193–8

ULTRASTRUCTURE

Reinnervation of the mammalian spinal cord after neonatal dorsal root crush. Carlstedt T. **J Neurocytol** 1988 Jun; 17(3):335–50

Nerve fibres with myelinated and unmyelinated portions in dorsal spinal roots. Pannese E, et al. **J Neurocytol** 1988 Oct;17(5):693–700

Internodal microvilli of Schwann cells of myelinated fibres in lizard spinal roots project onto unmyelinated axons. Pannese E, et al. **J Neurocytol** 1989 Jun;18(3):295–302

SPINAL NERVES

Delayed short-latency somatosensory evoked potentials in premature diagnosis of medullar disturbances in cervical spondylosis. Rubio Esteban G, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):361–8

Benign cystic lesions of peripheral nerves. Høgh J. **Int Orthop** 1988;12(4):269–71

Thoracic dorsal ramus entrapment. Case report. González-Darder JM. **J Neurosurg** 1989 Jan;70(1):124–5

[Neuropathy during prolonged treatment with nitrofurantoin. Study of a nerve biopsy] Pagès M, et al. **Arch Anat Cytol Pathol** 1988;36(4):167–9 (Eng. Abstr.) (Fre)

ANALYSIS

Diabetic neuropathy. Structural analysis of nerve hydration by magnetic resonance spectroscopy. Griffey RH, et al. **JAMA** 1988 Nov 18;260(19):2872–8

ANATOMY & HISTOLOGY

Evolution of spinal nerve number in anuran larvae. Nishikawa K, et al. **Brain Behav Evol** 1989;33(1):15–24

On internodal length. Jacobs JM. **J Anat** 1988 Apr; 157:153–62

[The anatomic variability of the intervertebral foramina L4——L5 and L5——S1 in the light of planimetric studies] Goździewski S, et al. **Gegenbaurs Morphol Jahrb** 1988; 134(5):785–90 (Eng. Abstr.) (Ger)

BLOOD SUPPLY

Microangiopathy in human diabetic neuropathy: relationship between capillary abnormalities and the severity of neuropathy. Malik RA, et al. **Diabetologia** 1989 Feb; 32(2):92–102

[Simulation of varicosity of the parva branch by massive varicosity of the venae nervi suralis] Fischer R. **Vasa** 1988; 17(4):283–7 (Eng. Abstr.) (Ger)

CYTOLOGY

Qualitative investigation of the postnatal development of axon and nerve fiber calibers in the ventral roots of rats. Tonner P, et al. **Acta Anat (Basel)** 1988;132(4):284–96

Differential loss of neuromuscular connections according to activity level and spinal position of neonatal rabbit soleus motor neurons. Callaway EM, et al. **J Neurosci** 1989 May; 9(5):1806–24

Morphological evidence for newly discovered double projection spinal neurons. Lu GW, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):181–5

DRUG EFFECTS

Effects of thyrotropin-releasing hormone on phencyclidine- and ketamine-induced spinal depression in neonatal rats. Ohno Y, et al. **Neuropharmacology** 1988 Oct;27(10):1013–8

GROWTH & DEVELOPMENT

Changes of the ratio between myelin thickness and axon diameter in human developing sural, femoral, ulnar, facial, and trochlear nerves. Schröder JM, et al. **Acta Neuropathol (Berl)** 1988;76(5):471–83

Neurofilament and tubulin transport slows along the course of mature motor axons. Watson DF, et al. **Brain Res** 1989 Jan 16;477(1–2):225–32

IMMUNOLOGY

Binding of swine IgM immunoglobulins to peripheral nerve myelin sheaths in electron microscopic immunocytochemistry. Sommer C, et al. **Acta Neuropathol (Berl)** 1988;77(1):100–3

Immunoglobulin M deposits in sural nerve in mononeuritis multiplex associated with immunoglobulin M paraproteinemia [letter] Seitz RJ. **Ann Neurol** 1988 Oct; 24(4):587–8

Relationship between urotensin II- and somatostatin-immunoreactive spinal cord neurons of Catostomus commersoni and Oncorhynchus kisutch (Teleostei). Yulis CR, et al. **Cell Tissue Res** 1988; 254(3):539–42

Direct immunofluorescence in sural nerve biopsies. Schenone A, et al. **Eur Neurol** 1988;28(5):262–9

INJURIES

Changes in lectin binding of lumbar dorsal root ganglia neurons and peripheral axons after sciatic and spinal nerve injury in the rat. Peyronnard JM, et al. **Cell Tissue Res** 1989 Aug;257(2):379–88

Pattern of peripheral traumatic neuropathy of the upper limb in Lagos. Adeyemi-Doro HO. **Injury** 1988 Sep; 19(5):329–32

[Magnetic resonance imaging in paralysis of the upper limb of traumatic origin] Roger B, et al. **J Radiol** 1989 Mar; 70(3):197–208 (Eng. Abstr.) (Fre)

METABOLISM

Sorbitol metabolism in the retina, optic nerve, and sural nerve of diabetic rats treated with an aldose reductase inhibitor. Naeser P, et al. **Metabolism** 1988 Dec;37(12):1143–5

PATHOLOGY

The yield of sural nerve biopsy in the evaluation of peripheral neuropathies. Argov Z, et al. **Acta Neurol Scand** 1989 Mar; 79(3):243–5

A pathological study of a peripheral nerve in a case of neonatal adrenoleukodystrophy. Mito T, et al. **Acta Neuropathol (Berl)** 1989;77(4):437–40

Peripheral nerve pathological findings in familial amyloid polyneuropathy: a correlative study of proximal sciatic nerve and sural nerve lesions. Hanyu N, et al. **Ann Neurol** 1989 Apr;25(4):340–50

Abnormalities of peripheral nerve in patients with human immunodeficiency virus infection. Mah V, et al. **Ann Neurol** 1988 Dec;24(6):713–7

Hereditary motor and sensory neuropathy with optic atrophy. Ultrastructural and morphometric observations on nerve fibers, mitochondria, and dense-cored vesicles. Sommer C, et al. **Arch Neurol** 1989 Sep;46(9):973–7

Peripheral neuropathy associated with mitochondrial myopathy. Yiannikas C, et al. **Aust Paediatr J** 1988;24 Suppl 1:62–3

Peripheral neuropathy associated with angioimmunoblastic lymphadenopathy. Ferrer I, et al. **Clin Neurol Neurosurg** 1988;90(2):159–62

Sural nerve biopsy findings in leprosy: a qualitative and quantitative light and electron microscope study in 4 treated cases of the lepromatous spectrum. Gibbels E, et al. **Clin Neuropathol** 1988 May–Jun;7(3):120–30

Light and electron microscopic changes in sural nerves in Ethiopian diabetics. Tekle Haimanot R, et al. **Ethiop Med J** 1989 Jan;27(1):1–8

Cryoglobulinemic neuropathy: case report. Testa D, et al. **Ital J Neurol Sci** 1988 Aug;9(4):391–5

Dysmaturation neuromyopathy: correlation with minimal neuropathy in sural nerve biopsies. Verity MA, et al. **J Child Neurol** 1988 Oct;3(4):276–91

Diphtheritic neuropathy, an analysis based on muscle and nerve biopsy and repeated neurophysiological and autonomic function tests. Solders G, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):876–80

Neurogenic involvement in distal myopathy (Welander). Histochemical and morphological observations on muscle and nerve biopsies. Borg K, et al. **J Neurol Sci** 1989 Jun; 91(1–2):53–70

Neurotoxicity of human eosinophils towards peripheral nerves. Sunohara N, et al. **J Neurol Sci** 1989 Aug;92(1):1–7

Pathological findings of the sural nerve in mitochondrial encephalomyopathy. Katsuragi S, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):307–13

Sural nerve biopsy in chronic inflammatory demyelinating polyradiculoneuropathy. Krendel DA, et al. **Muscle Nerve** 1989 Apr;12(4):257–64

HLA-DR-expressing cells and T-lymphocytes in sural nerve biopsies. Schröder HD, et al. **Muscle Nerve** 1988 Aug; 11(8):864–70

Diabetic neuropathy: abnormalities of Schwann cell and perineurial basal laminae. Implications for diabetic vasculopathy. King RH, et al. **Neuropathol Appl Neurobiol** 1989 Jul–Aug;15(4):339–55

Quantitative histologic study of sural nerves in xeroderma pigmentosum. Origuchi Y, et al. **Pediatr Neurol** 1987 Nov–Dec;3(6):356–9

Quantitative histological study of the sural nerve in a child with acid maltase deficiency (glycogenosis type II). Origuchi Y, et al. **Pediatr Neurol** 1986 Nov–Dec;2(6):346–9

[Peripheral neuropathy associated with polyarteritis nodosa: report of the clinical manifestations and pathologic findings of sural nerve biopsy in 21 cases] Guo YP, et al. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):97–102, 127 (Eng. Abstr.) **(Chi)**

[Morphometric studies of peripheral nerves and spinal ganglion cells in streptozotocin diabetic rats] Wattig B, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):207–9 (Eng. Abstr.) **(Ger)**

[The peripheral nerves of non-diabetic rats after streptozotocin administration using automatic microscopic image analysis] Wattig B, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):103–8 (Eng. Abstr.) **(Ger)**

[Sensori-motor neuropathy associated with congenital bilateral club feet: histological and ultrastructural study of the sural nerve] Yoshimura N, et al. **No To Shinkei** 1988 Sep;40(9):857–61 (Eng. Abstr.) **(Jpn)**

[Peripheral nerve involvement in tabes dorsalis (tabetic polyneuropathy)—histopathologic studies of sural nerve biopsies] Kita K, et al. **Rinsho Shinkeigaku** 1988 Jun; 28(6):674–80 (Eng. Abstr.) **(Jpn)**

[Familial bulbo-spinal muscular atrophy with sensory involvement—morphological studies of biopsied sural nerve in two patients] Saito T, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):695–704 (Eng. Abstr.) **(Jpn)**

[Clinical features of the peripheral nerve involvement in necrotizing angitis—characteristics in polyarteritis nodosa and allergic granulomatous angitis] Sobue G, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):40–8 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Regeneration of frog sympathetic neurons is accompanied by sprouting and retraction of intraganglionic neurites. Kelly ME, et al. **Brain Res** 1989 Jan 16;477(1–2):363–8

Conduction properties of epidurally recorded spinal cord potentials following lower limb stimulation in man. Halonen JP, et al. **Electroencephalogr Clin Neurophysiol** 1989 May–Jun;74(3):161–74

A comparison of nerve regeneration across a sural nerve graft and a vascularized pseudosheath. Mackinnon SE, et al. **J Hand Surg [Am]** 1988 Nov;13(6):935–42

An electrophysiological and histological study of myelinated axon regeneration after peripheral nerve injury and repair in the cat. Pover CM, et al. **J Neurol Sci** 1988 Jul; 85(3):281–91

A differential synaptic input to the motor nuclei of triceps surae from the caudal and lateral cutaneous sural nerves. LaBella LA, et al. **J Neurophysiol** 1989 Feb;61(2):291–301

Thyrotropin releasing hormone, cholecystokinin and endogenous opioids in the modulation of spinal reflexes in the rabbit. Clarke RW, et al. **Neuropharmacology** 1988 Dec;27(12):1279–84

Mechanisms of the inhibition of fast axonal transport by local anesthetics. Lavoie PA, et al. **Neuropharmacology** 1989 Feb; 28(2):175–81

Naloxone enhances the response to hypercapnia of spinal and cranial respiratory nerves. Overholt JL, et al. **Respir Physiol** 1988 Dec;74(3):299–309

Effects of alpha 1 adrenoceptor activation on the excitability of primary afferent terminals of the sural nerve in the spinal cord of the cat. Calvillo O, et al. **Synapse** 1988;2(3):326–8

[A mathematical model of the activity of spinal generators of rhythmic movements] Degtiarenko AM. **Neirofiziologiia** 1988;20(5):586–97 (Eng. Abstr.) **(Rus)**

[A modified method for sensory neurography of the lumbar spinal nerves (saphenous nerve and superficial peroneal nerve)] Klopčič Spevak M, et al. **Med Pregl** 1988; 41(1–2):27–30 (Eng. Abstr.) **(Ser)**

[The variation in neural conduction velocity related to temperature is not age-dependent] Paradiso G. **Medicina (B Aires)** 1988;48(3):251–4 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Beneficial effect of Org 2766 in treatment of peripheral neuropathy in streptozocin-induced diabetic rats. Van der Zee CE, et al. **Diabetes** 1989 Feb;38(2):225–30

Sympathetic nervous system response to mechanical stress of the spinal column in rats [letter] Jarmel ME. **J Manipulative Physiol Ther** 1989 Jun;12(3):242–3

Autonomic neuropathy in diabetics: comparison of cardiovascular tests, neurography, and cerebral refractory period of somatosensory evoked potentials. Rimpel J, et al. **J Neurol** 1989 Jul;236(5):278–83

[Dysfunction of the sural nerve in cigarette smokers] Husstedt IW, et al. **EEG EMG** 1988 Sep;19(3):161–4 (Eng. Abstr.) **(Ger)**

SURGERY

Neurotization via the spinal accessory nerve in complete paralysis due to multiple avulsion injuries of the brachial plexus. Allieu Y, et al. **Clin Orthop** 1988 Dec;(237):67–74

[A mobilization knife for extraction of the sural nerve] Govenko FS. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):59–61 **(Rus)**

TRANSPLANTATION

Sural nerve grafts for delayed repair of divided posterior interosseos nerves. Zook EG, et al. **J Hand Surg [Am]** 1989 Jan;14(1):114–20

Treatment of skin and median nerve defects with peroneal neurofasciocutaneous flap. Fukui A, et al. **Microsurgery** 1989;10(2):87–92

Comparison of regeneration across a vascularized versus conventional nerve graft: case report. Mackinnon SE, et al. **Microsurgery** 1988;9(4):226–34

Wandering nerve graft technique for management of the recalcitrant painful neuroma in the hand: a case report. Mackinnon SE. **Microsurgery** 1988;9(2):95–102

An alternative to the classical nerve graft for the management of the short nerve gap. Dellon AL, et al. **Plast Reconstr Surg** 1988 Nov;82(5):849–56

Preliminary report of peripheral nerve allografting in primates immunosuppressed with cyclosporin A. Bain JR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3176–7

ULTRASTRUCTURE

Peripheral neuropathy in hypothyroidism. II. Morphometrical and electron microscopical studies on sural nerve in hypothyroidism and axonal atrophy in hypothyroid polyneuropathy. Shinoda K, et al. **Bull Osaka Med Sch** 1987 Oct;33(2):149–63

Unmyelinated nerve fibres in leprosy. A qualitative and quantitative study of sural nerve biopsies in 2 cases of lepromatous leprosy. Gibbels E, et al. **Lepr Rev** 1988 Jun; 59(2):153–62

SPINAL OSTEOPHYTOSIS

DISH ... a state not a disease? [editorial] Hutton C. **Br J Rheumatol** 1989 Aug;28(4):277–8

The pathogenesis of cervical spondylosis. Lestini WF, et al. **Clin Orthop** 1989 Feb;(239):69–93 (76 ref.)

[Diffuse idiopathic skeletal hyperostosis] Havelka S, et al. **Cas Lek Cesk** 1988 Oct 28;127(44):1362–4 (Eng. Abstr.) **(Cze)**

CHEMICALLY INDUCED

Spinal cord compression after long-term etretinate [letter] Tfelt-Hansen P, et al. **Lancet** 1989 Aug 5;2(8658):325–6

[Vertebral hyperostosis induced by etretinate] Hans P, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1027–9 **(Fre)**

[Changed manifestation of fluorosis as an occupational disease within the past 15 years] Runge H. **Z Gesamte Hyg** 1988 Jul;34(7):396–8 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Dysphagia due to diffuse idiopathic skeletal hyperostosis. Shergy WJ, et al. **Am Fam Physician** 1989 Apr;39(4):149–52 (18 ref.)

Cervical involvement of diffuse idiopathic skeletal hyperostosis with dysphagia and rhinolalia. Kristensen S, et al. **Arch Otorhinolaryngol** 1988;245(6):330–4

Multiple peripheral nerve entrapment in Forestier's disease (diffuse idiopathic skeletal hyperostosis). Haskard DO, et al. **Br J Rheumatol** 1988 Oct;27(5):407–8

Diffuse idiopathic skeletal hyperostosis (DISH) of the spine: a cause of back pain? A controlled study. Schlapbach P, et al. **Br J Rheumatol** 1989 Aug;28(4):299–303 (21 ref.)

Diffuse skeletal hyperostosis in idiopathic hypoparathyroidism. Lambert RG, et al. **Clin Radiol** 1989 Mar;40(2):212–5 (12 ref.)

Delayed short-latency somatosensory evoked potentials in premature diagnosis of medullar disturbances in cervical spondylosis. Rubio Esteban G, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):361–8

Dysphagia due to cervical osteophytes. A description of five patients and a review of the literature. Stuart D. **Int Orthop** 1989;13(2):95–9

Hyperostosis of anterior cervical vertebrae: a rare cause of dysphagia. Joseph MG, et al. **Med J Aust** 1988 Oct 17; 149(8):442–3

Impairment of vertebral artery flow caused by extrinsic lesions. George B, et al. **Neurosurgery** 1989 Feb; 24(2):206–14

Diffuse idiopathic skeletal hyperostosis in a patient with right-sided aorta. Ravn-Pedersen P, et al. **Rontgenblatter** 1988 Dec; 1(12):495–6

Cervical spondylotic myelopathy: history and physical findings. Clark CR. **Spine** 1988 Jul;13(7):847–9

Monitoring of cervical spondylotic myelopathy. Cusick JF. **Spine** 1988 Jul;13(7):877–80

Myelopathy hand characterized by muscle wasting. A different type of myelopathy hand in patients with cervical spondylosis. Ebara S, et al. **Spine** 1988 Jul;13(7):785–91

Cervical spondylotic myelopathy in the aged patient. A radiographic evaluation of the aging changes in the cervical spine and etiologic factors of myelopathy. Hayashi H, et al. **Spine** 1988 Jun;13(6):618–25

Cervical spondylotic myelopathy: natural history. LaRocca H. **Spine** 1988 Jul;13(7):854–5 (6 ref.)

Comparison of the results of laminectomy and open-door laminoplasty for cervical spondylotic myeloradiculopathy and ossification of the posterior longitudinal ligament. Nakano N, et al. **Spine** 1988 Jul;13(7):792–4

Biomechanical considerations in the surgical management of cervical spondylotic myelopathy. White AA 3d, et al. **Spine** 1988 Jul;13(7):856–60

Anterior surgery for cervical spondylotic myelopathy. Smith-Robinson, Cloward, and vertebrectomy. Whitecloud TS 3d. **Spine** 1988 Jul;13(7):861–3 (69 ref.)

[Surgical treatment of complete dysphagia caused by a giant cervical osteophyte] Segal A, et al. **Ann Chir** 1989; 43(3):248–51 (21 ref.) (Eng. Abstr.) **(Fre)**

[Ankylosing vertebral hyperostosis and pulmonary function] Pardon-Zryd F, et al. **Schweiz Rundsch Med Prax** 1989 May 23;78(21):617–9 (Eng. Abstr.) **(Fre)**

[Diffuse idiopathic skeletal hyperostosis as a cause of dysphagia. A case report] Philipp A, et al. **HNO** 1989 Apr; 37(4):179–81 (Eng. Abstr.) **(Ger)**

[Complications of Forestier disease affecting the cervical vertebrae as seen from a neurosurgical point of view] Knauer S, et al. **Zentralbl Neurochir** 1988;49(2):93–100 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Comparison of myelography, CT myelography and magnetic resonance imaging in cervical spondylosis and disk herniation. Pre- and postoperative findings. Larsson EM, et al. **Acta Radiol** 1989 May–Jun;30(3):233–9

ETIOLOGY

[Mechanisms of formation of blockade of mobile segments of the spine] Voltanik SA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):59–62 **(Rus)**

HISTORY

Diffuse idiopathic skeletal hyperostosis as reflected in the paleontologic record: dinosaurs and early mammals. Rothschild BM. **Semin Arthritis Rheum** 1987 Nov; 17(2):119–25

[The man behind the syndrome: Jacques Forestier. One of the pioneers of rheumatology in France] Leden I. **Lakartidningen** 1989 Aug 9;86(32–33):2689–90 **(Swe)**

PATHOLOGY

Spinal hyperostosis in comparative pathology. A useful approach to the concept. Lagier R. **Skeletal Radiol** 1989; 18(2):99–107

[Enthesopathic reactions of the wrist in psoriatic arthritis, chronic polyarthritis and diffuse idiopathic skeletal hyperostosis. Results based on 3-dimensional soft radiographs] Fischer E. **Radiologe** 1989 Feb;29(2):73–81 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Pelvic manifestations of diffuse idiopathic skeletal

hyperostosis (DISH): are they clinically relevant? Fahrer H, et al. **Rheumatol Int** 1989;8(6):257–61

The pathophysiology of cervical spondylosis and myelopathy. Bohlman HH, et al. **Spine** 1988 Jul;13(7):843–6 (42 ref.)

[Scapular winging in cervical spondylotic myelopathy] Ando T, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1171–7 (Eng. Abstr.) **(Jpn)**

[Cervical spondylosis in neck pain] Durán Sacristán H. **An R Acad Nac Med (Madr)** 1988;105(2):141–84 **(Spa)**

RADIOGRAPHY

Abnormalities of the sacroiliac joints in diffuse idiopathic skeletal hyperostosis: demonstration by computed tomography. Durback MA, et al. **J Rheumatol** 1988 Oct; 15(10):1506–11

Cervical myelopathy secondary to movement disorders: case report. el-Mallakh RS, et al. **Neurosurgery** 1989 Jun; 24(6):902–5

Bony overgrowths and abnormal calcifications about the spine. Jones MD, et al. **Radiol Clin North Am** 1988 Nov; 26(6):1213–34 (61 ref.)

Diffuse idiopathic skeletal hyperostosis: diagnostic significance of radiographic abnormalities of the pelvis. Haller J, et al. **Radiology** 1989 Sep;172(3):835–9

Stress-related rib and vertebral changes. Macones AJ Jr, et al. **Radiology** 1989 Jan;170(1 Pt 1):117–9

Radiological patterns of lumbar spinal degenerative changes in symptomatic patients. Nzeh DA, et al. **Rays** 1987 Sep–Dec;12(3):35–8

Combined contrast studies in lumbar spine diseases. Myelography (peridurography) and nerve root infiltration. Kikuchi S, et al. **Spine** 1988 Nov;13(11):1327–31

[Imaging diagnosis of cervical spondylosis] Song ZQ. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Apr; 23(2):97–100 (Eng. Abstr.) **(Chi)**

[Omnipaque (iohexol) CT myelography (CTM) in the diagnosis of cervical spondylotic myelopathy—correlative study of conventional myelography (a report of 100 cases)] Wang YS. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Apr; 23(2):65–8 (Eng. Abstr.) **(Chi)**

[Osteochondrosis of the cervical spine as a cause of globus sensation and dysphagia] Biesinger E, et al. **HNO** 1989 Jan; 37(1):33–5 (Eng. Abstr.) **(Ger)**

[Pelvic and skeletal hyperostosis (diffuse idiopathic skeletal hyperostosis, Forestier disease)] Fahrer H, et al. **Z Rheumatol** 1988 Jul–Aug;47(4):227–32 (Eng. Abstr.) **(Ger)**

[Osseous outgrowths of the vertebrae simulating on lateral fluorograms round formations in the lungs] Rapis IuL. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):81–2 **(Rus)**

SURGERY

Neurosurgery for cervical spondylosis. Uttley D, et al. **Br J Hosp Med** 1989 Jul;42(1):62–70 (53 ref.)

Anterior cervical arthrodesis with heterologous bone graft and human fibrin glue in the surgical treatment of myelopathy due to spondylosis. Preliminary note. Fortuna A, et al. **Clin Neurol Neurosurg** 1988;90(2):125–9

The surgical management of cervical spondylotic radiculopathy and myelopathy. Herkowitz HN. **Clin Orthop** 1989 Feb;(239):94–108

Anterior cervical vertebrectomy and interbody fusion for multi-level spondylosis and ossification of the posterior longitudinal ligament. Kojima T, et al. **Neurosurgery** 1989 Jun;24(6):864–72

Anterolateral uncoforaminotomy for cervical spondylotic monoradiculopathy. Manabe S, et al. **No Shinkei Geka** 1989 Feb;17(2):153–8

The surgical management of cervical spinal stenosis, spondylosis, and myeloradiculopathy by means of the posterior approach. Epstein JA. **Spine** 1988 Jul;13(7):864–9

[Intervertebral fusion of a lumbo–sacral segment with insertion of a rotated local bone block by anterio–lateral approach] Zhao DL, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):136–8, 189 (Eng. Abstr.) **(Chi)**

SPINAL PUNCTURE

Informed consent for lumbar puncture. Botkin JR. **Am J Dis Child** 1989 Aug;143(8):899–904 (34 ref.)

The ameliorating effect of lumbar puncture in viral meningitis. Jaffe M, et al. **Am J Dis Child** 1989 Jun; 143(6):682–5

Dural punctures [letter] Hope A, et al. **Anaesthesia** 1989 Feb; 44(2):164–5

When to do a lumbar puncture in a neonate. Halliday HL. **Arch Dis Child** 1989 Mar;64(3):313–6 (27 ref.)

Incidence of post-lumbar puncture headache is independent of daily fluid intake. Dieterich M, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(4):194–6

Is lumbar puncture indicated in examination of dizzy patients? Ojala M. **Ear Neurol** 1989;29(2):86–9

Xanthochromia after subarachnoid haemorrhage needs no revisitation. Vermeulen M, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):826–8

Posthemorrhagic hydrocephalus in high-risk preterm infants: natural history, management, and long-term outcome. Dykes FD, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):611–8

Problems in study design to evaluate lumbar punctures as therapy for post-intraventricular hemorrhage hydrocephalus. Huddleston KW, et al. **J Perinatol** 1988 Fall;8(4):332–5

Xanthochromia [editorial] **Lancet** 1989 Sep 16;2(8664):658–9

Clinical scoring system for Lumbar puncture in infants. Zuckerberg A, et al. **Pediatr Emerg Care** 1988 Dec; 4(4):301–2

[Lumbar puncture in peripheral facial paresis is of significance in the early diagnosis of Borrelia] Hydén D, et al. **Lakartidningen** 1989 May 10;86(19):1792 **(Swe)**

ADVERSE EFFECTS

Iatrogenic intraspinal epidermoid tumour. Ersbak V, et al. **Acta Paediatr Scand** 1988 Sep;77(5):759

Lumbar myelography with iohexol. Adverse effects compared with spinal puncture. Nestvold K, et al. **Acta Radiol** 1988 Nov–Dec;29(6):637–40

CSF pleocytosis in an infant: a complication of lumbar puncture [letter] Puczynski MS, et al. **Am J Emerg Med** 1989 Jul;7(4):454

Bed rest and postlumbar puncture headache. The effectiveness of 24 hours' recumbency in reducing the incidence of postlumbar puncture headache. Cook PT, et al. **Anaesthesia** 1989 May;44(5):389–91

Fluid flow through dural puncture sites. An in vitro comparison of needle point types. Cruickshank RH, et al. **Anaesthesia** 1989 May;44(5):415–8

Postdural puncture headache. A comparison between 26- and 29-gauge needles in young patients. Flaatten H, et al. **Anaesthesia** 1989 Feb;44(2):147–9

Spinal anesthesia with extremely fine needles [letter] Dittman M, et al. **Anesthesiology** 1989 Jun;70(6):1035–6

Needle bevel direction and headache after inadvertent dural puncture. Norris MC, et al. **Anesthesiology** 1989 May; 70(5):729–31

Cerebral venous thrombosis versus postlumbar puncture headache [letter] Ravindran RS, et al. **Anesthesiology** 1989 Sep;71(3):478–9

Dural trauma during lumbar puncture [letter] de Boer WA. **Arch Intern Med** 1989 Sep;149(9):2139

Post-lumbar puncture cephalgia [letter] Klein DS. **Arch Neurol** 1988 Dec;45(12):1298

Intraspinal epidermoid tumour: late complication of lumbar puncture. Gardner DJ, et al. **Can Med Assoc J** 1989 Aug 1;141(3):223–5

The significance of age, sex, and cerebrospinal fluid pressure in post-lumbar-puncture headache. Vilming ST, et al. **Cephalalgia** 1989 Jun;9(2):99–106

Paraplegia after lumbar puncture. In an infant with previously undiagnosed hemophilia A. Treatment and peri-operative considerations. Faillace WJ, et al. **Clin Pediatr (Phila)** 1989 Mar;28(3):136–8

A simple treatment of post-lumbar-puncture headache. Ford CD, et al. **J Emerg Med** 1989 Jan–Feb;7(1):29–31

Cerebrospinal fluid protein elevation secondary to a subdural fluid collection in a child receiving multiple lumbar punctures. Friedman HS, et al. **J Pediatr** 1989 Sep; 115(3):439–41

Risks of lumbar puncture in the presence of intracranial mass lesions. Zisfein J, et al. **Mt Sinai J Med (NY)** 1988 Sep; 55(4):283–7

Spinal subdural haematoma: a rare complication of lumbar puncture. Case report and review of the literature. Spanu G, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31(5):157–9 (53 ref.)

Meningitis following spinal puncture in a patient with a CSF leak. Lanska DJ, et al. **Neurology** 1989 Feb;39(2 Pt 1):306–7

Iatrogenic intraspinal epidermoid tumor: myelo-CT and MRI diagnosis. Visciani A, et al. **Neuroradiology** 1989; 31(3):273–5

Spinal subarachnoid hematoma complicating lumbar puncture: diagnosis and management. Scott EW, et al. **Neurosurgery** 1989 Aug;25(2):287–92; discussion 292–3

Headache after lumbar puncture: review of the epidural blood patch. McGruder JM, et al. **South Med J** 1988 Oct; 81(10):1249–52 (30 ref.)

Post-lumbar puncture headache. Etiology and management [see comments] Raymond JR, et al. **West J Med** 1988 May; 148(5):551–4. **Comment in:** West J Med 1989 Jan;150(1):93

Post-lumbar puncture headache [letter; comment] Vetter WR. **West J Med** 1989 Jan;150(1):93. **Comment on:** West J Med 1988 May;148(5):551–4

[Hemorrhagic cerebrospinal fluid: confrontation of cytologic data of the blood cell count and of the CSF cell count] Cottier M, et al. **Arch Anat Cytol Pathol** 1988;36(4):150–5 (Eng. Abstr.) **(Fre)**

[Subacute intracranial subdural hygroma after lumbar puncture (letter)] Alari E, et al. **Presse Med** 1988 Sep 17; 17(31):1590 **(Fre)**

[The relief of postspinal headache using the Whitacre cannula. Experimental studies] Kreuscher H, et al. **Reg Anaesth** 1989 May;12(3):43–5 (Eng. Abstr.) **(Ger)**

[The relief of postspinal headache using the Whitacre cannula. A clinical study] Kreuscher H, et al. **Reg Anaesth** 1989 May;12(3):46–9 (Eng. Abstr.) **(Ger)**

[The incidence of postural headache in in- and outpatients following lumbar myelography (needles of different gauges and headache)] Urso S, et al. **Radiol Med (Torino)** 1989 Mar;77(3):165–70 (Eng. Abstr.) **(Ita)**

[A method for preventing postpuncture complications] Borisenko KK, et al. **Vestn Dermatol Venerol** 1988;(8):69–70 (Eng. Abstr.) **(Rus)**

[Headache after spinal puncture. Treatment alternatives: epidural blood patch] Barberá M, et al. **Rev Esp Anestesiol Reanim** 1989 Jan–Feb;36(1):25–37 (180 ref.) (Eng. Abstr.) **(Spa)**

EDUCATION

Teaching and training of invasive procedures on cadavers [letter] Brattebø G, et al. **Lancet** 1988 Nov 5;2(8619):1078–9

INSTRUMENTATION

Outpatient myelography with fine-needle technique: an appraisal. Vezina JL, et al. **AJNR** 1989 May–Jun; 10(3):615–7

Headache after dural puncture [letter] Barker P. **Anaesthesia** 1989 Aug;44(8):696–7

Keeping the position of the 29-gauge spinal needle [letter] Tunstall ME. **Anaesthesia** 1989 Aug;44(8):701–2

Method for sequential sampling of cerebrospinal fluid in humans. Bruce JN, et al. **Neurosurgery** 1988 Dec; 23(6):788–90

[Atraumatic lumbar puncture using very fine needles (letter)] Corcos A, et al. **Presse Med** 1989 Apr 1;18(13):686 **(Fre)**

METHODS

Cerebrospinal fluid (CSF) TRAP. A method to improve CSF laboratory efficiency. Albright RE Jr, et al. **Am J Clin Pathol** 1988 Dec;90(6):707–10

Dangers of lumbar spinal needle placement [letter] Nelson DA. **Ann Neurol** 1989 Mar;25(3):310

Gradients of monoamine metabolites in relation to position of the lumbar puncture needle. Nordin C. **Biol Psychiatry** 1989 Feb 15;25(4):513–6

Single-puncture myelographic evaluation of epidural block in the young infant. Weinberger E, et al. **Pediatr Radiol** 1989;19(4):223–5

Topographic anatomical aspects of lumbar disc puncture. Konings JG, et al. **Spine** 1988 Aug;13(8):958–61

[Lateral cervical puncture for myelography and cerebrospinal fluid collection: technical note] Rossitti SL, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):397–400 (Eng. Abstr.) **(Por)**

PSYCHOLOGY

Neurobiological effects of lumbar puncture stress in psychiatric patients and healthy volunteers. Breier A, et al. **Psychiatry Res** 1988 Aug;25(2):187–94

Objective and subjective side effects of research lumbar punctures in children and adolescents. Kruesi MJ, et al. **Psychiatry Res** 1988 Jul;25(1):59–63

SPINAL STENOSIS

Spinal stenosis: an annotated bibliography. Haglund MM, et al. **Pain** 1988 Oct;35(1):1–37 (176 ref.)

Spinal stenosis. Lipson SJ. **Rheum Dis Clin North Am** 1988 Dec;14(3):613–8 (25 ref.)

CEREBROSPINAL FLUID

A study of beta-endorphin and substance P level in cerebrospinal fluid on lumbar lesion. Masaki K. **Tokushima J Exp Med** 1987 Dec;34(3–4):61–9

COMPLICATIONS

Unilateral lumbar facet joint hypertrophy causing nerve root irritation. Wilde GP, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):307–10

Cervical spinal stenosis with cord neurapraxia and transient quadriplegia. Torg JS, et al. **Clin Sports Med** 1987 Jan; 6(1):115–33 (28 ref.)

Calcitonin for pseudoclaudication in lumbar spinal stenosis [letter] Streifler J, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):543–4

Transient paresis in athletes. Berg EE. **J S C Med Assoc** 1988 Oct;84(10):490–3

Spinal stenosis and ischaemic leg pain [letter] Maling PB. **N Z Med J** 1989 Apr 26;102(866):197

Spinal stenosis and ischaemic leg pain [letter] Morris T. **N Z Med J** 1989 May 24;102(868):260

Electrophysiological studies of intermittent claudication in lumbar stenosis. Kondo M, et al. **Spine** 1989 Aug; 14(8):862–6

[Radicular claudication with a narrowed lumbar canal] Revel M. **J Mal Vasc** 1989;14(2):149–52 (Eng. Abstr.) **(Fre)**

[Sciatica caused by lateral stenosis of the spinal canal] Deburge A, et al. **Rev Chir Orthop** 1989;75(2):90–7 (Eng. Abstr.) **(Fre)**

[Sciatica due to lateral stenosis of the lumbar canal] Deburge A, et al. **Rev Chir Orthop** 1988;74 Suppl 2:301–3 **(Fre)**

[Lumbar spinal stenosis syndrome in the experience of a rheumatologic-geriatric clinic] Stevanovic L, et al. **Schweiz Med Wochenschr** 1989 Feb 25;119(8):243–50 (Eng. Abstr.) **(Ger)**

[Venous pressure in the vertebral venous plexus and its role in cauda equina claudication] Yazaki S, et al. **Nippon Seikeigeka Gakkai Zasshi** 1988 Aug;62(8):733–45 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Stenosis of the foramen magnum and rostral spinal canal, with spinal cord deformity, in Jeune's asphyxiating thoracic dystrophy. Knisely AS, et al. **Pediatr Pathol** 1989; 9(3):299–305

DIAGNOSIS

Non–corresponding radiological and surgical diagnoses in patients operated for sciatica. Slebus FG, et al. **Acta Neurochir (Wien)** 1988;94(3–4):137–43

Preoperative evaluation of cervical radiculopathy and myelopathy by surface–coil MR imaging. Brown BM, et al. **AJR** 1988 Dec;151(6):1205–12

Spinal versus vascular claudication [letter] Howie GR. **N Z Med J** 1989 Jun 14;102(869):300

Further aspects of MR–signal enhancements in stenosis of the cervical spinal canal. MRI–investigations in correlation to clinical and cerebrospinal fluid (CSF) findings. Haupts M, et al. **Neuroradiology** 1988;30(6):545–6

Comparison of MRI to contrast CT in the diagnosis of spinal stenosis. Schnebel B, et al. **Spine** 1989 Mar;14(3):332–7

Transabdominal ultrasound measurement of the lumbar spinal canal. Its value for evaluation of lumbar spinal stenosis. Tervonen O, et al. **Spine** 1989 Feb;14(2):232–5

[The narrowed spinal canal] Winter M, et al. **Dtsch Med Wochenschr** 1989 May 12;114(19):756–8 (10 ref.) (Ger)

[Ultrasonic tomography—a noninvasive, imaging study method in lumbar canal diagnosis] Hagen A, et al. **Radiol Diagn (Berl)** 1988;29(5):719–27 (Eng. Abstr.) (Ger)

ETIOLOGY

Spinal disorders: kyphosis and lumbar stenosis. Dubousset J, et al. **Basic Life Sci** 1988;48:299–303 (0 ref.)

Severe cervical stenosis due to ossification of the posterior longitudinal ligament without neurological manifestations ("silent OPLL"). Merlini L, et al. **Ital J Neurol Sci** 1989 Feb;10(1):93–6

Lumbar spinal stenosis associated with hypertrophied ligamentum flavum and calcium pyrophosphate crystal deposition. Drouillard PJ, et al. **J Am Osteopath Assoc** 1988 Aug;88(8):1019–21

Does sublaminar wiring produce spinal stenosis? Nixon JE. **J Bone Joint Surg [Br]** 1989 Jan;71(1):92–3

Developmental spinal canal stenosis and somatotype. Nightingale S. **J Neurol Neurosurg Psychiatry** 1989 Jul; 52(7):887–90

Spinal claudication in systemic amyloidosis. Harats N, et al. **J Rheumatol** 1989 Jul;16(7):1003–6

Epidural lipomatosis [see comments] Quint DJ, et al. **Radiology** 1988 Nov;169(2):485–90. **Comment in:** Radiology 1989 May;171(2):581–2

Lumbar spinal stenosis. Woolsey RM. **Semin Neurol** 1986 Dec;6(4):385–9 (30 ref.)

Relationship between traumatic spinal canal stenosis and neurologic deficits in thoracolumbar burst fractures. Hashimoto T, et al. **Spine** 1988 Nov;13(11):1268–72

Significance of acute posttraumatic bony encroachment of the neural canal. Keene JS, et al. **Spine** 1989 Aug; 14(8):799–802

Spinal stenosis following anterior spinal fusion. A case report. Louw JA, et al. **Spine** 1988 Aug;13(8):952–3

[Clinical deterioration following chemonucleolysis. Sequestration or neurotoxic complication?] Wehling P, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):72–6 (Eng. Abstr.) (Ger)

[Diagnosis and differential diagnosis of spondylogenic cervical myelopathy] Matthes R, et al. **Z Arztl Fortbild (Jena)** 1989;83(9):467–70 (Ger)

PATHOLOGY

A technique for necropsy evaluation of stenosis of the foramen magnum and rostral spinal canal in osteochondrodysplasia. Knisely AS, et al. **Hum Pathol** 1988 Dec;19(12):1372–5

[The morphology of the lumbar spinal canal] Vitzthum HE. **Neurochirurgia (Stuttg)** 1989 Jan;32(1):1–4 (Eng. Abstr.) (Ger)

[Significance of nuclear magnetic resonance tomography for the diagnosis of degenerative diseases of the lumbar spine] Schulitz KP, et al. **Z Orthop** 1988 May–Jun;126(3):334–44 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

The subarachnoid fluid space in achondroplastic spinal stenosis: the surgical implication. Uematsu S, et al. **Basic Life Sci** 1988;48:275–81

Sway of the center of gravity in patients with spinal canal stenosis. Hanai K, et al. **Spine** 1988 Nov;13(11):1303–7

Urodynamic evaluation of patients with spinal stenosis. Smith AY, et al. **Urology** 1988 Nov;32(5):474–7

[Function of the long spinal cord pathways in cervical spinal stenosis—an electrophysiologic study] Masur H, et al. **EEG EMG** 1988 Dec;19(4):264–6 (Eng. Abstr.) (Ger)

[Incidence and clinical importance of chronic reactive periosteal new bone formation in the cervical region in patients with differing neurologic symptomatology] Trattnig S, et al. **Rontgenblatter** 1989 Feb;42(2):69–72 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Ultrasonic measurement of lumbar canal diameter: a screening tool for low back disorders? Chovil AC, et al. **South Med J** 1989 Aug;82(8):977–80 (25 ref.)

RADIOGRAPHY

Plain film assessment of spinal stenosis: method comparison with lumbar CT. Dailey EJ, et al. **J Manipulative Physiol Ther** 1989 Jun;12(3):192–9 (41 ref.)

Dimensions of the spinal canal in individuals symptomatic and non–symptomatic for sciatica: a CT study. Wilmink JT, et al. **Neuroradiology** 1988;30(6):547–50

Treatment of fractures of the vertebral limbus and spinal stenosis in five adolescents and five adults. Epstein NE, et al. **Neurosurgery** 1989 Apr;24(4):595–604

The clinical presentation of lumbar spinal stenosis. Heath JM. **Ohio Med** 1989 Jun;85(6):484–7

Single–puncture myelographic evaluation of epidural block in the young infant. Weinberger E, et al. **Pediatr Radiol** 1989;19(4):223–5

Spinal stenosis and disc herniation in a 14–year–old male. A case report. Epstein NE, et al. **Spine** 1988 Aug; 13(8):938–41

[Biomechanics of the lumbo–sacral sac in flexion–extension myelography] Jia LS. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):624–7, 639–40 (Eng. Abstr.) (Chi)

[Omnipaque myelography in diagnosis of lumbar spinal disorders] Jia LS. **Chung Hua Wai Ko Tsa Chih** 1988 Jul; 26(7):406–8, 445 (Eng. Abstr.) (Chi)

[Spinal stenosis] Kolín J. **Cesk Radiol** 1989 Jan;43(1):26–34 (Eng. Abstr.) (Cze)

[Assessing the myelogram of the narrow spinal canal] Vitzthum HE. **Neurochirurgia (Stuttg)** 1989 May; 32(3):77–81 (Eng. Abstr.) (Ger)

[Stenoses of intervertebral foramina in the cervical spine—do they have any significance?] Olsson T, et al. **Lakartidningen** 1988 Nov 23;85(47):4068–9 (Swe)

SURGERY

Transfacet decompression with dowel fixation: a new technique for lumbar lateral spinal stenosis. Ray CD. **Acta Neurochir Suppl (Wien)** 1988;43:48–54

Lumbar canal stenosis: results in 40 patients surgically treated. Spanu G, et al. **Acta Neurochir (Wien)** 1988; 94(3–4):144–9

Treatment of cervical canal stenosis by decompression and anterior fusion. Kiwerski J. **Arch Orthop Trauma Surg** 1988; 107(6):354–6

Treatment of kyphosis and lumbar stenosis in achondroplasia. Lonstein JE. **Basic Life Sci** 1988;48:283–92

Extended laminectomy for spinal stenosis in achondroplasia. Streeten E, et al. **Basic Life Sci** 1988;48:261–73

Lumbar spinal stenosis syndrome. Petropoulos BP. **Clin Orthop** 1989 Sep;(246):70–80

Vertebral artery release in vertebro–basilar insufficiency due to cervical uncoarthrosis. Solini A, et al. **Ital J Orthop Traumatol** 1989 Mar;15(1):43–56

Cauda equina syndrome after surgical treatment of lumbar spinal stenosis with application of free autogenous fat graft. A report of two cases. Mayer PJ, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1090–3

An unusual case infection following spinal surgery. Tsitsopoulos P, et al. **J Neurosurg Sci** 1988 Apr–Jun; 32(2):77–81

Multilevel lumbar laminotomies for focal spinal stenosis: case report. Aryanpur J, et al. **Neurosurgery** 1988 Jul;23(1):111–5

Relief of lumbar canal stenosis using multilevel subarticular fenestrations as an alternative to wide laminectomy: preliminary report. Young S, et al. **Neurosurgery** 1988 Nov; 23(5):628–33

Clinical results following enlargement of the cervical spinal canal by means of laminoplasty. Nakano N, et al. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1139–47

The surgical management of cervical spinal stenosis, spondylosis, and myeloradiculopathy by means of the posterior approach. Epstein JA. **Spine** 1988 Jul;13(7):864–9

Preoperative and postoperative instability in lumbar spinal stenosis. Johnsson KE, et al. **Spine** 1989 Jun;14(6):591–3

Hyperostotic lumbar spinal stenosis. A review of 12 surgically treated cases with roentgenographic survey of ossification of the yellow ligament at the lumbar spine. Kurihara A, et al. **Spine** 1988 Nov;13(11):1308–16

Rationale for spinal fusion in lumbar spinal stenosis. Nasca RJ. **Spine** 1989 Apr;14(4):451–4

[Decompression and fusion in flexion in the treatment of lumbar spinal stenosis] Jia LS. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):220–3, 255 (Eng. Abstr.) (Chi)

[Enlarging the spinal canal in cervical stenosis: report of 41 cases] Ma ZT, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):146–9, 190 (Eng. Abstr.) (Chi)

[Treatment of degenerative thoracic stenosis using a new method: en–bloc hemi–apophysio–laminectomy] Xu ST, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):143–5, 189–90 (Eng. Abstr.) (Chi)

[The fate of fat grafts used in surgery of the lumbar spine] Deburge A, et al. **Rev Chir Orthop** 1988;74(3):238–42 (Eng. Abstr.) (Fre)

[Functional results and prognostic factors in the surgical treatment of degenerative lumbar stenosis] Lassale B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:85–8 (Fre)

[Role of osteosynthesis of the lumbar spine associated with the surgical treatment of narrow lumbar canal] Roy–Camille R, et al. **Rev Chir Orthop** 1988;74 Suppl 2:70–3 (Fre)

[The surgical treatment of lumbar canal stenosis] Chevalley F, et al. **Schweiz Med Wochenschr** 1989 Mar 11; 119(10):312–7 (Eng. Abstr.) (Fre)

[Lumbar spinal stenoses. Results of surgical treatment] Lange M, et al. **Fortschr Med** 1988 Jun 20;106(18):375–8 (Eng. Abstr.) (Ger)

THERAPY

Kyphosis and lumbar stenosis in achondroplasia. Nelson MA. **Basic Life Sci** 1988;48:305–11

A hypothesis introducing a new calculation for discal reduction emphasis on stentotic factors and manipulative treatment [letter] Church CP, et al. **J Manipulative Physiol Ther** 1989 Apr;12(2):151–2

SPINDLE APPARATUS, MITOTIC see **MITOTIC SPINDLE APPARATUS**

SPINE

see related
LAMINECTOMY

Spinal manipulation for back pain. Raftis KL, et al. **Hosp Pract [Off]** 1989 Mar 15;24(3):89–90, 95–6, 102 passim (9 ref.)

Collagen organisation in the interspinous ligament and its relationship to tissue function. Aspden RM, et al. **J Anat** 1987 Dec;155:141–51

Treatment of lumbar motor unit instability with a custom orthosis: clinical procedure [letter] Bolton PS. **J Manipulative Physiol Ther** 1988 Oct;11(5):443

Spinal manipulation: science or black art? [editorial] Paterson JK. **Practitioner** 1988 Mar 22;232(1445):289, 291

The role of external spinal skeletal fixation in the assessment of low–back disorders. Esses SI, et al. **Spine** 1989 Jun; 14(6):594–601

Tensile strength of spinal ligaments. Myklebust JB, et al. **Spine** 1988 May;13(5):526–31

Spinal pedicle fixation: reliability and validity of roentgenogram–based assessment and surgical factors on successful screw placement. Weinstein JN, et al. **Spine** 1988 Sep;13(9):1012–8

[OPLL—a rare disease picture] Glathe S, et al. **ROFO** 1988 Oct;149(4):440–1 (Ger)

[Studies on induction mechanism of ossification of the posterior longitudinal ligament of the spine—especially on the cultured cells from the human spinal ligament] Ishida Y. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov; 62(11):1019–27 (Eng. Abstr.) (Jpn)

[Experimental study on ossification of spinal ligaments in the rabbit under influence of bone morphogenetic protein] Murakami H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec; 62(12):1211–20 (Eng. Abstr.) (Jpn)

[MRI of OPLL (ossification of the posterior longitudinal ligament)] Otake S, et al. **Rinsho Hoshasen** 1988 Sep; 33(9):989–93 (Eng. Abstr.) (Jpn)

[A device for reposition of the vertebrae] Voronovich IR, et al. **Ortop Travmatol Protez** 1989 Apr;(4):52–3 (Rus)

ABNORMALITIES

Vertebral malformations. Theiler K. **Adv Anat Embryol Cell Biol** 1988;112:1–99 (123 ref.)

3–M syndrome [letter] Flannery DB. **Am J Med Genet** 1989 Feb;32(2):252–4

Caudal deficiency sequence in 7q terminal deletion. Schrander–Stumpel C, et al. **Am J Med Genet** 1988 Jul; 30(3):757–61 (10 ref.)

Paediatric MR imaging—current clinical applications. Davies RP, et al. **Australas Radiol** 1988 May;32(2):184–9

Unclassified osteochondrodystrophies with extreme platyspondyly (report of two cases). Kozlowski K, et al. **Australas Radiol** 1988 May;32(2):263–8

Spinal segmentation anomalies: in utero diagnosis by ultrasound. Zalcman M, et al. **Br J Radiol** 1988 Sep; 61(729):847–9

VATER association. A unifying concept of multiple anomalies. Beals RK, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):948–50 (21 ref.)

Torticollis due to a combination of sternomastoid contracture and congenital vertebral anomalies. Brougham DI, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):404–7

Neural defects in Jarcho–Levin syndrome. Reyes MG, et al. **J Child Neurol** 1989 Jan;4(1):51–4

A further patient with the lethal type of Larsen syndrome. Clayton–Smith J, et al. **J Med Genet** 1988 Jul;25(7):499–500

Spondyloenchondrodysplasia. Menger H, et al. **J Med Genet** 1989 Feb;26(2):93–9

Congenital spinal deformity in a three generation family. Temple IK, et al. **J Med Genet** 1988 Dec;25(12):831–4

Aicardi syndrome in two sisters. Molina JA, et al. **J Pediatr** 1989 Aug;115(2):282–3

Spinal abnormalities in camptomelic dysplasia. Coscia MF, et al. **J Pediatr Orthop** 1989 Jan–Feb;9(1):6–14 (37 ref.)

Double split of notochord with massive prolapse of the gut. Pathak VB, et al. **J Pediatr Surg** 1988 Nov;23(11):1039–40

Topics in perinatal ultrasonography. Caudal regression syndrome. Bronsteen RA, et al. **J Perinatol** 1987 Summer;

7(3):264–6
Spondylothoracic dysplasia. Clinical and sonographic diagnosis. Marks F, et al. **J Ultrasound Med** 1989 Jan; 8(1):1–5
Innocent systolic murmurs in healthy young males: a study of the characteristics and prevalence in the SAF pre-enlistee population. Tan CC, et al. **Singapore Med J** 1988 Aug;29(4):337–40
Segmental wiring for spinal deformity. A morbidity report. Dove J. **Spine** 1989 Feb;14(2):229–31
Spondylothoracic dysplasia. A report of ten cases with follow-up. Herold HZ, et al. **Spine** 1988 May;13(5):478–81
Lower cervical spondylosis and myelopathy in adults with Down's syndrome. Olive PM, et al. **Spine** 1988 Jul; 13(7):781–4
[Etiology and treatment of obliquity of the pelvic bone] Li ZR. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):244–6 (17 ref.) (Chi)
[Results of conservative treatment of congenital deformities of the spine] Janíček P, et al. **Acta Chir Orthop Traumatol Cech** 1988 Oct;55(5):467–72 (Eng. Abstr.) (Cze)
[Oto-vertebral syndrome and defective mental development] Fehlow P. **Padiatr Grenzgeb** 1988;27(4):323–5 (Eng. Abstr.) (Ger)
[Spondylo-costal dysostosis. Description of a clinical case] Sardi R, et al. **Minerva Pediatr** 1988 Jul;40(7):437–40 (Eng. Abstr.) (Ita)
[Spondylo-costal dysostosis. Description of a case and review of the literature] Porcelli F, et al. **Pediatr Med Chir** 1988 May-Jun;10(3):339–42 (Eng. Abstr.) (Ita)
[A study on senile postural deformity] Nakada K. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1149–61 (Eng. Abstr.) (Jpn)
[A case of neurofibromatosis with spinal dural ectasia and vertebral body scalloping: a case report] Ito Y, et al. **No Shinkei Geka** 1988 Dec;16(13):1495–9 (Eng. Abstr.) (Jpn)
[Hereditary syndromes accompanied by pronounced deformity of the spine] Semiachkina AN, et al. **Pediatriia** 1989;(1):104–5 (Rus)
[Effect of background spinal changes on the development of injuries in flight personnel under G-loads] Poletaev RV. **Voen Med Zh** 1988 Nov;(11):43–5 (Rus)
[Robinow's syndrome] Nájera-Martínez P, et al. **Bol Med Hosp Infant Mex** 1988 Aug;45(8):537–42 (13 ref.) (Eng. Abstr.) (Spa)

ANALYSIS

Local differences in mineral content in vertebral trabecular bone measured by dual-energy computed tomography. Nepper-Rasmussen J, et al. **Acta Radiol** 1989 Jul-Aug; 30(4):369–71
Bone mineral density of the spine and proximal femur in normal and osteoporotic subjects in Japan. Norimatsu H, et al. **Bone Miner** 1989 Jan;5(2):213–22
The effects of muscle-building exercise on bone mineral density of the radius, spine, and hip in young men. Colletti LA, et al. **Calcif Tissue Int** 1989 Jul;45(1):12–4
[Contents of mineral substances in the spine and the possibility of fractures (review of the literature)] Sveshnikov AA. **Ortop Travmatol Protez** 1988 Nov; (11):76–8 (23 ref.) (Rus)

ANATOMY & HISTOLOGY

Correction of CSF motion artifact on MR images of the brain and spine by pulse sequence modification: clinical evaluation. Szeverenyi NM, et al. **AJNR** 1988 Nov-Dec; 9(6):1069–74
Descriptive and functional myology of the back and hindlimb of the striped hyena (Hyaena hyaena, L. 1758). Spoor CF, et al. **Anat Anz** 1988;167(4):313–21
Trajectory architecture of the trabecular bone between the body and the neural arch in human vertebrae. Pal GP, et al. **Anat Rec** 1988 Dec;222(4):418–25
Skeletal geometry underlying head movements. Vidal PP, et al. **Ann N Y Acad Sci** 1988;545:228–38 (37 ref.)
In vivo long-term precision of spinal bone mass measurement by dual photon absorptiometry. Reginster JY, et al. **Bone Miner** 1989 May;6(2):225–9
Influence of the menopause and aging on spinal density in French women. Ribot C, et al. **Bone Miner** 1988 Oct; 5(1):89–97
Correction of the effects of source, source strength, and soft-tissue thickness on spine dual-photon absorptiometry measurements. Dawson-Hughes B, et al. **Calcif Tissue Int** 1989 Apr;44(4):251–7
Spinal ascending projections to the nucleus tractus spinalis nervi trigemini of the dog. Mariala J, et al. **Folia Morphol (Praha)** 1989;37(1):64–70
Hip joint mobility and spinal angles in standing and in different sitting postures. Bridger RS, et al. **Hum Factors** 1989 Apr;31(2):229–41
Quantitative magnetic resonance imaging of vertebral bodies: a T1 and T2 study. Jenkins JP, et al. **Magn Reson Imaging** 1989 Jan-Feb;7(1):17–23
Age changes in the lumbar spinal and intervertebral canals. Twomey L, et al. **Paraplegia** 1988 Aug;26(4):238–49
Cerebrospinal fluid-iophendylate contrast on gradient-echo MR images. Jack CR Jr, et al. **Radiology** 1988 Nov; 169(2):561–3
Vertebral bone density in children: effect of puberty. van Kuijk C. **Radiology** 1989 Mar;170(3 Pt 1):893–6
Illustrated glossary for spinal anatomy. With explanations and a French and German translation. François RJ, et al. **Rheumatol Int** 1985;5(6):241–5
Segmental analysis of the sagittal plane alignment of the normal thoracic and lumbar spines and thoracolumbar junction. Bernhardt M, et al. **Spine** 1989 Jul;14(7):717–21
Method for determining vertebral body positions in the sagittal plane using skin markers. Bryant JT, et al. **Spine** 1989 Mar;14(3):258–65
Measurement of human lumbar spine ligaments during loaded and unloaded motion. Hedtmann A, et al. **Spine** 1989 Feb; 14(2):175–85
A comparison of actual and apparent lumbar lordosis in black and white adult females. Mosner EA, et al. **Spine** 1989 Mar; 14(3):310–4
3D-location of the L5-S1 fulcrum in relation to the hip. Németh G, et al. **Spine** 1989 Jun;14(6):604–5
The geometry of the muscles of the lumbar spine determined by magnetic resonance imaging. Tracy MF, et al. **Spine** 1989 Feb;14(2):186–93
[Role of magnetic resonance imaging in studies of the spine] Frocrain L, et al. **Rev Chir Orthop** 1988;74 Suppl 2:312–6 (Fre)

BLOOD SUPPLY

Comparative imaging: spinal vascular malformation. Wells RG, et al. **Clin Nucl Med** 1988 Jul;13(7):533–4
[The vertebral venous plexus: its physiopathological aspects. A CT study in 2 patients with obstruction of the inferior vena cava] Bellelli A, et al. **Radiol Med (Torino)** 1989 May; 77(5):564–7 (Ita)
[Vascular structures of the spinal cord and spine—special reference to questions and discussions] Yoshizawa E. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):395–402 (Jpn)
[Long-term regional infusion of drugs into the arteries of the spine and spinal cord (experimental anatomical validation) (published erratum appears in Ortop Travmatol Protez 1988 Oct;(10):58)] Toporov GN, et al. **Ortop Travmatol Protez** 1988 Jul;(7):38–41 (Eng. Abstr.) (Rus)

CYTOLOGY

Characterization of endosteal osteoblastic cells isolated from mouse caudal vertebrae. Lomri A, et al. **Bone** 1988; 9(3):165–75

DRUG EFFECTS

Effects of nandrolone decanoate and antiresorptive therapy on vertebral density in osteoporotic postmenopausal women. Need AG, et al. **Arch Intern Med** 1989 Jan; 149(1):57–60
Restoration of spinal bone in osteoporotic men by treatment with human parathyroid hormone (1-34) and 1,25-dihydroxyvitamin D. Slovik DM, et al. **J Bone Miner Res** 1986 Aug;1(4):377–81
The effect of oral betaine on vertebral body bone density in pyridoxine-non-responsive homocystinuria. Gahl WA, et al. **J Inherited Metab Dis** 1988;11(3):291–8
Effects of tamoxifen on spinal bone density in women with breast cancer. Turken S, et al. **J Natl Cancer Inst** 1989 Jul 19;81(14):1086–8

EMBRYOLOGY

undulated, a mutation affecting the development of the mouse skeleton, has a point mutation in the paired box of Pax 1. Balling R, et al. **Cell** 1988 Nov 4;55(3):531–5
The contribution made by a single somite to the vertebral column: experimental evidence in support of resegmentation using the chick-quail chimaera model. Bagnall KM, et al. **Development** 1988 May;103(1):69–85
A gene with sequence similarity to Drosophila engrailed is expressed during the development of the neural tube and vertebrae in the mouse. Davidson D, et al. **Development** 1988 Oct;104(2):305–16
Role of cartilage canals in osteogenesis and growth of the vertebral centra. Chandraraj S, et al. **J Anat** 1988 Jun; 158:121–36
Postural aspects of the human fetal spine. Morphometric and functional study. Panattoni GL, et al. **Panminerva Med** 1988 Oct-Dec;30(4):250–3

GROWTH & DEVELOPMENT

New method for assessing changes in growth and sexual dimorphism in paleoepidemiology. Clark GA. **Am J Phys Anthropol** 1988 Sep;77(1):105–16
Relevant principles in the management of spinal disorders in achondroplasia. O'Brien JP, et al. **Basic Life Sci** 1988; 48:293–8

METABOLISM

Spinal and peripheral bone mineral densities in acromegaly: the effects of excess growth hormone and hypogonadism. Diamond T, et al. **Ann Intern Med** 1989 Oct 1;111(7):567–73
Vitamin D, parathyroid hormone, and bone mineral content of lumbar spine and femur in primary biliary cirrhosis. Almdal T, et al. **J Intern Med** 1989 Mar;225(3):207–13
Bone mineral content of the lumbar spine and lower extremities years after spinal cord lesion. Biering-Sørensen F, et al. **Paraplegia** 1988 Oct;26(5):293–301

PATHOLOGY

Relations of the soft structures of the posterior mediastinum in the scoliotic spine. Nathan H. **Acta Anat (Basel)** 1988; 133(3):260–4
Closed biopsy of the spine using a stereotactic biopsy forceps. Technical note. Zentner J, et al. **Acta Neurochir (Wien)** 1988;94(3-4):155–7
Pathogenesis of square bodies in ankylosing spondylitis. Aufdermaur M. **Ann Rheum Dis** 1989 Aug;48(8):628–31
The vertebral column of diabetic sand rats (Psammomys obesus). Silberberg R. **Exp Cell Biol** 1988;56(4):217–20
Vertebral osteosarcoma. Tigani D, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):5–13
Incidence of spinal palpatory findings: a review. Beal MC. **J Am Osteopath Assoc** 1989 Aug;89(8):1027–30, 1033–5 (16 ref.)
Familial bulbo-spinal muscular atrophy associated with testicular atrophy and sensory neuropathy (Kennedy-Alter-Sung syndrome). Autopsy case report of two brothers. Nagashima T, et al. **J Neurol Sci** 1988 Nov; 87(2-3):141–52
Quantitative histologic study of the influence of spinal instrumentation on lumbar fusions: a canine model. Farey ID, et al. **J Orthop Res** 1989;7(5):709–22
Axial rotation component of thoracic scoliosis. Stokes IA. **J Orthop Res** 1989;7(5):702–8
Chemical shift misregistration effect in spinal magnetic resonance imaging. Komiyama M, et al. **Neurol Med Chir (Tokyo)** 1988 Jul;28(7):642–4
Coil holder and marker system for MR imaging of the total spine. Abrahams JJ, et al. **Radiology** 1989 Sep;172(3):869–71
Spinal hyperostosis in comparative pathology. A useful approach to the concept. Lagier R. **Skeletal Radiol** 1989; 18(2):99–107
Magnetic resonance imaging and contrast CT of the lumbar spine. Comparison of diagnostic methods and correlation with surgical findings. Forristall RM, et al. **Spine** 1988 Sep; 13(9):1049–54
Computerized ultrasonic digitization in the measurement of spinal curvature. Letts M, et al. **Spine** 1988 Oct; 13(10):1106–10
Measurement of spinal sagittal configuration and mobility with Debrunner's kyphometer. Ohlén G, et al. **Spine** 1989 Jun;14(6):580–3
[An antenna support table for studying the spinal cord and spine by magnetic resonance] Doyon D, et al. **J Radiol** 1989 Jan;70(1):65–6 (Fre)
[Examination of the spine within the scope of the forensic autopsy] Saternus KS. **Beitr Gerichtl Med** 1988;46:489–95 (Eng. Abstr.) (Ger)
[Spinal changes in neurofibromatosis in children] Köhler B, et al. **ROFO** 1989 Aug;151(2):186–91 (Eng. Abstr.) (Ger)
[Spinal intramedullary tumor with exophytic growth] Ishikawa T, et al. **No Shinkei Geka** 1988 Nov; 16(12):1339–45 (Eng. Abstr.) (Jpn)
[Spinal epidural tumors without destructive bone change: clinical and radiological studies] Koyanagi I, et al. **No Shinkei Geka** 1988 Jul;16(8):953–8 (Eng. Abstr.) (Jpn)

PHYSIOLOGY

A methodology for mechanical measurements of technical constants of trabecular bone. Yahia LH, et al. **Eng Med** 1988 Oct;17(4):169–73
Field distributions in vertebral bodies of the rat during electrical stimulation: a parametric study. Carter EL Jr, et al. **IEEE Trans Biomed Eng** 1989 Mar;36(3):333–45
Cadaveric spines to cyclic loading in bending, using a maximum bending moment of 3 Nm [letter] Adams MA. **Spine** 1988 Oct;13(10):1201
The lumbar spine in backward bending. Adams MA, et al. **Spine** 1988 Sep;13(9):1019–26
The spine as an arch. A new mathematical model. Aspden RM. **Spine** 1989 Mar;14(3):266–74 (53 ref.)
Torsional stability of the lumbosacral junction. Significance of the iliolumbar ligament. Chow DH, et al. **Spine** 1989 Jun;14(6):611–5
Immunoreactive ACTH, beta-endorphin, and cortisol levels in plasma following spinal manipulative therapy. Christian GF, et al. **Spine** 1988 Dec;13(12):1411–7
A three-dimensional digitization method to measure trunk muscle lines of action. Dumas GA, et al. **Spine** 1988 May; 13(5):532–41
The importance of pelvic tilt in reducing compressive stress in the spine during flexion-extension exercises. Gracovetsky S, et al. **Spine** 1989 Apr;14(4):412–6
The contribution of the three columns of the spine to rotational stability. A biomechanical model. Haher TR, et al. **Spine** 1989 Jul;14(7):663–9
Estimation of force and extensor moment contributions of the disc and ligaments at L4-L5. McGill SM. **Spine** 1988 Dec;13(12):1395–402
Networks of internal trunk-loading activities under controlled trunk-motion conditions. Marras WS, et al. **Spine** 1988 Jun;13(6):661–7
The vertical stability of the cervical spine. Pal GP, et al. **Spine** 1988 May;13(5):447–9

Three-dimensional movements of the upper cervical spine. Panjabi M, et al. **Spine** 1988 Jul;13(7):726–30
Biomechanical evaluation of spinal fixation devices: I. A conceptual framework. Panjabi MM. **Spine** 1988 Oct; 13(10):1129–34
Biomechanical evaluation of spinal fixation devices: II. Stability provided by eight internal fixation devices. Panjabi MM, et al. **Spine** 1988 Oct;13(10):1135–40
Physical activity and the strength of the lumbar spine. Porter RW, et al. **Spine** 1989 Feb;14(2):201–3
Simulift: a simulation model of human trunk motion. Reilly CH, et al. **Spine** 1989 Jan;14(1):5–11
The superiority of vascularized compared to nonvascularized rib grafts in spine surgery shown by biological and physical methods. Shaffer JW, et al. **Spine** 1988 Oct;13(10):1150–4
Critique of the optimum spine [letter] Stokes IA, et al. **Spine** 1988 May;13(5):597
[The "envelope" versus the biomechanical function of the spine] Roth M. **Cesk Radiol** 1989 Jan;43(1):1–13 (Eng. Abstr.) **(Cze)**

PHYSIOPATHOLOGY

Schober's test (modified). Murtagh J. **Aust Fam Physician** 1989 Jul;18(7):849
Comparison of lumbar paravertebral EMG patterns in chronic low back pain patients and non-patient controls. Ahern DK, et al. **Pain** 1988 Aug;34(2):153–60
Variation in lumbar sagittal mobility with low-back trouble. Burton AK, et al. **Spine** 1989 Jun;14(6):584–90
Posterior plating of the cervical spine. A biomechanical comparison of different posterior fusion techniques. Gill K, et al. **Spine** 1988 Jul;13(7):813–6
Spinal sagittal configuration and mobility related to low-back pain in the female gymnast. Ohlén G, et al. **Spine** 1989 Aug;14(8):847–50
Spinal stability and intersegmental muscle forces. A biomechanical model. Panjabi M, et al. **Spine** 1989 Feb; 14(2):194–200
Spinal mobility in adolescent girls with idiopathic scoliosis and in structurally normal controls. Poussa M, et al. **Spine** 1989 Feb;14(2):217–9
[East Bothnian treatment modalities of spinal manipulation and limb correction] Hernesniemi A. **Duodecim** 1989; 105(8):758–63 **(Fin)**
[Physiopathology and therapy of ossification of posterior longitudinal ligaments] Yamaura I. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):355–69 **(Jpn)**

RADIATION EFFECTS

Growth response to growth hormone therapy following craniospinal irradiation. Clayton PE, et al. **Eur J Pediatr** 1988 Aug;147(6):597–601

RADIOGRAPHY

Paravertebral somatic nerve block: a clinical, radiographic, and computed tomographic study in chronic pain patients. Purcell-Jones G, et al. **Anesth Analg** 1989 Jan;68(1):32–9
A practical radiographic comparison of short board technique and Kendrick Extrication Device. Howell JM, et al. **Ann Emerg Med** 1989 Sep;18(9):943–6
Interpreting the spinal X-ray: 2. Butt WP. **Br J Hosp Med** 1988 Aug;40(2):124–6 (2 ref.)
Anterior extrathecal ependymoma with systemic metastases—a case report and review of the literature. Thornton AS, et al. **Clin Radiol** 1988 Sep;39(5):562–4 (15 ref.)
Fibrous dysplasia of the spine. Wright JF, et al. **Clin Radiol** 1988 Sep;39(5):523–7
Radiological perspective of vertebral column disease at Nyeri Provincial Hospital. Elias GD. **East Afr Med J** 1989 Apr; 66(4):285–8
Bone loss in young hypoestrogenic women due to primary ovarian failure: spinal quantitative computed tomography. Louis O, et al. **Fertil Steril** 1989 Aug;52(2):227–31
Computerized tomography in the study of vertebral rotation and torsion in idiopathic scoliosis. Zagra A, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):407–13
Models of spinal trabecular bone loss as determined by quantitative computed tomography. Block JE, et al. **J Bone Miner Res** 1989 Apr;4(2):249–57
An analytical survey of structural aberrations observed in static radiographic examinations and acute low back cases [letter] **J Manipulative Physiol Ther** 1988 Oct;11(5):453–5
Relative efficacy for radiation reducing methods in scoliotic patients. Aikenhead J, et al. **J Manipulative Physiol Ther** 1989 Aug;12(4):259–64
Radiogenic cancer induction associated with spinal radiography: a quantitative analysis [letter; comment] Maurer EL. **J Manipulative Physiol Ther** 1989 Feb; 12(1):60–2. **Comment on:** J Manipulative Physiol Ther 1988 Aug;11(4):255–60
Biomechanical analysis by chiropractic radiography: Part II. Effects of X-ray projectional distortion on apparent vertebral rotation. Zengel F, et al. **J Manipulative Physiol Ther** 1988 Oct;11(5):380–9
Dominant inheritance of Scheuermann's juvenile kyphosis. Findlay A, et al. **J Med Genet** 1989 Jun;26(6):400–3
The os in os appearance in the spine and pelvis of adults. Butler JC, et al. **Orthop Rev** 1989 Apr;18(4):445–8
Stress-related rib and vertebral changes. Macones AJ Jr, et al. **Radiology** 1989 Jan;170(1 Pt 1):117–9
Intravertebral fat measurement with quantitative CT in patients with Cushing disease and anorexia nervosa. Mayo-Smith W, et al. **Radiology** 1989 Mar;170(3 Pt 1):835–8
Sagittal tomography in the supine patient. Nakanishi T, et al. **Radiology** 1989 May;171(2):574–6
Localized ossifications in the supraspinous and interspinous ligaments of adult man. Scapinelli R. **Rays** 1988 Jan-Apr; 13(1):29–33
Thoracic and lower cervical spine involvement in a case of rheumatoid arthritis. Benhamou CL, et al. **Rheumatol Int** 1989;9(1):39–41
Radiographically detectable lumbar degenerative changes as risk indicators of back pain. A cross-sectional epidemiologic study of concrete reinforcement workers and house painters. Riihimäki H, et al. **Scand J Work Environ Health** 1989 Aug;15(4):280–5
Stress views in the comparative assessment of spondylolytic spondylolisthesis. Kälebo P, et al. **Skeletal Radiol** 1989; 17(8):570–5
Functional radiographic diagnosis of the cervical spine: flexion/extension. Dvorak J, et al. **Spine** 1988 Jul; 13(7):748–55
Rotation of the cervical spine by using computerized-tomography (CT) [letter] Dvorak J. **Spine** 1988 May;13(5):595–7
Concordance of back surface asymmetry and spine shape in idiopathic scoliosis. Stokes IA, et al. **Spine** 1989 Jan; 14(1):73–8
Prediction of curve progression in idiopathic scoliosis based on initial roentgenograms. A proposal of an equation. Yamauchi Y, et al. **Spine** 1988 Nov;13(11):1258–61
[Chronic backache and radiobiometry (editorial)] Konings L, et al. **Acta Belg Med Phys** 1989 Jan-Mar;12(1):3–5 **(Fre)**
[Interpretation of the cause of transverse line shadows above the vertebral body base plate] Kohlbach W. **Rontgenblatter** 1988 Sep;41(9):382–3 (Eng. Abstr.) **(Ger)**
[The functional vertebrogram—benefits and risks] Manestar M. **Reumatizam** 1987;34(1–6):16–20 (Eng. Abstr.) **(Scr)**

RADIONUCLIDE IMAGING

Long-term precision of dual photon absorptiometry in the lumbar spine in clinical settings. Nilas L, et al. **Bone Miner** 1988 Mar;3(4):305–15
Radiologic investigation of low back pain [letter] Fishman S. **Can Med Assoc J** 1989 Jun 15;140(12):1430
SPECT imaging of the lumbosacral spine and pelvis. Gates GF. **Clin Nucl Med** 1988 Dec;13(12):907–14
Measurement of cerebrospinal fluid movement in the spine. An experimental technique. Palmer DW, et al. **Invest Radiol** 1989 Jan;24(1):61–4
Bone density of the radius, spine, and proximal femur in osteoporosis. Mazess RB, et al. **J Bone Miner Res** 1988 Feb;3(1):13–8

SURGERY

The effects of airway heat conservation and skin surface insulation on thermal balance during spinal surgery. Shanks CA, et al. **Anesthesiology** 1988 Dec;69(6):956–8
Loss of evoked potentials during spinal surgery due to spinal cord hemorrhage. Shukla R, et al. **Ann Neurol** 1988 Aug; 24(2):272–5
Spinal fixation. Using the Steffee pedicle screw and plate system. Allison RE, et al. **AORN J** 1989 Apr;49(4):1016–9, 1022–4, 1026–30
A draping technique for spinal surgery using the Stagnara wake-up test. Huss GK, et al. **AORN J** 1988 Sep; 48(3):530–5
Instrumentation surgery for primary tumors of the spine. Shikata J, et al. **Arch Orthop Trauma Surg** 1989; 108(3):144–9
Coagulopathies associated with major spinal surgery. Mayer PJ, et al. **Clin Orthop** 1989 Aug;(245):83–8
Flexible device for vertebral body replacement. Main JA, et al. **J Biomed Eng** 1989 Mar;11(2):113–7
Management of neuromuscular spinal deformities with Luque segmental instrumentation. Boachie-Adjei O, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):548–62
Intraoperative autologous transfusion in orthopaedic patients. Goulet JA, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):3–8
Closed subarachnoid drainage for management of cerebrospinal fluid leakage after an operation on the spine. Kitchel SH, et al. **J Bone Joint Surg [Am]** 1989 Aug; 71(7):984–7
Does subliminar wiring produce spinal stenosis? Nixon JE. **J Bone Joint Surg [Br]** 1989 Jan;71(1):92–3
Why does back surgery have a bad name? [letter] Stoll A. **J Fla Med Assoc** 1988 Sep;75(9):584–5
Neuropathology with spinal instrumentation. Coe JD, et al. **J Orthop Res** 1989;7(3):359–70
Clinical characteristics affecting survival in patients with rheumatoid arthritis undergoing cervical spine surgery: a controlled study. Saway PA, et al. **J Rheumatol** 1989 Jul; 16(7):890–6
Anterior decompression and stabilization of the spine in malignant disease. Moore AJ, et al. **Neurosurgery** 1989 May;24(5):713–7
The spinal pedicle screw: techniques and systems. Esses SI, et al. **Orthop Rev** 1989 Jun;18(6):676–82 (18 ref.)
Automated spinal cord monitoring for spinal surgery. Imai M, et al. **Paraplegia** 1989 Jun;27(3):204–11
The anterior surgical approach to the cervical spine: the Cloward Procedure: past, present, and future. The presidential guest lecture, Cervical Spine Research Society. Cloward RB. **Spine** 1988 Jul;13(7):823–7
Placement of transpedicular vertebral screws close to anterior vertebral cortex. Description of methods. Krag MH, et al. **Spine** 1989 Aug;14(8):879–83
The effect of magnetic resonance imaging on metal spine implants. Lyons CJ, et al. **Spine** 1989 Jul;14(7):670–2
Compound muscle action potentials and spinal evoked potentials in experimental spine maneuver. Machida M, et al. **Spine** 1989 Jul;14(7):687–91
Comparison of CT scan muscle measurements and isokinetic trunk strength in postoperative patients. Mayer TG, et al. **Spine** 1989 Jan;14(1):33–6
Temporal analysis of vascularized and nonvascularized rib grafts in canine spine surgery. Shaffer JW, et al. **Spine** 1989 Jul;14(7):727–32
An analysis of the effect of the Zielke operation on S-shaped curves in idiopathic scoliosis. The use of EVAs showing that correction of the thoracic curve occurs in its lower part: significance of the thoracolumbar spinal segment. Wojcik AS, et al. **Spine** 1989 Jun;14(6):625–31
Electrophysiological recordings during spinal surgery. Uematsu S, et al. **Stereotact Funct Neurosurg** 1989; 52(2–4):145–56
Correction of kyphotic deformity in ankylosing spondylitis using multiple spinal osteotomy and Zielke's VDS instruments. Chen PQ. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jul;87(7):692–9
Effect of application of polyvinilidine plates on the dorsal spinous processes of dogs. Rischen CG, et al. **Vet Surg** 1987 Jul-Aug;16(4):294–8
Histologic evaluation of response to implantation of polyvinilidine plates in dogs and rats. Swain CA, et al. **Vet Surg** 1988 Sep-Oct;17(5):278–81
[Biomechanical study of osteosynthesis of the vertebral column using the compressive Harrington apparatus] Todorov I. **Acta Chir Iugosl** 1987;34 Suppl 2:115–20 (Eng. Abstr.) **(Mac)**

SPINOCEREBELLAR ATAXIAS see **SPINOCEREBELLAR DEGENERATION**

SPINOCEREBELLAR DEGENERATION

BLOOD

Serum vitamin E concentrations in degenerative ataxias [letter] Harding AE, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):132
Serum vitamin E concentrations in adult-onset spinocerebellar degeneration [letter] Kay R, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):131–2
Electron spin resonance studies of erythrocyte membrane in spinocerebellar degeneration. Yasuda Y, et al. **J Neurol Sci** 1989 May;90(3):281–90

CEREBROSPINAL FLUID

Low lumbar CSF levels of homovanillic acid and 5-hydroxyindoleacetic acid in multiple system atrophy with autonomic failure. Polinsky RJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):914–9
[Amine metabolites in cerebrospinal fluids and thyrotropin releasing hormone in spinocerebellar degeneration] Arai M. **Rinsho Shinkeigaku** 1988 Jun;28(6):595–604 (Eng. Abstr.) **(Jpn)**
[Somatostatin and substance P in the cerebrospinal fluid in various neurological diseases] Harigaya Y, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):891–6 (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

[Nosologic place of Pierre Marie's disease] Markova ED, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):3–7 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Disialotransferrin developmental deficiency syndrome and olivopontocerebellar atrophy [letter] Jaeken J. **Arch Dis Child** 1989 May;64(5):764–5
3-Acetylpyridine-induced degeneration of the nigrostriatal dopamine system: an animal model of olivopontocerebellar atrophy-associated parkinsonism. Deutch AY, et al. **Exp Neurol** 1989 Jul;105(1):1–9
[A case of oligophrenic cerebello-lental degeneration associated with vascular hypertension and gynecomastia] Hayabara T, et al. **Rinsho Shinkeigaku** 1975 Mar; 15(3):110–5 (Eng. Abstr.) **(Jpn)**
[A case of spinocerebellar degeneration with bilateral MLF syndrome and dystonia] Ohtake T, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):112–4 (Eng. Abstr.) **(Jpn)**
[Spinocerebellar degeneration with oculopalatal myoclonus: a study on palato-ocular synchrony] Yokota T, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):382–7 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Human T-lymphotropic virus type I-associated myelopathy presenting as spinocerebellar syndrome [letter] Iwasaki Y, et al. **Ann Neurol** 1989 Apr;25(4):419–20

Multiple system atrophy—the nature of the beast. Quinn N. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:78–89 (71 ref.)

Levodopa dose-related fluctuations in presumed olivopontocerebellar atrophy. Lang AE, et al. **Mov Disord** 1986;1(2):93–102

Olivopontocerebellar atrophy. Choi IS, et al. **Yonsei Med J** 1988;29(3):233–8

[Applications and uses of static and dynamic measurement of posture (posturography)] Diener HC, et al. **Fortschr Neurol Psychiatr** 1988 Aug;56(8):249–58 (86 ref.) (Eng. Abstr.) (Ger)

[Positron emission tomography and evoked potentials in the early detection of hereditary ataxias] Nowak A, et al. **Nervenarzt** 1989 May;60(5):284–7 (Ger)

[Xeroderma pigmentosum presenting clinical features of spinocerebellar degeneration] Tomimoto H, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):172–6 (Eng. Abstr.) (Jpn)

DRUG THERAPY

Effects of neurotropin in patients with hereditary spino-cerebellar degeneration [letter] Van Mullem J. **Acta Clin Belg** 1989;44(1):64–5

Oral thyrotropin-releasing hormone treatment in inherited ataxias. Bonuccelli U, et al. **Clin Neuropharmacol** 1988 Dec; 11(6):520–8

Acetazolamide responsive hereditary paroxysmal ataxia. Friedman JH, et al. **Mov Disord** 1987;2(1):67–72 (17 ref.)

Familial periodic ataxia responsive to flunarizine. Boel M, et al. **Neuropediatrics** 1988 Nov;19(4):218–20

[Considerable improvement of spasticity and dystonic phenomena by sulfamethoxazole–trimethoprim in Joseph's disease (letter)] Dehen H, et al. **Presse Med** 1988 Sep 10; 17(30):1543 (Fre)

[Chronic experimentation with TRH administered intramuscularly in spinocerebellar degeneration. Double-blind cross-over study in 30 subjects] Filla A, et al. **Riv Neurol** 1989 Mar–Apr;59(2):83–8 (Eng. Abstr.) (Ita)

[Improvement in cardiovascular autonomic dysfunction of a patient with OPCA with L-threo-3,4-dihydroxyphenylserine] Fukuma A, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):847–51 (Jpn)

ENZYMOLOGY

Glutamate metabolism of leukocytes and skin fibroblasts in spinocerebellar degeneration with lowered glutamate dehydrogenase activity. Tatsumi C, et al. **Acta Neurol Scand** 1989 Jun;79(6):468–75

Degenerative neurological disorders associated with deficiency of glutamate dehydrogenase. Kostić VS, et al. **J Neurol** 1989 Feb;236(2):111–4

Low leukocyte glutamate dehydrogenase activity does not correlate with a particular type of multiple system atrophy. Duvoisin RC, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1508–11

Decreased glutamate dehydrogenase protein in spinocerebellar degeneration. Kajiyama K, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1078–80

Normal cerebellar glutamate dehydrogenase protein in spinocerebellar degeneration. Rosenberg RN, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):666–8

EPIDEMIOLOGY

Dominantly inherited ataxias in Portugal. Cunha L, et al. **Can J Neurol Sci** 1988 Nov;15(4):397–401

[Epidemiology of spinocerebellar degeneration in Tottori prefecture] Harada H, et al. **Rinsho Shinkeigaku** 1989 Feb; 29(2):164–6 (Eng. Abstr.) (Jpn)

ETIOLOGY

Paraneoplastic cerebellar degeneration due to Hodgkin's disease. Duncan MB, et al. **West J Med** 1989 Apr; 150(4):463–5 (16 ref.)

[Role of the electrophysiologic examination in the diagnosis of Bassen–Kornzweig syndrome] Hirsch E, et al. **Neurophysiol Clin** 1988 Sep;18(5):469–75 (Eng. Abstr.) (Fre)

[Juvenile spinocerebellar degeneration with low vitamin B6 concentration both in serum and cerebrospinal fluid] Abe K, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec; 77(12):1896–7 (Jpn)

[An autopsy case of subacute cerebellar degeneration with small cell carcinoma of the esophagus] Okamoto K, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):793–6 (Eng. Abstr.) (Jpn)

GENETICS

A large Japanese family with Machado–Joseph disease: clinical and genetic studies. Takiyama Y, et al. **Acta Neurol Scand** 1989 Mar;79(3):214–22

Assignment of autosomal dominant spinocerebellar ataxia (SCA1) centromeric to the HLA region on the short arm of chromosome 6, using multilocus linkage analysis. Zoghbi HY, et al. **Am J Hum Genet** 1989 Feb;44(2):255–63

A new family with Joseph disease in Japan. Homovanillic acid, magnetic resonance, and sleep apnea studies. Kitamura J, et al. **Arch Neurol** 1989 Apr;46(4):425–8

X-linked olivopontocerebellar atrophy. Lutz R, et al. **Clin Genet** 1989 Jun;35(6):417–22 (11 ref.)

Type III Machado–Joseph disease in a Japanese family: a clinicopathological study with special reference to the peripheral nervous system. Kanda T, et al. **Clin Neuropathol** 1989 May–Jun;8(3):134–41

Cell-mediated immunological status and association of genetic markers in hereditary cerebellar ataxia. Kumar D, et al. **Dis Markers** 1987 Mar;5(1):31–41

Hodgkin's disease presenting in 1 of 4 siblings affected by hereditary spinocerebellar ataxia: clinical, immunological and genetic study. Mantovani G, et al. **Eur Neurol** 1989; 29(3):156–63

Adrenoleukodystrophy presenting as spinocerebellar degeneration. Nakazato T, et al. **Eur Neurol** 1989; 29(4):229–34

DNA marker studies show that Machado Joseph disease is not an allele of the Huntington disease locus. Forse RA, et al. **J Neurogenet** 1989 May;5(2):155–8

Syndrome of cerebellar ataxia and hypogonadotrophic hypogonadism: evidence for pituitary gonadotrophin deficiency. Fok AC, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):407–9

Linkage study of dominantly inherited olivo–ponto–cerebellar atrophy (OPCA) and Holmes' ataxia. Sasaki H, et al. **Jinrui Idengaku Zasshi** 1988 Dec; 33(4):423–38

Hereditary paroxysmal ataxia [letter] Micheli F, et al. **Mov Disord** 1987;2(4):339–41

Hereditary ataxia. Rosenberg RN, et al. **Neurol Clin** 1989 Feb;7(1):25–36 (46 ref.)

The inherited ataxias. Stumpf DA. **Pediatr Neurol** 1985 May–Jun;1(3):129–33 (34 ref.)

Dominant recurrent ataxia and vertigo of childhood. Tibbles JA, et al. **Pediatr Neurol** 1986 Jan–Feb;2(1):35–8

[Familial periodic ataxia] Kurlemann G, et al. **Monatsschr Kinderheilkd** 1988 Aug;136(8):462–3 (Eng. Abstr.) (Ger)

[A family of spino-cerebellar degeneration with disturbance of ocular movement, choreoathetosis, amyotrophy and dementia—a consideration in clinical features] Usui S, et al. **No To Shinkei** 1988 Oct;40(10):953–61 (Eng. Abstr.) (Jpn)

[Machado-Joseph disease: dystonia of the frontal muscle] Yoneda M, et al. **Rinsho Shinkeigaku** 1988 May; 28(5):507–11 (18 ref.) (Eng. Abstr.) (Jpn)

METABOLISM

Cerebellar [3H]inositol 1,4,5-trisphosphate binding is markedly decreased in human olivopontocerebellar atrophy. Kish SJ, et al. **Brain Res** 1989 Jun 12;489(2):373–6

[Benzodiazepine receptors in spino-cerebellar degeneration studied with positron emission tomography] Shinotoh H, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):437–46 (Eng. Abstr.) (Jpn)

MORTALITY

Patterns of mortality from hereditary ataxias in the United States, 1971 and 1973–1978. Leone M, et al. **Neuroepidemiology** 1989;8(4):193–9

PATHOLOGY

Muscle pathology in Marinesco–Sjögren syndrome. Komiyama A, et al. **J Neurol Sci** 1989 Jan;89(1):103–13

Familial ataxia with abnormal CSF, with special reference to an autopsy case from three affected siblings. Nakamura I, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):277–89

Pathologic changes in the CNS of dystonia musculorum mutant mouse: an animal model for human spinocerebellar ataxia. Sotelo C, et al. **Neuroscience** 1988 Nov;27(2):403–24

Mitochondrial myopathy in six patients with Marinesco–Sjögren syndrome. Borud O, et al. **Prog Clin Biol Res** 1989;306:135–9

PHYSIOPATHOLOGY

Cognitive deficits in olivopontocerebellar atrophy: implications for the cholinergic hypothesis of Alzheimer's dementia. Kish SJ, et al. **Ann Neurol** 1988 Aug;24(2):200–6

Motor dysfunction in olivopontocerebellar atrophy is related to cerebral metabolic rate studied with positron emission tomography. Rosenthal G, et al. **Ann Neurol** 1988 Sep; 24(3):414–9

Neurophysiological and neuropathological studies in two children with unusual form of multiple system degeneration: evidence for cerebellar and brainstem involvement. Kawahara H, et al. **Brain Dev** 1988; 10(5):312–8

Auditory brainstem response patterns in familial and sporadic olivopontocerebellar atrophy. Sinatra MG, et al. **Eur Neurol** 1988;28(5):288–90

Characteristics of the fastest isometric knee extension in patients with spinocerebellar degenerations. Fujita M, et al. **Tohoku J Exp Med** 1989 Jan;157(1):13–7

[Measurement of cerebral circulation and metabolism in patients with spinocerebellar degeneration using positron emission tomography and O-15 steady-state method] Shishido F, et al. **Kaku Igaku** 1988 Jul;25(7):633–8 (Eng. Abstr.) (Jpn)

[Alteration of CBF and CMRO2 and TRH effects on CBF in spinocerebellar degeneration. The positron emission tomography study] Harada K, et al. **Rinsho Shinkeigaku** 1988 May;28(5):563–8 (Eng. Abstr.) (Jpn)

[Pupillary light reflex in patients with spinocerebellar degeneration—a frequency response analysis] Sakurai N, et al. **Rinsho Shinkeigaku** 1988 Nov;28(11):1227–33 (Eng. Abstr.) (Jpn)

[Ocular disturbance in dentato-pallido-luysian-atrophy (DRPLA)—neuro-otological study] Usui S, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1008–16 (Eng. Abstr.) (Jpn)

[Analysis of follow-up survey in spinocerebellar degeneration] Yanagimoto S, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):138–46 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

The olivopontocerebellar atrophies. Report of 4 cases. Razak AR, et al. **Med J Malaysia** 1988 Dec;43(4):344–7

RADIONUCLIDE IMAGING

[Analysis of cerebellar functions in spinocerebellar degeneration using positron emission tomography (PET)] Sakai Y, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):284–9 (Eng. Abstr.) (Jpn)

[Regional cerebrocerebellar perfusion imaging in spinocerebellar degeneration using technetium-99m-HM-PAO] Tanaka M, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):769–74 (Eng. Abstr.) (Jpn)

SPINOTHALAMIC TRACTS

ANATOMY & HISTOLOGY

GABA-immunoreactive neurons and terminals in the lateral cervical nucleus of the cynomolgus monkey. Broman J, et al. **J Comp Neurol** 1989 May 15;283(3):415–24

A dorsolateral spinothalamic tract in macaque monkey. Apkarian AV, et al. **Pain** 1989 Jun;37(3):323–33

Medial, intralaminar, and lateral terminations of lumbar spinothalamic tract neurons: a fluorescent double-label study. Stevens RT, et al. **Somatosens Mot Res** 1989; 6(3):285–308

CYTOLOGY

Spinothalamic projections in the pigeon. Schneider A, et al. **Brain Res** 1989 Apr 10;484(1–2):139–49

Significant differences in the retrograde labeling of spinothalamic tract cells by horseradish peroxidase and the fluorescent tracers fast blue and diamidino yellow. Craig AD Jr, et al. **Exp Brain Res** 1989;74(2):431–6

Patterns of spontaneous discharge in primate spinothalamic neurons. Surmeier DJ, et al. **J Neurophysiol** 1989 Jan; 61(1):106–15

The spinothalamic system of the rat: structural types of retrogradely labelled neurons in the marginal zone (lamina I). Lima D, et al. **Neuroscience** 1988 Oct;27(1):215–30

PHYSIOLOGY

Origin of thalamically projecting somatosensory relay neurons in the immature rat. Huang LY. **Brain Res** 1989 Aug 21;495(1):108–14

Short latency somaesthetic responses in motor cortex, transmitted through the spino-thalamic system, in the cat. Relova JL, et al. **Exp Brain Res** 1989;75(3):639–43

Electrophysiological characteristics of primate spinothalamic neurons with renal and somatic inputs. Ammons WS. **J Neurophysiol** 1989 Jun;61(6):1121–30

Urinary bladder and hindlimb afferent input inhibits activity of primate T2–T5 spinothalamic tract neurons. Brennan TJ, et al. **J Neurophysiol** 1989 Mar;61(3):573–88

PHYSIOPATHOLOGY

Responses of primate spinothalamic tract neurons to renal pelvic distension. Ammons WS. **J Neurophysiol** 1989 Sep; 62(3):778–88

Central dysesthesia syndrome in spinal cord injury patients. Berić A, et al. **Pain** 1988 Aug;34(2):109–16

SURGERY

Thalamic pain and stereotactic mesencephalotomy. Shieff C, et al. **Acta Neurochir Suppl (Wien)** 1988;42:239–42

Stereotactic mesencephalic tractotomy in the treatment of chronic cancer pain. Frank F, et al. **Acta Neurochir (Wien)** 1989;99(1–2):38–40

Lateral percutaneous spinothalamic tractotomy. Palma A, et al. **Acta Neurochir (Wien)** 1988;93(3–4):100–3

ULTRASTRUCTURE

Ultrastructural analysis of axosomatic contacts on functionally identified primate spinothalamic tract neurons. Carlton SM, et al. **J Comp Neurol** 1989 Mar 22; 281(4):555–66

SPIPERONE

ANALOGS & DERIVATIVES

In vivo assay for neuroleptic receptor binding in the striatum. Positron tomography in humans. Cambon H, et al. **Br J Psychiatry** 1987 Dec;151:824–30

[Age-related decrease of 11C-N-methylspiperone in vivo binding to human striatum detected by PET] Iyo M, et al. **Kaku Igaku** 1989 Feb;26(2):213–20 (Eng. Abstr.) **(Jpn)**

DIAGNOSTIC USE

Selective blockade of dopamine D-1 receptor by SCH 23390 affects dopamine agonist binding to 3H-spiperone labeled D-2 receptors in rat striatum. Zhang X, et al. **Jpn J Pharmacol** 1989 Jul;50(3):333–45

METABOLISM

Comparison of (3H)-terguride and (3H)-spiperone binding to dopamine receptors in the rat striatum. Valchář M, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):77–9

Chronic uridine treatment reduces the level of [3H]spiperone-labelled dopamine receptors and enhances their turnover rate in striatum of young rats: relationship to dopamine-dependent behaviours. Farabegoli C, et al. **Acta Physiol Scand** 1988 Feb;132(2):209–16

Partition coefficients of dopamine antagonists in brain membranes and liposomes. Oliveira CR, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2113–20

[3H]spiperone binding to lymphocyte in extrapyramidal disease and in aging. Członkowska A, et al. **Brain Behav Immun** 1987 Sep;1(3):197–203

Ovariectomy permits progesterone to increase the binding of [3H]spiperone to the anterior pituitary gland in estrogen-primed rats. Pilotte NS, et al. **Endocrinology** 1989 Feb;124(2):805–11

In vitro binding characteristics of [3H]spiperone to the pituitary of the goldfish (Carassius auratus). Omeljaniuk RJ, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):57–67

Quantitative analysis of the interaction of [3H]spiroperidol with serotonin and dopamine receptors. McGonigle P. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S73–7

Comparative distributions of dopamine D-1 and D-2 receptors in the cerebral cortex of rats, cats, and monkeys. Richfield EK, et al. **J Comp Neurol** 1989 Aug 22; 286(4):409–26

3H-spiperone binding sites in post-mortem brains from schizophrenic patients: relationship to neuroleptic drug treatment, abnormal movements, and positive symptoms. Kornhuber J, et al. **J Neural Transm** 1989;75(1):1–10

Definition of the in-vivo accumulation of [3H]spiperone in brain using haloperidol and sulpiride to determine functional dopamine receptor occupation. Chivers JK, et al. **J Pharm Pharmacol** 1988 Sep;40(9):613–9

Definition of the in-vivo binding of [3H]spiperone in rat brain using substituted benzamide drugs. Chivers JK, et al. **J Pharm Pharmacol** 1989 Feb;41(2):106–11

Comparison of neuroleptic binding characteristics in rat striatum and renal cortex. Hietala J, et al. **J Recept Res** 1988;8(6):753–71

Ontogenetic changes in [3H]-spiroperidol binding sites in posthatch chick brain. McDougall SA, et al. **Life Sci** 1989; 44(20):1515–20

Identification of the ligand-binding subunit of the human 5-hydroxytryptamine1A receptor with N-(p-azido-m-[125I] iodophenethyl)spiperone, a high affinity radioiodinated photoaffinity probe. Raymond JR, et al. **Mol Pharmacol** 1989 Jul;36(1):15–21

The effect of single and repeated administration of bromocriptine on monoamine metabolism in rat brain and [3H]spiroperidol binding to striatal membranes. Muradas V, et al. **Mov Disord** 1986;1(2):103–12

Anatomical and affinity state comparisons between dopamine D1 and D2 receptors in the rat central nervous system. Richfield EK, et al. **Neuroscience** 1989;30(3):767–77

[Identification of dopamine-D2 receptors on lymphocytes using the binding technic] Della Bella S, et al. **Medicina (Firenze)** 1988 Jan-Mar;8(1):73–5 (Eng. Abstr.) **(Ita)**

PHARMACOLOGY

Impaired ontogeny of striatal dopamine D1 and D2 binding sites after postnatal treatment of rats with SCH-23390 and spiroperidol. Kostrzewa RM, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):95–101

Effect of catecholamine-receptor antagonists on feeding-related neuronal activity in the central amygdaloid nucleus of the monkey: a microiontophoretic study. Jiang LH, et al. **J Neurophysiol** 1988 Aug;60(2):536–48

MIF-1 attenuates spiroperidol alteration of striatal dopamine D2 receptor ontogeny. Saleh MI, et al. **Peptides** 1989 Jan-Feb;10(1):35–9

Influence of the D-2 dopamine receptor agonist quinpirole on the odor detection performance of rats before and after spiperone administration. Doty RL, et al. **Psychopharmacology (Berlin)** 1989;98(3):310–5

SPIRAL GANGLION see under **COCHLEA**

SPIRAL LAMINA see under **COCHLEA**

SPIRAL ORGAN see **ORGAN OF CORTI**

SPIRAMYCINS see **LEUCOMYCINS**

SPIRILLACEAE

GENETICS

DNA-DNA hybridization incompatibility of Campylobacter pylori with other Campylobacter and Wolinella species. Bukholm G, et al. **APMIS** 1989 May;97(5):472–4

Functional expression of Aquaspirillum magnetotacticum genes in Escherichia coli K12. Waleh NS. **Mol Gen Genet** 1988 Nov;214(3):592–4

SPIRILLUM

CLASSIFICATION

Gastrospirillum hominis [editorial] **Lancet** 1989 Jul 29; 2(8657):252–3

ENZYMOLOGY

AseI, a restriction endonuclease from Aquaspirillum serpens which recognizes 5'AT—TAAT3'. Polisson C, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10365

GENETICS

Isolation and characterization of Azospirillum brasilense loci that correct Rhizobium meliloti exoB and exoC mutations. Michiels KW, et al. **J Bacteriol** 1988 Nov;170(11):5401–4

Cloning of histidine genes of Azospirillum brasilense: organization of the ABFH gene cluster and nucleotide sequence of the hisB gene. Fani R, et al. **Mol Gen Genet** 1989 Apr;216(2–3):224–9

ISOLATION & PURIFICATION

[Isolation of atmospheric-nitrogen-fixing spirilla from the waters of the Paraná delta and other rivers] Alvarez R. **Rev Argent Microbiol** 1984;16(2):93–6 (Eng. Abstr.) **(Spa)**

SPIRITUAL HEALING see **MENTAL HEALING**

SPIRO COMPOUNDS

The use of fluorescamine as a detection reagent in protein microcharacterization. Miedel MC, et al. **J Biochem Biophys Methods** 1989 Feb;18(1):37–52

Synthesis, opioid receptor binding profile, and antinociceptive activity of 1-azaspiro[4.5]decan-10-yl amides. Fujimoto RA, et al. **J Med Chem** 1989 Jun; 32(6):1259–65

[A method for protein determination with fluorescamine adapted to the ultramicroliter system "SUMAL"] Wenz I, et al. **Z Med Lab Diagn** 1988;29(6):343–7 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Visual contrast sensitivity in drug-induced Parkinsonism. Bulens C, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar; 52(3):341–5

BLOOD

Radioreceptor assay of dopamine binding activity in human serum after tiospirone administration. Hyslop DK, et al. **Ther Drug Monit** 1989;11(3):295–303

CHEMICAL SYNTHESIS

Trypanocidal activity of a new series of arsenical compounds the spiroarsorans. Loiseau P, et al. **Farmaco [Sci]** 1988 Jul-Aug;43(7–8):657–63

METABOLISM

Identification of microsomal metabolites of spirogermanium. Benfenati E, et al. **Anticancer Res** 1989 Mar-Apr; 9(2):507–10

Serotonergic properties of spiroxatrine enantiomers. Nikam SS, et al. **J Med Chem** 1988 Oct;31(10):1965–8

PHARMACOKINETICS

Pharmacokinetics of two spiroarsoranes administered intravenously or orally to rabbits. Rekik L, et al. **J Pharm Sci** 1989 Mar;78(3):203–5

PHARMACOLOGY

Pharmacological activities of spirogermanium and other structurally related azaspiranes: effects on tumor cell and macrophage functions. Mirabelli CK, et al. **Anticancer Drug Des** 1989 Mar;3(4):231–42

MDL 72832, a selective 5-HT1A receptor ligand, stereospecifically increases food intake. Neill JC, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):329–32

Immunomodulatory activity and non-specific suppressor cell generation by spirogermanium in murine and rat models of cell-mediated immunity. Badger AM, et al. **Immunopharmacology** 1988 Jul-Aug;16(1):33–43

Angiotensin converting enzyme inhibitors: spirapril and related compounds. Smith EM, et al. **J Med Chem** 1989 Jul;32(7):1600–6

Topical ocular hypotensive effects of the novel angiotensin converting enzyme inhibitor SCH 33861 in conscious rabbits. Watkins RW, et al. **J Ocul Pharmacol** 1987 Winter; 3(4):295–307

Systemic effects resulting from topical ocular administration of SCH 33861, a novel ACE inhibitor ocular hypotensive agent. Watkins RW, et al. **J Ocul Pharmacol** 1988 Summer; 4(2):93–100

Effect of metal containing compounds on superoxide release from phorbol myristate acetate stimulated murine peritoneal macrophages: inhibition by auranofin and spirogermanium. Mirabelli CK, et al. **J Rheumatol** 1988 Jul;15(7):1064–9

Pharmacologic characterization of a novel non-benzodiazepine selective anxiolytic, DN-2327. Wada T, et al. **Jpn J Pharmacol** 1989 Mar;49(3):337–49

Behavioral and neurochemical effects of the serotonin (5-HT)1A receptor ligand spiroxatrine. Barrett JE, et al. **Psychopharmacology (Berlin)** 1989;97(3):319–25

Fenspiride and relaxation of tracheobronchial musculature. Mechanism of action. Advenier C. **Rhinology** 1988;Suppl 4:67–74

Mediators of inflammation and antagonism of experimental pleurisy in the rat by fenspiride. Lima MC, et al. **Rhinology** 1988;Suppl 4:85–92

Recent data on the pharmacology of fenspiride. Lonchampt M, et al. **Rhinology** 1988;Suppl 4:59–66

[Effect of the antitumor preparations prospidin and spirobromin on the function of the liver lysosomal apparatus in mice] Kliment'eva TK, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):71–4 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Phase II trial of spirogermanium and vindesine in malignant glioma. Alavi JB, et al. **Am J Clin Oncol** 1989 Feb; 12(1):8–10

Phase II study of N-methylformamide, spirogermanium, and 4-demethoxydaunorubicin in the treatment of non-small cell lung cancer (EST 3583): an Eastern Cooperative Oncology Group study. Ettinger DS, et al. **Med Pediatr Oncol** 1989;17(3):197–201

Inflammation of the upper respiratory tract. Role of Pneumorel 80 mg. Proceedings of an international meeting. Athens, April 28–May 1, 1988. **Rhinology** 1988;Suppl 4:1–92

Efficacy of fenspiride in alleviating SO2 induced chronic bronchitis in rats and allergic rhinitis in guinea pigs. Broillet A, et al. **Rhinology** 1988;Suppl 4:75–83

Efficacy of Pneumorel 80 mg (fenspiride) in the treatment of chronic sinusitis. Double-blind placebo-controlled study. Cuénant G. **Rhinology** 1988;Suppl 4:21–9

Value of fenspiride (Pneumorel 80 mg) in the preoperative treatment of chronic open tympanum otitis. Double-blind placebo-controlled study. Frayssе B, et al. **Rhinology** 1988; Suppl 4:31–41

Value of Pneumorel 80 mg in the treatment of chronic otitis in adults. Multicentre study of 696 cases. Sallebert L, et al. **Rhinology** 1988;Suppl 4:43–58

SPIROCERCA see **THELAZIOIDEA**

SPIROCHAETA

GENETICS

Cloning and sequence analysis of flaA, a gene encoding a Spirochaeta aurantia flagellar filament surface antigen. Brahamsha B, et al. **J Bacteriol** 1989 Mar;171(3):1692–7

Chemotaxis mutants of Spirochaeta aurantia. Fosnaugh K, et al. **J Bacteriol** 1989 Jan;171(1):606–11

SPIROCHAETALES

Small-sized oral spirochetes and periodontal disease. Fiehn NE. **APMIS Suppl** 1989;7:1–31 (215 ref.)

Correlation of the hydrolysis of benzoyl-arginine naphthylamide (BANA) by plaque with clinical parameters and subgingival levels of spirochetes in periodontal patients. Schmidt EF, et al. **J Dent Res** 1988 Dec; 67(12):1505–9

GROWTH & DEVELOPMENT

Nutrient and environmental growth factors for nine oral small-sized spirochete strains containing one endoflagellum from each cell end. Fiehn NE. **APMIS** 1989 Apr; 97(4):287–96

IMMUNOLOGY

Adult Ixodes dammini on rabbits: development of acute inflammation in the skin and immune responses to salivary gland, midgut, and spirochetal components. Wheeler CM, et al. **J Infect Dis** 1989 Feb;159(2):265–73

ISOLATION & PURIFICATION

Comparison of culture, indirect immunofluorescence and dark-field microscopy for detection of spirochetes from Ixodes ricinus ticks [letter] Gustafson R, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):570–2

Three cases of gastric spirochetelike organisms [letter] Kern SE, et al. **Gastroenterology** 1989 Jan;96(1):266–8

Gastrospirillum hominis infection of the stomach [letter] **Lancet** 1989 Sep 16;2(8664):672
Spirochete-like organisms in the human gastrointestinal tract. **Ruane PJ, et al. Rev Infect Dis** 1989 Mar-Apr;11(2):184-96 (52 ref.)
Microscopic evaluation of bacterial colonization of interdental subgingival sites prior to and during experimental gingivitis in man. **Gusberti FA, et al. Schweiz Monatsschr Zahnmed** 1988;98(6):619-23
Fatal enteritis in rabbits associated with a spirochaete [letter] **Tribe GW, et al. Vet Rec** 1989 Jun 3;124(22):595

ULTRASTRUCTURE

Unusual in vitro formation of cyst-like structures associated with human intestinal spirochaetosis. **Gebbers JO, et al. Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):302-6

SPIROCHAETALES INFECTIONS

GENETICS

Comparative analysis of the genomes of intestinal spirochetes of human and animal origin. **Coene M, et al. Infect Immun** 1989 Jan;57(1):138-45

MICROBIOLOGY

Unusual in vitro formation of cyst-like structures associated with human intestinal spirochaetosis. **Gebbers JO, et al. Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):302-6
Spirochete-like organisms in the human gastrointestinal tract. **Ruane PJ, et al. Rev Infect Dis** 1989 Mar-Apr;11(2):184-96 (52 ref.)

PATHOLOGY

Electron microscopy to differentiate intestinal spirochaetosis from other conditions [letter] **Roberts KM, et al. Genitourin Med** 1989 Jun;65(3):200
Intestinal spirochaetosis: pathological entity of no clinical significance? **Mooney EE, et al. Ir J Med Sci** 1988 Oct; 157(10):324-5
[Intestinal spirochaetosis] **Aukrust P, et al. Tidsskr Nor Laegeforen** 1989 Feb 28;109(6):698-9 (Eng. Abstr.) (Nor)

VETERINARY

Lymphocyte blastogenesis and cellular cytotoxicity in a congenital infection of bovine fetuses related to epizootic bovine abortion. **Spezialetti R, et al. Res Vet Sci** 1989 Mar; 46(2):160-7
Fatal enteritis in rabbits associated with a spirochaete [letter] **Tribe GW, et al. Vet Rec** 1989 Jun 3;124(22):595

SPIROCHETE INFECTIONS see SPIROCHAETALES INFECTIONS

SPIROLACTONE see SPIRONOLACTONE

SPIROMETRA see under CESTODA

SPIROMETRY

Railroad workers with pleural plaques: I. Spirometric and nitrogen washout investigation on smoking and nonsmoking asbestos-exposed workers. **Hjortsberg U, et al. Am J Ind Med** 1988;14(6):635-41
Spirometric prediction equations for Hispanic children and adults in New Mexico. **Coultas DB, et al. Am Rev Respir Dis** 1988 Dec;138(6):1386-92
Serial relationships between ventilation-perfusion inequality and spirometry in acute severe asthma requiring hospitalization. **Roca J, et al. Am Rev Respir Dis** 1988 May; 137(5):1055-61
Analysis of spirometric data from a national sample of healthy 6- to 24-year-olds (NHANES II). **Schwartz JD, et al. Am Rev Respir Dis** 1988 Dec;138(6):1405-14
An evaluation of the incentive spirometer to improve lung function after cholecystectomy. **O'Connor M, et al. Anaesthesia** 1988 Sep;43(9):785-7
Relationship between arterial blood gases and spirometry in acute exacerbations of chronic obstructive pulmonary disease. **Emerman CL, et al. Ann Emerg Med** 1989 May; 18(5):523-7
Preoperative spirometry before abdominal operations. A critical appraisal of its predictive value. **Lawrence VA, et al. Arch Intern Med** 1989 Feb;149(2):280-5 (142 ref.)
Spirometry and maximal expiratory flow-volume curve reference standards for Polynesian, European, and Chinese teenagers. **Neukirch F, et al. Chest** 1988 Oct;94(4):792-8
Diaphragmatic function after cholecystectomy: effect of incentive spirometry. **Chuter TA, et al. Curr Surg** 1988 Sep-Oct;45(5):390-2
Spirometric reference values in Senegalese black adults. **Dufétel P, et al. Eur Respir J** 1989 Apr;2(4):352-8
Spirometry in euthyroid goitre. **Meenakshi S. J Indian Med Assoc** 1988 Jul;86(7):185-7
Spirometric standards for non-smokers and smokers of India (eastern region). **Chatterjee S, et al. Jpn J Physiol** 1988; 38(3):283-98
Spirometry: a simple but accurate gauge of cardiopulmonary health. **Petty TL. Occup Health Saf** 1989 Apr;58(4):40-2, 44-5
Spirometry in healthy elderly Chinese. **Woo J, et al. Thorax** 1988 Aug;43(8):617-20
[Ergospirometry and blood lactate data in the assessment of conditioning of soldiers in relation to physical activity within the scope of military service in the Austrian army] **Baumgartl P, et al. Wien Med Wochenschr** 1988 Sep 15; 138(17):433-7 (Eng. Abstr.) (Ger)
[Normal spirometric values in the Sicilian population] **La Paglia G, et al. G Ital Med Lav** 1988 Jan;10(1):31-7 (Eng. Abstr.) (Ita)
[Changes in the spirographic values of patients with pulmonary tuberculosis hospitalized at the Phthisiology Section in Dej] **Nicola DL. Rev Ig [Pneumoftiziol]** 1988 Apr-Jun;37(2):161-72 (Eng. Abstr.) (Rum)
[Use of automatic systems for processing spirograms of patients with chronic nonspecific diseases of the lungs] **Chumanskiĭ LI, et al. Probl Tuberk** 1989;(3):73-5 (Rus)

INSTRUMENTATION

Evaluation of a hand-held spirometer, the Respiradyne, for the measurement of forced expiratory volume in the first second (FEV1), forced vital capacity (FVC) and peak expiratory flow rate (PEFR). **Jenkins SC, et al. Br J Dis Chest** 1988 Jan;82(1):70-5
Spirometry and flow-volume curves. **Gardner RM, et al. Clin Chest Med** 1989 Jun;10(2):145-54 (39 ref.)
A home-based pulmonary function monitor for cystic fibrosis. **Shultz EK, et al. Med Instrum** 1988 Oct; 22(5):234-9
Spirometric forced volume measurements in the assessment of nasal patency after septoplasty. A prospective clinical study. **Larsen K, et al. Rhinology** 1988 Sep;26(3):203-8
[Promoting pneumologic basic diagnosis. Respiratory tract diseases are the cause of the majority of disability certificates—diagnosis with apparatus—possibilities for settlement] **Schwing C. Fortschr Med** 1989 Feb 10; 107(4):78-9 (Ger)

METHODS

Computerized spirometry using a portable microcomputer. **Hansen DJ, et al. Am Ind Hyg Assoc J** 1985 Jul;46(7):373-8
Differences in plethysmographic lung volumes. Effects of linked vs unlinked spirometry. **Williams JH Jr, et al. Chest** 1989 Jan;95(1):117-23
Pulmonary-function tests (spirometry). **Doyle DJ. MD Comput** 1989 May-Jun;6(3):164-5
Effect of incentive spirometry on diaphragmatic function after surgery. **Chuter TA, et al. Surgery** 1989 Apr; 105(4):488-93
[Use of helium spirometric pulmonary function tests by general practitioners at a hospital outpatient department] **Knudsen T, et al. Ugeskr Laeger** 1989 Jun 26; 151(26):1683-4 (Eng. Abstr.) (Dan)
[Postoperative respiratory therapy using incentive spirometry] **Mang H, et al. Anaesthesist** 1989 Apr; 38(4):200-5 (34 ref.) (Eng. Abstr.) (Ger)

STANDARDS

[Evaluation of the reliability of 2 portable electronic spirometers] **Tschopp JM, et al. Schweiz Med Wochenschr** 1988 Sep 24;118(38):1382-5 (Eng. Abstr.) (Fre)

SPIRONOLACTONE

ADMINISTRATION & DOSAGE

Excessively thick extemporaneous spironolactone suspension [letter] **Musgrove BS, et al. Am J Hosp Pharm** 1989 Mar; 46(3):486
Spironolactone with physiological female steroids for presurgical therapy of male-to-female transsexualism. **Prior JC, et al. Arch Sex Behav** 1989 Feb;18(1):49-57
Interference of spironolactone metabolites in a digoxin radioimmunoassay [letter; comment] **Crothers DC. Ther Drug Monit** 1989;11(1):113-4. **Comment on:** Ther Drug Monit 1987 Jun;9(2):208-11
[Topical treatment of acne with spironolactone] **Massone L, et al. Clin Ter** 1987 Nov 30;123(4):271-3 (Eng. Abstr.) (Ita)
[Spironolactone administered topically in the treatment of acne] **Tomidei M, et al. Clin Ter** 1987 Jul 31;122(2):99-105 (Eng. Abstr.) (Ita)
[Topical antiandrogen therapy in seborrheic blepharitis] **Prantera M, et al. G Ital Dermatol Venereol** 1988 Nov; 123(11):581-2 (Ita)

ADVERSE EFFECTS

Absence of progestational activity of oral spironolactone. **Nakajima ST, et al. Fertil Steril** 1989 Jul;52(1):155-8
Antialdosterones: incidence and prevention of sexual side effects. **de Gasparo M, et al. J Steroid Biochem** 1989 Jan; 32(1B):223-7

ANALOGS & DERIVATIVES

Analysis of the mineralocorticoid receptor in rat heart with the aid of two new spirolactone derivatives. **Agarwal MK, et al. Biochem Med Metab Biol** 1989 Feb;41(1):36-45
High-performance liquid chromatographic assay for the simultaneous measurement of two spironolactone analogues, 17 beta-hydroxy-3-oxo-17-pregn-4-ene-21-carboxylic acid-gamma-lactone 7 alpha-methyl ethyl ester and its 6 beta-hydroxylated derivative. **Jackson LS, et al. J Chromatogr** 1988 Jul 15;428(2):377-82
Extrarenal effects of aldosterone and antimineralocorticoid compounds. **Moura AM, et al. Kidney Int Suppl** 1988 Oct; 26:S8-11
ZK91587: a novel synthetic antimineralocorticoid displays high affinity for corticosterone (type I) receptors in the rat hippocampus. **Sutanto W, et al. Life Sci** 1988; 43(19):1537-43
On the role of brain mineralocorticoid (type I) and glucocorticoid (type II) receptors in neuroendocrine regulation. **Ratka A, et al. Neuroendocrinology** 1989 Aug; 50(2):117-23

BLOOD

Reassessment of cross-reactivity of spironolactone metabolites with four digoxin immunoassays. **Pleasants RA, et al. Ther Drug Monit** 1989;11(2):200-4

CHEMICAL SYNTHESIS

Synthesis of new fluorescent spirolactone derivatives: determination of their affinities for aldosterone receptors. **Auzou G, et al. Steroids** 1988 May-Jun;51(5-6):465-9

METABOLISM

Oxidative metabolism of spironolactone: evidence for the involvement of electrophilic thiosteroid species in drug-mediated destruction of rat hepatic cytochrome P450. **Decker CJ, et al. Biochemistry** 1989 Jun 13;28(12):5128-36
Spironolactone metabolism: steady-state serum levels of the sulfur-containing metabolites. **Gardiner P, et al. J Clin Pharmacol** 1989 Apr;29(4):342-7
The metabolism and biopharmaceutics of spironolactone in man. **Overdiek HW, et al. Rev Drug Metabol Drug Interact** 1987;5(4):273-302 (115 ref.)

PHARMACOKINETICS

Spironolactone metabolism in target tissues. Characteristics of deacetylation in kidney, liver, adrenal cortex, and testes. **Flowers NL, et al. Drug Metab Dispos** 1989 Mar-Apr; 17(2):186-9

PHARMACOLOGY

Effect of spironolactone on glucocorticoid-induced colonic cation transport. **Bastl CP. Am J Physiol** 1988 Dec;255(6 Pt 2):F1235-42
Additive effect of combined spironolactone and phenobarbital treatment on hepatic bilirubin UDP-glucuronyltransferase. **Mottino AD, et al. Biochem Pharmacol** 1989 Mar 1;38(5):851-3
Topical spironolactone inhibits dihydrotestosterone receptors in human sebaceous glands: an autoradiographic study in subjects with acne vulgaris. **Berardesca E, et al. Int J Tissue React** 1988;10(2):115-9
Androgenic activity of synthetic progestins and spironolactone in androgen-sensitive mouse mammary carcinoma (Shionogi) cells in culture. **Luthy IA, et al. J Steroid Biochem** 1988 Nov;31(5):845-52
Mineralocorticoid activity and the excretion of an oral potassium load in normal man. **Hené RJ, et al. Kidney Int** 1988 Nov;34(5):697-703
Extrarenal effects of aldosterone and antimineralocorticoid compounds. **Moura AM, et al. Kidney Int Suppl** 1988 Oct; 26:S8-11
Spironolactone and cytochrome P-450: impairment of steroid hydroxylation in the adrenal cortex. **Menard RH, et al. Life Sci** 1974 Nov 1;15(9):1639-48
Inhibition of hormonal-induced cAMP and steroid production by inhibitors of pregnenolone metabolism in adrenal and Leydig cells. **Penhoat A, et al. Mol Cell Endocrinol** 1988 Nov;60(1):55-60
A possible role for testosterone during luteolysis in the ewe. **Cooke RG, et al. Res Vet Sci** 1988 Sep;45(2):222-4
Effect of spironolactone on the renin-aldosterone system in rats. **Jiménez W, et al. Rev Esp Fisiol** 1988 Sep;44(3):257-63
Effects of adrenalectomy and spironolactone on urinary metabolites of aldosterone in rats. **Gorsline J, et al. Steroids** 1988 Jan-Feb;51(1-2):81-99
[Inhibitory effect on pig testicular 20 beta-hydroxysteroid dehydrogenase by various inhibitors of steroid metabolizing enzymes] **Nakajin S, et al. Yakugaku Zasshi** 1988 Dec; 108(12):1219-22 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Long-term metabolic effects of spironolactone and thiazides combined with potassium-sparing agents for treatment of essential hypertension. **Jeunemaitre X, et al. Am J Cardiol** 1988 Nov 15;62(16):1072-7
Comparative clinical study of spironolactone and potassium canrenoate. A randomized evaluation with double cross-over. **Emili M, et al. Arzneimittelforschung** 1988 Oct; 38(10):1492-5
The use of diuretics in preventing ascites recurrence. **Arrigoni A, et al. Br J Clin Pract** 1988 Mar;42(3):116-20
A comparative study of Spiroprop and Moducren in the treatment of mild to moderate hypertension in general

practice. Cranfield FR, et al. **Br J Clin Pract** 1988 Mar; 42(3):101–5

Bumetanide, spironolactone and a combination of the two, in the treatment of ascites due to liver disease. A prospective, controlled, randomized trial. Sarin SK, et al. **Digestion** 1988;41(2):101–7

Spironolactone: no longer for hypertension. **Drug Ther Bull** 1988 Oct 31;26(22):88

Successful treatment of hyperkalemic quadriplegia associated with spironolactone. Radó JP. **Int J Clin Pharmacol Ther Toxicol** 1988 Jul;26(7):339–45

Spironolactone therapy in hirsute women. Fine RM. **Int J Dermatol** 1989 Jan–Feb;28(1):23–4

Spironolactone is an effective and well tolerated systemic antiandrogen therapy for Hirsute women. Barth JH, et al. **J Clin Endocrinol Metab** 1989 May;68(5):966–70

Lymphocyte function tests in cirrhotic patients under treatment with spironolactone and potassium canrenoate. Cuppone R, et al. **J Int Med Res** 1988 Nov–Dec; 16(6):436–42

Bartter's syndrome—treatment with potassium, spironolactone and ACE-inhibitor. Clementsen P, et al. **J Intern Med** 1989 Feb;225(2):107–10

Effect of spironolactone–hydrochlorothiazide on lung function in infants with chronic bronchopulmonary dysplasia. Engelhardt B, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):619–24

Long-term experience of spironolactone in essential hypertension. Jeunemaitre X, et al. **Kidney Int Suppl** 1988 Oct;26:S14–7

Treatment of familial male precocious puberty with spironolactone and testolactone. Laue L, et al. **N Engl J Med** 1989 Feb 23;320(8):496–502

Clinical use of the potassium-sparing diuretics. Krishna GG, et al. **Semin Nephrol** 1988 Dec;8(4):354–64 (110 ref.)

[Restoration of insulin sensitivity after correction of hypokalemia due to chronic tubulopathy in a diabetic patient] Tourniaire J, et al. **Diabete Metab** 1988 Dec; 14(6):717–20 (Eng. Abstr.) (Fre)

[Experience using veroshpiron in the combined therapy of parkinsonism] Vartanian KZ, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):14–8 (Eng. Abstr.) (Rus)

TOXICITY

The effects of chronic ingestion of spironolactone on serum thyrotropin and thyroid hormones in the male rat. Semler DE, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):263–8

SPIROPERIDOL see **SPIPERONE**

SPIROPERONE see **SPIPERONE**

SPIROPLASMA

GROWTH & DEVELOPMENT

Evaluation of [3H]thymidine uptake method for studying growth of spiroplasmas under various conditions. Bastian FO, et al. **J Clin Microbiol** 1988 Oct;26(10):2124–6

[Pathogenicity of Spiroplasma sabaudiense (mollicute) for the cells (c6/36) of Aedes albopictus (Insecta: Diptera) in vitro] Humphery-Smith I, et al. **Bull Soc Pathol Exot Filiales** 1988;81(4):752–65 (Eng. Abstr.) (Fre)

ISOLATION & PURIFICATION

The isolation of spiroplasmas from mosquitoes in Macon County, Alabama. Shaikh AA, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):289–95

Creutzfeidt–Jakob disease, spiroplasmas, and crystalline artifacts [letter] Humphery-Smith I, et al. **Lancet** 1988 Nov 19;2(8621):1199

METABOLISM

Topology and acylation of spiralin. Wróblewski H, et al. **J Bacteriol** 1989 Sep;171(9):5039–47

RADIATION EFFECTS

Lethal and mutation frequency responses of Spiroplasma citri cells to UV irradiation. Labarère J, et al. **Mutat Res** 1989 Jan;210(1):135–41

SPIROSTANS

METABOLISM

Isolation of a steroidal sapogenin from the bile of a sheep fed Agave lecheguilla. Camp BJ, et al. **Vet Hum Toxicol** 1988 Dec;30(6):533–5

SPIRUROIDEA

ANATOMY & HISTOLOGY

Physalopterine larvae in muscles of blue grouse and a chukar partridge. Foreyt WJ. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1114–5

ISOLATION & PURIFICATION

Physaloptera retusa (Nematoda, Physalopteridae) in naturally infected sagebrush lizards, Sceloporus graciosus (Iguanidae). Goldberg SR, et al. **J Wildl Dis** 1989 Jul; 25(3):425–9

SPLANCHNIC CIRCULATION

Splanchnic hemodynamics in idiopathic portal hypertension: comparison with chronic persistent hepatitis. Ohnishi K, et al. **Am J Gastroenterol** 1989 Apr;84(4):403–8

Carotid sinus baroreceptor control of splanchnic resistance and capacity. Brunner MJ, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):H1305–10

Leukocyte margination and deformation in mesenteric venules of rat. Firrell JC, et al. **Am J Physiol** 1989 Jun; 256(6 Pt 2):H1667–74

Capsaicin-sensitive nerves are involved in bile-oleate-induced intestinal hyperemia. Rozsa Z, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G476–81

Postprandial celiac and superior mesenteric blood flows in conscious dogs. Takagi T, et al. **Am J Physiol** 1988 Oct; 255(4 Pt 1):G522–8

Effects of hypocapnia and hypercapnia on splanchnic circulation and hepatic function in the beagle. Fujita Y, et al. **Anesth Analg** 1989 Aug;69(2):152–7

Role of prostacyclin in the splanchnic hyperemia contributing to portal hypertension. Sitzmann JV, et al. **Ann Surg** 1989 Mar;209(3):322–7

Mesenteric shunting during thoracoabdominal aortic clamping to prevent disseminated intravascular coagulation in dogs. Cohen JR, et al. **Ann Vasc Surg** 1988 Jul;2(3):261–7

Increased levels of platelet-activating factor in blood following intestinal ischemia in the dog. Filep J, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):353–9

The influence of phenelzine and tranylcypromine on the release of prostaglandins from the rat mesenteric vascular bed. Nassar BA, et al. **Can J Physiol Pharmacol** 1988 Sep; 66(9):1206–9

Effect of portacaval surgical anastomosis on systemic and splanchnic hemodynamics in portal hypertensive, cirrhotic rats. Romeo JM, et al. **Can J Physiol Pharmacol** 1988 Dec; 66(12):1493–8

Splanchnic blood flows in a rat model of antibiotic-controlled intra-abdominal abscess during normoxia and hyperoxia. Muhvich KH, et al. **Circ Shock** 1989 Mar;27(3):253–62

Deleterious effects of splanchnic congestion on hepatic energy metabolism following repeated portal triad cross-clamping in dogs. Yamamoto S, et al. **Circ Shock** 1988 Oct;26(2):193–201

Duplex scanning in cerebral, abdominal and peripheral arterial disease. Legemate DA, et al. **Eur J Vasc Surg** 1989 Aug;3(4):287–95 (123 ref.)

Relationship between the blood flow volume of splanchnic blood vessels, cardiac output and serum catecholamine levels in healthy humans before and after laying down. Hino K, et al. **Gastroenterol Jpn** 1989 Apr;24(2):224

Steroids do not alter pancreatic blood supply in hypovolemic dogs: implications on steroid action in acute pancreatitis. Robert JH, et al. **Int J Pancreatol** 1988 Dec;3(6):449–56

Age-related changes of noradrenergic innervation of rat splanchnic blood vessels: a histofluorescence and neurochemical study. Mione MC, et al. **J Auton Nerv Syst** 1988 Nov;25(1):27–33

Splanchnic and renal exchange of infused fructose in insulin-deficient type 1 diabetic patients and healthy controls. Björkman O, et al. **J Clin Invest** 1989 Jan; 83(1):52–9

Techniques for measuring blood flow in splanchnic tissues of cattle. Huntington GB, et al. **J Dairy Sci** 1989 Jun; 72(6):1583–95

Calculated splanchnic oxygen uptake and hepatic vascular resistance: what do these terms mean? Hadengue A, et al. **J Hepatol** 1989 May;8(3):387–90

Clinical applicability of current pharmacokinetic models: splanchnic elimination of 5-fluorouracil in cancer patients. Robinson PJ, et al. **J Pharmacokinet Biopharm** 1988 Jun; 16(3):229–49

Capillary growth in the mesentery of normal young rats. Intravital video and electron microscope analyses. Rhodin JA, et al. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):1–34

The control of macro- and microcirculation in the mesentery and intestine. Minamiyama M. **Jpn Circ J** 1989 May; 53(5):453–61

Neurotransmitter release and vascular responsiveness in mesenteric vasculatures from two-kidney, one-clip Goldblatt hypertensive rats. Tsuda K, et al. **Jpn Heart J** 1989 Jan;30(1):85–94

Effects of Fusobacterium necrophorum on the mesenteric microcirculation of guinea pigs. Kanoe M, et al. **Med Microbiol Immunol (Berl)** 1989;178(2):99–104

Splanchnic metabolism of amino acids in healthy subjects: effect of 60 hours of fasting. Eriksson LS, et al. **Metabolism** 1988 Dec;37(12):1159–62

Splanchnic and peripheral release of 3-methylhistidine in relation to its urinary excretion in human infection. Sjölin J, et al. **Metabolism** 1989 Jan;38(1):23–9

Splanchnic disposal of human atrial natriuretic peptide in humans. Vierhapper H, et al. **Metabolism** 1988 Oct; 37(10):973–5

Pulsed Doppler ultrasound blood flow measurements in the superior mesenteric artery of the newborn. Leidig E. **Pediatr Radiol** 1989;19(3):169–72

Splanchnic perfusion and sepsis. Fry DE. **Prog Clin Biol Res** 1989;299:9–17 (29 ref.)

The effect of mucosal integrity and mesenteric blood flow on enteric translocation of microorganisms in cutaneous thermal injury. Herndon DN, et al. **Prog Clin Biol Res** 1989;308:377–82

Corrosion casts in liver and stomach microcirculation. Ohtani O. **Prog Clin Biol Res** 1989;295:317–26

Modeling splanchnic hemodynamics after distal splenorenal shunt: a computer simulation and sensitivity analysis. Rypins EB, et al. **Surgery** 1989 Jan;105(1):93–9

The effect of insulin on the leg and splanchnic balance of glucose and gluconeogenic substrates after cardiac surgery. Nilsson F, et al. **Thorac Cardiovasc Surg** 1988 Dec; 36(6):343–7

[Influence of ascites on splanchnic and systemic hemodynamics in patients with alcoholic cirrhosis] Cereda JM, et al. **Gastroenterol Clin Biol** 1989 May;13(5):495–8 (Eng. Abstr.) (Fre)

[Study of splanchno-portal hemodynamics in prognostic evaluation of the cirrhogenous development in patients at risk] Reitano R, et al. **Clin Ter** 1987 Jan 15;120(1):11–5 (Eng. Abstr.) (Ita)

[Characteristics of the microcirculation and blood rheology in arterial and venous forms of mesenteric vascular occlusion] Aleksandrova NP, et al. **Biull Eksp Biol Med** 1989 May;107(5):532–4 (Eng. Abstr.) (Rus)

[The distribution of blood flow velocity in the terminal bed of the rat mesentery] Kostromina Elu, et al. **Biull Eksp Biol Med** 1989 May;107(5):515–7 (Eng. Abstr.) (Rus)

[Laparoscopic organic rheography in the diagnosis of disorders of visceral blood flow] Dalgat DM, et al. **Vestn Khir** 1988 Oct;141(10):106–8 (Rus)

DRUG EFFECTS

Magnitude of thromboxane receptor antagonism necessary for antithrombotic activity in monkeys. Schumacher WA, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H726–34

Effects of intravenous AVP on cardiac output, mesenteric hemodynamics, and splanchnic nerve activity. Veelken R, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H658–64

Splanchnic oxygen consumption and hepatic surface oxygen tensions during isoflurane anesthesia. Conzen PF, et al. **Anesthesiology** 1988 Nov;69(5):643–51

Release of cysteinyl-leukotrienes is of minor importance in PAF induced reduction of perfusion rate in the gastric vascular bed. Dembińska-Kieć A, et al. **Biomed Biochim Acta** 1988;47(10–11):S228–32

Effects of ACE inhibition with cilazapril on splanchnic and systemic haemodynamics in man. Gasic S, et al. **Br J Clin Pharmacol** 1989;27 Suppl 2:225S–234S

Human alpha-calcitonin gene-related peptide (CGRP) is a potent vasodilator in human mesenteric vasculature. Marshall I, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):691–5

Impact of the hepatic arterial buffer response on splanchnic vascular responses to intravenous adenosine, isoproterenol, and glucagon. Lautt WW, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):807–13

Response of the mesenteric circulation to serotonin in normal and atherosclerotic monkeys: implications for the pathogenesis of non-occlusive intestinal ischaemia. Lopez JA, et al. **Cardiovasc Res** 1989 Feb;23(2):117–24

Inhibition of vasoconstriction by platelet activating factor in the in situ blood perfused rat mesentery. Gerkens JF. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):161–7

Effect of vaso-active intestinal polypeptide on systemic and splanchnic haemodynamics: role in vasodilation following mesenteric ischaemia. Somjen G, et al. **Digestion** 1988; 40(3):133–43

Intravenous and subcutaneous administration of a long-acting somatostatin analogue: effects on glucose metabolism and splanchnic haemodynamics in healthy subjects. Eriksson LS, et al. **Eur J Clin Invest** 1989 Apr;19(2):213–9

Effects of synthetic human gastric inhibitory polypeptide on splanchnic circulation in dogs. Kogire M, et al. **Gastroenterology** 1988 Dec;95(6):1636–40

Reduction of portal pressure by isosorbide-5-mononitrate in patients with cirrhosis. Effects on splanchnic and systemic hemodynamics and liver function. Navasa M, et al. **Gastroenterology** 1989 Apr;96(4):1110–8

Discrepancy between portal pressure and systemic hemodynamic changes after incremental doses of propranolol in awake portal hypertensive rats. Koshy A, et al. **Hepatology** 1989 Feb;9(2):269–73

Glucagon selectively increases splanchnic blood flow in patients with well-compensated cirrhosis. Lee SS, et al. **Hepatology** 1988 Nov–Dec;8(6):1501–5

Low dose of nitroglycerin failed to improve splanchnic hemodynamics in patients with cirrhosis: evidence for an impaired cardiopulmonary baroreflex function. Moreau R, et al. **Hepatology** 1989 Jul;10(1):93–7

Pressor effects of endothelin-1 and some analogs in the perfused superior mesenteric arterial bed of the rat. Hiley CR, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S197–9

Effects of glucagon on systemic and splanchnic circulation in conscious rats with biliary cirrhosis. Cerini R, et al. **J Hepatol** 1989 Jul;9(1):69–74

Vasoactive intestinal polypeptide potentiates the hypoxemia-induced decrease in splanchnic circulation in the rat. Grisoni ER, et al. **J Pediatr Surg** 1988 Dec;

23(12):1193–7
Hydroxylamine dilates resistance blood vessels of the perfused rat kidney and mesentery. Moore PK, et al. **J Pharm Pharmacol** 1989 Jun;41(6):426–9
Effects of fenoldopam on feline intestinal microcirculation. Clark ES, et al. **J Pharmacol Exp Ther** 1988 Mar; 244(3):983–6
PAF-acether and endotoxin display similar effects on rat mesenteric microvessels: inhibition by specific antagonists. Lagente V, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):254–61
Prostacyclin mediates splanchnic vascular response to norepinephrine in portal hypertension. Sitzmann JV, et al. **J Surg Res** 1989 Sep;47(3):208–11
Effect of synthetic physalaemin on splanchnic circulation in dogs. Takaori K, et al. **Life Sci** 1989;44(10):667–72
Tryglycylvasopressin-reduced portal and systemic concentrations of serum bile acids after exogenous chenodeoxycholic acid load in rats as a reflection of reduced splanchnic blood flow. Testa R, et al. **Liver** 1989 Feb;9(1):27–9
Effects of synthetic kassinin on splanchnic circulation and exocrine pancreas in dogs. Doi R, et al. **Peptides** 1988 Sep–Oct;9(5):1055–8
Influence of vasoactive intestinal polypeptide (VIP) on splanchnic and central hemodynamics in healthy subjects. Eriksson LS, et al. **Peptides** 1989 Mar–Apr;10(2):481–4
Beneficial mechanisms of action of a prostacyclin enhancing agent in splanchnic artery occlusion shock. Aoki N, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):275–89
Comparative haemodynamic effects of betaxolol and propranolol in patients with cirrhosis. Braillon A, et al. **Scand J Gastroenterol** 1988 Aug;23(6):691–5
Nifedipine-induced hypotension and mesenteric ischemia. Goglin WK, et al. **South Med J** 1989 Feb;82(2):274–5
[Diuretic effects of ibopamine and its action on splanchnic hemodynamics] Scardaccio V, et al. **Clin Ter** 1987 Jun 30; 121(6):495–503 (Eng. Abstr.) **(Ita)**
[Effect of nicotine on mesenteric circulation and tissue oxygen uptake] Pawlik WW, et al. **Folia Med Cracov** 1988; 29(1–2):73–85 (Eng. Abstr.) **(Pol)**

SPLANCHNIC NERVES

Percutaneous CT guided nerve block of the coeliac plexus and splanchnic nerves. Herpels V, et al. **Ann Radiol (Paris)** 1988;31(5):291–6 (13 ref.)

GROWTH & DEVELOPMENT

Thyroid hormone control of preganglionic innervation of the adrenal medulla and chromaffin cell development in the rat. An ultrastructural, morphometric and biochemical evaluation. Lau C, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):109–17

PHYSIOLOGY

Afferent electrical stimulation of mesenteric nerves inhibits duodenal HCO3- secretion via a spinal reflex activation of the splanchnic nerves in the rat. Jönson C, et al. **Acta Physiol Scand** 1988 Aug;133(4):545–50
The effect of splanchnic nerve stimulation and neuropeptide Y on cholera secretion and release of vasoactive intestinal polypeptide in the feline small intestine. Sjöqvist A, et al. **Acta Physiol Scand** 1988 Jul;133(3):289–95
Splanchnic nerve stimulation inhibits duodenal HCO3- secretion in the rat. Jönson C, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G709–12
Peripheral reflex pathways involving abdominal viscera: transmission of impulses through prevertebral ganglia. King BF, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G581–8
Patterns of fast synaptic cholinergic activation of neurons in the celiac ganglia of cats. Niel JP, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G759–66
Effects of intravenous AVP on cardiac output, mesenteric hemodynamics, and splanchnic nerve activity. Veelken R, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H658–64
Splanchnic neural regulation of pancreatic polypeptide release in the isolated perfused human pancreas. Brunicardi FC, et al. **Am J Surg** 1989 Jan;157(1):50–7
Gastric vagal-splanchnic interactions in the brainstem of the cat. Barber WD, et al. **Brain Res** 1989 May 15;487(1):1–8
In vivo interactions between prejunctional alpha 2- and beta 2-adrenoceptors at the level of the adrenal medulla. Foucart S, et al. **Can J Physiol Pharmacol** 1988 Oct; 66(10):1340–3
Nervous control of gastric and pancreatic secretory response to 2-deoxy-D-glucose in the dog. Becker S, et al. **Digestion** 1988;39(3):187–96
Splanchnic nerve activation inhibits the increase in duodenal HCO3- secretion induced by luminal acidification in the rat. Jönson C, et al. **Gastroenterology** 1989 Jan;96(1):45–9
Influence of splanchnic nerve on reserpine action in avian adrenal medulla. Mahata SK, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):165–72
Influence of age and splanchnic nerve on the action of melatonin in the adrenomedullary catecholamine content and blood glucose level in the avian group. Mahata SK, et al. **J Comp Physiol [B]** 1988;158(5):601–7
Inhibition by opioid agonists and enhancement by antagonists of the release of catecholamines from the dog adrenal gland in response to splanchnic nerve stimulation: evidence for the functional role of opioid receptors. Kimura T, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1098–102
Bilateral inputs and supraspinal control of viscerosomatic neurones in the lower thoracic spinal cord of the cat. Cervero F, et al. **J Physiol (Lond)** 1988 Sep;403:221–37
Splanchnic nerve stimulation modulates steroid secretion in hypophysectomized dogs. Engeland WC, et al. **Neuroendocrinology** 1989 Aug;50(2):124–31
The serotonin agonist, M-chlorophenylpiperazine, markedly increases levels of plasma catecholamines in the conscious rat. Bagdy G, et al. **Neuropharmacology** 1988 Oct; 27(10):975–80
Adrenal vein catecholamines and neuropeptides during splanchnic nerve stimulation in cats. Gaumann DM, et al. **Peptides** 1989 May–Jun;10(3):587–92
[Interaction of splanchnic and superficial somatic imputs in central nervous system] Chen ZH, et al. **Chen Tzu Yen Chiu** 1988;13(3):199–204 (Eng. Abstr.) **(Chi)**
[Electrophysiological study of medullary projection of the abdominal vagal and greater splanchnic afferents in the rabbit] Zhong SN, et al. **Sheng Li Hsueh Pao** 1988 Dec; 40(6):539–46 (Eng. Abstr.) **(Chi)**
[Microelectrophysiologic analysis of the representation of the vagal, splanchnic, sciatic nerves and sensomotor region of the cortex in the central nucleus of the amygdala] Avetisian EA, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):462–9 (Eng. Abstr.) **(Rus)**

SURGERY

[The celiac block test under x-ray computed tomography before possible surgical splanchnicectomy (letter)] Delassus P, et al. **Presse Med** 1989 Jun 3;18(22):1123 **(Fre)**

SPLANCHNOPTOSIS see VISCEROPTOSIS

SPLEEN

Diagnosis of thoracic splenosis by tru-cut needle biopsy. Gaines JJ, et al. **Am Rev Respir Dis** 1986 Jun; 133(6):1199–201
Splenosis. A cause of massive gastrointestinal hemorrhage. Basile RM, et al. **Arch Surg** 1989 Sep;124(9):1087–9
Roentgenogram of the month. Chest mass in a paraplegic. Hart CM, et al. **Chest** 1989 May;95(5):1121–2
The utility of SPECT liver-spleen imaging in the evaluation of a possible accessory spleen. Guze BH, et al. **Clin Nucl Med** 1988 Jul;13(7):496–7
Abdominal hemangiopericytoma scintigraphically simulating an accessory spleen. Lundy MM, et al. **Clin Nucl Med** 1988 Nov;13(11):812–5
Metabolic function of intraportal and intrasplenic islet autografts in cynomolgus monkeys. Sutton R, et al. **Diabetes** 1989 Jan;38 Suppl 1:182–4
Accessory spleen in the head of the pancreas [letter] Landry ML, et al. **Hum Pathol** 1989 May;20(5):497
Female splenic-gonadal fusion of the discontinuous type. Meneses MF, et al. **Hum Pathol** 1989 May;20(5):486–8
Splenic puncture for diagnosis of visceral leishmaniasis [letter] Choudhry VP, et al. **Indian J Pediatr** 1988 Nov–Dec;55(6):1003–4
Functional heterogeneity of macrophage precursor cells from spleen of Leishmania donovani-infected and untreated mice. Hockertz S, et al. **J Immunol** 1989 Apr 1; 142(7):2489–94
Evidence for the in vivo production of interleukin-3 in lethally irradiated mice transplanted with syngeneic murine splenocytes. Hirokawa M, et al. **Leuk Res** 1989; 13(2):145–50
Splenosis masquerading as small bowel neoplasm. Metzler M, et al. **Mo Med** 1989 Mar;86(3):162–4
Detection of splenosis: 99Tcm tin colloid scanning and computed transmission tomography compared. Logan H, et al. **Nucl Med Commun** 1988 Dec;9(12):993–7
Technical considerations in distal pancreatectomy with splenic preservation. Scott-Conner CE, et al. **Surg Gynecol Obstet** 1989 May;168(5):451–2
Transplantation of single-donor purified canine islets to the spleen or renal subcapsular space with cyclosporine immunosuppression. Cattral MS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2695–6
Prolonged function of intrasplenic canine pancreatic fragment autografts. Kneteman NM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2619–20
The natural history of pure canine islet autografts in hepatic or splenic sites. Warnock GL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2617–8
Variable allograft responses to pretreatment with donor splenocytes treated with mitomycin C in the rat. Yamaguchi Y, et al. **Transplantation** 1989 Feb;47(2):360–3
Imaging the effects of an ectopic spleen on the urinary tract. Nino-Murcia M, et al. **Urol Radiol** 1988;10(4):195–7
[Thoracic splenosis. Review of the literature apropos of a case] Jebara VA, et al. **Ann Chir** 1989;43(2):178–80 (17 ref.) (Eng. Abstr.) **(Fre)**
[Splenic iconography in Wegener's granulomatosis (letter)] Ruel M, et al. **Presse Med** 1989 Apr 8;18(14):725 **(Fre)**
[Thoracic splenosis] Destable MD, et al. **Rev Pneumol Clin** 1989;45(1):34–5 (8 ref.) (Eng. Abstr.) **(Fre)**
[Significance of ultrasonic studies of the splenic hilus in malignant lymphoma] Rosta A, et al. **Orv Hetil** 1989 Feb 19;130(8):395–7 (32 ref.) (Eng. Abstr.) **(Hun)**
[Peritoneal splenosis. Report of a case and pathogenetic considerations] Molan M, et al. **Minerva Chir** 1989 Apr 30;44(8):1311–4 (Eng. Abstr.) **(Ita)**
[Changes in the natural killer activity of lymphocytes in peripheral blood of patients with purulent-septic diseases under the effect of extracorporeal perfusion of pig spleen sections] Zhidkov KP, et al. **Anesteziol Reanimatol** 1989 Jan–Feb;(1):37–40 (Eng. Abstr.) **(Rus)**
[Effect of non-enzymatic inhibitor of fibrinolysis from the splenic tissue on the activity of the heparin-antithrombin III-thrombin complex in vitro and during activation of the anticoagulation system] Liapina LA, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):629–34 **(Rus)**
[The blood coagulation system after the administration of splenic extract and its complex with heparin] Liapina LA, et al. **Gematol Transfuziol** 1988 Jul;33(7):33–6 (Eng. Abstr.) **(Rus)**
[Hemosorption using xenogeneic spleen in the combined detoxication therapy of complicated trauma] Grinev MV, et al. **Ortop Travmatol Protez** 1988 May;(5):6–10 **(Rus)**
[Stimulation of the postradiation recovery of hematopoiesis in irradiated animals using a calf splenic extract] Olontseva OI, et al. **Radiobiologiia** 1989 May–Jun;29(3):403–6 (Eng. Abstr.) **(Rus)**
[Effect of splenin and splenic protein-free extracts on the adenosine deaminase activity in various organs of the rat] Korpachev VV, et al. **Ukr Biokhim Zh** 1989 May–Jun; 61(3):114–7 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Polyasplenia complex with mesocardia and renal agenesis in an infant of a diabetic mother. Gonzalez A, et al. **Am J Med Genet** 1989 Apr;32(4):457–60
Caudal deficiency and asplenia anomalies in sibs. Fullana A, et al. **Am J Med Genet Suppl** 1986;2:23–9
Sibs with the polyasplenia developmental field defect. Toriello HV, et al. **Am J Med Genet Suppl** 1986;2:31–6
Asplenia polysplenia syndrome—a study of 28 cases. Shah LS, et al. **Indian Heart J** 1987 Nov–Dec;39(6):64–9
Wandering spleen presenting as an adnexal mass. Aquino NM, et al. **J Natl Med Assoc** 1989 Mar;81(3):331, 334
Wandering spleen: case report and review. Robinson AP. **Mt Sinai J Med (NY)** 1988 Oct;55(5):428–34 (51 ref.)
Chronic torsion of the wandering spleen. Shiels WE, et al. **Pediatr Radiol** 1989;19(6–7):465–7
Splenic gonadal fusion. Walther MM, et al. **Urology** 1988 Dec;32(6):521–4 (39 ref.)
Two spleens [letter] Prole JH. **Vet Rec** 1988 Jul 16;123(3):88
[Accessory spleen torsion. Clinical picture, sonographic diagnosis and differential diagnosis] Müller H, et al. **Klin Padiatr** 1988 Sep–Oct;200(5):419–21 (Eng. Abstr.) **(Ger)**
[Asplenism and hyposplenism as an immune deficiency syndrome] Strasser-Vogel B, et al. **Monatsschr Kinderheilkd** 1988 Dec;136(12):795–807 (144 ref.) (Eng. Abstr.) **(Ger)**
[Conventional and computed tomographic findings in polysplenia syndrome] Melzer G, et al. **Rontgenblatter** 1989 Feb;42(2):89–91 (Eng. Abstr.) **(Ger)**
[Total correction of A(I)LL transposition of the great arteries with polysplenia syndrome] Terada M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1422–6 (Eng. Abstr.) **(Jpn)**
[Diagnosis and surgical treatment of developmental defects of the spleen] Iudin MIa. **Klin Khir** 1989;(6):60–1 (31 ref.) **(Rus)**
[A case of an accessory spleen in the greater omentum mimicking a tumor of the abdominal cavity in a child] Zhurilo IP, et al. **Klin Khir** 1989;(6):66 **(Rus)**

ANALYSIS

Asbestos fibers in human pulmonary and extrapulmonary tissues. Huang J, et al. **Am J Ind Med** 1988;14(3):331–9
Assessment of tissue iron overload by nuclear magnetic resonance imaging. Johnston DL, et al. **Am J Med** 1989 Jul;87(1):40–7
Crosslinks between intramolecular pairs of ferritin subunits: effects on both H and L subunits and on immunoreactivity of sheep spleen ferritin. McKenzie RA, et al. **Arch Biochem Biophys** 1989 Jul;272(1):88–96
Identification and partial separation of three distinct 32-kDa calcium/phospholipid-regulated proteins from bovine spleen. Kobayashi R, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):15–23
Analysis of the multiple forms of Gaucher spleen sphingolipid activator protein 2. Paton BC, et al. **Biochem J** 1988 Aug 15;254(1):77–84
Identification of the second (buried) cysteine residue and of the C-terminal disulfide bridge of bovine spleen cathepsin B. Baudyš M, et al. **Biol Chem Hoppe Seyler** 1988 May; 369 Suppl:169–74
HPLC determination of orthophosphate coexisting with large amounts of organophosphates in biological samples. Koshiishi I, et al. **Biomed Chromatogr** 1986 Aug;1(4):169–72
Lymphocyte population in spleen and lymph node in Hodgkin's lymphoma. Datta U, et al. **Indian J Pathol Microbiol** 1988 Apr;31(2):21–6
Chromatographic and enzymatic effects on transfer factor-like activity from human leukocytes and porcine

spleen dialysate. Karhumäki E, et al. **Int J Biochem** 1988; 20(10):1067–72

S-100 protein detection in "follicular macrophages" of mouse lymphoid organs by ABC immunoperoxidase method. Carbone A, et al. **Int J Biol Markers** 1988 Jan–Mar; 3(1):36–40

A protein containing the cystic fibrosis antigen is an inhibitor of protein kinases. Murao S, et al. **J Biol Chem** 1989 May 15;264(14):8356–60

Isolated soluble fractions from spleen cell culture supernatants induce tumor enhancement. Eiján AM, et al. **J Surg Oncol** 1989 Jun;41(2):134–8

Mouse spleen derived cDNA clones containing per repeat sequence. Nishimatsu S, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11831–2

Rapid detection of octamer binding proteins with 'mini-extracts', prepared from a small number of cells. Schreiber E, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):6419

Saposin A: second cerebrosidase activator protein. Morimoto S, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3389–93

[Characteristics of glucose-6-phosphate dehydrogenase of the spleen in rabbits] Ninfali P, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1109–12 (Eng. Abstr.) **(Ita)**

[The study of polyamine levels and enzyme activities in metabolic pathway of polyamine in spleen of mice inoculated tumor cells] Yokoyama I, et al. **Yakugaku Zasshi** 1989 Jan;109(1):52–8 (Eng. Abstr.) **(Jpn)**

[Identification of pro-opiomelanocortin in rat thymus and spleen using immunoblotting and the effect of adrenalectomy and haloperidol injection on the content of immunoreactive beta-endorphin in these organs] Dmitriev AD, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb; 304(1):235–7 **(Rus)**

[Direct atomic absorption determination of the 3d elements (Fe, Cu, Mn, Co, Ni) and zinc in biological material] Shamgunov AN, et al. **Lab Delo** 1989;(1):25–8 (Eng. Abstr.) **(Rus)**

[Is the renin-angiotensin system implicated in the hypertensive effect of a water-soluble tissue extract?] de Gandarias JM, et al. **Rev Esp Fisiol** 1988 Jun;44(2):191–5 (Eng. Abstr.) **(Spa)**

ANATOMY & HISTOLOGY

Ultrasonography of splenic variants. Hine AL, et al. **Can Assoc Radiol J** 1989 Feb;40(1):25–7

The effect of laboratory environment on the morphology of the spleen and the thymus in the yellow-bellied toad, Bombina variegata (L.). Dulak J, et al. **Dev Comp Immunol** 1989 Winter;13(1):49–55

The retrorenal spleen. Implications for percutaneous left renal invasive procedures. Hopper KD, et al. **Invest Radiol** 1989 Aug;24(8):592–5

Particulate suspensions as ultrasonic contrast agents for liver and spleen. Violante MR, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S294–7

A quantitative study of relaxation rate enhancement produced by iron oxide particles in polyacrylamide gels and tissue. Majumdar S, et al. **Magn Reson Med** 1989 Feb; 9(2):185–202

[Morphology and function of the human spleen. Enzyme histochemical and electron microscopy studies of the splenic lymphatic vessels, nerves and connective tissue structures] Heusermann U. **Veroff Pathol** 1988;129:1–165 (280 ref.) (Eng. Abstr.) **(Ger)**

[A histo-anatomical study on the spleen of a bat, Vespertilio orientalis] Tanaka Y. **Kaibogaku Zasshi** 1988 Dec; 63(6):502–12 (Eng. Abstr.) **(Jpn)**

[Ellipsoids of the spleen (ellipsoid macrophagal-lymphoid sheaths] Sapin MR, et al. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):5–13 (32 ref.) (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

On-line monitoring of sequential blood flow reduction during splenic embolization. Link DP, et al. **Acta Radiol** 1989 Jan–Feb;30(1):101–3

Correlations between posterior gastric artery and superior polar artery in human anatomy. Trubel W, et al. **Anat Anz** 1988;167(3):219–23

Conservation of the spleen with distal pancreatectomy [letter] Sutherland DE, et al. **Arch Surg** 1988 Dec;123(12):1525

Surgical anatomy of the human spleen. Redmond HP, et al. **Br J Surg** 1989 Feb;76(2):198–201

Hepatic haemodynamics as related to blood flow through gut, spleen, and pancreas. Charbon GA, et al. **Gut** 1989 Feb;30(2):265–78 (87 ref.)

Histometry of splenic microvascular architecture in hairy cell leukaemia. Re G, et al. **Histopathology** 1988 Oct; 13(4):425–34

Medical and surgical management of multiple organ infarctions secondary to bacterial endocarditis in a dog. Ellison GW, et al. **J Am Vet Med Assoc** 1988 Nov 15; 193(10):1289–91

Fine architecture of the splenic terminal vascular bed as revealed by arterial and venous pressure-loading perfusion fixation. Suzuki T, et al. **J Electron Microsc Tech** 1989 Jun;12(2):132–45

Redistribution of visceral blood volume in upright exercise in healthy volunteers. Froelich JW, et al. **J Nucl Med** 1988 Oct;29(10):1714–8

Arterial segmentation in the spleen. Cortés JA, et al. **Surg Radiol Anat** 1988;10(4):323–32

The red pulp of the human spleen. Structural basis of blood filtration. Brozman M, et al. **Z Mikrosk Anat Forsch** 1989; 103(2):316–28

The blood circulation inside the spleen. I. The arterial blood vessels general distribution in the rat spleen. Hadler WA, et al. **Z Mikrosk Anat Forsch** 1989;103(1):46–77

[Splenic salvage in distal pancreatectomy] Solheim K, et al. **Tidsskr Nor Laegeforen** 1989 Feb 20;109(5):579–80 (Eng. Abstr.) **(Nor)**

[Extracorporeal use of a donor spleen in the treatment of patients with urinary tract infection] Serniak PS, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):15–7 (Eng. Abstr.) **(Rus)**

[Laparoscopic organic rheography in the diagnosis of disorders of visceral blood flow] Dalgat DM, et al. **Vestn Khir** 1988 Oct;141(10):106–8 **(Rus)**

[Central and organic hemodynamics during the treatment of infection by splenosorption] Novikova RI, et al. **Vestn Khir** 1989 Feb;142(2):11–3 (Eng. Abstr.) **(Rus)**

[Ultrasonic echography in evaluating splenic blood circulation] Rikhcieva LE, et al. **Vestn Khir** 1989 Mar; 142(3):55–7 **(Rus)**

[Changes in hemodynamics and angioarchitecture of the hepatolienal basin after embolization of the splenic artery in liver cirrhosis] Vakhidov AV, et al. **Vestn Khir** 1989 Feb;142(2):24–7 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Alcian yellow as a fluorescent dye. Stockert JC, et al. **Acta Histochem (Jena)** 1989;85(1):59–63

Immortalization of rat spleen and thymus T cells by human T-cell leukemia virus type I. Akagi T, et al. **Acta Med Okayama** 1989 Jun;43(3):143–51

Interdigitating cells and dendritic cells of the mouse identified by monoclonal antibodies: interaction with lymphocyte subsets. Breel M, et al. **Adv Exp Med Biol** 1988;237:757–63

Enrichment of germinal centre cells. Brown AN, et al. **Adv Exp Med Biol** 1988;237:227–32

Tissue localization and migration of murine spleen macrophages carrying the Forsman glycosphingolipid antigen. Conradt P, et al. **Adv Exp Med Biol** 1988; 237:577–82

The de novo generation of germinal centers is an oligoclonal process. Kroese FG, et al. **Adv Exp Med Biol** 1988; 237:245–50

CBA/N mice have marginal zone B cells with normal surface immunoglobulin phenotype. Liu YJ, et al. **Adv Exp Med Biol** 1988;237:105–11

Memory B cells generated in T cell-dependent antibody responses colonise the splenic marginal zone. Oldfield S, et al. **Adv Exp Med Biol** 1988;237:93–8

Marginal zone B cells and the localisation of antigen on follicular dendritic cells. Oldfield S, et al. **Adv Exp Med Biol** 1988;237:99–104

The germinal center precursor cell is surface mu and delta positive. Seijen HG, et al. **Adv Exp Med Biol** 1988; 237:233–7

Characterization of cell populations, reappearing in the mouse spleen after elimination by liposome encapsulated dichloromethylene diphosphonate: reappearance of marginal zone lymphocytes is independent of marginal zone macrophages. van Rooijen N, et al. **Adv Exp Med Biol** 1988;237:889–93

Specific antibody forming cells in lymphoid follicles of spleen: an aspect of the late immune response. van Rooijen N, et al. **Adv Exp Med Biol** 1988;237:221–5

Hemorrhagic autoimmune encephalomyelitis induced by adoptive transfer of activated semiallogeneic spleen cells into irradiated rats. Matsumoto Y, et al. **Am J Pathol** 1988 Nov;133(2):306–15

Development of anti-tumoral cell-mediated cytotoxicity during the course of Marek's disease in chickens. Queré P, et al. **Ann Rech Vet** 1988;19(3):193–201

Differential properties of organ-specific serum opsonins for liver and spleen macrophages. Moghimi SM, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):379–83

Kurloff cell proteoglycans: presence of two main size-populations of intracellular protease-resistant proteochondroitin sulphate. Effect of D-xyloside. Letalef SE, et al. **Biol Cell** 1989;65(3):257–63

Raji-K562 hybrids and their use for trioma production. Hering S, et al. **Biomed Biochim Acta** 1988;47(2):211–6

Characterization of murine bone marrow and spleen-derived stromal cells: analysis of leukocyte marker and growth factor mRNA transcript levels. Gimble JM, et al. **Blood** 1989 Jul;74(1):303–11

Participation of radioresistant Forssman antigen-bearing macrophages in the formation of stromal elements of erythroid spleen colonies. Sadahira Y, et al. **Br J Haematol** 1989 Apr;71(4):469–74

Haemopoiesis in long-term cultures of liver, spleen and bone marrow of pre- and postnatal mice: CFU-GM production. Van Den Heuvel RL, et al. **Br J Haematol** 1988 Nov; 70(3):273–7

Effects of intracellular diphosphonates on cells of the mononuclear phagocyte system: in vivo effects of liposome-encapsulated diphosphonates on different macrophage subpopulations in the spleen. van Rooijen N, et al. **Calcif Tissue Int** 1989 Sep;45(3):153–6

A comparison of murine hepatic accessory cells and splenic dendritic cells. Shah PD, et al. **Cell Immunol** 1989 Feb; 118(2):394–405

Cellular morphogenesis and the formation of marginal bands in amphibian splenic erythroblasts. Ginsburg MF, et al. **Cell Motil Cytoskeleton** 1989;12(3):157–68

Full replacement of 2-mercaptoethanol by cysteine plus selenium compounds in augmenting DNA synthesis of mitogen-stimulated mouse spleen lymphocytes. Ishii T, et al. **Cell Struct Funct** 1989 Jun;14(3):287–97

Mathematical analysis of haemopoietic grafted cell renewal and migration through the allogeneic or syngeneic mouse host. Spach C, et al. **Cell Tissue Kinet** 1988 Jul;21(4):285–99

The spleen colony technique. II. Errors in estimation of the fraction of CFU-s synthesizing DNA. Znojil V, et al. **Cell Tissue Kinet** 1988 May;21(3):143–7

Indomethacin inhibition of IL-2-induced splenocyte proliferation. Franceschi D, et al. **Curr Surg** 1988 Nov-Dec;45(6):474–6

Proopiomelanocortin producing cells of spleen: increase after transplantation with opioid-peptide producing Ehrlich ascites tumor cells. Larsson LI, et al. **Eur J Cell Biol** 1988 Dec;47(2):373–8

Multipotent stem cell (CFU-S) numbers and circadian variations in aging mice. Sletvold O, et al. **Eur J Haematol** 1988 Sep;41(3):230–6

Eosinophilic spleen colonies are produced in rat-marrow-transplanted but not in murine-marrow-transplanted mice. Szabó LG, et al. **Eur J Haematol** 1988 Oct;41(4):347–51

Megakaryocyte colony-stimulating factor and burst-promoting activity in LPS-treated mouse spleen cell-conditioned medium. Sugimoto M, et al. **Exp Cell Biol** 1988;56(5):245–53

Monoclonal islet cell surface antibody dependent cellular cytotoxicity mediated by rat splenocytes with the RIN cell line as target. Hulinsky I, et al. **Exp Clin Endocrinol** 1989 May;93(2–3):181–6

On the late seeding of CFU-S to the spleen: 8- vs 12-day CFU-S. Lord BI, et al. **Exp Hematol** 1989 Aug; 17(7):836–42

In vivo proliferative and differential properties of murine bone marrow cells separated on the basis of rhodamine-123 retention. Ploemacher RE, et al. **Exp Hematol** 1988 Dec; 16(11):903–7

Characteristics of the neonatal spleen cell subpopulation in mice which suppresses lymphocyte proliferative response to mitogen stimulation. Mazur-Kolecka B, et al. **Folia Biol (Krakow)** 1988;36(1–2):127–38

The spleen in lymphocyte migration. Pabst R. **Immunol Today** 1988 Feb;9(2):43–5

Inhibition by glucocorticoids of mitogen-dependent histamine biosynthesis caused by histidine decarboxylase in cultured mouse spleen cells and peritoneal adherent cells. Oh C, et al. **Immunology** 1988 Nov;65(3):433–6

Flow cytometric analysis of lymphocyte populations in guinea pig blood and spleen. Is antigen expression and the effects of immunosuppressive agents. McPhee CA, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):275–80

In vitro proliferative responses of spleen lymphocytes from rats bearing progressive or regressive tumors induced by cell variants of a syngeneic colon carcinoma. Dearden-Badet MT, et al. **Int J Cancer** 1989 Feb 15; 43(2):334–9

An in vivo analysis of c-myc and c-fos expression during terminal erythroid differentiation in mouse spleen progenitors. Badiavas EV, et al. **Int J Cell Cloning** 1989 May;7(3):179–89

Cells with marrow and spleen repopulating ability and forming spleen colonies on day 16, 12, and 8 are sequentially ordered on the basis of increasing rhodamine 123 retention. Ploemacher RE, et al. **J Cell Physiol** 1988 Sep;136(3):531–6

Properties of isolated red pulp macrophages from mouse spleen. Nusrat AR, et al. **J Exp Med** 1988 Oct 1; 168(4):1505–10

Participation of IL-4 in the formation of IgD-binding factors by antigen-primed mouse spleen cells. Adachi M, et al. **J Immunol** 1988 Oct 1;141(7):2358–66

Spontaneous IFN-beta production. A common feature of natural suppressor systems. Cleveland MG, et al. **J Immunol** 1988 Sep 15;141(6):2043–9

Differential radiosensitivity among B cell subpopulations. Riggs JE, et al. **J Immunol** 1988 Sep 15;141(6):1799–807

Enrichment of murine splenic natural killer (NK) cells by the sequential elimination of non-NK cells. Lemieux S, et al. **J Immunol Methods** 1988 Oct 26;113(2):193–203

Efficient hybridoma production using previously frozen splenocytes. Marusich MF. **J Immunol Methods** 1988 Nov 10;114(1–2):155–9

Immunohistological localization and characterization of FITC-labelled lymphocytes. A rapid and inexpensive method for studying migration. Willführ KU, et al. **J Immunol Methods** 1989 Jun 2;120(1):29–36

Inhibitory effects of rabbit antisera on mitogenic activity of Actinobacillus actinomycetemcomitans lipopolysaccharide. Nishihara T, et al. **J Periodont Res** 1989 May;24(3):165–70

A disputed spleen. Brahams D. **Lancet** 1988 Nov 12; 2(8620):1151–2

Radioprotection of mice with interleukin-1: relationship to the number of spleen colony-forming units. Schwartz GN, et al. **Radiat Res** 1989 Jul;119(1):101–12

Determination of in vivo and in vitro radiosensitivity of mouse splenic T-lymphocytes using a T-cell cloning technique. Dohi S, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 1;11(1):13–22

Lymphocytotoxic cross-matching performed on spleen cells: immunomagnetic technique versus current KN (Kissmeyer-Nielsen) technique. Povlsen JV, et al. **Tissue Antigens** 1989 Mar;33(3):382–8

Differential effect of cyclosporine in vivo on the distribution of T cell subsets in the thymus, spleen, and lymph nodes. Hiramine C, et al. **Transplantation** 1989 Mar;47(3):499–503

Specific resistance to local graft-versus-host reaction in F1 hybrids pretreated intravenously with parent-strain spleen cells. Role of cytotoxic T lymphocytes directed against receptors for the major histocompatibility complex. Kosmatopoulos K, et al. **Transplantation** 1988 Oct; 46(4):570–4

The argentophil reticular cells of the mammalian spleen. III. Histophysiology of the perifollicular region of mammalian spleen. Hadler WA, et al. **Z Mikrosk Anat Forsch** 1988; 102(6):913–34

[Studies on the heterogeneity of spleen colony-forming cell population] Wei QS, et al. **Sheng Li Hsueh Pao** 1988 Oct; 40(5):510–7 (Eng. Abstr.) **(Chi)**

[Heterogeneity of natural killer (NK) cells in the human spleen] Witte T, et al. **Immun Infekt** 1989 Apr;17(2):65–7 (Eng. Abstr.) **(Ger)**

[Interactions of DNA topoisomerase inhibitors novobiocin and nalidixic acid with some cytotoxic agents. In vitro investigations in rat thymic and splenic cells] Tempel K. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):673–9 (Eng. Abstr.) **(Ger)**

[Regulation of monocyto- and granulocytopoiesis] Kondracka EE, et al. **Postepy Hig Med Dosw** 1988 May-Jun;42(3):296–314 (111 ref.) (Eng. Abstr.) **(Pol)**

[The role of splenocytes in the process of contact inhibition of cell division] Lavrovskiĭ VA, et al. **Dokl Akad Nauk SSSR** 1988;302(3):714–7 **(Rus)**

[Antibody-producing ability of splenic cells of the progeny of female rats with chronic lesions of the liver] Briukhin GV, et al. **Fiziol Zh** 1989 Mar-Apr;35(2):97–100 (Eng. Abstr.) **(Rus)**

[Effectiveness of formation of murine B-hybridomas by using various polyethylene glycols] Paniutich AV. **Gematol Transfuziol** 1988 Dec;33(12):47–51 **(Rus)**

[Histological study of splenic colonies at different times following the transplantation of hematopoietic cells from embryonic liver] Domaratskaia EI, et al. **Ontogenez** 1988 Jul-Aug;19(4):380–4 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Distinctive characteristics of the splenic vein in the dog. Its morphological and pharmacological discontinuities with the portal vein and splenic capsule. Yoshioka K, et al. **Blood Vessels** 1988;25(6):273–84

Effects of chronic injection of sphingomyelin-containing liposomes on lymphoid and non-lymphoid cells in the spleen. Transient suppression of marginal zone macrophages. Claassen E, et al. **Br J Exp Pathol** 1988 Dec; 69(6):865–75

Comparison of the mouse spleen cell assay and a radioimmunoassay for the measurement of serum erythropoietin. Lappin TR, et al. **Br J Haematol** 1988 Sep; 70(1):117–20

Induction of interleukin-1 and tumor necrosis factor by 12-O-tetradecanoylphorbol-13-acetate in phorbol ester-sensitive (SENCAR) and resistant (B6C3F1) mice. Updyke LW, et al. **Carcinogenesis** 1989 Jun;10(6):1107–11

Overnight incubation of mouse spleen cells in recombinant IL-2 generates cytotoxic cells with NK characteristics from precursors enriched with or devoid of LGL. Punturieri A, et al. **Clin Exp Immunol** 1989 Jan;75(1):155–60

The effect of cadmium on the hematology and on the activity of delta-aminolevulinic acid dehydratase (ALA-D) in blood and hematopoietic tissues of the flounder, Pleuronectes flesus L. Johansson-Sjöbeck ML, et al. **Environ Res** 1978 Oct;17(2):191–204

Long-term effects of high doses of cytosine arabinoside on pluripotent stem cells (CFU-S). Guigon M, et al. **Exp Hematol** 1989 Feb;17(2):203–7

Effects of cyclosporin A on the splenic tissue of rats: a histomorphometric analysis. Armas OA, et al. **Exp Mol Pathol** 1989 Feb;50(1):92–103

Cadmium-induced liver and spleen damage in inbred mouse strains. Godowicz B. **Folia Biol (Krakow)** 1988; 36(1-2):47–51

Inhibition of cell-mediated immunity by tumour cell products: depression of interleukin-2 production and responses to interleukin-2 by mouse spleen cells. Nelson M, et al. **Immunol Cell Biol** 1988 Apr;66 (Pt 2):97–104

Spleen cellularity shifts from the inhalation of 0.25-0.35 PPM nitrogen dioxide. Kuraitis KV, et al. **J Environ Pathol Toxicol Oncol** 1989;9(1):1–11

Production of DNA single-strand breaks in unstimulated splenocytes by dimethylnitrosamine. Kim BS, et al. **Mutat Res** 1989 Aug;213(2):185–93

Evidence for tumor reduction in refractory or relapsed B-CLL patients with infusional interleukin-2. Kay NE, et al. **Nouv Rev Fr Hematol** 1988;30(5-6):475–8

Effects of lysozyme on spleen and lungs in mice with Lewis lung carcinoma. Ceschia V, et al. **Pharmacol Res Commun** 1988 Jul;20(7):615–6

Influence of the intravenous administration of ACTH-(1-24) on the characteristics of brain, heart and spleen adrenoceptors of haemorrhage-shocked rats. Sandrini M, et al. **Pharmacol Res Commun** 1988 Sep;20(9):739–49

Hematopoietic effects in mice exposed to arsine gas. Hong HL, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):173–82

[Effect of manganese dichloride on the graft vs host activity of splenic lymphocytes in mice] Divanian Kh, et al. **Eksp Med Morfol** 1988;27(4):17–9 (Eng. Abstr.) **(Bul)**

[Pathomorphologic and hematologic studies of the immunotoxicity of the phenoxyalkane acid mecoprop in rats] Moeller T, et al. **Z Gesamte Hyg** 1989 May; 35(5):258–60 (Eng. Abstr.) **(Ger)**

[Effect of cyclosporin on the thymus and spleen in rats] Nagai Y. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):906–20 (Eng. Abstr.) **(Jpn)**

[Enhanced inhibition of splenic lymphocyte proliferation by 2,3,7,8-tetrachlorodibenzo-p-dioxin in C57B1/10 (Ah+Ah+) mice compared to DBA/2 (AhAh) mice] **Pavliak AL**, et al. **Biull Eksp Biol Med** 1989 Mar; 107(3):331–3 (Eng. Abstr.) **(Rus)**

[Changes in the peripheral blood, liver and spleen during the long-term experimental administration of modified hemoglobin] Selivanov EA, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):488–90 (Eng. Abstr.) **(Rus)**

[The activity of growth-regulating substances isolated from the spleen and thymus of healthy cows and of those with hemoblastoses] Ronichevskaia GM, et al. **Eksp Onkol** 1989; 11(4):63–6 (Eng. Abstr.) **(Rus)**

[Functional activity of the splenic cells in the late periods after the administration of antitumor preparations with various mechanisms of action] Zapuskalova OB, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):67–70 (Eng. Abstr.) **(Rus)**

[Effect of aroclor 1254 on morphochemical parameters of various organs in experimental studies] Seffner V, et al. **Gig Sanit** 1989 Mar;(3):71–4 **(Rus)**

[Natural killer activity of the splenocytes in C3HA strain mice during 20-methylcholanthrene-induced carcinogenesis] Pogodina ON, et al. **Tsitologiia** 1989 Feb; 31(2):220–5 (Eng. Abstr.) **(Rus)**

[Properties of the interferons produced by the splenocytes of induced mice] Bopegamage ShA, et al. **Vopr Virusol** 1988 May-Jun;33(3):354–6 **(Rus)**

[Interferon production and natural killer activity induced by staphylococcal enterotoxin in mouse spleen cells] Shcheglovitova ON, et al. **Vopr Virusol** 1988 May-Jun; 33(3):305–9 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

A novel mechanism of soluble guanylate cyclase stimulation: time-dependent activation by bacterial lipopolysaccharide in rat fetal spleen cells. Graber SE, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):331–8

Ontogeny of the chick embryo spleen--a cytological study. Yassine F, et al. **Cell Differ Dev** 1989 Jun;27(1):29–45

B cell precursors in chick embryos surgically bursectomized at 72 h of incubation. Lassila O, et al. **Eur J Immunol** 1988 Nov;18(11):1867–70

Spleen lymphocytes and haemopoiesis in the mouse embryo. Sasaki K, et al. **J Anat** 1988 Oct;160:27–37

Immuno-architecture of human fetal lymphoid tissues. Timens W, et al. **Virchows Arch [A]** 1988;413(6):563–71

ENZYMOLOGY

Lesions and repair of cells of maternal mice after valproic acid (VPA) treatment on day 8 of pregnancy: an enzyme histochemical analysis. Gossrau R, et al. **Acta Histochem (Jena)** 1989;86(1):23–32

The effect of Torecane on the female rat spleen during pregnancy. Zarębska A. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:241–6

The primary structure of a membrane-associated phospholipase A2 from human spleen. Kanda A, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):42–8

Effect of poly-basic amino acids on the phosphorylation of various substrate proteins by cytosolic protein-tyrosine kinase from porcine spleen. Sakai K, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1043–9

Induction of asparagine synthetase during lymphocyte activation by phytohemagglutinin. Hongo S, et al. **Biochem Int** 1989 Mar;18(3):661–6

Properties of native calf spleen NAD+ glycohydrolase immobilized by hydrophobic interaction. Muller HM, et al. **Biochem Int** 1988 Nov;17(5):953–63

A probable mechanism of inactivation by urea of goat spleen cathepsin B. Unfolding and refolding studies. Agarwal SK, et al. **Biochem J** 1988 Dec 1;256(2):609–13

Glutamine-dependent carbamoyl-phosphate synthetase and other enzyme activities related to the pyrimidine pathway in spleen of Squalus acanthias (spiny dogfish). Anderson PM. **Biochem J** 1989 Jul 15;261(2):523–9

A comparison of four cathepsins (B, L, N and S) with collagenolytic activity from rabbit spleen. Maciewicz RA, et al. **Biochem J** 1988 Dec 1;256(2):433–40

Deoxycytidine kinase from human leukemic spleen: preparation and characteristics of homogeneous enzyme. Bohman C, et al. **Biochemistry** 1988 Jun 14;27(12):4258–65

Demonstration that the leukocyte common antigen CD45 is a protein tyrosine phosphatase. Tonks NK, et al. **Biochemistry** 1988 Nov 29;27(24):8695–701

Properties of acid ceramidase from human spleen. Al BJ, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):245–51

In vitro detergent activation of lysosomal acid beta-glucosidase in the spleen of normal and type 1 Gaucher patients is not accompanied by change in aggregation state. Maret A, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):254–6

Cellular distribution of protein-disulfide interchange enzyme activity in mouse spleen. Mimić-Oka JI, et al. **Biomed Biochim Acta** 1988;47(3):227–31

Isolation and some properties of a cathepsin E type proteinase from rat spleen. Wiederanders B, et al. **Biomed Biochim Acta** 1989;48(1):23–32

Human acid beta-glucosidase: inhibition studies using glucose analogues and pH variation to characterize the normal and Gaucher disease glycon binding sites. Osiecki-Newman K, et al. **Enzyme** 1988;40(4):173–88

Inhibition of mammalian spermine synthase by N-alkylated-1,3-diaminopropane derivatives in vitro and in cultured rat hepatoma cells. Baillon JG, et al. **Eur J Biochem** 1989 Jan 15;179(1):17–21

Localization of 2-glucuronidase in the marginal sinus of rat spleen. Horský J, et al. **Folia Morphol (Praha)** 1989; 37(1):119–22

Biochemical and histochemical localization of succinate dehydrogenase on nuclear membrane of rat thymocytes and splenocytes. Arifuddin M, et al. **Indian J Exp Biol** 1988 May;26(5):397–9

Rat spleen cytoplasmic nucleotidase: characterization and its physiological significance. Hokari S, et al. **Int J Biochem** 1988;20(12):1405–10

Human spleen cathepsin D: its characterization and localization in human spleen. Ikeda K, et al. **Int J Biochem** 1989;21(3):317–26

New spectrophotometric method for continuous recording of the spleen exonuclease activity. Dolapchiev LB, et al. **J Biochem Biophys Methods** 1988 Nov;17(3):207–13

Comparative studies on the primary structure of human cystatin as from epidermis, liver, spleen, and leukocytes. Takeda A, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):986–91

Demonstration that spleen green hemeprotein is identical to granulocyte myeloperoxidase. Ikeda-Saito M, et al. **J Biol Chem** 1989 Mar 15;264(8):4559–63

Autophosphorylation and autoactivation of spleen protein tyrosine kinase. Kong SK, et al. **J Biol Chem** 1988 Oct 5;263(28):14523–30

Purification and characterization of a protein-phosphotyrosine phosphatase from rat spleen which dephosphorylates and inactivates a tyrosine-specific protein kinase. Swarup G, et al. **J Biol Chem** 1989 May 15;264(14):7801–8

[Isolation and analysis of Ca/Mg-dependent endonuclease from cell nuclei of human splenocytes] Sokolova IA, et al. **Biokhimiia** 1988 Jul;53(7):1163–73 (Eng. Abstr.) **(Rus)**

[DNA recombination in vitro initiated by Ca/Mg-dependent endonuclease from cell nuclei of human splenocytes] Morozov AIu, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr; (4):42–5 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Strain differences in the postnatal development of the mouse splenic lymphoid system. Forni L. **Ann Inst Pasteur Immunol** 1988 May-Jun;139(3):257–66

Age-associated changes in DNA methylation and mRNA level of the c-myc gene in spleen and liver of mice. Ono T, et al. **Mutat Res** 1989 Jan;219(1):39–50

Effect of separate and combined maternal ingestion of alkali metals on the developing mouse. Messiha FS. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3-4):205–8

Maternal cesium chloride ingestion and the newborn. Messiha FS. **Neurosci Biobehav Rev** 1988 Fall-Winter; 12(3-4):209–13

IMMUNOLOGY

Eradication of syngeneic tumor (Meth A fibrosarcoma) from mice by adoptive immunotherapy of immunized spleen cells induced by Corynebacterium parvum-pyridine extract residue. Mukai K, et al. **Acta Med Okayama** 1988 Dec; 42(6):301–10

Decreased mitogenic response of murine spleen cells following intraperitoneal injection of serovar-specific glycopeptidolipid antigens from the Mycobacterium avium complex. Hooper LC, et al. **Adv Exp Med Biol** 1988; 239:309–25

In vitro production of colony-stimulating factors by Listeria-immune spleen cells. Magee DM, et al. **Adv Exp Med Biol** 1988;239:245–55

Localization of TI2 antigen (Ficoll-FITC) and corresponding specific anti-FITC antibody forming cells in the rat spleen. Matsuno K, et al. **Adv Exp Med Biol** 1988;237:895–9

Partial characterization of suppressor factors in spleen cell culture supernatants of Mycobacterium lepraemurium-infected mice. Richard L, et al. **Adv Exp Med Biol** 1988;239:279–85

Inhibition of splenic T lymphocytes and accessory cell interaction by anti-mac-1 (monoclonal antibody to complement receptor type 3). el Rouby S, et al. **Adv Exp Med Biol** 1988;237:397–400

Histamine-releasing activity of mouse spleen cell culture

supernatants. Wyczółkowska J, et al. **Agents Actions** 1989 Apr;27(1–2):46–8
In vitro effect of T-2 mycotoxin on the immune response of mice. Holt PS, et al. **Am J Vet Res** 1988 Sep;49(9):1480–4
Delayed immune dysfunction following hemorrhagic shock and resuscitation. Croce MA, et al. **Am Surg** 1988 Dec; 54(12):731–5
The tissue distribution of Ia- and IgM-positive cells in adult and newborn miniature pigs. Horák V, et al. **Anat Histol Embryol** 1989 Jun;18(2):157–64
Primary in situ immune response in popliteal lymph nodes and spleen of mice after subcutaneous immunization with thymus-dependent or thymus-independent (type 1 and 2) antigens. Delemarre FG, et al. **Anat Rec** 1989 Feb; 223(2):152–7
Defective T-cell surface antigen expression after mitogen stimulation. An index of lymphocyte dysfunction after controlled murine injury. Gadd MA, et al. **Ann Surg** 1989 Jan;209(1):112–8
Comparative evaluation of the protective effect of immune spleen cells and immune RNA against Plasmodium berghei. Khullar N, et al. **Ann Trop Med Parasitol** 1988 Dec; 82(6):519–26
Disorders of the lymphatic homing and MIF production by the lymphocytes of thymus, spleen and lymph nodes after liver injury caused by portocaval shunt in rats. Andrzejewski W, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):753–8
The responsiveness of mice B-lymphocytes to neuromediators during an immune reaction. Ado AD, et al. **Brain Behav Immun** 1988 Mar;2(1):79–85
Shock-induced modulation of lymphocyte responsiveness and natural killer activity: differential mechanisms of induction. Cunnick JE, et al. **Brain Behav Immun** 1988 Jun; 2(2):102–13
Splenic immune responses following treadmill exercise in mice. Hoffman-Goetz L, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1415–9
Synergistic antitumor effects of topoisomerase inhibitors and natural cell-mediated cytotoxicity. Utsugi T, et al. **Cancer Res** 1989 Mar 15;49(6):1429–33
Norepinephrine and serotonin content of the murine spleen: its relationship to lymphocyte beta-adrenergic receptor density and the humoral immune response in vivo and in vitro. Fuchs BA, et al. **Cell Immunol** 1988 Dec; 117(2):339–51
PHA activation of encephalitogenic T cells: in vitro line selection overcomes splenic suppression. Jones RE, et al. **Cell Immunol** 1989 Oct 1;123(1):60–9
Antigen presentation by neonatal murine spleen cells. Levin D, et al. **Cell Immunol** 1989 Apr 15;120(1):132–44
Immunoarchitecture of regenerated splenic transplants: influence of donor and host age on the regeneration of splenic compartments. Westermann J, et al. **Cell Tissue Res** 1988 Nov;254(2):403–13
Exercise stress alters murine lymphocyte subset distribution in spleen, lymph nodes and thymus. Hoffman-Goetz L, et al. **Clin Exp Immunol** 1989 May;76(2):307–10
Role of the spleen in immunosuppression of gastric cancer: predominance of suppressor precursor and suppressor inducer T cells in the recirculating spleen cells. Toge T, et al. **Clin Exp Immunol** 1988 Dec;74(3):409–12
Supplemental zinc restores antibody formation in cultures of aged spleen cells. III. Impairment of II-2-mediated responses. Winchurch RA, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):215–22
Immunoenhancing property of dietary whey protein in mice: role of glutathione. Bounous G, et al. **Clin Invest Med** 1989 Jun;12(3):154–61
A simple method for measuring immunoglobulin synthesis in vivo in the spleen of chicks (Gallus domesticus). Muramatsu T, et al. **Comp Biochem Physiol [B]** 1989; 92(2):351–5
Properties of the immunosuppressive factor induced by murine cytomegalovirus. Hudson JB, et al. **Comp Immunol Microbiol Infect Dis** 1989;12(1–2):39–46
Dissociation of the RES and immune components in the transient splenic response of embryos and neonatal chicks to immunization. Seto F. **Dev Comp Immunol** 1988 Fall; 12(4):843–54
Cadmium, a metallic inhibitor of antibody-mediated immunity in mice. Bozelka BE, et al. **Environ Res** 1978 Dec;17(3):390–402
Rapid antibody response following intrasplenic inoculation of formalin-treated Toxoplasma gondii into mice [letter] Humphery-Smith I, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):573–5
Ontogenic development of autoantibody repertoires in spleen and peritoneal cavity of normal mice: examples of T cell-dependent and -independent reactivities. Huetz F, et al. **Eur J Immunol** 1989 Jul;19(7):1195–201
Effects of silica pretreatment on allogeneic tumour growth in mice treated with lentil lectin, spleen extract or alloantisera. Hilgert I, et al. **Folia Biol (Praha)** 1988; 34(4):266–76
Comparison of NK activity in mouse spleen and peripheral blood lymphocytes. Yron I, et al. **Immunobiology** 1988 Sep; 177(4–5):449–59
Cellular changes in the spleens of mice infected with Sarcocystis muris. Gill HS, et al. **Immunol Cell Biol** 1988 Oct–Dec;66 (Pt 5–6):337–43
Immunoglobulin Fc receptor molecules on Xenopus laevis splenocytes. Cocsemans V, et al. **Immunology** 1988 Dec; 65(4):641–5
Natural cytotoxic activity is not necessarily mediated by the release of tumour necrosis factor. Patek PQ, et al. **Immunology** 1989 Aug;67(4):509–13
Suppressive effects of mouse interferon-beta on gene expression occurring in concanavalin A-stimulated mouse spleen cells. Watanabe Y, et al. **Immunology** 1988 Aug; 64(4):739–41
Spleen lymphocyte populations and expression of activation markers in rats treated with the potent new immunosuppressive agent FK-506. Woo J, et al. **Immunology** 1988 Sep;65(1):153–5
Intestinal intraepithelial and splenic natural killer cell responses to eimerian infections in inbred chickens. Lillehoj HS. **Infect Immun** 1989 Jul;57(7):1879–84
Kinetics and isotype distribution of parasite-specific antibody responses in the spleen of mice during primary infection with Schistosoma mansoni. Studies at the single-cell level. Czerkinsky C, et al. **Int Arch Allergy Appl Immunol** 1989; 88(3):280–7
Development of splenic natural suppressor (NS) cells in Ehrlich tumor-bearing mice. Subiza JL, et al. **Int J Cancer** 1989 Aug 15;44(2):307–14
Inhibition by Trypanosoma cruzi of interferon-gamma production by mitogen-stimulated mouse spleen cells. Beltz LA, et al. **Int J Parasitol** 1989 Aug;19(5):555–9
Suppression of heterologous immunity by Nematospiroides dubius antigens in vitro. Crawford C, et al. **Int J Parasitol** 1989 Feb;19(1):29–34
O-acetylated sialic acids in gangliosides from pig spleen lymphocytes. Hueso P, et al. **Ital J Biochem** 1988 Sep–Oct; 37(5):302–9
Lymphokine-induced cytotoxic cell generation in thymus and spleen cell cultures. Biasi G, et al. **J Biol Regul Homeost Agents** 1987 Jul–Sep;1(3):119–25
Cytotoxic T-cells and antibody-producing cells isolated from liver and spleen of immunized rats. Malter M, et al. **J Cancer Res Clin Oncol** 1989;115(2):157–60
Construction of antigen-specific suppressor T cell hybridomas from spleen cells of mice primed for the persistent IgE antibody formation. Iwata M, et al. **J Immunol** 1988 Nov 15;141(10):3270–7
Induction of antigen-specific parasiticidal cytotoxic T cell splenocytes by a major membrane protein (P30) of Toxoplasma gondii. Khan IA, et al. **J Immunol** 1988 Nov 15;141(10):3600–5
Specific inhibition of hybrid resistance in F1 hybrid mice pretreated with parent-strain spleen cells. II. Evidence for an Hh-1 antigen-specific tolerization. Kosmatopoulos K, et al. **J Immunol** 1988 Nov 15;141(10):3285–92
Interdependence of CD4+ T cells and malarial spleen in immunity to Plasmodium vinckei vinckei. Relevance to vaccine development. Kumar S, et al. **J Immunol** 1989 Sep 15;143(6):2017–23
Differential antigen presentation by cloned populations of mouse splenic macrophages. Walker WS. **J Immunol** 1989 Oct 1;143(7):2142–5
Optimal conditions for the generation of monoclonal antibodies using primary immunisation of mouse splenocytes in vitro under serum-free conditions. De Boer M, et al. **J Immunol Methods** 1989 Jul 26;121(2):253–60
Differential induction of hematopoiesis and immune suppressor cells in the bone marrow versus in the spleen by Lewis lung carcinoma variants. Young MR, et al. **J Leukoc Biol** 1989 Mar;45(3):262–73
Spleen natural killer cells from iron-deficient rat pups manifest an altered ability to be stimulated by interferon. Lockwood JF, et al. **J Nutr** 1988 Dec;118(12):1558–63
Enhancement of murine splenic immunoglobulin secretion in vitro by supernatants from fetal and placental cell cultures. Bernadotte F, et al. **J Reprod Immunol** 1988 Dec; 14(3):225–34
Influence of immunization with allogeneic spleen cells on the number of viable neonates in mice. Heine O, et al. **J Reprod Immunol** 1989 May;15(2):169–73
Changes of peripheral T-cell subsets in asplenic W256 tumor-bearing rats. Ge YG, et al. **J Surg Oncol** 1989 Sep; 42(1):60–8
Effect of splenectomy upon the growth of B16-F10 melanoma and its relation to the interferon system. Stoll HL 3d, et al. **J Surg Oncol** 1989 Feb;40(2):79–84
Generation of self-macrophage-toxic non-T cells in the MHC-homozygous F1 spleen cells co-cultured with parental cells: possible involvements of host cells in impaired immunity in GVH disease. Hosono M, et al. **Jpn J Exp Med** 1988 Dec;58(6):261–7
The regulation of natural killer cell activity by splenic nonspecific suppressor cells and its modification in cancer patients. Yanagawa E, et al. **Jpn J Surg** 1988 Nov; 18(6):660–7
Interleukin production by neonatal spleen cells during and as a result of antigen presentation: the effect of ultraviolet light. Levin D, et al. **Lymphokine Res** 1989 Fall; 8(3):185–201
Functional bioassays for B cell growth factors using polyclonally activated murine spleen B cells. Ruuth E, et al. **Lymphokine Res** 1989 Summer;8(2):147–58
Reduced proliferative response of mouse spleen cells to mitogens during infection with Salmonella typhimurium or Listeria monocytogenes. Brunner H, et al. **Microb Pathog** 1989 Apr;6(4):265–76
Priming activity for chemiluminescence reaction of PMN in the culture supernatant of streptococcal preparation (OK-432)-stimulated spleen cells. Fukase Y, et al. **Microbiol Immunol** 1988;32(6):621–33
Expression of lymphokine genes in splenic lymphocytes of autoimmune mice. Umland S, et al. **Mol Immunol** 1989 Jul; 26(7):649–56
Modulation of mitogen-induced spleen cell proliferation and the antibody-forming cell response by beta-endorphin in vivo. Kusnecov AW, et al. **Peptides** 1989 Mar–Apr; 10(2):473–9
Quantitative differences in Ia antigen expression in the spleens of 15I5-B congenic and inbred chickens as defined by a new monoclonal antibody. Lillehoj HS, et al. **Poult Sci** 1988 Nov;67(11):1525–35
NF-kappa B protein purification from bovine spleen: nucleotide stimulation and binding site specificity. Lenardo MJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8825–9
Cytological basis of immune functions of the spleen. Immunocytochemical characterization of lymphoid and non-lymphoid cells involved in the 'in situ' immune response. van Rooijen N, et al. **Prog Histochem Cytochem** 1989;19(3):1–71 (174 ref.)
Significance of thymus differential ratio in immunologic status of graft tolerance. Otani Y, et al. **Res Exp Med (Berl)** 1988;188(4):305–17
Detection of individual interleukin 4- and gamma interferon-producing murine spleen cells after activation with T-cell mitogens. Sander B, et al. **Scand J Immunol** 1989 Sep;30(3):315–20
Immune response in deep cervical lymph nodes and spleen in the mouse after antigen deposition in different intracerebral sites. Widner H, et al. **Scand J Immunol** 1988 Nov;28(5):563–71
Comparison between thymus- and spleen-derived B-cell hybridomas. Zöller M. **Scand J Immunol** 1989 Aug; 30(2):271–5
Differential in vivo function of splenocytes and lymphocytes harvested from rejecting allografts. Heidecke CD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):184–5
The induction of immunologic unresponsiveness by antigen pretreatment is mediated by a CD4 T cell that appears transiently in the spleen and subsequently in the TDL. Quigley RL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):377–8
Lethal graft-versus-host reaction against non-H-2 antigens. I. Prevention of GVH-associated immunodeficiency by preimmunizing the donor against host-specific non-H-2 antigens. Bruley-Rosset M, et al. **Transplantation** 1989 Apr; 47(4):704–12
Abrogation of alloreactive spleen cell-induced second-set skin graft rejection in mice with donor-specific bone marrow cells. Pourshadi M, et al. **Transplantation** 1989 May;47(5):844–7
Mediation of the induction of immunologic unresponsiveness following antigen pretreatment by a CD4 (W3/25+) T cell appearing transiently in the splenic compartment and subsequently in the TDL. Quigley RL, et al. **Transplantation** 1989 Apr;47(4):689–96
Natural suppressor cells derived from adult spleen and thymus. Schwadron RB, et al. **Transplantation** 1989 Jul; 48(1):107–10
Presence of natural suppressor cells in the chicken embryo spleen and the effect of virus infection of the embryo on suppressor cell activity. Sharma JM. **Vet Immunol Immunopathol** 1988 Jul;19(1):51–66
[The role of liver, spleen and/or gastrointestinal immunization on the pathogenesis of mesangial IgA deposits] Wang L, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Apr;27(4):216–20, 260–1 (Eng. Abstr.) **(Chi)**
[The characterization of phagocytotic processes using morphometry] Schlöffel G, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):141–3 (Eng. Abstr.) **(Ger)**
[Influence of ambient thermal conditions on the immune response in mice] Kikuchi M. **Nippon Eiseigaku Zasshi** 1988 Oct;43(4):833–44 (Eng. Abstr.) **(Jpn)**
[A basic study of combination cancer immunotherapy with OK-432 and rIL-2—induction of lymphokine-activated killer (LAK) precursor cells in murine spleen by intravenous administration of OK-432] Shimoda K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20,23(7):1566–73 (Eng. Abstr.) **(Jpn)**
[A study of lymphocyte subsets in the peripheral blood, liver and spleen of patients with idiopathic portal hypertension (IPH)] Kato N. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):736–47 (Eng. Abstr.) **(Jpn)**
[Immunohistochemical analysis of splenic tissue in rats with destruction of the hypothalamic structures] Gushchin GV, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):319–22 (Eng. Abstr.) **(Rus)**
[Dynamic activity of the splenic lymphocytes during the modelling of chronic denervation-delymphatization of the kidneys in mice] Shestakova NK, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):572–4 (Eng. Abstr.) **(Rus)**
[The regulation of splenocyte natural killer activity in C3HA mice in the early period after hepatoma 22a transplantation] Filatova NA, et al. **Eksp Onkol** 1989;11(2):42–5 (Eng. Abstr.) **(Rus)**
[Effect of splenic cells sensitized with staphylococcal enterotoxin A on the metastasis of Lewis lung carcinoma

in mice] Shcheglovitova ON, et al. **Eksp Onkol** 1989; 11(2):54–7 (Eng. Abstr.) **(Rus)**

[Isolation of low–molecular weight fractions from the splenic tissue of calves that inhibit the proliferation of leukemic cells in mice] Sheleg SV. **Eksp Onkol** 1989;11(2):48–51 (Eng. Abstr.) **(Rus)**

[Induction of the antileukemic activity in nonimmune allogeneic splenocytes using spleen hemoregulators] Svirnovskil AI, et al. **Eksp Onkol** 1988;10(5):57–61 (Eng. Abstr.) **(Rus)**

[Detection of viral antigens in the lungs and spleen of mice infected with influenza virus] Ivanova IA, et al. **Mol Gen Mikrobiol Virusol** 1989 May;(5):39–45 (Eng. Abstr.) **(Rus)**

[Effect of an antiserum to splenocyte proteins on the development of an immune response in a toxic lesion of the liver in rats] Konoplia AI, et al. **Patol Fiziol Eksp Ter** 1988 Sep–Oct;(5):45–8 (Eng. Abstr.) **(Rus)**

[Evaluation of the activity of liver and spleen macrophages in children with hepatitis A and B] Reizis AR, et al. **Pediatriia** 1989;(7):20–3 (Eng. Abstr.) **(Rus)**

[Changes in the electrophoretic mobility of thymus, spleen and lymph node cells in tumor–bearing mice during dynamic tumor growth] Grinevich IuA, et al. **Tsitologiia** 1989 Feb;31(2):209–14 (Eng. Abstr.) **(Rus)**

[Antibody–dependent harmful effect of non–immune spleen cells in acute experimental tick–borne encephalitis in mice] Khozinskil VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):53–7 (Eng. Abstr.) **(Rus)**

[Enterobacteria antigens and the lymphoid tissue of rats] Faure–Fontenla MA, et al. **Bol Med Hosp Infant Mex** 1988 Aug;45(8):532–6 (Eng. Abstr.) **(Spa)**

INJURIES

Late presentation of splenic trauma after routine colonoscopy. Taylor FC, et al. **Am J Gastroenterol** 1989 Apr;84(4):442–3

Splenic injuries [letter] Reichl M, et al. **Arch Emerg Med** 1988 Dec;5(4):250

Selective nonoperative management of blunt splenic trauma in adults. Elmore JR, et al. **Arch Surg** 1989 May; 124(5):581–5; discussion 586

Hemostasis of solid viscus trauma by intraparenchymal injection of fibrin glue. Hauser CJ. **Arch Surg** 1989 Mar; 124(3):291–3

Fibrin glue achieves hemostasis in patients with coagulation disorders. Kram HB, et al. **Arch Surg** 1989 Mar; 124(3):385–7

Posttraumatic autotransplantation of spleen tissue. Mizrahi S, et al. **Arch Surg** 1989 Jul;124(7):863–5

Injuries of the spleen. Perry JF Jr. **Curr Probl Surg** 1988 Dec;25(12):749–859 (251 ref.)

Autogenous skin and fascia grafts as topical hemostatic agents in splenic injuries. Eitan A, et al. **Eur Surg Res** 1989; 21(1):60–4

Intraperitoneal splenosis: diagnosis by ultrasound and computed tomography. Maillard JC, et al. **Gastrointest Radiol** 1989 Spring;14(2):179–80

Splenic and liver trauma in children. Rescorla FJ, et al. **Indiana Med** 1989 Jul;82(7):516–20 (20 ref.)

Splenic injury—a prospective multicentre diagnostic study. Wiig JN, et al. **Injury** 1987 Mar;18(2):89–92

Splenic injury: nonoperative management in three patients with infectious mononucleosis. Gauderer MW, et al. **J Pediatr Surg** 1989 Jan;24(1):118–20

Immune consequences of nonoperative treatment of splenic trauma in the rat model. Karp MP, et al. **J Pediatr Surg** 1989 Jan;24(1):112–7; discussion 117

Splenic injury: a 5–year update with improved results and changing criteria for conservative management. Pearl RH, et al. **J Pediatr Surg** 1989 May;24(5):428–31

Splenic injury: a 5–year update with improved results and changing criteria for conservative management. Pearl RH, et al. **J Pediatr Surg** 1989 Jan;24(1):121–4; discussion 124–5

Hepatic and splenic conservation in trauma [letter] Reidy JF. **J R Soc Med** 1989 Feb;82(2):122–3

An unusual presentation of splenic rupture. Tyler G, et al. **J Trauma** 1988 Nov;28(11):1584–6

Blunt hepatic/splenic trauma in adults: CT–based classification and correlation with prognosis and treatment [letter] Conrad MR. **Radiology** 1989 Oct;173(1):285–6

CT diagnosis of blunt hepatic and splenic injuries: a look to the future [editorial] Jeffrey RB Jr. **Radiology** 1989 Apr; 171(1):17–8

Blunt splenic trauma in adults: CT–based classification and correlation with prognosis and treatment. Mirvis SE, et al. **Radiology** 1989 Apr;171(1):33–9

Splenic trauma in adults: impact of CT grading on management. Scatamacchia SA, et al. **Radiology** 1989 Jun; 171(3):725–9

A simplified approach to techniques of splenic salvage. Trooskin SZ, et al. **Surg Gynecol Obstet** 1989 Jun; 168(6):546–8

[Conservative treatment of splenic injuries in the adult] Schneider RP, et al. **Helv Chir Acta** 1989 Jun;56(1–2):195–8 (Eng. Abstr.) **(Fre)**

[Injuries of the spleen. Value of an absorbable perisplenic mesh. 15 cases] Feneyrou B, et al. **Presse Med** 1988 Sep 17;17(31):1570–2 (Eng. Abstr.) **(Fre)**

[Conservative treatment of injuries of the spleen] Ben Slimane T, et al. **Tunis Med** 1987 Jun–Jul;65(6–7):427–32 (Eng. Abstr.) **(Fre)**

[The conservative treatment of the spleen (apropos of 18 cases)] Kchila M, et al. **Tunis Med** 1989 Feb;67(2):91–4 (Eng. Abstr.) **(Fre)**

[Conservative surgery of splenic injuries] Rocca E, et al. **Minerva Chir** 1989 Feb 28;44(4):675–7 (18 ref.) **(Ita)**

[Embryologic and anatomo–surgical presuppositions in intraoperative injuries of the spleen. A clinical study] Tocchi A, et al. **Minerva Chir** 1989 Mar 31;44(6):937–42 (11 ref.) (Eng. Abstr.) **(Ita)**

[Autografting of the traumatized spleen] Ionescu NG, et al. **Rev Chir [Chir]** 1988 Sep–Oct;37(5):363–70 (Eng. Abstr.) **(Rum)**

[Procedures in splenic injury] Shapkin VS, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):71–4 (Eng. Abstr.) **(Rus)**

[Diagnosis and treatment of intrasplenic hematoma] Iudin MIa, et al. **Klin Khir** 1988;(9):36–8 (Eng. Abstr.) **(Rus)**

[Splenectomy during surgery of the abdominal organs] Utkin VV, et al. **Klin Khir** 1988;(9):61–2 **(Rus)**

[Diagnosis and treatment of traumatic rupture of the spleen] Vučković B, et al. **Acta Chir Iugosl** 1988;35(2):249–59 (Eng. Abstr.) **(Scr)**

INNERVATION

Evidence for co–transmitter role of neuropeptide Y in the pig spleen. Lundberg JM, et al. **Br J Pharmacol** 1989 Mar; 96(3):675–87

Pharmacological characterization of neuropeptide Y and noradrenaline mechanisms in sympathetic control of pig spleen. Lundberg JM, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):103–13

Parallel development of noradrenergic innervation and cellular compartmentation in the rat spleen. Ackerman KD, et al. **Exp Neurol** 1989 Mar;103(3):239–55

Sympathetic and afferent neurons projecting in the splenic nerve of the cat. Baron R, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):109–13

METABOLISM

12S,19– and 12S,20–dihydroxyeicosanoids: novel 12S–hydroxy–5,8–cis–10–trans–14–cis–eicosatetraenoic acid metabolites formed by hydroxylation and reduction in murine lymphocytes. Danilowicz RM, et al. **Arch Biochem Biophys** 1989 May 15;271(1):72–83

Isolation and characterization of thymosin beta 9 Met from pork spleen. Hannappel E, et al. **Arch Biochem Biophys** 1989 Sep;273(2):396–402

Translational regulation of ferritin synthesis in rat spleen: effects of iron and inflammation. Campbell CH, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):453–9

Purification and identification of two pertussis–toxin–sensitive GTP–binding proteins of bovine spleen. Morishita R, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1280–5

Polyamines in murine splenic lymphocytes. Marsh LL, et al. **Biochem Int** 1988 Dec;17(6):1071–8

Mössbauer spectroscopic study of the initial stages of iron–core formation in horse spleen apoferritin: evidence for both isolated Fe(III) atoms and oxo–bridged Fe(III) dimers as early intermediates. Bauminger ER, et al. **Biochemistry** 1989 Jun 27;28(13):5486–93

Na+–dependent and –independent transport of uridine and its phosphorylation in mouse spleen cells. Plagemann PG, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):315–25

Effect of cholesterol on the uptake and intracellular degradation of liposomes by liver and spleen; a combined biochemical and gamma–ray perturbed angular correlation study. Roerdink FH, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):234–40

Hyaluronic acid content and hyaluronidase activity in liver and spleen of rats with hydralazine–induced collagen–like syndrome. Dróżdż M, et al. **Biomed Biochim Acta** 1988; 47(3):247–50

Splenic accumulation of 99Tcm–methylene diphosphonate [letter] Alevizaki C, et al. **Br J Radiol** 1989 May;62(737):497

Splenic accumulation of technetium 99m in chronic lymphocytic leukaemia. McHugh K, et al. **Br J Radiol** 1988 Oct;61(730):957–9

Relationship between external calcium concentration and noradrenaline– and neuropeptide Y–evoked release from perfused dog spleen. Saxena VK, et al. **Brain Res** 1989 May 8;486(2):310–5

Ah receptor in spleen of rodent and primate species: detection by binding of 2,3,7,8–tetrachlorodibenzo–p–dioxin. Roberts EA, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):594–600

Local re–utilization of thymidine in normal mouse tissues as measured with iododeoxyuridine. Quackenbush RC, et al. **Cell Tissue Kinet** 1988 Nov;21(6):381–7

C1q production and C1q–mediated immune complex retention in lymphoid follicles of rat spleen. Maeda M, et al. **Cell Tissue Res** 1988;254(3):543–51

Production of interleukin 6 by human spleen cells stimulated with streptococcal preparation OK–432. Fukui H, et al. **Immunol Lett** 1989 May;21(2):127–30

Receptors on lymphocytes for endogenous splenic glycosaminoglycans. Bradbury MG, et al. **Immunology** 1989 Apr;66(4):546–53

In vitro uptake and release of epinephrine in chicken spleen slices. Choudhury C, et al. **Indian J Exp Biol** 1988 Jul; 26(7):538–9

Studies on ferritin in rat liver and spleen during repeated phlebotomy. Mostert LJ, et al. **Int J Biochem** 1989; 21(1):39–47

Purification and characterization of acid beta–D–galactosidase from rabbit spleen. Rodríguez–Berrocal FJ, et al. **J Biochem (Tokyo)** 1988 Jul; 104(1):66–71

Endothelin–1 releases eicosanoids from rabbit isolated perfused kidney and spleen. Rae GA, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S89–92; discussion S102

Avian T cells expressing gamma delta receptors localize in the splenic sinusoids and the intestinal epithelium. Bucy RP, et al. **J Immunol** 1988 Oct 1;141(7):2200–5

Limiting dilution analysis of TNF producing cells in C3H/HeJ mice. Lattime EC, et al. **J Immunol** 1988 Nov 15;141(10):3422–8

IL–2 production, IL–2 receptor expression, and IL–2 responsiveness of spleen and mesenteric lymph node cells from inbred mice infected with Trichinella spiralis. Zhu DH, et al. **J Immunol** 1989 May 1;142(9):3262–7

Brain, liver and spleen detection of liposomes after rectal administration. Gabev EE, et al. **J Microencapsul** 1985 Apr–Jun;2(2):85–9

Changes in lymphocyte beta–adrenergic receptor density and noradrenaline content of the spleen are early indicators of immune reactivity in acute experimental allergic encephalomyelitis in the Lewis rat. Mackenzie FJ, et al. **J Neuroimmunol** 1989 Jul;23(2):93–100

Production of a factor inhibiting tumor cell migration by spleen cells from tumor–bearing mice. Raichev I, et al. **Jpn J Med Sci Biol** 1988 Apr;41(2):49–56

Hydrolysis of 2',3'–cyclic adenosine monophosphate and 3',5'–cyclic adenosine monophosphate in subcellular fractions of normal and neoplastic mouse spleen. Konings AW, et al. **Life Sci** 1974 Aug 1;15(3):491–9

Analysis by the Carr–Purcell–Meiboom–Gill sequence of the influence of P388 leukemia and of cis–diamminedichloroplatinum(II) nephrotoxicity on water compartmentalization in kidneys and spleens of mice. François A, et al. **Magn Reson Med** 1988 Aug;7(4):449–62

Regulation of lymphokine production in experimental and human Chagas' disease. Tarleton RL. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:268–71

Bindings of toxic shock syndrome toxin–1 and staphylococcal enterotoxins A, B, and C to rabbit spleen cells. Fujikawa H, et al. **Microbiol Immunol** 1989;33(5):381–90

Cyclic AMP levels in lung and spleen tissue of mice treated with pertussis toxin. Torre D, et al. **Microbiologica** 1989 Jan;12(1):29–33

Co–release of neuropeptide Y and noradrenaline from pig spleen in vivo: importance of subcellular storage, nerve impulse frequency and pattern, feedback regulation and resupply by axonal transport. Lundberg JM, et al. **Neuroscience** 1989;28(2):475–86

Functional corticotropin–releasing factor (CRF) receptors in mouse spleen: evidence from adenylate cyclase studies. Webster EL, et al. **Peptides** 1989 Mar–Apr;10(2):395–401

Identification of erythropoietin receptors in isolated membranes from Friend virus infected mice spleen cells. Wang FF, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Apr;12(2):57–61

Oxygen consumption by portal vein–drained organs and by whole animal in conscious growing swine. Yen JT, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):393–8

Effects of chronic cocaine administration on rat cardiac and splenic norepinephrine levels. St. John–Allan K, et al. **Proc West Pharmacol Soc** 1989;32:61–3

Alterations in splenic and hepatic protein kinase C in sepsis and chronic endotoxemia. Hermiller JB, et al. **Prog Clin Biol Res** 1989;286:61–70

Thymic hormones and prostaglandins. I. Lack of stimulation of prostaglandin production by thymic hormones. Homo–Delarche F, et al. **Prostaglandins** 1989 Aug; 38(2):183–96

Quantitation of MR relaxation effects of iron oxide particles in liver and spleen. Majumdar S, et al. **Radiology** 1988 Dec; 169(3):653–8

Direct evidence for circulating apoSAA as the precursor of tissue AA amyloid deposits. Tape C, et al. **Scand J Immunol** 1988 Sep;28(3):317–24

[Effects of protein malnutrition on the metabolism of arachidonic acid in the rat stomach and spleen] Yue TL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):155–9 (Eng. Abstr.) **(Chi)**

[Increased affinity of liposomes derived from total spleen and liver lipids to spleen cells] Kulikov VI, et al. **Biokhimiia** 1988 May;53(5):786–92 (Eng. Abstr.) **(Rus)**

[Modulation of arachidonic acid cascade by gangliosides. The effect of gangliosides on lipoxygenase oxidation of arachidonic acid in mouse splenocytes] Bezuglov VV, et al. **Dokl Akad Nauk SSSR** 1988;300(3):725–7 **(Rus)**

[Direct regulatory action of erythrocyte membranes on the production of erythropoiesis–modulating factor in spleen cells] Pukhova IaI, et al. **Dokl Akad Nauk SSSR** 1989; 305(3):721–5 **(Rus)**

[Purine compound transport and metabolism in the thymus and spleen lymphocytes of C3HA mice during the growth of hepatoma 22] Pimenov AM, et al. **Eksp Onkol** 1989; 11(4):33–7 (Eng. Abstr.) **(Rus)**

[Effect of acute vitamin B1 deficiency caused by oxythiamine on protein biosynthesis in the spleen during immunogenesis]

Dvorianinovich LN. **Vopr Med Khim** 1988 Jul–Aug; 34(4):71–4 (Eng. Abstr.) **(Rus)**

[Change in nucleic acid synthesis in the spleen of rats with acute deficit of vitamin B1 during immunogenesis] Dvorianinovich LN. **Vopr Med Khim** 1989 May–Jun; 35(3):92–6 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

In vitro interaction of M. leprae–infected Schwann cells and splenic cells. Mehta R, et al. **Acta Neuropathol (Berl)** 1988; 76(4):407–10

Spirochetes in the spleen of a patient with chronic Lyme disease. Cimmino MA, et al. **Am J Clin Pathol** 1989 Jan; 91(1):95–7

Recovery from acute virus infection. Role of cytotoxic T lymphocytes in the elimination of lymphocytic choriomeningitis virus from spleens of mice. Lehmann–Grube F, et al. **Ann N Y Acad Sci** 1988; 532:238–56 (61 ref.)

Immunity to Brucella abortus induced in mice by popliteal lymph node restricted strain 19 vaccination. Plommet M, et al. **Ann Rech Vet** 1989;20(1):73–81

PARASITOLOGY

Pathophysiology of experimental leishmaniasis: the role of parasite physiology in the development of metastatic disease. Hill JO. **Am J Trop Med Hyg** 1988 Sep; 39(3):256–60

Trypanosoma cruzi: explant organ cultures from mice with chronic Chagas' disease. McCabe RE, et al. **Exp Parasitol** 1989 May;68(4):462–9

Transfer of Eimeria nieschulzi using extraintestinal tissue. Mayberry LF, et al. **J Parasitol** 1989 Jun;75(3):470–2

Visceral leishmaniasis: drug carrier system characteristics and the ability to clear parasites from the liver, spleen and bone marrow in Leishmania donovani infected BALB/c mice. Carter KC, et al. **J Pharm Pharmacol** 1989 Feb;41(2):87–91

Sporulated coccidian oocysts resembling Goussia Labbe, 1896 in the viscera of Nile crocodiles. Gardiner CH, et al. **J Wildl Dis** 1986 Oct;22(4):575–7

Trypanosoma cruzi antigens detected by immunoelectron microscopy in the spleen of mice serologically positive but parasitologically cured by chemotherapy. (Preliminary report). Andrade SG, et al. **Rev Soc Bras Med Trop** 1988 Jan–Mar;21(1):41–2

Detection of Leishmania donovani in live experimental hamsters. Kaddu JB, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):229–30

PATHOLOGY

Peliosis hepatis. An unusual case involving the spleen and lymph nodes. Kubosawa H, et al. **Acta Pathol Jpn** 1989 Mar;39(3):212–5

Characterization of splenic structure in Hodgkin disease by using narrow–band filtration of backscattered ultrasound. Friedman PA, et al. **AJR Am J Roentgenol** 1989 Jun; 152(6):1197–203

The distribution of non–Hodgkin's lymphoma in the lymphoid compartments of the human spleen. van Krieken JH, et al. **Am J Surg Pathol** 1989 Sep;13(9):757–65

Mechanisms of splenic control of murine malaria: tissue culture studies of the erythropoietic interplay of spleen, bone marrow, and blood in lethal (strain 17XL) Plasmodium yoelii malaria in BALB/c mice. Weiss L, et al. **Am J Trop Med Hyg** 1989 Aug;41(2):135–43

Mycotoxicosis caused by aerosolized T–2 toxin administered to female mice. Thurman JD, et al. **Am J Vet Res** 1988 Nov;49(11):1928–31

Newborn splenic volumes vary under different malaria endemic conditions. Corkill JA, et al. **Arch Dis Child** 1989 Apr;64(4):541–5

Idiopathic thrombocytopenic purpura in patients at risk for acquired immunodeficiency syndrome. Histopathologic study, immunohistochemistry, and ultrastructural study on six spleens. Rousselet MC, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1242–50

Some observations on the response of ring–necked pheasants to inoculation with various strains of cell–culture–propagated type II avian adenovirus. Fadly AM, et al. **Avian Dis** 1988 Jul–Sep;32(3):548–52

Prognostic significance of splenic follicle size in splenectomized idiopathic thrombocytopenic purpura patients. Arendt T, et al. **Blut** 1988 Dec;57(6):347–9

The pathogenesis of splenic extramedullary hematopoiesis in metastatic carcinoma. O'Keane JC, et al. **Cancer** 1989 Apr 15;63(8):1539–43

Prevention of doxorubicin–induced hematotoxicity in mice by interleukin 1. Eppstein DA, et al. **Cancer Res** 1989 Jul 15;49(14):3955–60

A study of the reliability of clinical palpation of the spleen. Zhang B, et al. **Clin Lab Haematol** 1989;11(1):7–10

Splenic adherent cells induce T cell hyporesponsiveness in experimental hepatic failure. Roughneen PT, et al. **Curr Surg** 1989 Jan–Feb;46(1):36–8

Familial hemophagocytic lymphohistiocytosis. Lachman MF, et al. **Diagn Cytopathol** 1988;4(2):121–4

The splenomegaly of myeloproliferative and lymphoproliferative disorders: splenic cellularity and vascularity. Zhang B, et al. **Eur J Haematol** 1989 Jul; 43(1):63–6

Chronic granulomatous disease of childhood. Report of two cases with unusual involvement of the gastric antrum and spleen. Orduña M, et al. **Eur J Radiol** 1989 Feb;9(1):67–70

Effects of isobaric hypoxia on murine medullary and splenic megakaryocytopoiesis. Cullen WC, et al. **Exp Hematol** 1989 Mar;17(3):246–51

Histological changes in the spleen and liver of C57BL/6 and A/J mice during Plasmodium chabaudi AS infection. Stevenson MM, et al. **Exp Mol Pathol** 1989 Aug; 51(1):80–95

Magnetic resonance imaging in hemochromatosis: extrahepatic iron deposition. Housman JF, et al. **Gastrointest Radiol** 1989 Winter;14(1):59–60

The spleen in Hodgkin's disease. An immunohistochemical study of lymphocyte subpopulations and macrophages. Falk S, et al. **Histopathology** 1988 Aug;13(2):139–48

Splenic marginal zone lymphocytes and related cells in the lymph node: a morphologic and immunohistochemical study. van Krieken JH, et al. **Hum Pathol** 1989 Apr; 20(4):320–5

Ultrasonographic features of splenic lymphosarcoma in dogs: 12 cases (1980–1986). Wrigley RH, et al. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1565–8

Pathology of the spleen in large granular lymphocyte leukaemia [letter] Griffiths DF, et al. **J Clin Pathol** 1989 Aug;42(8):885

Splenic accumulation of interleukin–3–dependent hematopoietic cells in Friend erythroleukemia. Spiro C, et al. **J Virol** 1989 Oct;63(10):4434–7

Differentiation of mononucleosis from hepatitis by sonographic measurement of spleen size. Ishibashi H, et al. **JCU** 1987 Jun;15(5):313–6

Pigmented spleens in C57BL mice. Veninga TS, et al. **Lab Anim** 1989 Jan;23(1):16–20

Cytoplasmic foreign material in liver and spleen. An iatrogenic complication of haemodialysis. Giangrande A, et al. **Life Support Syst** 1983;1 Suppl 1:223–6

Splenic fibrosis in patients with chronic schistosomiasis. Borojevic R. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:253–5

Pathology of the lymph node and spleen in systemic mast cell disease. Travis WD, et al. **Mod Pathol** 1988 Jan; 1(1):4–14

The spleen in acquired immunodeficiency syndrome (AIDS). Falk S, et al. **Pathol Res Pract** 1988 Aug;183(4):425–33

Case 4. Wolman's disease. Mitsudo S, et al. **Pediatr Pathol** 1989;9(2):193–8

Siderotic nodules in the spleen: MR imaging of portal hypertension. Minami M, et al. **Radiology** 1989 Sep; 172(3):681–4

Gamna–Gandy bodies of the spleen: evaluation with MR imaging. Sagoh T, et al. **Radiology** 1989 Sep;172(3):685–7

Effect of Proteus mirabilis on liver and spleen weight and the hemagglutinin response to SRBC in rats. Dlugovitzky DG, et al. **Rev Latinoam Microbiol** 1988 Jan–Mar; 30(1):31–5

Sonography of the liver, gallbladder, and spleen. Nyland TG, et al. **Semin Vet Med Surg (Small Anim)** 1989 Feb; 4(1):13–31 (44 ref.)

Influences of tumor cell number upon rejection ability and morphologic response of murine spleen. Hsu KY. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jun;87(6):595–601

Immunopathological changes in the spleen of BALB/c mice treated with either cyclosporine A or cyclosporine G. Masri MA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):952–3

Epithelioid granulomatosis with initial and predominant manifestation in spleen. Morphological and immunohistochemical analysis of six cases. Falk S, et al. **Virchows Arch [A]** 1988;414(1):69–76

Peritonitis and massive granulocytic infiltration of the spleen in adult Still's disease. Poralla T, et al. **Z Rheumatol** 1988 Sep–Oct;47(5):364–5

[Magnetic resonance imaging (MRI) of the spleen and bone marrow in hematology] Kurdziel JC, et al. **J Belge Radiol** 1988;71(2):211–29 (Eng. Abstr.) **(Fre)**

[Quantitative bacterial studies of experimentally–infected laboratory animals. 5. The spleen size test as a supplementary method in the analysis of the pathogen–host relations in experimental infections with Salmonella dublin] Selbitz HJ, et al. **Arch Exp Veterinarmed** 1988 Nov; 42(6):905–14 (Eng. Abstr.) **(Ger)**

[Basic abdominal ultrasound diagnosis course. The normal spleen] Kellner H. **Bildgebung** 1987–89;56 Suppl 1:55–8 **(Ger)**

[B– and T–lymphocyte compartments in the spleen in idiopathic thrombocytopenic purpura] Arendt T, et al. **Folia Haematol (Leipz)** 1988;115(5):711–8 (Eng. Abstr.) **(Ger)**

[Size relations of the spleen and lymph nodes in normal and pathologic processes] Watzinger F, et al. **Ultraschall Med** 1989 Feb;10(1):29–32 (Eng. Abstr.) **(Ger)**

[Hyposplenism in celiac disease in children] Fasce L, et al. **Minerva Pediatr** 1988 Sep;40(9):535–8 (Eng. Abstr.) **(Ita)**

[Ultrasonically guided splenic biopsy in patients with malignant lymphoma] Suzuki T. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):982–7 (Eng. Abstr.) **(Jpn)**

[Roentgenoradiological and ultrasonic diagnosis of liver and spleen involvement in patients with Hodgkin's disease] Balashov AT, et al. **Ter Arkh** 1988;60(9):73–6 (Eng. Abstr.) **(Rus)**

[Laparoscopic hemostatic procedures in patients with coagulation disorders undergoing hepatic and splenic puncture biopsies] Ferrando J, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):447–9 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Bidirectional cross–talk of intracellular signaling systems in splenocytes from athymic nude mice. Wiener E, et al. **Ann N Y Acad Sci** 1988;551:264–6

Regeneration and phagocytic function of devascularized spleens. Clayer MT, et al. **Aust N Z J Surg** 1989 Aug; 59(8):653–8

Potassium ion dependent proton efflux and depolarization from spleen lysosomes. Moriyama Y. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):211–6

Involvement of splenocytes in the control of corpus luteum function in the rat. Saito S, et al. **Endocrinol Jpn** 1988 Dec; 35(6):891–8

5–fluorouracil–induced thrombocytosis in mice is independent of the spleen and can be partially reproduced by repeated doses of cytosine arabinoside. Ebbe S, et al. **Exp Hematol** 1989 Aug;17(7):822–6

Separation of CFU–S from primitive cells responsible for reconstitution of the bone marrow hemopoietic stem cell compartment following irradiation: evidence for a pre–CFU–S cell. Ploemacher RE, et al. **Exp Hematol** 1989 Mar;17(3):263–6

Bone resorption by isolated chick osteoclasts in culture is stimulated by murine spleen cell supernatant fluids (osteoclast–activating factor) and inhibited by calcitonin and prostaglandin E2. de Vernejoul MC, et al. **J Bone Miner Res** 1988 Feb;3(1):69–80

Tuftsin stimulates IL–1 production by human mononuclear cells, human spleen cells and mouse spleen cells in vitro. Spirer Z, et al. **J Clin Lab Immunol** 1989 Jan;28(1):27–31

Macrophage subset repopulation in the spleen: differential kinetics after liposome–mediated elimination. van Rooijen N, et al. **J Leukoc Biol** 1989 Feb;45(2):97–104

Roles of spleen and liver in the clearance of Escherichia coli K1 bacteraemia in infant rats. Pelkonen S, et al. **Microb Pathog** 1989 Feb;6(2):93–102

On the origin of cells infiltrating lung interstitia: an experimental and quantitative research in splenectomized rabbits. Ionescu J, et al. **Morphol Embryol (Bucur)** 1988 Jul–Sep;34(3):195–205

Formation of intracellular vesicles in neonatal and adult erythrocytes: evidence against the concept of neonatal hyposplenism. Sills RH, et al. **Pediatr Res** 1988 Dec; 24(6):703–8

An electrodeless measuring technique for determining conductivity of biological tissues at radio frequencies. Li L, et al. **Phys Med Biol** 1988 Dec;33(12):1443–52

Regeneration of the spleen, thymus and femoral bone marrow following irradiation of diethyldithiocarbamate–protected mice. Kautská J, et al. **Radiobiol Radiother (Berl)** 1988; 29(4):409–16

Migration pattern of lymphocyte subsets in the normal rat and the influence of splenic tissue. Westermann J, et al. **Scand J Immunol** 1989 Feb;29(2):193–201

[Hemopoietic role of the spleen of rabbits] Piacentini G, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1091–4 (Eng. Abstr.) **(Ita)**

[Hepato–portal–splenic dynamics after hepatectomies] Yamanaka N, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep; 89(9):1422–5 (Eng. Abstr.) **(Jpn)**

[Role of the spleen in the regulation of the calcium content of the blood plasma in health and in stress] Doroshenko NM, et al. **Fiziol Zh** 1989 Jan–Feb;35(1):17–21 (Eng. Abstr.) **(Rus)**

[The role of the spleen in regulating the content of 11–hydroxycorticosteroids and biogenic amines of the blood plasma in rats under stress] Tiuleneva GV, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):47–50 (Eng. Abstr.) **(Rus)**

[Changes in the proliferative activity of the corneal epithelium and the regenerating liver in partial splenectomy in mice] Druzhkova TA. **Ontogenez** 1988 Jul–Aug; 19(4):390–3 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Lack of functional asplenia in HIV infection [letter] Levy DS, et al. **AIDS Res Hum Retroviruses** 1989 Jun;5(3):257–8

Ferrokinetic study of splenic erythropoiesis: relationships among clinical diagnosis, myelofibrosis, splenomegaly, and extramedullary erythropoiesis. Beguin Y, et al. **Am J Hematol** 1989 Oct;32(2):123–8

Spleen dysfunction in hemoglobinopathies determined by pitted red cells. Grover R, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):340–3

Reversible splenic dysfunction [letter] Mallouh AA. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):276

Scintigraphic quantitation of splenic function in SLE: correlation with IgM levels in serum. Wilson WA, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):251–5

Functional hyposplenia after allogeneic bone marrow transplantation is detected by epinephrine stimulation test and splenic ultrasonography. Knecht H, et al. **Eur J Haematol** 1988 Oct;41(4):382–7

Functional asplenia in childhood onset systemic lupus erythematosus. Malleson P, et al. **J Rheumatol** 1988 Nov; 15(11):1648–52

Suppression of splenic natural killer cell activity in rats with

brain tumors. Imaya H, et al. **Neurosurgery** 1988 Jul; 23(1):23–6

Malaria infection in rats with stimulated splenic red pulp: the blood flow and protective effect in normal and transplanted splenic tissue. Westermann J, et al. **Res Exp Med (Berl)** 1988;188(4):267–76

Role of the spleen and rosette-formation response in experimental Eperythrozoon ovis infection. Hung AL, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):119–26

The role of the spleen in the neuroinvasion of scrapie in mice. Kimberlin RH, et al. **Virus Res** 1989 Mar;12(3):201–11

[Effects of the spleen and tuftsin on the growth and metastasis of murine ascitic hepatoma] Chen S. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;68(11):615–8, 42 (Eng. Abstr.) (Chi)

[Diagnosis and clinical aspects of functional disorders of the spleen] Gabryś K. **Wiad Lek** 1988 Apr 15;41(8):500–6 (19 ref.) (Eng. Abstr.) (Pol)

RADIATION EFFECTS

Effects of treatment of donor mice with phenylhydrazine and 5-fluorouracil on thymidylate synthase activity and growth of bone marrow grafts in spleens of irradiated recipients. Panfil B, et al. **Acta Pol Pharm** 1988;45(3):266–70

Splenic irradiation as primary therapy for prolymphocytic leukemia. Kiss A, et al. **Am J Hematol** 1989 Mar; 30(3):188–9

The effects of splenic irradiation on lymphocyte subpopulations in chronic B-lymphocytic leukemia. Terstappen LW, et al. **Eur J Haematol** 1988 Nov; 41(5):496–505

Radionuclide production and partial radiochemical characterization following fast neutron irradiation of mouse spleens. Mellenberg DE, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):631–5

A study of splenic irradiation in chronic lymphocytic leukemia. Guiney MJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):225–9

Booster irradiation to the spleen following total body irradiation. A new immunosuppressive approach for allogeneic bone marrow transplantation. Lapidot T, et al. **J Immunol** 1988 Oct 15;141(8):2619–24

Organ-specific metallothionein induction in mice by X irradiation. Koropatnick J, et al. **Radiat Res** 1989 Aug; 119(2):356–65

The effect of ex vivo irradiation of donor spleen on pancreas allograft rejection in the dog. Hong JH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1132–3

[Streptococcus B meningitis after splenic irradiation of Hodgkin's disease (letter)] Hennequin C, et al. **Presse Med** 1989 Jan 7–14;18(1):34 (Fre)

[Cellular repair of sublethal radiation damage in 2 subpopulations of the CFUs from embryonal liver and bone marrow of adult mice] Gan OI, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):89–91 (Eng. Abstr.) (Rus)

[Comparative radiosensitivity of CFUs of the mouse bone marrow and embryonal liver forming 7- and 11-day colonies] Gan OI, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):93–5 (Eng. Abstr.) (Rus)

[The effect of regenerating gastrocnemius muscle on the radiosensitivity of spleen cells of C57Bl mice] Samokhvalova NS, et al. **Dokl Akad Nauk SSSR** 1988; 300(4):995–8 (Rus)

[Changes in the spleen structure during treatment of patients with generalized Hodgkin's disease] Gubareva AV, et al. **Eksp Onkol** 1988;10(5):70–3 (Eng. Abstr.) (Rus)

[Changes in the capacity of CFU-S to form macrocolonies under long-term chronic irradiation] Akhmadieva AKh, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):211–4 (Eng. Abstr.) (Rus)

[Quantitative evaluation of the combined effect of external gamma radiation and internal alpha radiation from 239Pu based on biochemical indices of the organs of the rat immune system] Elkina NI, et al. **Radiobiologiia** 1988 Sep-Oct;28(5):695–9 (Eng. Abstr.) (Rus)

[Effect of He-Ne laser radiation on the chemiluminescence of mouse spleen cells] Karu TI, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):230–4 (Eng. Abstr.) (Rus)

[Differential radiation susceptibility of endogenous precursor cells forming "early" and "late" hematopoietic foci in the spleen of mice] Man'ko VM, et al. **Radiobiologiia** 1989 May-Jun;29(3):315–20 (Eng. Abstr.) (Rus)

[Effect of tritium oxide in a wide range of doses on the nucleic acid metabolism of the rat spleen] Mushkacheva GS, et al. **Radiobiologiia** 1989 Jul-Aug;29(4):554–7 (Eng. Abstr.) (Rus)

[Modification by cystamine of radiation-induced free radical damage to biomolecules in tissues of mouse organs] Svistunenko DA, et al. **Radiobiologiia** 1989 Jan-Feb; 29(1):3–7 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Perfluoroctylbromide and hepatosplenic computed tomography. Preliminary clinical study. Bruneton JN, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S306–7

Changes in liver and spleen volumes in alcoholic liver disease. Sato H, et al. **J Hepatol** 1989 Mar;8(2):150–7

Liver, spleen, and vessels: preliminary clinical results of CT with perfluorooctylbromide. Bruneton JN, et al. **Radiology** 1989 Jan;170(1 Pt 1):179–83

[A new contrast material for CT of the liver and spleen. Iodinated oil emulsified by a non-ionic contrast material] Hori S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25;48(12):1503–10 (Eng. Abstr.) (Jpn)

[Changes in liver and spleen volume in various types of compensated liver cirrhosis—measurement by computed tomography] Hoshino H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2577–82 (Eng. Abstr.) (Jpn)

RADIONUCLIDE IMAGING

Diffuse bone marrow metastases observed incidental to liver-spleen imaging. Campeau RJ, et al. **Clin Nucl Med** 1988 Dec;13(12):919

Liver-spleen visualization following aerosol lung ventilation with technetium-99m DTPA. Goyer P, et al. **Clin Nucl Med** 1989 Feb;14(2):141–2

Abnormal Tc-99m MAA accumulation. Hiltz A, et al. **Clin Nucl Med** 1988 Oct;13(10):727–9

Enlarged left lobe of the liver mistaken for a mass in the splenic region. Rao MG. **Clin Nucl Med** 1989 Feb;14(2):134

Abdominal trauma with leukocytosis and Howell-Jolly bodies. Idiopathic functional asplenia. Spencer RP, et al. **Clin Nucl Med** 1988 Jul;13(7):544

Splenic imaging in a patient with functional asplenia. Wagman PG, et al. **Clin Nucl Med** 1989 Apr;14(4):264–7

Optimum processing protocols for volume determination of the liver and spleen from SPECT imaging with technetium-99m sulfur colloid. Mut F, et al. **J Nucl Med** 1988 Nov;29(11):1768–75

Splenic dynamics of indium-111 labeled platelets in idiopathic thrombocytopenic purpura. Syrjälä MT, et al. **J Nucl Med** 1989 Sep;30(9):1546–9

A comparison of liver-spleen ratios and uptakes obtained using planar and tomographic techniques. Chandler ST. **Nucl Med Commun** 1989 Apr;10(4):297–307

[Estimation of the volume and percent uptake of the liver and spleen by SPECT] Yamagata A. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1252–9 (Eng. Abstr.) (Jpn)

SECRETION

IL-1 secretion and membrane IL-1 expression by neonatal spleen cells during soluble antigen presentation. Levin D, et al. **Cell Immunol** 1988 Oct 15;116(2):382–91

SURGERY

Healing of experimental laser wound in liver and spleen. Tichý M, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 120:161–8

Splenorrhaphy for blunt trauma with a functioning distal splenorenal shunt: rationale and report of a case. Arnold JH, et al. **Am Surg** 1988 Oct;54(10):627–9

Splenic repair for trauma. Ghosh S, et al. **Br J Surg** 1988 Nov;75(11):1139–40

Comparison of sites for transplantation of canine pancreatic microfragments. Evans MG, et al. **Diabetes Res** 1989 Jan; 10(1):35–41

Subcutaneous transposition of the spleen enhances the survival rate following 90% hepatectomy in rats. Koga A, et al. **Experientia** 1989 May 15;45(5):457–9

Ducto-insular proliferation of beta-cells after syngeneic islet transplantation into the spleen of streptozotocin-diabetic Lewis rats. Wohlrab F, et al. **Int J Pancreatol** 1989 Jul; 5(1):77–83

Splenic resection with the Contact Nd:YAG laser system. Joffe SN, et al. **J Pediatr Surg** 1988 Sep;23(9):829–34

Allotransplantation of hepatocytes into spleen prolongs survival and improves albumin levels in cirrhotic dogs. Benito JM, et al. **Transplant Proc** 1989 Jun;21(3):3520

Transplantation of spheroidal aggregate cultured hepatocytes into the rat spleen. Saito S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2374–7

[Experimental and clinical use of porous biological membranes in the injured solid intra-abdominal organs] Li H, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):18–9, 60 (Eng. Abstr.) (Chi)

[Suturing splenic injuries in adults] Trnka J. **Rozhl Chir** 1988 Dec;67(12):808–9 (Eng. Abstr.) (Cze)

[Spleen-preserving surgery using a polyglactin (Vicryl) perisplenic prosthesis] Noterdaeme PM, et al. **Acta Chir Belg** 1987 Sep-Oct;87(5):282–6 (Eng. Abstr.) (Fre)

[A method of arrest of parenchymatous hemorrhage] Urakov AL, et al. **Vestn Khir** 1988 May;140(5):113–4 (Rus)

[Solitary splenic abscess treated by splenotomy (letter)] Monteagudo M, et al. **Med Clin (Barc)** 1988 Jul 2;91(6):239 (Spa)

TRANSPLANTATION

Vascular structure of splenic autografts in the rat kidney. Sasaki K. **Anat Anz** 1988;166(1–5):297–304

Posttraumatic autotransplantation of spleen tissue. Mizrahi S, et al. **Arch Surg** 1989 Jul;124(7):863–5

In vivo and in vitro synergistic antitumor effect of interleukin-2-cultured tumor-bearer spleen cells and immune fresh spleen cells. Kan N, et al. **Cancer Immunol Immunother** 1989;28(4):260–6

Adoptive transfer of experimental autoimmune hepatitis in mice—cellular interaction between donor and recipient mice. Ogawa M, et al. **Clin Exp Immunol** 1988 Aug; 73(2):276–82

Evaluation of the subrenal capsular space as a potential site for splenic autoimplantation. Callery MP, et al. **Curr Surg** 1989 May-Jun;46(3):207–10

Prevention of diabetes in BB/Wor rat by single transfusion of spleen cells. Parameters that affect degree of protection. Burstein D, et al. **Diabetes** 1989 Jan;38(1):24–30

Improved survival with splenic autotransplantation and fibronectin therapy following endotoxin administration in rats. Calise F, et al. **Eur Surg Res** 1989;21(1):18–24

Induction of indomethacin-sensitive suppressor cells by xenogeneic blood transfusion in mice. Kubera M, et al. **Folia Biol (Krakow)** 1989;37(1–2):73–82

Effect of neonatal spleen and thymus implants on H-Y incompatible skin grafts. Skowron-Cendrzak A, et al. **Folia Biol (Krakow)** 1989;37(1–2):101–4

The role of prostaglandin E in the natural suppressor activity of spleen cells from newborn rats. Bubak-Šatora M, et al. **Folia Biol (Praha)** 1988;34(3):202–6

Functional value of omental autotransplanted splenic tissue in rabbits. Mizrahi S, et al. **Isr J Med Sci** 1988 Dec; 24(12):706–9

Influence of donor and host age on the regeneration and blood flow of splenic transplants. Westermann J, et al. **J Pediatr Surg** 1988 Sep;23(9):835–8

Immunologic consequences of combined pancreas-spleen transplantation in the rat. Schulak JA, et al. **J Surg Res** 1989 Jul;47(1):52–8

Serum antibody responses to pneumococcal vaccine after splenic autotransplantation. Hebert JC, et al. **J Trauma** 1989 Mar;29(3):355–9

Role of germ cells and splenocytes in the steroidogenesis of ovarian endocrine cells. Takahashi M, et al. **Prog Clin Biol Res** 1989;294:101–15

Prevention of graft-versus-host disease in neonatal F1 hybrid mice by pre-immunisation of their mother with paternal spleen cells. DeGiorgi L, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):3045–9

Effect of specific and nonspecific alloantigen stimulation on islet allograft survival. Gotoh M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2746–7

Antigen presentation by neonatal spleen cells: a novel finding. Sherwood RA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):644–5

The nature of tolerance in adult recipient mice made tolerant of alloantigens with supralethal irradiation followed by syngeneic bone marrow cell transplantation plus injection of F1 spleen cells. Tomita Y, et al. **Transplantation** 1989 Jun;47(6):1021–9

[Nursing care of patients with homologous total spleen transplantation] Jin GX, et al. **Chung Hua Hu Li Tsa Chih** 1989 Mar;24(3):135–7 (Chi)

[Pancreatoduodenal transplantation with and without the spleen in an animal experiment] Friess P, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(3):131–7 (Eng. Abstr.) (Ger)

[Early and late results of heterotopic spleen autotransplantation in pediatric splenic trauma] Büyükünal C, et al. **Z Kinderchir** 1988 Dec;43(6):394–7 (Eng. Abstr.) (Ger)

[Heterotopic autotransplant of the spleen after splenectomy in traumatic rupture. Personal experience and scintigraphic follow-up] Lucarini L, et al. **Minerva Chir** 1989 Jun 15; 44(11):1569–72 (Eng. Abstr.) (Ita)

[Induction of endogenous antitumor activities in the portal vein by using a subcutaneously-imbedded pediculated spleen in the rat; experimental study of adjuvant immunotherapy in liver metastases] Fujii M. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1850–9 (Eng. Abstr.) (Jpn)

[Experimental transplantation of allogeneic spleen tissue] Majewski W. **Ann Acad Med Stetin** 1988;34:161–75 (Eng. Abstr.) (Pol)

[Obstruction of strangulated intestine as a complication of autotransplantation of the spleen after its injury] Kłęba T, et al. **Wiad Lek** 1988 Aug 15;41(16):1112–5 (Eng. Abstr.) (Pol)

[Phagocytosis of Salmonella typhimurium labeled with 131I in splenic intraperitoneal autotransplantation with or without topical splenic remnants. Experimental study in rats] Rodrigues Júnior AJ, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jan-Feb; 43(1):75–80 (Eng. Abstr.) (Por)

[Autografting of the traumatized spleen] Ionescu NG, et al. **Rev Chir [Chir]** 1988 Sep-Oct;37(5):363–70 (Eng. Abstr.) (Rum)

[A device for preparing a splenic autotransplant] Kushch NL, et al. **Klin Khir** 1989;(1):71 (Rus)

[Effect of the spleen cells from partially splenectomized and partially hepatectomized mice on the proliferation of hepatocytes in the regenerating liver of syngeneic recipients] Babaeva AG, et al. **Ontogenez** 1988 Nov-Dec; 19(6):573–81 (Eng. Abstr.) (Rus)

[Treatment of closed injuries of the spleen in children by splenectomy combined with heterotopic autotransplantation of splenic tissue] Babich II, et al. **Vestn Khir** 1989 Feb;142(2):93–6 (Rus)

ULTRASTRUCTURE

Electron microscopic study of subcutaneous and intraperitoneal splenules in the mouse. Johnson J, et al.

Am J Anat 1989 May;185(1):89–100

Mechanisms of splenic control of murine malaria: cellular reactions of the spleen in lethal (strain 17XL) Plasmodium yoelii malaria in BALB/c mice, and the consequences of pre-infective splenectomy. Weiss L.
Am J Trop Med Hyg 1989 Aug;41(2):144–60

Light-induced permeabilization and merocyanine 540 staining of mouse spleen cells. Szabo G Jr, et al.
Biochim Biophys Acta 1989 Mar 13;979(3):365–70

Morphologic and morphometric light and electron microscopic studies of the spleen in patients with hereditary spherocytosis and autoimmune haemolytic anaemia. Ferreira JA, et al. **Br J Haematol** 1989 Jun;72(2):246–53

Multi-organ damage resulting from experimental faecal peritonitis. Tighe D, et al. **Clin Sci** 1989 Mar;76(3):269–76

Scanning electron microscopic study of the red pulp of ferret spleen. Hataba Y, et al. **J Electron Microsc (Tokyo)** 1989; 38(3):190–200

On the use of Percoll as a marker for liposomes in electron microscopy of mouse spleen tissue. Cudd A, et al.
J Microencapsul 1986 Oct–Dec;3(4):275–82

Fine-needle aspiration of the spleen as an aid in the diagnosis of splenomegaly. O'Keefe DA, et al. **J Vet Intern Med** 1987 Jul–Sep;1(3):102–9

An electron microscopic study of hemopoietic tissues in the course of Lewis lung carcinoma. Hardy C, et al.
Scanning Microsc 1988 Sep;2(3):1587–91

Electron microscopic study of phagocytosis in human spleen in falciparum malaria. Pongponratn E, et al.
Southeast Asian J Trop Med Public Health 1989 Mar; 20(1):31–9

Spontaneous nonthymic T cell lymphomas in young Wistar rats. Hayashi S, et al. **Vet Pathol** 1989 Jul;26(4):326–32

[Electron microscopic observation on spleen T lymphocyte in animal model of lepromatous leprosy] Wang B, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):342–5 (Eng. Abstr.) **(Chi)**

SPLEEN FOCUS-FORMING VIRUSES see under **MOUSE LEUKEMIA VIRUSES**

SPLENECTOMY

Effect of splenectomy on hepasor treatment in allyl-alcohol-traumatized rat liver. Virtanen P, et al.
Acta Anat (Basel) 1989;134(4):301–4

Response to splenectomy in idiopathic thrombocytopenic purpura: prognostic value of the clinical and laboratory evaluation. Fabris F, et al. **Acta Haematol (Basel)** 1989; 81(1):28–33

Successful splenectomy in May-Hegglin anomaly: report of a case with platelet kinetic studies. Raveh D, et al.
Acta Haematol (Basel) 1989;82(1):43–5

Splenectomy for hematologic disease. Vevon PA, et al.
Adv Surg 1989;22:105–39 (64 ref.)

Long-term effect of splenectomy on transfusion requirements in thalassemia major. Cohen A, et al. **Am J Hematol** 1989 Apr;30(4):254–6

Apparent response of refractory post-transfusion purpura to splenectomy. Cunningham CC, et al. **Am J Hematol** 1989 Feb;30(2):112–3

Platelet survival and turnover: important factors in predicting response to splenectomy in immune thrombocytopenic purpura. Siegel RS, et al. **Am J Hematol** 1989 Apr; 30(4):206–12

Increased hematocrit mitigates ischemic renal damage in the splenectomized dog. Bell RD, et al. **Am J Med Sci** 1989 Mar;297(3):169–73

Mechanisms of splenic control of murine malaria: cellular reactions of the spleen in lethal (strain 17XL) Plasmodium yoelii malaria in BALB/c mice, and the consequences of pre-infective splenectomy. Weiss L.
Am J Trop Med Hyg 1989 Aug;41(2):144–60

Preoperative splenic artery occlusion as an adjunct for high risk splenectomy. Fujitani RM, et al. **Am Surg** 1988 Oct; 54(10):602–8

Distal pancreatectomy with and without splenectomy. A comparative study. Richardson DQ, et al. **Am Surg** 1989 Jan;55(1):21–5

Elective splenectomy in haematological disorders [letter] Gough M. **Ann R Coll Surg Engl** 1988 Nov;70(6):395

Splenectomy in agnogenic myeloid metaplasia and postpolycythemic myeloid metaplasia. A study of 34 cases. Brenner B, et al. **Arch Intern Med** 1988 Nov;148(11):2501–5

Immune thrombocytopenia in hemophiliacs infected with human immunodeficiency virus and their response to splenectomy. Kim HC, et al. **Arch Intern Med** 1989 Jul; 149(7):1685–8

Emergency splenectomy in adult idiopathic thrombocytopenic purpura. A report of seven cases. Wanachiwanawin W, et al. **Arch Intern Med** 1989 Jan; 149(1):217–9 (23 ref.)

Splenectomy. The treatment of choice for human immunodeficiency virus-related immune thrombocytopenia? Ravikumar TS, et al. **Arch Surg** 1989 May;124(5):625–8

Splenectomy for trauma: morbidity, mortality and associated abdominal injuries. Pitcher ME, et al. **Aust N Z J Surg** 1989 Jun;59(6):461–3

Splenectomy for immune thrombocytopenic purpura: Auckland experience 1979–87 [published erratum appears in Aust N Z J Surg 1989 May;59(5):442] Shaw JH, et al. **Aust N Z J Surg** 1989 Feb;59(2):123–6

Improved hematopoiesis in anemic Sl/Sld mice by splenectomy and therapeutic transplantation of a hematopoietic microenvironment. Anklesaria P, et al.
Blood 1989 Aug 15;74(3):1144–51

Prognostic significance of splenic follicle size in splenectomized idiopathic thrombocytopenic purpura patients. Arendt T, et al. **Blut** 1988 Dec;57(6):347–9

Function of reticuloendothelial system in splenectomised thalassemics. Germenis A, et al. **Blut** 1988 Nov; 57(5):307–10

Medical indications for splenectomy. Russell SJ, et al.
Br J Hosp Med 1989 Aug;42(2):120–3, 125–6, 127 (58 ref.)

Splenectomy for massive splenomegaly. Shaw JH, et al.
Br J Surg 1989 Apr;76(4):395–7

Effect of splenectomy on allograft survival and leukocyte migration in rat cardiac transplantation. Kuromoto N, et al. **Bull Osaka Med Sch** 1987 Jul;33(1):20–6

Prognostic variables in hairy cell leukemia after splenectomy as initial therapy. Ratain MJ, et al. **Cancer** 1988 Dec 1; 62(11):2420–4

Elimination of soluble 123I-labelled aggregates of human immunoglobulin G in humans; the effect of splenectomy. Halma C, et al. **Clin Exp Immunol** 1989 Jul;77(1):62–6

Polymorphonuclear neutrophils function in splenectomized patients. Wysocki H, et al. **Clin Exp Immunol** 1989 Mar; 75(3):392–5

Increase of NK cell-mediated cytotoxicity of hairy cell leukemia patients after splenectomy [letter] Bigda J, et al. **Eur J Haematol** 1989 Jul;43(1):78–9

Preferential localisation of red cell vacuoles to pathologically shaped human red blood cells. Demeter J, et al.
Eur J Haematol 1989 Jul;43(1):41–4

Reevaluation of the prognostic factors for splenectomy in chronic idiopathic thrombocytopenic purpura (ITP): a report on 181 cases. Fenaux P, et al. **Eur J Haematol** 1989 Mar;42(3):259–64

Glucuronyl transferase deficiency and mild hereditary spherocytosis: effect of splenectomy. Eber SW, et al.
Eur J Pediatr 1988 Aug;147(6):639–42

Partial splenectomy for treatment of chronic idiopathic thrombocytopenia in childhood. Specht U, et al.
Folia Haematol (Leipz) 1988;115(4):509–14

Treatment of the thalassemia syndrome with splenectomy. Yang XY, et al. **Hemoglobin** 1988;12(5–6):601–8

Phenotypic and functional analysis of cellular cytotoxicity after splenectomy. Müller C, et al.
Int Arch Allergy Appl Immunol 1988;87(1):76–80

Changes in lymphocyte subpopulations in peripheral blood of splenectomized patients. Brodsky E, et al.
Isr J Med Sci 1988 Dec;24(12):702–5

Functional value of omental autotransplanted splenic tissue in rabbits. Mizrahi S, et al. **Isr J Med Sci** 1988 Dec; 24(12):706–9

Splenectomy for Hodgkin's disease [letter] Kuse R.
J Clin Oncol 1988 Oct;6(10):1665

Circulating immune complexes after splenectomy. Donadi EA, et al. **J Clin Pathol** 1989 Jan;42(1):69–71

Primary biliary cirrhosis presenting as idiopathic thrombocytopenic purpura with deterioration after splenectomy. Wallerstedt S, et al. **J Intern Med** 1989 Apr; 225(4):279–83

Treatment of hairy cell leukemia with alpha-interferon and splenectomy. Tominaga S, et al. **J Med** 1987;18(5–6):375–83

Results of the splenectomy in children with thalassemia. Hathirat P, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:133–8

Splenectomy versus gamma globulin for thrombocytopenic purpura [letter] Mahoney DH Jr. **J Pediatr** 1988 Nov; 113(5):953–4

Partial splenectomy: the preferred alternative for the treatment of splenic cysts. Brown MF, et al.
J Pediatr Surg 1989 Jul;24(7):694–6

Experience of splenectomy and cholecystectomy in children with chronic haemolytic anaemia. Pappis CH, et al.
J Pediatr Surg 1989 Jun;24(6):543–6

Effect of splenectomy upon the growth of B16-F10 melanoma and its relation to the interferon system. Stoll HL 3d, et al. **J Surg Oncol** 1989 Feb;40(2):79–84

Pneumococcal vaccine improves pulmonary clearance of live pneumococci after splenectomy. Hebert JC. **J Surg Res** 1989 Oct;47(4):283–7

Postsplenectomy sepsis syndrome. Schreiner RD, et al.
J Tenn Med Assoc 1989 Jan;82(1):23–4

Pulmonary antipneumococcal defenses after hemisplenectomy. Hebert JC. **J Trauma** 1989 Sep; 29(9):1217–20; discussion 1220–1

Development of chronic granulocytic leukaemia in the absence of a spleen [letter] Galton DA, et al. **Lancet** 1989 Sep 30;2(8666):805

Whole blood assay for NK activity in splenectomized and non-splenectomized hairy cell leukemia patients during IFN-alpha-2b treatment. Nielsen B, et al. **Leuk Res** 1989; 13(6):451–6

Plasma levels of soluble CD8 antigen and interleukin-2 receptor antigen in patients with hairy cell leukemia, relationship with splenectomy and with clinical response to therapy. Ho AD, et al. **Leukemia** 1989 Oct;3(10):718–23

The importance of splenectomy for the adoptive immunotherapy of cancer. Schwarz RE, et al.
Med Hypotheses 1989 Mar;28(3):165–8

Splenectomy in idiopathic thrombocytopenic purpura: a clinical experience. Zaeni I, et al. **Paediatr Indones** 1988 Nov–Dec;28(11–12):259–66

Fever and headache in a splenectomized woman. Golightly LM, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):629–37

Polyarteritis nodosa presenting as recurrent pneumonia following splenectomy for hairy-cell leukemia. Komadina KH, et al. **Semin Arthritis Rheum** 1989 May;18(4):252–7 (27 ref.)

Splenectomy for massive splenomegaly. Coon WW.
Surg Gynecol Obstet 1989 Sep;169(3):235–7

Thrombocytopenic purpura in parenteral drug abusers. Hoballah JJ, et al. **Surg Gynecol Obstet** 1989 Jun; 168(6):497–500

Massive splenomegaly. Johnson HA, et al.
Surg Gynecol Obstet 1989 Feb;168(2):131–7

A crucial effect of splenectomy on prolonging cardiac xenograft survival in combination with cyclosporine. Monden M, et al. **Surgery** 1989 Apr;105(4):535–42

Splenectomy abrogates the ability of thoracic duct lymphocytes of tolerant rats to transfer suppression. Lim SM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):480–1

Prolongation of rat kidney allograft survival induced by the synergistic effect of a small dose of cyclosporin directly injected into the thoracic duct and splenectomy. Nakaji K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):961–2

Failure of splenectomy to affect the antibody rebound after plasma exchange in the rat. Reding R, et al.
Transplant Proc 1989 Feb;21(1 Pt 1):779–80

Prolonged cardiac xenograft survival by 15-deoxyspergualin combined with splenectomy. Valdivia LA, et al.
Transplant Proc 1989 Feb;21(1 Pt 1):532–3

A synergistic effect of total lymphoid irradiation, cyclosporine, and splenectomy in a hamster-to-rat hepatic xenograft model. Yamaguchi Y, et al. **Transplant Proc** 1989 Jun;21(3):3556

Effect of splenectomy on antibody rebound after plasma exchange. Reding R, et al. **Transplantation** 1989 Jul; 48(1):145–6

Splenectomy in Nigerian children with sickle cell anaemia. Okoro BA, et al. **Trop Geogr Med** 1989 Apr;41(2):123–7

Splenectomy in massive tropical splenomegaly: two-to six-year follow-up in 14 patients. Vriend WH, et al.
Trop Geogr Med 1988 Oct;40(4):298–303

Phagocytic activity of Kupffer cells in splenectomized rats. Abe T, et al. **Virchows Arch [A]** 1988;413(5):457–62

[Effects of splenectomy on erythrocyte membranes] Jiang HC. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;68(11):612–4, 42 (Eng. Abstr.) **(Chi)**

[Analysis of overwhelming postsplenectomy infection and septicemia in China] Liu LX, et al.
Chung Hua I Hsueh Tsa Chih 1988 Nov;68(11):619–21, 42 (Eng. Abstr.) **(Chi)**

[Post-splenectomy immunological changes in schistosomiasis patients] Wang XL. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):483–4, 511 (Eng. Abstr.) **(Chi)**

[Effects of splenectomy on changes in hemorrheologic parameters following coronary occlusion in dogs] Ma XL, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):81–4 (Eng. Abstr.) **(Chi)**

[Splenectomy in chronic idiopathic thrombopenic purpura in adults. Apropos of 49 cases] Melki J, et al.
Ann Chir 1989;43(5):363–6 (Eng. Abstr.) **(Fre)**

[Splenectomy in Gaucher's disease. Apropos of 2 cases, one of which was preceded by embolization] Samama G, et al. **Ann Chir** 1989;43(5):367–70 (Eng. Abstr.) **(Fre)**

[Hemolytic anemia and ulcerative rectocolitis: splenectomy or coloproctectomy? (letter)] Chochon M, et al.
Gastroenterol Clin Biol 1989 Jan;13(1):105 **(Fre)**

[Conservative treatment of splenic injuries in the adult] Schneider RP, et al. **Helv Chir Acta** 1989 Jun;56(1–2):195–8 (Eng. Abstr.) **(Fre)**

[Should left hypochondrium be drained after splenectomy? (letter)] Brefort JL, et al. **Presse Med** 1989 May 6; 18(18):940 **(Fre)**

[Monstrous splenomegaly in Gaucher's disease. Treatment by embolization and splenectomy (letter)] Samama G, et al. **Presse Med** 1989 May 27;18(21):1078–9 **(Fre)**

[Thrombocytopenia and HIV: the role of splenectomy] Guetty-Torello M, et al. **Schweiz Med Wochenschr** 1988 Oct 22;118(42):1546–50 (Eng. Abstr.) **(Fre)**

[Remission of cold agglutinin disease following splenectomy] Clemens MR, et al. **Dtsch Med Wochenschr** 1989 May 12; 114(19):753–5 (Eng. Abstr.) **(Ger)**

[Balloon catheter arterial occlusion before high-risk splenectomy and nephrectomy] Peitsch W, et al.
Dtsch Med Wochenschr 1989 Sep 1;114(35):1316–9 (Eng. Abstr.) **(Ger)**

[Long-term prognosis of the results of splenectomy in idiopathic thrombocytopenic purpura] Arendt T, et al.
Folia Haematol (Leipz) 1989;116(2):337–42 (Eng. Abstr.) **(Ger)**

[Splenectomy in idiopathic thrombocytopenic purpura] Rosen HR, et al. **Langenbecks Arch Chir** 1989;374(2):95–8 (Eng. Abstr.) **(Ger)**

[Asplenism and hyposplenism as an immune deficiency syndrome] Strasser-Vogel B, et al.
Monatsschr Kinderheilkd 1988 Dec;136(12):795–807 (144 ref.) (Eng. Abstr.) **(Ger)**

[Detection of superior mesenteric vein thrombosis following splenectomy using real-time and Doppler sonography] Mildenberger P, et al. **Radiologe** 1988 Aug;28(8):395–8 (Eng. Abstr.) **(Ger)**

[Efficacy of recombinant interferon alpha-2 in 34 patients with hairy cell leukemia. Effect of splenectomy and dosage reduction results of therapy] Frey B, et al. **Schweiz Med Wochenschr** 1988 Oct 15;118(41):1468–75 (Eng. Abstr.) (Ger)

[Histochemical determination of vitality limits after the use of neodymium-YAG-lasers on parenchymatous organs] Stöhr GA, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(4):235–43 (Eng. Abstr.) (Ger)

[Early and late results of heterotopic spleen autotransplantation in pediatric splenic trauma] Büyükünal C, et al. **Z Kinderchir** 1988 Dec;43(6):394–7 (Eng. Abstr.) (Ger)

[A new method for the preparation of the thrombocytopenic patient for splenectomy] Filippini A, et al. **Ann Ital Chir** 1987;59(1–6):109–13 (Ita)

[Laparosplenectomy in Hodgkin's disease] Bruni R, et al. **G Ital Oncol** 1988 Jul–Dec;8(3–4):127–9 (Eng. Abstr.) (Ita)

[Heterotopic autotransplant of the spleen after splenectomy in traumatic rupture. Personal experience and scintigraphic follow-up] Lucarini L, et al. **Minerva Chir** 1989 Jun 15; 44(11):1569–72 (Eng. Abstr.) (Ita)

[Surgery in oncohematology: state of the art] Marmont AM, et al. **Minerva Chir** 1989 Feb 28;44(4):643–6 (11 ref.) (Ita)

[Splenectomy in idiopathic thrombocytopenic purpura] Nicolosi A, et al. **Minerva Chir** 1989 Mar 31;44(6):1005–7 (9 ref.) (Eng. Abstr.) (Ita)

[Su-polysaccharide skin test and immunotherapy with OK-432 in postoperative gastric cancer—the effect of a splenectomy] Saito H, et al. **Gan No Rinsho** 1988 Nov; 34(14):1965–8 (Eng. Abstr.) (Jpn)

[Anesthetic management of thrombotic thrombocytopenic purpura] Saito A, et al. **Masui** 1989 Apr;38(4):563–7 (Eng. Abstr.) (Jpn)

[Normalization of platelet count following prednisolone and splenectomy in a patient with splenic hamartoma and thrombocytopenia] Ubara Y, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1083–7 (Eng. Abstr.) (Jpn)

[Splenectomy in hematologic diseases] Sletnes KE, et al. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):201–3 (Eng. Abstr.) (Nor)

[Varying indications] Solheim K. **Tidsskr Nor Laegeforen** 1989 Apr 30;109(12):1265–6 (Nor)

[Effect of splenectomy on the cytotoxic activity (ADCC) of K lymphocytes] Pawelski S, et al. **Pol Arch Med Wewn** 1985 Apr;73(4):230–5 (Eng. Abstr.) (Pol)

[Effect of splenectomy on antinuclear and anti-native DNA antibody titer in patients with idiopathic thrombocytopenic purpura] Poborski W. **Pol Tyg Lek** 1988 Jul 25; 43(30):968–70 (Eng. Abstr.) (Pol)

[CO2 laser in surgical procedures in patients with hemorrhagic diathesis] Martula M, et al. **Wiad Lek** 1988 Apr 1;41(7):464–5 (Eng. Abstr.) (Pol)

[Suppressor function of the blood lymphocytes in patients with stomach cancer undergoing gastrectomy combined with splenectomy] Kadagidze ZG, et al. **Eksp Onkol** 1988; 10(4):46–9 (Eng. Abstr.) (Rus)

[Splenectomy in the combined treatment of patients with thalassemia] Abdullaev GM, et al. **Gematol Transfuziol** 1988 Sep;33(9):13–6 (Eng. Abstr.) (Rus)

[Role of splenectomy in the combined treatment of children with Hodgkin's disease] Makhonova LA, et al. **Gematol Transfuziol** 1988 Sep;33(9):16–20 (Eng. Abstr.) (Rus)

[Splenectomy in children] Kushch NL, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):84–8 (Eng. Abstr.) (Rus)

[Contraindications to splenectomy in primary total extrahepatic portal hypertension] Tsatsanidi KN, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):88–93 (Eng. Abstr.) (Rus)

[Diagnosis and surgical treatment of developmental defects of the spleen] Iudin MIa. **Klin Khir** 1989;(6):60–1 (31 ref.) (Rus)

[Characteristics of the early postoperative period in patients with hemolytic anemia] Terekhov NT, et al. **Klin Khir** 1989; (3):41–3 (Eng. Abstr.) (Rus)

[Splenectomy during surgery of the abdominal organs] Utkin VV, et al. **Klin Khir** 1988;(9):61–2 (Rus)

[Treatment of closed injuries of the spleen in children by splenectomy combined with heterotopic autotransplantation of splenic tissue] Babich II, et al. **Vestn Khir** 1989 Feb;142(2):93–6 (Rus)

[Use of plasma surgical devices for hemostasis during operations on the liver and spleen] Skobelkin OK, et al. **Vestn Khir** 1988 May;140(5):32–3 (Eng. Abstr.) (Rus)

[Splenectomy in the combined treatment of aplastic anemia] Zerkalov VN, et al. **Voen Med Zh** 1988 Nov;(11):54 (Rus)

[Effects of splenectomy on long-term results of the surgical treatment of stomach cancer] Klimenkov AA, et al. **Vopr Onkol** 1989;35(7):822–6 (Eng. Abstr.) (Rus)

[Splenectomy in the treatment of idiopathic thrombocytopenic purpura] Colović M, et al. **Acta Chir Iugosl** 1989;36(1):7–14 (Eng. Abstr.) (Scc)

[Leukocyte changes in mice bearing sarcoma 180] Chasseing NA, et al. **Medicina (B Aires)** 1988;48(2):172–8 (Eng. Abstr.) (Spa)

[Surgery of portal hypertension. 12 years' experience] Hurtado Andrade H, et al. **Rev Gastroenterol Mex** 1989 Apr–Jun;54(2):91–7 (Eng. Abstr.) (Spa)

[Splenectomy of chronic lymphatic leukemia] López Guillermo A, et al. **Sangre (Barc)** 1988 Aug;33(4):287–90 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Septicaemia after splenectomy for Hodgkin's disease: two episodes in the same patient, 9 and 13 years after cure [letter] Galieni P, et al. **Acta Haematol (Basel)** 1988; 80(4):223

Pneumococcal vaccination in splenectomized patients with hematological disorders. Lindblad R, et al. **Acta Med Scand** 1988;224(5):467–71

Splenectomy in mild hereditary spherocytosis: is it worth the risk? Manno CS, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):300–3

Splenectomy, pneumococcal vaccination and antibiotic prophylaxis. Chattopadhyay B. **Br J Hosp Med** 1989 Feb; 41(2):172–4 (43 ref.)

Incidence of septic and thromboembolic-related deaths after splenectomy in adults. Pimpl W, et al. **Br J Surg** 1989 May; 76(5):517–21

Vacuoles in red cells from splenectomized subjects originate during cell life: association with glycosylated haemoglobin? De Haan LD, et al. **Eur J Haematol** 1988 Nov;41(5):482–8

Nonmalignant complications of therapy for Hodgkin's disease. Hohl RJ, et al. **Hematol Oncol Clin North Am** 1989 Jun;3(2):331–43 (65 ref.)

Thrombosis of the superior mesenteric and portal veins after splenectomy and/or distal splenorenal shunts. Ito K, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):71–6

Gamma-globulin enhances survival in pneumococcal-challenged asplenic infant rats. Ford EG, et al. **J Pediatr Surg** 1989 Aug;24(8):815–7

Meningitis after splenectomy. Selby CD, et al. **J R Soc Med** 1989 Apr;82(4):206–9

Overwhelming postsplenectomy infection in patients with thalassemia major. Golematis B, et al. **Mt Sinai J Med** 1989 Mar;56(2):97–8

Serious complications following treatment of chronic idiopathic thrombocytopenic purpura. Wanachiwanawin W, et al. **Postgrad Med J** 1988 Jun;64(752):426–30

Portal vein thromboembolism of liver allografts from splenectomized donors. Yanaga K, et al. **Transplantation** 1989 Feb;47(2):399–400

[Effect of splenectomy on the growth of W256 carcinosarcoma and T cell subsets of peripheral blood in rat] Ge YG. **Chung Hua Chung Liu Tsa Chih** 1989 Jan; 11(1):8–11 (Eng. Abstr.) (Chi)

[Retrospective echographic surveillance of a population of patients splenectomized for hematologic reasons. Thrombosis of the portal vein is rare] Goudet P, et al. **Chirurgie** 1988;114(5):383–6 (Eng. Abstr.) (Fre)

[Is drainage of the left subphrenic compartment after splenectomy still applicable?] Vermeulen B, et al. **Chirurgie** 1988;114(6):466–72 (45 ref.) (Eng. Abstr.) (Fre)

[Fulminant sepsis following posttraumatic splenectomy—OPSI (overwhelming postsplenectomy infection) syndrome] Thoma R, et al. **Anaesthesist** 1989 Jul;38(7):379–82 (Eng. Abstr.) (Ger)

[An autopsy case of syndrome of overwhelming postsplenectomy infection with pulmonary hypertension and right ventricular failure] Yagi H, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):814–8 (Jpn)

[Imaging diagnosis of portal vein thrombosis following splenectomy in 23 patients with hepatocellular carcinoma] Yamashita K, et al. **Rinsho Hoshasen** 1988 Nov; 33(12):1561–4 (Eng. Abstr.) (Jpn)

[Post-splenectomy pancreatitis] Utkin VV, et al. **Vestn Khir** 1988 Jul;141(7):102–5 (Rus)

[Severe post-splenectomy hepatic insufficiency in a patient with agnogenic myeloid metaplasia] Pérez-Villa F, et al. **Med Clin (Barc)** 1988 Jun 11;91(3):108–10 (Eng. Abstr.) (Spa)

METHODS

An improved technique for partial splenectomy. Sykes LN Jr. **Am Surg** 1989 Aug;55(8):508–10

Stapled partial splenectomy for splenic abscess in a child. Bhattacharyya N, et al. **J Pediatr Surg** 1989 Mar; 24(3):316–7

Gaucher disease: fate of the splenic remnant after partial splenectomy—a case of rapid enlargement. Fleshner PR, et al. **J Pediatr Surg** 1989 Jun;24(6):610–2

A simplified approach to techniques of splenic salvage. Trooskin SZ, et al. **Surg Gynecol Obstet** 1989 Jun; 168(6):546–8

[Conservative surgery of splenic injuries] Rocca E, et al. **Minerva Chir** 1989 Feb 28;44(4):675–7 (18 ref.) (Ita)

STATISTICS & NUMERICAL DATA

[Splenectomy and distal spleno-rectal shunt performed in Sergipe before and after a special program for the control of schistosomiasis] Netto AG. **Rev Soc Bras Med Trop** 1987 Jan-Mar;20(1):41–3 (Por)

TRENDS

Trends in splenectomy in the Trent region 1972–85. Fellows IW, et al. **Postgrad Med J** 1988 Apr;64(750):267–70

VETERINARY

Splenectomy in the dog by ligation of the splenic and short gastric arteries. Hosgood G, et al. **Vet Surg** 1989 Mar–Apr; 18(2):110–3

A technique for elective splenectomy of equidae using a transthoracic approach. Rigg DL, et al. **Vet Surg** 1987 Sep–Oct;16(5):389–91

SPLENIC ARTERY

Changes of portal systemic shunting after sclerotherapy and/or partial splenic embolization observed by thallium-201 per rectal administration. Tonami N, et al. **Am J Physiol Imaging** 1988;3(3):128–32

Preoperative splenic artery occlusion as an adjunct for high risk splenectomy. Fujitani RM, et al. **Am Surg** 1988 Oct; 54(10):602–8

Profuse rectal bleeding—an unusual cause [letter] Keane TE, et al. **Dis Colon Rectum** 1988 Dec;31(12):989–90

Huge splenic artery aneurysm after portocaval shunt. Tam TN, et al. **J Clin Gastroenterol** 1988 Oct;10(5):565–8

Evidence that temporary complete occlusion of splenic vessels prevents massive embolization and sudden death associated with intrasplenic hepatocellular transplantation. Nieto JA, et al. **Transplantation** 1989 Mar;47(3):449–50

[Balloon catheter arterial occlusion before high-risk splenectomy and nephrectomy] Peitsch W, et al. **Dtsch Med Wochenschr** 1989 Sep 1;114(35):1316–9 (Eng. Abstr.) (Ger)

[Diagnostic aspects of aneurysm of the splenic artery (description of a case)] Scicolone G, et al. **Chir Ital** 1988 Jun;40(3):225–9 (Eng. Abstr.) (Ita)

[5 cases of aneurysm of the splenic artery] Ponzio F, et al. **Minerva Cardioangiol** 1988 Apr;36(4):193–6 (Eng. Abstr.) (Ita)

[Hemorrhage in the Wirsung's duct caused by aneurysm of the splenic artery in chronic pancreatitis] Uomo G, et al. **Minerva Dietol Gastroenterol** 1989 Jan-Mar;35(1):55–60 (47 ref.) (Eng. Abstr.) (Ita)

[Percutaneous subtotal splenic embolization in thalassemia major. A 4-year follow up] Benea G, et al. **Radiol Med (Torino)** 1989 Jun;77(6):672–8 (Eng. Abstr.) (Ita)

[Usefulness of partial splenic embolization (PSE) in hepatocellular carcinomas showing a risk of gastrointestinal bleeding after transcatheter arterial embolization (TAE)] Ohmoto K, et al. **Gan No Rinsho** 1989 May;35(6):690–5 (Eng. Abstr.) (Jpn)

[Embolization of splenic and left gastric artery for hypersplenism and portal hypertension] Kodama T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25; 48(10):1204–11 (Eng. Abstr.) (Jpn)

[Roentgenologic diagnosis of splenic arterial aneurysm] Morita Y, et al. **Rinsho Hoshasen** 1988 Sep;33(9):981–8 (16 ref.) (Eng. Abstr.) (Jpn)

[Hemostasis in injury of the spleen by the method of embolization and intra-arterial infusion] Moskvichev VG, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):84–6 (Eng. Abstr.) (Rus)

[Ultrasonic echography in evaluating splenic blood circulation] Rikhcieva LE, et al. **Vestn Khir** 1989 Mar; 142(3):55–7 (Rus)

[Changes in hemodynamics and angioarchitecture of the hepatolienal basin after embolization of the splenic artery in liver cirrhosis] Vakhidov AV, et al. **Vestn Khir** 1989 Feb;142(2):24–7 (Eng. Abstr.) (Rus)

[Segmental portal hypertension caused by aneurysm of the distal splenic artery] Arias Pérez J, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):485–8 (Eng. Abstr.) (Spa)

ABNORMALITIES

Clinical implications of anatomic variations of the splenic artery. Waizer A, et al. **Surg Gynecol Obstet** 1989 Jan; 168(1):57–8

ANATOMY & HISTOLOGY

Correlations between posterior gastric artery and superior polar artery in human anatomy. Trubel W, et al. **Anat Anz** 1988;167(3):219–23

Arterial segmentation in the spleen. Cortés JA, et al. **Surg Radiol Anat** 1988;10(4):323–32

PATHOLOGY

A case of thromboangiitis obliterans affecting coronary, pulmonary, and splenic vessels. Is thromboangiitis obliterans a generalized vascular disease? Korsgaard N, et al. **Am J Cardiovasc Pathol** 1988;2(3):263–7

PHYSIOLOGY

Quantitative measurement of abdominal arterial blood flow using image-directed Doppler ultrasonography: superior mesenteric, splenic, and common hepatic arterial blood flow in normal adults. Nakamura T, et al. **JCU** 1989 May; 17(4):261–8

RADIOGRAPHY

Splenic arteriovenous fistula. Case report. Gudmundsen TE, et al. **Acta Chir Scand** 1988 Oct;154(10):603–4

[Jaundice and mass in the right iliac fossa as clinical

manifestations of spontaneous rupture of a splenic artery aneurysm] Pons Miñano JA, et al.
Rev Esp Enferm Apar Dig 1988 Jul;74(1):64–6 (Eng. Abstr.) **(Spa)**

SURGERY

Right splenorenal bypass: a technical suggestion. Battisti G, et al. **Br J Surg** 1989 Apr;76(4):397

Splenectomy in the dog by ligation of the splenic and short gastric arteries. Hosgood G, et al. **Vet Surg** 1989 Mar–Apr; 18(2):110–3

[Aneurysms of digestive arteries. What are the indications?] Mellière D, et al. **J Mal Vasc** 1989;14(3):206–12 (Eng. Abstr.) **(Fre)**

TRANSPLANTATION

The possibility of using celiac trunk branches as coronary artery bypass grafts. Aarnio P, et al.
Scand J Thorac Cardiovasc Surg 1989;23(2):165–8

The effect of a distal splenic arteriovenous fistula on tissue blood flow in the pancreatic segment. Kin S, et al.
Transplant Proc 1989 Feb;21(1 Pt 3):2812–4

SPLENIC DISEASES

CT diagnosis of splenic multifocal lesions and abdominal lymphoadenopathy secondary to sarcoidosis. Alvarez FJ, et al. **Comput Med Imaging Graph** 1988 Jul–Aug; 12(4):255–7

Splenic abscess associated with Salmonella infection: successful medical treatment [letter] Crosse BA.
J Infect 1989 Jul;19(1):80–2

Splenic abscesses in childhood. Keidl CM, et al.
Pediatr Infect Dis J 1989 Jun;8(6):368–73

Chronic torsion of the wandering spleen. Shiels WE, et al. **Pediatr Radiol** 1989;19(6–7):465–7

[Abscess of the spleen: diagnosis and treatment. Apropos of 12 cases] Rotman N, et al. **Ann Chir** 1989;43(3):203–6 (26 ref.) (Eng. Abstr.) **(Fre)**

[Giant echinococcal cyst of the spleen] Musaev TM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):130–1 **(Rus)**

[Diagnosis and treatment of splenic pseudocysts] Utkin VV, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):97–9 (Eng. Abstr.) **(Rus)**

[Diagnostic and surgical tactics in cysts of the spleen] Sotnichenko BA, et al. **Klin Khir** 1988;(11):11–2 (Eng. Abstr.) **(Rus)**

BLOOD

A study on hemorrheology in patients with spleen Qi deficiency. Kuang YL, et al. **J Tradit Chin Med** 1988 Dec; 8(4):235–8

Hypoprothrombinemia in the compensated form of hepatosplenic schistosomiasis: further studies. Manoukian N, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jul–Aug; 30(4):274–80

CHEMICALLY INDUCED

Quantitative evaluation of chlortoluran-induced splenic hemosiderosis by means of an image analyzer. Nyska A, et al. **Vet Hum Toxicol** 1989 Jun;31(3):218–21

[Granuloma formation in mice by liposomes of new glycolipid containing mycolic acids, "trehalose 2,3,6'-trimycolate"] Yokoi F, et al. **Yakugaku Zasshi** 1989 Jan;109(1):46–51 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Acute splenic sequestration crises in Saudi children with sickle cell disease. Salamah MM, et al.
Ann Trop Paediatr 1989 Jun;9(2):115–7

Subcorneal pustular dermatosis (Sneddon–Wilkinson disease) with amicrobial lymph node suppuration and aseptic spleen abscesses. Dallot A, et al. **Br J Dermatol** 1988 Dec; 119(6):803–7

Hepatosplenic candidiasis: an overlooked cause of prolonged fever during recovery from an episode of neutropenia. Fenaux P, et al. **Nouv Rev Fr Hematol** 1989;31(1):45–9

Hypersplenism due to fungal infection of spleen in a successfully treated patient with Hodgkin's disease. Raina V, et al. **Postgrad Med J** 1989 Feb;65(760):83–5

Acute splenic sequestration crisis in a young woman with homozygous sickle cell anaemia. Sarma PS.
Postgrad Med J 1989 Feb;65(760):105–7

[Functional state of autonomic nerve in spleen yin deficiency syndrome] Wei MX, et al.
Chung Hsi I Chieh Ho Tsa Chih 1988 Apr;8(4):202–3, 195 (Eng. Abstr.) **(Chi)**

[Spontaneous rupture of the spleen caused by primary amyloidosis. Description of a clinical case] Festa V, et al. **Minerva Chir** 1989 May 31;44(10):1525–8 (Eng. Abstr.) **(Ita)**

[Splenic abscess caused by Salmonella enteritidis arising from a long course hematoma (letter)] Casariego Vales E, et al. **Med Clin (Barc)** 1988 Sep 10;91(7):276–7 **(Spa)**

[Colon–splenic fistula. Complicated by large cell non-Hodgkin's lymphoma] Barreiro F, et al.
Rev Esp Enferm Apar Dig 1988 Sep;74(3):271–3 (Eng. Abstr.) **(Spa)**

[Gigantic splenomegaly as a form of clinical presentation of sarcoidosis (letter)] Fernández Monrás F, et al.
Rev Esp Enferm Apar Dig 1988 Dec;74(6):692–3 **(Spa)**

CONGENITAL

Congenital splenic cysts presenting after blunt abdominal trauma. Stylianos S, et al. **N Y State J Med** 1989 May; 89(5):289–91

Non-surgical treatment of a congenital splenic cyst [letter] Jequier S, et al. **Pediatr Radiol** 1989;19(5):346–7

[Diagnosis and surgical treatment of developmental defects of the spleen] Iudin MIa. **Klin Khir** 1989;(6):60–1 (31 ref.) **(Rus)**

DIAGNOSIS

Splenic cyst carcinoma presenting in pregnancy. Elit L, et al. **Am J Hematol** 1989 Sep;32(1):57–60

Computed tomography in the diagnosis of splenic emboli [letter] Ho P, et al. **Arch Intern Med** 1989 Feb;149(2):467, 471

Splenic abscess: report of two patients from Khartoum with review of literature. el Mahdi EM, et al.
East Afr Med J 1988 Aug;65(8):564–8 (9 ref.)

Ultrasonography of a splenic abscess due to Listeria monocytogenes. Corthouts B, et al. **J Belge Radiol** 1988; 71(3):375–6

Computed tomography in the diagnosis and treatment of solitary splenic abscesses. van der Laan RT, et al.
J Comput Assist Tomogr 1989 Jan–Feb;13(1):71–4

Prenatal ultrasonic diagnosis of splenic cyst. Lichman JP, et al. **J Ultrasound Med** 1988 Nov;7(11):637–8

Splenic abscesses in cat scratch disease: sonographic diagnosis and follow-up. Cox F, et al. **JCU** 1989 Sep;17(7):511–4

Ultrasound in the diagnosis of splenic abscess. Case report. Sivalingam S. **Med J Malaysia** 1988 Dec;43(4):338–9

Case 27–1988: hepatosplenic schistosomiasis [letter] **N Engl J Med** 1988 Nov 10;319(19):1286–7

Wheel-within-a-wheel patterns in hepatosplenic infections [letter] Fletcher BD, et al. **Radiology** 1988 Nov; 169(2):578–9

Siderotic nodules in the spleen: MR imaging of portal hypertension. Minami M, et al. **Radiology** 1989 Sep; 172(3):681–4

Gamna–Gandy bodies of the spleen: evaluation with MR imaging. Sagoh T, et al. **Radiology** 1989 Sep;172(3):685–7

Rectal snips in the diagnosis of hepatosplenic schistosomiasis. Harries AD, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):720

[Torsion of the spleen] Mendes J, et al. **Chir Pediatr** 1988; 29(5):291–2 (Eng. Abstr.) **(Fre)**

[Splenic abscesses. Apropos of a new clinical case of this rare pathology] Edzoa T, et al. **Chirurgie** 1988;114(4):314–8 (17 ref.) (Eng. Abstr.) **(Fre)**

[Basic abdominal ultrasound diagnosis course. The normal spleen] Kellner H. **Bildgebung** 1987–89;56 Suppl 1:55–8 **(Ger)**

[Accessory spleen torsion. Clinical picture, sonographic diagnosis and differential diagnosis] Müller H, et al.
Klin Padiatr 1988 Sep–Oct;200(5):419–21 (Eng. Abstr.) **(Ger)**

[A case from practice (120). Female patient: M. B., born 9–24–1967] Meili R. **Schweiz Rundsch Med Prax** 1988 Nov 22;77(47):1302–3 **(Ger)**

[Ultrasound in internal medicine. The spleen and lymph nodes] Kremer H, et al. **Verh Dtsch Ges Inn Med** 1988; 94:576–81 **(Ger)**

[A rare manifestation of Hodgkin's disease: splenic abscess] Pentimone F, et al. **Clin Ter** 1988 Dec 31;127(6):463–5 (Eng. Abstr.) **(Ita)**

[A case of pseudocyst of the spleen] Conte GF, et al.
Pediatr Med Chir 1988 Sep–Oct;10(5):543–6 (Eng. Abstr.) **(Ita)**

[Undiagnosed abscess of the spleen] Ivashchenko VI, et al.
Klin Khir 1988;(9):48 **(Rus)**

[Non-parasitic splenic cysts] Volobuev NN, et al.
Klin Khir 1988;(9):40–2 (41 ref.) **(Rus)**

[Current methods of diagnosing splenic diseases in surgical practice] Utkin VV, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):86–90 (Eng. Abstr.) **(Rus)**

[A case of a true splenic cyst] Nestalko OV, et al.
Vestn Rentgenol Radiol 1989 Mar–Apr;(2):84–5 **(Rus)**

[Splenic abscess] Troncoso P, et al. **Rev Med Chil** 1989 Jun; 116(6):563–5 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Treatment of childhood anorexia with spleen deficiency by Qiang Zhuang Ling. Zou ZW, et al.
J Tradit Chin Med 1989 Jun;9(2):100–2

[Observation on muscular glycogen in spleen-deficient rats treated with a jian pi yi qi decoction] Xiong H, et al.
Chung Hsi I Chieh Ho Tsa Chih 1989 Feb;9(2):96–7, 70 (Eng. Abstr.) **(Chi)**

[Effect of hongqi jianzhong decoction and sijunzi decoction on a mouse model of deficiency in the spleen caused by dahuang mixture] Wu AG. **Chung Yao Tung Pao** 1988 Aug; 13(8):39–41, 63 (Eng. Abstr.) **(Chi)**

[A case of splenic abscess occurring in ulcerative colitis and successfully treated by antibiotic therapy] Tazawa J, et al.
Nippon Shokakibyo Gakkai Zasshi 1988 Jun;85(6):1295–8 **(Jpn)**

ENZYMOLOGY

An immunoelectron microscopic study of glucocerebrosidase in type 1 Gaucher's disease spleen. Willemsen R, et al.
Ultrastruct Pathol 1988 Sep–Oct;12(5):471–8

ETHNOLOGY

The importance of consanguinity in hepatosplenic schistosomiasis in some endemic areas. Prata A.
Rev Soc Bras Med Trop 1988 Apr–Jun;21(2):45–6 (5 ref.) **(Eng, Por)**

ETIOLOGY

Sonography case of the day. Pseudosubcapsular splenic hematoma due to elongation of left hepatic lobe. Middleton WD. **AJR Am J Roentgenol** 1989 Jun;152(6):1325–6

Multiple splenic abscesses following Pseudomonas sepsis. Mack P, et al. **Ann Acad Med Singapore** 1989 May; 18(3):311–2

The kidney, hepatobiliary system, and spleen in sickle cell anemia. Pearson HA. **Ann N Y Acad Sci** 1989;565:120–5 (40 ref.)

Hepatosplenic and small bowel calcification due to Schistosoma mansoni infection. Radhakrishnan S, et al.
Dig Dis Sci 1988 Dec;33(12):1637–40

Echinococcus multilocularis: relationship between persistent inflammation, serum amyloid A protein response and amyloidosis in four mouse strains. Ali-Khan Z, et al.
Exp Parasitol 1988 Dec;67(2):334–45

Unexpected splenic nodules in leukemic patients. Hogan SF, et al. **Hum Pathol** 1989 Jan;20(1):62–8

Pseudocyst of the spleen after closed abdominal injury. Eri LM, et al. **Injury** 1988 Jul;19(4):297

Cat-scratch disease without adenopathy. Malatack JJ, et al.
J Pediatr 1989 Jan;114(1):101–4

Giant iatrogenic splenic pseudocyst. Reynolds M, et al.
J Pediatr Surg 1989 Jul;24(7):700–1; discussion 701–2

Acute splenic sequestration in a 2-month-old infant with sickle cell anemia. Pappo A, et al. **Pediatrics** 1989 Sep; 84(3):578–9

Splenic abscess due to Salmonella in a child. Oğuz M, et al. **Turk J Pediatr** 1988 Apr–Jun;30(2):127–30

[Unusual localizations of hydatid cysts. Apropos of 40 cases] Abi F, et al. **J Chir (Paris)** 1989 May;126(5):307–12 (Eng. Abstr.) **(Fre)**

[Splenic abscess caused by Salmonella typhi in a child (letter)] Nores JM, et al. **Presse Med** 1989 Apr 8;18(14):728–9 **(Fre)**

[Diagnosis and clinical aspects of functional disorders of the spleen] Gabryś K. **Wiad Lek** 1988 Apr 15;41(8):500–6 (19 ref.) (Eng. Abstr.) **(Pol)**

[Post-traumatic subcapsular rupture of the spleen with late suppuration of a hematoma] Drobot AI, et al.
Klin Khir 1988;(9):62 **(Rus)**

[Abscess of the spleen as a complication of cardiomyopathy] Penenkov BL, et al. **Vrach Delo** 1989 May;(5):39–40 **(Rus)**

[Splenic abscess after partial embolization] Bautista Casasnovas A, et al. **An Esp Pediatr** 1989 May;30(5):385–6 **(Spa)**

[Laparoscopic hemostatic procedures in patients with coagulation disorders undergoing hepatic and splenic puncture biopsies] Ferrando J, et al.
Rev Esp Enferm Apar Dig 1988 Oct;74(4 Pt 2):447–9 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Impaired antibody response to polysaccharides in association with functional asplenia. Gaines AD, et al. **J Pediatr** 1989 Jan;114(1):89–91

MICROBIOLOGY

Human necrotizing splenitis caused by Borrelia burgdorferi. Rank EL, et al. **Am J Clin Pathol** 1989 Apr;91(4):493–8

Splenic abscess from Fusobacterium nucleatum [letter] Haber SW, et al. **Ann Intern Med** 1989 Jun 1;110(11):948

PARASITOLOGY

Amoebic liver and splenic abscesses [letter] Misra SC, et al.
Indian J Gastroenterol 1989 Jul;8(3):204

PATHOLOGY

Sonomorphological abnormalities in Sudanese children with Schistosoma mansoni infection: a proposed staging-system for field diagnosis of periportal fibrosis.
Doehring-Schwerdtfeger E, et al. **Am J Trop Med Hyg** 1989 Jul;41(1):63–9

Hypothesis: splenic filtration and the pathogenesis of extramedullary hematopoiesis in agnogenic myeloid metaplasia. Wolf BC, et al. **Hematol Pathol** 1987;1(1):77–80 (31 ref.)

Intrahepatic bile duct changes in human hepatosplenic schistosomiasis mansoni. Vianna MR, et al. **Liver** 1989 Apr; 9(2):100–9

Epithelioid granulomatosis with initial and predominant manifestation in spleen. Morphological and immunohistochemical analysis of six cases. Falk S, et al.
Virchows Arch [A] 1988;414(1):69–76

[Ultrastructure of the gastric mucosa and trace elements in gastropathic patients with spleen deficiency syndrome and

its clinical significance] Yin GY. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):527–30, 516 (Eng. Abstr.) **(Chi)**

[Hyposplenism in celiac disease in children] Fasce L, et al. **Minerva Pediatr** 1988 Sep;40(9):535–8 (Eng. Abstr.) **(Ita)**

[Idiopathic hepatosplenic granulomatosis] Nalli G, et al. **Recenti Prog Med** 1989 Jan;80(1):9–13 (Eng. Abstr.) **(Ita)**

[A case of splenoma (hamartoma lienis) coexistent with amyloidosis] Prątnicki A, et al. **Patol Pol** 1988 Jul–Sep; 39(3):220–3 (Eng. Abstr.) **(Pol)**

[Non–Hodgkin's lymphoma with splenic granulomatous reaction] Urbano–Ispizua A, et al. **Med Clin (Barc)** 1989 May 6;92(17):661–4 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

[Progress in research on the spleen deficiency syndrome with traditional Chinese medicine and Western medicine] Ding J. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):697–9 (16 ref.) **(Chi)**

[Biometric data on adult patients with schistosomiasis, Bahia (Brazil)] Tavares–Neto J, et al. **Rev Saude Publica** 1988 Aug;22(4):288–91 (Eng. Abstr.) **(Por)**

RADIOGRAPHY

Significance of an enlarged splenic artery in patients with splenic vein thrombosis. Dumont AE, et al. **Am Surg** 1988 Oct;54(10):613–6

Intraperitoneal splenosis: diagnosis by ultrasound and computed tomography. Maillard JC, et al. **Gastrointest Radiol** 1989 Spring;14(2):179–80

Computed tomography demonstration of unusual diffuse metastatic calcification secondary to renal failure. Varma DG, et al. **J Comput Tomogr** 1988 Oct;12(4):282–6

RADIONUCLIDE IMAGING

Enlarged left lobe of the liver mistaken for a mass in the splenic region. Rao MG. **Clin Nucl Med** 1989 Feb;14(2):134

Functional hyposplenia in a child with the AIDS–related complex. Siddiqui AR. **Clin Nucl Med** 1988 Nov; 13(11):840–1

SURGERY

Splenic cyst: a case report. Márquez–Sarraga RH, et al. **Bol Asoc Med P R** 1989 Feb;81(2):51–3

Pediatric wandering spleen—the case for splenopexy: review of 35 reported cases in the literature. Allen KB, et al. **J Pediatr Surg** 1989 May;24(5):432–5 (35 ref.)

Stapled partial splenectomy for splenic abscess in a child. Bhattacharyya N, et al. **J Pediatr Surg** 1989 Mar; 24(3):316–7

Partial splenectomy: the preferred alternative for the treatment of splenic cysts. Brown MF, et al. **J Pediatr Surg** 1989 Jul;24(7):694–6

Splenic microabscesses in the immune–compromised patient. Hatley RM, et al. **J Pediatr Surg** 1989 Jul;24(7):697–9; discussion 701–2

Spontaneous rupture of the spleen in infectious mononucleosis: a failed attempt at nonoperative therapy. Vitello J. **J Pediatr Surg** 1988 Nov;23(11):1043–4

[Conservative surgery in pseudocysts of the spleen] Anselm Y, et al. **J Chir (Paris)** 1989 Apr;126(4):229–31 (Eng. Abstr.) **(Fre)**

[Splenic cyst. Diagnosis, indications and choice of procedure] Treutner KH, et al. **Chirurg** 1988 Jul;59(7):478–81 (Eng. Abstr.) **(Ger)**

[A case of epithelial cyst of the spleen] Piccioli R, et al. **Chir Ital** 1988 Aug–Oct;40(4–5):313–8 (Eng. Abstr.) **(Ita)**

[Splenic cyst. Treated with resection] Solheim K. **Tidsskr Nor Laegeforen** 1988 Nov 10;108(31):2848–9 (Eng. Abstr.) **(Nor)**

[Therapeutic alternatives in splenic abscess] Steinman E, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 May–Jun; 43(3):168–70 (Eng. Abstr.) **(Por)**

[Splenic torsion in a 9–year–old child] Kononuchenko VP, et al. **Klin Khir** 1988;(6):70 **(Rus)**

[Solitary splenic abscess treated by splenotomy (letter)] Monteagudo M, et al. **Med Clin (Barc)** 1988 Jul 2;91(6):239 **(Spa)**

[Solitary splenic abscess, treated by puncture–drainage] Lamamié E, et al. **Rev Esp Enferm Apar Dig** 1988 Jun; 73(6):725–7 (Eng. Abstr.) **(Spa)**

[Epidermoid cyst of the spleen] Noguerales F, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):279–82 (Eng. Abstr.) **(Spa)**

THERAPY

Use of the ultrasonic aspirator in splenic preservation. Nnochiri CP, et al. **Br J Surg** 1989 Apr;76(4):408

Splenic cysts: aspiration, sclerosis, or resection. Moir C, et al. **J Pediatr Surg** 1989 Jul;24(7):646–8

[Splenic abscess. Treatment by percutaneous drainage (letter)] Soffer M, et al. **Presse Med** 1989 Apr 22;18(16):846 **(Fre)**

[Diagnosis and treatment of intrasplenic hematoma] Iudin MIa, et al. **Klin Khir** 1988;(9):36–8 (Eng. Abstr.) **(Rus)**

[Treatment of echinococcosis of the spleen] Petričević A, et al. **Acta Chir Iugosl** 1987;34(1):21–6 (Eng. Abstr.) **(Scr)**

VETERINARY

Epidemiologic, clinical, pathologic, and prognostic characteristics of splenic hemangiosarcoma and splenic hematoma in dogs: 217 cases (1985). Prymak C, et al. **J Am Vet Med Assoc** 1988 Sep 15;193(6):706–12

Radiographic signs of isolated splenic torsion in dogs: eight cases (1980–1987). Stickle RL. **J Am Vet Med Assoc** 1989 Jan 1;194(1):103–6

Chronic splenitis as a possible complicating factor in calves inoculated with an attenuated redwater vaccine. Ehret WJ, et al. **J S Afr Vet Assoc** 1987 Sep;58(3):131–4

Spleen hydatidosis in sheep from north Jordan. Abdel–Hafez SK, et al. **Vet Parasitol** 1989 Jan;30(3):191–6

SPLENIC INFARCTION

[Splenic infarction] Lorentzen T, et al. **Ugeskr Laeger** 1989 May 8;151(19):1171–2 (Eng. Abstr.) **(Dan)**

COMPLICATIONS

Splenic infarction associated with nonenterococcal endocarditis—report of a case. Wang FD, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):219–22

DIAGNOSIS

Gas–containing splenic infarct masquerading as gastric bezoar: ultrasound elucidation. Williamson SL, et al. **JCU** 1988 Nov–Dec;16(9):678–80

ETIOLOGY

Splenic infarction. A new thrombotic manifestation of the circulating lupus anticoagulant. Obarski TP, et al. **Cleve Clin J Med** 1989 Mar–Apr;56(2):174–6

[The trial use of alpha–IFN in treating a case of chronic myelomonocytic leukemia with splenic infarction] Kimura S, et al. **Gan No Rinsho** 1989 Apr;35(5):615–9 (Eng. Abstr.) **(Jpn)**

[Massive splenic infarction in a case of CMML] Oita M, et al. **Rinsho Ketsueki** 1988 Sep;29(9):1471–5 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Splenic and renal infarction in systemic lupus erythematosus: association with anti–cardiolipin antibodies. Arnold MH, et al. **Clin Rheumatol** 1988 Sep;7(3):406–10

SPLENIC NEOPLASMS

Triple synchronous malignant tumors. Hepatic leiomyosarcoma, splenic hemangiosarcoma and sigmoid colon cancer. Case report. Kinoshita A, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):477–9

Splenic hamartoma: report of a case and review of the literature. Yamaguchi K, et al. **Jpn J Surg** 1989 May; 19(3):381–6 (33 ref.)

Hemangiosarcoma of the spleen. Hahner M, et al. **Pa Med** 1988 Nov;91(11):59–61 (23 ref.)

COMPLICATIONS

Kaposi's sarcoma with visceral involvement in a young heterosexual male without evidence of the acquired immune deficiency syndrome. Kumar S, et al. **Am J Gastroenterol** 1989 Mar;84(3):318–21

Primary malignant lymphoma of the spleen in systemic lupus erythematosus. Buskila D, et al. **J Rheumatol** 1989 Jul; 16(7):993–6

Haemolytic anaemia associated with splenic haemangiomata. Radhi JM, et al. **Postgrad Med J** 1988 Feb;64(748):152–4

Hamartoma of the spleen with haematological symptoms. Beham A, et al. **Virchows Arch [A]** 1989;414(6):535–9

[Spontaneous splenic rupture with hemothorax without hemoperitoneum. Description of a case of angiosarcoma of the spleen (letter) Millán J, et al. **Rev Clin Esp** 1988 Oct;183(6):334–5 **(Spa)**

DIAGNOSIS

The diagnosis of splenic lymphoma by MR imaging: value of superparamagnetic iron oxide. Weissleder R, et al. **AJR** 1989 Jan;152(1):175–80

Difficult preoperative diagnosis of a patient with sclerosing splenic hemangioma. Edoute Y, et al. **Am J Gastroenterol** 1989 Jul;84(7):817–9

Splenic cyst carcinoma presenting in pregnancy. Elit L, et al. **Am J Hematol** 1989 Sep;32(1):57–60

Isodense splenic mass: hamartoma, a case report. Norowitz DG, et al. **Comput Med Imaging Graph** 1989 Jul–Aug; 13(4):347–50

Inflammatory pseudotumor of the spleen: ultrasound and computed tomographic findings. Franquet T, et al. **Gastrointest Radiol** 1989 Spring;14(2):181–3

Ectopic endocrine pancreatic tumour simulating splenic angiosarcoma. Sapino A, et al. **Pathol Res Pract** 1989 Mar; 184(3):292–6

Superparamagnetic iron oxide: enhanced detection of focal splenic tumors with MR imaging. Weissleder R, et al. **Radiology** 1988 Nov;169(2):399–403

[Magnetic resonance tomography of focal liver and spleen lesions. Experiences using ferrite, a new RES–specific MR contrast medium] Rummeny E, et al. **Radiologe** 1988 Aug; 28(8):380–6 (Eng. Abstr.) **(Ger)**

[A rare manifestation of Hodgkin's disease: splenic abscess] Pentimone F, et al. **Clin Ter** 1988 Dec 31;127(6):463–5 (Eng. Abstr.) **(Ita)**

[Splenic lymphangioma: a case report] Bagnolesi P, et al. **Radiol Med (Torino)** 1989 Apr;77(4):424–6 **(Ita)**

[Primary angiosarcoma of the spleen with metastases in the liver—radionuclide and angiographic study] Hayashi K, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1137–40 (Eng. Abstr.) **(Jpn)**

[A case report of diffuse splenic hemangiomatosis] Inoue K, et al. **Rinsho Hoshasen** 1988 Aug;33(8):931–4 (Eng. Abstr.) **(Jpn)**

[Ultrasound and radiological diagnosis of primary splenic tumors] Iwasaki M, et al. **Rinsho Hoshasen** 1988 Jun; 33(6):673–8 (Eng. Abstr.) **(Jpn)**

[A case of splenic cavernous hemangioma] Morimoto H, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1605–8 (Eng. Abstr.) **(Jpn)**

[A case of extramedullary plasmacytoma of the spleen] Sonobe T, et al. **Rinsho Hoshasen** 1989 Mar;34(3):375–8 (Eng. Abstr.) **(Jpn)**

[A rare case of the splenogenous form of lymphogranulomatosis] Panov VA, et al. **Klin Khir** 1989; (5):59 **(Rus)**

METABOLISM

Hydrolysis of 2',3'–cyclic adenosine monophosphate and 3',5'–cyclic adenosine monophosphate in subcellular fractions of normal and neoplastic mouse spleen. Konings AW, et al. **Life Sci** 1974 Aug 1;15(3):491–9

PATHOLOGY

Monocytoid B–cell lymphoma: point on a spectrum [letter] Traweek ST, et al. **Am J Clin Pathol** 1988 Dec;90(6):748–9

Malignant systemic mastocytosis. Jane SM, et al. **Aust N Z J Med** 1988 Jun;18(4):610–2

Hamartomas of the spleen: a study of 20 biopsy cases. Falk S, et al. **Histopathology** 1989 Jun;14(6):603–12

Association of splenoma, peliosis and lipid histiocytosis in spleen or accessory spleen removed in 2 patients with chronic idiopathic thrombocytopenic purpura after long term treatment with steroids. Diebold J, et al. **Pathol Res Pract** 1988 Aug;183(4):446–52

Primary mucinous cystadenocarcinoma of the appendix with pseudomyxoma peritonei manifested as a splenic mass. Holder PD, et al. **South Med J** 1989 Aug;82(8):1029–31 (14 ref.)

Hemangiopericytoma of the spleen. Guadalajara Jurado J, et al. **Surgery** 1989 Sep;106(3):575–7

[Neoplasm of the liver and spleen. A clinical case] Pozzato G, et al. **G Clin Med** 1989 Mar;70(3):225–6 **(Ita)**

[Hemangioma of the spleen. Case contribution] Scolozzi R, et al. **Pathologica** 1988 Jan–Feb;80(1065):117–25 (Eng. Abstr.) **(Ita)**

[Laparoscopy in the staging of lymphoma. Personal experience] Reguzzoni G, et al. **Recenti Prog Med** 1988 May;79(5):206–9 (Eng. Abstr.) **(Ita)**

[Ultrasonically guided splenic biopsy in patients with malignant lymphoma] Suzuki T. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):982–7 (Eng. Abstr.) **(Jpn)**

[A case of splenoma (hamartoma lienis) coexistent with amyloidosis] Prątnicki A, et al. **Patol Pol** 1988 Jul–Sep; 39(3):220–3 (Eng. Abstr.) **(Pol)**

[Hamartoma of the spleen] Ershov IuA, et al. **Gematol Transfuziol** 1988 Aug;33(8):53–6 **(Rus)**

[Non–Hodgkin's lymphoma with splenic granulomatous reaction] Urbano–Ispizua A, et al. **Med Clin (Barc)** 1989 May 6;92(17):661–4 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Angiosarcoma of the spleen. Case report and review of literature. De Vriese L, et al. **Acta Chir Belg** 1989 Jan–Feb; 89(1):46–8 (14 ref.)

Cystic haemangioma of the spleen: findings on ultrasound and computed tomography. Duddy MJ, et al. **Br J Radiol** 1989 Feb;62(734):180–2

Unusual presentation of non–Hodgkin lymphoma of the spleen. Martí–Bonmatí L, et al. **Can Assoc Radiol J** 1989 Feb;40(1):49–50

Conventional CT and CT arteriography of a splenic hemangioma. De Munck B, et al. **J Belge Radiol** 1988; 71(5):605–9

Splenic cavernous hemangioma: CT findings and report of an unusual case. Danza FM, et al. **Rays** 1988 Sep–Dec; 13(3):77–9

Computerized tomography in metastatic evaluation. Smith RE, et al. **Wis Med J** 1989 May;88(5):25–7

[Cavernous hemangioma of the spleen. Apropos of a case] Mazas–Artasona L, et al. **Ann Radiol (Paris)** 1989; 32(3):227–9 (19 ref.) (Eng. Abstr.) **(Fre)**

[A case of blue rubber bleb nevus syndrome with splenic hemangioma] Hasegawa T, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1143–6 (12 ref.) (Eng. Abstr.) **(Jpn)**

[A case of ectopic insulinoma] Yamauchi T, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1141–2 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Detection of noncalcified splenic hemangioma by radionuclide bone scan. Cooper SG, et al. **J Nucl Med** 1989 Jun;30(6):1111–2

[A case of splenic hemangioma showing a "hot spot" on radiocolloid scintigraphy] Hayasaka K, et al. **Kaku Igaku** 1988 Nov;25(11):1279–82 (Eng. Abstr.) **(Jpn)**

SECONDARY

Solitary metastatic endometrial carcinoma of the spleen. Jørgensen LN, et al. **Acta Obstet Gynecol Scand** 1988; 67(1):91–2

Fine-needle aspiration of spleen: diagnosis of a solitary ovarian metastasis. Nosanchuk JS, et al. **Diagn Cytopathol** 1988;4(2):159–61

Recurrent endometrial adenocarcinoma: presentation as a splenic mass mimicking malignant lymphoma. Gilks CB, et al. **Gynecol Oncol** 1989 May;33(2):209–11 (13 ref.)

[Scintigraphic search for metastases in patients with neoplasms of the head and neck] Brauneis J, et al. **HNO** 1988 Nov;36(11):445–51 (Eng. Abstr.) **(Ger)**

[A rare case of metastasis of the spleen from recurrent cancer of the residual stomach] Fujita M, et al. **Gan No Rinsho** 1989 Jun;35(7):855–60 (Eng. Abstr.) **(Jpn)**

SURGERY

Use of thoracoabdominal incision for cancer of the splenic flexure in the obese patient. Walfisch S, et al. **Dis Colon Rectum** 1989 Feb;32(2):169–70

Thoracoabdominal incision [letter] White R. **Dis Colon Rectum** 1989 Jul;32(7):634–5

[3 cases of splenic angiomatosis] Cortese F, et al. **Minerva Chir** 1988 Apr 15;43(7):633–7 (Eng. Abstr.) **(Ita)**

[Normalization of platelet count following prednisolone and splenectomy in a patient with splenic hamartoma and thrombocytopenia] Ubara Y, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1083–7 (Eng. Abstr.) **(Jpn)**

VETERINARY

A primary extraskeletal osteogenic sarcoma arising in the spleen of a dog. Jabara AG, et al. **Aust Vet J** 1989 Jan; 66(1):27–9

Clinical, ultrasonographic and pathological findings in a horse with splenic lymphosarcoma and pseudohyperparathyroidism. Marr CM, et al. **Equine Vet J** 1989 May;21(3):221–6

Epidemiologic, clinical, pathologic, and prognostic characteristics of splenic hemangiosarcoma and splenic hematoma in dogs: 217 cases (1985). Prymak C, et al. **J Am Vet Med Assoc** 1988 Sep 15;193(6):706–12

Extraskeletal osteosarcoma in two dogs. Schena CJ, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1452–6

Ultrasonographic features of splenic lymphosarcoma in dogs: 12 cases (1980–1986). Wrigley RH, et al. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1565–8

Splenomegaly in dogs. Predictors of neoplasia and survival after splenectomy. Johnson KA, et al. **J Vet Intern Med** 1989 Jul–Sep;3(3):160–6

Fine-needle aspiration of the spleen as an aid in the diagnosis of splenomegaly. O'Keefe DA, et al. **J Vet Intern Med** 1987 Jul–Sep;1(3):102–9

SPLENIC RUPTURE

CHEMICALLY INDUCED

Streptokinase and splenic rupture. Wiener RS, et al. **Am J Med** 1989 Feb;86(2):249

[Acute monoblastic leukemia complicated by fatal splenic rupture following initiation of chemotherapy] Borgeat A, et al. **Schweiz Med Wochenschr** 1989 Feb 18;119(7):227–9 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Pain of delayed traumatic splenic rupture masked by intrapleural lidocaine. Pond WW, et al. **Anesthesiology** 1989 Jan;70(1):154–5

Hypotension and bleeding with various anatomic patterns of blunt splenic injury in adults. Buckman RF Jr, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):206–12

Spontaneous splenic rupture: a unique presentation of Q fever. Henderson SA, et al. **Ulster Med J** 1988 Oct; 57(2):218–9

[Thoracic splenosis] Destable MD, et al. **Rev Pneumol Clin** 1989;45(1):34–5 (8 ref.) (Eng. Abstr.) **(Fre)**

[Non-occlusive ischemic colitis after traumatic rupture of the spleen] Catergiannakis V, et al. **Minerva Chir** 1988 Nov 30;43(22):1963–8 (Eng. Abstr.) **(Ita)**

[Hemostasis in injury of the spleen by the method of embolization and intra-arterial infusion] Moskvichev VG, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):84–6 (Eng. Abstr.) **(Rus)**

[Post-traumatic subcapsular rupture of the spleen with late suppuration of a hematoma] Drobot AI, et al. **Klin Khir** 1988;(9):62 **(Rus)**

DIAGNOSIS

Spontaneous rupture of the spleen: a case report and literature review. Lieberman ME, et al. **Am J Emerg Med** 1989 Jan; 7(1):28–31 (29 ref.)

Anyone for tennis? Mohanlal M. **Aust Fam Physician** 1988 Oct;17(10):916

Use of ultrasound scanning in diagnosis and conservative management of rupture of the spleen. Diamond T, et al. **Injury** 1987 Nov;18(6):411–2

The inguinal hernia: not always straightforward, not always a hernia. Sherman HF. **J Emerg Med** 1989 Jan–Feb; 7(1):21–4

An unusual presentation of splenic rupture. Tyler G, et al. **J Trauma** 1988 Nov;28(11):1584–6

Spontaneous rupture of the spleen in pregnancy with splenic conservation. Fletcher H, et al. **West Indian Med J** 1989 Jun;38(2):114–5

[Inhomogeneous enlargement of the spleen] Frölich E. **Leber Magen Darm** 1989 Mar;19(2):81, 100 **(Ger)**

ETIOLOGY

Rupture of the spleen following endoscopic retrograde cholangiopancreatography (ERCP). Case report. Trondsen E, et al. **Acta Chir Scand** 1989;155(1):75–6

Splenic rupture as a cause of sudden death in undiagnosed chronic myelogenous leukemia. Nestok BR, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):241–5

Spontaneous (pathological) rupture of the spleen in non-Hodgkin's lymphoma. Morgan MS, et al. **Clin Lab Haematol** 1989;11(2):153–6

Spontaneous splenic rupture in myelodysplastic syndrome [letter] Raafat A, et al. **Eur J Haematol** 1989 Apr; 42(4):410–1

Splenic rupture in leukemia. Canady MR, et al. **J Surg Oncol** 1989 Jul;41(3):194–7 (24 ref.)

Fever, lymphadenopathy and shock in a 16-year-old girl. Moolenaar W, et al. **Neth J Med** 1988 Aug;33(1–2):37–40

[Rupture of the spleen in a patient with infectious mononucleosis] Clement F. **Ugeskr Laeger** 1989 Aug 7; 151(32):2034–5 (Eng. Abstr.) **(Dan)**

[An uncommon complication of chloroquine resistant Plasmodium falciparum malaria: spontaneous splenic rupture (letter)] Touze JE, et al. **Ann Med Interne (Paris)** 1989;140(3):228–9 **(Fre)**

[Splenic rupture caused by colonoscopy (letter)] Bier JY, et al. **Gastroenterol Clin Biol** 1989;13(2):224–5 (Eng. Abstr.) **(Fre)**

[Blunt upper abdominal trauma as a complication of cardiac resuscitation] Reinartz H. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):111–4 (Eng. Abstr.) **(Ger)**

[Spontaneous rupture of the spleen caused by primary amyloidosis. Description of a clinical case] Festa V, et al. **Minerva Chir** 1989 May 31;44(10):1525–8 (Eng. Abstr.) **(Ita)**

[Spontaneous rupture of the spleen in a case of malignant lymphoma] Sugawara M, et al. **Rinsho Ketsueki** 1988 Sep; 29(9):1427–31 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Splenic rupture in a patient with chronic myeloleukemia] Karmilov VA, et al. **Klin Med (Mosk)** 1988 Aug; 66(8):133–4 **(Rus)**

PATHOLOGY

Spontaneous rupture of spleen in acute myeloid leukaemia (AML) [letter] Sarode R, et al. **J Assoc Physicians India** 1988 Jun;36(6):400

Delayed spontaneous splenic rupture in sarcoidosis. Albala MM, et al. **R I Med J** 1989 May;72(5):175–7

RADIOGRAPHY

Life-threatening intraperitoneal bleeding: demonstration with CT. Sivit CJ, et al. **Radiology** 1989 May;171(2):430

SURGERY

Splenectomy for trauma: morbidity, mortality and associated abdominal injuries. Pitcher ME, et al. **Aust N Z J Surg** 1989 Jun;59(6):461–3

Successful transthoracic repair of a ruptured spleen. Davies M, et al. **J R Soc Med** 1988 Dec;81(12):733–4

[A spleen-preserving method in splenic rupture using an absorbable net] Leemans R, et al. **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2016–7 (Eng. Abstr.) **(Dut)**

[Spleen-preserving surgery using a polyglactin (Vicryl) perisplenic prosthesis] Noterdaeme PM, et al. **Acta Chir Belg** 1987 Sep-Oct;87(5):282–6 (Eng. Abstr.) **(Fre)**

[Fulminant sepsis following posttraumatic splenectomy—OPSI (overwhelming postsplenectomy infection) syndrome] Thoma R, et al. **Anaesthesist** 1989 Jul;38(7):379–82 (Eng. Abstr.) **(Ger)**

[Traumatic splenic rupture—personal treatment principles] Hilgier A, et al. **Beitr Orthop Traumatol** 1989 Apr; 36(4):149–52 (Eng. Abstr.) **(Ger)**

[Spontaneous splenic rupture in infectious mononucleosis—organ-sparing operation using fibrin glue] Ormann W, et al. **Langenbecks Arch Chir** 1988;373(4):240–2 (Eng. Abstr.) **(Ger)**

[Early and late results of heterotopic spleen autotransplantation in pediatric splenic trauma] Büyükünal C, et al. **Z Kinderchir** 1988 Dec;43(6):394–7 (Eng. Abstr.) **(Ger)**

[Heterotopic autotransplant of the spleen after splenectomy in traumatic rupture. Personal experience and scintigraphic follow-up] Lucarini L, et al. **Minerva Chir** 1989 Jun 15; 44(11):1569–72 (Eng. Abstr.) **(Ita)**

[Obstruction of strangulated intestine as a complication of autotransplantation of the spleen after its injury] Kleba T, et al. **Wiad Lek** 1988 Aug 15;41(16):1112–5 (Eng. Abstr.) **(Pol)**

[Closed injuries of the spleen] Bondarenko NM, et al. **Klin Khir** 1989;(4):42–4 (Eng. Abstr.) **(Rus)**

[Treatment of closed injuries of the spleen in children by splenectomy combined with heterotopic autotransplantation of splenic tissue] Babich II, et al. **Vestn Khir** 1989 Feb;142(2):93–6 **(Rus)**

[Diagnosis and treatment of traumatic rupture of the spleen] Vučković B, et al. **Acta Chir Iugosl** 1988;35(2):249–59 (Eng. Abstr.) **(Scr)**

THERAPY

Non-operative management of splenic trauma in adults [letter] Armengol M, et al. **Br J Surg** 1989 Apr;76(4):422

Rupture of the spleen. An analysis of 421 cases. Wilkinson AE. **S Afr J Surg** 1989 Jun;27(2):74–5

[Non-operative treatment of splenic rupture: clinical analysis of 76 cases] Tang BS. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):25–7, 61 (Eng. Abstr.) **(Chi)**

SPLENIC VEIN

Variceal hemorrhage as a consequence of spontaneous rupture of a pancreatic pseudocyst into the splenic vein. Demetrick DJ, et al. **Am J Gastroenterol** 1989 Sep; 84(9):1103–5

Splanchnic venous obstruction. A complication of chronic pancreatitis. Fogartie JA, et al. **Am Surg** 1989 Mar; 55(3):191–7

Development of large spleno-adreno-renal shunt after endoscopic sclerotherapy. Dilawari JB, et al. **Gastroenterology** 1989 Aug;97(2):421–6

Peripancreatic vascular occlusions as a complication of pancreatitis. Nordbeck I, et al. **Int Surg** 1989 Jan–Mar; 74(1):36–9

Segmental portal hypertension and polycythemia vera. Baniel J, et al. **Isr J Med Sci** 1989 Apr;25(4):202–4

Endoscopic sclerotherapy: a risk factor for splanchnic venous thrombosis. Leach SD, et al. **J Vasc Surg** 1989 Jul; 10(1):9–12; discussion 12–3

Hemodynamic study of occlusion of the splenic vein caused by carcinoma of the pancreas. Ku Y, et al. **Surg Gynecol Obstet** 1989 Jan;168(1):17–24 (22 ref.)

[Thromboses of the splenic vein. Our experience with 34 surgically treated cases] Morel P, et al. **Ann Chir** 1988; 42(7):442–7 (Eng. Abstr.) **(Fre)**

[Portal hypertension due to thromboses of the portal, splenic and mesenteric veins in congenital protein c deficiency] Höring E, et al. **Dtsch Med Wochenschr** 1988 Nov 25; 113(47):1847–9 (Eng. Abstr.) **(Ger)**

[Paroxysmal nocturnal hemoglobinuria with multiple venous thrombosis and acute renal insufficiency. Description of a case] Tedde R, et al. **Minerva Med** 1989 Jun;80(6):615–8 (Eng. Abstr.) **(Ita)**

[Splenic vein occlusion due to pancreatic disease: regional portal hypertension from hemodynamic points of view] Ku Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):409–14 (Eng. Abstr.) **(Jpn)**

[Calcifications in the portal venous system] Fernández Hidalgo JM, et al. **Rev Esp Enferm Apar Dig** 1988 Nov; 74(5):569–71 (Eng. Abstr.) **(Spa)**

[Isolated obstruction of the splenic vein by a pancreatic pseudocyst] Moreira Vicente VF, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):721–4 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Venous complications of sclerotherapy for esophageal varices. Hunter GC, et al. **Am J Surg** 1988 Dec; 156(6):497–501

Distinctive characteristics of the splenic vein in the dog. Its morphological and pharmacological discontinuities with the portal vein and splenic capsule. Yoshioka K, et al. **Blood Vessels** 1988;25(6):273–84

PATHOLOGY

Portal hypertension with a large spontaneous spleno-renal shunt in the absence of splenomegaly. Rees JI, et al. **Clin Radiol** 1989 Jul;40(4):431–3

Ultrasonography in portal hypertension: a sensitive noninvasive test to demonstrate portal-vascular anatomy. Nagabhusan G, et al. **Gastroenterol Jpn** 1989 Aug; 24(4):442–5

[Intravital diagnosis of thrombosis of the splenic vein] Kuznetsov NE, et al. **Klin Med (Mosk)** 1989 May; 67(5):132–4 **(Rus)**

PHYSIOPATHOLOGY

Development of splenoadrenorenal shunts after obliteration of esophageal varices by endoscopic sclerotherapy. Dilawari JB, et al. **Am J Gastroenterol** 1989 Mar; 84(3):304–5

[Changes in hemodynamics and angioarchitecture of the hepatolienal basin after embolization of the splenic artery in liver cirrhosis] Vakhidov AV, et al. **Vestn Khir** 1989 Feb;142(2):24–7 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Splenic arteriovenous fistula. Case report. Gudmundsen TE, et al. **Acta Chir Scand** 1988 Oct;154(10):603–4

Demonstration of splenic and portal veins at routine celiac angiography. A clinical investigation of metrizoate and ioxaglate. Nilsson P, et al. **Acta Radiol** 1989 Jan–Feb; 30(1):49–52

Significance of an enlarged splenic artery in patients with splenic vein thrombosis. Dumont AE, et al. **Am Surg** 1988 Oct;54(10):613–6

SURGERY

Splenocaval shunt for selective portal decompression. Iliopoulos JI, et al. **World J Surg** 1988 Dec;12(6):852–5

TRANSPLANTATION

The effect of a distal splenic arteriovenous fistula on tissue blood flow in the pancreatic segment. Kin S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2812–4

SPLENOMEGALY

CHEMICALLY INDUCED

The topography of mercurial lymphadenopathy in brown Norway rats. Levine S, et al. **Lymphology** 1988 Sep; 21(3):161–8

CLASSIFICATION

[The classification of splenomegaly] Mitrofanov EI. **Klin Med (Mosk)** 1988 Nov;66(11):138–40 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Upper gastrointestinal bleeding in Malawian adults and value of splenomegaly in predicting source of haemorrhage. Harries AD, et al. **East Afr Med J** 1989 Feb;66(2):97–9

[Whipple's disease and splenomegaly with negative intestinal biopsies] Carballo Fernández C, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):397–400 (Eng. Abstr.) **(Spa)**

[Dacie syndrome and lymphoma (letter)] Lobato-Mendizábal E. **Rev Invest Clin** 1989 Jan–Mar;41(1):91 **(Spa)**

DIAGNOSIS

A study on graft-versus-host reaction (GVHR) by Simonsen's splenomegaly assay. Cells and antigen systems involved in induction of GVHR. Onoé K, et al. **Acta Pathol Jpn** 1989 Feb;39(2):101–10

Nontropical idiopathic splenomegaly. Wohlgemuth SD, et al. **South Med J** 1988 Dec;81(12):1569–70 (9 ref.)

[Clinico-laboratory and morphologic characteristics of the tropical splenomegaly syndrome] Felitar VA, et al. **Ter Arkh** 1988;60(11):82–4 (Eng. Abstr.) **(Rus)**

[Non-tropical idiopathic splenomegaly and hypersplenism. Report of a case] Orozco H, et al. **Rev Invest Clin** 1988 Apr–Jun;40(2):167–70 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

A longitudinal study of splenomegaly in pregnancy in a malaria endemic area in Papua New Guinea. Brabin BJ, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):677–81

High and low spleen rates distinguish two populations of women living under the same malaria endemic conditions in Madang, Papua, New Guinea. Brabin L, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):671–6

Malaria and splenomegaly in the Punjab. Strickland GT, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):667–70

ETHNOLOGY

[Regression of the hepatosplenic form of schistosomiasis, after specific treatment, associated with race] Tavares-Neto J, et al. **Rev Soc Bras Med Trop** 1988 Jul–Sep;21(3):131–3 (Eng. Abstr.) **(Por)**

ETIOLOGY

Acne fulminans associated with painful splenomegaly [letter] van Schaardenburg D, et al. **Arch Dermatol** 1989 Jan; 125(1):132–3

Indeterminate splenomegaly in fourteen cases [letter] Gupta OP, et al. **J Assoc Physicians India** 1988 Feb;36(2):183

[Splenectomy in Gaucher's disease. Apropos of 2 cases, one of which was preceded by embolization] Samama G, et al. **Ann Chir** 1989;43(5):367–70 (Eng. Abstr.) **(Fre)**

[Anatomo-clinical conference. Hôpital de la Pitié-Salpêtrière. Case n. 1—1988. Lymph nodes, spleen and hypoglycemia] Guillevin L, et al. **Ann Med Interne (Paris)** 1988;139(3):219–26 **(Fre)**

[Hyper-reactive malarial splenomegaly in an European returning from Central Africa (letter)] Chagnon A, et al. **Presse Med** 1989 May 6;18(18):938 **(Fre)**

[Splenomegaly and peripheral pancytopenia in a 62-year-old patient] Hoever C, et al. **Internist (Berlin)** 1988 Sep; 29(9):641–5 **(Ger)**

[Left side mass (pseudosplenomegaly) caused by a large retroperitoneal ganglioneuroma] Girolami A, et al. **Clin Ter** 1988 Oct 31;127(2):143–6 (Eng. Abstr.) **(Ita)**

[A case of total situs inversus of the internal organs associated with splenomegaly and hypersplenism] Shamov IA, et al. **Klin Med (Mosk)** 1989 Jun;67(6):128–9 **(Rus)**

[Hepatosplenomegaly of unknown etiology: clinical examination in making a diagnosis in 57 cases] Loredo-Abdalá A, et al. **Bol Med Hosp Infant Mex** 1989 Jan;46(1):41–6 (Eng. Abstr.) **(Spa)**

[Gigantic splenomegaly as a form of clinical presentation of sarcoidosis (letter)] Fernández Monrás F, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):692–3 **(Spa)**

IMMUNOLOGY

Altered lymphocyte proliferation and cytokine release in hepatosplenic schistosomiasis mansoni in Brazil. Zwingenberger K, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:273–6

Tropical splenomegaly syndrome associated with cytomegalovirus infection. Wasserman GM, et al. **Milit Med** 1989 Mar;154(3):128–30

MICROBIOLOGY

Novel virulence properties of the Salmonella typhimurium virulence-associated plasmid: immune suppression and stimulation of splenomegaly. Hoertt BE, et al. **Plasmid** 1989 Jan;21(1):48–58

PATHOLOGY

The splenomegaly of myeloproliferative and lymphoproliferative disorders: splenic cellularity and vascularity. Zhang B, et al. **Eur J Haematol** 1989 Jul; 43(1):63–6

The disappearance of germinal centers in chronic lymphadeno-hepato-splenomegaly syndrome in childhood: report of three cases. Nezelof C, et al. **Pediatr Pathol** 1989; 9(1):57–71

PHYSIOPATHOLOGY

Differences in portal hemodynamics in cirrhosis and idiopathic portal hypertension. Ohnishi K, et al. **Am J Gastroenterol** 1989 Apr;84(4):409–12

Ferrokinetic study of splenic erythropoiesis: relationships among clinical diagnosis, myelofibrosis, splenomegaly, and extramedullary erythropoiesis. Beguin Y, et al. **Am J Hematol** 1989 Oct;32(2):123–8

The splenomegaly of myeloproliferative disorders: effects on blood volume and red blood count. Zhang B, et al. **Eur J Haematol** 1989 Mar;42(3):250–3

RADIOGRAPHY

The gastric bubble: roentgen observations. Gurney JW, et al. **Radiographics** 1989 May;9(3):467–85

SURGERY

Splenectomy for massive splenomegaly. Shaw JH, et al. **Br J Surg** 1989 Apr;76(4):395–7

Splenectomy for massive splenomegaly. Coon WW. **Surg Gynecol Obstet** 1989 Sep;169(3):235–7

Massive splenomegaly. Johnson HA, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):131–7

Splenectomy in massive tropical splenomegaly: two-to six-year follow-up in 14 patients. Vriend WH, et al. **Trop Geogr Med** 1988 Oct;40(4):298–303

THERAPY

[Monstrous splenomegaly in Gaucher's disease. Treatment by embolization and splenectomy (letter)] Samama G, et al. **Presse Med** 1989 May 27;18(21):1078–9 **(Fre)**

VETERINARY

An egg drop associated with splenomegaly in broiler breeders. Handlinger JH, et al. **Avian Dis** 1988 Oct–Dec; 32(4):773–8

Splenomegaly in dogs. Predictors of neoplasia and survival after splenectomy. Johnson KA, et al. **J Vet Intern Med** 1989 Jul–Sep;3(3):160–6

Fine-needle aspiration of the spleen as an aid in the diagnosis of splenomegaly. O'Keefe DA, et al. **J Vet Intern Med** 1987 Jul–Sep;1(3):102–9

SPLENOPORTOGRAPHY see **PORTOGRAPHY**

SPLENORENAL SHUNT, SURGICAL

Distal splenorenal shunt for portal vein thrombosis after liver transplantation. Marino IR, et al. **Am J Gastroenterol** 1989 Jan;84(1):67–70

Operative timing and patient survival following distal splenorenal shunt. Pomerantz RA, et al. **Am Surg** 1989 Jun; 55(6):333–7

Schistosomal versus nonschistosomal variceal bleeders. Do they respond differently to selective shunt (DSRS)? Ezzat FA, et al. **Ann Surg** 1989 Apr;209(4):489–500

Improved results with selective distal splenorenal shunt in a highly selected patient population. A prospective study. Paquet KJ, et al. **Ann Surg** 1989 Aug;210(2):184–9

Selection of portal-systemic shunts with an eye to subsequent liver transplantation. Flye MW. **Hepatology** 1988 Nov–Dec;8(6):1715–6.

Distal splenorenal vs. portal-systemic shunts after hemorrhage from varices: a randomized controlled trial. Grace ND, et al. **Hepatology** 1988 Nov–Dec;8(6):1475–81

Is the distal splenorenal shunt better? Rikkers LF. **Hepatology** 1988 Nov–Dec;8(6):1705–7

Comparison between selective distal splenorenal shunt and small diameter H-graft portosystemic shunt. Shah DM, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):459–61

Modeling splanchnic hemodynamics after distal splenorenal shunt: a computer simulation and sensitivity analysis. Rypins EB, et al. **Surgery** 1989 Jan;105(1):93–9

Portal versus systemic insulin delivery in canine pancreatic islet cell transplantation. Nason RW, et al. **Transplant Proc** 1988 Dec;20(6):1276–8

Appraisal of distal splenorenal shunt in the treatment of esophageal varices: an analysis of prophylactic, emergency, and elective shunts. Nagasue N, et al. **World J Surg** 1989 Jan–Feb;13(1):92–9; discussion 99

Prophylactic distal splenorenal shunt for child's class A and B patients at high risk of bleeding. Nagasue N, et al. **Zentralbl Chir** 1988;113(20):1329–37

[Distal splenorenal shunt in the treatment of portal hypertension] Qi YG. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):388–90, 444 (Eng. Abstr.) **(Chi)**

[Late results of spleno-renal shunt in portal hypertension: report of 142 cases] Wu GH. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):385–7, 444 (Eng. Abstr.) **(Chi)**

[Difficulties in distal splenorenal anastomosis] Vons C, et al. **Ann Chir** 1988;42(7):448–51 (Eng. Abstr.) **(Fre)**

[Selective distal spleno-renal shunt vs. latero-lateral porta-caval shunt. Subsequent analysis of encephalopathy and survival] Spina GP, et al. **Minerva Chir** 1989 Feb 15; 44(3):471–5 **(Ita)**

[Surgical correction of metabolism in diabetes mellitus] Galperin EI, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):6–11 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Severe hemolysis after distal splenorenal shunt. Ashida H, et al. **Am J Gastroenterol** 1989 Jan;84(1):71–4

Thrombosis of the superior mesenteric and portal veins after splenectomy and/or distal splenorenal shunts. Ito K, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):71–6

METHODS

Retroperitoneal approach to the Warren shunt [letter] Pera C, et al. **Am J Surg** 1989 Sep;158(3):275

Distal splenorenal shunt with splenopancreatic disconnection. A 4-year assessment. Henderson JM, et al. **Ann Surg** 1989 Sep;210(3):332–9; discussion 339–41

Distal splenorenal versus lienorenal shunt for acute variceal haemorrhage: is the selective shunt an advance? Lodge JP, et al. **J R Coll Surg Edinb** 1989 Apr;34(2):59–62 (23 ref.)

Splenorenal anastomosis during resection of juxtarenal aortic aneurysm. McCann RL, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):271–2

[Late results of Warren's distal splenorenal shunt] Gouillat C, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):291–7 (Eng. Abstr.) **(Fre)**

[Characteristics of performing distal splenorenal anastomosis] Beresnev AV, et al. **Klin Khir** 1988;(9):35–6 (Eng. Abstr.) **(Rus)**

MORTALITY

[Improvement of selectivity of distal splenorenal shunt and its clinical analysis] Ashida H, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1252–8 (Eng. Abstr.) **(Jpn)**

STATISTICS & NUMERICAL DATA

[Splenectomy and distal spleno-rectal shunt performed in Sergipe before and after a special program for the control of schistosomiasis] Netto AG. **Rev Soc Bras Med Trop** 1987 Jan–Mar;20(1):41–3 **(Por)**

SPLICED LEADER PEPTIDES see **SIGNAL PEPTIDES**

SPLICING, RNA see **RNA SPLICING**

SPLINTS

Lower limb compression using inflatable splints to prevent hypotension during spinal anaesthesia for caesarean section. Goudie TA, et al. **Acta Anaesthesiol Scand** 1988 Oct; 32(7):541–4

Brace treatment of Colles' fracture. Ferris BD, et al. **Acta Orthop Scand** 1989 Feb;60(1):63–5

Early controlled motion following flexor tendon graft. Dovelle S, et al. **Am J Occup Ther** 1988 Jul;42(7):457–63

A dynamic elbow extension splint. Parker BC. **Am J Occup Ther** 1987 Dec;41(12):825–6

The physiology of splint therapy: a literature review. Boero RP. **Angle Orthod** 1989 Fall;59(3):165–80 (84 ref.)

The Broadgreen osteotomy splint. Bainton R, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):80–2

An alternative method of fixation of alveolar ridge mucosa during the vestibuloplasty procedure. Grgurević J, et al.

Br J Oral Maxillofac Surg 1988 Oct;26(5):370–4
Reduction and fixation of jaw fractures using acrylic splints. Niimi M, et al. **Br J Oral Maxillofac Surg** 1989 Aug; 27(4):321–8
A locking bar modification for splint localisation. Roveda SI, et al. **Br J Oral Maxillofac Surg** 1989 Aug;27(4):318–20
A new splint for use in axillary surgery. Walker SJ, et al. **Br J Plast Surg** 1989 Jan;42(1):114–5
Surgical stents and major oral maxillofacial surgery. Small SA. **Dent Clin North Am** 1989 Jul;33(3):497–509 (19 ref.)
Efficacy of soft splints in reducing severe knee–flexion contractures. Anderson JP, et al. **Dev Med Child Neurol** 1988 Aug;30(4):502–8
Treatment of fractures of the hallux with a simple splint. Maitra AK. **Injury** 1987 Sep;18(5):344–6
Wrinkle corner. A splint for the metacarpophalangeal joint of the thumb. Wakeley CJ, et al. **Injury** 1987 Jul;18(4):291
A technique for the treatment of mandibular body fractures in young children. Calderon S, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):83–4
Modified acrylic cap splint for dento–alveolar fractures. Dehen M, et al. **Int J Oral Maxillofac Surg** 1989 Apr; 18(2):85–6
Pressure splints—an aid to rehabilitation. Rasmussen G. **Int J Rehabil Res** 1987;10(4 Suppl 5):85
Dental appliances for the treatment of obstructive sleep apnea. Clark GT, et al. **J Am Dent Assoc** 1989 May; 118(5):611–5, 617–9 (69 ref.)
An easily fabricated occlusal splint. Wright EF. **J Am Dent Assoc** 1988 Nov;117(6):757–8
A modification of digital splinting to prevent neurovascular impairment. Borrelli AH. **J Am Podiatr Med Assoc** 1989 Jan;79(1):34–5
Efficacy of continuous passive motion (CPM) devices with hand burns. Covey MH, et al. **J Burn Care Rehabil** 1988 Jul–Aug;9(4):397–400
Appliance therapy for perioral electrical burns: a conservative approach. Sadove AM, et al. **J Burn Care Rehabil** 1988 Jul–Aug;9(4):391–5
A nonsplinting approach to the care of the thermally injured patient. Schnebly WA, et al. **J Burn Care Rehabil** 1989 May–Jun;10(3):263–6
Have you tried the sandwich splint? A method of preventing hand deformities in children. Ward RS, et al. **J Burn Care Rehabil** 1989 Jan–Feb;10(1):83–5
The microbiology and cleaning of thermoplastic splints in burn care. Wright MP, et al. **J Burn Care Rehabil** 1989 Jan–Feb;10(1):79–83
Correction of deep overbite. A modified splint permitting rapid extrusion of posterior teeth. Tuinzing DB, et al. **J Craniomaxillofac Surg** 1989 May;17(4):172–4
A flexible wrist splint. Bora FW Jr, et al. **J Hand Surg [Am]** 1989 May;14(3):574–5
Early dynamic splinting for extensor tendon injuries. Browne EZ Jr, et al. **J Hand Surg [Am]** 1989 Jan;14(1):72–6
Extension splinting of palmar plate avulsion injuries of the proximal interphalangeal joint. Incavo SJ, et al. **J Hand Surg [Am]** 1989 Jul;14(4):659–61
A simple, comfortable, conforming, and adaptable splint. Mennen U. **J Hand Surg [Am]** 1989 May;14(3):576–8
External fixation of injured nail bed with the INRO surgical nail splint. Ogunro EO. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):236–41 (12 ref.)
A new dynamic splint for postoperative treatment of flexor tendon injury. Werntz JR, et al. **J Hand Surg [Am]** 1989 May;14(3):559–66
The "cage" splint: an added protection for flexor tendon repair. Ashall G, et al. **J Hand Surg [Br]** 1989 Feb;14(1):128
A simple inexpensive post–operative management regime following surgery for Dupuytren's contracture. Jain AS, et al. **J Hand Surg [Br]** 1988 Aug;13(3):259–61
The modified Kleinert splint in zone II flexor tendon injuries. Slattery PG. **J Hand Surg [Br]** 1988 Aug;13(3):273–6
Post–operative management of flexor tendon grafting. Tonkin M, et al. **J Hand Surg [Br]** 1988 Aug;13(3):277–81
Self–curing acrylic in the treatment of unstable zygomatic arch fracture. Güven O. **J Nihon Univ Sch Dent** 1988 Jun; 30(2):141–4
Modification of the interocclusal splint for orthognathic surgery. Fridrich KL, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):96–7
A method for repositioning a mandibular fracture with delayed union and/or nonunion. Waikakul A. **J Oral Maxillofac Surg** 1989 Feb;47(2):206–8
Short–term effect of a stabilization splint on the asymmetry of submaximal masticatory muscle activity. McCarroll RS, et al. **J Oral Rehabil** 1989 Mar;16(2):171–6
The immediate effect of splint–induced changes in jaw positioning on the asymmetry of submaximal masticatory muscle activity. McCarroll RS, et al. **J Oral Rehabil** 1989 Mar;16(2):163–70
Postural and maximum activity in elevators during mandible pre– and post–occlusal splint treatment of temporomandibular joint disturbance syndrome. Shi CS, et al. **J Oral Rehabil** 1989 Mar;16(2):155–61
Comparison of flexion versus extension splinting in the treatment of Mason type I radial head and neck fractures. Thompson JD. **J Orthop Trauma** 1988;2(2):117–9
Prevention of congenital dislocation of the hip in the newborn. Miranda L, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):671–5
Closed femoral shortening modification using an internal splint. Oppenheim WL, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):609–12
An efficient method for constructing a soft interocclusal splint. Hicks NA. **J Prosthet Dent** 1989 Jan;61(1):48–50
The use of the maxillary interocclusal splint as a mouthpiece for the mouthstick prosthesis. Hock DA. **J Prosthet Dent** 1989 Jul;62(1):56–7
Long–term treatment of disk–interference disorders of the temporomandibular joint with anterior repositioning occlusal splints. Okeson JP. **J Prosthet Dent** 1988 Nov; 60(5):611–6
Intranasal prostheses, splints, and stents. Seals RR Jr, et al. **J Prosthet Dent** 1988 Nov;60(5):595–601 (17 ref.)
Prognostic features of value in the management of temporomandibular joint pain–dysfunction syndrome by occlusal splint therapy. Suvinen T, et al. **J Prosthet Dent** 1989 Mar;61(3):355–61
A short–term evaluation of the effectiveness of stabilization–type occlusal splint therapy for specific symptoms of temporomandibular joint dysfunction syndrome. Tsuga K, et al. **J Prosthet Dent** 1989 May; 61(5):610–3
Intestinal anastomosis in the rat facilitated by a rapidly digested internal splint and indigestible but absorbable sutures. Kiernan JA. **J Surg Res** 1988 Nov;45(5):427–31
A modified bruxism appliance. Ordene NM. **N Y State Dent J** 1989 Jan;55(1):40–1
A new material and technique for appliance therapy. Weinberg LA. **N Y State Dent J** 1989 Jan;55(1):36–8
Use of a two–piece Gunning splint as a mandibular guide appliance for a patient treated for ameloblastoma. Fattore L, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec; 66(6):662–5
Disk–repositioning onlays in the treatment of temporomandibular joint disk displacement: comparison with a flat occlusal splint and with no treatment. Lundh H, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug; 66(2):155–62
Long–term follow–up after occlusal treatment to correct abnormal temporomandibular joint disk position. Lundh H, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan; 67(1):2–10
The pediatric counter rotation system (CRS)—an improvement on the Denis Browne splint for post club foot release splinting: a report of two cases. Milgrom C, et al. **Orthop Rev** 1987 Oct;16(10):762–4
Splints and casts. Managing foot deformity in children with neuromotor disorders. Cusick BD. **Phys Ther** 1988 Dec; 68(12):1903–12 (84 ref.)
Low–load, prolonged stretch in treatment of elbow flexion contractures secondary to head trauma: a case report. MacKay–Lyons M. **Phys Ther** 1989 Apr;69(4):292–6
Xomed nasal splints [letter] Barnett A. **Plast Reconstr Surg** 1989 Feb;83(2):397
[The application of plastic splints in burns and reconstruction surgery] Guo ZR, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Mar;1(1):45–6 (Chi)
[Treatment of congenital dislocation of hip in children failed with closed reduction by a new device splint] Bao QD. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):370–2, 384 (Eng. Abstr.) (Chi)
[Current principles of mobilization of the temporomandibular joint. Practical applications] Hofmann B. **Rev Stomatol Chir Maxillofac** 1988;89(6):365–9 (Eng. Abstr.) (Fre)
[A hand splint] Bizhko IP, et al. **Klin Khir** 1988;(12):58 (Rus)
[A splint for the treatment of congenital hip dislocation] Berenshtein SS. **Ortop Travmatol Protez** 1988 Oct;(10):57–8 (Rus)
[A splint for immobilization of the lower limb of the child during transportation] Sherepo KM, et al. **Ortop Travmatol Protez** 1989 Apr;(4):51–2 (Rus)
[A new method of dental splinting] Ivashchenko NI. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):30–2 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Ischaemic lesions related to pressure from the bindings of a wrist splint and cardiopulmonary bypass [letter] Luscombe F, et al. **Anaesthesia** 1989 Jul;44(7):610–1
Oviductal damage and the effect of estradiol. Sotrel G, et al. **Gynecol Obstet Invest** 1988;26(2):145–52
The effect of interdental continuous loop wire splinting and intermaxillary fixation on the marginal gingiva. Lello JL, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):249–52
Deformation of the nail following elastic band traction—a case report. Hoddinott C, et al. **J Hand Surg [Br]** 1989 Feb;14(1):23–4
[Complication of small splints used in immobilizing limb fracture. Report of 21 cases] Huang DF, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):342–3, 382 (Eng. Abstr.) (Chi)
[Severe complications following incorrect use of small wooden splints] Wang LA. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):346–7, 382–3 (Eng. Abstr.) (Chi)
[Analysis of 28 cases of peripheral nerve injury resulted from wooden splint and plaster] Zhu SX. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):344–5, 382 (Eng. Abstr.) (Chi)
[Various complications related to the treatment of congenital hip dysplasia using a Koszla splint] Maj S. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):229–33 (Eng. Abstr.) (Pol)
[Results of the surgical treatment of hip dysplasia with osteochondrosis as a complication of non–surgical treatment] Rogala P, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):224–8 (Eng. Abstr.) (Pol)

VETERINARY

Surgical correction of pectus excavatum, using external splintage in two dogs and a cat. Fossum TW, et al. **J Am Vet Med Assoc** 1989 Jul 1;195(1):91–7

SPLIT GENES see **RNA SPLICING**

SPONDYLARTHRITIS ANKYLOPOIETICA see **SPONDYLITIS, ANKYLOSING**

SPONDYLITIS

COMPLICATIONS

Atrial arrhythmias—the dominating cardiac problem in three patients with HLA B27 associated rheumatic disorders. Bergfeldt L, et al. **Acta Med Scand** 1988;224(6):627–30
Symptomatic psoriatic cervical spondylitis (a case report). Sharma RR, et al. **J Postgrad Med** 1988 Jul;34(3):176–9 (19 ref.)
Characterization of uveitis associated with spondyloarthritis. Rosenbaum JT. **J Rheumatol** 1989 Jun;16(6):792–6
A case of infectious pseudoaneurysm of the abdominal aorta associated with infectious spondylitis due to Klebsiella pneumoniae. Sugawa M, et al. **Jpn J Med** 1989 May–Jun; 28(3):402–5
[Pyogenic spinal osteomyelitis with right–sided retroperitoneal abscess] Jacobsen IE. **Ugeskr Laeger** 1989 Jul 3;151(27):1760–1 (Eng. Abstr.) (Dan)
[Superficial femoral artery thrombosis associated with protein S deficiency and rheumatoid pelvispondylitis] Millaire A, et al. **J Mal Vasc** 1989;14(3):263–4 (Fre)
[Inflammatory spondylitis in Verneuil's disease] Kuntz JL, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):63–5 (Fre)
[Substantiation of the use of terrilytin in the treatment of spinal cord disorders in tuberculous spondylitis] Bellendir EN, et al. **Probl Tuberk** 1989;(4):46–50 (Eng. Abstr.) (Rus)
[Mechanisms of pain syndrome in various vertebrogenic diseases] Popelianskiĭ AIa. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):53–5 (Rus)

DIAGNOSIS

MR imaging characteristics of tuberculous spondylitis vs vertebral osteomyelitis. Smith AS, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):399–405
Evaluation of patients with back pain of suspected inflammatory nature. Blackburn WD Jr, et al. **Am J Med** 1988 Dec;85(6):766–70
Advantages of diagnosing bacterial spondylitis with magnetic resonance imaging. Bruns J, et al. **Arch Orthop Trauma Surg** 1989;108(1):30–5
Brucellar and tuberculous spondylitis: comparative imaging features. Sharif HS, et al. **Radiology** 1989 May; 171(2):419–25
[Polyenthesopathies] Amor B, et al. **Ann Med Interne (Paris)** 1989;140(4):279–84 (48 ref.) (Fre)
[Diagnosis of seronegative spondylarthropathies] Felder M. **Schweiz Rundsch Med Prax** 1988 Sep 6;77(36):954–7 (Eng. Abstr.) (Ger)
[The radicular and pseudoradicular syndrome of infectious spondylitis and its differential diagnostic significance] Weber M, et al. **Z Orthop** 1988 Sep–Oct;126(5):563–9 (Eng. Abstr.) (Ger)
[MR imaging of tuberculous spondylitis] Ohgi K, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1079–86 (Eng. Abstr.) (Jpn)
[A case of generalized actinomycosis] Egorova LP, et al. **Klin Med (Mosk)** 1989 Apr;67(4):116–8 (Rus)
[Symptom of "brisk walk" in the differential diagnosis of vertebrogenic syndromes (preliminary report)] Korzh NA, et al. **Ortop Travmatol Protez** 1988 Jun;(6):40–3 (Eng. Abstr.) (Rus)
[An algorithm for the selection for manual therapy of patients with clinical manifestations of osteochondrosis] Kovalʹ DE, et al. **Ortop Travmatol Protez** 1989 May;(5):65–9 (Rus)
[A method of using infrared thermography in the diagnosis of osteochondrosis of the cervical spine] Sidorenko LV. **Ortop Travmatol Protez** 1988 Jun;(6):48–50 (Rus)
[Value of echography in the diagnosis of chronic osteomyelitis] Vesnin AG, et al. **Vestn Khir** 1988 Oct; 141(10):46–8 (Eng. Abstr.) (Rus)

ETIOLOGY

Erosive spondylo–arthropathy and tertiary hyperparathyroidism. Adler JS, et al. **Australas Radiol** 1989 Feb;33(1):90–2
Yersinia in intestinal biopsy specimens from patients with seronegative spondyloarthropathy: correlation with

specific serum IgA antibodies. de Koning J, et al. **J Infect Dis** 1989 Jan;159(1):109–12

Erosive osteoarthropathy associated with beta 2-microglobulin amyloidosis in a uraemic patient treated exclusively by long-term haemofiltration with biocompatible membranes. Renaud H, et al. **Nephrol Dial Transplant** 1988;3(6):820–2

[Salmonella typhi murium spondylodiscitis in systemic lupus (letter)] Choukroun G, et al. **Ann Med Interne (Paris)** 1988; 139(6):446–7 (Fre)

[Joint manifestations and HIV infections] De Bandt M, et al. **Ann Med Interne (Paris)** 1988;139(7):516–22 (69 ref.) (Fre)

[Chronic intermittent dialysis and cervical spine involvement. A cross-sectional study of 55 cases] Bergemer AM, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):533–8 (Fre)

[Cervical spondylodiscitis after intubation (letter)] Guillemin F, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):964–5 (Fre)

[Pelvi-rachidian involvement in sarcoidosis. Apropos of a case. Review of the literature] Mijiyawa M, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):529–32 (23 ref.) (Fre)

[Lesion of the spine in psoriatic arthritis] Milevskaia SG. **Vestn Dermatol Venerol** 1988;(7):62–5 (Eng. Abstr.) (Rus)

IMMUNOLOGY

[Study of antinuclear and anti-histone antibodies in chronic juvenile arthritis] Job-Deslandre C, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):31–3 (Fre)

METABOLISM

[Biochemical criteria of the inflammatory process in spinal osteomyelitis] Titarenko OT, et al. **Vopr Med Khim** 1989 May–Jun;35(3):100–3 (Eng. Abstr.) (Rus)

MICROBIOLOGY

[Candida spondylitis. A review of the predisposing factors, clinical and radiologic diagnosis based on a current case report] Le Grau KE, et al. **Ugeskr Laeger** 1988 Nov 14; 150(46):2823–4 (Eng. Abstr.) (Dan)

PATHOLOGY

Synovitis-acne-pustulosis hyperostosis-osteomyelitis syndrome (SAPHO). A new syndrome among the spondyloarthropathies? Benhamou CL, et al. **Clin Exp Rheumatol** 1988 Apr–Jun;6(2):109–12

Progressive ankylosis (ank/ank) in mice: an animal model of spondyloarthropathy. II. Light and electron microscopic findings. Mahowald ML, et al. **J Rheumatol** 1989 Jan; 16(1):60–6

[Spondylitis caused by malignant duodeno-retroperitoneal histiocytosis—a case report] Siegling CW, et al. **Beitr Orthop Traumatol** 1989 Mar;36(3):117–20 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

[Inflammation in spondylarthropathies] Amor B. **Rev Rhum Mal Osteoartic** 1989 Apr 30;56(5 Pt 2):8–11 (22 ref.) (Eng. Abstr.) (Fre)

PREVENTION & CONTROL

[Prevention of osteochondritis in folk medicine in the Ukraine] Pridatkevich AV, et al. **Ortop Travmatol Protez** 1988 Jun;(6):46–7 (Rus)

RADIOGRAPHY

Value of CT scanning in assessing location and extent of epidural and paraspinal inflammatory conditions. O'Sullivan R, et al. **Australas Radiol** 1988 May;32(2):203–6

[Is bacterial osteomyelitis of the spine spondylitis or spondylodiscitis?] Elke M, et al. **Radiologe** 1989 Apr; 29(4):170–5 (Eng. Abstr.) (Ger)

[Infectious damage to the intervertebral disk—before and following discotomy] Weber M. **Z Orthop** 1988 Sep–Oct; 126(5):555–62 (Eng. Abstr.) (Ger)

[Comparative clinico-roentgenological characteristics of degenerative-dystrophic changes in various segments of the spine] Kamalov II. **Zh Nevropatol Psikhiatr** 1989; 89(4):28–31 (Eng. Abstr.) (Rus)

[Non-specific spondylitis in childhood] García Arias F, et al. **An Esp Pediatr** 1989 Apr;30(4):284–8 (Eng. Abstr.) (Spa)

SURGERY

[The results of posterolateral lumbosacral arthrodesis] Onimus M, et al. **Rev Chir Orthop** 1988;74 Suppl 2:94–8 (Fre)

[Hypothermia in spinal surgery] Khvisiuk NI, et al. **Ortop Travmatol Protez** 1989 May;(5):8–11 (Eng. Abstr.) (Rus)

[External instrumental fixation of the spine in the treatment of spinal diseases and injuries] Lavrov VN, et al. **Sov Med** 1989;(4):35–8 (Eng. Abstr.) (Rus)

[Experimental substantiation and clinical evaluation of posterior spinal fusion using acryloxide] Bellendir EN, et al. **Vestn Khir** 1987 Dec;139(12):69–73 (Eng. Abstr.) (Rus)

[Results of the surgical treatment of patients with hematogenic osteomyelitis of the spine] Tikhodeev SA. **Vestn Khir** 1988 May;140(5):42–6 (Eng. Abstr.) (Rus)

THERAPY

[Our experience with organizing a department of manual therapy in an urban hospital] Lomakin PV. **Ortop Travmatol Protez** 1989 May;(5):55–8 (Rus)

SPONDYLITIS, ANKYLOSING

Disease expression of ankylosing spondylitis in males and females. Kidd B, et al. **J Rheumatol** 1988 Sep;15(9):1407–9

Epidemiology and genetics of ankylosing spondylitis. Ahearn JM, et al. **J Rheumatol Suppl** 1988 Sep;16:22–8 (78 ref.)

Ankylosing spondylitis and pregnancy. Östensen M, et al. **Rheum Dis Clin North Am** 1989 May;15(2):241–54 (53 ref.)

[Rheumatoid arthritis and Bechterew's disease. Guidelines for diagnosis and treatment] Glennås A, et al. **Tidsskr Nor Laegeforen** 1988 Sep 20;108(26):2143–6 (Eng. Abstr.) (Nor)

BLOOD

Serum hyaluronate in rheumatoid arthritis: study by affino-immunoenzymatic assay. Levesque H, et al. **Br J Rheumatol** 1988 Dec;27(6):445–9

Blood polymorphonuclear behavior in patients with ankylosing spondylitis. el Abbouyi A, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):401–3

Free and serum testosterone levels in 276 males: a comparative study of rheumatoid arthritis, ankylosing spondylitis and healthy controls. Spector TD, et al. **Clin Rheumatol** 1989 Mar;8(1):37–41

Evidence for a protective influence of blood group A phenotype on X-ray signs of ankylosing spondylitis in HLA-B27 positives. Bauer K. **Dis Markers** 1987 Sep; 5(3):187–8

IgA and rheumatoid factor in ankylosing spondylitis. Møller P, et al. **Scand J Rheumatol Suppl** 1988;75:276–7

[Serum beta 2-microglobulin and ankylosing spondylitis] Wendling D, et al. **Rev Rhum Mal Osteoartic** 1989 May; 56(6):441–3 (11 ref.) (Eng. Abstr.) (Fre)

[Trans-synovial kinetics of tiaprofenic acid] Kurowski M. **Z Rheumatol** 1988 May–Jun;47(3):173–6 (Eng. Abstr.) (Ger)

[Functional abnormalities of complement it. familial and sporadic ankylosing spondylitis] Jiménez Balderas FJ, et al. **Arch Invest Med (Mex)** 1989 Jan–Mar;20(1):79–86 (Eng. Abstr.) (Spa)

COMPLICATIONS

Cardiac valvular dysfunction associated with Crohn's disease in the absence of ankylosing spondylitis. Burdick S, et al. **Am Heart J** 1989 Jul;118(1):174–6

Achondroplasia with ankylosing spondylitis. Randolph LM, et al. **Am J Med Genet** 1988 Sep;31(1):117–21

Unsuspected cervical fractures: a common problem in ankylosing spondylitis. Salathé M, et al. **Anesthesiology** 1989 May;70(5):869–70

IgA nephropathy associated with ankylosing spondylitis: occurrence in women as well as in men. Lai KN, et al. **Ann Rheum Dis** 1989 May;48(5):435–7

Ankylosing spondylitis with predominant involvement of the cervical spine in a woman with Behçet's syndrome. Olivieri I, et al. **Ann Rheum Dis** 1988 Sep;47(9):780–3

Absence of an association between ankylosing spondylitis and IgA nephropathy [letter] van de Laar MA, et al. **Ann Rheum Dis** 1989 Mar;48(3):262–4

Spinal fractures complicating ankylosing spondylitis. Wade W, et al. **Arch Phys Med Rehabil** 1989 May;70(5):398–401

Mobility spectacles for ankylosing spondylitis. Kelly SP, et al. **BMJ** 1989 Jun 24;298(6689):1704

Ankylosing spondylitis and pregnancy. Husby G, et al. **Clin Exp Rheumatol** 1988 Apr–Jun;6(2):165–7 (10 ref.)

Fracture of the dens in ankylosing spondylitis. Govender S, et al. **Injury** 1987 May;18(3):213–4

Cervical osteotomy by the Simmons method in the treatment of cervical kyphosis due to ankylosing spondylitis. Case report. Savini R, et al. **Ital J Orthop Traumatol** 1988 Sep; 14(3):377–83

Cauda equina syndrome complicating ankylosing spondylitis: MR features. Rubenstein DJ, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):511–3

Traumatic spinal fracture in ankylosing spondylitis (a case report). Sharma RR, et al. **J Postgrad Med** 1988 Jul; 34(3):193–5 (8 ref.)

Ankylosing spondylitis and multiple sclerosis: an apparent association? Hanrahan PS, et al. **J Rheumatol** 1988 Oct; 15(10):1512–4

Cooccurrence of rheumatoid arthritis and ankylosing spondylitis [letter] Helfgott SM, et al. **J Rheumatol** 1988 Sep;15(9):1451–2

HLA antigens in ankylosing spondylitis associated with Crohn's disease. Increased frequency of the HLA phenotype B27,B44. Purrmann J, et al. **J Rheumatol** 1988 Nov;15(11):1658–61

Characterization of uveitis associated with spondyloarthritis. Rosenbaum JT. **J Rheumatol** 1989 Jun;16(6):792–6

Chest pain without radiographic sacroiliitis in relatives of patients with ankylosing spondylitis. van der Linden SM, et al. **J Rheumatol** 1988;15(5):836–9

Fractures of the cervical spine in patients with ankylosing spondylitis. Amamilo SC. **Orthop Rev** 1989 Mar; 18(3):339–44

Complications of fractures of the cervical spine in ankylosing spondylitis. Broom MJ, et al. **Spine** 1988 Jul;13(7):763–6

Fractures of the spine in ankylosing spondylitis. Diagnosis, treatment, and complications. Graham B, et al. **Spine** 1989 Aug;14(8):803–7

Migrating spinal pseudarthrosis in the spine affected by ankylosing spondylitis. Ho E, et al. **Spine** 1989 May; 14(5):546–8

Correction of kyphotic deformity in ankylosing spondylitis using multiple spinal osteotomy and Zielke's VDS instruments. Chen PQ. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jul;87(7):692–9

Salmonella reactive arthritis in established ankylosing spondylitis. Paul IR, et al. **Ulster Med J** 1988 Oct; 57(2):215–7

[Fibromyalgia syndrome in spondylarthritis ankylopoietica] Jensen OH. **Ugeskr Laeger** 1988 Sep 5;150(36):2128–9 (Dan)

[Coxitis in ankylosing spondylo-arthritis. Results of treatment with total arthroplasty. Apropos of 162 cases] Mehdi M, et al. **Int Orthop** 1989;13(2):137–41 (Eng. Abstr.) (Fre)

[Specific immunologic treatment of uveitis associated with the HLA-B27 group in ankylosing spondylarthritis] Demillière B, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):171–5 (Eng. Abstr.) (Fre)

[Compressive inflammatory epiduritis in ankylosing spondylitis (letter)] Dupuy M, et al. **Presse Med** 1989 May 13;18(19):984–5 (Fre)

[Ankylosing spondylitis with type AA amyloidosis. 6 cases] Geffriaud C, et al. **Presse Med** 1988 Dec 10;17(44):2344–7 (Eng. Abstr.) (Fre)

[Fracture dislocation of the thoracic spine in ankylosing spondylitis. A case of spontaneous occurrence and an uncommon course] Papavasiliou V, et al. **Rev Chir Orthop** 1988;74(7):679–81 (Eng. Abstr.) (Fre)

[Does the pseudomyopathic form of ankylosing spondylitis exist? (letter)] Jorgensen C, et al. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):341–2 (Fre)

[IgA nephropathy and ankylosing spondylitis] Pattin S, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):669–73 (32 ref.) (Fre)

[Anterior uveitis in ankylosing spondylitis. A retrospective study] Piergiacomi G, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):979–82 (Eng. Abstr.) (Fre)

[Cauda equina syndrome in ankylosing spondylitis] Pfister R, et al. **Dtsch Med Wochenschr** 1989 Jan 27;114(4):138–41 (Eng. Abstr.) (Ger)

[A case report of aortic and mitral regurgitation combined with ankylosing spondylosis] Enomoto S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):154–8 (Eng. Abstr.) (Jpn)

[A case of ankylosing spondylitis associated with IgA nephropathy] Nakamura Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1888–9 (Jpn)

[Results of the treatment of flexion deformities of the spine caused by ankylosing spondylitis using lumbar osteotomy] Malawski S, et al. **Chir Narzadow Ruchu Ortop Pol** 1988; 53(4):293–300 (Eng. Abstr.) (Pol)

[Characteristics of the articular syndrome at the early stages of ankylosing spondyloarthritis] Balaban SIa. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):67–8 (Rus)

[Echocardiographic, phonomechanocardiographic and electrocardiographic abnormalities in patients with ankylosing spondylitis] Turkulin K, et al. **Reumatizam** 1987; 34(1–6):5–9 (Eng. Abstr.) (Scr)

[Axial involvement in juvenile ankylosing spondylitis] Burgos-Vargas R, et al. **Bol Med Hosp Infant Mex** 1988 Sep;45(9):565–9 (Eng. Abstr.) (Spa)

[Megaloblastic anemia caused by sulfasalazine in rheumatoid arthritis or ankylosing spondylitis? (letter)] **Med Clin (Barc)** 1989 Jun 10;93(2):76–7 (Spa)

DIAGNOSIS

Circulating levels of sialic acid and glycosaminoglycans: a diagnostic test for ankylosing spondylitis. Susheela AK, et al. **Ann Rheum Dis** 1988 Oct;47(10):833–7

Value of HLA-B27 in the routine screening of patients with back pain. Woodrow JC. **Br J Rheumatol** 1988 Dec; 27(6):461

A destructive discovertebral lesion: septic discitis, ankylosing spondylitis, or rheumatoid arthritis? Arnold MH, et al. **Clin Rheumatol** 1989 Jun;8(2):277–81

Ankylosing spondylitis and peripheral joint disease. Landewe RB, et al. **Clin Rheumatol** 1989 Mar;8(1):87–90

Atypical spondyloarthritis in children: proposed diagnostic criteria. Hussein A, et al. **Eur J Pediatr** 1989 Apr; 148(6):513–7 (31 ref.)

Atypical ankylosing spondylitis. Bluestone R. **Hosp Pract [Off]** 1989 May 30;24(5A):83–90, 93, 97–8 passim

HLA-B27 testing in ankylosing spondylitis: an analysis of the pretesting assumptions [published erratum appears in J Rheumatol 1989 Jul;16(7):1014] Baron M, et al. **J Rheumatol** 1989 May;16(5):631–4; discussion 634–6

Ankylosing spondylitis. An optimistic outlook. Lisse JR. **Postgrad Med** 1989 Jul;86(1):147–8, 151–3 (18 ref.)

[Inflammatory-rheumatic diseases with special reference to

peculiarities in advanced age] Gromnica-Ihle E, et al. **Z Arztl Fortbild (Jena)** 1989;83(11):583–8 (16 ref.) **(Ger)**

[Ankylosing spondylitis with childhood onset. Description of a clinical case] Paci A, et al. **Pediatr Med Chir** 1988 May–Jun;10(3):329–34 (Eng. Abstr.) **(Ita)**

[A combined mitral heart defect in a patient with Bechterew's disease] Alelnikova LI, et al. **Klin Med (Mosk)** 1988 Jun; 66(6):111–2 **(Rus)**

[Cardiac and aortic lesions in spondylarthritis ankylopoietica] Pronin SV, et al. **Revmatologiia (Moskva)** 1988 Apr–Jun; (2):34–9 (Eng. Abstr.) **(Rus)**

[Comparative characteristics of the cardiac involvement in rheumatoid arthritis and Bechterew's disease (based on clinical and echocardiographic data)] Brusin SI, et al. **Ter Arkh** 1988;60(12):107–9 **(Rus)**

[A case of aortoarteritis simulating Bechterew's disease] Gordovskaia NB, et al. **Ter Arkh** 1988;60(6):129–30 **(Rus)**

[Recognition and diagnosis of juvenile ankylosing spondylitis: clinical analysis and comparative study of juvenile rheumatoid arthritis] Burgos-Vargas R, et al. **Bol Med Hosp Infant Mex** 1988 Aug;45(8):500–11 (80 ref.) (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Favorable results using methotrexate in the treatment of patients with ankylosing spondylitis [letter] Handler RP. **Arthritis Rheum** 1989 Feb;32(2):234

Treatment of the seronegative spondyloarthropathies with sulfasalazine. Zwillich SH, et al. **J Rheumatol Suppl** 1988 Sep;16:33–9 (19 ref.)

[Determination of endotoxin in inflammatory rheumatic diseases—the effect of nonsteroidal anti-inflammatory agents on intestinal permeability] Busch J, et al. **Z Rheumatol** 1988 May–Jun;47(3):156–60 (Eng. Abstr.) **(Ger)**

[Ulcer healing with ranitidine and antacids despite continued therapy with non-steroidal anti-rheumatic drugs] Stock KP, et al. **Z Rheumatol** 1988 May–Jun;47(3):177–81 (Eng. Abstr.) **(Ger)**

[Shortening diclofenac therapy by B vitamins. Results of a randomized double-blind study, diclofenac 50 mg versus diclofenac 50 mg plus B vitamins, in painful spinal diseases with degenerative changes] Vetter G, et al. **Z Rheumatol** 1988 Sep–Oct;47(5):351–62 (Eng. Abstr.) **(Ger)**

[Experience in the use of salazopyrine EN in patients with spondylarthritis ankylopoietica and rheumatoid arthritis] Somhegyi A, et al. **Orv Hetil** 1988 Sep 4;129(36):1917–21 (25 ref.) (Eng. Abstr.) **(Hun)**

[Sulfasalazine therapy in spondylarthritis ankylopoietica] Winkler V. **Orv Hetil** 1989 Jan 8;130(2):77–81 (29 ref.) (Eng. Abstr.) **(Hun)**

[Therapeutic effectiveness of D-penicillamine in ankylosing arthritis of the spine in relation to the degree of pathological changes in the joints] Bernatska K, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):28–32 (Eng. Abstr.) **(Rus)**

ECONOMICS

[Socio-medical consequences of patients with Bechterew's disease in Denmark] Ringsdal VS, et al. **Ugeskr Laeger** 1989 May 29;151(22):1380–2 (Eng. Abstr.) **(Dan)**

EPIDEMIOLOGY

Ankylosing spondylitis—an analytical review of 1500 patients: the changing pattern of disease. Calin A, et al. **J Rheumatol** 1988 Aug;15(8):1234–8

[The epidemiology of ankylosing spondylitis in Finland] Julkunen H, et al. **Duodecim** 1989;105(13–14):1246–51 **(Fin)**

[Ankylosing spondylitis is a generalized disease—even in women] Lehtinen K. **Duodecim** 1989;105(13–14):1236–8 (8 ref.) **(Fin)**

ETIOLOGY

Serum IgA, acute phase proteins, and glycosylation of alpha 1-acid glycoprotein in ankylosing spondylitis. Mackiewicz A, et al. **Ann Rheum Dis** 1989 Feb;48(2):99–103

Relative role of genetic and environmental factors in disease expression: sib pair analysis in ankylosing spondylitis. Calin A, et al. **Arthritis Rheum** 1989 Jan;32(1):77–81

The relationship between Klebsiella infection and ankylosing spondylitis. Ebringer A. **Baillieres Clin Rheumatol** 1989 Aug;3(2):321–38 (48 ref.)

Anatomic and genetic considerations in the pathogenesis of ankylosing spondylitis. Bluestein HG. **J Rheumatol Suppl** 1988 Sep;16:29–32 (10 ref.)

Causes of arthritis. Brewerton DA. **Lancet** 1988 Nov 5; 2(8619):1063–6 (73 ref.)

Foodborne enterobacterial pathogens and rheumatoid disease. Bunning VK, et al. **Soc Appl Bacteriol Symp Ser** 1988;17:87S–107S (124 ref.)

[The role of HLA-B27 in chronic juvenile arthritis and ankylosing spondylitis in children] Wójcik T, et al. **Pediatr Pol** 1988 Jul;63(7):431–6 (Eng. Abstr.) **(Pol)**

GENETICS

Restriction fragment length polymorphism analysis in ankylosing spondylitis. Reveille JD, et al. **Am J Med** 1988 Dec 23;85(6A):48–50

Studies of HLA-B27-associated disease. Taurog JD, et al. **Am J Med** 1988 Dec 23;85(6A):59–60 (22 ref.)

Ankylosing spondylitis without B27: no evidence for gene conversion. Pease CT, et al. **Ann Rheum Dis** 1988 Dec; 47(12):1001–3

Characterization of the class I HLA 9.2-kb PVU II restriction fragment length polymorphism. Linkage to HLA-A and lack of disease association. Ahearn JM Jr, et al. **Arthritis Rheum** 1989 Jul;32(7):870–6

HLA-Bw60 increases susceptibility to ankylosing spondylitis in HLA-B27+ patients. Robinson WP, et al. **Arthritis Rheum** 1989 Sep;32(9):1135–41

Genetics of the spondarthropathies. Woodrow JC. **Baillieres Clin Rheumatol** 1988 Dec;2(3):603–22 (79 ref.)

HLA-B27 positive spondyloarthritis in a case of tuberculous rectal stricture. Choksi AP, et al. **J Assoc Physicians India** 1988 May;36(5):337–9

Restriction fragment length polymorphism of T cell receptor alpha and beta chain genes in patients with ankylosing spondylitis. Durand JP, et al. **J Rheumatol** 1988 Jul; 15(7):1115–8

Association between ankylosing spondylitis and a 9.2 kb Pvu II class I HLA DNA restriction fragment: a reassessment. Durand JP, et al. **J Rheumatol** 1988 Jul;15(7):1119–22

HLA-B27 and B12(B44) in Crohn's disease with ankylosing spondylitis [letter] Khan MA. **J Rheumatol** 1989 Jun; 16(6):851–2

AS and a 9.2 kb Pvu II class I HLA DNA restriction fragment [letter] McDaniel DO, et al. **J Rheumatol** 1989 Jan;16(1):141–2

Search for a common DNA fragment in B27+ AS+ lymphocytes and an E. coli strain from a patient with AS [letter] Njoo FL, et al. **J Rheumatol** 1989 Apr;16(4):561–2

Ankylosing spondylitis and heterogeneity of HLA-B27. Khan MA. **Semin Arthritis Rheum** 1988 Nov;18(2):134–41 (58 ref.)

[Family study of ankylosing spondylitis] Chou CT, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):989–99 (Eng. Abstr.) **(Chi)**

[HLA-B27 as a genetic marker of extra-articular manifestations of ankylosing spondylitis] Haberhauer G, et al. **Beitr Orthop Traumatol** 1988 Aug;35(8):398–401 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Molecular mimicry between human leukocyte antigen B27 and Klebsiella. Consequences for spondyloarthropathies. Schwimmbeck PL, et al. **Am J Med** 1988 Dec 23; 85(6A):51–3

Cross-reacting bacterial determinants in ankylosing spondylitis. Sullivan JS, et al. **Am J Med** 1988 Dec 23; 85(6A):54–5 (21 ref.)

Immunoglobulin A in the skin of patients with ankylosing spondylitis. Collado A, et al. **Ann Rheum Dis** 1988 Dec; 47(12):1004–7

Immunohistological features of synovitis in ankylosing spondylitis: a comparison with rheumatoid arthritis. Kidd BL, et al. **Ann Rheum Dis** 1989 Feb;48(2):92–8

Immunoglobulin allotype Gm(1,2;21) in ankylosing spondylitis with peripheral arthritis. Mierau R, et al. **Ann Rheum Dis** 1988 Nov;47(11):893–7

IgA-alpha 1 antitrypsin complexes in ankylosing spondylitis. Struthers GR, et al. **Ann Rheum Dis** 1989 Jan;48(1):30–4

Natural killer cell function in ankylosing spondylitis [letter] Wendling D, et al. **Ann Rheum Dis** 1988 Sep;47(9):790–1

Cross-reactive epitope with Klebsiella pneumoniae nitrogenase in articular tissue of HLA-B27+ patients with ankylosing spondylitis. Husby G, et al. **Arthritis Rheum** 1989 Apr;32(4):437–45

Large granular lymphocytes and neutropenia in a patient with ankylosing spondylitis [letter] Lassoued S, et al. **Arthritis Rheum** 1989 Mar;32(3):355

Importance of intestinal mucosal immunity and luminal bacterial cell wall polymers in the aetiology of inflammatory joint diseases. Sartor RB. **Baillieres Clin Rheumatol** 1989 Aug;3(2):223–45 (118 ref.)

Studies of humoral and cell-mediated immunity to peptides shared by HLA-27.1 and Klebsiella pneumoniae nitrogenase in ankylosing spondylitis. Tsuchiya N, et al. **Clin Exp Immunol** 1989 Jun;76(3):354–60

HLA-B27 subtypes and seronegative spondyloarthropathies [letter] Sanmarti R, et al. **Clin Exp Rheumatol** 1989 Jan–Feb;7(1):102–3

Blood lymphocytes from ankylosing spondylitis patients fail to induce disease-specific cytotoxic T lymphocytes. Breur-Vriesendorp BS, et al. **Hum Immunol** 1989 Jul; 25(3):149–55

IgA containing immune complexes and hematuria in ankylosing spondylitis. A prospective longitudinal study. Peeters AJ, et al. **J Rheumatol** 1988 Nov;15(11):1662–7

B7 crossreactive antigens in spondyloarthropathies [letter] Reynolds TL, et al. **J Rheumatol** 1988 Sep;15(9):1454

Synovial expression of HLA-B27 related antigens in ankylosing spondylitis. Husby G, et al. **Scand J Rheumatol Suppl** 1988;76:23–5

[A 2-year evaluation of antibacterial serology adapted to the diagnosis of reactive arthritis (168 cases)] Jean-Pierre H, et al. **Pathol Biol (Paris)** 1989 Jan;37(1):17–24 (Eng. Abstr.) **(Fre)**

[IgA rheumatoid factors in ankylosing spondylitis] Steffen C, et al. **Z Rheumatol** 1988 Jul–Aug;47(4):205–8 (Eng. Abstr.) **(Ger)**

[Immunogenetic analysis of Bechterew's disease] Prokof'ev VF, et al. **Revmatologiia (Moskva)** 1988 Oct–Dec;(4):23–9 (Eng. Abstr.) **(Rus)**

[HLA associations in the clinical picture of Bechterew's disease] Prokof'ev VF, et al. **Revmatologiia (Moskva)** 1988 Oct–Dec;(4):29–34 (Eng. Abstr.) **(Rus)**

[Changes in cellular and humoral immunity in ankylosing spondylarthritis] Shirinskil VS, et al. **Revmatologiia (Moskva)** 1988 Oct–Dec;(4):67–72 (35 ref.) **(Rus)**

[Circulation of intestinal infection in the families of patients with rheumatic diseases and the state of humoral immunity to enterobacterial antigens] Nasonova VA, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):56–60 (Eng. Abstr.) **(Rus)**

[Functional abnormalities of complement in familial and sporadic ankylosing spondylitis] Jiménez Balderas FJ, et al. **Arch Invest Med (Mex)** 1989 Jan–Mar;20(1):79–86 (Eng. Abstr.) **(Spa)**

METABOLISM

Immunoglobulin synthesis by peripheral blood lymphocytes in patients with ankylosing spondylitis. Warmold A, et al. **J Rheumatol** 1988 Sep;15(9):1410–4

Defective helper T cell function in IgM rheumatoid factor synthesis in patients with ankylosing spondylitis. Yu CL, et al. **Scand J Rheumatol** 1989;18(1):43–9

MICROBIOLOGY

Ankylosing spondylitis lung disease and Mycobacterium scrofulaceum. Levy H, et al. **Br J Dis Chest** 1988 Jan; 82(1):84–7

Possible role of streptococci in pathogenesis of ankylosing spondylitis. Dwivedy AC, et al. **Indian J Med Res** 1988 Dec;88:475–9

PATHOLOGY

Pathogenesis of square bodies in ankylosing spondylitis. Aufdermaur M. **Ann Rheum Dis** 1989 Aug;48(8):628–31

Axial involvement in the seronegative enthesopathy and arthropathy syndrome and its progression to ankylosing spondylitis. Burgos-Vargas R, et al. **J Rheumatol** 1989 Feb; 16(2):192–7

Ankylosing spondylitis in the Mexican mestizo: patterns of disease according to age at onset. Burgos-Vargas R, et al. **J Rheumatol** 1989 Feb;16(2):186–91

Spondyloarthropathy in progressive ankylosis (ank/ank) mice: morphological features. Sampson HW. **Spine** 1988 Jun;13(6):645–9

PHYSIOPATHOLOGY

Polymorphonuclear leucocyte motility in men with ankylosing spondylitis. Pease CT, et al. **Ann Rheum Dis** 1989 Jan;48(1):35–41

Pulmonary function and maximal transrespiratory pressures in ankylosing spondylitis. Vanderschueren D, et al. **Ann Rheum Dis** 1989 Aug;48(8):632–5

The natural history and prognosis of ankylosing spondylitis. Calin A. **J Rheumatol** 1988 Jul;15(7):1054–5

The natural history of ankylosing spondylitis: is the disease really changing? Fries JF, et al. **J Rheumatol** 1989 Jul; 16(7):860–3

The natural history of ankylosing spondylitis [editorial] Little H. **J Rheumatol** 1988 Aug;15(8):1179–80

Clinical features and prognosis of patients with possible ankylosing spondylitis. Results of a 10-year followup. Mau W, et al. **J Rheumatol** 1988 Jul;15(7):1109–14

[Mucociliary function of 10 patients with ankylosing spondylarthritis with normal lung radiographs] Souquet PJ, et al. **Rev Mal Respir** 1988;5(6):615–7 (8 ref.) (Eng. Abstr.) **(Fre)**

[Natural killer cell function and ankylosing spondylarthritis] Wendling D, et al. **Rev Rhum Mal Osteoartic** 1989 Jan; 56(1):51–2 **(Fre)**

[Central hemodynamics and respiratory function in children with Bechterew's disease] Koval'chuk GG, et al. **Revmatologiia (Moskva)** 1988 Jul–Sep;(3):33–6 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

The relationship between pelvic, spinal and hip involvement in ankylosing spondylitis—one disease process or several? Calin A, et al. **Br J Rheumatol** 1988 Oct;27(5):393–5

Radiological investigation in the management of uveitis. Austin MW, et al. **Eye** 1988;2 (Pt 5):578–9

Radiological features of dialysis amyloid spondyloarthropathy. Fiocchi O, et al. **Int J Artif Organs** 1989 Apr;12(4):216–22

Ankylosing spondylitis: radiographic abnormalities of the hand and wrist. Hogikyan J, et al. **J Fam Pract** 1988 Nov; 27(5):533–5

Congenital kyphoscoliosis versus ankylosing spondylitis [letter] Tornero J, et al. **J Rheumatol** 1988 Oct; 15(10):1595–7

Radiologic case study. Diskovertebral erosions in ankylosing spondylitis. Baran G, et al. **Orthopedics** 1988 Nov; 11(11):1619, 1622–3

The other arthritides. Roentgenologic features of osteoarthritis, erosive osteoarthritis, ankylosing spondylitis,

psoriatic arthritis, Reiter's disease, multicentric reticulohistiocytosis, and progressive systemic sclerosis. Gold RH, et al. **Radiol Clin North Am** 1988 Nov; 26(6):1195–212 (29 ref.)

The calcaneus in ankylosing spondylitis. A radiographic study of 43 patients. López-Bote JP, et al. **Scand J Rheumatol** 1989;18(3):143–8

The pleuropulmonary manifestations of ankylosing spondylitis. Boushea DK, et al. **Semin Arthritis Rheum** 1989 May;18(4):277–81 (28 ref.)

[Spinal and sacro-iliac ankylosis suggesting ankylosing spondyloarthritis in progressive ossifying myositis (letter)] Crouzet J, et al. **Rev Rhum Mal Osteoartic** 1988 Nov; 55(11):966–7 (Fre)

[Ankylosing spondylitis: Andersson lesion] Sparenberg A, et al. **ROFO** 1989 Jun;150(6):744–5 (Ger)

RADIONUCLIDE IMAGING

[Diagnostic potentials of quantitative bone scintigraphy in spondylitis ankylopoietica: a comparison with x-ray findings] Mlatschkov C, et al. **Radiol Diagn (Berl)** 1989; 30(1):61–5 (Eng. Abstr.) (Ger)

RADIOTHERAPY

Local radiotherapy for pedal manifestations of HLA-B27-related arthropathy. Grill V, et al. **Br J Rheumatol** 1988 Oct;27(5):390–2

Retroperitoneal fibrosis in radiotherapy-treated ankylosing spondylitis [letter] Reilly PA, et al. **Br J Rheumatol** 1989 Jun;28(3):273–4

[Radiation cataract following injection of radium 224] Stefani FH, et al. **Fortschr Ophthalmol** 1989;86(1):32–7 (Eng. Abstr.) (Ger)

REHABILITATION

Ankylosing spondylitis and exercise [letter] Richards AJ. **Br J Rheumatol** 1989 Aug;28(4):365

[Occupational rehabilitation of patients with ankylosing spondylitis] Baumann P, et al. **Z Gesamte Hyg** 1988 Jul; 34(7):426–7 (Eng. Abstr.) (Ger)

SURGERY

Joint surgery in severe ankylosing spondylitis. Finsterbush A, et al. **Acta Orthop Scand** 1988 Oct;59(5):491–6

The outcome of 138 total hip replacements and 12 revisions in ankylosing spondylitis: high success rate after a mean followup of 7.5 years. Calin A, et al. **J Rheumatol** 1989 Jul;16(7):955–8

[Results of surgical treatment of patients with ankylosing spondylarthritis] Schubert T, et al. **Beitr Orthop Traumatol** 1988 Jul;35(7):290–5 (Eng. Abstr.) (Ger)

[Correction of Bechterew kyphosis] Böhm H, et al. **Orthopade** 1989 Apr;18(2):142–54 (Eng. Abstr.) (Ger)

[Ankylosing spondylitis: long-term results of implantation of hip joint prosthesis] Gualtieri G, et al. **Chir Organi Mov** 1988 Jul–Sep;73(3):199–203 (Eng. Abstr.) (Ita)

THERAPY

Sensitivity of anthropometric techniques for clinical trials in ankylosing spondylitis. Roberts WN, et al. **Br J Rheumatol** 1989 Feb;28(1):40–5

[Cognitive behavior therapy in patients with ankylosing spondylitis] Rehfisch HP, et al. **Z Rheumatol** 1989 Mar–Apr;48(2):79–85 (Eng. Abstr.) (Ger)

[Cryotherapy in rheumatology] Lasisz B, et al. **Wiad Lek** 1989 Dec 1;41(23):1599–602 (Eng. Abstr.) (Pol)

URINE

[Hyaluronic acid and N-terminal procollagen-III-peptide in the urine in inflammatory and degenerative joint diseases] Respondek M, et al. **Z Rheumatol** 1989 May–Jun; 48(3):117–22 (Eng. Abstr.) (Ger)

SPONDYLODISCITIS see **DISCITIS**

SPONDYLOEPIPHYSEAL DYSPLASIA see **OSTEOCHONDRODYSPLASIAS**

SPONDYLOLISTHESIS

Spondylolysis and spondylolisthesis in children and adolescents. Hensinger RN. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1098–107 (84 ref.)

Chiropractic management of spondylolisthesis with spondylolysis of the pars interarticularis: an example of the single-case study experimental design [letter] **J Manipulative Physiol Ther** 1988 Dec;11(6):515–7

COMPLICATIONS

Osteoporosis in unstable adult scoliosis. Velis KP, et al. **Clin Orthop** 1988 Dec;(237):132–41

The evolution of spondylolysis into spondylolisthesis during adult age. Postacchini F. **Ital J Orthop Traumatol** 1989 Jun;15(2):210–6

Scoliosis associated with lumbar spondylolisthesis. A clinical survey of 190 young patients. Seitsalo S, et al. **Spine** 1988 Aug;13(8):899–904

[Chance coincidence of spondylolisthesis and osteoid osteoma of the spine—a case report] Molsberger A, et al. **Z Orthop** 1989 May–Jun;127(3):343–5 (Eng. Abstr.) (Ger)

[The radicular syndrome in spondylolisthesis] Protsenko AI, et al. **Sov Med** 1988;(11):101–3 (Rus)

CONGENITAL

[Cervical spondylolisthesis of congenital origin. Apropos of a case, review of the literature] Goupille P, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):611–4 (27 ref.) (Fre)

DIAGNOSIS

MR imaging of the pars interarticularis. Johnson DW, et al. **AJR** 1989 Feb;152(2):327–32

Degenerative spondylolisthesis. Bolesta MJ, et al. **Instr Course Lect** 1989;38:157–65 (32 ref.)

Isthmic spondylolysis of the lumbar spine: MR imaging at 1.5 T. Grenier N, et al. **Radiology** 1989 Feb;170(2):489–93

The prevalence of disc degeneration associated with neural arch defects of the lumbar spine assessed by magnetic resonance imaging. Szypryt EP, et al. **Spine** 1989 Sep; 14(9):977–81

[Magnetic resonance tomography in spondylolysis and spondylolisthesis] Lang P, et al. **Z Orthop** 1988 Dec; 126(6):651–7 (Eng. Abstr.) (Ger)

EPIDEMIOLOGY

Prevalence of spondylolisthesis, transitional anomalies and low intercrestal line in a chiropractic patient population. Leboeuf C, et al. **J Manipulative Physiol Ther** 1989 Jun; 12(3):200–4

ETIOLOGY

Occupational spondylolysis and spondylolisthesis. Jakab G. **Baillieres Clin Rheumatol** 1989 Apr;3(1):89–98 (23 ref.)

The evolution of spondylolysis into spondylolisthesis during adult age. Postacchini F. **Ital J Orthop Traumatol** 1989 Jun;15(2):210–6

Traumatic retrolisthesis of the lumbosacral junction. A case report. Cohn SL, et al. **Spine** 1989 Jan;14(1):132–4

Spondylolisthesis with unilateral pars interarticularis defect and contralateral facet joint degeneration. A case report. Kornberg M. **Spine** 1988 Jun;13(6):712–3

Rotatory olisthesis in idiopathic scoliosis. Trammell TR, et al. **Spine** 1988 Dec;13(12):1378–82

[Spondyloptosis of the 4th thoracic vertebra with complete regression of neurologic disorders] Voronovich IR, et al. **Ortop Travmatol Protez** 1988 Nov;(11):53–4 (Rus)

GENETICS

Aspartylglucosaminuria in a Puerto Rican family: additional features of a panethnic disorder. Chitayat D, et al. **Am J Med Genet** 1988 Nov;31(3):527–32

[Concordant occurrence of grade I spondylolisthesis in childhood in a pair of monozygotic twins] Hamel J, et al. **Z Orthop** 1988 Sep–Oct;126(5):530–1 (Eng. Abstr.) (Ger)

HISTORY

Spondylolysis and its relationship to degenerative joint disease in the prehistoric southeastern United States. Bridges PS. **Am J Phys Anthropol** 1989 Jul;79(3):321–9

PHYSIOPATHOLOGY

Nerve conduction studies in upper limbs of patients with cervical spondylosis and motor neurone disease. Thacker AK, et al. **Acta Neurol Scand** 1988 Jul;78(1):45–8

RADIOGRAPHY

Roentgenologic assessment of spondylolisthesis. II. An evaluation of progression. Danielson B, et al. **Acta Radiol** 1989 Jan–Feb;30(1):65–8

Spondylolysis and the sacro-horizontal angle in athletes. Swärd L, et al. **Acta Radiol** 1989 Jul–Aug;30(4):359–64

CT diagnosis of spondylolysis of the axis vertebra [letter] Coughlin WF, et al. **AJR Am J Roentgenol** 1989 Jul; 153(1):195–6

Traumatic spondylolisthesis of the axis. Fielding JW, et al. **Clin Orthop** 1989 Feb;(239):47–52

Traumatic spondylolisthesis of the axis. Govender S, et al. **Injury** 1987 Sep;18(5):333–5

Post-traumatic spinal synovial cyst with spondylolysis: CT features. Awwad EE, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):334–7

Spondylolisthesis in children under 12 years of age: long-term results of 56 patients treated conservatively or operatively. Seitsalo S, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):516–21

Imaging rounds #96. Spondylolysis—laminal fragmentation on the AP view. Amato M, et al. **Orthop Rev** 1988 Sep; 17(9):925–31 (28 ref.)

Facet joint arthrography in lumbar spondylolysis: anatomic basis for spread of contrast medium. McCormick CC, et al. **Radiology** 1989 Apr;171(1):193–6

Multiple lumbar spondylolyses with transverse process pseudo-arthroses. A case report. Beningfield SJ, et al. **S Afr Med J** 1989 Jun 3;75(11):544–5

Stress views in the comparative assessment of spondylolytic spondylolisthesis. Källebo P, et al. **Skeletal Radiol** 1989; 17(8):570–5

Combined contrast studies in lumbar spine diseases. Myelography (peridurography) and nerve root infiltration. Kikuchi S, et al. **Spine** 1988 Nov;13(11):1327–31

[Osseous support in spondylolisthesis. A case report] Imhäuser G. **Z Orthop** 1988 Dec;126(6):647–50 (Eng. Abstr.) (Ger)

[A method of roentgenological diagnosis of bilateral spondylolysis] Zaretskov VV, et al. **Ortop Travmatol Protez** 1989 Jan;(1):59–60 (Rus)

SURGERY

Results of screw osteosynthesis in spondylolysis and low-grade spondylolisthesis. Winter M, et al. **Arch Orthop Trauma Surg** 1989;108(2):96–9

Direct repair of spondylolysis. Roca J, et al. **Clin Orthop** 1989 Sep;(246):86–91

Posterior transpedicular Zielke instrumentation of the lumbar spine. Simmons EH, et al. **Clin Orthop** 1988 Nov; (236):180–91

Spinal arthrodesis for severe spondylolisthesis in children and adolescents. A long-term follow-up study. Freeman BL 3d, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):594–8

In situ arthrodesis without decompression for Grade-III or IV isthmic spondylolisthesis in adults who have severe sciatica. Peek RD, et al. **J Bone Joint Surg [Am]** 1989 Jan; 71(1):62–8

Anterior spinal fusion for spondylolysis and isthmic spondylolisthesis. Long term results in adults. Cheng CL, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):264–7

Dermatomal monitoring for surgical correction of spondylolisthesis. A case report. Cohen BA, et al. **Spine** 1988 Oct;13(10):1125–8

The AO spinal internal fixator. Esses SI. **Spine** 1989 Apr; 14(4):373–8

Tension band wiring-bone grafting for spondylolysis and spondylolisthesis. A clinical and biomechanical study. Hambly M, et al. **Spine** 1989 Apr;14(4):455–60

Surgical treatment of isthmic lumbosacral spondylolisthesis. Analysis of variables influencing results. Hanley EN Jr, et al. **Spine** 1989 Jan;14(1):48–50

L4-5 degenerative spondylolisthesis. The results of treatment by decompressive laminectomy without fusion. Herron LD, et al. **Spine** 1989 May;14(5):534–8

Transfusion-related non-A, non-B hepatitis in elective spine deformity surgery patients in Gothenburg, Sweden. Landin P, et al. **Spine** 1989 Sep;14(9):1033–5

Cauda equina lesions following fusion in situ and decompressive laminectomy for severe spondylolisthesis. Four case reports. Maurice HD, et al. **Spine** 1989 Feb; 14(2):214–6

Paresis of proximal lumbar roots after reduction of L5-S1 spondylolisthesis. Transfeldt EE, et al. **Spine** 1989 Aug; 14(8):884–7

[Evaluation of different operative procedures in the treatment of spondylolisthesis] Chen ZB. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):409–11, 445 (Eng. Abstr.) (Chi)

[Intervertebral fusion of a lumbo-sacral segment with insertion of a rotated local bone block by anterio-lateral approach] Zhao DL, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):136–8, 189 (Eng. Abstr.) (Chi)

[Spondylolisthesis with severe displacement in children and adolescents Results of 12 cases of posterior reduction fixation] Herman S, et al. **Rev Chir Orthop** 1988; 74(7):614–21 (Eng. Abstr.) (Fre)

[Isthmic reconstitution of spondylolysis using screw plates and grafts without arthrodesis (78 cases)] Louis R. **Rev Chir Orthop** 1988;74 Suppl 2:80–3 (Fre)

[Pars interarticularis reconstruction of spondylolysis using plates and screws with grafting without arthrodesis. Apropos of 78 cases] Louis R. **Rev Chir Orthop** 1988; 74(6):549–57 (23 ref.) (Eng. Abstr.) (Fre)

[The results of posterolateral lumbosacral arthrodesis] Onimus M, et al. **Rev Chir Orthop** 1988;74 Suppl 2:94–8 (Fre)

[Vertebragenic cervical myelopathy as a sequel of degenerative anterolisthesis] Hohmann D. **Z Orthop** 1988 May–Jun;126(3):353–7 (27 ref.) (Eng. Abstr.) (Ger)

[Ventral interligamental-intercorporal spondylodesis in spondylolisthesis] Matzen KA. **Z Orthop** 1989 Jan–Feb; 127(1):39–46 (Eng. Abstr.) (Ger)

[Surgical management of lumbar spondylolisthesis] Bender G, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(2):139–44 (Eng. Abstr.) (Hun)

[Late results of the surgical treatment of spondylolisthesis complicated by injury of the cauda equina] Jarmundowicz W, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):216–20 (Eng. Abstr.) (Pol)

[Outcome of the surgical treatment of spondylolisthesis] Ardashev IP, et al. **Ortop Travmatol Protez** 1989 May; (5):22–5 (Eng. Abstr.) (Rus)

[Injuries of the lumbosacral segments of the spine] Shvets AI. **Ortop Travmatol Protez** 1989 May;(5):18–22 (Eng. Abstr.) (Rus)

THERAPY

Lumbar spondylolisthesis: retrospective comparison and

three-year follow-up of two conservative treatment programs. Sinaki M, et al. **Arch Phys Med Rehabil** 1989 Aug;70(8):594–8
Brace treatment for symptomatic spondylolisthesis. Bell DF, et al. **Clin Orthop** 1988 Nov;(236):192–8
Symptomatic spondylolisthesis in adults: four decades later. Apel DM, et al. **Spine** 1989 Mar;14(3):345–8
Closed reduction of spondylolisthesis. An experience in 22 patients. Bradford DS. **Spine** 1988 May;13(5):580–7

VETERINARY

Distracted cervical spinal fusion for management of caudal cervical spondylomyelopathy in large-breed dogs. Ellison GW, et al. **J Am Vet Med Assoc** 1988 Aug 15;193(4):447–53

SPONDYLOLYSIS see under **SPONDYLOLISTHESIS**

SPONDYLOSIS see **SPINAL OSTEOPHYTOSIS**

SPONDYLOSIS DEFORMANS see **SPINAL OSTEOPHYTOSIS**

SPORE COUNT see **COLONY COUNT, MICROBIAL**

SPORES

City spore concentrations in the European Economic Community (EEC). VII. Oleaceae (Fraxinus, Ligustrum, Olea). D'Amato G, et al. **Clin Allergy** 1988 Nov;18(6):541–7
Spore tests for low temperature steam with formaldehyde sterilizers [letter] Tompkins DS, et al. **J Hosp Infect** 1988 Oct;12(3):237

ANALYSIS

A one year survey of airborne pollen and spores in the neotropical city of Bogota (Colombia). Hurtado I, et al. **Allergol Immunopathol (Madr)** 1989 Mar-Apr;17(2):95–104

IMMUNOLOGY

Ferns and their allergenic importance: skin and nasal provocation tests to fern spore extract in allergic and non-allergic patients. Bunnag C, et al. **Ann Allergy** 1989 Jun;62(6):554–8
Studies on the allergenicity of the developing spores of Pteris vittata L. Singh J, et al. **Ann Allergy** 1989 Sep;63(3):239–43

PHYSIOLOGY

Spatial patterns in the fruiting bodies of the cellular slime mold Polysphondylium pallidum. Cox EC, et al. **Differentiation** 1988 Jul;38(2):73–81
Formation of conidia in a saprophytic strain Claviceps paspali producing simple lysergic acid derivatives. Rylko V, et al. **Folia Microbiol (Praha)** 1988;33(5):425–9

SPORES, BACTERIAL

A simple mathematical model of the thermal death of microorganisms. McKee S, et al. **Bull Math Biol** 1988; 50(5):493–501
Promoter specificity of sigma G-containing RNA polymerase from sporulating cells of Bacillus subtilis: identification of a group of forespore-specific promoters. Nicholson WL, et al. **J Bacteriol** 1989 May;171(5):2708–18
Integration and mapping of Bacillus megaterium genes which code for small, acid-soluble spore proteins and their protease. Sussman MD, et al. **J Bacteriol** 1988 Oct; 170(10):4942–5
Phenotypic and genetic characterization of mutations in the spoIVC locus of Bacillus subtilis. Farquhar R, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):9–17
Regulatory studies on the promoter for a gene governing synthesis and assembly of the spore coat in Bacillus subtilis. Cutting S, et al. **J Mol Biol** 1989 May 20;207(2):393–404

ANALYSIS

Immunoelectron microscopic studies on spore coat proteins of Bacillus megaterium. Imagawa M, et al. **Microbiol Immunol** 1988;32(10):991–8
Chemical composition of bacillus spores. Pendukar SH, et al. **Nahrung** 1988;32(10):1003–4

DRUG EFFECTS

Inhibitory effect of 1-methyldodecyldimethylamine oxide and N,N-bis(dodecyldimethyl)-1,2-ethanediammonium dibromide on the spores of Bacillus cereus. Cupková V, et al. **Folia Microbiol (Praha)** 1988;33(6):433–9
Sporicidal activity of local anaesthetics and their binary combinations with preservatives. Abdelaziz AA, et al. **J Clin Pharm Ther** 1988 Aug;13(4):249–56
Evaluation of the stability and sporicidal activity of three glutaraldehyde solutions during hospital continuous use. Vanhaecke E, et al. **J Pharm Belg** 1989 Mar-Apr; 44(2):127–32
[Comparison of the sporocidal effects of two different disinfectants i a model experiment with pathogenic and nonpathogenic clostridial spore as well as with Bacillus cereus] Stockinger H, et al. **Zentralbl Hyg Umweltmed** 1989 May;188(1-2):166–78 (Eng. Abstr.) **(Ger)**

GROWTH & DEVELOPMENT

Identification of a new sigma-factor involved in compartmentalized gene expression during sporulation of Bacillus subtilis. Sun DX, et al. **Genes Dev** 1989 Feb; 3(2):141–9

PHYSIOLOGY

Sigma-G RNA polymerase controls forespore-specific expression of the glucose dehydrogenase operon in Bacillus subtilis. Nakatani Y, et al. **Nucleic Acids Res** 1989 Feb 11; 17(3):999–1017

SPORES, FUNGAL

The effect of aggregation on the counting precision of mould spores on filters. Eduard W, et al. **Ann Occup Hyg** 1988; 32(4):471–9
Fungal and actinomycete spores as pollutants of the workplace and occupational allergens. Lacey J, et al. **Ann Occup Hyg** 1988;32(4):515–33 (167 ref.)
Hypersensitivity pneumonitis due to mushroom (Pholiota nameko) spores. Nakazawa T, et al. **Chest** 1989 May; 95(5):1149–51
Extrinsic allergic alveolitis caused by spores of the oyster mushroom Pleurotus ostreatus. Cox A, et al. **Eur Respir J** 1988 May;1(5):466–8
Selective gene expression during sporulation of Physarum polycephalum. Martel R, et al. **J Bacteriol** 1988 Oct; 170(10):4784–90
Proteins that interact with GTP during sporulation of Bacillus subtilis. Mitchell C, et al. **J Bacteriol** 1989 Jun; 171(6):2915–8
The cdc30 mutation in Saccharomyces cerevisiae affects phosphoglucose isomerase, the cell cycle and sporulation. Dickinson JR, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2475–80
[Fungal spores as risk factors at confectionery work places] Cosentino S, et al. **Nuovi Ann Ig Microbiol** 1988 Jan-Feb; 39(1):33–41 (Eng. Abstr.) **(Ita)**

ANALYSIS

Immunoprint analysis of Calvatia cyathiformis allergens. I. Reactivity with individual sera. Horner WE, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):784–92

DRUG EFFECTS

Ammonium ions and glutamine inhibit sporulation of Coprinus cinereus basidia assayed in vitro. Chiu SW, et al. **Cell Biol Int Rep** 1988 Jul;12(7):519–26
Sporicidal activity of local anaesthetics and their binary combinations with preservatives. Abdelaziz AA, et al. **J Clin Pharm Ther** 1988 Aug;13(4):249–56
[Fungicidal effect of iodophor preparations on dermatophyte arthrospores] Wołoszyn S. **Pol Arch Weter** 1987; 27(4):25–34 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Characterization of allergens from spores of the oyster mushroom, Pleurotus ostreatus. Horner WE, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):978–86
Identification and analysis of basidiospore allergens from puffballs. Ibanez MD, et al. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 1):787–95
Prevalence of basidiospore allergy in the Pacific Northwest. Sprenger JD, et al. **J Allergy Clin Immunol** 1988 Dec; 82(6):1076–80
Indirect immunofluorescent test on spore sampling preparations: a technique for diagnosis of individual mold allergies. Popp W, et al. **Stain Technol** 1988 Jul;63(4):249–53

ISOLATION & PURIFICATION

Basidiospore identification. Levetin E. **Ann Allergy** 1989 Apr; 62(4):306–10

PATHOGENICITY

Incidence of organic dust toxic syndrome and allergic alveolitis in Swedish farmers. Malmberg P, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):47–54

ULTRASTRUCTURE

A morphological and genetic analysis of conidiophore development in Neurospora crassa. Springer ML, et al. **Genes Dev** 1989 Apr;3(4):559–71

SPORIDESMINS see under **INDOLES**

SPOROTHRIX see **SPOROTRICHUM**

SPOROTRICHOSIS

Sporotrichosis. Belknap BS. **Dermatol Clin** 1989 Apr; 7(2):193–202 (62 ref.)
Systemic fungal infections: diagnosis and treatment. I. Sporotrichosis. Winn RE. **Infect Dis Clin North Am** 1988 Dec;2(4):899–911 (74 ref.)
Cutaneous sporotrichosis. Tan TQ, et al. **J La State Med Soc** 1988 Sep;140(9):41–5
Case report of synovial sporotrichosis involving both wrists. Wilson SD, et al. **J Med Vet Mycol** 1988;26(5):307–9
Sporothrix tenosynovitis—differential diagnosis of granulomatous inflammatory disease of the joints. Schwartz DA. **J Rheumatol** 1989 Apr;16(4):550–3
Sporotrichosis in the Orinoco river basin of Venezuela and Colombia. Beer-Romero P, et al. **Mycopathologia** 1989 Jan; 105(1):19–23
Polyarticular arthritis due to Sporothrix schenckii. Lesperance M, et al. **Mycoses** 1988 Dec;31(12):599–603

COMPLICATIONS

Pulmonary sporotrichosis with massive hemoptysis. Haponik EF, et al. **Am J Med Sci** 1989 Apr;297(4):251–3
Gallium scan finding in a patient with suppurative lymphangitis secondary to sporotrichosis. Yip TC, et al. **Clin Nucl Med** 1989 Feb;14(2):144
Acquired immunodeficiency syndrome presenting as disseminated cutaneous sporotrichosis. Fitzpatrick JE, et al. **Int J Dermatol** 1988 Jul-Aug;27(6):406–7
Empyema associated with pulmonary sporotrichosis. Fields CL, et al. **South Med J** 1989 Jul;82(7):910–3

DIAGNOSIS

Sporotrichoid spread of Mycobacterium chelonei. Higgins EM, et al. **Clin Exp Dermatol** 1988 Jul;13(4):234–6
Sporotrichoid pyogenic bacterial infection. Tanaka S, et al. **Dermatologica** 1989;178(4):228–30
Localized cutaneous verrucous sporotrichosis of 26 years duration. Villaça-Neto CM, et al. **Mycoses** 1988 Jul; 31(7):353–5
Sporotrichosis. Rowe JG, et al. **Orthopedics** 1989 Jul; 12(7):981–5
[A case of primary pulmonary sporotrichosis] Nakano H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb; 27(2):220–4 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Efficacies of four antifungal agents in experimental murine sporotrichosis. Kan VL, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1619–23
Intra-articular amphotericin B treatment of Sporothrix schenckii arthritis. Downs NJ, et al. **Arch Intern Med** 1989 Apr;149(4):954–5
Multifocal systemic sporotrichosis with lobar pulmonary involvement. Velji AM, et al. **Scand J Infect Dis** 1988; 20(5):565–9 (13 ref.)

EPIDEMIOLOGY

Multistate outbreak of sporotrichosis in seedling handlers, 1988. **Arch Dermatol** 1989 Feb;125(2):170
Leads from the MMWR. Multistate outbreak of sporotrichosis in seedling handlers, 1988. **JAMA** 1988 Nov 18;260(19):2806, 2811
Multistate outbreak of sporotrichosis in seedling handlers, 1988. **MMWR** 1988 Oct 28;37(42):652–3
Sporotrichosis outbreak. **N Y State J Med** 1988 Dec; 88(12):667

ETIOLOGY

Sporothrix schenckii var luriei as the cause of sporotrichosis in Italy. Alberici F, et al. **Eur J Epidemiol** 1989 Jun; 5(2):173–7 (33 ref.)

MICROBIOLOGY

Unusual structures of Sporothrix schenckii. Shadomy HJ, et al. **Mycopathologia** 1988 Jun;102(3):143–7

PATHOLOGY

Sporotrichosis in a father and son. Frumkin A, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):964–7
[Cutaneous lymphangitic-nodular sporotrichosis with multiple portals of entry] Bonasse J, et al. **Med Cutan Ibero Lat Am** 1988;16(3):263–5 (Eng. Abstr.) **(Spa)**
[Fixed cutaneous sporotrichosis localized on the face, with an infrequently seen clinical picture] Simal E, et al. **Med Cutan Ibero Lat Am** 1988;16(3):201–3 (Eng. Abstr.) **(Spa)**

TRANSMISSION

Sporotrichosis in association with Arbor Day activities [letter] Coté TR, et al. **N Engl J Med** 1988 Nov 10; 319(19):1290–1

SPOROTRICHUM

CYTOLOGY

Speculative cell cycle in yeast-phase growth of Sporothrix schenckii: plasma membrane ultrastructure as revealed by freeze-fracture electron microscopy. Maeda M, et al. **Can J Microbiol** 1988 Sep;34(9):1083–9

DRUG EFFECTS

Effects of zinc on macromolecular synthesis and nuclear division during the yeast to mycelium transition in Sporothrix schenckii. Rodríguez-del Valle N. **Mycopathologia** 1989 Apr;106(1):23–9

ENZYMOLOGY

Rapid kinetic studies of the reduction of cellobiose oxidase from the white-rot fungus Sporotrichum pulverulentum by cellobiose. Jones GD, et al. **Biochem J** 1988 Dec 15; 256(3):713–8

NAD(P)H dehydrogenase (quinone) from Sporotrichum pulverulentum. Buswell JA, et al. **Methods Enzymol** 1988; 161:271–4

Vanillate hydroxylase from Sporotrichum pulverulentum. Buswell JA, et al. **Methods Enzymol** 1988;161:274–81

GENETICS

Analysis of restriction profiles of mitochondrial DNA from Sporothrix schenckii and related fungi. Suzuki K, et al. **Mycopathologia** 1988 Sep;103(3):147–51

GROWTH & DEVELOPMENT

Yeast killer toxins and dimorphism. Polonelli L, et al. **J Clin Microbiol** 1989 Jun;27(6):1423–5

IMMUNOLOGY

Immunoblot analysis of antibody responses to Sporothrix schenckii. Scott EN, et al. **J Clin Microbiol** 1989 Feb; 27(2):300–4

ISOLATION & PURIFICATION

Sporothrix schenckii var luriei as the cause of sporotrichosis in Italy. Alberici F, et al. **Eur J Epidemiol** 1989 Jun; 5(2):173–7 (33 ref.)

METABOLISM

Isolation, purification and regeneration of protoplasts from Sporotrichum thermophile conidiospores. Sharma VK, et al. **Biochem Int** 1988 Nov;17(5):895–906

KS-501 and KS-502, new inhibitors of Ca2+ and calmodulin-dependent cyclic-nucleotide phosphodiesterase from Sporothrix sp. Nakanishi S, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1049–55

PATHOGENICITY

The pathogenic potential of Sporotrichum pruinosum isolated from the human respiratory tract. Khan ZU, et al. **J Med Vet Mycol** 1988 Jun;26(3):145–51

ULTRASTRUCTURE

Unusual structures of Sporothrix schenckii. Shadomy HJ, et al. **Mycopathologia** 1988 Jun;102(3):143–7

SPOROZOA

Observations on demyelinating lesions induced by Theiler's virus in CBA mice. Blakemore WF, et al. **Acta Neuropathol (Berl)** 1988;76(6):581–9

Experimental transmission of Theileria sergenti of cattle in Japan by Haemaphysalis mageshimaensis. Fujisaki K, et al. **Ann Trop Med Parasitol** 1988 Oct;82(5):513–5

Gonotrophic age, insemination, and Ascogregarina infection in a southern Wisconsin population of Aedes triseriatus. Porter CH, et al. **J Am Mosq Control Assoc** 1985 Jun; 1(2):238–40

Measurement of the effect of microsporidian pathogens on mosquito larval mortality under artificial field conditions. Undeen AH, et al. **J Am Mosq Control Assoc** 1987 Mar; 3(1):91–3

In vitro infection of bovine alloreactive cytotoxic T cell lines with sporozoites of Theileria annulata and T parva. Innes EA, et al. **Res Vet Sci** 1989 May;46(3):367–74

CLASSIFICATION

Phylogenetic analysis of the class Sporozoea (phylum Apicomplexa Levine, 1970): evidence for the independent evolution of heteroxenous life cycles. Barta JR. **J Parasitol** 1989 Apr;75(2):195–206

Progress in taxonomy of the Apicomplexan protozoa. Levine ND. **J Protozool** 1988 Nov;35(4):518–20 (23 ref.)

Characterization of buffalo-derived theilerial parasites with monoclonal antibodies and DNA probes. Conrad PA, et al. **Parasitology** 1989 Apr;98 Pt 2:179–88

GENETICS

Improved characterization of Theileria parva isolates using the polymerase chain reaction and oligonucleotide probes. Allsopp B, et al. **Mol Biochem Parasitol** 1989 Jun 15; 35(2):137–47

Isolation and characterization of RNA from the intracellular parasite Theileria parva. Gerhards J, et al. **Mol Biochem Parasitol** 1989 Apr;34(1):15–24

GROWTH & DEVELOPMENT

Theileria parva: reappearance of schizonts in infected lymphoblastoid cells treated with parvaquone is dependent on interleukin 2-like growth factors. Brown WC, et al. **Exp Parasitol** 1989 Apr;68(3):308–25

In vitro development of Neospora caninum (Protozoa: Apicomplexa) from dogs. Lindsay DS, et al. **J Parasitol** 1989 Feb;75(1):163–5

Encephalitozoon cuniculi: quantitation of parasites and evaluation of viability. Peterson N, et al. **J Protozool** 1988 Aug;35( )430–4

Besnoitia besnoiti: studies on the definitive host and experimental infections in cattle. Diesing L, et al. **Parasitol Res** 1988;75(2):114–7

IMMUNOLOGY

The effect of the microsporida Glugea stephani on the immunoglobulin levels of juvenile and adult winter flounder (Pseudopleuronectes americanus). Laudan R, et al. **Dev Comp Immunol** 1989 Winter;13(1):35–41

Dot enzyme-linked immunosorbent assay (dot ELISA) for antibodies to Encephalitozoon cuniculi. Beckwith C, et al. **Lab Anim Sci** 1988 Oct;38(5):573–6

Modulated immune responsiveness associated with experimental Encephalitozoon cuniculi infection in BALB/c mice. Didier ES, et al. **Lab Anim Sci** 1988 Dec; 38(6):680–4

Serologic evidence of Encephalitozoon cuniculi infection in a colony of squirrel monkeys (Saimiri sciureus). Shadduck JA, et al. **Lab Anim Sci** 1989 Jul;39(4):328–30

Characterization of surface polypeptides on different life-cycle stages of Theileria annulata. Shiels B, et al. **Mol Biochem Parasitol** 1989 May 15;34(3):209–20

The immunoglobulin response in cattle to experimental infection with Theileria sergenti. Kawazu S, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1107–8

Biochemical characterization of Theileria sergenti lysate antigen on the adjuvant effect in mice. Onodera T, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):814–6

Enhanced adjuvant effects in embryo aggregated mouse chimera injected with Theileria sergenti lysate antigen. Shimizu S, et al. **Nippon Juigaku Zasshi** 1988 Aug; 50(4):957–9

Macrophage-mediated cytostasis and lymphocyte cytotoxicity in cattle immunized with Theileria annulata sporozoites or macroschizont-infected cell lines. Preston PM, et al. **Parasite Immunol** 1988 Nov;10(6):631–47

Bovine mononuclear cell lines transformed by Theileria parva or Theileria annulata express different subpopulation markers. Spooner RL, et al. **Parasite Immunol** 1988 Nov; 10(6):619–29

Theileria annulata sporozoite surface antigen expressed in Escherichia coli elicits neutralizing antibody. Williamson S, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4639–43

Immunization of cattle with a Theileria parva bovis stock from Zimbabwe protects against challenge with virulent T.p. parva and T.p. lawrencei stocks from Kenya. Irvin AD, et al. **Vet Parasitol** 1989 Aug 1;32(4):271–8

The effect of dose and line on immunisation of cattle with lymphoblastoid cells infected with Theileria annulata. Oubelli H, et al. **Vet Parasitol** 1989 Jun;31(3–4):217–28

Prevalence of antibodies to Encephalitozoon cuniculi in stray dogs as determined by an ELISA. Hollister WS, et al. **Vet Rec** 1989 Apr 1;124(13):332–6

ISOLATION & PURIFICATION

Isolation of Theileria parva schizonts from infected lymphoblastoid cells. Sugimoto C, et al. **Acta Trop (Basel)** 1988 Sep;45(3):203–16

The isolation of microsporidia and other pathogens from concentrated ditch water. Avery SW, et al. **J Am Mosq Control Assoc** 1987 Mar;3(1):54–8

Isolation of Ascogregarina sp. (Eugregarinida: Lecudinidae) from Aedes hendersoni. Rowton ED, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):646–7

Spirogregarina fusiformis Wood and Herman, 1943, a diatom misidentified as an avian blood parasite. Bennett GF. **J Parasitol** 1989 Aug;75(4):636

Isolation of Theileria sergenti piroplasms from infected erythrocytes and development of an enzyme-linked immunosorbent assay for serodiagnosis of T sergenti infections. Shimizu S, et al. **Res Vet Sci** 1988 Sep; 45(2):206–12

PATHOGENICITY

Studies of encephalitozoonosis in vervet monkeys (Cercopithecus pygerythrus) orally inoculated with spores of Encephalitozoon cuniculi isolated from dogs (Canis familiaris). van Dellen AF, et al. **Onderstepoort J Vet Res** 1989 Mar;56(1):1–22

PHYSIOLOGY

Theileria parva: an intracellular protozoan parasite that induces reversible lymphocyte transformation. ole-MoiYoi OK. **Exp Parasitol** 1989 Aug;69(2):204–10 (38 ref.)

The effect of temperature on the rate of transmission of Theileria parva parva infection to cattle by its tick vector, Rhipicephalus appendiculatus. Ochanda H, et al. **Parasitology** 1988 Oct;97 (Pt 2):239–45

Relative role of male and female Hyalomma anatolicum anatolicum ticks in Theileria transmission. Sangwan AK, et al. **Vet Parasitol** 1989 Apr;31(1):83–7

ULTRASTRUCTURE

Transmission and scanning electron microscopy of Besnoitia besnoiti. Shkap V, et al. **Int J Parasitol** 1988 Sep; 18(6):761–6

Ultrastructure of the ookinetes of Haemoproteus meleagridis (Haemosporina: Haemoproteidae). Atkinson CT. **J Parasitol** 1989 Feb;75(1):135–41

SPORTS

see related
ATHLETIC INJURIES
DOPING IN SPORTS

Exercise-induced bronchospasm in the XXIII summer Olympic games. Pierson WE, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):695–700

The veteran athlete: an echocardiographic comparison of veteran cyclists, former cyclists and non-athletic subjects. Vollmer-Larsen A, et al. **Acta Physiol Scand** 1989 Mar; 135(3):393–8

Spondylolysis and the sacro-horizontal angle in athletes. Swärd L, et al. **Acta Radiol** 1989 Jul-Aug;30(4):359–64

The seasonal dependence of magnesium and zinc in blood in young sportsmen. Kubíček R, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:267–70

Exercise-induced asthma/other allergic reactions in the athlete. Katz RM. **Allergy Proc** 1989 May-Jun;10(3):203–8 (45 ref.)

Impact of air pollutants on athletic performance. Pierson WE. **Allergy Proc** 1989 May-Jun;10(3):209–14 (62 ref.)

Assembly-line physicals [letter] Dewester J. **Am Fam Physician** 1989 Sep;40(3):53

Sports medicine for wheelchair athletes. Schaefer RS, et al. **Am Fam Physician** 1989 May;39(5):239–45

Recurrent myocardial infarction and sudden death after sport. Ciampricotti R, et al. **Am Heart J** 1989 Jan;117(1):188–91

Prevalence of multivalvular regurgitation in athletes. Douglas PS, et al. **Am J Cardiol** 1989 Jul 15;64(3):209–12

Noninvasive evaluation of world class athletes engaged in different modes of training. Fisher AG, et al. **Am J Cardiol** 1989 Feb 1;63(5):337–41

Sudden death immediately after a record-setting athletic performance. Sadaniantz A, et al. **Am J Cardiol** 1989 Feb 1;63(5):375

Special presentation. Health, fitness, and sport. Bannister R. **Am J Clin Nutr** 1989 May;49(5 Suppl):927–30

Nutritional problems and measures in elite and amateur athletes. Chen JD, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1084–9

Macronutrient intake of US athletes compared with the general population and recommendations made for athletes. Grandjean AC. **Am J Clin Nutr** 1989 May;49(5 Suppl):1070–6

Physical activity, fitness, and diet: behavior in the population compared with elite athletes in the GDR. Heinemann L, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1066–9

Eating for health or for athletic performance? Leaf A, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1066–9

What constitutes good nutrition for the athlete and postathlete. Leaf A. **Am J Clin Nutr** 1989 May;49(5 Suppl):936–7

International Olympic Committee Medical Commission's policies and programs in nutrition and physical fitness. Prokop L. **Am J Clin Nutr** 1989 May;49(5 Suppl):1065

Barriers to bicycle helmet use among children. Results of focus groups with fourth, fifth, and sixth graders. Howland J, et al. **Am J Dis Child** 1989 Jun;143(6):741–4

High school athletes and the use of ergogenic aid. Krowchuk DP, et al. **Am J Dis Child** 1989 Apr;143(4):486–9

Strength, flexibility, and maturity in adolescent athletes. Pratt M. **Am J Dis Child** 1989 May;143(5):560–3

Judo principles and practices: applications to conflict-solving strategies in psychotherapy. Gleser J, et al. **Am J Psychother** 1988 Jul;42(3):437–47

Sport fish consumption advisories and projected cancer risks in the Great Lakes basin. Foran JA, et al. **Am J Public Health** 1989 Mar;79(3):322–5

A case-control study of pedestrian and bicyclist injuries in childhood. Pless IB, et al. **Am J Public Health** 1989 Aug; 79(8):995–8

Summer Olympics medical care [letter] Simone BM. **Am J Public Health** 1988 Dec;78(12):1599

Smokeless tobacco: less seen at 1988 World Series [letter] Sussman S, et al. **Am J Public Health** 1989 Apr;79(4):521–2

An analysis of fitness and time-motion characteristics of handball. Alexander MJ, et al. **Am J Sports Med** 1989 Jan-Feb;17(1):76–82

Orthotic treatment of sesamoid pain. Axe MJ, et al. **Am J Sports Med** 1988 Jul-Aug;16(4):411–6

Measurement of upper extremity torque production and its relationship to throwing speed in the competitive athlete. Bartlett LR, et al. **Am J Sports Med** 1989 Jan-Feb; 17(1):89–91

Grappling with herpes: herpes gladiatorum. Becker TM, et al. **Am J Sports Med** 1988 Nov-Dec;16(6):665–9

Martial arts injuries. The results of a five year national survey. Birrer RB, et al. **Am J Sports Med** 1988 Jul-Aug; 16(4):408–10

Upper extremity range of motion and isokinetic strength of the internal and external shoulder rotators in major league baseball players. Brown LP, et al. **Am J Sports Med** 1988 Nov-Dec;16(6):577–85

Isolated infraspinatus atrophy. A common cause of posterior shoulder pain and weakness in throwing athletes? Bryan WJ, et al. **Am J Sports Med** 1989 Jan-Feb;17(1):130–1

Noninvasive diagnosis of cruciate ligament damage with particular reference to computed tomography with arthrography. Büttner-Janz K, et al. **Am J Sports Med** 1989 Jul-Aug;17(4):501–4

Management of orbital blow-out fractures. Case reports and

discussion. Forrest LA, et al. **Am J Sports Med** 1989 Mar–Apr;17(2):217–20 (19 ref.)
Gore–Tex prosthetic ligament in anterior cruciate deficient knees. Glousman R, et al. **Am J Sports Med** 1988 Jul–Aug; 16(4):321–6
Low back pain among retired wrestlers and heavyweight lifters. Granhed H, et al. **Am J Sports Med** 1988 Sep–Oct; 16(5):530–3
Arthroscopic shoulder capsulorraphy: does it work? Gross RM. **Am J Sports Med** 1989 Jul–Aug;17(4):495–500
Limited joint mobility in power lifters [letter] Herrick RT. **Am J Sports Med** 1989 Jan–Feb;17(1):134
Limited joint mobility in power lifters [letter] Herrick RT. **Am J Sports Med** 1988 Nov–Dec;16(6):687
Osteochondritis dissecans of the shoulder in a tennis player. Ishikawa H, et al. **Am J Sports Med** 1988 Sep–Oct; 16(5):547–50 (18 ref.)
Stress fracture of the patella. Jerosch JG, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):579–80
Isokinetic muscular performance of the quadriceps in elite ice hockey players. Johansson C, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):30–4
A kinematic comparison of ergometer and on–water rowing. Lamb DH. **Am J Sports Med** 1989 May–Jun;17(3):367–73
Injuries in international ice hockey. A prospective, comparative study of injury incidence and injury types in international and Swedish elite ice hockey. Lorentzon R, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):389–91
Incidence, nature, and causes of ice hockey injuries. A three–year prospective study of a Swedish elite ice hockey team. Lorentzon R, et al. **Am J Sports Med** 1988 Jul–Aug; 16(4):392–6
Ipsilateral carpal, metacarpal, and ankle fractures resulting from an attempted basketball slam–dunk. A case report. McClelland SJ, et al. **Am J Sports Med** 1988 Sep–Oct; 16(5):544–6
Electromyographic analysis of elbow function in tennis players. Morris M, et al. **Am J Sports Med** 1989 Mar–Apr; 17(2):241–7
Stress fracture of the metacarpal in a adolescent tennis player. Murakami Y. **Am J Sports Med** 1988 Jul–Aug;16(4):419–20
Delayed unions and nonunions of stress fractures in athletes. Orava S, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):378–82
Computed tomography (CT) arthrography of shoulder instabilities in athletes. Rafii M, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):352–61
An electromyographic analysis of shoulder function in tennis players. Ryu RK, et al. **Am J Sports Med** 1988 Sep–Oct; 16(5):481–5
Comparison of maxillofacial and dental injuries in four contact team sports: American football, bandy, basketball, and handball. Sane J. **Am J Sports Med** 1988 Nov–Dec; 16(6):647–51
Injuries in elite pair skaters and ice dancers. Smith AD, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):482–8
Anterior cruciate ligament injuries in the young athlete with open physes [letter] Stanitski CL. **Am J Sports Med** 1988 Jul–Aug;16(4):424
Illness and absence among wrestlers, swimmers, and gymnasts at a large university. Strauss RH, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):653–55
Passive tension of the ankle before and after stretching. Toft E, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):489–94
Soccer injuries to the brain. A neurologic and electroencephalographic study of active football players. Tysvaer AT, et al. **Am J Sports Med** 1989 Jul–Aug; 17(4):573–8
Endofibrosis of the external iliac artery in bicycle racers: an unrecognized pathological state. Chevalier JM, et al. **Ann Vasc Surg** 1986 Nov;1(3):297–303
Controversies about intensive training in young athletes. Maffulli N, et al. **Arch Dis Child** 1988 Nov;63(11):1405–7 (26 ref.)
Waterslides—are safety standards sliding? Gordon CJ, et al. **Arch Emerg Med** 1988 Dec;5(4):216–22
Treatment of sprained ankles by physiotherapists at professional soccer clubs. Leaman AM, et al. **Arch Emerg Med** 1988 Sep;5(3):177–9
Alternative treatment for wrestlers' hematoma [letter] Jaffee IS. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):995
Wrestler's hematoma [letter] Koopman CF. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):995
Auricular injury and the use of headgear in wrestlers. Schuller DE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):714–7
A technique to treat wrestlers' auricular hematoma without interrupting training or competition. Schuller DE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):202–6
Posttraumatic syringomyelia associated with heavy weightlifting exercises: case report. Balmaseda MT Jr, et al. **Arch Phys Med Rehabil** 1988 Nov;69(11):970–2
Ankle and wrist weights: their effect on physiologic responses during treadmill running. Bhambhani Y, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):291–6
Kung–Fu: synthesis of wheelchair sport and self–protection. Madorsky JG, et al. **Arch Phys Med Rehabil** 1989 Jun; 70(6):490–2
Sports dentistry [letter] Castaldi CR. **ASDC J Dent Child** 1989 May–Jun;56(3):236
Orofacial trauma and mouth–protector wear among high school varsity basketball players. Maestrello–deMoya MG, et al. **ASDC J Dent Child** 1989 Jan–Feb;56(1):36–9
Anyone for tennis? Mohanlal M. **Aust Fam Physician** 1988 Oct;17(10):916
Paediatric bicycle injuries. Cass DT, et al. **Aust N Z J Surg** 1989 Sep;59(9):719–24
Resemblances of parents and twins in sports participation and heart rate. Boomsma DI, et al. **Behav Genet** 1989 Jan; 19(1):123–41
Performance of a weight–lifting task by normal and deafferented monkeys. Wylie RM, et al. **Behav Neurosci** 1989 Apr;103(2):273–82
Hazards of long distance cycling [letter] **BMJ** 1989 May 20; 298(6684):1380
Hazards of long distance cycling. Desai KM, et al. **BMJ** 1989 Apr 22;298(6680):1072–3
Surgeons' posture and kungfu. Yip YL. **BMJ** 1988 Dec 24–31;297(6664):1690–1
AAP condemns use of steroids [news] **Bol Assoc Med P R** 1988 Nov;80(11):440
Exercise, sports and pulmonary ailments in children. Mayol PM, et al. **Bol Assoc Med P R** 1988 Oct;80(10):377–83 (54 ref.)
Leptospirosis and water sports [editorial] Mumford CJ. **Br J Hosp Med** 1989 Jun;41(6):519
Martial arts and psychological health. Fuller JR. **Br J Med Psychol** 1988 Dec;61 (Pt 4):317–28 (45 ref.)
Handedness in 'fast ball' sports: do left–handers have an innate advantage? Wood CJ, et al. **Br J Psychol** 1989 May; 80 (Pt 2):227–40
Injuries to rowers [letter] Brosh S, et al. **Br J Sports Med** 1988 Dec;22(4):169
The road to success in international rowing. Budgett RG. **Br J Sports Med** 1989 Mar;23(1):49–50
Smoking and lung functions in sportsmen. De AK, et al. **Br J Sports Med** 1988 Jun;22(2):61–3
Anthropometric comparison of cyclists from different events. Foley JP, et al. **Br J Sports Med** 1989 Mar;23(1):30–3
The role of physiological assessment in team selection with special reference to rowing. Koutedakis Y. **Br J Sports Med** 1989 Mar;23(1):51–2
The short–term metabolic effects of strenuous exercise in bodybuilders. McKillop G, et al. **Br J Sports Med** 1988 Sep;22(3):107–8
The risks of injury in public ice skating. Radford PJ, et al. **Br J Sports Med** 1988 Jun;22(2):78–80
Injuries treated at a sports injury clinic compared with a neighbouring accident and emergency department. Rowell S, et al. **Br J Sports Med** 1988 Dec;22(4):157–60
Closed intramedullary nailing of tibial fractures in sportsmen [letter] Salai M, et al. **Br J Sports Med** 1988 Jun;22(2):82
Viruses and the athlete. Sharp JC. **Br J Sports Med** 1989 Mar;23(1):47–8 (5 ref.)
Thoracic back pain in rowers and butterfly swimmers—costo vertebral subluxation [letter] Thomas PL. **Br J Sports Med** 1988 Jun;22(2):81
Eye injuries in squash [letter] Verow PG. **Br J Sports Med** 1988 Jun;22(2):81–2
Japanese encephalitis vaccination, with reference to travellers to Seoul, Korea. **Can Dis Wkly Rep** 1988 Sep 10; 14(36):161–2 **(Eng, Fre)**
Nitrogen dioxide poisoning at a skating rink—Quebec. Dewailly E, et al. **Can Dis Wkly Rep** 1988 Apr 16; 14(15):61–2 **(Eng, Fre)**
Sudden death during exercise: how real a hazard? Firor WB, et al. **Can J Cardiol** 1988 Sep;4(6):251–4
Can vision training improve athletic performance? [editorial] Stein R, et al. **Can J Ophthalmol** 1989 Apr;24(3):105–7 **(Eng, Fre)**
Proceedings of the Canadian Association of Sport Sciences, 21st annual meeting. Sudbury, Ontario, October 21–24, 1988. Abstracts. **Can J Sport Sci** 1988 Sep;13(3):37P–96P
Expert—novice differences in perception: how expert does the expert have to be? Abernethy B. **Can J Sport Sci** 1989 Mar;14(1):27–30
Game standings and psychological crisis in sport: theory and research. Bar–Eli M, et al. **Can J Sport Sci** 1989 Mar; 14(1):31–7
Sequencing of endurance and high–velocity strength training. Bell GJ, et al. **Can J Sport Sci** 1988 Dec;13(4):214–9
The measurement of cohesion in sports teams: the Group Environment Questionnaire [letter] Carron AV, et al. **Can J Sport Sci** 1989 Mar;14(1):55–9
Effect of glucose polymer ingestion on glycogen depletion during a soccer match. Leatt PB, et al. **Can J Sport Sci** 1989 Jun;14(2):112–6
Shoulder injuries in archery. Mann DL, et al. **Can J Sport Sci** 1989 Jun;14(2):85–92
A survey of the race profiles of cyclists in the pursuit and kilo track events. Wilberg RB, et al. **Can J Sport Sci** 1988 Dec;13(4):208–13
A survey of age group ice hockey goal keepers. Wilberg RB. **Can J Sport Sci** 1988 Dec;13(4):231–40
Coincidences in twins [letter] **Can Med Assoc J** 1989 Aug 1;141(3):192
Fatal accident with weight–lifting equipment: implications for safety standards. George DH, et al. **Can Med Assoc J** 1989 Apr 15;140(8):925–6
Hypertrophic cardiomyopathy mimicking athlete heart: risk of progression and opportunity for a bioptical approach. Frustaci A, et al. **Cardiologia** 1989 Jan;34(1):93–5
Myocardial infarction and sudden death after sport: acute coronary angiographic findings. Ciampricotti R, et al. **Cathet Cardiovasc Diagn** 1989 Aug;17(4):193–7
EKG screening program for school athletes. LaCorte MA, et al. **Clin Cardiol** 1989 Jan;12(1):42–4
"Flipped" patterns of lactate dehydrogenase isoenzymes in serum of elite college basketball players. Rotenberg Z, et al. **Clin Chem** 1988 Nov;34(11):2351–4
Test–strip method for measuring lactate in whole blood. Shimojo N, et al. **Clin Chem** 1989 Sep;35(9):1992–4
A rationale for assessing sports activity levels and limitations in knee disorders. Noyes FR, et al. **Clin Orthop** 1989 Sep; (246):238–49
The effect of pretraining sports activity on the incidence of stress fractures among military recruits. A prospective study. Swissa A, et al. **Clin Orthop** 1989 Aug;(245):256–60
Coaches' goals for young children in a recreational sports program. Stern P, et al. **Clin Pediatr (Phila)** 1989 Jun; 28(6):277–81
Sports and allergies. **Clin Rev Allergy** 1988 Winter; 6(4):357–457
The athlete and his skin. Sports related cutaneous disorders. Atton AV, et al. **Clin Rev Allergy** 1988 Winter;6(4):403–29 (38 ref.)
Chronic cough in athletes. Katz RM, et al. **Clin Rev Allergy** 1988 Winter;6(4):431–41 (14 ref.)
Nutrition in the training and performance of allergic athletes. Mahan LK. **Clin Rev Allergy** 1988 Winter;6(4):385–402 (57 ref.)
Exercise–induced bronchospasm in clinical practice. Pierson WE. **Clin Rev Allergy** 1988 Winter;6(4):443–52 (32 ref.)
The unheralded value of arthroscopy using local anesthesia for diagnostic specificity and intraoperative corroboration of therapeutic achievement. Minkoff J, et al. **Clin Sports Med** 1987 Jul;6(3):471–90 (7 ref.)
Rugby injuries of the spine and spinal cord. Scher AT. **Clin Sports Med** 1987 Jan;6(1):87–99
Neck injuries in ice hockey: a recent, unsolved problem with many contributing factors. Tator CH. **Clin Sports Med** 1987 Jan;6(1):101–14
Trampoline–induced quadriplegia. Torg JS. **Clin Sports Med** 1987 Jan;6(1):73–85 (20 ref.)
Physicians and school sports physical examination. Cook DE. **Colo Med** 1988 Sep 15;85(17):373
Anabolic steroids and athletes. Zlotsky NA. **Conn Med** 1989 Apr;53(4):241
Electrophysiological pattern of development of fatigue during isometric contraction in sportsmen. Vatine JJ, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):7–14
Sport, leisure and ergonomics. **Ergonomics** 1988 Nov; 31(11):1497–721
Body composition and self–perceived health and fitness among indoor sports participants. Brodie DA, et al. **Ergonomics** 1988 Nov;31(11):1551–7
The role of the biceps and triceps brachii during tennis serving. Buckley JP, et al. **Ergonomics** 1988 Nov; 31(11):1621–9
Electromyography applied to sport ergonomics. Clarys JP, et al. **Ergonomics** 1988 Nov;31(11):1605–20 (17 ref.)
The effects of helmet design and bowling speed on indices of stress in cricket batting. Davids K, et al. **Ergonomics** 1988 Nov;31(11):1665–71
Symmetric and asymmetric manual materials handling, Part 2: Biomechanics. Drury CG, et al. **Ergonomics** 1989 Jun; 32(6):565–83
Self–regulation training in sport and work. Hardy L, et al. **Ergonomics** 1988 Nov;31(11):1573–83 (56 ref.)
An investigation into anaerobic performance of wheelchair athletes. Lees A, et al. **Ergonomics** 1988 Nov; 31(11):1529–37
Physiological responses and psychological sensations in wearer trials with knitted sportswear. Li Y, et al. **Ergonomics** 1988 Nov;31(11):1709–21
Sport, leisure and ergonomics. Reilly T, et al. **Ergonomics** 1988 Nov;31(11):1497–500
What does keeping one's eye on the ball mean? Ripoll H, et al. **Ergonomics** 1988 Nov;31(11):1647–54
Psychological health and squash play. Robertson K, et al. **Ergonomics** 1988 Nov;31(11):1567–72
Sport, leisure and well–being—an ergonomics perspective. Shephard RJ. **Ergonomics** 1988 Nov;31(11):1501–17 (115 ref.)
Induction of supraventricular tachyarrhythmia at rest and during exercise with transoesophageal atrial pacing in the electrophysiological evaluation of asymptomatic athletes with Wolff–Parkinson–White syndrome. Vergara G, et al. **Eur Heart J** 1988 Oct;9(10):1119–25
Slow upward drift of VO2 during constant–load cycling in untrained subjects. Camus G, et al. **Eur J Appl Physiol** 1988;58(1–2):197–202
Relationship between work and electromyographic activity during repeated leg muscle contractions in orienteers. Gerdle B, et al. **Eur J Appl Physiol** 1988;58(1–2):8–12
Interrelationships among various measures of upper body strength assessed by different contraction modes. Evidence for a general strength component. Hortobagyi T, et al. **Eur J Appl Physiol** 1989;58(7):749–55
Comparison of sympatho–adrenergic regulation at rest and of the adrenoceptor system in swimmers, long–distance runners, weight lifters, wrestlers and untrained men. Jost J, et al. **Eur J Appl Physiol** 1989;58(6):596–604
Serum and urinary markers of skeletal muscle tissue damage after weight lifting exercise. Paul GL, et al. **Eur J Appl Physiol** 1989;58(7):786–90
Plasma lecithin: cholesterol acyltransferase activity in elite

athletes from selected sports. Tsopanakis C, et al. **Eur J Appl Physiol** 1988;58(3):262–5
One- and two-dimensional echocardiography in bodybuilders using anabolic steroids. Urhausen A, et al. **Eur J Appl Physiol** 1989;58(6):633–40
The influence of the rotational energy of a flywheel on the load pulse sum during pedalling on a cycle ergometer. Voigt B, et al. **Eur J Appl Physiol** 1989;58(7):681–6
Sport activity and cigarette smoking among young and adult athletes from the northeastern part of Italy. Serraino D, et al. **Eur J Epidemiol** 1988 Dec;4(4):497–502
Somatotypes of premenarcheal athletes and non-athletes. Liu NY, et al. **Hum Biol** 1989 Apr;61(2):227–47
Measured and predicted total body water in premenarcheal athletes and nonathletes. Plowman SA, et al. **Hum Biol** 1988 Oct;60(5):725–37
AIDS prevention campaign and control programme at the "Universiade 87" international student sports games, Zagreb 1987. Lang S, et al. **Hygie** 1988 Sep;7(3):34–5
Ice skating accidents and injuries. Bernard AA, et al. **Injury** 1988 May;19(3):191–2
Rupture of pectoralis major in weight lifters: a case report and review of the literature. Jones MW, et al. **Injury** 1988 May;19(3):219 (7 ref.)
Hyperaesthesia associated with hyperextension injuries of the neck. Reichl M, et al. **Injury** 1987 Jul;18(4):234
Isolated episode of exercise-related ventricular fibrillation in a healthy athlete. Buja G, et al. **Int J Cardiol** 1989 Jul; 24(1):121–3
Wheelchairs designed for activity and sport. Bernt J. **Int J Rehabil Res** 1987;10(4 Suppl 5):73–5
German Congress of Sports Medicine. October 27–30, 1988, Hannover, FRG. Abstracts. **Int J Sports Med** 1988 Oct; 9(5):357–404
Eating, drinking, and cycling. A controlled Tour de France simulation study, Part I. Brouns F, et al. **Int J Sports Med** 1989 May;10 Suppl 1:S32–40 (41 ref.)
Eating, drinking, and cycling. A controlled Tour de France simulation study, Part II. Effect of diet manipulation. Brouns F, et al. **Int J Sports Med** 1989 May;10 Suppl 1:S41–8 (29 ref.)
Metabolic changes induced by sustained exhaustive cycling and diet manipulation. Brouns F, et al. **Int J Sports Med** 1989 May;10 Suppl 1:S49–62 (122 ref.)
Electrical stimulation of quadriceps femoris in an elite weight lifter: a single subject experiment. Delitto A, et al. **Int J Sports Med** 1989 Jun;10(3):187–91 (22 ref.)
Study on threshold dose of physical activity in coronary heart disease prevention. Part I. Relationship between leisure time physical activity and coronary risk factors. Drygas W, et al. **Int J Sports Med** 1988 Aug;9(4):275–8
Factors determining the preference of takeoff leg in jumping. Friberg O, et al. **Int J Sports Med** 1988 Oct;9(5):349–52
Heparin-released plasma lipase activities, lipoprotein and apoprotein levels in young adult cyclists and sedentary men. Giada F, et al. **Int J Sports Med** 1988 Aug;9(4):270–4
Daily hormonal and neuromuscular responses to intensive strength training in 1 week. Häkkinen K, et al. **Int J Sports Med** 1988 Dec;9(6):422–8
Sympathoadrenergic regulation in elite fencers in training and competition. Hoch F, et al. **Int J Sports Med** 1988 Aug;9 Suppl 2:S141–5
Comparison of maximum aerobic power, maximum anaerobic power, and skinfold thickness of elite and nonelite junior wrestlers. Horswill CA, et al. **Int J Sports Med** 1989 Jun; 10(3):165–8
Excretion of 3-methylhistidine and hydroxyproline following acute weight-training exercise. Horswill CA, et al. **Int J Sports Med** 1988 Aug;9(4):245–8
Significance of heel pad confinement for the shock absorption at heel strike. Jørgensen U, et al. **Int J Sports Med** 1988 Dec;9(6):468–73
Reevaluation of contribution of physical fitness, body weight, and different sports activity to resting blood pressure in young men. Kumagai S, et al. **Int J Sports Med** 1988 Oct; 9(5):334–7
Plasma volume responses associated with a sprint triathlon in novice triathletes. McNaughton LR. **Int J Sports Med** 1989 Jun;10(3):161–4 (42 ref.)
Development of valid pulmonary function equations for trained athletes. Morrow JR Jr, et al. **Int J Sports Med** 1989 Feb;10(1):43–7
Aerobic threshold, anaerobic threshold, and maximal oxygen uptake of Japanese speed-skaters. Nemoto I, et al. **Int J Sports Med** 1988 Dec;9(6):433–7
Complement and immunoglobulin levels in athletes and sedentary controls. Nieman DC, et al. **Int J Sports Med** 1989 Apr;10(2):124–8
Prospective study of concentric and eccentric leg muscle torques, flexibility, physical conditioning, and variation of injury rates during one season of amateur ice hockey. Posch E, et al. **Int J Sports Med** 1989 Apr;10(2):113–7
Isokinetic investigation of knee extensors and knee flexors in young French soccer players. Rochcongar P, et al. **Int J Sports Med** 1988 Dec;9(6):448–50
Sudden death of a young wrestler during competition. Rontoyannis GP, et al. **Int J Sports Med** 1988 Oct; 9(5):353–5
Study on food intake and energy expenditure during extreme sustained exercise: the Tour de France. Saris WH, et al. **Int J Sports Med** 1989 May;10 Suppl 1:S26–31
Glucose tolerance and insulin response to glucose load in body builders. Szczypaczewska M, et al. **Int J Sports Med** 1989 Feb;10(1):34–7
Left ventricular structure and function, assessed by imaging and Doppler echocardiography, in athletes engaged in throwing events. Van den Broeke C, et al. **Int J Sports Med** 1988 Dec;9(6):407–11
Nationwide survey on nutritional habits in elite athletes. Part I. Energy, carbohydrate, protein, and fat intake. van Erp-Baart AM, et al. **Int J Sports Med** 1989 May;10 Suppl 1:S3–10
Nationwide survey on nutritional habits in elite athletes. Part II. Mineral and vitamin intake. van Erp-Baart AM, et al. **Int J Sports Med** 1989 May;10 Suppl 1:S11–6
Macronutrient content of a hypoenergy diet affects nitrogen retention and muscle function in weight lifters. Walberg JL, et al. **Int J Sports Med** 1988 Aug;9(4):261–6
Effects of anabolic steroids, testosterone, and HGH on blood lipids and echocardiographic parameters in body builders. Zuliani U, et al. **Int J Sports Med** 1989 Feb;10(1):62–6
MRI of the athletic knee. Findings in asymptomatic professional basketball and collegiate football players. Brunner MC, et al. **Invest Radiol** 1989 Jan;24(1):72–5
Weight control methods in high school wrestlers. Woods ER, et al. **J Adolesc Health Care** 1988 Sep;9(5):394–7
The effects of theophylline on the physical performance and work capacity of well-trained athletes. Morton AR, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):55–61
Rimiterol and the prevention of exercise-induced asthma. Morton AR, et al. **J Allergy Clin Immunol** 1989 Jan; 83(1):61–5
Patterns of smokeless tobacco use among university athletes. Levenson-Gingiss P, et al. **J Am Coll Health** 1989 Sep; 38(2):87–90
The college student-athlete: psychological considerations and interventions. Pinkerton RS, et al. **J Am Coll Health** 1989 Mar;37(5):218–26 (80 ref.)
Iron deficiency among active men. Dallongeville J, et al. **J Am Coll Nutr** 1989 Jun;8(3):195–202
Relationship of body image and dietary intake of competitive ice skaters. Rucinski A. **J Am Diet Assoc** 1989 Jan; 89(1):98–100
Voluntary consumption of a carbohydrate supplement by elite speed skaters. Snyder AC, et al. **J Am Diet Assoc** 1989 Aug;89(8):1125–7
Dietary intakes of female college athletes: the need for nutrition education. Tilgner SA, et al. **J Am Diet Assoc** 1989 Jul;89(7):967–9
A comparison study of dynamic visual acuity between athletes and nonathletes. Rouse MW, et al. **J Am Optom Assoc** 1988 Dec;59(12):946–50
In-shoe casting technique for specialized sports shoes. Palamarchuk HJ, et al. **J Am Podiatr Med Assoc** 1989 Sep; 79(9):462–5
Neuromuscular and hormonal adaptations in athletes to strength training in two years. Häkkinen K, et al. **J Appl Physiol** 1988 Dec;65(6):2406–12
Cardiovascular response to cycle exercise during and after pregnancy. Sady SP, et al. **J Appl Physiol** 1989 Jan; 66(1):336–41
Muscle glycogenolysis and H+ concentration during maximal intermittent cycling. Spriet LL, et al. **J Appl Physiol** 1989 Jan;66(1):8–13
Ventilatory response to rowing and cycling in elite oarswomen. Szal SE, et al. **J Appl Physiol** 1989 Jul; 67(1):264–9
Enzyme activities of FT and ST muscle fibers in heavy-resistance trained athletes. Tesch PA, et al. **J Appl Physiol** 1989 Jul;67(1):83–7
Skeletal muscle enlargement with weight-lifting exercise by rats. Wong TS, et al. **J Appl Physiol** 1988 Aug;65(2):950–4
Sports and skin disorders [letter] Dhingra KK, et al. **J Assoc Physicians India** 1988 Nov;36(11):675
A geometrical model of speed skating the curves. de Boer RW, et al. **J Biomech** 1988;21(6):445–50
Bivariate optimization of pedalling rate and crank arm length in cycling. Hull ML, et al. **J Biomech** 1988;21(10):839–49
Potential of lumbodorsal fascia forces to generate back extension moments during squat lifts. Gracovetsky S. **J Biomed Eng** 1989 Mar;11(2):172–5
Potential of lumbodorsal fascia forces to generate back extension moments during squat lifts. McGill SM, et al. **J Biomed Eng** 1988 Jul;10(4):312–8
Biomechanical assessment of the effects of significant hamstring injury: an isokinetic study. Paton RW, et al. **J Biomed Eng** 1989 May;11(3):229–30
Estrogen 2-hydroxylase oxidation and menstrual function among elite oarswomen. Snow RC, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):369–76
Evidence of orbital deformation in indirect optic nerve injury. Weight lifter's optic neuropathy. Purvin V. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):9–11
Effects of running or weight lifting on self-concept in clinically depressed women. Ossip-Klein DJ, et al. **J Consult Clin Psychol** 1989 Feb;57(1):158–61
Sudden death in a young adult woman [clinical conference] Brunko MW, et al. **J Emerg Med** 1988 May-Jun;6(3):239–44
Age differences in heart rate patterns during concentration in a precision sport: implications for attentional functioning. Molander B, et al. **J Gerontol** 1989 May;44(3):P80–7
Traumatic manubriosternal joint subluxations in two basketball players. Woo CC. **J Manipulative Physiol Ther** 1988 Oct;11(5):433–7
Pasteurella multocida corneal ulcer following a baseball injury. Robinson JD, et al. **J Natl Med Assoc** 1989 May; 81(5):609–10, 614
Compressive mononeuropathy of the deep palmar branch of the ulnar nerve in cyclists. Hankey GJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1588–90
A comparison of movement direction-related versus load direction-related activity in primate motor cortex, using a two-dimensional reaching task. Kalaska JF, et al. **J Neurosci** 1989 Jun;9(6):2080–102
Nonalcoholic carbonated beverage consumption and bone fractures among women former college athletes. Wyshak G, et al. **J Orthop Res** 1989;7(1):91–9
Acute anterior compartment syndrome in the thigh: a case report and review of the literature. An HS, et al. **J Orthop Trauma** 1987;1(2):180–2
Exercise induced delayed menarche and amenorrhoea. Salvi V, et al. **J Postgrad Med** 1988 Oct;34(4):211–5
Changes in heart rate, noradrenaline, cortisol and mood during Tai Chi. Jin P. **J Psychosom Res** 1989;33(2):197–206
Sport and the asthmatic child: a study of exercise-induced asthma and the resultant handicap. Coughlin SP. **J R Coll Gen Pract** 1988 Jun;38(311):253–5
Cyclist's melanoma. Williams H, et al. **J R Coll Physicians Lond** 1989 Apr;23(2):114–5
Racing wheelchair crown compensation. Cooper RA. **J Rehabil Res Dev** 1989 Winter;26(1):25–32
Racing wheelchair rear wheel alignment. Cooper RA. **J Rehabil Res Dev** 1989 Winter;26(1):47–50
Effect of inter-repetition rest intervals in circuit weight training on PWC170 during arm-cranking exercise. Byrd R, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):336–40
Oxygen consumption and ventilation during constant-load exercise in runners and cyclists. Costa MM, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):36–44
Sexual dimorphism and sports results. Drabik J. **J Sports Med Phys Fitness** 1988 Sep;28(3):287–92
Psychiatric aspects of basketball. Glick ID, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):104–12
Some anthropological characteristics of top volleyball players in SFR Yugoslavia. Heimer S, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):200–8 (24 ref.)
Physiological and performance comparisons of running flat and hill routes as applied to orienteering navigation. Knowlton RG, et al. **J Sports Med Phys Fitness** 1988 Jun; 28(2):189–93
Flexibility characteristics of elite female and male volleyball players. Lee EJ, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):49–51
Peak physiological function and performance of recreational triathletes. Loftin M, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):330–5
Heart volume and electrocardiographic studies in sprinters and soccerplayers. Mathur DN, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):402–6
Somatic constitution of athletes in India. Sharma SS, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):194–9
Adherence to exercise and sports classes by college women. Siegel D, et al. **J Sports Med Phys Fitness** 1988 Jun; 28(2):181–8
Telemetrical study of the handball goal-keeper's heart rate during official and non-official competitions in the attack and defense phases. Soares JM. **J Sports Med Phys Fitness** 1988 Sep;28(3):220–3
Time phases and the individual psychological crisis in sports competition: theory and research findings. Bar-Eli M, et al. **J Sports Sci** 1988 Summer;6(2):141–9
Sex difference in muscle cross-sectional area of athletes and non-athletes. Bishop P, et al. **J Sports Sci** 1989 Spring; 7(1):31–9
The muscle activity paradox during circular rhythmic leg movements. Clarys JP, et al. **J Sports Sci** 1988 Winter; 6(3):229–37
The penalty throw in water polo: a cinematographic analysis. Elliott BC, et al. **J Sports Sci** 1988 Summer;6(2):103–14
Stress and cognitive functioning in sport. Jones JG, et al. **J Sports Sci** 1989 Spring;7(1):41–63 (90 ref.)
Impaired pulmonary and cardiac function after maximal exercise. Rasmussen BS, et al. **J Sports Sci** 1988 Winter; 6(3):219–28
Journal of Sports Sciences [editorial] Reilly T. **J Sports Sci** 1989 Spring;7(1):1–2
Discriminant analysis of the physiques of schoolboy rugby players, hurlers and non-team members. Watson AW. **J Sports Sci** 1988 Summer;6(2):131–40
Oxygen and athletes [editorial] Cooper KH, et al. **JAMA** 1989 Jul 14;262(2):264
Random testing during training, competition may be only way to combat drugs in sports [news] Cowart VS. **JAMA** 1988 Dec 23-30;260(24):3556–7
Sliding injuries: the third base coach as prophylactic [letter] McClurken JB, et al. **JAMA** 1989 Jan 13;261(2):247
Evaluation of potentially preventable deaths among pedestrian and bicyclist fatalities. Rivara FP, et al. **JAMA** 1989 Jan 27;261(4):566–70
Effects of 100% oxygen on performance of professional soccer players. Winter FD Jr, et al. **JAMA** 1989 Jul 14; 262(2):227–9
Detumescence by exercise bicycle [letter] Alexander W. **Lancet** 1989 Apr 1;1(8640):735
Intracranial aneurysm rupture as an occupational accident [letter] Russegger L, et al. **Lancet** 1988 Oct 15;2(8616):899

Surfer's ear in Japan. Umeda Y, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):639–41

Procedure to automatically classify markers in biomechanical analysis of whole-body movement in different sports activities. Ferrigno G, et al. **Med Biol Eng Comput** 1988 May;26(3):321–4

Cycling device powered by the electrically stimulated muscles of paraplegics. Pons DJ, et al. **Med Biol Eng Comput** 1989 Jan;27(1):1–7

Bicycle injuries in a rural community [letter] Brookman DJ. **Med J Aust** 1989 Mar 6;150(5):284, 286

Bicycle-spoke and "doubling" injuries. Griffiths DM, et al. **Med J Aust** 1988 Dec 5–19;149(11–12):618–9

Techniques of lifting [letter] Sedgwick AW, et al. **Med J Aust** 1989 Feb 20;150(4):221–2

Rugby must be safer: preventive programmes and rule changes [letter] Taylor TK, et al. **Med J Aust** 1988 Aug 15;149(4):224

Ver Heyden de Lancey medico-legal lectures 1988–89: soccer hooliganism. Sloan AK. **Med Sci Law** 1989 Jan; 29(1):14–25

36th annual meeting of the American College of Sports Medicine. Baltimore, May 31–June 3, 1989. Annual meeting abstracts. **Med Sci Sports Exerc** 1989 Apr;21(2 Suppl):S1–117

Relation of plasma volume change to intensity of weight lifting. Collins MA, et al. **Med Sci Sports Exerc** 1989 Apr; 21(2):178–85

Muscle hypertrophy in men and women. Cureton KJ, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):338–44

The long-term involution of physiological cardiomegaly and cardiac hypertrophy. Dickhuth HH, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):244–9

A biomechanical analysis of the sticking region in the bench press. Elliott BC, et al. **Med Sci Sports Exerc** 1989 Aug; 21(4):450–62

Lower prevalence of non-reproductive system cancers among female former college athletes. Frisch RE, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):250–3

Changes in lipids after weight training [letter] Goldberg L, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):418–20

Vitamin status of young athletes including the effects of supplementation. Guilland JC, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):441–9 (56 ref.)

Evaluation of oculomotor response in relationship to sports performance. Harbin G, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):258–62

Effects of a belt on intra-abdominal pressure during weight lifting. Harman EA, et al. **Med Sci Sports Exerc** 1989 Apr; 21(2):186–90

Isokinetic strength and body composition of high school wrestlers across age. Housh TJ, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):105–9

Cardiovascular and thermal responses of triathlon performance. Kreider RB, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):385–90

Predictors of competitive trait anxiety in male youth sport participants. Lewthwaite R, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):221–9

Women's soccer injuries in relation to the menstrual cycle and oral contraceptive use. Möller-Nielsen J, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):126–9

The influence of construction strategies of sprung surfaces on deformation during vertical jumps. Nigg BM, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):396–402

Implications of exercise testing for prediction of athletic performance: a contemporary perspective. Noakes TD. **Med Sci Sports Exerc** 1988 Aug;20(4):319–30 (69 ref.)

Urinary 3-methylhistidine excretion increases with repeated weight training exercise. Pivarnik JM, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):283–7

The effect of prophylactic knee bracing on performance. Sforzo GA, et al. **Med Sci Sports Exerc** 1989 Jun; 21(3):254–7

Wheelchair racing: effects of rim diameter and speed on physiology and technique. van der Woude LH, et al. **Med Sci Sports Exerc** 1988 Oct;20(5):492–500

Effects of bat composition, grip firmness, and impact location on postimpact ball velocity. Weyrich AS, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):199–205

A method for the assessment of area-elastic surfaces. Yeadon MR, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):403–7 (16 ref.)

Heart size and function of soldiers, athletes, and sedentary men. Rubal BJ, et al. **Milit Med** 1989 Mar;154(3):153–8 (30 ref.)

Herpes gladiatorum in a high school wrestler. Keilhofner M, et al. **Mo Med** 1988 Nov;85(11):723–5

Legislating safety—how far should we go? [editorial] Callahan D. **N Engl J Med** 1989 May 25;320(21):1412–3

Pedal pusher's palsy [letter] Haig AJ. **N Engl J Med** 1989 Jan 5;320(1):63

Abrasive shirts may contribute to herpes gladiatorum among wrestlers [letter] Strauss RH, et al. **N Engl J Med** 1989 Mar 2;320(9):598–9

A case-control study of the effectiveness of bicycle safety helmets. Thompson RS, et al. **N Engl J Med** 1989 May 25;320(21):1361–7

Bicycle safety. **N Y State J Med** 1988 Sep;88(9):505–6

Himself, Mrs Plucker, and the rites of spring. Imperato PJ. **N Y State J Med** 1989 Feb;89(2):85–8

The "yips": a focal dystonia of golfers. McDaniel KD, et al. **Neurology** 1989 Feb;39(2 Pt 1):192–5

Brain damage in former association football players. An evaluation by cerebral computed tomography. Sortland O, et al. **Neuroradiology** 1989;31(1):44–8

Martial arts: a perspective on their evolution, injuries, and training formats. Jaffe L, et al. **Orthop Rev** 1988 Feb; 17(2):208–9, 213–5, 220–1

Team physician #5. Salter-Harris type I fracture of the distal radius due to weightlifting. Weiss AP, et al. **Orthop Rev** 1989 Feb;18(2):233–5

Asystole with syncope secondary to hyperventilation in three young athletes. Buja G, et al. **PACE** 1989 Mar;12(3):406–12

Transition of physical fitness in wheelchair marathon competitors over several years. Okuma H, et al. **Paraplegia** 1989 Jun;27(3):237–43

Blow to face. Swischuk LE. **Pediatr Emerg Care** 1989 Mar; 5(1):49–50

Mixed flora brain abscess with Pseudomonas paucimobilis after a penetrating lawn dart injury. Tiffany KK, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):667–9 (18 ref.)

Preparticipation evaluation for athletics. Hulse E, et al. **Pediatr Rev** 1987 Dec;9(6):173–82 (13 ref.)

The pediatrician as team physician. Menna VJ. **Pediatr Rev** 1987 Aug;9(2):35

Exercise for children [published erratum appears in Pediatr Rev 1989 Mar;10(9):275] Risser WL. **Pediatr Rev** 1988 Nov; 10(5):131–9 (7 ref.)

Female athletes. Squire DL. **Pediatr Rev** 1987 Dec; 9(6):183–90 (23 ref.)

American Academy of Pediatrics Committee on Sports Medicine: Anabolic steroids and the adolescent athlete. **Pediatrics** 1989 Jan;83(1):127–8

American Academy of Pediatrics. Committee on Sports Medicine and Committee on School Health: Organized athletics for preadolescent children. **Pediatrics** 1989 Sep; 84(3):583–4

American Academy of Pediatrics Committee on Accident and Poison Prevention: Skateboard injuries. **Pediatrics** 1989 Jun;83(6):1070–1

American Academy of Pediatrics: Committee on Sports Medicine: Amenorrhea in adolescent athletes. **Pediatrics** 1989 Aug;84(2):394–5

Sports and sickle cell trait [letter] O'Keefe J. **Pediatrics** 1989 Apr;83(4 Pt 2):650–1

Sickle cell trait and competitive athletics: is there a risk? [editorial] Pearson HA. **Pediatrics** 1989 Apr;83(4):613–4

Relationship of eye color to winning horseshoe pitching contests. Beer J, et al. **Percept Mot Skills** 1989 Feb; 68(1):136–8

Internal consistency of the Sport Competition Anxiety Test. Brand HJ, et al. **Percept Mot Skills** 1988 Oct;67(2):441–2

Analysis of anxiety trend before a sport competition. De Moja CA, et al. **Percept Mot Skills** 1986 Apr;62(2):406

Coincidence-anticipation performance of adolescent baseball players and nonplayers. Dunham P Jr. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1151–6

Effects of preshot routine on free-throw shooting. Gayton WF, et al. **Percept Mot Skills** 1989 Feb;68(1):317–8

Use of factor analysis in the study of alcohol-induced strategy changes in skilled performance on a soccer test. Golby J. **Percept Mot Skills** 1989 Feb;68(1):147–56

Effects of fatigue on ability to process visual information by experienced orienteers. Hancock S, et al. **Percept Mot Skills** 1986 Apr;62(2):491–8

Complex evaluation of velocity, force, and accuracy characteristics of the movements of upper extremities in young athletes. Jaščaninas J, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):705–6

Effects of telic dominance and metamotivational state on squash task performance. Kerr JH, et al. **Percept Mot Skills** 1988 Aug;67(1):171–4

Suicide in the major leagues. Lester D, et al. **Percept Mot Skills** 1988 Dec;67(3):934

Major league baseball performances of players who were later suicides or homicide victims. Lester D, et al. **Percept Mot Skills** 1989 Aug;69(1):272

Effects of visual aids on acquisition of selected tennis skills. Miller G, et al. **Percept Mot Skills** 1988 Oct;67(2):603–6

Effects of sports instruction on children's self-concept. Miller R. **Percept Mot Skills** 1989 Feb;68(1):239–42

Uncertainty and visual strategies in table tennis. Ripoll H. **Percept Mot Skills** 1989 Apr;68(2):507–12

Effect of concurrent visual feedback on acquisition of a weightlifting skill. Sewall LP, et al. **Percept Mot Skills** 1988 Dec;67(3):715–8

Use of the personal orientation inventory with disabled athletes. Sherrill C, et al. **Percept Mot Skills** 1988 Aug; 67(1):263–6

Menstrual attitudes and symptoms in Nigerian athletes. Toriola AL. **Percept Mot Skills** 1989 Feb;68(1):210

Studies concerning the ergogenic value of protein supply and l-carnitine in elite junior cyclists. Drăgan GI, et al. **Physiologie** 1988 Jul-Sep;25(3):129–32

Studies on selenium in top athletes. Drăgan I, et al. **Physiologie** 1988 Oct-Dec;25(4):187–90

Surgical treatment of gynecomastia in the body builder. Aiache AE. **Plast Reconstr Surg** 1989 Jan;83(1):61–6

Bilateral pelvic masses in a long-distance cyclist [letter] Manoharan A, et al. **Postgrad Med J** 1988 Dec; 64(758):977–8

Women in sport. Dodds W. **Practitioner** 1988 Dec; 232(1460):1398–400

Children in sport. Read M. **Practitioner** 1988 Nov 22; 232(1459):1325–8

Leptospiral and hepatitis A antibodies amongst windsurfers and waterskiers in Bristol City Docks. Philipp R, et al. **Public Health** 1989 Mar;103(2):123–9

Variability of maximal expiratory flow-volume curve in young volley players. Viegi G, et al. **Respiration** 1988; 54(1):33–41

Muscle contractures of football players—relationship with knee complaints and the effect of stretching exercises. Weber M, et al. **Schweiz Z Sportmed** 1988 Dec;36(4):175–8

Sports participation and health status: a preliminary analysis. Lamb KL, et al. **Soc Sci Med** 1988;27(12):1309–16

Progressive isoinertial lifting evaluation. II. A comparison with isokinetic lifting in a disabled chronic low-back pain industrial population. Mayer TG, et al. **Spine** 1988 Sep; 13(9):998–1002

Progressive isoinertial lifting evaluation. I. A standardized protocol and normative database. Mayer TG, et al. **Spine** 1988 Sep;13(9):993–7

Dynamic EMG analysis of torque transfer in professional baseball pitchers. Watkins RG, et al. **Spine** 1989 Apr; 14(4):404–8

Sports nutrition. Approaching the nineties. Burke LM, et al. **Sports Med** 1989 Aug;8(2):80–100 (104 ref.)

Sport and the diabetic child. Dorchy H, et al. **Sports Med** 1989 Apr;7(4):248–62 (85 ref.)

Longstanding groin pain in athletes. A multidisciplinary approach. Ekberg O, et al. **Sports Med** 1988 Jul;6(1):56–61

Surface-related injuries in soccer. Ekstrand J, et al. **Sports Med** 1989 Jul;8(1):56–62 (34 ref.)

Biomechanics of the serve in tennis. A biomedical perspective. Elliott BC. **Sports Med** 1988 Nov;6(5):285–94 (35 ref.)

Athletic amenorrhoea. An update on aetiology, complications and management. Highet R. **Sports Med** 1989 Feb; 7(2):82–108 (102 ref.)

Rotator cuff injuries in baseball. Prevention and rehabilitation. Jobe FW, et al. **Sports Med** 1988 Dec; 6(6):378–87

The relationship between psychological factors and sports injuries. Kerr G, et al. **Sports Med** 1988 Sep;6(3):127–34 (51 ref.)

Overtraining in elite athletes. Review and directions for the future. Kuipers H, et al. **Sports Med** 1988 Aug;6(2):79–92 (99 ref.)

Exercise-induced asthma in athletes. Roberts JA. **Sports Med** 1988 Oct;6(4):193–6

Current perspectives on the economics of fitness and sport with particular reference to worksite programmes. Shephard RJ. **Sports Med** 1989 May;7(5):286–309 (50 ref.)

The role of biomechanics in the epidemiology of injuries. Taunton JE, et al. **Sports Med** 1988 Aug;6(2):107–20 (63 ref.)

Aerobic exercise and resistance weight-training during weight reduction. Implications for obese persons and athletes. Walberg JL. **Sports Med** 1989 Jun;7(6):343–56 (64 ref.)

Physiological considerations in training young athletes. Zauner CW, et al. **Sports Med** 1989 Jul;8(1):15–31 (140 ref.)

Ice rink injuries: a new epidemic in Northern Ireland. Brown MG. **Ulster Med J** 1989 Apr;58(1):69–71

Physical fitness and the high school athlete. Kendig EL Jr. **Va Med** 1989 Sep;116(9):358

Carbon monoxide poisoning in indoor ice skating arenas. Miller RK, et al. **Va Med** 1989 Feb;116(2):74–6

New medical standards for Virginia's high school athletes. Perriello VA Jr, et al. **Va Med** 1989 Sep;116(9):359–67

Condemnation of sports [letter] Drummond F. **Vet Rec** 1988 Oct 8;123(15):404

Veterinary attendance at driving trials [letter] Taylor DJ. **Vet Rec** 1989 Jul 1;125(1):25

[Problems in admitting and eliminating children from sports training schools] Kučera M, et al. **Acta Chir Orthop Traumatol Cech** 1989 Jun;56(3):240–4 (Eng. Abstr.) (Cze)

[Questions of stress in children in sports training schools] Kučera M, et al. **Cesk Pediatr** 1989 Mar;44(3):178–9 (Cze)

[Accidents among children riding bicycles] Lyng KM. **Ugeskr Laeger** 1988 Oct 3;150(40):2586–8 (Eng. Abstr.) (Dan)

[Bicycle accidents in preschool children] Lyng KM. **Ugeskr Laeger** 1989 May 29;151(22):1378–80 (Eng. Abstr.) (Dan)

[The effect of anabolic androgenic steroids on muscle strength, body weight and lean body mass in body-building men] Søe M, et al. **Ugeskr Laeger** 1989 Mar 6;151(10):610–3 (Eng. Abstr.) (Dan)

[Pressor effect of a soccer match (1988 European championship), registered via the Portapress] Imholz BP, et al. **Ned Tijdschr Geneeskd** 1989 Jun 3;133(22):1127–31 (Eng. Abstr.) (Dut)

[Participation in sports during pregnancy] Lotgering FK. **Ned Tijdschr Geneeskd** 1988 Oct 8;132(41):1881–4 (Dut)

[Participation in sports during pregnancy (letter)] Rijn J, et al. **Ned Tijdschr Geneeskd** 1989 Jan 28;133(4):179 (Dut)

[Physical activity and sports as health promoting behavior in middle age] Vanden Auweele Y. **Tijdschr Gerontol Geriatr** 1988 Dec;19(6):289–95 (Eng. Abstr.) (Dut)

[An epidemiologic and traumatologic analysis of injuries at a basketball club in Denmark] Yde JR, et al. **Ugeskr Laeger** 1988 Jan 18;150(3):142–4 (Eng. Abstr.) (Dut)

[Injuries to the cruciate ligament of the knee] Kannus P, et al. **Duodecim** 1989;105(13–14):1239–45 (41 ref.) (Fin)

[Conservative management of knee joint ligament injuries] Kannus P, et al. **Duodecim** 1988;104(11):842–9 (Fin)

[Deep venous thrombosis in a young athlete] Lehtinen M, et al. **Duodecim** 1988;104(14):1073–6 (Fin)

[The sauna and sports] Rehunen S. **Duodecim** 1988; 104(8):655–8 (15 ref.) (Fin)

[Anaphylaxis syndrome induced by exercise] Debavelaere C, et al. **Arch Fr Pediatr** 1989 Apr;46(4):281–3 (72 ref.) (Eng. Abstr.) (Fre)

[A project of medical examination for aptitude in physical activities and sports] Bouvrain Y. **Bull Acad Natl Med (Paris)** 1988 May;172(5):649–50 (Fre)

[Stability in shooting: the effect of expertise in the biathlon and in rifle shooting] Larue J, et al. **Can J Sport Sci** 1989 Mar;14(1):38–45 (Eng. Abstr.) (Fre)

[A comparison of cyclists' time records according to altitude and materials used] Péronnet F, et al. **Can J Sport Sci** 1989 Jun;14(2):93–8 (Eng. Abstr.) (Fre)

[Ischemic colitis during an unusual effort (letter)] Merlin P, et al. **Gastroenterol Clin Biol** 1989 Jan;13(1):108–9 (Fre)

[The epileptic child and participation in sports] Haenggeli CA. **Helv Paediatr Acta** 1988 Aug;43(1–2):9–14 (Eng. Abstr.) (Fre)

[EEG recorded after effort in triathletes. Influence of prior inhalation of hyperbaric oxygen] Dolisi C, et al. **Neurophysiol Clin** 1989 May;19(2):123–30 (Eng. Abstr.) (Fre)

[The "third testicle" in a cyclist: an ailment not to be ignored (letter)] Sava P, et al. **Presse Med** 1988 Oct 8;17(34):1761 (Fre)

[The "third testis" of cyclists, in women too... (letter)] Steiner E, et al. **Presse Med** 1989 Feb 18;18(7):361 (Fre)

[Joint overuse in sports and arthrosis] Lequesne M, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):163–7 (40 ref.) (Fre)

[Sports and the diabetic] de Mondenard JP. **Schweiz Z Sportmed** 1988 Dec;36(4):191–6 (Fre)

[The Club of Diabetic Champions. A comment on the practical behavior of the diabetic athlete] de Mondenard JP. **Schweiz Z Sportmed** 1988 Dec;36(4):197–8 (Fre)

[A partial fracture of the sternum in a 10-year-old soccer player] Rostan A. **Schweiz Z Sportmed** 1988 Oct;36(3):126 (Fre)

[Sudeck's dystrophy following arthroscopy of the knee joint—a case report] Loew M. **Aktuel Traumatol** 1988 Aug; 18(4):157–9 (Eng. Abstr.) (Ger)

[The hooligan and his world image in soccer vandalism. An introduction to this current phenomenon of socially deviant behavior] Harnischmacher R, et al. **Arch Kriminol** 1988 Nov–Dec;182(5–6):129–42 (69 ref.) (Eng. Abstr.) (Ger)

[Special education sports: an interdisciplinary responsibility within the scope of preventive measures and the promotion of physically handicapped children] Böttger W. **Arztl Jugendkd** 1989;80(2):110–4 (Eng. Abstr.) (Ger)

[Physical measurement of healthy, athletic boys 9–12 years of age in percentile values] Brauer BM, et al. **Arztl Jugendkd** 1989;80(2):80–2 (Eng. Abstr.) (Ger)

[Functional diagnosis in sports medicine in childhood and adolescence] Koinzer K. **Arztl Jugendkd** 1989;80(2):66–72 (Eng. Abstr.) (Ger)

[School sports and the assessment of physical endurance of healthy and performance handicapped children and adolescents] Nagel HJ. **Arztl Jugendkd** 1989;80(2):100–5 (Eng. Abstr.) (Ger)

[Development of functional stability of the musculoskeletal system in athletes in childhood and adolescence] Neumann G, et al. **Arztl Jugendkd** 1989;80(2):73–9 (Eng. Abstr.) (Ger)

[Sports and health-related values orientation and their realization in sports activity in the leisure time of adolescents] Roski G. **Arztl Jugendkd** 1989;80(2):92–9 (Eng. Abstr.) (Ger)

[Cause and treatment of back pain in athletes] Cotta H, et al. **Chirurg** 1988 Nov;59(11):708–12 (15 ref.) (Ger)

[School sports—early prevention of coronary heart disease?] Kraemann EO, et al. **Fortschr Med** 1989 Jun 10; 107(17):375–7 (15 ref.) (Eng. Abstr.) (Ger)

[Pregnancy as a doping measure? Dangerous development in high performance sports] Strobel E. **Fortschr Med** 1988 Oct 10;106(29):14 (Ger)

[True trigger wrist (a case report)] Koob E, et al. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):288–90 (Eng. Abstr.) (Ger)

[Rhabdomyolysis following body building] Kuthan P, et al. **Internist (Berlin)** 1989 Feb;30(2):114–6 (Ger)

[Effect of the diagnosis and prevention of exercise-induced bronchial obstruction on sports participation by asthmatic school children] Hussein A, et al. **Monatsschr Kinderheilkd** 1988 Dec;136(12):819–23 (Eng. Abstr.) (Ger)

[Possibilities and limits of preventive sports medicine examination by the Essen public health service] Habarta A, et al. **Off Gesundheitswes** 1989 Jul;51(7):349–51 (Eng. Abstr.) (Ger)

[Health benefits and risks in sports: the other side of the coin] Marti B. **Schweiz Rundsch Med Prax** 1989 Mar 14; 78(11):290–4 (Eng. Abstr.) (Ger)

[Sports as therapy] Scheu HD. **Schweiz Rundsch Med Prax** 1989 Mar 14;78(11):308–10 (Eng. Abstr.) (Ger)

[Biomechanics in sports] Stüssi E. **Schweiz Rundsch Med Prax** 1989 Mar 14;78(11):299–307 (Eng. Abstr.) (Ger)

[Contractures of the ischio-crural muscle group and femoropatellar pain syndrome in bicycling. Effects of muscle stretching exercises] Arnold MP, et al. **Schweiz Z Sportmed** 1988 Dec;36(4):187–90 (Eng. Abstr.) (Ger)

[Possibility of the transformation of muscle fibers by training and the significance of muscle biopsies for recognizing talent in sports] Appell HJ. **Sportverletz Sportschaden** 1988 Mar;2(1):4–9 (44 ref.) (Eng. Abstr.) (Ger)

[Preventive stabilization of the knee joint by a bandage (brace) in an ice hockey player. Sense or nonsense?] Bentzin J, et al. **Sportverletz Sportschaden** 1988 Dec;2(4):178–9 (Eng. Abstr.) (Ger)

[Performance diagnosis of the locomotor system and sensory organs?] de Marées H. **Sportverletz Sportschaden** 1989 Jun; 3(2):53–7 (12 ref.) (Eng. Abstr.) (Ger)

[Epiphysiolysis of the distal radius epiphysis in weight lifting] Engel A. **Sportverletz Sportschaden** 1987 Dec;1(4):229–30 (Eng. Abstr.) (Ger)

[Rupture of the triceps tendon in the athlete] Felenda M, et al. **Sportverletz Sportschaden** 1988 Sep;2(3):120–1 (Eng. Abstr.) (Ger)

[Injuries and damage caused by excess stress in body building and power lifting] Goertzen M, et al. **Sportverletz Sportschaden** 1989 Mar;3(1):32–6 (Eng. Abstr.) (Ger)

[Sonography of Achilles tendon changes in athletes] Gondolph-Zink B, et al. **Sportverletz Sportschaden** 1987 Jun;1(2):96–9 (Eng. Abstr.) (Ger)

[Figure skating in high performance sports] Gondolph-Zink B, et al. **Sportverletz Sportschaden** 1989 Mar;3(1):21–8 (Eng. Abstr.) (Ger)

[Rhabdomyolysis in a bodybuilder using anabolic steroids] Hageloch W, et al. **Sportverletz Sportschaden** 1988 Sep; 2(3):122–5 (Eng. Abstr.) (Ger)

[Real time sonography in sports specific tendon injuries] Hannesschläger G, et al. **Sportverletz Sportschaden** 1988 Dec;2(4):133–46 (Eng. Abstr.) (Ger)

[High resolution real time sonography in sports specific muscle injuries. Sonomorphologic-anatomic correlation and diagnostic criteria] Hannesschläger G, et al. **Sportverletz Sportschaden** 1988 Jun;2(2):45–54 (Eng. Abstr.) (Ger)

[Functional anatomy of the upper ankle joint] Hawe W, et al. **Sportverletz Sportschaden** 1989 Mar;3(1):1–5 (Eng. Abstr.) (Ger)

[Accidents with the "paraglider"] Lang TH, et al. **Sportverletz Sportschaden** 1988 Sep;2(3):115–9 (Eng. Abstr.) (Ger)

[Recurrent shoulder dislocation. On the sports capacity following surgical therapy] Lippert MJ, et al. **Sportverletz Sportschaden** 1988 Sep;2(3):100–5 (Eng. Abstr.) (Ger)

[Neurinoma of the L3 spinal nerve root as a cause of stress-induced lumbo-ischialgias] Mayer HM, et al. **Sportverletz Sportschaden** 1988 Mar;2(1):35–8 (Eng. Abstr.) (Ger)

[Long-term roentgenologic studies in peak performance javelin throwers] Neusel E, et al. **Sportverletz Sportschaden** 1987 Jun;1(2):76–80 (Eng. Abstr.) (Ger)

[Experimental and clinical results of ultrasound imaging in sports orthopedic soft tissue diseases] Pfister A. **Sportverletz Sportschaden** 1987 Sep;1(3):130–41 (Eng. Abstr.) (Ger)

[Triathlon—continuous stress on muscles, tendons and bones?] Sell S, et al. **Sportverletz Sportschaden** 1988 Sep; 2(3):112–4 (Eng. Abstr.) (Ger)

[Ice hockey injuries. Studies of the highest West German league] Smasal V, et al. **Sportverletz Sportschaden** 1987 Dec;1(4):181–4 (Eng. Abstr.) (Ger)

[Central dysregulations as a cause of movement disorders in performance sports? An analysis of movement in sports with reference to functional anatomic and neurophysiologic viewpoints] Sommer HM, et al. **Sportverletz Sportschaden** 1988 Mar;2(1):10–4 (23 ref.) (Eng. Abstr.) (Ger)

[Epidemiology of sports injuries. A 15 year analysis of sports orthopedic ambulatory care] Steinbrück K. **Sportverletz Sportschaden** 1987 Apr;1(1):2–12 (Eng. Abstr.) (Ger)

[Parosteal osteosarcoma as a cause of chronic knee pain in an athlete] Wuisman P, et al. **Sportverletz Sportschaden** 1989 Mar;3(1):37–40 (Eng. Abstr.) (Ger)

[Sports-related fractures of the facial skull in Austria] Strassl H, et al. **Unfallchirurgie** 1988 Dec;14(6):308–10 (Eng. Abstr.) (Ger)

[Senior sports in science and general practice] Barolin GS. **Wien Med Wochenschr** 1988 Sep 15;138(17):418–20 (Eng. Abstr.) (Ger)

[Principles and general practice of a goal-oriented training plan for diabetic patients participating in sports] Baron R, et al. **Wien Med Wochenschr** 1988 Jul 31;138(14):353–4 (Eng. Abstr.) (Ger)

[Sports and coronary heart disease] Brugger P, et al. **Wien Med Wochenschr** 1988 Jul 31;138(14):357–61 (26 ref.) (Eng. Abstr.) (Ger)

[Sports and their significance for the diabetic child] Kitzler P. **Wien Med Wochenschr** 1988 Jul 31;138(14):347–50 (Eng. Abstr.) (Ger)

[Blood circulation in diabetic patients and its effects on sports] Költringer P, et al. **Wien Med Wochenschr** 1988 Jul 31;138(14):344–5 (Eng. Abstr.) (Ger)

[Peak performance athletes speak with physicians about common problems—a panel discussion] Riedmann G, et al. **Wien Med Wochenschr** 1988 Sep 15;138(17):421–7 (Eng. Abstr.) (Ger)

[The epidemiology of athletic injuries] Franke A, et al. **Z Arztl Fortbild (Jena)** 1989;83(2):59–62 (Ger)

[Abnormalities, aseptic necroses, disorders of function of the spine—its relation to capacity in performance sports] Schaetz P. **Z Arztl Fortbild (Jena)** 1989;83(2):67–72 (Ger)

[Sports in the aged—sociologic and social psychological aspects] Emrich E. **Z Gerontol** 1989 Mar–Apr;22(2):101–5 (Eng. Abstr.) (Ger)

[Functions of sports activities in aging] Schaller B. **Z Gerontol** 1989 Jan–Feb;22(1):38–41 (Eng. Abstr.) (Ger)

[Serum and whole blood concentrations of fat and water soluble vitamins in normal persons and athletes] Rokitzki L, et al. **Z Gesamte Hyg** 1989 Jan;35(1):16–21 (Eng. Abstr.) (Ger)

[Physical therapy and sports in patients with chronic dermatitis] Breuer TM. **Z Hautkr** 1988;63 Suppl 4:100–3 (10 ref.) (Eng. Abstr.) (Ger)

[Differential diagnosis: physiologic-pathologic hypertrophy of the heart. A case report] Lehmann M, et al. **Z Kardiol** 1988 Dec;77(12):784–8 (Eng. Abstr.) (Ger)

[Follow-up study of 48 athletes with stage I hypertension with and without pharmacotherapy] Lehmann M, et al. **Z Kardiol** 1988 Oct;77(10):619–24 (Eng. Abstr.) (Ger)

[Regression of hypertension-induced left heart enlargement in an endurance athlete treated with verapamil RR] Lehmann M, et al. **Z Kardiol** 1989 Jul;78(7):465–8 (Eng. Abstr.) (Ger)

[Results of treatment in a 6-month movement and sports therapy rehabilitation program of children with cerebral palsy] Froböse I. **Z Orthop** 1989 Jan–Feb;127(1):108–10 (Eng. Abstr.) (Ger)

[Fatal bicycle accidents—causes and legal responsibility] Lutz FU, et al. **Z Rechtsmed** 1988;101(1):1–8 (Eng. Abstr.) (Ger)

[The dynamics of injuries caused by thrown, razor-sharp shurikens] Weber W. **Z Rechtsmed** 1989;102(2–3):143–8 (Eng. Abstr.) (Ger)

[Acute compartment syndrome as a sequela of muscular overexertion] Rädel W. **Zentralbl Chir** 1989;114(6):397–9 (Ger)

[Injuries of the basilar artery] Vitzthum HE, et al. **Zentralbl Neurochir** 1988;49(3):189–95 (Eng. Abstr.) (Ger)

[Sports anemia and iron metabolism in athletes] Arnon R, et al. **Harefuah** 1989 Apr 2;116(7):384–7 (44 ref.) (Heb)

[Sex identification of female athletes (editorial)] Hanne-Paparo N. **Harefuah** 1988 Dec 1;115(11):344–6 (Heb)

[Mitral valve prolapse and sports activity] Rusconi C, et al. **G Clin Med** 1988 Aug–Sep;69(8–9):533, 536–40 (Ita)

[Cardiologic protocols for judging fitness for competition sports. Cardiologic Organizational Committee for Sports Fitness] **G Ital Cardiol** 1989 Mar;19(3):250–72 (Ita)

[Coronary atherosclerosis and sudden death in a young athlete] Mantovani E, et al. **G Ital Cardiol** 1989 Jan; 19(1):59–62 (Eng. Abstr.) (Ita)

[Cardiorespiratory findings in top competitive rowers] Costa L, et al. **Minerva Cardioangiol** 1988 Nov;36(11):583–6 (Eng. Abstr.) (Ita)

[Evaluation of platelet aggregation on whole blood with an impedantiometric technic in athletes and sedentary subjects subjected to submaximal physical exertion] Craveri A, et al. **Minerva Cardioangiol** 1988 Oct;36(10):541–7 (Eng. Abstr.) (Ita)

[Effect of physical exercise training on the arterial pressure in normotensive subjects] Palatini P, et al. **Minerva Cardioangiol** 1989 Jan–Feb;37(1–2):55–9 (Eng. Abstr.) (Ita)

[Evaluation of the adrenergic and pressor response to the hand-grip test in young athletes] Nami R, et al. **Minerva Med** 1988 Nov;79(11):937–42 (Eng. Abstr.) (Ita)

[Underwater sports in the developmental years] Gancia GP, et al. **Minerva Pediatr** 1988 Mar;40(3):163–75 (33 ref.) (Eng. Abstr.) (Ita)

[Disorders of affective maturation and identity in adolescent girls. A comparison of female students and athletes] Marocco Muttini C, et al. **Minerva Psichiatr** 1988 Apr–Jun; 29(2):67–78 (Eng. Abstr.) (Ita)

[Study of variations in hematologic parameters in rugby players undergoing physical training at a high altitude] Bizzaro N. **Recenti Prog Med** 1989 May;80(5):237–40 (Eng. Abstr.) (Ita)

[Pulsed Doppler echocardiographic findings in 117 professional cyclists] Miki T, et al. **J Cardiol** 1987 Dec; 17(4):769–78 (Eng. Abstr.) (Jpn)

[Exercise and sudden death] Kobori Y, et al.

Kokyu To Junkan 1989 Mar;37(3):271–4 **(Jpn)**
[Sports injuries of the ankle] Fujimaki E.
Nippon Seikeigeka Gakkai Zasshi 1989 Jan;63(1):146–60 **(Jpn)**
[Evaluation of motor skills of adolescents from a large city environment attending the Technical School of Mechanical Engineering and the Grammar School in Łódź] Kozłowski W, et al. **Med Pr** 1988;39(5):309–21 (Eng. Abstr.) **(Pol)**
[Effects of metanabol and training on liver function and selected biochemical indicators of the blood and urine in weight lifters] Fojt E, et al. **Pol Tyg Lek** 1988 Sep 12; 43(37):1189–92 **(Pol)**
[A typical complications of using stimulating substances in sports] Mędraś M, et al. **Pol Tyg Lek** 1988 Oct 3; 43(40):1311–2 **(Pol)**
[Giant negative T waves associated with isolated hypertrophy of the papillary muscles of the left ventricle, in athletes. Report of 2 cases] Batlouni M, et al.
Arq Bras Cardiol 1988 Mar;50(3):183–7 (Eng. Abstr.) **(Por)**
[Anthropometric characteristics of people 21 to 35 years of age from Moscow and the Moscow region who participate in physical culture and popular sports on a regular basis] Busharov EV, et al. **Arkh Anat Gistol Embriol** 1989 Feb; 96(2):5–10 (Eng. Abstr.) **(Rus)**
[Composition of skeletal muscle fibers in athletes, performing work varying in duration and power] Iazvikov VV.
Arkh Anat Gistol Embriol 1989 Feb;96(2):49–55 (Eng. Abstr.) **(Rus)**
[Age-related characteristics of the structural-functional status of the left ventricle in young sportsmen of different specialties] Il'nitskiĭ VI, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):652–8 **(Rus)**
[Effect of physical exertion on the factors of nonspecific resistance and steroid hormone levels in human blood] Priiatkin SA, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):606–12 **(Rus)**
[Patterns of cardiac rhythm while shooting a bow] Shmid UD. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):64–8 **(Rus)**
[Interrelation of the sympatho-adrenal and hypothalamo-hypophyseo-adrenal system and sports results (correlation analysis)] Shreiberg GL, et al.
Fiziol Cheloveka 1989 Mar–Apr;15(2):108–14 **(Rus)**
[Effect of various types of sports on the pulmonary rheogram of young school age children] Il'nitskiĭ VI, et al.
Fiziol Zh 1989 Jan–Feb;35(1):44–52 (Eng. Abstr.) **(Rus)**
[Effect of triathlon competition on the content of various hormones and the energy substrate of the blood] Iurimiaé TA, et al. **Fiziol Zh** 1989 Jan–Feb;35(1):78–82 (Eng. Abstr.) **(Rus)**
[Use of Holter/monitoring in sports medicine] Kogan-Iasnyi VV, et al. **Kardiologiia** 1988 Jul;28(7):86–8 **(Rus)**
[So-called overstrained heart syndrome] Dembo AG.
Klin Med (Mosk) 1989 Jan;67(1):37–44 **(Rus)**
[Effect of acceleration on pilot-sportsmen during aerial performances] Voloshin VG, et al.
Kosm Biol Aviakosm Med 1988 Sep–Oct;22(5):14–7 (Eng. Abstr.) **(Rus)**
[A case of osteochondropathy of the sesamoid bone of the 1st metatarsophalangeal joint] Greida BP.
Ortop Travmatol Protez 1989 Feb;(2):49–50 **(Rus)**
[Effect of participation in physical activities on pulmonary rheograms of younger schoolchildren] Il'nitskiĭ VI, et al.
Pediatriia 1988;(7):108–9 **(Rus)**
[Characteristics of physical activities of secondary school students of Moscow and Kaunas] Kardialis KK, et al.
Pediatriia 1988;(7):107–8 **(Rus)**
[Effect of intensive physical loads on renal function] Bukaev IuN, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):3–7 (Eng. Abstr.) **(Rus)**
[The effectiveness of measured bicycle training in the combined treatment of myocardiodystrophy in children] Bisiarina VP, et al. **Vestn Akad Med Nauk SSSR** 1988; (5):72–6 (Eng. Abstr.) **(Rus)**
[The orthostatic stability of athletes of various specializations and its change under the effect of decreased gravity] Dronenko SV. **Voen Med Zh** 1989 May;(5):62 **(Rus)**
[The nutrition of cyclists during training exercises and competitions] Korovnikov KA, et al. **Vopr Pitan** 1988 Sep–Oct;(5):40–3 (Eng. Abstr.) **(Rus)**
[Use of recombinant alpha 2-interferon in athletes] Ershov FI, et al. **Vopr Virusol** 1988 Nov–Dec;33(6):693–7 (Eng. Abstr.) **(Rus)**
[Problems with expertise in traffic accidents involving two-wheeled vehicles] Dunjić D, et al.
Srp Arh Celok Lek 1986 Mar;114(3):341–4 (Eng. Abstr.) **(Scc)**
[Lipids, lipoproteins, apoproteins and physical exercise in young female athletes] López Benedicto MA, et al.
An Esp Pediatr 1988 May;28(5):395–400 (Eng. Abstr.) **(Spa)**
[Pulmonary function in elite Puerto Rican athletes] Frontera WR, et al. **Bol Asoc Med P R** 1989 Apr;81(4):125–9 **(Spa)**
[Nutritional requirements for athletes] Chávez A, et al.
Rev Invest Clin 1969 Apr–Jun;21(2):131–41 (0 ref.) (Eng. Abstr.) **(Spa)**

HISTORY

Opening address. Nutrition and fitness from the first Olympiad in 776 BC to 393 AD and the concept of positive health. Simopoulos AP. **Am J Clin Nutr** 1989 May;49(5 Suppl):921–6
Sport and medicine in ancient Greece. Appelboom T, et al.
Am J Sports Med 1988 Nov–Dec;16(6):594–6
When did Lou Gehrig's personal illness begin? **Kasarskis EJ**, et al. **Neurology** 1989 Sep;39(9):1243–5
[The role of public health authorities of Bashkiria in the development of physical culture during the first few decades of Soviet rule] Ibragimov NG. **Sov Zdravookhr** 1989;(1):68–71 **(Rus)**

SPORTS MEDICINE

see related
ATHLETIC INJURIES
PROTECTIVE DEVICES

The veteran athlete: an echocardiographic comparison of veteran cyclists, former cyclists and non-athletic subjects. Vollmer-Larsen A, et al. **Acta Physiol Scand** 1989 Mar; 135(3):393–8
Delirium in runners [letter] Fishbain DA, et al.
Am J Psychiatry 1989 Feb;146(2):277
Presidential address of the American Orthopaedic Society for Sports Medicine. Dreams. Snook GA.
Am J Sports Med 1988 Nov–Dec;16(6):555–7
The sauna and sports. Rehunen S. **Ann Clin Res** 1988; 20(4):292–4
Mouthguards and the role of sporting team dentists. Chapman PJ. **Aust Dent J** 1989 Feb;34(1):36–43 (26 ref.)
Eye injuries and eye protection in sports: a position statement from the International Federation of Sports Medicine.
Bol Asoc Med P R 1988 Sep;80(9):330–1
A sports medicine clinic in the community. Davison J, et al. **Br J Sports Med** 1988 Jun;22(2):75–7
Human growth hormone: friend or foe in sports medicine? Saartok T, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall; 48(2):159–63
Proceedings of the Canadian Association of Sport Sciences, 21st annual meeting. Sudbury, Ontario, October 21–24, 1988. Abstracts. **Can J Sport Sci** 1988 Sep;13(3):37P–96P
Sexism in CJSS [editorial] Shephard RJ. **Can J Sport Sci** 1989 Jun;14(2):65
"Flipped" patterns of lactate dehydrogenase isoenzymes in serum of elite college basketball players. Rotenberg Z, et al. **Clin Chem** 1988 Nov;34(11):2351–4
Medical problems in whitewater sports. Kizer KW.
Clin Sports Med 1987 Jul;6(3):663–8 (10 ref.)
The team physician's medical bag. Ray RL, et al.
Clin Sports Med 1989 Jan;8(1):139–46
Ophthalmic complications of water sports. Seiff SR.
Clin Sports Med 1987 Jul;6(3):685–93 (32 ref.)
Objective evaluation of insert material for diabetic and athletic footwear. Brodsky JW, et al. **Foot Ankle** 1988 Dec; 9(3):111–6
Maximal expiratory flow-volume loop in a southern Indian college sportsmen. Rao KV, et al.
Indian J Physiol Pharmacol 1988 Apr–Jun;32(2):93–9
German Congress of Sports Medicine. October 27–30, 1988, Hannover, FRG. Abstracts. **Int J Sports Med** 1988 Oct; 9(5):357–404
Scuba diver standards [letter] Goldmann RW.
J Am Board Fam Pract 1988 Oct–Dec;1(4):295
Institute of Sports Science, Rome. Faina M, et al.
J Sports Med Phys Fitness 1989 Mar;29(1):1–3
Sports, science and ergonomics: the overlap [editorial] Reilly T. **J Sports Sci** 1988 Winter;6(3):185–6
36th annual meeting of the American College of Sports Medicine. Baltimore, May 31–June 3, 1989. Annual meeting abstracts. **Med Sci Sports Exerc** 1989 Apr;21(2 Suppl):S1–117
Severe rhabdomyolysis in well conditioned athletes. Hurley JK. **Milit Med** 1989 May;154(5):244–5
Himself, Mrs. Plucker, and the rites of spring [letter] Silich RJ. **N Y State J Med** 1989 Aug;89(8):484
Sportsmedicine and the primary care practitioner. Howe WB.
Orthop Rev 1988 Nov;17(11):1074–9
Anorexia nervosa, athletics, and amenorrhea. Mansfield MJ, et al. **Pediatr Clin North Am** 1989 Jun;36(3):533–49 (61 ref.)
Sports medicine and the GP. Thomas P. **Practitioner** 1988 Jul;232(1452):830–1
[Problems in admitting and eliminating children from sports training schools] Kučera M, et al.
Acta Chir Orthop Traumatol Cech 1989 Jun;56(3):240–4 (Eng. Abstr.) **(Cze)**
[Determination of the systolic time interval: application to the study of myocardial contractility in sportsmen] Delabays A, et al. **Schweiz Z Sportmed** 1988 Oct; 36(3):128–32 (Eng. Abstr.) **(Fre)**
[Interdisciplinary classification analysis in the framework of sports medicine training guidelines. Theoretical bases] Banzer WE. **Schweiz Z Sportmed** 1988 Oct;36(3):133–9 (Eng. Abstr.) **(Ger)**
[The utilization of positive health status indicators in adolescents] Hartmann B. **Z Arztl Fortbild (Jena)** 1988; 82(19):958–9 **(Ger)**
[The significance of movement-induced adaptations for the stability of health] Israel S. **Z Arztl Fortbild (Jena)** 1988; 82(19):966–8 **(Ger)**
[Criteria for the determination of physical fitness as a health indicator] Lehnert K. **Z Arztl Fortbild (Jena)** 1988; 82(19):970 **(Ger)**
[Ventricular hypertrophy in athletes (editorial)] Antoniucci D. **G Ital Cardiol** 1988 Mar;18(3):181–3 **(Ita)**
[Extreme cardiac hypertrophy in athletes. Morphological and functional echographic study] Spataro A, et al.
G Ital Cardiol 1988 Mar;18(3):171–80 (Eng. Abstr.) **(Ita)**
[Pulsed Doppler echocardiographic findings in 117 professional cyclists] Miki T, et al. **J Cardiol** 1987 Dec; 17(4):769–78 (Eng. Abstr.) **(Jpn)**
[Use of Holter/monitoring in sports medicine] Kogan-Iasnyi VV, et al. **Kardiologiia** 1988 Jul;28(7):86–8 **(Rus)**
[What is the center for sports health and exercise sciences?] **Bol Asoc Med P R** 1988 Sep;80(9):326–9 **(Spa)**
[International unity on low risk of HIV transmission in connection with sport activities] Berglund B.
Lakartidningen 1989 Jun 21;86(25):2354 **(Swe)**
[Stop the sex chromatin test in sports medicine. A bad selective method causing tragedy] de la Chapelle A.
Lakartidningen 1988 Oct 19;85(42):3449 **(Swe)**

EDUCATION

An interprofessional learning experience in sports dentistry. Kumamoto DP, et al. **J Dent Educ** 1989 Aug;53(8):491–4

HISTORY

Sport and medicine in ancient Greece. Appelboom T, et al.
Am J Sports Med 1988 Nov–Dec;16(6):594–6
British Journal of Sports Medicine—historical development [editorial] Robson HE. **Br J Sports Med** 1988 Dec; 22(4):130–1

INSTRUMENTATION

A comparison of energy expenditure during rowing and cycling ergometry. Hagerman FC, et al.
Med Sci Sports Exerc 1988 Oct;20(5):479–88

LEGISLATION & JURISPRUDENCE

[Cardiologic protocols for judging fitness for competition sports. Cardiologic Organizational Committee for Sports Fitness] **G Ital Cardiol** 1989 Mar;19(3):250–72 **(Ita)**

METHODS

Visual skills of athletes versus nonathletes: development of a sports vision testing battery. Christenson GN, et al.
J Am Optom Assoc 1988 Sep;59(9):666–75
Specific ergometry in the functional assessment of top class sportsmen. Dal Monte A, et al.
J Sports Med Phys Fitness 1989 Mar;29(1):4–8
Fitness and its measurement. Sharp C. **Practitioner** 1988 Sep 8;232(1454 (Pt 1)):974–6

TRENDS

[International sports medicine—current responsibilities and goals] Hollmann W. **Sportverletz Sportschaden** 1988 Mar; 2(1):1–3 (Eng. Abstr.) **(Ger)**

SPOUSE ABUSE

Reasons for alcohol use in maritally violent men. Fagan RW, et al. **Am J Drug Alcohol Abuse** 1988;14(3):371–92
Substance abuse as a precipitant of wife abuse victimizations. Kantor GK, et al. **Am J Drug Alcohol Abuse** 1989; 15(2):173–89
The birth-weight/battering connection. Bullock LF, et al.
Am J Nurs 1989 Sep;89(9):1153–5
The dark consequences of marital rape. Campbell JC, et al.
Am J Nurs 1989 Jul;89(7):946–9
Head injury and marital aggression. Rosenbaum A, et al.
Am J Psychiatry 1989 Aug;146(8):1048–51
A study of battered women presenting in an emergency department. McLeer SV, et al. **Am J Public Health** 1989 Jan;79(1):65–6
Education is not enough: a systems failure in protecting battered women. McLeer SV, et al. **Ann Emerg Med** 1989 Jun;18(6):651–3
Is your patient a victim of domestic violence? [letter] Shepherd J. **Br Dent J** 1989 Jun 24;166(12):437–8
Support and education groups for children of battered women. Grusznski RJ, et al. **Child Welfare** 1988 Sep–Oct; 67(5):431–44
The traumatized children of violent marriages. Silvern L, et al. **Child Welfare** 1989 Jul–Aug;68(4):421–36
Battered wives and female alcoholics: a comparative social and psychiatric study. Bergman B, et al. **J Adv Nurs** 1989 Sep;14(9):727–34
Let's join the battle against adult domestic violence. Allen TW. **J Am Osteopath Assoc** 1989 Apr;89(4):457
A longitudinal study of sexuality and gynecologic health in abused women. Chapman JD. **J Am Osteopath Assoc** 1989 May;89(5):619–24
The battering syndrome: a poor record of detection in the emergency department. Morrison LJ. **J Emerg Med** 1988 Nov–Dec;6(6):521–6 (8 ref.)
Battered women [letter]
J Psychosoc Nurs Ment Health Serv 1988 Dec;26(12):33
A piece of my mind. Wife. Whitehall JA. **JAMA** 1989 Jun 16;261(23):3460
Spouse abuse. Loeb L. **N Y State J Med** 1989 Mar; 89(3):141–3
A test of two explanatory models of women's responses to battering. Campbell JC. **Nurs Res** 1989 Jan–Feb;38(1):18–24
The prevalence and characteristics of battered women in a primary care setting. Bullock L, et al. **Nurse Pract** 1989

Jun;14(6):47, 50, 53–6
Abused women: dispelling myths and encouraging intervention. King MC, et al. **Nurse Pract** 1989 May; 14(5):47–50, 53–8
Spouse abuse and other domestic violence. Dickstein LJ. **Psychiatr Clin North Am** 1988 Dec;11(4):611–28 (43 ref.)
Increasing the rate of identification of battered women in an emergency department: use of a nursing protocol. Tilden VP, et al. **Res Nurs Health** 1987 Aug;10(4):209–15
Violence in the family: morbidity and medical consumption. Larsson G, et al. **Scand J Soc Med** 1988;16(3):161–6

EPIDEMIOLOGY

Injuries due to deliberate violence in areas of Denmark. V. Violence against women and children. Copenhagen Study Group. Breiting VB, et al. **Forensic Sci Int** 1989 Jun; 41(3):285–94
Prevalence and stability of physical aggression between spouses: a longitudinal analysis. O'Leary KD, et al. **J Consult Clin Psychol** 1989 Apr;57(2):263–8

LEGISLATION & JURISPRUDENCE

Violence against women. Hindberg BO. **Women Health** 1988; 13(3–4):151–8

PREVENTION & CONTROL

Family violence will be the issue of the 90s [letter] Fried S. **Child Abuse Negl** 1988;12(4):608
Breaking the cycle of abuse: how nurses can intervene. Bullock LF, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):11–3
Campaign alerts physicians to identify, assist victims of domestic violence [news] Raymond C. **JAMA** 1989 Feb 17;261(7):963–4
Battered women—their susceptibility to treatment. Bergman BK, et al. **Scand J Soc Med** 1988;16(3):155–60

PSYCHOLOGY

Wife abuse as it affects work behavior in a center for mentally retarded persons. Poteat GM, et al. **J Clin Psychol** 1989 Mar;45(2):324–30
Interspousal aggression, marital discord, and child problems. Jouriles EN, et al. **J Consult Clin Psychol** 1989 Jun; 57(3):453–5
The relationship between characteristics of the victim, persuasive techniques of the batterer, and returning to a battering relationship. Schutte NS, et al. **J Soc Psychol** 1988 Oct;128(5):605–10
The decision to leave an abusive relationship: empirical evidence and theoretical issues. Strube MJ. **Psychol Bull** 1988 Sep;104(2):236–50 (132 ref.)

STATISTICS & NUMERICAL DATA

Fatal violence among spouses in the United States, 1976–85. Mercy JA, et al. **Am J Public Health** 1989 May;79(5):595–9

SPRAINS AND STRAINS

Inversion trauma of the ankle. Schaap GR, et al. **Arch Orthop Trauma Surg** 1989;108(5):273–5

COMPLICATIONS

Posterior malleolar fractures of the ankle associated with external rotation–abduction injuries. Results with and without internal fixation. Harper MC, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1348–56
Post-traumatic cervical syndrome. Lenhart LJ. **J Manipulative Physiol Ther** 1988 Oct;11(5):409–15
[Plastic surgery of the ligament for chronic lateral instability of the ankle] Fritschy D, et al. **Int Orthop** 1988;12(3):239–47 (Eng. Abstr.) (Fre)
[Dislocation of the os naviculare pedis following basal lamella rupture caused by tarsal sprain] Meyer HH, et al. **Beitr Orthop Traumatol** 1988 Oct;35(10):508–12 (Eng. Abstr.) (Ger)

DIAGNOSIS

Evaluation and treatment of common spine and trunk problems. Weiker GG. **Clin Sports Med** 1989 Jul; 8(3):399–417 (17 ref.)
Examination of the sprained ankle: anterior drawer test or arthrography? Lähde S, et al. **Eur J Radiol** 1988 Nov; 8(4):255–7
Sports-related muscle injuries: evaluation with MR imaging. Fleckenstein JL, et al. **Radiology** 1989 Sep;172(3):793–8
[Magnetic resonance imaging and the diagnosis of musculo-tendinous disorders] Sayegh C, et al. **Schweiz Z Sportmed** 1988 Dec;36(4):169–74 (Eng. Abstr.) (Fre)

DRUG THERAPY

A double-blind comparison of flurbiprofen with diflunisal in the treatment of acute ankle sprains and strains. Finch WF, et al. **Curr Med Res Opin** 1989;11(7):409–16
[The effect of flurbiprofen in acute ankle distortions] de Nies F, et al. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):449–51 (Eng. Abstr.) (Dut)
[Topical therapy of acute osteo-muscular lesions with a combination of heparin-soludexide] Annaratone G, et al. **Riv Eur Sci Med Farmacol** 1987 Sep;9(3):341–3 (Eng. Abstr.) (Ita)

EPIDEMIOLOGY

Incidence, nature, and causes of ice hockey injuries. A three-year prospective study of a Swedish elite ice hockey team. Lorentzon R, et al. **Am J Sports Med** 1988 Jul–Aug; 16(4):392–6
Injuries in international ice hockey. A prospective, comparative study of injury incidence and injury types in international and Swedish elite ice hockey. Lorentzon R, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):389–91

ETIOLOGY

Tibial collateral ligament brusitis [letter] Casscells SW. **Am J Sports Med** 1989 Jan–Feb;17(1):134–5
An evaluation of proposed causal mechanisms for "ejection associated" neck injuries. Guill FC, et al. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A26–47
Neck sprains after car accidents [letter] Hodgson SP, et al. **BMJ** 1989 May 27;298(6685):1452
Neck sprains after car accidents [letter] Maimaris C. **BMJ** 1989 Jul 8;299(6691):123
Neck sprains after car accidents [letter] Pearce JM. **BMJ** 1989 Jun 10;298(6687):1581
Neck sprains after car accidents. Porter KM. **BMJ** 1989 Apr 15;298(6679):973–4 (12 ref.)
Occupational lifting by nursing aides and warehouse workers. Ljungberg AS, et al. **Ergonomics** 1989 Jan;32(1):59–78
Aberrancy of the midtarsal locking mechanism as a causative factor in recurrent ankle sprains. Michaud TC. **J Manipulative Physiol Ther** 1989 Apr;12(2):135–41
[Sprains and dislocations of the wrist joint and carpal bones] Pannike A. **Langenbecks Arch Chir** 1988;Suppl 2:205–9 (19 ref.) (Eng. Abstr.) (Ger)
[The overstretched patellar tendon in patellar apex syndrome] Weh L. **Sportverletz Sportschaden** 1988 Mar;2(1):26–34 (Eng. Abstr.) (Ger)

NURSING

[Nursing care of children with sprain of the hip joint: reports of 31 cases] Han L, et al. **Chung Hua Hu Li Tsa Chih** 1989 Jan;24(1):5–7 (Chi)

PATHOLOGY

Lesion of the ligamentum bifurcatum in ankle sprain. Agnholt J, et al. **Arch Orthop Trauma Surg** 1988;107(5):326–8
[Chronic internal metacarpophalangeal sprains of the thumb. Anatomo-clinical classification and therapeutic consequences] Kuhlmann JN, et al. **Rev Chir Orthop** 1988; 74(5):446–53 (Eng. Abstr.) (Fre)

PHYSIOPATHOLOGY

Torque acceleration energy, power and peak torque in thigh muscles after a previous knee sprain. Kannus VP, et al. **Can J Sport Sci** 1989 Jun;14(2):103–6
Kinesthetic awareness in subjects with multiple ankle sprains. Garn SN, et al. **Phys Ther** 1988 Nov;68(11):1667–71
[The lower ankle joint. Anatomic and pathophysiologic observations] Machan FG, et al. **Zentralbl Chir** 1989; 114(6):371–80 (Eng. Abstr.) (Ger)

RADIOGRAPHY

[The "positioned image" of the talo-calcaneus joint in instability of the posterior distal ankle joint] Bruns J, et al. **Aktuel Traumatol** 1989 Apr;19(2):82–4 (Eng. Abstr.) (Ger)

SURGERY

Chronic peroneus brevis tendon lesions. Sammarco GJ, et al. **Foot Ankle** 1989 Feb;9(4):163–70
[The ankle joint fork and tarsus] Schmit-Neuerburg KP, et al. **Langenbecks Arch Chir** 1988;Suppl 2:225–32 (Eng. Abstr.) (Ger)
[Sprains and dislocations of large joints. The shoulder joint] Weller S. **Langenbecks Arch Chir** 1988;Suppl 2:197–200 (Eng. Abstr.) (Ger)
[Sprains and dislocations of large joints—the knee joint] Wentzensen A. **Langenbecks Arch Chir** 1988;Suppl 2:217–24 (11 ref.) (Eng. Abstr.) (Ger)
[Surgical treatment of chronic upper ankle joint instability in childhood] Zwipp H, et al. **Z Kinderchir** 1989 Apr; 44(2):97–104 (Eng. Abstr.) (Ger)

THERAPY

Nonsurgical treatment of ankle sprains using the modified Sarmiento brace. Carne P. **Am J Sports Med** 1989 Mar–Apr;17(2):253–7
Nonoperative treatment of grade II and III sprains of the lateral ligament compartment of the knee. Kannus P. **Am J Sports Med** 1989 Jan–Feb;17(1):83–8
Treatment of sprained ankles by physiotherapists at professional soccer clubs. Leaman AM, et al. **Arch Emerg Med** 1988 Sep;5(3):177–9
Clinical benefits of early cold therapy in accident and emergency following ankle sprain. Sloan JP, et al. **Arch Emerg Med** 1989 Mar;6(1):1–6
Office management of the acute ankle sprain. Ryan JB, et al. **Clin Sports Med** 1989 Jul;8(3):477–95 (90 ref.)
The influence of dorsiflexion in the treatment of severe ankle sprains: an anatomical study. Smith RW, et al. **Foot Ankle** 1988 Aug;9(1):28–33
Wrinkle corner. A splint for the metacarpophalangeal joint of the thumb. Wakeley CJ, et al. **Injury** 1987 Jul;18(4):291
Knee ligament injuries in adolescents. Eight year follow-up of conservative management. Kannus P, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):772–6
[The sprained ankle (letter)] Bruggeman A, et al. **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2035 (Dut)
[Sprain and dislocation of the hip joint] Kuner EH, et al. **Langenbecks Arch Chir** 1988;Suppl 2:211–6 (Eng. Abstr.) (Ger)
[The treatment of "chronic strains"] Dejung B. **Schweiz Z Sportmed** 1988 Dec;36(4):161–8 (Eng. Abstr.) (Ger)
[Treatment of closed injuries of finger tendons and aponeurosis at the level of the distal interphalangeal joint] Korshunov VF, et al. **Ortop Travmatol Protez** 1988 Aug; (8):12–4 (Eng. Abstr.) (Rus)

SPREAD PLATE COUNT see **COLONY COUNT, MICROBIAL**

SPREADING CORTICAL DEPRESSION

Effects of cortical spreading depression on spontaneous activity of red nucleus cells in the guinea pig. Aicardi G, et al. **Arch Ital Biol** 1988 Jun;126(3):199–203
Alterations in the microenvironment during spreading depression associated with epileptiform activity in the immature neocortex. Hablitz JJ, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):243–52
Cerebrovascular effects of nimodipine in cats. Schilling L, et al. **Miner Electrolyte Metab** 1989;15(3):178–84
Influence of unilateral cortical spreading depression on intraspecies aggression and sociability of isolated mice. Mikheev VV, et al. **Neurosci Behav Physiol** 1988 Sep–Oct; 18(5):432–8
Suppression of noxious thermal evoked responses in thalamic central lateral nucleus by cortical spreading depression. Condés-Lara M, et al. **Pain** 1988 Nov;35(2):199–204
Elicitation of spreading depression by rose bengal photodynamic action. Netto M, et al. **Photochem Photobiol** 1989 Aug;50(2):229–34

DRUG EFFECTS

Evidence for a role of the N-methyl-D-aspartate (NMDA) receptor in cortical spreading depression in the rat. Marrannes R, et al. **Brain Res** 1988 Aug 9;457(2):226–40
Apomorphine does not mimic the effects of REM-sleep deprivation on cortical spreading depression. Amorim LF, et al. **Braz J Med Biol Res** 1988;21(3):611–4
The effect of diphenylhydantoin on spreading depression. Chebabo SR, et al. **Braz J Med Biol Res** 1988;21(3):603–5
Extracellular Ca2+ and retinal spreading depression. Do Carmo RJ, et al. **Braz J Med Biol Res** 1988;21(3):607–10

SPRUE see **CELIAC DISEASE**

SPRUE, TROPICAL

EPIDEMIOLOGY

Tropical sprue in southern India. Mathan VI. **Trans R Soc Trop Med Hyg** 1988;82(1):10–4 (35 ref.)

ETHNOLOGY

Tropical sprue in expatriates from the tropics living in the continental United States. Klipstein FA, et al. **Medicine (Baltimore)** 1969 Nov;48(6):475–91 (89 ref.)

PHYSIOPATHOLOGY

Intestinal transit in healthy southern Indian subjects and in patients with tropical sprue. Jayanthi V, et al. **Gut** 1989 Jan;30(1):35–8

SPUTUM

Minitracheotomy in children. The management of sputum retention in older children by minitracheotomy. Allen PW, et al. **Anaesthesia** 1988 Sep;43(9):760–1
Sputum retention [letter] Stangel P. **Chest** 1989 Apr; 95(4):939–40
Massive melanoptysis: a serious unrecognized complication of coal worker's pneumoconiosis. Mosquera JA. **Eur Respir J** 1988 Aug;1(8):766–8
Mutagenicity of expectorate from workers in a coke plant. Kryskje A. **Mutat Res** 1989 Jun;223(2):213–9

ANALYSIS

Carpet beetle larval hairs in a sputum cytology specimen [letter] Johnson FP, et al. **Acta Cytol** 1989 Mar–Apr; 33(2):286
The role of the saccomano technique in sputum cytopathologic diagnosis of lung cancer. Perlman EJ, et al. **Am J Clin Pathol** 1989 Jan;91(1):57–60
Cast bronchitis in infants and children. Pérez-Soler A. **Am J Dis Child** 1989 Sep;143(9):1024–9
Sputum albumin in obstructive airways [letter] Persson CG. **Am Rev Respir Dis** 1988 Dec;138(6):1646–7

Chemical properties of bronchorrhea sputum in bronchial asthma. Shimura S, et al. **Chest** 1988 Dec;94(6):1211–5

Transient expectoration of pancreatic fluids in a patient with pancreaticopleural fistula. Gouin PR, et al. **Crit Care Med** 1989 Mar;17(3):293–4

Amoxycillin/clavulanic acid levels in lower respiratory secretions [letter] Gould IM, et al. **J Antimicrob Chemother** 1988 Jul;22(1):88–90

Usefulness of combined light and electron microscopy: evaluation of sputum samples for asbestos to determine past occupational exposure. Dodson RF, et al. **Mod Pathol** 1989 Jul;2(4):320–2

Granulocyte elastase–mediated proteolysis of alpha 1–antitrypsin in cystic fibrosis bronchopulmonary secretions. Cantin A, et al. **Pediatr Pulmonol** 1989;7(1):12–7

pH– and protein–dependent buffer capacity and viscosity of respiratory mucus. Their interrelationships and influence on health. Holma B, et al. **Sci Total Environ** 1989 Aug; 84:71–82

[A study on assay method for fucose and sialic acid contents in sputum and serum of patients with lung diseases] Fujisawa K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):658–64 (Eng. Abstr.) **(Jpn)**

[Quantitative study of the origin of proteins in the bronchial secretion of patients with chronic obstructive bronchitis] Szabó S, et al. **Rev Ig [Pneumoftiziol]** 1988 Jan–Mar; 37(1):77–84 (Eng. Abstr.) **(Rum)**

[The content of biologically active substances in the sputum of patients with chronic obstructive bronchitis] Goncharove VA, et al. **Probl Tuberk** 1988;(8):45–8 (Eng. Abstr.) **(Rus)**

[Clinical significance of the immunochemical study of serum and tissue proteins of the sputum in pulmonary pathology] Trubnikov GA, et al. **Ter Arkh** 1988;60(12):66–70 (Eng. Abstr.) **(Rus)**

[Proteolytic processes in the bronchial contents in pulmonary tuberculosis] Zaks OV, et al. **Vrach Delo** 1988 Oct;(10):41–2 (Eng. Abstr.) **(Rus)**

[Investigation of ferraginous bodies in the sputum of individuals exposed to asbestos fibers. Comparative study of 3 identification technics] Montoya Cabrera MA, et al. **Arch Invest Med (Mex)** 1988 Jan–Mar;19(1):97–106 (Eng. Abstr.) **(Spa)**

CYTOLOGY

Quantitative sputum cytologic findings in 109 nonsmokers. Schumann GB, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):601–3

Application of immunoperoxidase staining to the cell blocks from sputa and bronchial washings. Lyubsky S, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):94–5

Identification of features of metaplastic cells in sputum for the detection of squamous–cell carcinoma of the lung. Swank PR, et al. **Diagn Cytopathol** 1989;5(1):98–103

False positive diagnosis of bronchogenic carcinoma based on bronchoscopic brushing and sputum cytology. A surgical point of view. Lodi M, et al. **Ital J Surg Sci** 1988; 18(4):385–8

Accuracy of cytologic diagnosis and cytotyping of sputum in primary lung cancer: analysis of 161 cases. Liang XM. **J Surg Oncol** 1989 Feb;40(2):107–11

Utilization of the cytologic examination of sputum as a screening test in appraising the asbestosis risk. Constantinescu V. **Sante Publique (Bucur)** 1988 Jul–Sep; 31(3):269–73

DRUG EFFECTS

Influence of erdosteine, a mucolytic agent, on amoxycillin penetration into sputum in patients with an infective exacerbation of chronic bronchitis. Ricevuti G, et al. **Thorax** 1988 Aug;43(8):585–90

ENZYMOLOGY

A catalytically active high–Mr form of human cathepsin B from sputum. Buttle DJ, et al. **Biochem J** 1988 Sep 15; 254(3):693–9

Similar binding sites for unsaturated fatty acids and alkyl 2–pyrone inhibitors of human sputum elastase. Cook L, et al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):627–31

Activities and sources of beta–lactamase in sputum from patients with bronchiectasis. Dragicevic P, et al. **J Clin Microbiol** 1989 May;27(5):1055–61

Purification and cytotoxic potential of myeloperoxidase in cystic fibrosis sputum. Mohammed JR, et al. **J Lab Clin Med** 1988 Dec;112(6):711–20

[Elastase activity of the sputum and the functional activity of serum alpha 1–antitrypsin in patients with chronic obstructive pulmonary disease] Zhou SW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):269–70, 318 (Eng. Abstr.) **(Chi)**

[Detection of inducible beta–lactamase in sputum—clinical studies on Pseudomonas respiratory infection] Nakahama C, et al. **Kansenshogaku Zasshi** 1989 Apr;63(4):400–9 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Early lung cancer detection: monoclonal antibody staining of exfoliated cells in sputum. Bernal SD, et al. **J Clin Oncol** 1988 Nov;6(11):1676–8 (10 ref.)

Sensitive and specific monoclonal antibody recognition of human lung cancer antigen on preserved sputum cells: a new approach to early lung cancer detection. Tockman MS, et al. **J Clin Oncol** 1988 Nov;6(11):1685–93

Rapid detection of pneumococcal antigens in sputa in patients with community–acquired pneumonia by coagglutination. Zhang XP, et al. **Med Microbiol Immunol (Berl)** 1988; 177(6):333–8 (11 ref.)

[Determination of Salmonella typhimurium antigens in the excreta of children with salmonellosis using the passive hemagglutination reaction] Karal'nik BV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):39–44 (Eng. Abstr.) **(Rus)**

METABOLISM

Sputum levels of fluconazole in humans. Ebden P, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):963–4

Evidence for the tight binding of human mucus proteinase inhibitor to highly glycosylated macromolecules in sputum. Van–Seuningen I, et al. **Biol Chem Hoppe Seyler** 1989 Jul; 370(7):749–55

Serum, sputum and bronchial concentrations of erythromycin in chronic bronchitis after single and multiple treatments with either propionate–N–acetylcysteinate or stearate erythromycin. Ricevuti G, et al. **Chemotherapy** 1988; 34(5):374–9

Serum and sputum concentrations of netilmicin in combination with acylureidopenicillin and cephalosporins in clinical treatment of pulmonary exacerbations in cystic fibrosis. Hjelte L, et al. **J Antimicrob Chemother** 1989 Jun; 23(6):885–90

The binding of anti–pseudomonal antibiotics to macromolecules from cystic fibrosis sputum. Ramphal R, et al. **J Antimicrob Chemother** 1988 Oct;22(4):483–90

[Clinical studies and sputum levels of ceftriaxone once daily administration in respiratory tract infection] Kuwabara M, et al. **Jpn J Antibiot** 1989 Apr;42(4):921–9 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

A method of bacteriological examination of washed sputum in infants and children. Uehara S. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):253–60

Comparative mycobactericidal efficacy of chemical disinfectants in suspension and carrier tests. Best M, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2856–8

The use of mucolysed induced sputum for the identification of pulmonary pathogens associated with human immunodeficiency virus infection. Ng VL, et al. **Arch Pathol Lab Med** 1989 May;113(5):488–93

Clinical efficacy of the new quinolones in lower respiratory infections. Davies BI, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):447–8

Bactericidal effect of ceftriaxone versus imipenem plus cilastatin in bronchial secretion. Fraschini F, et al. **Chemotherapy** 1988;34 Suppl 1:3–15

A reevaluation of sputum microscopy and culture in the diagnosis of pulmonary tuberculosis. Levy H, et al. **Chest** 1989 Jun;95(6):1193–7

Diagnosis of Pneumocystis carinii pneumonia by induced sputum in a city with moderate incidence of AIDS. O'Brien RF, et al. **Chest** 1989 Jan;95(1):136–8

Culture–amplified immunological detection of Mycoplasma pneumoniae in clinical specimens. Cimolai N, et al. **Diagn Microbiol Infect Dis** 1988 Apr;9(4):207–12

Identification of Mycobacterium tuberculosis in sputum by direct inoculation of the BACTEC NAP vial. Stager CE, et al. **Diagn Microbiol Infect Dis** 1988 Jun;10(2):67–73

Bacteriological studies of tuberculosis in Sidamo Regional Hospital. Lemma E, et al. **Ethiop Med J** 1989 Jul; 27(3):147–9

Fibreoptic bronchoscopy in smear–negative pulmonary tuberculosis. Chawla R, et al. **Eur Respir J** 1988 Oct; 1(9):804–6

Gram stain and culture of morning and 24 h sputum in the diagnosis of bacterial exacerbation of chronic bronchitis: a dogma disputed. Medici TC, et al. **Eur Respir J** 1988 Dec;1(10):923–8

Drug resistance of Mycobacterium tuberculosis isolated from sputum in Manipal. Rao PS, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):316–20

Differences in adhesion of Pseudomonas aeruginosa to mucin glycopeptides from sputa of patients with cystic fibrosis and chronic bronchitis. Ramphal R, et al. **Infect Immun** 1989 Oct;57(10):3066–71

Some questions of aminoglycoside therapy in the intensive care unit. Csapó K, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Sep;26(9):432–5

Semiquantitation of bacteria in sputum gram stains. Valenstein PN. **J Clin Microbiol** 1988 Sep;26(9):1791–4

Cavitating pneumonia due to Trichosporon beigelii in a patient with acute myeloid leukaemia. Santhosh–Kumar CR, et al. **J Infect** 1989 Jul;19(1):65–8

Induced sputum to diagnose Pneumocystis carinii pneumonia in immunosuppressed pediatric patients. Ognibene FP, et al. **J Pediatr** 1989 Sep;115(3):430–3

Sputum induction for diagnosis of Pneumocystis carinii pneumonia. Leigh TR, et al. **Lancet** 1989 Jul 22; 2(8656):205–6

The problem of diagnosing bacterial pneumonia in patients with chronic bronchitis. Bacteria in sputum and bronchial washings from patients with chronic bronchitis are antibody coated. Yoo OH, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):395–8

Is sputum analysis indicated in the treatment of the acute exacerbation of chronic bronchitis? Hamilton IJ. **Practitioner** 1988 Nov 8;232(1458):1183

Cresyl violet: a rapid, simple, easily interpretable stain for detecting Pneumocystis carinii in sputum. Moss CM, et al. **South Med J** 1989 Aug;82(8):957–9

Comparative study of cold stain and Ziehl–Neelsen stain. Pathan AJ, et al. **Tubercle** 1988 Sep;69(3):227–9

[Diagnostic value of fiberoptic bronchoscopy examination in smear–negative pulmonary tuberculosis] Chen WB. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Apr; 11(2):65–8, 126 (Eng. Abstr.) **(Chi)**

[Quantitative determination of yeast in sputum—a direct microscopy method] Raclavský V, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 May;38(3):161–6 (Eng. Abstr.) **(Cze)**

[Patients hospitalized with pulmonary tuberculosis presenting Koch's bacillus in direct sputum examination. Clinical, radiologic and bacteriologic characteristics] Kuaban C, et al. **Ann Med Interne (Paris)** 1989;140(4):269–73 (Eng. Abstr.) **(Fre)**

[Induced expectoration in the search for Pneumocystis carinii in HIV seropositive patients. Value and limitations (letter)] Delacour T, et al. **Presse Med** 1989 Jan 21;18(2):81 **(Fre)**

[The pathogen spectrum in respiratory tract infections with reference to different clinical diagnoses] Drlicek M, et al. **Prax Klin Pneumol** 1988 Jul;42(7):594–6 (Eng. Abstr.) **(Ger)**

[Infections of the lower respiratory tract—effectiveness of beta– lactam antibiotics on bacterial isolates from sputum and bronchial secretions] Kapfhammer G, et al. **Prax Klin Pneumol** 1988 Jul;42(7):592–3 (Eng. Abstr.) **(Ger)**

[Comparative study of 2 staining methods in the follow–up of negative sputums in pulmonary tuberculosis] Petreanu V, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):703–6 (Eng. Abstr.) **(Rum)**

[Role of microbiological control in the choice of antibacterial therapy of respiratory infection in surgical patients during the postoperative period] Bekbergenov BM, et al. **Antibiot Khimioter** 1989 Jan;34(1):60–4 (Eng. Abstr.) **(Rus)**

[Experience in examining sputum for Mycobacterium tuberculosis using a bacterioscopic method in laboratories of a regional general medical network] Kunovskii BV, et al. **Lab Delo** 1988;(10):70–1 **(Rus)**

[A method of preservation of pathological specimens for detection of Mycobacterium tuberculosis in tissue culture] Balan VF. **Probl Tuberk** 1988;(7):40–1 (Eng. Abstr.) **(Rus)**

[Increasing the effectiveness of microbiological diagnosis of limited nondestructive pulmonary tuberculosis] Gamzaeva NF, et al. **Probl Tuberk** 1989;(2):55–7 **(Rus)**

[Use of UAP culture medium in isolating mycobacteria from expectorations] Reyes–Escárcega V, et al. **Rev Latinoam Microbiol** 1988 Jan–Mar;30(1):11–3 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

Vegetable cells in sputum: possible confusion with helminth eggs [letter] Alpern HD, et al. **Acta Cytol** 1989 May–Jun; 33(3):421–2

Diagnosis of Pneumocystis pneumonia by induced sputum technique in patients without the acquired immunodeficiency syndrome. Masur H, et al. **Ann Intern Med** 1988 Nov 1;109(9):755–6

Use of a monoclonal antibody to detect Pneumocystis carinii in induced sputum and bronchoalveolar lavage fluid by immunoperoxidase staining. Blumenfeld W, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1233–6

Sputum examination in the diagnosis of Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. del Rio C, et al. **Arch Pathol Lab Med** 1988 Dec; 112(12):1229–32

Optimal use of the cytocentrifuge for recovery and diagnosis of Pneumocystis carinii in bronchoalveolar lavage and sputum specimens. Gill VJ, et al. **J Clin Microbiol** 1988 Sep;26(9):1641–4

Sarcosporidiosis revealed in sputum [letter] Lancastre F, et al. **Lancet** 1989 Apr 8;1(8641):791

[A case of Strongyloides stercoralis infection detected by examination of the sputum] Bednarski Z, et al. **Wiad Lek** 1988 Jul 1;41(13):890–3 (Eng. Abstr.) **(Pol)**

PATHOLOGY

A quantitative cytologic study of sputum in early squamous cell bronchogenic carcinoma. Saito Y, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):365–70

Inverse correlation of expiratory lung flows and sputum eosinophils in status asthmaticus. Alfaro C, et al. **Ann Allergy** 1989 Sep;63(3):251–4

PHYSIOLOGY

Viscoelastic properties of bronchorrhoea sputum in bronchial asthmatics. Shimura S, et al. **Biorheology** 1988; 25(1–2):173–9

[Study of the viscoelastic properties of the contents of the

respiratory tract using the tapering thread method] Dobrykh VA, et al. **Lab Delo** 1988;(7):26–7 **(Rus)**

RADIATION EFFECTS

Palliation of massive bronchorrhea [letter] Krawtz SM, et al. **Chest** 1988 Dec;94(6):1313–4

SECRETION

The response of patients with purulent bronchiectasis to antibiotics for four months. Hill SL, et al. **Q J Med** 1988 Feb;66(250):163–73

SQ 14225 see **CAPTOPRIL**

SQ 18506 see under **NITROFURANS**

SQUALENE

Prevention of pressure sores. A comparison of new and old pressure sore treatments. van der Cammen TJ, et al. **Br J Clin Pract** 1987 Nov;41(11):1009–11

ANALOGS & DERIVATIVES

In vitro metabolism of azasqualene derivatives and their effects on aminopyrine N-demethylase activity in rat liver microsomes. Viola F, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2497–503

Squalene analogues containing isopropylidene mimics as potential inhibitors of pig liver squalene epoxidase and oxidosqualene cyclase. Sen SE, et al. **J Med Chem** 1989 Sep;32(9):2152–8

[Studies on distribution, excretion and subacute toxicity of squalane in dogs] **Kamimura H, et al.**
Fukuoka Igaku Zasshi 1989 May;80(5):269–80 (Eng. Abstr.) **(Jpn)**

[Histopathology of meibomian gland abnormalities in experimental PenCB intoxicated beagle treated with squalane] Kohno T, et al. **Fukuoka Igaku Zasshi** 1989 May; 80(5):258–62 (Eng. Abstr.) **(Jpn)**

METABOLISM

Variations of hepatic cholesterol precursors during altered flows of endogenous and exogenous squalene in the rat. Strandberg TE, et al. **Biochim Biophys Acta** 1989 Feb 6; 1001(2):150–6

RADIATION EFFECTS

Production of malonaldehyde from squalene, a major skin surface lipid, during UV-irradiation. Dennis KJ, et al. **Photochem Photobiol** 1989 May;49(5):711–6

SQUALENE SYNTHETASE see under **OXIDOREDUCTASES**

SQUID

[Contact dermatitis caused by heterologous proteins] Kvitko EB, et al. **Med Cutan Ibero Lat Am** 1989;17(2):111–2 (Eng. Abstr.) **(Spa)**

CYTOLOGY

Neuritic outgrowth in primary cell culture of neurons from the squid, Loligo pealei. Parsons TD, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):23–8

METABOLISM

Vesikin, a vesicle associated ATPase from squid axoplasm and optic lobe, has characteristics in common with vertebrate brain MAP 1 and MAP 2. Do CV, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):246–54

Substrate specificities of alpha-N-acetylgalactosaminidases I and II from squid liver. Nashida T, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):4000–7

Inhibitory effect of squid (Todarodes pacificus) paramyosin on actomyosin ATPase and on superprecipitation. Konno K, et al. **Comp Biochem Physiol [B]** 1988;90(4):795–801

Binding sites for [3H]-acetylcholine and 125I-alpha-bungarotoxin in the optic ganglion of Loligo pealii. Chen SJ, et al. **Comp Biochem Physiol [C]** 1988; 90(2):317–23

Squid major lens polypeptides are homologous to glutathione S-transferases subunits. Tomarev SI, et al. **Nature** 1988 Nov 3;336(6194):86–8

[The specificity of the interaction of the cholinesterases in Far Eastern squid and certain vertebrates with reversible inhibitors] Rozengart EV, et al. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):679–85 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Electrical coupling between secondary hair cells in the statocyst of the squid Alloteuthis subulata. Williamson R. **Brain Res** 1989 May 1;486(1):67–72

Properties of synaptic transmission at the neuromuscular junction of the squid, Loligo opalescens. Stockbridge N, et al. **Comp Biochem Physiol [A]** 1988;91(3):557–64

A lateral line analogue in cephalopods: water waves generate microphonic potentials in the epidermal head lines of Sepia and Lolliguncula. Budelmann BU, et al. **J Comp Physiol [A]** 1988 Nov;164(1):1–5

The actions of L-glutamate at the postsynaptic membrane of the squid giant synapse. Adams DJ, et al. **J Exp Biol** 1988 Nov;140:535–48

Adaptation of a deep-sea cephalopod to the photic environment. Evidence for three visual pigments. Matsui S, et al. **J Gen Physiol** 1988 Jul;92(1):55–66

Technical aspects of voltage-clamping the cut-open squid giant axon. Forster IC, et al. **J Neurosci Methods** 1988 Dec; 26(2):151–68

New evidence that L-glutamate is a transmitter at the squid giant synapse. De Santis A, et al. **Q J Exp Physiol** 1989 Mar;74(2):219–22

ULTRASTRUCTURE

Subcellular localization of functionally differentiated microtubules in squid neurons: regional distribution of microtubule-associated proteins and beta-tubulin isotypes. Arai T, et al. **J Neurochem** 1988 Dec;51(6):1825–38

SQUINT see **STRABISMUS**

SQUIRRELS see **SCIURIDAE**

SRC GENES see **ONCOGENES**

SRS-A

Characterization of specific leukotriene C4 binding sites on cultured human keratinocytes. Muller A, et al. **Br J Dermatol** 1988 Sep;119(3):275–80

ADMINISTRATION & DOSAGE

Effect of inhaled leukotriene C4 on cardiopulmonary function. Albazzaz MK, et al. **Am Rev Respir Dis** 1989 Jan;139(1):188–93

ANALOGS & DERIVATIVES

Synthesis of leukotrienes C4, D4, E4 and 20-carboxy-B4 by the isolated perfused kidney. Merab JP, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:221–4

Role of cysteinyl leukotrienes in gastric mucosal damage in rats. Peskar BM. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:552–5

Sequential formation of leukotriene E4 metabolites by isolated rat hepatocytes. Stene DO, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:108–11

Inhibition of cysteinyl-leukotriene production by azelastine and its biological significance. Achterrath-Tuckermann U, et al. **Agents Actions** 1988 Jul;24(3–4):217–23

Reversal of leukotriene D4- and leukotriene E4-induced airway constriction in the guinea pig. Silbaugh SA, et al. **Am Rev Respir Dis** 1989 Sep;140(3):610–4

Release of peptide leukotrienes from rat Kupffer cells. Sakagami Y, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):217–21

Transamination of LTE4 by cysteine conjugate aminotransferase. Tomisawa H, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1119–25

Cardiovascular effects of leukotrienes in the bullfrog. Herman CA, et al. **Biomed Biochim Acta** 1988;47(10–11):S178–81

The action and metabolism of peptide leukotrienes in the isolated bullfrog lung. Heller RS, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):309–14

Measurement of urinary leukotrienes by reversed-phase liquid chromatography and radioimmunoassay. Tagari P, et al. **Clin Chem** 1989 Mar;35(3):388–91

Leukotriene E4 release in cold urticaria. Maltby NH, et al. **Clin Exp Allergy** 1989 Jan;19(1):33–6

Leukotriene receptor antagonists. III. Pharmacological and chemical studies with LY137617, a leukotriene D4 and leukotriene E4 receptor antagonist. Herron DK, et al. **Drugs Exp Clin Res** 1988;14(5):303–10

Novel transcellular interaction: conversion of granulocyte-derived leukotriene A4 to cysteinyl-containing leukotrienes by human platelets. Edenius C, et al. **Eur J Biochem** 1988 Dec 1;178(1):81–6

Metabolism of cysteinyl leukotrienes in non-recirculating rat liver perfusion. Hepatocyte heterogeneity in uptake and biliary excretion. Wettstein M, et al. **Eur J Biochem** 1989 Apr 15;181(1):115–24

A novel leukotriene D4/E4 antagonist, SR2640 (2-[3-(2-quinolylmethoxy)phenylamino]benzoic acid). Ahnfelt-Rønne I, et al. **Eur J Pharmacol** 1988 Oct 11; 155(1–2):117–28

The relative responsiveness to inhaled leukotriene E4, methacholine and histamine in normal and asthmatic subjects. O'Hickey SP, et al. **Eur Respir J** 1988 Dec; 1(10):913–7

The effects of inhaled leukotriene E4 on the airway responsiveness to histamine in subjects with asthma and normal subjects. Arm JP, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):654–60

Metabolism of leukotriene C4, D4 and E4 in allergic inflammation in rats. Ohuchi K, et al. **J Clin Lab Immunol** 1988 Dec;27(4):171–8

Kinetic and pharmacologic analysis of [3H]leukotriene E4 binding to receptors on guinea pig lung membranes: evidence for selective binding to a subset of leukotriene D4 receptors. Aharony D, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):581–8

Antagonism of leukotriene C4, leukotriene D4 and leukotriene E4 vasoconstrictor responses in the conscious rat with the peptidoleukotriene receptor antagonist SK&F 104353: evidence for leukotriene D4 receptor heterogeneity. Smith EF 3d, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):805–11

Leukotriene D4-induced homologous desensitization in basal and differentiated U-937 cells: characterization with the partial agonist leukotriene E4 and assessment of receptor reserve. Winkler JD, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):54–62

Urinary leukotriene E4 after antigen challenge and in acute asthma and allergic rhinitis. Taylor GW, et al. **Lancet** 1989 Mar 18;1(8638):584–8

Antagonism of peptidoleukotrienes and inhibition of systemic anaphylaxis by RG 12525 in guinea pigs. Van Inwegen RG, et al. **Life Sci** 1989;44(12):799–807

A possible role for leukotrienes in the regulation of glomerular haemodynamics in the dog. Heller J, et al. **Pflugers Arch** 1988 Jul;412(1–2):155–63

Synthesis of beta-oxidation products as potential leukotriene metabolites and their detection in bile of anesthetized rat. Delorme D, et al. **Prostaglandins** 1988 Sep;36(3):291–302

Synthesis and contractile activity of new acetylenic and allenic analogues of leukotrienes C4 and D4: importance of the Z-11,12 double bond. Lellouche JP, et al. **Prostaglandins** 1989 Jan;37(1):93–103

In vivo formation of beta-oxidized metabolites of leukotriene E4 in the rat. Perrin P, et al. **Prostaglandins** 1989 Jan; 37(1):53–60

U19052 (ICIAm): a novel leukotriene analog which antagonizes LTC4, LTD4, and LTE4. Snyder DW, et al. **Prostaglandins** 1988 Jun;35(6):903–15

The biotransformation in vitro of cysteinyl leukotrienes in blood of normal and asthmatic subjects. Zakrzewski JT, et al. **Prostaglandins** 1989 Apr;37(4):425–44

Metabolism of LTC4 to LTD4 and LTE4 in isolated guinea pig lung lobes. Kobayashi J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(3):155–7

[Release of peptide leukotrienes from rat Kupffer cells] Sakagami Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1269–72 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Increased concentrations of leukotrienes in bronchoalveolar lavage fluid of patients with ARDS or at risk for ARDS. Stephenson AH, et al. **Am Rev Respir Dis** 1988 Sep; 138(3):714–9

Increased levels of leukotriene C4 in bronchoalveolar lavage from patients with pigeon breeder's disease. Selman M, et al. **Arch Invest Med (Mex)** 1988 Apr–Jun;19(2):127–31

Leukotrienes, LTC4 and LTB4, in bronchoalveolar lavage in bronchial asthma and other respiratory diseases. Wardlaw AJ, et al. **J Allergy Clin Immunol** 1989 Jul; 84(1):19–26

Leukotrienes levels in the aqueous humor following experimental ocular trauma. Latanza L, et al. **Retina** 1988; 8(3):199–204

LTC4, thromboxane B2 and 6-keto PGF1 in syngeneic and allogenic heterotopic cardiac transplant in rats. Pepino P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):442

ANTAGONISTS & INHIBITORS

Leukotriene D4 (LTD4) antagonists: structure activity relationships of stable phenylsubstituted leukotriene analogs. von Sprecher A, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:647–50

Structural analysis of sulfido-peptide leukotrienes: application to the design of potent and specific antagonists of leukotriene D4. Young RN. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:643–6

L-648,051, a potent and specific aerosol active leukotriene D4 antagonist. Young RN. **Agents Actions Suppl** 1988; 23:113–9

Inhibition by the LTD4 antagonist, SR2640, of effects of LTD4 on canine polymorphonuclear leukocyte functions. Thomsen MK, et al. **Biochem Pharmacol** 1989 Jul 15; 38(14):2291–5

L-648,051, a novel cysteinyl-leukotriene antagonist is active by the inhaled route in man. Evans JM, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):125–35

Rat alpha 2 macroglobulin is a selective inhibitor of antigen-induced leucotrienes in rat isolated lungs. Ufkes JG, et al. **Br J Exp Pathol** 1988 Aug;69(4):457–64

Leukotriene D4 and platelet-activating factor-acether antagonists on allergic and arachidonic acid-induced reactions in guinea pig airways. Burka JF, et al. **Can J Physiol Pharmacol** 1989 May;67(5):483–90

Pharmacology of L-660,711 (MK-571): a novel potent and selective leukotriene D4 receptor antagonist. Jones TR, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):17–28

A novel leukotriene D4/E4 antagonist, SR2640 (2-[3-(2-quinolylmethoxy)phenylamino]benzoic acid). Ahnfelt-Rønne I, et al. **Eur J Pharmacol** 1988 Oct 11; 155(1–2):117–28

Biochemical and pharmacological characterization of ICI

198,615: a peptide leukotriene receptor antagonist. Krell RD, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):73–81

Inhibition of antigen–induced contraction of guinea pig trachea by ICI 198,615. Redkar–Brown DG, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):113–21

Evidence for high and low affinity leukotriene D4 receptors mediating vascular responses in the conscious rat. Smith EF 3d, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):297–301

Effects of a new thromboxane A2–antagonist (ONO–3708) and a new leukotriene–antagonist (ONO–1078) on thromboxane A2 analogue–, leukotriene C4–, and D4–induced regional myocardial blood flow reduction. Torii T, et al. **Heart Vessels** 1988;4(2):104–11

Prevention and reversal of aerosol LTD4–induced changes in guinea pig pulmonary mechanics by Wy–48252, an orally active LTD4/E4 receptor antagonist. Hand JM, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):78–82

Effects of combined receptor antagonists of leukotriene D4 (LTD4) and platelet–activating factor (PAF) on rhesus airway responses to LTD4, PAF and antigen. Patterson R, et al. **Int Arch Allergy Appl Immunol** 1989;88(4):462–70

Effect of the oral leukotriene D4 antagonist LY171883 on inhaled and intradermal challenge with antigen and leukotriene D4 in atopic subjects. Fuller RW, et al. **J Allergy Clin Immunol** 1989 May;83(5):939–44

Hydroxyacetophenone–derived antagonists of the peptidoleukotrienes. Brown FJ, et al. **J Med Chem** 1989 Apr;32(4):807–26

N–[(arylmethoxy)phenyl] and N–[(arylmethoxy)naphthyl] sulfonamides: potent orally active leukotriene D4 antagonists of novel structure. Musser JH, et al. **J Med Chem** 1989 Jun;32(6):1176–83

Antagonism of leukotriene C4, leukotriene D4 and leukotriene E4 vasoconstrictor responses in the conscious rat with the peptidoleukotriene receptor antagonist SK&F 104353: evidence for leukotriene D4 receptor heterogeneity. Smith EF 3d, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):805–11

The bronchopulmonary pharmacology of SK&F 104353 in anesthetized guinea pigs: demonstration of potent and selective antagonism of responses to peptidoleukotrienes. Torphy TJ, et al. **J Pharmacol Exp Ther** 1989 May; 249(2):430–7

Antagonism of peptidoleukotrienes and inhibition of systemic anaphylaxis by RG 12525 in guinea pigs. Van Inwegen RG, et al. **Life Sci** 1989;44(12):799–807

Leukotriene antagonists attenuate thromboxane–inducible pulmonary hypertension. Soifer SJ, et al. **Pediatr Res** 1989 Aug;26(2):83–7

Lipoxin A4 antagonizes cellular and in vivo actions of leukotriene D4 in rat glomerular mesangial cells: evidence for competition at a common receptor. Badr KF, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3438–42

Selective antagonism of peptidoleukotriene responses does not reduce myocardial damage or neutrophil accumulation following coronary artery occlusion with reperfusion. Egan JW, et al. **Prostaglandins** 1989 May;37(5):597–613

Inhibitory effects of a lipoxygenase inhibitor nordihydroguaiaretic acid on antagonism of leukotriene C4–induced contractions of isolated guinea–pig trachea. Shikada K, et al. **Prostaglandins** 1988 Oct;36(4):533–46

U19052 (ICIAm): a novel leukotriene analog which antagonizes LTC4, LTD4, and LTE4. Snyder DW, et al. **Prostaglandins** 1988 Jun;35(6):903–15

The effects of lipoxygenase inhibitor and peptidoleukotriene antagonist on myocardial injury in a canine coronary occlusion–reperfusion model. Toki Y, et al. **Prostaglandins** 1988 Apr;35(4):555–71

Wy–48,252 (1,1,1–trifluoro–N–[3–(2–quinolinylmethoxy)= phenyl]methane sulfonamide) an orally active leukotriene D4 antagonist: pharmacological characterization in vitro and in vivo in the guinea pig. Hand JM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Aug; 37(2):97–106

Thyroid and liver trophic changes in rats secondary to liver microsomal enzyme induction caused by an experimental leukotriene antagonist (L–649,923). Sanders JE, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):378–87

[Effects of AA–673 on antigen–induced histamine release fr... leukocytes in patients with allergic rhinitis] Takenaka H, et al. **Arerugi** 1988 Nov;37(11):1094–100 (Eng. Abstr.) **(Jpn)**

[Azelastine inhibits bronchoconstriction induced by histamine and leukotriene C4] Tomooka M, et al. **Arerugi** 1988 Apr; 37(4):213–7 (Eng. Abstr.) **(Jpn)**

[Intraocular tissue accumulation during and after consecutive instillation of 1.0% AA–673 anti–allergic agent ophthalmic solution for 21 days in rabbit eyes] Ogawa T, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jul;92(7):1190–5 (Eng. Abstr.) **(Jpn)**

[Soy lipoxygenase as the object for the primary testing of potential inhibitors of leukotriene biosynthesis] Lototskaia LS, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):59–62 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Increased leukotriene C4 production in chronic myelogenous leukemia. Stenke L, et al. **Acta Oncol** 1988;27(6b):803–5

Involvement of peptidoleukotrienes in antigen–dependent thromboxane (TX) synthesis in IgG1–sensitized guinea pig lungs. Cheng JB, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:187–90

Synthesis of leukotrienes C4, D4, E4 and 20–carboxy–B4 by the isolated perfused kidney. Merab JP, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:221–4

Biosynthesis of cysteinyl–leukotrienes by human brain tissue in vitro. Simmet T, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:402–6

The cell biology and biochemistry of leukotriene C4 biosynthesis. Soberman RJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:21–5 (24 ref.)

Tolfenamic acid inhibits leukotriene synthesis in human granulocytes. Alanko J, et al. **Agents Actions** 1989 Jan; 26(1–2):254–5

Leukotriene C4 formation by purified human eosinophils can be induced by arachidonic acid in the absence of calcium–ionophore A23187. Kok PT, et al. **Agents Actions** 1989 Jan;26(1–2):96–8

Orally administered tolfenamic acid inhibits leukotriene synthesis in isolated human peripheral polymorphonuclear leukocytes. Moilanen E, et al. **Agents Actions** 1989 Aug; 28(1–2):83–8

Leukotriene C4 synthesis catalyzed by Dirofilaria immitis glutathione S–transferase. Weller PF, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):171–5

Heterogeneity of leukotriene C4 production by eosinophils from asthmatic and from normal subjects. Hodges MK, et al. **Am Rev Respir Dis** 1988 Oct;138(4):799–804

Formation of cysteinyl–leukotrienes by human brain tissue. Simmet T, et al. **Brain Res** 1988 Jul 26;456(2):344–9

Novel transcellular interaction: conversion of granulocyte–derived leukotriene A4 to cysteinyl–containing leukotrienes by human platelets. Edenius C, et al. **Eur J Biochem** 1988 Dec 1;178(1):81–6

Structural and physicochemical requirements of endotoxins for the activation of arachidonic acid metabolism in mouse peritoneal macrophages in vitro. Lüderitz T, et al. **Eur J Biochem** 1989 Jan 15;179(1):11–6

Augmentation of leukotriene C4 production by gamma interferon in leukocytes challenged with an allergen. Saito H, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):286–93

Enzymes functional in the syntheses of leukotrienes and related compounds. Shimizu T. **Int J Biochem** 1988; 20(7):661–6 (51 ref.)

Analysis of compound 48/80–induced skin histamine release and leukotriene production in chronic urticaria. Brunet C, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):398–402

Leukotriene C4 generation from human eosinophils stimulated with IgG–Aspergillus fumigatus antigen immune complexes. Cromwell O, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):535–43

PMA–induced pulmonary edema: mechanisms of the vasoactive response. Johnson A. **J Appl Physiol** 1988 Nov; 65(5):2302–12

Evidence for coordinate, selective regulation of eicosanoid synthesis in platelet–derived growth factor–stimulated 3T3 fibroblasts and in HL–60 cells induced to differentiate into macrophages or neutrophils. Goerig M, et al. **J Biol Chem** 1988 Dec 25;263(36):19384–91

The identification of a distinct export step following the biosynthesis of leukotriene C4 by human eosinophils. Lam BK, et al. **J Biol Chem** 1989 Aug 5;264(22):12885–9

Leukotriene C4 production from human eosinophils in vitro. Role of eosinophil chemotactic factors on eosinophil activation. Tamura N, et al. **J Immunol** 1988 Dec 15; 141(12):4291–7

Regulation of eicosanoid biosynthesis in vitro and in vivo by the marine natural product manoalide: a potent inactivator of venom phospholipases. Mayer AM, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):871–8

Interleukin 1 stimulates production of LTC4 and other eicosanoids by macrophages. Censini S, et al. **Lymphokine Res** 1989 Summer;8(2):107–14

Early reversible induction of leukotriene synthesis in chicken myelomonocytic cells transformed by a temperature–sensitive mutant of avian leukemia virus E26. Habenicht AJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):921–4

Inhibition by 16,16–dimethyl PGE2 of ethanol–induced gastric mucosal damage and leukotriene B4 and C4 formation. Boughton–Smith NK, et al. **Prostaglandins** 1988 Jun;35(6):945–57

Sulfidopeptide–leukotrienes are major mediators of arachidonic acid–induced mouse ear edema. Inoue H, et al. **Prostaglandins** 1988 Nov;36(5):731–9

Biosynthesis of peptidyl leukotrienes and other lipoxygenase products by rat pancreatic islets. Comparison with macrophages and neutrophils. Morgan RO, et al. **Prostaglandins** 1988 Apr;35(4):609–23

Leukotriene generation and small airway smooth muscle responsiveness in human lung. de Jongste JC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):31–6

Metabolism of LTC4 to LTD4 and LTE4 in isolated guinea pig lung lobes. Kobayashi J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(3):155–7

Mediators and allergic inflammation of human airways. Miadonna A, et al. **Respiration** 1988;54 Suppl 1:78–83

[Study on productive activity of leukotrienes in peripheral neutrophils in patients with liver disease] Kawada N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug;85(8):1570 **(Jpn)**

[Release of peptide leukotrienes from rat Kupffer cells] Sakagami Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1269–72 (Eng. Abstr.) **(Jpn)**

[Brain tissue leukotrienes in cerebral ischemia and the effect of inhibitor of SRS–A release on postischemic cerebral edema] Mabe H, et al. **No To Shinkei** 1988 Jul;40(7):673–8 (Eng. Abstr.) **(Jpn)**

BLOOD

Regulation of polymorphonuclear leukocyte leukotriene synthesis by endothelial cell cyclooxygenase products. Feinmark SJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:255–8

Platelets and endothelial cells contribute to the production of LTC4 by transcellular metabolism with neutrophils. Maclouf J, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:259–62

Enhanced production of LTC4 in leukocytes from allergic asthmatic subjects. Wang SR, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:548–51

Generation of leukotrienes in guinea–pigs in vivo during antigen–induced bronchospasm. Katayama K, et al. **Agents Actions Suppl** 1988;23:129–33

Leukotrienes in human umbilical plasma at birth. Pasetto N, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):88–91

Basophil histamine release and leukotriene (LTB4–LTC4) production in cluster headache. Martelletti P, et al. **Headache** 1989 Jan;29(1):46–8

Detection of leukotrienes B4, C4 and of their isomers in arterial, mixed venous blood and bronchoalveolar lavage fluid from ARDS patients. Antonelli M, et al. **Intensive Care Med** 1989;15(5):296–301

Plasma levels of leukotriene C4, B4, slow reacting substance of anaphylaxis in chronological phases of cerebrovascular disease. Katsura K, et al. **Prostaglandins** 1988 Nov; 36(5):655–65

The biotransformation in vitro of cysteinyl leukotrienes in blood of normal and asthmatic subjects. Zakrzewski JT, et al. **Prostaglandins** 1989 Apr;37(4):425–44

Assessment of plasma leukotriene and prostaglandin levels during adjuvant arthritis and kaolin–induced paw oedema in rats. Melli M. **Prostaglandins Leukot Essent Fatty Acids** 1988 Sep; 33(3):173–8

Clotting of whole human blood induces cysteinyl–leukotriene formation. Simmet T, et al. **Thromb Res** 1989 Jun 1; 54(5):423–33

ISOLATION & PURIFICATION

Synthesis and structural identification of four dihydroxy acids and 11,12–leukotriene C4 derived from 11,12–leukotriene A4. Kitamura S, et al. **Eur J Biochem** 1988 Oct 1; 176(3):725–31

METABOLISM

Molecular diversity of human leukocyte receptors. Koo CH, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989;19:191–4

Co–expression of leukotriene B4 and leukotriene D4 receptors on human monocytic leukemia U–937 cells. Sarau HM, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:180–6

Leukotriene D4 binding and signal transduction in rat glomerular mesangial cells. Badr KF, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):F280–7

Identification and transmembrane signaling of leukotriene D4 receptors in human mesangial cells. Simonson MS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C771–80

Leukotriene C4 and B4 in bronchoalveolar lavage fluid during biphasic allergic bronchoconstriction in sheep. Okayama H, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):725–31

Prostaglandin E2, leukotriene C4, and platelet–activating factor receptor sites in the brain. Binding parameters and pharmacological studies. Dray F, et al. **Ann N Y Acad Sci** 1989;559:100–11 (57 ref.)

Release of leukotriene C4 from human monocytes: defects in patients with systemic lupus erythematosus. Yamane K, et al. **Arerugi** 1988 May;37(5):301–8

Direct chemical ionization mass spectrometry of underivatized arachidonic acid metabolites: application to leukotriene biosynthesis. Gut J, et al. **Basic Life Sci** 1988; 49:185–9

Uptake, production and metabolism of cysteinyl leukotrienes in the isolated perfused rat liver. Inhibition of leukotriene uptake by cyclosporine. Hagmann W, et al. **Biochem J** 1989 Jul 15;261(2):611–6

Leukotriene C4 metabolism during its action on glucose and lactate balance and flow in perfused rat liver. Iwai M, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1131–6

The presence of leukotriene C4–binding sites in bovine corpora lutea of pregnancy. Chegini N, et al. **Biol Reprod** 1988 Nov;39(4):929–35

Bioconversion of leukotriene C4 by the bullfrog heart.

Herman RP, et al. **Biomed Biochim Acta** 1988; 47(10–11):S174–7

Differential release of histamine and eicosanoids from human skin mast cells activated by IgE-dependent and non-immunological stimuli. Benyon RC, et al.
Br J Pharmacol 1989 Jul;97(3):898–904

Oleic acid–induced pulmonary injury in rats: potential role of sulfidopeptide leukotrienes. Ball HA, et al.
Circ Shock 1988 Sep;26(1):59–70

Increased levels of leukotriene C4 in retinal pigment epithelium are correlated with early events in photoreceptor shedding in Xenopus laevis. Birkle DL, et al. **Curr Eye Res** 1989 Jun;8(6):557–61

Metabolism of cysteinyl leukotrienes in non-recirculating rat liver perfusion. Hepatocyte heterogeneity in uptake and biliary excretion. Wettstein M, et al. **Eur J Biochem** 1989 Apr 15;181(1):115–24

Brain leukotriene C4 binding sites are S-alkylglutathione binding sites. Goffinet AM, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):99–101

A comparison of the free radical scavenging activity of leukotrienes and prostaglandins. Chopra M, et al.
Free Radic Res Commun 1988;5(2):95–9

IgE-mediated release of rat mast cell protease II, beta-hexosaminidase and leukotriene C4 from cultured bone marrow-derived rat mast cells. MacDonald AJ, et al. **Immunology** 1989 Jul;67(3):414–8

Leukotriene generation and metabolism in isolated human lung macrophages. Schönfeld W, et al. **Immunology** 1988 Dec;65(4):529–36

Oxatomide inhibits the release of chemical mediators from human lung tissues and from granulocytes. Manabe H, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):91–7

Endotoxin-induced lung injury in rats: role of eicosanoids. Chang SW, et al. **J Appl Physiol** 1989 May;66(5):2407–18

Metabolism of leukotriene C4, D4 and E4 in allergic inflammation in rats. Ohuchi K, et al.
J Clin Lab Immunol 1988 Dec;27(4):171–8

Antiallergy agents. 1. Substituted 1,8-naphthyridin-2(1H)-ones as inhibitors of SRS-A release. Sherlock MH, et al. **J Med Chem** 1988 Nov; 31(11):2108–21

Kinetic and pharmacologic analysis of [3H]leukotriene E4 binding to receptors on guinea pig lung membranes: evidence for selective binding to a subset of leukotriene D4 receptors. Aharony D, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):581–8

Subcellular localization of leukotriene D4 receptors in sheep tracheal smooth muscle. Mong S, et al. **Mol Pharmacol** 1988 Oct;34(4):590–6

Binding of radiolabeled high affinity antagonist to leukotriene D4 receptor in guinea pig lung membranes: interconversion of agonist–receptor binding affinity states. O'Sullivan BP, et al. **Mol Pharmacol** 1989 Jun;35(6):795–802

The PAF-acether receptor antagonist BN-52021 inhibits mediator release during guinea-pig active lung anaphylaxis. Berti F, et al. **Pharmacol Res Commun** 1988 Dec; 20(12):1047–59

Phorbol 12-myristate 13-acetate inhibits binding of leukotriene B4 and platelet-activating factor and the responses they induce in neutrophils: site of action. Yamazaki M, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5791–4

The effects of platelet-activating factor on flow rate and eicosanoid release in the isolated perfused rat gastric vascular bed. Dembinska-Kiec A, et al. **Prostaglandins** 1989 Jan;37(1):69–91

Metabolism of leukotriene D4 by rat peritoneal mast cells. Koyano H, et al. **Prostaglandins** 1989 Aug;38(2):215–26

In vivo formation of omega-oxidized metabolites of leukotriene C4 in the rat. Orning L, et al.
Prostaglandins 1988 Apr;35(4):493–501

An LTC4 binding site in gastric mucosa is shared with glutathione. Pendley CE 2d, et al. **Prostaglandins** 1989 Aug; 38(2):237–50

Metabolism and excretion of exogenous [3H]-LTC4 in primates. Tagari P, et al. **Prostaglandins** 1989 Jun; 37(6):629–40

Metabolism of leukotriene C4 in the anesthetized guinea pig. Foster A, et al.
Prostaglandins Leukot Essent Fatty Acids 1989 May; 36(2):93–6

Metabolism of LTC4 to LTD4 and LTE4 in isolated guinea pig lung lobes. Kobayashi J, et al.
Prostaglandins Leukot Essent Fatty Acids 1989 Jun; 36(3):155–7

Slow-reacting substance of anaphylaxis (SRS-A) activity in the synovial fluids of rabbits with antigen-induced arthritis. Brum-Fernandes AJ, et al.
Res Commun Chem Pathol Pharmacol 1989 Mar;63(3):471–4

Antigen-induced arthritis in rabbits: a suitable experimental model for the study of arachidonic acid metabolites in articular inflammatory processes. de Brum-Fernandes AJ, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 May-Jun; 43(3):142–5

[Co-operative effect of tranilast and nifedipine on inhibition of the release of SRS-A from the guinea-pig lung] Chen DQ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Apr; 11(2):96–7, 128 (Eng. Abstr.) **(Chi)**

[A study of chemical mediator release in experimental nasal allergy of guinea pigs] Shirasaki H, et al.
Nippon Jibiinkoka Gakkai Kaiho 1988 Jul;91(7):1049–53 (Eng. Abstr.) **(Jpn)**

[Detection of leukotrienes in rat liver tissue] Kawada N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct; 85(10):2193–6 (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

Distribution and metabolism of leukotriene C4 after cisternal injection in guinea pigs. Juhn SK, et al.
Prostaglandins Leukot Essent Fatty Acids 1989 Jun; 36(3):135–41

PHARMACOLOGY

Effects of bradykinin and leukotrienes B4 and D4 on the bovine bronchial artery in vitro: role of the endothelium. Tracey WR, et al. **Agents Actions** 1988 Aug; 25(1–2):195–204

Comparison of the vasoactive effects of leukotrienes with thromboxane mimic in the perfused human placenta. Thorp JA, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1376–80

Leukotriene D4-induced proliferation of glomerular epithelial cells: PKC- and Na+-H+ exchanger-mediated response. Baud L, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C232–9

Effect of leukotriene D4 on blood flow to cerebrum and choroid plexus. Mayhan WG, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H834–8

Leukotriene D4 inhibits atrial natriuretic factor-dependent cGMP production in rat glomerulus. Terada Y, et al.
Am J Physiol 1989 Jan;256(1 Pt 2):F95–9

Effect of leukotriene C4 on electromechanical activity and Ca2+ uptake in taenia coli. Zschauer A, et al.
Am J Physiol 1988 Oct;255(4 Pt 1):C433–41

The effect of inhaled budesonide on the maximal degree of airway narrowing to leukotriene D4 and methacholine in normal subjects in vivo. Bel EH, et al.
Am Rev Respir Dis 1989 Feb;139(2):427–31

Localization of the site of the bronchoconstrictor effects of leukotriene C4 compared with that of histamine in asthmatic subjects. Pichurko BM, et al.
Am Rev Respir Dis 1989 Aug;140(2):334–9

Active immunization induces lung hyperresponsiveness in the guinea pig. Pharmacologic modulation and triggering role of the booster injection. Pretolani M, et al.
Am Rev Respir Dis 1988 Dec;138(6):1572–8

Reversal of leukotriene D4- and leukotriene E4-induced airway constriction in the guinea pig. Silbaugh SA, et al.
Am Rev Respir Dis 1989 Sep;140(3):610–4

Leukotriene C4 stimulates angiogenesis in bovine carotid artery endothelial cells in vitro. Kanayasu T, et al.
Biochem Biophys Res Commun 1989 Mar 15;159(2):572–8

Phorbol 12-myristate 13-acetate inhibition of leukotriene D4-induced signal transduction was rapidly reversed by staurosporine. Winkler JD, et al.
Biochem Biophys Res Commun 1988 Dec 15;157(2):521–9

Cardiovascular effects of leukotrienes in the bullfrog. Herman CA, et al. **Biomed Biochim Acta** 1988;47(10–11):S178–81

LTD4-induced bronchoconstriction in patients with asthma: lack of a vagal reflex. Ayala LE, et al.
Br J Clin Pharmacol 1988 Jul;26(1):110–2

Effects of REV 5901, a 5-lipoxygenase inhibitor and leukotriene antagonist, on pulmonary responses to platelet activating factor in the guinea-pig. Anderson G, et al.
Br J Pharmacol 1988 Aug;94(4):1115–22

Effects of leukotriene D4 on the mechanical and electrical properties of guinea-pig isolated trachealis. McCaig DJ, et al. **Br J Pharmacol** 1988 Jul;94(3):729–36

A fetal-instrumented model to study age-specific responses to leukotriene D4 and prostaglandin D2 in unsedated newborn lambs. Coe JY, et al.
Can J Physiol Pharmacol 1989 Jun;67(6):587–93

The action and metabolism of peptide leukotrienes in the isolated bullfrog lung. Heller RS, et al.
Can J Physiol Pharmacol 1989 Apr;67(4):309–14

Leukotriene C4 action and metabolism in the isolated perfused bullfrog heart. Herman RP, et al.
Can J Physiol Pharmacol 1988 Aug;66(8):980–4

Leukotriene and anti-IgE induced contractions of human isolated trachea: studies with leukotriene receptor antagonists and a novel 5-lipoxygenase inhibitor. Jones TR, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):762–8

Influence of platelet-activating factor on leukotriene D4-induced contractions of the guinea pig parenchymal strip. Yaghi A, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):315–21

Prostaglandin E2 enhances, and leukotriene C4 inhibits, interleukin-1 inhibition of WEHI-3B cell growth. Elliott GR, et al. **Cancer Immunol Immunother** 1989;28(1):74–6

Inhibition of U937 eicosanoid and DNA synthesis by 5,8,11,14-eicosatetraynoic acid, an inhibitor of arachidonic acid metabolism and its partial reversal by leukotriene C4. Ondrey F, et al. **Cancer Res** 1989 Mar 1;49(5):1138–42

Involvement of thromboxane and leukotriene in arachidonate induced coronary constriction in diabetic rats. Takiguchi Y, et al. **Diabetologia** 1989 Jun;32(6):337–41

Mechanism of action of cysteinyl leukotrienes on glucose and lactate balance and on flow in perfused rat liver. Comparison with the effects of sympathetic nerve stimulation and noradrenaline. Iwai M, et al.
Eur J Biochem 1989 Mar 15;180(2):273–81

Pharmacologic responsiveness of rat parenchymal strips, bronchi, and bronchioles. Szarek JL, et al.
Exp Lung Res 1988;14(5):575–85

Leukotriene C4 inhibits ATP-dependent transport of glutathione S-conjugate across rat heart sarcolemma. Implication for leukotriene C4 translocation mediated by glutathione S-conjugate carrier. Ishikawa T. **FEBS Lett** 1989 Mar 27;246(1–2):177–80

Hemodynamic and metabolic responses to leukotriene C4 in isolated perfused rat liver. Krell H, et al. **Hepatology** 1989 Sep;10(3):300–5

Effect of leukotrienes B4, C4, and D4 on segmental pulmonary vascular pressures. Albert RK, et al.
J Appl Physiol 1989 Jan;66(1):458–64

Differential responses of tissue viscance and collateral resistance to histamine and leukotriene C4. Ludwig MS, et al. **J Appl Physiol** 1988 Sep;65(3):1424–9

Electromechanical coupling of ferret airway smooth muscle in response to leukotriene C4. Murlas CG, et al.
J Appl Physiol 1989 Jun;66(6):2533–8

Interaction of inhaled LTC4 with histamine and PGD2 on airway caliber in asthma. Phillips GD, et al.
J Appl Physiol 1989 Jan;66(1):304–12

Importance of vasoconstriction in lipid mediator-induced pulmonary edema. Sakai A, et al. **J Appl Physiol** 1989 Jun; 66(6):2667–74

L-649,923: an antagonist of cardiac and vascular leukotriene D4 receptors. Siren AL, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):210–7

Leukotriene-D4 induced cell shrinkage in Ehrlich ascites tumor cells. Lambert IH. **J Membr Biol** 1989 May; 108(2):165–76

Leukotriene D4 potentiates the contractile effects of epinephrine and norepinephrine on rat aortic rings. Lawson DL, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):953–7

Leukotriene D4-induced homologous desensitization in basal and differentiated U-937 cells: characterization with the partial agonist leukotriene E4 and assessment of receptor reserve. Winkler JD, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):54–62

Renal effects of leukotrienes C4 and D4 in anesthetized dogs. Fukui K, et al. **Jpn J Pharmacol** 1988 Jul;47(3):293–300

Electromechanical effects of leukotriene D4 on ferret tracheal muscle and its muscarinic responsiveness. Lee HK, et al. **Lung** 1989;167(3):173–85

Antagonism of leukotriene receptors and administration of a 5-lipoxygenase inhibitor do not affect hypoxic vasoconstriction. Thomas HM 3d, et al. **Lung** 1989; 167(3):187–98

Microcirculatory effects of leukotrienes, LTC4 and LTD4, in rat cremaster muscle. Messina EJ, et al.
Microcirc Endothelium Lymphatics 1988 Oct;4(5):355–76

The effect of leukotriene D4 on pulmonary and systemic circulation in conscious newborn piglets [published erratum appears in Prostaglandins 1988 Nov;36(5):747] Coe JY, et al. **Prostaglandins** 1988 Jul;36(1):31–47

Specific enhancement of LTD4-induced contractions of isolated guinea pig trachea by 5-hydroxyeicosatetraenoic acid (5-HETE). Malo PE. **Prostaglandins** 1989 May; 37(5):539–51

Leukotrienes cause mesenteric vasoconstriction and hemoconcentration in rats without activating thromboxane receptors. Schumacher WA, et al. **Prostaglandins** 1989 Sep; 38(3):335–44

The influences of leukotriene C4 on the metabolism of labelled glucose in uteri isolated from ovariectomized and from ovariectomized-estrogenized rats. Effects of indomethacin. Gonzalez ET, et al.
Prostaglandins Leukot Essent Fatty Acids 1989 May; 36(2):113–7

Effects of leukotriene D4, the antagonist L-649-923, and arachidonic acid on duodenal bicarbonate secretion in the rat in vivo. Knutson L, et al. **Scand J Gastroenterol** 1988 Dec;23(10):1225–31

[Adherence of mononuclear leukocytes in multiple sclerosis: the effect of the calcium ionophore A 23187 and leukotrienes B4 and C4] Mayer M.
Cesk Neurol Neurochir 1989 Mar;52(2):69–74 (Eng. Abstr.) **(Cze)**

PHYSIOLOGY

Leukotriene D4 (LTD4)/leukotriene B4 (LTB4) interactions in the pathophysiology of experimental glomerulonephritis. Badr KF.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:233–6

Glucocorticoid inhibition of Ca2+ and phospholipid-dependent enzymes regulating leukotriene C4 formation and action in allergic and inflammatory responses. Zor U, et al.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:519–23

Prostaglandin E2 and leukotrienE C4 modulate interleukin-1 inhibition of WEHI-3B tumor cell growth in vitro. Elliott GR, et al. **Agents Actions** 1989 Jan;26(1–2):165–6

A possible role for leukotrienes in the regulation of glomerular haemodynamics in the dog. Heller J, et al.
Pflugers Arch 1988 Jul;412(1–2):155–63

[Features of the effect of leukotriene LTC4 and the blocker of its biosynthesis BW755C on the contractile capability of smooth muscles and the functioning of potential-dependent calcium channels of the nerve cell] Skryma RN, et al. **Neirofiziologiia** 1989;21(1):24–31 (Eng. Abstr.) **(Rus)**

[Action of the leukotriene LTC4 on the calcium channels of the somatic membrane of the nerve cell and tone of smooth muscle organs] Skryma RN, et al. **Neirofiziologiia** 1989;21(2):262–4 (Eng. Abstr.) **(Rus)**

SECRETION

Profile and sites of eicosanoid release in experimental necrotizing enterocolitis. Miller MJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:556–9

Role of cysteinyl leukotrienes in gastric mucosal damage in rats. Peskar BM. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:552–5

Release of peptide leukotrienes from rat Kupffer cells. Sakagami Y, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):217–21

Inhibition by adenosine of histamine and leukotriene release from human basophils. Peachell PT, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1717–25

Inhibition of leukotriene release in anaphylactic guinea–pig hearts by a 5–lipoxygenase inhibitor, CGS 8515. Yaacob HB, et al. **Br J Pharmacol** 1988 Dec;95(4):1322–8

Alloimmune B–lymphocytes modify the myocardium contractility–inducing release of SRS–A. Genaro AM, et al. **Int J Immunopharmacol** 1988;10(5):563–8

IgG–, IgA–, and IgE–induced release of leukotriene C4 by monocytes isolated from patients with atopic dermatitis. Ferreri NR, et al. **J Allergy Clin Immunol** 1988 Oct; 82(4):556–67

Leukotriene C4 release in upper respiratory mucosa during natural exposure to ragweed in ragweed–sensitive children. Volovitz B, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):414–8

The pharmacologic modulation of mediator release from human basophils. Warner JA, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):432–8

Interleukin 3–dependent mediator release in basophils triggered by C5a. Kurimoto Y, et al. **J Exp Med** 1989 Aug 1;170(2):467–79

Effect of muscarinic receptor stimulation on release of cysteinyl–leukotrienes and thromboxane B2 from anaphylactic guinea–pig hearts. Wittmann G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):577–81

The release of leukotrienes in the respiratory tract during infection with respiratory syncytial virus: role in obstructive airway disease. Volovitz B, et al. **Pediatr Res** 1988 Oct;24(4):504–7

[Inhibition of chemical mediator release from human leukocytes and lung fragments by TBX] Kawashima T, et al. **Arerugi** 1988 Jul;37(7):438–47 (Eng. Abstr.) **(Jpn)**

URINE

Measurement of urinary leukotrienes by reversed–phase liquid chromatography and radioimmunoassay. Tagari P, et al. **Clin Chem** 1989 Mar;35(3):388–91

Analysis of cysteinyl leukotrienes in human urine: enhanced excretion in patients with liver cirrhosis and hepatorenal syndrome. Huber M, et al. **Eur J Clin Invest** 1989 Feb; 19(1):53–60

SRV see **SIV**

SSPE VIRUS

GENETICS

Long–term effect of elevated temperatures on SSPE virus expression in persistently infected rat glial cells. Ogura H, et al. **Arch Virol** 1989;104(3–4):259–69

Matrix protein of cell–associated subacute sclerosing panencephalitis viruses. Enami M, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2191–6

Structural defect linked to nonrandom mutations in the matrix gene of biken strain subacute sclerosing panencephalitis virus defined by cDNA cloning and expression of chimeric genes. Ayata M, et al. **J Virol** 1989 Mar;63(3):1162–73

[Molecular mechanisms of persistent infection of subacute sclerosing panencephalitis (SSPE) viruses] Yoshikawa Y. **Ulrasu** 1988 Jun;38(1):23–57 (93 ref.) **(Jpn)**

PHYSIOLOGY

Coupling of viral membrane proteins to phosphatidylinositide signalling system. Weinmann–Dorsch C, et al. **FEBS Lett** 1989 Apr 24;247(2):185–8

STA–MCA BYPASS see **CEREBRAL REVASCULARIZATION**

STABILIZING AGENTS see **EXCIPIENTS**

STABLE FACTOR see **FACTOR VII**

STABLE FLY see **MUSCIDAE**

STACHYBOTRYS see under **HYPHOMYCETES**

STAFF DEVELOPMENT see under **PERSONNEL MANAGEMENT**

STAGGERER MICE see **MICE, NEUROLOGIC MUTANTS**

STAGING, NEOPLASM see **NEOPLASM STAGING**

STAINLESS STEEL

MR imaging in patients with intracranial aneurysm clips. Becker RL, et al. **AJNR** 1988 Sep;9(5):885–9

Hemilaryngeal reconstruction using an axial island cheek flap supported by Marlex and stainless steel wire mesh. Winek TG, et al. **Am J Surg** 1988 Oct;156(4):235–7

Role of corrosion in Harrington and Luque rods failure. Prikryl M, et al. **Biomaterials** 1989 Mar;10(2):109–17

Torsional moment to failure for carbon fibre polysulphone expandable rivets as compared with stainless steel screws for carbon fibre–reinforced epoxy fracture plate fixation. Sell PJ, et al. **Biomaterials** 1989 Apr;10(3):182–4

Antibiotic–metal interactions in saline medium. von Fraunhofer JA, et al. **Biomaterials** 1989 Mar;10(2):136–8

Coronary artery bypass grafts: new universal markers. Hoffman RB, et al. **Cathet Cardiovasc Diagn** 1989 Mar; 16(3):207–8

Reduction of stress shielding beneath a bone plate by use of a polymeric underplate. An experimental study in dogs. Jasmine MS, et al. **Clin Orthop** 1989 Sep;(246):293–9

Stainless steel as suturing material in human– and rabbit corneas: a SEM–study. Jongebloed WL, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):145–54

Clinical use of a nonferromagnetic needle for magnetic resonance–guided biopsy. Mueller PR, et al. **Gastrointest Radiol** 1989 Winter;14(1):61–4

Stainless steel mesh supports high density cell growth and production of recombinant müllerian inhibiting substances. Epstein J, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):213–6

Biomechanics of curved surgical needle bending. Abidin MR, et al. **J Biomed Mater Res** 1989 Apr;23(A1 Suppl):129–43

Duplex stainless steels for osteosynthesis devices. Cigada A, et al. **J Biomed Mater Res** 1989 Sep;23(9):1087–95

Periodontal health at first permanent molars adjacent to primary molar stainless steel crowns. Guelmann M, et al. **J Clin Periodontol** 1988 Oct;15(9):531–3

Scanning electron microscope evaluation of wear of stainless steel and high carbon steel curettes. Tal H, et al. **J Periodontol** 1989 Jun;60(6):320–4

A new treatment for urethral strictures: a permanently implanted urethral stent. Milroy EJ, et al. **J Urol** 1989 May; 141(5):1120–2

Self–expanding stainless steel biliary stents. Coons HG. **Radiology** 1989 Mar;170(3 Pt 2):979–83

The reaction of bone to titanium, stainless steel and chrome/cobalt implants. Linder L. **Rev Chir Orthop** 1988; 74 Suppl 2:351–2

Implantable drug delivery systems in computed tomography and magnetic resonance imaging—a comparison between titanium and stainless steel. Krog M, et al. **Ups J Med Sci** 1989;94(2):153–60

[Treatment of acute iliac artery occlusion by catheter lysis, catheter dilatation and implantation of a new kind of metallic vascular endoprosthesis] Richter GM, et al. **Chirurg** 1989 May;60(5):346–51 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Deaths and tumors among workers grinding stainless steel. Svensson BG, et al. **Am J Ind Med** 1989;15(1):51–9

[A decrease in the level of pathological states occurring from the use of dentures made of stainless steel or cobalt–chromium alloy (letter)] Napadov MA, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):91–2 **(Rus)**

RADIATION EFFECTS

Effects of radiotherapy on mandibular reconstruction plates. Castillo MH, et al. **Am J Surg** 1988 Oct;156(4):261–3

STAINS AND STAINING

see related
DYES

Immunostaining of mesothelial cells: no reactivity with HLE–1 [letter] Guzman J, et al. **Acta Cytol** 1989 Jan–Feb; 33(1):136–7

Sudan black B positivity in acute lymphoblastic leukemia. Charak BS, et al. **Acta Haematol (Basel)** 1988;80(4):199–202

The mechanism accounted for the silver staining "fast techniques" development and its histochemical meaning. II. The binding between silver and ferric ion accounted for the silver staining development. de Lucca O, et al. **Acta Histochem (Jena)** 1988;84(1):15–22

Application of Grimelius argyrophil staining to the study of tumour ultrastructure. III. Effects of osmium tetroxide. Soranzo L, et al. **Acta Histochem (Jena)** 1989;86(1):1–14

Permanent metachromatic effect of 1,9–dimethyl–methylene blue on acidic mucopolysaccharides of mastocytes. Pokorny E, et al. **Acta Morphol Hung** 1988;36(3–4):143–6

Senile plaque–like structures: observation of a probably unknown type of senile plaque by periodic–acid methenamine silver (PAM) electron microscopy. Ikeda K, et al. **Acta Neuropathol (Berl)** 1989;78(2):137–42

In vivo and in vitro staining of acidophilic neurons as indicative of cell death following kainic acid–induced lesions in rat brain. Lees GJ. **Acta Neuropathol (Berl)** 1989; 77(5):519–24

Tumor markers for ovarian cancer. A comparative immunohistochemical and immunocytochemical study of two commercial monoclonal antibodies (OV632 and OC125). Koelma IA, et al. **Am J Clin Pathol** 1988 Oct; 90(4):391–6

Rapid diagnosis of Campylobacter pylori by Gram's stain. Montgomery EA, et al. **Am J Clin Pathol** 1988 Nov; 90(5):606–9

Comparison of HMB–45 monoclonal antibody and S–100 protein in the immunohistochemical diagnosis of melanoma. Ordóñez NG, et al. **Am J Clin Pathol** 1988 Oct;90(4):385–90

Differential nucleolus organizer activity in normal and leukemic bone marrow. Arden KC, et al. **Am J Hematol** 1989 Mar;30(3):164–73

Preparation of colloidal gold for staining proteins electrotransferred onto nitrocellulose membranes. Yamaguchi K, et al. **Anal Biochem** 1988 Jul;172(1):104–7

Quantitative rose bengal staining technique for external ocular diseases. Laroche RR, et al. **Ann Ophthalmol** 1988 Jul;20(7):274–6

Vital fluorescent staining of human endothelial cells, fibroblasts, and monocytes: assessment of surface morphology. Crawford JM, et al. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S100–1

Complete staining of human spermatozoa and immature germ cells combined with phase contrast microscopy. Michael AY, et al. **Arch Androl** 1987;19(3):217–21

Alkaline erythrosine B staining of sperm heads. Its possible significance and potential use. Benitez Bribiesca L, et al. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):275–82

Interlaboratory variability of immunohistochemical stains. Results of the cell markers survey of the College of American Pathologists. Wold LE, et al. **Arch Pathol Lab Med** 1989 Jun;113(6):680–3

Rapid methenamine silver stain [letter] Yu PK, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):111

Neutrophil granulation stained with May Grunwald Giemsa or pure Azure B–eosin Y quantified by image analysis. Bins M, et al. **Blut** 1989 Feb;58(2):79–82

Localization of the microelectrode tip combining a rapid procedure method and marking with pontamine sky blue. Sánchez–Alvarez M, et al. **Bol Estud Med Biol** 1988; 36(1–4):55–9

Polichromic staining of five distinct cellular types in human and rat pituitaries. Villarreal ML, et al. **Bol Estud Med Biol** 1987 Jul–Dec;35(3–4):231–8

An assessment of the value of Ag NOR staining in the identification of dysplastic and other borderline melanocytic naevi. MacKie RM, et al. **Br J Dermatol** 1989 Apr;120(4):511–6

Membrane heterogeneity in sensory receptors of rat vibrissae: Merkel receptors differ from other nerve endings. Byers MR, et al. **Brain Res** 1988 Oct 4;461(2):397–402

Identification of the substantia nigra pars lateralis in the macaque using cytochrome oxidase and fiber stains. Ma TP. **Brain Res** 1989 Feb 20;480(1–2):305–11

A heavy metal marker of the developing striatal mosaic. Vincent SR, et al. **Brain Res Dev Brain Res** 1989 Jan 1; 45(1):155–9

The iodine–staining properties and fine structure of some mammalian and invertebrate glycogens. Craig SA, et al. **Carbohydr Res** 1988 Aug 15;179:327–40

Application of a silver–binding assay to the determination of protein in cerebrospinal fluid. Krystal G, et al. **Clin Chem** 1989 May;35(5):860–4

Discriminating between damaged and intact cells in fixed flow cytometric samples. Terstappen LW, et al. **Cytometry** 1988 Sep;9(5):477–84

Subdivision of S–phase by analysis of nuclear 5–bromodeoxyuridine staining patterns. van Dierendonck JH, et al. **Cytometry** 1989 Mar;10(2):143–50

Special stains in cytology: a technique using one half of a previously stained slide. Dhurandhar NR, et al. **Diagn Cytopathol** 1988;4(4):347–51

Demonstration and elimination of artifacts associated with gold staining of proteins on nitrocellulose membranes after separation by sodium dodecyl sulphate–polyacrylamide gel electrophoresis. Bath ML. **Electrophoresis** 1988 Mar; 9(3):148

Immunostaining of rocket immunoelectrophoresis precipitates too weak for identification following staining with Coomassie brilliant blue. Hansen SA. **Electrophoresis** 1988 Feb;9(2):101–2

Improved silver staining procedure for fast staining in PhastSystem Development Unit. I. Staining of sodium dodecyl sulfate gels. Heukeshoven J, et al. **Electrophoresis** 1988 Jan;9(1):28–32

Fast horizontal electrophoresis. II. Development of fast automated staining procedures using PhastSystem. Olsson I, et al. **Electrophoresis** 1988 Jan;9(1):22–7

Interference of the carbohydrate moiety in coomassie brilliant blue R–250 protein staining. Ouset M, et al. **Electrophoresis** 1989 Apr;10(4):271–3

Fast and sensitive protein staining with colloidal acid violet 17 following isoelectric focusing in carrier ampholyte generated and immobilized pH gradients. Patestos NP, et al. **Electrophoresis** 1988 Sep;9(9):488–96

Gram stain and culture of morning and 24 h sputum in the diagnosis of bacterial exacerbation of chronic bronchitis: a dogma disputed. Medici TC, et al. **Eur Respir J** 1988 Dec;1(10):923–8

Sudan stain of fecal fat: new insight into an old test. Khouri MR, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):421–7

About the usefulness of trap staining in monitoring the response to alpha interferon therapy in a case of hairy cell leukemia. Rosti A, et al. **Haematologica (Pavia)** 1988 Nov–Dec;73(6):485–8

A histochemical investigation of the mechanism of aldehyde Fuchsin staining of pancreatic B-cell granules. Cole LJ, et al. **Histochem J** 1988 Nov;20(11):635–41

An indirect method for quantitation of cellular zinc content of Timm-stained cerebellar samples by energy dispersive X-ray microanalysis. Farkas I, et al. **Histochemistry** 1988; 89(5):493–7

Staining kinetics in single cells. Part I. Influence of convective diffusion on the staining rate. Winzek C, et al. **Histochemistry** 1988;90(1):73–7

Staining kinetics in single cells. Part II. Diffusion processes inside the cell. Winzek C, et al. **Histochemistry** 1988; 90(1):79–83

The value of nucleolar organizer region staining in the differential diagnosis of borderline melanocytic lesions. Fallowfield ME, et al. **Histopathology** 1989 Mar; 14(3):299–304

A sensitive method for permanent silver staining of DNA in agarose gels. Datar RH, et al.
Indian J Biochem Biophys 1988 Aug;25(4):373–5

Detection of Mycoplasma pulmonis in arthritic joints of rats by indirect immunoperoxidase staining. Kohn DF, et al. **Infect Immun** 1989 Apr;57(4):1321–3

Drying and staining soft agar cultures of hemopoietic colonies [letter] Baines P. **Int J Cell Cloning** 1989 Mar; 7(2):136–7

Morphometric analysis of the corneal endothelium. Specular microscopy vs. alizarin red staining. Geroski DH, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):254–9

Use of Sedi-Stain for the diagnosis of elastosis perforans serpiginosa. Feldman SR, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1137–8

Langerhans cells with monoclonal antibody Lag [letter] McLelland J. **J Am Acad Dermatol** 1989 Apr;20(4):711

In-vivo staining of Aedes vigilax, Aedes aegypti and Culex annulirostris larvae with Giemsa and other vital dyes. Kay BH, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):141–5

Simple staining for heat-fixed brain sections after topographical pH analysis or autoradiographic studies. Parkinson NA, et al. **J Cereb Blood Flow Metab** 1988 Dec; 8(6):883–5

Granulocytic sarcoma: misleading immunohistological staining with MT1 and S100 protein antibodies. Elliott CJ, et al. **J Clin Pathol** 1989 Feb;42(2):188–90

Orcein-alcian blue staining: a new technique for demonstrating acid mucins in gastrointestinal epithelium. Singh R, et al. **J Clin Pathol** 1989 Aug;42(8):881–4

Immunohistochemical staining properties of amyloids with anti-keratin antibodies using formalin-fixed, paraffin-embedded sections. Yoneda K, et al.
J Cutan Pathol 1989 Jun;16(3):133–6

Ultrastructural and paraphenylene studies of degeneration in the primate visual system: degenerative remnants persist for much longer than expected. Johnson BM, et al.
J Electron Microsc Tech 1988 Feb;8(2):179–83

Silver enhancement of gold probes (5–40 nm): single and double labeling of antigenic sites on cell surfaces imaged with backscattered electrons. Namork E, et al.
J Electron Microsc Tech 1989 Feb;11(2):102–8

Usefulness of the stool Wright's stain in the emergency department. DuBois D, et al. **J Emerg Med** 1988 Nov–Dec; 6(6):483–6

Ethidium bromide- and propidium iodide-PTA staining of nucleic acids at the electron microscopic level. Biggiogera M, et al. **J Histochem Cytochem** 1989 Jul;37(7):1161–6

Indoxyl-tetranitro blue tetrazolium method for detection of alkaline phosphatase in immunohistochemistry. Brenan M, et al. **J Histochem Cytochem** 1989 Aug;37(8):1299–301

Fixatives and silver stainability of NOR proteins at the light microscopic level [letter] Derenzini M, et al.
J Histochem Cytochem 1988 Nov;36(11):1453–4

Label-fracture of cell surfaces by replica staining. Forsman CA, et al. **J Histochem Cytochem** 1988 Nov;36(11):1413–8

Synthesis of a more stable osmium ammine electron-dense DNA stain. Olins AL, et al. **J Histochem Cytochem** 1989 Mar;37(3):395–8

Lymphocyte subset analysis by flow cytometry. Comparison of three different staining techniques and effects of blood storage. Ashmore LM, et al. **J Immunol Methods** 1989 Mar 31;118(2):209–15

Evaluation of a fluorochrome assay for assessing the bactericidal activity of neutrophils in human phagocyte dysfunctions. Bellinati-Pires R, et al.
J Immunol Methods 1989 May 12;119(2):189–96

Re-examination and further development of a precise and rapid dye method for measuring cell growth/cell kill. Hansen MB, et al. **J Immunol Methods** 1989 May 12; 119(2):203–10

Comparison of antifading agents used in immunofluorescence. Krenik KD, et al.
J Immunol Methods 1989 Feb 8;117(1):91–7

Fluorescent staining for leukocyte chemotaxis. Eosinophil-specific fluorescence with aniline blue. McCrone EL, et al. **J Immunol Methods** 1988 Nov 10; 114(1–2):79–88

A blocking agent and a blocking step are not needed in ELISA, immunostaining dot-blots and western blots. Mohammad K, et al. **J Immunol Methods** 1989 Feb 8; 117(1):141–5

In situ immunocytochemical staining method for haemopoietic cells grown in vitro. Serke S.
J Immunol Methods 1988 Dec 9;115(2):187–93

In situ staining of bromodeoxyuridine positive cells in normal and neoplastic colony-forming units grown on plasma clots. Tazzari PL, et al. **J Immunol Methods** 1988 Oct 26; 113(2):215–9

Multiple immunoenzyme staining techniques. Use of fluoresceinated, biotinylated and unlabelled monoclonal antibodies. Van der Loos CM, et al.
J Immunol Methods 1989 Feb 8;117(1):45–52

Localization of lipoprotein unesterified cholesterol in nondenaturing gradient gels with filipin. Lefevre M.
J Lipid Res 1988 Jun;29(6):815–8

An investigation of the fixation and staining of lipids by a combination of malachite green or other triphenylmethane dyes with glutaraldehyde. Lawton JR. **J Microsc** 1989 Apr; 154 (Pt 1):83–92

Dynamics of the Golgi method: a time-lapse study of the early stages of impregnation in single sections. Spaček J.
J Neurocytol 1989 Feb;18(1):27–38

Selective silver impregnation of senile plaques: a method useful for computer imaging. Hedreen JC, et al.
J Neurosci Methods 1988 Sep;25(2):151–8

Application of the AgNOR method to cell imprints of lymphoid tissue. Boldy DA, et al. **J Pathol** 1989 Jan; 157(1):75–9

In vitro methods for determination of viability of mycobacteria: comparison of ATP content, morphological index and FDA-EB fluorescent staining in Mycobacterium leprae. Katoch VM, et al. **Lepr Rev** 1988 Jun;59(2):137–43

The alterations of magnetic resonance relaxation parameters in excised myocardial tissue during NMR spectroscopy: the effects of time, environmental exposure and TTC staining. Liu P, et al. **Magn Reson Imaging** 1989 Jan–Feb; 7(1):109–13

Basic fuchsin homologues. Are pure dyes really necessary? Proctor GB, et al. **Med Lab Sci** 1987 Oct;44(4):398–400

Congo red birefringent structures in the hypothalamus in senile dementia of the Alzheimer type. Simpson J, et al.
Neuropathol Appl Neurobiol 1988 Sep–Oct;14(5):381–93

Silver-stained protein gels allow recovery of transcription factors still active in specific DNA-binding. Schröter H, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6415

Immunostaining of intermediate filament proteins in paraffin sections. Evaluation of optimal protease treatment to improve the immunoreactivity. Miettinen M.
Pathol Res Pract 1989 Apr;184(4):431–6

Organization of the internal membrane system in the principal cells of the mouse epididymis after osmium impregnation. Fain-Maurel MA, et al. **Reprod Nutr Dev** 1988; 28(5):1237–50

Use of modified Fraser's stain in Promoting Activity Test (PAT). Borràs M. **Stain Technol** 1988 Sep;63(5):307–10

Staining of developing neurites with coomassie blue. Carri NG, et al. **Stain Technol** 1989 Jan;64(1):50–2

A rapid method for removing silver from stained chromosomes. Denton TE. **Stain Technol** 1989 Jan; 64(1):49–50

Sequential estimation of nuclear DNA and silver staining of nucleoli in plant cells. Doležel J, et al.
Stain Technol 1989 Jan;64(1):9–13

A new technique for staining catecholic residues in biological samples. Kalyani R, et al. **Stain Technol** 1989 Jan;64(1):15–8

The reliability of acid fast stained smears of gastric aspirate specimens. Berean K, et al. **Tubercle** 1988 Sep;69(3):205–8

Computer image analysis of two-dimensional crystals of beef heart NADH: ubiquinone oxidoreductase fragments. I. Comparison of crystal structures in various negative stains [published erratum appears in Ultramicroscopy 1989 Apr;27(3):334] Brink J, et al. **Ultramicroscopy** 1989 Jan–Feb;27(1):79–90

Computer image analysis of two-dimensional crystals of beef heart NADH: ubiquinone oxidoreductase fragments. II. Comparison of frozen hydrated and negatively stained specimens. Brink J, et al. **Ultramicroscopy** 1989 Jan–Feb; 27(1):91–9

Effects of certain electron-microscope stains on phospholipid monolayers [letter] Gorwyn D, et al. **Ultramicroscopy** 1989 Jan–Feb;27(1):113–4

[Typing of muscle fibers using the metachromatic reaction for the detection of adenosine triphosphatase] Adamcová J, et al. **Cesk Patol** 1988 Nov;24(4):225–9 (Eng. Abstr.) **(Cze)**

[Pneumonia in artificially ventilated patients: the significance of Gram preparation und bronchoscopic specimen collection methods in diagnosis and therapy] Konrad F, et al. **Anasth Intensivther Notfallmed** 1989 Jun;24(3):147–52 (Eng. Abstr.) **(Ger)**

[Immunofluorescence and immunocytochemical stain methods for simultaneous cytogenetic and phenotypic characterization of mitotic cells] Köller U, et al.
Wien Klin Wochenschr 1989 Feb 3;101(3):111–7 (Eng. Abstr.) **(Ger)**

[Sudan III staining: really new aspects of a really old test?] Lembcke B. **Z Gastroenterol** 1989 Jul;27(7):398–9 **(Ger)**

[Trypan blue staining capacities of the culture cells] Suganuma M, et al. **Rinsho Byori** 1989 Feb;37(2):187–93 **(Jpn)**

[Modification of various stainings of histological sections of cartilage and bone] Aleksina LA.
Arkh Anat Gistol Embriol 1988 Jun;94(6):79–80 **(Rus)**

[The relation of the phenomenon of nuclear achromasia to cell activation for proliferation] Erenpreisa EA, et al.
Eksp Onkol 1989;11(1):61–3 (Eng. Abstr.) **(Rus)**

[Tinctorial properties of microorganisms isolated from blood] Andreeva ZM, et al. **Lab Delo** 1989;(4):58–61 (Eng. Abstr.) **(Rus)**

[Localization of protein zones in polyacrylamide gel using the silver staining method] Blokhin DIu. **Lab Delo** 1988; (8):30–3 (Eng. Abstr.) **(Rus)**

[Measurement of the quantity of proteins, stained with amido black 10B, in cylindrical polyacrylamide gels] Stefanovich AN. **Lab Delo** 1988;(5):72–3 **(Rus)**

[Quantitative determination of protein in small volumes of biological substances using amido black 10B] Tumakov SA, et al. **Lab Delo** 1988;(5):54–6 (Eng. Abstr.) **(Rus)**

[The use of "aluminal" stain in dermatology and venereology. I. Indication of protein fractions after disc electrophoresis] Rasskazov NI, et al. **Vestn Dermatol Venerol** 1989;(2):8–9 (Eng. Abstr.) **(Rus)**

[Lectin staining of disorders of keratinization. I. Ichthyosis, Darier's disease and acrokeratosis verruciformis] Martínez Ojeda L, et al. **Med Cutan Ibero Lat Am** 1988;16(2):133–6 (Eng. Abstr.) **(Spa)**

[Lectin staining of a Merkel cell tumor] Ramírez Bosca A, et al. **Med Cutan Ibero Lat Am** 1988;16(2):125–7 (Eng. Abstr.) **(Spa)**

[Test of the potency of trivalent oral polio vaccines: comparison of 2 methods of reading] Chocarro LB, et al.
Rev Argent Microbiol 1987 Apr–Jun;19(2):65–9 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Automated Feulgen staining with a temperature-controlled staining machine. Chatelain R, et al.
Anal Quant Cytol Histol 1989 Jun;11(3):211–7

METHODS

Investigation of a modified gallocyanin chrome alum staining technique in cytology compared to thionine and haematoxylin as nuclear stains. Schulte E.
Acta Histochem Suppl (Jena) 1988;36:341–52

Grimelius' silver method for all types of malignant melanomas. Spalević L, et al. **Acta Med Iugosl** 1989; 43(2):121–6

Comparison of four staining methods on the detection of neuritic plaques. Wisniewski HM, et al.
Acta Neuropathol (Berl) 1989;78(1):22–7

Immunoelectron microscopic study of S-100 beta-positive human T-lymphocytes with special reference to double immunostaining. Ohtsuki Y, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1167–73

Further studies of HIV morphology by negative staining. Chrystie IL, et al. **Aids** 1988 Dec;2(6):459–64

Accelerated immunogold silver and immunoperoxidase staining of paraffin sections with the use of microwave irradiation. Factors influencing results. Boon ME, et al.
Am J Clin Pathol 1989 Feb;91(2):137–43

Evaluation of staining methods for identifying Campylobacter pylori. Madan E, et al.
Am J Clin Pathol 1988 Oct;90(4):450–3

Methenamine-silver staining in macular corneal dystrophy. Johannsson JH, et al. **Am J Ophthalmol** 1988 Nov 15; 106(5):630–1

Endoscopic tattooing of the colon. An experimental study. Hammond DC, et al. **Am Surg** 1989 Jul;55(7):457–61

Sodium dodecyl sulfate-gel electrophoresis: staining of polypeptides using heavy metal salts. Dzandu JK, et al.
Anal Biochem 1988 Oct;174(1):157–67

India ink staining of proteins on nylon and hydrophobic membranes. Hughes JH, et al. **Anal Biochem** 1988 Aug 15; 173(1):18–25

Silver stain for proteins in ultrathin polyacrylamide gels: a sensitive precipitation technique. Kling H, et al.
Anal Biochem 1988 Nov 1;174(2):589–92

A method for staining and stabilizing peroxidase activity in polyacrylamide gel electrophoresis. Shimoni M, et al.
Anal Biochem 1988 Nov 15;175(1):35–8

Alcian blue staining of proteoglycans in polyacrylamide gels using the "critical electrolyte concentration" approach. Wall RS, et al. **Anal Biochem** 1988 Nov 15;175(1):298–9

New technique for differential staining of myelinated fibers and nerve cells on paraffin sections. Tolivia J, et al.
Anat Rec 1988 Dec;222(4):437–40

The congo red stain revisited. Elghetany MT, et al.
Ann Clin Lab Sci 1989 May–Jun;19(3):190–5

Rapid and simple method for double staining of bacteria with 4',6-diamidino-2-phenylindole and fluorescein isothiocyanate-labeled antibodies. Hoff KA.
Appl Environ Microbiol 1988 Dec;54(12):2949–52

Modification of the silver impregnation technique of Bielschowsky for use in glycol methacrylate-embedded brain tissue. Ketring JL, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):196–8

A modified Brown and Hopps stain for identification of gram-positive and gram-negative microorganisms in glycol methacrylate-embedded tissues. Schwartz DA, et al.
Arch Pathol Lab Med 1989 Feb;113(2):181–3

Lectin histochemistry of fungi [letter] Senba M.

Arch Pathol Lab Med 1989 Apr;113(4):327–8

Human cutaneous mast cells—a study of fixative and staining reactions in normal skin. Markey AC, et al. **Br J Dermatol** 1989 May;120(5):625–31

A simplified method of tissue processing for immunostaining with good preservation of antigens and morphology. Bourges M, et al. **Cell Mol Biol** 1989;35(2):231–7

Three-dimensional structure of endothelial cells in hepatic sinusoids of the rat as revealed by the Golgi method. Wake K, et al. **Cell Tissue Res** 1988 Sep;253(3):563–71

Cardiac gap junctions and gap junction-associated vesicles: ultrastructural comparison of in situ negative staining with conventional positive staining. Chen L, et al. **Circ Res** 1989 Mar;64(3):501–14

Differential silver staining in lymphocytes and lymphoblastoid cell cultures. Martin-DeLeon PA, et al. **Cytobios** 1988;55(221):113–23

Current use of the Papanicolaou class system in gynecologic cytology. Maguire NC. **Diagn Cytopathol** 1988;4(2):169–76

Immunostaining of tissue sections previously stained with hematoxylin and eosin. Paul E, et al. **Dis Markers** 1988 Oct-Dec;6(4):231–6

Application of Neuhoff's optimized Coomassie brilliant blue G-250/ammonium sulfate/phosphoric acid protein staining to ultrathin polyacrylamide gels on polyester films. Peisker K. **Electrophoresis** 1988 May;9(5):236–8

Improvement and simplification of low-background silver staining of proteins by using sodium dithionite. Rabilloud T, et al. **Electrophoresis** 1988 Jun;9(6):288–91

Ultrasensitive polychromatic silver staining of sodium dodecyl sulfate-polyacrylamide gels with the Gelcode system using the PhastSystem Development Unit. Schiff TA, et al. **Electrophoresis** 1989 Jul;10(7):535–6

Staining procedure to detect viability and the true acrosome reaction in spermatozoa of various species. Didion BA, et al. **Gamete Res** 1989 Jan;22(1):51–7

Elderberry bark lectin—gold techniques for the detection of Neu5Ac (alpha 2,6) Gal/GalNAc sequences: applications and limitations. Taatjes DJ, et al. **Histochem J** 1988 Sep;20(9):478–90

Use of commercially available monoclonal antibodies for immunoenzyme double staining. van der Loos CM, et al. **Histochem J** 1988 Aug;20(8):409–13

Restriction endonuclease AluI resistant chromatin of "aged" slides. Agarwal A, et al. **Histochemistry** 1989;91(2):175–6

Simultaneous triple-immunogold staining of virus and host cell antigens with monoclonal antibodies of virus and host cell antigens in ultrathin cryosections. Nielsen MH, et al. **Histochemistry** 1989;92(2):89–93

Auramine staining in detecting small number of bacilli in skin smears. Bhatia VN, et al. **Indian J Lepr** 1988 Jan; 60(1):13–6

Evaluation of goblet cells in conjunctival impression cytology by multiple-step & two-step staining techniques. Sharma S, et al. **Indian J Med Res** 1989 Jun;90:233–6

Identification of ocular fungi (ink-potassium hydroxide preparation) Vs current staining methods (clinical study). Kamlesh, et al. **Indian J Ophthalmol** 1987;35(5–6):146–8

Giemsa staining for cysts and trophozoites of Pneumocystis carinii. Walker J, et al. **J Clin Pathol** 1989 Apr;42(4):432–4

A method for staining ultrathin sections on slotted grids. Pylypas SP, et al. **J Electron Microsc (Tokyo)** 1988; 37(3):163–6

Androscopy: a technique for examining men for condyloma. Pfenninger JL. **J Fam Pract** 1989 Sep;29(3):286–8

Immunogold-silver cytochemistry using a capillary action staining system. Kumar RK. **J Histochem Cytochem** 1989 Jun;37(6):913–7

Freeze-substitution staining of rat growth plate cartilage with alcian blue for electron microscopic study of proteoglycans. Maitland ME, et al. **J Histochem Cytochem** 1989 Mar;37(3):383–7

Enzyme histochemical demonstration of alkaline phosphatase activity in plastic-embedded tissues using a Gomori-based cerium-DAB technique. van Goor H, et al. **J Histochem Cytochem** 1989 Mar;37(3):399–403

Selective suppression of endogenous peroxidase activity: application for enhancing appearance of HRP-labeled neurons in vitro. Metz CB, et al. **J Neurosci Methods** 1989 Jan;26(3):181–8

An evaluation of the intraoperative staining technique using methylene blue for the detection of hyperplastic parathyroid glands. Kobayashi S, et al. **Jpn J Surg** 1988 Nov;18(6):729–31

Improved staining of leprosy bacilli in tissues. Harada K, et al. **Lepr Rev** 1989 Jun;60(2):124–8

A simple flagella staining technique for Trichomonas vaginalis. Adebayo JA. **Med Lab Sci** 1988 Jul;45(3):273–4

Combined immunocytochemistry and nucleolar organizer region staining: some technical aspects. McMeekin W, et al. **Med Lab Sci** 1989 Jan;46(1):11–5

Does amyloid precede paired helical filaments in the senile plaque? A study of 15 cases with graded intellectual status in aging and Alzheimer disease. Duyckaerts C, et al. **Neurosci Lett** 1988 Sep 12;91(3):354–9

How to use Heidenhains azan staining in insects. Schmid A. **Neurosci Lett** 1989 Jun 5;101(1):35–8

Staining of the nucleolus with protein and RNA stains for automatic measurement of nucleolar size in paraffin sections. Boon ME, et al. **Stain Technol** 1988 Sep; 63(5):289–97

Silver impregnation of Alzheimer's neurofibrillary changes counterstained for basophilic material and lipofuscin pigment. Braak H, et al. **Stain Technol** 1988 Jul; 63(4):197–200

A technique for C-banding plant chromosomes with Wright stain. Dillé JE. **Stain Technol** 1988 Sep;63(5):271–5

Methods for staining amyloid in tissues: a review. Elghetany MT, et al. **Stain Technol** 1988 Jul;63(4):201–12 (78 ref.)

A rapid method for producing stained sections of plastic embedded undecalcified bone specimens. Emmanual J. **Stain Technol** 1988 Sep;63(5):329–31

Perfusion method for preparing pig brain cortex for Golgi-Cox impregnation. Grandin T, et al. **Stain Technol** 1988 May;63(3):177–81

The use of copper salts to stain bone and collagenous tissues. Harder W. **Stain Technol** 1988 Jul;63(4):255–7

Fluorescent vital stains for complementary labelling of protoplasts from Trichoderma spp. Harman GE, et al. **Stain Technol** 1988 Jul;63(4):241–7

An improved technique for staining the head membranes of human spermatozoa. Isvarine A, et al. **Stain Technol** 1988 Jul;63(4):259–60

A rapid screening technique for detection of diosgenin through in situ cytophotometry. Kundu AK, et al. **Stain Technol** 1988 Nov;63(6):369–72

A controlled silver impregnation method to characterize cultured cardiomyocytes. Lascano EF, et al. **Stain Technol** 1988 Jul;63(4):221–7

A method for increasing the number of mitoses available for cytogenetic analysis in rainbow trout. Lozano R, et al. **Stain Technol** 1988 Nov;63(6):335–8

Aldehyde pararosanilin (true aldehyde fuchsin) stains purified insulin, oxidized or not, following adequate fixation with either formalin or Bouin's fluid. Mowry RW, et al. **Stain Technol** 1988 Sep;63(5):311–23

Mallory's phloxine B-methylene blue-azure II stain emphasizes elastin and collagen bundles in epoxy embedded lung. Oldmixon EH. **Stain Technol** 1988 May;63(3):165–70

Alkaline bismuth solution as an en bloc stain for formaldehyde-glutaraldehyde potassium permanganate fixed fungal spores. Park P, et al. **Stain Technol** 1988 Jul; 63(4):229–34

Staining of xylem parenchyma mitochondria with photo-oxidized 3,3'-diaminobenzidine. Ros Barcelo A, et al. **Stain Technol** 1988 Sep;63(5):277–81

Picrosirius red staining of dental structures. Roush JK, et al. **Stain Technol** 1988 Nov;63(6):363–7

Color differential staining of NOR-associated heterochromatic segments using acridine orange. Sato S. **Stain Technol** 1988 Jul;63(4):235–40

Color-contrast staining of two different lymphocyte subpopulations: a two-color modification of alkaline phosphatase monoclonal anti-alkaline phosphatase complex technique. Wagner L, et al. **Stain Technol** 1988 May; 63(3):129–36

A simple technique for sex chromatin analysis in amniotic cells of mouse and rat embryos. Watanabe T, et al. **Stain Technol** 1988 May;63(3):149–54

A technique for staining the superficial cells of plucked hair follicles and other solid tissue samples. Wells J. **Stain Technol** 1988 May;63(3):189–90

Comparative study of cold stain and Ziehl-Neelsen stain. Pathan AJ, et al. **Tubercle** 1988 Sep;69(3):227–9

[The demonstration of carious dentin with a stain solution] Göcke R, et al. **Zahn Mund Kieferheilkd** 1989;77(3):281–2 **(Ger)**

[Silver impregnation of connective tissue. V.] Krutsay M. **Zentralbl Allg Pathol** 1988;134(4–5):518–20 (Eng. Abstr.) **(Ger)**

[Clinical application of a new vital staining method for the conduction system at open heart surgery] Ishii K, et al. **Kyobu Geka** 1988 Aug;41(9):701–8, discussion 708–10 (Eng. Abstr.) **(Jpn)**

[Carcinoembryonic antigen in tumor tissue and urine in cases with primary bladder cancer—a study by immunogold-silver staining and radioimmunoassay] Kawano S. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar; 79(3):469–74 (Eng. Abstr.) **(Jpn)**

[Studies on human spermatozoal acrosome using spermac stain in fertile and infertile men including two cases of round-headed spermatozoa] Satoh K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):562–8 (Eng. Abstr.) **(Jpn)**

[An experimental study of Karnovsky's stain for differentiating motor and sensory funiculi during peripheral nerve surgery] Sumida J. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):91–9 (Eng. Abstr.) **(Jpn)**

[A comparative study on the ability to stain senile plaques with beta protein immunostain and three kinds of silver impregnation methods] Yamaguchi H, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):688–94 (Eng. Abstr.) **(Jpn)**

[Detection by the use of silver ions of additional protein zones in gradient polyacrylamide gels stained with Coomassie] Moskalenko AA, et al. **Biol Nauki** 1988;(5):101–5 (Eng. Abstr.) **(Rus)**

[A method of staining peripheral blood basophils and their dynamics in patients with psychic diseases during treatment with neuroleptics] Grishkova LI, et al. **Lab Delo** 1988; (6):13–6 (Eng. Abstr.) **(Rus)**

[The role of the degree of oral mucosal keratinization in assessing the results of the Schiller-Pisarev test] Guts IuV. **Stomatologiia (Mosk)** 1989 Mar-Apr;68(2):72–3 **(Rus)**

STANDARDS

How should we count AgNORS? Proposals for a standardized approach. Crocker J, et al. **J Pathol** 1989 Jul; 158(3):185–8

STAMMERING see **STUTTERING**

STANDARD PREPARATIONS see **REFERENCE STANDARDS**

STANDARDS, REFERENCE see **REFERENCE STANDARDS**

STANFORD-BINET TEST see under **INTELLIGENCE TESTS**

STANNUM see **TIN**

STANOLONE

ADMINISTRATION & DOSAGE

Effects of delivering different amounts of dihydrotestosterone by ceramic implants on the reproductive system of male rats. Benghuzzi HA, et al. **Biomed Sci Instrum** 1989; 25:179–89

ANALOGS & DERIVATIVES

Trilostane with hydrocortisone in treatment of metastatic breast cancer. Chu PS, et al. **Breast Cancer Res Treat** 1989 Mar;13(2):117–21

Biochemical characterization of the protein affinity labeled by dihydrotestosterone 17 beta-bromoacetate: comparison with the human androgen receptor. Kovacs WJ, et al. **Endocrinology** 1989 Mar;124(3):1270–7

Steroidogenesis in Fundulus heteroclitus. I. Production of 17 alpha-hydroxy,20 beta-dihydroprogesterone, testosterone, and 17 beta-estradiol by prematurational follicles in vitro. Petrino TR, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):147–56

The in-vitro transformation of [3H]dehydroepiandrosterone into its principal metabolites in the adrenal cortex of adult castrated male rats and following steroid treatment. Canonaco M, et al. **J Endocrinol** 1989 Jun;121(3):419–24

Precopulatory behaviour in the male hamster: effect of the 5 alpha-reductase inhibitor 17 beta-N,N-diethylcarbamoyl-4-aza-5 alpha-androstan-3-one. Steel E, et al. **J Endocrinol** 1988 Dec;119(3):483–91

The 56 kDa protein of human genital skin fibroblasts is identical to that radiolabelled by [3H]dihydrotestosterone 17 beta-bromoacetate. Belsham DD, et al. **J Steroid Biochem** 1989 Sep;33(3):389–94

Structure-activity relationship of the cholestatic activity of dihydrotestosterone glucuronide, allo bile acids and lithocholate. Vore M, et al. **Life Sci** 1989;44(26):2033–40

Reversal of diuretic-induced secondary hyperaldosteronism and hypokalemia by trilostane, an inhibitor of adrenal steroidogenesis. Griffing GT, et al. **Metabolism** 1989 Apr; 38(4):353–6

Effects of trilostane on 7,12-dimethylbenz[a]anthracene-induced rat mammary cancers and body weight of rats in relation to estrogen receptors. Iino Y, et al. **Oncology** 1989;46(5):301–5

Effect of a 4-methyl-4-aza steroid on androgen metabolism by rat ventral prostate epithelial and stromal cell cultures: selective inhibition of 5 alpha-reductase activity. Orlowski J, et al. **Prostate** 1988;13(4):289–97

[HmPaO Tc as an indicator of local cerebral blood flow: quantified study compared to the xenon 133 inhalation method] Steinling M, et al. **Ann Radiol (Paris)** 1988; 31(4):229–38 (Eng. Abstr.) **(Fre)**

[The antineoplastic activity of testiphenon] Lagova ND, et al. **Vopr Onkol** 1988;34(11):1363–8 (Eng. Abstr.) **(Rus)**

ANALYSIS

Dihydrotestosterone measured in core biopsies from prostatic tissues. Bruun E, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S27–9

Effects of exogenous melatonin prior to the breeding season on testis weight and epididymal androgen receptors in rams. Tekpetey FR, et al. **Domest Anim Endocrinol** 1988 Jul;5(3):257–64

[Prognostic evaluation of prostatic cancer by Gleason's histopathologic grading and tissue DHT level] Kohama Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul; 79(7):1228–34 (Eng. Abstr.) **(Jpn)**

BLOOD

An endocrine marker for pancreatic cancer. Tulassay Z, et al. **BMJ** 1988 Dec 3;297(6661):1447–8

Treatment of metastatic lipid cell tumor of the ovary with BV-CAP and VAC chemotherapy, using serum testosterone and dihydrotestosterone as tumor markers. Patsner B, et al. **Eur J Gynaecol Oncol** 1988;9(6):441–4

Plasma steroid concentrations change in response to sexual behavior in Bufo marinus. Orchinik M, et al. **Horm Behav** 1988 Sep;22(3):338–50

Simultaneous determination of testosterone,

dihydrotestosterone and 5 alpha-androstan-3 alpha,-17 beta-diol by isotopic dilution mass spectrometry in plasma and prostatic tissue of patients affected by benign prostatic hyperplasia. Effects of 3-month treatment with a GnRH analog. Salerno R, et al. **J Androl** 1988 Jul-Aug;9(4):234-40

The effect of ketoconazole related imidazole drugs and antiandrogens on [3H] R 1881 binding to the prostatic androgen receptor and [3H]5 alpha-dihydrotestosterone and [3H]cortisol binding to plasma proteins. Ayub M, et al. **J Steroid Biochem** 1989 Aug;33(2):251-5

Acute effects of drinking beer or wine on the steroid hormones of healthy men. Couwenbergs CJ. **J Steroid Biochem** 1988 Oct;31(4A):467-73

Testosterone replacement with transdermal therapeutic systems. Physiological serum testosterone and elevated dihydrotestosterone levels. Cunningham GR, et al. **JAMA** 1989 May 5;261(17):2525-30

Administration of gonadotropin-releasing hormone to pregnant rats inhibits postpartum sexual behavior. Dunlap KD, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):725-8

Serum androgen levels after streptozotocin administration in the male rat. Centol I, et al. **Rev Esp Fisiol** 1988 Mar; 44(1):31-4

Application of a non-chromatographic radio-immunoassay to the measurement of plasma 5 alpha-dihydrotestosterone in females with idiopathic hirsutism. Montalto J, et al. **Scand J Clin Lab Invest** 1989 May;49(3):303-4

[Testosterone-dihydrotestosterone ratio in the differential diagnosis of pancreatic disease] Sándor Z, et al. **Orv Hetil** 1989 Jun 25;130(26):1387-8 (Eng. Abstr.) **(Hun)**

DIAGNOSTIC USE

Intersex mice composed of androgen insensitive Tfm and wild-type cells analysed by 3H dihydrotestosterone autoradiography. Schleicher G, et al. **Anat Embryol (Berl)** 1988;178(6):521-8

Neuroanatomical localization of sex steroid-concentrating cells in the Japanese quail (Coturnix japonica): autoradiography with [3H]-testosterone, [3H]-estradiol, and [3H]-dihydrotestosterone. Watson JT, et al. **Neuroendocrinology** 1989 Jan;49(1):51-64

METABOLISM

Heart contains receptors for dihydrotestosterone but not testosterone: possible role in the sex differential in coronary heart disease. Sheridan PJ, et al. **Anat Rec** 1989 Apr; 223(4):414-9

Interaction between N-methyl-N'-nitro-N-nitrosoguanidine and 2 steroid hormones in the glandular stomach of mouse. II. Retardation of local dihydrotestosterone turnover by use of a rice-rich diet and the carcinogen. Kodama M, et al. **Biomed Pharmacother** 1989;43(3):207-13

Localization and identification of nuclear radioactivity in the pituitary gland and genital tract after administering 3H-testosterone, 3H-dihydrotestosterone, or 3H-estradiol to male rhesus monkeys. Rees HD, et al. **Cell Tissue Res** 1988 Oct;254(1):139-46

Markers of peripheral androgen action in vivo and in vitro. Horton R. **Clin Dermatol** 1988 Oct-Dec;6(4):46-51 (45 ref.)

Preferential metabolism of dihydrotestosterone to androstanediol 17-glucuronide in rat prostate. Rittmaster RS, et al. **Endocrinology** 1988 Dec;123(6):2788-92

Hormonal consequences of orchidectomy for carcinoma of the prostate. With special reference to the measurement of free testosterone in saliva and prostatic dihydrotestosterone levels. Boccon-Gibod L, et al. **Eur Urol** 1988;15(1-2):99-102

The in vitro conversion of 3H androstenedione to testosterone and dihydrotestosterone in the adrenal gland of castrated male rat: influence of gonadal steroid administration. Andò S, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):83-9

Intracellular and nuclear binding of [3H]dihydrotestosterone in cultured genital skin fibroblasts of patients with severe hypospadias. Schweikert HU, et al. **J Clin Invest** 1989 Feb; 83(2):662-8

Estradiol and testosterone metabolism and production in men with prostatic cancer. Meikle AW, et al. **J Steroid Biochem** 1989 Jul;33(1):19-24

Conversion of dihydrotestosterone to androstanediol glucuronide by female sexual skin. Pasupuleti V, et al. **Steroids** 1988 Mar-Apr;51(3-4):269-82

[Changes in dihydrotestosterone metabolism and its influences in prostate of sexually active rats] Huang JK, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Mar;41(3):197-200 (Eng. Abstr.) **(Chi)**

PHARMACOKINETICS

Absorption of dihydrotestosterone (DHT) after its intramuscular administration. Díaz-Sánchez V, et al. **Fertil Steril** 1989 Mar;51(3):493-7

PHARMACOLOGY

Androgenic influences on body size and composition of adult rhesus monkeys. Kemnitz JW, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E857-64

Quantitative assessment of the biological effects of follicle regulatory protein on dihydrotestosterone-maintained spermatogenesis in hypophysectomized rat. Ahmad N, et al. **Anat Rec** 1989 Aug;224(4):508-13

Antagonism of estrogen-induced prolactin release by dihydrotestosterone. Brann DW, et al. **Biol Reprod** 1989 Jun;40(6):1201-7

Androgens inhibit basal and estrogen-induced cell proliferation in the ZR-75-1 human breast cancer cell line. Poulin R, et al. **Breast Cancer Res Treat** 1988 Oct; 12(2):213-25

Influence of testosterone and dihydrotestosterone on bone-matrix induced endochondral bone formation. Kapur SP, et al. **Calcif Tissue Int** 1989 Feb;44(2):108-13

Regulation of renal N-nitrosodimethylamine demethylase activity by androgens, progestin, glucocorticoid, and estrogen in BALB/c mice. Ahir S, et al. **Cancer Res** 1989 Jul 15;49(14):3737-41

Gonadectomy and hormonal replacement changes systolic blood pressure and ventricular myosin isoenzyme pattern of spontaneously hypertensive rats. Lengsfeld M, et al. **Circ Res** 1988 Dec;63(6):1090-4

Effect of dihydrotestosterone on testicular and accessory gland function in male rhesus monkeys. Ramakrishnan PR, et al. **Contraception** 1989 Jul;40(1):111-27

Gonadotropin secretion in ovariectomized pony mares treated with dexamethasone or progesterone and subsequently with dihydrotestosterone. McNeill-Wiest DR, et al. **Domest Anim Endocrinol** 1988 Apr;5(2):149-55

Effects of dihydrotestosterone administration with and without estradiol pretreatment on gonadotropin secretion in ovariectomized pony mares. Wiest JJ, et al. **Domest Anim Endocrinol** 1987 Jul;4(3):167-74

The in vitro conversion of 3H androstenedione to testosterone and dihydrotestosterone in the adrenal gland of castrated male rat: influence of gonadal steroid administration. Andò S, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):83-9

Sex hormones influence growth and surfactant production in fetal lung explants. McMillan EM, et al. **Exp Lung Res** 1989 Mar;15(2):167-79

Activation of sexual behavior in male rats by combined subcutaneous and intracranial treatments of 5 alpha-dihydrotestosterone. Butera PC, et al. **Horm Behav** 1989 Mar;23(1):92-105

Effects of intracranial implantation of dihydrotestosterone on sexual behavior in male Cnemidophorus inornatus, a direct sexual ancestor of a parthenogenetic lizard. Rozendaal JC, et al. **Horm Behav** 1989 Jun;23(2):194-202

Hormonal control of neuron number in sexually dimorphic spinal nuclei of the rat: III. Differential effects of the androgen dihydrotestosterone. Sengelaub DR, et al. **J Comp Neurol** 1989 Feb 22;280(4):637-44

Oestradiol synergizes with 5 alpha-dihydrotestosterone or 3 alpha- but not 3 beta-androstanediol in inducing sexual behaviour in castrated rats. Södersten P, et al. **J Endocrinol** 1988 Dec;119(3):461-5

Androgens modulate endplate size and ACh receptor density at synapses in rat levator ani muscle. Bleisch WV, et al. **J Neurobiol** 1989 Jun;20(4):189-202

5 alpha-dihydrotestosterone has nonspecific effects on membrane channels and possible genomic effects on ACh-activated channels. Erulkar SD, et al. **J Neurophysiol** 1989 May;61(5):1036-52

Pretreatments with 5 alpha-dihydrotestosterone and the uptake of testosterone by cell nuclei in the brains of male rhesus monkeys. Bonsall RW, et al. **J Steroid Biochem** 1989 Sep;33(3):405-11

Modulation by sex steroids and [D-Trp6, Des-Gly-NH2(10)]luteinizing hormone (LH)-releasing hormone ethylamide of alpha-subunit and LH beta messenger ribonucleic acid levels in the rat anterior pituitary gland. Simard J, et al. **Mol Endocrinol** 1988 Sep; 2(9):775-84

Testosterone and dihydrotestosterone, but not estradiol, selectively maintain pituitary and serum follicle-stimulating hormone in gonadotropin-releasing hormone antagonist treated male rats. Arslan M, et al. **Neuroendocrinology** 1989 Apr;49(4):395-401

Effect of 5 alpha-dihydrotestosterone and flutamide on the facilitation of lordosis by LHRH and naloxone in estrogen-primed female rats. Erskine MS. **Physiol Behav** 1989 Apr;45(4):753-9

The influence of steroid hormones on competing sexual and ingestive behavior in the male rat. Hawkins CA, et al. **Physiol Behav** 1988;44(3):291-300

Influences of dihydrotestosterone, testosterone, estradiol, progesterone, or prolactin on the cell kinetics of human hyperplastic prostatic tissue in organ culture. de Launoit Y, et al. **Prostate** 1988;13(2):143-53

In-vitro contractility of human seminiferous tubules in response to testosterone, dihydrotestosterone and estradiol. Yamamoto M, et al. **Urol Res** 1989;17(4):265-8

PHYSIOLOGY

Androgen-dependent human prostate cancer in nude mice. The PC-82 tumor model. van Steenbrugge GJ, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S8-12

URINE

[Extraction-free determination of total and free forms of testosterone together with 5-alpha-dihydrotestosterone and estradiol in urine using a radioimmunologic analytic method] Buniatian AF, et al. **Lab Delo** 1988;(5):44-7 (Eng. Abstr.) **(Rus)**

STANOZOLOL

ADVERSE EFFECTS

Transient ischemic attack in a patient with congenital protein-C deficiency during treatment with stanozolol. De Stefano V, et al. **Am J Hematol** 1988 Oct;29(2):120-1

[Simultaneous intake of warfarin and stanozolol as cause of hemorrhage in a patient] Elwin CE, et al. **Lakartidningen** 1988 Oct 5;85(40):3290 **(Swe)**

DIAGNOSTIC USE

Sex hormone-binding globulin response to the anabolic steroid stanozolol: evidence for its suitability as a biological androgen sensitivity test. Sinnecker G, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1195-200

PHARMACOLOGY

Response of human skeletal muscle to the anabolic steroid stanozolol. Hosegood JL, et al. **BMJ** 1988 Oct 22; 297(6655):1028-9

Contrasting effects of testosterone and stanozolol on serum lipoprotein levels. Thompson PD, et al. **JAMA** 1989 Feb 24;261(8):1165-8

The effects of an anabolic steroid and peripherally administered intravenous nutrition in the early postoperative period. Hansell DT, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul-Aug;13(4):349-58 (54 ref.)

THERAPEUTIC USE

Effect of calcium and stanozolol on calcitonin secretion in patients with femoral neck fracture. Beringer TR, et al. **Bone Miner** 1986 Sep;1(4):289-95

[Therapy using stanozolol and measurement of transcutaneous oxygen] Neumann HA, et al. **Phlebologie** 1988 Jul-Oct;41(3):679-82 **(Fre)**

STAPEDIUS see under **MUSCLES**

STAPES see under **EAR OSSICLES**

STAPES MOBILIZATION

[Changes in selected biochemical indicators in long-term treatment of otosclerosis with sodium fluoride] Jaroszewicz-Heigelmann H, et al. **Otolaryngol Pol** 1988; 42(1-2):53-60 (Eng. Abstr.) **(Pol)**

[Effect of sodium fluoride on the activity of the otosclerotic process] Konarska A, et al. **Otolaryngol Pol** 1988; 42(1-2):46-52 (Eng. Abstr.) **(Pol)**

[Changes in bone conduction hearing in patients with otosclerosis after stapedoplasty] Gol'dman II, et al. **Vestn Otorinolaringol** 1988 Sep-Oct;(5):56-8 **(Rus)**

ADVERSE EFFECTS

Vertigo in postoperative follow-up of otosclerosis. Causse JB, et al. **Am J Otol** 1988 May;9(3):246-55 (36 ref.)

METHODS

[Indications for and results of the technic of suspending the piston from the manubrium] Zelený M. **Cesk Otolaryngol** 1988 Dec;37(6):332-7 (Eng. Abstr.) **(Cze)**

REHABILITATION

[Evaluation of hearing in patients with surgically treated otosclerosis] Kawiorska M, et al. **Otolaryngol Pol** 1988; 42(4):271-7 (Eng. Abstr.) **(Pol)**

STAPES SURGERY

Temporal bone histopathology over 15 years post-stapedectomy. Himi T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:126-34

The mechanics of the middle-ear at static air pressures: the role of the ossicular joints, the function of the middle-ear muscles and the behaviour of stapedial prostheses. Hüttenbrink KB. **Acta Otolaryngol Suppl (Stockh)** 1988; 451:1-35

Quantitative evaluation of sensorineural structures following stapes surgery. Nelson EG, et al. **Am J Otolaryngol** 1989 Jan-Feb;10(1):13-25

CO2 laser stapedotomy. Lesinski SG, et al. **Laryngoscope** 1989 Jun;99(6 Pt 2 Suppl 46):20-4

Stapedectomy revision with the CO2 laser. Lesinski SG, et al. **Laryngoscope** 1989 Jun;99(6 Pt 2 Suppl 46):13-9

[Stapedectomy] Lien CF. **Chung Hua I Hsueh Tsa Chih** 1987 Dec;40(6):511-6 (Eng. Abstr.) **(Chi)**

[Osseous allografts in microsurgery of the ear] Gersdorff M, et al. **Acta Otorhinolaryngol Belg** 1988;42(5):640-5 **(Fre)**

[Follow-up treatment and after care following operations to improve hearing] Kley W. **HNO** 1988 May;36(5):175-80 (20 ref.) (Eng. Abstr.) **(Ger)**

[A method of stabilizing auditory thresholds in patients with adhesive otitis media after stapedoplasty] Dmitriev NS, et al. **Vestn Otorinolaringol** 1988 May-Jun;(3):17-20 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

The fate of the non-operated ear in otosclerosis. Willis R. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):224-6
High-frequency audiometric changes after stapedectomy. Doménech J, et al. **Scand Audiol Suppl** 1988;30:233-5

INSTRUMENTATION

[Technical difficulties in stapectomy and stapedotomy in general and grasping and placement of the wire prosthesis in particular] Bader W. **Laryngorhinootologie** 1989 Jul; 68(7):416 (Ger)

METHODS

Comparison of small fenestra stapedotomies with and without KTP 532 laser [news] Pillsbury HC.
Arch Otolaryngol Head Neck Surg 1989 Sep;115(9):1027
Is there a "best" stapedectomy technique for the general otolaryngologist? Robinson M. **Ear Nose Throat J** 1989 Mar;68(3):220, 222, 224 (7 ref.)
Occasional stapes surgery--a Norwegian experience. Mair IW. **J Laryngol Otol** 1989 Mar;103(3):259-62
A method for ossicular reconstruction with tragal cartilage autografts. Mundada PS, et al. **Laryngoscope** 1989 Sep; 99(9):955-62
Small fenestra stapedectomy using a microdrill. Schwaber MK. **Laryngoscope** 1989 Jul;99(7 Pt 1):768-70
Small fenestra stapedotomies with and without KTP laser: a comparison. Silverstein H, et al. **Laryngoscope** 1989 May; 99(5):485-8
[Experimental studies of static stress on the footplate in the reconstruction of the sound conduction system] Pau HW, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):331-4 (Eng. Abstr.) (Ger)
[Initial experiences with the dentin-ossicle prosthesis] Hartwein J, et al. **Laryngorhinootologie** 1989 Apr; 68(4):204-8 (Eng. Abstr.) (Ger)

STAPHYLOCOAGULASE see COAGULASE

STAPHYLOCOCCAL CLUMPING FACTOR see COAGULASE

STAPHYLOCOCCAL FOOD POISONING

DIAGNOSIS

[Thermonuclease assay--a rapid method for screening Staphylococcus aureus food-poisoning] Xia SR.
Chung Hua Yu Fang I Hsueh Tsa Chih 1988 May; 22(3):164-6 (Eng. Abstr.) (Chi)

EPIDEMIOLOGY

Outbreak of staphylococcal foodborne illness related to consumption of lobster--Nova Scotia. Sweet L, et al.
Can Dis Wkly Rep 1989 Apr 15;15(15):81-3 (Eng, Fre)
Staphylococcal enterotoxin antibodies in pediatric patients from Utah. Reiser RF, et al. **J Infect Dis** 1988 Nov; 158(5):1105-8
An outbreak of gastrointestinal illness caused by Staphylococcus aureus in a prison population. Archer PW, et al. **J Okla State Med Assoc** 1989 May;82(5):209-12
Multiple outbreaks of staphylococcal food poisoning caused by canned mushrooms. **MMWR** 1989 Jun 23;38(24):417-8
[Food poisoning by Minas-type cheese contaminated with Staphylococcus aureus] Sabioni JG, et al.
Rev Saude Publica 1988 Oct;22(5):458-61 (Eng. Abstr.) (Por)

MICROBIOLOGY

Screening of milk and milk products for staphylococcal counts with special reference to public health. Masud T, et al. **JPMA** 1988 Nov;38(11):286-8
Incidence of several pathogens and staphylococcal enterotoxins in Kariesh cheese. Tawfek NF, et al.
Off Gesundheitswes 1989 Jan;51(1):27-9

PREVENTION & CONTROL

[Detection of endotoxin-producer strains of Staphylococcus aureus in the prevention of toxic food infections] Furlani D, et al. **Boll Chim Farm** 1988 Jul-Aug;127(7-8):188-92 (Eng. Abstr.) (Ita)
[Colonization of unboiled milk with toxigenic Staphylococcus and its resistance upon pasteurization] Pavlova ZhP, et al. **Vopr Pitan** 1989 Jan-Feb;(1):67-8 (Rus)
[Increasing the effectiveness of the method of Staphylococcus phage-typing] Petrushina LI, et al.
Vopr Pitan 1989 Mar-Apr;(2):51-4 (Eng. Abstr.) (Rus)

STAPHYLOCOCCAL INFECTIONS

see related
CROSS INFECTION

Meningoencephalitis and cerebral abscess as a complication of the halo device. Lammens J, et al. **Acta Orthop Belg** 1988;54(3):360-2
Staphylococcus intermedius: clinical presentation of a new human dog bite pathogen. Talan DA, et al.
Ann Emerg Med 1989 Apr;18(4):410-3
Infective endocarditis in neonates [letter] Bannon MD.
Arch Dis Child 1988 Sep;63(9):1112-3
Staphylococcus epidermidis endophthalmitis complicating intravitreal antiviral therapy of cytomegalovirus retinitis. Case report. Heinemann MH. **Arch Ophthalmol** 1989 May; 107(5):643-4
Giant mycotic aneurysm of the thoracic aorta. Illangasekera U. **Ceylon Med J** 1989 Mar;34(1):35-6
Postinfluenza toxic shock syndrome. Prechter GC, et al.
Chest 1989 May;95(5):1153-4 (10 ref.)
Pyogenic sacroiliac joint infection. Hodgson BF.
Clin Orthop 1989 Sep;(246):146-9
Heterogeneity of the plasma cell response to bovine staphylococcal mastitis: an ultrastructural study. Nickerson SC. **Cytobios** 1988;55(222-223):155-65
Endophthalmitis after Nd:YAG laser capsulotomy. Neuteboom GH, et al. **Doc Ophthalmol** 1988 Oct-Nov; 70(2-3):175-8
Maxillary osteomyelitis in a neonate. Date UG, et al.
Indian Pediatr 1988 Mar;25(3):302-5
Neonatal suppurative parotitis with facial palsy [letter] Mathur NB, et al. **Indian Pediatr** 1988 Aug;25(8):806-7
Septic arthritis in sickle cell disease. Sankaran-Kutty M, et al. **Int Orthop** 1988;12(3):255-7
Retroperitoneal infectious myositis. Badellino F, et al.
Int Surg 1989 Apr-Jun;74(2):126-8
Staphylococcus lugdunensis endocarditis [letter]
J Clin Pathol 1989 Aug;42(8):892-3
Purulent osteomyelitis associated with empyema and toxic shock syndrome. Chen SM, et al. **J Emerg Med** 1988 Jul-Aug;6(4):285-7
Non-menstrual toxic shock syndrome complicating orthopaedic surgery [letter] Croall J, et al. **J Infect** 1989 Mar;18(2):195-6
Malignant otitis externa due to Staphylococcus infection. Keay DG, et al. **J Laryngol Otol** 1988 Oct;102(10):926-7
Three-phase [99mTc]diphosphonate scintimetry in septic and nonseptic arthritis of the immature knee: an experimental investigation in dogs. Hansen ES, et al. **J Orthop Res** 1989; 7(4):543-9
Serious bacterial cellulitis of the periorbital area in two patients with systemic lupus erythematosus. Derksen RH, et al. **J Rheumatol** 1988;15(5):840-4
Staphylococcal pyomyositis with idiopathic dermatomyositis. Gelfand MS, et al. **J Tenn Med Assoc** 1989 May;82(5):243-4
Staphylococcus lugdunensis endocarditis [letter] Etienne J, et al. **Lancet** 1989 Feb 18;1(8634):390
Symmetrical peripheral gangrene [letter] Newsome FV.
Lancet 1989 Jun 17;1(8651):1383
Atypical osteomyelitis of the skull base. Grobman LR, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):671-6
Acute suppurative dacryoadenitis. Krishnasamy M, et al.
Med J Malaysia 1987 Jun;42(2):137-8
Psoas abscess. Yowler CJ, et al. **Milit Med** 1988 Dec; 153(12):641-2 (8 ref.)
Spinal epidural abscess. A case report and literature review. Ferree BA, et al. **Orthop Rev** 1989 Jan;18(1):75-80 (25 ref.)
Resistant staphylococci: concern of the 1980s. Proceedings. March 14, 1987, New Orleans, Louisiana.
Pharmacotherapy 1988;8(6 Pt 2):1S-25S
[Plasmid analysis and restriction enzyme digest pattern study in 20 cases of neonatal subcutaneous gangrene due to Staphylococcus aureus] Tang J, et al.
Chung Hua I Hsueh Tsa Chih 1988 Jun;68(6):332-4, 24 (Eng. Abstr.) (Chi)
[Septic sacroiliitis] Knockaert DC, et al.
Ned Tijdschr Geneeskd 1989 Apr 29;133(17):895-9 (Eng. Abstr.) (Dut)
[Spondylodiscitis disclosing bacterial endocarditis. Apropos of a case. Review of the literature] Jacquemart T, et al.
Ann Cardiol Angeiol (Paris) 1989 Apr;38(4):209-13 (38 ref.) (Eng. Abstr.) (Fre)
[Treatment by external drainage of perirenal abscess in AIDS] Grateau G, et al. **Ann Med Interne (Paris)** 1988; 139(6):403-4 (Eng. Abstr.) (Fre)
[Tinea capitis presenting as staphylococcal pyodermatitis of the scalp] Bigel ML, et al. **Arch Fr Pediatr** 1989 May; 46(5):363-5 (Eng. Abstr.) (Fre)
[Nephritis caused by ventriculo-atrial shunt: possible cure without reoperation of the valve?] Gourrier E, et al.
Arch Fr Pediatr 1989 May;46(5):355-7 (Eng. Abstr.) (Fre)
[Staphylococcal endocarditis on a heart valve prosthesis. Apropos of 28 cases] de Gevigney G, et al.
Arch Mal Coeur 1989 Jan;82(1):37-44 (Eng. Abstr.) (Fre)
[Prostatic abscess. Contribution of the x-ray computed tomography. Apropos of a case] Husain A, et al.
J Radiol 1988 Aug-Sep;69(8-9):517-9 (19 ref.) (Eng. Abstr.) (Fre)
[Infections on foreign material] Leport C. **Presse Med** 1989 Jan 21;18(2):50-2 (Fre)
[Salvage of infected knee prosthesis] Pellaton M.
Rev Med Suisse Romande 1988 Dec;108(12):1035-9 (Fre)
[Vertebral compression disclosing bifocal staphylococcal spondylodiscitis] Juvin R, et al.
Rev Rhum Mal Osteoartic 1989 May;56(6):495-7 (Fre)
[Coagulase-negative staphylococcal endocarditis] Ben Hassen A, et al. **Tunis Med** 1987 Mar;65(3):167-73 (Eng. Abstr.) (Fre)
[A case from practice (133). Female patient: J. L., born 1957, secretary] Moucka J. **Schweiz Rundsch Med Prax** 1989 Mar 7;78(10):273-4 (Ger)
[Nontropical pyomyositis] Klein L, et al. **Harefuah** 1989 Feb 1;116(3):145-6 (Eng. Abstr.) (Heb)
[Tricuspid valve endocarditis in drug addicts] Cotrufo M, et al. **Arch Monaldi Mal Torace** 1987 Jan-Feb;42(1):93-100 (Eng. Abstr.) (Ita)
[Critical considerations on various experimental staphylococcus infections] Farinelli S, et al. **Clin Ter** 1989 May 15;129(3):193-206 (41 ref.) (Eng. Abstr.) (Ita)
[Cerebrospinal fluid levels of sulbactam/ampicillin in rabbits with staphylococcal meningitis] Haruta T, et al.
Jpn J Antibiot 1989 Mar;42(3):594-7 (Eng. Abstr.) (Jpn)
[A case report of tricuspid valve endocarditis due to Staphylococcus aureus with successful surgical treatment] Takayama T, et al. **Kyobu Geka** 1989 Feb;42(2):160-3 (Eng. Abstr.) (Jpn)
[Role of Staphylococcus epidermidis in outer eye infections] Asaoka I. **Nippon Ganka Gakkai Zasshi** 1989 Mar; 93(3):351-7 (Eng. Abstr.) (Jpn)
[A case report of septicemia caused by methicillin cephem resistant Staphylococcus aureus (MRSA)] Arakawa S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):728-31 (Eng. Abstr.) (Jpn)
[Clinical evaluations of surgical treatment of infective endocarditis] Otaki M, et al.
Nippon Kyobu Geka Gakkai Zasshi 1989 Apr;37(4):600-5 (Eng. Abstr.) (Jpn)
[Acute staphylococcal rhinitis in neonates] Tasovac B, et al.
Srp Arh Celok Lek 1988 Jun;116(6):553-7 (Eng. Abstr.) (Sec)
[Pyogenic abscesses of the psoas: report of 2 cases] Sánchez Chapado MV, et al. **Arch Esp Urol** 1988 May;41(4):312-6 (Eng. Abstr.) (Spa)
[Staphylococcus aureus meningitis (editorial)] Falcó V, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):660-2 (Spa)

BLOOD

Relationship of serum antibiotic concentrations to nephrotoxicity in cancer patients receiving concurrent aminoglycoside and vancomycin therapy. Cimino MA, et al. **Am J Med** 1987 Dec;83(6):1091-7
Neutrophil chemotaxis and adherence in vitro and localization in vivo in rabbits with Staphylococcus aureus abscesses. Bamberger DM, et al. **J Lab Clin Med** 1989 Aug; 114(2):135-41
[Increased level of tryptophan fluorescence in the blood serum in generalized suppurative infection] Zaldenberg MA, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):51-4 (Eng. Abstr.) (Rus)
[Effect of the ABO blood group phenotype on the Staphylococcus aureus bacterial carrier state] Veselov ALa, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct; (10):22-4 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

Neonatal Staphylococcus epidermidis meningitis with unremarkable CSF examination results. Gruskay J, et al.
Am J Dis Child 1989 May;143(5):580-2

COMPLICATIONS

Non-tropical pyomyositis in children--with report of severe neurological complications. Brik R, et al.
Acta Paediatr Scand 1989 Mar;78(2):331-4
Pyomyositis: a report on two cases from a region with a temperate climate. Espersen GT. **Afr J Med Med Sci** 1989 Mar;18(1):33-4
Fatal hemopericardium due to ruptured solitary myocardial abscess unassociated with infective endocarditis. Winek RR, et al. **Am J Cardiovasc Pathol** 1988;2(3):255-7
Pyomyositis in a child with acquired immunodeficiency syndrome. Patient report and brief review. Raphael SA, et al. **Am J Dis Child** 1989 Jul;143(7):779-81
Spontaneous bacterial peritonitis associated with ascites due to malignant lymphoma [letter] Gonciarz M, et al.
Am J Gastroenterol 1989 Aug;84(8):988
Clinical significance and pathogenesis of hyperbilirubinemia associated with Staphylococcus aureus septicemia. Quale JM, et al. **Am J Med** 1988 Nov;85(5):615-8
Clinical significance of hyperbilirubinemia associated with Staphylococcus aureus septicemia [letter] Watanakunakorn C. **Am J Med** 1989 Mar;86(3):364-5
Staphylococcus aureus conjunctivitis and sepsis in a neutropenic patient. Wolf MD, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):87-8
Recurrent infections with meningitis [clinical conference] Taylor AJ, et al. **Ann Allergy** 1989 Jun;62(6):492-3, 538-40
An unusual case of floppy eyelid syndrome. Fleishman JA, et al. **Ann Ophthalmol** 1988 Dec;20(12):468-9
Toxic shock syndrome associated arthropathy.
Staphylococcus aureus: a further triggering event in reactive arthritis? Foley-Nolan D, et al.
Ann Rheum Dis 1989 Apr;48(4):331-2
Pyomyositis in a patient with the acquired immunodeficiency syndrome [letter] Victor G, et al. **Arch Intern Med** 1989 Mar;149(3):705, 709
Septic acromioclavicular arthritis and osteomyelitis in a patient with acquired immunodeficiency syndrome. Zimmermann B 3d, et al. **Arthritis Rheum** 1989 Sep; 32(9):1175-8 (16 ref.)
Endocarditis in intravenous drug abusers with staphylococcal

septicaemia. Burns JM, et al. **Br Heart J** 1989 Apr; 61(4):356–7

Papillon–Lefèvre syndrome: a study of the long–term clinical course of recurrent pyogenic infections and the effects of etretinate treatment. Bergman R, et al. **Br J Dermatol** 1988 Dec;119(6):731–6

Staphylococcus aureus septicaemia: the initial presentation of polyarteritis nodosa. O'Sullivan J, et al. **Br J Rheumatol** 1989 Aug;28(4):347–9

Osler's nodes on the dorsum of the foot. Watanakunakorn C. **Chest** 1988 Nov;94(5):1088–90

Clostridium perfringens and Staphylococcus epidermidis polymicrobial septic arthritis. A case report. McAllister CM, et al. **Clin Orthop** 1989 Apr;(241):245–7 (11 ref.)

Toxic shock syndrome following repair of a ligament of the knee. Dreghorn CR, et al. **Injury** 1987 Sep;18(5):356–7

Hemobilia. A complication of hepatic abscess secondary to staphylococcal endocarditis. Certain M, et al. **J Med Assoc Ga** 1988 Dec;77(12):901–3

Indium–111 leukocyte scintigraphic detection of myocardial abscess formation in patients with endocarditis. Cerqueira MD, et al. **J Nucl Med** 1989 May;30(5):703–6

Bacterial infection: the main cause of acute cholestasis in newborn infants receiving short–term parenteral nutrition. Wolf A, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr; 8(3):297–303 (52 ref.)

Hypertrophic callus formation leading to high–output cardiac failure in a patient with osteogenesis imperfecta. Burke TE, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):605–8

Staphylococcal carriage and HIV infection [letter] Ganesh R, et al. **Lancet** 1989 Sep 2;2(8662):558

Epiglottitis in AIDS patients. Rothstein SG, et al. **Laryngoscope** 1989 Apr;99(4):389–92

Magnesium, Staphylococcus aureus and toxic shock syndrome. Kass EH. **Magnesium** 1988;7(5–6):315–9 (9 ref.)

Acute stridor in childhood; retropharyngeal abscess. Yeo Ting Chuan. **Med J Malaysia** 1988 Mar;43(1):65–73

Postoperative toxic shock syndrome: a case report and review of the literature. Molloy M, et al. **Milit Med** 1989 Feb; 154(2):74–6 (9 ref.)

Relapsing fungal septicemia caused by Candida parapsilosis following staphylococcal septicemia. Walter B, et al. **Mycoses** 1988;Suppl 1:54–8

Infected uncemented hip arthroplasty. Preserving the femoral stem with a two–stage revision procedure. Struhl S, et al. **Orthop Rev** 1989 Jun;18(6):707–12 (14 ref.)

Toxic shock syndrome and the acquired immunodeficiency syndrome. Kline MW, et al. **Pediatr Infect Dis J** 1988 Oct; 7(10):736–8

Delayed rupture of the radial artery caused by catheter–related sepsis. Arnow PM, et al. **Rev Infect Dis** 1988 Sep–Oct;10(5):1035–7 (9 ref.)

Risk of developing toxic shock syndrome associated with toxic shock syndrome toxin 1 following nongenital staphylococcal infection. Jacobson JA, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S8–13

Central nervous system complications in patients with bacteremia. Syrjänen J. **Scand J Infect Dis** 1989; 21(3):285–96

Occult infections causing persistent low–back pain. Schofferman L, et al. **Spine** 1989 Apr;14(4):417–9

Synergism of Candida albicans and delta toxin producing Staphylococcus aureus on mouse mortality and morbidity: protection by indomethacin. Carlson EC. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):377–86

Effects of Staphylococcus epidermidis on cellular immunity to infection with Listeria monocytogenes. Ehlers S, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):200–12

[Portal system obstruction of delayed onset following neonatal Staphylococcus aureus infection] Garel D, et al. **Arch Fr Pediatr** 1989 Jan;46(1):41–3 (Eng. Abstr.) **(Fre)**

[Primary staphylococcal septicemia in adults. A retrospective study] Perrotin D, et al. **Presse Med** 1989 Mar 18; 18(11):573–6 (Eng. Abstr.) **(Fre)**

[Non–traumatic rhabdomyolysis in Staphylococcus aureus septicemia (letter)] Taillan B, et al. **Presse Med** 1988 Oct 22;17(36):1860–1 **(Fre)**

[Tularemia in Switzerland. Observation of 3 cases] Meier FP, et al. **Rev Med Suisse Romande** 1988 Aug;108(8):671–6 **(Fre)**

[An autopsy case of rhabdomyolysis associated with staphylococcal septicemia] Kawamoto R, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1278–9 **(Jpn)**

[Suppurative parotitis in a child with hepatitis A] Franczak T, et al. **Wiad Lek** 1988 Jul 15;41(14):952–4 (Eng. Abstr.) **(Pol)**

[Massive–focus choroiditis in staphylococcal septicemia with multiple sites] Stefănescu–Dima A. **Rev Chir [Oftalmol]** 1988 Apr–Jun;32(2):143–8 (Eng. Abstr.) **(Rum)**

[Treatment of non–lactation suppurative mastitis] Abdulzhavadov IM. **Khirurgiia (Mosk)** 1989 Jun;(6):42–5 (Eng. Abstr.) **(Rus)**

[Infection with involvement of the central nervous system] Vengerov Iula, et al. **Klin Med (Mosk)** 1989 Feb; 67(2):28–33 (Eng. Abstr.) **(Rus)**

[Role of disturbed erythrocyte membrane functions in developing tissue hypoergia and lactoacidosis in threatening conditions] Zakharova NB, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):68–71 (Eng. Abstr.) **(Rus)**

[Septic metastatic staphylococcal destruction of the lungs in adults] Liashchenko VI. **Vestn Khir** 1989 Feb;142(2):8–11 (Eng. Abstr.) **(Rus)**

[Abscess of the psoas muscle and pyomyositis caused by Staphylococcus aureus (letter)] Alfaro MJ, et al. **Rev Clin Esp** 1989 Apr;184(6):342–3 **(Spa)**

CONGENITAL

[Mammary gland abscess in newborn infants (news)] Ströder J. **Fortschr Med** 1989 Mar 10;107(7):18 **(Ger)**

DIAGNOSIS

Isolated tricuspid valve endocarditis in a child with a normal heart. Matsuoka Y, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Dec;30(6):717–22

Dyke award. Gd–DTPA–enhanced MR imaging of experimental bacterial meningitis: evaluation and comparison with CT. Mathews VP, et al. **AJR** 1989 Jan; 152(1):131–6

Tricuspid valve endocarditis in children with normal hearts. Tornos MP, et al. **Am Heart J** 1989 Sep;118(3):624–5

Ultrasound as a tool in the diagnosis and management of exit–site infections in patients undergoing continuous ambulatory peritoneal dialysis. Holley JL, et al. **Am J Kidney Dis** 1989 Sep;14(3):211–6

Syphilitic interstitial keratitis masquerading as staphylococcal marginal keratitis. Martinez JA, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):431–3

Staphylococcal pericarditis. An atypical presentation. Tsai J, et al. **Arch Intern Med** 1989 Apr;149(4):953–4

Failure of preoperative cultures to predict development of Staphylococcus aureus wound infections after cardiac surgery. Taylor G, et al. **Can J Surg** 1989 Mar;32(2):128–30

Echocardiographic detection of an infected superior vena caval thrombus presenting as a right atrial mass. Dick AE, et al. **Chest** 1989 Jul;96(1):212–4

Detection of a prosthetic aortic valvular abscess with indium–111–labeled leukocytes. Oates E, et al. **Chest** 1988 Oct;94(4):872–4

Sporotrichoid pyogenic bacterial infection. Tanaka S, et al. **Dermatologica** 1989;178(4):228–30

Echo–Doppler features of pulmonary valve endocarditis. Bitar J, et al. **Henry Ford Hosp Med J** 1989;37(1):41–2

The age of miracles hadn't passed. Weissmann G. **Hosp Pract [Off]** 1988 Oct 15;23(10):45–6, 48–9, 53

Direct testing of blood culture for detection of the serotype 5 and 8 capsular polysaccharides of Staphylococcus aureus. Boutonnier A, et al. **J Clin Microbiol** 1989 May; 27(5):989–93

Streptococcus pyogenes and Staphylococcus aureus pseudobacteremia [letter] Smith GE, et al. **J Infect** 1989 Mar;18(2):194–5

Nonoperative treatment of spinal epidural infections. Mampalam TJ, et al. **J Neurosurg** 1989 Aug;71(2):208–10

Osteomyelitis of the cervical spine presenting as a neurenteric cyst. Ein SH, et al. **J Pediatr Surg** 1988 Aug;23(8):779–81

Pulmonary septic emboli mimicking metastatic rhabdomyosarcoma. Stine KC, et al. **J Pediatr Surg** 1989 May;24(5):491–3

Delayed diagnosis of a primary psoas abscess mimicking septic arthritis of the hip. Toren A, et al. **J Pediatr Surg** 1989 Feb;24(2):227–8

Bacterial liver abscess in children. Wang DS, et al. **J Singapore Paediatr Soc** 1989;31(1–2):75–8

Mycotic aneurysm of the abdominal aorta in the neonate. Tran–Minh VA, et al. **JCU** 1989 Jan;17(1):37–9

Infected false aneurysms of the femoral artery in intravenous drug addicts. McIlroy MA, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):578–85

Tropical pyomyositis in a Greek adult. Meletis J, et al. **Scand J Infect Dis** 1989;21(3):343–4

Pyogenic vertebral osteomyelitis of a lumbar facet joint with associated epidural abscess. A case report with review of the literature. Roberts WA. **Spine** 1988 Aug;13(8):948–52 (35 ref.)

Glomerulonephritis and sinusitis. Hypocomplementemic glomerulonephritis associated with coagulase–negative staphylococcal pansinusitis and subdural empyema. Patel Y, et al. **W V Med J** 1989 May;85(5):186–7

[Diagnostic value of B–mode ultrasonography in acute suppurative hip joint] Ma HF. **Chung Hua Wai Ko Tsa Chih** 1988 Sep;26(9):547–9, 574 (Eng. Abstr.) **(Chi)**

[Principles of the diagnosis and organization of medical services for patients with septicemia] Boczoriszwili WG. **Pol Tyg Lek** 1988 Dec 5;43(49):1572–4 **(Pol)**

[Evolutive aspect of the echocardiographic image of the vegetation in tricuspid valve endocarditis cured with clinical treatment. A case report] Saraiva LR, et al. **Arq Bras Cardiol** 1988 Nov;51(5):415–7 (Eng. Abstr.) **(Por)**

[Serologic diagnosis of a staphylococcal etiology in osteomyelitis] Deriabin PN, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):39–42 **(Rus)**

[Diagnosis and treatment of suppurative processes caused by non–clostridial anaerobic microflora] Ofanesian SS. **Khirurgiia (Mosk)** 1989 Jun;(6):68–71 (Eng. Abstr.) **(Rus)**

[Principles of the early diagnosis and treatment of suppurative pericarditis in children] Poliakov VP. **Pediatriia** 1988; (11):48–51 **(Rus)**

DRUG THERAPY

Antibiotic treatment insufficient for established septic arthritis. Staphylococcus aureus experiments in rabbits. Riegels–Nielsen P, et al. **Acta Orthop Scand** 1989 Feb; 60(1):113–5

Methicillin resistant Staphylococcus aureus (MRSA). Nagendran T, et al. **Ala Med** 1989 May;58(11):29–30

Comparison of amoxicillin and clavulanic acid (augmentin) for the treatment of nonbullous impetigo. Dagan R, et al. **Am J Dis Child** 1989 Aug;143(8):916–8

Attempts to eradicate methicillin–resistant Staphylococcus aureus colonization with the use of trimethoprim–sulfamethoxazole, rifampin, and bacitracin. Roccaforte JS, et al. **Am J Infect Control** 1988 Aug; 16(4):141–6

Successful oral treatment of methicillin–resistant Staphylococcus aureus osteomyelitis using ciprofloxacin. Westblom TU, et al. **Am J Med** 1988 Dec;85(6):884

Methicillin–resistant staphylococcal mastitis. Kalstone C. **Am J Obstet Gynecol** 1989 Jul;161(1):120

Right–sided endocarditis with Staphylococcus aureus [letter] **Ann Intern Med** 1989 Mar 15;110(6):496–8

Right–sided staphylococcal endocarditis [letter] Monane M, et al. **Ann Intern Med** 1989 May 1;110(9):749–50

Successful treatment of empyema thoracis with polymethylmethacrylate antibiotic–impregnated beads in the guinea pig. Mavroudis C, et al. **Ann Thorac Surg** 1988 Dec;46(6):615–8

Influence of etoposide and cyclophosphamide on the efficacy of cloxacillin and erythromycin in an experimental staphylococcal infection. Calame W, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):980–2

Methicillin–resistant staphylococci: detection methods and treatment of infections. Hackbarth CJ, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):995–9 (97 ref.)

Efficacy of fleroxacin in experimental methicillin–resistant Staphylococcus aureus endocarditis. Kaatz GW, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):519–21

Comparative evaluation of daptomycin (LY146032) and vancomycin in the treatment of experimental methicillin–resistant Staphylococcus aureus osteomyelitis in rabbits. Mader JT, et al. **Antimicrob Agents Chemother** 1989 May;33(5):689–92

Ciprofloxacin for methicillin–resistant Staphylococcus aureus infections. Piercy EA, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):128–30

Ciprofloxacin therapy for methicillin–resistant Staphylococcus aureus infections or colonizations. Smith SM, et al. **Antimicrob Agents Chemother** 1989 Feb; 33(2):181–4

Antistaphylococcal activity of teicoplanin in Riyadh, Saudi Arabia. Shibl AM, et al. **APMIS Suppl** 1988;3:68–70

Short–course therapy for catheter–associated Staphylococcus aureus bacteremia. Ehni WF, et al. **Arch Intern Med** 1989 Mar;149(3):533–6

Methicillin–resistant Staphylococcus epidermidis keratitis treated with vancomycin. Goodman DF, et al. **Arch Ophthalmol** 1988 Nov;106(11):1570–1

Cefoperazone in the treatment of peritonitis in continuous ambulatory peritoneal dialysis patients. Leehey DJ, et al. **Artif Organs** 1988 Dec;12(6):482–3

Therapeutic approach to methicillin–resistant Staphylococcus aureus (MRSA) infections: vancomycin update. Gennery BA, et al. **Br J Clin Pract Symp Suppl** 1988 Feb;57:100–1 (3 ref.)

A morphological study of the effect of treatment with the antibiotic ceftazidime on experimental staphylococcal endocarditis and aortitis. Ferguson DJ, et al. **Br J Exp Pathol** 1988 Aug;69(4):551–61

Effects of fusidic acid on staphylococcal keratitis. Tabbara KF, et al. **Br J Ophthalmol** 1989 Feb;73(2):136–9

Microbiological indications for the treatment of Staphylococcus aureus infections. Fabbri A, et al. **Chemioterapia** 1988 Dec;7(6):378–81

Efficacy and safety of azlocillin and ticarcillin in febrile neutropenic children with cancer: a comparative study. Kosmidis H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):396–8

Ceftriaxone treatment of neonatal sepsis. Malaka–Zafiriu K, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):411–2

A study of the use of norfloxacin in prostatitis. Sheikh MA, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):529–30

The use of in vitro kinetic models in the evaluation of beta–lactamase inhibitors. White A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):202–4

Effect of dosing intervals on efficacy of clarithromycin and erythromycin in mouse infection models. Fernandes PB, et al. **Drugs Exp Clin Res** 1988;14(7):441–4

Treatment of chronic experimental Staphylococcus aureus osteomyelitis with LY146032 and vancomycin. Luu QN, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):562–3

Dosage guidelines for the use of vancomycin based on its pharmacokinetics in infants. Lisby–Sutch SM, et al. **Eur J Clin Pharmacol** 1988;35(6):637–42

Reappraisal of antibiotic susceptibility tests in the management of chronic bacterial prostatitis. Kazanci G, et al. **Eur Urol** 1988;14(5):398–401

Oxacillin–resistant S aureus [letter] Silver HJ. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):98

Antimicrobial prophylaxis of experimental endocarditis caused by Staphylococcus epidermidis. Baddour LM, et

al. **Infection** 1989 Mar–Apr;17(2):90–6
Peritonsillar abscess in an infant. Zohar S, et al. **Int J Pediatr Otorhinolaryngol** 1988 Sep;15(3):291–4
The efficacy of the combination of teicoplanin or flucloxacillin with netilmicin in the treatment of Staphylococcus aureus bacteraemia. Degener JE, et al. **J Antimicrob Chemother** 1989 Jun;23(6):899–904
Teicoplanin in the treatment of infections by staphylococci, Clostridium difficile and other gram-positive bacteria. de Lalla F, et al. **J Antimicrob Chemother** 1989 Jan; 23(1):131–42
Adaptation of methicillin-resistant Staphylococcus aureus during antibiotic therapy. Menzies RE, et al. **J Antimicrob Chemother** 1989 Jun;23(6):923–7
Drug transfer into cerebrospinal fluid after simultaneous administration of ampicillin with ceftriaxone or ceftazidime in rabbits with Staphylococcus aureus meningitis. Okura K, et al. **J Antimicrob Chemother** 1988 Aug;22(2):207–11
Activity of penems against methicillin-resistant Staphylococcus aureus [letter] Van der Auwera P. **J Antimicrob Chemother** 1988 Sep;22(3):385–7
Comparative efficacy of amoxicillin–clavulanate, cloxacillin, and vancomycin against methicillin-sensitive and methicillin-resistant Staphylococcus aureus endocarditis in rats. Cantoni L, et al. **J Infect Dis** 1989 May;159(5):989–93
Implications of acquired oxacillin resistance in the management and control of Staphylococcus aureus infections. Massanari RM, et al. **J Infect Dis** 1988 Oct; 158(4):702–9
The activity of isoxazolyl penicillins in experimental staphylococcal infection. Renneberg J, et al. **J Infect Dis** 1989 Jun;159(6):1128–32
The effect of local antibiotics in treating chronic osseous Staphylococcus aureus infection. Keogh BS, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):940–5
Efficacy of erythromycin acistrate (2'-acetyl erythromycin stearate) and erythromycin stearate in experimental infections in mice. Männistö PT, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1028–33
Antimicrobial treatment of infective endocarditis due to viridans streptococci, enterococci, and staphylococci. Bisno AL, et al. **JAMA** 1989 Mar 10;261(10):1471–7 (12 ref.)
In vitro and in vivo effects of combinations of cefotaxime or other beta-lactams with rolitetracycline on methicillin-resistant Staphylococcus aureus. Kobayashi S, et al. **Jpn J Antibiot** 1989 May;42(5):1208–15
Mupirocin for eradication of nasal carriage of staphylococci [letter] Casewell MW, et al. **Lancet** 1989 Jan 21;1(8630):154
Ciprofloxacin for the treatment of chronic ear disease. Piccirillo JF, et al. **Laryngoscope** 1989 May;99(5):510–3
Teicoplanin in patients who are allergic to vancomycin [letter] Wood G, et al. **Med J Aust** 1989 Jun 5;150(11):668
Urokinase: a treatment for relapsing peritonitis due to coagulase-negative staphylococci. Pickering SJ, et al. **Nephrol Dial Transplant** 1989;4(1):62–5
Pyomyositis in spinal cord injury patients. Midha M, et al. **Paraplegia** 1989 Aug;27(4):302–6
Timentin therapy for Staphylococcus aureus infections in children: results of a multicenter trial. Jacobs RF, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):441–4
Intraventricular nafcillin-induced seizures in a neonate. Brozanski BS, et al. **Pediatr Neurol** 1988 May–Jun; 4(3):188–90
Therapeutic considerations for infections caused by Staphylococcus epidermidis. Rodvold KA. **Pharmacotherapy** 1988;8(6 Pt 2):14S–18S (31 ref.)
The changing susceptibility of staphylococci. Williams TW Jr. **Pharmacotherapy** 1988;8(6 Pt 2):2S–6S (23 ref.)
Simulation of vancomycin peak and trough concentrations using five dosing methods in 37 patients. Zokufa HZ, et al. **Pharmacotherapy** 1989;9(1):10–6
Bactericidal activity of fusafungine towards nosocomial methicillin-resistant staphylococcal strains. German-Fattal M. **Rhinology** 1988;Suppl 5:29–36
Comparison of in vivo and in vitro activities of antibiotics with different modes of action against a tolerant and a non-tolerant Staphylococcus aureus strain. Hoogeterp JJ, et al. **Scand J Infect Dis** 1989;21(1):95–101
[Management of staphylococcal infections] Lumio J. **Duodecim** 1989;105(4):368–74 (30 ref.) **(Fin)**
[Efficacy of injectable ofloxacin in treating septicemia. Multicenter study] Doco-Lecompte T, et al. **Pathol Biol (Paris)** 1989 May;37(5):465–7 (Eng. Abstr.) **(Fre)**
[Acute interstitial nephritis following piperacillin] Dörner O, et al. **Klin Wochenschr** 1989 Jul 3;67(13):682–6 (Eng. Abstr.) **(Ger)**
[Non-surgical management of an infected ventriculo-atrial shunt] Zink PM, et al. **Neurochirurgia (Stuttg)** 1989 Mar; 32(2):61–4 (Eng. Abstr.) **(Ger)**
[Resistance of staphylococci to intracellular killing by macrophages—a new pathophysiologic concept of acute hematogenous osteomyelitis in childhood and its therapeutic consequences] Guggenbichler JP, et al. **Padiatr Padol** 1989;24(1):21–32 (Eng. Abstr.) **(Ger)**
[Infections of the cerebrospinal fluid shunt] Menardi G. **Padiatr Padol** 1989;24(1):43–8 (Eng. Abstr.) **(Ger)**
[Evaluation of the clinico-bacteriologic efficacy and tolerance of netilmicin in the treatment of neonatal staphylococcal infections] Stronati M, et al. **G Ital Chemioter** 1988 Jan–Dec;35(1–3):27–31 (Eng. Abstr.) **(Ita)**
[Clinical studies of rokitamycin dry syrup on skin and soft tissue infections in the pediatric fields] Motohiro T, et al. **Jpn J Antibiot** 1988 Oct;41(10):1503–16 (Eng. Abstr.) **(Jpn)**
[Clinical studies of cefpodoxime proxetil in respiratory tract infections] Odagiri S, et al. **Jpn J Antibiot** 1988 Oct; 41(10):1538–44 (Eng. Abstr.) **(Jpn)**
[Clinical evaluation of cefpodoxime proxetil in the treatment of skin and soft tissue infections. A double blind comparison of cefpodoxime proxetil and cefaclor] Yura J, et al. **Jpn J Antibiot** 1988 Oct;41(10):1517–37 (Eng. Abstr.) **(Jpn)**
[A case report of sepsis and multiple lung abscess associated with purulent arthritis of knee joint due to methicillin resistant Staphylococcus aureus] Watanabe K, et al. **Kansenshogaku Zasshi** 1988 Mar;62(3):266–72 (Eng. Abstr.) **(Jpn)**
[Evaluation of the effectiveness of the treatment of bacterial endocarditis with penicillin or cefamandole and determining the indications for surgical treatment. Preliminary report] Pracka H, et al. **Kardiol Pol** 1988;31 Suppl 2:63–71 (Eng. Abstr.) **(Pol)**
[Various new aspects of the prevention and treatment of postpartum and post-abortion suppurative-septic diseases] Bibilelshvili ZA, et al. **Akush Ginekol (Mosk)** 1988 Dec; (12):53–5 **(Rus)**
[Preparation of lysozyme immobilized on textile carriers and its use in treating suppurative wounds] Vlasov LG, et al. **Antibiot Khimioter** 1988 Nov;33(11):848–50 (Eng. Abstr.) **(Rus)**
[Chemotherapeutic effectiveness of preparation B-40 in experimental staphylococcal infection] Pavlii SI, et al. **Mikrobiol Zh** 1989 Jan–Feb;51(1):95–7 (Eng. Abstr.) **(Rus)**
[Effectiveness of the treatment of patients with bacterial keratitis using an arenarin ointment] Nadzhem A, et al. **Oftalmol Zh** 1988;(5):294–6 (Eng. Abstr.) **(Rus)**
[Experience with the treatment of infants under 1 year of age with the preparation "nipocin"] Vereshchagina TG, et al. **Pediatriia** 1989;(2):93–4 **(Rus)**
[Therapy and prevention of secondary infection in patients with atopic dermatitis] Lesnik NV, et al. **Vestn Dermatol Venerol** 1988;(5):58–60 (Eng. Abstr.) **(Rus)**
[Separate and combined action of antibiotics and vitamins on monoamine oxidase activity of the rabbit liver in staphylococcal infection] Tsyganenko Ala. **Vopr Med Khim** 1971 Jul–Aug;17(4):364–9 (Eng. Abstr.) **(Rus)**
[Antibiotic therapy of infected cerebrospinal fluid in hydrocephalus treated by a shunt] Isla Guerrero A, et al. **An Esp Pediatr** 1988 Dec;29(6):435–9 (23 ref.) (Eng. Abstr.) **(Spa)**

ECONOMICS

Cost of nosocomial infection: relative contributions of laboratory, antibiotic, and per diem costs in serious Staphylococcus aureus infections. Wakefield DS, et al. **Am J Infect Control** 1988 Oct;16(5):185–92
Expenses incurred during a 5-week epidemic methicillin-resistant Staphylococcus aureus outbreak [letter] Mehtar S, et al. **J Hosp Infect** 1989 Feb; 13(2):199–200

ENZYMOLOGY

[Enzymatic changes in experimental chronic salpingitis following exposure to sinusoidal modulating currents] Slavelkova O, et al. **Akush Ginekol (Sofiia)** 1988;27(4):57–60 (Eng. Abstr.) **(Bul)**

EPIDEMIOLOGY

Staphylococcus aureus bacteraemia in children below the age of one year. A review of 407 cases. Espersen F, et al. **Acta Paediatr Scand** 1989 Jan;78(1):56–61
Epidemiologic study of neonatal subcutaneous gangrene caused by multi-resistant Staphylococcus aureus. Wu SX, et al. **Acta Paediatr Scand** 1989 Mar;78(2):222–7
Morbidity and mortality of an endemic pathogen: methicillin-resistant Staphylococcus aureus. Hunt JL, et al. **Am J Surg** 1988 Dec;156(6):524–8
The changing pattern of severe neonatal staphylococcal infection: a 10-year study. Tam AY, et al. **Aust Paediatr J** 1988 Oct;24(5):275–9
Incidence of Staphylococcus aureus infections in a chronic care facility–Nova Scotia. Sweet L, et al. **Can Dis Wkly Rep** 1989 Aug 5;15(31):159–61 **(Eng, Fre)**
Methicillin resistant Staphylococcus aureus: identification of a community outbreak by monitoring of hospital isolates. Dammann TA, et al. **Can J Public Health** 1988 Sep–Oct; 79(5):312–4
Phage types of Staphylococcus aureus isolates from the throats of school children. Chaudhary U, et al. **Indian J Med Res** 1988 Jul;88:18–9
A prospective study of infections in hemodialysis patients: patient hygiene and other risk factors for infection. Kaplowitz LG, et al. **Infect Control Hosp Epidemiol** 1988 Dec;9(12):534–41
The epidemiology of methicillin-resistant Staphylococcus aureus in a burn center. Heggers JP, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):610–2
MRSA and environmental cleanliness [letter] Drabu YJ, et al. **J Hosp Infect** 1989 Jan;13(1):97–8
Methicillin-resistant Staphylococcus aureus in two burn units: clinical significance and epidemiological control. Ransjö U, et al. **J Hosp Infect** 1989 May;13(4):355–65
Staphylococcal enterotoxin antibodies in pediatric patients from Utah. Reiser RF, et al. **J Infect Dis** 1988 Nov; 158(5):1105–8
An outbreak of gastrointestinal illness caused by Staphylococcus aureus in a prison population. Archer PW, et al. **J Okla State Med Assoc** 1989 May;82(5):209–12
Ciprofloxacin resistance in epidemic methicillin-resistant Staphylococcus aureus [letter] **Lancet** 1988 Oct 8; 2(8615):843
World-wide antibiotic resistance in methicillin-resistant Staphylococcus aureus. Maple PA, et al. **Lancet** 1989 Mar 11;1(8637):537–40
[Neonatal sepsis in Finland over one decade] Vesikari T, et al. **Duodecim** 1989;105(9):831–8 **(Fin)**
[Infections caused by Staphylococcus epidermidis in the Alessandria Civil Hospital] Garavelli PL, et al. **Minerva Med** 1989 Jun;80(6):579–80 (Eng. Abstr.) **(Ita)**
[Epidemiological study of the associations of Staphylococcus aureus and Pseudomonas aeruginosa in the pulmonology clinic] Sologub VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):8–11 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Purulent pericarditis and ventricular pseudoaneurysm in an intravenous drug abuser. Wiegers SE, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1635–7
Peritonitis secondary to dialysis tubing contamination among patients undergoing continuous ambulatory peritoneal dialysis. Rubin J, et al. **Am J Kidney Dis** 1989 Aug; 14(2):92–5
Femoral endarteritis due to Staphylococcus aureus complicating percutaneous transluminal coronary angioplasty. Brummitt CF, et al. **Am J Med** 1989 Jun;86(6 Pt 2):822–4
Intra-abdominal sepsis after hepatic resection. Pace RF, et al. **Ann Surg** 1989 Mar;209(3):302–6
Epidural spinal infection in intravenous drug abusers. Koppel BS, et al. **Arch Neurol** 1988 Dec;45(12):1331–7 (14 ref.)
Pacemaker infection. Spelman D. **Aust Fam Physician** 1988 Oct;17(10):903
Brain abscess complicating cervical traction. Reece AT, et al. **BMJ** 1988 Aug 20–27;297(6647):539
Pathogenesis of S epidermidis foreign body infections. Peters G. **Br J Clin Pract Symp Suppl** 1988 Feb;57:62–5 (24 ref.)
Local infection after percutaneous transluminal coronary angioplasty: relation to early repuncture of ipsilateral femoral artery. Wiener RS, et al. **Cathet Cardiovasc Diagn** 1989 Mar;16(3):180–1
Laboratory, clinical, and epidemiological aspects of coagulase-negative staphylococci. Pfaller MA, et al. **Clin Microbiol Rev** 1988 Jul;1(3):281–99 (169 ref.)
Staphylococcus aureus skin carriage and development of peritonitis in patients on continuous ambulatory peritoneal dialysis. Sesso R, et al. **Clin Nephrol** 1989 May;31(5):264–8
Carriage of Staphylococcus aureus and inflamed infusion sites with insulin-pump therapy. van Faassen I, et al. **Diabetes Care** 1989 Feb;12(2):153–5
Infective endocarditis in children with congenital heart disease: the changing spectrum, 1965–85. Geva T, et al. **Eur Heart J** 1988 Nov;9(11):1244–9
Rubber band ligation for piles can be disastrous in HIV-positive patients. Buchmann P, et al. **Int J Color Dis** 1989;4(1):57–8
Acute suppurative parotitis in a patient on total parenteral nutrition. Sriram K, et al. **J Am Coll Nutr** 1988 Oct; 7(5):385–7
The pathogenesis of S. aureus endocarditis [letter] Proctor RA. **J Lab Clin Med** 1989 Feb;113(2):249–51
Septic arthritis of the temporomandibular joint complicating otitis externa. Thomson HG. **J Laryngol Otol** 1989 Mar; 103(3):319–21
Establishment of an experimental model of a Staphylococcus aureus abscess in mice by use of dextran and gelatin microcarriers. Ford CW, et al. **J Med Microbiol** 1989 Apr; 28(4):259–66
Good visual outcome after endophthalmitis in an eye previously treated successfully for amblyopia. Kushner BJ, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr; 26(2):69–71
Osteomyelitis of the clavicle secondary to infected Hickman catheter. Kravitz AB. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):426–7
Subclavian catheter infections. Rose SG, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):511–2
Cerebrospinal fluid shunt infections. **Lancet** 1989 Jun 10; 1(8650):1304–5 (14 ref.)
Generalized lymphadenopathy in continuous ambulatory peritoneal dialysis patients associated with Staphylococcus epidermidis infection. Pollock CA, et al. **Nephron** 1989; 52(1):81–2
Staphylococcal enterocolitis revisited: cytotoxic properties of Staphylococcus aureus from a neonate with enterocolitis. Christie CD, et al. **Pediatr Infect Dis J** 1988 Nov; 7(11):791–5
Toxic shock syndrome after ear piercing. McCarthy VP, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):741–2

Infective endocarditis as a complication of a permanent indwelling right atrial catheter in a patient with severe aplastic anaemia. Morrison AE, et al. **Scott Med J** 1988 Oct;33(5):337–8

Infections caused by central venous catheters in patients with acquired immunodeficiency syndrome. Prichard JG, et al. **South Med J** 1988 Dec;81(12):1496–8

Infected Charcot spine following spinal cord injury. Mikawa Y, et al. **Spine** 1989 Aug;14(8):892–5

An experimental study of susceptibility to infection after hemorrhagic shock. Livingston DH, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):138–42

Acute focal bacterial nephritis and renal abscess associated with vesicoureteral reflux. Report of a case. Sugao H, et al. **Urol Int** 1988;43(4):253–6

Toxic shock syndrome and sinusitis—a hidden site of infection. Griffith JA, et al. **West J Med** 1988 May; 148(5):580–1

[Pyodermatitis of the nasal pyramid disclosing a complication of rhinoplasty with silicone implant] Berbis P, et al. **Ann Dermatol Venereol** 1989;116(3):233–5 (Fre)

[Joint periostitis of the lower limb disclosing a fistulated and infected aortic prosthesis (letter)] Lassoued S, et al. **Presse Med** 1988 Oct 15;17(35):1815–6 (Fre)

[Tricuspid endocarditis caused by Staphylococcus aureus in AIDS. Discussion of a case] Serra W, et al. **G Ital Cardiol** 1988 Mar;18(3):240–3 (Eng. Abstr.) (Ita)

[A case of preoperative esophageal cancer developing lobar pneumonia due to MRSA infection of the catheter] Inoue H, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1122–6 (Eng. Abstr.) (Jpn)

[Experiences of postoperative staphylococcal enteritis caused by methicillin-cephem resistant Staphylococcus aureus (MRSA) and the state of the isolation of MRSA] Takahashi M, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):517–23 (Eng. Abstr.) (Jpn)

[Experimental viral-bacterial infections. II. Development and course of mixed EMC virus and Staphylococcus aureus infection in mice] Luczak M, et al. **Med Dosw Mikrobiol** 1988;40(1):50–7 (Eng. Abstr.) (Pol)

[Evaluation of the usefulness of a rabbit model in studies of toxic shock syndrome] Zaleska M, et al. **Med Dosw Mikrobiol** 1988;40(2):109–14 (Eng. Abstr.) (Pol)

[Staphylococcal septicemia] Ellert-Zygadłowska J, et al. **Wiad Lek** 1989 Dec 1;41(23):1611–4 (Eng. Abstr.) (Pol)

[A method for creating an experimental model of abscess] Mamedov LA, et al. **Arkh Patol** 1988;50(8):82–4 (Eng. Abstr.) (Rus)

[Evaluation of the safety of egg-white cream used in pastries and cakes] Bullo II, et al. **Gig Sanit** 1989 Jan;(1):66–8 (Rus)

[Study of possible reproduction of causative agents of suppurative skin diseases in the lubricating-cooling liquid "Ukrinol-1M"] Solovarov VP, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):42–3 (Rus)

[Multiple heart valve prolapse syndrome complicated by staphylococcal endocarditis] Demin AA, et al. **Kardiologiia** 1989 Feb;29(2):105–7 (Rus)

[Effect of contamination by opportunistic microflora on the incidence of wound infection in a surgical hospital] Mokhniuk IuN, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):22–3 (Eng. Abstr.) (Rus)

[Anaerobic infection after criminal abortion] Pisklivets ZS, et al. **Klin Khir** 1989;(1):54–5 (Rus)

[Staphylococcal osteomyelitis of the spine as a complication of gunshot abdominal wound] Ardashev IP, et al. **Ortop Travmatol Protez** 1989 Jan;(1):57–9 (Rus)

[Mechanism of the occurrence of postinjection abscesses] Zhdanskiĭ NV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):80–3 (Eng. Abstr.) (Rus)

[Splenic abscess after partial embolization] Bautista Casasnovas A, et al. **An Esp Pediatr** 1989 May;30(5):385–6 (Spa)

[Polymicrobial endocarditis in heroin addicts: a new case with mural involvement (letter)] Rodríguez Ramírez J, et al. **Med Clin (Barc)** 1988 Oct 1;91(10):399 (Spa)

IMMUNOLOGY

Impaired microbial killing in two patients with defective degranulation of myeloperoxidase. Edwards SW, et al. **Acta Paediatr Hung** 1988–89;29(1–2):101–4

Specific responses to Staphylococcus aureus in patients with hyper-IgE syndrome. Yanagi T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):649–53

Role of an intraperitoneal catheter implant in the pathogenesis of experimental Staphylococcus epidermidis peritoneal infection in renal failure mice. Gallimore B, et al. **Am J Nephrol** 1988;8(4):334–43

Opsonic activity in serum from septic infants treated with intravenous immunoglobulin. Maródi L, et al. **Arch Dis Child** 1989 Apr;64(4):530–4

Antibody response to Staphylococcus aureus surface proteins in rabbits with persistent osteomyelitis after treatment with demineralized bone implants. Thomas VL, et al. **Infect Immun** 1989 Feb;57(2):404–12

Cross protection between an encapsulated strain of Staphylococcus hyicus and encapsulated strains of Staphylococcus aureus. Yoshida K, et al. **J Appl Bacteriol** 1988 Dec;65(6):491–9

Impaired neutrophil killing in a patient with defective degranulation of myeloperoxidase. Edwards SW, et al. **J Clin Lab Immunol** 1988 Apr;25(4):201–6

Staphylococcus aureus capsular types and antibody response to lung infection in patients with cystic fibrosis. Albus A, et al. **J Clin Microbiol** 1988 Dec;26(12):2505–9

Antibodies to staphylococcal peptidoglycan and its peptide epitopes, teichoic acid, and lipoteichoic acid in sera from blood donors and patients with staphylococcal infections. Wergeland HI, et al. **J Clin Microbiol** 1989 Jun; 27(6):1286–91

[Selected indicators of immunity in patients with chronic osteomyelitis] Pyzio A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):313–7 (Eng. Abstr.) (Pol)

[Characteristics of the course of abscesses during effects on the system of phagocytosing mononuclear cells] Safuan D, et al. **Arkh Patol** 1988;50(7):45–51 (Eng. Abstr.) (Rus)

[Formation of a humoral immune response to Staphylococci in mice] Bobrovnik SA, et al. **Fiziol Zh** 1988 Nov–Dec; 34(6):18–23 (Eng. Abstr.) (Rus)

[An immuno-test system for determining antibodies to Staphylococcus aureus in osteomyelitis in children] Stepanov EA, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):98–101 (Eng. Abstr.) (Rus)

[Body reactions in experimental Pseudomonas aeruginosa-staphylococcal associated infections] Gots IuD, et al. **Mikrobiol Zh** 1987 May–Jun;49(3):96–9 (Eng. Abstr.) (Rus)

[Antigen-independent factors of the system of immunity in patients with inflammatory processes of the maxillofacial area of staphylococcal etiology] Kiselev VA, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):27–9 (Eng. Abstr.) (Rus)

[Serum immunoglobulins A,M, G and E in adolescents with chronic suppurative maxillary sinusitis during immunotherapy] Moskovchenko NA, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):61–3 (Eng. Abstr.) (Rus)

[The role of cellular and humoral factors of body resistance in the development of experimental influenza-staphylococcal infections in mice] Lavrov VF, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr; (4):73–6 (Eng. Abstr.) (Rus)

[The effect of alpha/beta and gamma interferon preparations on the functional activity of macrophages in experimental staphylococcal infections] Vikhot' NE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):57–60 (Eng. Abstr.) (Rus)

METABOLISM

[Indices of lysozyme activity and of liver metabolic function in staphylococcal and Pseudomonas aeruginosa infection] Pavlenko VA, et al. **Vrach Delo** 1989 Mar;(3):111–3 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Comparative characterization and biotyping of Staphylococcus aureus isolates from human and bovine sources. Farah IO, et al. **Acta Vet Scand** 1988; 29(3–4):303–10

Toxic shock syndrome caused by a strain of Staphylococcus aureus that produces enterotoxin C but not toxic shock syndrome toxin-1. Rizkallah MF, et al. **Am J Dis Child** 1989 Jul;143(7):848–9

Coagulase-negative staphylococcal bacteremia [letter] Collignon P. **Ann Intern Med** 1989 Jun 1;110(11):945–6

Staphylococcal wound infection in the pig: Part II. Inoculation, quantification of bacteria, and reproducibility. Sandén G, et al. **Ann Plast Surg** 1989 Sep;23(3):219–23

Antimicrobial resistance in nosocomial isolates of Staphylococcus haemolyticus. Froggatt JW, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):460–6

Coagulase-negative staphylococci and hydrocephalus shunt infections. Bayston R. **Biochem Soc Trans** 1989 Jun; 17(3):471–3

Outbreak of coagulase negative staphylococcus highly resistant to ciprofloxacin in a leukaemia unit. Oppenheim BA, et al. **BMJ** 1989 Jul 29;299(6694):294–7

Staphylococci—the cause of hospital infections in an orthopedic department. Tselenis-Kotsowilis A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):18–9

Infections due to coagulase-negative staphylococci. Caputo GM. **Del Med J** 1989 Jan;61(1):9–12, 15

Absence of factors associated with significant urinary tract infections caused by coagulase-negative staphylococci. Rimland D, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):123–7

Methicillin-resistant Staphylococcus aureus from China characterized by digestion of total DNA with restriction enzymes. Hall LM, et al. **Epidemiol Infect** 1989 Aug; 103(1):183–92

Hospital-acquired infection with methicillin-resistant and methicillin-sensitive staphylococci. Law MR, et al. **Epidemiol Infect** 1988 Dec;101(3):623–9

Infection with Staphylococcus aureus producing toxic shock syndrome (TSS) toxin-1 without TSS. Nadal D, et al. **Eur J Pediatr** 1989 Jan;148(4):318–9

Tropical myositis, the great imitator: a case report. Trotter JL, et al. **Hawaii Med J** 1988 Oct;47(10):468, 471–2

Botryomycosis of the oral cavity. Maves MD, et al. **Head Neck** 1989 May–Jun;11(3):274–8 (19 ref.)

Coagulase-negative staphylococcal sepsis in infants. Christo GG, et al. **Indian Pediatr** 1988 Apr;25(4):338–42

Coagulase-negative staphylococcal infections in vascular surgery: epidemiology and pathogenesis. Edmiston CE Jr, et al. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):111–7 (58 ref.)

Roles of alpha-toxin and beta-toxin in virulence of Staphylococcus aureus for the mouse mammary gland. Bramley AJ, et al. **Infect Immun** 1989 Aug;57(8):2489–94

Staphylococcus saprophyticus urease: characterization and contribution to uropathogenicity in unobstructed urinary tract infection of rats. Gatermann S, et al. **Infect Immun** 1989 Jan;57(1):110–6

Determination by western blot (immunoblot) of seroconversions to toxic shock syndrome (TSS) toxin 1 and enterotoxin A, B, or C during infection with TSS- and non-TSS-associated Staphylococcus aureus. Whiting JL, et al. **Infect Immun** 1989 Jan;57(1):231–4

Lack of extracellular slime effect on treatment outcome of Staphylococcus epidermidis experimental endocarditis. Steckelberg JM, et al. **J Antimicrob Chemother** 1989 Jan; 23(1):117–21

Microbiology of postthoracotomy sternal wound infection. Brook I. **J Clin Microbiol** 1989 May;27(5):806–7

Staff carriage of epidemic methicillin-resistant Staphylococcus aureus. Cookson B, et al. **J Clin Microbiol** 1989 Jul;27(7):1471–6

Comparative virulence of human isolates of coagulase-negative staphylococci tested in an infant mouse weight retardation model. Gunn BA. **J Clin Microbiol** 1989 Mar;27(3):507–11

Susceptibility of methicillin-resistant Staphylococcus aureus to lysostaphin. Huber MM, et al. **J Clin Microbiol** 1989 May;27(5):1122–4

Pathogenicity in two cases of Staphylococcus schleiferi, a recently described species. Jean-Pierre H, et al. **J Clin Microbiol** 1989 Sep;27(9):2110–1

Restriction endonuclease analysis of Staphylococcus epidermidis DNA may be a useful epidemiological marker. Renaud F, et al. **J Clin Microbiol** 1988 Sep;26(9):1729–34

Staphylococcus intermedius in canine gingiva and canine-inflicted human wound infections: laboratory characterization of a newly recognized zoonotic pathogen. Talan DA, et al. **J Clin Microbiol** 1989 Jan;27(1):78–81

Two populations of methicillin- and gentamicin-resistant Staphylococcus aureus strains in a regional hospital in Hong Kong: epidemiology and plasmid profile studies [letter] Cheng AC, et al. **J Hosp Infect** 1988 Oct;12(3):241–3

Methicillin-resistant Staphylococcus aureus bacteraemia in Hong Kong. Cheng AF, et al. **J Hosp Infect** 1988 Aug; 12(2):91–101

The emergence of methicillin-resistant Staphylococcus aureus infections in an Israeli hospital. Finkelstein R, et al. **J Hosp Infect** 1989 Jul;14(1):55–61

The laboratory interpretation of coagulase-negative staphylococcal bacteraemia in neonates. Marshall RJ, et al. **J Hosp Infect** 1988 Nov;12(4):295–9

Antibiotic resistance of coagulase-negative staphylococci in an orthopaedic department. Sanzén L, et al. **J Hosp Infect** 1988 Aug;12(2):103–8

Pyomyositis—an under-reported disease in temperate climates. Farrag N, et al. **J Infect** 1988 Nov;17(3):259–63

Strategies for molecular characterisation of methicillin- and gentamicin-resistant Staphylococcus aureus in a Canadian nosocomial outbreak. Bigelow N, et al. **J Med Microbiol** 1989 Sep;30(1):51–8

Enterotoxin production by Staphylococcus aureus isolates from cases of septicaemia and from healthy carriers. Humphreys H, et al. **J Med Microbiol** 1989 Mar; 28(3):163–72

Ten-year survey of positive blood cultures among admissions to a neonatal intensive care unit. Hall RT, et al. **J Perinatol** 1987 Spring;7(2):122–6

Colonization with slime-positive coagulase-negative staphylococci as a risk factor for invasive coagulase-negative staphylococci infections in neonates. Hall SL, et al. **J Perinatol** 1988 Summer;8(3):215–21

Nasal carriage of sodium fusidate resistant Staphylococcus aureus [letter] Dealler S. **J R Coll Gen Pract** 1988 Apr; 38(309):171

Vascular prosthetic infection with Staphylococcus epidermidis: experimental study of pathogenesis and therapy. Martin LF, et al. **J Vasc Surg** 1989 Mar; 9(3):464–71

Methicillin resistant staphylococcus aureus in a teaching hospital of Karachi—a laboratory study. Ashiq B, et al. **JPMA** 1989 Jan;39(1):6–9

Coagulase-negative staphylococcal endophthalmitis. Increase in antimicrobial resistance. Davis JL, et al. **Ophthalmology** 1988 Oct;95(10):1404–10

A study of coagulase-negative staphylococci isolated from clinically significant infections at an Australian teaching hospital. Large M, et al. **Pathology** 1989 Jan;21(1):19–22

Septicemia caused by Staphylococcus saprophyticus without associated urinary tract infection. Nataro JP, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):601–2

Analysis of enteric coagulase-negative staphylococci from neonates with necrotizing enterocolitis. Rotbart HA, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):140–2

Regulation and control of toxic shock syndrome toxin 1: overview. Bergdoll MS. **Rev Infect Dis** 1989 Jan–Feb;11

Suppl 1:S142–4 (16 ref.)
Distribution and expression of toxic shock syndrome toxin 1 gene among Staphylococcus aureus isolates of toxic shock syndrome and non–toxic shock syndrome origin. Bonventre PF, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S90–5
Production of toxic shock syndrome toxin 1 in a mouse model of Staphylococcus aureus abscess formation. Lee JC, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S254–9
Effect of trace metals on the synthesis of toxic shock syndrome toxin 1. Reeves MW. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S145–49; discussion S149–50
The efficacy of rifampicin against Staphylococcus aureus in vitro and in an experimental infection in normal and granulocytopenic mice. Hoogeterp JJ, et al. **Scand J Infect Dis** 1988;20(6):649–56
A long–term study of the nasal carriage of Staphylococcus aureus in healthy Nigerian students. Lamikanra A, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):500–2
Levels of toxic shock syndrome toxin–1 production among Staphylococcus aureus strains and clinical implications. Naidu AS, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan;270(3):337–44
Complex typing of methicillin–resistant Staphylococcus aureus (MRSA). Witte W, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):76–82
[Pseudo– "toxic lens" syndrome over the course of 4 years caused by staphylococcus epidermidis endophthalmitis] Bialasiewicz AA, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):142–5 (Eng. Abstr.) (Ger)
[The role of coagulase negative staphylococci in mixed infections: association testing as an in vitro model] Manncke KH, et al. **Langenbecks Arch Chir** 1989;374(4):214–20 (Eng. Abstr.) (Ger)
[In vitro virulence of wound infecting staphylococcal isolates from severely burned patients] Winkler M, et al. **Langenbecks Arch Chir** 1989;374(3):181–4 (Eng. Abstr.) (Ger)
[Detection of fibria–like surface structures in Staphylococcus saprophyticus as a pathogen in chronic pyelonephritis] Schmidt H, et al. **Z Urol Nephrol** 1988 Jul;81(7):437–44 (Eng. Abstr.) (Ger)
[Plasmid fingerprinting suggests nosocomial spread of methicillin–resistant Staphylococcus aureus in a newborn baby care unit] Tobita M, et al. **Rinsho Byori** 1988 Jul; 36(7):861–5 (Jpn)
[A comparison of characteristics of Staphylococcus epidermidis isolated from blood of patients and healthy carriers] Uchiyama K, et al. **Rinsho Byori** 1988 Dec; 36(12):1436–40 (Jpn)
[Evaluation of the capacity of chromosomal genes of erythromycin resistance for translocation in hospital strains of Staphylococcus aureus] Młynarczyk G, et al. **Med Dosw Mikrobiol** 1988;40(4):181–6 (Eng. Abstr.) (Pol)
[Coagulase–negative Staphylococci from the hospital and extra–hospital environments] Mikucki J, et al. **Przegl Epidemiol** 1988;42(2):134–40 (Eng. Abstr.) (Pol)
[Bacterial flora and antistreptolysin O level in chronic tonsillitis treated by ultrasonics] Karnicki C, et al. **Wiad Lek** 1988 Mar 1;41(5):281–5 (Eng. Abstr.) (Pol)
[Clinico–microbiologic aspects of burns complicated by suppurative infection] Znamenskiĭ VA, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):115–7 (Rus)
[Changes in the clonal structure of staphylococcal populations in a kidney infection model in mice] Belʹskiĭ VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar; (3):16–20 (Eng. Abstr.) (Rus)
[The search for strains of Staphylococcus aureus producing exfoliative toxin] Brevis P, et al. **Rev Latinoam Microbiol** 1988 Jan–Mar;30(1):1–4 (Eng. Abstr.) (Spa)
[The pathogenicity of coagulase–negative staphylococci with a capacity for growth adhering to smooth surfaces] Reyes PA, et al. **Rev Latinoam Microbiol** 1988 Apr–Jun; 30(2):69–71 (Eng. Abstr.) (Spa)

MORTALITY

Staphylococcus epidermidis bacteremia [letter; comment] Fierer J. **Ann Intern Med** 1989 Jul 1;111(1):93–4. **Comment on:** Ann Intern Med 1989 Jan 1;110(1):9–16
Coagulase–negative staphylococcal bacteremia. Mortality and hospital stay [see comments] Martin MA, et al. **Ann Intern Med** 1989 Jan 1;110(1):9–16. **Comment in:** Ann Intern Med 1989 Jul 1;111(1):93–4

NURSING

Epidural abscesses of the spine: case comparisons. Gilliland K. **J Neurosci Nurs** 1989 Jun;21(3):185–9

PATHOLOGY

Tympanic membrane structure during a Staphylococcus aureus–induced middle ear infection. A study in the rat middle ear. Grote JJ, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):225–34
Unsuspected Cushing's disease in a patient with fatal staphylococcal bacteremia and multiple pituitary adenomas. Dunlap NE, et al. **Am J Med** 1989 Feb;86(2):217–21
Staphylococcal wound infection in the pig: Part I. Course. Svedman P, et al. **Ann Plast Surg** 1989 Sep;23(3):212–8
Echocardiographic and clinical correlates in drug addicts with infective endocarditis. Implications of vegetation size. Manolis AS, et al. **Arch Intern Med** 1988 Nov; 148(11):2461–5
Recurrent bilateral parotitis. Iyer PU, et al. **Indian Pediatr** 1988 Aug;25(8):786–7
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercise. Case 38–1989. A 19–year–old man with fever, abdominal pain, anemia, and a left renal mass. **N Engl J Med** 1989 Sep 21;321(12):813–23
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 24–1989. A 77–year–old man with back pain and acute inability to walk. **N Engl J Med** 1989 Jun 15;320(24):1610–8
Phenotypic characterization of mononuclear cells and class II antigen expression in angular cheilitis infected by Candida albicans or Staphylococcus aureus. Ohman SC, et al. **Scand J Dent Res** 1989 Apr;97(2):178–85
[Staphylogenic Lyell syndrome] Reiss CJ. **Z Arztl Fortbild (Jena)** 1988;82(12):561–6 (34 ref.) (Ger)
[A study of the subcellular structure of the rabbit liver during the development of a bacterial infection] Korinteli VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):77–80 (Eng. Abstr.) (Rus)
[Fever and vasculitic purpura in a 41–year–old woman with a ventriculo–atrial shunt for normotensive hydrocephalus (clinical conference)] Martínez–Vea A, et al. **Med Clin (Barc)** 1988 May 14;90(19):786–93 (Spa)

PHYSIOPATHOLOGY

Effect of altered environmental temperature on established infection. Lewis GB. **Anaesth Intensive Care** 1988 Aug; 16(3):338–41
Anastomotic tensile strength following in situ replacement of an infected abdominal aortic graft. Vetsch R, et al. **Arch Surg** 1989 Apr;124(4):425–8
Staphylococcus aureus–induced shock: a pathophysiologic study. Hinshaw LB, et al. **Circ Shock** 1988 Nov; 26(3):257–65
Effects of microbial challenge on sleep in rabbits. Toth LA, et al. **FASEB J** 1989 Jul;3(9):2062–6
[Disrupted function of the cardiovascular system in fulgurant sepsis] Krikunovskiĭ KV, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):52–4 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

More is better. Antibiotic management after hemorrhagic shock. Livingston DH, et al. **Ann Surg** 1988 Oct; 208(4):451–9
Inhibitory effect of disodium EDTA upon the growth of Staphylococcus epidermidis in vitro: relation to infection prophylaxis of Hickman catheters. Root JL, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1627–31
Staphylococcus aureus nasal carriage in hemodialysis patients. Its role in infection and approaches to prophylaxis. Chow JW, et al. **Arch Intern Med** 1989 Jun;149(6):1258–62 (53 ref.)
Preventing second–generation complications due to Staphylococcus aureus [editorial] Rahal JJ. **Arch Intern Med** 1989 Mar;149(3):503–4
Management and prevention of infections due to gram–positive cocci in intensive care units. Graninger W, et al. **Br J Clin Pract Symp Suppl** 1988 Feb;57:91–9 (40 ref.)
Methicillin–resistant Staphylococcus aureus: associated morbidity and effectiveness of control measures. Law MR, et al. **Epidemiol Infect** 1988 Oct;101(2):301–9
Staphylococcal infections in the hemodialysis unit: prevention using infection control principles. Chow JW, et al. **Infect Control Hosp Epidemiol** 1988 Dec;9(12):531–3
Protective efficacy of protein A–specific antibody against bacteremic infection due to Staphylococcus aureus in an infant rat model. Greenberg DP, et al. **Infect Immun** 1989 Apr;57(4):1113–8
Elimination of nasal carriage of methicillin–resistant Staphylococcus aureus with mupirocin during a hospital outbreak. Hill RL, et al. **J Antimicrob Chemother** 1988 Sep; 22(3):377–84
The use of bacitracin irrigation to prevent infection in postoperative skeletal wounds. An experimental study. Rosenstein BD, et al. **J Bone Joint Surg [Am]** 1989 Mar; 71(3):427–30
The prevention of infection in open fractures. An experimental study of the effect of antibiotic therapy. Worlock P, et al. **J Bone Joint Surg [Am]** 1988 Oct; 70(9):1341–7
Use of nonsterile gloves for routine noninvasive procedures in thermally injured patients. Sadowski DA, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):613–5
Immunomodulation by Candida albicans: crucial role of organ colonization and chronic infection with an attenuated agerminative strain of C. albicans for establishment of anti–infectious protection. Vecchiarelli A, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2583–92
Five days versus one day of penicillin as prophylaxis in elective neurosurgical operations. Cartmill TD, et al. **J Hosp Infect** 1989 Jul;14(1):63–8
Simple perioperative antimicrobial chemoprophylaxis in elective neurosurgical operations. Ingham HR, et al. **J Hosp Infect** 1988 Oct;12(3):225–33
Protection of mice by a pseudodiffuse strain of Staphylococcus aureus possessing polyvalent capsular type antigen. Chomarat M, et al. **J Med Microbiol** 1989 Feb; 28(2):129–36
Prevention of hydrocephalus shunt catheter colonisation in vitro by impregnation with antimicrobials. Bayston R, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):605–9
Induction of resistance with heat–killed unencapsulated strains of Staphylococcus epidermidis against challenge with encapsulated strains of Staphylococcus epidermidis. Ichiman Y, et al. **Microbiol Immunol** 1989;33(4):277–86
The influence of calcium mupirocin nasal ointment on the incidence of Staphylococcus aureus infections in haemodialysis patients. Boelaert JR, et al. **Nephrol Dial Transplant** 1989;4(4):278–81
Surgical prophylaxis: how far have we really come? Kernodle DS. **Pharmacotherapy** 1988;8(6 Pt 2):11S–13S (12 ref.)
Iatrogenic discitis: the role of intravenous antibiotics in prevention and treatment. An experimental study. Fraser RD, et al. **Spine** 1989 Sep;14(9):1025–32
Use of topical antiseptic in prophylaxis of catheter–related septic complications. Illner H, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):481–90
Cell surface antigen of encapsulated Staphylococcus epidermidis SE–360 protects mice from homologous infection. Ohshima Y. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):219–27
[Characteristics of the course of the postpartum period in puerperants remaining together with their infants] Akhmedova ZA, et al. **Akush Ginekol (Mosk)** 1988 Sep; (9):5–8 (51 ref.) (Rus)

RADIOGRAPHY

Value of CT scanning in assessing location and extent of epidural and paraspinal inflammatory conditions. O'Sullivan R, et al. **Australas Radiol** 1988 May;32(2):203–6
Spinal epidural abscess. An infectious emergency. Case report and review. Rockney R, et al. **Clin Pediatr (Phila)** 1989 Jul;28(7):332–4 (4 ref.)
Tropical pyomyositis. Gyssens IC, et al. **Neth J Med** 1989 Apr;34(3–4):205–9
Radiographic observations of subtalar joint effusion in two children. Eggli KD. **Skeletal Radiol** 1989;18(3):207–9
Pyogenic vertebral osteomyelitis of the posterior elements. Ehara S, et al. **Skeletal Radiol** 1989;18(3):175–8

RADIONUCLIDE IMAGING

Detection of bacterial endocarditis with indium–111 labeled leukocytes. Oates E, et al. **Clin Nucl Med** 1988 Oct; 13(10):691–3
Indium–111 WBC imaging in a pericardial abscess. Peterdy AE. **Clin Nucl Med** 1989 Jul;14(7):541
Early detection of infantile endocarditis by gallium—67 scintigraphy. Hardoff R, et al. **Eur J Nucl Med** 1989; 15(4):219–21
Septic arthritis of a lumbar facet joint: detection with bone SPECT imaging. Swayne LC, et al. **J Nucl Med** 1989 Aug; 30(8):1408–11
Utility of the indium 111–labeled human immunoglobulin G scan for the detection of focal vascular graft infection. LaMuraglia GM, et al. **J Vasc Surg** 1989 Jul;10(1):20–7; discussion 27–8
Postoperative infection with the automatic implantable cardioverter defibrillator: clinical presentation and use of the gallium scan in diagnosis. Kelly PA, et al. **PACE** 1988 Aug;11(8):1220–5

SURGERY

Percutaneous catheter drainage of septic joints [letter] Proubasta IR, et al. **AJR** 1988 Nov;151(5):1057
Surgical excision of the vegetation as treatment of tricuspid valve endocarditis. Evora PR, et al. **Cardiology** 1988; 75(4):287–8
Laser vaporization: a novel treatment of botryomycosis. Leffell DJ, et al. **J Dermatol Surg Oncol** 1989 Jul; 15(7):703–5
Neonatal endocarditis requiring surgery. Charaf L, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(1):79–80
[Experimental study of bacterial endophthalmitis treated by vitrectomy] Cao WQ. **Chung Hua Yen Ko Tsa Chih** 1988 Jul;24(4):236–9 (Eng. Abstr.) (Chi)
[Postoperative complications following alloplastic aortic valve replacement in bacterial endocarditis of the aortic valve in established aortic coarctation—a case report] Wollert HG, et al. **Zentralbl Chir** 1989;114(3):175–80 (Ger)
[2 cases of mediastinal abscess] Sowiński H, et al. **Otolaryngol Pol** 1988;42(5):369–71 (Eng. Abstr.) (Pol)
[Possibilities of cardiac surgery in the treatment of active valvular infectious endocarditis] Tsukerman GI, et al. **Kardiologiia** 1988 Sep;28(9):31–5 (Eng. Abstr.) (Rus)
[Use of helium–cadmium lasers in the complex treatment of suppurative diseases in patients with diabetes mellitus] Khurshudian AG. **Khirurgiia (Mosk)** 1989 Jun;(6):38–42 (Eng. Abstr.) (Rus)
[Errors in the organization of medical services, diagnosis and treatment causing the development of septicemia in patients with suppurative–inflammatory diseases] Dolidze NG, et al. **Vestn Khir** 1989 Jan;142(1):118–20 (Rus)
[Various problems of the diagnosis and treatment of post–injection abscesses] Ersh ZIa, et al. **Vestn Khir** 1988

Sep;141(9):127–8 (Rus)
[Selection of the method of treatment of suppurative spinal epiduritis] Fadeev BP. **Vestn Khir** 1988 Sep;141(9):49–52 (Eng. Abstr.) (Rus)
[Use of the leukocyte mass in treatment of patients with suppurative lactation mastitis] Kutushev FKh, et al. **Vestn Khir** 1988 Aug;141(8):95–9 (Eng. Abstr.) (Rus)
[Treatment of complicated paronychia of the fingers with retrograde infusions of lincomycin] Zviagin LM, et al. **Vestn Khir** 1988 Jul;141(7):112–4 (Rus)

THERAPY

Embolotherapy of a high-flow false aneurysm by using an occlusion balloon, thrombin, steel coils, and a detachable balloon. Lammert GK, et al. **AJR** 1989 Feb;152(2):382–4
Efficacy of debridement and primary closure of contaminated wounds: a comparison of methods. Nichter LS, et al. **Ann Plast Surg** 1989 Sep;23(3):224–30
A new model for studying nutrition in peritonitis. The adverse effect of overfeeding. Alexander JW, et al. **Ann Surg** 1989 Mar;209(3):334–40
Low protein diets improve survival from peritonitis in guinea pigs. Peck MD, et al. **Ann Surg** 1989 Apr;209(4):448–54
Unsuccessful arthroscopic treatment of pyarthrosis following anterior cruciate ligament reconstruction. Kohn D. **Arthroscopy** 1988;4(4):287–9
Methicillin-resistant staphylococci. Chambers HF. **Clin Microbiol Rev** 1988 Apr;1(2):173–86 (177 ref.)
Treatment of resistant CAPD peritonitis by temporary discontinuation of peritoneal dialysis. Cairns HS, et al. **Clin Nephrol** 1989 Jul;32(1):27–30
Arthroscopy in acute septic knees. Management in pediatric patients. Stanitski CL, et al. **Clin Orthop** 1989 Apr; (241):209–12
Autogenous vaccine therapy in human cutaneous staphylococcosis. Das AM, et al. **Indian J Med Res** 1988 Nov;88:404–8
Treatment of wound sepsis in irradiated mice. Brook I, et al. **Int J Radiat Biol** 1989 Jul;56(1):75–82
Two-stage reimplantation of septic total knee arthroplasty. Report of three cases using an antibiotic-PMMA spacer block. Cohen JC, et al. **J Arthroplasty** 1988;3(4):369–77
Mediastinal infection after cardiac operation. A simple closed technique. Durandy Y, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):282–5
Immune enhancement by tumor necrosis factor-alpha improves antibiotic efficacy after hemorrhagic shock. Livingston DH, et al. **J Trauma** 1989 Jul;29(7):967–70; discussion 970–1
Chlorine dioxide sterilization of implanted right atrial catheters in rabbits. Dennis MB Jr, et al. **Lab Anim Sci** 1989 Jan;39(1):51–5
[Percutaneous drainage in the treatment of kidney abscess] Mosbah A, et al. **Tunis Med** 1987 Apr;65(4):277–80 (Eng. Abstr.) (Fre)
[Effect of Corynebacterium parvum preparation on selected immunologic indicators and clinical results in patients with chronic post-traumatic osteomyelitis] Perner T, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):44–8 (Eng. Abstr.) (Pol)
[Effect of lincomycin and staphylococcal vaccine on the course of experimental staphylococcal sepsis] Gabysehva LS, et al. **Antibiot Khimioter** 1988 Oct;33(10):779–81 (Eng. Abstr.) (Rus)
[Use of activated carbon fiber material for the local treatment of wounds] Kornilov VA, et al. **Vestn Khir** 1989 Jan; 142(1):59–62 (Rus)
[Diagnosis and treatment of acute abscesses of the lungs] Lamm IaE, et al. **Vestn Khir** 1988 Jun;140(6):13–7 (Eng. Abstr.) (Rus)
[Regeneration of the alveolar tree after suppurative-destructive diseases of the lungs] Muromskiĭ IuA, et al. **Vestn Khir** 1988 Jun;140(6):17–24 (Eng. Abstr.) (Rus)

TRANSMISSION

Epidemic methicillin-gentamicin-resistant Staphylococcus aureus in a neonatal intensive care unit. Reboli AC, et al. **Am J Dis Child** 1989 Jan;143(1):34–9
Transmission and control of methicillin-resistant Staphylococcus aureus in a skilled nursing facility. Thomas JC, et al. **Infect Control Hosp Epidemiol** 1989 Mar; 10(3):106–10
Staphylococcal carriage and infection in myasthenia gravis patients receiving therapeutic apheresis. Johnson RB, et al. **J Clin Apheresis** 1988;4(4):155–7
Cross-infection between animals and man: possible feline transmission of Staphylococcus aureus infection in humans? Scott GM, et al. **J Hosp Infect** 1988 Jul;12(1):29–34
The carrier state: methicillin-resistant Staphylococcus aureus. A hospital study "screening of hospital personnel" for nasal carriage of Staph aureus. Ashiq B. **JPMA** 1989 Feb;39(2):35–8
Peritonitis in peritoneal dialysis: bacterial colonization by biofilm spread along the catheter surface. Read RR, et al. **Kidney Int** 1989 Feb;35(2):614–21
[Features of contamination of the environment by Staphylococcus aureus carriers] Riabinin NV. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):68–71 (Eng. Abstr.) (Rus)

VETERINARY

Serum and synovial fluid steady-state concentrations of trimethoprim and sulfadiazine in horses with experimentally induced infectious arthritis. Bertone AL, et al. **Am J Vet Res** 1988 Oct;49(10):1681–7
Effects of intracisternal bead devices on lacteal secretion components, plaque formation, and bacterial infection during the nonlactating period. Nickerson SC, et al. **Am J Vet Res** 1988 Aug;49(8):1205–9
Frequency of isolation of environmental mastitis-causing pathogens and incidence of new intramammary infection during the nonlactating period. Oliver SP. **Am J Vet Res** 1988 Nov;49(11):1789–93
Comparative microscopic lesions in reoviral and staphylococcal tenosynovitis. Hill JE, et al. **Avian Dis** 1989 Jul-Sep;33(3):401–10
Diagnostic summary of 1986 turkey, broiler breeder, and layer necropsy cases at the University of Georgia. Morris MP, et al. **Avian Dis** 1988 Jul-Sep;32(3):391–403
Phage typing set for differentiating Staphylococcus epidermidis. Gershman M, et al. **Can J Microbiol** 1988 Dec; 34(12):1358–61
The use of liposomally-entrapped gentamicin in the treatment of bovine Staphylococcus aureus mastitis. MacLeod DL, et al. **Can J Vet Res** 1988 Oct;52(4):445–50
Sequential clinical and synovial fluid changes associated with acute infectious arthritis in the horse. Tulamo RM, et al. **Equine Vet J** 1989 Sep;21(5):325–31
The influence of corticosteroids on sequential clinical and synovial fluid parameters in joints with acute infectious arthritis in the horse. Tulamo RM, et al. **Equine Vet J** 1989 Sep;21(5):332–7
Prevalence of udder infections and mastitis in 50 California dairy herds. González RN, et al. **J Am Vet Med Assoc** 1988 Aug 1;193(3):323–8
Polyarthritis and polyosteomyelitis in a juvenile giraffe. Jacobson ER, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1182–3
Blepharoconjunctivitis associated with Staphylococcus aureus in a rabbit. Millichamp NJ, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1153–4
Ovine-associated Staphylococcus aureus protein with immunochemical similarity to toxic shock syndrome toxin 1. Ho G, et al. **J Clin Microbiol** 1989 Jan;27(1):210–2
Automatic application of teat disinfectant through the milking machine cluster. Grindal RJ, et al. **J Dairy Res** 1989 Aug;56(4):579–85
Use of N-acetyl-beta-glucosaminidase to detect teat canal inflammations. Kaartinen L, et al. **J Dairy Res** 1988 Nov; 55(4):603–7
Oxygen concentration in milk of healthy and mastitic cows and implications of low oxygen tension for the killing of Staphylococcus aureus by bovine neutrophils. Mayer SJ, et al. **J Dairy Res** 1988 Nov;55(4):513–9
Efficacy of .18% iodine teat dip against Staphylococcus aureus and Streptococcus agalactiae. Boddie RL, et al. **J Dairy Sci** 1989 Apr;72(4):1063–6
Effect of segregation on prevention of intramammary infections by Staphylococcus aureus. Fox LK, et al. **J Dairy Sci** 1989 Feb;72(2):540–4
Functional activity of neutrophils from bovine mammary glands infected with Staphylococcus aureus. Fox LK, et al. **J Dairy Sci** 1988 Dec;71(12):3521–4
Rate of environmental mastitis in quarters infected with Corynebacterium bovis and Staphylococcus species. Hogan JS, et al. **J Dairy Sci** 1988 Sep;71(9):2520–5
Local immunostimulation of the bovine mammary gland with interleukin-2. Nickerson SC, et al. **J Dairy Sci** 1989 Jul; 72(7):1764–73
Antibiotic treatment of mastitis: comparison of intramammary and intramammary plus intramuscular therapies. Owens WE, et al. **J Dairy Sci** 1988 Nov; 71(11):3143–7
Pathology of Staphylococcus aureus mastitis during lactogenesis: relationships with bovine mammary structure and function. Sordillo LM, et al. **J Dairy Sci** 1989 Jan; 72(1):228–40
Ear tag induced Staphylococcus infection in mice. Cover CE, et al. **Lab Anim** 1989 Jul;23(3):229–33
Vaccination against experimental staphylococcal mastitis in ewes. Watson DL. **Res Vet Sci** 1988 Jul;45(1):16–21
Prevalence of staphylococcal species in four dairy herds. Watts JL, et al. **Res Vet Sci** 1989 Jan;46(1):1–4
Effects of Staphylococcus aureus mastitis on bovine mammary gland plasma cell populations and immunoglobin concentrations in milk. Doymaz MZ, et al. **Vet Immunol Immunopathol** 1988 Dec;20(1):87–93
In vivo effects of a thymosin alpha 1-containing colostral whey product on neutrophils and lymphocytes from lactating cows without and with experimentally induced Staphylococcus aureus mastitis. Kehrli ME Jr, et al. **Vet Immunol Immunopathol** 1989 Jan;20(2):149–63
Clinical trial of three therapeutic regimens for bovine mastitis. Jarp J, et al. **Vet Rec** 1989 Jun 17;124(24):630–4
Antibiotic sensitivity of bovine staphylococcal and coliform mastitis isolates over four years. Mackie DP, et al. **Vet Rec** 1988 Nov 12;123(20):515–7
Incidence of clinical mastitis on farms with low somatic cell counts in bulk milk. Schukken YH, et al. **Vet Rec** 1989 Jul 15;125(3):60–3
Comparison of aerobic culturette, synovial membrane biopsy, and blood culture medium in detection of canine bacterial arthritis. Montgomery RD, et al. **Vet Surg** 1989 Jul-Aug; 18(4):300–3
Can the association of athymic mice (Han:NMRI-nu) with Staphylococcus sciuri prevent infection with Staphylococcus aureus? Experiences from a field study. Wullenweber-Schmidt M, et al. **Z Versuchstierkd** 1989; 32(1):49–56
The effect on inflammation of the bovine mammary gland of vaccination with a cell wall extract of Staphylococcus aureus. Frost AJ, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):688–94
Evaluation of the Staph-Zym-system for identification of Staphylococcus hyicus and Staphylococcus intermedius. Lämmler C. **Zentralbl Veterinarmed [B]** 1989 May; 36(3):180–4
[The disposition and clearance of inhaled bacteria (Staphylococcus aureus) in the lungs of piglets] Kastner P, et al. **Arch Exp Veterinarmed** 1989 May;43(3):379–89 (Eng. Abstr.) (Ger)
[The occurrence of bacterial infections in the swamp beaver (Myocaster coypus MOLINA, 1782). 3. Streptococcal, staphylococcal, Aeromonas and Actinobacillus infections] Köhler B, et al. **Arch Exp Veterinarmed** 1988 Nov; 42(6):877–89 (Eng. Abstr.) (Ger)
[The occurrence and significance of plasma coagulase negative staphylococci from the genital tract of horses] Hüthwohl H, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(5):256–8 (Eng. Abstr.) (Ger)

STAPHYLOCOCCAL NUCLEASE see MICROCOCCAL NUCLEASE

STAPHYLOCOCCAL PHAGES

CLASSIFICATION

Phage types of Staphylococcus aureus isolates from the throats of school children. Chaudhary U, et al. **Indian J Med Res** 1988 Jul;88:18–9
Colonization priority among Staphylococcus aureus strains—correlation with phage-type. Rosdahl VT, et al. **J Hosp Infect** 1988 Oct;12(3):151–62
[Increasing the effectiveness of the method of Staphylococcus phage-typing] Petrushina LI, et al. **Vopr Pitan** 1989 Mar-Apr;(2):51–4 (Eng. Abstr.) (Rus)

DRUG EFFECTS

[The effect of valinomycin and nigericin on the efficacy of bacteriophage infection of staphylococcal cells] Vinnikov AI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb; (2):17–20 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

Stabilities of lyophilized Staphylococcus aureus typing bacteriophages. Zierdt CH. **Appl Environ Microbiol** 1988 Oct;54(10):2590

METABOLISM

[Magnitude of the proton moving force of Staphylococcus aureus cells and features of the interaction of staphylococci with phages] Vinnikov AI, et al. **Biokhimiia** 1989 Jan; 54(1):149–53 (Eng. Abstr.) (Rus)

STAPHYLOCOCCAL PNEUMONIA see PNEUMONIA, STAPHYLOCOCCAL

STAPHYLOCOCCAL PROTEIN A

Analytical potential of protein A for affinity chromatography of polyclonal and monoclonal antibodies. Compton BJ, et al. **Anal Chem** 1989 Jul 1;61(13):1314–7
Protein A immunoadsorption therapy in HIV-related immune thrombocytopenia: a preliminary report. Bertram JH, et al. **Artif Organs** 1988 Dec;12(6):484–90
Reduction in platelet-binding immunoglobulins and improvement in platelet counts in patients with HIV-associated idiopathic thrombocytopenia purpura (ITP) following extracorporeal immunoadsorption of plasma over staphylococcal protein A-silica. Snyder HW Jr, et al. **Artif Organs** 1989 Feb;13(1):71–7
In the absence of antibody IgGsorb precipitates human placenta phosphotyrosine-containing proteins. Goren HJ, et al. **Biochem Biophys Res Commun** 1989 Feb 28; 159(1):332–6
Cisplatin-associated hemolytic-uremic syndrome. Successful treatment with a staphylococcal protein A column. Watson PR, et al. **Cancer** 1989 Oct 1;64(7):1400–3
Removal of background label in immunocytochemistry with the apolar Lowicryls by using washed protein A-gold-precoupled antibodies in a one-step procedure. Dürrenberger MB. **J Electron Microsc Tech** 1989 Feb; 11(2):109–16
Quantitative radioimmunohistochemical method using [125I]-protein A to measure the content of methionine enkephalin in discrete rat brain areas. Correa FM, et al. **J Histochem Cytochem** 1988 Nov;36(11):1379–86
Comparative adhesion of protein A-positive and protein A-negative strains of porcine Staphylococcus hyicus subsp. hyicus to Vero cells. Teranishi H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):825–7
A synthetic IgG-binding domain based on staphylococcal

protein A. Nilsson B, et al. **Protein Eng** 1987 Feb-Mar; 1(2):107-13

ANALYSIS

FTIR-ATR spectra of protein A immobilized on to functionalized polypropylene membranes by gaseous plasma of oxygen and of anhydrous ammonia. Sipehia R. **Biomater Artif Cells Artif Organs** 1988-89;16(5):955-66

Detection, isolation and characterization of staphylococcal enterotoxin B in protein A preparations purified by immunoglobulin G affinity chromatography. Balint J Jr, et al. **J Immunol Methods** 1989 Jan 6;116(1):37-43

Detection and reduction of protein A contamination in immobilized protein A purified monoclonal antibody preparations. Bloom JW, et al. **J Immunol Methods** 1989 Feb 8;117(1):83-9

Simple method for quantitation of cell-bound protein A on Staphylococcus aureus cells by means of hemagglutination with sheep erythrocytes differentially sensitized with rabbit antibody and its clinical application. Hwang SM, et al. **Microbiol Immunol** 1989;33(3):155-63

Distribution of methicillin-resistance and of protein A among Staphylococcus aureus strains isolated from different hosts. Pessione E, et al. **Microbios** 1988;55(224-225):147-53

DIAGNOSTIC USE

Use of the protein A-gold immunocytochemical and enzyme-gold cytochemical techniques in studies of vitellogenesis. Herbener GH. **Am J Anat** 1989 Jun-Jul; 185(2-3):244-54

Electron spectroscopic imaging for high-resolution immunocytochemistry: use of boronated protein A. Bendayan M, et al. **J Histochem Cytochem** 1989 May; 37(5):573-80

Detection of lymphocytic Fc receptors with 125I-labelled protein A. Villiu C, et al. **Med Interne** 1982 Apr-Jun; 20(2):159-63

[A simplified method to estimate an epidemics of Japanese encephalitis and dengue virus infections with hemagglutination inhibition titers before and after absorption of Ig-G with protein A] Miyanishi K. **Kansenshogaku Zasshi** 1988 Jul;62(7):628-35 (Eng. Abstr.) (Jpn)

[Triiodothyronine(T3) autoantibodies in a woman with nonthyroidal disorder: a study on preparation of serum IgG fraction employing protein A column chromatography] Mizuno E, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Aug 20;64(8):677-86 (Eng. Abstr.) (Jpn)

[Protein A-gold technique] Yokota S. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):150-6 (25 ref.) (Jpn)

GENETICS

Genetic studies of Staphylococcus aureus virulence factors. Foster TJ, et al. **Antonie Van Leeuwenhoek** 1988; 54(5):475-82 (29 ref.)

Construction of a recombinant expression plasmid encoding a staphylococcal protein A-ricin A fusion protein. Kim JH, et al. **Gene** 1988 Sep 7;68(2):315-21

High level expression of a synthetic gene coding for IgG-binding domain B of Staphylococcal protein A. Saito A, et al. **Protein Eng** 1989 Mar;2(6):481-7

[Synthesis and expression of an artificial gene of an IgG-binding fragment of protein A from Staphylococcus aureus] Efimov VA, et al. **Bioorg Khim** 1989 Apr; 15(4):499-507 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Protective efficacy of protein A-specific antibody against bacteremic infection due to Staphylococcus aureus in an infant rat model. Greenberg DP, et al. **Infect Immun** 1989 Apr;57(4):1113-8

Luminol-dependent chemiluminescence in antibody-sensitized neutrophils stimulated with protein A-bearing staphylococci. Nishihara S, et al. **Microbiol Immunol** 1988;32(5):535-40

[The specificity of erythrocyte staphylococcal diagnostic agents in relation to the presence of protein A in sensitin preparations] Deriabin PN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):85-9 (Eng. Abstr.) (Rus)

[Protein A: an immunomodulator in cancer patients] Subirá ML, et al. **Rev Med Univ Navarra** 1988 Jul-Sep;32(3):163-8 (45 ref.) (Eng. Abstr.) (Spa)

METABOLISM

Detection and use of recombinant staphylococcal protein A fusion proteins to localize nucleic-acid-binding domains of proteins. Dang CV. **Anal Biochem** 1988 Oct;174(1):313-7

Phagocytosis and killing of A-protein positive Staphylococcus aureus in the presence of low doses of antibiotics. Mascellino MT, et al. **Drugs Exp Clin Res** 1989; 15(2):63-9

Soluble complex formation of bovine immunoglobulin G2 with staphylococcal protein A studied by gel filtration chromatography. Shimazaki K. **J Dairy Sci** 1989 Mar; 72(3):702-7

Differential IgG-binding characteristics of staphylococcal protein A, streptococcal protein G, and a chimeric protein AG. Eliasson M, et al. **J Immunol** 1989 Jan 15;142(2):575-81

Human IgM molecules that bind staphylococcal protein A contain VHIII H chains. Sasso EH, et al. **J Immunol** 1989 Apr 15;142(8):2778-83

The Fc binding site for streptococcal protein G is in the C gamma 2-C gamma 3 interface region of IgG and is related to the sites that bind staphylococcal protein A and human rheumatoid factors. Stone GC, et al. **J Immunol** 1989 Jul 15;143(2):565-70

DNA binding of glucocorticoid receptor protein A fusion proteins expressed in E. coli. Bonifer C, et al. **J Steroid Biochem** 1989 Jan;32(1A):5-11

Fc epitopes for human rheumatoid factors and the relationships of rheumatoid factors to the Fc binding proteins of microorganisms. Nardella FA, et al. **Scand J Rheumatol Suppl** 1988;75:190-8 (44 ref.)

[The growth and protein A accumulation of Staphylococcus aureus A-676 on a medium made from nonfood raw material] Dubinina GP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):24-8 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Induction of mixed function oxidase activities of protein A in rat mammary tumors. Bansal MR, et al. **Carcinogenesis** 1989 Sep;10(9):1749-51

Dissociation between murine spleen cell mitogenic activity of enterotoxin contaminants and anti-tumor activity of staphylococcal protein A. Das C, et al. **J Immunol** 1989 Apr 15;142(8):2943-8

Recombinant protein A of non-staphylococcal origin is not mitogenic for human peripheral lymphocytes. Mitogenicity of natural protein A is caused by a contaminant. Persson U, et al. **Scand J Immunol** 1989 Feb;29(2):151-8

SECRETION

Secretion of recombinant proteins into the culture medium by Escherichia coli and Staphylococcus aureus. Uhlén M, et al. **Biochem Soc Trans** 1989 Apr;17(2):340-1

THERAPEUTIC USE

The effects of a new tissue plasminogen activator analogue, Fb-Fb-CF, on cerebral reperfusion in a rabbit embolic stroke model. Phillips DA, et al. **Ann Neurol** 1989 Mar; 25(3):281-5

Protection against carbon tetrachloride-induced hepatotoxicity by protein A. Singh KP, et al. **J Appl Toxicol** 1988 Dec;8(6):407-10

Selective removal of plasma components to achieve immune modulation. Proceedings of a satellite symposium. December 2, 1988, San Antonio, TX. **Semin Hematol** 1989 Apr;26(2 Suppl 1):1-51

Immune thrombocytopenia purpura: a pilot study of staphylococcal protein A immunomodulation in refractory patients. Guthrie TH Jr, et al. **Semin Hematol** 1989 Apr; 26(2 Suppl 1):3-9

Protein A immunotherapy in the treatment of cancer: an update. Messerschmidt GL, et al. **Semin Hematol** 1989 Apr; 26(2 Suppl 1):19-24

Treatment of patients with HIV thrombocytopenia and hemolytic uremic syndrome with protein A (Prosorba column) immunoadsorption. Mittelman A, et al. **Semin Hematol** 1989 Apr;26(2 Suppl 1):15-8

The effect of immunoadsorption therapy by a protein A column on patients with thrombocytopenia. Muroi K, et al. **Semin Hematol** 1989 Apr;26(2 Suppl 1):10-4

Remission of FeLV-associated lymphosarcoma and persistent viral infection after extracorporeal immunoadsorption of plasma using staphylococcal protein A columns: details of immune response. Snyder HW Jr, et al. **Semin Hematol** 1989 Apr;26(2 Suppl 1):25-30

STAPHYLOCOCCAL SCALDED SKIN SYNDROME see under **STAPHYLOCOCCAL SKIN INFECTIONS**

STAPHYLOCOCCAL SKIN INFECTIONS

BLOOD

Early burn wound excision and skin grafting postburn trauma restores in vivo neutrophil delivery to inflammatory lesions. Tchervenkov JI, et al. **Arch Surg** 1988 Dec;123(12):1477-81

COMPLICATIONS

Atopic dermatitis complicated by acute bacterial endocarditis. Pike MG, et al. **Acta Paediatr Scand** 1989 May;78(3):463-4

Colon carcinoma occurring two years after the development of SSSS in an adult[letter] Takiuchi I, et al. **J Dermatol (Tokyo)** 1988 Jun;15(3):276

[Atopic dermatitis and staphylococcal infection] Stalder JF, et al. **Ann Dermatol Venereol** 1989;116(4):341-5 (26 ref.) (Fre)

DIAGNOSIS

Staphylococcal scalded skin syndrome mimicking acute graft-vs-host disease in a bone marrow transplant recipient. Goldberg NS, et al. **Arch Dermatol** 1989 Jan;125(1):85-7

Skin infection provoked by coagulase-negative Staphylococcus resembling gram-negative folliculitis. Lotem M, et al. **Cutis** 1988 Nov;42(5):443-4

[Staphylococcal scalded skin syndrome (staphylococcal Lyell's syndrome) in adults: 2 cases] Salag P, et al. **Ann Dermatol Venereol** 1988;115(11):1164-6 (Fre)

DRUG THERAPY

A double-blind comparative study to compare the efficacy of Locoid C with Tri-Adcortyl in children with infected eczema. Meenan FO. **Br J Clin Pract** 1988 May;42(5):200-2

Clindamycin for staphylococcal skin infections in AIDS [letter] Rolston KV. **JAMA** 1989 Mar 10;261(10):1444-5

Recurrent staphylococcal skin infections. **Lancet** 1988 Dec 10;2(8624):1346-7 (15 ref.)

Effect of ciprofloxacin on subcutaneous abscesses induced with Staphylococcus epidermidis and a foreign body implant in the mouse. Mayberry-Carson KJ, et al. **Microbios** 1988;54(218):45-59

[Treatment of recurrent skin abscesses with TFX] Dąbrowska M, et al. **Wiad Lek** 1988 Dec 15;41(24):1665-7 (Eng. Abstr.) (Pol)

[DDS in the treatment of necrotic acne] Baliavichene GR. **Vestn Dermatol Venerol** 1988;(6):48-51 (Eng. Abstr.) (Rus)

[Evaluation of the efficacy and toxicity of local fusidic aid versus oral dicloxacillin in infections of the skin] Macotela-Ruiz E, et al. **Med Cutan Ibero Lat Am** 1988; 16(2):171-3 (Eng. Abstr.) (Spa)

EPIDEMIOLOGY

Staphylococcal scalded skin syndrome [letter] Cox RA, et al. **J Infect** 1989 Jan;18(1):90-1

ETIOLOGY

[Study of bacterial and mycotic contamination of objects in the surface technological complex of coal mines under construction] Ivanchenko VN, et al. **Gig Sanit** 1988 Sep; (9):77-8 (Rus)

IMMUNOLOGY

Anti-Staphylococcus aureus IgE antibodies for diagnosis of hyperimmunoglobulinemia E-recurrent infection syndrome in infancy. Lavoie A, et al. **Am J Dis Child** 1989 Sep; 143(9):1038-41

MICROBIOLOGY

Antibiotic resistance of Staphylococcus aureus isolates from community acquired soft tissue infections in Bulawayo. Oliver MJ, et al. **Cent Afr J Med** 1989 Feb;35(2):327-9

Skin-isolated, community-acquired Staphylococcus aureus: in vitro resistance to methicillin and erythromycin. Ohana N, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):544-6

[Possible taxonomic description of coagulase-negative staphylococci isolated in infectious skin processes] Codiță I, et al. **Rev Ig [Bacteriol]** 1988 Apr-Jun;33(2):147-53 (Rum)

PATHOLOGY

Staphylococcus aureus induction of inflammatory plaques of nipples and areolae. Paslin D. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):932-4

[Staphylococcal scalded skin syndrome in 2 adults with acute kidney failure] Petzelbauer P, et al. **Hautarzt** 1989 Feb; 40(2):90-3 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Neonatology —then and now. Neonatal sepsis (1960). Two outbreaks of neonatal skin sepsis caused by Staphylococcus aureus, phage type 71. Howells CH, et al. **Arch Dis Child** 1988 Dec;63(12):1506

Prevention of recurrent staphylococcal skin infections with low-dose oral clindamycin therapy. Klempner MS, et al. **JAMA** 1988 Nov 11;260(18):2682-5

[Prevention of chronic staphylococcal skin diseases] Kalamkarian AA, et al. **Vestn Dermatol Venerol** 1988; (8):51-5 (Eng. Abstr.) (Rus)

SURGERY

[Economic effect of using CO2 laser in the treatment of suppurative-inflammatory diseases of soft tissues] Skobelkin OK, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):19-21 (Eng. Abstr.) (Rus)

[Errors in the organization of medical services, diagnosis and treatment causing the development of septicemia in patients with suppurative-inflammatory diseases] Dolidze NG, et al. **Vestn Khir** 1989 Jan;142(1):118-20 (Rus)

THERAPY

Therapy of microbial eczema with staphylococcal vaccine. Viktorinová M, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:299-309

VETERINARY

Frequency and antimicrobial susceptibility of Staphylococcus spp isolated from feline skin lesions. Medleau L, et al. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1080-1

Staphylococcal dermatitis in sheep [letter] Doherty ML, et al. **Vet Rec** 1989 Apr 29;124(17):470

Staphylococcal dermatitis involving the teats of lactating

ewes. Gunning RF, et al. **Vet Rec** 1989 Feb 11;124(6):146–7
Synergistic hemolytic reactions between staphylococci and Micrococcus lylae. Lämmler C, et al.
Zentralbl Veterinarmed [B] 1989 Jun;36(4):297–302

STAPHYLOCOCCAL TOXOID

IMMUNOLOGY

[Immune response of donors, previously hyperimmunized with staphylococcus anatoxin to Pseudomonas aeruginosa antigen] Fedorovskaia EA, et al. **Vrach Delo** 1989 May;(5):123–4 (Eng. Abstr.) **(Rus)**
[Immune response of donors during immunization with staphylococcus anatoxin] Fedorovskaia EA, et al.
Vrach Delo 1989 Feb;(2):70–2 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

[Use of staphylococcal anatoxin in the complex treatment of patients with chronic cicatricial stenoses of the hollow organs of the neck] Tarasov DI, et al.
Vestn Otorinolaringol 1988 Nov–Dec;(6):29–33 (Eng. Abstr.) **(Rus)**

STAPHYLOCOCCAL VACCINES

Vaccination against experimental staphylococcal mastitis in ewes. Watson DL. **Res Vet Sci** 1988 Jul;45(1):16–21

IMMUNOLOGY

[Immunoregulatory activity of the lungs in relation to corpuscular and soluble antigens] Eremenko AE.
Zh Mikrobiol Epidemiol Immunobiol 1988 Sep;(9):82–5 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Therapy of microbial eczema with staphylococcal vaccine. Viktorinová M, et al.
Acta Univ Palacki Olomuc Fac Med 1988;119:299–309
[Effect of lincomycin and staphylococcal vaccine on the course of experimental staphylococcal sepsis] Gabyshva LS, et al. **Antibiot Khimioter** 1988 Oct;33(10):779–81 (Eng. Abstr.) **(Rus)**

STAPHYLOCOCCUS

Adherence of staphylococci to intravascular catheters. Kristinsson KG. **J Med Microbiol** 1989 Apr;28(4):249–57
Monkey feeding test for staphylococcal enterotoxin. Bergdoll MS. **Methods Enzymol** 1988;165:324–33
V beta-specific stimulation of human T cells by staphylococcal toxins. Kappler J, et al. **Science** 1989 May 19;244(4906):811–3
Immunomodulatory effects of staphylococcal lipoteichoic acid in early Listeria monocytogenes infection in Balb/c-mice. Ohshima Y, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Aug; 269(2):251–6
Immunostimulating staphylococcal lipoteichoic acid prevents pulmonary tumor colonization in BALB/c-mice. Ohshima Y, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):213–8
[Effect of sodium oxybutyrate on the development of a staphylococcal intoxication] Brill' GE.
Farmakol Toksikol 1989 Jan–Feb;52(1):90–3 (Eng. Abstr.) **(Rus)**
[Mechanism of action of staphylococcal toxin on the heart] Brill' GE. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):45–8 (Eng. Abstr.) **(Rus)**
[Increase in the effectiveness of microbial absorption on activated charcoal upon sorbent polarization] Tikhonova LS, et al. **Prikl Biokhim Mikrobiol** 1989 Mar–Apr; 25(2):184–7 (Eng. Abstr.) **(Rus)**
[Elaboration of an immunoenzyme method for determining the levels of staphylococcal enterotoxins in food products] Bellbaeva ML, et al. **Vopr Pitan** 1988 Jul–Aug;(4):74–5 **(Rus)**

ANALYSIS

[Extraction of chromosomal DNA from Staphylococcus and Listeria by a rapid method using achromopeptidase] Boujaafar N, et al. **Arch Inst Pasteur Tunis** 1988 Jul–Oct; 65(3–4):271–8 (Eng. Abstr.) **(Fre)**
[Comparative spectral study of the ribosomal proteins of coagulase-negative staphylococci] Badin VA, et al.
Zh Mikrobiol Epidemiol Immunobiol 1989 May;(5):12–6 **(Rus)**

CLASSIFICATION

Staphylococci—the cause of hospital infections in an orthopedic department. Tselenis-Kotsowilis A, et al.
Chemioterapia 1987 Jun;6(2 Suppl):18–9
A comparison of DNA and immunoblot fingerprinting of the SII biotype of coagulase negative staphylococci. Burnie JP, et al. **Epidemiol Infect** 1988 Oct;101(2):203–12
Characteristics of coagulase-negative staphylococci that help differentiate these species and other members of the family Micrococcaceae. Hébert GA, et al. **J Clin Microbiol** 1988 Oct;26(10):1939–49
Biotyping coagulase-negative staphylococci. Hébert GA, et al. **J Clin Microbiol** 1988 Oct;26(10):1950–6
Construction of a database to identify Staphylococcus species. Geary C, et al. **J Clin Pathol** 1989 Mar;42(3):289–94
The laboratory interpretation of coagulase-negative staphylococcal bacteraemia in neonates. Marshall RJ, et al. **J Hosp Infect** 1988 Nov;12(4):295–9
[Possible taxonomic description of coagulase-negative staphylococci isolated in infectious skin processes] Codiță I, et al. **Rev Ig [Bacteriol]** 1988 Apr–Jun;33(2):147–53 **(Rum)**
[Improvement of the plasma coagulation test] Darbeeva OS, et al. **Lab Delo** 1989;(5):21–2 **(Rus)**
[Additions to the present classification of staphylococci] Akatov AK. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):3–9 **(Rus)**
[Staphylococcal DNA as a basis for classification] Akatov AK, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec; (12):9–13 (Eng. Abstr.) **(Rus)**
[Minimal biochemical tests for interspecies identification in the Staphylococcus genus] Romeo AM, et al.
Rev Argent Microbiol 1988 Oct–Dec;20(4):171–82 (Eng. Abstr.) **(Spa)**
[Species of coagulase-negative Staphylococcus isolated from clinical material] Delgado-Ochoa MD, et al.
Rev Latinoam Microbiol 1988 Oct–Dec;30(4):313–6 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Wall degradation of antibiotic-pretreated staphylococci within macrophages. Wecke J, et al.
Acta Paediatr Hung 1988–89;29(1–2):159–61
In vitro interaction between rifampin and clindamycin against pathogenic coagulase-negative staphylococci. Arditi M, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):245–7
Antimicrobial resistance in nosocomial isolates of Staphylococcus haemolyticus. Froggatt JW, et al.
Antimicrob Agents Chemother 1989 Apr;33(4):460–6
Comparative in vitro antibiotic resistance of surface-colonizing coagulase-negative staphylococci. Gristina AG, et al. **Antimicrob Agents Chemother** 1989 Jun; 33(6):813–6
Methicillin-resistant staphylococci: detection methods and treatment of infections. Hackbarth CJ, et al.
Antimicrob Agents Chemother 1989 Jul;33(7):995–9 (97 ref.)
Methicillin-resistant staphylococci: genetics and mechanisms of resistance. Hackbarth CJ, et al.
Antimicrob Agents Chemother 1989 Jul;33(7):991–4 (57 ref.)
Activities of daptomycin and teicoplanin against Staphylococcus haemolyticus and Staphylococcus epidermidis, including evaluation of susceptibility testing recommendations. Low DE, et al.
Antimicrob Agents Chemother 1989 Apr;33(4):585–8
Reappraisal of the antistaphylococcal activities of first-generation (narrow-spectrum) and second-generation (expanded-spectrum) cephalosporins. Sabath LD.
Antimicrob Agents Chemother 1989 Apr;33(4):407–11 (30 ref.)
Role of beta-lactamase and different testing conditions in oxacillin-borderline-susceptible staphylococci.
Sierra-Madero JG, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1754–7
Cloning and expression of methicillin resistance from Staphylococcus epidermidis in Staphylococcus carnosus. Tesch W, et al. **Antimicrob Agents Chemother** 1988 Oct; 32(10):1494–9
Comparative in vitro activities of new fluorinated quinolones and other antibiotics against coagulase-negative Staphylococcus blood isolates from neutropenic patients, and relationship between susceptibility and slime production. Venditti M, et al.
Antimicrob Agents Chemother 1989 Feb;33(2):209–11
Survey on methicillin/oxacillin-resistant staphylococci (MORS) in Hungary. Thege MK, et al.
Br J Clin Pract Symp Suppl 1988 Feb;57:66–71
Interpretive criteria for the agar diffusion susceptibility test with teicoplanin using the ICS-and DIN-methods, respectively. Grimm H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):119–20
In vitro activity of coumermycin in comparison to other non-beta-lactam antibiotics against staphylococci, streptococci, and Clostridium difficile. Mittermayer H.
Chemioterapia 1987 Jun;6(2 Suppl):163–4
In vitro interaction between cefotetan and aminoglycosides on Staphylococcus aureus and coagulase negative staphylococci, both methicillin-susceptible and -resistant. Stefani S, et al. **Chemioterapia** 1988 Jun;7(3):151–5
Methicillin-resistant staphylococci. Thornsberry C.
Clin Lab Med 1989 Jun;9(2):255–67 (21 ref.)
Clinically significant differences in antibiograms of morphologic variants of blood culture isolates. Travis LB, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):177–9
The in vitro activity of ramoplanin (A-16686/MDL 62,198), vancomycin and teicoplanin against methicillin-susceptible and methicillin-resistant Staphylococcus spp. O'Hare MD, et al. **Drugs Exp Clin Res** 1988;14(10):617–9
Comparison of the Cobas-Bact five-hour susceptibility testing system with the NCCLS agar diffusion and dilution methods. Wüst J, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):511–7
Glucose oxidase as an adjunct to penicillin on penicillin resistant staphylococcal isolates. Sharma GK, et al.
Indian J Ophthalmol 1987;35(5–6):89–90
In vitro activity of sulbactam plus ampicillin against hospital isolates of coagulase-negative staphylococci and Acinetobacter species. Frank U, et al. **Infection** 1989 Jul–Aug;17(4):272–4
In vitro induction of ciprofloxacin resistance in coagulase-negative staphylococci [letter] Hartley JW, et al. **Infection** 1989 Jul–Aug;17(4):247–8
Frequency and antimicrobial susceptibility of Staphylococcus spp isolated from feline skin lesions. Medleau L, et al.
J Am Vet Med Assoc 1988 Nov 1;193(9):1080–1
Reversal of activity of trimethoprim against gram-positive cocci by thymidine, thymine and 'folates'. Hamilton-Miller JM. **J Antimicrob Chemother** 1988 Jul;22(1):35–9
In-vitro activity and beta-lactamase stability of methicillin, isoxazolyl penicillins and cephalothin against coagulase-negative staphylococci. Jarløv JO, et al.
J Antimicrob Chemother 1988 Aug;22(2):119–25
Bactericidal mechanisms of ofloxacin. Lewin CS, et al.
J Antimicrob Chemother 1988 Sep;22 Suppl C:1–8
In-vitro induction of resistance in coagulase-negative staphylococci to vancomycin and teicoplanin.
Watanakunakorn C. **J Antimicrob Chemother** 1988 Sep; 22(3):321–4
In vitro susceptibility to quinolones and other antimicrobial agents of Staphylococcus species isolated from immunocompromised patients. Cellini L, et al.
J Chemother 1989 Apr;1(2):95–100
In vitro activity of lomefloxacin (SC-47111) against enterobacteriaceae, enterococci and staphylococci.
Cornaglia G, et al. **J Chemother** 1989 Apr;1(2):84–90
Salt-supplemented medium for testing methicillin-resistant staphylococci with newer beta-lactams. Jorgensen JH, et al. **J Clin Microbiol** 1988 Sep;26(9):1675–8
Repeat antimicrobial susceptibility testing of identical isolates. Thomson RB Jr, et al. **J Clin Microbiol** 1989 May; 27(5):1108–11
Aromatic dienoyl tetramic acids. Novel antibacterial agents with activity against anaerobes and staphylococci. Rosen T, et al. **J Med Chem** 1989 May;32(5):1062–9
Methicillin resistance in staphylococci: an evaluation of conditions for detection. Jolly J, et al. **Med Lab Sci** 1989 Jan;46(1):2–5
A comparison of disc agar diffusion and agar dilution for the detection of methicillin resistant staphylococci. Diller DL, et al. **Methods Find Exp Clin Pharmacol** 1988 Nov; 10(11):695–7
Klebocin activity of Klebsiella pneumoniae strains and its heterologous effect on Staphylococcus sp. Albesa I, et al.
Microbiologica 1989 Jan;12(1):35–41
The effect of anaerobiosis on antistaphylococcal antibiotics. Tsukayama DT, et al. **Orthopedics** 1988 Sep;11(9):1285–9
A study of coagulase-negative staphylococci isolated from clinically significant infections at an Australian teaching hospital. Large M, et al. **Pathology** 1989 Jan;21(1):19–22
Clinical and bacteriological effects of therapy of urinary tract infection in primary health care: relation to in vitro sensitivity testing. Ferry S, et al. **Scand J Infect Dis** 1988; 20(5):535–44
The in vitro activity of beta-lactam antibiotics against hospital pathogens [letter] Noone P, et al.
Scand J Infect Dis 1988;20(4):461
[Determination of the sensitivity of bacteria to antibiotics by an agar diffusion method and use of the API ATB system: a comparative study] Reynaud AE, et al.
Ann Biol Clin (Paris) 1989;47(2):71–5 (Eng. Abstr.) **(Fre)**
[In vitro activity of roxithromycin compared to 5 other macrolides against staphylococci] Brun Y, et al.
Pathol Biol (Paris) 1988 Jun;36(5 Pt 2):613–8 (Eng. Abstr.) **(Fre)**
[Antibacterial activity of pefloxacin in the urine during the 7 days following a single 800 mg oral dose] Guibert J, et al. **Pathol Biol (Paris)** 1989 May;37(5):406–10 (Eng. Abstr.) **(Fre)**
[Antibacterial activity of lomefloxacin in the urine during the 4 days following a single 400 mg oral dose] Guibert J, et al. **Pathol Biol (Paris)** 1989 May;37(5):411–4 (Eng. Abstr.) **(Fre)**
[Staphylococcus species: differentiation in lyogroups and incidence of methicillin resistance in various species] Renzini V, et al. **Nuovi Ann Ig Microbiol** 1988 May–Jun; 39(3):271–81 (Eng. Abstr.) **(Ita)**
[Antioiotic sensitivity of staphylococci isolated from the surface of the skin of the breasts in pregnant women] Sytnik SI. **Antibiot Khimioter** 1988 Jul;33(7):536–9 (Eng. Abstr.) **(Rus)**
[Antibiotic sensitivity of Staphylococci populating the breast skin of nursing women] Sytnik SI. **Antibiot Khimioter** 1989 Feb;34(2):112–6 (Eng. Abstr.) **(Rus)**
[Clinico-microbiologic aspects of burns complicated by suppurative infection] Znamenskil VA, et al.
Khirurgiia (Mosk) 1989 Mar;(3):115–7 **(Rus)**

ENZYMOLOGY

Improved detection of beta-lactamase activity in isolates of Staphylococcus saprophyticus with the use of a modified Cefinase disk procedure. Kellogg JA, et al.
Am J Clin Pathol 1989 Mar;91(3):319–22
Evaluation of the effect of staphylococcal serine proteinase on phagocytosis. Międzobrodski J, et al.
Arch Immunol Ther Exp (Warsz) 1987;35(6):877–85
Plasmid-encoded lysostaphin endopeptidase resistance of

Staphylococcus simulans biovar staphylolyticus. Heath HE, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1106–9

Staphylococcal phosphoenolpyruvate–dependent phosphotransferase system: purification and characterization of the mannitol–specific enzyme IImtl of Staphylococcus aureus and Staphylococcus carnosus and homology with the enzyme IImtl of Escherichia coli. Reiche B, et al. **Biochemistry** 1988 Aug 23;27(17):6512–6

Infections due to coagulase–negative staphylococci. Caputo GM. **Del Med J** 1989 Jan;61(1):9–12, 15

Bacteriuria due to coagulase–negative staphylococci in children [letter] Nahata MC, et al. **Drug Intell Clin Pharm** 1988 Sep;22(9):724–5

Influence of cationic peptides on the activity of the autolytic endo–beta–N–acetylglucosaminidase of Staphylococcus simulans 22. Bierbaum G, et al. **FEMS Microbiol Lett** 1989 Apr;49(2–3):223–7

Cloning and expression of Staphylococcus saprophyticus urease gene sequences in Staphylococcus carnosus and contribution of the enzyme to virulence. Gatermann S, et al. **Infect Immun** 1989 Oct;57(10):2998–3002

Streptolytic activities of a lytic enzyme from Staphylococcus hyicus. Frede C, et al. **Int J Med Microbiol** 1989 May; 271(1):54–60

The bactericidal activity of vancomycin and teicoplanin against methicillin–resistant strains of coagulase negative Staphylococcus spp. O'Hare MD, et al. **J Antimicrob Chemother** 1989 May;23(5):800–2

Characteristic bacteriolytic activities of Staphylococcus hyicus. Lämmler C. **J Clin Microbiol** 1989 Jul;27(7):1682–3

Comparison of methods for determining DNase and phosphatase activities of staphylococci. Langlois BE, et al. **J Clin Microbiol** 1989 May;27(5):1127–9

GENETICS

Diversity of plasmids in Staphylococcus saprophyticus isolated from urinary tract infections in women. Cristino JA, et al. **Epidemiol Infect** 1989 Jun;102(3):413–9

Species–specific variation in signal peptide design. Implications for protein secretion in foreign hosts. von Heijne G, et al. **FEBS Lett** 1989 Feb 27;244(2):439–46

Structural gene isolation and prepeptide sequence of gallidermin, a new lanthionine containing antibiotic. Schnell N, et al. **FEMS Microbiol Lett** 1989 Apr; 49(2–3):263–7

Homology of mycoplasma plasmid pADB201 and staphylococcal plasmid pE194. Bergemann AD, et al. **J Bacteriol** 1989 Jan;171(1):593–5

Inactivation of lincosaminide antibiotics in Staphylococcus. Identification of lincosaminide O–nucleotidyltransferases and comparison of the corresponding resistance genes. Brisson–Noël A, et al. **J Biol Chem** 1988 Nov 5; 263(31):15880–7

Comparative analysis of five related Staphylococcal plasmids. Projan SJ, et al. **Plasmid** 1988 May;19(3):203–21

Deoxyribonucleic acid relatedness amongst Staphylococcus epidermidis and Staphylococcus saprophyticus strains. Zakrzewska–Czerwinska J, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):179–87

GROWTH & DEVELOPMENT

How long do middle ear pathogens survive in mucoid effusion material? Stenfors LE, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):244–8

Coagulase–negative staphylococci and hydrocephalus shunt infections. Bayston R. **Biochem Soc Trans** 1989 Jun; 17(3):471–3

Staphylococcus haemolyticus: cocarde growth around imipenem disks. Traub WH, et al. **Chemotherapy** 1988; 34(6):467–71

Studies on antagonism between porcine skin bacteria. Allaker RP, et al. **J Appl Bacteriol** 1989 Jun;66(6):507–14

Modelling the growth response of Staphylococcus xylosus to changes in temperature and glycerol concentration/water activity. Chandler RE, et al. **J Appl Bacteriol** 1989 Jun;66(6):543–8

Water hygiene of two swimming pools: microbial indicators. Tosti E, et al. **J Appl Bacteriol** 1988 Jul;65(1):87–91

Prevention of exudative epidermitis in gnotobiotic piglets by bacterial interference. Allaker RP, et al. **Vet Rec** 1988 Dec 3;123(23):597–8

[Antagonistic action of Pseudomonas aeruginosa against Staphylococci, coliform bacilli and various types of Proteus] Bel'kiĭ VV, et al. **Antibiot Khimioter** 1989 Jan; 34(1):31–4 (Eng. Abstr.) **(Rus)**

[Antagonistic action of corynebacteria and bacilli of a skin ecotype on staphylococci] Sytnik SI. **Mikrobiol Zh** 1989 Jan–Feb;51(1):82–7 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Effects of serum opsonins and intravenous immunoglobulin on phagocytosis and intracellular killing of Staphylococcus saprophyticus by human granulocytes. Maródi L, et al. **Acta Paediatr Hung** 1988–89;29(1–2):147–51

Cross protection between a strain of Staphylococcus epidermidis and eight other species of coagulase–negative staphylococci. Yoshida K, et al. **Can J Microbiol** 1988 Jul; 34(7):913–5

Effect of ciprofloxacin and ofloxacin on human polymorphonuclear leukocyte activity against staphylococci. Pascual A, et al. **Chemotherapy** 1989; 35(1):17–22

Selective proliferation of natural killer cells among monocyte–depleted peripheral blood mononuclear cells as a result of stimulation with staphylococcal enterotoxin B. Garcia–Peñarrubia P, et al. **Infect Immun** 1989 Jul; 57(7):2057–65

Cross protection between an encapsulated strain of Staphylococcus hyicus and encapsulated strains of Staphylococcus aureus. Yoshida K, et al. **J Appl Bacteriol** 1988 Dec;65(6):491–9

Hemagglutination by Staphylococcus saprophyticus and other coagulase–negative staphylococci. Beuth J, et al. **Microb Pathog** 1988 May;4(5):379–83

Can the association of athymic mice (Han:NMRI–nu) with Staphylococcus sciuri prevent infection with Staphylococcus aureus? Experiences from a field study. Wullenweber–Schmidt M, et al. **Z Versuchstierkd** 1989; 32(1):49–56

[Organizational and immunologic aspects of obtaining antistaphylococcal plasma from immune donors] Sorokin IuV, et al. **Voen Med Zh** 1989 Mar;(3):33–4 **(Rus)**

ISOLATION & PURIFICATION

The microbial content and complement C3 cleaving capacity of comedones in acne vulgaris. Leeming JP, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):468–73

Use of cellular hydrophobicity, slime production, and species identification markers for the clinical significance of coagulase–negative staphylococcal isolates. Martin MA, et al. **Am J Infect Control** 1989 Jun;17(3):130–5

Coagulase–negative staphylococcal bacteremia [letter] Collignon P. **Ann Intern Med** 1989 Jun 1;110(11):945–6

Outbreak of coagulase negative staphylococcus highly resistant to ciprofloxacin in a leukaemia unit. Oppenheim BA, et al. **BMJ** 1989 Jul 29;299(6694):294–7

Prevalence of peritonitis–associated coagulase–negative staphylococci on the skin of continuous ambulatory peritoneal dialysis patients. Beard–Pegler MA, et al. **Epidemiol Infect** 1989 Jun;102(3):365–78

Characterization of staphylococci from patients with toxic shock syndrome. Aliu B, et al. **J Clin Microbiol** 1988 Nov; 26(11):2427–8

Staphylococcus intermedius in canine gingiva and canine–inflicted human wound infections: laboratory characterization of a newly recognized zoonotic pathogen. Talan DA, et al. **J Clin Microbiol** 1989 Jan;27(1):78–81

Isolation and identification of coagulase–negative Staphylococcus species from bovine body sites and streak canals of nulliparous heifers. White DG, et al. **J Dairy Sci** 1989 Jul;72(7):1886–92

Surface colonization with coagulase–negative staphylococci in premature neonates. D'Angio CT, et al. **J Pediatr** 1989 Jun;114(6):1029–34

Ecological impact of antibiotics in neonatal units [letter] **Lancet** 1989 Aug 26;2(8661):509–10

Microbiological contamination of 99Tcm eluates [letter] Vinberg N, et al. **Nucl Med Commun** 1988 Dec;9(12):972

Prevalence of staphylococcal species in four dairy herds. Watts JL, et al. **Res Vet Sci** 1989 Jan;46(1):1–4

Evaluation of the Staph–Zym–system for identification of Staphylococcus hyicus and Staphylococcus intermedius. Lämmler C. **Zentralbl Veterinarmed [B]** 1989 May; 36(3):180–4

[Isolation of Staphylococcus hyicus strains in healthy hosts and the diagnostic study of the strains] Skalka B. **Vet Med (Praha)** 1988 Oct;33(10):607–16 (Eng. Abstr.) **(Cze)**

[Identification of coagulase–negative Staphylococci. Significance of miniaturized systems] Granjon V, et al. **Ann Biol Clin (Paris)** 1988;46(10):800–3 (Eng. Abstr.) **(Fre)**

[The occurrence and significance of plasma coagulase negative staphylococci from the genital tract of horses] Hüthwohl H, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(5):256–8 (Eng. Abstr.) **(Ger)**

[Staphylococci of human oral cavity] Krzemiński Z. **Med Dosw Mikrobiol** 1988;40(3):117–23 (Eng. Abstr.) **(Pol)**

[Coagulase–negative Staphylococci from the hospital and extra–hospital environments] Mikucki J, et al. **Przegl Epidemiol** 1988;42(2):134–40 (Eng. Abstr.) **(Pol)**

[Comparison of the effectiveness of detection of coagulase–positive staphylococci in milk in 3 liquid media] Szteyn J, et al. **Rocz Panstw Zakl Hig** 1988;39(6):485–8 (Eng. Abstr.) **(Pol)**

[Sanitaro–bacteriologic evaluation of the use of animal blood in the manufacture of fish sausages] Shul'gina LV, et al. **Gig Sanit** 1988 Aug;(8):73–5 **(Rus)**

[Structuro–functional properties of staphylococci in patients with pyoderma] Shakhabiddinov TT, et al. **Vestn Dermatol Venerol** 1989;(3):15–9 (Eng. Abstr.) **(Rus)**

[Colonization of unboiled milk with toxigenic Staphylococcus and its resistance upon pasteurization] Pavlova ZhP, et al. **Vopr Pitan** 1989 Jan–Feb;(1):67–8 **(Rus)**

[Staphylococci in skin microbiocenosis of the breasts in nursing women] Sytnik SI. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):23–7 (Eng. Abstr.) **(Rus)**

[The incidence of Staphylococcus saprophyticus in urine and its identification] Mirović V, et al. **Vojnosanit Pregl** 1989 Mar–Apr;46(2):108–10 (Eng. Abstr.) **(Scr)**

METABOLISM

The metabolic heterogeneity of pathogenic and nonpathogenic coagulase negative staphylococci. Mikucki J, et al. **Acta Microbiol Pol** 1989;38(1):55–62

Effect of milk on fibronectin and collagen type I binding to Staphylococcus aureus and coagulase–negative staphylococci isolated from bovine mastitis [published erratum appears in J Clin Microbiol 1989 Jul;27(7):1705] Miedzobrodzki J, et al. **J Clin Microbiol** 1989 Mar; 27(3):540–4

New method for detecting slime production by coagulase negative staphylococci. Freeman DJ, et al. **J Clin Pathol** 1989 Aug;42(8):872–4

Characteristics of extracellular protein production by Staphylococcus simulans biovar staphylolyticus during aerobic and anaerobic growth. Donham MC, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2615–21

Fibronectin, fibrinogen, and laminin act as mediators of adherence of clinical staphylococcal isolates to foreign material. Herrmann M, et al. **J Infect Dis** 1988 Oct; 158(4):693–701

Relationship between susceptibility and immune response to staphylococcal exfoliative toxin A in mammalian species. Machida K, et al. **Microbiol Immunol** 1988;32(10):1079–84

Lectin–mediated cell–attachment and phagocytosis of Staphylococcus saprophyticus strain S1. Beuth J, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):22–7

Properties of a protein from Staphylococcus capitis that binds human serum high density lipoprotein. Osland A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jun; 268(4):435–47

[Features of glycolysis and pentose phosphate pathway in novobiocin sensitive and novobiocin resistant staphylococci] Vinnikov AI, et al. **Antibiot Khimioter** 1989 Jan;34(1):34–8 (Eng. Abstr.) **(Rus)**

[Fibronectin–binding capacity of staphylococci] Sokurenko EV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec; (12):13–6 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

Adhesiveness and invasiveness of staphylococcal species in a cell culture model. Schmidt H, et al. **APMIS** 1989 Jul; 97(7):655–60

Proposed virulence factors among coagulase–negative staphylococci isolated from two healthy populations. Baddour LM, et al. **Can J Microbiol** 1988 Jul;34(7):901–5

Absence of factors associated with significant urinary tract infections caused by coagulase–negative staphylococci. Rimland D, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):123–7

Granulocyte activation by a cell surface complex of Staphylococcus saprophyticus: a receptor–mediated phenomenon. Ko HL, et al. **Int J Med Microbiol** 1989 May; 271(1):104–13

Comparative virulence of human isolates of coagulase–negative staphylococci tested in an infant mouse weight retardation model. Gunn BA. **J Clin Microbiol** 1989 Mar;27(3):507–11

Pathogenicity in two cases of Staphylococcus schleiferi, a recently described species. Jean–Pierre H, et al. **J Clin Microbiol** 1989 Sep;27(9):2110–1

Interaction of sub–epithelial connective tissue components with Staphylococcus aureus and coagulase–negative staphylococci from bovine mastitis. Mamo W, et al. **Vet Microbiol** 1988 Oct;18(2):163–76

[Study of bacterial and mycotic contamination of objects in the surface technological complex of coal mines under construction] Ivanchenko VN, et al. **Gig Sanit** 1988 Sep; (9):77–8 **(Rus)**

[Study of possible reproduction of causative agents of suppurative skin diseases in the lubricating–cooling liquid "Ukrinol–1M"] Solovarov VP, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):42–3 **(Rus)**

[The pathogenicity of coagulase–negative staphylococci with a capacity for growth adhering to smooth surfaces] Reyes PA, et al. **Rev Latinoam Microbiol** 1988 Apr–Jun; 30(2):69–71 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Comparative adhesion of protein A–positive and protein A–negative strains of porcine Staphylococcus hyicus subsp. hyicus to Vero cells. Teranishi H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):825–7

Synergistic hemolytic reactions between staphylococci and Micrococcus lylae. Lämmler C, et al. **Zentralbl Veterinarmed [B]** 1989 Jun;36(4):297–302

[Antagonistic action of the autonomous flora of the skin of the breasts on staphylococci in pregnant women] Sytnik SI. **Mikrobiol Zh** 1987 Nov–Dec;49(6):75–80 (Eng. Abstr.) **(Rus)**

[Antagonistic action of autonomous human skin flora on staphylococci] Sytnik SI. **Mikrobiol Zh** 1987 Jan–Feb; 49(1):68–72 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[Effect of ultraviolet radiation on microbial contamination of the human skin] Panferova NE, et al. **Gig Sanit** 1988 Sep;(9):19–21 **(Rus)**

ULTRASTRUCTURE

Demonstration of capsule in a strain of Staphylococcus hyicus by an electron microscope. Yoshida K, et al. **J Appl Bacteriol** 1988 Jun;64(6):483–6

[Detection of fibria-like surface structures in Staphylococcus saprophyticus as a pathogen in chronic pyelonephritis] Schmidt H, et al. **Z Urol Nephrol** 1988 Jul;81(7):437–44 (Eng. Abstr.) **(Ger)**

STAPHYLOCOCCUS AUREUS

Interaction of FCE 22101 with penicillin-binding proteins of Staphylococcus aureus. Tonn EA, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):120–1

Rapid latex agglutination test for detection of staphylococcal enterotoxins A to E that uses high-density latex particles. Fujikawa H, et al. **Appl Environ Microbiol** 1988 Oct; 54(10):2345–8

The effect of Staphylococcus aureus enterotoxin A on proliferation of lymphoid and nerve cells. Alakhov VYu, et al. **Biotekhnol Appl Biochem** 1988 Dec;10(6):563–7

Survival of Salmonella typhimurium and Staphylococcus aureus in Genoa salami of varying salt concentration. Messier S, et al. **Can J Vet Res** 1989 Jan;53(1):84–6

Emerging pathogens in nosocomial pneumonia. Berk SL, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):11–4

Ion transport through channels formed in lipid bilayers by Staphylococcus aureus alpha-toxin. Krasilnikov OV, et al. **Gen Physiol Biophys** 1989 Jun;8(3):213–22

Direct testing of blood culture for detection of the serotype 5 and 8 capsular polysaccharides of Staphylococcus aureus. Boutonnier A, et al. **J Clin Microbiol** 1989 May; 27(5):989–93

Quantitative determination of staphylococcal enterotoxin A by an enzyme-linked immunosorbent assay using a combination of polyclonal and monoclonal antibodies and biotin-streptavidin interaction. Edwin C. **J Clin Microbiol** 1989 Jul;27(7):1496–501

Ovine-associated Staphylococcus aureus protein with immunochemical similarity to toxic shock syndrome toxin 1. Ho G, et al. **J Clin Microbiol** 1989 Jan;27(1):210–2

Colony immunoblot assay for the detection of staphylococcal toxic shock syndrome toxin 1 (TSST-1) with anti-TSST-1 F(ab')2 fragments. See RH, et al. **J Clin Microbiol** 1989 Sep;27(9):2050–3

Rapid purification of staphylococcal enterotoxin B by high-pressure liquid chromatography. Strickler MP, et al. **J Clin Microbiol** 1989 May;27(5):1031–5

Phagocytic and postphagocytic activities of bovine neutrophils for pure and mixed bacterial cultures. Silva ID, et al. **J Dairy Sci** 1988 Sep;71(9):2513–9

Structure-activity relationship of toxic-shock-syndrome toxin-1: derivation and characterization of immunologically and biologically active fragments. Edwin C, et al. **J Infect Dis** 1988 Dec;158(6):1287–95

Production of tumor necrosis factor by human monocytes in response to toxic-shock-syndrome toxin-1. Parsonnet J, et al. **J Infect Dis** 1988 Nov;158(5):1026–33

Influence of thymus factor (TFX "Polfa") on the ability of granulocytes to absorb neutral latex particles and Staphylococcus aureus in patients treated for long-time periods with corticosteroids. Matusiewicz R, et al. **Mater Med Pol** 1988 Apr-Jun;20(2):132–4

Detection of endotoxin by enhancement with toxic shock syndrome toxin-1 (TSST-1). Bohach GA, et al. **Methods Enzymol** 1988;165:302–6

Assays for epidermolytic toxin of Staphylococcus aureus. de Azavedo JC, et al. **Methods Enzymol** 1988;165:333–8

Chick embryo assay for staphylococcal toxic shock syndrome toxin-1. de Azavedo JC, et al. **Methods Enzymol** 1988; 165:344–7

Immunochemical assays for toxic shock syndrome toxin-1. Schlievert PM. **Methods Enzymol** 1988;165:339–44

Bindings of toxic shock syndrome toxin-1 and staphylococcal enterotoxins A, B, and C to rabbit spleen cells. Fujikawa H, et al. **Microbiol Immunol** 1989;33(5):381–90

Characteristics of toxic shock syndrome toxin 1-induced lectin-like activity and inhibitor(s) in rabbit serum. Arko RJ, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S294–304

Toxicity of staphylococcal toxic shock syndrome toxin 1 for germ-free and conventional piglets. Bulanda M, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S248–53

Structure-function analysis of toxic shock syndrome toxin 1. Edwin C. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S137–9

Effects of drugs on the pyrogenicity of toxic shock syndrome toxin 1 and its capacity to enhance susceptibility to the lethal effects of endotoxic shock in rabbits. Igarashi H, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S210–3

Determination of biologically active region in toxic shock syndrome toxin 1. Kokan-Moore NP, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S125–9

Direct effects of purified staphylococcal toxic shock syndrome toxin 1 on myocardial function of isolated rabbit atria. Olson RD, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S313–5

Increased expression of leucocyte adherence-related glycoproteins by polymorphonuclear leucocytes during phagocytosis of staphylococci on an endothelial surface. Vandenbroucke-Grauls CM, et al. **Scand J Immunol** 1989 Jul;30(1):91–8

Detection of staphylococcal toxic shock syndrome toxin 1 by a latex agglutination kit. Espersen F, et al. **Scand J Infect Dis** 1988;20(4):449–50

Effect of toxic shock syndrome toxin-1 on human hemostatic parameters. Gareau R, et al. **Thromb Res** 1989 May 15; 54(4):349–56

Incorporation of staphylococcal alpha-toxin in glutaraldehyde fixed erythrocytes. Füssle R, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):346–54

[Diagnosis of staphylococcal enterotoxin by the immunoenzyme test] Nicolae M. **Rev Ig [Bacteriol]** 1988 Jan-Mar;33(1):55–63 (Eng. Abstr.) **(Rum)**

[Effect of staphylococcal enterotoxin A on the development of Lewis lung carcinoma in mice] Shcheglovitova ON, et al. **Eksp Onkol** 1989;11(1):73–4, 79 (Eng. Abstr.) **(Rus)**

[Effect of pH on the potential-dependent functioning of staphylococcal toxin channels in phosphatidylcholine bilayer] Krasil'nikov OV, et al. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):60–6 (Eng. Abstr.) **(Rus)**

[Interferon production and natural killer activity induced by staphylococcal enterotoxin in mouse spleen cells] Shcheglovitova ON, et al. **Vopr Virusol** 1988 May-Jun; 33(3):305–9 (Eng. Abstr.) **(Rus)**

[Adaptation of pathogens of purulent infections to surface-active antiseptics] Gudz' OV. **Vrach Delo** 1989 Feb; (2):105–7 (Eng. Abstr.) **(Rus)**

ANALYSIS

Sensitivity and specificity of latex agglutination tests used to identify Streptococcus agalactiae and Staphylococcus aureus isolated from bulk tank milk. Hogan JS, et al. **Am J Vet Res** 1988 Sep;49(9):1537–9

Strong-cation-exchange sulfoethyl aspartamide chromatography for peptide mapping of Staphylococcus aureus V8 protein digests. Crimmins DL, et al. **Anal Biochem** 1989 Feb 1;176(2):255–60

Fibrinogen-binding protein/clumping factor from Staphylococcus aureus. Bodén MK, et al. **Infect Immun** 1989 Aug;57(8):2358–63

Identification of functional antigenic segments of toxic shock syndrome toxin 1 by differential immunoreactivity and by differential mitogenic responses of human peripheral blood mononuclear cells, using active toxin fragments. Edwin C, et al. **Infect Immun** 1989 Jul;57(7):2230–6

On-line high-performance liquid chromatography-post-column reaction-capillary gas chromatography analysis of lipids in biological samples. Raglione TV, et al. **J Chromatogr** 1988 Nov 11;454:157–67

Staphylococcus aureus exopolysaccharide in vivo demonstrated by immunomagnetic separation and electron microscopy. Johne B, et al. **J Clin Microbiol** 1989 Jul; 27(7):1631–5

Characterisation of methicillin-resistant isolates of Staphylococcus aureus by analysis of whole-cell and exported proteins. Thomson-Carter FM, et al. **J Med Microbiol** 1989 Jan;28(1):25–32

Simple method for quantitation of cell-bound protein A on Staphylococcus aureus cells by means of hemagglutination with sheep erythrocytes differentially sensitized with rabbit antibody and its clinical application. Hwang SM, et al. **Microbiol Immunol** 1989;33(3):155–63

Surface proteins of Staphylococcus aureus. Cheung AL, et al. **Rev Infect Dis** 1988 Jul-Aug;10 Suppl 2:S351–5

Comparison of cellular fatty acids composition between Staphylococcus aureus and Staphylococcus aureus subsp. anaerobius. de la Fuente R, et al. **Rev Latinoam Microbiol** 1987 Oct-Dec;29(4):363–5

Preparation of cultured and isolated cells for X-ray microanalysis. Zierold K, et al. **Scanning Microsc** 1988 Sep; 2(3):1775–90

[Quantitative determination of staphylococcal enterotoxin type D using the method of rocket immunoelectrophoresis] Naubet'iarov RB, et al. **Lab Delo** 1988;(10):69–70 (Eng. Abstr.) **(Rus)**

[Staphylococcal enterotoxin type E: isolation, purification, identification] Bellbaeva ML, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr;(4):32–6 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Comparative characterization and biotyping of Staphylococcus aureus isolates from human and bovine sources. Farah IO, et al. **Acta Vet Scand** 1988; 29(3-4):303–10

Differentiation of Staphylococcus aureus from freshly slaughtered poultry and strains 'endemic' to processing plants by biochemical and physiological tests. Mead GC, et al. **J Appl Bacteriol** 1989 Feb;66(2):153–9

Restriction enzyme analysis of plasmid DNA and bacteriophage typing of paired Staphylococcus aureus blood culture isolates. Hartstein AI, et al. **J Clin Microbiol** 1989 Aug;27(8):1874–9

Immunoblots, antimicrobial resistance, and bacteriophage typing of oxacillin-resistant Staphylococcus aureus. Mulligan ME, et al. **J Clin Microbiol** 1988 Nov; 26(11):2395–401

Enterotoxin B production and phage typing patterns of Staphylococcus aureus. Chen CP, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Aug; 4(8):444–50

Complex typing of methicillin-resistant Staphylococcus aureus (MRSA). Witte W, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1-2):76–82

[Plasmid analysis and restriction enzyme digest pattern study in 20 cases of neonatal subcutaneous gangrene due to Staphylococcus aureus] Tang J, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):332–4, 24 (Eng. Abstr.) **(Chi)**

[Experimental phages for differentiating nontypable methicillin-resistant Staphylococcus aureus] Zueva EA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):19–24 (Eng. Abstr.) **(Rus)**

CYTOLOGY

[Structure of Staphylococcus aureus cell wall determined by the freeze-substitution method] Umeda A. **Nippon Saikingaku Zasshi** 1988 Nov;43(6):961–9 **(Jpn)**

DRUG EFFECTS

Attempts to eradicate methicillin-resistant Staphylococcus aureus colonization with the use of trimethoprim-sulfamethoxazole, rifampin, and bacitracin. Roccaforte JS, et al. **Am J Infect Control** 1988 Aug; 16(4):141–6

Enhanced phagocytosis, killing, and serum sensitivity of Escherichia coli and Staphylococcus aureus treated with sub-MICs of imipenem. Adinolfi LE, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1012–8

Plasma bactericidal activity after administration of erythromycin estolate and erythromycin ethylsuccinate to healthy volunteers. Bérubé D, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1227–30

Low-level methicillin resistance in strains of Staphylococcus aureus. Chambers HF, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):424–8

In vitro effects of beta-lactams combined with beta-lactamase inhibitors against methicillin-resistant Staphylococcus aureus. Kobayashi S, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):331–5

Enhancing effect of serum ultrafiltrate on the activity of cephalosporins against gram-negative bacilli. Leggett JE, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):35–40

Susceptibility and bactericidal activity studies of four beta-lactamase-producing enterococci. Patterson JE, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):251–3

Widespread quinolone resistance among methicillin-resistant Staphylococcus aureus isolates in a general hospital. Shalit I, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):593–4

Macrodilution MBC result reproducibility for methicillin-susceptible and reputedly tolerant Staphylococcus aureus isolates [letter] Wolfrey BF, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1464

Bactericidal activity of oxacillin against beta-lactamase-hyperproducing Staphylococcus aureus. Woods GL, et al. **Antimicrob Agents Chemother** 1988 Nov; 32(11):1614–8

In vitro activity of dicloxacillin against methicillin-susceptible and methicillin-resistant Staphylococcus-aureus. Frimodt-Møller N, et al. **APMIS** 1989 Mar;97(3):207–11

The antibacterial activity of a siderophore. 1. In vitro activity of deferoxamine alone and in combination with ascorbic acid on Staphylococcus aureus. Hartzen SH, et al. **APMIS** 1989 May;97(5):419–24

Resistance to dicloxacillin, methicillin and oxacillin in methicillin-susceptible and methicillin-resistant Staphylococcus aureus detected by dilution and diffusion methods. Rosdahl VT, et al. **APMIS** 1989 Aug; 97(8):715–22

Antistaphylococcal activity of teicoplanin in Riyadh, Saudi Arabia. Shibl AM, et al. **APMIS Suppl** 1988;3:68–70

In vivo standardization of cutaneous bactericidal activity of antiseptics by using monoxenic hairless mice. Barc MC, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1911–5

Is free halogen necessary for disinfection? Williams DE, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2583–5

Staphylococcus aureus nasal carriage in hemodialysis patients. Its role in infection and approaches to prophylaxis. Chow JW, et al. **Arch Intern Med** 1989 Jun;149(6):1258–62 (53 ref.)

Surveillance of MRS in Poland. Borowski J. **Br J Clin Pract Symp Suppl** 1988 Feb;57:72–3

Susceptibility of Pseudomonas and Staphylococcus wound isolates to topical antimicrobial agents: a 10-year review and clinical evaluation. Thomson PD, et al. **Burns** 1989 Jun;15(3):190–2

Methicillin resistant Staphylococcus aureus: identification of a community outbreak by monitoring of hospital isolates. Dammann TA, et al. **Can J Public Health** 1988 Sep-Oct; 79(5):312–4

Discrepancies in the effect of protein binding on beta-lactam antibiotics. Bakhtiar M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):54–6

In vitro studies of synergistic interaction between aztreonam and cefoperazone. Borowski J, et al. **Chemioterapia** 1987

Jun;6(2 Suppl):109–10
Antibiotic susceptibility of bacteria isolated from active, therapy–resistant periodontal sites. De Luca M. **Chemioterapia** 1988 Oct;7(5):309–12
Cefotetan: antibacterial activity against Staphylococcus aureus in the presence of human serum. Edwards JR. **Chemioterapia** 1988 Aug;7(4):271–3
Microbiological indications for the treatment of Staphylococcus aureus infections. Fabbri A, et al. **Chemioterapia** 1988 Dec;7(6):378–81
In vitro activity of sulbactam/ampicillin and ampicillin against methicillin–sensitive and methicillin–resistant Staphylococcus aureus and Staphylococcus epidermidis. Fabbri A, et al. **Chemioterapia** 1988 Oct;7(5):306–8
Alterations in microbial structure and function induced by exposure to antimicrobial agents: implications for host response to infection. Gemmell CG. **Chemioterapia** 1987 Jun;6(2 Suppl):211–2
Immunomodulating properties of newer cephalosporins: a preliminary classification. Labro M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):219–21
In vitro interaction between cefotetan and aminoglycosides on Staphylococcus aureus and coagulase negative staphylococci, both methicillin–susceptible and –resistant. Stefani S, et al. **Chemioterapia** 1988 Jun;7(3):151–5
In vitro susceptibility to 10 antibiotics of methicillin–resistant (MRSA) Staphylococcus aureus in Chile. Montiel F, et al. **Diagn Microbiol Infect Dis** 1988 Jul;10(3):145–8
Commercially available technique for rapid laboratory detection of methicillin resistance among Staphylococcus aureus. Piper J, et al. **Diagn Microbiol Infect Dis** 1988 Nov; 11(3):177–80
Synergistic interaction of cefotaxime and its metabolite desacetylcefotaxime demonstrated by drug–impregnated disks. Stevens DL, et al. **Diagn Microbiol Infect Dis** 1989 Jan–Feb;12(1):73–80
Evaluation of cefotaxime alone and in combination with desacetylcefotaxime against strains of Staphylococcus aureus that produce variants of staphylococcal beta–lactamase. Stratton CW, et al. **Diagn Microbiol Infect Dis** 1989 Jan–Feb;12(1):57–65
Phagocytosis and killing of A–protein positive Staphylococcus aureus in the presence of low doses of antibiotics. Mascellino MT, et al. **Drugs Exp Clin Res** 1989; 15(2):63–9
A study of synergism between cloxacillin and gentamicin on resistant staphylococci (penicillinase producing and gentamicin resistant). Coker AO. **East Afr Med J** 1989 Feb; 66(2):141–7
Transmissible mupirocin resistance in Staphylococcus aureus. Rahman M, et al. **Epidemiol Infect** 1989 Apr;102(2):261–70
Comparative in vitro activity of daptomycin (LY146032) and vancomycin against gram–positive cocci determined using a pharmacokinetic model. Blenkharn JI, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug;8(8):734–7
Ciprofloxacin resistance in methicillin– and gentamicin–resistant Staphylococcus aureus. Maple P, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul;8(7):622–4
Effect of amoxycillin and clavulanic acid, alone and in combination, on human polymorphonuclear leukocyte function against Staphylococcus aureus. Pascual A, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):277–81
Turbidimetric response of Staphylococcus aureus and Enterococcus faecalis to daptomycin. Wale MC, et al. **Eur J Clin Microbiol Infect Dis** 1988 Dec;7(6):809–12
Comparison of the Cobas–Bact five–hour susceptibility testing system with the NCCLS agar diffusion and dilution methods. Wüst J, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):511–7
Flow microcalorimetry as a tool for an improved analysis of antibiotic activity: the different stages of chloramphenicol action. Krüger D, et al. **Experientia** 1989 Apr 15;45(4):322–5
Iron depletion alters surface–associated properties of Staphylococcus aureus and its association to human neutrophils in chemiluminescence. Domingue PA, et al. **FEMS Microbiol Lett** 1989 Jun;50(3):265–8
Immunological detection of penicillin–binding protein 2' in clinical isolates of methicillin–resistant Staphylococcus aureus and Staphylococcus epidermidis [published erratum appears in FEMS Michrobiol Lett 1989 Jul 15;51(1):246] O'Hara DM, et al. **FEMS Microbiol Lett** 1989 Jan 1; 48(1):97–103
Antibiotic resistance pattern of Staphylococcus aureus with special reference to methicillin resistant strains. Chakravarty A, et al. **Indian J Med Res** 1988 Jun;87:570–2
Antibiotic sensitivity pattern of Staphylococcus aureus. Faridi MM, et al. **Indian Pediatr** 1988 Jun;25(6):534–7
Oxacillin–resistant S aureus [letter] Silver HJ. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):98
Transmission and control of methicillin–resistant Staphylococcus aureus in a skilled nursing facility. Thomas JC, et al. **Infect Control Hosp Epidemiol** 1989 Mar; 10(3):106–10
The microbiological efficacy of the combination of fosfomycin and vancomycin against clinically relevant staphylococci. Gatermann S, et al. **Infection** 1989 Jan–Feb; 17(1):35–7
Variable effect of toxic shock toxins from different sources on neutrophil function in vitro. Berger EM, et al. **Inflammation** 1988 Oct;12(5):447–53
Skin–isolated, community–acquired Staphylococcus aureus: in vitro resistance to methicillin and erythromycin. Ohana N, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):544–6
The mode of action of cervinomycin in Staphylococcus aureus. Tanaka H, et al. **J Antibiot (Tokyo)** 1989 Mar; 42(3):431–9
Combination of aztreonam with anti–staphylococcal antibiotics [letter] Bakhtiar M, et al. **J Antimicrob Chemother** 1988 Nov;22(5):773–4
Bactericidal kinetics of various dosages of fleroxacin simulated in bacterial cultures. Bauernfeind A, et al. **J Antimicrob Chemother** 1988 Oct;22 Suppl D:81–9
Natural methicillin resistance in comparison with that selected by in–vitro drug exposure in Staphylococcus aureus. Berger–Bächi B, et al. **J Antimicrob Chemother** 1989 Feb;23(2):179–88
Genetics of methicillin resistance in Staphylococcus aureus. Berger–Bächi B. **J Antimicrob Chemother** 1989 May; 23(5):671–3
In–vitro and in–vivo activity of cefpirome (HR 810) against methicillin–susceptible and –resistant Staphylococcus aureus and Streptococcus faecalis. Eng RH, et al. **J Antimicrob Chemother** 1989 Mar;23(3):373–81
Activity of penems against methicillin–resistant Staphylococcus aureus [letter] Fontana R. **J Antimicrob Chemother** 1988 Jul;22(1):86
Activity of penems against methicillin–resistant Staphylococcus aureus [letter] Holt HA, et al. **J Antimicrob Chemother** 1988 Jul;22(1):87–8
Time course of the antibacterial activity of erythromycin stearate and erythromycin acistrate against two Staphylococcus aureus strains in vitro. Korkeala H, et al. **J Antimicrob Chemother** 1988 Aug;22(2):127–33
Bactericidal activity of ciprofloxacin against Staphylococcus aureus [letter] Lewin CS, et al. **J Antimicrob Chemother** 1989 Jul;24(1):84–5
Comparative in–vitro activity of vancomycin, teicoplanin, ramoplanin (formerly A16686), paldimycin, DuP 721 and DuP 105 against methicillin and gentamicin resistant Staphylococcus aureus. Maple PA, et al. **J Antimicrob Chemother** 1989 Apr;23(4):517–25
Modification of homogeneous resistance in a methicillin–resistant strain of Staphylococcus aureus by acquisition of a beta–lactamase encoding plasmid. Opal SM, et al. **J Antimicrob Chemother** 1989 Mar;23(3):315–25
Suppression of rifampicin–resistant variants of Staphylococcus aureus [letter] Paull A, et al. **J Antimicrob Chemother** 1989 Jan;23(1):161–2
Activity of FCE 22101 against methicillin–resistant Staphylococcus aureus and affinity for penicillin binding proteins. Piddock LJ, et al. **J Antimicrob Chemother** 1989 Mar;23 Suppl C:59–64
In–vitro susceptibility of staphylococci to fleroxacin in comparison with six other quinolones. Pohlod DJ, et al. **J Antimicrob Chemother** 1988 Oct;22 Suppl D:35–41
In–vitro activity of ciprofloxacin combined with either fusidic acid or rifampicin against Staphylococcus aureus. Røder BL, et al. **J Antimicrob Chemother** 1989 Mar; 23(3):347–52
Sub–inhibitory and post–antibiotic effects of spiramycin and erythromycin on Staphylococcus aureus. Webster C, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:33–9
In–vitro and in–vivo studies of trimethoprim–sulphamethoxazole against multiple resistant Staphylococcus aureus. Yeldandi V, et al. **J Antimicrob Chemother** 1988 Dec;22(6):873–80
Sensitivity of methicillin–resistant Staphylococcus aureus strains to some antibiotics, antiseptics and disinfectants. Al–Masaudi SB, et al. **J Appl Bacteriol** 1988 Oct; 65(4):329–37
Onset of penicillin–induced bacteriolysis in staphylococci is cell cycle dependent. Maidhof H, et al. **J Bacteriol** 1989 Apr;171(4):2252–7
The epidemiology of methicillin–resistant Staphylococcus aureus in a burn center. Heggers JP, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):610–2
Susceptibility of methicillin–resistant Staphylococcus aureus to lysostaphin. Huber MM, et al. **J Clin Microbiol** 1989 May;27(5):1122–4
Salt–supplemented medium for testing methicillin–resistant staphylococci with newer beta–lactams. Jorgensen JH, et al. **J Clin Microbiol** 1988 Sep;26(9):1675–8
Comparison of the agar dilution, tube dilution, and broth microdilution susceptibility tests for determination of teicoplanin MICs. Kenny MT, et al. **J Clin Microbiol** 1989 Jun;27(6):1409–10
Evaluation of various antibiotics for induction of L forms from Staphylococcus aureus strains isolated from bovine mastitis. Owens WE. **J Clin Microbiol** 1988 Oct; 26(10):2187–90
Methicillin–resistant strains of Staphylococcus aureus resistant to quinolones. Schaefler S. **J Clin Microbiol** 1989 Feb;27(2):335–6
Survival of some non–starter bacteria in naturally ripened and enzyme–accelerated Cheddar cheese. Bautista L, et al. **J Dairy Res** 1988 Nov;55(4):597–602
Prolonged in vitro exposure of Staphylococcus aureus to germicidal teat dips. Hogan JS, et al. **J Dairy Sci** 1989 Apr;72(4):1052–6
Antibiotic–impregnated bone cement: an in vitro comparative analysis. Heard GS, et al. **J Foot Surg** 1989 Jan–Feb; 28(1):54–9
Gamma interferon enhances the killing of Staphylococcus aureus by human neutrophils. Edwards SW, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):37–42
Efficacy of the antiseptic solution 'TCP' against Staphylococcus aureus and Pseudomonas aeruginosa [letter] Acheampong YB, et al. **J Hosp Infect** 1988 Oct; 12(3):235–6
Two populations of methicillin– and gentamicin–resistant Staphylococcus aureus strains in a regional hospital in Hong Kong: epidemiology and plasmid profile studies [letter] Cheng AC, et al. **J Hosp Infect** 1988 Oct;12(3):241–3
Plasmid analysis of 219 methicillin–resistant Staphylococcus aureus strains with uncommon profiles isolated in Lisbon. Cristino JA, et al. **J Hosp Infect** 1989 Feb;13(2):133–41
The emergence of methicillin–resistant Staphylococcus aureus infections in an Israeli hospital. Finkelstein R, et al. **J Hosp Infect** 1989 Jul;14(1):55–61
Nasal carriage of Staphylococcus aureus treated with topical mupirocin (pseudomonic acid) in a children's hospital. Frank U, et al. **J Hosp Infect** 1989 Feb;13(2):117–20
Implications of acquired oxacillin resistance in the management and control of Staphylococcus aureus infections. Massanari RM, et al. **J Infect Dis** 1988 Oct; 158(4):702–9
Bacterial elution from bone cement. Drabu KJ. **J R Coll Surg Edinb** 1988 Jun;33(3):148–50
Prevention of vascular prosthetic infection with an antibiotic–bonded Dacron graft. Shue WB, et al. **J Vasc Surg** 1988 Nov;8(5):600–5
Methicillin resistant staphylococcus aureus in a teaching hospital of Karachi—a laboratory study. Ashiq B, et al. **JPMA** 1989 Jan;39(1):6–9
In vitro and in vivo effects of combinations of cefotaxime or other beta–lactams with rolitetracycline on methicillin–resistant Staphylococcus aureus. Kobayashi S, et al. **Jpn J Antibiot** 1989 May;42(5):1208–15
Ciprofloxacin resistance in epidemic methicillin–resistant Staphylococcus aureus [letter] **Lancet** 1988 Oct 8; 2(8615):843
Gentamicin and antiseptic resistance in epidemic methicillin–resistant Staphylococcus aureus [letter] Gillespie MT, et al. **Lancet** 1989 Mar 4;1(8636):503
World–wide antibiotic resistance in methicillin–resistant Staphylococcus aureus. Maple PA, et al. **Lancet** 1989 Mar 11;1(8637):537–40
Antibiotic resistance in Staphylococcus aureus [editorial] Marples RR. **Med J Aust** 1989 Jan 16;150(2):58–9
A national survey of antimicrobial resistance in Staphylococcus aureus in Australian teaching hospitals. Turnidge J, et al. **Med J Aust** 1989 Jan 16;150(2):65, 69–72
Microcalorimetric studies of the effects of platinum group metal complexes on bacterial growth. Bunker JC, et al. **Microbios** 1989;58(235):83–93
Influence of cefotaxime on Staphylococcus aureus with respect to their interaction with macrophages. Cuffini AM, et al. **Microbios** 1989;58(236–237):147–54
Distribution of methicillin–resistance and of protein A among Staphylococcus aureus strains isolated from different hosts. Pessione E, et al. **Microbios** 1988;55(224–225):147–53
Methicillin–resistant Staphylococcus aureus. Brumfitt W, et al. **N Engl J Med** 1989 May 4;320(18):1188–96 (120 ref.)
A descriptive survey of uncontrolled methicillin–resistant Staphylococcus aureus in a twin site general hospital. Barrett SP, et al. **Postgrad Med J** 1988 Aug;64(754):606–9
Cadmium resistance from Staphylococcus aureus plasmid pI258 cadA gene results from a cadmium–efflux ATPase. Nucifora G, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3544–8
Beta–lactam antibiotics and beta–lactamases: two sides of a continuing story. Richmond MH. **Rev Infect Dis** 1979 Jan–Feb;1(1):30–8 (31 ref.)
Comparison of in vivo and in vitro activities of antibiotics with different modes of action against a tolerant and a non–tolerant Staphylococcus aureus strain. Hoogeterp JJ, et al. **Scand J Infect Dis** 1989;21(1):95–101
The efficacy of rifampicin against Staphylococcus aureus in vitro and in an experimental infection in normal and granulocytopenic mice. Hoogeterp JJ, et al. **Scand J Infect Dis** 1988;20(6):649–56
Pharmacodynamics of beta–lactam antibiotics. Studies on the paradoxical and postantibiotic effects in vitro and in an animal model. Odenholt–Tornqvist I. **Scand J Infect Dis Suppl** 1989;58:1–55
Evaluation of antibacterial sensitivity testing methods for methicillin–resistant Staphylococcus aureus in a dermatology outpatient population. McBride ME, et al. **South Med J** 1989 Feb;82(2):165–8
Kill kinetics of the cephalosporin antibiotics cephalexin and cefuroxime against bacteria of veterinary importance. Silley P, et al. **Vet Rec** 1988 Sep 24;123(13):343–5
Chlorhexidine diacetate and povidone–iodine cytotoxicity to canine embryonic fibroblasts and Staphylococcus aureus. Sanchez IR, et al. **Vet Surg** 1988 Jul–Aug;17(4):182–5
Disinfection with gaseous formaldehyde. Second Part: Influence of test materials on formaldehyde residues and the bactericidal and sporicidal effectiveness. Casella ML, et al. **Zentralbl Hyg Umweltmed** 1989 Aug;188(5):449–65
[Antibiotic resistance and plasmids analysis in Staphylococcus aureus] Chang LL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Mar; 5(3):172–9 (Eng. Abstr.) (Chi)
[The sensitivity pattern of Staphylococcus aureus isolated from quarter milk of cattle (letter)] van den Bogaard AE

Jr. **Tijdschr Diergeneeskd** 1989 Jun 1;114(11):634–5 **(Dut)**
[Sensitivity pattern of Staphylococcus aureus isolated from quarter milk from cattle] Vecht U, et al. **Tijdschr Diergeneeskd** 1989 Mar 1;114(5):260–9 (Eng. Abstr.) **(Dut)**
[Bactericidal activity of disinfectants against certain bacterial strains of S. aureus] Economou-Stamatelopoulou C, et al. **Bull Soc Pathol Exot Filiales** 1988;81(4):721–5 (Eng. Abstr.) **(Fre)**
[Antibiotic sensitivity of strains of Staphylococcus aureus isolated in Lome] De Souza C, et al. **Med Trop (Mars)** 1988 Jul–Sep;48(3):243–7 (Eng. Abstr.) **(Fre)**
[In vitro effect of combinations of netilmicin and amikacin with fosfomycin and pefloxacin on 31 strains of heterogeneous methicillin- resistant Staphylococcus aureus] David C, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):608–12 (Eng. Abstr.) **(Fre)**
[Course of the resistance of Staphylococcus aureus to pefloxacin. A study based on 782 strains isolated in 1985 and 1986] Jean-Pierre H, et al. **Pathol Biol (Paris)** 1988 Oct;36(8):956–8 (Eng. Abstr.) **(Fre)**
[Comparison of the in vitro post-antibiotic effect of C14 macrolides (erythromycin and roxithromycin) and C16 macrolides (josamycin and spiramycin) against Staphylococcus aureus] Rolin O, et al. **Pathol Biol (Paris)** 1989 May;37(5):375–7 (Eng. Abstr.) **(Fre)**
[Comparative bactericidal activity of fourteen antibiotics against Staphylococcus aureus] Thabaut A, et al. **Pathol Biol (Paris)** 1989 May;37(5):321–8 (Eng. Abstr.) **(Fre)**
[In vitro bactericidal effects of ofloxacin on S. aureus] Korting HC, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):387–94 (Eng. Abstr.) **(Ger)**
[Effect of sodium pyruvate on the resumption of cell division of Staphylococcus aureus subjected to freezing] Leoni E, et al. **Nuovi Ann Ig Microbiol** 1987 May–Aug; 38(3–4):305–13 (Eng. Abstr.) **(Ita)**
[Studies on susceptibility of isolated organisms from pediatric infections against various antimicrobial agents] Fujii R, et al. **Jpn J Antibiot** 1988 Jul;41(7):841–53 (Eng. Abstr.) **(Jpn)**
[In vitro susceptibilities of clinical isolates of Staphylococcus aureus] Igari J, et al. **Jpn J Antibiot** 1988 Sep;41(9):1205–11 (Eng. Abstr.) **(Jpn)**
[A nationwide study of the antimicrobial susceptibility of clinical isolates of Staphylococcus aureus in Japan] Igari J, et al. **Jpn J Antibiot** 1988 May;41(5):485–93 (Eng. Abstr.) **(Jpn)**
[Pharmacokinetic, bacteriological and clinical studies of cefuzonam in the field of obstetrics and gynecology] Kubota K, et al. **Jpn J Antibiot** 1988 Aug;41(8):1015–29 (Eng. Abstr.) **(Jpn)**
[Influence of human albumin on bactericidal or antibacterial activities of cephems and monobactams] Saionji K. **Jpn J Antibiot** 1988 Oct;41(10):1390–406 (Eng. Abstr.) **(Jpn)**
[Experiences of postoperative staphylococcal enteritis caused by methicillin-cephem resistant Staphylococcus aureus (MRSA) and the state of the isolation of MRSA] Takahashi M, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):517–23 (Eng. Abstr.) **(Jpn)**
[Correlation between coagulase typing and antibiotic susceptibility in methicillin resistant Staphylococcus aureus] Takesue Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):5–11 (Eng. Abstr.) **(Jpn)**
[Studies on recent clinically isolated Staphylococcus aureus—drug susceptibility and incidence of MRSA in clinical isolates] Arakawa S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):674–81 (Eng. Abstr.) **(Jpn)**
[Drug resistance of Staphylococcus aureus in the field of obstetrics and gynecology] Nozue J. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Apr; 41(4):449–53 (Eng. Abstr.) **(Jpn)**
[Effect of the source of susceptibility-test agar on the in vitro activity of antibiotics against Staphylococcus aureus] Ito Y, et al. **Rinsho Byori** 1989 Jan;37(1):84–8 **(Jpn)**
[Studies on the antibiotic-susceptibility of Staphylococcus aureus isolated from clinical samples] Sato J, et al. **Rinsho Byori** 1989 Mar;37(3):321–4 **(Jpn)**
[Reliability of the MS-2 system in detecting Staphylococcus aureus resistant to methicillin] Tobita M, et al. **Rinsho Byori** 1988 Aug;36(8):984–7 **(Jpn)**
[Pharmaceutical availability and biological activity of ampicillin after rectal administration] Sawicka J, et al. **Acta Pol Pharm** 1988;45(4):334–9 (Eng. Abstr.) **(Pol)**
[Effect of cadmium on C-14-glucose uptake by Staphylococcus aureus] Tynecka Z, et al. **Med Dosw Mikrobiol** 1989;41(1):1–8 (Eng. Abstr.) **(Pol)**
[Sensitivity of Staphylococcus aureus strains to 2d and 3d generation cephalosporins] Ziółkowski G, et al. **Pol Tyg Lek** 1988 Dec 5;43(49):1592–4 (Eng. Abstr.) **(Pol)**
[Sensitivity of bacteria to netilmicin in comparison with their sensitivity to gentamicin and other aminoglycosides] Ruczkowska J, et al. **Przegl Lek** 1988;45(4):383–6 (Eng. Abstr.) **(Pol)**
[Sensitivity of Staphylococci to netilmicin and other antibiotics with reference to oxacillin-resistant strains] Ruczkowska J, et al. **Wiad Lek** 1988 Aug 15;41(16):1086–90 (Eng. Abstr.) **(Pol)**
[Sensitivity to antibiotics and the disinfectant chloramine of Staphylococci isolated from healthy and sick persons] Balakliets NI, et al. **Antibiot Khimioter** 1989 Jan;34(1):38–42 (Eng. Abstr.) **(Rus)**
[Effect of an interferon preparation on increasing bacterial sensitivity to antibiotics] Maleeva LI, et al. **Antibiot Khimioter** 1988 Nov;33(11):820–3 (Eng. Abstr.) **(Rus)**
[Effects of gentamycin on interactions of neutrophils with Staphylococcus] Pal'tsyn AA, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):65–8 (Eng. Abstr.) **(Rus)**
[The effect of salvin on the growth and ultrastructure of Staphylococcus aureus 209P] Pavlenko LV, et al. **Mikrobiol Zh** 1989 Mar–Apr;51(2):86–91 (Eng. Abstr.) **(Rus)**
[Biological properties of staphylococci resistant to salvin] Pavlenko LV, et al. **Mikrobiol Zh** 1987 May–Jun; 49(3):25–30 (Eng. Abstr.) **(Rus)**
[Effect of copper, manganese and zinc on some causative agents of pyelonephritis in children] Lagutina LE, et al. **Pediatriia** 1988;(10):22–4 (Eng. Abstr.) **(Rus)**
[Microbial kinetics: experiences with Staphylococcus aureus ATCC 25 293 and bacteriostatic drugs] Pappano NB, et al. **Rev Latinoam Microbiol** 1987 Oct–Dec;29(4):367–72 (Eng. Abstr.) **(Spa)**
[Bactericidal spectrum of pyocins on strains collected at Region IX and X hospitals in Chile] García-Quintana HG, et al. **Rev Med Chil** 1989 Jun;116(6):543–8 (Eng. Abstr.) **(Spa)**
[A comparison of the in vitro susceptibility of three bacteria to beta-lactamase inhibitors and to ampicillin and cefazolin] Acar N, et al. **Mikrobiyol Bul** 1987 Oct;21(4):284–8 (Eng. Abstr.) **(Tur)**

ENZYMOLOGY

DNA gyrase of Staphylococcus aureus and inhibitory effect of quinolones on its activity. Takahata M, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1192–5
Mechanism of staphylococcal serine proteinase inactivation by lymphocytes and granulocytes. Ochalek T, et al. **Antonie Van Leeuwenhoek** 1989;55(4):383–92
Generation and characterization of monoclonal antibodies against Staphylococcus aureus thermonuclease. Brakstad OG, et al. **APMIS** 1989 Feb;97(2):166–74
A comparative study of two lipases from different strains of Staphylococcus aureus. Rollof J, et al. **APMIS** 1989 Jan;97(1):9–13
Isolation of a Staphylococcus aureus beta-lactamase-dicloxacillin complex and kinetic studies on the reactivation of the enzyme. Hardy LW, et al. **Arch Biochem Biophys** 1989 Jan;268(1):338–48
Accumulation of acyl-enzyme intermediates during turnover of penicillins by the class A beta-lactamase of Staphylococcus aureus PC1. Pratt RF, et al. **Biochem J** 1988 Sep 15;254(3):919–22
Clavulanate inactivation of Staphylococcus aureus beta-lactamase. Rizwi I, et al. **Biochem J** 1989 Feb 15; 258(1):205–9
In vivo enzymology: a deuterium NMR study of formaldehyde dismutase in Pseudomonas putida F61a and Staphylococcus aureus. Mason RP, et al. **Biochemistry** 1989 Mar 7;28(5):2160–8
Staphylococcal phosphoenolpyruvate-dependent phosphotransferase system: purification and characterization of the mannitol-specific enzyme IIImtl of Staphylococcus aureus and Staphylococcus carnosus and homology with the enzyme IImtl of Escherichia coli. Reiche B, et al. **Biochemistry** 1988 Aug 23;27(17):6512–6
Interference of Staphylococcus aureus lipase with human granulocyte function. Rollof J, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):505–10
N-terminal amino acid sequence of the chromosomal dihydrofolate reductase purified from trimethoprim-resistant Staphylococcus aureus. Hartman PG, et al. **FEBS Lett** 1988 Dec 19;242(1):157–60
Differentiation of beta-lactamase variants of Staphylococcus aureus by substrate hydrolysis profiles. Kernodle DS, et al. **J Infect Dis** 1989 Jan;159(1):103–8
The role of beta-lactamase in mixed infections in mice in relation to treatment with ampicillin. Renneberg J, et al. **J Infect Dis** 1989 Aug;160(2):337–41
Assessment of a new test ("Staphylase") for the identification of Staphylococcus aureus. Cremer AW, et al. **Med Lab Sci** 1988 Jul;45(3):221–4
Improved methods for detection and serotyping of coagulase from Staphylococcus aureus. Hwang SM, et al. **Microbiol Immunol** 1989;33(3):175–82
Effects of serine proteinase from Staphylococcus aureus V8 cells on Con A stimulation of human lymphocytes. Porwit-Bobr Z, et al. **Microbiologica** 1989 Apr; 12(2):139–42
Alteration of proteins reacting with antibody to toxic shock syndrome toxin 1 by endogenous proteases of Staphylococcus aureus. Lawellin DW, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S117–23; discussion S123–4
Methicillin resistance and beta-lactamase production in Staphylococcus aureus. de Villiers FJ, et al. **S Afr Med J** 1989 Mar 4;75(5):217–9
A new chromogenic assay for direct detection of staphylocoagulase. Bulanda M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):115–21
Purification and characterization of the bacterial plasminogen activator staphylokinase secreted by a recombinant Bacillus subtilis. Gerlach D, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):314–22
[The enzymatic mechanisms of resistance to aminoglycoside antibiotics in methicillin-cephem-resistant Staphylococcus aureus] Matsuhashi Y, et al. **Jpn J Antibiot** 1988 May; 41(5):523–9 (Eng. Abstr.) **(Jpn)**
[Activity and characteristics of the regulation of glycolytic proteins in Staphylococcus aureus] Vinnikov AI. **Biol Nauki** 1988;(10):86–9 **(Rus)**
[The enzyme activity of energy metabolism in antibiotic-resistant staphylococci] Vinnikov AI, et al. **Mikrobiol Zh** 1989 Jan–Feb;51(1):22–5 (Eng. Abstr.) **(Rus)**
[Isolation of beta lactamase enzyme in strains of Staphylococcus aureus with the method of starch paper] Prat Lariot A, et al. **Rev Cubana Med Trop** 1989 Jan–Apr; 41(1):114–8 (Eng. Abstr.) **(Spa)**

GENETICS

Genetic analysis of gentamicin resistance in methicillin- and gentamicin-resistant strains of Staphylococcus aureus isolated in Dublin hospitals. Storrs MJ, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1174–81
Characterization of a novel insertion of the macrolides-lincosamides-streptogramin B resistance transposon Tn554 in methicillin-resistant Staphylococcus aureus and Staphylococcus epidermidis. Tillotson LE, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):541–50
Tn4201, a beta-lactamase transposon in Staphylococcus aureus. Weber DA, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1164–9
Molecular analyses of conjugative, gentamicin-resistance plasmids from staphylococcal clinical isolates. Zorbas I, et al. **Can J Microbiol** 1988 Sep;34(9):1050–7
Methicillin-resistant staphylococci. Chambers HF. **Clin Microbiol Rev** 1988 Apr;1(2):173–86 (177 ref.)
Transposon Tn554 encodes three products required for transposition. Bastos MC, et al. **EMBO J** 1988 Sep; 7(9):2935–41
Methicillin-resistant Staphylococcus aureus from China characterized by digestion of total DNA with restriction enzymes. Hall LM, et al. **Epidemiol Infect** 1989 Aug; 103(1):183–92
The nucleotide sequence of a small cryptic plasmid found in Staphylococcus aureus and its relationship to other plasmids. Dyke KG, et al. **FEMS Microbiol Lett** 1989 Apr; 49(2–3):209–15
IS257 from Staphylococcus aureus: member of an insertion sequence superfamily prevalent among gram-positive and gram-negative bacteria. Rouch DA, et al. **Gene** 1989; 76(2):195–205
Conservation of the biologically active portions of staphylococcal enterotoxins C1 and C2. Bohach GA, et al. **Infect Immun** 1989 Jul;57(7):2249–52
Chromosomally-encoded gentamicin resistance in 'epidemic' methicillin-resistant Staphylococcus aureus: detection with a synthetic oligonucleotide probe. Jordens JZ, et al. **J Antimicrob Chemother** 1989 Mar;23(3):327–34
Adaptation of methicillin-resistant Staphylococcus aureus during antibiotic therapy. Menzies RE, et al. **J Antimicrob Chemother** 1989 Jun;23(6):923–7
Cloning and expression in Escherichia coli of genes encoding a multiprotein complex involved in secretion of proteins from Staphylococcus aureus. Adler LA, et al. **J Bacteriol** 1988 Nov;170(11):5337–43
Genetic and molecular analyses of the gene encoding staphylococcal enterotoxin D. Bayles KW, et al. **J Bacteriol** 1989 Sep;171(9):4799–806
Nucleotide sequence of the type C3 staphylococcal enterotoxin gene suggests that intergenic recombination causes antigenic variation. Couch JL, et al. **J Bacteriol** 1989 Aug;171(8):4507–10
An enhancer of DNA replication. Gennaro ML, et al. **J Bacteriol** 1988 Dec;170(12):5709–17
Staphylococcus aureus chromosomal mutation plaC1 amplifies plasmid pT181 by depressing synthesis of its negative-effector countertranscripts. Iordanescu S. **J Bacteriol** 1989 Sep;171(9):4831–5
Staphylococcus aureus chromosomal mutations that decrease efficiency of Rep utilization in replication of pT181 and related plasmids. Iordanescu S, et al. **J Bacteriol** 1989 Aug; 171(8):4501–3
Extent of the DNA sequence required in integration of staphylococcal bacteriophage L54a. Lee CY, et al. **J Bacteriol** 1989 Mar;171(3):1652–7
Genetic analysis of Staphylococcus aureus with Tn4001. Mahairas GG, et al. **J Bacteriol** 1989 Jul;171(7):3968–72
Characterization of the tetracycline resistance gene of plasmid pT181 of Staphylococcus aureus. Mojumdar M, et al. **J Bacteriol** 1988 Dec;170(12):5522–8
Involvement of multiple genetic determinants in high-level methicillin resistance in Staphylococcus aureus. Murakami K, et al. **J Bacteriol** 1989 Feb;171(2):874–9
Transformation of a conditionally peptidoglycan-deficient mutant of Staphylococcus aureus with plasmid DNA. Nieuwlandt DT, et al. **J Bacteriol** 1989 Sep;171(9):4906–13

Mobilization of the relaxable Staphylococcus aureus plasmid pC221 by the conjugative plasmid pGO1 involves three pC221 loci. Projan SJ, et al. **J Bacteriol** 1989 Apr; 171(4):1841–5

Identification and cloning of the conjugative transfer region of Staphylococcus aureus plasmid pGO1. Thomas WD Jr, et al. **J Bacteriol** 1989 Feb;171(2):684–91

Expression and inducibility in Staphylococcus aureus of the mecA gene, which encodes a methicillin-resistant S. aureus-specific penicillin-binding protein. Ubukata K, et al. **J Bacteriol** 1989 May;171(5):2882–5

Nucleotide sequence and genetic characterization of staphylococcal bacteriophage L54a int and xis genes. Ye ZH, et al. **J Bacteriol** 1989 Aug;171(8):4146–53

Stability and expression of the staphylococcal constitutive macrolide-lincosamide-streptogramin B resistance plasmid pE3692 in Staphylococcus aureus and Bacillus subtilis. Wieckiewicz J, et al. **J Basic Microbiol** 1989;29(2):93–8

Synthesis of single-stranded plasmid pT181 DNA in vitro. Initiation and termination of DNA replication. Murray RW, et al. **J Biol Chem** 1989 Jan 15;264(2):1051–7

The nucleotide sequence of Staphylococcus aureus plasmid pT48 conferring inducible macrolide-lincosamide-streptogramin B resistance and comparison with similar plasmids expressing constitutive resistance. Catchpole I, et al. **J Gen Microbiol** 1988 Mar; 134 (Pt 3):697–709

Molecular cloning and genetic analysis of the determinant for gamma-lysin, a two-component toxin of Staphylococcus aureus. Cooney J, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2179–88

Characterization of the conjugation system associated with the Staphylococcus aureus plasmid pJE1. Evans J, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):1–8

Structural and evolutionary relationships of beta-lactamase transposons from Staphylococcus aureus. Gillespie MT, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):2857–66

The expression in Staphylococcus aureus of cloned DNA encoding methicillin resistance. Inglis B, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1465–9

Amplification of a section of chromosomal DNA in methicillin-resistant Staphylococcus aureus following growth in high concentrations of methicillin. Matthews PR, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1455–64

Molecular cloning and expression of the coagulase gene of Staphylococcus aureus 8325-4. Phonimdaeng P, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):75–83

DNA sequencing of the eta gene coding for staphylococcal exfoliative toxin serotype A. Sakurai S, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):711–7

Physical and biochemical characterization of the qacA gene encoding antiseptic and disinfectant resistance in Staphylococcus aureus. Tennent JM, et al. **J Gen Microbiol** 1989 Jan;135 (Pt 1):1–10

Chromosomally-encoded aminoglycoside resistance in methicillin-resistant Staphylococcus aureus [letter] Jordens JZ, et al. **J Hosp Infect** 1988 Aug;12(2):134–6

A comparison of immunoblot and DNA restriction patterns in characterising methicillin-resistant isolates of Staphylococcus aureus. Burnie JP, et al. **J Med Microbiol** 1989 Aug;29(4):255–61

A new methicillin- and gentamicin-resistant Staphylococcus aureus in Dublin: molecular genetic analysis. Carroll JD, et al. **J Med Microbiol** 1989 Jan;28(1):15–23

Plasmid profiles and restriction enzyme fragmentation patterns of plasmids of methicillin-sensitive and methicillin-resistant isolates of Staphylococcus aureus from hospital and the community. Coia JE, et al. **J Med Microbiol** 1988 Dec;27(4):271–6

Characterisation of methicillin-resistant Staphylococcus aureus isolates by restriction endonuclease digestion of chromosomal DNA. Jordens JZ, et al. **J Med Microbiol** 1988 Oct;27(2):117–23

New genetic location of gentamicin-resistance in methicillin-resistant Staphylococcus aureus [letter] Rahman M, et al. **Lancet** 1988 Nov 26;2(8622):1256

Cloning and expression in Escherichia coli and Staphylococcus aureus of the beta-lysin determinant from Staphylococcus aureus: evidence that bacteriophage conversion of beta-lysin activity is caused by insertional inactivation of the beta-lysin determinant. Coleman DC, et al. **Microb Pathog** 1986 Dec;1(6):549–64

Inactivation of the alpha-haemolysin gene of Staphylococcus aureus 8325-4 by site-directed mutagenesis and studies on the expression of its haemolysins. O'Reilly M, et al. **Microb Pathog** 1986 Apr;1(2):125–38

Non-radioactive gene probes for the detection of tetracycline and/or minocycline resistance in staphylococci. Sakamoto H, et al. **Mol Cell Probes** 1988 Dec;2(4):321–30

Positioning ribosomes on leader mRNA for translational activation of the message of an inducible Staphylococcus aureus cat gene. Dick T, et al. **Mol Gen Genet** 1988 Sep; 214(1):108–11

Specificity of the interactions between the Rep proteins and the origins of replication of Staphylococcus aureus plasmids pT181 and pC221. Iordanescu S. **Mol Gen Genet** 1989 Jun; 217(2-3):481–7

Construction, transfer and properties of a novel temperature-sensitive integrable plasmid for genomic analysis of Staphylococcus aureus. Luchansky JB, et al. **Mol Microbiol** 1989 Jan;3(1):65–78

Trimethoprim resistance transposon Tn4003 from Staphylococcus aureus encodes genes for a dihydrofolate reductase and thymidylate synthetase flanked by three copies of IS257. Rouch DA, et al. **Mol Microbiol** 1989 Feb;3(2):161–75

Nucleotide sequence: the beta-hemolysin gene of Staphylococcus aureus. Projan SJ, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3305

The nucleotide sequence of the lacC and lacD genes of Staphylococcus aureus. Rosey EL, et al. **Nucleic Acids Res** 1989 May 25;17(10):3980

Nucleotide sequence of a staphylococcal plasmid gene, vgb, encoding a hydrolase inactivating the B components of virginiamycin-like antibiotics. Allignet J, et al. **Plasmid** 1988 Nov;20(3):271–5

Nucleotide sequence of the gene for a fibronectin-binding protein from Staphylococcus aureus: use of this peptide sequence in the synthesis of biologically active peptides. Signäs C, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(2):699–703

Enzymatic cleavage of a bacterial genome at a 10-base-pair recognition site. Weil MD, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):51–5

Analysis of toxic shock syndrome isolates producing staphylococcal enterotoxins B and C1 with use of southern hybridization and immunologic assays. Bohach GA, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S75–81; discussion S81–2

Distribution and expression of toxic shock syndrome toxin 1 gene among Staphylococcus aureus isolates of toxic shock syndrome and non-toxic shock syndrome origin. Bonventre PF, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S90–5

Toxic shock syndrome toxin 1 is encoded by a variable genetic element. Kreiswirth BN, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S83–8; discussion S88–9

Genetics and expression of toxic shock syndrome toxin 1: overview. Kreiswirth BN. **Rev Infect Dis** 1989 Jan-Feb; 11 Suppl 1:S97–100 (29 ref.)

[Plasmid fingerprinting suggests nosocomial spread of methicillin-resistant Staphylococcus aureus in a newborn baby care unit] Tobita M, et al. **Rinsho Byori** 1988 Jul; 36(7):861–5 **(Jpn)**

[Evaluation of the capacity of chromosomal genes of erythromycin resistance for translocation in hospital strains of Staphylococcus aureus] Mlynarczyk G, et al. **Med Dosw Mikrobiol** 1988;40(4):181–6 (Eng. Abstr.) **(Pol)**

[Synthesis and expression of an artificial gene of an IgG-binding fragment of protein A from Staphylococcus aureus] Efimov VA, et al. **Bioorg Khim** 1989 Apr; 15(4):499–507 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

How long do middle ear pathogens survive in mucoid effusion material? Stenfors LE, et al. **Acta Otolaryngol (Stockh)** 1989 Mar-Apr;107(3-4):244–8

Effect of growth on surface charge and hydrophobicity of Staphylococcus aureus. Beck G, et al. **Ann Inst Pasteur Microbiol** 1988 Nov-Dec;139(6):655–64

In vitro and in vivo comparative colonization of Staphylococcus aureus and Staphylococcus epidermidis on orthopaedic implant materials. Barth E, et al. **Biomaterials** 1989 Jul;10(5):325–8

Bacterial challenge study of a porous carbon percutaneous implant. Krouskop TA, et al. **Biomaterials** 1988 Sep; 9(5):398–404

Factors influencing potent antagonistic effects of Escherichia coli and Bacteroides ovatus on Staphylococcus aureus in anaerobic continuous flow cultures. Ushijima T, et al. **Can J Microbiol** 1988 May;34(5):645–50

Staphylococcus aureus skin carriage and development of peritonitis in patients on continuous ambulatory peritoneal dialysis. Sesso R, et al. **Clin Nephrol** 1989 May;31(5):264–8

A highly selective two-stage isolation method for the enumeration of Staphylococcus aureus in foods. Isigidi BK, et al. **J Appl Bacteriol** 1989 May;66(5):379–84

The growth of potential food poisoning organisms on chicken and pork muscle surfaces. Mattila T, et al. **J Appl Bacteriol** 1988 Dec;65(6):455–61

Staphylococcus aureus, thermostable nuclease and staphylococcal enterotoxins in raw ewes' milk Manchego cheese. Nuñez M, et al. **J Appl Bacteriol** 1988 Jul; 65(1):29–34

L-form-like colonies of Staphylococcus aureus induced by an extracellular lytic enzyme from Pseudomonas aeruginosa. Falcon MA, et al. **J Clin Microbiol** 1989 Jul; 27(7):1650–4

Morphologic study of Staphylococcus aureus L-form, reverting, and intermediate colonies in situ. Owens WE, et al. **J Clin Microbiol** 1989 Jun;27(6):1382–6

Effects of blood and different media on the production of toxic shock syndrome toxin 1 by Staphylococcus aureus in the tampon sac method. Reiser RF, et al. **J Clin Microbiol** 1988 Dec;26(12):2672–4

A problem encountered using staphylococcus/streptococcus supplement. Morton CE, et al. **Med Lab Sci** 1989 Jan; 46(1):72–3

Preparation of toxic shock syndrome toxin-1. Blomster-Hautamaa DA, et al. **Methods Enzymol** 1988; 165:37–43

Purification of epidermolytic toxin of Staphylococcus aureus. de Azavedo JC, et al. **Methods Enzymol** 1988;165:32–6

Purification of staphylococcal enterotoxins. Iandolo JJ, et al. **Methods Enzymol** 1988;165:43–52

Purification and crystallization of staphylococcal leukocidin. Noda M, et al. **Methods Enzymol** 1988;165:22–32

The growth of compact and diffuse variants of Staphylococcus aureus in bovine mastitic and normal whey. Mattila T, et al. **Microbiol Immunol** 1988;32(7):667–73

Incidence and population of enterotoxigenic Staphylococcus aureus in raw milk from milking to milk plant. Shinagawa K, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1060–4

Growth of toxic shock syndrome toxin 1-producing, tryptophan-requiring strains of Staphylococcus aureus associated with the presence of Escherichia coli. Chu MC, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S101–3

Role of air in growth and production of toxic shock syndrome toxin 1 by Staphylococcus aureus in experimental cotton and rayon tampons. Fischetti VA, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S176–81

Growth of Staphylococcus aureus and synthesis of toxic shock syndrome toxin 1 in different in vitro systems. Kirkland JJ, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S188–95; discussion S195–6

Growth of gram-positive and gram-negative bacteria in platelet concentrates. Punsalang A, et al. **Transfusion** 1989 Sep;29(7):596–9

Growth of Staphylococcus aureus and synthesis of enterotoxins in home-made yoghurt. Orden JA, et al. **Z Lebensm Unters Forsch** 1989 Jul;189(1):16–20

[Antibacterial activity of human cervical mucus] Chimura T, et al. **Jpn J Antibiot** 1988 Oct;41(10):1545–9 (Eng. Abstr.) **(Jpn)**

[The growth and protein A accumulation of Staphylococcus aureus A-676 on a medium made from nonfood raw material] Dubinina GP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):24–8 (Eng. Abstr.) **(Rus)**

[Potassium sorbate, pH and aqueous activity as inhibitors of the growth of Staphylococcus aureus] Giannuzzi L, et al. **Rev Latinoam Microbiol** 1988 Jan-Mar;30(1):19–23 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Staphylococcus aureus and Staphylococcus epidermidis strains differ in interleukin 2 inducing activity. Nagy ZN, et al. **Acta Microbiol Hung** 1988;35(4):379–82

Staphylococcus aureus and influenza A virus stimulate human bronchoalveolar cells to release histamine and leukotrienes. Clementsen P, et al. **Agents Actions** 1989 Apr;27(1-2):107–9

Determination by enzyme-linked immunosorbent assay of the optimal dose of staphylococcal leukocidin for systemic immunization of dairy cows. Loeffler DA, et al. **Am J Vet Res** 1988 Sep;49(9):1452–5

The ability of granulocytes to engulf latex particles and Staphylococcus aureus in healthy children of parents with atopic asthma. Matusiewicz R, et al. **Ann Allergy** 1989 May; 62(5):445–8

The ability of granulocytes from patients with atopy to engulf neutral latex particles and Staphylococcus aureus. Matusiewicz R, et al. **Arch Immunol Ther Exp (Warsz)** 1987; 35(6):781–5

The V beta-specific superantigen staphylococcal enterotoxin B: stimulation of mature T cells and clonal deletion in neonatal mice. White J, et al. **Cell** 1989 Jan 13;56(1):27–35

In vitro IgM and IgM rheumatoid factor production in response to Staphylococcus aureus Cowan I and pokeweed mitogen: the contribution of CD5+ (Leu 1) B cells. Karsh J, et al. **Clin Exp Immunol** 1989 Aug;77(2):179–83

Mitogen-induced human IgG subclass expression. II. IgG1 and IgG3 subclasses are preferentially stimulated by a combination of Staphylococcus aureus Cowan I and pokeweed mitogen. Butch AW, et al. **Hum Immunol** 1989 Mar;24(3):207–18

Regulation of human neutrophil type 3 complement receptor (iC3b receptor) expression during phagocytosis of Staphylococcus aureus and Escherichia coli. Gordon DL, et al. **Immunology** 1989 Aug;67(4):460–5

Opsonin-dependent and independent surface phagocytosis of S. aureus proceeds independently of complement and complement receptors. Gordon DL, et al. **Immunology** 1988 Aug;64(4):709–14

Linoleic acid-deficient rat neutrophils show decreased bactericidal capacity, superoxide formation and membrane depolarization. Gyllenhammar H, et al. **Immunology** 1989 Apr;66(4):616–20

Human hyperimmune globulin protects against the cytotoxic action of staphylococcal alpha-toxin in vitro and in vivo. Bhakdi S, et al. **Infect Immun** 1989 Oct;57(10):3214–20

Effect of chemical modification of histidine and tyrosine residues in toxic shock syndrome toxin 1 on the serologic and mitogenic activities of the toxin. Kokan-Moore NP, et al. **Infect Immun** 1989 Jul;57(7):1901–5

Antibody response to Staphylococcus aureus surface proteins in rabbits with persistent osteomyelitis after treatment with demineralized bone implants. Thomas VL, et al. **Infect Immun** 1989 Feb;57(2):404–12

Cross protection between an encapsulated strain of Staphylococcus hyicus and encapsulated strains of Staphylococcus aureus. Yoshida K, et al. **J Appl Bacteriol** 1988 Dec;65(6):491–9

Staphylococcus aureus capsular types and antibody response to lung infection in patients with cystic fibrosis. Albus A, et al. **J Clin Microbiol** 1988 Dec;26(12):2505–9

Antibodies to staphylococcal peptidoglycan and its peptide

epitopes, teichoic acid, and lipoteichoic acid in sera from blood donors and patients with staphylococcal infections. Wergeland HI, et al. **J Clin Microbiol** 1989 Jun; 27(6):1286–91

Localization of an immune functional site on staphylococcal enterotoxin A using the synthetic peptide approach. Pontzer CH, et al. **J Immunol** 1989 Jul 1;143(1):280–4

Immunomodulatory activity of staphylococcal enterotoxin-B. The induction of an I-J-restricted suppressor factor. Taub DD, et al. **J Immunol** 1989 Aug 1;143(3):813–20

Staphylococcus aureus phagocytosis. A new cytofluorometric method using FITC and paraformaldehyde. Cantiniesux B, et al. **J Immunol Methods** 1989 Jul 26;121(2):203–8

Staphylococcal enterotoxin antibodies in pediatric patients from Utah. Reiser RF, et al. **J Infect Dis** 1988 Nov; 158(5):1105–8

Protection of mice by a pseudodiffuse strain of Staphylococcus aureus possessing polyvalent capsular type antigen. Chomarat M, et al. **J Med Microbiol** 1989 Feb; 28(2):129–36

Production and characterisation of monoclonal antibodies specific for staphylococcal enterotoxin B. Lin YS, et al. **J Med Microbiol** 1988 Dec;27(4):263–70

The use of a new assay for detecting antibody to Staphylococcus aureus in severely injured patients. Hershman MJ, et al. **J Trauma** 1989 Jan;29(1):75–8

Proliferation of leukemic B cells in response to SAC and anti-mu. Evidence for different modes of action and comparison to proliferation and differentiation induced by conditioned medium. Steinberg J, et al. **Leuk Res** 1988; 12(7):559–66

Specificity, cross-reactivity and competition profile of monoclonal antibodies to staphylococcal enterotoxins B and C1 detected by indirect enzyme-linked immunosorbent assays. Kienle E, et al. **Med Microbiol Immunol (Berl)** 1989; 178(3):127–33

Luminol-dependent chemiluminescence in antibody-sensitized neutrophils stimulated with protein A-bearing staphylococci. Nishihara S, et al. **Microbiol Immunol** 1988;32(5):535–40

Opsonic effect of fibronectin on staphylococcal phagocytosis by human polymorphonuclear leukocytes: its relative inefficiency in post-phagocytic metabolic activities and in intracellular killing. Yonemasu K, et al. **Microbiol Immunol** 1988;32(8):795–805

Comparative effects of roxithromycin and erythromycin on cellular immune functions in vitro. 2. Chemotaxis and phagocytosis of 3H-Staphylococcus aureus by human macrophages. Carlone NA, et al. **Microbios** 1989; 58(234):17–25

Inhibition of direct haemolytic plaques by antistaphylococcal sera. Carmona Plá MP, et al. **Microbios** 1989;57(231):93–8

Comparative effects of roxithromycin and erythromycin on cellular immune functions in vitro. 3. Killing of intracellular Staphylococcus aureus by human macrophages. Cuffini AM, et al. **Microbios** 1989;58(234):27–33

Ovine opsonins for Staphylococcus aureus cell wall and pseudocapsule. Watson DL. **Res Vet Sci** 1989 Jan; 46(1):84–9

Stimulation of T cells and induction of interferon by toxic shock syndrome toxin 1. Micusan VV, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S305–12

Effects of monoclonal antibody on biologic function of toxic shock syndrome toxin 1 in vitro and in vivo. Parsonnet J, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S318–9

Passive protection of rabbits infected with toxic shock syndrome-associated strains of Staphylococcus aureus by monoclonal antibody to toxic shock syndrome toxin 1. Scott DF, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S214–7; discussion S217–8

Antibodies against toxic shock syndrome toxin no. 1 (TSST-1) in Poland. Bulanda M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):396–9

Prevalence of serum antibodies to toxic-shock-syndrome-toxin-1 and to staphylococcal enterotoxins A, B and C in West-Germany. Schröder E, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):110–4

The effect on inflammation of the bovine mammary gland of vaccination with a cell wall extract of Staphylococcus aureus. Frost AJ, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):688–94

Phagocytosis and intracellular killing of Staphylococcus aureus by bovine blood polymorphonuclear leukocytes after migration in vitro. Niemialtowski M, et al. **Zentralbl Veterinarmed [B]** 1989 Mar;36(2):154–6

[Specific IgE to Staphylococcus aureus in patients with atopic dermatitis] Kapp A, et al. **Hautarzt** 1989 Jan; 40(1):19–22 (Eng. Abstr.) **(Ger)**

[Phagocytosis of Staphylococcus aureus and Pseudomonas aeruginosa by pulmonary macrophages and granulocytes] Hürter T. **Pneumologie** 1989 Mar;43(3):147–58 (Eng. Abstr.) **(Ger)**

[Observation of the processes of phagocytosis and digestion of Staphylococcus aureus by Trichomonas vaginalis using a transmission electron microscope] Szreter H, et al. **Wiad Parazytol** 1989;35(2):121–6 (Eng. Abstr.) **(Pol)**

[An immuno-test system for determining antibodies to Staphylococcus aureus in osteomyelitis in children] Stepanov EA, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):98–101 (Eng. Abstr.) **(Rus)**

[Preparation of a staphylococcal immunosorbent sensitized by antibodies to the M-subunit of LDH] Rashkovetskii LG, et al. **Vopr Med Khim** 1989 May–Jun;35(3):136–9 (Eng. Abstr.) **(Rus)**

[Specificity of suppressor cells of the delayed hypersensitivity type for Staphylococcus studied by immunoadsorption] Bekhalo VA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):49–51 (Eng. Abstr.) **(Rus)**

[The role of the bone marrow in forming an immunological memory to Staphylococcus] Bobrovnik SA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):69–71 (Eng. Abstr.) **(Rus)**

[The specificity of erythrocyte staphylococcal diagnostic agents in relation to the presence of protein A in sensitin preparations] Deriabin PN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):85–9 (Eng. Abstr.) **(Rus)**

[Staphylococcal antigens cross-reacting with mammalian tissues and their role in inducing immunopathological processes] Romanov VA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):77–80 (Eng. Abstr.) **(Rus)**

[ChemicaL and immunochemical characteristics of antigenic preparations from Staphylococcus aureus and Klebsiella pneumoniae as the components for an associated vaccine] Shagam NL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):51–5 (Eng. Abstr.) **(Rus)**

[Effect of detergent and glycerin on the efficacy of nasal immunotherapy with allergens and on the level of the lymphocyte subpopulation in the organs of local immunity] Sukhodoeva GS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):94–8 (Eng. Abstr.) **(Rus)**

[Inhibitory effect of Staphylococcus aureus on the growth of rat sarcoma] Dlugovitzky DG, et al. **Rev Argent Microbiol** 1988 Jul–Sep;20(3):125–35 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Treatment of angular cheilitis. The significance of microbial analysis, antimicrobial treatment, and interfering factors. Ohman SC, et al. **Acta Odontol Scand** 1988 Oct; 46(5):267–72

Prevalence and characterization of Staphylococcus aureus in young goats. de Centorbi ON, et al. **Am J Vet Res** 1988 Sep;49(9):1494–6

Frequency of isolation of environmental mastitis-causing pathogens and incidence of new intramammary infection during the nonlactating period. Oliver SP. **Am J Vet Res** 1988 Nov;49(11):1789–93

Staphylococcus epidermidis and Staphylococcus aureus in otitis media with effusion. Kurono Y, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1262–5

Staphylococcal colonization in atopic dermatitis and the effect of topical mupirocin therapy. Lever R, et al. **Br J Dermatol** 1988 Aug;119(2):189–98

Failure of preoperative cultures to predict development of Staphylococcus aureus wound infections after cardiac surgery. Taylor G, et al. **Can J Surg** 1989 Mar;32(2):128–30

NIDDM and prevalence of nasal Staphylococcus aureus colonization. San Luis Valley Diabetes Study. Boyko EJ, et al. **Diabetes Care** 1989 Mar;12(3):189–92

Carriage of Staphylococcus aureus and inflamed infusion sites with insulin-pump therapy. van Faassen I, et al. **Diabetes Care** 1989 Feb;12(2):153–5

Evaluation of six different agglutination methods for rapid identification of Staphylococcus aureus [letter] Orsi A, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul;8(7):655–6

Comparative evaluation of a latex test for the identification of Staphylococcus aureus. Stevens M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Feb;8(2):153–6

Staphylococcus aureus colonization of burrows in erythrodermic Norwegian scabies. A case study of iatrogenic contagion. Shelley WB, et al. **J Am Acad Dermatol** 1988 Oct;19(4):673–8

Comparative studies of selective media for recovery of Staphylococcus aureus from natural waters. Borrego JJ, et al. **J Appl Bacteriol** 1988 Aug;65(2):153–61

Dry rehydratable films for enumeration of coliforms and aerobic bacteria in dairy products: collaborative study. Curiale MS, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr; 72(2):312–8

Staff carriage of epidemic methicillin-resistant Staphylococcus aureus. Cookson B, et al. **J Clin Microbiol** 1989 Jul;27(7):1471–6

Staphylococcus aureus strains which are not identified by rapid agglutination methods are of capsular serotype 5. Fournier JM, et al. **J Clin Microbiol** 1989 Jun;27(6):1372–4

Efficacies of rapid agglutination tests for identification of methicillin-resistant staphylococcal strains as Staphylococcus aureus. Piper J, et al. **J Clin Microbiol** 1988 Sep;26(9):1907–9

Synthetic exfoliative toxin A and B DNA probes for detection of toxigenic Staphylococcus aureus strains. Rifai S, et al. **J Clin Microbiol** 1989 Mar;27(3):504–6

Slide coagulase positive, tube coagulase negative Staphylococcus aureus [letter] Golledge C, et al. **J Clin Pathol** 1989 Apr;42(4):443

Colonization priority among Staphylococcus aureus strains—correlation with phage-type. Rosdahl VT, et al. **J Hosp Infect** 1988 Oct;12(3):151–62

Tonsillar microflora—superficial surface vs deep. Uppal K, et al. **J Laryngol Otol** 1989 Feb;103(2):175–7

Strategies for molecular characterisation of methicillin- and gentamicin-resistant Staphylococcus aureus in a Canadian nosocomial outbreak. Bigelow N, et al. **J Med Microbiol** 1989 Sep;30(1):51–8

Nasal carriage of sodium fusidate resistant Staphylococcus aureus [letter] Dealler S. **J R Coll Gen Pract** 1988 Apr; 38(309):171

Abscess formation in sternoclavicular joint septic arthritis [letter; comment] Van Linthoudt D, et al. **J Rheumatol** 1989 Mar;16(3):413–4. **Comment on:** J Rheumatol 1988 Aug;15(8):1302–6

Screening of milk and milk products for staphylococcal counts with special reference to public health. Masud T, et al. **JPMA** 1988 Nov;38(11):286–8

In vivo localization of Staphylococcus aureus in nasal tissues of healthy and influenza A virus-infected ferrets. Sanford BA, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):163–9

Recurrent staphylococcal furunculosis in families. Zimakoff J, et al. **Scand J Infect Dis** 1988;20(4):403–5

A long-term study of the nasal carriage of Staphylococcus aureus in healthy Nigerian students. Lamikanra A, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):500–2

[The usefulness of three rapid commercially-available tests for the identification of Staphylococcus aureus strains isolated from animals] Weber A, et al. **Berl Munch Tierarztl Wochenschr** 1989 May 1; 102(5):149–51 (Eng. Abstr.) **(Ger)**

[Indications of fecal contamination and presence of Salmonella, Yersinia and Staphylococcus aureus in commercial flesh fly larvae ("cagnotti" or "bigattini")] Pianetti A, et al. **Nuovi Ann Ig Microbiol** 1988 Jan–Feb; 39(1):43–52 (Eng. Abstr.) **(Ita)**

[An analysis of incidents of Staphylococcus in Kashima Rosai Hospital (I)] Tomizawa K, et al. **Jpn J Antibiot** 1988 May; 41(5):494–504 (Eng. Abstr.) **(Jpn)**

[Isolation of methicillin-resistant Staphylococcus aureus (MRSA) and study on these MRSA isolates in the ICU of our hospital] Kawakami H, et al. **Kansenshogaku Zasshi** 1988 Aug;62(8):695–701 (Eng. Abstr.) **(Jpn)**

[Changing pattern of respiratory pathogens due to the development of antibacterial agents] Matsumoto K. **Nippon Saikingaku Zasshi** 1988 Jul;43(4):809–20 (52 ref.) **(Jpn)**

[Isolation of Staphylococcus in Northern Norway. Identification and effects of antibacterial agents] Andersen BM, et al. **Tidsskr Nor Laegeforen** 1989 Jan 10;109(1):49–52 (Eng. Abstr.) **(Nor)**

[Staphylococcus aureus: carriers among food handlers] Raddi MS, et al. **Rev Saude Publica** 1988 Feb;22(1):36–40 (Eng. Abstr.) **(Por)**

[Epidemiologic significance of bacterial contamination of the skin of the breasts of puerperants] Sytnik SI. **Akush Ginekol (Mosk)** 1988 Sep;(9):27–30 (Eng. Abstr.) **(Rus)**

[A rapid method of detecting the staphylococcal exotoxin of toxic shock] Fluer FS, et al. **Lab Delo** 1989;(4):62–4 (Eng. Abstr.) **(Rus)**

[Detection of toxigenic Staphylococcus in milk] Dediukhina VP, et al. **Vopr Pitan** 1988 Sep–Oct;(5):71 **(Rus)**

[Simulation of the Baird-Parker media formula based on Soviet ingredients for the isolation of Staphylococcus aureus] Petrushina LI, et al. **Vopr Pitan** 1989 Jan–Feb; (1):60–5 (Eng. Abstr.) **(Rus)**

[Ways of transmitting wound infection pathogens at a hospital] Filippenko LI, et al. **Vrach Delo** 1989 Feb; (2):102–5 (Eng. Abstr.) **(Rus)**

[Isolation of strains of a new ecological variant of Staphylococcus aureus from asses] Orzuev MI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):16–8 (Eng. Abstr.) **(Rus)**

[[Staphylococcus aureus producing toxic shock syndrome toxin 1 in the lower genital tract of the female] Puig de Centorbi ON, et al. **Rev Argent Microbiol** 1987 Apr–Jun; 19(2):47–54 (Eng. Abstr.) **(Spa)**

[Cottage-industry and semi-industrial ice-creams. Incidence of Staphylococcus aureus and enterotoxigenicity] Rivas M, et al. **Rev Argent Microbiol** 1983;15(3):147–55 (Eng. Abstr.) **(Spa)**

[Ice cream of industrial manufacture. Incidence of Staphylococcus aureus and enterotoxigenicity] Rivas M, et al. **Rev Argent Microbiol** 1984;16(4):225–8 (Eng. Abstr.) **(Spa)**

[The search for strains of Staphylococcus aureus producing exfoliative toxin] Brevis P, et al. **Rev Latinoam Microbiol** 1988 Jan–Mar;30(1):1–4 (Eng. Abstr.) **(Spa)**

[Sanitary control of food in Mexico city] Sartí-Gutiérrez EJ, et al. **Salud Publica Mex** 1989 Jan–Feb;31(1):82–90 (Eng. Abstr.) **(Spa)**

METABOLISM

Effects of elfamycins on elongation factor Tu from Escherichia coli and Staphylococcus aureus. Hall CC, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):322–5

Production of enterotoxin A by supposedly nonenterotoxigenic Staphylococcus aureus strains. Gomez-Lucía E, et al. **Appl Environ Microbiol** 1989 Jun;

55(6):1447–51

Secretion of recombinant proteins into the culture medium by Escherichia coli and Staphylococcus aureus. Uhlén M, et al. **Biochem Soc Trans** 1989 Apr;17(2):340–1

Evolutionary conservation of laminin-binding proteins. Lopes JD, et al. **Braz J Med Biol Res** 1988;21(6):1269–73 (23 ref.)

Pyomyositis and probable toxic shock syndrome caused by a toxin-1 producing strain of Staphylococcus aureus [letter] Gahrn-Hansen B, et al.
Eur J Clin Microbiol Infect Dis 1989 Jan;8(1):89–90

Crystal violet binding, cell surface properties and extracellular enzyme profiles of Staphylococcus aureus producing toxic shock syndrome toxin-1. Naidu AS, et al. **Int J Med Microbiol** 1989 May;271(1):11–21

Interaction of cephalosporins with penicillin-binding proteins of methicillin-resistant Staphylococcus aureus. Truesdell SE, et al. **J Antimicrob Chemother** 1989 Apr;23 Suppl D:13–9

Amino acid requirements for the growth and production of some exocellular products of Staphylococcus aureus. Taylor D, et al. **J Appl Bacteriol** 1989 Apr;66(4):319–29

Production of a toxic shock syndrome toxin variant by Staphylococcus aureus strains associated with sheep, goats, and cows. Ho G, et al. **J Clin Microbiol** 1989 Sep; 27(9):1946–8

Particle agglutination assays for rapid detection of fibronectin, fibrinogen, and collagen receptors on Staphylococcus aureus. Naidu AS, et al.
J Clin Microbiol 1988 Aug;26(8):1549–54

Enterotoxin production by strains of Staphylococcus aureus isolated from clinical specimens [letter] Reina J, et al.
J Clin Pathol 1989 Feb;42(2):217–8

Oxygen-dependent killing of Staphylococcus aureus by human neutrophils. Edwards SW, et al.
J Gen Microbiol 1987 Dec;133 (Pt 12):3591–7

Binding of staphylococcal enterotoxin A to HLA-DR on B cell lines. Fischer H, et al. **J Immunol** 1989 May 1; 142(9):3151–7

Enterotoxin production by Staphylococcus aureus isolates from cases of septicaemia and from healthy carriers. Humphreys H, et al. **J Med Microbiol** 1989 Mar; 28(3):163–72

Comparison of compact colony-forming activity and paracoagulation activity of strains of Staphylococcus aureus in serum and plasmas of various animals. Ohtomo T, et al. **Med Microbiol Immunol (Berl)** 1988;177(6):323–31

Regulation and control of toxic shock syndrome toxin 1: overview. Bergdoll MS. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S142–4 (16 ref.)

Identification of a new toxin from a strain of Staphylococcus aureus isolated from a patient with nonmenstrual toxic shock syndrome. Hall WW, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S130–5; discussion S135–6

Risk of developing toxic shock syndrome associated with toxic shock syndrome toxin 1 following nongenital staphylococcal infection. Jacobson JA, et al.
Rev Infect Dis 1989 Jan–Feb;11 Suppl 1:S8–13

Effect of magnesium on in vitro production of toxic shock syndrome toxin 1. James JF, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S157–66

Magnesium and the pathogenesis of toxic shock syndrome. Kass EH. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S167–73; discussion S173–5

Production of toxic shock syndrome toxin 1 in a mouse model of Staphylococcus aureus abscess formation. Lee JC, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S254–9

Mediators in the pathogenesis of toxic shock syndrome: overview. Parsonnet J. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S263–9 (46 ref.)

Effect of trace metals on the synthesis of toxic shock syndrome toxin 1. Reeves MW. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S145–49; discussion S149–50

Effect of tampon wraps on production of toxic shock syndrome toxin 1. Robbins RN, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S197–202

Purification and purity assessment of toxic shock syndrome toxin 1. Rosten PM, et al. **Rev Infect Dis** 1989 Jan–Feb; 11 Suppl 1:S110–5; discussion S115–6

Role of toxic shock syndrome toxin 1 in toxic shock syndrome: overview. Schlievert PM. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S107–9 (23 ref.)

Production of toxic shock syndrome toxin 1 by Staphylococcus aureus under aerobic and anaerobic conditions and the effect of magnesium ion limitation. Taylor D, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S151–6

Ecology of toxic shock syndrome: amplification of toxic shock syndrome toxin 1 by materials of medical interest. Tierno PM Jr, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S182–6; discussion S186–7

Levels of toxic shock syndrome toxin-1 production among Staphylococcus aureus strains and clinical implications. Naidu AS, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan;270(3):337–44

[Peptidoglycan modification of Staphylococcus aureus P18 strain after use of 6 active antibiotics on the bacterial wall] Najioullah F, et al. **Pathol Biol (Paris)** 1989 May; 37(5):370–4 (Eng. Abstr.) **(Fre)**

[Detection of endotoxin-producer strains of Staphylococcus aureus in the prevention of toxic food infections] Furlani D, et al. **Boll Chim Farm** 1988 Jul–Aug;127(7–8):188–92 (Eng. Abstr.) **(Ita)**

[Studies of carotenoids in the cells of Staphylococcus aureus] Czeczuga B, et al. **Rocz Akad Med Bialymstoku** 1984–85; 29–30:237–44 (Eng. Abstr.) **(Pol)**

[Magnitude of the proton moving force of Staphylococcus aureus cells and features of the interaction of staphylococci with phages] Vinnikov AI, et al. **Biokhimiia** 1989 Jan; 54(1):49–53 (Eng. Abstr.) **(Rus)**

[ATP synthesis in Staphylococcus aureus cells during induction of membrane potentials and proton gradient] Vinnikov AI. **Biokhimiia** 1988 May;53(5):853–5 (Eng. Abstr.) **(Rus)**

[The use of passive hemagglutination for determining the fibronectin-binding properties of microorganisms] Sokurenko EV, et al. **Lab Delo** 1989;(4):65–7 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

Acitretin induces an increased adherence of S. aureus to epithelial cells. Lianou P, et al.
Acta Derm Venereol (Stockh) 1989;69(4):330–2

Genetic studies of Staphylococcus aureus virulence factors. Foster TJ, et al. **Antonie Van Leeuwenhoek** 1988; 54(5):475–82 (29 ref.)

Infection with Staphylococcus aureus producing toxic shock syndrome (TSS) toxin-1 without TSS. Nadal D, et al.
Eur J Pediatr 1989 Jan;148(4):318–9

Roles of alpha-toxin and beta-toxin in virulence of Staphylococcus aureus for the mouse mammary gland. Bramley AJ, et al. **Infect Immun** 1989 Aug;57(8):2489–94

Staphylococcal alpha-toxin: a study of membrane penetration and pore formation. Harshman S, et al. **J Biol Chem** 1989 Sep 5;264(25):14978–84

Induction of murine hemopoietic growth factors by toxic shock syndrome toxin-1. Galelli A, et al. **J Immunol** 1989 Apr 15;142(8):2855–63

Cytotoxic effects of ingested Staphylococcus aureus on bovine endothelial cells: role of S. aureus alpha-hemolysin. Vann JM, et al. **Microb Pathog** 1988 Jun;4(6):443–53

Staphylococcal enterocolitis revisited: cytotoxic properties of Staphylococcus aureus from a neonate with enterocolitis. Christie CD, et al. **Pediatr Infect Dis J** 1988 Nov; 7(11):791–5

[In vitro virulence of wound infecting staphylococcal isolates from severely burned patients] Winkler M, et al.
Langenbecks Arch Chir 1989;374(3):181–4 (Eng. Abstr.) **(Ger)**

[Evaluation of the usefulness of a rabbit model in studies of toxic shock syndrome] Zaleska M, et al.
Med Dosw Mikrobiol 1988;40(2):109–14 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Influenza A virus enhances Staphylococcus aureus-induced basophil histamine release in normal individuals and patients with intrinsic asthma. Clementsen P, et al.
Allergy 1989 Jan;44(1):39–44

Endotoxin-induced suppression of pulmonary antibacterial defenses against Staphylococcus aureus. Harris SE, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1439–43

Skin graft survival—the bacterial answer. Perry AW, et al. **Ann Plast Surg** 1989 Jun;22(6):479–83

Hemagglutination by Staphylococcus aureus. Studies on strains isolated from bovine mastitis. Lindahl M, et al.
APMIS 1989 Feb;97(2):175–80

Selected decrease of haemocytes of the freshwater snail Planorbarius corneus (L.) (Gastropoda, Pulmonata) after bacteria injection. Ottaviani E. **Experientia** 1989 Apr 15; 45(4):368–9

Lower autolytic activity in a homogeneous methicillin-resistant Staphylococcus aureus strain compared to derived heterogeneous-resistant and susceptible strains. Gustafson JE, et al.
FEMS Microbiol Lett 1989 May;50(1–2):107–11

Toxic shock syndrome-associated staphylococcal and streptococcal pyrogenic toxins are potent inducers of tumor necrosis factor production. Fast DJ, et al. **Infect Immun** 1989 Jan;57(1):291–4

Reduced adherence to traumatized rat heart valves by a low-fibronectin-binding mutant of Staphylococcus aureus. Kuypers JM, et al. **Infect Immun** 1989 Aug;57(8):2306–12

Aminoglycosides enhance the adherence of Staphylococcus aureus to HeLa cells. Miyake Y, et al.
J Antimicrob Chemother 1989 Jan;23(1):79–86

Variation in the behaviour of enterotoxigenic Staphylococcus aureus after heat stress in milk. Batish VK, et al.
J Appl Bacteriol 1989 Jan;66(1):27–35

Role of surface proteins in staphylococcal adherence to fibers in vitro. Cheung AL, et al. **J Clin Invest** 1989 Jun; 83(6):2041–9

Immunoelectron microscopic localization of fibronectin in adherence of Staphylococcus aureus to cultured bovine endothelial cells. Vann JM, et al. **J Infect Dis** 1989 Sep; 160(3):538–42

Staphylococcus aureus tetrapeptide with high chemotactic potency and efficacy for human leukocytes. Rot A, et al.
J Leukoc Biol 1989 Feb;45(2):114–20

Endotoxin is not an essential mediator in toxic shock syndrome. Melish ME, et al. **Rev Infect Dis** 1989 Jan–Feb; 11 Suppl 1:S219–28; discussion S228–30

Microbiology of toxic shock syndrome: overview. See RH, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S55–60 (59 ref.)

[The disposition and clearance of inhaled bacteria (Staphylococcus aureus) in the lungs of piglets] Kastner P, et al. **Arch Exp Veterinarmed** 1989 May;43(3):379–89 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

Bacterial survival and thermal responses of beef loaf after microwave processing. Lin W, et al.
J Microw Power Electromagn Energy 1988;23(3):183–94

[Effect of high frequency treatment on several microorganisms important to food health] Rosenberg U, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):271–83 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Outermost-cell-surface changes in an encapsulated strain of Staphylococcus aureus after preservation by freeze-drying. Ohtomo T, et al. **Appl Environ Microbiol** 1988 Oct; 54(10):2486–91

Aminoglycoside-binding sites in Staphylococcus aureus as revealed by neomycin-gold labeling. Morioka H, et al.
J Electron Microsc (Tokyo) 1988;37(3):141–9

The substitution-fixation of Staphylococcus aureus. Takade A, et al. **J Electron Microsc (Tokyo)** 1988;37(4):215–7

Scanning electronmicroscopy of Staphylococcus aureus and Enterococcus faecalis exposed to daptomycin. Wale LJ, et al. **J Med Microbiol** 1989 Sep;30(1):45–9

[Variability of Staphylococcus aureus membranes depending on the growth phase of the culture] Kotelevets LM, et al. **Mikrobiol Zh** 1987 May–Jun;49(3):14–8 (Eng. Abstr.) **(Rus)**

STAPHYLOCOCCUS EPIDERMIDIS

CLASSIFICATION

Phage typing set for differentiating Staphylococcus epidermidis. Gershman M, et al. **Can J Microbiol** 1988 Dec; 34(12):1358–61

Evaluation of the variety of plasmid profiles in S epidermidis isolates from hospital patients and staff. Valentine CR, et al. **Infect Control Hosp Epidemiol** 1988 Oct;9(10):441–6

DRUG EFFECTS

Activities of daptomycin and teicoplanin against Staphylococcus haemolyticus and Staphylococcus epidermidis, including evaluation of susceptibility testing recommendations. Low DE, et al.
Antimicrob Agents Chemother 1989 Apr;33(4):585–8

Inhibitory effect of disodium EDTA upon the growth of Staphylococcus epidermidis in vitro: relation to infection prophylaxis of Hickman catheters. Root JL, et al.
Antimicrob Agents Chemother 1988 Nov;32(11):1627–31

Antistaphylococcal activity of teicoplanin in Riyadh, Saudi Arabia. Shibl AM, et al. **APMIS Suppl** 1988;3:68–70

In vivo standardization of cutaneous bactericidal activity of antiseptics by using monoxenic hairless mice. Barc MC, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1911–5

Rifampin activity against Staphylococcus epidermidis biofilms. Obst G, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):782–4

Surveillance of MRS in Poland. Borowski J.
Br J Clin Pract Symp Suppl 1988 Feb;57:72–3

In vitro activity of sulbactam/ampicillin and ampicillin against methicillin-sensitive and methicillin-resistant Staphylococcus aureus and Staphylococcus epidermidis. Fabbri A, et al. **Chemioterapia** 1988 Oct;7(5):306–8

The activity of antistaphylococcal drugs on nosocomial Staphylococcus epidermidis. Fabbri A, et al.
Chemioterapia 1988 Dec;7(6):373–7

Alterations in microbial structure and function induced by exposure to antimicrobial agents: implications for host response to infection. Gemmell CG. **Chemioterapia** 1987 Jun;6(2 Suppl):211–2

Immunomodulating properties of newer cephalosporins: a preliminary classification. Labro M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):219–21

Effect of sublethal concentration of antibiotics on the adherence of Staphylococcus epidermidis to eukaryotic cells. Chugh TD, et al. **Chemotherapy** 1989;35(2):113–8

Comparison of in vitro activity of daptomycin, vancomycin and fluoroquinolones in broth and serum against Staphylococcus epidermidis as determined by time-kill kinetics. Lentino JR, et al. **Chemotherapy** 1989;35(3):168–73

Immunological detection of penicillin-binding protein 2' in clinical isolates of methicillin-resistant Staphylococcus aureus and Staphylococcus epidermidis [published erratum appears in FEMS Michrobiol Lett 1989 Jul 15;51(1):246] O'Hara DM, et al. **FEMS Microbiol Lett** 1989 Jan 1; 48(1):97–103

The microbiological efficacy of the combination of fosfomycin and vancomycin against clinically relevant staphylococci. Gatermann S, et al. **Infection** 1989 Jan–Feb; 17(1):35–7

Combination of aztreonam with anti-staphylococcal antibiotics [letter] Bakhtiar M, et al.
J Antimicrob Chemother 1988 Nov;22(5):773–4

In-vitro susceptibility of staphylococci to fleroxacin in comparison with six other quinolones. Pohlod DJ, et al.

J Antimicrob Chemother 1988 Oct;22 Suppl D:35–41
In-vitro induction of resistance in coagulase-negative staphylococci to vancomycin and teicoplanin. Watanakunakorn C. J Antimicrob Chemother 1988 Sep; 22(3):321–4
Microbiological determination of neomycin in feeds: collaborative study. Stahl GL, et al. J Assoc Off Anal Chem 1989 Mar–Apr;72(2):237–41
Drug resistance and plasmid profiles in Staphylococcus epidermidis in 1964 and 1986. Møller JK. J Hosp Infect 1988 Jul;12(1):19–27
Contamination of blood during cardiopulmonary bypass: the effect of antibiotic prophylaxis. Wilson AP, et al. J Hosp Infect 1988 Jul;12(1):35–42
Coagulase-negative staphylococcal endophthalmitis. Increase in antimicrobial resistance. Davis JL, et al. Ophthalmology 1988 Oct;95(10):1404–10
Overcoming resistance. Pharmacotherapy 1988;8(6 Pt 2):19S–25S
[In vitro activity of fusidic acid in combination with various antibiotics against Staphylococcus epidermidis] Fosse T, et al. Pathol Biol (Paris) 1988 Jun;36(5 Pt 2):621–5 (Eng. Abstr.) (Fre)
[Sensitivity of Staphylococci to netilmicin and other antibiotics with reference to oxacillin-resistant strains] Ruczkowska J, et al. Wiad Lek 1988 Aug 15;41(16):1086–90 (Eng. Abstr.) (Pol)
[Effect of an interferon preparation on increasing bacterial sensitivity to antibiotics] Maleeva LI, et al. Antibiot Khimioter 1988 Nov;33(11):820–3 (Eng. Abstr.) (Rus)

ENZYMOLOGY

[Urease activity of bacteria in urine] Arai Y, et al. Hinyokika Kiyo 1989 Feb;35(2):277–81 (Eng. Abstr.) (Jpn)

GENETICS

Characterization of a novel insertion of the macrolides-lincosamides-streptogramin B resistance transposon Tn554 in methicillin-resistant Staphylococcus aureus and Staphylococcus epidermidis. Tillotson LE, et al. Antimicrob Agents Chemother 1989 Apr;33(4):541–50
Pep5, a new lantibiotic: structural gene isolation and prepeptide sequence. Kaletta C, et al. Arch Microbiol 1989; 152(1):16–9
Molecular analyses of conjugative, gentamicin-resistance plasmids from staphylococcal clinical isolates. Zorbas I, et al. Can J Microbiol 1988 Sep;34(9):1050–7
Restriction endonuclease analysis of Staphylococcus epidermidis DNA may be a useful epidemiological marker. Renaud F, et al. J Clin Microbiol 1988 Sep;26(9):1729–34
Deoxyribonucleic acid relatedness amongst Staphylococcus epidermidis and Staphylococcus saprophyticus strains. Zakrzewska-Czerwinska J, et al. Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Aug; 269(2):179–87

GROWTH & DEVELOPMENT

In vitro and in vivo comparative colonization of Staphylococcus aureus and Staphylococcus epidermidis on orthopaedic implant materials. Barth E, et al. Biomaterials 1989 Jul;10(5):325–8
Bacterial challenge study of a porous carbon percutaneous implant. Krouskop TA, et al. Biomaterials 1988 Sep; 9(5):398–404
Competition between Neisseria gonorrhoeae and Staphylococcus epidermidis during iron-limited or replete continuous culture. Keevil CW, et al. FEMS Microbiol Lett 1989 May;50(1–2):83–6
Studies on antagonism between porcine skin bacteria. Allaker RP, et al. J Appl Bacteriol 1989 Jun;66(6):507–14
Survival of Staphylococcus epidermidis on the skin of patients of lepromatous leprosy. Kumar B, et al. J Appl Bacteriol 1988 Jun;64(6):471–3
Effects of Staphylococcus epidermidis on cellular immunity to infection with Listeria monocytogenes. Ehlers S, et al. Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Nov; 270(1–2):200–12

IMMUNOLOGY

Staphylococcus aureus and Staphylococcus epidermidis strains differ in interleukin 2 inducing activity. Nagy ZN, et al. Acta Microbiol Hung 1988;35(4):379–82
Immunomodulation by altered gastrointestinal tract flora. The effects of orally administered, killed Staphylococcus epidermidis, Candida, and Pseudomonas on systemic immune responses. Marshall JC, et al. Arch Surg 1988 Dec; 123(12):1465–9
Cross protection between a strain of Staphylococcus epidermidis and eight other species of coagulase-negative staphylococci. Yoshida K, et al. Can J Microbiol 1988 Jul; 34(7):913–5
Heterogeneity in opsonic requirements of Staphylococcus epidermidis: relative importance of surface hydrophobicity, capsules and slime. van Bronswijk H, et al. Immunology 1989 May;67(1):81–6
A sensitive chemiluminescence based immunoassay for antibody to staphylococcal peptidoglycan. Minors S, et al. J Immunol Methods 1988 Nov 25;115(1):119–25
Reversal of virus-induced alveolar macrophage bactericidal dysfunction by cyclooxygenase inhibition in vitro. Laegreid WW, et al. J Leukoc Biol 1989 Apr;45(4):293–300
The role of extracellular slime in opsonophagocytosis of Staphylococcus epidermidis. Kristinsson KG, et al. J Med Microbiol 1988 Nov;27(3):207–13
Cell surface antigen of encapsulated Staphylococcus epidermidis SE-360 protects mice from homologous infection. Ohshima Y. Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Nov; 270(1–2):219–27
[Staphylococcal antigens cross-reacting with mammalian tissues and their role in inducing immunopathological processes] Romanov VA, et al. Zh Mikrobiol Epidemiol Immunobiol 1989 May;(5):77–80 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Staphylococcus epidermidis and Staphylococcus aureus in otitis media with effusion. Kurono Y, et al. Arch Otolaryngol Head Neck Surg 1988 Nov; 114(11):1262–5
Identification of Staphylococcus epidermidis vascular graft infections: a comparison of culture techniques. Bergamini TM, et al. J Vasc Surg 1989 May;9(5):665–70
[An analysis of incidents of Staphylococcus in Kashima Rosai Hospital (I)] Tomizawa K, et al. Jpn J Antibiot 1988 May; 41(5):494–504 (Eng. Abstr.) (Jpn)
[A comparison of characteristics of Staphylococcus epidermidis isolated from blood of patients and healthy carriers] Uchiyama K, et al. Rinsho Byori 1988 Dec; 36(12):1436–40 (Jpn)
[Isolation of Staphylococcus in Northern Norway. Identification and effects of antibacterial agents] Andersen BM, et al. Tidsskr Nor Laegeforen 1989 Jan 10;109(1):49–52 (Eng. Abstr.) (Nor)

METABOLISM

Azelaic acid: its uptake and mode of action in Staphylococcus epidermidis NCTC 11047. Bojar RA, et al. J Appl Bacteriol 1988 Jun;64(6):497–504
[The use of passive hemagglutination for determining the fibronectin-binding properties of microorganisms] Sokurenko EV, et al. Lab Delo 1989;(4):65–7 (Eng. Abstr.) (Rus)

PATHOGENICITY

Proposed virulence factors among coagulase-negative staphylococci isolated from two healthy populations. Baddour LM, et al. Can J Microbiol 1988 Jul;34(7):901–5
Possible common biological and immunological properties for detecting encapsulated strains of Staphylococcus epidermidis. Yamada T, et al. J Clin Microbiol 1988 Oct; 26(10):2167–72

PHYSIOLOGY

Adherence of Staphylococcus epidermidis to intraocular lenses. Griffiths PG, et al. Br J Ophthalmol 1989 Jun; 73(6):402–6
Lack of extracellular slime effect on treatment outcome of Staphylococcus epidermidis experimental endocarditis. Steckelberg JM, et al. J Antimicrob Chemother 1989 Jan; 23(1):117–21

STAPHYLOMYCIN see VIRGINIAMYCINS

STARCH

Capillary blood flow and local oxygen supply in skeletal muscle during acute haemodilution with hydroxyethyl starch. Harrison DK, et al. Adv Exp Med Biol 1989; 248:693–8
Thermodynamic study on the effects of beta-cyclodextrin inclusion with anilinonaphthalenesulfonates. Catena GC, et al. Anal Chem 1989 Apr 15;61(8):905–9
Aggregation of amphotericin B in the presence of gamma-cyclodextrin. Kajtár M, et al. Biopolymers 1989 Sep;28(9):1585–96
Complexation of aspirin with potato starch and improvement of dissolution rate by dry mixing. Ishizaka T, et al. Chem Pharm Bull (Tokyo) 1988 Jul;36(7):2562–9
Sucrose versus saccharin as an added sweetener in non-insulin-dependent diabetes: short- and medium-term metabolic effects. Cooper PL, et al. Diabetic Med 1988 Oct;5(7):676–80
The varied appearances of starch particles in smears and paraffin sections. Levison DA, et al. Histopathology 1988 Dec;13(6):667–74
Use of hydroxypropyl- and hydroxyethyl-derivatized beta-cyclodextrins for the thin-layer chromatographic separation of enantiomers and diastereomers. Armstrong DW, et al. J Chromatogr 1988 Oct 28;452:323–30
Conformational differences between alpha-cyclodextrin in aqueous solution and in crystalline form. A molecular dynamics study. Koehler JE, et al. J Mol Biol 1988 Sep 5;203(1):241–50
Inclusion complex formation of 1,8-dihydroxyanthraquinone with cyclodextrins in aqueous solution and in solid state. Smulevich G, et al. J Pharm Sci 1988 Jun;77(6):523–6
Relative affinity of 5-methoxypsoralen and 8-methoxypsoralen towards beta-cyclodextrin: a fluorescence, circular dichroism and chromatographic study. Blais J, et al. J Photochem Photobiol [B] 1988 Dec; 2(4):455–65
Wearing gloves as cause of false-negative HIV tests [letter] Lampe AS, et al. Lancet 1988 Nov 12;2(8620):1140–1
Methylreductic acid and hydroxymethylreductic acid: oxygen radical-forming agents in heated starch. Kasai H, et al. Mutat Res 1989 Sep;214(1):159–64
Colloidal volume expansion during acute cerebral ischaemia: assessed by local cerebral blood flow and computerized power ratio index [published erratum appears in Neurol Res 1989 Jun;11(2):inside back cover] Tranmer BI, et al. Neurol Res 1988 Sep;10(3):151–5
Effects of roll mixing with beta-cyclodextrin on enhancing solubilities of water insoluble drugs. Nozawa Y, et al. Pharm Acta Helv 1989;64(1):24–9
Studies on cyclodextrin polymer. Part 1: The effect of CDP on indomethacin tablet formulation. Tarimci N, et al. Pharmazie 1988 May;43(5):323–5
Molecular modeling of beta-cyclodextrin drug inclusion complexes based on NMR-interaction measurements. Wiese M, et al. Prog Clin Biol Res 1989;291:233–6
[Application of beta-cyclodextrin during direct pressing of tablets] Szabóné RP, et al. Acta Pharm Hung 1989 May; 59(3):99–107 (Eng. Abstr.) (Hun)
[Pressure effect on enzyme reactions] Makimoto S, et al. Tanpakushitsu Kakusan Koso 1989 Feb;34(2):105–12 (Jpn)
[Improvement of bioavailability of menaquinone-4 by dimethyl-beta-cyclodextrin complexation following oral administration] Horiuchi Y, et al. Yakugaku Zasshi 1988 Nov;108(11):1093–100 (Eng. Abstr.) (Jpn)
[Use of starch-containing media for cultivation of Bacillus mesentericus] Kovalenko EA, et al. Prikl Biokhim Mikrobiol 1988 Nov–Dec;24(6):784–8 (Eng. Abstr.) (Rus)

ADMINISTRATION & DOSAGE

Comparative effects of meals high in protein, sucrose, or starch on human mineral metabolism and insulin secretion. Holl MG, et al. Am J Clin Nutr 1988 Nov;48(5):1219–25
An attempt to reduce the photosensitizing potential of chlorpromazine with the simultaneous use of beta- and dimethyl-beta-cyclodextrins in guinea pigs. Hoshino T, et al. Arch Dermatol Res 1989;281(1):60–5
Influence of starches of low digestibility on the rat caecal microflora. Mallett AK, et al. Br J Nutr 1988 Nov; 60(3):597–604
The effect on the cornea of alpha cyclodextrin vehicle for cyclosporin eye drops. Kanai A, et al. Transplant Proc 1989 Feb;21(1 Pt 3):3150–2
[Chemoembolization with degradable starch microspheres for liver metastases in colorectal cancer] Itani K, et al. Gan To Kagaku Ryoho 1989 Aug;16(8 Pt 2):2897–900 (Eng. Abstr.) (Jpn)
[Effect of degradable starch microspheres (DSM) on hepatic hemodynamics] Koike S, et al. Gan To Kagaku Ryoho 1989 Aug;16(8 Pt 2):2818–21 (Eng. Abstr.) (Jpn)
[Hepatic arterial infusion chemotherapy and hyperthermia with degradable starch microspheres in primary and metastatic liver malignancies] Miura T, et al. Gan To Kagaku Ryoho 1989 Aug;16(8 Pt 2):2822–6 (Eng. Abstr.) (Jpn)
[Chemo-embolization using degradable starch microspheres and regional hyperthermia in unresectable hepatocellular carcinoma] Oyamada H, et al. Gan To Kagaku Ryoho 1989 Aug;16(8 Pt 2):3070–4 (Eng. Abstr.) (Jpn)
[Intra-arterial infusion port system for intermittent degradable starch microsphere chemoembolization and implantation method] Takayasu Y, et al. Gan To Kagaku Ryoho 1989 Aug;16(8 Pt 2):3075–80 (Eng. Abstr.) (Jpn)

ADVERSE EFFECTS

Postoperative starch granuloma revealed as femoral herniation. A case report. Ohtsuki Y, et al. Acta Pathol Jpn 1988 Sep;38(9):1235–40
Comparison of faecal blood loss, upper gastrointestinal mucosal integrity and symptoms after piroxicam beta-cyclodextrin, piroxicam and placebo administration. Patoia L, et al. Eur J Clin Pharmacol 1989;36(6):599–604
Amylophagia and iron deficiency anemia. Ephros HD, et al. Oral Surg Oral Med Oral Pathol 1988 Oct;66(4):448–9

ANALOGS & DERIVATIVES

Visual compatibility of hetastarch with injectable critical-care drugs. Wohlford JG, et al. Am J Hosp Pharm 1989 May;46(5):995–6
O2 uptake in bled dogs after resuscitation with hypertonic saline or hydroxyethylstarch. Reinhart K, et al. Am J Physiol 1989 Jul;257(1 Pt 2):H238–43
Severe coagulopathy in Jehovah's witness [letter] Panchal HI, et al. Anaesthesia 1989 Jan;44(1):71–2
Placebo-controlled, double-blind trial of hemodilution in peripheral occlusive arterial disease. Ernst E, et al. Angiology 1989 May;40(5):479–83
Hemodynamic and oxygen transport effects of pentastarch in burn resuscitation. Waxman K, et al. Ann Surg 1989 Mar;209(3):341–5
Comparison of hydroxyethyl starch and lactated Ringer's solution on hemodynamics and oxygen transport of

critically ill patients in prospective crossover studies. Hankeln K, et al. **Crit Care Med** 1989 Feb;17(2):133–5

Effects of pentastarch and albumin infusion on cardiorespiratory function and coagulation in patients with severe sepsis and systemic hypoperfusion. Rackow EC, et al. **Crit Care Med** 1989 May;17(5):394–8

Hetastarch: an alternative colloid in burn shock management. Waters LM, et al. **J Burn Care Rehabil** 1989 Jan–Feb; 10(1):11–6

Haemodilution with dextran 40 and hydroxyethyl starch and its effect on cerebral microcirculation. Scharf J, et al. **J Neurol** 1989 Mar;236(3):164–7

Biodegradable microspheres. XII: Properties of the crosslinking chains in polyacryl starch microparticles. Stjärnkvist P, et al. **J Pharm Sci** 1989 Jan;78(1):52–6

A randomized clinical trial of 10% pentastarch (low molecular weight hydroxyethyl starch) versus 5% albumin for plasma volume expansion after cardiac operations. London MJ, et al. **J Thorac Cardiovasc Surg** 1989 May; 97(5):785–97

Effect of hetastarch, mannitol, and phenylephrine on spinal cord blood flow following experimental spinal injury. Dyste GN, et al. **Neurosurgery** 1989 Feb;24(2):228–35

Hydroxyethyl starch and lung lymph flow in an ovine model of endotoxemia. Lübbesmeyer HJ, et al. **Prog Clin Biol Res** 1989;308:815–9

Hypervolemic hemodilution treatment of acute stroke. Results of a randomized multicenter trial using pentastarch. The Hemodilution in Stroke Study Group. **Stroke** 1989 Mar;20(3):317–23

A biophysical approach to capillary permeability. Zikria BA, et al. **Surgery** 1989 May;105(5):625–31 (53 ref.)

[Influences of colloid and crystalloid infusion on the pulmonary capillary wedge pressure of dogs after hemorrhagic shock] Wen J. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):332–4, 381 (Eng. Abstr.) (Chi)

[Properties of hydroxyethyl starch of domestic origin in animal experiments] Skala E, et al. **Cas Lek Cesk** 1987 Jun 12;126(24):754–6 (Eng. Abstr.) (Cze)

[The effect of high and low molecular weight hydroxyethyl starch on the cellular composition of granulocyte concentrates] Aulmann HM, et al. **Beitr Infusionther** 1988; 21:127–9 (Ger)

[Effect of a 10% and 6% hydroxyethyl starch solution (molecular weight 200,000/0.62) in comparison with a 10% dextran solution (molecular weight 40,000) on flow properties of blood and tissue oxygen pressure in patients with intermittent claudication] Ehrly AM, et al. **Infusionstherapie** 1988 Oct;15(5):181–7 (Eng. Abstr.) (Ger)

[Hemorheologic, micro- and macrocirculatory effects of hypervolemic hemodilution with middle molecular weight hydroxyethyl starch (Haes 200/0.62; 6 percent)] Jung F, et al. **Infusionstherapie** 1988 Dec;15(6):265–71 (Eng. Abstr.) (Ger)

[Effect of hemodilution with 10% hydroxyethyl starch solution (MW 200,000/9.5) on the flow properties of blood, arterial blood gases and conjunctival oxygen partial pressure in patients with cerebral infarct] Staedt U, et al. **Infusionstherapie** 1989 Jun;16(3):107–12 (Eng. Abstr.) (Ger)

[Conjunctival oxygen partial pressure in cerebral infarct before and following infusion of 500 ml of 10 percent hydroxyethyl starch 200/0.5] Staedt U, et al. **Klin Wochenschr** 1988 Nov 15;66(22):1146 (Ger)

ANALYSIS

Improvement of chemical instability of digitoxin in aqueous solution by complexation with beta-cyclodextrin derivatives. Yoshida A, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):4075–80

The varied appearances of starch particles in smears and paraffin sections [letter] Davies JD. **Histopathology** 1989 Aug;15(2):203–4

Modified food starch and nutrient density of baby foods [letter] Jacobson MF. **J Am Diet Assoc** 1989 Mar;89(3):336, 338

Planar chromatographic separation of enantiomers and diastereomers with cyclodextrin mobile phase additives. Armstrong DW, et al. **J Chromatogr** 1988 Sep 16; 448(3):345–54

Studies of cyclodextrin inclusion complexes: II—Inclusion complexes between alpha-cyclodextrin and N-desmethyldiazepam and chlordiazepoxide. Aboutaleb AE, et al. **J Pharm Belg** 1988 Nov–Dec;43(6):437–44

Heptakis(2,6-di-O-methyl)-beta-cyclodextrin complexation with the antitumor agent chlorambucil. Green AR, et al. **J Pharm Sci** 1989 May;78(5):427–31

Utilization of milk proteins and cereal starches to obtain co-extrudates. Smietana Z, et al. **Nahrung** 1988; 32(6):545–51

Amorphous water-soluble cyclodextrin derivatives: 2-hydroxyethyl, 3-hydroxypropyl, 2-hydroxyisobutyl, and carboxamidomethyl derivatives of beta-cyclodextrin. Irie T, et al. **Pharm Res** 1988 Nov;5(11):713–7

[Dissolution profiles of powdered inclusion compounds of sulfonamide drugs with beta-cyclodextrin] Chen JY, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Apr; 5(4):206–11 (Eng. Abstr.) (Chi)

[A structural study of the inclusion compound of piroxicam with beta-cyclodextrin by NMR] Miao ZC, et al. **Yao Hsueh Hsueh Pao** 1988;23(9):682–7 (Eng. Abstr.) (Chi)

[Stability test of chloramphenicol-beta-cyclodextrin-containing tablets] Szabó-Révész P, et al. **Pharmazie** 1988 Aug;43(8):554–5 (Ger)

[Amyloplast DNA] Kobayashi H. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):345–53 (54 ref.) (Jpn)

BIOSYNTHESIS

Metabolites controlling the rate of starch synthesis in the chloroplast of C3 plants. Pettersson G, et al. **Eur J Biochem** 1989 Jan 15;179(1):169–72

BLOOD

Determination of cyclodextrins and branched cyclodextrins by reversed-phase chromatography with pulsed amperometric detection and a membrane reactor. Haginaka J, et al. **Anal Biochem** 1989 Jun;179(2):336–40

DIAGNOSTIC USE

Evaluation of the liquid chromatographic separation of monosaccharides, disaccharides, trisaccharides, tetrasaccharides, deoxysaccharides and sugar alcohols with stable cyclodextrin bonded phase columns. Armstrong DW, et al. **J Chromatogr** 1989 Jan 13;462:219–32

Use of cyclodextrins in isotachophoresis. VI. Cyclodextrins as leading electrolyte additives for the separation of bile acids. Snopek J, et al. **J Chromatogr** 1988 Oct 26; 450(3):373–9

ISOLATION & PURIFICATION

Effect of the content of divinylbenzene in ion-exchange resins on the chromatographic separation of alpha-cyclodextrin and glucose. Hashimoto K, et al. **J Chromatogr** 1988 Sep 2;448(2):241–8

METABOLISM

Inclusion complex formation of benzo[a]pyrene metabolites with cyclodextrins. Woodberry R, et al. **Anal Chem** 1988 Dec 1;60(23):2621–5

Role of starch as a substrate for Bacteroides vulgatus growing in the human colon. McCarthy RE, et al. **Appl Environ Microbiol** 1988 Aug;54(8):1911–6

In vitro acid production from starch and sucrose in saliva. Renz CL, et al. **ASDC J Dent Child** 1989 Jul–Aug; 56(4):267–9

Decreased-activity mutants of phosphoglucose isomerase in the cytosol and chloroplast of Clarkia xantiana. Impact on mass-action ratios and fluxes to sucrose and starch, and estimation of Flux Control Coefficients and Elasticity Coefficients. Kruckeberg AL, et al. **Biochem J** 1989 Jul 15;261(2):457–67

Utilization of alpha-amylase (EC 3.2.1.1) resistant maize and pea (Pisum sativum) starch in the rat. Faulks RM, et al. **Br J Nutr** 1989 Mar;61(2):291–300

Amylolytic breakdown of Lycasin compared with other carbohydrate derivatives. Grenby TH, et al. **Caries Res** 1988;22(5):276–9

Microbial amylolytic enzymes. Vihinen M, et al. **Crit Rev Biochem Mol Biol** 1989;24(4):329–418 (658 ref.)

Influence of substrate carbon on the metabolism of Clostridium thermohydrosulfuricum. Donaduzzi L, et al. **FEMS Microbiol Lett** 1989 Jan 15;48(2):213–7

Starch digestion in normal subjects and patients with pancreatic disease, using a 13CO2 breath test. Hiele M, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):503–9

Effect of starch malabsorption on colonic function and metabolism in humans. Scheppach W, et al. **Gastroenterology** 1988 Dec;95(6):1549–55

Constancy of glucose and starch fermentations by two different human faecal microbial communities. Weaver GA, et al. **Gut** 1989 Jan;30(1):19–25

Effects of corn grinding and time of corn feeding on growth, starch utilization and digesta passage characteristics of growing steers fed hay-based diets. Leonard ES, et al. **J Anim Sci** 1989 Jun;67(6):1603–11

Biochemical evidence that starch breakdown by Bacteroides thetaiotaomicron involves outer membrane starch-binding sites and periplasmic starch-degrading enzymes. Anderson KL, et al. **J Bacteriol** 1989 Jun;171(6):3192–8

Genetic evidence that outer membrane binding of starch is required for starch utilization by Bacteroides thetaiotaomicron. Anderson KL, et al. **J Bacteriol** 1989 Jun;171(6):3199–204

Influence of varying protein and starch degradabilities on performance of lactating cows. Herrera-Saldana R, et al. **J Dairy Sci** 1989 Jun;72(6):1477–83

Role of parotid amylase in starch digestion in the gastro-intestinal tracts of diabetic rats. Kurahashi M, et al. **J Dent Res** 1989 Sep;68(9):1366–9

Oxidation of corn starch, glucose, and fructose ingested before exercise. Guezennec CY, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):45–50

Physicochemical characteristics of food and the digestion of starch and dietary fibre during gut transit. Robertson JA. **Proc Nutr Soc** 1988 Jul;47(2):143–52 (52 ref.)

Inhibition of starch absorption by dietary fibre. A comparative study of wheat bran, sugar-beet fibre, and pea fibre. Hamberg O, et al. **Scand J Gastroenterol** 1989 Jan; 24(1):103–9

The effect of starch malabsorption on fecal short-chain fatty acid excretion in man. Scheppach W, et al. **Scand J Gastroenterol** 1988 Aug;23(6):755–9

The utilization of starch by yeasts. McCann AK, et al. **Yeast** 1986 Jun;2(2):109–15 (80 ref.)

[Amyloplast] Akazawa T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):81–5 (Jpn)

PHARMACOKINETICS

Determination of hydroxypropyl-beta-cyclodextrin in plasma and urine by size-exclusion chromatography with post-column complexation. Szathmary SC. **J Chromatogr** 1989 Jan 27;487(1):99–105

The effects of guar gum or wheat bran on the disappearance of 14C-labeled starch from the rat gastrointestinal tract. Tinker LF, et al. **J Nutr** 1989 Mar;119(3):403–8

PHARMACOLOGY

Insulin and glycemic responses in healthy humans to native starches processed in different ways: correlation with in vitro alpha-amylase hydrolysis. Bornet FR, et al. **Am J Clin Nutr** 1989 Aug;50(2):315–23

Dietary fructose or starch: effects on copper, zinc, iron, manganese, calcium, and magnesium balances in humans. Holbrook JT, et al. **Am J Clin Nutr** 1989 Jun;49(6):1290–4

Robust conditioned flavor preference produced by intragastric starch infusions in rats. Sclafani A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R672–5

Proliferative activity in the colon of the mouse and its modulation by dietary starch, fat, and cellulose. Caderni G, et al. **Cancer Res** 1989 Apr 1;49(7):1655–9

Some properties and the inclusion behavior of branched cyclodextrins. Okada Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2176–85

Some pharmaceutical properties of 3-hydroxypropyl- and 2,3-dihydroxypropyl-beta-cyclodextrins and their solubilizing and stabilizing abilities. Yoshida A, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):1059–63

Factors affecting absorption and excretion of 54Mn in rats. Lee DY, et al. **J Nutr** 1988 Dec;118(12):1509–16

The effect of low protein-high dextrin diet and subsequent food restriction upon life prolongation in Fischer 344 male rats. Horáková M, et al. **Mech Ageing Dev** 1988 Oct; 45(1):1–7

Effect of cyclodextrins on anthracycline stability in acidic aqueous media. Bekers O, et al. **Pharm Weekbl [Sci]** 1988 Oct 14;10(5):207–12

Control of angiogenesis with synthetic heparin substitutes. Folkman J, et al. **Science** 1989 Mar 17;243(4897):1490–3

[Experimental study of normal liver regeneration in hepatic arterial infusion with degradable starch microspheres (DSM)] Yoshinaka K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):787–92 (Eng. Abstr.) (Jpn)

[Pharmacological studies on the clathrate compound of mobenzoxamine with beta-cyclodextrin. (I). Effects on the digestive system] Yokochi E, et al. **Nippon Yakurigaku Zasshi** 1988 Nov;92(5):297–310 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Effect of cornstarch formula in an infant with type I glycogen storage disease. Ogata T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Oct;30(5):547–52

Prostaglandin I2 analogue and propranolol prevent ischaemia induced mitochondrial dysfunction through the stabilisation of lysosomal membranes. Hieda N, et al. **Cardiovasc Res** 1988 Mar;22(3):219–25

Starch-based oral rehydration therapy and its application. Lee B. **R I Med J** 1989 Jun;72(6):203–6

Regional hepatic arterial infusion of degradable starch microspheres increases fluorodeoxyuridine (FUdR) tumor uptake. Thom AK, et al. **Surgery** 1989 Mar;105(3):383–92

[Value of the Practitioner's Ambulatory Treatment in treating leg ulcers] Kalis B, et al. **Phlebologie** 1989 Jan–Mar; 42(1):169–73 (Fre)

[The effect of prostacyclin analog (OP-41483) on pulmonary oxygen toxicity in isolated heart-lung autoperfusion model] Arima T, et al. **Masui** 1988 Jun;37(6):661–6 (Eng. Abstr.) (Jpn)

[Preventive effect of OP-41483-alpha-CD on cyclosporine A-induced renal tubular and arterial damages] Kobayashi M. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):187–98 (Eng. Abstr.) (Jpn)

URINE

Pseudocrystalluria and pseudolipiduria. Kirkpatrick WG, et al. **Am J Med** 1989 Aug;87(2):242

Structural and immunochemical analysis of three alpha-limit dextrin oligosaccharides. Kumlien J, et al. **Arch Biochem Biophys** 1989 Mar;269(2):678–89

STARCH (BACTERIAL GLYCOGEN) SYNTHASE see under **GLUCOSYLTRANSFERASES**

STARFISH

Purification of MPF from starfish: identification as the H1 histone kinase p34cdc2 and a possible mechanism for its periodic activation. Labbe JC, et al. **Cell** 1989 Apr 21;

57(2):253–63
Starfish oocyte maturation: evidence for a cyclic AMP-dependent inhibitory pathway. Meijer L, et al. **Dev Biol** 1989 May;133(1):58–66
Inhibition of starfish oocyte maturation by leupeptin analogs, potent trypsin inhibitors. Sawada MT, et al. **Dev Biol** 1989 Jun;133(2):609–12
Pertussis toxin inhibits 1-methyladenine-induced maturation in starfish oocytes. Shilling F, et al. **Dev Biol** 1989 Jun; 133(2):605–8
Purification and characterization of a lethal factor in venom from the crown-of-thorns starfish (Acanthaster planci). Shiomi K, et al. **Toxicon** 1988;26(11):1077–83

CYTOLOGY

Starfish acrosomal acid phosphatase: a cytochemical and biochemical study. Sousa M, et al. **Biol Cell** 1988; 63(1):101–4
Nuclear envelope disassembly and nuclear lamina depolymerization during germinal vesicle breakdown in starfish. Stricker SA, et al. **Dev Biol** 1989 Sep;135(1):87–98

EMBRYOLOGY

RNA synthesis in starfish embryos: developmental consequences of its inhibition by formycin. Isomura H, et al. **Biochim Biophys Acta** 1989 Apr 12;1007(3):343–9
Centrosome inheritance in starfish zygotes: selective loss of the maternal centrosome after fertilization. Sluder G, et al. **Dev Biol** 1989 Feb;131(2):567–79
Induction of cross-fertilization between sea urchin eggs and starfish sperm by polyethylene glycol treatment. Kyozuka K, et al. **Gamete Res** 1989 Feb;22(2):123–9
[Duration of the mitotic cycle at the period of synchronous cleavage division (t0) in the starfish Asterina pectinifera (Müller et Troschel)] Davydov PV, et al. **Ontogenez** 1989 Jan–Feb;20(1):58–62 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Isolation and characterization of a sialidase from the starfish Asterias rubens. Schauer R, et al. **Biol Chem Hoppe Seyler** 1989 Mar;370(3):183–90
Presence of ATPase and alkaline phosphatase activities in the starfish sperm acrosome. Sousa M, et al. **Cell Biol Int Rep** 1988 Dec;12(12):1049–54

GENETICS

Conserved tRNA gene cluster in starfish mitochondrial DNA. Jacobs HT, et al. **Curr Genet** 1989 Mar;15(3):193–206
Molecular analyses of gene expression during sea star spermatogenesis. Boom JD, et al. **J Exp Zool** 1989 Jun; 250(3):312–20

METABOLISM

Lipolytic enzymes of the digestive organs of the crown-of-thorns starfish (Acanthaster planci): comparison of the stomach and pyloric caeca. Brahimi-Horn MC, et al. **Comp Biochem Physiol [B]** 1989;92(4):637–43
A requirement for protein phosphorylation in regulating the meiotic and mitotic cell cycles in echinoderms. Néant I, et al. **Dev Biol** 1989 Apr;132(2):304–14
Biological activity of saponins and saponin-like compounds from starfish and brittle-stars. Andersson L, et al. **Toxicon** 1989;27(2):179–88

PHYSIOLOGY

Physiological inducers of the acrosome reaction. Hoshi M, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:19–24 (15 ref.)
Stimulation of sea star Asterias rubens axial organ B-like cells by Nocardia-delipidated cell mitogen and derived fractions. Leclerc M, et al. **Folia Biol (Praha)** 1988; 34(3):182–91
Fertilization cone formation in starfish oocytes: the role of the egg cortex actin microfilaments in sperm incorporation. Kyozuka K, et al. **Gamete Res** 1988 Jul;20(3):275–85
Starfish sperm–oocyte jelly binding triggers functional changes in cortical granules. A study using acid phosphatase and ruthenium red ultrastructural histochemistry. Sousa M, et al. **Histochemistry** 1989; 90(5):353–7

STARTLE REACTION

Sensitization of the acoustic startle reflex by footshock. Davis M. **Behav Neurosci** 1989 Jun;103(3):495–503
Orientation of the semicircular canals in rat. Blanks RH, et al. **Brain Res** 1989 May 22;487(2):278–87
Double-pulse stimulation of startle-like responses in rats: refractory periods and temporal summation. Yeomans JS, et al. **Brain Res** 1989 May 1;486(1):147–58
Prestimulation effects on blink and cardiac reflexes of 15-month human infants. Balaban MT, et al. **Dev Psychobiol** 1989 Mar;22(2):115–27
Enhanced acoustic startle responding in rats with radiation-induced hippocampal granule cell hypoplasia. Mickley GA, et al. **Exp Brain Res** 1989;75(1):28–34
The startle probe response: a new measure of emotion? Vrana SR, et al. **J Abnorm Psychol** 1988 Nov;97(4):487–91
Fetal response to sound stimulation: preliminary report exploring use of sound stimulation in routine obstetrical ultrasound examinations. Crade M, et al. **J Ultrasound Med** 1988 Sep;7(9):499–503
Startle disease: an avoidable cause of sudden infant death [letter] Vigevano F, et al. **Lancet** 1989 Jan 28;1(8631):216
Holiday heart type II [letter] Kukin M, et al. **N Engl J Med** 1989 Feb 9;320(6):402–3
Prepulse rise time and startle reflex modification: different effects for discrete and continuous prepulses. Blumenthal TD, et al. **Psychophysiology** 1989 Mar;26(2):158–65
The startle response to acoustic stimuli near startle threshold: effects of stimulus rise and fall time, duration, and intensity. Blumenthal TD. **Psychophysiology** 1988 Sep;25(5):607–11
Long-term habituation and sensitization of the acoustic startle response in the normal adult human. Ornitz EM, et al. **Psychophysiology** 1989 Mar;26(2):166–73

DRUG EFFECTS

Inhibition of acoustic startle in the rat by a footshock prestimulus: effects of morphine and naloxone. Leitner DS. **Behav Neurosci** 1988 Aug;102(4):526–33
Effect of in utero cocaine exposure on startle and its modification. Anday EK, et al. **Dev Pharmacol Ther** 1989; 12(3):137–45
Blockade of potentiated startle responding in rats by 5-hydroxytryptamine1A receptor ligands. Mansbach RS, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):375–83
Prepulse inhibition of the acoustic startle response is disrupted by N-ethyl-3,4-methylenedioxyamphetamine (MDEA) in the rat. Mansbach RS, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):49–55
Habituation of tactile startle is altered by drugs acting on serotonin-2 receptors. Geyer MA, et al. **Neuropsychopharmacology** 1988 May;1(2):135–47
Startle disease or hyperekplexia: adolescent onset and response to valproate. Dooley JM, et al. **Pediatr Neurol** 1989 Mar-Apr;5(2):126–7
Spinal vs. supraspinal sites of action of the alpha 2-adrenergic agonists clonidine and ST-91 on the acoustic startle reflex. Davis M, et al. **Pharmacol Biochem Behav** 1989 May; 33(1):233–40
The startle reaction to an acoustic stimulus in the rat: the effect of noradrenaline administered by microinjection into the pontomedullary reticular formation. Pavlásek J. **Physiol Bohemoslov** 1989;38(1):81–91

PHYSIOLOGY

Startle modulation in children with posttraumatic stress disorder. Ornitz EM, et al. **Am J Psychiatry** 1989 Jul; 146(7):866–70
Neural systems involved in fear-potentiated startle. Davis M. **Ann N Y Acad Sci** 1989;563:165–83 (42 ref.)
Startle, categorical response, and attention in acoustic behavior of insects. Hoy RR. **Annu Rev Neurosci** 1989; 12:355–75 (96 ref.)
MR/Har and MNRA/Har Maudsley rat strains: differences in acoustic startle habituation. Commissaris RL, et al. **Behav Genet** 1988 Nov;18(6):663–9
Footshock-induced sensitization of electrically elicited startle reflexes. Boulis NM, et al. **Behav Neurosci** 1989 Jun; 103(3):504–8
Sensitization of the startle reflex by footshock: blockade by lesions of the central nucleus of the amygdala or its efferent pathway to the brainstem. Hitchcock JM, et al. **Behav Neurosci** 1989 Jun;103(3):509–18
Mesencephalic reticular formation lesions made after habituation training abolish long-term habituation of the acoustic startle response in rats. Jordan WP. **Behav Neurosci** 1989 Aug;103(4):805–15
Multisensory deficits in rats produced by acute exposure to cold swim stress. Leitner DS. **Behav Neurosci** 1989 Feb; 103(1):151–7
Acoustic startle response in young and aging C57BL/6J and CBA/J mice. Parham K, et al. **Behav Neurosci** 1988 Dec; 102(6):881–6
Ontogeny of the acoustic startle response and sensitization to background noise in the rat. Sheets LP, et al. **Behav Neurosci** 1988 Oct;102(5):706–13
Startle disorders of man: hyperekplexia, jumping and startle epilepsy. Andermann F, et al. **Brain Dev** 1988;10(4):213–22 (60 ref.)
Learning-related activation in the auditory system of the rat produced by long-term habituation: a 2-deoxyglucose study. Gonzalez-Lima F, et al. **Brain Res** 1989 Jun 5; 489(1):67–79
Anatomical distribution and response patterns of reticular neurons active in relation to acoustic startle. Wu MF, et al. **Brain Res** 1988 Aug 9;457(2):399–406
Acquisition of acoustic startle response in relation to growth and thyroid function in rats. Schneider BF, et al. **Int J Dev Neurosci** 1987;5(2):99–106
Influence of long-term sensitization on long-term habituation of the acoustic startle response in rats: central gray lesions, preexposure, and extinction. Borszcz GS, et al. **J Exp Psychol [Anim Behav]** 1989 Jan;15(1):54–64
Genetic transmission of hyper-responsivity in crosses between spontaneously hypertensive and Wistar-Kyoto rats. Casto R, et al. **J Hypertens Suppl** 1988 Dec;6(4):S52–4
Comparison of vestibular and auditory startle responses in the rat and cat. Gruner JA. **J Neurosci Methods** 1989 Feb; 27(1):13–23
Lesions of the inferior olive do not affect long- or short-term habituation of the acoustic startle response in rats. de Sperati C, et al. **Neurosci Lett** 1989 May 22; 100(1–3):164–8
Neural substrates for long-term habituation of the acoustic startle reflex in rats: a 2-deoxyglucose study. Gonzalez-Lima F, et al. **Neurosci Lett** 1989 Jan 16; 96(2):151–6
Comparative threshold studies of the acoustic pinna, jaw and startle reflex in the rat. Pilz PK, et al. **Physiol Behav** 1988; 43(4):411–5
Temporal characteristics of enhancement of startle by stimulation of the amygdala. Rosen JB, et al. **Physiol Behav** 1988;44(1):117–23
Isolation, tactile startle and resting blood pressure in Long-Evans rats. Woodworth CH, et al. **Physiol Behav** 1988;43(5):609–16
The role of 5HT1A receptors in the modulation of the acoustic startle reflex in rats. Nanry KP, et al. **Psychopharmacology (Berlin)** 1989;97(4):507–13
[Role of the cerebellar vermis in the long term habituation of the acoustic startle response in the rat] Lopiano L, et al. **Ann Ist Super Sanita** 1988;24(4):511–3 (Eng. Abstr.) **(Ita)**
[A case of startle disease—electrophysiological analysis] Hashimoto K, et al. **Rinsho Shinkeigaku** 1988 Jun; 28(6):630–5 (Eng. Abstr.) **(Jpn)**
[Influence of stimulation of the central gray matter on low- and high-threshold startle reflexes] Gokin AP, et al. **Neirofiziologiia** 1989;21(1):71–8 (Eng. Abstr.) **(Rus)**

STARVATION

see related
FASTING
FOOD DEPRIVATION
HUNGER

Fetal glucose utilization in response to maternal starvation and acute hyperketonemia. Leturque A, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E699–703
Vitamin A supplementation for refugees and famine victims. Nieburg P, et al. **Bull WHO** 1988;66(6):689–97
Protein and energy metabolism in starvation reconsidered. Henry CJ, et al. **Eur J Clin Nutr** 1988 Jul;42(7):543–9 (15 ref.)
Effect of starvation and insulin in vivo on the activity of the pyruvate dehydrogenase complex in rat skeletal muscles. Denyer GS, et al. **FEBS Lett** 1989 Jul 3; 250(2):464–8
Differential regulation of the degradation of myofibrillar and total proteins in skeletal muscle of rats: effects of streptozotocin-induced diabetes, dietary protein and starvation. Kadowaki M, et al. **J Nutr** 1989 Mar; 119(3):471–7
Involvement of the liver in the regulation of tryptophan availability. Possible role in the responses of liver and brain to starvation. Bloxam DL, et al. **Life Sci** 1974 Oct 15; 15(8):1443–55
Regional brain glucose use in unstressed rats after two days of starvation. Mans AM, et al. **Metab Brain Dis** 1987 Dec; 2(4):213–21
In vivo glucose utilization in rat tissues during the three phases of starvation. Cherel Y, et al. **Metabolism** 1988 Nov; 37(11):1033–9
Metabolic response to starvation at late gestation in chronically ethanol-treated and pair-fed undernourished rats. Testar X, et al. **Metabolism** 1988 Nov;37(11):1008–14

BLOOD

Metabolic response to short term starvation in non-pregnant and late pregnant cafeteria-obese rats. Roca P, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):29–35
Serum lipids and apolipoproteins in the rat refed after starving: influence of the molecular form of nitrogen (protein, peptides, or free amino acids). Poullain MG, et al. **Metabolism** 1989 Aug;38(8):740–4

COMPLICATIONS

Severe metabolic ketoacidosis induced by starvation and exercise. Miaskiewicz S, et al. **Am J Med Sci** 1989 Mar; 297(3):178–80
Weight loss and the heart. Effects of anorexia nervosa and starvation. Schocken DD, et al. **Arch Intern Med** 1989 Apr; 149(4):877–81 (65 ref.)
beta-Adrenergic blockade counteracts starvational ketosis, but aggravates post-exercise ketosis in non-athletes. Vahed YA, et al. **J Endocrinol** 1988 Oct;119(1):167–71

ENZYMOLOGY

Effects of starvation, feeding, and time of day on the activity of proton transport adenosine triphosphatase in the parietal cells of the mouse gastric glands. Coulton GR, et al. **Anat Rec** 1988 Sep;222(1):42–8
Pyruvate dehydrogenase and glycogen synthase activity at transition from fasted to fed state. Madar Z. **Biochem Med Metab Biol** 1989 Apr;41(2):93–104
Acid lipase activity in neonatal rat liver cell types. Effect of starvation. Burgaya F, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):566–9
Time-course of changes in pancreatic size and enzyme composition in rats during starvation. Nagy I, et al. **Int J Pancreatol** 1989 Jul;5(1):35–45
[The effect of starvation on GABA-transaminase and

glutamate decarboxylase activity on mitochondria of dog limbic structures during postnatal ontogenesis] Faradzhev AN. **Vopr Med Khim** 1988 Nov–Dec;34(6):32–6 (Eng. Abstr.) **(Rus)**

[Activity of hexokinase and glucose-6-phosphate dehydrogenase in hemopoietic cells of the bone marrow in normal rabbits and after hydrocortisone administration during starvation and alloxan diabetes] Kapitonova ZD. **Vopr Med Khim** 1971 Jul–Aug;17(4):394–7 (Eng. Abstr.) **(Rus)**

METABOLISM

Characterization of specific insulin binding sites in rat testis following induced diabetes and experimental starvation. Kanwar KC, et al. **Acta Eur Fertil** 1989 Jan–Feb; 20(1):39–42

Metabolic response to starvation in late pregnant rats. I. Maternal response. Nowacka M, et al. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):427–34

Metabolic response to starvation in late pregnant rats. II. Fetal response. Nowacka M, et al. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):435–41

Tumor necrosis factor production during starvation. Vaisman N, et al. **Am J Med** 1989 Jul;87(1):115

Effect of 36-hour starvation on in vivo amino acid and glucose uptake by rat brown adipose tissue. López-Soriano FJ, et al. **Biochem Int** 1989 May;18(5):895–902

Effects of a cafeteria diet and starvation of global 14C(U)-glucose disposal. Prats E, et al. **Biochem Int** 1988 Jul;17(1):35–49

Secretion and storage of newly synthesized hepatic triacylglycerol fatty acids in vivo in different nutritional states and in diabetes. Duerden JM, et al. **Biochem J** 1988 Nov 1;255(3):929–35

Skeletal-muscle glycogen synthesis during the starved-to-fed transition in the rat. Holness MJ, et al. **Biochem J** 1988 Sep 15;254(3):855–9

Pyruvate dehydrogenase activities during the fed-to-starved transition and on re-feeding after acute or prolonged starvation. Holness MJ, et al. **Biochem J** 1989 Mar 1; 258(2):529–33

Accumulation of phenols and catechols in isolated mouse hepatocytes in starvation or after pretreatment with acetone. Bánhegyi G, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4157–62

Glutamine and ketone-body metabolism in the small intestine of starved peak-lactating rats. Ardawi MS, et al. **Biochimie** 1988 Jun;70(6):749–55

Effect of food deprivation on regional brain glucose utilization in lean and fatty Zucker rats. Tsujii S, et al. **Brain Res** 1988 Dec 20;475(2):371–5

Effects of acute starvation on carbohydrate metabolism in rat salivary glands. Yokoyama N, et al. **Comp Biochem Physiol [B]** 1979;62(1):17–22

Mechanisms decreasing glucose oxidation in diabetes and starvation: role of lipid fuels and hormones. Randle PJ, et al. **Diabetes Metab Rev** 1988 Nov;4(7):623–38 (68 ref.)

Effect of starvation on nutrition and insulin secretion in pregnant rats and their fetuses. Tanigawa K, et al. **Endocrinol Jpn** 1989 Apr;36(2):195–201

Protein economy during human starvation. Elia M, et al. **Eur J Clin Nutr** 1989 Feb;43(2):139–43

Nutritional deficiency, starvation, and tissue antioxidant status. Godin DV, et al. **Free Radic Biol Med** 1988; 5(3):165–76 (146 ref.)

Effects of starvation, refeeding, and insulin on energy-linked metabolic processes in catfish (Rhamdia hilarii) adapted to a carbohydrate-rich diet. Machado CR, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):429–37

Starvation and dehydration: effect on hypothalamic monoamines and serum LH and prolactin. Scacchi P, et al. **Gen Pharmacol** 1989;20(1):111–3

Serotonin turnover in rat brain during semistarvation with high-protein and high-carbohydrate diets. Schweiger U, et al. **J Neural Transm** 1989;77(2–3):131–9

Short term neonatal starvation altered cholera toxin binding in rabbits. Baker SS, et al. **J Nutr** 1989 Feb;119(2):280–5

Visceral organ size and hepatocyte metabolic activity in fed and fasted rats. Burrin DG, et al. **J Nutr** 1988 Dec; 118(12):1547–52

Starvation leads to decreased levels of mRNA for myofibrillar proteins. Fong Y, et al. **J Surg Res** 1989 May; 46(5):457–61

Effect of whey proteins, their oligopeptide hydrolysates and free amino acid mixtures on growth and nitrogen retention in fed and starved rats. Poullain MG, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):382–6

Inhibited amino acid uptake in skeletal muscle during starvation. Warner BW, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):344–8

Metabolic adaptation of the renal carbohydrate metabolism. I. Effects of starvation on the gluconeogenic and glycolytic fluxes in the proximal and distal renal tubules. García-Salguero L, et al. **Mol Cell Biochem** 1988 Oct; 83(2):167–78

Effect of starvation on insulin receptors in rat brain. Marks JL, et al. **Neuroscience** 1989;30(2):551–6

A longitudinal study of starvation in piglets and the introduction of a modified liver biopsy technique. van Lith PM, et al. **Vet Q** 1988 Jul;10(3):145–50

MORTALITY

Death by starvation. A modern American problem? Morley JE. **J Am Geriatr Soc** 1989 Feb;37(2):184–5

Sociodemographic differentials in mortality during the 1974–75 famine in a rural area of Bangladesh. Razzaque A. **J Biosoc Sci** 1989 Jan;21(1):13–22

The association between inadequate rations, undernutrition prevalence, and mortality in refugee camps: case studies of refugee populations in eastern Thailand, 1979–1980, and eastern Sudan, 1984–1985. Toole MJ, et al. **J Trop Pediatr** 1988 Oct;34(5):218–24

PATHOLOGY

A morphometric study of the effects of short-term starvation on rat hepatocytes. Belloni AS, et al. **J Submicrosc Cytol Pathol** 1988 Oct;20(4):751–7

PHYSIOPATHOLOGY

Effects of starvation on the parathyroid glands in golden hamsters of different ages, with special reference to the frequency of lipid droplets. Emura S, et al. **Acta Anat (Basel)** 1988;133(2):96–101

Influence of starvation on hormonal control of hypophyseal secretion in rats. Hugues JN, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):195–202

Acute diaphragmatic changes induced by starvation in rats. Dureuil B, et al. **Am J Clin Nutr** 1989 May;49(5):738–44

Effects of starvation and streptozotocin-induced diabetes on the activity of phosphofructokinase in the epithelial cells of rat colon. Khoja SM, et al. **Biochimie** 1988 Jun; 70(6):721–5

Paradoxical enhancement of pituitary growth hormone (GH) responsiveness to GH-releasing factor in the face of high somatostatin tone. Tannenbaum GS, et al. **Endocrinology** 1989 Mar;124(3):1380–8

The effect of maturation on insulin secretion after starvation in isolated perfused rat pancreas. Ikeda T, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):282–6

The energy density of weight loss in semistarvation. Alpert SS. **Int J Obes** 1988;12(6):533–42

Effects of starvation and refeeding on elastase-induced emphysema. Sahebjami H, et al. **J Appl Physiol** 1989 Jun; 66(6):2611–6

Effect of short-term starvation on reproductive hormone gene expression, secretion and receptor levels in male rats. Bergendahl M, et al. **J Endocrinol** 1989 Jun;121(3):409–17

Ultrastructural immunocytochemical localization of secretory proteins in autophagic vacuoles of parotid acinar cells of starved rats. Hand AR, et al. **J Oral Pathol** 1988 Jul;17(6):279–86

Protective effect of fasting upon cerebral hypoxic-ischemic injury. Go KG, et al. **Metab Brain Dis** 1988 Dec; 3(4):257–63

Clinical correlates of starvation in man. Edes TE. **Mo Med** 1986 Jan;83(1):23–6

How ketones spare protein in starvation. **Nutr Rev** 1989 Mar; 47(3):80–1 (10 ref.)

Starvaholics? Rusting R. **Sci Am** 1988 Nov;259(5):36

[Functional properties of isolated kidney mitochondria of rats in food deprivation] Jung K. **Z Urol Nephrol** 1989 May; 82(5):273–6 (Eng. Abstr.) **(Ger)**

[Effect of starvation on respiratory reactivity in inbred rats] Berezovskiĭ VA, et al. **Fiziol Zh SSSR** 1989 Feb;75(2):232–8 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Combating drought: food for all. Mpofu B, et al. **World Health Forum** 1988;9(1):92–7

THERAPY

Recombinant growth hormone enhances muscle myosin heavy-chain mRNA accumulation and amino acid accrual in humans. Fong Y, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3371–4

VETERINARY

Fatty acid synthetase in control, starved and refed Richardson's ground squirrels. Anderson BD, et al. **Comp Biochem Physiol [A]** 1989;93(3):613–6

Effect of starvation and sampling time on plasma alkaline phosphatase activity and calcium homeostasis in the rat. Thompson CS, et al. **Lab Anim** 1989 Jan;23(1):53–8

The effect of food deprivation on the rate of sulfamethazine elimination in goats. Abdullah AS, et al. **Vet Res Commun** 1988;12(6):441–6

STASIS ULCER see **VARICOSE ULCER**

STATE DENTISTRY

Belshazzar's feast. Thomson PJ. **Br Dent J** 1989 Feb 25; 166(4):106

ORGANIZATION & ADMINISTRATION

A lay member's perspective. McIvor J. **Br Dent J** 1989 Aug 5;167(3):96–7

STATE GOVERNMENT see under **GOVERNMENT**

STATE HEALTH PLANNING AND DEVELOPMENT AGENCIES see under **HEALTH PLANNING ORGANIZATIONS**

STATE HEALTH PLANNING, UNITED STATES see **HEALTH PLANNING**

STATE HEALTH PLANS

Countdown at Boston's Countway Medical Library: an interview with Arnold Relman [interview by Richard L. Reece] Relman A. **Minn Med** 1988 Sep;71(9):523–5, 556–7

Cancer control in the Illinois State Cancer Plan. Cairns NU. **Prog Clin Biol Res** 1988;278:105–9

ECONOMICS

Cost estimate of health care coverage for the medically indigent in Hawaii. Mondragón D, et al. **Asia Pac J Public Health** 1989;3(1):82–5

Fiscal conditions and state government policy choices. Newcomer RJ. **Compr Gerontol [B]** 1987 Dec;1(3):122–8

Town vs gown. Alexander JR. **J Okla State Med Assoc** 1989 Aug;82(8):406

Presumptive eligibility: early access to prenatal care. Sadler DK. **J Tenn Med Assoc** 1989 Feb;82(2):88–9

LEGISLATION & JURISPRUDENCE

Massachusetts: omen or anomaly? Leitner WA. **Ala Med** 1988 Jul;59(1):7–8, 12–3

Health department reorganizes AIDS program [news] **Pa Med** 1988 Nov;91(11):18

ORGANIZATION & ADMINISTRATION

State government at the grass roots: a community relations approach to mental health program development. Byalin K, et al. **Community Ment Health J** 1988 Fall;24(3):196–204

State epidemiology programs and state epidemiologists: results of a national survey. Gunn RA, et al. **Public Health Rep** 1989 Mar–Apr;104(2):170–7

STANDARDS

Model Standards impact on local health department performance in California. Spain C, et al. **Am J Public Health** 1989 Aug;79(8):969–74

TRENDS

State family support and education programs: lessons from the pioneers. Weiss HB. **Am J Orthopsychiatry** 1989 Jan; 59(1):32–48

Many state health departments begin major cancer control efforts [news] Newman ME. **J Natl Cancer Inst** 1989 Jul 19;81(14):1053–5

STATE MEDICINE

Pragmatic and explanatory trials in the evaluation of the experimental National Health Service nursing homes. Bond J, et al. **Age Ageing** 1989 Mar;18(2):89–95 (25 ref.)

The implementation of a multicentred randomized controlled trial in the evaluation of the experimental National Health Service nursing homes. Bond J, et al. **Age Ageing** 1989 Mar;18(2):96–102

Attitudes to publicly funded orthodontics in the United Kingdom [letter] Stephens CD. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):84–5

The homeless and the changing British National Health Service [editorial] Reid J. **Am J Public Health** 1989 Aug; 79(8):965–6

The GMC and medical ethics [letter] **BMJ** 1989 May 20; 298(6684):1379–80

Disciplining midwives [editorial] Drife JO. **BMJ** 1988 Oct 1;297(6652):806–7

Greening the NHS [editorial] Gray M, et al. **BMJ** 1989 Jul 1;299(6690):4–5

NHS review. Consumerism and general practice. Leavey R, et al. **BMJ** 1989 Mar 18;298(6675):737–9

Pride and prejudice [editorial] Lock S. **BMJ** 1989 May 6; 298(6682):1197

... Sends the GPs' contract out for consultation [editorial] MacPherson G. **BMJ** 1989 May 27;298(6685):1406–7

Appoint a colleague. Petch MC. **BMJ** 1989 May 20; 298(6684):1365–7

'Patients charges and the use of dental services: some evidence' [letter] **Br Dent J** 1989 Apr 8;166(7):243–4

Fissure sealants on the NHS. Ball IA. **Br Dent J** 1988 Aug 6;165(3):80–1

Why not the NHS? Carrington HB. **Br Dent J** 1988 Nov 19;165(10):352

Root canal treatment in the General Dental Service 1948–1987. Farrell TH, et al. **Br Dent J** 1989 Mar 25; 166(6):203–8

'The hospital service today' [letter] Hardman FG. **Br Dent J** 1989 Feb 25;166(4):111

'Why not the NHS?' [letter] Lando LJ. **Br Dent J** 1988 Dec 24;165(12):420

'White knight' into just 'honest broker' [letter] Macey-Dare BL. **Br Dent J** 1989 Jun 10;166(11):397

Windermere relativities inquiry. Nettley MP, et al. **Br Dent J** 1988 Sep 10;165(5):188–92

Scottish dentists' preferences for remuneration and their

opinions on the scope of General Dental Service treatment. Nuttall NM, et al. **Br Dent J** 1989 Jun 24;166(12):451–4
'Why not the NHS?' [letter] Posner BT. **Br Dent J** 1989 Jan 21;166(2):36
'President's new year message' [letter; comment] Renson CE. **Br Dent J** 1989 Mar 11;166(5):149. **Comment on:** Br Dent J 1988 Jul 9;165(1):1–2
'The great debate' [letter] Saunders SM. **Br Dent J** 1989 Jun 10;166(11):398–9
Fissure sealants and the preventive resin restoration on the NHS. Simonsen RJ. **Br Dent J** 1988 Oct 8;165(7):238–9
Belshazzar's feast. Thomson PJ. **Br Dent J** 1989 Feb 25; 166(4):106
Litigation and public relations in the NHS [letter] Anderson DN. **Br J Hosp Med** 1988 Aug;40(2):148–9
The public/private divide in long-stay health care [letter] Livesley B. **Br J Hosp Med** 1988 Sep;40(3):234
Highlighting epilepsy services [letter] Parsonage M. **Br J Hosp Med** 1988 Aug;40(2):149
Working for patients [editorial] Haslock I. **Br J Rheumatol** 1989 Jun;28(3):185–6
The Community Dental Service—opportunities for the future [editorial] Beal JH. **Community Dent Health** 1988 Dec; 5(4):327–9
Uptake of General Dental Service care in the northern region 1985. Carmichael CL. **Community Dent Health** 1988 Sep; 5(3):219–29
Socialized medicine or state-ruled medicine: the Venezuelan dilemma. Morgado PJ. **Dis Colon Rectum** 1989 Jul; 32(7):615–7
A physician's nightmare. Chua PS. **Indiana Med** 1989 May; 82(5):388
The availability of physiotherapy services within the National Health Service—changing trends in England and Wales. Partridge C. **Int J Rehabil Res** 1987;10(4 Suppl 5):171–2
Vascular surgery and the National Health Service [editorial] Campbell DR. **J Med** 1987;18(5–6):261–4
Molecular genetics in the National Health Service in Britain. Harris R, et al. **J Med Genet** 1989 Apr;26(4):219–25
Medicine as a utility. McIntyre RV. **J Okla State Med Assoc** 1988 Oct;81(10):616
Family practice in the National Health Service: a mid-life crisis? [editorial] Godber G. **J R Coll Gen Pract** 1988 Apr; 38(309):145–6
Medical manpower planning: factors influencing workload in general practice [editorial] Martin E. **J R Coll Gen Pract** 1987 Dec;37(305):530–1
Opposition to nationalized (socialized) health care. **J Tenn Med Assoc** 1989 Mar;82(3):134–5
A plan for information in the National Health Service. Marcus A. **Lancet** 1988 Nov 26;2(8622):1242–3
The collection of information about nuclear medicine in the health service. Britton KE. **Nucl Med Commun** 1985 Feb; 6(2):63–6
Health services research by clinicians. Watt GC, et al. **Scott Med J** 1989 Apr;34(2):423–4
Choosing who shall not be treated in the NHS. Charny MC, et al. **Soc Sci Med** 1989;28(12):1331–8
[The distribution of resources in the health field. The experience of the Naticnal Health Service (NHS)] Williams D. **Gac Sanit** 1987 Jul–Aug;1(1):32–6 **(Spa)**

ECONOMICS

Budget management of National Health Service pathology laboratories. Lilleyman JS. **Ann Clin Biochem** 1989 Jul;26 (Pt 4):309–10
United Kingdom health service [editorial] Kettlewell MG. **Aust Clin Rev** 1988 Dec;8(31):157–8
NHS: a time to choose [letter] **BMJ** 1989 Jan 28; 298(6668):252–3
NHS review [letter] **BMJ** 1989 Feb 18;298(6671):455–6
NHS review [letter] **BMJ** 1989 Apr 15;298(6679):1034–5
Dissecting the NHS bonanza [editorial] Appleby J. **BMJ** 1988 Nov 19;297(6659):1284–5
NHS review. Radical change of policy on NHS pay. Dyson R. **BMJ** 1989 Mar 11;298(6674):654–5
The case for differential capitation fees based on age in British general practice. Fleming DM. **BMJ** 1988 Oct 15; 297(6654):966–8
NHS review. Internal markets for surgical services: opportunity for trade in orthopaedics. Fordham RJ, et al. **BMJ** 1989 Apr 1;298(6677):882–4
NHS review. Doing the sums [letter] Fox PS. **BMJ** 1989 Apr 1;298(6677):890–1
NHS review. A GP's perspective. Harris A. **BMJ** 1989 Apr 1;298(6677):884–5
Treatment of stroke [letter] Hewer RL. **BMJ** 1988 Sep 3; 297(6648):625
Indicative drug budgets for general practitioners: a prescription for change. O'Brien B. **BMJ** 1989 Apr 8; 298(6678):944–6
The new general practitioner contract [letter] Shapiro J. **BMJ** 1989 May 27;298(6685):1454
NHS: a time to choose [editorial] Smith T. **BMJ** 1989 Jan 7;298(6665):1–2
Contract confidence trick? [letter] Bard GH. **Br Dent J** 1989 Jan 21;166(2):36–7
Funds for research [letter] Rose G. **Br Dent J** 1989 Feb 11; 166(3):71
'Windermere relativities inquiry' [letter] Watts TL. **Br Dent J** 1988 Oct 22;165(8):278
Patient charges and the use of dental services: some evidence. Yule BF, et al. **Br Dent J** 1988 Nov 19;165(10):376–9
The white paper: working for students? Breed S. **Br J Hosp Med** 1989 Jun;41(6):581–2
Funding and contracts. Illman J. **Br J Hosp Med** 1989 Apr; 41(4):385
Regional variation in the provision and cost of General Dental Service orthodontic treatment in England and Wales. O'Brien KD, et al. **Br J Orthod** 1989 May; 16(2):67–74
Input–output relationships in the NHS: inter district variations in ENT surgery within Wales. West RR, et al. **Community Med** 1988 Nov;10(4):319–26
From global rationing to target setting in the U.K. Klein R. **Hastings Cent Rep** 1989 Jul–Aug;SPEC Suppl:3–4
Health service costs and the general practitioner's role in relation to prescribing [editorial] Gregory DA. **J R Coll Gen Pract** 1987 Dec;37(305):531–2
Funding the National Health Service [editorial] Ludbrook A. **J R Coll Gen Pract** 1988 Oct;38(315):437–8
The cost of AIDS: discussion paper. West PA. **J R Soc Med** 1988 Sep;81(9):540–1
Medicine for sale. Silver GA. **Lancet** 1989 Jul 8;2(8654):95
The Canadian health-care system: is it losing its appeal? Budd JH. **Ohio Med** 1989 Aug;85(8):611–2, 636
Socialized medicine—the patient-victim. Sutherland G. **Ohio Med** 1989 Aug;85(8):607–8
The politics of health care [interview by Roger Neighbour] Maynard A. **Practitioner** 1987 Oct 22;231(1437):1395–7
State and health. Deppe HU. **Soc Sci Med** 1989; 28(11):1159–64 (7 ref.)
[Suggestions for reorganization of the British Health Service System. Some health economic aspects] Olsen JA. **Tidsskr Nor Laegeforen** 1989 Aug 20;109(23):2329–31 **(Nor)**

HISTORY

Looking forward—a retrospective view. Johnson-Gilbert R. **Br Dent J** 1989 Aug 5;167(3):111–4
A six-hundredth anniversary: the beginning of public health and state medical legislation in England, 1388 and thenabouts. Warren M. **Community Med** 1988 Nov; 10(4):269–72
Antecedents of "the principles of socialist health". Károlyi G. **Sante Publique (Bucur)** 1989 Jan–Mar;32(1):41–6
[Founding of the Soviet state public health system (history, tasks and results)] Zabludovskii PE. **Sov Zdravookhr** 1988; (6):8–13 **(Rus)**
[Responsibility of the State for the health care of the population (editorial)] Viel B. **Rev Med Chil** 1988 Jan; 116(1):61–3 (Eng. Abstr.) **(Spa)**

LEGISLATION & JURISPRUDENCE

[The British Health Services System—major changes once again. The White Paper and commercialization of the National Health Service] Kolflaath J. **Tidsskr Nor Laegeforen** 1989 Aug 20;109(23):2326–8 (Eng. Abstr.) **(Nor)**

MANPOWER

Running out of staff for the NHS [editorial] Livesley B. **BMJ** 1989 Jul 1;299(6690):1–2

ORGANIZATION & ADMINISTRATION

National Health Service White Paper. Will it work for patients? Appleyard WJ. **Arch Dis Child** 1989 Apr; 64(4):643–5
NHS review. RCGP's reaction [letter] **BMJ** 1989 Apr 1; 298(6677):888
NHS Review. Working papers "to form a basis of detailed discussions". **BMJ** 1989 Mar 4;298(6673):587–93
NHS review. The benefits of budgets [letter] **BMJ** 1989 Apr 1;298(6677):889
NHS review and the new general practitioner contract [letter] **BMJ** 1989 May 20;298(6684):1386
NHS review. Views from abroad [letter] **BMJ** 1989 Apr 1; 298(6677):889
NHS review [letter] **BMJ** 1989 Mar 18;298(6675):744–7
NHS review. **BMJ** 1989 Apr 8;298(6678):961
NHS review [letter] **BMJ** 1989 Mar 4;298(6673):599–600
NHS review. JCC's evidence to social services committee. **BMJ** 1989 Apr 22;298(6680):1090–1
BMA's doubts on AIDS care in reformed NHS [news] **BMJ** 1989 Mar 18;298(6675):760
An inspector calls [editorial] Black N. **BMJ** 1988 Oct 8; 297(6653):875
NHS Review. Information please—and quick. Black N. **BMJ** 1989 Mar 4;298(6673):586–7
NHS review. Emasculating the profession [letter] Burns JL, et al. **BMJ** 1989 Apr 1;298(6677):890
NHS Review. Streamlining management. Bussey A. **BMJ** 1989 Feb 25;298(6672):512–3
NHS review: the first three months [editorial] Butler JR. **BMJ** 1989 Apr 29;298(6681):1128–9
NHS review. Obstetrics after the white paper. Chamberlain G. **BMJ** 1989 Jun 24;298(6689):1702–3
Be a manager. Chantler C. **BMJ** 1989 Jun 3;298(6686):1505–8
NHS review. Merit awards [letter] Connolly CK. **BMJ** 1989 Apr 1;298(6677):890
NHS review: the broad picture [editorial] Day P, et al. **BMJ** 1989 Feb 11;298(6670):339–40
NHS review. Words from the source: an interview with Alsin Enthoven [interview by Robert Smith] Enthoven A. **BMJ** 1989 Apr 29;298(6681):1166–8
NHS review. No hope in blind opposition [letter] Hewish P. **BMJ** 1989 Apr 1;298(6677):889–90
NHS review. Plus ça change [letter] Jones FA. **BMJ** 1989 Apr 1;298(6677):890
NHS review. The white paper and the independent sector: scope for growth and restructuring. Laing W. **BMJ** 1989 Mar 25;298(6676):821–3
Steaming through the NHS [editorial] Lock S. **BMJ** 1989 Mar 11;298(6674):619–20
Close vote and now a ballot on GPs' contract [editorial] MacPherson G. **BMJ** 1989 Jul 1;299(6690):6
BMA's measured response [editorial] Macpherson G. **BMJ** 1989 Feb 11;298(6670):340–1
New Zealand proposals to unshackle hospitals [editorial] Maxwell RJ. **BMJ** 1988 Nov 12;297(6658):1214–5
NHS review. Aging: should it be left to chance? Millard PH, et al. **BMJ** 1989 Apr 15;298(6679):1020–1
The new general practitioner contract: is there an alternative? Morrell D. **BMJ** 1989 Apr 15;298(6679):1005–7
All must audit [letter] Murley R. **BMJ** 1989 Apr 15; 298(6679):1032–3
Serious gaps in response to Griffiths [editorial] Murphy E. **BMJ** 1989 Jul 22;299(6693):217–8
NHS review. Unrealistic targets [letter] O'Donnell PM. **BMJ** 1989 Apr 1;298(6677):890
Perestroika in the Soviet Union's health system. Paton CR. **BMJ** 1989 Jul 1;299(6690):45–6
Distinction and merit awards: a 100m pound management tool? Raftery J. **BMJ** 1989 Apr 8;298(6678):946–8
NHS Review. New health care market. Robinson R. **BMJ** 1989 Feb 18;298(6671):437–9
NHS review. Self governing hospitals. Robinson R. **BMJ** 1989 Mar 25;298(6676):819–21
BMA rejects NHS review but ... [editorial] Smith T. **BMJ** 1989 May 27;298(6685):1405–6
The BMA after the NHS review [editorial] Vallance-Owen AJ. **BMJ** 1989 Jun 24;298(6689):1661–2
NHS review. Welcome for medical audit [interview by Dr. Tony Smith] van't Hoff W. **BMJ** 1989 Apr 15; 298(6679):1021–3
NHS: the challenge of change. **Br Dent J** 1989 Feb 25; 166(4):103–4
Self-governing hospitals. Matthews TJ. **Br J Hosp Med** 1989 Apr;41(4):386
Medical audit. Paton A. **Br J Hosp Med** 1989 Apr;41(4):383
Capital charges. Savory CF. **Br J Hosp Med** 1989 Apr; 41(4):387
NHS consultants. Scotland A. **Br J Hosp Med** 1989 Apr; 41(4):384
Racial inequalities in health: a challenge to the British National Health Service. Baxter C, et al. **Int J Health Serv** 1988;18(4):563–71
Racism, the National Health Service, and the health of black people. Kushnick L. **Int J Health Serv** 1988;18(3):457–70 (30 ref.)
American perceptions of the British National Health Service: five myths. Potter C, et al. **J Health Polit Policy Law** 1989 Summer;14(2):341–65
Restructuring and accelerating the development of the Soviet health service: preliminary observations and recommendations. Terris M. **J Public Health Policy** 1988 Winter;9(4):537–43
Discrepancies in the availability of open access services: comparison between the Northern and Oxford regions. Douglass RA, et al. **J R Coll Gen Pract** 1988 Jan; 38(306):28–9
A Black look at a White Paper [editorial] Black D. **J R Coll Physicians Lond** 1989 Apr;23(2):66–7
Improving clinical practice [editorial] Black NA, et al. **J R Soc Med** 1988 Nov;81(11):621–2
Proposed changes in Britain's health service stir varied reactions, widespread controversy [news] Henahan JF. **JAMA** 1989 Apr 21;261(15):2174
Making the headless chicken squawk [editorial] **Lancet** 1988 Oct 22;2(8617):941–2
The position of the Soviet physician: the bureaucratic professional. Field MG. **Milbank Q** 1988;66 Suppl 2:182–201
Governing the health sector: power and policy making in the English and Swedish health services. Ham C. **Milbank Q** 1988;66(2):389–414
Doctors, partitocrazia, and the Italian state. Krause EA. **Milbank Q** 1988;66 Suppl 2:148–66
Proposals for reform of the British National Health Service. Lister J. **N Engl J Med** 1989 Mar 30;320(13):877–80
Health service reform worries MRC [news] McGourty C. **Nature** 1989 Jun 15;339(6225):494
England's National Health Service: still a success. Williams HP. **Ohio Med** 1988 Aug;84(8):605, 682
Been to America [editorial] **Public Health** 1989 Jul; 103(4):235–6
College assessors: putting policy into action. Price R. **Radiography** 1988 Jul–Aug;54(616):151–3
Health research of the chief scientist organisation. Moir AT, et al. **Scott Med J** 1989 Apr;34(2):421–3
Health service performance indicators. Geddis PW. **Ulster Med J** 1988 Oct;57(2):121–8
[Free choice of physician—geographic association—system of lists] Bruusgaard D, et al. **Tidsskr Nor Laegeforen** 1988

Oct 25;108(29B):2620–3 (Nor)

STANDARDS

The government and quality in health care. Currie E. **Aust Clin Rev** 1988 Dec;8(31):170–3

TRENDS

The rise in private hospital care [editorial] Goldacre M. **BMJ** 1989 Jan 28;298(6668):202–3
The secularization of health affairs. Kissick WL. **Conn Med** 1988 Nov;52(11):675–9
A.D. 2005: the President calls for deregulation of the medical profession. McEwan DB. **Hawaii Med J** 1988 Dec; 47(12):553
Will there always be a National Health Service? Finn J. **Hospitals** 1988 Oct 20;62(20):86, 88–9
British optometry [letter] Edgar DF, et al. **J Am Optom Assoc** 1989 Feb;60(2):87
A fairy tale. Cook DE. **J Miss State Med Assoc** 1988 Jul; 29(7):201–4
The National Health Service—a grand design in distress. Nairne P. **J R Soc Med** 1989 Jan;82(1):6–11
Socialized medicine. Are we ready for it? Paxton RE. **Mich Med** 1989 Jun;88(6):58
So what? Listening and learning. Gaffin J. **Paediatr Perinat Epidemiol** 1989 Jul;3(3):245–7
Is health care a right or a privilege? Morey DA. **Va Med** 1988 Aug;115(8):380
Is there a Harley Street in your future? Alper P. **W V Med J** 1988 Aug;84(8):340–2

UTILIZATION

Much data but limited information in the NHS. MacFaul R. **Arch Dis Child** 1988 Oct;63(10):1276–80

STATE OF THE ART REVIEW see **REVIEW LITERATURE**

STATISTICAL COMPUTING see **MATHEMATICAL COMPUTING**

STATISTICAL MODELS see **MODELS, STATISTICAL**

STATISTICS

see related
BIOMETRY
EPIDEMIOLOGIC METHODS
META-ANALYSIS
MODELS, STATISTICAL
PSYCHOMETRICS
SOCIOMETRIC TECHNICS

A research methods and statistics journal club for residents. Markert RJ. **Acad Med** 1989 Apr;64(4):223–4
Discriminant analysis in predicting prognosis of Bell's palsy. Gavilán C, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct; 106(3–4):276–80
Correlation, causation and agreement [letter] Diamond GA. **Am J Cardiol** 1989 Feb 1;63(5):392
Limited assurances [editorial] Diamond GA. **Am J Cardiol** 1989 Jan 1;63(1):99–100
Between- and within-subject variation in nutrient intake from infancy to old age: estimating the number of days required to rank dietary intakes with desired precision. Nelson M, et al. **Am J Clin Nutr** 1989 Jul;50(1):155–67
Praise for useful words [editorial] Brown GW. **Am J Dis Child** 1989 Jul;143(7):770
Sample size. Brown GW. **Am J Dis Child** 1988 Nov; 142(11):1213–5
Ordinal regression models for epidemiologic data. Armstrong BG, et al. **Am J Epidemiol** 1989 Jan;129(1):191–204
Re: "Misinterpretation and misuse of the kappa statistic" [letter] Yoshizawa CN, et al. **Am J Epidemiol** 1988 Nov; 128(5):1179–81
Statistics alone can't prove murder [letter; comment] Carl LC. **Am J Nurs** 1989 Jul;89(7):931. **Comment on:** Am J Nurs 1988 Oct;88(10):1327–8, 1332
Algebra of sphero-cylinders and refractive errors, and their means, variance, and standard deviation. Harris WF. **Am J Optom Physiol Opt** 1988 Oct;65(10):794–802
Sample size and power based on the population attributable fraction. Browner WS, et al. **Am J Public Health** 1989 Sep; 79(9):1289–94
A statistic for inferences based upon negative results [letter] Grayzel J. **Anesthesiology** 1989 Aug;71(2):320–1
Odds ratio and relative risk [letter] Williams BC. **Ann Intern Med** 1989 Sep 1;111(5):444–5
Pitfalls in statistical analysis of heart valve prostheses. Grunkemeier GL, et al. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S14–5
Sample size for clinical and biological research. Bach LA, et al. **Aust N Z J Med** 1989 Feb;19(1):64–8
Words on numbers: statistics in medical journals [editorial] Ludbrook J. **Aust N Z J Surg** 1989 Jun;59(6):443–4
Usage of statistics in the surgical literature and the 'orphan P' phenomenon. Oliver D, et al. **Aust N Z J Surg** 1989 Jun;59(6):449–51
Empirical evaluation of two-sample statistical tests for differences of stepping phase during insect walking. Cocatre-Zilgien JH, et al. **Biol Cybern** 1988;59(6):367–77
Covariance density estimation for autoregressive spectral modelling of point processes. Lago PJ, et al. **Biol Cybern** 1989;61(3):195–203
Some thoughts on one-tailed tests [letter] Peace KE. **Biometrics** 1988 Sep;44(3):911–2
Significance tests. Bulman JS, et al. **Br Dent J** 1989 Mar 11;166(5):178–80
Analysing the association between two variables. Bulman JS, et al. **Br Dent J** 1989 Apr 22;166(8):303–7
Significance tests. Part 2. Bulman JS, et al. **Br Dent J** 1989 Mar 25;166(6):218–21
Descriptive statistics [published erratum appears in Br Dent J 1989 Feb 11;166(3):90] Bulman JS, et al. **Br Dent J** 1989 Jan 21;166(2):51–4
Comparison of several groups. Bulman JS, et al. **Br Dent J** 1989 May 6;166(9):341–3
Simple summary calculations. Bulman JS, et al. **Br Dent J** 1989 Feb 11;166(3):87–90
Significance tests. Part 3. Bulman JS, et al. **Br Dent J** 1989 Apr 8;166(7):261–4
Meaningless means [letter] Simmons S. **Br Dent J** 1989 Jun 10;166(11):399
Misuse of the standard error of the mean [letter] Herxheimer A. **Br J Clin Pharmacol** 1988 Aug;26(2):197
Statistical significance and confidence intervals. Berry G. **Br J Clin Pract** 1988 Nov;42(11):465–8
Prognostic factors in soft tissue sarcomas. A multivariate analysis of 109 cases. Mandard AM, et al. **Cancer** 1989 Apr 1;63(7):1437–51 (30 ref.)
Unscheduled DNA synthesis: some statistical thoughts. Thakur AK. **Cell Biol Toxicol** 1987 Jun;3(2):175–92
The jackknife technique in statistical analysis [letter] Rothpearl A. **Chest** 1989 Apr;95(4):940
The CV at the detection limit [letter; comment] Krouwer JS. **Clin Chem** 1989 May;35(5):901. **Comment on:** Clin Chem 1989 Feb;35(2):289–91
Sampling distribution of skewness and kurtosis. Lacher DA. **Clin Chem** 1989 Feb;35(2):330–1
Study and performance evaluation of statistical methods in image processing. Liang Z, et al. **Comput Biol Med** 1988; 18(6):395–408
Software interface between SAS and the GDDM interactive chart utility. Schreiner W. **Comput Biol Med** 1989; 19(3):197–201
Computer program for statistical Mann-Whitney U nonparametric analysis of neuronal spike activity. Soto E, et al. **Comput Methods Programs Biomed** 1989 Mar; 28(3):197–200
A bibliography of the statistical analysis of vaginal bleeding patterns. Mullee MA, et al. **Contraception** 1988 Aug; 38(2):259–85
Designing clinical trials for two-sided multiple comparisons with a control. Bristol DR. **Controlled Clin Trials** 1989 Jun; 10(2):142–52
One-sided or two-sided p values? [letter] Goodman S. **Controlled Clin Trials** 1988 Dec;9(4):387–8
Perusing the literature. Hawkins BS, et al. **Controlled Clin Trials** 1989 Jun;10(2):211
Some thoughts on one-tailed tests [letter] Peace KE. **Controlled Clin Trials** 1988 Dec;9(4):383–4
Use of restricted significance tests in clinical trials: beyond the one- versus two-tailed controversy. Salsburg D. **Controlled Clin Trials** 1989 Mar;10(1):71–82
How to evaluate a surgical article: how much do "statistics" help? Schenk WG Jr. **Curr Surg** 1988 Jul–Aug;45(4):274–6
Modified histogram subtraction technique for analysis of flow cytometry data [published erratum appears in Cytometry 1989 Jul;10(4):492–4] Overton WR. **Cytometry** 1988 Nov; 9(6):619–26
Statistician on Board [letter] Milsom J. **Dis Colon Rectum** 1989 Aug;32(8):729
Use of a "power calculation" [letter] Nelson RL. **Dis Colon Rectum** 1989 Sep;32(9):817–8
Satisfied conclusion validity of early intervention research with handicapped children. Ottenbacher KJ. **Except Child** 1989 Apr;55(6):534–40
Local approximation and its applications in statistics. Schmerling S, et al. **Gegenbaurs Morphol Jahrb** 1989; 135(2):255–60
Robust methods for the detection of genetic linkage for quantitative data from pedigrees. Amos CI, et al. **Genet Epidemiol** 1989;6(2):349–60
Fragile sites and statistics. Mariani T. **Hum Genet** 1989 Mar; 81(4):319–22
A homogeneity test for follow-up studies. Berger A, et al. **IMA J Math Appl Med Biol** 1988;5(2):101–12
Crossover counts and likelihood in multipoint linkage analysis. Thompson EA. **IMA J Math Appl Med Biol** 1987; 4(2):93–108
Statistical analysis of 2 x 2 tables. McNutt LA, et al. **Infect Control Hosp Epidemiol** 1988 Sep;9(9):420–3
Slaves of a test. Bobbio M. **Int J Cardiol** 1989 Jun; 23(3):287–90
Weak associations in environmental epidemiology. Brunekreef B, et al. **Int J Epidemiol** 1988 Dec;17(4):960–3
Weak associations in epidemiological research: some examples and their interpretation. Florey CD. **Int J Epidemiol** 1988 Dec;17(4):950–4
Weak associations in occupational epidemiology: adjustment for exposure estimation error. Heederik D, et al. **Int J Epidemiol** 1988 Dec;17(4):970–4
An 'electronic' extramural course in epidemiology and medical statistics. Ostbye T. **Int J Epidemiol** 1989 Mar; 18(1):275–9
Statistical errors in software [letter] Porta M, et al. **Int J Epidemiol** 1988 Dec;17(4):931
A strengthening programme for weak associations. Rothman KJ, et al. **Int J Epidemiol** 1988 Dec;17(4):955–9
A note concerning the analysis of an epidemic of Q fever. Senn S. **Int J Epidemiol** 1988 Dec;17(4):891–3
An examination of three spatial disease clustering methodologies. Shaw GM, et al. **Int J Epidemiol** 1988 Dec; 17(4):913–9
Weak associations in nutritional epidemiology: the importance of replication of observations on individuals. Van Staveren WA, et al. **Int J Epidemiol** 1988 Dec; 17(4):964–9
Statistics in dental journals and dental education. Some comments and a selected bibliography. Sahai H, et al. **Int J Orthod** 1989 Spring;27(1–2):23–7
The need for clarification of percent risk reduction data in clinical cardiovascular trial reports. Weissler AM, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):764–6
Do methodological problems negate findings of important nursing home studies? [letter] Muncie HL Jr, et al. **J Am Geriatr Soc** 1989 Apr;37(4):390
Performance of tests of significance based on stratification by a multivariate confounder score or by a propensity score. Cook EF, et al. **J Clin Epidemiol** 1989;42(4):317–24
The statistical analysis of multiple binary measurements. Donner A, et al. **J Clin Epidemiol** 1988;41(9):899–905
Statistical uncertainty due to misclassification: implications for validation substudies. Greenland S. **J Clin Epidemiol** 1988;41(12):1167–74
Simultaneous interval estimates of the odds ratio in studies with two or more comparisons. Holford TR, et al. **J Clin Epidemiol** 1989;42(5):427–34
Kappa coefficients in epidemiology: an appraisal of a reappraisal. Kraemer HC, et al. **J Clin Epidemiol** 1988; 41(10):959–68
The alternative hypothesis: one-sided or two-sided? Peace KE. **J Clin Epidemiol** 1989;42(5):473–6
The J. Allyn Taylor International Prize in Medicine: a salute to excellence [editorial] Spitzer WO. **J Clin Epidemiol** 1989; 42(4):291–2
A reappraisal of the kappa coefficient. Thompson WD, et al. **J Clin Epidemiol** 1988;41(10):949–58
Kappa and the concept of independent errors. Thompson WD, et al. **J Clin Epidemiol** 1988;41(10):969–70
Estimation of test error rates, disease prevalence and relative risk from misclassified data: a review. Walter SD, et al. **J Clin Epidemiol** 1988;41(9):923–37 (72 ref.)
Discriminant function analysis to calculate a Crohn's activity group scale to predict future inactive or active disease. Pinchbeck BR, et al. **J Clin Gastroenterol** 1988 Oct; 10(5):498–504
Uses and abuses of multivariate methods in epidemiology. Evans SJ. **J Epidemiol Community Health** 1988 Dec; 42(4):311–5 (8 ref.)
Use of BMDP statistical package to generate maximum liklihood estimates for single channel data. Wachtel RE. **J Neurosci Methods** 1988 Sep;25(2):121–8
Accuracy and reliability of nutrient intake estimates. Schlundt DG. **J Nutr** 1988 Dec;118(12):1432–5
Ambulation in patients with myelomeningocele: a multivariate statistical analysis. Samuelsson L, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):569–75
Good's L-statistic—rebuttal. Moore WE, et al. **J Periodont Res** 1989 May;24(3):222–3
On the use of Good's L-statistic in the analysis of bacteriologic samples. Morrison EC, et al. **J Periodont Res** 1988 Sep;23(5):344
Who took the "p" out of statistics? [editorial] Barnes RW. **J Vasc Surg** 1989 Jul;10(1):100–2
The inexact use of Fisher's Exact Test in six major medical journals. McKinney WP, et al. **JAMA** 1989 Jun 16; 261(23):3430–3
Statistical considerations for performing multiple tests in a single experiment. 4. Performing multiple statistical tests on the same data. O'Brien PC, et al. **Mayo Clin Proc** 1988 Oct;63(10):1043–5
Problems with fitting data to a saturating exponential: a simple solution which takes account of transformation and measurement errors. Dibdin GH. **Med Biol Eng Comput** 1988 Mar;26(2):217–21
Marginal analysis applied to the dose–response curve. Silber JH, et al. **Med Pediatr Oncol** 1988;16(5):344–8
Maximum likelihood analysis of free-response receiver operating characteristic (FROC) data. Chakraborty DP. **Med Phys** 1989 Jul–Aug;16(4):561–8
A statistical model for appraisal of discrimination performance in closed set tests. Köppen L, et al. **Methods Inf Med** 1988 Jul;27(3):133–4
The contribution of discrimination analysis to the diagnostic decision in patients with lung carcinoma. Procházka J, et al. **Neoplasma** 1989;36(3):333–41
Analysis of data in nephrology. IV. Relationships between continuous variables. Appleton DR. **Nephrol Dial Transplant** 1988;3(4):478–81
Confidence intervals [editorial] Murray GD. **Nucl Med Commun** 1989 Jun;10(6):387–8
Statistics notebook. De Land PN, et al. **Optom Vis Sci** 1989 May;66(5):329–30
Perinatology—how firm a foundation? [published erratum appears in Paediatr Perinat Epidemiol 1988 Jul;2(3):239]

Stirrat GM. **Paediatr Perinat Epidemiol** 1987 Apr;1(1):7–9
Caution on statistics [letter] Malloy MH, et al. **Pediatrics** 1988 Dec;82(6):954–6
Statistical interpretation [letter] Kirkman S. **Phys Ther** 1989 Jun;69(6):510–1
Multivariate data analysis and experimental design in biomedical research. Ståhle L, et al. **Prog Med Chem** 1988; 25:291–338 (42 ref.)
Mathematical and statistical analysis of circadian rhythms. Minors DS, et al. **Psychoneuroendocrinology** 1988; 13(6):443–64
Standard terminology for reporting of reproductive health statistics in the United States. **Public Health Rep** 1988 Sep–Oct;103(5):464–71
The "guidelines" on reporting reproductive health statistics tend to confuse rather than clarify [letter] Ahmed F. **Public Health Rep** 1989 Mar–Apr;104(2):199–200
The distinction between rate and ratio is important [letter] Fortney JA. **Public Health Rep** 1989 Mar–Apr;104(2):200
Körner statistics. Young J. **Radiography** 1988 May–Jun; 54(615):98–9
Interspecific scaling of toxicity data: a question of interpretation [letter] Chappell WR. **Risk Anal** 1989 Mar; 9(1):13–4
Sample sizes for constructing confidence intervals and testing hypotheses. Bristol DR. **Stat Med** 1989 Jul;8(7):803–11
Statistical methods for short-term projections of AIDS incidence. Brookmeyer R, et al. **Stat Med** 1989 Jan; 8(1):23–34
Test for batch-to-batch variation in stability analysis. Chow SC, et al. **Stat Med** 1989 Jul;8(7):883–90
How study design affects outcomes in comparisons of therapy. I: Medical. Colditz GA, et al. **Stat Med** 1989 Apr; 8(4):441–54
Statistical comparison of ligand–binding kinetics. Cologne JB, et al. **Stat Med** 1989 Jul;8(7):871–81
Some analysis strategies for three period changeover designs with two treatments [letter] Gough K. **Stat Med** 1989 Jul; 8(7):891–2
Beyond sensitivity, specificity and statistical independence. Jones RH, et al. **Stat Med** 1988 Dec;7(12):1289–95
Interactions between statisticians and biomedical journal editors. Marks RG, et al. **Stat Med** 1988 Oct;7(10):1003–11
Crossover designs for clinical trials [letter] Matthews JN. **Stat Med** 1989 May;8(5):633
Explanatory and pragmatic estimates of the treatment effect when deviations from allocated treatment occur. Newcombe RG. **Stat Med** 1988 Nov;7(11):1179–86
How much of the 'placebo 'effect' is really statistical regression? [letter] Senn SJ. **Stat Med** 1988 Nov;7(11):1203
Statistical methods for monitoring the AIDS epidemic. Zeger SL, et al. **Stat Med** 1989 Jan;8(1):3–21
Simple calculation of the unpaired t test. Fabri PJ, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):381–2
What is the proper experimental unit for long–term rodent studies? An examination of the NTP benzyl acetate study. Young SS. **Toxicology** 1989 Mar;54(3):233–9
Spreadsheets, data handling and statistics. Nakatsu K, et al. **Trends Pharmacol Sci** 1989 Feb;10(2):57–60
The widespread use of the geometric mean [letter] Tallarida RJ. **Trends Pharmacol Sci** 1988 May;9(5):158
Iterative least squares fitting of pH–partition data. Whelpton R. **Trends Pharmacol Sci** 1989 May;10(5):182–3 (7 ref.)
Cross–lagged panel correlation analysis. Reed PG, et al. **West J Nurs Res** 1988 Oct;10(5):671–6
Computer use and nursing research. The entrepreneurial nurse researcher. Uman GC. **West J Nurs Res** 1989 Apr; 11(2):243–6
[Methods of processing clinical and laboratory results in paired sampling studies] Skalská H. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(2):255–63 (Eng. Abstr.) (Cze)
[Less common methods of statistical analysis of results] Skalská H. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(4):543–51 (Eng. Abstr.) (Cze)
[Clinical aspects of clinical comparative experiments] Strnad L. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(4):529–42 (Eng. Abstr.) (Cze)
[Clinical significance of controlled trials: estimation of confidence intervals for therapeutic effects] Sørensen HT, et al. **Nord Med** 1989;104(3):89–90 (Dan)
[Advantages of multifactorial analysis of correlations (Benzekri's method) in practice and in clinical research. A simplified example of its application to bladder tumors] Bittard M, et al. **Ann Urol (Paris)** 1988;22(5):359–62 (Eng. Abstr.) (Fre)
[Epidemiology and medical statistics: elements of methodology (I)] Ben Hamida A. **Tunis Med** 1988 Jan; 66(1):17–9 (Eng. Abstr.) (Fre)
[Contribution of statistical methodology in medical writing] Dziri C, et al. **Tunis Med** 1988 Jun–Jul;66(6–7):503–7 (Fre)
[Epidemiology and medical statistics: protocol and preparation of an etiologic study (II)] Hessairi M, et al. **Tunis Med** 1988 Feb;66(2):87–92 (Eng. Abstr.) (Fre)
[Time from the viewpoint of Cantor's and post–Cantorian set theory—a contribution to the founding of chronobiology] Scharf JH. **Gegenbaurs Morphol Jahrb** 1988;134(6):801–30 (Eng. Abstr.) (Ger)
[Application of discrimination analysis to the results of radionuclide ventriculography at rest and during exertion in patients with ischemic heart disease] Saad B, et al. **Radiol Diagn (Berl)** 1988;29(3):516–9 (Ger)
[Product of the month: SPSS statistical package for the sciences] Horstmann GA. **Radiologe** 1988 Sep;28(9):438–9 (Ger)
[Some exact results for random walk models with applications] Schwarz W. **Z Exp Angew Psychol** 1989; 36(1):101–17 (Eng. Abstr.) (Ger)
[Numerical synthesis of statistical data] Duca P. **Med Lav** 1989 Mar–Apr;80(2):164–77 (4 ref.) (Eng. Abstr.) (Ita)
[A comparative study on three methods for working out the maximum increment age—based on the data of the Harpenden Growth Study] Matsumoto K, et al. **Nippon Eiseigaku Zasshi** 1988 Aug;43(3):749–53 (Eng. Abstr.) (Jpn)
[A statistical method for method–comparison studies—linear structural relationship considering measurement errors] Tango T. **Rinsho Byori** 1988 Sep;36(9):1101–8 (Jpn)
[Statistic programs for personal computers] Hannisdal E, et al. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):223–6 (Nor)
[Assessing reliability and validity in qualitative data] Heap KK. **Tidsskr Nor Laegeforen** 1988 Dec 10; 108(34–36):3191–5 (Eng. Abstr.) (Nor)
[Use of the method of discriminant analysis for the prognosis of early thrombosis of Lavsan vascular prostheses following surgery of occlusions of the iliac arteries] El'kov AN, et al. **Klin Khir** 1988;(7):23–5 (Eng. Abstr.) (Rus)
[Theory of statistical moments in pharmacokinetic studies: application to the bioavailability of propranolol] Cid E, et al. **Rev Med Chil** 1988 Aug;116(8):711–6 (Eng. Abstr.) (Spa)

EDUCATION

[Introduction to the topic "Biostatistics and scientific methodology"] Hiller E, et al. **Z Arztl Fortbild (Jena)** 1988; 82(18):855–6 (Ger)

HISTORY

"Student" days [letter] Gambino R. **Clin Chem** 1988 Dec; 34(12):2603

METHODS

A method for combining matched and unmatched binary data. Application to randomized, controlled trials of photocoagulation in the treatment of diabetic retinopathy. Duffy SW, et al. **Am J Epidemiol** 1989 Aug;130(2):371–8
Introduction to statistics. III: Correlation, chi–square and the choice of statistical procedure. Clegg F. **Br J Hosp Med** 1988 Nov;40(5):396–9
Chemometrics: measurement reliability. Castañeda–Méndez K. **Clin Chem** 1988 Dec;34(12):2494–8
Probability of disease ascertained by modified cumulative frequency plots: some comments [letter] Redondo FL. **Clin Chem** 1988 Nov;34(11):2389–90
Comparison of statistical methods for the analysis of limiting dilution assays. Cobb L, et al. **In Vitro Cell Dev Biol** 1989 Jan;25(1):76–81
Power analysis of statistical methods for comparing treatment differences from limiting dilution assays. Schmehl MK, et al. **In Vitro Cell Dev Biol** 1989 Jan;25(1):69–75
The poor statistical properties of the Fe–plot. Taylor JM, et al. **Int J Radiat Biol** 1989 Aug;56(2):161–7
The place of statistical methods in radiology (and in the bigger picture). Hanley JA. **Invest Radiol** 1989 Jan; 24(1):10–6 (29 ref.)
Thanks and a clarification on statistical significance [letter] Romano PE. **J Lab Clin Med** 1988 Oct;112(4):498
Approaches to monitoring clinical trials. Fleming TR, et al. **J Natl Cancer Inst** 1989 Feb 1;81(3):188–93 (30 ref.)
More about the misuse of Scatchard plots in binding studies. Nicosia S. **Pharmacol Res Commun** 1988 Sep;20(9):733–7
[Nonparametric correlation analysis] Sørensen HT, et al. **Nord Med** 1989;104(2):54–5 (Dan)
[Selected statistical measurement values] Wernecke KD. **Z Arztl Fortbild (Jena)** 1988;82(18):861–4 (Ger)

STANDARDS

Measures of effect size in the reporting of rehabilitation research. Ottenbacher KJ, et al. **Am J Phys Med Rehabil** 1989 Apr;68(2):52–8
Ordinal scales and foundations of misinference. Merbitz C, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):308–12
Public and private hypotheses. Murphy EA. **J Clin Epidemiol** 1989;42(1):79–84
Paracetamol and peptic ulcer [letter] [see comments] Piper DW, et al. **Lancet** 1988 Nov 19;2(8621):1192. **Comment in:** Lancet 1989 Jan 28;1(8631):213
Managing measurement error. Jennings BM, et al. **Nurs Res** 1989 May–Jun;38(3):186–7
Not really reliability? [letter] Stratford PW. **Phys Ther** 1989 Aug;69(8):700–2

STATUS ASTHMATICUS see under **ASTHMA**

STATUS DYSRAPHICUS

Tethered cord syndrome: a pediatric case study. Greif L, et al. **J Neurosci Nurs** 1989 Apr;21(2):86–91

DIAGNOSIS

Computerized tomography and magnetic resonance imaging in a case of spinal dysraphism. Lusins JO, et al. **Mt Sinai J Med** 1989 Mar;56(2):133–5

RADIOGRAPHY

Closed spinal dysraphism: analysis of clinical, radiological, and surgical findings in 104 consecutive patients. Scatliff JH, et al. **AJR Am J Roentgenol** 1989 May;152(5):1049–57

STATUS EPILEPTICUS

CEREBROSPINAL FLUID

Cerebrospinal fluid nucleotide metabolites following non–convulsive status epilepticus. Livingston JH, et al. **Dev Med Child Neurol** 1989 Apr;31(2):168–73

CHEMICALLY INDUCED

Substantia nigra lesions in mercaptopropionic acid induced status epilepticus: a light and electron microscopic study. Towfighi J, et al. **Acta Neuropathol (Berl)** 1989;77(6):612–20
Absence status epilepticus with computed tomographic brain changes following metrizamide myelography. Obeid T, et al. **Ann Neurol** 1988 Oct;24(4):582–4
Nonconvulsive status epilepticus following cerebral angiography. Vickrey BG, et al. **Ann Neurol** 1989 Feb; 25(2):199–201
Experimental secondarily generalized convulsive status epilepticus induced by D,L–homocysteine thiolactone. Walton NY, et al. **Epilepsy Res** 1988 Mar–Apr;2(2):79–86
Isoniazid overdose: a case report. Dixon AC, et al. **Hawaii Med J** 1988 Dec;47(12):558–9
Paradoxical precipitation of tonic seizures by lorazepam in a child with atypical absence seizures. DiMario FJ Jr, et al. **Pediatr Neurol** 1988 Jul–Aug;4(4):249–51
Cerebral depression due to propylene glycol in a patient with chronic epilepsy—the value of the plasma osmolal gap in diagnosis. Lolin Y, et al. **Postgrad Med J** 1988 Aug; 64(754):610–3
[Status epilepticus during pipemidic acid treatment (letter)] Devriendt J, et al. **Presse Med** 1989 Feb 25;18(8):433 (Fre)
[A case of Wilson's disease who developed status epilepticus during D–penicillamine therapy] Yoshida K, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan;78(1):70–4 (Jpn)
[Morphological changes in the hippocampus and cortex of the rat during status epilepticus induced by penicillin] Morales Bejarano A, et al. **Arch Neurobiol (Madr)** 1988 May–Jun;51(3):159–66 (Eng. Abstr.) (Spa)

COMPLICATIONS

Migraine and status epilepticus [letter] Shuaib A. **Acta Neurol Scand** 1988 Nov;78(5):445
Oculoclonic status epilepticus. Kanazawa O, et al. **Epilepsia** 1989 Jan–Feb;30(1):121–3
Cerebral infarction due to systemic necrotizing vasculitis in a patient with rheumatic heart disease, subacute bacterial endocarditis and status epilepticus. Mizutani T, et al. **Histopathology** 1987 Oct;11(10):1093–9

DIAGNOSIS

Nonconvulsive status epilepticus in adults [letter] Huff JS. **Am J Emerg Med** 1989 May;7(3):344–5
CT, MRI and SPECT neuroimaging in status epilepticus with simple partial and complex partial seizures: case report. Bauer J, et al. **J Neurol** 1989 Jul;236(5):296–9
Pseudostatus epilepticus [editorial] **Lancet** 1989 Aug 26; 2(8661):485
Status epilepticus. Shields WD. **Pediatr Clin North Am** 1989 Apr;36(2):383–93 (35 ref.)
[Confusional states of epileptic origin. Value of emergency EEG] Rohr–Le Floch J, et al. **Rev Neurol (Paris)** 1988; 144(6–7):425–36 (Eng. Abstr.) (Fre)
[Status epilepticus: immediate diagnosis and acute therapy] Schmidt D, et al. **Internist (Berlin)** 1989 Feb;30(2):98–103 (Ger)
[Misdiagnosis of non–convulsive epileptic states as post–traumatic exogenous psychosis] Mewe R, et al. **Nervenarzt** 1989 Jul;60(7):433–6 (Ger)

DRUG THERAPY

Rectal diazepam in pediatric status epilepticus. Albano A, et al. **Am J Emerg Med** 1989 Mar;7(2):168–72
Intravenous injection of flunitrazepam for status epilepticus in children—two case reports. Ono J, et al. **Brain Dev** 1988; 10(5):329–32
Treatment of status epilepticus. Cruse RP. **Cleve Clin J Med** 1989;56 Suppl Pt 2:S254–9 (43 ref.)
Failure of high–dose intravenous magnesium sulfate to control myoclonic status epilepticus. Fisher RS, et al. **Clin Neuropharmacol** 1988 Dec;11(6):537–44
Long–lasting movement disorder induced by intravenous phenytoin administration for status epilepticus. A case report. Kurata K, et al. **Clin Neuropharmacol** 1988 Oct; 11(5):467–71
Isoflurane for the management of status epilepticus. Meeke RI, et al. **DICP** 1989 Jul–Aug;23(7–8):579–81
High–dose lorazepam therapy for status epilepticus in a pediatric patient. Reincke HM, et al.

Drug Intell Clin Pharm 1988 Nov;22(11):889–90

Suppression of pentylenetetrazol–elicited seizure activity by intraosseous lorazepam in pigs. Jim KF, et al. **Epilepsia** 1989 Jul–Aug;30(4):480–6

Treatment of refractory generalized tonic–clonic status epilepticus with pentobarbital anesthesia after high–dose phenytoin. Osorio I, et al. **Epilepsia** 1989 Jul–Aug; 30(4):464–71

Pharmacokinetics and clinical use of parenteral phenytoin, phenobarbital, and paraldehyde. Ramsay RE. **Epilepsia** 1989;30 Suppl 2:S1–3

Pharmacokinetics and clinical use of benzodiazepines in the management of status epilepticus. Treiman DM. **Epilepsia** 1989;30 Suppl 2:S4–10 (48 ref.)

Emergency management of seizures: an overview. Uthman BM, et al. **Epilepsia** 1989;30 Suppl 2:S33–7

Managing tonic–clonic status epilepticus in children. Hale BR, et al. **Indiana Med** 1989 Apr;82(4):256–60 (14 ref.)

Etomidate infusions for the control of refractory status epilepticus. Yeoman P, et al. **Intensive Care Med** 1989; 15(4):255–9

The effect of ACTH on dopamine beta–hydroxylase activity in cerebrospinal fluid of epileptic children. Suzuki H, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):646–7

Lidocaine for convulsion. Tanaka Y, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):622

Trial of a minimum doses of L–dopa (0.5 mg/kg/day) on intractable epilepsy associated with tuberous sclerosis. Uchiyama A, et al. **Jpn J Psychiatry Neurol** 1988 Sep; 42(3):584–5

Phenobarbital for status [letter] Crawford TO, et al. **Neurology** 1989 Apr;39(4):609

EEG monitoring of prolonged thiopentone administration for intractable seizures and status epilepticus in infants and young children. Tasker RC, et al. **Neuropediatrics** 1989 Aug;20(3):147–53

Valproate hepatotoxicity: two new cases, a summary of others, and recommendations. Fenichel GM, et al. **Pediatr Neurol** 1985 Mar–Apr;1(2):109–13 (31 ref.)

Lorazepam versus diazepam for the treatment of status epilepticus. Giang DW, et al. **Pediatr Neurol** 1988 Nov–Dec;4(6):358–61

Isoflurane anaesthesia for status epilepticus [letter] Lippert MM. **S Afr Med J** 1989 Apr 1;75(7):350–1

[Treatment of refractory status convulsivus with chlormethiazole] García García MJ, et al. **An Esp Pediatr** 1988 Oct;29(4):324–6 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Etiology and mortality of status epilepticus in children. A recent update. Phillips SA, et al. **Arch Neurol** 1989 Jan; 46(1):74–6

Status epilepticus in children: etiology, clinical features, and outcome. Dunn DW. **J Child Neurol** 1988 Jul;3(3):167–73

[Primarily electric status epilepticus: complication of severe idiopathic malaise in infants] Nogues B, et al. **Ann Pediatr (Paris)** 1988 Sep;35(7):495–8 (Eng. Abstr.) **(Fre)**

[A case of Epstein–Barr virus encephalitis presenting as status epilepticus] Kubota F, et al. **Rinsho Shinkeigaku** 1988 Jul; 28(7):751–5 (Eng. Abstr.) **(Jpn)**

[A case of aseptic meningoencephalitis with recurrent abnormal behavior, status epilepticus and aphthous stomatitis, improved by acyclovir] Shimada K, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):367–70 (Eng. Abstr.) **(Jpn)**

[A case of unmanageable status epilepticus due to a post–traumatic fronto–orbital false cerebral hernia] Zakrzhevskii DV, et al. **Vrach Delo** 1988 Sep;(9):91–3 **(Rus)**

METABOLISM

Local cerebral glucose utilization during status epilepticus in newborn primates. Fujikawa DG, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1160–7

Functional [14C]2–deoxyglucose mapping of progressive states of status epilepticus induced by amygdala stimulation in rat. Handforth A, et al. **Brain Res** 1988 Sep 13; 460(1):94–102

Distribution of diphenylhydantoin in the brain during experimental status epilepticus of the cat. Sechi GP, et al. **Epilepsy Res** 1987 May;1(3):173–7

Status epilepticus–induced hippocampal damage is modulated by glucose availability. Sapolsky RM, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):157–62

Induction of stress protein HSP70 in nerve cells after status epilepticus in the rat. Vass K, et al. **Neurosci Lett** 1989 May 22;100(1–3):259–64

MORTALITY

Etiology and mortality of status epilepticus in children. A recent update. Phillips SA, et al. **Arch Neurol** 1989 Jan; 46(1):74–6

Low morbidity and mortality of status epilepticus in children. Maytal J, et al. **Pediatrics** 1989 Mar;83(3):323–31

PATHOLOGY

Neuronal lesions in mercaptopropionic acid–induced status epilepticus. O'Connell BK, et al. **Acta Neuropathol (Berl)** 1988;77(1):47–54

PHYSIOPATHOLOGY

Status epilepticus in the elderly: etiology, seizure type and outcome. Sung CY, et al. **Acta Neurol Scand** 1989 Jul; 80(1):51–6

Status epilepticus in children. Yager JY, et al. **Can J Neurol Sci** 1988 Nov;15(4):402–5

Role of excitatory amino acids in brain injury caused by hypoxia–ischemia, status epilepticus, and hypoglycemia. Clark GD. **Clin Perinatol** 1989 Jun;16(2):459–74 (57 ref.)

Self–sustaining limbic status epilepticus induced by 'continuous' hippocampal stimulation: electrographic and behavioral characteristics. Lothman EW, et al. **Epilepsy Res** 1989 Mar–Apr;3(2):107–19

Aphasic status epilepticus. Primavera A, et al. **Eur Neurol** 1988;28(5):255–7

Kindling–based status epilepticus: effect of norepinephrine depletion with 6–hydroxydopamine. McIntyre DC, et al. **Exp Neurol** 1989 Apr;104(1):10–4

Clinical significance of periodic lateralized epileptiform discharges: relationship with status epilepticus. Snodgrass SM, et al. **J Clin Neurophysiol** 1989 Apr;6(2):159–72

Alteration of regional cerebral metabolic rate for glucose at interictal and ictal stages in a case of epilepsy with electrical status epilepticus during slow sleep. Fueki N, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):611–2

A comparative study of absence status epilepticus between children and adults. Fujiwara T, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):497–508

A case of complex partial status epilepticus. Fukunishi I, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):601–2 (4 ref.)

Petit mal status—reappraisal and its clinical manifestation. Hosokawa K. **Jpn J Psychiatry Neurol** 1988 Sep; 42(3):495–6

Nonconvulsive status epilepticus with continuous diffuse spike–and–wave discharges during sleep in childhood. Kobayashi K, et al. **Jpn J Psychiatry Neurol** 1988 Sep; 42(3):509–14

Comparing "absence status" to "complex partial status". Miyasaka M. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):521–3 (9 ref.)

Complex partial status epilepticus. Murasaki M, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):515–9 (17 ref.)

Lennox–Gastaut syndrome. Considerations in its concept and categorization. Ohtahara S. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):535–42 (25 ref.)

Cognitive function during absence seizures. Sengoku A, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):558–9

Nonconvulsive status epilepticus. Yagi K, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):531–2

PREVENTION & CONTROL

Status epilepticus: it's not what we've thought or taught. Freeman JM. **Pediatrics** 1989 Mar;83(3):444–5

RADIONUCLIDE IMAGING

Cerebral glucose metabolism in five patients with Lennox–Gastaut syndrome. Iinuma K, et al. **Pediatr Neurol** 1987 Jan–Feb;3(1):12–8

THERAPY

Status epilepticus in children and adults. Lacey DJ. **J Clin Psychiatry** 1988 Dec;49 Suppl:33–6 (25 ref.)

"Pseudo" status epilepticus [letter] Burton JL. **Lancet** 1989 Sep 9;2(8663):632

[Emergencies in general practice. First aid in grand mal seizures and status epilepticus. A seizure does not mean epilepsy] Stefan H. **Fortschr Med** 1988 Oct 10;106(29):26, 28 **(Ger)**

STEALING see **THEFT**

STEAM

In vivo recovery and half–life time of a steam–treated factor IX concentrate in hemophilia B patients. The influence of reagents and standards. Köhler M, et al. **Biut** 1988 Dec; 57(6):341–5

Spore tests for low temperature steam with formaldehyde sterilizers [letter] Tompkins DS, et al. **J Hosp Infect** 1988 Oct;12(3):237

[The secret of controlled steam] Helamaa E, et al. **Duodecim** 1988;104(8):584–90 **(Fin)**

ADVERSE EFFECTS

Car radiator burns: a report on 72 cases. al–Baker AA, et al. **Burns** 1989 Aug;15(4):265–7

[Atmocausis vaporization. Most severe internal burns following intrauterine use of steam] Hardt W, et al. **Geburtshilfe Frauenheilkd** 1989 Mar;49(3):293–5 (Eng. Abstr.) **(Ger)**

[Characteristics of injuries of the respiratory tract caused by steam and boiling water] Boenko SK. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):34–7 (Eng. Abstr.) **(Rus)**

STEARATES see under **STEARIC ACIDS**

STEARIC ACIDS

Prevention of pressure sores. A comparison of new and old pressure sore treatments. van der Cammen TJ, et al. **Br J Clin Pract** 1987 Nov;41(11):1009–11

Transverse location of new fluorene based depth dependent fluorescent probes in membranes—quenching studies with 9,10–dibromostearic acid. Lala AK, et al. **Photochem Photobiol** 1989 Jun;49(6):763–7

ADMINISTRATION & DOSAGE

Effect of dietary stearic acid on plasma cholesterol level [letter] **N Engl J Med** 1988 Oct 20;319(16):1089–91

ADVERSE EFFECTS

Cosmetic allergy from stearic acid and glyceryl stearate. de Groot AC, et al. **Contact Dermatitis** 1988 Jul;19(1):77–8

[The early and late effects of a radiation lesion by 14C(14C–stearic acid)] Vasilenko IIa, et al. **Radiobiologiia** 1989 May–Jun;29(3):422–5 (Eng. Abstr.) **(Rus)**

ANALYSIS

Human tissue factor contains thioester–linked palmitate and stearate on the cytoplasmic half–cystine. Bach R, et al. **Biochemistry** 1988 Jun 14;27(12):4227–31

Serum albumin binding of palmitate and stearate. Multiple binding theory for insoluble ligands. Brodersen R, et al. **Eur J Biochem** 1989 Jun 1;182(1):19–25

Gas chromatographic determination of calcium stearate in polyethylene food packaging sheets. Tan S, et al. **J Chromatogr** 1988 Aug 5;447(1):198–201

Chemical, physical, and lubricant properties of magnesium stearate. Ertel KD, et al. **J Pharm Sci** 1988 Jul;77(7):625–9

BLOOD

Erythrocyte membrane stearic and oleic acid ratios in breast cancer. Thomas BS, et al. **Br J Surg** 1988 Nov; 75(11):1078–9

cis–9,10–epoxystearic acid in human leukocytes: isolation and quantitative determination. Fahlstadius P. **Lipids** 1988 Nov; 23(11):1015–8

CEREBROSPINAL FLUID

[Gas chromatography–mass spectroscopy detection of tuberculostearic acid in the cerebrospinal fluid as a diagnostic aid in the differential diagnosis of tuberculoid meningitis] Roelcke U, et al. **Nervenarzt** 1989 May; 60(5):288–90 **(Ger)**

ISOLATION & PURIFICATION

Radiolabeled 9– or 10–monoiodostearic acid and 9– or 10–monoiodostearyl carnitine—I. Synthesis and purification. Reed KW, et al. **Int J Rad Appl Instrum [A]** 1989;40(1):27–31

[9,12,13–Trihydroxy–10(E)–octadecenoic and 9,12,13–trihydroxy–10,11–epoxy–octadecanoic acids—new antistress substances isolated from licorice] Shirinian EA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov–Dec;(6):932–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Induction of an endothermic transition in the Arrhenius plot of fatty acid uptake by lipid–depleted ascites tumor cells. Haeffner EW, et al. **Biochim Biophys Acta** 1989 Sep 11; 1005(1):27–33

Fatty acyl coupled catalase. Rosen G, et al. **Biochim Biophys Acta** 1989 Feb 23;994(3):264–9

Interaction of a hydrophobic model peptide and its fatty acid derivative with lipid vesicles. Joseph M, et al. **FEBS Lett** 1988 Oct 10;238(2):411–4

Diagnosis of nasopharyngeal tuberculosis by detection of tuberculostearic acid in formalin fixed, paraffin wax embedded tissue biopsy specimens. Arnold M, et al. **J Clin Pathol** 1988 Dec;41(12):1334–6

The influence of incorporation of octadecenoic acid on the cell–associated fructosyltransferase and the extracellular glucosyltransferase activities of Streptococcus salivarius. Pitty LJ, et al. **J Gen Microbiol** 1987 Dec;133 (Pt 12):3565–73

[Hepatic microsomal delta 9 desaturation of stearic acid in the spontaneously diabetic female BB rat] Mimouni V, et al. **C R Soc Biol (Paris)** 1988;182(3):324–34 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Evidence for the regulation of fatty acid utilization in human sperm by docosahexaenoic acid. Jones RE, et al. **Biol Reprod** 1988 Aug;39(1):76–80

Fluidization of brain membranes by A2C does not produce anesthesia and does not augment muscimol–stimulated 36Cl– influx. Buck KJ, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):359–67

Effects of thiastearic acids on growth and on dihydrosterculic acid and other phospholipid fatty acyl groups of Leishmania promastigotes. Beach DH, et al. **Mol Biochem Parasitol** 1989 Jun 1;35(1):57–66

RADIATION EFFECTS

UVB irradiation and distribution of arachidonic acid (20:4) and stearic acid (18:0) in human keratinocytes. Punnonen K, et al. **Photodermatol** 1989 Apr;6(2):85–8

THERAPEUTIC USE

[Effect of glycine–steatamide or glutamic acid palmitamide on oral dyskinesia, obtained by a single administration of haloperidol combined with GABA–linoleamide in rats] Vamvakidès A. **Ann Pharm Fr** 1988;46(4):261–6 (32 ref.) (Eng. Abstr.) (Fre)

STEARYL-COA DESATURASE see under **FATTY ACID DESATURASES**

STEATITIS

PATHOLOGY

Pansteatitis in great blue herons. Nichols DK, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1110–2

STEATORRHEA see **CELIAC DISEASE**

STEEL see under **ALLOYS**

STEELE-RICHARDSON-OLSZEWSKI SYNDROME see **SUPRANUCLEAR PALSY, PROGRESSIVE**

STEIN-LEVENTHAL SYNDROME see **POLYCYSTIC OVARY SYNDROME**

STELLATE GANGLION

Ganglionic blockade and aphasia therapy [letter] Floyd JB Jr. **Hosp Pract [Off]** 1989 Apr 30;24(4A):18

ANATOMY & HISTOLOGY

[Localization of neurons, making projections via the postganglionic nerves of the stellate ganglion] Kade AKh, et al. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):22–5 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Stellate ganglion block with bupivacaine. Minimum effective concentration of bupivacaine and the effect of added potassium. Hardy PA. **Anaesthesia** 1989 May;44(5):398–9

Cardioacceleration produced by close intra-arterial injection of neurotensin into the stellate ganglion of the cat. Bachoo M, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):408–12

METABOLISM

Dopamine receptors in the stellate ganglion of the dog. Kohli JD, et al. **Eur J Pharmacol** 1989 May 19;164(2):265–72

PATHOLOGY

Long QT syndrome associated with inflammatory degeneration of the stellate ganglia. Pfeiffer D, et al. **Clin Cardiol** 1989 Apr;12(4):222–4

PHYSIOLOGY

Slow cardioacceleration mediated by noncholinergic transmission in the stellate ganglion of the cat. Bachoo M, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1066–74

Coronary sinus norepinephrine concentrations during ventricular tachycardia induced by left stellate ganglion stimulation in dogs. Nadeau R, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):419–21

Differential response to right and left ansae subclaviae stimulation of early afterdepolarizations and ventricular tachycardia induced by cesium in dogs. Ben-David J, et al. **Circulation** 1988 Nov;78(5 Pt 1):1241–50

The effect of sustained stellate ganglion stimulation on left ventricular contractility in the dog. Kanda H, et al. **Tohoku J Exp Med** 1988 Oct;156(2):135–48

SURGERY

Electrophysiologic actions and antifibrillatory efficacy of subacute left stellectomy in a conscious, post-infarction canine model of ischemic ventricular fibrillation. Nelson SD, et al. **Int J Cardiol** 1989 Mar;22(3):365–76

STEM CELL ASSAY see **COLONY-FORMING UNITS ASSAY**

STEM CELLS

The recovery of circulating progenitor cells after chemotherapy in AML and ALL and its relation to the rate of bone marrow regeneration after aplasia. Reid CD, et al. **Br J Haematol** 1989 May;72(1):21–7

Decreased frequency of bone marrow NK progenitors in aplastic anaemia. Yoda Y, et al. **Br J Haematol** 1989 Apr; 71(4):545–9

Circulating colony-forming units of granulocytes and monocytes/macrophages in systemic lupus erythematosus. López-Karpovitch X, et al. **Clin Exp Immunol** 1989 Jul; 77(1):43–6

Production of chimaeric mice containing embryonic stem (ES) cells carrying a homoeobox Hox 1.1 allele mutated by homologous recombination. Zimmer A, et al. **Nature** 1989 Mar 9;338(6211):150–3

ANALYSIS

Transient coappearance of glucagon and insulin in the progenitor cells of the rat pancreatic islets. Hashimoto T, et al. **Anat Embryol (Berl)** 1988;178(6):489–97

Restriction fragment analysis of V preB and lambda 5 within the genus Mus. D'Hoostelaere LA, et al. **Eur J Immunol** 1989 Jan;19(1):37–42

Expression of CSF-1-receptor-related proteins in muscular stem cells. Leibovitch SA, et al. **Oncogene Res** 1989; 4(2):157–62

CLASSIFICATION

Human normal CD5+ B lymphocytes can be induced to differentiate to CD5- B lymphocytes with germinal center cell features. Caligaris-Cappio F, et al. **Blood** 1989 Apr; 73(5):1259–63

Human postnatal CD4- CD8- CD3- thymic T cell precursors differentiate in vitro into T cell receptor delta-bearing cells. Denning SM, et al. **J Immunol** 1989 May 1;142(9):2988–97

Lymphomas with acquired mouse mammary tumor virus proviruses resemble distinct prethymic and intrathymic phenotypes defined in vivo. Meyers S, et al. **J Immunol** 1989 May 1;142(9):3342–50

The stem cell antigens Sca-1 and Sca-2 subdivide thymic and peripheral T lymphocytes into unique subsets. Spangrude GJ, et al. **J Immunol** 1988 Dec 1; 141(11):3697–707

CYTOLOGY

Purification of murine hemopoietic stem cells and committed progenitors by fluorescence activated cell sorting using wheat germ agglutinin and monoclonal antibodies. Bauman JG, et al. **Acta Histochem Suppl (Jena)** 1988;36:241–53

Initiation and duration of myogenic precursor cell replication in transplants of intact skeletal muscles: an autoradiographic study in mice. Roberts P, et al. **Anat Rec** 1989 May;224(1):1–6

Characteristics of osteoclast precursor-like cells grown from mouse bone marrow. van de Wijngaert FP, et al. **Bone Miner** 1987 Nov;3(2):111–23

Purification of erythroid progenitor cells and characterization of erythropoietin receptors. Krantz SB, et al. **Br J Cancer Suppl** 1988 Dec;9:31–5

Existence of slow-cycling limbal epithelial basal cells that can be preferentially stimulated to proliferate: implications on epithelial stem cells. Cotsarelis G, et al. **Cell** 1989 Apr 21;57(2):201–9

Kinetics of thymus repopulation by intrathymic progenitors after intravenous injection: evidence for successive repopulation by an IL-2R+, Pgp-1- and by an IL-2R-, Pgp-1+ progenitor. Lesley J, et al. **Cell Immunol** 1988 Dec;117(2):378–88

Bone marrow fibroblast colony-forming cells are osteogenic stem cells [letter] Beranek JT. **Cell Tissue Kinet** 1988 Sep; 21(5):375–7

The cell cycle of spermatogonial colony forming stem cells in the CBA mouse after neutron irradiation. Bootsma AL, et al. **Cell Tissue Kinet** 1988 Mar;21(2):105–13

Cryopreservation of human megakaryocytic progenitor cells (CFU-MK): influence of culture conditions. Berthier R, et al. **Cryobiology** 1989 Jun;26(3):265–72

Determination of numbers of osteoprogenitors present in isolated fetal rat calvaria cells in vitro. Bellows CG, et al. **Dev Biol** 1989 May;133(1):8–13

Role of interstitial cell migration in generating position-dependent patterns of nerve cell differentiation in Hydra. Fujisawa T. **Dev Biol** 1989 May;133(1):77–82

Determination and regulation in the pigment cell lineage of the ascidian embryo. Nishida H, et al. **Dev Biol** 1989 Apr; 132(2):355–67

Differentiation of neuron-like cells in cultured rat optic nerves: a neuron or common neuron-glia progenitor? Omlin FX, et al. **Dev Biol** 1989 May;133(1):247–53

Cyclic AMP regulates the rate of differentiation of oligodendrocytes without changing the lineage commitment of their progenitors. Raible DW, et al. **Dev Biol** 1989 Jun;133(2):437–46

Differentiation of mammary stem cells in vivo and in vitro. Barraclough R, et al. **Environ Health Perspect** 1989 Mar; 80:39–48 (90 ref.)

Integrated control of proliferation and differentiation of mesenchymal stem cells. Filipak M, et al. **Environ Health Perspect** 1989 Mar;80:117–25 (54 ref.)

Mouse peritoneal macrophages produce CFU-gm and CFU-meg growth-promoting factors. Sugimoto M, et al. **Exp Cell Biol** 1988;56(1-2):29–38

Culture of putative Langerhans cell bone marrow precursors: characterization of their phenotype. de Fraissinette A, et al. **Exp Hematol** 1988 Oct;16(9):764–8

Role of different epithelial cell types in liver ontogenesis, regeneration and neoplasia. Marceau N, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):336–41 (72 ref.)

An in vivo analysis of c-myc and c-fos expression during terminal erythroid differentiation in mouse spleen progenitors. Badiavas EV, et al. **Int J Cell Cloning** 1989 May;7(3):179–89

Effects of inhibitors and activators of protein kinase C on late erythroid progenitor (CFU-e) colony formation in vitro. Jenis DM, et al. **Int J Cell Cloning** 1989 May; 7(3):190–202

Thrombin is a potent mitogen for rat astroblasts but not for oligodendroblasts and neuroblasts in primary culture. Perraud F, et al. **Int J Dev Neurosci** 1987;5(3):181–8

Osteoclast formation in vitro from progenitor cells present in the adult mouse circulation. Helfrich MH, et al. **J Bone Miner Res** 1989 Jun;4(3):325–34

Species-specific structural differences in the alpha 1 + alpha 2 domains determine the frequency of murine cytotoxic T cell precursors stimulated by human and murine class I molecules. Engelhard VH, et al. **J Immunol** 1988 Sep 15;141(6):1835–9

Functional analysis of monocyte-macrophages derived from nonadherent cord blood progenitor cells: correlation with the ontogeny of cell surface proteins. Santiago-Schwarz F, et al. **J Leukoc Biol** 1989 Sep;46(3):230–8

Studies on sensitivity of human GM-CFU and L-CFU to hyperthermic killing in vitro. Da WM, et al. **Leuk Res** 1989; 13(3):217–20

Stimulation of CFU-Mk colony growth by normal plasma and plasma from myelodysplastic patients. Podolak-Dawidziak M. **Leuk Res** 1989;13(3):213–5

Characterization of clonogenic cells in refractory anemia with excess of blasts (RAEB-CFU): response to recombinant hematopoietic growth factors and maturation phenotypes. Schouten HC, et al. **Leuk Res** 1989; 13(3):245–51

Epithelial-mesenchymal interactions in intestinal epithelial differentiation. Kedinger M, et al. **Scand J Gastroenterol Suppl** 1988;151:62–9

DRUG EFFECTS

Uridine reverses the toxicity of 3'-azido-3'-deoxythymidine in normal human granulocyte-macrophage progenitor cells in vitro without impairment of antiretroviral activity. Sommadossi JP, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):997–1001

Inhibition against CFU-C and CFU-E colony formation by soluble factor(s) derived from hairy cells. Taniguchi N, et al. **Blood** 1989 Mar;73(4):907–13

Growth of osteoclast precursor-like cells from whole mouse bone marrow: inhibitory effect of CSF-1. van de Wijngaert FP, et al. **Bone Miner** 1987 Nov;3(2):97–110

Effect of alpha interferon on growth of leukemic and normal hematopoietic progenitors. Synergism with H2 histamine receptor antagonists. Douer D, et al. **Exp Hematol** 1989 Jun;17(5):443–8

Effects of a new bifunctional alkylating agent (PTT-119) on in vitro growth of human cell lines and normal myeloid progenitors (CFU-GM). Lemoli RM, et al. **Haematologica (Pavia)** 1988 May-Jun;73(3):195–200

Inhibiton of the colony-forming capacity of human T-lymphocytes exerted by theophylline. Ghio R, et al. **Int J Immunopharmacol** 1988;10(3):299–302

Toxicity of coumarin (1,2-benzopyrone) on human peripheral blood mononuclear cells and human and murine bone marrow progenitor stem cells. Gallicchio VS, et al. **J Biol Response Mod** 1989 Apr;8(2):116–21

Recombinant human granulocyte-colony stimulating factor and recombinant human macrophage-colony stimulating factor synergize in vivo to enhance proliferation of granulocyte-macrophage, erythroid, and multipotential progenitor cells in mice. Broxmeyer HE, et al. **J Cell Biochem** 1988 Oct;38(2):127–36

Inhibition of pluripotential embryonic stem cell differentiation by purified polypeptides. Smith AG, et al. **Nature** 1988 Dec 15;336(6200):688–90

Effect of antibiotics on colony formation from mouse granulocyte-macrophage progenitors (CFU-GM), megakaryocyte progenitors (CFU-M) and erythrocyte progenitors (CFU-E, BFU-E) in vitro. Maruyama T, et al. **Pharmacol Toxicol** 1989 May;64(5):391–6

[The effect of purified mouse GM-CSF on CFU-C colony growth in serum-free cultures] Sato T, et al. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1;10(3):289–96 (Eng. Abstr.) (Jpn)

[Effects of lipoxin B on colony-forming capacity of human peripheral blood mononuclear cells in diffusion chambers] Popov GK, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):80–3 (Eng. Abstr.) (Rus)

[T-lymphocyte precursors--the target cells of thymocyte growth factor] Protsak EA, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):462–4 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Application of monoclonal antibodies in the antigenic characteristics of normal myeloid progenitor cells and clonogenic blasts in acute myeloid leukaemia. Robak T. **Arch Immunol Ther Exp (Warsz)** 1988;36(1):71–84

Antigenic characteristics of erythropoietin dependent and independent erythroid progenitors (BFU-E and CFU-E) in polycythaemia vera and idiopathic myelofibrosis defined by monoclonal antibodies. Robak T. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):733–47

MLR3 molecule is an activation antigen shared by human B, T lymphocytes and T cell precursors. Risso A, et al. **Eur J Immunol** 1989 Feb;19(2):323–8

Identification and characterization of 114/A10, an antigen

highly expressed on the surface of murine myeloid and erythroid progenitor cells and IL-3-dependent cell lines. Dougherty GJ, et al. **Exp Hematol** 1989 Sep;17(8):877–82

Modulation of macrophage Ia expression by lipopolysaccharide: stem cell requirements, accessory lymphocyte involvement, and IA-inducing factor production. Wentworth PA, et al. **Infect Immun** 1989 Jul; 57(7):2028–36

Interleukin-2 (rIL-2)-induced lymphokine-activated killer (LAK) cells and their precursors express the VGO1 antigen. Denegri JF, et al. **J Clin Immunol** 1989 Jul; 9(4):362–7

Studies of lymphokine-activated killer (LAK) cells. I. Evidence using novel monoclonal antibodies that most human LAK precursor cells share a common surface marker. Morris DG, et al. **J Exp Med** 1989 Mar 1; 169(3):717–36

The MRC OX-22- CD4+ T cells that help B cells in secondary immune responses derive from naive precursors with the MRC OX-22+ CD4+ phenotype. Powrie F, et al. **J Exp Med** 1989 Mar 1;169(3):653–62

Naturally occurring cytotoxic T lymphocyte precursors with specificity for an Ig idiotype. Dohi Y, et al. **J Immunol** 1988 Dec 1;141(11):3804–9

Functional heterogeneity of macrophage precursor cells from spleen of Leishmania donovani-infected and untreated mice. Hockertz S, et al. **J Immunol** 1989 Apr 1; 142(7):2489–94

Normal B cell precursors responsive to recombinant murine IL-7 and inhibition of IL-7 activity by transforming growth factor-beta. Lee G, et al. **J Immunol** 1989 Jun 1; 142(11):3875–83

Characterization of anti-CD8-resistant cytolytic T lymphocytes induced by multivalent cross-linking of CD8 on precursor cells. McCarthy SA, et al. **J Immunol** 1989 Oct 1;143(7):2112–9

Induction of anti-CD8 resistant cytotoxic T lymphocytes by anti-CD8 antibodies. Functional evidence for T cell signaling induced by multi-valent cross-linking of CD8 on precursor cells. McCarthy SA, et al. **J Immunol** 1988 Dec 1;141(11):3737–46

An ongoing in vivo immune response affects the abundancy and differentiation of lymphokine-activated killer cell precursors, but does not influence their broad spectrum target reactivity. Vanhaesebroeck B, et al. **J Immunol** 1989 Aug 15;143(4):1396–402

Chromosomal translocation in a human leukemic stem-cell line disrupts the T-cell antigen receptor delta-chain diversity region and results in a previously unreported fusion transcript. Begley CG, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2031–5

Quantitative analysis of precursors frequency of rheumatoid factor (RF) producing human B cells. Vischer TL, et al. **Scand J Rheumatol Suppl** 1988;75:123–6

Priming of cytotoxic T lymphocyte precursors by donor-specific transfusions and modulation post transplant in relation to steroid withdrawal. Burlingham WJ, et al. **Transplant Proc** 1988 Dec;20(6):1166–8

[The expression of antigens, detectable with ICO-series monoclonal antibodies, on the surfaces of cells forming granulocyte and macrophage colonies in semiliquid agar] Savel'eva EV, et al. **Eksp Onkol** 1989;11(1):46–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Biochemical assays of hemoglobin in normal human erythroid clones. Barr RD, et al. **Am J Hematol** 1989 Jan;30(1):27–31

Studies on the myeloid synergistic factor from 5637: comparison with interleukin-1 alpha. McNiece IK, et al. **Blood** 1989 Mar;73(4):919–23

DNA methylation and cell memory. Riggs AD. **Cell Biophys** 1989 Aug-Oct;15(1-2):1–13 (50 ref.)

Cytoplasmic, nuclear, membrane-bound and secreted [35S]methionine-labelled polypeptide pattern in differentiating fibroblast stem cells in vitro. Francz PI, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):231–9

17-beta-estradiol increases mitogenic activity of medium from cultured preadipocytes of massively obese persons. Cooper SC, et al. **J Clin Invest** 1989 Jun;83(6):1925–9

Effect of human recombinant IL-2 on murine macrophage precursors. Involvement of a receptor distinct from the p55 (Tac) protein. Baccarini M, et al. **J Immunol** 1989 Jan 1;142(1):118–25

Clonal analysis of autoantibody-producing cell precursors in the preimmune B cell repertoire. McHeyzer-Williams MG, et al. **J Immunol** 1988 Dec 15;141(12):4118–23

The DJH complex remains active in recombination to VH segments after the loss of mu-chain expression in mu-positive pre-B cells. Maeda T, et al. **J Immunol** 1989 May 15;142(10):3652–6

Clonal analysis of autoantibody-producing cell precursors in the preimmune B cell repertoire [letter] Sinclair NR. **J Immunol** 1989 May 15;142(10):3726–7

Replication-defective vectors of reticuloendotheliosis virus transduce exogenous genes into somatic stem cells of the unincubated chicken embryo. Bosselman RA, et al. **J Virol** 1989 Jun;63(6):2680–9

Mouse embryonic stem cells and reporter constructs to detect developmentally regulated genes. Gossler A, et al. **Science** 1989 Apr 28;244(4903):463–5

Targeting of nonexpressed genes in embryonic stem cells via homologous recombination. Johnson RS, et al. **Science** 1989 Sep 15;245(4923):1234–6

MICROBIOLOGY

Epstein-Barr virus DNA sequences in precursor monocyte-macrophage cell lines established from the bone marrow of children with maturation defects of haematopoiesis. Revoltella RP, et al. **J Gen Virol** 1989 May; 70 (Pt 5):1203–15

PATHOLOGY

Suppression by bone marrow but not by blood T lymphocytes of autologous and allogeneic granulocytic stem cells in a case of lymphoproliferative T-cell syndrome. Marinof C, et al. **Am J Hematol** 1989 May;31(1):65–6

Human nasal polyp epithelial basophil/mast cell and eosinophil colony-stimulating activity. The effect is T-cell-dependent. Ohnishi M, et al. **Am Rev Respir Dis** 1988 Sep;138(3):560–4

Myeloid progenitor cells (CFU-GM) predict engraftment kinetics in autologous transplantation in children. Emminger W, et al. **Bone Marrow Transplant** 1989 Jul; 4(4):415–20

Normal myeloid progenitors (CFU-GM) in multiple myeloma: a preliminary study in view of autologous BMT. Lemoli RM, et al. **Bone Marrow Transplant** 1989 Jul; 4(4):373–7

Improved CFU-GM recoveries from marrows of neuroblastoma patients using a slightly modified immunomagnetic depletion technique [letter] Lopez M, et al. **Bone Marrow Transplant** 1989 Jul;4(4):453–4

Effect of recombinant interferons on hairy cell leukemia progenitors. Masuda M, et al. **Int J Cell Cloning** 1989 Mar; 7(2):120–8

The mast cell-committed progenitor. II. W/Wv mice do not make mast cell-committed progenitors and S1/S1d fibroblasts do not support development of normal mast cell-committed progenitors. Jarboe DL, et al. **J Immunol** 1989 Apr 1;142(7):2418–23

Establishment of a leukemic cell model for studying human pre-B to B cell differentiation. Wörmann B, et al. **J Immunol** 1989 Jan 1;142(1):110–7

Studies on the relationship between leukemic fibroblast colony forming cell and hemopoietic cells. Chen Y, et al. **J Tongji Med Univ** 1988;8(4):219–22

[Studies on CFU-Mix in 54 cases of leukemia and myelodysplastic syndrome] Chen Y, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jan;28(1):35–8, 62–3 (Eng. Abstr.) **(Chi)**

[Precursor cells of newly formed connective tissue in inflammatory foci in various organs in mice] Voskresenskiĭ DK, et al. **Ontogenez** 1988 May-Jun;19(3):247–52 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Characterization of human marrow stromal cells: role in progenitor cell binding and granulopoiesis. Liesveld JL, et al. **Blood** 1989 May 15;73(7):1794–800

Pre-pre-B cells containing only cytoplasmic B220 can be induced by dendritic cells and T cells to differentiate in vitro. Saleh F, et al. **Cell Immunol** 1989 Oct 1;123(1):44–59

Evidence that the nerve controls molecular identity of progenitor cells for limb regeneration. Fekete DM, et al. **Development** 1988 Jul;103(3):567–73

Bu-1 antigen expression as a marker for B cell precursors in chicken embryos. Houssaint E, et al. **Eur J Immunol** 1989 Feb;19(2):239–43

B cell precursors are present in the thymus during early development. Kimoto H, et al. **Eur J Immunol** 1989 Jan; 19(1):97–104

The epigenetic influences of bone marrow and fetal liver stroma cells on the developmental potential of Ly-1+ pro-B lymphocyte clones. Palacios R, et al. **Eur J Immunol** 1989 Feb;19(2):347–56

Developmental status and reconstitution potential of subpopulations of murine thymocytes. Scollay R, et al. **Immunol Rev** 1988 Aug;104:81–120 (71 ref.)

The doubling time of regenerating clonogenic cells in the crypts of the irradiated mouse small intestine. Potten CS, et al. **Int J Radiat Biol** 1988 Dec;54(6):1041–51

Nonterminally differentiated cells express decreased growth factor responsiveness. Hoerl BJ, et al. **J Cell Physiol** 1989 Apr;139(1):68–75

Varying capacities for replication of rat adipocyte precursor clones and adipose tissue growth. Wang H, et al. **J Clin Invest** 1989 May;83(5):1741–6

The mast cell-committed progenitor. I. Description of a cell capable of IL-3-independent proliferation and differentiation without contact with fibroblasts. Jarboe DL, et al. **J Immunol** 1989 Apr 1;142(7):2405–17

Precursor immigration and thymocyte succession during larval development and metamorphosis in Xenopus. Turpen JB, et al. **J Immunol** 1989 Jan 1;142(1):41–7

Development of inward currents in chick sensory and autonomic neuronal precursor cells in culture. Gottmann K, et al. **J Neurosci** 1988 Oct;8(10):3722–32

What are stem cells and how are they controlled? Hall PA. **J Pathol** 1989 Aug;158(4):275–7 (17 ref.)

Myeloid leukaemia inhibitory factor maintains the developmental potential of embryonic stem cells. Williams RL, et al. **Nature** 1988 Dec 15;336(6200):684–7

Altering the genome by homologous recombination. Capecchi MR. **Science** 1989 Jun 16;244(4910):1288–92 (24 ref.)

[Review on internal medicine (1986). Recent progress in hematology. Stem cells] Niho Y. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):640–2 (4 ref.) **(Jpn)**

RADIATION EFFECTS

Stem-cell depletion and grid therapy [letter] Maruyama Y, et al. **Br J Radiol** 1989 Apr;62(736):386–7

Response of human bone marrow progenitor cells to X-rays in vitro. Petkau A, et al. **Int J Radiat Biol** 1988 Oct; 54(4):593–600

The radiosensitivity of kidney colony-forming cells: a short-term assay in situ in the mouse. Ewen C, et al. **Radiat Res** 1989 Apr;118(1):169–79

Dose-response studies on the spermatogonial stem cells of the rhesus monkey (Macaca mulatta) after X irradiation. van Alphen MM, et al. **Radiat Res** 1989 Sep;119(3):443–51

Chemical radioprotection to bone marrow stem cells after whole body gamma irradiation to mice. Dey J, et al. **Strahlenther Onkol** 1988 Nov;164(11):681–3

[Cellular repair of sublethal radiation damage in 2 subpopulations of the CFUs from embryonal liver and bone marrow of adult mice] Gan OI, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):89–91 (Eng. Abstr.) **(Rus)**

[Comparative radiosensitivity of CFUs of the mouse bone marrow and embryonal liver forming 7- and 11-day colonies] Gan OI, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):93–5 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

Autograft using peripheral blood stem cells collected after high dose melphalan in high risk multiple myeloma [letter] Henon P, et al. **Br J Haematol** 1988 Oct;70(2):254–5

In-utero transplantation of stem cells in bare lymphocyte syndrome [letter] Touraine JL, et al. **Lancet** 1989 Jun 17; 1(8651):1382

Mechanism of rejection of fetal pig proislet xenografts in mice. Simeonovic CJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2728–9

Transplantation of proliferated human pre-islet cells into diabetic patients with renal transplants. Voss P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2751–6

ULTRASTRUCTURE

Cell lineage in the rat cerebral cortex: a study using retroviral-mediated gene transfer. Price J, et al. **Development** 1988 Nov;104(3):473–82

A morphologically distinct candidate for an epithelial stem cell in mouse mammary gland. Smith GH, et al. **J Cell Sci** 1988 May;90 (Pt 1):173–83

STEM CELLS, HEMATOPOIETIC see **HEMATOPOIETIC STEM CELLS**

STEM CELLS, NEOPLASTIC see **TUMOR STEM CELLS**

STENOCARDIA see **ANGINA PECTORIS**

STEPHANURUS DENTATUS INFECTION see under **NEMATODE INFECTIONS**

STEREOGNOSIS

Hemispace and information control by the two cerebral hemispheres: which interaction? Tressoldi PE. **Brain Cogn** 1989 May;10(1):44–53

Spatial performance and perceptual asymmetries in beginning readers: shift of hand advantage in dichhaptic tasks. Walch JP, et al. **Brain Cogn** 1989 May;10(1):1–17

Comparison of stereognosis and two-point discrimination testing of the hands of children with cerebral palsy. Bolanos AA, et al. **Dev Med Child Neurol** 1989 Jun;31(3):371–6

Tactual learning and cross-modal transfer of an oddity problem in young children. Krekling S, et al. **J Exp Child Psychol** 1989 Feb;47(1):88–96

Haptic integration of object properties: texture, hardness, and planar contour. Klatzky RL, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):45–57

Perceiving extents of rods by wielding: haptic diagonalization and decomposition of the inertia tensor. Solomon HY, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):58–68

Sensory-perceptual qualities of images. Intons-Peterson MJ, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar; 15(2):188–99

Haptic identification of rotated letters using the left or right hand. Hunt LJ, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):899–906

Influence of cognitive style and interstimulus interval on the hemispheric processing of tactile stimuli. Minagawa N, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1031–9

Tactile recognition of mirror images by children: intermanual transfer and rotation of the palm. Heath B, et al. **Perception** 1988;17(4):535–47

Spatial asymmetries in tactile discrimination of line orientation: a comparison of the sighted, visually impaired, and blind. Lechelt EC. **Perception** 1988;17(5):579–85

Cross-modal transfer of forms between vision and touch. Juurmaa J, et al. **Scand J Psychol** 1988;29(2):95–110

PHYSIOLOGY

The relationship between oral sensation and drooling in persons with cerebral palsy. Weiss-Lambrou R, et al. **Am J Occup Ther** 1989 Mar;43(3):155–61

Left hemispheric interference with nonverbal performance in aphasics: comparison with data from split-brain studies. Hartje W, et al. **Brain Cogn** 1988 Oct;8(2):137–46

STEREOISOMERS

Chiral polymeric reagents for off-line and on-line derivatizations of enantiomers in high-performance liquid chromatography with ultraviolet and fluorescence detection: an enantiomer recognition approach. Chou TY, et al. **Anal Chem** 1989 Jul 15;61(14):1548–58

Racemates or enantiomers: regulatory approaches. Birkett DJ. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):479–83 (13 ref.)

Concerning racemic fixed ratio mixtures. Ariëns EJ. **Drug Des Deliv** 1989 Mar;4(2):163–4

Stereoselectivity, a natural aspect of molecular biology: a blind spot in clinical pharmacology and pharmacokinetics [letter] Ariëns EJ. **Eur J Drug Metab Pharmacokinet** 1988 Oct–Dec;13(4):307–8

First International Symposium on Separation of Chiral Molecules. Paris, May 31–June 2, 1988. Proceedings. **J Chromatogr** 1988 Oct 21;450(2):143–290

Use of hydroxypropyl- and hydroxyethyl-derivatized beta-cyclodextrins for the thin-layer chromatographic separation of enantiomers and diastereomers. Armstrong DW, et al. **J Chromatogr** 1988 Oct 28;452:323–30

Thin-layer chromatographic enantiomeric resolution via ligand exchange. Günther K. **J Chromatogr** 1988 Aug 31; 448(1):11–30

Stereopsis ambiguity in stereo images [letter] Chapuis G. **Nature** 1989 Jun 29;339(6227):670

Stereoselective synthesis of P-homochiral oligo(thymidine methanephosphonates). Lesnikowski ZJ, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11675–89

Mispair formation in DNA can involve rare tautomeric forms in the template. Strazewski P. **Nucleic Acids Res** 1988 Oct 25;16(20):9377–98 (133 ref.)

Stereoselectivity in the action of drugs. Ariëns EJ. **Pharmacol Toxicol** 1989 Apr;64(4):319–20

Stereoselectivity: an issue of significant importance in clinical pharmacology. Lam YW. **Pharmacotherapy** 1988; 8(3):147–57 (121 ref.)

STEREOPHOTOGRAMMETRY see PHOTOGRAMMETRY

STEREOPSIS see DEPTH PERCEPTION

STEREOSCOPIC VISION see DEPTH PERCEPTION

STEREOTAXIC TECHNICS

see related
BRAIN MAPPING

Advances in stereotactic and functional neurosurgery 8. Proceedings of the 8th meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, 1988. **Acta Neurochir Suppl (Wien)** 1989;46:1–114

The relevance of pathological diagnosis for therapy and outcome of brain stem gliomas. Artigas J, et al. **Acta Neurochir Suppl (Wien)** 1988;42:166–9

Pitfalls in diagnostic stereotactic brain surgery. Blaauw G, et al. **Acta Neurochir Suppl (Wien)** 1988;42:161–5

Validity of stereotactic biopsy as a diagnostic tool. Colombo F, et al. **Acta Neurochir Suppl (Wien)** 1988;42:152–6

Psychiatric and neuropsychological findings after stereotactic hypothalamotomy, in cases of extreme sexual aggressivity. Dieckmann G, et al. **Acta Neurochir Suppl (Wien)** 1988; 44:163–6

Stereotactic biopsy and treatment of brain stem lesions: combined study of 33 cases (Bologna–Marseille). Frank F, et al. **Acta Neurochir Suppl (Wien)** 1988;42:177–81

Serial stereotactic biopsy of brain stem expanding lesions. Considerations on 45 consecutive cases. Franzini A, et al. **Acta Neurochir Suppl (Wien)** 1988;42:170–6

Brain stem expanding lesions: stereotactic diagnosis and therapeutical approach. Giunta F, et al. **Acta Neurochir Suppl (Wien)** 1989;46:86–9

Brain stem expansive lesions: stereotactic biopsy for a better therapeutic approach. Giunta F, et al. **Acta Neurochir Suppl (Wien)** 1988;42:182–6

Stereotaxy of third ventricular masses. Hitchcock E, et al. **Acta Neurochir Suppl (Wien)** 1989;46:82–5

Transplantation in Parkinson's disease: stereotactic implantation of adrenal medulla and foetal mesencephalon. Hitchcock ER, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:48–50

CT-guided percutaneous cordotomy. Kanpolat Y, et al. **Acta Neurochir Suppl (Wien)** 1989;46:67–8

Differential diagnosis between tumoural and non-tumoural intracranial lesions in children: a stereotactic approach. Munari C, et al. **Acta Neurochir Suppl (Wien)** 1989;46:75–8

Stereotactic investigations in frontal lobe epilepsies. Munari C, et al. **Acta Neurochir Suppl (Wien)** 1989;46:9–12

Experiences with CT-guided stereotaxic biopsies in 121 cases. Niizuma H, et al. **Acta Neurochir Suppl (Wien)** 1988; 42:157–60

Stereotactic operation in behaviour disorders. Amygdalotomy and hypothalamotomy. Ramamurthi B. **Acta Neurochir Suppl (Wien)** 1988;44:152–7

Natural history of neuroepithelial tumours: contribution of stereotactic biopsy. Roselli R, et al. **Acta Neurochir Suppl (Wien)** 1989;46:79–81

Craniofacial postherpetic neuralgia managed by stereotactic spinal trigeminal nucleotomy. Schvarcz JR. **Acta Neurochir Suppl (Wien)** 1989;46:62–4

Thalamic pain and stereotactic mesencephalotomy. Shieff C, et al. **Acta Neurochir Suppl (Wien)** 1988;42:239–42

Radiosurgery in cerebral tumours and AVM. Valentino V. **Acta Neurochir Suppl (Wien)** 1988;42:193–7

Tumour recurrence vs radionecrosis: an indication for multitrajectory serial stereotactic biopsies. Zamorano L, et al. **Acta Neurochir Suppl (Wien)** 1989;46:90–3

Treatment of craniopharyngiomas—the stereotactic approach in a ten to twenty-three years' perspective. I. Surgical, radiological and ophthalmological aspects. Backlund EO, et al. **Acta Neurochir (Wien)** 1989;99(1–2):11–9

Cell kinetics and multimodal prognostic evaluation in glial tumours investigated by serial stereotactic biopsy. Broggi G, et al. **Acta Neurochir (Wien)** 1988;94(1–2):53–6

Stereotactic mesencephalic tractotomy in the treatment of chronic cancer pain. Frank F, et al. **Acta Neurochir (Wien)** 1989;99(1–2):38–40

Treatment of craniopharyngiomas—the stereotactic approach in a ten to twenty–three years' perspective. II. Psychosocial situation and pituitary function. Sääf M, et al. **Acta Neurochir (Wien)** 1989;99(3–4):97–103

Incidence of late radiation necrosis with transient mass effect after interstitial low dose rate radiotherapy for cerebral gliomas. Wowra B, et al. **Acta Neurochir (Wien)** 1989; 99(3–4):104–8

Audiological findings after stereotactic radiosurgery in acoustic neurinomas. Hirsch A, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct;106(3–4):244–51

Audiologic findings after stereotactic radiosurgery in acoustic neurinomas. Hirsch A, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:17

Targeting cerebral tumors. Combining image-guided stereotactic endoscopy with laser therapy. Koch F, et al. **AORN J** 1989 Mar;49(3):740–3, 745–7, 750 passim

Diagnostic value of the stereotactic approach to focal lesions in the deep brain of children and adolescents. Schmitt HP, et al. **Brain Dev** 1988;10(5):305–11

Simple template method for targeting brain loci in small animal stereotaxy. Dixon RG, et al. **Brain Res Bull** 1978 Nov–Dec;3(6):721–2

Method for effective rabbit head restraint during stereotaxic surgery. Pivik RT, et al. **Brain Res Bull** 1978 Jul–Aug; 3(4):401–4

A stereotaxic atlas for the telencephalon of the Siamese fighting fish (Betta splendens). Marino-Neto J, et al. **Braz J Med Biol Res** 1988;21(5):971–86

Stereotactic interstitial irradiation of diencephalic tumors with iridium 192 and iodine 125: 10 years follow-up and comparison with other treatments. Etou A, et al. **Childs Nerv Syst** 1989 Jun;5(3):140–3 (20 ref.)

The use of computed tomography-guided stereotactic techniques in the treatment of brain stem abscesses. Rossitch E Jr, et al. **Clin Neurol Neurosurg** 1988;90(4):365–8

Stereotactic technology in tumor surgery. Kelly PJ. **Clin Neurosurg** 1989;35:215–53

Stereotaxic localisation and aspiration cytology of impalpable breast lesions. Dent DM, et al. **Clin Radiol** 1989 Jul; 40(4):380–2

Stereotaxic Vim thalamotomy for treatment of tremor. Narabayashi H. **Eur Neurol** 1989;29 Suppl 1:29–32 (16 ref.)

Stereotactic radiosurgery for intracranial arteriovenous malformations using a standard linear accelerator. Loeffler JS, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):673–7

Heavy charged-particle stereotactic radiosurgery: cerebral angiography and CT in the treatment of intracranial vascular malformations. Phillips MH, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):419–26

Subependymal giant cell astrocytoma diagnosed by CT-guided stereotactic brain biopsy [letter] Finkelstein SD, et al. **J Child Neurol** 1988 Oct;3(4):292–3

MR body stereotaxis: an aid for MR-guided biopsies. Lufkin R, et al. **J Comput Assist Tomogr** 1988 Nov–Dec; 12(6):1088–9

Biomechanical analysis by chiropractic radiography: Part I. A simple method for determining X-ray projectional distortion. Zengel F, et al. **J Manipulative Physiol Ther** 1988 Aug;11(4):273–80

Results of stereotactic radiosurgery of arteriovenous malformations: an analysis of 52 cases. Kemeny AA, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):554–8

Cerebral palsy and stereotactic neurosurgery: long term results. Speelman D, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):23–30

Contribution of stereotactic techniques to the diagnosis and treatment of cerebral tumours in childhood (tumours of the pineal region excluded). Finizio FS, et al. **J Neuroradiol** 1988;15(4):353–71 (Eng, Fre)

A lightweight hybrid microdrive for use with awake unrestrained animals. Amos A, et al. **J Neurosci Methods** 1989 Jun;28(3):219–24

A grid system and a microsyringe for single cell recording. Crist CF, et al. **J Neurosci Methods** 1988 Dec;26(2):117–22

Treatment of colloid cysts of the third ventricle by stereotaxic microsurgical laser craniotomy. Abernathey CD, et al. **J Neurosurg** 1989 Apr;70(4):525–9

Stereotaxic suboccipital transcerebellar biopsy of pontine mass lesions. Abernathey CD, et al. **J Neurosurg** 1989 Feb; 70(2):195–200

Posterior fossa stereotaxic biopsy using the Brown-Roberts-Wells stereotaxic system. Technical note. Guthrie BL, et al. **J Neurosurg** 1989 Apr;70(4):649–52

Stereotactic suboccipital transcerebellar biopsy of pontine lesions [letter] Lobato RD, et al. **J Neurosurg** 1989 Sep; 71(3):466–7

Stereotaxy in neuro-oncology. Proceedings of the First Meeting of Neuro-Oncology. Rome, March 10–11, 1988. **J Neurosurg Sci** 1989 Jan–Mar;33(1):3–154

Methodology of stereotactic biopsy. Carapella CM, et al. **J Neurosurg Sci** 1989 Jan–Mar;33(1):5–10 (19 ref.)

Treatment of colloid cysts of the third ventricle by aspiration in stereotactic conditions. Pappadá G, et al. **J Neurosurg Sci** 1988 Apr–Jun;32(2):51–4

Dosimetric aspects in stereotactic radiotherapy using small shielded sources. Piermattei A, et al. **J Neurosurg Sci** 1989 Jan–Mar;33(1):141–2

Indications of stereotactic biopsy. Scerrati M, et al. **J Neurosurg Sci** 1989 Jan–Mar;33(1):11–4

Neuro-oncological problems in the histological diagnosis of stereotactic biopsies. Schiffer D. **J Neurosurg Sci** 1989 Jan–Mar;33(1):23–6

Image guided stereotaxic surgery. Gower DJ. **J Okla State Med Assoc** 1989 Jun;82(6):265–8

The return of stereotaxic surgery. Hash CJ, et al. **J Okla State Med Assoc** 1989 Jun;82(6):262–4

Surgical treatment and indication of intractable epilepsy. Shimizu H, et al. **Jpn J Psychiatry Neurol** 1988 Sep; 42(3):586–8

Stereotactic fine-needle biopsy in 2594 mammographically detected non-palpable lesions. Azavedo E, et al. **Lancet** 1989 May 13;1(8646):1033–6

Volumetric stereotactic surgical resection of intra-axial brain mass lesions. Kelly PJ. **Mayo Clin Proc** 1988 Dec; 63(12):1186–98

Stereotactic neutron radiosurgery for arteriovenous malformations of the brain. Griffin BR, et al. **Med Dosim** 1988 Dec;13(4):179–82

The use of computed-tomographic-directed stereotaxis in the diagnosis of intracerebral lesions. Redmond MJ, et al. **Med J Aust** 1988 Nov 7;149(9):468–72

Long-term follow-up after stereotaxic basal ganglia surgery in parkinsonism. A neuroanatomical study of a case showing unusual postural disorders. Viallet F, et al. **Mov Disord** 1988;3(2):140–51

Role of stereotactic biopsy in the management of transplant patients with intracranial lesions. Young B. **Neurol Clin** 1988 Aug;6(3):639–44

Comparison of stereotactic aspiration, craniotomy, and conservative treatment for putaminal hemorrhage. Yamanaka R, et al. **Neurol Med Chir (Tokyo)** 1988 Oct; 28(10):986–90 (13 ref.)

Stereotactic biopsy in the diagnosis of brain masses: comparison of results of biopsy and resected surgical specimen. Chandrasoma PT, et al. **Neurosurgery** 1989 Feb; 24(2):160–5

The incidence of unexpected pathological findings in an image-guided biopsy series: a review of 100 consecutive cases. Friedman WA, et al. **Neurosurgery** 1989 Aug; 25(2):180–4

Stereotactic drainage of Aspergillus brain abscess with long-term survival: case report and review. Goodman ML, et al. **Neurosurgery** 1989 Jan;24(1):96–9 (17 ref.)

Stereotactic management of cystic gliomas of the brain stem. Hood TW, et al. **Neurosurgery** 1989 Mar;24(3):373–8

What is radiosurgery? [letter] Hudgins WR. **Neurosurgery** 1988 Aug;23(2):272–3

Stereotactic biopsy and resection of thalamic astrocytomas. Kelly PJ. **Neurosurgery** 1989 Aug;25(2):185–94; discussion 194–5

Radiosurgery [letter] Leksell D. **Neurosurgery** 1989 Feb; 24(2):297–8

Stereotactic radiosurgery of the brain using the first United States 201 cobalt-60 source gamma knife. Lunsford LD, et al. **Neurosurgery** 1989 Feb;24(2):151–9

Magnetic resonance imaging stereotactic thalamotomy: report of a case with comparison to computed tomography. Lunsford LD. **Neurosurgery** 1988 Sep;23(3):363–7

Results of stereotactic aspiration in 175 cases of putaminal hemorrhage. Niizuma H, et al. **Neurosurgery** 1989 Jun; 24(6):814–9

Stereotactic evacuation of hypertensive cerebellar hemorrhage using plasminogen activator. Yokote H, et al. **No Shinkei Geka** 1989 May;17(5):421–6

Computer-assisted stereotactic biopsy of intracranial lesions in pediatric patients. Davis DH, et al. **Pediatr Neurosci** 1988;14(1):31–6

Delayed stereotactic transplantation technique in non-human primates. Bakay RA, et al. **Prog Brain Res** 1988;78:463–71

An improved procedure for pressure-free insertion of tissue into the central nervous system. Wyatt RJ, et al. **Prog Brain Res** 1988;78:625–9

Nonpalpable breast lesions: stereotaxic fine-needle aspiration cytology. Ciatto S, et al. **Radiology** 1989 Oct;173(1):57–9

Nonpalpable breast tumors: diagnosis with stereotaxic localization and fine-needle aspiration. Dowlatshahi K, et al. **Radiology** 1989 Feb;170(2):427–33

Needle localization of nonpalpable breast lesions with current dedicated mammographic systems [letter] Yagan R, et al. **Radiology** 1989 Aug;172(2):580–1

Proceedings of the meeting on the use of microphysiological recordings during stereotactic neurosurgery. Evain–les–Bains, France, September 4–6, 1987. **Stereotact Funct Neurosurg** 1989;52(2–4):77–261

Functional neuroanatomy of the target area for the treatment of pathological tremor: an electrophysiological approach. Birk P, et al. **Stereotact Funct Neurosurg** 1989; 52(2–4):164–70

Intraoperative impedance monitoring during CT–guided stereotactic biopsies. Bullard DE. **Stereotact Funct Neurosurg** 1989;52(1):1–17

Rapid method for determination of isocenter of radiation gantry and alignment of laser beams for stereotactic radiosurgery. Heifetz MD, et al. **Stereotact Funct Neurosurg** 1989;53(1):46–8

Immunocytochemical techniques in stereotactic biopsy. Hitchcock E, et al. **Stereotact Funct Neurosurg** 1989; 53(1):21–8

New trends in computer graphics and computer vision to assist functional neurosurgery. Lipinski HG, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):234–41

Microphysiological recordings at CT gantry site during stereotactic thalamotomy. Uematsu S, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):183–90

Electrophysiological characterization of human subcortical structures by frequency spectrum analysis of neural noise (field potential) obtained during stereotactic surgery. Preliminary presentation of frequency power spectrum of various subcortical structures. Yoshida M. **Stereotact Funct Neurosurg** 1989;52(2–4):157–63

The acute onset of nausea and vomiting following stereotactic radiosurgery: correlation with total dose to area postrema. Alexander E 3d, et al. **Surg Neurol** 1989 Jul;32(1):40–4

Diagnosis and treatment of colloid cysts of the third ventricle by stereotactic drainage. Report on eleven cases. Musolino A, et al. **Surg Neurol** 1989 Oct;32(4):294–9

CT profile of experimental radiofrequency lesion in the thalamus. Ebisutani D. **Tokushima J Exp Med** 1988 Jun; 35(1–2):21–35

[CT–guided stereotaxis in the management of brain abscesses] Chen MH, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Nov; 40(5):457–62 (Eng. Abstr.) (Chi)

[Stereotaxic transplantation of human embryonic nerve tissue into the brain in schizophrenia] Kolařík J, et al. **Cesk Psychiatr** 1988 Dec;84(6):361–4 (Eng. Abstr.) (Cze)

[Stereotaxic approach in extensive lesions of the septum–fornix–callosal region. Apropos of 14 cases] Devaux B, et al. **Neurochirurgie** 1988;34(5):315–22 (23 ref.) (Eng. Abstr.) (Fre)

[Stereotaxic ventriculocisternostomy in the treatment of triventricular obstructive hydrocephalus. Apropos of 23 cases] Musolino A, et al. **Neurochirurgie** 1988;34(6):361–73 (43 ref.) (Eng. Abstr.) (Fre)

[Cavernomas and stereotaxic surgery] Sedan R, et al. **Neurochirurgie** 1989;35(2):126–7 (Fre)

[An evaluation of breast stereotaxis] Poisson R, et al. **Union Med Can** 1989 May–Jun;118(3):100–2 (Fre)

[Stereotaxic brain biopsy as basis of therapy planning] Alesch F, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1988; 125(1):5–13 (Ger)

[Radiation treatment of intracranial arteriovenous malformations—experiences with a semi–stereotactic technic] Makoski HB, et al. **Radiobiol Radiother (Berl)** 1989; 30(3):213–20 (Eng. Abstr.) (Ger)

[Stereotaxic biopsy of intracranial processes: validity of histologic diagnosis] Ungersböck K, et al. **Wien Klin Wochenschr** 1989 May 26;101(11):376–80 (Eng. Abstr.) (Ger)

[Basic study on MRI guided stereotaxic surgery] Kyuma Y, et al. **No Shinkei Geka** 1989 May;17(5):449–55 (Eng. Abstr.) (Jpn)

[Stereotaxic radiosurgery using photon beam radiation from a linear accelerator] Pozza F. **Med Radiol (Mosk)** 1989 Aug;34(8):36–9 (Rus)

[Experience with the clinical study of the dynamics of severe forms of epilepsy in patients treated by the stereotaxic method] Spivak LI, et al. **Zh Nevropatol Psikhiatr** 1988; 88(6):56–60 (Eng. Abstr.) (Rus)

[Combination of computer tomography and stereotaxic technic in the diagnosis and therapy of brain tumors] Sramka M, et al. **Bratisl Lek Listy** 1988 Aug;89(8):591–5 (Eng. Abstr.) (Slo)

INSTRUMENTATION

CT–guided "real time" stereotaxy. Reinhardt HF, et al. **Acta Neurochir Suppl (Wien)** 1989;46:107–8

The stereotactic operating microscope: accuracy refinement and clinical experience. Roberts DW, et al. **Acta Neurochir Suppl (Wien)** 1989;46:112–4

Transposition of image–defined trajectories into arc–quadrant centered stereotactic systems. Zamorano L, et al. **Acta Neurochir Suppl (Wien)** 1989;46:109–11

New head fixation for the Riechert stereotaxic system. Technical note. Ostertag CB. **Acta Neurochir (Wien)** 1988; 94(1–2):88–92

Stereotactically guided convergent beam irradiation with a linear accelerator: localization–technique. Pastyr O, et al. **Acta Neurochir (Wien)** 1989;99(1–2):61–4

Closed biopsy of the spine using a stereotactic biopsy forceps. Technical note. Zentner J, et al. **Acta Neurochir (Wien)** 1988;94(3–4):155–7

A stereotaxic apparatus for the study of the central nervous structures in the pig. Marcilloux JC, et al. **Brain Res Bull** 1989 Mar;22(3):591–7

A frameless stereotaxic operating microscope for neurosurgery. Friets EM, et al. **IEEE Trans Biomed Eng** 1989 Jun;36(6):608–17

Modern stereotactic neurosurgery. Cozzens JW, et al. **IMJ** 1988 Aug;174(2):89–92

Stereotactic frame for neuroradiology and charged particle Bragg peak radiosurgery of intracranial disorders. Lyman JT, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1615–21

The brain of the raccoon (Procyon lotor) in stereotaxic coordinates. I. Macroscopic studies. Schober W, et al. **J Hirnforsch** 1988;29(6):701–8

Transcranial Doppler arteriography—a technical note. Smith RR, et al. **J Miss State Med Assoc** 1989 Jun;30(6):175–9

Stereotactic CT localization and biopsy of brain tumours using the Leksell frame. A study of 45 cases. Debaene A, et al. **J Neuroradiol** 1988;15(3):266–75 (Eng, Fre)

Localization of brain tumors with a simple scalp–mounted fiducial device. Technical note. Hirschberg H. **J Neurosurg** 1989 Feb;70(2):280–1

New model of stereotactic system. Preliminary experience. Ambrosio D, et al. **J Neurosurg Sci** 1988 Apr–Jun; 32(2):55–9

Theoretical study for use of Leksell's stereotactic frame in radiosurgery. Burini G, et al. **J Neurosurg Sci** 1989 Jan–Mar;33(1):131–3

Technical aids for the flexible use of the Leksell stereotactic system. Salcman M, et al. **Neurol Res** 1989 Jun;11(2):89–96

Stereotactic radiosurgery with the linear accelerator: treatment of arteriovenous malformations. Betti OO, et al. **Neurosurgery** 1989 Mar;24(3):311–21

Linear accelerator radiosurgery of cerebral arteriovenous malformations. Colombo F, et al. **Neurosurgery** 1989 Jun; 24(6):833–40

Magnetic movement of a brain thermoceptor. Howard MA, et al. **Neurosurgery** 1989 Mar;24(3):444–8

Permanent high–activity iodine–125 in the management of petroclival meningiomas: case reports. Kumar PP, et al. **Neurosurgery** 1989 Sep;25(3):436–41; discussion 441–2

Stereotactic heavy–charged–particle Bragg peak radiosurgery for the treatment of intracranial arteriovenous malformations in childhood and adolescence. Levy RP, et al. **Neurosurgery** 1989 Jun;24(6):841–52

Needle localization and fine–needle aspiration biopsy of nonpalpable breast lesions with use of standard and stereotactic equipment. Evans WP, et al. **Radiology** 1989 Oct;173(1):53–6

Breast skin calcifications: localization with a stereotactic device. Linden SS, et al. **Radiology** 1989 May;171(2):570–1

[An improved guide for electrodes for stereotaxic brain surgery] Nádvorník P, et al. **Cesk Neurol Neurochir** 1988 Jul;51(4):275–6 (Eng. Abstr.) (Cze)

[The stereotaxic marking of conspicuous changes in the breast] Flesch U, et al. **Rontgenpraxis** 1989 Mar;42(3):89–92 (Ger)

[The first version of a whole body stereotactic device] Nádvorník P, et al. **Zentralbl Neurochir** 1988;49(4):310–2 (Eng. Abstr.) (Ger)

[Intracranial stereotaxic external radiation using a linear accelerator] Watne K, et al. **Tidsskr Nor Laegeforen** 1989 Jun 30;109(19–21):2017–8 (Eng. Abstr.) (Nor)

TRENDS

Future perspectives in stereotactic neurosurgery: stereotactic microsurgical removal of deep brain tumors. Kelly PJ. **J Neurosurg Sci** 1989 Jan–Mar;33(1):149–54

STEREOTYPED BEHAVIOR

The greeting behavior of fragile X males. Wolff PH, et al. **Am J Ment Retard** 1989 Jan;93(4):406–11

Lesions of anterior thalamic nuclei impair acquisition of new and changing of preoperatively learnt active avoidance stereotypes. Klingberg F, et al. **Biomed Biochim Acta** 1988; 47(6):497–505

Behavioral correlates of self–stimulation, flight and ambivalence. St–Laurent J. **Brain Res Bull** 1988 Jul; 21(1):61–77

Treating high–rate stereotyped behaviours in children. Jones RS. **Child Care Health Dev** 1988 May–Jun;14(3):175–88 (81 ref.)

Behavioral aspects of GABAergic–dopaminergic interactions in the central nervous system. Sandoval MR, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):117–25

An evaluation of gentle teaching and visual screening in the reduction of stereotypy. Jordan J, et al. **J Appl Behav Anal** 1989 Spring;22(1):9–22

Basing the treatment of stereotypic and self–injurious behaviors on hypotheses of their causes. Repp AC, et al. **J Appl Behav Anal** 1988 Fall;21(3):281–9

The effects of social context and verbal skill on the stereotypic and task–involved behaviour of autistic children. Dadds M, et al. **J Child Psychol Psychiatry** 1988 Sep;29(5):669–76

The effects of stereotyped behaviour on orienting and tonic cardiac activity. MacLean WE Jr, et al. **J Ment Defic Res** 1989 Feb;33 (Pt 1):31–9

Lazarus sign and extensor posturing in a brain–dead patient. Case report. Heytens L, et al. **J Neurosurg** 1989 Sep; 71(3):449–51

Perseverative structuring of responses by schizophrenic and affective disorder patients. Lyon N, et al. **J Psychiatr Res** 1988;22(4):261–77

Computerized rotometer apparatus for recording circling behavior. Etemadzadeh E, et al. **Methods Find Exp Clin Pharmacol** 1989 Jun;11(6):399–407

Video EEG diagnosis of repetitive behavior in early childhood and its relationship to seizures. Duchowny MS, et al. **Pediatr Neurol** 1988 May–Jun;4(3):162–4

Rett syndrome in China: report of 9 patients. Wu XR, et al. **Pediatr Neurol** 1988 Mar–Apr;4(2):126–7

Both prenatal and postnatal factors contribute to the effects of maternal stress on offspring behavior and central 5–hydroxytryptamine receptors in the rat. Peters DA. **Pharmacol Biochem Behav** 1988 Jul;30(3):669–73

Stereotypic behavior of mentally retarded adults adjunctive to a positive reinforcement schedule. Wieseler NA, et al. **Res Dev Disabil** 1988;9(4):393–403

Stereotyped behaviour in animals induced by stimulant drugs or by a restricted cage environment: relation to disintegrated behaviour, brain dopamine and psychiatric disease. Randrup A, et al. **Yakubutsu Seishin Kodo** 1988 Jun;8(2):313–27 (133 ref.)

DRUG EFFECTS

Amphetamine stereotypy in cats and neurotransmitter interactions in the caudate nucleus. I. Effects of intracaudate injections of haloperidol, GABA and bicuculline. Moyanova SG, et al. **Acta Physiol Pharmacol Bulg** 1989;15(1):54–62

Neuroleptic–induced marching–in–place. Frost L, et al. **Acta Psychiatr Scand** 1989 Jan;79(1):48–51

Diminished D2 dopamine receptor function and the emergence of repetitive jaw movements. Rosengarten H, et al. **Adv Exp Med Biol** 1988;235:159–67

TRH–catecholamine interactions in brain and spinal cord. Bennett GW, et al. **Ann N Y Acad Sci** 1989;553:106–20

Functional interactions between TRH and 5–hydroxytryptamine (5–HT) and proctolin in rat brain and spinal cord. Marsden CA, et al. **Ann N Y Acad Sci** 1989; 553:121–34

Continuous and intermittent levodopa differentially affect basal ganglia function. Juncos JL, et al. **Ann Neurol** 1989 May;25(5):473–8

Susceptibility to sensitization. I. Sex differences in the enduring effects of chronic D–amphetamine treatment on locomotion, stereotyped behavior and brain monoamines. Camp DM, et al. **Behav Brain Res** 1988 Sep 1;30(1):55–68

Susceptibility to sensitization. II. The influence of gonadal hormones on enduring changes in brain monoamines and behavior produced by the repeated administration of D–amphetamine or restraint stress. Camp DM, et al. **Behav Brain Res** 1988 Sep 1;30(1):69–88

Evidence that apomorphine and (+)–amphetamine produce different types of circling in rats. Cools AR, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):111–6

Amphetamine–induced rotation reveals post 6–OHDA lesion neurochemical reorganization. Lynch MR, et al. **Behav Brain Res** 1989 Feb 1;32(1):69–74

Attenuation of amphetamine–stereotypy by mesostriatal dopamine depletion enhances plasma corticosterone: implications for stereotypy as a coping response. Jones GH, et al. **Behav Neural Biol** 1989 Jan;51(1):80–91

Behavioral and biochemical effects of intranigral injection of phospholipase–A2. Cadet JL, et al. **Biol Psychiatry** 1989 May;26(1):106–10

Subchronic cocaine treatment enhances cocaine–induced dopamine efflux, studied by in vivo intracerebral dialysis. Akimoto K, et al. **Brain Res** 1989 Jun 26;490(2):339–44

Adrenal medulla grafts enhance functional activity of the striatal dopamine system following substantia nigra lesions. Becker JB, et al. **Brain Res** 1988 Oct 18;462(2):401–6

Stereotypies elicited by injection of N–propylnorapomorphine into striatal subregions and nucleus accumbens. Bordi F, et al. **Brain Res** 1989 Jun 12;489(2):205–15

Vitamin E attenuates the toxic effects of intrastriatal injection of 6–hydroxydopamine (6–OHDA) in rats: behavioral and biochemical evidence. Cadet JL, et al. **Brain Res** 1989 Jan 2;476(1):10–5

Effect of intrathecal proctolin administration on the behaviour evoked by the thyrotrophin–releasing hormone (TRH) analogue (RX 77368) and the indoleamine, TRH. substance P and calcitonin gene–related peptide levels and choline acetyltransferase activity in the rat spinal cord. Fone KC, et al. **Brain Res** 1988 Sep 13;460(1):22–8

Hemiparkinsonism in monkeys after unilateral caudate nucleus infusion of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine (MPTP): behavior and histology. Imai H, et al. **Brain Res** 1988 Dec 6;474(2):327–32

Effects of ovariectomy and of estrogen administration on some dopamine–related behaviors in the rat. Dorce VA, et al. **Braz J Med Biol Res** 1988;21(2):313–20

Inactivation of dopamine D–1 or D–2 receptors differentially inhibits stereotypies induced by dopamine agonists in rats. Arnt J, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):37–47

Intermittent neuroleptic treatment induces long–lasting

abnormal mouthing in the rat. Glenthøj B, et al. **Eur J Pharmacol** 1989 May 19;164(2):393–6

Changes in naloxone and haloperidol effects during the development of captivity-induced jumping stereotypy in bank voles. Kennes D, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):19–24

Effects of intrastriatal injections of selective dopamine D-1 and D-2 agonists and antagonists on jaw movements of rats. Koshikawa N, et al. **Eur J Pharmacol** 1989 Apr 25; 163(2–3):227–36

MIF-1 attenuates apomorphine stereotypies in adult rats after neonatal 6-hydroxydopamine. Kostrzewa RM, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):33–42

The induction of grooming and vacuous chewing by a series of selective D-1 dopamine receptor agonists: two directions of D-1:D-2 interaction. Murray AM, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):377–84

Perseverative responding in male and female Wistar rats: effects of gonadal hormones. van Hest A, et al. **Horm Behav** 1989 Mar;23(1):57–67

Behavioral effect of scopolamine in cats. Murillo JR, et al. **Int J Neurosci** 1988 Aug;41(3–4):223–30

Thioridazine dose effects with reference to stereotypic behavior in mentally retarded residents. Aman MG, et al. **J Autism Dev Disord** 1988 Sep;18(3):355–66

Differentiation of stereotypies from neuroleptic-related dyskinesias in autistic children. Meiselas KD, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):207–9

Neurotoxic damage to the nigrostriatal system in rats following intranigral administration of MPDP+ and MPP+. Sun CJ, et al. **J Neural Transm** 1988;74(2):75–86

The novel neuropsychotropic agent milacemide is a specific enzyme-activated inhibitor of brain monoamine oxidase B. Janssens de Varebeke P, et al. **J Neurochem** 1989 Oct; 53(4):1109–16

Drug-induced dyskinesia in primates rendered hemiparkinsonian by intracarotid administration of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). Clarke CE, et al. **J Neurol Sci** 1989 May;90(3):307–14

Actions of buspirone in a putative model of anxiety in the mouse. Costall B, et al. **J Pharm Pharmacol** 1988 Jul; 40(7):494–500

Dopamine-mediated behaviour following chronic treatment with B-HT 920. Darmani NA, et al. **J Pharm Pharmacol** 1988 Jul;40(7):523–4

Pharmacokinetic and pharmacodynamic evaluation of phencyclidine and its decadeutero variant. Cho AK, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):210–5

Properties of some 1-arylpiperazines as antagonists of stereotyped behaviors mediated by central serotonergic receptors in rodents. Simansky KJ, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1073–81

Potentiation of para-hydroxyamphetamine-induced head-twitch response by inhibition of monoamine oxidase type A in the brain. Tadano T, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):254–60

Alterations of accumbens neuronal activity in freely moving rats following methamphetamine. Fukuzako H, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):331–5

Effects of imipramine and serotonin-2 agonists and antagonists on serotonin-2 and beta-adrenergic receptors following noradrenergic or serotonergic denervation. Eison AS, et al. **Life Sci** 1989;44(19):1419–27

Alterations in amphetamine-induced locomotor activity and stereotypy after electrical stimulation of the nucleus accumbens and neostriatum. Kokkinidis L, et al. **Life Sci** 1989;44(9):633–41

Behavioral recovery after irreversible inactivation of D-1 and D-2 dopamine receptors. Meller E, et al. **Life Sci** 1989; 44(15):1019–26

Effects of caerulein + haloperidol on amphetamine-induced locomotor stereotypy in rats. Mueller K, et al. **Life Sci** 1989;44(11):717–24

Monoamine oxidase inhibitory properties of milacemide in rats. Truong DD, et al. **Life Sci** 1989;44(15):1059–66

Relationship between rotational behaviour induced by apomorphine and caffeine in rats with unilateral lesion of the nigrostriatal pathway. Casas M, et al. **Neuropharmacology** 1989 Apr;28(4):407–9

Antagonization of the behavioral activation produced by direct stimulation of forebrain dopamine receptors caused by intraaccumbens injections of neurotensin. Ervin GN, et al. **Neuropsychopharmacology** 1988 Sep;1(3):243–50

Behavioral and neurochemical modifications induced by apomorphine treatment. Piervincenzo P, et al. **Neurosci Lett** 1989 May 22;100(1–3):265–70

Angiotensin II-(3–8)-hexapeptide affects motor activity, performance of passive avoidance and a conditioned avoidance response in rats. Braszko JJ, et al. **Neuroscience** 1988 Dec;27(3):777–83

Bombesin-induced behavior in infant rats. Jackson HC, et al. **Peptides** 1989 May-Jun;10(3):529–31

Chronic ACTH treatment: influence on 5-HT2 receptors and behavioral supersensitivity induced by 5,7-dihydroxytryptamine lesions. Pranzatelli MR, et al. **Peptides** 1989 Jan-Feb;10(1):5–8

Interactions of substance P antagonists with serotonin in the mouse spinal cord. Vaught JL, et al. **Peptides** 1988 Jul-Aug;9(4):909–13

Serotonin receptor blocking effect of SCH 23390. Bijak M, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):585–7

Opioid influence on some aspects of stereotyped behavior induced by repeated amphetamine treatment. Cancela LM, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):899–904

Neuroleptic-induced reduction of quipazine-elicited head-twitches in rats: possible involvement of striatal dopaminergic supersensitivity. Dall'Olio R, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):941–4

Potentiation of morphine-elicited circling by dopaminergic uptake blockade. Gratton A, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1077–9

Conditioned stereotypy: behavioral specification of the UCS and pharmacological investigation of the neural change. Hiroi N, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):249–58

Patterns of locomotor and stereotypic behavior during continuous amphetamine administration in rats. Hollingsworth EM, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):535–7

Effects of chronic amphetamine in BALB/cBy mice, a strain that is not stimulated by acute administration of amphetamine. Logan L, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):675–82

Locomotor activity and stereotypy in rats following repeated apomorphine treatments at 1-, 3-, or 7-day intervals. Mattingly BA, et al. **Pharmacol Biochem Behav** 1988 Dec; 31(4):871–5

The role of the purinergic system in the control of stereotypy: relationship to D-1/D-2 dopamine receptor activity. Popoli P, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):203–6

Independent effects of morphine and apomorphine on stereotyped gnawing in the hamster. Schnur P, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):589–94

ICV-CRH alters stress-induced freezing behavior without affecting pain sensitivity. Sherman JE, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):801–7

Atypical antipsychotic drugs block selective components of amphetamine-induced stereotypy. Tschanz JT, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):519–22

Effects of cysteamine and pantethine on open-field behavior, hypothalamic catecholamine concentrations, and somatostatin-induced barrel rotation in rats. Vécsei L, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):629–35

Opposite actions of CCK-8 on amphetamine-induced hyperlocomotion and stereotypy following intracerebroventricular and intra-accumbens injections in rats. Weiss F, et al. **Pharmacol Biochem Behav** 1988 Jun; 30(2):309–17

Behavioral and neurochemical effects of amfonelic acid on the spontaneously diabetic Wistar-BB rat: implications of impaired dopamine function. Ahmad Q, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):551–8

Evidence for post-synaptic changes mediating increased behavioural sensitivity to dopamine receptor agonists in hypothyroid rats. Crocker AD, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):607–15

The effects of concurrent D-1 and D-2 dopamine receptor blockade with SCH 23390 and eticlopride, on bombesin-induced behaviours. Piggins H, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):583–94

Low doses of corticotropin-releasing factor potentiate amphetamine-induced stereotyped behavior. Cole BJ, et al. **Psychopharmacology (Berlin)** 1989;99(1):27–33

Alpha 1- and alpha 2-adrenoreceptor antagonists differentially influence locomotor and stereotyped behaviour induced by d-amphetamine and apomorphine in the rat. Dickinson SL, et al. **Psychopharmacology (Berlin)** 1988;96(4):521–7

Characterization of the associative nature of sensitization to amphetamine-induced circling behavior and of the environment dependent placebo-like response. Drew KL, et al. **Psychopharmacology (Berlin)** 1988;95(4):482–7

Appearance of a stereotyped apomorphine-induced climbing in unresponsive DBA2 mice after subchronic manipulations of brain dopamine transmission. Duterte-Boucher D, et al. **Psychopharmacology (Berlin)** 1989;98(1):56–60

Induction of oral stereotypy following amphetamine microinjection into a discrete subregion of the striatum. Kelley AE, et al. **Psychopharmacology (Berlin)** 1988; 95(4):556–9

Heterogeneous rotational responsiveness in 6-hydroxydopamine-denervated rats: pharmacological and neurochemical characterization. Liebman JM, et al. **Psychopharmacology (Berlin)** 1988;96(4):477–83

Another look at amphetamine-induced stereotyped locomotor activity in rats using a new statistic to measure locomotor stereotypy. Mueller K, et al. **Psychopharmacology (Berlin)** 1989;97(1):74–9

Inhibitory effect of a selective kappa receptor agonist, U-50, 488H, on methamphetamine-elicited ipsilateral circling behavior in rats with unilateral nigral lesions. Ohno M, et al. **Psychopharmacology (Berlin)** 1989;97(2):219–21

Previous experience disrupts d-amphetamine-induced stereotypic diving in rats. Petree AD, et al. **Psychopharmacology (Berlin)** 1989;97(4):462–5

Stereotyped responding on a two-choice guessing task by marmosets and humans treated with amphetamine. Ridley RM, et al. **Psychopharmacology (Berlin)** 1988;95(4):560–4

The pharmacological characterisation of pilocarpine-induced purposeless chewing behaviour in the rat. Stewart BR, et al. **Psychopharmacology (Berlin)** 1988;96(1):55–62

Chronic neuroleptic-induced mouth movements in the rat: suppression by CCK and selective dopamine D1 and D2 receptor antagonists. Stoessl AJ, et al. **Psychopharmacology (Berlin)** 1989;98(3):372–9

The NK-3 tachykinin agonist senktide elicits yawning and chewing mouth movements following subcutaneous administration in the rat. Evidence for cholinergic mediation. Stoessl AJ, et al. **Psychopharmacology (Berlin)** 1988;95(4):502–6

Biochemical and behavioral effects of sigma and PCP ligands. Contreras PC, et al. **Synapse** 1988;2(3):240–3

Intrastriatal dendrotoxin injection: behavioral and neurochemical effects. Silveira R, et al. **Toxicon** 1988; 26(11):1009–15

[Age-related modification of dopaminergic-cholinergic neuronal interaction in rats] Kishimoto O. **Yakubutsu Seishin Kodo** 1988 Dec;8(4):443–51 (Eng. Abstr.) **(Jpn)**

[Effects of bifemelane on central dopaminergic and cholinergic systems in rats] Ushijima I, et al. **Yakubutsu Seishin Kodo** 1988 Dec;8(4):463–70 (Eng. Abstr.) **(Jpn)**

[Synthesis and the effect of new derivatives of perhydro-1,4,6-oxadiazocine on the central nervous system] Brzezińska E, et al. **Acta Pol Pharm** 1988; 45(5):400–5 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Cortical lesions interfere with behavioral recovery from unilateral substantia nigra lesions induced by brain grafts. Freed WJ, et al. **Behav Brain Res** 1989 Apr 1;32(3):279–88

Circling behavior: ethological analysis and functional considerations. Piazza PV, et al. **Behav Brain Res** 1989 Jan 1;31(3):267–71

The influence of dopaminergic A10 neurons on the motor pattern evoked by substantia nigra (pars compacta) stimulation. Piazza PV, et al. **Behav Brain Res** 1989 Jan 1;31(3):273–8

Head and body movements evoked electrically from the caudal superior colliculus of rats: pulse frequency effects. Tehovnik EJ. **Behav Brain Res** 1989 Aug 1;34(1–2):71–8

Influence of the mesocortical dopaminergic system on activity, food hoarding, social-agonistic behavior, and spatial delayed alternation in male rats. Stam CJ, et al. **Behav Neurosci** 1989 Feb;103(1):24–35

Influence of inherent directional biases on neurochemical consequences of conditioned circling. Szostak C, et al. **Behav Neurosci** 1989 Jun;103(3):678–87

Delayed emergence of striatal dopaminergic hyperactivity after anterolateral ischemic cortical lesions in humans; evidence from turning behavior. Bracha HS, et al. **Biol Psychiatry** 1989 Feb 1;25(3):265–74

Receptor characteristics and recovery of function following kainic acid lesions and fetal transplants of the striatum. I. Cholinergic systems. Deckel AW, et al. **Brain Res** 1988 Nov 22;474(1):27–38

Effect of striatal implantation of bovine adrenal chromaffin cells on turning behavior in a rat model of Parkinson's disease. Fitzgerald LR, et al. **Brain Res** 1989 Mar 6; 481(2):373–7

Basal and amphetamine-induced asymmetries in striatal dopamine release and metabolism: bilateral in vivo microdialysis in normal rats. Glick SD, et al. **Brain Res** 1988 Nov 8;473(1):161–4

New evidence for distinct patterns of brain organization in rats differentiated on the basis of inherent laterality. LaHoste GJ, et al. **Brain Res** 1988 Dec 6;474(2):296–308

Substantia nigra as a site of origin of dopamine-dependent motor syndromes induced by stimulation of mu and delta opioid receptors. Morelli M, et al. **Brain Res** 1989 May 15;487(1):120–30

Output pathway for turning behavior from the neostriatum and substantia nigra in cats. Motles E, et al. **Brain Res** 1988 Nov 8;473(1):65–73

A 6-hydroxydopamine-induced selective parkinsonian rat model. Perese DA, et al. **Brain Res** 1989 Aug 14; 494(2):285–93

Effects of ageing on the behavioural responses to dopamine agonists: decreased yawning and locomotion, but increased stereotypy. Stoessl AJ, et al. **Brain Res** 1989 Aug 21; 495(1):20–30

Turning responses evoked by stimulation of visuomotor pathways. Yeomans JS, et al. **Brain Res** 1988 Nov; 472(3):235–59 (324 ref.)

EEG development in Rett syndrome. A study of 30 cases. Hagne I, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan;72(1):1–6

Graft-derived recovery from 6-OHDA lesions: specificity of ventral mesencephalic graft tissues. Dunnett SB, et al. **Exp Brain Res** 1988;71(2):411–24

Neurochemical correlates of conditioned circling within localized regions of the striatum. Szostak C, et al. **Exp Brain Res** 1989;75(2):430–40

Effects of different environmental enrichment devices on cage stereotypies and autoaggression in captive cynomolgus monkeys. Bryant CE, et al. **J Med Primatol** 1988;17(5):257–69

Hippocampal place cells: stereotypy and plasticity. Breese CR, et al. **J Neurosci** 1989 Apr;9(4):1097–111

Isolation, characterization, and evolutionary aspects of a cDNA clone encoding multiple neuropeptides involved in

the stereotyped egg-laying behavior of the freshwater snail Lymnaea stagnalis. Vreugdenhil E, et al. **J Neurosci** 1988 Nov;8(11):4184–91

Caudato–nigral transmission in the substantia nigra pars reticulata neurons changes with recovery from circling movements induced by microinfusion of ibotenic acid. II. Electrophysiological study on synaptic transmission. Udo M, et al. **Neurosci Res** 1989 Jun;6(5):481–6

Caudato–nigral transmission in the substantia nigra pars reticulata neurons changes with recovery from circling movements induced by microinfusion of ibotenic acid. I. Behavioral study. Udo M, et al. **Neurosci Res** 1989 Jun; 6(5):475–80

Experimental hemiparkinsonism in the rat following chronic unilateral infusion of MPP+ into the nigrostriatal dopamine pathway—I. Behavioural, neurochemical and histological characterization of the lesion. Sirinathsinghji DJ, et al. **Neuroscience** 1988 Oct;27(1):117–28

Development of dopamine innervation and turning behavior in dopamine-depleted infant rats receiving unilateral nigral transplants. Snyder-Keller AM, et al. **Neuroscience** 1989; 30(3):779–94

Conditioned circling in rats: bilateral involvement of the mesotelencephalic dopamine system demonstrated following unilateral 6-hydroxydopamine lesions. Szostak C, et al. **Neuroscience** 1988 Aug;26(2):395–401

Transplant improves hemiparkinsonian syndrome in nonhuman primate: intracerebral injection, rotometry, tyrosine hydroxylase immunohistochemistry. Dubach M, et al. **Prog Brain Res** 1988;78:491–6

A novel rotational behavior model for assessing the restructuring of striatal dopamine effector systems: are transplants sensitive to peripherally acting drugs? Norman AB, et al. **Prog Brain Res** 1988;78:61–7

[Behavior of Limnephilus sp. larvae in response to sudden changes in the weight of the building material] Kozlov AT, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct; 22(5):88–90 (Rus)

RADIATION EFFECTS

Spontaneous perseverative turning in rats with radiation-induced hippocampal damage. Mickley GA, et al. **Behav Neurosci** 1989 Aug;103(4):722–30

STEREOTYPING

Stereotypes of smokers among health science students. Lee C. **Addict Behav** 1989;14(3):327–33

Female and male: issues of gender. Jacklin CN. **Am Psychol** 1989 Feb;44(2):127–33 (60 ref.)

Social interactions and play patterns of parents and toddlers with feminine, masculine, and neutral toys. Caldera YM, et al. **Child Dev** 1989 Feb;60(1):70–6

Is there a "psychology of the deaf"? Lane H. **Except Child** 1988 Sep;55(1):7–19

Origins of stereotypes of the elderly: an experimental study of the self–other discrepancy. Schulz R, et al. **Exp Aging Res** 1987 Winter;13(4):189–95

Latino/"Hispanic"—who needs a name? The case against a standardized terminology. Gimenez ME. **Int J Health Serv** 1989;19(3):557–71

Almost perfect. Schreiber MH. **Invest Radiol** 1989 Feb; 24(2):162

Stereotypic beliefs about women as moderators of stress–distress relationships. Belk SS, et al. **J Clin Psychol** 1989 Jul;45(4):665–72

The mystique of age. Friedan B. **J Geriatr Psychiatry** 1987; 20(2):115–24

Role incongruence and gender variation in the provision of prison mental health services. Baskin DR, et al. **J Health Soc Behav** 1989 Sep;30(3):305–14

Prematurity stereotyping by mothers of premature infants. Stern M, et al. **J Pediatr Psychol** 1988 Jun;13(2):255–63

A psychometric study of stereotypes: assessment of malingering in a criminal forensic group. Grossman LS, et al. **J Pers Assess** 1988 Fall;52(3):549–63

Stereotypic biases in social decision making and memory: testing process models of stereotype use. Bodenhausen GV. **J Pers Soc Psychol** 1988 Nov;55(5):726–37

Use of categorical and individuating information in making inferences about personality. Krueger J, et al. **J Pers Soc Psychol** 1988 Aug;55(2):187–95

Perceived distributions of the characteristics of in-group and out-group members: empirical evidence and a computer simulation. Linville PW, et al. **J Pers Soc Psychol** 1989 Aug;57(2):165–88

An attributional analysis of reactions to stigmas. Weiner B, et al. **J Pers Soc Psychol** 1988 Nov;55(5):738–48

The impact of occupation, performance, and sex on sex role stereotyping. Hartman SJ, et al. **J Soc Psychol** 1988 Aug; 128(4):451–63

Age stereotype disconfirming information and evaluations of old people. Jackson LA, et al. **J Soc Psychol** 1988 Dec; 128(6):721–9

Ethnic group and compulsory detention. Moodley P, et al. **Med Sci Law** 1988 Oct;28(4):324–8

Age, interpersonal attraction, and social interaction. A review and assessment. Webb L, et al. **Res Aging** 1989 Mar; 11(1):107–23 (56 ref.)

Nursing students' stereotypes of married and unmarried pregnant clients. Ganong LH, et al. **Res Nurs Health** 1988 Oct;11(5):333–42

The content of advertisements in medical journals: distorting the image of women. Hawkins JW, et al. **Women Health** 1988;14(2):43–59

[The impact of perceptual stereotypes in indications for psychoanalysis] Blaser A. **Z Psychosom Med Psychoanal** 1989;35(1):59–67 (Eng. Abstr.) (Ger)

STERIGMATOCYSTIN see under **XANTHENES**

STERILITY see **INFERTILITY**

STERILITY, FEMALE see **INFERTILITY, FEMALE**

STERILITY, MALE see **INFERTILITY, MALE**

STERILIZATION

Sterility of total parenteral nutrient solutions stored at room temperature for seven days. Takagi J, et al. **Am J Hosp Pharm** 1989 May;46(5):973–7

Reprocessing of hemodialyzers: a critical appraisal. Shusterman NH, et al. **Am J Kidney Dis** 1989 Aug; 14(2):81–91 (55 ref.)

pH and H2O2 concentration of hydrogen peroxide disinfection systems. Harris MG, et al. **Am J Optom Physiol Opt** 1988 Jul;65(7):527–35

Residual ethylene oxide in hollow fiber hemodialysis units is neurotoxic in vitro. Windebank AJ, et al. **Ann Neurol** 1989 Jul;26(1):63–8

Substandard disinfection deactivates AIDS virus. **AORN J** 1989 Feb;49(2):592

Withdrawal of iodinated disinfectants at delivery decreases the recall rate at neonatal screening for congenital hypothyroidism [letter] Chanoine JP, et al. **Arch Dis Child** 1988 Oct;63(10):1297–8

Computerized model for accurate determination of ethylene oxide diffusion in sterilized medical supplies. Gibson C, et al. **Biomaterials** 1989 Jul;10(5):343–8

Multiple gamma radiation sterilization of polyester fibres. Nair PD, et al. **Biomaterials** 1988 Jul;9(4):335–8

Gas chromatography/mass spectrometry study of mixed haloacetic acids expected to be found in chlorinated drinking water. Ireland JC, et al. **Biomed Environ Mass Spectrom** 1988 Dec;17(6):483–6

Chemical inactivation of HIV on surfaces [letter] de Jong JC, et al. **BMJ** 1989 Jun 17;298(6688):1646–7

Chemical inactivation of HIV on surfaces [letter] Hansen PJ. **BMJ** 1989 Jul 22;299(6693):260

Survival of bacteriophage 1 of the Salmonella typhimurium phage typing scheme in different liquid pharmaceutical preparations. Papaconstantinou AT, et al. **Boll Ist Sieroter Milan** 1988;67(1):57–61

Autoclavable handpieces—an update [letter] Martin MV. **Br Dent J** 1989 Jun 10;166(11):399

Sterility before service [letter] Smith P. **Br Dent J** 1988 Nov 19;165(10):355

Debate on sterilization [letter] Lumsden KW. **Br J Orthod** 1989 Aug;16(3):223

Guidelines on sterilization and high-level disinfection methods effective against human immunodeficiency virus (HIV). **Bull Int Union Tuberc Lung Dis** 1988 Jun;63(2):7–11

Sterilization of anaesthetic equipment [letter] Brown RA, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):359–61

Iodine sensitivity of bacteria isolated from iodinated water systems. Pyle BH, et al. **Can J Microbiol** 1989 Apr; 35(4):520–3

Disinfection associated spoilage of high water content ionic matrix hydrogels. Sack RA, et al. **CLAO J** 1989 Apr–Jun; 15(2):138–45

Acanthamoeba-contaminated hydrogel contact lenses. Susceptibility to disinfection. Lindquist TD, et al. **Cornea** 1988;7(4):300–3

Cleaning and disinfection of equipment for gastrointestinal flexible endoscopy: interim recommendations of a Working Party of the British Society of Gastroenterology [letter] Casemore DP, et al. **Gut** 1989 Aug;30(8):1156–7

Selective decontamination of the digestive tract improves survival in patients receiving differential lung ventilation. Zandstra DF, et al. **Intensive Care Med** 1988;15(1):15–8

Risk of virus transmission and sterilization practices of dermatologists [letter] Caumes E, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):324

Infection control procedures [letter] Fein SI. **J Am Dent Assoc** 1988 Dec;117(7):812

Preoperative whole body disinfection (viewpoint Sweden). Brandberg A. **J Chemother** 1989 Apr;1 Suppl 1:19–24

Disinfection of endoscopes [letter; comment] Rodney WM. **J Fam Pract** 1989 Apr;28(4):396. **Comment on:** J Fam Pract 1988 Sep;27(3):271–6

A method to evaluate the cleaning and disinfectant action of surface disinfectants. Walder M, et al. **J Hosp Infect** 1989 Feb;13(2):149–59

Bronchopulmonary cross-colonization and infection related to mycobacterial contamination of suction valves of bronchoscopes. Wheeler PW, et al. **J Infect Dis** 1989 May; 159(5):954–8

Linear dimensional changes in dental impressions after immersion in disinfectant solutions. Tullner JB, et al. **J Prosthet Dent** 1988 Dec;60(6):725–8

The effect of post-milking teat dipping on teat canal infections. Du Preez JH. **J S Afr Vet Assoc** 1987 Sep; 58(3):119–23

Potentiation of the poliocidal effectiveness of free chlorine by a buffer. Berg G, et al. **J Virol Methods** 1989 Feb; 23(2):179–86

Chlorine dioxide sterilization of implanted right atrial catheters in rabbits. Dennis MB Jr, et al. **Lab Anim Sci** 1989 Jan;39(1):51–5

Alcohol swabs and venepuncture [letter] **Lancet** 1989 Jun 17;1(8651):1388

Sunlight as disinfectant [letter] [see comments] Miller RL. **Lancet** 1988 Oct 15;2(8616):912. **Comment in:** Lancet 1989 Feb 4;1(8632):280

Ultraviolet light for sterilisation [letter] Watts GT. **Lancet** 1988 Oct 15;2(8616):912

How well are endoscopes cleaned and disinfected between patients? Collignon P, et al. **Med J Aust** 1989 Sep 4; 151(5):269–72

Human breast milk: laboratory detection of enzymes, and their use as markers for control of the pasteurisation process. Rees E. **Med Lab Sci** 1987 Oct;44(4):345–9

Disinfecting barbers' instruments [letter] Koffler M, et al. **N Engl J Med** 1989 Feb 9;320(6):402

Sterility in unsterilized surgical adhesive tape. Bundy AT. **Plast Reconstr Surg** 1989 May;83(5):880–3

Sterilization of the bone pencil [letter] Husami T, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1100

Bactericidal activity, eggshell conductance, and hatchability effects of ozone versus formaldehyde disinfection. Whistler PE, et al. **Poult Sci** 1989 Aug;68(8):1074–7

Decontamination of the gastrointestinal tract and prevention of multiple organ failure. An experimental study. van Bebber IP, et al. **Prog Clin Biol Res** 1989;308:827–33

The pharmacology of a new pasteurized antihemophilic factor concentrate derived from human blood plasma. Rousell RH, et al. **Transfusion** 1989 Mar–Apr;29(3):208–12

Effect of ethylene oxide sterilization and storage conditions on canine cortical bone harvested for banking. Johnson AL, et al. **Vet Surg** 1987 Nov–Dec;16(6):418–22

Disinfection with gaseous formaldehyde. Second Part: Influence of test materials on formaldehyde residues and the bactericidal and sporicidal effectiveness. Casella ML, et al. **Zentralbl Hyg Umweltmed** 1989 Aug;188(5):449–65

[Chlorination of piped water supplies in large cities of China] Jin JX, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan;23(1):1–4 (Eng. Abstr.) (Chi)

[A sensitive method with a simple statistical evaluation for determining the antimicrobial effects in sterility testing] Valšík A. **Cesk Farm** 1988 Oct;37(8):363–7 (Eng. Abstr.) (Cze)

[The role of disinfection in HIV infections: the classical agents suffice] Huisman J. **Ned Tijdschr Geneeskd** 1988 Nov 12;132(46):2100–1 (Dut)

[Disinfection and sterilization in general practice] van Klingeren B, et al. **Ned Tijdschr Geneeskd** 1988 Nov 12; 132(46):2096–100 (31 ref.) (Dut)

[Measures for preventing infection in general practice. 1: General hygiene] Steuer W, et al. **Fortschr Med** 1989 Mar 15;107(8):180–1 (Ger)

[The effect of Co-60 irradiation on the monomer fraction of intraocular PMMA lenses] Ludwig K, et al. **Fortschr Ophthalmol** 1989;86(1):38–40 (Eng. Abstr.) (Ger)

[Sterilization of non-air evacuated infusion flasks containing little water] Kownacki E, et al. **Pharm Acta Helv** 1989; 64(3):68–70 (Eng. Abstr.) (Ger)

[Risk of infection due to catheter reuse] Heeg P, et al. **Radiologe** 1988 Sep;28(9):435–7 (Eng. Abstr.) (Ger)

[The epidemiology of nosocomial infections in urology. 4: On the effectiveness of hygienic measures in preventing nosocomial infections] Friedrich M, et al. **Z Arztl Fortbild (Jena)** 1989;83(5):251–5 (Ger)

[Efficient hygiene precautions in the household today] Borneff J. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4–6):404–13 (Eng. Abstr.) (Ger)

[Problems in disinfection of dental impression materials] Borneff M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr;187(4–6):365–81 (Eng. Abstr.) (Ger)

[The disinfection of the oral mucosa] Gundermann KO. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4–6):382–9 (7 ref.) (Eng. Abstr.) (Ger)

[The possibilities and limits for virus inactivation in the household] Mahnel H. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4–6):414–21 (15 ref.) (Eng. Abstr.) (Ger)

[Antibiotic prophylaxis in vascular surgery] Locati P, et al. **Minerva Chir** 1988 Oct 31;43(20):1729–32 (Eng. Abstr.) (Ita)

[Determination in time of the residual antibacterial activity after disinfection of hands with Citrosil products with benzalkonium chloride base] Scheda P, et al. **Minerva Chir** 1988 Nov 15;43(21):1845–7 (Eng. Abstr.) (Ita)

[Sanitation, disinfection and sterilization of the work environment. 21st national congress of the Italian Society of Odontostomatology and Maxillo-facial Surgery. Florence, November 19–21, 1987. Proceedings] **Minerva Stomatol** 1988 Sep;37(9):661–700 (Ita)

[Preliminary results on the use of gaseous chlorine (by sterihydrol and rapid hydrolysis) in the treatment of infected solid refuse] Bianchi P, et al. **Nuovi Ann Ig Microbiol** 1988 Jan–Feb;39(1):63–75 (Eng. Abstr.) (Ita)

[The rate of dying-off of Escherichia coli in sea water]

Nizhegorodova LE, et al. **Gig Sanit** 1988 Dec;(12):16–8 (Eng. Abstr.) (Rus)
[Use of the ATU-3 aerotherapeutic equipment] Kuzin MI, et al. **Med Tekh** 1988 Jul–Aug;(4):6–11 (Eng. Abstr.) (Rus)
[Colonization of unboiled milk with toxigenic Staphylococcus and its resistance upon pasteurization] Pavlova ZhP, et al. **Vopr Pitan** 1989 Jan–Feb;(1):67–8 (Rus)
[Wound infections after surgery—hospital hygiene] **Lakartidningen** 1988 Dec 7;85(49):4342–6 (Swe)

HISTORY

Upgrading surgeons' autoclaves [letter] Møller HJ. **J Infect** 1988 Nov;17(3):274–5
Upgrading surgeons' autoclaves [letter] Pilsworth R. **J Infect** 1988 Nov;17(3):275–6
Disinfection [editorial] **Public Health** 1988 Jul;102(4):306–8
[Research in hospital health at the Institute of General and Community Health of the Greifswald Ernst-Moritz-Arndt University] Weuffen W. **Z Gesamte Hyg** 1989 Apr; 35(4):186–8 (Eng. Abstr.) (Ger)
[I. I. Mechnikov—the organizer of disinfection in Odessa] Sokol'skaia VP, et al. **Mikrobiol Zh** 1988 Mar–Apr; 50(2):107–9 (Rus)

INSTRUMENTATION

Recommendations relating to the selection of autoclaves. **Aust Dent J** 1988 Oct;33(5):435
Use of the 'Safe air' dental heater for sterilising endodontic reamers. Forrester N, et al. **Br Dent J** 1988 Oct 22; 165(8):290–2
Washer-decontaminator—an evaluation. Crow S. **Infect Control Hosp Epidemiol** 1989 May;10(5):220–1
Interaction of some sterilizing filter materials with some technetium-99m radiopharmaceuticals. Billinghurst MW, et al. **Int J Rad Appl Instrum [A]** 1988;39(12):1255–8
Small batch control projects. Norris DM, et al. **ISA Trans** 1989;28(3):1–8
HPLC studies on the degradation profiles of glucose 5% solutions subjected to heat sterilization in a microprocessor-controlled autoclave. Cook AP, et al. **J Clin Pharm Ther** 1989 Jun;14(3):189–95
A study of the use of autoclave bags in non-vacuum autoclaves. Wood PR, et al. **J Dent** 1989 Jun;17(3):148–9
Evaluation of the Draeger Anaesthetic Equipment Washing Machine (ANDA 9002). Miles RS, et al. **J Hosp Infect** 1989 May;13(4):399–411
Autoclaves for rural health facilities [letter] Carter JY, et al. **Lancet** 1989 Jan 21;1(8630):160
An ultrasonic cleaning bath in general practice. Brown JS. **Practitioner** 1988 Apr 8;232(1446):377
The pressure cooker as a steam sterilizer. Monson MH. **Trop Doct** 1988 Oct;18(4):159–60
UV disinfecting experiments with E.coli and actinometric determination of the irradiation intensity. Zemke V, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):380–4
[Sterilization of thermolabile medical instruments with the low pressure formaldehyde procedure at 60 degrees Celsius] Mecke P. **Beitr Orthop Traumatol** 1989 Jan–Feb; 36(1–2):68–72 (Ger)
[A new method of bone sterilization] Jerosch J, et al. **Biomed Tech (Berlin)** 1989 May;34(5):117–20 (Eng. Abstr.) (Ger)
[Use of ozone in the preparation of swimming and bathing water in West Germany] Eichelsdörfer D, et al. **Off Gesundheitswes** 1988 Jul;50(7):363–6 (Eng. Abstr.) (Ger)
[Prevention of recontamination of common sterilization containers for sterilization by dry heat] Bergmann HJ, et al. **Z Arztl Fortbild (Jena)** 1988;82(10):465–8 (Ger)
[Assessment of the suitability of the sterile Aseptur pack for formaldehyde gas sterilization] Heller G. **Z Gesamte Hyg** 1989 Feb;35(2):88–9 (Eng. Abstr.) (Ger)
[Formaldehyde chamber disinfection: not suitable for respirators and anesthesia equipment] Lüderitz P, et al. **Z Gesamte Hyg** 1989 Mar;35(3):158–61 (Eng. Abstr.) (Ger)
[Bacteria-collecting and bacteriostatic effectiveness of filters for air purification] Drobenia VV, et al. **Gig Sanit** 1988 Aug;(8):90–2 (Rus)
[A cylindrical container for the sterilization and storage of pins] Kovalev EV, et al. **Voen Med Zh** 1989 Mar;(3):54 (Rus)

LEGISLATION & JURISPRUDENCE

[Disinfection, sterilization, decontamination] Silla M, et al. **Minerva Stomatol** 1988 Sep;37(9):670–87 (44 ref.) (Ita)

METHODS

Effect of storage and 60Co irradiation on the antiviral activity and subtype pattern of native human interferon-alpha preparations. Mécs I, et al. **Acta Virol (Praha)** 1989 Mar; 33(2):177–82
Survey of techniques used for sterilization of facial implants. Gurevich I, et al. **Am J Infect Control** 1989 Feb;17(1):35–8
Clearing the air. The theory and application of ultraviolet air disinfection. Riley RL, et al. **Am Rev Respir Dis** 1989 May;139(5):1286–94 (64 ref.)
Flash sterilization of anesthesia bellows reduces postoperative infection rate. Dryden GE. **AORN J** 1989 Apr;49(4):1123–5
Operating room practices: myth or science? Lehr PS, et al. **AORN J** 1989 Feb;49(2):645–9
Effect of disinfection of drinking water with ozone or chlorine dioxide on survival of Cryptosporidium parvum oocysts. Peeters JE, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1519–22
Disinfection of Goldmann tonometers against human immunodeficiency virus type 1. Pepose JS, et al. **Arch Ophthalmol** 1989 Jul;107(7):983–5
Clean vs sterile technique for pediatric dental patients in the operating room. Helpin ML, et al. **ASDC J Dent Child** 1988 Nov–Dec;55(6):449–51
Ageing of radiation-sterilized polypropylene: changes in semicrystallinity. Jayabalan M, et al. **Biomaterials** 1989 Jan; 10(1):33–7
Autoclavable handpieces [letter] Davis JM. **Br Dent J** 1989 Jan 21;166(2):35–6
Autoclavable handpieces [letter] Martin MV. **Br Dent J** 1988 Nov 19;165(10):356
A Reflex Plotter investigation into the dimensional stability of alginate impressions following disinfection by varying regimes employing 2.2 per cent glutaraldehyde. Jones ML, et al. **Br J Orthod** 1988 Aug;15(3):185–92
Wound sterilization: CO2 laser versus iodine. al-Qattan MM, et al. **Br J Plast Surg** 1989 Jul;42(4):380–4
Drinking-water improvement in the Americas with mixed oxidant gases generated on-site for disinfection (MOGGOD). Reiff FM. **Bull Pan Am Health Organ** 1988; 22(4):394–415
Vigorous cleaning of Inspirease Reservoir Devices [letter] French CL, et al. **Chest** 1989 Jun;95(6):1366
Contact lens disinfection to prevent transmission of viral disease. Pepose JS. **CLAO J** 1988 Jul–Sep;14(3):165–8 (36 ref.)
Skin preparation. Masterson BJ. **Clin Obstet Gynecol** 1988 Sep;31(3):736–43
Chemical disinfection of non-porous inanimate surfaces experimentally contaminated with four human pathogenic viruses. Sattar SA, et al. **Epidemiol Infect** 1989 Jun; 102(3):493–505
Laboratory evaluation of disposable and reusable disinfectant cloths for cleaning food contact surfaces. Tebbutt GM. **Epidemiol Infect** 1988 Oct;101(2):367–75
Sterilization potential of contact lens solutions. Dada VK, et al. **Indian J Ophthalmol** 1988 Apr–Jun;36(2):92–4
A prospective study of infections in hemodialysis patients: patient hygiene and other risk factors for infection. Kaplowitz LG, et al. **Infect Control Hosp Epidemiol** 1988 Dec;9(12):534–41
Chemical sterilization in nursing homes [letter] Silver HJ. **Infect Control Hosp Epidemiol** 1988 Aug;9(8):342
Creutzfeldt-Jakob disease agent [letter] Taylor DM. **Infect Control Hosp Epidemiol** 1988 Dec;9(12):526
The use of ethylene oxide and low temperature steam/formaldehyde in hospitals. Ayliffe GA. **Infection** 1989 Mar–Apr;17(2):109–10
Biological indicators for verifying sterilization. Council on Dental Materials, Instruments, and Equipment. Council on Dental Therapeutics. **J Am Dent Assoc** 1988 Oct; 117(5):653–4
Hydrogen peroxide systems [letter] Nicolson PC. **J Am Optom Assoc** 1988 Oct;59(10):758–9
Sterilization of medical devices: a review. Dempsey DJ, et al. **J Biomater Appl** 1989 Jan;3(3):454–523 (50 ref.)
Radiation sterilization of polymeric implant materials. Bruck SD, et al. **J Biomed Mater Res** 1988 Aug;22(A2 Suppl):133–44
Enhancement of the kinetics of the aeration of ethylene oxide sterilized polymers using microwave radiation. Matthews IP, et al. **J Biomed Mater Res** 1989 Feb;23(2):143–56
Methods of disinfection of the water system of dental units by water chlorination. Fiehn NE, et al. **J Dent Res** 1988 Dec;67(12):1499–504
Sterile technique and the prevention of wound infection in office surgery—Part I. Sebben JE. **J Dermatol Surg Oncol** 1988 Dec;14(12):1364–71 (39 ref.)
Laundering of nurses' dresses at home. Ayliffe GA, et al. **J Hosp Infect** 1989 Jan;13(1):91
A comparison of hypochlorite and phenolic disinfectants for disinfection of clean and soiled surfaces and blood spillages. Bloomfield SF, et al. **J Hosp Infect** 1989 Apr;13(3):231–9
A laboratory model for testing agents for hygienic hand disinfection: handwashing and chlorhexidine for the removal of klebsiella. Casewell MW, et al. **J Hosp Infect** 1988 Oct;12(3):163–75
The effect of incisional plastic drapes and redisinfection of operation site on wound infection following caesarean section. Cordtz T, et al. **J Hosp Infect** 1989 Apr; 13(3):267–72
Routine cleaning and the elimination of Campylobacter pylori from endoscopic biopsy forceps. Karim QN, et al. **J Hosp Infect** 1989 Jan;13(1):87–90
Evaluation of ethylene oxide sterilization of tissue implants. Kearney JN, et al. **J Hosp Infect** 1989 Jan;13(1):71–80
Efficacy of various methods of sterilization of acupuncture needles [letter] Jacobs GE. **J Manipulative Physiol Ther** 1988 Oct;11(5):442
Sterilization and disinfection. Kobayashi H. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:46–8
A comparison of colony counts of breast milk using two methods of breast cleansing. Costa KM. **J Obstet Gynecol Neonatal Nurs** 1989 May–Jun;18(3):231–6
Design and use of a novel peracetic acid sterilizer for absolute barrier sterility testing chambers. Davenport SM. **J Parenter Sci Technol** 1989 Jul–Aug;43(4):158–66
Effects of sodium hypochlorite on denture base metals during immersion for short-term sterilization. McGowan MJ, et al. **J Prosthet Dent** 1988 Aug;60(2):212–8
Disinfection methods in general practice and health authority clinics: a telephone survey. Farrow SC, et al. **J R Coll Gen Pract** 1988 Oct;38(315):447–9
Lower limb salvage with autoclaved autogenous tibial diaphysis: case report. Hallock GG, et al. **J Trauma** 1989 Apr;29(4):528–30
Simple method to sterilize syringes and needles [letter] Ramachandran CR. **J Trop Pediatr** 1988 Oct;34(5):261–2
Microwave sterilization: a method for home sterilization of urinary catheters. Silbar EC, et al. **J Urol** 1989 Jan; 141(1):88–90
Sunlight as disinfectant [letter; comment] Acra A, et al. **Lancet** 1989 Feb 4;1(8632):280. **Comment on:** Lancet 1988 Oct 15;2(8616):912
Contamination of endoscopes used in AIDS patients. Hanson PJ, et al. **Lancet** 1989 Jul 8;2(8654):86–8
"Boil the water" [letter] Mayon-White RT, et al. **Lancet** 1989 Jul 22;2(8656):216
Virus transmission via fiberoptic endoscope: recommended disinfection. Bond WW. **Md Med J** 1988 Jul;37(7):497–8
Sterilization in the field—a place for glutaraldehyde [letter] Boland JP. **Milit Med** 1988 Dec;153(12):652–3
Reducing the amount of monomers in intraocular lenses through sterilization by gamma radiation. Ludwig K, et al. **Ophthalmic Res** 1988;20(5):304–7
A simple, convenient tonometer tip disinfection technique. Machesney W, et al. **Ophthalmic Surg** 1988 Oct; 19(10):748–9
Microwave disinfection of soft contact lenses. Harris MG, et al. **Optom Vis Sci** 1989 Feb;66(2):82–6
Self-sterilization of the electrosurgery electrode. Shaw DH, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):290–2
Skin and respiratory symptoms from exposure to alkaline glutaraldehyde in medical services. Norbäck D. **Scand J Work Environ Health** 1988 Dec;14(6):366–71
The failure of ethylene oxide gas-sterilized freeze-dried bone graft for thoracic and lumbar spinal fusion. Herron LD, et al. **Spine** 1989 May;14(5):496–500
Disinfection, sterilization and decontamination procedures. Favero MS. **State Art Rev Occup Med** 1989;4 Suppl:35–8
Sterilization of ophthalmological instruments. Brouwer MR, et al. **Trop Doct** 1988 Oct;18(4):174–6 (13 ref.)
The peracetic acid/low pressure cold sterilization--a new method to sterilize corticocancellous bone and soft tissue. von Versen R, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(1):18–21
Disinfection with gaseous formaldehyde. First Part: Bactericidal and sporicidal effectiveness of formaldehyde with and without formation of a condensing layer. Casella ML, et al. **Zentralbl Hyg Umweltmed** 1989 May; 188(1–2):144–65
[Effect of air-anion on air disinfection in respiratory care units and treatment of patients with COPD] Zhang JS. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):8–9, 61 (Eng. Abstr.) (Chi)
[Comparative study on the effects of 5 disinfection methods on the hepatitis B virus in patients' serum] Luo SL. **Chung Hua Hu Li Tsa Chih** 1988 Apr;23(4):224–6 (Chi)
[A study on the safety of radiation sterilization for disposable medical plastic infusion pipeline] Mi ZS. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Oct; 9(5):291–3 (Eng. Abstr.) (Chi)
[Application of solar disinfection to drinking water in tropical regions] De Lorenzi G, et al. **Bull Soc Pathol Exot Filiales** 1989;82(2):255–9 (Eng. Abstr.) (Fre)
[Virus inactivation in blood products] Stephan W. **Beitr Infusionther** 1988;21:192–201 (10 ref.) (Ger)
[Training of disinfectors—a geographic comparison—emphasis, deficiencies, perspectives] Bodenschatz W. **Off Gesundheitswes** 1988 Dec;50(12):694–7 (Eng. Abstr.) (Ger)
[Formaldehyde measurements in room air caused by disinfection measures] Broszat G, et al. **Off Gesundheitswes** 1988 Nov;50(11):654 (Ger)
[Responsibilities of the public health office in monitoring tattooing establishments] Hartung M. **Off Gesundheitswes** 1988 Dec;50(12):677–9 (Eng. Abstr.) (Ger)
[Disinfection of swimming pool water and its outcome] Hässelbarth U. **Off Gesundheitswes** 1988 Jul;50(7):360–2 (15 ref.) (Eng. Abstr.) (Ger)
[The inactivation of viruses in water and disinfection] Mahnel H. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:121–35 (26 ref.) (Ger)
[Recommendations for the treatment of dialysis patients infected with HTLV III/LAV] Baumgarten R. **Z Arztl Fortbild (Jena)** 1988;82(18):891 (Ger)
[Inactivation of hepatitis A virus in water by ozone] Botzenhart K, et al. **Z Gesamte Hyg** 1988 Sep;34(9):508–10 (Eng. Abstr.) (Ger)
[Aspects of virus inactivation in water] Burger G. **Z Gesamte Hyg** 1988 Sep;34(9):506–8 (Eng. Abstr.) (Ger)
[An apparatus for the cleaning of microtiter plates] Steinwehr

D. Z Med Lab Diagn 1989;30(2):136 (Ger)
[Use of UV rays for the disinfection of water. II. Microbiological studies of surface water] Martiny H, et al. Zentralbl Bakteriol Mikrobiol Hyg [B] 1988 Jul; 186(4):344–59 (Eng. Abstr.) (Ger)
[Use of UV rays for the disinfection of water. III. UV sensitivity of Legionella pneumophila of different ages in cold and warm drinking water] Martiny H, et al. Zentralbl Hyg Umweltmed 1989 May;188(1–2):35–46 (Eng. Abstr.) (Ger)
[Effect of gamma ray sterilization on the expanding endo–orthosis for flatfoot] Girolami M, et al. Chir Organi Mov 1988 Jul–Sep;73(3):255–7 (Eng. Abstr.) (Ita)
[Current testing of a physical method for the sterilization of dental instruments using quartz pellets] Martina R, et al. Minerva Stomatol 1988 Sep;37(9):692–4 (Ita)
[Sterilization methods] Fara GM, et al. Nuovi Ann Ig Microbiol 1988 May–Jun;39(3):263–9 (4 ref.) (Eng. Abstr.) (Ita)
[Physico–chemical and microbiological characteristics of purified and chlorinated urban sewage, particularly in relation to induced toxicity, impact on marine environment and its reuse in agriculture] Parrella A, et al. Nuovi Ann Ig Microbiol 1988 May–Jun;39(3):215–39 (Eng. Abstr.) (Ita)
[Disinfection and sterilization in the field of dentistry: practical implications and possibility of control in the confrontation with HIV] Simonetti D'Arca A, et al. Nuovi Ann Ig Microbiol 1987 Jan–Apr;38(1–2):81–9 (Eng. Abstr.) (Ita)
[Sterilization of serums and vaccines by cobalt gamma radiation] Guidolin R, et al. Rev Saude Publica 1988 Apr; 22(2):113–7 (Eng. Abstr.) (Por)
[Use of antimicrobial materials for the prevention of cross infection] Koshcheev VS, et al. Gig Sanit 1988 Aug;(8):31–4 (Eng. Abstr.) (Rus)
[Tactics in using aerosols for disinfection of therapeutic and prophylactic institutions] Liarskii PP, et al. Gig Sanit 1989 Feb;(2):35–8 (Eng. Abstr.) (Rus)
[Effectiveness of the methods of purification and disinfection of virus–contaminated water] Rusanova NA, et al. Gig Sanit 1988 Aug;(8):13–5 (Eng. Abstr.) (Rus)
[Enterosorption in the preparation of patients for surgery of the large intestine] Beliakov NA, et al. Vestn Khir 1989 Feb;142(2):30–3 (Eng. Abstr.) (Rus)
[Development of disinfection regimens for the special clothing of miners on a test object model made from different fabrics] Mikhno IL, et al. Vrach Delo 1988 Jul; (7):116–8 (Eng. Abstr.) (Rus)

STANDARDS

Endoscopic sterilization questioned [letter] Strzelecki LR. AORN J 1988 Sep;48(3):430–1
Biological indicators. McCormick PJ. Infect Control Hosp Epidemiol 1988 Nov;9(11):504–7
Hospital use of chlorine disinfectants in a hepatitis B endemic area—a prevalence survey in twenty hospitals. Ching TY, et al. J Hosp Infect 1989 Jul;14(1):39–47
Spore tests for low temperature steam with formaldehyde sterilizers [letter] Tompkins DS, et al. J Hosp Infect 1988 Oct;12(3):237
Physicochemical, toxicological and hygienic aspects of ethylene oxide application for the sterilization of medical products. III. Setting hygienic norms in sterilized medical products. Lyarsky PP, et al. J Hyg Epidemiol Microbiol Immunol 1988;32(3):257–64
Parenteral Drug Association response to the FDA compliance policy guide, #7132a.13, entitled, "Parametric release—terminally heat sterilized drug products". J Parenter Sci Technol 1988 Jul–Aug;42(4):105
PDA's response to FDA's "Guideline on sterile drug products produced by aseptic processing". Akers JE, et al. J Parenter Sci Technol 1988 Jul–Aug;42(4):114–7
Microbiological environmental monitoring during sterile product manufacture: adaptation of methods for a research facility. Slater GJ, et al. J Parenter Sci Technol 1988 Jul–Aug;42(4):111–3
A warning about nonsterile rubber gloves [letter] Polit SA. N Engl J Med 1988 Dec 1;319(22):1485
[Assurance of basic sterility in the validation of procedures for sterilization by steam pressure] Pharm Acta Helv 1988; 63(12):327–32 (Eng. Abstr.) (Fre)
[Results of assessing sterilization and disinfection guidelines in Baden–Württemberg] Junghannss U. Off Gesundheitswes 1988 Dec;50(12):680–2 (Eng. Abstr.) (Ger)
[Disinfection measures in routine cleaning of child day care centers—result of a survey of 83 child day care centers of a district area] van Gemmern C. Off Gesundheitswes 1989 May;51(5):238–41 (Eng. Abstr.) (Ger)
[Hospital public health inspections in clinico–chemical laboratories of the Potsdam district] Gastmeier P, et al. Z Gesamte Hyg 1989 Mar;35(3):162–3 (Eng. Abstr.) (Ger)
[Results of controls of hospital health in physical therapy facilities of the Potsdam district] Gastmeier P, et al. Z Gesamte Hyg 1988 May;34(5):292–3 (Eng. Abstr.) (Ger)
[Hospital public health status in community health nursing units of the Potsdam district] Kiesel M, et al. Z Gesamte Hyg 1989 Mar;35(3):164–5 (Eng. Abstr.) (Ger)
[Hygienic problems of allocating and planning for milk pasteurization and processing plants at subsidiary farms] Tulupov VP. Gig Sanit 1988 Dec;(12):68–70 (Rus)
[Evaluation of culture media for cultivating test microorganisms used in the control of the efficacy of sterilization in autoclaves] Zhuravleva VI, et al. Lab Delo 1988;(11):63–4 (Eng. Abstr.) (Rus)

TRENDS

[Trends in medical microbiology. I. Diagnosis of pathogenic markers] Presber W, et al. Z Gesamte Hyg 1988 Dec; 34(12):694–6 (Eng. Abstr.) (Ger)

STERILIZATION, INVOLUNTARY see under **STERILIZATION, SEXUAL**

STERILIZATION REVERSAL

Microsurgical reversal of female mechanical sterilization techniques. Vercruysse P, et al. Contraception 1988 Jul; 38(1):99–107
Pregnancy after vasovasostomy for vasectomy reversal: a study of factors affecting long–term return of fertility in 282 patients followed for 10 years. Silber SJ. Hum Reprod 1989 Apr;4(3):318–22
[Experimental study of reconstruction of the vas deferens in the rat] Martínez–Urrutia MJ, et al. Arch Esp Urol 1989 May;42(4):305–7 (Eng. Abstr.) (Spa)

METHODS

Microsurgical reversal of female sterilization. Dahl C, et al. Acta Obstet Gynecol Scand 1988;67(3):223–4
Tubal desterilization through exclusive laparoscopy. Sedbon E, et al. Hum Reprod 1989 Feb;4(2):158–9
Successful term pregnancies after tubal anastomosis utilizing contralateral tubal segments. West ST, et al. Int J Fertil 1989 Jan–Feb;34(1):34–6
Microsurgical reversal of female sterilization. Long–term follow–up of 117 cases. Xue P, et al. J Reprod Med 1989 Jul;34(7):451–5
Infrapubic incision for specific vasectomy reversal situations. Belker AM. Urology 1988 Nov;32(5):413–5
[Vasectomy and its reversibility] Schoysman R, et al. Acta Urol Belg 1989;57(1):103–16 (Eng. Abstr.) (Fre)
[Refertilization operation in men using microsurgical technics] Leibundgut B, et al. Helv Chir Acta 1988 Jul; 55(3):281–4 (Eng. Abstr.) (Ger)

STERILIZATION, SEXUAL

see related
PEST CONTROL, BIOLOGICAL

Postoperative pain: a comparison of laparoscopic sterilisation and diagnostic laparoscopy [letter] Davis A, et al. Anaesthesia 1988 Sep;43(9):796–7
Law lords' decision on consent [letter] Jolly CD. BMJ 1989 Jul 8;299(6691):125
Male or female sterilization: a comparative study. Kjeragaard AG, et al. Fertil Steril 1989 Mar;51(3):439–43
Fertility studies for the benefit of animals and human beings: development of improved sterilization and contraceptive methods. Dunbar BS, et al. J Am Vet Med Assoc 1988 Nov 1;193(9):1165–70 (92 ref.)
Fertility trends in Singapore. Singh K, et al. J Biosoc Sci 1988 Oct;20(4):401–9
Sterilisation of a mentally incapable woman. Brahams D. Lancet 1989 Jun 3;1(8649):1275–6
Legal power to sterilise incompetent women. Brahams D. Lancet 1989 Apr 15;1(8642):854–5
Sterilisation and mental handicap. Brahams D. Lancet 1988 Dec 10;2(8624):1377–8
Sterilisation of mentally handicapped woman approved by House of Lords. Brahams D. Lancet 1989 May 13; 1(8646):1089
Mental health. Sterilization protests [news] Dickman S. Nature 1989 Mar 16;338(6212):192
Sterilisation—the before and after. Drife J. Practitioner 1988 Jan;232(1441):39–43
Medical and contraceptive reasons for sterilization in the United States. Rindfuss RR, et al. Stud Fam Plann 1988 Nov–Dec;19(6 Pt 1):370–80
[Sterilization of handicapped within the scope of a discussion outline for a new guardianship law] Dörner K. Nervenarzt 1988 Aug;59(8):491–2 (Ger)
[10 years after compulsory sterilization: women are the key figures in Indian family planning] Buxbaum L, et al. Lakartidningen 1989 May 3;86(18):1713–6 (Swe)

ADVERSE EFFECTS

Postoperative pain after laparoscopic sterilisation [letter] McKenzie R. Anaesthesia 1989 May;44(5):450
Menstrual pattern change 1 year after sterilization: results of a controlled, prospective study. Shain RN, et al. Fertil Steril 1989 Aug;52(2):192–203

ECONOMICS

Public funding of family planning, sterilization and abortion services, 1987. Gold RB, et al. Fam Plann Perspect 1988 Sep–Oct;20(5):228–33

HISTORY

The role of physicians in America's sterilization movement, 1894–1925. Haller JS Jr. N Y State J Med 1989 Mar; 89(3):169–79

METHODS

A new method of transcervical female sterilization: preliminary results in rabbits. Vancaillie TG, et al. Fertil Steril 1989 Feb;51(2):335–8
Prospects for nonsurgical female sterilization [editorial] Kessel E. Int J Gynaecol Obstet 1989 May;29(1):1–4
Surgical sterilization at the time of cesarean delivery. Pastorek JG 2d, et al. Obstet Gynecol Clin North Am 1988 Dec;15(4):771–81
[Routine appendectomy during sterilization using a transverse mini–laparotomy technic] Ramialison L. J Gynecol Obstet Biol Reprod (Paris) 1988;17(4):521–6 (Eng. Abstr.) (Fre)

STATISTICS & NUMERICAL DATA

Childlessness among American women. Jacobson CK, et al. Soc Biol 1988 Fall–Winter;35(3–4):186–97
Development and childlessness in the states and territories of Brazil. Poston DL Jr, et al. Soc Biol 1988 Fall–Winter; 35(3–4):267–84 (27 ref.)

TRENDS

Recent trends in contraceptive sterilization in Flanders. Lodewijckx E. J Biosoc Sci 1989 Jan;21(1):59–70

UTILIZATION

[Sterilization of women in Denmark during a 7–year period, 1978–1984] Kjer JJ, et al. Ugeskr Laeger 1988 Sep 26; 150(39):2331–4 (Eng. Abstr.) (Dan)

VETERINARY

Bilateral removal of the cauda epididymides in the neonatal pig as a technique for creating teaser boars. Arkins S, et al. J Anim Sci 1989 Jan;67(1):15–9

STERILIZATION, TUBAL

see related
STERILIZATION REVERSAL

Endoscopy for contraception. Cittadini E, et al. Acta Eur Fertil 1988 Nov–Dec;19(6):309–14 (72 ref.)
Microsurgical reversal of female sterilization. Dahl C, et al. Acta Obstet Gynecol Scand 1988;67(3):223–4
The effect of H2–receptor antagonist premedication on the duration of vecuronium–induced neuromuscular blockade in postpartum patients. Hawkins JL, et al. Anesthesiology 1989 Aug;71(2):175–7
Chlamydial salpingitis and perihepatitis after tubal occlusion. Heinonen PK, et al. Arch Gynecol Obstet 1989; 244(3):179–81
Post–tubal sterilization problems correlated with ovarian steroidogenesis. Cattanach JF, et al. Contraception 1988 Nov;38(5):541–50
Evaluation of the FemTest device pre– and post–sterilization. Guzmán–Serani R, et al. Contraception 1989 Jul;40(1):49–57
Menstrual patterns and progesterone circulating levels following different procedures of tubal occlusion. Rivera R, et al. Contraception 1989 Aug;40(2):157–69
Microsurgical reversal of female mechanical sterilization techniques. Vercruysse P, et al. Contraception 1988 Jul; 38(1):99–107
Successful hemisterilization in a patient with uterus didelphus. Børlum KG, et al. Int J Gynaecol Obstet 1989 Mar;28(3):287–8
Analysis of sterilization failure in Brazil. Lassner KJ, et al. Int J Gynaecol Obstet 1988 Oct;27(2):255–63
The efficacy of tramadol in the interval laparoscopic sterilization: a comparison of two dosage regimen. Padmasuta K, et al. J Med Assoc Thai 1988 Jul;71 Suppl 2:61–3
Amnesic effect of midazolam as premedication in interval laparoscopic sterilization. Pausawasdi S, et al. J Med Assoc Thai 1988 Jul;71 Suppl 2:65–7
Availability of donated oocytes from an ambulatory sterilization program. Feinman M, et al. J Reprod Med 1989 Jul;34(7):441–3
Microsurgical reversal of female sterilization. Long–term follow–up of 117 cases. Xue P, et al. J Reprod Med 1989 Jul;34(7):451–5
Extrauterine pregnancy four weeks after successful tubal sterilization. Pschera H, et al. Zentralbl Gynakol 1988; 110(21):1392–3
[The clinical study on abdominal tuboligation under acupuncture anesthesia] Wang SY, et al. Chen Tzu Yen Chiu 1988;13(3):189–93, 183 (Eng. Abstr.) (Chi)
[General anesthesia of a patient with tuberous sclerosis (letter)] Martín ML, et al. Rev Esp Anestesiol Reanim 1988 May–Jun;35(3):169 (Spa)

ADVERSE EFFECTS

Ectopic pregnancy subsequent to laparoscopic sterilization. Kjer JJ, et al. Am J Obstet Gynecol 1989 May;160(5 Pt 1):1202–4

Changes in menstrual symptoms among sterilized and comparison women: a prospective study. Rulin MC, et al. **Obstet Gynecol** 1989 Aug;74(2):149–54

[Extrauterine pregnancy after sterilization via a laparoscope] Kjer JJ, et al. **Ugeskr Laeger** 1989 Mar 20;151(12):765–6 (Eng. Abstr.) (Dan)

[Post-ligation syndrome: a follow-up of 556 cases, 5 to 8 years after tubal sterilization] Desrosiers JA, et al. **Union Med Can** 1989 May–Jun;118(3):114, 117–9, 122–5 (Eng. Abstr.) (Fre)

[Adverse effects of tubal sterilization in the female] Puchala M. **Cesk Gynekol** 1989 May;54(4):304–8 (Slo)

[Transoperative morbidity in bilateral tubal ligation in the IMSS (Mexican Institute of Social Security)] Reynoso Ron L, et al. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):207–11 (Eng. Abstr.) (Spa)

INSTRUMENTATION

[Laparoscopic sterilization in women using Filshie clips] Lebech M, et al. **Ugeskr Laeger** 1989 Jul 10;151(28):1809–11 (Eng. Abstr.) (Dan)

METHODS

Distal tubal torsion after laparoscopic sterilization: an unnecessary late complication [letter] De Wilde RL. **Am J Obstet Gynecol** 1989 Apr;160(4):1024

Transcervical sterilization with use of methyl 2-cyanoacrylate and a newer delivery system (the FEMCEPT device). Shuber J. **Am J Obstet Gynecol** 1989 Apr;160(4):887–9

Prospective study of the pituitary-ovarian function after tubal sterilization by the Pomeroy or Uchida techniques. Alvarez F, et al. **Fertil Steril** 1989 Apr;51(4):604–8

Laparoscopic sterilization combined with dilation and evacuation up to 18 weeks' gestation. Kaali SG, et al. **J Reprod Med** 1989 Jul;34(7):463–4

Association of previous abdominal surgery and significant adhesions in laparoscopic sterilization patients. Szigetvari I, et al. **J Reprod Med** 1989 Jul;34(7):465–6

Reducing bipolar sterilization failures. Soderstrom RM, et al. **Obstet Gynecol** 1989 Jul;74(1):60–3

Hysteroscopic sterilization. Thatcher SS. **Obstet Gynecol Clin North Am** 1988 Mar;15(1):51–9 (20 ref.)

Morphology of rabbit ovaries after sterilization by uterus horn coagulation or section. Riedel HH, et al. **Zentralbl Gynakol** 1989;111(9):581–6

MORTALITY

Case-fatality rates for tubal sterilization in U.S. hospitals, 1979 to 1980. Escobedo LG, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):147–50

PSYCHOLOGY

Beliefs about contraceptive sterilization among low-income urban women. Cushman LF, et al. **Fam Plann Perspect** 1988 Sep–Oct;20(5):218–21, 233

Sterilization regret among women in metropolitan Montreal. Marcil-Gratton N. **Fam Plann Perspect** 1988 Sep–Oct; 20(5):222–7

Late sequelae following laparoscopic female sterilization. Bartfai G, et al. **Int J Fertil** 1989 Jan–Feb;34(1):67–70

UTILIZATION

Sterilization: Canadian choices. Alderman PM, et al. **Can Med Assoc J** 1989 Mar 15;140(6):645–9

Sterilization: Canadian choices [letter] Edmonds J. **Can Med Assoc J** 1989 Jun 15;140(12):1431

Incidence of hysterectomy and tubal ligation in public hospitals in south Australia, 1980–82. Yusuf F, et al. **J Biosoc Sci** 1988 Oct;20(4):453–9

STERNOCLAVICULAR JOINT

A unified approach to symptomatic juxtasternal arthritis and enthesitis. Katz ME, et al. **AJR Am J Roentgenol** 1989 Aug; 153(2):327–33

Osteoradionecrosis of the head and neck: a case of a clavicular-tracheal fistula secondary to osteoradionecrosis of the sternoclavicular joint. Stofman GM, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):545–9

The risk of abscess from sternoclavicular septic arthritis [see comments] Wohlgethan JR, et al. **J Rheumatol** 1988 Aug; 15(8):1302–6 (46 ref.). **Comment in:** J Rheumatol 1989 Mar;16(3):413–4

Dialysis amyloid presenting as acute arthritis [letter] Sethi D, et al. **Nephron** 1988;50(1):73–4

Neuropathic sternoclavicular joint secondary to syringomyelia. A case report. Chidgey LK, et al. **Orthopedics** 1988 Nov;11(11):1571–3

[Sternoclavicular dislocations. Observations on the treatment and result of 49 cases] Féry A, et al. **Int Orthop** 1988; 12(3):187–95 (Eng. Abstr.) (Fre)

ANATOMY & HISTOLOGY

[Manubrium of the sternum and its joint connections with the clavicle and first ribs as a function of age. Results of anthropologic studies] Schmitt WG, et al. **Rontgenpraxis** 1989 Jun;42(6):193–7 (Ger)

BLOOD SUPPLY

[Rupture of the left subclavian artery] Rabidzhanov MR, et al. **Vestn Khir** 1988 May;140(5):75 (Rus)

INJURIES

Sternoclavicular dislocation. Treatment and complications. Ferrandez L, et al. **Ital J Orthop Traumatol** 1988 Sep; 14(3):349–55

Retrosternal epiphyseal disruption of medial clavicle: case and review in children. Winter J, et al. **J Emerg Med** 1989 Jan–Feb;7(1):9–13 (20 ref.)

Scapulothoracic dissociation (closed avulsion of the scapula, subclavian artery, and brachial plexus): a newly recognized variant, a new classification, and a review of the literature and treatment options. Ebraheim NA, et al. **J Orthop Trauma** 1987;1(1):18–23 (24 ref.)

Asymptomatic innominate vein tamponade with retromanubrial clavicular dislocation. A case report. Southworth SR, et al. **Orthop Rev** 1988 Aug;17(8):789–91

Posterior dislocation of the sternoclavicular joint: report of two cases, with emphasis on radiologic management and early diagnosis. Cope R, et al. **Skeletal Radiol** 1988; 17(4):247–50

[Treatment of chronic instability of the shoulder girdle with periosteal reinplasty] Lindenmaier HL, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(2):126–32 (Ger)

[Migration of the pin into the popliteal vein after osteosynthesis of the sternoclavicular joint] Todorov TI, et al. **Ortop Travmatol Protez** 1988 May;(5):53–4 (Rus)

MICROBIOLOGY

Abscess formation in sternoclavicular joint septic arthritis [letter; comment] Van Linthoudt D, et al. **J Rheumatol** 1989 Mar;16(3):413–4. **Comment on:** J Rheumatol 1988 Aug;15(8):1302–6

PATHOLOGY

Symptomatic manubriosternal joint involvement in rheumatoid arthritis. Doube A, et al. **Ann Rheum Dis** 1989 Jun;48(6):516–7

Palmoplantar pustulosis and sternocostoclavicular arthro-osteitis. Edlund E, et al. **Ann Rheum Dis** 1988 Oct; 47(10):809–15

SURGERY

Operation for old sternoclavicular dislocation. Results in 12 cases. Eskola A, et al. **J Bone Joint Surg [Br]** 1989 Jan; 71(1):63–5

[Surgery of apical lung cancer invading the chest wall—a new approach to apical thorax by dislocation of sterno-clavicular joint] Kusajima K. **Kyobu Geka** 1988 May;41(6):475–9 (Eng. Abstr.) (Jpn)

STERNOCOSTAL JOINTS see under **JOINTS**

STERNOCOSTOCLAVICULAR HYPEROSTOSIS

[The acquired hyperostosis syndrome. Synthesis of 13 personal observations of sternocostoclavicular hyperostosis and 300 cases from the literature. 1] Dihlmann W, et al. **ROFO** 1988 Oct;149(4):386–91 (Eng. Abstr.) (Ger)

COMPLICATIONS

Soft tissue involvement, mediastinal pseudotumor, and venous thrombosis in pustulotic arthro-osteitis. A study of eight new cases. van Holsbeeck M, et al. **Skeletal Radiol** 1989;18(1):1–8

[Sternocostoclavicular hyperostosis. Association with pustular psoriasis and systemic vasculitis] Wieland T, et al. **Schweiz Med Wochenschr** 1988 Dec 3;118(48):1803–7 (Eng. Abstr.) (Ger)

DIAGNOSIS

General diagnosis case of the day. Sternocostoclavicular hyperostosis. Dehdashti F, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1319–21

Sternocostoclavicular hyperostosis (SCCH) presenting as a mass in the neck. Finkelstein DM, et al. **J Otolaryngol** 1989 Aug;18(5):254–7

Sternocostoclavicular hyperostosis. Suh JS, et al. **Yonsei Med J** 1988;29(4):388–92

[Sternocostoclavicular hyperostosis: a space-occupying lesion of the superior thoracic aperture] Farrés MT, et al. **Radiologe** 1988 Dec;28(12):584–7 (Eng. Abstr.) (Ger)

ETIOLOGY

Three cases of inter-sterno-costo-clavicular ossification associated with tonsillar infection. Furukawa M, et al. **J Laryngol Otol** 1989 Aug;103(8):783–6

RADIOGRAPHY

Sterno-costo-clavicular hyperostosis. A case report with a review of the literature. Hallas J, et al. **Acta Radiol** 1988 Sep–Oct;29(5):577–9 (22 ref.)

Sterno-costoclavicular hyperostosis. A report of two new cases and review. Geake T. **Australas Radiol** 1988 Nov; 32(4):440–3

The misleading pre-operative chest radiograph. Ipinyomi J, et al. **Br J Radiol** 1989 Mar;62(735):279–80

Computed tomographic appearances of sternocostoclavicular hyperostosis. Chigira M, et al. **Skeletal Radiol** 1989; 18(5):347–52

[The acquired hyperostosis syndrome. 2] Dihlmann W, et al. **ROFO** 1988 Dec;149(6):596–602 (68 ref.) (Eng. Abstr.) (Ger)

[Roentgenological analysis of sternocostoclavicular hyperostosis by computed tomography] Shimizu T, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):18–24 (Eng. Abstr.) (Jpn)

RADIONUCLIDE IMAGING

[Usefulness of bone imaging in diagnosis of sternocostoclavicular hyperostosis] Sakata H, et al. **Radioisotopes** 1989 Feb;38(2):76–9 (Eng. Abstr.) (Jpn)

RADIOTHERAPY

[Irradiation as therapy in painful sternocostoclavicular hyperostosis] Kutzner J, et al. **Med Klin** 1988 Aug 12; 83(16):516–9, 540 (Eng. Abstr.) (Ger)

STERNUM

Controversies in management of sternal tumors. Gabbay S, et al. **Ann Thorac Surg** 1989 Sep;48(3):428–31

Transmission of sound generated by sternal percussion. Bohadana AB, et al. **J Appl Physiol** 1989 Jan;66(1):273–7

Sternal involvement in disseminated tuberculosis [letter] Kalra OP, et al. **J Assoc Physicians India** 1988 Apr; 36(4):292–3

Pain in the sternocleidomastoid muscle and occlusal interferences. Kohno S, et al. **J Oral Rehabil** 1988 Jul; 15(4):385–92

Case report 513: Tuberculosis of manubrium sterni. Rajah R. **Skeletal Radiol** 1989;17(8):601–2

Case report 535: Hepatoma metastatic to the sternum. Reed JD Jr, et al. **Skeletal Radiol** 1989;18(2):161–3

Haemophilus aphrophilus sternal osteomyelitis. Berenson CS, et al. **South Med J** 1988 Dec;81(12):1593–4

Primary sternal osteomyelitis. Gill EA Jr, et al. **West J Med** 1989 Aug;151(2):199–203 (18 ref.)

[Radiologic diagnosis of tumors of the sternum (analysis of 30 cases)] Jiang ZH. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Oct;22(5):286–9 (11 ref.) (Eng. Abstr.) (Chi)

[Serious complications of sternal puncture] Bichel J. **Ugeskr Laeger** 1989 Feb 13;151(7):442–4 (Eng. Abstr.) (Dan)

[Reconstruction of the thoracic wall in neoplasms of the manubrium of sternum] Baisi A, et al. **Minerva Chir** 1989 Apr 30;44(8):1289–92 (Eng. Abstr.) (Ita)

[1st reported case of pneumothorax caused by sternal puncture] Polverino M, et al. **Minerva Med** 1989 Jun; 80(6):611–3 (Eng. Abstr.) (Ita)

[Newly designed approach to an aneurysm eroding the sternum and protruding over the sternum] Takeuchi E, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):962–6 (Eng. Abstr.) (Jpn)

[Solitary plasmacytoma of the thorax: report of two cases] Hara F, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2516–20 (Eng. Abstr.) (Jpn)

[Evaluation of the degree of infundibuliform abnormality of the thorax and technics of the fixation of the sternum] Abdrakhmanov AZh. **Ortop Travmatol Protez** 1989 Apr; (4):14–7 (Eng. Abstr.) (Rus)

ABNORMALITIES

Development and morphology of the sternal foramen. Cooper PD, et al. **Am J Forensic Med Pathol** 1988 Dec; 9(4):342–7

Preoperative and postoperative abnormalities in chest x-ray indices and in lung function in pectus deformities. Derveaux L, et al. **Chest** 1989 Apr;95(4):850–6

Superior sternal cleft. Kumar A, et al. **Indian Pediatr** 1988 Feb;25(2):203–6

Pentalogy of defects—a variant of Cantralls syndrome [letter] Singh H, et al. **Indian Pediatr** 1989 Feb;26(2):192–3

Congenital bifid sternum with partial ectopia cordis. Kamuran M, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):288–9 (6 ref.)

Surgical management of the cleft sternum. Mogilner J, et al. **J Pediatr Surg** 1988 Oct;23(10):889–91

[A case of aortic coarctation associated with skeletal abnormalities] Dichev P, et al. **Vutr Boles** 1988;27(3):116–8 (Eng. Abstr.) (Bul)

[Surgical treatment of congenital cardiac defects in a patient with Cantrell syndrome; a case report] Atsumi H, et al. **Kyobu Geka** 1988 Oct;41(11):936–9 (Eng. Abstr.) (Jpn)

[Congenital anomalies associated with lower celosomia and their prenatal diagnosis] Arizawa M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):105–8 (5 ref.) (Jpn)

[Treatment of deformities of the anterior wall of the thorax associated with deformities of the spinal column] Filipović MS. **Acta Chir Iugosl** 1987;34(1):57–64 (Eng. Abstr.) (Ser)

ANALYSIS

A comparison of the morphological, histochemical and biochemical features of embryonic chick sternal chondrocytes in vivo with chondrocytes cultured in three-dimensional collagen gels. McClure J, et al. **Bone Miner** 1988 Jan;3(3):235-47

A comparison of rat femoral, sternebral and lumbar vertebral bone marrow fat content by subjective assessment and image analysis of histological sections. Wright JA. **J Comp Pathol** 1989 May;100(4):419-26

BLOOD SUPPLY

The effects of median sternotomy and internal mammary artery takedown on sternal blood flow. Shriver CD, et al. **Curr Surg** 1988 Sep-Oct;45(5):376-9

Sternal blood flow after median sternotomy and mobilization of the internal mammary arteries. Seyfer AE, et al. **Surgery** 1988 Nov;104(5):899-904

INJURIES

Of seat belts and sternal fractures [letter] Graber MA, et al. **Ann Emerg Med** 1989 Apr;18(4):427

Traumatic sternal segment dislocation in a child. Watanabe S, et al. **Chest** 1989 Sep;96(3):684-6

Intramedullary fixation of fracture of the sternum. Hoofwijk AG, et al. **Injury** 1988 Mar;19(2):128-9

Isolated fractures of the sternum due to road accidents. Tatò FB, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):121-5

Traumatic manubriosternal joint subluxations in two basketball players. Woo CC. **J Manipulative Physiol Ther** 1988 Oct;11(5):433-7

Sternal fracture: a benign injury? Maxwell WA. **J R Coll Surg Edinb** 1988 Oct;33(5):267-9

Sternal fractures associated with spinal injury. Jones HK, et al. **J Trauma** 1989 Mar;29(3):360-4

Traumatic sternal fractures: current concepts in diagnosis and management. Carey S, et al. **Milit Med** 1988 Sep; 153(9):451-3

Fractures of the sternum. Breederveld RS, et al. **Neth J Surg** 1988 Oct;40(5):133-5 (11 ref.)

[A partial fracture of the sternum in a 10-year-old soccer player] Rostan A. **Schweiz Z Sportmed** 1988 Oct;36(3):126 (Fre)

PATHOLOGY

Treatment of median sternotomy wound infection and sternal necrosis in an infant. Terranova W, et al. **Ann Thorac Surg** 1989 Jul;48(1):122-3

Bone lesions in pigs with locomotor dysfunction of hind legs. Yamasaki K, et al. **J Comp Pathol** 1989 Apr;100(3):313-22

Pathogenesis of discovertebral and manubriosternal joint abnormalities in rheumatoid arthritis: a cadaveric study. Schils JP, et al. **J Rheumatol** 1989 Mar;16(3):291-7

RADIOGRAPHY

Chondrosarcoma of the sternum: CT features. Aoki J, et al. **J Comput Assist Tomogr** 1989 Sep-Oct;13(5):806-10

Age estimation from quantitation of features of "chest plate" X-rays. Barrès DR, et al. **J Forensic Sci** 1989 Jan; 34(1):228-33

CT appearance of large sternoclavicular calcific masses in a teenager with chronic renal disease and secondary hyperparathyroidism, on hemodialysis maintenance. O'Malley BM, et al. **Pediatr Radiol** 1989;19(5):339-40

The oblique sternum: an alternative projection. Arnold M, et al. **Radiography** 1988 Jul-Aug;54(616):159-61

An alternative to the standard radiographic position for the sternum. Moore TF. **Radiol Technol** 1988 Nov-Dec; 60(2):133-4

[Isolated arthritis of the sternal manubrium and palmo-plantar pustular psoriasis] Larbre JP, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):999-1000 (Fre)

[Eosinophilic granuloma located in the sternum] Martinelli C, et al. **Radiol Med (Torino)** 1989 Mar;77(3):270-1 (Ita)

SURGERY

Poststernotomy neuralgia: a new pain syndrome. Defalque RJ, et al. **Anesth Analg** 1989 Jul;69(1):81-2

Closure of a sternal defect with the rectus abdominis muscle after sacrifice of both internal mammary arteries. Fernando B, et al. **Ann Plast Surg** 1988 Nov;21(5):468-71

The management of infected median sternotomy wounds. Martin RD. **Ann Plast Surg** 1989 Mar;22(3):243-51

Interlocking figure-of-8 closure of the sternum. Di Marco RF Jr, et al. **Ann Thorac Surg** 1989 Jun;47(6):927-9

Reoperative median sternotomy. Garrett HE Jr, et al. **Ann Thorac Surg** 1989 Aug;48(2):305

Delayed primary closure after sternal wound infection. Johnson JA, et al. **Ann Thorac Surg** 1989 Feb;47(2):270-3

Repair of fractured wire during sternal closure [letter] Malavé G. **Ann Thorac Surg** 1989 May;47(5):794

Chest wall stabilization using plate fixation. Sherman JE, et al. **Ann Thorac Surg** 1988 Oct;46(4):467-9

Ectopic ossification after median sternotomy [letter] Vander Salm TJ, et al. **Ann Thorac Surg** 1989 Aug;48(2):315-6 (9 ref.)

Management of difficult sternal closure after sternal infection [letter] Vasu MA, et al. **Ann Thorac Surg** 1989 Aug; 48(2):315

Median sternotomy for implantable cardioverter/defibrillator. Blakeman BM, et al. **Arch Surg** 1989 Sep;124(9):1065-6

Sternal osteomyelitis: treatment with rectus abdominis muscle. Iacobucci JJ, et al. **Br J Plast Surg** 1989 Jul; 42(4):452-9

Effect of temporary external stabilization on ventilator weaning after sternal resection. Ali J, et al. **Chest** 1989 Feb;95(2):472-3

Combination of ofloxacin and amikacin in the treatment of sternotomy wound infection. Yew WW, et al. **Chest** 1989 May;95(5):1051-5

Arteriovenous fistula of internal mammary artery after median sternotomy. Bentivegna PE, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):375-7

Zipper sternotomy: a new approach to an old problem [letter] Gonzalez-Diego JF, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):671-2

Median sternotomy with bilateral bullous resection for unilateral spontaneous pneumothorax, with special reference to operative indications. Ikeda M, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):615-20

Randomized clinical trial of fibrin sealant in patients undergoing resternotomy or reoperation after cardiac operations. A multicenter study. Rousou J, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):194-203

Osteochondrosarcoma of the sternum: 29-year cure by radical surgery. Seley GP. **Mt Sinai J Med (NY)** 1988 Sep; 55(4):329-32

Primary treatment of the infected sternotomy wound with muscle flaps: a review of 211 consecutive cases. Nahai F, et al. **Plast Reconstr Surg** 1989 Sep;84(3):434-41

Reconstruction of infant thoracic wounds. Stahl RS, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1000-11

Primary tumours of the sternum. Ala-Kulju K, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):169-72 (16 ref.)

Repair of the dehisced median sternotomy incision. Miller JI, et al. **Surg Clin North Am** 1989 Oct;69(5):1091-102 (21 ref.)

Median sternotomy as an approach for pulmonary surgery. Watanabe Y, et al. **Thorac Cardiovasc Surg** 1988 Aug; 36(4):227-31

[Post-operative care of patients with funnel chest after subvolution of the sternum by vascular pedicle surgery] Yin WL. **Chung Hua Hu Li Tsa Chih** 1989 Feb;24(2):71-2 (Chi)

[Mediastinal exploration by sternotomy in surgery of hyperparathyroidism. 36 cases] Dubost CI, et al. **J Chir (Paris)** 1988 Nov;125(11):631-7 (20 ref.) (Eng. Abstr.) (Fre)

[Trendelenburg's operation using an sternostomy approach for pulmonary embolectomy] Balique JG, et al. **Presse Med** 1988 Sep 17;17(31):1583-5 (Eng. Abstr.) (Fre)

[Experimental studies of stabilization of refixation following median sternotomy] Schade K, et al. **Langenbecks Arch Chir** 1989;374(1):20-4 (Eng. Abstr.) (Ger)

[Simplified technique for closure of median sternotomy incision: the use of bone stapler] Hashiguchi M, et al. **Kyobu Geka** 1989 Mar;42(3):203-5 (Eng. Abstr.) (Jpn)

[Power staple fixation of the sternum after refractory mediastinitis following A-C bypass; key points of sternal fixation] Okada M, et al. **Kyobu Geka** 1988 Jul;41(8):641-3 (Eng. Abstr.) (Jpn)

[Report of 108 patients with valvular heart disease who underwent re-operations through repeated median sternotomy incision] Terada Y, et al. **Kyobu Geka** 1989 Jun;42(6):426-30, discussion 431-3 (Eng. Abstr.) (Jpn)

[A case report of difficult sternal closure after open heart surgery—useful method of using bone cement as a sternal spacer] Ina H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1156-60 (Eng. Abstr.) (Jpn)

[Median sternotomy in resection of bilateral multiple metastatic lung tumors] Tatsuta M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2255-62 (Eng. Abstr.) (Jpn)

[A 1-stage surgical treatment of bilateral bullous disease of the lungs using trans-sternal organ-preserving surgery] Vishnevskiĭ AA, et al. **Grudn Khir** 1989 Mar-Apr;(2):44-8 (Eng. Abstr.) (Rus)

[Prevention of suppurative complications after a trans-sternal approach to the organs of the anterior mediastinum] Chupryna VV, et al. **Vestn Khir** 1988 Sep;141(9):52-3 (Rus)

STEROID-11-HYDROXYLASE see under **STEROID HYDROXYLASES**

STEROID-12-HYDROXYLASE see under **STEROID HYDROXYLASES**

STEROID-17-HYDROXYLASE see under **STEROID HYDROXYLASES**

STEROID-21-HYDROXYLASE see under **STEROID HYDROXYLASES**

STEROID HYDROXYLASES

ANALYSIS

A normal phase high-performance liquid chromatography system for steroid 17 alpha-hydroxylase/C17-20 lyase (cytochrome P-450 21scc) assays. Schatzman GL, et al. **Anal Biochem** 1988 Nov 15;175(1):219-26

Characterization of the liver mitochondrial cytochrome P-450 catalyzing the 26-hydroxylation of 5 beta-cholestane-3 alpha, 7 alpha, 12 alpha-triol [published erratum appears in Biochem Biophys Res Commun 1989 Feb 28;159(:370] Dahlbäck H. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):30-6

Effects of serum testosterone level with buserelin on the activities of drug and testosterone hydroxylase and on the content of a male-specific form of cytochrome P-450 in male rats. Ohi H, et al. **Biochem Pharmacol** 1989 Feb 1; 38(3):535-8

In vitro metabolism of 25-hydroxyvitamin D3 by human trophoblastic homogenates, mitochondria, and microsomes: lack of evidence for the presence of 25-hydroxyvitamin D3-1.alpha- and 24R-hydroxylases. Hollis BW, et al. **Endocrinology** 1989 Sep;125(3):1224-30

Quantification of P450scc, P450(17) alpha, and iron sulfur protein reductase in Leydig cells and adrenals of inbred strains of mice. Perkins LM, et al. **Endocrinology** 1988 Dec; 123(6):2675-82

Constitutive testosterone 6 beta-hydroxylase in rat liver. Imaoka S, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):481-7

Immunochemical studies for the presence of P-450 HFLa, a form of cytochrome P-450 in human fetal livers in human hepatocellular carcinoma cells. Kitada M, et al. **J Pharmacobiodyn** 1989 Jun;12(6):341-4

Immunolocalization of aromatase, 17 alpha-hydroxylase and side-chain-cleavage cytochromes P-450 in the human ovary. Sasano H, et al. **J Reprod Fertil** 1989 Jan;85(1):163-9

Immunohistochemical analysis of cytochrome P-450 17 alpha-hydroxylase in pig adrenal cortex, testis and ovary. Sasano H, et al. **Mol Cell Endocrinol** 1989 Apr; 62(2):197-202

Rat P450(17 alpha) from testis: characterization of a full-length cDNA encoding a unique steroid hydroxylase capable of catalyzing both delta 4- and delta 5-steroid-17,20-lyase reactions. Fevold HR, et al. **Mol Endocrinol** 1989 Jun;3(6):968-75

The estrogen 2-hydroxylase activity of the gonadotropin-stimulated hypophysectomized immature rat ovary. Chakraborty C, et al. **Proc Soc Exp Biol Med** 1988 Nov;189(2):189-95

Immunohistochemical study of cytochrome P-450 11 beta-hydroxylase in human adrenal cortex with mineralo- and glucocorticoid excess. Sasano H, et al. **Virchows Arch [A]** 1988;413(4):313-8

[A study of non-aromatizing androgen 19-hydroxylase in sheep adrenal] Kosaki T, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jul 20;64(7):606-22 (Eng. Abstr.) (Jpn)

[Determination of liver cholesterol-7 alpha-monooxygenase activity in an in vivo experiment] Tverdokhlib VP, et al. **Biol Nauki** 1989;(5):30-2 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

19-Hydroxylase inhibition of adrenal mitochondrial P450 11 beta/18/19-hydroxylase by a suicide inhibitor. Griffing GT, et al. **Am J Med Sci** 1989 Aug;298(2):83-8

24-Dehydrovitamin D is potent inhibitor of rat liver microsomal vitamin D-25-hydroxylase. Bolt MJ, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):532-8

17 beta-(cyclopropylamino)-androst-5-en-3 beta-ol, a selective mechanism-based inhibitor of cytochrome P450(17 alpha) (steroid 17 alpha-hydroxylase/C17-20 lyase). Angelastro MR, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1571-7

Effects of the chitin synthetase inhibitor plumbagin and its 2-demethyl derivative juglone on insect ecdysone 20-monooxygenase activity. Mitchell MJ, et al. **Experientia** 1988 Dec 1;44(11-12):990-1

Inhibition of human adrenal steroidogenic enzymes in vitro by imidazole drugs including ketoconazole. Ayub M, et al. **J Steroid Biochem** 1989 Apr;32(4):515-24

2-Bromo- and 16-bromo-estrogens and related compounds: potential inhibitors for both estradiol 2- and 16 alpha-hydroxylases in rat liver microsomes. Numazawa M, et al. **J Steroid Biochem** 1989 Jul;33(1):111-7

Kinetic studies of inhibition of estradiol 2- and 16 alpha-hydroxylases with 17 alpha-ethynyl and 17 beta-cyano steroids: preferential inhibition of the 16 alpha-hydroxylase. Numazawa M, et al. **J Steroid Biochem** 1989 Jan;32(1A):85-90

Interferon-gamma inhibits steroidogenesis and accumulation of mRNA of the steroidogenic enzymes P450scc and P450c17 in cultured porcine Leydig cells. Orava M, et al. **Mol Endocrinol** 1989 Jun;3(6):887-94

Specific inactivation by 17 beta-substituted steroids of rabbit and rat liver cytochromes P-450 responsible for progesterone 21-hydroxylation. Halpert J, et al. **Mol Pharmacol** 1989 Jan;35(1):148-56

[Inhibitory effects and spectral changes in pig testicular cytochrome P-450(17 alpha-hydroxylase/lyase) by 20 beta-hydroxy-C21-steroids] Nakajin S, et al. **Yakugaku Zasshi** 1988 Dec;108(12):1188-95 (Eng. Abstr.)

(Jpn)

BIOSYNTHESIS

The calcium ionophore A23187 is a potent stimulator of the vitamin D3-25 hydroxylase in hepatocytes isolated from normocalcaemic vitamin D-depleted rats. Benbrahim N, et al. **Biochem J** 1988 Oct 1;255(1):91-7

[The role of suppression of cholesterol 7-hydroxylase activity of the liver in the development of atherogenic stress-induced dyslipoproteinemia] Meerson FZ, et al. **Kardiologiia** 1988 Sep;28(9):85-7 (Rus)

DEFICIENCY

Molecular genetic analysis of steroid 21-hydroxylase [P-450(C21)] deficiency. Higashi Y, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:105-10

RFLPs of 21-hydroxylase and C4 genes: application to pedigree analysis on 21-hydroxylase deficiency. Matsumoto T, et al. **Acta Paediatr Jpn Overseas Ed** 1988; 30 Suppl:111-6

Growth and final height in classical and nonclassical 21-hydroxylase deficiency. New MI, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:79-88

Genetic analysis of 21-hydroxylase deficiency—possible role of gene conversion in monogenic disease. Sasazuki T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):495-9

Congenital adrenal hyperplasia in females with virilized genitalia: the problem of delayed diagnosis. Luthra M, et al. **Aust Paediatr J** 1988 Aug;24(4):254-7

Diagnosis of 21-hydroxylase deficiency in newborn infants by GC-MS of urinary steroids. Yong AB, et al. **Aust Paediatr J** 1988 Oct;24(5):280-5

Heterozygotes for 17 alpha-hydroxylase deficiency can be detected with a short ACTH test. Wit JM, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):657-64

Prenatal treatment in congenital adrenal hyperplasia due to 21-hydroxylase deficiency: up-date 88 of the French multicentric study. Forest MG, et al. **Endocr Res** 1989; 15(1-2):277-301

Analysis of mutations causing steroid 21-hydroxylase deficiency. White PC. **Endocr Res** 1989;15(1-2):239-56

A new variant of 17 alpha-hydroxylase deficiency with hyperaldosteronism in two Japanese sisters. Monno S, et al. **Endocrinol Jpn** 1989 Apr;36(2):315-23

Age-related changes in adrenal size during the first year of life in normal newborns, infants and patients with congenital adrenal hyperplasia due to 21-hydroxylase deficiency: comparison of ultrasound and hormonal parameters. Hauffa BP, et al. **Eur J Pediatr** 1988 Oct; 148(1):43-9

Prenatal DNA analysis in four embryos/fetuses at risk of 21-hydroxylase deficiency. Matsumoto T, et al. **Eur J Pediatr** 1988 Dec;148(3):228-32

Evidence of 11 beta-hydroxylase deficiency in a patient with cortical adrenal adenoma. Touitou Y, et al. **Horm Metab Res** 1989 May;21(5):272-4

Identification of a common molecular basis for combined 17 alpha-hydroxylase/17,20-lyase deficiency in two Mennonite families. Kagimoto K, et al. **Hum Genet** 1989 Jun;82(3):285-6

Prenatal diagnosis and management of congenital adrenal hyperplasia due to steroid 21-hydroxylase deficiency. Passarge E. **Indian J Pediatr** 1988 Jul-Aug;55(4):472-5

21-Hydroxylase deficiency in female hyperandrogenism: screening and diagnosis. Azziz R, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):577-84

Increased plasma 21-deoxycorticosterone (21-DB) levels in late-onset adrenal 21-hydroxylase deficiency suggest a mild defect of the mineralocorticoid pathway. Fiet J, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):542-7

Gene conversions and rearrangements cause discordance between inheritance of forms of 21-hydroxylase deficiency and HLA types. Morel Y, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):592-9

In vitro fertilization and primary embryonic cleavage are possible in 17 alpha-hydroxylase deficiency despite extremely low intrafollicular 17 beta-estradiol. Rabinovici J, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):693-7

Combined 17-hydroxylase and 17,20-desmolase deficiencies: evidence for synthesis of a defective cytochrome P450c17. Winter JS, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):309-16

Partial 17, 20-desmolase and 17 alpha-hydroxylase deficiencies in a 16-year-old boy. Bosson D, et al. **J Endocrinol Invest** 1988 Jul-Aug;11(7):527-33

Prevalence of late-onset 11 beta-hydroxylase deficiency in hirsute patients. Carmina E, et al. **J Endocrinol Invest** 1988 Sep;11(8):595-8

Male pseudohermaphroditism due to 17-hydroxylase deficiency. D'Alberton A, et al. **J Endocrinol Invest** 1989 Mar;12(3):193-6

Severe hypertension with absent secondary sex characteristics due to partial deficiency of steroid 17 alpha-hydroxylase activity. Fraser R, et al. **J Hum Hypertens** 1987 Jun;1(1):53-8

A hitherto unreported case of 21-hydroxylase deficiency associated with Bartter's syndrome and a balanced 6-9 translocation. Yabe R, et al. **J Med** 1987;18(5-6):333-49

21-hydroxylase deficiency families with HLA identical affected and unaffected sibs. Sinnott PJ, et al. **J Med Genet** 1989 Jan;26(1):10-7

Infertility in a man with 21-hydroxylase deficient congenital adrenal hyperplasia. Mirsky HA, et al. **J Urol** 1989 Jul; 142(1):111-3

Combined 17 alpha-hydroxylase/17,20-lyase deficiency due to a stop codon in the N-terminal region of 17 alpha-hydroxylase cytochrome P-450. Yanase T, et al. **Mol Cell Endocrinol** 1988 Oct;59(3):249-53

Early prenatal diagnosis of 21-hydroxylase deficiency using amniotic fluid 17-hydroxyprogesterone determination and DNA probes. Raux-Demay M, et al. **Prenat Diagn** 1989 Jul;9(7):457-66

[Virilization caused by 21-hydroxylase deficiency and axillary sweat gland hyperplasia] Jourdain JC, et al. **Ann Dermatol Venereol** 1988;115(11):1136-8 (Fre)

[Malignant arterial hypertension disclosing late congenital adrenal hyperplasia due to 17 alpha-hydroxylase deficiency] Ribstein J, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:93-5 (Eng. Abstr.) (Fre)

[The effect of maternal dexamethasone treatment after the 12th week of pregnancy on fetal genital development in adrenogenital syndrome with 21-hydroxylase deficiency] Schwab KO, et al. **Monatsschr Kinderheilkd** 1989 May; 137(5):293-6 (Eng. Abstr.) (Ger)

[21-hydroxylase deficiency associated with adrenal tumor: case report of two brothers] Sunaga Y, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 May 20;65(5):525-36 (Eng. Abstr.) (Jpn)

[Molecular genetic analysis of steroid 21-hydroxylase (P-450(C21)) deficiency] Higashi Y. **Seikagaku** 1988 Sep; 60(9):1047-52 (Jpn)

GENETICS

RFLPs of 21-hydroxylase and C4 genes: application to pedigree analysis on 21-hydroxylase deficiency. Matsumoto T, et al. **Acta Paediatr Jpn Overseas Ed** 1988; 30 Suppl:111-6

Major-histocompatibility-complex gene markers and restriction-fragment analysis of steroid 21-hydroxylase (CYP21) and complement C4 genes in classical congenital adrenal hyperplasia patients in a single population. Partanen J, et al. **Am J Hum Genet** 1989 May;44(5):660-70

Structural characterization of the bovine CYP17 (17 alpha-hydroxylase) gene. Bhasker CR, et al. **Arch Biochem Biophys** 1989 Jun;271(2):479-87

Four species of cDNAs for cytochrome P450 isozymes immunorelated to P450C-M/F encode for members of P450IID subfamily, increasing the number of members within the subfamily. Ishida N, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):681-8

Rat testis P-450(17)alpha cDNA: the deduced amino acid sequence, expression and secondary structural configuration. Namiki M, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):705-12

Functional characterization of two cytochrome P-450s within the mouse, male-specific steroid 16 alpha-hydroxylase gene family: expression in mammalian cells and chimeric proteins. Ichikawa T, et al. **Biochemistry** 1989 May 30;28(11):4779-84

Mouse steroid 15 alpha-hydroxylase gene family: identification of type II P-450(15)alpha as coumarin 7-hydroxylase. Negishi M, et al. **Biochemistry** 1989 May 16;28(10):4169-72

Rip locus: regulation of female-specific isozyme (I-P-450(16 alpha) of testosterone 16 alpha-hydroxylase in mouse liver, chromosome localization, and cloning of P-450 cDNA. Noshiro M, et al. **Biochemistry** 1988 Aug 23;27(17):6434-43

Genetic regulation of estrogen-dependent repression of female-specific testosterone 16 alpha-hydroxylase (I-P-450(16 alpha) in male mouse liver: murine Ripr locus. Noshiro M, et al. **Biochemistry** 1988 Aug 23;27(17):6444-8

Coordinated maternal imprinting and paternal genotype determined the ultimate level of hepatic cytochrome P-450 and associated monooxygenase activities. Simpson VJ, et al. **Drug Metab Dispos** 1988 Jul-Aug;16(4):576-81

Pulsed field gel electrophoresis identifies a high degree of variability in the number of tandem 21-hydroxylase and complement C4 gene repeats in 21-hydroxylase deficiency haplotypes. Collier S, et al. **EMBO J** 1989 May; 8(5):1393-402

Regulation of 21-hydroxylase gene expression. Handler JD, et al. **Endocr Res** 1989;15(1-2):31-47

Developmental regulation of P-45017 alpha gene expression in fetal bovine adrenal. Lund J, et al. **Endocr Res** 1989; 15(1-2):17-29

Clinical and genetic characterization of nonclassic 21-hydroxylase deficiency. Speiser PW, et al. **Endocr Res** 1989;15(1-2):257-76

cDNA-directed expression of rat testosterone 7 alpha-hydroxylase using the modified vaccinia virus, T7-RNA-polymerase system and evidence for 6 alpha-hydroxylation and delta 6-testosterone formation. Aoyama T, et al. **Eur J Biochem** 1989 May 1;181(2):331-6

Cellular senescence involves stochastic processes causing loss of expression of differentiated function genes: transfection with SV40 as a means for dissociating effects of senescence on growth and on differentiated function gene expression. Cheng CY, et al. **Exp Cell Res** 1989 Jan;180(1):49-62

Cellular senescence involves stochastic processes causing loss of expression of differentiated function genes: visualization by in situ hybridization for steroid 17 alpha-hydroxylase in bovine adrenocortical cells. Ryan RF, et al. **Exp Cell Res** 1989 Jan;180(1):36-48

Evidence for a multigene family involved in bile acid 7-dehydroxylation in Eubacterium sp. strain VPI 12708. White WB, et al. **J Bacteriol** 1988 Oct;170(10):4555-61

Expression of a rat liver microsomal cytochrome P-450 catalyzing testosterone 16 alpha-hydroxylation in Saccharomyces cerevisiae: vitamin D3 25-hydroxylase and testosterone 16 alpha-hydroxylase are distinct forms of cytochrome P-450. Hayashi S, et al. **J Biochem (Tokyo)** 1988 May;103(5):858-62

Expression of two kinds of cytochrome P-450(11 beta) mRNA in bovine adrenal cortex. Kirita S, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):683-6

Cloning, structure, and expression of the mitochondrial cytochrome P-450 sterol 26-hydroxylase, a bile acid biosynthetic enzyme. Andersson S, et al. **J Biol Chem** 1989 May 15;264(14):8222-9

The structure and characterization of type I P-450(15) alpha gene as major steroid 15 alpha-hydroxylase and its comparison with type II P-450(15) alpha gene. Lindberg R, et al. **J Biol Chem** 1989 Apr 15;264(11):6465-71

Gene conversion and differential regulation in the rat P-450 IIA gene subfamily. Purification, catalytic activity, cDNA and deduced amino acid sequence, and regulation of an adult male-specific hepatic testosterone 15 alpha-hydroxylase. Matsunaga T, et al. **J Biol Chem** 1988 Dec 5;263(34):17995-8002

Structural and functional analysis of the promoter region of the gene encoding mouse steroid 11 beta-hydroxylase. Mouw AR, et al. **J Biol Chem** 1989 Jan 15;264(2):1305-9

A cAMP-responsive element regulates expression of the mouse steroid 11 beta-hydroxylase gene. Rice DA, et al. **J Biol Chem** 1989 Aug 25;264(24):14011-5

Gene family of male-specific testosterone 16 alpha-hydroxylase (C-P-450(16 alpha)) in mice. Organization, differential regulation, and chromosome localization. Wong G, et al. **J Biol Chem** 1989 Feb 15; 264(5):2920-7

The roles of cAMP and cAMP-dependent protein kinase in the expression of cholesterol side chain cleavage and steroid 11 beta-hydroxylase genes in mouse adrenocortical tumor cells. Wong M, et al. **J Biol Chem** 1989 Aug 5; 264(22):12867-71

Cytochromes P-45011 beta, P-450scc and adrenodoxin gene expression during adrenocortical regeneration in the rat. Chou FP, et al. **J Endocrinol** 1989 Jul;122(1):403-8

Direct observation of the gene organization of the complement C4 and 21-hydroxylase loci by pulsed field gel electrophoresis. Dunham I, et al. **J Exp Med** 1989 May 1;169(5):1803-18

Transcriptional pattern of 21-hydroxylase gene (P-450C21) during embryonic development, before, and after birth in mice as determined by in situ hybridization. Raschellà G, et al. **J Histochem Cytochem** 1989 May;37(5):751-6

Heterogeneity in the gene locus for steroid 21-hydroxylase deficiency. Rumsby G, et al. **J Med Genet** 1988 Sep; 25(9):596-9

DNA and RNA analysis of cytochrome P-450 21-hydroxylase: transcriptional activity in congenital adrenal hyperplasia. al-Othman AN, et al. **J Mol Endocrinol** 1988 Nov;1(3):157-64

Homologous sequences in steroidogenic enzymes, steroid receptors and a steroid binding protein suggest a consensus steroid-binding sequence. Picado-Leonard J, et al. **Mol Endocrinol** 1988 Nov;2(11):1145-50

An inherited defect in aldosterone biosynthesis caused by a mutation in or near the gene for steroid 11-hydroxylase. Globerman H, et al. **N Engl J Med** 1988 Nov 3; 319(18):1193-7

Cytochrome P450CMF cDNA: nucleotide sequence of P450CMF1b. Ishida N, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6407

Aberrant splicing and missense mutations cause steroid 21-hydroxylase [P-450(C21)] deficiency in humans: possible gene conversion products. Higashi Y, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7486-90

Transcript encoded on the opposite strand of the human steroid 21-hydroxylase/complement component C4 gene locus. Morel Y, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6582-6

Nucleotide-sequence-specific de novo methylation in a somatic murine cell line. Szyf M, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6853-7

[Molecular analysis of 21-hydroxylase gene of simple-virilizing 21-hydroxylase deficiency] Ogo A, et al. **Fukuoka Igaku Zasshi** 1988 Nov;79(11):787-90 (Eng. Abstr.) (Jpn)

[Localization of the pathologic gene for 21-hydroxylase enzyme deficiency within the HLA system] Brkljačić-Surkalović L, et al. **Lijec Vjesn** 1988 Sep-Oct; 110(9-10):306-11 (Eng. Abstr.) (Scr)

IMMUNOLOGY

Characterization of monoclonal antibodies specific to bovine renal vitamin D hydroxylases. Bort RE, et al. **Endocrinology** 1988 Nov;123(5):2491-8

ISOLATION & PURIFICATION

Purification of two isozymes of rat liver microsomal cytochrome P450 with testosterone 7 alpha-hydroxylase activity. Arlotto MP, et al. **Arch Biochem Biophys** 1989 May 1;270(2):441-57

Identification of cytochrome P450a (P450IIA1) as the principal testosterone 7 alpha-hydroxylase in rat liver microsomes and its regulation by thyroid hormones. Ariotto MP, et al. **Arch Biochem Biophys** 1989 May 1; 270(2):458–71

Purification and characterization of two distinct forms of rat adrenal cytochrome P450(11) beta: functional and structural aspects. Lauber M, et al. **Arch Biochem Biophys** 1989 Oct;274(1):109–19

Purification and characterization of hepatic steroid hydroxylases from untreated rainbow trout. Miranda CL, et al. **Arch Biochem Biophys** 1989 Jan;268(1):227–38

Reconstitution of C27-steroid 26-hydroxylase activity from bovine brain mitochondria. Pedersen JI, et al. **Biochem Int** 1989 Mar;18(3):615–22

Soluble 25-hydroxyvitamin D3-1 alpha-hydroxylase from kidney mitochondria of rachitic pigs. Saarem K, et al. **Comp Biochem Physiol [B]** 1978;61(4):485–90

Heterogeneity of the bovine adrenal steroid 21-hydroxylase. Narasimhulu S. **Endocr Res** 1989;15(1–2):67–84

Isolation of two distinct cytochromes P-45011 beta with aldosterone synthase activity from bovine adrenocortical mitochondria. Ogishima T, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):497–9

Purification and characterization of vitamin D 25-hydroxylase from rat liver mitochondria. Masumoto O, et al. **J Biol Chem** 1988 Oct 5;263(28):14256–60

Isolation of aldosterone synthase cytochrome P-450 from zona glomerulosa mitochondria of rat adrenal cortex. Ogishima T, et al. **J Biol Chem** 1989 Jul 5;264(19):10935–8

Purification and characterization of 5 beta-cholestane-3 alpha,7 alpha,12 alpha-triol 27-hydroxylase from female rat liver mitochondria. Okuda K, et al. **J Biol Chem** 1988 Dec 5;263(34):18138–42

METABOLISM

Tissue distribution and levels of gene expression of three steroid hydroxylases in ovine fetal adrenal glands. Tangalakis K, et al. **Acta Endocrinol (Copenh)** 1989 Feb; 120(2):225–32

Effect of hypercalcemia-producing tumor on 1,25(OH)2D3 biosynthesis in athymic mice. Kukreja SC, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E309–14

Aromatase and nonaromatizing 10-demethylase activity of adrenal cortex mitochondrial P-450(11)beta. Suhara K, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):31–7

Point mutations at threonine-301 modify substrate specificity of rabbit liver microsomal cytochromes P-450 (laurate (omega-1)-hydroxylase and testosterone 16 alpha-hydroxylase). Imai Y, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):717–22

Evidence for the formation of 26-hydroxycholesterol by cytochrome P-450 in pig kidney mitochondria. Postlind H, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1135–40

Solubilization and reconstitution of kidney 25-hydroxyvitamin D3 1 alpha- and 24-hydroxylases from vitamin D-replete pigs. Gray RW, et al. **Biochem J** 1989 Apr 15;259(2):561–8

Androgen hydroxylation catalysed by a cell line (SD1) that stably expresses rat hepatic cytochrome P-450 PB-4 (IIB1). Waxman DJ, et al. **Biochem J** 1989 May 15;260(1):81–5

Substrate specificities of cytochrome P-450, C-P-450(16)alpha and P-450(15)alpha, and contribution to steroid hydroxylase activities in mouse liver microsomes. Harada N, et al. **Biochem Pharmacol** 1988 Dec 15; 37(24):4778–80

Stimulatory effect of testosterone on renal 25-hydroxyvitamin D-3 1 alpha-hydroxylase in guinea pig. Hagenfeldt Y, et al. **Biochim Biophys Acta** 1989 Mar 14; 1002(1):84–8

Effect of streptozotocin-induced diabetes on the activity of 7 alpha-hydroxy-4-cholesten-3-one-specific 12 alpha-hydroxylase in rats. Kimura K, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1117–20

Increases in cytochrome P-450 mediated 17 beta-estradiol 2-hydroxylase activity in rat liver microsomes after both acute administration and subchronic administration of 2,3,7,8-tetrachlorodibenzo-p-dioxin in a two-stage hepatocarcinogenesis model. Graham MJ, et al. **Carcinogenesis** 1988 Nov;9(11):1935–41

Regulation of steroid 17 alpha-hydroxylase in adrenocortical cells in culture. Hornsby PJ. **Endocr Res** 1989; 15(1–2):159–82

Regulation of renal 25-hydroxyvitamin D-1-hydroxylase activity in the mouse after uninephrectomy. Almond JR, et al. **Endocrinology** 1989 May;124(5):2118–21

Monooxygenase mediating catecholestrogen formation by rat anterior pituitary is an estrogen-4-hydroxylase. Bui QD, et al. **Endocrinology** 1989 Feb;124(2):1085–7

Mevinolin (lovastatin) inhibits androstenedione production by porcine ovarian theca cells at the level of the 17 alpha-hydroxylase:C-17,20-lyase complex. Engelhardt H, et al. **Endocrinology** 1989 May;124(5):2297–304

Abnormal adenosine 3',5'-monophosphate stimulation of renal 1,25-dihydroxyvitamin D production in hyp mice: evidence that 25-hydroxyvitamin D-1 alpha-hydroxylase dysfunction results from aberrant intracellular function. Nesbitt T, et al. **Endocrinology** 1989 Mar;124(3):1184–9

Distribution and regulation of 5 alpha-androstane-3 beta,17 beta-diol hydroxylase in the rat central nervous system. Warner M, et al. **Endocrinology** 1989 Jun;124(6):2699–706

Ultrastructural effects of phosphorothionates and other inhibitors of lung monooxygenases: protection against trialkylphosphorothiolate-induced lung injury. Dinsdale D, et al. **Exp Lung Res** 1989 May;15(3):459–71

Ecdysone 20-monooxygenase activity throughout the life cycle of Drosophila melanogaster. Mitchell MJ, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):467–70

Estrogen-2-hydroxylase in the brain of the male African catfish, Clarias gariepinus. Timmers RJ, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):190–203

Immunohistochemical studies of steroidogenic enzymes (aromatase, 17 alpha-hydroxylase and cholesterol side-chain cleavage cytochromes P-450) in sex cord-stromal tumors of the ovary. Sasano H, et al. **Hum Pathol** 1989 May;20(5):452–7

Nutrition-related alterations in liver microsomal testosterone hydroxylases. Gil L, et al. **Int J Androl** 1988 Aug; 11(4):339–48

Pattern and tissue distribution of catechol estrogen forming activity by pig conceptuses during the peri-implantation period. Chakraborty C, et al. **J Anim Sci** 1989 Apr; 67(4):991–8

Sex-related difference in vitamin D3 25-hydroxylase of rat liver microsomes. Hayashi S, et al. **J Biochem (Tokyo)** 1988 May;103(5):863–6

Immunochemical evidence for the catalysis of vitamin D3 25-hydroxylation and testosterone 16 alpha-hydroxylation by homologous forms of cytochrome P-450 in rat liver microsomes. Hayashi S, et al. **J Biochem (Tokyo)** 1988 May; 103(5):853–7

A sex-specific form of cytochrome P-450 catalyzing propoxycoumarin O-depropylation and its identity with testosterone 6 beta-hydroxylase in untreated rat livers: reconstitution of the activity with microsomal lipids. Yamazoe Y, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):785–90

Developmental expression of bovine adrenocortical steroid hydroxylases. Regulation of P-450(17 alpha) expression leads to episodic fetal cortisol production. Lund J, et al. **J Biol Chem** 1988 Nov 5;263(31):16195–201

Phosphorylation of ferredoxin and regulation of renal mitochondrial 25-hydroxyvitamin D-1 alpha-hydroxylase activity in vitro. Nemani R, et al. **J Biol Chem** 1989 Sep 15;264(26):15361–6

Estrogen 2-hydroxylase oxidation and menstrual function among elite oarswomen. Snow RC, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):369–76

Downregulation of the male-specific hepatic microsomal steroid 16 alpha-hydroxylase, cytochrome P-450UT-A, in rats with portal bypass. Relevance to estradiol accumulation and impaired drug metabolism in hepatic cirrhosis. Cantrill E, et al. **J Clin Invest** 1989 Apr; 83(4):1211–6

Competitive inhibition of bile acid synthesis by endogenous cholestanol and sitosterol in sitosterolemia with xanthomatosis. Effect on cholesterol 7 alpha-hydroxylase. Shefer S, et al. **J Clin Invest** 1988 Dec;82(6):1833–9

Ovine placental steroid 17 alpha-hydroxylase/C-17,20-lyase, aromatase and sulphatase in dexamethasone-induced and natural parturition. Mason JI, et al. **J Endocrinol** 1989 Jul; 122(1):351–9

Relationship between zonal distribution of microsomal cytochrome P-450s (P-450(17)alpha,lyase and P-450C21) and steroidogenic activities in guinea-pig adrenal cortex. Shinzawa K, et al. **J Endocrinol** 1988 Nov;119(2):191–200

Regulation of bile acid synthesis. III. Correlation between biliary bile salt hydrophobicity index and the activities of enzymes regulating cholesterol and bile acid synthesis in the rat. Heuman DM, et al. **J Lipid Res** 1989 Aug; 30(8):1161–71

Deoxycholate 7 alpha-hydroxylase in the hamster: substrate specificity and effect of phenobarbital. Yamashita H, et al. **J Lipid Res** 1989 May;30(5):711–8

Cytochrome P-450 mediated metabolism in active murine systemic lupus erythematosus. Baer AN, et al. **J Rheumatol** 1989 Mar;16(3):335–8

Determination of estradiol 2- and 16-alpha-hydroxylase activities in MCF-7 human breast cancer cells in culture using radiometric analysis. Niwa T, et al. **J Steroid Biochem** 1989 Aug;33(2):311–4

Modulation of 17 alpha-hydroxylase/C17,20-lyase activity in porcine theca cells. Tonetta SA, et al. **J Steroid Biochem** 1989 Aug;33(2):263–70

Hydroxylation of steroids with nonpolar side chains with 11 alpha-hydroxylase of Rhizopus nigricans. Zakelj-Mavrič M, et al. **J Steroid Biochem** 1989 Aug; 33(2):287–8

Interspecies homology of cytochrome P-450: inhibition by anti-P-450-male antibodies of testosterone hydroxylases in liver microsomes from various animal species including man. Miura T, et al. **Jpn J Pharmacol** 1989 Mar; 49(3):365–74

Renal 25-hydroxyvitamin D3-1-hydroxylase in patients with renal disease. Satomura K, et al. **Kidney Int** 1988 Nov; 34(5):712–6

Effect of sitosterol on the rate-limiting enzymes in cholesterol synthesis and degradation. Boberg KM, et al. **Lipids** 1989 Jan;24(1):9–12

Mutagenic activation of aflatoxin B1 by P-450 HFLa in human fetal livers. Kitada M, et al. **Mutat Res** 1989 Sep; 227(1):53–8

Effect of hypophysectomy on 17 alpha-hydroxylase activity in theca cells of the ovarian follicle in the Japanese quail. Mori M, et al. **Poult Sci** 1988 Nov;67(11):1636–41

[The covalent-sorption reconstitution of steroid hydroxylases] Shkumatov VM, et al. **Biokhimiia** 1988 Dec; 53(12):1962–71 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Lactogen and LH receptors. Rat P-450 17 alpha, structural analysis and hormonal regulation of mRNA levels in the Leydig cell. Dufau ML, et al. **Ann N Y Acad Sci** 1989; 564:57–76

STEROID ISOMERASES see under **ISOMERASES**

STEROID MONOOXYGENASES see **STEROID HYDROXYLASES**

STEROID RECEPTORS see **RECEPTORS, STEROID**

STEROIDAL ANTI-INFLAMMATORY AGENTS see **ANTI-INFLAMMATORY AGENTS, STEROIDAL**

STEROIDS

A computer program for drawing structure formulas of the hormonal steroids used most frequently in endocrinology. Bendl E, et al. **Comput Methods Programs Biomed** 1989 Feb;28(2):121–7

Proceedings of the XIII meeting of the International Study Group for Steroid Hormones. (Rome, Italy, 30 November–2 December 1987). **J Steroid Biochem** 1989 Jan; 32(1B):129–241

Stereochemical complementary of DNA and steroid agonists and antagonists. Hendry LB. **J Steroid Biochem** 1988 Oct; 31(4B):493–523 (160 ref.)

11 beta-substituted steroids, an original pathway to antihormones. Teutsch G, et al. **J Steroid Biochem** 1988 Oct;31(4B):549–65 (127 ref.)

Steroids: reactions and partial syntheses. Elks J. **Nat Prod Rep** 1988 Apr;5(2):147–86 (227 ref.)

Steroids: physical methods. Kirk DN. **Nat Prod Rep** 1989 Aug;6(4):393–404 (224 ref.)

Steroids: reactions and partial syntheses. Turner AB. **Nat Prod Rep** 1988 Aug;5(4):311–49 (193 ref.)

ADMINISTRATION & DOSAGE

Evaluation of hearing recovery and efficacy of steroid treatment in sudden deafness. Kanzaki J, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:31–6

Thrombolytic therapy and steroids [letter] Kenny D. **Am Heart J** 1989 Jun;117(6):1404–5

Treating patients with asthma who are dependent on systemic steroids. Shiner RJ, et al. **BMJ** 1989 Jul 22;299(6693):216–7 (10 ref.)

Medial epicondylitis caused by injury to the medial antebrachial cutaneous nerve: a case report. Richards RR, et al. **Can J Surg** 1989 Sep;32(5):366–7, 369

Transdermal delivery of steroids. Sitruk-Ware R. **Contraception** 1989 Jan;39(1):1–20 (32 ref.)

The intraligamental dental syringe facilitates steroid injection into hypertrophic scars and keloids [letter] Sagher U. **Plast Reconstr Surg** 1989 Sep;84(3):542

[Evaluation of the efficacy of infiltrative treatment in carpal tunnel syndrome. Electrophysiologic data and clinical applications] Séror P. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):307–12 (17 ref.) **(Fre)**

[The results of experimental studies on the modification of litter size in swine by exogenous sex steroid supplementation during early pregnancy. 1. Progesterone levels in plasma without and after hormonal substitution during early pregnancy in swine] Elze K, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):502–8 (Eng. Abstr.) **(Ger)**

[The results of experimental studies on the modification of litter size in swine by exogenous sex steroid supplementation in early pregnancy. 2. The effect of hormonal intervention in early pregnancy on the level of 17beta-estradiol and progesterone in plasma] Rudolph K, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):509–17 (Eng. Abstr.) **(Ger)**

[Better marketing of steroid preparations] Swanbeck G. **Lakartidningen** 1989 Apr 5;86(14):1255 **(Swe)**

ADVERSE EFFECTS

Recent onset of smooth, shiny, erythematous papules on the face. Steroid rosacea secondary to topical fluorinated steroid therapy. Martin DL, et al. **Arch Dermatol** 1989 Jun; 125(6):828, 831

Angina bullosa haemorrhagica: a complication of long-term steroid inhaler use. High AS, et al. **Br Dent J** 1988 Sep 10;165(5):176–9

Steroid-induced euphoria [letter] Seymour J. **Br J Psychiatry** 1988 Oct;153:577

Spontaneous perforation of the foreskin in Sweet's syndrome. Pak K, et al. **Br J Urol** 1989 Jul;64(1):101

Raised intraocular pressure with topical steroids after trabeculectomy. Thomas R, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):337–40

Steroid induced tear film abnormality—role of mucous in its pathogenesis. **Indian J Ophthalmol** 1987;35(5–6):455–60

Septic arthritis following arthroscopy and intra-articular

steroids. Montgomery SC, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):540

ANALYSIS

Diet and fecal steroid profile in a South Asian population with a low colon-cancer rate. McKeigue PM, et al. **Am J Clin Nutr** 1989 Jul;50(1):151–4

Some applications of chromatography to steroid analysis in the horse. Houghton E, et al. **Analyst** 1988 Aug; 113(8):1179–87

Laser-desorption/Laser-ionization mass spectrometry of biomolecules. Grotemeyer J, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):143–9

Bound/free separation methods in steroid enzyme immunoassay with monoclonal antibody. Hosoda H, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3525–31

New steroidal alkaloids from the Chinese herb drug, "bei-mu". Kaneko K, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4700–5

The presence of a pregnenolone-binding factor in the copulatory organ of the migratory locust, Locusta migratoria migratorioides R. & F. Paesen G, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):402–7

A specific reversed-phase liquid chromatographic method for analysis of steroids in Y-1 adrenal cell cultures. Cheng B, et al. **J Chromatogr** 198. Nov 18;432:302–7

On-line high-performance liquid chromatographic diode array spectrophotometric analysis of steroidal hormones in illegal preparations. De Beer JO. **J Chromatogr** 1989 Apr 7;489(1):139–55

Selection of high-performance liquid chromatographic methods in pharmaceutical analysis. I. Optimization for selectivity in reversed-phase chromatography. Gazdag M, et al. **J Chromatogr** 1988 Nov 11;454:83–94

Selection of high-performance liquid chromatographic methods in pharmaceutical analysis. II. Optimization for selectivity in normal-phase systems. Gazdag M, et al. **J Chromatogr** 1988 Nov 11;454:95–107

Studies on steroids. CCXXXVIII. Determination of bile acids in liver tissue by gas chromatography-mass spectrometry with negative ion chemical ionization detection. Goto J, et al. **J Chromatogr** 1988 Oct 28;452:119–29

Group fractionation of free and conjugated steroids by means of disposable silica-based anion-exchange columns. Vanluchene E, et al. **J Chromatogr** 1988 Dec 2; 456(1):175–82

Salivary steroid analysis: potential in clinical endocrinology. Griffiths K, et al. **J Clin Chem Clin Biochem** 1989 Apr; 27(4):233–4

High-performance liquid chromatography in endocrinology. **Monogr Endocrinol** 1988;30:1–262

High-performance liquid chromatography of steroid hormones. Makin HL, et al. **Monogr Endocrinol** 1988; 30:183–234 (267 ref.)

Non-radiometric assays. Technology and application in polypeptide and steroid hormone detection. Proceedings of a meeting. Bethesda, Maryland, October 15–16, 1987. **Prog Clin Biol Res** 1988;285:1–361

Non-radiometric methods for immunoassay of steroid hormones. Munro CJ, et al. **Prog Clin Biol Res** 1988; 285:289–329 (84 ref.)

Investigation of steroid-CBG (transcortin)-interactions with fluorescent 4,6,8(14)-triene-3-one steroids. Müller RF, et al. **Steroids** 1988 Oct;52(4):419–20

[Radioimmunologic analysis of steroids. Scientific and practical aspects] Morozov VI, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1049–72 (110 ref.) (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Anti-steroids. Proceedings of a satellite symposium of the Seventh International Congress on Hormonal Steroids. (Marbella, Spain, September, 1986). **J Steroid Biochem** 1988 Oct;31(4B):481–744

The mechanism of action of steroid antagonists: insights from crystallographic studies. Duax WL, et al. **J Steroid Biochem** 1988 Oct;31(4B):481–92 (62 ref.)

Stereochemical complementary of DNA and steroid agonists and antagonists. Hendry LB. **J Steroid Biochem** 1988 Oct; 31(4B):493–523 (160 ref.)

Nuclear acceptor sites for steroid hormone receptors: comparisons of steroids and antisteroids. Spelsberg TC, et al. **J Steroid Biochem** 1988 Oct;31(4B):579–92 (91 ref.)

BIOSYNTHESIS

The effects of alpha-human atrial natriuretic polypeptide on steroidogenesis by fetal zone cells of the human fetal adrenal gland. Carr BR, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1361–5

Regulation of the differentiated functions of Leydig tumor cells by epidermal growth factor. Ascoli M, et al. **Ann N Y Acad Sci** 1989;564:99–115

Constitutive glucose transport in rat Leydig cells and pyruvate support of steroidogenesis. Moger WH, et al. **Arch Androl** 1988;21(1):17–22

Neurosteroids: steroidogenesis in primary cultures of rat glial cells after release of aminoglutethimide blockade. Hu ZY, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):917–22

Disparate effects of estrogens on in vitro steroidogenesis by mammalian and avian granulosa cells. Hutz RJ. **Biol Reprod** 1989 Apr;40(4):709–13 (72 ref.)

The steroidogenic characteristics of primary testicular cell cultures from adult hypophysectomized rats: enhanced formation of C21 steroids. Payne DW, et al. **Biol Reprod** 1988 Oct;39(3):581–91

Catecholaminergic nerves in the embryonic chick ovary: co-localization with beta 2-adrenoceptor-bearing steroidogenic cells. Müller-Marschhausen U, et al. **Cell Tissue Res** 1988 Oct;254(1):1–9

Cytochromes P-450 in steroidogenesis: are these enzymes more specific than those of drug metabolism? Hall PF. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):485–9 (16 ref.)

The effects of ACTH on adrenal steroidogenesis and blood corticosteroid levels in the echidna (Tachyglossus aculeatus). Weiss M, et al. **Comp Biochem Physiol [B]** 1979; 64(1):65–70

Post-tubal sterilization problems correlated with ovarian steroidogenesis. Cattanach JF, et al. **Contraception** 1988 Nov;38(5):541–50

Biotransformations of steroids. Sedlaczek L. **Crit Rev Biotechnol** 1988;7(3):187–236 (249 ref.)

Mechanisms by which a phorbol ester and a diacylglycerol analog inhibit hen granulosa cell steroidogenesis. Tilly JL, et al. **Domest Anim Endocrinol** 1989 Apr;6(2):155–66

Regulation of mRNAs for human steroidogenic enzymes. Miller WL. **Endocr Res** 1989;15(1–2):1–16 (47 ref.)

Molecular biology of steroid hormone synthesis. Miller WL. **Endocr Rev** 1988 Aug;9(3):295–318 (274 ref.)

Steroidogenesis in human polycystic ovary. Mahajan DK. **Endocrinol Metab Clin North Am** 1988 Dec;17(4):751–69 (91 ref.)

Effects of removal of carboxy-terminal extension from equine luteinizing hormone (LH) beta-subunit on LH and follicle-stimulating hormone receptor-binding activities and LH steroidogenic activity in rat testicular Leydig cells. Bousfield GR, et al. **Endocrinology** 1989 Jan;124(1):379–87

Regulation of steroidogenesis in cultured porcine theca cells by growth factors. Caubo B, et al. **Endocrinology** 1989 Jul; 125(1):321–6

Plasma membrane cholesterol: removal and insertion into the membrane and utilization as substrate for steroidogenesis. Freeman DA. **Endocrinology** 1989 May;124(5):2527–34

Steroidogenesis of porcine granulosa cells from small and medium-sized follicles: effects of follicle-stimulating hormone, forskolin, and adenosine 3,5'-cyclic monophosphate versus phorbol ester. Hylka VW, et al. **Endocrinology** 1989 Mar;124(3):1204–9

Histamine affects testicular steroid production in the golden hamster. Mayerhofer A, et al. **Endocrinology** 1989 Jul; 125(1):560–2

Developmental changes in luteinizing hormone/human chorionic gonadotropin steroidogenic responsiveness in marmoset granulosa cells: effects of follicle-stimulating hormone and androgens. Shaw HJ, et al. **Endocrinology** 1989 Apr;124(4):1669–77

RU-486 inhibits rat gonadal steroidogenesis. Sanchez PE, et al. **Horm Metab Res** 1989 Jul;21(7):369–71

Effects of two oral antimycotics, ketoconazole and fluconazole, upon steroidogenesis in rat adrenal cells in vitro. Eckhoff C, et al. **J Steroid Biochem** 1988 Nov; 31(5):819–23

Steroidogenesis expression depends on negative control(s): analysis in Leydig X adrenal intraspecific cell hybrids. Lefèvre A, et al. **Mol Cell Endocrinol** 1988 Dec; 60(2–3):169–76

Inhibition of hormonal-induced cAMP and steroid production by inhibitors of pregnenolone metabolism in adrenal and Leydig cells. Penhoat A, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):55–60

The biosynthesis of triterpenoids, steroids, and carotenoids. Harrison DM. **Nat Prod Rep** 1988 Aug;5(4):387–415 (268 ref.)

Involvement of cyclic AMP in the functions of granulosa and luteal cells: regulation of steroidogenesis. Strauss JF 3d, et al. **Prog Clin Biol Res** 1988;267:177–200 (48 ref.)

Role of heme in endocrine function. Piper WN. **Semin Hematol** 1988 Oct;25(4):330–5 (25 ref.)

[Glutethimide derivatives: inhibitors of steroid biosynthesis as tumor chemotherapy] Tschiersch B, et al. **Pharmazie** 1988 May;43(5):352–4 (33 ref.) **(Ger)**

BLOOD

Influence of naturally occurring and synthetic glucocorticoids on corticosteroid-binding globulin-steroid interaction in human peripheral plasma. Frairia R, et al. **Ann N Y Acad Sci** 1988;538:287–303 (70 ref.)

Octafluorotoluene as a derivatizing agent for steroids in human plasma. Baker MH, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):211–3

An improved solid-phase enzyme and luminescent immunoassay system for steroid hormones and digoxin. Hubl W, et al. **Clin Chem** 1988 Dec;34(12):2521–3

Preimplantation embryo development and serum steroid levels in immature rats induced to ovulate or superovulate with pregnant mares' serum gonadotropin injection or follicle-stimulating hormone infusions. Leveille MC, et al. **Gamete Res** 1989 May;23(1):127–38

Effects of photoperiod and temperature on gonadal maturation, and plasma steroid and gonadotropin levels in a cyprinid fish, the honmoroko Gnathopogon caerulescens. Okuzawa K, et al. **Gen Comp Endocrinol** 1989 Jul; 75(1):139–47

A plasma steroid hormone binding protein in the viviparous water snake, Nerodia. Riley D, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):419–28

Clinical analysis of individual steroids by column liquid chromatography. Kabra PM. **J Chromatogr** 1988 Jul 29; 429:155–76 (58 ref.)

Influence of diet on plasma steroids and sex hormone-binding globulin levels in adult men. Bélanger A, et al. **J Steroid Biochem** 1989 Jun;32(6):829–33

A simple method for the measurement of the steroid fraction bound to sex hormone binding globulin in serum. Bonfrer JM, et al. **J Steroid Biochem** 1989 Aug;33(2):227–31

Computer simulation of in vivo steroid binding by plasma proteins in the presence of interfering drugs. Rajkowski KM, et al. **Steroids** 1988 Oct;52(4):421–2

Circulating sex steroids after induction of luteinized unruptured follicles in adult guinea pigs. Westfahl PK. **Steroids** 1988 Jan-Feb;51(1–2):101–14

[Transport of steroid hormones by serum lipoproteins] Panin LE, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):56–8 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Oxidoreduction of steroids with immobilized hydroxysteroid dehydrogenases and cofactor regeneration. Riva S, et al. **Ann N Y Acad Sci** 1988;542:413–6

Synthesis and gas chromatographic-mass spectrometric analysis of reduced compounds derived from 6 alpha- and 6 beta-hydroxy-11-deoxycorticosterone. Bournot P, et al. **Steroids** 1989 Jan-Feb;53(1–2):149–68

DIAGNOSTIC USE

Comparison of the quantity of estrogen receptors in human endometrium and myometrium by steroid-binding assay and enzyme immunoassay based on monoclonal antibodies to human estrophilin. Senekjian EK, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):592–7

HISTORY

Clinical steroid research—is it still worthwhile? Zachmann M. **Horm Res** 1989;31(3):106–14

The development of spectrophotometry: fortuitous inventions for steroid biochemistry. Kochakian CD. **Trends Biochem Sci** 1988 Sep;13(9):359–62

IMMUNOLOGY

Unexpected loss of immunoreactivity of a glucose oxidase-labeled antigen in a steroid enzyme immunoassay system. Hosoda H, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):859–60

ISOLATION & PURIFICATION

Detection of unconjugated and conjugated steroids in the ovary, eggs, and haemolymph of the decapod crustacean Nephrops norvegicus. Fairs NJ, et al. **Gen Comp Endocrinol** 1989 May;74(2):199–208

Comparison of the chromatographic properties of sterols, select additional steroids and triterpenoids: gravity-flow column liquid chromatography, thin-layer chromatography, gas-liquid chromatography and high-performance liquid chromatography. Xu SH, et al. **J Chromatogr** 1988 Oct 28;452:377–98

A convenient, unified scheme for the differential extraction of conjugated and unconjugated serum C19 steroids on Sep-Pak C18-cartridges. Payne DW, et al. **J Steroid Biochem** 1989 Aug;33(2):289–95

METABOLISM

Steroid-protein interactions: basic and clinical aspects. Second International Symposium on Binding Proteins. Turin, Italy, September 29–October 1, 1987. Proceedings. **Ann N Y Acad Sci** 1988;538:1–326

Steroid-protein interactions: the first fifty years. Bradlow HL. **Ann N Y Acad Sci** 1988;538:3–9 (41 ref.)

Steroid metabolism by epidermal keratinocytes. Milewich L, et al. **Ann N Y Acad Sci** 1988;548:66–89

Isolation and identification of intestinal steroid-desulfating bacteria from rats and humans. Van Eldere J, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2112–7

The metabolism of xenobiotics and endogenous compounds by the constitutive dog liver cytochrome P450 PBD-2. Duignan DB, et al. **Arch Biochem Biophys** 1988 Nov 15; 267(1):294–304

Monoclonal antibodies to rat liver cytochrome P-450 2c/RLM5 that regiospecifically inhibit steroid metabolism. Park SS, et al. **Biochem Pharmacol** 1989 Sep 15; 38(18):3067–74

Phosphorylated sites within the functional domains of the approximately 100-kDa steroid-binding subunit of glucocorticoid receptors. Smith LI, et al. **Biochemistry** 1989 May 16;28(10):4490–8

Conversion of 5 alpha-pregnane-3,20-dione, 3 alpha-hydroxy-5 alpha-pregnan-20-one and 3 beta-hydroxy-5 alpha-pregnan-20-one to delta 16-C19 steroids by the reconstituted delta 16-C19-steroid synthetase system. Kohara H, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):141–4

Estradiol-induced blockade of ovulation in the cow: effects on luteinizing hormone release and follicular fluid steroids. Engelhardt H, et al. **Biol Reprod** 1989 Jun;40(6):1287–97

Steroid hormone sulphation in lead workers. Apostoli P, et

al. **Br J Ind Med** 1989 Mar;46(3):204–8
In vitro steroid metabolism by rat retina. Lanthier A, et al. **Brain Res** 1988 Nov 1;463(2):403–6
Effects of the aromatase inhibitor 4-hydroxyandrostenedione and the antiandrogen flutamide on growth and steroid levels in DMBA-induced rat mammary tumors. Spinola PG, et al. **Breast Cancer Res Treat** 1988 Dec;12(3):287–96
The effect of low- and high-density lipoprotein cholesterol on steroid hormone production and ACTH-induced differentiation of rat adrenocortical cells in primary culture. Heikkilä P, et al. **Cell Tissue Res** 1989 Jun;256(3):487–94
Enzymes of steroid hormone metabolism in ovarian tissue of teleosts. Eckstein B, et al.
Comp Biochem Physiol [B] 1979;64(3):309–12
Perinatal opiate exposure. Effects on metabolism of xenobiotics and steroids in adult rat liver. Hansson T, et al. **Dev Pharmacol Ther** 1989;12(3):146–52
Pregnant mare's serum gonadotropin stimulates inhibin subunit gene expression in the immature rat ovary: dose response characteristics and relationships to serum gonadotropins, inhibin, and ovarian steroid content. Davis SR, et al. **Endocrinology** 1988 Nov;123(5):2399–407
New perspectives on the molecular pharmacology of affective disorders. Sulser F.
Eur Arch Psychiatry Neurol Sci 1989;238(5–6):231–9 (72 ref.)
Conjugated and unconjugated C-21, C-19 and C-18 steroid concentrations in human follicular fluid from hyperstimulated follicles. Prévost J, et al.
Gynecol Endocrinol 1987 Dec;1(4):331–8
Effects of cadmium in vitro on microsomal steroid metabolism in the inner and outer zones of the guinea pig adrenal cortex. Colby HD, et al. **J Biochem Toxicol** 1987 Spring;2:1–11
Dynamics of steroid biosynthesis during the luteal-placental shift in rhesus monkeys. Ellinwood WE, et al.
J Clin Endocrinol Metab 1989 Aug;69(2):348–55
Insulin administration alters gonadal steroid metabolism independent of changes in gonadotropin secretion in insulin-resistant women with the polycystic ovary syndrome. Dunaif A, et al. **J Clin Invest** 1989 Jan;83(1):23–9
Steroids in equine testes: the identification of endogenous 19-hydroxy and 19-nor neutral steroids by gas chromatography—mass spectrometry. Dumasia MC, et al.
J Endocrinol 1989 Feb;120(2):223–9
Steroid hormone metabolism by human epidermal keratinocytes [letter] Milewich L, et al.
J Invest Dermatol 1989 Aug;93(2):292
Mechanism of action of cyclic AMP in altering steroid metabolism in permeabilized rat hepatocytes. Berry LA, et al. **J Mol Endocrinol** 1988 Nov;1(3):165–70
Specificity of steroid binding to testicular microsomal cytochrome P-450. Relation of steroid structure to type-I spectral responses after correction for hydrophobic association with the membrane. Kühn-Velten N, et al.
J Steroid Biochem 1989 Jul;33(1):33–9
Modulation of 17 alpha-hydroxylase/C17,20-lyase activity in porcine theca cells. Tonetta SA, et al.
J Steroid Biochem 1989 Aug;33(2):263–70
Hydroxylation of steroids with nonpolar side chains with 11 alpha-hydroxylase of Rhizopus nigricans.
Zakelj-Mavrič M, et al. **J Steroid Biochem** 1989 Aug; 33(2):287–8
Spironolactone and cytochrome P-450: impairment of steroid hydroxylation in the adrenal cortex. Menard RH, et al. **Life Sci** 1974 Nov 1;15(9):1639–48
Molecular mechanism of steroid hormone action during aging. A review. Thakur MK. **Mech Ageing Dev** 1988 Nov 14;45(2):93–110 (126 ref.)
The stimulation by adrenocorticotropin of the phosphorylation of adrenal inhibitor-1: a possible role in steroidogenesis. Iyer RB, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):61–9
Homologous sequences in steroidogenic enzymes, steroid receptors and a steroid binding protein suggest a consensus steroid-binding sequence. Picado-Leonard J, et al.
Mol Endocrinol 1988 Nov;2(11):1145–50
Effect of ovarian steroids on the concentration of mu opiate receptors in different regions of the brain of the female rat. Maggi R, et al. **Pharmacol Res** 1989 Jan-Feb;21(1):91–2
Steroid hormone production in testis, ovary, and adrenal gland of immature rats irradiated in utero with 60Co. Inano H, et al. **Radiat Res** 1989 Feb;117(2):293–303
Faecal lipids in familial adenomatosis coli. Tilvis RS, et al. **Scand J Gastroenterol** 1988 Sep;23(7):882–4
Metabolism of 19-methyl substituted steroids and a proposal for the third aromatase monooxygenation. Covey DF, et al. **Steroids** 1987 Oct-Dec;50(4–6):363–74 (33 ref.)
Modulation of steroid affinity for the androgen receptor by sucrose. Traish AM, et al. **Steroids** 1989 Jan-Feb; 53(1–2):169–93
Regulation of sexual differentiation in drug and steroid metabolism. Zaphiropoulos PG, et al.
Trends Pharmacol Sci 1989 Apr;10(4):149–53 (42 ref.)
[Removal of steroid hormones with the carbon sorbent SKN-1K] Klebleev FA, et al. **Anesteziol Reanimatol** 1989 Jan-Feb;(1):40–1 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Possible relevance of steroid availability and breast cancer. Bruning PF, et al. **Ann N Y Acad Sci** 1988;538:257–64 (49 ref.)
Plasma protein-mediated transport of steroid and thyroid hormones. A critique. Ekins RP, et al.
Ann N Y Acad Sci 1988;538:193–203 (13 ref.)
Ceramic systems for long-term delivery of chemicals and biologicals. Bajpai PK, et al. **J Biomed Mater Res** 1988 Dec;22(12):1245–66
Controlled release of steroids through microporous membranes with sodium dodecyl sulfate micelles. Johnson KA, et al. **Pharm Res** 1989 Mar;6(3):239–43
The isolated perfused porcine skin flap. III. Percutaneous absorption pharmacokinetics of organophosphates, steroids, benzoic acid, and caffeine. Carver MP, et al.
Toxicol Appl Pharmacol 1989 Feb;97(2):324–37
[Mechanisms of transformation of the hormonal signal of steroids in the biological response of the target cell] Sergeev PV, et al. **Farmakol Toksikol** 1988 Jul-Aug; 51(4):4–12 (64 ref.) (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Collagen fibril dynamics in the anulus fibrosus induced by an anabolic steroid hormone. Michna H.
Acta Anat (Basel) 1989;135(1):12–6
Interaction of ethanol with the GABAA receptor in the rat brain: possible involvement of endogenous steroids. Majewska MD. **Alcohol** 1988 Jul-Aug;5(4):269–73
Actions of steroids and prostaglandins secreted by the placenta and uterus of the cow and ewe on lymphocyte proliferation in vitro. Low BG, et al.
Am J Reprod Immunol Microbiol 1988 Nov;18(3):71–5
Modulation of rat prostatic inhibinlike peptide (PIP) by steroids and protein hormones. Teni TR, et al.
Arch Androl 1988;20(3):211–7
Modulation of the GABAA receptor complex by steroids in slices of rat cuneate nucleus. Turner JP, et al.
Br J Pharmacol 1989 Feb;96(2):409–17
Cyclooxygenase products formed by primary cultures of cells from human chorion laeve: influence of steroids. Gibb W, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):788–93
Inhibition of human endothelial cell proliferation by heparin and steroids. Cariou R, et al. **Cell Biol Int Rep** 1988 Dec; 12(12):1037–47
Digoxin-like immunoreactivity, displacement of ouabain and inhibition of Na+/K+ ATPase by four steroids known to be increased in essential hypertension. Seccombe DW, et al. **Clin Biochem** 1989 Feb;22(1):17–21
Morphological studies of bronchial mucosal biopsies from asthmatics before and after ten years of treatment with inhaled steroids. Lundgren R, et al. **Eur Respir J** 1988 Dec; 1(10):883–9
Steroid regulation of monoamine oxidase activity in the adrenal medulla. Youdim MB, et al. **FASEB J** 1989 Apr; 3(6):1753–9
Steroid and xenobiotic effects on the adrenal cortex: mediation by oxidative and other mechanisms. Hornsby PJ. **Free Radic Biol Med** 1989;6(1):103–15 (128 ref.)
The corticosteroid receptor and the action of various steroids in rainbow trout fibroblasts. Lee LE, et al.
Gen Comp Endocrinol 1989 Apr;74(1):85–95
Structure-activity relationships of steroids in inducing germinal vesicle breakdown of Atlantic croaker oocytes in vitro. Trant JM, et al. **Gen Comp Endocrinol** 1988 Aug; 71(2):307–17
Expression of transferred chicken lysozyme gene in homologous and heterologous cells: steroid control in oviduct cells and SV40 DNA dependence in human cells. Renkawitz R, et al. **Gene Amplif Anal** 1983;3:261–80
In vitro effectiveness of estradiol-17 beta, androgens, corticosteroids, progesterone, and other pregnene derivatives on germinal vesicle breakdown in oocytes of the exotic common carp Cyprinus carpio (L.). Inbaraj RM, et al. **Indian J Exp Biol** 1988 Aug;26(8):583–5
Induction of estradiol dehydrogenase activity in human uterine endometrium by synthetic steroids. Kitawaki J, et al. **J Endocrinol Invest** 1988 May;11(5):351–4
Translational regulation of myelin protein synthesis by steroids. Verdi JM, et al. **J Neurochem** 1989 Jan;52(1):321–4
Effects of steroids on serotonin-N-acetyltransferase activity of pineals in organ culture. Yuwiler A. **J Neurochem** 1989 Jan;52(1):46–53
Steroid anesthetics and naturally occurring analogs modulate the gamma-aminobutyric acid receptor complex at a site distinct from barbiturates. Turner DM, et al.
J Pharmacol Exp Ther 1989 Mar;248(3):960–6
Structural basis of steroid compounds interaction with "digitalis"-receptor sites of Na,K-dependent ATPase. Kamernitzky AV, et al. **J Steroid Biochem** 1989 Jun; 32(6):857–63
Potentiation of angiostatic steroids by a synthetic inhibitor of arylsulfatase. Chen NT, et al. **Lab Invest** 1988 Oct; 59(4):453–9
Combined effects of interferon and steroid hormones on 2',5'-oligoadenylate synthetase activity in chronic lymphocytic leukemia cells. Triozzi PL, et al. **Leuk Res** 1989;13(6):437–43
Effect of various steroids on the biosynthesis of arachidonic acid in isolated hepatocytes and HTC cells. Marra CA, et al. **Lipids** 1988 Nov;23(11):1053–8
Effect of mammalian steroid hormones and luteinizing hormone on the germination of Candida albicans and implications for vaginal candidosis. Kinsman OS, et al.
Mycoses 1988 Dec;31(12):617–26
Anticonvulsant profile of an anesthetic steroid. Peterson SL.
Neuropharmacology 1989 Aug;28(8):877–9
Kinetics of drug action in disease states. XXII. Effects of contraceptive steroids on the pharmacodynamics of ethanol in rats. Wanwimolruk S, et al. **Pharm Res** 1987 Jun; 4(3):240–3
Cardiotonic steroids extracted from rabbit uterine tissue and amnionic fluid. Katsiyannis WT, et al.
Proc West Pharmacol Soc 1989;32:19–22
Control of angiogenesis with synthetic heparin substitutes. Folkman J, et al. **Science** 1989 Mar 17;243(4897):1490–3
Steroid use and aggressive behavior [letter] Svare B.
Science 1988 Dec 2;242(4883):1227

PHYSIOLOGY

Features of a hormone-driven defined neural circuit for a mammalian behavior. Principles illustrated, neuroendocrine syllogisms, and multiplicative steroid effects. Pfaff DW.
Ann N Y Acad Sci 1989;563:131–47 (69 ref.)
Topical growth factors and wound contraction in the rat: Part II. Platelet-derived growth factor and wound contraction in normal and steroid-impaired rats. Engrav LH, et al. **Ann Plast Surg** 1989 Sep;23(3):245–8
Congenital adrenal hyperplasia. New M.
Biochem Soc Trans 1988 Oct;16(5):691–4 (68 ref.)
Effects of follicle-stimulating hormone and ovarian steroids during in vitro meiotic maturation on fertilization of rat oocytes. Zhang X, et al. **Gamete Res** 1989 Jul;23(3):267–77
How steroid hormones work. Harrison RW 3d, et al.
Hosp Pract [Off] 1989 Sep 15;24(9):63–8, 70–1, 75–6 (9 ref.)
Liquid membrane phenomenon in the biological actions of gonadal steroid hormones. Nagappa AN, et al.
Indian J Biochem Biophys 1988 Aug;25(4):350–5
Distribution of opioid peptides in the preoptic region: immunohistochemical evidence for a steroid-sensitive enkephalin sexual dimorphism. Simerly RB, et al.
J Comp Neurol 1988 Oct 15;276(3):442–59
Nuclear receptor sites for steroid hormone receptors: comparisons of steroids and antisteroids. Spelsberg TC, et al. **J Steroid Biochem** 1988 Oct;31(4B):579–92 (91 ref.)
[Role of adrenal and sex steroids in the regulation of pancreatic exocrine function] Mozhelko LA.
Probl Endokrinol (Mosk) 1989 Jan-Feb;35(1):61–4 (Eng. Abstr.) **(Rus)**

SECRETION

An electron microscopic study of cells with steroid-secreting morphology in the paraaortic lymph node of the hamster. Kimura M, et al. **Anat Rec** 1989 Feb;223(2):139–51
In situ demonstration of the activity of 3 beta-hydroxysteroid dehydrogenase on steroid hormone secreting cells within the paraaortic lymph nodes of golden hamster. Tohya K, et al. **Experientia** 1989 Aug 15;45(8):750–3
Influence of dietary cis and trans fats on DMH-induced colon tumors, steroid excretion, and eicosanoid production in rats prone to colon cancer. Sugano M, et al. **Nutr Cancer** 1989; 12(2):177–87

THERAPEUTIC USE

Minimal-change glomerulopathy of adulthood. Korbet SM, et al. **Am J Nephrol** 1988;8(4):291–7
Immunologic analysis of steroid-dependent asthma. Ito K, et al. **Ann Allergy** 1989 Jan;62(1):15–20
Bilateral massive adrenal hemorrhage: early recognition and treatment [see comments] Rao RH, et al.
Ann Intern Med 1989 Feb 1;110(3):227–35 (46 ref.).
Comment in: Ann Intern Med 1989 Jul 15;111(2):185
Selected immunological parameters in patients suffering from uveitis subjected to different treatment. Wieczorek E, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):367–76
Is steroid therapy in multiple sclerosis superior to corticotropin therapy? [letter] Troiano R, et al.
Arch Neurol 1989 Apr;46(4):362
Diurnal periodicity of cortisol secretion, immune reactivity and disease activity in rheumatoid arthritis: implications for steroid treatment. Kirkham BW, et al.
Br J Rheumatol 1989 Apr;28(2):154–7 (47 ref.)
Steroid-sensitive minimal change nephrotic syndrome. Long-term follow-up. Lewis MA, et al.
Contrib Nephrol 1988;67:226–8
Steroids in Pneumocystis carinii pneumonia in HIV seropositive infants [letter] Plebani A, et al.
Eur J Pediatr 1989 Apr;148(6):579–80
Steroid-responsive and dependent stiff-man syndrome: a clinical and electrophysiological study of two cases. Piccolo G, et al. **Ital J Neurol Sci** 1988 Dec;9(6):559–66
Azathioprine as a single drug or in combination with steroids in the treatment of myasthenia gravis. Mantegazza R, et al. **J Neurol** 1988 Nov;235(8):449–53
Lecithin:sphingomyelin ratio in the amniotic fluid of male and female fetuses. Zachman RD, et al. **J Reprod Med** 1989 Mar;34(3):203–6
Steroids and cytotoxic drugs in the treatment of membranous glomerulopathy [letter] Garattini S, et al. **Nephron** 1988; 50(3):263–4
Unicameral bone cysts. A comparison of treatment options. Bovill DF, et al. **Orthop Rev** 1989 Apr;18(4):420–7 (25 ref.)
Steroid treatment of laryngotracheitis: a meta-analysis of the evidence from randomized trials. Kairys SW, et al.
Pediatrics 1989 May;83(5):683–93
Single center randomized trial using ATG v OKT3 treatment in steroid resistant rejection crises after kidney

transplantation. Blümke M, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1747
Infections in pediatric liver recipients treated for acute rejection. Koneru B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2251–2
[Does the Health Administration take responsibility for clinical testing? (letter)] Olesen KL, et al.
Ugeskr Laeger 1988 Sep 26;150(39):2357 (Dan)
[Lymphocyte subpopulations in children with steroid responsive nephrotic syndrome] Hirose H.
Nippon Jinzo Gakkai Shi 1988 Nov;30(11):1293–304 (Eng. Abstr.) (Jpn)

STEROIDS, ANABOLIC see **ANABOLIC STEROIDS**

STEROIDS, CHLORINATED

PHARMACOKINETICS

Studies on intestinal absorption, distribution and metabolism of 3 beta-chloro[4–14C]cholest-5-ene and 3 beta-chloro[4–14C]stigmast-5-ene in mice. Weber N.
Food Chem Toxicol 1989 Apr;27(4):259–63

PHARMACOLOGY

Selective inactivation of rat liver cytochromes P-450 by 21-chlorinated steroids. Halpert J, et al.
Drug Metab Dispos 1989 Jan–Feb;17(1):26–31

STEROIDS, FLUORINATED

ADMINISTRATION & DOSAGE

The topical administration of steroids in the treatment of typical vulvar dystrophies. Gadducci A, et al.
Clin Exp Obstet Gynecol 1989;16(1):12–5 (28 ref.)

ADVERSE EFFECTS

[Persistent hand warts after long-term treatment of eczema with steroid ointments] Lańcucki J, et al.
Przegl Dermatol 1988 May–Jun;75(3):190–3 (Eng. Abstr.) (Pol)

THERAPEUTIC USE

Response of mononuclear leukocyte cyclic adenosine monophosphate-phosphodiesterase activity to treatment with topical fluorinated steroid ointment in atopic dermatitis. Holden CA, et al. **J Am Acad Dermatol** 1989 Jul;21(1):69–74

STEROIDS, HETEROCYCLIC

PHARMACOKINETICS

[The pharmacokinetics of an immunomodulator of the D-homo-8-azasteroid series] Kuz'mitskiĭ BB, et al.
Farmakol Toksikol 1989 Mar–Apr;52(2):71–4 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Effect of MK-906, a specific 5 alpha-reductase inhibitor, on serum androgens and androgen conjugates in normal men. Rittmaster RS, et al. **J Androl** 1989 Jul–Aug;10(4):259–62
Precopulatory behaviour in the male hamster: effect of the 5 alpha-reductase inhibitor 17 beta-N,N-diethylcarbamoyl-4-aza-5 alpha-androstan-3-one. Steel E, et al. **J Endocrinol** 1988 Dec;119(3):483–91
Role of steroid 5 alpha-reductase activity in sexual differentiation of the guinea pig. Connolly PB, et al.
Neuroendocrinology 1989 Mar;49(3):324–30
Effect of a 4-methyl-4-aza steroid on androgen metabolism by rat ventral prostate epithelial and stromal cell cultures: selective inhibition of 5 alpha-reductase activity. Orlowski J, et al. **Prostate** 1988;13(4):289–97
Hormonal effects of an orally active 4-azasteroid inhibitor of 5 alpha-reductase in humans. Vermeulen A, et al.
Prostate 1989;14(1):45–53

STEROLS

Amphotericin B-sterol complex formation and competition with egg phosphatidylcholine: a monolayer study. Saint-Pierre-Chazalet M, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):477–86
Biological activities of oxysterols. Smith LL, et al.
Free Radic Biol Med 1989;7(3):285–332 (543 ref.)

ANALYSIS

The sterol composition of the marine sponge Aplysina (= Verongia) archeri: a comparative study of the Verongidae. Carballeira NM, et al. **Comp Biochem Physiol [B]** 1989; 93(1):175–9
Sterols of parasitic protozoa and helminths. Furlong ST.
Exp Parasitol 1989 May;68(4):482–5 (30 ref.)
Effects of in utero and in vitro incubation on the lipid-bound fatty acids and sterols of porcine spermatozoa. Evans RW, et al. **Gamete Res** 1987 Oct;18(2):153–62
Plasma lipids, lipoproteins, and fecal excretion of neutral sterols and bile acids in rats fed various high fat diets or a low fat/high sucrose diet. Høstmark AT, et al.
J Nutr 1989 Mar;119(3):356–63
Cell membrane localization of sterols with conventional and unusual side chains in two marine demosponges. Lawson MP, et al. **Lipids** 1988 Aug;23(8):750–4
Quantification of oxysterols in Dutch foods: egg products and mixed diets. van de Bovenkamp P, et al. **Lipids** 1988 Nov;23(11):1079–85
The distribution of lipids and sterols in cell types from the marine sponge Pseudaxinyssa sp. Zimmerman MP, et al.
Lipids 1989 Mar;24(3):210–6
Effects of dietary fatty acid saturation on serum and tissue cholesterol concentrations and fecal sterol excretion: a chronic metabolic study in the rat. Vaziri ND, et al.
Res Commun Chem Pathol Pharmacol 1988 Aug; 61(2):245–56
Sterols of Acanthamoeba culbertsoni strain A-1. Mehdi H, et al. **Steroids** 1988 May–Jun;51(5–6):551–8
[Variation of the sterols from Kluyveromyces lactis and from a resistant mutant by culture in the presence of sublethal doses of amphotericin B] Hakkou A, et al.
Can J Microbiol 1988 Jun;34(6):787–92 (Eng. Abstr.) (Fre)
[Sterols from Spergularia ramosa] Senatore A, et al.
Boll Soc Ital Biol Sper 1988 Jul;64(7):627–9 (Eng. Abstr.) (Ita)

ANTAGONISTS & INHIBITORS

Inhibitors of sterol synthesis. Exogenous oleate reduces the inhibitory effect of 5 alpha-cholest-8(14)-en-3 beta-ol-15-one on the growth of CHO-K1 cells. Pinkerton FD, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):689–94

BIOSYNTHESIS

Concentration and time dependence of the effects of ketoconazole on growth and sterol synthesis by Trypanosoma (Schizotrypanum) cruzi epimastigotes. Larralde G, et al. **Acta Cient Venez** 1988;39(2):140–6
Sterol biosynthesis inhibitors. Secondary effects and enhanced in vivo efficacy. Berg D, et al.
Ann N Y Acad Sci 1988;544:338–47
Mechanism of action and biochemical selectivity of allylamine antimycotic agents. Ryder NS.
Ann N Y Acad Sci 1988;544:208–20
Inhibitors of sterol synthesis. Oleate ester of 5 alpha-cholest-8(14)-en-3 beta-ol-15-one as a substrate for pancreatic cholesterol esterase. Stephens TW, et al.
Biochim Biophys Acta 1988 Dec 16;963(3):395–400
Inhibitors of sterol synthesis. Metabolism of [2,4-3H]5 alpha-cholest-8(14)-en-3 beta-ol-15-one after oral administration to a nonhuman primate. Pajewski TN, et al. **Chem Phys Lipids** 1989 Mar;49(4):243–63
Inhibitors of sterol synthesis. A major role of chylomicrons in the metabolism of 5 alpha-cholest-8(14)-en-3 beta-ol-15-one in the rat. Schroepfer GJ Jr, et al.
Chem Phys Lipids 1988 Sep;48(1–2):29–58
Inhibitors of sterol synthesis. Chemical syntheses, properties and effects of 4,4-dimethyl-15-oxygenated sterols on sterol synthesis and on 3-hydroxy-3-methylglutaryl coenzyme A reductase activity in cultured mammalian cells. Schroepfer GJ Jr, et al. **Chem Phys Lipids** 1988 Jul; 47(3):187–207
Correlation of inhibition of sterol synthesis with growth-inhibitory action of imidazole antimycotics in Candida albicans. Nicholas RO, et al.
J Antimicrob Chemother 1989 Jan;23(1):7–19
Inhibitors of sterol synthesis. Characterization of side chain oxygenated derivatives formed upon incubation of 3 beta-hydroxy-5 alpha-cholest-8(14)-en-15-one with rat liver mitochondria. Pyrek JS, et al. **J Biol Chem** 1989 Mar 15;264(8):4536–43
Sterol synthesis and low density lipoprotein clearance in vivo in the pregnant rat, placenta, and fetus. Sources for tissue cholesterol during fetal development. Belknap WM, et al.
J Clin Invest 1988 Dec;82(6):2077–85
A Candida albicans mutant conditionally defective in sterol 14 alpha-demethylation. Shimokawa O, et al.
J Med Vet Mycol 1989;27(2):121–5
The activity of ketoconazole and other azoles against Trypanosoma cruzi: biochemistry and chemotherapeutic action in vitro. Goad LJ, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):179–89
Structural and functional conservation between yeast and human 3-hydroxy-3-methylglutaryl coenzyme A reductases, the rate-limiting enzyme of sterol biosynthesis. Basson ME, et al. **Mol Cell Biol** 1988 Sep;8(9):3797–808
Inhibitors of sterol synthesis. Studies of the distribution and metabolism of 5 alpha-[2,4-3H]cholest-8(14)-en-3 beta-ol-15-one after intragastric administration to rats. Brabson JS, et al. **Steroids** 1988 Jul–Aug;52(1–2):51–68
[Phylogenetic precursors of sterols] Wilkomirski B.
Postepy Biochem 1988;34(3):229–40 (52 ref.) (Pol)

BLOOD

High density lipoprotein stimulates sterol translocation between intracellular and plasma membrane pools in human monocyte-derived macrophages. Aviram M, et al.
J Lipid Res 1989 Jan;30(1):65–76
Serum cholestanol and plant sterol levels in relation to cholesterol metabolism in middle-aged men. Miettinen TA, et al. **Metabolism** 1989 Feb;38(2):136–40
[Effect of hypolipidemic agents on the content of sterol-fibrinogen complexes of the blood in patients with ischemic heart disease] Palamarchuk VI, et al.
Vrach Delo 1989 Jan;(1):39–41 (Eng. Abstr.) (Rus)

CHEMICAL SYNTHESIS

Facile synthesis of zymosterol and related compounds. Ogihara N, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul; 36(7):2724–5
Inhibitors of sterol synthesis. Chemical synthesis, structure, and biological activities of (25R)-3 beta,26-dihydroxy-5 alpha-cholest-8(14)-en-15-one, a metabolite of 3 beta-hydroxy-5 alpha-cholest-8(14)-en-15-one. Kim HS, et al. **J Lipid Res** 1989 Feb;30(2):247–61
Chromatographic separation of putative precursors of cholestanol. Batta AK, et al. **Steroids** 1988 Jul–Aug; 52(1–2):109–22

ISOLATION & PURIFICATION

Steroidal constituents and anti-inflammatory activity of the horse chestnut (Aesculus hippocastanum L.) bark. Senatore F, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):137–41
Comparison of the chromatographic properties of sterols, select additional steroids and triterpenoids: gravity-flow column liquid chromatography, thin-layer chromatography, gas-liquid chromatography and high-performance liquid chromatography. Xu SH, et al.
J Chromatogr 1988 Oct 28;452:377–98
Three new 7-keto sterols from the Mediterranean sponge Clathrina clathrus. Aiello A, et al. **Steroids** 1988 Nov–Dec; 52(5–6):533–42

METABOLISM

Sterol balance and cholesterol absorption in inbred strains of rabbits hypo- or hyperresponsive to dietary cholesterol. Beynen AC, et al. **Atherosclerosis** 1989 Jun;77(2–3):151–7
Inhibitors of sterol synthesis. 14 alpha-ethyl-5 alpha-cholest-7-ene-3 beta,15 alpha-diol induces changes in the sterol composition and the morphology of CHO-K1 cells. Pinkerton FD, et al.
Biochem Biophys Res Commun 1988 Nov 30;157(1):359–63
Regulation of squalene synthetase in human hepatoma cell line Hep G2 by sterols, and not by mevalonate-derived non-sterols. Cohen LH, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):69–73
Accumulation of 14 alpha-methylergosta-8,24(28)-dien-3 beta,6 alpha-diol in 14 alpha-demethylation mutants of Candida albicans: genetic evidence for the involvement of 5-desaturase. Shimokawa O, et al.
Biochim Biophys Acta 1989 May 15;1003(1):15–9
Transfer of cholesterol and oxysterol derivatives by the nonspecific lipid transfer protein (sterol carrier protein 2): a study on its mode of action. van Amerongen A, et al.
Biochim Biophys Acta 1989 Jul 17;1004(1):36–43
Identification of isoprenoid-type components in human expired air: a possible shunt pathway in sterol metabolism. O'Neill HJ, et al. **Biomed Chromatogr** 1987;2(2):66–70
Relationship of dietary cholesterol and cellulose in the prevention of colon cancer. Tempero MA, et al.
Cancer Detect Prev 1988;13(1):41–54
Physical training plasma lipoproteins and faecal steroid excretion in sedentary men. Sutherland WH, et al.
Clin Physiol 1988 Oct;8(5):445–52
Increased sterol formation in Saccharomyces cerevisiae. Analysis of cell components and ultrastructure of vacuoles. Běhalová B, et al. **Folia Microbiol (Praha)** 1988;33(4):292–7
Changes in the distribution of intramembranous particles and filipin-reactive membrane sterols during in vitro capacitation of golden hamster spermatozoa. Suzuki F, et al. **Gamete Res** 1989 Jul;23(3):335–47
Purification of oxysterol binding protein from hamster liver cytosol. Dawson PA, et al. **J Biol Chem** 1989 May 25; 264(15):9046–52
Subcellular localization of sterol carrier protein-2 in rat hepatocytes: its primary localization to peroxisomes. Keller GA, et al. **J Cell Biol** 1989 Apr;108(4):1353–61
Sterol synergism in Paramecium tetraurelia. Whitaker BD, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1441–7
Interactions of sterols with antiestrogen-binding sites: structural requirements for high-affinity binding. Hwang PL, et al. **J Lipid Res** 1989 Feb;30(2):239–45
Changes in the distribution of intramembranous particles and filipin-sterol complexes during epididymal maturation of golden hamster spermatozoa. Suzuki F.
J Ultrastruct Mol Struct Res 1988 Jul;100(1):39–54
Gas chromatographic analysis of intact steryl esters in wild type Saccharomyces cerevisiae and in an ester accumulating mutant. Fenner GP, et al. **Lipids** 1989 Jul; 24(7):625–9
Localization of long-chain fatty acids and unconventional sterols in spherulous cells of a marine sponge. Lawson MP, et al. **Lipids** 1988 Nov;23(11):1037–48
Effect of low-fat, high-carbohydrate, high-fiber diet on fecal bile acids and neutral sterols. Reddy BS, et al.
Prev Med 1988 Jul;17(4):432–9
Pleiotropic mutations in Saccharomyces cerevisiae affecting sterol uptake and metabolism. Lewis TL, et al. **Yeast** 1988 Jun;4(2):93–106
Sterol uptake by anaerobically grown Saccharomyces cerevisiae. Youings A, et al. **Yeast** 1989 Apr;5 Spec No:S459–63

[Effect of a subinhibitory dose of amphotericin B on cellular fatty acid and sterol composition of Candida albicans] Mpona-Minga M, et al. **Ann Inst Pasteur Microbiol** 1988 Sep-Oct;139(5):547-55 (Eng. Abstr.) **(Fre)**

[Effect on the fertility of female Drosophila of sterol metabolism in an ecological-genetic yeast-Drosophila system] Bondarenko LV, et al. **Ontogenez** 1989 Mar-Apr; 20(2):141-8 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Lectin mediated agglutination of Candida kefyr cells and their spheroplasts grown in sterol enriched growth medium and its correlation with lipid composition. Sharma SC, et al. **Acta Microbiol Pol** 1988;37(2):175-82

Comparison of steady-state fluorescence polarization and urea permeability of phosphatidylcholine and phosphatidylsulfocholine liposomes as a function of sterol structure. Pugh EL, et al. **Chem Phys Lipids** 1989 Apr; 50(1):43-50

Steinernema feltiae (= Neoaplectana carpocapsae): effect of sterols and hypolipidemic agents on development. Ritter KS. **Exp Parasitol** 1988 Dec;67(2):257-67

Sterol-independent regulation of 3-hydroxy-3-methylglutaryl-CoA reductase by mevalonate in Chinese hamster ovary cells. Magnitude and specificity. Panini SR, et al. **J Biol Chem** 1989 Jul 5; 264(19):11044-52

Multiple sterol regulatory elements in promoter for hamster 3-hydroxy-3-methylglutaryl-coenzyme A synthase. Smith JR, et al. **J Biol Chem** 1988 Dec 5;263(34):18480-7

Influence of sterols and phospholipids on sarcolemmal and sarcoplasmic reticular cation transporters. Vemuri R, et al. **J Biol Chem** 1989 May 25;264(15):8680-5

Identification of a zinc finger protein that binds to the sterol regulatory element. Rajavashisth TB, et al. **Science** 1989 Aug 11;245(4918):640-3

PHYSIOLOGY

Reassessment of the role of phospholipids in sexual reproduction by sterol-auxotrophic fungi. Kerwin JL, et al. **J Bacteriol** 1989 Jul;171(7):3831-9

Sterol control of phospholipid biosynthesis in yeast. Bloch K. **Prog Clin Biol Res** 1988;282:3-9 (18 ref.)

STEVENS-JOHNSON SYNDROME

Update on the Stevens-Johnson syndrome. Rasmussen JE. **Cleve Clin J Med** 1988 Sep-Oct;55(5):412-4

CHEMICALLY INDUCED

An unusual combination of phototoxicity and Stevens-Johnson syndrome due to antimalarial therapy. Ortel B, et al. **Dermatologica** 1989;178(1):39-42

Stevens-Johnson syndrome due to pyrimethamine/sulfadoxine during presumptive self-therapy of malaria [letter] Phillips-Howard PA, et al. **Lancet** 1989 Sep 30;2(8666):803-4

Development of severe Stevens-Johnson syndrome after administration of slow-release theophylline. Brook U, et al. **Pediatr Dermatol** 1989 Jun;6(2):126-9

Fatal Stevens-Johnson syndrome following urography with iopamidol in systemic lupus erythematosus. Savill JS, et al. **Postgrad Med J** 1988 May;64(751):392-4

[Stevens-Johnson syndrome and toxoplasmic choroiditis] Mimoun G, et al. **Bull Soc Ophtalmol Fr** 1988 Aug-Sep; 88(8-9):961-5 (14 ref.) **(Fre)**

COMPLICATIONS

Episodic conjunctival inflammation after Stevens-Johnson syndrome. Foster CS, et al. **Ophthalmology** 1988 Apr; 95(4):453-62

[A case of esophageal ulcer associated with Stevens-Johnson syndrome] Kimura T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2250-4 **(Jpn)**

[Stevens-Johnson syndrome with a fulminant course] Karkowski MK, et al. **Wiad Lek** 1988 Mar 1;41(5):317-9 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

From a physician in Alaska, a correction in terminology [letter] Senter TP. **Va Med** 1988 Aug;115(8):361-2

[Diagnostic and prognostic significance of the contents of Willebrand factor in Lyell's and Stevens-Johnson syndromes] Rozhkova LE, et al. **Pediatriia** 1988;(12):41-2 **(Rus)**

DRUG THERAPY

Vitamin A in Stevens-Johnson Syndrome. Singer L, et al. **Ann Ophthalmol** 1989 Jun;21(6):209-10

[A case of the successful treatment of the Stevens-Johnson syndrome] Iakovlev VA, et al. **Sov Med** 1988;(12):113-5 **(Rus)**

REHABILITATION

Rehabilitative considerations for patients with severe Stevens-Johnson syndrome or toxic epidermal necrolysis. A case report. McDonald K, et al. **J Burn Care Rehabil** 1989 Mar-Apr;10(2):167-71

SURGERY

Anesthetic management of a child with Stevens-Johnson syndrome. Kalhan SB, et al. **Cleve Clin J Med** 1988 Sep-Oct;55(5):467-9

[Treatment of acquired distichiasis] Guan ZS, et al. **Yen Ko Hsueh Pao** 1987 Dec;3(4):259-62 (Eng. Abstr.) **(Chi)**

THERAPY

Burn unit treatment of acute, severe exfoliating disorders. Halebian PH, et al. **Annu Rev Med** 1989;40:137-47 (29 ref.)

STICKLEBACKS see **FISHES**

STIFLE see under **HINDLIMB**

STIGMASTEROL see under **PHYTOSTEROLS**

STIGMATIZATION see **CHRISTIANITY**

STILBENES

Reaction of trans-4-N-acetoxy-N-acetylaminostilbene with guanosine and deoxyguanosine in vitro: the primary reaction product at N2 of guanine yields different final adducts. Franz R, et al. **Chem Biol Interact** 1988; 67(1-2):105-16

Characterization of semiquinone free radicals formed from stilbene catechol estrogens. An ESR spin stabilization and spin trapping study. Kalyanaraman B, et al. **J Biol Chem** 1989 Jul 5;264(19):11014-9

DIAGNOSTIC USE

Visualization of fungi in histological sections. Wachsmuth ED. **Virchows Arch [B]** 1988;56(1):1-4

METABOLISM

Role of bicarbonate in biliary excretion of diisothiocyanostilbene disulfonate. Anwer MS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G713-22

Prostaglandin-H-synthase catalyzed formation of reactive intermediates from stilbene and steroid estrogens: covalent binding to proteins. Freyberger A, et al. **Arch Toxicol Suppl** 1989;13:206-10

Inhibition of inorganic anion transport across the human red blood cell membrane by chloride-dependent association of dipyridamole with a stilbene disulfonate binding site on the band 3 protein. Legrum B, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):193-207

Characterization of semiquinone free radicals formed from stilbene catechol estrogens. An ESR spin stabilization and spin trapping study. Kalyanaraman B, et al. **J Biol Chem** 1989 Jul 5;264(19):11014-9

PHARMACOLOGY

Preferential inhibition of the human red cell Ca-ATPase by some disulfonic stilbene derivatives. Fraile G, et al. **Acta Cient Venez** 1987;38(4):448-52

Inhibition of H,K-ATPase and Na,K-ATPase by DIDS, a disulphonic stilbene derivative. Vega FV, et al. **Acta Physiol Scand** 1988 Dec;134(4):543-7

Stilbene disulfonate blockade of colonic secretory Cl-channels in planar lipid bilayers. Bridges RJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C902-12

Depolarization-induced alkalinization in proximal tubules. II. Effects of lactate and SITS. Siebens AW, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):F354-65

The renal proximal tubule: a model for diversity of anion exchangers and stilbene-sensitive anion transporters. Aronson PS. **Annu Rev Physiol** 1989;51:419-41 (104 ref.)

Direct evidence for modulation of porter quaternary structure by transport site ligands. Salhany JM, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1337-44

Effects of five anion channel blockers on thrombin- and ionomycin-activated platelet functions. Ozaki Y, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2147-52

Inhibition and derivatization of the renal Na,K-ATPase by dihydro-4,4'-diisothiocyanatostilbene-2,2'-disulfonate. Pedemonte CH, et al. **Biochemistry** 1988 Oct 4; 27(20):7966-73

The anion-transport inhibitor H2DIDS cross-links hemoglobin interdimerically and enhances oxygen unloading. Fuhrmann GF, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):25-32

Effect of DIDS on osmotic properties of bovine erythrocytes. Mosior M, et al. **Biochim Biophys Acta** 1988 Nov 3; 945(1):51-5

4-Acetamido-4'-isothiocyanostilbene-2,2'-disulfonic acid inhibits adrenocorticotropin secretion from anterior pituitary cells. Heisler S, et al. **Endocrinology** 1989 Sep; 125(3):1231-8

Effects of two inhibitors of anion transport on bone resorption in organ culture. Klein-Nulend J, et al. **Endocrinology** 1989 Aug;125(2):1019-24

Impermeant stilbene disulfonic acids block chemotactic peptide receptor function on human granulocytes. Skubitz KM, et al. **Inflammation** 1989 Feb;13(1):31-45

Rapid [14C]heptachlor clearance from body stores of ovines: ingested mineral oil and parenteral trans-stilbene oxide lack effects. Smith GS, et al. **J Anim Sci** 1989 Jan;67(1):187-95

Intracisternal DIDS enhances ventilatory response to rebreathing CO2 in rats. Adams JM, et al. **J Appl Physiol** 1988 Oct;65(4):1611-6

4,4'-Diisothiocyanatostilbene-2,2'-disulfonic acid inhibits CD3-T cell antigen receptor-stimulated Ca2+ influx in human T lymphocytes. Rosoff PM, et al. **J Biol Chem** 1988 Dec 25;263(36):19535-40

Overexpression of a 123-kDa anion transport inhibitor binding protein and two cytoskeleton proteins in Drosophila Kc cell variants resistant to disulfonic stilbenes. Sherwood AC, et al. **J Biol Chem** 1989 Jan 25; 264(3):1829-36

Intracellular pH-regulating mechanism of the squid axon. Interaction between DNDS and extracellular Na+ and HCO3-. Boron WF, et al. **J Gen Physiol** 1989 Jan; 93(1):123-50

Role of specific interactions between protein kinase C and triphenylethylenes in inhibition of the enzyme. O'Brian CA, et al. **J Natl Cancer Inst** 1988 Dec 21;80(20):1628-33

Effects of DIDS on the chick retinal pigment epithelium. I. Membrane potentials, apparent resistances, and mechanisms. Gallemore RP, et al. **J Neurosci** 1989 Jun; 9(6):1968-76

Effects of DIDS on the chick retinal pigment epithelium. II. Mechanism of the light peak and other responses originating at the basal membrane. Gallemore RP, et al. **J Neurosci** 1989 Jun;9(6):1977-84

Analogies and differences in the modulation of progesterone receptor induction and cell proliferation by estrogens and antiestrogens in MCF-7 human breast cancer cells: study with 24 triphenylacrylonitrile derivatives. Bignon E, et al. **J Steroid Biochem** 1988 Dec;31(6):877-85

The nonselective cation channel in the basolateral membrane of rat exocrine pancreas. Inhibition by 3',5-dichlorodiphenylamine-2-carboxylic acid (DCDPC) and activation by stilbene disulfonates. Gögelein H, et al. **Pflugers Arch** 1989 Jan;413(3):287-98

Resveratrol activity on guinea pig isolated trachea from normal and albumin-sensitized animals. Ragazzi E, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:79-82

Hereditary differences in the expression of the human glutathione transferase active on trans-stilbene oxide are due to a gene deletion. Seidegård J, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7293-7

Anion channel blockers cause apparent inhibition of exocytosis by reacting with agonist or secretory product, not with cell. Vostal JG, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5839-43

The effect of DIDS on fluid reabsorption from the proximal convoluted tubule of the rat: dependence on the presence of bicarbonate. White SJ, et al. **Q J Exp Physiol** 1988 Nov; 73(6):951-8

[Effects of polydatin on platelet aggregation in rabbits] Shan CW. **Yao Hsueh Hsueh Pao** 1988 May;23(5):394-6 (Eng. Abstr.) **(Chi)**

TOXICITY

Mutagenicities of N-acyl-N-arylhydroxylamines for Salmonella. Wang CY, et al. **Chem Biol Interact** 1988; 67(3-4):215-23

Induction of single-strand breaks and interstrand cross-links in liver DNA after the administration of 2-acetylaminofluorene and trans-4-acetylaminostilbene to rats. Ruthsatz M, et al. **J Biochem Toxicol** 1987 Fall-Winter;2:271-9

URINE

Oestrogen radioreceptor assay for multi-residue screening of bovine urine for oestrogenic anabolic compounds. Arts CJ, et al. **Food Addit Contam** 1989 Jan-Mar;6(1):103-15

STILBESTROL see **DIETHYLSTILBESTROL**

STILLBIRTH see **FETAL DEATH**

STILL'S DISEASE see **ARTHRITIS, JUVENILE RHEUMATOID**

STIMULATION, ACOUSTIC see **ACOUSTIC STIMULATION**

STIMULATION, CHEMICAL

see related
ENZYME INDUCTION

STIMULATION, ELECTRIC see **ELECTRIC STIMULATION**

STIMULATION, PHOTIC see **PHOTIC STIMULATION**

STIMULATION, PHYSICAL see **PHYSICAL STIMULATION**

STINGS see **BITES AND STINGS**

STIPPLED EPIPHYSES see **CHONDRODYSPLASIA PUNCTATA**

STLV-I see under **SIMIAN RETROVIRUSES**

STLV-II see under SIMIAN RETROVIRUSES

STLV-III see SIV

STOCHASTIC PROCESSES see under PROBABILITY

STOCKINGS, COMPRESSION see CLOTHING

STOICISM see PHILOSOPHY

STOKES-ADAMS ATTACKS see ADAMS-STOKES SYNDROME

STOMACH

see related
GASTRECTOMY

Gastric lupinoma: a new variety of phytobezoar. Meeroff JC, et al. **Am J Gastroenterol** 1989 Jun;84(6):650–2

Gastric emptying and bezoars. Calabuig R, et al. **Am J Surg** 1989 Mar;157(3):287–90

Prolonged retention of a swallowed foreign body in the stomach following pyloromyotomy. Suita S, et al. **Anat Paediatr J** 1988 Dec;24(6):373–4

Unusual gastric foreign bodies [letter] Firor WB. **Can J Surg** 1989 Mar;32(2):83

Unusual gastric foreign body: a case report. Kuzon WM Jr, et al. **Can J Surg** 1988 Nov;31(6):413–7 (23 ref.)

Endoscopic removal of a trichobezoar [letter] Soehendra N. **Endoscopy** 1989 Jul;21(4):201

Failure of non-surgical procedures to treat gastric trichobezoar [letter] Van Gossum A, et al. **Endoscopy** 1989 Mar;21(2):113

Balloon extraction in 12 minutes—a new method of removing gastric balloons [letter] Weiss H. **Endoscopy** 1988 Sep; 20(5):282

Endoscopic removal of long foreign bodies from stomach. Kochhar R, et al. **J Assoc Physicians India** 1988 Jun; 36(6):391–2

Gastric bezoar after hepatic transplantation. Schwarzenberg SJ, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):119–22

Ectopic gastric-like duplication of the pancreas. Wold M, et al. **J Pediatr Surg** 1988 Nov;23(11):1051–2

Cylindrical battery ingestion: a case of endoscopic retrieval. Young TL, et al. **J Tenn Med Assoc** 1989 Aug;82(8):415–6

Treatment of acute gastric pain by needling acupoints Liangqiu and Weishu. Xu PC. **J Tradit Chin Med** 1989 Jun;9(2):84–6

Gas-containing splenic infarct masquerading as gastric bezoar: ultrasound elucidation. Williamson SL, et al. **JCU** 1988 Nov-Dec;16(9):678–80

Toothbrush ingestion. Salman RA. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):386

Hematobilia resulting from heterotopic stomach in the gallbladder neck. Adam R, et al. **Surgery** 1989 Apr; 105(4):564–9 (24 ref.)

The Rapunzel syndrome: a rare presentation of trichobezoar. Hassan AA, et al. **Ulster Med J** 1989 Apr;58(1):94–6 (6 ref.)

Gastric phytobezoar: endoscopic removal using the gallstone lithotripter. Lübke HJ, et al. **Z Gastroenterol** 1988 Aug; 26(8):393–6

[The intragastric balloon: a logical and attractive idea, but probably ineffective] Héralef E, et al. **Ther Umsch** 1989 May;46(5):329–33 (Eng. Abstr.) (Fre)

[Intrathoracic gastric duplication with intrapulmonary abscesses and perforation into the bronchial system—pathologico-anatomic peculiarities and diagnostic problems] Wiersbitzky S, et al. **Z Erkr Atmungsorgane** 1988; 171(2):175–83 (Eng. Abstr.) (Ger)

[Phytobezoar of the gastric stump] Guzzetti A, et al. **Chir Ital** 1988 Apr;40(2):170–6 (Eng. Abstr.) (Ita)

[A case of extragastric developing cancer with high serum AFP titer] Funatsu K, et al. **Rinsho Hoshasen** 1988 Sep; 33(9):1027–30 (Eng. Abstr.) (Jpn)

[A case of abdominal actinomycosis following foreign body in the stomach wall] Kawase T, et al. **Rinsho Hoshasen** 1989 Feb;34(2):269–72 (Eng. Abstr.) (Jpn)

[Experimental phytobezoar and weight loss in rats] de Tolosa EM, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Mar-Apr;43(2):87–92 (Eng. Abstr.) (Por)

[Heterotopic gastric mucosa in the rectum] Eropkin PV, et al. **Klin Med (Mosk)** 1989 Apr;67(4):124–6 (Rus)

[Roentgeno-endoscopic changes in the stomach in chronic pancreatitis] Krasiuk MN, et al. **Sov Med** 1989;(3):95–7 (Rus)

[Recurrent trichobezoar of the gastrointestinal tract in a child] Lysak ZD, et al. **Vestn Khir** 1988 Jun;140(6):93–4 (Rus)

[Trichobezoar in children. Apropos of 2 cases] Marco Macián A, et al. **An Esp Pediatr** 1989 May;30(5):410–3 (Spa)

ABNORMALITIES

Congenital microgastria and hypoplastic upper limb anomalies. Lueder GT, et al. **Am J Med Genet** 1989 Mar; 32(3):368–70 (14 ref.)

Subdiaphragmatic bronchogenic cyst with gastric communication. Braffman B, et al. **Gastrointest Radiol** 1988 Oct;13(4):309–11

Review of bronchopulmonary foregut malformations. Fowler CL, et al. **J Pediatr Surg** 1988 Sep;23(9):793–7

An unusual neonatal case presentation: congenital microgastria. Kaneta MK, et al. **J Perinatol** 1988 Winter; 8(1):53–5

A case of bilateral gastric bronchopulmonary-foregut malformation. Pan G, et al. **Pediatr Radiol** 1989; 19(6-7):463–4

The use of mechanical sutures in the treatment of gastric duplications. Izzidien al-Samarrai AY, et al. **Z Kinderchir** 1989 Jun;44(3):186–7

[Dystopia ventriculi antecolica. An unusual anomaly of organ placement in gastro-colonic relations] Vělín S. **Cesk Radiol** 1988 Oct;42(5):343–8 (Eng. Abstr.) (Cze)

[Dystopia ventriculi antecolica. An unusual anomaly of the organotopic gastrocolic relations] Vělín S, et al. **Radiol Diagn (Berl)** 1988;29(5):703–6 (Eng. Abstr.) (Ger)

[Late results of the surgical treatment of stomach duplication] Popovich SA, et al. **Klin Khir** 1988;(8):68–9 (Rus)

ANALYSIS

Glycoconjugate histochemistry of the rat fundic gland using Griffonia simplicifolia agglutinin-II during the development. Ihida K, et al. **Am J Anat** 1988 Jul; 182(3):250–6

Expression of ras oncogene p21 protein in early gastric carcinoma and adjacent gastric epithelia. Czerniak B, et al. **Cancer** 1989 Oct 1;64(7):1467–73

Immunological characterization and clinical implication of cobalamin binding protein in human gastric cancer. Wakatsuki Y, et al. **Cancer Res** 1989 Jun 1;49(11):3122–8

Lipolytic enzymes of the digestive organs of the crown-of-thorns starfish (Acanthaster planci): comparison of the stomach and pyloric caeca. Brahimi-Horn MC, et al. **Comp Biochem Physiol [B]** 1989;92(4):637–43

Tissue specific distribution of calcyclin—10.5 kDa Ca2+-binding protein. Kuźnicki J, et al. **FEBS Lett** 1989 Aug 28;254(1-2):141–4

Two types of rat gastric mucus glycoprotein subunits. Ohara S, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):1050–3

Immunoreactive glucagons purified from dog pancreas, stomach and ileum. Shinomura Y, et al. **Regul Pept** 1988 Dec;23(3):299–308

[Changes in contents of several autologous active substances in gastric tissues of rats severely burned with phosphorus] Xia SF. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):288–90 (Eng. Abstr.) (Chi)

[Increased levels of immunoreactive endorphins in the stomach, small intestine mucosa and liver of fasting rats] Dmitriev AD, et al. **Dokl Akad Nauk SSSR** 1988 Sep-Oct; 302(1):243–5 (Rus)

ANATOMY & HISTOLOGY

Imaging of the stomach, and localization of the stomach meridian & its acupuncture points in a human cadaver by the use of the indirect "Bi-Digital O-Ring Test Imaging Technique". Omura Y, et al. **Acupunct Electrother Res** 1988;13(4):153–64

Food intake in relation to pouch volume, stoma diameter, and pouch emptying after gastroplasty for morbid obesity. Andersen T, et al. **Scand J Gastroenterol** 1988 Nov; 23(9):1057–62

Llama medicine. Nutrition. Johnson LW. **Vet Clin North Am [Food Anim Pract]** 1989 Mar;5(1):37–54 (54 ref.)

[Anatomo-physiologic review of the stomach] Hamida RB. **Tunis Med** 1988 Mar;66(3):155–6 (Fre)

[Determination of the location of the greater curvature of the stomach by superficial sliding palpation] Panfilov BK. **Vrach Delo** 1989 Jun;(6):27–8 (Rus)

BLOOD SUPPLY

The devitalization of the stomach by a devascularization technique. Fortýn K, et al. **Acta Chir Hung** 1988; 29(2):163–72

Extravascular arteriovenous oxygen shunting in the cat stomach. Ivarsson L, et al. **Acta Physiol Scand** 1989 Mar; 135(3):293–7

Effects of hCGRP I and II on gastric blood flow and acid secretion in anesthetized rabbits. Bauerfeind P, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G145–9

Postprandial gastric blood flow in conscious dogs. Kato M, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G111–7

Optimal hematocrit for canine gastric oxygenation. Kiel JW, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H472–7

Endothelin has potent ulcerogenic and vasoconstrictor actions in the stomach. Wallace JL, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G661–6

Correlations between posterior gastric artery and superior polar artery in human anatomy. Trubel W, et al. **Anat Anz** 1988;167(3):219–23

Myocardial revascularization with combined arterial grafts utilizing the internal mammary and the gastroepiploic arteries. Suma H, et al. **Ann Thorac Surg** 1989 May; 47(5):712–5

Combined hepatic and gastric artery aneurysms: a case report and review of the literature. Weingarten MS, et al. **Ann Vasc Surg** 1987 Dec;1(5):598–603 (41 ref.)

Angioarchitectural classification of esophageal varices and paraesophageal veins in selective left gastric venography. Hashizume M, et al. **Arch Surg** 1989 Aug;124(8):961–6

The amplificative role of PAF-acether in the oxidative stress following reperfusion of ischemic stomach. Droy-Lefaix MT, et al. **Basic Life Sci** 1988;49:887–90

Human gastric perfusion: evidence for non-uniformity of blood flow. Allen PI, et al. **Br J Surg** 1988 Aug;75(8):741–2

Left gastric venous caval shunt with externally reinforced polytetrafluoroethylene graft. Kambayashi J, et al. **Br J Surg** 1988 Sep;75(9):886–7

Postoperative gastric ischaemia. Schein M, et al. **Br J Surg** 1989 Aug;76(8):844–8 (90 ref.)

Angiography of right gastroepiploic artery for coronary artery bypass graft. Tanimoto Y, et al. **Cathet Cardiovasc Diagn** 1989 Jan;16(1):35–8

Diversion of the gastroduodenal vein: an in situ model of systemic insulin drainage. Miller AR, et al. **Diabetes Res Clin Pract** 1989 Aug 1;7(2):109–14

Vasculature of various locations of canine gastrointestinal tract responds differently to intravenous isoproterenol. Harrison DA, et al. **Dig Dis Sci** 1988 Nov;33(11):1418–24

Gastric vascular changes in portal hypertension. Groszmann RJ, et al. **Hepatology** 1988 Nov-Dec;8(6):1708–10

Arteriovenous malformation of the stomach [letter] Bhatt CB, et al. **Indian J Gastroenterol** 1989 Jul;8(3):201–2

Ruptured gastroepiploic artery aneurysm and vascular collapse in a patient with thoracic aneurysm. Rosengart TK, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun; 30(3):514–6

Endoscopic laser Doppler flowmetry in evaluation of human gastric blood flow. Lunde OC. **J Oslo City Hosp** 1988 Nov-Dec;38(11-12):113–26 (64 ref.)

Gastric vasodilatation and vasoactive intestinal peptide output in response to vagal stimulation in the dog. Ito S, et al. **J Physiol (Lond)** 1988 Oct;404:669–82

Ehlers-Danlos syndrome presenting with infarction of stomach. Shaikh NA, et al. **J R Soc Med** 1988 Oct; 81(10):611

Luminal acid reduces gastric mucosal blood flow in the ischemic stomach. Stein HJ, et al. **J Surg Res** 1989 Jun; 46(6):616–9

Coronary artery bypass grafting with the right gastroepiploic artery. Lytle BW, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):826–31

Gastric mucosal perfusion and injury: variation in the relationship over time. Ephgrave KS, et al. **J Trauma** 1989 Mar;29(3):380–3

The defensive role played by the gastric microcirculation. Whittle BJ. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:35–43 (31 ref.)

Infarction of the stomach wall [letter] Schimmel JW, et al. **Neth J Surg** 1988 Jun;40(4):116

Abdominal wall and gastric infarction in acute pancreatitis. Scholefield JH, et al. **Pancreas** 1988;3(4):494–6

The effects of platelet-activating factor on flow rate and eicosanoid release in the isolated perfused rat gastric vascular bed. Dembinska-Kiec A, et al. **Prostaglandins** 1989 Jan;37(1):69–91

Gastric and hepatic infarction following embolization of the left gastric artery: case report. Brown KT, et al. **Radiology** 1989 Sep;172(3):731–2

Assessment of gastric blood flow with laser Doppler flowmetry. Ahn H, et al. **Scand J Gastroenterol** 1988 Dec; 23(10):1203–10

Continuous measurement of gastric blood flow by laser-Doppler flowmetry during gastroscopy. Christoforidis EC, et al. **Scand J Gastroenterol** 1989 Jan; 24(1):16–20

Evaluation of endoscopic laser Doppler flowmetry for measurement of human gastric blood flow. Methodologic aspects. Lunde OC, et al. **Scand J Gastroenterol** 1988 Nov; 23(9):1072–8

Splenectomy in the dog by ligation of the splenic and short gastric arteries. Hosgood G, et al. **Vet Surg** 1989 Mar-Apr; 18(2):110–3

[The effect and nervous mechanism of acupuncture on gastric blood flow] Zhang H, et al. **Chen Tzu Yen Chiu** 1988; 13(4):334–9 (Eng. Abstr.) (Chi)

[Henle's trunk and its related veins] Jiang DF, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):181–3, 192 (Eng. Abstr.) (Chi)

[Effect of gastric arterial flow on intramural venous pressure in portal hypertension] Wang Y. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):471–4, 510 (Eng. Abstr.) (Chi)

[Microcirculatory aspects of Reilly's phenomena] Tsuchiya M, et al. **Bull Acad Natl Med (Paris)** 1988 Mar; 172(3):409–19 (Eng. Abstr.) (Fre)

[Dielafoy's ulcer: a case report] Volterrani P, et al. **G Ital Oncol** 1987 Apr-Sep;7(2-3):127–9 (Eng. Abstr.) (Ita)

[Short- and long-term results of the intervention of esophago-gastric devascularization with esophageal transection used in the therapy of bleeding esophageal varices] Ancona E, et al. **Minerva Chir** 1989 Jan 31; 44(1-2):117–22 (Ita)

[Hemodynamic studies of portal hypertension with esophageal varices; a role of left gastric artery and vein] Umehara M. **Nippon Geka Gakkai Zasshi** 1988 Nov; 89(11):1869–78 (Eng. Abstr.) (Jpn)

[Embolization of splenic and left gastric artery for hypersplenism and portal hypertension] Kodama T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25; 48(10):1204–11 (Eng. Abstr.) (Jpn)

[Coronary artery bypass grafting using the right gastroepiploic artery] Suma H, et al.

Nippon Kyobu Geka Gakkai Zasshi 1988 Aug;36(8):1347–51 (Eng. Abstr.) **(Jpn)**

[Right gastric arterial embolization in avoidance of gastric toxicity by hepatic infusion chemotherapy] Arai Y, et al. **Rinsho Hoshasen** 1988 Jun;33(6):663–5 (Eng. Abstr.) **(Jpn)**

[Rupture of right gastric artery aneurysm—a case report and the usefulness of TAE] Hosaka J, et al. **Rinsho Hoshasen** 1989 May;34(5):621–4 (Eng. Abstr.) **(Jpn)**

[Circulatory and metabolic effects of neuropeptides on the stomach] Gustaw P. **Folia Med Cracov** 1988;29(1–2):3–19 (Eng. Abstr.) **(Pol)**

[Regional blood flow and gastric motor function following truncal vagotomy in patients with duodenal ulcer complicated by hemorrhage] Koval'chuk LA, et al. **Klin Khir** 1988;(8):8–10 (Eng. Abstr.) **(Rus)**

[Regional blood flow and gastric and duodenal function in the late period after selective proximal vagotomy] Koval'chuk LA, et al. **Klin Khir** 1988;(8):58–9 **(Rus)**

CYTOLOGY

Inhibition of antral gastrin cells by peptide histidine isoleucine. Wolfe MM, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G328–33

Influence of bombesin on gastrointestinal and pancreatic cell growth in adult and suckling animals. Lehy T, et al. **Ann N Y Acad Sci** 1988;547:255–67

Effects of long-term hypergastrinaemia on the ultrastructure of enterochromaffin-like cells in the stomach of the rat, hamster and guinea pig. Böttcher G, et al. **Cell Tissue Res** 1989;256(2):247–57

Quantitative electron microscopy of endocrine cells in oxyntic mucosa of normal human stomach. D'Adda T, et al. **Cell Tissue Res** 1989 Jan;255(1):41–8

Distribution of G-cells in the antrum and duodenum and D-cells in the fundus, antrum, duodenum and pancreas of the guinea pig. Vassilakis JS, et al. **Exp Pathol** 1989; 36(4):211–6

Genesis and decay of the foregut: development and repair. Vilanova JR, et al. **Histopathology** 1988 Sep;13(3):269–79 (61 ref.)

Comparative morphology of the stomach of some laboratory mammals. Ghoshal NG, et al. **Lab Anim** 1989 Jan; 23(1):21–9

[Endocrine cells of the stomach and their pathology] Monges G, et al. **Ann Pathol** 1989;9(1):10–9 (154 ref.) **(Fre)**

[Histochemical features of the formation of the protective barrier of the stomach in various periods of ontogenesis of mammals] Mogil'naia GM, et al. **Arkh Anat Gistol Embriol** 1988 Aug;95(8):73–8 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Gastric effects of cytokines [letter] Evans RD. **Anaesthesia** 1989 Jun;44(6):518

Gastric relaxation evoked by captopril (SQ 14,225) in anaesthetized rats. Rani R, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:257–69

Inhibition by anti-inflammatory agents of contraction induced by epidermal growth factor-urogastrone in isolated longitudinal smooth muscle strips from guinea-pig stomach. Itoh H, et al. **Br J Pharmacol** 1988 Nov; 95(3):821–9

Influence of prostaglandins on electrical and mechanical activities of gastric muscles of Bufo marinus. Shonnard P, et al. **Comp Biochem Physiol [C]** 1988;90(2):325–33

Aspirin and gastroduodenal injury. Prichard PJ, et al. **Dig Dis** 1989;7(1):28–38 (76 ref.)

Vasoactive intestinal peptide. An inhibitor of feline gastric smooth muscle in vitro. Merlo A, et al. **Dig Dis Sci** 1989 Sep;34(9):1365–8

Effect of endogenous opioid peptides on TRH release from rat stomach in vitro. Mitsuma T, et al. **Endocrinol Exp** 1989 Mar;23(1):11–6

Calcium channel modulators: effects on gastric function. Glavin GB. **Eur J Pharmacol** 1989 Feb 7;160(3):323–30

Comparison of the effects of endothelin-1 and endothelin-3 on the rat stomach. Wallace JL, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):41–7

An evaluation of the safety of ranitidine during seven years daily oral administration to beagle dogs. Spurling NW, et al. **Hum Toxicol** 1989 Jan;8(1):23–32

Effect of pre-operative oral ranitidine on gastric pH and volume in children. Indu, et al. **Indian J Pediatr** 1988 May–Jun;55(3):420–3

Action of amino acids on stomach, pancreas, and gallbladder in dogs. Kondo T, et al. **Int J Pancreatol** 1989 Feb;4(1):41–9

Parathyroid hormone-related protein relaxes rat gastric smooth muscle and shows cross-desensitization with parathyroid hormone. Mok LL, et al. **J Bone Miner Res** 1989 Jun;4(3):433–9

Development of acid secretory function in the rat stomach: sensitivity to secretagogues and corticosterone. Hervatin F, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):82–8 (32 ref.)

Contractile actions of epidermal growth factor-urogastrone in isolated smooth muscle preparations from guinea pig stomach: structure-activity relationships and comparison with the effects of human transforming growth factor-alpha. Hollenberg MD, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):384–90

Gradient in the effects of ethyl alcohol on canine gastric antral circular muscles. Sanders KM, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):202–7

Inhibitory effect of intravenous GABA antagonists on gastric acid secretion stimulated by secretagogues in rats. Lin WC, et al. **Jpn J Pharmacol** 1989 Feb;49(2):267–74

Pharmacological action of the phospholipase A2 from the venom of Trimeresurus flavoviridis on the smooth muscle of the rat stomach. Kamata K, et al. **Life Sci** 1989; 44(2):137–42

CNS effects of platelet-activating factor on the rat stomach. Cucala M, et al. **Methods Find Exp Clin Pharmacol** 1989; 11 Suppl 1:67–71

Direct effects of motilin on isolated smooth muscle from various regions of the human stomach. Lüdtke FE, et al. **Pflugers Arch** 1989 Sep;414(5):558–63

Effect of gamma-aminobutyric acid on bombesin-evoked release of somatostatin and gastrin from isolated rat stomach. Guo YS, et al. **Regul Pept** 1989 Feb;24(2):179–86

The effect of gastrin-releasing peptide on acid secretion and the release of gastrin, somatostatin, and histamine in the totally isolated, vascularly perfused rat stomach. Sandvik AK, et al. **Scand J Gastroenterol** 1989 Jan;24(1):9–15

Mechanisms of gastric damage by non-steroidal anti-inflammatory drugs. Shorrock CJ, et al. **Scand J Rheumatol Suppl** 1989;78:5–11; discussion 30–2 (23 ref.)

[Prolonged effect of an antacid treatment on changes in gastric potential difference induced by aspirin in man] Bergmann JF, et al. **Therapie** 1989 Jan–Feb;44(1):39–42 (Eng. Abstr.) **(Fre)**

[Effects of cholecystokinin-octapeptide and tetragastrin on the contractile activities of the stomach, duodenum and papilla of Vater] Yada S, et al. **Nippon Heikatsukin Gakkai Zasshi** 1988 May;24(2):101–11 (Eng. Abstr.) **(Jpn)**

[Effect of COOH-terminal octapeptide of cholecystokinin or carbachol on free cytosolic Ca++ concentration and pepsinogen secretion in the isolated guinea pig gastric chief cells] Sakamoto C, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1347–52 (Eng. Abstr.) **(Jpn)**

[Effect of hydrocortisone on the metabolic indices of hexosamine-containing biopolymers in the stomach] Sharaev PN, et al. **Farmakol Toksikol** 1988 Nov–Dec; 51(6):81–4 (Eng. Abstr.) **(Rus)**

[Effect of pentagastrin on the secretory, motor and evacuatory functions of the stomach] Tsimmerman IaS, et al. **Lab Delo** 1988;(6):23–6 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Sonographic evaluation of the fetal stomach: significance of nonvisualization. Pretorius DH, et al. **AJR** 1988 Nov; 151(5):987–9

[Intrauterine developmental stages of the really gastric compartments of the goat (Capra hircus)] Molinari E, et al. **Anat Histol Embryol** 1988 Jun;17(2):121–37 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Carbonic anhydrase in the normal rat stomach and duodenum and after treatment with omeprazole and ranitidine. Lönnerholm G, et al. **Acta Physiol Scand** 1989 Jun; 136(2):253–62

Effects of chronic ethanol consumption on carcinogen activating and detoxifying systems in rat upper alimentary tract tissue. Farinati F, et al. **Alcoholism (N Y)** 1989 Jun; 13(3):357–60

Metabolism of gastrin and cholecystokinin by endopeptidase 24.11 from the pig stomach. Bunnett NW, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G676–84

Detection of UDP-N-acetylgalactosamine-oligosaccharide N-acetylgalactosaminyltransferase activity in rat stomach and human serum by high-performance liquid chromatography. Iwase H, et al. **Anal Biochem** 1988 Sep; 173(2):317–20

Human stomach alcohol and aldehyde dehydrogenases (ALDH): a genetic model proposed for ALDH III isozymes. Yin SJ, et al. **Biochem Genet** 1988 Jun; 26(5–6):343–60

Purification and properties of mouse stomach aldehyde dehydrogenase. Evidence for a role in the oxidation of peroxidic and aromatic aldehydes. Algar EM, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):168–73

Inhibition of gastric H+/K+-ATPase by substituted imidazo[1,2-a]pyridines. Briving C, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):185–92

Hydrolysis of fluorescent pyrenetriacylglycerols by lipases from human stomach and gastric juice. Nègre A, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):340–8

Effect of hydrocortisone on histidine decarboxylase activity in rat stomach. Imanishi N, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):4088–94

Creatine kinase and lactate dehydrogenase isoenzymes in serum and tissues of patients with stomach adenocarcinoma. Hirata RD, et al. **Clin Chem** 1989 Jul;35(7):1385–9

Gastric lipase: localization in the human stomach. Abrams CK, et al. **Gastroenterology** 1988 Dec;95(6):1460–4

Effects of cimetidine on gastric alcohol dehydrogenase activity and blood ethanol levels. Caballeria J, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):388–92

Preparation of protein components exhibiting myosin light chain kinase activities from bovine aorta: discrepancies between its enzyme activity and actomyosin activating effect. Kuwayama H, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):862–6

Human gastric cathepsin E. Predicted sequence, localization to chromosome 1, and sequence homology with other aspartic proteinases. Azuma T, et al. **J Biol Chem** 1989 Oct 5;264(28):16748–53

A novel Ca2+ pump expressed in brain, kidney, and stomach is encoded by an alternative transcript of the slow-twitch muscle sarcoplasmic reticulum Ca-ATPase gene. Identification of cDNAs encoding Ca2+ and other cation-transporting ATPases using an oligonucleotide probe derived from the ATP-binding site. Gunteski-Hamblin AM, et al. **J Biol Chem** 1988 Oct 15; 263(29):15032–40

Multiple cDNA sequences and the evolution of bovine stomach lysozyme. Irwin DM, et al. **J Biol Chem** 1989 Jul 5;264(19):11387–93

Kinetic studies of the gastric H,K-ATPase. Evidence for simultaneous binding of ATP and inorganic phosphate. Reenstra WW, et al. **J Biol Chem** 1988 Dec 25; 263(36):19618–25

Episodic evolution in the stomach lysozymes of ruminants. Jollès J, et al. **J Mol Evol** 1989 Jun;28(6):528–35

"High Km" aldehyde dehydrogenase isozymes in human tissues: constitutive and tumor-associated forms. Agarwal DP, et al. **Prog Clin Biol Res** 1989;290:119–31

Role of gastrin-releasing peptide in pepsinogen secretion from the isolated perfused rat stomach. Skak-Nielsen T, et al. **Regul Pept** 1988 Oct;23(1):95–104

Activity and distribution of histidine decarboxylase and histamine concentration in rat stomach. Konagaya M, et al. **Tokai J Exp Clin Med** 1988 Dec;13(4–5):239–44

[Intragastric and intraduodenal proteolysis in children with bronchial asthma] Solov'ev SB, et al. **Pediatriia** 1988; (10):111–2 **(Rus)**

[Intragastric proteolysis in cancer of the stomach and precancerous diseases] Masevich TsG, et al. **Sov Med** 1988; (11):77–8 **(Rus)**

[Gastric juice acidity and intragastric proteolysis in stomach ulcer] Nechal AI, et al. **Sov Med** 1989;(3):6–8 (Eng. Abstr.) **(Rus)**

[The intestinal type of digestion in the stomach of patients with chronic gastritis and secretory insufficiency] Gorshkov VA, et al. **Vrach Delo** 1989 Jun;(6):4–6 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Postnatal development of the stomach in the Japanese field vole, Microtus montebelli. Kobaru Y, et al. **Anat Histol Embryol** 1988 Jun;17(2):138–48

An autoradiographic study of the developing parietal cell population in neonatal pigs. Tudor EM, et al. **Cell Tissue Kinet** 1988 Jan;21(1):3–14

The development expression of the rat alpha-vascular and gamma-enteric smooth muscle isoactins: isolation and characterization of a rat gamma-enteric actin cDNA. McHugh KM, et al. **Mol Cell Biol** 1988 Dec;8(12):5224–31

Tissue-specific sex differences in galanin-like immunoreactivity and galanin mRNA during development in the rat. Gabriel SM, et al. **Peptides** 1989 Mar–Apr; 10(2):369–74

IMMUNOLOGY

Expression of Lewisa, Lewisb, Lewisx, Lewisy, sialyl-Lewisa, and sialyl-Lewisx blood group antigens in human gastric carcinoma and in normal gastric tissue. Sakamoto S, et al. **Cancer Res** 1989 Feb 1;49(3):745–52

Association between CAM 5.2 and anti-CD1a reactivity in lymph nodes and gastrointestinal tract epithelium. Jack AS, et al. **J Clin Pathol** 1989 Mar;42(3):271–4

The distribution and differential expression of MHC class II antigens (HLA-DR, DP, and DQ) in human fetal adrenal, pancreas, thyroid, and gut. Oliver AM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):651–2

INJURIES

Gas explosion during diathermy gastrotomy. Joyce FS, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):530–1

Injuries of the stomach. An analysis of 95 cases. Wilkinson AE. **S Afr J Surg** 1989 Jun;27(2):59–60; discussion 60–1

[Immediate oesojejunal anastomosis after total gastrectomy in caustic necrosis] Gossot D, et al. **Ann Chir** 1989; 43(5):352–5 (Eng. Abstr.) **(Fre)**

[Caustic lesions of the upper digestive tract] Benaguida M, et al. **J Chir (Paris)** 1989 May;126(5):350–4 (Eng. Abstr.) **(Fre)**

[Therapeutic strategies in corrosive disease of the upper digestive tract (SDT)] Latteri S, et al. **Minerva Chir** 1989 Jan 31;44(1–2):127–33 **(Ita)**

[The problem of caustic poisoning in children] Marchi AG, et al. **Pediatr Med Chir** 1988 Jul–Aug;10(4):425–8 (Eng. Abstr.) **(Ita)**

[Jejunostomy in the surgical treatment of the sequelae of combined chemical burns of the esophagus and stomach] Shraer TI, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):87–9 **(Rus)**

[Surgical treatment of sequelae of chemical burns of the upper

segments of the digestive tract] Shraer TI, et al. **Vestn Khir** 1988 Jul;141(7):29–33 (Eng. Abstr.) **(Rus)**
[Traumatic rupture of the stomach in a child] Slobodin EA, et al. **Vestn Khir** 1988 Jul;141(7):79 **(Rus)**
[Outcome of the surgical treatment of chemical burns of the esophagus and stomach] Zadorozhnyĭ AA, et al. **Vestn Khir** 1988 Jul;141(7):26–9 (Eng. Abstr.) **(Rus)**
[Gastroesophageal caustic lesions caused by the use of MASH 10 in cafeterias] Alonso Franch M, et al. **An Esp Pediatr** 1989 Mar;30(3):217–9 **(Spa)**
[Gastric lesions caused by caustic agents] García C. **An Esp Pediatr** 1988 Sep;29 Suppl 33:99–100 **(Spa)**

INNERVATION

The effect of truncal vagotomy on the bicarbonate–ion secretion of the stomach in rat. Dubecz S Jr, et al. **Acta Chir Hung** 1988;29(2):131–6
GRP–producing nerves in the control of gastric secretion. Holst JJ, et al. **Acta Chir Scand Suppl** 1988;547:26–31 (32 ref.)
Brain stem responses to electrical stimulation of ventral vagal gastric fibers. Barber WD, et al. **Am J Physiol** 1989 Jul; 257(1 Pt 1):G24–9
Evidence for inhibition of opossum LES through intrinsic gastric nerves. Schulze–Delrieu K, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G198–205
Neural isolation of the entire canine stomach in vivo: effects on motility. Van Lier Ribbink JA, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G30–40
The presence and possible roles of bombesin–like peptides in enteric neurons. Furness JB, et al. **Ann N Y Acad Sci** 1988;547:76–82 (47 ref.)
Gastric vagal–splanchnic interactions in the brainstem of the cat. Barber WD, et al. **Brain Res** 1989 May 15;487(1):1–8
Nucleus raphe obscurus (nRO) influences vagal control of gastric motility in rats. McCann MJ, et al. **Brain Res** 1989 May 1;486(1):181–4
TRH stimulation and L–glutamic acid inhibition of proximal gastric motor activity in the rat dorsal vagal complex. Raybould HE, et al. **Brain Res** 1989 Aug 28;495(2):319–28
Modulation of smooth muscle activity by excitatory and inhibitory nerves in the guinea–pig stomach. Komori K, et al. **Comp Biochem Physiol [C]** 1988;91(2):311–9
Pyloroplasty divides the efferent right gastroepiploic nerve. Yoshida J, et al. **Curr Surg** 1988 Jul–Aug;45(4):285–7
Nervous control of gastric and pancreatic secretory response to 2–deoxy–D–glucose in the dog. Becker S, et al. **Digestion** 1988;39(3):187–96
Role of gastrin–releasing peptide in the neural control of pepsinogen secretion from the pig stomach. Skak–Nielsen T, et al. **Gastroenterology** 1988 Nov;95(5):1216–20
Demonstration of GABA–like immunoreactivity in myenteric plexus of frog stomach. Gábriel R, et al. **Histochemistry** 1989;91(6):523–5
Central origin of vagal nerve fibres innervating the fundus and corpus of the stomach in rat. Ewart WR, et al. **J Auton Nerv Syst** 1988 Dec;25(2–3):219–31
Activation of gastric afferent fibers increases coronary arterial resistance in anesthetized dogs. Pitetti KH, et al. **J Auton Nerv Syst** 1988 Jun;23(1):25–34
Viscerotopic representation of the upper alimentary tract in the rat: sensory ganglia and nuclei of the solitary and spinal trigeminal tracts. Altschuler SM, et al. **J Comp Neurol** 1989 May 8;283(2):248–68
Ultrastructural demonstration of a gastric monosynaptic vagal circuit in the nucleus of the solitary tract in rat. Rinaman L, et al. **J Neurosci** 1989 Jun;9(6):1985–96
Gastric relaxation and vasoactive intestinal peptide output in response to reflex vagal stimulation in the dog. Ito S, et al. **J Physiol (Lond)** 1988 Oct;404:683–93
Brain stem topography of vagus nerve to the greater curvature of the stomach. Yoshida J, et al. **J Surg Res** 1989 Jan;46(1):60–9
Two types of gastric excitatory responses to stimulation of the vagal trunk in cats: efferent and afferent responses. Tsubomura T, et al. **Jpn J Pharmacol** 1988 Jun;47(2):115–22
Similarities between the relaxations induced by vasoactive intestinal peptide and by stimulation of the non–adrenergic non–cholinergic neurons in the rat stomach. Kamata K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):401–6
Olfactory and visceral projections to the nucleus of the solitary tract. Garcia–Diaz DE, et al. **Physiol Behav** 1988; 44(4–5):619–24
CCK inhibits real and sham feeding in gastric vagotomized rats. Le Sauter J, et al. **Physiol Behav** 1988;44(4–5):527–34
Evidence for serotonergic modulation of sucrose sham–feeding in the gastric–fistulated rat. Neill JC, et al. **Physiol Behav** 1988;44(4–5):453–9
Corticotropin–releasing factor acts on the brain to reduce gastric contractility. Garrick T, et al. **Psychother Psychosom** 1987;48(1–4):14–20
Vagal gastric efferent activity and its reflex changes in conscious sheep. Dalal A, et al. **Q J Exp Physiol** 1989 May; 74(3):277–89
Development of substance P– and vasoactive intestinal polypeptide–containing neurones in the rat stomach. Ito S, et al. **Q J Exp Physiol** 1988 Sep;73(5):729–36
Interdigestive gastric motility patterns: the role of vagal and nonvagal extrinsic innervation. Spencer MP, et al. **Surgery** 1989 Aug;106(2):185–93 discussion 193–4
[Endoscopic pharmacologic denervation of the stomach in the treatment of duodenal ulcer] Sinev IuV, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):133–5 **(Rus)**
[Surgical anatomy of the vagus nerves in the vagotomy aspect] Ivanov NM, et al. **Vestn Khir** 1988 May;140(5):22–5 (Eng. Abstr.) **(Rus)**
[Selective endoscopic pharmacologic denervation of the stomach in the treatment of reflux esophagitis associated with duodenal ulcer] Sinĕv IuV, et al. **Vestn Khir** 1988 Sep;141(9):13–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Fate of milk calcium in the gastrointestinal tract of suckling rats. Simmons MA, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1063–9
Immunocytochemical analysis of potential neurotransmitters present in the myenteric plexus and muscular layers of the corpus of the guinea pig stomach. Mawe GM, et al. **Anat Rec** 1989 Jul;224(3):431–42
Bombesin receptors on gastrin cells. Vigna SR, et al. **Ann N Y Acad Sci** 1988;547:131–7
Interaction between N–methyl–N'–nitro–N–nitrosoguanidine and 2 steroid hormones in the glandular stomach of mouse. I. Acceleration of hydrocortisone turnover by use of a salt–rich diet and the carcinogen. Kodama M, et al. **Biomed Pharmacother** 1989;43(3):197–205
Interaction between N–methyl–N'–nitro–N–nitrosoguanidine and 2 steroid hormones in the glandular stomach of mouse. II. Retardation of local dihydrotestosterone turnover by use of a rice–rich diet and the carcinogen. Kodama M, et al. **Biomed Pharmacother** 1989;43(3):207–13
Buffering the stomach content enhances the absorption of diflunisal in man. Nuernberg B, et al. **Biopharm Drug Dispos** 1989 Jul–Aug;10(4):377–87
Evaluation of the gastric absorption and emptying of drugs under various pH conditions using a simple intubation method: application to diclofenac. Vidon N, et al. **Br J Clin Pharmacol** 1989 Jul;28(1):121–4
Intragastric capsaicin enhances rat gastric acid elimination and mucosal blood flow by afferent nerve stimulation. Lippe IT, et al. **Br J Pharmacol** 1989 Jan;96(1):91–100
Histamine release in the isolated vascularly perfused stomach of the rat: regulation by autoreceptors. Sandvik AK, et al. **Br J Pharmacol** 1989 Mar;96(3):557–62
A comparison of regional versus systemic drug injection. Adriamycin concentration in peripheral blood and gastric stump (post–Billroth II gastrectomy) in the dog. P'eng FK, et al. **Cancer Chemother Pharmacol** 1989;23(6):363–6
Hydroxy metabolites of methyl–n–amylnitrosamine produced by esophagus, stomach, liver, and other tissues of the neonatal to adult rat and hamster. Mirvish SS, et al. **Cancer Res** 1988 Oct 15;48(20):5663–8
DNA methylation in rat stomach and duodenum following chronic exposure to N–methyl–N'–nitro–N–nitrosoguanidine and the effect of dietary taurocholate. Kobori O, et al. **Carcinogenesis** 1988 Dec;9(12):2271–4
Theoretical model for predicting rates of nitrosamine and nitrosamide formation in the human stomach. Licht WR, et al. **Carcinogenesis** 1988 Dec;9(12):2227–37
32P–postlabeling analysis of DNA adducts in rat stomach with 1–nitrosoindole–3–acetonitrile, a direct–acting mutagenic indole compound formed by nitrosation. Yamashita K, et al. **Carcinogenesis** 1988 Oct;9(10):1905–7
Kinetics of L–alanine and L–leucine transport at the blood–tissue interface in the perfused stomach. Bravo I, et al. **Cell Mol Biol** 1988;34(3):323–36
Cobalamin binding proteins in stomach and serum from various animal species data for B12 binding capacities and molecular sizes of the binding proteins. Hippe E, et al. **Comp Biochem Physiol [B]** 1977;56(3):305–9
Concentrations of volatile fatty acids and acetate production rates in the forestomachs of grazing camels. Höller H, et al. **Comp Biochem Physiol [B]** 1989;93(2):413–6
Comparative studies on the gastric glycopeptide in eleven animal species. Masuda H, et al. **Comp Biochem Physiol [B]** 1977;58(2):163–5
Gastric luminal digestion of lactoferrin and transferrin by preterm infants. Britton JR, et al. **Early Hum Dev** 1989 May;19(2):127–35
Regulation of pancreatic enzyme secretion in conscious rats by intraluminal somatostatin: mechanism of action. Sarfati P, et al. **Endocrinology** 1989 May;124(5):2406–14
The occurrence of tobacco–specific nitrosamines in oral tobacco products and their potential formation under simulated gastric conditions. Tricker AR, et al. **Food Chem Toxicol** 1988 Oct;26(10):861–5
Gastrin receptors in human gastric scirrhous carcinoma. Kumamoto T. **Gastroenterol Jpn** 1988 Aug;23(4):384–9
Peptide–containing nerve in the rat stomach: an immunohistochemical study. Ito H, et al. **Hiroshima J Med Sci** 1988 Sep;37(3):97–102
Regulation of the gastric H+, K+–transporting ATPase by a cytosolic 80 kDa activator protein and calcium: Ca2+ as a possible physiological switch. Ray TK, et al. **Indian J Biochem Biophys** 1988 Feb–Apr;25(1–2):43–51
Protein kinase C modulates effects of prostanoids on cyclic adenosine monophosphate in guinea pig chief cells. Raufman JP, et al. **J Cell Physiol** 1989 Jul;140(1):91–7
Prosomatostatin–derived antrin is present in gastric D cells and in portal blood. Ravazzola M, et al. **J Clin Invest** 1989 Feb;83(2):362–6
Transferrin degradation by gastrointestinal fluids of suckling and weanling rats. Britton JR, et al. **J Dev Physiol** 1989 Feb;11(2):57–61
Intragastric behavior and absorption kinetics of a normal and "floating" modified–release capsule of isradipine under fasted and fed conditions. Mazer N, et al. **J Pharm Sci** 1988 Aug;77(8):647–57
Luminal hydrolysis of recombinant human epidermal growth factor in the rat gastrointestinal tract: segmental and developmental differences. Britton JR, et al. **Life Sci** 1988; 43(17):1339–47
PGE2 and PGI2 synthesis in different layers of rat gastric wall requires calcium ion. Nakamura H. **Osaka City Med J** 1988 Oct;34(2):123–34
Gastric lipolysis and fat absorption in preterm infants: effect of medium–chain triglyceride or long–chain triglyceride–containing formulas. Hamosh M, et al. **Pediatrics** 1989 Jan;83(1):86–92
Controlled gastric emptying. II. In vitro erosion and gastric residence times of an erodible device in beagle dogs. Cargill R, et al. **Pharm Res** 1989 Jun;6(6):506–9
Effects of gender, posture, and age on gastric residence time of an indigestible solid: pharmaceutical considerations. Mojaverian P, et al. **Pharm Res** 1988 Oct;5(10):639–44
The effect of gastro–entero–pancreatic hormones on the activity of vagal hepatic afferent fibres. Niijima A. **Prog Brain Res** 1988;74:155–60
The effect of an intravenous infusion of aldosterone upon magnesium metabolism in the sheep. Charlton JA, et al. **Q J Exp Physiol** 1989 May;74(3):329–37
Flux of calcium across the sheep rumen wall in vivo and in vitro. Höller H, et al. **Q J Exp Physiol** 1988 Jul; 73(4):609–18
Effect of cyclic nucleotides on bombesin–evoked gastrin release from isolated perfused rat stomach. Guo YS, et al. **Regul Pept** 1988 Sep;22(4):361–9
Muscarinic M2 stimulation releases histamine in the totally isolated, vascularly perfused rat stomach. Sandvik AK, et al. **Scand J Gastroenterol** 1988 Nov;23(9):1049–56
Histamine and the stomach. Waldum HL, et al. **Scand J Gastroenterol** 1989 Mar;24(2):130–9 (103 ref.)
[Effects of protein malnutrition on the metabolism of arachidonic acid in the rat stomach and spleen] Yue TL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):155–9 (Eng. Abstr.) **(Chi)**
[Gastro–entero–pancreatic production and hepatic uptake of gastrin and somatostatin in the preruminant calf receiving milk proteins or milk serum] Guilloteau P, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:163–4 (Eng. Abstr.) **(Fre)**
[Effect of various forms of diet on the nitrosation of sodium metamizole (analgin tablets) under simulated conditions of the human stomach] Ziebarth D, et al. **Arch Geschwulstforsch** 1989;59(2):79–84 (Eng. Abstr.) **(Ger)**
[Co–existence and co–release of gastrin 34 N–terminal fragment with gastrin 17 in rat stomach] Akai H. **Nippon Naibunpi Gakkai Zasshi** 1988 Oct 20;64(10):1065–80 (Eng. Abstr.) **(Jpn)**
[Quantitative measurement of gastrointestinal protein loss using 99mTc–labelled albumin in a patient with Ménétrier's disease] Sakamoto H, et al. **Rinsho Hoshasen** 1988 Nov; 33(12):1593–6 (Eng. Abstr.) **(Jpn)**
[Influence of the degree of saturation of iron stores on the gastrointestinal absorption of aluminum] Fernández I, et al. **Rev Esp Fisiol** 1989 Mar;45(1):33–9 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Campylobacter pylori and other urease positive bacteria in gastric biopsies [letter] Westblom TU. **Am J Clin Pathol** 1989 Sep;92(3):397
Distribution of Campylobacter pylori and gastritis in the stomach of patients with and without duodenal ulcer. Queiroz DM, et al. **Am J Gastroenterol** 1988 Dec; 83(12):1368–70
Prevalence of Campylobacter pylori in patients undergoing upper endoscopy. Schubert TT, et al. **Am J Gastroenterol** 1989 Jun;84(6):637–42
Population changes of indigenous murine Candida pintolopesii under various experimental conditions and routes of inoculation. Artwohl J, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2371–4
Biotin–labeled plasmid DNA probes for detection of epithelium–associated strains of lactobacilli. Tannock GW. **Appl Environ Microbiol** 1989 Feb;55(2):461–4
Nosocomial pneumonia in the intubated patient: role of gastric colonization. Craven DE, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):40–50 (81 ref.)
Biotypes of Campylobacter pylori isolated in gastroduodenal biopsies. Reina J, et al. **Eur J Clin Microbiol Infect Dis** 1989 Feb;8(2):175–7
The bacterial flora of the stomach and small intestine. Drasar BS. **Gastroenterol Clin Biol** 1989;13(1 Pt 1):18B–20B (15 ref.)
Failure of ciprofloxacin to eradicate Campylobacter pylori from the stomach [letter] Stone JW, et al. **J Antimicrob Chemother** 1988 Jul;22(1):92–3
Comparison of rapid urease tests, staining techniques, and growth on different solid media for detection of Campylobacter pylori. Coudron PE, et al. **J Clin Microbiol** 1989 Jul;27(7):1527–30

Examination of human stomach biopsies, saliva, and dental plaque for Campylobacter pylori. Krajden S, et al. **J Clin Microbiol** 1989 Jun;27(6):1397–8

Topographic association between active gastritis and Campylobacter pylori colonisation. Bayerdörffer E, et al. **J Clin Pathol** 1989 Aug;42(8):834–9

Septic complications in relation to factors influencing the gastric microflora in patients undergoing gastric surgery. Sjöstedt S, et al. **J Hosp Infect** 1989 Feb;13(2):191–7

Role of gastric colonization in nosocomial infections and endotoxemia: a prospective study in neurosurgical patients on mechanical ventilation. Reusser P, et al. **J Infect Dis** 1989 Sep;160(3):414–21

Use of the mouse for the isolation and investigation of stomach-associated, spiral-helical shaped bacteria from man and other animals. Dick E, et al. **J Med Microbiol** 1989 May;29(1):55–62

The reliability of acid fast stained smears of gastric aspirate specimens. Berean K, et al. **Tubercle** 1988 Sep;69(3):205–8

[Histologic study of Campylobacter pylori: role of fixation (letter)] Flejou JF, et al. **Gastroenterol Clin Biol** 1989 Mar; 13(3):316–7 **(Fre)**

[Non-ulcer dyspepsia and Campylobacter pylori] Restellini A, et al. **Schweiz Rundsch Med Prax** 1989 Jun 20; 78(25):715–7 (36 ref.) (Eng. Abstr.) **(Fre)**

[Comparison of methods for the identification of Campylobacter pylori in gastric biopsies of patients with dyspepsia] Guglielmetti P, et al. **Quad Sclavo Diagn** 1987 Sep;23(3):251–6 (Eng. Abstr.) **(Ita)**

[Effect of Campylobacter pyloridis and other parietal microflora on gastric epitheliocytes in peptic ulcer and following vagotomy] Baibekov IM, et al. **Arkh Patol** 1988; 50(12):51–4 (Eng. Abstr.) **(Rus)**

[Isolation of C. pyloridis from children] Spirina TS, et al. **Lab Delo** 1989;(1):57–8 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Prevalence of gastric metaplasia, inflammation, and Campylobacter pylori in the duodenum of members of a normal population. Fitzgibbons PL, et al. **Am J Clin Pathol** 1988 Dec;90(6):711–4

Gastroscopic screening of the post-gastrectomy stomach. Relationship of dysplasia to remnant cancer. Greene FL. **Am Surg** 1989 Jan;55(1):12–5

The lymphoepithelial phenomenon of the stomach. A case report. Rubio CA, et al. **APMIS** 1988 Oct;96(10):898–900

Enhancement by vagotomy of experimental induction of intestinal metaplasia and atypical glandular hyperplasia in Wistar rats. Tatsuta M, et al. **Arch Geschwulstforsch** 1988; 58(5):305–11

Neoplastic Paneth cells in the stomach. Report of two cases and review of the literature. Lev R, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):129–33 (22 ref.)

A clinicopathological study of synchronous multiple gastric cancer. Mitsudomi T, et al. **Br J Surg** 1989 Mar; 76(3):237–40

Composite carcinoid–adenocarcinoma of the stomach associated with multiple gastric carcinoids and nonantral gastric atrophy. Caruso ML, et al. **Cancer** 1989 Oct 1; 64(7):1534–9

Promotion by dihydroxybenzene derivatives of N-methyl-N'-nitro-N-nitrosoguanidine-induced F344 rat forestomach and glandular stomach carcinogenesis. Hirose M, et al. **Cancer Res** 1989 Sep 15;49(18):5143–7

Hypergastrinaemia induced by acid blockade evokes enterochromaffin-like (ECL) cell hyperplasia in chicken, hamster and guinea-pig stomach. Axelson J, et al. **Cell Tissue Res** 1988;254(3):511–6

Solitary Peutz-Jeghers type polyp of the stomach in the absence of familial polyposis coli in a teenage boy. Kuwano H, et al. **Endoscopy** 1989 Jul;21(4):188–90

Ultrastructure of the mucus-negative vacuolated cells in the metaplastic pyloric gland of the human stomach. Torikata C, et al. **Hum Pathol** 1989 May;20(5):437–40

Morphometric distinction of low- and high-grade dysplasias in gastric biopsies. Tosi P, et al. **Hum Pathol** 1989 Sep; 20(9):839–44

Experimental study of morphological changes after gastroplasty. Kuwano H, et al. **Int Surg** 1988 Oct-Dec; 73(4):250–3

Gastric hypertrophy associated with cryptosporidiosis in a snake. Godshalk CP, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1126–8

Gastric metaplasia and Campylobacter pylori infection of duodenum in patients with chronic renal failure. Shousha S, et al. **J Clin Pathol** 1989 Apr;42(4):348–51

Could the stomach site help predict outcome in babies with left sided congenital diaphragmatic hernia diagnosed antenatally? Burge DM, et al. **J Pediatr Surg** 1989 Jun; 24(6):567–9

Ultrasonic examination of the wall of the fluid-filled stomach. Worlicek H, et al. **JCU** 1989 Jan;17(1):5–14

High incidence of upper gastrointestinal tract involvement in children with Crohn disease. Lenaerts C, et al. **Pediatrics** 1989 May;83(5):777–81

Tachykinins protect against ethanol-induced gastric lesions in rats. Evangelista S, et al. **Peptides** 1989 Jan-Feb; 10(1):79–81

Multiple gastric adenomas. Davis M, et al. **Radiat Med** 1988 Sep-Oct;6(5):197–9

Acute gastric necrosis in the postoperative period. Sharlow JW, et al. **South Med J** 1989 Apr;82(4):529–30

Chronic toxicity study on formaldehyde administered orally to rats. Tobe M, et al. **Toxicology** 1989 May 31;56(1):79–86

Neonatal multicystic kidney with associated respiratory distress, obstruction of contralateral ureter, and gastric compromise. Middleton AW Jr, et al. **Urology** 1989 Jul; 34(1):36–8 (9 ref.)

Ultrastructure of metaplastic ciliated cells in human stomach. Torikata C, et al. **Virchows Arch [A]** 1989;414(2):113–9

[Papilloma of forestomach induced by Fusarium T-2 toxin in mice] Yang S. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):339–41 (Eng. Abstr.) **(Chi)**

[Gastroduodenoscopic findings and clinical analysis in patients with dengue fever] Perng DS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Jan; 5(1):35–41 (Eng. Abstr.) **(Chi)**

[Comparison of the degree of chronic gastritis in the resected gastric body with histologic findings in postoperative gastric biopsy] Hájek J, et al. **Vnitr Lek** 1989 Feb; 35(2):112–9 (Eng. Abstr.) **(Cze)**

[Detection of Campylobacter pylori in gastric biopsies: a comparative study of 4 histopathologic methods and scanning electron microscopy] Aymard B, et al. **Arch Anat Cytol Pathol** 1988;36(3–6):193–9 (Eng. Abstr.) **(Fre)**

[Importance of the invasion of the gastric wall and regional lymph nodes in the prognosis of stomach carcinoma] Vitale M, et al. **Minerva Chir** 1988 Apr 30;43(8):677–81 (Eng. Abstr.) **(Ita)**

[Prognostic factors in gastric cancer with serosal invasion—importance of the extent of cancer infiltration in the subserosal layer] Habu H, et al. **Gan No Rinsho** 1989 May;35(6):685–9 (Eng. Abstr.) **(Jpn)**

[A case of malignant transformation of gastric hyperplastic polyp with metaplastic bone formation] Hayashi K, et al. **Gan No Rinsho** 1989 Jun;35(7):851–4 (Eng. Abstr.) **(Jpn)**

[Relation of the serosal invasion mode to a recurrence in advanced gastric carcinomas] Matsusaka T, et al. **Gan No Rinsho** 1989 Jul;35(8):917–22 (Eng. Abstr.) **(Jpn)**

[A primary gastric adenosquamous carcinoma with remarkable lymphatic metastasis diagnosed by the stomach and lymph node biopsy] Shigematsu T, et al. **Gan No Rinsho** 1989 Feb;35(3):421–6 (Eng. Abstr.) **(Jpn)**

[A case of superficial esophageal cancer with an intramural metastasis to the gastric wall] Takano Y, et al. **Gan No Rinsho** 1989 Jul;35(8):948–54 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Studies on the angulus] Hidaka S. **Igaku Kenkyu** 1988 Sep; 58(4):165–78 (Eng. Abstr.) **(Jpn)**

[Value of ultrasonographic examination in monitoring the treatment of advanced cancer of the stomach] Wojnar J, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jul-Oct; 52(4–5):216–8 (Eng. Abstr.) **(Pol)**

[Optimization of the diagnosis of gastric cancer: cytology via endoscopic fine-needle aspiration] Stanciu C, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr-Jun;92(2):377–8 (Eng. Abstr.) **(Rum)**

[Endocrine cells of the gastroduodenal area in duodenal ulcer] Osadchuk MA, et al. **Sov Med** 1989;(3):8–13 (Eng. Abstr.) **(Rus)**

[Gas-chromatographic detection of acetic acid in cadaveric specimens] Voronkova LG, et al. **Sud Med Ekspert** 1989 Jan-Mar;32(1):41–2 (Eng. Abstr.) **(Rus)**

[Gastric dysplasia: a theme to reconsider (editorial)] Cueva FO. **Acta Gastroenterol Latinoam** 1987;17(3):271–2 **(Spa)**

[Gastric dysplasia: its incidence in precancerous conditions, advanced cancer and early cancer] Hojman D, et al. **Acta Gastroenterol Latinoam** 1988;18(4):231–48 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Gastroduodenal physiology in relation to peptic ulcer disease. Jensen SL, et al. **Acta Chir Scand Suppl** 1988;547:23–5

Participation of cholinergic mechanisms in the realization of the effect of bombesin on the migrating myoelectrical complex. Kortezova N, et al. **Acta Physiol Pharmacol Bulg** 1988;14(3):3–9

Ionized calcium influences gastrin stimulated histamine release and acid secretion, but not histamine stimulated acid output in the totally isolated vascularly perfused rat stomach. Sandvik AK, et al. **Acta Physiol Scand** 1988 Nov; 134(3):443–8

Effects of hemodilution on gastric and intestinal oxygenation. Kiel JW, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H171–8

Coronary vascular responses to chemical stimulation of abdominal visceral organs. Martin SE, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H735–44

Properties of receptors for gastrin and CCK on gastric smooth muscle cells. Menozzi D, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G73–9

Mechanics and neuropeptide responses of feline pylorus and gastric muscle in vitro. Merlo A, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G862–7

Ketocyclazocine, a kappa-opioid receptor agonist, and control of intestinal myoelectric activity in dogs. Telford GL, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G566–70

Detection of oesophageal intubation: the cola complication [letter] Zbinden S, et al. **Anaesthesia** 1989 Jan;44(1):81

Bombesin-like peptides as regulators of gastric function. Walsh JH, et al. **Ann N Y Acad Sci** 1988;547:217–24 (42 ref.)

Adaptation to vection-induced symptoms of motion sickness. Stern RM, et al. **Aviat Space Environ Med** 1989 Jun; 60(6):566–72

Identification of serotonin from rabbit upper stomach as a stimulant of in vitro gallbladder contraction. Cox KL, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):364–72

Effects of naloxone and opioid agonists on gastric excitatory responses to stimulation of the vagus nerve in cats. Okamoto T, et al. **Br J Pharmacol** 1988 Oct;95(2):329–34

GABAA-receptor-mediated inhibition of the delayed increase in intragastric pressure to stimulation of vagal afferent fibres in cats. Okamoto T, et al. **Br J Pharmacol** 1988 Sep;95(1):163–8

Beaumont's contribution to gastric psychophysiology: a reappraisal. Mai FM. **Can J Psychiatry** 1988 Oct; 33(7):650–3

Development of a murine gastric distension model for testing the emetic potential of new drugs and efficacy of antiemetics. Oliver IN, et al. **Chem Biol Interact** 1989; 69(4):353–7

Multichannel digital recording of intraluminal temperature in the upper gastrointestinal tract of man: techniques and analyses. Pearson RC, et al. **Clin Phys Physiol Meas** 1988 Aug;9(3):243–8

Antagonist like action of synthetic alpha 2-adrenoceptor agonists on contractile response to catecholamines in smooth muscle strips isolated from rainbow trout stomach (Salmo gairdneri). Kitazawa T, et al. **Comp Biochem Physiol [C]** 1988;91(2):585–8

Effects of gastric alkalization on bacterial colonization in critically ill patients. Garvey BM, et al. **Crit Care Med** 1989 Mar;17(3):211–6

The electrogastrogram and its analysis. Kingma YJ. **Crit Rev Biomed Eng** 1989;17(2):105–32 (322 ref.)

Autotransplantation of the stomach: motility is controlled by hormonal factors. Van Lier Ribbink JA, et al. **Curr Surg** 1988 Nov-Dec;45(6):486–9

Relaxatory responses of canine proximal stomach to esophageal and duodenal distension. Importance of vagal pathways. De Ponti F, et al. **Dig Dis Sci** 1989 Jun; 34(6):873–81

Effect of feeding on motor activity of canine stomach. Gill RC, et al. **Dig Dis Sci** 1989 Jun;34(6):865–72

Oxyntomodulin from distal gut. Role in regulation of gastric and pancreatic functions. Schjoldager B, et al. **Dig Dis Sci** 1989 Sep;34(9):1411–9

Use of dimethicone to reduce the fall in gastric potential difference induced by bile salts. Bergmann JF, et al. **Eur J Clin Pharmacol** 1989;36(4):379–81

The two-component stomach: effects of meal particle size on fundal and antral emptying. Urbain JL, et al. **Eur J Nucl Med** 1989;15(5):254–9

Occurrence of platelet-activating factor (PAF) in normal rat stomach and alteration of PAF level by water immersion stress. Sugatani J, et al. **FASEB J** 1989 Jan;3(1):65–70

Physiology of gastric emptying and pathophysiology of gastroparesis. Read NW, et al. **Gastroenterol Clin North Am** 1989 Jun;18(2):359–73 (105 ref.)

Electrical activity recorded from abdominal surface after gastrectomy or colectomy in humans. Pezzolla F, et al. **Gastroenterology** 1989 Aug;97(2):313–20

Response to an editorial on gastric cytoprotection. Robert A, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):548–51 (50 ref.)

Comparison of gastric body and antral pH: a 24 hour ambulatory study in healthy volunteers. McLauchlan G, et al. **Gut** 1989 May;30(5):573–8

Use of spectral analysis in the detection of frequency differences in the electrogastrograms of normal and diabetic subjects. Pfister CJ, et al. **IEEE Trans Biomed Eng** 1988 Nov;35(11):935–41

Central and peripheral opioid modulation of gastric relaxation induced by feeding in dogs. Gué M, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1006–10

Gastroduodenal motor activity associated with gastric emptying rate in sheep. Malbert CH, et al. **J Physiol (Lond)** 1988 Jul;401:227–39

Gastric control of food intake. Robinson PH, et al. **J Psychosom Res** 1988;32(6):593–606 (25 ref.)

Effect of inhibition of prostaglandin synthesis on epinephrine-induced gastroduodenal electromechanical changes in humans. Kim CH, et al. **Mayo Clin Proc** 1989 Feb;64(2):149–57

Adaptive method for cancellation of respiratory artefact in electrogastric measurements. Chen J, et al. **Med Biol Eng Comput** 1989 Jan;27(1):57–63

Development of calcium channels in gastric smooth muscle. Hyman PE, et al. **Pediatr Res** 1989 Jun;25(6):600–4

In vitro response of rat gastrointestinal segments to cholecystokinin and bombesin. Margolis RL, et al. **Peptides** 1989 Jan-Feb;10(1):157–61

Local application of neurotensin to abdominal organs triggers cardiovascular reflexes in guinea pigs: possible mechanisms. Rioux F, et al. **Peptides** 1989 May-Jun;10(3):647–55

Gastric acid antisecretory effect of two different dosage forms of omeprazole during prolonged oral treatment in the gastric fistula dog. Larsson H, et al. **Scand J Gastroenterol** 1988 Oct;23(8):1013–9

[New development in study and application of electrogastroenterography] Wang XF.

Chen Tzu Yen Chin 1988;13(1):65–70, 51 (35 ref.) (Eng. Abstr.) (Chi)

[Effects of intracerebroventricular and intravenous injection of morphine on the migrating myoelectric complex in dogs] Qu SY, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):395–9 (Eng. Abstr.) (Chi)

[The gastroduodenal junction: functional significance] Ruckebusch Y. **Bull Acad Natl Med (Paris)** 1988 Dec; 172(9):1261–5 (Eng. Abstr.) (Fre)

[The spectral component of electrogastrography (EGG): factors of variation in normal subjects, and in patients with cancer and ulcers] Giorgio I, et al. **Pathol Biol (Paris)** 1989 Jun;37(6):712–9 (Eng. Abstr.) (Fre)

[Gastric perfusion in the rat—a method for determining gastric secretion] Albrecht R, et al. **Pharmazie** 1989 Jan; 44(1):58–9 (Eng. Abstr.) (Ger)

[Pneumatosis of the stomach as a result of duodenal stenosis in an infant] Hörmann D, et al. **ROFO** 1988 Dec; 149(6):673–4 (Ger)

[Effects of glutamic acid and glutathione on the secretory function of the stomach] Shlygin GK, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):405–8 (Eng. Abstr.) (Rus)

[Function of the gastroduodenal zone during electric stimulation of the afferent innervation area of the vagus nerve in the concha auriculae] Repin AA, et al. **Fiziol Cheloveka** 1988 Jan–Feb;14(1):76–80 (Rus)

[Evacuatory activity and motor periodicity of the stomach after transposition of the pancreatic duct into the jejunum] Korot'ko GF, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):85–9 (Eng. Abstr.) (Rus)

[A diffusion method of determining acidity combined with a study of proteolysis in the upper digestive tract] Gorshkov VA, et al. **Lab Delo** 1988;(9):35–40 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Gastric emptying and gastric myoelectrical activity in patients with diabetic gastroparesis: effect of long-term domperidone treatment. Koch KL, et al. **Am J Gastroenterol** 1989 Sep;84(9):1069–75

24-hour ambulatory dual gastroduodenal pH monitoring. The role of acid in duodenal ulcer disease. Eriksen CA, et al. **Ann Surg** 1988 Dec;208(6):702–7

Motion sickness and gastric myoelectric activity as a function of speed of rotation of a circular vection drum. Hu S, et al. **Aviat Space Environ Med** 1989 May;60(5):411–4

Electrogastrograms during motion sickness in fasted and fed subjects. Stewart JJ, et al. **Aviat Space Environ Med** 1989 Mar;60(3):214–7

Failure of transient lower oesophageal sphincter relaxation in response to gastric distension in patients with achalasia: evidence for neural mediation of transient lower oesophageal sphincter relaxations. Holloway RH, et al. **Gut** 1989 Jun;30(6):762–7

Organic basis for symptoms in functional gastrointestinal disease? [editorial] Camilleri M. **Mayo Clin Proc** 1988 Dec; 63(12):1256–7

Gastric distension and gastric capacity in relation to food intake in humans. Geliebter A. **Physiol Behav** 1988; 44(4–5):665–8

A randomized comparison of horizontal and vertical banded gastroplasty: what determines weight loss? Andersen T, et al. **Scand J Gastroenterol** 1989 Mar;24(2):186–92

Function of the intrathoracic stomach as esophageal replacement. Hölscher AH, et al. **World J Surg** 1988 Dec; 12(6):835–44

[Manometric observation of the esophagus and intrathoracic stomach after partial esophagectomy in carcinoma] Wang QZ. **Chung Hua Wai Ko Tsa Chih** 1988 May;26(5):305–7, 320 (Eng. Abstr.) (Chi)

[Physiopathology of gastric and biliary reconstruction: evaluation of several entero-hormones] Antonaci AR, et al. **Minerva Chir** 1989 Feb 28;44(4):547–50 (0 ref.) (Ita)

[Pyloroplasty and motile functions of the stomach and duodenum] Hashimura C. **Nippon Heikatsukin Gakkai Zasshi** 1988 Jun;24(3):171–84 (Eng. Abstr.) (Jpn)

[An experimental study on the remnant gastric motilities and gastrointestinal hormones after various types of gastrectomies] Ohira Y. **Nippon Heikatsukin Gakkai Zasshi** 1988 May;24(2):79–100 (Eng. Abstr.) (Jpn)

[Gastrointestinal functions in obesity] Kashimura H, et al. **Nippon Rinsho** 1988 Nov;46(11):2429–33 (Jpn)

[Functional status of the operated-on stomach in patients with post-burn esophageal stenosis] Manevich VL, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):79–83 (Eng. Abstr.) (Rus)

[State of the gastroduodenal system in patients with reflux esophagitis] Ilinich VK, et al. **Klin Med (Mosk)** 1988 Jul; 66(7):88–90 (Rus)

[Regional blood flow, secretory and motor functions of the stomach and duodenum in patients with duodenal ulcers] Koval'chuk LA, et al. **Klin Med (Mosk)** 1988 Jul;66(7):82–5 (Rus)

[Effect of soybean flour on indices of the functional state of the stomach and ulcer healing in patients with duodenal ulcer] Mansurov KhKh, et al. **Klin Med (Mosk)** 1988 Jul; 66(7):74–7 (Eng. Abstr.) (Rus)

[Changes in the morphofunctional indices of the stomach in patients with chronic gastritis and an acid-forming deficiency under the influence of hydrocortisone ultraphonophoresis] Kapanadze GT. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr; (2):57–60 (Rus)

[Anatomico-functional changes of the duodenum and stomach in pancreatic cancer] Iugov VK, et al. **Vrach Delo** 1989 Apr;(4):21–3 (Rus)

[Mucosal blood flow and the functional state of the stomach and duodenum in peptic ulcer] Koval'chuk LA, et al. **Vrach Delo** 1988 Nov;(11):6–8 (Eng. Abstr.) (Rus)

[Esophageal and gastric functions in patients with chronic alcoholic intoxication (a review of the literature)] Peleshchuk AP, et al. **Vrach Delo** 1988 Oct;(10):63–7 (52 ref.) (Rus)

RADIATION EFFECTS

Effect of X-irradiation on the stomach of the rat. Breiter N, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct; 17(4):779–84

Functional and morphological alterations following irradiation of isolated rat stomach: a model for estimation of radiation injury. Weshler Z, et al. **Pharmacol Ther** 1988; 39(1–3):85–7

[Comparative study of the results of combined treatment of cancer of the stomach using various schedules of preoperative radiation therapy] Kiseleva ES, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):22–8 (Eng. Abstr.) (Rus)

[Ways of improving the methods of preoperative irradiation of patients with cancer of the stomach] Mizun EP, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):28–32 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Brief communication: a simple model for teaching double-contrast examinations of the gastrointestinal tract. Munro TG. **Can Assoc Radiol J** 1989 Jun;40(3):162–3

CT demonstration of normal gastric wall thickness: the value of administering gas-producing and paralytic agents. Karantanas AH, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):333–7

CT diagnosis of a gastric trichobezoar. Tamminen J, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):339–41

The gastric air–fluid sign: aid in CT assessment of gastric wall thickening. Hammerman AM, et al. **Gastrointest Radiol** 1989 Spring;14(2):109–12

Gastric intramural pseudocyst: computed tomographic diagnosis. Milici LP, et al. **Gastrointest Radiol** 1989 Spring; 14(2):113–4

Gastrohepatic ligament fibrosis following esophageal sclerotherapy: CT findings. Foster GS, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):136–7

Gastric pneumatosis secondary to an intramural feeding catheter. Mandell GA, et al. **Pediatr Radiol** 1988; 18(5):418–20

CT of the stomach and duodenum. Scatarige JC, et al. **Radiol Clin North Am** 1989 Jul;27(4):687–706 (67 ref.)

Small bowel phytobezoars: detection with radiography. Verstandig AG, et al. **Radiology** 1989 Sep;172(3):705–7

[Radiologic and experimental investigation on the inflammatory nodules at an anastomotic site after Billroth II gastrectomy] Xu DS. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Jun;22(3):177–9 (Eng. Abstr.) (Chi)

[Biphasic contrast study of the upper digestive tract] Kuus EM. **Radiol Diagn (Berl)** 1988;29(3):423–30 (Eng. Abstr.) (Ger)

[Videodensitometry analysis of stomach wall motility—presentation of a new method] Weissbrodt M, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989; 22(3):168–72 (Eng. Abstr.) (Ger)

[Evaluation of anti-scatter grids in barium study of the stomach] Sugino Y. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1349–63 (Eng. Abstr.) (Jpn)

[Primary double contrasting of the stomach] Sharova LE. **Vestn Khir** 1988 Jul;141(7):109–11 (Rus)

RADIONUCLIDE IMAGING

Gastric pertechnetate contribution to blood pool images. Levine GM, et al. **Clin Nucl Med** 1989 Jun;14(6):436–8

Scintigraphic evaluation of gastric emptying: are radiolabeled solids necessary? Siegel JA, et al. **Clin Nucl Med** 1989 Jan; 14(1):40–6

Effect of body posture on radionuclide measurements of gastric emptying. Moore JG, et al. **Dig Dis Sci** 1988 Dec; 33(12):1592–5

[Gastric scintigraphy following esophageal and gastric surgery] Takahashi T, et al. **Rinsho Hoshasen** 1988 Jul; 33(7):809–10 (Jpn)

[Gallium-67 accumulation in the stomach] Tomita M, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1093–7 (Eng. Abstr.) (Jpn)

[Dynamic scintigraphy in assessing gastric excretory function] Kramer AS, et al. **Med Radiol (Mosk)** 1989 Jan; 34(1):29–32 (29 ref.) (Rus)

[Radionuclide research on the functional state of the stomach, intestines and pancreas in nonspecific ulcerative colitis] Talipov M. **Med Radiol (Mosk)** 1989 Feb;34(2):10–5 (Rus)

SURGERY

Postoperative pancreatitis after biliary and gastric operations. Jakab F, et al. **Acta Chir Hung** 1988;29(3):241–9 (45 ref.)

Trial of pectin-enriched muffins in patients with severe dumping syndrome after gastric resection. Observations on symptoms and gastric emptying pattern. Andersen JR, et al. **Acta Chir Scand** 1989;155(1):39–41

Gastric banding in the treatment of morbid obesity. Factors influencing immediate and long-term results. Sjöberg EJ, et al. **Acta Chir Scand** 1989;155(1):31–4

Emptying of the intrathoracic stomach with and without pyloroplasty. Gupta S, et al. **Am J Gastroenterol** 1989 Aug; 84(8):921–3

Gastric restrictive operations for morbid obesity. Benotti PN, et al. **Am J Surg** 1989 Jan;157(1):150–5

Pancreaticogastrostomy for chronic pancreatitis. Ebbehøj N, et al. **Am J Surg** 1989 Mar;157(3):315–7

The Roux-Y technic and syndrome [letter] Frankel LA. **Am J Surg** 1989 Apr;157(4):450

Roux-Y gastrectomy for chronic gastric stony. Karlstrom L, et al. **Am J Surg** 1989 Jan;157(1):44–9

Weight loss with vertical banded gastroplasty and Roux-Y gastric bypass for morbid obesity with selective versus random assignment. Sugerman HJ, et al. **Am J Surg** 1989 Jan;157(1):93–102

Decompression after gastric surgery. Gastrostomy versus nasogastric tube. Pricolo VE, et al. **Am Surg** 1989 Jul; 55(7):413–6

Hypocalcemia following pharyngoesophageal ablation and gastric pull-up reconstruction: pathophysiology and management. Price JC, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):521–6

Vertical gastric plication: an operation for gastro-oesophageal reflux. Taylor TV, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):31–6

Combined gastric pull-up and microvascular jejunal transfer procedure after pharyngolaryngoesophagectomy. Asamura H, et al. **Ann Thorac Surg** 1989 Sep;48(3):423–5

Gastric adaptability following antrectomy and gastroduodenal anastomosis. Petroianu A, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):133–4

The effect of new monofilament absorbable sutures on the healing of musculoaponeurotic incisions, gastrotomies, and colonic anastomoses. Foresman PA, et al. **Arch Surg** 1989 Jun;124(6):708–10

Staple line healing in gastric surgery [letter] Owen ER. **Arch Surg** 1989 Jun;124(6):752

Gastric surgery for morbid obesity. Complications and long-term weight control. Yale CE. **Arch Surg** 1989 Aug; 124(8):941–6

Gastric explosion: a cautionary tale. Earnshaw JJ, et al. **BMJ** 1989 Jan 14;298(6666):93–4

Angelchik prosthesis [letter] Royston CM, et al. **Br J Surg** 1989 Jan;76(1):101

Anterior lesser curve seromyotomy and posterior truncal vagotomy for chronic duodenal ulcer: the results at five years. Siriwardena AK, et al. **Br J Surg** 1988 Sep; 75(9):866–8

Stapled bypass procedure for unresectable pancreatic carcinoma. Simon FL, et al. **Can J Surg** 1989 Mar; 32(2):85–7

Insertive esophagogastrostomy. A new technic. Shao LF, et al. **Chin Med J [Engl]** 1988 Aug;101(8):597–600

Gastric emptying after resection of esophageal cancer. Wang QZ, et al. **Chin Med J [Engl]** 1988 Jul;101(7):485–7

Sequelae of stomach surgery. Burrell M, et al. **CRC Crit Rev Diagn Imaging** 1977;10(1):17–97 (147 ref.)

Is a gastric replacement reservoir essential with total gastrectomy? Pathophysiologic update. Nadrowski L. **Curr Surg** 1989 Jul–Aug;46(4):276–84 (65 ref.)

Ablation of rabbit liver, stomach, and colon with a pulsed holmium laser. Nishioka NS, et al. **Gastroenterology** 1989 Mar;96(3):831–7

Pharyngeal repair after laryngopharyngectomy: 4-year experience. Rifai M, et al. **Head Neck Surg** 1987 Nov–Dec; 10(2):99–101

Gastroatrial fistula following esophagectomy with esophagogastrostomy. Coelho JC, et al. **Int Surg** 1989 Apr–Jun;74(2):107–8

Changes in gastric glands after gastric surgery in symptomatic patients. Niv Y. **Isr J Med Sci** 1989 Jun; 25(6):317–20

Rectal anticonvulsants in seizure patients undergoing gastrointestinal surgery. Woody RC, et al. **J Pediatr Surg** 1989 May;24(5):474–7

Silk lesions after gastric surgery. Al-Atrakchi HA. **J R Coll Surg Edinb** 1988 Aug;33(4):189–91

Gastric transposition in transhiatal oesophagectomy: a new technique. Hashimi H, et al. **J R Coll Surg Edinb** 1988 Oct;33(5):287

Transhiatal esophagectomy with gastric transposition for pharyngolaryngeal malignant disease. Goldberg M, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):327–33

Anastomotic narrowing after esophagogastrectomy with the EEA stapling device. Muehrcke DD, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):434–8

Cervical esophagogastric anastomosis for benign disease. Functional results. Orringer MB, et al. **J Thorac Cardiovasc Surg** 1988 Dec;96(6):887–93

Creation of a transverse colon—gastric composite reservoir: a new technique. Bihrle R, et al. **J Urol** 1989 May; 141(5):1217–20

Replacement of upper esophagus: results with myocutaneous flap and with gastric transposition. Silver CE, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):819–21
Trichobezoar. Baker D. **Med Pediatr Oncol** 1988;16(5):341–3
The effect of gastric banding on body weight in experimental animals. Badura R, et al. **Pol Arch Weter** 1987;27(2–3):5–14
Local immune defence in relation to gastritis in Billroth–II–resected stomachs. Valnes K, et al. **Scand J Gastroenterol** 1988 Dec;23(10):1217–24
The surgical management of abdominal tuberculosis. Goldman M. **Surg Annu** 1989;21:363–72 (29 ref.)
Gastrojejunostomy with mechanical suspension of the afferent loop. Carabalona BJ, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):65–6
Gastric stapling and sleep apnea [letter] Evans RA. **Tex Med** 1988 Sep;84(9):7–8
Oesophagogastrectomy in patients over 70. Muehrcke DD, et al. **Thorax** 1989 Feb;44(2):141–5
Bone metabolism following gastric surgery: microdensitometry and single–photon absorptiometry. Imamura M, et al. **Tohoku J Exp Med** 1988 Nov; 156(3):237–49
Billroth II gastrojejunostomy in dogs. Stapling technique and postoperative complications. Ahmadu–Suka F, et al. **Vet Surg** 1988 Jul–Aug;17(4):211–9
Significance of the Heineke–Mikulicz pyloroplasty in the treatment of gastric dilatation–volvulus. A prospective clinical study. Greenfield CL, et al. **Vet Surg** 1989 Jan–Feb; 18(1):22–6
Gastric drainage procedures: effects in normal dogs. I. Introduction and description of surgical procedures. Papageorges M, et al. **Vet Surg** 1987 Sep–Oct;16(5):327–31
Gastric drainage procedures: effects in normal dogs. II. Clinical observations and gastric emptying. Papageorges M, et al. **Vet Surg** 1987 Sep–Oct;16(5):332–40
Gastric drainage procedures: effects in normal dogs. III. Postmortem evaluation. Papageorges M, et al. **Vet Surg** 1987 Sep–Oct;16(5):341–5
Effects of the Y–U pyloroplasty on gastric emptying and duodenogastric reflux in the dog. Stanton ME, et al. **Vet Surg** 1987 Sep–Oct;16(5):392–7
[New technique of esophagogastrostomy—improved intraluminal elastic circular ligation] Zhang YD, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):224–6 (Eng. Abstr.) (Chi)
[Perforation of the stomach into the thoracic cavity after resection of esophageal cancer: report of 4 cases] Gao JH. **Chung Hua Wai Ko Tsa Chih** 1988 Sep;26(9):561–2, 575 (Eng. Abstr.) (Chi)
[Experimental study and clinical application of a single row suturing esophagogastrostomy] Gao SZ. **Chung Hua Wai Ko Tsa Chih** 1988 Nov;26(11):665–6, 701 (Eng. Abstr.) (Chi)
[Clinical experience with staplers in gastrointestinal surgery] Lin CH. **Chung Hua Wai Ko Tsa Chih** 1988 Oct; 26(10):590–2, 636–7 (Eng. Abstr.) (Chi)
[Clinical application of gastro–intestinal staplers] Zou ZS. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):373–6, 384 (Eng. Abstr.) (Chi)
[Block of the cervical plexus for the unipolar exclusion of a gastroplasty after bronchial fistula] Sardin B, et al. **Ann Fr Anesth Reanim** 1988;7(4):343–5 (Eng. Abstr.) (Fre)
[Vertical gastroplasty: surgical treatment of choice in exogenous morbid obesity] Gazzola LM, et al. **Helv Chir Acta** 1988 Jun;55(1–2):7–14 (Eng. Abstr.) (Fre)
[Technical complications at midterm of Mason gastroplasty] Merlini M, et al. **Helv Chir Acta** 1988 Jun;55(1–2):15–7 (Eng. Abstr.) (Fre)
[Surgical treatment of exogenous morbid obesity: results of Mason's vertical gastroplasty] Jayet A, et al. **Ther Umsch** 1989 May;46(5):325–8 (Eng. Abstr.) (Fre)
[Experimental animal studies on the significance of endogenous prostaglandins in maintaining the integrity of the stomach mucosa after truncal vagotomy] Dubecz S Jr, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988; 21(6):322–7 (Eng. Abstr.) (Ger)
[Correction of subtotal esophageal aplasias and extensive artificial esophageal defects by gastric transposition] Hecker WC, et al. **Z Kinderchir** 1988 Oct;43(5):336–42 (Eng. Abstr.) (Ger)
[Cancer of the operated stomach] Zambon M, et al. **Minerva Chir** 1988 Nov 15;43(21):1819–22 (Eng. Abstr.) (Ita)
[Spontaneous esophagogastric perforation after fundoplication: an unusual complication of antireflux surgery] Bonaldi U, et al. **Minerva Med** 1989 Jul; 80(7):729–32 (Ita)
[Wide resection of the gastric body with preservation of the pylorus in the treatment of normal and hypoacidic gastric ulcers] Serafimov K. **Acta Chir Iugosl** 1987;34 Suppl 2:27–42 (Eng. Abstr.) (Mac)
[Formation of an invagination esophageal–gastric (intestinal) anastomosis using Bloxhin's expanding suture] Musulmanbekov KZh, et al. **Grudn Khir** 1988 Jul–Aug; (4):69–71 (Eng. Abstr.) (Rus)
[The highest permissible levels of resection of the esophagus in cancer during surgery with intrathoracic or cervical esophagogastric anastomoses] Pirogov AI, et al. **Grudn Khir** 1989 Mar–Apr;(2):65–70 (Eng. Abstr.) (Rus)
[Single–stage plasty of the esophagus with the stomach using a cervico–abdominal approach] Astaf'ev VI, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):32–7 (Eng. Abstr.) (Rus)
[Choice of the method of stomach resection] Gadzhiev AS, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):6–10 (Eng. Abstr.) (Rus)
[Prognostication of incompetence of duodenal stump sutures after stomach resection] Kostin AE, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):130–1 (Rus)
[Anterior seromyotomy of the corpus and fundus of the stomach in combination with posterior selective vagotomy in the treatment of duodenal ulcer] Petrov VI, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):84–7 (Rus)
[Resection of the acid–producing portion of the stomach as a method of treating Zollinger–Ellison syndrome] Sidorenko VD, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):89–91 (Rus)
[The place of duodenogastric reflux in the genesis of diseases of the unoperated and operated stomach] Dimitrova V, et al. **Khirurgiia (Sofiia)** 1988;41(3):43–9 (35 ref.) (Rus)
[Emergency cytological diagnosis in surgery of cancer of the proximal part of the stomach] Agamova KA, et al. **Sov Med** 1989;(3):101–3 (Rus)
[Principles of creating anastomoses of hollow organs of the gastrointestinal tract with reference to characteristics of their regeneration] Zemlianoĭ AG, et al. **Vestn Khir** 1989 Mar;142(3):91–5 (Eng. Abstr.) (Rus)
[Truncal vagotomy, antrectomy and Roux–en–Y gastrojejunostomy in the surgical treatment of ulcer disease] Maksimović V, et al. **Vojnosanit Pregl** 1988 Sep–Oct;45(5):328–33 (Eng. Abstr.) (Scr)
[Discriminant analysis of risk factors of postoperative infections in gastroduodenal surgery] Bolufer Cano JM, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):645–50 (Eng. Abstr.) (Spa)
[Antibiotic prevention in gastroduodenal surgery] Bolufer Cano JM, et al. **Rev Esp Enferm Apar Dig** 1989 Jan; 75(1):47–52 (Eng. Abstr.) (Spa)

TRANSPLANTATION

Intrathoracic stapled anastomosis after oesophagectomy for cancer. Woods SD, et al. **Aust N Z J Surg** 1989 Aug; 59(8):647–51
Gastrocystoplasty: an alternative solution to the problem of urological reconstruction in the severely compromised patient. Adams MC, et al. **J Urol** 1988 Nov;140(5 Pt 2):1152–6
Chronic renal failure and bladder augmentation: stomach versus sigmoid colon in the canine model. Kennedy HA, et al. **J Urol** 1988 Nov;140(5 Pt 2):1138–40
[Functional and motor study of retrosternal esophageal plasties] Guillemot F, et al. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):591–5 (Eng. Abstr.) (Fre)
[Experimental bile duct replacement using deep seromuscular stomach wall grafts] Klepetko W, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(5):269–74 (Eng. Abstr.) (Ger)
[Ensuring the viability of gastric transplants used in esophagoplasty using hemomotordynamic monitoring] Sigal ZM, et al. **Grudn Khir** 1989 Mar–Apr;(2):70–3 (Eng. Abstr.) (Rus)
[Esophagoplasty using a gastric tube] Mamontov AS, et al. **Sov Med** 1988;(8):13–4 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Ultrastructure of a neuroendocrine complex in oxyntic mucosa of normal human stomach. D'Adda T, et al. **Cell Tissue Res** 1988 Nov;254(2):465–7
[Ultrastructure of the gastrointestinal epithelium in the marmoset (Callithrix jacchus)] Jablonski O, et al. **Z Mikrosk Anat Forsch** 1989;103(2):190–220 (Eng. Abstr.) (Ger)

STOMACH, AVIAN

PARASITOLOGY

Ventriculus worm infection in the pigeon (Columba livia domestica). Farah MO. **Br Vet J** 1988 Nov–Dec; 144(6):596–601

STOMACH CONTENTS see **GASTROINTESTINAL CONTENTS**

STOMACH DILATATION

BLOOD

Marked hypergastrinemia in gastric outlet obstruction. Hangen D, et al. **J Clin Gastroenterol** 1989 Aug;11(4):442–4

COMPLICATIONS

Aspiration pneumonitis following electroconvulsive therapy in patients with gastroparesis. Zibrak JD, et al. **Biol Psychiatry** 1988 Nov;24(7):812–4

DIAGNOSIS

Prenatal gastric dilatation and infantile hypertrophic pyloric stenosis. Katz S, et al. **J Pediatr Surg** 1988 Nov; 23(11):1021–2

ETIOLOGY

Acute gastric dilatation in an incarcerated hiatus hernia. Hopkins CS, et al. **Br J Anaesth** 1989 Jan;62(1):108–11
Acute gastric dilatation as a manifestation of Duchenne's muscular dystrophy. Stark P, et al. **ROFO** 1988 Nov; 149(5):554

PATHOLOGY

Effects of gastric distension and prostaglandin on acid ethanol–induced mucosal lesions in the rat. Takeuchi K, et al. **Dig Dis Sci** 1988 Dec;33(12):1569–77

VETERINARY

Relationship of plasma gastrin immunoreactivity and gastroesophageal sphincter pressure in clinically normal dogs and in dogs with previous gastric dilatation–volvulus. Hall JA, et al. **Am J Vet Res** 1989 Aug;50(8):1228–32
Gastric emptying of a radionuclide–labeled test meal after surgical correction of gastric dilatation–volvulus in dogs. van Sluijs FJ, et al. **Am J Vet Res** 1989 Mar;50(3):433–5
What is your diagnosis? Gastric dilatation; possible diaphragmatic hernia. Kieval RS, et al. **J Am Vet Med Assoc** 1989 Mar 15;194(6):819–20
Abomasal dilatation and emptying defect in a flock of Suffolk ewes. Ruegg PL, et al. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1534–6
Gastric dilation in a dog [letter] Dobromylskyj P. **Vet Rec** 1989 May 20;124(20):547
Metaclopramide for preventing watery mouth [letter] Stewart M. **Vet Rec** 1989 May 6;124(18):497–8
Significance of the Heineke–Mikulicz pyloroplasty in the treatment of gastric dilatation–volvulus. A prospective clinical study. Greenfield CL, et al. **Vet Surg** 1989 Jan–Feb; 18(1):22–6

STOMACH DISEASES

Gastric involvement in an epigastric hernia [letter] Serour F, et al. **AJR** 1989 Apr;152(4):893–4
Gastric xanthoma [letter] Kim WJ, et al. **Gastrointest Endosc** 1988 Sep–Oct;34(5):437
Jejunogastric intussusception diagnosis and management. Wheatley MJ. **J Clin Gastroenterol** 1989 Aug;11(4):452–4
[The diagnostic and therapeutic importance of esophago–gastro–duodenoscopy] Spinelli P, G **Clin Med** 1989 May;70(5):323–39 (24 ref.) (Ita)
[A rare case of lymphatic cyst of the gastric wall] Del Cimmuto P, et al. **Minerva Chir** 1988 Sep 30;43(18):1509–13 (Eng. Abstr.) (Ita)

BLOOD

[The content of regulatory peptides in the blood of patients with chronic gastric and duodenal diseases] Starodub EM. **Vrach Delo** 1989 Mar;(3):73–5 (Eng. Abstr.) (Rus)
[Behavior of serum CA 72.4 in patients with non–tumor pathologies. Preliminary results (letter)] Sagredo E, et al. **Med Clin (Barc)** 1989 Jan 21;92(2):78–9 (Spa)

CHEMICALLY INDUCED

Light microscopic quantitative investigation on the effects of prostaglandin E2 (PGE2) on the lectin binding pattern in rat gastric mucosa injured by ethanol or sodium taurocholate. Fringes B, et al. **Acta Histochem Suppl (Jena)** 1988;36:263–72
Comparative evaluation of gastrointestinal intolerance produced by plain and tri–buffered aspirin tablets. Sabesin SM, et al. **Am J Gastroenterol** 1988 Nov;83(11):1220–5
Mechanisms of nonsteroidal anti–inflammatory drug–induced gastric damage. Schoen RT, et al. **Am J Med** 1989 Apr; 86(4):449–58 (136 ref.)
Non–steroidal anti–inflammatory drugs induced gastropathy: endoscopic findings in rheumatic patients. Rodríguez W, et al. **Bol Asoc Med P R** 1988 Oct;80(10):366–8
Acetaminophen directly protects human gastric epithelial cell monolayers against damage induced by sodium taurocholate. Romano M, et al. **Digestion** 1988;40(3):181–90
Ingestion of corrosive acids. Spectrum of injury to upper gastrointestinal tract and natural history. Zargar SA, et al. **Gastroenterology** 1989 Sep;97(3):702–7
Indomethacin–induced gastroduodenal damage is not affected by cotreatment with ranitidine. Stalnikowicz R, et al. **J Clin Gastroenterol** 1989 Apr;11(2):178–82
Non–steroidal anti–inflammatory drug–induced gastropathy. Mechanisms and management. Szabo S, et al. **Med Toxicol Adverse Drug Exp** 1989 Mar–Apr;4(2):77–94 (161 ref.)
Gastroduodenal effects of nonsteroidal antiinflammatory drugs. Kimmey MB. **Postgrad Med** 1989 Apr;85(5):65–70, 73 (35 ref.)
Practical management of NSAID gastropathy in rheumatic patients. Peltier AP. **Scand J Rheumatol Suppl** 1989;78:12–7; discussion 30–2
New understandings of NSAID gastropathy. Roth SH. **Scand J Rheumatol Suppl** 1989;78:24–9; discussion 30–2
Gastric enterochromaffin–like cell hyperplasia and neoplasia in the rat: an indirect effect of the histamine H2–receptor antagonist, BL–6341. Hirth RS, et al. **Toxicol Pathol** 1988; 16(2):273–87
Forestomach lesions induced by butylated hydroxyanisole and ethylene dibromide: a scientific and regulatory

perspective. Moch RW. **Toxicol Pathol** 1988;16(2):172–83
Morphologic stomach findings in rats and mice treated with the H2 receptor antagonists, ICI 125,211 and ICI 162,846. Streett CS, et al. **Toxicol Pathol** 1988;16(2):299–304
[Gastroduodenal complications of hepatic intra–arterial chemotherapy of hepatic metastases of colorectal origin] Rougier P, et al. **Gastroenterol Clin Biol** 1989;13(2):193–6 (Eng. Abstr.) (Fre)
[A combination of a burn stricture of the abdominal esophagus and a total cicatricial lesion of the stomach] Cherniavskii AA, et al. **Grudn Khir** 1988 Nov–Dec;(6):91–3 (Rus)

COMPLICATIONS

Gastric xanthelasma in hyperplastic gastric polyposis. Lin PY, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):428–30
Gastroduodenal mucosal intussusception causing gastric outlet obstruction: a complication of gastrostomy tubes. Galea MH, et al. **J Pediatr Surg** 1988 Oct;23(10):980–1
Ehlers–Danlos syndrome with infarction of stomach [letter] Leung AK. **J R Soc Med** 1989 Feb;82(2):123
Incidence of gastropathy in destructive arthropathies. Hazleman BL. **Scand J Rheumatol Suppl** 1989;78:1–4; discussion 30–2 (17 ref.)
[Gastric pain and respiratory sounds in sarcoidosis patients] Järvinen M, et al. **Duodecim** 1988;104(19):1546–9 (Fin)
[Treatment of metabolic alkalosis in a patient with dynamic torsion of the stomach] Bondarenko AV, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):60–2 (Eng. Abstr.) (Rus)
[Rare causes of acute esophago–gastroduodenal hemorrhages] Pinskii SB, et al. **Khirurgiia (Mosk)** 1989 Apr; (4):49–53 (Eng. Abstr.) (Rus)
[Vascular ectasia of the antrum or "watermelon stomach". Apropos of a case] Andrade Bellido RJ, et al. **Rev Esp Enferm Apar Dig** 1988 Jul;74(1):70–2 (Eng. Abstr.) (Spa)

CONGENITAL

[Radiologic case of the month. Neonatal gastric perforation and diaphragmatic eventration] Donnou–Da Lage MD, et al. **Arch Fr Pediatr** 1988 Nov;45(9):661–2 (5 ref.) (Fre)

DIAGNOSIS

Ultrasonic examination of the wall of the fluid–filled stomach. Worlicek H, et al. **JCU** 1989 Jan;17(1):5–14
Isolated Crohn's disease of the stomach. Cary ER, et al. **Mayo Clin Proc** 1989 Jul;64(7):776–9
Sonographic pitfalls in imaging of the antropyloric region in infants. Swischuk LE, et al. **Radiographics** 1989 May; 9(3):437–47
[Fiber gastroscopy in the diagnosis of gastroduodenal diseases and of primary cancer of the gastric stump in particular] Dimitrova V, et al. **Khirurgiia (Sofiia)** 1989;42(1):14–8 (Eng. Abstr.) (Bul)
[Primary gastroduodenal tuberculosis. Problems posed apropos of a case] François GF, et al. **Chirurgie** 1988; 114(4):327–33 (25 ref.) (Eng. Abstr.) (Fre)
[Motor disorders of the unoperated stomach] Jian R. **Presse Med** 1988 Oct 8;17(34):1727–8 (11 ref.) (Fre)
[Morphologic and clinical aspects of chronic gastric erosions] Rácz I, et al. **Orv Hetil** 1989 Apr 9;130(15):773–6 (Eng. Abstr.) (Hun)
[Clinical usefulness of endoscopy of the upper digestive tract in the aged] Pilotto A, et al. **G Clin Med** 1988 Nov; 69(11):651–5 (Eng. Abstr.) (Ita)
[Arrhythmia during endoscopy of the upper gastrointestinal tract] Wierzbicka–Paczos E. **Przegl Lek** 1989;46(5):451–4 (Eng. Abstr.) (Pol)
[Gastric torsion in a 6–month–old child] Shish AA, et al. **Klin Khir** 1989;(6):74 (Rus)
[Experience using videoendoscopes] Veselov VV, et al. **Klin Med (Mosk)** 1989 May;67(5):68–71 (Rus)
[Lymph node hyperplasia of the gastric antrum] Luk'ianov VV, et al. **Ter Arkh** 1988;60(12):72–3 (Eng. Abstr.) (Rus)

DRUG THERAPY

Diabetic gastroparesis in a patient with Parkinson's disease: effective treatment with domperidone [letter] Day JP, et al. **Am J Gastroenterol** 1989 Jul;84(7):837–8
Gastric emptying and gastric myoelectrical activity in patients with diabetic gastroparesis: effect of long–term domperidone treatment. Koch KL, et al. **Am J Gastroenterol** 1989 Sep;84(9):1069–75
Sucralfate therapy for acid–induced upper gastrointestinal tract injury. Mittal PK, et al. **Am J Gastroenterol** 1989 Feb;84(2):204–5
A multicenter placebo–controlled clinical trial of oral metoclopramide in diabetic gastroparesis. McCallum RW, et al. **Diabetes Care** 1983 Sep–Oct;6(5):463–7
[Antacids and mucosa–protecting agents] Lamers CB. **Ned Tijdschr Geneeskd** 1988 Aug 6;132(32):1467–70 (Dut)
[Old and new stomach therapy with bismuth salts. Pharmacokinetics, pharmacodynamics, toxicity] Börsch G. **Med Klin** 1988 Sep 16;83(18):605–10 (51 ref.) (Ger)
[Antimicrobial drugs in the treatment of stomach and duodenal diseases associated with Campylobacter pylori] Perederil VG, et al. **Klin Med (Mosk)** 1989 Jan;67(1):44–8 (44 ref.) (Rus)

EPIDEMIOLOGY

[Epigastric pain and regurgitation: descriptive epidemiology in a representative sample of the adult population of France] Bruley des Varannes S, et al. **Gastroenterol Clin Biol** 1988 Oct;12(10):721–8 (Eng. Abstr.) (Fre)

ETIOLOGY

Rupture of the stomach complicating bleeding peptic ulcer. Case report. Almskog BA, et al. **Acta Chir Scand** 1988 Sep; 154(9):543–5
Gastroparesis following traumatic brain injury and response to metoclopramide therapy. Jackson MD, et al. **Arch Phys Med Rehabil** 1989 Jul;70(7):553–5
Gastrointestinal involvement of dialysis–related amyloidosis. Takahashi S, et al. **Clin Nephrol** 1988 Sep;30(3):168–71
Tumor–associated gastroparesis with esophageal carcinoma. Use of intravenous metoclopramide during radionuclide gastric emptying studies to predict clinical response. Choe AI, et al. **Dig Dis Sci** 1989 Jul;34(7):1132–4
Spontaneous gastroduodenal perforation in cancer patients receiving cytotoxic therapy. Ricci JL, et al. **J Surg Oncol** 1989 Aug;41(4):219–21
Gastric lipoma and intussusception in a child. McCombe AW, et al. **Scott Med J** 1988 Aug;33(4):310–1
Perforation of the gastrointestinal tract following renal transplantation. Knechtle SJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2143–4
[Disorders of stomach emptying] Müller–Lissner S. **Fortschr Med** 1989 Mar 10;107(7):168–71 (0 ref.) (Eng. Abstr.) (Ger)
[Dental status and stomach diseases] Wolff G, et al. **Z Arztl Fortbild (Jena)** 1989;83(1):33–6 (23 ref.) (Ger)
[Hernia of Morgagni as a cause of intestinal occlusion. Comments on 2 clinical cases] Noya G, et al. **Minerva Chir** 1988 Oct 15;43(19):1639–42 (Eng. Abstr.) (Ita)
[Spontaneous esophagogastric perforation after fundoplication: an unusual complication of antireflux surgery] Bonaldi U, et al. **Minerva Med** 1989 Jul; 80(7):729–32 (Ita)
[Campylobacter pylori colonization and gastroduodenal pathology] Gullini S, et al. **Minerva Med** 1988 Nov; 79(11):957–60 (Eng. Abstr.) (Ita)
[Prevalence of chronic background and precancerous diseases in the manufacture of graphite articles] Gladkova EV, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):21–4 (Eng. Abstr.) (Rus)
[The place of duodenogastric reflux in the genesis of diseases of the unoperated and operated stomach] Dimitrova V, et al. **Khirurgiia (Sofiia)** 1988;41(3):43–9 (35 ref.) (Rus)
[A rare case of gastric hemorrhage] Iatsenko AA, et al. **Klin Khir** 1988;(6):66 (Rus)
[Clinico–radiographic evaluation of the state of the spine in stomach and duodenal diseases] Dmitriev AE, et al. **Klin Med (Mosk)** 1989 Jan;67(1):108–12 (Eng. Abstr.) (Rus)
[Etiology, pathogenesis and treatment of gastroparesis] Legeza VI, et al. **Ter Arkh** 1988;60(11):151–4 (53 ref.) (Rus)
[Morgagni's diaphragmatic hernia. Report of 2 cases] Borrego Galán JC, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):389–92 (Eng. Abstr.) (Spa)
[Descriptive analysis of 660 cases of upper digestive hemorrhage: relation of emergency endoscopy and mortality] Codina Cazador A, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):665–70 (Eng. Abstr.) (Spa)
[Stomach incarcerated in an inguinal hernia as a cause of upper digestive hemorrhage] Loizate Totoricaguena A, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):172–4 (Eng. Abstr.) (Spa)

IMMUNOLOGY

[Detection of the epithelial membrane antigen in patients with varying status of the gastric mucosa using monoclonal antibodies] Vorob'eva TA, et al. **Arkh Patol** 1989; 51(5):47–51 (Eng. Abstr.) (Rus)

METABOLISM

Proline is not useful as a chemical probe to measure nitrosation in the gastrointestinal tract of patients with gastric disorders characterised by anacidic conditions. Adam B, et al. **Gut** 1989 Aug;30(8):1068–75
Vitamin C in the human stomach: relation to gastric pH, gastroduodenal disease, and possible sources. O'Connor HJ, et al. **Gut** 1989 Apr;30(4):436–42
Immunohistochemical study of ras p21 expression in human gastric cancers and benign lesions. Nakajima K, et al. **Oncology** 1989;46(4):260–5
[Role of lipid peroxidation and polymorphonuclear leukocytes–derived oxygen radicals in acute gastric lesions induced by hyperthermic treatment] Yoshikawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb;86(2):159–64 (Eng. Abstr.) (Jpn)
[Lipid spectrum of the blood serum and feces in children with gastroduodenal pathology] Khamraev AKh, et al. **Pediatriia** 1988;(10):109 (Rus)

MICROBIOLOGY

Identification of Campylobacter–like organisms in gastric brushings. Mason CH, et al. **Acta Cytol** 1989 Mar–Apr; 33(2):284–6

PATHOLOGY

Gastric Castleman's disease with a lupus–like circulating anticoagulant. Yebra M, et al. **Am J Gastroenterol** 1989 May;84(5):566–70
A method of quantitating Paneth cell metaplasia of the stomach by image analysis. Rubio CA, et al. **Anal Quant Cytol Histol** 1989 Apr;11(2):115–8
Acute pathological effects on rats of orally administered wortmannin–containing preparations and purified wortmannin from Fusarium oxysporum. Gunther R, et al. **Food Chem Toxicol** 1989 Mar;27(3):173–9
Use of endoscopic biopsy for diagnosing congestive gastropathy. Corbishley CM, et al. **J Clin Pathol** 1988 Nov; 41(11):1187–90
Histopathological study of endoscopic biopsies of stomach. Kazi JI, et al. **JPMA** 1988 Jul;38(7):177–9
Morphometric indexes and computerized diagnosis of gastric dysplasia. Yan RF, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(1):43–7
Gastric intestinal metaplasia: endoscopic and histologic study of 179 cases. Abrate M, et al. **Riv Eur Sci Med Farmacol** 1987 Sep;9(3):261–3
[Ultrastructure of the gastric mucosa and trace elements in gastropathic patients with spleen deficiency syndrome and its clinical significance] Yin GY. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):527–30, 516 (Eng. Abstr.) (Chi)
[Vascular dilatation in the gastric antrum—a rare cause of hemorrhage] Koivisto P. **Duodecim** 1988;104(5):336–40 (Fin)
[Gastric sarcoidosis. Presentation of 2 apparently primary cases] Freschi M, et al. **Pathologica** 1988 Jan–Feb; 80(1065):111–6 (Eng. Abstr.) (Ita)
[A case of amyloidosis localized at the stomach] Iwai C, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1288–9 (Jpn)

PHYSIOPATHOLOGY

Predictable and unpredictable shock stimulates gastric contractility and causes mucosal injury in rats. Garrick T, et al. **Behav Neurosci** 1989 Feb;103(1):124–30
Physiology of gastric emptying and pathophysiology of gastroparesis. Read NW, et al. **Gastroenterol Clin North Am** 1989 Jun;18(2):359–73 (105 ref.)
Frequency of idiopathic gastric stasis and intestinal transit disorders in essential dyspepsia. Wegener M, et al. **J Clin Gastroenterol** 1989 Apr;11(2):163–8
Gastric dysrhythmias: pathophysiologic and etiologic factors. Dubois A. **Mayo Clin Proc** 1989 Feb;64(2):246–50 (40 ref.)
[Motor disorders of the stomach excluding sequelae from surgery] Jian R. **Rev Med Suisse Romande** 1989 May; 109(5):337–9 (Fre)
[Evaluation of blood flow in the gastric microcirculation in humans during pirenzepine infusion] Spiga L, et al. **Minerva Dietol Gastroenterol** 1988 Oct–Dec;34(4):257–63 (Eng. Abstr.) (Ita)

PREVENTION & CONTROL

Mechanism of action of nonantisecretory agents [letter] De Wal J. **Dig Dis Sci** 1988 Oct;33(10):1342
Sucralfate protection of human gastric mucosa against acute ethanol injury. Cohen MM, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):292–8
Prevention of acute gastric erosions in the rat by novel semi–synthetic amphipathic analogues of pepstatin. Huddy SP, et al. **Gut** 1988 Nov;29(11):1569–77
Protective effects of hypolaetin–8–glucoside on the rat gastric mucosa. Alcaraz MJ, et al. **Prog Clin Biol Res** 1988; 280:183–6
NSAIDs: new approaches to limiting gastropathy. Zeidler H, et al. **Scand J Rheumatol Suppl** 1989;78:18–23; discussion 30–2 (9 ref.)
[Pirenzepine in the prevention of gastric intolerance to drugs used in pulmonary pathology] Guarino C, et al. **Minerva Dietol Gastroenterol** 1988 Apr–Jun;34(2):129–34 (Eng. Abstr.) (Ita)

PSYCHOLOGY

Research note: recurrent headaches and stomachaches in preschool children. Stevenson J, et al. **J Child Psychol Psychiatry** 1988 Nov;29(6):897–900

RADIOGRAPHY

Diagnostic accuracy of double contrast barium meal in the diseases of stomach and duodenum using locally prepared negative contrast agent. Sharif ME, et al. **Bangladesh Med Res Counc Bull** 1988 Jun;14(1):21–8
Residents' corner. Answer to case of the month #1. Gastric sarcoidosis. Mathieson JR. **Can Assoc Radiol J** 1989 Jun; 40(3):181
Gastric torsion. Reddy ER, et al. **Can Assoc Radiol J** 1989 Feb;40(1):47–8
Gastro–duodenal retention of Telepaque—a useful sign in

oral cholecystography. Hamilton S. **Ir Med J** 1989 Feb; 82(1):28–9

The gastric bubble: roentgen observations. Gurney JW, et al. **Radiographics** 1989 May;9(3):467–85

Cyst formation in gastric heterotopic pancreas: report of two cases. Claudon M, et al. **Radiology** 1988 Dec;169(3):659–60

Subtle gastric abnormalities in a canine model: detection with low-dose imaging with storage phosphors and its equivalence to conventional radiography. Shin JH, et al. **Radiology** 1989 Aug;172(2):399–401

[Amyloidosis of the stomach: presentation of a case] Pias H, et al. **J Belge Radiol** 1989 Apr;72(2):111–3 (Eng. Abstr.) **(Dut)**

[Crohn disease of the upper gastrointestinal tract] Kuntz HD, et al. **Med Klin** 1988 Nov 11;83(22):760–2, 776 (31 ref.) **(Ger)**

[The present status of x-ray studies of the stomach and duodenum] Georgi M, et al. **Rontgenpraxis** 1989 May; 42(5):166–73 **(Ger)**

[The diagnosis of functional epigastric syndrome] Raue I, et al. **Z Gesamte Inn Med** 1989 Feb 1;44(3):79–82 (Eng. Abstr.) **(Ger)**

[Localized gastric amyloidosis. Clinico-radiologic aspects] Merlo L, et al. **Radiol Med (Torino)** 1988 Nov;76(5):494–6 **(Ita)**

[X-ray diagnosis of diseases of the stomach based on fine-relief data] Zubarev AV, et al. **Vestn Rentgenol Radiol** 1988 Sep-Oct;(5):19–23 (Eng. Abstr.) **(Rus)**

SURGERY

Problems in the surgical treatment of motility disorders occurring after gastric surgery. Hubens A, et al. **Acta Chir Belg** 1987 Sep-Oct;87(5):334–8

Roux-Y gastrectomy for chronic gastric atony. Karlstrom L, et al. **Am J Surg** 1989 Jan;157(1):44–9

Preventive preoperative chemotherapy with ceftriaxone or cefotaxime in abdominal surgery. Blatzas G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):591

Endoscopic laser therapy for watermelon stomach. Gostout CJ, et al. **Gastroenterology** 1989 Jun;96(6):1462–5

Nine cases of acute gastric anisakiasis. Ikeda K, et al. **Gastrointest Endosc** 1989 Jul-Aug;35(4):304–8

Consequences of gastric surgery for benign conditions: an overview. Tytgat GN, et al. **Hepatogastroenterology** 1988 Dec;35(6):271–8 (50 ref.)

Surgical therapy of diabetic gastroparesis. Reardon TM, et al. **J Clin Gastroenterol** 1989 Apr;11(2):204–7

Septic complications in relation to factors influencing the gastric microflora in patients undergoing gastric surgery. Sjöstedt S, et al. **J Hosp Infect** 1989 Feb;13(2):191–7

Successful gastrorrhaphy on ECMO. Howell CG, et al. **J Pediatr Surg** 1988 Dec;23(12):1161–2

Cancer of remnant stomach following gastric surgery for benign conditions. Sowa M, et al. **Osaka City Med J** 1989 Jun;35(1):21–7

Management of upper gastrointestinal hemorrhage in patients with pseudoxanthoma elasticum. McCreedy CA, et al. **Surgery** 1989 Feb;105(2 Pt 1):170–4

[A case of chronic ischemic erosive gastropathy healed after surgical revascularization] Bouché O, et al. **Gastroenterol Clin Biol** 1989 Jan;13(1):94–7 (Eng. Abstr.) **(Fre)**

[Spontaneous rupture of the stomach (case report)] Montresor E, et al. **Chir Ital** 1988 Aug-Oct;40(4-5):306–12 (Eng. Abstr.) **(Ita)**

[Cardio-esophageal achalasia] Aureggi A, et al. **Minerva Chir** 1989 Jan 31;44(1-2):107–11 (0 ref.) **(Ita)**

[Endoscopic gastric polypectomy. Evaluation of 5,492 endoscopies of the upper digestive tract] Manildo M, et al. **Minerva Dietol Gastroenterol** 1989 Apr-Jun;35(2):115–8 (Eng. Abstr.) **(Ita)**

[The treatment of caustic agent-induced lesions of the primary segment of the digestive tract] Baisi A, et al. **Minerva Med** 1989 Jul;80(7):775–80 **(Ita)**

[What happens to gastric surgery?] Ernspp E, et al. **Nord Med** 1988;103(10):270–2 (Eng. Abstr.) **(Nor)**

[Treatment of concurrent diseases of the organs of the abdominal cavity] Sakhautdinov VG, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):80–4 (Eng. Abstr.) **(Rus)**

[A case of gastromalacia] Bakuma VA, et al. **Klin Khir** 1988; (8):67 **(Rus)**

[Surgical treatment of combined cicatricial stenoses of the pharynx, esophagus and stomach following chemical burns] Mumladze RB. **Klin Khir** 1988;(10):48–50 **(Rus)**

[Late results of the surgical treatment of stomach duplication] Popovich SA, et al. **Klin Khir** 1988;(8):68–9 **(Rus)**

[Diagnosis and treatment of incompetence of sutures of the duodenal stump] Godlevskiĭ AI. **Vestn Khir** 1987 Dec; 139(12):83–5 (Eng. Abstr.) **(Rus)**

[Development of surgery of the stomach during the 70-year period of Soviet rule] Gorbashko AI. **Vestn Khir** 1987 Dec; 139(12):8–15 **(Rus)**

[Immediate results of the use of CO2 laser in surgery of the stomach] Kalish IuI, et al. **Vestn Khir** 1988 Aug; 141(8):123–5 **(Rus)**

[A method for the surgical correction of cardial failure by using the round ligament of the liver] Chibis OA, et al. **Voen Med Zh** 1988 Dec;(12):47–8 **(Rus)**

[Diet therapy of patients after operations on the stomach] Gurvich MM. **Vopr Pitan** 1988 Jul-Aug;(4):78–80 **(Rus)**

THERAPY

Gastric wall abscess drained at endoscopy [letter] Lantz PE, et al. **Gastrointest Endosc** 1989 May-Jun;35(3):272–4

Heat probe treatment for antral vascular ectasia. Petrini JL Jr, et al. **Gastrointest Endosc** 1989 Jul-Aug;35(4):324–8

Endoscopic retrieval of ingested broken glass in the esophagus and stomach by end-hood and suction technique [letter] Tuen HH, et al. **Gastrointest Endosc** 1989 Jul-Aug; 35(4):357–8

[Upper digestive hemorrhage in pseudoxanthoma elasticum. Treatment by arterial embolization (letter)] Guivarch P, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):432–4 **(Fre)**

[Disorders of gastric emptying] Müller-Lissner S. **Verh Dtsch Ges Inn Med** 1988;94:457–62 (19 ref.) **(Ger)**

[Transcatheter arterial embolization for gastric and duodenal arterial bleeding] Aikawa H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25; 48(10):1218–25 (Eng. Abstr.) **(Jpn)**

[Successful conservative treatment of an external gastric fistula] Opekunov SM, et al. **Klin Khir** 1988;(8):68 **(Rus)**

URINE

N-nitrosoproline excretion in patients with gastric lesions and in a control population. Knight TM, et al. **IARC Sci Publ** 1988;(89):97–101

VETERINARY

Encephalitis, proventricular and ventricular myositis, and myenteric ganglioneuritis in an umbrella cockatoo. Joyner KL, et al. **Avian Dis** 1989 Apr-Jun;33(2):379–81

Abomasal volvulus in cattle following correction of left displacement by casting and rolling. St. Jean G, et al. **Cornell Vet** 1989 Oct;79(4):345–51

Gastric pneumatosis in a red ruffed lemur. Calle PP. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1212–4

Failure of omasal transport attributable to perireticular abscess formation in cattle: 29 cases (1980–1986). Fubini SL, et al. **J Am Vet Med Assoc** 1989 Mar 15;194(6):811–4

Bar suture (toggle pin) vs open surgical abomasopexy for treatment of left displaced abomasum in dairy cattle. Kelton DF, et al. **J Am Vet Med Assoc** 1988 Sep 1;193(5):557–9

Gastric trichuriasis in a black and white colobus monkey. Loomis MR, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1214–5

Decision-tree analysis of treatment alternatives for left displaced abomasum. Ruegg PL, et al. **J Am Vet Med Assoc** 1989 Aug 15;195(4):464–7

Mycotic omasitis and rumenitis as sequelae to sepsis in dairy cattle: six cases (1979–1986). Sweeney RW, et al. **J Am Vet Med Assoc** 1989 Feb 15;194(4):552–3

Post-mortem changes in the abomasal mucosae of sheep infected with Haemonchus contortus compared with those in uninfected sheep. Nicholls CD, et al. **J Comp Pathol** 1989 Jan;100(1):19–25

Studies on the prevalence and the transmission of lung and stomach nematodes of the wild boar (Sus scrofa) in France. Humbert JF, et al. **J Wildl Dis** 1989 Jul;25(3):335–41

Effect of synthetic gizzerosine on growth, mortality, and gizzard erosion in broiler chicks. Sugahara M, et al. **Poult Sci** 1988 Nov;67(11):1580–4

Pathophysiological and parasitological studies on Ostertagia ostertagi infections in calves. Taylor LM, et al. **Res Vet Sci** 1989 Mar;46(2):218–25

Extensive intestinal atresia and forestomach distention in a full term fetal calf. Kramme PM. **Vet Pathol** 1989 Jul; 26(4):346–8

Parasites of the stomach in donkeys of the highveld of Zimbabwe. Pandey VS, et al. **Vet Q** 1988 Oct;10(4):246–8

Villus atrophy in ruminal drinking calves and mucosal restoration after reconditioning. van Weeren-Keverling Buisman A, et al. **Vet Q** 1988 Jul;10(3):164–71

Left displacement of the abomasum [letter] Benedictus G. **Vet Rec** 1988 Nov 26;123(22):583

[Ruminal fluid in cows with chronic inactivity of the forestomach flora and fauna before and after treatment and change of feed] Braun U, et al. **Schweiz Arch Tierheilkd** 1988 Oct;130(10):545–58 (Eng. Abstr.) **(Ger)**

[A balloon probe for the treatment of recurrent bloat in calves and young cattle] Doll K. **Tierarztl Prax** 1989;17(1):35–7 (Eng. Abstr.) **(Ger)**

[Disseminated intravascular coagulation in a cow of the breed "Deutsche Rotbunte" with fungal mastitis and abomasal displacement] Heuwieser W, et al. **Tierarztl Prax** 1989; 17(2):133–5 (Eng. Abstr.) **(Ger)**

STOMACH DIVERTICULA

[Gastric diverticula: case reports] Tropeano A, et al. **Clin Ter** 1987 May 31;121(4):337–9 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

[Torsion of the sigmoid colon caused by a gastric diverticulum] Grechko BV, et al. **Klin Khir** 1989;(2):63–4 **(Rus)**

PATHOLOGY

N-methyl-N'-nitro-N-nitrosoguanidine (MNNG) in experimental rat gastrocarcinogenesis: comparative sensibility to MNNG-carcinogenic action of the gland epithelium and the epithelium of experimental endophytic hyperplastic adenomatous structures. Volfson NI, et al. **Exp Pathol** 1988;35(1):57–60

STOMACH NEOPLASMS

Carcinoma of the stomach in a 24-year-old pregnant woman [letter] Sasidharan K, et al. **Am J Gastroenterol** 1989 Aug; 84(8):990–1

Gastric cancer. Boddie AW Jr, et al. **Am J Surg** 1989 Jun; 157(6):595–606 (68 ref.)

Primary gastric lymphoma in Auckland, New Zealand. Shaw JH, et al. **Aust N Z J Surg** 1989 Apr;59(4):325–8

Esophageal squamous cell carcinoma associated with gastric adenocarcinoma. Souquet JC, et al. **Cancer** 1989 Feb 15; 63(4):786–90

Abstracts from New Trends in Gastric Cancer. June 16, 1989, Rome, Italy. **Cancer Lett** 1989 May;45(2):145–63

Gastrointestinal polyposis syndromes. Finan MC, et al. **Dermatol Clin** 1989 Jul;7(3):419–34 (123 ref.)

Gastric cancer—medical and surgical approaches. **Hepatogastroenterology** 1989 Feb;36(1):1–39

New approaches in gastric cancer research: I. Monoclonal antibodies in diagnosis and therapy. Juhl H. **Hepatogastroenterology** 1989 Feb;36(1):27–32 (53 ref.)

Hyperthermic peritoneal perfusion combined with anticancer chemotherapy as prophylactic treatment of peritoneal recurrence of gastric cancer. Kaibara N, et al. **Hepatogastroenterology** 1989 Apr;36(2):75–8

Gastric cancer. Lygidakis NJ. **Hepatogastroenterology** 1989 Feb;36(1):2–6 (179 ref.)

Adenocarcinoma of the stomach: a multivariate analysis of clinical, pathologic and treatment factors. Shiu MH, et al. **Hepatogastroenterology** 1989 Feb;36(1):7–12

'Krukenberg' tumour of the testis. Zak RJ, et al. **Histopathology** 1989 Feb;14(2):214–6

Leiomyoblastoma stomach. Wani NA, et al. **Indian J Gastroenterol** 1989 Apr;8(2):115–6

Human chorionic gonadotropin in gastric carcinoma. A useful marker for bone metastasis. Yonemura Y, et al. **Int Surg** 1989 Apr-Jun;74(2):84–7

Metastatic adenocarcinoma of the carpus: a case report. Craigen MA, et al. **J Hand Surg [Br]** 1988 Aug;13(3):306–7

Acquired divergent strabismus: presumed metastatic gastric carcinoma to the medial rectus muscle. Arnold RW, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jan-Feb; 26(1):50–1

Gastric cancer in Karachi—some preliminary observations. Ismail K, et al. **JPMA** 1988 Aug;38(8):219–20

Gastric carcinoma. Battling a stalwart enemy. Bruckstein AH. **Postgrad Med** 1989 Mar;85(4):235–8 (14 ref.)

Gastric leiomyosarcoma: two unusual cases. Fazzi UG, et al. **Scott Med J** 1989 Apr;34(2):441–2

[Hepatoid adenocarcinoma of the stomach] Wang XL. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):455–7 (Eng. Abstr.) **(Chi)**

[Primary gastric malignant lymphoma: a clinical analysis of 32 cases] Fang DC, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):677–9, 716 (Eng. Abstr.) **(Chi)**

[Malignant lymphoma of the stomach] Kostka R, et al. **Rozhl Chir** 1989 May;68(5):306–11 (Eng. Abstr.) **(Cze)**

[Ovarian metastasis of carcinoid tumor of the stomach (letter)] Imbaud P, et al. **J Chir (Paris)** 1988 Oct; 125(10):611–2 **(Fre)**

[Villous adenoma of the stomach] Barzilai A, et al. **Harefuah** 1988 Nov 15;115(10):278–80 (Eng. Abstr.) **(Heb)**

[Early gastric cancer: clinical and morphological aspects] Roncoroni L, et al. **Ann Ital Chir** 1988;60(1):59–63 (Eng. Abstr.) **(Ita)**

[Gastric carcinoma: epidemiology, natural history, early diagnosis and therapy] Amadori D, et al. **Medicina (Firenze)** 1988 Jan-Mar;8(1):34–46 (31 ref.) (Eng. Abstr.) **(Ita)**

[Primary lymphoma of the stomach. Clinical and prognostic analysis of our experience and 20 years' literature] Manfe AZ, et al. **Minerva Chir** 1989 May 15;44(9):1325–34 (75 ref.) (Eng. Abstr.) **(Ita)**

[Radiologic and endoscopic diagnostic findings useful for the surgical therapeutic programming of early gastric cancer] Purri P. **Minerva Chir** 1989 Feb 15;44(3):333–40 (40 ref.) **(Ita)**

[Gastric leiomyoma and leiomyoblastoma. Presentation of 2 clinical cases] Ramella A, et al. **Minerva Chir** 1988 Jun 15;43(11):969–73 (Eng. Abstr.) **(Ita)**

[Metastatic liver cancer from the stomach successfully treated by combined immunochemotherapy and transarterial embolization] Otsuka S, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2429–32 (Eng. Abstr.) **(Jpn)**

[Two cases of metastatic renal tumor] Koike H, et al. **Hinyokika Kiyo** 1989 Mar;35(3):475–9 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Characteristics of the gastric cancer in the aged (over 65 years old)] Kurokawa H, et al. **Nippon Ronen Igakkai Zasshi** 1988 Sep;25(5):469–73 (Eng. Abstr.) **(Jpn)**

[Bifocal malignant lymphoma of the stomach] Paierbski JJ, et al. **Wiad Lek** 1988 Apr 15;41(8):518–9 (Eng. Abstr.) **(Pol)**

[Endoscopic diagnosis and treatment of an inflammatory pseudotumor of the stomach] Bregel' AI, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):112–3 **(Rus)**

[Diagnosis and treatment of recurrences of cancer of the stomach] Chernyĭ VA, et al. **Khirurgiia (Mosk)** 1989 May; (5):29–32 (Eng. Abstr.) (Rus)

[Polyneoplasia of the stomach and intestines] Kharaberiush VA, et al. **Klin Khir** 1989;(5):56 (Rus)

[Embolization of the hepatic artery in the treatment of metastases of gastric cancer to the liver] Tarazov PG, et al. **Klin Med (Mosk)** 1988 Dec;66(12):84–6 (Eng. Abstr.) (Rus)

[Metastasis of cancer of the stomach to the maxillary sinus] Shadyev KhD, et al. **Vestn Otorinolaringol** 1989 Mar–Apr; (2):85–6 (Rus)

[Carcinoma of the stomach in the light of epidemiologic, clinical and pathologic research (definition of etiologic and pathogenic phenomena in our data and the literature)] Zatrić A, et al. **Acta Chir Iugosl** 1989;36(1):45–66 (Eng. Abstr.) (Scr)

[Leptomeningeal carcinomatosis as a metastasis from adenocarcinoma of the stomach] Dugonjić A, et al. **Neurologija** 1988;37(1–2):89–96 (Scr)

ANALYSIS

Immunocytochemical detection of lactoferrin in human gastric carcinomas and adenomas. Tuccari G, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):912–5

DNA ploidy in early gastric cancer and its relationship to prognosis. de Aretxabala X, et al. **Br J Cancer** 1988 Jul; 58(1):81–4

Expression of ras oncogene p21 protein in early gastric carcinoma and adjacent gastric epithelia. Czerniak B, et al. **Cancer** 1989 Oct 1;64(7):1467–73

Gastric cancer heterogeneity. de Aretxabala X, et al. **Cancer** 1989 Feb 15;63(4):791–8

Immunohistochemical study of epidermal growth factor and epidermal growth factor receptor in gastric carcinoma. Sugiyama K, et al. **Cancer** 1989 Apr 15;63(8):1557–61

Expression of growth factor and epidermal growth factor receptor encoded transcripts in human gastric tissues. Bennett C, et al. **Cancer Res** 1989 Apr 15;49(8):2104–11

Immunological characterization and clinical implication of cobalamin binding protein in human gastric cancer. Wakatsuki Y, et al. **Cancer Res** 1989 Jun 1;49(11):3122–8

Measurement of urinary trypsin inhibitor in urine, plasma and cancer tissues of patients with stomach cancer. Nishino N, et al. **Haemostasis** 1989;19(2):112–9

Immunohistochemical detection of carcinoembryonic antigen (CEA) in non-cancerous and cancerous gastric mucosa. Nasierowska-Guttmejer A, et al. **Int J Biol Markers** 1989 Jan–Mar;4(1):8–12

Expression of transforming growth factor alpha messenger RNA in the normal and neoplastic gastro-intestinal tract. Malden LT, et al. **Int J Cancer** 1989 Mar 15;43(3):380–4

Distribution of fibronectin and laminin in early and advanced signet-ring-cell carcinomas of the stomach. Sugihara H, et al. **Int J Cancer** 1989 Feb 15;43(2):263–9

An analysis of gastric and oesophageal cancers found with 'epidemiological necropsy' during 1953–1982. Chan CK, et al. **Int J Epidemiol** 1989 Jun;18(2):315–9

Procoagulant activity of gastric, colorectal, and renal cancer is factor VII-dependent. Szczepański M, et al. **J Cancer Res Clin Oncol** 1988;114(5):519–22

Epidermal growth factor receptors in cancer tissues of esophagus, lung, pancreas, colorectum, breast and stomach. Ozawa S, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1201–7

Comparison of nuclear DNA content and exudative stromal reaction between surgical and autopsy materials from gastric and colorectal carcinomas. Adachi Y, et al. **Jpn J Surg** 1988 Jul;18(4):423–9

Clinico-histochemical studies on type 4 carcinoma of the stomach—with special reference to mucopolysaccharides and sialic acid in tumor tissue. Sowa M, et al. **Jpn J Surg** 1989 Mar;19(2):153–62 (32 ref.)

Gastric cancer with special references to WHO and Laurén's classifications: glycogen and triacylglycerol concentrations in the tumor. Namiot Z, et al. **Neoplasma** 1989;36(3):363–8

Immunohistochemical study of ras p21 expression in human gastric cancers and benign lesions. Nakajima K, et al. **Oncology** 1989;46(4):260–5

Epidermal growth factor receptor status and S-phase fractions in gastric carcinoma. Yonemura Y, et al. **Oncology** 1989;46(3):158–61

Villin, intestinal brush border hydrolases and keratin polypeptides in intestinal metaplasia and gastric cancer; an immunohistologic study emphasizing the different degrees of intestinal and gastric differentiation in signet ring cell carcinomas. Osborn M, et al. **Virchows Arch [A]** 1988; 413(4):303–12

Estrogen receptors in gastric adenocarcinoma: a retrospective immunohistochemical analysis. Yokozaki H, et al. **Virchows Arch [A]** 1988;413(4):297–302

[Localization of tumor-associated placental protein in human placental tissue and detection in carcinoma cell lines] Cao ZH, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May; 10(3):188–90 (Eng. Abstr.) (Chi)

[Study on neuro-endocrine type of gastric carcinoma] Chen BF. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):364–6 (Eng. Abstr.) (Chi)

[Immunohistologic detection of pepsin and gastricsin in carcinoma of the stomach] Marek J, et al. **Cas Lek Cesk** 1989 Apr 7;128(15):456–9 (Eng. Abstr.) (Cze)

[Purification to apparent homogeneity of the somatostatin receptor of the human cell line HGT-1 of gastric origin] Reyl-Desmars F, et al. **C R Acad Sci [III]** 1989; 308(9):251–4 (Eng. Abstr.) (Fre)

[Estrogen receptors in human gastric, hepatocellular, and gallbladder carcinomas and normal liver tissues] Ohnami S, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2923–8 (Eng. Abstr.) (Jpn)

[Biochemical study on interstitial proteins of human gastric cancer tissue with special reference to cross-linking amino acids of collagen and elastin] Kyogoku H. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):841–50 (Eng. Abstr.) (Jpn)

[Human epidermal growth factor (h-EGF) in gastric carcinomas] Fushida S, et al. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):1965–8 (Eng. Abstr.) (Jpn)

[Immunohistochemical study of epidermal growth factor receptor in gastric carcinoma] Kikkawa K, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):973 (Jpn)

[A new chemosensitivity test for cancer cells by measuring intracellular ATP content] Nogaki M, et al. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):1950–6 (Eng. Abstr.) (Jpn)

[Correlation of epidermal growth factor receptor status and clinical outcome in gastric carcinoma] Yonemura Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1611–5 (Eng. Abstr.) (Jpn)

[Immunohistologic study of intestinal antigen beta-2-MA in gastric tumors] Pugachev KK, et al. **Arkh Patol** 1989; 51(3):35–8 (Eng. Abstr.) (Rus)

[Ornithine decarboxylase activity and polyamine content in human adenocarcinomas of the stomach and large intestine] Berdinskikh NK, et al. **Eksp Onkol** 1988;10(6):39–41 (Eng. Abstr.) (Rus)

[Nucleic acids of the gastric mucosa in chronic gastritis and cancer] Kol'tsov PA, et al. **Vopr Onkol** 1989;35(4):433–6 (Eng. Abstr.) (Rus)

BLOOD

Enzyme-linked immunosorbent assays for serum pepsinogens I and II using monoclonal antibodies—with data on peptic ulcer and gastric cancer. Huang SC, et al. **Clin Chim Acta** 1988 Jun 30;175(1):37–50

Serum selenium and gastric cancer in two regions of Norfolk. Caygill CP, et al. **Food Addit Contam** 1989 Jul–Sep; 6(3):359–63

Frequency of Lewis group substances in patients with cancer of stomach. Csató E, et al. **Haematologia (Budap)** 1989; 22(1):55–9

Gastrin and somatostatin levels in patients with gastric cancer. Pawlikowski M, et al. **Horm Metab Res** 1989 Feb; 21(2):89–91

Serum testosterone level in the peripheral vein and the perigastric draining vein of patients with gastric carcinoma. Inutsuka S, et al. **Jpn J Clin Oncol** 1988 Dec;18(4):357–62

[Relationship between the contents of sialic acid and fucose on red cell membrane and occurrence of atrophic gastritis and gastric cancer] Sun YX. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):346–8 (Eng. Abstr.) (Chi)

[Pretreatment evaluation of CA 72.4 in patients with carcinoma of the stomach (0–IV stage) versus CEA, TPA, CA 19-9, FER] Buda F, et al. **G Ital Oncol** 1989 Apr–Sep; 9(2–3):67–72 (Eng. Abstr.) (Ita)

[A correlation between the evaluation of assay results of immuno-suppressive substance (IS) in the blood and other parameters in patients with gastric cancer] Tanaka T, et al. **Gan No Rinsho** 1988 Nov;34(14):1969–73 (Eng. Abstr.) (Jpn)

[Wound healing, blood coagulation and fibrinolysis during operations involving gastric cancer surgery] Gando S, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):59–63 (Eng. Abstr.) (Jpn)

[Clinical evaluation of serum type IV collagen peptide on metastatic gastric cancer] Yagi K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1722 (Jpn)

[Immunohistochemical evaluation of blood group substances A, B and H of the gastric mucosa in patients with peptic ulcer and cancer of the stomach] Słotwiński R, et al. **Pol Tyg Lek** 1988 Nov 21;43(47):1500–3 (Eng. Abstr.) (Pol)

[Serum levels of alpha fetoprotein (AFP), B-chorionic gonadotropin (BHCG), ferritin and prostatic acid phosphatase (PAP) in patients with cancer of the stomach] Bukowski J, et al. **Wiad Lek** 1988 Jul 15;41(14):915–20 (Eng. Abstr.) (Pol)

[Disseminated intravascular coagulation in a patient with generalized cancer of the stomach] Dmoch A. **Wiad Lek** 1988 Sep 15;41(18):1235–8 (Eng. Abstr.) (Pol)

[Prealbumin and gastric neoplasms] Rodríguez Cuartero A, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):323–6 (Eng. Abstr.) (Spa)

BLOOD SUPPLY

[Medical changes in preformed host arteries involved in a tumor—a morphometric study of gastric, colonic, and pancreatic carcinomas in man] Yagashi H, et al. **Gan No Rinsho** 1988 Sep;34(11):1555–60 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Promotion by ethanol of gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Iishi H, et al. **Br J Cancer** 1989 May;59(5):719–21

Modifying effects of concomitant treatment with butylated hydroxyanisole or butylated hydroxytoluene on N,N-dibutylnitrosamine-induced liver, forestomach and urinary bladder carcinogenesis in F344 male rats. Imaida K, et al. **Cancer Lett** 1988 Dec 15;43(3):167–72

Promotion by dihydroxybenzene derivatives of N-methyl-N'-nitro-N-nitrosoguanidine-induced F344 rat forestomach and glandular stomach carcinogenesis. Hirose M, et al. **Cancer Res** 1989 Sep 15;49(18):5143–7

Enhancement by prolonged administration of caerulein of experimental carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in rat stomach. Tatsuta M, et al. **Cancer Res** 1988 Nov 15;48(22):6332–5

Enhancement of experimental gastric carcinogenesis induced in spontaneously hypertensive rats by N-methyl-N'-nitro-N-nitrosoguanidine. Tatsuta M, et al. **Cancer Res** 1989 Feb 15;49(4):794–8

Promotion by bombesin of gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Cancer Res** 1989 Oct 1;49(19):5254–7

Promotion by neurotensin of gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Cancer Res** 1989 Feb 15;49(4):843–6

Inhibition by neostigmine and isoproterenol and promotion by atropine of experimental carcinogenesis in rat stomach by N-methyl-N'-nitro-N-nitrosoguanidine [letter] Tatsuta M, et al. **Int J Cancer** 1989 Jul 15;44(1):188–9

Role of prostaglandins in the early phases of experimental gastric carcinogenesis in the rat. Materia A, et al. **J Cancer Res Clin Oncol** 1989;115(3):253–8

Promotion by nialamide of gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Jpn J Cancer Res** 1989 Jun;80(6):521–5

Mechanisms of differential strain sensitivity in gastric carcinogenesis. Weisburger JH, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1304–10

Induction of gastric cancer in monkeys by N-methyl-N-nitro-N-nitrosoguanidine (MNNG). Sharashidze LK, et al. **Neoplasma** 1989;36(2):129–33

Is chronic long-term inhibition of gastric secretion really dangerous? Wormsley KG. **Scand J Gastroenterol Suppl** 1988;146:166–74 (64 ref.)

Gastric enterochromaffin-like cell hyperplasia and neoplasia in the rat: an indirect effect of the histamine H2-receptor antagonist, BL-6341. Hirth RS, et al. **Toxicol Pathol** 1988; 16(2):273–87

Forestomach lesions induced by butylated hydroxyanisole and ethylene dibromide: a scientific and regulatory perspective. Moch RW. **Toxicol Pathol** 1988;16(2):172–83

Gastric morphological changes including carcinoid tumors in animals treated with a potent hypolipidemic agent, ciprofibrate. Spencer AJ, et al. **Toxicol Pathol** 1989;17(1 Pt 1):7–15

Forestomach carcinogens: pathology and relevance to man. Wester PW, et al. **Toxicol Pathol** 1988;16(2):165–71 (26 ref.)

A carcinogenesis reversibility study of the effects of butylated hydroxyanisole on the forestomach and urinary bladder in male Fischer 344 rats. Nera EA, et al. **Toxicology** 1988 Dec 30;53(2–3):251–68

[Mutagenicity and carcinogenicity of T-2 toxin, a trichothecene produced by Fusarium fungi] Li MX. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):326–9 (Eng. Abstr.) (Chi)

[Papilloma of forestomach induced by Fusarium T-2 toxin in mice] Yang S. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):339–41 (Eng. Abstr.) (Chi)

[Omeprazole long-term therapy: how great is the risk of developing a carcinoid tumor?] Koop H. **Z Gastroenterol** 1988 Dec;26(12):769–71 (Ger)

[Promoting effect of bile acids on gastric carcinogenesis induced by MNNG in rats] Takebayashi M. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):49–58 (Eng. Abstr.) (Jpn)

[Effect of ethanol on N-nitrososarcosine ethyl ester-induced carcinogenesis in the esophageal and forestomach mucosa of mongrel rats] Novikov AI, et al. **Eksp Onkol** 1989; 11(2):19–22 (Eng. Abstr.) (Rus)

[Blastomogenic and nephrotoxic effects of a petroleum product obtained from high-vanadium oil at a temperature of 300–350 degrees C] Karimov MA, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):53–5 (Rus)

[Prevention using ascorbic acid, hexamethylenetetramine and sodium metabisulfite of the blastomogenic effect caused by the combined administration into the stomach of mice of sodium nitrite with methylurea or with aminopyrine] Dzhioev FK. **Vopr Onkol** 1988;34(11):1369–73 (Eng. Abstr.) (Rus)

[The induction of stomach cancer in monkeys with N-methyl-N'-nitro-N-nitrosoguanidine] Sharashidze LK, et al. **Vopr Onkol** 1989;35(3):335–8 (Eng. Abstr.) (Rus)

[Pretumorous states of the stomach in workers manufacturing organic glass] Sharova TG, et al. **Vrach Delo** 1988 Sep; (9):105–7 (Eng. Abstr.) (Rus)

[Correlation of the risk of gastric cancer in the province of Soria and the nitrate content of drinking water] Sanz Anquela JM, et al. **Rev Esp Enferm Apar Dig** 1989 Jun; 75(6 Pt 1):561–5 (Eng. Abstr.) (Spa)

CLASSIFICATION

Retrospective study of gastric cancer on the basis of Laurén's classification criteria. Tichá V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:193–8

[Clinicopathologic evaluation of three different two-type histologic classifications for gastric carcinoma] Sakaguchi H. **Fukuoka Igaku Zasshi** 1988 Aug;79(8):579–93 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Upper gastrointestinal bleeding due to benign tumours of the stomach. De Waele B, et al. **Acta Chir Belg** 1987 Sep–Oct; 87(5):322–5

Cytomegalovirus gastritis as an initial manifestation of a patient with adult T-cell leukemia. Furukawa Y, et al. **Acta Haematol (Basel)** 1988;80(4):216–8

Spontaneous subdural hematoma in two cancer patients. Giuffrida S, et al. **Acta Neurol (Napoli)** 1987 Oct–Dec; 9(5–6):368–71

Subacute cor pulmonale due to tumor cell pulmonary embolization [letter] Cheng TO. **Arch Intern Med** 1989 Jun; 149(6):1459, 1462

Bilateral Baker's cyst as the presenting symptom of paraneoplastic syndrome. Shapira A, et al. **Arch Orthop Trauma Surg** 1988;107(6):383–7

Gastric xanthelasma in hyperplastic gastric polyposis. Lin PY, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):428–30

A foregut carcinoid tumor causing Zollinger–Ellison syndrome. Werbel GB, et al. **Arch Surg** 1989 Mar; 124(3):381–4

Severe destruction of esophageal nerves in a patient with achalasia secondary to gastric cancer. A possible role of eosinophil neurotoxic proteins. Fredens K, et al. **Dig Dis Sci** 1989 Feb;34(2):297–303

Imaging diagnosis of portal tumor thrombus secondary to gastric cancer. Takayasu K, et al. **Gastrointest Radiol** 1989 Spring;14(2):161–3

Erythema nodosum as the presenting symptom of gastric centrofollicular lymphoma. Parodi A, et al. **Int J Dermatol** 1989 Jun;28(5):336–7

Strange bedfellows: duodenal ulcer and cancer of the stomach. Norfleet RG, et al. **J Clin Gastroenterol** 1989 Aug; 11(4):382–5

Chronic myelocytic leukemia and gastric cancer in the same patient. Butala A, et al. **J Natl Med Assoc** 1989 Apr; 81(4):457–9 (28 ref.)

Gastrobronchial fistula and pancreatic heterotopia. Mohlala ML, et al. **J R Coll Surg Edinb** 1989 Feb;34(1):48–9

Healing of a malignant gastric ulcer with cimetidine. Taylor TV, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):339–40

Signet cell carcinoma of the stomach in a patient with acquired immunodeficiency syndrome: a case report. Uchida T, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):75–8

Sjögren's syndrome following gastrectomy and chemotherapy for gastric malignant lymphoma. Monno S, et al. **Jpn J Med** 1989 May–Jun;28(3):399–401

Gastric carcinoid tumours in patients with Zollinger–Ellison syndrome on long-term omeprazole [letter] Goldfain D, et al. **Lancet** 1989 Apr 8;1(8641):776–7

Do young patients with dyspepsia need investigation? Williams B, et al. **Lancet** 1988 Dec 10;2(8624):1349–51

Diffuse neurofibroma of the pylorus: a cause of gastric outlet obstruction. Waxman JS, et al. **Mt Sinai J Med** 1989 Mar; 56(2):129–32

Gastric lipoma and intussusception in a child. McCombe AW, et al. **Scott Med J** 1988 Aug;33(4):310–1

Gastric carcinoid associated with achlorhydria, hypergastrinemia, and Addison's disease. Bruce TA, et al. **South Med J** 1988 Dec;81(12):1595–6 (8 ref.)

Angiolipoma of the stomach as a cause of chronic upper gastrointestinal bleeding. DeRidder PH, et al. **Surg Endosc** 1989;3(2):106–8

Trichobezoar associated with gastric polyposis. Bates CK, et al. **West J Med** 1988 Aug;149(2):220–3

Aplastic anemia associated with stomach cancer—a case report. Hahn JS, et al. **Yonsei Med J** 1988;29(3):263–9

[Double gastric leiomyosarcoma revealed by a hemoperitoneum] Chad B, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 May;25(3):105–7 (34 ref.) (Eng. Abstr.) **(Fre)**

[A rare etiology of anasarca in Africa: gastric lymphoma] Klotz F, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Oct; 24(5):241–2 (Eng. Abstr.) **(Fre)**

[Gastric carcinoid tumor and parathyroid adenoma. Apropos of a case. Discussion and review of the literature (letter)] Nores JM, et al. **Ann Med Interne (Paris)** 1989;140(1):61–2 (5 ref.) **(Fre)**

[9 cases of early gastric cancer disclosed on chronic ulcer with or without complications] Marra A, et al. **J Chir (Paris)** 1989 May;126(5):347–9 (Eng. Abstr.) **(Fre)**

[Endoscopic palliative therapy of malignant esophageal and cardia stenoses. Results—complications—follow-up] Schwegler U, et al. **Bildgebung** 1987–89;56(2):69–75 (Eng. Abstr.) **(Ger)**

[Leser–Trélat syndrome] Hoffmann A, et al. **Internist (Berlin)** 1989 Jul;30(7):457–8 **(Ger)**

[Unrecognized primary hyperparathyroidism in simultaneous presence of insulin-dependent diabetes mellitus. Joint occurrence of parathyroid adenoma, type I diabetes mellitus, Basedow disease, pernicious anemia and stomach carcinoid] Ollenschläger G, et al. **Med Klin** 1988 Dec 9; 83(24):844–5, 854 **(Ger)**

[A calcified heterotopic pancreas in the lesser curvature of the stomach] Gamroth A, et al. **ROFO** 1989 Jun; 150(6):738–9 **(Ger)**

[Interstitial lung disease of unclear etiology (clinical conference)] Villiger B, et al. **Schweiz Med Wochenschr** 1988 Aug 9;118(31–32):1142–6 **(Ger)**

[Pemphigus and neoplasia. 2 new clinical cases and a review of the literature] Calzavara PG, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):25–9 (24 ref.) (Eng. Abstr.) **(Ita)**

[Lymphedema of the lower limbs secondary to neoplastic lymphangitis caused by mucin-producing adenocarcinoma of the stomach. 2 case reports] Arcuri V, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2103–6 (Eng. Abstr.) **(Ita)**

[Afferent loop syndrome as an epiphenomenon of neoplasms of the gastric stump] De Leo S, et al. **Minerva Chir** 1989 Apr 30;44(8):1297–300 (Eng. Abstr.) **(Ita)**

[Aberrant pancreas in the stomach: a rare cause of pyloric stenosis] D'Elia F, et al. **Minerva Chir** 1988 Dec 31; 43(23–24):2107–10 (Eng. Abstr.) **(Ita)**

[An infrequent cause of upper digestive hemorrhage: gastric leiomyoma] Liscidini P, et al. **Minerva Chir** 1989 Mar 31; 44(6):1037–9 (Eng. Abstr.) **(Ita)**

[Carney's triad. Apropos of a case of recurrent gastric leiomyosarcoma and bilateral pulmonary chondroma] Pignatelli V, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):577–9 (14 ref.) (Eng. Abstr.) **(Ita)**

[A case of early gastric cancer accompanied by Recklinghausen's disease] Kumahara T, et al. **Gan No Rinsho** 1988 Sep;34(11):1590–4 (Eng. Abstr.) **(Jpn)**

[Phase II clinical study of LC9018 on carcinomatous peritonitis of gastric cancer. Subgroup for Carcinomatous Peritonitis, Cooperative, Study Group of LC9018] Okamura T, et al. **Gan To Kagaku Ryoho** 1989 Jun; 16(6):2257–62 (Eng. Abstr.) **(Jpn)**

[An autopsy case of gastric cancer with disseminated intravascular coagulation, multiple cerebral embolism and fungal endocarditis] Nakane H, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):523–6 **(Jpn)**

[A case of oral pemphigus vulgaris involving the esophagus combined with early gastric carcinoma] Ohkawa F, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1725–9 (15 ref.) **(Jpn)**

[A rare case of gastric neuroma as a cause of hemorrhage from the upper segment of the digestive tract] Stelmach E. **Wiad Lek** 1988 Apr 1;41(7):459–63 (Eng. Abstr.) **(Pol)**

[Acanthosis nigricans and cancer of the stomach] Sarmento JA, et al. **Acta Med Port** 1989 Jan–Feb;2(1):31–4 (41 ref.) (Eng. Abstr.) **(Por)**

[Association of Virchowian hanseniasis, dermatopolymyositis and gastric adenocarcinoma. Report of a case] Porro AM, et al. **Med Cutan Ibero Lat Am** 1989;17(3):179–81 (14 ref.) (Eng. Abstr.) **(Por)**

[The significance of respiration disorders in the development of postoperative pulmonary complications in patients with cancer of the stomach] Kassil' VL, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):62–4 (Eng. Abstr.) **(Rus)**

[Peutz–Jeghers syndrome in association with cancer of the stomach complicated by hemorrhage] Akhadov MK, et al. **Khirurgiia (Mosk)** 1989 May;(5):122–3 **(Rus)**

[A rare association of peptic ulcer, stomach cancer and accessory pancreas] Voltsov NI. **Khirurgiia (Mosk)** 1989 Apr;(4):133–4 **(Rus)**

[Leiomyosarcoma of the stomach complicated by bleeding] Egorov VP, et al. **Klin Khir** 1989;(5):54–5 **(Rus)**

[Acute cholecystitis in cancer patients in the postoperative period] Lebedev AM, et al. **Vopr Onkol** 1989;35(6):734–5 **(Rus)**

[Disorders of the hemostatic system in patients with disseminated stomach cancer] Tiutrin II, et al. **Vopr Onkol** 1989;35(4):460–5 (Eng. Abstr.) **(Rus)**

[Acute encephalitis associated with gastric carcinoma (letter)] Palomo F, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):595 **(Spa)**

[Regenerative nodular hyperplasia of the liver and gastric carcinoma (letter)] Cano Ruiz A, et al. **Rev Clin Esp** 1988 Jun;183(2):101 **(Spa)**

[Early gastric cancer associated with chronic gastric ulcer] Bianchi A, et al. **Rev Esp Enferm Apar Dig** 1988 Dec; 74(6):641–4 (Eng. Abstr.) **(Spa)**

[Acute abdomen caused by a perforated gastric lymphoma (letter)] Martínez Martínez J, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):183–4 **(Spa)**

[Malignant gastric leiomyoblastoma. The cause of subclinical digestive hemorrhage (letter)] Martínez Martínez J, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):687–8 **(Spa)**

[Robboy's acral cyanosis as initial manifestation of a gastric adenocarcinoma] Martínez Martínez LM, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):562–4 (Eng. Abstr.) **(Spa)**

[Metachronous carcinoma of the colon associated with a previous early gastric carcinoma (letter)] Palazón Astiz R. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):422–3 **(Spa)**

DIAGNOSIS

Gastric large cell lymphoma expressing cytokeratin but no leukocyte common antigen. A diagnostic dilemma. de Mascarel A, et al. **Am J Clin Pathol** 1989 Apr;91(4):478–81

Ectopic pancreas in the stomach presenting as an inflammatory abdominal mass. Kaneda M, et al. **Am J Gastroenterol** 1989 Jun;84(6):663–6

Campylobacter pylori: "all that glitters is not gold" [letter] Patel AS, et al. **Am J Gastroenterol** 1989 Jun;84(6):690–1

Gastroduodenal polyps in familial polyposis coli. Gahtan V, et al. **Am Surg** 1989 May;55(5):278–80

Primary gastric lymphoma and pseudolymphoma. Jung SS, et al. **Am Surg** 1988 Oct;54(10):594–7

Detection of early gastric cancer in an aggressive endoscopy unit. Longo WE, et al. **Am Surg** 1989 Feb;55(2):100–4

Tumour markers in gastric cancer. Roberts PJ, et al. **Ann Chir Gynaecol** 1989;78(1):38–40 (22 ref.)

Does endoscopy really help the surgeon evaluate gastric cancer? Hakim NS, et al. **Can J Surg** 1989 May;32(3):175–7

Ultrasonography of gastric neoplasm. Li JF, et al. **Chin Med J [Engl]** 1988 Nov;101(11):847–52

Carcinoembryonic antigen in gastric juice and gastric mucosa and its value in detecting high-risk patients and gastric cancer. Zhang T, et al. **Chin Med J [Engl]** 1988 Jan; 101(1):65–6

Immunocytochemical presentation of alpha-fetoprotein-producing gastric cancer in ascitic fluid: a case study. Kobayashi TK, et al. **Diagn Cytopathol** 1988; 4(2):116–20

The tumor markers CEA, TPA and CA 19-9 in gastric cancer. Putzki H, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(3–4):145–8

Solitary Peutz–Jeghers type polyp of the stomach in the absence of familial polyposis coli in a teenage boy. Kuwano H, et al. **Endoscopy** 1989 Jul;21(4):188–90

Endoscopic diagnosis of minute, small, and flat early gastric cancers. Misumi A, et al. **Endoscopy** 1989 Jul;21(4):159–64

The effect of routine endoscopy on the detection rate of T1 gastric cancer (early gastric cancer) in Birmingham. Newbold KM, et al. **Endoscopy** 1989 Mar;21(2):56–9

Gastric involvement with excavated plasmacytoma: case report and review of endoscopic criteria. Sloyer A, et al. **Endoscopy** 1988 Sep;20(5):267–9 (17 ref.)

CEA and CA 19.9 in gastric juice and serum: an aid in the diagnosis of gastric carcinoma? Harrison JD, et al. **Eur J Surg Oncol** 1989 Jun;15(3):253–7

Plasmacytoma of the stomach. Shapira I, et al. **Eur J Surg Oncol** 1989 Apr;15(2):165–7

An immunohistological study of gastric cancer—with special reference to the expression of carbohydrate antigens and nuclear DNA ploidy patterns. Sowa M, et al. **Eur J Surg Oncol** 1989 Aug;15(4):307–15

Corrosive gastritis mimicking linitis plastica carcinoma. Usui Y, et al. **Gastroenterol Jpn** 1989 Aug;24(4):398–401

The diagnosis of submucosal tumors of the stomach by endoscopic ultrasonography. Yasuda K, et al. **Gastrointest Endosc** 1989 Jan–Feb;35(1):10–5

Early gastric carcinoma—don't miss it. Huguier M, et al. **Hepatogastroenterology** 1989 Feb;36(1):33–5

Short-circuiting the diagnostic process. Kassirer JP, et al. **Hosp Pract [Off]** 1988 Dec 15;23(12):33–4, 36, 40

Tissue CEA as prognostic indicator in a series of 31 cases of gastric cancer. Barillari P, et al. **Ital J Surg Sci** 1988; 18(3):237–41

Smooth muscle tumors of the stomach. Elhamel A, et al. **Ital J Surg Sci** 1988;18(3):233–6

Gastric leiomyoblastoma: diagnosis by CT and ultrasonography. Delamarre J, et al. **J Belge Radiol** 1989 Feb;72(1):17–20

Unusual anodic migrating isoamylase differentiates selected malignant from nonmalignant ascites. Kosches DS, et al. **J Clin Gastroenterol** 1989 Feb;11(1):43–6

Tripe palms and malignancy. Cohen PR, et al. **J Clin Oncol** 1989 May;7(5):669–78 (82 ref.)

Endoscopic ultrasonography of gastric myogenic tumor. A comparative study between histology and ultrasonography. Nakazawa S, et al. **J Ultrasound Med** 1989 Jul;8(7):353–9

Sonographic findings in glomus tumor of the stomach. Dupuy DE, et al. **JCU** 1989 Mar–Apr;17(3):219–21

Ultrasonographic findings in gastric cancer: in vitro and in vivo studies. Miyamoto Y, et al. **JCU** 1989 Jun;17(5):309–18

Ultrasonic examination of the wall of the fluid-filled stomach. Worlicek H, et al. **JCU** 1989 Jan;17(1):5–14

The significance of low serum pepsinogen levels to detect stomach cancer associated with extensive chronic gastritis in Japanese subjects. Miki K, et al. **Jpn J Cancer Res** 1989 Feb;80(2):111–4

Polymerase chain reaction to confirm extranodal progression of follicular lymphoma [letter] Price CG, et al. **Lancet** 1989 May 20;1(8647):1132

Diagnosis of gastric cancers with fluorescein-labeled monoclonal antibodies to carcinoembryonic antigen. Tatsuta M, et al. **Lasers Surg Med** 1989;9(4):422–6

The use of antibodies to intermediate filament proteins in the differential diagnosis of stomach lymphoma versus poorly differentiated carcinoma, using small tissue samples obtained from routine biopsies during endoscopy. Starzyńska T. **Mater Med Pol** 1988 Oct–Dec;20(4):227–32

Case for diagnosis. Fundic gland polyposis. Shekitka KM, et al. **Millit Med** 1988 Dec;153(12):648–9, 653–4

Radiological and endoscopic correlation in upper gastrointestinal haemorrhage and malignancy. Atoba MA, et al. **Scand J Gastroenterol Suppl** 1986;124:149–51

Endoscopic ultrasonography of tumours of the oesophagus

and the stomach. Heyder N. **Surg Endosc** 1987;1(1):17–23
Endoscopic ultrasonography of the upper gastrointestinal tract. Murata Y, et al. **Surg Endosc** 1988;2(3):180–3
Endoscopic ultraasonography in leiomyoma of gastric cardia. Silva SA, et al. **Surg Endosc** 1989;3(2):109–11
[Fiber gastroscopy in the diagnosis of gastroduodenal diseases and of primary cancer of the gastric stump in particular] Dimitrova V, et al. **Khirurgiia (Sofiia)** 1989;42(1):14–8 (Eng. Abstr.) (Bul)
[Malignant neurinoma (schwannoma) of the stomach simulating the picture of a bleeding ulcer] Manolov G, et al. **Khirurgiia (Sofiia)** 1989;42(2):89–91 (Bul)
[Primary malignant non-Hodgkin's lymphoma of the stomach] Kolarski V, et al. **Vutr Boles** 1988;27(3):107–12 (Eng. Abstr.) (Bul)
[Clinical application of a decoction of "fast-developing liquid for gastrointestinal ultrasound"] Wei PK. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr;9(4):210–2, 196 (Eng. Abstr.) (Chi)
[Benign stomach tumors: histology, diagnosis and surgical experience] Vanhove M, et al. **Acta Chir Belg** 1987 Sep–Oct;87(5):329–33 (Eng. Abstr.) (Dut)
[Achalasia as a mask of cardial carcinoma] Lübke HJ, et al. **Dtsch Med Wochenschr** 1988 Dec 23;113(51–52):1997–2002 (Eng. Abstr.) (Ger)
[Achalasia as a mask of cardial carcinoma (letter)] Popp J. **Dtsch Med Wochenschr** 1989 Mar 10;114(10):402 (Ger)
[Diagnostic strategies of the stomach] Schumpelick V, et al. **Langenbecks Arch Chir** 1988;Suppl 2:427–33 (32 ref.) (Eng. Abstr.) (Ger)
[Pseudolymphoma of the stomach] Blum U, et al. **ROFO** 1989 Mar;150(3):246–9 (Eng. Abstr.) (Ger)
[Endoscopic sonography of the upper digestive tract] Dancygier H. **Ultraschall Med** 1989 Jun;10(3):164–9 (16 ref.) (Eng. Abstr.) (Ger)
[Tumor markers in the upper intestinal tract—stomach and pancreas] Pointner R, et al. **Wien Klin Wochenschr** 1989 Jul 14;101(14):482–4 (Eng. Abstr.) (Ger)
[Errors and mistakes in the diagnosis of stomach cancer] Slisow W, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):139–43 (Ger)
[Prognosis of stomach cancer patients in the age of complex diagnostic methods] Györffy A, et al. **Orv Hetil** 1989 Apr 30;130(18):937–43 (32 ref.) (Eng. Abstr.) (Hun)
[Role of endoscopy in the diagnosis of gastric lymphomas: remarks on a case] Saffiotti O, et al. **G Clin Med** 1988 Oct; 69(10):581–4 (Eng. Abstr.) (Ita)
[Ultrasonic diagnosis of 22 gastric tumors] Monaci R, et al. **Minerva Med** 1988 Oct;79(10):897–901 (Eng. Abstr.) (Ita)
[Gastric leiomyoma. Description of a case with unusual clinical onset] Andiloro F, et al. **Radiol Med (Torino)** 1988 Dec;76(6):636–8 (Ita)
[Gastric lymphomas. The role of echotomography] Potente G, et al. **Radiol Med (Torino)** 1989 May;77(5):478–81 (Eng. Abstr.) (Ita)
[Calcified cavernous hemangioma of the stomach. A case report] Torricelli P, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):112–4 (Ita)
[Diagnosis of stomach cancer] Izumi T, et al. **Gan No Rinsho** 1989 Jan;Spec No:212–20 (Jpn)
[Simultaneously diagnosed triple primary neoplasms—a case report] Murate T, et al. **Gan No Rinsho** 1989 May; 35(6):741–7 (Eng. Abstr.) (Jpn)
[Evaluation of sialylated LewisX as a tumor-associated carbohydrate antigen in the sera of patients with gastric cancer] Nakagoe T, et al. **Gan No Rinsho** 1989 Mar; 35(4):455–61 (Eng. Abstr.) (Jpn)
[Diagnosis of early cancer with monoclonal antibodies] Yachi A, et al. **Gan No Rinsho** 1988 Aug;34(10):1216–21 (Eng. Abstr.) (Jpn)
[A case of glomus tumor of the stomach, including a review of the literature of 52 reported cases in Japan] Yasutake K, et al. **Gan No Rinsho** 1989 May;35(6):748–55 (26 ref.) (Eng. Abstr.) (Jpn)
[Serum pepsinogen I level in patients with stomach cancer—its value and limitation in clinical use] Miki K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1122–8 (Eng. Abstr.) (Jpn)
[Sialyl Lewis(x)-I (SLX) as a tumor-associated carbohydrate antigen in sera in patients with gastric and colorectal cancer—evaluation according to clinico-pathological factors] Nakagoe T, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 1):819–25 (Eng. Abstr.) (Jpn)
[Basic study on diagnosis of concave early gastric cancer in body of the stomach—particularly on macroscopically elusive gastric cancer] Nakamura Y. **Igaku Kenkyu** 1988 Oct;58(5):237–49 (Eng. Abstr.) (Jpn)
[Recent progress in diagnosis cancer and treatment of digestive diseases. II. Esophageal cancer and gastric cancer. 4. Detection of early cancer by panendoscopy] Sakita T, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1651–4 (Jpn)
[Recent advances in endoscopic diagnosis and treatment of early gastric cancer] Oguro Y. **Nippon Rinsho** 1989 May; 47(5):1107–13 (Jpn)
[Endoscopic diagnosis of minute early gastric cancer] Takemoto T, et al. **Nippon Rinsho** 1989 May;47(5):1017–21 (Jpn)
[Primary malignant lymphomas of the digestive tract. Morphologic and clinical analysis of 100 cases] Kemona A, et al. **Przegl Lek** 1989;46(5):448–50 (Eng. Abstr.) (Pol)
[Analysis of the causes of delayed diagnosis of cancer of the stomach] Batko B. **Wiad Lek** 1988 Jul 15;41(14):910–4 (Eng. Abstr.) (Pol)
[Difficulties in the gastroscopic diagnosis of gastric lymphoma] Kryszewski A, et al. **Wiad Lek** 1988 Aug 1; 41(15):1028–32 (Eng. Abstr.) (Pol)
[Optimization of the diagnosis of gastric cancer: cytology via endoscopic fine-needle aspiration] Stanciu C, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):377–8 (Eng. Abstr.) (Rum)
[Morphologic diagnosis of the initial stages of stomach cancer (an analysis of 252 cases)] Voshchanova NP, et al. **Arkh Patol** 1988;50(8):52–6 (Eng. Abstr.) (Rus)
[Fluorescent laser diagnosis of the invasiveness of cancer of the digestive organs] Polsachev VI, et al. **Khirurgiia (Mosk)** 1989 May;(5):112–5 (Rus)
[Cases of leiomyoma of the stomach] Mel'nichuk AI, et al. **Klin Khir** 1989;(5):55 (Rus)
[Laparoscopy in surgical planning] Mitiuk II, et al. **Klin Khir** 1989;(1):39–41 (Eng. Abstr.) (Rus)
[Cancer of the stomach in a 16-year-old patient] Moroz GS, et al. **Klin Khir** 1989;(5):54 (Rus)
[Potentialities of ultrasonic diagnosis of tumors of the stomach] Tarasiuk BA, et al. **Klin Khir** 1989;(5):35–6 (Eng. Abstr.) (Rus)
[Emergency cytological diagnosis in surgery of cancer of the proximal part of the stomach] Agamova KA, et al. **Sov Med** 1989;(3):101–3 (Rus)
[Fluorescent endoscopy in the diagnosis of cancer of the stomach] Polsachev VI, et al. **Sov Med** 1989;(4):121–2 (Rus)
[The role of endoscopic study in the diagnosis of precancerous gastric pathology and identification of a risk group] Poddubnyi BK, et al. **Ter Arkh** 1988;60(9):119–23 (Eng. Abstr.) (Rus)
[Exogastric leiomyosarcoma of the stomach] Egiazarian VT, et al. **Vestn Khir** 1988 Dec;141(12):34–6 (Rus)
[Diagnosis of early forms of cancer and pre-cancerous diseases of the stomach and colon at a specialized sanitorium] Prusakov NN, et al. **Voen Med Zh** 1989 May; (5):39–41 (Rus)
[Blood lipase activity in cancer patients] Shelestiuk PI, et al. **Vopr Onkol** 1989;35(7):801–5 (Eng. Abstr.) (Rus)
[The role of echinocytosis indices in the diagnosis and prognosis of the course of stomach cancer] Tereshchenko IP, et al. **Vopr Onkol** 1988;34(9):1059–64 (Eng. Abstr.) (Rus)
[Characteristics of the course and diagnosis of malignant degeneration of stomach ulcers] Chernobrovyi NP, et al. **Vrach Delo** 1988 Nov;(11):14–6 (Eng. Abstr.) (Rus)
[Improving the diagnostic efficacy of carcinoembryonic antigen (CEA) in gastric cancer by the simultaneous administration of Ca 72.4 (letter)] Sagredo E, et al. **Rev Clin Esp** 1989 Apr;184(6):336–7 (Spa)
[Survival and early diagnosis/therapy in early or precocious gastric cancer: 2 endoscopic histological alternatives to choose from? (letter)] Estrada Rodriguez M, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):686–7 (Spa)
[Gastric pseudotumor caused by varices] Padín Martín I, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):710–1 (Eng. Abstr.) (Spa)
[Gastric cancer: advances in diagnosis and treatment] Hoffenberg P. **Rev Med Chil** 1989 Jun;116(6):549–51 (Eng. Abstr.) (Spa)

DRUG THERAPY

Progress report on studies of FAM-CF for gastric cancer and intraperitoneal administration of FUra-CF followed by cisplatin (DDP). Arbuck SG, et al. **Adv Exp Med Biol** 1988;244:285–93
Mount Sinai clinical experience with leucovorin and 5-fluorouracil. Bruckner HW. **Adv Exp Med Biol** 1988; 244:157–66
Oral idarubicin in measurable gastric cancer. Abad-Esteve A, et al. **Am J Clin Oncol** 1989 Feb;12(1):14–6
Phase II study of diaziquone in untreated advanced gastric carcinoma. A Southwest Oncology Group Study. Pugh RP, et al. **Am J Clin Oncol** 1989 Feb;12(1):11–3
Therapy of advanced gastric carcinoma. The Georgetown-Lombardi Cancer Center experience. Treat J, et al. **Am J Clin Oncol** 1989 Apr;12(2):162–8
Gastric cancer—the recognition of a chemosensitive tumour. Cunningham D. **Br J Cancer** 1988 Dec;58(6):695–9 (57 ref.)
The effect of tamoxifen and estrogen receptor status on survival in gastric carcinoma. Harrison JD, et al. **Cancer** 1989 Sep 1;64(5):1007–10
Phase II study of adriamycin with sequential methotrexate and 5-fluorouracil (AMF) in gastric carcinoma. Ajani JA, et al. **Cancer Chemother Pharmacol** 1989;24(1):41–4
Sequential moderate-dose methotrexate and 5-fluorouracil in advanced gastric adenocarcinoma. Dickinson R, et al. **Cancer Chemother Pharmacol** 1989;24(1):67–8
Postoperative adjuvant chemotherapy inhibits early recurrence of early gastric carcinoma. Okamura T, et al. **Cancer Chemother Pharmacol** 1989;23(5):319–22
Chemotherapy of gastric cancer. Gohmann JJ, et al. **Cancer Invest** 1989;7(1):39–52 (113 ref.)
Chemotherapy of gastric cancer. Preusser P, et al. **Cancer Treat Rev** 1988 Dec;15(4):257–77 (127 ref.)
Phase II study of high-dose 4'-epidoxorubicin in the treatment of advanced gastrointestinal cancer. Vorobiof DA, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):563–4
Current status of chemotherapy for gastric cancer. Wils J, et al. **Eur J Cancer Clin Oncol** 1989 Jan;25(1):3–8 (52 ref.)
Chemosensitivity differences between primary and metastatic lesions of clinical gastric cancer. Kusumoto H, et al. **Eur J Surg Oncol** 1988 Dec;14(6):685–9
Surgery and adjuvant chemotherapy for gastric cancer. Nakajima T, et al. **Hepatogastroenterology** 1989 Apr; 36(2):79–85 (21 ref.)
The in vitro growth response of primary human colorectal and gastric cancer cells to gastrin. Watson SA, et al. **Int J Cancer** 1989 Apr 15;43(4):692–6
Chemotherapy of gastric cancer: a review. Kelsen D. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):557–61 (32 ref.)
Phase II study with the combination etoposide, doxorubicin, and cisplatin in advanced measurable gastric cancer. Preusser P, et al. **J Clin Oncol** 1989 Sep;7(9):1310–7
Preoperative chemotherapy in locally advanced and nonresectable gastric cancer: a phase II study with etoposide, doxorubicin, and cisplatin. Wilke H, et al. **J Clin Oncol** 1989 Sep;7(9):1318–26
A case of gastric cancer in which long-term administration of 5'-deoxy-5-fluorouridine proved effective. Koda T, et al. **J Int Med Res** 1989 Mar–Apr;17(2):179–84
Effect of vitamin B complex on the immunodeficiency produced by surgery of gastric cancer patients. Kurashige S, et al. **Jpn J Exp Med** 1988 Aug;58(4):197–202
Postoperative adjuvant immunochemotherapy with mitomycin C, futraful and PSK for gastric cancer. An analysis of data on 579 patients followed for five years. Niimoto M, et al. **Jpn J Surg** 1988 Nov;18(6):681–6
Adjuvant chemotherapy in operable gastric cancer. 5 year follow-up of first British Stomach Cancer Group trial. Allum WH, et al. **Lancet** 1989 Mar 18;1(8638):571–4
Antitumour activity of histamine plus H2-receptor antagonist [letter] Burtin C, et al. **Lancet** 1988 Dec 10;2(8624):1369
Adjuvant chemotherapy for stomach cancer [letter] Greenspan EM. **Lancet** 1989 Jun 24;1(8652):1459–60
An EORTC gastrointestinal (GI) group randomized evaluation of the toxicity of sequential high dose methotrexate and 5-fluorouracil combined with adriamycin (FAMTX) vs 5-fluorouracil, adriamycin and mitomycin (FAM) in advanced gastric cancer. Klein HO, et al. **Med Oncol Tumor Pharmacother** 1989;6(2):171–4
5-Fluorouracil, doxorubicin (adriamycin) and mitomycin-C (FAM) in advanced gastric cancer: observations on response, patient characteristics, myelosuppression and delivered dosage. Biran H, et al. **Oncology** 1989;46(2):83–7
[The specific photodynamic effect of monoclonal antibodies conjugated with hematoporphyrin derivative on gastric cancer in vitro and in vivo] Lin K. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;69(1):24–7, 4 (Eng. Abstr.) (Chi)
[Cimetidine treatment of stomach cancer] Tønnesen H, et al. **Ugeskr Laeger** 1989 Jun 12;151(24):1549–51 (Eng. Abstr.) (Dan)
[The results of a modified FAMeth chemotherapy protocol in metastatic stomach carcinoma] Weh HJ, et al. **Dtsch Med Wochenschr** 1989 Sep 15;114(37):1391–6 (Eng. Abstr.) (Ger)
[Chemo- and laser therapy of advanced tumors of the upper gastrointestinal tract] Firusian N. **Onkologie** 1988;11 Suppl 2:23–33 (Eng. Abstr.) (Ger)
[UFT/CDDP treatment in advanced gastric cancer—case report] Suga S, et al. **Gan No Rinsho** 1989 Jan;35(1):87–92 (Eng. Abstr.) (Jpn)
[A case of advanced gastric cancer (Borrmann's type 2) that disappeared following short-term preoperative chemotherapy with UFT] Uesugi H, et al. **Gan No Rinsho** 1989 Jul;35(8):963–9 (19 ref.) (Eng. Abstr.) (Jpn)
[A randomized controlled trial comparing short-term MF chemotherapy with MF plus long-term HCFU chemotherapy as an adjuvant to a curative resection of stomach cancer: Mifurol Study Group for Stomach Cancer] Yamamura Y, et al. **Gan No Rinsho** 1988 Nov; 34(14):1936–42 (Eng. Abstr.) (Jpn)
[A phase II study of cisplatin in gastric cancer. Kyushu Cisplatin Chemotherapy Group] **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):341–7 (Eng. Abstr.) (Jpn)
[The significance of hormone receptors in hormone therapy of gastric cancers] Furukawa H, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2156–60 (33 ref.) (Eng. Abstr.) (Jpn)
[Randomized-controlled study of treatment with UFT-MMC or UFT-ACR in advanced gastric cancer. Tohoku Study Group of Cancer Treatment for the Digestive Organs] Goto Y, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2227–33 (Eng. Abstr.) (Jpn)
[FEP and FAP combination chemotherapy in advanced gastric cancer. Research Group for Gastric Cancer] Hayakawa M, et al. **Gan To Kagaku Ryoho** 1988 Nov; 15(11):3073–9 (Eng. Abstr.) (Jpn)
[Phase II study with cisplatin in advanced stomach and colon carcinoma. Cooperative Study Group of Cisplatin for Stomach and Colon Carcinoma] Ishibiki K, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3185–93 (Eng. Abstr.) (Jpn)
[Clinical study of platinum accumulation in gastric cancer after preoperative intra-arterial injection of cisplatin] Itoh A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2722–5 (Eng. Abstr.) (Jpn)

[Comparative study of tegafur (p.o.) and mitomycin C (MMC) plus tegafur in cases of unresectable gastric cancer] Kawaura Y, et al. **Gan To Kagaku Ryoho** 1989 Sep; 16(9):3179–84 (Eng. Abstr.) **(Jpn)**

[Multihospital randomized study on adjuvant chemotherapy with mitomycin C and futraful or UFT in gastric cancer—(Part 2). Comparisons between futraful and UFT. North Kyushu Co-operative Study Group for Cancer Chemotherapy] Kuroda Y, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2235–40 (Eng. Abstr.) **(Jpn)**

[A case of gastric carcinoma remarkably responding to etoposide, adriamycin and cisplatin (EAP) therapy] Nakamura Y, et al. **Gan To Kagaku Ryoho** 1988 Oct; 15(10):2995–8 (Eng. Abstr.) **(Jpn)**

[Experimental study on combination chemotherapy of UFT and calcium antagonist in gastric cancer] Nakano GI, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):793–8 (Eng. Abstr.) **(Jpn)**

[Some problems of the criteria for response evaluation of cancer chemotherapy of the digestive organs] Nakao I. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):302–6 (Eng. Abstr.) **(Jpn)**

[Inhibition of thymidylate synthetase and antiproliferative effect by 1-hexylcarbamoyl-5-fluorouracil] Nishiyama M, et al. **Gan To Kagaku Ryoho** 1988 Nov;15(11):3109–13 (Eng. Abstr.) **(Jpn)**

[Anticancer activities of a new mitomycin derivative KW 2149, against human tumors xenografted into nude mice] Nishiyama M, et al. **Gan To Kagaku Ryoho** 1988 Nov; 15(11):3133–7 (Eng. Abstr.) **(Jpn)**

[A current overview of chemotherapy in advanced gastric cancer] Ogawa M. **Gan To Kagaku Ryoho** 1989 Jun; 16(6):2161–8 (29 ref.) (Eng. Abstr.) **(Jpn)**

[Effect of sodium thiosulfate on the antitumor effect and nephrotoxicity of CDDP in human gastric cancer transplanted in nude mice] Saito D, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):379–85 (Eng. Abstr.) **(Jpn)**

[Phase II study of cisplatin in advanced esophageal cancer and gastric cancer] Saitoh S, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):213–7 (Eng. Abstr.) **(Jpn)**

[Randomized multicenter trial of sequential methotrexate and 5-fluorouracil versus 5-fluorouracil alone in advanced gastric cancer] Sasaki T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2545–55 (Eng. Abstr.) **(Jpn)**

[Clinical effectiveness of arterial infusion chemotherapy in advanced and recurrent gastric cancer] Sato M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2927–31 (Eng. Abstr.) **(Jpn)**

[Long-term chemotherapy in patients with stage IV gastric cancer after surgical treatment—a randomized comparative study of FT-207 and UFT] Sugimachi K, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2953–7 (Eng. Abstr.) **(Jpn)**

[Present status of surgical adjuvant chemotherapy of gastric cancer] Taguchi T. **Gan To Kagaku Ryoho** 1989 Jun; 16(6):2169–72 (1 ref.) (Eng. Abstr.) **(Jpn)**

[Comparative study on the anticancer activities of KW2149 and mitomycin C against human tumor xenografts using subrenal capsule assay] Takagami S, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2189–93 (Eng. Abstr.) **(Jpn)**

[Chemotherapeutic effect on metastatic tumors] Takahashi H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1255–9 (Eng. Abstr.) **(Jpn)**

[A case report of an advanced and recurrent stomach cancer in a patient manifesting response to cisplatinum-based chemotherapy] Takamura H, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3269–72 (Eng. Abstr.) **(Jpn)**

[Two cases of gastrointestinal cancers with major responses to sequential methotrexate 5-FU plus 5'-DFUR] Tamura Y, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2109–12 (Eng. Abstr.) **(Jpn)**

[Long-term administration of tegafur in postoperative adjuvant chemotherapy in gastric cancer patients. Serial analysis of serum tegafur and 5-fluorouracil concentrations, and influence from PSK combination] Tanaka T, et al. **Gan To Kagaku Ryoho** 1989 Jan;16(1):95–9 (Eng. Abstr.) **(Jpn)**

[The effect of EAP (etoposide, adriamycin, cis-platinum) on patients with advanced gastric cancer: the role of EAP as neoadjuvant chemotherapy and histopathological study on its effect] Tsujinaka T, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3295–8 **(Jpn)**

[A study of combined chemotherapy with MMC, ADM, CDDP, VP-16 and 5'DFUR (MAC-VD) in advanced cancers of digestive organs] Yasutake K, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2477–80 **(Jpn)**

[Morphologic evaluation of systemic chemotherapy for gastric cancer—using new criteria of the Research Society for Gastric Cancer] Iwase H, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2769–78 (Eng. Abstr.) **(Jpn)**

[Experimental study on an adriamycin-aluminum complex modified anticancer agent] Shintomi Y. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):69–77 (Eng. Abstr.) **(Jpn)**

[The drug sensitivity of human gastric cancer implanted into the subcutis and stomach wall of nude mice] Yamashita T. **Nippon Gan Chiryo Gakkai Shi** 1989 Mar 20;24(3):611–6 (Eng. Abstr.) **(Jpn)**

[Anti-tumor effect of fluoropyrimidines on human tumor cell lines transplanted in nude mice with CCl4-induced liver dysfunction] Nio Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):538–45 (Eng. Abstr.) **(Jpn)**

[Recent progress in diagnosis and treatment of digestive diseases. II. Esophageal cancer and gastric cancer. 5. Chemotherapy of esophageal and gastric cancer] Wakui A. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1655–9 (7 ref.) **(Jpn)**

[Effect of indomethacin on the immunological indices of patients with inoperable stomach cancer] Moroz TD, et al. **Eksp Onkol** 1989;11(2):66–8 (Eng. Abstr.) **(Rus)**

[The effectiveness of chemoradiotherapy of malignant tumors using platidiam] Monakhov BV, et al. **Vopr Onkol** 1988; 34(9):1114–8 (Eng. Abstr.) **(Rus)**

[Optimization of chemotherapy of stomach cancer] Chernyl VA, et al. **Vrach Delo** 1989 Jun;(6):10–2 (Eng. Abstr.) **(Rus)**

[The intraperitoneal administration of chemical preparations and taktivin in the combined treatment of stomach cancer] Shchepotin IB, et al. **Vrach Delo** 1988 Sep;(9):3–6 (Eng. Abstr.) **(Rus)**

[Chemotherapy of gastric cancer using a MAF combination] Fodor M, et al. **Rev Med Chil** 1988 Jul;116(7):612–7 (Eng. Abstr.) **(Spa)**

ECONOMICS

[Medical and economic efficacy of the detection, treatment and rehabilitation of patients with cancer of the stomach and cancer of the cervix] Stranadko EF, et al. **Sov Med** 1988;(9):63–7 **(Rus)**

ENZYMOLOGY

Ultrastructural immunolocalization of lysozyme in paneth-like cells in undifferentiated (gastric)-type carcinoma of the stomach. Ohtani H, et al. **Acta Pathol Jpn** 1988 Jul;38(7):861–71

Cathepsin B and L activities in gastric cancer tissue: correlation with histological findings. Watanabe M, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):21–9

5-Fluorouracil and UFT-sensitive gastric carcinoma has a high level of thymidylate synthase. Maehara Y, et al. **Cancer** 1989 May 1;63(9):1693–6

Creatine kinase and lactate dehydrogenase isoenzymes in serum and tissues of patients with stomach adenocarcinoma. Hirata RD, et al. **Clin Chem** 1989 Jul;35(7):1385–9

Slow moving proteinase in gastric cancer and its relationship to pepsinogens I and II. An immunohistochemical study. Shiraishi T, et al. **Dig Dis Sci** 1988 Nov;33(11):1466–72

Evidence for autocrine activation of a tyrosine kinase in a human gastric carcinoma cell line. Giordano S, et al. **J Cell Biochem** 1988 Dec;38(4):229–36

Pepsinogens I and II in gastric cancer: an immunohistochemical study using monoclonal antibodies. Huang SC, et al. **Jpn J Cancer Res** 1988 Oct;79(10):1139–46

p145, a protein with associated tyrosine kinase activity in a human gastric carcinoma cell line. Giordano S, et al. **Mol Cell Biol** 1988 Aug;8(8):3510–7

Inhibition of benzo[a]pyrene-induced forestomach neoplasia in mice by citrus limonoids. Lam LK, et al. **Nutr Cancer** 1989;12(1):43–7

Beta-glucuronidase activity in gastric cancer. Ostrowski J, et al. **Riv Eur Sci Med Farmacol** 1987 Dec;9(4):355–8

Lactic dehydrogenase levels in patients with duodenal ulcer, gastric ulcer, gastric polys and gastric carcinoma. Teniola D, et al. **Scand J Gastroenterol Suppl** 1986;124:169–78

[Regulation of the RNAse activity of the saliva in healthy subjects and in stomach cancer] Kharchenko SV, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jan-Feb;(1):58–63 (Eng. Abstr.) **(Rus)**

[Changes in the activities of enzymes of metabolism of DNA precursors in peptic ulcer and cancer of the stomach] Borzenko BG. **Klin Med (Mosk)** 1989 May;67(5):87–91 (Eng. Abstr.) **(Rus)**

[Age-related dynamics of the activity of the enzymes involved in the metabolism of adenosine in normal subjects and in oncologic patients] Borzenko BG, et al. **Lab Delo** 1988;(11):53–7 (Eng. Abstr.) **(Rus)**

[Intragastric proteolysis in cancer of the stomach and precancerous diseases] Masevich TsG, et al. **Sov Med** 1988; (11):77–8 **(Rus)**

[The enzymatic activity of DNA metabolism of the blood in patients operated on in stomach cancer] Borzenko BG, et al. **Vopr Onkol** 1989;35(5):579–83 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Increasing incidence and excellent survival of patients with early gastric cancer: experience in a United States medical center. Green PH, et al. **Am J Med** 1988 Nov;85(5):658–61

Gastric carcinoma in young adults. Matley PJ, et al. **Ann Surg** 1988 Nov;208(5):593–6

Stomach cancer in a native and migrant population in Puerto Rico and New York City, 1975 to 1979. Menéndez-Bergad B, et al. **Bol Asoc Med P R** 1989 Mar;81(3):95–8

Cardia carcinoma considered as a distinct clinical entity. Husemann B. **Br J Surg** 1989 Feb;76(2):136–9

Has the incidence of primary gastric lymphoma increased? Hayes J, et al. **Cancer** 1989 May 15;63(10):2073–6

Proportion attributable to medical care of the reduction in stomach cancer deaths in Miyagi, Japan. Shimizu H, et al. **Cancer Detect Prev** 1988;13(3-4):189–93

Carcinoma of stomach in childhood [letter] Vishwanathan C, et al. **Indian J Gastroenterol** 1988 Oct;7(4):244

A clinico-pathological study of carcinoma stomach. Usha, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):266–71

A case-control study of cancer of the esophagus and gastric cardia in Linxian. Li JY, et al. **Int J Cancer** 1989 May 15;43(5):755–61

Lack of an association between carcinoma of the stomach and the major histocompatibility complex (HLA) in Cape Coloureds. Martell RW, et al. **Tissue Antigens** 1988 Sep; 32(3):150–4

[A retrospective investigation of patients with gastric cancer in ward patients] Luan BQ. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Jun; 10(3):149–53 (Eng. Abstr.) **(Chi)**

[Use of psychological personality inventory method in cancer epidemiological survey] Zhang ZW. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Aug; 9(4):230–2 (Eng. Abstr.) **(Chi)**

[Cancer of the stomach in Siena and province. Clinical, epidemiologic, endoscopic and bioptic findings] Abate L, et al. **Minerva Dietol Gastroenterol** 1989 Jan-Mar; 35(1):23–6 (Eng. Abstr.) **(Ita)**

[Analysis of indices of morbidity in cancer of the stomach] Kovaleva NS, et al. **Sov Med** 1988;(11):45–7 **(Rus)**

[Cancer of the stomach in Costa Rica. Incidence and mortality] Guevara R, et al. **Bol Of Sanit Panam** 1988 Oct; 105(4):353–8 (Eng. Abstr.) **(Spa)**

[Gastric cancer. I. Epidemiology] Sanz Anquela JM, et al. **Med Clin (Barc)** 1988 Oct 8;91(11):427–34 (98 ref.) **(Spa)**

[Epidemiologic study of gastric cancer in the health district of Nalón (Asturias) (1978–1985)] Pozo F, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):682–6 (Eng. Abstr.) **(Spa)**

[Gastric cancer in adults. A decade's experience at the Hospital Dr. Rafael Hernández L.] Caballero JL, et al. **Rev Med Panama** 1988 Sep;13(3):178–82 (12 ref.) (Eng. Abstr.) **(Spa)**

[Incidence of stomach cancer in Panama] Sabonge R, et al. **Rev Med Panama** 1988 Sep;13(3):160–2 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Surgery for gastric cancer in Singapore, 1951–1980, with particular reference to racial differences in incidence. Kang JY. **Aust N Z J Med** 1988 Aug;18(5):661–4 (16 ref.)

Stomach cancer among New Mexico's American Indians, Hispanic whites, and non-Hispanic whites. Wiggins CL, et al. **Cancer Res** 1989 Mar 15;49(6):1595–9

ETIOLOGY

Gastric stump carcinoma. Jakab F, et al. **Acta Chir Hung** 1988;29(3):231–40

Second follow-up study of mucosal changes in the gastric remnant after resection for peptic ulcer disease. Ovaska JT, et al. **Acta Chir Scand** 1989;155(1):35–8

Campylobacter pylori-associated gastritis and immune response in a population at increased risk of gastric carcinoma. Fox JG, et al. **Am J Gastroenterol** 1989 Jul; 84(7):775–81

Gastric schwannoma after Nissen fundoplication. A rare complication? Genova G, et al. **Am Surg** 1989 Aug; 55(8):495–7

Gastric cancer after peptic ulcer surgery. A historic prospective cohort investigation. Toftgaard C. **Ann Surg** 1989 Aug;210(2):159–64

Use of a modified N-nitrosoproline test to show intragastric nitrosation in patients at risk of gastric cancer. Houghton PW, et al. **Br J Cancer** 1989 Aug;60(2):231–4

Gastric stump cancer: etiopathological and clinical aspects. Pointner R, et al. **Endoscopy** 1989 May;21(3):115–9

Carcinoma following gastric surgery: a national survey. Forestieri P, et al. **Ital J Surg Sci** 1989;19(2):155–63

Stomach cancer and food storage. Coggon D, et al. **J Natl Cancer Inst** 1989 Aug 2;81(15):1178–82

Enhanced induction by high-cholesterol diet of remnant gastric carcinogenesis by N-methyl-N'-nitro-N-nitrosoguanidine in rats. Makino M, et al. **J Natl Cancer Inst** 1989 Jan 18;81(2):130–5

A case-control study of gastric cancer and diet in northern Kyushu, Japan. Kono S, et al. **Jpn J Cancer Res** 1988 Oct; 79(10):1067–74

Intestinal-type gastric carcinoma and colonic carcinoma: a common pathogenesis? Newbold KM. **Lancet** 1989 Jan 21; 1(8630):131–3

Intestinal-type gastric carcinoma and colonic carcinoma: a common pathogenesis? [letter] Newbold KM. **Lancet** 1989 Apr 8;1(8641):793

Upper gastrointestinal cancer in patients with familial adenomatous polyposis. Spigelman AD, et al. **Lancet** 1989 Sep 30;2(8666):783–5

Gastric, pancreatic, and colorectal carcinogenesis following remote peptic ulcer surgery. Review of the literature with the emphasis on risk assessment and underlying mechanism. Offerhaus GJ, et al. **Mod Pathol** 1988 Sep;1(5):352–6 (95 ref.)

Identification of mutagens in Japanese pickles. Takenaka S, et al. **Mutat Res** 1989 May;223(1):35–40

Cancer of remnant stomach following gastric surgery for

benign conditions. Sowa M, et al. **Osaka City Med J** 1989 Jun;35(1):21–7

Granulocytic sarcoma presenting as bleeding gastric polyp. Wong KF, et al. **Pathology** 1989 Jan;21(1):63–4

The association of Campylobacter pylori with mucosal pathological changes in a population at risk for gastric cancer. Jaskiewicz K, et al. **S Afr Med J** 1989 May 6; 75(9):417–9

Cancer of the stomach after operation for benign ulcer disease. Lundegårdh G. **Ups J Med Sci** 1988;93(2):169–72

The mechanism of carcinogenesis in the gastrointestinal tract. Hill MJ. **Z Gastroenterol [Verh]** 1989 Jul;24:141–6 (33 ref.)

[Risk analysis of fuzzy states in data of case–control study for stomach cancer in Heilongjiang Province] Hu JF. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):28–30 (Eng. Abstr.) (Chi)

[Carcinoma in the operated stomach: an experimental study] Lin YZ. **Chung Hua Wai Ko Tsa Chih** 1988 Nov; 26(11):660–4, 701 (Eng. Abstr.) (Chi)

[A study on the relationship between consumption of allium vegetables and gastric cancer] You WC. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov; 22(6):321–3 (Eng. Abstr.) (Chi)

[Primary Sjögren's syndrome complicated by gastric lymphoma. Study of Epstein–Barr viral DNA in the tumor (letter)] Mariette X, et al. **Ann Med Interne (Paris)** 1989; 140(1):62–4 (Fre)

[Postoperative disorders of gastrointestinal motility. 2: Status following total gastrectomy and ileum resection] Stockbrügger R. **Fortschr Med** 1988 Nov 20;106(33):660, 661–662 (5 ref.) (Eng. Abstr.) (Ger)

[Alcohol and the upper gastrointestinal tract] Cooreman M, et al. **Z Gastroenterol** 1988 Oct;26 Suppl 3:47–52 (78 ref.) (Ger)

[Clinical autopsy study of the incidence of remnant gastric carcinoma in patients with stomach resection] Aragona P, et al. **G Ital Oncol** 1988 Jul–Dec;8(3–4):130–8 (Eng. Abstr.) (Ita)

[Cholelithiasis and neoplasms of the digestive tract] Peracchia A, et al. **Minerva Chir** 1989 Feb 15;44(3):347–8 (3 ref.) (Ita)

[Cancer of the operated stomach] Zambon M, et al. **Minerva Chir** 1988 Nov 15;43(21):1819–22 (Eng. Abstr.) (Ita)

[Evaluation of primary multiple cancer manifesting exposure to asbestos] Kishimoto T, et al. **Gan No Rinsho** 1989 Jun; 35(7):825–7 (Eng. Abstr.) (Jpn)

[A case of asbestosis complicated with double cancer of the stomach and colon] Kishimoto T, et al. **Gan No Rinsho** 1989 Feb;35(3):417–20 (Eng. Abstr.) (Jpn)

[The pathogenesis of adenocarcinoma of the stomach after successful radiotherapy of squamous cell carcinoma of the lower intrathoracic esophagus—case report] Tomonari K, et al. **Gan No Rinsho** 1988 Aug;34(9):1185–9 (Eng. Abstr.) (Jpn)

[A case–control study of stomach cancer in young females, with special reference to the effects of pregnancy and delivery] Tsukuma H, et al. **Gan No Rinsho** 1989 Jan; 35(1):35–40 (Eng. Abstr.) (Jpn)

[Diet, environmental factors and gastric cancer] González Svatetz CA, et al. **Gac Sanit** 1988 May–Jun;2(6):157–64 (Spa)

[Carcinoma of the gastric stump after surgery of gastroduodenal ulcer] Docobo Durántez F, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):353–8 (Eng. Abstr.) (Spa)

[Etiopathogenesis of gastric cancer] Senra Varela A, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):179–82 (48 ref.) (Eng. Abstr.) (Spa)

GENETICS

Immunophenotypic and gene probe analysis of a case of Richter's syndrome. Ostrowski M, et al. **Am J Clin Pathol** 1989 Feb;91(2):215–21

Implications of flow cytometry in malignant conditions of the stomach. Bronzo R, et al. **Am J Gastroenterol** 1989 Sep;84(9):1065–8

Primary B cell gastric lymphoma. A genotypic analysis. Spencer J, et al. **Am J Pathol** 1989 Sep;135(3):557–64

Malignancies in the families of patients with gastric polyps. Harju E. **Anticancer Res** 1989 May–Jun;9(3):659–61

Clonal allele loss in gastrointestinal cancers. Fey MF, et al. **Br J Cancer** 1989 May;59(5):750–4

DNA ploidy pattern and tumour spread in gastric cancer. de Aretxabala X, et al. **Br J Surg** 1988 Aug;75(8):770–3

Prognostic significance of DNA content with special reference to age in gastric cancer. Baba H, et al. **Cancer** 1989 May 1;63(9):1768–72

Analysis of ras gene expression in stomach cancer by anti-ras p21 monoclonal antibodies. Yoshida K, et al. **Cancer Detect Prev** 1988;12(1–6):369–76

Cytogenetic observations in a human gastric leiomyosarcoma. Mark J, et al. **Cancer Genet Cytogenet** 1989 Feb; 37(2):215–20

A novel transforming gene, hst. Terada M, et al. **IARC Sci Publ** 1988;(92):133–8

Periampullary, colorectal and gastric cancer in two siblings. Schlossberg D, et al. **Int J Cancer** 1988 Dec 15;42(6):839–41

Flow cytometric analysis of DNA ploidy pattern from deparaffinized formalin-fixed gastric cancer tissue. Tosi P, et al. **Int J Cancer** 1988 Dec 15;42(6):868–71

Distribution of haptoglobin phenotypes in oesophageal and gastric cancer. Jayanthi M, et al. **J Med Genet** 1989 Mar; 26(3):172–3

Study of the c-Ha-ras-1 locus polymorphism in an Italian population with high incidence of gastric cancer. Ranzani GN, et al. **Mol Biol Med** 1988 Dec;5(3):145–53

Rapid detection of ras oncogenes in human tumors: applications to colon, esophageal, and gastric cancer. Jiang W, et al. **Oncogene** 1989 Jul;4(7):923–8

Cytophotometric analysis on nuclear DNA contents of human scirrhous gastric carcinoma. Oda N, et al. **Pathol Res Pract** 1989 Apr;184(4):390–401

Flow cytometric DNA measurement of gastric cancers. Clinico-pathological implication of DNA ploidy. Sasaki K, et al. **Pathol Res Pract** 1989 Jun;184(6):561–6

Transgenic mouse model for human gastric carcinoma. Koike K, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5615–9

Amplification of epidermal growth factor receptor (EGFR) gene and oncogenes in human gastric carcinomas. Yoshida K, et al. **Virchows Arch [B]** 1989;57(5):285–90

[The application of oncogene probes to studying the activation of Ha-ras in stomach cancer cells] Deng GR. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):503–5, 36 (Eng. Abstr.) (Chi)

[Diffuse stomach cancer in the minor form of familial adenomatosis coli. Correlation or coincidence?] Polensky A, et al. **Z Gastroenterol** 1988 Dec;26(12):737–43 (Eng. Abstr.) (Ger)

[Oncogenes in human gastric carcinoma] Tahara E. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2149–55 (23 ref.) (Eng. Abstr.) (Jpn)

[ret gene from a human stomach cancer] Koda T. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):913–24 (Eng. Abstr.) (Jpn)

[Expression of c-myc product in gastric cancer: preliminary report] Ninomiya I, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):628 (Jpn)

[Study of food habits in the families of patients with stomach cancer] Rachtan J. **Rocz Panstw Zakl Hig** 1988; 39(4):258–63 (Eng. Abstr.) (Pol)

[Proto-oncogene expression in human carcinomas of the stomach and in the gastric mucosa of rats exposed to N-methyl-N'-nitro-N-nitrosoguanidine-induced gastric carcinogenesis] Novikov LB, et al. **Eksp Onkol** 1989; 11(1):18–21 (Eng. Abstr.) (Rus)

HISTORY

[Legends and facts (remarks on the illness of Marshal Józef Pilsudski)] Gutt RW. **Arch Hist Filoz Med** 1988; 51(3):407–20 (Pol)

IMMUNOLOGY

CD30(Ki-1) antigen expression in a subset of gastric mucosal plasma cells and in a primary gastric plasmacytoma. Möller P, et al. **Am J Clin Pathol** 1989 Jan;91(1):18–23

Expression of type 1 and type 2 blood group-related antigens in normal and neoplastic gastric mucosa. Torrado J, et al. **Am J Clin Pathol** 1989 Mar;91(3):249–54

Immunohistochemical detection of human lung and gastric cancer antigen in human salivary gland tumors. Tsuzi T, et al. **Anticancer Res** 1989 Mar–Apr;9(2):327–39

Effects of gastric cancer cells on lymphocyte proliferation. Wu CW, et al. **Asian Pac J Allergy Immunol** 1988 Jun; 6(1):29–32

Alterations of humoral immunity in patients with gastric cancer. Wu CW, et al. **Asian Pac J Allergy Immunol** 1988 Jun;6(1):7–10

Detection of glycoproteins as tumor-associated Hanganutziu–Deicher antigen in human gastric cancer cell line, NUGC4. Fukui Y, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1149–54

HLA class I gene expression on human primary tumours and autologous metastases: demonstration of selective losses of HLA antigens on colorectal, gastric and laryngeal carcinomas. López-Nevot MA, et al. **Br J Cancer** 1989 Feb;59(2):221–6

Changes in serum levels of Forssman-like antibody in patients with gastric cancer. Hirayama R, et al. **Cancer** 1989 Apr 15;63(8):1528–33

IgA serum levels and HLA complement markers in gastric cancer patients. De Paoli F, et al. **Cancer Detect Prev** 1988; 12(1–6):389–93

Lymphokine-activated suppressor (LAS) cells in patients with gastric carcinoma. Ebihara T, et al. **Cancer Immunol Immunother** 1989;28(3):218–24

Mosaicism in the expression of tumor-associated carbohydrate antigens in human colonic and gastric cancers. Nakasaki H, et al. **Cancer Res** 1989 Jul 1; 49(13):3662–9

Expression of Lewisa, Lewisb, Lewisx, Lewisy, sialyl-Lewisa, and sialyl-Lewisx blood group antigens in human gastric carcinoma and in normal gastric tissue. Sakamoto S, et al. **Cancer Res** 1989 Feb 1;49(3):745–52

SC-1, a functional human monoclonal antibody against autologous stomach carcinoma cells. Vollmers HP, et al. **Cancer Res** 1989 May 1;49(9):2471–6

Ultrastructural localization of carcinoembryonic antigen in gastric cancer. Immunoelectron microscopic observation. Dong YM, et al. **Chin Med J [Engl]** 1988 Dec;101(12):923–6

Mouse and human monoclonal antibodies against gastric cancer. Preparation and clinical application. Fan DM, et al. **Chin Med J [Engl]** 1988 Jul;101(7):488–9

SC, IgA and IgA-producing cells in gastric mucosa of chronic gastritis and gastric carcinoma and their clinical significance. Zhang ZB, et al. **Chin Med J [Engl]** 1988 Oct; 101(10):755–60

Role of the spleen in immunosuppression of gastric cancer: predominance of suppressor precursor and suppressor inducer T cells in the recirculating spleen cells. Toge T, et al. **Clin Exp Immunol** 1988 Dec;74(3):409–12

CA 19-9 determination in gastric juice: role in identifying gastric cancer and high risk patients. Farinati F, et al. **Eur J Cancer Clin Oncol** 1988 May;24(5):923–7

Localization of antigen defined by anti-scirrhous gastric carcinoma monoclonal antibody S202 in fixed human cancer tissues. Yokota T, et al. **Gastroenterol Jpn** 1988 Dec; 23(6):619–23

Anergy in patients with gastric cancer. Cainzos M, et al. **Hepatogastroenterology** 1989 Feb;36(1):36–9

TAG-72 serum determination in early and advanced gastric cancer [letter] Farinati F, et al. **Int J Cancer** 1989 Aug 15;44(2):378–9

Biochemical and immunological properties of the human carcinoma antigen CAR-5 defined by the monoclonal antibody BD-5. Prat M, et al. **Int J Cancer** 1989 Jul 15; 44(1):67–74

Levels of tissue polypeptide antigen in serum and the progression of gastric cancer. Hamazoe R, et al. **J Surg Oncol** 1989 Jun;41(2):128–33

Carcinoembryonic antigen levels of portal blood in gastric cancer patients. Tabuchi Y, et al. **J Surg Res** 1989 Jul; 47(1):81–6

Human monoclonal antibodies against cytokeratin 18 generated from patients with gastric cancer. Abe T, et al. **Jpn J Cancer Res** 1989 Mar;80(3):271–6

Differential activation of lymphokine-activated killer cells with different surface phenotypes by cultivation with recombinant interleukin 2 or T-cell growth factor in gastric cancer patients. Koyama S, et al. **Jpn J Cancer Res** 1989 Feb;80(2):150–7

A human monoclonal antibody recognizing a surface antigen on stomach cancer cells. Yoshikawa K, et al. **Jpn J Cancer Res** 1989 Jun;80(6):546–53

Cimetidine-mediated augmentation of lymphocyte responses to phytohemagglutinin in gastric cancer patients. Kurosu Y, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):56–61

The regulation of natural killer cell activity by splenic nonspecific suppressor cells and its modification in cancer patients. Yanagawa E, et al. **Jpn J Surg** 1988 Nov; 18(6):660–7

Effect of radiation on the expression of carcinoembryonic antigen on the membranes of human gastric adenocarcinoma cells—immunological study using monoclonal antibodies. Hareyama M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25; 48(12):1572–4

[In vitro synthesis of SIgA and CEA and their relationship in gastric cancer tissue] Gong YZ, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):184–7 (Eng. Abstr.) (Chi)

[Study of anticancer human monoclonal antibody—establishment of human monoclonal antibody to gastric cancer by human-mouse hybridoma] Liu H. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):242–4 (Eng. Abstr.) (Chi)

[A study on the expression of MG7 corresponding antigen in gastric mucosa with dysplasia and its significance in detection of early gastric cancer] Hu JL. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;68(7):363–5, 26 (Eng. Abstr.) (Chi)

[Immunohistochemical study of carcinoembryonic antigen (CEA) in gastric cancer] Wu JF. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):270–2 (Eng. Abstr.) (Chi)

[Relations between markers and immunological status in surgical patients. Tumor markers and immunity in surgery] Nano M, et al. **Minerva Med** 1988 Nov;79(11):943–6 (Eng. Abstr.) (Ita)

[Preoperative determination of CEA and GICA in gastric neoplasms] Sanlorenzo M, et al. **Minerva Med** 1989 Mar; 80(3):255–9 (Eng. Abstr.) (Ita)

[Su-polysaccharide skin test and immunotherapy with OK-432 in postoperative gastric cancer—the effect of a splenectomy] Saito H, et al. **Gan No Rinsho** 1988 Nov; 34(14):1965–8 (Eng. Abstr.) (Jpn)

[Immunologic examination of Juzentaiho-to (TJ-48) in postoperative gastric cancer] Kurokawa T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1506–10 (Eng. Abstr.) (Jpn)

[Histopathologic and immunohistochemical studies on the elevation mechanism of carcinoembryonic antigen (CEA) in gastric cancer patients] Imanishi K, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):843–51 (Eng. Abstr.) (Jpn)

[Monoclonal antibody NCC-ST-439 in gastric cancer tissue] Kamata T, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb; 90(2):222–7 (Eng. Abstr.) (Jpn)

[Histopathological and immunohistochemical studies on the elevation mechanism of cancer associated antigens, CEA and CA19-9, in gastric cancer patients] Tabuchi Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1181–91 (Eng. Abstr.) (Jpn)

[Serial analysis of peripheral lymphocyte subsets in patients with gastric cancer] Tanaka T, et al.

Nippon Geka Hokan 1988 Sep 1;57(5):360–71 (Eng. Abstr.) (Jpn)

[Sialylated Lewis(x) and sialylated Lewis(a) as tumor-associated carbohydrate antigens in sera of patients with gastric cancer—usefulness of combination assay of these two antigens] Nakagoe T, et al. Nippon Shokakibyo Gakkai Zasshi 1989 Jan;86(1):19–25 (Eng. Abstr.) (Jpn)

[Carcinoembryonic antigen levels in the serum and gastric juice of patients with cancer of the stomach and in patients with various non-neoplastic diseases of the digestive tract] Zmudziński J, et al. Pol Tyg Lek 1988 Nov 21;43(47):1496–9 (Eng. Abstr.) (Pol)

[Changes in cellular and humoral immunologic mechanisms in the postoperative period] Litarczek G, et al. Rev Chir [Chir] 1989 Jan–Feb;38(1):69–80 (Eng. Abstr.) (Rum)

[Immunohistologic study of intestinal antigen beta-2-MA in gastric tumors] Pugachev KK, et al. Arkh Patol 1989; 51(3):35–8 (Eng. Abstr.) (Rus)

[The antigen of transplantable cells immunologically related to the antigen of the normal human gastric mucosa] Bobrova TS, et al. Eksp Onkol 1988;10(6):35–9 (Eng. Abstr.) (Rus)

[Suppressor function of the blood lymphocytes in patients with stomach cancer undergoing gastrectomy combined with splenectomy] Kadagidze ZG, et al. Eksp Onkol 1988; 10(4):46–9 (Eng. Abstr.) (Rus)

[Distribution of one of the ascitic fluid antigens of ovarian cancer patients in malignant tumors of the stomach and intestines] Sergeeva NS, et al. Eksp Onkol 1989;11(2):35–7 (Eng. Abstr.) (Rus)

[Dynamics of indices of the natural resistance of patients with cancer of the stomach] Podil'chak MD. Klin Khir 1989; (5):13–4 (Eng. Abstr.) (Rus)

[Neutrophil granulocyte function in patients with malignant neoplasms] Cherdyntseva NV, et al. Vopr Onkol 1989; 35(4):429–33 (Eng. Abstr.) (Rus)

METABOLISM

Pharmacodynamics of 5-fluorouracil and leucovorin. Gustavsson BG, et al. Adv Exp Med Biol 1988;244:219–24

Structural analysis of a distinct subtype of CCK receptor on human gastric smooth muscle tumors. Pearson RK, et al. Am J Physiol 1989 Jun;256(6 Pt 1):G1005–10

Pyrimidine nucleotide synthesis is more extensive in poorly differentiated than in well-differentiated human gastric carcinoma. Maehara Y, et al. Cancer 1989 Jan 1; 63(1):96–101

Immunohistochemical study of carbohydrate antigen expression in gastric carcinoma. Dohi T, et al. Gastroenterol Jpn 1989 Jun;24(3):239–45

Gastrin receptors in human gastric scirrhous carcinoma. Kumamoto T. Gastroenterol Jpn 1988 Aug;23(4):384–9

Hormonal control of gastric and colorectal cancer in man. Morris DL, et al. Gut 1989 Apr;30(4):425–9 (48 ref.)

Mucin histochemistry of the upper gastrointestinal tract. Shah M, et al. Indian J Gastroenterol 1989 Apr;8(2):83–4

Serum & urinary follicle stimulating hormone in gastric carcinoma patients before & after gastrectomy. Sheth NA, et al. Indian J Med Res 1988 Jul;88:47–50

Expression of TGF-beta and procollagen type I and type III in human gastric carcinomas. Yoshida K, et al. Int J Cancer 1989 Sep 15;44(3):394–8

Purification and identification of [hydroxyprolyl3]bradykinin in ascitic fluid from a patient with gastric cancer. Maeda H, et al. J Biol Chem 1988 Nov 5;263(31):16051–4

The uptake of anticancer drugs by tumor tissues and lymph node and the effectiveness of postoperative adjuvant chemotherapy on survival time. Arima S, et al. Jpn J Surg 1989 Mar;19(2):177–81

Interaction between transforming growth factor-alpha and c-Ha-ras p21 in progression of human gastric carcinoma. Yamamoto T, et al. Pathol Res Pract 1988 Nov; 183(6):663–9

Pharmacokinetics of paracetamol in patients with stomach cancer. Gawrońska-Szklarz B, et al. Pol J Pharmacol Pharm 1988 Jan–Feb;40(1):41–5

Fat malabsorption in patients before and after total gastrectomy, studied by the triolein breath test. Walther B, et al. Scand J Gastroenterol 1989 Apr;24(3):309–14

[Lectin binding sites as a parameter of cell differentiation in normal gastric mucosa, intestinal metaplasia, and gastric carcinoma] Skutta B, et al. Verh Dtsch Ges Pathol 1988; 72:299–303 (Eng. Abstr.) (Ger)

[Purine metabolism in human tumors] Vannoni D, et al. Medicina (Firenze) 1989 Jan–Mar;9(1):51–4 (Eng. Abstr.) (Ita)

[A case of AFP-producing gastric cancer accompanied with testicular tumor] Watanabe M, et al. Gan No Rinsho 1988 Dec;34(15):2131–7 (Eng. Abstr.) (Jpn)

[Influence of OK-432 on intratumor 5-fluorouracil concentration in cases given UFT] Sinmyo K, et al. Gan To Kagaku Ryoho 1989 May;16(5):2051–7 (Eng. Abstr.) (Jpn)

[Blood and tumor levels of tegafur, 5-fluorouracil, and uracil] Takeshita T, et al. Gan To Kagaku Ryoho 1988 Nov; 15(11):3053–8 (Eng. Abstr.) (Jpn)

[Nutritional assessment of postoperative gastric cancer patients using rapid-turnover proteins] Takada Y, et al. Nippon Geka Hokan 1988 Jul 1;57(4):287–92 (Eng. Abstr.) (Jpn)

[Deficiency of the triiodothyronine pool in patients with stomach cancer] Vereshchagina GV, et al. Vopr Onkol 1989;35(3):299–304 (Eng. Abstr.) (Rus)

MICROBIOLOGY

T-cell lymphoma, tropical spastic paraparesis, and malignant fibrous histiocytoma in a patient with human T-cell lymphotropic virus, type 1. Lee JW, et al. Ann Intern Med 1989 Feb 1;110(3):239–41

Isolation of virus-producing transformants from human gastric cancer cell line, HGC-27, infected with human T-cell leukemia virus type I. Akagi T, et al. Jpn J Cancer Res 1988 Jul;79(7):836–42

MORTALITY

Five year survival following radical surgery for cancer stomach and oesophagus. Ti TK. Ann Acad Med Singapore 1988 Jan;17(1):42–7

Cancer mortality in relation to measures of occupational exposure to crocidolite at Wittenoom Gorge in Western Australia. de Klerk NH, et al. Br J Ind Med 1989 Aug; 46(8):529–36

Ecological analyses and case-control studies of gastric cancer and leukaemia in relation to DBCP in drinking water in Fresno County, California. Wong O, et al. Br J Ind Med 1989 Aug;46(8):521–8

Changing patterns of gastric cancer mortality in Spain. Palmeiro R, et al. Cancer Lett 1988 Sep-Oct;42(1-2):99–102

Mortality caused by stomach cancer after remote partial gastrectomy for benign conditions: 40 years of follow up of an Amsterdam cohort of 2633 postgastrectomy patients. Offerhaus GJ, et al. Gut 1988 Nov;29(11):1588–90

Correlation of DNA ploidy and clinical outcome in Borrmann type 4 gastric carcinoma. Yonemura Y, et al. J Surg Oncol 1989 Sep;42(1):1–4

Surgery for gastric cancer [letter] Kato D. Lancet 1989 Mar 18;1(8638):622

Effect of cimetidine on survival after gastric cancer. Tønnesen H, et al. Lancet 1988 Oct 29;2(8618):990–2

Implications of survival curve slopes on the interpretation of adjuvant therapy results. Eriguchi M, et al. Suppl J Med Oncol Tumor Pharmacother 1988;1:93–7

The absence of correlation between Na in diet duplicates and stomach cancer mortality in Japan. Ikeda M, et al. Tohoku J Exp Med 1988 Jul;155(3):285–94

Cancers of the stomach, lung and breast: mortality trends and control strategies. Stanley K, et al. World Health Stat Q 1988;41(3–4):107–14

Screening for gastric cancer. Hisamichi S. World J Surg 1989 Jan–Feb;13(1):31–7 (17 ref.)

[Causes of death after an early gastric cancer operation] Ifuku M, et al. Gan No Rinsho 1989 Mar;35(4):463–6 (Eng. Abstr.) (Jpn)

[Survival of stomach cancer patients (based on data from the All-Union Center for the Study of Treatment Effectiveness in Patients with Malignant Tumors)] Berëzkin DP, et al. Vopr Onkol 1989;35(3):305–12 (Eng. Abstr.) (Rus)

[Follicular hyperplasia of the regional lymph nodes in stomach cancer and its prognostic significance] Bugrov VV, et al. Vopr Onkol 1989;35(1):17–21 (Eng. Abstr.) (Rus)

[Mortality trends in cancer of the digestive tract in the province of Buenos Aires, Argentina, 1950–1979] Iscovich MJ. Acta Gastroenterol Latinoam 1987;17(4):305–16 (Eng. Abstr.) (Spa)

[Progress in the availability of domestic refrigeration of food in Spain and mortality from gastric cancer] Cortina Greus P, et al. Rev Esp Enferm Apar Dig 1988 Oct;74(4 Pt 2):435–40 (Eng. Abstr.) (Spa)

NURSING

[Nursing care of and changes in the blood picture in patients with gastric cancer treated with combined chemotherapy] Ma YX. Chung Hua Hu Li Tsa Chih 1988 Aug;23(8):461–2 (Chi)

PATHOLOGY

Gastric pseudolymphoma. Vuylsteke P, et al. Acta Chir Belg 1987 Sep-Oct;87(5):326–8

Management and care of the precanceroses of the stomach in the 11-year material of our clinic. Faller J, et al. Acta Chir Hung 1989;30(2):119–28

Histologic features of gastric cancer in relation to patterns of spread. Nihei Z, et al. Acta Chir Scand 1989;155(1):43–6

Primary gastric malignant lymphoma. A morphological and immunohistochemical study of 38 cases. Ishido T, et al. Acta Pathol Jpn 1989 Apr;39(4):229–34

Gastric carcinoma metastatic to the breast diagnosed by mucosubstance histochemistry and electron microscopy. Tsuchiya S, et al. Acta Pathol Jpn 1988 Oct;38(10):1353–61

Early gastric carcinoma. Tichá V, et al. Acta Univ Palacki Olomuc Fac Med 1988;120:187–91

A rapid immunohistologic method for determining the limit of cancer invasion at the surgical margin of scirrhous carcinoma of the stomach during surgery. Yokota T, et al. Am J Clin Pathol 1989 Feb;91(2):187–90

Elevated gastric ulcer grossly resembling primary gastric lymphoma [letter] Adachi Y, et al. Am J Gastroenterol 1988 Dec;83(12):1434

Granular cell tumor of the stomach coincident with two early gastric carcinomas. Yamaguchi K, et al. Am J Gastroenterol 1989 Jun;84(6):656–9

Early gastric cancer. Lehnert T, et al. Am J Surg 1989 Feb; 157(2):202–7

Follow-up in gastric dysplasia patients [letter] Farinati F, et al. Am J Surg Pathol 1989 Feb;13(2):173–4

Paneth cell adenoma of the stomach. Rubio CA. Am J Surg Pathol 1989 Apr;13(4):325–8

Squamous cell carcinoma of the gastric stump. A case report and review of the literature. Ruck P, et al. Am J Surg Pathol 1989 Apr;13(4):317–24 (53 ref.)

Gastroscopic screening of the post-gastrectomy stomach. Relationship of dysplasia to remnant cancer. Greene FL. Am Surg 1989 Jan;55(1):12–5

Early gastric cancer in Singapore. Ho MS, et al. Ann Acad Med Singapore 1989 Jan;18(1):63–8

Histological changes in the gastric stump mucosa and late clinical results after Billroth I, Billroth II and Roux-en-Y operations for peptic ulcer disease. Ovaska JT, et al. Ann Chir Gynaecol 1988;77(1):1–5

O-acetyl sialomucin and differentiation of stomach cancer: a histochemical study. Huang CB, et al. Anticancer Res 1988 Jul-Aug;8(4):829–32

Early carcinoma of the stomach after gastric surgery: comparison with early carcinoma in the non-operated stomach. Iishi H, et al. Arch Geschwulstforsch 1988; 58(6):395–401

Cor pulmonale due to tumor cell microemboli. Report of a case with occult gastric carcinoma. Hirata K, et al. Arch Intern Med 1988 Oct;148(10):2287–9

Multicentric gastric carcinoids complicating pernicious anemia. Origin from the metaplastic endocrine cell population. Berendt RC, et al. Arch Pathol Lab Med 1989 Apr;113(4):399–403

Papillary adenoma of the stomach. Pathologic and immunohistochemical study. Ito H, et al. Arch Pathol Lab Med 1989 Sep;113(9):1030–4

Neoplastic Paneth cells in the stomach. Report of two cases and review of the literature. Lev R, et al. Arch Pathol Lab Med 1989 Feb;113(2):129–33 (22 ref.)

Histopathologic features of minute and small human gastric adenocarcinomas. Mori M, et al. Arch Pathol Lab Med 1989 Aug;113(8):926–31

Collision of malignant lymphoma and multiple early adenocarcinomas of the stomach. Noda T, et al. Arch Pathol Lab Med 1989 Apr;113(4):419–22

Prognostic factors in gastric cancer with serosal invasion. Univariate and multivariate analyses. Baba H, et al. Arch Surg 1989 Sep;124(9):1061–4

Gastric adenocarcinoma. A disease in transition. Cady B, et al. Arch Surg 1989 Mar;124(3):303–8

DNA ploidy and tumor invasion in human gastric cancer. Histopathologic differentiation. Korenaga D, et al. Arch Surg 1989 Mar;124(3):314–8

Cell kinetics in leukaemia and solid tumours studied with in vivo bromodeoxyuridine and flow cytometry. Riccardi A, et al. Br J Cancer 1989 Jun;59(6):898–903

Gastrin: growth enhancing effects on human gastric and colonic tumour cells. Watson S, et al. Br J Cancer 1989 Apr;59(4):554–8

A clinicopathological study of synchronous multiple gastric cancer. Mitsudomi T, et al. Br J Surg 1989 Mar; 76(3):237–40

Intraoperative immunostaining for detection of invasive cells at the resection margin of Borrmann type 4 gastric carcinoma using monoclonal antibody S202. Yokota T, et al. Br J Surg 1989 Jul;76(7):690–2

Gastric cancer in a high-risk area in Italy. Histopathologic patterns according to Lauren's classification. Amorosi A, et al. Cancer 1988 Nov 15;62(10):2191–6

Composite carcinoid-adenocarcinoma of the stomach associated with multiple gastric carcinoids and nonantral gastric atrophy. Caruso ML, et al. Cancer 1989 Oct 1; 64(7):1534–9

The effect of sex hormones and tamoxifen on the growth of human gastric and colorectal cancer cell lines. Harrison JD, et al. Cancer 1989 Jun 1;63(11):2148–51

Multiple carcinoids and endocrine cell micronests in type A gastritis. Their morphology, histogenesis, and natural history. Itsuno M, et al. Cancer 1989 Mar 1;63(5):881–90

Simultaneous gastric cancer in monozygotic twins. Matsukura N, et al. Cancer 1988 Dec 1;62(11):2430–5 (28 ref.)

Depressed adenoma of the stomach. Nakamura K, et al. Cancer 1988 Nov 15;62(10):2197–202

The mucosa of the gastric remnant harboring malignancy. Histologic findings in the biopsy specimens of 504 asymptomatic patients 15 to 46 years after partial gastrectomy with emphasis on nonmalignant lesions. Offerhaus GJ, et al. Cancer 1989 Aug 1;64(3):698–703

Reactive changes in the esophageal epithelium and predictability of survival for patients with adenocarcinoma of the upper third of the stomach. Okamura T, et al. Cancer 1989 Feb 15;63(4):769–73

Coincidence of fundic glandular hyperplasia and carcinoma of the stomach. Stamm B, et al. Cancer 1989 Jan 15; 63(2):354–9

Prospective evaluation of diagnostic accuracy of gastrofiberscopic biopsy in diagnosis of gastric cancer. Tatsuta M, et al. Cancer 1989 Apr 1;63(7):1415–20

Greater tendency for submucosal invasion in fundic area

gastric carcinomas than those arising in the pyloric area. Yamada Y, et al. **Cancer** 1989 May 1;63(9):1757–60

Correlation of DNA ploidy and proliferative activity in human gastric cancer. Yonemura Y, et al. **Cancer** 1988 Oct 15;62(8):1497–502

Pyloric gland phenotypic expression of gastric cancers developing in the rat fundic glandular stomach. Tatematsu M, et al. **Carcinogenesis** 1989 Jun;10(6):1033–9

Cell kinetic study of human carcinomas using bromodeoxyuridine. Kikuyama S, et al. **Cell Tissue Kinet** 1988 Jan;21(1):15–20

The histopathology of carcinoma of the stomach in Zimbabwe. Nkenza NK. **Cent Afr J Med** 1988 Sep; 34(9):207–11

UFT is more antineoplastic against gastric carcinoma than 5-fluorouracil, 1-(2-tetrahydrofuryl)-5-fluorouracil and 1-hexylcarbamoyl-5-fluorouracil. Maehara Y, et al. **Chemotherapy** 1988;34(6):484–9

A model assessment of gastric precancerous lesions by morphometric analysis. Wang RN, et al. **Chin Med J [Engl]** 1988 Jun;101(6):403–9

Inflammatory fibroid polyp of stomach. Report of two cases and review of the literature. Lin SL, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;42(2):147–50

Liver metastasis in cancer of the stomach and its dependence on the histology of the primary tumor: an autopsy study on 102 cases. Rhomberg W, et al. **Clin Exp Metastasis** 1989 Nov–Dec;7(6):585–90

The preoperative staging of malignant tumors of the stomach by computed tomography and liver function tests. Dulchavsky S, et al. **Curr Surg** 1989 Jan–Feb;46(1):26–8

Immunocytochemical localization of carcinoembryonic antigen in cerebrospinal fluid with metastatic carcinoma of the stomach: report of four cases. Iwa N, et al. **Diagn Cytopathol** 1988;4(4):312–5

Clinicopathological features and natural history of gastric hamartomatous polyps. Iishi H, et al. **Dig Dis Sci** 1989 Jun; 34(6):890–4

Histopathological classification of nonantral gastric endocrine growths in man. Solcia E, et al. **Digestion** 1988; 41(4):185–200 (53 ref.)

Eighteen-year survival of unresected leiomyoblastoma of the stomach with liver and lymph node metastases. Baba H, et al. **Eur J Surg Oncol** 1989 Apr;15(2):159–64

Clinicopathological analysis of synchronous multiple gastric carcinoma. Honmyo U, et al. **Eur J Surg Oncol** 1989 Aug; 15(4):316–21

Significance of tumor invasion and lymph node involvement on the prognosis and selection for surgery of adenocarcinoma of the cardia. Ponsioen CY, et al. **Eur J Surg Oncol** 1989 Aug;15(4):301–6

Coexpression of vimentin and desmin in gastric leiomyomas. An immunohistochemical study in paraffin sections. Szczudrawa J, et al. **Folia Histochem Cytobiol** 1989; 27(2):73–81

In vivo selection of tumorigenic subline from non-tumorigenic human gastric carcinoma cells: in relation to proliferative properties in vivo and in nude mice. Kubota H, et al. **Gastroenterol Jpn** 1988 Aug;23(4):371–83

Establishment of a new cell line derived from human gastric adenocarcinoma, producing tumor markers. Terano A, et al. **Gastroenterol Jpn** 1989 Apr;24(2):219

Gastric small lymphocytic proliferation with immunoglobulin gene rearrangement in pseudolymphoma versus lymphoma. Sigal SH, et al. **Gastroenterology** 1989 Jul;97(1):195–201 (39 ref.)

Endoscopic cytology of cancer of the esophagus and cardia: a long-term evaluation. Cussó X, et al. **Gastrointest Endosc** 1989 Jul–Aug;35(4):321–3

Lymphatic dissemination of gastric cancer—therapeutic implications. Moreno González E, et al. **Hepatogastroenterology** 1989 Apr;36(2):66–70

Preoperative TNM classification of gastric carcinoma by endosonography in comparison with the pathological TNM system: a prospective study of 72 cases. Tio TL, et al. **Hepatogastroenterology** 1989 Apr;36(2):51–6

Early gastric stump cancer: macroscopic and microscopic appearance. Tytgat GN, et al. **Hepatogastroenterology** 1989 Apr;36(2):103–8

Gastric adenocarcinoleiomyosarcoma: a light, electron microscopic and immunohistological study. Dundas SA, et al. **Histopathology** 1988 Sep;13(3):347–50

Minute carcinoid arising in gastric tubular adenoma. Ito H, et al. **Histopathology** 1989 Jul;15(1):96–9

Carcinosarcoma of the stomach. Siegal A, et al. **Histopathology** 1988 Sep;13(3):350–3

The value of NOR numbers in neoplastic and non-neoplastic epithelium of the stomach. Suarez V, et al. **Histopathology** 1989 Jan;14(1):61–6

Morphometric distinction of low- and high-grade dysplasias in gastric biopsies. Tosi P, et al. **Hum Pathol** 1989 Sep; 20(9):839–44

Gastric carcinoma and familial adenomatous polyposis (FAP). Goodman AJ, et al. **Int J Color Dis** 1988 Nov; 3(4):201–3

Sister Mary Joseph's nodule. Cooper JP, et al. **Int J Dermatol** 1988 Nov;27(9):652–3

Radiation survival properties of cultured human gastric adenocarcinoma cells and the effect of AT-1727. He SQ, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):361–8

Early gastric cancer. Belcastro G, et al. **Ital J Surg Sci** 1988; 18(3):227–32

Krukenberg's tumor in the young population. Gupta P, et al. **J Am Osteopath Assoc** 1989 Apr;89(4):500–2, 505 (17 ref.)

Non Hodgkin's lymphoma of stomach in a case of Hodgkin's disease. Mohandas KM, et al. **J Assoc Physicians India** 1988 Jul;36(7):456–7

Gastric epithelial polyps. A 10-year study. Deppisch LM, et al. **J Clin Gastroenterol** 1989 Feb;11(1):110–5

Flow cytometry as a predictive indicator in patients with operable gastric cancer. Nanus DM, et al. **J Clin Oncol** 1989 Aug;7(8):1105–12

Lysozyme and mucins in gastric adenomas. Caruso RA, et al. **J Clin Pathol** 1989 Aug;42(8):827–33

Leiomyoblastoma of stomach. Wani NA, et al. **J Indian Med Assoc** 1988 Jul;86(7):198

Comparison of histopathological and flow cytometric parameters in prediction of prognosis in gastric cancer. Wyatt JI, et al. **J Pathol** 1989 Jul;158(3):195–201

Study of stomach cancer in atomic bomb survivors. Report 1. Histological findings and prognosis. Ito C, et al. **J Radiat Res (Tokyo)** 1989 Jun;30(2):164–75

A study on the anti-cancer effect of ningxia wolfberry. Hu Q, et al. **J Tradit Chin Med** 1989 Jun;9(2):117–24

Enhanced liver metastatic potential of alpha-fetoprotein-producing human gastric carcinoma after carbon tetrachloride-induced liver damage in nude mice. Sawada H, et al. **Jpn J Cancer Res** 1989 Apr; 80(4):341–7

Manifestation of metastatic potential in human gastric cancer implanted into the stomach wall of nude mice. Yamashita T. **Jpn J Cancer Res** 1988 Aug;79(8):945–51

The natural history of early gastric cancer. Yoshimori M. **Jpn J Clin Oncol** 1989 Jun;19(2):89–93 (56 ref.)

Characteristics of three human gastric cancer cell lines, NU-GC-2, NU-GC-3 and NU-GC-4. Akiyama S, et al. **Jpn J Surg** 1988 Jul;18(4):438–46

The antiproliferative effects of fluoropyrimidine derivatives against human tumor xenografts in a subrenal capsule assay. Nishiyama M, et al. **Jpn J Surg** 1988 Nov;18(6):725–8

Carcinoma at the esophago-gastric junction—its biological behaviour toward the squamous epithelium. Noguchi Y, et al. **Jpn J Surg** 1989 Mar;19(2):143–52

Undifferentiated cells, metaplasia, c-myc expression, and gastrointestinal carcinogenesis [letter] **Lancet** 1989 Mar 11; 1(8637):566–7

Polymerase chain reaction for detection of dissemination in gastric lymphoma. Cunningham D, et al. **Lancet** 1989 Apr 1;1(8640):695–7

Definition of carcinoma of the gastric cardia. Misumi A, et al. **Langenbecks Arch Chir** 1989;374(4):221–6

Glomus tumor: a benign gastric neoplasm. Kunkel JM. **Milit Med** 1988 Aug;153(8):417–8

Mucosal thickening adjacent to gastric malignancy: association with epidermal growth factor. Lee EY, et al. **Mod Pathol** 1989 Jul;2(4):397–402

Gastrointestinal polyps. Listrom MB, et al. **Mod Pathol** 1989 Mar;2(2):161–81

Carcinoma of the esophagogastric junction. Gavriliță L, et al. **Morphol Embryol (Bucur)** 1988 Jul–Sep;34(3):183–7

Leiomyomatous tumors: presentation of a giant gastric leiomyoma and a review of the literature. Cohen SP, et al. **N Y State J Med** 1989 Jul;89(7):416–9 (27 ref.)

Relationship between immunophenotype and the development of second primary neoplasms in patients with non-Hodgkin's lymphoma. Shimizu K, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):71–9

Early gastric cancer: 52 cases of combined experience of two south Australian teaching hospitals. Chia MM, et al. **Pathology** 1988 Jul;20(3):216–26

Gastric leiomyoblastoma (epithelioid leiomyoma) occurring in a child: a case report. Rogers BB, et al. **Pediatr Pathol** 1989;9(1):79–85

Gastric adenocarcinoma associated with adenomyoma of the stomach. Chapple CR, et al. **Postgrad Med J** 1988 Oct; 64(756):801–3

Morphometric indexes and computerized diagnosis of gastric dysplasia. Yan RF, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(1):43–7

Inflammatory fibroid polyp of the stomach: report of a case. Chang FY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jun; 87(6):655–7

Scirrhous carcinoma cell invasion into the stomach wall detected by monoclonal antibody S202: a comparison between immunoperoxidase and hematoxylin–eosin stain. Yokota T, et al. **Tohoku J Exp Med** 1989 Feb;157(2):137–44

Gastric carcinoma with lymphoid stroma. Analysis using mucin histochemistry and immunohistochemistry. Lertprasertsuke N, et al. **Virchows Arch [A]** 1989; 414(3):231–41

A clinicopathological study of gastric cancer with special reference to age of the patients: an analysis of 1,630 cases. Mitsudomi T, et al. **World J Surg** 1989 Mar–Apr; 13(2):225–30; discussion 230–1

Gastric glandular cysts—investigations into their genesis and relationship to colorectal epithelial tumors. Eidt S, et al. **Z Gastroenterol** 1989 Apr;27(4):212–7

[The relation of typing of gastric carcinoma according to traditional Chinese medicine theories and clinical pathologic classification] Qu SF, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan;9(1):14–5, 4 (Eng. Abstr.) (Chi)

[Pathologic study on the treatment-effect of hematoporphyrin derivative in carcinoma of the gastric cardia] Hu C, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):197–9 (Eng. Abstr.) (Chi)

[Metastatic characteristics of SY86B human gastric carcinoma in athymic nude mice] Li H. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):421–3 (Eng. Abstr.) (Chi)

[Clinico-pathologic comparison between early gastric cancer and early cancriform progressive cancer] Li SH. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):44–6 (Eng. Abstr.) (Chi)

[A case of hepatoid adenocarcinoma of the stomach] Li XZ. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):74–5 (Eng. Abstr.) (Chi)

[Relationship between free cancer cells in the abdominal cavity, serosal type and pathologic characteristics of gastric cancer] Liu QH. **Chung Hua Chung Liu Tsa Chih** 1988 Nov; 10(6):430–3 (Eng. Abstr.) (Chi)

[A newly recognized precancerous lesion of the stomach—histopathologic features of globoid dysplasia of human gastric epithelium] Liu SC. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):37–40 (Eng. Abstr.) (Chi)

[A study on the relationship between gastric cancer and the variants of intestinal metaplasia by determination of nuclear DNA content] Fang DC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):310–2, 22 (Eng. Abstr.) (Chi)

[Cell kinetics in intestinal metaplasia and gastric carcinoma] Wang S, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Mar;18(1):53–5 (Eng. Abstr.) (Chi)

[Malignant genitourinary tumor accompany with multiorgan primary malignant tumors: report of 15 cases] Hong BF, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Feb;26(2):105–6, 126 (Eng. Abstr.) (Chi)

[Observation on tumor invasion in vivo after subcapsular transplantation of a mouse forestomach carcinoma into a syngenic mouse kidney] Li LM. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):200–4 (Eng. Abstr.) (Chi)

[The synthesis and antineoplastic activity of substituted benzaldehyde arylsulfonylhydrazones] He XF, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):317–9 (Eng. Abstr.) (Chi)

[A study of the accuracy of gross staging in the patients with gastric cancer] Huang YS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Jul; 4(7):409–13 (Eng. Abstr.) (Chi)

[Changes of Golgi complex during the induced differentiation of human gastric adenocarcinoma cells in vitro] Li QF, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Mar;22(1):87–97 (Eng. Abstr.) (Chi)

[The relationship between transport site of HPD and photodamage region of human gastric cancer cells in the cell cycle] Wang DS, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Mar;21(1):35–45 (Eng. Abstr.) (Chi)

[The effects of the calmodulin antagonist-trifluoperazine in cell proliferation and microtubule assembly] Zhao YL, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Dec;21(4):481–91 (Eng. Abstr.) (Chi)

[Early gastric carcinomas] Jirková A. **Cesk Patol** 1988 Nov; 24(4):230–41 (Eng. Abstr.) (Cze)

[Benign tumoral and pseudotumoral lesions of the stomach. Study of a surgical and biopsied series] Van Eeckhout P, et al. **Acta Chir Belg** 1987 Sep–Oct;87(5):317–21 (Eng. Abstr.) (Fre)

[Anaplastic adenocarcinoma developing on pancreatic heterotopy (letter)] Bou B, et al. **J Chir (Paris)** 1988 Nov; 125(11):672–3 (Fre)

[Hemorrhagic ulcerated schwannoma with a double endo and exogastric localization. Apropos of a case (letter)] Firouz Abadi M, et al. **J Chir (Paris)** 1989 Feb;126(2):123–4 (Fre)

[Hepatoid adenocarcinoma of the stomach (letter)] Quesnel T, et al. **Presse Med** 1989 Apr 1;18(13):685 (Fre)

[Malignant transformation of an adenomyoma of the cardia (letter)] Tremeaux JC, et al. **Presse Med** 1988 Dec 17; 17(45):2399 (Fre)

[Neoplastic transformation of gastric ulcer] Korbi S, et al. **Tunis Med** 1988 Mar;66(3):213–4 (14 ref.) (Fre)

[2 cases of leiomyoma (gastric and intestinal)] Mejdoub S, et al. **Tunis Med** 1989 Mar;67(3):189–95 (24 ref.) (Eng. Abstr.) (Fre)

[Multilocular gastrointestinal lymphoma of the Burkitt type in AIDS] Felcht H, et al. **Chirurg** 1988 Sep;59(9):614–7 (Ger)

[The new TNM classification and its effect on surgical treatment of stomach cancer] Schlag P, et al. **Chirurg** 1989 Jan;60(1):8–15 (Ger)

[Secondary achalasia caused by diffuse infiltrating cardial cancer] Wenzl E, et al. **Chirurg** 1988 Aug;59(8):536–40 (Eng. Abstr.) (Ger)

[Intestinal metaplasia and fungus involvement in peptic and neoplastic lesions of the mucosa of the stomach] Lüftner J. **Gastroenterol J** 1989;49(1):20–5 (Eng. Abstr.) (Ger)

[Differential diagnosis of Crohn disease: segmental intestinal metastasis of breast and stomach cancer] Madeya S, et al. **Leber Magen Darm** 1989 May;19(3):140, 143–6, 149–52 (Eng. Abstr.) (Ger)

[The prognosis of carcinoid tumors of the stomach] Stolte

M, et al. **Leber Magen Darm** 1988 Sep;18(5):246–50, 253–6 (56 ref.) (Eng. Abstr.) (Ger)

[Superficial early cancer of the stomach] Gollub H, et al. **Pathologe** 1988 Nov;9(6):325–9 (Ger)

[Immunohistochemical classification of stromal tumors of the stomach] Sinn HP, et al. **Pathologe** 1989 Jul;10(4):244–51 (Ger)

[Biological significance of dysplasias of the stomach mucosa] Stosiek P, et al. **Pathologe** 1988 Jul;9(4):193–8 (Ger)

[Prognostic significance of the Lauren classification of patients with stomach carcinoma. A statistical analysis of long-term results following gastrectomy] Roukos D, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):755–9 (Eng. Abstr.) (Ger)

[Precancerous conditions of the upper digestive tract] Paul F, et al. **Verh Dtsch Ges Inn Med** 1988;94:613–7 (Ger)

[Characterization of human stomach cancer cell lines] Müller J, et al. **Verh Dtsch Ges Pathol** 1988;72:214–7 (Eng. Abstr.) (Ger)

[Primary metastatic choriocarcinoma of the stomach] Scholz P, et al. **Z Gesamte Inn Med** 1988 Oct 1;43(19):557–9 (Eng. Abstr.) (Ger)

[A draining carcinoma of the stomach] Honma K, et al. **Zentralbl Allg Pathol** 1989;135(2):155–9 (Eng. Abstr.) (Ger)

[Pathogenesis of cancer of the operated stomach] Dittrich S, et al. **Zentralbl Chir** 1988;113(22):1476–87 (Eng. Abstr.) (Ger)

[Ectopic pancreas in the gastric wall with massive bleeding] Shaked G, et al. **Harefuah** 1989 Apr 2;116(7):358–9 (Eng. Abstr.) (Heb)

[Bladder neoplasm secondary to distant tumors: a case of bladder metastasis from gastric adenocarcinoma] del Boca C, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):91–4 (Eng. Abstr.) (Ita)

[Immunohistochemical studies on gastric adenomas] Caruso R, et al. **G Ital Oncol** 1988 Jul–Dec;8(3–4):139–44 (Eng. Abstr.) (Ita)

[Histopathologic and ultrastructural studies on hyperplastic dysplasia of the stomach] Caruso R, et al. **G Ital Oncol** 1987 Oct–Dec;7(4):200–4 (Eng. Abstr.) (Ita)

[Gastric non-Hodgkin's lymphoma: cytogenetic correlations] Cosimi MF, et al. **G Ital Oncol** 1987 Oct–Dec;7(4):186–9 (Eng. Abstr.) (Ita)

[Leiomyosarcoma of the stomach: contribution to case reports] Sacco R, et al. **G Ital Oncol** 1989 Apr–Sep; 9(2–3):93–9 (Eng. Abstr.) (Ita)

[Incidence of precancerous lesions and risk in endoscopic biopsies of the gastric mucosa] Abbate L, et al. **Minerva Chir** 1989 Feb 15;44(3):315–7 (Ita)

[Gastric leiomyoblastoma. Description of a case with the cytological findings and review of the literature] Barbazza R, et al. **Minerva Chir** 1989 Apr 30;44(8):1301–4 (Eng. Abstr.) (Ita)

[Staging of gastric carcinoma] de Manzoni G, et al. **Minerva Chir** 1989 Apr 15;44(7):1061–6 (Eng. Abstr.) (Ita)

[Early gastric cancer] Ficari A. **Minerva Chir** 1989 Feb 15; 44(3):319–23 (Ita)

[Importance of the invasion of the gastric wall and regional lymph nodes in the prognosis of stomach carcinoma] Vitale M, et al. **Minerva Chir** 1988 Apr 30;43(8):677–81 (Eng. Abstr.) (Ita)

[Anatomo-clinical considerations on lymphatic metastasis of cancer of the stomach] Vitale M, et al. **Minerva Chir** 1988 Jun 30;43(12):1049–54 (48 ref.) (Eng. Abstr.) (Ita)

[Primary lymphoma of the stomach. Endoscopic study] Manildo M, et al. **Minerva Dietol Gastroenterol** 1989 Apr–Jun;35(2):127–30 (Eng. Abstr.) (Ita)

[Intramural infiltration of gastric cancer] Vitale M, et al. **Minerva Med** 1989 Feb;80(2):139–43 (33 ref.) (Eng. Abstr.) (Ita)

[Gastric carcinoma probably of hamartomatous origin. Presentation of a case and review of the literature] Lanzafame S, et al. **Pathologica** 1989 Jan–Feb; 81(1071):77–82 (6 ref.) (Eng. Abstr.) (Ita)

[Gastric leiomioblastoma associated with adenocarcinoma of the rectum. Personal observation] Lupattelli R, et al. **Riv Eur Sci Med Farmacol** 1987 Mar;9(1):83–6 (Eng. Abstr.) (Ita)

[A case of giant leiomyosarcoma that grew exogastrically in a year and four months] Ashida C, et al. **Gan No Rinsho** 1989 Mar;35(4):505–11 (Eng. Abstr.) (Jpn)

[Prognostic factors in gastric cancer with serosal invasion—importance of the extent of cancer infiltration in the subserosal layer] Habu H, et al. **Gan No Rinsho** 1989 May;35(6):685–9 (Eng. Abstr.) (Jpn)

[The histological type and lymphatic permeation of diffuse infiltrative carcinoma of the stomach] Hagihara T, et al. **Gan No Rinsho** 1989 Jul;35(8):912–6 (Eng. Abstr.) (Jpn)

[Early carcinoma of the gastric remnant: pathological features relating to the interval between the initial and second surgery] Hosokawa O, et al. **Gan No Rinsho** 1989 Apr;35(5):587–96 (Eng. Abstr.) (Jpn)

[A clinicopathological study of early mucinous adenocarcinoma of the stomach] Hosokawa O, et al. **Gan No Rinsho** 1989 Aug;35(9):1004–9 (Eng. Abstr.) (Jpn)

[Evaluation of double cancers of the lung and stomach] Kishimoto T, et al. **Gan No Rinsho** 1988 Sep;34(11):1565–7 (Eng. Abstr.) (Jpn)

[An undifferentiated carcinoma of the stomach—a report of 2 cases] Kitahara S, et al. **Gan No Rinsho** 1989 Jan; 35(2):305–11 (Eng. Abstr.) (Jpn)

[A case of coexistent adenocarcinoma and primary malignant lymphoma of the stomach] Kojima H, et al. **Gan No Rinsho** 1989 Feb;35(3):411–6 (Eng. Abstr.) (Jpn)

[Clinico-pathological study of solid poorly differentiated carcinoma of the stomach] Maruyama M, et al. **Gan No Rinsho** 1989 Jul;35(8):905–11 (Eng. Abstr.) (Jpn)

[Surgical problems encountered in cases of S0 (serosal invasion-free) gastric cancers] Matsusaka T, et al. **Gan No Rinsho** 1988 Nov;34(14):1943–50 (Eng. Abstr.) (Jpn)

[Relation of the serosal invasion mode to a recurrence in advanced gastric carcinomas] Matsusaka T, et al. **Gan No Rinsho** 1989 Jul;35(8):917–22 (Eng. Abstr.) (Jpn)

[Studies involving 11 cases of early gastric cancer with a widespread lymph node metastasis] Matsushita M, et al. **Gan No Rinsho** 1988 Sep;34(11):1584–9 (Eng. Abstr.) (Jpn)

[A primary gastric adenosquamous carcinoma with remarkable lymphatic metastasis diagnosed by the stomach and lymph node biopsy] Shigematsu T, et al. **Gan No Rinsho** 1989 Feb;35(3):421–6 (Eng. Abstr.) (Jpn)

[A case of early stage double carcinomas arising in the duodenum and stomach] Shimizu T, et al. **Gan No Rinsho** 1989 Jun;35(7):845–50 (Eng. Abstr.) (Jpn)

[A comparative study of the biological behavior of gastric cancer from the view of the amount of connective tissue in the cancerous tissue—a correlation between the amount of connective tissue and the metastatic pattern] Takakashi Y, et al. **Gan No Rinsho** 1989 Aug;35(9):1011–5 (Eng. Abstr.) (Jpn)

[A case of duodenal carcinoid associated with early gastric carcinoma] Tanahashi Y, et al. **Gan No Rinsho** 1989 Jan; 35(2):316–22 (11 ref.) (Eng. Abstr.) (Jpn)

[A case of cystic changes in a giant leiomyoblastoma of the stomach] Toda S, et al. **Gan No Rinsho** 1988 Nov; 34(14):1990–5 (Eng. Abstr.) (Jpn)

[The metastasis of gastric adenocarcinoma to the gingiva of the mandible—review of the Japanese literature] Tojyo Y, et al. **Gan No Rinsho** 1989 Sep;35(10):1165–70 (10 ref.) (Eng. Abstr.) (Jpn)

[A glomus tumor of the stomach associated with a lipoma] Yamada Y, et al. **Gan No Rinsho** 1988 Dec;34(15):2096–101 (Eng. Abstr.) (Jpn)

[A clinicopathological study of early gastric cancers with a diameter larger than five centimeters] Yamagawa H, et al. **Gan No Rinsho** 1989 Sep;35(10):1114–8 (Eng. Abstr.) (Jpn)

[A 5-FU, ADR, MMC combined hepatic arterial infusion therapy in non-resectable liver metastases from colon and gastric cancer] Arai Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2731–4 (Eng. Abstr.) (Jpn)

[The influence of sodium thiosulfate on the antitumor effect of cisplatin in human gastric cancer cell lines] Fujii T, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3227–32 (Eng. Abstr.) (Jpn)

[Decline of autopsy rates in Japan and the significance of autopsy in gastric carcinoma] Ishiko T. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1920–4 (Eng. Abstr.) (Jpn)

[Arterial infusion chemotherapy in patients with gastric cancer in liver metastasis and long-term survival after treatment] Kitamura M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2936–9 (Eng. Abstr.) (Jpn)

[Over two years survival of intra-arterial infusion chemotherapy in gastric cancer with liver metastases] Okuyama K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2932–5 (Eng. Abstr.) (Jpn)

[Effect of human epidermal factor (hEGF) on antitumor activity of 5-fluorouracil (5-FU) in human gastric cancer cell lines] Saito D, et al. **Gan To Kagaku Ryoho** 1989 May; 16(5):2117–20 (Jpn)

[Effect of PMU hepatic arterial chemotherapy for liver metastases of gastric cancer. Hokuriku Cisplatin Round-table Conference] Sakuma H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2557–62 (Eng. Abstr.) (Jpn)

[Preventive hepatic arterial infusion in high risk cases of liver metastasis from gastric cancer] Takahashi Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2756–9 (Eng. Abstr.) (Jpn)

[Intraperitoneal chemotherapy in gastric cancer with peritoneal metastasis using totally implantable peritoneal access system] Tokushige M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2743–7 (Eng. Abstr.) (Jpn)

[Metastatic tumor of the spermatic cord from gastric cancer] Kagawa S, et al. **Hinyokika Kiyo** 1988 May;34(5):892–4 (Eng. Abstr.) (Jpn)

[Evaluation of the endoscopic gastric mucosal resection] Takasaki Y. **Igaku Kenkyu** 1988 Dec;58(6):366–82 (Eng. Abstr.) (Jpn)

[Clinicopathological study of early gastric cancer—indication of conservative surgery and radical endoscopic treatment of early gastric cancer] Nashimoto A, et al. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1780–8 (Eng. Abstr.) (Jpn)

[Flow-cytometric cell cycle analysis using a monoclonal antibody to bromodeoxyuridine on gastric cancer: preliminary report] Ohyama S, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):454 (Jpn)

[In vitro BrdU labeling for clinical use—flow cytometric analysis of proliferative activity in gastric cancers: preliminary report] Ohyama S, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):629 (Jpn)

[Heterotransplantation of human esophageal carcinoma in nude mice-comparison of the results between human esophageal and gastric carcinoma: preliminary report] Okumura T, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb; 90(2):314 (Jpn)

[Malignancy in gastric carcinoma, with special reference to the DNA ploidy and proliferative activity] Yonemura Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1175–80 (Eng. Abstr.) (Jpn)

[Growth and stromal changes in transplanted human gastric cancer cell lines in nude mice. Especially the role of fibroblasts] Shimizu Y. **Nippon Ika Daigaku Zasshi** 1988 Oct;55(5):505–17 (Eng. Abstr.) (Jpn)

[Proliferation of cancer cells and stromal changes in transplantable human gastric cancers in nude mice] Yoshiyuki T. **Nippon Ika Daigaku Zasshi** 1988 Oct; 55(5):491–504 (Eng. Abstr.) (Jpn)

[Gastric mucosa in patients with fundic hyperplastic polyps] Haruma K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):851–7 (Eng. Abstr.) (Jpn)

[Prostaglandin E2 and F2 alpha inhibit growth of human gastric carcinoma cell line KATOIII with simultaneous stimulation of cyclic AMP production] Nakamura A, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2694 (Jpn)

[An analysis of DNA histogram and the expression of carbohydrate antigens regarding the degree of malignancy in gastric cancer] Nishimura M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):843–50 (Eng. Abstr.) (Jpn)

[A case of gastric cancer forming a tumor embolus in the portal vein] Ozeki Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2255–60 (16 ref.) (Jpn)

[A case of synchronous Borrmann 4 type cancer of the stomach and early cancer of papilla Vateri associated with acanthosis nigricans] Saka M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):926–30 (Jpn)

[An autopsy case of primary gastric choriocarcinoma] Kinukawa N, et al. **Rinsho Byori** 1988 Nov;36(11):1340–4 (Jpn)

[Study on the gastric carcinoma within 1 cm in diameter] Yamagiwa H. **Rinsho Byori** 1988 Nov;36(11):1327–30 (Jpn)

[Two cases of gastric cancer with generalized bone metastases revealing severe ossification] Usami K, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1155–8 (Eng. Abstr.) (Jpn)

[Extensive bone marrow necrosis associated with carcinomatosis 7 years after operation for gastric cancer] Komiya I, et al. **Rinsho Ketsueki** 1989 Apr;30(4):573–7 (Eng. Abstr.) (Jpn)

[IBL-like T cell lymphoma associated with early gastric cancer: a case report] Seki Y, et al. **Rinsho Ketsueki** 1989 Jan;30(1):111–5 (Eng. Abstr.) (Jpn)

[Asynchronous quadruplicate malignancies: cancer of the stomach, breast and uterus and acute leukemia] Suzuki A, et al. **Rinsho Ketsueki** 1989 Apr;30(4):553–7 (8 ref.) (Eng. Abstr.) (Jpn)

[Gastric cancer and sigmoid colon cancer in a patient with chronic B-cell leukemia] Tagami T, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1244–9 (19 ref.) (Eng. Abstr.) (Jpn)

[Neoplasms of the stomach and small intestine of muscular origin with special reference to leiomyoblastoma in our practice] Wejman J, et al. **Patol Pol** 1988 Oct–Dec; 39(4):257–65 (Eng. Abstr.) (Pol)

[Early cancer of the stomach] Gil J, et al. **Wiad Lek** 1988 Oct 15;41(20):1396–404 (Eng. Abstr.) (Pol)

[Gastric carcinoma: autopsy of 124 cases] Barbieri Neto J, et al. **Acta Med Port** 1988 Mar–Apr;1(2):119–25 (Eng. Abstr.) (Por)

[Barrett's esophagus and cancer of the cardial section of the stomach] Chissov VI, et al. **Arkh Patol** 1988;50(8):40–6 (Eng. Abstr.) (Rus)

[Morphologic evaluation of the effectiveness of local immune reactions in gastric cancer] Dikshtein EA, et al. **Arkh Patol** 1988;50(12):24–30 (Eng. Abstr.) (Rus)

[Early cancer of the stomach (review of the literature)] Malinovskiĭ NN, et al. **Khirurgiia (Mosk)** 1988 Dec; (12):134–6 (56 ref.) (Rus)

[Diagnostic possibilities of laparoscopy in the assessment of the stage in stomach cancer] Popova TN, et al. **Khirurgiia (Mosk)** 1989 May;(5):33–4 (Eng. Abstr.) (Rus)

[Morphologic assessment of chronic gastritis in peptic ulcer and stomach cancer] Deineka SV, et al. **Klin Khir** 1988; (8):23–6 (Eng. Abstr.) (Rus)

[Malignant transformation of gastric polyps] Belogolovtsev VA, et al. **Klin Med (Mosk)** 1988 Jul;66(7):109–12 (Eng. Abstr.) (Rus)

[Cytologic diagnosis of metastases of stomach cancer during

laparoscopy] Petrova AS, et al. **Lab Delo** 1989;(6):9–11 (Eng. Abstr.) (Rus)

[Gastroscopy in the morphologic verification of cancer of the stomach] Maksimov IA, et al. **Sov Med** 1988;(11):78–81 (Rus)

[Epithelial dysplasia and cancer of the stomach] Poddubnyi BK, et al. **Sov Med** 1989;(3):34–8 (Eng. Abstr.) (Rus)

[A case of metastatic cancer en cuirasse of the skin in stomach carcinoma] Abramovich IaA, et al. **Vestn Dermatol Venerol** 1988;(6):58–9 (Eng. Abstr.) (Rus)

[The malignant transformation of gastric ulcers (review of the literature)] Portnoi LM, et al. **Vestn Rentgenol Radiol** 1988 Sep–Oct;(5):65–70 (109 ref.) (Rus)

[Morphologic data on the immune reaction of malignant tumors of the stomach] Butov IuL, et al. **Vrach Delo** 1989 May;(5):46–8 (Eng. Abstr.) (Rus)

[Epithelial dysplasia of the gastric mucosa in infiltrative cancer] Butov IuL, et al. **Vrach Delo** 1988 Oct;(10):46–9 (Eng. Abstr.) (Rus)

[Eosinophilia in a patient with a malignant neoplasm] Krasiuk MN. **Vrach Delo** 1988 Dec;(12):34 (Rus)

[Capillary hemangioma of the stomach] Shuliarenko VA, et al. **Vrach Delo** 1988 Nov;(11):19–20 (Rus)

[Gastric dysplasia: its incidence in precancerous conditions, advanced cancer and early cancer] Hojman D, et al. **Acta Gastroenterol Latinoam** 1988;18(4):231–48 (Eng. Abstr.) (Spa)

[Gastric tumors of muscular origin] Rodríguez Montes JA. **An R Acad Nac Med (Madr)** 1988;105(4):445–60 (33 ref.) (Spa)

[Gastric cancer. II. Pathological anatomy] Sanz Anquela JM, et al. **Med Clin (Barc)** 1989 Jan 28;92(3):104–10 (59 ref.) (Spa)

[Palatal tumor as the first manifestation of gastric cancer (letter)] Arjona R, et al. **Rev Clin Esp** 1989 Jan;184(1):52–3 (Spa)

[Pathologic anatomy of gastric cancer. Review of a series of 246 cases] Almajano Martínez C, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):441–6 (Eng. Abstr.) (Spa)

[Preneoplastic lesions associated with carcinoma of the stomach: retrospective study of 125 gastrectomy pieces] Anquela JM, et al. **Rev Esp Enferm Apar Dig** 1989 Jun; 75(6 Pt 2):676–9 (Eng. Abstr.) (Spa)

[Leiomyoblastoma of the stomach: an infrequent muscular tumor] Camps C, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):503–6 (42 ref.) (Eng. Abstr.) (Spa)

[Metachronic carcinoma of the colon associated with previous gastric carcinoma] López Zaborras J, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):553–5 (Eng. Abstr.) (Spa)

[Gastric pancreatic heterotopias] Manuel Palazuelos JC, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):652–4 (Eng. Abstr.) (Spa)

[Superficial gastric carcinoma. Clinical analysis] Medina E, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):348–52 (Eng. Abstr.) (Spa)

[Analysis of early carcinoma of the stomach] Moreto M, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):457–8 (3 ref.) (Eng. Abstr.) (Spa)

[Non-functioning malignant gastric carcinoid] Pérez Blanco FJ, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):655–8 (41 ref.) (Eng. Abstr.) (Spa)

[Gastric lymphoma–pseudolymphoma] Ruiz-Cabello JM, et al. **Rev Esp Enferm Apar Dig** 1988 May;73(5 Pt 2):623–4 (Eng. Abstr.) (Spa)

[Endoscopic study of the inflammatory gastric fibroid polyp. Analysis of 15 cases] Zaballa M, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):687–90 (Eng. Abstr.) (Spa)

[Gastric cancer in subjects under 35 years of age.rs of age. Report on 19 cases] Ramírez Guerrero A, et al. **Rev Gastroenterol Mex** 1988 Oct–Dec;53(4):261–5 (Eng. Abstr.) (Spa)

[Anatomoclinical case. A 40-year-old man with thoraco-abdominal giant hemangioma, history of infracondylar amputation of legs, loss of weight, abdominal pain and ascites] Manffrini Madrid F, et al. **Rev Invest Clin** 1988 Oct–Dec;40(4):433–8 (Spa)

PHYSIOPATHOLOGY

Excised human neoplastic tissues are more sensitive to heat than the adjacent normal tissues. Maehara Y, et al. **Eur Surg Res** 1988;20(4):254–9

Difference in main lymphatic pathways from the lower esophagus and gastric cardia. Aikou T, et al. **Jpn J Surg** 1989 May;19(3):290–5

[Spectral characteristics of electrogastrography in gastric cancer. Possibilities of screening] Giorgio I, et al. **Pathol Biol (Paris)** 1988 Dec;36(10):1211–6 (Eng. Abstr.) (Fre)

[The spectral component of electrogastrography (EGG): factors of variation in normal subjects, and in patients with cancer and ulcers] Giorgio I, et al. **Pathol Biol (Paris)** 1989 Jun;37(6):712–9 (Eng. Abstr.) (Fre)

[Surface electrogastrography (EGG) in cancer: influence of the localization and tumor characteristics on the spectral components of the signal] Lemaire MC, et al. **Pathol Biol (Paris)** 1989 Jan;37(1):25–34 (Eng. Abstr.) (Fre)

[Stomach cancer in pregnancy] Alberti P, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):171–7 (Eng. Abstr.) (Ita)

[Lymphatic flow of the remnant stomach] Noguchi Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):852–62 (Eng. Abstr.) (Jpn)

[Hydrochloric acid and pepsin secretion in surgically treated patients with cancer of the stomach] Snarska J, et al. **Nowotwory** 1988 Apr–Jun;38(2):101–8 (Eng. Abstr.) (Pol)

PREVENTION & CONTROL

Gastric stump carcinoma—is prophylactic screening indicated? Fischer A, et al. **Acta Chir Scand Suppl** 1988; 547:86–7

A long-term follow-up study of patients with gastric cancer detected by mass screening. Yamazaki H, et al. **Cancer** 1989 Feb 15;63(4):613–7

Precursor lesions of the GI tract and psychosocial risk factors for prediction and prevention of gastric cancer. Grossarth-Maticek R, et al. **Cancer Detect Prev** 1988; 13(1):23–9

The epidemiology and primary prevention of gastric and esophageal cancer. A worldwide perspective. Frank-Stromborg M. **Cancer Nurs** 1989 Apr;12(2):53–64

Effect of 6-hydroxydopamine on gastric carcinogenesis and tetragastrin inhibition of gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Cancer Res** 1989 Aug 1;49(15):4199–203

Inhibition of N-nitrosodiethylamine carcinogenesis in mice by naturally occurring organosulfur compounds and monoterpenes. Wattenberg LW, et al. **Cancer Res** 1989 May 15;49(10):2689–92

Protective effect of oral cysteamine against induction of gastric cancer by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Eur J Cancer Clin Oncol** 1989 Jan;25(1):91–7

Reduction of benzo[a]pyrene-induced forestomach neoplasms in mice given nitrite and dietary soy sauce. Benjamin H, et al. **Food Chem Toxicol** 1988 Aug; 26(8):671–8

The inhibitory effect of thioproline on carcinogenesis induced by N-benzylmethylamine and nitrite. Tahira T, et al. **Food Chem Toxicol** 1988 Jun;26(6):511–6

Effects of propranolol and cimetidine on cysteamine inhibition of gastric carcinogenesis induced in Wistar rats by N-methyl-N'-nitro-N-nitrosoguanidine. Tatsuta M, et al. **Int J Cancer** 1989 Mar 15;43(3):464–7

Allium vegetables and reduced risk of stomach cancer. You WC, et al. **J Natl Cancer Inst** 1989 Jan 18;81(2):162–4

[How can we make mass-screening of stomach cancer more efficient using epidemiological results?] Kikuchi S, et al. **Gan No Rinsho** 1989 Jan;35(2):202–6 (Eng. Abstr.) (Jpn)

[Prevention of stomach cancer] Osima A. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2142–8 (38 ref.) (Eng. Abstr.) (Jpn)

[A retrospective study on the findings of indirect fluorography in gastric cancer with special reference to the course and interval of gastric mass surveys] Kusano K. **Igaku Kenkyu** 1988 Jun;58(3):125–37 (Eng. Abstr.) (Jpn)

[The detection rate of early gastric cancer according to the methods of mass survey examination] Asaki S, et al. **Nippon Rinsho** 1989 May;47(5):990–5 (Jpn)

[A new surgical method to treat reflux gastritis and prevent gastric carcinoma] Veiga-Fernandes F, et al. **Acta Med Port** 1988 Jan–Feb;1(1):9–15 (Eng. Abstr.) (Por)

[Inhibiting effect of thymogen on the development of tumors of the esophagus and forestomach induced by N-nitrososarcosine ethyl ester in rats] Bespalov VG, et al. **Eksp Onkol** 1989;11(4):23–6 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Left gastric and coeliac lymph nodes: a problem area for C.T. staging of carcinoma of the gastro-oesophageal junction. Lee WB. **Australas Radiol** 1988 May;32(2):230–1

Ossified leiomyoma of the stomach: demonstration on computed tomography. Savit RM, et al. **Br J Radiol** 1989 Jan;62(733):79–80

Air contrast CT for evaluating gastric carcinoma. Li SN, et al. **Chin Med J [Engl]** 1988 Jun;101(6):391–7

Computed tomography of gastric lymphoma. Tiu CM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;42(6):463–8

Endoscopic indirect lymphography in gastric cancer. Karanov SI. **Endoscopy** 1988 Sep;20(5):241–3

Exogastric neurilemmoma presenting as acute abdomen: role of computed tomography in diagnosis. Nussinson E, et al. **Gastrointest Radiol** 1988 Oct;13(4):306–8

Computed tomography of the stomach with water as an oral contrast agent: technique and preliminary results. Baert AL, et al. **J Comput Assist Tomogr** 1989 Jul–Aug; 13(4):633–6

Thickened gastric walls showing diffuse low attenuation on CT. Miyake H, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):253–5

Multiple gastric adenomas. Davis M, et al. **Radiat Med** 1988 Sep–Oct;6(5):197–9

The gastric bubble: roentgen observations. Gurney JW, et al. **Radiographics** 1989 May;9(3):467–85

Cyst formation in gastric heterotopic pancreas: report of two cases. Claudon M, et al. **Radiology** 1988 Dec;169(3):659–60

Gallbladder metastasis: CT appearance. Ferrozzi F, et al. **Rays** 1988 May–Aug;13(2):23–5

Malignant giant gastric ulcer in a Nigerian. Olubuyide IO, et al. **Trop Geogr Med** 1989 Jan;41(1):85–8

[The x-ray detection of carcinoma in the esophagogastric zone] Kuus EM, et al. **Radiol Diagn (Berl)** 1989; 30(2):127–32 (Eng. Abstr.) (Ger)

[A cystic epigastric tumor? A differentiated urothelial carcinoma on the left with growth into a large pancreatic pseudocyst] Frahm R, et al. **Radiologe** 1988 Aug; 28(8):399–400 (Ger)

[Computed tomography of a neurinoma of the gastric wall] Doringer E, et al. **ROFO** 1989 Aug;151(2):235–6 (Ger)

[A study on radiological mucosal patterns of flat and depressed type early gastric cancers—with special references to the differences between mucosal patterns of the affected mucosal regions and of the adjacent non-cancerous mucosa] Arimura K. **Igaku Kenkyu** 1988 Apr;58(2):47–64 (Eng. Abstr.) (Jpn)

[Radiological study on early gastric cancer in the cardia] Higo K. **Igaku Kenkyu** 1988 Oct;58(5):250–66 (Eng. Abstr.) (Jpn)

[On diagnostic ability of routine X-ray examination to pick up undifferentiated type IIc early gastric cancers and advanced cancers analogous to type IIc in the body and upper part of the stomach—with special references to the early detection of linitis plastica type gastric cancers] Sakaki N. **Igaku Kenkyu** 1988 Sep;58(4):219–35 (Eng. Abstr.) (Jpn)

[A study on the gastric carcinoma in mass survey—with special reference to the position and the visualizing ability of indirect fluororadiography] Shinmaki K. **Igaku Kenkyu** 1988 Jun;58(3):138–50 (Eng. Abstr.) (Jpn)

[A case of gastric lipoma diagnosed with CT scan] Nakayama M, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1023–6 (19 ref.) (Eng. Abstr.) (Jpn)

[Evaluation of computed tomography in the preoperative staging of gastric cancer] Oshima T, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1555–9 (Eng. Abstr.) (Jpn)

[Computed tomographic evaluation of metastatic and primary ovarian tumors] Wakabayashi Y, et al. **Rinsho Hoshasen** 1988 Aug;33(8):885–8 (Eng. Abstr.) (Jpn)

[Usefulness of computerized tomography in the diagnosis of gastric tumors] Bem Z, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jan–Feb;52(1):15–8 (Eng. Abstr.) (Pol)

[Paraneoplastic polyarthritis revealing gastric cancer] Constantinoiu S, et al. **Rev Chir [Chir]** 1988 Nov–Dec; 37(6):441–6 (Eng. Abstr.) (Rum)

[Radiologic aspects and forms found in gastric cancer] Sturdza M, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):563–5 (Eng. Abstr.) (Rum)

[The role of x-ray examination in the detection of early cancer of the stomach] Fridman EG, et al. **Sov Med** 1988; (9):86–9 (Rus)

[X-ray diagnosis of diseases of the stomach based on fine-relief data] Zubarev AV, et al. **Vestn Rentgenol Radiol** 1988 Sep–Oct;(5):19–23 (Eng. Abstr.) (Rus)

[A 63-year-old man with melena] Diego Rey P, et al. **Rev Clin Esp** 1988 Jun;183(1):35–6 (Spa)

[Gastric leiomyosarcoma] Manuel Palazuelos JC, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):210–4 (Eng. Abstr.) (Spa)

RADIONUCLIDE IMAGING

[Clinico-radionuclide study of cerebral blood circulation in cancer patients in the postoperative period] Bolko IP. **Med Radiol (Mosk)** 1989 May;34(5):13–5 (Eng. Abstr.) (Rus)

RADIOTHERAPY

Intraoperative and external beam radiotherapy in advanced resectable gastric cancer: technical description and preliminary results. Calvo FA, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):183–9

[Palliative treatment of malignant stenoses of the esophagus and cardia: laser therapy versus laser + high-dose-rate Iridium 192 afterloading therapy. A prospective randomized study] Ries G, et al. **Strahlenther Onkol** 1989 Aug;165(8):584–6 (Eng. Abstr.) (Ger)

[Interdisciplinary therapy concepts—esophagus and cardia cancer (radiation therapy)] Ernst H, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:58–9 (Ger)

REHABILITATION

[Effect of diet and drug therapy on the rehabilitation processes in patients who have undergone radical surgery for stomach tumor] Loranskaia TI, et al. **Vopr Pitan** 1988 Sep–Oct;(5):14–8 (Eng. Abstr.) (Rus)

SECONDARY

Hepatocellular carcinoma metastatic to the stomach presenting as bleeding multiple craterogenic ulcers. Lynch P, et al. **Am J Gastroenterol** 1989 Jun;84(6):653–5

Esophageal carcinoma multiplex with gastric metastasis. Davis M, et al. **Gastrointest Radiol** 1989 Winter;14(1):6–8

Secondary Hodgkin's lymphoma of stomach (a case report).

Kapote S, et al. **J Postgrad Med** 1988 Jul;34(3):188–9 (4 ref.)

Gastric metastases from breast cancer: a case report. Cascinu S, et al. **Tumori** 1989 Apr 30;75(2):150–1

[Gastric metastases of cancer of the breast. Apropos of a case. Review of the literature] Navarrete E, et al. **J Chir (Paris)** 1989 May;126(5):294–300 (27 ref.) (Eng. Abstr.) (Fre)

[Stomach hemorrhage—a leading symptom of metastatic choriocarcinoma] Bartenstein O, et al. **Med Klin** 1988 Jul 15;83(15):473–4 (Ger)

[An autopsy case of gastric metastasis simulating linitis plastica carcinoma from primary linitis plastica carcinoma of the rectum] Kondo K, et al. **Gan No Rinsho** 1988 Nov; 34(14):1996–2001 (20 ref.) (Eng. Abstr.) (Jpn)

[A case of cystadenocarcinoma of the liver complicated by gastric cancer—a review of 83 cases of primary cystic liver cancer in the literature] Morokoshi Y, et al. **Gan No Rinsho** 1988 Aug;34(9):1174–84 (38 ref.) (Eng. Abstr.) (Jpn)

[An autopsy revealing hepatocellular carcinoma with solitary metastatic gastric cancer] Nishio M, et al. **Gan No Rinsho** 1989 Jan;35(2):298–304 (Eng. Abstr.) (Jpn)

[A case of gastric metastases from carcinoma of the breast] Shimizu S, et al. **Gan No Rinsho** 1988 Aug;34(9):1163–8 (Eng. Abstr.) (Jpn)

[A case of superficial esophageal cancer with an intramural metastasis to the gastric wall] Takano Y, et al. **Gan No Rinsho** 1989 Jul;35(8):948–54 (11 ref.) (Eng. Abstr.) (Jpn)

[A case of remote metastasis of myxoid rhabdomyosarcoma of the ovary in the gastric wall] Reziapkin VV, et al. **Vestn Rentgenol Radiol** 1988 Sep–Oct;(5):87–8 (Rus)

SECRETION

[Multifocal gastric carcinoid associated with anemia caused by vitamin B12 deficiency: demonstration of in situ production of serotonin (letter)] Fraitag S, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):863–4 (6 ref.) (Fre)

[Gastric acid secretions and serum gastrin levels in patients with mucosal and submucosal gastric cancers] Ogoshi K, et al. **Gan No Rinsho** 1989 Aug;35(9):999–1003 (Eng. Abstr.) (Jpn)

[Gastric acid secretion and cellular immunity in patients with gastric cancer] Ogoshi K, et al. **Gan No Rinsho** 1989 Mar; 35(4):450–4 (Eng. Abstr.) (Jpn)

SURGERY

Complete ten-year postgastrectomy follow-up of early gastric cancer. Itoh H, et al. **Am J Surg** 1989 Jul;158(1):14–6

Radioimmunoguided surgery using monoclonal antibody. Martin EW Jr, et al. **Am J Surg** 1988 Nov;156(5):386–92

Advanced gastric leiomyosarcoma. Estes NC, et al. **Am Surg** 1989 Jun;55(6):353–5

Thoracoabdominal approach for cure of patients with an adenocarcinoma in the upper third of the stomach. Okamura T, et al. **Am Surg** 1989 Apr;55(4):248–51

Outcome of failure in clearing the oesophageal margin in total gastrectomy for adenocarcinoma. Goh HS, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):69–71

Synchronous primary hepatocellular carcinoma and multiple early gastric cancer—a case report. Ng BL, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):101–3

Total versus subtotal gastrectomy for adenocarcinoma of the gastric antrum. A French prospective controlled study. Gouzi JL, et al. **Ann Surg** 1989 Feb;209(2):162–6

Is extensive lymphadenectomy necessary for surgical treatment of intramucosal carcinoma of the stomach? Iriyama K, et al. **Arch Surg** 1989 Mar;124(3):309–11

Results of operative treatment of gastrointestinal tract tumors in patients over 80 years of age. Morel P, et al. **Arch Surg** 1989 Jun;124(6):662–4

Away with leniency toward gastric pseudolymphoma [letter] Sternberg A, et al. **Arch Surg** 1989 Jun;124(6):751–2

Carney's triad. McLaughlin SJ, et al. **Aust N Z J Surg** 1988 Aug;58(8):679–81 (10 ref.)

Improving the results of treating gastric cancer. Milewski PJ, et al. **BMJ** 1989 Jul 29;299(6694):278–9 (9 ref.)

Parietal cell carcinoma of the stomach: association with long-term survival after curative resection. Byrne D, et al. **Br J Cancer** 1988 Jul;58(1):85–7

Gastric cancer: a 25-year review. Allum WH, et al. **Br J Surg** 1989 Jun;76(6):535–40

Preventive preoperative chemotherapy with ceftriaxone or cefotaxime in abdominal surgery. Blatzas G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):591

Surgery and current management for cancer of the esophagus and cardia. DeMeester TR, et al. **Curr Probl Cancer** 1988 Sep–Oct;12(5):243–328 (187 ref.)

Surgery and current management for cancer of the esophagus and cardia: Part II. DeMeester TR, et al. **Curr Probl Surg** 1988 Aug;25(8):535–605 (207 ref.)

Surgery and current management for cancer of the esophagus and cardia: Part I. DeMeester TR, et al. **Curr Probl Surg** 1988 Jul;25(7):475–531 (207 ref.)

Endoscopic gastroduodenal polypectomy. Bátovský M, et al. **Czech Med** 1988;11(3):157–67

Unusual exogastric leiomyoblastoma. Saku M, et al. **Fukuoka Igaku Zasshi** 1988 Aug;79(8):647–53

Principles of radical surgery in gastric carcinoma. Fass J, et al. **Hepatogastroenterology** 1989 Feb;36(1):13–7

Gastric cancer in elderly patients—results of surgical treatment. Habu H, et al. **Hepatogastroenterology** 1989 Apr; 36(2):71–4

The role of total gastrectomy in locally advanced gastric carcinoma. Jain V, et al. **Hepatogastroenterology** 1989 Apr; 36(2):63–5

Surgery and adjuvant chemotherapy for gastric cancer. Nakajima T, et al. **Hepatogastroenterology** 1989 Apr; 36(2):79–85 (21 ref.)

Japan gastric trials in intraoperative radiation therapy. Abe M, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec; 15(6):1431–3

Gastric cancer: views and overviews. Smith EB. **J Natl Med Assoc** 1989 Jun;81(6):707–9

Gastric carcinoids. Aman S, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):325–7

Colloquium: modern appraisal for surgery of gastric cancer. Davies GC. **J R Coll Surg Edinb** 1989 Apr;34(2):106–8

Morbidity and mortality associated with intraoperative radiotherapy. Avizonis VN, et al. **J Surg Oncol** 1989 Aug; 41(4):240–5

Palliative and curative surgical therapy of malignant stenoses of the esophagus and cardia. Sons HU, et al. **J Surg Oncol** 1989 Mar;40(3):162–9

Preoperative nutritional assessment to predict postoperative complication in gastric cancer patients. Yamanaka H, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun; 13(3):286–91

Diaphragmatic reconstruction using a latissimus dorsi muscle flap following wide resection of the diaphragm combined with esophago–gastrectomy for cardial cancer. Fujita H, et al. **Jpn J Surg** 1988 Jul;18(4):480–1

Multiple organ failure without sepsis following surgical treatment of advanced gastric carcinoma. Miyashita M, et al. **Jpn J Surg** 1988 Nov;18(6):705–8

A case of a postoperative aneurysm of the common hepatic artery which ruptured into the remnant stomach after a radical gastrectomy. Satoh H, et al. **Jpn J Surg** 1989 Mar; 19(2):241–5

Surgery for gastric cancer [letter] Sagar PM, et al. **Lancet** 1989 Jan 21;1(8630):165

The changes of fat absorption after resection for carcinoma of the gastric cardia—a comparison between total and proximal subtotal gastrectomy. Zhang YT, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(4):232–5

Oesophagectomy without thoracotomy. Experiences from 30 cases. Hambraeus GM, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):216–9

Total gastrectomy for gastric carcinoma. Brando CR, et al. **South Med J** 1989 Aug;82(8):973–6 (17 ref.)

Clinical evaluation of laser endoscopy for the treatment of gastric tumors. Suguro M, et al. **Surg Endosc** 1987; 1(3):131–8

Trends and controversies in the management of carcinoma of the stomach. Adam YG, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):371–85 (135 ref.)

Strategy for lymphadenectomy of gastric cancer. Boku T, et al. **Surgery** 1989 May;105(5):585–92

Antrectomy for multicentric, argyrophil gastric carcinoids: a preliminary report. Eckhauser FE, et al. **Surgery** 1988 Dec;104(6):1046–53

Intraoperative chemotherapy with carbon particles adsorbing mitomycin C for gastric cancer with peritoneal dissemination in rabbits. Hagiwara A, et al. **Surgery** 1988 Nov;104(5):874–81

Lymph node involvement as the only prognostic factor in curative resected gastric carcinoma: a multivariate analysis. Msika S, et al. **World J Surg** 1989 Jan–Feb;13(1):118–23; discussion 123

Endoscopic laser therapy in the curative and palliative treatment of upper gastrointestinal cancer. Suzuki H, et al. **World J Surg** 1989 Mar–Apr;13(2):158–64

[Radical surgical treatment of stomach carcinoma] Dudunkov Z, et al. **Khirurgiia (Sofiia)** 1989;42(1):7–12 (Bul)

[Radical total gastrectomy and improved operation in gastric cancer] Lao YH. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):53–6 (Eng. Abstr.) (Chi)

[Surgical management of adenocarcinoma of the gastric cardia—experience in 937 patients] Zhang DW. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):376–8 (Eng. Abstr.) (Chi)

[Inversion-stripping esophagectomy for treatment of hypopharyngeal, esophageal and cardial carcinomas] Yang JJ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun; 19(2):210–2 (Eng. Abstr.) (Chi)

[The effect of gastrectomy on cholecystokinin (CCK) release and gallbladder contraction in patients with early gastric cancer—preliminary report] Huang YS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Jun; 5(6):330–4 (Eng. Abstr.) (Chi)

[Late reoperation in patients with carcinoma of the esophagus and cardia] Pelíková M, et al. **Rozhl Chir** 1989 Feb; 68(2):67–71 (Eng. Abstr.) (Cze)

[Nd:YAG laser treatment of cancer of the esophagus and cardia] Schulze S, et al. **Ugeskr Laeger** 1989 Apr 17; 151(16):989–91 (Eng. Abstr.) (Dan)

[Construction of a jejunal pouch using stapling technics in total gastrectomy] Haeck L, et al. **Acta Chir Belg** 1988 May–Jun;88(3):147–50 (Eng. Abstr.) (Dut)

[The prognosis of (early) carcinoma of the stomach] Gouma DJ, et al. **Ned Tijdschr Geneeskd** 1988 Dec 10; 132(50):2278–83 (Eng. Abstr.) (Dut)

[Esophagectomy without thoracotomy using a stripping method: technic, results, indications in benign and malignant diseases of the esophagus] Apoil B, et al. **Ann Chir** 1989;43(1):10–4 (Eng. Abstr.) (Fre)

[Cancer of the stomach. Retrospective and prognostic study apropos of 210 surgically treated patients] Bouillot JL, et al. **Ann Chir** 1988;42(6):395–401 (Eng. Abstr.) (Fre)

[Total gastrectomy versus partial gastrectomy of adenocarcinoma of the antrum. A French prospective controlled study] Gouzi JL, et al. **Ann Chir** 1989; 43(5):356–60 (19 ref.) (Eng. Abstr.) (Fre)

[Results of a follow-up of 200 patients with gastric cancer treated surgically] Huguier M. **Ann Gastroenterol Hepatol (Paris)** 1989 Jun–Sep; 25(4):151–4 (Fre)

[Benign gastric muscular tumors. Apropos of a surgical series of 22 cases] Leborgne J, et al. **Chirurgie** 1988;114(5):405–14 (26 ref.) (Eng. Abstr.) (Fre)

[Total gastrectomy and infraserous cancer of the stomach] Spay G, et al. **Chirurgie** 1988;114(6):473–81 (58 ref.) (Eng. Abstr.) (Fre)

[Gastric adenocarcinoma surgically treated. A multivariate analysis of prognostic factors] Elias D, et al. **Gastroenterol Clin Biol** 1988 Oct;12(10):729–35 (37 ref.) (Eng. Abstr.) (Fre)

[Cancer of the esophago–gastric area. Palliative resection and anastomosis by laparotomy alone] Cosendey BA, et al. **Helv Chir Acta** 1989 Jan;55(5):703–6 (Eng. Abstr.) (Fre)

[Adenocarcinoma of the cardia] Cuttat JF. **Helv Chir Acta** 1989 Jan;55(5):699–702 (Eng. Abstr.) (Fre)

[Lymphadenectomy in stomach cancer] Denecke H. **Chirurg** 1989 Mar;60(3):133–8 (15 ref.) (Ger)

[Intestino–esophageal reflux following gastrectomy. Mechanism of action and effectiveness of esophago–jejunoplication] Feussner H, et al. **Chirurg** 1988 Oct;59(10):665–9 (Eng. Abstr.) (Ger)

[Primary extranodal non-Hodgkin lymphoma of the stomach. Value of surgery within the scope of a multimodality treatment concept] Roder JD, et al. **Chirurg** 1989 Mar; 60(3):157–62 (Eng. Abstr.) (Ger)

[Locally advanced cardia carcinoma—is resection worthwhile?] Hölscher AH, et al. **Dtsch Med Wochenschr** 1989 Jun 30;114(26):1021–6 (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in tumors of the stomach] Häring R, et al. **Langenbecks Arch Chir** 1988; Suppl 2:275–81 (18 ref.) (Eng. Abstr.) (Ger)

[Surgical treatment of early stomach cancer] Junginger T, et al. **Langenbecks Arch Chir** 1989;374(3):175–80 (Eng. Abstr.) (Ger)

[Diagnosis and surgical therapy of primary and secondary lymphomas of the stomach] Strohmeyer T, et al. **Med Klin** 1988 Jun 17;83(13–14):429–33 (Eng. Abstr.) (Ger)

[Interdisciplinary therapy concepts in gastrointestinal tumors: esophagus/cardia] Hirner A, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:53–5 (33 ref.) (Ger)

[Interdisciplinary therapy concepts in gastrointestinal tumors: stomach] Meyer HJ, et al. **Z Gastroenterol [Verh]** 1989 Jul; 24:60–5 (Ger)

[Stomach cancer following gastroenterostomy] Demirkol K, et al. **Zentralbl Chir** 1988;113(22):1472–5 (Eng. Abstr.) (Ger)

[Long-term survival after radical surgery for cancer of the stomach: multifactorial evaluation] Lesti G, et al. **Ann Ital Chir** 1987;59(1–6):143–7 (Eng. Abstr.) (Ita)

[Early gastric cancer] Bonfanti G, et al. **Minerva Chir** 1989 Feb 15;44(3):329–32 (20 ref.) (Ita)

[4 cases of gastric leiomyoblastoma] Bonfiglio S, et al. **Minerva Chir** 1988 Apr 15;43(7):611–8 (Eng. Abstr.) (Ita)

[Primary malignant non-Hodgkin's lymphoma of the stomach. Case series contribution] Bordone N, et al. **Minerva Chir** 1989 Apr 30;44(8):1217–24 (Eng. Abstr.) (Ita)

[Giant leiomyoma of the stomach. Presentation of a clinical case] D'Elia F, et al. **Minerva Chir** 1988 Dec 31; 43(23–24):2099–101 (Eng. Abstr.) (Ita)

[Diagnostic and therapeutic considerations in early gastric cancer] Di Mauro S, et al. **Minerva Chir** 1989 Apr 30; 44(8):1225–8 (Eng. Abstr.) (Ita)

[Early gastric cancer: total gastrectomy versus resection. Analysis of the results of a multicenter study of 271 cases] Garofalo A, et al. **Minerva Chir** 1989 Feb 15;44(3):325–8 (Ita)

[Gastric leiomyosarcoma] Ghisotti E, et al. **Minerva Chir** 1988 Jun 30;43(12):1065–8 (Eng. Abstr.) (Ita)

[Surgical results in the treatment of early gastric cancer] Guerrera C, et al. **Minerva Chir** 1988 Jul 31; 43(13–14):1133–7 (Eng. Abstr.) (Ita)

[Carcinoma of the esophagogastric junction] Soliani P, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2029–40 (Eng. Abstr.) (Ita)

[Gastric polyps: endoscopic and surgical treatment] Spinoglio G, et al. **Minerva Chir** 1989 May 31;44(10):1473–4 (Eng. Abstr.) (Ita)

[Role of postoperative peripheral parenteral nutrition in

gastric surgery in malnourished patients with cancer] Talpacci A, et al. **Minerva Chir** 1988 Sep 30;43(18):1463–7 (Eng. Abstr.) (Ita)

[Total gastrectomy in cancer. 10 years' experience] Zanghi M, et al. **Minerva Chir** 1989 Feb 15;44(3):341–5 (17 ref.) (Ita)

[Carcinoma of the esophagogastric junction. Our experience] Formisano C, et al. **Minerva Med** 1989 Jul;80(7):781–4 (Ita)

[Gastric leiomyoblastoma] Lupattelli R, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):157–60 (Eng. Abstr.) (Ita)

[The significance and the indication to dissect para-aortic lymph nodes in esophageal and cardiac cancers] Aikou T, et al. **Gan No Rinsho** 1988 Oct;34(12):1677–83 (Eng. Abstr.) (Jpn)

[A rare case of metastasis of the spleen from recurrent cancer of the residual stomach] Fujita M, et al. **Gan No Rinsho** 1989 Jun;35(7):855–60 (Eng. Abstr.) (Jpn)

[A case report of brain metastasis due to an advanced gastric cancer] Kojima Y, et al. **Gan No Rinsho** 1988 Oct; 34(12):1731–4 (Eng. Abstr.) (Jpn)

[Possibility of performing a modified operation on the depressed type early gastric carcinoma] Kumagai K, et al. **Gan No Rinsho** 1989 May;35(6):677–83 (Eng. Abstr.) (Jpn)

[Treatment of stomach cancer] Nishi M, et al. **Gan No Rinsho** 1989 Jan;Spec No:221–32 (Jpn)

[Intraoperative chemotherapy against peritoneal dissemination of gastric cancer with intraperitoneal activated carbon particles adsorbing mitomycin C] Hagiwara A, et al. **Gan To Kagaku Ryoho** 1989 Feb; 16(2):187–92 (Eng. Abstr.) (Jpn)

[Gastric remnant cancer—physical and laboratory examination and results of treatment] Ishibiki K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1299–302 (Eng. Abstr.) (Jpn)

[Intraoperative chemotherapy with intraperitoneal activated carbon particles adsorbing mitomycin C against peritoneal dissemination of gastric cancer] Iwamoto A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2748–51 (Eng. Abstr.) (Jpn)

[Adjuvant chemotherapy for gastric cancer—the third study. First report: central randomization by telephone method and analysis of patients' background factors] Kunii Y, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):349–55 (Eng. Abstr.) (Jpn)

[Evaluation and problems of second-look operations in resectable gastric cancer] Niimoto M, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1295–8 (Eng. Abstr.) (Jpn)

[Extended operations in cancer—gastric cancer] Takagi K. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1051–8 (Eng. Abstr.) (Jpn)

[Clinical study of postoperative infection of gastrointestinal cancer. Randomized study of preventive efficacy of cefmetazole versus cephalothin in postoperative infection of gastric and colorectal cancer] Kikuchi K, et al. **Jpn J Antibiot** 1988 Oct;41(10):1480–92 (Eng. Abstr.) (Jpn)

[Effect of mitomycin given in massive dose intraoperatively in cases of gastric cancer as assessed in terms of postoperative serum LDH isoenzyme patterns] Asaki S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20; 23(7):1503–11 (Eng. Abstr.) (Jpn)

[Dosage and its safety in intraperitoneal high dose mitomycin C administration as postoperative adjuvant therapy for gastric cancer] Hiratsuka M, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1574–9 (Eng. Abstr.) (Jpn)

[Extended treatment for gastric cancer patients with peritoneal seeding] Fujimoto S, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1524–7 (Eng. Abstr.) (Jpn)

[A clinicopathological study on conservative surgery and extended surgery for gastric cancer] Furukawa H, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1531–4 (Eng. Abstr.) (Jpn)

[Extension and reduction of surgery of cancer occupying mainly the upper third part of the stomach—indications and limitations] Hirose S, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1517–20 (Eng. Abstr.) (Jpn)

[Modified radical lymph node dissection in the treatment of gastric cancer invading the gastric serosa] Kaibara N, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1521–3 (Eng. Abstr.) (Jpn)

[Relative non curative resection of gastric cancer] Kodama M, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):513–6 (Eng. Abstr.) (Jpn)

[Study on the lymphatic flow of the lower gastric region for radical lymphadenectomy in advanced lower gastric cancer] Kodama M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1008–13 (Eng. Abstr.) (Jpn)

[Evaluation of water-electrolyte metabolism in patients with upper GI tract cancer—the dynamic status of secretion of alpha-hANP levels] Kojima Y. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1603–10 (Eng. Abstr.) (Jpn)

[Stratified removal of the lymph nodes during resection of advanced carcinoma in the upper part of the stomach] Suzuki H. **Nippon Geka Gakkai Zasshi** 1988 Sep; 89(9):1513–6 (Eng. Abstr.) (Jpn)

[Examination of 400 cases of early gastric cancer—appropriate operation in view of follow-up observations] Takano M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):999–1007 (Eng. Abstr.) (Jpn)

["Super-extensive lymph node dissection" for advanced gastric cancer] Tokuda H, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1528–30 (Eng. Abstr.) (Jpn)

[Lymph node metastasis of early gastric cancer and lymph node dissection] Yoshikawa T, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1506–8 (Eng. Abstr.) (Jpn)

[Modified operation for early gastric cancer; rationale, technic and results] Yoshino K, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1509–12 (Eng. Abstr.) (Jpn)

[Endoscopic treatment of early gastric cancer in patients undergoing chronic hemodialysis] Yamamoto S, et al. **Nippon Jinzo Gakkai Shi** 1989 Mar;31(3):287–92 (Eng. Abstr.) (Jpn)

[What happens to gastric surgery?] Ernøp E, et al. **Nord Med** 1988;103(10):270–2 (Eng. Abstr.) (Nor)

[Value of ultrasonographic examination in monitoring the treatment of advanced cancer of the stomach] Wojnar J, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jul–Oct; 52(4–5):216–8 (Eng. Abstr.) (Pol)

[Management and early results of treatment of cancer of the stomach] Górnicki K. **Wiad Lek** 1988 Sep 1;41(17):1133–7 (Eng. Abstr.) (Pol)

[2 benign proliferative diseases of the stomach with a major surgical solution: hypertrophic gastropathy with giant folds and diffuse gastric polyposis] Rădulescu D, et al. **Rev Chir [Chir]** 1988 Sep–Oct;37(5):379–86 (Eng. Abstr.) (Rum)

[Choice of the level of duodenal resection in cancer of the distal part of the stomach] Karazhigitov MF, et al. **Khirurgiia (Mosk)** 1989 May;(5):118–20 (Rus)

[Experience in the use of cuff-like esophago-small intestine anastomosis in gastrectomy for cancer] Klimenkov AA, et al. **Khirurgiia (Mosk)** 1989 May;(5):109–11 (Rus)

[Cancer of the stomach in patients over 70 years of age] Pavlova ZV, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):58–61 (Eng. Abstr.) (Rus)

[Recovery from cancer of the stomach with Virchow's metastasis] Turgunov MB. **Khirurgiia (Mosk)** 1988 Nov; (11):111–2 (Rus)

[Complications in the combination treatment of cancer of the proximal portion of the stomach] Volkov ON, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):104–6 (Rus)

[A large leiomyoma of the esophagogastric junction] Kharitonov VA, et al. **Klin Khir** 1988;(10):66 (Rus)

[The stress reaction to surgical trauma in peptic ulcer and stomach cancer patients depending on the nature of the preoperative preparation] Makshanov IIa, et al. **Klin Khir** 1988;(8):65–6 (Rus)

[Potentialities of a fluorescent method in determining the completeness of resection of the stomach in cancer] Polsachev VI, et al. **Klin Khir** 1989;(5):33–4 (Eng. Abstr.) (Rus)

[Combined endoscopic treatment of villous adenoma of the stomach and large intestine in middle-aged and elderly patients] Sokolov LK, et al. **Klin Med (Mosk)** 1989 Mar; 67(3):115–7 (Eng. Abstr.) (Rus)

[Possible immunologic prevention of recurrences and metastases of gastric cancer after its radical surgical treatment] Ageenko AI, et al. **Sov Med** 1988;(10):27–30 (Eng. Abstr.) (Rus)

[Healing of esophagogastric anastomosis performed with the use of compression suturing equipment] Pirogov AI, et al. **Sov Med** 1989;(4):12–5 (Eng. Abstr.) (Rus)

[Indications for surgical treatment in stomach cancer with metastases to the ovaries] Vashakmadze LA, et al. **Sov Med** 1988;(12):95–8 (Rus)

[Surgical and combined treatment of patients with cancer of the lower thoracic portion of the esophagus and proximal parts of the stomach with metastasis to the esophagus] Ganul VL, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):19–22 (Eng. Abstr.) (Rus)

[Comparative study of the results of combined treatment of cancer of the stomach using various schedules of preoperative radiation therapy] Kiseleva ES, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):22–8 (Eng. Abstr.) (Rus)

[Ways of improving the methods of preoperative irradiation of patients with cancer of the stomach] Mizun EP, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):28–32 (Eng. Abstr.) (Rus)

[Electric stimulation of the duodenal stump in the early postoperative period after gastrectomy by the Billroth II method] Kostin AE. **Vestn Khir** 1989 Feb;142(2):101 (Rus)

[A method of tubular resection of the stomach with formation of a rectangular oblique gastro-jejunal anastomosis] Panazov FK, et al. **Vestn Khir** 1989 Mar;142(3):100–2 (Eng. Abstr.) (Rus)

[Dialectics of the method of diaphragmo-crurotomy by A.G. Savinykh] Saks FF, et al. **Vestn Khir** 1988 May;140(5):3–10 (Eng. Abstr.) (Rus)

[A method of plastic split esophago-gastric anastomosis in proximal resection of the stomach] Tsellikman EG. **Vestn Khir** 1988 May;140(5):15–8 (Eng. Abstr.) (Rus)

[Functional results of gastrectomy] Utkin VV, et al. **Vestn Khir** 1988 May;140(5):11–5 (Eng. Abstr.) (Rus)

[Effects of splenectomy on long-term results of the surgical treatment of stomach cancer] Klimenkov AA, et al. **Vopr Onkol** 1989;35(7):822–6 (Eng. Abstr.) (Rus)

[Experience with the treatment of early stomach cancer] Vilrmaa AA, et al. **Vopr Onkol** 1989;35(4):481–2 (Rus)

[Malignant gastric lymphomas] Beláček J, et al. **Rozhl Chir** 1988 Jul;67(7):461–3 (Eng. Abstr.) (Slo)

[Esophagojejunal fistula. Treatment with intravenous somatostatin. Apropos of a case] Calvo Benedi M, et al. **Rev Esp Enferm Apar Dig** 1988 May;73(5 Pt 2):615–8 (Eng. Abstr.) (Spa)

[Immediate prognosis factors in total gastrectomy in cancer] Hebrero J, et al. **Rev Esp Enferm Apar Dig** 1989 May; 75(5):449–55 (Eng. Abstr.) (Spa)

[Gastric lymphomas. Our cases] Martínez Martínez J, et al. **Rev Esp Enferm Apar Dig** 1989 Feb;75(2):212–3 (Spa)

[Gastric cancer: surgical results and survival] Pimentel F, et al. **Rev Med Chil** 1989 Jun;116(6):525–31 (Eng. Abstr.) (Spa)

THERAPY

Immunochemosurgery as a new approach to reasonable treatment of advanced cancer. Kim JP. **Ann Acad Med Singapore** 1988 Jan;17(1):48–54

Postoperative immunochemotherapy (BCG + 5-FU) in advanced gastric cancer. Popiela T, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1423–7

Prediction of survival in gastric carcinoma and a new histopathologic approach. Zilling TL, et al. **Anticancer Res** 1989 Mar–Apr;9(2):487–99

Enhancement of hyperthermochemotherapy for human gastric cancer in nude mice by thermosensitization with nitroimidazoles. Fujimoto S, et al. **Br J Cancer** 1988 Jul; 58(1):42–5

Adjuvant treatments following curative resection for gastric cancer. The Italian Gastrointestinal Tumor Study Group. **Br J Surg** 1988 Nov;75(11):1100–4

Comparison of blocked and non-blocked ricin-antibody immunotoxins against human gastric carcinoma and colorectal adenocarcinoma cell lines. Cattel L, et al. **Cancer Immunol Immunother** 1988;27(3):233–40

The endoscopic intratumor administration of OK-432 in gastric cancer unsuitable for surgery. Nakazawa S, et al. **Endoscopy** 1989 Jul;21(4):168–71

Primary non-Hodgkin's lymphoma of the stomach: changing aspects and therapeutic choices. Taal BG, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):439–50

Pharmacokinetic analysis in intraperitoneal hyperthermic chemotherapy of far-advanced gastric cancer patients. Kobayashi K, et al. **Gan No Rinsho** 1989 Aug;35(9):1016–20

Endoscopic palliation of obstructive esophagogastric malignancy. Richter JM, et al. **Gastrointest Endosc** 1988 Nov–Dec;34(6):454–8

Immunological contributions to the management of gastric cancer. Guillou PJ, et al. **Hepatogastroenterology** 1989 Apr; 36(2):86–91 (60 ref.)

Advanced gastric cancer: a new combined surgical and oncological approach. Kremer B, et al. **Hepatogastroenterology** 1989 Feb;36(1):23–6

Local hyperthermia using a low powered Nd: YAG laser for pancreatic and gastric carcinoma. Tajiri H, et al. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):889–96

Gastric cancer: a neoplastic enigma. Kern KA. **J Surg Oncol Suppl** 1989;1:34–9 (22 ref.)

A trial of postoperative adjuvant combination chemo-immunotherapy for stage IV gastric carcinoma. Akiyoshi T, et al. **Jpn J Surg** 1988 Sep;18(5):521–6

Thermotolerance of xenografted human gastric cancer. Fujimoto S, et al. **Jpn J Surg** 1989 Mar;19(2):203–7

The concepts, procedures, and problems related in endoscopic laser therapy of early gastric cancer. A retrospective study on early gastric cancer. Hiki Y, et al. **Surg Endosc** 1989;3(1):1–6

Hemolytic streptococcus preparation OK-432; beneficial adjuvant therapy in recurrent gastric carcinoma. Hanaue H, et al. **Tokai J Exp Clin Med** 1987 Nov;12(4):209–14

Gastric cancer. Berridge FE. **Wis Med J** 1988 Oct; 87(10):11–3

[Perioperative fluid therapy in major elective abdominal operations] Zhang YT. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;68(4):198–200, 16 (Eng. Abstr.) (Chi)

[Treatment of primary gastric lymphoma and factors that influence the prognosis] Kanda H, et al. **Gan No Rinsho** 1988 Sep;34(11):1568–71 (Eng. Abstr.) (Jpn)

[The relationship between thermotolerance and the tissue oxygen tension in human gastric cancer tissue] Kokubun M, et al. **Gan No Rinsho** 1988 Dec;34(15):2075–8 (Eng. Abstr.) (Jpn)

[Effect of endoscopical administration of OK-432 in 4 patients with advanced esophageal or gastric cancer] Satomi T, et al. **Gan No Rinsho** 1989 Mar;35(4):512–5 (Eng. Abstr.) (Jpn)

[Pharmacokinetic analysis in intraperitoneal hyperthermic perfusion using mitomycin C in far-advanced gastric cancer] Fujimoto S, et al. **Gan To Kagaku Ryoho** 1989 Jul; 16(7):2411–5 (Eng. Abstr.) (Jpn)

[Clinical evaluation of intraperitoneal hyperthermic perfusion in far-advanced gastric cancer] Kiuchi S, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2726-9 (Eng. Abstr.) **(Jpn)**

[A case of unresectable advanced gastric cancer with effective treatment by local administration of OK-432 on operation] Kodama M, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2301-3 (Eng. Abstr.) **(Jpn)**

[Polarographic analysis of tumor tissue oxygen tension after hyperthermia combined with misonidazole] Kokubun M, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):371-7 (Eng. Abstr.) **(Jpn)**

[Multi-institutional cooperative study of adjuvant immunochemotherapy in gastric cancer—five-year survival rate] Nakajima T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):799-806 (Eng. Abstr.) **(Jpn)**

[An effect of adjuvant immunochemotherapy using krestin and 5-FU on gastric cancer patients with radical surgery (first report)—a randomized controlled trial by the cooperative study group. Study Group of Immuno-chemotherapy with PSK for Gastric Cancer] Nakazato H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2563-76 (Eng. Abstr.) **(Jpn)**

[Recent trends in the treatment of stomach carcinoma and its link with treatment of carcinoma of other organs] Omori Y, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):938-44 (23 ref.) (Eng. Abstr.) **(Jpn)**

[A case of liver metastasis of gastric cancer which was made resectable by hyperthermo-chemo-radiotherapy] Urade M, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):446-9 (5 ref.) (Eng. Abstr.) **(Jpn)**

[A study on the effectiveness of the adjuvant chemotherapy and immunotherapy and its correlation with cellular immunity] Sachira, et al. **Nippon Ika Daigaku Zasshi** 1989 Jun;56(3):308-12 **(Jpn)**

[Comparison of the clinical outcome of gastric cancer in aged and younger patients in relation to treatment] Ozawa S, et al. **Nippon Ronen Igakkai Zasshi** 1988 Nov;25(6):603-9 (Eng. Abstr.) **(Jpn)**

[Esophageal bougie and endoprosthesis of the esophagus in inoperable patients with cancer of the esophagus and cardia] Toshchakov RA, et al. **Khirurgiia (Mosk)** 1989 May; (5):115-7 **(Rus)**

[Combination treatment of cancer of the stomach using preoperative telegammatherapy in combination with local SHF-hyperthermia] Chernyi VA, et al. **Klin Khir** 1989; (5):31-2 (Eng. Abstr.) **(Rus)**

[An individualized approach to the treatment of recurrences of cancer of the stomach] Shchepotin IB, et al. **Klin Khir** 1989;(5):17-9 (Eng. Abstr.) **(Rus)**

[Hemostasis in cancer patients during radiation therapy using metronidazole] Chekalina SI, et al. **Med Radiol (Mosk)** 1989 Feb;34(2):52-6 (Eng. Abstr.) **(Rus)**

[Thermochemotherapy of cancer of the stomach] Kakehi M, et al. **Med Radiol (Mosk)** 1988 Dec;33(12):31-4 (Eng. Abstr.) **(Rus)**

[The role of ascorbic acid in the combined preoperative preparation of cancer patients] Gorozhanskaia EG, et al. **Vopr Onkol** 1989;35(4):436-41 (Eng. Abstr.) **(Rus)**

[Characteristics of the postoperative period in stomach cancer patients undergoing combined treatment] Sivets NF, et al. **Vopr Onkol** 1989;35(5):612-4 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Gastric plasmacytoma with rod-shaped intracytoplasmic inclusions. Report of a case studied by light and electron microscopy and immunohistochemistry. Matsumoto K, et al. **Acta Pathol Jpn** 1988 Jun;38(6):815-21

Ciliated metaplasia in a gastric adenoma in a Swedish patient. Rubio CA. **APMIS** 1988 Oct;96(10):895-7

Characterization of a continuous cell line in culture established from a Krukenberg tumour of the ovary arising from a primary gastric adenocarcinoma. Whelan R, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1397-408

N-methyl-N'-nitro-N-nitrosoguanidine (MNNG) in experimental rat gastrocarcinogenesis: comparative sensibility to MNNG-carcinogenic action of the gland epithelium and the epithelium of experimental endophytic hyperplastic adenomatous structures. Volfson NI, et al. **Exp Pathol** 1988;35(1):57-60

Ultrastructural study of two subtypes of gastric adenoma. Muratani M, et al. **J Clin Pathol** 1989 Apr;42(4):352-9

Nucleolar organizer regions in myogenic stromal tumours of the stomach. Sinn HP, et al. **Virchows Arch [A]** 1989; 415(4):317-21

[Stomach cancer with tumor endocrine cells in the presence of chronic ulcer] Vasilenko IV, et al. **Arkh Patol** 1989; 51(5):63-6 (Eng. Abstr.) **(Rus)**

URINE

High urinary cadmium concentration in a case of gastric cancer [letter] Kido T, et al. **Br J Ind Med** 1989 Apr; 46(4):288

VETERINARY

Three cases of gastric neoplasia in psittacines. Leach MW, et al. **Avian Dis** 1989 Jan-Mar;33(1):204-10

Gastric hyperplastic polyp in a horse. Morse CC, et al. **J Comp Pathol** 1988 Oct;99(3):337-42

Spontaneous gastric carcinoid tumor in an aged Sprague-Dawley rat. Majka JA, et al. **Vet Pathol** 1989 Jan; 26(1):88-90

STOMACH, RUMINANT

DRUG EFFECTS

The evocation of rumination in sheep by the close-arterial injection of catecholamines, cholinergic drugs, autacoids and gastrointestinal hormones into the forestomach. Stafford KJ, et al. **Zentralbl Veterinarmed [A]** 1989 Mar; 36(3):230-5

EMBRYOLOGY

Early organogenesis of the caprine stomach. Mutoh K, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):474-84

METABOLISM

Partition of portal-drained visceral net flux in beef steers. 2. Net flux of volatile fatty acids, D-beta-hydroxybutyrate and L-lactate across stomach and post-stomach tissues. Reynolds CK, et al. **Br J Nutr** 1988 Nov;60(3):553-62

Partition of portal-drained visceral net flux in beef steers. 1. Blood flow and net flux of oxygen, glucose and nitrogenous compounds across stomach and post-stomach tissues. Reynolds CK, et al. **Br J Nutr** 1988 Nov; 60(3):539-51

PHYSIOLOGY

The effects of intake of lucerne (Medicago sativa L.) and orchard grass (Dactylis glomerata L.) hay on the motility of the forestomach and digesta flow at the abomaso-duodenal junction of the sheep. Malbert CH, et al. **Br J Nutr** 1989 May;61(3):699-714

STOMACH RUPTURE

Neonatal gastrointestinal perforation. Tan CE, et al. **J Pediatr Surg** 1989 Sep;24(9):888-92 (11 ref.)

[Spontaneous rupture of the stomach in a newborn—a case report] Lee DH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;41(5):389-92 (Eng. Abstr.) **(Chi)**

[Spontaneous rupture of the stomach in a neonate] Kuntarić-Srketić D, et al. **Lijec Vjesn** 1988 Nov; 110(11):373-5 (Eng. Abstr.) **(Scr)**

CHEMICALLY INDUCED

[A case of stomach rupture after ingestion of sodium bicarbonate] Tonetti F, et al. **Minerva Chir** 1988 Oct 31; 43(20):1737-9 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Gastric rupture from blunt abdominal trauma. Theunis P, et al. **Acta Chir Belg** 1988 Sep-Oct;88(5):309-11

Hazards of nasopharyngeal oxygen therapy: a case of iatrogenic stomach rupture. Van Daele G, et al. **Acta Chir Belg** 1987 Sep-Oct;87(5):291-3

Rupture of the stomach and the esophagus after attempted transcatheter ablation of an accessory pathway by direct current shock. Sebag C, et al. **Am J Cardiol** 1989 Apr 1; 63(12):890-1

[Perforation of the stomach into the thoracic cavity after resection of esophageal cancer: report of 4 cases] Gao JH. **Chung Hua Wai Ko Tsa Chih** 1988 Sep;26(9):561-2, 575 (Eng. Abstr.) **(Chi)**

[Stomach rupture—a rare complication of resuscitation] Armbruster C, et al. **Chirurg** 1989 Mar;60(3):178-9 **(Ger)**

STOMACH ULCER

Gastric stress ulcers. Levinson MJ. **Hosp Pract [Off]** 1989 Mar 30;24(3A):59-63, 67-8

[Gastric ulcers. 17th Maghrebin Medical Congress. Tunis, 30-31 May & 1 June 1988] **Tunis Med** 1988 Mar; 66(3):150-215 **(Fre)**

[The circumstances of discovery and the complications of gastric ulcers. Results of a retrospective study of 575 gastric ulcers] Kharrat J, et al. **Tunis Med** 1988 Mar;66(3):165-70 **(Fre)**

[Gastritis and ulcer—diseases caused by infection? 28 August 1988, Karlsruhe] **Internist (Berlin)** 1988 Nov;29(11 Suppl):1-8 **(Ger)**

BLOOD

[Gastroduodenofibroscopy in the prognostic evaluation of local factors of heniostasis in acute gastrointestinal hemorrhage] Zaltsev VT, et al. **Klin Khir** 1989;(4):7-9 (Eng. Abstr.) **(Rus)**

[Content of sex steroid hormones of the blood in patients with gastric and duodenal peptic ulcer] Loginov AS, et al. **Vrach Delo** 1988 Oct;(10):49-52 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

The pharmacologic activity of complexes and mixtures with copper and salicylates or aminopyrine following oral dosing in rats. Korolkiewicz Z, et al. **Agents Actions** 1989 Mar; 26(3-4):355-9

Endothelin has potent ulcerogenic and vasoconstrictor actions in the stomach. Wallace JL, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G661-6

Local opioid-sensitive afferent sensory neurones in the modulation of gastric damage induced by Paf. Esplugues JV, et al. **Br J Pharmacol** 1989 Jun;97(2):579-85

Thyrotropin-releasing hormone: medullary site of action to induce gastric ulcers and stimulate acid secretion. Hernandez DE, et al. **Brain Res** 1988 Aug 30;459(1):148-52

The protective effect of zinc on gastric ulceration caused by ethanol treatment. Rodrigues LE, et al. **Braz J Med Biol Res** 1989;22(1):41-50

Is the gastric lesion correlated with the inhibition of tissular peroxidase activity induced by indomethacin? Aliño SF, et al. **Cell Mol Biol** 1988;34(4):351-9

Comparison of the effects of endothelin-1 and endothelin-3 on the rat stomach. Wallace JL, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):41-7

Do mild irritants protect surface epithelial cells of gastric mucosa against ethanol-induced damage in rat? An ultrastructural study of adaptive cytoprotection. Terano A, et al. **Gastroenterol Jpn** 1989 Feb;24(1):80

Effect of tetraprenylacetone, a novel anti-ulcer agent, on healing process of ethanol-induced gastric injury in rat. Terano A, et al. **Gastroenterol Jpn** 1989 Feb;24(1):81

Nonsteroidal antiinflammatory drug-induced ulcers: management by traditional therapies. McCarthy DM. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):662-74 (60 ref.)

Ulcers, nonsteroidal antiinflammatory drugs, and related matters. Soll AH, et al. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):561-8 (19 ref.)

Bilateral adrenalectomy worsens gastric mucosal lesions induced by indomethacin in the rat. Role of enhanced gastric motility. Takeuchi K, et al. **Gastroenterology** 1989 Aug;97(2):284-93

NSAID-induced gastropathy in the elderly: understanding and avoidance. Moore JG, et al. **Geriatrics** 1989 Aug; 44(8):51-7 (43 ref.)

Further studies on the role of the adrenals in the capsaicin-sensitive "gastric defence mechanism". Evangelista S, et al. **Int J Tissue React** 1988;10(4):253-5

Cardiopulmonary and gastric ulcerogenic actions of endothelin-1 in the guinea pig and rat. Whittle BJ, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S103-7; discussion S123

Effect of particle size and film thickness on bioavailability and ulcerogenicity of encapsulated flufenamic acid. Foda A el-M, et al. **J Microencapsul** 1989 Apr-Jun;6(2):227-32

A new approach to encapsulating nonsteroidal anti-inflammatory drugs. I. Bioavailability and gastric ulcerogenic activity. Meshali MM, et al. **J Microencapsul** 1987 Apr-Jun;4(2):133-40

A new approach to encapsulating nonsteroidal anti-inflammatory drugs. IV. Effect of cellulose derivatives with different functional groups on the bioavailability and gastric ulcerogenic activity of acidic as well as basic nonsteroidal anti-inflammatory drugs. Meshali MM, et al. **J Microencapsul** 1989 Jul-Sep;6(3):355-60

Effect of encapsulation of mefenamic acid with cationic Eudragit E on its bioavailability and gastric ulcerogenic activity in rabbits. Ramadan EM, et al. **J Microencapsul** 1987 Apr-Jun;4(2):125-32

Modulating action of melatonin on serotonin-induced aggravation of ethanol ulceration and changes of mucosal blood flow in rat stomachs. Cho CH, et al. **J Pineal Res** 1989;6(1):89-97

Gastropyloric ulcers related to 'crack' [letter] Abramson DL, et al. **JAMA** 1989 Aug 4;262(5):617-8

On the biochemical background of cinchophen-induced gastric ulcer in the dog. Balint GA. **Jpn J Exp Med** 1989 Feb;59(1):47-9

Exacerbation of indomethacin-induced gastric ulceration by systemically administered GABA in rats: possible involvement of peripheral GABA receptors. Hara S, et al. **Jpn J Pharmacol** 1988 Aug;47(4):333-40

Prevention of NSAID-induced gastric ulcer with misoprostol: multicentre, double-blind, placebo-controlled trial. Graham DY, et al. **Lancet** 1988 Dec 3;2(8623):1277-80

Role of neutrophils in gastric damage induced by platelet activating factor. Etienne A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):422-5

Stimulation of afferent nerve endings by intragastric capsaicin protects against ethanol-induced damage of gastric mucosa. Holzer P, et al. **Neuroscience** 1988 Dec;27(3):981-7

Influence of indomethacin amphoteric gel on gastric ulcerogenicity and absorption of indomethacin in rats. Liversidge GG, et al. **Pharm Res** 1989 Jan;6(1):44-8

The possible role of metabolic acidosis in acetazolamide-induced gastric lesion formation in rats. Cho CH, et al. **Pharmacology** 1989;38(3):201-4

[Endoscopic study of gastric tolerance of paracetamol and acetylsalicylic acid. A placebo-controlled double-blind study on healthy subjects] Müller P, et al. **Arzneimittelforschung** 1988 Jun;38(6):831-2 (Eng. Abstr.) **(Ger)**

[Prostaglandins and the prevention of non-steroidal antirheumatic drug-induced gastric lesions] Miederer SE. **Fortschr Med** 1989 Mar 30;107(10):63-4, 67-8 (32 ref.) (Eng. Abstr.) **(Ger)**

[Ranitidine in the treatment of non-steroidal anti-inflammatory agent-induced damage of the stomach and duodenal mucosa. Results of a randomized, placebo-controlled double-blind study in patients with rheumatic diseases] Simon B, et al. **Z Gastroenterol** 1988

Jun;26(6):310–3 (Eng. Abstr.) (Ger)

CLASSIFICATION

[Type III ulcers (pre–pyloric ulcers and ulcers of the distal portion of the antrum). Apropos of 62 cases] Kehila M. **Tunis Med** 1988 Mar;66(3):195–7 (Fre)

COMPLICATIONS

Solitary exulcerstio simplex (ulcer of Dieulafoy). Goossens A, et al. **Acta Chir Belg** 1989 Jan–Feb;89(1):54–7

Rupture of the stomach complicating bleeding peptic ulcer. Case report. Almskog BA, et al. **Acta Chir Scand** 1988 Sep; 154(9):543–5

Postoperative gastric atony after vagotomy for obstructing peptic ulcer. Hom S, et al. **Am J Surg** 1989 Mar; 157(3):282–6

A multifactorial analysis of factors related to lethality after treatment of perforated gastroduodenal ulcer. 1935–1985. Svanes C, et al. **Ann Surg** 1989 Apr;209(4):418–23

Bleeding gastric ulcer: a prospective evaluation of rebleeding and mortality. Branicki FJ, et al. **Aust N Z J Surg** 1989 Jul;59(7):551–62

Aspirin and bleeding peptic ulcers in the elderly. Faulkner G, et al. **BMJ** 1988 Nov 19;297(6659):1311–3

Operative mortality after perforated peptic ulcer. Ball AB, et al. **Br J Surg** 1989 May;76(5):521–2

Controlled trial of heater probe treatment in bleeding peptic ulcers. Fullarton GM, et al. **Br J Surg** 1989 Jun;76(6):541–4

Perforated gastric ulcer. Lang C, et al. **Br J Surg** 1988 Aug; 75(8):758–9

APACHE II score in massive upper gastrointestinal haemorrhage from peptic ulcer: prognostic value and potential clinical applications. Schein M, et al. **Br J Surg** 1989 Jul;76(7):733–6

Perforated benign gastric ulcer: the case for simple closure. Thurston OG. **Can J Surg** 1989 Mar;32(2):94–6

Effects of prednisolone and human epidermal growth factor on angiogenesis in granulation tissue of gastric ulcer induced by acetic acid. Hase S, et al. **Digestion** 1989; 42(3):135–42

Rectal peptic ulceration—a rare cause of rectal bleeding. Report of a case. Testart J, et al. **Dis Colon Rectum** 1988 Oct;31(10):803–5 (28 ref.)

Intestinal metaplasia in gastric ulcer tissue repair [letter] Sossai P, et al. **Endoscopy** 1988 Nov;20(6):335

Effect of continuous intravenous infusion of secretin preparation (secrepan) in patients with hemorrhage from chronic peptic ulcer and AGML. Watanabe Y, et al. **Gastroenterol Jpn** 1988 Oct;23(5):506–13

Placebo–controlled trial with the somatostatin analogue SMS 201–995 in peptic ulcer bleeding. Christiansen J, et al. **Gastroenterology** 1989 Sep;97(3):568–74

Silent peptic ulceration: deadly silence or golden silence? Pounder R. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):626–31 (32 ref.)

Chronic gastritis and gastroduodenal ulcer: a case control study on risk of coexisting duodenal or gastric ulcer in patients with gastritis. Sipponen P, et al. **Gut** 1989 Jul; 30(7):922–9

Sister Mary Joseph's nodule. Cooper JP, et al. **Int J Dermatol** 1988 Nov;27(9):652–3

Vena caval penetration by gastric ulcer: massive hemorrhage and embolization of gastric contents to lungs. Palmer RC. **J Clin Gastroenterol** 1989 Aug;11(4):455–7

Secondary Hodgkin's lymphoma of stomach (a case report). Kapote S, et al. **J Postgrad Med** 1988 Jul;34(3):188–9 (4 ref.)

Double pylorus accompanied by gastric ulcer resistant to H2–receptor antagonist—a case report and review of the literature. Yoshimura Y, et al. **Kobe J Med Sci** 1988 Aug; 34(4):151–9 (13 ref.)

Laser probe coagulation of bleeding canine ulcers. Van Stiegmann G, et al. **Lasers Surg Med** 1988;8(4):409–12

Peptic ulcer disease presenting as life–threatening diarrhea following subtotal colectomy. Rodgers JB. **N Y State J Med** 1989 Apr;89(4):231–2

Perforation of a gastrojejunal ulcer into the pericardium. Yazicioglu N, et al. **N Y State J Med** 1989 Jun;89(6):358–9

H2 antagonists in the treatment of upper gastrointestinal bleeding. Langman MJ. **Scand J Gastroenterol Suppl** 1988; 146:185–90 (7 ref.)

Endoscopic treatment of bleeding peptic ulcers. Nakagawa K, et al. **World J Surg** 1989 Mar–Apr;13(2):154–7

[Malignant neurinoma (schwannoma) of the stomach simulating the picture of a bleeding ulcer] Manolov G, et al. **Khirurgiia (Sofiia)** 1989;42(2):89–91 (Bul)

[Secretory gastric function and the development of reflux esophagitis in peptic ulcer] Simitchiev S, et al. **Vutr Boles** 1988;27(6):14–20 (Eng. Abstr.) (Bul)

[A clinical study on the treatment of acute upper digestive tract hemorrhage with wen–she decoction] Gong QM, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 May;9(5):272–3, 260 (Eng. Abstr.) (Chi)

[Hemorrhagic gastric ulcer: which procedures should be performed?] Picaud R, et al. **Ann Chir** 1989;43(1):55–7 (Eng. Abstr.) (Fre)

[Pyopneumothorax disclosing perforation of gastric ulcer without associated peritonitis. Apropos of 2 cases (letter)] Naouri A, et al. **Gastroenterol Clin Biol** 1989;13(2):227–8 (Fre)

[Complicated gastric ulcers. Therapeutic measures] Khalfallah T, et al. **Tunis Med** 1988 Mar;66(3):198–202 (Fre)

[131 cases of hemorrhagic ulcer] Mejdoub S, et al. **Tunis Med** 1989 Apr;67(4):243–8 (12 ref.) (Eng. Abstr.) (Fre)

[Upper gastrointestinal bleeding from ulcer: reduction of mortality by early elective surgical therapy of patients at risk] Siewert JR, et al. **Dtsch Med Wochenschr** 1989 Mar 24;114(12):447–52 (Eng. Abstr.) (Ger)

[A spontaneous fluid pneumopericardium as a complication of a gastric ulcer] Buchberger W, et al. **ROFO** 1989 Apr; 150(4):490–1 (Ger)

[Dielafoy's ulcer: a case report] Volterrani P, et al. **G Ital Oncol** 1987 Apr–Sep;7(2–3):127–9 (Eng. Abstr.) (Ita)

[Long–term evaluation of the treatment of perforated gastroduodenal ulcer using a median suture] Uccheddu A, et al. **Minerva Chir** 1989 Jun 30;44(12):1637–41 (Eng. Abstr.) (Ita)

[Stomach cancer with tumor endocrine cells in the presence of chronic ulcer] Vasilenko IV, et al. **Arkh Patol** 1989; 51(5):63–6 (Eng. Abstr.) (Rus)

[Treatment of patients with gastroduodenal hemorrhage] Bondarenko NM, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):81–3 (Rus)

[Programmed peritoneal lavage in suppurative complications of perforated ulcer of the stomach] Kuzin NM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):121–3 (Rus)

[A rare association of peptic ulcer, stomach cancer and accessory pancreas] Voltsov NI. **Khirurgiia (Mosk)** 1989 Apr;(4):133–4 (Rus)

[Reasons for the need to resect bleeding chronic ulcers of the duodenum and stomach] Zaltsev VT, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):18–20 (Eng. Abstr.) (Rus)

[Free–radical lipid peroxidation in patients with acute gastro–intestinal hemorrhage] Bekh ND, et al. **Klin Khir** 1989;(4):10–2 (Eng. Abstr.) (Rus)

[Repeat operations in patients after the suturing of perforated stomach and duodenal ulcers] Chernobrovyi NP, et al. **Klin Khir** 1988;(8):60–1 (Rus)

[Improved methods of laser photocoagulation in hemorrhaging stomach and duodenal ulcers] Grubnik VV. **Klin Khir** 1988;(8):74 (Rus)

[Surgical procedures in patients with acute hemorrhaging from stomach and duodenal ulcers] Kharaberiush VA, et al. **Klin Khir** 1988;(8):19–21 (Eng. Abstr.) (Rus)

[Ways of improving the results in treating patients with acute gastrointestinal hemorrhage of peptic ulcer etiology] Kharaberiush VA, et al. **Klin Khir** 1989;(4):1–4 (Eng. Abstr.) (Rus)

[Radical operations in perforating stomach and duodenal ulcers] Krivitskii DI, et al. **Klin Khir** 1988;(8):29–31 (Eng. Abstr.) (Rus)

[Clinical characteristics and the surgical treatment of patients with perforated gastroduodenal ulcers] Lutsenko SM. **Klin Khir** 1989;(4):12–4 (Eng. Abstr.) (Rus)

[Diagnosis and surgical treatment of acute gastrointestinal hemorrhage] Mazurik MF, et al. **Klin Khir** 1989;(4):5–7 (Eng. Abstr.) (Rus)

[Emergency surgical intervention in hemorrhaging gastric and duodenal ulcer] Nesterenko IuA, et al. **Klin Khir** 1988; (8):16–8 (Eng. Abstr.) (Rus)

[An analysis of complications following operations in gastric and duodenal peptic ulcer] Papazov FK, et al. **Klin Khir** 1988;(8):55–6 (Rus)

[The perforation of acute stomach and duodenal ulcers] Ponomarev AA, et al. **Klin Khir** 1988;(8):48–50 (50 ref.) (Rus)

[Combined gastroduodenal ulcers] Filimonov RM, et al. **Klin Med (Mosk)** 1988 Oct;66(10):99–101 (Eng. Abstr.) (Rus)

[Surgical treatment of complicated gastroduodenal ulcers in children] Batrov GG, et al. **Pediatriia** 1988;(9):101–2 (Rus)

[Profuse hemorrhage from stomach ulcer after correction of the blood flow through the celiac trunk in its stenosis and in Leriche's syndrome] Gadzhiev MM, et al. **Vestn Khir** 1988 Aug;141(8):55 (Rus)

[Surgical treatment of bleeding penetrating ulcers of the stomach and duodenum] Krivitskii DI, et al. **Vestn Khir** 1989 Jan;142(1):104–7 (Rus)

[Unsolved problems in the surgical treatment of complicated ulcers of the stomach and duodenum] Lytkin MI, et al. **Vestn Khir** 1988 Sep;141(9):3–7 (Eng. Abstr.) (Rus)

[Peptic ulcer perforation in children] Nelkov GN, et al. **Vestn Khir** 1989 Mar;142(3):70–1 (Rus)

[Perforating ulcers of the stomach and duodenum in young adults and children] Nelmark II. **Vestn Khir** 1989 Feb; 142(2):18–20 (Eng. Abstr.) (Rus)

[Errors in the diagnosis of perforated gastroduodenal ulcer] Ushakova EI. **Vestn Khir** 1988 Jul;141(7):116–8 (Rus)

[Surgical tactics in ulcer–related gastroduodenal hemorrhage in middle–aged and elderly patients] Verushkin IuI, et al. **Vestn Khir** 1989 Jan;142(1):13–5 (Eng. Abstr.) (Rus)

[Surgical treatment of perforation of gastroduodenal ulcers at a regional hospital] Veselovskii BA, et al. **Vestn Khir** 1988 Sep;141(9):122–3 (Rus)

[Risk factors in perforated gastroduodenal ulcer] Zaltsev VT, et al. **Vestn Khir** 1988 Oct;141(10):124–7 (Rus)

[Characteristics of emergency interventions in perforated and bleeding recurrent gastroduodenal ulcers] Zavgorodnii LG, et al. **Vestn Khir** 1988 Jul;141(7):15–9 (Eng. Abstr.) (Rus)

[Chronobiological changes in patients with perforated gastric and duodenal ulcers] Epanchintsev GM, et al. **Voen Med Zh** 1988 May;(5):39–41 (Rus)

[Characteristics of the course and diagnosis of malignant degeneration of stomach ulcers] Chernobrovyi NP, et al. **Vrach Delo** 1988 Nov;(11):14–6 (Eng. Abstr.) (Rus)

[Gastric ulcer following suture of a perforated duodenal ulcer] Popović M, et al. **Acta Chir Iugosl** 1987;34(1):75–83 (Eng. Abstr.) (Scr)

[Hemorrhagic recurrence in upper digestive hemorrhage caused by peptic ulcer (letter)] Martínez Prieto C, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):316–7 (Spa)

[Early gastric cancer associated with chronic gastric ulcer] Bianchi A, et al. **Rev Esp Enferm Apar Dig** 1988 Dec; 74(6):641–4 (Eng. Abstr.) (Spa)

[Perforated peptic ulcer, 237 cases] Rodero D, et al. **Rev Esp Enferm Apar Dig** 1988 Jul;74(1):47–51 (Eng. Abstr.) (Spa)

DIAGNOSIS

Three–dimensional determination of gastric ulcer size with laser endoscopy. Yamaguchi M, et al. **Endoscopy** 1988 Sep; 20(5):263–6

Ultrasonography of benign gastric ulcers. Characteristic features and sequential follow–ups. Tomooka Y, et al. **J Ultrasound Med** 1989 Sep;8(9):513–7

Sonographic pitfalls in imaging of the antropyloric region in infants. Swischuk LE, et al. **Radiographics** 1989 May; 9(3):437–47

Retrograde intraoperative gastroscopy in obscure bleeding of the gastrointestinal tract. Schein M, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):437–8

[Radiology of the gastric ulcer] Allegue M, et al. **Tunis Med** 1988 Mar;66(3):171–3 (22 ref.) (Fre)

[The gastric ulcer: endoscopy] Saffar H. **Tunis Med** 1988 Mar;66(3):175–80 (Fre)

[Diagnostic strategies of the stomach] Schumpelick V, et al. **Langenbecks Arch Chir** 1988;Suppl 2:427–33 (32 ref.) (Eng. Abstr.) (Ger)

[Symptomatic ulcers of the stomach and duodenum] Sheptulin AA. **Klin Med (Mosk)** 1988 Jun;66(6):126–32 (Rus)

[The role of endoscopy and ultrasonic study in determining the procedure for managing patients with peptic ulcer] Sokolov LK, et al. **Klin Med (Mosk)** 1988 Jun;66(6):80–3 (Eng. Abstr.) (Rus)

[Methodology of studying the rheological properties of the gastric mucus and its diagnostic informativeness] Fisher AA, et al. **Lab Delo** 1989;(5):29–32 (Eng. Abstr.) (Rus)

[Giant ulcers of the stomach] Bachev II. **Sov Med** 1988; (6):90–2 (Rus)

[Luminescent analysis in the diagnosis and prognosis of gastric ulcer] Baranovskii AIu. **Sov Med** 1988;(9):46–50 (55 ref.) (Rus)

[Endoscopy in the evaluation of rare forms of gastric ulcers] Vakhidov VV, et al. **Vestn Khir** 1988 Dec;141(12):17–20 (Eng. Abstr.) (Rus)

[Gastric ulcer] de Manueles J. **An Esp Pediatr** 1988 Sep;29 Suppl 33:97–9 (Spa)

DRUG THERAPY

Factors influencing the healing rate of gastric ulcer under treatment with cimetidine. Okada M, et al. **Am J Gastroenterol** 1989 May;84(5):501–5

Ulcer healing: moderate or strong acid inhibition? [letter] Savarino V, et al. **Am J Gastroenterol** 1989 Jun;84(6):691–3

Sucralfate versus ranitidine in the treatment of gastric ulcer. Randomized clinical results in short–term and maintenance therapy. Herrerias–Gutierrez JM, et al. **Am J Med** 1989 Jun 9;86(6A):94–7

Two daily doses of sucralfate or cimetidine in the healing of gastric ulcer. A comparative randomized study. Hjortrup A, et al. **Am J Med** 1989 Jun 9;86(6A):113–5

Medical treatment of stomal ulcers. Hjortrup A, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):343–4

Prostaglandin E1 analogue therapy in the treatment of refractory gastric ulcer in an elderly patient. Ramsey EJ, et al. **Arch Intern Med** 1988 Oct;148(10):2275–6

Effects of the novel anti–ulcer agent 1–(5'–oxohexyl)–3–methyl–7–propyl xanthine on experimental ulcers and gastric secretion in rats. Tanaka T, et al. **Arzneimittelforschung** 1989 Jun;39(6):689–94

Histamine H2–receptor antagonists. Pounder R. **Baillieres Clin Gastroenterol** 1988 Jul;2(3):593–608 (95 ref.)

Omeprazole. Walan A. **Baillieres Clin Gastroenterol** 1988 Jul; 2(3):629–40 (34 ref.)

Omeprazole and cimetidine in the treatment of ulcers of the body of the stomach: a double blind comparative trial. Danish Omeprazole Study Group. **BMJ** 1989 Mar 11; 298(6674):645–7

Omeprazole and cimetidine in treating ulcers of the body of the stomach [letter] Savarino V, et al. **BMJ** 1989 May 6;298(6682):1249–50

Studies on gastric antiulcer active agents. III. Synthesis of 1–substituted 4–(5–tetrazolyl)thio–1–butanones and related compounds. Uchida M, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):958–61

Studies on gastric antiulcer active agents. II. Synthesis of tetrazole alkanamides and related compounds. Uchida M,

et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):322–6
Randomized, double-blind comparison of famotidine with ranitidine in treatment of acute, benign gastric ulcer disease. Community-based study coupled with a patient registry. Brazer SR, et al. **Dig Dis Sci** 1989 Jul;34(7):1047–52
Persistence of gastric ulcers caused by plain aspirin or nonsteroidal antiinflammatory agents in patients treated with a combination of cimetidine, antacids, and enteric-coated aspirin. Jaszewski R, et al. **Dig Dis Sci** 1989 Sep;34(9):1361–4
Effects of NC-1300, a gastric proton pump inhibitor, on healing of acetic acid-induced gastric ulcers in rats. Okabe S, et al. **Dig Dis Sci** 1989 Jul;34(7):1035–42
A US multicenter study of enprostil 35 micrograms twice daily for treatment of prepyloric, pyloric channel, and duodenal bulb ulcers. Enprostil Study Group. Schubert TT, et al. **Dig Dis Sci** 1989 Sep;34(9):1355–60
Preventive and curative effects of prostaglandins on stress ulcer in rats. Application of endoscopic observation. Yoshimura H, et al. **Dig Dis Sci** 1989 Mar;34(3):436–44
Comparison of the gastric antisecretory and antiulcer potencies of telenzepine, pirenzepine, ranitidine and cimetidine in the rat. Riedel R, et al. **Digestion** 1988; 40(1):25–32
Roxatidine acetate in the long term maintenance of gastric ulcers. Börsch G. **Drugs** 1988;35 Suppl 3:134–8
A comparison of roxatidine acetate and ranitidine in gastric ulcer healing. Judmaier G. **Drugs** 1988;35 Suppl 3:120–6
Histamine H2-receptor antagonists versus prostaglandins in the treatment of peptic ulcer disease. Penston JG, et al. **Drugs** 1989 Apr;37(4):391–401 (146 ref.)
Nizatidine. A preliminary review of its pharmacodynamic and pharmacokinetic properties, and its therapeutic use in peptic ulcer disease. Price AH, et al. **Drugs** 1988 Nov; 36(5):521–39 (70 ref.)
A comparison of roxatidine acetate 150 mg once daily and 75 mg twice daily in gastric ulcer healing. Rösch W. **Drugs** 1988;35 Suppl 3:127–33
Calcitonin versus cimetidine or De-Nol in gastric ulcer treatment. An endoscopically controlled trial. Janke A, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(5):239–43
Effects of antimuscarinic agents, H2-blockers and omeprazole on rat chronic gastric ulcer after long- and short-term administration. Chiavarini M, et al. **Farmaco [Sci]** 1988 May;43(5):479–87
Campylobacter pylori and peptic ulcer therapy. Bianchi Porro G, et al. **Gastroenterol Clin Biol** 1989;13(1 Pt 1):107B–111B (40 ref.)
A multiclinic trial evaluating arbaprostil [15(R)-15-methyl prostaglandin E2] as a therapeutic agent for gastric ulcer. Euler AR, et al. **Gastroenterology** 1989 Apr;96(4):967–71
Are antacids cytoprotective? Hollander D, et al. **Gut** 1989 Feb;30(2):145–7 (22 ref.)
Rioprostil: a clinical experience in gastric ulcer treatment. Mascio G, et al. **Int J Clin Pharmacol Res** 1988;8(5):341–4
Healing of gastric ulcer in the elderly: a double-blind study of cetraxate versus ranitidine. Tam HC, et al. **J Clin Gastroenterol** 1989 Apr;11(2):183–6
Gastric ulcer recurrence: follow-up of a double-blind, placebo-controlled trial. Wolosin JD, et al. **J Clin Gastroenterol** 1989 Feb;11(1):12–6
The anti-ulcer effect in rats of ginger constituents. Yamahara J, et al. **J Ethnopharmacol** 1988 Jul-Aug;23(2-3):299–304
Famotidine in the USA: a review of efficacy studies. Gitnick G. **J Int Med Res** 1989;17 Suppl 1:17A–24A (8 ref.)
Clinical evaluation of 20 mg/day famotidine in the treatment of acute gastric mucosal lesions. Miwa T. **J Int Med Res** 1989;17 Suppl 1:41A–47A
Novel method for producing standard subacute gastric ulcer in rats and for the quantitative evaluation of the healing process. Effect of several drugs on healing. Ezer E. **J Pharmacol Methods** 1988 Dec;20(4):279–91
Healing of a malignant gastric ulcer with cimetidine. Taylor TV, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):339–40
Effect of OPC-12759, a novel antiulcer agent, on chronic and acute experimental gastric ulcer, and gastric secretion in rats. Yamasaki K, et al. **Jpn J Pharmacol** 1989 Apr; 49(4):441–8
Twice daily cimetidine in the initial treatment of chronic gastric ulcer—a double-blind placebo-controlled trial. Tay HH, et al. **Med J Malaysia** 1988 Jun;43(2):181–5
Omeprazole versus ranitidine for gastric ulcer [letter; comment] **N Engl J Med** 1989 Jul 20;321(3):191–2. **Comment on:** N Engl J Med 1989 Jan 12;320(2):69–75
Effect of omeprazole and ranitidine on ulcer healing and relapse rates in patients with benign gastric ulcer [see comments] Walan A, et al. **N Engl J Med** 1989 Jan 12; 320(2):69–75. **Comment in:** N Engl J Med 1989 Jul 20;321(3):191–2
New drug effective [news] **Occup Health Saf** 1989 Mar; 58(3):16
Effect of polyamine related tetraamines on anti-ulcerogenic activity and anti-H+,K+-ATPase activity. Kakegawa T, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jun; 64(3):395–406
Relapse of gastric ulcers after healing with omeprazole and cimetidine. A double-blind follow-up study. Danish Omeprazole Study Group. **Scand J Gastroenterol** 1989 Jun; 24(5):557–60
Rioprostil and ranitidine in the treatment of prepyloric gastric ulcer. A double-blind comparative trial. Lauritsen K, et al. **Scand J Gastroenterol** 1989 Apr;24(3):368–72
Clinical characteristics of roxatidine acetate: a review. Dammann HG, et al. **Scand J Gastroenterol Suppl** 1988; 146:121–34 (95 ref.)
Effect of omeprazole and cimetidine on healing of chronic gastric ulcers and gastric acid secretion in rats. Skov Olsen P, et al. **Tohoku J Exp Med** 1988 Aug;155(4):305–10
The intragastric milieu during gastric ulcer treatment with pirenzepine 50 mg b.i.d. or cimetidine 400 mg b.i.d. Stockbrügger RW, et al. **Z Gastroenterol** 1988 Nov; 26(11):685–8
[Treatment of peptic ulcer using proglumide (Milid)] Brailski Kh, et al. **Vutr Boles** 1989;28(1):46–51 (Eng. Abstr.) **(Bul)**
[Syndrome differentiation-typing in traditional Chinese medicine of peptic ulcer in relation to gastric acid, gastrin and cyclonucleotide] Mu DJ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):531–3, 516–7 (Eng. Abstr.) **(Chi)**
[Short-term clinical trial of China made doxepin in peptic ulcer] Yang ZX, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Sep;27(9):569–71, 589 (Eng. Abstr.) **(Chi)**
[A single evening dose of 300 mg ranitidine in the treatment of acute attacks of gastric and duodenal ulcers. Evaluation of 1,208 patients] Bories P, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Oct;24(5):227–32 (Eng. Abstr.) **(Fre)**
[Effect of prostaglandins in the treatment of gastric and duodenal ulcers] Florent C, et al. **Gastroenterol Clin Biol** 1988 Oct;12(10):743–54 (91 ref.) **(Fre)**
[Medical treatment of non-complicated gastric ulcer] Ben Bader ST, et al. **Tunis Med** 1988 Mar;66(3):181–5 (22 ref.) **(Fre)**
[Gastritis and ulcer: reconsidering therapy? Report from a presymposium: "Campylobacter pylori—value of therapy today". 3 March 1989, Taormina/Sicily. Abstracts] **Fortschr Med** 1989;107 Suppl 62:1–22 **(Ger)**
[Treatment of acute stomach ulcer with H2 receptor antagonists. A direct therapy comparison with 300 mg nizatidine nightly and 2 times 150 mg nizatidine with twice daily 150 mg ranitidine] Arnold R, et al. **Fortschr Med** 1989 Jun 10;107(17):390–4 (Eng. Abstr.) **(Ger)**
[What is safe in the treatment of Campylobacter pylori-induced gastritis and Campylobacter pylori-associated peptic ulcer?] Menge H. **Internist (Berlin)** 1988 Nov;29(11):743–54 (52 ref.) **(Ger)**
[Famotidine treatment of patients with gastric and duodenal ulcers. A comparative study with once or twice-a-day administration] Bonardelli P, et al. **Clin Ter** 1987 Aug 15; 122(3):183–7 (Eng. Abstr.) **(Ita)**
[Nizatidine] Romero M, et al. **Medicina (Firenze)** 1989 Jan-Mar;9(1):93–6 (19 ref.) (Eng. Abstr.) **(Ita)**
[Effect of an H+, K+-ATPase inhibitor, omeprazole (OPZ), on gastric acid secretion and gastric or duodenal lesion. Comparison with an H2-receptor antagonist, famotidine (FMD)] Haga K, et al. **Nippon Yakurigaku Zasshi** 1988 Jul;92(1):39–47 (Eng. Abstr.) **(Jpn)**
[Effects of nizatidine, a new histamine H2-receptor antagonist, on gastric acid secretion and various gastric and duodenal lesions in rats: comparison with cimetidine] Okabe S, et al. **Nippon Yakurigaku Zasshi** 1989 Mar; 93(3):133–44 (Eng. Abstr.) **(Jpn)**
[Effect of prostacyclin on the endoscopic picture and secretory activity of the gastric mucosa in active peptic ulcers] Kosiniak-Kamysz A. **Folia Med Cracov** 1988; 29(1-2):59–72 (Eng. Abstr.) **(Pol)**
[Therapeutic endoscopy in combined therapy of gastroduodenal ulcers] Nikitin VA, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):33–5 (Eng. Abstr.) **(Rus)**
[Use of sucralfate in the treatment of peptic ulcer] Grigor'ev Pia, et al. **Klin Med (Mosk)** 1989 Jan;67(1):98–102 **(Rus)**
[Characteristics of the treatment of persistent gastric ulcers] Maiorov VM, et al. **Klin Med (Mosk)** 1989 Mar; 67(3):118–21 (Eng. Abstr.) **(Rus)**
[Experience in the use of sucralfate in patients with ulcers] Orlov VA, et al. **Klin Med (Mosk)** 1988 Jul;66(7):72–4 **(Rus)**
[Solcoseryl in the treatment of peptic ulcer] Trusov VV, et al. **Klin Med (Mosk)** 1989 Jan;67(1):103–5 **(Rus)**
[Clinico-immunologic evaluation of saparal in the treatment of recurrent ulcers] Tsimmerman IaS, et al. **Klin Med (Mosk)** 1988 Jul;66(7):78–82 (Eng. Abstr.) **(Rus)**
[Adverse clinico-humoral manifestations in ulcer patients treated with cimetidine. Our experience in 488 patients] Estrada Rodríguez M, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):736–7 **(Spa)**
[Treatment of gastric ulcer with famotidine. (Multicenter study)] Bernal Sahagún F, et al. **Rev Gastroenterol Mex** 1989 Jan-Mar;54(1):7–11 (Eng. Abstr.) **(Spa)**

ECONOMICS

[Could treatment of gastric and duodenal ulcers be cheaper?] Jacobsen CD. **Tidsskr Nor Laegeforen** 1989 May 10; 109(13):1413–5 (Eng. Abstr.) **(Nor)**

ENZYMOLOGY

Peptic ulcer: the many proteinases of aggression. Samloff IM. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):586–95 (98 ref.)
Effect of ammonia on the gastric mucosa in rats: pathophysiological importance of urease in gastric ulcer disease. Murakami M, et al. **Jpn J Pharmacol** 1988 Jul; 47(3):330–2
Biochemical examination on the increased superoxide dismutase-like plasma substance observed in a state of acute gastric mucosal lesions. Ohara T, et al. **Life Sci** 1989; 44(20):1499–504
Lactic dehydrogenase levels in patients with duodenal ulcer, gastric ulcer, gastric polyps and gastric carcinoma. Teniola D, et al. **Scand J Gastroenterol Suppl** 1986;124:169–78
[Role of gastric mucosal Na+-K+-Mg2+-dependent ATPase in the adaptive cytoprotection] Wang JY, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):215–22 (Eng. Abstr.) **(Chi)**
[Residual protease activity of the gastric mucosa after histamine stimulation normally and in acetate-induced ulcer in arts] Amirov NSh, et al. **Patol Fiziol Eksp Ter** 1988 May-Jun;(3):64–6 (Eng. Abstr.) **(Rus)**
[Intragastric proteolysis in cancer of the stomach and precancerous diseases] Masevich TsG, et al. **Sov Med** 1988; (11):77–8 **(Rus)**

EPIDEMIOLOGY

Seasonal periodicity of perforated gastric ulcer. Christensen A, et al. **Dan Med Bull** 1988 Jun;35(3):281–2
The pattern of chronic gastric ulcer at Kenyatta National Hospital (K.N.H.). Ogutu EO, et al. **East Afr Med J** 1989 Jan;66(1):10–4
Toward an epidemiology of gastropathy associated with nonsteroidal antiinflammatory drug use. Fries JF, et al. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):647–55
Natural history and epidemiologic studies of peptic ulcer disease in Japan. Kawai K, et al. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):581–5
Epidemiologic evidence on the association between peptic ulceration and antiinflammatory drug use. Langman MJ. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):640–6 (30 ref.)
Profile of peptic ulcer disease in Malaysia. Kudva MV, et al. **Singapore Med J** 1988 Dec;29(6):544–7
[A clinical analysis of gastric ulcer in the aged] Fang KM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):472–6 (Eng. Abstr.) **(Chi)**
[Semiology of gastroduodenal ulcer proved by endoscopy: epidemiological analysis of 1,800 cases] Poynard T, et al. **Gastroenterol Clin Biol** 1988 Aug-Sep;12(8–9):596–603 (Eng. Abstr.) **(Fre)**

ETIOLOGY

Alterations in gastric mucosal microvascular endothelium in a stressed condition—relevance to gastric ulcerogenesis. Oda M, et al. **Adv Exp Med Biol** 1988;242:161–75 (39 ref.)
Heterotopic gastric mucosa in the duodenal bulb: relationship to peptic ulcer. Smithuis RH, et al. **AJR** 1989 Jan; 152(1):59–61
Colonization of gastric lesions by urease-positive bacteria [letter] Räisänen S, et al. **Am J Clin Pathol** 1988 Dec; 90(6):749–50
Hepatocellular carcinoma metastatic to the stomach presenting as bleeding multiple craterogenic ulcers. Lynch P, et al. **Am J Gastroenterol** 1989 Jun;84(6):653–5
Energy expenditure during stress ulcer formation in vulnerable rats. Greenberg D, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R403–7
All perforated ulcers are not alike. Horowitz J, et al. **Ann Surg** 1989 Jun;209(6):693–6; discussion 696–7
Aetiology of ulcers. Wormsley KG. **Baillieres Clin Gastroenterol** 1988 Jul;2(3):555–71 (139 ref.)
Campylobacter pylori—a bacterial cause of peptic ulcer disease. Hornick RB. **Bull N Y Acad Med** 1988 Jul-Aug; 64(6):529–37
Relative roles of acid and mucosal compression in ulcerogenesis in indomethacin-insulin-treated rat. Mersereau WA, et al. **Dig Dis Sci** 1988 Nov;33(11):1454–8
Effects of stress transmission pathways on acute ulcerogenesis in rats under cold-restraint stress. Kodama O, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):57–62
Acute gastric ulceration due to excessive reduction of blood pressure in hypertensive patients. Mizuno T, et al. **Jpn J Med** 1989 Mar-Apr;28(2):269–71
Campylobacter pylori infection in gastric and duodenal ulcer. Andreica V, et al. **Med Interne** 1988 Oct-Dec; 26(4):297–303
The role of leukotrienes in the pathogenesis of gastric ulceration. Boughton-Smith NK, et al. **Pharmacol Res Commun** 1988 Nov;20(11):919–34 (34 ref.)
Stress-rest cyclicity in the pathogenesis of restraint-induced stress gastric ulcers in rats. Murison R, et al. **Physiol Behav** 1989 Apr;45(4):809–13
Chronic antral gastritis, Lewis(a+) phenotype, and male sex as factors in predicting coexisting duodenal ulcer. Sipponen P, et al. **Scand J Gastroenterol** 1989 Jun;24(5):581–8
The mechanism of acute gastric ulcer after induced hemorrhagic shock. Urakawa T, et al. **Scand J Gastroenterol** 1989 Mar;24(2):193–201
Campylobacter pylori: Swedish experiences. Unge P, et al. **Scand J Gastroenterol Suppl** 1989;157:12–5; discussion 21–2
A microbiological etiology for gastritis and peptic ulceration. Quintero GA, et al. **World J Surg** 1988 Oct;12(5):718–22
[Gastritis, peptic ulcer and Campylobacter pylori] Li ZL. **Chung Hua Nei Ko Tsa Chih** 1988 Apr;27(4):244–7 (25 ref.) **(Chi)**

[Subcardial ulcer and the Nissen technic. Apropos of a case of recovery by partial release of the fundoplication] Houdelette P, et al. **Ann Chir** 1989;43(4):282–4 (17 ref.) (Eng. Abstr.) (Fre)

[Is Campylobacter pylori responsible for ulcer disease?] Stadler P, et al. **Gastroenterol Clin Biol** 1989 Jan;13(1):3–7 (81 ref.) (Fre)

[Ulcer of the gastric fundus after abdominal fundoplication. A peculiar entity?] Tissot E, et al. **J Chir (Paris)** 1989 Jun–Jul;126(6–7):379–81 (10 ref.) (Eng. Abstr.) (Fre)

[Acute gastric ulcer after insertion of an intragastric balloon (letter)] Schlienger JL, et al. **Presse Med** 1989 Mar 25; 18(12):636 (Fre)

[The gastric ulcer: the main etiopathogenetic trends] Filali A, et al. **Tunis Med** 1988 Mar;66(3):157–60 (Fre)

[Campylobacter pylori and gastric ulcer] Korbi S, et al. **Tunis Med** 1988 Mar;66(3):161–4 (17 ref.) (Fre)

[Campylobacter pylori, ulcer and dyspepsia (letter)] Börsch G. **Dtsch Med Wochenschr** 1988 Nov 11;113(45):1781–2 (Ger)

[Campylobacter pylori and pathology of the gastro-duodenal mucosa. Critical review of clinico-experimental and therapeutic contributions] Lazzaroni M, et al. **Medicina (Firenze)** 1989 Jan–Mar;9(1):9–18 (134 ref.) (Eng. Abstr.) (Ita)

[A study on pathogenesis of gastric ulcer in patient with liver cirrhosis: with special reference to the gastric mucosal blood flow] Maeda T. **Fukuoka Igaku Zasshi** 1988 Aug; 79(8):636–46 (Eng. Abstr.) (Jpn)

[Effects of dopamine receptor agonists and antagonists on an experimental ulcer system induced by cysteamine in rats—dopaminergic mechanism vs pathogenesis of peptic ulceration] Kondoh Y. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):822–33 (Eng. Abstr.) (Jpn)

[Recent trend in the research of hypertension in Japan. Acute gastric ulceration due to excessive reduction of blood pressure in hypertensive patients] Mizuno T, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1826–9 (Jpn)

[Participation of immediate-type allergic processes in the pathogenesis of gastric and duodenal ulcer] Romański B. **Pol Arch Med Wewn** 1985 Jun;73(6):329–35 (Pol)

[Campylobacter pylori infection—a new concept of the etiology of stomach diseases] Muszyński J, et al. **Pol Tyg Lek** 1988 Aug 29;43(35):1107–10 (Pol)

[Unsolved problems of peptic ulcer] El'shtein NV, et al. **Klin Med (Mosk)** 1989 Apr;67(4):30–5 (39 ref.) (Rus)

[The role of cytoprotective factors in the pathogenesis of ulcers] Pasechnikov VD, et al. **Sov Med** 1988;(9):12–6 (Eng. Abstr.) (Rus)

[The role of local factors regulating vascular blood flow in the development of hypoxia of the gastric mucosa in peptic ulcer] Pasechnikov VD, et al. **Ter Arkh** 1988;60(12):74–7 (Eng. Abstr.) (Rus)

[Factors of protracted and recurrent course of chronic erosions of the stomach] Preobrazhenskiĭ VN, et al. **Ter Arkh** 1989;61(2):38–9 (Eng. Abstr.) (Rus)

[Secondary stomach ulcers after organ-sparing operations in duodenal ulcer] Borisov VF, et al. **Vestn Khir** 1988 Jun; 140(6):25–8 (Eng. Abstr.) (Rus)

[Post-sectional antral peptic ulcer and antrofundic re-anastomosis in rats (manifestation of a probable antrofundic neuroendocrine center)] Tiscornia OM, et al. **Acta Gastroenterol Latinoam** 1988;18(1):3–21 (Eng. Abstr.) (Spa)

[Ulcer of the hernia neck. Review of our experience] Pérez Moreno JM, et al. **Rev Esp Enferm Apar Dig** 1988 Jun; 73(6):677–81 (29 ref.) (Eng. Abstr.) (Spa)

IMMUNOLOGY

Diagnostic value of an immunoassay to detect anti Campylobacter pylori antibodies in non-ulcer dyspepsia. Loffeld RJ, et al. **Lancet** 1989 May 27;1(8648):1182–5

[Immunologic reactivity of patients with gastric and duodenal peptic ulcer] Aseev VP, et al. **Klin Khir** 1988;(8):70–1 (Rus)

[Clinico-immunologic characteristics of peptic ulcer] Miagkova LP, et al. **Klin Med (Mosk)** 1988 Jun;66(6):75–80 (Eng. Abstr.) (Rus)

[Indicators of cellular and humoral immunity during the process of healing of stomach ulcer] Sheptulin AA, et al. **Klin Med (Mosk)** 1989 Jun;67(6):40–6 (Eng. Abstr.) (Rus)

[Prognostic value of studying the cellular immunity in ulcerative lesions of the stomach] Uspenskiĭ VM, et al. **Ter Arkh** 1989;61(2):21–3 (Eng. Abstr.) (Rus)

[Immunity in patients with gastric and duodenal peptic ulcer (a review of the literature)] Epishin AV, et al. **Vrach Delo** 1988 Sep;(9):13–6 (32 ref.) (Rus)

METABOLISM

Lipid peroxidation in normal and ulcerated gastric mucosa of rats treated with pentacaine and cimetidine. Nosálová V, et al. **Agents Actions** 1989 Apr;27(1–2):160–2

Genesis and recovery of ethanol-induced gastric lesions in rats: possible involvement of prostaglandin D2. Kawabe Y, et al. **Am J Gastroenterol** 1989 Feb;84(2):138–42

Effects of omeprazole on rat gastric mucus glycoproteins with acetylsalicylic acid-induced gastric damage. Ohara S, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec; 296:192–201

Relapse of acetic acid-induced gastric ulcer and gastric mucosal prostaglandin I2 level in rats. Uchida M, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):805–7

Zinc deficiency worsens ethanol-induced gastric ulcers in rats. Cho CH, et al. **Drug Nutr Interact** 1988;5(4):289–95

Suppression of nocturnal acid secretion with famotidine accelerates gastric ulcer healing. McCullough AJ, et al. **Gastroenterology** 1989 Oct;97(4):860–6

Healing process of acetic acid-induced gastric ulcer and gastric mucosal prostaglandin E generation level in rats. Uchida M, et al. **Jpn J Pharmacol** 1989 Jul;50(3):366–8

Up-regulation of prostaglandin E2 binding and of prostanoid release in rabbits producing antibodies against prostaglandin E2. Beinborn M, et al. **Prostaglandins** 1989 Sep;38(3):355–74

[Antiulcer effects of pirenzepine in rats] Zheng W, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):442–5 (Eng. Abstr.) (Chi)

[Experimental models of gastric ulcers. Changes in the secretion of gastric glycoproteins in selected types] Cížková J, et al. **Cas Lek Cesk** 1989 Feb 10;128(7):204–5 (Eng. Abstr.) (Cze)

[Ph measurement in the stomach and duodenum through endoscopy] Rácz I, et al. **Orv Hetil** 1989 Feb 12; 130(6):283–6, 289 (28 ref.) (Eng. Abstr.) (Hun)

[Changes in amine contents and regulating enzyme activity of gastric mucosa during the healing process of acetic acid induced ulcer in rats] Omata T, et al. **Nippon Yakurigaku Zasshi** 1989 Mar;93(3):113–8 (Eng. Abstr.) (Jpn)

[Effect of acupuncture on the catecholamine content in the hypothalamus and brain stem of rats with an experimental stomach ulcer] Bragin EO, et al. **Biul Eksp Biol Med** 1989 Feb;107(2):182–4 (Eng. Abstr.) (Rus)

[The DOPA and dopamine content in the hypothalamus and brain stem of rats with an experimental stomach ulcer against a background of a course of acupuncture] Emel'ianenko IV, et al. **Biull Eksp Biol Med** 1989 Mar; 107(3):274–9 (Eng. Abstr.) (Rus)

[Lipid peroxidation, the enzyme antioxidative system and acid phosphatase content of the gastric mucosa in stomach ulcer] Pasechnikov VD. **Vopr Med Khim** 1989 May–Jun; 35(3):51–4 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Campylobacter pylori and gastroduodenal disease: a prospective endoscopic study and comparison of diagnostic tests. Chodos JE, et al. **Am J Gastroenterol** 1988 Nov; 83(11):1226–30

Campylobacter pylori in patients undergoing gastroscopy at Goroka Base Hospital. Richens J, et al. **P N G Med J** 1989 Mar;32(1):23–6

[Campylobacter pylori compels re-thinking] Stolte M. **Leber Magen Darm** 1989 Mar;19(2):57–8 (Ger)

[Bacteriologic, histologic and serologic studies of the detection of Campylobacter pylori in stomach diseases] Briedigkeit H, et al. **Z Arztl Fortbild (Jena)** 1988; 82(17):815–8 (Ger)

[Is Campylobacter pylori the pathogen of ulcer disease? Pro] Börsch G. **Z Gastroenterol** 1989 Feb;27(2):121–6 (46 ref.) (Ger)

[Is Campylobacter pylori the pathogen of ulcer disease? Contra] Stadler P, et al. **Z Gastroenterol** 1989 Feb; 27(2):127–30 (81 ref.) (Ger)

[Comparative volume of membrane microflora and morphology of the epitheliocytes during irradiation of chronic stomach ulcer with helium-neon laser in association with vagotomy] Balbekov IM, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):106–8 (Eng. Abstr.) (Rus)

[The role of Candida fungi in the pathogenesis of long-term non-healing gastroduodenal ulcers] Krylov AA, et al. **Klin Med (Mosk)** 1988 Jul;66(7):69–72 (Eng. Abstr.) (Rus)

[A method of determining Campylobacter pylori in the gastric mucosa in peptic ulcer and chronic gastritis] Grigor'ev PIa, et al. **Lab Delo** 1989;(6):52–4 (Eng. Abstr.) (Rus)

[Campylobacter pylori, ulcer and gastritis: another piece from an old puzzle?] Camarero Salces C, et al. **An Esp Pediatr** 1988 Aug;29(2):91–3 (39 ref.) (Spa)

MORTALITY

Mortality and perforated peptic ulcer: a case for risk stratification in elderly patients. Irvin TT. **Br J Surg** 1989 Mar;76(3):215–8

[Decrease in postoperative mortality caused by bleeding peptic ulcer] Checa Ceballos J, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):671–5 (Eng. Abstr.) (Spa)

PARASITOLOGY

Disseminated strongyloidiasis: report of two fatal cases. Sane SY. **Indian J Gastroenterol** 1989 Jul;8(3):191–2

PATHOLOGY

The role of endogenous prostaglandins in maintaining the integrity of the gastric mucosa in Shay's ulcer model after truncal vagotomy in rat. Dubecz S Jr, et al. **Acta Chir Hung** 1988;29(3):205–13

Gastric ulcer and gastritis. Results of short-term follow-up. Laszewicz W, et al. **Acta Med Pol** 1987;28(1–4):23–34

Wischnewski revisited. The diagnostic value of gastric mucosal ulcers in hypothermic deaths. Birchmeyer MS, et al. **Am J Forensic Med Pathol** 1989 Mar;10(1):28–30

Elevated gastric ulcer grossly resembling primary gastric lymphoma [letter] Adachi Y, et al. **Am J Gastroenterol** 1988 Dec;83(12):1434

Gastric small lymphocytic proliferation with immunoglobulin gene rearrangement in pseudolymphoma versus lymphoma. Sigal SH, et al. **Gastroenterology** 1989 Jul;97(1):195–201 (39 ref.)

No acid, no polys—no "active" gastritis, no dyspepsia. A proposal. DeLuca VA Jr. **J Clin Gastroenterol** 1989 Apr; 11(2):127–31

The effects of buspirone, a selective anxiolytic, on stress ulcer formation in rats. Sullivan RM, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):317–9

Strain, age, but not gender, influence ulcer severity induced by water-restraint stress. Paré WP. **Physiol Behav** 1989 Mar;45(3):627–32

The gastric mucosal barrier: tight junction structure in gastritis and ulcer biopsies. Posalaky Z, et al. **Virchows Arch [A]** 1989;414(3):217–22

[The effect of cyclo(L-alanyl-1-amino-1-cyclopentancarbonyl) —Alaptide on experimental gastric ulcers in rats] Korbová L, et al. **Cas Lek Cesk** 1988 Dec 16;127(51):1574–7 (Eng. Abstr.) (Cze)

[An anatomopathologic study of gastric ulcer in Tunisia] Korbi S, et al. **Tunis Med** 1988 Mar;66(3):203–6 (Fre)

[Neoplastic transformation of gastric ulcer] Korbi S, et al. **Tunis Med** 1988 Mar;66(3):213–4 (14 ref.) (Fre)

[Intestinal metaplasia and fungus involvement in peptic and neoplastic lesions of the mucosa of the stomach] Lüftner J. **Gastroenterol J** 1989;49(1):20–5 (Eng. Abstr.) (Ger)

[Histologic detection of Campylobacter pylori] Steininger H. **Pathologe** 1989 Jan;10(1):27–30 (Ger)

[Endoscopic studies of the upper gastrointestinal lesions in patients with chronic renal failure during hemodialysis] Tokuda Y, et al. **Igaku Kenkyu** 1988 Dec;58(6):417–20 (Eng. Abstr.) (Jpn)

[Healing promoting effect of proamipide, a novel drug that increases gastric defense mechanisms, on acetic acid-induced gastric ulcers in the rat] Shiraki M, et al. **Nippon Yakurigaku Zasshi** 1988 Dec;92(6):389–95 (Eng. Abstr.) (Jpn)

[The evolution of ulcers] Buglak NP. **Klin Med (Mosk)** 1988 Jul;66(7):85–8 (Eng. Abstr.) (Rus)

[The malignant transformation of gastric ulcers (review of the literature)] Portnoĭ LM, et al. **Vestn Rentgenol Radiol** 1988 Sep–Oct;(5):65–70 (109 ref.) (Rus)

PHYSIOPATHOLOGY

Experimental models of gastric ulceration and injury. Silen W. **Am J Physiol** 1988 Oct;255(4 Pt 1):G395–402 (90 ref.)

Central nervous system action of bombesin to influence gastric secretion and ulceration. Taché Y, et al. **Ann N Y Acad Sci** 1988;547:183–93 (62 ref.)

The GABA/benzodiazepine receptor complex in the central amygdalar nucleus and stress ulcers in rats. Sullivan RM, et al. **Behav Neural Biol** 1989 Mar;51(2):262–9

A study of knowledge, attitudes and practices (KAP) of a rural community on malaria and the mosquito vector. Ongore D, et al. **East Afr Med J** 1989 Feb;66(2):79–90

Role of leukotrienes and platelet activating factor in acute gastric mucosal lesions in rats. Konturek SJ, et al. **Eur J Pharmacol** 1989 May 19;164(2):285–92

Occurrence of platelet-activating factor (PAF) in normal rat stomach and alteration of PAF level by water immersion stress. Sugatani J, et al. **FASEB J** 1989 Jan;3(1):65–70

Aspirin-induced gastric mucosal injury: lessons learned from animal models. Kauffman G. **Gastroenterology** 1989 Feb; 96(2 Pt 2 Suppl):606–14 (49 ref.)

Intracellular pH in isolated Necturus antral mucosa in simulated ulcerogenic conditions. Kivilaakso E, et al. **Gastroenterology** 1988 Nov;95(5):1198–205

Delayed healing of acetic acid-induced gastric ulcers in rats by indomethacin. Wang JY, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):393–402

Gastric ulcer and stomach aging: pathophysiology and clinical implications. Farinati F, et al. **Gerontology** 1988; 34(5–6):297–303

Experimental and clinical studies on epidermal growth factor for gastric mucosal protection and healing of gastric ulcers. Itoh M, et al. **J Clin Gastroenterol** 1988;10 Suppl 1:S7–12

Recent studies of the central nucleus of the amygdala and stress ulcers. Henke PG. **Neurosci Biobehav Rev** 1988 Summer;12(2):143–50 (42 ref.)

Gastric emptying in patients with gastric and duodenal ulcer. Kanaizumi T, et al. **Tohoku J Exp Med** 1989 Jun; 158(2):133–40

[Effects of Codonopsis pilosula (Franch) Nannf on gastric electricity, gastric motility and gastric emptying] Hou JY, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan;9(1):31–2 (Chi)

[Changes of mucosal blood flow in the healing process of peptic ulcer] Li ZS. **Chung Hua I Hsueh Tsa Chih** 1989 Apr;69(4):203–5, 16 (Eng. Abstr.) (Chi)

[Study on gastric mucosal blood flow in rats with experimental gastric ulcer] Shen T.

Chung Hua I Hsueh Tsa Chih 1989 Mar;69(3):163–5 (Chi)

[Microcirculatory aspects of Reilly's phenomena] Tsuchiya M, et al. Bull Acad Natl Med (Paris) 1988 Mar; 172(3):409–19 (Eng. Abstr.) (Fre)

[The spectral component of electrogastrography (EGG): factors of variation in normal subjects, and in patients with cancer and ulcers] Giorgio I, et al. Pathol Biol (Paris) 1989 Jun;37(6):712–9 (Eng. Abstr.) (Fre)

[Ulcer diseases and intestinal motility] Langhans W, et al. Fortschr Med 1988 Jun 30;106(19):403–7 (36 ref.) (Eng. Abstr.) (Ger)

[A study on the ulcer in the upper portion of the stomach with special reference to the ulcer on the watershed—in connection with the mucosal blood volume, hemoglobin–oxygen saturation and hemodynamics of the gastric wall in the watershed] Nakahara S. Igaku Kenkyu 1988 Apr;58(2):65–76 (Eng. Abstr.) (Jpn)

[Electroencephalographic studies and endoscopy in peptic ulcer. Correlation of EEG changes and the endoscopic image] Maslowski J, et al. Neurol Neurochir Pol 1988 Sep–Oct;22(5):394–8 (Eng. Abstr.) (Pol)

[Gastric juice acidity and intragastric proteolysis in stomach ulcer] Nechaĭ AI, et al. Sov Med 1989;(3):6–8 (Eng. Abstr.) (Rus)

[Cholate–forming and cholesterol–secreting function of the liver in patients with ulcers after vagotomy] Fedyshin SP, et al. Vrach Delo 1989 May;(5):48–50 (Eng. Abstr.) (Rus)

[The importance of physiopathology in the management of peptic ulcer (editorial)] de la Rosa Laris C. Rev Gastroenterol Mex 1989 Apr–Jun;54(2):75–6 (Spa)

PREVENTION & CONTROL

Food and Drug Administration's Gastrointestinal Drugs Advisory Committee. September 15–16, 1988. The ACG Committee on FDA–related matters. American College of Gastroenterology. Stern WR. Am J Gastroenterol 1989 Apr;84(4):351–4

Effect of immunization with prostaglandin metabolites on gastrointestinal ulceration. Redfern JS, et al. Am J Physiol 1988 Dec;255(6 Pt 1):G723–30

Gastric protective effects of gastric secretagogues on 0.6N HCl–induced gastric lesions in rats. Isobe Y, et al. Arch Int Pharmacodyn Ther 1988 Sep–Oct;295:270–81

Economic effects of prophylactic use of misoprostol to prevent gastric ulcer in patients taking nonsteroidal anti–inflammatory drugs. Hillman AL, et al. Arch Intern Med 1989 Sep;149(9):2061–5

Prevention of gastroduodenal damage induced by non–steroidal anti–inflammatory drugs: controlled trial of ranitidine. Ehsanullah RS, et al. BMJ 1988 Oct 22; 297(6655):1017–21

Endogenous prostaglandin E2 synthesis preserved following cytoprotection by Roter (bismuth subnitrate) in the rat alcohol model of gastric ulceration. Pugh S, et al. Br J Exp Pathol 1988 Dec;69(6):833–8

Failure of the inhibition of rat gastric mucosal 5–lipoxygenase by novel acetohydroxamic acids to prevent ethanol–induced damage. Boughton–Smith NK, et al. Br J Pharmacol 1988 Sep;95(1):155–62

A possible protective mechanism by zinc sulfate against ethanol–induced gastric ulceration in rats. Chen SM, et al. Chung Hua I Hsueh Tsa Chih 1988 May;41(5):323–8

Use of ranitidine in children undergoing cardiopulmonary bypass. Eddleston JM, et al. Crit Care Med 1989 Jan; 17(1):26–9

Dimethyl–prostaglandin E2 prevents stress ulceration with minimal complications. Ephgrave KS, et al. Crit Care Med 1989 Jan;17(1):53–7

Sulfhydryls and gastric mucosa protection [letter] Evangelista S, et al. Dig Dis Sci 1988 Oct;33(10):1338–9

Prostaglandin protection against hemorrhage–induced gastric stress ulceration in the rat. Ranta–Knuuttila T, et al. Dig Dis Sci 1989 Jul;34(7):1028–34

Does early antisecretory treatment limit ulcer development? [letter] Duchateau A, et al. Gastroenterology 1989 Mar; 96(3):961–2

Prevention of gastroduodenal injury induced by chronic nonsteroidal antiinflammatory drug therapy. Graham DY. Gastroenterology 1989 Feb;96(2 Pt 2 Suppl):675–81 (70 ref.)

Surfactant approach to the gastric mucosal barrier: protection of rats by banana even when acidified. Hills BA, et al. Gastroenterology 1989 Aug;97(2):294–303

Misoprostol reduces gastroduodenal injury from one week of aspirin: an endoscopic study. Jiranek GC, et al. Gastroenterology 1989 Feb;96(2 Pt 2 Suppl):656–61

Misoprostol prevents nonsteroidal antiinflammatory drug–induced gastric ulcers—Has Pandora's box been opened? Peterson WL. Gastroenterology 1989 Oct; 97(4):1053–5

Stress ulceration: a serious complication in critically ill patients [letter] Konopad E, et al. Heart Lung 1989 Mar; 18(2):214–5

Effect of central prostaglandins in stress–induced gastric ulceration in rats. Gupta MB, et al. Indian J Med Res 1988 Jun;87:637–40

Effect of verapamil on gastric acid secretion and ulceration by pyloric–ligation and aspirin in albino rats. Kale A, et al. Indian J Physiol Pharmacol 1989 Apr–Jun;33(2):113–7

Verapamil and nifedipine effects on gastric acid secretion and ulcer formation in rats. Glavin GB.

J Pharm Pharmacol 1988 Jul;40(7):514–5

Paracetamol confers resistance to ethanol–induced gastric mucosal damage in rats. Poon YK, et al. J Pharm Pharmacol 1988 Jul;40(7):478–81

Protection by procaine hydrochloride against reserpine–induced acute gastric mucosal injury in the rat: implications for stress–induced injury. Salim AS. J Pharm Sci 1988 Jul;77(7):582–5

Misoprostol: ulcer prophylaxis at what cost? [editorial][see comments] Lancet 1988 Dec 3;2(8623):1293–4. Comment in: Lancet 1989 Jan 14;1(8629):98–9

Prevention of NSAID–induced gastric ulcer with prostaglandin analogues [letter] [see comments] Lancet 1989 Jan 7;1(8628):52–3. Comment in: Lancet 1989 Apr 15;1(8642):844–5

Prevention of NSAID–induced gastric ulcer with prostaglandin analogues [letter; comment] Rietbrock N, et al. Lancet 1989 Apr 15;1(8642):844–5. Comment on: Lancet 1989 Jan 7;1(8628):52–3

Misoprostol and ulcer prophylaxis [letter; comment] Upadhyay R, et al. Lancet 1989 Jan 28;1(8631):212–3. Comment on: Lancet 1988 Dec 24–31;2(8626–8627):1484–5

Protective effect of an orally administered, highly potent somatostatin analog (RC–121) against absolute ethanol–induced hemorrhagic erosions of the rat gastric mucosa. László F, et al. Life Sci 1989;44(21):1573–8

Misoprostol. Med Lett Drugs Ther 1989 Mar 10;31(787):21–2

Observations on dopamine receptor antagonists and gastric ulceration associated with experimental anorexia cachexia. Willis GL, et al. Pharmacol Biochem Behav 1988 Sep; 31(1):69–73

Role of glutathione status in protection against ethanol–induced gastric lesions. Lu SC, et al. Pharmacology 1989;38(1):57–60

Comparison of the ulcerogenicity of indomethacin and the gastric secretion in verapamil–treated rats. Mirossay L, et al. Physiol Bohemoslov 1988;37(6):503–6

Stimulation of mucus production and prevention of aspirin induced ulcerogenesis by enprostil in the rat. Waterbury LD, et al. Proc West Pharmacol Soc 1988;31:21–3

Kynuremic acid protects against gastroduodenal ulceration in mice injected with extracts from poisonous Atlantic shellfish. Glavin GB, et al. Prog Neuropsychopharmacol Biol Psychiatry 1989; 13(3–4):569–72

Kynurenic acid attenuates experimental ulcer formation and basal gastric acid secretion in rats. Glavin GB, et al. Res Commun Chem Pathol Pharmacol 1989 Apr;64(1):111–9

Prevention of stress ulcer by intragastric glucose. An experimental study. Oguz M, et al. S Afr Med J 1989 Mar 18;75(6):284–6

Experimental study of vagotomy for prevention of stress ulcer after hepatectomy of cirrhotic livers. Its influence on hepatic regeneration. Urakawa T, et al. Scand J Gastroenterol 1988 Aug;23(6):705–11

[Prevention of stress ulcer and nosocomial pneumonia] Koop H. Z Gastroenterol 1988 Jun;26(6):337–8 (Ger)

[Experimental stress ulcer of rat and the effect of vitamin B2] Kawamura T, et al. Nippon Shokakibyo Gakkai Zasshi 1988 Aug;85(8):1459–65 (Eng. Abstr.) (Jpn)

[Inhibitory effects of omeprazole and cimetidine on the formation of gastric ulcer in rats with obstructive jaundice and acute renal failure] Namba S. Nippon Shokakibyo Gakkai Zasshi 1988 Jun;85(6):1223–32 (Eng. Abstr.) (Jpn)

[Effects of a platelet activating factor (PAF) antagonist CV–3988 on acute gastric erosions in rats by water immersion and restrained stress, and by ethanol] Nogami M, et al. Nippon Shokakibyo Gakkai Zasshi 1988 Oct; 85(10):2149–54 (Eng. Abstr.) (Jpn)

[Right gastric arterial embolization in avoidance of gastric toxicity by hepatic infusion chemotherapy] Arai Y, et al. Rinsho Hoshasen 1988 Jun;33(6):663–5 (Eng. Abstr.) (Jpn)

[Effect of blockaders of biogenic amine receptors on experimental ulcer development] Karevina TG, et al. Farmakol Toksikol 1988 Jul–Aug;51(4):56–60 (Eng. Abstr.) (Rus)

[The role of prostaglandins in preventing and treating experimental stomach lesions] Vitebskiĭ EM, et al. Patol Fiziol Eksp Ter 1988 Sep–Oct;(5):48–51 (Eng. Abstr.) (Rus)

[Ranitidine and cimetidine in long–term (2 years) maintenance therapy of chronic gastric ulcer] Varas MJ. Rev Esp Enferm Apar Dig 1989 Feb;75(2):153–6 (Eng. Abstr.) (Spa)

PSYCHOLOGY

The protective mechanism of FPL55712 against stress–induced gastric ulceration in rats. Ogle CW, et al. Agents Actions 1989 Mar;26(3–4):350–4

Personality factors in chronic gastric and duodenal ulcers: a controlled study. Magni G, et al. Gastroenterol Clin Biol 1988 Dec;12(12):926–30 (19 ref.)

A comparison of two ulcerogenic techniques. Paré WP. Physiol Behav 1988;44(3):417–20

[The significance of stressful life events and their management in patients with rheumatoid arthritis, essential hypertension and stomach and duodenal ulcer] Scholz OB. Psychother Psychosom Med Psychol 1989 Mar–Apr; 39(3–4):135–40 (Eng. Abstr.) (Ger)

RADIOGRAPHY

Malignant giant gastric ulcer in a Nigerian. Olubuyide IO, et al. Trop Geogr Med 1989 Jan;41(1):85–8

[Gastric ulcer in infancy and childhood in 13 cases—upper gastrointestinal radiographic findings] Sakakibara N, et al. Rinsho Hoshasen 1988 Aug;33(8):871–7 (Eng. Abstr.) (Jpn)

[X–ray studies in the diagnosis of pyloroduodenal ulcerative stenoses] Polak EZ, et al. Vestn Rentgenol Radiol 1989 Mar–Apr;(2):8–15 (Eng. Abstr.) (Rus)

RADIOTHERAPY

[Effectiveness of the treatment of chronic non–healing stomach ulcers using copper vapor laser] Loginov AS, et al. Ter Arkh 1989;61(2):42–6 (Eng. Abstr.) (Rus)

SURGERY

Gastric stump carcinoma. Jakab F, et al. Acta Chir Hung 1988;29(3):231–40

Incidence of gastrectomy in United States army hospitals worldwide from 1975 to 1985. Burkhalter E. Am J Gastroenterol 1988 Nov;83(11):1231–4

Surgical treatment of high bleeding gastric ulcer. Ovaska JT, et al. Ann Chir Gynaecol 1988;77(1):6–8

The need for definitive therapy in the management of perforated gastric ulcers. Review of 202 cases. Hodnett RM, et al. Ann Surg 1989 Jan;209(1):36–9

Long–term recurrence patterns following proximal gastric vagotomy. Schache DJ, et al. Aust N Z J Surg 1989 May; 59(5):387–90

Gastric ulcer healing after laser treatment in dogs. Marcuard SP, et al. Dig Dis Sci 1989 Jul;34(7):1053–6

Proximal gastric vagotomy for complicated duodenal ulcer and benign gastric ulcer disease. Gupta R, et al. Indian J Gastroenterol 1988 Oct;7(4):223–5

Billroth I versus Billroth II partial gastrectomy in the treatment of gastric ulcer. Bechi P, et al. Ital J Surg Sci 1988;18(4):339–46

Intra–aortic balloon counterpulsation in high–risk cardiac patients undergoing noncardiac surgery. Grotz RL, et al. Surgery 1989 Jul;106(1):1–5

Parietal cell vagotomy and truncal vagotomy in elective duodenal ulcer surgery—results after six to twelve years. Elfberg BA, et al. Ups J Med Sci 1989;94(2):129–36

Cancer of the stomach after operation for benign ulcer disease. Lundegårdh G. Ups J Med Sci 1988;93(2):169–72

Influence of food on plasma cholecystokinin and gastrin in patients with partial gastric resections and Roux–en–Y anastomosis. Mössner J, et al. Z Gastroenterol 1989 Feb; 27(2):94–8

[A method for the surgical treatment of stomach ulcer] Iankov V. Khirurgiia (Sofiia) 1988;41(5):110–1 (Bul)

[Indications for elective surgery of stomach ulcer. A physician's views] Rune S. Ugeskr Laeger 1989 Mar 27; 151(13):814–6 (Eng. Abstr.) (Dan)

[Partial gastrectomy for benign stomach ulcer: early and late results] Cooreman F, et al. Acta Chir Belg 1987 Sep–Oct; 87(5):308–12 (Eng. Abstr.) (Dut)

[Surgical indications for non–complicated gastric ulcer] Ayachi K, et al. Tunis Med 1988 Mar;66(3):189–94 (33 ref.) (Fre)

[A study of early surgical outcomes] Balti MH, et al. Tunis Med 1988 Mar;66(3):207–9 (Fre)

[Sequelae of surgery of gastric ulcers] Cherif A, et al. Tunis Med 1988 Mar;66(3):210–2 (Fre)

[Surgical treatment of gastric ulcers. Why—when—how?] Letaief R. Tunis Med 1988 Mar;66(3):186–8 (21 ref.) (Fre)

[Technical modification of surgical therapy of esophageal perforation] Hausmaninger C, et al. Chirurg 1989 Jan; 60(1):55–7 (Ger)

[Laser therapy of arterial ulcer hemorrhage. Effect of local adrenaline infiltration] Heldwein W. Fortschr Med 1989 May 30;107(16):361–2 (Ger)

[Cholera following Billroth II stomach resection] Eggeling T, et al. Med Klin 1988 Jul 15;83(15):480–1 (Ger)

[Recurrent ulcers following stomach resection in Billroth II and Billroth I stomachs. Different patterns of distribution] Rahn A, et al. Med Klin 1988 Aug 12;83(16):503–6 (Eng. Abstr.) (Ger)

[Surgical therapy of stomach ulcer] Siewert JR, et al. Schweiz Med Wochenschr 1989 May 27;119(21):690–5 (30 ref.) (Eng. Abstr.) (Ger)

[Experimental animal studies of the effect of selective proximal vagotomy on the prostaglandin content of the gastric mucosa in the Shay ulcer model] Dubecz S Jr, et al. Z Exp Chir Transplant Kunstliche Organe 1989; 22(1):45–9 (Eng. Abstr.) (Ger)

[Surgical treatment of duodenal and stomach ulcers with the VARY operation (bilateral truncal vagotomy + antrectomy + Roux–Y gastrojejunostomy)] Ciringioglu K, et al. Zentralbl Chir 1988;113(23):1520–4 (Eng. Abstr.) (Ger)

[Perforation of gastroduodenal ulcer. Risk factors and choice of procedure] de Heer K, et al. Zentralbl Chir 1989; 114(11):714–21 (Eng. Abstr.) (Ger)

[Results of surgery of the hemorrhaging stomach and duodenal ulcer—a 10–year retrospective study] Heinz J, et al. Zentralbl Chir 1989;114(11):705–13 (Eng. Abstr.) (Ger)

[Wide resection of the gastric body with preservation of the

pylorus in the treatment of normal and hyposcidic gastric ulcers] Serafimov K. **Acta Chir Iugosl** 1987;34 Suppl 2:27–42 (Eng. Abstr.) (Mac)

[Late results of the surgical treatment of stomach ulcer using the Maki method] Dąbrowski A, et al. **Wiad Lek** 1989 Dec 1;41(23):1559–62 (Eng. Abstr.) (Pol)

[Surgical treatment of peptic ulcer in adolescents and young adults] Ibadov IIu. **Khirurgiia (Mosk)** 1988 Jul;(7):49–53 (Eng. Abstr.) (Rus)

[An open letter to Prof. Ia.D. Viteb skiĭ] Niko'skiĭ VI. **Khirurgiia (Mosk)** 1989 Jun;(6):102–3 (Rus)

[Variants of pylorus-preserving resection in gastric peptic ulcer] Mazurik MF, et al. **Klin Khir** 1988;(8):34–6 (Eng. Abstr.) (Rus)

[Prevention of postoperative pancreatitis in the surgical treatment of pyloroduodenal ulcers complicated by hemorrhage] Zaĭtsev VT, et al. **Klin Khir** 1988;(11):8–11 (Eng. Abstr.) (Rus)

[Surgical treatment of stomach ulcers] Chernyshev VN, et al. **Vestn Khir** 1989 Jan;142(1):47–9 (Rus)

[Gastric emptying in patients with pyloroduodenal ulcers after selective proximal vagotomy] Gorbashko AI, et al. **Vestn Khir** 1988 Aug;141(8):21–5 (Eng. Abstr.) (Rus)

[A method of treating high ulcers of the posterior gastric wall] Gorbashko AI, et al. **Vestn Khir** 1989 Jan;142(1):7–11 (Eng. Abstr.) (Rus)

[Selection of the method of surgical treatment of bleeding gastroduodenal ulcers] Korovich AIa, et al. **Vestn Khir** 1989 Jan;142(1):51–2 (Rus)

[Surgical treatment of combined ulcers of the stomach and duodenum] Nechaĭ AI, et al. **Vestn Khir** 1988 Oct; 141(10):19–22 (Eng. Abstr.) (Rus)

[Treatment of peptic ulcers in the operated stomach] Chernobrovyĭ NP, et al. **Vrach Delo** 1988 Aug;(8):4–7 (Eng. Abstr.) (Rus)

[Carcinoma of the gastric stump after surgery of gastroduodenal ulcer] Docobo Durántez F, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):353–8 (Eng. Abstr.) (Spa)

THERAPY

Endoscopic hemostasis by local injection of epinephrine and polidocanol in bleeding ulcer. A prospective randomized trial. Balanzó J, et al. **Endoscopy** 1988 Nov;20(6):289–91

Consensus conference: Therapeutic endoscopy and bleeding ulcers. **JAMA** 1989 Sep 8;262(10):1369–72 (0 ref.)

[Dieulafoy's "exulceratio simplex": unusual recurrent subacute development. Treatment by endoscopic infiltration (letter)] Maroy B, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):309 (Fre)

[Diagnosis and therapy of stomach ulcer] Halter F. **Schweiz Med Wochenschr** 1989 May 27;119(21):683–9 (41 ref.) (Eng. Abstr.) (Ger)

[Changes in the treatment of gastric ulcer] Castrini G, et al. **Minerva Chir** 1989 Feb 15;44(3):301–6 (12 ref.) (Ita)

[Recent progress in diagnosis and treatment of digestive diseases. I. Chronic gastritis and peptic ulcer. 3. Drug treatment of peptic ulcer disease-including maintenance therapy in the prevention of recurrence] Ohshiba S. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1646–50 (14 ref.) (Jpn)

[Use of MK-8 glue in treating stomach and duodenal ulcers] Mironiuk NV. **Klin Khir** 1988;(8):41–2 (Eng. Abstr.) (Rus)

[Use of antimetabolites in the combined preparation of patients with gastric peptic ulcer for organ-preserving operations] Ol'shanetskiĭ AA, et al. **Klin Khir** 1988;(8):62–3 (Rus)

[Endoscopic laser therapy of stomach and duodenal ulcers] Romanov GA, et al. **Klin Khir** 1988;(8):63–4 (Rus)

[Complex treatment of patients with non-healing stomach ulcers using hyperbaric oxygenation] Preobrazhenskiĭ VN, et al. **Klin Med (Mosk)** 1989 May;67(5):77–80 (Eng. Abstr.) (Rus)

[Preoperative preparation of patients with gastric peptic ulcer] Lukich VL, et al. **Sov Med** 1988;(6):86–90 (Rus)

[Treatment of chronic erosions of the gastric mucosa] Preobrazhenskiĭ VN, et al. **Sov Med** 1988;(7):90–3 (Rus)

[Hemosorption in the treatment of stomach ulcer] Zhidkov KP, et al. **Vestn Khir** 1988 Oct;141(10):122–4 (Rus)

[Non-drug treatment of ulcers] Postovit NV, et al. **Vrach Delo** 1989 Feb;(2):27–30 (Eng. Abstr.) (Rus)

VETERINARY

Gizzard ulceration in chicks fed cysteamine alone or in combination with a histamine H2-receptor antagonist. Zavy MT, et al. **J Vet Pharmacol Ther** 1988 Dec; 11(4):362–73

Upper gastrointestinal surgery for ulcer disease in foals. Campbell-Thompson M. **Vet Clin North Am Equine Pract** 1989 Aug;5(2):351–62 (43 ref.)

Effect of clenbuterol on the incidence of abomasal ulcers in veal calves. Breukink HJ, et al. **Vet Rec** 1989 Jul 29; 125(5):109–11

[Physiological effects of gizzerosine, a natural inducer of gizzard erosion in chicks] Ito Y, et al. **Seikagaku** 1988 Oct; 60(10):1168–72 (Jpn)

STOMACH VOLVULUS

Acute gastric volvulus [letter] Alwan MH, et al. **Dig Dis Sci** 1989 Aug;34(8):1309

[Chronic volvulus of the stomach] Ružička P, et al. **Rozhl Chir** 1989 Feb;68(2):100–2 (Eng. Abstr.) (Cze)

[Gastric volvulus. Clinical contribution] Lemma F, et al. **Minerva Chir** 1989 Mar 31;44(6):979–84 (Eng. Abstr.) (Ita)

[Gastric volvulus. Presentation of a new case and review of the literature] González González JJ, et al. **Rev Esp Enferm Apar Dig** 1989 Jan;75(1):59–62 (24 ref.) (Eng. Abstr.) (Spa)

COMPLICATIONS

Chronic intermittent gastric volvulus within the foramen of Morgagni. Bhasin DK, et al. **Am J Gastroenterol** 1989 Sep; 84(9):1106–8

DIAGNOSIS

Acute gastric volvulus and strangulation of colon mimicking chest infection. Dickey W, et al. **Ulster Med J** 1989 Apr; 58(1):105–7

[Chronic intermittent volvulus of the stomach: difficult diagnosis, simple treatment] van Vroonhoven TJ. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):273–5 (Dut)

ETIOLOGY

Radiological case of the month. Intrathoracic stomach with volvulus. Bonadio WA, et al. **Am J Dis Child** 1989 Apr; 143(4):503–4

Volvulus of the stomach after traumatic hernia diaphragmatica. Bemelman WA, et al. **Neth J Surg** 1989 Feb;41(1):8–10

[Intrathoracic volvulus of the stomach in hiatal hernia. Apropos of a case] Bel Hadj N, et al. **Tunis Med** 1987 Jun-Jul;65(6-7):453–9 (10 ref.) (Eng. Abstr.) (Fre)

[Gastric volvulus and diaphragm relaxation (letter)] Pérez Blanco FJ, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):625–6 (Spa)

GENETICS

Familial occurrence of intrathoracic gastric volvulus. Yin RL, et al. **Dig Dis Sci** 1988 Nov;33(11):1483–6

PHYSIOPATHOLOGY

Gastric volvulus: a case report. Waweru Ndaguatha PL, et al. **East Afr Med J** 1988 Oct;65(10):714–8 (9 ref.)

RADIOGRAPHY

[Chronic intermittent stomach volvulus: hard to diagnose, simple to treat (letter)] Klooster NJ, et al. **Ned Tijdschr Geneeskd** 1989 Jun 10;133(23):1188–9 (Dut)

SURGERY

Gastrojejunal hitch in gastric volvulus [letter] Singh J, et al. **Am J Gastroenterol** 1989 Jun;84(6):693–4

[Strangulation of the abdominal cavity organs in diaphragmatic hernia combined with gastric torsion] Shamanov AKh, et al. **Klin Khir** 1988;(10):55–6 (Rus)

THERAPY

Endoscopic correction of organo-axial volvulus [letter] Bhasin DK, et al. **Endoscopy** 1988 Sep;20(5):283

VETERINARY

Relationship of plasma gastrin immunoreactivity and gastroesophageal sphincter pressure in clinically normal dogs and in dogs with previous gastric dilatation-volvulus. Hall JA, et al. **Am J Vet Res** 1989 Aug;50(8):1228–32

Gastric emptying of a radionuclide-labeled test meal after surgical correction of gastric dilatation-volvulus in dogs. van Sluijs FJ, et al. **Am J Vet Res** 1989 Mar;50(3):433–5

Abomasal volvulus in cattle following correction of left displacement by casting and rolling. St. Jean G, et al. **Cornell Vet** 1989 Oct;79(4):345–51

Comparison of naturally occurring proximal duodenal obstruction and abomasal volvulus in dairy cattle. Garry F, et al. **Vet Surg** 1988 Jul-Aug;17(4):226–33

Significance of the Heineke-Mikulicz pyloroplasty in the treatment of gastric dilatation-volvulus. A prospective clinical study. Greenfield CL, et al. **Vet Surg** 1989 Jan-Feb; 18(1):22–6

STOMATITIS

CHEMICALLY INDUCED

Pine oil cleaner ingestion. Brook MP, et al. **Ann Emerg Med** 1989 Apr;18(4):391–5

Mouthwash stomatitis [letter] Plosay JJ 3d, et al. **Ann Emerg Med** 1989 Jun;18(6):709–10

Assessment of the oral condition of cancer patients submitted to chemotherapeutic treatment. Hamza M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):733–5

Burning mouth syndrome due to nicotinic acid esters and sorbic acid. Haustein UF. **Contact Dermatitis** 1988 Sep; 19(3):225–6

Allergic reaction to orthodontic wire: report of case. Dunlap CL, et al. **J Am Dent Assoc** 1989 Apr;118(4):449–50

Chemically induced inflammation in rat oral mucosa. Ahlfors EE, et al. **Scand J Dent Res** 1988 Oct;96(5):428–34

[Clinical picture of dentition, periodontium and mouth mucosa in pharmaceutical industry workers] Nowicka J, et al. **Med Pr** 1988;39(2):130–6 (Eng. Abstr.) (Pol)

COMPLICATIONS

Pyostomatitis vegetans. Report of a case and review of the literature. Ballo FS, et al. **J Am Acad Dermatol** 1989 Aug; 21(2 Pt 2):381–7 (24 ref.)

[Oral and anal manifestations of HIV infection] Petzoldt D. **Z Gastroenterol [Verh]** 1989 Jul;24:175 (Ger)

DIAGNOSIS

Scoring irradiation mucositis in head and neck cancer patients. Spijkervet FK, et al. **J Oral Pathol Med** 1989 Mar;18(3):167–71

DRUG THERAPY

Fluconazole in the treatment of Candida-associated denture stomatitis. Budtz-Jørgensen E, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1859–63

Local prostaglandin E2 in patients with oral malignancies undergoing chemo- and radiotherapy. Porteder H, et al. **J Craniomaxillofac Surg** 1988 Nov;16(8):371–4

Treatment of denture stomatitis by a sustained drug-delivery device: a preliminary study. Lamb DJ, et al. **J Dent** 1988 Oct;16(5):219–21

Clinical evaluation of a nystatin pastille for treatment of denture-related oral candidiasis. Johnson GH, et al. **J Prosthet Dent** 1989 Jun;61(6):699–703

Treatment for irradiation-induced mucositis [letter] Abdelaal AS, et al. **Lancet** 1989 Jan 14;1(8629):97

Effect of chlorhexidine rinsing on the oropharyngeal ecology in patients with head and neck cancer who have irradiation mucositis. Spijkervet FK, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):154–61

[Fibronectin--a new drug in the treatment of complications of chemotherapy in children with proliferative diseases of the hematopoietic system] Matysiak M, et al. **Pediatr Pol** 1988 Nov;63(11):728–32 (Eng. Abstr.) (Pol)

[Use of multiple-component ointments on a hydrophilic base for treating suppurative inflammatory processes of the oral cavity] Kirsanov PV, et al. **Stomatologiia (Mosk)** 1988 Nov-Dec;67(6):11–2 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

[Incidence and severity of denture stomatitis in wearers of complete upper dentures] Alberth M, et al. **Fogorv Sz** 1988 Nov;81(11):333–7 (Eng. Abstr.) (Hun)

ETIOLOGY

Oropharyngeal mucositis complicating bone marrow transplantation: prognostic factors and the effect of chlorhexidine mouth rinse. Weisdorf DJ, et al. **Bone Marrow Transplant** 1989 Jan;4(1):89–95

Contact stomatitis due to methyl methacrylate monomer. Kanzaki T, et al. **Contact Dermatitis** 1989 Feb;20(2):146–8

Contact stomatitis from a breath refresher (Eundan). Kim SC, et al. **Contact Dermatitis** 1988 Oct;19(4):309

The painful mouth. Mucositis, gingivitis, and stomatitis. Epstein JB. **Infect Dis Clin North Am** 1988 Mar; 2(1):183–202 (88 ref.)

Severe chemotherapy-induced recall of radiation mucositis in a patient with non-Hodgkin's lymphoma of Waldeyer's ring [letter] Eifel PJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):907–8

Influence of pontic material on alveolar mucosal conditions. Tolboe H, et al. **Scand J Dent Res** 1988 Oct;96(5):442–7

[Food allergies--oropharyngeal reactions] Kremser M. **Wien Med Wochenschr** 1989 Apr 15;139(6-7):135–9 (34 ref.) (Eng. Abstr.) (Ger)

[Problems with dental prosthesis and dental filling materials: results of epicutaneous tests, consequences and follow-up] Lindmaier A, et al. **Z Hautkr** 1989 Jan 15;64(1):24–30 (Eng. Abstr.) (Ger)

[Destruction of dental polymers and its role in the etiology of denture stomatitis] Temirbaev MA, et al. **Stomatologiia (Mosk)** 1989 Jan-Feb;68(1):68–70 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Immunological cellular response in denture stomatitis mycotic. Mierzwińska E, et al. **Folia Biol (Praha)** 1989; 35(1):27–34

Macrophage activation for cytolysis of virally infected target cells. LeBlanc PA. **J Leukoc Biol** 1989 Apr;45(4):345–52

[Complement-binding antibodies in women simultaneously infected with various species of Trichomonas] Cvetkova A, et al. **Wiad Parazytol** 1988;34(2):185–90 (Eng. Abstr.) (Pol)

MICROBIOLOGY

[Isolates from pyogenic infection in the field of oral surgery] Yamada Y, et al. **Rinsho Byori** 1989 Jan;37(1):97–101 (Jpn)

NURSING

Mouth care for mucositis due to radiation therapy. Dudjak LA. **Cancer Nurs** 1987 Jun;10(3):131–40

[Oral care of 269 patients with aplastic anemia] Zeng QH. **Chung Hua Hu Li Tsa Chih** 1989 Feb;24(2):75–6 (Chi)

PATHOLOGY

Nonhealing ulceration of oral mucosa. Dodson TB, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):849–52

Eosinophilic ulcer. Doyle JL, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):349–52

Gangrenous stomatitis in AIDS [letter] [see comments] Akula SK, et al. **Lancet** 1989 Apr 29;1(8644):955. **Comment in:** Lancet 1989 Jul 8;2(8654):108

[Diagnostic problems in a case of pyostomatitis vegetans] Rodriguez y Baena R, et al. **Minerva Stomatol** 1989 Mar; 38(3):317–20 (Eng. Abstr.) (Ita)

PREVENTION & CONTROL

Beneficial effects of leucovorin after methotrexate treatment in rheumatoid arthritis: a case report [letter] Polk JR. **Arthritis Rheum** 1988 Dec;31(12):1587–8

Control of oral mucositis and candidiasis in marrow transplantation: a prospective, double-blind trial of chlorhexidine digluconate oral rinse. Ferretti GA, et al. **Bone Marrow Transplant** 1988 Sep;3(5):483–93

Allopurinol mouthwash as prophylactic therapy for 5-fluorouracil-induced mucositis [letter; comment] Loprinzi CL, et al. **Eur J Surg Oncol** 1989 Jun;15(3):297 **Comment on:** Eur J Surg Oncol 1988 Oct;14(5):405–6

Reduction of oral toxicity of 5-fluorouracil by allopurinol mouthwashes [see comments] Tsavaris N, et al. **Eur J Surg Oncol** 1988 Oct;14(5):405–6. **Comment in:** Eur J Surg Oncol 1989 Jun;15(3):297

Prevention of oral mucositis in radiation therapy: a controlled study with benzydamine hydrochloride rinse. Epstein JB, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1571–5

Efficacy of oral sucralfate suspension in prevention and treatment of chemotherapy-induced mucositis [published erratum appears in J Pediatr 1989 May;114(5):900] Shenep JL, et al. **J Pediatr** 1988 Oct;113(4):758–63

[Monitoring the efficacy of disinfection measures in denture stomatitis caused by Candida] Wagner A. **Mycoses** 1988 Jun;31(6):320–3 (Eng. Abstr.) (Ger)

[The prevention of allergy to metal dentures] Dolnikov AI, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):46–8 (Eng. Abstr.) (Rus)

SURGERY

[Characteristics of rendering surgical services and conducting anesthesia during the treatment of diffuse phlegmons of the mouth floor] Vol'fovskii VZ, et al. **Vestn Khir** 1989 Feb;142(2):113–5 (Rus)

THERAPY

[Use of standardized oral hygiene in the prevention and therapy of mucositis in patients treated with radiochemotherapy of head and neck neoplasms] Hasenau C, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov; 67(11):576–9 (Eng. Abstr.) (Ger)

VETERINARY

Epizoötic vesicular stomatitis in Colorado, 1982: isolation of virus from insects collected along the northern Colorado Rocky Mountain Front Range. Francy DB, et al. **J Med Entomol** 1988 Sep;25(5):343–7

Experimental vesicular stomatitis virus infection of swine: extent of infection and immunological response. Redelman D, et al. **Vet Immunol Immunopathol** 1989 Mar;20(4):345–61

Herpes-like virus particles in necrotic stomatitis of tortoises. Cooper JE, et al. **Vet Rec** 1988 Nov 19;123(21):544

Prevalence of feline calicivirus, feline leukaemia virus and antibodies to FIV in cats with chronic stomatitis. Knowles JO, et al. **Vet Rec** 1989 Apr 1;124(13):336–8

STOMATITIS, APHTHOUS

BLOOD

The in vitro cytotoxic effect of leukocytes from patients with recurrent aphthous ulceration upon mouse 3T3 fibroblasts. Thomas DW, et al. **J Oral Pathol** 1988 Sep;17(8):421–5

T-lymphocyte subsets in recurrent aphthous ulceration. Pedersen A, et al. **J Oral Pathol Med** 1989 Jan;18(1):59–60

[Effect of nonenzymatic fibrinolysis on blood fibrinolytic activity in patients with chronic recurrent aphthous stomatitis] Kosorukova NIa, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):11–3 (Eng. Abstr.) (Rus)

DRUG THERAPY

Treatment of resistant aphthous ulceration with thalidomide in patients positive for HIV antibody. Youle M, et al. **BMJ** 1989 Feb 18;298(6671):432

Alternative therapies for acne, aphthae, insect bites, and bullous diseases. Coverman MH. **Dermatol Clin** 1989 Jan; 7(1):71–2

Treatment of aphthae with thalidomide. Grinspan D, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1060–3

ETIOLOGY

Recurrent aphthous stomatitis [letter] Dundar S. **Australas J Dermatol** 1987 Dec;28(3):143

Aphthous ulceration as a presentation of Giardia lamblia infection. Grant SC, et al. **Br Dent J** 1989 Jun 24; 166(12):457

Recurrent aphthous stomatitis: current concepts of etiology, pathogenesis and management. Scully C, et al. **J Oral Pathol Med** 1989 Jan;18(1):21–7 (155 ref.)

Periodic fever associated with aphthous stomatitis, pharyngitis and cervical adenitis. Feder HM Jr, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):186–7

[A case of aseptic meningoencephalitis with recurrent abnormal behavior, status epilepticus and aphthous stomatitis, improved by acyclovir] Shimada K, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):367–70 (Eng. Abstr.) (Jpn)

[Disordered sympathetic mediation in the genesis of aphthous stomatitis] Banchenko GV, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):11–5 (Eng. Abstr.) (Rus)

[Mycotic complications in acute leukemia (personal observations and review of the literature)] Volkova MA, et al. **Ter Arkh** 1988;60(8):103–9 (57 ref.) (Eng. Abstr.) (Rus)

[Erosive-ulcerative lesions of the skin and mucous membranes in patients with yersiniosis] Markov IS. **Vrach Delo** 1988 Sep;(9):114–6 (Eng. Abstr.) (Rus)

GENETICS

[Genetic factors in recurrent aphthous ulceration: an analysis of chromosome structure in the parents and offspring of patients] Zhou H. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Sep; 23(5):279–81, 319 (Eng. Abstr.) (Chi)

IMMUNOLOGY

HLA-A,B,C, and DR antigens in recurrent oral ulcers. Albanidou-Farmaki E, et al. **Ann Dent** 1988 Summer; 47(1):5–8, 15

Serum immunoglobulins in recurrent aphthous stomatitis. Güven O. **J Nihon Univ Sch Dent** 1988 Dec;30(4):297–301

The proportion of suppressor-inducer T-lymphocytes is reduced in recurrent aphthous stomatitis. Savage NW, et al. **J Oral Pathol** 1988 Jul;17(6):293–7

Varicella zoster virus and recurrent aphthous ulceration [letter] Pedersen A. **Lancet** 1989 May 27;1(8648):1203

Anti-mucosal antibodies in recurrent aphthous ulcers. Sun A, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):122–7

PATHOLOGY

[Observation on imprints of the tongue caused by recurrent oropharyngeal ulcers and its clinical significance] Qiu ZX, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):150–2, 132–3 (Eng. Abstr.) (Chi)

[Mucocutaneous involvement in Behçet's disease] Touraine R. **J Mal Vasc** 1988;13(3):220–1 (Eng. Abstr.) (Fre)

PSYCHOLOGY

Psychologic stress and recurrent aphthous ulceration. Pedersen A. **J Oral Pathol Med** 1989 Feb;18(2):119–22

[Behavior pattern analysis in recurrent aphthae] Xie H. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan;24(1):55–7 (Chi)

RADIOTHERAPY

The use of low energy laser therapy to treat aphthous ulcers. Howell RM, et al. **Ann Dent** 1988 Winter;47(2):16–8

STOMATITIS, DENTURE see under **STOMATITIS**

STOMATITIS, GANGRENOUS see **NOMA**

STOMATITIS, HERPETIC

COMPLICATIONS

Chronic indolent orofacial herpes simplex virus infection in chronic leukemia: a report of three cases. Barrett AP. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):387–90 (15 ref.)

Bilateral simultaneous Bell's palsy. Two cases following herpes simplex gingivostomatitis. Ghonim MR, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(4):269–72 (13 ref.)

[Recurrent herpetic gingivostomatitis and enteritis resulting in a perforated intestine in a boy with primary cellular immunodeficiency] Getlik A, et al. **Cesk Pediatr** 1988 Aug; 43(8):493–5 (Slo)

DRUG THERAPY

Acyclovir-resistant, foscarnet-sensitive oral herpes simplex type 2 lesion in a patient with AIDS. MacPhail LA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):427–32

EPIDEMIOLOGY

Acute herpetic stomatitis: referrals to Leeds Dental Hospital 1978–1987. Main DM. **Br Dent J** 1989 Jan 7;166(1):14–6

[The incidence of acute herpetic stomatitis in children in the Carpathian area] Kazakova RV, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):69–70 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Orofacial infection of athymic mice with defined mixtures of acyclovir-susceptible and acyclovir-resistant herpes simplex virus type 1. Ellis MN, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):304–10

PREVENTION & CONTROL

Effect of acyclovir on radiation- and chemotherapy-induced mouth lesions. Bubley GJ, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):862–5

Acyclovir prophylaxis for oral herpes simplex virus infection in patients with bone marrow transplants. Redding SW, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):680–3 (17 ref.)

[Use of an immunoglobulin with targeted action for the prevention and treatment of recurrent herpetic stomatitis in children] Mel'nichenko EM, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):63–5 (Eng. Abstr.) (Rus)

THERAPY

[SIgA extracted from colostrum in the clinical treatment of herpetic stomatitis in children] Chang RQ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):165–6 (Chi)

STOMATITIS, ULCERATIVE see **GINGIVITIS, NECROTIZING ULCERATIVE**

STOMATOGNATHIC DISEASES

DIAGNOSIS

Early detection: the role of the dentist. Cioffi G. **Del Med J** 1988 Aug;60(8):10–4

[Rapid diagnosis of functional disorders. A symptomatic triad for the rapid diagnosis of functional disorders of the masticatory system requiring treatment] Jenni M, et al. **Schweiz Monatsschr Zahnmed** 1988;98(11):1251–3 (Ger, Fre)

EPIDEMIOLOGY

[Symptoms of functional disorders—epidemiologic research on the masticatory system of recruits (1974 and 1985)] Jenni M, et al. **Schweiz Monatsschr Zahnmed** 1988;98(11):1185–90 (Eng. Abstr.) (Ger)

ETIOLOGY

[Changes in the masticatory system of children with systemic diseases of the connective tissue] Drecks-Kuzan K, et al. **Pediatr Pol** 1988 Jul;63(7):457–62 (Pol)

GENETICS

[Focal dermal hypoplasia (Goltz's syndrome). Review of the literature and clinical contribution] Bucci E, et al. **Minerva Stomatol** 1989 Apr;38(4):439–43 (42 ref.) (Eng. Abstr.) (Ita)

IMMUNOLOGY

[The outlook for clinical immunology in the diagnosis and therapy of surgical dental diseases] Robustova TG, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):89–91 (14 ref.) (Rus)

THERAPY

[Features of rendering orthodontic aid to servicemen] Shaldullin MS, et al. **Voen Med Zh** 1989 May;(5):33–5 (Rus)

STOMATOGNATHIC SYSTEM

ANATOMY & HISTOLOGY

Measurement in vivo of masticatory mucosal thickness with 20 MHz B-mode ultrasonic diagnostic equipment. Uchida H, et al. **J Dent Res** 1989 Feb;68(2):95–100

[Comparative analysis immediately after treatment and 2 years and 10 months after treatment by posterior-anterior traction of the maxilla in patients with cleft lip and palate using a facial mask] Fernández De Cevallos-Urueta J, et al. **Bol Med Hosp Infant Mex** 1988 Dec;45(12):837–45 (Eng. Abstr.) (Spa)

PHYSIOLOGY

Association of functional state of stomatognathic system with mobility of cervical spine and neck muscle tenderness. Kirveskari P, et al. **Acta Odontol Scand** 1988 Oct; 46(5):281–6

15 years follow-up on condylar fractures. Dahlström L, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):18–23

[The role of the sensory input and its significance in the masticatory system] Kubota K, et al. **Kokubyo Gakkai Zasshi** 1988 Jun;55(2):269–82 (31 ref.) (Jpn)

STOMATOLOGY see **DENTISTRY**

STOMOXYS CALCITRANS see MUSCIDAE

STOREROOMS see MATERIALS MANAGEMENT, HOSPITAL

STRABISMUS

see related
ORTHOPTICS

ABC of eyes. Squint. Elkington AR, et al. **BMJ** 1988 Sep 3;297(6648):608–11 (0 ref.)
Saccadic eye velocity in concomitant divergent squint. Prakash P, et al. **Indian J Ophthalmol** 1987;35(3–6):383–5

COMPLICATIONS

Acquired Brown's syndrome associated with Hurler–Scheie's syndrome. Bradbury JA, et al. **Br J Ophthalmol** 1989 Apr; 73(4):305–8
Rotatory nystagmus in infantile esotropia. Clarke WN, et al. **Can J Ophthalmol** 1988 Oct;23(6):270–2
Recording of disparity vergence in comitant esotropia. Campos EC, et al. **Doc Ophthalmol** 1989 Jan;71(1):69–76
Amblyopia and strabismus in congenital ptosis. Harrad RA, et al. **Eye** 1988;2 (Pt 6):625–7
Esotropic children with amblyopia: effects of patching on acuity. Fulton AB, et al.
Graefes Arch Clin Exp Ophthalmol 1988;226(4):309–12
Exophoria and refractive errors–evaluation of 250 cases. Gupta NC, et al. **Indian J Ophthalmol** 1987 Jul–Aug; 35(4):204–6
Infantile esotropia with abduction nystagmus. Ciancia AO. **Int Ophthalmol Clin** 1989 Spring;29(1):24–9 (29 ref.)
Acquired monofixation syndrome. Eustis HS, et al.
J Pediatr Ophthalmol Strabismus 1989 Jul–Aug; 26(4):169–72; discussion 173–5
Möbius and Möbius–like syndromes (TTV–OFM, OMLH). Miller MT, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jul–Aug;26(4):176–88 (69 ref.)
The Williams syndrome. Spectrum and significance of ocular features. Greenberg F, et al. **Ophthalmology** 1988 Dec; 95(12):1608–12
Primary inferior oblique overaction in congenital esotropia, accommodative esotropia, and intermittent exotropia. Wilson ME, et al. **Ophthalmology** 1989 Jul;96(7):950–5; discussion 956–7
Clinical characteristics of anomalous correspondence. Rutstein RP, et al. **Optom Vis Sci** 1989 Jul;66(7):420–5
[The refractive states of concomitant strabismus in children] Yang SM, et al. **Yen Ko Hsueh Pao** 1985 Sep;1(1):71–5 (Eng. Abstr.) **(Chi)**
[Epidemiologic study of strabismic amblyopia in Tunisia] Marrakchi S, et al. **J Fr Ophtalmol** 1988;11(12):819–23 (Eng. Abstr.) **(Fre)**

CONGENITAL

Congenital adduction palsy and synergistic divergence: a clinical and electro–oculographic study. Cruysberg JR, et al. **Br J Ophthalmol** 1989 Jan;73(1):68–75 (21 ref.)
Late results of surgery for congenital esotropia. Teller J, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(4):156–9
Postoperative refractive changes in children with congenital esotropia: a preliminary study. Snir M, et al.
Ophthalmic Surg 1989 Jan;20(1):57–62
Primary inferior oblique overaction in congenital esotropia, accommodative esotropia, and intermittent exotropia. Wilson ME, et al. **Ophthalmology** 1989 Jul;96(7):950–5; discussion 956–7
Congenital esotropia: search for etiology [letter] Jones ST. **Surv Ophthalmol** 1988 Jul–Aug;33(1):69–70
Esotropia. Helveston EM. **Trans Am Ophthalmol Soc** 1989; 86:441–54; discussion 454–60
[The so–called blockage syndromes: adduction, esodeviation and elevation in early strabismus. Congenital monocular optomotor syndrome] Spielmann A. **Ophtalmologie** 1988 Jan–Mar;2(1):1–4 (Eng. Abstr.) **(Fre)**
[Strabismus and pseudostrabismus in premature infants] Cernea P, et al. **Rev Chir [Oftalmol]** 1989 Jan–Mar; 33(1):21–8 (Eng. Abstr.) **(Rum)**
[Brown's syndrome associated with arthritis] Calabozo Raluy M, et al. **Med Clin (Barc)** 1988 Jul 2;91(6):220–2 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Acute acquired comitant esotropia. Clark AC, et al.
Br J Ophthalmol 1989 Aug;73(8):636–8
Preoperative prism adaptation test in normosensoric strabismus. Schildwächter–von Langenthal A, et al.
Graefes Arch Clin Exp Ophthalmol 1989;227(3):206–8
Bagolini lenses vs. PFL filters in the diagnosis of correspondence. Fors LA, et al. **J Am Optom Assoc** 1989 Feb;60(2):132–5
Developmental aspects of the Brückner test. Archer SM. **Ophthalmology** 1988 Aug;95(8):1098–101
The three–step test [letter] Cartwright MJ, et al.
Ophthalmology 1989 Sep;96(9):1447–8
Calibration of Hirschberg test photographs under clinical conditions. DeRespinis PA, et al. **Ophthalmology** 1989 Jul; 96(7):944–9
Teller acuity cards versus clinical judgment in the diagnosis of amblyopia with strabismus. Ellis GS Jr, et al.
Ophthalmology 1988 Jun;95(6):788–91
Errors in the three–step test in the diagnosis of vertical strabismus. Kushner BJ. **Ophthalmology** 1989 Jan; 96(1):127–32
Photographic method for Brückner and Hirschberg testing. Griffin JR, et al. **Optom Vis Sci** 1989 Jul;66(7):474–9
[Diagnosis and treatment of hyperphoria] Ge XY.
Chung Hua Yen Ko Tsa Chih 1988 Sep;24(5):265–7 (Eng. Abstr.) **(Chi)**
[Screening of strabismus and refractive errors in children by simultaneous photography of the corneal and fundal reflexes] Wang GJ. **Chung Hua Yen Ko Tsa Chih** 1988 Jan; 24(1):44–8 (Eng. Abstr.) **(Chi)**
[Amblyopia–strabismus–nystagmus. Contribution of automatic refractometry without their optical correction] Quere MA, et al. **Bull Soc Ophtalmol Fr** 1988 Nov; 88(11):1301–4 (Eng. Abstr.) **(Fre)**
[Accommodation–convergence coupling using the stereomicroscope] Draeger J, et al. **Fortschr Ophthalmol** 1989;86(1):84–8 (Eng. Abstr.) **(Ger)**
[A new procedure for measuring the strabismus angle in both eyes] Effert R, et al. **Fortschr Ophthalmol** 1988;85(5):486–8 (Eng. Abstr.) **(Ger)**
[Near heterophoria according to the angle mirror principle] Littan KE. **Fortschr Ophthalmol** 1988;85(3):280–2 (Eng. Abstr.) **(Ger)**
[Esophoria of the divergent insufficiency type—a case report] Mayer W, et al. **Fortschr Ophthalmol** 1988;85(3):283–4 (Eng. Abstr.) **(Ger)**
[An alternative measuring procedure to the simultaneous prism cover test] Effert R. **Klin Monatsbl Augenheilkd** 1989 Jun;194(6):462–6 (Eng. Abstr.) **(Ger)**
[A computer program for registering all daily accumulated data at a school for vision disorders] Effert R, et al.
Klin Monatsbl Augenheilkd 1988 Nov;193(5):518–22 (Eng. Abstr.) **(Ger)**
[Measuring cyclodeviations] Nowak MR, et al.
Klin Monatsbl Augenheilkd 1989 Feb;194(2):105–9 (Eng. Abstr.) **(Ger)**
[Visual field defects in strabismic amblyopes] Sireteanu R, et al. **Klin Monatsbl Augenheilkd** 1989 Apr;194(4):261–9 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Botulinum toxin—the rationale of its use. Dunlop C.
Aust N Z J Ophthalmol 1988 Nov;16(4):333–5
Botulinum toxin—the need for a controlled study [letter] Kowal L. **Aust N Z J Ophthalmol** 1988 Nov;16(4):372
Long–lasting organic spasm of the near reflex. Ohashi T, et al. **Jpn J Ophthalmol** 1988;32(4):466–70
Clinical use of botulinum toxin [letter] Elston J, et al.
Lancet 1988 Nov 12;2(8620):1139
[Treatment of facial spasm and strabismus with oculinum] Garraud L. **Bull Soc Ophtalmol Fr** 1988 Nov; 88(11):1315–20 **(Fre)**

EPIDEMIOLOGY

Visual acuity, strabismus, and amblyopia in premature babies with and without retinopathy of prematurity. Snir M, et al. **Ann Ophthalmol** 1988 Jul;20(7):256–8
Development of normal ocular alignment. Sondhi N, et al.
J Pediatr Ophthalmol Strabismus 1988 Sep–Oct;25(5):210–1
[Strabismus and heterophoria: the situation in Zaire] Kikudi Z, et al. **J Fr Ophtalmol** 1988;11(11):765–8 (Eng. Abstr.) **(Fre)**
[The incidence of heterophorias] Kaden R.
Fortschr Ophthalmol 1988;85(5):478–80 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Transient comitant esotropia in a child with migraine. Slavin ML. **Am J Ophthalmol** 1989 Feb 15;107(2):190–1
Acute comitant esotropia in children with brain tumors. Williams AS, et al. **Arch Ophthalmol** 1989 Mar;107(3):376–8
Bowman lecture. Current concepts of infantile esotropia. von Noorden GK. **Eye** 1988;2 (Pt 4):343–57 (82 ref.)
Visual disorders in cerebral palsy. Govind A, et al.
Indian J Ophthalmol 1988 Apr–Jun;36(2):88–91
Longitudinal study of acuity and stereopsis in infants with or at–risk for esotropia. Dobson V, et al.
Invest Ophthalmol Vis Sci 1989 Jun;30(6):1146–58
Acquired divergent strabismus: presumed metastatic gastric carcinoma to the medial rectus muscle. Arnold RW, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jan–Feb; 26(1):50–1
Exercise induced esotropia. Oesterle CS.
J Pediatr Ophthalmol Strabismus 1989 May–Jun; 26(3):150–1
Inferior rectus recession for vertical tropia after cataract surgery. Burns CL, et al. **Ophthalmology** 1988 Aug; 95(8):1120–4
Hyperdeviation associated with isolated unilateral abducens palsy. Slavin ML. **Ophthalmology** 1989 Apr;96(4):512–6
High myopia as an unusual cause of restrictive motility disturbance. Demer JL, et al. **Surv Ophthalmol** 1989 Jan–Feb;33(4):281–4
[The morning–glory syndrome with contralateral strabic amblyopia] Bord G, et al. **Bull Soc Ophtalmol Fr** 1988 Mar; 88(3):443–6, 448 (33 ref.) (Eng. Abstr.) **(Fre)**
[Strabismus caused by deep unilateral organic amblyopia. Determinant factors] George JL, et al.
Bull Soc Ophtalmol Fr 1988 Oct;88(10):1199–204 (Eng. Abstr.) **(Fre)**
[Postoperative secondary divergent strabismus. Statistical analysis of 160 consecutive exotropias] Quere MA, et al. **J Fr Ophtalmol** 1989;12(1):3–10 (Eng. Abstr.) **(Fre)**
[Round table discussion on heterophoria, held at the 85th meeting of the German Society of Ophthalmology, September 1987, Heidelberg] de Decker W, et al.
Fortschr Ophthalmol 1988;85(4):331–8 **(Ger)**
[Contribution of the pediatrician in the early diagnosis of eye diseases] Deufrains A, et al. **Kinderarztl Prax** 1989 May; 57(5):213–21 (8 ref.) (Eng. Abstr.) **(Ger)**

GENETICS

Discordance of accommodative esotropia in monozygotic twins. Bucci FA JR, et al. **Am J Ophthalmol** 1989 Jan 15; 107(1):84–5

HISTORY

Strabismus surgery for neurological illness. The Stevens Commission 1887–1889. Keane JR. **Arch Neurol** 1989 Mar; 46(3):323–4

PATHOLOGY

Fusional vergence in microstrabismus. Boonstra FN, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):221–6
Acute thalamic esotropia. Gomez CR, et al. **Neurology** 1988 Nov;38(11):1759–62

PHYSIOPATHOLOGY

The Hirschberg test: a double–masked clinical evaluation. Eskridge JB, et al. **Am J Optom Physiol Opt** 1988 Sep; 65(9):745–50
Comparison of vertical fixation disparities between essential hypertensives and matched normotensives. Fancher RD, et al. **Am J Optom Physiol Opt** 1988 Jul;65(7):552–60
Relation between distance heterophoria and tonic vergence. O'Shea WF, et al. **Am J Optom Physiol Opt** 1988 Oct; 65(10):787–93
Relation between horizontal and vertical phorias [letter] Sucher DF. **Am J Optom Physiol Opt** 1988 Aug;65(8):687
'Normal' overaction of inferior oblique muscles [letter] Fleming AW. **Arch Ophthalmol** 1989 Aug;107(8):1113
Visual evoked potentials in dissociated vertical deviation: a reappraisal. Kriss A, et al. **Br J Ophthalmol** 1989 Apr; 73(4):265–70
The prism adaptation test in the preoperative evaluation of esodeviations. Delisle P, et al. **Can J Ophthalmol** 1988 Aug; 23(5):208–12
Suppression scotomas in primary microstrabismus—a perimetric artefact. Mehdorn E. **Doc Ophthalmol** 1989 Jan; 71(1):1–18
The length–tension diagrams of human oblique muscles in trochlear palsy and strabismus sursoadductorius. Simonsz HJ, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):227–36
Effects of convergent strabismus on spatio–temporal response properties of neurons in cat area 18. Chino YM, et al.
Exp Brain Res 1988;72(2):264–78
Neural site of strabismic amblyopia in cats: X–cell acuities in the LGN. Gillard–Crewther S, et al. **Exp Brain Res** 1988;72(3):503–9
Stereotest artifacts and the strabismus patient. Archer SM.
Graefes Arch Clin Exp Ophthalmol 1988;226(4):313–6
Dynamic analysis of head movements by means of a three–dimensional position measurement system. Watanabe Y, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):418–24
Proprioceptive reflexes in exodeviations. Garg R, et al.
Indian J Ophthalmol 1988 Oct–Dec;36(4):168–70
Monocular geometry is selectively distorted in the central visual field of strabismic amblyopes. Fronius M, et al.
Invest Ophthalmol Vis Sci 1989 Sep;30(9):2034–44
An automated system of strabismus management. A direct approach using a "reverse" model. Kault D, et al.
Invest Ophthalmol Vis Sci 1989 Feb;30(2):276–87
Measurement of binocular alignment in normal monkeys and in monkeys with strabismus. Quick MW, et al.
Invest Ophthalmol Vis Sci 1989 Jun;30(6):1159–68
Early abnormal visual experience induces strabismus in infant monkeys. Quick MW, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):1012–7
Different patterns of retinal correspondence in the central and peripheral visual field of strabismics. Sireteanu R, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2023–33
Measurements of active and passive force of horizontal muscles in strabismus. Iwashige H, et al.
Jpn J Ophthalmol 1988;32(2):223–35
Binocular luminance summation (BLS) in esotropic and exotropic kittens. Min BM, et al. **Korean J Ophthalmol** 1988 Dec;2(2):62–5
Strabismus in infancy. Archer SM, et al. **Ophthalmology** 1989 Jan;96(1):133–7
[Binocular vision—binocular vision of concomitant strabismus] Yang SM, et al. **Yen Ko Hsueh Pao** 1987 Jun; 3(2):124–7, 113 (Eng. Abstr.) **(Chi)**
[The role of convergence excess and nystagmus in esodeviations] Spielmann A. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):449–53 (Eng. Abstr.) **(Fre)**
[Early esotropia, disorders of the monocular fixation reflex] Spielmann A. **Bull Soc Ophtalmol Fr** 1988 Oct; 88(10):1193–8 (Eng. Abstr.) **(Fre)**

[Comparative study of the binocular vision of ortho–microtropia and residual strabismus. Post–treatment development of esotropia] Quéré MA, et al. **Ophtalmologie** 1988 Jan–Mar;2(1):5–8 (Eng. Abstr.) **(Fre)**

[Predominance of crossed optic nerve fibers is a characteristic of albinism, but not of dissociated vertical deviation] Bach M, et al. **Fortschr Ophthalmol** 1989;86(3):253–5 (Eng. Abstr.) **(Ger)**

[Electromyographical activity of the four horizontal rectus muscles and refraction in intermittent exotropia] Kimura H, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun; 92(6):1002–8 (Eng. Abstr.) **(Jpn)**

[Eye–head coordination in two cases of congenital strabismus syndrome with torticollis] Ohtsuki H, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2080–8 (Eng. Abstr.) **(Jpn)**

[Functional significance of a floating eye model] Galoian VR. **Biofizika** 1989 May–Jun;34(3):481–7 (Eng. Abstr.) **(Rus)**

[Characteristics of visual functions in concomitant strabismus in young infants and preschoolers] Avetisov ES, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):37–9 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[Clinical use of simultaneous photography of the corneal and the fundus reflexes] Wang GJ. **Chung Hua Yen Ko Tsa Chih** 1988 May;24(3):150–4 (Eng. Abstr.) **(Chi)**

[Experience in the early detection of strabismus in child day care centers. Value in the prevention of amblyopia in young children] Revel C, et al. **Pediatrie** 1988;43(3):241–3 (Eng. Abstr.) **(Fre)**

SURGERY

Posterior chamber hemorrhage during strabismus surgery. Greenberg DR, et al. **Am J Ophthalmol** 1988 Nov 15; 106(5):634–5

Incidence of emesis and postanesthetic recovery after strabismus surgery in children: a comparison of droperidol and lidocaine. Christensen S, et al. **Anesthesiology** 1989 Feb; 70(2):251–4

Masseter muscle spasm, succinylcholine, and strabismus surgery [letter] Schwartz N, et al. **Anesthesiology** 1988 Oct; 69(4):635–6

Asystole due to the oculocardiac reflex during strabismus surgery: a report of two cases. Gold RS, et al. **Ann Ophthalmol** 1988 Dec;20(12):473–5, 477

Transposition procedures in strabismus. Hiatt RL. **Ann Ophthalmol** 1986 Nov;18(11):332–6

A caliper–hook for strabismus surgery. Lingua RW, et al. **Arch Ophthalmol** 1989 Sep;107(9):1387

Bilateral anterior transposition of the inferior obliques. Mims JL 3d, et al. **Arch Ophthalmol** 1989 Jan;107(1):41–4

Complicated strabismus and adjustable sutures. Pratt–Johnson JA. **Aust N Z J Ophthalmol** 1988 May; 16(2):87–92

Stability of one–stage adjustable suture for the correction of horizontal strabismus. Chow PC. **Br J Ophthalmol** 1989 Jul;73(7):541–6

Passive limitation of adduction after Cüppers's 'Fadenoperation' on medial recti. Paliaga GP, et al. **Br J Ophthalmol** 1989 Aug;73(8):633–5

Microsurgery for strabismus. Roth A. **Dev Ophthalmol** 1989; 18:36–49 (12 ref.)

Prerequisites for strabismus microsurgery. Microscope instruments and sutures. Véronneau–Troutman S. **Dev Ophthalmol** 1989;18:24–35 (12 ref.)

Strabismus surgery on the nonamblyopic eye. Gonzalez C, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):304–8

Long–term results after strabismus surgery. Maruo T, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(5):414–7

Evaluation of the faden operation. Pillai P. **Indian J Ophthalmol** 1987;35(5–6):375–82

Anterior segment ischaemia following muscle transposition procedures—(an experimental study on monkeys). Prakash P, et al. **Indian J Ophthalmol** 1987;35(5–6):372–4

Adjustable squint surgery under general anaesthesia. Prakash P, et al. **Indian J Ophthalmol** 1987;35(5–6):365–9

Paralimbal conjuntival incision in squint surgery. Prakah P, et al. **Indian J Ophthalmol** 1987 Jul–Aug;35(4):211–3

Inferior oblique—weakening procedure. Reddy NS. **Indian J Ophthalmol** 1987;35(5–6):370–1

Practical aspects of the adjustable suture technique for strabismus surgery. Wright KW. **Int Ophthalmol Clin** 1989 Spring;29(1):10–5

Surgical success rates in infantile esotropia. Scheiman M, et al. **J Am Optom Assoc** 1989 Jan;60(1):22–31 (79 ref.)

Hang–back lateral rectus recessions for exotropia. Capó H, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jan–Feb; 26(1):31–4

Topical anesthesia for strabismus surgery. Diamond GR. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr; 26(2):86–90

Residual incomitant DVD following large bilateral superior rectus recession. Freeman RS, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr; 26(2):76–80

Good visual outcome after endophthalmitis in an eye previously treated successfully for amblyopia. Kushner BJ, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr; 26(2):69–71

Evaluation of strabismus surgery by reoperation rate [letter] Romano PE. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct;25(5):257–8

"Which eye will you be straightening, doctor?" [editorial] Simon JW, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr;26(2):55

Expanded binocular peripheral visual fields following surgery for esotropia [published erratum appears in J Pediatr Ophthalmol Strabismus 1989 Jul–Aug;26(4):208] Wortham E 5th, et al. **J Pediatr Ophthalmol Strabismus** 1989 May–Jun;26(3):109–12

Experimental strabismus surgery using N–butyl–2–cyanoacrylate (Histoacryl). Jung YC, et al. **Korean J Ophthalmol** 1988 Dec;2(2):57–61

Large recession of one lateral rectus muscle. Park C, et al. **Korean J Ophthalmol** 1988 Dec;2(2):82–5

Duty to disclose medical records. Brahams D. **Lancet** 1989 Aug 19;2(8660):460

Binocular function after surgical alignment of infantile esotropia. Spierer A. **Metab Pediatr Syst Ophthalmol** 1988; 11(1–2):35–6

Late results of surgery for congenital esotropia. Teller J, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(3):115–8

Infantile exotropia in healthy children. Rubin SE, et al. **Ophthalmic Surg** 1988 Nov;19(11):792–4

Length–tension diagrams of medial rectus muscles after Cüppers' fadenoperation. Surgical assessment of the reversibility of posterior fixation sutures. Castanera AM. **Ophthalmologica** 1989;198(1):46–52

The use of vertical offsets with horizontal strabismus surgery. Metz HS. **Ophthalmology** 1988 Aug;95(8):1094–7

Comparison of hang–back medial rectus recession with conventional recession. Repka MX, et al. **Ophthalmology** 1988 Jun;95(6):782–7

[Retro–fixation suture of the medial rectus muscle] Duan YX. **Chung Hua Yen Ko Tsa Chih** 1988 Jan;24(1):28–30 (Eng. Abstr.) **(Chi)**

[Surgical transposition of the inferior oblique muscle] Kong LY. **Chung Hua Yen Ko Tsa Chih** 1988 Jan;24(1):24–7 (Eng. Abstr.) **(Chi)**

[Continuous propofol infusion versus enflurane in children operated on for strabismus. Comparison of the quality of anesthesia and recovery conditions] Queinnec MC, et al. **Ann Fr Anesth Reanim** 1989;8(1):37–41 (Eng. Abstr.) **(Fre)**

[Microcomputers and the operative plan in strabismus: update on the Macintosh] Aflalo G. **Bull Soc Ophtalmol Fr** 1988 Apr;88(4):559–60 **(Fre)**

[A microcomputer and the operative plan in strabismus: update on the Macintosh] Aflalo G. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):903–5 **(Fre)**

[Choice and surgical strategy in case of so–called concomitant strabismus (conference)] Roth A. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):363–7 (Eng. Abstr.) **(Fre)**

[Orbital cellulitis following surgery of strabismus] Casu L, et al. **J Fr Ophtalmol** 1988;11(11):771–2 (Eng. Abstr.) **(Fre)**

[Results of surgical treatment of alphabetical syndromes in esotropia. Apropos of 98 cases] Julou J, et al. **J Fr Ophtalmol** 1988;11(12):825–9 (Eng. Abstr.) **(Fre)**

[Malignant hyperthermia in ophthalmologic surgery] Negre F, et al. **J Fr Ophtalmol** 1988;11(11):753–7 (14 ref.) (Eng. Abstr.) **(Fre)**

[Adjustable surgery in strabismus] Putteman A, et al. **J Fr Ophtalmol** 1988;11(2):219–26 (Eng. Abstr.) **(Fre)**

[Postoperative secondary divergent strabismus. Statistical analysis of 160 consecutive exotropias] Quere MA, et al. **J Fr Ophtalmol** 1989;12(1):3–10 (Eng. Abstr.) **(Fre)**

[Surgical treatment of accommodative strabismus. Apropos of 100 cases of esotropia] Chettibi A, et al. **Ophtalmologie** 1988 Oct;2(4):303–5 (Eng. Abstr.) **(Fre)**

[Structural surgery in strabismology. 2 years' experience] Stein A, et al. **Ophtalmologie** 1988 Oct;2(4):299–301 (Eng. Abstr.) **(Fre)**

[Adjustable procedures in eye muscle operations] Roggenkämper P, et al. **Fortschr Ophthalmol** 1988; 85(5):484–5 (Eng. Abstr.) **(Ger)**

[Fibrin gluing of the extraocular eye muscles. Experimental use in the rabbit] Aichmair MW, et al. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):499–503 (Eng. Abstr.) **(Ger)**

[Eye position and function following late surgical correction of consecutive strabismus following primary tenotomy] Aust W. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):165–8 (Eng. Abstr.) **(Ger)**

[Torsional shift operation, a tool in complete early childhood strabismus] de Decker W, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):615–21 (Eng. Abstr.) **(Ger)**

[Severed musculus rectus internus caused by a dog bite] Reese PD, et al. **Klin Monatsbl Augenheilkd** 1988 Nov; 193(5):504–5 (Eng. Abstr.) **(Ger)**

[Polyglactin 910 implants in muscle revision surgery for the reconstruction of physiologic limits in Tenon's capsule] Schmidt T, et al. **Klin Monatsbl Augenheilkd** 1988 Sep; 193(3):271–4 (Eng. Abstr.) **(Ger)**

[Intrascleral anteposition of the shortened muscle] Krwawicz L. **Klin Oczna** 1988 Mar;90(3):104–5 (Eng. Abstr.) **(Pol)**

THERAPY

The management of squint. Fielder AR. **Arch Dis Child** 1989 Mar;64(3):413–8 (26 ref.)

Role of occlusion in treatment of intermittent exotropia. Vishnoi SK, et al. **Indian J Ophthalmol** 1987 Jul–Aug; 35(4):207–10

Botulin therapy in pediatric ophthalmology. Magoon EH. **Int Ophthalmol Clin** 1989 Spring;29(1):30–2

Management of intermittent exotropia using a combination of vision therapy and surgery. Gallaway M, et al. **J Am Optom Assoc** 1989 Jun;60(6):428–34

The use of part–time occlusion for early onset unilateral exotropia. Freeman RS, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr;26(2):94–6

Botulinum toxin injection into the superior rectus muscle of the non–dominant eye for dissociated vertical deviation. McNeer KW. **J Pediatr Ophthalmol Strabismus** 1989 Jul–Aug;26(4):162–4

Who needs botulinum toxin? [letter] **Med J Aust** 1988 Dec 5–19;149(11–12):723–4

Botulinum toxin therapy of eye muscle disorders. Safety and effectiveness. American Academy of Ophthalmology. **Ophthalmology** 1989 Sep;Pt 2:37–41

Management of strabismus with botulinum A toxin. Biglan AW, et al. **Ophthalmology** 1989 Jul;96(7):935–43

Chemodenervation of strabismic children. A 2– to 5–year follow–up study compared with shorter follow–up. Magoon EH. **Ophthalmology** 1989 Jul;96(7):931–4

Changes in refractive error for exotropes treated with overminus lenses. Rutstein RP, et al. **Optom Vis Sci** 1989 Aug;66(8):487–91

[Strabismus—a computer program] Brožek B, et al. **Cesk Oftalmol** 1988 Nov;44(6):409–10 (Eng. Abstr.) **(Cze)**

[Treatment of eccentric fixation. Inverse prism and occlusion] Pigassou–Albouy R. **J Fr Ophtalmol** 1988;11(8–9):597–600 (31 ref.) **(Fre)**

[Update on sectorial occlusion] Berrondo P, et al. **Ophtalmologie** 1988 Oct;2(4):297–8 (Eng. Abstr.) **(Fre)**

[Comparative study of the binocular vision of ortho–microtropia and residual strabismus. Post–treatment development of esotropia] Quéré MA, et al. **Ophtalmologie** 1988 Jan–Mar;2(1):5–8 (Eng. Abstr.) **(Fre)**

[Convergent microstrabismus with exophoria—clinical picture and treatment] Müller–Loeffelholz C, et al. **Fortschr Ophthalmol** 1988;85(5):481–3 (Eng. Abstr.) **(Ger)**

[A method and results of using optic penalization in preschoolers with amblyopia and unilateral strabismus] Pospelov VI. **Oftalmol Zh** 1988;(7):411–6 (Eng. Abstr.) **(Rus)**

STRAMONIUM

[Acute poisoning with stropine–like alkaloids of Datura Metel] Testa P, et al. **Clin Ter** 1988 May 15;125(3):203–11 (Eng. Abstr.) **(Ita)**

ANALYSIS

Isolation and structure of a pseudopeptide gamma–L–glutamyl–L–aspartic acid from Datura stramonium that impairs learning retention in mice. Schmitz–Bourgeois M, et al. **Biochimie** 1988 Sep; 70(9):1179–84

STRATIGRAPHY, X–RAY see **TOMOGRAPHY, X–RAY**

STREAK PLATE COUNT see **COLONY COUNT, MICROBIAL**

STREET DRUGS

Patterns of drug use and sensation–seeking among adolescents in Norway. Pedersen W, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):386–90

A comparison of the empirical utility of three composite measures of adolescent overall drug involvement. Needle R, et al. **Addict Behav** 1989;14(4):429–41

Adolescents who apparently are invulnerable to drug, alcohol, and nicotine use. Marston AR, et al. **Adolescence** 1988 Fall;23(91):593–8

Differences in psychological need hierarchy between program completers and dropouts from a drug abuse treatment program. Craig RJ, et al. **Am J Drug Alcohol Abuse** 1988;14(1):89–96

Clinical toxicity of cocaine adulterants. Shannon M. **Ann Emerg Med** 1988 Nov;17(11):1243–7 (93 ref.)

Patterns of drug use by young people in the rural community of Spain. Alvarez FJ, et al. **Br J Addict** 1989 Jun; 84(6):647–52

Co–ordinating drugs research in Britain. Berridge V. **Br J Addict** 1988 Sep;83(9):1013–8

Drugs research: the European dimension [editorial] Berridge V. **Br J Addict** 1989 Jun;84(6):579–80

The sex industry, alcohol and illicit drugs: implications for the spread of HIV infection. Plant ML, et al. **Br J Addict** 1989 Jan;84(1):53–9 (57 ref.)

Participant observation and its place in the study of illicit drug abuse. Power R. **Br J Addict** 1989 Jan;84(1):43–52 (39 ref.)

Reports from research centres—16. The National Institute on Drug Abuse (NIDA). Schuster CR. **Br J Addict** 1989 Jan;84(1):19–28

Drug and substance use among 3,333 London adolescents.

Swadi H. Br J Addict 1988 Aug;83(8):935–42
An evaluation of the results of a drug sample analysis. Gomez J, et al. Bull Narc 1989;41(1–2):121–6
Development of an information reporting system on illicit drug use in Mexico. Ortiz A, et al. Bull Narc 1989; 41(1–2):41–52
Parkinsonian syndrome after cardiac arrest: radiological and neurochemical changes. Verslegers W, et al. Clin Neurol Neurosurg 1988;90(2):177–9
Medical complications of illicit cocaine use. VanDette JM, et al. Clin Pharm 1989 Jun;8(6):401–11 (107 ref.)
Nonnarcotic drug use over an addiction career—a study of heroin addicts in Baltimore and New York City. Nurco DN, et al. Compr Psychiatry 1988 Sep–Oct;29(5):450–9
Use of alcohol, tobacco and illicit drugs amongst 13-year-olds in three areas of Britain. Bagnall G. Drug Alcohol Depend 1988 Dec;22(3):241–51
Prenatal, perinatal, and early childhood risk factors and drug involvement in adolescence. Brook JS, et al. Genet Soc Gen Psychol Monogr 1989 May;115(2):221–41
The dark side of medication abuse [editorial] Edmeads J. Headache 1989 Mar;29(3):190–1
Substance abuse in the elderly: over-the-counter and illegal drugs. Abrams RC, et al. Hosp Community Psychiatry 1988 Aug;39(8):822–3, 829
Volatile substance abuse in relation to alcohol and illicit drugs: psychosocial perspectives. Edeh J. Hum Toxicol 1989 Jul;8(4):313–7 (27 ref.)
The effects of two therapeutic communities on illicit drug users between 6 months and 1 year after treatment. Page RC, et al. Int J Addict 1988 Jun;23(6):591–601
Interactional variables associated with retention and success in residential drug treatment. Siddall JW, et al. Int J Addict 1988;23(12):1241–54
Trend analyses of four large-scale surveys of high school drug use 1977–1986. Pascale PJ, et al. J Drug Educ 1988; 18(3):221–33
Adolescent substance abuse. Lewis DM. J Med Assoc Ga 1988 Nov;77(11):819–20
Prevalence of alcohol and drug use among North Carolina public school students. Palmer JH, et al. J Sch Health 1988 Sep;58(7):288–91
Assessing the effectiveness of Malaysia's drug prevention education and rehabilitation programs. Scorzelli JF. J Subst Abuse Treat 1988;5(4):253–62
Drug war intelligence gathering: risky, but useful to physicians [news][see comments] Zylke JW. JAMA 1988 Oct 21;260(15):2169–70. Comment in: JAMA 1989 Mar 10;261(10):1445–6
Adolescent drug use and antisocial behaviour. Osuna E, et al. Med Law 1988;7(4):365–70
Gunshot wounds to legs in drug runners [letter] Sanchez J, et al. N Engl J Med 1989 Apr 20;320(16):1089
Ecstasy abuse [letter] Ellis P, et al. N Z Med J 1989 Jul 12;102(871):358
The Drug Czar: no "Walter Wallflower" [news] Marshall E. Science 1989 Mar 10;243(4896):1287
Drug war [editorial] Campell HS. Va Med 1989 Jun; 116(6):279–80
Patterns of substance use and abuse in inner-city adolescent medical patients. Earls F, et al. Yale J Biol Med 1988 May–Jun;61(3):233–42
Drug abuse in Denmark (Jutland and Funen). A forensic study based upon drugs seized in 1982–1987. Kaa E. Z Rechtsmed 1988;101(4):229–36
[HIV infection in intravenous drug dependent patients—Vienna 1988 results] Loimer N, et al. Wien Med Wochenschr 1989 Jul 30;139(14):334–6 (Eng. Abstr.) (Ger)

ADMINISTRATION & DOSAGE

Causal models of adolescent substance use: an examination of gender differences using distribution-free estimators. Windle M, et al. J Pers Soc Psychol 1989 Jan;56(1):132–42
AIDS and the new drug injector. Friedman SR, et al. Nature 1989 Jun 1;339(6223):333–4
The dynamics of an illicit drug scene. Robertson JR, et al. Scott Med J 1988 Aug;33(4):293

ADVERSE EFFECTS

"Ecstasy" and sudden cardiac death. Suarez RV, et al. Am J Forensic Med Pathol 1988 Dec;9(4):339–41
Illicit drug use, AIDS, and public policy [editorial] Novick A. Conn Med 1988 Oct;52(10):623–4
Erythematous cutaneous nodules caused by adulterated cocaine. Heng MC, et al. J Am Acad Dermatol 1989 Sep; 21(3 Pt 1):570–2
Drug use in pregnancy: parameters of risk. Chasnoff IJ. Pediatr Clin North Am 1988 Dec;35(6):1403–12 (37 ref.)

ANALYSIS

Illicit methamphetamine: analysis, synthesis, and availability [published erratum appears in Am J Drug Alcohol Abuse 1989;15(3):353] Puder KS, et al. Am J Drug Alcohol Abuse 1988;14(4):463–73
Identification and determination of norcocaine in illicit cocaine and coca leaves by gas chromatography–mass spectrometry and high-performance liquid chromatography. LeBelle MJ, et al. Analyst 1988 Aug; 113(8):1213–5
Drugs of abuse found in fatally injured drivers in Los Angeles County. Budd RD, et al. Drug Alcohol Depend 1989 Apr; 23(2):153–8
Illicit drug abuse in the Marmara region of Turkey. Atasoy S, et al. Forensic Sci Int 1988 Jul–Aug;38(1–2):75–81
At law. Crack, symbolism, and the constitution. Annas GJ. Hastings Cent Rep 1989 May–Jun;19(3):35–7
Identification of cocaine in cocaine–lidocaine mixtures ("rock cocaine") and other illicit cocaine preparations using derivative absorption spectroscopy. Arufe-Martinez MI, et al. J Anal Toxicol 1988 Jul–Aug;12(4):192–6
Inappropriate use of immunoassays as a quantitative tool [editorial] Baselt RC. J Anal Toxicol 1989 Jan–Feb;13(1):1
Evaluation of the ETS and ADx urine drug screening immunoassay analyzers. Edinboro LE, et al. J Anal Toxicol 1989 Jul–Aug;13(4):232–4
Programmable temperature vaporizer applications in an high-resolution gas chromatographic method for the quantitation of impurities in illicit heroin. Bertol E, et al. J Chromatogr 1989 Apr 19;466:384–9
On-line high-performance liquid chromatographic diode array spectrophotometric analysis of steroidal hormones in illegal preparations. De Beer JO. J Chromatogr 1989 Apr 7;489(1):139–55
Positive confirmation of identity of doping agents using gas chromatography–mass spectrometry with Fourier transform infrared spectrometry. Selala MI, et al. J Chromatogr 1989 Apr 7;489(1):51–6
Crime labs or the street for drug information? [letter; comment] Stein B. JAMA 1989 Mar 10;261(10):1445–6. Comment on: JAMA 1988 Oct 21;260(15):2169–70
American Academy of Pediatrics Committee on Adolescence, Committee on Bioethics, and Provisional Committee on Substance Abuse: Screening for drugs of abuse in children and adolescents. Pediatrics 1989 Aug; 84(2):396–8

BLOOD

Direct detection of drugs of abuse in whole hemolyzed blood using the EMIT d.a.u. urine assays [published erratum appears in J Anal Toxicol 1988 Nov–Dec;12(6):16A] Asselin WM, et al. J Anal Toxicol 1988 Jul–Aug; 12(4):207–15

METABOLISM

Effect of chronic maternal drug addiction on placental drug metabolism. Ostrea EM Jr, et al. Dev Pharmacol Ther 1989; 12(1):42–8
The binding of [3H]thienyl cyclohexylpiperidine ([3H]TCP) to the NMDA-phencyclidine receptor complex. Stirling JM, et al. Neuropharmacology 1989 Jan;28(1):1–7

PHARMACOKINETICS

Clinical pharmacokinetics of non-opiate abused drugs. Busto U, et al. Clin Pharmacokinet 1989 Jan;16(1):1–26 (211 ref.)

PHARMACOLOGY

Mutagenicity of some alkyl nitrites used as recreational drugs. Dunkel VC, et al. Environ Mol Mutagen 1989;14(2):115–22
Cadmium and lead exposure associated with pharmaceuticals imported from Asia—Texas. MMWR 1989 Sep 8; 38(35):612–4

POISONING

The "mini-packer" syndrome. Fatal ingestion of drug containers in Baltimore, Maryland. Introna F Jr, et al. Am J Forensic Med Pathol 1989 Mar;10(1):21–4
Adverse effects of the use of unusual phenethylamine compounds sold as illicit amphetamine. Bal TS, et al. Med Sci Law 1989 Jul;29(3):186–8
Fatal intoxications in the Nordic countries. A forensic toxicological study with special reference to young drug addicts. Steentoft A, et al. Z Rechtsmed 1989;102(6):355–65

TOXICITY

Evaluation of the neurotoxic potential of N,N-dimethylamphetamine: an illicit analog of methamphetamine. Ricaurte GA, et al. Brain Res 1989 Jun 26;490(2):301–6

URINE

Urine drug screening in mothers and newborns. Osterloh JD, et al. Am J Dis Child 1989 Jul;143(7):791–3
Confirmation of drugs of abuse in urine drug screens by direct exposure probe mass spectrometry. Papa VM, et al. Biomed Environ Mass Spectrom 1988 Oct;16(1–12):263–5
Status of drugs-of-abuse testing in urine under blind conditions: an AACC study. Frings CS, et al. Clin Chem 1989 May;35(5):891–4
Adulterants causing false negatives in illicit drug testing. Mikkelsen SL, et al. Clin Chem 1988 Nov;34(11):2333–6
Proficiency testing on drugs of abuse: one year's experience in Spain. Segura J, et al. Clin Chem 1989 May;35(5):879–83
Interference of common household chemicals in immunoassay methods for drugs of abuse. Warner A. Clin Chem 1989 Apr;35(4):648–51
Comparison of three commercial amphetamine immunoassays for detection of methamphetamine, methylenedioxyamphetamine, methylenedioxymethamphetamine, and methylenedioxyethylamphetamine. Ruangyuttikarn W, et al. J Anal Toxicol 1988 Jul–Aug;12(4):229–33
Drug screening in the workplace [letter] Phelps G. J S C Med Assoc 1988 Nov;84(11):560
A stand against drug testing [letter] Lampton LM. Mo Med 1987 Mar;84(3):111
The accuracy and reliability of tests for drugs of abuse in urine samples. Kelly KL. Pharmacotherapy 1988; 8(5):263–75 (106 ref.)
Sports Illustrated gets an 'F' on NFL drug testing article! [editorial] Griffin GC. Postgrad Med 1989 Sep 1;86(3):13–4, 16
Clinical evaluation and use of urine screening for drug abuse. Saxon AJ, et al. West J Med 1988 Sep;149(3):296–303

STREET PEOPLE see HOMELESS PERSONS

STREETER SYNDROME see AMNIOTIC BAND SYNDROME

STREPTOCOCCACEAE

ANALYSIS

Identification of monounsaturated fatty acids of Aerococcus viridans with dimethyl disulfide derivatives and combined gas chromatography–mass spectrometry. Moss CW, et al. J Clin Microbiol 1989 Sep;27(9):2130–2

CLASSIFICATION

Identification of gram-positive coccal and coccobacillary vancomycin-resistant bacteria. Facklam R, et al. J Clin Microbiol 1989 Apr;27(4):724–30
Identification of Enterococcus species isolated from human infections by a conventional test scheme. Facklam RR, et al. J Clin Microbiol 1989 Apr;27(4):731–4

DRUG EFFECTS

Genetic basis of antibiotic resistance in Aerococcus viridans. Buu-Hoï A, et al. Antimicrob Agents Chemother 1989 Apr; 33(4):529–34
Relationship between in vitro susceptibility test results for chloramphenicol and production of chloramphenicol acetyltransferase by Haemophilus influenzae, Streptococcus pneumoniae, and Aerococcus species. Matthews HW, et al. J Clin Microbiol 1988 Nov; 26(11):2387–90

GENETICS

Cloning of two bacteriocin genes from a lactococcal bacteriocin plasmid. van Belkum MJ, et al. Appl Environ Microbiol 1989 May;55(5):1187–91

GROWTH & DEVELOPMENT

Studies on antagonism between porcine skin bacteria. Allaker RP, et al. J Appl Bacteriol 1989 Jun;66(6):507–14

ISOLATION & PURIFICATION

Aerococcus-like organism—an unnoticed urinary tract pathogen. Christensen JJ, et al. APMIS 1989 Jun; 97(6):539–46

METABOLISM

Protein dynamics from chemical shift and dipolar rotational spin–echo 15N NMR. Garbow JR, et al. Biochemistry 1989 Feb 7;28(3):1362–7
[The action of hydrogen peroxide produced by Aerococcus viridans on Escherichia coli and Bacillus subtilis] Kremenchutskiĭ GN, et al. Mikrobiol Zh 1987 Mar–Apr; 49(2):91–3 (Eng. Abstr.) (Rus)

STREPTOCOCCAL INFECTIONS

The prevention and treatment of neonatal group B streptococcal infections. Givner LB, et al. Adv Pediatr Infect Dis 1988;3:65–90 (102 ref.)
Molecular analysis of viridans and nutritionally deficient (variant) streptococci causing sequential episodes of endocarditis in a patient. Stein DS, et al. Am J Clin Pathol 1989 May;91(5):620–4
Group A streptococcal peritonitis in a patient undergoing continuous ambulatory peritoneal dialysis. Cavalieri SJ, et al. Am J Med 1989 Feb;86(2):249–50
Streptococcus salivarius endophthalmitis from contaminated donor cornea after keratoplasty. Heidemann DG, et al. Am J Ophthalmol 1989 Apr 15;107(4):429–30
Endogenous orbital cellulitis and endogenous endophthalmitis in subacute bacterial endocarditis. Hornblass A, et al. Am J Ophthalmol 1989 Aug 15; 108(2):196–7
Postoperative endophthalmitis and asymptomatic bacteriuria caused by group G Streptococcus. Margo CE, et al. Am J Ophthalmol 1989 Apr 15;107(4):430–1
Group B streptococcal infections. Perinatal impact and prevention methods. Baker CJ, et al. Ann N Y Acad Sci 1988;549:193–202
Purulent pericarditis caused by Streptococcus milleri. Akashi K, et al. Arch Intern Med 1988 Nov;148(11):2446–7
Endocarditis due to streptomycin-susceptible Enterococcus faecalis with high-level gentamicin resistance. Spiegel CA,

et al. **Arch Intern Med** 1989 Aug;149(8):1873–5
Streptococcus pyogenes pneumonia with abscess formation. McIntyre HD, et al. **Aust N Z J Med** 1989 Jun;19(3):248–9
Dangers of an uncomplicated tooth extraction. A case of Streptococcus sanguis meningitis. Fernando IN, et al. **Br Dent J** 1988 Sep 24;165(6):220
Infectious crystalline keratopathy. Zabel RW, et al. **Can J Ophthalmol** 1988 Dec;23(7):311–4
Brain abscess following dilatation of esophageal stricture. Harp DL, et al. **Clin Imaging** 1989 Jun;13(2):140–1 (7 ref.)
A case of postanginal sepsis. **Compr Ther** 1989 Jun;15(6):67
Mycotic aortic aneurysms. Baird RN. **Eur J Vasc Surg** 1989 Apr;3(2):95–6
Mycotic aneurysm of the aorta due to group B streptococcus (Streptococcus agalactiae). Blackett RL, et al. **Eur J Vasc Surg** 1989 Apr;3(2):177–9
Neonatal group B streptococcal bacteremia and meningitis. Smith AJ, et al. **Heart Lung** 1989 Jan;18(1):94–6
Skeletal infection by group B beta-haemolytic streptococci in neonates. A case report and review of the literature. Baxter MP, et al. **J Bone Joint Surg [Br]** 1988 Nov; 70(5):812–4 (19 ref.)
CT appearance of mycotic abdominal aortic aneurysms. Blair RH, et al. **J Comput Assist Tomogr** 1989 Jan–Feb; 13(1):101–4
Severe group B streptococcal eye infections in adults. Ormerod LD, et al. **J Infect** 1989 Jan;18(1):29–34
Dysentery and Streptococcus pyogenes [letter] Seal DV. **J Infect** 1988 Sep;17(2):185–6
Acute glomerulonephritis in children: a prospective study. Tapaneya-Olarn W, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:35–8
Mycotic vasculitis with repeated intracranial aneurysmal hemorrhage. Case report. Venger BH, et al. **J Neurosurg** 1988 Nov;69(5):775–9
Another cause of pharyngotonsillitis [letter] Negreira S, et al. **J Pediatr** 1988 Oct;113(4):785–6
Neonatal septicemia due to group B streptococci—perinatal risk factors and outcome of subsequent pregnancies. Faxelius G, et al. **J Perinat Med** 1988;16(5–6):423–30
Neonatal bacterial endocarditis of the pulmonary valve: report of two cases. Franzek DA, et al. **J Perinatol** 1987 Fall;7(4):292–5
Serious bacterial cellulitis of the periorbital area in two patients with systemic lupus erythematosus. Derksen RH, et al. **J Rheumatol** 1988;15(5):840–4
Streptococcus faecalis arthritis. Mitchell D, et al. **J Rheumatol** 1989 Jan;16(1):138–9
Enhancement of survival from murine polymicrobial peritonitis with increased abdominal abscess formation. Cheadle WG, et al. **J Surg Res** 1989 Aug;47(2):120–3
Maternal and neonatal group B streptococcal bacteriuria [editorial] Kirmani N. **JPMA** 1988 Aug;38(8):201–2
Streptococcus acidominimus infections in a human. Akaike T, et al. **Jpn J Med** 1988 Aug;27(3):317–20
Viridans streptococcal endocarditis. Lessons we've learned from the animal model. Dall L, et al. **Mo Med** 1986 Feb; 83(2):85–8
Enterococcal meningitis: a subacute presentation. Brown DR, et al. **N Y State J Med** 1989 Feb;89(2):92–3
Acute streptococcal necrotising fasciitis. Frankish PD, et al. **N Z Med J** 1988 Oct 12;101(855):625–6
Meningitis following spinal puncture in a patient with a CSF leak. Lanska DJ, et al. **Neurology** 1989 Feb;39(2 Pt 1):306–7
Balanitis caused by group A beta-hemolytic Streptococcus in an 8-year-old boy. Deliyanni VA, et al. **Pediatr Infect Dis J** 1989 Jan;8(1):61–2
Acute phlegmonous gastritis. O'Toole PA, et al. **Postgrad Med J** 1988 Apr;64(750):315–6
Group C beta-hemolytic streptococcal infections in children: nine pediatric cases and review. Arditi M, et al. **Rev Infect Dis** 1989 Jan–Feb;11(1):34–45 (86 ref.)
Neonatal meningitis due to Streptococcus mitis. Bignardi GE, et al. **Rev Infect Dis** 1989 Jan–Feb;11(1):86–8
Enterococcal bacteremia: analysis of 75 episodes. Gullberg RM, et al. **Rev Infect Dis** 1989 Jan–Feb;11(1):74–85
Streptococcus bovis bacteremia and endocarditis at Groote Schuur Hospital [letter] Robson SC, et al. **S Afr Med J** 1989 Jun 17;75(12):597
Endocarditis due to Streptococcus bovis—a case report. Parasakthi N, et al. **Singapore Med J** 1988 Aug;29(4):416–7
Group C beta-hemolytic streptococci causing pharyngitis and scarlet fever. Corson AP, et al. **South Med J** 1989 Sep;82(9):1119–21
[Streptococcus bovis septicemia and colonic cancer] Devis A, et al. **Acta Chir Belg** 1989 Jan–Feb;89(1):58–60 (Eng. Abstr.) **(Fre)**
[Pulmonary valve endocarditis caused by Streptococcus D bovis in a patient with a colorectal adenocarcinoma] Chidiac C, et al. **Arch Mal Coeur** 1988 Jun;81(6):797–800 (Eng. Abstr.) **(Fre)**
[Recurrent myocardial abscess during Streptococcus B endocarditis] Prunier L, et al. **Arch Mal Coeur** 1988 Jul; 81(7):925–8 (Eng. Abstr.) **(Fre)**
[Infections on foreign material] Leport C. **Presse Med** 1989 Jan 21;18(2):50–2 **(Fre)**
[Septic shock caused by Streptococcus milleri after endoscopic sclerosis of esophageal varices (letter)] Minault S, et al. **Presse Med** 1988 Nov 5;17(39):2089–90 **(Fre)**
[Simultaneous septic and gouty arthritis (letter)] Poiraudeau S, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1039 **(Fre)**
[Rapid diagnosis of Streptococcus A angina] Kechrid A, et al. **Tunis Med** 1988 Jan;66(1):31–5 (Eng. Abstr.) **(Fre)**
[Diseases caused by group G beta-hemolytic streptococci] Füssle R, et al. **Dtsch Med Wochenschr** 1989 Mar 24; 114(12):461–3 (Eng. Abstr.) **(Ger)**
[Importance of Streptococci and in particular of the Enterococci in urinary tract infections] Savarino A, et al. **Quad Sclavo Diagn** 1987 Sep;23(3):312–7 (Eng. Abstr.) **(Ita)**
[Clinical evaluations of surgical treatment of infective endocarditis] Otaki M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):600–5 (Eng. Abstr.) **(Jpn)**
[Streptococcal perianal disease and balanoposthitis] Guerrero Vázquez J, et al. **An Esp Pediatr** 1989 Mar;30(3):198–200 (Eng. Abstr.) **(Spa)**

BLOOD

C reactive protein (1957). The significance of the C reactive protein estimation in streptococcal and allied disease. Dawson SF. **Arch Dis Child** 1989 Mar;64(3):423

COMPLICATIONS

Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. VI. Heightened cellular reactivity to streptolysin-O in mice infected with S. pyogenes and in MCLS patients. Akiyama T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):68–72
Ultrasonographic findings in periventricular leukomalacia in the newborn: two cases associated with early onset group B streptococcal sepsis. Ogino T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):89–93
Streptococcus bovis septicemia and large bowel neoplasia. Tabibian N, et al. **Am Fam Physician** 1989 Apr;39(4):227–9 (26 ref.)
Prostaglandin E1 selectively reduces group B beta-hemolytic streptococci-induced pulmonary hypertension in newborn piglets. Hammerman C, et al. **Am J Dis Child** 1989 Mar; 143(3):343–7
Postinfectious glomerulonephritis in the elderly [letter] Volpi A, et al. **Am J Nephrol** 1988;8(5):431–2
Toxic shock-like syndrome associated with Bartholin's gland abscess: case report. Shearin RS, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1073–4
Mitral stenosis in childhood and adolescence—a study of 45 cases and their surgical management. Beg MH, et al. **Ann Trop Paediatr** 1989 Jun;9(2):98–101
Delayed presentation of a right-sided diaphragmatic hernia and group B streptococcal sepsis. Two case reports and a review of the literature. Rescorla FJ, et al. **Arch Surg** 1989 Sep;124(9):1083–6 (14 ref.)
Rheumatic fever and poststreptococcal glomerulonephritis: a case report. Kujala GA, et al. **Arthritis Rheum** 1989 Feb; 32(2):236–9
Total hip replacement infected by septic abortion. Sibly TF. **Br J Clin Pract** 1988 Jun;42(6):253–4
Streptococcus bovis endocarditis and carcinoma of the colon. Zuccollo R, et al. **Br J Clin Pract** 1987 Nov;41(11):1022–3
Streptococcus bovis endocarditis and carcinoma of the colon. Henderson S, et al. **Br J Hosp Med** 1989 Jan;41(1):85
Streptococcal tonsillitis and acute nonrheumatic myopericarditis. Karjalainen J. **Chest** 1989 Feb; 95(2):359–63
Osler's nodes on the dorsum of the foot. Watanakunakorn C. **Chest** 1988 Nov;94(5):1088–90
Acute poststreptococcal glomerulonephritis and sickle cell disease. Asear R, et al. **Child Nephrol Urol** 1988–89; 9(3):176–9
Splenic infarction associated with nonenterococcal endocarditis—report of a case. Wang FD, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):219–22
Endostreptosin: isolation of the probable immunogen of acute post-streptococcal glomerulonephritis (PSGN). Cronin W, et al. **Clin Exp Immunol** 1989 May;76(2):198–203
Concurrent malaria and bacteraemia in a multiply transfused patient. MacIntyre EA, et al. **Clin Lab Haematol** 1988; 10(3):355–5
Group B streptococcal cellulitis and adenitis concurrent with meningitis. Rathore MH. **Clin Pediatr (Phila)** 1989 Sep; 28(9):411
Elephantiasis nostras: an eight-year observation of progressive nonfilarial elephantiasis of the lower extremity. Sanders LJ, et al. **Cutis** 1988 Nov;42(5):406–11
Selective inhibition of thromboxane synthetase reduces group-B-beta-hemolytic-streptococci-induced pulmonary hypertension in piglets. Hammerman C, et al. **Dev Pharmacol Ther** 1988;11(5):306–12
Anterior mitral valve aneurysm perforation secondary to aortic valve endocarditis detected by Doppler colour flow mapping. Decroly P, et al. **Eur Heart J** 1989 Feb; 10(2):186–9
Subdiaphragmatic gas in hepatic hydatid disease [letter] Masterton RG, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):576–7
Fatal disseminated intravascular coagulation secondary to streptococcal cervicitis. Paraskevaides EC, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Sep;29(1):39–40
Arborescent bacterial keratopathy (infectious crystalline keratopathy). Watson AP, et al. **Eye** 1988;2 (Pt 5):517–22
Group B streptococcus and premature rupture of membranes and preterm delivery. Matorras R, et al. **Gynecol Obstet Invest** 1989;27(1):14–8
Pathogenicity of capsulate and non-capsulate members of Bacteroides fragilis and B. melaninogenicus groups in mixed infection with Escherichia coli and Streptococcus pyogenes. Brook I. **J Med Microbiol** 1988 Nov;27(3):191–8
Guttate psoriasis associated with perianal streptococcal disease. Honig PJ. **J Pediatr** 1988 Dec;113(6):1037–9
Neonatal radiologic casebook. Group B streptococcal infection/cerebral necrosis. Truemper EJ, et al. **J Perinatol** 1987 Summer;7(3):267–9
Epiglottitis in AIDS patients. Rothstein SG, et al. **Laryngoscope** 1989 Apr;99(4):389–92
Urine-dipalide testing for group-B streptococci to identify those at risk of premature rupture of membranes [letter] Thomas IL, et al. **Med J Aust** 1989 Sep 4;151(5):300
Hemorrhagic colitis with Streptococcus pyogenes preceding hemolytic uremic syndrome during early pregnancy [letter] Bollaert PE, et al. **Nephron** 1989;52(1):103–4
Prognosis of children with poststreptococcal reactive arthritis. De Cunto CL, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):683–6
Serious suppurative group A streptococcal infections in previously well children. Harnden A, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):714–8
Poststreptococcal arthritis. Herold BC, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):681–2
Osteomyelitis associated with varicella infection. Kain Z, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):473–5 (19 ref.)
Profile of crescentic glomerulonephritis in Natal—a clinicopathological assessment. Parag KB, et al. **Q J Med** 1988 Aug;68(256):629–36
Streptococcus bovis bacteremia and digestive system neoplasms [letter] Pigrau C, et al. **Scand J Infect Dis** 1988; 20(4):459–60
Central nervous system complications in patients with bacteremia. Syrjänen J. **Scand J Infect Dis** 1989; 21(3):285–96
Streptococcal infections and their sequelae in the upper respiratory tract. Rodriguez-Noriega E, et al. **Scand J Infect Dis Suppl** 1988;57:12–9 (55 ref.)
Group G streptococcal bacteremia with presumed endocarditis in a patient with AIDS [letter] Kaplan JD, et al. **West J Med** 1988 Sep;149(3):344
[Urticaria caused by streptococcal tonsillitis. A differential diagnosis of type I penicillin allergy] Sørensen HT, et al. **Ugeskr Laeger** 1988 Nov 21;150(47):2913–4 (Eng. Abstr.) **(Dan)**
[Initial symptoms in post-streptococcal glomerulonephritis] van der Poel J, et al. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):425–7 **(Dut)**
[Abscess in HIV infection] Metzger U, et al. **Schweiz Rundsch Med Prax** 1988 Nov 1;77(44):1189–92 (Eng. Abstr.) **(Ger)**
[Post-streptococcal diseases] Migone L. **G Clin Med** 1988 Oct;69(10):563–5, 568–80 (59 ref.) **(Ita)**
[Tricuspid valvular regurgitation due to infective endocarditis with ventricular septal defect] Niwaya K, et al. **Kyobu Geka** 1988 Nov;41(12):983–7 (Eng. Abstr.) **(Jpn)**
[Role of the membrane attack complex (MAC) in acute poststreptococcal glomerulonephritis] Oshima S, et al. **Nippon Jinzo Gakkai Shi** 1988 Jul;30(7):811–9 (Eng. Abstr.) **(Jpn)**
[A case report of Streptococcus bovis meningitis associated with asymptomatic rectal carcinoma] Onuma M, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):430–1 **(Jpn)**
[Current status of the pathogenesis of rheumatic disease] Couto AA, et al. **Arq Bras Cardiol** 1988 Feb;50(2):75–8 **(Por)**
[Clinical aspects and treatment of bacterial thrombosis of the cavernous sinus in children] Manerov FK, et al. **Pediatriia** 1988;(4):83–5 **(Rus)**
[Acute phlegmonous gastritis due to beta hemolytic Streptococcus, with septicemia and fatal development] Morales O, et al. **Rev Med Chil** 1988 Aug;116(8):775–80 (Eng. Abstr.) **(Spa)**
[Lesion of the heart conduction system tissue after streptococcal infection: oligosymptomatic manifestation of rheumatic disease?] Ramírez A, et al. **Rev Med Chil** 1988 Aug;116(8):743–50 (Eng. Abstr.) **(Spa)**

CONGENITAL

[Mammary gland abscess in newborn infants (news)] Ströder J. **Fortschr Med** 1989 Mar 10;107(7):18 **(Ger)**

DIAGNOSIS

Detection of aortic valve ring abscess by intraoperative epicardial two-dimensional echocardiography. Tanaka M, et al. **Am Heart J** 1989 Mar;117(3):692–5
The diagnosis of group A, beta-hemolytic streptococcal pharyngitis in the office setting [letter] Kellogg JA. **Am J Dis Child** 1989 Jul;143(7):761–2
Group A streptococcal carrier state [letter] Tanz RR, et al. **Am J Dis Child** 1988 Oct;142(10):1020
The diagnosis of group A, beta-hemolytic streptococcal pharyngitis in the office setting. Rapid latex test vs throat culture. Taubman B, et al. **Am J Dis Child** 1989 Jan; 143(1):102–4
Carcinoma of the colon presenting as Streptococcus equinus bacteremia. Gilon D, et al. **Am J Med** 1989 Jan;86(1):135–6
Asymptomatic poststreptococcal glomerulonephritis in

relatives of patients with symptomatic glomerulonephritis. Diagnostic value of endostreptosin antibodies. Lange K, et al. **Child Nephrol Urol** 1988–89;9(1–2):11–5

Group A streptococcal rapid test. Antigen detection after 18–24 hours of penicillin therapy. Beach PS, et al. **Clin Pediatr (Phila)** 1989 Jan;28(1):6–10

Aortic root abscess—echocardiographic image. Torbicki A, et al. **Cor Vasa** 1988;30(4):281–4

Sporotrichoid pyogenic bacterial infection. Tanaka S, et al. **Dermatologica** 1989;178(4):228–30

Comparison of Visuwell enzyme immunoassay to culture for detection of group A Streptococcus in throat swab specimens. Drulak M, et al. **Diagn Microbiol Infect Dis** 1988 Dec;11(4):181–7

Echo-Doppler features of pulmonary valve endocarditis. Bitar J, et al. **Henry Ford Hosp Med J** 1989;37(1):41–2

Possible role of streptococci in pathogenesis of ankylosing spondylitis. Dwivedy AC, et al. **Indian J Med Res** 1988 Dec;88:475–9

Correlation between C-reactive protein and throat culture results in patients with pharyngitis. Singer A, et al. **Isr J Med Sci** 1989 Apr;25(4):235–6

Evaluation of the pacific biotech CARDS STREP A test for detecting group A streptococci from cases of pharyngitis. Manasse RJ. **J Clin Microbiol** 1989 Jul; 27(7):1657–8

Streptococcus pyogenes and Staphylococcus aureus pseudobacteremia [letter] Smith GE, et al. **J Infect** 1989 Mar;18(2):194–5

An in vitro comparison of eight rapid streptococcal antigen detection tests. White CB, et al. **J Pediatr** 1988 Oct; 113(4):691–3

New approaches to streptococcal pharyngitis. Nohinek B, et al. **Mo Med** 1986 May;83(5):265–8

Reliability of a rapid latex fixation test for detecting group B streptococci in the genital tract of parturients at term. Brady K, et al. **Obstet Gynecol** 1989 Apr;73(4):678–81

Polyclonal anti-group B Streptococcus latex antigen detection test. Blecker DL, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):251–2

Infant with two relapses of group B streptococcal sepsis documented by DNA restriction enzyme analysis. Denning DW, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):729–32

Evaluation of the throat culture as a follow-up for an initially negative enzyme immunosorbent assay rapid streptococcal antigen detection test. Lewey S, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):765–9

Clinical evaluation of a latex agglutination test for streptococcal pharyngitis: performance and impact on treatment rates. Lieu TA, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):847–54

Comparison of two rapid diagnostic tests for group A Streptococcus. Macknin ML, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):735–6

Streptococcal pharyngitis study [letter] Read JS, et al. **Pediatrics** 1989 May;83(5):808–9

Rapid group A streptococcal antigen detection kit: effect on antimicrobial therapy for acute pharyngitis. Redd SC, et al. **Pediatrics** 1988 Oct;82(4):576–81

Streptococcus pneumoniae endocarditis presenting as an epidural abscess. Clark R, et al. **Rev Infect Dis** 1989 Mar–Apr;11(2):338–40

Value of rapid tests for the detection of streptococcal infections. Reinert P, et al. **Rhinology** 1988;Suppl 5:75–9

Effect of latex agglutination test on prescribing for group A streptococcal throat disease in primary care. Mäkelä M. **Scand J Infect Dis** 1989;21(2):161–7

Streptococcal throat infections: still a complex clinical problem. Lundberg C, et al. **Scand J Infect Dis Suppl** 1988; 57:7–11 (24 ref.)

Clinical assessment of pharyngitis in general practice. Hjortdahl P, et al. **Scand J Prim Health Care** 1988 Nov; 6(4):219–23

Septic shock and acute respiratory distress syndrome after salpingitis caused by Streptococcus pyogenes group A. Fikrig E, et al. **South Med J** 1989 May;82(5):634–5

Rapid detection of group B streptococci in vaginal swabs of parturients by latex particle agglutination. Hoppe JE, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):379–84

[Problems of the diagnosis and treatment of glomerulonephritis] Ado MA. **Klin Med (Mosk)** 1989 Apr; 67(4):24–9 (46 ref.) (Rus)

[Epidemiologic aspects of the laboratory diagnosis of streptococcal infections] Beliakov VD, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):39–46 (72 ref.) (Eng. Abstr.) (Rus)

[Rapid diagnosis of pharyngotonsillitis using an ELISA method (Test Pack Strep A): comparison with culture and clinical data. Analysis of 306 cases] Arribas Blanco JM, et al. **Med Clin (Barc)** 1988 Nov 5;91(15):561–4 (Eng. Abstr.) (Spa)

[Comparative study of 2 rapid antigenic technics for diagnosing streptococcal pharyngitis (letter)] Betriu Cabecerin C, et al. **Rev Clin Esp** 1989 Apr;184(7):389 (Spa)

[A quick test of latex agglutination for diagnosing streptococcal pharyngitis and predictive value of the clinical picture] Diz Dios P, et al. **Rev Clin Esp** 1989 Jun; 185(1):14–8 (23 ref.) (Eng. Abstr.) (Spa)

[A rapid test for tonsillitis/pharyngitis as an aid in the diagnostic arsenal] Lind L, et al. **Lakartidningen** 1988 Nov 30;85(48):4209–10 (Swe)

[Direct antigen detection for group A streptococcal pharyngitis: comparison of throat cultures and the direct antigen test] Söyletir G, et al. **Mikrobiyol Bul** 1988; 22(4):322–6 (Eng. Abstr.) (Tur)

DRUG THERAPY

Failure of once-daily penicillin V therapy for streptococcal pharyngitis. Gerber MA, et al. **Am J Dis Child** 1989 Feb; 143(2):153–5

Twice-daily therapy for strep? [letter] Gill EC. **Am J Dis Child** 1989 Sep;143(9):997

Acute pericarditis due to group C Streptococcus: report of a medically treated case. Marsa RJ, et al. **Am J Med** 1989 Apr;86(4):474–6

Postantibiotic effect of penicillin plus gentamicin versus Enterococcus faecalis in vitro and in vivo. Hessen MT, et al. **Antimicrob Agents Chemother** 1989 May;33(5):608–11

Endocarditis due to streptomycin-susceptible Enterococcus faecalis with high-level gentamicin resistance. Spiegel CA, et al. **Arch Intern Med** 1989 Aug;149(8):1873–5

Penicillin and clindamycin therapy in recurrent tonsillitis. Effect of microbial flora. Foote PA Jr, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):856–9

Josamycin versus erythromycin in the treatment of streptococcal pharyngitis in children. Marchisio P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):413–4

Short-term treatment of streptococcal tonsillitis with ceftriaxone. Pavesio D, et al. **Chemotherapy** 1988;34 Suppl 1:34–8

Clinical comparison of once-daily cefadroxil and thrice-daily cefaclor in the treatment of streptococcal pharyngitis. Randolph MF. **Chemotherapy** 1988;34(6):512–8

Prevention of rheumatic fever. A statement for health professionals by the Committee on Rheumatic Fever, Endocarditis, and Kawasaki Disease of the Council on Cardiovascular Disease in the Young, the American Heart Association. Danjani AS, et al. **Circulation** 1988 Oct; 78(4):1082–6

Clinical commentary. Some thoughts on the treatment of beta hemolytic streptococcal infections. Disney FA. **Clin Pediatr (Phila)** 1989 Jan;28(1):10–1

Neonatal group B streptococcal osteomyelitis and suppurative arthritis. Outpatient therapy. Perkins MD, et al. **Clin Pediatr (Phila)** 1989 May;28(5):229–30

Effect of blood product medium supplements on the activity of cefotaxime and other cephalosporins against Enterococcus faecalis. Eliopoulos GM, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):149–56

Effect of dosing intervals on efficacy of clarithromycin and erythromycin in mouse infection models. Fernandes PB, et al. **Drugs Exp Clin Res** 1988;14(7):441–4

Beta-haemolytic streptococci from the female genital tract: clinical correlates and outcome of treatment. Lewis RF. **Epidemiol Infect** 1989 Jun;102(3):391–400

Cefadroxil versus penicillin in the treatment of streptococcal tonsillopharyngitis. Milatovic D, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):282–8

A five-day course of clindamycin for strep throat [letter] Walterspiel JN, et al. **Infection** 1988 Sep–Oct;16(5):299–300

LL-E19085 alpha, a novel antibiotic from Micromonospora citrea: taxonomy, fermentation and biological activity. Maiese WM, et al. **J Antibiot (Tokyo)** 1989 Jun;42(6):846–51

3H-spiramycin penetration into fibrin vegetations in an experimental model of streptococcal endocarditis. Cremieux AC, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:127–33

Comparative efficacy and toxicity of roxithromycin and erythromycin ethylsuccinate in the treatment of streptococcal pharyngitis in adults. Melcher GP, et al. **J Antimicrob Chemother** 1988 Oct;22(4):549–56

Intravenous benzyl penicillin [letter] Mathur SL, et al. **J Assoc Physicians India** 1988 Sep;36(9):571

Effect of tissue-type plasminogen activator (t-PA) on the treatment with benzylpenicillin of rabbits with experimental Streptococcus sanguis endocarditis. Buiting AG, et al. **J Infect Dis** 1989 Apr;159(4):780–4

Standardized symptomatic treatment versus penicillin as initial therapy for streptococcal pharyngitis. Middleton DB, et al. **J Pediatr** 1988 Dec;113(6):1089–94

Efficacy of erythromycin acistrate (2'-acetyl erythromycin stearate) and erythromycin stearate in experimental infections in mice. Männistö PT, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1028–33

Antimicrobial treatment of infective endocarditis due to viridans streptococci, enterococci, and staphylococci. Bisno AL, et al. **JAMA** 1989 Mar 10;261(10):1471–7 (12 ref.)

Antibiotics in endocarditis due to nutritionally deficient streptococci [letter] Stein DS, et al. **JAMA** 1989 Aug 4; 262(5):618

Failure of gentamicin when injected through 0.2 micron filter [letter] Richards J, et al. **Lancet** 1988 Dec 3;2(8623):1309–10

Chemotherapy of streptococcal infections: implications of antimicrobial drug resistance in Streptococcus pyogenes [editorial] Hansman D. **Med J Aust** 1989 Jun 5; 150(11):611–2

Prevention of neonatal group B streptococcal disease: intrapartum detection and chemoprophylaxis of heavily colonized parturients. Tuppurainen N, et al. **Obstet Gynecol** 1989 Apr;73(4):583–7

Evidence for hydroxyl radical involvement in group B streptococcus-induced pulmonary hypertension and arterial hypoxemia in young piglets. Pauly TH, et al. **Pediatr Res** 1988 Dec;24(6):735–9

'Little bits of stuff' [letter] Paris JA. **Practitioner** 1988 Apr 22;232(1447):431

Effects of clindamycin and gentamicin and other antimicrobial combinations against enterococci in an experimental model of intra-abdominal abscess. Willey SH, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):199–202

Penicillin-induced agranulocytosis. Walz B, et al. **West J Med** 1988 Oct;149(4):460–2

[Efficacy of injectable ofloxacin in treating septicemia. Multicenter study] Doco-Lecompte T, et al. **Pathol Biol (Paris)** 1989 May;37(5):465–7 (Eng. Abstr.) (Fre)

[Rational dosing intervals in streptococcal infections of the pharynx] Rauchegger H, et al. **Wien Klin Wochenschr** 1989 Mar 31;101(7):230–3 (Eng. Abstr.) (Ger)

[Clinical application of rokitamycin in pediatrics] Yanagawa Y, et al. **Jpn J Antibiot** 1988 Jul;41(7):871–4 (Eng. Abstr.) (Jpn)

[Evaluation of bacteriologic examination of the urine of children with pyelonephritis treated during the years 1985–1986] Morawska Z, et al. **Wiad Lek** 1988 Aug 15; 41(16):1077–81 (Eng. Abstr.) (Pol)

[Effectiveness of the treatment of patients with bacterial keratitis using an arenarin ointment] Nadzhem A, et al. **Oftalmol Zh** 1988;(5):294–6 (Eng. Abstr.) (Rus)

[Usefulness of combined benzathine penicillin in the treatment of streptococcal pharyngotonsillitis] Rodríguez RS, et al. **Bol Med Hosp Infant Mex** 1988 Dec; 45(12):797–802 (Eng. Abstr.) (Spa)

[Acute streptococcal pharyngitis: oral or intramuscular treatment? (letter)] Lobos Bejarano JM, et al. **Med Clin (Barc)** 1989 May 6;92(17):677 (Spa)

[Evaluation of the efficacy and toxicity of local fusidic aid versus oral dicloxacillin in infections of the skin] Macotela-Ruiz E, et al. **Med Cutan Ibero Lat Am** 1988; 16(2):171–3 (Eng. Abstr.) (Spa)

[The frequency of group A beta-hemolytic Streptococcus in acute tonsillopharyngitis and therapy with cefadroxil, clavulanic acid-amoxicillin combination and erythromycin in patients unresponsive to procaine penicillin therapy] Tuncer AM, et al. **Mikrobiyol Bul** 1987 Jul;21(3):172–7 (Eng. Abstr.) (Tur)

ENZYMOLOGY

A streptococcal plasminogen activator in the focus of infection and in the kidneys during the initial phase of experimental streptococcal glomerulonephritis. Holm SE, et al. **APMIS** 1988 Dec;96(12):1097–108

Alterations in lactate dehydrogenase isoenzyme patterns after therapy with streptokinase or streptococcal infection. Podlasek SJ, et al. **Clin Chem** 1989 Aug;35(8):1763–6

Hyaluronidase production in Streptococcus milleri in relation to infection. Unsworth PF. **J Clin Pathol** 1989 May; 42(5):506–10

EPIDEMIOLOGY

Neonatal septicaemia in Finland 1981–85. Predominance of group B streptococcal infections with very early onset. Vesikari T, et al. **Acta Paediatr Scand** 1989 Jan;78(1):44–50

Viridans streptococcal endocarditis. Harris LF. **Ala Med** 1989 Jul;59(1):13–7

Nosocomial enterococcal infections: association with use of third-generation cephalosporin antibiotics. Magnussen CR, et al. **Am J Infect Control** 1988 Dec;16(6):241–5

Streptococcal diseases. Rotta J. **APMIS Suppl** 1988;3:3–7 (16 ref.)

Occupational exposure to Streptococcus suis type 2. Robertson ID, et al. **Epidemiol Infect** 1989 Aug; 103(1):157–64

A community outbreak of group A beta haemolytic streptococci with transferable resistance to erythromycin. Scott RJ, et al. **Epidemiol Infect** 1989 Feb;102(1):85–91

Management of streptococcal pharyngitis: the conundrum of acute rheumatic fever. Hutten-Czapski P. **Fam Pract** 1988 Sep;5(3):200–8

Occurrence of mucoid M-18 Streptococcus pyogenes in a central Ohio pediatric population. Marcon MJ, et al. **J Clin Microbiol** 1988 Aug;26(8):1539–42

Microbiological investigation of an outbreak of bacteraemia due to Streptococcus faecalis in an intensive care unit. Hussain Z, et al. **J Hosp Infect** 1988 Nov;12(4):263–71

An outbreak of puerperal fever caused by group C streptococci. Teare EL, et al. **J Hosp Infect** 1989 May; 13(4):337–47

Invasive streptococcal infections in the era before the acquired immune deficiency syndrome: a 10 years' compilation of patients with streptococcal bacteraemia in North Yorkshire. Barnham M. **J Infect** 1989 May; 18(3):231–48 (64 ref.)

Cervicovaginal infection with group B streptococci among pregnant Mexican women [letter] Solorzano-Santos F, et al. **J Infect Dis** 1989 May;159(5):1003–4

Outbreaks of human infection caused by pyogenic streptococci of Lancefield groups C and G. Efstratiou A. **J Med Microbiol** 1989 Jul;29(3):207–19

Epidemiology of streptococcal pyoderma in an orphanage community of a tropical country. Brahmadathan KN, et al. **J Trop Med Hyg** 1988 Dec;91(6):306–14

Leads from the MMWR. Acute rheumatic fever among army trainees—Fort Leonard Wood, Missouri, 1987–1988. **JAMA** 1988 Oct 21;260(15):2185, 2188

Infections due to Lancefield group C streptococci. Salata RA, et al. **Medicine (Baltimore)** 1989 Jul;68(4):225–39 (107 ref.)

Severe group A streptococcal infections associated with a toxic shock-like syndrome and scarlet fever toxin A. Stevens DL, et al. **N Engl J Med** 1989 Jul 6;321(1):1–7

Group A streptococcus–associated upper respiratory tract infections in a day-care center. Smith TD, et al. **Pediatrics** 1989 Mar;83(3):380–4

Streptococcus pyogenes bacteraemia in Cambridge—a review of 67 episodes. Francis J, et al. **Q J Med** 1988 Aug; 68(256):603–13

Throat carrier rates of beta-hemolytic streptococci among healthy adults and children. Strömberg A, et al. **Scand J Infect Dis** 1988;20(4):411–7

Acute tonsillitis in young men: etiological agents and their differentiation. Ylikoski J, et al. **Scand J Infect Dis** 1989; 21(2):169–74

Scabies and streptococcal skin infection in Ghana. Acheampong JW, et al. **Trop Doct** 1988 Oct;18(4):151–2

[Neonatal sepsis in Finland over one decade] Vesikari T, et al. **Duodecim** 1989;105(9):831–8 **(Fin)**

[Movements of epidemic serogroups or types of streptococcus in Toyama Prefecture—from group A type 3 in 1985 to again type 12 in 1986] Kodama H, et al. **Kansenshogaku Zasshi** 1988 Oct;62(10):878–85 **(Jpn)**

[Statistical studies on relation between numbers of patients with streptococcal infectious disease and meteorological data (4th report)] Morita M, et al. **Kansenshogaku Zasshi** 1988 Oct;62(10):848–54 (Eng. Abstr.) **(Jpn)**

[Statistical studies on relation between numbers of patients with streptococcal infectious disease and meteorological data (5th report)] Morita M, et al. **Kansenshogaku Zasshi** 1988 Oct;62(10):855–61 (Eng. Abstr.) **(Jpn)**

[A study on streptococcal prevalence in Chiang Mai, Thailand, with special reference to unusual combination between T and M antigens of group A Streptococcus] Murai T, et al. **Kansenshogaku Zasshi** 1988 Oct; 62(10):869–77 (Eng. Abstr.) **(Jpn)**

[Long-term prevalence of group A type T-1 isolated from throat of healthy schoolchildren. Part I. Analysis by detection rate. Streptococcal Disease Study Group] Nakajima K, et al. **Kansenshogaku Zasshi** 1988 Oct; 62(10):886–92 (Eng. Abstr.) **(Jpn)**

[Streptococcal infections, anti-streptococcal immunity and rheumatism in the builders and operators of Baikal-Amur trunk line] Satybaldyev AM, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):91–5 (Eng. Abstr.) **(Rus)**

[The main results of a study on the epidemiology and prevention of angina] Khodyrev AP, et al. **Voen Med Zh** 1989 Feb;(2):36–9 **(Rus)**

[Ecologic and epidemiologic features of the circulation of streptococcus group B at a maternity clinic] Bochkov IA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr; (4):37–42 (Eng. Abstr.) **(Rus)**

[Streptococcus agalactiae bacteremia in adults: study of 46 cases admitted to the Hospital Vall d'Hebron (1978–1985)] Ribera E, et al. **Med Clin (Barc)** 1988 Jul 2;91(6):211–3 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Streptococcus bovis endocarditis associated with villous adenoma following colonoscopy. Watanakunakorn C. **Am Heart J** 1988 Oct;116(4):1115–6

Streptococcal cell wall–induced arthritis and flare-up reaction in mice induced by homologous or heterologous cell walls. van den Broek MF, et al. **Am J Pathol** 1988 Oct;133(1):139–49

Subgaleal abscess: an unusual presentation. Wiley JF 2d, et al. **Ann Emerg Med** 1989 Jul;18(7):785–7

Intra-abdominal sepsis after hepatic resection. Pace RF, et al. **Ann Surg** 1989 Mar;209(3):302–6

Infective endocarditis in Crohn's disease. Wong JS. **Br Heart J** 1989 Aug;62(2):163–4

Streptococcus anginosus ("Streptococcus milleri"): the unrecognized pathogen. Ruoff KL. **Clin Microbiol Rev** 1988 Jan;1(1):102–8 (80 ref.)

Ocular streptococcal infections. Jones S, et al. **Cornea** 1988; 7(4):295–9

Sero group C streptococcal infection in intravenous drug abusers: a report of two cases. Kramer ED, et al. **Diagn Microbiol Infect Dis** 1988 Jul;10(3):181–4

Infective endocarditis in children with congenital heart disease: the changing spectrum, 1965–85. Geva T, et al. **Eur Heart J** 1988 Nov;9(11):1244–9

Respiratory insufficiency in acute leukemia following treatment with cytosine arabinoside and septicemia with streptococcus viridans [letter] Dybedal I, et al. **Eur J Haematol** 1989 Apr;42(4):405–6

Role of adherence in pathogenesis of Enterococcus faecalis urinary tract infection and endocarditis. Guzmán CA, et al. **Infect Immun** 1989 Jun;57(6):1834–8

The use of experimental airborne infections to monitor impairments in pulmonary defenses. Gardner DE. **J Appl Toxicol** 1988 Dec;8(6):385–8

Recurrent infection of a total hip arthroplasty associated with radiation-induced ulcerative colitis. A case report. Passick J, et al. **J Arthroplasty** 1989;4(1):87–90

Association of homozygous C4B deficiency with bacterial meningitis. Rowe PC, et al. **J Infect Dis** 1989 Sep; 160(3):448–51

Streptococcus pyogenes meningitis after myelography [letter] Damani NN, et al. **JPMA** 1988 Jul;38(7):197–8

Spontaneous streptococcal peritonitis in renal transplant recipient [letter] Shaked Y, et al. **Nephron** 1988;50(1):72

Bacterial meningitis following epidural anesthesia for vaginal delivery: a case report. Berga S, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):437–9

Group B streptococcal sepsis and death in utero following funipuncture. McColgin SW, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):464–5

Group A streptococcal pericarditis in a previously well child [letter] Pruitt JL. **Pediatr Infect Dis J** 1989 May;8(5):338

Post-varicella streptococcal pyomyositis. Raphael SA, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):187–9

Neonatal septicemia caused by group A beta-hemolytic Streptococcus. Wilschanski M, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):536–7

Group G streptococcal bacteremia in a healthy young man. Teel LD, et al. **South Med J** 1989 May;82(5):633–4

Infected Charcot spine following spinal cord injury. Mikawa Y, et al. **Spine** 1989 Aug;14(8):892–5

Study on pathogenesis of Enterococcus faecalis in urinary tract. Hirose T, et al. **Urol Res** 1989;17(2):125–9

[Streptococcus group B tardive meningitis revealing chronic septic granulomatosis] Garel D, et al. **Ann Pediatr (Paris)** 1989 Jan;36(1):35–7 (Eng. Abstr.) **(Fre)**

[Streptococcal meningitis secondary to inoculation. 2 cases (letter)] Dubost JJ, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):570 **(Fre)**

[Fulminant sepsis following posttraumatic splenectomy—OPSI (overwhelming postsplenectomy infection) syndrome] Thoma R, et al. **Anaesthesist** 1989 Jul;38(7):379–82 (Eng. Abstr.) **(Ger)**

[Systemic infection caused by Streptococcus suis] Kaufhold A, et al. **Dtsch Med Wochenschr** 1988 Oct 21; 113(42):1642–3 (Eng. Abstr.) **(Ger)**

[Infection and digestive bleeding: late complications of aortofemoral bypass surgery] Girardi A, et al. **Minerva Med** 1988 Dec;79(12):1095–9 (Eng. Abstr.) **(Ita)**

[Necrotizing fasciitis of the abdominal wall] Czekanowski R, et al. **Ginekol Pol** 1988 Dec;59(12):763–5 (Eng. Abstr.) **(Pol)**

[Effect of Streptococci on epithelial cells of the vagina of albino inbred mice NMRI] Stefanowicz M, et al. **Patol Pol** 1988 Jul–Sep;39(3):210–9 (Eng. Abstr.) **(Pol)**

[Sanitary and bacteriologic evaluation of Black Sea mussels] Govorin IA, et al. **Gig Sanit** 1989 Apr;(4):81–3 **(Rus)**

[Alimentary outbreak of tonsillitis] Sheinkman EV, et al. **Klin Med (Mosk)** 1989 Feb;67(2):129–30 **(Rus)**

[Significance of enterococcus in the development of infectious diseases of the respiratory organs] Sedov VI. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):96–103 (61 ref.) **(Rus)**

[Polymicrobial endocarditis in heroin addicts: a new case with mural involvement (letter)] Rodríguez Ramírez J, et al. **Med Clin (Barc)** 1988 Oct 1;91(10):399 **(Spa)**

[Identification of group B beta hemolytic Streptococcus in infections of adults and children] Fernández A, et al. **Rev Med Chil** 1989 Jun;116(6):514–9 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

The distribution of immunocompetent cells in the compartments of the palatine tonsils in bacterial and viral infections of the upper respiratory tract. Bernstein JM, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:153–62

Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. VII. A weak response to Epstein–Barr viral capsid antigen in mice infected neonatally with S. pyogenes. Akiyama T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Dec;30(6):654–61

Neutrophil mobilization induced by complement fragments during experimental group B streptococcal (GBS) infection. Shigeoka AO, et al. **Am J Pathol** 1988 Dec; 133(3):623–9

Immunoglobulin isotype response to the group-A streptococcal carbohydrate in humans. Araj GF, et al. **APMIS Suppl** 1988;3:8–12

Anti-streptolysin O titer, fifty-five years after Todd: a reappraisal of its clinical significance. Aguzzi F, et al. **Boll Ist Sieroter Milan** 1988;67(2):162–4

Infection with the human immunodeficiency virus (HIV) as a risk factor for bacteremic illness due to Streptococcus pneumoniae. Pesanti EL, et al. **Conn Med** 1988 Dec; 52(12):703–4

Immunological abnormalities in children with acute rheumatic carditis and acute post-streptococcal glomerulonephritis. Benatar A, et al. **Int J Cardiol** 1988 Oct;21(1):51–8

Seroepidemiology of group B streptococcus type III colonization at delivery. Gray BM, et al. **J Infect Dis** 1989 Jun;159(6):1139–42

Haemolytic streptococcus infection of chronic maxillary sinusitis. An immunological study using the skin window test. Toppozada H. **J Laryngol Otol** 1988 Oct;102(10):890–3

Optimal protein intake estimated by the resistance to streptococcal infection and the nutritional indices in mice. Yamamoto S, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Aug; 34(4):423–32

High intravenous doses of human immune globulin suppress neonatal group B streptococcal immunity in rats. Weisman LE, et al. **J Pediatr** 1989 Sep;115(3):445–50

Serological assessments of streptococcal infection by comparison of antibody titres to streptococcal extracellular antigens. el-Khateeb MS. **J Trop Pediatr** 1988 Oct; 34(5):251–3

Tissue cages for study of experimental streptococcal infection in rabbits. III. Influence of immunization with erythrogenic toxin type A (ET A) and its toxoid on subsequent infection with an ET A producing strain. Knöll H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):366–76

[Chronic streptococcal tonsillitis: significance of specific blastogenic response test and possibilities of its clinical applications] Sartoris A, et al. **Acta Otorhinolaryngol Ital** 1988 Nov–Dec;8(6):605–15 (Eng. Abstr.) **(Ita)**

[Role of streptococcal Fc-receptors for IgG in the formation of a microbial focus and the development of poststreptococcal immunopathologic conditions] Burova LA, et al. **Revmatologiia (Moskva)** 1988 Jul–Sep;(3):9–12 (Eng. Abstr.) **(Rus)**

[Detection and determination of the biological activity of IgG Fc receptors in strains of streptococci isolated from carriers and patients] Burova LA, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):30–4 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Bacterial adherence and upper respiratory tract disease: a correlation between S. pyogenes attachment and recurrent throat infections. Galioto GB, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:167–74

Experimental studies on the initial focus of invasion of group A streptococci. Hokonohara M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:192–6

Emergence of isolates resistant to ampicillin. Rupar DG, et al. **Am J Dis Child** 1989 Sep;143(9):1033–7

The presence of beta-lactamase-producing bacteria as a guideline in the management of children with recurrent tonsillitis. Brook I. **Am J Otolaryngol** 1984 Nov–Dec; 5(6):382–6

Poststreptococcal reactive arthritis. Arnold MH, et al. **Ann Rheum Dis** 1989 Aug;48(8):686–8

Penicillin susceptibility of Streptococcus pneumoniae in a private pediatric hospital in Houston, Texas. Caraway N, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1111–2

Treatment of experimental endocarditis caused by a beta-lactamase-producing strain of Enterococcus faecalis with high-level resistance to gentamicin. Hindes RG, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1019–22

Risk factors for acquisition of gentamicin-resistant enterococci. A multivariate analysis. Axelrod P, et al. **Arch Intern Med** 1989 Jun;149(6):1397–401

Microbiology of obstructive tonsillar hypertrophy and recurrent tonsillitis. Kielmovitch IH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):721–4

Septic arthritis of the knee due to Streptococcus anginosus. Balentine LT, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):189–91

Group C streptococci in human infection: a study of 308 isolates with clinical correlations. Barnham M, et al. **Epidemiol Infect** 1989 Jun;102(3):379–90

DNA fingerprinting of Streptococcus uberis: a useful tool for epidemiology of bovine mastitis. Hill AW, et al. **Epidemiol Infect** 1989 Aug;103(1):165–71

High-level vancomycin-resistant enterococci causing hospital infections. Uttley AH, et al. **Epidemiol Infect** 1989 Aug;103(1):173–81

Colonization of pregnant women and their newborn infants with group B streptococci in the Gondar College of Medical Sciences. Schmidt J, et al. **Ethiop Med J** 1989 Jul;27(3):115–9

Fatal Streptococcus suis septicemia in an abattoir worker. Büngener W, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):306–8

Association of penicillin-tolerant streptococci with epidemics of streptococcal pharyngitis in closed communities. Dagan R, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul; 8(7):629–31

Prevalence of Streptococcus mutans and dental decay in school children from Siena (Italy). Gasparini R, et al. **Eur J Epidemiol** 1989 Jun;5(2):189–92

Could streptococcal infection be one of the causes of Bell's palsy [letter] Odugbemi T, et al. **Eur J Epidemiol** 1989 Mar; 5(1):125–7

Patterns of carriage of group B streptococci in genitourinary medicine clinic patients. Monteiro EF, et al. **Genitourin Med** 1988 Dec;64(6):387–90

Speciation of viridans streptococci & their significance in human infections. Joag SV, et al. **Indian J Med Res** 1989 Jan;89:16–23

Enterococcal infections: an increasing problem in hospitalized patients. Terpenning MS, et al. **Infect Control Hosp Epidemiol** 1988 Oct;9(10):457–61

Endocarditis due to nutritionally variant streptococci. Handrick W, et al. **Infection** 1988;16(6):371–2

Infective endocarditis caused by Streptococcus agalactiae.

Pringle SD, et al. **Int J Cardiol** 1989 Aug;24(2):179–83
Prevalence and susceptibility of highly gentamicin resistant Enterococcus faecalis in a south London teaching hospital. Smyth EG, et al. **J Antimicrob Chemother** 1989 Apr; 23(4):633–9
The prevalence of high-level aminoglycoside resistance among enterococci isolated from blood cultures during 1980–1988. Watanakunakorn C. **J Antimicrob Chemother** 1989 Jul;24(1):63–8
Quantitative assay of glycocalyx produced by viridans group streptococci that cause endocarditis. Dall L, et al. **J Clin Microbiol** 1989 Sep;27(9):2039–41
Restriction endonuclease analysis of human and bovine group B streptococci for epidemiologic study. Denning DW, et al. **J Clin Microbiol** 1989 Jun;27(6):1352–6
Molecular species of R-protein antigens produced by clinical isolates of group B streptococci. Flores AE, et al. **J Clin Microbiol** 1989 May;27(5):1050–4
Comparison of the Directigen 1-2-3 Group A Strep Test with culture for detection of group A beta-hemolytic streptococci. Huck W, et al. **J Clin Microbiol** 1989 Aug; 27(8):1715–8
Enterococci highly resistant to penicillin and ampicillin: an emerging clinical problem? Sapico FL, et al. **J Clin Microbiol** 1989 Sep;27(9):2091–5
Pyomyositis—an under-reported disease in temperate climates. Farrag N, et al. **J Infect** 1988 Nov;17(3):259–63
Meningitis due to Streptococcus mitis cross-reacting with Streptococcus pneumoniae [letter] Fraise AP, et al. **J Infect** 1989 Jul;19(1):75–7
Endocarditis due to Streptococcus morbillorum. Maxwell S. **J Infect** 1989 Jan;18(1):67–72
Dysentery and Streptococcus pyogenes [letter] Rahman M. **J Infect** 1989 Jan;18(1):91–2
Fatal septicaemia with group A streptococcal infection in previously healthy subjects [letter] Waghorn DJ, et al. **J Infect** 1988 Sep;17(2):184–5
Pathogenicity of enterococci in a rat model of fecal peritonitis. Matlow AG, et al. **J Infect Dis** 1989 Jul; 160(1):142–5
Serious infection due to beta-lactamase-producing Streptococcus faecalis with high-level resistance to gentamicin [letter] Patterson JE, et al. **J Infect Dis** 1988 Nov;158(5):1144–5
Serological confirmation of group C streptococcal pneumonia. Rizkallah MF, et al. **J Infect Dis** 1988 Nov; 158(5):1092–4
Experimental arthritis induced by atypical strains of Streptococcus pyogenes. Barridge BD, et al. **J Med Microbiol** 1988 Sep;27(1):23–31
Ten-year survey of positive blood cultures among admissions to a neonatal intensive care unit. Hall RT, et al. **J Perinatol** 1987 Spring;7(2):122–6
Streptococcus suis type 2—an underdiagnosed zoonotic agent? [letter] Robertson ID, et al. **Med J Aust** 1989 Aug 21;151(4):238
Nutritionally variant streptococci develop ultrastructural abnormalities during experimental endocarditis. Frehel C, et al. **Microb Pathog** 1988 Apr;4(4):247–55
Evidence for group A-related M protein genes in human but not animal-associated group G streptococcal pathogens. Simpson WJ, et al. **Microb Pathog** 1987 Nov; 3(5):339–50
Clinically significant Streptococcus anginosus (Streptococcus milleri) infections: a review of 186 cases. Singh KP, et al. **N Z Med J** 1988 Dec 14;101(859):813–6 (24 ref.)
High isolation rates of group A streptococci in pharyngeal cultures from a group of Dunedin schoolchildren: what does this signify? [letter] Tagg J, et al. **N Z Med J** 1989 Feb 22;102(862):85–6
Bacteremia caused by a vancomycin-resistant Enterococcus. Bingen E, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):475–6
Group A streptococcal meningitis and brain abscess. Jagdis F. **Pediatr Infect Dis J** 1988 Dec;7(12):885–6
Group A streptococcal infection in children younger than three years of age. Levin RM, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):581–7
Identification of a high-virulence clone of type III Streptococcus agalactiae (group B Streptococcus) causing invasive neonatal disease. Musser JM, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4731–5
Liver abscess caused by Streptococcus milleri. Chua D, et al. **Rev Infect Dis** 1989 Mar-Apr;11(2):197–202 (38 ref.)
Endocarditis due to Streptococcus faecalis with high-level resistance to gentamicin. Lipman ML, et al. **Rev Infect Dis** 1989 Mar-Apr;11(2):325–8
Beta-hemolytic group C streptococci and pharyngitis [letter] Rudensky B, et al. **Rev Infect Dis** 1989 Jul-Aug;11(4):668
Group G streptococcal neonatal septicaemia: two case reports and a brief review of literature. Carstensen H, et al. **Scand J Infect Dis** 1988;20(4):407–10 (17 ref.)
Erythromycin-resistant beta-hemolytic streptococci group A in Göteborg, Sweden. Zackrisson G, et al. **Scand J Infect Dis** 1988;20(4):419–20
A year of rapid slide-culture in health centres: novelty wears off. Mäkelä M. **Scand J Prim Health Care** 1988 Nov; 6(4):245–9
Group C streptococcal arthritis. Davidson JR, et al. **Wis Med J** 1988 Oct;87(10):16–8 (18 ref.)
[Frequency and severity of systemic infections caused by Streptococcus mitis and sanguis II in neutropenic children] Leblanc T, et al. **Pathol Biol (Paris)** 1989 May;37(5):459–64 (Eng. Abstr.) (Fre)
[Clinical spectrum of a common and insidious pathogen: Streptococcus milleri] Spertini F, et al. **Schweiz Med Wochenschr** 1988 Oct 1;118(39):1393–7 (41 ref.) (Eng. Abstr.) (Fre)
[Group B streptococcal infections in newborn infants and young infants. A 5-year analysis] Halle E, et al. **Kinderarztl Prax** 1988 Dec;56(12):585–91 (Eng. Abstr.) (Ger)
[The disease picture of facial B streptococcal cellulitis in the neonatal period and infancy] Hunkert F, et al. **Kinderarztl Prax** 1988 Dec;56(12):593–7 (8 ref.) (Eng. Abstr.) (Ger)
[Hemolytic group B streptococci in obstetrics] Martius J. **Z Geburtshilfe Perinatol** 1988 Sep-Oct;192(5):187–91 (43 ref.) (Ger)
[Involvement of streptococci in infections of the root canal] Glockmann E, et al. **Z Gesamte Hyg** 1988 Oct;34(10):594–5 (Eng. Abstr.) (Ger)
[Type 2 Streptococcus suis (R-Streptococci) as pathogens of occupational diseases. Report of a case and a review of the literature] Köhler W, et al. **Z Gesamte Inn Med** 1989 Mar 1;44(5):144–8 (54 ref.) (Eng. Abstr.) (Ger)
[Colonization of pregnant females and their newborn infants with group B streptococci at the Gondar College of Medical Sciences] Halle E, et al. **Zentralbl Gynakol** 1988; 110(21):1362–5 (Eng. Abstr.) (Ger)
[Serotype-distribution of group B streptococci isolated from patients with neonatal infections] Yasuda T, et al. **Kansenshogaku Zasshi** 1988 Oct;62(10):904–10 (Eng. Abstr.) (Jpn)
[Bacterial flora and antistreptolysin O level in chronic tonsillitis treated by ultrasonics] Karnicki C, et al. **Wiad Lek** 1988 Mar 1;41(5):281–5 (Eng. Abstr.) (Pol)
[Biological characteristics of Streptococcus pneumoniae strains isolated from children with pneumococcal diseases] Kvetnaia AS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):25–30 (Eng. Abstr.) (Rus)
[Clinical infections due to Streptococcus intermedius] Fernández de Quirós J, et al. **Rev Clin Esp** 1988 Oct; 183(5):227–31 (Eng. Abstr.) (Spa)
[Severe group A streptococci infections. Decreased immunity is a possible cause] Holm SE. **Lakartidningen** 1989 Feb 8; 86(6):413–5 (Swe)

PATHOLOGY

Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. V. Further electron microscopic observations on group A beta-hemolytic streptococci inoculated into immune mice. Akiyama T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):721–6
Transmission electron microscopic studies on streptococcal aerosol infection. Haraguchi T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):24–30
Scanning electron microscopic studies on streptococcal aerosol infection. Yoshinaga M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):31–7
Fulminant streptococcal myositis. Schattner A, et al. **Ann Emerg Med** 1989 Mar;18(3):320–2
Magnetic resonance imaging of the brain in bacterial endocarditis. Bertorini TE, et al. **Arch Intern Med** 1989 Apr;149(4):815–7
Streptococcal necrotizing fasciitis: development of an animal model to study its pathogenesis. Seal DV, et al. **Br J Exp Pathol** 1988 Dec;69(6):813–31
Alveolar epithelial responses in experimental streptococcal pneumonia. Rhodes GC, et al. **J Pathol** 1989 Apr; 157(4):347–57
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 18-1989. A 52-year-old woman with left-lower quadrant abdominal pain, fever, and splenic infarcts. **N Engl J Med** 1989 May 4; 320(18):1201–6
Correlation of clinical and pathologic findings in early onset neonatal group B streptococcal infection with disease severity and prediction of outcome. Payne NR, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):836–47
[Streptococcal group A fulminant septicemia at the end of pregnancy (letter)] Bollaert PE, et al. **Presse Med** 1988 Oct 15;17(35):1816 (Fre)
[Unusual healing of tendon sheath tuberculosis by intercurrent streptococcal phlegmon] Pfeiffer KM. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):218–9 (Eng. Abstr.) (Ger)
[Dynamics of early morphologic shifts in the bronchopulmonary system in intranasal infection of mice with streptococcus group B] Bartazarian ND, et al. **Arkh Patol** 1989;51(5):26–32 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Properties of high and low density subpopulations of group B streptococci: enhanced virulence of the low density variant. Håkansson S, et al. **Microb Pathog** 1988 Nov; 5(5):345–55
The role of leukotrienes in the late hemodynamic manifestations of group B streptococcal sepsis in piglets. Goldberg RN, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Sep; 33(3):191–8

PREVENTION & CONTROL

Management and prevention of infections due to gram-positive cocci in intensive care units. Graninger W, et al. **Br J Clin Pract Symp Suppl** 1988 Feb;57:91–9 (40 ref.)
Antimicrobial prophylaxis of neonatal group B streptococcal sepsis. Boyer KM, et al. **Clin Perinatol** 1988 Dec; 15(4):831–50 (93 ref.)
Prevention of group B streptococci transmission during delivery by vaginal application of chlorhexidine gel. Kollée LA, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Apr; 31(1):47–51
Chlorhexidine for prevention of neonatal colonization with group B streptococci. V. Chlorhexidine concentrations in blood following vaginal washing during delivery. Nilsson G, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun; 31(3):221–6
Prevention of bacteremia caused by alpha-hemolytic streptococci by roxithromycin (RU-28 965) in granulocytopenic patients receiving ciprofloxacin. Rozenberg-Arska M, et al. **Infection** 1989 Jul-Aug; 17(4):240–4
A polyclonal human IgG preparation hyperimmune for type III, group B Streptococcus: in vitro opsonophagocytic activity and efficacy in experimental models. Givner LB, et al. **J Infect Dis** 1988 Oct;158(4):724–30
Group A streptococcus vaccine may be ready for phase I clinical trials in late 1989 [news] Raymond CA. **JAMA** 1988 Nov 18;260(19):2778
Group B streptococcal vaccine in pregnant women [letter] **N Engl J Med** 1989 Mar 23;320(12):807–9
Immunization of pregnant women with a polysaccharide vaccine of group B streptococcus. Baker CJ, et al. **N Engl J Med** 1988 Nov 3;319(18):1180–5
Prevention of group B streptococcal early onset sepsis: 1989. Gotoff SP, et al. **Pediatr Infect Dis J** 1989 May;8(5):268–70 (19 ref.)
Group B streptococcal disease: its importance in the developing world and prospect for prevention with vaccines. Walsh JA, et al. **Pediatr Infect Dis J** 1989 May; 8(5):271–7 (100 ref.)
Secondary prophylaxis of group A beta-hemolytic streptococcal throat infections [letter] Donald PR, et al. **S Afr Med J** 1989 Mar 4;75(5):248–9
Protection against streptococcal pharyngeal colonization with a vaccinia: M protein recombinant. Fischetti VA, et al. **Science** 1989 Jun 23;244(4911):1487–90
Considerations in the prevention of perinatally acquired group B streptococcal and chlamydial infections in the newborn. Miller JM Jr, et al. **Semin Perinatol** 1988 Oct; 12(4):336–47 (136 ref.)
Intensive control measures for streptococcal infections—is there a need? [editorial] Hill HR. **West J Med** 1988 May; 148(5):575–6
Experience of a Wyoming county streptococcal control project. Phibbs B, et al. **West J Med** 1988 May; 148(5):546–50
[Communicable disease control measures in group A streptococcal diseases at community facilities] Steinitz H, et al. **Off Gesundheitswes** 1989 Feb;51(2):71–4 (Eng. Abstr.) (Ger)
[Trial of screening test for prevention of neonatal infection due to group B Streptococcus] Suzuki Y, et al. **Kansenshogaku Zasshi** 1988 Oct;62(10):911–5 (Eng. Abstr.) (Jpn)
[Experience and efficacy of a system of preventing respiratory streptococcal infections at a large pioneer camp] Beliakov VD, et al. **Revmatologiia (Moskva)** 1988 Jul-Sep; (3):3–9 (Eng. Abstr.) (Rus)

RADIOGRAPHY

CT appearance of mycotic abdominal aortic aneurysms. Blair RH, et al. **J Comput Assist Tomogr** 1989 Jan-Feb; 13(1):101–4

SURGERY

Aneurysm of the abdominal aorta in an eighteen-month-old child. Defraigne JO, et al. **Ann Vasc Surg** 1988 Apr; 2(2):193–5
Transiliac bypass for infected femoral end of an aortofemoral graft. Brzezinski W, et al. **Can J Surg** 1989 Mar;32(2):121–3
[Surgical aortic valve replacement for acute Streptococcus viridans endocarditis with simultaneous moderate hemophilia A] Krawietz W, et al. **Z Kardiol** 1988 Jul; 77(7):470–3 (Eng. Abstr.) (Ger)
[Detection of aortic valve ring abscess by intraoperative epicardial two-dimensional echocardiography] Tanaka M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2508–11 (Eng. Abstr.) (Jpn)
[Surgical treatment of complications of acute pancreatitis including the use of ceftazidime (fortum)] Puchalski Z, et al. **Wiad Lek** 1988 Nov 15;41(22):1530–3 (Pol)
[Possibilities of cardiac surgery in the treatment of active valvular infectious endocarditis] Tsukerman GI, et al. **Kardiologiia** 1988 Sep;28(9):31–5 (Eng. Abstr.) (Rus)

THERAPY

Aortic endocarditis caused by gentamicin-resistant Enterococcus faecalis. Fernández-Guerrero ML, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):525–7

Treatment of recurrent streptococcal tonsillitis by recolonization with alpha-streptococci [letter] Roos K, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):318–9

Spontaneous streptococcal gangrenous myositis: survival with early debridement. Doebbeling BN, et al. **South Med J** 1989 Jul;82(7):900–2

[The course of a streptococcal infection during treatment at a hospital and polyclinic] Bystriakova LV, et al. **Pediatriia** 1988;(11):104–5 (Rus)

[Diagnosis and treatment of acute abscesses of the lungs] Lamm IaE, et al. **Vestn Khir** 1988 Jun;140(6):13–7 (Eng. Abstr.) (Rus)

TRANSMISSION

Two cases of Streptococcus suis meningitis. Hay PE, et al. **Br J Ind Med** 1989 May;46(5):352–3

Plasmid-containing strains of Streptococcus mutans cluster within family and racial cohorts: implications for natural transmission. Caufield PW, et al. **Infect Immun** 1988 Dec; 56(12):3216–20

Early-onset neonatal group B streptococcal septicaemia in siblings. Carstensen H, et al. **J Infect** 1988 Nov;17(3):201–4

Influence of indoor heating on carrier state of beta-hemolytic streptococci among school children. Fukuda K, et al. **Kurume Med J** 1988;35(1):7–11

Beta-haemolytic streptococci group A in a cat, as a possible source of repeated tonsillitis in a family [letter] Roos K, et al. **Lancet** 1988 Nov 5;2(8619):1072

Maternal transmission and dental caries induction in Sprague–Dawley rats infected with Streptococcus mutans. Ooshima T, et al. **Microbiol Immunol** 1988;32(8):785–94

Group B streptococcal breast abscess in a mother and mastitis in her infant. Rench MA, et al. **Obstet Gynecol** 1989 May; 73(5 Pt 2):875–7

Neonatal group B streptococcal colonization and maternal urogenital or anorectal carriage. Gökalp A, et al. **Turk J Pediatr** 1988 Jan–Mar;30(1):17–23

[Materno-fetal colonization by group B beta-hemolytic streptococcus and neonatal meningitis] Castelli G, et al. **G Batteriol Virol Immunol** 1987 Jan–Dec;80(1–12):263–6 (15 ref.) (Eng. Abstr.) (Ita)

[Long-term prevalence of group A type T-1 isolated from throats of healthy schoolchildren. Part II. Analysis by school classroom and sibling. Streptococcal Disease Study Group] Nakajima K, et al. **Kansenshogaku Zasshi** 1988 Oct; 62(10):893–9 (Eng. Abstr.) (Jpn)

VETERINARY

Using simulation modeling to assess the benefit of lactational therapy for subclinical Streptococcus agalactiae mastitis. Goodger WJ, et al. **Acta Vet Scand Suppl** 1988;84:377–80

Uterine clearance mechanisms during the early postovulatory period in mares. LeBlanc MM, et al. **Am J Vet Res** 1989 Jun;50(6):864–7

Frequency of isolation of environmental mastitis-causing pathogens and incidence of new intramammary infection during the nonlactating period. Oliver SP. **Am J Vet Res** 1988 Nov;49(11):1789–93

Differences in virulence between two strains of Streptococcus suis type II after experimentally induced infection of newborn germ-free pigs. Vecht U, et al. **Am J Vet Res** 1989 Jul;50(7):1037–43

Fecal streptococcal infection of commercial white pekin ducklings. Sandhu TS. **Avian Dis** 1988 Jul–Sep;32(3):570–3

Protecting against 'strangles': a contemporary view. Timoney JF. **Equine Vet J** 1988 Nov;20(6):392–4 (23 ref.)

Treatment of bacterial endocarditis in a horse. Dedrick P, et al. **J Am Vet Med Assoc** 1988 Aug 1;193(3):339–42

Prevalence of udder infections and mastitis in 50 California dairy herds. González RN, et al. **J Am Vet Med Assoc** 1988 Aug 1;193(3):323–8

Description of an epizootic and persistence of Streptococcus equi infections in horses. Sweeney CR, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1281–6

Diskospondylitis in a California sea lion. Thomas-Baker B. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1151

Medical treatment of tusk pulpitis in an African elephant. Wyatt JD. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1193

Enterococcus hirae implicated as a cause of diarrhea in suckling rats. Etheridge ME, et al. **J Clin Microbiol** 1988 Sep;26(9):1741–4

Evaluation of the Minitek Gram-Positive Set for identification of streptococci isolated from bovine mammary glands. Watts JL. **J Clin Microbiol** 1989 May; 27(5):1008–10

Studies of the protective effect of different fractions of sera from pigs immune to Streptococcus suis type 2 infection. Holt ME, et al. **J Comp Pathol** 1989 May;100(4):435–42

Automatic application of teat disinfectant through the milking machine cluster. Grindal RJ, et al. **J Dairy Res** 1989 Aug;56(4):579–85

Use of N-acetyl-beta-glucosaminidase to detect teat canal inflammations. Kaartinen L, et al. **J Dairy Res** 1988 Nov; 55(4):603–7

Efficacy of .18% iodine teat dip against Staphylococcus aureus and Streptococcus agalactiae. Boddie RL, et al. **J Dairy Sci** 1989 Apr;72(4):1063–6

Influence of bovine mastitis on lipolysis and proteolysis in milk. Murphy SC, et al. **J Dairy Sci** 1989 Mar;72(3):620–6

Characterization of a soft-tissue infection model in the horse and its response to intravenous cephapirin administration. Beadle RE, et al. **J Vet Pharmacol Ther** 1989 Mar; 12(1):73–86

Binding of fibronectin, fibrinogen and type II collagen to streptococci isolated from bovine mastitis. Mamo W, et al. **Microb Pathog** 1987 Jun;2(6):417–24

Pathogenicity of two strains of Streptococcus uberis infused into lactating and non-lactating bovine mammary glands. Hill AW. **Res Vet Sci** 1988 Nov;45(3):400–4

Immunisation of pigs with live cultures of Streptococcus suis type 2. Holt ME, et al. **Res Vet Sci** 1988 Nov;45(3):349–52

A murine model of Streptococcus suis type 2 meningitis in the pig. Williams AE, et al. **Res Vet Sci** 1988 Nov; 45(3):394–9

Isolation of Streptococcus suis from diseased pigs in Canada. Touil F, et al. **Vet Microbiol** 1988 Jun;17(2):171–7

Enterococcus (Streptococcus) durans adherence in the small intestine of a diarrheic pup. Collins JE, et al. **Vet Pathol** 1988 Sep;25(5):396–8

Immunisation of pigs with Streptococcus suis type 2. **Vet Rec** 1989 May 20;124(20):538

Streptococcus suis and other streptococcal species as a cause of extramammary infection in ruminants. Hommez J, et al. **Vet Rec** 1988 Dec 10;123(24):626–7

Pre-chemotactic and chemotactic properties of uterine fluid from mares with experimentally induced endometritis. Pycock JF, et al. **Vet Rec** 1988 Aug 20;123(8):193–5

Prevalence of Streptococcus suis types 1 and 2 in domestic pigs in Australia and New Zealand. Robertson ID, et al. **Vet Rec** 1989 Apr 15;124(15):391–4

Incidence of clinical mastitis on farms with low somatic cell counts in bulk milk. Schukken YH, et al. **Vet Rec** 1989 Jul 15;125(3):60–3

Summer mastitis: transmission by blood feeding flies [letter] Tarry DW, et al. **Vet Rec** 1988 Sep 10;123(11):304

[Persistent cough] Boerma S. **Tijdschr Diergeneeskd** 1989 Jan 1;114(1):39–40 (Dut)

[The occurrence of bacterial infections in the swamp beaver (Myocaster coypus MOLINA, 1782). 3. Streptococcal, staphylococcal, Aeromonas and Actinobacillus infections] Köhler B, et al. **Arch Exp Veterinarmed** 1988 Nov; 42(6):877–89 (Eng. Abstr.) (Ger)

[The problems of mastitis in mares] Bostedt H, et al. **Tierarztl Prax** 1988;16(4):367–71 (Eng. Abstr.) (Ger)

[The early chemotactic reaction of the equine uterus to acute inflammatory stimulation] Pycock JF, et al. **Tierarztl Prax** 1989;Suppl 4:17–20 (Eng. Abstr.) (Ger)

[Streptococcus porcinus—as a cause of abortion in swine] Plagemann O. **Zentralbl Veterinarmed [B]** 1988 Dec; 35(10):770–2 (Eng. Abstr.) (Ger)

STREPTOCOCCUS

New nomenclature of the non-rod-shaped lactic acid bacteria. Sandine WE. **Biochimie** 1988 Apr;70(4):519–21

Reduction of the adherence of Streptococcus sobrinus insoluble alpha-D-glucan by endo-(1——3)-alpha-D-glucanase. Inoue M, et al. **Carbohydr Res** 1988 Nov 1;182(2):277–86

Streptolytic activities of a lytic enzyme from Staphylococcus hyicus. Frede C, et al. **Int J Med Microbiol** 1989 May; 271(1):54–60

The use of Streptococcus zymogenes for estimating tryptophan and methionine bioavailability in 17 foods. Wells P, et al. **Plant Foods Hum Nutr** 1989;39(1):121–7

Paraghurt for patients with irritable bowel syndrome. A controlled clinical investigation from general practice. Gade J, et al. **Scand J Prim Health Care** 1989 Mar;7(1):23–6

ANALYSIS

Electron microscopic demonstration of carbohydrates and lipoteichoic acid in cell envelopes of streptococci by lectins labelled with ferritin or gold. Wagner M, et al. **Acta Histochem Suppl (Jena)** 1988;36:409–13

D-alanine as a chemical marker for the determination of streptococcal cell wall levels in mammalian tissues by gas chromatography/negative ion chemical ionization mass spectrometry. Ueda K, et al. **Anal Chem** 1989 Feb 1; 61(3):265–70

Molecular surface characterization of oral streptococci by Fourier transform infrared spectroscopy. van der Mei HC, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):395–8

Distribution of spermine in bacilli and lactic acid bacteria. Hamana K, et al. **Can J Microbiol** 1989 Apr;35(4):450–5

Determination of viridans streptococci surface lipoteichoic acid by enzyme linked immune sorbent assay. Hogg SD, et al. **FEMS Microbiol Lett** 1989 Apr;49(2–3):239–42

Enzymatic extraction and spectral analysis of the chromophore from cell walls of nutritionally deficient streptococci. Stein DS, et al. **J Clin Microbiol** 1989 Jan; 27(1):207–9

Solubilization of IgG-binding proteins from group A and G streptococci. Goward CR, et al. **Microbiol Immunol** 1989;33(2):123–7

An improved method for the purification of high molecular weight bacterial chromosomal DNA. Méjean V, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5405

CLASSIFICATION

Classification and identification of the viridans streptococci. Coykendall AL. **Clin Microbiol Rev** 1989 Jul;2(3):315–28 (127 ref.)

Enterococcus raffinosus sp. nov., Enterococcus solitarius sp. nov. and Enterococcus pseudoavium sp. nov. Collins MD, et al. **FEMS Microbiol Lett** 1989 Feb;48(3):283–8

Speciation of viridans streptococci & their significance in human infections. Joag SV, et al. **Indian J Med Res** 1989 Jan;89:16–23

Type-specific antigen of Streptococcus rattus strains (KAY1 and FA1). I. Characterization. Ota F, et al. **Int J Med Microbiol** 1989 May;271(1):36–45

Evaluation of rapid, commercial latex techniques for serogrouping beta-hemolytic streptococci. Daly JA, et al. **J Clin Microbiol** 1988 Nov;26(11):2429–31

Outbreaks of human infection caused by pyogenic streptococci of Lancefield groups C and G. Efstratiou A. **J Med Microbiol** 1989 Jul;29(3):207–19

Identification of viridans streptococci by pyrolysis-gas chromatography. French GL, et al. **J Med Microbiol** 1989 May;29(1):19–27

A physiological classification of viridans streptococci by use of the API-20STREP system. French GL, et al. **J Med Microbiol** 1989 Apr;28(4):275–86

Beta-hemolytic group C streptococci and pharyngitis [letter] Rudensky B, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):668

[A modified medium, bile esculin-pyrrolidonyl-beta-naphthylamide, for rapid differentiation between enterococci and nonenterococci] Wu SJ, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Aug;21(3):188–90 (Eng. Abstr.) (Chi)

[Isolation and characteristics of nutritional variants of streptococci of animal origin] Skardová O. **Vet Med (Praha)** 1989 May;34(5):257–66 (Eng. Abstr.) (Cze)

[Testing specimens of Soviet filter paper for the transport of material relevant to studies on the detection of beta-hemolytic streptococci] Eshchina AS, et al. **Lab Delo** 1988;(7):57–60 (Eng. Abstr.) (Rus)

CYTOLOGY

Variation in buoyant density of whole cells and isolated cell walls of Streptococcus faecium (ATCC 9790). Glaser D, et al. **J Bacteriol** 1989 Sep;171(9):4992–5

Chromosome and cell wall segregation in Streptococcus faecium ATCC 9790. Higgins ML, et al. **J Bacteriol** 1989 Jan;171(1):349–52

DRUG EFFECTS

Emergence of isolates resistant to ampicillin. Rupar DG, et al. **Am J Dis Child** 1989 Sep;143(9):1033–7

In vitro antimicrobial activity of sulfonamides against some porcine pathogens. Mengelers MJ, et al. **Am J Vet Res** 1989 Jul;50(7):1022–8

High-level penicillin resistance among isolates of enterococci. Implications for treatment of enterococcal infections. Bush LM, et al. **Ann Intern Med** 1989 Apr 1; 110(7):515–20

Plasma bactericidal activity after administration of erythromycin estolate and erythromycin ethylsuccinate to healthy volunteers. Bérubé D, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1227–30

High-level resistance to gentamicin in clinical isolates of Streptococcus (Enterococcus) faecium. Eliopoulos GM, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1528–32

Transferable vancomycin and teicoplanin resistance in Enterococcus faecium. Leclercq R, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):10–5

Characterization of vancomycin resistance in Enterococcus faecium and Enterococcus faecalis. Nicas TI, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1121–4

Antimicrobial susceptibilities of Streptococcus species that cause septicemia in neutropenic patients. Venditti M, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):580–2

Effects of clindamycin and metronidazole on the intestinal colonization and translocation of enterococci in mice. Wells CL, et al. **Antimicrob Agents Chemother** 1988 Dec; 32(12):1769–75

Evaluation of the combination effects of ampicillin or vancomycin combined with streptomycin, gentamicin, tobramycin or netilmicin against enterococci. Fuursted K. **APMIS** 1989 Jan;97(1):23–6

Combined effect of xylitol, NaF and ZnCl2 on growth and metabolism of Streptococcus sobrinus OMZ 176. Scheie AA, et al. **APMIS** 1988 Sep;96(9):761–7

Antibiotic susceptibility of bacteria isolated from active, therapy-resistant periodontal sites. De Luca M. **Chemioterapia** 1988 Oct;7(5):309–12

Different activity of penicillins and cephalosporins on enterococci. Fontana R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):60–1

Further microbiological investigations of flurithromycin against gram-positive bacteria and mycoplasmas. Furneri P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):161–3

Interpretive criteria for the agar diffusion susceptibility test with teicoplanin using the ICS-and DIN-methods, respectively. Grimm H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):119–20

In vitro activity of coumermycin in comparison to other non-beta-lactam antibiotics against staphylococci, streptococci, and Clostridium difficile. Mittermayer H. **Chemioterapia** 1987 Jun;6(2 Suppl):163–4

In vitro activity of ampicillin/sulbactam against enterococci

determined by the time-kill method. D'Amato RF, et al. **Diagn Microbiol Infect Dis** 1989 Jan-Feb;12(1):9-11

Time kill curve analysis of vancomycin and rifampin alone and in combination against nine strains of nutritionally deficient streptococci. Stein DS, et al. **Diagn Microbiol Infect Dis** 1988 Jul;10(3):139-44

Differential methotrexate sensitivity: a test to distinguish Enterococcus faecalis from Enterococcus faecium [letter] Hamilton-Miller JM. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):696-7

Emergence of penicillin-resistant viridans streptococci causing septicemia in granulocytopenic patients [letter] Santini C, et al. **Eur J Epidemiol** 1988 Sep;4(3):391-2

In-vitro activity of the new penems FCE 22101 and FCE 24362 alone or in combination with aminoglycosides against streptococci isolated from patients with endocarditis. Dornbusch K, et al. **J Antimicrob Chemother** 1989 Mar;23 Suppl C:109-17

Reversal of activity of trimethoprim against gram-positive cocci by thymidine, thymine and 'folates'. Hamilton-Miller JM. **J Antimicrob Chemother** 1988 Jul;22(1):35-9

Penicillin-aminoglycoside synergy and post-antibiotic effect for enterococci. Winstanley TG, et al. **J Antimicrob Chemother** 1989 Feb;23(2):189-99

In vitro activity of lomefloxacin (SC-47111) against enterobacteriaceae, enterococci and staphylococci. Cornaglia G, et al. **J Chemother** 1989 Apr;1(2):84-90

Enterococci highly resistant to penicillin and ampicillin: an emerging clinical problem? Sapico FL, et al. **J Clin Microbiol** 1989 Sep;27(9):2091-5

Laboratory detection of high-level aminoglycoside-aminocyclitol resistance in Enterococcus spp. Spiegel CA. **J Clin Microbiol** 1988 Nov;26(11):2270-4

Problems with the disk diffusion test for detection of vancomycin resistance in enterococci. Swenson JM, et al. **J Clin Microbiol** 1989 Sep;27(9):2140-2

Tolerance to penicillin in streptococci of viridans group. Powley L, et al. **J Clin Pathol** 1989 Jan;42(1):77-80

Activity of various glycopeptides against an inducibly vancomycin-resistant strain of Enterococcus faecium (D366). Shlaes DM, et al. **J Infect Dis** 1989 Jun; 159(6):1132-5

Inducible resistance to vancomycin in Enterococcus faecium D366. Williamson R, et al. **J Infect Dis** 1989 Jun; 159(6):1095-104

The in vitro dental plaque inhibitory properties of a series of N-[1-alkyl-4(1H)-pyridinylidene]alkylamines. Wentland MP, et al. **J Med Chem** 1988 Oct;31(10):2024-7

Penicillin tolerance among oral streptococci. Holbrook WP, et al. **J Med Microbiol** 1988 Sep;27(1):17-22

Erythromycin resistance in streptococci [letter] Spencer RC, et al. **Lancet** 1989 Jan 21;1(8630):168

Trimethoprim resistance in enterococci: microbiological and biochemical aspects. Hamilton-Miller JM, et al. **Microbios** 1988;56(226):45-55

Effect of topical administration of vancomycin versus chlorhexidine on alpha-hemolytic streptococci in oral cavity. Borthen Svinhufvud L, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):304-9

Antimicrobial and antiplaque effects of a chlorhexidine and Triton X-100 combination. Giertsen E, et al. **Scand J Dent Res** 1989 Jun;97(3):233-41

Inhibition of plaque formation and plaque acidogenicity by zinc and chlorhexidine combinations. Giertsen E, et al. **Scand J Dent Res** 1988 Dec;96(6):541-50

Erythromycin-resistant beta-hemolytic streptococci group A in Göteborg, Sweden. Zackrisson G, et al. **Scand J Infect Dis** 1988;20(4):419-20

Kill kinetics of the cephalosporin antibiotics cephalexin and cefuroxime against bacteria of veterinary importance. Silley P, et al. **Vet Rec** 1988 Sep 24;123(13):343-5

[Determination of the sensitivity of bacteria to antibiotics by an agar diffusion method and use of the API ATB system: a comparative study] Reynaud AE, et al. **Ann Biol Clin (Paris)** 1989;47(2):71-5 (Eng. Abstr.) **(Fre)**

[In vitro activity of penicillin G and amoxicillin against 14 strains of Streptococcus milleri] Berardi-Grassias L, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):632-4 (Eng. Abstr.) **(Fre)**

[Bactericidal activity of daptomycin and vancomycin alone or in combination with tobramycin, netilmicin or ampicillin against enterococcus] Duez JM, et al. **Pathol Biol (Paris)** 1989 Apr;37(4):263-8 (Eng. Abstr.) **(Fre)**

[Resistance of nongroupable streptococci to beta-lactams. Detection by antibiogram and the activity of combinations of penicillin G and gentamicin] Leclercq R, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):626-31 (Eng. Abstr.) **(Fre)**

[Studies on determination of minimum bactericidal concentrations of penicillin-G for beta-hemolytic streptococci] Takizawa Y, et al. **Kansenshogaku Zasshi** 1989 May;63(5):457-62 (Eng. Abstr.) **(Jpn)**

[Sensitivity, resistance and tolerance of Streptococci to beta-lactam antibiotics] Berger-Jekić O, et al. **Srp Arh Celok Lek** 1986 Mar;114(3):299-309 (Eng. Abstr.) **(Scc)**

ENZYMOLOGY

Measurement of constitutive L-pyrrolidonyl peptidase activity from Streptococcus and Enterococcus using tetrazotized 0-dianisidine. Panosian KJ, et al. **Antonie Van Leeuwenhoek** 1989;55(3):269-75

Sucrose 6-alpha-D-glucosyltransferase from Streptococcus sobrinus: characterization of a glucosyl-enzyme complex. Mooser G, et al. **Biochemistry** 1989 Jan 24;28(2):443-9

Molecular cloning of lactose genes in dairy lactic streptococci: the phospho-beta-galactosidase and beta-galactosidase genes and their expression products. De Vos WM, et al. **Biochimie** 1988 Apr;70(4):461-73 (88 ref.)

Genetics of proteinases of lactic acid bacteria. Kok J, et al. **Biochimie** 1988 Apr;70(4):475-88 (82 ref.)

Inhibition by maltose, isomaltose, and nigerose of the synthesis of high-molecular-weight D-glucans by the D-glucosyltransferases of Streptococcus sobrinus. McAlister D, et al. **Carbohydr Res** 1989 Apr 1;187(1):131-8

Chondroitinase C activity of Streptococcus intermedius. Hibi E, et al. **FEMS Microbiol Lett** 1989 Jan 15;48(2):121-4

IgA1 proteases of oral streptococci: ecological aspects. Kilian M, et al. **Immunol Invest** 1989 Jan-May;18(1-4):161-70

Glucan-binding domain of a glucosyltransferase from Streptococcus sobrinus: isolation of a 55-kilodalton peptide from a trypsin digest of glucosyltransferase prebound to insoluble glucan. Kobayashi S, et al. **Infect Immun** 1989 Jul;57(7):2210-3

A simple purification method for a glucosyltransferase complex from Streptococcus mutans OMZ 176 with a high yield. Furutani M, et al. **Int J Biochem** 1988;20(11):1327-32

The F1-ATPase from Streptococcus cremoris: isolation, purification and partial characterization. Rimpiläinen MA, et al. **Int J Biochem** 1988;20(10):1117-24

Isolation and characterization of hyaluronidase from Streptococcus uberis. Schaufuss P, et al. **Int J Med Microbiol** 1989 May;271(1):46-53

The second peptidoglycan hydrolase of Streptococcus faecium ATCC 9790 covalently binds penicillin. Dolinger DL, et al. **J Bacteriol** 1989 Aug;171(8):4355-61

A maturation protein is essential for production of active forms of Lactococcus lactis SK11 serine proteinase located in or secreted from the cell envelope. Vos P, et al. **J Bacteriol** 1989 May;171(5):2795-802

Hyaluronidase production in Streptococcus milleri in relation to infection. Unsworth PF. **J Clin Pathol** 1989 May; 42(5):506-10

Purification and thermostability of beta-galactosidase (lactase) from an autolytic strain of Streptococcus salivarius subsp. thermophilus. Chang BS, et al. **J Dairy Res** 1989 Feb;56(1):117-27

A method for determining beta-galactosidase activity of yogurt cultures in skim milk. Lin WJ, et al. **J Dairy Sci** 1989 Feb;72(2):351-9

Effect of threonine and glycine concentrations on threonine aldolase activity of yogurt microorganisms during growth in a modified milk prepared by ultrafiltration. Marranzini RM, et al. **J Dairy Sci** 1989 May;72(5):1142-8

The influence of incorporation of octadecenoic acid on the cell-associated fructosyltransferase and the extracellular glucosyltransferase activities of Streptococcus salivarius. Pitty LJ, et al. **J Gen Microbiol** 1987 Dec;133 (Pt 12):3565-73

Preformed enzyme profiles of reference strains of gram-positive anaerobic cocci. Murdoch DA, et al. **J Med Microbiol** 1988 Sep;27(1):65-70

Immune properties of glucosyltransferases from S. sobrinus. Taubman MA, et al. **J Oral Pathol** 1988 Nov; 17(9-10):466-70

Extracellular invertase in Streptococcus mutans and Streptococcus salivarius. Chassy BM, et al. **Life Sci** 1974 Sep 15;15(6):1173-80

The occurrence of nicotinamide adenine dinucleotide glycohydrolase and the serum opacity reaction in groups B, C, F and G streptococci. Reitmeyer JC, et al. **Microbios** 1989;58(236-237):183-7

Nucleotide sequence of the streptokinase gene from a group-G Streptococcus. Walter F, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1262

[Production of glucose isomerase by Streptomyces phaeochromogenes] Faloci MM, et al. **Rev Argent Microbiol** 1983;15(1):1-8 (Eng. Abstr.) **(Spa)**

GENETICS

Molecular analysis of viridans and nutritionally deficient (variant) streptococci causing sequential episodes of endocarditis in a patient. Stein DS, et al. **Am J Clin Pathol** 1989 May;91(5):620-4

Occurrence of the Campylobacter resistance gene tetO in Enterococcus and Streptococcus spp. Zilhao R, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1793-6

Campbell-like integration of heterologous plasmid DNA into the chromosome of Lactococcus lactis subsp. lactis. Leenhouts KJ, et al. **Appl Environ Microbiol** 1989 Feb; 55(2):394-400

Genetic transformation of intact Lactococcus lactis subsp. lactis by high-voltage electroporation. McIntyre DA, et al. **Appl Environ Microbiol** 1989 Mar;55(3):604-10

Construction of a lactococcal expression vector: expression of hen egg white lysozyme in Lactococcus lactis subsp. lactis. van de Guchte M, et al. **Appl Environ Microbiol** 1989 Jan;55(1):224-8

Lactic acid bacteria II. Genetics and genetic exchange systems. **Biochimie** 1988 Apr;70(4):461-585

Development of an efficient spheroplast transformation procedure for S. thermophilus: the use of transfection to define a regeneration medium. Mercenier A, et al. **Biochimie** 1988 Apr;70(4):567-77

Plasmid-encoded functions of ropy lactic acid streptococcal strains from Scandinavian fermented milk. Neve H, et al. **Biochimie** 1988 Mar;70(3):437-42

Genetic transformation of Streptococcus thermophilus by electroporation. Somkuti GA, et al. **Biochimie** 1988 Apr; 70(4):579-85

Loss of phage resistance encoded by plasmid pSK112 in chemostat cultures of Lactococcus lactis ssp. cremoris SK110. Sterkenburg A, et al. **Biochimie** 1988 Mar; 70(3):451-6

DNA fingerprinting of Streptococcus uberis: a useful tool for epidemiology of bovine mastitis. Hill AW, et al. **Epidemiol Infect** 1989 Aug;103(1):165-71

Homology between surface protein antigen genes of Streptococcus sobrinus and Streptococcus mutans. Takahashi I, et al. **FEBS Lett** 1989 Jun 5;249(2):383-8

Species-specific variation in signal peptide design. Implications for protein secretion in foreign hosts. von Heijne G, et al. **FEBS Lett** 1989 Feb 27;244(2):439-46

Isolation and study of two mutants of Streptomyces cattleya affected in DNA repair and genetic instability. Hromic A, et al. **FEMS Microbiol Lett** 1989 Jan 15;48(2):139-43

Molecular and immunochemical characterization of recombinant Escherichia coli containing the spaA gene region of Streptococcus sobrinus. Ogundipe JO, et al. **Infect Immun** 1989 Jul;57(7):1906-15

Identification of a gene required for maturation of an extracellular lactococcal serine proteinase. Haandrikman AJ, et al. **J Bacteriol** 1989 May;171(5):2789-94

Lactose transport system of Streptococcus thermophilus: a hybrid protein with homology to the melibiose carrier and enzyme III of phosphoenolpyruvate-dependent phosphotransferase systems. Poolman B, et al. **J Bacteriol** 1989 Jan;171(1):244-53

Product of the Lactococcus lactis gene required for malolactic fermentation is homologous to a family of positive regulators. Renault P, et al. **J Bacteriol** 1989 Jun; 171(6):3108-14

Survey of the pSM10 family of streptococcal cloning vectors. Laplace F, et al. **J Basic Microbiol** 1988;28(7):471-80

Homology of glucosyltransferase gene and protein sequences from Streptococcus sobrinus and Streptococcus mutans. Russell RR, et al. **J Dent Res** 1988 Mar;67(3):543-7

Evidence for group A-related M protein genes in human but not animal-associated group G streptococcal pathogens. Simpson WJ, et al. **Microb Pathog** 1987 Nov; 3(5):339-50

Identification, cloning and sequence of the Streptococcus faecium infB (translational initiation factor IF2) gene. Friedrich K, et al. **Mol Gen Genet** 1988 Nov;214(3):595-600

Characterization of genetic transformation in Streptococcus oralis NCTC 11427: expression of the pneumococcal amidase in S. oralis using a new shuttle vector. Ronda C, et al. **Mol Gen Genet** 1988 Dec;215(1):53-7

Protein G genes: structure and distribution of IgG-binding and albumin-binding domains. Sjöbring U, et al. **Mol Microbiol** 1989 Mar;3(3):319-27

A protein of unusual composition from Enterococcus faecium. Fürst P, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6724

Transformation of Acholeplasma laidlawii with streptococcal plasmids pVA868 and pVA920. Dybvig K. **Plasmid** 1989 Mar;21(2):155-60

GROWTH & DEVELOPMENT

Comparison of bacterial indicators and sampling programs for drinking water systems. Collin JF, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2073-7

Evaluation of media for monitoring fecal streptococci in seawater. Yoshpe-Purer Y. **Appl Environ Microbiol** 1989 Aug;55(8):2041-5

Survival of Streptococcus viridans in gentamicin-supplemented McCarey-Kaufman medium. Baer JC, et al. **Cornea** 1989;8(2):131-4

Treatment of recurrent streptococcal tonsillitis by recolonization with alpha-streptococci [letter] Roos K, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):318-9

Endocarditis due to nutritionally variant streptococci. Handrick W, et al. **Infection** 1988;16(6):371-2

Buoyant density, growth rate, and the cell cycle in Streptococcus faecium. Glaser D, et al. **J Bacteriol** 1989 Feb;171(2):669-73

Influence of desalivation in rats on incidence of caries in intact cagemates. Bowen WH, et al. **J Dent Res** 1988 Oct; 67(10):1316-8

Talk-back regulation: a regulatory response to the inhibitions of cell surface growth. McDowell TD, et al. **Microbios** 1989;57(232-233):187-204

Probiotics [letter] Schumm H. **Vet Rec** 1989 Feb 11; 124(6):151-2

[Relationship between pH changes of mixed cariogenic bacteria in culture and incubation time] Zhou XD, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):158-60 (Eng. Abstr.) **(Chi)**

[Antibacterial activity of human cervical mucus] Chimura T, et al. **Jpn J Antibiot** 1988 Oct;41(10):1545-9 (Eng. Abstr.) **(Jpn)**

[Dynamics of proteins in a culture broth growing beta-hemolytic streptococci group C] Nikandrov VN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):11-6

(Eng. Abstr.) (Rus)

IMMUNOLOGY

Rapid streptococcal antigen detection in experimental keratitis. Sobol WM, et al. **Am J Ophthalmol** 1989 Jan 15; 107(1):60–4

Identification of cell wall antigens associated with a large conjugative plasmid encoding phage resistance and lactose fermentation ability in lactic streptococci. Dunny GM, et al. **Biochimie** 1988 Mar;70(3):443–50

T cell responses to streptococcal antigens in rats: relation to susceptibility to streptococcal cell wall–induced arthritis. van den Broek MF, et al. **Cell Immunol** 1988 Oct 1; 116(1):216–29

Asymptomatic poststreptococcal glomerulonephritis in relatives of patients with symptomatic glomerulonephritis. Diagnostic value of endostreptosin antibodies. Lange K, et al. **Child Nephrol Urol** 1988–89;9(1–2):11–5

Interactions of streptococci with human colostral immunoglobulin A. Lämmler C, et al.
Comp Immunol Microbiol Infect Dis 1988;11(2):115–9

Equine neutrophil locomotion in response to Streptococcus zooepidemicus. Pycock JF, et al. **Equine Vet J** 1988 Nov; 20(6):448–50

Protecting against 'strangles': a contemporary view. Timoney JF. **Equine Vet J** 1988 Nov;20(6):392–4 (23 ref.)

Chemical and structural studies of serotype polysaccharide antigens of Streptococcus sobrinus 6715. Takada K, et al. **Infect Immun** 1988 Nov;56(11):2942–7

Immunological abnormalities in children with acute rheumatic carditis and acute post–streptococcal glomerulonephritis. Benatar A, et al. **Int J Cardiol** 1988 Oct;21(1):51–8

Type–specific antigen of Streptococcus rattus strains (KAY1, FA1 and BHT). II. Ultrastructural localization. Ota F, et al. **Int J Med Microbiol** 1989 Jul;271(2):137–45

Studies of the protective effect of different fractions of sera from pigs immune to Streptococcus suis type 2 infection. Holt ME, et al. **J Comp Pathol** 1989 May;100(4):435–42

Cross–sectional analysis of serum antibody to oral streptococcal antigens in children. Luo Z, et al.
J Dent Res 1988 Mar;67(3):554–60

Streptococcal cell wall arthritis. Passive transfer of disease with a T cell line and crossreactivity of streptococcal cell wall antigens with Mycobacterium tuberculosis. DeJoy SQ, et al. **J Exp Med** 1989 Aug 1;170(2):369–82

Protection against streptococcal cell wall–induced arthritis by pretreatment with the 65–kD mycobacterial heat shock protein. van den Broek MF, et al. **J Exp Med** 1989 Aug 1;170(2):449–66

Meningitis due to Streptococcus mitis cross–reacting with Streptococcus pneumoniae [letter] Fraise AP, et al.
J Infect 1989 Jul;19(1):75–7

Serological confirmation of group C streptococcal pneumonia. Rizkallah MF, et al. **J Infect Dis** 1988 Nov; 158(5):1092–4

Serological variation in oral Streptococcus milleri. Yakushiji T, et al. **J Med Microbiol** 1988 Oct;27(2):145–51

Comparison of IgG Fc receptors from clinical isolates of Streptococcus zooepidemicus. Yarnall M, et al.
J Med Microbiol 1989 Feb;28(2):137–41

Antibodies to a streptococcal cell wall adjuvant structure persist in patient with chronic rheumatic heart disease. Bahr GM, et al. **J Mol Cell Cardiol** 1989 Jan;21(1):61–6

Skin hypersensitivity to streptococcal antigens and the induction of systemic symptoms by the antigens in Behçet's disease—a multicenter study. The Behcet's Disease Research Committee of Japan. **J Rheumatol** 1989 Apr; 16(4):506–11

Immunisation of pigs with live cultures of Streptococcus suis type 2. Holt ME, et al. **Res Vet Sci** 1988 Nov;45(3):349–52

Molecular mimicries between human IgG, IgM rheumatoid factor and streptococcal IgG Fc receptors. Schröder AK, et al. **Scand J Rheumatol Suppl** 1988;75:199–202

Hemolytic streptococcus preparation OK–432; beneficial adjuvant therapy in recurrent gastric carcinoma. Hanaue H, et al. **Tokai J Exp Clin Med** 1987 Nov;12(4):209–14

Immunisation of pigs with Streptococcus suis type 2.
Vet Rec 1989 May 20;124(20):538

[Su–polysaccharide skin test and immunotherapy with OK–432 in postoperative gastric cancer—the effect of a splenectomy] Saito H, et al. **Gan No Rinsho** 1988 Nov; 34(14):1965–8 (Eng. Abstr.) (Jpn)

[Allergenic properties of the substance produced by the Streptococcus strain sp. Thom–1606] Savranskaia SIa, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec; (12):107–11 (Eng. Abstr.) (Rus)

[Effect of a streptococcal allergen on the rosette–forming capacity of the T–lymphocytes in erysipelas patients] Tsoi IG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun; (6):76–80 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Streptococcus suis isolated from pigs in Finland. Sihvonen L, et al. **Acta Vet Scand** 1988;29(1):9–13

A double–blinded comparative evaluation of three media for chromophore testing with viridans and nutritionally variant (deficient) streptococci. Stein DS, et al.
Am J Clin Pathol 1989 May;91(5):589–93

Non–group A streptococci in the pharynx. Pathogens or innocent bystanders? Hayden GF, et al.
Am J Dis Child 1989 Jul;143(7):794–7

Fecal streptococcal infection of commercial white pekin ducklings. Sandhu TS. **Avian Dis** 1988 Jul–Sep;32(3):570–3

Incidence, clinical distribution, and susceptibility to several antibiotics of enterococci isolated in some Italian regions. Stefani S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):22–3

Septic arthritis of the knee due to Streptococcus anginosus. Balentine LT, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):189–91

Group C streptococci in human infection: a study of 308 isolates with clinical correlations. Barnham M, et al.
Epidemiol Infect 1989 Jun;102(3):379–90

Inhibitory substances produced by Streptococcus salivarius and colonization of the upper respiratory tract with group A streptococci. Huskins WC, et al. **Epidemiol Infect** 1989 Jun;102(3):401–12

Isolation and study of fosfomycin–resistant mutants of group A and B streptococci. Ravdonikas LE, et al.
Folia Microbiol (Praha) 1988;33(6):507–12

Modified filter paper strip technique for transportation & rapid isolation of streptococci from throat swabs. Koshi G, et al. **Indian J Med Res** 1988 Oct;88:336–8

Enterococcal infections: an increasing problem in hospitalized patients. Terpenning MS, et al.
Infect Control Hosp Epidemiol 1988 Oct;9(10):457–61

A medium for the detection of Lancefield Group D cocci in skimmed milk powder by measurement of conductivity changes. Neaves P, et al. **J Appl Bacteriol** 1988 Dec; 65(6):437–48

An improved procedure for shipboard enumeration of faecal indicator bacteria in marine sediments from sewage sludge disposal areas. West PA. **J Appl Bacteriol** 1988 Apr; 64(4):345–53

Enterococcus hirae implicated as a cause of diarrhea in suckling rats. Etheridge ME, et al. **J Clin Microbiol** 1988 Sep;26(9):1741–4

Simple genetic method to identify viridans group streptococci by colorimetric dot hybridization and fluorometric hybridization in microdilution wells. Ezaki T, et al. **J Clin Microbiol** 1988 Sep;26(9):1708–13

Rapid detection of group C streptococci from animals by latex agglutination. Inzana TJ, et al. **J Clin Microbiol** 1989 Feb;27(2):309–12

Rapid identification of Streptococcus bovis by using combination constitutive enzyme substrate hydrolyses. Panosian KJ, et al. **J Clin Microbiol** 1989 Aug; 27(8):1719–22

Bacteremia with Streptococcus bovis and Streptococcus salivarius: clinical correlates of more accurate identification of isolates. Ruoff KL, et al. **J Clin Microbiol** 1989 Feb; 27(2):305–8

Evaluation of the Minitek Gram–Positive Set for identification of streptococci isolated from bovine mammary glands. Watts JL. **J Clin Microbiol** 1989 May; 27(5):1008–10

Effect of freezing on bacteriologic culturing of mastitis milk samples. Schukken YH, et al. **J Dairy Sci** 1989 Jul; 72(7):1900–6

Invasive streptococcal infections in the era before the acquired immune deficiency syndrome: a 10 years' compilation of patients with streptococcal bacteraemia in North Yorkshire. Barnham M. **J Infect** 1989 May; 18(3):231–48 (64 ref.)

Infective sacroiliac arthritis and psoas abscess caused by Streptococcus milleri [letter] Humphreys H, et al.
J Infect 1989 Jul;19(1):77–8

Endocarditis due to Streptococcus morbillorum. Maxwell S. **J Infect** 1989 Jan;18(1):67–72

Tonsillar microflora—superficial surface vs deep. Uppal K, et al. **J Laryngol Otol** 1989 Feb;103(2):175–7

The beta–hemolytic streptococcal pharyngeal carriers in school children. Danchaivijitr S, et al.
J Med Assoc Thai 1988 Oct;71(10):561–5

Importance of group G streptococci in human pyogenic infections. Brahmadathan KN, et al. **J Trop Med Hyg** 1989 Feb;92(1):35–8

Studies on faecal streptococci in the river Tigris. Khalaf SH, et al. **Microbios** 1989;57(231):99–103

Isolation and physiological characterization of Streptococcus milleri strains from human dental plaque. Yakushiji T, et al. **Microbios** 1988;55(224–225):161–71

Liver abscess caused by Streptococcus milleri. Chua D, et al. **Rev Infect Dis** 1989 Mar–Apr;11(2):197–202 (38 ref.)

Group G streptococcal neonatal septicaemia: two case reports and a brief review of literature. Carstensen H, et al. **Scand J Infect Dis** 1988;20(4):407–10 (17 ref.)

Throat carrier rates of beta–hemolytic streptococci among healthy adults and children. Strömberg A, et al.
Scand J Infect Dis 1988;20(4):411–7

A year of rapid slide–culture in health centres: novelty wears off. Mäkelä M. **Scand J Prim Health Care** 1988 Nov; 6(4):245–9

Isolation of Streptococcus suis from diseased pigs in Canada. Touil F, et al. **Vet Microbiol** 1988 Jun;17(2):171–7

Streptococcus suis and other streptococcal species as a cause of extramammary infection in ruminants. Hommez J, et al. **Vet Rec** 1988 Dec 10;123(24):626–7

Prevalence of Streptococcus suis types 1 and 2 in domestic pigs in Australia and New Zealand. Robertson ID, et al.
Vet Rec 1989 Apr 15;124(15):391–4

[The distribution of streptococci in the woman and her newborn child] Stoianova M, et al.
Akush Ginekol (Sofiia) 1988;27(6):48–51 (Eng. Abstr.) (Bul)

[Beta hemolytic streptococci in the reproductive organs of horses] Mazurová J, et al. **Vet Med (Praha)** 1988 Aug; 33(8):475–83 (Eng. Abstr.) (Cze)

[Group G streptococcal cellulitis] Svendsen PE, et al.
Ugeskr Laeger 1988 Sep 12;150(37):2184–5 (Eng. Abstr.) (Dan)

[Clinical spectrum of a common and insidious pathogen: Streptococcus milleri] Spertini F, et al.
Schweiz Med Wochenschr 1988 Oct 1;118(39):1393–7 (41 ref.) (Eng. Abstr.) (Fre)

[Pharyngeal bacterial flora in newborn infants] Karnicki C, et al. **Wiad Lek** 1988 Jul 15;41(14):934–6 (Eng. Abstr.) (Pol)

[Streptococci of the nasopharynx in healthy persons] Kolotilova LV, et al. **Mikrobiol Zh** 1987 Jan–Feb; 49(1):64–8 (Eng. Abstr.) (Rus)

METABOLISM

Lasalocid–catalyzed proton conductance in Streptococcus bovis as affected by extracellular potassium. Schwingel WR, et al. **Appl Environ Microbiol** 1989 Jan;55(1):259–60

Utilization of dipeptides by Lactococcus lactis ssp. cremoris. van Boven A, et al. **Biochimie** 1988 Apr;70(4):535–42

Acidogenesis by oral streptococci at different pH values. de Soet JJ, et al. **Caries Res** 1989;23(1):14–7

Protection by F, I, Sr, and combinations against fermentation attack by Streptococcus sobrinus artificial plaque on bovine enamel. Luoma H, et al. **Caries Res** 1989;23(1):5–13

Microflora of plaque in rats following infection with an LDH–deficient mutant of Streptococcus rattus. Stashenko KP, et al. **Caries Res** 1989;23(5):375–7

Phosphate regulation of ACV synthetase and cephalosporin biosynthesis in Streptomyces clavuligerus. Jhang J, et al.
FEMS Microbiol Lett 1989 Jan 15;48(2):145–50

Fermentation products, amino acid utilization, maintenance energies and growth yields for the fibrillar Streptococcus salivarius HB and a non–fibrillar mutant HB–B grown in continuous culture under glucose limitation. Harty DW, et al. **J Appl Bacteriol** 1988 Aug;65(2):143–52

Inhibition of adhesion of viridans streptococci to fibronectin–coated hydroxyapatite beads by lipoteichoic acid. Hogg SD, et al. **J Appl Bacteriol** 1988 Dec;65(6):483–9

Transport of glutamine by Streptococcus bovis and conversion of glutamine to pyroglutamic acid and ammonia. Chen GJ, et al. **J Bacteriol** 1989 Jun; 171(6):2981–5

Transport of basic amino acids by membrane vesicles of Lactococcus lactis. Driessen AJ, et al. **J Bacteriol** 1989 Mar;171(3):1453–8

Mechanism and energetics of dipeptide transport in membrane vesicles of Lactococcus lactis. Smid EJ, et al.
J Bacteriol 1989 Jan;171(1):292–8

Kinetic mechanism and specificity of the arginine–ornithine antiporter of Lactococcus lactis. Driessen AJ, et al.
J Biol Chem 1989 Jun 25;264(18):10361–70

Quantitative assay of glycocalyx produced by viridans group streptococci that cause endocarditis. Dall L, et al.
J Clin Microbiol 1989 Sep;27(9):2039–41

Uptake of glutamic acid by Streptococcus salivarius subsp. thermophilus CNRZ 302. Bracquart P, et al.
J Dairy Res 1989 Feb;56(1):107–16

Binding activity of Streptococcus canis for albumin and other plasma proteins. Lämmler C, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2317–23

Differential IgG–binding characteristics of staphylococcal protein A, streptococcal protein G, and a chimeric protein AG. Eliasson M, et al. **J Immunol** 1989 Jan 15;142(2):575–81

Influence of environment on glycolysis in streptococci. Iwani Y. **Kitasato Arch Exp Med** 1988 Apr;61(1):1–20 (119 ref.)

Binding of fibronectin, fibrinogen and type II collagen to streptococci isolated from bovine mastitis. Mamo W, et al. **Microb Pathog** 1987 Jun;2(6):417–24

Cell surface charge of lactobacilli and enterococci isolated from pig small intestine as studied by free zone electrophoresis: a methodological study. Gullmar B, et al.
Microbios 1988;55(224–225):183–92

Partial characterisation of the inhibitory substances produced by Streptococcus oralis and related species. Willcox MD, et al. **Microbios** 1988;55(224–225):135–45

Isolation and characterization of a specific receptor for human albumin on a group L Streptococcus. Lämmler C. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):237–44

[The nitrosophenol system of iron metabolism regulation in actinomycetes] Blinov NO, et al.
Izv Akad Nauk SSSR [Biol] 1989 Jan–Feb;(1):70–8 (Eng. Abstr.) (Rus)

PATHOGENICITY

Differences in virulence between two strains of Streptococcus suis type II after experimentally induced infection of newborn germ–free pigs. Vecht U, et al.
Am J Vet Res 1989 Jul;50(7):1037–43

Invasion of HeLa cells by beta–hemolytic group G streptococci. Nath SK. **Can J Microbiol** 1989 Apr; 35(4):515–7

Streptococcus anginosus ("Streptococcus milleri"): the unrecognized pathogen. Ruoff KL. **Clin Microbiol Rev** 1988 Jan;1(1):102–8 (80 ref.)

Sero group C streptococcal infection in intravenous drug abusers: a report of two cases. Kramer ED, et al. **Diagn Microbiol Infect Dis** 1988 Jul;10(3):181–4

Bacterial endocarditis caused by Streptococcus suis type 2 [letter] Peetermans WE, et al. **J Infect Dis** 1989 Mar; 159(3):595–6

Pathogenicity of two strains of Streptococcus uberis infused into lactating and non-lactating bovine mammary glands. Hill AW. **Res Vet Sci** 1988 Nov;45(3):400–4

[The nephritogenic role of Streptococcus group C zooepidemicus, a recognized priority in Iasi] Buiuc D. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):307–10 (Eng. Abstr.) **(Rum)**

PHYSIOLOGY

Influence of saliva from 'heavy' and 'light' plaque formers on the colloidal stability of bacterial suspensions. Simonsson T, et al. **Acta Odontol Scand** 1988 Aug;46(4):195–7

Adherence of alpha-hemolytic streptococci to human endocardial, endothelial and buccal cells. Schollin J. **Acta Paediatr Scand** 1988 Sep;77(5):705–10

The enterococci: evidence of species-specific clinical and microbiologic heterogeneity. Mackowiak PA. **Am J Med Sci** 1989 Apr;297(4):238–43

Adherence of streptococcal isolates from cattle and horses to their respective host epithelial cells. Valentin-Weigand P, et al. **Am J Vet Res** 1988 Sep;49(9):1485–8

Comparison of different assays for the aggregation of oral bacteria by human whole saliva. Koop HM, et al. **Antonie Van Leeuwenhoek** 1989;55(2):109–22

Adhesion of oral streptococci to teeth. Busscher HJ. **Biochem Soc Trans** 1989 Jun;17(3):458–60

Effect of neuraminidase on the adherence to salivary pellicle of Streptococcus sanguis and Streptococcus mitis. Liljemark WF, et al. **Caries Res** 1989;23(3):141–5

Effect of desalivation and age on susceptibility to infection by Streptococcus sobrinus. Madison KM, et al. **Caries Res** 1989;23(2):70–4

Influence of ovarian steroids on adherence (in vitro) of Streptococcus zooepidemicus to endometrial epithelial cells. Watson ED, et al. **Equine Vet J** 1988 Sep;20(5):371–2

Hemagglutination activities of group B, C, D, and G streptococci: demonstration of novel sugar-specific cell-binding activities in Streptococcus suis. Kurl DN, et al. **Infect Immun** 1989 Feb;57(2):384–9

Specific and nonspecific inhibition of adhesion of oral actinomyces and streptococci to erythrocytes and polystyrene by caseinoglycopeptide derivatives. Neeser JR, et al. **Infect Immun** 1988 Dec;56(12):3201–8

Role of immunoglobulin G in platelet aggregation by viridans group streptococci. Sullam PM, et al. **Infect Immun** 1988 Nov;56(11):2907–11

Mediation of adherence of streptococci to human endothelial cells by complement S protein (vitronectin). Valentin-Weigand P, et al. **Infect Immun** 1988 Nov; 56(11):2851–5

Effect of cell cycle stages on the central density of Enterococcus faecium ATCC 9790. Bourbeau P, et al. **J Bacteriol** 1989 Apr;171(4):1982–6

Prevention of bacterial adhesion to denture acrylic. Wilson M, et al. **J Dent** 1989 Aug;17(4):166–70

Utilization of a continuous streptococcal surface to measure interbacterial adherence in vitro and in vivo. Liljemark WF, et al. **J Dent Res** 1988 Dec;67(12):1455–60

Differential modulation of adherence of oral streptococci by human neutrophil myeloperoxidase. Miyasaki KT, et al. **J Dent Res** 1988 Oct;67(10):1300–6

The effects of pellicle formation on streptococcal adhesion to human enamel and artificial substrata with various surface free-energies. Pratt-Terpstra IH, et al. **J Dent Res** 1989 Mar;68(3):463–7

Adherence of streptococci to surface-modified glass. Satou N, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1299–305

Suppression of Streptococcus sobrinus 6715 (g) in plaques by Streptococcus mutans 32K (c). Ikeda T, et al. **J Oral Pathol** 1988 Nov;17(9–10):471–4

Compliance of bacterial flagella measured with optical tweezers. Block SM, et al. **Nature** 1989 Apr 6; 338(6215):514–8

Chemotactic response of equine polymorphonuclear leucocytes to Streptococcus equi. Muhktar MM, et al. **Res Vet Sci** 1988 Sep;45(2):225–9

Enterococcus (Streptococcus) durans adherence in the small intestine of a diarrheic pup. Collins JE, et al. **Vet Pathol** 1988 Sep;25(5):396–8

ULTRASTRUCTURE

Scanning electron microscopic studies on streptococcal aerosol infection. Yoshinaga M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):31–7

Ultrastructural changes in Streptococcus sobrinus induced by xylitol, NaF and ZnCl2. Scheie AA, et al. **Caries Res** 1989;23(5):320–7

Adherence to epithelial cells and ultrastructure of fosfomycin-resistant mutants of group A streptococci. Ravdonikas LE, et al. **Folia Microbiol (Praha)** 1988; 33(6):513–9

Nutritionally variant streptococci develop ultrastructural abnormalities during experimental endocarditis. Frehel C, et al. **Microb Pathog** 1988 Apr;4(4):247–55

Surface structures, co-aggregation and adherence phenomena of Streptococcus oralis and related species. Willcox MD, et al. **Microbios** 1989;59(238):19–29

STREPTOCOCCUS AGALACTIAE

Synthesis of a di-, tri-, and tetra-saccharide unit of the group B streptococcal common antigen. Pozsgay V, et al. **Carbohydr Res** 1988 Aug 15;179:61–75

Phagocytic and postphagocytic activities of bovine neutrophils for pure and mixed bacterial cultures. Silva ID, et al. **J Dairy Sci** 1988 Sep;71(9):2513–9

[Streptococcus B meningitis after splenic irradiation of Hodgkin's disease (letter)] Hennequin C, et al. **Presse Med** 1989 Jan 7–14;18(1):34 **(Fre)**

ANALYSIS

Sensitivity and specificity of latex agglutination tests used to identify Streptococcus agalactiae and Staphylococcus aureus isolated from bulk tank milk. Hogan JS, et al. **Am J Vet Res** 1988 Sep;49(9):1537–9

Multiantennary group-specific polysaccharide of group B Streptococcus. Michon F, et al. **Biochemistry** 1988 Jul 12; 27(14):5341–51

Isolation and characterization of type IV group B Streptococcus capsular polysaccharide. Wessels MR, et al. **Infect Immun** 1989 Apr;57(4):1089–94

[Isolation of group-specific polysaccharide complexes from group B streptococci by phenol-water extraction] Mehl M, et al. **J Basic Microbiol** 1988;28(7):437–44 (Eng. Abstr.) **(Ger)**

CLASSIFICATION

Spot CAMP test for the prompt presumptive identification of group B streptococci. Prakash K, et al. **Indian J Med Res** 1989 Mar;89:76–9

Cell electrophoresis of group B streptococci: separation of types Ia, Ib/c, II, III and IV before and after neuraminidase treatment. Uhlenbruck G, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):28–34

[Serotype-distribution of group B streptococci isolated from patients with neonatal infections] Yasuda T, et al. **Kansenshogaku Zasshi** 1988 Oct;62(10):904–10 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Resistance of Streptococcus agalactiae to erythromycin [letter] Von Recklinghausen G, et al. **J Antimicrob Chemother** 1989 Jul;24(1):93

Iron and glucose affecting growth and haemolysin production in human strains of group B streptococci. Griffiths BB. **Microbios** 1989;58(236–237):135–46

GENETICS

Molecular analysis of a region of the group B streptococcus chromosome involved in type III capsule expression. Kuypers JM, et al. **Infect Immun** 1989 Oct;57(10):3058–65

Restriction endonuclease analysis of human and bovine group B streptococci for epidemiologic study. Denning DW, et al. **J Clin Microbiol** 1989 Jun;27(6):1352–6

GROWTH & DEVELOPMENT

In vitro bacterial growth in whey from M'blood group positive and negative cows—growth of Streptococcus agalactiae is dependent on protease inhibitor level. Kaartinen L, et al. **Zentralbl Veterinarmed [B]** 1988 Nov; 35(9):681–7

[A fermenter dialysis cultivation technic for encapsulated pathogenic bacteria. II. Group B streptococci] Starke R, et al. **J Basic Microbiol** 1989;29(3):177–84 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Bacteroides fragilis lipopolysaccharide and group B streptococcus serotype II glycocalyx have a common major antigenic determinant. Linko L, et al. **APMIS** 1988 Sep; 96(9):805–12

Seroepidemiology of group B Streptococcus type II antibody specificity. Gray BM, et al. **Epidemiol Infect** 1988 Oct; 101(2):347–54

Identification of non-immunoglobulin A-Fc-binding forms and low-molecular-weight secreted forms of the group B streptococcal beta antigen. Brady LJ, et al. **Infect Immun** 1989 May;57(5):1573–81

Molecular species of R-protein antigens produced by clinical isolates of group B streptococci. Flores AE, et al. **J Clin Microbiol** 1989 May;27(5):1050–4

Human monoclonal antibodies to group B streptococcus. Reactivity and in vivo protection against multiple serotypes. Raff HV, et al. **J Exp Med** 1988 Sep 1; 168(3):905–17

Two novel antigens associated with group B streptococci identified by a rapid two-stage radioimmunoassay. Brady LJ, et al. **J Infect Dis** 1988 Nov;158(5):965–72

A polyclonal human IgG preparation hyperimmune for type III, group B Streptococcus: in vitro opsonophagocytic activity and efficacy in experimental models. Givner LB, et al. **J Infect Dis** 1988 Oct;158(4):724–30

Seroepidemiology of group B streptococcus type III colonization at delivery. Gray BM, et al. **J Infect Dis** 1989 Jun;159(6):1139–42

High intravenous doses of human immune globulin suppress neonatal group B streptococcal immunity in rats. Weisman LE, et al. **J Pediatr** 1989 Sep;115(3):445–50

Isolation of a C (Ibc) protein from group B Streptococcus which elicits mouse protective antibody. Valtonen MV, et al. **Microb Pathog** 1986 Apr;1(2):191–204

Group B streptococcal vaccine in pregnant women [letter] **N Engl J Med** 1989 Mar 23;320(12):807–9

Immunization of pregnant women with a polysaccharide vaccine of group B streptococcus. Baker CJ, et al. **N Engl J Med** 1988 Nov 3;319(18):1180–5

Polyclonal anti-group B Streptococcus latex antigen detection test. Blecker DL, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):251–2

Group B streptococcal disease: its importance in the developing world and prospect for prevention with vaccines. Walsh JA, et al. **Pediatr Infect Dis J** 1989 May; 8(5):271–7 (100 ref.)

Demonstration of opsonic and protective activity of human cord sera against type III group B streptococcus that are independent of type-specific antibody. Kim KS, et al. **Pediatr Res** 1988 Nov;24(5):628–32

Surface-localized protein antigens of group B streptococci. Ferrieri P. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S363–6 (20 ref.)

Immunochemical characterization of the polysaccharide antigens of group B streptococci. Pritchard DG, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S367–71 (25 ref.)

Structural similarity of the type-specific group B streptococcal polysaccharides and the carbohydrate units of tissue glycoproteins: evaluation of possible cross-reactivity. Häyrinen J, et al. **Vaccine** 1989 Jun; 7(3):217–24

Ingestion and killing of Streptococcus agalactiae by bovine granulocytes in the presence of natural opsonins. Rainard P, et al. **Vet Microbiol** 1988 Sep;18(1):41–50

[Trial of screening test for prevention of neonatal infection due to group B Streptococcus] Suzuki Y, et al. **Kansenshogaku Zasshi** 1988 Oct;62(10):911–5 (Eng. Abstr.) **(Jpn)**

[Antibodies to group B streptococci in maternal and cord sera] Kubota T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):676–82 (Eng. Abstr.) **(Jpn)**

[Group-specific antigens of streptococci in the make-up of circulating immune complexes in rheumatism and rheumatoid arthritis] Zborovskii AB, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):51–6 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Rapid detection of vaginal colonization with group B streptococci by means of latex agglutination. Stiller RJ, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):566–8

Frequency of isolation of environmental mastitis-causing pathogens and incidence of new intramammary infection during the nonlactating period. Oliver SP. **Am J Vet Res** 1988 Nov;49(11):1789–93

Beta-haemolytic streptococci from the female genital tract: clinical correlates and outcome of treatment. Lewis RF. **Epidemiol Infect** 1989 Jun;102(3):391–400

Evaluation of a rapid latex agglutination test for detection of group B streptococci in vaginal specimens. Lotz-Nolan L, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr; 8(4):289–93

Patterns of carriage of group B streptococci in genitourinary medicine clinic patients. Monteiro EF, et al. **Genitourin Med** 1988 Dec;64(6):387–90

Incidence of group-B beta haemolytic streptococci in the vaginal flora of pregnant women. Lakshmi V, et al. **Indian J Pathol Microbiol** 1988 Jul;31(3):240–4

Rapid detection of group B streptococci in vaginal swabs of parturients by latex particle agglutination. Hoppe JE, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):379–84

[Evaluation of various culture media for use in isolating group B streptococci from clinical specimens] Zatsiorskaia SL. **Lab Delo** 1989;(3):15–8 (Eng. Abstr.) **(Rus)**

[Methodologic aspects of the isolation of beta-hemolytic streptococci] Shevchuk MS, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):49–51 (Eng. Abstr.) **(Rus)**

[Identification of group B beta hemolytic Streptococcus in infections of adults and children] Fernández A, et al. **Rev Med Chil** 1989 Jun;116(6):514–9 (Eng. Abstr.) **(Spa)**

METABOLISM

A model of bacterially induced umbilical vein spasm, relevant to fetal hypoperfusion. Hyde S, et al. **Obstet Gynecol** 1989 Jun;73(6):966–70

PATHOGENICITY

Recto-vaginal colonization and urinary tract infection by group B Streptococcus in the pregnant diabetic patient. Matorras R, et al. **Acta Obstet Gynecol Scand** 1988; 67(7):617–20

Pathogenic factors in group B streptococci types IV and V. Orefici G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):19–21

Properties of high and low density subpopulations of group B streptococci: enhanced virulence of the low density

variant. Håkansson S, et al. **Microb Pathog** 1988 Nov; 5(5):345–55

Identification of a high-virulence clone of type III Streptococcus agalactiae (group B Streptococcus) causing invasive neonatal disease. Musser JM, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4731–5

[Biological properties of Streptococcus group B: the interrelations of the virulence in mice, the adhesion to human epithelial cells and the production of type-specific antigen] Bulgakova TN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):29–34 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Group B streptococci inhibit the chemotactic activity of the fifth component of complement. Hill HR, et al. **J Immunol** 1988 Nov 15;141(10):3551–6

Assessment of phagocytosis of plastic adherent group B streptococci by ELISA quenching. Rainard P. **J Immunol Methods** 1988 Oct 4;113(1):137–42

[A comparison of 2 methods for determining the hydrophobicity of Streptococcus groups A and B] Ravdonikas LE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):15–8 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Preservation of capsular material of streptococcal cells by specific lectins determined by immunoelectron microscopy. Molinari A, et al. **Histochem J** 1988 Sep;20(9):526–30

STREPTOCOCCUS FAECALIS

ANALYSIS

Characterization of the human neutrophil response to sex pheromones from Streptococcus faecalis. Ember JA, et al. **Am J Pathol** 1989 Apr;134(4):797–805

CLASSIFICATION

Measurement of active constitutive L-pyrrolidonyl-peptidase from the genera Streptococcus and Enterococcus. Panosian KJ, et al. **Med Microbiol Immunol (Berl)** 1988;177(6):317–21

DRUG EFFECTS

Effect of peptide AS-48 on Enterococcus faecalis subsp. liquefaciens S-47. Galvez A, et al. **Antimicrob Agents Chemother** 1989 May;33(5):641–5

Postantibiotic effect of penicillin plus gentamicin versus Enterococcus faecalis in vitro and in vivo. Hessen MT, et al. **Antimicrob Agents Chemother** 1989 May;33(5):608–11

Characterization of vancomycin resistance in Enterococcus faecium and Enterococcus faecalis. Nicas TI, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1121–4

Susceptibility and bactericidal activity studies of four beta-lactamase-producing enterococci. Patterson JE, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):251–3

In vitro synergism between daptomycin and fosfomycin against Enterococcus faecalis isolates with high-level gentamicin resistance. Rice LB, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):470–3

In vitro activities of quinolones against enterococci resistant to penicillin-aminoglycoside synergy. Sahm DF, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):71–7

Inducible, transferable resistance to vancomycin in Enterococcus faecalis A256. Shlaes DM, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):198–203

In vitro activity of SK&F 104662, a new glycopeptide antibiotic. Yao JD, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):965–7

Further studies on post-antibiotic effect and synergism in two strains of Streptococcus faecalis. Fuursted K. **APMIS** 1989 Jan;97(1):33–7

Synergism and mechanism of subinhibitory concentration of streptomycin on Streptococcus faecalis. Fuursted K. **APMIS** 1989 Jan;97(1):27–32

Different activity of penicillins and cephalosporins on enterococci. Fontana R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):60–1

Bactericidal effect and regrowth of Streptococcus faecalis exposed to amoxicillin following beta-lactamase. Yourassowsky E, et al. **Chemotherapy** 1988;34(6):462–6

In vitro activity of ampicillin/sulbactam against enterococci determined by the time-kill method. D'Amato RF, et al. **Diagn Microbiol Infect Dis** 1989 Jan-Feb;12(1):9–11

Effect of blood product medium supplements on the activity of cefotaxime and other cephalosporins against Enterococcus faecalis. Eliopoulos GM, et al. **Diagn Microbiol Infect Dis** 1989 Mar-Apr;12(2):149–56

Activity of amikacin and ampicillin in succession and in combination. Lorian V, et al. **Diagn Microbiol Infect Dis** 1988 Nov;11(3):163–9

Interaction of ciprofloxacin with ampicillin and vancomycin for Streptococcus faecalis. Smith SM, et al. **Diagn Microbiol Infect Dis** 1988 Apr;9(4):239–43

High-level vancomycin-resistant enterococci causing hospital infections. Uttley AH, et al. **Epidemiol Infect** 1989 Aug;103(1):173–81

Comparative in vitro activity of daptomycin (LY146032) and vancomycin against gram-positive cocci determined using a pharmacokinetic model. Blenkharn JI, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug;8(8):734–7

Differential methotrexate sensitivity: a test to distinguish Enterococcus faecalis from Enterococcus faecium [letter] Hamilton-Miller JM. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):696–7

Turbidimetric response of Staphylococcus aureus and Enterococcus faecalis to daptomycin. Wale MC, et al. **Eur J Clin Microbiol Infect Dis** 1988 Dec;7(6):809–12

False resistance of Streptococcus faecalis to enoxacin by disc diffusion susceptibility tests [letter] Bergeron MG, et al. **J Antimicrob Chemother** 1989 Jan;23(1):158–9

In-vitro and in-vivo activity of cefpirome (HR 810) against methicillin-susceptible and -resistant Staphylococcus aureus and Streptococcus faecalis. Eng RH, et al. **J Antimicrob Chemother** 1989 Mar;23(3):373–81

Inducible, transferable resistance to vancomycin in Enterococcus faecium, D399. Shlaes DM, et al. **J Antimicrob Chemother** 1989 Apr;23(4):503–8

Prevalence and susceptibility of highly gentamicin resistant Enterococcus faecalis in a south London teaching hospital. Smyth EG, et al. **J Antimicrob Chemother** 1989 Apr; 23(4):633–9

Comparison of the agar dilution, tube dilution, and broth microdilution susceptibility tests for determination of teicoplanin MICs. Kenny MT, et al. **J Clin Microbiol** 1989 Jun;27(6):1409–10

Survival of some non-starter bacteria in naturally ripened and enzyme-accelerated Cheddar cheese. Bautista L, et al. **J Dairy Res** 1988 Nov;55(4):597–602

Serious infection due to beta-lactamase-producing Streptococcus faecalis with high-level resistance to gentamicin [letter] Patterson JE, et al. **J Infect Dis** 1988 Nov;158(5):1144–5

Bacteremia caused by a vancomycin-resistant Enterococcus. Bingen E, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):475–6

Streptococcus faecalis susceptibility to amiloride depends on medium pH. Giunta S, et al. **Pharmacol Res Commun** 1988 Oct;20(10):853–61

Endocarditis due to Streptococcus faecalis with high-level resistance to gentamicin. Lipman ML, et al. **Rev Infect Dis** 1989 Mar-Apr;11(2):325–8

[Antibacterial activity of lomefloxacin in the urine during the 4 days following a single 400 mg oral dose] Guibert J, et al. **Pathol Biol (Paris)** 1989 May;37(5):411–4 (Eng. Abstr.) **(Fre)**

[Antibacterial activity of pefloxacin in the urine during the 7 days following a single 800 mg oral dose] Guibert J, et al. **Pathol Biol (Paris)** 1989 May;37(5):406–10 (Eng. Abstr.) **(Fre)**

[An evaluation of the antibacterial effectiveness of bisdequalinium acetate and sodium hypochlorite] Görgül G, et al. **Mikrobiyol Bul** 1987 Oct;21(4):289–95 (Eng. Abstr.) **(Tur)**

ENZYMOLOGY

Treatment of experimental endocarditis caused by a beta-lactamase-producing strain of Enterococcus faecalis with high-level resistance to gentamicin. Hindes RG, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1019–22

Effects of spermine and spermidine on the inorganic pyrophosphatase of Streptococcus faecalis. Interactions between polyamines and inorganic pyrophosphate. Lahti R, et al. **Biochem J** 1989 Apr 1;259(1):53–9

Purification and substrate specificity of a strongly hydrophobic extracellular metalloendopeptidase ("gelatinase") from Streptococcus faecalis (strain 0G1-10). Mäkinen PL, et al. **J Biol Chem** 1989 Feb 25;264(6):3325–34

The non-flavin redox center of the streptococcal NADH peroxidase. I. Thiol reactivity and redox behavior in the presence of urea. Poole LB, et al. **J Biol Chem** 1989 Jul 25;264(21):12322–9

The non-flavin redox center of the streptococcal NADH peroxidase. II. Evidence for a stabilized cysteine-sulfenic acid. Poole LB, et al. **J Biol Chem** 1989 Jul 25; 264(21):12330–8

Purification of the ATPase of Streptococcus faecalis. Solioz M, et al. **Methods Enzymol** 1988;157:680–9

GENETICS

Extrachromosomal control of antibiotic resistance, DNase activity and enterotoxin production in Streptococcus faecalis. Soni SK, et al. **Acta Microbiol Pol** 1988; 37(3-4):345–8

In vivo transfer of pAM beta 1 from Lactobacillus reuteri to Enterococcus faecalis. Morelli L, et al. **J Appl Bacteriol** 1988 Nov;65(5):371–5

Cloning and expression of genes encoding pheromone-inducible antigens of Enterococcus (Streptococcus) faecalis. Christie PJ, et al. **J Bacteriol** 1988 Nov;170(11):5161–8

Factors affecting transfer frequency of pAM beta 1 from Streptococcus faecalis to Lactobacillus plantarum. Sasaki Y, et al. **J Bacteriol** 1988 Dec;170(12):5939–42

Structure of cCF10, a peptide sex pheromone which induces conjugative transfer of the Streptococcus faecalis tetracycline resistance plasmid, pCF10. Mori M, et al. **J Biol Chem** 1988 Oct 5;263(28):14574–8

Detection of a large haemolysin plasmid carrying multiple antibiotic resistance markers in Streptococcus faecalis. Siegrist HH, et al. **Microb Pathog** 1987 Feb;2(2):155–8

Sex pheromones and plasmid transfer in Enterococcus faecalis. Clewell DB, et al. **Plasmid** 1989 May;21(3):175–84 (54 ref.)

Tn916 delta E: a Tn916 transposon derivative expressing erythromycin resistance. Rubens CE, et al. **Plasmid** 1988 Sep;20(2):137–42

Inter- and intrageneric transfer of Tn916 between Streptococcus faecalis and Clostridium tetani. Volk WA, et al. **Plasmid** 1988 May;19(3):255–9

GROWTH & DEVELOPMENT

Growth of gram-positive and gram-negative bacteria in platelet concentrates. Punsalang A, et al. **Transfusion** 1989 Sep;29(7):596–9

IMMUNOLOGY

Stimulating effect of Streptococcus faecalis on phagocytosis in gnotobiotic piglets. Mandel L, et al. **Folia Microbiol (Praha)** 1989;34(1):68–76

Chemotactic and chemokinetic activity of Streptococcus faecalis culture supernatant for equine neutrophils. Blancquaert AM, et al. **Vet Immunol Immunopathol** 1988 Oct;19(3-4):285–97

ISOLATION & PURIFICATION

A medium for the detection of Lancefield Group D cocci in skimmed milk powder by measurement of conductivity changes. Neaves P, et al. **J Appl Bacteriol** 1988 Dec; 65(6):437–48

Oral hygiene and the prevalence of oral group D streptococci in medically-physically compromised and periodontal disease patients. McCrary BR, et al. **J Periodontol** 1989 May;60(5):255–8

[Venous and capillary diffusion of Enterococcus faecalis during experimental bacteremia in the chicken] Labarthe JC, et al. **Ann Inst Pasteur Microbiol** 1988 Sep-Oct; 139(5):631–6 (Eng. Abstr.) **(Fre)**

[Study of bacterial contamination of peloid in the process of its use and in its formation site] Zotova VI, et al. **Gig Sanit** 1988 Aug;(8):86–7 **(Rus)**

[Methods of preserving strains of enterococci and evaluation of the technological properties as a function of storage time] Simonetta AC, et al. **Rev Argent Microbiol** 1984;16(1):19–26 (Eng. Abstr.) **(Spa)**

METABOLISM

Norfloxacin binds to human fecal material. Edlund C, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1869–74

Purification and amino acid composition of peptide antibiotic AS-48 produced by Streptococcus (Enterococcus) faecalis subsp. liquefaciens S-48. Gálvez A, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):437–41

Identification of aggregation substances of Enterococcus faecalis cells after induction by sex pheromones. An immunological and ultrastructural investigation. Galli D, et al. **Arch Microbiol** 1989;151(6):486–90

Localization of aggregation substances of Enterococcus faecalis after induction by sex pheromones. An ultrastructural comparison using immuno labelling, transmission and high resolution scanning electron microscopic techniques. Wanner G, et al. **Arch Microbiol** 1989;151(6):491–7

Regulation of the cytoplasmic pH by a proton-translocating ATPase in Streptococcus faecalis (faecium). A computer simulation. Suzuki T, et al. **Eur J Biochem** 1989 Mar 15; 180(2):467–71

Transport of diamines by Enterococcus faecalis is mediated by an agmatine-putrescine antiporter. Driessen AJ, et al. **J Bacteriol** 1988 Oct;170(10):4522–7

Active potassium extrusion regulated by intracellular pH in Streptococcus faecalis. Kakinuma Y, et al. **J Biol Chem** 1988 Oct 5;263(28):14166–70

Binding of fibronectin and albumin to Enterococcus (Streptococcus) faecalis. Shorrock PJ, et al. **Microb Pathog** 1989 Jan;6(1):61–7

PATHOGENICITY

Pathogenicity of enterococci in a rat model of fecal peritonitis. Matlow AG, et al. **J Infect Dis** 1989 Jul; 160(1):142–5

Study on pathogenesis of Enterococcus faecalis in urinary tract. Hirose T, et al. **Urol Res** 1989;17(2):125–9

[Study of the pathogenicity of Enterococcus faecalis—experimental mice with mixed infection with E. faecalis and other organisms] Ogawa M, et al. **Kansenshogaku Zasshi** 1988 Mar;62(3):217–25 (Eng. Abstr.) **(Jpn)**

[Effect of Streptococci on epithelial cells of the vagina of albino inbred mice NMRI] Stefanowicz M, et al. **Patol Pol** 1988 Jul-Sep;39(3):210–9 (Eng. Abstr.) **(Pol)**

[Significance of enterococcus in the development of infectious diseases of the respiratory organs] Sedov VI. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):96–103 (61 ref.) **(Rus)**

PHYSIOLOGY

Ion-conducting channels in a gram-positive bacterium. Zoratti M, et al. **FEBS Lett** 1988 Nov 21;240(1-2):105–9

Effects of interleukin-1, lipopolysaccharide, and streptococci on procoagulant activity of cultured human cardiac valve

endothelial and stromal cells. Drake TA, et al. **Infect Immun** 1989 Feb;57(2):507–12
[Evaluation of the effect of biologically purified waste water on the survival of microflora] Vinogradova LA. **Gig Sanit** 1988 Aug;(8):80–2 **(Rus)**
[Survival of pathogenic microorganisms in snow] Vlodavets VV, et al. **Gig Sanit** 1988 Sep;(9):17–9 **(Rus)**

ULTRASTRUCTURE

Scanning electronmicroscopy of Staphylococcus aureus and Enterococcus faecalis exposed to daptomycin. Wale LJ, et al. **J Med Microbiol** 1989 Sep;30(1):45–9

STREPTOCOCCUS GROUP A see **STREPTOCOCCUS PYOGENES**

STREPTOCOCCUS GROUP B see **STREPTOCOCCUS AGALACTIAE**

STREPTOCOCCUS LACTIS

CYTOLOGY

Proportion of phage-insensitive and phage-sensitive cells within pure strains of lactic streptococci, and the influence of calcium. Tesfaigzi J, et al. **J Dairy Res** 1989 Feb; 56(1):151–4

DRUG EFFECTS

Response of Lactococcus (Streptococcus) lactis to N-methyl-N'-nitro-N-nitrosoguanidine: absence of adaptive response. Auffray Y, et al. **Mutagenesis** 1989 Jul; 4(4):280–2
[Effect of amino acids on the growth of the lactic acid streptococci Streptococcus lactis and the process of their protoplast formation] Stoianova LG, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov–Dec;(6):892–9 **(Rus)**

ENZYMOLOGY

Molecular cloning of lactose genes in dairy lactic streptococci: the phospho-beta-galactosidase and beta-galactosidase genes and their expression products. De Vos WM, et al. **Biochimie** 1988 Apr;70(4):461–73 (88 ref.)
N5-(L-1-carboxyethyl)-L-ornithine:NADP+ oxidoreductase from Streptococcus lactis. Purification and partial characterization. Thompson J. **J Biol Chem** 1989 Jun 5;264(16):9592–601
Effect of Streptococcus lactis preparation in diet of mice on inhibiting age-dependent loss of superoxide dismutase activity in tissues. Abe N, et al. **Mech Ageing Dev** 1989 Jul;49(1):87–92

GENETICS

Insertion and amplification of foreign genes in the Lactococcus lactis subsp. lactis chromosome. Chopin MC, et al. **Appl Environ Microbiol** 1989 Jul;55(7):1769–74
Cloning of nisin resistance determinant and replication origin on 7.6-kilobase EcoRI fragment of pNP40 from Streptococcus lactis subsp. diacetylactis DRC3. Froseth BR, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2136–9
Localization, cloning, and expression of genetic determinants for bacteriophage resistance (Hsp) from the conjugative plasmid pTR2030. Hill C, et al. **Appl Environ Microbiol** 1989 Jul;55(7):1684–9
Characterization of a pAM beta 1 deletion derivative isolated from Lactobacillus casei after conjugation. Iwata M. **Biochimie** 1988 Apr;70(4):553–8
Transposition of the Streptococcus lactis ssp. lactis Z270 lactose plasmid to pVA797: demonstration of an insertion sequence and its relationship to an inverted repeat sequence isolated by self-annealing. Novel M, et al. **Biochimie** 1988 Apr;70(4):543–51
Construction of a vector plasmid family and its use for molecular cloning in Streptococcus lactis. Simon D, et al. **Biochimie** 1988 Apr;70(4):559–66
Characterization of a cloned chromosomal fragment affecting the proteinase activity of Streptococcus lactis ssp. lactis. Tynkkynen S, et al. **Biochimie** 1988 Apr;70(4):531–4
A new simple method of curing plasmids in lactic streptococci (Streptococcus cremoris; Streptococcus lactis, plasmids). Sinha RP. **FEMS Microbiol Lett** 1989 Feb; 48(3):349–52
Nisin, a peptide antibiotic: cloning and sequencing of the nisA gene and posttranslational processing of its peptide product. Kaletta C, et al. **J Bacteriol** 1989 Mar; 171(3):1597–601
Structure, expression, and evolution of a gene encoding the precursor of nisin, a small protein antibiotic. Buchman GW, et al. **J Biol Chem** 1988 Nov 5;263(31):16260–6
Molecular characterization of a cell wall-associated proteinase gene from Streptococcus lactis NCDO763. Kiwaki M, et al. **Mol Microbiol** 1989 Mar;3(3):359–69
Conjugal transfer of genetic material by Lactococcus lactis subsp. lactis 11007. Steele JL, et al. **Plasmid** 1989 Jul; 22(1):32–43
Characterization of the genetic element coding for lactose metabolism in Lactococcus lactis subsp. lactis KP3. Steele JL, et al. **Plasmid** 1989 Jul;22(1):44–51
[A mutant of Streptococcus lactis with resistance to bacteriophages isolated in Argentina and the United States of America] De Fabrizio SV, et al. **Rev Argent Microbiol** 1989 Jan–Mar;21(1):1–7 (Eng. Abstr.) **(Spa)**

GROWTH & DEVELOPMENT

Amine production by Streptococcus lactis under different growth conditions. Chander H, et al. **Acta Microbiol Pol** 1988;37(1):61–4

IMMUNOLOGY

Antitumor activity of lactic acid bacteria on a solid fibrosarcoma, sarcoma-180 and Ehrlich ascites carcinoma. Kelkar SM, et al. **Cancer Lett** 1988 Sep–Oct;42(1–2):73–7

ISOLATION & PURIFICATION

Dry rehydratable films for enumeration of coliforms and aerobic bacteria in dairy products: collaborative study. Curiale MS, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr; 72(2):312–8

METABOLISM

Bioenergetics and solute transport in lactococci. Konings WN, et al. **Crit Rev Microbiol** 1989;16(6):419–76 (266 ref.)

PHYSIOLOGY

Functional reconstitution of prokaryote and eukaryote membrane proteins. Maloney PC, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):1–10
[Trials of cheese-making using concentrated bacterial starters] Garat MH, et al. **Rev Argent Microbiol** 1984; 16(2):67–74 (Eng. Abstr.) **(Spa)**

STREPTOCOCCUS MUTANS

ANALYSIS

[Gas chromatographic analysis of the S. mutans product spectrum from glucose turnover] Stösser L, et al. **Zahn Mund Kieferheilkd** 1989;77(4):309–11 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Interactions of zinc with fluoride on growth, glycolysis and survival of Streptococcus mutans GS-5. Izaguirre-Fernández EJ, et al. **Caries Res** 1989;23(1):18–25
Ultrastructure, growth, and adherence of Streptococcus mutans after treatment with chlorhexidine and fluoride. Meurman JH. **Caries Res** 1988;22(5):283–7
Usnic acid revisited, its activity on oral flora. Ghione M, et al. **Chemioterapia** 1988 Oct;7(5):302–5
Effects of sustained-release chlorhexidine acetate on the human dental plaque flora. Schaeken MJ, et al. **J Dent Res** 1989 Feb;68(2):119–23
Bicarbonate-based dental powder, fluoride, and saccharin inhibition of dental caries associated with Streptococcus mutans infection of rats. Tanzer JM, et al. **J Dent Res** 1988 Jun;67(6):969–72
Inhibition of bacterial colonization by antimicrobial agents incorporated into dental resins. Bapna MS, et al. **J Oral Rehabil** 1988 Sep;15(5):405–11
Antimicrobial activity of calcium hydroxide liners on Streptococcus sanguis and S. mutans. Barkhordar RA, et al. **J Prosthet Dent** 1989 Mar;61(3):314–7
Effect of copper fluoride and copper sulfate on dental plaque, Streptococcus mutans and caries in hamsters. Maltz M, et al. **Scand J Dent Res** 1988 Oct;96(5):390–2
[Antimicrobial activity of N-alkylethylenediamines against oral and other microorganisms] Ueda M, et al. **Yakugaku Zasshi** 1989 Mar;109(3):184–7 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

In vivo studies on stereospecificity of the monoglyceride kinase, lysophosphatidic acid acyltransferase, phosphatidic acid phosphatase and CDP-diglyceride synthase of Streptococcus mutans BHT using the stereoisomers of the ether lipid, dodecylglycerol. Cabacungan EA, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):241–7
Synthesis of 6-deoxy-6-fluorosucrose, and its inhibition of Leuconostoc and Streptococcus D-glucansucrases. Eklund SH, et al. **Carbohydr Res** 1988 Jun 15;177:253–8
Synthesis of 4,6-dideoxysucrose, and inhibition studies of Leuconostoc and Streptococcus D-glucansucrases with deoxy and chloro derivatives of sucrose modified at carbon atoms 3, 4, and 6. Tanriseven A, et al. **Carbohydr Res** 1989 Feb 15;186(1):87–94
Evidence for the presence of two distinct sites of sucrose hydrolysis and glucosyl transfer activities on 1,3-alpha-D-glucan synthase of Streptococcus mutans. Yamashita Y, et al. **FEBS Lett** 1989 Jan 30;243(2):343–6
Isolation and characterization of the Streptococcus mutans gtfD gene, coding for primer-dependent soluble glucan synthesis. Hanada N, et al. **Infect Immun** 1989 Jul; 57(7):2079–85
Effects of Tween 80 and sodium fluoride on extracellular glucosyltransferase production and membrane lipids of Streptococcus mutans. Sato M, et al. **Int J Biochem** 1989; 21(7):751–4
Concentration-dependent repression of the soluble and membrane components of the Streptococcus mutans phosphoenolpyruvate: sugar phosphotransferase system by glucose. Hamilton IR, et al. **J Bacteriol** 1989 Jun; 171(6):2942–8
Inhibition of Streptococcus mutans glucosyltransferase by M-GTFI, a new inhibitor. Uyeda M, et al. **J Enzym Inhib** 1987;1(3):231–41
Characteristics of M-GTFI, a new inhibitor of Streptococcus mutans glucosyltransferase. Uyeda M, et al. **J Enzym Inhib** 1988;2(3):173–81
The structure of M-GTFI, an inhibitor of glucosyltransferase from S. mutans, and its inhibitory relationship with other sulfate ester-containing inhibitors. Uyeda M, et al. **J Enzym Inhib** 1989;2(4):279–94
Immunological properties of the primer-independent glucosyltransferase of Streptococcus mutans serotypes d and g. Yamashita Y, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1223–7
Extracellular invertase in Streptococcus mutans and Streptococcus salivarius. Chassy BM, et al. **Life Sci** 1974 Sep 15;15(6):1173–80

GENETICS

Homology between surface protein antigen genes of Streptococcus sobrinus and Streptococcus mutans. Takahashi I, et al. **FEBS Lett** 1989 Jun 5;249(2):383–8
Genetic and antigenic comparison of Streptococcus mutans fructosyltransferase and glucan-binding protein. Aduse-Opoku J, et al. **FEMS Microbiol Lett** 1989 Jun; 50(3):279–82
Sequence analysis of the gtfC gene from Streptococcus mutans GS-5. Ueda S, et al. **Gene** 1988 Sep 15;69(1):101–9
Plasmid-containing strains of Streptococcus mutans cluster within family and racial cohorts: implications for natural transmission. Caufield PW, et al. **Infect Immun** 1988 Dec; 56(12):3216–20
Transformation of fluoride resistance genes in Streptococcus mutans. Chansley PE, et al. **Infect Immun** 1989 Jul; 57(7):1968–70
Genetic linkage among cloned genes of Streptococcus mutans. Perry D, et al. **Infect Immun** 1989 Mar;57(3):805–9
Tn916 insertional inactivation of multiple genes on the chromosome of Streptococcus mutans GS-5. Procino JK, et al. **Infect Immun** 1988 Nov;56(11):2866–70
Characterization and sequence analysis of the scrA gene encoding enzyme IIScr of the Streptococcus mutans phosphoenolpyruvate-dependent sucrose phosphotransferase system. Sato Y, et al. **J Bacteriol** 1989 Jan;171(1):263–71
Genetic diversity within Streptococcus mutans evident from chromosomal DNA restriction fragment polymorphisms [published erratum appears in J Clin Microbiol 1989 Aug;27(8):1918] Caufield PW, et al. **J Clin Microbiol** 1989 Feb;27(2):274–8
Homology of glucosyltransferase gene and protein sequences from Streptococcus sobrinus and Streptococcus mutans. Russell RR, et al. **J Dent Res** 1988 Mar;67(3):543–7
Purification and characterization of the expression product of the sr gene of Streptococcus mutans OMZ 175. Ogier JA, et al. **Microb Pathog** 1989 Mar;6(3):175–82
Sequence analysis of the wall-associated protein precursor of Streptococcus mutans antigen A. Ferretti JJ, et al. **Mol Microbiol** 1989 Apr;3(4):469–78
Molecular characterization of a surface protein antigen gene from serotype c Streptococcus mutans, implicated in dental caries. Okahashi N, et al. **Mol Microbiol** 1989 May; 3(5):673–8
Cloning of a surface protein antigen gene from serotype c Streptococcus mutans. Okahashi N, et al. **Mol Microbiol** 1989 Feb;3(2):221–8
Nucleotide sequence of the gtfA gene from S. mutans GS-5. James LC, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10398
[Detection of plasmids in Streptococcus mutans] Wang DS. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):79–81, 126–7 (Eng. Abstr.) **(Chi)**
[Comparative physiologic studies on plasmid-containing and plasmidless streptococcus mutans] Wang DS. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):348–50 **(Chi)**

GROWTH & DEVELOPMENT

Effect of inoculum size and frequency on the establishment of Streptococcus mutans in the oral cavities of experimental animals. Ooshima T, et al. **J Dent Res** 1988 Jun;67(6):964–8
[Experiment study of the coexistence and acid producing of Streptococcus mutans and Actinomyces viscosus] Gui HM. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan;24(1):11–4 **(Chi)**
[A method for the standardized in vitro testing of biomaterials with bacterial cultures] Schubert R, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(2):66–73 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Antibodies to the oral bacterium Streptococcus mutans and the development of caries in children in relation to maternal dental treatment during pregnancy. Aaltonen AS, et al. **Arch Oral Biol** 1988;33(1):33–9
Colonization of rat molar teeth by mutans streptococci with different salivary agglutination characteristics. Brack CM,

et al. **Arch Oral Biol** 1988;33(10):695–9

Recent advances in the development of a Streptococcus mutans vaccine. Klein JP, et al. **Eur J Epidemiol** 1988 Dec; 4(4):419–25 (70 ref.)

Local oral immunization with synthetic peptides induces a dual mucosal IgG and salivary IgA antibody response and prevents colonization of Streptococcus mutans. Lehner T, et al. **Immunology** 1989 Jul;67(3):419–24

Proteolysis of the 185,000 MW streptococcal cell wall antigen generating 4000 and 6000 MW peptides with distinct antigenic determinants. Mitchell CG, et al. **Immunology** 1989 Feb;66(2):246–51

Oral administration of a streptococcal antigen coupled to cholera toxin B subunit evokes strong antibody responses in salivary glands and extramucosal tissues. Czerkinsky C, et al. **Infect Immun** 1989 Apr;57(4):1072–7

[Anticaries vaccination: present and future prospects] Mosci F, et al. **Minerva Stomatol** 1989 Mar;38(3):379–88 (71 ref.) (Eng. Abstr.) **(Ita)**

ISOLATION & PURIFICATION

Caries-related microbiological findings in a group of teenagers and their parents. Alaluusua S, et al. **Caries Res** 1989;23(1):49–54

Streptococcus mutans infection level and caries in a group of 5-year-old children. Alaluusua S, et al. **Caries Res** 1989; 23(3):190–4

Correlating Streptococcus mutans with dental caries in young children using a clinically applicable microbiological method. Weinberger SJ, et al. **Caries Res** 1989;23(5):385–8

Salivary Streptococcus mutans and caries prevalence in Brazilian schoolchildren. Buischi YA, et al. **Community Dent Oral Epidemiol** 1989 Feb;17(1):28–30

Effect of a preventive program on dental caries and mutans streptococci in Polish schoolchildren. Carlsson P, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):253–7

Caries prevalence and severity in the primary dentition and Streptococcus mutans levels in the saliva of preschoolchildren in South Africa. Chosack A, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):289–91

Prevalence of Streptococcus mutans and dental decay in school children from Siena (Italy). Gasparini R, et al. **Eur J Epidemiol** 1989 Jun;5(2):189–92

Analytical and physiological variability of salivary microbial counts. Bentley C, et al. **J Dent Res** 1988 Nov; 67(11):1409–13

A new method for the estimation of mutans streptococci in human saliva. Jensen B, et al. **J Dent Res** 1989 Mar; 68(3):468–71

Salivary and microbial conditions and dental health in patients with Crohn's disease: a 3-year study. Sundh B, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar; 67(3):286–90

Dip-slide scores of mutans streptococci and lactobacilli of Finnish mothers in the Turku area, Finland, during the first nursing year. Paunio P, et al. **Proc Finn Dent Soc** 1988; 84(5–6):271–7

Distribution of mutans streptococci in populations with different levels of sugar consumption. Carlsson P. **Scand J Dent Res** 1989 Apr;97(2):120–5 (4 ref.)

METABOLISM

Biosyntheses of galactosyl lipids and polysaccharide in Streptococcus mutans. Chiu TH. **Biochim Biophys Acta** 1988 Nov 25;963(2):359–66

Production of mutacin-like substances by Streptococcus mutans. Parrot M, et al. **Can J Microbiol** 1989 Mar; 35(3):366–72

Impairment of melibiose utilization in Streptococcus mutans serotype c gtfA mutants. Barletta RG, et al. **Infect Immun** 1989 Mar;57(3):992–5

Comparison of properties of collected cells and cells from the culture vessel during continuous culture of Streptococcus mutans Ingbritt. Mayo JA, et al. **J Appl Bacteriol** 1989 Jun;66(6):535–41

Kinetic study of a change in intracellular ATP level associated with aerobic catabolism of ethanol by Streptococcus mutans. Fukui K, et al. **J Bacteriol** 1988 Oct; 170(10):4589–93

Dual mechanism for stimulation of glutamate transport by potassium ions in Streptococcus mutans. Sato Y, et al. **J Bacteriol** 1989 Sep;171(9):4963–6

Physical and biochemical studies of Streptococcus mutans sediments suggest new factors linking the cariogenicity of plaque with its extracellular polysaccharide content. Dibdin GH, et al. **J Dent Res** 1988 Jun;67(6):890–5

Difference in amounts between titratable acid and total carboxylic acids produced by oral streptococci during sugar metabolism. Iwami Y, et al. **J Dent Res** 1989 Jan; 68(1):16–9

Increased pH-lowering ability of Streptococcus mutans cell masses associated with extracellular glucan-rich matrix material and the mechanisms involved. Van Houte J, et al. **J Dent Res** 1989 Mar;68(3):451–9

Biological and biochemical characterization of novel lipid-like antibacterial substances (mutalipocins) produced by Streptococcus mutans strain 32K. Kurita T, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):213–20

Uptake of saccharin and related intense sweeteners by Streptococcus mutans NCTC 10449. Ziesenitz SC, et al. **Z Ernahrungswiss** 1988 Sep;27(3):155–69

Electron-microscopic observation of adherence of serotype c Streptococcus mutans to the enamel surface due to glucan synthesis. Koga T, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):492–500

[Analysis of extracellular polysaccharides synthesized by cariogenic bacteria in mixed cultures] Zhou XD, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):396–9 (Eng. Abstr.) **(Chi)**

[Uptake of radioactive orthophosphate (32PO4) by Streptococcus mutans OMZ 176] Stösser L, et al. **Zahn Mund Kieferheilkd** 1988;76(6):609–10 **(Ger)**

[Acidogenic properties of Streptococcus mutans] Stösser L, et al. **Zahn Mund Kieferheilkd** 1988;76(7):692–7 (Eng. Abstr.) **(Ger)**

PATHOGENICITY

Invasion of Streptococcus mutans and Lactobacillus salivarius in early caries lesions of gnotobiotic rats. Seppä L, et al. **Caries Res** 1989;23(5):371–4

Cariogenicity of a lactate dehydrogenase-deficient mutant of Streptococcus mutans serotype c in gnotobiotic rats. Fitzgerald RJ, et al. **Infect Immun** 1989 Mar;57(3):823–6

[Cariogenicity of acidogenic and aciduric streptococci (S. mutans) in a rat experiment] Kneist S, et al. **Zahn Mund Kieferheilkd** 1988;76(7):698–703 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Microbial caries induction in the roots of human teeth in vitro. Kaufman HW, et al. **Arch Oral Biol** 1988; 33(7):499–503

Bacterial agglutinin activity in the saliva of human identical and fraternal twins. Malamud D, et al. **Arch Oral Biol** 1988; 33(11):801–5

Monobacterial and mixed bacterial plaques of Streptococcus mutans and Veillonella alcalescens in an artificial mouth: development, metabolism, and effect on human dental enamel. Noorda WD, et al. **Caries Res** 1988;22(6):342–7

In vitro induced fluoride resistance of Streptococcus mutans and dental caries in rats. van Loveren C, et al. **Caries Res** 1989;23(5):358–64

Biological factors as indicators of future caries. Krasse B. **Int Dent J** 1988 Dec;38(4):219–25 (47 ref.)

Adsorbed salivary acidic proline-rich proteins contribute to the adhesion of Streptococcus mutans JBP to apatitic surfaces. Gibbons RJ, et al. **J Dent Res** 1989 Sep; 68(9):1303–7

The effects of pellicle formation on streptococcal adhesion to human enamel and artificial substrata with various surface free-energies. Pratt-Terpstra IH, et al. **J Dent Res** 1989 Mar;68(3):463–7

Streptococcal adherence on various restorative materials. Satou J, et al. **J Dent Res** 1988 Mar;67(3):588–91

Suppression of Streptococcus sobrinus 6715 (g) in plaques by Streptococcus mutans 32K (c). Ikeda T, et al. **J Oral Pathol** 1988 Nov;17(9–10):471–4

Growth and adsorption of Streptococcus mutans 6715–13 to hydroxyapatite in the presence of lactoferrin. Visca P, et al. **Med Microbiol Immunol (Berl)** 1989;178(2):69–79

[Studies of artificial plaque: comparison of the adherence ability of 5 cariogenic bacteria in vitro] Zhou XD. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):214–6, 255 (Eng. Abstr.) **(Chi)**

ULTRASTRUCTURE

[Electron microscopic visualization of microbial extracellular metabolic products in an in vitro test] Müller RF, et al. **Zahn Mund Kieferheilkd** 1989;77(4):305–8 (Eng. Abstr.) **(Ger)**

STREPTOCOCCUS PNEUMONIAE

see related

PNEUMOCOCCAL INFECTIONS

Effect of formalin-fixed Hemophilus influenzae and Streptococcus pneumoniae on dye transport by the chinchilla eustachian tube. Bakaletz LO, et al. **Acta Otolaryngol (Stockh)** 1989 Mar-Apr;107(3–4):235–43

Emerging pathogens in nosocomial pneumonia. Berk SL, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):11–4

The epidemiology of respiratory tract pathogens in southern Netherlands. Davies BI, et al. **Eur Respir J** 1988 May; 1(5):415–20

The frog palate mucosa as a model for studying bacterial adhesion to mucus-coated respiratory epithelium. Plotkowski MC, et al. **J Comp Pathol** 1989 Jan;100(1):37–46

Pulmonary antipneumococcal defenses after hemisplenectomy. Hebert JC. **J Trauma** 1989 Sep; 29(9):1217–20; discussion 1220–1

In vitro adherence of Streptococcus pneumoniae to oropharyngeal cells: enhanced activity and colonization of the upper respiratory tract in patients with recurrent respiratory infections. Mbaki N, et al. **Tohoku J Exp Med** 1989 Apr;157(4):345–54

[Synthesis of a tetrasaccharide unit of the capsular polysaccharide of Streptococcus pneumoniae type 9V] Paulsen H, et al. **Carbohydr Res** 1989 Mar 15; 186(2):189–205 (Eng. Abstr.) **(Ger)**

[Synthesis of trisaccharide units from capsular polysaccharides of Streptococcus pneumoniae] Paulsen H, et al. **Carbohydr Res** 1988 Aug 15;179:173–97 (Eng. Abstr.) **(Ger)**

ANALYSIS

Structural analysis of the specific capsular polysaccharide of Streptococcus pneumoniae type 43 (American type 72). Moreau M, et al. **Biochemistry** 1988 Sep 6;27(18):6820–9

Structural studies of the capsular polysaccharide from Streptococcus pneumoniae type 2, a reinvestigation. Jansson PE, et al. **Carbohydr Res** 1988 Oct 15;182(1):111–7

Application of high-resolution n.m.r. spectroscopy to the elucidation of the structure of the specific capsular polysaccharide of Streptococcus pneumoniae type 7F. Moreau M, et al. **Carbohydr Res** 1988 Oct 15;182(1):79–99

Variation in penicillin-binding protein patterns of penicillin-resistant clinical isolates of pneumococci. Markiewicz Z, et al. **J Clin Microbiol** 1989 Mar; 27(3):405–10

CLASSIFICATION

Surveillance of invasive Streptococcus pneumoniae infection in Quebec, Canada, from 1984 to 1986: serotype distribution, antimicrobial susceptibility, and clinical characteristics. Jetté LP, et al. **J Clin Microbiol** 1989 Jan; 27(1):1–5

Pneumococcal serotyping [letter] Smart LE, et al. **J Infect** 1989 May;18(3):296–8

Drug resistance patterns and serogroups or serotypes of pneumococcal isolates from cerebrospinal fluid or blood, 1979–1986. Klugman KP, et al. **J Infect Dis** 1988 Nov; 158(5):956–64

Protein serotyping of Streptococcus pneumoniae based on reactivity to six monoclonal antibodies. Waltman WD 2d, et al. **Microb Pathog** 1988 Sep;5(3):159–67

Serotyping of Streptococcus pneumoniae by latex agglutination—reply [letter] Kaldor J, et al. **Pathology** 1988 Oct;20(4):397

Pneumococcal infections in eastern Saudi Arabia: serotypes and antibiotic sensitivity patterns. el-Mouzan MI, et al. **Trop Geogr Med** 1988 Jul;40(3):213–7

[Serotypes and epidemiological study of pneumococcal infection in 18 provinces (cities) in China] Shen SJ. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Jun; 10(3):133–7 (Eng. Abstr.) **(Chi)**

[Distribution of serotypes of S. pneumoniae in upper respiratory tract infections] Dake Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Feb;92(2):228–32 (Eng. Abstr.) **(Jpn)**

[Typing pneumococci using the coagglutination reaction] Kostiukova NN, et al. **Lab Delo** 1988;(9):60–2 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Penicillin susceptibility of Streptococcus pneumoniae in a private pediatric hospital in Houston, Texas. Caraway N, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1111–2

Survey of antimicrobial susceptibility of community isolates of Streptococcus pneumoniae in Ontario. Mazzulli T, et al. **Can Dis Wkly Rep** 1989 Jul 1;15(26):131–3 **(Eng, Fre)**

Susceptibility of penicillin-sensitive and -resistant strains of Streptococcus pneumoniae to new antimicrobial agents, including daptomycin, teicoplanin, cefpodoxime and quinolones. Appelbaum PC, et al. **J Antimicrob Chemother** 1989 Apr;23(4):509–16

A seventeen-year epidemiological survey of antimicrobial resistance in pneumococci in two hospitals. Buu-Hoï AY, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:41–52

Antibiotic susceptibility of Streptococcus pneumoniae isolates from paediatric patients. Latorre Otín C, et al. **J Antimicrob Chemother** 1988 Nov;22(5):659–65

The selection and frequency of streptococci with decreased susceptibility to ofloxacin compared with other quinolones. Piddock LJ, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:45–51

Fatal infection caused by a multiply resistant type 3 pneumococcus. Lawrenson JB, et al. **J Clin Microbiol** 1988 Aug;26(8):1590–1

Relationship between in vitro susceptibility test results for chloramphenicol and production of chloramphenicol acetyltransferase by Haemophilus influenzae, Streptococcus pneumoniae, and Aerococcus species. Matthews HW, et al. **J Clin Microbiol** 1988 Nov; 26(11):2387–90

Penicillin-binding protein families: evidence for the clonal nature of penicillin resistance in clinical isolates of pneumococci. Jabes D, et al. **J Infect Dis** 1989 Jan; 159(1):16–25

The role of beta-lactamase in mixed infections in mice in relation to treatment with ampicillin. Renneberg J, et al. **J Infect Dis** 1989 Aug;160(2):337–41

Antimicrobial resistance in Streptococcus pneumoniae: a growing universal concern. Hussein SS, et al. **J Natl Med Assoc** 1989 Sep;81(9):937–41 (79 ref.)

Antibiotic susceptibility and serotype distribution of Streptococcus pneumoniae in Malaysian children. Cheong YM, et al. **J Trop Pediatr** 1988 Aug;34(4):182–5

Erythromycin-resistant Streptococcus pneumoniae [letter] [published erratum appears in Lancet 1989 Jan 7;1(8628):58] **Lancet** 1988 Dec 17;2(8625):1432–3

Increase in resistance to penicillin in pneumococci in Spain

[letter] Casal J, et al. **Lancet** 1989 Apr 1;1(8640):735
Low frequency of erythromycin-resistant Streptococcus pneumoniae in The Netherlands [letter] Endtz HP, et al. **Lancet** 1989 May 20;1(8647):1144-5
Pneumococcaemia caused by erythromycin-resistant Streptococcus pneumoniae type 14 [letter] Eykyn SJ. **Lancet** 1988 Nov 5;2(8619):1086
Worldwide increase in pneumococcal antibiotic resistance [letter] Klugman KP, et al. **Lancet** 1989 Aug 19;2(8660):444
Erythromycin resistance in streptococci [letter] Perez Trallero E, et al. **Lancet** 1989 Aug 19;2(8660):444-5
Meningitis caused by a penicillin- and chloramphenicol-resistant Streptococcus pneumoniae. Collignon PJ, et al. **Med J Aust** 1988 Nov 7;149(9):497-8
[Antibiotic resistance of Streptococcus pneumoniae (Pneumococcus). Epidemiologic and clinical aspects] Kaufhold A. **Med Klin** 1988 Oct 28;83(21):723-6 (52 ref.) (Ger)
[Change in the susceptibility of the pneumococcus—is still penicillin the drug of choice?] Rottenstreich E, et al. **Harefuah** 1989 Apr 2;116(7):374-7 (41 ref.) (Heb)
[Recent trend of incidence of respiratory pathogenic bacteria and its susceptibility to antimicrobial agents: studies in the year 1984-1986] Nishioka K, et al. **Jpn J Antibiot** 1988 Sep;41(9):1212-22 (Eng. Abstr.) (Jpn)
[Penicillin insensitive and resistant Streptococcus pneumoniae infection in children] Sato K, et al. **Kansenshogaku Zasshi** 1989 Mar;63(3):189-94 (Eng. Abstr.) (Jpn)
[Sensitivity to antibiotics of pneumococci isolated from patients with chronic nonspecific pneumonia and bronchitis] Molochko VA, et al. **Antibiot Khimioter** 1989 Apr;34(4):291-3 (Eng. Abstr.) (Rus)
[Infections caused by penicillin-resistant pneumococcus: apropos of 3 cases] Bermejo J, et al. **Medicina (B Aires)** 1988;48(3):285-9 (Eng. Abstr.) (Spa)
[Sensitivity of Streptococcus pneumonias and its clinical importance] Juliet C, et al. **Rev Med Chil** 1987 Sep; 115(9):852-7 (Eng. Abstr.) (Spa)

ENZYMOLOGY

Purification and characterization of the autolytic glycosidase of Streptococcus pneumoniae. García P, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):251-6
DNA topoisomerase I from Diplococcus pneumoniae. Störl K, et al. **Biomed Biochim Acta** 1989;48(1):69-76
Purification and properties of Streptococcus pneumoniae neuraminidase. Scanlon KL, et al. **Enzyme** 1989; 41(3):143-50
Mechanism of pneumococcal cell wall degradation in vitro and in vivo. Garcia-Bustos J, et al. **J Bacteriol** 1989 Jan; 171(1):114-9
The exoA gene of Streptococcus pneumoniae and its product, a DNA exonuclease with apurinic endonuclease activity. Puyet A, et al. **J Bacteriol** 1989 May;171(5):2278-86
Crystallization of the DpnM methylase from the DpnII restriction system of Streptococcus pneumoniae. Cerritelli S, et al. **J Mol Biol** 1989 Jun 20;207(4):841-2
Purification and immunological characterization of neuraminidase produced by Streptococcus pneumoniae. Lock RA, et al. **Microb Pathog** 1988 Jan;4(1):33-43

GENETICS

Expression of the pneumolysin gene in Escherichia coli: rapid purification and biological properties. Mitchell TJ, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):67-72
DNA hybridization studies of a nucleotide sequence homologous to transposon Tn1545 in the "Minnesota" strain of multiresistant Streptococcus pneumoniae isolated in 1977. Cooksey RC, et al. **Diagn Microbiol Infect Dis** 1989 Jan-Feb;12(1):13-6
Cloning of the amiA locus of Streptococcus pneumoniae and identification of its functional limits. Alloing G, et al. **Gene** 1989;76(2):363-8
Cloning and expression of the pneumococcal neuraminidase gene in Escherichia coli. Berry AM, et al. **Gene** 1988 Nov 30;71(2):299-305
Repair of single- and multiple-substitution mismatches during recombination in Streptococcus pneumoniae. Gasc AM, et al. **Genetics** 1989 Jan;121(1):29-36
Plasmid structural instability associated with pC194 replication functions. Ballester S, et al. **J Bacteriol** 1989 May;171(5):2271-7
Region of the streptococcal plasmid pMV158 required for conjugative mobilization. Priebe SD, et al. **J Bacteriol** 1989 Sep;171(9):4778-84
The exoA gene of Streptococcus pneumoniae and its product, a DNA exonuclease with apurinic endonuclease activity. Puyet A, et al. **J Bacteriol** 1989 May;171(5):2278-86
Insertional inactivation of the major autolysin gene of Streptococcus pneumoniae. Tomasz A, et al. **J Bacteriol** 1988 Dec;170(12):5931-4
Proteins encoded by the DpnI restriction gene cassette. Hyperproduction and characterization of the DpnI endonuclease. de la Campa AG, et al. **J Biol Chem** 1988 Oct 15;263(29):14696-702
Characterization of the polA gene of Streptococcus pneumoniae and comparison of the DNA polymerase I it encodes to homologous enzymes from Escherichia coli and phage T7. Lopez P, et al. **J Biol Chem** 1989 Mar 5; 264(7):4255-63
Inhibition of DNA repair by neighbouring mismatched bases in Streptococcus pneumoniae. Gasc AM, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):3019-24
Genetic analysis of Streptococcus pneumoniae serotypes with the use of DNA fingerprinting. Viering TP, et al. **J Infect Dis** 1989 Jul;160(1):76-82
DNA sequences required to induce localized conversion in Streptococcus pneumoniae transformation. Garcia P, et al. **Mol Gen Genet** 1988 Nov;214(3):509-13
Polarity of DNA entry in transformation of Streptococcus pneumoniae. Méjean V, et al. **Mol Gen Genet** 1988 Aug; 213(2-3):444-8
Extensive re-modelling of the transpeptidase domain of penicillin-binding protein 2B of a penicillin-resistant South African isolate of Streptococcus pneumoniae. Dowson CG, et al. **Mol Microbiol** 1989 Jan;3(1):95-102

GROWTH & DEVELOPMENT

How long do middle ear pathogens survive in mucoid effusion material? Stenfors LE, et al. **Acta Otolaryngol (Stockh)** 1989 Mar-Apr;107(3-4):244-8
[Use of a system of biotechnological parameters of culturing processes in the comparative characteristics of various strains of Streptococcus pneumoniae] Gruber IM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):3-6 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Use of bacterial antigen detection in the diagnosis of acute pneumonia in childhood. Namba M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):261-6
Vitamin A depletion and repletion: effects on antibody response to the capsular polysaccharide of Streptococcus pneumoniae, type III (SSS-III). Pasatiempo AM, et al. **Am J Clin Nutr** 1989 Mar;49(3):501-10
High rates of immunization in a nursing home. Siewert M, et al. **Am J Infect Control** 1988 Oct;16(5):228-30
Structure of the specific capsular polysaccharide of Streptococcus pneumoniae type 23F (American type 23). Richards JC, et al. **Biochem Cell Biol** 1988 Jul;66(7):758-71
Vaccination against pneumococcal infection. Noah ND. **BMJ** 1988 Nov 26;297(6660):1351-2 (23 ref.)
Latex agglutination test for diagnosing pneumococcal pneumonia in children in developing countries. O'Neill KP, et al. **BMJ** 1989 Apr 22;298(6680):1061-4
Canadian Immunization Guide. National Advisory Committee on Immunization. **Can Dis Wkly Rep** 1989 Apr 22;15(16):85-8 (Eng, Fre)
The pneumococcal polysaccharide S4: a structural re-assessment. Jones C, et al. **Carbohydr Res** 1988 Dec 31; 184:279-84
The structure of the Streptococcus pneumoniae type 29 polysaccharide: a re-examination. Kenne L, et al. **Carbohydr Res** 1988 Dec 31;184:288-91
Regulation of IgG responses by helper and suppressor T cells activated by pneumococcal capsular polysaccharides. Milligan GN, et al. **Cell Immunol** 1989 Mar;119(1):222-32
Interleukin 2 receptor expression by human blood lymphocytes after vaccination with pneumococcal polysaccharides. Tvede N, et al. **Clin Exp Immunol** 1989 Jun;76(3):404-11
Demonstration of cross-reactions between pneumococci and alpha-streptococci using gold-labelled mono- and polyclonal antibodies and electron microscopy. Sjögren AM, et al. **Diagn Microbiol Infect Dis** 1988 May;10(1):7-21
Comment: pneumococcal revaccination [letter] Grabenstein JD. **DICP** 1989 Mar;23(3):258-9
The effect of pneumococcal vaccine on the disposition of theophylline. Cupit GC, et al. **Eur J Clin Pharmacol** 1988; 34(5):505-7
Antibody response to pneumococcal vaccine in patients with early stage Hodgkin's disease. Frederiksen B, et al. **Eur J Haematol** 1989 Jul;43(1):45-9
Adjuvant effects of trehalose dimycolate on the antibody response to type III pneumococcal polysaccharide. Baker PJ, et al. **Infect Immun** 1989 Mar;57(3):912-7
Antipneumococcal effects of C-reactive protein and monoclonal antibodies to pneumococcal cell wall and capsular antigens. Briles DE, et al. **Infect Immun** 1989 May; 57(5):1457-64
A pneumococcal surface protein (PspB) that exhibits the same protease sensitivity as streptococcal R antigen. McDaniel LS, et al. **Infect Immun** 1988 Nov;56(11):3001-3
Production of interleukin-1 but not tumor necrosis factor by human monocytes stimulated with pneumococcal cell surface components. Riesenfeld-Orn I, et al. **Infect Immun** 1989 Jul;57(7):1890-3
Pneumolysin, the thiol-activated toxin of Streptococcus pneumoniae, does not require a thiol group for in vitro activity. Saunders FK, et al. **Infect Immun** 1989 Aug; 57(8):2547-52
Modulation of the immune response to pneumococcal type 14 capsular polysaccharide-protein conjugates by the adjuvant Quil A depends on the properties of the conjugates. Verheul AF, et al. **Infect Immun** 1989 Apr; 57(4):1078-83
Nonionic block polymer surfactants modulate the humoral immune response against Streptococcus pneumoniae-derived hexasaccharide-protein conjugates. Zigterman GJ, et al. **Infect Immun** 1989 Sep;57(9):2712-8
Pneumococcal serum antibody concentrations during the first three years of life: a study of otitis-prone and non-otitis-prone children. Prellner K, et al. **Int J Pediatr Otorhinolaryngol** 1989 Jul;17(3):267-79
Effect of various adjuvants on the antibody response of mice to pneumococcal polysaccharides. Yin JZ, et al. **J Biol Response Mod** 1989 Apr;8(2):190-205
Human-isotype-specific enzyme immunoassay for antibodies to pneumococcal polysaccharides. Shyamala GN, et al. **J Clin Microbiol** 1988 Aug;26(8):1575-9
Cross-reactive monoclonal antibodies for diagnosis of pneumococcal meningitis. Waltman WD 2d, et al. **J Clin Microbiol** 1988 Sep;26(9):1635-40
Antibody recognition of the type 14 pneumococcal capsule. Evidence for a conformational epitope in a neutral polysaccharide. Wessels MR, et al. **J Exp Med** 1989 Jun 1;169(6):2121-31
Genetics of the phosphocholine-specific antibody response to Streptococcus pneumoniae. Germ-line but not mutated T15 antibodies are dominantly selected. Claflin JL, et al. **J Immunol** 1988 Dec 1;141(11):4012-9
Quantitation of IgG antibody to Streptococcus pneumoniae vaccine by ELISA and FAST-ELISA using tyraminated antigen. Boctor FN, et al. **J Immunol Methods** 1989 Jun 21;120(2):167-71
Is pneumococcal infection a preventable disease? Finch R. **J Infect** 1988 Sep;17(2):95-8 (26 ref.)
Meningitis due to Streptococcus mitis cross-reacting with Streptococcus pneumoniae [letter] Fraise AP, et al. **J Infect** 1989 Jul;19(1):75-7
Epidemiological studies of Streptococcus pneumoniae in infants: antibody to types 3, 6, 14, and 23 in the first two years of life. Gray BM, et al. **J Infect Dis** 1988 Nov; 158(5):948-55
Prevention of pneumococcal bacteremia by immunization with type 6 pneumococcal capsular polysaccharide vaccine in splenectomized rats. Iinuma H, et al. **J Infect Dis** 1989 Jul;160(1):66-75
Class-specific antibody response to pneumococcal capsular polysaccharides in men infected with human immunodeficiency virus type 1. Janoff EN, et al. **J Infect Dis** 1988 Nov;158(5):983-90
Antibody response to pneumococcal vaccination as related to tonsillectomy. Stjernquist-Desatnik A, et al. **J Laryngol Otol** 1988 Oct;102(10):883-5
Serum antibody responses to pneumococcal vaccine after splenic autotransplantation. Hebert JC, et al. **J Trauma** 1989 Mar;29(3):355-9
Leads from the MMWR. Recommendations of the Immunization Practices Advisory Committee. Pneumococcal polysaccharide vaccine. **JAMA** 1989 Mar 3;261(9):1265-7 (41 ref.)
November 1988. Pneumococcal vaccine--an increased emphasis [news] **Md Med J** 1988 Nov;37(11):825
Rapid detection of pneumococcal antigens in sputa in patients with community-acquired pneumonia by coagglutination. Zhang XP, et al. **Med Microbiol Immunol (Berl)** 1988; 177(6):333-8 (11 ref.)
Comparative efficacy of pneumococcal neuraminidase and pneumolysin as immunogens protective against Streptococcus pneumoniae. Lock RA, et al. **Microb Pathog** 1988 Dec;5(6):461-7
Analysis of a surface protein of Streptococcus pneumoniae recognised by protective monoclonal antibodies. McDaniel LS, et al. **Microb Pathog** 1986 Dec;1(6):519-31
A protective monoclonal antibody that reacts with a novel antigen of pneumococcal teichoic acid. McDaniel LS, et al. **Microb Pathog** 1987 Oct;3(4):249-60
Local production of IgG to pneumococcal C-polysaccharide in upper airway secretions from children with recurrent acute otitis media. Sørensen CH, et al. **Microb Pathog** 1989 Mar;6(3):183-91
Pneumococcal polysaccharide vaccine. **MMWR** 1989 Feb 10;38(5):64-8, 73-6 (41 ref.)
Estimation of the avidity of antibodies in polyclonal antisera against Streptococcus pneumoniae type 3 by inhibition ELISA. van Dam GJ, et al. **Mol Immunol** 1989 Mar; 26(3):269-74
Vaccination against influenza and pneumococcal disease—are we doing our best? Morris A, et al. **N Z Med J** 1989 Apr 26;102(866):193-5
Pneumococcal polysaccharide immunization in patients with active nephrotic syndrome. Garin EH, et al. **Nephron** 1988; 50(4):383-8
Pneumococcal antibodies measured with a rapid enzyme-linked-immunosorbent assay (ELISA), using the whole vaccine as antigen. Suggestions for clinical application. Snijder JA, et al. **Neth J Med** 1988 Aug; 33(1-2):52-9
Human adult immunogenicity of protein-coupled pneumococcal capsular antigens of serotypes prevalent in otitis media. Anderson P, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S50-3
Studies of Streptococcus pneumoniae and influenza virus vaccines in the chinchilla otitis media model. Giebink GS. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S42-4 (11 ref.)
The role of antibodies to pneumococcal C polysaccharide in otitis media. Henrichsen J, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S26-7
Pneumococcal otitis media vaccine trials. Klein JO. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S82-3
Influenza and pneumococcal vaccines [letter] Poland GA. **Postgrad Med** 1988 Nov 15;84(7):26

Pneumococcal polysaccharide vaccines. Austrian R.
Rev Infect Dis 1989 May–Jun;11 Suppl 3:S598–602 (43 ref.)
Distribution of kappa and lambda light chain isotypes among human blood immunoglobulin–secreting cells after vaccination with pneumococcal polysaccharides. Heilmann C, et al. **Scand J Immunol** 1989 Feb;29(2):159–64
IgG subclasses of pneumococcal antibodies—effect of allotype G2m(n). Sarvas H, et al. **Scand J Immunol** 1989 Feb;29(2):229–37
Pneumococcal vaccine. White RT. **Thorax** 1988 May; 43(5):345–8 (42 ref.)
[The efficacy of counterimmunoelectrophoresis and coagglutination in detecting bacterial antigens in meningitis] Rusu V, et al.
Arch Roum Pathol Exp Microbiol 1983 Jan–Mar;42(1):5–14 (Eng. Abstr.) **(Fre)**
[The appearance of specific IgG and IgA antibodies to Streptococcus pneumoniae in serum and lung lavage fluid of mice after the administration of different antigens. 2. IgG and IgA antibody detection after intraperitoneal, aerosol and oral immunization with Streptococcus pneumoniae] Schumann V, et al. **Z Erkr Atmungsorgane** 1988;171(1):75–81 (Eng. Abstr.) **(Ger)**
[The appearance of specific IgG and IgA antibodies to Streptococcus pneumoniae in serum and in lung lavage fluid of mice after the administration of different antigens. 1. Development of an enzyme immunoassay (EIA) for the detection of specific IgG and IgA antibodies to Streptococcus pneumoniae] Schumann V, et al.
Z Erkr Atmungsorgane 1988;171(1):67–74 (Eng. Abstr.) **(Ger)**
[Pneumovax vaccination in children] Melamed A.
Harefuah 1989 Feb 1;116(3):166–8 **(Heb)**

ISOLATION & PURIFICATION

Pneumococcal carriage amongst children in Adelaide, South Australia. Hansman D, et al. **Epidemiol Infect** 1988 Oct; 101(2):411–7
Pneumococcosuria in children. Miller MA, et al.
J Clin Microbiol 1989 Jan;27(1):99–101
DNA probe for identification of Streptococcus pneumoniae. Pozzi G, et al. **J Clin Microbiol** 1989 Feb;27(2):370–2
Caution advisable when interpreting gram–stained smears of material from peritoneal paracentesis [letter] Heltberg O. **J Infect** 1989 Jan;18(1):93–4
Pneumococcal cellulitis: a rare manifestation of pneumococcaemia in adults. Peters NS, et al. **J Infect** 1989 Jul;19(1):57–9 (5 ref.)
Counterimmunoelectrophoresis and latex particle agglutination in the etiologic diagnosis of presumed bacterial pneumonia in pediatric patients. Rusconi F, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):781–5
[Biological characteristics of Streptococcus pneumoniae strains isolated from children with pneumococcal diseases] Kvetnaia AS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):25–30 (Eng. Abstr.) **(Rus)**

METABOLISM

Penicillin–binding proteins of Streptococcus pneumoniae. Chalkley LJ, et al. **J Antimicrob Chemother** 1988 Dec; 22(6):791–800
A sandwich adhesion on Streptococcus pneumoniae attaching to human oropharyngeal epithelial cells in vitro. Andersson B, et al. **Microb Pathog** 1988 Apr;4(4):267–78

PATHOGENICITY

Role of attachment for the virulence of Streptococcus pneumoniae. Andersson B, et al.
Acta Otolaryngol Suppl (Stockh) 1988;454:163–6
Reduced virulence of a defined pneumolysin–negative mutant of Streptococcus pneumoniae. Berry AM, et al.
Infect Immun 1989 Jul;57(7):2037–42
Contribution of autolysin to virulence of Streptococcus pneumoniae. Berry AM, et al. **Infect Immun** 1989 Aug; 57(8):2324–30
Role of pneumococcal surface protein A in the virulence of Streptococcus pneumoniae. Briles DE, et al.
Rev Infect Dis 1988 Jul–Aug;10 Suppl 2:S372–4
[Virulence of Streptococcus pneumoniae strains belonging to different serovars] Reztsova IuV.
Zh Mikrobiol Epidemiol Immunobiol 1988 Jun;(6):20–3 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

A new model for studying bacterial adherence to the respiratory epithelium. Plotkowski MC, et al.
Braz J Med Biol Res 1988;21(2):285–8
Effect of Streptococcus pneumoniae on human respiratory epithelium in vitro. Steinfort C, et al. **Infect Immun** 1989 Jul;57(7):2006–13
The frog palate mucosa as a model for studying bacterial adhesion to mucus–coated respiratory epithelium. Plotkowski MC, et al. **J Comp Pathol** 1989 Jan;100(1):37–46

RADIATION EFFECTS

Excision–repair capacity of UV–irradiated strains of Escherichia coli and Streptococcus pneumoniae, estimated by plasmid recovery. Estevenon AM, et al.
J Photochem Photobiol [B] 1989 Apr;3(2):185–92

STREPTOCOCCUS PYOGENES

Streptococcus pyogenes and bone resorption [letter] Greenberg RN. **Ann Intern Med** 1988 Nov 15;109(10):843
Systemic injection of group A streptococcal peptidoglycan–polysaccharide complexes elicits persistent neutrophilia and monocytosis associated with polyarthritis in rats. Wells AF, et al. **Infect Immun** 1989 Feb;57(2):351–8
Transforming growth factor–beta production by synovial tissues from rheumatoid patients and streptococcal cell wall arthritic rats. Studies on secretion by synovial fibroblast–like cells and immunohistologic localization. Lafyatis R, et al. **J Immunol** 1989 Aug 15;143(4):1142–8
Structure, function, and genetics of streptococcal M protein. Fischetti VA, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S356–9 (22 ref.)
Biological and biochemical activities of a toxoid of erythrogenic toxin type A. Knöll H, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Nov; 269(4):468–78
[Synthesis of 6–aminohexylglycosides of a polysaccharide from Streptococcus group A and its fragments] Tsvetkov IuE, et al. **Bioorg Khim** 1988 Oct;14(10):1428–36 (Eng. Abstr.) **(Rus)**

ANALYSIS

A simplified method for purification of an antitumor acidic glycoprotein from Streptococcus pyogenes (Su strain) by immunoadsorbent chromatography. Yoshida J, et al.
J Antibiot (Tokyo) 1989 Mar;42(3):448–53
Purification and characterization of streptococcal erythrogenic toxin type A produced by Streptococcus pyogenes strain NY–5 cultured in the synthetic medium NCTC–135. Comparison with the dialyzed medium (TP medium)–derived toxin. Kamezawa Y, et al.
Microbiol Immunol 1989;33(3):183–94

CLASSIFICATION

Reliable five–minute test strip method for identification of Streptococcus pyogenes. Dealler SF, et al.
Eur J Clin Microbiol Infect Dis 1989 Apr;8(4):308–10
Microtechnique for serum opacity factor characterization of group A streptococci adaptable to the use of human sera. Johnson DR, et al. **J Clin Microbiol** 1988 Oct; 26(10):2025–30
Group A streptococcal serotypes isolated from patients and sibling contacts during the resurgence of rheumatic fever in the United States in the mid–1980s. Kaplan EL, et al. **J Infect Dis** 1989 Jan;159(1):101–3
Use of enzymes in typing group A beta–haemolytic streptococci. Brahmadathan KN, et al. **J Med Microbiol** 1988 Oct;27(2):141–4
Measurement of active constitutive L–pyrrolidonyl–peptidase from the genera Streptococcus and Enterococcus. Panosian KJ, et al.
Med Microbiol Immunol (Berl) 1988;177(6):317–21
[Evaluation of the Phadirect Strep A system] Fiks LI, et al. **Lab Delo** 1988;(7):60–2 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. VI. Heightened cellular reactivity to streptolysin–O in mice infected with S. pyogenes and in MCLS patients. Akiyama T, et al.
Acta Paediatr Jpn Overseas Ed 1988 Feb;30(1):68–72
New macrolides active against Streptococcus pyogenes with inducible or constitutive type of macrolide–lincosamide–streptogramin B resistance. Fernandes PB, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):78–81
Berberine sulfate blocks adherence of Streptococcus pyogenes to epithelial cells, fibronectin, and hexadecane. Sun D, et al. **Antimicrob Agents Chemother** 1988 Sep; 32(9):1370–4
Association of penicillin–tolerant streptococci with epidemics of streptococcal pharyngitis in closed communities. Dagan R, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul; 8(7):629–31
Degree and stability of tolerance to penicillin in Streptococcus pyogenes. Michel MF, et al.
Eur J Clin Microbiol Infect Dis 1989 Mar;8(3):225–32
Comparative activity of cefixime and cefaclor in an in vitro model simulating human pharmacokinetics. Nies BA.
Eur J Clin Microbiol Infect Dis 1989 Jun;8(6):558–61
Group A streptococci resistant to erythromycin & lincomycin. Prakash K, et al. **Indian J Med Res** 1988 Nov; 88:391–4
The role of iron in the growth and hemolysin (Streptolysin S) production in Streptococcus pyogenes. Griffiths BB, et al. **J Basic Microbiol** 1988;28(7):427–36
Clinical and microbiological evaluation of miocamycin activity against group A beta–hemolytic streptococci in pediatric patients. Three years' incidence of erythromycin–resistant group A streptococci. Borzani M, et al. **J Chemother** 1989 Feb;1(1):35–8
Group A streptococcal resistance to clindamycin and erythromycin [letter] Sorbello AF. **JAMA** 1989 Sep 8; 262(10):1329
Erythromycin resistance in group A streptococci [letter] Järvinen H, et al. **Lancet** 1989 May 6;1(8645):1022–3
Erythromycin resistance in streptococci [letter] Perez Trallero E, et al. **Lancet** 1989 Aug 19;2(8660):444–5
Chemotherapy of streptococcal infections: implications of antimicrobial drug resistance in Streptococcus pyogenes [editorial] Hansman D. **Med J Aust** 1989 Jun 5; 150(11):611–2
The emergence of erythromycin resistance in Streptococcus pyogenes in Fremantle, Western Australia. Stingemore N, et al. **Med J Aust** 1989 Jun 5;150(11):626–7, 630–1
Pharmacodynamics of beta–lactam antibiotics. Studies on the paradoxical and postantibiotic effects in vitro and in an animal model. Odenholt–Tornqvist I.
Scand J Infect Dis Suppl 1989;58:1–55
[Studies on susceptibility of isolated organisms from pediatric infections against various antimicrobial agents] Fujii R, et al. **Jpn J Antibiot** 1988 Jul;41(7):841–53 (Eng. Abstr.) **(Jpn)**
[Antibiotic susceptibility and T–serotypes of group A hemolytic streptococci, clinically isolated in 1986] Kawakami A, et al. **Kansenshogaku Zasshi** 1988 Oct; 62(10):900–3 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Measurement of constitutive L–pyrrolidonyl peptidase activity from Streptococcus and Enterococcus using tetrazotized 0–dianisidine. Panosian KJ, et al.
Antonie Van Leeuwenhoek 1989;55(3):269–75
Cloning and expression of the streptococcal C5a peptidase gene in Escherichia coli: linkage to the type 12 M protein gene. Chen CC, et al. **Infect Immun** 1989 Jun;57(6):1740–5
Heterogeneity of the streptokinase gene in group A streptococci. Huang TT, et al. **Infect Immun** 1989 Feb; 57(2):502–6
Serine and tyrosine protein kinase activities in Streptococcus pyogenes. Phosphorylation of native and synthetic peptides of streptococcal M proteins. Chiang TM, et al.
J Biol Chem 1989 Feb 15;264(5):2957–62
The occurrence of nicotinamide adenine dinucleotide glycohydrolase and the serum opacity reaction in groups B, C, F and G streptococci. Reitmeyer JC, et al.
Microbios 1989;58(236–237):183–7
Nucleotide sequence of the streptokinase gene from a Streptococcus pyogenes type 1 strain. Walter F, et al.
Nucleic Acids Res 1989 Feb 11;17(3):1261

GENETICS

Conjugative co–transfer of penicillin tolerance and high–level resistance to kanamycin in group A streptococci. Lakshmi TM, et al. **FEMS Microbiol Lett** 1989 Feb;48(3):329–33
Sequence analysis and expression in Escherichia coli of the hyaluronidase gene of Streptococcus pyogenes bacteriophage H4489A. Hynes WL, et al. **Infect Immun** 1989 Feb;57(2):533–9
Fibrinogen binding and resistance to phagocytosis of Streptococcus sanguis expressing cloned M protein of Streptococcus pyogenes. Poirier TP, et al.
Infect Immun 1989 Jan;57(1):29–35
Bacteriophage association of streptococcal pyrogenic exotoxin type C. Goshorn SC, et al. **J Bacteriol** 1989 Jun; 171(6):3068–73
DNA fingerprints of Streptococcus pyogenes are M type specific. Cleary PP, et al. **J Infect Dis** 1988 Dec; 158(6):1317–23
Evidence for group A–related M protein genes in human but not animal–associated group G streptococcal pathogens. Simpson WJ, et al. **Microb Pathog** 1987 Nov; 3(5):339–50
Cell surface proteins of a group A streptococcus type M4: the IgA receptor and a receptor related to M proteins are coded for by closely linked genes. Lindahl G.
Mol Gen Genet 1989 Apr;216(2–3):372–9
Increased kasugamycin sensitivity in Escherichia coli caused by the presence of an inducible erythromycin resistance (erm) gene of Streptococcus pyogenes. Suvorov AN, et al. **Mol Gen Genet** 1988 Dec;215(1):152–5
The streptokinase gene of group A streptococci: cloning, expression in Escherichia coli, and sequence analysis. Huang TT, et al. **Mol Microbiol** 1989 Feb;3(2):197–205
Receptor for IgA in group A streptococci: cloning of the gene and characterization of the protein expressed in Escherichia coli. Lindahl G, et al. **Mol Microbiol** 1989 Feb; 3(2):239–47
Fc–receptor and M–protein genes of group A streptococci are products of gene duplication. Heath DG, et al.
Proc Natl Acad Sci U S A 1989 Jun;86(12):4741–5
Spontaneous M6 protein size mutants of group A streptococci display variation in antigenic and opsonogenic epitopes. Jones KF, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8271–5
[Creation and analysis of a bank of chromosomal genes of Streptococcus group A] Nesterchuk LB, et al.
Mol Gen Mikrobiol Virusol 1989 Feb;(2):42–6 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Bacterial growth blocked by a synthetic peptide based on the structure of a human proteinase inhibitor. Björck L, et al. **Nature** 1989 Jan 26;337(6205):385–6
Value of rapid tests for the detection of streptococcal infections. Reinert P, et al. **Rhinology** 1988;Suppl 5:75–9
[Verification of the preparation of Streptococcus pyogenes str. A1 96/50 based on the results of growth properties

of media] Valšík A. **Cesk Epidemiol Mikrobiol Imunol** 1989 Mar;38(2):111–8 (Eng. Abstr.) (Cze)

[The effect of blood serum components on the growth, biochemical and biological properties of streptococcus] Savel'ev EP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):6–10 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Chemiluminescence of human neutrophils after interaction with group A streptococci opsonized with antibodies to streptococcal carbohydrate. Rüfenacht R, et al. **Acta Paediatr Hung** 1988–89;29(1–2):125–30

Immunosuppressive macrophages induced by arthropathic peptidoglycan–polysaccharide polymers from bacterial cell walls. Regan DR, et al. **Clin Exp Immunol** 1988 Dec; 74(3):365–70

Group A streptococcal rapid test. Antigen detection after 18–24 hours of penicillin therapy. Beach PS, et al. **Clin Pediatr (Phila)** 1989 Jan;28(1):6–10

Demonstration of cross–reactions between pneumococci and alpha–streptococci using gold–labelled mono– and polyclonal antibodies and electron microscopy. Sjögren AM, et al. **Diagn Microbiol Infect Dis** 1988 May;10(1):7–21

Human immune response to group A streptococcal carbohydrate (A–CHO). III. Comparison of the efficiencies of anti–idiotopic antibody and of nominal antigen in the induction of IgM anti–A–CHO–producing B cells. Bloem AC, et al. **Eur J Immunol** 1988 Dec;18(12):1959–64

Activation of a murine T–cell hybridoma by cationized bacteria. Shapiro DN, et al. **Immunology** 1989 Aug; 67(4):478–83

Vimentin–cross–reactive epitope of type 12 streptococcal M protein. Kraus W, et al. **Infect Immun** 1989 Aug; 57(8):2457–61

Group A streptococcal pyrogenic exotoxin (scarlet fever toxin) type A and blastogen A are the same protein. Schlievert PM, et al. **Infect Immun** 1989 Jun;57(6):1865–7

Interleukin–1 inducing activity of a streptococcal preparation OK–432 and its fractions by human monocytes. Katsuta S, et al. **J Clin Lab Immunol** 1989 Mar;28(3):129–36

Bacterial cell wall–induced immunosuppression. Role of transforming growth factor beta. Wahl SM, et al. **J Exp Med** 1988 Oct 1;168(4):1403–17

Protective immunity evoked by locally administered group A streptococcal vaccines in mice. Bronze MS, et al. **J Immunol** 1988 Oct 15;141(8):2767–70

Human monoclonal antibodies reactive with antigens of the group A Streptococcus and human heart. Cunningham MW, et al. **J Immunol** 1988 Oct 15;141(8):2760–6

Fc region–dependence of IgG3 anti–streptococcal group A carbohydrate antibody functional affinity. I. The effect of temperature. Greenspan NS, et al. **J Immunol** 1988 Dec 15;141(12):4276–82

Ig allotype–linked regulation of class and subclass composition of natural antibodies to group A streptococcal carbohydrate. Morell A, et al. **J Immunol** 1989 Apr 1; 142(7):2495–500

Neutrophil chemiluminescence induced by opsonized group A streptococcal particles: an effective probe of intravenous immunoglobulin preparations. Rüfenacht R, et al. **J Lab Clin Med** 1989 Mar;113(3):387–95

Serological assessments of streptococcal infection by comparison of antibody titres to streptococcal extracellular antigens. el–Khateeb MS. **J Trop Pediatr** 1988 Oct; 34(5):251–3

The future streptococcal M. vaccine against rheumatic fever [editorial] Imran M, et al. **JPMA** 1988 Jul;38(7):176–7

Rapid group A streptococcal antigen detection kit: effect on antimicrobial therapy for acute pharyngitis. Redd SC, et al. **Pediatrics** 1988 Oct;82(4):576–81

Tissue cages for study of experimental streptococcal infection in rabbits. III. Influence of immunization with erythrogenic toxin type A (ET A) and its toxoid on subsequent infection with an ET A producing strain. Knöll H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):366–76

[Treatment of chronic recurrent erysipelas with streptococcal vaccine] Haustein UF, et al. **Hautarzt** 1989 Apr; 40(4):215–21 (Eng. Abstr.) (Ger)

[A study on streptococcal prevalence in Chiang Mai, Thailand, with special reference to unusual combination between T and M antigens of group A Streptococcus] Murai T, et al. **Kansenshogaku Zasshi** 1988 Oct; 62(10):869–77 (Eng. Abstr.) (Jpn)

[Monoclonal autoantibodies to different epithelial structures of the thymus gland obtained by the immunization with streptococcal group A antigens] Drobyshevskaia EI, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):77–80 (Eng. Abstr.) (Rus)

[Receptors for polysaccharides of group A streptococci on human thymic lymphocytes. Stimulation of their expression by action of adenosine, theophylline and supernatant of thymocytes] Gnezditskaia EV, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):467–9 (Eng. Abstr.) (Rus)

[Role of streptococcal Fc–receptors for IgG in the formation of a microbial focus and the development of poststreptococcal immunopathologic conditions] Burova LA, et al. **Revmatologiia (Moskva)** 1988 Jul–Sep;(3):9–12 (Eng. Abstr.) (Rus)

[Detection and determination of the biological activity of IgG Fc receptors in strains of streptococci isolated from carriers and patients] Burova LA, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):30–4 (Eng. Abstr.) (Rus)

[Serologic indices of the persistence of L forms of group A streptococci in patients with rheumatism] Goncharova SA, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):34–6 (Eng. Abstr.) (Rus)

[Group–specific antigens of streptococci in the make–up of circulating immune complexes in rheumatism and rheumatoid arthritis] Zborovskiĭ AB, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):51–6 (Eng. Abstr.) (Rus)

[Direct antigen detection for group A streptococcal pharyngitis: comparison of throat cultures and the direct antigen test] Söyletir G, et al. **Mikrobiyol Bul** 1988; 22(4):322–6 (Eng. Abstr.) (Tur)

ISOLATION & PURIFICATION

Comparison of Visuwell enzyme immunoassay to culture for detection of group A Streptococcus in throat swab specimens. Drulak M, et al. **Diagn Microbiol Infect Dis** 1988 Dec;11(4):181–7

Inhibitory substances produced by Streptococcus salivarius and colonization of the upper respiratory tract with group A streptococci. Huskins WC, et al. **Epidemiol Infect** 1989 Jun;102(3):401–12

Beta–haemolytic streptococci from the female genital tract: clinical correlates and outcome of treatment. Lewis RF. **Epidemiol Infect** 1989 Jun;102(3):391–400

Strep A–chek test as presumptive test for identification of group A streptococci. Prakash K, et al. **Indian J Med Res** 1988 Nov;88:387–90

Comparison of the Directigen 1–2–3 Group A Strep Test with culture for detection of group A beta–hemolytic streptococci. Huck W, et al. **J Clin Microbiol** 1989 Aug; 27(8):1715–8

Evaluation of the pacific biotech CARDS STREP A test for detecting group A streptococci from cases of pharyngitis. Manasse RJ. **J Clin Microbiol** 1989 Jul; 27(7):1657–8

Occurrence of mucoid M–18 Streptococcus pyogenes in a central Ohio pediatric population. Marcon MJ, et al. **J Clin Microbiol** 1988 Aug;26(8):1539–42

Dysentery and Streptococcus pyogenes [letter] Rahman M. **J Infect** 1989 Jan;18(1):91–2

Fatal septicaemia with group A streptococcal infection in previously healthy subjects [letter] Waghorn DJ, et al. **J Infect** 1988 Sep;17(2):184–5

Comparison of the sensitivity and specificity of eight commercially–available reagents for clinical detection of group A streptococcus to different extracts of streptococci. Hodgins GW, et al. **Med Lab Sci** 1988 Jan;45(1):34–9

The significance of high isolation rates of group A streptococci in pharyngeal cultures of school children [letter] Wallace M. **N Z Med J** 1989 Mar 22;102(864):141

Effect of latex agglutination test on prescribing for group A streptococcal throat disease in primary care. Mäkelä M. **Scand J Infect Dis** 1989;21(2):161–7

[Evaluation of a fast test for direct research on streptococcal group A from pharyngeal samples] Fellah H, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):885–7 (Eng. Abstr.) (Fre)

[Rapid diagnosis of Streptococcus A angina] Kechrid A, et al. **Tunis Med** 1988 Jan;66(1):31–5 (Eng. Abstr.) (Fre)

[Methodologic aspects of the isolation of beta–hemolytic streptococci] Shevchuk MS, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):49–51 (Eng. Abstr.) (Rus)

METABOLISM

The essential factor for streptolysin S production by Streptococcus pyogenes. Akao T, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):3994–9

Specific binding of collagen type IV to Streptococcus pyogenes. Kostrzynska M, et al. **FEMS Microbiol Lett** 1989 May;50(1–2):229–33

Mapping of the human plasmin domain recognized by the unique plasmin receptor of group A streptococci. Broder CC, et al. **Infect Immun** 1989 Sep;57(9):2597–605

Quantification and toxicity of group A streptococcal pyrogenic exotoxins in an animal model of toxic shock syndrome–like illness. Lee PK, et al. **J Clin Microbiol** 1989 Aug;27(8):1890–2

Localization of a lipoteichoic acid binding site to a 24–kilodalton NH2–terminal fragment of fibronectin. Courtney HS, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S360–2

Group A streptococci bind human plasmin but not other structurally related proteins. DeJardin LE, et al. **Thromb Res** 1989 Jul 15;55(2):187–93

Further characterization of haptoglobin binding to streptococci of serological group A. Lämmler C, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):454–9

Localization and characterization of fibronectin–binding to group A streptococci. An electron microscopic study using protein–gold–complexes. Wagner B, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):479–91

PATHOGENICITY

Evidence for two distinct classes of streptococcal M protein and their relationship to rheumatic fever. Bessen D, et al. **J Exp Med** 1989 Jan 1;169(1):269–83

Experimental arthritis induced by atypical strains of Streptococcus pyogenes. Barridge BD, et al. **J Med Microbiol** 1988 Sep;27(1):23–31

Characterization of the interaction of human plasmin with its specific receptor on a group A streptococcus. Broeseker TA, et al. **Microb Pathog** 1988 Jul;5(1):19–27

Severe group A streptococcal infections associated with a toxic shock–like syndrome and scarlet fever toxin A. Stevens DL, et al. **N Engl J Med** 1989 Jul 6;321(1):1–7

[Effect of Streptococci on epithelial cells of the vagina of albino inbred mice NMRI] Stefanowicz M, et al. **Patol Pol** 1988 Jul–Sep;39(3):210–9 (Eng. Abstr.) (Pol)

PHYSIOLOGY

Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. III Electron microscopic observations on group A hemolytic streptococci inoculated into mice. Akiyama T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Jun;29(3):417–25

Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. IV. Immunological tolerance following exposure of neonatal mice to live attenuated strains of Streptococcus pyogenes. Akiyama T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Jun;29(3):426–32

Secretory IgA and bacterial adherence to nasal mucosal cells. Kurono Y, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):273–7

Skin graft survival—the bacterial answer. Perry AW, et al. **Ann Plast Surg** 1989 Jun;22(6):479–83

Evidence of inherited susceptibility of increased streptococcal adherence to pharyngeal cells of children with rheumatic fever. Hafez M, et al. **Br J Rheumatol** 1989 Aug;28(4):304–9

Molecular aspects of the phagocytosis resistance of group A streptococci. Manjula BN. **Eur J Epidemiol** 1988 Sep; 4(3):289–300 (97 ref.)

Toxic shock syndrome–associated staphylococcal and streptococcal pyrogenic toxins are potent inducers of tumor necrosis factor production. Fast DJ, et al. **Infect Immun** 1989 Jan;57(1):291–4

Differences in penicillin–binding proteins of Streptococcus pyogenes and two derived, stabilized L forms. Leon O, et al. **J Bacteriol** 1988 Oct;170(10):4775–83

[Changes in surface characteristics of group A streptococci] Savoia D, et al. **G Batteriol Virol Immunol** 1987 Jan–Dec; 80(1–12):3–13 (Eng. Abstr.) (Ita)

[A comparison of 2 methods for determining the hydrophobicity of Streptococcus groups A and B] Ravdonikas LE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):15–8 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Ultrastructural localization of the fibrinogen–binding domain of streptococcal M protein. Rýc M, et al. **Infect Immun** 1989 Aug;57(8):2397–404

Electron microscopic localization of lipoteichoic acid on group A streptococci. Rýc M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):168–78

STREPTOCOCCUS SANGUIS

DRUG EFFECTS

Effects of sustained–release chlorhexidine acetate on the human dental plaque flora. Schaeken MJ, et al. **J Dent Res** 1989 Feb;68(2):119–23

Antimicrobial activity of calcium hydroxide liners on Streptococcus sanguis and S. mutans. Barkhordar RA, et al. **J Prosthet Dent** 1989 Mar;61(3):314–7

The effect of chlorhexidine on Streptococcus sanguis biofilms. Millward TA, et al. **Microbios** 1989; 58(236–237):155–64

Inhibition of plaque formation and plaque acidogenicity by zinc and chlorhexidine combinations. Giertsen E, et al. **Scand J Dent Res** 1988 Dec;96(6):541–50

Antimicrobial and antiplaque effects of a chlorhexidine and Triton X–100 combination. Giertsen E, et al. **Scand J Dent Res** 1989 Jun;97(3):233–41

ENZYMOLOGY

Characteristics of a protease of Streptococcus sanguis G9B which degrades the major salivary adhesin. Lamont RJ, et al. **FEMS Microbiol Lett** 1989 Mar;49(1):101–5

Characterization of salivary alpha–amylase binding to Streptococcus sanguis. Scannapieco FA, et al. **Infect Immun** 1989 Sep;57(9):2853–63

GENETICS

Transformation of Streptococcus sanguis to intrinsic penicillin resistance. Zito ET, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1237–49

IMMUNOLOGY

Saliva–mediated aggregation of Enterococcus faecalis

transformed with a Streptococcus sanguis gene encoding the SSP-5 surface antigen. Demuth DR, et al. **Infect Immun** 1989 May;57(5):1470–5

Fibrinogen binding and resistance to phagocytosis of Streptococcus sanguis expressing cloned M protein of Streptococcus pyogenes. Poirier TP, et al. **Infect Immun** 1989 Jan;57(1):29–35

ISOLATION & PURIFICATION

[Isolation of viridans streptococci from the lesions of periodontal diseases] Miyamoto Y, et al. **Kansenshogaku Zasshi** 1988 Oct;62(10):916–9 (Eng. Abstr.) **(Jpn)**

METABOLISM

Interaction between wild-type, mutant and revertant forms of the bacterium Streptococcus sanguis and the bacterium Actinobacillus actinomycetemcomitans in vitro and in the gnotobiotic rat. Hillman JD, et al. **Arch Oral Biol** 1988; 33(6):395–401

Difference in amounts between titratable acid and total carboxylic acids produced by oral streptococci during sugar metabolism. Iwami Y, et al. **J Dent Res** 1989 Jan; 68(1):16–9

[Analysis of extracellular polysaccharides synthesized by cariogenic bacteria in mixed cultures] Zhou XD, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):396–9 (Eng. Abstr.) **(Chi)**

[Anaphylactoid purpura and Streptococcus sanguis—culture medium of Streptococcus sanguis induce C3c binding activity on vascular endothelial cells] Hashimoto A, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Apr;98(4):477–9 **(Jpn)**

PHYSIOLOGY

Influence of saliva from 'heavy' and 'light' plaque formers on the colloidal stability of bacterial suspensions. Simonsson T, et al. **Acta Odontol Scand** 1988 Aug;46(4):195–7

Bacterial agglutinin activity in the saliva of human identical and fraternal twins. Malamud D, et al. **Arch Oral Biol** 1988; 33(11):801–5

Effect of neuraminidase on the adherence to salivary pellicle of Streptococcus sanguis and Streptococcus mitis. Liljemark WF, et al. **Caries Res** 1989;23(3):141–5

Isolation of a coaggregation-inhibiting cell wall polysaccharide from Streptococcus sanguis H1. Cassels FJ, et al. **J Bacteriol** 1989 Jul;171(7):4019–25

Utilization of a continuous streptococcal surface to measure interbacterial adherence in vitro and in vivo. Liljemark WF, et al. **J Dent Res** 1988 Dec;67(12):1455–60

Differential modulation of adherence of oral streptococci by human neutrophil myeloperoxidase. Miyasaki KT, et al. **J Dent Res** 1988 Oct;67(10):1300–6

The effects of pellicle formation on streptococcal adhesion to human enamel and artificial substrata with various surface free-energies. Pratt-Terpstra IH, et al. **J Dent Res** 1989 Mar;68(3):463–7

Streptococcal adherence on various restorative materials. Satou J, et al. **J Dent Res** 1988 Mar;67(3):588–91

Detachment of oral bacteria from saliva-coated hydroxyapatite by human polymorphonuclear leukocytes. Erard JC, et al. **J Periodontol** 1989 Apr;60(4):211–6

[Studies of artificial plaque: comparison of the adherence ability of 5 cariogenic bacteria in vitro] Zhou XD. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):214–6, 255 (Eng. Abstr.) **(Chi)**

ULTRASTRUCTURE

A comparison of the adhesive properties and surface ultrastructure of the fibrillar Streptococcus sanguis 12 and an adhesion deficient non-fibrillar mutant 12 na. Willcox MD, et al. **J Appl Bacteriol** 1989 Apr;66(4):291–9

STREPTODORNASE see **DEOXYRIBONUCLEASES**

STREPTODORNASE AND STREPTOKINASE

ADMINISTRATION & DOSAGE

A case of coagulated haemothorax treated by intrapleural varidase. McGarry GW. **Scott Med J** 1988 Jun;33(3):268–9

ADVERSE EFFECTS

[Cellular sensitization to Varidase] Hansen AK, et al. **Ugeskr Laeger** 1988 Oct 10;150(41):2471–3 (Eng. Abstr.) **(Dan)**

STREPTOGRAMINS see **VIRGINIAMYCINS**

STREPTOKINASE

see related
STREPTODORNASE AND STREPTOKINASE

[A study of native streptokinase and its polymeric derivative by means of small angle x-ray scattering] Illarionova VE, et al. **Prikl Biokhim Mikrobiol** 1989 Jan-Feb;25(1):22–8 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Intravenous thrombolytic treatment for acute myocardial infarction. Effects of early intervention and early examination. Golf S, et al. **Acta Med Scand** 1988; 224(6):523–9

Emergency room infusion of intravenous streptokinase in acute myocardial infarction: feasibility, safety, and hemodynamic consequences. Verheugt FW, et al. **Am Heart J** 1989 May;117(5):1018–22

Limitation of myocardial infarct size and preservation of left ventricular function by early administration of APSAC in myocardial infarction. Bassand JP, et al. **Am J Cardiol** 1989 Jul 5;64(2):18A–23A; discussion 24A–26A

Prehospital use of APSAC: results of a placebo-controlled study. Castaigne AD, et al. **Am J Cardiol** 1989 Jul 5; 64(2):30A–33A; discussion 41A–42A

Pharmacokinetics, thrombolytic efficacy and hemorrhagic risk of different streptokinase regimens in heparin-treated acute myocardial infarction. Col JJ, et al. **Am J Cardiol** 1989 May 15;63(17):1185–92

Do different doses of intravenous streptokinase alter the frequency of coronary reperfusion in acute myocardial infarction? Gottlich CM, et al. **Am J Cardiol** 1988 Nov 1;62(13):843–6

A protocol for the safe treatment of acute lower limb ischaemia with intra-arterial streptokinase and surgery. Walker WJ, et al. **Br J Surg** 1988 Dec;75(12):1189–92

Low-dose fibrinolytic therapy for recent lower extremity thromboembolism. Sniderman KW, et al. **Can Assoc Radiol J** 1989 Apr;40(2):98–103

Streptokinase in a loculated pleural effusion. Effectiveness determined by site of instillation. Ogirala RG, et al. **Chest** 1988 Oct;94(4):884–6

A system approach to intravenous thrombolysis in acute myocardial infarction in community hospitals: the influence of paramedics. Hartmann J, et al. **Clin Cardiol** 1988 Dec; 11(12):812–6

Cost and efficacy of intravenous streptokinase plus PTCA for acute myocardial infarction when therapy is initiated in community hospitals. Leimbach WN Jr, et al. **Clin Cardiol** 1988 Nov;11(11):731–8

Daily serial evaluation of left ventricular function with equilibrium radionuclide ventriculography following thrombolysis during acute myocardial infarction. Marx JD, et al. **Clin Cardiol** 1988 Oct;11(10):665–70

Study finds similar reperfusion rates with intravenous APSAC and intracoronary streptokinase in acute myocardial infarction [news] **Clin Pharm** 1988 Sep;7(9):634, 638

Study suggests added benefit from combined aspirin—streptokinase therapy after myocardial infarction [news] **Clin Pharm** 1988 Nov;7(11):785–6

Recovery of left ventricular function after myocardial infarction can be predicted immediately after thrombolysis by semiquantitative intracoronary thallium and technetium pyrophosphate scintigraphy. Schofer J, et al. **Eur Heart J** 1988 Oct;9(10):1088–97

Low dose intra-arterial streptokinase and acylated plasminogen-streptokinase activator complex: a retrospective review of two thrombolytic regimes in recent peripheral arterial ischaemia. Earnshaw JJ, et al. **Eur J Vasc Surg** 1987 Jun;1(3):151–8

Medical decisions and premature disclosures. Schatz IJ. **Hawaii Med J** 1988 Oct;47(10):486

Intravenous streptokinase therapy in evolving acute myocardial infarction. A study of forty-six consecutive cases in an industrial hospital. Bose TK, et al. **Indian Heart J** 1988 May-Jun;40(3):155–60

Reduced incidence of left ventricular thrombi with intravenous streptokinase in acute anterior myocardial infarction: prospective evaluation by cross-sectional echocardiography. Natarajan D, et al. **Int J Cardiol** 1988 Aug;20(2):201–7

Randomized trial of intravenous streptokinase, oral aspirin, both, or neither among 17,187 cases of suspected acute myocardial infarction: ISIS-2.ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):3A–13A

A new thrombolytic regimen for acute myocardial infarction using combination half dose tissue-type plasminogen activator with full dose streptokinase: a pilot study. KAMIT Study Group. Grines CL, et al. **J Am Coll Cardiol** 1989 Sep;14(3):573–80

Successful treatment of Candida-infected caval thrombosis in critically ill infants by low-dose streptokinase infusion. Lacey SR, et al. **J Pediatr Surg** 1988 Dec;23(12):1204–9

Combination of the thromboxane receptor antagonist, sulotroban (BM 13.177; SK&F 95587), with streptokinase: demonstration of thrombolytic synergy. Kopia GA, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):887–95

Treatment of an infected silicone right atrial catheter with combined fibrinolytic and antibiotic therapy: case report and review of the literature. Lewis JA, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan-Feb;13(1):92–8 (31 ref.)

Rapid high dose streptokinase in severe pulmonary embolism [letter] Ozbek C, et al. **Lancet** 1989 Jul 22;2(8656):229–30

Effect of intravenous streptokinase as compared with that of tissue plasminogen activator on left ventricular function after first myocardial infarction. White HD, et al. **N Engl J Med** 1989 Mar 30;320(13):817–21

Quantitative ECG changes and patency of infarct-related arteries after intravenous streptokinase. Gourassas J, et al. **S Afr Med J** 1989 May 6;75(9):422–7

Intracoronary thrombolysis and coronary angioplasty for evolving myocardial infarction. Theron HD, et al. **S Afr Med J** 1988 Dec 17;74(12):615–8

Development of anisoylated plasminogen-streptokinase activator complex from the acyl enzyme concept. Fears R. **Semin Thromb Hemost** 1989 Apr;15(2):129–39 (46 ref.)

Intraoperative intra-arterial thrombolytic therapy for salvage of limbs in patients with distal arterial thrombosis. Comerota AJ, et al. **Surg Gynecol Obstet** 1989 Oct; 169(4):283–9

Thrombolytic treatment for acute myocardial infarction. Kleiman N, et al. **Tex Med** 1988 Oct;84(10):27–32 (29 ref.)

Induced clot lysis by mini-dose injection of streptokinase in non-perfused arterial segments of rabbits. Kolis RL, et al. **Thromb Res** 1989 Feb 15;53(4):401–8

[First results of a randomized study of intravenous thrombolytic therapy in acute myocardial infarct—evaluation of the early period] Janoulek S, et al. **Vnitr Lek** 1988 Dec;34(12):1145–54 (Eng. Abstr.) **(Cze)**

[Streptokinase in impending heart infarct (published erratum appears in Ned Tijdschr Geneeskd 1989 Apr 15;133(15):800)] Kiemeneij F, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):366–8 (Eng. Abstr.) **(Dut)**

[Safety and efficacy of thrombolysis during ambulance transportation of patients with an acute heart infarct] Oemrawsingh PV, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):354–8 (Eng. Abstr.) **(Dut)**

[Experiences at a peripheral hospital with the intracoronary administration of streptokinase and urokinase in acute heart infarct] van Brussel BL, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):358–62 (Eng. Abstr.) **(Dut)**

[Hemorrhagic risk in intravenously administered thrombolytic treatment in acute myocardial infarction] Acar J, et al. **Arch Mal Coeur** 1988 May;81 Spec No:59–65 (Eng. Abstr.) **(Fre)**

[Lysis treatment of left ventricular thrombi (letter)] Herrmann KS, et al. **Dtsch Med Wochenschr** 1988 Nov 11;113(45):1781 **(Ger)**

[Ultra-high dose thrombolytic therapy with streptokinase in peripheral venous thrombosis] Fahn H, et al. **Med Klin** 1989 Apr 15;84(4):183–7, 226 (Eng. Abstr.) **(Ger)**

[Experiences with early fibrinolysis in coronary infarct at an acute care hospital. Second report of experiences with 200 patients 1980 to 1985] von Eiff M, et al. **Med Klin** 1989 May 15;84(5):246–51 (Eng. Abstr.) **(Ger)**

[Long-term results following fibrinolytic treatment of deep venous thromboses in the area of the pelvis and leg] Thiele C, et al. **Vasa** 1989;18(1):48–55 (Eng. Abstr.) **(Ger)**

[Fibrinolytic therapy of thromboembolic vascular occlusions: experiences based on 87 patients] Grabenwöger F, et al. **Vasa Suppl** 1988;26:96–8 **(Ger)**

[Validation of the treatment of fresh pelvic-leg venous thromboses with ultra-high dose streptokinase based on a new phlebographic score] Heinrich F, et al. **Vasa Suppl** 1988;23:87–90 **(Ger)**

[Experiences with ultra-high dosage fibrinolysis in arterial occlusive disease] Redecker M, et al. **Vasa Suppl** 1988; 23:182–5 **(Ger)**

[Experiences with ultra-high dosage local short-term fibrinolysis in massive lung embolism] Maercker W, et al. **Z Arztl Fortbild (Jena)** 1988;82(14):655–8 **(Ger)**

[Ischemic reaction in coronary angioplasty (PTCA) as a prerequisite for improving left ventricular function following intravenous thrombolysis in acute myocardial infarct] Leisch F, et al. **Z Kardiol** 1988 Sep;77(9):566–72 (Eng. Abstr.) **(Ger)**

[Thallium single photon emission computed tomography following thrombolysis: missing relation to left ventricular function] Schofer J, et al. **Z Kardiol** 1988 Aug; 77(8):497–502 (Eng. Abstr.) **(Ger)**

[5-year survival rate in acute transmural heart infarct following thrombolysis and immediate coronary angioplasty] Schwarz F, et al. **Z Kardiol** 1988 Nov; 77(11):713–20 (Eng. Abstr.) **(Ger)**

[Long-term follow-up of acute myocardial infarction after early intravenous streptokinase] Gurevitch J, et al. **Harefuah** 1989 Jan 1;116(1):6–11 (Eng. Abstr.) **(Heb)**

[Changes in left-ventricular mural thrombus examined by two-dimensional echocardiography during hospitalization for acute myocardial infarction. Clinico-echocardiographic correlations and the effect of intravenous streptokinase and/or heparin] Piszczek I, et al. **Kardiol Pol** 1988; 31(8):481–7 (Eng. Abstr.) **(Pol)**

[Results of the treatment of acute ischemia of the legs with small intra-arterial doses of streptokinase] Wiechowski S, et al. **Pol Tyg Lek** 1988 Aug 22;43(34):1088–91 (Eng. Abstr.) **(Pol)**

[Factors controlling the effectiveness of thrombolytic drugs administered by the intravenous route in myocardial infarction] Tubek S. **Wiad Lek** 1988 Jul 15;41(14):941–3 (17 ref.) (Eng. Abstr.) **(Pol)**

[Favorable effect of short-term intravenous infusion of streptokinase in the early phase of myocardial infarction] Tubek S, et al. **Wiad Lek** 1988 Jun 15;41(12):801–3 (Eng. Abstr.) **(Pol)**

[Effect of thrombolytic therapy on the contractile function of the left-ventricular myocardium in patients with acute myocardial infarction] Mirrakhimov EM, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR**

1989;12(1):93–4 (Rus)

[Study of the effect of the restoration of coronary blood flow on left-ventricular contractility in patients with acute myocardial infarction based on the data of computerized two-dimensional echocardiography] Chikvashvili DI, et al. **Kardiologiia** 1988 Dec;28(12):57–61 (Eng. Abstr.) (Rus)

[Thrombolytic reperfusion of coronary arteries and the function of the left ventricle in acute myocardial infarction] Pomerantsev EV, et al. **Kardiologiia** 1989 Feb;29(2):13–8 (Eng. Abstr.) (Rus)

[Blood coagulation shifts in patients with myocardial infarction treated with streptokinase] Smirnov AA, et al. **Kardiologiia** 1988 Nov;28(11):40–6 (Eng. Abstr.) (Rus)

[Combined treatment of urogenital chlamydiosis with streptokinase preparations] Miltin'kh AP, et al. **Vestn Dermatol Venerol** 1988;(8):66–9 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Hemorrhagic compression of the phrenic nerve after streptokinase infusion. Seaberg DC, et al. **Am J Emerg Med** 1989 Mar;7(2):185–6

Streptokinase therapy and cholesterol embolization. Ridker PM, et al. **Am J Med** 1989 Sep;87(3):357–8

Streptokinase and splenic rupture. Wiener RS, et al. **Am J Med** 1989 Feb;86(2):249

Reperfusion pulmonary edema after thrombolytic therapy of massive pulmonary embolism [published erratum appears in Am Rev Respir Dis 1989 Feb;139(2):572] Ward BJ, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1308–11

Plasmacytosis and renal failure after readministration of streptokinase for threatened myocardial reinfarction. Chan NS, et al. **BMJ** 1988 Sep 17;297(6650):717–8

Vasculitis complicating treatment with intravenous anisoylated plasminogen streptokinase activator complex in acute myocardial infarction [letter] Gemmill JD, et al. **Br Heart J** 1988 Oct;60(4):361

Fatal intrathoracic haemorrhage after cardiopulmonary resuscitation and treatment with streptokinase and heparin. Haugeberg G, et al. **Br Heart J** 1989 Aug;62(2):157–8

Pathological changes after intravenous streptokinase treatment in eight patients with acute myocardial infarction. Richardson SG, et al. **Br Heart J** 1989 May; 61(5):390–5

Immunology of a serum sickness/vasculitis reaction secondary to streptokinase used for acute myocardial infarction. Davidson JR, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):381–4

Lymphocytic angiitis following streptokinase therapy. Sorber WA, et al. **Cutis** 1988 Jul;42(1):57–8

Hypersensitivity vasculitis complicating intravenous streptokinase therapy in acute myocardial infarction. Ong AC, et al. **Int J Cardiol** 1988 Oct;21(1):71–3

Is aeromedical transport of patients during acute myocardial infarction safe? Sternbach G, et al. **J Emerg Med** 1989 Jan–Feb;7(1):73–7

Haemolysis after intravenous streptokinase [letter] Mathiesen O, et al. **Lancet** 1989 May 6;1(8645):1016–7

[Serum sickness after fibrinolysis using intravenous streptokinase in myocardial infarction] Albert F, et al. **Arch Mal Coeur** 1988 Aug;81(8):1013–5 (Eng. Abstr.) (Fre)

[Neurologic complications caused by anticoagulants and fibrinolytic agents] Bewermeyer H, et al. **Nervenarzt** 1989 May;60(5):268–75 (Eng. Abstr.) (Ger)

[Can streptokinase produce renal changes? (letter)] Tubek S. **Wiad Lek** 1988 May 1;41(9):613–5 (Pol)

ANTAGONISTS & INHIBITORS

Lipoprotein a inhibits streptokinase-mediated activation of human plasminogen. Edelberg JM, et al. **Biochemistry** 1989 Mar 21;28(6):2370–4

Regulation of streptokinase-human plasmin complex by the plasma proteinase inhibitors alpha 2-antiplasmin and alpha 2-macroglobulin is species specific and temperature dependent. Gonias SL, et al. **Blood** 1988 Nov;72(5):1658–64

GENETICS

Heterogeneity of the streptokinase gene in group A streptococci. Huang TT, et al. **Infect Immun** 1989 Feb; 57(2):502–6

Streptokinase mutations relieving Escherichia coli K-12 (prlA4) of detriments caused by the wild-type skc gene. Müller J, et al. **J Bacteriol** 1989 Apr;171(4):2202–8

The streptokinase gene of group A streptococci: cloning, expression in Escherichia coli, and sequence analysis. Huang TT, et al. **Mol Microbiol** 1989 Feb;3(2):197–205

Nucleotide sequence of the streptokinase gene from a Streptococcus pyogenes type 1 strain. Walter F, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1261

Nucleotide sequence of the streptokinase gene from a group-G Streptococcus. Walter F, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1262

IMMUNOLOGY

An anti-plasminogen antibody preparation that inhibits the activation of human plasminogen but enhances the activator activity of the B-chain–streptokinase complex. Summaria L, et al. **Thromb Res** 1989 Apr 1;54(1):1–15

METABOLISM

A streptokinase dependent plasma factor (SKDF) induces leucocyte tissue factor activity. Niemetz J, et al. **Br J Haematol** 1988 Dec;70(4):427–33

Streptokinase binds to lactate dehydrogenase subunit-M, which shares an epitope with plasminogen. Podlasek SJ, et al. **Clin Chem** 1989 Jan;35(1):69–73

Conformational properties of streptokinase. Radek JT, et al. **J Biol Chem** 1989 Jun 15;264(17):9915–22

The conversion of streptokinase-plasminogen complex to SK-plasmin complex in the presence of fibrin or fibrinogen. Takada Y, et al. **Thromb Res** 1989 Apr 15;54(2):133–9

[Modification of the streptokinase functional groups during iodination] Nikandrov VN, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):41–7 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Streptokinase—biochemistry and clinical application. Reddy KN. **Enzyme** 1988;40(2–3):79–89 (63 ref.)

Activation of human plasminogen by streptokinase: new aspects of fibrinolysis regulation. Nikandrov VN, et al. **Folia Haematol (Leipz)** 1988;115(4):557–61

Comparison of thrombolytic, fibrinolytic, and fibrinogenolytic properties of tissue plasminogen activator, streptokinase, single-chain urokinase, high molecular weight and low molecular weight urokinase in human plasma in vitro. Samama M, et al. **Fundam Clin Pharmacol** 1988;2(6):509–23

Streptokinase improves reperfusion blood flow after coronary artery occlusion. Mickelson JK, et al. **Int J Cardiol** 1989 Jun;23(3):373–84

Protection of myocardial function and coronary vasculature by streptokinase. Mickelson JK, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):186–95

Immunovisualization of fibrinogen A alpha-chain heterogeneity in normal plasma and plasma from patients with DIC or on streptokinase therapy. Grøn B, et al. **Thromb Res** 1988 Dec 1;52(5):413–24

[Effect of hypoxia and streptase on the blood and abdominal aorta in rats] Nikulin AA, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):66–8 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Evidence for the formation of a trimolecular complex between streptokinase, plasminogen and fibrinogen. Takada Y, et al. **Thromb Res** 1989 Feb 15;53(4):409–15

THERAPEUTIC USE

Effect of reperfusion on electrocardiographic and enzymatic infarct size: results of a randomized multicenter study of intravenous anisoylated plasminogen streptokinase activator complex (APSAC) versus intracoronary streptokinase in acute myocardial infarction. Hackworthy RA, et al. **Am Heart J** 1988 Oct;116(4):903–14

Functional significance of predischarge exercise thallium-201 findings following intravenous streptokinase therapy during acute myocardial infarction. Touchstone DA, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1500–7

Exercise-induced ischemia in the streptokinase-reperfused myocardium: relationship to extent of salvaged myocardium and degree of residual coronary stenosis. Weiss AT, et al. **Am Heart J** 1989 Jul;118(1):9–16

A symposium: Early intervention in the treatment of acute myocardial infarction—clinical profile of Eminase (APSAC). November 12, 1988, Washington, D.C. **Am J Cardiol** 1989 Jul 5;64(2):1A–42A

Reperfusion, patency and reocclusion with anistreplase (APSAC) in acute myocardial infarction. Anderson JL. **Am J Cardiol** 1989 Jul 5;64(2):12A–17A; discussion 24A–26A (31 ref.)

Relation of plasma D-dimer concentrations to coronary artery reperfusion before and after thrombolytic treatment in patients with acute myocardial infarction. Brenner B, et al. **Am J Cardiol** 1989 May 15;63(17):1179–84

Increased survival after APSAC: 30-day and 12-month mortality data from the APSAC Intervention Mortality Study. Julian DG. **Am J Cardiol** 1989 Jul 5;64(2):27A–29A; discussion 41A–42A

Potential use of thrombolytic therapy before hospitalization. Kennedy JW, et al. **Am J Cardiol** 1989 Jul 5;64(2):8A–11A; discussion 24A–26A

Influence of thrombolytic treatment followed by full dose anticoagulation on the frequency of left ventricular thrombi in acute myocardial infarction. Lupi G, et al. **Am J Cardiol** 1989 Sep 15;64(10):588–90

Prognostic significance of the extent of myocardial injury in acute myocardial infarction treated by streptokinase (the GISSI trial). Mauri F, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1291–5

Early versus late hospital arrival for acute myocardial infarction in the western Washington thrombolytic therapy trials. Maynard C, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1296–300

Evolution of left ventricular function after intracoronary thrombolysis for acute myocardial infarction. Schmidt WG, et al. **Am J Cardiol** 1989 Mar 1;63(9):497–502

Influence of fibrinolysis and percutaneous transluminal coronary angioplasty on the frequency of ventricular premature complexes. Théroux P, et al. **Am J Cardiol** 1989 Apr 1;63(12):797–801

Intravenous streptokinase in acute myocardial infarction at the community hospital: a six-year experience. Vogel JH, et al. **Am J Cardiol** 1988 Dec 6;62(18):25K–27K

Nuclear magnetic resonance and radionuclide angiographic assessment of acute myocardial infarction in a randomized trial of intravenous streptokinase. Wisenberg G, et al. **Am J Cardiol** 1988 Nov 15;62(16):1011–6

Thrombolytic therapy in acute arterial thrombosis. Price C, et al. **Am J Surg** 1988 Dec;156(6):488–91

Identification and transport of patients with acute myocardial infarction for thrombolytic therapy. Burney RE, et al. **Ann Emerg Med** 1988 Nov;17(11):1158–65 (46 ref.)

Comparison of cost effectiveness of streptokinase and urokinase in the treatment of deep vein thrombosis. Graor RA, et al. **Ann Vasc Surg** 1987 Dec;1(5):524–8

Streptokinase for aortic thrombosis. Kirk CR, et al. **Arch Dis Child** 1988 Sep;63(9):1086–7

Nonemergent cardiac catheterization and risk-stratified revascularization following thrombolytic therapy for acute myocardial infarction. A critical analysis of therapy in the community setting. University of North Carolina Cardiology Consortium. Rowe WW, et al. **Arch Intern Med** 1989 Jul;149(7):1611–7

Streptokinase vs heparin for deep venous thrombosis. Can lytic therapy be justified? Sidorov J. **Arch Intern Med** 1989 Aug;149(8):1841–5 (63 ref.)

Cost-effectiveness of intra-arterial thrombolytic therapy. Dacey LJ, et al. **Arch Surg** 1988 Oct;123(10):1218–23

Treatment of experimentally induced cerebral atherothromboembolism in an animal model with streptokinase and taurochenodeoxycholate. Jeynes BJ. **Artery** 1988;15(5):259–71

Acute thrombotic obstruction of a mitral valve prosthesis: the role of thrombolytic therapy. Fitzpatrick MA, et al. **Aust N Z J Med** 1988 Oct;18(6):795–7 (16 ref.)

A milestone for myocardial infarction [editorial] Julian DG, et al. **BMJ** 1988 Aug 20–27;297(6647):497–8

Microvascular surgery to preserve a preterm infant's ischaemic arm [letter] Kirk CR, et al. **BMJ** 1988 Nov 5; 297(6657):1198

A milestone for myocardial infarction [letter] Majer RV, et al. **BMJ** 1988 Oct 22;297(6655):1047

Plasma atrial natriuretic peptide in patients with acute myocardial infarction: effects of streptokinase. Phillips PA, et al. **Br Heart J** 1989 Feb;61(2):139–43

The surgeon and thrombolysis [editorial] Treasure T. **Br J Hosp Med** 1989 May;41(5):415

Acute lower limb ischemia [letter] Berridge DC, et al. **Br J Surg** 1989 Jun;76(6):651

Acute lower limb ischemia [letter] Lancashire MJ, et al. **Br J Surg** 1989 May;76(5):526

Guidelines for the use of intravenous thrombolytic agents in acute myocardial infarction. Ontario Medical Association Consensus Group on Thrombolytic Therapy [published erratum appears in Can Med Assoc J 1989 Jul 15;141(2):104] Naylor CD, et al. **Can Med Assoc J** 1989 Jun 1;140(11):1289–99

Use of streptokinase for lysis of a mobile left ventricular thrombus—report of a case and review of the literature. Keren A, et al. **Cardiology** 1988;75(6):444–7 (23 ref.)

Changes in ventricular function and coronary stenosis after successful intravenous thrombolysis in acute myocardial infarction. Lotan C, et al. **Cardiology** 1988;75(6):419–30

Fibrinolytic therapy in peripheral arterial grafts utilizing the "crossed two catheter" technique. Shewchun J, et al. **Cardiovasc Intervent Radiol** 1989 Mar–Apr;12(2):110–2

Brachial artery injury as a complication of cardiac catheterization: percutaneous transluminal angioplasty and streptokinase as a treatment alternative. Angelini P, et al. **Cathet Cardiovasc Diagn** 1988;15(4):243–6

Late thrombotic occlusion of saphenous vein grafts: successful recanalization using thrombolytic therapy. Grill HP, et al. **Cathet Cardiovasc Diagn** 1988;15(4):252–9

Thrombolytic therapy for acute myocardial infarction. Bates ER, et al. **Chest** 1989 May;95(5 Suppl):257S–264S (56 ref.)

Treating pulmonary emboli [letter] Demeter SL. **Chest** 1988 Nov;94(5):1113

Treating pleural effusion [letter] Miller JM. **Chest** 1989 Sep; 96(3):703

Comparison of tissue plasminogen activator and streptokinase in the management of acute myocardial infarction. White HD. **Chest** 1989 May;95(5 Suppl):265S–269S (36 ref.)

Alterations in lactate dehydrogenase isoenzyme patterns after therapy with streptokinase or streptococcal infection. Podlasek SJ, et al. **Clin Chem** 1989 Aug;35(8):1763–6

Rapid resolution of massive pulmonary embolism due to streptokinase therapy: documented by ventilation/perfusion imaging. Langer JE, et al. **Clin Nucl Med** 1988 Dec;13(12):874–7

Improvement of myocardial perfusion after thrombolysis assessed by thallium-201 exercise scintigraphy.Report of the Working Group on Thrombolytic Therapy in Acute Myocardial Infarction of the Netherlands Interuniversity Institute of Cardiology. van der Wall EE, et al. **Eur Heart J** 1988 Aug;9(8):828–35

Long-term results of percutaneous transluminal angioplasty: a study of 4750 dilatations and local lyses. Beck AH, et al. **Eur J Vasc Surg** 1989 Jun;3(3):245–52

The treatment of venous thrombosis of the upper and lower limbs with "APSAC" (p-anisoylated streptokinase-plasminogen complex). Ruckley CV, et al. **Eur J Vasc Surg** 1987 Apr;1(2):107–12

Venous thrombolysis [letter] Scott DJ, et al. **Eur J Vasc Surg** 1988 Aug;2(4):274

Thrombolytic treatment of pulmonary embolism with APSAC. Vander Sande J, et al. **Eur Respir J** 1988 Aug; 1(8):721–5

Fibrinolytic therapy with streptokinase and urokinase in deep vein thrombosis. Trübestein G, et al. **Folia Haematol (Leipz)** 1988;115(4):599–602

Recanalization time after intravenous streptokinase in evolving acute myocardial infarction. Bhat A, et al. **Indian Heart J** 1988 Jul–Aug;40(4):228–31

Specific reperfusion arrhythmias with high dose short term IV streptokinase therapy in acute myocardial infarction. Chopra KL, et al. **Indian Heart J** 1988 Jul–Aug;40(4):232–6

Thrombolytic therapy for a thromobosed Bjork–Shiley mitral valve prosthesis. Tyagi S, et al. **Indian Heart J** 1988 Nov–Dec;40(6):507–9

Myocardial salvage with streptokinase combined with nitroglycerine and verapamil in acute myocardial infarction. Lee KJ, et al. **Int J Cardiol** 1988 Dec; 21(3):279–91

Intrapleural instillation of streptokinase in the treatment of organizing empyema. Lysy Y, et al. **Isr J Med Sci** 1989 May;25(5):284–7

Multicenter trial of intravenous anisoylated plasminogen streptokinase activator complex (APSAC) in acute myocardial infarction: effects on infarct size and left ventricular function. Bassand JP, et al. **J Am Coll Cardiol** 1989 Apr;13(5):988–97

Reperfusion therapy in inferior myocardial infarction. Bates ER. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):44A–51A (48 ref.)

Antecedent angina: a predictor of residual stenosis after thrombolytic therapy. Bergelson BA, et al. **J Am Coll Cardiol** 1989 Jul;14(1):91–5

Long–term results of thrombolytic therapy with and without percutaneous transluminal coronary angioplasty. Erbel R, et al. **J Am Coll Cardiol** 1989 Aug;14(2):276–85; discussion 286–8

Plasminogen Activator Italian Multicenter Study (PAIMS): comparison of intravenous recombinant single–chain human tissue–type plasminogen activator (rt–PA) with intravenous streptokinase in acute myocardial infarction. Magnani B. **J Am Coll Cardiol** 1989 Jan;13(1):19–26

Late thrombolytic therapy preserves left ventricular function in patients with collateralized total coronary occlusion: primary end point findings of the Second Mount Sinai–New York University Reperfusion Trial. Rentrop KP, et al. **J Am Coll Cardiol** 1989 Jul;14(1):58–64

Differential effect of thrombolytic therapy [letter] Simoons ML. **J Am Coll Cardiol** 1988 Nov;12(5):1392

Coronary angioplasty in patients with unstable angina pectoris: is there a role for thrombolysis? Suryapranata H, et al. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):69A–77A (66 ref.)

Effects of successful intravenous reperfusion therapy on regional myocardial function and geometry in humans: a tomographic assessment using two–dimensional echocardiography. Touchstone DA, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1506–13

Quantitative radionuclide assessment of regional ventricular function after thrombolytic therapy for acute myocardial infarction: results of phase I Thrombolysis in Myocardial Infarction (TIMI) trial. Wackers FJ, et al. **J Am Coll Cardiol** 1989 Apr;13(5):998–1005

A canine model of coronary artery thrombosis with superimposed high grade stenosis for the investigation of rethrombosis after thrombolysis. Yasuda T, et al. **J Am Coll Cardiol** 1989 May;13(6):1409–14

Thrombolytic therapy of acute myocardial infarction in a community hospital. Baxley PJ, et al. **J Arkansas Med Soc** 1989 Jan;85(8):334–6

Coronary thrombolysis with intravenous streptokinase in the anesthetized dog: a dose–response study. Kopia GA, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):956–62

Thrombolytic therapy for acute myocardial infarction. Haley FL. **J Tenn Med Assoc** 1989 Apr;82(4):183–6

Late results after intracoronary thrombolysis and early bypass grafting for acute myocardial infarction. Messmer BJ, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):10–8

Recovery of function in a solitary kidney after intra–arterial thrombolytic therapy. Skinner RE, et al. **J Urol** 1989 Jan; 141(1):108–10

Massive pulmonary embolism: triple–armed therapy. Rosenthal D, et al. **J Vasc Surg** 1989 Feb;9(2):261–70

Coronary angioplasty after thrombolysis. Vine DL. **Kans Med** 1988 Jul;89(7):214–5

Reperfusion injury after thrombolytic therapy for acute myocardial infarction. **Lancet** 1989 Sep 16;2(8664):655–7 (16 ref.)

Randomised double–blind trial of recombinant pro–urokinase against streptokinase in acute myocardial infarction. PRIMI Trial Study Group. **Lancet** 1989 Apr 22;1(8643):863–8

Significant reduction in mortality with streptokinase given 7–24 hours after pain onset [letter] Collins R, et al. **Lancet** 1988 Nov 19;2(8621):1187–8

Out–of–hospital, paramedic administered streptokinase for acute myocardial infarction [letter] Greenberg H, et al. **Lancet** 1988 Nov 19;2(8621):1187

Left–ventricular function as an end–point [letter] White HD, et al. **Lancet** 1989 Sep 16;2(8664):676

Plasma fibronectin in acute leukaemias and during streptokinase therapy. Bykowska K, et al. **Mater Med Pol** 1988 Apr–Jun;20(2):114–8

Successful treatment of pulmonary embolism and associated mobile right atrial thrombus with use of a central thrombolytic infusion. Proano M, et al. **Mayo Clin Proc** 1988 Dec;63(12):1181–5

Coronary thrombolysis [letter] Stock E. **Med J Aust** 1989 Jan 16;150(2):109

Streptokinase or tissue plasminogen activator and left ventricular function after myocardial infarction [letter] **N Engl J Med** 1989 Sep 7;321(10):687–9

Streptokinase in acute myocardial infarction [letter] Stubbs B. **N Z Med J** 1988 Oct 12;101(855):645

Streptokinase and acute myocardial infarction [letter] White H. **N Z Med J** 1988 Nov 23;101(858):805–6

Acute myocardial infarction: a true medical emergency. White HD. **N Z Med J** 1989 Jun 14;102(869):281–3 (30 ref.)

Lower–extremity in situ saphenous vein grafts: angiographic interventions. Sniderman KW, et al. **Radiology** 1989 Mar; 170(3 Pt 2):1023–7

Coronary thrombolysis in rural hospitals [letter] Tate DA, et al. **South Med J** 1989 Jan;82(1):95

Streptokinase treatment versus calcium overload blockade in experimental thromboembolic stroke. De Ley G, et al. **Stroke** 1989 Mar;20(3):357–61

Fibrinolytic profiles in local low–dose thrombolysis with streptokinase and recombinant tissue plasminogen activator. Berridge DC, et al. **Thromb Haemost** 1989 Apr 25;61(2):275–8

[107 patients with thromboangiitis obliterans treated by traditional Chinese medicine combined with Western medicine therapy] Pan JY. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):665–7, 646 (Eng. Abstr.) (Chi)

[ISIS–2, an international study of survival after a heart infarct: the power of large numbers?] Koster RW. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):338–40 (Dut)

[Intravenous thrombolysis in myocardial infarction. Influence of the quality of the anticoagulation on the early recurrence rate of angina or infarction] Camilleri JF, et al. **Arch Mal Coeur** 1988 Sep;81(9):1037–41 (Eng. Abstr.) (Fre)

[Angiographic morphology of the coronary arteries after a recent myocardial infarction treated by intravenous thrombolysis] Grand A, et al. **Arch Mal Coeur** 1989 Jan; 82(1):51–6 (Eng. Abstr.) (Fre)

[Socioeconomic implications of the practice of thrombolysis in the acute stage of myocardial infarction] Hervé C, et al. **Arch Mal Coeur** 1989 Mar;82(3):353–8 (Eng. Abstr.) (Fre)

[Role of fibrinolysis in the treatment of retinal arterial occlusion. Discussion of 5 cases] Annonier P, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1167–71 (Eng. Abstr.) (Fre)

[Angiographic coronary arterial lesions after a recent myocardial infarction treated by intravenous thrombolysis (letter)] Grand A, et al. **Presse Med** 1989 May 20; 18(20):1032–3 (Fre)

[At home thrombolysis. 100 cases (letter)] Hervé C, et al. **Presse Med** 1988 Dec 3;17(43):2308 (Fre)

[Current strategy in the treatment of acute myocardial infarct] Kappenberger L, et al. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1691–4 (Eng. Abstr.) (Fre)

[Intravenous thrombolysis in acute myocardial infarction (editorial)] Gagnon RM. **Union Med Can** 1988 Sep; 117(4):275 (Fre)

[Intravenous thrombolysis in acute myocardial infarction] Laramée P. **Union Med Can** 1988 Sep;117(4):276–8 (Fre)

[Percutaneous transluminal angioplasty, local thrombolysis and percutaneous thrombus extraction in the treatment of arterial occlusions of the extremities] Schneider E. **Internist (Berlin)** 1989 Jul;30(7):440–6 (22 ref.) (Ger)

[Thrombolysis in acute massive lung embolism] Marbet GA. **Schweiz Med Wochenschr** 1988 Aug 9;118(31–32):1138–41 (Eng. Abstr.) (Ger)

[Fibrinolysis in acute myocardial infarct. Treatment rate, assessment and follow–up treatment in the Zürich hospitals] Marx BE, et al. **Schweiz Med Wochenschr** 1988 Nov 26; 118(47):1753–7 (Eng. Abstr.) (Ger)

[Systemic thrombolysis using streptokinase. Experiences at the Civic Hospital of Lugano in the framework of the ISIS–2 study] Moccetti T, et al. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1702–5 (Eng. Abstr.) (Ger)

[Thrombolysis in acute myocardial infarct. Initial experiences in a Swiss university hospital] Ritz R, et al. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1706–10 (Eng. Abstr.) (Ger)

[Intravenous streptokinase therapy in acute myocardial infarct in a district hospital] Ziegler H. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1698–701 (Eng. Abstr.) (Ger)

[The progress of a fibrinolytic therapy with streptokinase, urokinase and warfarin in a thoroughbred with intermittent lameness with special reference to resonance thrombography] Pause B, et al. **Tierarztl Prax** 1988; 16(4):377–83 (Eng. Abstr.) (Ger)

[Fibrinolytic therapy—plasminogen activator inhibitors] Hönigl K, et al. **Vasa Suppl** 1988;26:103–6 (Eng. Abstr.) (Ger)

[Changes in the plasma levels of fibrinopeptide A in acute myocardial infarction after administration of intravenous streptokinase] Amoriello A, et al. **Cardiologia** 1988 Dec; 33(12):1121–6 (Eng. Abstr.) (Ita)

[On the possibility of accelerating thrombolytic therapy in the acute phase of myocardial infarction: efficacy of and tolerance to the infusion of 1.5 million units of streptokinase in 30 minutes] Mazzotta G, et al. **G Ital Cardiol** 1989 Jan; 19(1):53–8 (Eng. Abstr.) (Ita)

[Thrombosis of the superior vena cava caused by catheterization. Successfully treated with streptokinase] Kjernsmo A, et al. **Lakartidningen** 1989 Mar 15; 86(11):954–6 (Nor)

[Streptokinase treatment in acute myocardial infarction] Dale J, et al. **Tidsskr Nor Laegeforen** 1989 Feb 10;109(4):429–32 (29 ref.) (Eng. Abstr.) (Nor)

[Right–atrial thrombi: report of 2 cases treated with a fibrinolytic drug] Pasierski T, et al. **Kardiol Pol** 1988; 31(8):523–8 (Eng. Abstr.) (Pol)

[Use of streptokinase in acute myocardial infarction] Dowgird M, et al. **Pol Tyg Lek** 1988 Oct 31; 43(44):1399–401 (Pol)

[Clinical trial with streptokinase and sequential procedures for the treatment of acute myocardial infarction] Bellotti G, et al. **Arq Bras Cardiol** 1988 Apr;50(4):223–9 (Eng. Abstr.) (Por)

[Reliability of clinical and laboratory signs of recanalization in acute myocardial infarction] Nicolau JC, et al. **Arq Bras Cardiol** 1988 Oct;51(4):321–5 (Eng. Abstr.) (Por)

[Intravenous streptokinase in acute myocardial infarction] Nicolau JC, et al. **Arq Bras Cardiol** 1988 Feb;50(2):87–91 (Eng. Abstr.) (Por)

[Thrombolytic treatment of patients with thromboses of artificial heart valves (successful avelizin treatment of a female patient with thrombosis of a mitral prosthesis)] Martsinkiavichus A, et al. **Grudn Khir** 1988 May–Jun; (3):27–9 (Rus)

[Systemic fibrinolytic therapy with streptokinase preparations in patients with acute myocardial infarction] Liusov VA, et al. **Kardiologiia** 1989 Jun;29(6):118–20 (Rus)

[Importance of the early intravenous administration of streptokinase in acute myocardial infarct] Martínez Ríos MA, et al. **Arch Inst Cardiol Mex** 1988 Jul–Aug; 58(4):307–11 (Eng. Abstr.) (Spa)

[Intravenous streptokinase in acute myocardial infarction. A Mexican multicentric study] Martínez Ríos MA, et al. **Arch Inst Cardiol Mex** 1988 Nov–Dec;58(6):511–5 (Eng. Abstr.) (Spa)

[Local fibrinolysis and percutaneous transluminal angioplasty in embolism of the renal artery] Rosique Delmás P, et al. **Med Clin (Barc)** 1988 Sep 10;91(7):267–9 (Eng. Abstr.) (Spa)

[Successful fibrinolytic treatment in a patient with acute mitral prosthetic thrombosis] Cladellas M, et al. **Rev Esp Cardiol** 1989 Jun–Jul;42(6):422–4 (Eng. Abstr.) (Spa)

[Intravenous streptokinase in acute myocardial infarction. Reduction of early in–hospital mortality] Cortadellas J, et al. **Rev Esp Cardiol** 1989 Apr;42(4):254–61 (Eng. Abstr.) (Spa)

[Streptokinase or urokinase in the treatment of myocardial infarction?] Dahlström H. **Lakartidningen** 1988 Oct 12; 85(41):3367 (Swe)

TOXICITY

[Possible side effects of plasminogen activators on the conduction system of the heart] Stark G, et al. **Vasa Suppl** 1988;26:205–8 (Eng. Abstr.) (Ger)

STREPTOLYSINS

ANALYSIS

Electron microscopy: assays involving freeze–fracture and freeze–etching. Tranum–Jensen J. **Methods Enzymol** 1988; 165:374–89

BIOSYNTHESIS

The essential factor for streptolysin S production by Streptococcus pyogenes. Akao T, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):3994–9

Production of pneumolysin, a pneumococcal toxin, in Bacillus subtilis. Taira S, et al. **Gene** 1989 Apr 30;77(2):211–8

The role of iron in the growth and hemolysin (Streptolysin S) production in Streptococcus pyogenes. Griffiths BB, et al. **J Basic Microbiol** 1988;28(7):427–36

GENETICS

Expression of the pneumolysin gene in Escherichia coli: rapid purification and biological properties. Mitchell TJ, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):67–72

Reduced virulence of a defined pneumolysin–negative mutant of Streptococcus pneumoniae. Berry AM, et al. **Infect Immun** 1989 Jul;57(7):2037–42

IMMUNOLOGY

Streptococcal antibody: as an indicator of tonsillectomy. Fujikawa S, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:286–91

Comparison of latex and haemolysin tests for determination

of anti-streptolysin O (ASO) antibodies. Curtis GD, et al. **J Clin Pathol** 1988 Dec;41(12):1331-3
Comparative efficacy of pneumococcal neuraminidase and pneumolysin as immunogens protective against Streptococcus pneumoniae. Lock RA, et al. **Microb Pathog** 1988 Dec;5(6):461-7

ISOLATION & PURIFICATION

Production, purification, and assay of streptolysin O. Alouf JE, et al. **Methods Enzymol** 1988;165:52-9
Production, purification, and assay of streptolysin S. Alouf JE, et al. **Methods Enzymol** 1988;165:59-64

PHARMACOLOGY

Possible role of Streptococcus pyogenes in mucocutaneous lymph node syndrome. VI. Heightened cellular reactivity to streptolysin-O in mice infected with S. pyogenes and in MCLS patients. Akiyama T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):68-72
Receptor-mediated release of inositol 1,4,5-trisphosphate and inositol 1,4-bisphosphate in rat basophilic leukemia RBL-2H3 cells permeabilized with streptolysin O. Ali H, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):88-99
Appearance of collagenase in pneumolysin-treated corneal fibroblast cultures. Johnson MK, et al. **Curr Eye Res** 1988 Sep;7(9):951-3
Peripheral actin filaments control calcium-mediated catecholamine release from streptolysin-O-permeabilized chromaffin cells. Sontag JM, et al. **Eur J Cell Biol** 1988 Jun;46(2):316-26
Introduction of macromolecules into bovine adrenal medullary chromaffin cells and rat pheochromocytoma cells (PC12) by permeabilization with streptolysin O: inhibitory effect of tetanus toxin on catecholamine secretion. Ahnert-Hilger G, et al. **J Neurochem** 1989 Jun; 52(6):1751-8
Poration by alpha-toxin and streptolysin O: an approach to analyze intracellular processes. Ahnert-Hilger G, et al. **Methods Cell Biol** 1989;31:63-90

TOXICITY

The thiol-activated toxin streptolysin O does not require a thiol group for cytolytic activity. Pinkney M, et al. **Infect Immun** 1989 Aug;57(8):2553-8
Pneumolysin, the thiol-activated toxin of Streptococcus pneumoniae, does not require a thiol group for in vitro activity. Saunders FK, et al. **Infect Immun** 1989 Aug; 57(8):2547-52

STREPTOMYCES

ANALYSIS

The galbonolides. Novel, powerful antifungal macrolides from Streptomyces galbus ssp. eurythermus. Achenbach H, et al. **Ann N Y Acad Sci** 1988;544:128-40
Purification of cellulases from Streptomyces strain A20 by electroendosmotic preparative electrophoresis. Curioni A, et al. **Electrophoresis** 1988 Jul;9(7):327-30
A structurally unique, potent, and selective oxytocin antagonist derived from Streptomyces silvensis. Pettibone DJ, et al. **Endocrinology** 1989 Jul;125(1):217-22
Identification of binding protein of virginiae butanolide C, an autoregulator in virginiamycin production, from Streptomyces virginiae. Kim HS, et al. **J Antibiot (Tokyo)** 1989 May;42(5):769-78
Screening of phosphatidylinositol kinase inhibitors from Streptomyces. Nishioka H, et al. **J Antibiot (Tokyo)** 1989 May;42(5):823-5
Distribution of virginiae butanolides in antibiotic-producing actinomycetes, and identification of the inducing factor from Streptomyces antibioticus as virginiae butanolide A. Ohashi H, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1191-5

CLASSIFICATION

Studies on new phosphate ester antifungal antibiotics phoslactomycins. I. Taxonomy, fermentation, purification and biological activities. Fushimi S, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1019-25
FR-900520 and FR-900523, novel immunosuppressants isolated from a Streptomyces. I. Taxonomy of the producing strain. Hatanaka H, et al. **J Antibiot (Tokyo)** 1988 Nov;41(11):1586-91
A new macromolecular antitumor antibiotic, C-1027. I. Discovery, taxonomy of producing organism, fermentation and biological activity. Hu JL, et al. **J Antibiot (Tokyo)** 1988 Nov;41(11):1575-9
Mureidomycins A-D, novel peptidylnucleoside antibiotics with spheroplast forming activity. I. Taxonomy, fermentation, isolation and physico-chemical properties. Inukai M, et al. **J Antibiot (Tokyo)** 1989 May;42(5):662-6
New antitumor antibiotic, FR-900462. I. Taxonomy of the producing strain. Iwami M, et al. **J Antibiot (Tokyo)** 1989 May;42(5):680-5
Thrazarine, a new antitumor antibiotic. I. Taxonomy, fermentation, isolation and biological properties. Kameyama T, et al. **J Antibiot (Tokyo)** 1988 Nov; 41(11):1561-7
Deacetylravidomycin N-oxide, a new antibiotic. Taxonomy and fermentation of the producing organism and isolation, structure and biological properties of the antibiotic. Narita T, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):347-56
New glutarimide antibiotics, S-632-B1 and B2. I. Taxonomy of producing strain, fermentation and biological properties. Otani T, et al. **J Antibiot (Tokyo)** 1989 May;42(5):647-53
BMY-28438 (3,7-dihydroxytropolone), a new antitumor antibiotic active against B16 melanoma. II. Taxonomy of producing organism. Tomita K, et al. **J Antibiot (Tokyo)** 1989 Feb;42(2):317-21
New probability matrices for identification of Streptomyces. Langham CD, et al. **J Gen Microbiol** 1989 Jan;135 (Pt 1):121-33

CYTOLOGY

[Use of Streptomyces sp. 26-115 protoplasts inactivated by heating in fusion experiments] Orlova TI, et al. **Antibiot Khimioter** 1989 Feb;34(2):94-8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Measurement of delta-(L-alpha-aminoadipyl)-L-cysteinyl-D-valine synthetase activity in Streptomyces clavuligerus by high-performance liquid chromatography after precolumn derivatization with o-phthaldialdehyde. White RL, et al. **Anal Biochem** 1989 May 1;178(2):399-403
Characteristics of the beta-lactam synthesizing enzymes of Streptomyces clavuligerus, Cephalosporium acremonium, and Penicillium chrysogenum. Westlake DW, et al. **Ann N Y Acad Sci** 1988;542:11-5
Characterization of an extracellular lignin peroxidase of the lignocellulolytic actinomycete Streptomyces viridosporus. Ramachandra M, et al. **Appl Environ Microbiol** 1988 Dec; 54(12):3057-63
Origin of p-aminobenzoic acid from chorismic rather than iso-chorismic acid in Enterobacter aerogenes and Streptomyces species. Johanni M, et al. **Arch Biochem Biophys** 1989 Jun;271(2):495-501
Determination of the primary structure of Paim II, an alpha-amylase inhibitor from Streptomyces coruchorushii, by high-performance tandem mass spectrometry. Akashi S, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):514-9
Streptomyces glucose/xylose isomerase has a single active site for glucose and xylose. Gaikwad SM, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):457-63
Chemical modification of a xylanase from a thermotolerant Streptomyces. Evidence for essential tryptophan and cysteine residues at the active site. Keskar SS, et al. **Biochem J** 1989 Jul 1;261(1):49-55
The Streptomyces K15 DD-peptidase/penicillin-binding protein. Active site and sequence of the N-terminal region. Leyh-Bouille M, et al. **Biochem J** 1989 Jun 1;260(2):601-4
Identification of two histidines as copper ligands in Streptomyces glaucescens tyrosinase. Huber M, et al. **Biochemistry** 1988 Jul 26;27(15):5610-5
Activity of phosphoenolpyruvate carboxylase of an anthracycline-producing streptomycete. Dekleva ML, et al. **Can J Microbiol** 1988 Nov;34(11):1241-6
Induction of tyrosinase by L-methionine in Streptomyces antibioticus. Katz E, et al. **Can J Microbiol** 1988 Dec; 34(12):1297-303
Purification and initial characterization of deacetoxycephalosporin C synthase from Streptomyces clavuligerus. Rollins MJ, et al. **Can J Microbiol** 1988 Nov; 34(11):1196-202
A novel L-glutamate oxidase from Streptomyces endus. Purification and properties. Böhmer A, et al. **Eur J Biochem** 1989 Jun 15;182(2):327-32
Alanine dehydrogenase from Streptomyces fradiae. Purification and properties. Vančura A, et al. **Eur J Biochem** 1989 Jan 15;179(1):221-7
Crystallisation and preliminary analysis of glucose isomerase from Streptomyces albus. Dauter Z, et al. **FEBS Lett** 1989 Apr 10;247(1):1-8
Enzymic degradation of bromoxynil by cell-free extracts of Streptomyces fellelus. Neužil J, et al. **Folia Microbiol (Praha)** 1988;33(5):349-54
The SalI (SalGI) restriction-modification system of Streptomyces albus G. Rodicio MR, et al. **Gene** 1988 Dec 25;74(1):39-42 (13 ref.)
Nucleotide sequence of the phosphinothricin N-acetyltransferase gene from Streptomyces viridochromogenes Tü494 and its expression in Nicotiana tabacum. Wohlleben W, et al. **Gene** 1988 Oct 15;70(1):25-37
Studies on the biosynthesis of bialaphos (SF-1293). 9. Biochemical mechanism of C-P bond formation in bialaphos: discovery of phosphoenolpyruvate phosphomutase which catalyzes the formation of phosphonopyruvate from phosphoenolpyruvate. Hidaka T, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):491-4
Enzymic inactivation of lincosaminide and macrolide antibiotics: divalent metal cation and coenzyme specificities. Marshall VP, et al. **J Antibiot (Tokyo)** 1989 May;42(5):826-30
Studies on the biosynthesis of bialaphos (SF-1293). 8. Purification and characterization of 2-phosphinomethylmalic acid synthase from Streptomyces hygroscopicus SF-1293. Shimotohno KW, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):1057-65
Isolation and properties of a blasticidin S acetylating enzyme from a producer organism. Sugiyama M, et al. **J Antibiot (Tokyo)** 1989 Jan;42(1):135-7
Regulation of glutamine synthetase in Streptomyces coelicolor. Fisher SH, et al. **J Bacteriol** 1989 May; 171(5):2378-83
Isolation and characterization of valine dehydrogenase from Streptomyces aureofaciens. Vančurová I, et al. **J Bacteriol** 1988 Nov;170(11):5192-6
Compartmentation of enzymes interconverting aclacinomycins in Streptomyces species AM 33352. Gräfe U, et al. **J Basic Microbiol** 1988;28(1-2):17-23
Purification and characterization of chitinase produced by Streptomyces erythraeus. Hara S, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):484-9
Amino acid sequence of chitinase from Streptomyces erythraeus. Kamei K, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):979-85
Purification, characterization, and kinetic mechanism of S-adenosyl-L-methionine:macrocin O-methyltransferase from Streptomyces fradiae. Bauer NJ, et al. **J Biol Chem** 1988 Oct 25;263(30):15619-25
Purification and properties of deacetoxycephalosporin C synthase from recombinant Escherichia coli and its comparison with the native enzyme purified from Streptomyces clavuligerus. Dotzlaf JE, et al. **J Biol Chem** 1989 Jun 15;264(17):10219-27
Characterization of crystals of xylose isomerase from Streptomyces violaceoniger. Glasfeld A, et al. **J Biol Chem** 1988 Oct 15;263(29):14612-3
Purification of thymidine-diphospho-D-glucose 4,6-dehydratase from an erythromycin-producing strain of Saccharopolyspora erythraea by high resolution liquid chromatography. Vara JA, et al. **J Biol Chem** 1988 Oct 15;263(29):14992-5
The beta-lactamase of Streptomyces cacaoi: interaction with cefoxitin and beta-iodopenicillanate. Lenzini MV, et al. **J Enzym Inhib** 1985;1(1):25-34
A non-specific deoxyribonuclease with restriction function in Streptomyces glaucescens. Aparicio JF, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2345-51
Purification and characterization of the isopenicillin N synthase of Streptomyces lactamdurans. Castro JM, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):133-41
Preliminary X-ray crystallographic study of lysozyme produced by Streptomyces globisporus. Harada S, et al. **J Mol Biol** 1989 Jun 20;207(4):851-2
Lignin-depolymerizing activity of Streptomyces. Crawford DL, et al. **Methods Enzymol** 1988;161:249-58
The 3.0 A crystal structure of xylose isomerase from Streptomyces olivochromogenes. Farber GK, et al. **Protein Eng** 1987 Dec;1(6):459-66
Comparison of backbone structures of glucose isomerase from Streptomyces and Arthrobacter. Henrick K, et al. **Protein Eng** 1987 Dec;1(6):467-9
[Nitrogen metabolism of Streptomyces antibioticus on media with various glucose contents] Prokopenko VM, et al. **Antibiot Khimioter** 1988 Jul;33(7):496-9 (Eng. Abstr.) **(Rus)**
[Enzymes involved in the metabolism of flavin nucleotides in Streptomyces olivaceus] Bilinskaia IS, et al. **Mikrobiologiia** 1989 Jan-Feb;58(1):5-8 (Eng. Abstr.) **(Rus)**

GENETICS

Genetics of Streptomyces fradiae and tylosin biosynthesis. Baltz RH, et al. **Annu Rev Microbiol** 1988;42:547-74 (93 ref.)
Streptomyces cloning: possible construction of novel compounds and regulation of antibiotic biosynthetic genes. Tomich PK. **Antimicrob Agents Chemother** 1988 Oct; 32(10):1472-6 (60 ref.)
Streptomyces cloning: useful recombinant DNA systems and a summation of cloned genes. Tomich PK. **Antimicrob Agents Chemother** 1988 Oct;32(10):1465-71 (149 ref.)
The impact of genetic engineering on the commercial production of antibiotics by Streptomyces and related bacteria. Hutchinson CR. **Appl Biochem Biotechnol** 1987 Sep-Dec;16:169-90 (154 ref.)
Molecular cloning of the nosiheptide resistance gene from Streptomyces actuosus ATCC 25421. Dosch DC, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):517-23
The integrated conjugative plasmid pSAM2 of Streptomyces ambofaciens is related to temperate bacteriophages. Boccard F, et al. **EMBO J** 1989 Mar;8(3):973-80
Oxacillin-hydrolysing beta-lactamases. A comparative analysis at nucleotide and amino acid sequence levels. Mossakowska D, et al. **Eur J Biochem** 1989 Mar 15; 180(2):309-18
Species-specific variation in signal peptide design. Implications for protein secretion in foreign hosts. von Heijne G, et al. **FEBS Lett** 1989 Feb 27;244(2):439-46
Development of pLR591, a Streptomyces-Escherichia coli positive selection shuttle vector. Hill RT, et al. **FEMS Microbiol Lett** 1989 Jan 15;48(2):223-6
Cloning and characterization of the carbapenem biosynthetic genes from Streptomyces fulvoviridis. Nakata K, et al. **FEMS Microbiol Lett** 1989 Jan 1;48(1):51-5
Nucleotide sequence, transcription and deduced function of a gene involved in polyketide antibiotic synthesis in Streptomyces coelicolor. Hallam SE, et al. **Gene** 1988 Dec 30;74(2):305-20
Nucleotide sequence of the ribostamycin phosphotransferase

gene and of its control region in Streptomyces ribosidificus. Hoshiko S, et al. **Gene** 1988 Sep 7;68(2):285–96

Expression and secretion of interferon-alpha 1 by Streptomyces lividans: use of staphylokinase signals and amplification of a neo gene. Noack D, et al. **Gene** 1988 Aug 15;68(1):53–62

Organization and nucleotide sequence analysis of a ribosomal RNA gene cluster from Streptomyces ambofaciens. Pernodet JL, et al. **Gene** 1989 Jun 30;79(1):33–46

Two genes in Streptomyces alboniger puromycin biosynthesis pathway are closely linked. Vara JA, et al. **Gene** 1988 Sep 15;69(1):135–40

Cloning, characterisation and regulation of an alpha-amylase gene from Streptomyces venezuelae. Virolle MJ, et al. **Gene** 1988 Dec 30;74(2):321–34

The use of a chromosome integration vector to map erythromycin resistance and production genes in Saccharopolyspora erythraea (Streptomyces erythraeus). Weber JM, et al. **Gene** 1988 Sep 7;68(2):173–80

Identification of a gene required for the terminal step in erythromycin A biosynthesis in Saccharopolyspora erythraea (Streptomyces erythreus). Weber JM, et al. **Gene** 1989 Feb 20;75(2):235–41

Cloning and nucleotide sequence of the Streptomyces coelicolor gene encoding glutamine synthetase. Wray LV Jr, et al. **Gene** 1988 Nov 30;71(2):247–56

Unusual transcriptional and translational features of the aminoglycoside phosphotransferase gene (aph) from Streptomyces fradiae. Janssen GR, et al. **Genes Dev** 1989 Mar;3(3):415–29

Codon usage as a reason for unsuccessful search for amber-suppressor mutants in Streptomyces lividans? Schmieger H, et al. **Genet Res** 1988 Dec;52(3):163–7

Cloning of tyrosinase gene from Streptomyces lividans in Escherichia coli. Nayak KK, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):515–7

Cloning of macromomycin apoprotein gene from Streptomyces macromomyceticus by use of 50-mer deoxynucleotide probes. Hori M, et al. **J Antibiot (Tokyo)** 1988 Oct;41(10):1462–70

The bialaphos resistance gene (bar) plays a role in both self-defense and bialaphos biosynthesis in Streptomyces hygroscopicus. Kumada Y, et al. **J Antibiot (Tokyo)** 1988 Dec;41(12):1838–45

Analysis of the promoter region of the cloned kanamycin resistance gene (kmr) from Streptomyces kanamyceticus. Nakano MM, et al. **J Antibiot (Tokyo)** 1989 Mar; 42(3):413–22

Expression of the kanamycin resistance gene in a kanamycin-producing strain of Streptomyces kanamyceticus. Nakano MM, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):423–30

Cloning and heterologous expression in Streptomyces lividans of Streptomyces rimosus genes involved in oxytetracycline biosynthesis. Binnie C, et al. **J Bacteriol** 1989 Feb;171(2):887–95

Nucleotide sequence of the gene for cholesterol oxidase from a Streptomyces sp. Ishizaki T, et al. **J Bacteriol** 1989 Jan; 171(1):596–601

Complete nucleotide sequence of the Streptomyces lividans plasmid pIJ101 and correlation of the sequence with genetic properties. Kendall KJ, et al. **J Bacteriol** 1988 Oct; 170(10):4634–51

Heterologous expression of the alpha-amylase inhibitor gene cloned from an amplified genomic sequence of Streptomyces tendae. Koller KP, et al. **J Bacteriol** 1989 Sep;171(9):4953–7

Cloning, characterization, and expression in Escherichia coli of the Streptomyces clavuligerus gene encoding deacetoxycephalosporin C synthetase. Kovacevic S, et al. **J Bacteriol** 1989 Feb;171(2):754–60

Site-specific integration in Streptomyces ambofaciens: localization of integration functions in S. ambofaciens plasmid pSAM2. Kuhstoss S, et al. **J Bacteriol** 1989 Jan; 171(1):16–23

Hypervariability, a new phenomenon of genetic instability, related to DNA amplification in Streptomyces ambofaciens. Leblond P, et al. **J Bacteriol** 1989 Jan; 171(1):419–23

Analysis of recombination occurring at SLP1 att sites. Lee SC, et al. **J Bacteriol** 1988 Dec;170(12):5806–13

Isolation and nucleotide sequencing of an aminocyclitol acetyltransferase gene from Streptomyces rimosus forma paromomycinus. López-Cabrera M, et al. **J Bacteriol** 1989 Jan;171(1):321–8

Characterization of a unique methyl-specific restriction system in Streptomyces avermitilis. MacNeil DJ. **J Bacteriol** 1988 Dec;170(12):5607–12

Transduction and transformation of plasmid DNA in Streptomyces fradiae strains that express different levels of restriction. Matsushima P, et al. **J Bacteriol** 1989 Jun; 171(6):3080–4

Streptomyces lipmanii expresses two restriction systems that inhibit plasmid transformation and bacteriophage plaque formation. Matsushima P, et al. **J Bacteriol** 1989 Jun; 171(6):3128–32

Intergeneric conjugation between Escherichia coli and Streptomyces species. Mazodier P, et al. **J Bacteriol** 1989 Jun;171(6):3583–5

Thiostrepton-induced gene expression in Streptomyces lividans. Murakami T, et al. **J Bacteriol** 1989 Mar; 171(3):1459–66

Nucleotide sequence and expression of a Streptomyces griseosporeus proteinaceous alpha-amylase inhibitor (HaimII) gene. Nagaso H, et al. **J Bacteriol** 1988 Oct; 170(10):4451–7

Construction and shuttling of novel bifunctional vectors for Streptomyces spp. and Escherichia coli. Neesen K, et al. **J Bacteriol** 1989 Mar;171(3):1569–73

Biochemical characterization of two cloned resistance determinants encoding a paromomycin acetyltransferase and a paromomycin phosphotransferase from Streptomyces rimosus forma paromomycinus. Pérez-González JA, et al. **J Bacteriol** 1989 Jan;171(1):329–34

Method for selection of transposable DNA and characterization of a new insertion sequence, IS493, from Streptomyces lividans. Solenberg PJ, et al. **J Bacteriol** 1989 Sep;171(9):4807–13

A cloned regulatory gene of Streptomyces lividans can suppress the pigment deficiency phenotype of different developmental mutants. Stein D, et al. **J Bacteriol** 1989 Apr;171(4):2258–61

Two transcribing activities are involved in expression of the Streptomyces galactose operon. Westpheling J, et al. **J Bacteriol** 1989 Mar;171(3):1355–61

Methylation of 23S rRNA caused by tlrA (ermSF), a tylosin resistance determinant from Streptomyces fradiae. Zalacain M, et al. **J Bacteriol** 1989 Aug;171(8):4254–60

Characterization of a thermosensitive mutant of Streptomyces hygroscopicus defective in both DNA and RNA syntheses. Süss F, et al. **J Basic Microbiol** 1988; 28(8):541–51

Molecular cloning and nucleotide sequence determination of gene encoding Streptomyces subtilisin inhibitor (SSI). Obata S, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):367–71

High-level expression in Streptomyces lividans 66 of a gene encoding Streptomyces subtilisin inhibitor from Streptomyces albogriseolus S-3253. Obata S, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):372–6

Characterization of two families of spontaneously amplifiable units of DNA in Streptomyces ambofaciens. Demuyter P, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):2001–7

Characterization of bacteriophage phi C69 of Saccharopolyspora erythraea and demonstration of heterologous actinophage propagation by transfection of Streptomyces and Saccharopolyspora. Katz L, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1765–71

Cloning, expression in Escherichia coli and nucleotide sequence of a tetracycline-resistance gene from Streptomyces rimosus. Reynes JP, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):585–98

Genetic analysis in Streptomyces ambofaciens. Smokvina T, et al. **J Gen Microbiol** 1988 Feb;134 (Pt 2):395–402

Characterization of SE-3, a virulent bacteriophage of Saccharopolyspora erythraea. Smorawinska M, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1773–8

Structure and regulation of controlling sequences for the Streptomyces coelicolor glycerol operon. Smith CP, et al. **J Mol Biol** 1988 Dec 5;204(3):569–80

Extremely large chromosomal deletions are intimately involved in genetic instability and genomic rearrangements in Streptomyces glaucescens. Birch A, et al. **Mol Gen Genet** 1989 Jun;217(2-3):447–58

Molecular cloning of resistance genes and architecture of a linked gene cluster involved in biosynthesis of oxytetracycline by Streptomyces rimosus. Butler MJ, et al. **Mol Gen Genet** 1989 Jan;215(2):231–8

"Strong incompatibility" between derivatives of the Streptomyces multi-copy plasmid pIJ101. Deng ZX, et al. **Mol Gen Genet** 1988 Oct;214(2):286–94

Identification and characterization of a locus inhibiting extrachromosomal maintenance of the Streptomyces plasmid SLP1. Grant SR, et al. **Mol Gen Genet** 1989 Jun; 217(2-3):324–31

Heterogeneous genomic amplification in Streptomyces glaucescens: structure, location and junction sequence analysis. Häusler A, et al. **Mol Gen Genet** 1989 Jun; 217(2-3):437–46

afsB stimulates transcription of the actinorhodin biosynthetic pathway in Streptomyces coelicolor A3(2) and Streptomyces lividans. Horinouchi S, et al. **Mol Gen Genet** 1989 Jan;215(2):355–7

Cloning and comparative sequence analysis of the gene coding for isopenicillin N synthase in Streptomyces. Shiffman D, et al. **Mol Gen Genet** 1988 Nov;214(3):562–9

The repressor gene (c) of the Streptomyces temperate phage phi c31: nucleotide sequence, analysis and functional cloning. Sinclair RB, et al. **Mol Gen Genet** 1988 Aug; 213(2-3):269–77

Excision of pIJ408 from the chromosome of Streptomyces glaucescens and its transfer into Streptomyces lividans. Sosio M, et al. **Mol Gen Genet** 1989 Jul;218(1):169–76

Transcriptional analysis of the 16S rRNA gene of the rrnD gene set of Streptomyces coelicolor A3(2). Baylis HA, et al. **Mol Microbiol** 1988 Sep;2(5):569–79

Nucleotide sequence of the xylose isomerase gene from Streptomyces violaceoniger. Drocourt D, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9337

Structural analysis of loci involved in pSAM2 site-specific integration in Streptomyces. Boccard F, et al. **Plasmid** 1989 Jan;21(1):59–70

Structural instability of a bifunctional plasmid pZG1 and single-stranded DNA formation in Streptomyces. Pigac J, et al. **Plasmid** 1988 May;19(3):222–30

Multigene families for anthracycline antibiotic production in Streptomyces peucetius. Stutzman-Engwall KJ, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3135–9

The Leeuwenhoek lecture, 1987. Towards an understanding of gene switching in Streptomyces, the basis of sporulation and antibiotic production. Hopwood DA. **Proc R Soc Lond [Biol]** 1988 Nov 22;235(1279):121–38 (78 ref.)

[Genetic analysis of heteroclones of Streptomyces erythreus. I. Determination of the arrangement of genetic loci on its map] Pencheva R, et al. **Acta Microbiol Bulg** 1988;23:3–10 (Eng. Abstr.) **(Bul)**

[Cloning of a nosiheptide-resistant gene from Streptomyces actuosus] Dary A, et al. **C R Acad Sci [III]** 1989; 308(2):35–41 (Eng. Abstr.) **(Fre)**

[Molecular cloning and structure of genes conferring curromycin resistance to curromycin producing organism] Ogura M, et al. **Jpn J Antibiot** 1988 May;41(5):606 **(Jpn)**

[Molecular cloning of tylosin-producing Streptomyces fradiae B-45 genes determining increased inducible resistance to tylosin in Streptomyces lividans TK64] Furs AR, et al. **Antibiot Khimioter** 1989 May;34(5):332–7 (Eng. Abstr.) **(Rus)**

[Effect of plasmid pIJ350 on genetic stability of antibiotic production by Streptomyces bambergiensis] Zotchev SB, et al. **Antibiot Khimioter** 1989 Mar;34(3):180–6 (Eng. Abstr.) **(Rus)**

[Amplifying sequence of Streptomyces rimosus: study of ability to co-amplification of hybrid plasmids containing this sequence in Streptomyces lividans 66] Danilenko VN, et al. **Dokl Akad Nauk SSSR** 1988;301(6):1488–92 **(Rus)**

[Transposon-like DNA sequence encoding neomycin resistance in Streptomyces lividans 66] Danilenko VN, et al. **Dokl Akad Nauk SSSR** 1989 Jan-Feb;304(1):201–5 **(Rus)**

[Genetic mapping of unstable chloramphenicol resistance determinant in Streptomyces coelicolor A3(2)] Fedorenko VA, et al. **Genetika** 1988 Oct;24(10):1768–76 (Eng. Abstr.) **(Rus)**

[Characterization of multiple changes of antibiotic resistance characters in Streptomyces coelicolor A3(2)] Fedorenko VA, et al. **Genetika** 1989 Apr;25(4):626–34 (Eng. Abstr.) **(Rus)**

[Restriction of two-replicon shuttle Escherichia coli–Streptomyces plasmids in Streptomyces lividans strain 66] Orekhov AV, et al. **Genetika** 1989 Apr;25(4):614–25 (Eng. Abstr.) **(Rus)**

[Fusion of protoplasts in Streptomyces antibioticus] Shevchenko AA, et al. **Genetika** 1988 Nov;24(11):1940–6 (Eng. Abstr.) **(Rus)**

[Mapping UVS1 and UVS2 mutations in Streptomyces olivaceus VKX] Lavrenchuk VIa, et al. **Mikrobiol Zh** 1983 May-Jun;45(3):3–8 (Eng. Abstr.) **(Rus)**

[Transformation of Streptomyces sp. 1912-8 protoplasts using plasmid pSG 1912 DNA] Polishchuk LV, et al. **Mikrobiol Zh** 1987 Jan-Feb;49(1):24–8 (Eng. Abstr.) **(Rus)**

[Analysis of genomic similarity in Streptomycetes belonging to the fluorescent subgroup as a confirmation of their taxonomic revision using a population method] Filippova SN, et al. **Mikrobiologiia** 1989 Jan-Feb;58(1):87–91 (Eng. Abstr.) **(Rus)**

[Location of determinants of stability to neomycin and kanamycin as well as DNA segments, responsible for amplification in Streptomyces plasmids pSU3 and pSU10] Starodubtseva LI, et al. **Mol Biol (Mosk)** 1989 Jan-Feb; 23(1):193–203 (Eng. Abstr.) **(Rus)**

[The recombination capacity of Uvs mutants of Streptomyces olivaceus VKX] Lavrenchuk VIa, et al. **Tsitol Genet** 1988 Nov-Dec;22(6):34–9 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Streptomycetes can grow through small filter capillaries. Wolf H, et al. **FEMS Microbiol Lett** 1989 Feb;48(3):259–63

Production of streptavidin in a synthetic medium. Cazin J Jr, et al. **J Immunol Methods** 1988 Oct 4;113(1):75–81

Isolation and characterization of highly purified streptavidin obtained in a two-step purification procedure from Streptomyces avidinii grown in a synthetic medium. Suter M, et al. **J Immunol Methods** 1988 Oct 4;113(1):83–91

PCR as a rapid screening method for transgenic mice. Abbott C, et al. **Trends Genet** 1988 Nov;4(11):325

[Development of protoplasts of Streptomycetes on media favoring the regeneration and formation of L-forms] Dmitrieva SV, et al. **Mikrobiologiia** 1988 Sep-Oct; 57(5):785–92 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

[Use of the method of enriching of soil samples with calcium carbonate for isolation of Actinomyces] Alferova IV, et al. **Antibiot Khimioter** 1988 Dec;33(12):888–90 (Eng. Abstr.) **(Rus)**

METABOLISM

Studies on the biosynthesis of avermectins. Chen TS, et al. **Arch Biochem Biophys** 1989 May 1;270(2):521–5

Directed biosynthesis of avermectins. Chen TS, et al. **Arch Biochem Biophys** 1989 Mar;269(2):544–7

Biosynthesis of 9-beta-D-arabinofuranosyladenine: hydrogen exchange at C-2' and oxygen exchange at C-3'

of adenosine. Suhadolnik RJ, et al.
Arch Biochem Biophys 1989 Apr;270(1):363–73

Mutation affecting peptide bond formation in nikkomycin biosynthesis. Engel P, et al.
Biochem Biophys Res Commun 1988 Oct 31;156(2):695–700

8-Ketodeoxycoformycin and 8-ketocoformycin as intermediates in the biosynthesis of 2'-deoxycoformycin and coformycin. Hanvey JC, et al. **Biochemistry** 1988 Jul 26;27(15):5790–5

Role of the carbon source in regulating chloramphenicol production by Streptomyces venezuelae: studies in batch and continuous cultures. Bhatnagar RK, et al.
Can J Microbiol 1988 Nov;34(11):1217–23

Biosynthesis of epsilon-rhodomycinone from glucose by Streptomyces C5 and comparison with intermediary metabolism of other polyketide-producing streptomycetes. Dekleva ML, et al. **Can J Microbiol** 1988 Nov; 34(11):1235–40

The hydrogenation of alpha-hydroxymethylene-ketone derivatives to alpha-hydroxymethyl-ketone derivatives with a cell-free system of Streptomyces cinereocrocatus. Oda T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb; 37(2):502–5

Structures of duocarmycins, novel antitumor antibiotics produced by Streptomyces sp. Yasuzawa T, et al.
Chem Pharm Bull (Tokyo) 1988 Sep;36(9):3728–31

Gilvomycin, a new antibacterial antibiotic. Hussein A, et al.
Chemioterapia 1987 Jun;6(2 Suppl):165–6

A novel extracellular subtilisin inhibitor produced by a Streptomyces sp. Kourteva Y, et al. **FEBS Lett** 1989 Apr 24;247(2):468–70

Streptogramins-inactivating activity in three producer streptomycetes. Fernando Fierro J, et al.
FEMS Microbiol Lett 1989 Apr;49(2–3):243–6

Propionate and the production of monensins in Streptomyces cinnamonensis. Matěju J, et al. **Folia Microbiol (Praha)** 1988;33(6):440–6

Strain improvement studies for neomycin production by Streptomyces marinensis. Ellaiah P, et al.
Indian J Exp Biol 1988 Jul;26(7):562–3

Benadrostin, new inhibitor of poly(ADP-ribose) synthetase, produced by actinomycetes. I. Taxonomy, production, isolation, physico-chemical properties and biological activities. Aoyagi T, et al. **J Antibiot (Tokyo)** 1988 Aug; 41(8):1009–14

Selection of a specifically blocked mutant of Streptomyces cinnamonensis: isolation and synthesis of 26-deoxymonensin A. Ashworth DM, et al.
J Antibiot (Tokyo) 1989 Jul;42(7):1088–99

Isolation of Streptomyces tendae mutants with an altered nikkomycin spectrum. Bormann C, et al.
J Antibiot (Tokyo) 1989 Jun;42(6):913–8

Pacidamycins, a novel series of antibiotics with anti-Pseudomonas aeruginosa activity. II. Isolation and structural elucidation. Chen RH, et al.
J Antibiot (Tokyo) 1989 Apr;42(4):512–20

Discovery, production, and biological assay of an unusual flavenoid cofactor involved in lincomycin biosynthesis. Coats JH, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):472–4

New products related to kinamycin from Streptomyces murayamaensis. I. Taxonomy, production, isolation and biological properties. Cone MC, et al.
J Antibiot (Tokyo) 1989 Feb;42(2):179–88

Common biosynthetic feature of fortimicin-group antibiotics. Dairi T, et al. **J Antibiot (Tokyo)** 1989 Jun;42(6):934–43

Metabolic products of microorganisms. 252. Isolation of new nikkomycins from Streptomyces tendae. Decker H, et al.
J Antibiot (Tokyo) 1989 Feb;42(2):230–5

Isolation of 1,5-dideoxy-1,5-imino-D-mannitol from culture broth of Streptomyces species. Ezure Y, et al.
J Antibiot (Tokyo) 1988 Aug;41(8):1142–4

Metabolites of microorganisms. 247. Phenazines from Streptomyces antibioticus, strain Tü 2706. Geiger A, et al. **J Antibiot (Tokyo)** 1988 Nov;41(11):1542–51

DC 107, a novel antitumor antibiotic produced by a Streptomyces sp. Hara M, et al. **J Antibiot (Tokyo)** 1989 Feb;42(2):333–5

FR-900520 and FR-900523, novel immunosuppressants isolated from a Streptomyces. II. Fermentation, isolation and physico-chemical and biological characteristics. Hatanaka H, et al. **J Antibiot (Tokyo)** 1988 Nov; 41(11):1592–601

FK-506 related compounds produced by Streptomyces tsukubaensis No. 9993. Hatanaka H, et al.
J Antibiot (Tokyo) 1989 Apr;42(4):620–2

Urdamycins, new angucycline antibiotics from Streptomyces fradiae. V. Derivatives of urdamycin A. Henkel T, et al.
J Antibiot (Tokyo) 1989 Feb;42(2):299–311

Biosynthetic similarity between Streptomyces tenjimariensis and Micromonospora olivasterospora which produce fortimicin-group antibiotics. Hotta K, et al.
J Antibiot (Tokyo) 1989 May;42(5):745–51

Lavanducyanin, a new antitumor substance produced by Streptomyces sp. Imai S, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1196–8

Inhibition of prolyl hydroxylase activity and collagen biosynthesis by fibrostatin C, a novel inhibitor produced by Streptomyces catenulae subsp. griseospora No. 23924. Iahimaru T, et al. **J Antibiot (Tokyo)** 1988 Nov; 41(11):1668–74

New antitumor antibiotic, FR-900462. II. Production, isolation, characterization and biological activity. Iwami M, et al. **J Antibiot (Tokyo)** 1989 May;42(5):686–90

Mechanism and stereochemistry of the biosynthesis of 2-deoxystreptamine and neosamine C. Kakinuma K, et al.
J Antibiot (Tokyo) 1989 Jun;42(6):926–33

Complestatin, a potent anti-complement substance produced by Streptomyces lavendulae. I. Fermentation, isolation and biological characterization. Kaneko I, et al.
J Antibiot (Tokyo) 1989 Feb;42(2):236–41

Pacidamycins, a novel series of antibiotics with anti-Pseudomonas aeruginosa activity. I. Taxonomy of the producing organism and fermentation. Karwowski JP, et al. **J Antibiot (Tokyo)** 1989 Apr;42(4):506–11

Biosynthesis and 13C NMR assignment of cytovaricin, a neutral macrolide antibiotic. Kihara T, et al.
J Antibiot (Tokyo) 1989 Jun;42(6):919–25

Isolation and identification of 7,8-didemethyl-8-hydroxy-5-deazariboflavin, an unusual cosynthetic factor in streptomycetes, from Streptomyces lincolnensis. Kuo MS, et al. **J Antibiot (Tokyo)** 1989 Mar; 42(3):475–8

16-Deethylindanomycin (A83094A), a novel pyrrole-ether antibiotic produced by a strain of Streptomyces setonii. Taxonomy, fermentation, isolation and characterization. Larsen SH, et al. **J Antibiot (Tokyo)** 1988 Sep;41(9):1170–7

5-Hydroxymethylblasticidin S and biasticidin S from Streptomyces setonii culture A83094. Larsen SH, et al.
J Antibiot (Tokyo) 1989 Mar;42(3):470–1

Production of new polyene antibiotics by Streptomyces cellulosae after addition of ethyl (Z)-16-phenylhexadec-9-enoate. Li Z, et al.
J Antibiot (Tokyo) 1989 Apr;42(4):577–84

Microbial O-phosphorylation of macrolide antibiotics. Marshall VP, et al. **J Antibiot (Tokyo)** 1989 Jan;42(1):132–4

Biological activities of IC201 ((3S,8E)-1,3-dihydroxy-8-decen-5-one), a low molecular weight immunomodulator produced by Streptomyces. Mizutani S, et al. **J Antibiot (Tokyo)** 1989 Jun;42(6):952–9

1-Epidactimicin, a new aminoglycoside antibiotic converted from fortimicin B by a blocked mutant of istamycin-producing Streptomyces tenjimariensis [letter] Morioka M, et al. **J Antibiot (Tokyo)** 1989 May;42(5):831–3

WS-9659 A and B, novel testosterone 5 alpha-reductase inhibitors isolated from a Streptomyces. I. Taxonomy, fermentation, isolation, physico-chemical characteristics. Nakayama O, et al. **J Antibiot (Tokyo)** 1989 Aug; 42(8):1221–9

Structure-activity relationships of virginiae butanolide C, an inducer of virginiamycin production in Streptomyces virginiae. Nihira T, et al. **J Antibiot (Tokyo)** 1988 Dec; 41(12):1828–37

A new antitumor antibiotic, FR900840. I. Discovery, identification, isolation and characterization. Nishimura M, et al. **J Antibiot (Tokyo)** 1989 Apr;42(4):542–8

Structural studies on minor components of trienomycin group antibiotics trienomycins D and E. Nomoto H, et al.
J Antibiot (Tokyo) 1989 Mar;42(3):479–81

Physiological analysis of bicozamycin high-producing Streptomyces griseoflavus used at industrial level. Ochi K, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):1106–15

Phthoramycin, a new antibiotic active against a plant pathogen, Phytophthora sp. Omura S, et al.
J Antibiot (Tokyo) 1988 Dec;41(12):1910–2

Studies on a novel antitumor antibiotic, phenazinomycin: taxonomy, fermentation, isolation, and physicochemical and biological characteristics. Omura S, et al.
J Antibiot (Tokyo) 1989 Jul;42(7):1037–42

Endusamycin, a novel polycyclic ether antibiotic produced by a strain of Streptomyces endus subsp. aureus. Oscarson JR, et al. **J Antibiot (Tokyo)** 1989 Jan;42(1):37–48

A51493A, a novel anthracyclinone antibiotic produced by a strain of Streptomyces humifer. Paschal JW, et al.
J Antibiot (Tokyo) 1989 Apr;42(4):623–6

UK-63,052 complex, new quinomycin antibiotics from Streptomyces braegensis subsp. japonicus; taxonomy, fermentation, isolation, characterisation and antimicrobial activity. Rance MJ, et al. **J Antibiot (Tokyo)** 1989 Feb; 42(2):206–17

Metabolic products of microorganisms. 249. Tetracenomycins B3 and D3, key intermediates of the elloramycin and tetracenomycin C biosynthesis. Rohr J, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):1066–73

Urdamycins, new angucycline antibiotics from Streptomyces fradiae. IV. Biosynthetic studies of urdamycins A–D. Rohr J, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1151–7

834-B1, a new thiolactone containing antibiotic taxonomy, fermentation, isolation and structure. Sato T, et al.
J Antibiot (Tokyo) 1989 Jun;42(6):890–6

New cirramycin-family antibiotics F-1 and F-2. Selection of producer mutants, fermentation, isolation, structural elucidation and antibacterial activity. Sawada Y, et al.
J Antibiot (Tokyo) 1989 Feb;42(2):242–53

New products related to kinamycin from Streptomyces murayamaensis. II. Structures of pre-kinamycin, keto-anhydrokinamycin, and kinamycins E and F. Seaton PJ, et al. **J Antibiot (Tokyo)** 1989 Feb;42(2):189–97

UCN-01 and UCN-02, new selective inhibitors of protein kinase C. I. Screening, producing organism and fermentation. Takahashi I, et al. **J Antibiot (Tokyo)** 1989 Apr;42(4):564–70

Duocarmycin A, a new antitumor antibiotic from Streptomyces. Takahashi I, et al. **J Antibiot (Tokyo)** 1988 Dec;41(12):1915–7

Nitracidomycins A and B, new enteromycin-group antibiotics. Takeuchi M, et al. **J Antibiot (Tokyo)** 1989 Feb; 42(2):329–32

Benadrostin, new inhibitor of poly(ADP-ribose) synthetase, produced by actinomycetes. II. Structure determination. Yoshida S, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):1015–8

Glutamate synthesis in Streptomyces coelicolor. Fisher SH.
J Bacteriol 1989 May;171(5):2372–7

Lysine catabolism in Streptomyces spp. is primarily through cadaverine: beta-lactam producers also make alpha-aminoadipate. Madduri K, et al. **J Bacteriol** 1989 Jan;171(1):299–302

The structure and biosynthesis of new tetrahydropyrimidine derivatives in actinomycin D producer Streptomyces parvulus. Use of 13C- and 15N-labeled L-glutamate and 13C and 15N NMR spectroscopy. Inbar L, et al.
J Biol Chem 1988 Nov 5;263(31):16014–22

[Isolation, purification and separation of the polyether antibiotic complex IM-15 from a strain of Streptomyces sp. 15] Ivanova V, et al. **Acta Microbiol Bulg** 1988;22:61–7 (Eng. Abstr.) **(Bul)**

[Effect of carbon and nitrogen source on the yield of D-glucose isomerase in Streptomyces roseocastaneus strain No. 336] Pan RR, et al. **Wei Sheng Wu Hsueh Pao** 1988 Dec;28(4):325–32 (Eng. Abstr.) **(Chi)**

[Controlled search for the producers of ionophore antibiotics among Streptomycetes] Drobysheva TN, et al.
Antibiot Khimioter 1988 Dec;33(12):891–5 (Eng. Abstr.) **(Rus)**

[Comparison of antibiotic complexes formed by cultures of Streptomyces griseoruber] Igina EF, et al.
Antibiot Khimioter 1989 Jan;34(1):13–6 (Eng. Abstr.) **(Rus)**

[L-arabinose control of the formation of heliomycin complex synthesized by Streptomyces olivocinereus] Kirillova NP, et al. **Antibiot Khimioter** 1989 Feb;34(2):89–94 (Eng. Abstr.) **(Rus)**

[The role of succinic acid in the biosynthesis of levorin] Namestnikova VP, et al. **Antibiot Khimioter** 1989 Mar; 34(3):189–91 (Eng. Abstr.) **(Rus)**

[Reduction of actinomycin biosynthesis during protoplast regeneration in an inactive variant producer] Orlova TI, et al. **Antibiot Khimioter** 1988 Jul;33(7):486–90 (Eng. Abstr.) **(Rus)**

[Dynamics of the changes in microelement composition (cations of iron, copper and arsenic) during the biosynthesis of nystatin] Sher AA, et al. **Antibiot Khimioter** 1989 Mar; 34(3):186–9 (Eng. Abstr.) **(Rus)**

[Elaboration of the method of "quiescent cells" for the study of heliomycin-synthesizing system of Streptomyces olivocinereus] Vinogradova KA, et al.
Antibiot Khimioter 1988 Dec;33(12):910–3 (Eng. Abstr.) **(Rus)**

[Use of a protoplasting method in the selection of Streptomyces kanamyceticus] Podgorskaia ME, et al.
Mikrobiol Zh 1988 Jul-Aug;50(4):3–7 (Eng. Abstr.) **(Rus)**

[Biosynthesis of oleandomycin by cultures of Streptomyces antibioticus obtained after regeneration and fusion of protoplasts] Shevchenko AA, et al. **Mikrobiol Zh** 1989 Mar-Apr;51(2):22–5 (Eng. Abstr.) **(Rus)**

[Production of rifamycin complex] Oner M, et al.
Mikrobiyol Bul 1987 Oct;21(4):296–300 (Eng. Abstr.) **(Tur)**

PHYSIOLOGY

[Effect of lyophilization on the biological activity of streptomycetes] Kozyritskaia VE, et al. **Mikrobiol Zh** 1988 Mar-Apr;50(2):33–6 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[The nature of the uvs mutations of Streptomyces olivaceus VKX strain 22c supersensitive to UV light] Lavrenchuk VIa. **Mikrobiol Zh** 1988 Mar-Apr;50(2):3–6 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

[Use of a protoplasting method for altering the qualitative and quantitative composition of the anthracycline complex in Streptomyces peucetius var. caesius] Krasil'nikova OL, et al. **Antibiot Khimioter** 1988 Jul;33(7):483–6 (Eng. Abstr.) **(Rus)**

STREPTOMYCES ANTIBIOTICUS see under **STREPTOMYCES**

STREPTOMYCES AUREOFACIENS

ENZYMOLOGY

Glucose-6-phosphate dehydrogenase from a tetracycline producing strain of Streptomyces aureofaciens: some properties and regulatory aspects of the enzyme. Neužil J, et al. **Biochem Int** 1988 Jul;17(1):187–96

Exocellular ribonuclease from Streptomyces aureofaciens. I. Isolation and purification. Bačová M, et al.
Biochim Biophys Acta 1971 May 12;235(2):335–42

Exocellular ribonuclease from Streptomyces aureofaciens. II. Properties and specificity. Zelinková E, et al.
Biochim Biophys Acta 1971 May 12;235(2):343–52

A further characterization of alanine dehydrogenase from

Streptomyces aureofaciens. Vančurová I, et al. **J Basic Microbiol** 1989;29(3):185–9

GENETICS

Molecular cloning and high-level expression of a bromoperoxidase gene from Streptomyces aureofaciens Tü24. van Pée KH. **J Bacteriol** 1988 Dec;170(12):5890–4

STREPTOMYCES GRISEUS

ENZYMOLOGY

Xenobiotic oxidation by cytochrome P-450–enriched extracts of Streptomyces griseus. Trower MK, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1417–22

Characterization of an 8-hydroxy-5-deazaflavin:NADPH oxidoreductase from Streptomyces griseus. Eker AP, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):80–6

Streptomyces griseus aminopeptidase is a calcium-activated zinc metalloprotein. Purification and properties of the enzyme. Spungin A, et al. **Eur J Biochem** 1989 Aug 1; 183(2):471–7

Purification and characterization of a soybean flour-induced cytochrome P-450 from Streptomyces griseus. Trower MK, et al. **J Bacteriol** 1989 Apr;171(4):1781–7

Purification and characterization of an acidic amino acid specific endopeptidase of Streptomyces griseus obtained from a commercial preparation (Pronase). Yoshida N, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):451–6

Chitosanase from Streptomyces griseus. Ohtakara A. **Methods Enzymol** 1988;161:505–10

Molecular characterization of a gene encoding a photolyase from Streptomyces griseus. Kobayashi T, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4731–44

[Creation of a polyenzyme composition of proteases from Streptomyces griseus and Acremonium chrysogenum] Mishunin IF, et al. **Ukr Biokhim Zh** 1988 Jul-Aug; 60(4):78–81 (Eng. Abstr.) (Rus)

GENETICS

Cloning of amylase and alkaline phosphatase genes from Streptomyces griseus as secretion vectors. Martin JF, et al. **Biochem Soc Trans** 1989 Apr;17(2):342–4

Strain- and species-specific distribution of the streptomycin gene cluster and kan-related sequences in Streptomyces griseus. Hotta K, et al. **J Antibiot (Tokyo)** 1988 Aug; 41(8):1116–23

Nucleotide sequence and transcriptional analysis of the Streptomyces griseus gene (afsA) responsible for A-factor biosynthesis. Horinouchi S, et al. **J Bacteriol** 1989 Feb; 171(2):1206–10

Cascading regulation of histidase activity in Streptomyces griseus. Kroening TA, et al. **J Bacteriol** 1989 Feb; 171(2):1100–5

[Hybridization of A-factor deficient mutants of Streptomyces griseus by means of fusion of protoplasts] Efremenkova OV, et al. **Antibiot Khimioter** 1988 Oct;33(10):723–6 (Eng. Abstr.) (Rus)

[Isolation of auxotrophic mutants under the action of N-methyl-N'-nitro-N-nitrosoguanidine and UV radiation and the mapping of new loci on the Streptomyces griseus chromosome by protoplast fusion] Serdechnaia AI, et al. **Mikrobiol Zh** 1987 Sep-Oct;49(5):3–8 (Eng. Abstr.) (Rus)

METABOLISM

Production of a streptomycin-Park nucleotide complex by Streptomyces griseus. Szabó I, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):58–62

Detection and properties of A-factor-binding protein from Streptomyces griseus. Miyake K, et al. **J Bacteriol** 1989 Aug;171(8):4298–302

Structure of the complex of Streptomyces griseus proteinase B and polypeptide chymotrypsin inhibitor-1 from Russet Burbank potato tubers at 2.1 A resolution. Greenblatt HM, et al. **J Mol Biol** 1989 Jan 5;205(1):201–28

STREPTOMYCETACEAE

ENZYMOLOGY

Terminal phenylalanine and tyrosine biosynthesis of Microtetraspora glauca. Speth AR, et al. **Biol Chem Hoppe Seyler** 1989 Jun;370(6):591–9

METABOLISM

Mannostatins A and B: new inhibitors of alpha-D-mannosidase, produced by Streptoverticillium verticillus var. quintum ME3-AG3: taxonomy, production, isolation, physico-chemical properties and biological activities. Aoyagi T, et al. **J Antibiot (Tokyo)** 1989 Jun; 42(6):883–9

MM 47755, a new benz[a]anthracene antibiotic from a streptomycete. Gilpin ML, et al. **J Antibiot (Tokyo)** 1989 Apr;42(4):627–8

Lanthiopeptin, a new peptide antibiotic. Production, isolation and properties of lanthiopeptin. Naruse N, et al. **J Antibiot (Tokyo)** 1989 Jun;42(6):837–45

STREPTOMYCIN

Spreading of streptomycin antibiotic resistance gene in Escherichia coli plasmids demonstrated by Southern blot analysis. Hajnal A, et al. **Microbiol Immunol** 1989; 33(6):441–7

[Study on the rule of discoloration and prediction of shelf-life of streptomycin sulfate injection] Guo YX, et al. **Yao Hsueh Hsueh Pao** 1988 Jul;23(7):532–8 (Eng. Abstr.) (Chi)

ADMINISTRATION & DOSAGE

Perfusion of the inner ear with streptomycin. Shea JJ. **Am J Otol** 1989 Mar;10(2):150–5

The use of streptomycin to induce unilateral ablation of vestibular function in the rat: a preliminary report. Proctor LR, et al. **Am J Otolaryngol** 1989 May-Jun;10(3):188–97

Efficacy of various treatment regimens, using liposomal streptomycin in cows with brucellosis. Nicoletti P, et al. **Am J Vet Res** 1989 Jul;50(7):1004–7

Synergism and mechanism of subinhibitory concentration of streptomycin on Streptococcus faecalis. Fuursted K. **APMIS** 1989 Jan;97(1):27–32

Evaluation of the combination effects of ampicillin or vancomycin combined with streptomycin, gentamicin, tobramycin or netilmicin against enterococci. Fuursted K. **APMIS** 1989 Jan;97(1):23–6

Tuberculosis and HIV infection in Africa [letter] Roberts DJ, et al. **BMJ** 1989 Mar 18;298(6675):751

Effect of streptomycin administration on association of enteric pathogens with cecal tissue of mice. Pongpech P, et al. **Infect Immun** 1989 Jul;57(7):2092–7

Streptomycin sulphate microspheres: formulation and in vivo distribution. Gürkan H, et al. **J Microencapsul** 1986 Apr-Jun;3(2):101–8

Streptomycin sulphate microspheres: dissolution rate studies and release kinetics. I. Gürkan H, et al. **J Microencapsul** 1987 Jan-Mar;4(1):39–46

Treatment of tuberculous meningitis in adults with a combination of isoniazid, rifampicin and streptomycin: a prospective study. Doğanay M, et al. **Scand J Infect Dis** 1989;21(1):81–5

[Intrapulmonary administration of streptomycin in the treatment of destructive lower-lobe pulmonary tuberculosis] Skobelev VV. **Probl Tuberk** 1988;(6):40–3 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Streptomycin-induced fever confirmed by rechallenge. Arroyo JC. **Am J Med** 1989 Jan;86(1):136–7

The assessment of recruitment in rhinoscleroma patients with hearing loss after streptomycin therapy. Golabek W, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:19–23

Unique inheritance of streptomycin-induced deafness. Higashi K. **Clin Genet** 1989 Jun;35(6):433–6

[Acoustic nerve and cerebellar damage in a child treated with streptomycin] Nakiela J. **Wiad Lek** 1988 Oct 15; 41(20):1393–5 (Eng. Abstr.) (Pol)

[Response of cortical evoked potentials to electric stimulation of the acoustic nerve in animals with damaged cochlea] D'iakonova IN, et al. **Fiziol Zh** 1989 May-Jun;35(3):8–11 (Eng. Abstr.) (Rus)

ANALOGS & DERIVATIVES

Ashimycins A and B, new streptomycin analogues. Tohma S, et al. **J Antibiot (Tokyo)** 1989 Aug;42(8):1205–12

BIOSYNTHESIS

Production of a streptomycin-Park nucleotide complex by Streptomyces griseus. Szabó I, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):58–62

BLOOD

INH and streptomycin in Ethiopian children with tuberculosis and different nutritional status. Eriksson M, et al. **Acta Paediatr Scand** 1988 Nov;77(6):890–4

GENETICS

Strain- and species-specific distribution of the streptomycin gene cluster and kan-related sequences in Streptomyces griseus. Hotta K, et al. **J Antibiot (Tokyo)** 1988 Aug; 41(8):1116–23

A mutation in the 530 loop of Escherichia coli 16S ribosomal RNA causes resistance to streptomycin. Melançon P, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9631–9

HISTORY

Selman Waksman (1888–1973), discoverer of streptomycin: a centenary review [published erratum appears in Br J Dis Chest 1988 Apr;82(2):137] Sakula A. **Br J Dis Chest** 1988 Jan;82(1):23–31 (23 ref.)

METABOLISM

The enigma of streptomycin transport. Nichols WW. **J Antimicrob Chemother** 1989 May;23(5):673–6

Aminoglycoside-O-phosphotransferase (APH (3'')) activity in a clinical isolate of Acinetobacter calcoaceticus. Elisha BG, et al. **S Afr Med J** 1989 Mar 4;75(5):220–2

PHARMACOKINETICS

[The effect of laser radiation on the permeability of eye tissue for medicinal substances] Kiselev GA. **Oftalmol Zh** 1988; (8):484–7 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Inhibition of Leishmania donovani growth by streptomycin and tobramycin. Navin TR, et al. **Ann Trop Med Parasitol** 1987 Dec;81(6):731–3

Characterization of a streptomycin-sulfonamide resistance plasmid from Actinobacillus pleuropneumoniae. Willson PJ, et al. **Antimicrob Agents Chemother** 1989 Feb; 33(2):235–8

Plasmid mediated antimicrobial resistance in Ontario isolates of Actinobacillus (Haemophilus) pleuropneumoniae. Gilbride KA, et al. **Can J Vet Res** 1989 Jan;53(1):38–42

A small nonconjugative plasmid encoded for streptomycin-resistant character in Shigella dysenteriae. Datta S, et al. **Folia Microbiol (Praha)** 1988;33(6):525–8

Two new tools: multi-purpose cloning vectors that carry kanamycin or spectinomycin/streptomycin resistance markers. Kirschman JA, et al. **Gene** 1988 Aug 15; 68(1):163–5

Effect of streptomycin on biomass and amylase production by a thermophilic strain of Humicola grisea. Gaur R, et al. **Hindustan Antibiot Bull** 1988 Aug-Nov;30(3–4):80–1

Effect of streptomycin on cellulase production by Trichoderma viride. Gaur R, et al. **Hindustan Antibiot Bull** 1988 Feb-May;30(1–2):31–2

Effect of streptomycin on extracellular proteases production by Fusarium oxysporum. Gaur R, et al. **Hindustan Antibiot Bull** 1988 Aug-Nov;30(3–4):85–6

Drug resistance of Mycobacterium tuberculosis isolated from sputum in Manipal. Rao PS, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):316–20

Type 1 pili are not necessary for colonization of the streptomycin-treated mouse large intestine by type 1-piliated Escherichia coli F-18 and E. coli K-12. McCormick BA, et al. **Infect Immun** 1989 Oct; 57(10):3022–9

Chloroplast ribosomal protein gene rps12 of Chlamydomonas reinhardtii. Wild-type sequence, mutation to streptomycin resistance and dependence, and function in Escherichia coli. Liu XQ, et al. **J Biol Chem** 1989 Sep 25; 264(27):16100–8

Differential pattern of misreading induced by streptomycin in vitro. Nègre D, et al. **J Mol Biol** 1988 Nov 5;204(1):213–6

Isolation and interspecies-transfer of a plasmid from Pasteurella multocida encoding for streptomycin resistance. Schwarz S, et al. **Med Microbiol Immunol (Berl)** 1989; 178(2):121–5

Mechanism of streptomycin resistance in Leptospira biflexa strain Urawa. Fukunaga M, et al. **Microbiol Immunol** 1988; 32(6):641–4

Ribosomal protein S12 as a site for streptomycin resistance in Nicotiana chloroplasts. Galili S, et al. **Mol Gen Genet** 1989 Aug;218(2):289–92

Mapping of chloroplast mutations conferring resistance to antibiotics in Chlamydomonas: evidence for a novel site of streptomycin resistance in the small subunit rRNA. Gauthier A, et al. **Mol Gen Genet** 1988 Oct;214(2):192–7

Streptomycin-resistant and dependent mutants of E. coli: possible indicators of two important types of DNA alteration by UV mutagenesis [letter] Bockrath R. **Mutagenesis** 1989 Jan;4(1):78–9

[Mechanisms of resistance of Salmonella derby cells to streptomycin] Ktsoian ZhA, et al. **Antibiot Khimioter** 1988 Oct;33(10):760–3 (Eng. Abstr.) (Rus)

[Characteristics of transposition of Tn7-like elements determining resistance to trimethoprim and streptomycin] Tietze E, et al. **Mol Gen Mikrobiol Virusol** 1988 Oct; (10):10–7 (Eng. Abstr.) (Rus)

[Indicators of antibody formation in patients with pulmonary tuberculosis and drug-resistant Mycobacteria] Evdokimov VN. **Probl Tuberk** 1988;(9):44–7 (Eng. Abstr.) (Rus)

POISONING

[Use of the spin label method for studying the structure of the brain membranes in cats with streptomycin poisoning] Maksina AG, et al. **Biol Nauki** 1988;(11):61–4 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Efficacy of long-acting oxytetracycline alone or in combination with streptomycin for treatment of Brucella ovis infection of rams. Marín CM, et al. **Am J Vet Res** 1989 Apr;50(4):560–3

Endocarditis due to streptomycin-susceptible Enterococcus faecalis with high-level gentamicin resistance. Spiegel CA, et al. **Arch Intern Med** 1989 Aug;149(8):1873–5

Comparative study of two regimens in the treatment of brucellosis. Rodriguez Zapata M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):360–2

Comparative trial of doxycycline plus streptomycin versus doxycycline plus rifampin for the therapy of human brucellosis. Colmenero Castillo JD, et al. **Chemotherapy** 1989;35(2):146–52

Superiority of enviomycin or streptomycin over ethambutol in initial treatment of lung disease caused by Mycobacterium avium complex. Tsukamura M, et al.

Chest 1989 May;95(5):1056–8
Streptomycin in Menière's disease: a case requiring multiple treatments. Glasscock ME 3d, et al.
Otolaryngol Head Neck Surg 1989 Mar;100(3):237–41

TOXICITY

Cellular target of streptomycin in the internal ear. Meza G, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun; 107(5–6):406–11
Further observations of vestibular ototoxicity in the chick: effects of streptomycin on the ampullary sensory epithelium. Park JC, et al. **Am J Otolaryngol** 1984 Nov–Dec;5(6):387–93
Cochlear toxicity of streptomycin in man. Sharma SC, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun;33(2):89–92
Synergistic toxicity of cyclosporin A and streptomycin in renal epithelial cell cultures. Walker RJ, et al.
Res Commun Chem Pathol Pharmacol 1988 Dec; 62(3):447–60

STREPTONIGRIN

Electron spin resonance of the semiquinone of the antitumor antibiotic streptonigrin and its metal complexes. Soedjak HS, et al. **Basic Life Sci** 1988;49:203–10
Bifunctional antitumor compounds: synthesis and characterization of a Au(III)–streptonigrin complex with thiol–modulating properties. Moustatih A, et al.
J Med Chem 1989 Jul;32(7):1426–31

ANALOGS & DERIVATIVES

Biological properties of streptonigrin derivatives. III. In vitro and in vivo antiviral and antitumor activities. Take Y, et al. **J Antibiot (Tokyo)** 1989 Jun;42(6):968–76

METABOLISM

["Chimeric" antibiotics, daunorubicin and its analogs N–acylated with bruneomycin (Streptonigrin)] Tolstikov VV, et al. **Bioorg Khim** 1989 Feb;15(2):277–80 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Isolation by streptonigrin enrichment and characterization of a transferrin–specific iron uptake mutant of Neisseria meningitidis. Dyer DW, et al. **Microb Pathog** 1987 Nov; 3(5):351–63

STREPTONIVICIN see **NOVOBIOCIN**

STREPTOTHRICINS see under **ANTIBIOTICS, AMINOGLYCOSIDE**

STREPTOVARICINS

PHARMACOLOGY

Selective killing of human T cell lymphotropic virus type I–transformed cell lines by a damavaricin Fc derivative. Ito S, et al. **J Antibiot (Tokyo)** 1989 May;42(5):779–87

STREPTOZOCIN see **STREPTOZOTOCIN**

STREPTOZOTOCIN

Effects of neonatal capsaicin treatment and streptozotocin–induced diabetes on urinary bladder function in rats. Lee CM, et al. **Neurosci Lett** 1989 May 22;100(1–3):281–6
Sequence specificity of streptozotocin–induced mutations. Mack SL, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9811–20
Resolution of streptozotocin–induced diabetes mellitus by pancreatic transplantation in inbred mice. Pollak R, et al. **Transplantation** 1988 Oct;46(4):611–3

ADMINISTRATION & DOSAGE

Genetic and environmental control of diabetes induction by multi–dose streptozotocin in two BALB/c substrains. Leiter EH, et al. **Diabetes Res** 1988 Sep;9(1):5–10
Multiple low dose streptozotocin induces systemic MHC expression in mice by triggering T cells to release IFN–gamma. Cockfield SM, et al. **J Immunol** 1989 Feb 15;142(4):1120–8
Comparison of Megace, Stilphostrol, Megace plus DES, or streptozotocin in metastatic prostatic cancer in patients with hormonal failure and prior radiotherapy. McLeod DG, et al. **Urology** 1988 Nov;32(5):431–6

ADVERSE EFFECTS

[Clinicobiological study of drug–induced renal diseases] Hadj–Aissa A, et al. **Ann Biol Clin (Paris)** 1989;47(6):346–50 (Eng. Abstr.) **(Fre)**

ANALOGS & DERIVATIVES

Drug–induced tumor progression in a rat rhabdomyosarcoma. Pauwels C, et al.
Adv Exp Med Biol 1988;233:385–93
ECOG phase II trials of MGBG, chlorozotocin, COM multidrug therapy in advanced measurable colorectal cancer. Douglass HO Jr, et al. **Am J Clin Oncol** 1988 Dec; 11(6):646–9
Response of cultured human cell lines from rhabdomyosarcoma xenografts to treatment with chloroethylnitrosoureas. Smith DG, et al. **Cancer Res** 1989 Feb 15;49(4):883–6
Ethylidene glucose–substituted new analogue of streptozotocin cannot induce diabetes: study on the basis of structure and activity relationship. Kawada J, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):153–9

PHARMACOLOGY

Chemically–initiated hyperglycemia: streptozotocin–specific T lymphocyte reactions. Gleichmann H, et al.
Adv Exp Med Biol 1988;246:93–100
Modulation of human lymphocyte O6–alkylguanine–DNA alkyltransferase by streptozotocin in vivo. Gerson SL.
Cancer Res 1989 Jun 1;49(11):3134–8
Blood pressure and metabolic effects of streptozotocin in Wistar–Kyoto and spontaneously hypertensive rats. Yamamoto J. **Clin Exp Hypertens [A]** 1988;10(6):1065–83
The characterization of the protection by nicotinamide against the action of diabetogenic nitrosoureas. Akpan JO. **Diabete Metab** 1988 Dec;14(6):693–9
Evaluation of the pancreatic B–cell function in the rat after prenatal exposure to streptozotocin or N–nitrosomethylurea. Serradas P, et al. **Diabete Metab** 1989 Jan–Feb;15(1):30–7
Decreased insulin– and glucagon–pulse amplitude accompanying beta–cell deficiency induced by streptozotocin in baboons. Goodner CJ, et al. **Diabetes** 1989 Jul; 38(7):925–31
Streptozotocin–induced deficits in sex behavior and neuroendocrine function in male rats. Steger RW, et al. **Endocrinology** 1989 Apr;124(4):1737–43
Streptozotocin: a nitric oxide carrying molecule and its effect on vasodilation. Thomas G, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):279–80
Survival and B–cell function of mouse pancreatic islets maintained in culture after concomitant exposure to streptozotocin and nicotinamide. Strandell E, et al.
Exp Clin Endocrinol 1989 May;93(2–3):219–24
Effect of streptozotocin on transaminases, creatinine and urea in serum of rats. Voss C, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):37–42
Early enhanced beta cell replication in normoglycaemic Wistar rats in response to a subdiabetogenic dose of streptozotocin. Ziegler B, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):1–10
Enhancement by streptozotocin of O2– radical generation by the xanthine oxidase system of pancreatic beta–cells. Nukatsuka M, et al. **FEBS Lett** 1988 Nov 7;239(2):295–8
Augmentation of streptozotocin–induced hyperglycemia in mice by prior treatment with complete Freund's adjuvant. Kohnert KD, et al. **Int J Pancreatol** 1989 Apr;4(3):321–33
Importance of diabetes in inhibition of pancreatic cancer by streptozotocin. Bell RH Jr, et al. **J Surg Res** 1989 May; 46(5):515–9
Collagen production in bone and cartilage after short–term exposure to streptozotocin. Spanheimer RG. **Matrix** 1989 Mar;9(2):172–4
The effects of streptozotocin on rates of glucose utilization, oxidation, and production in the sheep fetus. Hay WW Jr, et al. **Metabolism** 1989 Jan;38(1):30–7
Functional characteristics of cultured mouse pancreatic islets following exposure to different streptozotocin concentrations. Strandell E, et al. **Mol Cell Endocrinol** 1988 Sep;59(1–2):83–91
DNA repair mechanisms affecting cytotoxicity by streptozotocin in E. coli. Fram RJ, et al. **Mutat Res** 1989 Sep;218(2):125–33
Effects of streptozotocin exposure in vitro on the replication and repair of DNA in fetal rat pancreatic islet cells. Sandler S, et al. **Pancreas** 1989;4(1):53–8
Use of fetal streptozotocin injection to determine the role of normal levels of fetal insulin in regulating uteroplacental and umbilical glucose exchange. Hay WW Jr, et al.
Pediatr Res 1988 Sep;24(3):312–7
Serum androgen levels after streptozotocin administration in the male rat. Centol I, et al. **Rev Esp Fisiol** 1988 Mar; 44(1):31–4
Correlations between blood glucose levels and bromodeoxyuridine labelling indices of pancreatic islet cells following streptozotocin administration to pregnant Syrian golden hamsters. McDowell EM, et al.
Virchows Arch [B] 1989;57(4):223–30
[Streptozocin–sensitized lymphocytes suppress the glucose–stimulated insulin secretion of the islands of Langerhans] Linn T, et al. **Immun Infekt** 1988 Dec; 16(6):226–9 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Results of a randomized trial comparing BCNU plus radiotherapy, streptozotocin plus radiotherapy, BCNU plus hyperfractionated radiotherapy, and BCNU following misonidazole plus radiotherapy in the postoperative treatment of malignant glioma. Deutsch M, et al.
Int J Radiat Oncol Biol Phys 1989 Jun;16(6):1389–96

TOXICITY

Some characteristics of chemically–induced beta–cell lesions as possible contributing factors in diabetes. Grodsky GM, et al. **Adv Exp Med Biol** 1988;246:339–46
Streptozotocin toxicity to cultured pancreatic islets of the Syrian hamster. Zucker PF, et al. **Cell Biol Toxicol** 1988 Sep;4(3):349–56
Prevention of low dose streptozotocin induced diabetes by muramyl dipeptide. Leclerc C, et al.
Int J Immunopharmacol 1988;10(3):293–8
[Importance of db gene for the development of low dose streptozotocin diabetes in C57BL/KsJ mice] Blokh KO, et al. **Probl Endokrinol (Mosk)** 1988 Sep–Oct;34(5):73–5 (Eng. Abstr.) **(Rus)**

STREPTOZOTOCIN DIABETES see **DIABETES MELLITUS, EXPERIMENTAL**

STRESS

The stress response to surgery: release mechanisms and the modifying effect of pain relief. Kehlet H.
Acta Chir Scand Suppl 1989;550:22–8 (75 ref.)
Effect of melittin on pituitary–adrenal responsiveness to stress. Dunn JD, et al. **Acta Endocrinol (Copenh)** 1988 Nov; 119(3):339–44
Mechanisms of physical and emotional stress. Based on the proceedings of an NIH symposium. November 6–8, 1986, Bethesda, Maryland. **Adv Exp Med Biol** 1988;245:1–530
Vasodepressor syncope induced by lower body negative pressure: possible relevance to +Gz–stress training—a case report. Hilton F, et al. **Aviat Space Environ Med** 1989 Jan; 60(1):61–3
Local bone mineral response to brief exercise that stresses the skeleton. Beverly MC, et al. **BMJ** 1989 Jul 22; 299(6693):233–5
Abstracts of the International Conference on the Biology of Stress Ulcers. May 22–24, 1988, Lake Arrowhead, California. **Dig Dis Sci** 1988 Nov;33(11):1473–82
Gastric stress ulcers. Levinson MJ. **Hosp Pract [Off]** 1989 Mar 30;24(3A):59–63, 67–8
Biosocial responses to seasonal food stress in highland Peru. Leonard WR, et al. **Hum Biol** 1989 Feb;61(1):65–85
Occupational health, stress, and work organization in Australia. Deves L, et al. **Int J Health Serv** 1989; 19(2):351–63 (29 ref.)
Do nurses smoke because of stress? Elkind AK.
J Adv Nurs 1988 Nov;13(6):733–45
Treatment of upper gastro–intestinal bleeding with the H2–receptor antagonist famotidine. Aoki T.
J Int Med Res 1989;17 Suppl 1:32A–40A
Endogenous opioid actions and effects of environmental disturbance on parturition and oxytocin secretion in rats. Leng G, et al. **J Reprod Fertil** 1988 Sep;84(1):345–56
Health, culture and the nature of nerves: introduction. Davis DL, et al. **Med Anthropol** 1989 May;11(1):1–13
The variable character of nerves in a Newfoundland fishing village. Davis DL. **Med Anthropol** 1989 May;11(1):63–78
Words of fear, words of power: nerves and the awakening of political consciousness. Lock M. **Med Anthropol** 1989 May;11(1):79–90
Health, culture and the nature of nerves: a critique. Low SM. **Med Anthropol** 1989 May;11(1):91–5
Paradigms underlying the study of nerves as a popular illness term in eastern Kentucky. Van Schaik E.
Med Anthropol 1989 May;11(1):15–28
Thermal, metabolic, and cardiovascular changes in men and women during cold stress. Graham TE.
Med Sci Sports Exerc 1988 Oct;20(5 Suppl):S185–92 (36 ref.)
Factors affecting cold acclimation and thermogenesis in man. Leblanc J. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S193–6 (13 ref.)
The effect of body cooling on oxygen transport during exercise. Pendergast DR. **Med Sci Sports Exerc** 1988 Oct; 20(5 Suppl):S171–6 (36 ref.)
The involvement of opioid peptides in stress–induced analgesia in the slug Arion ater. Dalton LM, et al.
Peptides 1989 Jan–Feb;10(1):9–13
Chronic stress attenuation of alpha 2–adrenoceptor reactivity is reversed by naltrexone. Cancela LM, et al.
Pharmacol Biochem Behav 1988 Sep;31(1):33–5
The effects of buspirone, a selective anxiolytic, on stress ulcer formation in rats. Sullivan RM, et al.
Pharmacol Biochem Behav 1988 Oct;31(2):317–9
Stressful conditions of work: the participative ergonomics approach. Corlett EN, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:541–8 (3 ref.)
Occupational stressors, biological stress and workers' health. Levi L. **Sangyo Ika Daigaku Zasshi** 1989 Jun 1;11(2):229–45 (48 ref.)
Combined effects of job strain and social isolation on cardiovascular disease morbidity and mortality in a random sample of the Swedish male working population. Johnson JV, et al. **Scand J Work Environ Health** 1989 Aug; 15(4):271–9
[Questions of stress in children in sports training schools] Kučera M, et al. **Cesk Pediatr** 1989 Mar;44(3):178–9 **(Cze)**
[Shift work can be hard on health] Kuipers EJ, et al.
Ned Tijdschr Geneeskd 1989 Jul 1;133(26):1297–9 **(Dut)**
[The significance of the family as primary caregiver for the aged in need of assistance] Janssen T.
Tijdschr Gerontol Geriatr 1988 Sep;19(4):185–91 (Eng. Abstr.) **(Dut)**

[Cardiovascular stress in workers of porphyry mines] Zanettini R, et al. **Med Lav** 1988 May–Jun;79(3):211–8 (Eng. Abstr.) **(Ita)**

[Endocrino–metabolic response to anesthesia and surgical stress] Sarcinelli L. **Minerva Chir** 1989 Jan 31;44(1–2):233–5 **(Ita)**

[Acute multiple duodenal ulcers. Diagnostic and therapeutic management] Jukemura J, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Mar–Apr; 43(2):117–20 (Eng. Abstr.) **(Por)**

BLOOD

Effect of acute ether or restraint stress on plasma corticotropin–releasing hormone, vasopressin and oxytocin levels in the rat. Hashimoto K, et al. **Acta Med Okayama** 1989 Jun;43(3):161–7

Hormonal responses to the stress of exercise. Luger A, et al. **Adv Exp Med Biol** 1988;245:273–80

Plasma–amino acid profiles in sepsis and stress. Vente JP, et al. **Ann Surg** 1989 Jan;209(1):57–62

Plasma luteinizing hormone levels in normal and prenatally stressed male and female rat fetuses and their mothers. Salisbury R, et al. **Biol Reprod** 1989 Jan;40(1):111–7

Neonatal capsaicin treatment of rats reduces ACTH secretion in response to peripheral neuronal stimuli but not to centrally acting stressors. Donnerer J, et al. **Br J Pharmacol** 1988 Jul;94(3):647–52

The response of plasma oxytocin to surgical stress. Nussey SS, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):277–82

Changes in the adrenal steroidogenic responsiveness of the mallard duck (Anas platyrhynchos) during early post–natal development. Holmes WN, et al. **Comp Biochem Physiol [A]** 1989;92(3):403–8

Relationship of visceral proteins to nutritional status in chronic and acute stress. Boosalis MG, et al. **Crit Care Med** 1989 Aug;17(8):741–7

Steroidogenic properties of isolated adrenocortical cells from Japanese quail selected for high serum corticosterone response to immobilization. Carsia RV, et al. **Domest Anim Endocrinol** 1988 Jul;5(3):231–40

Depletion of fibrinolysis activators as a result of continuous stress. Lyutova LV, et al. **Folia Haematol (Leipz)** 1988; 115(3):356–60

Plasma catecholamine concentrations in rainbow trout (Salmo gairdneri) at rest and after anesthesia and surgery. Gingerich WH, et al. **Gen Comp Endocrinol** 1989 Mar; 73(3):390–7

Effect of flickering light stress on certain biochemical parameters in rats. Lalitha R, et al. **Indian J Physiol Pharmacol** 1988 Jul–Sep;32(3):182–6

Biochemical changes in acute noise stress in rats. Prabhakaran K, et al. **Indian J Physiol Pharmacol** 1988 Apr–Jun; 32(2):100–4

Neuroendocrine effects of diazepam in normal subjects following brief painful stress. Roy–Byrne PP, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):331–5

Aging, stress, and chronic disease interact to suppress plasma testosterone in Syrian hamsters. Ottenweller JE, et al. **J Gerontol** 1988 Nov;43(6):M175–80

Changes in platelet count and related parameters in SART–stressed mice and the action of administered neurotropin. Hata T, et al. **Jpn J Pharmacol** 1988 Aug; 47(4):349–56

Studies on the energy expenditure following surgical stress (II. The correlation between energy expenditure and hormonal changes). Naruko M, et al. **Jpn J Surg** 1988 Nov; 18(6):694–704

Does stressful venepuncture explain increased midnight serum cortisol concentration? [letter] Ginsberg L, et al. **Lancet** 1988 Nov 26;2(8622):1257

Influence of intensity and duration of exposure to various stressors on serum TSH and GH levels in adult male rats. Armario A, et al. **Life Sci** 1989;44(3):215–21

The effects of immobilization stress on serum triglycerides, nonesterified fatty acids, and total cholesterol in male rats after dietary modifications. Hershock D, et al. **Life Sci** 1989; 45(2):157–65

Examination stress, platelet peripheral benzodiazepine binding sites, and plasma hormone levels. Karp L, et al. **Life Sci** 1989;44(16):1077–82

Age–dependent effects of chronic stress on ACTH and corticosterone responses to an acute novel stress. Brodish A, et al. **Neuroendocrinology** 1989 May;49(5):496–501

Studies of the regulation of the hypothalamic–pituitary–adrenal axis in sheep with hypothalamic–pituitary disconnection. I. Effect of an audiovisual stimulus and insulin–induced hypoglycemia. Engler D, et al. **Neuroendocrinology** 1988 Nov;48(5):551–60

i.r. Beta–endorphin, corticosterone, cholesterol and triglyceride concentrations in rat plasma after stress, cingulotomy or both. Recher H, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):75–9

Plasma catecholamine and corticosterone responses to predictable and unpredictable noise stress in rats. De Boer SF, et al. **Physiol Behav** 1989 Apr;45(4):789–95

Alterations in stress–induced prolactin release in adult female and male rats exposed to stress, in utero. Kinsley CH, et al. **Physiol Behav** 1989 May;45(5):1073–6

Habituation of sympathetic–adrenal medullary responses following exposure to chronic intermittent stress. Konarska M, et al. **Physiol Behav** 1989 Feb;45(2):255–61

Physiological responses to acute stress in alloxan and streptozotocin diabetic rats. Lee JH, et al. **Physiol Behav** 1989 Mar;45(3):483–9

Blood coagulation and fibrinolysis after confinement hypokinesia. Groza P, et al. **Physiologie** 1988 Oct–Dec; 25(4):161–8

[Plasma cortisol and serum thyroxine levels following burn stress] Jin HS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):291–3 (Eng. Abstr.) **(Chi)**

[Plasma platelet–derived factors in patients with systemic scleroderma—alterations of plasma beta–thromboglobulin and platelet factor 4 levels after vibration stress on bilateral hands] Maeda M, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Nov;98(12):1205–9 (Eng. Abstr.) **(Jpn)**

[The role of the spleen in regulating the content of 11–hydroxycorticosteroids and biogenic amines of the blood plasma in rats under stress] Tiuleneva GV, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):47–50 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Benzodiazepine antagonism does not provoke a stress response. White PF, et al. **Anesthesiology** 1989 Apr; 70(4):636–9

Relationship of the hypothalamic–pituitary–adrenal axis with chemically induced immunomodulation. I. Stress–like response after exposure to T–2 toxin. Taylor MJ, et al. **Toxicology** 1989 Jun 1;56(2):179–95

[Changes in cerebellar iron metabolism and their prevention by allopurinol in oxidative stress related to acute ethanol administration in rats] Rouach H, et al. **C R Soc Biol (Paris)** 1989;183(1):40–7 (Eng. Abstr.) **(Fre)**

[Is ethanol a stressogenic factor for rats with a developed alcohol motivation?] Vedernikova NN, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):456–8 (Eng. Abstr.) **(Rus)**

[Study of the combined effect of carbon monoxide, nitrogen dioxide and hydrocarbons on the body of the rat] Vyskochil A, et al. **Gig Sanit** 1989 Mar;(3):69–71 **(Rus)**

COMPLICATIONS

Antacid in the prevention of upper gastrointestinal bleeding in burns. Steen J, et al. **Acta Chir Scand Suppl** 1988;547:93–5

Neurophysiological findings in headache patients. Psychogalvanic reflex investigation in migraineurs and tension headache patients. Covelli V, et al. **Acta Neurol (Napoli)** 1987 Oct–Dec;9(5–6):354–8

Alterations in gastric mucosal microvascular endothelium in a stressed condition—relevance to gastric ulcerogenesis. Oda M, et al. **Adv Exp Med Biol** 1988;242:161–75 (39 ref.)

Side effects of stress bleeding prophylaxis. Tryba M. **Am J Med** 1989 Jun 9;86(6A):85–93 (69 ref.)

Causes of elder abuse: caregiver stress versus problem relatives. Pillemer K, et al. **Am J Orthopsychiatry** 1989 Apr;59(2):179–87

Thomas G Orr Memorial Lecture. Pathogenesis, prophylaxis, and treatment of stress gastritis. Cheung LY. **Am J Surg** 1988 Dec;156(6):437–40 (26 ref.)

Prostaglandin–induced gastric mucosal protection against stress injury. Absence of a relationship to tissue glutathione levels. Victor BE, et al. **Ann Surg** 1989 Mar;209(3):289–96

The effect of verapamil in patients with asymptomatic stress–induced ischemia. Zilberman A, et al. **Arch Intern Med** 1989 May;149(5):1062–4

Stress–induced behavioral depression in the rat is associated with a decrease in GABA receptor–mediated chloride ion flux and brain benzodiazepine receptor occupancy. Drugan RC, et al. **Brain Res** 1989 May 15;487(1):45–51

Genetic influences on brain stimulation–produced analgesia in mice. I. Correlation with stress–induced analgesia. Marek P, et al. **Brain Res** 1989 Jun 5;489(1):182–4

Participation of serotonergic mechanisms in the anticonvulsant effect of stress in mice treated with pentylenetetrazol. De–Lima TC, et al. **Braz J Med Biol Res** 1988;21(2):333–5

Nonfocal scintigraphic lesions in military recruits with lower leg pain [letter] Goldfarb R, et al. **Clin Orthop** 1988 Dec; (237):286–7

The effect of pretraining sports activity on the incidence of stress fractures among military recruits. A prospective study. Swissa A, et al. **Clin Orthop** 1989 Aug;(245):256–60

Prostaglandin protection against hemorrhage–induced gastric stress ulceration in the rat. Ranta–Knuuttila T, et al. **Dig Dis Sci** 1989 Jul;34(7):1028–34

Preventive and curative effects of prostaglandins on stress ulcer in rats. Application of endoscopic observation. Yoshimura H, et al. **Dig Dis Sci** 1989 Mar;34(3):436–44

Acute gastritis occurring within 24 hours of severe head injury. Brown TH, et al. **Gastrointest Endosc** 1989 Jan–Feb; 35(1):37–40

Stress ulceration in the critically ill [letter] Clochesy JM. **Heart Lung** 1989 Jan;18(1):103

Effects of stress transmission pathways on acute ulcerogenesis in rats under cold–restraint stress. Kodama O, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):57–62

Lesions of the anteroventral third ventricle and development of stress–induce hypertension in the borderline hypertensive rat. Sanders BJ, et al. **Hypertension** 1989 Jun; 13(6 Pt 2):817–21

Role of dopaminergic mechanisms in the central amygdalar nucleus in the regulation of stress–induced gastric ulcer formation in rats. Ray A, et al. **Indian J Med Res** 1989 Jun;90:224–8

Stress–induced disturbances of the gastro–intestinal tract in children. Ricour C. **Intensive Care Med** 1989;15 Suppl 1:S32–6

Impairment of gastric microcirculation in stress. Kitajima M, et al. **J Clin Gastroenterol** 1988;10 Suppl 1:S120–8

Effects of water–immersion restraint stress on rat gastric epithelial cell loss and migration. Kuwayama H, et al. **J Clin Gastroenterol** 1988;10 Suppl 1:S78–83

Gastric surface epithelial cell damage induced by restraint and water–immersion stress in rats. Protective effects of 16,16–dimethyl–prostaglandin E2. Ohno T, et al. **J Clin Gastroenterol** 1988;10 Suppl 1:S46–52

Anger expression and life stress among blacks: their role in physical health. Broman CL, et al. **J Natl Med Assoc** 1988 Dec;80(12):1329–34

Stress in patients with pain in the muscles of mastication and the temporomandibular joints. Lundeen TF, et al. **J Oral Rehabil** 1988 Nov;15(6):631–7

Muscle contraction headache: the importance of depression and anxiety [letter] Marcer D. **J R Soc Med** 1988 Nov; 81(11):677

The preventive and therapeutic effects of vagotomy for stress ulcer—experimental studies on the aspects of gastric submucosal blood flow and ulcer index. Watanabe Y, et al. **Jpn J Surg** 1988 Jul;18(4):446–54

Stress and acute cardiovascular events [letter] Birrell PC, et al. **Med J Aust** 1988 Nov 7;149(9):510

Trauma as an etiology of parkinsonism: opinions in the nineteenth century [letter] Keppel Hesselink JM. **Mov Disord** 1989;4(3):283–5

Nutritional support: a prophylaxis against stress bleeding after spinal cord injury. Kuric J, et al. **Paraplegia** 1989 Apr; 27(2):140–5

Strain, age, but not gender, influence ulcer severity induced by water–restraint stress. Paré WP. **Physiol Behav** 1989 Mar;45(3):627–32

Adrenovascular alterations from neurogenic stress modified by denervation of the adrenal gland in rat. Gonzalo–Sanz LM, et al. **Rev Esp Fisiol** 1989 Mar;45(1):1–7

Adrenovascular lesions from neurogenic stress modified by suppression of nervous centres in rat. Gonzalo–Sanz LM, et al. **Rev Esp Fisiol** 1989 Mar;45(1):9–14

Prevention of stress ulcer by intragastric glucose. An experimental study. Oguz M, et al. **S Afr Med J** 1989 Mar 18;75(6):284–6

Erosive prepyloric changes—a manifestation of stress? Nesland A, et al. **Scand J Gastroenterol** 1989 Jun; 24(5):522–8

Disruption of the posterior pelvic ring caused by vertical shear. Webb LX, et al. **South Med J** 1988 Oct; 81(10):1217–21

Hyperglycemia is a stress response in acute stroke. Woo E, et al. **Stroke** 1988 Nov;19(11):1359–64

Monitoring gastric pH levels. Durham RM, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):14–6

Glaucomatocyclitic crises and systemic disease: peptic ulcer, other gastrointestinal disorders, allergy and stress. Knox DL. **Trans Am Ophthalmol Soc** 1989;86:473–94; discussion 494–5

[Working hypothesis on the effect of stress in the development of the premenstrual syndrome] Fuchs V, et al. **Cesk Gynekol** 1989 Mar;54(2):134–49 (134 ref.) **(Cze)**

[Consensus development conference in resuscitation and emergency medicine: prevention of stress gastroduodenal hemorrhage] **Ann Fr Anesth Reanim** 1989;8(2):6A (0 ref.) **(Fre)**

[Prevention of stress hemorrhage in an internal medicine intensive care station: sucralfate versus ranitidine] Laggner AN, et al. **Anaesthesist** 1988 Nov;37(11):704–10 (Eng. Abstr.) **(Ger)**

[Long–term hypotensive effects of substance P on the stress induced hypertension of primates] Stechmesser G, et al. **Biomed Biochim Acta** 1988;47(3):265–71 (Eng. Abstr.) **(Ger)**

[Prevention of stress ulcer and nosocomial pneumonia] Koop H. **Z Gastroenterol** 1988 Jun;26(6):337–8 **(Ger)**

[Modeling of dose–response relations in exposure–related changes of the locomotor system] Enderlein G, et al. **Z Gesamte Hyg** 1989 Apr;35(4):215–8 (Eng. Abstr.) **(Ger)**

[Assessment and evaluation of stresses—progress and trends in East Germany] Rublack K, et al. **Z Gesamte Hyg** 1988 May;34(5):287–91 (20 ref.) (Eng. Abstr.) **(Ger)**

[Facilitation of tumor metastasis to the lung by operative stress in the rat—influence of adrenocortical hormones and preoperative administration of OK–432] Kida H, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1692–8 (Eng. Abstr.) **(Jpn)**

[The role of epidural anesthesia in preventing the development of acute postoperative erosion and ulcers of the stomach and duodenum] Chepkii LP, et al. **Klin Khir** 1988;(12):27–9 (Eng. Abstr.) **(Rus)**

[Stress–induced ulcers in thoraco–abdominal injuries] Kharitonov VA, et al. **Klin Khir** 1989;(4):68–9 **(Rus)**

[Prevention of acute erosions and ulcers of the esophagus, stomach and duodenum after surgery] Khokholia VP, et al. **Vestn Khir** 1988 Dec;141(12):10–7 (Eng. Abstr.) **(Rus)**

[Acute gastroduodenal ulcers in the early postoperative period] Kurygin AA, et al. **Vestn Khir** 1989 Jan;142(1):11–3

(Eng. Abstr.) (Rus)
[Clinical systematization of diseases of the locomotor apparatus caused by functional overstrain] Kol'tsov VA. **Vrach Delo** 1988 Dec;(12):89–91 (Eng. Abstr.) (Rus)

DIAGNOSIS

[Evaluation of stress indicators in 2 groups of video display terminal operators] Modiano A, et al. **G Ital Med Lav** 1987 Jan;9(1):31–7 (Eng. Abstr.) (Ita)
[Possibilities of identifying patients at risk for stress ulcer] Serdev N, et al. **Khirurgiia (Sofiia)** 1988;41(3):11–7 (Eng. Abstr.) (Rus)
[Presymptomatic detection of autonomic stress during general anesthesia in heart surgery] Darbinian TM, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):4–10 (Eng. Abstr.) (Rus)

DRUG THERAPY

Treatment with tyrosine, a neurotransmitter precursor, reduces environmental stress in humans. Banderet LE, et al. **Brain Res Bull** 1989 Apr;22(4):759–62
Branched-chain amino acid support of stressed patients. Oki JC, et al. **DICP** 1989 May;23(5):399–410 (27 ref.)
Do parenteral nutrition solutions with high concentrations of branched-chain amino acids offer significant benefits to stressed patients? Teasley KM, et al. **DICP** 1989 May; 23(5):411–6 (34 ref.)
Changes in brain biogenic amines under influence of an indigenous drug, geriforte, following immobilization stress. Upadhya L, et al. **Indian J Exp Biol** 1988 Nov;26(11):911–2
Respiratory effects of epidural morphine and sufentanil in the absence and presence of chlordiazepoxide. Van den Hoogen RH, et al. **Pain** 1989 Apr;37(1):103–10
Met-enkephalin, injected during the early phase of stress, attenuates stress-induced increases in noradrenaline release in rat brain regions. Tanaka M, et al.
Pharmacol Biochem Behav 1989 Mar;32(3):791–5
Alprazolam reduces stress-induced mortality in cardiomyopathic hamsters. Tapp WN, et al.
Pharmacol Biochem Behav 1989 Jan;32(1):331–6
[Effects of ulinastatin on operative stress in major surgery] Ota K, et al. **Masui** 1989 Apr;38(4):540–5 (Eng. Abstr.) (Jpn)
[Effect of the N-terminal fragment of substance P1–4 on the somatic manifestations of the stress reaction and on the catecholamine content of the adrenals in rats] Arefolov VA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):201–4 (Eng. Abstr.) (Rus)
[Carnosine prevents the activation of free-radical lipid oxidation during stress] Guliaeva NV, et al.
Biull Eksp Biol Med 1989 Feb;107(2):144–7 (Eng. Abstr.) (Rus)
[9,12,13-Trihydroxy-10(E)-octadecenoic and 9,12,13-trihydroxy-10,11-epoxy-octadecanoic acids—new antistress substances isolated from licorice] Shirinian EA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov–Dec;(6):932–6 (Eng. Abstr.) (Rus)
[Antistressor effect of ethanolamine in acute alcoholic intoxication] Bykov IL, et al. **Probl Endokrinol (Mosk)** 1989 May–Jun;35(3):72–4 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Acetylcholinesterase and choline acetyltransferase activity in some hypothalamic nuclei under immobilization stress in rats. Fatranská M, et al. **Endocrinol Exp** 1989 Mar; 23(1):3–10
Changes of dipeptidyl peptidase (DP IV) activity in the T lymphocytes of rats following administration of ACTH, dexamethasone and opiates. Korányi L, et al.
Exp Clin Endocrinol 1989 Apr;93(1):61–8
Serum DBH in three forms of acute stress. Ogihara T, et al. **Life Sci** 1974 Sep 1;15(5):923–30
Stress causes an increase in endogenous monoamine oxidase inhibitor (tribulin) in rat brain. Bhattacharya SK, et al.
Neurosci Lett 1988 Oct 5;92(2):218–21
[Reaction of intestinal enzymes to exogenous hydrocortisone in newborn rats after prenatal or first post-birth day stress] Egorova VV, et al. **Dokl Akad Nauk SSSR** 1988; 302(4):988–91 (Rus)
[Activity of enkephalin- and angiotensin II-forming peptidases in the brain and peripheral tissues in chronic stress due to hypergravity] Gomazkov OA, et al.
Patol Fiziol Eksp Ter 1988 Sep–Oct;(5):52–7 (Eng. Abstr.) (Rus)
[The role of changes in catalytic properties of brain monoamine oxidase in the response to extreme conditions (review of the literature)] Goroshinskaia IA.
Vopr Med Khim 1989 Mar–Apr;35(2):2–10 (68 ref.) (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

[The method for stress assessment of workers (Part 1). Stress score by self-rating method] Natsume M, et al.
Sangyo Igaku 1988 Jul;30(4):266–79 (Eng. Abstr.) (Jpn)

ETHNOLOGY

Greek women and broken nerves in Montreal. Dunk P.
Med Anthropol 1989 May;11(1):29–45
The multiple meanings of ataques de nervios in the Latino community. Guarnaccia PJ, et al. **Med Anthropol** 1989 May;11(1):47–62

ETIOLOGY

The modifying effect of anesthetic technique on the metabolic and endocrine responses to anesthesia and surgery. Kehlet H. **Acta Anaesthesiol Belg** 1988;39(3):143–6 (17 ref.)
The relevance of metabolic and endocrine responses to anesthesia and surgery. Salo M. **Acta Anaesthesiol Belg** 1988;39(3):133–41 (55 ref.)
The relevance of immunologic responses to anesthesia and surgery. Watkins J. **Acta Anaesthesiol Belg** 1988; 39(3):129–32 (12 ref.)
Anesthetic technique and surgical convalescence. Kehlet H. **Acta Chir Scand Suppl** 1989;550:182–8; discussion 188–91 (37 ref.)
Coping with stress. Antelyes J. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1222–3
Health and occupational correlates of perceived occupational stress in symphony orchestra musicians. Middlestadt SE, et al. **J Occup Med** 1988 Sep;30(9):687–92
Soman toxicity during and after exposure to different environmental temperatures. Wheeler TG.
J Toxicol Environ Health 1989;26(3):349–60
The ravelled sleeve of care. Managing the stresses of residency training. Colford JM Jr, et al. **JAMA** 1989 Feb 10;261(6):889–93
Experiences of a stress clinic. Wheatley D.
Postgrad Med J 1988;64 Suppl 2:36–9
The gut: a central organ after surgical stress. Wilmore DW, et al. **Surgery** 1988 Nov;104(5):917–23 (38 ref.)
[The change in stress hormones after open heart surgery] Ikeda T, et al. **Masui** 1988 Sep;37(9):1070–3 (Eng. Abstr.) (Jpn)
[Sleep disturbances complicated by surgical stress; a questionnaire survey of 50 patients] Yasuma F, et al.
Masui 1989 Jan;38(1):66–70 (Eng. Abstr.) (Jpn)
[The combined effect on the human body of general and local vibration, noise and work stress characteristic of the work sites of agricultural equipment operators] Cherniuk VI, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):47–8 (Rus)
[Surgical trauma and the adequacy of the anesthesiologic service] Shifrin GA, et al. **Klin Khir** 1988;(12):45–8 (66 ref.) (Rus)
[Modification of the stress model for large groups of rats] Slepushkin VD, et al. **Patol Fiziol Eksp Ter** 1988 May–Jun; (3):66–8 (Rus)

GENETICS

DNA synthetic ability in cerebella from temperature and handling stressed neonatal rats. Griffin WS, et al.
Brain Res Bull 1978 Jul–Aug;3(4):365–7
Racial differences in stress-induced cardiovascular reactivity and hypertension: current status and substantive issues. Anderson NB. **Psychol Bull** 1989 Jan;105(1):89–105 (167 ref.)

IMMUNOLOGY

Host defense mechanisms in surgical patients: effect of surgery and trauma. Meakins JL.
Acta Chir Scand Suppl 1989;550:43–51; discussion 51–3 (29 ref.)
Effect of sound stress on the migration of prethymic stem cells. Bomberger CE, et al. **Ann N Y Acad Sci** 1988; 540:700–1
Shock-induced modulation of lymphocyte responsiveness and natural killer activity: differential mechanisms of induction. Cunnick JE, et al. **Brain Behav Immun** 1988 Jun; 2(2):102–13
Stress-induced decline in immune responsiveness in C3H/HeJ mice: relation to endocrine alterations and tumor growth. Kandil O, et al. **Brain Behav Immun** 1988 Mar; 2(1):32–49
Suppression of specific antibody production by inescapable shock: stability under varying conditions. Laudenslager ML, et al. **Brain Behav Immun** 1988 Jun;2(2):92–101
Critical periods associated with stressor effects on antibody titers and on the plaque-forming cell response to sheep red blood cells. Zalcman S, et al. **Brain Behav Immun** 1988 Sep;2(3):254–66
Splenic immune responses following treadmill exercise in mice. Hoffman-Goetz L, et al.
Can J Physiol Pharmacol 1988 Nov;66(11):1415–9
Effect of psychosocial stress on natural killer cell activity. Schlesinger M, et al. **Cancer Detect Prev** 1988;12(1–6):9–14
Changes of immunoregulatory cells induced by acoustic stress in patients with systemic lupus erythematosus, sarcoidosis, and in healthy controls. Hinrichsen H, et al. **Eur J Clin Invest** 1989 Aug;19(4):372–7
Depression of nonadaptive immunity after surgical stress: influence on metastatic spread. Zöller M, et al.
Invasion Metastasis 1989;9(1):46–68
Stress alters immune function and disease resistance in chinook salmon (Oncorhynchus tshawytscha). Maule AG, et al. **J Endocrinol** 1989 Jan;120(1):135–42
Stress and immunity: an integrated view of relationships between the brain and the immune system. Dantzer R, et al. **Life Sci** 1989;44(26):1995–2008 (108 ref.)
Effect of preoperative stress on serum immunoglobulin levels. Sane AS, et al. **Panminerva Med** 1988 Jul–Sep;30(3):181–3
Stress and immunity: a unifying concept. Griffin JF.
Vet Immunol Immunopathol 1989 Feb;20(3):263–312 (261 ref.)
[The effect of immobilization stress on primary humoral immune response in white rats] Balutsov M.
Eksp Med Morfol 1989;28(2):29–32 (Eng. Abstr.) (Bul)
[Immunomodulatory effect of ginsenoside on cell-mediated immunity with operative stress in the mouse] Yang GZ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Aug;8(8):479–80, 454 (Eng. Abstr.) (Chi)
[Surgical stress and immunosuppression in cancer patients] Toge T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1115–21 (Eng. Abstr.) (Jpn)

METABOLISM

Brain regional and adrenal monoamine concentrations and behavioral responses to stress in alcohol-preferring AA and alcohol-avoiding ANA rats. Korpi ER, et al. **Alcohol** 1988 Sep–Oct;5(5):417–25
Postmortem metabolic indices of antemortem adrenergic stimulation. Ianuzzo CD, et al.
Am J Forensic Med Pathol 1989 Mar;10(1):42–6
Stress and enhanced dopamine utilization in the frontal cortex: the myth and the reality. Antelman SM, et al.
Ann N Y Acad Sci 1988;537:262–72 (25 ref.)
Stress-related activation of cerebral dopaminergic systems. Dunn AJ. **Ann N Y Acad Sci** 1988;537:188–205
Stress and the mesocorticolimbic dopamine systems. Roth RH, et al. **Ann N Y Acad Sci** 1988;537:138–47 (24 ref.)
An in vivo voltammetric study of the response of mesocortical and mesoaccumbens dopaminergic neurons to environmental stimuli in strains of rats with differing levels of emotionality. Scatton B, et al.
Ann N Y Acad Sci 1988;537:124–37 (45 ref.)
Lack of stress-induced neuroendocrine changes after prolonged drinking of acid water in the rat. Preziosi P, et al. **Arch Toxicol Suppl** 1989;13:448–51
The major heat-shock protein hsp 68 is not induced by stress in mouse erythroleukemia cell lines. Aujame L.
Biochem Cell Biol 1988 Jul;66(7):691–701
Postnatal recruitment of brown adipose tissue is induced by the cold stress experienced by the pups. An analysis of mRNA levels for thermogenin and lipoprotein lipase. Obregón MJ, et al. **Biochem J** 1989 Apr 15;259(2):341–6
Stress- and morphine-induced elevations of plasma and tissue cholesterol in mice: reversal by naltrexone. Bryant HU, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3777–80
Heat shock stress is deleterious to CNS cultured neurons microinjected with anti-HSP70 antibodies. Khan NA, et al. **Biol Cell** 1989;65(2):199–202
Leucine kinetics in surgical patients, I: A study of the effect of surgical 'stress'. Harrison RA, et al. **Br J Surg** 1989 May; 76(5):505–8
Stressful environmental stimuli increase extracellular DOPAC levels in the prefrontal cortex of hypoemotional (Roman high-avoidance) but not hyperemotional (Roman low-avoidance) rats. An in vivo voltammetric study. D'Angio M, et al. **Brain Res** 1988 Jun 7;451(1–2):237–47
Single or repeated mild stress increases synthesis and release of hypothalamic corticotropin-releasing factor. Haas DA, et al. **Brain Res** 1988 Oct 4;461(2):230–7
Alterations of muscarinic cholinergic receptors in the hippocampal formation of stressed rat: in vitro quantitative autoradiographic analysis. Mizukawa K, et al.
Brain Res 1989 Jan 23;478(1):187–92
Mild stress stimulates rat hippocampal glucose utilization transiently via NMDA receptors, as assessed by lactography. Schasfoort EM, et al. **Brain Res** 1988 Dec 13;475(1):58–63
Endogenous opioid system down-regulation during hibernation in amphibians. Stevens CW, et al.
Brain Res 1989 Aug 14;494(2):227–31
Changes in mu opiate receptors following inescapable shock. Stuckey J, et al. **Brain Res** 1989 Jan 2;476(1):167–9
Norepinephrine content of discrete brain nuclei in acutely and chronically stressed borderline hypertensive rats. Mitchell VP, et al. **Brain Res Bull** 1989 Mar;22(3):545–7
Adrenergic receptors mediate changes in c-fos mRNA levels in brain. Gubits RM, et al. **Brain Res Mol Brain Res** 1989 Jul;6(1):39–45
Aging and alfentanil disposition in healthy volunteers and surgical patients. Sitar DS, et al. **Can J Anaesth** 1989 Mar; 36(2):149–54
Evidence of calmodulin involvement in cell volume recovery following hypo-osmotic stress. Pierce SK, et al.
Cell Calcium 1989 Apr;10(3):159–69
Differential response of rat brown and white adipose tissue to environmental or nutritional stress. Klain GJ, et al.
Comp Biochem Physiol [B] 1977;58(3):227–30
Fat metabolism in injury and stress. Wiener M, et al.
Crit Care Clin 1987 Jan;3(1):25–56 (143 ref.)
A model to evaluate acute and chronic stress in the colonic mucosa of rats. Rubio CA, et al. **Dis Colon Rectum** 1989 Jan;32(1):26–9
Lactation inhibits stress-mediated secretion of corticosterone and oxytocin and hypothalamic accumulation of corticotropin-releasing factor and enkephalin messenger ribonucleic acids. Lightman SL, et al. **Endocrinology** 1989 May;124(5):2358–64
Induction of the stress response by isolation of rabbit type II pneumocytes. Brandes ME, et al. **Exp Lung Res** 1989; 15(1):93–111
Adrenal catecholamine synthesis rate changes induced by combined thermal and immobilization stress in fed and 24

hour fasted rats. Bargiel Z, et al.
Folia Histochem Cytobiol 1989;27(2):89–95
Oxidative stress and heat shock protein induction in human cells. Burdon RH, et al. **Free Radic Res Commun** 1987; 3(1–5):129–39
Inhibition of stress–induced gastric injury in the rat by glutathione. Hirota M, et al. **Gastroenterology** 1989 Oct; 97(4):853–9
Eight weeks of streptozotocin–induced diabetes influences the effects of cold stress on immunoreactive beta–endorphin levels in female rats. Forman LJ, et al.
Horm Metab Res 1988 Sep;20(9):555–8
Are catecholamines positive regulators of metallothionein synthesis during stress in the rat? Hidalgo J, et al.
Horm Metab Res 1988 Aug;20(8):530–2
Alteration in blood and brain catecholamines and amino acid levels in albino rats following chronic exposure to stress. Singh JN, et al. **Indian J Exp Biol** 1988 Jun;26(6):467–9
Age–related changes in lipid profiles & lipid peroxidation in the CNS following restraint stress. Gupta A, et al.
Indian J Med Res 1988 Jun;87:624–30
Effect of acute environmental heat stress on urinary water and electrolyte excretion in the rat. Marya RK, et al.
Indian J Physiol Pharmacol 1988 Apr–Jun;32(2):126–31
Studies on monoamine levels in rat myocardium in different stresses. Suthanthirarajan N, et al.
Indian J Physiol Pharmacol 1989 Jan–Mar;33(1):35–8
Anesthetic and surgical stress in the diabetic patient: carbohydrate homeostasis. Daykin AP.
Int Anesthesiol Clin 1988 Fall;26(3):206–12 (52 ref.)
The ontogeny of the metabolic and endocrine stress response in the human fetus, neonate and child. Platt MP, et al.
Intensive Care Med 1989;15 Suppl 1:S44–5
Carnitine femoral arterial–venous differences in the stressed critically ill. Scholten DJ, et al. **J Am Coll Nutr** 1989 Apr; 8(2):121–4
Effect of immobilization stress on testosterone and inhibin in male rats. Demura R, et al. **J Androl** 1989 May–Jun; 10(3):210–3
The cytoplasmic matrix of the adrenal chromaffin cells of rats under normal and stressed conditions. Kondo H.
J Electron Microsc Tech 1989 Aug;12(4):356–63
Stress–related peptide hormones in the placenta: their possible physiological significance. Sirinathsinghji DJ, et al. **J Endocrinol** 1989 Aug;122(2):435–7 (32 ref.)
Neither the pituitary gland nor the sympathetic nervous system is responsible for eliciting the large drop in elevated rat pineal melatonin levels due to swimming. Troiani ME, et al. **J Neural Transm** 1988;74(3):149–60
Foot–shock stress and anxiogenic beta–carbolines increase t–[35S]butylbicyclophosphorothionate binding in the rat cerebral cortex, an effect opposite to anxiolytics and gamma–aminobutyric acid mimetics. Concas A, et al.
J Neurochem 1988 Dec;51(6):1868–76
Catecholamine content changes in brain regions of spontaneously hypertensive rats under immobilization stress. Nomura M, et al. **J Neurochem** 1989 Mar;52(3):933–7
Receptor specificity of a glucocorticoid– and stress–induced hippocampal protein. Schlatter LK, et al. **J Neurosci** 1989 Apr;9(4):1134–40
A simple field test for assessing salt balance in heat–stressed miners. Cross RB, et al. **J Occup Med** 1989 Aug; 31(8):668–73
Repeated swim stress alters brain benzodiazepine receptors measured in vivo. Weizman R, et al.
J Pharmacol Exp Ther 1989 Jun;249(3):701–7
Medium–chain triglyceride–based fat emulsions: an alternative energy supply in stress and sepsis. Bach AC, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):82S–88S (101 ref.)
Effects of L–carnitine supplemented total parenteral nutrition on lipid and energy metabolism in postoperative stress. Pichard C, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):555–62
Effects of stress and chronic propranolol infusion on cardiac beta–receptor function in the Maudsley Reactive and Non–Reactive rat strains. Christ GJ, et al. **Life Sci** 1988; 43(22):1773–84
Changes in acetylcholine content, release and muscarinic receptors in rat hippocampus under cold stress. Fatranská M, et al. **Life Sci** 1989;45(2):143–9
Dexamethasone suppresses ACTH release without attenuating pituitary cyclic AMP response to stress in vivo. Kant GJ, et al. **Life Sci** 1989;45(2):125–31
Are there stress resistant and susceptible myocardia? Knight VA. **Med Hypotheses** 1988 Nov;27(3):201–4
Secretion of melanocyte–stimulating hormone and adrenocorticotropin from transplanted pituitary pars intermedia in stressed and nonstressed rats. Iturriza FC, et al. **Neuroendocrinology** 1989 Jun;49(6):610–6
Interactions of thyrotropin–releasing hormone (TRH) with neurotensin and dopamine in the central nucleus of the amygdala during stress ulcer formation in rats. Henke PG, et al. **Neurosci Lett** 1988 Aug 15;91(1):95–100
Chronic stress increases the binding of the A1 adenosine receptor agonist, [3H]cyclohexyladenosine, to rat hypothalamus. Anderson SM, et al.
Pharmacol Biochem Behav 1988 May;30(1):169–75
MIF–1 is active in a chronic stress animal model of depression. Pignatiello MF, et al.
Pharmacol Biochem Behav 1989 Mar;32(3):737–42
Effects of acute morphine administration on noradrenaline turnover and metabolism in various brain parts of control and handled rats. Attila LM. **Pharmacol Toxicol** 1989 Feb; 64(2):202–9
Naloxone reversal of stress–induced suppression of LH release in the common marmoset. O'Byrne KT, et al.
Physiol Behav 1989 May;45(5):1077–80
Influence of steroids on the hypothalamic corticotropin–releasing factor and preproenkephalin mRNA responses to stress. Lightman SL, et al.
Proc Natl Acad Sci U S A 1989 Jun;86(11):4306–10
Effects of zinc acexamate on gastric mucosal production of prostaglandin E2 in normal and stressed rats. Navarro C, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul; 33(1):75–80
Chronic administration of clomipramine prevents the increase in serotonin and noradrenaline induced by chronic stress. Adell A, et al. **Psychopharmacology (Berlin)** 1989;99(1):22–6
Corticotropin–releasing hormone and pituitary–adrenocortical responses in chronically stressed rats. Hashimoto K, et al. **Regul Pept** 1988 Nov;23(2):117–26
Effect of hypoxia and/or cold stress on plasma and brain amino acids in rat. al–Bekairi AM.
Res Commun Chem Pathol Pharmacol 1989 May; 64(2):287–97
Lipid peroxidation activation and cytochrome P–450 decrease in rat liver endoplasmic reticulum under oxidative stress. Serbinova EA, et al. **Toxicol Lett** 1989 May; 47(2):119–23
[Effect of shouerkang prescription on stress in old rats] Wang R, et al. **Chung Yao Tung Pao** 1988 Nov;13(11):45–7, 64 (Eng. Abstr.) (Chi)
[Pharmacokinetic and toxicologic aspects of stress] Panagiotis K, et al. **Boll Chim Farm** 1988 Apr;127(4):83–9 (59 ref.) (Eng. Abstr.) (Fre)
[Experimental studies on stress hormones at the time of sudden death (I)—Difference in adrenocortical hormone level between cardiac arrest–preceding type and apnea–preceding type sudden death] Tsunoda K, et al.
Nippon Hoigaku Zasshi 1988 Dec;42(6):496–503 (Eng. Abstr.) (Jpn)
[Metabolic and cardiovascular changes in ovariectomized animals with alloxan diabetes and under stress] Sneer A, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun; 92(2):335–40 (Eng. Abstr.) (Rum)
[The inhibition stage of lipid peroxidation during stress] Guliaeva NV, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):660–3 (Eng. Abstr.) (Rus)
[Comparative evaluation of the effect of immobilization stress on the dynamics of resistance to induction of lipid peroxidation in internal organs and brain] Arkhipenko IuV, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1500–3 (Rus)
[A stage of the inhibition of free radical lipid oxidation precedes its activation during stress] Guliaeva NV, et al. **Dokl Akad Nauk SSSR** 1988;300(3):748–52 (Rus)
[Changes in the catecholamine level and energy metabolism of the myocardium in rats during cold and emotional stress] Gurin VN, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):542–7 (Eng. Abstr.) (Rus)
[Disorders of the oxidation–reduction processes in the ocular structures in pathology and stress states] Moiseeva NN. **Oftalmol Zh** 1988;(6):364–8 (81 ref.) (Rus)
[Effect of stress and the adaptogen cucurbitacin R diglycoside on arachidonic acid metabolism] Panosian AG, et al. **Probl Endokrinol (Mosk)** 1989 Jan–Feb;35(1):58–61 (Eng. Abstr.) (Rus)
[Characteristics of phospholipid–glycerol metabolism in erythrocyte membranes during acoustic stress] Melkonian MM, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):68–71 (Eng. Abstr.) (Rus)
[Indices of lipid free–radical oxidation and of antiradical protection of the brain—the neurochemical correlates of the development of the general adaptation syndrome] Guliaeva NV, et al. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug; 38(4):731–7 (Eng. Abstr.) (Rus)
[Histochemical analysis of noradrenaline and adrenaline cells in the adrenal gland during hypoxic stress in relation to the time of sacrifice] Mihalj–Nović M, et al. **Med Pregl** 1988;41(3–4):124–7 (Eng. Abstr.) (Ser)

MORTALITY

Improved survival from compound 48/80–induced lethal stress and inhibition of myocardial histamine and carnosine mobilization by lodoxamide. Flancbaum L, et al.
Circ Shock 1989 Feb;27(2):155–64

NURSING

Stress: an added incapacitator. Kaseman DF, et al.
Geriatr Nurs (New York) 1988 Sep–Oct;9(5):274–7

PATHOLOGY

Stress fibers in endothelial cells overlying atherosclerotic lesions in rabbit aorta. Guyton JR, et al.
Am J Med Sci 1989 Aug;298(2):79–82
Permanent loss in stem cell self renewal capacity following stress to the marrow. Mauch P, et al. **Blood** 1988 Oct; 72(4):1193–6
Influence of stress on epithelial cell proliferation in the gut mucosa of rats. Greant P, et al. **Digestion** 1988;40(4):212–8
Hippocampal damage associated with prolonged and fatal stress in primates. Uno H, et al. **J Neurosci** 1989 May; 9(5):1705–11
[The functional morphology of the adrenal cortex after experimental stress] Hartmann G, et al.
Z Mikrosk Anat Forsch 1988;102(6):884–96 (Eng. Abstr.) (Ger)
[Combined reaction of the lymphoid organs and the adrenals to stress in mature animals subjected to cold in the early period of postnatal ontogeny] Borodin IuI, et al.
Arkh Anat Gistol Embriol 1989 Jan;96(1):73–8 (Eng. Abstr.) (Rus)
[Ultrastructure of neurosecretory cells of the hypothalamic supraoptic nuclei of albino rats during nociceptive stress and aging] Pelevin IuM, et al. **Neirofiziologiia** 1989; 21(3):389–96 (Eng. Abstr.) (Rus)
[Ultrastructure of the adrenal glands in rats under stress after preliminary use of the biostimulator "Biomos"] Bogdanova TI, et al. **Tsitol Genet** 1989 Jan–Feb;23(1):3–6 (Eng. Abstr.) (Rus)
[Morphologic study of the effects of acute stress and the separate administration of "adaptive hormones" on mouse hepatocytes] Shkurupii VA. **Tsitol Genet** 1988 Jul–Aug; 22(4):3–8 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Important factors in the maintenance of homeostasis in the surgical patient. Shires GT. **Acta Chir Scand Suppl** 1989; 550:29–33; discussion 34–5
Involvement of histaminergic neurons in the stress–induced release of pro–opiomelanocortin–derived peptides in rats. Knigge U, et al. **Acta Endocrinol (Copenh)** 1989 Apr; 120(4):533–9
Effects of adrenal demedullation on stress–induced hypertension and cardiovascular responses to acute stress. Knardahl S, et al. **Acta Physiol Scand** 1988 Aug; 133(4):477–83
Effect of stress and ethanol on reproduction of conditioned food motor reflexes in cats. Stodulka J.
Acta Univ Palacki Olomuc Fac Med 1988;118:63–72
Digestion and faecal mineral content of virginiamycin–fed rabbits exposed to physiological and simulated stress. Fekete S, et al. **Acta Vet Hung** 1988;36(1–2):61–8
Changes of 36Cl– flux and 35S–TBPS binding induced by stress and gabaergic drugs. Concas A, et al.
Adv Biochem Psychopharmacol 1988;45:227–46
Rapid internalization of benzodiazepine receptors in the rat cortex induced by handling. Mennini T, et al.
Adv Biochem Psychopharmacol 1988;45:263–73
Individual differences and the stress response: studies of a wild primate. Sapolsky RM. **Adv Exp Med Biol** 1988; 245:399–411
Disparate hemodynamic and sympathoadrenergic responses to isometric and mental stress in essential hypertension. Grossman E, et al. **Am J Cardiol** 1989 Jul 1;64(1):42–4
Efficacy of four antihypertensive drugs (clonidine, enalapril, nitrendipine, oxprenolol) on stress blood pressure. Schmieder RE, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1333–8
Parity and perceived job stress elevate blood pressure in young normotensive working women. James GD, et al.
Am J Hypertens 1989 Aug;2(8):637–9
Forearm hemodynamics at rest and stress in borderline hypertensive adolescents. Santangelo K, et al.
Am J Hypertens 1989 Jan;2(1):52–6
Central oxytocin systems may mediate a cardiovascular response to acute stress in rats. Callahan MF, et al.
Am J Physiol 1989 May;256(5 Pt 2):H1369–77
Prior immobilization stress alters adrenal hormone responses to hemorrhage in rats. Graessler J, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R661–7
Metallothionein response to stress in rats: role in free radical scavenging. Hidalgo J, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E518–24
Adipose tissue and skeletal muscle blood flow during mental stress. Linde B, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E12–8
Injection of muscimol into posterior hypothalamus blocks stress–induced tachycardia. Lisa M, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R246–51
Postprandial gastrointestinal blood flow and oxygen consumption during environmental cold stress. Mayfield SR, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G364–8
Hypothalamic noradrenergic and sympathoadrenal control of glycemia after stress. Smythe GA, et al.
Am J Physiol 1989 Feb;256(2 Pt 1):E231–5
Immune activation and psychoneurogenic stress modulate corticosterone–releasing effects of lymphokines and ACTH. Torres–Aleman I, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):R839–45
Central neurotensin affects rat gastric integrity, prostaglandin E2, and blood flow. Zhang L, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G226–32
Pituitary–adrenal stress response in the absence of brain–pituitary connections. Carr DB, et al.
Anesth Analg 1989 Aug;69(2):197–201
Visual evoked potential processing under acceleration stress. Maskarinec GJ, et al. **Ann Biomed Eng** 1989;17(3):233–51
Acute physiologic and perceptual responses during three modes of ambulation: walking, axillary crutch walking, and running. Bhambani Y, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):445–50
Improving the validity of clinical exercise testing: the relationship between practice and performance. Dean E, et al. **Arch Phys Med Rehabil** 1989 Aug;70(8):599–604

High-G stress and orientational stress: physiologic effects of aerial maneuvering. Gillingham KK. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A10-20

Place avoidance learning and stress-induced analgesia in the attacked mouse: role of endogenous opioids. Siegfried B, et al. **Behav Neural Biol** 1989 Jul;52(1):95-107

Multisensory deficits in rats produced by acute exposure to cold swim stress. Leitner DS. **Behav Neurosci** 1989 Feb; 103(1):151-7

Maternal deprivation potentiates pituitary-adrenal stress responses in infant rats. Stanton ME, et al. **Behav Neurosci** 1988 Oct;102(5):692-700

Surgical stress: the role of pain and analgesia. Kehlet H. **Br J Anaesth** 1989 Aug;63(2):189-95 (46 ref.)

Footshock stress facilitates self-stimulation of the medial prefrontal cortex but not the lateral hypothalamus in the rat. McGregor IS, et al. **Brain Res** 1989 Jun 26; 490(2):397-403

The role of short-term hypobaric hypoxia in prevention of disorders of the cerebral circulation in rats during acoustic stress. Ryasina TV, et al. **Brain Res** 1988 Nov 8; 473(1):153-6

Stress induced analgesia plays an adaptive role in the organization of behavioral responding. Amit Z, et al. **Brain Res Bull** 1988 Dec;21(6):955-8 (40 ref.)

Behavioral evaluation of the stress induced by the platform method for short-term paradoxical sleep deprivation in rats. Coll-Andreu M, et al. **Brain Res Bull** 1989 May;22(5):825-8

Functional beta 2-adrenoceptors in right atria isolated from footshock-stressed rats. Bassani RA, et al. **Braz J Med Biol Res** 1988;21(3):557-9

Volume-pressure analysis of reflex changes in forearm venous function. A method by mental arithmetic stress and radionuclide plethysmography. Robinson VJ, et al. **Circulation** 1989 Jul;80(1):99-105

Metabolic and hormonal effects of dexfenfluramine on stress situations. Brindley DN. **Clin Neuropharmacol** 1988;11 Suppl 1:S86-9

The tension-stress effect on the genesis and growth of tissues. Part I. The influence of stability of fixation and soft-tissue preservation. Ilizarov GA. **Clin Orthop** 1989 Jan; (238):249-81

Environmental stressors during space flight: potential effects on body temperature. Jauchem JR. **Comp Biochem Physiol [A]** 1988;91(3):425-9 (86 ref.)

Mediators of altered perioperative physiology. O'Neal K, et al. **Crit Care Clin** 1987 Apr;3(2):359-71 (49 ref.)

Stress ulceration: the enigma continues. MacLellan DG. **Dig Dis** 1989;7(3):159-68 (51 ref.)

Effects of chlorpromazine on hypothalamic aminergic neurons and stress responses in moderate cold. Kortelainen ML, et al. **Eur J Appl Physiol** 1989;58(5):514-21

Neurochemical correlates of behavioural responses to frustrative nonreward in the rat: implications for the role of central noradrenergic neurones in behavioural adaptation to stress. Stanford SC, et al. **Exp Brain Res** 1989;75(1):133-8

Induction of heat shock protein transcripts and B2 transcripts by various stresses in Chinese hamster cells. Fornace AJ Jr, et al. **Exp Cell Res** 1989 May;182(1):61-74

The effect of prolonged stress on the hypothalamic luteinizing hormone-releasing hormone (LHRH) in the anoestrous ewe. Przekop F, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):334-40

Effects of chronic dietary restriction on sensory-motor function and susceptibility to stressor stimuli in the laboratory rat. Campbell BA, et al. **Exp Gerontol** 1988; 23(4-5):417-27

PGE1-pretreatment abolishes increased mitotic activity induced by stress. Sinzinger H, et al. **Exp Pathol** 1988; 34(2):61-4

Occurrence of platelet-activating factor (PAF) in normal rat stomach and alteration of PAF level by water immersion stress. Sugatani J, et al. **FASEB J** 1989 Jan;3(1):65-70

Stress-induced gastrointestinal secretory and motor responses in rats are mediated by endogenous corticotropin-releasing factor. Lenz HJ, et al. **Gastroenterology** 1988 Dec; 95(6):1510-7

Neurohumoral pathways mediating stress-induced changes in rat gastrointestinal transit. Lenz HJ. **Gastroenterology** 1989 Jul;97(1):216-8

Stress effects on gastrointestinal transit in the rat. Enck P, et al. **Gut** 1989 Apr;30(4):455-9

Effect of stress on oesophageal motor function in normal subjects and in patients with the irritable bowel syndrome. Soffer EE, et al. **Gut** 1988 Nov;29(11):1591-4

Mental and physical stress as moderators of the postural response in insulin-dependent diabetic patients. Naliboff BD, et al. **Health Psychol** 1988;7(6):499-514

The role of anabolic steroids on baseline and stress heart rate in cynomolgus monkeys. Rejeski WJ, et al. **Health Psychol** 1988;7(4):299-307

Stress and auto-immune endocrine diseases. Leclère J, et al. **Horm Res** 1989;31(1-2):90-3

Forearm blood flow responses of offspring of hypertensives to an extended stress task. Ditto B, et al. **Hypertension** 1989 Feb;13(2):181-7

Opioids in the systemic hemodynamic and renal responses to stress in spontaneously hypertensive rats. Kapusta DR, et al. **Hypertension** 1989 Jun;13(6 Pt 2):808-16

Stress responses during anesthesia. **Int Anesthesiol Clin** 1988 Fall;26(3):175-236

Neonatal and pediatric stress responses to anesthesia and operation. Anand KJ, et al. **Int Anesthesiol Clin** 1988 Fall; 26(3):218-25 (62 ref.)

Operation, anesthesia, and the endorphin system. Carr DB, et al. **Int Anesthesiol Clin** 1988 Fall;26(3):199-205 (86 ref.)

The effects of acupuncture on operative pain and the hormonal responses to stress. Leong RJ, et al. **Int Anesthesiol Clin** 1988 Fall;26(3):213-7 (47 ref.)

Guidelines for corticosteroid use in anesthetic and surgical stress. Napolitano LM, et al. **Int Anesthesiol Clin** 1988 Fall; 26(3):226-32 (27 ref.)

Catecholamines in anesthetic and surgical stress. Zaloga GP. **Int Anesthesiol Clin** 1988 Fall;26(3):187-98 (106 ref.)

Hormone levels in male ice hockey players during a 26-hour cup tournament. Tegelman R, et al. **Int J Androl** 1988 Oct; 11(5):361-8

Effects of daytime noise load on the sleep-wake cycle and endocrine patterns in man. III. 24 hours secretion of free and sulfate conjugated catecholamines. Fruhstorfer B, et al. **Int J Neurosci** 1988 Nov;43(1-2):53-62

The effects of the transcendental mediation technique and progressive muscle relaxation on EEG coherence, stress reactivity, and mental health in black adults. Gaylord C, et al. **Int J Neurosci** 1989 May;46(1-2):77-86

Plasma cortisol, renin, and aldosterone during an intense heat acclimation program. Armstrong LE, et al. **Int J Sports Med** 1989 Feb;10(1):38-42

Endogenous hormones subtly alter women's response to heat stress. Carpenter AJ, et al. **J Appl Physiol** 1988 Nov; 65(5):2313-7

Aerobic power and cardiovascular response to stress. Claytor RP, et al. **J Appl Physiol** 1988 Sep;65(3):1416-23

Thermal and metabolic responses to cold by men and by eumenorrheic and amenorrheic women. Graham TE, et al. **J Appl Physiol** 1989 Jul;67(1):282-90

Effect of cerebrospinal fluid hyperosmolality on sweating in the heat-stressed patas monkey. Owen MD, et al. **J Appl Physiol** 1989 Jul;67(1):128-33

Effects of CSF ANG II and AVP on sweating in the heat-stressed patas monkey. Owen MD, et al. **J Appl Physiol** 1989 Jul;67(1):134-40

Cardiovascular reactivity to physical and psychologic stress during long-term treatment with nitrendipine in essential hypertension. Palombo C, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S135-42

Abnormal proteins as the trigger for the induction of stress responses: heat, diamide, and sodium arsenite. Lee KJ, et al. **J Cell Physiol** 1988 Sep;136(3):411-20

Common pathway for the induction of hexose transport by insulin and stress. Warren AP, et al. **J Cell Physiol** 1989 Feb;138(2):323-8

Pancreatic noradrenergic nerves are activated by neuroglucopenia but not by hypotension or hypoxia in the dog. Evidence for stress-specific and regionally selective activation of the sympathetic nervous system. Havel PJ, et al. **J Clin Invest** 1988 Nov;82(5):1538-45

Effect of adrenomedullectomy and propranolol treatment on the response of gonadotrophins to chronic stress in male rats. Ariznavarreta C, et al. **J Endocrinol** 1989 Feb; 120(2):275-9

Feedback regulation by progesterone of stress-induced prolactin release in rats. Deis RP, et al. **J Endocrinol** 1989 Jan;120(1):37-43

Secretion of beta-endorphin into the maternal circulation by uteroplacental tissues in response to hypoglycaemic stress. Falconer J, et al. **J Endocrinol** 1988 Aug;118(2):R5-8

Opioids and stress in man. Grossman A. **J Endocrinol** 1988 Dec;119(3):377-81 (42 ref.)

Role of the adrenal cortex in chronic stress-induced inhibition of prolactin secretion in male rats. López-Calderón A, et al. **J Endocrinol** 1989 Feb; 120(2):269-73

Effects of acute stress on the patterns of LH secretion in the common marmoset (Callithrix jacchus). O'Byrne KT, et al. **J Endocrinol** 1988 Aug;118(2):259-64

Dietary fatty acid supplementation alters stress reactivity and performance in man. Mills DE, et al. **J Hum Hypertens** 1989 Apr;3(2):111-6

Selective central alpha-2 adrenoceptor control of regional haemodynamic responses to air jet stress in conscious spontaneously hypertensive rats. Kapusta DR, et al. **J Hypertens** 1989 Mar;7(3):189-94

Lifestyle- and occupation-related changes in blood pressure over a six-year period in a cohort of working men. Jenner DA, et al. **J Hypertens Suppl** 1988 Dec;6(4):S605-7

Adrenaline-induced amplification of sympathetic activity during rest and stress: inhibition by non-selective and beta 1-selective beta-adrenoceptor blockade. van den Meiracker AH, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S558-61

Adaptation to stress increases the heart resistance to ischemic and reperfusion arrhythmias. Meerson FZ, et al. **J Mol Cell Cardiol** 1989 Mar;21(3):299-303

Audiogenic stress response: behavioral characteristics and underlying monoamine mechanisms. Segal DS, et al. **J Neural Transm** 1989;75(1):31-50

Differential effect of stress on in vivo dopamine release in striatum, nucleus accumbens, and medial frontal cortex. Abercrombie ED, et al. **J Neurochem** 1989 May; 52(5):1655-8

Left ventricular mass in borderline hypertension, assessed by echocardiography. Relationships with resting and stress blood pressure. Giaconi S, et al. **J Nucl Med Allied Sci** 1989 Jan-Mar;33(1):26-31

Corticotrophin-releasing factor, vasopressin and pro-opiomelanocortin mRNA responses to stress and opiates in the rat. Lightman SL, et al. **J Physiol (Lond)** 1988 Sep;403:511-23

Impairment of stress-induced secretion of prolactin during development: effects of adrenalectomy, TRH and sulpiride. el Feki A, et al. **J Physiol (Paris)** 1988;83(1):36-42

Physiological responses to thermal stress in a glass bangle factory. Rastogi SK, et al. **J Soc Occup Med** 1988 Winter; 38(4):137-42

Clinical significance of stress-induced ST segment elevation in patients with previous anterior myocardial infarction. Analysis of lactate metabolism with atrial pacing. Hiyamuta K. **Jpn Heart J** 1988 May;29(3):279-94

Subsensitivity to substance P in SART-stressed mice. Hata T, et al. **Jpn J Pharmacol** 1989 Feb;49(2):293-6

Atropine, diazepam, and physostigmine: thermoregulatory effects in the heat-stressed rat. Matthew CB, et al. **Life Sci** 1989;44(25):1921-7

Effect of chronic undernutrition on susceptibility to cold stress in young adult and aged rats. Campbell BA, et al. **Mech Ageing Dev** 1988 Aug;44(2):193-202

Heart-rate and blood-pressure response in medium-artillery gun crews. Carter NL. **Med J Aust** 1988 Aug 15; 149(4):185-9

Effect of environmental stress on neural control of renal function. Koepke JP. **Miner Electrolyte Metab** 1989; 15(1-2):83-7 (20 ref.)

Membrane changes during virus infection and other forms of cellular stress. Pasternak CA. **Mol Aspects Med** 1988; 10(3):281-90 (34 ref.)

Studies of the secretion of corticotropin-releasing factor and arginine vasopressin into the hypophysial-portal circulation of the conscious sheep. I. Effect of an audiovisual stimulus and insulin-induced hypoglycemia. Engler D, et al. **Neuroendocrinology** 1989 Apr;49(4):367-81

Effect of histamine depletion on circadian variations of corticotropin and corticosterone in rats. Itowi N, et al. **Neuroendocrinology** 1989 Aug;50(2):187-92

Cold stress or a pyrogenic substance elevates thyrotropin-releasing hormone levels in the rat hypothalamus and induces thermogenic reactions. Lin MT, et al. **Neuroendocrinology** 1989 Aug;50(2):177-81

Correlation between the stress-induced transient increase in corticotropin-releasing hormone content of the median eminence of the hypothalamus and adrenocorticotropic hormone secretion. Murakami K, et al. **Neuroendocrinology** 1989 Mar;49(3):233-41

Corticosterone-induced responses in rat brain RNA are also evoked in hippocampus by acute vibratory stress. Nichols NR, et al. **Neuroendocrinology** 1989 Jan;49(1):40-6

Age-related adaptation of pituitary-adrenocortical responses to stress. Odio M, et al. **Neuroendocrinology** 1989 Apr; 49(4):382-8

Adaptation of the adrenocorticotropic response to chronic intermittent stress was altered by intracerebroventricular infusion of hemicholinium-3. Ramade F, et al. **Neuroendocrinology** 1989 Aug;50(2):165-9

Corticotropin-releasing factor: evidence for a neurotransmitter role in the locus ceruleus during hemodynamic stress. Valentino RJ, et al. **Neuroendocrinology** 1988 Dec;48(6):674-7

Electrophysiological evidence for terminal sprouting of locus coeruleus neurons following repeated mild stress. Nakamura S, et al. **Neurosci Lett** 1989 May 22; 100(1-3):147-52

Changes in QT and Q-aT intervals induced by mental and physical stress with fixed rate and atrial triggered ventricular inhibited cardiac pacing. Hedman A, et al. **PACE** 1988 Oct;11(10):1426-31

Intracisternal injection of CRF antagonist blocks surgical stress-induced inhibition of gastric secretion in the rat. Stephens RL Jr, et al. **Peptides** 1988 Sep-Oct;9(5):1067-70

Long-term effects of inescapable stress on daily running activity and antagonism by desipramine. Desan PH, et al. **Pharmacol Biochem Behav** 1988 May;30(1):21-9

Alterations in behavioral and striatal dopamine asymmetries induced by prenatal stress. Fride E, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):425-30

Prenatal stress alters morphine- and stress-induced analgesia in male and female rats. Kinsley CH, et al. **Pharmacol Biochem Behav** 1988 May;30(1):123-8

Effects of maternal stress during different gestational periods on the serotonergic system in adult rat offspring. Peters DA. **Pharmacol Biochem Behav** 1988 Dec;31(4):839-43

A failure to support cross-sensitization between effects of apomorphine and lesions of the habenula nucleus. Thornton EW, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):77-81

Characterization of stress reactions to the Stroop Color Word Test. Tulen JH, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):9-15

Effects of Librium and shock controllability upon nociception and contextual fear. Warren DA, et al. **Pharmacol Biochem Behav** 1988 May;30(1):209-14

Adaptation of plasma catecholamine and corticosterone responses to short-term repeated noise stress in rats. De Boer SF, et al. **Physiol Behav** 1988;44(2):273-80

Suppression of feeding and body weight by inescapable shock: modulation by quinine adulteration, stress reinstatement, and controllability. Dess NK, et al. **Physiol Behav** 1989 May;45(5):975-83

Virus infection as a stressor: influenza virus elevates plasma concentrations of corticosterone, and brain concentrations of MHPG and tryptophan. Dunn AJ, et al. **Physiol Behav** 1989 Mar;45(3):591–4

Individual housing does not influence the adaptation of the pituitary–adrenal axis and other physiological variables to chronic stress in adult male rats. Giralt M, et al. **Physiol Behav** 1989 Mar;45(3):477–81

Open field behavior and cardiovascular responses to stress in normal rats. Gomez RE, et al. **Physiol Behav** 1989 Apr; 45(4):767–9

Stress–rest cyclicity in the pathogenesis of restraint–induced stress gastric ulcers in rats. Murison R, et al. **Physiol Behav** 1989 Apr;45(4):809–13

A further analysis of behavioral and endocrine effects of unpredictable chronic stress. Rodríguez Echandía EL, et al. **Physiol Behav** 1988;43(6):789–95

Behavioral and cardiac responses to a sudden change in environmental stimuli: effect of forced shift in food intake. Steenbergen JM, et al. **Physiol Behav** 1989 Apr; 45(4):729–33

Effort and stress influence the effect of lesion of the habenula complex in one–way active avoidance learning. Thornton EW, et al. **Physiol Behav** 1989 May;45(5):929–35

Prenatal ethanol and stress in mice: 1. Pup behavioral development and maternal physiology. Ward GR, et al. **Physiol Behav** 1989 Mar;45(3):533–40

Reductions in maternal food and water intake account for prenatal stress effects on neurobehavioral development in B6D2F2 mice. Ward GR, et al. **Physiol Behav** 1988; 44(6):781–6

Prenatal ethanol and stress in mice: 2. Development and behavior of fostered offspring. Ward GR, et al. **Physiol Behav** 1989 Mar;45(3):541–9

Verapamil sensitizes cardiomyopathic hamsters to the effects of stress. Tapp WN, et al. **Res Commun Chem Pathol Pharmacol** 1988 Dec;62(3):511–4

Stress and cardiovascular disease. Hatano S, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:39–48 (10 ref.)

Occupational stressors, biological stress reactions, and worker's health. Levi L. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:480–1

Cardiovascular reactions to vibration stress. Matoba T. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:96–105 (16 ref.)

Stress and the heart. Wheatley D. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:482–97 (24 ref.)

Role of neuropeptide Y (NPY) in cardiovascular responses to stress. Zukowska–Grojec Z, et al. **Synapse** 1988; 2(3):293–8

Beta and alpha adrenergic reactivity elicitable stress study with special reference of electrocardiographic T–wave amplitude. Taguchi F, et al. **Tohoku J Exp Med** 1989 Feb; 157(2):95–106

Corticotropin–releasing factor: endocrine and autonomic integration of responses to stress. Fisher LA. **Trends Pharmacol Sci** 1989 May;10(5):189–93 (35 ref.)

[Role of the central nervous system in the pathogenesis of stress ulcer] Yang H. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):218–22 (31 ref.) **(Chi)**

[Pressor effect of a soccer match (1988 European championship), registered via the Portapress] Imholz BP, et al. **Ned Tijdschr Geneeskd** 1989 Jun 3;133(22):1127–31 (Eng. Abstr.) **(Dut)**

[The inhibition of action. Interdisciplinary approach of its mechanisms and physiopathology] Laborit H. **Ann Med Psychol (Paris)** 1988 Jun;146(6):503–22 (51 ref.) (Eng. Abstr.) **(Fre)**

[Stress reaction and anesthesia. The role of morphine agonists and antagonists] Simionescu R. **Cah Anesthesiol** 1988 Jun–Jul;36(4):289–301 (50 ref.) **(Fre)**

[Stress ulcer disease and its prevention] Gyr K, et al. **Schweiz Med Wochenschr** 1989 Apr 5;119(13–14):423–9 (34 ref.) (Eng. Abstr.) **(Ger)**

[Effect of stress on the function of chloride channels associated with the GABA receptor complex] Concas A, et al. **Ann Ist Super Sanita** 1988;24(4):551–4 (Eng. Abstr.) **(Ita)**

[Pharmacologic demonstration of the physiologic role of adenosine in stress activation] Scaccianoce S, et al. **Ann Ist Super Sanita** 1988;24(4):555–8 (Eng. Abstr.) **(Ita)**

[Experimental stress ulcer of rat and the effect of vitamin B2] Kawamura T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug;85(8):1459–65 (Eng. Abstr.) **(Jpn)**

[Effects of a platelet activating factor (PAF) antagonist CV–3988 on acute gastric erosions in rats by water immersion and restrained stress, and by ethanol] Nogami M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct; 85(10):2149–54 (Eng. Abstr.) **(Jpn)**

[Effects of iridoids on sex– and learning–behaviours in chronic stressed mice] Imai T, et al. **Yakugaku Zasshi** 1988 Jun;108(6):572–85 (Eng. Abstr.) **(Jpn)**

[Studies of physical stress of parturients in the attempt to minimize intrapartum fetal risk. III. Comparative evaluation of exertion tolerance and the degree of stress in physiological labor] Brodziński W. **Ginekol Pol** 1988 Jan; 59(1):24–8 (Eng. Abstr.) **(Pol)**

[Problem of gestoses] Mirovich DIu, et al. **Akush Ginekol (Mosk)** 1988 Dec;(12):58–60 **(Rus)**

[Inhibition of free–radical lipid oxidation in the mechanisms of immediate and long–term adaptation to stress] Guliaeva NV. **Biol Nauki** 1989;(4):5–14 (32 ref.) (Eng. Abstr.) **(Rus)**

[The selective role of the nucleus raphe magnus in the mechanisms of analgesia in electrocutaneous pain stimulation, cold stress and the action of morphine] Bragin EO, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):561–3 (Eng. Abstr.) **(Rus)**

[Effect of immobilization stress on the gonadotropic function of the hypophysis in male hamadryas baboons (Papio hamadryas)] Katsiia GV, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):231–4 (Eng. Abstr.) **(Rus)**

[Body adaptation to stress exposure enhances cardiac resistance to adrenotoxic damage] Malyshev IIu. **Biull Eksp Biol Med** 1989 Apr;107(4):411–3 (Eng. Abstr.) **(Rus)**

[Elimination of stress–induced activation of DNA reparative synthesis in the myocardium by increasing the load on the heart] Meerson FZ, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):655–7 (Eng. Abstr.) **(Rus)**

[Relation between activities of vasopressinergic and pituitary–adrenal cortex systems] Filaretov AA, et al. **Dokl Akad Nauk SSSR** 1988;301(2):500–2 **(Rus)**

[Effect of antisera against enolase isoenzymes on ethanol consumption during stress in rats] Nikolaev IuV. **Dokl Akad Nauk SSSR** 1988;302(2):488–91 **(Rus)**

[The probability of disorders in the control system as a criterion of stress in an operator's activities] Gritsevskiĭ MA, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):424–7 **(Rus)**

[The role of granulocytic chalone and antichalone in regulating granulocytopoiesis under stress] Bala IuM, et al. **Fiziol Zh** 1989 Jan–Feb;35(1):75–8 (Eng. Abstr.) **(Rus)**

[Role of the spleen in the regulation of the calcium content of the blood plasma in health and in stress] Doroshenko NM, et al. **Fiziol Zh** 1989 Jan–Feb;35(1):17–21 (Eng. Abstr.) **(Rus)**

[Response of the gastric mucosa and its blood flow to acute stress in young and old rats] Koval'chuk NA. **Fiziol Zh** 1988 Nov–Dec;34(6):76–9 (Eng. Abstr.) **(Rus)**

[Effect of color mutation on the function of the adrenal cortex in chronic feed stress in American mink] Trapezov OV, et al. **Genetika** 1989 Mar;25(3):508–12 (Eng. Abstr.) **(Rus)**

[Effect of the work process on the genital sphere in female workers] Oshchepkov VI, et al. **Gig Tr Prof Zabol** 1989; (2):11–3 (Eng. Abstr.) **(Rus)**

[Characteristics of the physiological functions in the operators of foundry transfer lines in the course of the work day and week] Solov'eva LP, et al. **Gig Tr Prof Zabol** 1989; (2):17–20 (Eng. Abstr.) **(Rus)**

[Mechanisms of adaptation of the cardiorespiratory system to physical loads in cardiosurgical patients] Kassirskiĭ GI, et al. **Kardiologiia** 1988 Nov;28(11):16–9 (Eng. Abstr.) **(Rus)**

[Endocrinopathy as a factor of surgical risk in proctology] Myshkin KI, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):19–24 (Eng. Abstr.) **(Rus)**

[Psycho–endocrine interrelations in patients in a state of emotional stress during cerebral obesity] Voznesenskaia TG, et al. **Probl Endokrinol (Mosk)** 1989 Jan–Feb;35(1):3–7 (Eng. Abstr.) **(Rus)**

[Effect of ionol and eleutherococcus on changes of the hypophyseo–adrenal system in rats under extreme conditions] Golotin VG, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):35–7 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Shift work may be hazardous to your health, doctors warned. Paré M. **Can Med Assoc J** 1989 Aug 1;141(3):243–4

Soothing pain–elicited distress in infants with swaddling and pacifiers. Campos RG. **Child Dev** 1989 Aug;60(4):781–92

Ranitidine—bolus or infusion prophylaxis for stress ulcer [letter] Böhrer H, et al. **Crit Care Med** 1989 Apr;17(4):381–2

Effect of nursing contact on the stress response of patients being weaned from mechanical ventilation. Henneman EA. **Heart Lung** 1989 Sep;18(5):483–9

Follow–up of stress–management courses. Sedgwick AW, et al. **Med J Aust** 1989 May 1;150(9):485–6, 488–9

To release stress—exercise! Liebowitz CS. **N Y State Dent J** 1989 May;55(5):36–7

[Burden and possibility of respite for family caregivers] Bösch J, et al. **Soz Praventivmed** 1988;33(4–5):210–6 (Eng. Abstr.) **(Ger)**

[Effects of chlordemethyldiazepam on blood cortisol during surgical stress] D'Eramo C, et al. **Acta Biomed Ateneo Parmense** 1988;59(5–6):199–204 (Eng. Abstr.) **(Ita)**

[The role of pulsatile perfusion flow in decreasing hormonal stress reaction in open–heart surgery] Arakelov AM, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):13–7 (Eng. Abstr.) **(Rus)**

[The effect of delta–sleep peptide on Cyprinidae] Lebedeva NE, et al. **Dokl Akad Nauk SSSR** 1988;301(4):1010–1 **(Rus)**

[The stress reaction to surgical trauma in peptic ulcer and stomach cancer patients depending on the nature of the preoperative preparation] Makshanov IIa, et al. **Klin Khir** 1988;(8):65–6 **(Rus)**

[Adaptation to the conditions of military service and the prevention of maladaptive disorders (1)] Viazitskiĭ FO, et al. **Voen Med Zh** 1988 Aug;(8):45–7 **(Rus)**

PSYCHOLOGY

Impairment of passive avoidance performance in SART–stressed mice and the action of drugs. Nishimura Y, et al. **Jpn J Pharmacol** 1989 Jan;49(1):111–7

Discriminative stimulus control by the anxiogenic beta–carboline FG 7142: generalization to a physiological stressor. Leidenheimer NJ, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):351–5

Perceived job–stress and major depression in industry: a case–control study. Kawakami N, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:467–73

REHABILITATION

Obstetrical physical therapy. Review of the literature. Gleeson PB, et al. **Phys Ther** 1988 Nov;68(11):1699–702 (41 ref.)

THERAPY

The role of nutrition in the management of metabolic stress. Cerra FB. **Crit Care Clin** 1986 Oct;2(4):807–19 (32 ref.)

Protection of the pediatric surgeon from heat stress caused by the overhead radiant heater during surgery. Bar–Maor JA, et al. **J Pediatr Surg** 1988 Sep;23(9):846–7

Novel triglycerides for special medical purposes. Mascioli EA, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec; 12(6 Suppl):127S–132S (28 ref.)

Stress management during noxious medical procedures: an evaluative review of outcome studies. Ludwick–Rosenthal R, et al. **Psychol Bull** 1988 Nov;104(3):326–42 (94 ref.)

Some psychophysiological aspects of an Oriental method of stress reduction. Ikemi A, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:445–53

Behavioural psychotherapy for anxiety and stress 10.11.88. Marks IM. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:498–505

[Differentiated enteral feeding in the post–aggression phase in polytrauma patients. Comparison of a high calorie nutritionally defined diet (whole protein high calorie diet) with a peptide diet] Balogh D, et al. **Infusionstherapie** 1989 Apr;16(2):52–9 (Eng. Abstr.) **(Ger)**

[Stress adapted parenteral amino acid substitution in operated premature and newborn infants] Schober PH, et al. **Infusionstherapie** 1989 Apr;16(2):68–74 (Eng. Abstr.) **(Ger)**

URINE

Urinary 5–HIAA and VMA and their relationship with immunoregulatory cells in stress administered subjects. Khan NA, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(6):717–21

VETERINARY

Protein–induced changes in the response of plasma cortisol of lambs to heat stress. Ghani FM. **Acta Vet Hung** 1988; 36(3–4):257–64

Serum chemical profile of feeder pigs, as influenced by market stress and feeding regimen. Clemens ET, et al. **Am J Vet Res** 1989 Jul;50(7):1114–7

Effect of xylazine in heifers under thermoneutral or heat stress conditions. Fayed AH, et al. **Am J Vet Res** 1989 Jan;50(1):151–3

Stress–induced changes in plasma concentrations of immunoreactive beta–endorphin and cortisol in response to routine surgical procedures in lambs. Shutt DA, et al. **Aust J Biol Sci** 1987;40(1):97–103

The effect of artificial Eperythrozoon ovis infection on the growth rate of stressed and nonstressed sheep. Nicholls TJ, et al. **Aust Vet J** 1989 Jun;66(6):184–6

Effect of environmental stress on the responses of ascorbic–acid–treated chickens to Escherichia coli challenge infection. Gross WB. **Avian Dis** 1988 Jul–Sep; 32(3):432–6

Effect of environmental–genetic interactions on Mycobacterium avium challenge infection. Gross WB, et al. **Avian Dis** 1989 Jul–Sep;33(3):411–5

Effect of ascorbic acid on antibody response of stressed and unstressed chickens. Gross WB. **Avian Dis** 1988 Jul–Sep; 32(3):483–5

Open canalicular system of platelets in porcine stress syndrome. Basrur PK, et al. **Can J Vet Res** 1988 Jul; 52(3):380–5

Effect of adrenal blocking chemicals on viral and respiratory infections of chickens. Gross WB. **Can J Vet Res** 1989 Jan; 53(1):48–51

Neuroendocrine changes produced by competition stress on the Thoroughbred race horse. Martínez R, et al. **Comp Biochem Physiol [A]** 1988;91(3):599–602

Influence of magnesium gluconate on stress reactions in rats. Kietzmann M. **DTW Dtsch Tierarztl Wochenschr** 1989 May; 96(6):292–3

Immunomodulation: a means of disease prevention in stressed livestock. Blecha F. **J Anim Sci** 1988 Aug;66(8):2084–90 (63 ref.)

Genetic parameter estimates for preweaning traits of beef cattle in a stressful environment. DeNise SK, et al. **J Anim Sci** 1988 Aug;66(8):1899–906

Effect of confinement method on physiology and production of gestating gilts. Friend TH, et al. **J Anim Sci** 1988 Nov; 66(11):2906–15

Photoperiod and heat stress influence on lactating sow performance and photoperiod effects on nursery pig performance. McGlone JJ, et al. **J Anim Sci** 1988 Aug; 66(8):1915–9

Selenium effects on glutathione peroxidase and the immune response of stressed calves challenged with Pasteurella hemolytica. Stabel JR, et al. **J Anim Sci** 1989 Feb; 67(2):557–64

Energetics of sows and gilts in gestation crates in the cold. Verstegen MW, et al. **J Anim Sci** 1988 Nov;66(11):2865–75

Hormonal alterations in the lactating dairy cow in response to thermal stress. Wise ME, et al. **J Dairy Sci** 1988 Sep; 71(9):2480–5

Elevation in plasma glucagon levels in response to stress in squirrel monkeys: comparisons of two subspecies (Saimiri sciureus boliviensis and Saimiri sciureus sciureus). Myers BA, et al. **J Med Primatol** 1988;17(4):205–14

Beta-adrenergic responsiveness in stress-sensitive and stress-resistant pigs. Jones CA, et al. **J Vet Pharmacol Ther** 1989 Mar;12(1):14–8

Wasting pig syndrome (WPS) in weaners—treatment with amperozide. Kyriakis SC, et al. **J Vet Pharmacol Ther** 1989 Jun;12(2):232–6

The absence of sex and age effects on the corticosterone response of turkey poults to adrenocorticotropic hormone and temperature stressors. Davis GS, et al. **Poult Sci** 1989 Jun;68(6):846–9

System for studying multiple concurrent stressors in chicks. McFarlane JM, et al. **Poult Sci** 1988 Dec;67(12):1787–90

Multiple concurrent stressors in chicks. 3. Effects on plasma corticosterone and the heterophil:lymphocyte ratio. McFarlane JM, et al. **Poult Sci** 1989 Apr;68(4):522–7

System for exposing chicks to experimental intermittent electric shock. McFarlane JM, et al. **Poult Sci** 1988 Dec; 67(12):1791–3

Multiple concurrent stressors in chicks. 1. Effect on weight gain, feed intake, and behavior [published erratum appears in Poult Sci 1989 Jun;68(6):865–6] McFarlane JM, et al. **Poult Sci** 1989 Apr;68(4):501–9

Multiple concurrent stressors in chicks. 2. Effects on hematologic, body composition, and pathologic traits. McFarlane JM, et al. **Poult Sci** 1989 Apr;68(4):510–21

Ascorbic acid and acetylsalicylic acid (aspirin) in the diet of broilers maintained under heat stress conditions. Stilborn HL, et al. **Poult Sci** 1988 Aug;67(8):1183–7

Effects of blood sampling procedures, grouping and adrenal stimulation on stress responses in the growing pig. Baldi A, et al. **Reprod Nutr Dev** 1989;29(1):95–103

Increased indices of lipid peroxidation in stress-susceptible pigs and effects of vitamin E. Duthie GG, et al. **Res Vet Sci** 1989 Mar;46(2):226–30

Effects of certain stress factors on the re-excretion of infectious laryngotracheitis virus from latently infected carrier birds. Hughes CS, et al. **Res Vet Sci** 1989 Mar; 46(2):274–6

Stress and disease in cattle. **Vet Clin North Am [Food Anim Pract]** 1988 Nov; 4(3):441–578

The physiology of stress and its relationship to mechanisms of disease and therapeutics. Breazile JE. **Vet Clin North Am [Food Anim Pract]** 1988 Nov; 4(3):441–80 (255 ref.)

Arthropod-induced stress in livestock. Campbell JB. **Vet Clin North Am [Food Anim Pract]** 1988 Nov;4(3):551–5 (15 ref.)

Nutrient requirements of diseased, stressed cattle. Hutcheson DP. **Vet Clin North Am [Food Anim Pract]** 1988 Nov; 4(3):523–30

Nutrition and management of stressed beef calves. An update. Lofgreen GP. **Vet Clin North Am [Food Anim Pract]** 1988 Nov;4(3):509–22 (8 ref.)

The role of vitamins in modulating disease resistance. Nockels CF. **Vet Clin North Am [Food Anim Pract]** 1988 Nov; 4(3):531–42 (119 ref.)

Stress factors that can affect studies of drug metabolism in fish. Sommer CV, et al. **Vet Hum Toxicol** 1986;28 Suppl 1:45–54

The influence of stress and cheese-whey on intestinal parameters in mice. Koopman JP, et al. **Vet Q** 1989 Jan; 11(1):24–9

Stress [letter] Coffey DJ. **Vet Rec** 1988 Oct 29;123(18):476

Stress resistant and stress susceptible landrace pigs: comparison of blood variables after exposure to halothane or exercise on a treadmill. Heinze PH, et al. **Vet Rec** 1989 Feb 18;124(7):163–8

Welfare of intensively housed animals [letter] Hughes BO. **Vet Rec** 1988 Oct 1;123(14):378

Stress in cattle assessed after handling, after transport and after slaughter. Mitchell G, et al. **Vet Rec** 1988 Aug 20; 123(8):201–5

[The relationship between hereditary characteristics in the blood (Phi-PO2-Pgd) and susceptibility to stress in swine. A pilot study] Oskam JP, et al. **Tijdschr Diergeneeskd** 1989 Jun 15;114(12):668–75 (Eng. Abstr.) **(Dut)**

[Improper feeding as stress] Marschang F. **DTW** 1988 Sep; 95(8):331–4 (56 ref.) (Eng. Abstr.) **(Ger)**

[Sudden "laying halt" as an adaptation reaction to heat stress] Petersen J, et al. **DTW** 1988 Sep;95(8):317–22 (Eng. Abstr.) **(Ger)**

[The "weaving" of horses] Sambraus HH, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(5):248–55 (Eng. Abstr.) **(Ger)**

STRESS DISORDERS, POST-TRAUMATIC

The process of research in posttraumatic stress disorder. Boehnlein JK. **Perspect Biol Med** 1989 Spring;32(3):455–65 (66 ref.)

Victims of violence and post-traumatic stress disorder. Sonnenberg SM. **Psychiatr Clin North Am** 1988 Dec; 11(4):581–90 (44 ref.)

[Combat stress reaction] Grinspoon A, et al. **Harefuah** 1989 Mar 1;116(5):250–1 (Eng. Abstr.) **(Heb)**

BLOOD

Low plasma beta-endorphin in post-traumatic stress disorder. Hoffman L, et al. **Aust N Z J Psychiatry** 1989 Jun;23(2):269–73

COMPLICATIONS

PTSD and suicide attempts by adolescents [letter] Crumley FE. **Am J Psychiatry** 1989 Apr;146(4):558

Multiple diagnosis in posttraumatic stress disorder. The role of war stressors. Green BL, et al. **J Nerv Ment Dis** 1989 Jun;177(6):329–35

Post-traumatic stress syndrome and sexual dysfunction. Kaplan PM. **J Sex Marital Ther** 1989 Spring;15(1):74–7

Concurrent psychiatric illness in inpatients with post-traumatic stress disorder. Hryvniak MR, et al. **Milit Med** 1989 Aug;154(8):399–401

Coexisting physical conditions among inpatients with post-traumatic stress disorder. White P, et al. **Milit Med** 1989 Feb;154(2):66–71 (29 ref.)

DIAGNOSIS

Posttraumatic stress disorder: a descriptive study supporting DSM-III-R criteria. Feinstein A. **Am J Psychiatry** 1989 May;146(5):665–6

PTSD in refugees [letter] Glassman JN. **Am J Psychiatry** 1988 Nov;145(11):1486–7

Hypnotizability and PTSD [letter] Liebowitz MR. **Am J Psychiatry** 1988 Nov;145(11):1486

Diagnosis of posttraumatic stress disorder [letter] Ramchandani D. **Am J Psychiatry** 1989 May;146(5):684–5

Development of a tool for assessing posttrauma response. Tanaka K. **Arch Psychiatr Nurs** 1988 Dec;2(6):350–6 (62 ref.)

The corticotropin-releasing hormone test in patients with posttraumatic stress disorder. Smith MA, et al. **Biol Psychiatry** 1989 Aug;26(4):349–55

Convergent validity of posttraumatic stress disorder (PTSD) diagnosis: self-report and clinical assessment. Solomon Z. **Isr J Psychiatry Relat Sci** 1988;25(1):46–55

The validity of the DSM-III posttraumatic stress disorder classification as applied to children. Saigh PA. **J Abnorm Psychol** 1989 May;98(2):189–92

Post-traumatic stress disorder in young children: a reaction to purported sexual abuse. Kiser LJ, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):645–9 (35 ref.)

Post-traumatic stress disorder in sexually abused children. McLeer SV, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):650–4

Children who witness the sexual assaults of their mothers. Pynoos RS, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):567–72

MMPI F-K index among hospitalized Vietnam veterans. Hyer L, et al. **J Clin Psychol** 1989 Mar;45(2):250–4

Completeness and internal consistency of DSM-III criteria for post-traumatic stress disorder. Kuhne A, et al. **J Clin Psychol** 1988 Sep;44(5):717–22

Civilian-related post-traumatic stress disorder: assessment-related issues. McCaffrey RJ, et al. **J Clin Psychol** 1989 Jan;45(1):72–6

Psychometric detection of fabricated symptoms of combat-related post-traumatic stress disorder: a systematic replication. McCaffrey RJ, et al. **J Clin Psychol** 1989 Jan; 45(1):76–9

Validity and reliability of the DSM-III criteria for posttraumatic stress disorder. Experience with a structured interview. Davidson J, et al. **J Nerv Ment Dis** 1989 Jun; 177(6):336–41

Diagnostic and psychopharmacological treatment characteristics of 536 inpatients with posttraumatic stress disorder. Faustman WO, et al. **J Nerv Ment Dis** 1989 Mar; 177(3):154–9

Posttraumatic stress and conversion disorders in a Laotian refugee veteran: use of amobarbital interviews. Freimer N, et al. **J Nerv Ment Dis** 1989 Jul;177(7):432–3

Concurrent validation of the Million Clinical Multiaxial Inventory among Vietnam veterans with posttraumatic stress disorder. Hyer L, et al. **Psychol Rep** 1988 Aug; 63(1):271–8

Revising the differential diagnosis of the parasomnias in DSM-IIIR [letter] Ross RJ, et al. **Sleep** 1989 Jun; 12(3):287–9

[Post-traumatic stress disorder: not only in war victims] van Meekeren E, et al. **Ned Tijdschr Geneeskd** 1989 Jan 21; 133(3):97–9 **(Dut)**

DRUG THERAPY

Propranolol treatment for childhood posttraumatic stress disorder, acute type. A pilot study. Famularo R, et al. **Am J Dis Child** 1988 Nov;142(11):1244–7

Comments on posttraumatic stress disorder [letter] **Am J Psychiatry** 1989 Jan;146(1):128–9

Pharmacotherapy for PTSD [letter] **Am J Psychiatry** 1988 Nov;145(11):1484–6

A controlled trial of desipramine in 18 men with posttraumatic stress disorder. Reist C, et al. **Am J Psychiatry** 1989 Apr;146(4):513–6

Clonidine in Cambodian patients with posttraumatic stress disorder. Kinzie JD, et al. **J Nerv Ment Dis** 1989 Sep; 177(9):546–50

Dietary tyrosine as an aid to stress resistance among troops. Salter CA. **Milit Med** 1989 Mar;154(3):144–6

Effects of a specific beta 2-receptor blocker in neuroleptic-induced akathisia. Adler L, et al. **Psychiatry Res** 1989 Jan;27(1):1–4

EPIDEMIOLOGY

Prevalence of psychiatric disorders among subjects exposed to a natural disaster. Maj M, et al. **Acta Psychiatr Scand** 1989 Jun;79(6):544–9

Prevalence of posttraumatic stress disorder in wounded Vietnam veterans. Pitman RK, et al. **Am J Psychiatry** 1989 May;146(5):667–9

Social and behavioral consequences of the Vietnam experience among American Legionnaires. Stellman JM, et al. **Environ Res** 1988 Dec;47(2):129–49

An explanatory model of recovery from disaster loss. Murphy SA. **Res Nurs Health** 1989 Apr;12(2):67–76

[Mental health problems in refugees after World War II] Andersen HS. **Nord Med** 1989;104(5):147–9 (Eng. Abstr.) **(Dan)**

ETIOLOGY

Self-cutting after rape. Greenspan GS, et al. **Am J Psychiatry** 1989 Jun;146(6):789–90

The aetiology of post-traumatic stress disorders following a natural disaster. McFarlane AC. **Br J Psychiatry** 1988 Jan;152:116–21

Post-traumatic stress disorder among American Legionnaires in relation to combat experience in Vietnam: associated and contributing factors. Snow BR, et al. **Environ Res** 1988 Dec;47(2):175–92

Posttraumatic stress disorder in victims of motor vehicle accidents. Burstein A. **Hosp Community Psychiatry** 1989 Mar;40(3):295–7 (11 ref.)

Through a glass darkly: the psychoanalytic use of hypnosis with post-traumatic stress disorder. Peebles MJ. **Int J Clin Exp Hypn** 1989 Jul;37(3):192–206

PTSD and sexually abused children [letter] Huessy HR. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):298–9

Recognition and treatment of the post-traumatic stress disorder in the burn victim. Courtemanche DJ, et al. **J Burn Care Rehabil** 1989 May-Jun;10(3):247–50

Psychological stages in adaptation following burn injury: a method for facilitating psychological recovery of burn victims. Watkins PN, et al. **J Burn Care Rehabil** 1988 Jul-Aug;9(4):376–84

Psychological aftereffects of transportation disaster. Hodgkinson PE. **Med Sci Law** 1988 Oct;28(4):304–9

Technological disaster—survival and bereavement. Hodgkinson PE. **Soc Sci Med** 1989;29(3):351–6

[Post-traumatic stress syndrome: not only in war victims (letter)] Levie LH. **Ned Tijdschr Geneeskd** 1989 Mar 4; 133(9):464 **(Dut)**

[Psychological aspects of the battered child syndrome] Popielarska M, et al. **Pediatr Pol** 1988 Apr;63(4):236–42 (Eng. Abstr.) **(Pol)**

[Mental disorders as late sequelae of closed cranio-cerebral trauma] Golodets RG, et al. **Zh Nevropatol Psikhiatr** 1989; 89(6):77–82 (Eng. Abstr.) **(Rus)**

[Remote sequelae of closed cranio-cerebral trauma (various disputable problems)] Shogam II. **Zh Nevropatol Psikhiatr** 1989;89(5):141–5 (29 ref.) **(Rus)**

[Neuropsychological sequelae of deportation to the Nazi concentration camps during the Second World War] Abalan F, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Jan-Feb;17(1):36–43 (35 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

Familial psychiatric illness in chronic posttraumatic stress disorder. Davidson J, et al. **Compr Psychiatry** 1989 Jul-Aug;30(4):339–45

HISTORY

Posttraumatic stress disorder. A historical perspective on diagnosis and treatment. Peebles MJ. **Bull Menninger Clin** 1989 May;53(3):274–86

NURSING

When the war doesn't end. Counseling POWs. Nelson LF. **J Psychosoc Nurs Ment Health Serv** 1989 Jul;27(7):26–30

PHYSIOPATHOLOGY

Heterogeneity of PTSD [letter; comment] Kolb LC.

Am J Psychiatry 1989 Jun;146(6):811–2. Comment on: Am J Psychiatry 1988 May;145(5):655–6

Startle modulation in children with posttraumatic stress disorder. Ornitz EM, et al. Am J Psychiatry 1989 Jul; 146(7):866–70

Sleep disturbance in posttraumatic stress disorder: pathogenetic or epiphenomenal? [editorial] Reynolds CF 3d. Am J Psychiatry 1989 Jun;146(6):695–6

Sleep disturbance as the hallmark of posttraumatic stress disorder. Ross RJ, et al. Am J Psychiatry 1989 Jun; 146(6):697–707 (92 ref.)

Post-traumatic stress disorder, hormones, and memory [editorial] Pittman RK. Biol Psychiatry 1989 Jul; 26(3):221–3 (14 ref.)

PREVENTION & CONTROL

Early mental health intervention in combat situations: the USS Stark. Sokol RJ. Milit Med 1989 Aug;154(8):407–9

PSYCHOLOGY

Disaster severity and emotional disturbance: implications for primary mental health care in developing countries. Lima BR, et al. Acta Psychiatr Scand 1989 Jan;79(1):74–82

The dynamics of posttraumatic stress disorder in South African political ex-detainees. Solomons K. Am J Psychother 1989 Apr;43(2):208–17 (13 ref.)

A tormented mind: clinical and theoretical implications of overwhelming life events. Watson PB. Aust N Z J Psychiatry 1989 Mar;23(1):97–102

Somatic complaints, stress reaction, and posttraumatic stress disorder: a three-year follow-up study. Solomon Z. Behav Med 1988 Winter;14(4):179–85

Characteristic expressions of combat-related posttraumatic stress disorder among Israeli soldiers in the 1982 Lebanon War. Solomon Z, et al. Behav Med 1988 Winter;14(4):171–8

Combat level and social support in the development of posttraumatic stress disorder in Vietnam veterans. Barrett TW, et al. Behav Modif 1988 Jan;12(1):100–15

Audiological evaluation of nonalcoholic, drug-free posttraumatic stress disorder patients. Shalev A, et al. Biol Psychiatry 1988 Sep;24(5):522–30

Locus of control and combat-related post-traumatic stress disorder: the intervening role of battle intensity, threat appraisal and coping. Solomon Z, et al. Br J Clin Psychol 1989 May;28 (Pt 2):131–44

The neuropsychiatry of post-traumatic stress disorder. Burges Watson IP, et al. Br J Psychiatry 1988 Feb; 152:164–73 (103 ref.)

Post-traumatic stress disorder and civil violence in Northern Ireland. Loughrey GC, et al. Br J Psychiatry 1988 Oct; 153:554–60

Dreams in head-injured patients. Benyakar M, et al. Brain Inj 1988 Oct–Dec;2(4):351–6

Functionalism: the penumbra of psychiatric diagnoses. Bromberg W. Bull Am Acad Psychiatry Law 1988; 16(3):259–68

Post-traumatic stress in sexually abused, physically abused, and nonabused children. Deblinger E, et al. Child Abuse Negl 1989;13(3):403–8

Assessment of symptoms in adult survivors of incest: a factor analytic study of the Responses to Childhood Incest Questionnaire. Edwards PW, et al. Child Abuse Negl 1989; 13(1):101–10

Post-traumatic stress disorder: a reaction to state-supported child abuse and neglect. Straker G, et al. Child Abuse Negl 1988;12(3):383–95

Children in a disaster: an overview. Sugar M. Child Psychiatry Hum Dev 1989 Spring;19(3):163–79 (62 ref.)

Posttraumatic stress disorder and blindness. McFarlane AC. Compr Psychiatry 1988 Nov–Dec;29(6):558–60

Traumatic stress disorder: diagnostic and clinical issues in former prisoners of war. Miller TW, et al. Compr Psychiatry 1989 Mar–Apr;30(2):139–48

Physical and psychological sequelae to torture. A controlled clinical study of exiled asylum applicants. Hougen HP. Forensic Sci Int 1988 Oct;39(1):5–11

Posttraumatic stress in immigrants from Central America and Mexico. Cervantes RC, et al. Hosp Community Psychiatry 1989 Jun;40(6):615–9

Posttraumatic stress disorder in a Central American refugee. Lopez A, et al. Hosp Community Psychiatry 1988 Dec; 39(12):1309–11

PTSD in minorities [letter] White PA, et al. Hosp Community Psychiatry 1989 Jan;40(1):86–7

Substance abuse among Vietnam veterans: a view from the CAP control perspective. McCormack NA. Int J Addict 1988;23(12):1311–6 (13 ref.)

Psychological distress of Holocaust survivors and offspring in Israel, forty years later: a review. Dasberg H. Isr J Psychiatry Relat Sci 1987;24(4):243–56 (54 ref.)

Visual conversion disorder: a case analysis of the influence of visual information. Bryant RA, et al. J Abnorm Psychol 1989 Aug;98(3):326–9

Attributional style and combat-related posttraumatic stress disorder. Mikulincer M, et al. J Abnorm Psychol 1988 Aug; 97(3):308–13

Negative life events, coping responses, and combat-related psychopathology: a prospective study. Solomon Z, et al. J Abnorm Psychol 1988 Aug;97(3):302–7

A three-year follow-up of Cambodian young people traumatized as children. Kinzie JD, et al. J Am Acad Child Adolesc Psychiatry 1989 Jul;28(4):501–4

Clinical meaning of the Keane PTSD Scale. Moody DR, et al. J Clin Psychol 1989 Jul;45(4):542–6

The relationships of post-traumatic stress disorder to adolescent illegal activities, drinking, and employment. Watson CG, et al. J Clin Psychol 1988 Jul;44(4):592–8

PTSD 40 years later: incidence and person–situation correlates in former POWs. Zeiss RA, et al. J Clin Psychol 1989 Jan;45(1):80–7

Forty years later: long-term consequences of massive traumatization as manifested by Holocaust survivors from the city and the Kibbutz. Nadler A, et al. J Consult Clin Psychol 1989 Apr;57(2):287–93

Concurrent posttraumatic stress disorder in psychogeriatric patients. Rosen J, et al. J Geriatr Psychiatry Neurol 1989 Apr–Jun;2(2):65–9

Dimensions of war zone stress. An empirical analysis. Grady DA, et al. J Nerv Ment Dis 1989 Jun;177(6):347–50

Posttraumatic adjustment of Australian firefighters [letter] Lyons JA. J Nerv Ment Dis 1989 Apr;177(4):248

Psychological sequelae of war. A 3-year prospective study of Israeli combat stress reaction casualties. Solomon Z. J Nerv Ment Dis 1989 Jun;177(6):342–6

Posttraumatic stress disorder as a consequence of the POW experience. Speed N, et al. J Nerv Ment Dis 1989 Mar; 177(3):147–53

Childhood stress disorder behaviors in veterans who do and do not develop posttraumatic stress disorder. Watson CG, et al. J Nerv Ment Dis 1989 Feb;177(2):92–5

Vietnam veterans: overreporting versus acceptable reporting of symptoms. Hyer L, et al. J Pers Assess 1988 Fall; 52(3):475–86

Coping, locus of control, social support, and combat-related posttraumatic stress disorder: a prospective study. Solomon Z, et al. J Pers Soc Psychol 1988 Aug;55(2):279–85

Survival skills for psychic trauma. Karl GT. J Psychosoc Nurs Ment Health Serv 1989 Apr;27(4):15–9

Morale in battle—the medical and the military. Carver. J R Army Med Corps 1989 Feb;135(1):5–9

Lockerbie air disaster [letter] Tyrer M. J R Army Med Corps 1989 Jun;135(2):93–4

Psychological symptoms of residents in the aftermath of the Three Mile Island nuclear accident and restart. Prince-Embury S, et al. J Soc Psychol 1988 Dec; 128(6):779–90

The concept of nomogenic disorders. Tyndel M, et al. Med Law 1988;7(2):167–76

Slight hysteria. Bellamy RF, et al. Milit Med 1989 Feb; 154(2):94–7

The Porter lecture. Common psychological themes in societies' reaction to terrorism and disasters. Duffy JC. Milit Med 1988 Aug;153(8):387–90

A survey of the effect of the Vietnam Memorial dedication on psychiatric symptoms in Vietnam veterans. Parsons JP, et al. Milit Med 1988 Nov;153(11):578–82

Neuropsychology of posttraumatic stress disorder: a pilot study. Everly GS, et al. Percept Mot Skills 1989 Jun;68(3 Pt 1):807–10

The aging war veteran and alcohol abuse: an emerging relationship? Parette HP Jr, et al. Percept Mot Skills 1989 Jun;68(3 Pt 1):985–6

The effect of combat-related posttraumatic stress disorder on the family. Solomon Z. Psychiatry 1988 Aug;51(3):323–9 (32 ref.)

Interest patterns among Vietnam-era veterans. O'Leary WC, et al. Psychol Rep 1988 Aug;63(1):79–85

Flood experience and posttraumatic trait anxiety in Appalachia. Simpson-Housley P, et al. Psychol Rep 1989 Jun;64(3 Pt 1):896–8

Posttraumatic stress syndrome-like symptoms among AIDS caregivers. Trice AD. Psychol Rep 1988 Oct;63(2):656–8

The implications of life events and social integration in the course of combat-related post-traumatic stress disorder. Solomon Z, et al. Soc Psychiatry Psychiatr Epidemiol 1989 Jan;24(1):41–8

PTSD and social functioning. A three year prospective study. Solomon Z. Soc Psychiatry Psychiatr Epidemiol 1989 May; 24(3):127–33

Catastrophic stress and factors affecting its consequences among Southeast Asian refugees. Beiser M, et al. Soc Sci Med 1989;28(3):183–95

Violence and trauma response. White SG, et al. State Art Rev Occup Med 1988 Oct–Dec;3(4):677–94 (11 ref.)

[Armed conflict and trauma: a clinical study of Latin-American refugee children] Rousseau C, et al. Can J Psychiatry 1989 Jun;34(5):376–85 (Eng. Abstr.) (Fre)

[Psychological sequelae of persecution. The survivor syndrome] Peters UH. Fortschr Neurol Psychiatr 1989 May; 57(5):169–91 (160 ref.) (Eng. Abstr.) (Ger)

[The psychoanalyst as a military psychiatrist. An open letter to Peter Kutter] Cremerius J. Psyche (Stuttg) 1989 Jun; 43(6):558–63 (Ger)

REHABILITATION

Torture victims. A pathway to recovery. Feldman MK. Minn Med 1988 Sep;71(9):535–8, 540

THERAPY

Hallucinations, delusions and things that go bump in the night. Smith CH. Ala Med 1989 Mar;58(9):17–8, 21–4, 27–8

Hypnosis and rape victims. Ebert BW. Am J Clin Hypn 1988 Jul;31(1):50–6

Hypnosis in the treatment of posttraumatic stress disorder: an isomorphic intervention. Kingsbury SJ. Am J Clin Hypn 1988 Oct;31(2):81–90

Hypnotic intervention with accident victims during the acute phase of posttraumatic adjustment. Venn J. Am J Clin Hypn 1988 Oct;31(2):114–7

Psychiatric symptoms in refugee families from South East Asia: therapeutic challenges. Ganesan S, et al. Am J Psychother 1989 Apr;43(2):218–28

Post accident/incident counseling: some exploratory findings. Johnston AN, et al. Aviat Space Environ Med 1988 Aug; 59(8):766–9

Torture. Başoğlu M, et al. BMJ 1988 Dec 3;297(6661):1423–4

The treatment of post-traumatic stress disorder. McFarlane AC. Br J Med Psychol 1989 Mar;62 (Pt 1):81–90

The traumatized children of violent marriages. Silvern L, et al. Child Welfare 1989 Jul–Aug;68(4):421–36

Gold award. A regional resource for psychiatric treatment of victims of violence. Hosp Community Psychiatry 1988 Nov;39(11):1192–5

The unconscious history of Vietnam in the group: an innovative multiphasic model for working through authority transferences in guilt-driven veterans. Parson ER. Int J Group Psychother 1988 Jul;38(3):275–301

Short-term psychotherapy with Israeli youth during military service. Bleich A, et al. Isr J Psychiatry Relat Sci 1988; 25(2):88–101

An Israeli Airforce mental health unit: sociopsychological factors and medical care use following psychological intervention. Rabinowitz SS, et al. Isr J Psychiatry Relat Sci 1988;25(2):78–87

Organizational diagnosis and training plan for psychiatrists-commanders of small psychiatric teams treating soldiers suffering from combat reactions. Student M, et al. Isr J Psychiatry Relat Sci 1988;25(2):102–12

Treatment outcomes of Vietnam veterans with PTSD and the consistency of the MCMI. Hyer L, et al. J Clin Psychol 1989 Jul;45(4):547–52

The use of an in vitro flooding package in the treatment of traumatized adolescents. Saigh PA. J Dev Behav Pediatr 1989 Feb;10(1):17–21

On-site work evaluations: desensitization for avoidance reactions following severe hand injuries. Grunert BK, et al. J Hand Surg [Br] 1989 May;14(2):239–41

Psychiatric intervention after disaster [editorial] Lancet 1989 Jul 15;2(8655):138

How to treat torture victims. Feldman MK. Minn Med 1988 Sep;71(9):539

Post-traumatic aspects of the treatment of victims of sexual abuse and incest. Coons PM, et al. Psychiatr Clin North Am 1989 Jun;12(2):325–35

Hypnosis in the treatment of victims of sexual abuse. Spiegel D. Psychiatr Clin North Am 1989 Jun;12(2):295–305 (45 ref.)

Rx: art. Horgan J. Sci Am 1988 Jun;258(6):38

[Use of reflexotherapy in patients with sequelae of injuries] Poliakova AG. Ortop Travmatol Protez 1988 Aug;(8):50–4 (Eng. Abstr.) (Rus)

STRESS, MECHANICAL

Prevention of lower extremity stress fractures: a controlled trial of a shock absorbent insole [see comments] Gardner LI Jr, et al. Am J Public Health 1988 Dec;78(12):1563–7 . Comment in: Am J Public Health 1989 Aug;79(8):1056–7

The effect of rate of force application on the threshold of periodontal ligament mechanoreceptors in the cat canine tooth. Linden RW, et al. Arch Oral Biol 1988;33(10):715–9

A strain-gauge study of the effect of external fixation on the canine tibia. Matusbek KJ, et al. Arch Orthop Trauma Surg 1989;108(3):159–65

Failure load and displacement of the human sacroiliac joint under in vitro loading. Rothkötter HJ, et al. Arch Orthop Trauma Surg 1988;107(5):283–7

Couette membrane filtration with constant shear stress. Fischel RJ, et al. ASAIO Trans 1988 Jul–Sep;34(3):375–85

Regional stress in a noncircular cylinder. Janz RF, et al. Biophys J 1989 Jan;55(1):173–82

Model study on the strain and stress distributions in the vicinity of an arterial stenosis. Nakamura M, et al. Biorheology 1988;25(4):685–95

Catching up the orthopods [editorial] Evans G, et al. BMJ 1988 Oct 15;297(6654):936

Osteoblasts increase their rate of division and align in response to cyclic, mechanical tension in vitro. Buckley MJ, et al. Bone Miner 1988 Jul;4(3):225–36

Cyclic loading of segmental spinal instrumentation. Kummer FJ, et al. Bull Hosp Jt Dis Orthop Inst 1988 Fall;48(2):204–6

Load transfer characteristics of a noncemented total knee arthroplasty. Whiteside LA, et al. Clin Orthop 1989 Feb; (239):168–77

The effect of mechanical stress on cultured growth cartilage cells. Uchida A, et al. Connect Tissue Res 1988;17(4):305–11

Mechanical strength of trabecular bone at the knee. Hvid I. Dan Med Bull 1988 Aug;35(4):345–65 (247 ref.)

Experimental stress-induced changes in growing long bones. Hille E, et al. Int Orthop 1988;12(4):309–15

Effect of traction on the vasculature of choricallantoic membranes of chick embryos. Yamashita H, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):778–82
Poly(ether) urethane reactivity with metal–ion in calcification and environmental stress cracking. Thoma RJ. **J Biomater Appl** 1987 Apr;1(4):449–86
Stress injury of the distal radial growth plate. Carter SR, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):834–6
Torsional stability of the femoral component of hip arthroplasty. Response to an anteriorly applied load. Nunn D, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):452–5
Endothelial adherence under shear stress is dependent upon microfilament reorganization. Wechezak AR, et al. **J Cell Physiol** 1989 Apr;139(1):136–46
Sympathetic nervous system response to mechanical stress of the spinal column in rats [letter] Jarmel ME. **J Manipulative Physiol Ther** 1989 Jun;12(3):242–3
Ion channels activated by osmotic and mechanical stress in membranes of opossum kidney cells. Ubl J, et al. **J Membr Biol** 1988 Sep;104(3):223–32
The mechanical and morphological properties of bone beneath internal fixation plates of differing rigidity. Claes L. **J Orthop Res** 1989;7(2):170–7
The effect of medial meniscectomy and coronal plane angulation on in vitro load transmission in the canine stifle joint. Newman AP, et al. **J Orthop Res** 1989;7(2):281–91
Proximal tibial sclerotic reaction. Herring JA, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):721–4
Displaced stress fractures of the femoral neck in young male adults: a report of twelve operative cases. Visuri T, et al. **J Trauma** 1988 Nov;28(11):1562–9
Cavitation microjets as a contributory mechanism for renal calculi disintegration in ESWL. Crum LA. **J Urol** 1988 Dec;140(6):1587–90 (32 ref.)
Optimal graft diameter: effect of wall shear stress on vascular healing. Binns RL, et al. **J Vasc Surg** 1989 Sep;10(3):326–37
Mechanical properties of bone–cement interface following prostaglandin–synthetase inhibition in rabbits. Kjaersgaard–Andersen P, et al. **Rev Chir Orthop** 1988;74 Suppl 2:332–3
Experimental instability of the elbow joint. Söjbjerg JO, et al. **Rev Chir Orthop** 1988;74 Suppl 2:334–5
Measurement of human lumbar spine ligaments during loaded and unloaded motion. Hedtmann A, et al. **Spine** 1989 Feb; 14(2):175–85
[Biomechanics of dental implants: theoretical aspects] Richter EJ. **Rev Belge Med Dent** 1987;42(6):186–90 **(Fre)**
[Visualization of femur stresses in monopodal support using the finite elements method (with or without prosthesis)] Passuti N, et al. **Rev Chir Orthop** 1988;74 Suppl 2:212–5 **(Fre)**
[Fatigue fractures of the femoral neck in a military recruit] Frick T, et al. **Schweiz Rundsch Med Prax** 1988 Dec 13; 77(50):1376–8 (Eng. Abstr.) **(Ger)**
[Biomechanics in sports] Stüssi E. **Schweiz Rundsch Med Prax** 1989 Mar 14;78(11):299–307 (Eng. Abstr.) **(Ger)**
[Characteristics of spinal stress in modeling scoliotic deformity and the methods of its correction] Gladkov AV, et al. **Ortop Travmatol Protez** 1989 Jan;(1):43–7 (Eng. Abstr.) **(Rus)**

STRESS PROTEINS see **HEAT-SHOCK PROTEINS**

STRESS, PSYCHOLOGICAL

see related
CROWDING
LIFE CHANGE EVENTS

Self-report and stability of physical symptoms by adolescents. Marschall P. **Adolescence** 1989 Spring; 24(93):209–16
Mechanisms of physical and emotional stress. Based on the proceedings of an NIH symposium. November 6–8, 1986, Bethesda, Maryland. **Adv Exp Med Biol** 1988;245:1–530
Determinants of reported burnout in health professionals associated with the care of patients with AIDS. Ross MW, et al. **Aids** 1988 Oct;2(5):395–7
Stresses on physicians treating AIDS. Frierson RL, et al. **Am Fam Physician** 1987 Jun;35(6):153–9
Patient care, resident stress, and government regulation. Cohen MI, et al. **Am J Dis Child** 1989 Feb;143(2):181–2
Stress experienced during pediatric residency training. Its causes, consequences, recognition, and solutions. Hoekelman RA. **Am J Dis Child** 1989 Feb;143(2):177–80
The relation of psychosocial dimensions of work with coronary heart disease risk factors: a meta–analysis of five United States data bases. Pieper C, et al. **Am J Epidemiol** 1989 Mar;129(3):483–94
Wartime determinants of arteriographically confirmed coronary artery disease in Beirut. Sibai AM, et al. **Am J Epidemiol** 1989 Oct;130(4):623–31
Stress ulcer prophylaxis in medical patients: who, what, and how much? Wilcox CM, et al. **Am J Gastroenterol** 1988 Nov;83(11):1199–211 (106 ref.)
Neurovegetative assessment in subjects with a risk for hypertension. Pirrelli A, et al. **Am J Hypertens** 1989 Feb; 2(2 Pt 2):24S–28S
Reactions of asbestos–exposed workers to notification and screening. Meyerowitz BE, et al. **Am J Ind Med** 1989; 15(4):463–75
Legal concept of torts and emotional distress [letter] Tobak M. **Am J Psychiatry** 1989 Sep;146(9):1237–8
Effect of family break–up and parent divorce on children. Connell HM. **Aust Paediatr J** 1988 Aug;24(4):222–7 (41 ref.)
Trends in Poland in space psychology research. Terelak JF. **Aviat Space Environ Med** 1989 Apr;60(4):352–60
Stress and relapse of breast cancer [letter; comment] Wood J, et al. **BMJ** 1989 Apr 8;298(6678):962–3. **Comment on:** BMJ 1989 Feb 4;298(6669):291–3
Stress in medical undergraduates and house officers. Firth–Cozens J. **Br J Hosp Med** 1989 Feb;41(2):161–4 (66 ref.)
Shoplifting as a symptom of stress in families of mentally handicapped persons: a case report [letter] Fishbain D. **Br J Psychiatry** 1988 Nov;153:713
Hopelessness and helplessness: treating the doctors who treat AIDS patients. LeBourdais E. **Can Med Assoc J** 1989 Feb 15;140(4):440–3
Job stress and satisfaction among the staff members at a cancer center. Peteet JR, et al. **Cancer** 1989 Aug 15; 64(4):975–82
The development of a method for determining oncology patients' emotional distress using linear analogue scales. Sutherland HJ, et al. **Cancer Nurs** 1988 Oct;11(5):303–8
The stresses of caring: Part 2. Swogger G Jr. **Colo Med** 1988 Dec 1;85(22):478–9
Coping with the social environment: the relationship between life events, coping strategies and psychological distress. Headey B, et al. **Community Health Stud** 1988;12(4):444–52
Rules for surviving a chief medical residency. Schneiderman H. **Conn Med** 1989 Jan;53(1):45–6
Hair casts or pseudonits acquired following psychological trauma. Held JL, et al. **Cutis** 1989 Apr;43(4):380–1
Earthquake urticaria. Stewart JH, et al. **Cutis** 1989 Apr; 43(4):340
The stressful family: implications for diabetes control [letter] Mengel MB. **Diabetes Care** 1988 Jul–Aug;11(7):602–3
Hemorrhagic stress ulcer management [letter] Granda AM. **Dig Dis Sci** 1988 Oct;33(10):1340–1
When the caregiver becomes the patient. Gaynor S. **Geriatr Nurs (New York)** 1989 May–Jun;10(3):120–3
Caregiving and employment: results of an employee survey. Scharlach AE, et al. **Gerontologist** 1989 Jun;29(3):382–7
Do we need another "stress and caregiving" study? [editorial] Zarit SH. **Gerontologist** 1989 Apr;29(2):147–8
Job–related stress and coping among home–care workers with elderly people. Bartoldus E, et al. **Health Soc Work** 1989 Aug;14(3):204–10
Moral distress and the shortage of critical care nurses. Fowler MD. **Heart Lung** 1989 May;18(3):314–5
Job demands and stress reactions in repetitive and uneventful monotony at work. Johansson G. **Int J Health Serv** 1989; 19(2):365–77
Emotional stress or acceptance: parental reactions to unexpected developmental processes. Fritz A. **Int J Rehabil Res** 1987;10(4 Suppl 5):168–70
The understanding and evaluation of chronic pain: subjective vs. objective determinants of pain. Hyyppä MT. **Int J Rehabil Res** 1987;10(4 Suppl 5):243–7
Burnout and coping strategies among hospital staff nurses. Ceslowitz SB. **J Adv Nurs** 1989 Jul;14(7):553–8
A comparison of sources of nursing stress and job satisfaction among mental handicap and hospice nursing staff. Power KG, et al. **J Adv Nurs** 1988 Nov;13(6):726–32
Association between job stress and perceived quality of life. Horowitz SM, et al. **J Am Coll Health** 1988 Jul;37(1):29–35
Working status and stress of middle class women of Calcutta. Mukhopadhyay S. **J Biosoc Sci** 1989 Jan;21(1):109–14
Physical health and stress in entering dental students. Rubenstein LK, et al. **J Dent Educ** 1989 Sep;53(9):545–7
Psychosocial distress and perceived health status among elderly users of a health maintenance organization. Goldstein MS, et al. **J Gerontol** 1989 Sep;44(5):P154–6
Aberrant behaviors and Alzheimer's disease: mental health effects on spouse caregivers. Pruchno RA, et al. **J Gerontol** 1989 Sep;44(5):S177–82
The impact of a military air disaster on the health of assistance workers. A prospective study. Bartone PT, et al. **J Nerv Ment Dis** 1989 Jun;177(6):317–28
Childhood stress disorder behaviors in veterans who do and do not develop posttraumatic stress disorder. Watson CG, et al. **J Nerv Ment Dis** 1989 Feb;177(2):92–5
Factors associated with role stress in middle managers. Skorga P, et al. **J Nurs Adm** 1989 Oct;19(10):4, 22
Predictors of stress–related illness in city bus drivers. Bartone PT. **J Occup Med** 1989 Aug;31(8):657–63 (62 ref.)
Is it possible to prepare for trauma? Weiss RS. **J Palliat Care** 1988 May;4(1–2):74–6
Stress and coping with scoliosis: psychological effects on adolescents and their families. MacLean WE Jr, et al. **J Pediatr Orthop** 1989 May–Jun;9(3):257–61
The irritable bowel: a pathological or a psychological syndrome? Waxman D. **J R Soc Med** 1988 Dec; 81(12):718–20
Time phases and the individual psychological crisis in sports competition: theory and research findings. Bar–Eli M, et al. **J Sports Sci** 1988 Summer;6(2):141–9
Teachers, stress, and mortality [letter] Herloff B, et al. **Lancet** 1989 Jan 21;1(8630):159–60
Staff surgeon stress syndrome [letter] Lamb JM. **Milit Med** 1988 Oct;153(10):540
Impact of military life stress on the quality of life of military wives. Rosen LN, et al. **Milit Med** 1989 Mar;154(3):116–20
Physician stress: is it inevitable? Orman MC. **Mo Med** 1989 Jan;86(1):21–5
House staff stress. Walerstein SJ, et al. **N Y State J Med** 1989 Aug;89(8):454–7
Psychosocial predictors of pregnancy outcomes in low–income black, Hispanic, and white women. Norbeck JS, et al. **Nurs Res** 1989 Jul–Aug;38(4):204–9
Family stress and adaptation. Mays RM. **Nurse Pract** 1988 Aug;13(8):52, 54, 56
Psychological impact of the diagnosis of gestational diabetes. Spirito A, et al. **Obstet Gynecol** 1989 Apr;73(4):562–6
Managing work–related stress, burnout, impairment. Gable GK. **Pa Med** 1989 Jun;92(6):46–8, 50 concl
Resident stress = spousal stress [letter] Gerardi GR. **Pediatrics** 1989 Apr;83(4 Pt 2):637
Different effects of acute and chronic stress on two dopamine–mediated behaviors in the mouse. Cabib S, et al. **Physiol Behav** 1988;43(2):223–7
Acute and repeated gestational stress affect offspring learning and activity in rats. Weller A, et al. **Physiol Behav** 1988; 43(2):139–43
Innovations in the management of change. Byrne RB. **Prog Clin Biol Res** 1989;293:7–14
Psychological consequences of surgery. O'Hara MW, et al. **Psychosom Med** 1989 May–Jun;51(3):356–70
Psychophysiological responses in women reporting severe premenstrual symptoms. van den Akker O, et al. **Psychosom Med** 1989 May–Jun;51(3):319–28
Subjective stress, job satisfaction, and job performance of hospital nurses. Packard JS, et al. **Res Nurs Health** 1987 Aug;10(4):253–61
Personality hardiness, occupational stress, and burnout in critical care nurses. Topf M. **Res Nurs Health** 1989 Jun; 12(3):179–86
Physicians' stress in the coronary care units. Hasegawa A, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:474–9
Basic pattern of daily life stress and work condition. Hayashi S, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:519–27
Occupational influences on burnout phenomenon among hospital nurses. Hisashige A, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:454–66
Psychological stress in the workplace. Lazarus RS. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:528–40 (34 ref.)
Stress and rheumatoid arthritis: can a cognitive coping model help explain a link? Beckham JC, et al. **Semin Arthritis Rheum** 1987 Nov;17(2):81–9 (59 ref.)
The impacts of positive psychological states on physical health: a review and theoretical framework. Edwards JR, et al. **Soc Sci Med** 1988;27(12):1447–59 (121 ref.)
Psychosocial effects of screening for somatic risk: the Swedish alpha 1 antitrypsin experience. McNeil TF, et al. **Thorax** 1988 Jul;43(7):505–7
Stress and tension in patient care [editorial] Watts MS. **West J Med** 1989 Feb;150(2):205–6
Uncertainty in illness and the future. Yarcheski A. **West J Nurs Res** 1988 Aug;10(4):401–13
Stress and adaptation patterns of older osteoporotic women. Roberto KA. **Women Health** 1988;14(3–4):105–19
[The disappointed patient and the burned–out physician] Nørrelund N. **Ugeskr Laeger** 1989 Feb 27;151(9):594–6 **(Dan)**
[Psychosomatic factors in angina pectoris] Fellmann M, et al. **Schweiz Rundsch Med Prax** 1988 Dec 27;77(52):1423–7 (Eng. Abstr.) **(Ger)**
[Hormone levels and reaction times of the anesthetist before and after a surgical session] Porro CA, et al. **Minerva Anestesiol** 1988 Oct;54(10):451–5 (Eng. Abstr.) **(Ita)**
[Stress and postoperative analgesia] Stacca R, et al. **Minerva Anestesiol** 1988 Oct;54(10):445–50 (Eng. Abstr.) **(Ita)**
[A study of the state–trait anxiety inventory (STAI) and its application to noise stress] Iwamoto M, et al. **Nippon Eiseigaku Zasshi** 1989 Feb;43(6):1116–23 (Eng. Abstr.) **(Jpn)**
[Present status and countermeasures for problems in occupational mental health] Miyasato K. **Seishin Shinkeigaku Zasshi** 1988;90(10):881–6 **(Jpn)**
[Stress and physicians. Interviews of 30 physicians working at hospitals] Riksaasen R. **Tidsskr Nor Laegeforen** 1989 Jun 10;109(16):1798–9 (Eng. Abstr.) **(Nor)**
[The future and health—an examination of an organization test] Engström K, et al. **Lakartidningen** 1989 Jul 12; 86(28–29):2519–21 **(Swe)**
[Stress and bad personnel policy made nurses to quit their jobs] Lilja A, et al. **Lakartidningen** 1989 Mar 29; 86(13):1145–6 **(Swe)**
[Physicians feel stress, anxiety and anger more often than other employees] Theorell T, et al. **Lakartidningen** 1988 Oct 5;85(40):3268–71 **(Swe)**

BLOOD

Physiological and psychological response to a three–month mental strain period in students. Scheuch K, et al. **Act Nerv Super (Praha)** 1988 Sep;30(3):169–73
Effect of ethanol and stress on plasma catecholamines and their relation to changes in emotional state and performance. Vogel WH, et al. **Alcoholism (NY)** 1989 Apr;

13(2):284–90
Haematological changes during acute mental stress. Jern C, et al. **Br J Haematol** 1989 Jan;71(1):153–6
Vasopressin secretion: suppression after light and tone stimuli previously paired with footshocks in rats. Onaka T, et al. **Exp Brain Res** 1988;71(2):291–7
Sympathoadrenergic regulation in elite fencers in training and competition. Hoch F, et al. **Int J Sports Med** 1988 Aug;9 Suppl 2:S141–5
Reversal of an abnormal free fatty acid response to emotional stress in a diabetic adolescent using a portable insulin–infusion pump. Noto RA, et al. **J Adolesc Health Care** 1989 Mar;10(2):160–4
Reduced responses of prolactin and catecholamine to stress in the lactating rat. Higuchi T, et al. **J Endocrinol** 1989 Aug;122(2):495–8
Platelet activation in outpatients undergoing esophagogastroduodenoscopy. Sagripanti A, et al. **J Nucl Med Allied Sci** 1989 Jan–Mar;33(1):22–5
Hematocrit increase by mental stress in hypertensive patients. Kitahara Y, et al. **Jpn Heart J** 1988 Jul;29(4):429–35
Serum pepsinogen I, gastrin, ABO blood groups, secretor status of ABH substances and behavioral factors in patients with duodenal ulcer and their relatives. Sumii K, et al. **Jpn J Med** 1988 Aug;27(3):291–4
Effects of opioid peptides administered in conscious rats on the changes in blood adrenaline levels caused by immobilization stress. Nakamura M, et al. **Jpn J Pharmacol** 1989 Jul;50(3):354–6
The effect of bombesin on basal, alpha–methyl–p–tyrosine, haloperidol, morphine, bremazocine and stress–induced prolactin secretion. Buydens P, et al. **Life Sci** 1988; 43(21):1755–60
Factors modifying the effect of diazepam on plasma corticosterone levels in rats. Pohorecky LA, et al. **Life Sci** 1988;43(25):2159–67
Neuronal cell bodies in the hypothalamic paraventricular nucleus mediate stress–induced renin and corticosterone secretion. Morton KD, et al. **Neuroendocrinology** 1989 Jul; 50(1):73–80
Psychosocial stress and catecholamines: their relationship to ageing, duodenal ulcer, hypochondriasis and hypertension. Christensen NJ. **Pharmacol Toxicol** 1988;63 Suppl 1:24–6
Effects of fasting on plasma catecholamine, corticosterone and glucose concentrations under basal and stress conditions in individual rats. De Boer SF, et al. **Physiol Behav** 1989 May;45(5):989–94
Plasma adrenocorticotropic hormone and cortisol in pigs: effects of time of day on basal and stressor–altered concentrations. Klemcke HG, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):42–53
Insulin response to a short stress period. Alvarez MA, et al. **Psychoneuroendocrinology** 1989;14(3):241–4
[Sex hormones in men under occupational stress] Hampl R, et al. **Vnitr Lek** 1988 Aug;34(8):802–6 (Eng. Abstr.) **(Cze)**
[A decrease in the content of immunoreactive alpha– and gamma–endorphins in the blood and the suppression of their hypersecretion under the influence of dexamethasone in emotional stress in monkeys] Dmitriev AD, et al. **Biull Eksp Biol Med** 1989 May;107(5):572–4 (Eng. Abstr.) **(Rus)**
[Phenotypic and functional characteristics of the subpopulations of regulatory T–lymphocytes participating in the stimulation of hemopoiesis during stress] Dygai AM, et al. **Biull Eksp Biol Med** 1989 May;107(5):590–3 (Eng. Abstr.) **(Rus)**
[Effect of emotional stress on the aggregation of platelets, content of zinc, copper, manganese, calcium and magnesium in plasma, erythrocytes and hair of healthy persons with different types of behavior] Gribauskas PS, et al. **Fiziol Cheloveka** 1988 Sep–Oct;14(5):857–62 **(Rus)**
[Status of lipid metabolism in patients with ischemic heart disease and its behavioral risk factor] Polozhentsev SD, et al. **Kardiologiia** 1988 Dec;28(12):101–2 **(Rus)**
[Features of blood lipid composition during emotional stress in rabbits with dyslipoproteinemia] Bel'chenko DI, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):10–3 (Eng. Abstr.) **(Rus)**
[Changes in the lipid composition of the blood plasma lipoproteins in acute emotional stress] Gurin VN, et al. **Patol Fiziol Eksp Ter** 1988 Sep–Oct;(5):57–9 (Eng. Abstr.) **(Rus)**
[Effect of emotional–pain stress on the level of lipids and esterification of cholesterol in the blood of rats] Tverdokhlib VP, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug; (4):27–9 (Eng. Abstr.) **(Rus)**
[Individual characteristics and the effect of stress exposure on the ethanol concentration in the body] Ushakova MM, et al. **Sud Med Ekspert** 1988 Jul–Sep;31(3):45–8 (Eng. Abstr.) **(Rus)**
[Hormonal indices of the normal dolphin Turpsiops truncatus and in the dynamics of experimental stress] Orlov MM, et al. **Zh Evol Biokhim Fiziol** 1988 Jul–Aug;24(4):557–63 (Eng. Abstr.) **(Rus)**
[Lipid peroxidation in emotional stress and neurotic disorders] Aleksandrovskiĭ IuA, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):95–101 (Eng. Abstr.) **(Rus)**
[Endocrine behavior of battered children in the acute stage of the aggression] Loredo–Abdalá A, et al. **Bol Med Hosp Infant Mex** 1989 Apr;46(4):272–6 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Potent mental stress and insulin absorption in normal subjects. Fernqvist E, et al. **Diabetes Care** 1988 Sep;11(8):650–5

COMPLICATIONS

Acute chest pain without obvious organic cause before the age of 40. Respiratory and circulatory response to mental stress. Roll M, et al. **Acta Med Scand** 1988;224(3):237–43
The role of life events in the myasthenia gravis outcome: a one–year longitudinal study. Magni G, et al. **Acta Neurol Scand** 1989 Apr;79(4):288–91
Rapidly developing overweight in school children as an indicator of psychosocial stress. Mellbin T, et al. **Acta Paediatr Scand** 1989 Jul;78(4):568–75
Further evidence of an association between psychosocial problems and increase in relative weight between 7 and 10 years of age. Mellbin T, et al. **Acta Paediatr Scand** 1989 Jul;78(4):576–80
Psychosocial stress and coronary artery atherosclerosis of monkeys. Clarkson TB, et al. **Acta Physiol Scand Suppl** 1988;571:197–207
Work stress has negative effects on the attitudes of emergency personnel towards patients who attempt suicide. Suokas J, et al. **Acta Psychiatr Scand** 1989 May; 79(5):474–80
Anxiolytic effects of smoking associated with four stressors. Jarvik ME, et al. **Addict Behav** 1989;14(4):379–86
Psychological and somatic factors in women with pain due to pelvic congestion. Beard R, et al. **Adv Exp Med Biol** 1988;245:413–21 (42 ref.)
The psychology of stress: run silent, run deep. Jewell DS, et al. **Adv Exp Med Biol** 1988;245:489–505
Physiological and behavioral aspects of stress in adolescence. Susman EJ, et al. **Adv Exp Med Biol** 1988;245:341–52 (40 ref.)
Neurochemical and electrophysiological events underlying stress–induced depression in an animal model. Weiss JM, et al. **Adv Exp Med Biol** 1988;245:425–40 (81 ref.)
The protective mechanism of FPL55712 against stress–induced gastric ulceration in rats. Ogle CW, et al. **Agents Actions** 1989 Mar;26(3–4):350–4
Occupational strain and the incidence of coronary heart disease. Reed DM, et al. **Am J Epidemiol** 1989 Mar; 129(3):495–502
Burnout and stress among employees at a state institution for mentally retarded persons. Caton DJ, et al. **Am J Ment Retard** 1988 Nov;93(3):300–4
Correlates of stress, perceived competence, and depression among family care providers. Stoneman Z, et al. **Am J Ment Retard** 1988 Sep;93(2):166–73
From menarche to menopause: coronary artery atherosclerosis and protection in cynomolgus monkeys. Clarkson TB, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 2):1280–5
Does stress affect bleeding in hemophilia? A review of the literature. Perrin JM, et al. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):230–5 (40 ref.)
Energy expenditure during stress ulcer formation in vulnerable rats. Greenberg D, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R403–7
Psychological factors in preterm labor: critical review and theoretical synthesis. Omer H, et al. **Am J Psychiatry** 1988 Dec;145(12):1507–13 (72 ref.)
Use of DSM–III axis IV in clinical practice: rating etiologically significant stressors. Skodol AE, et al. **Am J Psychiatry** 1989 Jan;146(1):61–6
Chronic stressors and maternal depression: implications for prevention. Orr ST, et al. **Am J Public Health** 1989 Sep; 79(9):1295–6
Conservation of resources. A new attempt at conceptualizing stress. Hobfoll SE. **Am Psychol** 1989 Mar;44(3):513–24 (118 ref.)
Two cardiac arrests after needle punctures in a patient with mitral valve prolapse: psychogenic? Abraham ZA, et al. **Anesth Analg** 1989 Jul;69(1):126–8
Anticipation of bypass surgery: can it induce silent myocardial ischemia? Plawes S, et al. **Ann Thorac Surg** 1989 Apr;47(4):586–8
Severe stress and psoriasis. Walter J. **Australas J Dermatol** 1987 Dec;28(3):135–6
Failing aviator syndrome: a case history. Voge VM. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A89–91
Behavior, stress, and variability. Parsons PA. **Behav Genet** 1988 May;18(3):293–308 (56 ref.)
Job stress and mental well–being: similarities and differences among American, Japanese, and Indian managers. DeFrank RS, et al. **Behav Med** 1988 Winter;14(4):160–70
Stress among farm women: a structural model approach. Giesen C, et al. **Behav Med** 1989 Summer;15(2):53–62
Relationship of hassles, uplifts, and life events to psychological well–being of freshman medical students. Wolf TM, et al. **Behav Med** 1989 Spring;15(1):37–45
The GABA/benzodiazepine receptor complex in the central amygdalar nucleus and stress ulcers in rats. Sullivan RM, et al. **Behav Neural Biol** 1989 Mar;51(2):262–9
The effects of post–stress exposure to alcohol upon the development of alcohol consumption in rats. Boyd TL, et al. **Behav Res Ther** 1989;27(1):35–41
Somatic response to stress, physical symptoms and health service use: the role of current stress. Frost RO, et al. **Behav Res Ther** 1988;26(6):481–7
Similar effects of daily cocaine and stress on mesocorticolimbic dopamine neurotransmission in the rat. Kalivas PW, et al. **Biol Psychiatry** 1989 Apr 1;25(7):913–28
Effects on birth weight of smoking, alcohol, caffeine, socioeconomic factors, and psychosocial stress. Brooke OG, et al. **BMJ** 1989 Mar 25;298(6676):795–801
Stress and relapse of breast cancer [letter; comment] Israël L. **BMJ** 1989 Apr 15;298(6679):1032. **Comment on: BMJ** 1989 Feb 4;298(6669):291–3
The increase in alcohol consumption among women: a phenomenon related to accessibility or stress? A general population study. Hammer T, et al. **Br J Addict** 1989 Jul; 84(7):767–75
Sources of stress and dissatisfaction among nurses in four hospital environments. Hipwell AE, et al. **Br J Med Psychol** 1989 Mar;62 (Pt 1):71–9
Persistent hypotensive effect of L–dopa given early during development to rats with inherited stress–induced arterial hypertension. Naumenko EV, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):205–12
Preventive measures for stress ulcers in burn patients. Rath T, et al. **Burns Incl Therm Inj** 1988 Dec;14(6):504–7
The ER nurse: "can't everyone see I'm doing as much as I can"? Mendham L. **Can Med Assoc J** 1988 Nov 1; 139(9):881–2
Effect of activity–stress on experimental rat colon carcinogenesis: early histopathologic changes and colon tumor induction. Andrianopoulos GD, et al. **Cancer Detect Prev** 1988;13(1):31–9
Hypertension and stress. Hudzinski LG, et al. **Clin Cardiol** 1988 Sep;11(9):622–6
Probable triggers of onset of acute myocardial infarction. Muller JE, et al. **Clin Cardiol** 1989 Aug;12(8):473–5
Current psychological treatments for stress–related skin disorders. Tsushima WT. **Cutis** 1988 Nov;42(5):402–4 (15 ref.)
The rôle of psychological, health–behaviour and medical factors in adolescent headache. Larsson B. **Dev Med Child Neurol** 1988 Oct;30(5):616–25
Stress antecedents and immune status in recently diagnosed type I (insulindependent) diabetes mellitus. Vialettes B, et al. **Diabete Metab** 1989 Jan–Feb;15(1):45–50
Is a migraine patient more sensitive to stressors? A neuropsychological and neurophysiological study. Formisano R, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec;28(7–8):405–8
Reproductive outcome in women who lost their husbands in the course of pregnancy. Cepický P, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):137–40
Hypothesis: stress induced vascular entrapment and migraine. Gage AA. **Headache** 1988 May;28(4):267–8
Support, stress, and recovery from coronary heart disease: a longitudinal causal model. Fontana AF, et al. **Health Psychol** 1989;8(2):175–93
Hispanic youth, substance abuse, and stress: implications for prevention research. Schinke SP, et al. **Int J Addict** 1988 Aug;23(8):809–26 (103 ref.)
Psychosocial distress and infertility: a review of controlled research. Wright J, et al. **Int J Fertil** 1989 Mar–Apr; 34(2):126–42 (59 ref.)
Nurses' work satisfaction and feelings of health and stress in three psychiatric departments. Landeweerd JA, et al. **Int J Nurs Stud** 1988;25(3):225–34
Interactive effects of type A personality and psychological and physical stressors on human cardiovascular functions. Albright GL, et al. **Int J Psychophysiol** 1988 Nov; 6(4):315–26
Electrodermal asymmetry and vigilance in negative emotion, anxiety and stress. Naveteur J, et al. **Int J Psychophysiol** 1988 Nov;6(4):339–42
Stress and aging. Sabey BJ, et al. **Int J Psychosom** 1988; 35(1–4):49–51 (11 ref.)
The management of epilepsy at work. Floyd M, et al. **Int J Rehabil Res** 1988;11(1):3–10
Stress, expectancies, and vulnerability to substance abuse: a test of a model among homosexual men. McKirnan DJ, et al. **J Abnorm Psychol** 1988 Nov;97(4):461–6
Psychosocial growth retardation in adolescence. A reversible condition secondary to severe stress. Eisenstein TD, et al. **J Adolesc Health Care** 1988 Sep;9(5):436–40
Stress factors, emotional stress and rheumatoid arthritis disease activity. Crosby LJ. **J Adv Nurs** 1988 Jul; 13(4):452–61
Psychosocial stress and minor psychiatric morbidity: a community study in Taiwan. Cheng TA. **J Affective Disord** 1989 Sep–Oct;17(2):137–52
Psycho–social stress and puerperal depression. Martin CJ, et al. **J Affective Disord** 1989 Mar–Jun;16(2–3):283–93
Stress and psoriasis: the importance of insight and empathy in prognosis. Seville RH. **J Am Acad Dermatol** 1989 Jan; 20(1):97–100 (52 ref.)
Delirium induced by neuropsychological tests [letter] Rozzini R, et al. **J Am Geriatr Soc** 1989 Jul;37(7):666
Stress and medical malpractice: organizational risk assessment and intervention. Jones JW, et al. **J Appl Psychol** 1988 Nov;73(4):727–35
Sex differences in occupational stress: a meta–analytic review. Martocchio JJ, et al. **J Appl Psychol** 1989 Jun; 74(3):495–501
Stress management training for hypertensives: cognitive and

physiological effects. Bosley F, et al. J Behav Med 1989 Feb;12(1):77–89
Compliance with an outpatient stress reduction program: rates and predictors of program completion. Kabat-Zinn J, et al. J Behav Med 1988 Aug;11(4):333–52
A biopsychosocial model of medical student distress. Vitaliano PP, et al. J Behav Med 1988 Aug;11(4):311–31
Transient global amnesia precipitated by emotion in an adolescent. Tirman PJ, et al. J Child Neurol 1988 Jul; 3(3):185–8
Competence and stress in school children: the moderating effects of individual and family qualities. Masten AS, et al. J Child Psychol Psychiatry 1988 Nov;29(6):745–64
Stress management and coping research in the health care setting: an overview and methodological commentary. Auerbach SM. J Consult Clin Psychol 1989 Jun; 57(3):388–95 (70 ref.)
Parental problem-solving skills, stress, and dietary compliance in phenylketonuria. Fehrenbach AM, et al. J Consult Clin Psychol 1989 Apr;57(2):237–41
Coping by children undergoing stressful medical procedures: some conceptual, methodological, and therapeutic issues. Peterson L. J Consult Clin Psychol 1989 Jun;57(3):380–7 (57 ref.)
Links from emotional distress to adolescent drug use: a path model. Swaim RC, et al. J Consult Clin Psychol 1989 Apr; 57(2):227–31
Relationship between psychosocial variables and school absenteeism in kindergarten children. Chapar GN, et al. J Dev Behav Pediatr 1988 Dec;9(6):352–8
Pressor response to stress and exercise in the young: intracellular ion content relationships and prognostic implications. Ambrosioni E, et al. J Hum Hypertens 1987 Dec;1(3):229–35
Cardiovascular changes during mental stress: correlations with presence of coronary risk factors and cardiovascular disease in physicians and dentists. McKinney ME, et al. J Hum Hypertens 1987 Sep;1(2):137–45
How to perform mental stress tests. Schmieder R, et al. J Hum Hypertens 1987 Dec;1(3):223–8
Psychophysiologic aspects in essential hypertension. Schmieder RE, et al. J Hum Hypertens 1987 Dec; 1(3):215–22 (63 ref.)
Haemodynamic responses to conflict stress in borderline hypertensive rats. Knardahl S, et al. J Hypertens 1989 Jul; 7(7):585–93
Cardiovascular structural changes induced by isolation-stress hypertension in the rat. Carlier PG, et al. J Hypertens Suppl 1988 Dec;6(4):S112–5
Psychological distress among homeless adults. Gelberg L, et al. J Nerv Ment Dis 1989 May;177(5):291–5
Evaluation of a work site relaxation training program using ambulatory blood pressure monitoring. Fiedler N, et al. J Occup Med 1989 Jul;31(7):595–602
A case study of stress and mass psychogenic illness in industrial workers. Hall EM, et al. J Occup Med 1989 Mar; 31(3):243–50 (18 ref.)
Psychologic stress and recurrent aphthous ulceration. Pedersen A. J Oral Pathol Med 1989 Feb;18(2):119–22
Stress in patients with pain in the muscles of mastication and the temporomandibular joints. Lundeen TF, et al. J Oral Rehabil 1988 Nov;15(6):631–7
Centrality and individual differences in the meaning of daily hassles. Gruen RJ, et al. J Pers 1988 Dec;56(4):743–62
Chronic stress and coping styles: a comparison of male and female undergraduates. Hamilton S, et al. J Pers Soc Psychol 1988 Nov;55(5):819–23
Perceptions of control, competence, and contingency as influences on the stress-behavior symptom relation in school-age children. Weigel C, et al. J Pers Soc Psychol 1989 Mar;56(3):456–64
Teacher stress and health; examination of a model. DeFrank RS, et al. J Psychosom Res 1989;33(1):99–109
The mediating effects of psychophysiological reactivity and recovery on the relationship between environmental stress and illness. Gannon L, et al. J Psychosom Res 1989; 33(2):167–75
Psychophysiological reactivity of migraine sufferers in conditions of stress and relaxation. Kröner-Herwig B, et al. J Psychosom Res 1988;32(4–5):483–92
Symptoms of depression and psychological distress in United States and Japanese college students. Baron MR, et al. J Soc Psychol 1988 Dec;128(6):803–16
Stress and panic [editorial] Lancet 1989 Jun 17;1(8651):1365–6
Teachers, stress, and mortality [letter] Jackson JR. Lancet 1989 Feb 18;1(8634):388
Immigration, stress, and prescription drug use among Cuban women in south Florida. Kirby DG. Med Anthropol 1989 Apr;10(4):287–95
Restraint stress during late pregnancy in rats elicits early hypermyelination in the offspring. Wiggins RC, et al. Metab Brain Dis 1986 Sep;1(3):197–203
Trauma as an etiology of parkinsonism: opinions in the nineteenth century [letter] Keppel Hesselink JM. Mov Disord 1989;4(3):283–5
Diagnosis of stress-related hyperprolactinemia. Evaluation of the hyperprolactinemia rest test. Muneyyirci-Delale O, et al. N Y State J Med 1989 Apr;89(4):205–8
Handedness, prenatal stress and pregnancy complications. Schwartz M. Neuropsychologia 1988;26(6):925–9
Recent studies of the central nucleus of the amygdala and stress ulcers. Henke PG. Neurosci Biobehav Rev 1988 Summer;12(2):143–50 (42 ref.)
Identifying stressors is necessary to combat potential health problems. Brodsky R. Occup Health Saf 1989 Mar;58(3):30, 32, 34
Outside stress factors may underlie variations in workplace productivity [editorial] Strasser AL. Occup Health Saf 1989 Mar;58(3):20
The premenstrual syndrome: psychophysiologic concomitants of perceived stress and low back pain. Dickson-Parnell B, et al. Pain 1988 Aug;34(2):161–9
Candidate risk factors for temporomandibular pain and dysfunction syndrome: psychosocial, health behavior, physical illness and injury. Marbach JJ, et al. Pain 1988 Aug;34(2):139–51
Reliability of heart-rate reactivity to a psychological stressor. Sharpley CF, et al. Percept Mot Skills 1989 Feb; 68(1):319–22
The "holiday blues" as a stress reaction. Baier M. Perspect Psychiatr Care 1987–88;24(2):64–8
Influence of stressor predictability and behavioral control on lymphocyte reactivity, antibody responses and neuroendocrine activation in rats. Mormede P, et al. Physiol Behav 1988;43(5):577–83
A comparison of two ulcerogenic techniques. Paré WP. Physiol Behav 1988;44(3):417–20
Psychosocial factors in the epidemiology of coronary heart disease in women. Baker ED. Psychiatr Clin North Am 1989 Mar;12(1):167–73 (42 ref.)
Incidence and perception of psychosocial stress: the relationship with breast cancer. Cooper CL, et al. Psychol Med 1989 May;19(2):415–22
Psychiatric symptoms and related factors in a sample of Japanese workers. Iwata N, et al. Psychol Med 1988 Aug; 18(3):659–63
Base-rates, cut-points and interaction effects: the problem with dichotomized continuous variables. Veiel HO. Psychol Med 1988 Aug;18(3):703–10
Work-stress burnout among paramedics. Grisby DW, et al. Psychol Rep 1988 Aug;63(1):55–64
Suicide and the stress of residency training: a case report and review of the literature. Kiraling RA, et al. Psychol Rep 1989 Jun;64(3 Pt 1):951–9 (50 ref.)
The police stress survey: reliability and relation to job satisfaction and organizational commitment. Martelli TA, et al. Psychol Rep 1989 Feb;64(1):267–73
Stress in a seminar on stress: a methodological study. Weybrew BB, et al. Psychol Rep 1988 Oct;63(2):367–80
On "stress-induced recovery of fears and phobias". McNally RJ. Psychol Rev 1989 Jan;96(1):180–1
Health complaints, stress, and distress: exploring the central role of negative affectivity. Watson D, et al. Psychol Rev 1989 Apr;96(2):234–54
Influences of potential for hostility, type A behavior, and parental history of hypertension on adolescents' cardiovascular responses during stress. McCann BS, et al. Psychophysiology 1988 Sep;25(5):503–11
Assessment of endogenous opioid mediation in stress-induced hypercholesterolemia in the rat. Bryant HU, et al. Psychosom Med 1988 Nov-Dec;50(6):576–85
Psychologic and physiologic reactivity to stressors in eating disordered individuals. Cattanach L, et al. Psychosom Med 1988 Nov-Dec;50(6):591–9
Cardiovascular responses to occupational stress and caffeine in telemarketing employees. France C, et al. Psychosom Med 1989 Mar-Apr;51(2):145–51
Responses of the QT interval of the electrocardiogram during emotional stress. Huang MH, et al. Psychosom Med 1989 Jul-Aug;51(4):419–27
Cardiovascular reactivity, emotional factors, and home blood pressures in black males with and without a parental history of hypertension. Johnson EH. Psychosom Med 1989 Jul-Aug;51(4):390–403
Naltrexone potentiates glycemic responses during stress and epinephrine challenge in genetically obese mice. McCubbin JA, et al. Psychosom Med 1989 Jul-Aug;51(4):441–8
Effects of aerobic exercise training on hemodynamic responses during psychosocial stress in normotensive and borderline hypertensive type A men: a preliminary report. Sherwood A, et al. Psychosom Med 1989 Mar-Apr; 51(2):123–36
Cardiovascular reactivity with caffeine and stress in black and white normotensive females. Strickland TL, et al. Psychosom Med 1989 Jul-Aug;51(4):381–9
Laboratory stress testing to assess real-life cardiovascular reactivity. Van Egeren LF, et al. Psychosom Med 1989 Jan-Feb;51(1):1–9
Hostility and cardiovascular reactivity to stress in women and men. Weidner G, et al. Psychosom Med 1989 Jan-Feb; 51(1):36–45
Stress and menstrual dysfunction in medical students. Clarvit SR. Psychosomatics 1988 Fall;29(4):404–9
Hyperprolactinemia and psychological distress in women undergoing chronic hemodialysis. Fava M, et al. Psychother Psychosom 1988;49(1):6–9
The meaning of stress, anxiety and collective panic in clinical settings. López-Ibor JJ Jr. Psychother Psychosom 1987; 47(3–4):168–74 (12 ref.)
Examination stress, personality and self-reported physical symptoms. Vassend O. Scand J Psychol 1988;29(1):21–32
The "stress analogy" in the context of psychoneuroimmunology. Chiappelli F. Schizophr Bull 1988;14(2):135–7, 139–40
The relationship of low-back pain, work history, work environment, and stress. A retrospective cross-sectional study of 38- to 64-year-old women. Svensson HO, et al. Spine 1989 May;14(5):517–22
Stress reactions in the job setting: case examples. McLean AA. State Art Rev Occup Med 1988 Oct-Dec;3(4):639–51
Social support and coping with stress: implications for the workplace. Mor-Barak ME. State Art Rev Occup Med 1988 Oct-Dec;3(4):663–76 (51 ref.)
Occupational stress. Warshaw LJ. State Art Rev Occup Med 1988 Oct-Dec;3(4):587–93 (12 ref.)
Stress prostatitis [letter] Goldstein AM, et al. Urology 1989 May;33(5):449
Stress prostatitis. Miller HC. Urology 1988 Dec;32(6):507–10
Diet, tobacco, alcohol, and stress as causes of coronary artery heart disease: an ecological trend analysis of national data. Lynch WD, et al. Yale J Biol Med 1988 Sep-Oct; 61(5):413–26
[Disorders of the menstrual cycle in women after entering a military training center. III. FSH, LH, prolactin, estradiol, progesterone and psychological stress 2 months after entering the center] Cížková J, et al. Cesk Gynekol 1988 Sep;53(8):556–60 (Eng. Abstr.) (Cze)
[Psychophysiologic loads amplify clinical stress tests] Mäntysaari M, et al. Duodecim 1989;105(1):6–7 (Fin)
[Suffering from stress or enjoying stress? Method and results of a clinically successful anti-stress triple strategy exemplified by asthma] Findeisen DG. Fortschr Med 1989 Mar 30;107(10):72–3 (Ger)
[Prevention of stress-induced hemorrhage of the upper gastrointestinal tract in neurosurgical intensive care patients. A controlled, randomized double-blind study with ranitidine alone and in combination with pirenzepine] Krakamp B, et al. Med Klin 1989 Mar 15;84(3):133–4, 172 (Eng. Abstr.) (Ger)
[Emotional processing of perceived stresses by myocardial infarct rehabilitation patients: a speech content analytic study of affect in narrative interviews] Faller H. Psychother Psychosom Med Psychol 1989 May;39(5):151–60 (Eng. Abstr.) (Ger)
[Emotional stresses and cognitive processes in patients with neurodermatitis] Korth EE, et al. Psychother Psychosom Med Psychol 1988 Aug;38(8):276–81 (Eng. Abstr.) (Ger)
[Selective effect of personality markers and psychosocial stress on T lymphocyte subpopulations] Kropiunigg U, et al. Psychother Psychosom Med Psychol 1989 Jan; 39(1):18–25 (Eng. Abstr.) (Ger)
[Coronary risk factors and their relation to psychosocial factors in females with myocardial infarct] Meyer K, et al. Soz Praventivmed 1988;33(3):155–61 (Eng. Abstr.) (Ger)
[Stress, adjustment, support] Böttcher HR. Z Arztl Fortbild (Jena) 1989;83(8):396–400 (15 ref.) (Ger)
[Ergopsychometry. New methods in experimental psychodiagnosis of pathologic stress reactions] Beiglböck W, et al. Z Exp Angew Psychol 1989;36(1):16–30 (Eng. Abstr.) (Ger)
[Clinical symptoms, psychopathology and intestinal motility in patients with "irritable bowel"] Enck P, et al. Z Gastroenterol 1989 Jul;27(7):357–61 (Eng. Abstr.) (Ger)
[Selected results of occupational psychological studies of nurses] Ammer M, et al. Z Gesamte Hyg 1989 Apr; 35(4):232–4 (Eng. Abstr.) (Ger)
[The relation of qualifications, performance standards and psychological stress in trainees in the control service] Biermann E, et al. Z Gesamte Hyg 1989 May;35(5):266–8 (Eng. Abstr.) (Ger)
[Differences in stress of vocational education and polytechnical school teachers in teaching activities] Knothe M, et al. Z Gesamte Hyg 1988 Nov;34(11):644–5 (Eng. Abstr.) (Ger)
[Some aspects of the complaint problem in occupational medicine] Scheuch K, et al. Z Gesamte Hyg 1988 Jul; 34(7):404–6 (0 ref.) (Eng. Abstr.) (Ger)
[Assessing the stress tolerance of teachers by psychophysiologic laboratory studies] Scheuch K, et al. Z Gesamte Hyg 1988 Nov;34(11):646–7 (Eng. Abstr.) (Ger)
[Stress caused by shift work in relation to automated production] Seibt A, et al. Z Gesamte Hyg 1988 Jul; 34(7):409–12 (Eng. Abstr.) (Ger)
[Hormone changes as indicators of stress in the development and course of myocardial infarct] Titlbach O, et al. Z Gesamte Inn Med 1989 Feb 1;44(3):82–7 (Eng. Abstr.) (Ger)
[What protects against neurosis? Results of a comparative study of neurotic patients with high risk factors and healthy probands] Lieberz K. Z Psychosom Med Psychoanal 1988; 34(4):338–50 (Eng. Abstr.) (Ger)
[Personality, stress and rheumatism: methodologic considerations] Leichner-Hennig R, et al. Z Rheumatol 1988 Sep-Oct;47(5):337–41 (22 ref.) (Eng. Abstr.) (Ger)
[Psycho-neuro-immunological aspects in the evaluation and prevention of anesthesiologic-surgical risk] Caregnato L, et al. Minerva Anestesiol 1988 Oct;54(10):439–43 (Eng. Abstr.) (Ita)
[Syncope and cardiac arrest induced by stress. Presentation of 2 cases] Dalmasso M, et al. Minerva Cardioangiol 1988

Sep;36(9):461–3 (Eng. Abstr.) (Ita)
[Recent progress in diagnosis and treatment of digestive diseases. V. Present status and problems of other treatments. 10. Psychosomatic treatment of gastrointestinal disorders] Namiki M, et al.
Nippon Naika Gakkai Zasshi 1988 Nov;77(11):1679–82 (Jpn)
[Effects of petroleum derivatives and psychological stress on eye changes in prospective studies] Krawczykowa Z, et al. **Med Pr** 1988;39(3):212–6 (Eng. Abstr.) (Pol)
[Correlation of mental fatigue due to work load and professional qualifications of physicians] Wichrowski A, et al. **Med Pr** 1988;39(4):246–52 (Eng. Abstr.) (Pol)
[Psychosomatic aspects of neoplasms] Czubalski K.
Nowotwory 1988 May–Jun;38(3):204–10 (Eng. Abstr.) (Pol)
[The role of psychological factors in the etiopathogenesis of pulmonary tuberculosis] Pecyna MB, et al.
Pol Tyg Lek 1988 Jun 27;43(26):850–3 (Pol)
[Gardner–Diamond syndrome—a psychosomatic disease?] Straszak A, et al. **Pol Tyg Lek** 1988 Aug 29;43(35):1126–8 (Eng. Abstr.) (Pol)
[Psychological aspects of the pathogenesis of pain] Lazowski J. **Przegl Lek** 1989;46(4):415–9 (28 ref.) (Pol)
[Correlations between life events and psychosomatic diseases of the cardiovascular system] Mausch K. **Psychiatr Pol** 1988 Mar–Apr;22(2):156–61 (11 ref.) (Pol)
[Selected psychosomatic and environmental aspects in patients with irritable bowel syndrome] Jerzemowski J. **Wiad Lek** 1988 Jun 15;41(12):770–5 (Eng. Abstr.) (Pol)
[Various psychosomatic problems in patients with diabetes mellitus] Nasiłowska-Barud A. **Wiad Lek** 1988 Aug 15; 41(16):1059–64 (Eng. Abstr.) (Pol)
[Tuberculosis and the natural human environment in psychosociometric studies] Pecyna MB. **Wiad Lek** 1988 Aug 1;41(15):984–90 (Eng. Abstr.) (Pol)
[The role of the reactive factor in the development of discordant psychosis] Gheorghe MD, et al.
Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir 1988 Oct–Dec;33(4):309–13 (Rum)
[Occupational hazards and the digestive system (review of the literature)] Liubchenko PN. **Gig Tr Prof Zabol** 1988 Nov;(11):36–41 (99 ref.) (Rus)
[Secondary immune deficits in psychoemotional stress] Kuz'min SN, et al. **Sov Med** 1988;(8):108–11 (Rus)
[Respiratory relaxation training in the treatment of hypertension] Alvazian TA, et al. **Ter Arkh** 1989; 61(2):120–3 (Rus)
[Systematic approach to the evaluation of the role of neuro-psychological factors in the development and course of bronchial asthma] Kuprianov SIu.
Vestn Akad Med Nauk SSSR 1989;(2):24–9 (Eng. Abstr.) (Rus)
[Prevention of atherogenic dislipoproteinemias and metabolic disorders in the liver in emotional–pain stress] Meerson FZ, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):104–9 (Eng. Abstr.) (Rus)
[Stress and irritable colon] Gallart–Esquerdo A.
Rev Esp Enferm Apar Dig 1988 Jul;74(1):29–31 (Eng. Abstr.) (Spa)

DIAGNOSIS

Cases from the aerospace medicine residents' teaching file, case #30. A difficult differentiation between idiopathic perilymph fistula and psychosomatic dizziness and unsteadiness [clinical conference] Mason KT.
Aviat Space Environ Med 1989 Mar;60(3):277–9
In their own words: concerns of young children. Dibrell LL, et al. **Child Psychiatry Hum Dev** 1988 Fall;19(1):14–25
Personal stress inventory in the screening and evaluation of family practice patients. Ireton HR, et al.
Fam Pract Res J 1989 Spring–Summer;8(2):62–74
A psychocutaneous profile of psoriasis patients who are stress reactors. A study of 127 patients. Gupta MA, et al.
Gen Hosp Psychiatry 1989 May;11(3):166–73
Caregiving Hassles Scale: assessing the daily hassles of caring for a family member with dementia. Kinney JM, et al.
Gerontologist 1989 Jun;29(3):328–32
Stressor frequency, tension, tiredness and coping: some measurement issues and a comparison across nursing groups. Dewe PJ. **J Adv Nurs** 1989 Apr;14(4):308–20 (44 ref.)
Unconfounding the Hassles Scale: external sources versus internal responses to stress. Reich WP, et al.
J Behav Med 1988 Jun;11(3):239–49
Psychological consequences of AIDS-related bereavement among gay men. Martin JL. **J Consult Clin Psychol** 1988 Dec;56(6):856–62
Psychometric evaluation of the Clinical Stress Questionnaire (CSQ). Pagana KD. **J Nurs Educ** 1989 Apr;28(4):169–74
[An information test as a method of increasing the effectiveness and quality of pre-trip medical examinations of locomotive engineers] Prazdnov AS, et al.
Gig Tr Prof Zabol 1989;(5):35–6 (Rus)

DRUG THERAPY

Psychopharmacologic management of the stress in pedodontic practice. Cupalová R, et al.
Acta Univ Palacki Olomuc Fac Med 1988;120:351–6
Reduction of distress vocalization in chicks by opiate-like peptides. Panksepp J, et al. **Brain Res Bull** 1978 Nov–Dec; 3(6):663–7
[Stereometric evaluation of the myocardial cardiomyocyte–capillary ratio in emotional and pain-induced stress after administration of thiamine and nicotinamide] Shneider AB. **Kardiologiia** 1989 Apr; 29(4):97–9 (Eng. Abstr.) (Rus)
[Apha-tocopherol in a complex with dimethyl sulfoxide—an agent possessing highly effective adaptogenic action in chronic emotional–pain stress in rats] Levshina IP, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):533–9 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Increase in the activity of tryptophan hydroxylase from cortex and midbrain of male Fischer 344 rats in response to acute or repeated sound stress. Boadle-Biber MC, et al. **Brain Res** 1989 Mar 20;482(2):306–16
[Effect of adaptation to hypoxia on the antioxidant enzyme activity in the liver in animals that have undergone stress] Tverdokhlib VP, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):528–9 (Eng. Abstr.) (Rus)
[Effect of amizil on the activity of enzymes participating in protein hydrolysis in intact animals and animals subjected to stress exposure] ZakirovUB, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):78–80 (Eng. Abstr.) (Rus)
[Effect of clinostatic and anti-orthostatic hypokinesia on serum enzyme activity] Vetrova EG, et al.
Kosm Biol Aviakosm Med 1988 Jul–Aug;22(4):70–3 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Burnout in occupational therapists. Rogers JC, et al.
Am J Occup Ther 1988 Dec;42(12):787–92
Level of depressive symptoms and life stresses for culturally diverse older adults. Smallegan M. **Gerontologist** 1989 Feb; 29(1):45–50
More than 98% of health care CEOs feel stressed. Lappa K. **Hospitals** 1989 Sep 20;63(18):50–5
Mental health and the labor force participation of older workers. Mitchell JM, et al. **Inquiry** 1989 Summer; 26(2):262–71
Medical student distress. A longitudinal study. Vitaliano PP, et al. **J Nerv Ment Dis** 1989 Feb;177(2):70–6
Sickness absence in the freezing industry. Turner WE.
N Z Med J 1988 Oct 26;101(856 Pt 1):663–6
Maslach Burnout Inventory: factor structures and norms for USA pharmacists. Lahoz MR, et al. **Psychol Rep** 1989 Jun; 64(3 Pt 2):1059–63
[Englishmen under stress] Elle PJ.
Tidsskr Nor Laegeforen 1989 Mar 30;109(9):982–3 (Nor)

ETHNOLOGY

Ethnicity and stress among older Australians. McCallum J, et al. **J Gerontol** 1989 May;44(3):S89–96
Race, socioeconomic status, and psychological distress: an examination of differential vulnerability. Ulbrich PM, et al. **J Health Soc Behav** 1989 Mar;30(1):131–46
Ethnic differences in response to adversity. A community sample of Bangladeshis and their indigenous neighbours. MacCarthy B, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jul;24(4):196–201

ETIOLOGY

Personality, stress, and injuries in professional ballet dancers. Hamilton LH, et al. **Am J Sports Med** 1989 Mar–Apr; 17(2):263–7
Stress on caregivers of the elderly. Bunting SM. **ANS** 1989 Jan;11(2):63–73
The House of God revisited [letter; comment] Matz R.
Arch Intern Med 1989 Feb;149(2):471–2. **Comment on:** Arch Intern Med 1988 Jun;148(6):1428–35
Sources of stress affecting pilot judgment. Simmel EC, et al. **Aviat Space Environ Med** 1989 Jan;60(1):53–5
Mental health, job satisfaction, and job stress among general practitioners. Cooper CL, et al. **BMJ** 1989 Feb 11; 298(6670):366–70
Psychological aspects of bone marrow transplantation: a retrospective study of 17 long-term survivors. Hengeveld MW, et al. **Bone Marrow Transplant** 1988 Jan;3(1):69–75
Shop-lifting as a symptom of stress in families of mentally handicapped persons. A case report. Roy M.
Br J Psychiatry 1988 Jun;152:845–6
Stress among emergency medical staff [letter] Ho K.
Can Med Assoc J 1988 Dec 1;139(11):1034–5
Occupational stress reactions: lessons for management [editorial] Morgan PP. **Can Med Assoc J** 1989 Apr 1; 140(7):795–6
Fatigue and stress in medical students, interns and residents: it's time to act! [editorial] Squires BP.
Can Med Assoc J 1989 Jan 1;140(1):18–9
Side effects and emotional distress during cancer chemotherapy. Love RR, et al. **Cancer** 1989 Feb 1; 63(3):604–12
Illness of spouse and psychological well-being in older adults. Krause N, et al. **Compr Gerontol [B]** 1987 Dec;1(3):105–8
Stress in parents of children with diabetes mellitus. Hauenstein EJ, et al. **Diabetes Care** 1989 Jan;12(1):18–23
First year residency stress: sources and mediators. Badger LW, et al. **Fam Pract Res J** 1987 Winter;7(2):104–13
Role stress in hospital executives and nursing executives. Burke GC 3d, et al. **Health Care Manage Rev** 1988 Summer; 13(3):67–72
Isolated and combined effects of prolonged exposures to noise and whole-body vibration on hearing, vision and strain. Seidel H, et al. **Int Arch Occup Environ Health** 1988; 61(1–2):95–106
Stress among disaster nurses and relief workers. Errington G. **Int Nurs Rev** 1989 May–Jun;36(3):90–1, 80
Sources of satisfaction and stress in nursing home caregivers: preliminary results. Cohen-Mansfield J. **J Adv Nurs** 1989 May;14(5):383–8
Psychological profile of dysphoric women postabortion. Franco KN, et al. **J Am Med Wom Assoc** 1989 Jul–Aug; 44(4):113–5
Assisting the parent of a child with asthma. Schwam JS. **J Asthma** 1987;24(1):45–54 (63 ref.)
Dental student stress, burnout, and memory. Davis EL, et al. **J Dent Educ** 1989 Mar;53(3):193–5
Sources of stress and satisfaction in emergency practice. Keller KL, et al. **J Emerg Med** 1989 May–Jun;7(3):293–9
Withdrawal of critical care medicine application by ABEM [letter] Tintinalli JE. **J Emerg Med** 1989 May–Jun;7(3):292
Context and the sociological study of stress. An invited response to Pearlin (Vol. 30, No. 3). Jacobson D.
J Health Soc Behav 1989 Sep;30(3):257–60
The structural contexts of stress. An invited response to Pearlin (Vol. 30, No. 3). Lennon MC.
J Health Soc Behav 1989 Sep;30(3):261–8
The sociological study of stress. Pearlin LI.
J Health Soc Behav 1989 Sep;30(3):241–56 (43 ref.)
Outrageous and beyond the bounds of decency. Epps CH Jr. **J Natl Med Assoc** 1989 Sep;81(9):975–7, 981, 985–6
Stresses and threats reported by baccalaureate students in relation to an initial clinical experience. Pagana KD.
J Nurs Educ 1988 Nov;27(9):418–24
Health and occupational correlates of perceived occupational stress in symphony orchestra musicians. Middlestadt SE, et al. **J Occup Med** 1988 Sep;30(9):687–92
Stress and the workplace. Paul DW.
J Okla State Med Assoc 1989 Feb;82(2):59–61
Multiparity and stressful events. Affonso DD, et al.
J Perinatol 1988 Fall;8(4):312–7
Neonatal intensive care units can be hazardous to nurses' health. Sosnowitz BG, et al. **J Perinatol** 1988 Summer; 8(3):253–7
Sociocultural influences on psychosocial adjustment in Antarctica. Palinkas LA. **Med Anthropol** 1989 Apr; 10(4):235–46
Disaster, stress and the doctor. Fain RM, et al.
Med Educ 1989 Jan;23(1):91–6
The PRO. Another knife in the heart. Dinter RW.
Miss Med 1988 Sep;71(9):528–30, 533
Supporting the deliverers of care: strategies to support nurses and prevent burnout. Bolle JL. **Nurs Clin North Am** 1988 Dec;23(4):843–50 (14 ref.)
Helping patients cope with the stress of myocardial infarction. Lawrence SA, et al. **Nurs Forum** 1987–88; 23(3):92–100
A framework for coping with stress and its application in patient care. Roberts SL. **Nurs Forum** 1987–88;23(3):101–7
Depressed mood in chronic low back pain: relationship with stressful life events. Atkinson JH, et al. **Pain** 1988 Oct; 35(1):47–55
The relationship of locus of control to pain coping strategies and psychological distress in chronic pain patients. Crisson JE, et al. **Pain** 1988 Nov;35(2):147–54
Impact of role stress on physical therapists' emotional and physical well-being. Deckard GJ, et al. **Phys Ther** 1989 Sep;69(9):713–8
Prenatal diagnosis and psychological distress: amniocentesis or chorionic villus biopsy? Sjögren B, et al.
Prenat Diagn 1989 Jul;9(7):477–87
Stress and coping in a NICU. Rosenthal SL, et al.
Res Nurs Health 1989 Aug;12(4):257–65
Personality hardiness, occupational stress, and burnout in critical care nurses. Topf M. **Res Nurs Health** 1989 Jun; 12(3):179–86
The measurement of stress associated with hospitalization. Boey KW. **Singapore Med J** 1988 Dec;29(6):586–8
The impact of the physical environment on the psychological well-being of office workers. Klitzman S, et al.
Soc Sci Med 1989;29(6):733–42
Morbidity of Hurricane Elena. Longmire AW, et al.
South Med J 1988 Nov;81(11):1343–6
Workers under stress. Self-reported health and well-being of Weirton steel workers before and after becoming an ESOP company. Levine A, et al. **W V Med J** 1988 Dec; 84(12):561–7
Physician stress [letter] Lowinger P. **West J Med** 1989 Jan; 150(1):92
[Mental and emotional stress in railroad locomotive drivers in one- and two-member crews] Kiczka K, et al.
Rocz Akad Med Bialymstoku 1984–85;29–30:261–74 (Eng. Abstr.) (Pol)
[Various subjective and objective indicators of intellectual and emotional stress in air traffic controllers during different work shifts] Kan EL, et al. **Gig Sanit** 1989 Feb; (2):28–31 (Eng. Abstr.) (Rus)
[Determining physical and psychological occupational stress in women performing physical work on the basis of subjective evaluation] Makovska Z, et al.

Gig Tr Prof Zabol 1989;(5):8–11 (Rus)
[An analysis of the causes for the occurrence of psychoemotional tension in patients in an orthodontic consultation] Trezubov VN. Stomatologiia (Mosk) 1989 Mar–Apr;68(2):36–9 (Eng. Abstr.) (Rus)
[Mental disadaptation in emergency situations (accident at the Chernobyl nuclear power station)] Aleksandrovskii IuA, et al. Zh Nevropatol Psikhiatr 1989;89(5):111–7 (Eng. Abstr.) (Rus)
[Space and time in the intensive care unit. (Study of psychiatric problems which are seen in the ICU] Dörr Zegers O.
Actas Luso Esp Neurol Psiquiatr Cienc Afines 1988 Jul–Aug;16(4):246–54 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Corticosteroids and the immune response. Claman HN.
Adv Exp Med Biol 1988;245:203–8 (42 ref.)
Glucocorticoid antagonists and the role of glucocorticoids at the resting and stress state. Laue L, et al.
Adv Exp Med Biol 1988;245:225–35
Daily relaxation modifies serum and salivary immunoglobulins and psychophysiologic symptom severity. Green ML, et al. Biofeedback Self Regul 1988 Sep;13(3):187–99
Premature maternal separation and lymphocyte function. Ackerman SH, et al. Brain Behav Immun 1988 Jun; 2(2):161–5
Prolonged effect of psychological disturbance on macrophage chemiluminescence in the squirrel monkey. Coe CL, et al. Brain Behav Immun 1988 Jun;2(2):151–60
Inescapable shock, shock controllability, and mitogen stimulated lymphocyte proliferation. Maier SF, et al.
Brain Behav Immun 1988 Jun;2(2):87–91
Effects on immune responses by chronic stress are modulated by aging. Odio M, et al. Brain Behav Immun 1987 Sep; 1(3):204–15
Sense of humor, hassles, and immunoglobulin A: evidence for a stress–moderating effect of humor. Martin RA, et al. Int J Psychiatry Med 1988;18(2):93–105
Family functioning and stress as predictors of influenza B infection. Clover RD, et al. J Fam Pract 1989 May; 28(5):535–9
Academic stress, social support, and secretory immunoglobulin A. Jemmott JB 3d, et al.
J Pers Soc Psychol 1988 Nov;55(5):803–10
Time–dependent enhancement of lymphocyte activation by mitogens after exposure to isolation or water scheduling. Jessop JJ, et al. Life Sci 1988;43(14):1133–40
Social stress and activity of the immune system in guinea pigs. Stefanski V, et al. Naturwissenschaften 1989 May; 76(5):225–6
Stress–induced alterations of immunity in hypophysectomized rats. Keller SE, et al.
Proc Natl Acad Sci U S A 1988 Dec;85(23):9297–301
Microstress, mood, and natural killer–cell activity. Moss RB, et al. Psychosomatics 1989 Summer;30(3):279–83
[Induction of an immune response to beta–endorphin leads to a decrease in emotional stress in monkeys] Karamian AI, et al. Dokl Akad Nauk SSSR 1989 May–Jun; 306(1):233–6 (Rus)

METABOLISM

Deficient release of prostacyclin–like activity by rat stomach under stress. Chamone DA, et al. Arq Gastroenterol 1988; 25 Spec No:17–20
Glucocorticoid receptor regulation: the effects of adrenalectomy, exogenous glucocorticoid, and stress on hepatic receptor number in male and female mice. Svec F, et al. Biochem Med Metab Biol 1989 Jun;41(3):224–33
Time course of changes in serotonin and noradrenaline in rat brain after predictable or unpredictable shock. Adell A, et al. Brain Res 1988 Aug 30;459(1):54–9
The nucleus locus coeruleus modulates local cerebral glucose utilization during noise stress in rats. Justice A, et al.
Brain Res 1989 Jun 19;490(1):73–84
D2 dopamine receptors in the rat prefrontal cortex: characterization and alteration by stress. MacLennan AJ, et al. Brain Res 1989 Jan 16;477(1–2):300–7
Expression of aggression attenuates stress–induced increases in rat brain noradrenaline turnover. Tsuda A, et al.
Brain Res 1988 Nov 22;474(1):174–80
The effects of immobilization stress on beta–endorphin levels are modulated by testosterone. Forman LJ, et al.
Brain Res Bull 1988 Jul;21(1):7–12
Repeated (isolation) stress increases tribulin–like activity in the rat. Armando I, et al. Cell Mol Neurobiol 1989 Mar; 9(1):115–22
A model to evaluate acute and chronic stress in the colonic mucosa of rats. Rubio CA, et al. Dis Colon Rectum 1989 Jan;32(1):26–9
Stress–induced enhancement of dopamine and acetylcholine release in limbic structures: role of corticosterone. Imperato A, et al. Eur J Pharmacol 1989 Jun 20;165(2–3):337–8
In vivo action of phosphatidylserine, amitriptyline and stress on the binding of [3H]imipramine to membranes of the rat cerebral cortex. Stockert M, et al. Eur J Pharmacol 1989 Jan 24;160(1):11–6
Influence of exogenously administered oxytocin on central noradrenaline, dopamine and serotonin levels following psychological stress in nulliparous female rats (Rattus norvegicus). Pfister HP, et al. Int J Neurosci 1989 Apr; 45(3–4):221–9
Psychological stress and administered oxytocin during pregnancy: effect corticosterone and prolactin response in lactating rats. Pfister HP, et al. Int J Neurosci 1989 Mar; 45(1–2):91–9
Emotional stress and saliva cortisol response. Hubert W, et al. J Clin Chem Clin Biochem 1989 Apr;27(4):235–7
Response variability of salivary cortisol under psychological stimulation. Kirschbaum C, et al.
J Clin Chem Clin Biochem 1989 Apr;27(4):237
Effects of mild stress on adrenal and heart catecholamines in male and female rats. Carlsson M, et al.
J Neural Transm 1989;77(2–3):217–26
Chronic immobilization stress: evidence for decreases of 5–hydroxy–tryptamine immunoreactivity and for increases of glucocorticoid receptor immunoreactivity in various brain regions of the male rat. Kitayama I, et al.
J Neural Transm 1989;77(2–3):93–130
Influence of electric foot shock on pharmacokinetics of isosorbide dinitrate orally administered to rats. Gomita Y, et al. Jpn J Pharmacol 1989 Feb;49(2):297–9
Evidence for prolonged suppression of stress–induced release of adrenocorticotropic hormone and corticosterone with a brain–enhanced dexamethasone–redox delivery system. Anderson WR, et al. Neuroendocrinology 1989 Jul; 50(1):9–16
Characterization of stress–induced alterations in [3H] Ro5–4864 binding to peripheral benzodiazepine receptors in rat heart and kidney. Drugan RC, et al.
Pharmacol Biochem Behav 1988 Aug;30(4):1015–20
ACTH, prolactin, corticosterone and pituitary cyclic AMP responses to repeated stress. Kant GJ, et al.
Pharmacol Biochem Behav 1989 Feb;32(2):557–61
Stressor predictability and rat brain noradrenaline metabolism. Tsuda A, et al. Pharmacol Biochem Behav 1989 Feb;32(2):569–72
Effect of restraint stress and anxiolytics on 5–HT turnover in rat brain. Mitchell SN, et al. Pharmacology 1988; 37(2):105–13
The effects of valerian, propranolol, and their combination on activation, performance, and mood of healthy volunteers under social stress conditions. Kohnen R, et al.
Pharmacopsychiatry 1988 Nov;21(6):447–8
Neurochemical and behavioral responses to stress. Oliverio A. Pol J Pharmacol Pharm 1988 Sep–Oct;40(5):489–95 (34 ref.)
[Effects of stress, ACTH and dexamethasone on the activity of steroidogenesis–related enzymes in pregnant rats. I. Steroid hormone levels in the serum, ovary and placenta and their synthesis in the placenta in vitro] Rembiesa R, et al. Endokrynol Pol 1988;39(1):1–9 (Eng. Abstr.) (Pol)
[Selective suppression of lipid peroxidation in the brain under stress] Meerson FZ, et al. Biull Eksp Biol Med 1988 Nov; 106(11):542–4 (Eng. Abstr.) (Rus)
[Indicators of mental status, catecholamine excretion, lipid metabolism and hemostasis in air–traffic controllers at automated and non–automated stations during their non–work days] Kan GS, et al. Gig Sanit 1989 Mar;(3):35–7 (Eng. Abstr.) (Rus)
[The role of suppression of cholesterol 7–hydroxylase activity of the liver in the development of atherogenic stress–induced dyslipoproteinemia] Meerson FZ, et al.
Kardiologiia 1988 Sep;28(9):85–7 (Rus)
[Trace element composition of bone tissue of mice in the normal state and in hypokinesia] Burkovskaia TE, et al. Kosm Biol Aviakosm Med 1989 Mar–Apr;23(2):51–6 (Eng. Abstr.) (Rus)
[Carbohydrates and lipids in the blood serum and liver of rats exposed to repeated hypokinesia] Tikhomirova NA, et al. Kosm Biol Aviakosm Med 1989 Jan–Feb;23(1):81–3 (Rus)
[Cytophotometric study of catecholamines and energy metabolism enzymes in the neurons of the rat celiac plexus during cold and emotional stresses] Lapsha VI, et al.
Neirofiziologiia 1988;20(6):743–9 (Eng. Abstr.) (Rus)
[The effect of emotional–pain stress on the rate of DNA synthesis in heart and liver cells] Meerson FZ, et al.
Vopr Med Khim 1988 Sep–Oct;34(5):59–62 (Eng. Abstr.) (Rus)

NURSING

Stress: an added incapacitator. Kaseman DF, et al.
Geriatr Nurs (New York) 1988 Sep–Oct;9(5):274–7
Nurses' perception of stress in preoperative surgical patients. Biley FC. J Adv Nurs 1989 Jul;14(7):575–81
The concept of reassurance in nursing. Teasdale K.
J Adv Nurs 1989 Jun;14(6):444–50
Helping men cope with divorce. Beal G.
J Psychosoc Nurs Ment Health Serv 1989 Aug;27(8):30–2 (10 ref.)
Resilience. Responding to adversity. Kadner KD.
J Psychosoc Nurs Ment Health Serv 1989 Jul;27(7):20–5
As birth and death coincide. Johannsen L. MCN 1989 Mar–Apr;14(2):89–92
Nursing care to ease parents' grief. Null S. MCN 1989 Mar–Apr;14(2):84–9
[Stress reactions of in–patients before surgery] Xie H.
Chung Hua Hu Li Tsa Chih 1988 Jun;23(6):361–2 (Chi)

PATHOLOGY

Membrane aspects of chronic stress: effects of psychotropic drugs. Valdman AV, et al. Ann Ist Super Sanita 1988; 24(3):437–42
[Cyto–physiologic indicators of the status of the reproductive organs of male rats after 7–day immobilization stress and 7–day hypokinesia] Balkova OV.
Kosm Biol Aviakosm Med 1988 Sep–Oct;22(5):56–9 (Eng. Abstr.) (Rus)
[Effect of hypokinesia on the osteogenetic and hematopoietic functions of the bone marrow in mice. The ectopic bone model] Burkovskaia TE, et al.
Kosm Biol Aviakosm Med 1988 Jul–Aug;22(4):61–5 (Eng. Abstr.) (Rus)
[Morphometric analysis of aortic endothelium and serum lipoproteins in rats during readaptation after 15–day hypokinesia] Gansburgskii AN, et al.
Kosm Biol Aviakosm Med 1989 May–Jun;23(3):46–9 (Eng. Abstr.) (Rus)
[Effect of long–term hypokinesia on the androgenic system in rats] Kirillov OI, et al. Kosm Biol Aviakosm Med 1988 Jul–Aug;22(4):74–6 (Eng. Abstr.) (Rus)
[Dynamics of immobilization–induced osteoporosis in rats] Shvets VN, et al. Kosm Biol Aviakosm Med 1988 Sep–Oct; 22(5):51–5 (Eng. Abstr.) (Rus)
[Prevention of osteoporosis in rats by administration of xydiphone before and during hypokinesia] Shvets VN, et al. Kosm Biol Aviakosm Med 1988 Jul–Aug;22(4):65–70 (Eng. Abstr.) (Rus)
[Central serotonin administration and post–stress damage of the gastric mucosa in inbred mice during various seasons] Koriakina LA, et al. Patol Fiziol Eksp Ter 1989 Jan–Feb; (1):28–31 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Adrenoceptors on blood cells in patients with essential hypertension before and after mental stress. Graafsma SJ, et al. J Hypertens 1989 Jul;7(7):519–24
Stress and cognitive functioning in sport. Jones JG, et al.
J Sports Sci 1989 Spring;7(1):41–63 (90 ref.)

PHYSIOPATHOLOGY

Corticotropin releasing factor receptors: characterization and actions in the anterior pituitary gland. Aguilera G, et al.
Adv Exp Med Biol 1988;245:83–105 (57 ref.)
Regulation of rat hypothalamic corticotropin–releasing hormone secretion in vitro: potential clinical implications. Calogero AE, et al. Adv Exp Med Biol 1988;245:167–81 (64 ref.)
Corticotropin–releasing hormone (CRH) receptors in brain. De Souza EB, et al. Adv Exp Med Biol 1988;245:123–36
Studies on the secretion of corticotropin–releasing factor into hypophysial portal blood. Guillaume V, et al.
Adv Exp Med Biol 1988;245:137–41 (17 ref.)
Behavioral pharmacology of stress: Focus on CNS corticotropin–releasing factor. Koob GF, et al.
Adv Exp Med Biol 1988;245:25–34 (33 ref.)
Sympathoadrenal medullary system and stress. Kopin IJ, et al. Adv Exp Med Biol 1988;245:11–23 (27 ref.)
Glucocorticoid receptors and behavior: implications for the stress response. McEwen BS, et al. Adv Exp Med Biol 1988; 245:35–45 (66 ref.)
Regulation of pituitary cyclic AMP, plasma prolactin and POMC–derived peptide responses to stressful conditions. Meyerhoff JL, et al. Adv Exp Med Biol 1988;245:107–22 (92 ref.)
Hypophysiotropic regulation of stress–induced ACTH secretion. Plotsky PM. Adv Exp Med Biol 1988;245:65–81 (61 ref.)
Stress and reproduction: physiologic and pathophysiologic interactions between the stress and reproductive axes. Rabin D, et al. Adv Exp Med Biol 1988;245:377–87 (98 ref.)
Prolactin and growth hormone secretion in stress. Reichlin S. Adv Exp Med Biol 1988;245:353–76 (107 ref.)
Regulation of vasopressin and oxytocin release in vitro. Sladek CD, et al. Adv Exp Med Biol 1988;245:157–65 (46 ref.)
Is the benzodiazepine/GABA receptor chloride ionophore complex involved in physical and emotional stress? Trullas R, et al. Adv Exp Med Biol 1988;245:183–200 (56 ref.)
CRH effects on central noradrenergic neurons: relationship to stress. Valentino RJ. Adv Exp Med Biol 1988;245:47–64 (64 ref.)
Is there a "final common pathway" in the regulation of ACTH release? Whitnall MH. Adv Exp Med Biol 1988; 245:143–56 (60 ref.)
Transient left ventricular dysfunction during provocative mental stress in patients with coronary artery disease. LaVeau PJ, et al. Am Heart J 1989 Jul;118(1):1–8
Disparate hemodynamic and sympathoadrenergic responses to isometric and mental stress in essential hypertension. Grossman E, et al. Am J Cardiol 1989 Jul 1;64(1):42–4
Parity and perceived job stress elevate blood pressure in young normotensive working women. James GD, et al.
Am J Hypertens 1989 Aug;2(8):637–9
Effects of antihypertensive therapy on blood pressure control, cognition, and reactivity. A placebo–controlled comparison of prazosin, propranolol, and hydrochlorothiazide. Lasser NL, et al. Am J Med 1989 Jan 23;86(1B):98–103

Peripheral and central consequences of immobilization stress in genetically obese Zucker rats. Chaouloff F, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R435–42

Cardiovascular and sympathoadrenal responses to mental stress: influence of beta–blockade. Freyschuss U, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1443–51

Induction of gastric and duodenal mucosal ornithine decarboxylase during stress. Wang JY, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G259–65

Ear wiggling tics [letter] Forrest DV. **Am J Psychiatry** 1989 Mar;146(3):414

Physiological responses to stress. Doswell WM. **Annu Rev Nurs Res** 1989;7:51–69 (54 ref.)

Effects of underwater escape training—a psychophysiological study. Hytten K, et al. **Aviat Space Environ Med** 1989 May;60(5):460–4

Office hypertension in the military aviator. Stewart JC. **Aviat Space Environ Med** 1988 Aug;59(8):778–9

Stress and behavior in streptozotocin diabetic rats: biochemical correlates of passive avoidance learning. Bellush LL, et al. **Behav Neurosci** 1989 Feb;103(1):144–50

Predictable and unpredictable shock stimulates gastric contractility and causes mucosal injury in rats. Garrick T, et al. **Behav Neurosci** 1989 Feb;103(1):124–30

Determinants of the nature of environmentally induced hypoalgesia. Maier SF. **Behav Neurosci** 1989 Feb; 103(1):131–43

Reporting of life events, family history of hypertension, and cardiovascular activity at rest and during psychological stress. Jorgensen RS, et al. **Biol Psychol** 1989 Apr; 28(2):135–48

Cross–situational consistency of cardiovascular reactivity. Smith TW, et al. **Biol Psychol** 1988 Dec;27(3):237–43

Swim–stress–induced antinociception in young rats. Jackson HC, et al. **Br J Pharmacol** 1989 Mar;96(3):617–22

Acute stress and GABAergic function in the rat brain. Otero Losada ME. **Br J Pharmacol** 1989 Mar;96(3):507–12

Adaptation of female rats to stress: shift to male pattern by inhibition of corticosterone synthesis. Haleem DJ, et al. **Brain Res** 1988 Aug 23;458(2):339–47

Immobilization stress affects oxytocin and vasopressin levels in hypothalamic and extrahypothalamic sites. Miaskowski C, et al. **Brain Res** 1988 Aug 16;458(1):137–41

Restraint–induced analgesia in the CD–1 mouse: interactions with morphine and time of day. Miller DB. **Brain Res** 1988 Nov 15;473(2):327–35

Game standings and psychological crisis in sport: theory and research. Bar–Eli M, et al. **Can J Sport Sci** 1989 Mar; 14(1):31–7

EMG in common migraine: changes in absolute and proportional EMG levels during real–life stress. Goudswaard P, et al. **Cephalalgia** 1988 Sep;8(3):163–74

Echocardiographic monitoring of mental stress test in ischemic heart disease. Modena MG, et al. **Clin Cardiol** 1989 Jan;12(1):21–4

Cardiovascular reactivity and plasma prolactin response to mental stress in normals and hypertensives. Musumeci V, et al. **Clin Exp Hypertens [A]** 1989;11(2):277–93

Increase of striatal dopamine turnover by stress in MPTP–treated mice. Urakami K, et al. **Clin Neuropharmacol** 1988 Aug;11(4):360–8

Altered platelet function during mental stress and adrenaline infusion in humans: evidence for an increased aggregability in vivo as measured by filtragometry. Larsson PT, et al. **Clin Sci** 1989 Apr;76(4):369–76

Mental arithmetic stress as a test for evaluation of diabetic sympathetic autonomic neuropathy. Locatelli A, et al. **Diabetic Med** 1989 Aug;6(6):490–5

Stress induces alteration of esophageal pressures in healthy volunteers and non–cardiac chest pain patients. Anderson KO, et al. **Dig Dis Sci** 1989 Jan;34(1):83–91

Upper esophageal sphincter tone and reactivity to stress in patients with a history of globus sensation. Cook IJ, et al. **Dig Dis Sci** 1989 May;34(5):672–6

Different pattern of prolactin release under various acute stress stimuli in rats. Jurčovičová J, et al. **Endocrinol Exp** 1988 Dec;22(4):235–42

Effect of acute and repeated immobilization stress on food and water intake, urine output and vasopressin changes in rats. Michajlovskij N, et al. **Endocrinol Exp (Bratisl)** 1988 Sep;22(3):143–57

The reliability of psychophysiological examinations under field conditions: results of repetitive mental stress testing in middle–aged men. Langewitz W, et al. **Eur Heart J** 1989 Jul;10(7):657–65

Changes in nutrient intakes of conditioned men during a 5–day period of increased physical activity and other stresses. Smoak BL, et al. **Eur J Appl Physiol** 1988; 58(3):245–51

Left ventricular performance during psychological stress. Young DZ, et al. **Eur J Nucl Med** 1989;15(3):118–22

Heart rate and blood pressure reactivity during active coping with a mental task in healthy 18– to 73–year–old subjects. Faucheux BA, et al. **Gerontology** 1989;35(1):19–30

Gastric potential difference and pH in ulcer patients and normal volunteers during Stroop's colour word conflict test. Højgaard L, et al. **Gut** 1989 Jun;30(6):782–5

Cynical hostility and vulnerability to disease: social support, life stress, and physiological response to conflict. Hardy JD, et al. **Health Psychol** 1988;7(5):447–59

Smoking, caffeine, and stress: effects on blood pressure and heart rate in male and female college students. MacDougall JM, et al. **Health Psychol** 1988;7(5):461–78

Psychophysiological reactivity to mental arithmetic stress in black and white normotensive men. Morell MA, et al. **Health Psychol** 1988;7(5):479–96

Mental and physical stress as moderators of the postural response in insulin–dependent diabetic patients. Naliboff BD, et al. **Health Psychol** 1988;7(6):499–514

Caffeine may potentiate adrenocortical stress responses in hypertension–prone men. Lovallo WR, et al. **Hypertension** 1989 Aug;14(2):170–6

Stress and physiological, behavioral and performance patterns of children under varied air ion levels. Fornof KT, et al. **Int J Biometeorol** 1988 Nov;32(4):260–70

Beta–endorphin and dynorphin mimic the circadian immunoenhancing and anti–stress effects of melatonin. Maestroni GJ, et al. **Int J Immunopharmacol** 1989; 11(4):333–40

Cardiovascular reactivity to physical and psychologic stress during long–term treatment with nitrendipine in essential hypertension. Palombo C, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S135–42

Epinephrine suppresses stress–induced increases in plasma immunoreactive beta–endorphin in humans. Troullos ES, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):546–51

Stress, depression, and the immune system. Stein M. **J Clin Psychiatry** 1989 May;50 Suppl:35–40; discussion 41–2 (35 ref.)

Behavioral and neural influences on cellular immune responses: effects of stress and interleukin–1. Weiss JM, et al. **J Clin Psychiatry** 1989 May;50 Suppl:43–53; discussion 54–5 (43 ref.)

Stressful life events and depressive symptoms: disaggregating the effects of acute stressors and chronic strains. Avison WR, et al. **J Health Soc Behav** 1988 Sep;29(3):253–64

Impact of antihypertensive therapy on blood pressure reactivity during mental stress. Rüddel H, et al. **J Hum Hypertens** 1988 Mar;1(4):259–65

Disparate effects of mental stress on plasma noradrenaline in young normotensive and hypertensive subjects. Lenders JW, et al. **J Hypertens** 1989 Apr;7(4):317–23

Standardized stress testing in the cardiovascular laboratory: has it any bearing on ambulatory blood pressure values? Langewitz W, et al. **J Hypertens Suppl** 1989 May; 7(3):S41–8

Cardiovascular reactivity and interpersonal influence: active coping in a social context. Smith TW, et al. **J Pers Soc Psychol** 1989 Feb;56(2):209–18

Protection by procaine hydrochloride against reserpine–induced acute gastric mucosal injury in the rat: implications for stress–induced injury. Salim AS. **J Pharm Sci** 1988 Jul;77(7):582–5

The relationship between aerobic activity and cognitive performance under stress. Kagan DM, et al. **J Psychol** 1988 Sep;122(5):451–62

Hemodynamic response to different types of mental stress in patients with recent myocardial infarction. Mazzuero G, et al. **Jpn Heart J** 1989 Jan;30(1):35–46

The restraint stress–induced decrease of the nocturnal prolactin surge and the physiology of pseudopregnancy and pregnancy in the rat. Morehead MH, et al. **Life Sci** 1989;45(3):207–15

Endocrine effects of psychological stress associated with neurobehavioral performance testing. Mutti A, et al. **Life Sci** 1989;44(24):1831–6

Involvement of corticotropin–releasing factor in restraint stress–induced anorexia and reversion of the anorexia by somatostatin in the rat. Shibasaki T, et al. **Life Sci** 1988; 43(14):1103–10

A brief, versatile, computerized, stress–inducing task derived from the Stroop color word test. Douchamps J. **Methods Find Exp Clin Pharmacol** 1988 Sep;10(9):595–601

Adaptation to chronic stress. Temporal pattern of immune and neuroendocrine correlates. Irwin MR, et al. **Neuropsychopharmacology** 1988 Sep;1(3):239–42

Effects of propranolol on cardiovascular and neuroendocrine responses to mental arithmetic in type A men. Williams RB Jr, et al. **Neuropsychopharmacology** 1988 Dec; 1(4):337–40

Changes in QT and Q–aT intervals induced by mental and physical stress with fixed rate and atrial triggered ventricular inhibited cardiac pacing. Hedman A, et al. **PACE** 1988 Oct;11(10):1426–31

Opposite effects of restraint on morphine analgesia and naloxone–induced jumping. Dymshitz J, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):905–10

Both prenatal and postnatal factors contribute to the effects of maternal stress on offspring behavior and central 5–hydroxytryptamine receptors in the rat. Peters DA. **Pharmacol Biochem Behav** 1988 Jul;30(3):669–73

ICV–CRH alters stress–induced freezing behavior without affecting pain sensitivity. Sherman JE, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):801–7

Effect of acute ethanol administration on noradrenaline metabolism in brain regions of stressed and nonstressed rats. Shirao I, et al. **Pharmacol Biochem Behav** 1988 Jul; 30(3):769–73

Physiological correlates of the coronary–prone behavior pattern in women during examination stress. Lawler KA, et al. **Physiol Behav** 1989 Apr;45(4):777–9

A further analysis of behavioral and endocrine effects of unpredictable chronic stress. Rodríguez Echandía EL, et al. **Physiol Behav** 1988;43(6):789–95

Endogenous opioids and their receptors in stress–induced analgesia. Panerai AE, et al. **Pol J Pharmacol Pharm** 1987 Sep–Oct;39(5):597–607

Regulation of duodenal bicarbonate secretion during stress by corticotropin–releasing factor and beta–endorphin. Lenz HJ. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1417–20

Comparison of motor activity circadian rhythm for SHR and WKY during moderate audiogenic stress. Watanabe Y, et al. **Proc West Pharmacol Soc** 1988;31:273–6

Influence of CGP 361A, propranolol and diazepam on autonomous reactions to different stressors. Albus M, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):87–97

The role of the hypothalamic–pituitary–adrenocortical axis in post–stress induced ethanol consumption by rats. Nash JF Jr, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):653–71

Cingulotomy in the rat fails to block opiate withdrawal effects but elevates stress–induced plasma beta–endorphin. Smith GC, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):683–8

Neuroendocrine responses to nicotine and stress: enhancement of peripheral stress responses by the administration of nicotine. Morse DE. **Psychopharmacology (Berlin)** 1989;98(4):539–43

Detection of changes in the mouse circadian rhythm induced by stress. Díez–Noguera A, et al. **Rev Esp Fisiol** 1988 Sep; 44(3):247–55

Autopsy statistics on the relative frequency of acute myocardial infarction in the Japanese mental workers and the unemployed during the two oil–crises periods. Chang NC, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:106–19

Sinking heart: a Punjabi communication of distress. Krause IB. **Soc Sci Med** 1989;29(4):563–75

Role of neuropeptide Y (NPY) in cardiovascular responses to stress. Zukowska–Grojec Z, et al. **Synapse** 1988; 2(3):293–8

[Elimination of stress–induced activation of DNA reparative synthesis in the myocardium by increasing the load on the heart] Meerson FZ, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):655–7 (Eng. Abstr.) (Rus)

[Delta sleep–inducing peptide in the blood and hypothalamus of rats with various resistance to emotional stress] Salieva RM, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):264–6 (Eng. Abstr.) (Rus)

[Control of vertical posture during emotional stress] Efremov VS. **Fiziol Cheloveka** 1988 Sep–Oct;14(5):818–22 (Rus)

[Effect of complex methods of relieving neuro–emotional stress on cardiorespiratory indicators of workers] Gumeniuk VA, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):664–71 (Rus)

[Various indicators of health status during 3–month watchmans' duty period] Valov R, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):672–8 (Rus)

[Effect of emotional–algesic stress on the hormonal function of thyroid and parathyroid glands] Kuripka VI, et al. **Fiziol Zh** 1989 Jan–Feb;35(1):72–5 (Eng. Abstr.) (Rus)

[Hemodynamics (general and cerebral) and mental activity under normal conditions] Rashman SM. **Fiziol Zh** 1989 May–Jun;35(3):49–56 (Eng. Abstr.) (Rus)

[Effect of substance P and its N–terminal fragment on the components of the normal microcirculatory system and under stress] Gorizontova MP. **Fiziol Zh SSSR** 1989 May; 75(5):709–14 (Eng. Abstr.) (Rus)

[Hormonal homeostasis and intraocular pressure in chronic emotional stress caused by influences acting on the amygdala] Isakova LS, et al. **Fiziol Zh SSSR** 1989 Jan; 75(1):124–30 (Eng. Abstr.) (Rus)

[Characteristics of neurophysiologic changes in experimental stress induced by long–term group isolation in rats] Rasulov MM, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1087–93 (Eng. Abstr.) (Rus)

[Hemodynamics in emotional responses and in emotional stress] Sydakov KV, et al. **Fiziol Zh SSSR** 1988 Nov; 74(11):1535–45 (Eng. Abstr.) (Rus)

[Effect of learning stress on various indicators of the cardiovascular system and energy metabolism in schoolchildren starting their education at 6 and 7 years of age] Atroshchenko GN, et al. **Gig Sanit** 1988 Sep; (9):78–80 (Rus)

[Effect of correcting schoolchildren's nutrition on urinary excretion of catecholamines during increased mental and emotional stress] Kerimova MG, et al. **Gig Sanit** 1989 May; (5):93–4 (Rus)

[Reorganization of the neuromediatory function of the brain and autonomic regulation at rest during adaptation to chronic hypokinesia] Zhuravleva NG. **Gig Sanit** 1989 Mar; (3):85–6 (Rus)

[Rearrangement of bioelectric activity of the brain during adaptation to chronic hypokinesia] Zhuravleva NG. **Gig Sanit** 1989 Feb;(2):32–5 (Eng. Abstr.) (Rus)

[Psychophysiological correlations and reactivity of patients with hypertension] Aivazian TA, et al. **Kardiologiia** 1988 Dec;28(12):10–3 (Eng. Abstr.) (Rus)

[Selection of psychoemotional load test for the diagnosis of hypertension] Belova EV, et al. **Kardiologiia** 1988 Dec; 28(12):17–20 (Eng. Abstr.) (Rus)

[Characteristics of circulatory and neurohumoral reactions to psychoemotional stress of patients with borderline

arterial hypertension] Dornichev VM, et al. **Kardiologiia** 1988 Dec;28(12):23–7 (Eng. Abstr.) (Rus)

[Effect of preliminary adaptation to long-term stress on disorders of the contractile function of the heart in experimental infarction] Kuznetsov VI, et al. **Kardiologiia** 1989 Feb;29(2):89–91 (Rus)

[Possibility of reflex activation of stress-limiting systems and the prevention of arrhythmia by electroacupuncture] Meerson FZ, et al. **Kardiologiia** 1989 Jan;29(1):88–90 (Rus)

[Effect of adaptation to stress exposures on the cholino- and adrenoreactivity of the atria and their content of acetylcholine in rats with myocardial infarct] Pshennikova MG, et al. **Kardiologiia** 1988 Aug;28(8):82–6 (Eng. Abstr.) (Rus)

[Various aspects of applied biochemical studies in aviation medicine] Dlusskaia IG, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):15–21 (76 ref.) (Eng. Abstr.) (Rus)

[The problem of information control in the pilot's reliability in extreme conditions] Ponomarenko VA, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):16–21 (Eng. Abstr.) (Rus)

[Effect of delta-sleep inducing peptide on electrical instability of the heart in emotional stress] Arkhangel'skaia MI, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):45–9 (Eng. Abstr.) (Rus)

[The role of glycosaminoglycans in regulation of medullary hematopoiesis in stress] Dygai AM, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):60–2 (Eng. Abstr.) (Rus)

[The role of macrophages in the development of the phenomenon of the stimulation of bone marrow hematopoiesis in stress] Gol'dberg ED, et al. **Patol Fiziol Eksp Ter** 1988 Sep–Oct;(5):32–4 (Eng. Abstr.) (Rus)

[Oligopeptides in the mechanisms of resistance to emotional stress] Sudakov KV. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):3–11 (Rus)

[The problem of the influences of brain cholinergic mechanisms on lipoprotein metabolism in disorders of heat exchange and in emotional stress] Gurin VN, et al. **Vestn Akad Med Nauk SSSR** 1989;(1):21–8 (Eng. Abstr.) (Rus)

[Participation of the B-endorphinergic system in changes in intestinal motility induced in situations of psychic stress. Experimental study in dogs] Ramírez P, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):407–13 (Eng. Abstr.) (Spa)

PREVENTION & CONTROL

Drug testing at the oral boards? [letter] Mamourian A, et al. **AJR** 1989 Feb;152(2):431

Managing ICU-induced stress. Doran MO. **Am J Nurs** 1988 Nov;88(11):1559–60, 1562

How well do CCU patient-nurse contracts work? Ziemann KM, et al. **Am J Nurs** 1989 May;89(5):691CC–694CC

Biofeedback and stress management strategies. Kong DS, et al. **Ann Acad Med Singapore** 1989 May;18(3):261–5

Reducing emotional distress associated with childhood illness. Marshall P. **Compr Ther** 1989 Jan;15(1):3–7

Natural support systems of Puerto Ricans: a key dimension for well-being. De La Rosa M. **Health Soc Work** 1988 Summer;13(3):181–90 (44 ref.)

Effects of the nursing mutual participation model of care on parental stress in the pediatric intensive care unit. Curley MA. **Heart Lung** 1988 Nov;17(6 Pt 1):682–8

Stress is nothing new to MDs who are CEOs. Koska MT. **Hospitals** 1989 Sep 20;63(18):72–3

Dimensions of control as related to work organization, stress, and health. Aronsson G. **Int J Health Serv** 1989; 19(3):459–68

Action research on occupational stress: involving workers as researchers. Israel BA, et al. **Int J Health Serv** 1989; 19(1):135–55

Collective control: strategies for survival in the workplace. Johnson JV. **Int J Health Serv** 1989;19(3):469–80

Stress and religious involvement among older blacks. Krause N, et al. **J Gerontol** 1989 Jan;44(1):S4–13

Sources of resistance to an intern support group. Kaplan C, et al. **J Med Educ** 1988 Dec;63(12):906–11

Alleviating distress for children in treatment [news] Burklow J. **J Natl Cancer Inst** 1989 May 10;81(10):731–2

Survey of stress management content in baccalaureate nursing curricula. Manderino MA, et al. **J Nurs Educ** 1988 Sep;27(7):321–5

Taking the stress out of training. Miller AJ. **J R Soc Health** 1989 Feb;109(1):34–5

Follow-up of stress-management courses. Sedgwick AW, et al. **Med J Aust** 1989 May 1;150(9):485–6, 488–9

Provision of respite care for children with developmental disabilities: changes in maternal coping and stress over time. Rimmerman A. **Ment Retard** 1989 Apr;27(2):99–103

Supporting the deliverers of care: strategies to support nurses and prevent burnout. Bolle JL. **Nurs Clin North Am** 1988 Dec;23(4):843–50 (14 ref.)

Comprehensive health programs should include stress management. Knight EA, et al. **Occup Health Saf** 1988 Oct;57(11):46–50

Reduce stress with a leisurely lunch [letter] Shulkin DJ. **Postgrad Med** 1989 Jan;85(1):35

Stress in relation to satisfaction with leisure experienced by those performing in therapeutic recreation. Cunningham PH. **Psychol Rep** 1989 Apr;64(2):652

Stress inoculation with nursing students. Foley J, et al. **West J Nurs Res** 1988 Aug;10(4):435–48

[Defense reactions and coping with stress in patients with cancer] Losiak W. **Przegl Lek** 1989;46(3):334–7 (Eng. Abstr.) (Pol)

[Antistress effects of vitamin E and dimethylsulfoxide during their combined administration in low doses] Levshina IP, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):274–7 (Eng. Abstr.) (Rus)

[Detection of hypodynamia and psychoemotional stress during the mass prophylactic examination of students] Nikolaeva AA, et al. **Sov Med** 1988;(8):45–8 (Rus)

[Significance of the socio-psychological climate of workers' teams] Flek VO. **Sov Zdravookhr** 1988;(11):23–6 (Eng. Abstr.) (Rus)

[Prophylactic effect of interferon in the combined action of stress and experimental influenza infection] Gotovtseva EP, et al. **Vopr Virusol** 1988 Nov–Dec;33(6):748–50 (Rus)

[Can the number of myocardial infarctions be reduced by improving the psychosocial work environment?] Theorell T, et al. **Lakartidningen** 1989 Apr 19;86(16):1455–6 (Swe)

PSYCHOLOGY

Perceptions of social support, receipt of supportive behaviors, and locus of control as moderators of the effects of chronic stress. Cummins RC. **Am J Community Psychol** 1988 Oct; 16(5):685–700

Social support in the workplace: tests of six theoretical models. Dignam JT, et al. **Am J Community Psychol** 1988 Oct;16(5):701–24

Personal relationships, personal attributes, and stress resistance: mothers' reactions to their child's illness. Hobfoll SE, et al. **Am J Community Psychol** 1988 Aug;16(4):565–89

Social support from a friend, perceived support, and social problem solving. Lakey B, et al. **Am J Community Psychol** 1988 Dec;16(6):811–24

Psychoactive drugs, alcohol, and stress and coping processes in older adults. Huffine CL, et al. **Am J Drug Alcohol Abuse** 1989;15(1):101–13

Burnout and stress among employees at a state institution for mentally retarded persons. Caton DJ, et al. **Am J Ment Retard** 1988 Nov;93(3):300–4

Construct validity of the adapted Questionnaire on Resources and Stress—short form. Salisbury CL. **Am J Ment Retard** 1989 Jul;94(1):74–9

"Burnout" (a metaphoric myth) [editorial] Johnson EW. **Am J Phys Med Rehabil** 1988 Dec;67(6):237

Burnout in rehabilitation medicine. Osborn M, et al. **Am J Phys Med Rehabil** 1988 Dec;67(6):275–6

Management of stress and prevention of burnout in emergency physicians. Keller KL, et al. **Ann Emerg Med** 1989 Jan;18(1):42–7

Who's stressing whom? [editorial] Koltonow SH. **Ann Emerg Med** 1989 Jan;18(1):103–4

Reviewing nursing stress according to a proposed coping-adaption framework. Harris RB. **ANS** 1989 Jan; 11(2):12–28 (59 ref.)

Alternative explanations of coping with stressful experiences associated with physical illness. Johnson JE, et al. **ANS** 1989 Jan;11(2):39–52 (22 ref.)

Fear of contagion: a stress response to acquired immunodeficiency syndrome. Meisenhelder JB, et al. **ANS** 1989 Jan;11(2):29–38

The stress-coping process in school-age children: gaps in the knowledge needed for health promotion. Ryan NM. **ANS** 1988 Oct;11(1):1–12 (51 ref.)

Staff stress and job satisfaction at a children's hospice. Woolley H, et al. **Arch Dis Child** 1989 Jan;64(1):114–8

The right and wrong stuff in civil aviation. Leimann Patt HO. **Aviat Space Environ Med** 1988 Oct;59(10):955–9

The Aviation Psychology Program at RAF Upper Heyford. Senechal PK, et al. **Aviat Space Environ Med** 1988 Oct; 59(10):973–5

Combat stress in the chemical and biological warfare environment. [editorial] Ursano RJ. **Aviat Space Environ Med** 1988 Dec;59(12):1123–4

Organizational characteristics, occupational stress, and mental health in nurses. Revicki DA, et al. **Behav Med** 1989 Spring;15(1):30–6

Workload, stress, and strain among police officers. Stotland E, et al. **Behav Med** 1989 Spring;15(1):5–17

Stressor-provoked behavioral changes in six strains of mice. Shanks N, et al. **Behav Neurosci** 1988 Dec;102(6):894–905

Leisure interest patterns and subjective stress in college students. Rosenthal TL, et al. **Behav Res Ther** 1989; 27(1):59–64

Changes in patients' stress and arousal levels associated with therapists' perception of their requests during crisis intervention. Kirk AK, et al. **Br J Clin Psychol** 1988 Nov; 27 (Pt 4):363–9

Psychosocial job demands of cardiac patients in Hungary. Hoffmann A. **Eur Heart J** 1988 Nov;9 Suppl L:20–5

Practical aspects of identifying and correcting worksite stress in post-infarction patients returning to work. Stolz I, et al. **Eur Heart J** 1988 Nov;9 Suppl L:82–3

Hospitalization stress in children: sensitizer and repressor coping styles. Field T, et al. **Health Psychol** 1988; 7(5):433–45

Child life: meeting the psychosocial needs of children and families in the hospital. Newman CO, et al. **Henry Ford Hosp Med J** 1988;36(4):222–6

Perceived job-stress and blood pressure increase among Japanese blue collar workers: one-year follow-up study. Kawakami N, et al. **Ind Health** 1989;27(2):71–81

Effect of stress on behaviour in rats. Abraham ME, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun;33(2):84–8

Effect of stress on maternal behaviour. Sahakari SD, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun;33(2):93–6

Nurses' work satisfaction and feelings of health and stress in three psychiatric departments. Landeweerd JA, et al. **Int J Nurs Stud** 1988;25(3):225–34

Parental perception of learning-disabled children's adjustment problems and related stress. Konstantareas MM, et al. **J Abnorm Child Psychol** 1989 Apr;17(2):177–86

Parenting stress in raising autistic children. Milgram NA, et al. **J Autism Dev Disord** 1988 Sep;18(3):415–24

Psychological effects of parenting stress on parents of autistic children. Wolf LC, et al. **J Autism Dev Disord** 1989 Mar; 19(1):157–66

Assessing child symptom severity and stress in parents of autistic children. Konstantareas MM, et al. **J Child Psychol Psychiatry** 1989 May;30(3):459–70

The consequences for preschool children of a parent's detention: a preliminary South African clinical study of caregivers' reports. Skinner D, et al. **J Child Psychol Psychiatry** 1989 Mar;30(2):243–59

Associations among family support, family stress, and personal functional health status. Parkerson GR Jr, et al. **J Clin Epidemiol** 1989;42(3):217–29

Stereotypic beliefs about women as moderators of stress-distress relationships. Belk SS, et al. **J Clin Psychol** 1989 Jul;45(4):665–72

The student survey of problems in the academic environment in Canadian dental faculties. Bradley IF, et al. **J Dent Educ** 1989 Feb;53(2):126–31

Child psychopathology and parenting stress in girls and boys having attention deficit disorder with hyperactivity. Breen MJ, et al. **J Pediatr Psychol** 1988 Jun;13(2):265–80

Does emotionality predict stress? Findings from the normative aging study. Aldwin CM, et al. **J Pers Soc Psychol** 1989 Apr;56(4):618–24

The hardy personality: cognitive and physiological responses to evaluative threat. Allred KD, et al. **J Pers Soc Psychol** 1989 Feb;56(2):257–66

Perceived self-efficacy in coping with cognitive stressors and opioid activation. Bandura A, et al. **J Pers Soc Psychol** 1988 Sep;55(3):479–88

Assessing coping strategies: a theoretically based approach. Carver CS, et al. **J Pers Soc Psychol** 1989 Feb;56(2):267–83

Major life events, hassles, and adaptation in adolescence: confounding in the conceptualization and measurement of life stress and adjustment revisited. Rowlison RT, et al. **J Pers Soc Psychol** 1988 Sep;55(3):432–44

Adjustment to the stress of simulated captivity: effects of emotion-focused versus problem-focused preparation on hostages differing in locus of control. Strentz T, et al. **J Pers Soc Psychol** 1988 Oct;55(4):652–60

Job satisfaction and occupational stress among general practitioners—a pilot study. Makin PJ, et al. **J R Coll Gen Pract** 1988 Jul;38(312):303–6

Inquiry mode, occupational stress, and preferred leadership style among American elementary school teachers. Kagan DM. **J Soc Psychol** 1989 Jun;129(3):297–305

A characteristic pattern of active avoidance behavior in SART-stressed rats. Hata T, et al. **Jpn J Pharmacol** 1989 Mar;49(3):436–40

The psychosocial consequences of childhood infection with human immunodeficiency virus. Waters BG, et al. **Med J Aust** 1988 Aug 15;149(4):198–202 (16 ref.)

Effect of some benzamide derivatives on stress-induced behavior and striatum dopamine receptors. Bondarenko NA, et al. **Methods Find Exp Clin Pharmacol** 1988 Oct; 10(10):629–33

Effect of 5-HT1A agonists on stress-induced deficit in open field locomotor activity of rats: evidence that this model identifies anxiolytic-like activity. Carli M, et al. **Neuropharmacology** 1989 May;28(5):471–6

Stress-induced potentiation of morphine-induced analgesia in morphine-tolerant rats. Fleetwood SW, et al. **Neuropharmacology** 1989 Jun;28(6):563–7

Stressors and patterns of coping in renal transplant patients. Sutton TD, et al. **Nurs Res** 1989 Jan–Feb;38(1):46–9

Stress process among mothers of infants: preliminary model testing. Walker LO. **Nurs Res** 1989 Jan–Feb;38(1):10–6

Managing work-related stress, burnout, impairment. Gable GK. **Pa Med** 1989 May;92(5):38–40

Stress ulcer and open-field behavior of spontaneously hypertensive, normotensive, and Wistar rats. Paré WP. **Pavlov J Biol Sci** 1989 Apr–Jun;24(2):54–7

Alteration of the effects of caffeine by prenatal stress. Pohorecky LA, et al. **Pharmacol Biochem Behav** 1989 May; 33(1):55–62

Attenuation of conditioned taste aversions by external stressors. Revusky S, et al. **Pharmacol Biochem Behav** 1989 May;33(1):219–26

Influence of adrenal demedullation on stress induced alterations within the general adaptation behaviour of August-rats. Roske I, et al. **Pharmazie** 1988 May; 43(5):339–43

Physician burnout [letter] Vinson DC. **Pharos** 1988 Summer; 51(3):42

Impact of role stress on physical therapists' emotional and physical well-being. Deckard GJ, et al. **Phys Ther** 1989 Sep;69(9):713–8

The difference in stress-induced analgesia in C57BL/6 and DBA/2 mice: a search for biochemical correlates. Przewlocka B, et al. **Pol J Pharmacol Pharm** 1988 Sep–Oct;40(5):497–506

Immobilization stress modifies locomotor response to catecholamine receptor agonists in rats. Zebrowska-Lupina I, et al. **Pol J Pharmacol Pharm** 1988 Sep–Oct;40(5):441–50

Attentional problems in dysfunctional mother-child interactions: an interbehavioral model. Wahler RG, et al. **Psychol Bull** 1989 Jan;105(1):116–30 (110 ref.)

Sex differences in psychological burnout in teachers. Burke RJ, et al. **Psychol Rep** 1989 Aug;65(1):55–63

Career orientations and psychological burnout in teachers. Burke RJ, et al. **Psychol Rep** 1988 Aug;63(1):107–16

It may be lonely at the top but it's less stressful: psychological burnout in public schools. Burke RJ, et al. **Psychol Rep** 1989 Apr;64(2):615–23

Stress, locus of control, and achievement of high school seniors. Cole T Jr, et al. **Psychol Rep** 1988 Oct;63(2):355–9

The Stress-Arousal Checklist as a measure of situational stress versus simple arousal. Duckro PN, et al. **Psychol Rep** 1989 Feb;64(1):239–42

Work-stress burnout among paramedics. Grisby DW, et al. **Psychol Rep** 1988 Aug;63(1):55–64

Type A, locus of control, and stress: another case in point. Heilbrun AB Jr. **Psychol Rep** 1989 Apr;64(2):524–6

A revised strategy of type A research. Heilbrun AB Jr. **Psychol Rep** 1988 Dec;63(3):979–83 (12 ref.)

Comparative analysis of the influence of stress-related variables on adaptation to a new work setting. Zahrly J, et al. **Psychol Rep** 1988 Dec;63(3):767–77

Persistent sensitization of clonidine-induced hypokinesia following one exposure to a stressor: possible relevance to panic disorder and its treatment. Antelman SM, et al. **Psychopharmacology (Berlin)** 1989;98(1):97–101

Post-natal morphine differentially affects opiate and stress analgesia in adult rats. Arjune D, et al. **Psychopharmacology (Berlin)** 1989;98(4):512–7

Discovery of antidepressant activity by forced swimming test may depend on pre-exposure of rats to a stressful situation. Borsini F, et al. **Psychopharmacology (Berlin)** 1989; 97(2):183–8

Effects of chronic haloperidol on stress-induced oral behaviour in rats. Nobrega JN, et al. **Psychopharmacology (Berlin)** 1989;98(4):476–82

Family stress and family strengths: a comparison of single- and two-parent families with handicapped children. McCubbin MA. **Res Nurs Health** 1989 Apr;12(2):101–10

Empathy and burnout in male and female helping professionals. Williams CA. **Res Nurs Health** 1989 Jun; 12(3):169–78

Cancer care—a stress for health professionals. Delvaux N, et al. **Soc Sci Med** 1988;27(2):159–66 (70 ref.)

Unemployment and psychiatric distress: social resources and coping. Ensminger ME, et al. **Soc Sci Med** 1988; 27(3):239–47

Cultural variations in the response to psychiatric disorders and emotional distress. Kirmayer LJ. **Soc Sci Med** 1989; 29(3):327–39 (103 ref.)

Perceived stress in medical school: resistors, persistors, adaptors and maladaptors. Vitaliano PP, et al. **Soc Sci Med** 1989;28(12):1321–9 (69 ref.)

A prospective investigation of suicidal ideation in college students: a test of a model. Bonner RL, et al. **Suicide Life Threat Behav** 1988 Fall;18(3):245–58

Adaptive responses to diabetes mellitus. Pollock SE. **West J Nurs Res** 1989 Jun;11(3):265–75; discussion 275–80

The relationship of cognitive styles and stress in nursing students. Williams RA. **West J Nurs Res** 1988 Aug; 10(4):449–62

Coping with the stress of being sued. Reineck MC. **Wis Med J** 1989 Mar;88(3):32

[Chronic stress and the degree of anxiety in girls with menstrual cycle disorders] Sirakov M, et al. **Akush Ginekol (Sofiia)** 1989;28(2):51–4 (Eng. Abstr.) (Bul)

[Subjective assessment of stress and monotony in manufacturing workers in the food and flavorings industries] Kirkova R, et al. **Probl Khig** 1988;13:56–63 (Eng. Abstr.) (Bul)

[Chronogenesis, psychorhythms and work] Amiel R. **Ann Med Psychol (Paris)** 1988 May-Jun;146(7):633–6 (Eng. Abstr.) (Fre)

[Arterial hypertension and psychological factors among personnel of international organizations residing in Geneva] Baczko A, et al. **Schweiz Rundsch Med Prax** 1988 Jul 19; 77(29–30):790–5 (Eng. Abstr.) (Fre)

[How dentists deal with occupational stress] Heim E, et al. **Schweiz Monatsschr Zahnmed** 1988;98(10):1057–66 contd (Eng. Abstr.) (Ger)

[Clinical studies of the role of stress situations in the psychopathological picture of the first episode of schizophrenia] Terminska K, et al. **Psychiatr Pol** 1988 Mar-Apr;22(2):116–21 (Eng. Abstr.) (Pol)

[An analysis of the psychoemotional tension in patients before oral surgery in relation to their psychological personality traits] Sinichkin VV, et al. **Stomatologiia (Mosk)** 1989 May-Jun;68(3):28–9 (Eng. Abstr.) (Rus)

[Emotional stress psychotherapy] Rozhnov VE. **Zh Nevropatol Psikhiatr** 1989;89(1):58–62 (Eng. Abstr.) (Rus)

[Primary mental health care for the victims of the disaster in Armero, Colombia] Lima BR, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Mar;34(1):13–32 (Eng. Abstr.) (Spa)

REHABILITATION

The effect of a telephone family assessment intervention on the functional health of patients with elevated family stress. Parkerson GR Jr, et al. **Med Care** 1989 Jul;27(7):680–93

SURGERY

The benefits and hazards of cosmetic surgery. Harris D. **Br J Hosp Med** 1989 Jun;41(6):540–5

THERAPY

Coping with examination stress through hypnosis: an experimental study. Palan BM, et al. **Am J Clin Hypn** 1989 Jan;31(3):173–80

Teaching stress management techniques to a schizophrenic patient. Stein F, et al. **Am J Occup Ther** 1989 Mar; 43(3):162–9

Stress reduction training changed number of sexual partners but not immune function in men with HIV. Coates TJ, et al. **Am J Public Health** 1989 Jul;79(7):885–7

Why not try hypnosis? [letter] Wadsworth R. **Aust Fam Physician** 1988 Dec;17(12):1028–9

Relaxation and imagery in the treatment of breast cancer. Bridge LR, et al. **BMJ** 1988 Nov 5;297(6657):1169–72

A transcultural support group for Turkish women in poor health. Isaac DR. **Community Health Stud** 1989;13(1):49–58

Hypnosis and rational-emotive therapy—a de-stressing combination: a brief communication. Stanton HE. **Int J Clin Exp Hypn** 1989 Apr;37(2):95–9

The college student-athlete: psychological considerations and interventions. Pinkerton RS, et al. **J Am Coll Health** 1989 Mar;37(5):218–26 (80 ref.)

Stress reduction with heart transplant patients and their families: a multidisciplinary approach. Gier MD, et al. **J Heart Transplant** 1988 Sep–Oct;7(5):342–7

Exercise may evoke rather than reduce stress. Cronin-Stubbs D, et al. **J Nurs Adm** 1989 Jul–Aug;19(7):3

Stress management training for parents of children with severe handicaps. Singer GH, et al. **Ment Retard** 1988 Oct; 26(5):269–77

Essays on the art of caring in nursing: I. The human spirit in stress management. Dugan DO. **Nurs Forum** 1987–88; 23(3):108–17

Personal energy profiles determine stress-management capabilities. Poe CA. **Occup Health Saf** 1989 Aug; 58(8):33–4

Stress-relieving relaxation audio-tape for supportive care of cancer patients: developmental studies. Presant CA, et al. **Prog Clin Biol Res** 1988;278:151–8

Psychological distress and the decision to seek medical care. Berkanovic E, et al. **Soc Sci Med** 1988;27(11):1215–21

Managing occupational stress associated with HIV infection. Self-care and self-management skills. Scott CD, et al. **State Art Rev Occup Med** 1989;4 Suppl:85–93 (30 ref.)

[A method of central electroanalgesia for correcting the functional status of pilots during intensive flights] Egorov VA, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct; 22(5):18–20 (Eng. Abstr.) (Rus)

[A psychotherapist's experience with conducting emotional and psychological relaxation] Grabovskil IaA. **Zh Nevropatol Psikhiatr** 1989;89(3):84–5 (Eng. Abstr.) (Rus)

URINE

Crew workload in JASDF C-1 transport flight: II. Change in urinary catecholamine excretion. Nakamura A, et al. **Aviat Space Environ Med** 1989 Apr;60(4):301–6

The effects of VDT work on urinary excretion of catecholamines. Tanaka T, et al. **Ergonomics** 1988 Dec; 31(12):1753–63

Convergence between the Daily Stress Inventory and endocrine measures of stress. Brantley PJ, et al. **J Consult Clin Psychol** 1988 Aug;56(4):549–51

STRESSFUL EVENTS see **LIFE CHANGE EVENTS**

STRIA VASCULARIS see under **COCHLEA**

STRIATE CORTEX see **VISUAL CORTEX**

STRIATED BORDER see **MICROVILLI**

STRIDOR see **RESPIRATORY SOUNDS**

STRIKES, EMPLOYEE

Risk factors associated with participation in the Ontario, Canada doctors' strike. Kravitz RL, et al. **Am J Public Health** 1989 Sep;79(9):1227–33

Doctor strikes and other signs of discontent [editorial] Mechanic D. **Am J Public Health** 1989 Sep;79(9):1218–9

Patients' responses to short obstetrical hospital stays during a nurses' strike. Gjerdingen DK, et al. **Fam Pract Res J** 1988 Summer;7(4):227–35

The effect of a nurses' strike on the functioning of chronic patients. Sigal M, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):409–11

Patients claim inadequate care during labor strike. Holthaus D. **Hospitals** 1988 Oct 20;62(20):38

How to avoid strikes in a unionized hospital. Lappa K. **Hospitals** 1989 Jul 5;63(13):48–9

Walkout threatened hospital's Medicare status. Robinson ML. **Hospitals** 1989 Mar 5;63(5):20

Doctors' strike: non-availability of drugs: activation of seizures [letter] Agarwal A, et al. **J Assoc Physicians India** 1988 Jul;36(7):460–1

Effects of a psychiatrists' strike on emergency psychiatric referral and admissions. Schlosberg A, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Mar;24(2):84–7

STROKE see **CEREBROVASCULAR DISORDERS**

STROKE VOLUME

Changes in ejection fraction during induction of anesthesia with two different i.v. techniques. Dahlgren G, et al. **Acta Anaesthesiol Scand** 1988 Nov;32(8):647–52

Right ventricular dysfunction in septic shock: assessment by measurements of right ventricular ejection fraction using the thermodilution technique. Vincent JL, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):34–8

Two-dimensional echocardiographic evaluation of right ventricular ejection fraction: comparison between three different methods. Vitolo E, et al. **Acta Cardiol (Brux)** 1988; 43(4):469–80

Alteration of ventricular function during coronary artery surgery. Mangano DT. **Acta Chir Scand Suppl** 1989; 550:57–62

Computer method for automatic determination of stroke volume using impedance cardiography signals. Cybulski G. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):494–503

Optimal and actual end systolic pressure-volume relations in dogs and rabbits. Including new method of Emax determination. Piene H, et al. **Acta Physiol Scand** 1988 Aug; 133(4):501–11

First myocardial infarction: age and ejection fraction identify a low-risk group. Ahnve S, et al. **Am Heart J** 1988 Oct; 116(4):925–32

Value of color Doppler estimation of regurgitant volume in patients with chronic aortic insufficiency. Bouchard A, et al. **Am Heart J** 1989 May;117(5):1099–105

Determination of left ventricular filling parameters by pulsed Doppler echocardiography: a noninvasive method to predict high filling pressures in patients with coronary artery disease. Kuecherer H, et al. **Am Heart J** 1988 Oct; 116(4):1017–21

The effects of successful PTCA on left ventricular function: assessment by exercise echocardiography. Labovitz AJ, et al. **Am Heart J** 1989 May;117(5):1003–8

Transient left ventricular dysfunction during provocative mental stress in patients with coronary artery disease. LaVeau PJ, et al. **Am Heart J** 1989 Jul;118(1):1–8

Hemodynamic response to treadmill exercise in normal volunteers: an assessment by Doppler ultrasonic measurement of ascending aortic blood velocity and acceleration. Mehta N, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1298–307

The inverse relationship between baseline left ventricular ejection fraction and outcome of antiarrhythmic therapy: a dangerous imbalance in the risk-benefit ratio. Pratt CM, et al. **Am Heart J** 1989 Sep;118(3):433–40

Responses of left and right ventricular ejection fractions to aerobic and anaerobic phases of upright and supine exercise in normal subjects. Rodrigues EA, et al. **Am Heart J** 1989 Aug;118(2):319–24

Long-term stepwise sustained improvement in left ventricular ejection fraction after myocardial infarction. Silberberg J, et al. **Am Heart J** 1989 Mar;117(3):532–7

Resting left ventricular ejection fraction in elderly patients without evidence of heart disease. Aronow WS, et al. **Am J Cardiol** 1989 Feb 1;63(5):368–9

Right ventricular function during transient myocardial ischemia induced by percutaneous transluminal angioplasty of the proximal right coronary artery. Danchin N, et al. **Am J Cardiol** 1989 Apr 15;63(13):989–91

Left ventricular exercise echocardiographic abnormalities in apparently healthy men with exertional hypotension. Fisman EZ, et al. **Am J Cardiol** 1989 Jan 1;63(1):81–5

Interobserver agreement and accuracy of bedside estimation of right and left ventricular ejection fraction in acute myocardial infarction. Gadsbøll N, et al. **Am J Cardiol** 1989 Jun 1;63(18):1301–7

A new Doppler method of assessing left ventricular ejection force in chronic congestive heart failure. Isaaz K, et al. **Am J Cardiol** 1989 Jul 1;64(1):81–7

Relation of left ventricular ejectional flow velocity to volume ejection rate. Koito H, et al. **Am J Cardiol** 1989 Jan 15; 63(3):256–7

Optimal Doppler measurement of left ventricular ejection time. Koito H, et al. **Am J Cardiol** 1989 Jan 15;63(3):257–9

Influence of left atrial systolic emptying on left ventricular early filling dynamics by Doppler in patients with sequential atrioventricular pacemakers. Rokey R, et al. **Am J Cardiol** 1988 Nov 1;62(13):968–71

Effect of rapid mobilization on ejection fractions and ventricular volumes after acute myocardial infarction. Rowe MH, et al. **Am J Cardiol** 1989 May 1;63(15):1037–41

Evolution of left ventricular function after intracoronary thrombolysis for acute myocardial infarction. Schmidt WG, et al. **Am J Cardiol** 1989 Mar 1;63(9):497–502

Influence of age and sex on left ventricular filling at rest in subjects without clinical cardiac disease. Sinak LJ, et al. **Am J Cardiol** 1989 Sep 15;64(10):646–50

Nongeometric Doppler stroke volume determination. Spodick DH, et al. **Am J Cardiol** 1989 Apr 1;63(12):883–4

Noninvasive measurement of left ventricular filling pressures by means of transmitral pulsed Doppler ultrasound. Störk TV, et al. **Am J Cardiol** 1989 Sep 15;64(10):655–60

Evaluation of left ventricular contractility indexes for the detection of symptomatic and silent myocardial ischemia. Wilson MF, et al. **Am J Cardiol** 1988 Dec 1;62(17):1176–9

Negative intrathoracic pressure decreases independently left ventricular filling and emptying. Peters J, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H120–31

Measurement of stroke volume with three-dimensional transesophageal ultrasonic scanning: comparison with thermodilution measurement. Martin RW, et al. **Anesthesiology** 1989 Mar;70(3):470–6

Right and left ventricular performance during and after abdominal aortic aneurysm repair. Harpole DH, et al. **Ann Surg** 1989 Mar;209(3):356–62

Skeletal muscle ventricles as a potential right heart assist or substitute. Anderson WA, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):241–6

Geometric and muscle physiological determinants of cardiac stroke volume as evaluated on the basis of model calculations. Gülch RW, et al. **Basic Res Cardiol** 1988 Sep–Oct;83(5):476–85

Significance of biological parameters of human blood levels of CoQ10. Komorowski J, et al. **Biofactors** 1988 Jan; 1(1):67–9

Relation between histological findings on early repeat right ventricular biopsy and ventricular function in patients with myocarditis. Dec GW Jr, et al. **Br Heart J** 1988 Oct; 60(4):332–7

Difference between the response of the pulmonary and systemic circulation during exercise in congestive heart failure. Lage SG, et al. **Braz J Med Biol Res** 1988; 21(1):65–70

Lack of correlation between anatomic infarct size and ventriculographic variables following coronary occlusion in closed-chest dogs. Laurindo FR, et al. **Braz J Med Biol Res** 1988;21(5):927–38

Temporal reproducibility of diastolic filling parameters derived from Doppler left ventricular inflow time velocity curves. Studies in normal subjects. Golia G, et al. **Cardiologia** 1989 May;34(5):407–10

Factors influencing late right ventricular ejection. Raizada V, et al. **Cardiovasc Res** 1988 Apr;22(4):244–8

Use of a conductance (volume) catheter and transient inferior vena caval occlusion for rapid determination of pressure–volume relationships in man. Kass DA, et al. **Cathet Cardiovasc Diagn** 1988;15(3):192–202

Right ventricular volume assessment. An alternative perspective [letter] Morrison DA. **Chest** 1989 Sep; 96(3):704–5

End-systolic pressure as a balance between opposing effects of ejection. Hunter WC. **Circ Res** 1989 Feb;64(2):265–75

Long-term versus intrabeat history of ejection as determinants of canine ventricular end-systolic pressure. Sugiura S, et al. **Circ Res** 1989 Feb;64(2):255–64

Percutaneous balloon valvuloplasty in patients with severe aortic stenosis and low ejection fraction. Immediate results and 1-year follow-up. Berland J, et al. **Circulation** 1989 Jun;79(6):1189–96

Long-term serial changes in left ventricular function and reversal of ventricular dilatation after valve replacement for chronic aortic regurgitation. Bonow RO, et al. **Circulation** 1988 Nov;78(5 Pt 1):1108–20

Prognostic implications and predictors of enhanced regional wall motion of the noninfarct zone after thrombolysis and angioplasty therapy of acute myocardial infarction. The TAMI Study Groups. Grines CL, et al. **Circulation** 1989 Aug;80(2):245–53

Dynamic mitral regurgitation. An important determinant of the hemodynamic response to load alterations and inotropic therapy in severe heart failure. Keren G, et al. **Circulation** 1989 Aug;80(2):306–13

Left ventricular function after correction of chronic aortic regurgitation. Levine HJ. **Circulation** 1988 Nov;78(5 Pt 1):1319–21 (19 ref.)

Evaluation of left ventricular diastolic function. Lew WY. **Circulation** 1989 Jun;79(6):1393–7

Improvement in symptoms and left ventricular performance after balloon aortic valvuloplasty in patients with aortic stenosis and depressed left ventricular ejection fraction. Safian RD, et al. **Circulation** 1988 Nov;78(5 Pt 1):1181–91

Global and regional left ventricular systolic performance in the in situ ejecting canine heart. Importance of the mitral apparatus. Sarris GE, et al. **Circulation** 1989 Sep;80(3 Pt 1):I24–42

Left ventricular ejection times [letter] Spodick DH. **Circulation** 1989 Aug;80(2):419

Influence of alteration in preload on the pattern of left ventricular diastolic filling as assessed by Doppler echocardiography in humans. Stoddard MF, et al. **Circulation** 1989 Jun;79(6):1226–36

Percutaneous transluminal coronary angioplasty in patients with reduced left ventricular ejection fraction: effects on myocardial perfusion and left ventricular response to exercise. Singh A, et al. **Clin Cardiol** 1989 May;12(5):247–51

Left ventricular performance during exercise in long-term type I diabetic men: an echocardiographic study. Danielsen R, et al. **Clin Physiol** 1988 Oct;8(5):475–86

Assessment of stroke volume and cardiac output by Doppler echocardiography. Niederle P, et al. **Cor Vasa** 1988; 30(5):338–44

Left ventricular function during sepsis. Artucio H, et al. **Crit Care Med** 1989 Apr;17(4):323–7

Non-invasive study of dual chamber pacing by pulsed Doppler. Prediction of the haemodynamic response by echocardiographic measurements. Lascault G, et al. **Eur Heart J** 1989 Jun;10(6):525–31

Left ventricular performance during psychological stress. Young DZ, et al. **Eur J Nucl Med** 1989;15(3):118–22

Right ventricular performance and pulmonary haemodynamics in adolescent and adult patients with cystic fibrosis. Burghuber OC, et al. **Eur J Pediatr** 1988 Dec; 148(3):187–92

Effects of massive ascites on measurement of cardiac ejection fraction via multi-gated acquisition (MUGA) scanning. Yetman TJ, et al. **Gynecol Oncol** 1989 Jul;34(1):116–8

Optimal stroke volume in left-ventricular ejection. Hämäläinen JJ. **IEEE Trans Biomed Eng** 1989 Feb; 36(2):172–82

Relation of coronary artery disease or left ventricular systolic function to post-angio left ventricular end-diastolic pressure. Pothineni RB, et al. **Indian Heart J** 1988 May–Jun;40(3):152–4

Radionuclide assessment of the natural heart ejection fraction before and after LVAD implantation. Moritz A, et al. **Int J Artif Organs** 1989 Jan;12(1):41–6

Efficacy of aortic balloon valvoplasty: direct measurement of orificial area in a model with pulsatile flow. Sprigings DC, et al. **Int J Cardiol** 1989 Aug;24(2):173–7

Reproducibility in the analysis of multigated radionuclide studies of left ventricular ejection fraction. Gjørup T, et al. **Invest Radiol** 1989 Feb;24(2):104–9

Validity of multigated acquisition in evaluation of right-ventricular function? [letter] Vorobiof DA, et al. **Isr J Med Sci** 1988 Dec;24(12):721–2

Linearity of the left ventricular end-systolic pressure-volume relation in patients with severe heart failure. Aroney CN, et al. **J Am Coll Cardiol** 1989 Jul;14(1):127–34

Left ventricular ejection dynamics and outflow obstruction in hypertrophic cardiomyopathy. Bonow RO. **J Am Coll Cardiol** 1989 May;13(6):1280–2

Acute changes in global and regional rest left ventricular function after successful coronary angioplasty: comparative results in stable and unstable angina. Carlson EB, et al. **J Am Coll Cardiol** 1989 May;13(6):1262–9

Implications for patient triage from survival and left ventricular functional recovery analyses in 500 patients treated with coronary angioplasty for acute myocardial infarction. Ellis SG, et al. **J Am Coll Cardiol** 1989 May; 13(6):1251–9

Effect of long-term high intensity aerobic training on left ventricular volume during maximal upright exercise. Ginzton LE, et al. **J Am Coll Cardiol** 1989 Aug; 14(2):364–71

The prognostic significance of quantitative signal-averaged variables relative to clinical variables, site of myocardial infarction, ejection fraction and ventricular premature beats: a prospective study. Gomes JA, et al. **J Am Coll Cardiol** 1989 Feb;13(2):377–84

Supernormal ejection performance is isolated to the ipsilateral congenitally pressure-overloaded ventricle. Leman RB, et al. **J Am Coll Cardiol** 1989 May;13(6):1314–9

Evaluation of ventricular contractility indexes in the dog with left ventricular dysfunction induced by rapid atrial pacing. Morgan DE, et al. **J Am Coll Cardiol** 1989 Aug; 14(2):489–95; discussion 496–8

Causal relation between the pressure gradient and left ventricular ejection time in hypertrophic cardiomyopathy. Sasson Z, et al. **J Am Coll Cardiol** 1989 May;13(6):1275–9

Load dependence of the single beat maximal pressure (stress)/volume ratios in humans. Starling MR, et al. **J Am Coll Cardiol** 1989 Aug;14(2):345–53; discussion 354–6

Mechanism of reduced LV afterload by systolic and diastolic positive pleural pressure. Fessler HE, et al. **J Appl Physiol** 1988 Sep;65(3):1244–50

Diastolic left ventricular function in normal children: the maximal positive dD/dt compared with the E/A ratio of mitral flow pattern. Horino N, et al. **J Cardiol** 1988 Sep; 18(3):787–93

Ambulatory ventricular function monitoring for serial assessments of cardiac function during exercise. Tamaki N, et al. **J Cardiol** 1987 Dec;17(4):875–85

Electrocardiographic markers of impaired left ventricular ejection performance in aortic stenosis. Recke SH, et al. **J Electrocardiol** 1989 Jan;22(1):45–52

Prediction of acute cardiac rejection by changes in left ventricular volumes. Novitzky D, et al. **J Heart Transplant** 1988 Nov–Dec;7(6):453–5

Do X-ray determined cardiac volume and signs of congestive heart failure provide additional prognostic information after myocardial infarction if the left ventricular ejection fraction is known? Rollag A, et al. **J Intern Med** 1989 Apr; 225(4):267–72

Late left ventricular function following angioplasty in acute myocardial infarction. Waites TF, et al. **J Miss State Med Assoc** 1988 Aug;29(8):223–6

Quantification of three-dimensional left ventricular segmental wall motion and volumes from gated tomographic radionuclide ventriculograms. Faber TL, et al. **J Nucl Med** 1989 May;30(5):638–49

Clinical usefulness of ultrashort-lived iridium-191m from a carbon-based generator system for the evaluation of the left ventricular function. Franken PR, et al. **J Nucl Med** 1989 Jun;30(6):1025–31

Alternative method for calculating right ventricular ejection fraction from first-pass time-activity curves. Iwata K. **J Nucl Med** 1988 Dec;29(12):1990–7

Determinants of left ventricular filling in normotensive and hypertensive subjects. An Echo-Doppler study. Genovesi-Ebert A, et al. **J Nucl Med Allied Sci** 1988 Oct–Dec;32(4):252–9

The significance of ductal shunting during extracorporeal membrane oxygenation. Burch KD, et al. **J Pediatr Surg** 1989 Sep;24(9):855–9

Independent determinants of systolic effectiveness: growth ability, contractility and mobility. Regen DM. **J Theor Biol** 1988 May 7;132(1):61–81

Extubation and ventricular performance [letter] Cohn LH. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):938–9

Depressed myocardial contractility and normal ejection performance after aortic valve replacement in patients with aortic regurgitation. Taniguchi K, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):258–65

Determination of ejection fraction from contrast echocardiography using videodensitometry in an in vitro model. Xie F, et al. **J Ultrasound Med** 1988 Oct;7(10):581–7

Perioperative and late outcome in patients with left ventricular ejection fraction of 35% or less who require major vascular surgery [letter] Bunt TJ. **J Vasc Surg** 1989 Apr;9(4):619–20

Resection of abdominal aortic aneurysm in patients with low ejection fractions. McCann RL, et al. **J Vasc Surg** 1989 Sep;10(3):240–4

Relationship of plasma norepinephrine to ventricular-load coupling in patients with heart failure. Asanoi H, et al. **Jpn Circ J** 1989 Feb;53(2):131–40

Effect of afterload on the left ventricular pressure fall during isovolumic relaxation period in man. Katayama K, et al. **Jpn Circ J** 1988 Jun;52(6):518–24

Serial assessment of left ventricular function following coronary bypass surgery by radionuclide angiocardiography. Kawasuji M, et al. **Jpn Circ J** 1988 Oct;52(10):1149–55

Effect of exercise on circulating atrial natriuretic peptide and left ventricular ejection fraction in healthy persons and patients with coronary artery disease. Nakamura T, et al. **Jpn Heart J** 1988 Nov;29(6):761–70

Brady- and tachycardia in light of the Valsalva and the Mueller maneuver (apnea). Paulev PE, et al. **Jpn J Physiol** 1988;38(4):507–17

Stroke distance in acute myocardial infarction [letter] Eriksson P. **Lancet** 1989 Jul 29;2(8657):268–9

Left-ventricular function as an end-point [letter] White HD, et al. **Lancet** 1989 Sep 16;2(8664):676

Possible technique to measure ventricular volume using electrical impedance measurements with an oesophageal electrode. Patterson RP. **Med Biol Eng Comput** 1987 Nov; 25(6):677–9

Variability of ejection fraction results using commercial cardiac phantoms. French AP, et al. **Nucl Med Commun** 1988 Jul;9(7):527–32

The evaluation of right ventricular function in acute myocardial infarction by xenon-133. Martin W, et al. **Nucl Med Commun** 1989 Jan;10(1):35–43

Accuracy of gated equilibrium radioventriculography in measuring left ventricular function in dogs. Valette H, et al. **Nucl Med Commun** 1988 Dec;9(12):999–1004

Left ventricular volume characteristics of patients with pure mitral insufficiency treated medically and surgically. Altieri PI, et al. **P R Health Sci J** 1988 Dec;7(3):211–4

Physiological principles of a new method for rate responsive pacing using the pre-ejection interval. Chirife R. **PACE** 1988 Nov;11(11 Pt 1):1545–54

Feline left ventricular oxygen consumption is not affected by volume expansion, ejection or redevelopment of pressure during relaxation. Duwel CM, et al. **Pflugers Arch** 1988 Sep;412(4):409–16

Long-term follow-up of left ventricular function with the nuclear stethoscope in patients with coronary artery disease. Liu YZ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(1):47–9

The load independence of the end-systolic pressure-length relationship of the heart. Coetzee AR, et al. **S Afr Med J** 1989 Sep 2;76(5):191–4

Stroke distance—an improved measure of cardiovascular function. Rawles JM. **Scott Med J** 1989 Feb;34(1):394–8

Late results of prosthetic valve replacement for aortic regurgitation and the prognostic significance of the end-diastolic and regurgitated blood volumes. Skupin M, et al. **Thorac Cardiovasc Surg** 1988 Dec;36(6):326–31

Does right ventricular function predict survival in patients with chronic obstructive lung disease? France AJ, et al. **Thorax** 1988 Aug;43(8):621–6

[Clinical and basic research on cardiac ejection function in coronary artery disease] Zheng XL. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Jun;

16(3):150–1 (Chl)
[Determination of stroke volume and minute cardiac output using Doppler echocardiography] Niederle P, et al. **Cas Lek Cesk** 1988 Jul 1;127(27):842–4 (Eng. Abstr.) (Cze)
[Doppler measurement of pulse volume. Problems in clinical use] Chaloupka V, et al. **Vnitr Lek** 1988 Oct;34(10):957–63 (Eng. Abstr.) (Cze)
[Comparison of the QRS score and the left ventricular ejection fraction in patients after acute myocardial infarct] Janoušek S, et al. **Vnitr Lek** 1989 May;35(5):417–24 (Eng. Abstr.) (Cze)
[Comparison of the left ventricular stroke volume and fraction measured with MRI and contrast ventriculography] Germain P, et al. **Ann Cardiol Angeiol (Paris)** 1989 Jun;38(6):319–25 (27 ref.) (Eng. Abstr.) (Fre)
[Value of digital subtraction of left ventriculographies by the venous route. Comparison with balanced scintigraphy of the heart cavities] Hueber A, et al. **Ann Cardiol Angeiol (Paris)** 1989 Jun;38(6):293–6 (Eng. Abstr.) (Fre)
[Echocardiographic detection of adriamycin cardiotoxicity. Study of the relationship between the shortening fraction–constraint and the systolic shortening fraction–diameter of the left ventricle] Boujon B, et al. **Arch Mal Coeur** 1989 Feb;82(2):167–75 (Eng. Abstr.) (Fre)
[Angiography of right ventricular volume after surgical repair of tetralogy of Fallot] Chantepie A, et al. **Arch Mal Coeur** 1989 May;82(5):693–8 (28 ref.) (Eng. Abstr.) (Fre)
[Radionuclide ventriculography. The significance of global and regional ejection fractions and Fourier amplitude and phase in the diagnosis of exertion–dependent ischemia] Conrady C, et al. **Dtsch Med Wochenschr** 1989 Sep 15; 114(37):1397–401 (Eng. Abstr.) (Ger)
[A combination of scintigraphic and echocardiographic determination of left ventricular ejection fraction] Pink V, et al. **Radiol Diagn (Berl)** 1988;29(3):528–31 (Ger)
["Ambulatory" monitoring of left ventricular function using a scintillation detection system. Evaluation of a new method] Regenass S, et al. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1719–23 (Eng. Abstr.) (Ger)
[Spontaneous variability and reproducibility of Doppler echocardiography determination of heart minute volumes in infancy] Stern H, et al. **Wien Klin Wochenschr** 1988 Oct 7;100(19):648–52 (Eng. Abstr.) (Ger)
[Recent physiologic and pathophysiologic studies in heart function in the perinatal period] Schwartze H. **Zentralbl Gynakol** 1988;110(15):921–6 (Eng. Abstr.) (Ger)
[Quantitative evaluation of left ventricular systolic function using bidimensional echocardiography: comparison with cineangiography] Crepaz R, et al. **G Ital Cardiol** 1989 May; 19(5):393–401 (Eng. Abstr.) (Ita)
[Right ventricular dysfunction in demand–induced ischemia in patients with isolated right coronary artery disease: a radioisotope study] Marcassa C, et al. **G Ital Cardiol** 1988 Dec;18(12):1005–12 (Eng. Abstr.) (Ita)
[Clinical results and modification of left ventricular function after emergency revascularization for acute myocardial infarction] Paolillo V, et al. **G Ital Cardiol** 1989 Feb; 19(2):104–13 (Eng. Abstr.) (Ita)
[Surgical results in mitral insufficiency: prognostic value of the indices of left ventricular function] Rubartelli P, et al. **G Ital Cardiol** 1989 Mar;19(3):221–9 (Eng. Abstr.) (Ita)
[Radioisotopic angiographic study of left ventricular function in hypertensive disease] Aschieri D, et al. **Minerva Cardioangiol** 1989 May;37(5):215–8 (Eng. Abstr.) (Ita)
[Usefulness of radioisotope ventriculography in the evaluation of right ventricular function in acute anterior and inferior myocardial infarction] Bruno A, et al. **Minerva Cardioangiol** 1988 Apr;36(4):183–8 (Eng. Abstr.) (Ita)
[Evaluation of different electrocardiographic scores (QRS score) for estimating the ejection fraction of the left ventricle after acute myocardial infarct] Canziani R, et al. **Minerva Cardioangiol** 1989 Jan–Feb;37(1–2):11–8 (Eng. Abstr.) (Ita)
[Right ventricular flow dynamics in the early neonatal period assessed by pulsed Doppler echocardiography] Hosono T. **J Cardiol** 1987 Dec;17(4):895–905 (Eng. Abstr.) (Jpn)
[Quantitative analysis of the left ventricular volume curve by digital subtraction angiography] Ikeda H. **J Cardiol** 1987;17 Suppl 15:27–33 (Eng. Abstr.) (Jpn)
[Evaluation of right ventricular function in severe left ventricular failure: comparison of old myocardial infarction with dilated cardiomyopathy] Kubota Y, et al. **J Cardiol** 1987 Dec;17(4):731–40 (Eng. Abstr.) (Jpn)
[Pre– and post–operative right ventricular functions in valvular heart diseases: the significance of noninvasive assessment] Uehara T, et al. **J Cardiol** 1987 Dec; 17(4):865–74 (Eng. Abstr.) (Jpn)
[Clinical significance of right ventricular ejection fraction in cases with atrial septal defect] Hamada S, et al. **Kaku Igaku** 1989 Apr;26(4):535–7 (Eng. Abstr.) (Jpn)
[Studies of left ventricular volume estimation from single photon emission computed tomography] Hiraki Y, et al. **Kaku Igaku** 1988 Nov;25(11):1229–34 (Eng. Abstr.) (Jpn)
[The correlation among the LVEF response during exercise, diseased coronary arteries and RI parameters in acute myocardial infarction] Kinoshita E. **Kaku Igaku** 1988 Apr; 25(4):311–21 (Eng. Abstr.) (Jpn)
[Accuracy of the measurements of left ventricular volume and ejection fraction determined by multigated blood pool tomography] Yamagishi T, et al. **Kaku Igaku** 1989 Feb; 26(2):155–64 (Eng. Abstr.) (Jpn)
[Relationship between left atrial diameter and cardiac function in myocardial infarction—assessment of left ventricular end–diastolic pressure by the left atrial index] Ishikawa T, et al. **Kokyu To Junkan** 1989 Jun;37(6):657–61 (Eng. Abstr.) (Jpn)
[Analysis of factors influencing the accuracy of ejection fraction measurement based on the thermal washout technic—investigation in a model heart] Imai T, et al. **Masui** 1989 Apr;38(4):475–82 (Eng. Abstr.) (Jpn)
[Quadratic analysis of left ventricular ejection phase volume using a M–mode echocardiogram, and the effects of beta–methyldigoxin, nifedipine, physical exercise and propranolol on new parameters] Suzuki K. **Nippon Ika Daigaku Zasshi** 1988 Dec;55(6):527–38 (Eng. Abstr.) (Jpn)
[A new trial assessment of left ventricular function before and after aorto coronary bypass surgery—application of ejection vector (E.V.)] Furukawa H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar;37(3):490–7 (Eng. Abstr.) (Jpn)
[Early postoperative left ventricular function in volume overload from valvular regurgitation with reference to end–systolic pressure, volume and stress relations] Kuraoka S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec; 36(12):2561–5 (Eng. Abstr.) (Jpn)
[Intraoperative assessment of left ventricular systolic function utilizing end systolic pressure–volume relationship in patients with open heart surgery] Matsuwaka R, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2170–4 (Eng. Abstr.) (Jpn)
[Evaluation of left atrial function by 99mTc gated blood pool scan] Kawamura Y, et al. **Radioisotopes** 1989 Feb; 38(2):63–7 (Eng. Abstr.) (Jpn)
[ST segment depression in precordial derivations in acute myocardial infarction of the inferior wall] Campos Filho O, et al. **Arq Bras Cardiol** 1988 Sep;51(3):217–25 (Eng. Abstr.) (Por)
[Evaluation of the left ventricular chamber of patients with chronic Chagas cardiopathy using cineventriculography. II. Segmentary movement between end diastole and end systole] Nogueira EA. **Arq Bras Cardiol** 1988 Jun; 50(6):369–76 (Eng. Abstr.) (Por)
[Evaluation of the ventricular cavity in patients with chronic Chagas cardiopathy using cineventriculography. III. Segmental motion during the systolic period] Nogueira EA. **Arq Bras Cardiol** 1988 Aug;51(2):135–41 (Eng. Abstr.) (Por)
[Correlation of the clinical aspects of the patient evaluated by functional class and left ventricular function in chronic aortic insufficiency. II. Stresses] Peixoto EC, et al. **Arq Bras Cardiol** 1988 Sep;51(3):231–7 (Eng. Abstr.) (Por)
[Ventricular circumferential stress and its telesystolic relations in ischemic heart disease. Simple alternatives for its evaluation] Studart PC, et al. **Arq Bras Cardiol** 1988 Oct;51(4):309–14 (Eng. Abstr.) (Por)
[Noninvasive methods of determining the minute volume of the heart in young children in the early postoperative period] Kapba IV, et al. **Anesteziol Reanimatol** 1989 Jan–Feb;(1):22–4 (Eng. Abstr.) (Rus)
[Accuracy of the rheographic method of evaluating stroke volume] Zemtsovskii EV, et al. **Kardiologiia** 1989 Jun; 29(6):75–9 (Eng. Abstr.) (Rus)
[Absolute biventricular volumes and cardiac output by isotopic ventriculography] Estorch M, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:97–101 (Eng. Abstr.) (Spa)
[Simultaneous tests of ventricular function and myocardial perfusion during exercise using a new agent labeled with TC–99m] Pérez Baliño N, et al. **Rev Esp Cardiol** 1988 May; 41(5):271–7 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Effect of the second–generation calcium channel blocking drug nisoldipine on diastolic left ventricular dysfunction in heart failure. Lewis BS, et al. **Am Heart J** 1989 Sep; 118(3):505–11
Effect of intravenous metoprolol on left ventricular performance in Q–wave acute myocardial infarction. Dell'Italia LJ, et al. **Am J Cardiol** 1989 Jan 15;63(3):166–71
Effects of nicorandil on left ventricular hemodynamics and volume at rest and during exercise–induced angina pectoris. Silke B, et al. **Am J Cardiol** 1989 Jun 20;63(21):49J–55J
Nitrous oxide: cardiovascular effects in infants and small children during halothane and isoflurane anesthesia. Murray D, et al. **Anesth Analg** 1988 Nov;67(11):1059–64
Changes in ventricular function and coronary stenosis after successful intravenous thrombolysis in acute myocardial infarction. Lotan C, et al. **Cardiology** 1988;75(6):419–30
Daily serial evaluation of left ventricular function with equilibrium radionuclide ventriculography following thrombolysis during acute myocardial infarction. Marx JD, et al. **Clin Cardiol** 1988 Oct;11(10):665–70
Right and left ventricular performance during endotoxin–induced pulmonary hypertension in sheep. Hüttemeier PC, et al. **Clin Physiol** 1989 Feb;9(1):57–65
Effect of digoxin and vasodilators on left ventricular function in aortic regurgitation. Crawford MH, et al. **Int J Cardiol** 1989 Jun;23(3):385–93
Prostaglandin E1 and right ventricular function in ARDS [letter] Radermacher P, et al. **Intensive Care Med** 1989; 15(2):146–7
Comparative effects of verapamil and nitroprusside on left ventricular function in patients with hypertension. Brush JE Jr, et al. **J Am Coll Cardiol** 1989 Aug;14(2):515–22
Effects of coronary thrombolysis on left ventricular ejection fraction in patients with acute myocardial infarction. Ishikawa K, et al. **Jpn Circ J** 1988 Oct;52(10):1141–8
Streptokinase or tissue plasminogen activator and left ventricular function after myocardial infarction [letter] **N Engl J Med** 1989 Sep 7;321(10):687–9
Long–term improvement in left ventricular ejection fraction during continuous PGE1–therapy in a patient with congestive cardiomyopathy [letter] Sinzinger H, et al. **Postgrad Med J** 1988 Dec;64(758):975
Prostacyclin I2 (PGI2) increases left ventricular ejection fraction (LVEF). Auinger C, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(3):149–54
[Enalapril versus digoxin in chronic congestive cardiac failure. Study of variation of the left ventricular ejection fraction determined by radio–isotopic angiocintigraphy at rest and during exertion] Tissot A, et al. **Ann Cardiol Angeiol (Paris)** 1989 Mar;38(3):137–42 (38 ref.) (Eng. Abstr.) (Fre)
[Effect of PGE1 on the left ventricular ejection fraction] Auinger C, et al. **Wien Klin Wochenschr** 1988 Nov 4; 100(21):706–9 (Eng. Abstr.) (Ger)
[Effects of digitalis on the left ventricular filling phase in the normal and ischemic heart. Angiographic study in man] Bolognesi R, et al. **Cardiologia** 1989 May;34(5):419–24 (Eng. Abstr.) (Ita)
[Effects of atrial natriuretic peptide on left ventricular function in man] Indolfi C, et al. **Cardiologia** 1989 Mar; 34(3):253–7 (Eng. Abstr.) (Ita)
[Effect of dobutamine on ventriculo–arterial coupling and ventricular work efficiency in patients with cardiac failure] Ishizaka S, et al. **J Cardiol** 1988 Jun;18(2):457–65 (Eng. Abstr.) (Jpn)
[Clinical trial with streptokinase and sequential procedures for the treatment of acute myocardial infarction] Bellotti G, et al. **Arq Bras Cardiol** 1988 Apr;50(4):223–9 (Eng. Abstr.) (Por)
[Radionuclide angiocardiographic evaluation of the effect of isosorbide dinitrate in patients with Chagas' disease] Marin–Neto JA, et al. **Arq Bras Cardiol** 1988 Nov; 51(5):367–71 (Eng. Abstr.) (Por)
[Effect of propranolol on left ventricular function in hyperthyroidism] Goldberg V, et al. **Medicina (B Aires)** 1988;48(2):167–71 (Eng. Abstr.) (Spa)

STRONGYLE INFECTIONS, EQUINE

DRUG THERAPY

Oxfendazole: activity of a two–dose treatment regimen on natural infections of internal parasites of equids, with emphasis on migrating large strongyles in controlled tests in 1986 and 1987. Lyons ET, et al. **Am J Vet Res** 1988 Nov;49(11):1923–7
Effect of repeated oxfendazole treatments on small strongyle infections in Shetland ponies. Eysker M, et al. **Res Vet Sci** 1989 May;46(3):409–12
A field evaluation of anthelmintics in horses in Sweden. Nilsson O, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):163–71
Experimental chemotherapy in horses infected with benzimidazole–resistant small strongyles. Britt DP, et al. **Vet Rec** 1988 Aug 27;123(9):219–21

IMMUNOLOGY

Immunologic and hematologic responses in ponies with experimentally induced Strongylus vulgaris infection. Bailey M, et al. **Am J Vet Res** 1989 Aug;50(8):1386–91

PATHOLOGY

Hepatic AA amyloidosis associated with severe strongylosis in a horse. Vanhooser SL, et al. **Equine Vet J** 1988 Jul; 20(4):274–6

PREVENTION & CONTROL

Observations on equine strongyle control in southern temperate USA. Reinemeyer R, et al. **Equine Vet J** 1987 Nov;19(6):505–8

STRONGYLOIDEA

DRUG EFFECTS

Development of a novel in vitro equine anthelmintic assay. Folz SD, et al. **J Vet Pharmacol Ther** 1988 Jun;11(2):177–82
[Benzimidazole resistance in small strongylids (Cyathostominae): distribution in horse stock in Northrhine–Westphalia] Ullrich D, et al. **Berl Munch Tierarztl Wochenschr** 1988 Dec 1;101(12):406–8 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Immunologic and hematologic responses in ponies with experimentally induced Strongylus vulgaris infection. Bailey M, et al. Am J Vet Res 1989 Aug;50(8):1386–91

MICROBIOLOGY

Characterization of the microbial community colonizing the anal and vulvar pores of helminths from the hindgut of zebras. Mackie RI, et al. Appl Environ Microbiol 1989 May; 55(5):1178–86

PHYSIOLOGY

Larval ecology of bovine strongylid worms in tropical soils. I. In vitro studies on the longevity of infective strongylid larvae in different soil types. Lyaku JR, et al. Trop Anim Health Prod 1988 Aug;20(3):190–2

STRONGYLOIDES

GROWTH & DEVELOPMENT

The effect of fatty acids on the developmental direction of Strongyloides ratti first-stage larvae. Minematsu T, et al. J Helminthol 1989 Jun;63(2):102–6

The effects of single and repeated inoculations of various larval doses on Strongyloides ratti burden and distribution in rats. Uchikawa R, et al. J Parasitol 1989 Aug; 75(4):577–84

Factors influencing development of free-living generations of Strongyloides stercoralis. Shiwaku K, et al. Parasitology 1988 Aug;97 (Pt 1):129–38

[Methods of cultivating parasitic nematoda in vitro] Jablonowski Z, et al. Wiad Parazytol 1988;34(2):93–111 (Eng. Abstr.) (Pol)

IMMUNOLOGY

Surface labelling of Strongyloides ratti: stage-specificity and cross-reactivity with S. stercoralis. Northern C, et al. Clin Exp Immunol 1989 Mar;75(3):487–92

Antibodies to Strongyloides stercoralis in healthy Jamaican carriers of HTLV-1 [letter] Nera FA, et al. N Engl J Med 1989 Jan 26;320(4):252–3

Western blot analysis of reactivity to larval and adult Strongyloides ratti antigens in mice. Northern C, et al. Parasite Immunol 1988 Nov;10(6):681–91

Strongyloides ratti: studies of cutaneous reactions elicited in naive and sensitized rats and of changes in surface antigenicity of skin-penetrating larvae. McHugh TD, et al. Parasitology 1989 Feb;98 (Pt 1):95–103

ISOLATION & PURIFICATION

[An improved method for the coprological diagnosis of human strongyloidiasis] Prokhorov AF, et al. Med Parazitol (Mosk) 1988 Jul-Aug;(4):84–5 (Eng. Abstr.) (Rus)

STRONGYLOIDIASIS

Disseminated strongyloidiasis: report of two fatal cases. Sane SY. Indian J Gastroenterol 1989 Jul;8(3):191–2

[Anguilluliasis] Roussin-Bretagne S, et al. Ann Gastroenterol Hepatol (Paris) 1988 Dec;24(7):363–7 (24 ref.) (Fre)

COMPLICATIONS

Strongyloides stercoralis hyperinfection and the acquired immunodeficiency syndrome [letter] Armignacco O, et al. Am J Med 1989 Feb;86(2):258

Hyperinfection with strongyloides after treatment for adult T cell leukaemia-lymphoma in an African immigrant. Pagliuca A, et al. BMJ 1988 Dec 3;297(6661):1456–7

Disseminated strongyloidiasis presenting as septicaemia and meningitis: a case report. Chunge CN. East Afr Med J 1987 Dec;64(12):864–6

Helminthic infections in the acquired immunodeficiency syndrome. Miller SE. J Electron Microsc Tech 1988 Jan; 8(1):133–5

Escherichia coli meningitis and disseminated strongyloidiasis [letter] Thompson AJ, et al. J Neurol Neurosurg Psychiatry 1988 Dec;51(12):1596–7

Arteriomesenteric duodenal occlusion associated with strongyloidiasis. Lee MG, et al. J Trop Med Hyg 1989 Feb; 92(1):41–5

A case of severe Strongyloides stercoralis infection with jejunal perforation in an Australian ex-prisoner-of-war. Kennedy S, et al. Med J Aust 1989 Jan 16;150(2):92–3

Pelvic inflammatory disease complicated by massive helminthic hyperinfection. Young RL, et al. Obstet Gynecol 1989 Sep;74(3 Pt 2):484–6

[Fatal fulminating anguilluliasis after corticotherapy and diabetic acidoketosis (letter)] Debuische X, et al. Ann Med Interne (Paris) 1989;140(3):227–8 (Fre)

[Intestinal pseudo-obstruction disclosing digestive anguilluliasis in a non-immunosuppressed patient (letter)] Parent B, et al. Gastroenterol Clin Biol 1989 May; 13(5):523–4 (Fre)

[A new case of strongyloidiasis in an immunosuppressed patient] Huarte MP, et al. Rev Esp Enferm Apar Dig 1988 Sep;74(3):289 (Spa)

DIAGNOSIS

Predictive values [letter] Lo CY, et al. Am J Clin Pathol 1989 Apr;91(4):505–7

Hyperinfection with strongyloides [letter] Seymour R, et al. BMJ 1989 Feb 11;298(6670):386

Colitis due to strongyloidiasis [letter] Kang JY, et al. Gastrointest Endosc 1989 Jan-Feb;35(1):71–2

The spectrum of strongyloidiasis. Kaye D. Hosp Pract [Off] 1988 Oct 15;23(10):111–5, 118–9, 125–6

'Enterotest' and Strongyloides stercoralis [letter] Vighi G, et al. Lancet 1989 Jul 15;2(8655):156–7

Strongyloidiasis. An unusual cause of colonic pseudopolyposis and gastrointestinal bleeding. Carp NZ, et al. Surg Endosc 1987;1(3):175–7

[A case of Strongyloides stercoralis infection detected by examination of the sputum] Bednarski Z, et al. Wiad Lek 1988 Jul 1;41(13):890–3 (Eng. Abstr.) (Pol)

[Serologic diagnosis of human strongyloidiasis using an immunoenzymatic method] Brasil R, et al. Rev Soc Bras Med Trop 1988 Jul-Sep;21(3):139–43 (Eng. Abstr.) (Por)

[An improved method for the coprological diagnosis of human strongyloidiasis] Prokhorov AF, et al. Med Parazitol (Mosk) 1988 Jul-Aug;(4):84–5 (Eng. Abstr.) (Rus)

DRUG THERAPY

Ivermectin for human strongyloidiasis and other intestinal helminths. Naquira C, et al. Am J Trop Med Hyg 1989 Mar;40(3):304–9

The effects of thiabendazole, mebendazole and cambendazole in normal and immunosuppressed dogs infected with a human strain of Strongyloides stercoralis. Grove DI, et al. Trans R Soc Trop Med Hyg 1988;82(1):146–9

[Effectiveness of treating patients with strongyloidosis with medamine in powder form and tabletted] Tikhomirova EP. Med Parazitol (Mosk) 1988 May-Jun;(3):67–70 (Eng. Abstr.) (Rus)

[Comparative study of thiabendazole and mebendazole in strongyloidiasis] Beus A. Lijec Vjesn 1989 Mar; 111(3):98–101 (Eng. Abstr.) (Scr)

EPIDEMIOLOGY

Strongyloides [letter] Skelton WP 3d. Arch Intern Med 1989 Mar;149(3):717, 721

Endemic strongyloidiasis in northern Italy: clinical and immunological aspects. Genta RM, et al. Q J Med 1988 Sep;68(257):679–90

[Epidemiological and clinical studies on strongyloidiasis] Mitsueda K. Fukuoka Igaku Zasshi 1988 Oct;79(10):706–22 (Eng. Abstr.) (Jpn)

ETIOLOGY

Fatal strongyloidiasis latent over 42 years in the antineoplastic chemotherapy of a case with malignant lymphoma. Suzuki T, et al. Jpn J Med 1989 Jan-Feb; 28(1):96–9

IMMUNOLOGY

Concurrent infections with Strongyloides and T-cell leukemia virus and their possible effect on immune responses of host. Sato Y, et al. Clin Immunol Immunopathol 1989 Aug;52(2):214–24

Western blot analysis of reactivity to larval and adult Strongyloides ratti antigens in mice. Northern C, et al. Parasite Immunol 1988 Nov;10(6):681–91

Strongyloides ratti: studies of cutaneous reactions elicited in naive and sensitized rats and of changes in surface antigenicity of skin-penetrating larvae. McHugh TD, et al. Parasitology 1989 Feb;98 (Pt 1):95–103

PARASITOLOGY

Opportunistic Strongyloides stercoralis infection in lymphoma patients. Report of a case and review of the literature. Genta RM, et al. Cancer 1989 Apr 1; 63(7):1407–11 (32 ref.)

The course of infection in rats given small primary doses of Strongyloides ratti and S. venezuelensis. Carter KC, et al. J Helminthol 1989 Jun;63(2):107–14

Possible effects of Strongyloides fuelleborni-like infections on children in the Karimui area of Simbu Province. Barnish G, et al. P N G Med J 1989 Mar;32(1):51–4

Factors influencing development of free-living generations of Strongyloides stercoralis. Shiwaku K, et al. Parasitology 1988 Aug;97 (Pt 1):129–38

PATHOLOGY

Cutaneous manifestations of strongyloidiasis. von Kuster LC, et al. Arch Dermatol 1988 Dec;124(12):1826–30

Pulmonary microcalcifications associated with Strongyloides stercoralis infection. Caceres MH, et al. Chest 1988 Oct; 94(4):862–5

PHYSIOPATHOLOGY

The effects of single and repeated inoculations of various larval doses on Strongyloides ratti burden and distribution in rats. Uchikawa R, et al. J Parasitol 1989 Aug; 75(4):577–84

TRANSMISSION

Transmammary transmission of Strongyloides ratti. Kawanabe M, et al. Parasitol Res 1988;75(1):50–6

VETERINARY

Efficacy of ivermectin against natural infection of Strongyloides spp. in squirrel monkeys (Saimiri sciureus). Battles AH, et al. Lab Anim Sci 1988 Aug;38(4):474–6

STRONGYLOSIS, EQUINE see STRONGYLE INFECTIONS, EQUINE

STRONGYLUS see under STRONGYLOIDEA

STRONTIUM

Strontium is required for statolith development and thus normal swimming behaviour of hatchling cephalopods. Hanlon RT, et al. J Exp Biol 1989 Jan;141:187–95

ANALYSIS

Quantification of strontium in plasma and urine with flameless atomic absorption spectrometry. Leeuwenkamp OR, et al. Clin Chem 1989 Sep;35(9):1911–4

BLOOD

Serum strontium estimation as a medico-legal diagnostic indicator of drowning. Piette M, et al. Med Sci Law 1989 Apr;29(2):162–71 (20 ref.)

METABOLISM

Intracellular site of Sr2+ and Ba2+ accumulation in frog twitch muscle fibres as determined by electron probe X-ray microanalysis. Uhrik B, et al. Gen Physiol Biophys 1988 Dec;7(6):569–79

Effect of isoprenaline on 85Sr accumulation in the myocardium of the adult rat. Oštádalová I, et al. Physiol Bohemoslov 1988;37(4):351–3

PHARMACOKINETICS

Multiple tracer studies of bone uptake of 99mTc-MDP and 85Sr. McCarthy ID, et al. Am J Physiol 1989 May;256(5 Pt 2):H1261–5

The removal of strontium from the mouse by chelating agents. Ortega A, et al. Arch Environ Contam Toxicol 1989 Jul-Aug;18(4):612–6

The distribution and retention of 89Sr in mice after a single intravenous injection of high and low doses. Takahashi S, et al. J Radiat Res (Tokyo) 1989 Jun;30(2):176–84

PHARMACOLOGY

Study of the strontium response in isolated rat aorta. Barreda A, et al. Arch Int Pharmacodyn Ther 1989 May-Jun; 299:210–20

Effect of strontium chloride on bone resorption induced by prostaglandin E2 in cultured bone. Matsumoto A. Arch Toxicol 1988;62(2-3):240–1

Influence of strontium chloride on blood platelet function. Togna G, et al. Arch Toxicol Suppl 1989;13:366–9

Transformation of human neonatal prostate epithelial cells by strontium phosphate transfection with a plasmid containing SV40 early region genes. Kaighn ME, et al. Cancer Res 1989 Jun 1;49(11):3050–6

Protection by F, I, Sr, and combinations against fermentation attack by Streptococcus sobrinus artificial plaque on bovine enamel. Luoma H, et al. Caries Res 1989;23(1):5–13

Control of reactivation and microtubule sliding by calcium, strontium, and barium in detergent-extracted macrocilia of Beroë. Tamm SL. Cell Motil Cytoskeleton 1989; 12(2):104–12

The effect of strontium on the drug-receptor interaction on cholinergic drugs. Macara B, et al. Eur J Pharmacol 1989 Mar 14;162(1):51–8

Strontium supports capacitation and the acrosome reaction in mouse sperm and rapidly activates mouse eggs. Fraser LR. Gamete Res 1987 Dec;18(4):363–74

Effect of substitution of troponin C in cardiac myofibrils with skeletal troponin C or calmodulin on the Ca2+- and Sr2+-sensitive ATPase activity. Morimoto S, et al. J Biochem (Tokyo) 1988 Jul;104(1):149–54

Interaction of Sr2+ with Ca2+-induced Ca2+ release in mitochondria. Saris NE, et al. J Bioenerg Biomembr 1988 Dec;20(6):749–57

Effects of organic and inorganic Ca antagonists on rat platelet arachidonic acid metabolism in the presence of Ca2+, Sr2+ and Ba2+. Blache D, et al. Mol Cell Biochem 1989 Feb 21;85(2):191–6

Differences between Ca2+- and Sr2+-activated gK+ in bullfrog sympathetic neurons. Riker WK, et al. Proc West Pharmacol Soc 1988;31:1–3

beta-Bungarotoxin-induced phospholipid hydrolysis in rat brain synaptosomes: effect of replacement of calcium by strontium. Ghassemi A, et al. Toxicon 1988;26(5):509–14

[Evaluation of the effectiveness of topical application in vivo of preparations consisting of fluoride and strontium on human teeth] Angelillo IF, et al. Minerva Stomatol 1989 Mar;38(3):335–9 (Eng. Abstr.) (Ita)

THERAPEUTIC USE

Prevention of fissure caries in rats by dietary F supplement with and without topical application of F and Sr + F. Seppä L, et al. **Caries Res** 1988;22(6):353–6

TOXICITY

[Effect of strontium on the anti-rickets activity of vitamin D3 and its hydroxy analogs] Bauman VK, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):26–32 (Eng. Abstr.) **(Rus)**

STRONTIUM RADIOISOTOPES

ADMINISTRATION & DOSAGE

Immune competence in 90Sr–exposed, adult thymectomized and antilymphocyteglobulin–treated CBA mice. I. Allogenic skin graft reaction. Bierke P. **Acta Oncol** 1989; 28(2):271–5

Radiostrontium–induced oncogenesis and the role of immunosuppression. I. Influence of 90Sr dose, adult thymectomy and antilymphocyteglobulin treatment on the development of neoplastic and preneoplastic lesions in the skeleton of CBA mice. Bierke P, et al. **Acta Oncol** 1989; 28(1):87–102

[Immunity after exposure to radiation] Shubik VM. **Gig Sanit** 1989 Jan;(1):25–8 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Potentiating and inhibiting effects of steroid hormones on the incidence of 90Sr induced osteosarcoma. Haraldsson I, et al. **Acta Oncol** 1988;27(4):393–8

Effect of 89 Sr–induced monocytopenia on splenic and pulmonary alveolar macrophage populations in a normal steady state. Oghiso Y, et al. **J Radiat Res (Tokyo)** 1988 Sep;29(3):189–202

Strontium–90 ophthalmic applicators: use with caution [letter] Goetsch SJ. **Ophthalmic Surg** 1988 Nov; 19(11):827–8

[Biochemical changes of the liver in rats with a combined lesion from 89Sr and 131I] Soroka LP, et al. **Radiobiologiia** 1989 Mar–Apr;29(2):207–10 (Eng. Abstr.) **(Rus)**

ANALYSIS

Distribution of 90Sr and 137Cs in annual tree rings of Japanese cedar, Cryptomeria japonica D. Don. Chigira M, et al. **J Radiat Res (Tokyo)** 1988 Jun;29(2):152–60

Strontium–90 and fluoride [letter] Smith GE. **N Z Med J** 1988 Nov 23;101(858):802–3

[The transfer of 137Cs and 90Sr into flour, bran and straw from wheat, rye, barley and oats in the years 1982, 1986 (reactor accident in Chernobyl) and 1987 in field studies] Bunzl K, et al. **Z Lebensm Unters Forsch** 1989 May; 188(5):439–44 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

Regional alterations in long bone produced by internal fixation devices. Part I. 85Sr clearance. Daum WJ, et al. **J Orthop Trauma** 1988;2(3):241–4

Regional alterations in long bone 85Sr clearance produced by internal fixation devices. Part II. Histomorphometry. Simmons DJ, et al. **J Orthop Trauma** 1988;2(3):245–9

METABOLISM

Mobilization of 85Sr by flavone derivatives (morin and ipriflavone) in normal and pregnant rats. Gachályi A, et al. **Radiobiol Radiother (Berl)** 1988;29(4):513–7

[The effect of age and sex on bone retention of radioactive strontium 85Sr in rats] Kapitola J, et al. **Sb Lek** 1989 Jan; 91(1):11–5 (Eng. Abstr.) **(Cze)**

[Percutaneous resorption of cesium–137 and strontium–89 in alkali solutions and inactivation of the burned surface] Ivannikov AT, et al. **Gig Sanit** 1989 May;(5):26–9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Palliation of multiple bone metastases from prostatic carcinoma with strontium–89. Tennvall J, et al. **Acta Oncol** 1988;27(4):365–9

89Sr therapy: strontium plasma clearance in disseminated prostatic carcinoma. Blake GM, et al. **Eur J Nucl Med** 1989;15(1):49–54

Results of a double blind study of 89–strontium therapy of skeletal metastases of prostatic carcinoma. Buchali K, et al. **Eur J Nucl Med** 1988;14(7–8):349–51

Calibration of SR–90 ophthalmic applicators [letter] Goetsch SJ. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1653

Strontium–89: treatment results and kinetics in patients with painful metastatic prostate and breast cancer in bone. Robinson RG, et al. **Radiographics** 1989 Mar;9(2):271–81

[Results of scar keloid prevention using contact irradiation with strontium 90] Wagner W, et al. **Rontgenpraxis** 1989 Jul;42(7):248–52 **(Ger)**

TOXICITY

The effect of 90Sr given to pregnant mice on spermatogenesis in the male offspring: a comparison with the effect on the ovaries in the female offspring. De Rooij DG, et al. **Int J Radiat Biol** 1989 Aug;56(2):151–9

STROPHANTHIDIN

ANALOGS & DERIVATIVES

Effect of acetylstrophanthidin on twitches, microscopic tension fluctuations and cooling contractures in rabbit ventricle. Bers DM, et al. **J Physiol (Lond)** 1988 Oct; 404:53–69

PHARMACOLOGY

Relation between Na+–K+ pump, Na+ activity and force in strophanthidin inotropy in sheep cardiac Purkinje fibres. Abete P, et al. **J Physiol (Lond)** 1988 Oct;404:275–99

G-STROPHANTHIN see OUABAIN

STROPHANTHINS

Preparation and evaluation of technetium–99m labeled cardiac glycoside derivatives as potential myocardial imaging agent. Misra M, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):409–17

METABOLISM

Increased in vivo synthesis of retinal Na pump isoforms after pre–treatment with citrate buffer. Specht SC, et al. **Prog Clin Biol Res** 1988;268B:143–7

PHARMACOKINETICS

Biodistribution of two 99mTc–cardiac glycosides with end glucose unit: effect of lipophilicity on their relative myocardial accumulation. Sarkar HS, et al. **Int J Rad Appl Instrum [B]** 1989;16(1):41–6

PHARMACOLOGY

[Effects of digitalis on the left ventricular filling phase in the normal and ischemic heart. Angiographic study in man] Bolognesi R, et al. **Cardiologia** 1989 May;34(5):419–24 (Eng. Abstr.) **(Ita)**

THERAPEUTIC USE

[Effect of strophanthin and digoxin on the activity of succinate and lactate dehydrogenases and membrane Na+, K+–ATPase in the heart of rats with experimental myocarditis] Galust'ian GE, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):442–4 (Eng. Abstr.) **(Rus)**

[Myocardial contractile function in acute heart failure during exposure to strophanthin and its combination with alpha–tocopherol] Chekman IS, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):44–7 (Eng. Abstr.) **(Rus)**

TOXICITY

[Changes in the myocardium damaged by strophanthin] Fedosenko NG, et al. **Arkh Anat Gistol Embriol** 1989 May; 96(5):48–52 (Eng. Abstr.) **(Rus)**

STRUCTURE-ACTIVITY RELATIONSHIP

The human interleukin–2 receptor. Recent studies of structure and regulation. Greene WC, et al. **Ann N Y Acad Sci** 1988;546:116–21 (32 ref.)

Structural characteristics of peptides required for their interaction with IAd. Grey HM, et al. **Ann N Y Acad Sci** 1988;546:72–9 (14 ref.)

Proton magnetic resonance spectra of adrenodoxin: features of the aromatic region. Greenfield NJ, et al. **Biochim Biophys Acta** 1989 May 1;995(3):246–54

Structure–function relationships in the inorganic salt–induced precipitation of alpha–chymotrypsin. Przybycien TM, et al. **Biochim Biophys Acta** 1989 May 1;995(3):231–45

Detection of a covalent intermediate in the mechanism of action of porcine pancreatic alpha–amylase by using 13C nuclear magnetic resonance. Tao BY, et al. **Biochim Biophys Acta** 1989 May 1;995(3):214–20

Perspectives in QSAR: computer chemistry and pattern recognition. Hyde RM, et al. **J Comput Aided Mol Des** 1988 Jul;2(2):145–55

Pattern recognition study of QSAR substituent descriptors. van de Waterbeemd H, et al. **J Comput Aided Mol Des** 1989 Jun;3(2):111–32

IL–1 induction–capacity of defined lipopolysaccharide partial structures. Loppnow H, et al. **J Immunol** 1989 May 1; 142(9):3229–38

Structural analysis of peptides capable of binding to more than one Ia antigen. Sette A, et al. **J Immunol** 1989 Jan 1;142(1):35–40

Amino acid substitutions in VH CDR2 change the idiotype but not the antigen–binding of monoclonal antibodies to alpha(1——6)dextrans. Sikder SK, et al. **J Immunol** 1989 Feb 1;142(3):888–93

A radioimmunoassay to screen for antibodies to native conformational antigens and analyse ligand–induced structural states of antigenic proteins. Bernotat–Danielowski S, et al. **J Immunol Methods** 1988 Dec 9;115(2):275–87

Predictive motifs derived from cytosine methyltransferases. Pósfai J, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2421–35

Energy–structure correlations of plasmid DNA in different topological forms. Thumm W, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11737–57

Computer–assisted modeling of receptor–ligand interaction. Theoretical aspects and applications to drug design. Proceedings of the 1988 OHOLO Conference. Eilat, Israel, April 24–28, 1988. **Prog Clin Biol Res** 1989;289:1–512

QSAR: quantitative structure–activity relationships in drug design. Proceedings of the 7th European Symposium on QSAR. Interlaken, Switzerland, September 5–9, 1988. **Prog Clin Biol Res** 1989;291:1–443

QSAR methods and stereoselectivity in action. Ariëns EJ. **Prog Clin Biol Res** 1989;291:3–6

Quantitative and explicit structure–time–activity relations. Baláž S, et al. **Prog Clin Biol Res** 1989;291:37–40

Response surfaces for modelling biological activities by principal properties of substituents: the CARSO procedure. Barbagianni N, et al. **Prog Clin Biol Res** 1989;291:135–8

Recent advances in comparative molecular field analysis (CoMFA). Cramer RD 3d, et al. **Prog Clin Biol Res** 1989; 291:161–5

A new type of information index and its use. Csorvássy I, et al. **Prog Clin Biol Res** 1989;291:111–4

QSAR—a European viewpoint. Dearden JC. **Prog Clin Biol Res** 1989;291:7–14 (36 ref.)

Surface area and hydrophobicity of small molecules. Dunn WJ 3d. **Prog Clin Biol Res** 1989;291:47–51

Multivariate parametrization of coded and non–coded amino acids by thin layer chromatography. Eriksson L, et al. **Prog Clin Biol Res** 1989;291:131–4

Molecular electrostatic potentials: a critical assessment in QSAR and a tryptamine binding model. Hadži D, et al. **Prog Clin Biol Res** 1989;291:259–63

Comparative structure–activity relationships. Hansch C. **Prog Clin Biol Res** 1989;291:23–30

Molecular shape analysis of structure–activity tables. Hopfinger AJ, et al. **Prog Clin Biol Res** 1989;291:151–9

QSAR parameters a la carte from computer chemistry. Hyde R. **Prog Clin Biol Res** 1989;291:91–5

QSAR analysis of acetylcholinesterase inhibitors by use of structure similarity methods. Jerman–Blažič B, et al. **Prog Clin Biol Res** 1989;291:213–6

Molecular similarity: a basis for designing drug screening programs. Johnson M, et al. **Prog Clin Biol Res** 1989; 291:167–71

An index of flexibility from molecular shape descriptors. Kier LB. **Prog Clin Biol Res** 1989;291:105–9

Implementing drug screening programs using molecular similarity methods. Lajiness MS, et al. **Prog Clin Biol Res** 1989;291:173–6

Increasing the accuracy of computer calculated log P(Oct/water) values. Leo AJ. **Prog Clin Biol Res** 1989; 291:53–8

Discovering activity determinants: graphics and a related probability. McFarland JW, et al. **Prog Clin Biol Res** 1989; 291:199–202

DARC/PELCO success in anticholinergic research. Mercier C, et al. **Prog Clin Biol Res** 1989;291:203–7

Structural databases and computer modeling in pharmaceutical research. Mueller K, et al. **Prog Clin Biol Res** 1989;291:219–26

The use of 3D modelling databases for identifying structure activity relationships. Perry NC, et al. **Prog Clin Biol Res** 1989;291:189–93

QSAR analysis of chiral compounds including racemates. Schaper KJ. **Prog Clin Biol Res** 1989;291:41–4

Titrations in water–saturated octanol: a guide to partition coefficients of ion pairs and receptor–site interactions. Scherrer RA, et al. **Prog Clin Biol Res.** 1989;291:59–62

QSAR and multivariate data analysis of the interaction of amphiphilic drugs with phospholipids. Seydel JK, et al. **Prog Clin Biol Res** 1989;291:117–22

Peptide QSARS: PLS modelling and design in principal properties. Sjöström M, et al. **Prog Clin Biol Res** 1989; 291:313–7

Principal properties of aromatic substituents. Skagerberg B, et al. **Prog Clin Biol Res** 1989;291:127–30

QSAR study in xenobiotics distribution—estimation of target organ. Tichý M. **Prog Clin Biol Res** 1989;291:337–40

Consequences of the Hansch paradigm—Part II. Unger SH. **Prog Clin Biol Res** 1989;291:15–22 (22 ref.)

Multivariate data analyses of QSAR parameters. Van de Waterbeemd H, et al. **Prog Clin Biol Res** 1989;291:123–6

DESBASE, a multiparameter substituent database. Van de Waterbeemd H, et al. **Prog Clin Biol Res** 1989;291:101–3

Analogy in computer–assisted design. Wipke WT, et al. **Prog Clin Biol Res** 1989;291:141–5

Automatic knowledge base building for the organic synthesis design program (SECS). Yanaka M, et al. **Prog Clin Biol Res** 1989;291:147–50

QSAR oriented computer representation of chemical compounds used in CISOC–SARSS. Yuan SG, et al. **Prog Clin Biol Res** 1989;291:195–8

CISOC–SARSS: a versatile structure–activity relationship study system. Zheng CZ, et al. **Prog Clin Biol Res** 1989; 291:97–100

Molecular characterization of suppressor T cells. Weiner DB, et al. **Transplant Proc** 1988 Dec;20(6):1151–3 (13 ref.)

Three–dimensional structure–activity relationships. Marshall GR, et al. **Trends Pharmacol Sci** 1988 Aug;9(8):285–9 (34 ref.)

[Receptor structure and function—the basis of modern drug development] Taskinen J, et al. **Duodecim** 1988; 104(22):1881–90 (18 ref.) **(Fin)**

[Computer-assisted structure-activity relationship analysis] Kühnstedt H. **Pharmazie** 1989 Jun;44(6):371–2 (5 ref.) **(Ger)**

[Possibilities of determining hydrophobic constants by thin-layer chromatographic methods] Vámos J, et al. **Acta Pharm Hung** 1988 Nov;58(6):247–65 (Eng. Abstr.) **(Hun)**

[Universal cellular systems of external signal perception, transduction and realization as a basis for drug classification and analysis of the structure-activity relations] Lulk AI, et al. **Dokl Akad Nauk SSSR** 1988;301(3):765–8 **(Rus)**

STRUCTURE, MOLECULAR see MOLECULAR STRUCTURE

STRUMA OVARII

PATHOLOGY

A case of struma ovarii in a 92-year-old woman. D'Addato F, et al. **Clin Exp Obstet Gynecol** 1989;16(1):3–5

Malignant struma ovarii. Rosenblum NG, et al. **Gynecol Oncol** 1989 Feb;32(2):224–7

SECONDARY

Metastatic malignant struma ovarii presenting as parasparesis from a spinal metastasis. McDougall IR, et al. **J Nucl Med** 1989 Mar;30(3):407–11

STRYCHNINE

Strychnine seizure potentiation by azaspirodecanedione anxiolytics in rats. Anderson MC, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):279–83

Strychnine poisoning [letter] Wilkins DB. **Vet Rec** 1989 Mar 25;124(12):312–3

ANALOGS & DERIVATIVES

An evaluation of the structure-activity relationships of a series of analogues of mephenesin and strychnine on the response to pressure in mice. Bowser-Riley F, et al. **Br J Pharmacol** 1989 Apr;96(4):789–94

[Studies on the relation of alkaloids in semen Strychni and its processing] Sha DZ, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jan;14(1):22–4, 62 (Eng. Abstr.) **(Chi)**

ANALYSIS

[Studies on the relation of alkaloids in semen Strychni and its processing] Sha DZ, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jan;14(1):22–4, 62 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

Polyclonal antibodies to the glycine receptor antagonist strychnine. Phelan PP, et al. **J Neurochem** 1989 May; 52(5):1481–6

METABOLISM

Age-dependent changes in brain glycine concentration and strychnine-induced seizures in the rat. Hunter C, et al. **Brain Res** 1989 Mar 20;482(2):247–51

Functional expression in Xenopus oocytes of the strychnine binding 48 kd subunit of the glycine receptor. Schmieden V, et al. **EMBO J** 1989 Mar;8(3):695–700

Glycinergic systems in the brain stem of developing and adult mice: effects of taurine. Kontro P, et al. **Int J Dev Neurosci** 1987;5(5–6):461–70

Anion regulation of [3H]strychnine binding to glycine-gated chloride channels is explained by the presence of two anion binding sites. Marvizón JC, et al. **Mol Pharmacol** 1988 Dec; 34(6):806–13

Metabolic fate of strychnine in rats. Oguri K, et al. **Xenobiotica** 1989 Feb;19(2):171–8

PHARMACOLOGY

An evaluation of the structure-activity relationships of a series of analogues of mephenesin and strychnine on the response to pressure in mice. Bowser-Riley F, et al. **Br J Pharmacol** 1989 Apr;96(4):789–94

Investigations into the origin of the high pressure neurological syndrome: the interaction between pressure, strychnine and 1,2-propandiols in the mouse. Bowser-Riley F, et al. **Br J Pharmacol** 1988 Aug;94(4):1069–76

CNQX (6-cyano-7-nitroquinoxaline-2,3-dione) antagonizes NMDA-evoked [3H]GABA release from cultured cortical neurons via an inhibitory action at the strychnine-insensitive glycine site. Harris KM, et al. **Brain Res** 1989 Jun 5;489(1):185–9

Strychnine decreases the voltage-dependent Ca2+ current of both Aplysia and frog ganglion neurons. Oyama Y, et al. **Cell Mol Neurobiol** 1988 Sep;8(3):307–14

Kynurenic acid antagonises responses to NMDA via an action at the strychnine-insensitive glycine receptor. Birch PJ, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):85–7

Thermodynamics of agonist and antagonist interaction with the strychnine-sensitive glycine receptor. Ruiz-Gómez A, et al. **J Neurochem** 1989 Jun;52(6):1775–80

Inhibitory effect of intravenous GABA antagonists on gastric acid secretion stimulated by secretagogues in rats. Lin WC, et al. **Jpn J Pharmacol** 1989 Feb;49(2):267–74

Characteristics of glycine-activated conductances in cultured medullary neurons from embryonic rat. Lewis CA, et al. **Neurosci Lett** 1989 Jan 16;96(2):185–90

Strychnine-enhanced transsynaptic degeneration of dorsal horn neurons in rats with an experimental painful peripheral neuropathy. Sugimoto T, et al. **Neurosci Lett** 1989 Mar 27;98(2):139–43

The effects of strychnine on neurons in cat somatosensory cortex and its interaction with the inhibitory amino acids, glycine, taurine and beta-alanine. Tremblay N, et al. **Neuroscience** 1988 Sep;26(3):745–62

Behavioral and autonomic correlates of the tactile evoked allodynia produced by spinal glycine inhibition: effects of modulatory receptor systems and excitatory amino acid antagonists. Yaksh TL. **Pain** 1989 Apr;37(1):111–23

Anticonvulsant activity of MK-801 and nimodipine alone and in combination against pentylenetetrazole and strychnine. O'Neill SK, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):595–600

[Effect of strychnine and bicuculline on responses evoked by application of inhibitory mediators in neurons of the lamprey spinal cord] Safronov BV. **Neirofiziologiia** 1989; 21(1):133–3 (Eng. Abstr.) **(Rus)**

[Effect of strychnine on the neuronal reactivity of the sensorimotor cortex and the temporary connection in rabbits] Chizhenkova RA. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):846–54 (Eng. Abstr.) **(Rus)**

POISONING

Strychnine poisoning [letter] Hollands C. **Vet Rec** 1989 Apr 29;124(17):473

Strychnine poisoning [letter] Morton DB. **Vet Rec** 1989 Apr 15;124(15):409

TOXICITY

Glycine potentiates strychnine-induced convulsions: role of NMDA receptors. Larson AA, et al. **J Neurosci** 1988 Oct; 8(10):3822–6

Systemically administered glycine protects against strychnine convulsions, but not the behavioural effects of high pressure, in mice. Halsey MJ, et al. **J Physiol (Lond)** 1989; 408:431–41

Temperature-dependence of reflex transmission in the neonatal rat spinal cord, in vitro: influence on strychnine- and bicuculline-sensitive inhibition. Deshpande SB, et al. **Neuropharmacology** 1988 Oct;27(10):1033–7

STUART FACTOR see FACTOR X

STUART-PROWER FACTOR see FACTOR X

STUDENT DROPOUTS

Understanding and predicting the yield in medical school admissions. Bross TM. **Acad Med** 1989 Aug;64(8):458–62

Physician dropout [letter] Margolis CZ, et al. **Acad Med** 1989 May;64(5):251

The effect of maternal psychotic illness on a child. Mander AJ, et al. **Br J Psychiatry** 1987 Dec;151:848–50

Outdoor adventures encourage youths to S.T.A.Y. in school. Wasylyshyn V. **Child Today** 1988 Sep–Oct;17(5):16–21

Follow-up of postsecondary-age rural learning disabled graduates and dropouts. deBettencourt LU, et al. **Except Child** 1989 Sep;56(1):40–9

Casualties of residency training: a national study of loss and attrition. Baldwin DC Jr, et al. **Proc Annu Conf Res Med Educ** 1988;27:112–7

Student attrition rates equal fewer R.T.(T)s. Pales G. **Radiol Technol** 1988 Nov–Dec;60(2):143–4

PSYCHOLOGY

Dropouts speak out: qualitative data on early school departures. Tidwell R. **Adolescence** 1988 Winter; 23(92):939–54

School leavers' changing identifications with different social categories and their "internalisation" of the category "school leaver". Honess TM. **Br J Educ Psychol** 1989 Feb; 59 (Pt 1):59–65

Student attrition: is lack of support a key? Marshall JE. **Nurs Outlook** 1989 Jul–Aug;37(4):176–8

STUDENT HEALTH SERVICES

Abstracts of the scientific programs of the American College Health Association, sixty-seventh annual meeting. May 23–27, 1989, Washington. **J Am Coll Health** 1989 Jul; 38(1):21–43

American College Health Association standards on student health insurance. January 1988. Task Force on Student Health Insurance. **J Am Coll Health** 1989 Jan;37(4):175–6

Health consequences of loneliness: a review of the literature. Blai B Jr. **J Am Coll Health** 1989 Jan;37(4):162–7 (39 ref.)

An eating disorders hotline: organization, implementation, and initial experience. Burket RC, et al. **J Am Coll Health** 1989 Jan;37(4):183–6

Self-care practices of college students. Coons SJ, et al. **J Am Coll Health** 1989 Jan;37(4):170–3

Toward a smoke-free campus. Daniel EL. **J Am Coll Health** 1989 Jan;37(4):187–8 ©

Mental health consultation in campus discipline: a program of primary prevention. Dodson WW, et al. **J Am Coll Health** 1988 Sep;37(2):85–8

Coping with competitors coast to coast. Ebbin A. **J Am Coll Health** 1989 Sep;38(2):99–100

Classification, management, and tracking of abnormal Papanicolaou smears. Estrin HM. **J Am Coll Health** 1989 May;37(6):283–7

Management of the abnormal Papanicolaou smear. Frisch LE. **J Am Coll Health** 1989 May;37(6):279–82

The efficacy of educational movies on AIDS knowledge and attitudes among college students. Gilliam A, et al. **J Am Coll Health** 1989 May;37(6):261–5

National survey of student health pharmaceutical services—1985. Hak SH, et al. **J Am Coll Health** 1988 Sep; 37(2):65–70

University health service physician intervention with cigarette smokers. Hellmann R, et al. **J Am Coll Health** 1988 Sep;37(2):91–3

Chlamydia trachomatis infection in a male college student population. Kaplan JE, et al. **J Am Coll Health** 1989 Jan; 37(4):159–61

Sex and sexually transmitted disease on campus: perspective and challenge [editorial] Keeling RP. **J Am Coll Health** 1989 May;37(6):245–6

Genital chlamydial infection in female and male college students. Lee H. **J Am Coll Health** 1989 May;37(6):288–91

Screening for hypercholesterolemia in college students. Manchester RA, et al. **J Am Coll Health** 1989 Jan; 37(4):149–53

College students' knowledge and health beliefs about AIDS: implications for education and prevention. Manning DT, et al. **J Am Coll Health** 1989 May;37(6):254–9

Visits to the college health service for alcohol-related injuries. Meilman PW, et al. **J Am Coll Health** 1989 Mar; 37(5):205–10

Is Lyme disease a health threat for your students? Pinger RR, et al. **J Am Coll Health** 1989 Jan;37(4):177–9

Intervening with collegiate COAs: can we afford no to? Ponchalek K, et al. **J Am Coll Health** 1988 Nov;37(3):140–1

Sex and the 1980s college student. Renshaw DC. **J Am Coll Health** 1989 Jan;37(4):154–7

Effect of instructional videotapes on AIDS knowledge and attitudes. Rhodes F, et al. **J Am Coll Health** 1989 May; 37(6):266–71

Condom sales at public universities in California: implications for campus AIDS prevention. Richwald GA, et al. **J Am Coll Health** 1989 May;37(6):272–7

Alcohol-related injuries and objective screening tests. Schwartz RH. **J Am Coll Health** 1989 Jul;38(1):49–50

Screening for chlamydia by university health centers: is it necessary and feasible? Spear SF, et al. **J Am Coll Health** 1989 May;37(6):293–5

Sexual harassment: a challenge to college health service delivery. Spratlen LP. **J Am Coll Health** 1988 Nov; 37(3):137–8

Modeling and guided practice as components within a comprehensive testicular self-examination cancer education program. Walker R, et al. **J Am Coll Health** 1989 Mar;37(5):211–5

Vaccine-preventable diseases on college campuses: the emergence of mumps. Williams WW, et al. **J Am Coll Health** 1989 Mar;37(5):197–203

The use of support groups to raise self-esteem for women clients. Yahne CE, et al. **J Am Coll Health** 1988 Sep; 37(2):79–84

Dietary intakes of female college athletes: the need for nutrition education. Tilgner SA, et al. **J Am Diet Assoc** 1989 Jul;89(7):967–9

Responding to the chemically dependent nursing student. Eller RA, et al. **J Nurs Educ** 1989 Feb;28(2):87–8

Screening for Chlamydia trachomatis at a university health service. Woolard DG, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Mar–Apr;18(2):145–9

[Osteo-muscular lesions in students of a ballet school] Lamata Iturria M, et al. **Acta Orthop Belg** 1988;54(4):418–23 (Eng. Abstr.) **(Fre)**

[Profile of a psychiatric consultation service for students] Michel L. **Rev Med Suisse Romande** 1989 Feb; 109(2):119–23 **(Fre)**

MANPOWER

The collaborative model: a multidisciplinary approach to student health care. Sossong AE, et al. **J Am Coll Health** 1988 Nov;37(3):135–6

ORGANIZATION & ADMINISTRATION

Family phone therapy in university counseling and psychological service centers: a family systems approach. DeSalvo FJ Jr. **J Am Coll Health** 1988 Sep;37(2):71–6

The mentally ill student on campus: theory and practice. Hoffmann FL, et al. **J Am Coll Health** 1989 Jul;38(1):15–20

Student health. Medical care within institutions of higher education. Patrick K. **JAMA** 1988 Dec 9;260(22):3301–5

[The February (1988) Plenum of the CPSU Central Committee and the objectives of public health] Shitskova AP, et al. **Gig Sanit** 1988 Dec;(12):4–7 **(Rus)**

[Detection of cardiovascular pathology in adolescents and students during mass preventive examinations] Antonova

LT, et al. **Sov Zdravookhr** 1989;(5):29–32 (Eng. Abstr.) **(Rus)**
[Detection of pathology of the urinary system in students during preventive mass screening] Seisembekov TZ, et al. **Ter Arkh** 1988;60(6):16–8 (Eng. Abstr.) **(Rus)**

STANDARDS

Accreditation of health services [letter] Card WF. **J Am Coll Health** 1989 Jul;38(1):52
Quality of care and the accreditation of health services: what is the relationship? Kraft DP. **J Am Coll Health** 1988 Nov; 37(3):109–14
Peer review for the nurse-directed health service. Woolard D, et al. **J Am Coll Health** 1989 Sep;38(2):91–3

TRENDS

Sex and anxiety on the campus: thirty-five years thereof. Arnstein RL. **J Am Coll Health** 1989 May;37(6):247–53
Changing with the times [editorial] Dorman JM, et al. **J Am Coll Health** 1989 Jul;38(1):5–6
College students and national health objectives for the year 2000: a summary report. Guyton R, et al. **J Am Coll Health** 1989 Jul;38(1):9–14

UTILIZATION

Somatic response to stress, physical symptoms and health service use: the role of current stress. Frost RO, et al. **Behav Res Ther** 1988;26(6):481–7

STUDENT LOANS see **TRAINING SUPPORT**

STUDENTS

A study of student attitude toward traditional and generative models of instruction. Maroufi C. **Adolescence** 1989 Spring; 24(93):65–72
The perception of poverty and wealth among teenage university students. Stacey BG, et al. **Adolescence** 1989 Spring;24(93):193–207
High school athletes and the use of ergogenic aid. Krowchuk DP, et al. **Am J Dis Child** 1989 Apr;143(4):486–9
A career day—with a difference. Grant P. **Am J Nurs** 1989 Mar;89(3):354–5
Incidence of upper extremity discomfort among piano students. Revak JM. **Am J Occup Ther** 1989 Mar; 43(3):149–54
Age of initiation and switching patterns between smokeless tobacco and cigarettes among college students in the United States. Glover ED, et al. **Am J Public Health** 1989 Feb;79(2):207–8
Teaching high schoolers how to prevent cardiovascular disease [news] **Bol Asoc Med P R** 1988 Nov;80(11):447–8
Self-reported drug use among secondary school students in the Nigerian state of Ogun. Adelekan ML. **Bull Narc** 1989; 41(1–2):109–16
Extent and patterns of drug use by students at a Spanish university. Lopez Alvarez MJ, et al. **Bull Narc** 1989; 41(1–2):117–9
Screening for parasites in a selected group of foreign students—Alberta. Clarkson G, et al. **Can Dis Wkly Rep** 1988 Apr 23;14(16):67–8 **(Eng, Fre)**
Patterns of marihuana smoking among Brazilian students. Silva MT, et al. **Drug Alcohol Depend** 1989 Apr; 23(2):159–64
Student cannabis use and enforcement activity in Canada: 1977–1987. Smart RG, et al. **Drug Alcohol Depend** 1989 Aug;24(1):67–74
Status of school children's hearing aids relative to monitoring practices. Elfenbein JL, et al. **Ear Hear** 1988 Aug; 9(4):212–7 (21 ref.)
Retailing students learn about gerontology. Babic AL, et al. **Gerontol Geriatr Educ** 1987–88;8(1–2):149–60
Prevention of atherosclerosis among 11-year-old schoolchildren in two Moscow administrative districts. Alexandrov A, et al. **Health Psychol** 1988;7 Suppl:247–52
Sex difference in the morningness-eveningness preference in student and hospital nurse samples. Motohashi Y. **Ind Health** 1988;26(4):245–9
Student knowledge of the AIDS epidemic. Taggart M, et al. **Iowa Med** 1989 Jul;79(7):334
Epstein-Barr virus infections among university students in a tropical country. Chang, et al. **J Am Coll Health** 1988 Nov;37(3):115–8
The diabetic student and needle disposal: a hidden health problem. Garling J, et al. **J Am Coll Health** 1989 Sep; 38(2):97–8
Peer educators reach college students with nutrition information. Gates G, et al. **J Am Coll Health** 1989 Sep; 38(2):95–6
Smokeless tobacco use among American college students. Glover ED, et al. **J Am Coll Health** 1989 Sep;38(2):81–5
College students and national health objectives for the year 2000: a summary report. Guyton R, et al. **J Am Coll Health** 1989 Jul;38(1):9–14
Patterns of smokeless tobacco use among university athletes. Levenson-Gingiss P, et al. **J Am Coll Health** 1989 Sep; 38(2):87–90
Testicular self-examination: reaching the college male. Pinch WJ, et al. **J Am Coll Health** 1988 Nov;37(3):131–2
Alcohol-related injuries and objective screening tests. Schwartz RH. **J Am Coll Health** 1989 Jul;38(1):49–50
Does it pay to change answers on objective tests? Brittin HC, et al. **J Am Diet Assoc** 1988 Oct;88(10):1283–4
Dietary intake of calcium, iron, folacin, alcohol, and fat for college students in central Michigan. Hoffman CJ. **J Am Diet Assoc** 1989 Jun;89(6):836–8
Dietary intakes of female college athletes: the need for nutrition education. Tilgner SA, et al. **J Am Diet Assoc** 1989 Jul;89(7):967–9
On becoming a perfect student. Osborne CA. **J Am Vet Med Assoc** 1989 Jul 1;195(1):42
A survey of university students' AIDS-related knowledge and attitudes. Dorman SM, et al. **J Fla Med Assoc** 1988 Jul;75(7):441–4
Mentor program for high school students. Bookchin S, et al. **J Nurs Adm** 1989 Sep;19(9):37–40
A comparison of satisfaction with types of diaphragms among women in a college population. Loucks A. **J Obstet Gynecol Neonatal Nurs** 1989 May–Jun; 18(3):194–200
Patterns and prevalence of smokeless tobacco use by high school seniors in New York. Olds RS. **J Sch Health** 1988 Nov;58(9):374–8
Tobacco use prevention and health facilitator effectiveness. Young RL, et al. **J Sch Health** 1988 Nov;58(9):370–3
Adherence to exercise and sports classes by college women. Siegel D, et al. **J Sports Med Phys Fitness** 1988 Jun; 28(2):181–8
Anabolic steroid use among male high school seniors [letter] **JAMA** 1989 May 12;261(18):2639–40
Involvement of students in a leprosy health education programme—an experiment. Naik SS, et al. **Lepr Rev** 1988 Sep;59(3):255–8
Smoking among medical and engineering students. Nachtigal D, et al. **Med Educ** 1989 Mar;23(2):196–200
Who should help to encourage healthy life-styles among schoolchildren? [letter] Gaughwin MD. **Med J Aust** 1989 Apr 17;150(8):467–8
Survey assesses AIDS on college campuses [news] **N Y State J Med** 1989 Jul;89(7):438
University students' drinking patterns and problems: examining the effects of raising the purchase age. Engs RC, et al. **Public Health Rep** 1988 Nov–Dec;103(6):667–73 (61 ref.)
What radiologic technology educators should know about due process of law. Ward MD, et al. **Radiol Technol** 1989 Jan–Feb;60(3):223–7
Medical students hold anti-tobacco art contest for kids. **Wis Med J** 1988 Oct;87(10):31
[Epidemiologic study of allergy in the school environment] Fourrier E. **Allerg Immunol (Paris)** 1989 Mar;21(3):93–101 (Eng. Abstr.) **(Fre)**
[Infection-induced morbidity in school-age children] Rasch G, et al. **Z Gesamte Hyg** 1988 Nov;34(11):631–3 (Eng. Abstr.) **(Ger)**
[The effect of environmental factors on health and development of school children] Sälzler A, et al. **Z Gesamte Hyg** 1988 Nov;34(11):627–9 (Eng. Abstr.) **(Ger)**
[Electrocardiographic findings in a school-age population using a computerized system: calculation of standard norms for heart rate and PR, QRS, and QT intervals] Adinolfi L, et al. **G Ital Cardiol** 1989 Feb;19(2):145–52 (Eng. Abstr.) **(Ita)**
[Evaluation of motor skills of adolescents from a large city environment attending the Technical School of Mechanical Engineering and the Grammar School in Łódź] Kozłowski W, et al. **Med Pr** 1988;39(5):309–21 (Eng. Abstr.) **(Pol)**
[Lateral scoliosis in 14-year-old students and various environmental factors outside school] Ignar-Golinowska B, et al. **Rocz Panstw Zakl Hig** 1988;39(2):89–98 (Eng. Abstr.) **(Pol)**
[Daily nutrition of young workers, vocational school students at large industrial plants] Szponar L, et al. **Rocz Panstw Zakl Hig** 1988;39(3):176–85 (Eng. Abstr.) **(Pol)**
[Status of the blood circulation system in senior secondary school students during their studies] Berenshtein GF, et al. **Gig Sanit** 1988 Sep;(9):80–1 **(Rus)**
[Hygienic electrooculographic evaluation of working conditions of school children using a computer] Doskin VA, et al. **Gig Sanit** 1989 Feb;(2):19–22 (Eng. Abstr.) **(Rus)**
[Vitamin C requirements of schoolchildren and vocational school and secondary school students in various seasons of the year] Dudenko NV, et al. **Gig Sanit** 1988 Nov; (11):20–1 (Eng. Abstr.) **(Rus)**
[Effect of training conditions on the health status of students of secondary vocational schools in the coal mining industry] Kharkovenko NM, et al. **Gig Sanit** 1988 Oct; (10):26–9 (Eng. Abstr.) **(Rus)**
[Functional status of the central nervous system of students during the process of learning and adaptation to the conditions of Western Siberia] Nedbaeva ND, et al. **Gig Sanit** 1988 Dec;(12):28–31 (Eng. Abstr.) **(Rus)**
[Status of thermoregulatory mechanisms in adolescents trained as radio assemblers at an industrial-training combine] Sergeta VN, et al. **Gig Sanit** 1989 Feb;(2):86–7 **(Rus)**
[Hygienic evaluation of students' training at a light industry vocational school] Shpirt MB, et al. **Gig Sanit** 1989 Apr; (4):65–7 **(Rus)**
[Development of the motor working capacity of vocational school and secondary school students in Łódź] Sobchak Z, et al. **Gig Sanit** 1988 Nov;(11):62–4 **(Rus)**
[Physical development of students at vocational and secondary schools] Sobchak Z, et al. **Gig Sanit** 1989 Jan; (1):53–6 **(Rus)**
[Detection of hypodynamia and psychoemotional stress during the mass prophylactic examination of students] Nikolaeva AA, et al. **Sov Med** 1988;(8):45–8 **(Rus)**
[Students' evaluation of the quality of the educational process] Chaltsev VG, et al. **Sov Zdravookhr** 1989;(2):58–60 **(Rus)**
[Characteristics of a number of risk factors of ischemic heart disease among university students] Kovaľ SN, et al. **Sov Zdravookhr** 1989;(1):51–3 **(Rus)**
[Detection of pathology of the urinary system in students during preventive mass screening] Seisembekov TZ, et al. **Ter Arkh** 1988;60(6):16–8 (Eng. Abstr.) **(Rus)**
[The content of food fiber in student diets in Tbilisi] Grigorashvili GZ, et al. **Vopr Pitan** 1988 Sep–Oct;(5):69–70 **(Rus)**
[Determination of cardiorespiratory economy by the differentiated electrocardiogram in the ambulatory care of students] Dushanin SA, et al. **Vrach Delo** 1988 Oct; (10):23–6 (Eng. Abstr.) **(Rus)**
[Incidence of borderline arterial hypertension among the students of higher education institutions] Malaia LT, et al. **Vrach Delo** 1988 Oct;(10):1–3 (Eng. Abstr.) **(Rus)**
[Knowledge and drug abuse among students in Brasília, Brazil] Bucher RE, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Jun;34(2):113–26 (Eng. Abstr.) **(Spa)**
[Drug use among students in Cali, Colombia] Bergonzoli Peláez G, et al. **Bol Of Sanit Panam** 1989 Jan;106(1):22–31 (Eng. Abstr.) **(Spa)**
[Diagnosis of the health status of a college-level student population] Duarte D, et al. **Rev Med Chil** 1988 Jan; 116(1):75–81 (Eng. Abstr.) **(Spa)**
[Smoking among high-school students in a rural community] Sobarzo Aguila P, et al. **Rev Med Chil** 1988 Aug; 116(8):829–35 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

The overseas student: expatriate, sojourner or settler? Cox JL. **Acta Psychiatr Scand Suppl** 1988;344:179–84
Differences in adjustment among university-educated men and women. Holmström R, et al. **Acta Psychiatr Scand Suppl** 1988;343:1–109
Responses of deaf high school students to an 'Attitudes Toward Alcohol' scale: a national survey. Sabin MC. **Am Ann Deaf** 1988 Jul;133(3):199–203
Patterns of substance use on a college campus: a 14-year comparison study. Patterson EW, et al. **Am J Drug Alcohol Abuse** 1988;14(2):237–46
Sexual behavior of unmarried Colombian university students: a follow-up. Alzate H. **Arch Sex Behav** 1989 Jun; 18(3):239–50
Leisure interest patterns and subjective stress in college students. Rosenthal TL, et al. **Behav Res Ther** 1989; 27(1):59–64
Cross-cultural study of alcohol behaviour among Singapore college students. Hong OT, et al. **Br J Addict** 1989 Mar; 84(3):319–21
Singapore: a study of university students' drinking behaviour. Isralowitz R, et al. **Br J Addict** 1988 Nov;83(11):1321–3
Vulnerability factors in the transition to university: self-reported mobility history and sex differences as factors in psychological disturbance. Fisher S, et al. **Br J Psychol** 1988 Aug;79 (Pt 3):309–20
Perceptions of the normal use of alcohol among black Zimbabwean University students. McMaster JM. **Cent Afr J Med** 1988 Jun;34(6):133–9
Graduate student marriages: an organizational/interactional view. Scheinkman M. **Fam Process** 1988 Sep;27(3):351–68
Stressful events [letter] Segal SA, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):998
Consequences of alcohol use: behavior changes and problems during first year of university. Glikaman L. **Int J Addict** 1988;23(12):1281–95
Intentionality of college students regarding North Carolina's 21-year drinking age law. Lotterhos JF, et al. **Int J Addict** 1988 Jun;23(6):629–47
Just World beliefs and attitudes toward helping elderly people: a comparison of British and Canadian university students. MacLean MJ, et al. **Int J Aging Hum Dev** 1988; 26(4):249–60
Smoking among junior high school students in Nagoya, Japan. Ogawa H, et al. **Int J Epidemiol** 1988 Dec; 17(4):814–20
Relationships between the life values of U.S. college students and their cognitive/affective responses to the threat of nuclear war. Hamilton SB, et al. **J Adolesc** 1989 Mar; 12(1):55–68
A bereavement group for college students. Berson RJ. **J Am Coll Health** 1988 Nov;37(3):101–8
College students and AIDS: a preliminary survey of knowledge, attitudes, and behavior. Katzman EM, et al. **J Am Coll Health** 1988 Nov;37(3):127–30
Susceptibility to AIDS: what college students do and don't believe. Manning D, et al. **J Am Coll Health** 1989 Sep; 38(2):67–73
College students' knowledge and health beliefs about AIDS: implications for education and prevention. Manning DT, et al. **J Am Coll Health** 1989 May;37(6):254–9

The college student-athlete: psychological considerations and interventions. Pinkerton RS, et al. **J Am Coll Health** 1989 Mar;37(5):218–26 (80 ref.)
College student suicide in the United States: incidence data and prospects for demonstrating the efficacy of preventative programs. Schwartz AJ, et al. **J Am Coll Health** 1988 Sep;37(2):53–9 (10 ref.)
Knowledge about AIDS and reported risk behaviors among black college students. Thomas SB, et al. **J Am Coll Health** 1989 Sep;38(2):61–6
Eating patterns and weight concerns of college women. Bailey S, et al. **J Am Diet Assoc** 1989 Jan;89(1):95–6
Symptoms of anorexia nervosa in female university dietetic majors. Drake MA. **J Am Diet Assoc** 1989 Jan;89(1):97–8
Eating disorders among selected female student populations at UCLA [see comments] Kurtzman FD, et al. **J Am Diet Assoc** 1989 Jan;89(1):45–53. **Comment in:** J Am Diet Assoc 1989 Jul;89(7):906, 909
What does the Beck Depression Inventory measure in college students? Evidence from a non-western culture. Tashakkori A, et al. **J Clin Psychol** 1989 Jul;45(4):595–602
Changes in generic and degree completion dental hygiene student characteristics. Carr S, et al. **J Dent Educ** 1989 Apr;53(4):241–3
Cognitive style as related to emotional empathy. DeVore CH, et al. **J Dent Educ** 1989 Sep;53(9):538–41
Nutritional behavior and status of German university students. Harnroongroj T, et al. **J Med Assoc Thai** 1988 Aug;71(8):422–30
High school students' perceptions of nursing as a career: a pilot study. Grossman D, et al. **J Nurs Educ** 1989 Jan; 28(1):18–21
Moral reasoning in college students: implications for nursing education. Mustapha SL, et al. **J Nurs Educ** 1989 Mar; 28(3):107–11
Chronic stress and coping styles: a comparison of male and female undergraduates. Hamilton S, et al. **J Pers Soc Psychol** 1988 Nov;55(5):819–23
Undergraduate marijuana use and anger. Stoner SB. **J Psychol** 1988 Jul;122(4):343–7
Students' awareness of and attitudes to AIDS. Brown JS, et al. **J R Coll Gen Pract** 1987 Oct;37(303):457–8
Safety and first aid behavioral intentions of supervised and unsupervised third grade students. Frederick RA, et al. **J Sch Health** 1989 Apr;59(4):146–9
Student alcohol use and perceived problems with peers and adults. Ringwalt C, et al. **J Sch Health** 1989 Jan;59(1):31–3
Symptoms of depression and psychological distress in United States and Japanese college students. Baron MR, et al. **J Soc Psychol** 1988 Dec;128(6):803–16
Reasons students give for limiting drinking: a factor analysis with implications for research and practice. Greenfield TK, et al. **J Stud Alcohol** 1989 Mar;50(2):108–15
Undergraduate student and faculty perceptions of problem drinking. Leavy RL, et al. **J Stud Alcohol** 1989 Mar; 50(2):101–7
The relation of initial alcohol experiences to current alcohol consumption in a college population. Samson HH, et al. **J Stud Alcohol** 1989 May;50(3):254–60
Leads from the MMWR. HIV-related beliefs, knowledge, and behaviors among high school students. **JAMA** 1988 Dec 23–30;260(24):3567, 3570
AIDS-related beliefs and behaviours of Australian university students. Turtle AM, et al. **Med J Aust** 1989 Apr 3; 150(7):371–6
HIV-related beliefs, knowledge, and behaviors among high school students [published erratum appears in MMWR 1988 Dec 9;37(48):751] **MMWR** 1988 Dec 2;37(47):717–21
Ethics in high school. Caruso DM, et al. **N J Med** 1989 Jan; 86(1):53–4
Personality disorders in students with depressive pathology. Ionescu R, et al. **Neurol Psychiatr (Bucur)** 1989 Jan–Mar; 27(1):45–55
Is family planning already accepted by the present generation? Freshmen's view on family planning at University of North Sumatera, Medan. (Third report). Syarifuddin A, et al. **Paediatr Indones** 1988 Nov–Dec; 28(11–12):238–49
Mother-blaming among college students. Der-Karabetian A, et al. **Percept Mot Skills** 1989 Apr;68(2):453–4
The sleep duration and sleep satisfaction of college students: striking changes over the last decade (1978–1988). Hicks RA, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):806
Parental divorce during the college years. Cain BS. **Psychiatry** 1989 May;52(2):135–46
Spatial attention in hypothetically psychosis-prone college students. Jutai JW. **Psychiatry Res** 1989 Feb;27(2):207–15
University students' support for heterosexual women with AIDS. Allen MJ, et al. **Psychol Rep** 1989 Aug;65(1):171–6
Academic achievement of children of divorced parents. Cherian VI. **Psychol Rep** 1989 Apr;64(2):355–8
Depression and attributions for problems and solutions in college students. Endlich E. **Psychol Rep** 1989 Aug; 65(1):131–41
Sex differences in drinking patterns and behaviours among college students in Singapore. Isralowitz RE, et al. **Psychol Rep** 1989 Apr;64(2):364–6
Community mental health ideology of preprofessional students. Jacobs EF, et al. **Psychol Rep** 1989 Apr; 64(2):381–2
Smokeless tobacco on campus. Lopez LC. **Psychol Rep** 1988 Oct;63(2):439–42
Mental health of Iranian high school and college students. Makaremi A. **Psychol Rep** 1989 Feb;64(1):19–22
Academic locus of control, type A behavior, and college absenteeism. Trice AD, et al. **Psychol Rep** 1989 Aug; 65(1):337–8
Psychosocial stress, physical symptoms, and anxiety in Greek students. Georgas J, et al. **Psychother Psychosom** 1988; 49(3–4):164–70
Sexual behaviour in university students: report of a postal survey. Greatorex IF, et al. **Public Health** 1989 May; 103(3):199–203
College students' knowledge about AIDS and attitudes toward condom use. Strader MK, et al. **Public Health Nurs** 1989 Jun;6(2):62–6
Clues for success on examinations. Roberts GH, et al. **Radiol Technol** 1988 Nov–Dec;60(2):139–41
University students' attitudes toward mental patients in a developing country. Eker D. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):264–6
Knowledge about AIDS and self-reported behaviour among Zimbabwean secondary school pupils. Wilson D, et al. **Soc Sci Med** 1989;28(9):957–61
AIDS and student attitudes. Merrill JM, et al. **South Med J** 1989 Apr;82(4):426–32
Attitudes toward suicide: a comparison of Canadian and U.S. college students. Domino G, et al. **Suicide Life Threat Behav** 1989 Summer;19(2):160–72
The prevalence of suicidal ideation among college students. Rudd MD. **Suicide Life Threat Behav** 1989 Summer; 19(2):173–83
[Conversion signs in students] Mäntyjärvi M, et al. **Duodecim** 1988;104(11):864–6 **(Fin)**
["I protect others' and my life". Adolescents and their adaptation to the dangers of AIDS. A survey of trade school students] Schröder I, et al. **Soz Praventivmed** 1988; 33(7):353–8 (Eng. Abstr.) **(Ger)**
[The effect of room air temperature and humidity and differential ventilation on the mental performance of students] Schrader G, et al. **Z Gesamte Hyg** 1988 Nov; 34(11):612–4 (Eng. Abstr.) **(Ger)**
[Attitude of 12-year-old students to alcohol drinking] Spangenberg B. **Z Gesamte Hyg** 1988 Nov;34(11):656–8 (Eng. Abstr.) **(Ger)**
[Disorders of affective maturation and identity in adolescent girls. A comparison of female students and athletes] Marocco Muttini C, et al. **Minerva Psichiatr** 1988 Apr–Jun; 29(2):67–78 (Eng. Abstr.) **(Ita)**
[Adjustment processes of foreign exchange high school students in Japan] Nagai S. **Shinrigaku Kenkyu** 1988 Apr; 59(1):37–44 (Eng. Abstr.) **(Jpn)**
[Prevalence of smoking and its motivation among students of 2 institutions of higher learning in Bialystok] Fabczak J, et al. **Pneumonol Pol** 1988 Jun;56(6):273–7 (Eng. Abstr.) **(Pol)**
[Alcohol consumption among students] Sławińska JB. **Psychiatr Pol** 1988 May–Jun;22(3):251–7 (Eng. Abstr.) **(Pol)**
[Hemodynamics (general and cerebral) and mental activity under normal conditions] Rashman SM. **Fiziol Zh** 1989 May–Jun;35(3):49–56 (Eng. Abstr.) **(Rus)**
[Training of students of the pedagogical college in anti-alcoholism propaganda at school and in the family] Potashniuk RZ, et al. **Gig Sanit** 1989 Feb;(2):44–7 **(Rus)**
[Development of professionally significant qualities in adolescents during their training as radio assemblers] Sergeta VN, et al. **Gig Sanit** 1988 Dec;(12):26–8 (Eng. Abstr.) **(Rus)**
[A method of determining the leading factors in professional orientation of adolescents at the inter-school educational-industrial combine] Zhizhin KS, et al. **Gig Sanit** 1988 Jul;(7):34–5 **(Rus)**
[Characteristics of circulatory and neurohumoral reactions to psychoemotional stress of patients with borderline arterial hypertension] Dornichev VM, et al. **Kardiologiia** 1988 Dec;28(12):23–7 (Eng. Abstr.) **(Rus)**
[Prognosis of the risk of early alcohol dependence among male adolescents] Drobyshev VV. **Sov Med** 1988;(10):76–9 **(Rus)**
[Certification of teachers as one of the forms of establishing feedback between teachers and students at medical institutes] Isaev DN, et al. **Sov Zdravookhr** 1989;(5):51–5 **(Rus)**
[Alcoholism among students of rural vocational technical schools] Reznikov SG, et al. **Sov Zdravookhr** 1989;(2):50–3 **(Rus)**
[The effect of anxiety neuroses on success in studies in students at the Novi Sad University] Jankulov-Demjen M. **Med Pregl** 1988;41(3–4):149–50 (Eng. Abstr.) **(Ser)**
[Drinking water and garbage: customs and beliefs among schoolchildren of a marginal population] Ferrarini SO, et al. **Salud Publica Mex** 1989 May–Jun;31(3):292–8 (Eng. Abstr.) **(Spa)**

STUDENTS, DENTAL

Teaching first-year students the interpersonal recall process for patient interviews. Paniagua FA, et al. **Acad Med** 1989 Mar;64(3):170–1
Acrylic resin pneumoconiosis: report of a case in a dental student. Barrett TE, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):841–3
A study to investigate the visual quality of dental undergraduates using a simple screening programme. Rawlinson A. **Aust Dent J** 1988 Aug;33(4):303–7
Teaching of oral medicine, periodontology and oral surgery: students' opinions. Downer CS, et al. **Br Dent J** 1988 Dec 10;165(11):403–6
Hepatitis B immunisation of dental students in 14 UK dental schools [letter] Mitchell R. **Br Dent J** 1989 Aug 5;167(3):94
Hepatitis B immunisation of dental students in the 14 UK dental schools [letter] Scully C. **Br Dent J** 1989 May 20; 166(10):360
First year enrollment of Canadians in North American dental schools. Bennett IC, et al. **Can Dent Assoc J** 1989 Aug; 55(8):631–5
Education re: capitation [letter] Watson P. **Can Dent Assoc J** 1989 Feb;55(2):106
Factors influencing dental career choice. A survey of currently-enrolled students and implications for recruitment. Grogono AL, et al. **J Am Coll Dent** 1988 Winter;55(4):30–5
Minority group dental students in a period of decreasing enrollment. Waldman HB. **J Am Coll Dent** 1988 Winter; 55(4):36–40 (8 ref.)
New dentists' problems [letter] O'Connor K. **J Am Dent Assoc** 1989 May;118(5):522, 524
Variation in amalgam margin angles among student carving projects. Novickas D, et al. **J Dent Educ** 1989 Mar; 53(3):203–5
Trends in seniors' financial aid counseling and career counseling. Solomon ES, et al. **J Dent Educ** 1988 Oct; 52(10):584–5
Acceptance of hepatitis B vaccine among dental health care workers. Jacobson JJ, et al. **J Public Health Dent** 1989 Spring;49(2):67–72
[Course of HBV infection among dentistry students: longitudinal study] Simonetti D'Arca A, et al. **Nuovi Ann Ig Microbiol** 1988 May–Jun;39(3):175–81 (Eng. Abstr.) **(Ita)**
[Prevalence of hepatitis B virus infection in dentists of District I of the province of Buenos Aires] Echeverría RF, et al. **Acta Gastroenterol Latinoam** 1988;18(4):253–62 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

The student survey of problems in the academic environment in Canadian dental faculties. Bradley IF, et al. **J Dent Educ** 1989 Feb;53(2):126–31
Attitudes of dental students toward individuals with AIDS. Cohen LA, et al. **J Dent Educ** 1989 Sep;53(9):542–4
Do grades influence students' evaluations of clinical courses? Cohen PA. **J Dent Educ** 1989 Apr;53(4):238–40
Dental student stress, burnout, and memory. Davis EL, et al. **J Dent Educ** 1989 Mar;53(3):193–5
Clinical decision making among dental students and general practitioners. Grembowski D, et al. **J Dent Educ** 1989 Mar; 53(3):189–92
Physical health and stress in entering dental students. Rubenstein LK, et al. **J Dent Educ** 1989 Sep;53(9):545–7
The dental education experience: seniors see a marked improvement. Solomon ES. **J Dent Educ** 1989 Sep; 53(9):552–5
Personality variables as predictors of performance for first-year dental students. Westerman GH, et al. **J Dent Educ** 1989 Apr;53(4):233–7
Psychiatric symptoms in dental students. Lloyd C, et al. **J Nerv Ment Dis** 1989 Feb;177(2):61–9
A multivariable approach toward predicting dental motor skill performance. Wilson SG, et al. **Percept Mot Skills** 1988 Aug;67(1):211–7
Relationship between academic achievement and measured career interest: examination of Holland's theory. Henry P. **Psychol Rep** 1989 Feb;64(1):35–40
[Intensification of the instruction and the development of the creative activities of students in a department of oral surgery] Pantiukhin AI, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):86–7 **(Rus)**

STUDENTS, HEALTH OCCUPATIONS

Skin test reactions to a phenol-soluble antigen of Brucella abortus among veterinary students, Lyon, France, 1984. Duclos PJ, et al. **Int J Epidemiol** 1989 Jun;18(2):446–50
The recruitment and retention of minority and disadvantaged allied health students. Baker J, et al. **J Allied Health** 1989 Summer;18(4):389–401
Death and dying. Part I—the experience. Newham MD. **Radiol Technol** 1989 May–Jun;60(5):445–6
[Minor health problems in a university population] Bayés R, et al. **Gac Sanit** 1987 Sep–Oct;1(2):63–8 (Eng. Abstr.) **(Cat, Spa)**

PSYCHOLOGY

Health science students' images of disabled people. Westbrook MT, et al. **Community Health Stud** 1988; 12(3):304–13
Determinants of attitude toward death by students enrolled in coordinated undergraduate dietetic programs. Vickery CE. **J Am Diet Assoc** 1989 Apr;89(4):505–8
Death and dying. Part II—The hospice project. Fulton J, et al. **Radiol Technol** 1989 Jul–Aug;60(6):537–9

STATISTICS & NUMERICAL DATA

Allied health applicant pools and employment opportunities—1987. Karni KR, et al. **J Allied Health** 1988 Nov;17(4):261–76

STUDENTS, MEDICAL

Congress challenges medical schools on progress in minority representation. Carr S. **Acad Med** 1989 Feb;64(2):81

Evaluation of clinical instructors by third-year medical students. Donnelly MB, et al. **Acad Med** 1989 Mar; 64(3):159–64

Academic performance of reapplicants to a medical school. Jackson JR, et al. **Acad Med** 1989 Apr;64(4):219–20

Predicting the medical school progress of minority students who participated in a preparatory program. McGlinn S, et al. **Acad Med** 1989 Mar;64(3):164–6

Noncognitive criteria for assessing students in North American medical schools. Miller GD, et al. **Acad Med** 1989 Jan;64(1):42–5

Physicians' and medical students' knowledge of nutrition. Mlodinow SG, et al. **Acad Med** 1989 Feb;64(2):105–6

A survey to determine factors influencing medical students' career choices. Rogers LQ, et al. **Acad Med** 1989 Jul; 64(7):417

Course selections and career plans of black participants in a summer intervention program for minority students. Watts VG, et al. **Acad Med** 1989 Mar;64(3):166–7

Recruitment for family medicine [letter] Canty M. **Am Fam Physician** 1989 Jul;40(1):52, 54

Prospective study of respiratory effects of formaldehyde among healthy and asthmatic medical students. Uba G, et al. **Am J Ind Med** 1989;15(1):91–101

Women optometry students: how qualified? Kegel-Flom P. **Am J Optom Physiol Opt** 1988 Aug;65(8):666–73

Teaching effectiveness analysis plan applied to lectures in medical physiology. Casteel CP, et al. **Am J Physiol** 1989 Jun;256(6 Pt 3):S3–8

What do medical students know about in-hospital radiation hazards? Janssen JH, et al. **Angiology** 1989 Jan;40(1):36–8

Emergency care knowledge of medical students: results and implications [letter] Burckes-Miller ME, et al. **Ann Emerg Med** 1989 May;18(5):605–6

Personal characteristics, career plans, and specialty choices of medical students elected to Alpha Omega Alpha. Babbott D, et al. **Arch Intern Med** 1989 Mar;149(3):576–80

Assessment of cardiovascular risk factors in Nigerian students. Adams-Campbell LL, et al. **Arteriosclerosis** 1988 Nov-Dec;8(6):793–6

How should we select surgical trainees? Gough MH. **Aust Clin Rev** 1988 Dec;8(31):163–9

Trainee surgery in teaching hospitals: is there a cost? Martin L, et al. **Aust N Z J Surg** 1989 Mar;59(3):257–60

Medical student, resident, and faculty use of a computerized literature searching system. Markert RJ, et al. **Bull Med Libr Assoc** 1989 Apr;77(2):133–8

Library use and information-seeking behavior of veterinary medical students. Pelzer NL, et al. **Bull Med Libr Assoc** 1988 Oct;76(4):328–33

Memorial's dramatic dean: can drama help medical students learn? Helwig D. **Can Med Assoc J** 1989 Jun 1; 140(11):1364–5

Fatigue and stress in medical students, interns and residents: it's time to act! [editorial] Squires BP. **Can Med Assoc J** 1989 Jan 1;140(1):18–9

Medical student projects in practical health promotion. Joffe M, et al. **Community Med** 1989 Feb;11(1):35–40

Medical education in the United States, 1960–1987. Jolly P. **Conn Med** 1988 Jul;52(7):421–5

South Park Inn medical student clinic. Lynders WT. **Conn Med** 1989 Aug;53(8):475–6

What's wrong with general surgery training [letter] Woodbury DF. **Conn Med** 1989 Jul;53(7):439–40

An evaluation of diabetes knowledge amongst general practitioners and senior medical students. Central Manchester Health Authority Working Party on Diabetes Care. Hessett C, et al. **Diabetic Med** 1989 May-Jun; 6(4):351–3

Evaluation of performance of medical students, Faculty of Medicine, Addis Ababa University. Shamebo D. **Ethiop Med J** 1988 Oct;26(4):185–91

Specialty choice by medical students: recent graduate follow-up survey at the University of Washington. Greer T, et al. **Fam Med** 1989 Mar-Apr;21(2):127–31

Factors influencing student selection of family practice residency programs in Texas. Hitchcock MA, et al. **Fam Med** 1989 Mar-Apr;21(2):122–6

Effect of perceived malpractice insurance costs on the family practice career goals of medical students. Rodney WM, et al. **Fam Med** 1988 Nov-Dec;20(6):418–21

Entry of U.S. medical school graduates into family practice residencies: 1988–1989 and eight-year summary. Schmittling G, et al. **Fam Med** 1989 Mar-Apr;21(2):132–8

Student clinical experiences in family medicine: a comparison of clerkships and preceptorships. Rabinowitz HK. **Fam Pract Res J** 1989 Spring-Summer;8(2):92–9

The National Student Dermatology Association—debut [letter] Lizerbram FW, et al. **Int J Dermatol** 1989 Sep; 28(7):483–4

Education of medical students [editorial] Alberts ME. **Iowa Med** 1989 Apr;79(4):181–2

Today's medical students and the Iowa curriculum. Helms CM. **Iowa Med** 1989 Apr;79(4):167–8

Medical students who care. Fighting AIDS Through Education. Henderson VL, et al. **J Arkansas Med Soc** 1988 Nov;85(6):237–9

University of Arkansas for Medical Sciences medical student awards. Walls E, et al. **J Arkansas Med Soc** 1988 Sep; 85(4):179–82

Medical art and medical science: an exhortation to students on primary care. Hughes JS. **J Gen Intern Med** 1989 Jan-Feb;4(1):48–53

Ideology or self-interest? Medical students' attitudes toward national health insurance. Sudit M. **J Health Soc Behav** 1988 Dec;29(4):376–84

Substance use by fourth-year students at 13 U.S. medical schools. Conard S, et al. **J Med Educ** 1988 Oct; 63(10):747–58

Analysis of a site visit by senior medical students to an internal medicine residency program. Gordon DL, et al. **J Med Educ** 1988 Nov;63(11):868–70

Development of information retrieval skills for freshman medical students. Moore GF. **J Med Educ** 1988 Nov; 63(11):870–2

Teaching communication and interviewing skills to medical students preparing for residency interviews. Regan-Smith MG, et al. **J Med Educ** 1988 Oct;63(10):801–3

The importance of listening to medical students' experiences when teaching them medical ethics. Osborne LW, et al. **J Med Ethics** 1989 Mar;15(1):35–8

Drawing medical students into research: Hughes program expands [news] Vanchieri C. **J Natl Cancer Inst** 1988 Nov 2;80(17):1358–60

Alcohol and drug taking among medical students at a Nigerian university campus: Part 2. Sociodemographic factors of etiologic significance. Iheruе UH. **J Natl Med Assoc** 1988 Feb;80(2):191–5

Interviews in the selection of partners, trainees and medical students [editorial] Pendleton D, et al. **J R Coll Gen Pract** 1988 Apr;38(309):147–8

Sports injuries in medical school. A retrospective study. Birrer RB, et al. **J Sports Med Phys Fitness** 1988 Dec; 28(4):348–51

Introducing Pulse [editorial] **JAMA** 1988 Nov 4;260(17):2564

Making the time. Amble F. **JAMA** 1988 Dec 2; 260(21):3211–2

A piece of my mind. Mr Turner's toenails. Berlin RM. **JAMA** 1989 Apr 14;261(14):2124

AMA-MSS Interim Meeting. Callaghan S. **JAMA** 1989 Mar 3;261(9):1356

Black student enrollment in US medical schools. Lloyd SM Jr, et al. **JAMA** 1989 Jan 13;261(2):272–4

Serving the underserved. Lockhart DC. **JAMA** 1988 Dec 2;260(21):3212

Black medical student enrollment: let's hear it for East Carolina University School of Medicine [letter] Metcalf ZW. **JAMA** 1989 Jun 9;261(22):3243

Should medical students treat HIV-infected patients? Pan R. **JAMA** 1989 Mar 3;261(9):1358

Consent for vaginal examination by students on anaesthetised patients [letter] Bibby J, et al. **Lancet** 1988 Nov 12; 2(8620):1150

Medical students' and residents' estimates of cardiac risk. Tape TG, et al. **Med Decis Making** 1989 Jul-Sep;9(3):170–5

Factors determining the performance of medical students of the Faculty of Medicine, University of Kuwait. Ahmed B, et al. **Med Educ** 1988 Nov;22(6):506–8

Student population changes and progress in Belgian medical schools. Albert A, et al. **Med Educ** 1989 Jan;23(1):39–47

Social issues in medicine: a follow-up comparison of senior-year medical students' attitudes with contemporaries in non-medical faculties. Ewan C. **Med Educ** 1988 Sep; 22(5):375–80

The impact of student ratings on a new course: the general clerkship (ALCO). Hoeks TW, et al. **Med Educ** 1988 Jul; 22(4):308–13

Do conventional and innovative medical schools recruit different students? Maheux B, et al. **Med Educ** 1989 Jan; 23(1):30–8

Smoking among medical and engineering students. Nachtigal D, et al. **Med Educ** 1989 Mar;23(2):196–200

Learning human anatomy: student preferences of methods in a Nigerian medical school. Nnodim JO. **Med Educ** 1988 Sep;22(5):412–7

Training and experience of examiners. van der Vleuten CP, et al. **Med Educ** 1989 May;23(3):290–6

Medical students, Aborigines and migrants: evaluation of a teaching programme. Copeman RC. **Med J Aust** 1989 Jan 16;150(2):84–7

Rubella immunity in medical students: implications for health-care workers [letter] Nichols TT, et al. **Med J Aust** 1988 Aug 15;149(4):227–8

The politics of the sand-pit [letter] Smith AJ, et al. **Med J Aust** 1989 May 1;150(9):543–4

Career what...? Calman KC. **Med Teach** 1987;9(4):383–7

Preparing medical students to teach: an educational program using three approaches. Greenberg LW, et al. **Med Teach** 1987;9(4):409–14

Socio-economic status and aspirations of Third World medical entrants: a Sri Lankan study. Karalliedde LD, et al. **Med Teach** 1988;10(1):101–4

What is ... a profile? Mulholland H. **Med Teach** 1988; 10(3-4):277–82

American medical student activism: 1964–1968. Madison DL. **N C Med J** 1988 Sep;49(9):457–64

American Medical Student Association. A success story. Reynolds PP. **N C Med J** 1989 Feb;50(2):95–102

Medical schools to tap liberal arts pool [news] **Ohio Med** 1989 Jul;85(7):508

Students teaching AIDS to students: addressing AIDS in the adolescent population. Haven GG, et al. **Public Health Rep** 1989 Jan-Feb;104(1):75–9

Clinical examination of medical students in general practice. Bruusgaard D, et al. **Scand J Prim Health Care** 1989 Mar; 7(1):57–9

Medical students experience early patient contact in general practice. A description and evaluation of a new course in the medical curriculum. Lassen LC, et al. **Scand J Prim Health Care** 1989 Mar;7(1):53–5

Short- and long-term academic predictors of medical student performance. Wallace WF, et al. **Ulster Med J** 1988 Oct; 57(2):149–54

Students' initiatives bear fruit [letter] Mgeni AY. **World Health Forum** 1988;9(1):75–6

[Educational activities at university colleges] Linhart K. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(4):569–73 (Eng. Abstr.) (Cze)

[Student evaluation of university instruction] Mareš J. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(4):553–64 (Eng. Abstr.) (Cze)

[Knowledge about technics of blood pressure determination of medical students in their internship year at the University of Düsseldorf] Wernecke U, et al. **Schweiz Rundsch Med Prax** 1988 Oct 25;77(43):1167–70 (Eng. Abstr.) (Ger)

[Criteria for selecting candidates for medical studies with special reference to chemistry] Brzezińska E. **Ann Acad Med Stetin** 1988;34:49–67 (Eng. Abstr.) (Pol)

[Polish medical students in Lvov during the Nazi occupation] Zablotniak R. **Przegl Lek** 1989;46(1):132–6 (Pol)

[Changes in the parameters of skin capillaries during the adaptation of students from the countries of Asia, Africa and Latin America] Zubanskiĭ RV. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):89–97 (Eng. Abstr.) (Rus)

[Relation between health status indicators and physical fitness of students and their physical activity] Sergeev VN, et al. **Gig Sanit** 1988 Jul;(7):29–32 (Rus)

[The value of student scientific circles in increasing the efficacy of a course in general surgery] Chernov VN, et al. **Klin Khir** 1989;(5):51–2 (Rus)

[Comparative evaluation of progress in studies of various student groups] Berzinia Ala, et al. **Sov Zdravookhr** 1988; (10):51–4 (Eng. Abstr.) (Rus)

[The main form of research conducted by students at medical institutes] Sachek MG, et al. **Sov Zdravookhr** 1988;(11):42–5 (Eng. Abstr.) (Rus)

[Study of characteristics of the health status of medical students based on the data of preventive examinations] Zakharchenko VV, et al. **Sov Zdravookhr** 1988;(12):37–40 (Eng. Abstr.) (Rus)

[Soundness of the assimilation of knowledge by students as a criterion for the effectiveness of teaching] Khamidov NKh, et al. **Ter Arkh** 1989;61(5):144–7 (Rus)

[Relation of patients and students during clinical training. A study of the hospital activity of the surgical undergraduate] Díez Miralles M, et al. **Rev Clin Esp** 1988 Oct;183(5):273–7 (Eng. Abstr.) (Spa)

PSYCHOLOGY

Impact of a required family medicine clerkship on medical students' attitudes about primary care. Duerson MC, et al. **Acad Med** 1989 Sep;64(9):546–8

Predicting and fostering success of American Indians in medical school. Kerbeshian LA. **Acad Med** 1989 Jul; 64(7):396–400

Assessing the value of student case write-ups and write-up evaluations. McLeod PJ. **Acad Med** 1989 May;64(5):273–4

Medical students' perceptions of cheating. Simpson DE, et al. **Acad Med** 1989 Apr;64(4):221–2

Assessing correlations between black and white students' perceptions of the medical school learning environment, their academic performances, and their well-being. Strayhorn G, et al. **Acad Med** 1989 Aug;64(8):468–73

Effect of a major curriculum revision on students' perceptions of well-being. Strayhorn G. **Acad Med** 1989 Jan;64(1):25–9

Medical students' early expectations and later opinions of aspects of their first year. Tiberius RG, et al. **Acad Med** 1989 Sep;64(9):538–42

Coping with examination stress through hypnosis: an experimental study. Palan BM, et al. **Am J Clin Hypn** 1989 Jan;31(3):173–80

Documentation of students' clinical reasoning using a computer simulation. Schwartz W. **Am J Dis Child** 1989 May;143(5):575–9

Substance abuse among medical trainees: current problems and evolving resources. Westermeyer J. **Am J Drug Alcohol Abuse** 1988;14(3):393–404

Cocaine use by senior medical students. Conard S, et al. **Am J Psychiatry** 1989 Mar;146(3):382–3

Medical students' attitudes toward cocaine use [letter] Milman DH, et al. **Am J Psychiatry** 1989 Sep;146(9):1234

Educating medical students about death and dying. Black D, et al. **Arch Dis Child** 1989 May;64(5):750–3 (37 ref.)

Relationship of hassles, uplifts, and life events to psychological well-being of freshman medical students.

Wolf TM, et al. **Behav Med** 1989 Spring;15(1):37–45
A longitudinal study of the intrusiveness of cognitions in test anxiety. Kent G, et al. **Behav Res Ther** 1989;27(1):43–50
Drinking among medical students: a questionnaire survey. Collier DJ, et al. **BMJ** 1989 Jul 1;299(6690):19–22
Drinking among medical students [letter] Ind T, et al. **BMJ** 1989 Jul 29;299(6694):321
Mental disorders among Yugoslav medical students. Erić L, et al. **Br J Psychiatry** 1988 Jan;152:127–9
Medical students' attitude towards psychiatry. Das MP, et al. **Can J Psychiatry** 1988 Dec;33(9):783–7
Medical students view family practice. Hafferty FW, et al. **Fam Med** 1988 Jul–Aug;20(4):277–81
Alcoholics anonymous in medical school education. Karnitschnig A. **Fam Med** 1989 Mar–Apr;21(2):146–7
The effect of training on medical students' responses to geriatric patient concerns: results of a linguistic analysis. Robins LS, et al. **Gerontologist** 1989 Jun;29(3):341–4
A profile and prediction study of problem drinking among first-year medical students. Forney MA, et al. **Int J Addict** 1988 Jul;23(7):767–79
Eating pattern disturbances among women medical and graduate students. Futch LS, et al. **J Adolesc Health Care** 1988 Sep;9(5):378–83
An investigation of physician assistant and medical student empathic skills. Jarski RW. **J Allied Health** 1988 Aug; 17(3):211–9
Motivation for child and adolescent psychiatry [letter] Reichenbacher T. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):137–8
Gender differences in the prediction of medical students' clinical performance. Oggins J, et al. **J Am Med Wom Assoc** 1988 Nov–Dec;43(6):171–5
The dimensional structure of medical students' perceptions of diseases. Schmelkin LP, et al. **J Behav Med** 1988 Apr; 11(2):171–83
A biopsychosocial model of medical student distress. Vitaliano PP, et al. **J Behav Med** 1988 Aug;11(4):311–31
Anxiety, depression, and menstrual symptoms among freshman medical students. Sherry S, et al. **J Clin Psychiatry** 1988 Dec;49(12):490–3
Bedside case presentations: why patients like them but learners don't. Wang–Cheng RM, et al. **J Gen Intern Med** 1989 Jul–Aug;4(4):284–7
Cadaver stories and the emotional socialization of medical students. Hafferty FW. **J Health Soc Behav** 1988 Dec; 29(4):344–56
Medical student perspectives on the Louisiana Charity Hospital System. Groves FD. **J La State Med Soc** 1988 Aug;140(8):19–23
The achievement and attitudes of medical students toward the profession. Eoaskoon W, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:11–4
The achievement and satisfaction of clinical subjects in old and new curricula of Ramathibodi. Eoaskoon W, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:15–7
A national survey concerning the ethical aspects of informed consent and role of medical students. Cohen DL, et al. **J Med Educ** 1988 Nov;63(11):821–9
A survey of fourth-year medical students' decisions regarding family practice as a career. Montano DE, et al. **J Med Educ** 1988 Nov;63(11):830–8
Students' certainty during course test-taking and performance on clerkships and board exams. Zeleznik C, et al. **J Med Educ** 1988 Dec;63(12):881–91
Medical student distress. A longitudinal study. Vitaliano PP, et al. **J Nerv Ment Dis** 1989 Feb;177(2):70–6
Masculinity, femininity, and multiple regression: comment on Zeldow, Daugherty, and Clark's "Masculinity, Femininity, and Psychosocial Adjustment in Medical Students: A 2-Year Follow-Up". Holmbeck GN. **J Pers Assess** 1989 Fall;53(3):583–606
Interactive television teaching: a student's point of view. Salame MY. **J R Soc Med** 1989 May;82(5):292
Health care is a team effort. Ayres J. **JAMA** 1988 Nov 4; 260(17):2589–90
Vicissitudes of depressed mood during four years of medical school. Clark DC, et al. **JAMA** 1988 Nov 4;260(17):2521–8
Knowledge, attitudes, and reported practices of medical students and house staff regarding the diagnosis and treatment of alcoholism. Geller G, et al. **JAMA** 1989 Jun 2;261(21):3115–20
Depression in medical students [letter] Merrill JM, et al. **JAMA** 1989 Apr 14;261(14):2065–6
A piece of my mind. First day. Murphy RE. **JAMA** 1989 Mar 10;261(10):1509
Major depression during medical training [editorial] Zoccolillo M. **JAMA** 1988 Nov 4;260(17):2560–1
Medical students' fears about breaking bad news [letter] Sykes N. **Lancet** 1989 Sep 2;2(8662):564
Approaches to learning in a problem-based medical programme: a developmental study. De Volder ML, et al. **Med Educ** 1989 May;23(3):262–4
The effect of medical education on the attitudes of medical students towards disabled people. Duckworth SC. **Med Educ** 1988 Nov;22(6):501–5
Gender as a factor in student learning: preliminary findings. Gledhill RF, et al. **Med Educ** 1989 Mar;23(2):201–4
Types of problem students encountered by clinical teachers on clerkships. Hunt DD, et al. **Med Educ** 1989 Jan; 23(1):14–8
Increasing empathy among medical students. Kramer D, et al. **Med Educ** 1989 Mar;23(2):168–73
Towards the identification of student learning problems: the development of a diagnostic inventory. Newble DI, et al. **Med Educ** 1988 Nov;22(6):518–26
Some phenomena of medical students' diagnostic problem-solving. Ramsden P, et al. **Med Educ** 1989 Jan; 23(1):108–17
Medical students' attitudes to old people and career preference: the case of Nottingham Medical School. Smith CW, et al. **Med Educ** 1989 Jan;23(1):81–5
How comfortable do first-year medical students expect to be when taking sexual histories? Vollmer SA, et al. **Med Educ** 1988 Sep;22(5):418–25
A retrospective study of attitude change during medical education. Wolf TM, et al. **Med Educ** 1989 Jan;23(1):19–23
Attitudes that predict antinuclear-war activity in medical students. Halford WK, et al. **Med J Aust** 1988 Dec 5–19; 149(11–12):599–602
General practice through the medical students' eyes. Chan CS, et al. **Med Teach** 1987;9(4):465–71
Attitudes of medical students to mental handicap. Holt G, et al. **Med Teach** 1988;10(3–4):305–7
Traits of the 'ideal physician' as perceived by medical students and faculty. Notzer N, et al. **Med Teach** 1988; 10(2):181–9
Ten commandments for clinical training. Hornblow AR. **N Z Med J** 1988 Sep 28;101(854):604–6
Survey of preclinical medical students: declining interest in becoming a physician. Arbegast K, et al. **Nebr Med J** 1989 Jul;74(7):178–9
Learning from medical students—Part I [editorial] Cousins N. **Ohio Med** 1989 Jul;85(7):498–500, 572–3
Learning from medical students, Part II. Cousins N. **Ohio Med** 1989 Aug;85(8):587–9, 594
Discussing dying: changing attitudes among patients, physicians, and medical students. Jeret JS. **Pharos** 1989 Winter;52(1):15–20 (24 ref.)
Attitudes toward prevention of cardiovascular diseases among first-year students at eight American medical schools, 1983–1985. Greenland P, et al. **Prev Med** 1988 Nov;17(6):700–11
The experience of mistreatment and abuse among medical students. Baldwin DC Jr, et al. **Proc Annu Conf Res Med Educ** 1988;27:80–4
Relationship between academic achievement and measured career interest: examination of Holland's theory. Henry P. **Psychol Rep** 1989 Feb;64(1):35–40
Medical students' Edwards Personal Preference Schedule norms. Thorson JA, et al. **Psychol Rep** 1988 Oct; 63(2):465–6
Stress and menstrual dysfunction in medical students. Clarvit SR. **Psychosomatics** 1988 Fall;29(4):404–9
Anxiety and the allocation of attention to threat. MacLeod C, et al. **Q J Exp Psychol [A]** 1988 Nov;40(4):653–70
Intolerance of ambiguity in students entering medical school. DeForge BR, et al. **Soc Sci Med** 1989;28(8):869–74
Psychiatric disorders and selected variables among medical students in Belgrade (Yugoslavia). Erić L, et al. **Soc Sci Med** 1988;27(2):187–90
Perceived stress in medical school: resistors, persistors, adaptors and maladaptors. Vitaliano PP, et al. **Soc Sci Med** 1989;28(12):1321–9 (69 ref.)
Lack of recognition of internal medicine as a specialty: a factor in medical student career choice? Anders DL, et al. **South Med J** 1989 Apr;82(4):411–3
AIDS and student attitudes. Merrill JM, et al. **South Med J** 1989 Apr;82(4):426–32
[French medical students and tobacco] Tessier JF, et al. **Rev Mal Respir** 1988;5(6):589–99 (Eng. Abstr.) **(Fre)**
[Does medical education change behavior, attitude and knowledge in relation to smoking? A survey of medical students in the 1st and next to last year of study] Gillmann-Blum D, et al. **Pneumologie** 1989 Jun;43(6):284–9 (Eng. Abstr.) **(Ger)**
[Selective effect of personality markers and psychosocial stress on T lymphocyte subpopulations] Kropiunigg U, et al. **Psychother Psychosom Med Psychol** 1989 Jan; 39(1):18–25 (Eng. Abstr.) **(Ger)**
[Means of activating cognitive activity and the development of clinical thinking in students at departments of surgical diseases] Gusak VK, et al. **Klin Khir** 1989;(5):50 **(Rus)**
[A scale on the attitude of medical institute students to the academic disciplines in a military department] Druzhinin GA, et al. **Voen Med Zh** 1988 Nov;(11):22 **(Rus)**
[Changes in attitude towards mental patients and variations in personality measured by the SCL-90 scale in medical students] Ylla Segura L, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Sep–Oct;16(5):356–66 (Eng. Abstr.) **(Spa)**
[Design, evaluation and application of a model for evaluating the cognitive abilities related to scientific aptitude in medical students] D'Ottavio AE, et al. **Rev Clin Esp** 1989 Apr;184(7):385–7 (Eng. Abstr.) **(Spa)**

SUPPLY & DISTRIBUTION

Recruiting students for medicine. Geokas MC, et al. **Ann Intern Med** 1989 Sep 1;111(5):433–6

STUDENTS, NURSING

NBC's tinsel handmaidens [editorial] Mallison MB. **Am J Nurs** 1989 Apr;89(4):453
BSN enrollments not as rosy as reported [letter] Neill KM. **Am J Nurs** 1989 Jul;89(7):931
Desktop publishing. Benedict S. **Comput Nurs** 1989 Mar–Apr; 7(2):78–9
Food consumption patterns and bowel movements of final-year nursing students in Ile-Ife, Nigeria: an implication for applied nutrition in the nursing curriculum. Ojofeitimi EO. **Eur J Clin Nutr** 1988 Jul;42(7):611–6
Learning clinical teaching skills at the baccalaureate level. Byrne C, et al. **J Adv Nurs** 1989 Aug;14(8):678–85
The functioning of nursing routines in the management of a transient workforce. Procter S. **J Adv Nurs** 1989 Mar; 14(3):180–9
A design for recruitment and feedback. Schutzenhofer KK, et al. **J Nurs Adm** 1989 Sep;19(9):5
Survey of baccalaureate nursing schools' guidelines/policies on AIDS. Bowles CL, et al. **J Nurs Educ** 1988 Oct; 27(8):349–53
A mentor program for nursing majors. Cahill MF, et al. **J Nurs Educ** 1989 Jan;28(1):40–2
Role deprivation in baccalaureate nursing students pre and post curriculum revision. Carroll TL. **J Nurs Educ** 1989 Mar;28(3):134–9
Recruitment and retention of nursing students from diverse cultural backgrounds. Crawford LA, et al. **J Nurs Educ** 1988 Oct;27(8):379–81
Responding to the chemically dependent nursing student. Eller RA, et al. **J Nurs Educ** 1989 Feb;28(2):87–8
A comparison of the clinical judgment process in experienced registered nurses and student nurses. Itano JK. **J Nurs Educ** 1989 Mar;28(3):120–6
Clinical exam: a summative evaluation tool. Johnson G, et al. **J Nurs Educ** 1988 Oct;27(8):373–4
Classification of teacher written comments on student assignments. Lutz EM. **J Nurs Educ** 1989 May;28(5):227–9 (15 ref.)
Baccalaureate students learn research and teamwork in a community setting. Malloy C, et al. **J Nurs Educ** 1989 Jan; 28(1):36–8
Chart reading and anxiety levels of nursing students prior to first interactions with psychiatric clients. Nieswiadomy R, et al. **J Nurs Educ** 1989 Feb;28(2):67–71
Providing health services to elderly in public housing: a case for clinical experience. Reinardy JR, et al. **J Nurs Educ** 1989 Mar;28(3):127–32
Baccalaureate nursing student preceptorship programs and the development of clinical competence. Scheetz LJ. **J Nurs Educ** 1989 Jan;28(1):29–35
Student career goal changes during doctoral education in nursing. Zebelman ES, et al. **J Nurs Educ** 1989 Feb; 28(2):53–60
Legal and ethical issues. Resources for dealing with chemically dependent students. Giovinco G. **J Prof Nurs** 1988 Nov–Dec;4(6):401, 459
Effects of faculty practice on student learning outcomes. Kramer M, et al. **J Prof Nurs** 1986 Sep–Oct;2(5):289–301
Preparing students to be moral agents in clinical nursing practice. Report of a national study. Cassells JM, et al. **Nurs Clin North Am** 1989 Jun;24(2):463–73
Assessing nurses' communication: a cross-sectional study. Harrison TM, et al. **West J Nurs Res** 1989 Feb;11(1):75–91

PSYCHOLOGY

Wellness begins with the nursing student. Benson AM, et al. **Am J Nurs** 1988 Dec;88(12):1711
Why students choose ADN programs. Williams JK. **Am J Nurs** 1989 Mar;89(3):396, 398
Undergraduate OR experience. Are we meeting students' needs? Jones JM, et al. **AORN J** 1989 Aug;50(2):316, 318–20, 322 passim
Computers in nursing practice. A comparison of the attitudes of nurses and nursing students. Schwirian PM, et al. **Comput Nurs** 1989 Jul–Aug;7(4):168–77
Alertness of night nurses: two shift systems compared. Wilkinson R, et al. **Ergonomics** 1989 Mar;32(3):281–92
Student nurse perception of the staff nurse role. Buckenham MA. **J Adv Nurs** 1988 Sep;13(5):662–70
Perceptions and attitudes of academic nursing students to research. Eckerling S, et al. **J Adv Nurs** 1988 Nov; 13(6):759–67 (36 ref.)
How hospital ward members treat learner nurses: an investigation of learners' perceptions in a British hospital. Hyland ME, et al. **J Adv Nurs** 1988 Jul;13(4):472–7
Students' and trained nurses' perceptions of their own interpersonal skills: a report and comparison. Morrison P, et al. **J Adv Nurs** 1989 Apr;14(4):321–9
Relationship between a preceptorship experience and role socialization of graduate nurses. Clayton GM, et al. **J Nurs Educ** 1989 Feb;28(2):72–5
Perspective transformation: the challenge for the RN in the baccalaureate program. Duff V. **J Nurs Educ** 1989 Jan; 28(1):38–9
The relative influence of identified components of test anxiety in baccalaureate nursing students. Howell CC, et al. **J Nurs Educ** 1989 May;28(5):215–20
The educational impact of a course about addiction. Jack LW. **J Nurs Educ** 1989 Jan;28(1):22–8
Socialization of nurse scientists: the graduate student as research assistant. Kennedy MB, et al. **J Nurs Educ** 1988 Oct;27(8):371–2
Analysis of coping methods reported by returning RNs. Lee EJ. **J Nurs Educ** 1988 Sep;27(7):309–13

The relationship of locus of control to decision making in nursing students. Neaves JJ. **J Nurs Educ** 1989 Jan; 28(1):12–7

Psychometric evaluation of the Clinical Stress Questionnaire (CSQ). Pagana KD. **J Nurs Educ** 1989 Apr;28(4):169–74

Stresses and threats reported by baccalaureate students in relation to an initial clinical experience. Pagana KD. **J Nurs Educ** 1988 Nov;27(9):418–24

Sexuality of the aged and the attitudes and knowledge of nursing students. Quinn-Krach P, et al. **J Nurs Educ** 1988 Oct;27(8):359–63

Effect of a CVIS instructional program regarding therapeutic communication on student learning and anxiety. Rickelman B, et al. **J Nurs Educ** 1988 Sep;27(7):314–20

Nursing image as reflected in sex role preferences. van Cleve L. **J Nurs Educ** 1988 Nov;27(9):390–3

Research preceptorship for degree-seeking RNs: a strategy for resocialization. Viar V, et al. **J Nurs Educ** 1988 Sep; 27(7):329–31

Learning styles of baccalaureate nursing students and attitudes toward theory-based nursing. Laschinger HK, et al. **J Prof Nurs** 1989 Jul–Aug;5(4):215–23

A study of values of baccalaureate nursing students and graduate nurses from a secular and a nonsecular program. Schank MJ, et al. **J Prof Nurs** 1989 Jan–Feb;5(1):17–22

Values held by nursing faculty and students in a university setting. Thurston HI, et al. **J Prof Nurs** 1989 Jul–Aug; 5(4):199–207

Student attrition: is lack of support a key? Marshall JE. **Nurs Outlook** 1989 Jul–Aug;37(4):176–8

Depression: it happened to me! Macey JC. **Perspect Psychiatr Care** 1987;24(1):25–30

Novice home visitors teaching/learning needs. Davis JH, et al. **Public Health Nurs** 1988 Dec;5(4):214–8

The homeless experience: clinic building in a community health discovery-learning project. Turner SL, et al. **Public Health Nurs** 1989 Jun;6(2):97–101

Nursing students' stereotypes of married and unmarried pregnant clients. Ganong LH, et al. **Res Nurs Health** 1988 Oct;11(5):333–42

Pain management across age groups. Burke SO, et al. **West J Nurs Res** 1989 Apr;11(2):164–78; discussion 178–80

Stress inoculation with nursing students. Foley J, et al. **West J Nurs Res** 1988 Aug;10(4):435–48

Computer use and nursing research. CAI versus traditional learning. Nyamathi A, et al. **West J Nurs Res** 1989 Aug; 11(4):498–501

The relationship of cognitive styles and stress in nursing students. Williams RA. **West J Nurs Res** 1988 Aug; 10(4):449–62

[Psychological tendencies of nursing school students] Liu C, et al. **Chung Hua Hu Li Tsa Chih** 1988 Jul;23(7):425–6 **(Chi)**

[Reaction to death: a comparison of the change of attitude in 2 different cultures over a 20-year period] Pineda EB, et al. **Educ Med Salud** 1988;22(1):101–5 **(Spa)**

STUDENTS, PHARMACY

Factors affecting outcomes of medication-history interviewing by pharmacy students. Ranelli PL, et al. **Am J Hosp Pharm** 1989 Feb;46(2):267–81

The mood of health care: a small inquiry. Kilwein JH. **Am Pharm** 1989 Aug;NS29(8):31–2

Accidental occupational sensitization to p-nitrobenzoyl chloride in a chemistry student synthesizing procaine. Foussereau J. **Contact Dermatitis** 1989 May;20(5):397–8

Cross-sectional study of the ethics of pharmacy students. Boyce EG, et al. **DICP** 1989 Jul–Aug;23(7–8):590–2

STUDENTS, PREMEDICAL

Medical students [editorial] Kendig EL Jr. **Va Med** 1989 Sep; 116(9):375

[Comparative evaluation of progress in studies of various student groups] Berzinia AIa, et al. **Sov Zdravookhr** 1988; (10):51–4 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Stress in medical undergraduates and house officers. Firth-Cozens J. **Br J Hosp Med** 1989 Feb;41(2):161–4 (66 ref.)

STURGE-WEBER SYNDROME see under **ANGIOMATOSIS**

STUTTERING

Speech dysfluency [editorial] [see comments] **Lancet** 1989 Mar 11;1(8637):530–2. **Comment in:** Lancet 1989 Jul 1;2(8653):49

Stuttering [letter] Rosenfield DB. **N Engl J Med** 1989 Jun 15;320(24):1630–1

CLASSIFICATION

Dysfluency isn't always stuttering [letter] Culatta R, et al. **J Speech Hear Disord** 1988 Nov;53(4):486–8

DIAGNOSIS

Is it stuttering? [letter] Bloodstein O. **ASHA** 1988 Dec; 30(12):3

Final consonant repetition: a linguistic perspective. Camarata SM. **J Speech Hear Disord** 1989 May;54(2):159–62

Stutterers' self-ratings of speech naturalness: assessing effects and reliability. Ingham RJ, et al. **J Speech Hear Res** 1989 Jun;32(2):419–31

DRUG THERAPY

A trial of verapamil in the treatment of stuttering in adults. Brady JP, et al. **Biol Psychiatry** 1989 Mar 1;25(5):630–3

A double-blind study of verapamil in the treatment of stuttering. Brumfitt SM, et al. **Br J Disord Commun** 1988 Apr;23(1):35–40

GENETICS

Postulated genetic linkage between manic-depression and stuttering. Hays P, et al. **J Affective Disord** 1989 Jan–Feb; 16(1):37–40

HISTORY

Historic treatments for stuttering: from pebbles to psychoanalysis. **ASHA** 1989 Jun–Jul;31(6–7):71

PHYSIOPATHOLOGY

Event-related potential indices of speech motor programming in stutterers and non-stutterers. Prescott J. **Biol Psychol** 1988 Dec;27(3):259–73

Acquired stuttering: a motor programming disorder? Cipolotti L, et al. **Eur Neurol** 1988;28(6):321–5

Vowel duration and voice onset time for stressed and nonstressed syllables in stutterers under delayed auditory feedback condition. Kalveram KT, et al. **Folia Phoniatr (Basel)** 1989;41(1):30–42

A comparative investigation of the laryngeal premotor, adjustment, and reaction times of stutterers and nonstutterers. Bakker K, et al. **J Speech Hear Res** 1989 Jun;32(2):239–44

Selected temporal aspects of coordination during fluent speech of young stutterers. Conture EG, et al. **J Speech Hear Res** 1988 Dec;31(4):640–53

The selection of "fluent" samples in research on stuttering: conceptual and methodological considerations. Finn P, et al. **J Speech Hear Res** 1989 Jun;32(2):401–18 (166 ref.)

Stutterers' and nonstutterers' voice fundamental frequency changes in response to auditory stimuli. McLean-Muse A, et al. **J Speech Hear Res** 1988 Dec;31(4):549–55

Temporal-phonemic processing skills in adult stutterers and nonstutterers. Meyers SC, et al. **J Speech Hear Res** 1989 Jun;32(2):274–80

Acoustic and physiological reaction times of stutterers and nonstutterers. Peters HF, et al. **J Speech Hear Res** 1989 Sep;32(3):668–80

Coordination of aerodynamic and phonatory processes in fluent speech utterances of stutterers. Peters HF, et al. **J Speech Hear Res** 1988 Sep;31(3):352–61

Constancy of relative timing for stutterers and nonstutterers. Prosek RA, et al. **J Speech Hear Res** 1988 Dec;31(4):654–8

Comparison of period-by-period fundamental frequency of stutterers and nonstutterers over repeated utterances. Sacco PR, et al. **J Speech Hear Res** 1989 Jun;32(2):439–44

Neural drive to muscles in stuttering. Smith A. **J Speech Hear Res** 1989 Jun;32(2):252–64

Brain studies may alter long-held concepts about likely causes of some voice disorders [news] Goldsmith MF. **JAMA** 1989 Feb 17;261(7):964–5

Syntactic clause boundaries, speech timing, and stuttering frequency in adult stutterers. Klouda GV, et al. **Lang Speech** 1987 Jul–Sep;30 (Pt 3):263–76

Contrastive stress, intonation, and stuttering frequency. Klouda GV, et al. **Lang Speech** 1988 Jan–Mar;31 (Pt 1):3–20

Acoustic evidence of aberrant velocities in stutterers' fluent speech. Pindzola RH. **Percept Mot Skills** 1986 Apr; 62(2):399–405

Bimanual handedness in adults who stutter. Vaughn CL, et al. **Percept Mot Skills** 1989 Apr;68(2):375–82

[Lung function tests in children and adolescents who stutter] Pešák J. **Cesk Pediatr** 1988 Jul;43(7):400–3 (Eng. Abstr.) **(Cze)**

[Features of the bilateral relations of fluctuations of the biopotentials of the cerebral cortex in children with stuttering] Efimov OI, et al. **Fiziol Cheloveka** 1988 Nov-Dec;14(6):892–904 **(Rus)**

[Eye movements during stuttering while reading aloud] Karpov BA. **Fiziol Cheloveka** 1988 Jan-Feb;14(1):50–7 **(Rus)**

[Functional asymmetry of the brain in stuttering children during the perception of emotion] Kuz'min IuI, et al. **Fiziol Cheloveka** 1989 Mar-Apr;15(2):96–8 **(Rus)**

[Characteristics of the functional asymmetry of the cerebral hemispheres in stuttering] Morozov VP, et al. **Fiziol Cheloveka** 1988 May-Jun;14(3):395–402 **(Rus)**

[Clinical and psychopathologic aspects of early pathologic stuttering] Almonte C, et al. **Rev Chil Pediatr** 1987 Nov-Dec;58(6):456–60 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

Talking to persons who stutter. **ASHA** 1989 Sep;31(9):29–30

Stuttering and anxiety [letter] Lovett JW. **Br J Psychiatry** 1988 Dec;153:844

Sequence initiation performance by stutterers under conditions of response competition. Webster WG. **Brain Lang** 1989 Feb;36(2):286–300

Nonfluencies of preschool stutterers and conversational partners: observing reciprocal relationships. Meyers SC. **J Speech Hear Disord** 1989 Feb;54(1):106–12

Difference of susceptibility to delayed auditory feedback between stutterers and nonstutterers. Fukawa T, et al. **J Speech Hear Res** 1988 Sep;31(3):475–9

Some effects of variations in response time latency on speech rate, interruptions, and fluency in children's speech. Newman LL, et al. **J Speech Hear Res** 1989 Sep; 32(3):635–44

A comparison of stutterers' and nonstutterers' affective, cognitive, and behavioral self-reports. Watson JB. **J Speech Hear Res** 1988 Sep;31(3):377–85

Judgments of disfluency by mothers of stuttering and normally fluent children. Zebrowski PM, et al. **J Speech Hear Res** 1989 Sep;32(3):625–34

Stuttering [letter] Nessell WE. **JAMA** 1989 Jan 6;261(1):46

Effect of directed attention on cerebral asymmetries in stuttering adults. Blood GW, et al. **Percept Mot Skills** 1986 Apr;62(2):351–5

THERAPY

The child who stutters: theory and therapy in the 1980s. Debney SJ, et al. **Aust Paediatr J** 1988 Oct;24(5):273–4 (9 ref.)

Multidimensional behavioral treatment for child stutterers. Caron C, et al. **Behav Modif** 1989 Apr;13(2):206–15

Relative efficacy of intensive and spaced behavioral treatment of stuttering. James JE, et al. **Behav Modif** 1989 Jul;13(3):376–95

Psychological change and fluency therapy: a pilot project. Leahy M, et al. **Br J Disord Commun** 1987 Dec; 22(3):245–51

Prediction of outcome after treatment for stuttering. Andrews G, et al. **Br J Psychiatry** 1988 Aug;153:236–40

Prediction of outcome after treatment for stuttering [letter] Finn P, et al. **Br J Psychiatry** 1989 Feb;154:273–4

Stuttering severity and treatment outcome. Ladouceur R, et al. **J Behav Ther Exp Psychiatry** 1989 Mar;20(1):49–56

The relationship of stuttering severity and treatment length to temporal measures of stutterers' perceptually fluent speech. Healey EC, et al. **J Speech Hear Disord** 1989 Aug; 54(3):313–9

A preliminary analysis of the ameliorative effects of time-out from speaking on stuttering. James JE, et al. **J Speech Hear Res** 1989 Sep;32(3):604–10

Response contingent stimuli and stuttering: issues and implications. Prins D, et al. **J Speech Hear Res** 1988 Dec; 31(4):696–709 (113 ref.)

Speech dysfluency [letter; comment] Bennett PR. **Lancet** 1989 Jul 1;2(8653):49. **Comment on:** Lancet 1989 Mar 11;1(8637):530–2

[Current status of stuttering therapy in preschool and school-age children in the Federal Republic of Germany: results of a questionnaire study among therapists and analysis of the literature] Johannsen HS, et al. **Folia Phoniatr (Basel)** 1989;41(1):10–22 (Eng. Abstr.) **(Ger)**

[Organization of the treatment of stuttering in a logopedics kindergarten using the methods of therapeutic physical exercise] Gusarova AE. **Pediatriia** 1988;(5):91–3 **(Rus)**

[Stammering: a new approach to its treatment] Lokhov MI, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):68–73 (Eng. Abstr.) **(Rus)**

STYRENES

see related **POLYSTYRENES**

[Study of Pseudomonas aeruginosa DC13 stability during biological purification of industrial sewage from alpha-methyl styrene] Golovleva LA, et al. **Mikrobiologiia** 1988 Nov-Dec;57(6):1044–5 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Thrombogenicity of Teflon versus copolymer-coated guidewires: evaluation with scanning electron microscopy. Pinto RS, et al. **AJNR** 1989 Mar-Apr;10(2):407–10

Long term neurotoxicity of styrene. A quantitative study of glial fibrillary acidic protein (GFA) and S-100. Rosengren LE, et al. **Br J Ind Med** 1989 May;46(5):316–20

Lack of nephrotoxicity of styrene at current TLV level (50 ppm). Vyskocil A, et al. **Int Arch Occup Environ Health** 1989;61(6):409–11

Reproductive outcomes of pregnant workers employed at 36 reinforced plastics companies. II. Lowered birth weight. Lemasters GK, et al. **J Occup Med** 1989 Feb;31(2):115–20

Cytogenetic and hematological effects in plastics workers exposed to styrene. Hagmar L, et al. **Scand J Work Environ Health** 1989 Apr;15(2):136–41

[Urinary enzymes: early biochemical indicators in the biological monitoring study of subjects exposed to styrene] Malaguti Aliberti L, et al. **Minerva Med** 1989 Apr; 80(4):383–8 (Eng. Abstr.) **(Ita)**

ANALYSIS

Breath and blood levels of benzene, toluene, cumene and styrene in non-occupational exposure. Brugnone F, et al.

Int Arch Occup Environ Health 1989;61(5):303–11

CHEMICAL SYNTHESIS

Antiinflammatory 2,6-di-tert-butyl-4-(2-arylethenyl)phenols. Lazer ES, et al. J Med Chem 1989 Jan;32(1):100–4

METABOLISM

Singlet oxygen production from the peroxidase catalyzed formation of styrene glutathione adducts. Kanofsky JR. Biochem Biophys Res Commun 1989 Mar 31;159(3):1051–4

pEG plasmid involved in styrene degradation: molecular dimorphism and integration of a segment into the chromosome. Ruzzi M, et al. FEMS Microbiol Lett 1989 Jun;50(3):337–43

Kinetic interpretation of the exposure test for styrene. Wieczorek H, et al. Int Arch Occup Environ Health 1988; 61(1–2):107–13

Stereoselectivity of styrene oxidation in microsomes and in purified cytochrome P-450 enzymes from rat liver. Foureman GL, et al. J Pharmacol Exp Ther 1989 Feb; 248(2):492–7

The metabolism of ethylbenzene and styrene to mandelic acid: stereochemical considerations. Drummond L, et al. Xenobiotica 1989 Feb;19(2):199–207

[Increased urinary excretion of D-glucaric acid in workers exposed to styrene in reinforced plastics industry] Volpi R, et al. Med Lav 1988 Mar–Apr;79(2):136–41 (Eng. Abstr.) (Ita)

[The primary stages of alpha-methylstyrene degradation by a culture of Pseudomonas aeruginosa 8] Rustemov SA, et al. Izv Akad Nauk SSSR [Biol] 1989 Jan–Feb;(1):102–8 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Biological monitoring of styrene: a review [published erratum appears in Am Ind Hyg Assoc J 1989 May;50(5):288] Guillemin MP, et al. Am Ind Hyg Assoc J 1988 Oct; 49(10):497–505 (84 ref.)

Distribution and elimination of [14C]octachlorostyrene in cod (Gadus morhua), rainbow trout (Salmo gairdneri, and blue mussel (Mytilus edulis). Ingebrigtsen K, et al. J Toxicol Environ Health 1988;25(3):361–72

[Degradation of alpha-methylstyrene and toluene by plasmid-containing bacterial strains of the genus Pseudomonas] Golovleva LA, et al. Izv Akad Nauk SSSR [Biol] 1988 Jul–Aug;(4):558–64 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Effect of styrene and other alkyl benzene derivatives on oxidation of FAD- and NAD-linked substrates in rat liver mitochondria. Mickiewicz W, et al. Biochem Pharmacol 1988 Dec 1;37(23):4439–44

Inhibition of albumin denaturation and antiinflammatory activity of dehydrozingerone and its analogs. Elias G, et al. Indian J Exp Biol 1988 Jul;26(7):540–2

The potential of antiestrogens as centrally-acting antihostility agents: recent animal data. Brain PF, et al. Int J Neurosci 1988 Aug;41(3–4):169–77

Effects of styrene on wheel-running and ambulatory activities in mice. Teramoto K, et al. J Toxicol Sci 1988 May;13(2):133–9

Activation of human neutrophils and oxygen radical scavenging activity of phenyl-3-methoxy-4-hydroxy styryl ketone. Saldanha LA, et al. Pharmazie 1989 Apr; 44(4):300–1

[Inhibition of delta-aminolevulinic acid dehydratase by styrene and styrene oxide] Mori K, et al. Sangyo Ika Daigaku Zasshi 1988 Sep 1;10(3):269–75 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Evaluation of Mannich bases of styryl ketones and related hydrazones for activity against P388 leukemia. Dimmock JR, et al. Neoplasma 1988;35(6):715–24

TOXICITY

Effect of styrene administration on rat testis. Srivastava S, et al. Arch Toxicol 1989;63(1):43–6

Review of the toxicology of styrene. Bond JA. CRC Crit Rev Toxicol 1989;19(3):227–49 (91 ref.)

In vitro effects of styrene on cytoskeletal apparatus: an immunocytochemical study. Malorni W, et al. Drug Chem Toxicol 1988;11(4):419–31

Single-strand breaks in DNA of peripheral lymphocytes of styrene-exposed workers. Walles SA, et al. IARC Sci Publ 1988;(89):223–6

Metabolism and hepatorenal toxicity due to repeated exposure to styrene in spontaneously hypertensive rats (SHR). Décarie S, et al. J Toxicol Environ Health 1989; 27(4):455–65

Sub-chronic effects of styrene and styrene oxide on lipid peroxidation and the metabolism of glutathione in rat liver and brain. Katoh T, et al. J Toxicol Sci 1989 Feb;14(1):1–9

Analysis of chromosomes in peripheral blood lymphocytes of styrene-exposed workers. Jablonická A, et al. Mutat Res 1988 Oct;206(2):167–9

The neurobehavioral effects of chronic styrene exposure in the rat. Kulig BM. Neurotoxicol Teratol 1988 Nov–Dec; 10(6):511–7

[Correction of MPEL of styrene in the air of the work area and the substantiation of safe levels of its metabolites in the urine of workers] Ulanova IP, et al. Gig Sanit 1988 Oct;(10):17–9 (Eng. Abstr.) (Rus)

SUBACUTE SCLEROSING PANENCEPH VIRUS see SSPE VIRUS

SUBACUTE SCLEROSING PANENCEPHALITIS

[Subacute sclerosing panencephalitis in an adult] Reinikainen K, et al. Duodecim 1988;104(21):1712–7 (Fin)

COMPLICATIONS

[Epileptic crisis at the onset of SSPE (subacute sclerosing panencephalitis): considerations apropos of a case] Volpe E, et al. Riv Neurol 1988 Sep–Oct;58(5):193–8 (Eng. Abstr.) (Ita)

[Viruses in multiple sclerosis] Maciejek Z. Wiad Lek 1988 Apr 1;41(7):447–53 (60 ref.) (Pol)

DIAGNOSIS

MR imaging vs CT in subacute sclerosing panencephalitis. Tsuchiya K, et al. AJNR 1988 Sep;9(5):943–6

Suspected SSPE—a delayed psychiatric presentation. Mattinson PJ. Br J Psychiatry 1989 Jan;154:116–8

Focal MRI findings in early SSPE. Geller TJ, et al. Pediatr Neurol 1987 Sep–Oct;3(5):310–2

Magnetic resonance and CT imaging correlated with clinical status in SSPE [published erratum appears in Pediatr Neurol 1986 May–Jun;2(3):147] Lum GB, et al. Pediatr Neurol 1986 Mar–Apr;2(2):75–9

[Symptoms and clinical signs, laboratory data in 80 cases of subacute sclerosing panencephalitis] Anlar B, et al. Rev Neurol (Paris) 1988;144(12):829–32 (15 ref.) (Eng. Abstr.) (Fre)

[Vision disorders and fundus oculi changes as the first symptoms of subacute sclerosing panencephalitis in children] Szreterowa M, et al. Klin Oczna 1988 Sep; 90(9):329–30 (Eng. Abstr.) (Pol)

DRUG THERAPY

Electroencephalographic changes during interferon therapy in a case of subacute sclerosing panencephalitis. Hatanaka T, et al. Eur Neurol 1989;29(1):6–9

Intraventricular interferon treatment for subacute sclerosing panencephalitis. Steiner I, et al. J Child Neurol 1989 Jan; 4(1):20–4

Oral ribavirin therapy for subacute sclerosing panencephalitis. Ogle JW, et al. J Infect Dis 1989 Apr; 159(4):748–50

EPIDEMIOLOGY

Seroepidemiology of mumps, measles, and subacute sclerosing panencephalitis in Saudi Arabia. Bakir TM, et al. J Trop Pediatr 1988 Oct;34(5):254–6

Subacute sclerosing panencephalitis in Turkey: epidemiological features. Yalaz K, et al. J Trop Pediatr 1988 Dec;34(6):301–5

[Subacute sclerosing panencephalitis (SSPE) in Poland 1984–1986. Stage III of epidemiologic studies] Naruszewicz-Lesiuk D, et al. Przegl Epidemiol 1988; 42(3):205–10 (Eng. Abstr.) (Pol)

ETIOLOGY

S.S.P.E.: some clues to pathogenesis from epidemiological data. Cernescu C, et al. Virologie 1988 Oct–Dec; 39(4):247–56

[Encephalitic complications of measles in 1987] Celers J, et al. Bull Acad Natl Med 1989 Feb;173(2):133–8; discussion 139 (Eng. Abstr.) (Fre)

[A case of subacute sclerosing panencephalitis with diffuse cortical damage after head injury] Markiewicz D, et al. Neuropatol Pol 1988;26(4):561–72 (Eng. Abstr.) (Pol)

GENETICS

Long-term effect of elevated temperatures on SSPE virus expression in persistently infected rat glial cells. Ogura H, et al. Arch Virol 1989;104(3–4):259–69

IMMUNOLOGY

Impaired measles-specific cytotoxic T-cell response in subacute sclerosing panencephalitis. Dhib-Jalbut S, et al. Ann N Y Acad Sci 1988;540:645–8

Impaired human leukocyte antigen-restricted measles virus-specific cytotoxic T-cell response in subacute sclerosing panencephalitis. Dhib-Jalbut S, et al. Ann Neurol 1989 Mar;25(3):272–80

Immunoglobulin G subclass antibodies to measles virus in patients with subacute sclerosing panencephalitis or multiple sclerosis. Mehta PD, et al. J Clin Microbiol 1989 Jan;27(1):62–5

Comparative analysis of virus-specific antibodies and immunoglobulins in serum and cerebrospinal fluid of subacute measles virus-induced encephalomyelitis (SAME) in rats and subacute sclerosing panencephalitis (SSPE). Dörries R, et al. J Neuroimmunol 1988 Oct;19(4):339–52

Extended repertoire of specific antibodies in CSF of patients with subacute sclerosing panencephalitis compared to those with multiple sclerosis: anti-bacterial antibodies are also increased. Persson MA, et al. J Neuroimmunol 1989 Apr; 22(2):135–42

METABOLISM

Cerebral glucose metabolism in the course of subacute sclerosing panencephalitis. Huber M, et al. Arch Neurol 1989 Jan;46(1):97–100

MICROBIOLOGY

Postmortem detection of measles virus in non-neural tissues in subacute sclerosing panencephalitis. Brown HR, et al. Ann Neurol 1989 Aug;26(2):263–8

[Molecular mechanisms of persistent infection of subacute sclerosing panencephalitis (SSPE) viruses] Yoshikawa Y. Uirusu 1988 Jun;38(1):23–57 (93 ref.) (Jpn)

PATHOLOGY

Case 2, 1988. Congenital mental retardation and juvenile parkinsonism. Jankovic J, et al. Mov Disord 1988; 3(4):352–61

Diagnostic difficulties in a case of subacute sclerosing encephalitis. Light and electron-microscopic studies. Liberski PP, et al. Neuropatol Pol 1988;26(1):97–110

PHYSIOPATHOLOGY

Fulminant subacute sclerosing panencephalitis in association with pregnancy. Wirguin I, et al. Arch Neurol 1988 Dec; 45(12):1324–5

Clinical and laboratory findings in a series of subacute sclerosing panencephalitis. Anlar B, et al. Turk J Pediatr 1988 Apr–Jun;30(2):85–92 (14 ref.)

[Periodic discharges and diagnosis of central nervous system diseases] Kazis AD. Neurophysiol Clin 1989 Mar;19(1):1–14 (Eng. Abstr.) (Fre)

[Morphological characteristics and the evolutive electroclinical aspects of pathological biopotentials in subacute sclerosing panencephalitis] Aşgian B, et al. Rev Med Interna [Neurol Psihiatr] 1988 Jan–Mar; 33(1):23–35 (Eng. Abstr.) (Rum)

PSYCHOLOGY

Subacute sclerosing panencephalitis (SSPE) presenting at the age of 21 as a schizophrenia-like state with bizarre dysmorphophobic features. Salib EA. Br J Psychiatry 1988 May;152:709–10

THERAPY

Intrathecal interferon in subacute sclerosing panencephalitis. Maimone D, et al. Acta Neurol Scand 1988 Sep;78(3):161–6

The effect of intraventricular interferon on subacute sclerosing panencephalitis. Kuroki S, et al. Brain Dev 1989; 11(1):65–9

Use of interferon in the treatment of subacute sclerosing panencephalitis. Vranješević D, et al. Neurologija 1988; 37(3–4):17–27

[Interferon and interferon-inducers in the therapy of subacute sclerosing panencephalitis] Kulczycki J, et al. Psychiatr Neurol Med Psychol Beih 1988;40:65–6 (Ger)

[Propionibacterium granulosum KP-45 in the treatment of subacute sclerosing panencephalitis] Sobczyk W, et al. Psychiatr Neurol Med Psychol (Leipz) 1989 Jun; 41(6):344–51 (Eng. Abstr.) (Ger)

[Therapy of subacute sclerosing panencephalitis with intrathecal alpha-interferon] Grimaldi LM, et al. Acta Neurol (Napoli) 1989 Apr–Jun;11(2–3):211–5 (Eng. Abstr.) (Ita)

TRANSMISSION

Transmission of measles virus encephalitis to ferrets by intracardiac inoculation of a cell-associated SSPE virus strain. Thormar H, et al. APMIS 1988 Dec;96(12):1125–8

SUBARACHNOID HEMORRHAGE

Subarachnoid hemorrhage. Day AL, et al. Am Fam Physician 1989 Jul;40(1):95–105 (33 ref.)

Trends in blood pressure, osmolality and electrolytes after subarachnoid hemorrhage from aneurysms. Disney L, et al. Can J Neurol Sci 1989 Aug;16(3):299–304

Circumstances surrounding aneurysmal subarachnoid hemorrhage. Schievink WI, et al. Surg Neurol 1989 Oct; 32(4):266–72 (60 ref.)

BLOOD

Atrial natriuretic polypeptide in patients with subarachnoid haemorrhage due to aneurysmal rupture. Correlation to hyponatremia. Shimoda M, et al. Acta Neurochir (Wien) 1989;97(1–2):53–61

Possible role of complement peptides in SAH [letter] Höllerhage HG. J Neurosurg 1988 Nov;69(5):802–3

The effect of subarachnoid hemorrhage on blood and CSF atrial natriuretic factor. Rosenfeld JV, et al. J Neurosurg 1989 Jul;71(1):32–7

[Lipid metabolism of the patients with subarachnoid hemorrhage due to ruptured intracranial aneurysm—with special reference to the occurrence of cerebral angiospasm]

Nonaka N, et al. **No To Shinkei** 1989 Jan;41(1):67–72 (Eng. Abstr.) **(Jpn)**

CEREBROSPINAL FLUID

S-100 protein in cerebrospinal fluid of patients with subarachnoid haemorrhage: a potential marker of brain damage. Persson L, et al. **Acta Neurochir (Wien)** 1988; 93(3–4):116–22

Time course of CSF lactate level in subarachnoid haemorrhage. Correlation with clinical grading and prognosis. Shimoda M, et al. **Acta Neurochir (Wien)** 1989; 99(3–4):127–34

The amount of blood in CSF and degree of hydrocephalus studied with CT as compared to clinical condition and concentrations of various substances in human CSF after subarachnoid haemorrhage. von Holst H, et al. **Acta Neurochir (Wien)** 1988;94(1–2):38–41

Xanthochromia after subarachnoid haemorrhage needs no revisitation. Vermeulen M, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):826–8

Increased concentration of atrial natriuretic factor in the cerebrospinal fluid of patients with aneurysmal subarachnoid hemorrhage and raised intracranial pressure. Dóczi T, et al. **Neurosurgery** 1988 Jul;23(1):16–9

Role of blood volume on eicosanoids in cerebrospinal fluid [letter] Gaetani P, et al. **Neurosurgery** 1989 Jul;25(1):143–5

Prostaglandins and vasoactive amines in cerebral vasospasm after aneurysmal subarachnoid hemorrhage. Chehrazi BB, et al. **Stroke** 1989 Feb;20(2):217–24

[Hemorrhagic cerebrospinal fluid: confrontation of cytologic data of the blood cell count and of the CSF cell count] Cottier M, et al. **Arch Anat Cytol Pathol** 1988;36(4):150–5 (Eng. Abstr.) **(Fre)**

[Significance of trabeculae in subarachnoid hemorrhage. Measurement of bradykinin, fibrinopeptide A, and thromboxane B2 in cerebrospinal fluid] Kasuya H, et al. **Neurol Med Chir (Tokyo)** 1988 Sep;28(9):880–5 (Eng. Abstr.) **(Jpn)**

[Changes in Mg++ concentration of CSF after subarachnoid hemorrhage and Mg++—effects on the contractions of bovine cerebral artery] Miura K. **No Shinkei Geka** 1988 Oct;16(11):1251–9 (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

Fatal subarachnoid haemorrhage associated with dental local anaesthesia. Okada Y, et al. **Aust Dent J** 1989 Aug; 34(4):323–5

A fatal attraction: cocaine related subarachnoid hemorrhage. Willis D, et al. **J Neurosci Nurs** 1989 Jun;21(3):171–4

COMPLICATIONS

Prevention and treatment of delayed ischaemic dysfunction in patients with subarachnoid haemorrhage. An update. **Acta Neurochir Suppl (Wien)** 1988;45:1–55

Haemodynamic effectiveness of nimodipine on spastic brain vessels after subarachnoid haemorrhage evaluated by the transcranial Doppler method. A review of clinical studies. Harders A, et al. **Acta Neurochir Suppl (Wien)** 1988;45:21–8 (39 ref.)

Cerebral vasospasm after subarachnoid haemorrhage investigated by means of transcranial Doppler ultrasound. Lindegaard KF, et al. **Acta Neurochir Suppl (Wien)** 1988; 42:81–4

Pathophysiology of delayed ischaemic dysfunction after subarachnoid haemorrhage: experimental and clinical data. Mendelow AD. **Acta Neurochir Suppl (Wien)** 1988;45:7–10 (17 ref.)

Prostacyclin: a new treatment for vasospasm associated with subarachnoid haemorrhage. Stanworth PA, et al. **Acta Neurochir Suppl (Wien)** 1988;42:85–7

Attempts at prevention and treatment of delayed ischaemic dysfunction in patients with subarachnoid haemorrhage. Wilkins RH. **Acta Neurochir Suppl (Wien)** 1988;45:36–40 (25 ref.)

CO2 reactivity of cerebral vasospasm after aneurysmal subarachnoid haemorrhage. Hassler W, et al. **Acta Neurochir (Wien)** 1989;98(3–4):167–75

Angiographic investigation of cerebral vasospasm in subarachnoid haemorrhage due to arteriovenous malformation. von Holst H, et al. **Acta Neurochir (Wien)** 1988;94(3–4):129–32

Cardiac autoptic histopathology consequent to head injuries and/or subarachnoid hemorrhages. Borromei A, et al. **Acta Neurol (Napoli)** 1987 Apr;9(2):95–103

Clinical brain death with preserved cerebral arterial circulation. Kosteljanetz M, et al. **Acta Neurol Scand** 1988 Nov;78(5):418–21

The management of caesarean section in a patient with an intracranial arteriovenous malformation. Laidler JA, et al. **Anaesthesia** 1989 Jun;44(6):490–1 (8 ref.)

Factors associated with hydrocephalus after subarachnoid hemorrhage. A report of the Cooperative Aneurysm Study. Graff-Radford NR, et al. **Arch Neurol** 1989 Jul; 46(7):744–52

Spinal arachnoiditis following subarachnoid haemorrhage. Tjandra JJ, et al. **Aust N Z J Surg** 1989 Jan;59(1):84–7

Thunderclap headache: is it migraine? Harling DW, et al. **Cephalalgia** 1989 Jun;9(2):87–90

Effect of the 21-aminosteroid U-74006F on cerebral vasospasm following subarachnoid hemorrhage. Zuccarello M, et al. **J Neurosurg** 1989 Jul;71(1):98–104

Nimodipine for cerebral vasospasm after subarachnoid hemorrhage. **Med Lett Drugs Ther** 1989 May 19; 31(792):47–8

Blindsight and insight in visuo-spatial neglect. Marshall JC, et al. **Nature** 1988 Dec 22–29;336(6201):766–7

The role of endothelin in the pathogenesis of vasospasm following subarachnoid haemorrhage. Ide K, et al. **Neurol Res** 1989 Jun;11(2):101–4

Cranial nerve lesions following subarachnoid hemorrhage and aneurysm of the circle of Willis. Laun A, et al. **Neurosurg Rev** 1988;11(2):137–41

Modification of experimental post-subarachnoid hemorrhage vasculopathy with intracisternal plasmin. Alksne JF, et al. **Neurosurgery** 1988 Sep;23(3):335–7

Early treatment with diltiazem reduces delayed cerebral vascular narrowing after subarachnoid hemorrhage. Frazee JG, et al. **Neurosurgery** 1988 Nov;23(5):611–5

The importance of "accessory" outflow pathways in hydrocephalus after experimental subarachnoid hemorrhage. Griebel RW, et al. **Neurosurgery** 1989 Feb; 24(2):187–92

The investigation of unilateral sensori-neural hearing loss. Kumar A, et al. **Scand Audiol Suppl** 1988;30:225–8

Subarachnoid hemorrhage in pregnancy. Wiebers DO. **Semin Neurol** 1988 Sep;8(3):226–9 (22 ref.)

Management problems in acute hydrocephalus after subarachnoid hemorrhage. Hasan D, et al. **Stroke** 1989 Jun; 20(6):747–53

Acute hydrocephalus after subarachnoid hemorrhage. Heros RC. **Stroke** 1989 Jun;20(6):715–7 (22 ref.)

Prediction of delayed cerebral ischemia, rebleeding, and outcome after aneurysmal subarachnoid hemorrhage. Hijdra A, et al. **Stroke** 1988 Oct;19(10):1250–6

[Subarachnoid hemorrhage associated with cardiac changes] Anttonen O, et al. **Duodecim** 1989;105(12):1197–201 **(Fin)**

[Terson's syndrome and a case of post-traumatic syndrome in an infant] Billotte C, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):111–4 (Eng. Abstr.) **(Fre)**

[Terson's syndrome. Apropos of 2 cases] Gauthier L, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):253–5 **(Fre)**

[Treatment of vasospasm in aneurysmal meningeal hemorrhage using intravenous nimodipine. Multicenter cooperative study] Frerebeau P, et al. **Neurochirurgie** 1988; 34(6):383–8 (Eng. Abstr.) **(Fre)**

[Cerebral vasospasm. The cerebral arterial spasm of subarachnoid hemorrhage—a new hemodynamic dimension] Pendefunda L, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):649–54 (Eng. Abstr.) **(Fre)**

[Subarachnoid hemorrhage as a cause of acute headache] Laumer R. **Fortschr Med** 1989 Feb 10;107(4):18, 20 **(Ger)**

[Spasm of the cerebral arteries in angiographic studies in relation to the duration of bleeding from the aneurysm] Zaręba A, et al. **Neurol Neurochir Pol** 1988 Sep–Oct; 22(5):439–43 (Eng. Abstr.) **(Pol)**

[Pathophysiology of cerebral vasospasm after subarachnoid hemorrhage from ruptured intracranial aneurysm] Jaskólski D, et al. **Pol Tyg Lek** 1988 Jun 6;43(23):748–52 (30 ref.) (Eng. Abstr.) **(Pol)**

[Basilar artery thrombosis as a complication of angiographic study in spontaneous subarachnoid hemorrhage] Mosilchuk NM, et al. **Vrach Delo** 1989 Apr;(4):92 **(Rus)**

DIAGNOSIS

S-100 protein in cerebrospinal fluid after aneurysmal subarachnoid haemorrhage: relation to functional outcome, late CT and SPECT changes, and signs of higher cortical dysfunction. Hårdemark HG, et al. **Acta Neurochir (Wien)** 1989;99(3–4):135–44

Enlarging fundal hemorrhage in Terson's syndrome. Kashihara K, et al. **Ann Ophthalmol** 1989 Feb;21(2):59–60, 64

Warning headache in aneurysmal subarachnoid hemorrhage [letter] Fox JL. **Arch Neurol** 1989 Aug;46(8):839

Early symptoms of subarachnoid haemorrhage due to aneurysms of the posterior communicating artery. Huige WM, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):251–6

MR imaging of subarachnoid hemorrhage [letter] Byrne JV. **J Neurosurg** 1989 Jan;70(1):155–6

Subarachnoid hemorrhage and intracranial pulse waves [letter; comment] Portnoy HD. **J Neurosurg** 1989 Apr; 70(4):661–2. **Comment on:** J Neurosurg 1988 Nov;69(5):712–8

Transcranial Doppler sonography within 12 hours after subarachnoid hemorrhage. Romner B, et al. **J Neurosurg** 1988 May;68(5):732–6

Uniform SAH grading [letter] Ståhlhammar D, et al. **J Neurosurg** 1989 Aug;71(2):303–4

Magnetic resonance imaging of acute SAH [letter; comment] Volpin L. **J Neurosurg** 1989 Apr;70(4):657. **Comment on:** J Neurosurg 1988 May;68(5):731–6

Xanthochromia [editorial] **Lancet** 1989 Sep 16;2(8664):658–9

Magnetic resonance imaging of subarachnoid hemorrhage. Satoh S, et al. **Neuroradiology** 1988;30(5):361–6

[Diagnosis of subarachnoid hemorrhage] Henze T, et al. **Dtsch Med Wochenschr** 1989 Apr 28;114(17):673–4 **(Ger)**

[Difficulties in the differential diagnosis of primary and secondary (post-traumatic) subarachnoid hemorrhage] Kawiak W, et al. **Wiad Lek** 1988 Oct 15;41(20):1390–2 (Eng. Abstr.) **(Pol)**

[ECG changes in subarachnoid hemorrhage of non-traumatic origin] Golikov AP, et al. **Kardiologiia** 1989 May; 29(5):39–44 (Eng. Abstr.) **(Rus)**

[Transcranial Doppler sonography combined with other ultrasonic methods in the diagnosis of stroke] Stulin ID, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):98–105 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

An experimental study of the effect of nimodipine in primate subarachnoid haemorrhage. Dorsch NW, et al. **Acta Neurochir (Wien)** 1989;99(1–2):65–75

Rebleeding, ischaemia and hydrocephalus following anti-fibrinolytic treatment for ruptured cerebral aneurysms: a retrospective clinical study. Pinna G, et al. **Acta Neurochir (Wien)** 1988;93(3–4):77–87

Effect of oral nimodipine on cerebral infarction and outcome after subarachnoid haemorrhage: British aneurysm nimodipine trial. Pickard JD, et al. **BMJ** 1989 Mar 11; 298(6674):636–42

Intrathecal fibrinolytic therapy after subarachnoid hemorrhage: dosage study in a primate model and review of the literature. Findlay JM, et al. **Can J Neurol Sci** 1989 Feb;16(1):28–40 (99 ref.)

Nimodipine treatment of subarachnoid hemorrhage. Laursen J, et al. **Clin Neurol Neurosurg** 1988;90(4):329–37

The effect of fludrocortisone acetate on plasma volume and natriuresis in patients with aneurysmal subarachnoid hemorrhage. Wijdicks EF, et al. **Clin Neurol Neurosurg** 1988;90(3):209–14

Nimodipine in the treatment of subarachnoid hemorrhage. Yasuda SU, et al. **DICP** 1989 Jun;23(6):451–5 (37 ref.)

Hypersensitivity reactions to heparin and the use of new low molecular weight heparins [letter] Schey SA. **Eur J Haematol** 1989 Jan;42(1):107

Effect of intrathecal thrombolytic therapy on subarachnoid clot and chronic vasospasm in a primate model of SAH. Findlay JM, et al. **J Neurosurg** 1988 Nov;69(5):723–35

Relationship of thrombolysis to vasospasm [letter] Seifert V. **J Neurosurg** 1989 Jun;70(6):969–70

Diltiazem for aneurysmal subarachnoid hemorrhage [letter] Harbaugh RE. **Neurosurgery** 1989 Mar;24(3):474–5

Management of aneurysmal subarachnoid hemorrhage. Biller J, et al. **Stroke** 1988 Oct;19(10):1300–5

Effect of fludrocortisone acetate in patients with subarachnoid hemorrhage. Hasan D, et al. **Stroke** 1989 Sep; 20(9):1156–61

[Preoperative care and treatment of acute subarachnoid hemorrhage] Rehák S. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(2):241–6 (Eng. Abstr.) **(Cze)**

[Nimodipine for subarachnoid hemorrhage] Rimpel J. **Dtsch Med Wochenschr** 1989 Jun 2;114(22):888 **(Ger)**

ENZYMOLOGY

Serum and cerebrospinal fluid enzymes in subarachnoid haemorrhage. Maiuri F, et al. **Neurol Res** 1989 Mar; 11(1):6–8

EPIDEMIOLOGY

A review of 102 consecutive patients with intracranial aneurysms in a community hospital in Japan. Ohno K, et al. **Acta Neurochir (Wien)** 1988;94(1–2):23–7

Incidence and prognosis of subarachnoid hemorrhage in a Japanese rural community. Kiyohara Y, et al. **Stroke** 1989 Sep;20(9):1150–5

[Meningeal hemorrhage at a neurological intensive care unit. Study of a series of 234 unselected cases] Labauge R, et al. **Rev Neurol (Paris)** 1988;144(12):796–804 (53 ref.) (Eng. Abstr.) **(Fre)**

ETIOLOGY

Rerupture of intracranial aneurysms during angiography. Aoyagi N, et al. **Acta Neurochir (Wien)** 1989;98(3–4):141–7 (54 ref.)

Subarachnoid haemorrhage of unknown origin: clinical and tomographical aspects. Cioffi F, et al. **Acta Neurochir (Wien)** 1989;97(1–2):31–9

Immunological method for prediction of progress in neurological deficit in patients with intracranial aneurysm rupture. Ryba M, et al. **Acta Neurochir (Wien)** 1989; 97(1–2):67–70

Fatal acute pontocerebellar hemorrhage due to an unsuspected spheno-occipital chordoma. Franquemont DW, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):1075–8

Cerebromeningeal hemorrhage. Analysis of autopsies performed over a 10-year period. Martelli N, et al. **Arq Neuropsiquiatr** 1988 Jun;46(2):166–75

Unusual manifestations of basilar artery ectasia. Nogues M, et al. **Eur Neurol** 1988;28(6):345–8

Subarachnoid haemorrhage in tubercular meningitis. Mohapatra AK, et al. **J Assoc Physicians India** 1988 Mar; 36(3):237

Subarachnoid haemorrhage due to acoustic neurinoma. Case report and review of the literature. Arienta C, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31(5):162–5 (52 ref.)

Subarachnoid haemorrhage with acute cauda symptom due to spinal tumour. Kulali A, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):87–90

Clinical study of OKY-046, a thromboxane synthetase inhibitor, in prevention of cerebral vasospasms and delayed cerebral ischaemic symptoms after subarachnoid haemorrhage due to aneurysmal rupture: a randomized double-blind study. Suzuki S, et al. **Neurol Res** 1989 Jun; 11(2):79–88

Subarachnoid hemorrhage from intraspinal intradural vertebral artery aneurysm: case report and review of the literature. Barnett GH. **Neurosurgery** 1989 May;24(5):753–5 (16 ref.)

Anterior communicating aneurysm missed at angiography: report of two cases treated surgically. Di Lorenzo N, et al. **Neurosurgery** 1988 Oct;23(4):494–9

De novo aneurysm formation following carotid ligation: case report and review of the literature. Dyste GN, et al. **Neurosurgery** 1989 Jan;24(1):88–92 (77 ref.)

Carotid–anterior cerebral artery anastomosis with aneurysm: case report and review of the literature. Odake G. **Neurosurgery** 1988 Nov;23(5):654–8

Extracranial posterior inferior cerebellar artery aneurysm causing isolated intraventricular hemorrhage: a case report. Ruelle A, et al. **Neurosurgery** 1988 Dec;23(6):774–7

Intradural spinal hematoma in an infant with cystic fibrosis. Zochodne D, et al. **Pediatr Neurol** 1986 Sep–Oct;2(5):311–3

Aneurysms are more common than arteriovenous malformations as the cause of subarachnoid haemorrhage in the Malaysian population. Chee CP, et al. **Singapore Med J** 1988 Oct;29(5):427–31

Subarachnoid haemorrhage of unknown aetiology—a clinico-radiological analysis of 22 consecutive cases in the Malaysian population. Chee CP. **Singapore Med J** 1988 Aug;29(4):319–21

Etiology of subarachnoid haemorrhage in Singapore. Tan KK. **Singapore Med J** 1988 Oct;29(5):419

[A space-occupying hemorrhage following spinal anesthesia in the presence of an undiagnosed small spinal tumor (ependymoma)] Bredtmann RD, et al. **Reg Anaesth** 1989 Mar;12(2):38–40 (Eng. Abstr.) **(Ger)**

[Subarachnoid hemorrhage as initial manifestation of polyarteritis nodosa] Simonetti C, et al. **Riv Neurol** 1988 Sep–Oct;58(5):180–2 (23 ref.) (Eng. Abstr.) **(Ita)**

[Subarachnoid hemorrhage due to spinal tumor. Case report] Hotta T, et al. **Neurol Med Chir (Tokyo)** 1988 May; 28(5):504–9 (50 ref.) (Eng. Abstr.) **(Jpn)**

[Spinal subarachnoid hemorrhage due to neurinoma of the cauda equina] Furuno M, et al. **No Shinkei Geka** 1989 May; 17(5):485–8 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Unusual postoperative hemorrhage in a patient with ruptured aneurysm and hemophilia B] Komatsu Y, et al. **No Shinkei Geka** 1988 Oct;16(11):1281–5 (Eng. Abstr.) **(Jpn)**

[Cerebral infarction and subarachnoid hemorrhage caused by dolichoectasia; report of a case] Kuroda S, et al. **No Shinkei Geka** 1988 Sep;16(10):1187–92 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Traumatic subarachnoid hemorrhage in acute severe head injury] Kobayashi S, et al. **No To Shinkei** 1988 Dec; 40(12):1131–5 (Eng. Abstr.) **(Jpn)**

[Sudden hemorrhage into asymptomatic hypophyseal tumors] Kandel' EI. **Zh Nevropatol Psikhiatr** 1988;88(11):51–4 (Eng. Abstr.) **(Rus)**

[Recurrent hemorrhage in rupture of intracranial arterial aneurysms in the acute period] Kholodov SA, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):3–6 (Eng. Abstr.) **(Rus)**

GENETICS

Subarachnoid blood and headache: altered trigeminal tachykinin gene expression. Linnik MD, et al. **Ann Neurol** 1989 Feb;25(2):179–84

METABOLISM

Effect of nimodipine on mitochondrial respiration in different rat brain areas after subarachnoid haemorrhage. Rodriguez y Baena R, et al. **Acta Neurochir Suppl (Wien)** 1988; 43:177–81

Histochemical evaluation of the glycosaminoglycans in vasoconstricted human cerebral arteries after subarachnoid haemorrhage. von Holst H, et al. **Acta Neurochir (Wien)** 1989;98(3–4):164–6

Neuropeptide Y: vasoconstrictor effects and possible role in cerebral vasospasm after experimental subarachnoid hemorrhage. Abel PW, et al. **Brain Res** 1988 Nov 1; 463(2):250–8

Alterations in serotonin and neuropeptide Y content of cerebrovascular sympathetic nerves following experimental subarachnoid hemorrhage. Jackowski A, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):271–9

Release of endothelium-derived relaxing factor after subarachnoid hemorrhage. Kim P, et al. **J Neurosurg** 1989 Jan;70(1):108–14

Changes in glutathione peroxidase and lipid peroxides in cerebrospinal fluid and serum after subarachnoid hemorrhage—with special reference to the occurrence of cerebral vasospasm. Watanabe T, et al. **Neurol Med Chir (Tokyo)** 1988 Jul;28(7):645–9

Changes of calcitonin gene-related peptide-like immunoreactivity in cerebrovascular nerve fibers in the dog after experimentally produced subarachnoid hemorrhage. Nozaki K, et al. **Neurosci Lett** 1989 Jul 17;102(1):27–32

Biosynthesis of leukotrienes in canine cerebral vasospasm. Yokota M, et al. **Stroke** 1989 Apr;20(4):527–33

The distribution of intravenous nicardipine in rat brain after subarachnoid hemorrhage. Tsukahara T, et al. **Surg Neurol** 1989 Sep;32(3):188–94

MORTALITY

The impact of rebleeding on the life time probabilities of different outcomes in patients with ruptured intracranial aneurysms. A theoretical evaluation. Eakesen V, et al. **Acta Neurochir (Wien)** 1988;95(3–4):99–101

Outcome of aneurysmal subarachnoid hemorrhage in patients 66 years of age and older. Muizelaar JP, et al. **Clin Neurol Neurosurg** 1988;90(3):203–7

Subarachnoid haemorrhage of unknown cause: a long term follow-up. Hawkins TD, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):230–5

Has there been a decline in subarachnoid hemorrhage mortality? Ingall TJ, et al. **Stroke** 1989 Jun;20(6):718–24

PATHOLOGY

Unexplained chronic subarachnoid bleeding and a slowly progressive neurological syndrome [letter] Sadeh M, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1465–6

Daily trends in white blood cell count and temperature after subarachnoid hemorrhage from aneurysm. Weir B, et al. **Neurosurgery** 1989 Aug;25(2):161–5

PHYSIOPATHOLOGY

Pathophysiology of subarachnoid haemorrhage. Experimental and clinical data. Voldby B. **Acta Neurochir Suppl (Wien)** 1988;45:1–6 (32 ref.)

Blood–arterial wall barrier disruption to various sized tracers following subarachnoid haemorrhage. Nakagomi T, et al. **Acta Neurochir (Wien)** 1989;99(1–2):76–84

Time course of the blood–arterial wall barrier disruption following experimental subarachnoid haemorrhage. Nakagomi T, et al. **Acta Neurochir (Wien)** 1989; 98(3–4):176–83

Positron emission tomography with 68-Ga–EDTA and computed tomography in patients with subarachnoid haemorrhage. von Holst H, et al. **Acta Neurochir (Wien)** 1989;97(3–4):146–9

Pathophysiology of acute intracerebral and subarachnoid hemorrhage: applications to MR imaging. Hayman LA, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):135–9 (19 ref.)

Investigation of the vasoconstrictor action of subarachnoid haemoglobin in the pig cerebral circulation in vivo. Byrne JV, et al. **Br J Pharmacol** 1989 Jul;97(3):669–74

The role of callosal connections in speech prosody. Klouda GV, et al. **Brain Lang** 1988 Sep;35(1):154–71

Hemodynamics in subarachnoid hemorrhage [letter] McGrath RB, et al. **Crit Care Med** 1989 Apr;17(4):381

Effects of the nonglucocorticoid 21-aminosteroid U74006F on acute cerebral hypoperfusion following experimental subarachnoid hemorrhage. Hall ED, et al. **Exp Neurol** 1988 Nov;102(2):244–8

Simple laboratory experiments to replicate some of the stresses on vertebro-basilar arterial walls. An investigation of possible mechanisms of traumatic subarachnoid haemorrhage. Farag AM, et al. **Forensic Sci Int** 1988 Sep; 38(3–4):275–84

The cortical activity in experimental subarachnoid hemorrhage. Karacostas D, et al. **Funct Neurol** 1988 Jul–Sep;3(3):275–83

Interference of pentobarbital and verapamil with the reactivity of middle cerebral artery of cat exposed to experimental subarachnoid hemorrhage. Marín J, et al. **Gen Pharmacol** 1989;20(2):243–8

Transient ST-segment elevation in subarachnoid hemorrhage. Nakamura Y, et al. **J Electrocardiol** 1989 Apr; 22(2):133–7

Reversible intracranial circulatory arrest in acute subarachnoid haemorrhage [letter] Steinmetz H, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1355–6

Computerized monitoring system in neurosurgical intensive care. Suzuki A, et al. **J Neurosci Methods** 1988 Dec; 26(2):133–9

Electrocardiographic changes following subarachnoid hemorrhage. Kocan MJ. **J Neurosci Nurs** 1988 Dec; 20(6):362–5 (22 ref.)

Effect of subarachnoid hemorrhage on intracranial pulse waves in cats [see comments] Cardoso ER, et al. **J Neurosurg** 1988 Nov;69(5):712–8. **Comment in:** J Neurosurg 1989 Apr;70(4):661–2

Endothelium and cerebral vasospasm [letter; comment] Clark FL, et al. **J Neurosurg** 1989 Apr;70(4):657–9. **Comment on:** J Neurosurg 1988 May;68(5):757–66

Alterations of mechanical properties in canine basilar arteries after subarachnoid hemorrhage. Kim P, et al. **J Neurosurg** 1989 Sep;71(3):430–6

Effect of intracisternal antithrombin III on subarachnoid hemorrhage-induced arterial narrowing. Vollmer DG, et al. **J Neurosurg** 1989 Apr;70(4):599–604

Comparison of electrocardiographic changes in patients suffering from subarachnoid hemorrhage and ischemic cerebral infarction. Grad A, et al. **Neurologija** 1987; 36(1–4):61–8

Comparison of intimal platelet accumulation in cerebral arteries in two experimental models of subarachnoid hemorrhage. Honma Y, et al. **Neurosurgery** 1989 Apr; 24(4):487–90

De novo saccular aneurysms. Misra BK, et al. **Neurosurgery** 1988 Jul;23(1):10–5

Influence of blood volume on cerebrospinal fluid levels of arachidonic acid metabolites after subarachnoid hemorrhage: experimental study on the pathogenesis of cerebral vasospasm. Seifert V, et al. **Neurosurgery** 1988 Sep; 23(3):313–21

Dysautoregulation in patients with ruptured aneurysms: cerebral blood flow measurements obtained during surgery by a temperature-controlled thermoelectrical method. Tenjin H, et al. **Neurosurgery** 1988 Dec;23(6):705–9

The influence of experimental subarachnoid hemorrhage on the relaxation induced by vasoactive intestinal polypeptide in the cerebral arteries of the rabbit. Tsukahara T, et al. **Neurosurgery** 1989 May;24(5):731–5

Serial electrocardiographic recording in aneurysmal subarachnoid hemorrhage. Brouwers PJ, et al. **Stroke** 1989 Sep;20(9):1162–7

Effect of subarachnoid hemorrhage on calcitonin gene-related peptide-induced relaxation in rabbit basilar artery. Hongo K, et al. **Stroke** 1989 Jan;20(1):100–4

Model of electrocardiographic changes seen with subarachnoid hemorrhage in rabbits. Uchida M, et al. **Stroke** 1989 Jan;20(1):112–8

Protective effect of a 21-aminosteroid on the blood–brain barrier following subarachnoid hemorrhage in rats. Zuccarello M, et al. **Stroke** 1989 Mar;20(3):367–71

[Brain function and blood flow velocity in the middle cerebral artery in subarachnoid hemorrhage: evaluation with multimodality evoked potentials (MEPs) and transcranial Doppler (TCD) ultrasound] Shigemori M, et al. **No Shinkei Geka** 1989 Apr;17(4):327–34 (Eng. Abstr.) **(Jpn)**

[Pressure waves induced by electrical stimulation of upper pons and lower midbrain in dogs with experimental subarachnoid hemorrhage] Kogure Y, et al. **No To Shinkei** 1989 Mar;41(3):283–8 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Antifibrinolytic therapy for prevention of recurrent aneurysmal subarachnoid hemorrhage. Adams HP Jr. **Semin Neurol** 1986 Sep;6(3):309–15 (65 ref.)

PSYCHOLOGY

Cognitive outcome and quality of life one year after subarachnoid haemorrhage. McKenna P, et al. **Neurosurgery** 1989 Mar;24(3):361–7

RADIOGRAPHY

Bilateral angiographic vasoconstriction of the middle cerebral and internal carotid arteries after subarachnoid haemorrhage in patients with and without aneurysms. A retrospective study. von Holst H, et al. **Acta Neurochir (Wien)** 1988;94(1–2):32–7

Cerebral panangiography in spontaneous subarachnoid hemorrhage from intracranial aneurysms. Nakstad P, et al. **Acta Radiol** 1988 Nov–Dec;29(6):633–6

Subarachnoid hemorrhage and normal angiography: should the angiogram be reviewed by a second neuroradiologist? Shuaib A, et al. **Can J Neurol Sci** 1988 Nov;15(4):413–6

Delayed arterial narrowing following SAH [letter] Amagasa M. **J Neurosurg** 1989 Jul;71(1):152–3

CT findings in subarachnoidal haemorrhage (SAH). A retrospective study of 138 patients. Berlit P, et al. **Neurochirurgia (Stuttg)** 1988 Jul;31(4):123–7

Vascular abnormalities in the neck associated with intracranial aneurysms. George B, et al. **Neurosurgery** 1989 Apr;24(4):499–508

Subarachnoid haemorrhage and the negative angiogram. Ho KH. **Singapore Med J** 1988 Aug;29(4):311–2 (17 ref.)

[Direct detection of intracranial aneurysms by computerized tomography] Sąsiadek M, et al. **Pol Przegl Radiol (Warszawa)** 1988 Mar–Apr;52(2):58–61 (Eng. Abstr.) **(Pol)**

SURGERY

Early surgical repair of large intracranial saccular aneurysms. Auer LM, et al. **Acta Neurochir (Wien)** 1988;95(3–4):95–8

Results of treatment for cerebral saccular aneurysms in a small neurosurgical unit—evaluation of early operation and nimodipine treatment. Hillman J, et al. **Acta Neurochir (Wien)** 1988;94(1–2):28–31

Arterial hypertension in neurosurgical emergencies. Plets C. **Am J Cardiol** 1989 Feb 2;63(6):40C–42C

Intracranial operation within seven days of aneurysmal subarachnoid hemorrhage. Results in 150 patients. Adams HP Jr, et al. **Arch Neurol** 1988 Oct;45(10):1065–9

Performance in free recall following rupture and repair of intracranial aneurysm. Richardson JT. **Brain Cogn** 1989 Mar;9(2):210–26

Ruptured intracranial arterial aneurysms of children and adolescents. Surgical and total management results. Heiskanen O. **Childs Nerv Syst** 1989 Apr;5(2):66–70

Timing of aneurysm surgery. Comparison of results of early and delayed surgical intervention. Seifert V, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(5):291–7

The effects of earlier surgery and shorter bedrest on the outcome in patients with subarachnoid haemorrhage. Juvela S, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun; 52(6):776–7

A universal subarachnoid hemorrhage scale: report of a committee of the World Federation of Neurosurgical Societies [letter] Teasdale GM, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1457

Effect of nimodipine on the outcome of patients after aneurysmal subarachnoid hemorrhage and surgery. Ohman J, et al. **J Neurosurg** 1988 Nov;69(5):683–6

Delayed ischemic deficit after SAH and aneurysm clipping [letter] Shiokawa Y, et al. **J Neurosurg** 1989 Jun;70(6):970–1

Timing of surgery for cerebral aneurysms: a plea for early referral. Dorsch NW, et al. **Med J Aust** 1989 Feb 20; 150(4):183, 187–8

The calcium entry blocker nimodipine improves the quality of life of patients operated on for cerebral aneurysms. A 5-year follow-up analysis. Kostron H, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31(5):150–3

Long-term outcome of the management of ruptured intracranial aneurysm. Review of 328 consecutive patients treated over a period of 12 years. Deruty R, et al. **Neurol Res** 1988 Dec;10(4):217–20

Evaluation of dead cases of ruptured intracranial aneurysms with special reference to a comparison between patients with early operations and unoperated cases. Takahashi S, et al. **Neurol Res** 1988 Jun;10(2):69–72

Aneurysmal subarachnoid hemorrhage: prevention of delayed ischemic dysfunction with intravenous nimodipine. Ljunggren B, et al. **Neurosurg Rev** 1987;10(4):255–63 (64 ref.)

Transluminal angioplasty of intracerebral vessels for cerebral arterial spasm: reversal of neurological deficits after delayed treatment. Barnwell SL, et al. **Neurosurgery** 1989 Sep;25(3):424–9

Temporary vessel occlusion and barbiturate protection in cerebral aneurysm surgery. McDermott MW, et al. **Neurosurgery** 1989 Jul;25(1):54–61; discussion 61–2

Intraoperative ventricular puncture [letter] Rengachary SS. **Neurosurgery** 1989 Jan;24(1):140

Late magnetic resonance imaging related to neurobehavioral functioning after aneurysmal subarachnoid hemorrhage. Romner B, et al. **Neurosurgery** 1989 Sep;25(3):390–6; discussion 396–7

Outcome of aneurysmal subarachnoid hemorrhage in a hospital population: a prospective study including early operation, intravenous nimodipine, and transcranial Doppler ultrasound. Seiler RW, et al. **Neurosurgery** 1988 Nov;23(5):598–604

Early aneurysm surgery and prophylactic hypervolemic hypertensive therapy for the treatment of aneurysmal subarachnoid hemorrhage. Solomon RA, et al. **Neurosurgery** 1988 Dec;23(6):699–704

Intracranial extradural pressure monitoring after direct operation on ruptured cerebral aneurysms. Takeuchi S, et al. **Neurosurgery** 1989 Jun;24(6):878–83

Intraoperative ventricular puncture [letter; comment] Volpin L, et al. **Neurosurgery** 1989 Jun;24(6):959. **Comment on:** Neurosurgery 1988 Jun;22(6 Pt 1):1107–9

Rupture of a previously documented asymptomatic aneurysm enhances the argument for prophylactic surgical intervention. Solomon RA, et al. **Surg Neurol** 1988 Oct; 30(4):321–3

[Therapy of aneurysm-induced subarachnoid hemorrhage] Mehdorn HM, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31 Suppl 1:175–8 (Eng. Abstr.) **(Ger)**

[Early surgical treatment of ruptured intracranial aneurysm] Marchel A, et al. **Pol Tyg Lek** 1988 Jun 6;43(23):739–41 (Eng. Abstr.) **(Pol)**

[Surgical treatment of intracranial hematoma in the acute period of rupture of cerebral aneurysm] Lebedev VV, et al. **Zh Vopr Neirokhir** 1988 Jul-Aug;(4):9–13 (Eng. Abstr.) **(Rus)**

[Effects of 1% isoflurane on intracranial pressure under normocapnic conditions] Gómez Sainz JJ, et al. **Rev Esp Anestesiol Reanim** 1988 Jul-Aug;35(4):187–90 (Eng. Abstr.) **(Spa)**

THERAPY

Spontaneous subarachnoid haemorrhage: expert system for appraisal of the prognosis and computer-supported decision for therapy. Spitzer K, et al. **J Neurol** 1988 Jul; 235(6):335–42

[Therapy of subarachnoid hemorrhage] Henze T, et al. **Dtsch Med Wochenschr** 1989 Apr 28;114(17):675–7 **(Ger)**

[Intensive care problems in subarachnoid hemorrhage] Loebe FM, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:60–2 **(Ger)**

[Substantiation of puncture perfusion of the subarachnoid space in experiments with biomanikins] Starykh VS, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):86–9 (Eng. Abstr.) **(Rus)**

[Use of puncture perfusion in the treatment of patients with brain contusions complicated by subarachnoid hemorrhage] Starykh VS. **Zh Nevropatol Psikhiatr** 1988;88(12):25–7 (Eng. Abstr.) **(Rus)**

SUBARACHNOID PRESSURE see **INTRACRANIAL PRESSURE**

SUBARACHNOID SPACE

Subarachnoid analgesia with hyperbaric 0.5% bupivacaine: effect of a 60-min period of sitting. Povey HM, et al. **Acta Anaesthesiol Scand** 1989 May;33(4):295–7

Spontaneous bronchial-subarachnoid fistula: an unusual cause of pneumocephalus. Lerner EJ, et al. **AJNR** 1989 Sep-Oct; 10(5 Suppl):S103

Acquired spinal subarachnoid cysts: evaluation with MR, CT myelography, and intraoperative sonography. Sklar E, et al. **AJNR** 1989 Sep-Oct;10(5):1097–104

A non-traumatic approach to ventral subarachnoid space near circle of Willis. Lacy PS. **J Neurosci Methods** 1988 Oct;25(3):239–42

Post-operative analgesia after subarachnoid administration of mixture of buprenorphine and lignocaine. Dasgupta D, et al. **J Postgrad Med** 1988 Oct;34(4):205–10

[A rhinogenous abscess of the frontal and parietal lobes of the brain rupturing into the subarachnoid space with a favorable outcome] Kozlov VS, et al. **Vestn Otorinolaringol** 1988 Nov-Dec;(6):67–8 **(Rus)**

ANATOMY & HISTOLOGY

Ultrasound measurement of the subarachnoid space in infants. Govaert P, et al. **Eur J Pediatr** 1989 Feb;148(5):412–3

DRUG EFFECTS

Investigation of the vasoconstrictor action of subarachnoid haemoglobin in the pig cerebral circulation in vivo. Byrne JV, et al. **Br J Pharmacol** 1989 Jul;97(3):669–74

An experimental evaluation of response to contrast media: Pantopaque, iopamidol, and iohexol in the subarachnoid space. Paşaoğlu A, et al. **Invest Radiol** 1988 Oct; 23(10):762–6

METABOLISM

High levels of NPY in rabbit cerebrospinal fluid and immunohistochemical analysis of possible sources. McDonald JK, et al. **Brain Res** 1988 Nov 1;463(2):259–67

[Infiltration of India ink from subarachnoid space to nasal mucosa along olfactory nerves in rabbits] Yamazumi H. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr;92(4):608–16 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

[Possible roles of adhesive factor, stromal fibronectin, and peanut agglutinin receptor in subarachnoid dissemination of brain tumor cells] Kuratsu J, et al. **Neurol Med Chir (Tokyo)** 1989 Feb;29(2):84–7 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

[Prediction of the intracranial hypertension degree and the course of the brain injury from the initial score of basal cisterns] Convert J, et al. **Agressologie** 1988 Apr;29(4):273–9 (Eng. Abstr.) **(Fre)**

SUBCELLULAR FRACTIONS

Partial characterization of suppressor factors in spleen cell culture supernatants of Mycobacterium lepraemurium-infected mice. Richard L, et al. **Adv Exp Med Biol** 1988;239:279–85

Parameters of activation of the membrane-bound O2- generating oxidase from bovine neutrophils in a cell-free system. Pilloud MC, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):783–90

Studies on lysine:N6-hydroxylation by cell-free systems of Aerobacter aerogenes 62-1. Goh CJ, et al. **Biochim Biophys Acta** 1989 Mar 24;990(3):240–5

Respiratory burst oxidase activation can be dissociated from phosphatidylinositol bisphosphate degradation in a cell-free system from human neutrophils. Traynor AE, et al. **Blood** 1989 Jan;73(1):296–300

Role of culture supernatant of cytotoxic/cytostatic macrophages in activation of murine resident peritoneal macrophages. Hashimoto S, et al. **Cancer Immunol Immunother** 1989;28(4):253–9

Ki-1 (CD30) antigen is released by Ki-1-positive tumor cells in vitro and in vivo. I. Partial characterization of soluble Ki-1 antigen and detection of the antigen in cell culture supernatants and in serum by an enzyme-linked immunosorbent assay. Josimovic-Alasevic O, et al. **Eur J Immunol** 1989 Jan;19(1):157–62

Activation of the superoxide forming NADPH oxidase in a cell-free system by sodium dodecyl sulfate. Absolute lipid dependence of the solubilized enzyme. Shpungin S, et al. **J Biol Chem** 1989 Jun 5;264(16):9195–203

Enhancement of IL-2-induced T cell proliferation by a novel factor(s) present in murine spleen dendritic cell-T cell culture supernatants. Everson MP, et al. **J Immunol** 1989 Feb 15;142(4):1183–94

Characterization of a method using viable human target cells as the solid phase in a cell concentration fluorescence immunoassay (CCFIA) for screening of monoclonal antibodies and hybridoma supernatants. Avner B, et al. **J Immunol Methods** 1988 Oct 4;113(1):123–35

ANALYSIS

Subcellular distribution of cardiac fatty acid-binding protein in bovine heart muscle and quantitation with an enzyme-linked immunosorbent assay. Börchers T, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):54–61

Subcellular localization of sialic acid in human brain tumors. Kökoğlu E, et al. **Cancer Lett** 1988 Dec 1;43(1-2):29–31

Subcellular calcium content in cardiomyopathic hamster hearts in vivo: an electron probe study. Bond M, et al. **Circ Res** 1989 May;64(5):1001–12

Discontinuous buffer systems optimized for the agarose gel electrophoresis of subcellular particles. Orbán L, et al. **Electrophoresis** 1988 Apr;9(4):167–71

Subcellular localization of aldehyde dehydrogenase isozymes in human liver. Takase S, et al. **Gastroenterol Jpn** 1989 Feb;24(1):31–9

Properties of light and heavy vesicles simultaneously prepared from hog gastric mucosae. Asano S, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):672–7

Immunological and chemical characterization of hamster brain polyribosomes-cytomatrix complexes. Bouhtiauy I, et al. **Neurochem Res** 1989 Jul;14(7):635–40

Role of phosphatidylserine in the cellular and subcellular lung distribution of quinidine in rats. Nishiura A, et al. **Pharm Res** 1988 Apr;5(4):209–13

Identification and subcellular localization of proteins that are rapidly phosphorylated in tyrosine in response to colony-stimulating factor 1. Sengupta A, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8062–6

Biochemical toxicology of argemone alkaloids. III. Effect on lipid peroxidation in different subcellular fractions of the liver. Upreti KK, et al. **Toxicol Lett** 1988 Sep; 42(3):301–8

[In vivo effect of L-thyroxine on carbohydrate content of glycoproteins in subcellular fractions of the rat liver] Panasiuk EN, et al. **Vopr Med Khim** 1988 Nov-Dec; 34(6):64–71 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Studies on the nature of superoxide dismutase activity in sheep liver subcellular fractions. Konstantinova SG, et al. **Acta Physiol Pharmacol Bulg** 1988;14(4):71–7

Further studies on rat cathepsin E: subcellular localization and existence of the active subunit form. Yonezawa S, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):176–83

Subcellular distribution of protein kinase C in rat adrenal glomerulosa cells. Faragó A, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):628–33

Subcellular localization of glycogen synthase with monoclonal antibodies. Lane RD, et al. **Biochem Int** 1989 May;18(5):961–70

Subcellular localization of glucose-6-phosphatase in animal tissues. Vorhaben JE, et al. **Comp Biochem Physiol [B]** 1979; 62(1):85–7

Subcellular localization and kinetic properties of phosphatidylinositol 4,5-bisphosphate phospholipase C and inositol phosphate enzymes from human peripheral blood mononuclear cells. Graber R, et al. **Enzyme** 1989; 41(1):17–26

Subcellular localization of UDP-glucuronyltransferase by differential centrifugation. Changes produced by pretreatment of rats with secretin, glucagon, vasoactive intestinal polypeptide and phenobarbitone. Ricci GL, et al. **Enzyme** 1989;41(2):75–86

Intracellular localization of inositol-phospholipid-metabolizing enzymes in rabbit fast-twitch skeletal muscle. Can D-myo-inositol 1,4,5-trisphosphate play a role in excitation-contraction coupling? Varsányi M, et al. **Eur J Biochem** 1989 Feb 1; 179(2):473–9

Effect of homeopathic dilutions on subcellular enzymatic activity. Petit C, et al. **Hum Toxicol** 1989 Mar;8(2):125–9

Organic nitrate reductase: reassessment of its subcellular localization and tissue distribution and its relationship to the glutathione transferases. Taylor IW, et al. **Int J Biochem** 1989;21(1):67–71

Growth-dependent subcellular redistribution of protein kinase C in cultured porcine aortic endothelial cells. Uratsuji Y, et al. **J Cell Physiol** 1988 Sep;136(3):431–8

Distribution of activity converting 4-aminobutyraldehyde to gamma-aminobutyric acid in subcellular fractions of mouse brain. Asakura T, et al. **J Neurochem** 1989 Feb;52(2):448–52

Subcellular distribution of tyrosine hydroxylase in some catecholaminergic rat brain areas determined by a quantitative immunoblot assay. Gillon JY, et al. **J Neurochem** 1989 Mar;52(3):677–83

Proteinases of Entamoeba histolytica associated with different subcellular fractions. Ostoa-Saloma P, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2-3):133–43

On the compartmentalization of catalase, fatty acyl-CoA oxidase and urate oxidase in mammalian livers, and the influence of clofibrate treatment on this microlocalization. Hemsley A, et al. **Mol Cell Biochem** 1988 Oct;83(2):187–94

Translocation of protein kinase C to subcellular fractions of human neutrophils. Christiansen NO, et al. **Scand J Immunol** 1989 Apr;29(4):409–16

[Activity of 5-alpha- and 5-beta-steroid reductases in subcellular liver structures from rats bearing Walker carcinosarcoma] Ulinskaite AP, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):77–81 (Eng. Abstr.) **(Rus)**

METABOLISM

Effect of chronic ethanol consumption on the content of alpha-tocopherol in subcellular fractions of rat liver. Hagen BF, et al. **Alcoholism (NY)** 1989 Apr;13(2):246–51

Subcellular distribution of malate-aspartate cycle intermediates during normoxia and anoxia in the heart. Wiesner RJ, et al. **Biochim Biophys Acta** 1988 Oct 26;

936(1):114–23
Human platelet-derived mitogens. II. Subcellular localization of insulinlike growth factor I to the alpha-granule and release in response to thrombin. Karey KP, et al. **Blood** 1989 Aug 15;74(3):1093–100
Neurochemical characteristics of a postsynaptic density fraction isolated from adult canine hippocampus. Wu K, et al. **Brain Res** 1988 Aug 2;457(1):98–112
Loss of D1 and D2 dopamine receptors and muscarinic cholinergic receptors in rat brain following in vitro polytron homogenization. Norman AB, et al. **Brain Res Bull** 1989 Apr;22(4):633–6
Subcellular distribution of compounds in biosystems. Baláž S, et al. **Bull Math Biol** 1988;50(4):367–78
Subcellular distribution of laminin and prolactin in stimulated and blocked prolactin cells in the pituitary of lactating rats. Vila-Porcile E, et al. **Cell Tissue Res** 1988;254(3):617–27
Regional and subcellular distribution of [3H]nitrendipine binding sites in SHR and WKY rats. Ross D, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S94–7
Subcellular distribution and membrane association of human neutrophil substrates for ADP-ribosylation by pertussis toxin and cholera toxin. Volpp BD, et al. **J Immunol** 1989 May 1;142(9):3206–12
Hydrolysis of 2',3'-cyclic adenosine monophosphate and 3',5'-cyclic adenosine monophosphate in subcellular fractions of normal and neoplastic mouse spleen. Konings AW, et al. **Life Sci** 1974 Aug 1;15(3):491–9
Subcellular distribution of basic drugs accumulated in the isolated perfused lung. Yoshida H, et al. **Pharm Res** 1987 Feb;4(1):50–3
Epinephrine induces changes in the subcellular distribution of the inhibitory GTP-binding protein Gi alpha-2 and a 38-kDa phosphorylated protein in the human platelet. Crouch MF, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(6):1776–80
Metabolism of tritiated water in the cell nucleus and intracellular substances of the rat. Takizawa Y, et al. **Radiat Res** 1989 Mar;117(3):523–30
Effects of Ca2+ antagonists on 45Ca2+ uptake by rat whole brain P1 and P2 fractions. Honda H, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jun; 64(3):463–70
[Effect of cycloheximide on lipid metabolism in cells, nuclei and subcellular fractions in the rat liver] Alesenko AV, et al. **Biokhimiia** 1989 Feb;54(2):328–37 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Abstracts of papers presented at the joint meeting of the American Society for Cell Biology and the American Society for Biochemistry and Molecular Biology. 29 January–2 February 1989, San Francisco, California. **J Cell Biol** 1988 Dec;107(6 Pt 3):1a–1007a

SUBCHONDRAL CYSTS see **BONE CYSTS**

SUBCLAVIAN ARTERY

Congenital subclavian arterial stenosis. Nogami T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):619–21
Isolation of the right subclavian artery [letter] Nath H. **AJR** 1989 Feb;152(2):430–1
Unilateral digital ischaemia secondary to embolisation from subclavian atheroma. Bryan AJ, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):140–2
PTA of the subclavian and innominate artery: short- and long-term results. Jaschke W, et al. **Ann Radiol (Paris)** 1989;32(1):29–33
Left subclavian arterioesophageal fistula induced by a foreign body. Mok CK, et al. **Ann Thorac Surg** 1989 Mar; 47(3):458–60
The rudimentary first rib. A cause of thoracic outlet syndrome with arterial compromise. Baumgartner F, et al. **Arch Surg** 1989 Sep;124(9):1090–2
Subclavian arteritis. Karanjia ND, et al. **Br J Surg** 1989 Aug; 76(8):824–5
Subclavian artery aneurysm caused by cervical rib: case report and review. Engel A, et al. **Cardiovasc Intervent Radiol** 1989 Mar–Apr;12(2):92–4 (15 ref.)
Percutaneous transluminal angioplasty for innominate artery stenosis and total occlusion of subclavian artery in Takayasu's-type arteritis. Staller BJ, et al. **Cathet Cardiovasc Diagn** 1989 Feb;16(2):91–4
Six cases of subclavian stenosis treated by percutaneous angioplasty. Cook AM, et al. **Clin Radiol** 1989 Jul; 40(4):352–4
Color Doppler evaluation of arterial stenoses and occlusions involving the neck and thoracic inlet. Erickson SJ, et al. **Radiographics** 1989 May;9(3):389–406
Brachiocephalic vessels in the elderly: technique for catheterization. Mewissen MW, et al. **Radiology** 1989 Mar; 170(3 Pt 1):887
Subclavian artery angioplasty and the origin of the vertebral artery. Vitek JJ. **Radiology** 1989 Feb;170(2):407–9
Subclavian artery–to–innominate vein fistula: a case caused by subclavian venous catheterization. Pabst TS 3d, et al. **Surgery** 1989 Jun;105(6):801–3 (17 ref.)
[Angioplasty of the subclavian artery. The technic, early and late results] Düber C, et al. **Dtsch Med Wochenschr** 1989 Mar 31;114(13):496–502 (Eng. Abstr.) (Ger)
[Subclavian occlusion and an anomaly of the vertebral artery with subclavian steal syndrome. Fibrinolysis and PTA therapy] Lederer W, et al. **ROFO** 1989 Apr;150(4):477–9 (Ger)
[Vascular disease of the supra-aortic trunk (SAT). Clinical, velocimetric and risk factors findings in a group of elderly subjects] Gallo E, et al. **Minerva Cardioangiol** 1988 Dec; 36(12):601–4 (Eng. Abstr.) (Ita)
[Extra-anatomical bypass in the treatment of stenotico-obstructive lesions of the subclavian and vertebral arteries] Barile C, et al. **Minerva Chir** 1989 Mar 15;44(5):877–81 (8 ref.) (Eng. Abstr.) (Ita)
[Multicentric intrathoracic obstructions of the supra-aortic trunks. Presentation of a clinical case] Bortolani E, et al. **Minerva Chir** 1988 Nov 30;43(22):1977–82 (Eng. Abstr.) (Ita)
[Pseudoaneurysm of the subclavian artery. Case report] Bortolani E, et al. **Minerva Chir** 1989 Apr 15;44(7):1183–92 (Eng. Abstr.) (Ita)
[Percutaneous transluminal angioplasty of supra-aortic vessels. Presentation of 16 cases] Belli L, et al. **Radiol Med (Torino)** 1988 Sep;76(3):174–8 (Eng. Abstr.) (Ita)
[A case of A-V fistula with severe hemolysis following internal jugular venipuncture] Makuuchi H, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1310–3 (Eng. Abstr.) (Jpn)
[Clinical evaluation of repeat-PTA for post-PTA re-stenosis] Kodera K, et al. **Rinsho Hoshasen** 1988 Sep;33(9):995–7 (Eng. Abstr.) (Jpn)
[Report of a case of iatrogenic pseudoaneurysm of right subclavian artery] Ogura Y, et al. **Rinsho Hoshasen** 1989 Feb;34(2):265–8 (Eng. Abstr.) (Jpn)
[A case of erroneous diagnosis of rheumatic heart defect in a patient with nonspecific aortoarteritis] Saksonov SI, et al. **Ter Arkh** 1989;61(2):123–5 (Rus)
[Neurologic manifestations of nonspecific aorto-arteritis of the branches of the aortic arch] Kuperberg EB, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):17–22 (Eng. Abstr.) (Rus)

ABNORMALITIES

Intravascular embolization of a congenital subclavian arteriovenous fistula. Yang PJ, et al. **AJNR** 1989 Sep–Oct; 10(5 Suppl):S25–7
Vertebral and right subclavian artery abnormalities in the Down syndrome. Rathore MH, et al. **Am J Cardiol** 1989 Jun 15;63(20):1528–9
Successful management of aberrant subclavian artery–esophageal fistula in an infant. Guzzetta PC, et al. **Ann Thorac Surg** 1989 Feb;47(2):308–9
Subclavian steal syndrome in a congenitaly anomalous subclavian artery: a case report. De Vleeschauwer P, et al. **Ann Vasc Surg** 1986 Nov;1(3):389–91
Aberrant right subclavian artery aneurysm: report of a case and review of the literature. Jebara VA, et al. **Ann Vasc Surg** 1989 Jan;3(1):68–73 (35 ref.)
Supraclavicular approach for the simultaneous treatment of dysphagia lusoria and thoracic outlet syndrome. Valentine RJ, et al. **Ann Vasc Surg** 1988 Oct;2(4):378–80
Real-time echo-Doppler Duplex Scanner in the evaluation of patients with Poland sequence. Merlob P, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):103–8
Aneurysm of aberrant right subclavian artery and Ondine's curse. Hardy JD. **J Thorac Cardiovasc Surg** 1989 Feb; 97(2):319–20
Surgical treatment of aberrant right subclavian artery aneurysms [letter] Jebara VA, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):297–8
Acquired diseases of aberrant subclavian arteries. Mulligan S, et al. **J Thorac Imaging** 1989 Apr;4(2):76–81
A modified extrathoracic approach to the treatment of dysphagia lusoria. Valentine RJ, et al. **J Vasc Surg** 1987 Mar;5(3):498–500
Right aortic arch with atresia of aberrant left subclavian artery: case report. Matsunaga N, et al. **Radiat Med** 1989 Jan–Feb;7(1):10–2
Ruptured anomalous right subclavian artery: aneurysm or diverticulum? Felson B. **Semin Roentgenol** 1989 Apr; 24(2):121–6 (17 ref.)
Aneurysm of an aberrant right subclavian artery with bleeding into the esophageal wall. Kullnig P. **Semin Roentgenol** 1989 Apr;24(2):75–6
Translocation of aberrant right subclavian artery in dysphagia lusoria in children through a right thoracotomy. van Son JA, et al. **Thorac Cardiovasc Surg** 1989 Feb;37(1):52–4
Aneurysms of aberrant right subclavian artery: a rare cause of the superior vena cava syndrome. Yavuzer S, et al. **Vasa** 1989;18(1):69–73 (39 ref.)
[Congenital vascular rings in children (letter)] Hüpscher DN. **Ned Tijdschr Geneeskd** 1989 Mar 25;133(12):634 (Dut)
[Congenital vascular rings in children] van Son JA, et al. **Ned Tijdschr Geneeskd** 1989 Jan 14;133(2):76–80 (Eng. Abstr.) (Dut)
[Aneurysm of the arteria lusoria. Case report and review of the literature] Jauch KW, et al. **Chirurg** 1988 Jun; 59(6):418–24 (15 ref.) (Eng. Abstr.) (Ger)
[Right aortic arch with isolation of the left subclavian artery. A case report] Odagiri S, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1734–7 (Eng. Abstr.) (Jpn)
[A case of right aortic arch with the stenotic left subclavian artery at its origin complaining of left nuchal pain] Endo M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb; 37(2):383–5 (8 ref.) (Eng. Abstr.) (Jpn)
[Successful repair of a coarctation complex with an anomalous right subclavian artery in an infant] Ishihara K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan; 37(1):191–4 (Eng. Abstr.) (Jpn)
[Congenital fistula between the left subclavian artery and the innominate vein. A rare cause of intractable insufficiency in the newborn infant] Romero M, et al. **Rev Esp Cardiol** 1988 Dec;41(10):630–2 (Eng. Abstr.) (Spa)

INJURIES

Giant false aneurysm of the subclavian artery. An unusual complication of internal jugular venous cannulation. Huddy SP, et al. **Anaesthesia** 1989 Jul;44(7):588–9
Emergency versus delayed repair of severe brachial plexus injuries. Magalon G, et al. **Clin Orthop** 1988 Dec;(237):32–5
Exsanguinating upper extremity vascular injury: is an initial approach by clavicular resection adequate? Spence RK, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):450–3
Scapulothoracic dissociation (closed avulsion of the scapula, subclavian artery, and brachial plexus): a newly recognized variant, a new classification, and a review of the literature and treatment options. Ebraheim NA, et al. **J Orthop Trauma** 1987;1(1):18–23 (24 ref.)
Nonpenetrating vascular injury to the subclavian artery. Posner MP, et al. **J Vasc Surg** 1988 Nov;8(5):611–7 (18 ref.)
[Vascular injuries during percutaneous catheterization of the lower neck in children] Ricard J, et al. **Chir Pediatr** 1989; 30(1):25–9 (Eng. Abstr.) (Fre)
[A case of traumatic subclavian steal syndrome] Saito H, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):138–40 (9 ref.) (Eng. Abstr.) (Jpn)
[Traumatic injury of the subclavian artery] Rabidzhanov MR, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):134–5 (Rus)
[Falconer-Weddell costoclavicular syndrome in sportsmen] Greida BP. **Vestn Khir** 1988 Oct;141(10):121–2 (Rus)
[Rupture of the left subclavian artery] Rabidzhanov MR, et al. **Vestn Khir** 1988 May;140(5):75 (Rus)

PATHOLOGY

A case of subclavian steal syndrome with a specific form of obstruction of the right proximal subclavian artery. Ishikawa T, et al. **Jpn Circ J** 1988 Oct;52(10):1216–20 (16 ref.)

PHYSIOPATHOLOGY

Radial artery pressures compared with subclavian artery pressure during coronary artery surgery. Bazaral MG, et al. **Cleve Clin J Med** 1988 Sep–Oct;55(5):448–57
[Non-invasive methods of examination in the diagnosis of hemodynamic phenomena of "borrowing" and "stealing" of blood] Bokhya NK, et al. **Kardiologiia** 1988 Dec; 28(12):68–71 (Eng. Abstr.) (Rus)

RADIOGRAPHY

[Comparison of angiography and continuous-wave Doppler sonography in the diagnosis of subclavian stenoses and of the subclavian steal syndrome] Ackermann H, et al. **ROFO** 1989 Feb;150(2):187–91 (Eng. Abstr.) (Ger)
[Angiographic findings in a patient with spontaneous hemopneumothorax] Tsukioka K, et al. **Kyobu Geka** 1989 Jun;42(6):478–81 (Eng. Abstr.) (Jpn)
[Balloon dilatation of subclavian artery stenosis and brachiocephalic trunk stenosis] Thomassen L, et al. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1063–8 (Eng. Abstr.) (Nor)
[The thoracic outlet compression syndrome—angiographic diagnosis of vascular complications] Klanfar Z, et al. **Lijec Vjesn** 1988 Nov;110(11):361–8 (Eng. Abstr.) (Scr)

SURGERY

Response of upper limb blood flow to handgrip exercise after Blalock-Taussig operation (for tetralogy of Fallot) or subclavian flap operation (for aortic isthmic coarctation). Joyner MJ, et al. **Am J Cardiol** 1989 Jun 1;63(18):1379–84
Retrosternal subclavian-femoral artery bypass. Chauve A, et al. **Ann Vasc Surg** 1989 Jan;3(1):74–6
Direct subclavian-carotid anastomosis for the subclavian steal syndrome. Weimann S, et al. **Eur J Vasc Surg** 1987 Oct;1(5):305–10
Current status of vascular grafting in supraaortic trunks. Personal experience. Courbier R, et al. **Int Surg** 1988 Oct–Dec;73(4):210–2
Late results of the subclavian flap repair of coarctation in infancy. Baudet E, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):445–9
Left subclavian–left coronary artery anastomosis for anomalous origin of the left coronary artery. Long-term follow-up. Kesler KA, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):25–9
A new technique for use of an anomalous subclavian artery for a systemic–pulmonary arterial shunt. Yamaguchi M, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):110–3
Seizures following subclavian-carotid bypass. Ammar AD. **J Vasc Surg** 1987 Mar;5(3):483–5
Experience with PTFE-prostheses for construction of

Blalock–Taussig shunts. Rigler B, et al. **Life Support Syst** 1983;1 Suppl 1:394–5

[Subclavian–carotid transposition as surgical therapy of subclavian steal syndrome: 5–year results] Weimann S, et al. **Vasa Suppl** 1988;23:232–5 (Ger)

[Surgical treatment of extracranial occlusive processes of the vertebral artery by construction of a subclavio–vertebral bypass] Bürger K, et al. **Zentralbl Chir** 1989;114(3):181–9 (Eng. Abstr.) (Ger)

[The inter–subclavian bypass: our approach in the subclavian steal syndrome] Battisti G, et al. **Ann Ital Chir** 1987; 59(1–6):31–4 (Eng. Abstr.) (Ita)

[Seroma: a complication of systemic–pulmonary shunt with a tubular prosthesis] Marianeschi SM, et al. **Cardiologia** 1989 Mar;34(3):271–4 (Eng. Abstr.) (Ita)

[Loco–regional complications in the surgery of the subclavian artery] Bortolani EM, et al. **Minerva Chir** 1989 Apr 30; 44(8):1213–5 (Eng. Abstr.) (Ita)

[Balloon dilatation angioplasty of stenotic pulmonary artery simultaneously with a Blalock–Taussig shunt in extremely tetralogy of Fallot] Ishii K, et al. **Kyobu Geka** 1988 Nov; 41(12):971–5 (Eng. Abstr.) (Jpn)

[An experience of isthmosubclavioplasty operation on an infant with aortic coarctation] Nawa S, et al. **Kyobu Geka** 1988 May;41(6):517–20 (Eng. Abstr.) (Jpn)

[A case of abdominal aneurysm accompanied by an aneurysm of left subclavian artery] Nagami H, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1142–5 (Eng. Abstr.) (Jpn)

[Use of a subclavian–femoral prosthesis in treating a complication after implantation of a bifurcated aortic prosthesis in a patient with hypertension] Grajek S, et al. **Kardiol Pol** 1988;31(12):780–5 (Eng. Abstr.) (Pol)

[Surgical treatment of occlusive diseases of the carotid and subclavian arteries] Diuzhikov AA, et al. **Kardiologiia** 1989 Jun;29(6):110–1 (Rus)

[A method of reconstruction of the orifice of the vertebral artery] Barkauskas EM, et al. **Khirurgiia (Mosk)** 1988 Dec; (12):96–102 (Rus)

[Physical work capacity and social adaptation of patients with tetralogy of Fallot who have undergone the Blalock–Taussig operation at an early age] Il'in RN, et al. **Pediatriia** 1988;(6):53–7 (Rus)

TRANSPLANTATION

Recurrence of aortic coarctation following repair by re–implantation of the subclavian artery. Ladusans EJ, et al. **Int J Cardiol** 1989 Jun;23(3):321–5

SUBCLAVIAN STEAL SYNDROME

CONGENITAL

Right aortic arch with atresia of aberrant left subclavian artery: case report. Matsunaga N, et al. **Radiat Med** 1989 Jan–Feb;7(1):10–2

[Brachiocephalic arterial aplasia of the right aortic arch with subclavian steal syndrome] Kurata H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):171–4 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Doppler diagnosis of intermittent subclavian steal during systole caused by axillary–axillary bypass graft. Kotval PS, et al. **J Ultrasound Med** 1988 Oct;7(10):593–5

Dopplersonographic diagnosis of subclavian steal in infants with coarctation of the aorta and interrupted aortic arch. Deeg KH, et al. **Pediatr Radiol** 1989;19(3):163–6

Color Doppler evaluation of arterial stenoses and occlusions involving the neck and thoracic inlet. Erickson SJ, et al. **Radiographics** 1989 May;9(3):389–406

[Transcranial Doppler ultrasonic examination in vertebro–basilar circulatory pathology] De Bray JM, et al. **J Mal Vasc** 1989;14(3):202–5 (Eng. Abstr.) (Fre)

[Comparison of angiography and continuous–wave Doppler sonography in the diagnosis of subclavian stenoses and of the subclavian steal syndrome] Ackermann H, et al. **ROFO** 1989 Feb;150(2):187–91 (Eng. Abstr.) (Ger)

[Non–invasive methods of examination in the diagnosis of hemodynamic phenomena of "borrowing" and "stealing" of blood] Bokhya NK, et al. **Kardiologiia** 1988 Dec; 28(12):68–71 (Eng. Abstr.) (Rus)

ETIOLOGY

Review of coronary–subclavian steal following internal mammary artery–coronary artery bypass surgery. Olsen CO, et al. **Ann Thorac Surg** 1988 Dec;46(6):675–8 (19 ref.)

[Traumatic subclavian steal syndrome. Report of a case] Kinoshita Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun; 89(6):967–70 (13 ref.) (Eng. Abstr.) (Jpn)

[A case of traumatic subclavian steal syndrome] Saito H, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):138–40 (9 ref.) (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Natural history of subclavian steal syndrome. Moran KT, et al. **Am Surg** 1988 Nov;54(11):643–4

Basilar artery blood flow in subclavian steal. Bornstein NM, et al. **Can J Neurol Sci** 1988 Nov;15(4):417–9

RADIOGRAPHY

Subclavian steal syndrome in a congenitaly anomalous subclavian artery: a case report. De Vleeschauwer P, et al. **Ann Vasc Surg** 1986 Nov;1(3):389–91

SURGERY

Subclavian steal syndrome: various causes and management. Ko ST, et al. **Chic Med Sch Q** 1972;31(1–4):59–68

Direct subclavian–carotid anastomosis for the subclavian steal syndrome. Weimann S, et al. **Eur J Vasc Surg** 1987 Oct;1(5):305–10

A case of subclavian steal syndrome with a specific form of obstruction of the right proximal subclavian artery. Ishikawa T, et al. **Jpn Circ J** 1988 Oct;52(10):1216–20 (16 ref.)

[Current surgical therapy of stenoses of arteries supplying the brain] Koch G. **Vasa Suppl** 1988;26:140–2 (Ger)

[Proximal lesions of the subclavian artery and common carotid artery on the left side—experiences with direct anastomosis (transposition)] Teleky B, et al. **Vasa Suppl** 1988;26:157–8 (Ger)

[Subclavian–carotid transposition as surgical therapy of subclavian steal syndrome: 5–year results] Weimann S, et al. **Vasa Suppl** 1988;23:232–5 (Ger)

[The inter–subclavian bypass: our approach in the subclavian steal syndrome] Battisti G, et al. **Ann Ital Chir** 1987; 59(1–6):31–4 (Eng. Abstr.) (Ita)

THERAPY

PTA of the subclavian and innominate artery: short– and long–term results. Jaschke W, et al. **Ann Radiol (Paris)** 1989;32(1):29–33

[Subclavian occlusion and an anomaly of the vertebral artery with subclavian steal syndrome. Fibrinolysis and PTA therapy] Lederer W, et al. **ROFO** 1989 Apr;150(4):477–9 (Ger)

[Percutaneous transluminal angioplasty of subclavian stenoses] Ahmadi A, et al. **Vasa Suppl** 1988;26:85–7 (Ger)

[Treatment of subclavian steal syndrome by percutaneous transluminal angioplasty with temporary balloon occlusion of the vertebral artery. Report of two cases] Minakawa T, et al. **Neurol Med Chir (Tokyo)** 1988 Aug;28(8):802–7 (Jpn)

SUBCLAVIAN VEIN

Ultrasonically guided subclavian vein catheterization. Nolsøe C, et al. **Acta Radiol** 1989 Jan–Feb;30(1):108–9

Upper extremity radionuclide venography in the diagnosis and management of venous disease associated with intravenous catheters. Dhekne RD, et al. **Angiology** 1988 Oct;39(10):907–14

Diagnosis and management of subclavian vein thrombosis occurring in association with subclavian cannulation for hemodialysis. Brady HR, et al. **Blood Purif** 1989;7(4):210–7

The place of first rib resection in the management of axillary–subclavian thrombosis [letter] Scott DJ, et al. **Eur J Vasc Surg** 1987 Oct;1(5):363

"Effort" thrombosis of the axillary and subclavian vein associated with cervical rib and oral contraceptives in a young woman athlete. Aquino BC, et al. **J Am Board Fam Pract** 1989 Jul–Sep;2(3):208–11

Axillary–subclavian venous thrombosis. Brochner G, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):108–11

Use of spiral vein graft to bypass occluded subclavian vein. Jain KM, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct; 29(5):572–3

Resection of the first rib, following deep arm vein thrombolysis in patients with thoracic outlet syndrome. Strange–Vognsen HH, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):430–3

Contamination of subclavian vein catheters: an intraluminal culture method. Jakobsen CJ, et al. **J Hosp Infect** 1989 Apr;13(3):253–60

Implantofix vascular access system: an experience with 19 patients. Alpeter DM Jr, et al. **J Surg Oncol** 1988 Nov; 39(3):210–2

Percutaneous retrieval of a Hickman catheter fragment. Mehta JB, et al. **J Tenn Med Assoc** 1989 Mar;82(3):129–30

High–resolution real–time ultrasonography. Diagnosis and follow–up of jugular and subclavian vein thrombosis. Gaitini D, et al. **J Ultrasound Med** 1988 Nov;7(11):621–7

Internal jugular and subclavian vein thrombosis caused by central venous catheters. Evaluation using Doppler blood flow imaging. Hübsch PJ, et al. **J Ultrasound Med** 1988 Nov;7(11):629–36

Total venous obstruction—a possible complication of transvenous dual–chamber pacing. Koike R, et al. **Jpn Circ J** 1988 Nov;52(11):1293–6 (15 ref.)

Vascular access for haemodialysis [letter; comment] Rello J, et al. **Lancet** 1989 Feb 18;1(8634):379. **Comment on:** Lancet 1988 Dec 24–31;2(8626–8627):1495–6

Subclavian stenosis: a major complication of subclavian dialysis catheters. Barrett N, et al. **Nephrol Dial Transplant** 1988;3(4):423–5

Perforation of superior vena cava by subclavian haemodialysis access cannula—a preventable complication? [letter] Salahudeen AK, et al. **Nephrol Dial Transplant** 1988; 3(3):354–5

Salvage of upper arm access graft in the presence of symptomatic subclavian vein thrombosis. Campistol JM, et al. **Nephron** 1989;51(4):551–2

Development of traumatic arteriovenous fistula after cannulation of the subclavian vein in a chronic–dialysis patient [letter] Cozzupoli P, et al. **Nephron** 1989;51(2):278–9

Subclavian vein thrombosis following fracture of the clavicle: a case report [letter] Kanbar MS. **Orthopedics** 1988 Oct; 11(10):1372, 1374

Simultaneous insulation deterioration associated with side–by–side subclavian placement of two polyurethane leads. Fyke FE 3d. **PACE** 1988 Nov;11(11 Pt 1):1571–4

Fluoroscopic technique of subclavian venous puncture for permanent pacing: a safer and easier approach. Lamas GA, et al. **PACE** 1988 Oct;11(10):1398–401 (3 ref.)

Soft tissue involvement, mediastinal pseudotumor, and venous thrombosis in pustulotic arthro–osteitis. A study of eight new cases. van Holsbeeck M, et al. **Skeletal Radiol** 1989;18(1):1–8

Percutaneous insertion of subclavian venous catheters in infants and children. Bonventre EV, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):203–5

Spontaneous subclavain vein thrombosis: a successful combined approach of local thrombolytic therapy followed by first rib resection [letter] Kunkel JM, et al. **Surgery** 1989 Jul;106(1):114

[Complications of the subclavian vascular approach for hemodialysis] Bourquia A, et al. **Ann Med Interne (Paris)** 1989;140(2):102–3 (19 ref.) (Eng. Abstr.) (Fre)

[Mechanical complications of emergency catheterization of the subclavian vein. Apropos of 202 cases] Lassie P, et al. **Cah Anesthesiol** 1989 May;37(3):221–4 (Fre)

[Venous involvement in the thoracic outlet syndrome (apropos of 30 cases)] Hassen–Khodja R, et al. **Phlebologie** 1988 Nov–Dec;41(4):818–24 (Eng. Abstr.) (Fre)

[Percutaneous transfemoral foreign body removal from the heart or great vessels] Erdmann E. **Dtsch Med Wochenschr** 1988 Oct 14;113(41):1594–7 (Eng. Abstr.) (Ger)

[Percutaneous implantation of an endovascular Gianturco prosthesis in subclavian vein obstruction] Schild H, et al. **ROFO** 1989 Jul;151(1):120–1 (Ger)

[Etiology and long–term course of subclavian vein thrombosis with reference to acute therapy] Häuptli W, et al. **Schweiz Med Wochenschr** 1989 May 20;119(20):647–52 (Eng. Abstr.) (Ger)

[Deep venous thrombosis of the upper extremities] Huber P, et al. **Schweiz Med Wochenschr** 1988 Sep 3; 118(35):1230–6 (Eng. Abstr.) (Ger)

[Emergency vascular access with a double–lumen subclavian catheter] Cavicchioni C, et al. **Minerva Chir** 1988 Sep 15; 43(17):1371–6 (Eng. Abstr.) (Ita)

[Paget–Schroetter–Kristelli syndrome and pregnancy] Makatsariia AD, et al. **Akush Ginekol (Mosk)** 1988 Oct; (10):58–9 (Rus)

[Tactics in using the subclavian vein for infusion therapy] Alakozov VA. **Khirurgiia (Mosk)** 1989 Jun;(6):32–6 (Eng. Abstr.) (Rus)

[Treatment of the Paget–Schroetter syndrome] Frantsev VI, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):90–3 (Eng. Abstr.) (Rus)

[Potentially hazardous complications of central venous catheterization] Sloventantor VIu, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):62–9 (Eng. Abstr.) (Rus)

[Displacement of the catheter into the internal jugular vein during the catheterization of the subclavian vein] Sitnikov VA, et al. **Vestn Khir** 1988 Sep;141(9):136–7 (Rus)

[Occlusion of the subclavian vein—a late complication of the subclavian catheter] Grinfeld B, et al. **Lijec Vjesn** 1988 Sep–Oct;110(9–10):322–4 (Eng. Abstr.) (Scr)

ABNORMALITIES

Intravascular embolization of a congenital subclavian arteriovenous fistula. Yang PJ, et al. **AJNR** 1989 Sep–Oct; 10(5 Suppl):S25–7

ANATOMY & HISTOLOGY

Anatomical bases for a safe method of subclavian venipuncture. Clinical experience in 350 cases. Lechner P, et al. **Surg Radiol Anat** 1989;11(2):91–5

INJURIES

Emergency versus delayed repair of severe brachial plexus injuries. Magalon G, et al. **Clin Orthop** 1988 Dec;(237):32–5

[Falconer–Weddell costoclavicular syndrome in sportsmen] Greida BP. **Vestn Khir** 1988 Oct;141(10):121–2 (Rus)

PATHOLOGY

Venous thrombosis in the neck. The role of real time ultrasound. Williams CE, et al. **Eur J Radiol** 1989 Feb; 9(1):32–6

PHYSIOLOGY

M–mode echovenography: a new technique for the evaluation of venous wall and valve motion. Jäger K, et al. **Cardiovasc Res** 1989 Jan;23(1):25–30

RADIOGRAPHY

Insertion of subclavian hemodialysis catheters in difficult cases: value of fluoroscopy and angiographic techniques. Selby JB, et al. **AJR** 1989 Mar;152(3):641–3
Nonunion of a midshaft clavicle fracture associated with subclavian vein compression. A case report. Koss SD, et al. **Orthop Rev** 1989 Apr;18(4):431–4
Spontaneous subclavian vein thrombosis. Featherstone T. **Scott Med J** 1988 Jun;33(3):270–1
[The importance of subclavian vein stenosis for the treatment of Dupuytren's contracture] Wilhelm A, et al. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):66–71 (Eng. Abstr.) (Ger)

SURGERY

Venous complications of the thoracic outlet syndrome. Jamieson CW. **Eur J Vasc Surg** 1987 Feb;1(1):1–3 (19 ref.)
The place of first rib resection in the management of axillary–subclavian vein thrombosis. Pittam MR, et al. **Eur J Vasc Surg** 1987 Feb;1(1):5–10
Brachial jugular autogenous spiral vein bypass for obstruction of subclavian vein. Taheri SA, et al. **Int Angiol** 1988 Jul–Sep;7(3):278–80
A modified method of vascular access system implantation using the subclavian vein. Sweeney WB. **JPEN J Parenter Enteral Nutr** 1989 May–Jun;13(3):329–30
[Non-invasive evaluation of the optimal access to the veins using ultrasonic flowmetry in continuous cardiac pacing] Babin AV, et al. **Kardiologiia** 1988 Sep;28(9):93–5 (Rus)

SUBCOMMISSURAL ORGAN see under NEUROSECRETORY SYSTEMS

SUBCONSCIOUS see UNCONSCIOUS (PSYCHOLOGY)

SUBCUTANEOUS EMPHYSEMA see under EMPHYSEMA

SUBDURAL EFFUSION see under MENINGITIS

SUBDURAL EMPYEMA

[Spinal subdural abscess—report of a case and a review of the literature of 43 cases] Takenaka K, et al. **No To Shinkei** 1989 Apr;41(4):331–6 (28 ref.) (Eng. Abstr.) (Jpn)

DIAGNOSIS

Subdural and epidural empyemas: MR imaging. Weingarten K, et al. **AJR** 1989 Mar;152(3):615–21
Subdural empyema—an unusual presentation. A report on 2 cases. Chaudhari AB, et al. **S Afr Med J** 1989 Sep 2; 76(5):217–20
Glomerulonephritis and sinusitis. Hypocomplementemic glomerulonephritis associated with coagulase-negative staphylococcal pansinusitis and subdural empyema. Patel Y, et al. **W V Med J** 1989 May;85(5):186–7

EPIDEMIOLOGY

Central nervous system infections in the elderly. Behrman RE, et al. **Arch Intern Med** 1989 Jul;149(7):1596–9

ETIOLOGY

Bilateral subdural empyema due to Salmonella enteritidis in an infant. Okudera H, et al. **Childs Nerv Syst** 1989 Feb; 5(1):45–6
Subdural empyema complicating frontal and ethmoid sinusitis. Rosenbaum GS, et al. **Heart Lung** 1989 Mar; 18(2):199–202
Epidural abscess and subdural empyema. Sellick JA Jr. **J Am Osteopath Assoc** 1989 Jun;89(6):806–10 (28 ref.)
Subdural abscess associated with halo-pin traction. Garfin SR, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1338–40
Intracranial complications of sinusitis. Parker GS, et al. **South Med J** 1989 May;82(5):563–9

MICROBIOLOGY

[Brain abscess and subdural empyema from the bacteriologic viewpoint] Szuwart U, et al. **Zentralbl Chir** 1989; 114(8):534–44 (15 ref.) (Eng. Abstr.) (Ger)

SURGERY

Omentum graft for intractable subdural empyema. Barnett GH, et al. **Cleve Clin J Med** 1989 May;56(3):311–5
Subdural empyemas in children. Pattisapu JV, et al. **Pediatr Neurosci** 1987;13(5):251–4
Craniotomy improves outcome in subdural empyema. Feuerman T, et al. **Surg Neurol** 1989 Aug;32(2):105–10
[Augmentation of a frontoparietal bone defect with autogenous rib cartilage] Eskici A, et al. **Fortschr Kiefer Gesichtschir** 1989;34:98–100 (Ger)
[Subdural empyema] Russegger L, et al. **Unfallchirurg** 1989 May;92(5):216–9 (Eng. Abstr.) (Ger)

SUBDURAL SPACE see under MENINGES

SUBFORNICAL ORGAN see under NEUROSECRETORY SYSTEMS

SUBGINGIVAL CURETTAGE

see related PERIODONTITIS

Effects of personal oral hygiene and subgingival scaling on bleeding interdental gingiva. Caton J, et al. **J Periodontol** 1989 Feb;60(2):84–90

INSTRUMENTATION

The effectiveness of root debridement in open flap procedures by means of a comparison between hand instruments and diamond burs. A SEM study. Schwarz JP, et al. **J Clin Periodontol** 1989 Sep;16(8):510–8

METHODS

Clinical effects of root debridement in molar and non-molar teeth. A 2-year follow-up. Loos B, et al. **J Clin Periodontol** 1989 Sep;16(8):498–504

SUBJECT HEADINGS

Capturing the semantic relationship between clinical terms with current MeSH bibliographic coding. Miller PL, et al. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):205–11
The data dictionary—a controlled vocabulary for integrating clinical databases and medical knowledge bases. Linnarsson R, et al. **Methods Inf Med** 1989 Apr;28(2):78–85

SUBLIMINAL PERCEPTION see SUBLIMINAL STIMULATION

SUBLIMINAL STIMULATION

Psychodynamic features in borderline personality disorder identified by a subliminal test, the Defense Mechanism Test. Sundbom E, et al. **Acta Psychiatr Scand** 1989 Jul; 80(1):101–5
The effect of subliminal oedipal and competitive stimulation on dart throwing: another miss. Vitiello MV, et al. **J Abnorm Psychol** 1989 Feb;98(1):54–6
Subliminal messages, persuasion, and behavior change. Treimer M, et al. **J Soc Psychol** 1988 Aug;128(4):563–5
Semantic priming without awareness: some methodological considerations and replications. Kemp-Wheeler SM, et al. **Q J Exp Psychol [A]** 1988 Nov;40(4):671–92
Depressive retardation and subliminally manipulated aggressive involvement. Smith GJ, et al. **Scand J Psychol** 1988;29(3–4):186–93
[Use of subconscious and conscious suggestions combined with music as a relaxation technic] Chaloult L, et al. **Can J Psychiatry** 1988 Nov;33(8):734–40 (Eng. Abstr.) (Fre)

SUBLINGUAL GLAND

Ranula and sarcoid granuloma of a sublingual gland. Takimoto T, et al. **Auris Nasus Larynx** 1989;16(1):39–42

ANATOMY & HISTOLOGY

Does the polystomatic gland exist? Imai M, et al. **Okajimas Folia Anat Jpn** 1989 Mar;65(6):405–11

CYTOLOGY

Visualization of carbohydrate chains in rabbit salivary glands by means of enzymatic degradation and plant lectins. Menghi G, et al. **Acta Histochem (Jena)** 1988;84(2):163–77
Morphological changes in the myoepithelial cells of the rat sublingual salivary gland during differentiation as shown by the nitrobenzoxadiazole–phallacidin fluorescent method. Murakami M, et al. **Arch Oral Biol** 1989;34(2):143–5

ENZYMOLOGY

Enzymatic sulphation of mucus glycoprotein in rat sublingual salivary gland. Slomiany A, et al. **Arch Oral Biol** 1988; 33(9):669–76
[Peroxidase activity in developing rat sublingual glands] Asano T. **Kaibogaku Zasshi** 1988 Oct;63(5):432–41 (Eng. Abstr.) (Jpn)

PATHOLOGY

Plunging ranula—an unusual presentation. Lyall JB. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):60–2
Relations of the histopathology of sublingual and labial salivary glands to the clinical presentation in primary Sjögren's syndrome. LeRoy JP, et al. **Clin Exp Rheumatol** 1989 Mar–Apr;7(2):171–4
The effects of upper incisor separation on the submandibular and sublingual glands of rats. Kamogashira K, et al. **J Dent Res** 1988 Mar;67(3):602–10

PHYSIOLOGY

Characterization and anticoagulant properties of rodent sublingual gland extracts. Menghi G, et al. **Cell Mol Biol** 1988;34(3):279–86
Inhibition of isoproterenol-induced DNA and RNA synthesis in rat parotid and pancreas following removal of submandibular–sublingual glands. Schneyer CA, et al. **Cell Tissue Res** 1989;256(2):361–3
Effects of epidermal growth factor and nerve growth factor on isoproterenol-induced DNA synthesis in rat parotid and pancreas following removal of submandibular–sublingual glands. Schneyer CA, et al. **J Oral Pathol** 1988 May; 17(5):250–6
A comparison of the effects of bilateral sections of the chorda tympani nerve and extirpation of the submaxillary and sublingual salivary glands on the eating and drinking patterns of the rat. Smith JC, et al. **Physiol Behav** 1988; 44(4–5):435–44

SECRETION

Studies on fluoride concentrations in human submandibular/sublingual saliva and their relation to flow rate and plasma fluoride levels. Oliveby A, et al. **J Dent Res** 1989 Feb;68(2):146–9
Submandibular and parotid salivary secretion after electrolytic lesioning of the brainstem nucleus parvocellularis in the rat. Ramos JM, et al. **Physiol Behav** 1988;44(2):173–80

SURGERY

The plunging ranula. Pathogenesis, diagnosis and management. de Visscher JG, et al. **J Craniomaxillofac Surg** 1989 May;17(4):182–5 (35 ref.)

SUBLINGUAL GLAND NEOPLASMS see under SALIVARY GLAND NEOPLASMS

SUBLINGUAL REGION see MOUTH FLOOR

SUBLUXATION, LENS see LENS DISLOCATION AND SUBLUXATION

SUBMANDIBULAR GLAND

Giant salivary calculi: an orocervical fistula caused by a submandibular gland calculus. Asfar SK, et al. **Can J Surg** 1989 Jul;32(4):295–6

ANALYSIS

Increases in concentrations of somatostatin- and insulin-like immunoreactivities in submandibular salivary gland of diabetic rats: effect of insulin treatment. Deville de Perière D, et al. **Acta Endocrinol (Copenh)** 1989 Jun;120(6):790–4
A sensitive enzyme immunoassay system of rat epidermal growth factor in biological fluids and tissue extracts. Joh T, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):616–23
Amino acid sequence of an inducible cysteine proteinase inhibitor (cystatin) from submandibular glands of isoproterenol-treated rats. Bedi GS. **Arch Biochem Biophys** 1989 Aug 15;273(1):245–53
Purification and characterization of an inducible cysteine proteinase inhibitor from submandibular glands of isoproterenol-treated rats. Bedi GS. **Arch Biochem Biophys** 1989 Apr;270(1):335–43
Determination of the structure of a novel acidic oligosaccharide with blood-group activity isolated from bovine submaxillary-gland mucin. D'Arcy SM, et al. **Biochem J** 1989 Jun 1;260(2):389–93
Effects of mammal submandibular gland glycoderivatives on human hemostatic system. Menghi G, et al. **Cell Mol Biol** 1989;35(3):263–70
Enzymatic degradation and quantitative lectin labeling for characterizing glycoconjugates which act as lectin acceptors in cat submandibular gland. Menghi G, et al. **Histochemistry** 1989;90(5):331–8
Effects of estradiol and progesterone on epidermal growth factor concentration in plasma, bile, urine, submandibular gland and kidney of the mouse. Tuomela T, et al. **Horm Res** 1989;31(3):143–7
Somatostatin-immunoreactive concentrations in human saliva and in the submandibular salivary glands of the rat. Possible sexual dependence in the human. Deville de Periere D, et al. **J Biol Buccale** 1988 Sep;16(3):191–6
Isolation and characterization of a glycosylated form of beta nerve growth factor in mouse submandibular glands. Murphy RA, et al. **J Biol Chem** 1989 Jul 25;264(21):12502–9
Subfamily of submaxillary gland-specific Mup genes: chromosomal linkage and sequence comparison with liver-specific Mup genes. Shi Y, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6191–203
Epidermal growth factor content of submandibular glands is increased in rats with experimentally induced gastric lesions. Gysin B, et al. **Scand J Gastroenterol** 1988 Aug; 23(6):665–71
Biochemical characterization and immunohistochemical localization of progestin and estrogen receptors in castrate rat submandibular gland. Sakabe K, et al. **Tokai J Exp Clin Med** 1987 Dec;12(5–6):353–63
[Immunofluorescent and immunoenzymatic analysis of an insulin-like protein of the mouse submandibular glands using monoclonal antibodies to insulin] Pogodina LS, et al. **Probl Endokrinol (Mosk)** 1989 May–Jun;35(3):74–8 (Eng. Abstr.) (Rus)

ANATOMY & HISTOLOGY

Histochemical demonstration of 7,9-disubstituted sialic acids: strong periodate oxidation of sialic acid mixtures on the biochemical and histochemical level. Veh RW, et al. **Acta Histochem Suppl (Jena)** 1989;37:185–6
Effects of castration and antiandrogens (RU 23908 and

cyproterone acetate) on glandulain activity and on the secretory epithelium of the rat submandibular gland. Porto CS, et al. **Braz J Med Biol Res** 1988;21(3):591–8

[A quantitative morphologic study on age changes in the histologic structures of the human submandibular gland] Dong SZ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan;24(1):15–7, 62 (Eng. Abstr.) (Chi)

BLOOD SUPPLY

The effect of a bradykinin antagonist on vasodilator responses with particular reference to the submandibular gland of the cat. Barton S, et al. **Experientia** 1988 Oct 15; 44(10):897–8

Role of kinin in regulation of rat submandibular gland blood flow. Berg T, et al. **Hypertension** 1989 Jul;14(1):73–80

CYTOLOGY

Visualization of carbohydrate chains in rabbit salivary glands by means of enzymatic degradation and plant lectins. Menghi G, et al. **Acta Histochem (Jena)** 1988;84(2):163–77

Effects of triiodothyronine on resting membrane potential of primary cultured rat submandibular gland cells. Bryant HJ, et al. **Cell Biol Int Rep** 1988 Dec;12(12):1027–36

The short-term effects of a single injection of isoproterenol on proliferation in the submandibular gland, parotid gland and oesophagus in vivo. Bybee A, et al. **Cell Tissue Kinet** 1988 Mar;21(2):133–41

Beta-adrenergic control of cell volume and chloride transport in an established rat submandibular cell line. He XJ, et al. **J Cell Physiol** 1989 Mar;138(3):527–35

Intracellular accumulation of basement membrane components during morphogenesis of rat submandibular gland. Kadoya Y, et al. **J Histochem Cytochem** 1989 Sep; 37(9):1387–92

Suppression of intercellular communication in acinar cells from rat submandibular gland by cholinergic and adrenergic agonists. Sasaki Y, et al. **Jpn J Physiol** 1988; 38(4):531–43

The use of cytodex microcarrier beads in patch-clamp studies on cultured epithelial cells. Poronnik P, et al. **Pflugers Arch** 1988 Nov;413(1):90–2

DRUG EFFECTS

Morphological changes in salivary glands after treatment with sialagogues. An electronmicroscopical study. Lundquist PG, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):434–40

Effect of ethanol on the in vitro sulfation of salivary mucin. Slomiany BL, et al. **Alcoholism (NY)** 1988 Dec;12(6):774–9

Relationship between serum-amylase activity and intraductal pressures in the rat parotid and submandibular salivary glands after administration of pilocarpine or isoprenaline. Ikeno T, et al. **Arch Oral Biol** 1988;33(6):403–6

Effects of acetylcholine and transport inhibitors on K content in dispersed submandibular salivary cells of newborn and adult rats. Martinez JR, et al. **Arch Oral Biol** 1988; 33(3):203–7

Effects of repeated androgen treatments on metabolism and nuclear binding of androgen in the infant murine submandibular gland. Katsukawa H, et al. **Comp Biochem Physiol [B]** 1989;93(1):187–91

Changes in glycoconjugates in rat submandibular gland after chronic treatment with reserpine and isoproterenol. Versura P, et al. **Histochemistry** 1988;90(4):285–8

Effect of alpha-receptor stimulation on Cl transport by rat submandibular acini. Martinez JR, et al. **J Dent Res** 1988 Mar;67(3):561–4

A comparative study of the effects of four choline esters on the secretion of fluid and glycoprotein from rat submandibular glands. Iwabuchi Y, et al. **Jpn J Pharmacol** 1988 Oct;48(2):175–84

Ca2+ not cyclic AMP mediates the fluid secretory response to isoproterenol in the rat mandibular salivary gland: whole-cell patch-clamp studies. Cook DI, et al. **Pflugers Arch** 1988 Nov;413(1):67–76

Effects of carbamylcholine and isoproterenol on electrolyte fluxes in perfused main duct of submandibular gland of reserpinized rat. Jirakulsomchok D, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):375–8

EMBRYOLOGY

The role of interstitial collagens in cleft formation of mouse embryonic submandibular gland during initial branching. Fukuda Y, et al. **Development** 1988 Jun;103(2):259–67

Accumulation of collagen III at the cleft points of developing mouse submandibular epithelium. Nakanishi Y, et al. **Development** 1988 Sep;104(1):51–9

Appearance of acinar-cell-specific mucin in prenatal mouse submandibular glands. Denny PA, et al. **Differentiation** 1989 May;40(2):93–8

ENZYMOLOGY

Enzymatic sulfation of salivary mucins: structural features of 35S-labeled oligosaccharides. Slomiany BL, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):61–7

Characterization and partial purification of rat submandibular gland protein kinase C. Pon DJ, et al. **Biochem Cell Biol** 1988 Jul;66(7):683–90

The biosynthesis of N-glycoloylneuraminic acid occurs by hydroxylation of the CMP-glycoside of N-acetylneuraminic acid. Shaw L, et al. **Biol Chem Hoppe Seyler** 1988 Jun;369(6):477–86

Classification of mouse submaxillary gland esteroproteases by their substrate specificities. Kurosawa N, et al. **Electrophoresis** 1989 Mar;10(3):189–94

Degradation of 125I-glucagon, -pancreatic polypeptide and -insulin by acid saline extract of rat submaxillary gland and their protection by proteinase inhibitors. Tasaka Y, et al. **Endocrinol Jpn** 1989 Feb;36(1):47–53

The immunohistolocalization of carbonic anhydrase III in the submandibular gland of rats and hamsters. Nishita T, et al. **Histochem J** 1989 Jan;21(1):8–14

A cytotoxic serine proteinase isolated from mouse submandibular gland. Shimamura T, et al. **Immunol Lett** 1989 Aug;22(2):155–9

Enzymatic sulfation of mucus glycoprotein in rat submandibular salivary gland. Slomiany BL, et al. **Int J Biochem** 1989;21(2):165–71

Interaction of mouse submaxillary gland renin with a statine-containing, subnanomolar, competitive inhibitor. Poe M, et al. **J Enzym Inhib** 1985;1(1):13–23

Co-localization of neuron-specific enolase-like and kallikrein-like immunoreactivity in ductal and tubular epithelium of sheep salivary gland and kidney. Trahair JF, et al. **J Histochem Cytochem** 1989 Mar;37(3):309–14

Androgen induction of beta-glucuronidase translational yield in submaxillary gland of B6.N mice. Bracey LT, et al. **Mol Endocrinol** 1988 Aug;2(8):701–5

Processing of one-chain to two-chain renin in the mouse submandibular gland is influenced by androgen. Ingelfinger JR, et al. **Pediatr Res** 1989 Apr;25(4):332–5

[Biochemical characteristics of nuclear 5 alpha-reductase and cytosol 3 alpha-hydroxysteroid dehydrogenase in rat submandibular gland] Furuyama M. **Nippon Naibunpi Gakkai Zasshi** 1989 Jan 20;65(1):1–17 (Eng. Abstr.) (Jpn)

GROWTH & DEVELOPMENT

A light and electron microscope study of aging parotid and submandibular salivary glands of Swiss-Webster mice. Meisel DL, et al. **Exp Gerontol** 1988;23(3):197–210

IMMUNOLOGY

Histochemical analysis of the chemical structure of blood group-related carbohydrate chains in serous cells of human submandibular glands using lectin staining and glycosidase digestion. Ito N, et al. **J Histochem Cytochem** 1989 Jul; 37(7):1115–24

INNERVATION

Transient involvement of enkephalins in both the sympathetic and parasympathetic innervations of the submandibular gland of rats. Light- and electron-microscopic immunocytochemical study. Kondo H, et al. **Cell Tissue Res** 1988 Sep;253(3):529–37

CGRP-immunoreactive sensory nerve fibers in the submandibular gland of the rat. Soinila J, et al. **Histochemistry** 1989;91(6):455–60

Gustatory-salivary reflex: neural activity of sympathetic and parasympathetic fibers innervating the submandibular gland of the hamster. Matsuo R, et al. **J Auton Nerv Syst** 1989 Apr;26(3):187–97

Ability of developing epithelia to attract neurite outgrowth in culture is not correlated with the appearance of laminin. Nishi R. **J Neurosci Res** 1988 Oct–Dec;21(2–4):307–14

"Paralytic' secretion after parasympathectomy of rabbit submandibular glands includes a cholinergic component. Garrett JR, et al. **Q J Exp Physiol** 1988 Sep;73(5):737–46

METABOLISM

Carbachol stimulation of inositol phosphate accumulation in rat submandibular gland fragments is not modified by VIP. Larsson O, et al. **Acta Physiol Scand** 1989 Mar;135(3):263–9

Impaired production of nerve growth factor in the submandibular gland of diabetic mice. Kasayama S, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E400–4

Muscarinic supersensitivity and subsensitivity induced by chronic treatment with atropine and diisopropylfluorophosphate in rat submaxillary glands. Ukai Y, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb; 297:148–57

In-vivo incorporation of omega 3 fatty acids into membrane lipids of rat salivary glands and changes in adenylate-cyclase activity. Alam SQ, et al. **Arch Oral Biol** 1988;33(5):295–9

Alpha-aminoisobutyric acid transport in isolated rat submandibular salivary acinar cells. Anderson LC, et al. **Arch Oral Biol** 1989;34(2):131–6

The control of cytosolic Ca2+ concentration: studies of high affinity Ca2+ transport in permeabilized acini of rat submandibular glands. Hurley TW, et al. **Arch Oral Biol** 1988;33(11):793–800

Contrasting effects of autonomic agents and prostaglandins on 22Na uptake in rat submandibular salivary acini. Martinez JR, et al. **Arch Oral Biol** 1988;33(8):621–2

An examination of functional linkage between K efflux and 36Cl efflux in rat submandibular salivary gland acini in vitro. Martinez JR, et al. **Arch Oral Biol** 1987;32(12):891–5

Effects of isoproterenol on Cl transport in rat submandibular salivary-gland acini. Martinez JR, et al. **Arch Oral Biol** 1988;33(7):505–9

A histochemical study of the main excretory duct of the human submandibular gland. Perra MT, et al. **Arch Oral Biol** 1988;33(7):525–30

[3H]-forskolin binding sites in rat submandibular salivary glands. Ren YF, et al. **Arch Oral Biol** 1988;33(11):779–82

Submaxillary mucins. Internolecular interactions and gel-forming potential of concentrated solutions. Sellers LA, et al. **Biochem J** 1988 Dec 1;256(2):599–607

Role of glycosylation on the conformation and chain dimensions of O-linked glycoproteins: light-scattering studies of ovine submaxillary mucin. Shogren R, et al. **Biochemistry** 1989 Jun 27;28(13):5525–36

Acetylcholine-induced metabolic changes in the perfused rabbit mandibular salivary gland studied by 31P-NMR spectroscopy. Seo Y, et al. **Biochim Biophys Acta** 1988 Oct 7;971(3):289–97

Phospholipid metabolism in rat submandibular gland. Positional distribution of fatty acids in phosphatidylcholine and microsomal lysophospholipid acyltransferase systems concerning proliferation. Yashiro K, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):56–64

Somatostatin-, vasoactive intestinal polypeptide- and neuropeptide Y-like immunoreactivity in eye- and submandibular gland-projecting sympathetic neurons. Wright LL, et al. **Brain Res** 1989 Aug 14;494(2):267–75

Difference in saliva/plasma concentration ratio of endogenous urea between mandibular and parotid glands in dogs. Mizuno S, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4921–6

Amylase activity, glycoprotein and electrolyte concentration in rat's submaxillary salivary gland during heat acclimation. Horowitz M, et al. **Comp Biochem Physiol [B]** 1978; 60(4):351–4

Amiloride inhibits 22Na uptake and [3H]QNB binding in rat submandibular cells. Martinez JR, et al. **Eur J Pharmacol** 1989 May 19;164(2):335–9

Stalle and transient expression of mouse submaxillary gland renin cDNA in AtT20 cells: proteolytic processing and secretory pathways. Landenheim, RG, et al. **FEBS Lett** 1989 Mar 13;245(1–2):70–4

Potassium-evoked efflux of [3H]purines from the rat submaxillary gland. Filinger EJ, et al. **Gen Pharmacol** 1989; 20(3):285–8

Cloning and sequencing of cDNA encoding a rat salivary cysteine proteinase inhibitor inducible by beta-adrenergic agonists. Shaw PA, et al. **J Biol Chem** 1988 Dec 5; 263(34):18133–7

The regulation by thyroid hormones and androgen of epidermal growth factor synthesis in the submandibular gland and its plasma concentrations in mice. Kasayama S, et al. **J Endocrinol** 1989 May;121(2):269–75

Light and electron microscopic immunolocalization of rat submandibular gland mucin glycoprotein and glutamine/glutamic acid-rich proteins. Moreira JE, et al. **J Histochem Cytochem** 1989 Apr;37(4):515–28

Enhancement of phosphatidylinositol turnover and cyclic nucleotide accumulation by chronic anethole trithione treatment in rat submaxillary glands. Ukai Y, et al. **J Pharm Pharmacol** 1989 Apr;41(4):247–52

Androgen-induced production of colony-stimulating factor (CSF) and colony-inhibitory factor (CIF) in the submandibular gland in female mice. Shimizu M, et al. **J Pharmacobiodyn** 1989 Jun;12(6):352–6

Effects of exercise training on the amylase activity and glycogen content in rat submandibular gland. Komabayashi T, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):293–7

Effects of metaraminol on the secretion of fluid and glycoproteins from the rat submandibular gland. Iwabuchi Y, et al. **Jpn J Pharmacol** 1989 Apr;49(4):491–500

Characterization of muscarinic receptor subtypes in human tissues. Giraldo E, et al. **Life Sci** 1988;43(19):1507–15

In vivo 31P NMR studies of rat salivary glands at 6.3 tesla. Heerschap A, et al. **Magn Reson Med** 1988 Oct;8(2):129–41

Chloride handling by submandibular cells from young and old rats with and without duct ligation. Scott J, et al. **Mech Ageing Dev** 1989 Jun;48(3):231–41

Muscarinic receptor regulation of Ca2+ mobilization in a human salivary cell line. He XJ, et al. **Pflugers Arch** 1989 Mar;413(5):505–10

High level of accumulation of a mRNA coding for a precursor-like protein in the submaxillary gland of male rats. Rosinski-Chupin I, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8553–7

MICROBIOLOGY

Whole, submandibular, and parotid saliva-mediated aggregation of Pseudomonas aeruginosa in cystic fibrosis. Komiyama K, et al. **Infect Immun** 1989 Apr;57(4):1299–304

PATHOLOGY

Histological analysis of parotid and submandibular glands in chronic alcohol abuse: a necropsy study. Scott J, et al. **J Clin Pathol** 1988 Aug;41(8):837–40

The effects of upper incisor separation on the submandibular and sublingual glands of rats. Kamogashira K, et al. **J Dent Res** 1988 Mar;67(3):602–10

Morphological alterations of salivary gland parenchyma in chronic sialadenitis. Matthews TW, et al. **J Otolaryngol** 1988 Dec;17(7):385–94

[Frequent occurrences of an enlarged submandibular gland

following interstitial irradiation therapy in patients with cancer of the tongue] Moriguchi S, et al. **Gan No Rinsho** 1988 Dec;34(15):2052-6 (Eng. Abstr.) (Jpn)

PHYSIOLOGY

Age-related changes of the granular intercalated duct cells of male rat submandibular gland. Sashima M, et al. **Arch Oral Biol** 1988;33(1):71-3

Introduction of cyclic AMP phosphodiesterase into rat submandibular acini prevents isoproterenol-stimulated cyclic AMP rise without affecting mucin secretion. Bradbury NA, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):661-71

Enhanced malignant phenotype of urethane-induced lung adenoma associated with sialoadenectomy in BALB/c mice. Smith GJ, et al. **Carcinogenesis** 1989 Jul;10(7):1169-73

Inhibition of isoproterenol-induced DNA and RNA synthesis in rat parotid and pancreas following removal of submandibular-sublingual glands. Schneyer CA, et al. **Cell Tissue Res** 1989;256(2):361-3

Sexual dimorphism of erythropoietin-degrading activity in mouse submaxillary gland extracts. Tam P.C, et al. **Exp Hematol** 1989 Feb;17(2):160-3

Different tachykinin receptor subtypes are coupled to the phosphoinositide or cyclic AMP signal transduction pathways in rat submandibular cells. Laniyonu A, et al. **FEBS Lett** 1988 Nov 21;240(1-2):186-90

Detection of nerve growth factor and its mRNA by separate and combined immunohistochemistry and in situ hybridization in mouse salivary glands. Ayer-Le Lievre C, et al. **Histochem J** 1989 Jan;21(1):1-7

Decrease of hypothalamic TRH levels but not plasmatic TSH levels after ablation of submandibular salivary glands in the rat. Boyer R, et al. **J Biol Buccale** 1988 Jun;16(2):69-74

Effects of epidermal growth factor and nerve growth factor on isoproterenol-induced DNA synthesis in rat parotid and pancreas following removal of submandibular-sublingual glands. Schneyer CA, et al. **J Oral Pathol** 1988 May; 17(5):250-6

In situ hybridization of nerve growth factor mRNA in the mouse submandibular gland. Salido EC, et al. **Lab Invest** 1988 Nov;59(5):625-30

G regulatory proteins and muscarinic receptor signal transduction in mucous acini of rat submandibular gland. Fleming N, et al. **Life Sci** 1989;44(15):1027-35

A comparison of the effects of bilateral sections of the chorda tympani nerve and extirpation of the submaxillary and sublingual salivary glands on the eating and drinking patterns of the rat. Smith JC, et al. **Physiol Behav** 1988; 44(4-5):435-44

Effects of the ablation of the submaxillary gland on the rat testis. Pellegrini A, et al. **Z Mikrosk Anat Forsch** 1988; 102(5):760-8

PHYSIOPATHOLOGY

Salivary gland function after sialolithiasis: scintigraphic examination of submandibular glands with 99mTc-pertechnetate. Yoshimura Y, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):704-10; discussion 710-1

RADIOGRAPHY

Computed tomography of salivary glands in Sjögren's syndrome. March DE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):105-6

SECRETION

Mechanism of action of calcitonin on secretion in rat submandibular gland. Sagulin GB, et al. **Acta Physiol Scand** 1989 Jul;136(3):435-42

Stimulation of mucin release from rat submandibular salivary-gland cells by NaF. Shahed AR, et al. **Arch Oral Biol** 1988;33(5):347-51

Studies on fluoride concentrations in human submandibular/sublingual saliva and their relation to flow rate and plasma fluoride levels. Oliveby A, et al. **J Dent Res** 1989 Feb;68(2):146-9

Effects of dobutamine and terbutaline on the secretion of glycoproteins from the acinar cells of the rat submandibular gland. Iwabuchi Y, et al. **Jpn J Pharmacol** 1988 Jul; 47(3):301-10

Continuous measurements of tissue impedance during secretion in dog submandibular gland. Nakahari T, et al. **Jpn J Physiol** 1988;38(5):699-712

Differential effects of tetrodotoxin on the sialogenous and vasodilator actions of prostaglandin E2 in the dog salivary gland. Taira N, et al. **Life Sci** 1974 Sep 1;15(5):987-93

Submandibular and parotid salivary secretion after electrolytic lesioning of the brainstem nucleus parvocellularis in the rat. Ramos JM, et al. **Physiol Behav** 1988;44(2):173-80

[Experimental and clinical study of submandibular salivary gland secretion in the evaluation of peripheral paralysis of the facial nerve] Ristić B. **God Vojnomed Akad** 1987; 29:44-50 (Eng. Abstr.) (Scr)

[Submandibular secretion in the clinical evaluation of peripheral paralysis of the facial nerve] Ristić B, et al. **Vojnosanit Pregl** 1989 Mar-Apr;46(2):83-7 (Eng. Abstr.) (Scr)

SURGERY

Excision of the submandibular gland: minimizing the risk of nerve damage. Kennedy PJ, et al. **Aust N Z J Surg** 1989 May;59(5):411-4

Mylohyoid nerve damage due to excision of the submandibular salivary gland. Adjei SS, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):209-11

Surgical management of drooling in the neurologically damaged child. O'Dwyer TP, et al. **J Laryngol Otol** 1989 Aug;103(8):750-2

Submandibular gland excision. Crabtree GM, et al. **Laryngoscope** 1988 Oct;98(10):1044-5

Treatment of chronic drooling: a preliminary report. Fear DW, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug; 66(2):163-6

Submandibular duct relocation for drooling: a 10-year experience with 194 patients. Crysdale WS, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):87-92

Surgical management of sialorrhea. Shott SR, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):47-50

Submandibular gland resection and bilateral parotid duct ligation as a management for chronic drooling in cerebral palsy. Brundage SR, et al. **Plast Reconstr Surg** 1989 Mar; 83(3):443-6

[Submandibular sialoadenectomy and long-term results] Turco C, et al. **Minerva Stomatol** 1988 Apr;37(4):329-34 (Eng. Abstr.) (Ita)

[Experimental restoration of the patency of the efferent ducts of the salivary glands] Dumpis IaP, et al. **Stomatologiia (Mosk)** 1989 Mar-Apr;68(2):8-9 (Eng. Abstr.) (Rus)

TRANSPLANTATION

Trophic effects on cholinergic striatal interneurons by submaxillary gland transplants. Fischer W, et al. **Prog Brain Res** 1988;78:409-12

ULTRASTRUCTURE

Salivary gland morphology after alpha-adrenergic and cholinergic stimulation. An ultrastructural study. Lundquist PG, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:14-22

Changes with senescence in the fine structure of the granular convoluted tubule of the submandibular gland of the mouse. Gresik EW. **Am J Anat** 1989 Feb;184(2):147-56

Progestin and estrogen receptors: characterization and localization in rat submandibular glands, with special reference to epidermal growth factor. Sakabe K, et al. **Endocrinol Jpn** 1988 Oct;35(5):709-23

Characterization of epimyoepithelial islands in benign lymphoepithelial lesions of major salivary gland: an immunohistochemical and ultrastructural study. Dardick I, et al. **Head Neck Surg** 1988 Jan-Feb;10(3):168-78

Establishment and characterization of an epithelial cell line from the rat submandibular gland. Brown AM, et al. **J Oral Pathol Med** 1989 Apr;18(4):206-13

Fine structure of the mandibular gland in volcano rabbit. Suzuki S, et al. **Jikken Dobutsu** 1989 Jan;38(1):1-9

Surface microanatomy of human major salivary glands. Riva A, et al. **Prog Clin Biol Res** 1989;295:235-41

[Ultrastructural aspects of the submandibular gland] Lolli R, et al. **Minerva Stomatol** 1989 May;38(5):523-31 (Eng. Abstr.) (Ita)

SUBMANDIBULAR GLAND DISEASES see under SALIVARY GLAND DISEASES

SUBMANDIBULAR GLAND NEOPLASMS see under SALIVARY GLAND NEOPLASMS

SUBMARINE MEDICINE

see related
SEALED CABIN ECOLOGY

Submarine escape training, lung cysts and tension pneumothorax. Saywell WR. **Br J Radiol** 1989 Mar; 62(735):276-8

EDUCATION

The submarine Medical Branch rating. Evans RM. **J R Nav Med Serv** 1988 Summer;74(2):76-7

The Submarine Medical Officer. Smith MS. **J R Nav Med Serv** 1988 Summer;74(2):73-5

INSTRUMENTATION

[Automated medical systems aboard atomic submarines (a review of the literature)] Bulkin EI, et al. **Voen Med Zh** 1988 Sep;(9):46-8 (16 ref.) (Rus)

SUBMAXILLARY GLAND see SUBMANDIBULAR GLAND

SUBMERSION see IMMERSION

SUBMITOCHONDRIAL PARTICLES

ENZYMOLOGY

The interaction of the cardioprotective agent ICRF-187 [(+)-1,2-bis(3,5-dioxopiperazinyl-1-yL)propane); its hydrolysis product (ICRF-198); and other chelating agents with the Fe(III) and Cu(II) complexes of adriamycin. Hasinoff BB. **Agents Actions** 1989 Mar;26(3-4):378-85

Diffusional effects in the steady state kinetics of ubiquinol cytochrome c reductase in bovine heart submitochondrial particles. Fato R, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1145-53

Photoaffinity labelling of mitochondrial NADH: ubiquinone reductase with pethidine analogues. Werner S. **Biochem Pharmacol** 1989 Jun 1;38(11):1807-18

Pre-steady-state studies of the adenosine triphosphatase activity of coupled submitochondrial particles. Regulation by ADP. Martins OB, et al. **Biochemistry** 1988 Sep 20; 27(19):7552-8

Purification from a yeast mutant of mitochondrial F1 with modified beta-subunit. High affinity for nucleotides and high negative cooperativity of ATPase activity. Falson P, et al. **Biochim Biophys Acta** 1989 Jun 23;975(1):119-26

DCCD sensitivity of electron and proton transfer by NADH: ubiquinone oxidoreductase in bovine heart submitochondrial particles--a thermodynamic approach. Vuokila PT, et al. **Biochim Biophys Acta** 1989 May 8; 974(2):219-22

Mitochondrial F0F1 H+-ATP synthase. Characterization of F0 components involved in H+ translocation [published erratum appears in FEBS Lett 1989 Jul 17;251(1-2):283] Guerrieri F, et al. **FEBS Lett** 1989 Jun 19;250(1):60-6

Structure of the ATP-synthase studied by electron microscopy and image processing. Tsuprun VL, et al. **FEBS Lett** 1989 Feb 27;244(2):279-82

Hysteretic interaction of NADH and Mg2+ with mammalian NADH:CoQ reductase from beef heart. Tushurashvili PR, et al. **FEBS Lett** 1989 Feb 27;244(2):268-70

Assembly of the mitochondrial membrane system. Analysis of structural mutants of the yeast coenzyme QH2-cytochrome c reductase complex. Crivellone MD, et al. **J Biol Chem** 1988 Oct 5;263(28):14323-33

ATP synthase complex from bovine heart mitochondria. Passive H+ conduction through mitochondrial coupling factor 6-depleted F0 complexes. Joshi S, et al. **J Biol Chem** 1989 Sep 15;264(26):15548-51

METABOLISM

Sodium/proton antiporters in the mitochondrial inner membrane. Garlid KD. **Adv Exp Med Biol** 1988;232:37-46

Novel reconstitution and enzymatic assay of the mitochondrial tricarboxylate carrier. Lüthy R, et al. **Anal Biochem** 1989 Mar;177(2):323-6

Heart mitochondrial creatine kinase revisited: the outer mitochondrial membrane is not important for coupling of phosphocreatine production to oxidative phosphorylation. Kuznetsov AV, et al. **Arch Biochem Biophys** 1989 Jan; 268(1):176-90

Energy-induced modulation of the kinetics of oxidative phosphorylation and reverse electron transfer. Hekman C, et al. **Biochemistry** 1988 Sep 20;27(19):7559-65

The pathway of electron transfer in NADH:Q oxidoreductase. van Belzen R, et al. **Biochim Biophys Acta** 1989 May 30;974(3):311-20

Chromium(V) is produced upon reduction of chromate by mitochondrial electron transport chain complexes. Rossi SC, et al. **Carcinogenesis** 1989 May;10(5):913-20

Thyroid hormone regulation of nuclear-encoded mitochondrial inner membrane polypeptides of the liver. Joste V, et al. **Eur J Biochem** 1989 Sep 1;184(1):255-60

Effect of ischemia on heart submitochondrial superoxide production. Guarnieri C, et al. **Free Radic Res Commun** 1985;1(2):123-8

Tocopheroxyl radical persistence and tocopherol consumption in liposomes and in vitamin E-enriched rat liver mitochondria and microsomes. Mehlhorn RJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13448-52

Subcellular distribution of "peripheral type" binding sites for [3H]Ro5-4864 in guinea pig lung. Localization to the mitochondrial inner membrane. Mukherjee S, et al. **J Biol Chem** 1989 Oct 5;264(28):16713-8

New 4-hydroxypyridine and 4-hydroxyquinoline derivatives as inhibitors of NADH-ubiquinone reductase in the respiratory chain. Chung KH, et al. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):609-16

[Hysteresis behavior of complex I in delta mu H+-dependent reduction of NAD+ succinate] Kotliar AB, et al. **Biokhimiia** 1989 Jan;54(1):9-16 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Selective inhibition of complex I of the brain electron transport system by tetrahydroisoquinoline. Suzuki K, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1541-5

Calorimetric and spectroscopic studies of lipid thermotropic phase behavior in liver inner mitochondrial membranes from a mammalian hibernator. Pehowich DJ, et al. **Biochemistry** 1988 Jun 28;27(13):4632-8

ULTRASTRUCTURE

Menkes kinky hair disease with 'ragged red' fibers. Morgello S, et al. **Dev Med Child Neurol** 1988 Dec;30(6):812-6

SUBMUCOUS PLEXUS

ANATOMY & HISTOLOGY

Structure, afferent innervation, and transmitter content of ganglia of the guinea pig gallbladder: relationship to the enteric nervous system. Mawe GM, et al. **J Comp Neurol** 1989 May 15;283(3):374–90

BLOOD SUPPLY

[Principles of the structuro-functional organization of the hemomicrocirculatory bed of the intramural nervous plexuses of organs of the gastrointestinal tract of mammals] Vasina EN, et al. **Arkh Anat Gistol Embriol** 1988 Jun; 94(6):38–47 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Tyrosine hydroxylase-immunoreactive intrinsic neurons in the Auerbach's and Meissner's plexuses of humans. Wakabayashi K, et al. **Neurosci Lett** 1989 Jan 30; 96(3):259–63

METABOLISM

Expression of substance P/neurokinin A-encoding preprotachykinin messenger ribonucleic acids in the rat enteric nervous system. Sternini C, et al. **Gastroenterology** 1989 Aug;97(2):348–56

PATHOLOGY

Parkinson's disease: the presence of Lewy bodies in Auerbach's and Meissner's plexuses. Wakabayashi K, et al. **Acta Neuropathol (Berl)** 1988;76(3):217–221

Deficient neurogenic innervation of the myenteric plexus with normal submucous plexus involving the entire small and large bowel. Mishalany H, et al. **J Pediatr Surg** 1989 Jan;24(1):83–6; discussion 86–7

PHYSIOLOGY

Late slow outward currents following hyperpolarizing commands are associated with intracellular Ca2+ increase in guinea-pig submucous neurons: investigations with fura-2. Hirai K, et al. **Brain Res** 1988 Oct 4;461(2):367–70

Contractions of the guinea-pig ileum evoked by stimulation of the submucous plexus. Jin JG, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):73–8

An electrophysiological comparison of substance P-immunoreactive neurons with other neurons in the guinea-pig submucous plexus. Bornstein JC, et al. **J Auton Nerv Syst** 1989 Mar;26(2):113–20

Correlated electrophysiological and histochemical studies of submucous neurons and their contribution to understanding enteric neural circuits. Bornstein JC, et al. **J Auton Nerv Syst** 1988 Nov;25(1):1–13 (62 ref.)

Muscarinic excitation and inhibition of neurons in the submucous plexus of the guinea-pig caecum. Mihara S, et al. **Neuroscience** 1989;31(1):247–57

Histamine H2 receptor mediates postsynaptic excitation and presynaptic inhibition in submucous plexus neurons of the guinea-pig. Tokimasa T, et al. **Neuroscience** 1989; 28(3):735–44

SECRETION

Ion transport and enteric nervous system (ENS) in rat rectal colon: mechanical stretch causes electrogenic Cl-secretion via plexus Meissner and amiloride-sensitive electrogenic Na-absorption is not affected by intramural neurons. Schulzke JD, et al. **Pflugers Arch** 1989 Jun;414(2):216–21

SUBPHRENIC ABSCESS

COMPLICATIONS

Left pleural effusion: masking subphrenic abscess—caused by Salmonella enteritidis serotype Heidelberg. Schwartz ID, et al. **Clin Pediatr (Phila)** 1989 Jun;28(6):266–7

Pericarditis with effusion and tamponade complicating left subdiaphragmatic abscesses. Horton JM, et al. **West J Med** 1988 Aug;149(2):213–5

Nonsuppurative pericardial effusion [letter] Trimble GX. **West J Med** 1989 Mar;150(3):347–8

[Transdiaphragmatic bronchopleural fistulas as complications of subdiaphragmatic abscesses] Lokhvitskiĭ SV, et al. **Grudn Khir** 1989 May-Jun;(3):71–7 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Emphysematous pyelitis in a cushinoid patient mimicking a subphrenic abscess: diagnosis by sonography. Carrington BM, et al. **JCU** 1989 Jul-Aug;17(6):453–5

[Diagnostic difficulties in idiopathic subphrenic abscess] Mishchenko FF, et al. **Klin Khir** 1988;(8):57 **(Rus)**

[Ultrasonic diagnosis of abscesses of the abdominal cavity and soft tissues] Buianov VM, et al. **Sov Med** 1988;(5):28–34 **(Rus)**

ETIOLOGY

[Postoperative subdiaphragmatic abscesses and their treatment] Gulevskiĭ BA, et al. **Vestn Khir** 1988 Oct; 141(10):102–5 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[Is drainage of the left subphrenic compartment after splenectomy still applicable?] Vermeulen B, et al. **Chirurgie** 1988;114(6):466–72 (45 ref.) (Eng. Abstr.) **(Fre)**

SURGERY

[Surgical treatment of multiple abscesses of the liver] Buromskaia GA, et al. **Khirurgiia (Mosk)** 1988 Sep; (9):140–1 **(Rus)**

[A foreign body in the cavity of a subphrenic abscess] Kholiavko VK, et al. **Klin Khir** 1989;(1):61 **(Rus)**

[Drainage of a left subphrenic abscess through a percutaneous catheter in children] García Crespo JM, et al. **An Esp Pediatr** 1989 May;30(5):414–5 **(Spa)**

THERAPY

Percutaneous drainage of subphrenic abscesses. van Gansbeke D, et al. **Br J Radiol** 1989 Feb;62(734):127–33

"Conservative" treatment of intra-abdominal complications after total gastrectomy with interventional radiological techniques. Jähne J, et al. **Surg Endosc** 1989;3(1):16–20

SUBRENAL CAPSULE ASSAY

Growth and chemosensitivity of human head and neck cancers implanted under the kidney capsule of cyclosporine-immunosuppressed mice. Bennett JA, et al. **Ann Otol Rhinol Laryngol** 1989 Jun;98(6):455–60

Use of the subrenal capsule assay to measure antibody-dependent, cell-mediated cytotoxicity against head and neck tumors. Kau R, et al. **Arch Otorhinolaryngol** 1989;246(3):165–8

The anti-tumor effect of in vitro tumor-stimulated autologous peripheral blood lymphocytes measured by the subrenal capsule assay. Kürten C, et al. **Arch Otorhinolaryngol** 1989;246(2):105–8

UFT is more antineoplastic against gastric carcinoma than 5-fluorouracil, 1-(2-tetrahydrofuryl)-5-fluorouracil and 1-hexylcarbamoyl-5-fluorouracil. Machara Y, et al. **Chemotherapy** 1988;34(6):484–9

Histopathologic evaluation of response to treatment of human tumors implanted under the renal capsule of normal immunocompetent mice. Iwagaki H, et al. **J Med** 1989; 20(1):83–95

A subrenal capsule assay for testing the effect of anticancer drugs against human tumors. Iwagaki H, et al. **J Med** 1988; 19(1):21–31

Chemotesting of prostate cancer in xenografts. Byard MA, et al. **J Surg Oncol** 1989 Jul;41(3):198–200

Accuracy of the subrenal capsule xenograft assay in predicting the clinical growth and chemosensitivity of human squamous head and neck carcinomas. Parnes SM, et al. **J Surg Oncol** 1989 Sep;42(1):21–7

The subrenal capsule: an alternative site for the maintenance of normal and preneoplastic urothelium. Joyce AD, et al. **J Urol** 1988 Nov;140(5):1067–70

The antiproliferative effects of fluoropyrimidine derivatives against human tumor xenografts in a subrenal capsule assay. Nishiyama M, et al. **Jpn J Surg** 1988 Nov;18(6):725–8

Murine subrenal capsule assay: prediction of chemoresponsiveness in head and neck cancer. Panje WR, et al. **Laryngoscope** 1989 Jan;99(1):41–9

The 6-day subrenal capsule assay (SRCA): its criticism, biology and review of assay/clinical correlations. Bogden AE, et al. **Prog Clin Biol Res** 1988;276:139–204 (35 ref.)

Subrenal capsule assay (SRCA) in human tumors. Kangas L, et al. **Prog Clin Biol Res** 1988;276:205–12

Critical valuation of the subrenal capsule (SRC) assay and its use in experimental therapy. Arnold W, et al. **Strahlenther Onkol** 1989 Jul;165(7):532–3

The subrenal capsule assay for chemosensitivity testing of tumors. A review. Mäenpää J, et al. **Zentralbl Gynakol** 1988;110(16):989–96 (38 ref.)

[Observation on tumor invasion in vivo after subcapsular transplantation of a mouse forestomach carcinoma into a syngenic mouse kidney] Li LM. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):200–4 (Eng. Abstr.) **(Chi)**

[Plasma, renal and tumor determination of total platinum during predictive tests of chemosensitivity of human tumor implants in the renal capsule in syngeneic mice] Favre R, et al. **Pathol Biol (Paris)** 1988 Dec;36(10):1199–203 (Eng. Abstr.) **(Fre)**

[Applicability of the subrenal capsule assay (SRCA) in primary breast carcinoma] Gerber B, et al. **Arch Geschwulstforsch** 1989;59(2):85–91 (Eng. Abstr.) **(Ger)**

[Preclinical evaluation of a new anthracycline derivative, SM-5887 by subrenal capsule assay] Inoue K, et al. **Gan To Kagaku Ryoho** 1988 Nov;15(11):3139–42 (Eng. Abstr.) **(Jpn)**

[An experimental study on subrenal capsule assay (SRCA)—problems for the use of immunosuppressive agents] Kikuchi H, et al. **Gan To Kagaku Ryoho** 1989 Aug; 16(8 Pt 1):2607–12 (Eng. Abstr.) **(Jpn)**

[Comparative study on the anticancer activities of KW2149 and mitomycin C against human tumor xenografts using subrenal capsule assay] Takagami S, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2189–93 (Eng. Abstr.) **(Jpn)**

[A study of 6-day subrenal capsule assay with cyclophosphamide pretreatment—histological evaluation of clinical samples] Terashima M, et al. **Gan To Kagaku Ryoho** 1988 Nov;15(11):3127–32 (Eng. Abstr.) **(Jpn)**

[Histological take rates of fresh human tumors in the subrenal capsular space of cyclosporin A treated mice] Yamada H. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2613–9 (Eng. Abstr.) **(Jpn)**

[Evaluation of chemosensitivity of gynecological cancer cell lines by the subrenal capsule assay] Kubo H, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):837–43 (Eng. Abstr.) **(Jpn)**

[Chemosensitivity test against urogenital malignant tumors transplanted into nude mice by the subrenal capsule assay] Horiuchi K. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct; 79(10):1633–8 (Eng. Abstr.) **(Jpn)**

[Fundamental studies of subrenal capsule assay] Ushijima K. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):707–14 (Eng. Abstr.) **(Jpn)**

METHODS

Treatment of advanced and recurrent endometrial carcinoma: correlation of patient response to hormonal and cytotoxic chemotherapy and the response predicted by the subrenal capsule chemosensitivity assay. Stratton JA, et al. **Gynecol Oncol** 1989 Jan;32(1):55–9

SUBRENAL CAPSULE XENOGRAFT ASSAY see **SUBRENAL CAPSULE ASSAY**

SUBSEPSIS ALLERGICA see **WISSLER'S SYNDROME**

SUBSEPSIS HYPERERGICA see **WISSLER'S SYNDROME**

SUBSIDIES, EDUCATIONAL see **TRAINING SUPPORT**

SUBSIDIES, GOVERNMENT see **FINANCING, GOVERNMENT**

SUBSIDIES, RESEARCH see **RESEARCH SUPPORT**

SUBSTANCE ABUSE

see related
DESIGNER DRUGS
DRUG AND NARCOTIC CONTROL

Sexual behavior, drugs, and relationship patterns on a college campus over thirteen years. Murstein BI, et al. **Adolescence** 1989 Spring;24(93):125–39

Natural history of HIV infection in European drug users [letter] Gatell JM, et al. **Aids** 1989 Jun;3(6):404

Syringe-exchange programmes for injecting drug users. Stimson GV. **Aids** 1989 May;3(5):253–60 (73 ref.)

Screening for alcohol and other drug abuse. U.S. Preventive Services Task Force. **Am Fam Physician** 1989 Jul; 40(1):137–46 (78 ref.)

How to assess the risk of HIV exposure. Jewell ME, et al. **Am Fam Physician** 1989 Jul;40(1):153–61

Lupus anticoagulant associated with specific inhibition of factor VII in a patient with AIDS. Ndimbie OK, et al. **Am J Clin Pathol** 1989 Apr;91(4):491–3

Gastrointestinal neoplasia in young HIV antibody-positive patients. Ravalli S, et al. **Am J Clin Pathol** 1989 Apr; 91(4):458–61

American Psychiatric Committee on Drug Abuse and Alcoholism. American Psychiatric Association annual meeting. May, 1987, Chicago, Illinois. **Am J Drug Alcohol Abuse** 1988;14(2):139–292

Rapid death during cocaine abuse: a variant of the neuroleptic malignant syndrome? Kosten TR, et al. **Am J Drug Alcohol Abuse** 1988;14(3):335–46 (44 ref.)

Substance abuse among medical trainees: current problems and evolving resources. Westermeyer J. **Am J Drug Alcohol Abuse** 1988;14(3):393–404

Drugs and homicide [letter] Spitz WU. **Am J Forensic Med Pathol** 1989 Mar;10(1):90

Occult polymicrobial endocarditis with Haemophilus parainfluenzae in intravenous drug abusers. Raucher B, et al. **Am J Med** 1989 Feb;86(2):169–72

In utero cocaine exposure: observations of fetal behavioral state may predict neonatal outcome. Hume RF Jr, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):685–90

Alcoholics' use of benzodiazepines [letter] Annitto WJ. **Am J Psychiatry** 1989 May;146(5):683–4

HIV seroprevalence in intravenous drug users: Los Angeles, California, 1986. Mascola L, et al. **Am J Public Health** 1989 Jan;79(1):81–2

Risk reduction among intravenous drug users in Amsterdam under the influence of AIDS. van den Hoek JA, et al. **Am J Public Health** 1989 Oct;79(10):1353–7

Are tests a threat to the profession? [letter] **Am Pharm** 1989 May;NS29(5):6–7

Anabolic steroids—misuse is abuse [letter] Greco RJ. **Am Pharm** 1988 Oct;NS28(10):8

Anaesthesia and substance abuse. Wood PR, et al. **Anaesthesia** 1989 Aug;44(8):672–80 (65 ref.)

Prenatal abuse of licit and illicit drugs. **Ann N Y Acad Sci** 1989;562:1–388

Perspectives on the concern for and management of prenatal chemical exposure and postnatal effects. Kimmel CA.

Ann N Y Acad Sci 1989;562:1–2
Misuse of temazepam [letter] Farrell M, et al. **BMJ** 1988 Nov 26;297(6660):1402
Decriminalising possession of drugs [letter] Strang J, et al. **BMJ** 1989 Jul 29;299(6694):320
What drives British drug policies? Edwards G. **Br J Addict** 1989 Feb;84(2):219–26 (57 ref.)
Dutch policy on the management of drug-related problems. Engelsman EL. **Br J Addict** 1989 Feb;84(2):211–8
Undergraduate training in substance abuse in the United Kingdom. Glass IB. **Br J Addict** 1989 Feb;84(2):197–202
Uses and abuses of benzodiazepines [editorial] Hallstrom C. **Br J Hosp Med** 1989 Feb;41(2):115
The acquired immunodeficiency syndrome and intravenous drug abuse. Battjes RJ, et al. **Bull Narc** 1988;40(1):21–34 (50 ref.)
Drug abuse and aneurysm [letter] Scher DL. **Chest** 1989 Sep; 96(3):706
An unusual case of toluene-induced metabolic acidosis. Jone CM, et al. **Clin Chem** 1988 Dec;34(12):2596–9
Self-harm behaviors (carving) in female adolescent drug abusers. Schwartz RH, et al. **Clin Pediatr (Phila)** 1989 Aug; 28(8):340–6
Insulin abuse in long-standing IDDM. Schuler G, et al. **Diabetes Res Clin Pract** 1989 Feb 15;6(2):145–8
Miraa. **East Afr Med J** 1988 Jun;65(6):353–4
Psychiatric morbidity among khat chewers. Dhadphale M, et al. **East Afr Med J** 1988 Jun;65(6):355–9
Use of prescription forgeries in a drug abuse surveillance network. Bergman U, et al. **Eur J Clin Pharmacol** 1989; 36(6):621–3
The war on drugs: wrong target, wrong approach [editorial] Reppun JI. **Hawaii Med J** 1988 Sep;47(9):397
Severity grading in self-poisoning. Starmark JE, et al. **Hum Toxicol** 1988 Nov;7(6):551–5
Hospice care of the intravenous drug user AIDS patient in a skilled nurse facility. Bulkin W, et al. **J Acquir Immune Defic Syndr** 1988;1(4):375–80
Why don't intravenous drug users use condoms? [letter] Jones C, et al. **J Acquir Immune Defic Syndr** 1989;2(4):416–7
Incidence of seroconversion and progression of HIV disease among intravenous drug abusers [letter] Vaccher E, et al. **J Acquir Immune Defic Syndr** 1989;2(4):414–5
Cardiovascular effects of adolescent drug abuse. Choi YS, et al. **J Adolesc Health Care** 1989 Jul;10(4):332–7 (73 ref.)
The casual user [letter] Cloninger RT. **J Am Dent Assoc** 1989 Sep;119(3):348, 350
Substance abuse education during internal medicine training. Bigby J. **J Gen Intern Med** 1989 Jan–Feb;4(1):74–6
Job performance and prescription vs. non-prescription drugs [letter] Lewy R. **J Gen Intern Med** 1989 Jul–Aug;4(4):361–2
Do job conditions influence the use of drugs? Mensch BS, et al. **J Health Soc Behav** 1988 Jun;29(2):169–84
Use of zidovudine for drug misusers infected with human immunodeficiency virus. Cowan FM, et al. **J Infect** 1989 Jan;18 Suppl 1:59–66
Human immunodeficiency virus as a possible cofactor in the development of fulminant hepatitis B in intravenous drug abusers. Lange WR, et al. **J Med** 1988;19(3–4):203–14
Substance abuse units taught by four specialties in medical schools and residency programs. Davis AK, et al. **J Med Educ** 1988 Oct;63(10):739–46
Substance abuse policies and programs at U.S. medical schools. Rowley BD, et al. **J Med Educ** 1988 Oct; 63(10):759–61
Pregnancy-associated substance abuse and addiction: current concepts and management. Martin JN Jr, et al. **J Miss State Med Assoc** 1988 Dec;29(12):369–74 (10 ref.)
Seroepidemiology of HIV infection in two cohorts of intravenous drug users in New York City. Brown LS Jr. **J Natl Med Assoc** 1988 Dec;80(12):1313–7
Impaired nurses: a cost analysis. LaGodna GE, et al. **J Nurs Adm** 1989 Sep;19(9):13–8
Alcohol, other drugs, and fatal work-related injuries. Lewis RJ, et al. **J Occup Med** 1989 Jan;31(1):23–8
Maternal substance use and neonatal drug withdrawal. **J Perinatol** 1988 Fall;8(4):387–92
Evaluation of the abuse potential of methocarbamol. Preston KL, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1146–57
AIDS and drug addiction needle exchange schemes [letter] Loza N. **J R Soc Med** 1989 Feb;82(2):123
Alcohol and drug problems in the schools: results of a national survey of school administrators. Moskowitz JM, et al. **J Stud Alcohol** 1988 Jul;49(4):299–305 (18 ref.)
Familial drinking history as a predictor of alcohol and drug consumption among adolescent children. Pandina RJ, et al. **J Stud Alcohol** 1989 May;50(3):245–53
Pulmonary talc granulomatosis due to intravenous ritalin. Williams J, et al. **J Tenn Med Assoc** 1988 Sep;81(9):560–1
From the Centers for Disease Control. Counseling and testing intravenous-drug users for HIV Infection—Boston. **JAMA** 1989 Aug 18;262(7):892
Cocaine use and HIV infection in intravenous drug users in San Francisco. Chaisson RE, et al. **JAMA** 1989 Jan 27; 261(4):561–5
Temporal patterns of cocaine use in pregnancy. Perinatal outcome. Chasnoff IJ, et al. **JAMA** 1989 Mar 24–31; 261(12):1741–4
Maternal cocaine use during early pregnancy as a risk factor for congenital urogenital anomalies. Chávez GF, et al. **JAMA** 1989 Aug 11;262(6):795–8
Will bleach decontaminate needles during cocaine binges in shooting galleries? [letter] Friedman SR, et al. **JAMA** 1989 Sep 15;262(11):1467
Cocaine abuse in pregnancy [letter] Goldin K. **JAMA** 1989 Aug 11;262(6):771
From the Alcohol, Drug Abuse, and Mental Health Administration. Goodwin FK. **JAMA** 1989 May 12; 261(18):2604
Abuse of benzodiazepines [letter] Lin SC, et al. **JAMA** 1989 May 26;261(20):2956–7
Redeclared war on illegal drugs: most agree with intent, but how? [news] Marwick C. **JAMA** 1989 Oct 6;262(13):1741
US cities struggle to implement needle exchanges despite apparent success in European cities [news] Raymond CA. **JAMA** 1988 Nov 11;260(18):2620–1
Combinations of drugs taken by pregnant women add to problems in determining fetal damage [news] Silverman S. **JAMA** 1989 Mar 24–31;261(12):1694
Interaction of drug-abusing mother, fetus, types of drugs examined in numerous studies [news] Silverman S. **JAMA** 1989 Mar 24–31;261(12):1689, 1693
Links between cocaine and retroviral infection. Weiss SH. **JAMA** 1989 Jan 27;261(4):607–9
Use and abuse of benzodiazepines. Issues relevant to prescribing. Woods JH, et al. **JAMA** 1988 Dec 16; 260(23):3476–80 (99 ref.)
Mobility of injection drug users and transmission of HIV [letter; comment] Bisset C, et al. **Lancet** 1989 Jul 1; 2(8653):44. **Comment on:** Lancet 1989 Apr 8;1(8641):782–3
Fatal adult respiratory distress syndrome after quinine overdose [letter] Wenstone R, et al. **Lancet** 1989 May 20; 1(8647):1143–4
Substance abuse in adolescents. Adger H Jr. **Md Med J** 1988 Dec;37(12):962–5
Characterization of the use and misuse of medications by an elderly, ambulatory population. Bernstein LR, et al. **Med Care** 1989 Jun;27(6):654–63
Perinatal cocaine intoxication. Collins E, et al. **Med J Aust** 1989 Mar 20;150(6):331–2, 334
Captopril overdose [letter] Graham SR, et al. **Med J Aust** 1989 Jul 17;151(2):111
The naming of parts [letter] Wodak AD. **Med J Aust** 1988 Nov 21;149(10):568
Coordinated community programs for HIV prevention among intravenous-drug users—California, Massachusetts. **MMWR** 1989 Jun 2;38(21):369–74
Counseling and testing intravenous-drug users for HIV infection—Boston. **MMWR** 1989 Jul 21;38(28):489–90, 495–6
Effects of maternal marijuana and cocaine use on fetal growth [letter] **N Engl J Med** 1989 Oct 5;321(14):979
Oropharyngeal injury possibly due to free-base cocaine [letter] Bezmalinovic Z, et al. **N Engl J Med** 1988 Nov 24;319(21):1420–1
Ophthalmic use of cocaine and the urine test for benzoylecgonine [letter] Bralliar BB, et al. **N Engl J Med** 1989 Jun 29;320(26):1757–8
Female intravenous drug users and perinatal HIV transmission [letter] Brown LS Jr, et al. **N Engl J Med** 1989 Jun 1;320(22):1493–4
The hazards of smokable methamphetamine [letter] Jackson JG. **N Engl J Med** 1989 Sep 28;321(13):907
Atrial fibrillation induced by breath spray [letter] Ridker PM, et al. **N Engl J Med** 1989 Jan 12;320(2):124
Risk factors for human immunodeficiency virus infection in intravenous drug users. Schoenbaum EE, et al. **N Engl J Med** 1989 Sep 28;321(13):874–9
Changes in needle sharing and syringe cleaning among San Francisco drug abusers [letter] Sorensen JL, et al. **N Engl J Med** 1989 Mar 23;320(12):807
Is analgesic nephropathy still a problem in Belgium? Elseviers MM, et al. **Nephrol Dial Transplant** 1988;3(2):143–9
Mechanisms of cocaine abuse and toxicity. Papers from a technical review. September 21–23, 1987, Rockville, MD. **NIDA Res Monogr** 1988;88:1–353
Learning factors in substance abuse. Papers based on a technical review. November 3 and 4, 1986, Bethesda, MD. **NIDA Res Monogr** 1988;84:1–211
Pharmacological effects of cocaine relevant to its abuse. Balster RL. **NIDA Res Monogr** 1988;88:1–13 (33 ref.)
Mechanisms of cocaine abuse and toxicity: an overview. Dunwiddie TV. **NIDA Res Monogr** 1988;88:337–53
Vaginally administered cocaine overdose in a pregnant woman. Greenland VC, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):476–7
Cocaine abuse during pregnancy: maternal and fetal implications. Little BB, et al. **Obstet Gynecol** 1989 Feb; 73(2):157–60
Cocaine, pregnancy, and postpartum intracerebral hemorrhage. Mercado A, et al. **Obstet Gynecol** 1989 Mar; 73(3 Pt 2):467–8
Cocaine: friend or foe? Fairbanks DN. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):638–41
Substance abuse. Macdonald DI. **Pediatr Rev** 1988 Sep; 10(3):89–95 (9 ref.)
Alcohol and psychoactive drug use during pregnancy. Zuckerman B, et al. **Pediatr Rev** 1988 Mar;9(9):271
Successful fibrinolytic treatment of arterial thrombosis and hypertension in a cocaine-exposed neonate. Reznik VM, et al. **Pediatrics** 1989 Oct;84(4):735–8
Reinforcing and discriminative stimulus effects of Ca-acetyl homotaurine in animals. Grant KA, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):607–11
The accuracy and reliability of tests for drugs of abuse in urine samples. Kelly KL. **Pharmacotherapy** 1988; 8(5):263–75 (106 ref.)
Medication and drug abuse in relation to road traffic safety. Lesch OM, et al. **Pharmatherapeutica** 1989;5(5):338–54
Stolen prescription blanks [letter] **Postgrad Med** 1989 Sep 1;86(3):40, 44
Neuropsychiatric symptoms following bismuth intoxication [letter] Eakens GT. **Postgrad Med J** 1988 Sep;64(755):724
Smokeless tobacco use among ninth graders in a north-central metropolitan population: cross-sectional and prospective associations with age, gender, race, family structure, and other drug use. Murray DM, et al. **Prev Med** 1988 Jul;17(4):449–60
Report of the Second Public Health Service AIDS Prevention and Control Conference. Report of the workgroup on intravenous drug abuse. **Public Health Rep** 1988;103 Suppl 1:66–71
Intracerebral hemorrhage following intravenous administration of epinephrine. Delodovici ML, et al. **Riv Neurol** 1989 Mar–Apr;59(2):64–5
Perceptions of South Dakota adults concerning selected adolescent health problems. Schubot DB, et al. **S D J Med** 1989 Jun;42(6):17–20
HIV infection in a non-drug abusing prostitute population [letter] Hyams KC, et al. **Scand J Infect Dis** 1989; 21(3):353–4
AIDS and i.v. drug use. Des Jarlais DC, et al. **Science** 1989 Aug 11;245(4918):578
Adolescents and chemical dependency. Henderson DC, et al. **Soc Work Health Care** 1989;14(1):87–105 (59 ref.)
Substance abuse: an annotated bibliography. Bigby J, et al. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):373–86
The drug problem. Jaspan N. **Top Health Care Financ** 1988 Winter;15(2):46–50
Intravenous drug abusers as renal allograft donors: a retrospective study. Korb S, et al. **Transplant Proc** 1988 Oct;20(5):753–4
Adolescent poisoning: a comparison of accidental and intentional exposures. Dean B, et al. **Vet Hum Toxicol** 1988 Dec;30(6):579–81
Pregnancy outcome following first trimester exposure to cocaine in social users in Toronto, Canada. Graham K, et al. **Vet Hum Toxicol** 1989 Apr;31(2):143–8
[Possibilities of modelling of an undesirable phenomenon—non-alcoholic substance abuse in society] Fikr V, et al. **Cesk Zdrav** 1988 Oct;36(10):418–26 (Eng. Abstr.) (Cze)
[Flaws and deficiencies in debates about drug abuse] Roepstorff K. **Ugeskr Laeger** 1989 Aug 28;151(35):2217 (Dan)
[Effects of maternal methadone addiction on the growth and health of the fetus] Rosati P, et al. **Minerva Ginecol** 1988 Oct;40(10):597–601 (Eng. Abstr.) (Ita)
[Abuse of laxatives] Hovde O, et al. **Tidsskr Nor Laegeforen** 1988 Oct 20;108(29):2469–70 (Eng. Abstr.) (Nor)
[Toward the 8th All-Union Congress of Neuropathologists, Psychiatrists and Drug Abuse Specialists] Morozov GV. **Zh Nevropatol Psikhiatr** 1988;88(10):3–8 (Rus)
[Risk factors in the adolescent personality. Inadaptability and drugs] Garay Mata V. **An Esp Pediatr** 1988 Sep;29 Suppl 32:148–51 (Spa)
[Absence of HTLV-I infection in drug addicts in Vizcaya (letter)] Merino F, et al. **Med Clin (Barc)** 1989 Jan 21; 92(2):79 (Spa)
[Traffic accidents and drug abuse (letter)] Nogué S, et al. **Med Clin (Barc)** 1989 Jan 21;92(2):78 (Spa)

BLOOD

Neuroendocrine and mood responses to intravenous L-tryptophan in 3,4-methylenedioxymethamphetamine (MDMA) users. Preliminary observations. Price LH, et al. **Arch Gen Psychiatry** 1989 Jan;46(1):20–2
Impulsivity, aggression, and neuroendocrine responses to serotonergic stimulation in substance abusers. Fishbein DH, et al. **Biol Psychiatry** 1989 Apr 15;25(8):1049–66
Raised serum beta 2 microglobulin levels in different stages of human immunodeficiency virus infection. Franzetti F, et al. **J Clin Lab Immunol** 1988 Nov;27(3):133–7 (30 ref.)

COMPLICATIONS

Obsessive-compulsive disorder in people that abuse codeine. Senjo M. **Acta Psychiatr Scand** 1989 Jun;79(6):619–20
Cocaine abuse: historical, epidemiologic, and clinical perspectives for pediatricians. Krug SE. **Adv Pediatr** 1989; 36:369–406 (247 ref.)
Poor lifestyle modification among intravenous drug users assisted at a sexually transmitted disease clinic for HIV infection diagnosis, Madrid, 1987 [letter] de la Loma A, et al. **Aids** 1988 Oct;2(5):401–2
HIV and intravenous drug use. Des Jarlais DC, et al. **Aids** 1988;2 Suppl 1:S65–9 (59 ref.)
The natural history of HIV infection in intravenous drug users: risk of disease progression in a cohort of seroconverters. Rezza G, et al. **Aids** 1989 Feb;3(2):87–90
Needle sharing and other behaviours related to HIV spread among intravenous drug users [letter] Rezza G, et al. **Aids** 1989 Apr;3(4):247–8
Significance of HIV antibody testing as a preventive measure in intravenous drug users [letter] Sasse H, et al. **Aids** 1988 Oct;2(5):402–3

Epidemic Kaposi's sarcoma in Italy, a country with intravenous drug abusers as the major group at risk for AIDS: report of 60 cases [letter] Vaccher E, et al. **Aids** 1989 May;3(5):321

Syringe HIV seroprevalence and behavioural and demographic characteristics of intravenous drug users in Sydney, Australia, 1987. Wolk J, et al. **Aids** 1988 Oct; 2(5):373–7

Toxicology screening in acute spinal cord injury. Heinemann AW, et al. **Alcoholism (NY)** 1988 Dec;12(6):815–9

Purulent pericarditis and ventricular pseudoaneurysm in an intravenous drug abuser. Wiegers SE, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1635–7

Substance abuse among general psychiatric patients: place of presentation, diagnosis, and treatment. Galanter M, et al. **Am J Drug Alcohol Abuse** 1988;14(2):211–35 (75 ref.)

Substance abuse as a precipitant of wife abuse victimizations. Kantor GK, et al. **Am J Drug Alcohol Abuse** 1989; 15(2):173–89

Drug abuse in schizophrenia and bipolar disorder. Miller FT, et al. **Am J Drug Alcohol Abuse** 1989;15(3):291–5

Candida osteomyelitis [letter] Collignon P. **Am J Med** 1987 Dec;83(6):1173

Double dose of phenylpropanolamine as cause of transient hypertension [letter] Duvernoy WF. **Am J Med** 1988 Dec; 85(6):896

Cocaine-associated acute myoglobinuric renal failure [letter] Guerin JM, et al. **Am J Med** 1989 Aug;87(2):248–9

Pulmonary granulomatosis secondary to pentazocine abuse mimicking connective tissue diseases. Newell GC, et al. **Am J Med** 1988 Dec;85(6):890–2

Cocaine-associated acute myoglobinuric renal failure. Pogue VA, et al. **Am J Med** 1989 Feb;86(2):183–6

Rhabdomyolysis after intravenous cocaine. Reinhart WH, et al. **Am J Med** 1988 Oct;85(4):579

Cocaine-induced rhabdomyolysis masquerading as myocardial ischemia. Rubin RB, et al. **Am J Med** 1989 May;86(5):551–3

Cocaine-associated rhabdomyolysis. Parks JM, et al. **Am J Med Sci** 1989 May;297(5):334–6

Illicit substance use by acutely psychotic patients [letter] Brady K, et al. **Am J Psychiatry** 1989 Oct;146(10):1349–50

Anabolic androgenic steroids and suicide [letter] Brower KJ, et al. **Am J Psychiatry** 1989 Aug;146(8):1075

Comorbidity of substance abuse and other psychiatric disorders in adolescents. Bukstein OG, et al. **Am J Psychiatry** 1989 Sep;146(9):1131–41 (97 ref.)

Psychiatric syndromes in adolescent substance abusers. DeMilio L. **Am J Psychiatry** 1989 Sep;146(9):1212–4

Outbreaks of hepatitis A among illicit drug users, Oklahoma, 1984–87. Harkess J, et al. **Am J Public Health** 1989 Apr; 79(4):463–6

The psychology of preventing AIDS among intravenous drug users. A social learning conceptualization. Des Jarlais DC, et al. **Am Psychol** 1988 Nov;43(11):865–70

Tuberculosis screening in alcoholics and drug addicts [letter] Friedman L. **Am Rev Respir Dis** 1988 Jul;138(1):239

Lymphadenopathy in an inner-city population consisting principally of intravenous drug abusers with suspected acquired immunodeficiency syndrome. Hewlett D Jr, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1275–9

Long-term follow-up of drug abusers with intravenous talcosis. Paré JP, et al. **Am Rev Respir Dis** 1989 Jan; 139(1):233–41

The relevance of volatile substance abuse to anaesthetics [letter] Marjot R. **Anaesthesia** 1989 Feb;44(2):162–3

Facial swelling secondary to inhaled bronchodilator abuse: catecholamine-induced sialadenosis. Loria RC, et al. **Ann Allergy** 1989 Apr;62(4):289–93

Managing cocaine crisis. Karch SB. **Ann Emerg Med** 1989 Feb;18(2):228–30

Fulminant hepatitis A in intravenous drug users with chronic liver disease. Akriviadis EA, et al. **Ann Intern Med** 1989 May 15;110(10):838–9

Co-infection with human immunodeficiency virus-type 1 (HIV-1) and cytomegalovirus in two intravenous drug users. Bonetti A, et al. **Ann Intern Med** 1989 Aug 15; 111(4):293–6

Recommendations for control and prevention of human immunodeficiency virus (HIV) infection in intravenous drug users. Brickner PW, et al. **Ann Intern Med** 1989 May 15;110(10):833–7 (60 ref.)

Botulism associated with Clostridium botulinum sinusitis after intranasal cocaine abuse. Kudrow DB, et al. **Ann Intern Med** 1988 Dec 15;109(12):984–5

Fulminant hepatitis A in intravenous-drug users [letter] Laskin KJ, et al. **Ann Intern Med** 1989 May 15; 110(10):845–6

Cocaine abuse and deep venous thrombosis [letter] Lisse JR, et al. **Ann Intern Med** 1989 Apr 1;110(7):571–2

Myonecrosis and cocaine abuse [letter] Singhal PC, et al. **Ann Intern Med** 1988 Nov 15;109(10):843

Cardiac effects of inhaled typewriter correction fluid [letter] Wodka RM, et al. **Ann Intern Med** 1989 Jan 1;110(1):91–2

Cocaine: clinical studies of pregnancy and the newborn. Chasnoff IJ, et al. **Ann N Y Acad Sci** 1989;562:260–6

Drug injection injuries of the upper extremity. Smith DJ Jr, et al. **Ann Plast Surg** 1989 Jan;22(1):19–24

Vascular trauma in drug abuse: patterns of injury. Benitez PR, et al. **Ann Vasc Surg** 1986 Sep;1(2):175–81

Fever and hyperpigmented papules in an intravenous drug abuser. Disseminated histoplasmosis in acquired immunodeficiency syndrome (AIDS). Freeman WE, et al. **Arch Dermatol** 1989 May;125(5):689, 692–3

Maternal narcotic abuse and neonatal thrombocytosis [letter] Chambers HM, et al. **Arch Dis Child** 1989 Mar;64(3):426

'Ecstasy': a human neurotoxin? [letter] Peroutka SJ. **Arch Gen Psychiatry** 1989 Feb;46(2):191

The prevalence of psychiatric disorders in patients with alcohol and other drug problems. Ross HE, et al. **Arch Gen Psychiatry** 1988 Nov;45(11):1023–31

Pyomyositis in an intravenous drug user with human immunodeficiency virus [letter] Vartian C, et al. **Arch Intern Med** 1988 Dec;148(12):2689

Stroke associated with cocaine use. Klonoff DC, et al. **Arch Neurol** 1989 Sep;46(9):989–93 (42 ref.)

Epidural spinal infection in intravenous drug abusers. Koppel BS, et al. **Arch Neurol** 1988 Dec;45(12):1331–7 (14 ref.)

Orbital inflammation and optic neuropathies associated with chronic sinusitis of intranasal cocaine abuse. Possible role of contiguous inflammation. Goldberg RA, et al. **Arch Ophthalmol** 1989 Jun;107(6):831–5

A new cocaine abuse complex. Involvement of nose, septum, palate, and pharynx. Deutsch HL, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):235–7

Nasal symptoms associated with cocaine abuse during adolescence. Schwartz RH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):63–4

Intracerebral hemorrhage associated with cocaine abuse. Nolte KB, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):812–3

Simultaneous acute thrombosis of two major coronary arteries following intravenous cocaine use. Stenberg RG, et al. **Arch Pathol Lab Med** 1989 May;113(5):521–4

Detection of renal impairment in cases of chronic abuse of analgesics by administration of desamino-D-arginine vasopressin. Wambach G, et al. **Arzneimittelforschung** 1989 Mar;39(3):387–90

Chloroquine abuse and heart block in Africans. Ihenacho HN, et al. **Aust N Z J Med** 1989 Feb;19(1):17–21

Psychosis from alcohol or drug abuse [letter] Lipsedge M, et al. **BMJ** 1988 Dec 17;297(6663):1612

Well users clinic for illicit drug users [letter] Strang J, et al. **BMJ** 1989 May 13;298(6683):1310

Endocarditis in intravenous drug abusers with staphylococcal septicaemia. Burns JM, et al. **Br Heart J** 1989 Apr; 61(4):356–7

Distribution of risk behaviour for HIV infection amongst intravenous drug users. Coleman RM, et al. **Br J Addict** 1988 Nov;83(11):1331–4

Alcohol: the hidden drug among substance abusers [editorial] De Leon G. **Br J Addict** 1989 Aug;84(8):837–40

The sex industry, alcohol and illicit drugs: implications for the spread of HIV infection. Plant ML, et al. **Br J Addict** 1989 Jan;84(1):53–9 (57 ref.)

Sex differences in the prevalence of psychiatric disorders in patients with alcohol and drug problems. Ross HE, et al. **Br J Addict** 1988 Oct;83(10):1179–92

Acute psychotic episode caused by abuse of phensedyl [letter] Abed RT, et al. **Br J Psychiatry** 1987 Dec;151:868

Special problems of injecting drug-misusers. Brettle RP, et al. **Br Med Bull** 1988 Jan;44(1):149–60 (25 ref.)

HIV-1 infection in intravenous drug abusers with clinical manifestations of hepatitis in the city of Buenos Aires. Díaz Lestrem M, et al. **Bull Pan Am Health Organ** 1989; 23(1-2):35–41

Prevalence of HIV-1 infection among injection drug users in Montreal, 1985–1987. Lamothe F, et al. **Can Dis Wkly Rep** 1988 Dec 17;14(50):225–7 **(Eng, Fre)**

Hepatitis A outbreak in British Columbia, 1988–1989. Ng T, et al. **Can Dis Wkly Rep** 1989 Aug 12;15(32):163–5 **(Eng, Fre)**

Cocaine-associated myocardial infarction. A word of caution about thrombolytic therapy. Bush HS. **Chest** 1988 Oct; 94(4):878

Acute non-Q wave cocaine-related myocardial infarction. Kossowsky WA, et al. **Chest** 1989 Sep;96(3):617–21

Bilateral exudative pleural effusions following intravenous ethchlorvynol administration. Miller KS, et al. **Chest** 1989 Feb;95(2):464–6

Airway complications from free-basing cocaine. Taylor RF, et al. **Chest** 1989 Feb;95(2):476–7

Pulmonary hemorrhage in a cocaine abuser [letter; comment] Walek JW, et al. **Chest** 1989 Jul;96(1):222. **Comment on:** Chest 1988 Feb;93(2):427–9

Predictive indicators for adjustment in 4-year-old children whose mothers used amphetamine during pregnancy. Billing L, et al. **Child Abuse Negl** 1988;12(4):503–7

Acute aortic dissection associated with cocaine abuse [letter] Cregler LL. **Clin Cardiol** 1988 Nov;11(11):806

Rhabdomyolysis in a case of free-base cocaine ("crack") overdose. Jandreski MA, et al. **Clin Chem** 1989 Jul; 35(7):1547–9

Symmetrical columnar necrosis of the basal ganglia and brain stem in an adult following cardiac arrest. Révész T, et al. **Clin Neuropathol** 1988 Nov-Dec;7(6):294–8

Cocaine exposure in a term neonate. Necrotizing enterocolitis as a complication. Telsey AM, et al. **Clin Pediatr (Phila)** 1988 Nov;27(11):547–50

Intrauterine stroke and maternal polydrug abuse. Case report. Tenorio GM, et al. **Clin Pediatr (Phila)** 1988 Nov; 27(11):565–7

Medical complications of illicit cocaine use. VanDette JM, et al. **Clin Pharm** 1989 Jun;8(6):401–11 (107 ref.)

Hepatitis A among drug abusers. Centers for Disease Control. **Conn Med** 1988 Sep;52(9):555–6

Safer drug use and AIDS [editorial] Novick A. **Conn Med** 1988 Nov;52(11):683–4

Sharing blood-borne viruses and illicit drug users [editorial] Novick A. **Conn Med** 1988 Dec;52(12):736–7

Cocaine abuse and delusions of parasitosis. Elpern DJ. **Cutis** 1988 Oct;42(4):273–4

Sero group C streptococcal infection in intravenous drug abusers: a report of two cases. Kramer ED, et al. **Diagn Microbiol Infect Dis** 1988 Jul;10(3):181–4

Relative abuse liability of lorazepam and diazepam: an evaluation in 'recreational' drug users. Funderburk FR, et al. **Drug Alcohol Depend** 1988 Dec;22(3):215–22

An epidemiologic investigation of marijuana- and cocaine-related palpitations. Petronis KR, et al. **Drug Alcohol Depend** 1989 Jun;23(3):219–26

Antibodies to hepatitis delta virus in intravenous drug addicts and male homosexuals in Spain. León P, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):533–5

The association between analgesic abuse and headache—coincidental or causal [letter] Bowdler I, et al. **Headache** 1988 Aug;28(7):494

Cerebral infarction associated with cocaine use. Meza I, et al. **Henry Ford Hosp Med J** 1989;37(1):50–1

Practices reported by incarcerated drug abusers to reduce risk of AIDS. Valdiserri EV, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):966–72

Neurologic sequelae of cocaine. Feinman BN. **Hosp Pract [Off]** 1989 Jan 30;24(1A):97–8, 104

Cocaine or perhaps antihistamine abuse [letter] Goldin K. **Hosp Pract [Off]** 1989 May 15;24(5):14, 16

Cocaine and the heart. Waller BF. **Indiana Med** 1988 Nov; 81(11):956–9 (50 ref.)

Increased incidence of infections in intravenous drug users. Horsburgh CR Jr, et al. **Infect Control Hosp Epidemiol** 1989 May;10(5):211–5

Localized cutaneous leukocytoclastic vasculitis in an intravenous drug abuser. Bickley LK, et al. **Int J Dermatol** 1988 Sep;27(7):512–3

Prevalence of antibodies to human immunodeficiency virus among intravenous drug users in Israel—association with travel abroad. Dan M, et al. **Int J Epidemiol** 1989 Mar; 18(1):239–41

AIDS information campaign has significantly reduced risk factors for HIV infection in Italian drug abusers. Bortolotti F, et al. **J Acquir Immune Defic Syndr** 1988;1(4):412–3

HIV infection among persons who inject illicit drugs: problems and prospects. Des Jarlais DC, et al. **J Acquir Immune Defic Syndr** 1988;1(3):267–73

No evidence of HTLV-I infection in intravenous drug abusers in West Germany [letter] Krämer A, et al. **J Acquir Immune Defic Syndr** 1988;1(2):163–4

Cocaine abuse: unusual medical complications. Fitzharris JW. **J Am Osteopath Assoc** 1989 Jul;89(7):914–6 (19 ref.)

Needle exchange and the prevention of AIDS [editorial] Imperato PJ. **J Community Health** 1989 Summer;14(2):61–3

Subcortical cerebral hemorrhages associated with cocaine abuse: CT and MR findings. Nalls G, et al. **J Comput Assist Tomogr** 1989 Jan-Feb;13(1):1–5

Freebased cocaine smoking and reactive airway disease. Gordon K 3d. **J Emerg Med** 1989 Mar-Apr;7(2):145–7 (7 ref.)

Prescription diuretic abuse in patients with bulimia nervosa. Pomeroy C, et al. **J Fam Pract** 1988 Nov;27(5):493–6

Intra-arterial injection of dextropropoxyphene into hand arteries. Siana JE, et al. **J Hand Surg [Br]** 1989 Feb; 14(1):43–4

Hepatitis D virus and human immunodeficiency virus antibodies in parenteral drug abusers who are hepatitis B surface antigen positive. Novick DM, et al. **J Infect Dis** 1988 Oct;158(4):795–803

Risk of developing AIDS in newly seropositive intravenous drug abusers [letter] Rezza G, et al. **J Infect Dis** 1989 Jun; 159(6):1156

Disseminated candidiasis in a drug addict not using heroin [letter] Scheidegger C, et al. **J Infect Dis** 1989 May; 159(5):1007–8

Benzodiazepine prescription abuse and the benzodiazepine withdrawal syndrome. Olivier HR. **J La State Med Soc** 1989 Mar;141(3):18–22

Adverse health consequences of cocaine abuse. Cregler LL. **J Natl Med Assoc** 1989 Jan;81(1):27–38 (171 ref.)

Drug abuse and AIDS in women and their affected offspring [editorial] Mitchell JL. **J Natl Med Assoc** 1989 Aug; 81(8):841–2

Alcohol and substance abuse among schizophrenic patients presenting to an emergency psychiatric service. Barbee JG, et al. **J Nerv Ment Dis** 1989 Jul;177(7):400–7

A fatal attraction: cocaine related subarachnoid hemorrhage. Willis D, et al. **J Neurosci Nurs** 1989 Jun;21(3):171–4

Leads from the MMWR. Acquired immunodeficiency syndrome associated with intravenous-drug use—United States, 1988. **JAMA** 1989 Apr 28;261(16):2314–6

Prospective study on cocaine use prior to delivery. Ahmed MS, et al. **JAMA** 1989 Oct 6;262(13):1880

Drug abuse, HIV infection, and tuberculosis [letter] Brown LS Jr, et al. **JAMA** 1989 Aug 4;262(5):615–6

From the Alcohol, Drug Abuse, and Mental Health Administration. Goodwin FK. **JAMA** 1989 Sep 15; 262(11):1439

Prevalence of HIV infection among intravenous drug users in the United States. Hahn RA, et al. **JAMA** 1989 May

12;261(18):2677–84 (51 ref.)
Crack and fatal child abuse [letter] Press S. **JAMA** 1988 Dec 2;260(21):3132
Study of i.v. drug users and AIDS finds differing infection rate, risk behaviors [news] Raymond CA. **JAMA** 1988 Dec 2;260(21):3105
Migrainelike headache and cocaine use. Satel SL, et al. **JAMA** 1989 May 26;261(20):2995–6
Prospective study of human immunodeficiency virus infection and pregnancy outcomes in intravenous drug users. Selwyn PA, et al. **JAMA** 1989 Mar 3;261(9):1289–94
Amphetamine–induced myoglobinuric acute renal failure. Terada Y, et al. **Jpn J Med** 1988 Aug;27(3):305–8 (15 ref.)
HIV infection in drug misusers [news] **Lancet** 1988 Oct 8; 2(8615):862
Epidemiology, clinical features, and prognostic factors of paediatric HIV infection. Italian Multicentre Study. **Lancet** 1988 Nov 5;2(8619):1043–6
Cocaine and HIV seropositivity [letter] French JF. **Lancet** 1988 Oct 22;2(8617):965
Butane sniffing causing ventricular fibrillation [letter] Gunn J, et al. **Lancet** 1989 Mar 18;1(8638):617
Cocaine abuse and opioid withdrawal [letter] Kosten TA, et al. **Lancet** 1989 Jul 15;2(8655):165–6
HIV seroconversion rates in intravenous drug abusers from northern Italy [letter] Nicolosi A, et al. **Lancet** 1989 Jul 29;2(8657):269
Chronic non–A, non–B hepatitis developed after transfusions, illicit self–injections or sporadically. Outcome during long–term follow–up—a comparison. Mattsson L, et al. **Liver** 1989 Apr;9(2):120–7
Preventing AIDS contagion among intravenous drug users. Newmeyer JA, et al. **Med Anthropol** 1989 Mar; 10(2–3):167–75
Cocaine–induced coronary artery disease: recognition and treatment. Frishman WH, et al. **Med Clin North Am** 1989 Mar;73(2):475–86 (62 ref.)
Cocaine abuse with hyperthermia, seizures and fatal complications. Campbell BG. **Med J Aust** 1988 Oct 3; 149(7):387–9
The acquired immunodeficiency syndrome in heterosexual intravenous drug abusers in Australia [letter] Wodak A, et al. **Med J Aust** 1988 Nov 7;149(9):505
Adolescent drug use and antisocial behaviour. Osuna E, et al. **Med Law** 1988;7(4):365–70
AIDS grant for "U". **Minn Med** 1989 Jan;72(1):48
Non–A, non–B hepatitis—Illinois. **MMWR** 1989 Aug 11; 38(31):529–31
Update: acquired immunodeficiency syndrome associated with intravenous–drug use—United States, 1988. **MMWR** 1989 Mar 17;38(10):165–70
Arsenic intoxication in a cocaine abuser [letter] Lombard J, et al. **N Engl J Med** 1989 Mar 30;320(13):869
A prospective study of the risk of tuberculosis among intravenous drug users with human immunodeficiency virus infection. Selwyn PA, et al. **N Engl J Med** 1989 Mar 2; 320(9):545–50
Drug use in pregnancy. Chasnoff IJ. **N Y State J Med** 1989 May;89(5):255
Birth outcomes for infants of drug abusing mothers. Kaye K, et al. **N Y State J Med** 1989 May;89(5):256–61
Pneumomediastinum induced by inhalation of alkaloidal cocaine. Palat D, et al. **N Y State J Med** 1988 Aug; 88(8):438–9
AIDS and the new drug injector. Friedman SR, et al. **Nature** 1989 Jun 1;339(6223):333–4
Acute renal failure following cocaine abuse. Singhal P, et al. **Nephron** 1989;52(1):76–8
Seizures associated with recreational drug abuse. Alldredge BK, et al. **Neurology** 1989 Aug;39(8):1037–9
Laxative abuse causing hypermagnesemia, quadriparesis, and neuromuscular junction defect. Castelbaum AR, et al. **Neurology** 1989 May;39(5):746–7
Nocardial spinal epidural abscess. Siao P, et al. **Neurology** 1989 Jul;39(7):996
Pharmacotherapy of concomitant psychiatric disorders in adolescent substance abusers. Geller B. **NIDA Res Monogr** 1988;77:94–112 (108 ref.)
Cocaine use and acute rupture of ectopic pregnancies. Thatcher SS, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):478–9
Aspergillus flavus endophthalmitis and retinitis in an intravenous drug abuser. A therapeutic success. Lance SE, et al. **Ophthalmology** 1988 Jul;95(7):947–9
Test and teach. Number fifty–seven. Cocaine–associated coronary thrombosis and myocardial ischemia. Cooke CT, et al. **Pathology** 1988 Jul;20(3):242, 305–6
Chest pain in an adolescent: think of cocaine! [letter] Schwartz RH. **Pediatrics** 1989 Apr;83(4 Pt 2):639–40
Chest pain in an adolescent: think of cocaine! [letter] Selbst SM. **Pediatrics** 1989 Sep;84(3):582
Caring for intravenous drug abusers with HIV infection: some lessons from Edinburgh. Welsby PD. **Postgrad Med J** 1988 Aug;64(754):575–7
AIDS and injecting drug users. Bucknall A. **Practitioner** 1988 Apr 22;232(1447):463–6
Chlormethiazole and alcohol abuse [editorial] Caviston P, et al. **Practitioner** 1988 Mar 8;232(1444):217
Patterns of previous drug abuse in patients presenting with postpsychotic depression. Siris SG, et al. **Psychopharmacol Bull** 1988;24(2):256–9
Continuing outbreak of hepatitis A linked with intravenous drug abuse in Multnomah County. Schade CP, et al. **Public Health Rep** 1988 Sep–Oct;103(5):452–9
Chest pain and dyspnea related to "crack" cocaine smoking: value of chest radiography. Eurman DW, et al. **Radiology** 1989 Aug;172(2):459–62
Pulmonary cystic disease: comparison of Pneumocystis carinii pneumatoceles and bullous emphysema due to intravenous drug abuse. Gurney JW, et al. **Radiology** 1989 Oct; 173(1):27–31
Pulmonary edema in cocaine smokers. Hoffman CK, et al. **Radiology** 1989 Aug;172(2):463–5
Cocaine abuse: neurovascular complications. Jacobs IG, et al. **Radiology** 1989 Jan;170(1 Pt 1):223–7
Calcium oxalate retinopathy associated with methoxyflurane abuse. Novak MA, et al. **Retina** 1988;8(4):230–6
Needles that kill: modeling human immunodeficiency virus transmission via shared drug injection equipment in shooting galleries [published erratum appears in Rev Infect Dis 1989 Jul–Aug;11(4):672] Kaplan EH. **Rev Infect Dis** 1989 Mar–Apr;11(2):289–98
Entry of HIV infection into the intravenous drug abusing population [letter] Martin DJ, et al. **S Afr Med J** 1989 Apr 1;75(7):349
Subcutaneous calcium heparin for anticoagulation of HIV/hepatitis B infected intravenous drug abusers [letter] Green ST, et al. **Scand J Infect Dis** 1988;20(4):457
High rate of HTLV–II infection in seropositive i.v. drug abusers in New Orleans. Lee H, et al. **Science** 1989 Apr 28;244(4903):471–5
A larger spectrum of severe HIV–1–related disease in intravenous drug users in New York City. Stoneburner RL, et al. **Science** 1988 Nov 11;242(4880):916–9
The dynamics of an illicit drug scene. Robertson JR, et al. **Scott Med J** 1988 Aug;33(4):293
Rheumatic manifestations of diseases associated with substance abuse. Lohr KM. **Semin Arthritis Rheum** 1987 Nov;17(2):90–111 (125 ref.)
Cocaine–associated acute myoglobinuric renal failure [letter] Guerin JM, et al. **South Med J** 1989 Sep;82(9):1196–7
Migraine headaches and drug abuse [letter] el–Mallakh RS. **South Med J** 1989 Jun;82(6):805
High prevalence of delta virus infection in Thai intravenous drug abusers. Louisirirotchanakul S, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):191–5
Cocaine and stroke. Levine SR, et al. **Stroke** 1988 Jun; 19(6):779–83
Thrombocytopenic purpura in parenteral drug abusers. Hoballah JJ, et al. **Surg Gynecol Obstet** 1989 Jun; 168(6):497–500
Epidemiology and mechanistic basis of analgesic–associated nephropathy. Gregg NJ, et al. **Toxicol Lett** 1989 Mar; 46(1–3):141–51 (30 ref.)
Persistent generalized lymphadenopathy syndrome vs "AIDS"—unrelated malignant lymphoma: comparison of presenting clinical and laboratory findings in 88 patients. AIDS and Related Syndromes Study Group. Tirelli U, et al. **Tumori** 1989 Jun 30;75(3):222–5
Penile ecthyma gangrenosum. Complication of drug addiction. Cunningham DL, et al. **Urology** 1989 Aug; 34(2):109–10
HIV–2 in Spanish drug abusers [letter] Soriano V, et al. **Vox Sang** 1989;57(2):157
Fatal hyperthermia associated with cocaine use. Bauwens JE, et al. **West J Med** 1989 Feb;150(2):210–2
Mass lesion in an intravenous drug user. Round pneumonia. Pandya K, et al. **West J Med** 1989 Jan;150(1):95–6
Seizures associated with smoking 'crack'—a survey of adolescent 'crack' smokers [letter] Schwartz RH. **West J Med** 1989 Feb;150(2):213
Self–poisoning with drugs. Kerr HD. **Wis Med J** 1989 Feb; 88(2):15–8
Intravenous drug use and HIV infection [news] **World Health Forum** 1988;9(2):273–4
[AIDS prevention and control among substance abusers] Jacobsen JP, et al. **Ugeskr Laeger** 1988 Nov 7; 150(45):27554–5 (Dan)
[EEC concerted action research on HIV infection among intravenous drug abusers] Worm AM. **Ugeskr Laeger** 1988 Nov 14;150(46):2836–7 (Dan)
[Substance abuse among women—maternal care as a new risk group?] Halmesmäki E. **Duodecim** 1989;105(12):1191–6 (Fin)
[Renal disease associated with heroin abuse] Uzan M, et al. **Nephrologie** 1988;9(5):217–21 (Eng. Abstr.) (Fre)
[Neurologic accidents after cocaine use (letter)] De Broucker T, et al. **Presse Med** 1989 Mar 11;18(10):541–2 (Fre)
[Myocardial infarct following cocaine abuse] Gubser R, et al. **Schweiz Med Wochenschr** 1988 Nov 12;118(45):1657–9 (Eng. Abstr.) (Fre)
[Cerebrovascular accidents in relation to drug consumption or drug abuse] Uldry PA, et al. **Schweiz Rundsch Med Prax** 1989 Jun 6;78(23):663–6 (41 ref.) (Eng. Abstr.) (Fre)
[AIDS: the portion of drug dependent patients is increasing] **Fortschr Med** 1989 Feb 10;107(4):11 (Ger)
[AIDS in the drug scene. Less needle sharing (news)] **Fortschr Med** 1989 Aug 10;107(23):16 (Ger)
[AIDS: low infection rate in German drug addicts] **Schweiz Rundsch Med Prax** 1989 May 2;78(18):537 (Ger)
[Asthenia, vomiting, weight loss (clinical conference)] Steiner A, et al. **Schweiz Rundsch Med Prax** 1988 Dec 20; 77(51):1410–2 (Eng. Abstr.) (Ger)
[Complications following parenteral administration of oral methadone solution] Naschitz JE, et al. **Harefuah** 1988 Nov 15;115(10):271–4 (Eng. Abstr.) (Heb)
[Abuse of licit drugs in heroin addicts] Barattini M, et al. **Clin Ter** 1987 Feb 15;120(3):183–98 (Eng. Abstr.) (Ita)
[An autopsy case of subarachnoid and intracerebral hemorrhage and necrotizing angitis associated with methamphetamine abuse] Shibata S, et al. **No To Shinkei** 1988 Nov;40(11):1089–94 (Eng. Abstr.) (Jpn)
[A case of late diagnosis of analgesic nephropathy] Osokin SV, et al. **Ter Arkh** 1988;60(6):120–1 (Rus)
[Venereal diseases in women who abuse narcotic substances] Slutskin BM, et al. **Vestn Dermatol Venerol** 1988;(10):65–7 (Eng. Abstr.) (Rus)
[Prevalence of HIV–1 infection in viral hepatitis patients with a history of intravenous drug abuse] Díaz Lestrem M, et al. **Bol Of Sanit Panam** 1988 Nov–Dec;105(5–6):510–6 (Eng. Abstr.) (Spa)
[Esophageal candidiasis in acute HIV infection (letter)] González Lahoz JM, et al. **Rev Clin Esp** 1988 Nov; 183(7):386 (Spa)
[Left ventricular function in intravenous drug addicts. Preliminary study] González Juanatey JR, et al. **Rev Esp Cardiol** 1988 Oct;41(8):467–70 (Eng. Abstr.) (Spa)
[Drug abstinence is more difficult when benzodiazepines are prescribed] Alström J, et al. **Lakartidningen** 1988 Dec 28; 85(52):4608 (Swe)

DIAGNOSIS

Uncle Wilfred [editorial] **Am Fam Physician** 1988 Dec; 38(6):99
Addiction and prenatal screening [letter] Monroe L. **Am Fam Physician** 1988 Dec;38(6):46
Privacy, profit, and the physician. Cohen SR. **Am J Dermatopathol** 1988 Feb;10(1):87–8
Urine drug screening in mothers and newborns. Osterloh JD, et al. **Am J Dis Child** 1989 Jul;143(7):791–3
Substance abuse/mental illness: diagnostic issues. Ford J, et al. **Am J Drug Alcohol Abuse** 1989;15(3):297–307
Pseudotetanus from illicit drug use [letter] Melvin JA, et al. **Am J Emerg Med** 1989 Jul;7(4):455–6
A nation of suspects: drug testing and the Fourth Amendment. Glantz LH. **Am J Public Health** 1989 Oct; 79(10):1427–31
Drug use and women: establishing a standard of care. Chasnoff IJ. **Ann N Y Acad Sci** 1989;562:208–10
Evaluation of the Keystone Diagnostic Quik Test. A paper chromatography test for drugs of abuse in urine. Schwartz RH, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):363–4
The reliability of the CIDI–SAM: a comprehensive substance abuse interview. Cottler LB, et al. **Br J Addict** 1989 Jul; 84(7):801–14
Diagnostic validity of the drug abuse screening test in the assessment of DSM–III drug disorders. Gavin DR, et al. **Br J Addict** 1989 Mar;84(3):301–7
Advisability of substance abuse testing in parents who severely maltreat their children: the issue of drug testing before the juvenile/family courts. Famularo R, et al. **Bull Am Acad Psychiatry Law** 1988;16(3):217–23
Tandem mass spectrometry in drug–abuse testing, exemplified for anabolic steroids [letter] Kinter M, et al. **Clin Chem** 1988 Oct;34(10):2178
Missed diagnosis of substance abuse in psychiatric patients. Ananth J, et al. **Hosp Community Psychiatry** 1989 Mar; 40(3):297–9
Employers get broader power to fight drug use. Holthaus D. **Hospitals** 1989 Aug 5;63(15):44
Employee drug tests are unreliable and intrusive. Morgan JP. **Hospitals** 1989 Aug 20;63(16):64
Excluding a psychoactive substance use disorder in forensic psychiatric evaluations. Lacoursiere RB. **J Forensic Sci** 1989 Jan;34(1):64–73
Clinical problems in adolescent medicine. D'Angelo LJ, et al. **J Gen Intern Med** 1989 Jan–Feb;4(1):64–73
Relation of the pre–employment drug testing result to employment status: a one–year follow–up. Parish DC. **J Gen Intern Med** 1989 Jan–Feb;4(1):44–7
Mental illness, substance abuse, and criminal behavior. Ermutlu IM, et al. **J Med Assoc Ga** 1989 Apr;78(4):213–7
Adolescent substance abuse. Lewis DM. **J Med Assoc Ga** 1988 Nov;77(11):819–20
Maternal cocaine use and risk of sudden infant death [letter] Graham K, et al. **J Pediatr** 1989 Aug;115(2):333
Differential diagnosis of psychiatric comorbidity in substance abusers. Kosten TR, et al. **J Subst Abuse Treat** 1988; 5(4):201–6
A stand against drug testing [letter] Lampton LM. **Mo Med** 1987 Mar;84(3):111
Assessing adolescents who abuse chemicals: the chemical dependency adolescent assessment project. Winters KC, et al. **NIDA Res Monogr** 1988;77:4–18 (27 ref.)
Identifying drug–abusing criminals. Wish ED. **NIDA Res Monogr** 1988;86:139–59 (42 ref.)
American Academy of Pediatrics Committee on Adolescence, Committee on Bioethics, and Provisional Committee on Substance Abuse: Screening for drugs of abuse in children and adolescents. **Pediatrics** 1989 Aug; 84(2):396–8

Investigation of benzodiazepine-consumers concerning intake-habits, signs of abuse or dependence, and information about the drug. Barnas C, et al. **Pharmacopsychiatry** 1988 Nov;21(6):355-6

Drug testing [letter] Black DL. **Postgrad Med** 1989 May 1; 85(6):47

Stricter drug testing in sports and elsewhere [editorial] Griffin GC. **Postgrad Med** 1988 Dec;84(8):11-2, 16

Discriminating between substance abusers with single and dual diagnoses using MMPI profiles and the Mac Andrews Alcoholism Scale: Axis I and Axis II subtypes. Rozensky RH, et al. **Psychol Rep** 1988 Dec;63(3):985-6

The neurologist's approach to alcoholism and drug abuse: outpatient care. Richter RW, et al. **Semin Neurol** 1987 Dec; 7(4):336-43 (26 ref.)

Clinical evaluation and use of urine screening for drug abuse. Saxon AJ, et al. **West J Med** 1988 Sep;149(3):296-303

[Determination of benzoyl ecgonine in human scalp hair following cocaine abuse by gas chromatography-mass spectrometry (GC-MS)] Brunner H, et al. **Beitr Gerichtl Med** 1988;46:127-34 (Eng. Abstr.) (Ger)

["Drug screening" without the patient's knowledge] Rieger HJ. **Dtsch Med Wochenschr** 1988 Sep 23;113(38):1492 (Ger)

[Medicosocial aspects of drug abuse and addiction] Vrublevskii AG, et al. **Voen Med Zh** 1988 May;(5):66-8 (Rus)

DRUG THERAPY

Enkephalinase inhibition and precursor amino acid loading improves inpatient treatment of alcohol and polydrug abusers: double-blind placebo-controlled study of the nutritional adjunct SAAVE. Blum K, et al. **Alcohol** 1988 Nov-Dec;5(6):481-93

Psychopharmacological trials in cocaine abuse treatment. Kleber H, et al. **Am J Drug Alcohol Abuse** 1986; 12(3):235-46 (48 ref.)

Sublingual versus subcutaneous buprenorphine in opiate abusers. Jasinski DR, et al. **Clin Pharmacol Ther** 1989 May; 45(5):513-9

Tricyclic antidepressants in the treatment of alcoholism and drug abuse. Weiss RD, et al. **J Clin Psychiatry** 1989 Jul; 50 Suppl:4-9; discussion 9-11 (57 ref.)

Pharmacotherapeutic interventions for cocaine abuse. Matching patients to treatments. Kosten TR. **J Nerv Ment Dis** 1989 Jul;177(7):379-89 (73 ref.)

Considerations in using psychotropic medication with dual diagnosis patients in recovery. Zweben JE, et al. **J Psychoactive Drugs** 1989 Apr-Jun;21(2):221-8 (36 ref.)

Relapse to cocaine abuse after initiating desipramine treatment. Weiss RD. **JAMA** 1988 Nov 4;260(17):2545-6

HIV infection and drug misusers [news] **Lancet** 1989 Mar 4;1(8636):512

Treatment of cocaine abuse with mazindol [letter] [see comments] Berger P, et al. **Lancet** 1989 Feb 4;1(8632):283 . **Comment in:** Lancet 1989 Jul 8;2(8654):111

Naloxone and opiate addiction [letter] Brewer C, et al. **Lancet** 1989 Sep 16;2(8664):683-4

Buprenorphine suppresses cocaine self-administration by rhesus monkeys. Mello NK, et al. **Science** 1989 Aug 25; 245(4920):859-62

ECONOMICS

Measuring comorbidity and overlap in the hospitalization cost for alcohol and drug abuse and mental illness. Rice DP, et al. **Inquiry** 1989 Summer;26(2):249-60

Costs and consequences of drug use: a comparison of health care utilization and social-psychological consequences for clinical and nonclinical adolescents and their families. Needle R, et al. **Int J Addict** 1988 Nov;23(11):1125-43

The economic shaping of substance abuse. Lerner WD, et al. **NIDA Res Monogr** 1988;84:62-73 (12 ref.)

The drug of champions [news] Marshall E. **Science** 1988 Oct 14;242(4876):183-4

EPIDEMIOLOGY

Using self-generated identification codes to match questionnaires in panel studies of adolescent substance use. Grube JW, et al. **Addict Behav** 1989;14(2):159-71

Patterns of drug use among young adults. Mehrabian A, et al. **Addict Behav** 1989;14(1):99-104

A comparison of the empirical utility of three composite measures of adolescent overall drug involvement. Needle R, et al. **Addict Behav** 1989;14(4):429-41

Increased risk of bacterial pneumonia in HIV-infected intravenous drug users without AIDS. Selwyn PA, et al. **Aids** 1988 Aug;2(4):267-72

Drug usage among adolescents: a survey from a pediatric/adolescent practice [letter] Buchta RM. **Am J Dis Child** 1989 Jul;143(7):765-6

Adolescent alcohol and drug abuse and its consequences--an overview. Czechowicz D. **Am J Drug Alcohol Abuse** 1988; 14(2):189-97 (14 ref.)

Analysis of drug involvement in traffic fatalities in Alabama. Fortenberry JC, et al. **Am J Drug Alcohol Abuse** 1986; 12(3):257-67

Correlates of adolescent drug use by gender and geographic location. Johnson RE, et al. **Am J Drug Alcohol Abuse** 1988;14(1):51-63

The impact of changing methods of data collection on the reliability of self-reported drug use of adolescents. Needle RH, et al. **Am J Drug Alcohol Abuse** 1989;15(3):275-89

Patterns of substance use on a college campus: a 14-year comparison study. Patterson EW, et al. **Am J Drug Alcohol Abuse** 1988;14(2):237-46

Sex differences in drug and alcohol use among ethnic groups in Laos, 1965-1975. Westermeyer J. **Am J Drug Alcohol Abuse** 1988;14(4):443-61

Longitudinal patterns of cocaine use among adolescents. White HR. **Am J Drug Alcohol Abuse** 1988;14(1):1-15

Cocaine abuse during pregnancy: peripartum prevalence and perinatal outcome. Neerhof MG, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):633-8

Cocaine use by senior medical students. Conard S, et al. **Am J Psychiatry** 1989 Mar;146(3):382-3

Benzodiazepine use and abuse by patients at outpatient clinics. Rifkin A, et al. **Am J Psychiatry** 1989 Oct; 146(10):1331-2

American Indian youth and drugs, 1976-87: a continuing problem. Beauvais F, et al. **Am J Public Health** 1989 May; 79(5):634-6

Risk reduction among intravenous drug users in Amsterdam under the influence of AIDS. van den Hoek JA, et al. **Am J Public Health** 1989 Oct;79(10):1355-7

Relationship of syphilis to drug use and prostitution--Connecticut and Philadelphia, Pennsylvania. **Arch Dermatol** 1989 Feb;125(2):169-70

Patterns of drug use by young people in the rural community of Spain. Alvarez FJ, et al. **Br J Addict** 1989 Jun; 84(6):647-52

Drug use by prostitutes in Sydney. Philpot CR, et al. **Br J Addict** 1989 May;84(5):499-505

Trends in the use and misuse of alcohol and other psychoactive drugs in the United Kingdom: some perplexing connections. Plant MA, et al. **Br J Addict** 1988 Aug;83(8):943-7

Drug and substance use among 3,333 London adolescents. Swadi H. **Br J Addict** 1988 Aug;83(8):935-42

Monitoring drug use in a community [letter] Parker J, et al. **Br J Psychiatry** 1988 Oct;153:572

Monitoring problem drug use in Bristol. Parker J, et al. **Br J Psychiatry** 1988 Feb;152:214-21

Self-reported drug use among secondary school students in the Nigerian state of Ogun. Adelekan ML. **Bull Narc** 1989; 41(1-2):109-16

An evaluation of the results of a drug sample analysis. Gomez J, et al. **Bull Narc** 1989;41(1-2):121-6

A multi-city study of drug misuse in Europe. Hartnoll R, et al. **Bull Narc** 1989;41(1-2):3-27 (17 ref.)

The effects of the liberalization of syringe sales on the behaviour of intravenous drug users in France. Ingold FR, et al. **Bull Narc** 1989;41(1-2):67-81

The survey technique in drug abuse assessment. Johnston LD. **Bull Narc** 1989;41(1-2):29-40 (24 ref.)

Extent and patterns of drug use by students at a Spanish university. Lopez Alvarez MJ, et al. **Bull Narc** 1989; 41(1-2):117-9

Development and application of a system for monitoring drug abuse: the Malaysian experience. Navaratnam V, et al. **Bull Narc** 1989;41(1-2):53-65

Development of an information reporting system on illicit drug use in Mexico. Ortiz A, et al. **Bull Narc** 1989; 41(1-2):41-52

Recent trends in drug use and abuse in Nigeria. Pela AO. **Bull Narc** 1989;41(1-2):103-7

Japan: stimulant epidemics past and present. Tamura M. **Bull Narc** 1989;41(1-2):83-93

Nonnarcotic drug use over an addiction career--a study of heroin addicts in Baltimore and New York City. Nurco DN, et al. **Compr Psychiatry** 1988 Sep-Oct;29(5):450-9

Relationship of syphilis to drug use and prostitution: Connecticut and Philadelphia, Pennsylvania. Centers for Disease Control. **Conn Med** 1989 Jan;53(1):35-7

Use of alcohol, tobacco and illicit drugs amongst 13-year-olds in three areas of Britain. Bagnall G. **Drug Alcohol Depend** 1988 Dec;22(3):241-51

Drugs of abuse found in fatally injured drivers in Los Angeles County. Budd RD, et al. **Drug Alcohol Depend** 1989 Apr; 23(2):153-8

Drug abuse in France: a review of statistical data. Facy F, et al. **Drug Alcohol Depend** 1989 Aug;24(1):1-9 (25 ref.)

Psychoactive substance use and related behaviours of 135 regular illicit drug users in Scotland. Morrison V. **Drug Alcohol Depend** 1989 Apr;23(2):95-101

Khat chewing spread to the Somali community in Rome. Nencini P, et al. **Drug Alcohol Depend** 1989 Jun;23(3):255-8

A comparison of alcohol and drug use patterns of homosexual and heterosexual men: the San Francisco Men's Health Study. Stall R, et al. **Drug Alcohol Depend** 1988 Oct; 22(1-2):63-73

Drug abuse in schizophrenia. Miller FT, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):847-9

Assessing patterns of drug use in local jurisdictions. Harris JA. **Int J Addict** 1988 Oct;23(10):1071-81

Cultural patterns and causal processes in adolescent drug use: the case of Greeks versus Americans. Marcos AC, et al. **Int J Addict** 1988 Jun;23(6):545-72

Drug use and policy in Poland in the 1980s. Watson M. **Int J Health Serv** 1989;19(3):443-56

Intersecting epidemics: black teen crack use and sexually transmitted disease. Fullilove MT, et al. **J Am Med Wom Assoc** 1989 Sep-Oct;44(5):146-7, 151-3

Comparison of drug abuse in different military populations. Needleman SB, et al. **J Forensic Sci** 1989 Jul;34(4):848-57

The cocaine epidemic: drug abuse patterns in New Orleans. Schwartz BD, et al. **J La State Med Soc** 1988 Aug; 140(8):28-31

Substance use by fourth-year students at 13 U.S. medical schools. Conard S, et al. **J Med Educ** 1988 Oct; 63(10):747-58

Seroepidemiology of hepatitis B virus, hepatitis D virus, and human immunodeficiency virus infections among parenteral drug abusers in southern Taiwan. Chung DC, et al. **J Med Virol** 1989 Aug;28(4):215-8

Drug enforcement policy as a factor in trends of trafficking and use of different substances. Arnao G. **J Psychoactive Drugs** 1988 Oct-Dec;20(4):463-5

An epidemiological and clinical analysis of propylhexedrine abuse in the United States. Smith DE, et al. **J Psychoactive Drugs** 1988 Oct-Dec;20(4):441-2

Leads from the MMWR. Relationship of syphilis to drug use and prostitution--Connecticut and Philadelphia, Pennsylvania. **JAMA** 1989 Jan 20;261(3):353, 357

Estimated prevalence of anabolic steroid use among male high school seniors. Buckley WE, et al. **JAMA** 1988 Dec 16;260(23):3441-5

Professional football player suspensions re-emphasize problems of steroid abuse [news] Cowart VS. **JAMA** 1989 Oct 6;262(13):1743

Marijuana and benzodiazepines in patients receiving methadone treatment [letter] DuPont RL, et al. **JAMA** 1989 Jun 16;261(23):3409

Like other segments of culture, military has had to come to grips with drug abuse problems [news] Marwick C, et al. **JAMA** 1989 May 19;261(19):2784-5, 2788

Anabolic steroid use in adolescence. Moore WV. **JAMA** 1988 Dec 16;260(23):3484-6

Scope, specifics of maternal drug use, effects on fetus are beginning to emerge from studies [news] Silverman S. **JAMA** 1989 Mar 24-31;261(12):1688-9

Relationship of syphilis to drug use and prostitution--Connecticut and Philadelphia, Pennsylvania. **MMWR** 1988 Dec 16;37(49):755-8, 764

Prevalence of drug use among applicants for military service--United States, June-December 1988. **MMWR** 1989 Aug 25;38(33):580-3

Ecstasy abuse [letter] Laverty R, et al. **N Z Med J** 1989 Aug 23;102(874):451

Epidemiology of inhalant abuse: an update. Papers from the RAUS review. September 30 and October 1, 1986, Rockville, Maryland. **NIDA Res Monogr** 1988;85:1-203

Inhalant abuse by young children. Beauvais F, et al. **NIDA Res Monogr** 1988;85:30-3

Inhalant overview. Crider RA, et al. **NIDA Res Monogr** 1988; 85:1-7

The continuing problem of youthful solvent abuse in New York State. Frank B, et al. **NIDA Res Monogr** 1988; 85:77-105

Nitrite inhalants: contemporary patterns of abuse. Lange WR, et al. **NIDA Res Monogr** 1988;83:86-95

Inhalant abuse in a small rural South Texas community: a social epidemiological overview. Mata AG Jr, et al. **NIDA Res Monogr** 1988;85:49-76

Epidemiology of solvent/inhalant abuse in Mexico. Medina-Mora E, et al. **NIDA Res Monogr** 1988;85:140-71

Deliberate inhalation of isobutyl nitrite during adolescence: a descriptive study. Schwartz RH. **NIDA Res Monogr** 1988; 83:81-5

Inhalant use and abuse in Canada. Smart RG. **NIDA Res Monogr** 1988;85:121-39

Substance abuse in pregnant women: recent experience at the Perinatal Center for Chemical Dependence of Northwestern Memorial Hospital. Keith LG, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):715-20

Drug use among adolescent mothers: profile of risk. Amaro H, et al. **Pediatrics** 1989 Jul;84(1):144-51

Anabolic steroid use by male adolescents. Johnson MD, et al. **Pediatrics** 1989 Jun;83(6):921-4

Substance use among eighth-grade students who take care of themselves after school. Richardson JL, et al. **Pediatrics** 1989 Sep;84(3):556-66

Benzodiazepine abuse and dependence in psychiatric inpatients. Wolf B, et al. **Pharmacopsychiatry** 1989 Mar; 22(2):54-60

Substance use and abuse among senior medical students in 23 medical schools. Baldwin DC Jr, et al. **Proc Annu Conf Res Med Educ** 1988;27:262-7

Substance use and the resident physician: a national study. Conard SE, et al. **Proc Annu Conf Res Med Educ** 1988; 27:256-61

An annualized analysis of drug related incidents in Rhode Island emergency rooms--calendar year 1987. Hachadorian C Jr, et al. **R I Med J** 1988 Jul;71(7):275-7

Drug use among Puerto Rican youth: an exploration of generational status differences. Velez CN, et al. **Soc Sci Med** 1989;29(6):779-89

Patterns of substance use and abuse in inner-city adolescent medical patients. Earls F, et al. **Yale J Biol Med** 1988 May-Jun;61(3):233-42

Drug abuse in Denmark (Jutland and Funen). A forensic study based upon drugs seized in 1982-1987. Kaa E. **Z Rechtsmed** 1988;101(4):229-36

[Consumption of legal and illegal drugs by school students from the region of Doubs] Baudier F, et al. **Arch Fr Pediatr** 1988 Oct;45(8):575-81 (Eng. Abstr.) (Fre)

[Alcohol and drugs as social problems in Norway] Gerhardsen TS. **Blutalkohol** 1988 Sep;25(5):289–98 (Eng. Abstr.) (Ger)
[Benzodiazepine abuse—findings from a German state mental hospital] Laux G, et al. **Schweiz Rundsch Med Prax** 1989 Jul 4;78(27–28):779–83 (Eng. Abstr.) (Ger)
[Epidemiological survey of a group of drug addicts] Sensini G, et al. **Nuovi Ann Ig Microbiol** 1988 Nov–Dec; 39(6):591–615 (Eng. Abstr.) (Ita)
[Drug dependence and drug abuse in the light of publications of the International Organ of Narcotic Control 1984–1986] Kubalski J, et al. **Pol Tyg Lek** 1988 May 16;43(20):645–8 (Pol)
[Abuse of volatile solvents: epidemiologic, medico-psychological and experimental aspects] Carlini EA, et al. **AMB Rev Assoc Med Bras** 1988 Mar–Apr; 34(2):61–8 (63 ref.) (Eng. Abstr.) (Por)
[Consumption of drugs, alcoholic beverages and cigarettes by workers of Cubatão] DeLucia R, et al. **AMB Rev Assoc Med Bras** 1987 Nov–Dec;33(11–12):215–8 (Eng. Abstr.) (Por)
[Consumption of drugs in a region of the State of São Paulo (Brazil), 1985] Simões MJ, et al. **Rev Saude Publica** 1988 Dec;22(6):494–9 (Eng. Abstr.) (Por)
[Knowledge and drug abuse among students in Brasília, Brazil] Bucher RE, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Jun;34(2):113–26 (Eng. Abstr.) (Spa)
[Characteristics of psychosocial development in adolescents 16 to 19 years of age with longitudinal follow-up. 1. Characteristics of the sample; psychotropic drug abuse and smoking habits] Avendaño A, et al. **Rev Chil Pediatr** 1988 Jan–Feb;59(1):26–33 (Eng. Abstr.) (Spa)

ETHNOLOGY

Ethnicity and drug use: a critical look. Adlaf EM, et al. **Int J Addict** 1989 Jan;24(1):1–18
Crack and AIDS: an ethnographic impression. Bowser BP. **J Natl Med Assoc** 1989 May;81(5):538–40
Intravenous cocaine and HIV infection [letter] French JF. **JAMA** 1989 Sep 15;262(11):1471–2
Immigration, stress, and prescription drug use among Cuban women in south Florida. Kirby DG. **Med Anthropol** 1989 Apr;10(4):287–95
Indian youth and inhalants: an update. Beauvais F, et al. **NIDA Res Monogr** 1988;85:34–48

ETIOLOGY

Amphetamines: pharmacology, abuse and addiction. Miller NS, et al. **Adv Alcohol Subst Abuse** 1989;8(2):53–69 (42 ref.)
Abuse of benzodiazepines: the problems and the solutions. A report of a Committee of the Institute for Behavior and Health, Inc. **Am J Drug Alcohol Abuse** 1988;14 Suppl 1:1–69 (63 ref.)
Parental alcoholism as a risk factor in benzodiazepine abuse: a pilot study. Ciraulo DA, et al. **Am J Psychiatry** 1989 Oct;146(10):1333–5
Potential for abuse of alprazolam [letter] Cole JO, et al. **Am J Psychiatry** 1988 Dec;145(12):1609–10
Seasonal cocaine abuse. Satel SL, et al. **Am J Psychiatry** 1989 Apr;146(4):534–5
Rates of tranquillizer prescribing in primary care [letter] Cantopher T, et al. **Br J Addict** 1988 Aug;83(8):969–70
Lephetamine abuse and dependence: clinical effects and withdrawal syndrome. Janiri L, et al. **Br J Addict** 1989 Jan;84(1):89–95
Assessment of the abuse potential of acetorphan, an enkephalinase inhibitor. Knisely JS, et al. **Drug Alcohol Depend** 1989 Apr;23(2):143–51
Substance abuse in the elderly: over-the-counter and illegal drugs. Abrams RC, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):822–3, 829
Benzodiazepine abuse and management of anxiety in the community. Ellis P, et al. **Int J Addict** 1988 Oct; 23(10):1083–90
Comparative study of the abuse liability of alprazolam, lorazepam, diazepam, methaqualone, and placebo. Orzack MH, et al. **Int J Addict** 1988 May;23(5):449–67 (14 ref.)
Current perspectives on substance abuse in youth. Bailey GW. **J Am Acad Child Adolesc Psychiatry** 1989 Mar; 28(2):151–62 (120 ref.)
Euphorigenic properties of anticholinergics [letter] Knable MB. **J Clin Psychiatry** 1989 May;50(5):186
Biological vulnerability to drug abuse. Based on papers from a technical review. June 2 and 3, 1986, Rockville, Maryland. **NIDA Res Monogr** 1988;89:1–180
Etiologic factors in substance abuse: an adoption study perspective. Cloninger CR. **NIDA Res Monogr** 1988; 89:52–72 (72 ref.)
Substance abuse in adolescents: diagnostic issues derived from studies of attention deficit disorder with hyperactivity. Loney J. **NIDA Res Monogr** 1988;77:19–26 (15 ref.)
Heavy cocaine use by adolescents. Smith DE, et al. **Pediatrics** 1989 Apr;83(4):539–42
The risk of multiple addictions. Guidelines for assessing a woman's alcohol and drug use. Matteo S. **West J Med** 1988 Dec;149(6):741–5 (73 ref.)

GENETICS

Bulimia with and without a family history of drug abuse. Mitchell JE, et al. **Addict Behav** 1988;13(3):245–51
HIV infection and distribution of GC alleles in AIDS patients, i.v. drug addicts, and hemophiliacs. Kühnl P, et al. **Beitr Infusionther** 1988;21:169–73
Specific familial transmission in substance abuse. Meller WH, et al. **Int J Addict** 1988 Oct;23(10):1029–39
Genotypes of the group-specific component protein in black intravenous drug abusers [letter] Levine B, et al. **J Infect Dis** 1989 Jan;159(1):147–8
Drinking, drinking styles and drug use in children of alcoholics, depressives and controls. Johnson S, et al. **J Stud Alcohol** 1989 Sep;50(5):427–31
Biological vulnerability: treatment implications/applications. Bigelow GE, et al. **NIDA Res Monogr** 1988;89:165–73
Exploring drug abuse with genetic strategies: cautionary tales. Gottesman II. **NIDA Res Monogr** 1988;89:150–64
The applications of biological vulnerability research to drug abuse prevention. Kaufman E. **NIDA Res Monogr** 1988; 89:174–80
Analytical approaches to twin and family data. McGue M. **NIDA Res Monogr** 1988;89:134–49
Genetic vulnerability to drug abuse. Pickens RW, et al. **NIDA Res Monogr** 1988;89:1–8 (13 ref.)
The twin method in the study of vulnerability to drug abuse. Pickens RW, et al. **NIDA Res Monogr** 1988;89:41–51
The high-risk paradigm in alcohol and drug abuse research. Tarter RE. **NIDA Res Monogr** 1988;89:73–86

HISTORY

The pursuit of intoxication: our 100 century-old romance with psychoactive substances. Westermeyer J. **Am J Drug Alcohol Abuse** 1988;14(2):175–87
Evolution of American attitudes toward substance abuse. Musto DF. **Ann N Y Acad Sci** 1989;562:3–7
[Control of drug abuse and toxicomania among children and adolescents during the 1920's and 1930's] Popov VA. **Sov Zdravookhr** 1989;(5):67–70 (Rus)

IMMUNOLOGY

Cross-sectional study of immunologic abnormalities in intravenous drug abusers on methadone maintenance in New York City [published erratum appears in Aids 1989 Jul;3(7):following A100] Grieco MH, et al. **Aids** 1989 Apr; 3(4):235–7
Serum antibodies to HTLV-I in Thai patients with chronic progressive myelopathy, multiple sclerosis, myopathy and in HIV-seropositive intravenous drug abusers. Hemachudha T, et al. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):33–5
Low prevalence of human immunodeficiency virus infection in methadone program attenders and pregnant intravenous drug users in the western metropolitan region of Sydney. Dwyer D, et al. **Aust N Z J Med** 1989 Aug;19(4):407–8
Functional analysis of lymphocytes subpopulations in experimental cocaine abuse. I. Dose-dependent activation of lymphocyte subsets. Bagasra O, et al. **Clin Exp Immunol** 1989 Aug;77(2):289–93
Human immunodeficiency virus seroprevalence and drug-using behavior in Milwaukee intravenous drug abusers. Belongia EA, et al. **J Acquir Immune Defic Syndr** 1988;1(4):381–5
HIV, HTLV-I, and HBV infections in a cohort of Italian intravenous drug abusers: analysis of risk factors. Titti F, et al. **J Acquir Immune Defic Syndr** 1988;1(4):405–11
T lymphocyte subsets and viral infections in Sardinian parenteral drug abusers: relationship to HIV infection. Farci P, et al. **J Med Virol** 1989 Feb;27(2):81–6

LEGISLATION & JURISPRUDENCE

Occupational medicine forum. **J Occup Med** 1988 Oct; 30(10):760
Some thoughts on drug abuse [editorial] Rozear MP. **N C Med J** 1988 Nov;49(11):595–6

METABOLISM

Drug screening of meconium in infants of drug-dependent mothers: an alternative to urine testing. Ostrea EM Jr, et al. **J Pediatr** 1989 Sep;115(3):474–7
Interaction of the discriminative stimulus effects of phencyclidine with those of (+)-N-allylnormetazocine, pentobarbital and d-amphetamine. McMillan DE, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):711–5
Pockets of subcutaneous cocaine: legal and clinical implications in a cocaine-induced death [letter] Strauss A, et al. **South Med J** 1989 Aug;82(8):1064–5

MICROBIOLOGY

A case of polymicrobial infective endocarditis involving Neisseria mucosa occurring in an intravenous drug abuser. Giles MW, et al. **Aust N Z J Med** 1988 Dec;18(7):874–6

MORTALITY

The "mini-packer" syndrome. Fatal ingestion of drug containers in Baltimore, Maryland. Introna F Jr, et al. **Am J Forensic Med Pathol** 1989 Mar;10(1):21–4
Impact of the AIDS epidemic on morbidity and mortality among intravenous drug users in a New York City methadone maintenance program. Selwyn PA, et al. **Am J Public Health** 1989 Oct;79(10):1358–62
Patterns and economic effects of drug overdose mortality in Texas: 1980–1986. Harlow KC, et al. **J Drug Educ** 1989; 19(2):165–82
Cocaine and homicide in Memphis and Shelby county: an epidemic of violence. Harruff RC, et al. **J Forensic Sci** 1988 Sep;33(5):1231–7
An epidemic of intravenous narcoticism deaths associated with the resurgence of black tar heroin. Sperry K. **J Forensic Sci** 1988 Sep;33(5):1156–62
Fatalities associated with an acute overdose of glutethimide (Doriden) and codeine. Bender FH, et al. **Vet Hum Toxicol** 1988 Aug;30(4):332–3

NURSING

The urgency of substance abuse education in schools of nursing. Murphy SA. **J Nurs Educ** 1989 Jun;28(6):247–51 (33 ref.)
Drug abuse. A self-care deficit. Compton P. **J Psychosoc Nurs Ment Health Serv** 1989 Mar;27(3):22–6
Nursing interventions for addicted patients. **Nurs Clin North Am** 1989 Mar;24(1):1–299

PATHOLOGY

Pathology of volatile substance abuse: a case report and a literature review. al-Alousi LM. **Med Sci Law** 1989 Jul; 29(3):189–208 (34 ref.)

PHYSIOPATHOLOGY

Sudden death temporally related to vaginal cocaine abuse. Ettinger TB, et al. **Am J Emerg Med** 1989 Jan;7(1):129–31
Locus ceruleus discharge characteristics of morphine-dependent rats: effects of naltrexone. Valentino RJ, et al. **Brain Res** 1989 May 29;488(1–2):126–34
Lead brachial neuropathy in heroin addiction. A case report. Antonini G, et al. **Clin Neurol Neurosurg** 1989;91(2):167–70
Chronic ergotamine abuse: evidence of functional impairment of long ascending spinal tracts. Ludolph AC, et al. **Eur Neurol** 1988;28(6):311–6
Clinical toxicology of cocaine. Loper KA. **Med Toxicol Adverse Drug Exp** 1989 May–Jun;4(3):174–85 (118 ref.)
Effects of maternal marijuana and cocaine use on fetal growth. Zuckerman B, et al. **N Engl J Med** 1989 Mar 23; 320(12):762–8
Central nervous system effects of chronic toluene abuse—clinical, brainstem evoked response and magnetic resonance imaging studies. Rosenberg NL, et al. **Neurotoxicol Teratol** 1988 Sep–Oct;10(5):489–95
Does drug abuse in the donor have a harmful effect on kidney graft quality and graft survival? Groenewoud AF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1932–3

PREVENTION & CONTROL

Evaluation of a drug abuse prevention program: a field experiment. LoSciuto L, et al. **Addict Behav** 1988; 13(4):337–51
Substance abuse and international travel. Lange WR, et al. **Adv Alcohol Subst Abuse** 1989;8(2):37–51 (52 ref.)
National and international strategies to control drug abuse. Westermeyer J. **Adv Alcohol Subst Abuse** 1989;8(2):1–35 (136 ref.)
Drug free workplace [editorial] [see comments] **Am Fam Physician** 1988 Nov;38(5):80, 82. **Comment in:** Am Fam Physician 1989 Apr;39(4):62, 71, 74
Chemical impairment [editorial] Talley CR. **Am J Hosp Pharm** 1988 Oct;45(10):2077
Substance use and abuse among children and teenagers. Newcomb MD, et al. **Am Psychol** 1989 Feb;44(2):242–8 (19 ref.)
A comprehensive community approach to adolescent drug abuse prevention: effects on cardiovascular disease risk behaviors. Pentz MA, et al. **Ann Med** 1989 Jun;21(3):219–22
Public health policy: maternal substance use and child health. Vanderveen E. **Ann N Y Acad Sci** 1989;562:255–9
Comments on 'drug scenes'. **Br J Addict** 1988 Aug; 83(8):883–97
'Drug scenes'. A report by the Royal College of Psychiatrists and some comments on the report and its recommendations. **Br J Addict** 1988 Aug;83(8):875–81
Co-ordinating drugs research in Britain. Berridge V. **Br J Addict** 1988 Sep;83(9):1013–8
Reactions to drug education: a comparison of two videos produced for schools. Eiser C, et al. **Br J Addict** 1988 Aug; 83(8):955–63
Reports from research centres—16. The National Institute on Drug Abuse (NIDA). Schuster CR. **Br J Addict** 1989 Jan;84(1):19–28
Managing drug use. Whynes DK, et al. **Br J Addict** 1989 May;84(5):533–40
The use of the Transcendental Meditation programme in the prevention of drug abuse and in the treatment of drug-addicted persons. Clements G, et al. **Bull Narc** 1988; 40(1):51–6 (28 ref.)
Impact of fitness training on native adolescents' self-evaluations and substance use. Scott KA, et al. **Can J Public Health** 1988 Nov–Dec;79(6):424–9
Drug use among Sydney teenagers in 1985 and 1986. Levy SJ, et al. **Community Health Stud** 1989;13(2):161–9
Alcohol and other drugs: the prevention paradoxes. Saunders B. **Community Health Stud** 1989;13(2):150–5
Tackling the problems of drug use: response to the

government's strategy. Smith L, et al. **Community Med** 1988 May;10(2):156–9

Psychosocial approaches to substance abuse prevention: theoretical foundations and empirical findings. Botvin GJ, et al. **Crisis** 1989 Apr;10(1):62–77 (49 ref.)

Youth, alcohol and drugs: truth and sober consequences. Foster R. **Dimens Health Serv** 1988 Oct;65(7):25–6

Substance abuse and mandatory drug testing in health care institutions. Tanner J, et al. **Health Care Manage Rev** 1988 Fall;13(4):33–42

Fighting drug abuse in Australia. Grichting WL, et al. **Int J Addict** 1988 May;23(5):491–507

Hispanic youth, substance abuse, and stress: implications for prevention research. Schinke SP, et al. **Int J Addict** 1988 Aug;23(8):809–26 (103 ref.)

Delivery of prevention services: a policy statement. **Iowa Med** 1988 Jul;78(7):334–7

Laxative abuse: a hazardous habit for weight control. Vanin JR, et al. **J Am Coll Health** 1989 Mar;37(5):227–30 (17 ref.)

Individuals' attitudes toward organizational drug testing policies and practices. Stone DL, et al. **J Appl Psychol** 1989 Jun;74(3):518–21

The private sector: taking a role in the prevention of drug and alcohol abuse for young people. Adams T, et al. **J Drug Educ** 1988;18(3):185–99

Alcohol use and psychosocial outcome of two preventive classroom programs with seventh and tenth graders. Baer PE, et al. **J Drug Educ** 1988;18(3):171–84

The effects of school-based substance abuse education—meta-analysis. Bangert-Drowns RL. **J Drug Educ** 1988;18(3):243–64 (56 ref.)

A critical and comparative review of the prevention of drug and alcohol abuse in Israel. Barnea Z. **J Drug Educ** 1989; 19(1):59–81 (92 ref.)

Long-term evaluation of a life skills approach for alcohol and drug abuse prevention. Brochu S, et al. **J Drug Educ** 1988;18(4):311–31

Evaluating the effectiveness of a school drug and alcohol prevention curriculum: a new look at "Here's Looking at You, Two". Green JJ, et al. **J Drug Educ** 1989;19(2):117–32

Do parents today need drug education programs as badly as their parents needed them? Manning TM, et al. **J Drug Educ** 1989;19(2):97–102

Job satisfaction among military prevention specialists. Whorley LW. **J Drug Educ** 1989;19(2):133–8

Drug abuse and the physician [editorial] Abraham GE 2d. **J Miss State Med Assoc** 1989 Mar;30(3):85

Just Say No. Macdonald DI. **J Pediatr** 1989 Apr;114(4 Pt 1):673–5

Prevention of adolescent drug abuse: why "Just Say No" just won't work. Strasburger VC. **J Pediatr** 1989 Apr;114(4 Pt 1):676–81

Classroom-oriented, primary prevention programming for drug abuse. Falck R, et al. **J Psychoactive Drugs** 1988 Oct-Dec;20(4):403–8

Alcohol and drug abuse prevention in Wisconsin public schools. Fredisdorf M. **J Sch Health** 1989 Jan;59(1):21–4

Substance abuse curricula vs. school drug policies. Goodstadt MS. **J Sch Health** 1989 Aug;59(6):246–50 (30 ref.)

Prescription drug diversion: "what Lola wants, Lola gets" [editorial] Thomison JB. **J Tenn Med Assoc** 1989 Jan; 82(1):35–7

Drug abuse: more help available for addicted persons, but main problem continues unabated [news] Kirn TF. **JAMA** 1988 Oct 21;260(15):2170–2

A multicommunity trial for primary prevention of adolescent drug abuse. Effects on drug use prevalence. Pentz MA, et al. **JAMA** 1989 Jun 9;261(22):3259–66

Substance abuse. Schnoll SH, et al. **JAMA** 1989 May 19; 261(19):2890–2

A step beyond "just say no". Burpo RH. **MCN** 1988 Nov-Dec;13(6):428–31

National campaign against drug abuse [letter] Bell DS. **Med J Aust** 1989 Jan 16;150(2):109–10

National campaign against drug abuse [letter] Howarth F. **Med J Aust** 1989 Apr 3;150(7):408–9

A report on the National Advisory Committee on the Acquired Immunodeficiency Syndrome's workshop on human immunodeficiency virus infection and intravenous drug abuse. Wodak A, et al. **Med J Aust** 1988 Oct 3; 149(7):373–5

New prescription drug abuse laws [letter] Howe CW. **Mich Med** 1988 Aug;87(8):463, 508

Testing for drugs of abuse in urine. Turk J. **Mo Med** 1989 Jun;86(6):337–40

Prescribing addictive medications. Sanders JH Jr. **N C Med J** 1989 Feb;50(2):105

Preemployment drug testing of housestaff physicians [letter] Lewy R. **N Y State J Med** 1988 Oct;88(10):553–4

Current topics in inhalant abuse. Kerner K. **NIDA Res Monogr** 1988;85:8–29 (90 ref.)

The role of the psychiatric nurse in a community substance abuse prevention program. Finley B. **Nurs Clin North Am** 1989 Mar;24(1):121–36

Private lives of employees: how much should employers know? Evans DG. **Occup Health Saf** 1988 Oct;57(11):36–41

Project Outreach: Organizations Unified to Reach Youth. Dunnington BC, et al. **Public Health Rep** 1989 Jan-Feb; 104(1):79–82

Ignorance in action. Horgan J. **Sci Am** 1988 Nov;259(5):17

NIDA's role in war on drugs [letter] **Science** 1988 Oct 7; 242(4875):15–6

The Drug Czar: no "Walter Wallflower" [news] Marshall E. **Science** 1989 Mar 10;243(4896):1287

Drug prohibition in the United States: costs, consequences, and alternatives. Nadelmann EA. **Science** 1989 Sep 1; 245(4921):939–47

Drug war [editorial] Campell HS. **Va Med** 1989 Jun; 116(6):279–80

[Perspectives of the 3d Basel Psychiatry Rounds] Angst J. **Schweiz Rundsch Med Prax** 1989 Jul 4;78(27–28):788–90 (Eng. Abstr.) (Ger)

[Problems in long-term benzodiazepine treatment] Steinberg R, et al. **Schweiz Rundsch Med Prax** 1989 Jul 4; 78(27–28):784–7 (Eng. Abstr.) (Ger)

[Perestroika in neurology, psychiatry and narcology at the present-day stage] Denisov IN. **Zh Nevropatol Psikhiatr** 1989;89(5):3–10 (Rus)

PSYCHOLOGY

Patterns of drug use and sensation-seeking among adolescents in Norway. Pedersen W, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):386–90

The role of cigarettes in the initiation and progression of early substance use. Fleming R, et al. **Addict Behav** 1989; 14(3):261–72

Substance use among high school students in relation to school characteristics. Skager R, et al. **Addict Behav** 1989; 14(2):129–38

Adolescent substance abuse: introduction. Schwartzberg AZ. **Adolesc Psychiatry** 1988;15:505–7

Changes in HIV risk behaviour in clients of syringe-exchange schemes in England and Scotland. Donoghoe MC, et al. **Aids** 1989 May;3(5):267–72

American Psychiatric Association Committee on Drug Abuse and Alcoholism. Presentations at the annual meeting of the American Psychiatric Association. May 1985. **Am J Drug Alcohol Abuse** 1986;12(3):187–294

Inner-city substance abuse patterns: a study of psychiatric inpatients. Fernandez-Pol B, et al. **Am J Drug Alcohol Abuse** 1988;14(1):41–50

Psychopathology in substance abusers: diagnosis and treatment. Mirin SM, et al. **Am J Drug Alcohol Abuse** 1988; 14(2):139–57 (57 ref.)

Substance use and abuse among mentally retarded persons: a comparison of patients and a survey population. Westermeyer J, et al. **Am J Drug Alcohol Abuse** 1988; 14(1):109–23

Maintaining patient confidentiality in a case of potential substance abuse. McCart GM, et al. **Am J Hosp Pharm** 1989 Jan;46(1):116–9

Life events of adolescents in relation to personal and parental substance abuse. Brown SA. **Am J Psychiatry** 1989 Apr; 146(4):484–9

Critical review of liability for benzodiazepine abuse among alcoholics. Ciraulo DA, et al. **Am J Psychiatry** 1988 Dec; 145(12):1501–6 (48 ref.)

Medical students' attitudes toward cocaine use [letter] Milman DH, et al. **Am J Psychiatry** 1989 Sep;146(9):1234

Preference for alprazolam over diazepam [letter] Schmauss C, et al. **Am J Psychiatry** 1989 Mar;146(3):408

Determinants of needle sharing among intravenous drug users. Magura S, et al. **Am J Public Health** 1989 Apr; 79(4):459–62

Personality risk factors for cocaine abuse. Yates WR, et al. **Am J Public Health** 1989 Jul;79(7):891–2

Cessation of illicit drug use in young adulthood. Kandel DB, et al. **Arch Gen Psychiatry** 1989 Feb;46(2):109–16

Who can say no to illicit drug use? Response to a new study. Meyer RE. **Arch Gen Psychiatry** 1989 Feb;46(2):189–90

Auditory event-related potentials in adolescents at risk for drug abuse. Herning RI, et al. **Biol Psychiatry** 1989 Mar 1;25(5):598–609

Dependence potential and abuse liability of nicotine replacement therapies. Hughes JR. **Biomed Pharmacother** 1989;43(1):11–7 (27 ref.)

Neuropsychological consequences of volatile substance abuse: a population based study of secondary school pupils. Chadwick O, et al. **BMJ** 1989 Jun 24;298(6689):1679–83

Blasted with ennui [editorial] Edwards G. **BMJ** 1989 Jan 21;298(6667):136

Ecstasy and the oxygen of publicity. Farrell M. **Br J Addict** 1989 Aug;84(8):943

Types of male alcohol- and drug-abusing incarcerated offenders. Hodgins DC, et al. **Br J Addict** 1988 Oct; 83(10):1201–13

Pathological gambling among youthful multiple substance abusers in a therapeutic community. Lesieur HR, et al. **Br J Addict** 1988 Jul;83(7):765–71

Peers as perceived by drug abusers in their drug-seeking behaviour. Ong TH. **Br J Addict** 1989 Jun;84(6):631–7

Participant observation and its place in the study of illicit drug abuse. Power R. **Br J Addict** 1989 Jan;84(1):43–52 (39 ref.)

Drug abusers' perceptions of their parents. Schweitzer RD, et al. **Br J Addict** 1989 Mar;84(3):309–14

Personality and substance use among adolescents: a longitudinal study. Teichman M, et al. **Br J Addict** 1989 Feb;84(2):181–90

The relationship between sexual abuse and substance abuse among psychiatrically hospitalized adolescents. Singer MI, et al. **Child Abuse Negl** 1989;13(3):319–25

Histories of substance abuse in patients with postpsychotic depressions. Siris SG, et al. **Compr Psychiatry** 1988 Nov-Dec;29(6):550–7

Prenatal, perinatal, and early childhood risk factors and drug involvement in adolescence. Brook JS, et al. **Genet Soc Gen Psychol Monogr** 1989 May;115(2):221–41

A network of influences on adolescent drug involvement: neighborhood, school, peer, and family. Brook JS, et al. **Genet Soc Gen Psychol Monogr** 1989 Feb;115(1):123–45

Predicting changes in teenage drug use: the role of intention-behavior discrepancy. Weng LJ, et al. **Genet Soc Gen Psychol Monogr** 1989 Feb;115(1):25–48

Homelessness: consequence of a crisis or a long-term process? Benda BB, et al. **Hosp Community Psychiatry** 1988 Aug; 39(8):884–6

Volatile substance abuse in relation to alcohol and illicit drugs: psychosocial perspectives. Edeh J. **Hum Toxicol** 1989 Jul;8(4):313–7 (27 ref.)

The relationship between physical and sexual abuse and illicit drug use: a replication among a new sample of youths entering a juvenile detention center. Dembo R, et al. **Int J Addict** 1988 Nov;23(11):1101–23

An integrated analysis of the contribution made by irrational beliefs and parental interaction to adolescent drug abuse. Denoff MS. **Int J Addict** 1988 Jul;23(7):655–69

A survey of alcohol and drug problems in incarcerated offenders. Lightfoot LO, et al. **Int J Addict** 1988 Jul; 23(7):687–706

Substance abuse among Vietnam veterans: a view from the CAP control perspective. McCormack NA. **Int J Addict** 1988;23(12):1311–6 (13 ref.)

Attitudes and perceptions of health professionals toward substance use disorders and substance-dependent individuals. Moodley-Kunnie T. **Int J Addict** 1988 May; 23(5):469–75

Familial, interpersonal, and intrapersonal correlates of drug use: a longitudinal comparison of adolescents in treatment, drug-using adolescents not in treatment, and non-drug-using adolescents. Needle R, et al. **Int J Addict** 1988;23(12):1211–40

A statistical evaluation of the literature regarding the associations among alcoholism, drug abuse, and antisocial personality disorder. Schubert DS, et al. **Int J Addict** 1988 Aug;23(8):797–808 (30 ref.)

Sensation seeking, state and trait anxiety, and depressive mood in adolescent substance users. Teichman M, et al. **Int J Addict** 1989 Feb;24(2):87–99

Stress, expectancies, and vulnerability to substance abuse: a test of a model among homosexual men. McKirnan DJ, et al. **J Abnorm Psychol** 1988 Nov;97(4):461–6

Ego identity: developmental differences and experimental substance use among adolescents. Jones RM, et al. **J Adolesc** 1988 Dec;11(4):347–60

Depression and substance abuse [letter] Schwartz RH. **J Am Acad Child Adolesc Psychiatry** 1988 Jul;27(4):515

Structure of drug use behaviors and consequences among young adults: multitrait-multimethod assessment of frequency, quantity, work site, and problem substance use. Stein JA, et al. **J Appl Psychol** 1988 Nov;73(4):595–605

Abuse of caffeine in substance abusers [letter] Russ NW, et al. **J Clin Psychiatry** 1988 Nov;49(11):457

Bran binging: a variant of laxative abuse in a bulimic patient [letter] Torem MS, et al. **J Clin Psychiatry** 1988 Nov; 49(11):456

Psychological functioning of cocaine free-basers derived from objective psychological tests. Craig RJ. **J Clin Psychol** 1988 Jul;44(4):599–606

Assessment of cognitive functioning in poly-substance abusers. Sweeney JA, et al. **J Clin Psychol** 1989 Mar; 45(2):346–51

Links from emotional distress to adolescent drug use: a path model. Swaim RC, et al. **J Consult Clin Psychol** 1989 Apr; 57(2):227–31

Dimensions of assertiveness: differential relationships to substance use in early adolescence. Wills TA, et al. **J Consult Clin Psychol** 1989 Aug;57(4):473–8

The impact of the "I'm Special" Program on student substance abuse and other related student problem behavior. Kim S, et al. **J Drug Educ** 1989;19(1):83–95

A path analytic examination of differential social control theory. Ried LD. **J Drug Educ** 1989;19(2):139–56

Sex differences in psychosocial consequences of alcohol and drug abuse. Robbins C. **J Health Soc Behav** 1989 Mar; 30(1):117–30

Physician heal thyself [letter] **J Ky Med Assoc** 1989 Jul; 87(7):343

The relationship of MMPI and Sensation Seeking Scales to adolescent drug use. Andrucci GL, et al. **J Pers Assess** 1989 Summer;53(2):253–66

Schedule induction of drug intake: differential responsiveness to agents with abuse potential. Falk JL, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):143–8

Nitrous oxide mood disorder. Grigg JR. **J Psychoactive Drugs** 1988 Oct-Dec;20(4):449–50

Substance abuse prognosis with an additional psychiatric diagnosis: understanding the relationship. Stoffelmayr BE, et al. **J Psychoactive Drugs** 1989 Apr-Jun;21(2):145–52

Caffeine use and abuse in psychiatric clients. Kirmer DA. **J Psychosoc Nurs Ment Health Serv** 1988 Nov;26(11):20–5

Narcissistic deficits in drug abusers: a self-psychological approach. Nighorn S. **J Psychosoc Nurs Ment Health Serv** 1988 Sep;26(9):22–6

Risk reduction and drug abusers [letter] Coleman RM. **J R Coll Gen Pract** 1988 Nov;38(316):518

Area specific self-esteem scales and substance use among elementary and middle school children. Young M, et al. **J Sch Health** 1989 Aug;59(6):251–4

Nuclear war as a source of adolescent worry: relationships with age, gender, trait emotionality, and drug use. Hamilton SB, et al. **J Soc Psychol** 1988 Dec;128(6):745–63

A comparison of alcoholic and nonalcoholic drug abusers. Weiss RD, et al. **J Stud Alcohol** 1988 Nov;49(6):510–5

Knowledge of HIV antibody status and decisions to continue or terminate pregnancy among intravenous drug users. Selwyn PA, et al. **JAMA** 1989 Jun 23–30;261(24):3567–71

A discriminant analysis of the relationship between drug abuse patterns and social maladjustment variables in imprisoned juvenile male delinquents. Osuna E, et al. **Med Law** 1988;7(3):287–93

Family-based approaches to reducing adolescent substance use: theories, techniques and findings. Bry BH. **NIDA Res Monogr** 1988;77:39–68 (106 ref.)

Parent and peer factors associated with drug sampling in early adolescence: implications for treatment. Dishion TJ, et al. **NIDA Res Monogr** 1988;77:69–93

Social and psychological factors underlying inhalant abuse. Oetting ER, et al. **NIDA Res Monogr** 1988;85:172–203

The role of psychopathology in the familial transmission of drug abuse. Rounsaville BJ. **NIDA Res Monogr** 1988; 89:108–19

Drug use, depression, and adolescents. Joshi NP, et al. **Pediatr Clin North Am** 1988 Dec;35(6):1349–64 (119 ref.)

Study of ideal–self discrepancy and observed social behaviors in a therapeutic community. Rogers MK, et al. **Psychol Rep** 1989 Apr;64(2):495–502

Validation of the Toronto Alexithymia Scale with substance abusers. Haviland MG, et al. **Psychother Psychosom** 1988; 50(2):81–7

Unemployment, drug use, and health in late adolescence. Winefield HR, et al. **Psychother Psychosom** 1987; 47(3–4):204–10

How the sex differences in the use of psychotropic drugs are explained. Riska E. **Scand J Soc Med** 1989;17(1):3–6 (28 ref.)

[Early alcoholization and drug abuse behavior as a manifestation of delinquency in children and adolescents] Popov IuV. **Zh Nevropatol Psikhiatr** 1988;88(8):86–90 (Eng. Abstr.) **(Rus)**

[Suicide attempts at a general hospital] Martínez García JJ, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Sep–Oct;16(5):319–26 (Eng. Abstr.) **(Spa)**

[Abuse of flunitrazepam by the nasal route among slum adolescents of Santiago, Chile] Maddaleno M, et al. **Rev Med Chil** 1988 Jul;116(7):691–4 (Eng. Abstr.) **(Spa)**

REHABILITATION

Adolescent chemical use and dependence: current issues in epidemiology, treatment and prevention. Kaminer Y, et al. **Acta Psychiatr Scand** 1989 May;79(5):415–24 (54 ref.)

Smoking as an issue in alcohol and drug abuse treatment. Battjes RJ. **Addict Behav** 1988;13(3):225–30 (36 ref.)

Drug-free therapeutic community: a ten-year follow-up. Charuvastra VC, et al. **Addict Behav** 1989;14(3):343–5

Prospects for smoking treatment in individuals seeking treatment for alcohol and other drug problems. Kozlowski LT, et al. **Addict Behav** 1989;14(3):273–8

The therapeutic community perspective and approach for adolescent substance abusers. De Leon G. **Adolesc Psychiatry** 1988;15:535–56

Hospital programs for psychiatrically disturbed, drug-abusing adolescents. King JW, et al. **Adolesc Psychiatry** 1988;15:522–34

Delinquents and drug use: a model program for community reintegration. Haggerty KP, et al. **Adolescence** 1989 Summer;24(94):439–56

Monitoring recovery from substance abuse: rationales, methods and challenges. Westermeyer J. **Adv Alcohol Subst Abuse** 1989;8(1):93–106

Differences in psychological need hierarchy between program completers and dropouts from a drug abuse treatment program. Craig RJ, et al. **Am J Drug Alcohol Abuse** 1988;14(1):89–96

Families of adolescent drug abusers: systemic interventions to attain drug-free behavior. Quinn WH, et al. **Am J Drug Alcohol Abuse** 1988;14(1):65–87

Immunologic assessment of a cluster of asymptomatic HTLV-I–infected individuals in New Orleans. deShazo RD, et al. **Am J Med** 1989 Jan;86(1):65–70

Subspecialty training in alcoholism and drug abuse [editorial] Galanter M. **Am J Psychiatry** 1989 Jan;146(1):8–9

The current status of psychiatric education in alcoholism and drug abuse. Galanter M, et al. **Am J Psychiatry** 1989 Jan; 146(1):35–9

Pharmacists recovering from alcohol and other drug addictions: an interview study. Bissell L, et al. **Am Pharm** 1989 Jun;NS29(6):19–30

The dual crisis: mental illness and substance abuse. Present and future directions. Brown VB, et al. **Am Psychol** 1989 Mar;44(3):565–9 (23 ref.)

The combined approach: a further comment [letter] **Br J Addict** 1989 Apr;84(4):441–5

Characteristics and help-seeking patterns of attenders at a community-based voluntary agency and an alcohol and drug treatment unit. Allan CA. **Br J Addict** 1989 Jan; 84(1):73–80

Drugs research: the European dimension [editorial] Berridge V. **Br J Addict** 1989 Jun;84(6):579–80

Substance abuse and professional education: a tops-down or bottoms-up approach? Glass IB. **Br J Addict** 1988 Sep; 83(9):999–1001

The relationship between impulsivity, empathy and involvement in twelve step self-help substance abuse treatment groups. McCown W. **Br J Addict** 1989 Apr; 84(4):391–3

Fair Oaks Clinical Research Center. Miller NS, et al. **Br J Addict** 1989 Jun;84(6):599–606

Treatment of drug misuse in the general practice setting. Robertson JR. **Br J Addict** 1989 Apr;84(4):377–80

Drug use among alcoholism detoxification patients: prevalence and impact on alcoholism treatment. Crane M, et al. **Drug Alcohol Depend** 1988 Oct;22(1–2):33–6

Using group therapy to persuade dual-diagnosis patients to seek substance abuse treatment. Kofoed L, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1209–11

London's voluntary drug agencies. III. A "snapshot" view of residential and nonresidential clients. Ettorre B. **Int J Addict** 1988;23(12):1255–69

London's voluntary drug agencies. I. Funding and organizational management. Ettorre B. **Int J Addict** 1988 Oct;23(10):1041–56

London's voluntary drug agencies. II: Staffing. Ettorre B. **Int J Addict** 1988 Nov;23(11):1157–70

From theory to practice: the planned treatment of drug users [interview by S. Einstein] Ford WE. **Int J Addict** 1989 Jan;24(1):39–70

From theory to practice: the planned treatment of drug users [interview by Stanley Einstein] Kleber HD. **Int J Addict** 1989 Feb;24(2):123–66

Treatment providers' assessment of dual-prognosis patients: diagnosis, treatment, referral, and family involvement. Menicucci LD, et al. **Int J Addict** 1988 Jun;23(6):617–22

The effects of two therapeutic communities on illicit drug users between 6 months and 1 year after treatment. Page RC, et al. **Int J Addict** 1988 Jun;23(6):591–601

Interactional variables associated with retention and success in residential drug treatment. Siddall JW, et al. **Int J Addict** 1988;23(12):1241–54

Choosing drug use measures for treatment outcome studies. I. The influence of measurement approach on treatment results. Wells EA, et al. **Int J Addict** 1988 Aug;23(8):851–73 (42 ref.)

Choosing drug use measures for treatment outcome studies. II. Timing baseline and follow-up measurement. Wells EA, et al. **Int J Addict** 1988 Aug;23(8):875–85 (27 ref.)

Skills training for drug abusers: generalization, maintenance, and effects on drug use. Hawkins JD, et al. **J Consult Clin Psychol** 1989 Aug;57(4):559–63

Engaging adolescent drug abusers and their families in treatment: a strategic structural systems approach. Szapocznik J, et al. **J Consult Clin Psychol** 1988 Aug; 56(4):552–7

Reducing the risk of AIDS through methadone maintenance treatment. Ball JC, et al. **J Health Soc Behav** 1988 Sep; 29(3):214–26

COPYIR—the Ocean City experience. Silverman HB, et al. **J Psychoactive Drugs** 1988 Oct–Dec;20(4):445–8

Self-efficacy and relapse among inpatient drug and alcohol abusers: a predictor of outcome. Burling TA, et al. **J Stud Alcohol** 1989 Jul;50(4):354–60

Predictors of reduction and cessation of drinking in community-dwelling men: results from the normative aging study. Hermos JA, et al. **J Stud Alcohol** 1988 Jul; 49(4):363–8

Employer-sponsored insurance coverage for alcoholism and drug-abuse treatments. Morrisey MA, et al. **J Stud Alcohol** 1988 Sep;49(5):456–61

What ever happened to patient confidentiality? [editorial] Imhof J. **J Subst Abuse Treat** 1989;6(1):1

The psychotherapy of dually diagnosed patients. Kaufman E. **J Subst Abuse Treat** 1989;6(1):9–18

Inpatient treatment of the mentally ill substance abuser: some medicolegal concerns. Mann DW. **J Subst Abuse Treat** 1989;6(1):19–21

Assessing the effectiveness of Malaysia's drug prevention education and rehabilitation programs. Scorzelli JF. **J Subst Abuse Treat** 1988;5(4):253–62

Intravenous drug users and human immunodeficiency virus testing and counseling [letter] **JAMA** 1989 Sep 8; 262(10):1331–2

Methadone treatment and acquired immunodeficiency syndrome. Cooper JR. **JAMA** 1989 Sep 22–29; 262(12):1664–8 (88 ref.)

Methadone treatment and the acquired immunodeficiency syndrome epidemic [editorial] Dole VP. **JAMA** 1989 Sep 22–29;262(12):1681–2

Potential toxic interactions of cocaine and mazindol [letter; comment] Iaffe JH, et al. **Lancet** 1989 Jul 8;2(8654):111. **Comment on:** Lancet 1989 Feb 4;1(8632):283

Role of opioid antagonists in treating intravenous cocaine abuse. Kosten TR, et al. **Life Sci** 1989;44(13):887–92

Learning and unlearning drug abuse in the real world: clinical treatment and public policy. Crowley TJ. **NIDA Res Monogr** 1988;84:100–21 (28 ref.)

Program experiences with the solvent abuser in Philadelphia. McSherry TM. **NIDA Res Monogr** 1988;85:106–20

Substance abuse. The silent saboteur in rehabilitation. Pires M. **Nurs Clin North Am** 1989 Mar;24(1):291–6 (10 ref.)

Involuntary treatment of substance abuse disorders—impediments to success. Schottenfeld RS. **Psychiatry** 1989 May;52(2):164–76

Effects of moral reconation therapy upon moral reasoning, life purpose, and recidivism among drug and alcohol offenders. Little GL, et al. **Psychol Rep** 1989 Feb; 64(1):83–90

Role of the employee assistance program in helping the troubled worker. Fitzgerald ST, et al. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):233–43 (40 ref.)

Treatment of drug abuse in veterans [letter] De Ford HA. **Tex Med** 1989 May;85(5):9–10

Impaired physicians who are seeking help. Peer assistance, not public identification. Dickison HW. **W V Med J** 1989 Sep;85(9):390

[Testing the automobile driver in cases of uncertain qualification prognosis] Bode HJ. **Blutalkohol** 1989 May; 26(3):150–75 (Eng. Abstr.) **(Ger)**

STATISTICS & NUMERICAL DATA

Epidemiology of substance abuse including alcohol and cigarette smoking. Adams EH, et al. **Ann N Y Acad Sci** 1989;562:14–20

[Drug use among students in Cali, Colombia] Bergonzoli Peláez G, et al. **Bol Of Sanit Panam** 1989 Jan;106(1):22–31 (Eng. Abstr.) **(Spa)**

SURGERY

The surgical management of empyema thoracis in substance abuse patients: a 5-year experience. Hoover EL, et al. **Ann Thorac Surg** 1988 Nov;46(5):563–6

THERAPY

Guidelines for the successful psychotherapy of substance abusers. Kaufman E, et al. **Am J Drug Alcohol Abuse** 1988; 14(2):199–209

A contemporary approach to the family treatment of substance abuse disorders. Kaufman E. **Am J Drug Alcohol Abuse** 1986;12(3):199–211

A contemporary psychodynamic approach to drug abuse treatment. Khantzian EJ. **Am J Drug Alcohol Abuse** 1986; 12(3):213–22 (20 ref.)

The primary care therapist and patient needs in substance abuse treatment. Khantzian EJ. **Am J Drug Alcohol Abuse** 1988;14(2):159–67

Personality, drug use, and early attrition from substance abuse treatment. Stark MJ, et al. **Am J Drug Alcohol Abuse** 1988; 14(4):475–85

Nontreatment factors affecting treatment outcome in substance abuse. Westermeyer J. **Am J Drug Alcohol Abuse** 1989;15(1):13–29 (51 ref.)

Drug abuse discharges from non-federal short-stay hospitals. Gfroerer JC, et al. **Am J Public Health** 1988 Dec; 78(12):1559–62

Heroine abuse in India [letter] Adityanjee, et al. **Br J Psychiatry** 1988 Jan;152:142–3

Treatment options in responding to drug misuse problems. Tongue E, et al. **Bull Narc** 1988;40(1):3–19 (26 ref.)

Drug-related emergencies in athletes. Felter RA, et al. **Clin Sports Med** 1989 Jan;8(1):129–38 (17 ref.)

Employers want more substance-abuse services. Droste T. **Hospitals** 1989 May 5;63(9):24, 26–8, 30

Events precipitating hospital treatment of adolescent drug abusers. Williams RA, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):70–3

Adolescent dual diagnosis: a 12-step transformational model. Chatlos JC. **J Psychoactive Drugs** 1989 Apr–Jun; 21(2):189–201 (65 ref.)

Psychopathology and substance abuse: what is being learned from research in therapeutic communities. De Leon G. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):177–88 (36 ref.)

Day-care treatment for youth multiple drug abuse: a six-year follow-up study. Feigelman W, et al. **J Psychoactive Drugs** 1988 Oct–Dec;20(4):385–95

Neurocognitive impairment: the unrecognized component of dual diagnosis in substance abuse treatment. Meek PS, et al. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):153–60

Herbs and substance abuse treatment: a 10-year perspective. Nebelkopf E. **J Psychoactive Drugs** 1988 Jul–Sep; 20(3):349–54 (47 ref.)

Impediments to effective treatment of the dually diagnosed patient. Wallen MC, et al. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):161–8 (16 ref.)

Dual diagnosis patients in the urban psychiatric emergency room. Wolfe HL, et al. **J Psychoactive Drugs** 1989 Apr–Jun; 21(2):169–75

Cops & counselors. Counseling issues with prison inmate substance abusers. Rynerson BC. **J Psychosoc Nurs Ment Health Serv** 1989 Feb;27(2):12–7

Management of drug abuse in general practice [letter] **J R Coll Gen Pract** 1988 Oct;38(315):472

Treating the hearing-impaired in a standard chemical dependence unit [published erratum appears in J Stud Alcohol 1988 Nov;49(6):575] Larson EW, et al. **J Stud Alcohol** 1988 Jul;49(4):381–3

Khat: a plant with amphetamine effects. Kalix P. **J Subst Abuse Treat** 1988;5(3):163–9 (50 ref.)

Three hundred admissions to the Waikato Hospital intensive therapy unit—survival, costs, and quality of life after two years. Havill JH, et al. **N Z Med J** 1989 Apr 26; 102(866):179–81

The chemically dependent physician: clinical and legal considerations. Angres DH, et al. **New Dir Ment Health Serv** 1989 Spring;(41):21–32

Adolescent drug abuse: analyses of treatment research. Technical review meeting, November 6–7, 1985, Bethesda, Maryland. **NIDA Res Monogr** 1988;77:1–139

Compulsory treatment of drug abuse: research and clinical practice. January 26 and 27, 1987, Rockville, MD. **NIDA Res Monogr** 1988;86:1–251

The relationship of stimulus control to the treatment of substance abuse. Bickel WK, et al. **NIDA Res Monogr** 1988; 84:122–40 (45 ref.)

Civil commitment—international issues. Brown BS. **NIDA Res Monogr** 1988;86:192–208 (17 ref.)

Legal pressure in therapeutic communities. De Leon G. **NIDA Res Monogr** 1988;86:160–77 (27 ref.)

The costs of crime and the benefits of drug abuse treatment: a cost–benefit analysis using TOPS data. Harwood HJ, et al. **NIDA Res Monogr** 1988;86:209–35

Treatment validity: an approach to evaluating the quality of assessment. Hayes SC. **NIDA Res Monogr** 1988; 77:113–27

Empirical guidelines for optimal client–treatment matching. Hester RK, et al. **NIDA Res Monogr** 1988;77:27–38 (33 ref.)

The criminal justice client in drug abuse treatment. Hubbard RL, et al. **NIDA Res Monogr** 1988;86:57–80

Adolescent drug use: suggestions for future research. Krasnegor NA. **NIDA Res Monogr** 1988;77:128–34

Compulsory treatment: a review of findings. Leukefeld CG, et al. **NIDA Res Monogr** 1988;86:236–51 (10 ref.)

An introduction to compulsory treatment for drug abuse: clinical practice and research. Leukefeld CG, et al. **NIDA Res Monogr** 1988;86:1–7 (7 ref.)

Treatment services for adolescent drug abusers: introduction and overview. Rahdert ER. **NIDA Res Monogr** 1988;77:1–3

Send in the clowns.... Edwards KS. **Ohio Med** 1989 May; 85(5):343–5

Dealing with drug users. Wiggins P. **Practitioner** 1988 Oct 8;232(1456 (Pt 1)):1105–7

[Ethylene glycol poisoning] Kuska J, et al. **Wiad Lek** 1988 Jun 15;41(12):780–4 (Eng. Abstr.) **(Pol)**

[Hyperbaric oxygenation in inhalation toxicomania] Chudin AS, et al. **Sov Med** 1989;(1):77–80 **(Rus)**

[The organization of drug abuse care for adolescents] Abramov VA, et al. **Vrach Delo** 1988 Nov;(11):112–4 **(Rus)**

[A new conceptual framework in the treatment of drug addiction (editorial)] Camprubí García J. **Gac Sanit** 1987 Nov–Dec;1(3):95–6 **(Spa)**

TRENDS

Alcohol and drug use among the elderly: trends in use and characteristics of users. Smart RG, et al. **Can J Public Health** 1988 Jul–Aug;79(4):236–42

AIDS and intranasal heroin [letter] French JF, et al. **Lancet** 1989 May 13;1(8646):1082

[Alcohol and drug abuse—present state and perspectives to the year 1990 in the USA] Vichnar M. **Cesk Pediatr** 1989 Apr;44(4):242 **(Cze)**

[Craxi and drugs (editorial)] Cugurra F. **Clin Ter** 1989 Mar 31;128(6):379–85 **(Ita)**

URINE

Drug testing: technical complications of a complex social issue. McCunney RJ. **Am J Ind Med** 1989;15(3):589–600

Protracted elimination of cocaine metabolites in long–term high–dose cocaine abusers. Weiss RD, et al. **Am J Med** 1988 Dec;85(6):879–80

An evaluation of six methods for the detection of drugs of abuse in urine. Simpson D, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):172–81

Increased urinary lipoperoxides in drug abusers. Knight JA, et al. **Ann Clin Lab Sci** 1988 Sep–Oct;18(5):374–7

Urine testing in the detection of drugs of abuse. Schwartz RH. **Arch Intern Med** 1988 Nov;148(11):2407–12 (41 ref.)

Status of drugs–of–abuse testing in urine under blind conditions: an AACC study. Frings CS, et al. **Clin Chem** 1989 May;35(5):891–4

Proficiency testing on drugs of abuse: one year's experience in Spain. Segura J, et al. **Clin Chem** 1989 May;35(5):879–83

Radioimmunoassay of buprenorphine in urine: studies in patients and in a drug clinic. Hand CW, et al. **J Anal Toxicol** 1989 Mar–Apr;13(2):100–4

Screening procedure for stimulant laxatives in urine using high–performance liquid chromatography with diode array detection. Fullinfaw RO, et al. **J Chromatogr** 1988 Dec 9;433:131–40

Drug concentrations and driving impairment—consensus report [letter] McBay AJ. **J Forensic Sci** 1989 Jan;34(1):3–4

Opinion: clinical use of urine testing in relapse prevention. Annitto WJ, et al. **N J Med** 1988 Oct;85(10):829–31

Quantitative urine testing. A new tool for diagnosing and treating cocaine use. Tennant F, et al. **Postgrad Med** 1989 Sep 1;86(3):107–14

SUBSTANCE DEPENDENCE

American Medical Society on Alcoholism and Other Drug Dependencies, Inc. Program highlights of the 20th annual medical–scientific conference at the National Alcoholism Forum. April 27–30, 1989, Atlanta, Georgia. Abstracts. **Alcoholism (NY)** 1989 Feb;13(1):146–54

Cocaine. Miller NS, et al. **Am Fam Physician** 1989 Feb; 39(2):115–20 (23 ref.)

Pregnancy in a drug–abusing population. Fitzsimmons J, et al. **Am J Drug Alcohol Abuse** 1986;12(3):247–55

Zygomycosis of the basal ganglia in intravenous drug users. Stave GM, et al. **Am J Med** 1989 Jan;86(1):115–7 (19 ref.)

Use of "addictive" to describe neuroleptic drugs [letter] McCormick S. **Am J Psychiatry** 1989 Sep;146(9):1239–40

Psychomotor stimulant properties of addictive drugs. Wise RA. **Ann N Y Acad Sci** 1988;537:228–34 (95 ref.)

Cocaine dependence. Gawin FH, et al. **Annu Rev Med** 1989; 40:149–61 (54 ref.)

Risks of dependence on benzodiazepine drugs [letter] **BMJ** 1989 Feb 18;298(6671):456–7

Risks of dependence on benzodiazepine drugs [letter] Mant A, et al. **BMJ** 1989 Apr 1;298(6677):892

Is T–cell activation an unfavourable sign in i.v.–drug addicts infected with HIV? Fuchs DN, et al. **Cancer Detect Prev** 1988;12(1–6):277–82

Cocaine and pregnancy: clinical and toxicological implications for the neonate. Chasnoff IJ, et al. **Clin Chem** 1989 Jul;35(7):1276–8

Effect of chronic maternal drug addiction on placental drug metabolism. Ostrea EM Jr, et al. **Dev Pharmacol Ther** 1989; 12(1):42–8

Codeine addiction. Rowden AM, et al. **DICP** 1989 Jun; 23(6):475–7

Clorazepate in dogs: tolerance to the anticonvulsant effect and signs of physical dependence. Scherkl R, et al. **Epilepsy Res** 1989 Mar–Apr;3(2):144–50

Chemical dependency. Guidelines for the treatment of recovering chemically dependent dental patients. Miers DR, et al. **J Am Coll Dent** 1989 Spring;56(1):4, 6–8 (20 ref.)

Chemical dependency. There are 18,000 dentists who need our special attention (Part I). Oberg SW. **J Am Coll Dent** 1989 Spring;56(1):5, 9–12

Effects of chronic drug use: defining our terms [editorial] Miller LG. **J Clin Psychopharmacol** 1988 Oct;8(5):309–10

Cocaine abuse and addiction. Gawin FH. **J Fam Pract** 1989 Aug;29(2):193–7 (21 ref.)

Legalizing drugs is humane and may work [letter] Parker V. **J Fla Med Assoc** 1988 Aug;75(8):485

Chronic hepatitis D in intravenous drug addicts and non–addicts. A comparative clinico–pathological study. Buti M, et al. **J Hepatol** 1988 Oct;7(2):169–74

Pregnancy–associated substance abuse and addiction: current concepts and management. Martin JN Jr, et al. **J Miss State Med Assoc** 1988 Dec;29(12):369–74 (10 ref.)

Legal and ethical issues. Resources for dealing with chemically dependent students. Giovinco G. **J Prof Nurs** 1988 Nov–Dec;4(6):401, 459

Suicide and cocaine [letter] Clarke MJ. **JAMA** 1988 Nov 4;260(17):2506

HIV screening and counseling for intravenous drug abuse patients. Staff and patient attitudes. Curtis JL, et al. **JAMA** 1989 Jan 13;261(2):258–62

Drug therapy. Pharmacologic aspects of cigarette smoking and nicotine addition. Benowitz NL. **N Engl J Med** 1988 Nov 17;319(20):1318–30 (167 ref.)

The seduction of substance abuse: two personal accounts. **N Y J Dent** 1988 Sep–Oct;58(5):176–7

The cocaine–abusing health care professional. Rosecan JS. **N Y J Dent** 1988 Sep–Oct;58(5):190–3

The committee on chemical dependency. A report. O'Connell WL. **N Y State Dent J** 1989 Aug–Sep;55(7):20–1

A new class opioid peptide, [D–Arg2, beta–Ala4]–dermorphin tetrapeptide; physical dependence liability in mice. Chaki K, et al. **Neuropeptides** 1989 Feb–Mar;13(2):83–8

The chemically dependent nurse. Green P. **Nurs Clin North Am** 1989 Mar;24(1):81–94 (24 ref.)

Models and perspectives of addiction. Implications for treatment. Hughes TL. **Nurs Clin North Am** 1989 Mar; 24(1):1–12 (54 ref.)

Cocaine addiction. Assessment and intervention. Nuckols CC, et al. **Nurs Clin North Am** 1989 Mar;24(1):33–43 (19 ref.)

Alcoholism and other drug dependencies. Haugland S. **Prim Care** 1989 Jun;16(2):411–29 (88 ref.)

Anti–human immunodeficiency virus type 1 antibody complexes on platelets of seropositive thrombocytopenic homosexuals and narcotic addicts. Karpatkin S, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9763–7

Induction of physical dependence on pentobarbital by new infusion method in the rat. Suzuki T, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):285–95

Alcoholism and chemical dependency in the workplace. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):195–390

Crack and cocaine—current medical issues. Krajewski KJ. **Tex Med** 1988 Sep;84(9):48–50

Nicotine addiction? [editorial] **W V Med J** 1988 Sep;84(9):405

Chemical dependency in women. Meeting the challenges of accurate diagnosis and effective treatment [published erratum appears in West J Med 1989 Apr;150(4):466] Unger KB. **West J Med** 1988 Dec;149(6):746–50 (16 ref.)

[Clomipramine dependence in a drug addict. 1st case (letter)] Toro P, et al. **Presse Med** 1989 Jan 28;18(3):132 **(Fre)**

[Benefits and risks in using benzodiazepines from the viewpoint of pharmaco–epidemiology with reference to substance dependence] Ladewig D. **Schweiz Rundsch Med Prax** 1989 Jul 4;78(27–28):773–8 (0 ref.) (Eng. Abstr.) **(Ger)**

[Untoward side effects of benzodiazepines: dependence and withdrawal syndrome] Fossati C. **Clin Ter** 1987 Sep 15; 122(5):367–72 (72 ref.) (Eng. Abstr.) **(Ita)**

[Addiction to cocaine and recent psychostimulant molecules] Paroli E. **Clin Ter** 1988 Jan 31;124(2):85–98 (54 ref.) (Eng. Abstr.) **(Ita)**

[Amineptine abuse syndrome. Clinical and pharmacological considerations] Casu G, et al. **Minerva Psichiatr** 1988 Jan–Mar;29(1):51–3 (Eng. Abstr.) **(Ita)**

[The prevalence of psychopharmaceutic use in a sample of the Naples population] Amodio Cocchieri R, et al. **Nuovi Ann Ig Microbiol** 1988 Jan–Feb;39(1):53–62 (Eng. Abstr.) **(Ita)**

[The newborn infant of the drug–addicted mother. Experience relative to the period 1978–1986] Fabris C, et al. **Pediatr Med Chir** 1988 Mar–Apr;10(2):177–85 (Eng. Abstr.) **(Ita)**

[A steroid dependent asthmatic patient with hypereosinophilia] Akasawa A, et al. **Arerugi** 1988 Oct; 37(10):1027–32 (Eng. Abstr.) **(Jpn)**

[MPTP and Parkinson's disease] Imai H. **No To Shinkei** 1988 Nov;40(11):1011–24 (97 ref.) **(Jpn)**

[Pharmacological interactions between dependence–liable drugs] Kaneto H, et al. **Yakubutsu Seishin Kodo** 1988 Sep; 8(3):405–15 (Eng. Abstr.) **(Jpn)**

[The effects of noscapine and chlorpheniramine on physical dependence and antitussive activity of dihydrocodeine] Suzuki T, et al. **Yakubutsu Seishin Kodo** 1988 Jun; 8(2):337–43 (Eng. Abstr.) **(Jpn)**

[Toward the 8th All–Union Congress of Neuropathologists, Psychiatrists and Drug Abuse Specialists] Morozov GV. **Zh Nevropatol Psikhiatr** 1988;88(10):3–8 **(Rus)**

[International diffusion of Spanish research on drug dependence] Guardiola E, et al. **Med Clin (Barc)** 1988 Oct 1;91(10):375–8 (Eng. Abstr.) **(Spa)**

[Addiction to buprenorphine (letter)] Cervera G, et al. **Rev Clin Esp** 1989 Feb;184(3):159 **(Spa)**

BLOOD

Tissue distribution of cocaine in a pregnant woman [published erratum appears in J Forensic Sci 1989 Jul;34(4):807] Mittleman RE, et al. **J Forensic Sci** 1989 Mar;34(2):481–6

Failure of behavioral dependence induction and oral nicotine bioavailability in rats. Le Houezec J, et al. **Physiol Behav** 1989 Jan;45(1):103–8

[Changes in hemostasis in drug addicts] Arnalich F, et al. **Med Clin (Barc)** 1988 Dec 3;91(19):725–7 (Eng. Abstr.) **(Spa)**

COMPLICATIONS

Hyperpyrexia, seizures, and hypotension in a 31–year–old man [clinical conference] Merlin SI, et al. **Ala J Med Sci** 1988 Jul;25(3):274–9

Prenatal cocaine exposure is associated with respiratory pattern abnormalities. Chasnoff IJ, et al. **Am J Dis Child** 1989 May;143(5):583–7

Sexual dysfunction in abusers of cocaine and alcohol. Cocores JA, et al. **Am J Drug Alcohol Abuse** 1988; 14(2):169–73

Drug abuse in schizophrenia and bipolar disorder. Miller FT, et al. **Am J Drug Alcohol Abuse** 1989;15(3):291–5

Fetal development and cocaine [letter] Stephens BG. **Am J Forensic Med Pathol** 1989 Sep;10(3):268–9

Treatment of cocaine–induced panic disorder. Louie AK, et al. **Am J Psychiatry** 1989 Jan;146(1):40–4

Needle sharing among IVDUs at risk for AIDS [letter] Des Jarlais DC, et al. **Am J Public Health** 1988 Nov; 78(11):1498–9

HIV seropositivity and IVDUs: ethnic/gender comparisons [letter] Lewis DK, et al. **Am J Public Health** 1988 Nov; 78(11):1499

Neonatal behavior after drug dependent pregnancy. van Baar AL, et al. **Arch Dis Child** 1989 Feb;64(2):235–40

Behaviour in first year after drug dependent pregnancy. van Baar AL, et al. **Arch Dis Child** 1989 Feb;64(2):241–5

Heterosexual human immunodeficiency virus transmission among the middle class. Glaser JB, et al. **Arch Intern Med** 1989 Mar;149(3):645–9

Prevention of human immunodeficiency virus infection among intravenous drug users in New South Wales, Australia: the needles and syringes distribution programme through retail pharmacies. Tsai R, et al. **Asia Pac J Public Health** 1988;2(4):245–51

Intravenous cocaine: psychiatric effects, biological mechanisms. Sherer MA. **Biol Psychiatry** 1988 Dec; 24(8):865–85

Risk behaviours for HIV infection among injecting drug users attending a drug dependency clinic. Hart GJ, et al. **BMJ** 1989 Apr 22;298(6680):1081–3

Perception of risk of HIV infection by injecting drug users and effects on medical clinic attendance. Coleman RM, et al. **Br J Addict** 1988 Nov;83(11):1325–9

HIV transmission risk behaviour of clients attending syringe–exchange schemes in England and Scotland. Stimson GV, et al. **Br J Addict** 1988 Dec;83(12):1449–55

Mephentermine dependence with psychosis. A case report. Uday GJ, et al. **Br J Psychiatry** 1988 Jan;152:129–31

Acute aortic dissection associated with cocaine abuse. Grannis FW Jr, et al. **Clin Cardiol** 1988 Aug;11(8):572–4
Clinical and immunological aspects of HIV infection in drug addicts. Galli M, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 2):S166–76
Parkinsonian syndrome after cardiac arrest: radiological and neurochemical changes. Verslegers W, et al. **Clin Neurol Neurosurg** 1988;90(2):177–9
An outbreak of hepatitis B among intravenous drug users in Medway. Streetly A, et al. **Community Med** 1988 May; 10(2):147–55
Drug dependence: health and socio-economic consequences. Acuda SW. **East Afr Med J** 1988 Oct;65(10):643–52 (33 ref.)
HIV infection and STD in drug addicted prostitutes in Amsterdam: potential for heterosexual HIV transmission. van den Hoek JA, et al. **Genitourin Med** 1989 Jun; 65(3):146–50
Headaches in hospitalized cocaine users. Lipton RB, et al. **Headache** 1989 Apr;29(4):225–8
Cocaine use in a population of drug abusers on methadone. Cushman P Jr. **Hosp Community Psychiatry** 1988 Nov; 39(11):1205–7
A model for implementing AIDS education in a drug abuse treatment setting. Galea RP, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):886–8
Neurologic sequelae of cocaine [letter] Cregler LL. **Hosp Pract [Off]** 1989 May 15;24(5):16
Polymicrobial endocarditis in an i.v. drug user. Stroh JA, et al. **Hosp Pract [Off]** 1988 Oct 15;23(10):176, 178
Lead poisoning during heroin addiction. Antonini G, et al. **Ital J Neurol Sci** 1989 Feb;10(1):105–8
T-lymphocyte subsets and delayed type hypersensitivity as classification parameters for HIV infection among drug-addicts. Lazzarin A, et al. **J Clin Lab Immunol** 1988 Apr;25(4):157–60
Hyperthyroidism in a cocaine-dependent patient. Burton KR, et al. **J Clin Psychiatry** 1989 Aug;50(8):305–6
Death by Freon [letter] Goldsmith RJ. **J Clin Psychiatry** 1989 Jan;50(1):36–7
Buspirone treatment of anxiety in a patient dependent on alprazolam [letter] Kranzler HR. **J Clin Psychopharmacol** 1989 Apr;9(2):153
Cocaine psychosis. Baker FM. **J Natl Med Assoc** 1989 Sep; 81(9):987, 990, 993–6, passim (16 ref.)
Psychopathology in cocaine abusers. Changing trends. Weiss RD, et al. **J Nerv Ment Dis** 1988 Dec;176(12):719–25
Management of the oral surgery patient addicted to heroin. Cook H, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):281–5 (17 ref.)
Addiction in pregnancy: high risk intrapartum management and outcome. Silver H, et al. **J Perinatol** 1987 Summer; 7(3):178–84
Dual diagnosis: clinical and research perspectives. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):135–257
The use of bromocriptine for the treatment of attention deficit disorder in two chemically dependent patients. Cavanagh R, et al. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):217–20
Dual diagnosis: eating disorders and psychoactive substance dependence. Yeary JR, et al. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):239–49 (32 ref.)
An unusual cause of massive non-surgical pneumoperitoneum: case report. Andreone P, et al. **J Trauma** 1989 Sep;29(9):1286–8
HIV-1 infection among intravenous drug users in Manhattan, New York City, from 1977 through 1987. Des Jarlais DC, et al. **JAMA** 1989 Feb 17;261(7):1008–12
HIV-related disease in i.v. drug use. Goodwin FK. **JAMA** 1989 Feb 17;261(7):970
Osteocartilaginous necrosis of the sinonasal tract following cocaine abuse. Kuriloff DB, et al. **Laryngoscope** 1989 Sep; 99(9):918–24
Preventing AIDS contagion among intravenous drug users. Newmeyer JA, et al. **Med Anthropol** 1989 Mar; 10(2–3):167–75
Nonfatal pulmonary edema following cocaine smoking. Efferen L, et al. **N Y State J Med** 1989 Jul;89(7):415–6
Brain abscess: a complication of cocaine inhalation. Rao AN. **N Y State J Med** 1988 Oct;88(10):548–50
AIDS and the new drug injector. Friedman SR, et al. **Nature** 1989 Jun 1;339(6223):333–4
Diagnosing major depression in cocaine abusers: the use of depression rating scales. Weiss RD, et al. **Psychiatry Res** 1989 Jun;28(3):335–43
Developing strategies for AIDS prevention research with black and Hispanic drug users. Schilling RF, et al. **Public Health Rep** 1989 Jan–Feb;104(1):2–11 (102 ref.)
The groin hit: complications of intravenous drug abuse. Rouzier MH, et al. **Radiographics** 1989 May;9(3):487–508
Infected false aneurysms of the femoral artery in intravenous drug addicts. McIlroy MA, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):578–85
Infectious complications in drug addicts: seven-year review of 269 hospitalized narcotics abusers in Switzerland. Scheidegger C, et al. **Rev Infect Dis** 1989 May–Jun; 11(3):486–93
Cocaine-associated rhabdomyolysis and acute renal failure. Anand V, et al. **South Med J** 1989 Jan;82(1):67–9
Addicting drug danger [letter] Thompson DC. **South Med J** 1989 Apr;82(4):532
Cocaine and pregnancy—implications for the child [editorial] Chasnoff IJ. **West J Med** 1989 Apr;150(4):456–8
Neurologic aspects of cocaine abuse [clinical conference] Rowbotham MC. **West J Med** 1988 Oct;149(4):442–8 (60 ref.)
[Drug addiction and HIV infection] Ege P. **Ugeskr Laeger** 1989 Mar 6;151(10):616–8 (Eng. Abstr.) (Dan)
[Prescription of psychopharmaceuticals in general practice. 2. Purpose, psychiatric diagnosis and treatment, addiction] Holm M, et al. **Ugeskr Laeger** 1989 Aug 21;151(34):2126–9 (Eng. Abstr.) (Dan)
[Psychotic patients with substance dependence] Jessen-Petersen B. **Ugeskr Laeger** 1988 Nov 7; 150(45):2751–3 (Dan)
[HIV transmission in the daily ritual of intravenous drug users] Grund JP, et al. **Ned Tijdschr Geneeskd** 1989 Apr 29;133(17):899–900 (Dut)
[Pharmacological causes of disturbances in sexual activity] Klinge E, et al. **Duodecim** 1988;104(15):1157–68 (98 ref.) (Fin)
[Lethal pulmonary arterial hypertension in a heroin and amphetamine addict (letter)] Rouveix E, et al. **Ann Med Interne (Paris)** 1989;140(2):153 (Fre)
[Intervention by Mme S. Chappellon-Briançon. Education of staff in drug addiction and of health care personnel of seropositive and/or patients with AIDS] **Arch Belg** 1988; 46(5–6):259–63 (Fre)
[B virus, delta agent and human immunodeficiency virus infections in drug addicts] Buffet C, et al. **Presse Med** 1988 Sep 10;17(30):1533–7 (31 ref.) (Eng. Abstr.) (Fre)
[Clomipramine dependence responsible for right bundle branch resolving after stopping the poison (letter)] Nores JM, et al. **Therapie** 1988 Oct–Dec;43(6):501–2 (Fre)
[A high fraction of drug-dependent patients among anonymously detected HIV-infected patients in Stuttgart] Marquart KH. **Off Gesundheitswes** 1989 Mar;51(3):115–7 (Eng. Abstr.) (Ger)
[AIDS epidemiology and prevention in i.v. drug addicts] Uchtenhagen A. **Soz Praventivmed** 1988;33(7):326–30 (Eng. Abstr.) (Ger)
[HIV infection in intravenous drug dependent patients—Vienna 1988 results] Loimer N, et al. **Wien Med Wochenschr** 1989 Jul 30;139(14):334–6 (Eng. Abstr.) (Ger)
[Tricuspid valve endocarditis in drug addicts] Cotrufo M, et al. **Arch Monaldi Mal Torace** 1987 Jan–Feb;42(1):93–100 (Eng. Abstr.) (Ita)
[Considerations on infectious endocarditis in drug addicts. Description of 3 cases] Pellegrino F, et al. **Clin Ter** 1987 Jun 15;121(5):425–8 (Eng. Abstr.) (Ita)
[Gonorrhea, Chlamydia infection, Trichomonas vaginitis and candidiasis in drug addicts. Second report] Stapiński A, et al. **Przegl Dermatol** 1988 Sep–Oct;75(5):381–5 (Eng. Abstr.) (Pol)
[Incidence of syphilis among drug addicts. Report II] Stapiński A, et al. **Przegl Dermatol** 1988 Jul–Aug; 75(4):308–13 (Eng. Abstr.) (Pol)
[Traumatism among children and adolescents (a new approach)] Doletskil SIa. **Ortop Travmatol Protez** 1988 Dec;(12):46–9 (Rus)
[Neuropsychologic disorders in drug addicts] García López A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Nov–Dec;16(6):425–33 (57 ref.) (Eng. Abstr.) (Spa)
[Syndrome of persistent generalized lymphadenopathies parenteral drug addicts. Clinical, immunological and histopathological study of 18 cases] Aguilar Ligorit E, et al. **Med Clin (Barc)** 1988 Sep 10;91(7):256–60 (Eng. Abstr.) (Spa)
[Cocaine and dystonias (letter)] Torné Cachot J, et al. **Med Clin (Barc)** 1988 Jun 4;91(2):79 (Spa)
[Cardiac disease caused by non-Hodgkin's lymphoma in a heroin addict with AIDS (letter)] Galofré J, et al. **Rev Clin Esp** 1989 May;184(9):498–9 (Spa)
[Left ventricular function in intravenous drug addicts. Preliminary study] González Juanatey JR, et al. **Rev Esp Cardiol** 1988 Oct;41(8):467–70 (Eng. Abstr.) (Spa)
[Drug abstinence is more difficult when benzodiazepines are prescribed] Alström J, et al. **Lakartidningen** 1988 Dec 28; 85(52):4608 (Swe)
[The frequency of hepatitis B in Malmö is not influenced by a program of replacing the injection needles of drug addicts] Cronberg S, et al. **Lakartidningen** 1989 Mar 15; 86(11):951 (Swe)

DIAGNOSIS

Drug addiction and pregnancy: a different perspective. Custo GM, et al. **Acta Eur Fertil** 1988 Mar–Apr;19(2):105–6
Correlates of addiction-related problems in Kuwait: a cross-cultural view. Bilal AM. **Acta Psychiatr Scand** 1988 Oct;78(4):414–6
Addiction and prenatal screening [letter] Monroe L. **Am Fam Physician** 1988 Dec;38(6):46
Substance abuse/mental illness: diagnostic issues. Ford J, et al. **Am J Drug Alcohol Abuse** 1989;15(3):297–307
Addiction to neuroleptics? [letter] Breggin PR. **Am J Psychiatry** 1989 Apr;146(4):560
Assessment and treatment of chemical dependence. Part I. **Am Pharm** 1988 Jun;NS28(6):63–7 (13 ref.)
A comparison of male and female cocaine abusers. Griffin ML, et al. **Arch Gen Psychiatry** 1989 Feb;46(2):122–6
The reliability of the CIDI-SAM: a comprehensive substance abuse interview. Cottler LB, et al. **Br J Addict** 1989 Jul; 84(7):801–14
Substance-use disorders in DSM-III-R. Evidence for the dependence syndrome across different psychoactive substances. Kosten TR, et al. **Br J Psychiatry** 1987 Dec; 151:834–43
Chemical dependence treatment review guidelines. Phillips KL. **Gen Hosp Psychiatry** 1989 Jul;11(4):282–7
Diagnosing drug dependency [letter] Peyser HS. **Hosp Community Psychiatry** 1988 Sep;39(9):995–6
Anabolic-androgenic steroid dependence. Brower KJ, et al. **J Clin Psychiatry** 1989 Jan;50(1):31–3
Excluding a psychoactive substance use disorder in forensic psychiatric evaluations. Lacoursiere RB. **J Forensic Sci** 1989 Jan;34(1):64–73
Dual diagnosis: psychoactive substance dependence and the personality disorders. Blume SB. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):139–44 (38 ref.)
Diagnosing attention-deficit hyperactivity disorder and learning disabilities with chemically dependent adolescents. Ralph N, et al. **J Psychoactive Drugs** 1989 Apr–Jun; 21(2):203–15 (49 ref.)
The Addiction Severity Index: reliability and validity in a Dutch addict population. Hendriks VM, et al. **J Subst Abuse Treat** 1989;6(2):133–41
The diagnosis of alcohol, cocaine, and other drug dependence in an inpatient treatment population. Miller NS, et al. **J Subst Abuse Treat** 1989;6(1):37–40
Assessing adolescents who abuse chemicals: the chemical dependency adolescent assessment project. Winters KC, et al. **NIDA Res Monogr** 1988;77:4–18 (27 ref.)
Investigation of benzodiazepine-consumers concerning intake-habits, signs of abuse or dependence, and information about the drug. Barnas C, et al. **Pharmacopsychiatry** 1988 Nov;21(6):355–6
Psychiatric diagnosis in cocaine abuse. Nunes EV, et al. **Psychiatry Res** 1989 Apr;28(1):105–14
[Diagnostic criteria for the drugs that cause drug addiction] Deniker P. **Bull Acad Natl Med (Paris)** 1988 Oct; 172(7):927–33 (Fre)
[Barbiturate dependence] Lukachev GIa, et al. **Sov Med** 1989; (4):112–6 (Rus)
[Medicosocial aspects of drug abuse and addiction] Vrublevskii AG, et al. **Voen Med Zh** 1988 May;(5):66–8 (Rus)

DRUG THERAPY

Desipramine facilitation of initial cocaine abstinence. Gawin FH, et al. **Arch Gen Psychiatry** 1989 Feb;46(2):117–21
Outpatient treatment of 'crack' cocaine smoking with flupenthixol decanoate. A preliminary report. Gawin FH, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):322–5
Pharmacological adjuncts in the treatment of opioid and cocaine addicts. Herridge P, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):233–42 (83 ref.)
Carbamazepine for cocaine addiction? [letter] Halikas J, et al. **Lancet** 1989 Mar 18;1(8638):623–4
The treatment of tranquilizer dependence by propranolol. Hallström C, et al. **Postgrad Med J** 1988;64 Suppl 2:40–4
Double-blind evaluation of the effect of acute amantadine on cocaine craving. Gawin FH, et al. **Psychopharmacology (Berlin)** 1989;97(3):402–3
NIDA aims to fight drugs with drugs [news] Waldrop MM. **Science** 1989 Sep 29;245(4925):1443–4
Interactions between dopamine and 5-HT3 receptors suggest new treatments for psychosis and drug addiction. Tricklebank MD. **Trends Pharmacol Sci** 1989 Apr; 10(4):127–9 (20 ref.)
Transdermal clonidine therapy and nicotine withdrawal. Green JJ, et al. **West J Med** 1989 Jul;151(1):79–80
[Weaning of a dependence on amineptine by clonidine] Baudot S, et al. **Therapie** 1988 Aug–Sep;43(5):437 (Fre)

EPIDEMIOLOGY

The impact of changing methods of data collection on the reliability of self-reported drug use of adolescents. Needle RH, et al. **Am J Drug Alcohol Abuse** 1989;15(3):275–89
Longitudinal patterns of cocaine use among adolescents. White HR. **Am J Drug Alcohol Abuse** 1988;14(1):1–15
Epidemiology of coca and alcohol use among high-altitude miners in Argentina. Schinder EO, et al. **Am J Ind Med** 1989;15(5):579–87
Cocaine and heroin dependence compared: evidence from an epidemiologic field survey. Anthony JC, et al. **Am J Public Health** 1989 Oct;79(10):1409–10
Patterns of drug use by young people in the rural community of Spain. Alvarez FJ, et al. **Br J Addict** 1989 Jun; 84(6):647–52
Epidemic cocaine abuse: America's present, Britain's future? Kleber HD. **Br J Addict** 1988 Dec;83(12):1359–71
Drug use by prostitutes in Sydney. Philpot CR, et al. **Br J Addict** 1989 May;84(5):499–505
Trends in the use and misuse of alcohol and other psychoactive drugs in the United Kingdom: some perplexing connections. Plant MA, et al. **Br J Addict** 1988 Aug;83(8):943–7
Cyclizine abuse among a group of opiate dependents receiving methadone. Ruben SM, et al. **Br J Addict** 1989 Aug;84(8):929–34
Buprenorphine and temazepam abuse by drug takers in Glasgow—an increase [letter] Sakol MS, et al. **Br J Addict** 1989 Apr;84(4):439–41

Cocaine-related problems in the city of São Paulo, 1982–1986. da Matta Chasin AA, et al. **Bull Narc** 1989; 41(1–2):99–101

Nonnarcotic drug use over an addiction career—a study of heroin addicts in Baltimore and New York City. Nurco DN, et al. **Compr Psychiatry** 1988 Sep–Oct;29(5):450–9

The cocaine epidemic: drug abuse patterns in New Orleans. Schwartz BD, et al. **J La State Med Soc** 1988 Aug; 140(8):28–31

The incidence of amphetamine use among truck drivers from various regions of Thailand. Mongkolsirichaikul D, et al. **J Med Assoc Thai** 1988 Sep;71(9):471–4

Drug addiction—current trends. Low Wah Yun, et al. **Med J Malaysia** 1988 Mar;43(1):34–9

Cocaine use during pregnancy: prevalence and correlates. Frank DA, et al. **Pediatrics** 1988 Dec;82(6):888–95

Cocaine exposure among children seen at a pediatric hospital. Shannon M, et al. **Pediatrics** 1989 Mar;83(3):337–42

Benzodiazepine abuse and dependence in psychiatric inpatients. Wolf B, et al. **Pharmacopsychiatry** 1989 Mar; 22(2):54–60

Epidemiology and pharmacology of chronic "crack" use: the growing problem of an inner-city hospital. Longmore W, et al. **Proc West Pharmacol Soc** 1989;32:211–6

[Drug dependence and drug abuse in the light of publications of the International Organ of Narcotic Control 1984–1986] Kubalski J, et al. **Pol Tyg Lek** 1988 May 16;43(20):645–8 **(Pol)**

[Cocaine: the epidemic to come] Camí J, et al. **Med Clin (Barc)** 1988 Jun 4;91(2):71–6 (34 ref.) **(Spa)**

ETIOLOGY

Levodopa addiction. A case study. Tack E, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):356–60

Amphetamines: pharmacology, abuse and addiction. Miller NS, et al. **Adv Alcohol Subst Abuse** 1989;8(2):53–69 (42 ref.)

Addictive behaviors and benzodiazepines: 1. Abuse liability and physical dependence. Senay EC. **Adv Alcohol Subst Abuse** 1989;8(1):107–24 (29 ref.)

Abuse of benzodiazepines: the problems and the solutions. A report of a Committee of the Institute for Behavior and Health, Inc. **Am J Drug Alcohol Abuse** 1988;14 Suppl 1:1–69 (63 ref.)

Addiction to tranylcypromine (Parnate): a case report. Westermeyer J. **Am J Drug Alcohol Abuse** 1989; 15(3):345–50

Potential for abuse of alprazolam [letter] Cole JO, et al. **Am J Psychiatry** 1988 Dec;145(12):1609–10

The development of dependence to an octapeptide somatostatin analog: contribution to the study of somatostatin analgesia. Paunović VR, et al. **Biol Psychiatry** 1989 May;26(1):97–101

Nicotine absorption and dependence in an over the counter aid to stopping smoking. Belcher M, et al. **BMJ** 1989 Mar 4;298(6673):570

Fifty-five years of cocaine dependence [letter] Brown R, et al. **Br J Addict** 1989 Aug;84(8):946

Lephetamine abuse and dependence: clinical effects and withdrawal syndrome. Janiri L, et al. **Br J Addict** 1989 Jan;84(1):89–95

Cocaine and its effects on the newborn. Howard J. **Dev Med Child Neurol** 1989 Apr;31(2):255–7 (11 ref.)

Benzodiazepine dependence—aetiological factors, time course, consequences and withdrawal symptomatology: a study of five cases. Brenner PM, et al. **Drug Alcohol Depend** 1988 Dec;22(3):253–61

Assessment of the abuse potential of acetorphan, an enkephalinase inhibitor. Knisely JS, et al. **Drug Alcohol Depend** 1989 Apr;23(2):143–51

Khat consumption: a pharmacological review. Nencini P, et al. **Drug Alcohol Depend** 1989 Jan;23(1):19–29 (94 ref.)

Alcohol and drug taking among medical students at a Nigerian university campus: Part 2. Sociodemographic factors of etiologic significance. Ihezue UH. **J Natl Med Assoc** 1988 Feb;80(2):191–5

Cocaine: general characteristics, abuse, and addiction. Miller NS, et al. **N Y State J Med** 1989 Jul;89(7):390–5 (32 ref.)

Factors that predict individual vulnerability to amphetamine self-administration. Piazza PV, et al. **Science** 1989 Sep 29; 245(4925):1511–3

[Acknowledgement of drug addiction by physicians] Huttunen MO. **Duodecim** 1989;105(9):856–63 **(Fin)**

[Benzodiazepines—good hypnotics? Interview with R. Steinberg, Landeck Pfalz clinic: suppression of deep sleep-dependence in long-term use] Steinberg R. **Fortschr Med** 1989 Jan 20;107(2):62 **(Ger)**

[The occurrence of addiction to karbofos in the progeny of rats administered it during pregnancy] Ivashin VM, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):87–90 (Eng. Abstr.) **(Rus)**

[Case of phenacetin drug dependence] Denisenko GT, et al. **Vrach Delo** 1988 Jul;(7):75–6 **(Rus)**

[Laughing gas and amphetamine abuse] Jacobson B, et al. **Lakartidningen** 1989 Jun 21;86(25):2360 **(Swe)**

GENETICS

Pharmacogenetics of drugs of abuse. Shuster L. **Ann N Y Acad Sci** 1989;562:56–73 (98 ref.)

Specific familial transmission in substance abuse. Meller WH, et al. **Int J Addict** 1988 Oct;23(10):1029–39

Family pedigree studies of biological vulnerability to drug dependence. Stabenau JR. **NIDA Res Monogr** 1988; 89:25–40 (60 ref.)

Genetic approaches to the analysis of addiction processes. George FR, et al. **Trends Pharmacol Sci** 1989 Feb; 10(2):78–83 (31 ref.)

[Pharmacogenetic studies on drug dependence] Suzuki T. **Yakubutsu Seishin Kodo** 1988 Sep;8(3):367–80 (81 ref.) (Eng. Abstr.) **(Jpn)**

HISTORY

The Committee on Problems of Drug Dependence: a legacy of the National Academy of Sciences. A historical account. May EL, et al. **Drug Alcohol Depend** 1989 Jun; 23(3):183–218

Cocaine addiction and Dr. William S. Halsted [letter] Schneck JM. **J Clin Psychiatry** 1988 Dec;49(12):503–4

More on cocaine addiction and Dr. William S. Halsted [letter] Wright AJ. **J Clin Psychiatry** 1989 Sep;50(9):358

[Cocaine euphoria and natural science] Reichenecker JG. **Sudhoffs Arch** 1988;72(2):170–84 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Prevalence of anti-LAV/HTLV-III in Portuguese drug addicts and hemodialyzed patients. Lecour H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):635–6

Clinical features of hepatitis delta virus infection in a northern Italian area. Pasetti G, et al. **Infection** 1988;16(6):345–8

Postmortem detection of anti-HIV and anti-HBc antibodies in 148 drug addicts died between 1977 and 1987. Tappero P, et al. **Panminerva Med** 1988 Oct–Dec;30(4):243–8

Seroprevalence of hepatitis B surface antigen (HBsAg) in 145 drug addicts died between 1977–1987. Tappero P, et al. **Panminerva Med** 1988 Oct–Dec;30(4):249

[Study of immunologic parameters in parenteral drug addicts (PDA) with condylomata acuminata] Marzo Lopez MC, et al. **Med Cutan Ibero Lat Am** 1988;16(3):187–91 (Eng. Abstr.) **(Spa)**

[Prevalence of antibodies against HIV in drug addicts and convicts] Cour MI, et al. **Rev Clin Esp** 1989 Apr; 184(6):326–9 (Eng. Abstr.) **(Spa)**

METABOLISM

Increased synthesis and production of prostaglandin E2 by monocytes from drug addicts with AIDS. Fernández-Cruz E, et al. **Aids** 1989 Feb;3(2):91–6

Biphasic effects of alcohol drinking on methamphetamine metabolism in man. Shimosato K, et al. **Alcohol Alcohol** 1988;23(5):351–7

Rapid isolation and detection of drugs in meconium of infants of drug-dependent mothers. Ostrea EM Jr, et al. **Clin Chem** 1988 Nov;34(11):2372–3

Prolonged occurrence of cocaine in human saliva and urine after chronic use. Cone EJ, et al. **J Anal Toxicol** 1989 Mar–Apr;13(2):65–8

Binding characteristics of t-[35S]butylbicyclophosphorothionate in discrete brain regions of rats made tolerant to and dependent on pentobarbital. Ito Y, et al. **J Neurochem** 1989 Apr; 52(4):1093–8

Differential down-regulation of delta opioid binding sites during physical dependence on methionine enkephalin in the rat. Steece KA, et al. **Life Sci** 1989;44(20):1449–55

Beta-endorphin in brain limbic structures as neurochemical correlate of psychic dependence on drugs. Sweep CG, et al. **Life Sci** 1989;44(16):1133–40

MICROBIOLOGY

Anti-HIV-1 antibodies, anti-HTLV-I antibodies and neopterin levels in parenteral drug addicts in the Austrian Tyrol. Fuchs D, et al. **J Acquir Immune Defic Syndr** 1988; 1(1):65–6

Prevalence of antibodies to human herpesvirus 6 in human immunodeficiency virus 1–seropositive and –negative intravenous drug addicts [letter] Huemer HP, et al. **J Infect Dis** 1989 Sep;160(3):549–50

MORTALITY

Deaths among drug addicts in Denmark in 1968–1986. Kringsholm B. **Forensic Sci Int** 1988 Jul–Aug; 38(1–2):139–49

Patterns and economic effects of drug overdose mortality in Texas: 1980–1986. Harlow KC, et al. **J Drug Educ** 1989; 19(2):165–82

Fatal intoxications in the Nordic countries. A forensic toxicological study with special reference to young drug addicts. Steentoft A, et al. **Z Rechtsmed** 1989;102(6):355–65

NURSING

The role of the addictions nurse specialist in a general hospital setting. Leiker TL. **Nurs Clin North Am** 1989 Mar; 24(1):137–49

The certification process. History and significance for addictions nursing practice. Nelson N. **Nurs Clin North Am** 1989 Mar;24(1):151–9

PATHOLOGY

Focal segmental glomerulosclerosis. A common entity in nephrotic black adults. Bakir AA, et al. **Arch Intern Med** 1989 Aug;149(8):1802–4

Echocardiographic and clinical correlates in drug addicts with infective endocarditis. Implications of vegetation size. Manolis AS, et al. **Arch Intern Med** 1988 Nov; 148(11):2461–5

Analysis of cocaine-positive fatalities. Tardiff K, et al. **J Forensic Sci** 1989 Jan;34(1):53–63

Radiological and neurological changes in the drug abuse patient: a study with MRI. Volkow ND, et al. **J Neuroradiol** 1988;15(3):288–93 **(Eng, Fre)**

Ultrastructural changes in neurons and interneuronal synapses of the hypothalamus in progeny of morphine-dependent rats. Kolusheva GV. **Neurosci Behav Physiol** 1989 May–Jun;19(3):186–90

[Hepatitis in drug poisonings] Trübner K, et al. **Z Rechtsmed** 1989;102(2–3):199–205 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Ultrasonic growth parameters in fetuses of mothers with primary addiction to cocaine. Mitchell M, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1104–9

Cocaine addiction: the hidden dimension. Oswald LM. **Arch Psychiatr Nurs** 1989 Jun;3(3):134–41

Antinociception and physical dependence produced by [D-Arg2] dermorphin tetrapeptide analogues and morphine in rats. Chaki K, et al. **Br J Pharmacol** 1988 Sep;95(1):15–22

Physical dependence on diazepam in the dog: precipitation of different abstinence syndromes by the benzodiazepine receptor antagonists Ro 15-1788 and ZK 93426. Löscher W, et al. **Br J Pharmacol** 1989 Jul;97(3):843–52

Cerebral blood flow in chronic cocaine users: a study with positron emission tomography. Volkow ND, et al. **Br J Psychiatry** 1988 May;152:641–8

The GABA system in functional tolerance and dependence following barbiturates, benzodiazepines or ethanol—correlation or causality? Taberner PV. **Comp Biochem Physiol [A]** 1989;93(1):241–5 (80 ref.)

Effects of ethanol withdrawal on ethanol-reinforced responding in rhesus monkeys. Winger G. **Drug Alcohol Depend** 1988 Dec;22(3):235–40

Intermittent naloxone attenuates the development of physical dependence on methadone in rhesus monkeys. Krystal JH, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):331–8

Neurophysiology and neurochemistry of drug dependence: a review. Kiyatkin EA. **Int J Neurosci** 1989 Feb; 44(3–4):283–316 (111 ref.)

Drug discrimination in human postaddicts: agonist-antagonist opioids. Preston KL, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):184–96

The relevance to clinical care of recent research in neurobiology. Wallace J. **J Subst Abuse Treat** 1988; 5(4):207–17 (93 ref.)

Trans-cranial electrical stimulation attenuates the severity of naloxone-precipitated morphine withdrawal in rats. Dougherty PM, et al. **Life Sci** 1989;44(26):2051–6

Rapid induction of lorazepam dependence and reversal with flumazenil. Nutt DJ, et al. **Life Sci** 1988;43(13):1045–53

Sex differences in physical dependence on methaqualone in the rat. Suzuki T, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):483–8

Cellular and molecular mechanisms of drug dependence. Koob GF, et al. **Science** 1988 Nov 4;242(4879):715–23 (97 ref.)

Cat study halted amid protests [news] Norman C. **Science** 1988 Nov 18;242(4881):1001–2

PREVENTION & CONTROL

National and international strategies to control drug abuse. Westermeyer J. **Adv Alcohol Subst Abuse** 1989;8(2):1–35 (136 ref.)

Abstracts of free communications. The Society for the Study of Addiction to Alcohol and Other Drugs annual symposium. Primary health care and the addictions: practical and theoretical issues. 24 and 25th November 1988, London. **Br J Addict** 1988 Dec;83(12):1469–76

Comments on 'drug scenes'. **Br J Addict** 1988 Aug; 83(8):883–97

'Drug scenes'. A report by the Royal College of Psychiatrists and some comments on the report and its recommendations. **Br J Addict** 1988 Aug;83(8):875–81

Co-ordinating drugs research in Britain. Berridge V. **Br J Addict** 1988 Sep;83(9):1013–8

'Drug scenes'. The start of a debate. Boyd P. **Br J Addict** 1988 Sep;83(9):1041–4

Cleaning the people's home: recent developments in Sweden's addiction policy. Gould A. **Br J Addict** 1989 Jul;84(7):731–41

Resisting temptation: a psychological analysis. Hodgson RJ. **Br J Addict** 1989 Mar;84(3):251–7

Journal interview 21. Conversation with Harold Kalant [interview] Kalant H. **Br J Addict** 1988 Sep;83(9):1003–12

Managing drug use. Whynes DK, et al. **Br J Addict** 1989 May;84(5):533–40

Preventing drug dependency: Part 2, Educating and supporting staff. Clark MD. **J Nurs Adm** 1989 Jan; 19(1):21–6

The educational impact of a course about addiction. Jack LW. **J Nurs Educ** 1989 Jan;28(1):22–8

A comprehensive approach to drug-free schools and communities. Fox CL, et al. **J Sch Health** 1988 Nov; 58(9):365–9

Intermittent flumazenil and benzodiazepine tolerance: discouraging findings in rats [letter] Löscher W, et al. **Lancet** 1989 Jun 17;1(8651):1386–7
National campaign against drug abuse [letter] Bell DS. **Med J Aust** 1989 Jan 16;150(2):109–10
WHO expert committee on drug dependence. Twenty-fifth Report. **WHO Tech Rep Ser** 1989;775:1–48
Acting in good time against the drug menace. Haworth A. **World Health Forum** 1988;9(4):531–5
[Perspectives of the 3d Basel Psychiatry Rounds] Angst J. **Schweiz Rundsch Med Prax** 1989 Jul 4;78(27–28):788–90 (Eng. Abstr.) (Ger)

PSYCHOLOGY

Female alcoholics. I. Alcohol dependence and problems associated with prescribed psychotropic drug use. Blankfield A. **Acta Psychiatr Scand** 1989 Apr;79(4):355–62
Why low-dose benzodiazepine-dependent insomniacs can't escape their sleeping pills. Schneider-Helmert D. **Acta Psychiatr Scand** 1988 Dec;78(6):706–11
Predicting intention to use cocaine in teenagers in Sydney, Australia. Levy SJ, et al. **Addict Behav** 1989;14(2):105–11
Adolescent chemical dependency. Meeks JE. **Adolesc Psychiatry** 1988;15:509–21
Psychological correlates of sexual abuse in adolescent girls in chemical dependency treatment. Edwall GE, et al. **Adolescence** 1989 Summer;24(94):279–88
Experience with the cocaine trigger inventory. Shulman GD. **Adv Alcohol Subst Abuse** 1989;8(2):71–85
The functioning of individuals on a drug abuse treatment waiting list. Brown BS, et al. **Am J Drug Alcohol Abuse** 1989;15(3):261–74
Psychobiology and the treatment of drug dependence: the biobehavioral interface. Meyer RE. **Am J Drug Alcohol Abuse** 1986;12(3):223–33 (53 ref.)
Psychiatrists and the treatment of addictions: perceptions and practices. Miller SI, et al. **Am J Drug Alcohol Abuse** 1986; 12(3):187–97
Cessation of illicit drug use in young adulthood. Kandel DB, et al. **Arch Gen Psychiatry** 1989 Feb;46(2):109–16
Dependence potential and abuse liability of nicotine replacement therapies. Hughes JR. **Biomed Pharmacother** 1989;43(1):11–7 (27 ref.)
Risks of dependence on benzodiazepine drugs: a major problem of long term treatment. Ashton H. **BMJ** 1989 Jan 14;298(6666):103–4
Risks of dependence on benzodiazepine drugs: the importance of patient selection. Tyrer P. **BMJ** 1989 Jan 14;298(6666):102, 104–5
Tranquillisers: prevalence, predictors and possible consequences. Data from a large United Kingdom survey. Ashton H, et al. **Br J Addict** 1989 May;84(5):541–6
Dependence on sedative-hypnotics: neuropsychological impairment, field dependence and clinical course in a 5-year follow-up study. Bergman H, et al. **Br J Addict** 1989 May;84(5):547–53
Addictions and the media [editorial] Farrell M. **Br J Addict** 1989 Aug;84(8):841
An 11-year follow-up of a network of cocaine users. Murphy SB, et al. **Br J Addict** 1989 Apr;84(4):427–36
Changes in HIV risk-taking behaviour in intravenous drug users: a second follow-up. Skidmore CA, et al. **Br J Addict** 1989 Jun;84(6):695–6
Behavioural analysis of addiction: what future does it have? Stolerman I. **Br J Addict** 1988 Sep;83(9):991–3
Self-esteem in abused chemically dependent adolescents. Cavaiola AA, et al. **Child Abuse Negl** 1989;13(3):327–34
Self-medication among addicts with primary psychiatric disorders. Casteneda R, et al. **Compr Psychiatry** 1989 Jan–Feb;30(1):80–3
Family factors associated with the use of psychotropic drugs, alcohol abuse, and minor psychiatric morbidity in the community. Zimmermann-Tansella C, et al. **Compr Psychiatry** 1988 Sep–Oct;29(5):460–6
Attitudes and perceptions of health professionals toward substance use disorders and substance-dependent individuals. Moodley-Kunnie T. **Int J Addict** 1988 May; 23(5):469–75
Women and crack addiction. Guinan ME. **J Am Med Wom Assoc** 1989 Jul–Aug;44(4):129
New beginnings: one day at a time. Storm EM. **J Am Med Wom Assoc** 1989 Jul–Aug;44(4):111–2, 128
Homicidal psychosis during the combined use of cocaine and an over-the-counter cold preparation [letter] Strauss A. **J Clin Psychiatry** 1989 Apr;50(4):147
Anabolic steroid use: indications of habituation among adolescents. Yesalis CE, et al. **J Drug Educ** 1989; 19(2):103–16
The disease of chemical dependency. Smith DP. **J Miss State Med Assoc** 1988 Dec;29(12):375
A hierarchical model of opiate addiction. Failures of self-regulation as a central aspect of substance abuse. Wilson A, et al. **J Nerv Ment Dis** 1989 Jul;177(7):390–9
Preventing drug dependency: Part I, Recognizing risk factors. Clark MD. **J Nurs Adm** 1988 Dec;18(12):12–5
Domestic violence and chemical dependency: dual problems, dual interventions. Gorney B. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):229–38 (54 ref.)
Inpatient cocaine abusers: an analysis of psychological and demographic variables. Dougherty RJ, et al. **J Subst Abuse Treat** 1989;6(1):45–7
A community-based support group for HIV positive i.v. drug abusers: the HERO program. Greif GL, et al. **J Subst Abuse Treat** 1988;5(4):263–6
Addiction: self-destruction or self-repair? [editorial] Khantzian EJ. **J Subst Abuse Treat** 1989;6(2):75
Psychological and environmental determinants of relapse in crack cocaine smokers. Wallace BC. **J Subst Abuse Treat** 1989;6(2):95–106
The treatment of chemical dependence [letter] Clark RJ. **JAMA** 1989 Jun 9;261(22):3239
Traumas of the past, problems of the present and fear of the future. Aftermaths of parental chemical dependency. Goebels U, et al. **N C Med J** 1989 Jul;50(7):374–6
Personality factors in drug addiction. Butcher JN. **NIDA Res Monogr** 1988;89:87–92
Classically conditioned responses in opioid and cocaine dependence: a role in relapse? Childress AR, et al. **NIDA Res Monogr** 1988;84:25–43
Types of conditioning found in drug-dependent humans. O'Brien CP, et al. **NIDA Res Monogr** 1988;84:44–61 (35 ref.)
The use of second-order schedules to study the influence of environmental stimuli on drug-seeking behavior. Schindler CW, et al. **NIDA Res Monogr** 1988;84:180–95 (15 ref.)
Drug anticipation and the treatment of dependence. Siegel S. **NIDA Res Monogr** 1988;84:1–24 (66 ref.)
Nursing interventions for addicted patient. Strategies for intervention. Williams E. **Nurs Clin North Am** 1989 Mar; 24(1):95–107 (5 ref.)
IES Arrow Dot performance and success in a cocaine detoxification program. Stawar TL. **Percept Mot Skills** 1988 Dec;67(3):960–2
An experimental study on dependence liability of zipeprol. Moretti V, et al. **Pharmacol Res** 1989 Mar–Apr;21(2):223–9
The need for a shift in paradigm in the theory of addiction. Thauberger P, et al. **Proc West Pharmacol Soc** 1989; 32:27–31 (19 ref.)
The pleasure dome with caves of ice. Cerebral lateralization, creativity, and the drug experience. Kaplan CD. **Psychiatr Clin North Am** 1988 Sep;11(3):339–49 (24 ref.)
Nicotine addiction in the psychiatric hospital: a preliminary report [letter] Peele R. **Psychiatr J Univ Ottawa** 1988 Nov; 13(4):239
Cocaine-induced cocaine craving. Jaffe JH, et al. **Psychopharmacology (Berlin)** 1989;97(1):59–64
Validation of the Toronto Alexithymia Scale with substance abusers. Haviland MG, et al. **Psychother Psychosom** 1988; 50(2):81–7
[Anorexia and drug addiction. Apropos of toxicorexias] Hers D, et al. **Acta Psychiatr Belg** 1988 Mar–Apr;88(2):93–104 (Eng. Abstr.) (Fre)
[Psychodependence on psychoanalysis or the dangers of paleopsychiatry (letter)] Maroy B. **Presse Med** 1989 May 27;18(21):1081 (Fre)
[From pharmacodependence to psychopharmacology (letter)] Toro P, et al. **Presse Med** 1989 May 27;18(21):1081 (Fre)
[Pathogenetic role of the dependence potential of drugs of the hypnotic and tranquilizer type with special reference to the iatrogenic factor] Fritzsche S. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Dec; 40(12):731–8 (Eng. Abstr.) (Ger)
[Torticollis spasmodicus and addiction] Schulze A. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Dec; 40(12):724–30 (Eng. Abstr.) (Ger)
[Addiction—a contribution from the viewpoint of adolescent psychiatry] Herzka HS, et al. **Schweiz Rundsch Med Prax** 1989 Jul 4;78(27–28):762–5 (Eng. Abstr.) (Ger)
[Intellectual efficiency and drug addiction] Fagiani MB, et al. **Minerva Psichiatr** 1989 Apr–Jun;30(2):89–92 (Eng. Abstr.) (Ita)
[Interpretation of the overdose phenomenon] Gallese A, et al. **Minerva Psichiatr** 1988 Oct–Dec;29(4):231–3 (28 ref.) (Eng. Abstr.) (Ita)
[Ketamine dependence] Rusek A, et al. **Psychiatr Pol** 1988 Jul–Aug;22(4):338–40 (Pol)
[Characteristics of the development of drug addiction and toxicomania in adolescents] Lukacher GIa, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):114–8 (Eng. Abstr.) (Rus)

REHABILITATION

Adolescent chemical use and dependence: current issues in epidemiology, treatment and prevention. Kaminer Y, et al. **Acta Psychiatr Scand** 1989 May;79(5):415–24 (54 ref.)
Characteristics of relapse following adolescent substance abuse treatment. Brown SA, et al. **Addict Behav** 1989; 14(3):291–300
New mandatory course in alcohol and drug dependence for medical students at the Karolinska Institute. Toraker P, et al. **Adv Alcohol Subst Abuse** 1989;8(1):55–66
Alcohol and drug services: the case for combining [editorial] Dunne FJ, et al. **Alcohol Alcohol** 1989;24(2):75–6
A study of physicians certified in alcohol and drug dependence [editorial] Galanter M, et al. **Alcoholism (NY)** 1989 Feb;13(1):1–2
Comparison of the characteristics and functioning of cocaine treatment and cocaine research subjects. Rose MR, et al. **Am J Drug Alcohol Abuse** 1989;15(3):251–60
The allocation of drug addicts to different types of treatment. An evaluation and a two-year follow-up. Segest E, et al. **Am J Drug Alcohol Abuse** 1989;15(1):41–53
Pharmacist involvement in a chemical-dependency rehabilitation program. Haynes M. **Am J Hosp Pharm** 1988 Oct;45(10):2099–101
Establishing a rehabilitation program for impaired pharmacists. Sheffield JW. **Am J Hosp Pharm** 1988 Oct; 45(10):2092–8
Hospital pharmacy employment considerations for the chemically dependent health-care professional. Smith RL, et al. **Am J Hosp Pharm** 1988 Oct;45(10):2102–7
Bromocriptine treatment of cocaine withdrawal symptoms [letter] Extein IL, et al. **Am J Psychiatry** 1989 Mar; 146(3):403
Clinical ratings and plasma HVA during cocaine abstinence. Martin SD, et al. **Biol Psychiatry** 1989 Aug;26(4):356–62
The combined approach: a further comment [letter] **Br J Addict** 1989 Apr;84(4):441–5
Drugs research: the European dimension [editorial] Berridge V. **Br J Addict** 1989 Jun;84(6):579–80
Treatment for the addictions in a psychiatric setting. Blume SB. **Br J Addict** 1989 Jul;84(7):727–9
Treatment at farm place. Ditzler JM, et al. **Br J Addict** 1989 May;84(5):493–7
The Addiction Research Unit of the Institute of Psychiatry, University of London—I. The work of the unit's drug and alcohol section, and general issues. Edwards G. **Br J Addict** 1989 Jul;84(7):715–25
Substance abuse and professional education: a tops-down or bottoms-up approach? Glass IB. **Br J Addict** 1988 Sep; 83(9):999–1001
The alliance between research and clinical practice in drug dependence—wedlock or deadlock? Johns A. **Br J Addict** 1988 Jul;83(7):725–7
Economical with the truth? What to tell the patient in a clinical trial [letter] Johns A. **Br J Addict** 1988 Sep; 83(9):1115–7
Fair Oaks Clinical Research Center. Miller NS, et al. **Br J Addict** 1989 Jun;84(6):599–606
Substance Abuse Treatment Research Center Philadelphia VA Medical Center and the University of Pennsylvania. O'Brien CP, et al. **Br J Addict** 1988 Nov;83(11):1261–70 (53 ref.)
The 'combined approach'—a comment on Duncan Raistrick's editorial. Pittman DJ. **Br J Addict** 1988 Aug;83(8):871–3
The 'combined approach'—still an important debate [editorial] Raistrick D. **Br J Addict** 1988 Aug;83(8):867–9
Treatment of drug misuse in the general practice setting. Robertson JR. **Br J Addict** 1989 Apr;84(4):377–80
The Drug Dependence Clinical Research and Treatment Unit, the Maudsley and Bethlem Royal Hospitals. Strang J, et al. **Br J Addict** 1988 Dec;83(12):1387–94 (95 ref.)
School programmes in drug rehabilitation and social reintegration in the Philippines. San Pedro RM, et al. **Bull Narc** 1988;40(1):63–6
Rehabilitation of drug-addicted persons: the experience of the Nav-Chetna Center in India. Sharma K, et al. **Bull Narc** 1988;40(1):43–9 (8 ref.)
Cocaine abuse and treatment. Pollack MH, et al. **Compr Psychiatry** 1989 Jan–Feb;30(1):31–44 (82 ref.)
Healing, not jailing: dealing with addiction [letter] Blansfield HN. **Conn Med** 1988 Dec;52(12):743–4
Contingency management in methadone maintenance: effects of reinforcing and aversive consequences on illicit polydrug use. Iguchi MY, et al. **Drug Alcohol Depend** 1988 Oct; 22(1–2):1–7
NAS research unit supports ready access to condoms, drug treatment to halt AIDS spread [news] **Hosp Community Psychiatry** 1989 Jul;40(7):763–4
Differences in psychological needs among drug abusers: first admissions compared to recidivists. Craig RJ, et al. **Int J Addict** 1988 Jun;23(6):649–54
London's voluntary drug agencies. I. Funding and organizational management. Ettorre B. **Int J Addict** 1988 Oct;23(10):1041–56
London's voluntary drug agencies. II: Staffing. Ettorre B. **Int J Addict** 1988 Nov;23(11):1157–70
Cocaine abuse treated with phenelzine. Golwyn DH. **Int J Addict** 1988 Sep;23(9):897–905
From theory to practice: the planned treatment of drug users [interview by Stanley Einstein] Kleber HD. **Int J Addict** 1989 Feb;24(2):123–66
Interactional variables associated with retention and success in residential drug treatment. Siddall JW, et al. **Int J Addict** 1988;23(12):1241–54
Bromocriptine in cocaine withdrawal—does it work? Teller DW, et al. **Int J Addict** 1988 Nov;23(11):1197–205
A review of the characteristics and treatment progress of 45 pregnant opiate addicts attending the Irish National Drug Advisory and Treatment Centre over a two year period. O'Connor JJ, et al. **Ir J Med Sci** 1988 May; 157(5):146–9
Predicting rapid relapse following treatment for chemical dependence: a matched-subjects design. Svanum S, et al. **J Consult Clin Psychol** 1989 Apr;57(2):222–6
Responding to the chemically dependent nursing student. Eller RA, et al. **J Nurs Educ** 1989 Feb;28(2):87–8
Dealing with addicts—one GP's personal experience [news] Lefever R. **J R Coll Gen Pract** 1988 May;38(310):242, 244
Treatment and detoxification of opiate dependent drug users in different countries. Roberts K. **J R Soc Health** 1989 Jun;109(3):100–5, 109
Self-efficacy and relapse among inpatient drug and alcohol

abusers: a predictor of outcome. Burling TA, et al. **J Stud Alcohol** 1989 Jul;50(4):354–60

Cliffside: Four Winds—Westchester's program for psychiatric chemical dependency treatment. **J Subst Abuse Treat** 1989;6(1):55–8

Kids and cocaine—a treatment dilemma. Brown BS, et al. **J Subst Abuse Treat** 1989;6(1):3–8

A behavioral measure of AIDS information seeking by drug and alcohol inpatients. Kramer TH, et al. **J Subst Abuse Treat** 1989;6(2):83–5

Brief interventions for psychophysiological symptoms in hospitalized addicted patients. Pantesco VF. **J Subst Abuse Treat** 1989;6(2):107–11

Assessing the effectiveness of Malaysia's drug prevention education and rehabilitation programs. Scorzelli JF. **J Subst Abuse Treat** 1988;5(4):253–62

Recovery-oriented psychotherapy: patient resistances and therapist dilemmas. Zweben JE. **J Subst Abuse Treat** 1989; 6(2):123–32

Workload, setting of clinics often far from ideal [news] Kirn TF. **JAMA** 1988 Nov 25;260(20):2975–6

The ethics of statutory coercion in the treatment of chemical substance abuse/dependence (addiction). de Miranda S. **Med Law** 1989;7(5):427–32

The therapeutic community and behavioral science. De Leon G. **NIDA Res Monogr** 1988;84:74–99 (17 ref.)

Methadone maintenance in pregnancy: consequences to care and outcome [letter] Boyd KL. **Obstet Gynecol** 1989 Jan; 73(1):136

Treating the chemically impaired medical family. Samkoff JS, et al. **Pa Med** 1989 Feb;92(2):32, 34

Case management and follow-up of a chemically impaired nurse. Stefanik-Campisi C, et al. **Perspect Psychiatr Care** 1987–88;24(3–4):114–9

Bromocriptine and amantadine in cocaine detoxification. Giannini AJ, et al. **Psychiatry Res** 1989 Jul;29(1):11–6

Occupational chemical dependency programs: the business of alcohol and drug dependencies. Wright C. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):195–212 (39 ref.)

[The effect of physical training on physical, mental and social conditions in drug and/or alcohol addicts] Sell EH, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2064–7 (Eng. Abstr.) (Dan)

[Using benzodiazepines for withdrawal from benzodiazepines?] Müller WE. **Med Monatsschr Pharm** 1989 Mar;12(3):94–7 (Ger)

[Withdrawal phenomena in stepwise withdrawal of benzodiazepines] Soyka M, et al. **Nervenarzt** 1988 Dec; 59(12):744–8 (Ger)

[Recurrence—its classification in substance-dependent diseases and theoretical and practical aspects of analysis, processing and prevention] Linde C. **Psychiatr Neurol Med Psychol Beih** 1988;39:98–9 (Ger)

[Accepted methadone treatment] Gunne LM. **Lakartidningen** 1989 Jun 7;86(23):2194, 2196 (Swe)

SURGERY

Renal transplantation in substance abusers revisited: the Howard University Hospital experience. John D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1422–4

THERAPY

Psychobiology and the treatment of drug dependence: the biobehavioral interface. Meyer RE. **Am J Drug Alcohol Abuse** 1986;12(3):223–33 (53 ref.)

Advances in alcoholism and chemical dependence [editorial] Whitfield CL. **Am J Med** 1988 Oct;85(4):465

AIDS and drugs [news] **BMJ** 1989 Mar 11;298(6674):627–8

The therapeutic community: exploring the boundaries. Rosenthal MS. **Br J Addict** 1989 Feb;84(2):141–50

Addiction and after. Gossop M. **Br J Psychiatry** 1988 Mar; 152:307–9

Treatment, rehabilitation and social reintegration of drug dependent persons. **Bull Narc** 1988;40(1):1–74

The use of the Transcendental Meditation programme in the prevention of drug abuse and in the treatment of drug-addicted persons. Clements G, et al. **Bull Narc** 1988; 40(1):51–6 (28 ref.)

Family therapy approach to addiction. Crowley P. **Bull Narc** 1988;40(1):57–62 (24 ref.)

Characteristics of a population undergoing treatment for drug addiction in a therapeutic community setting in Spain. Hinojal Fonseca R, et al. **Bull Narc** 1988;40(1):67–9

An acupuncture programme for the treatment of drug-addicted persons. Smith MO, et al. **Bull Narc** 1988; 40(1):35–41

Treatment options in responding to drug misuse problems. Tongue E, et al. **Bull Narc** 1988;40(1):3–19 (26 ref.)

Withdrawal from benzodiazepines of short half-life [letter] Craig DF. **Can Med Assoc J** 1988 Dec 1;139(11):1036–7

Long-term crisis management by furthering group dependence as a narcissistic reinforcement of drug and alcohol dependents. Battegay R. **Crisis** 1988 Nov;9(2):83–92

Doctors and dependency. Martindale JL. **J Arkansas Med Soc** 1988 Aug;85(3):129–30

Legal vulnerabilities in the treatment of chemically dependent dual diagnosis patients. Clark HW, et al. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):251–7

Clinical and legal aspects of nonphysician prescription of vitamins, amino acids and other nutritional supplements. Clark HW, et al. **J Psychoactive Drugs** 1988 Jul–Sep; 20(3):355–74 (147 ref.)

Clinical impressions of SAAVE and tropamine. Horne DE. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):333–6

Can alcoholism and other drug addiction problems be treated away or is the current treatment binge doing more harm than good? Peele S. **J Psychoactive Drugs** 1988 Oct–Dec; 20(4):375–83

Improvement of cocaine-induced neuromodulator deficits by the neuronutrient Tropamine. Trachtenberg MC, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):315–31 (90 ref.)

Management of drug misuse in general practice [editorial] Chang JM. **J R Coll Gen Pract** 1988 Jun;38(311):248–9

Anglo-Dutch responses to drug problems [editorial] Ghodse AH, et al. **J R Soc Med** 1988 Sep;81(9):497–8

An instrument for treatment progress and matching: the recovery attitude and treatment evaluator (RAATE). Mee-Lee D. **J Subst Abuse Treat** 1988;5(3):183–6

Psychotherapy of nine successfully treated cocaine abusers: techniques and dynamics. Schiffer F. **J Subst Abuse Treat** 1988;5(3):131–7

Acceptance of HIV-antibody testing by persons seeking outpatient treatment for cocaine abuse. Weddington WW Jr, et al. **J Subst Abuse Treat** 1988;5(3):145–9

The treatment of chemical dependence [letter] Clark RJ. **JAMA** 1989 Jun 9;261(22):3239

Techniques of benzodiazepine withdrawal in clinical practice. A consensus workshop report. Marks J. **Med Toxicol Adverse Drug Exp** 1988 Jul–Aug;3(4):324–33 (3 ref.)

Follow up of alcohol and other drug dependents treated with psychodrama [letter] Crawford RJ. **N Z Med J** 1989 Apr 26;102(866):199

Treatment alternatives to street crime. Cook LF, et al. **NIDA Res Monogr** 1988;86:99–105

Use of milieu as a problem-solving strategy in addiction treatment. Jack LW. **Nurs Clin North Am** 1989 Mar; 24(1):69–80 (20 ref.)

Cocaine withdrawal. An effective three-drug regimen. Pike RF. **Postgrad Med** 1989 Mar;85(4):115–6, 121

Chemical dependency. What to do once you suspect it. Schulz JE, et al. **Postgrad Med** 1989 Apr;85(5):89–91, 96

Dealing with drug users. Wiggins P. **Practitioner** 1988 Oct 8;232(1456 (Pt 1)):1105–7

Intravenous drug misusers presenting to the accident and emergency department of a large teaching hospital. A failure of clinical management? Stone MH, et al. **Scott Med J** 1989 Apr;34(2):428–30

[Hospitalization of minors at a psychiatric clinic for adults] Molčan J, et al. **Cesk Psychiatr** 1989 Jun;85(3):159–64 (Eng. Abstr.) (Cze)

[Treatment of addicts (editorial)] Mark I. **Ugeskr Laeger** 1989 Aug 14;151(33):2063 (Dan)

[Psychosocial approach for families of drug addicts in close consultation with a center for parents] Rösch D, et al. **Soz Psychiatry Psychiatr Epidemiol** 1988 Jul;23(3):188–94 (Fre)

[The drug addict in prison: Medical response and its limitations] Jeanmonod R, et al. **Soz Praventivmed** 1988; 33(6):274–80 (Eng. Abstr.) (Fre)

[Counseling, care and treatment of drug-dependent patients] Fuchs WJ. **Ther Umsch** 1988 Sep;45(9):637–9 (Eng. Abstr.) (Ger)

[Therapeutic approach to chemical drug addiction] Kaminer Y. **Harefuah** 1989 Feb 1;116(3):170–2 (Heb)

[The university and the training of professionals to deal with drug dependencies] Fernández PL. **An R Acad Nac Med (Madr)** 1988;105(4):415–30 (Spa)

[Practical aspects of the clinical management of benzodiazepine dependence] Moodley P, et al. **Rev Med Chil** 1988 May;116(5):472–5 (36 ref.) (Eng. Abstr.) (Spa)

URINE

Validity testing of commercial urine cocaine metabolite assays: II. Sensitivity, specificity, accuracy, and confirmation by gas chromatography/mass spectrometry. Cone EJ, et al. **J Forensic Sci** 1989 Jan;34(1):32–45

Validity testing of commercial urine cocaine metabolite assays: I. Assay detection times, individual excretion patterns, and kinetics after cocaine administration to humans. Cone EJ, et al. **J Forensic Sci** 1989 Jan;34(1):15–31

Drug concentrations and driving impairment—consensus report [letter] McBay AJ. **J Forensic Sci** 1989 Jan;34(1):3–4

Rapid confirmation of enzyme multiplied immunoassay technique (EMIT) cocaine positive urine samples by capillary gas-liquid chromatography/nitrogen phosphorus detection (GLC/NPD). Verebey K, et al. **J Forensic Sci** 1989 Jan;34(1):46–52

[Evaluation of the usefulness of thin-layer chromatography and orientation tests detecting various addictive drugs in biological specimens] Mielczarska J. **Med Pr** 1989; 40(1):12–7 (Eng. Abstr.) (Pol)

SUBSTANCE K

ANALOGS & DERIVATIVES

Conformationally constrained tachykinins: N-methylated analogues of neurokinin A. Rovero P, et al. **Biopolymers** 1989 Jan;28(1):65–7

ANALYSIS

Neurokinin A, neurokinin B and neuropeptide K in the rabbit iris: a study comparing different extraction methods. Beding-Barnekow B, et al. **Regul Pept** 1989 May; 25(2):199–206

Establishment of highly specific radioimmunoassays for neurokinin A and neurokinin B and determination of tissue distribution of these peptides in rat central nervous system. Tateishi K, et al. **Regul Pept** 1989 Mar;24(3):245–57

ANTAGONISTS & INHIBITORS

Effect of nedocromil sodium on the bronchoconstrictor effect of neurokinin A in asthmatics. Joos GF, et al. **Drugs** 1989; 37 Suppl 1:109–12; discussion 127–36

GENETICS

Expression of substance P/neurokinin A-encoding preprotachykinin messenger ribonucleic acids in the rat enteric nervous system. Sternini C, et al. **Gastroenterology** 1989 Aug;97(2):348–56

Solution hybridization–nuclease protection assays for sensitive detection of differentially spliced substance P- and neurokinin A-encoding messenger ribonucleic acids. Krause JE, et al. **Methods Enzymol** 1989;168:634–52

METABOLISM

Receptors for neurokinins, tachykinins, and bombesin: a pharmacological study. Regoli D, et al. **Ann N Y Acad Sci** 1988;547:158–73 (55 ref.)

Selective agonists for receptors of substance P and related neurokinins. Regoli D, et al. **Biopolymers** 1989 Jan; 28(1):81–90

Substance P and neurokinin A in the cat carotid body: localization, exogenous effects and changes in content in response to arterial pO2. Prabhakar NR, et al. **Brain Res** 1989 Mar 6;481(2):205–14

In vitro and in vivo release of neurokinin A-like immunoreactivity from rat substantia nigra. Diez-Guerra FJ, et al. **Neuroscience** 1988 Nov;27(2):327–36

Substance P and substance K receptor binding sites in the human gastrointestinal tract: localization by autoradiography. Gates TS, et al. **Peptides** 1988 Nov–Dec; 9(6):1207–19

Ontogeny of the novel tachykinins neurokinin A, neurokinin B and neuropeptide K in the rat central nervous system. Diez-Guerra FJ, et al. **Regul Pept** 1989 Apr;25(1):87–97

PHARMACOLOGY

Capsaicin-induced vasodilatation of human coronary arteries in vitro is mediated by calcitonin gene-related peptide rather than substance P or neurokinin A. Franco-Cereceda A, et al. **Acta Physiol Scand** 1989 Aug;136(4):575–80

Characterization of the effects of neurokinins on canine antral muscle. Koelbel CB, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G779–86

Characterization of neurokinin effects and receptor selectivity in human isolated bronchi. Naline E, et al. **Am Rev Respir Dis** 1989 Sep;140(3):679–86

Mammalian tachykinins modulate the nicotinic secretory response of cultured bovine adrenal chromaffin cells. Khalil Z, et al. **Brain Res** 1988 Sep 6;459(2):289–97

Tachykinins produce fast and slow depolarizations in sympathetic neurons of rat coeliac-superior mesenteric ganglia. Konishi S, et al. **Brain Res** 1989 Jun 19; 490(1):162–5

Lack of desensitization to neurokinin A due to partial agonist property of this peptide at parotid substance P receptors. McMillian MK, et al. **Brain Res** 1989 Feb 20;480(1–2):330–4

Intra-raphe neurokinin-induced hyperactivity: effects of 5,7-dihydroxytryptamine lesions. Paris JM, et al. **Brain Res** 1989 Jan 2;476(1):183–8

Prostacyclin release induced by neurokinins in cultured human endothelial cells. Marceau F, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):159–62

Dimerization of neurokinin A and B COOH-terminal heptapeptide fragments enhanced the selectivity for tachykinin receptor subtypes. Kodama H, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):317–20

Amphetamine facilitates the in vivo release of neurokinin A in the nucleus accumbens of the rat. Lindefors N, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):417–20

The effect of nedocromil sodium on the bronchoconstrictor effect of neurokinin A in subjects with asthma. Joos GF, et al. **J Allergy Clin Immunol** 1989 Mar;83(3):663–8

Coupling between inositol phosphate formation and DNA synthesis in smooth muscle cells stimulated with neurokinin A. Hultgårdh-Nilsson A, et al. **J Cell Physiol** 1988 Oct; 137(1):141–5

Substance P, neurokinin A, and neurokinin B induce generation of IL-1-like activity in P388D1 cells. Possible relevance to arthritic disease. Kimball ES, et al. **J Immunol** 1988 Nov 15;141(10):3564–9

Effects of calcitonin gene-related peptide (CGRP), neurokinin A and neurokinin A (4–10) on the mitogenic response of human peripheral blood mononuclear cells. Casini A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar;339(3):354–8

Structure-activity studies of neurokinin A. Rovero P, et al. **Neuropeptides** 1989 May–Jun;13(4):263–70

Neurokinin A selectively inhibits water intake in the rat.

Perfumi M, et al. **Neuropharmacology** 1988 Sep; 27(9):909–14

The actions of neurokinins and substance P in canine pylorus, antrum and duodenum. Allescher HD, et al. **Peptides** 1989 May–Jun;10(3):671–9

A potent and selective agonist for NK–2 tachykinin receptor. Rovero P, et al. **Peptides** 1989 May–Jun;10(3):593–5

Neurokinin–alpha injected into the ventral tegmental area elicits a dopamine–dependent behavioral activation in the rat. Burns LH, et al. **Pharmacol Biochem Behav** 1988 Oct; 31(2):255–63

Neurokinin A and osmotic thirst: a behavioural and renal study. Polidori C, et al. **Pharmacol Res Commun** 1988 Jul; 20(7):605–6

Temperature dependence of the effect of tachykinins on whole guinea–pig ileum in vitro. Landis GC, et al. **Proc West Pharmacol Soc** 1988;31:29–32

Neurotensin, substance P, neurokinin–alpha, and enkephalin: injection into ventral tegmental area in the rat produces differential effects on operant responding. Kelley AE, et al. **Psychopharmacology (Berlin)** 1989;97(2):243–52

Suppression of salt intake in the rat by neurokinin A: comparison with the effect of kassinin. Massi M, et al. **Regul Pept** 1989 Mar;24(3):233–44

PHYSIOLOGY

Control of vascular permeability and vascular smooth muscle in the respiratory tract by multiple neuropeptides. Saria A, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:25–8 (29 ref.)

Substance P, neurokinin A and neurokinin B in the ocular response to injury in the rabbit. Beding–Barnekow B, et al. **Br J Pharmacol** 1988 Sep;95(1):259–67

Cardiovascular roles of tachykinin peptides in the nucleus tractus solitarii of rats. Nagashima A, et al. **Brain Res** 1989 May 22;487(2):392–6

[Distribution of substance K in the rat heart and its cardiovascular effects] Wang JP, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):264–71 (Eng. Abstr.) (Chi)

[Substance K in the digestive tract of rats] Wang JP, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):278–82 (Eng. Abstr.) (Chi)

SUBSTANCE P

Binding of a neuropeptide, substance P, to neutral and negatively charged lipids. Seelig A, et al. **Biochemistry** 1989 Mar 21;28(6):2490–6

Inhibitory actions of procaterol, a beta–2 stimulant, on substance P–induced cough in normal subjects during upper respiratory tract infection. Katsumata U, et al. **Tohoku J Exp Med** 1989 May;158(1):105–6

ADMINISTRATION & DOSAGE

Effects of intravenous calcitonin gene–related peptide (CGRP) and substance P on the blood–aqueous barrier in the rabbit. Andersson SE, et al. **Acta Physiol Scand** 1989 Mar;135(3):349–57

Increased behavioural response to intrathecal substance P after intracerebroventricular 5,7–dihydroxytryptamine but not after p–chlorophenylalanine administration. Eide PK, et al. **Acta Physiol Scand** 1988 Mar;132(3):419–23

Substance P and vasoactive intestinal peptide influence polyamine metabolism in salivary glands of the rat. Ekström J, et al. **Acta Physiol Scand** 1989 Jul;136(3):427–33

Cigarette smoke induces bronchoconstrictor hyperresponsiveness to substance P and inactivates airway neutral endopeptidase in the guinea pig. Possible role of free radicals. Dusser DJ, et al. **J Clin Invest** 1989 Sep; 84(3):900–6

Substance P induces granulocyte infiltration through degranulation of mast cells. Matsuda H, et al. **J Immunol** 1989 Feb 1;142(3):927–31

ANALOGS & DERIVATIVES

Hypoventilation and apnoea induced by the substance P antagonist [D–Pro2,D–Trp7,9]–SP in the ventrolateral rat medulla. Chen Z, et al. **Acta Physiol Scand** 1988 Sep; 134(1):153–4

A tachykinin receptor antagonist inhibits and an inhibitor of tachykinin metabolism potentiates toluene diisocyanate–induced airway hyperresponsiveness in guinea pigs. Sheppard D, et al. **Am Rev Respir Dis** 1988 Sep; 138(3):547–51

The relationship of intracellular free calcium activity to amylase secretion in substance P– and isoprenaline–stimulated rat parotid acini. Arkle S, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1257–61

An analogue of substance P with broad receptor antagonist activity. Zhang L, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):37–44

Determination of cyclopeptide conformations in solution using NMR data and conformational energy calculations. Shenderovich MD, et al. **Biophys Chem** 1988 Aug; 31(1–2):163–73

1H–NMR studies of receptor–selective substance P analogues reveal distinct predominant conformations in DMSO–d6. Levian–Teitelbaum D, et al. **Biopolymers** 1989 Jan; 28(1):51–64

Tachykinin involvement in parasympathetic nerve–evoked salivation of the ferret. Ekström J, et al. **Br J Pharmacol** 1988 Jul;94(3):707–12

Facilitation of the tail–flick reflex by noxious cutaneous stimulation in the rat: antagonism by a substance P analogue. Cridland RA, et al. **Brain Res** 1988 Oct 11; 462(1):15–21

Electroencephalographic and behavioral assessment of intracerebroventricular somatostatin and a substance P analogue. Grabow TS, et al. **Brain Res** 1989 Jun 12; 489(2):223–30

TRH fails to antagonize the acute paralytic effects of intrathecal dynorphin A and substance P antagonists in the rat. Martínez–Arizala A, et al. **Brain Res** 1988 Nov 15; 473(2):385–8

Intra–raphe neurokinin–induced hyperactivity: effects of 5,7–dihydroxytryptamine lesions. Paris JM, et al. **Brain Res** 1989 Jan 2;476(1):183–8

The actions of receptor–selective substance P analogs on myenteric neurons: an electrophysiological investigation. Hanani M, et al. **Eur J Pharmacol** 1988 Aug 24; 153(2–3):247–53

Place aversion induced by the substance P analogue, dimethyl–C7, is not state dependent: implication of substance P in aversion. Elliott PJ. **Exp Brain Res** 1988; 73(2):354–6

Immunohistochemical and behavioral analysis of spinal lesions induced by a substance P antagonist and protection by thyrotropin releasing hormone. Freedman J, et al. **Exp Brain Res** 1989;74(2):279–92

Conformational behavior of the linear hexapeptide senktide: a receptor specific tachykinin analog. Sumner SC, et al. **FEBS Lett** 1989 Aug 14;253(1–2):117–20

Synthesis and biological activity of substance P analogues. Haro I, et al. **Int J Pept Protein Res** 1989 May;33(5):335–9

Reduced peptide bond pseudopeptide analogues of substance P. A new class of substance P receptor antagonists with enhanced specificity. Qian JM, et al. **J Biol Chem** 1989 Oct 5;264(28):16667–71

The tachykinin NH2–senktide, a selective neurokinin B receptor agonist, is a very potent inhibitor of salt appetite in the rat. Massi M, et al. **Neurosci Lett** 1988 Oct 17; 92(3):341–6

Vasoconstrictor effects in spinal cord of the substance P antagonist [D–Arg, D–Trp7,9 Leu11]–substance P (Spantide) and somatostatin and interaction with thyrotropin releasing hormone. Freedman J, et al. **Neuroscience** 1988 Oct;27(1):267–78

The actions of neurokinins and substance P in canine pylorus, antrum and duodenum. Allescher HD, et al. **Peptides** 1989 May–Jun;10(3):671–9

Substance P analogues function as bombesin receptor antagonists and inhibit small cell lung cancer clonal growth. Bepler G, et al. **Peptides** 1988 Nov–Dec;9(6):1367–72

Substance P antagonist–induced spinal cord vasoconstriction: effects of thyrotropin–releasing hormone and substance P agonists. Helke CJ, et al. **Peptides** 1988 Nov–Dec; 9(6):1307–15

Interactions of substance P antagonists with serotonin in the mouse spinal cord. Vaught JL, et al. **Peptides** 1988 Jul–Aug;9(4):909–13

The NK–3 tachykinin agonist senktide elicits yawning and chewing mouth movements following subcutaneous administration in the rat. Evidence for cholinergic mediation. Stoessl AJ, et al. **Psychopharmacology (Berlin)** 1988;95(4):502–6

Increased potency of antagonists of substance P having asparagine in position 6. Ljungqvist A, et al. **Regul Pept** 1989 Mar;24(3):283–91

(D–Phe12) bombesin and substance P analogues function as central bombesin receptor antagonists. Merali Z, et al. **Synapse** 1988;2(3):282–7

ANALYSIS

Substance–P–like immunoreactive subepithelial nerve plexuses in the labial mucosa of the mouse. Ichikawa H, et al. **Acta Anat (Basel)** 1989;134(4):283–5

Angiotensin II/III and substance P in human follicular fluid obtained during IVF: relation of the peptide content with follicular size. Jarry H, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):277–82

Substance P in the acoustic area of the cortex during neuronal development and maturation. Manolidis L, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):375–82

The distribution of nerve fibers showing substance P–like immunoreactivity in the conduction system of the bovine heart: dense innervation in the atrioventricular bundle. Forsgren S. **Anat Embryol (Berl)** 1989;179(5):485–90

Ultrastructural immunocytochemical studies of the localization and distribution of somatostatin, calcitonin, calcitonin gene–related peptide, and substance P in the bat thyroid follicle. Nunez EA, et al. **Anat Rec** 1988 Jul; 221(3):707–13

Chick heart peptidergic innervation: localization and development. Corvetti G, et al. **Basic Appl Histochem** 1988; 32(4):485–93

Localization of substance P and neurofilament immunoreactive fibers in the lumbar facet joint capsule and supraspinous ligament of the rabbit. el–Bohy A, et al. **Brain Res** 1988 Sep 20;460(2):379–82

Presence of a substance P–like immunoreactive neurone system from the parabrachial area to the central amygdaloid nucleus of the rat with reference to coexistence with calcitonin gene–related peptide. Yamano M, et al. **Brain Res** 1988 Jun 7;451(1–2):179–88

Substance P–like immunoreactivity in sympathetic ganglion from toad. Montoya GA, et al. **Cell Mol Biol** 1989; 35(3):325–31

Colonic substance P levels are increased in ulcerative colitis and decreased in chronic severe constipation. Goldin E, et al. **Dig Dis Sci** 1989 May;34(5):754–7

Apparent molecular weight of the substance P binding site in rat brain. Nakata Y, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):171–4

Further analysis of presence of peptides in dopamine neurons. Cholecystokinin, peptide histidine–isoleucine/vasoactive intestinal polypeptide and substance P in rat supramammillary region and mesencephalon. Seroogy K, et al. **Exp Brain Res** 1988;72(3):523–34

An immunohistochemical study on the innervation of SP–IR nerves in the cerebral arteries of the bent–winged bat. Ando K, et al. **Histochemistry** 1989;90(6):459–63

Substance P–like immunoreactive nerve fibers of the human laryngeal mucosa—preliminary report. Frigo B, et al. **Ital J Neurol Sci** 1989 Feb;10(1):69–72

The co–localisation of substance P and VIP in cholinergic–type terminals of the rat parotid gland. al–Hadithi BA, et al. **J Anat** 1988 Aug;159:83–92

High–performance liquid chromatographic determination of substance P–like arginine–containing peptide in rat brain by on–line post–column fluorescence derivatization with benzoin. Ohno M, et al. **J Chromatogr** 1989 May 30; 490(2):301–10

Appearance of neuropeptides in ascitic fluid after peritoneal therapy with interleukin–2 and lymphokine–activated killer cells for intraabdominal malignancy. Schiogolev SA, et al. **J Clin Immunol** 1989 Mar;9(2):169–73

Coexistence of glutamate and substance P in dorsal root ganglion neurons of the rat and monkey. Battaglia G, et al. **J Comp Neurol** 1988 Nov 8;277(2):302–12

Peptide immunoreactivity of unmyelinated primary afferent axons in rat lumbar dorsal roots. McNeill DL, et al. **J Histochem Cytochem** 1989 Jul;37(7):1047–52

Quantification of cutaneous sensory nerves and their substance P content in psoriasis. Naukkarinen A, et al. **J Invest Dermatol** 1989 Jan;92(1):126–9

Substance P levels in peripheral nerve, skin, atrial myocardium and gastrointestinal tract of rats with long–term diabetes mellitus. Effects of aldose reductase inhibition. Willars GB, et al. **J Neurol Sci** 1989 Jun; 91(1–2):153–64

Differential distribution of 5–hydroxytryptamine and substance P in synaptosomal vesicles of rat ventral spinal cord. Fried G, et al. **Neurosci Lett** 1988 Sep 12;91(3):315–20

Origins of substance P– and calcitonin gene–related peptide–containing nerves in the internal carotid artery of rat. Hardebo JE, et al. **Neurosci Lett** 1989 Jun 5; 101(1):39–45

Substance P–like immunoreactive nerve fibers in the pars distalis of the adenohypophysis of macaque monkeys. Liu SJ, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):1–4

Substance P–like immunoreactive retinal terminals found in two retinorecipient areas of the Japanese monkey. Nakagawa S, et al. **Neurosci Lett** 1988 Oct 31;93(1):32–7

Neural and glandular localisation of substance P in Echinostoma caproni (Trematoda–Digenea). Richard J, et al. **Parasitol Res** 1989;75(8):641–8

Substance P and gastrin releasing peptide in bovine mesenteric lymphatic vessels: chemical characterization and action. Foy WL, et al. **Peptides** 1989 May–Jun; 10(3):533–7

Localization of substance P immunoreactivity in phrenic primary afferent neurons. Holtman JR Jr. **Peptides** 1989 Jan–Feb;10(1):53–6

Quantitative determination of substance P in the inner ear of the guinea pig. Nowak R, et al. **Pharmazie** 1989 Feb; 44(2):163–4

Glutamate and substance P coexist in primary afferent terminals in the superficial laminae of spinal cord. De Biasi S, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7820–4

Development of substance P– and vasoactive intestinal polypeptide–containing neurones in the rat stomach. Ito S, et al. **Q J Exp Physiol** 1988 Sep;73(5):729–36

Contributions from the upper cervical dorsal roots and trigeminal ganglia to the feline circle of Willis. Saito K, et al. **Stroke** 1989 Apr;20(4):524–6

Localization of substance P binding sites in submucous plexus of guinea pig ileum, using whole–mount autoradiography. Burcher E, et al. **Synapse** 1988;2(3):232–9

Distribution of substance P–like immunoreactive neurons in the human medulla oblongata: co–localization with monoamine–synthesizing neurons. Halliday GM, et al. **Synapse** 1988;2(4):353–70

Immunocytochemical evidence for substance P and serotonin input to medullary bulbospinal adrenergic neurons. Nicholas AP, et al. **Synapse** 1988;2(6):569–76

Immunohistochemical and biochemical analysis of serotonin and substance P colocalization in the nucleus tractus solitarii and associated afferent ganglia of the rat. Thor KB, et al. **Synapse** 1988;2(3):225–31

Morphological characterization of substance P–like immunoreactive amacrine cells in the anuran retina. Hiscock J, et al. **Vision Res** 1989;29(3):293–301

[Effect of amygdaloid kindling on thyrotropin–releasing hormone, somatostatin, cholecystokinin and substance P

contents of the amygdala/piriform cortex and hippocampus of rats] Kajita S, et al. **No To Shinkei** 1988 Jun;40(6):525–30 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

N-acylated pentapeptides antagonists of substance P on guinea-pig ileum. Schmitt P, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):323–7

Calcitonin gene-related peptide desensitizes skeletal muscle arterioles to substance P in vivo. Ohlén A, et al. **Br J Pharmacol** 1988 Nov;95(3):673–4

Substance P antagonists and analgesia: a review of the hypothesis. Vaught JL. **Life Sci** 1988;43(18):1419–31 (75 ref.)

Substance P antagonist–induced spinal cord vasoconstriction: effects of thyrotropin–releasing hormone and substance P agonists. Helke CJ, et al. **Peptides** 1988 Nov–Dec; 9(6):1307–15

Interactions of substance P antagonists with serotonin in the mouse spinal cord. Vaught JL, et al. **Peptides** 1988 Jul–Aug;9(4):909–13

Increased potency of antagonists of substance P having asparagine in position 6. Ljungqvist A, et al. **Regul Pept** 1989 Mar;24(3):283–91

BIOSYNTHESIS

Development of serotonin, substance P and thyrotrophin–releasing hormone in mouse medullary raphe grown in organotypic tissue culture: developmental regulation by serotonin. Jonakait GM, et al. **Brain Res** 1988 Nov 15;473(2):336–43

Enhancement of preprotachykinin A gene expression by adjuvant-induced inflammation in the rat spinal cord: possible involvement of substance P–containing spinal neurons in nociception. Minami M, et al. **Neurosci Lett** 1989 Mar 13;98(1):105–10

BLOOD

Angiotensin–converting enzyme inhibition, cough and the serum concentration of substance P. Thysell H, et al. **Eur J Clin Pharmacol** 1988;34(6):649–50

Evidence of increased levels of substance P in obese children. Baroncelli GI, et al. **Funct Neurol** 1989 Apr–Jun;4(2):183–4

Plasma substance P levels in fibrositis. Reynolds WJ, et al. **J Rheumatol** 1988 Dec;15(12):1802–3

[Substance P—perioperative plasma level in patients with intracranial tumors—a first pilot study] Röding T, et al. **Anaesthesiol Reanim** 1988;13(3):177–82 (Eng. Abstr.) **(Ger)**

CEREBROSPINAL FLUID

Fluoxetine treatment of depression. Clinical effects, drug concentrations and monoamine metabolites and N–terminally extended substance P in cerebrospinal fluid. Mårtensson B, et al. **Acta Psychiatr Scand** 1989 Jun; 79(6):586–96

Immunoreactive substance P and somatostatin in the cerebrospinal fluid of senile parkinsonian patients. Cramer H, et al. **Eur Neurol** 1989;29(1):1–5

Substance P–like immunoreactivity in human cerebrospinal fluid. Higa T, et al. **Int J Pept Protein Res** 1989 Jun; 33(6):446–51

Cerebrospinal fluid immunoreactive substance P and somatostatin in neurological patients with peripheral and spinal cord disease. Cramer H, et al. **Neuropeptides** 1988 Oct;12(3):119–24

A study of beta–endorphin and substance P level in cerebrospinal fluid on lumbar lesion. Masaki K. **Tokushima J Exp Med** 1987 Dec;34(3–4):61–9

CHEMICAL SYNTHESIS

Synthesis and biological activity of substance P analogues. Haro I, et al. **Int J Pept Protein Res** 1989 May;33(5):335–9

DIAGNOSTIC USE

Bronchospasm induced by inhalation of substance P: effect of sodium cromoglycate. Crimi N, et al. **Respiration** 1988; 54 Suppl 1:95–9

GENETICS

Decrease in gene expression of substance P and thyrotropin releasing hormone (TRH) in rat medulla oblongata following treatment with an antidepressive drug. Schalling M, et al. **Acta Physiol Scand** 1988 Nov;134(3):455–6

The polyprotein nature of substance P precursors. Krause JE, et al. **Bioessays** 1989 Feb–Mar;10(2–3):62–9 (74 ref.)

Expression of substance P/neurokinin A–encoding preprotachykinin messenger ribonucleic acids in the rat enteric nervous system. Sternini C, et al. **Gastroenterology** 1989 Aug;97(2):348–56

Solution hybridization–nuclease protection assays for sensitive detection of differentially spliced substance P– and neurokinin A–encoding messenger ribonucleic acids. Krause JE, et al. **Methods Enzymol** 1989;168:634–52

Neurokinin B and substance P genes are co–expressed in a subset of neurons in the rat habenula. Burgunder JM, et al. **Neuropeptides** 1989 Apr;13(3):165–9

IMMUNOLOGY

Increased reactivity to chemical but not to heat noxious stimuli in mice producing anti–idiotypic antibodies for substance P. Calvino B, et al. **Brain Res** 1988 Sep 20; 460(2):389–93

Long–lasting neurochemical and functional changes in rats induced by neonatal administration of substance P antiserum. De Felipe MC, et al. **Brain Res** 1989 Apr 24; 485(2):301–8

Simultaneous localization of acetylcholinesterase activity and met–enkephalin, vasoactive intestinal peptide and substance P immunoreactivity in the rat myenteric plexus. Anglade P, et al. **Histochem J** 1988 Aug;20(8):464–7

Ultrastructural analysis of substance P–immunoreactive nerve fibers in myenteric ganglia of guinea pig small intestine. Llewellyn–Smith IJ, et al. **J Neurosci** 1989 Jan;9(1):167–74

Vagal afferents interact with substance P–immunoreactive structures in the nucleus of the tractus solitarius: immunoelectron microscopy combined with an anterograde degeneration study. Kawai Y, et al. **Neurosci Lett** 1989 Jun 5;101(1):6–10

Effect of passive immunization against substance P in rats with hyperprolactinemia. Debeljuk L, et al. **Peptides** 1988 Sep–Oct;9(5):933–6

[Primary ovarian carcinoid with secretion of human pancreatic polypeptide and immunoreactivity to substance P] Proye C, et al. **Chirurgie** 1988;114(3):234–43 (38 ref.) (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

Effects of orthodontic force on methionine enkephalin and substance P concentrations in human pulpal tissue. Parris WG, et al. **Am J Orthod Dentofacial Orthop** 1989 Jun; 95(6):479–89

Presence of a substance P–like peptide in an acid extract of the intestinal bulb of the carp (Cyprinus carpio). Kitazawa T, et al. **Br J Pharmacol** 1988 Sep;95(1):39–48

Optimizing recovery of peptides from an octadecylsilyl (ODS) cartridge. Higa T, et al. **Int J Pept Protein Res** 1989 Apr;33(4):250–5

Optimization of high–performance liquid chromatography–radioimmunoassay protocols for the analyses of substance P and some of its metabolic fragments. Igwe OJ, et al. **J Chromatogr** 1988 Nov 18;432:113–26

METABOLISM

Increased levels of substance P and cholecystokinin in rat cerebral cortex following repeated electroconvulsive shock and subchronic treatment with a serotonin uptake inhibitor. Brodin K, et al. **Acta Physiol Scand** 1989 Aug;136(4):613–4

Substance P–, VIP– and CGRP–like immunoreactivities coexist in a population of cholinergic postganglionic sympathetic nerves innervating sweat glands in the cat. Lindh B, et al. **Acta Physiol Scand** 1988 Dec;134(4):569–70

Chemical degradation of 3H–labeled substance P in tris buffer solution. Higa T, et al. **Anal Biochem** 1988 Sep;173(2):463–8

Substance P as a transglutaminase substrate: identification of the reaction products by fast atom bombardment mass spectrometry. Porta R, et al. **Anal Biochem** 1988 Aug 1; 172(2):499–503

Co–localisation of substance P–, bombesin– and peptide histidine isoleucine (PHI)–like peptides in gut endocrine cells of the dogfish Scyliorhinus stellaris. Cimini V, et al. **Anat Embryol (Berl)** 1989;179(6):605–14

Increase in substance P levels in the lung of old rats. Amenta F, et al. **Arch Gerontol Geriatr** 1988 Sep;7(3):215–9

1H–NMR studies of receptor–selective substance P analogues reveal distinct predominant conformations in DMSO–d6. Levian–Teitelbaum D, et al. **Biopolymers** 1989 Jan; 28(1):51–64

Selective agonists for receptors of substance P and related neurokinins. Regoli D, et al. **Biopolymers** 1989 Jan; 28(1):81–90

A comparison of bradykinin– and capsaicin–induced myocardial and coronary effects in isolated perfused heart of guinea–pig: involvement of substance P and calcitonin gene–related peptide release. Manzini S, et al. **Br J Pharmacol** 1989 Jun;97(2):303–12

Substance P–like immunoreactivity in brains with pathological features of Parkinson's and Alzheimer's diseases. Clevens RA, et al. **Brain Res** 1989 May 8; 486(2):387–90

Quantitative radioimmunocytochemical evidence that haloperidol and SCH 23390 induce opposite changes in substance P levels of rat substantia nigra [published erratum appears in Brain Res 1988 Nov 8;472(1):203] Cruz CJ, et al. **Brain Res** 1988 Aug 2;457(1):29–43

Cutaneous stimuli releasing immunoreactive substance P in the dorsal horn of the cat. Duggan AW, et al. **Brain Res** 1988 Jun 7;451(1–2):261–73

Effect of intrathecal proctolin administration on the behaviour evoked by the thyrotrophin–releasing hormone (TRH) analogue (RX 77368) and the indoleamine, TRH, substance P and calcitonin gene–related peptide levels and choline acetyltransferase activity in the rat spinal cord. Fone KC, et al. **Brain Res** 1988 Sep 13;460(1):22–8

Autoradiographic localization of binding sites for 125I–substance P on neurones from cultured rat superior cervical ganglion. James S, et al. **Brain Res** 1988 Aug 23; 458(2):205–11

Parvicellular adrenergic neurons receive substance P–ergic inputs in the nucleus of the tractus solitarius of the rat. Kawai Y, et al. **Brain Res** 1989 Feb 13;479(2):344–8

Autoradiographic localization of substance P ligand binding sites and distribution of immunoreactive neurons in the periaqueductal gray of the rat. Liu RP, et al. **Brain Res** 1988 Dec 13;475(1):73–9

Substance P content in cultured neonatal rat vagal sensory neurons: the effect of nerve growth factor. MacLean DB, et al. **Brain Res** 1988 Aug 2;457(1):53–62

Differential regulation of calcitonin gene–related peptide and substance P in cultured neonatal rat vagal sensory neurons. MacLean DB, et al. **Brain Res** 1989 Jan 30;478(2):349–55

Biochemical, anatomical and functional correlates of postnatal development of the capsaicin–sensitive innervation of the rat urinary bladder. Maggi CA, et al. **Brain Res** 1988 Oct 1;471(2):183–90

The coexistence of substance P– and glutamic acid decarboxylase–like immunoreactivity in entopeduncular neurons of the rat. Murakami S, et al. **Brain Res** 1989 Apr 24;485(2):403–6

Tachykinin binding sites in the interpeduncular nucleus of the rat: normal distribution, postnatal development and the effects of lesions. Murray M, et al. **Brain Res** 1988 Aug 30;459(1):76–92

Substance P–like immunoreactive neurons in the arcuate nucleus project to the median eminence in rat. Palkovits M, et al. **Brain Res** 1989 May 8;486(2):364–8

Substance P and neurokinin A in the cat carotid body: localization, exogenous effects and changes in content in response to arterial pO2. Prabhakar NR, et al. **Brain Res** 1989 Mar 6;481(2):205–14

Calcitonin gene–related peptide– and substance P–containing primary afferent fibers in the dorsal column of the rat. Tamatani M, et al. **Brain Res** 1989 Aug 21;495(1):122–30

Convergence of serotonin–, enkephalin– and substance P–like immunoreactive afferent fibers on single pudendal motoneurons in Onuf's nucleus of the cat: a light microscope study combining the triple immunocytochemical staining technique with the retrograde HRP–tracing method. Tashiro T, et al. **Brain Res** 1989 Mar 6;481(2):392–8

Convergence of serotonin–, enkephalin– and substance P–like immunoreactive afferent fibers onto cat medullary dorsal horn projection neurons: a triple immunocytochemical staining technique combined with the retrograde HRP–tracing method. Tashiro T, et al. **Brain Res** 1989 Jul 10;491(2):360–5

Enkephalin–, substance P– and serotonin–like immunoreactive axonal varicosities in close apposition to perikarya of mesencephalic trigeminal nucleus neurons in the cat. Tashiro T, et al. **Brain Res** 1989 Aug 7;494(1):162–7

Substance P–like immunoreactive fibres in the ventromedial mesencephalic tegmentum of rat. Halliday G, et al. **Brain Res Bull** 1988 Oct;21(4):659–70

The distribution of substance P in the cerebral cortex and hippocampal formation: an immunohistochemical study in the monkey and rat. Iritani S, et al. **Brain Res Bull** 1989 Feb;22(2):295–303

Evidence for substance P, serotonin and oxytocin input to medullary catecholamine neurons with diencephalic projections. Nicholas AP, et al. **Brain Res Bull** 1989 Feb; 22(2):213–23

Substance P–like immunoreactive projection to the hippocampal formation from the posterior hypothalamus in the cat. Yanagihara M, et al. **Brain Res Bull** 1989 Apr; 22(4):689–94

The ontogeny of substance P– and serotonin–like immunoreactivities in the sexually dimorphic cremaster nucleus of the rat spinal cord. Newton BW, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):227–42

The postnatal ontogeny of substance P–immunoreactive fibers in the sympathetic preganglionic nuclei of the rat. Newton BW, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):161–80

Intramural distribution of immunoreactive vasoactive intestinal polypeptide (VIP), substance P, somatostatin and mammalian bombesin in the oesophago–gastro–pyloric region of the human gut. Ferri GL, et al. **Cell Tissue Res** 1989 Apr;256(1):191–7

Effects of capsaicin in rat and pigeon on peripheral nerves containing substance P and calcitonin gene–related peptide. Harti G, et al. **Cell Tissue Res** 1989 Jun;256(3):465–74

Distribution of substance P in the enteric plexuses of the small intestine of the platypus, Ornithorhynchus anatinus. Osborne PB, et al. **Cell Tissue Res** 1989 Mar;255(3):663–7

Substance P and hydra: an immunohistochemical and physiological study. Pierobon P, et al. **Comp Biochem Physiol [C]** 1989;92(2):217–21

Effects of sorbinil treatment in rats with chronic streptozotocin–diabetes; changes in lens and in substance P and catecholamines in the iris. Tomlinson DR, et al. **Curr Eye Res** 1989 Apr;8(4):357–63

Distribution of immunoreactive substance P in opossum esophagus. Christensen J, et al. **Dig Dis Sci** 1989 Apr; 34(4):513–20

Distribution of vasoactive intestinal polypeptide and substance P receptors in human colon and small intestine. Korman LY, et al. **Dig Dis Sci** 1989 Jul;34(7):1100–8

Binding of a iodinated substance P analog to a NK–1 receptor on isolated cell membranes from rat anterior pituitary. Larsen PJ, et al. **Endocrinology** 1989 May;124(5):2548–57

Effects of opioids on the heat stimulus–evoked substance P

release and thermal edema in the rat hind paw. Yonehara N, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):381–7

Ultrastructural localisation of substance P and choline acetyltransferase in endothelial cells of rat coronary artery and release of substance P and acetylcholine during hypoxia. Milner P, et al. **Experientia** 1989 Feb 15; 45(2):121–5

Release of substance P- and calcitonin gene-related peptide-like immunoreactivity and motor response of the isolated guinea pig gallbladder to capsaicin. Maggi CA, et al. **Gastroenterology** 1989 Apr;96(4):1093–101

The effect of calcium free medium and nifedipine on the release of substance P-like immunoreactivity and contractions induced by capsaicin in the isolated guinea-pig and rat bladder. Maggi CA, et al. **Gen Pharmacol** 1989; 20(4):445–56

A developmental influence of substance P on its receptors. Handelmann GE, et al. **Int J Dev Neurosci** 1987;5(1):11–5

Purification and characterization of a substance P-degrading endopeptidase from rat brain. Endo S, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):999–1006

Substance P receptors in human pituitary: a potential inhibitor of luteinizing hormone secretion. Wormald PJ, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):612–5

Distribution of substance P and vasoactive intestinal polypeptide neurons in the chicken spinal cord, with notes on their postnatal development. Du F, et al. **J Comp Neurol** 1988 Dec 8;278(2):253–64

Lumbar dorsal root ganglia of the cat: a quantitative study of peptide immunoreactivity and cell size. Garry MG, et al. **J Comp Neurol** 1989 Jun 1;284(1):36–47

Development of substance P-containing neurons in the central nervous system in mice: an immunocytochemical study. Ni L, et al. **J Comp Neurol** 1988 Sep 22; 275(4):493–510

Substance P-like immunoreactive amacrine cells in the cat retina. Pourcho RG, et al. **J Comp Neurol** 1988 Sep 22; 275(4):542–52

Morphological characterization of substance P-like immunoreactive glomeruli in the superficial dorsal horn of the rat spinal cord and trigeminal subnucleus caudalis: a quantitative study. Ribeiro-da-Silva A, et al. **J Comp Neurol** 1989 Mar 22;281(4):497–15

Distribution of substance P-like immunoreactivity in the goldfish brain. Sharma SC, et al. **J Comp Neurol** 1989 Jan 1;279(1):104–16

Preganglionic and sensory origins of calcitonin gene-related peptide-like and substance P-like immunoreactivities in bullfrog sympathetic ganglia. Horn JP, et al. **J Neurosci** 1989 Jul;9(7):2543–61

Effect of neonatal infraorbital nerve transection on substance P- and leucine enkephalin-like immunoreactivities in trigeminal subnucleus caudalis of the rat. Rhoades RW, et al. **J Neurosci** 1988 Jul;8(7):2234–47

The effect of small intestinal transplantation on intraluminal levels of serotonin and substance P. LaRosa CA, et al. **J Surg Res** 1989 Jun;46(6):600–4

Relation between the therapeutic effect of moxibustion in treating arthralgia and SP and enkephalin in nervous tissues. Lu ZS, et al. **J Tradit Chin Med** 1989 Mar; 9(1):69–74

Metalloendopeptidase (EC 3.4.24.11) but not angiotensin converting enzyme is involved in the inactivation of substance P by synaptic membranes of the rat substantia nigra. Oblin A, et al. **Life Sci** 1989;44(20):1467–74

Substance P and NPY innervation of microvessels in the rabbit tenuissimus muscle. Ohlén A, et al. **Microvasc Res** 1988 Sep;36(2):117–29

Binding and internalization of a iodinated substance P analog by cultured anterior pituitary cells. Larsen PJ, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):91–101

Cystatins from bovine brain: purification, some properties, and action on substance P degrading activity. Aghajanyan HG, et al. **Neurochem Res** 1988 Aug;13(8):721–7

Substance p in the median eminence and pituitary of the rat: demonstration of immunoreactive fibers and specific binding sites. Mikkelsen JD, et al. **Neuroendocrinology** 1989 Jul;50(1):100–8

Degradation of substance P by neuronal and glial cells cultured from rat fetal brain and their membranes. Endo S, et al. **Neuropeptides** 1989 Jul;14(1):31–7

Modulation of [3H]DAGO binding by substance P (SP) and SP fragments in the mouse brain and spinal cord via MU1 interactions. Krumins SA, et al. **Neuropeptides** 1989 May-Jun;13(4):225–33

Levels of Met-enkephalin, Leu-enkephalin, substance P and cholecystokinin in the brain of the common marmoset following long term 1-methyl-4-phenyl-1,2,3,6,-tetrahydropyridine treatment. Taquet H, et al. **Neuropeptides** 1988 Oct;12(3):105–10

Restricted fiber growth from substance P-immunoreactive brain neurons grafted to the anterior eye chamber of the rat. Bjelke B, et al. **Neurosci Lett** 1989 Jul 17;102(1):15–9

Regional differences in substance P-like immunoreactivity in the striatum correlate with levels of pre-protachykinin mRNA. Chesselet MF, et al. **Neurosci Lett** 1989 Jan 2; 96(1):47–53

Specific [125I]Bolton-Hunter substance P binding sites in human and rat skin. Deguchi M, et al. **Neurosci Lett** 1989 May 8;99(3):287–92

Co-existence of neuropeptides and differential inhibition of vasodilator responses by neuropeptide Y in guinea pig uterine arteries. Fallgren B, et al. **Neurosci Lett** 1989 May 22;100(1–3):71–6

Developmental alterations in thermal nociceptive threshold and the distribution of immunoreactive calcitonin gene-related peptide and substance P after neonatal administration of capsaicin in the rat. Hammond DL, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):57–62

Effects of neonatal monosodium glutamate treatment on substance P binding sites in the rat retina. Lee CM, et al. **Neurosci Lett** 1988 Oct 17;92(3):310–4

Evidence for colocalization of substance P and 5-hydroxytryptamine in spinally projecting neurons from the cat medulla oblongata. Marson L. **Neurosci Lett** 1989 Jan 2;96(1):54–9

Neonatal capsaicin treatment abolishes the modulations by opioids of substance P release from rat spinal cord slices. Pohl M, et al. **Neurosci Lett** 1989 Jan 2;96(1):102–7

Capsaicin-induced release of substance P-like immunoreactivity from the guinea pig stomach in vitro and in vivo. Renzi D, et al. **Neurosci Lett** 1988 Oct 17; 92(3):254–8

The bradykinin-induced release of substance P from nerve fibre endings in the rat saphenous nerve neuroma is not related to electrophysiological excitation. White DM, et al. **Neurosci Lett** 1988 Sep 23;92(1):108–13

Nigrostriatal dopamine neurons are required to maintain basal levels of substance P in the rat substantia nigra. Cruz CJ, et al. **Neuroscience** 1989;30(2):331–8

Intraspinal substance P-containing projections to the sympathetic preganglionic neuropil in pigeon, Columba livia: high-performance liquid chromatography, radioimmunoassay and electron microscopic evidence. Davis BM, et al. **Neuroscience** 1988 Aug;26(2):655–68

Calcitonin gene-related peptide in rat salivary glands: neuronal localization, depletion upon nerve stimulation, and effects on salivation in relation to substance P. Ekström J, et al. **Neuroscience** 1988 Sep;26(3):933–49

Stimulus specificity of peripherally evoked substance P release from the rabbit dorsal horn in situ. Kuraishi Y, et al. **Neuroscience** 1989;30(1):241–50

Localization of substance P and enkephalin by immunohistochemistry in the spinal cord of human fetus. Luo CB, et al. **Neuroscience** 1988 Dec;27(3):989–93

Cell type and conduction velocity of rat primary sensory neurons with substance P-like immunoreactivity. McCarthy PW, et al. **Neuroscience** 1989;28(3):745–53

Regional differences in the motor response to capsaicin in the guinea-pig urinary bladder: relative role of pre- and postjunctional factors related to neuropeptide-containing sensory nerves. Maggi CA, et al. **Neuroscience** 1988 Nov; 27(2):675–88

Serotonergic projections to the spinal cord but not those to the olfactory bulb also contain substance P. A combined immunocytochemical and autoradiographic study following retrograde axonal transport of [3H]serotonin labeled products. Magoul R, et al. **Neuroscience** 1988 Sep; 26(3):959–69

Ontogeny of substance P-containing neurons in relation to serotonin-containing neurons in the central nervous system of the mouse. Ni L, et al. **Neuroscience** 1989;30(1):257–69

Detailed immunoautoradiographic mapping of enkephalinase (EC 3.4.24.11) in rat central nervous system: comparison with enkephalins and substance P. Pollard H, et al. **Neuroscience** 1989;30(2):339–76

Expression of substance P and of a Ca2+-activated Cl- current in quail sensory trigeminal neurons. Schlichter R, et al. **Neuroscience** 1989;30(3):585–94

Coexistence of peptides (corticotropin releasing factor/neurotensin and substance P/somatostatin) in the bed nucleus of the stria terminalis and central amygdaloid nucleus of the rat. Shimada S, et al. **Neuroscience** 1989; 30(2):377–83

Trigeminal fibre collaterals storing substance P and calcitonin gene-related peptide associate with ganglion cells containing choline acetyltransferase and vasoactive intestinal polypeptide in the sphenopalatine ganglion of the rat. An axon reflex modulating parasympathetic ganglionic activity? Suzuki N, et al. **Neuroscience** 1989;30(3):595–604

Biochemical mapping of cholecystokinin-, substance P-, [Met]enkephalin-, [Leu]enkephalin- and dynorphin A (1-8)-like immunoreactivities in the human cerebral cortex. Taquet H, et al. **Neuroscience** 1988 Dec;27(3):871–83

Ultrastructural investigation of substance P-, leucine-enkephalin- and 5-hydroxytryptamine-like immunoreactive terminals in the area of cremaster motoneurons of the male rat. Wang BR, et al. **Neuroscience** 1989;28(3):711–23

The ventral striatopallidal parts of the basal ganglia in the rat--II. Compartmentation of ventral pallidal efferents. Zahm DS. **Neuroscience** 1989;30(1):33–50

Neuronal and glial elements of fetal neostriatal grafts in the adult neostriatum. Zhou FC, et al. **Neuroscience** 1989; 30(1):19–31

Electrical stimulation of primary afferent A fibres does not reduce substance P release in the dorsal horn of the cat. Hutchison WD, et al. **Pain** 1989 Jun;37(3):357–63

Substance P and substance K receptor binding sites in the human gastrointestinal tract: localization by autoradiography. Gates TS, et al. **Peptides** 1988 Nov-Dec; 9(6):1207–19

Substance P binding sites in the nucleus tractus solitarius of the cat. Maley BE, et al. **Peptides** 1988 Nov-Dec; 9(6):1301–6

Substance P in infants with relation to the sudden infant death syndrome--a preliminary report. Scholle S, et al. **Pharmazie** 1988 Jun;43(6):439–40

Substance P receptor binding sites are expressed by glia in vivo after neuronal injury. Mantyh PW, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5193–7

Release of calcitonin gene-related peptide from rat enteric nerves is Ca2+-dependent but is not induced by K+ depolarization. Belai A, et al. **Regul Pept** 1988 Nov; 23(2):227–35

Substance P-, CGRP- and NPY-immunoreactive nerve fibers in rat sciatic nerve-end neuromas. Fried K, et al. **Regul Pept** 1989 Apr;25(1):11–24

Distribution of calcitonin gene-related peptide-like immunoreactivity in various rat tissues: correlation with substance P and other tachykinins and sensitivity to capsaicin. Geppetti P, et al. **Regul Pept** 1988 Dec; 23(3):289–98

Calcitonin gene-related peptide is metabolized by an endopeptidase hydrolyzing substance P. Le Grevès P, et al. **Regul Pept** 1989 Jun-Jul;25(3):277–86

Direct demonstration of interactions between substance P immunoreactive terminals and tyrosine hydroxylase immunoreactive neurons in the substantia nigra of the rat: an ultrastructural study. Mahalik TJ. **Synapse** 1988; 2(5):508–15

Light and electron microscopical studies of the substance P innervation of the dorsal column nuclei and the lateral cervical nucleus in the primate. Westman J. **Ups J Med Sci** 1989;94(2):123–8

[Descending bulbospinal substance-P-containing pathway involved in the pressor response evoked by physostigmine] Zhu GQ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):184–90 (Eng. Abstr.) **(Chi)**

[Immunoreactive substance P levels in respiratory tract tissues of normal and airway-allergic guinea pigs] Yoshihara S. **Arerugi** 1988 Dec;37(12):1161–8 (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

Distribution of substance P and methionine-enkephalin in salivary glands and effect of chronic morphine treatment on levels of these peptides. Yonehara N, et al. **Jpn J Pharmacol** 1989 Aug;50(4):503–6

PHARMACOLOGY

Effect of the body temperature upon central administration of substance P--the role of adrenalectomy and GABA-activation. Yakimova K, et al. **Acta Physiol Pharmacol Bulg** 1988;14(4):65–70

The effect of substance P (SP) infusion above the supraoptic nuclei of hypothalamus on the vasopressin content in the posterior pituitary lobe after haemorrhage in rats. Rubacha G, et al. **Acta Physiol Pol** 1988 May-Jun;39(3):175–82

Capsaicin-induced vasodilatation of human coronary arteries in vitro is mediated by calcitonin gene-related peptide rather than substance P or neurokinin A. Franco-Cereceda A, et al. **Acta Physiol Scand** 1989 Aug;136(4):575–80

The 1988 Ulf Euler Lecture. Substancce P: from extract to excitement. Lembeck F. **Acta Physiol Scand** 1988 Aug; 133(4):435–54 (113 ref.)

Substance P-mediated modulation of the primary antibody response. Eglezos A, et al. **Adv Exp Med Biol** 1988; 237:499–503

Neutral endopeptidase inhibitors potentiate substance P-induced contraction in gut smooth muscle. Djokic TD, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G39–43

Local effect of substance P on colonic motor activity in different experimental states. Hou JY, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G997–1004

Characterization of the effects of neurokinins on canine antral muscle. Koelbel CB, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G779–86

Involvement of substance P in noncholinergic excitation of rabbit colonic muscle. Koelbel CB, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G246–53

Differential action of somatostatin on peptide-induced release of acetylcholine. Kowal V, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 1):G221–5

Mechanics and neuropeptide responses of feline pylorus and gastric muscle in vitro. Merlo A, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G862–7

Substance P: mechanism of action and receptor distribution at the feline ileocecal sphincter region. Rothstein RD, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G447–53

Substance P and nasal secretion in dog, rat, and man. Petersson G, et al. **Ann Allergy** 1989 May;62(5):410–4

Substance P stimulates release of arachidonic acid cyclooxygenation products from primary culture rat astrocytes. Hartung HP, et al. **Ann N Y Acad Sci** 1988; 540:427–9

Potentiation of IL-1-induced BALB/3T3 fibroblast proliferation by substance P. Kimball ES, et al. **Ann N Y Acad Sci** 1988;540:681–3

Neurokinin-induced generation of interleukin-1 in a macrophage cell line. Kimball ES, et al. **Ann N Y Acad Sci** 1988;540:688–90

Effect of neuropeptides present in skin on the proliferation of human peripheral blood mononuclear cells and T cells.

Reusch MK, et al. **Arch Dermatol Res** 1988;280(5):279–81

Biphasic pulp blood-flow response to substance P in the dog as measured with a radiolabelled, microsphere injection method. Kim S, et al. **Arch Oral Biol** 1988;33(5):305–9

Substance P primes human neutrophil activation: a mechanism for neurological regulation of inflammation. Perianin A, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):520–4

Protein kinase C-dependent and -independent mechanisms regulating the parotid substance P receptor as revealed by differential effects of protein kinase C inhibitors. Sugiya H, et al. **Biochem J** 1988 Dec 1;256(2):677–80

Effects of substance P (SP) and the N-terminal SP-analogue SP (1–4) on inositol phospholipids in rat adrenal medulla slices. Minenko A, et al. **Biomed Biochim Acta** 1988; 47(9):871–9

Effect of the N-terminal tetrapeptide of substance P SP (1–4) and tuftsin on the pre- and postsynaptic transmitter outflow in rat adrenal gland slices. Nieber K, et al. **Biomed Biochim Acta** 1988;47(7):663–6

Long-term effects of substance P on the isolated guinea pig trachea. Schreiber J, et al. **Biomed Biochim Acta** 1988; 47(8):799–803

Substance P activates leukocytes and platelets in rabbit microvessels. Ohlén A, et al. **Blood Vessels** 1989;26(2):84–94

Contractile effects of substance P and other tachykinins on the mouse isolated distal colon. Fontaine J, et al. **Br J Pharmacol** 1989 Mar;96(3):583–90

The differential effect with time of neuropeptides on the proliferative responses of murine Peyer's patch and splenic lymphocytes. Scicchitano R, et al. **Brain Behav Immun** 1987 Sep;1(3):231–7

Substance P and GABAergic effects on adrenal and autonomic function evoked by microinjections into trigeminal subnucleus caudalis in the cat. Bereiter DA, et al. **Brain Res** 1989 Jun 26;490(2):307–19

Substance P, neurotensin and enkephalin injections into the ventral tegmental area: comparative study on dopamine turnover in several forebrain structures. Cador M, et al. **Brain Res** 1989 May 8;486(2):357–63

Effect of substance P on nicotine-induced desensitization of cultured bovine adrenal chromaffin cells: possible receptor subtypes. Khalil Z, et al. **Brain Res** 1988 Sep 6;459(2):282–8

Tachykinins produce fast and slow depolarizations in sympathetic neurons of rat coeliac-superior mesenteric ganglia. Konishi S, et al. **Brain Res** 1989 Jun 19; 490(1):162–5

Lack of desensitization to neurokinin A due to partial agonist property of this peptide at parotid substance P receptors. McMillian MK, et al. **Brain Res** 1989 Feb 20;480(1–2):330–4

Substance P and serotonin act synergistically to activate a cation permeability in a neuronal cell line. Reiser G, et al. **Brain Res** 1989 Feb 6;479(1):40–8

Cardiovascular effects of substance P receptor stimulation in the ventrolateral medullary pressor and depressor areas. Urbanski RW, et al. **Brain Res** 1989 Jul 10;491(2):383–9

Substance P induces a cardiovascular defense reaction in the rat: pharmacological characterization. Unger T, et al. **Circ Res** 1988 Oct;63(4):812–20

Substance P dilates epicardial coronary arteries and increases coronary blood flow in humans. Crossman DC, et al. **Circulation** 1989 Sep;80(3):475–84

Contractile response of canine gallbladder and sphincter of Oddi to substance P and related peptides in vitro. Guo YS, et al. **Dig Dis Sci** 1989 Jun;34(6):812–7

Influence of gastrointestinal neuropeptides on the anal canal. Lorentzen M, et al. **Dis Colon Rectum** 1989 Apr;32(4):293–5

Central noradrenergic pathways are not involved in the pressor response to intracerebroventricular substance P. Badoer E, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):105–8

Dimeric substance P analogue shows a highly potent activity of the in vivo salivary secretion in the rat [published erratum appears in Eur J Pharmacol 1989 May 30;164(3):614] Higuchi Y, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):413–6

VIP modulates substance P-induced plasma extravasation in vivo. Khalil Z, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):281–7

Bradykinin and substance P potentiate acetylcholine-induced bronchospasm in guinea-pig. Omini C, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):195–7

Gamma-preprotachykinin-(72–92)-peptide amide potentiates substance P-induced salivation. Takeda Y, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):267–71

Grooming behavior induced by substance P. Van Wimersma Greidanus TB, et al. **Eur J Pharmacol** 1988 Sep 13; 154(2):217–20

Substance P-induced increase in vascular permeability in the rat trachea does not depend on neutrophils or other components of circulating blood. Bethel RA, et al. **Exp Lung Res** 1988;14(6):769–79

Evidence for a myotropic effect of substance P in Periplaneta americana L. Penzlin H, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):88–95

Activation of substance P receptors leads to membrane potential responses in cultured astrocytes. Wienrich M, et al. **GLIA** 1989;2(3):155–60

Substance P modulates lymphokine activities in supernatants of cultured human duodenal biopsies. Hart R, et al. **Immunol Lett** 1988 Oct;19(2):133–6

Substance P increases lymphocyte traffic and lymph flow through peripheral lymph nodes of sheep. Moore TC, et al. **Immunology** 1989 May;67(1):109–14

Substance P and Arg-Pro-Lys-Pro-NH-C12-H25-induced mediator release from different mast cell subtypes of rat and guinea-pig. Assem ES, et al. **Immunopharmacology** 1989 Mar-Apr;17(2):119–28

Substance P-induced effects in guinea pig lungs: effects of thiorphan and captopril. Drazen JM, et al. **J Appl Physiol** 1989 Mar;66(3):1364–72

Epithelium removal alters responsiveness of guinea pig trachea to substance P. Fine JM, et al. **J Appl Physiol** 1989 Jan;66(1):232–7

Enhanced airway responses to substance P after repeated challenge in guinea pigs. Shore SA, et al. **J Appl Physiol** 1989 Feb;66(2):955–61

Distribution of substance P binding sites in guinea-pig heart and pharmacological effects of substance P. Hoover DB, et al. **J Auton Nerv Syst** 1988 Sep;23(3):189–97

Formation and metabolism of [3H]inositol phosphates in AR42J pancreatoma cells. Substance P-induced Ca2+ mobilization in the apparent absence of inositol 1,4,5-trisphosphate 3-kinase activity. Horstman DA, et al. **J Biol Chem** 1988 Oct 25;263(30):15297–303

Reduced peptide bond pseudopeptide analogues of substance P. A new class of substance P receptor antagonists with enhanced specificity. Qian JM, et al. **J Biol Chem** 1989 Oct 5;264(28):16667–71

Cardiovascular responses induced by intrathecal substance P in the conscious freely moving rat. Hasséssian H, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):594–602

Coupling between inositol phosphate formation and DNA synthesis in smooth muscle cells stimulated with neurokinin A. Hultgårdh-Nilsson A, et al. **J Cell Physiol** 1988 Oct; 137(1):141–5

Neutral endopeptidase inhibitors potentiate substance P- and capsaicin-induced cough in awake guinea pigs. Kohrogi H, et al. **J Clin Invest** 1988 Dec;82(6):2063–8

Substance P, neurokinin A, and neurokinin B induce generation of IL-1-like activity in P388D1 cells. Possible relevance to arthritic disease. Kimball ES, et al. **J Immunol** 1988 Nov 15;141(10):3564–9

Substance P augmentation of CSF-1-stimulated in vitro myelopoiesis. A two-signal progenitor restricted, tuftsin-like effect. Moore RN, et al. **J Immunol** 1988 Oct 15;141(8):2699–703

Activation of human neutrophils by substance P. Effect on oxidative metabolism, exocytosis, cytosolic Ca2+ concentration and inositol phosphate formation. Serra MC, et al. **J Immunol** 1988 Sep 15;141(6):2118–24

In vivo motor effects of substance P on the rat urinary bladder. Berggren A, et al. **J Neural Transm** 1988; 74(3):207–17

Baclofen, gamma-aminobutyric acidB receptors and substance P in the mouse spinal cord. Hwang AS, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1026–33

Activation of rat peritoneal mast cells by substance P and mastoparan. Mousli M, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):329–35

Characterization of substance P effects on sphincter of Oddi myoelectric activity. Parodi JE, et al. **J Surg Res** 1989 May; 46(5):405–12

Subsensitivity to substance P in SART-stressed mice. Hata T, et al. **Jpn J Pharmacol** 1989 Feb;49(2):293–6

Extraluminally applied acetylcholine and substance P on the release of EDRF. Minami Y, et al. **Jpn J Pharmacol** 1989 Jul;50(3):362–5

Further evidence for possible analgesic mechanism of electroacupuncture: effects on neuropeptides and serotonergic neurons in rat spinal cord. Tsai HY, et al. **Jpn J Pharmacol** 1989 Feb;49(2):181–5

Acetylcholine and substance P responsiveness of intestinal smooth muscles in streptozotocin diabetic rats. Liu HS, et al. **Jpn J Physiol** 1988;38(6):787–97

Smooth-muscle effects of C-terminal tripeptide of substance P. Zamfirova R, et al. **Methods Find Exp Clin Pharmacol** 1988 Oct;10(10):609–12

Smooth-muscle effects of substance P. Zamfirova R, et al. **Methods Find Exp Clin Pharmacol** 1988 Nov;10(11):683–6

Protein kinase C may regulate the tonic component of intestinal smooth muscle contraction in response to substance P. Holzer P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1–2):214–20

Intrathecal administration of 5,6-DHT or 5,7-DHT reduces morphine and substance P-antinociceptive activity in the rat. Rodríguez FD, et al. **Neuropeptides** 1989 Feb-Mar; 13(2):139–46

Photoperiodic variation in substance P induced plasma extravasation in the rat. Gibson SJ, et al. **Neuropharmacology** 1989 Aug;28(8):889–92

Involvement of spinal monoaminergic pathways in antinociception produced by substance P and neurotensin in rodents. Naranjo JR, et al. **Neuropharmacology** 1989 Mar; 28(3):291–8

Substance P-induced cutaneous plasma extravasation in rats is mediated by NK-1 tachykinin receptors. Devor M, et al. **Neurosci Lett** 1989 Aug 28;103(2):203–8

Trophic effect of various neuropeptides on the cultured ventral spinal cord of rat embryo. Iwasaki Y, et al. **Neurosci Lett** 1989 Jul 3;101(3):316–20

Acupuncture and sensory neuropeptides increase cutaneous blood flow in rats. Jansen G, et al. **Neurosci Lett** 1989 Feb 27;97(3):305–9

Substance P(1–7) antagonizes substance P-induced aversive behaviour in mice. Sakurada T, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):281–5

Inositol trisphosphate-linked calcium mobilization couples substance P receptors to conductance increase in a rat pancreatic acinar cell line. Song SY, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):143–8

Effects of lysergic acid diethylamide (LSD) and adjuvant-induced inflammation on desensitization to and metabolism of substance P in the mouse spinal cord. Larson AA, et al. **Pain** 1989 Jun;37(3):365–73

Substance P and peripheral inflammatory hyperalgesia. Nakamura-Craig M, et al. **Pain** 1989 Jul;38(1):91–8

Substance P analogues function as bombesin receptor antagonists and inhibit small cell lung cancer clonal growth. Bepler G, et al. **Peptides** 1988 Nov-Dec;9(6):1367–72

Peptides and self-stimulation of the medial prefrontal cortex in the rat: effects of intracerebral microinjections of substance P and cholecystokinin. Ferrer JM, et al. **Peptides** 1988 Sep-Oct;9(5):937–43

Neuropeptides and septo-hippocampal neurons: electrophysiological effects and distributions of immunoreactivity. Lamour Y, et al. **Peptides** 1988 Nov-Dec;9(6):1351–9

Effects of substance P on the rat adrenal zona glomerulosa in vivo. Nussdorfer GG, et al. **Peptides** 1988 Sep-Oct; 9(5):1145–9

Inhibitory effect of intracranial injections of tachykinins on angiotensin-induced drinking in the cat. Barocelli E, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):493–7

Influence of substance P and substance P--sequences on immunocompetent cells. Paegelow I, et al. **Pharmazie** 1989 Feb;44(2):145–6

Effect of 5 alpha-dihydrotestosterone and flutamide on the facilitation of lordosis by LHRH and naloxone in estrogen-primed female rats. Erskine MS. **Physiol Behav** 1989 Apr;45(4):753–9

Effects of vasoactive intestinal polypeptide and substance P on human intramyometrial arteries and stem villous arteries in term pregnancy. Hansen V, et al. **Placenta** 1988 Sep-Oct; 9(5):501–6

Protein kinase C is not necessary for peptide-induced suppression of M current or for desensitization of the peptide receptors. Bosma MM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2943–7

Neuropeptide K potently stimulates salivary gland secretion and potentiates substance P-induced salivation. Takeda Y, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):392–6

Peptidergic modulation of efferent sympathetic neurons in intrathoracic ganglia regulating the canine heart. Armour JA. **Proc Soc Exp Biol Med** 1989 May;191(1):60–8

Temperature dependence of the effect of tachykinins on whole guinea-pig ileum in vitro. Landis GC, et al. **Proc West Pharmacol Soc** 1988;31:29–32

Neurotensin, substance P, neurokinin-alpha, and enkephalin: injection into ventral tegmental area in the rat produces differential effects on operant responding. Kelley AE, et al. **Psychopharmacology (Berlin)** 1989;97(2):243–52

Effects of substance P, calcitonin gene-related peptide and capsaicin on tension and membrane potential of pig coronary artery in vitro. Bény JL, et al. **Regul Pept** 1989 Apr;25(1):25–36

Endothelium-dependent and -independent responses to vasodilators of isolated dog cerebral arteries. Onoue H, et al. **Stroke** 1988 Nov;19(11):1388–94

Serotonin and substance P stimulate intestinal secretion in the isolated perfused ileum. Yeo CJ, et al. **Surgery** 1989 Jan;105(1):86–92

Substance P-mediated membrane currents in voltage-clamped guinea pig inferior mesenteric ganglion cells. Griffith WH, et al. **Synapse** 1988;2(4):432–41

(D-Phe12) bombesin and substance P analogues function as central bombesin receptor antagonists. Merali Z, et al. **Synapse** 1988;2(3):282–7

Effect of bombesin and substance P on the smooth muscle of the chicken crop. Denac M, et al. **Vet Res Commun** 1988;12(6):447–52

The influence of substance P on oviductal, duodenal and blood pressure in the anaesthetized domestic hen. De Saedeleer V, et al. **Vet Res Commun** 1989;13(3):183–91

[Substance P: a peripheral inhibitor of gastric acid secretion in the rat] Rozé C, et al. **Bull Acad Natl Med** 1989 Feb; 173(2):193–7; discussion 197–9 (Eng. Abstr.) **(Fre)**

[Visual evoked potentials and water deprivation of rats during intrahypothalamic application of substance P] Kolle U, et al. **Biomed Biochim Acta** 1988;47(12):1065–71 (Eng. Abstr.) **(Ger)**

[Long-term hypotensive effects of substance P on the stress induced hypertension of primates] Stechmesser G, et al. **Biomed Biochim Acta** 1988;47(3):265–71 (Eng. Abstr.) **(Ger)**

[Substance P increases acetylcholine release from vagal nerve terminals] Aizawa H, et al. **Arerugi** 1988 Jun;37(6):387–90 (Eng. Abstr.) **(Jpn)**

[Mechanism of substance P-induced increase in vascular permeability in guinea pig skin] Iwamoto I. **Arerugi** 1989 Mar;38(3):239–45 (Eng. Abstr.) **(Jpn)**

[Circulatory and metabolic effects of neuropeptides on the stomach] Gustaw P. **Folia Med Cracov** 1988;29(1–2):3–19 (Eng. Abstr.) **(Pol)**

[Effect of substance P and its N-terminal fragment on the components of the normal microcirculatory system and

under stress] Gorizontova MP. **Fiziol Zh SSSR** 1989 May; 75(5):709–14 (Eng. Abstr.) **(Rus)**

[The action of substance P on the course of pregnancy and fetal function in white rats] Pustynnikova AM, et al. **Patol Fiziol Ekap Ter** 1988 Sep–Oct;(5):72–5 (Eng. Abstr.) **(Rus)**

[Effect of substance P on the reproduction of memory engrams and on the amino acid composition of brain structures in rats with experimental neurosis] Nerush PA. **Zh Vysh Nerv Deiat** 1988 Nov–Dec;38(6):1152–7 (Eng. Abstr.) **(Rus)**

[Substance P and the ethanol-evoked changes in the independent motivated behavioral reactions of rabbits] Zilov VG, et al. **Zh Vysh Nerv Deiat** 1989 Mar–Apr; 39(2):343–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Control of vascular permeability and vascular smooth muscle in the respiratory tract by multiple neuropeptides. Saria A, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:25–8 (29 ref.)

Neural control of the middle ear mucosa. Ylikoski J, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:159–63

Substance P: the relationship between receptor distribution in rat lung and the capacity of substance P to stimulate vascular permeability. Sertl K, et al. **Am Rev Respir Dis** 1988 Jul;138(1):151–9

Neuropeptides and inflammation: the role of substance P. Payan DG. **Annu Rev Med** 1989;40:341–52 (67 ref.)

Substance P, neurokinin A and neurokinin B in the ocular response to injury in the rabbit. Beding–Barnekow B, et al. **Br J Pharmacol** 1988 Sep;95(1):259–67

Electroencephalographic and behavioral assessment of intracerebroventricular somatostatin and a substance P analogue. Grabow TS, et al. **Brain Res** 1989 Jun 12; 489(2):223–30

Cardiovascular roles of tachykinin peptides in the nucleus tractus solitarii of rats. Nagashima A, et al. **Brain Res** 1989 May 22;487(2):392–6

Target regulation of the serotonin and substance P innervation of the sexually dimorphic cremaster nucleus. Newton BW, et al. **Brain Res** 1989 Apr 17;485(1):149–56

Excitatory responses of trigeminal neurons to substance P suggest involvement in sensory transmission. Spigelman I, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):845–8

Peptidergic regulation of secretory activity in amphibian olfactory mucosa: immunohistochemistry, neural stimulation, and pharmacology. Getchell ML, et al. **Cell Tissue Res** 1989;256(2):381–9

Immunohistochemical and behavioral analysis of spinal lesions induced by a substance P antagonist and protection by thyrotropin releasing hormone. Freedman J, et al. **Exp Brain Res** 1989;74(2):279–92

Substance P: a modulator of neuroendocrine–immune function. Payan DG. **Hosp Pract [Off]** 1989 Feb 15; 24(2):67–73, 76, 78–80 (7 ref.)

Adrenal grafting for Parkinson's disease: a role for substance P. Barker R. **Int J Neurosci** 1989 May;46(1–2):47–51 (27 ref.)

An electrophysiological comparison of substance P-immunoreactive neurons with other neurons in the guinea-pig submucous plexus. Bornstein JC, et al. **J Auton Nerv Syst** 1989 Mar;26(2):113–20

Interaction between cholinergic neurons and substance P or calcitonin gene-related peptide terminals of the rat sacral intermediolateral nucleus: double immunostaining at the light and electron microscopic levels. Peng YW, et al. **J Comp Neurol** 1989 Jul 1;285(1):1–8

Effects of muscarinic, alpha-adrenergic, and substance P agonists and ionomycin on ion transport mechanisms in the rat parotid acinar cell. The dependence of ion transport on intracellular calcium. Soltoff SP, et al. **J Gen Physiol** 1989 Feb;93(2):285–319

Immunocytochemical study of substance P-like fibres and cell bodies in the cat diencephalon. Burgos C, et al. **J Hirnforsch** 1988;29(6):651–7

Role of substance P and neurotensin in the regulation of neurosecretion and vascular responsiveness in hypertension. Tsuda K, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S539–41

Evidence that a substance P-like peptide mediates the non-cholinergic excitatory response of the carp intestinal bulb (Cyprinus carpio). Kitazawa T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):68–73

Non-cholinergic ascending excitatory response in the cat small intestine: possible involvement of substance P. Miolan JP, et al. **Neuropeptides** 1988 Nov–Dec;12(4):243–8

Importance of the presence of the N-terminal tripeptide of substance P for the stimulation of phosphatidylinositol metabolism in rat parotid gland: a possible activation of phospholipases C and D. Rollandy I, et al. **Neuropeptides** 1989 Apr;13(3):175–85

Substance P induced hydrolysis of inositol phospholipids in rat skin in an in vivo model of inflammation. Thomas KL, et al. **Neuropeptides** 1989 Apr;13(3):191–6

Evidence for an involvement of substance P, but not cholecystokinin-like peptides, in hexamethonium-resistant intestinal peristalsis. Barthó L, et al. **Neuroscience** 1989; 28(1):211–7

Substance P, like acetylcholine, augments one type of Ca2+ current in isolated smooth muscle cells. Clapp LH, et al. **Pflugers Arch** 1989 Mar;413(5):565–7

Substance P as a transmitter in the human ciliary muscle. Lograno MD, et al. **Pharmacol Res Commun** 1988 Oct; 20(10):901–5

Role of substance P in suppressing growth hormone release in the rat. Arisawa M, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7290–4

Substance P involved in mental disorders. Takeuchi K, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S157–64 (41 ref.)

Developmental characteristics of substance P immunoreactivity within specific rabbit brainstem nuclei. Gingras JL, et al. **Regul Pept** 1988 Nov;23(2):183–92

[Nonadrenergic noncholinergic nervous system in the lung and bronchial asthma] Fu JX. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):48–50 (20 ref.) **(Chi)**

[Effects of substance P on the contractile response of longitudinal muscle of rat ileum to 5-HT] Xiao QA, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):313–7 (Eng. Abstr.) **(Chi)**

[Vasoactive intestinal peptide and substance P in the regulation of reproductive functions] Uher J. **Cesk Gynekol** 1988 Sep;53(8):588–99 (62 ref.) **(Cze)**

[The role of substance P in regulating bronchomotor tone and the pathogenesis of bronchial hyperreactivity] Schreiber J, et al. **Z Erkr Atmungsorgane** 1989;172(2):90–8 (0 ref.) (Eng. Abstr.) **(Ger)**

[Neuropeptide-induced cough in humans] Sekizawa K. **Kokyu To Junkan** 1989 May;37(5):483–5 **(Jpn)**

[Airway mucus secretion and neuropeptides] Shimura S. **Kokyu To Junkan** 1989 May;37(5):505–10 **(Jpn)**

[Endogenous peptides of the central nervous system: enkephalins, endorphins and substance P. III. Their effect on various functions of the body (except pain reaction)] Finkiewicz-Murawiejska L. **Postepy Hig Med Dosw** 1988 Sep–Oct;42(5):543–59 (117 ref.) (Eng. Abstr.) **(Pol)**

SECRETION

Release of VIP and substance P from isolated perfused canine ileum. Manaka H, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G182–90

Sufentanil, morphine, met-enkephalin, and kappa-agonist (U-50,488H) inhibit substance P release from primary sensory neurons: a model for presynaptic spinal opioid actions. Chang HM, et al. **Anesthesiology** 1989 Apr; 70(4):672–7

Experimental bronchoalveolar lavage in guinea pigs—a useful tool to investigate the intrabronchial release of substance P. Schreiber J, et al. **Biomed Biochim Acta** 1988; 47(4–5):445–7

Substance P release from knee joint afferent terminals: modulation by opioids. Yaksh TL. **Brain Res** 1988 Aug 23;458(2):319–24

Substance P and [leucine]enkephalin release in guinea pig ileum during naloxone-precipitated morphine withdrawal. Wang FS, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):329–32

Thiorphan increases capsaicin-evoked release of substance P from slices of dorsal spinal cord of guinea pig. Geppetti P, et al. **Neurosci Lett** 1989 Aug 14;103(1):69–73

Release of substance P in the nucleus tractus solitarius measured by in vivo microdialysis: response to stimulation of the aortic depressor nerves in rabbit. Morilak DA, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):131–7

Rapid release of substance P and LH-RH from synaptosomes prepared from the medial basal hypothalamus and substantia nigra. Shu C, et al. **Peptides** 1989 Jan–Feb; 10(1):131–6

Calcium channels that regulate neurosecretion. Dunlap K, et al. **Soc Gen Physiol Ser** 1989;44:239–50

THERAPEUTIC USE

[Effect of the N-terminal fragment of substance P1–4 on the somatic manifestations of the stress reaction and on the catecholamine content of the adrenals in rats] Arefolov VA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):201–4 (Eng. Abstr.) **(Rus)**

SUBSTANCE USE DISORDERS

Volatile substance abuse: evaluation and treatment. Richardson H. **Hum Toxicol** 1989 Jul;8(4):319–22

Solvent constituents in paint, glue and thinner for plastic miniature hobby. Saito J, et al. **Tohoku J Exp Med** 1988 Jul;155(3):275–83

CLASSIFICATION

Substance-use disorders in DSM-III-R. Evidence for the dependence syndrome across different psychoactive substances. Kosten TR, et al. **Br J Psychiatry** 1987 Dec; 151:834–43

COMPLICATIONS

Impaired physicians: they are not the only ones at risk. Jacyk W. **Can Med Assoc J** 1989 Jul 15;141(2):147–8

Emerging treatment guidelines for mentally ill chemical abusers. Carey KB. **Hosp Community Psychiatry** 1989 Apr; 40(4):341–2, 349

Renal tubular acidosis with an elevated anion gap in a 'glue sniffer' [letter] Sarmiento Martinez J, et al. **Hum Toxicol** 1989 Mar;8(2):139–40

Mechanism of sudden death associated with volatile substance abuse. Shepherd RT. **Hum Toxicol** 1989 Jul; 8(4):287–91

Acute optic neuropathy induced by thinner sniffing: inhalation of mixed organic solvent containing methyl alcohol and methyl acetate. Ogawa Y, et al. **Ind Health** 1988;26(4):239–44

Toxic pneumonitis in an adolescent following exposure to Snow Storm tablets. Jay MS, et al. **J Adolesc Health Care** 1988 Sep;9(5):431–3

Pan Masala [letter] Didwania Pradid DK, et al. **J Assoc Physicians India** 1988 Feb;36(2):181

Hearing loss in a glue sniffer. Williams DM. **J Otolaryngol** 1988 Oct;17(6):321–4

From the Alcohol, Drug Abuse, and Mental Health Administration. Goodwin FK. **JAMA** 1989 Jun 23–30; 261(24):3517

Myocardial degeneration in chronic solvent abuse. Claydon SM. **Med Sci Law** 1988 Jul;28(3):217–8

Severe Goodpasture's syndrome after glue sniffing [letter] Robert R, et al. **Nephrol Dial Transplant** 1988;3(4):483–4

DIAGNOSIS

Suggestions for changes in DSM-III-R criteria for substance use disorders. Miller NS, et al. **Am J Drug Alcohol Abuse** 1989;15(2):223–30

Diagnosis and treatment of acute poisoning with volatile substances. Meredith TJ, et al. **Hum Toxicol** 1989 Jul; 8(4):277–286

Suggestions for the DSM-IV criteria for substance use disorders [letter] Miller NS, et al. **J Nerv Ment Dis** 1989 May;177(5):316

EPIDEMIOLOGY

Nitrite inhalants: patterns of abuse in Baltimore and Washington, D.C. Lange WR, et al. **Am J Drug Alcohol Abuse** 1988;14(1):29–39

Estimating population prevalence of human immunodeficiency virus infection in urban areas with high rates of intravenous drug use: a model of the Bronx in 1988. Drucker E, et al. **Am J Epidemiol** 1989 Jul; 130(1):133–42

Drug and substance use among 3,333 London adolescents. Swadi H. **Br J Addict** 1988 Aug;83(8):935–42

Volatile substance abuse—an overview. Flanagan RJ, et al. **Hum Toxicol** 1989 Jul;8(4):257–9

An introduction to the practice, prevalence and chemical toxicology of volatile substance abuse. Ramsey J, et al. **Hum Toxicol** 1989 Jul;8(4):261–9

The use of solvents and other drugs among children and adolescents from a low socioeconomic background: a study in São Paulo, Brazil. Carlini-Cotrim B, et al. **Int J Addict** 1988 Nov;23(11):1145–56

Prevalence and patterns of combined alcohol and marijuana use. Norton R, et al. **J Stud Alcohol** 1988 Jul;49(4):378–80

Prevalence, trends, and correlates of alcohol use, nonmedical drug use, and tobacco use among U.S. military personnel. Bray RM, et al. **Milit Med** 1989 Jan;154(1):1–11

[Abuse of volatile solvents: epidemiologic, medico-psychological and experimental aspects] Carlini EA, et al. **AMB Rev Assoc Med Bras** 1988 Mar–Apr; 34(2):61–8 (63 ref.) (Eng. Abstr.) **(Por)**

ETIOLOGY

Sniffing of ethyl chloride—an uncommon form of abuse with serious mental and neurological symptoms. Nordin C, et al. **Int J Addict** 1988 Jun;23(6):623–7

GENETICS

Chromosome abnormalities and sister chromatid exchanges in children with acute intoxication due to inhalation of volatile substances. Salamanca-Gómez F, et al. **Arch Environ Health** 1989 Jan–Feb;44(1):49–53

PATHOLOGY

Chronic non-neurological toxicity from volatile substance abuse. Marjot R, et al. **Hum Toxicol** 1989 Jul;8(4):301–6

PHYSIOPATHOLOGY

Neuropsychological consequences of volatile substance abuse: a review. Chadwick OF, et al. **Hum Toxicol** 1989 Jul;8(4):307–12 (24 ref.)

[Electrophysiological studies on visual toxicity of toluene] Toyonaga N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Nov; 92(11):1875–80 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Substance use and abuse among children and teenagers. Newcomb MD, et al. **Am Psychol** 1989 Feb;44(2):242–8 (19 ref.)

Preventing petrol sniffing in Aboriginal communities. Franks C. **Community Health Stud** 1989;13(1):14–22

Pretest and treatment effects in an elementary school-based alcohol misuse prevention program. Campanelli PC, et al. **Health Educ Q** 1989 Spring;16(1):113–30

Volatile substance abuse: the role of agencies in the community in prevention and counselling. Billington AC. **Hum Toxicol** 1989 Jul;8(4):323–5

Volatile substance abuse within a health education context. Lee JT. **Hum Toxicol** 1989 Jul;8(4):331–4
Government, trade and industry and other preventative responses to volatile substance abuse. Liss BI. **Hum Toxicol** 1989 Jul;8(4):327–30

PSYCHOLOGY

Delinquency and regular solvent abuse: an unfavourable combination? Jacobs AM, et al. **Br J Addict** 1988 Aug; 83(8):965–8
Commercial butane abuse: a disturbing case. Mathew B, et al. **Br J Addict** 1989 May;84(5):563–4
Volatile substance abuse in relation to alcohol and illicit drugs: psychosocial perspectives. Edeh J. **Hum Toxicol** 1989 Jul;8(4):313–7 (27 ref.)
A profile of 25 inhalant abusers referred to Woodbridge Hospital for psychiatric assessment. Mahendran R, et al. **Singapore Med J** 1988 Dec;29(6):580–2

SUBSTANCE WITHDRAWAL, NEONATAL see **NEONATAL ABSTINENCE SYNDROME**

SUBSTANCE WITHDRAWAL SYNDROME

Beta-receptor blockade and spinal anaesthesia. Withdrawal versus continuation of long-term therapy. Pontén J, et al. **Acta Anaesthesiol Scand Suppl** 1982;76:62–9
Beta-receptor blocker withdrawal. A preoperative problem in general surgery? Pontén J, et al. **Acta Anaesthesiol Scand Suppl** 1982;76:32–7
A comparison of self-reported symptoms and DSM-III-R criteria for cocaine withdrawal. Brower KJ, et al. **Am J Drug Alcohol Abuse** 1988;14(3):347–56
Cardiac arrest in an explosives factory worker due to withdrawal from nitroglycerin exposure. Ben-David A. **Am J Ind Med** 1989;15(6):719–22
Benzodiazepine withdrawal [letter] Kellman AM. **Am J Med** 1988 Nov;85(5):755
Aspirin withdrawal in a patient with essential thrombocythemia: possible cause of myocardial infarction [letter] Louwerenburg JW, et al. **Am J Med** 1987 Dec; 83(6):1175
Effects of "nitrendipine" on nitrous oxide anesthesia, tolerance, and physical dependence. Dolin SJ, et al. **Anesthesiology** 1989 Jan;70(1):91–7
Benzodiazepine withdrawal delirium with catatonic features. Occurrence in patients with partial seizure disorders. Hauser P, et al. **Arch Neurol** 1989 Jun;46(6):696–9
Neuroleptic malignant syndrome in striatonigral degeneration. Gibb WR. **Br J Psychiatry** 1988 Aug; 153:254–5
Severity of withdrawal in subjects exposed to a combination of alcohol and minor tranquillisers. Thomas CS, et al. **Br J Psychiatry** 1989 Jan;154:83–5
Effects of ovariectomy and of estrogen administration on some dopamine-related behaviors in the rat. Dorce VA, et al. **Braz J Med Biol Res** 1988;21(2):313–20
Opiate withdrawal unmasks Tourette's syndrome. Lichter D, et al. **Clin Neuropharmacol** 1988 Dec;11(6):559–64
Hallucinations and confusion after pergolide withdrawal. McHale DM, et al. **Clin Neuropharmacol** 1988 Dec; 11(6):545–8
Acute benzodiazepine withdrawal syndrome after midazolam infusions in children [letter] Sury MR, et al. **Crit Care Med** 1989 Mar;17(3):301–2
Precipitation of benzodiazepine withdrawal following sudden discontinuation of midazolam. Finley PR, et al. **DICP** 1989 Feb;23(2):151–2
Discontinuation of clonazepam after long-term treatment. Specht U, et al. **Epilepsia** 1989 Jul–Aug;30(4):458–63
Analgesic rebound headache. Rapoport AM. **Headache** 1988 Nov;28(10):662–5 (8 ref.)
The narcotic bowel syndrome. Rogers M, et al. **J Clin Gastroenterol** 1989 Apr;11(2):132–5 (22 ref.)
Tranylcypromine withdrawal delirium [letter] Absher JR, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):379–80
Protracted tinnitus after discontinuation of long-term therapeutic use of benzodiazepines. Busto U, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):359–62
Diazepam: effects on sleep and withdrawal phenomena. Kales A, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):340–6
Effects of chronic alcohol consumption and alcohol withdrawal on blood pressure in stroke-prone spontaneously hypertensive rats. Howe PR, et al. **J Hypertens** 1989 May;7(5):387–93
Analgesic-induced chronic headache: long-term results of withdrawal therapy. Diener HC, et al. **J Neurol** 1989 Jan; 236(1):9–14
Does caffeine withdrawal contribute to postanaesthetic morbidity? [letter] Galletly DC, et al. **Lancet** 1989 Jun 10; 1(8650):1335
Danger of MAOI therapy after fluoxetine withdrawal [letter] Sternbach H. **Lancet** 1988 Oct 8;2(8615):850–1
Verapamil withdrawal as a possible cause of myocardial infarction in a hypertensive woman with a normal coronary angiogram. Dimmitt SB, et al. **Med J Aust** 1988 Aug 15; 149(4):218
Mitochondrial encephalomyopathy with corticosteroid dependence. Gubbay SS, et al. **Med J Aust** 1989 Jul 17; 151(2):100–3, 106, 108
Death following withdrawal of encainide [letter] Thomas GS. **N Engl J Med** 1989 Aug 10;321(6):393
Biochemical evidence that brainstem adrenaline-containing neurons are activated during clonidine withdrawal in the spontaneously hypertensive rat. Lambés-Señas L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):543–7
Corticosteroid withdrawal syndrome in dialysis patients. Verresen L, et al. **Nephrol Dial Transplant** 1988;3(4):476–7
Phenytoin withdrawal and seizure frequency. Bromfield EB, et al. **Neurology** 1989 Jul;39(7):905–9
Dystonia related to cocaine withdrawal: a case report and pathogenic hypothesis. Choy-Kwong M, et al. **Neurology** 1989 Jul;39(7):996–7
The pentylenetetrazol-like interoceptive stimulus produced by ethanol withdrawal is potentiated by bicuculline and picrotoxinin. Idemudia SO, et al. **Neuropsychopharmacology** 1989 Jun;2(2):115–22
The benzodiazepine receptor inverse agonist RO15-4513 exacerbates, but does not precipitate, ethanol withdrawal in mice. Becker HC, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):163–7
Behavioral dependence on caffeine and phencyclidine in rhesus monkeys: interactive effects. Carroll ME, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):927–32
The ontogeny of opiate tolerance and withdrawal in infant rats. Fanselow MS, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):431–8
Effects of ethanol withdrawal on beta-endorphin levels in rat brain and pituitary. Hutchison WD, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):933–9
Fulminant hepatic failure in nephrotic syndrome related to withdrawal of immunosuppressive therapy. Onwubalili JK. **Postgrad Med J** 1988 Apr;64(750):325–7
Cingulotomy in the rat fails to block opiate withdrawal effects but elevates stress-induced plasma beta-endorphin. Smith GC, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):683–8
Time course of cigarette withdrawal symptoms while using nicotine gum. West R, et al. **Psychopharmacology (Berlin)** 1989;99(1):143–5
Withdrawal syndrome. Káldor A. **Ther Hung** 1988;36(2):43–6 (9 ref.)
[Postoperative agitation. A new cause] Madi S, et al. **Cah Anesthesiol** 1988 Nov;36(7):509–12 (Eng. Abstr.) (Fre)
[A scale for evaluating withdrawal symptoms induced by anxiolytic agents] Bourin M. **Encephale** 1988 Jul–Aug; 14(4):283–5 (Eng. Abstr.) (Fre)
[Malignant hyperthermia during alcohol withdrawal] Bercault N, et al. **Rev Med Interne** 1989 May–Jun; 10(3):203–5 (Eng. Abstr.) (Fre)
[Untoward side effects of benzodiazepines: dependence and withdrawal syndrome] Fossati C. **Clin Ter** 1987 Sep 15; 122(5):367–72 (72 ref.) (Eng. Abstr.) (Ita)
[Cardiocirculatory findings in a group of workers exposed to nitro derivatives. A pathogenetic hypothesis of withdrawal hazard] Taccola A, et al. **G Ital Med Lav** 1987 May–Jul;9(3–4):153–8 (Eng. Abstr.) (Ita)
[The newborn infant of the drug-addicted mother. Experience relative to the period 1978–1986] Fabris C, et al. **Pediatr Med Chir** 1988 Mar–Apr;10(2):177–85 (Eng. Abstr.) (Ita)
[Convulsive episodes caused by a suspension of lorazepam] Pellegrini A, et al. **Riv Neurol** 1988 Jul–Aug;58(4):153–5 (Eng. Abstr.) (Ita)
[A case of pseudotumor cerebri probably due to the withdrawal of adrenal corticosteroid hormone] Ujihara M, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):661–6 (Jpn)
[Two cases of psychotic state following normal-dose benzodiazepine withdrawal] Terao T, et al. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1;10(3):337–40 (Eng. Abstr.) (Jpn)
[Withdrawal syndrome after discontinuation of calcium channel blockers] Sosnowski M, et al. **Pol Tyg Lek** 1988 Oct 31;43(44):1409–11 (Pol)
[Barbiturate dependence] Lukachev GIa, et al. **Sov Med** 1989; (4):112–6 (Rus)

BLOOD

Circadian rhythms of cortisol during alcohol withdrawal. Risher-Flowers D, et al. **Adv Alcohol Subst Abuse** 1988; 7(3–4):37–41
An attempt to evaluate diagnostic and prognostic significance of blood endogenous ethanol in alcoholics and their relatives. Ostrovsky YM, et al. **Alcohol** 1989 Mar–Apr; 6(2):97–102
Changes in carbohydrate-deficient transferrin levels after alcohol withdrawal. Behrens UJ, et al. **Alcoholism (NY)** 1988 Aug;12(4):539–44
Effect of acute ethanol intake and hangover on the levels of plasma and urinary catecholamines and lymphocytic beta-adrenergic receptors. Heikkonen E, et al. **Alcoholism (NY)** 1989 Feb;13(1):20–4
The effect of neuroleptic discontinuation on psychopathology, involuntary movements, and biochemical measures in patients with persistent tardive dyskinesia. Glazer WM, et al. **Biol Psychiatry** 1989 Jul;26(3):224–33
Effect of neuroleptic withdrawal on plasma prolactin: a possible marker of receptor adaptation. Kirkpatrick B, et al. **Biol Psychiatry** 1989 Jun;26(2):131–8
Clinical ratings and plasma HVA during cocaine abstinence. Martin SD, et al. **Biol Psychiatry** 1989 Aug;26(4):356–62
Platelet thromboxane formation capacity after ethanol withdrawal in chronic alcoholics. Hillbom M, et al. **Haemostasis** 1988;18(3):170–8
Effects of beta-carboline-ethyl ester on plasma corticosterone—a parallel with antagonist-precipitated diazepam withdrawal. Eisenberg RM, et al. **Life Sci** 1989; 44(20):1457–66
Rapid rise of serum testosterone following discontinuation of long term treatment of prostate carcinoma with an LHRH-agonist. Kreis W, et al. **Onkologie** 1988 Dec; 11(6):292–3
Clinical implications of increased antipsychotic plasma concentrations upon anticonvulsant cessation. Jann MW, et al. **Psychiatry Res** 1989 May;28(2):153–9
Plasma amine metabolites before and after withdrawal from neuroleptic treatment in chronic schizophrenic inpatients. Kirch DG, et al. **Psychiatry Res** 1988 Sep;25(3):233–42

CEREBROSPINAL FLUID

Elevated cerebrospinal fluid histidine in alcohol withdrawal. Hawley RJ, et al. **Alcohol** 1988 Jul–Aug;5(4):321–3
CSF norepinephrine in schizophrenia is elevated prior to relapse after haloperidol withdrawal. van Kammen DP, et al. **Biol Psychiatry** 1989 Jun;26(2):176–88

CHEMICALLY INDUCED

Effect of ibogaine on naloxone-precipitated withdrawal syndrome in chronic morphine-dependent rats. Dzoljic ED, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug; 294:64–70
Comparison of peripheral and central administration of naloxone in precipitating abstinence in morphine-dependent rats. Bell J, et al. **Drug Alcohol Depend** 1988 Jul;21(3):189–94
Naloxone hazard in drug abuser [letter] Popper C, et al. **Lancet** 1989 Aug 19;2(8660):446

COMPLICATIONS

Hematemesis following discontinuation of psychoactive drugs in geriatric patients. Kishnir SL. **J Am Geriatr Soc** 1988 Nov;36(11):1045–6
Sleep apnea following withdrawal of amitriptyline. Musa MN. **J Clin Pharmacol** 1988 Nov;28(11):1038–9
[Consecutive changes of R-R interval variation on ECG after abstinence in male alcoholics] Yokoyama A, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1989 Feb;24(1):36–42 (Eng. Abstr.) (Jpn)
[Ethanol withdrawal syndrome in the pathogenesis of alcoholic heart damage] Nuzhnyl VP, et al. **Kardiologiia** 1989 Jun;29(6):94–9 (Eng. Abstr.) (Rus)

DIAGNOSIS

Severity of precipitated opiate withdrawal predicts drug dependence by DSM-III-R criteria. Kosten TA, et al. **Am J Drug Alcohol Abuse** 1989;15(3):237–50
NMR T1 relaxation time of the brain during alcohol withdrawal and its lack of relationship with symptom severity. Mander AJ, et al. **Br J Addict** 1989 Jun; 84(6):669–72
Tourette-like symptoms associated with neuroleptic therapy in an autistic child. Perry R, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):93–6
Signs and symptoms assessment: a guide for the treatment of the alcohol withdrawal syndrome. Massman JE, et al. **J Psychoactive Drugs** 1988 Oct–Dec;20(4):443–4
Possible steroid withdrawal syndrome following short Synacthen test—a personal report. Rippere V. **Med Hypotheses** 1989 Mar;28(3):187–91
Alcohol consumption and withdrawal in new-onset seizures [letter] Edelsberg JS. **N Engl J Med** 1989 Mar 2; 320(9):596–7

DIET THERAPY

Suppression of opiate withdrawal by cyclosporin A and dietary modification. McVaugh W, et al. **Life Sci** 1989; 44(14):977–83

DRUG THERAPY

Bromocriptine treatment of cocaine withdrawal symptoms [letter] Extein IL, et al. **Am J Psychiatry** 1989 Mar; 146(3):403
Double-blind controlled trial comparing carbamazepine to oxazepam treatment of alcohol withdrawal. Malcolm R, et al. **Am J Psychiatry** 1989 May;146(5):617–21
Carbamazepine for withdrawal pseudohallucinations [letter] Neppe VM. **Am J Psychiatry** 1988 Dec;145(12):1605–6
Carbamazepine treatment for benzodiazepine withdrawal. Ries RK, et al. **Am J Psychiatry** 1989 Apr;146(4):536–7
Effects of 5-hydroxytryptophan on fragmentation of REM sleep in alcoholics. Zarcone VP Jr, et al. **Am J Psychiatry** 1975 Jan;132(1):74–6
Management of alcohol withdrawal: treatment controversies. Engle JP, et al. **Am Pharm** 1988 Nov;NS28(11):51–7 (26 ref.)
The efficacy of atenolol in the outpatient management of the alcohol withdrawal syndrome. Results of a randomized clinical trial. Horwitz RI, et al. **Arch Intern Med** 1989 May;

149(5):1089–93
How to get patients off barbiturates. **Aust Fam Physician** 1976 Sep;5(8):1126–7
Clonidine in heroin withdrawal syndrome: a controlled study in India. Gupta AK, et al. **Br J Addict** 1988 Sep; 83(9):1079–84
Opioid withdrawal and naltrexone induction in 48–72 hours with minimal drop-out, using a modification of the naltrexone–clonidine technique. Brewer C, et al. **Br J Psychiatry** 1988 Sep;153:340–3
Naloxone treatment for opiate withdrawal syndrome [letter] Loimer N, et al. **Br J Psychiatry** 1988 Dec;153:851–2
The use of naloxone during the withdrawal syndrome from heroin. Vlissides DN, et al. **Br J Psychiatry** 1988 Apr; 152:565–7
Biperiden withdrawal in schizophrenic inpatients receiving long-term antipsychotic medication. Wada Y, et al. **Clin Neuropharmacol** 1987 Aug;10(4):370–5
Clonidine in nicotine withdrawal. McGee KH, et al. **DICP** 1989 Jun;23(6):473–4
Clonidine and the treatment of the opiate withdrawal syndrome. Gossop M. **Drug Alcohol Depend** 1988 Jul; 21(3):253–9 (45 ref.)
Changes in locomotor-activity patterns as a measure of spontaneous morphine withdrawal: no effect of clonidine. van der Laan JW, et al. **Drug Alcohol Depend** 1988 Oct; 22(1–2):133–40
Comparison of selective and complete inhibitors of enkephalin-degrading enzymes on morphine withdrawal syndrome. Maldonado R, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):199–207
Antipsychotic withdrawal phenomena in the medical-surgical setting. Dilsaver SC, et al. **Gen Hosp Psychiatry** 1988 Nov;10(6):438–46 (44 ref.)
Emerging treatment options in the alcohol withdrawal syndrome. Rosenbloom A. **J Clin Psychiatry** 1988 Dec;49 Suppl:28–32 (24 ref.)
Valproate in anxiety and withdrawal syndromes. Roy-Byrne PP, et al. **J Clin Psychiatry** 1989 Mar;50 Suppl:44–8 (42 ref.)
Effects of clonidine on alprazolam discontinuation in panic patients: a pilot study. Fyer AJ, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):270–4
Controlled trial of transdermal nicotine patch in tobacco withdrawal [see comments] Abelin T, et al. **Lancet** 1989 Jan 7;1(8628):7–10. **Comment in:** Lancet 1989 Feb 11;1(8633):334
Gamma-hydroxybutyric acid for treatment of alcohol withdrawal syndrome. Gallimberti L, et al. **Lancet** 1989 Sep 30;2(8666):787–9
Transdermal nicotine and placebo [letter; comment] Sudan BJ. **Lancet** 1989 Feb 11;1(8633):334. **Comment on:** Lancet 1989 Jan 7;1(8628):7–10
Physostigmine induced beta-endorphin release as a mechanism for physostigmine management of early alcohol withdrawal. Backon J. **Med Hypotheses** 1989 Jun; 29(2):85–6
The beta-carboline derivatives ZK 93426 and FG 7142 fail to precipitate abstinence signs in diazepam-dependent cats. Giorgi O, et al. **Pharmacol Biochem Behav** 1989 Mar; 32(3):671–5
Adenosine triphosphate blocks opiate withdrawal symptoms in rats and mice. Gomaa AA, et al. **Pharmacol Toxicol** 1989 Jan;64(1):111–5
Pharmacotherapy of alcohol-withdrawal syndrome in hospitalised patients. Clinical and methodological aspects. Busch H, et al. **Pharmacopsychiatry** 1988 Sep;21(5):232–7 (71 ref.)
Double blind study on the efficacy and safety of tetrabamate and chlordiazepoxide in the treatment of the acute alcohol withdrawal syndrome. Radouco-Thomas S, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):55–75
Flumazenil but not nitrendipine reverses the increased anxiety during ethanol withdrawal in the rat. File SE, et al. **Psychopharmacology (Berlin)** 1989;98(2):262–4
Nicotine replacement: ten-week effects on tobacco withdrawal symptoms. Gross J, et al. **Psychopharmacology (Berlin)** 1989;98(3):334–41
Analgesic nitrous oxide for addictive withdrawal states. Gillman MA. **S Afr Med J** 1989 Feb 4;75(3):100–1
[Using benzodiazepines for withdrawal from benzodiazepines?] Müller WE. **Med Monatsschr Pharm** 1989 Mar;12(3):94–7 **(Ger)**
[Dapiprazole in the treatment of drug withdrawal symptoms] Fogari R, et al. **Farmaco [Prat]** 1988 Sep;43(9):279–89 (Eng. Abstr.) **(Ita)**
[Alcohol withdrawal syndrome. Effects of short-term treatment with dapiprazole] Bono G, et al. **Minerva Med** 1988 Dec;79(12):1085–9 (Eng. Abstr.) **(Ita)**
[Practical aspects of the clinical management of benzodiazepine dependence] Moodley P, et al. **Rev Med Chil** 1988 May;116(5):472–5 (36 ref.) (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Fluctuations of succinic dehydrogenase during morphine tolerance, dependence and withdrawals in the spinal cord and medulla oblongata of mice. Josephjohn K, et al. **Acta Neurol Belg** 1988 Nov-Dec;88(5):281–9
Diurnal changes in succinate and D-3-hydroxybutyrate dehydrogenase activities of rat liver mitochondria after chronic alcohol consumption and withdrawal. Kaminsky YG, et al. **Comp Biochem Physiol [C]** 1988;90(1):79–82
Bone turnover in postmenopausal women after withdrawal of estrogen/gestagen replacement therapy. Thomsen K, et al. **Gynecol Endocrinol** 1987 Jun;1(2):169–75

EPIDEMIOLOGY

How often can antihypertensive treatment be discontinued? Hudson MF. **J Hum Hypertens** 1988 Aug;2(2):65–9 (16 ref.)
[Recurrence rate of alcohol withdrawal syndrome and change in drinking pattern] Fujimoto A, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1988 Sep;23(3):197–210 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Mania precipitated by benzodiazepine withdrawal. Rigby J, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):406–7
The quitting experience for smokers in sixth through twelfth grades. Ershler J, et al. **Addict Behav** 1989;14(4):365–78
Withdrawal from benzodiazepines [letter] Burbach RV. **Am J Drug Alcohol Abuse** 1989;15(2):231
Withdrawal of barbiturate anticonvulsant drugs: prospective controlled study. Coulter DL. **Am J Ment Retard** 1988 Nov;93(3):320–7
Manic syndrome after discontinuation of methyldopa [letter] Labbate LA, et al. **Am J Psychiatry** 1989 Aug; 146(8):1075–6
Treatment of cocaine-induced panic disorder. Louie AK, et al. **Am J Psychiatry** 1989 Jan;146(1):40–4
Polydipsia, hyponatremia, and psychosis [letter] Vieweg WV, et al. **Am J Psychiatry** 1989 Jan;146(1):124
Benzodiazepine therapy and withdrawal in elderly patients [letter] Zarr ML. **Am J Psychiatry** 1989 Sep;146(9):1242–3
Parkinsonism following neuroleptic withdrawal [letter] Nelli AC, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):383–4
Reserpine withdrawal psychosis. Samuels AH, et al. **Aust N Z J Psychiatry** 1989 Mar;23(1):129–30
Psychoses associated with propranolol withdrawal. Golden RN, et al. **Biol Psychiatry** 1989 Feb 1;25(3):351–4
Recurrent neuroleptic malignant syndrome due to haloperidol and amantadine. Hermesh H, et al. **Biol Psychiatry** 1989 Apr 1;25(7):962–5
Mianserin withdrawal and the pupil response of depressed and recovered patients: a preliminary report. Muijen M, et al. **Biol Psychiatry** 1989 Mar 15;25(6):810–4
Cardiac arrhythmia following rapid imipramine withdrawal. Regan WM, et al. **Biol Psychiatry** 1989 Feb 15;25(4):482–4
Toxic ictal delirium. van Sweden B, et al. **Biol Psychiatry** 1989 Feb 15;25(4):449–58
Lephetamine abuse and dependence: clinical effects and withdrawal syndrome. Janiri L, et al. **Br J Addict** 1989 Jan;84(1):89–95
Abrupt withdrawal of isosorbide-5-mononitrate in Durules (Imdur) after long term treatment in patients with stable angina pectoris. Rehnqvist N, et al. **Eur Heart J** 1988 Dec; 9(12):1339–47
Mania induced by lorazepam withdrawal: a report of two cases. Turkington D, et al. **J Affective Disord** 1989 Jul-Aug; 17(1):93–5
Antipsychotic-withdrawal akathisia versus antipsychotic-induced akathisia: further evidence for the existence of tardive akathisia. Dufresne RL, et al. **J Clin Psychiatry** 1988 Nov;49(11):435–8
Apparent complex partial seizures in a bipolar patient after withdrawal of carbamazepine. Garbutt JC, et al. **J Clin Psychiatry** 1988 Oct;49(10):410–1
Benzodiazepine withdrawal: a review of the evidence. Noyes R Jr, et al. **J Clin Psychiatry** 1988 Oct;49(10):382–9 (73 ref.)
Continuation and maintenance treatment trials of adjunctive imipramine therapy in patients with postpsychotic depression. Siris SG, et al. **J Clin Psychiatry** 1988 Nov; 49(11):439–40
Atypical withdrawal syndrome (organic delusional syndrome) secondary to oxycodone detoxification [letter] Fishbain DA, et al. **J Clin Psychopharmacol** 1988 Dec; 8(6):441–2
Rebound insomnia: a critical review. Gillin JC, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):161–72 (51 ref.)
Benzodiazepine prescription abuse and the benzodiazepine withdrawal syndrome. Olivier HR. **J La State Med Soc** 1989 Mar;141(3):18–22
Withdrawal symptoms from phenytoin, carbamazepine and sodium valproate. Duncan JS, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):924–8
Withdrawal from diazepam substitutes for the discriminative stimulus properties of pentylenetetrazol. Emmett-Oglesby MW, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):892–7
Danger of MAOI therapy after fluoxetine withdrawal [letter] Graham PM, et al. **Lancet** 1988 Nov 26;2(8622):1255–6
Sudden confusion with levodopa withdrawal [letter] Lang AE. **Mov Disord** 1987;2(3):223
[Is serotonin implicated in the pathogenesis of the alcohol abstinence syndrome?] Nardoni A, et al. **Minerva Med** 1989 Mar;80(3):281–3 (Eng. Abstr.) **(Ita)**

GENETICS

Ethanol and diazepam withdrawal convulsions are extensively codetermined in WSP and WSR mice. Belknap JK, et al. **Life Sci** 1989;44(26):2075–80
[Induction of physical dependence on morphine and genetic analysis of morphine withdrawal signs in mice] Suzuki T, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1988 Sep; 23(3):258–67 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

The immune system and opiate withdrawal. Dafny N, et al. **Int J Immunopharmacol** 1989;11(4):371–5
Enigmatic action of ciclosporine A on the naloxone-precipitated morphine withdrawal syndrome in mice. Berthold H, et al. **Neuroscience** 1989;31(1):97–103

METABOLISM

Nifedipine reversal of decreased serotonin metabolite levels during morphine withdrawal. Colado MI, et al. **Arch Int Pharmacodyn Ther** 1989 Mar-Apr;298:61–7
Effects of alcohol on tryptophan metabolism. Badawy AA. **Biochem Soc Trans** 1988 Jun;16(3):254–6
Effect of the removal of individual antiepileptic drugs on antipyrine kinetics, in patients taking polytherapy. Patsalos PN, et al. **Br J Clin Pharmacol** 1988 Sep;26(3):253–9
Behavioral and metabolic alterations in the opiate withdrawal syndrome induced by lesions of fasciculus retroflexus. Cutlip AC, et al. **Brain Res** 1988 Jun 7;451(1–2):54–8
Effects of acute central LH-RH administration of the skin temperature response in morphine dependent rats. Katovich MJ, et al. **Brain Res** 1989 Aug 7;494(1):85–94
Beta-blockade disappearance rate predicts beta-adrenergic hypersensitivity. Reeves RA, et al. **Clin Pharmacol Ther** 1989 Sep;46(3):279–90
Decreased systemic formation of prostaglandin E and prostacyclin, and unchanged thromboxane formation, in alcoholics during withdrawal as estimated from metabolites in urine [letter] Mikhailidis DP, et al. **Clin Sci** 1988 Nov; 75(5):559–60
Differences in GABA activity between ethanol withdrawal seizure prone and resistant mice. Feller DJ, et al. **Eur J Pharmacol** 1988 Nov 22;157(2–3):147–54
Changes in brain monoamine metabolism during withdrawal from chronic oral self-administration of morphine and in response to a morphine challenge in the withdrawn state. Ahtee L, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):303–10
Changes in cortical acetylcholine and gamma-aminobutyric acid outflow during morphine withdrawal involve alpha-1 and alpha-2 receptors. Beani L, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):682–7
Glucose utilization in the rat brain during chronic morphine treatment and naloxone-precipitated morphine withdrawal. Kimes AS, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):538–45
Substance P and [leucine]enkephalin release in guinea pig ileum during naloxone-precipitated morphine withdrawal. Wang FS, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):329–32
The effect of morphine dependence and abstinence on opioid receptors in the cerebral cortex and spinal cord of the rat. Antkiewicz-Michaluk L, et al. **Pol J Pharmacol Pharm** 1988 Jan-Feb;40(1):11–6
Dopamine D2 and muscarinic receptor binding characteristics in rat brain after withdrawal of subchronic fluphenazine and sulpiride treatment. Hietala J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):247–58
Clonidine infusions into the locus coeruleus attenuate behavioral and neurochemical changes associated with naloxone-precipitated withdrawal. Taylor JR, et al. **Psychopharmacology (Berlin)** 1988;96(1):121–34

MORTALITY

[Attempts at discontinuing cardiac glycosides in general practice] Hügel A, et al. **Z Arztl Fortbild (Jena)** 1989; 83(9):471–2 **(Ger)**

PATHOLOGY

Hippocampal mossy fiber-CA3 synapses after chronic alcohol consumption and withdrawal. Cadete-Leite A, et al. **Alcohol** 1989 Jul-Aug;6(4):303–10
[Ultrastructural changes in the thalamus in chronic morphine intoxication and abstinence] Kolusheva GV. **Zh Nevropatol Psikhiatr** 1988;88(7):67–71 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Renal sympathetic nerve activity during morphine abstinence in sino-aortic baroreceptor-denervated rats. Delle M, et al. **Acta Physiol Scand** 1988 Dec;134(4):479–91
Central haemodynamics during morphine abstinence in anaesthetized rats. Delle M, et al. **Acta Physiol Scand** 1988 Dec;134(4):493–501
Antidepressant withdrawal syndromes: phenomenology and pathophysiology. Dilsaver SC. **Acta Psychiatr Scand** 1989 Feb;79(2):113–7
Monoamine oxidase inhibitor withdrawal phenomena: symptoms and pathophysiology. Dilsaver SC. **Acta Psychiatr Scand** 1988 Jul;78(1):1–7 (53 ref.)
Phenomenology and pathophysiology of antipsychotic withdrawal symptoms [letter] Fava GA, et al. **Acta Psychiatr Scand** 1989 Feb;79(2):205–6
Alpha-2-adrenoceptor function in alcoholics. Nutt DJ, et

al. **Adv Alcohol Subst Abuse** 1988;7(3–4):43–6
Withdrawal-induced antihypertensive effect of vasopressin in Doca-salt hypertension. Chiu EK, et al. **Am J Hypertens** 1989 Jun;2(6 Pt 1):458–61
Benzodiazepine dependence and withdrawal in elderly patients. Schweizer E, et al. **Am J Psychiatry** 1989 Apr; 146(4):529–31
Auricular microelectrostimulation: naloxone-reversible attenuation of opiate abstinence syndrome. Malin DH, et al. **Biol Psychiatry** 1988 Dec;24(8):886–90
Alterations in sleep polygraphy after neuroleptic withdrawal: a putative supersensitive dopaminergic mechanism. Thaker GK, et al. **Biol Psychiatry** 1989 Jan;25(1):75–86
Primary sensory neurones and naloxone-precipitated morphine withdrawal. Donnerer J. **Br J Pharmacol** 1989 Apr;96(4):767–72
Physical dependence on diazepam in the dog: precipitation of different abstinence syndromes by the benzodiazepine receptor antagonists Ro 15–1788 and ZK 93426. Löscher W, et al. **Br J Pharmacol** 1989 Jul;97(3):843–52
Long-term beta-blockade in dilated cardiomyopathy. Effects of short- and long-term metoprolol treatment followed by withdrawal and readministration of metoprolol. Waagstein F, et al. **Circulation** 1989 Sep;80(3):551–63
Neonatal alprazolam withdrawal—possible effects of breast feeding [letter] Anderson PO, et al. **DICP** 1989 Jul–Aug; 23(7–8):614
The effect of repeated withdrawal episodes on subsequent withdrawal severity in ethanol-treated rats. Maier DM, et al. **Drug Alcohol Depend** 1989 Apr;23(2):103–10
Effects of ethanol withdrawal on ethanol-reinforced responding in rhesus monkeys. Winger G. **Drug Alcohol Depend** 1988 Dec;22(3):235–40
Renal function before and after withdrawal of long term antihypertensive treatment in primary hypertension. Ljungman S, et al. **Drugs** 1988;35 Suppl 5:55–8
Differential effects of calcium channel blockers and stimulants on morphine withdrawal in vitro. Barrios M, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):175–8
Effects of calcitonin on morphine tolerance and withdrawal syndrome in morphine physically dependent rats. Clementi G, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):175–9
Experimental characterisation of the withdrawal syndrome after 14 days treatment with clonazepam. Toreva D, et al. **Folia Med (Plovdiv)** 1987;29(3):27–32
Evaluation of peripheral nerve conduction and central visual conduction in chronic alcoholics and in chronic alcoholics after prolonged abstention. Devetag F. **Ital J Neurol Sci** 1988 Dec;9(6):583–92
Blood pressure and blood pressure variability following withdrawal of propranolol and clonidine. Neusy AJ, et al. **J Clin Pharmacol** 1989 Jan;29(1):18–24
Obsessive-compulsive disorder occurring as a complication in benzodiazepine withdrawal. Drummond LM, et al. **J Nerv Ment Dis** 1988 Nov;176(11):688–91
The effect of acute and chronic administration of morphine and morphine withdrawal on intestinal transit time in the rat. Brown NJ, et al. **J Pharm Pharmacol** 1988 Dec; 40(12):844–8
Characterization of a pentylenetetrazol-like interoceptive stimulus produced by ethanol withdrawal. Lal H, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):508–18
Trans-cranial electrical stimulation attenuates the severity of naloxone-precipitated morphine withdrawal in rats. Dougherty PM, et al. **Life Sci** 1989;44(26):2051–6
A comparison of the effects of morphine withdrawal, thyroxine or thyroidectomy on the sensitivity of the anococcygeus muscle to agonists and on serum thyroxine levels in the rat. Gardiner DC, et al. **Life Sci** 1974 Jul 15;15(2):339–49
Alcohol withdrawal reactions and reserpine effects in inbred strains of mice. Goldstein DB, et al. **Life Sci** 1974 Aug 1;15(3):415–25
Ethanol withdrawal in the rat: involvement of noradrenergic neurons. Pohorecky LA, et al. **Life Sci** 1974 Aug 1; 15(3):427–37
Effects of withdrawal from chronic exposure to cigarette smoke on hypothalamic and preoptic catecholamine nerve terminal systems and on the secretion of pituitary hormones in the male rat. Andersson K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):387–96
The EEG response to diffuse and patterned photic stimulation during acute untreated alcohol withdrawal. Fisch BJ, et al. **Neurology** 1989 Mar;39(3):434–6
Increased central noradrenergic activity during benzodiazepine withdrawal: an electrophysiological study. Bell J, et al. **Neuropharmacology** 1988 Nov;27(11):1187–90
Intermittent medication cessation in the treatment of Tourette syndrome. Fulton WA. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):235–40
Enhancement by haloperidol of the locomotor response induced by naloxone in morphine-treated guinea pigs. Chahl LA, et al. **Neurosci Lett** 1989 Jan 16;96(2):213–7
Ethanol withdrawal alters apomorphine-induced motility. Gonzalez LP, et al. **Pharmacol Biochem Behav** 1988 Sep; 31(1):163–8
Behavior of monkeys during opiate withdrawal and locus coeruleus stimulation. Grant SJ, et al. **Pharmacol Biochem Behav** 1988 May;30(1):13–9
Effect of phentolamine on blood pressure, heart rate and plasma catecholamine levels in conscious, unrestrained morphine dependent rats during naloxone precipitated autonomic withdrawal responses. Dixon WR, et al. **Proc West Pharmacol Soc** 1988;31:117–9
Comparative study in mice of flunitrazepam vs. diazepam on morphine withdrawal syndrome. Gibert-Rahola J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):927–33
Tardive and withdrawal dyskinesia in autistic children: a prospective study. Campbell M, et al. **Psychopharmacol Bull** 1988;24(2):251–5
Nucleus accumbens as a substrate for the aversive stimulus effects of opiate withdrawal. Koob GF, et al. **Psychopharmacology (Berlin)** 1989;98(4):530–4
[Alcohol withdrawal syndrome] Iwasaki M. **Nippon Rinsho** 1988 Aug;46(8):1789–93 **(Jpn)**

PREVENTION & CONTROL

Prevention of alcohol withdrawal seizures with carbamazepine and valproic acid. Hillbom M, et al. **Alcohol** 1989 May–Jun;6(3):223–6
An algorithm for corticosteroid withdrawal. Kountz DS. **Am Fam Physician** 1989 Mar;39(3):250–4
Rapid detoxification from opioid dependence [letter] Kosten TR, et al. **Am J Psychiatry** 1989 Oct;146(10):1349
Capsaicin pretreatment does not inhibit the opioid withdrawal response in guinea-pigs. Chahl LA. **Eur J Pharmacol** 1988 Dec 6;158(1–2):91–8
Continuous naloxone administration suppresses opiate withdrawal symptoms in human opiate addicts during detoxification treatment. Loimer N, et al. **J Psychiatr Res** 1989;23(1):81–6
Use of clonidine in nicotine withdrawal. Sees KL, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):263–8 (37 ref.)
Benzodiazepines: time to withdraw [editorial] Montgomery SA, et al. **J R Coll Gen Pract** 1988 Apr;38(309):146–7
Cocaine and morphine withdrawal [letter] Clarke MJ. **Lancet** 1989 Aug 12;2(8659):381–2
Cocaine abuse and opioid withdrawal [letter] Kosten TA, et al. **Lancet** 1989 Jul 15;2(8655):165–6
Cocaine withdrawal. An effective three-drug regimen. Pike RF. **Postgrad Med** 1989 Mar;85(4):115–6, 121
Flumazenil prevents the development of chlordiazepoxide withdrawal in rats tested in the social interaction test of anxiety. Baldwin HA, et al. **Psychopharmacology (Berlin)** 1989;97(3):424–6
Modification of quasi-morphine withdrawal with serotonin agonists and antagonists: evidence for a role of serotonin in the expression of opiate withdrawal. Kleven MS, et al. **Psychopharmacology (Berlin)** 1989;98(2):231–5
Lukewarm turkey. Horgan J. **Sci Am** 1989 Mar;260(3):32

PSYCHOLOGY

Withdrawal reactions to diazepam in combined imipramine/diazepam treatment of primary nonagitated depressed outpatients. Feet PO, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):341–7
Effects of deprivation on smokers' mood during the operation of a complex computer simulation. Cutler GH, et al. **Addict Behav** 1988;13(4):379–82
The effects of repeated withdrawals from alcohol on the memory of male and female alcoholics. Glenn SW, et al. **Alcohol Alcohol** 1988;23(5):337–42
The experience of opioid abstinence: the relevance of motivation and history. Murphy PN, et al. **Br J Addict** 1989 Jun;84(6):673–9
Delusional depression following benzodiazepine withdrawal. Keshavan MS, et al. **Can J Psychiatry** 1988 Oct;33(7):626–7
Secondary mania with steroid withdrawal. Venkatarangam SH, et al. **Can J Psychiatry** 1988 Oct;33(7):631–2
The tobacco withdrawal syndrome: performance decrements assessed on a computerized test battery. Snyder FR, et al. **Drug Alcohol Depend** 1989 Jun;23(3):259–66
Measuring nicotine dependence: a review of the Fagerstrom Tolerance Questionnaire. Fagerstrom KO, et al. **J Behav Med** 1989 Apr;12(2):159–82 (65 ref.)
Long-lasting behavioral changes following prednisone withdrawal [letter] Wolkowitz OM. **JAMA** 1989 Mar 24–31;261(12):1731–2
Resumption of benzodiazepine use after withdrawal in hospital—a follow-up study. Priebe S, et al. **Pharmacopsychiatry** 1988 Nov;21(6):353–4
The efficacy of the abstinence model in the treatment of alcoholism. Pagliaro L, et al. **Proc West Pharmacol Soc** 1989;32:23–6
Clozapine withdrawal rebound psychosis. Borison RL, et al. **Psychopharmacol Bull** 1988;24(2):260–3
Hyperglycemic suppression of morphine withdrawal signs in the rat. Akunne HC, et al. **Psychopharmacology (Berlin)** 1988;96(1):1–6
Effect of smoke-free cigarettes on 24 h cigarette withdrawal: a double-blind placebo-controlled study. Hajek P, et al. **Psychopharmacology (Berlin)** 1989;97(1):99–102
Social, motor, and autonomic signs of morphine withdrawal: differential sensitivities to catecholaminergic drugs in mice. Kantak KM, et al. **Psychopharmacology (Berlin)** 1988; 96(4):468–76
The effects of short-term smokeless tobacco deprivation on performance. Keenan RM, et al. **Psychopharmacology (Berlin)** 1989;98(1):126–30
Effects of nicotine administration following 12 h of tobacco deprivation: assessment on computerized performance tasks. Snyder FR, et al. **Psychopharmacology (Berlin)** 1989; 97(1):17–22
[Withdrawal phenomena in stepwise withdrawal of benzodiazepines] Soyka M, et al. **Nervenarzt** 1988 Dec; 59(12):744–8 **(Ger)**
[Plasma levels of biogenic amines in patients with various forms of the alcohol abstinence syndrome] Treskov VG, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):109–11 (Eng. Abstr.) **(Rus)**

REHABILITATION

The effect of placebo in the alcohol withdrawal state. Lichtigfeld FJ, et al. **Alcohol Alcohol** 1989;24(2):109–12
Alcohol withdrawal syndrome: clinical and hormonal responses to alpha 2-adrenergic agonist treatment. Cushman P Jr, et al. **Alcoholism (N Y)** 1989 Jun;13(3):361–4
The Bethlem Study on NET: putting the record straight [letter] Gossop M, et al. **Br J Addict** 1989 Jul;84(7):818–9
Neuro-electric therapy: criticisms of the 1984 Bethlem Study [letter] Patterson MA. **Br J Addict** 1989 Jul;84(7):818
Chlordiazepoxide vs. methadone in opiate withdrawal: a preliminary double blind trial. Drummond DC, et al. **Drug Alcohol Depend** 1989 Jan;23(1):63–71
Effects of dapiprazole, clonidine and yohimbine on the development of dependence and withdrawal behaviour in mice. Valeri P, et al. **Drug Alcohol Depend** 1989 Jan; 23(1):73–7
Bromocriptine in cocaine withdrawal—does it work? Teller DW, et al. **Int J Addict** 1988 Nov;23(11):1197–205
Clonidine transdermal patches for use in outpatient opiate withdrawal. Spencer L, et al. **J Subst Abuse Treat** 1989; 6(2):113–7

THERAPY

Withdrawal-oriented therapy for smokers. Hajek P. **Br J Addict** 1989 Jun;84(6):591–8
Reasons for smoking and severity of residual nicotine withdrawal symptoms when using nicotine chewing gum. Niaura R, et al. **Br J Addict** 1989 Jun;84(6):681–7
Management of withdrawal syndromes [letter] Perry-Whittingham BD. **Can Med Assoc J** 1988 Nov 1; 139(9):825–6
Benzodiazepine dependence—aetiological factors, time course, consequences and withdrawal symptomatology: a study of five cases. Brenner PM, et al. **Drug Alcohol Depend** 1988 Dec;22(3):253–61
Alcohol withdrawal: a review of clinical management. Castaneda R, et al. **J Clin Psychiatry** 1989 Aug;50(8):278–84 (63 ref.)
Quitting smoking: nicotine vs placebo gum [letter] Jacobson TA. **JAMA** 1989 Aug 11;262(6):773–4
Comparative effectiveness and costs of inpatient and outpatient detoxification of patients with mild-to-moderate alcohol withdrawal syndrome. Hayashida M, et al. **N Engl J Med** 1989 Feb 9;320(6):358–65
The treatment of alcohol withdrawal. Guthrie SK. **Pharmacotherapy** 1989;9(3):131–43 (117 ref.)

SUBSTANTIA GELATINOSA see under **SPINAL CORD**

SUBSTANTIA INNOMINATA see under **BASAL GANGLIA**

SUBSTANTIA NIGRA

Transplant-induced recovery from 6-OHDA lesions of the nigrostriatal dopamineneurones in mice. Shimizu K, et al. **Acta Neurochir Suppl (Wien)** 1988;43:149–53
Effects of intranigral application of clinically-effective anticonvulsants on electroshock-induced seizures. Chen LS, et al. **Neuropharmacology** 1989 Aug;28(8):781–6

ANALYSIS

Neuromelanin in the substantia nigra of adult horses. Cozzi B, et al. **Anat Anz** 1988;166(1–5):53–61
Localization of ARPP-90, a major 90 kiloDalton basal ganglion-enriched substrate for cyclic AMP-dependent protein kinase, in striatonigral neurons in the rat brain. Walaas SI, et al. **Brain Res Mol Brain Res** 1989 Mar; 5(2):149–57
Regional distribution of ubiquinones and tocopherols in the mouse brain: lowest content of ubiquinols in the substantia nigra. Fariello RG, et al. **Neuropharmacology** 1988 Oct; 27(10):1077–80

ANATOMY & HISTOLOGY

Corticonigral projections from area 6 in the raccoon. Sakai ST. **Exp Brain Res** 1988;73(3):498–504
Neuroanatomical studies of the nigrotectal projection in the cat. Harting JK, et al. **J Comp Neurol** 1988 Dec 22; 278(4):615–31
Convergence of afferent fibers from the entopeduncular nucleus and the substantia nigra pars reticulata onto single neurons in the ventromedial thalamic nucleus: an electron microscope study in the cat. Moriizumi T, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):125–9
[Projection of the neurons of the substantia nigra and ventral field of the midbrain tegmen in the cat to the putamen] Gorbachevskaia AI. **Arkh Anat Gistol Embriol** 1989 Mar; 96(3):8–15 (Eng. Abstr.) **(Rus)**
[The position of individual nuclei of the midbrain of children

and adolescents with respect to stereotaxic coordinates] Maslovskiĭ SIu, et al. **Arkh Anat Gistol Embriol** 1988 Jun; 94(6):21–5 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Nimodipine enhances growth and vascularization of neural grafts. Finger S, et al. **Exp Neurol** 1989 Apr;104(1):1–9

CYTOLOGY

A topographic study of the course of nigral axons and of the distribution of pallidal axonal endings in the centre médian–parafascicular complex of macaques. François C, et al. **Brain Res** 1988 Nov 8;473(1):181–6

Spatial relationship of the striatonigral and mesostriatal pathways: double-label immunocytochemistry for DARPP-32 and tyrosine hydroxylase. Gustafson EL, et al. **Brain Res** 1989 Jul 10;491(2):297–306

Minimal connectivity between six month neostriatal transplants and the host substantia nigra. McAllister JP 2d, et al. **Brain Res** 1989 Jan 9;476(2):345–50

Evidence for a distinct nigropallidal dopaminergic projection in the squirrel monkey. Smith Y, et al. **Brain Res** 1989 Mar 20;482(2):381–6

Interconnections between substantia nigra reticulata and medullary reticular formation. Chronister RB, et al. **Brain Res Bull** 1988 Aug;21(2):313–7

Fluorometric comparisons of the retrograde axonal transport of true blue and diamidino yellow from the rat caudate-putamen. Payne JN, et al. **Exp Brain Res** 1989; 75(1):169–82

Cholinergic somata and terminals in the rat substantia nigra: an immunocytochemical study with optical and electron microscopic techniques. Martínez-Murillo R, et al. **J Comp Neurol** 1989 Mar 15;281(3):397–415

Nigrotectal projection to the inferior colliculus: horseradish peroxidase transport and tyrosine hydroxylase immunohistochemical studies in rats, cats, and bats. Olazábal UE, et al. **J Comp Neurol** 1989 Apr 1; 282(1):98–118

Nigrostriatal projections in the rat as demonstrated by retrograde transport of horseradish peroxidase. I. Projections to the rostral striatum. Druga R. **J Hirnforsch** 1989;30(1):11–21

Two cell types in rat substantia nigra zona compacta distinguished by membrane properties and the actions of dopamine and opioids. Lacey MG, et al. **J Neurosci** 1989 Apr;9(4):1233–41

Topical organization of the projections of neurons of the substantia nigra and the ventral field of the tegmentum of the midbrain to the head of the caudate nucleus of the cat. Gorbachevskaya IA. **Neurosci Behav Physiol** 1989 May–Jun;19(3):196–203

Three-dimensional organization of the striosomal compartment and patchy distribution of striatonigral projections in the matrix of the cat caudate nucleus. Desban M, et al. **Neuroscience** 1989;29(3):551–66

The neurons of the substantia nigra and zona incerta which project to the cat superior colliculus are GABA immunoreactive: a double-label study using GABA immunocytochemistry and lectin retrograde transport. Ficalora AS, et al. **Neuroscience** 1989;29(3):567–81

Cholinergic projections to the substantia nigra from the pedunculopontine and laterodorsal tegmental nuclei. Gould E, et al. **Neuroscience** 1989;28(3):611–23

DRUG EFFECTS

GM1 ganglioside protects against the 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced degeneration of nigrostriatal dopamine neurons in the black mouse. Janson AM, et al. **Acta Physiol Scand** 1988 Apr; 132(4):587–8

Chronic nicotine treatment partly protects against the 1-methyl-4-phenyl-2,3,6-tetrahydropyridine-induced degeneration of nigrostriatal dopamine neurons in the black mouse. Janson AM, et al. **Acta Physiol Scand** 1988 Apr; 132(4):589–91

Behavioral and biochemical effects of intranigral injection of phospholipase-A2. Cadet JL, et al. **Biol Psychiatry** 1989 May;26(1):106–10

Increased saccadic distractibility in tardive dyskinesia: functional evidence for subcortical GABA dysfunction. Thaker GK, et al. **Biol Psychiatry** 1989 Jan;25(1):49–59

The histological effects of intracerebral injection or infusion of MPTP (1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine) and MPP+ (1-methyl-4-phenylpyridinium) in rat and mouse. Gibb WR, et al. **Brain Res** 1988 Oct 4;461(2):361–6

Microinjections of Sch-23390 into the ventral tegmental area and substantia nigra pars reticulata attenuate the development of sensitization to the locomotor activating effects of systemic amphetamine. Stewart J, et al. **Brain Res** 1989 Aug 28;495(2):401–6

Time course of MPTP-induced degeneration of the nigrostriatal dopamine system in C57 BL/6 mice. Sundström E, et al. **Brain Res Bull** 1988 Aug;21(2):257–63

GABAergic fibers from substantia nigra pars reticulata modulate escape behavior induced by midbrain central gray stimulation. Coimbra NC, et al. **Braz J Med Biol Res** 1989; 22(1):111–4

Ultrastructural alterations induced by 1-methyl-4-phenylpyridinium (MPP+) in canine substantia nigra and rat mesencephalon in vitro. Christie-Pope BC, et al. **Exp Neurol** 1989 Jun;104(3):235–40

Trypan blue in vivo stains nigral dopaminergic neurons killed by 6-hydroxydopamine. Lees GJ. **Histochemistry** 1989; 91(4):357–9

Studies on semirigid tricyclic analogues of the nigrostriatal toxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine. Booth RG, et al. **J Med Chem** 1989 Feb;32(2):473–7

Differential effects of tachykinins injected intranigrally on striatal dopamine metabolism. Tan DP, et al. **J Neurochem** 1988 Nov;51(5):1333–7

Effects of N-n-propylnorapomorphine enantiomers on single unit activity of substantia nigra pars compacta and ventral tegmental area dopamine neurons. Cox RF, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):355–62

Effects of 3,4-methylenedioxyamphetamine and 3,4-methylenedioxymethamphetamine isomers on central serotonergic, dopaminergic and nigral neurotensin systems of the rat. Johnson M, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):977–82

Cocaine selectively increases striatonigral dynorphin levels by a dopaminergic mechanism. Sivam SP. **J Pharmacol Exp Ther** 1989 Sep;250(3):818–24

Responses of substantia nigra pars reticulata neurons to benzodiazepine ligands after acute and prolonged diazepam exposure. I. Modulation of gamma-aminobutyric acid sensitivity. Wilson MA, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):879–85

Responses of substantia nigra pars reticulata neurons to benzodiazepine ligands after acute and prolonged diazepam exposure. II. Modulation of firing rate. Wilson MA, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):886–91

Modification by apomorphine of the circling behaviour in the rat due to unilateral intranigral injection of 1-methyl-4-phenylpyridine (MPP+). Lange KW. **J Toxicol Clin Exp** 1989 Jan–Feb;9(1):21–5

Preservation of the substantia nigra and locus coeruleus in a patient receiving levodopa (2 kg) plus decarboxylase inhibitor over a four-year period. Quinn N, et al. **Mov Disord** 1986;1(1):65–8

Cholecystokinin system in striatal–nigral neuronal networks: infusion of quinolinic acid into rat striatum. Takita M, et al. **Neuropeptides** 1989 Jan;13(1):71–4

Effects of intraperitoneal administration of apomorphine and the isomers of 3-(1-propyl-3-piperidinyl)phenol on the firing activity of substantia nigra dopamine neurons: comparison of agonist efficacies and development of acute tolerance. Meltzer LT, et al. **Neuropharmacology** 1988 Sep; 27(9):933–42

Eye movements induced by microinjection of GABA agonist in the rat substantia nigra pars reticulata. Sakamoto M, et al. **Neurosci Res** 1989 Feb;6(3):216–33

Progressive pathology of the caudate nucleus, the substantia nigra pars reticulata and the deeper layers of the colliculus superior: acute behavioural and metabolic effects of intrastriatal kainic acid. Jaspers RM, et al. **Neuroscience** 1989;28(1):159–69

Sensitization to cocaine in the nigrostriatal dopamine system. Zahniser NR, et al. **NIDA Res Monogr** 1988;88:55–77 (70 ref.)

Role for excitatory amino acids in methamphetamine-induced nigrostriatal dopaminergic toxicity. Sonsalla PK, et al. **Science** 1989 Jan 20; 243(4889):398–400

[The neurotoxic effect of MPTP and its mechanisms] Xu XJ. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):310–4 (40 ref.) **(Chi)**

[Excitatory effect of subthalamo-nigral and subthalamo-pallidal efferent pathways in the rat] Robledo P, et al. **C R Acad Sci [III]** 1988;307(3):133–8 (Eng. Abstr.) **(Fre)**

[Significance of the neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine for the etiology and therapy of idiopathic Parkinson disease] Lange KW. **Fortschr Neurol Psychiatr** 1989 Apr;57(4):142–8 (65 ref.) (Eng. Abstr.) **(Ger)**

[Effect of activation and blockade of the GABA-ergic system of the substantia nigra in the midbrain on the realization of conditioned food reflexes in dogs] Iakimovskiĭ AF. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):829–35 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Presynaptic transmitters and depolarizing influences regulate development of the substantia nigra in culture. Friedman WJ, et al. **J Neurosci** 1988 Oct;8(10):3616–23

ENZYMOLOGY

Identification of the substantia nigra pars lateralis in the macaque using cytochrome oxidase and fiber stains. Ma TP. **Brain Res** 1989 Feb 20;480(1–2):305–11

Release of acetylcholinesterase from the guinea-pig substantia nigra during peripheral nerve stimulation. Taylor SJ, et al. **Brain Res** 1989 Mar 20;482(2):356–8

Distinct adenosine deaminase-containing inputs to the substantia nigra from the striatum and tuberomammillary nucleus. Yamamoto T, et al. **Brain Res** 1988 Nov 22; 474(1):112–24

Evidence that histochemically distinct zones of the primate substantia nigra pars compacta are related to patterned distributions of nigrostriatal projection neurons and striatonigral fibers. Jimenez-Castellanos J, et al. **Exp Brain Res** 1989;74(2):227–38

A selective increase in particulate superoxide dismutase activity in parkinsonian substantia nigra. Saggu H, et al. **J Neurochem** 1989 Sep;53(3):692–7

Calcium/diacylglycerol-dependent protein kinase and its major 87-kilodalton protein substrate are differentially distributed in rat basal ganglia. Walaas SI, et al. **J Neurochem** 1989 Oct;53(4):1199–202

Oxygen toxicity protecting enzymes in Parkinson's disease. Increase of superoxide dismutase-like activity in the substantia nigra and basal nucleus. Marttila RJ, et al. **J Neurol Sci** 1988 Sep;86(2–3):321–31

Metalloendopeptidase (EC 3.4.24.11) but not angiotensin converting enzyme is involved in the inactivation of substance P by synaptic membranes of the rat substantia nigra. Oblin A, et al. **Life Sci** 1989;44(20):1467–74

Presence of calcium/calmodulin-dependent protein kinase II in nerve terminals of rat brain. Walaas SI, et al. **Synapse** 1989;3(4):356–62

GROWTH & DEVELOPMENT

Pattern formation in the striatum: developmental changes in the distribution of striatonigral projections. Fishell G, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):239–55

The development of activity of succinate dehydrogenase (EC.1.3.99.1) in the areas of the nigro-striatal pathway during the ontogenesis of a pig. Jaworska-Adamu J, et al. **Folia Histochem Cytobiol** 1989;27(2):97–106

Development and ageing of the rat nigrostriatal dopamine system studied with fast cyclic voltammetry. Stamford JA. **J Neurochem** 1989 May;52(5):1582–9

INJURIES

Conditioned turning and functional recovery after unilateral substantia nigra lesion in rats. Mattioli R, et al. **Braz J Med Biol Res** 1988;21(3):655–8

METABOLISM

Intraneuronal dopamine in the primate substantia nigra. Wood JG, et al. **Acta Histochem Suppl (Jena)** 1988; 36:323–30

Quantitative radioimmunocytochemical evidence that haloperidol and SCH 23390 induce opposite changes in substance P levels of rat substantia nigra [published erratum appears in Brain Res 1988 Nov 8;472(1):203] Cruz CJ, et al. **Brain Res** 1988 Aug 2;457(1):29–43

Compartmental distribution of endogenous amino acids in the substantia nigra of the rat. Farrant M, et al. **Brain Res** 1989 Feb 20;480(1–2):344–8

Distribution of striatonigral and striatopallidal peptidergic neurons in both patch and matrix compartments: an in situ hybridization histochemistry and fluorescent retrograde tracing study. Gerfen CR, et al. **Brain Res** 1988 Sep 13; 460(1):161–7

GM1 ganglioside-induced recovery of nigrostriatal dopaminergic neurons after MPTP: an immunohistochemical study. Hadjiconstantinou M, et al. **Brain Res** 1989 Apr 10;484(1–2):297–303

The effect of MPTP on uridine uptake in murine nerve cells. Pakkenberg H, et al. **Brain Res** 1988 Sep 13;460(1):146–9

Does cholecystokinin colocalize with dopamine in the human substantia nigra? Palacios JM, et al. **Brain Res** 1989 May 29;488(1–2):369–75

Basal ganglia lesions in the rat: effects on quinolinic acid metabolism. Schwarcz R, et al. **Brain Res** 1989 Jun 19; 490(1):103–9

Evidence for the involvement of nigral GABAA receptors in seizures of adult rats. Sperber EF, et al. **Brain Res** 1989 Feb 20;480(1–2):378–82

Dopaminergic nigrotectal projection in the rat. Takada M, et al. **Brain Res** 1988 Aug 2;457(1):165–8

Age-related changes of muscimol binding in the substantia nigra. Wurpel JN, et al. **Brain Res** 1988 Oct 1;471(2):305–8

Increased dopamine release from striata of rats after unilateral nigrostriatal bundle damage. Zhang WQ, et al. **Brain Res** 1988 Oct 4;461(2):335–42

Lesion-induced reductions in trace amine accumulation: dependence on MAO inhibitor pretreatment. Nguyen TV, et al. **Brain Res Bull** 1989 Feb;22(2):197–200

Modulation of GFAP mRNA levels following toxic lesions in the basal ganglia of the rat. Rataboul P, et al. **Brain Res Bull** 1989 Jan;22(1):155–61

Evidence for the involvement of nigral GABAB receptors in seizures of rat pups. Sperber EF, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):143–6

Chronic lesions differentially decrease tyrosine hydroxylase messenger RNA in dopaminergic neurons of the substantia nigra. Pasinetti GM, et al. **Brain Res Mol Brain Res** 1989 May;5(3):203–9

Evidence for a role of beta-endorphin in activity of nigrostriatal neurons in the rat. Lebrun I, et al. **Braz J Med Biol Res** 1988;21(3):645–7

5-HT1B receptors are negatively coupled with adenylate cyclase in rat substantia nigra. Bouhelal R, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):189–96

Characterization of methamphetamine effects on the striatal-nigral dynorphin system. Hanson GR, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):11–8

Subchronic haloperidol treatment decreases the in vivo release of tachykinins in rat substantia nigra. Lindefors N, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):95–8

L-dopa activates c-fos in the striatum ipsilateral to a 6-hydroxydopamine lesion of the substantia nigra. Robertson GS, et al. **Eur J Pharmacol** 1989 Jan 2; 159(1):99–100

Tissue levels and in vivo release of tachykinins and GABA in striatum and substantia nigra of rat brain after unilateral striatal dopamine denervation. Lindefors N, et al. **Exp Brain Res** 1989;74(3):527–34

3-Acetylpyridine-induced degeneration of the nigrostriatal dopamine system: an animal model of olivopontocerebellar atrophy-associated parkinsonism. Deutch AY, et al. **Exp Neurol** 1989 Jul;105(1):1–9

Seizures evoked from area tempestas are subject to control by GABA and glutamate receptors in substantia nigra. Maggio R, et al. **Exp Neurol** 1989 Aug;105(2):184–8

Experimental support for the implication of oxidative stress in the genesis of parkinsonian syndromes. Fariello RG. **Funct Neurol** 1988 Oct-Dec;3(4):407–12 (10 ref.)

Lack of evidence for axonal transport of D1 and D2 receptors in the nigro-striatal pathway of the rat. Savasta M, et al. **Fundam Clin Pharmacol** 1988;2(6):499–507

Correspondence between high affinity 125I-neurotensin binding sites and dopaminergic neurons in the rat substantia nigra and ventral tegmental area: a combined radioautographic and immunohistochemical light microscopic study. Szigethy E, et al. **J Comp Neurol** 1989 Jan 1;279(1):128–37

Increased iron (III) and total iron content in post mortem substantia nigra of parkinsonian brain. Sofic E, et al. **J Neural Transm** 1988;74(3):199–205

Neurotoxic damage to the nigrostriatal system in rats following intranigral administration of MPDP+ and MPP+. Sun CJ, et al. **J Neural Transm** 1988;74(2):75–86

Increased nigral iron content and alterations in other metal ions occurring in brain in Parkinson's disease. Dexter DT, et al. **J Neurochem** 1989 Jun;52(6):1830–6

Basal lipid peroxidation in substantia nigra is increased in Parkinson's disease. Dexter DT, et al. **J Neurochem** 1989 Feb;52(2):381–9

Release of gamma-[3H]aminobutyric acid from rat olfactory bulb and substantia nigra: differential modulation by glutamic acid. Jaffé EH, et al. **J Neurochem** 1989 Jun; 52(6):1766–74

Synthesis and release of dopamine in rat brain: comparison between substantia nigra pars compacta, pars reticulata, and striatum. Nissbrandt H, et al. **J Neurochem** 1989 Apr; 52(4):1170–82

Neuroleptic-sensitive binding sites in the nigrostriatal system: evidence for differential distribution of sigma sites in the substantia nigra, pars compacta of the cat. Graybiel AM, et al. **J Neurosci** 1989 Jan;9(1):326–38

Effect of buflomedil [4-(1-pyrrolidinyl)-1-(2,4,6-trimethoxyphenyl)-1-butanone hydrochloride] on neurotransmitters in the striatum and substantia nigra. Koda H, et al. **Jpn J Pharmacol** 1988 Jul;47(3):253–9

Mitochondrial function in Parkinson's disease [letter; comment] Bindoff LA, et al. **Lancet** 1989 Jul 1;2(8653):49
Comment on: Lancet 1989 Jun 3;1(8649):1269

Compensatory responses to nigrostriatal bundle injury. Studies with 6-hydroxydopamine in an animal model of parkinsonism. Zigmond MJ, et al. **Mol Chem Neuropathol** 1989 Jun;10(3):185–200 (65 ref.)

The 5-hydroxytryptamine 5-HT1D receptor subtype is negatively coupled to adenylate cyclase in calf substantia nigra. Schoeffter P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):602–8

Biogenic amines and their metabolites in Alzheimer's disease: noradrenaline, 5-hydroxytryptamine and 5-hydroxyindole-3-acetic acid depleted in hippocampus but not in substantia innominata. Baker GB, et al. **Neurosci Lett** 1989 May 22;100(1-3):335–9

Somatodendritic release of endogenous dopamine: in vivo dialysis in the A10 dopamine region. Kalivas PW, et al. **Neurosci Lett** 1989 May 22;100(1-3):215–20

The neurotoxin MPTP does not reproduce in the rhesus monkey the interregional pattern of striatal dopamine loss typical of human idiopathic Parkinson's disease. Pifl C, et al. **Neurosci Lett** 1988 Oct 5;92(2):228–33

Ultrastructural correlates of functional relationships between nigral dopaminergic or cortical afferent fibers and neuropeptide Y-containing neurons in the rat striatum. Vuillet J, et al. **Neurosci Lett** 1989 May 22;100(1-3):99–104

Heterogeneous distribution of polysialylated neuronal-cell adhesion molecule during post-natal development and in the adult: an immunohistochemical study in the rat brain. Aaron LI, et al. **Neuroscience** 1989;28(3):701–10

Association of dopamine D1 and D2 receptors with specific cellular elements in the basal ganglia of the cat: the uneven topography of dopamine receptors in the striatum is determined by intrinsic striatal cells, not nigrostriatal axons. Beckstead RM. **Neuroscience** 1988 Dec;27(3):851–63

Experimental hemiparkinsonism in the rat following chronic unilateral infusion of MPP+ into the nigrostriatal dopamine pathway—II. Differential localization of dopamine and cholecystokinin receptors. Beresford IJ, et al. **Neuroscience** 1988 Oct;27(1):129–43

Nigrostriatal dopamine neurons are required to maintain basal levels of substance P in the rat substantia nigra. Cruz CJ, et al. **Neuroscience** 1989;30(2):331–8

In vitro and in vivo release of neurokinin A-like immunoreactivity from rat substantia nigra. Diez-Guerra FJ, et al. **Neuroscience** 1988 Nov;27(2):527–36

Pharmacological characterization of dopaminergic influence on expression of neuropeptide Y immunoreactivity by rat striatal neurons. Kerkerian L, et al. **Neuroscience** 1988 Sep; 26(3):809–17

Effects of the unilateral striatal lesion on neurotransmitter markers in the contralateral striatum and both substantia nigrae of the rat. Masuo Y, et al. **Neuroscience** 1988 Dec; 27(3):827–36

Nigral dopamine autoreceptors are exclusively of the D2 type: quantitative autoradiography of [125I]iodosulpride and [125I]SCH 23982 in adjacent brain sections. Morelli M, et al. **Neuroscience** 1988 Dec;27(3):865–70

Dopamine-regulated phosphorylation of synaptic vesicle-associated proteins in rat neostriatum and substantia nigra. Walaas SI, et al. **Neuroscience** 1989;29(1):9–19

Habenular modulation of dynorphinergic systems in rat ventral mesencephalon. Ichikawa H, et al. **Peptides** 1988 Sep-Oct;9(5):1107–14

GABAergic pallidonigral and "accessory" striatonigral connections demonstrated in cats by double peroxidase labeling. Fisher RS. **Synapse** 1989;4(2):165–7

Direct demonstration of interactions between substance P immunoreactive terminals and tyrosine hydroxylase immunoreactive neurons in the substantia nigra of the rat: an ultrastructural study. Mahalik TJ. **Synapse** 1988; 2(5):508–15

[Dopamine metabolism and the GABA level in the structures of the nigrostriatal and mesolimbic systems of the rat brain in experimental pathology of higher nervous activity] Saul'skaia NB. **Zh Vyssh Nerv Deiat** 1988 Nov-Dec; 38(6):1145–51 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Calcineurin immunoreactivity in striatonigral degeneration. Goto S, et al. **Acta Neuropathol (Berl)** 1989;78(1):65–71

Intracytoplasmic inclusion bodies of the thalamus and the substantia nigra, and Marinesco bodies in myotonic dystrophy: a quantitative morphological study. Ono S, et al. **Acta Neuropathol (Berl)** 1989;77(4):350–6

Decreased glucose utilization in the striatum and frontal lobe in probable striatonigral degeneration. De Volder AG, et al. **Ann Neurol** 1989 Aug;26(2):239–47

A quantitative investigation of the substantia nigra in Huntington's disease. Oyanagi K, et al. **Ann Neurol** 1989 Jul;26(1):13–9

Dementia in Parkinson's disease is related to neuronal loss in the medial substantia nigra. Rinne JO, et al. **Ann Neurol** 1989 Jul;26(1):47–50

Neuroleptic malignant syndrome in striatonigral degeneration. Gibb WR. **Br J Psychiatry** 1988 Aug; 153:254–5

MPTP produces a pattern of nigrostriatal degeneration which coincides with the mosaic organization of the caudate nucleus. Turner BH, et al. **Brain Res** 1988 Nov 8; 473(1):60–4

Striatonigral degeneration. A case report and a review of the literature. van Leeuwen RB, et al. **Clin Neurol Neurosurg** 1988;90(2):121–4 (35 ref.)

Seizure-induced damage in the substantia nigra pars reticulata: lesions in the frontal cortex prior to the seizure period mitigate the damage. Ingvar M. **Exp Brain Res** 1989; 75(2):369–74

The substantia nigra and ventral tegmental area in Alzheimer's disease and Down's syndrome. Gibb WR, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):193–200

Asymmetry of substantia nigra neuronal loss in Parkinson's disease and its relevance to the mechanism of levodopa related motor fluctuations. Kempster PA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):72–6

Lewy bodies contain epitopes both shared and distinct from Alzheimer neurofibrillary tangles. Galloway PG, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):654–63

Some features of the nigrostriatal dopaminergic neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) in the mouse. Heikkila RE, et al. **Mol Chem Neuropathol** 1989 Jun;10(3):171–83 (54 ref.)

MPTP-induced ventral mesencephalic cell loss in the cat. Williams JL, et al. **Neurosci Lett** 1989 Jul 3;101(3):258–62

[Two adult cases of adrenoleukodystrophy with clinical features of striatonigral degeneration—a probable variant of adrenoleukodystrophy] Sano M, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):996–1003 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Nigral influence on intestinal activity in the cat. Gravante G, et al. **Acta Neurol (Napoli)** 1988 Aug-Oct;10(4-5):231–8

Firing patterns of midbrain dopamine neurons: differences between A9 and A10 cells. Grenhoff J, et al. **Acta Physiol Scand** 1988 Sep;134(1):127–32

Cortical lesions interfere with behavioral recovery from unilateral substantia nigra lesions induced by brain grafts. Freed WJ, et al. **Behav Brain Res** 1989 Apr 1;32(3):279–88

Circling behavior: ethological analysis and functional considerations. Piazza PV, et al. **Behav Brain Res** 1989 Jan 1;31(3):267–71

The influence of dopaminergic A10 neurons on the motor pattern evoked by substantia nigra (pars compacta) stimulation. Piazza PV, et al. **Behav Brain Res** 1989 Jan 1;31(3):273–8

Neonatal dopamine-rich grafts and 6-OHDA lesions independently provide partial protection from the adult nigrostriatal lesion syndrome. Rogers DC, et al. **Behav Brain Res** 1989 Aug 1;34(1-2):131–46

'Disengage' sensorimotor deficit following apparent recovery from unilateral dopamine depletion. Schallert T, et al. **Behav Brain Res** 1988 Sep 1;30(1):15–24

Prefrontal cortex lesions attenuate substantia nigra self-stimulation: a reward summation analysis. Silverman JA, et al. **Behav Brain Res** 1989 Feb 1;32(1):43–50

Behavioral lateralization in rats and dopaminergic system: individual and population laterality. Castellano MA, et al. **Behav Neurosci** 1989 Feb;103(1):46–53

Lesions of the substantia nigra retard Pavlovian eye-blink but not heart rate conditioning in the rabbit. Kao KT, et al. **Behav Neurosci** 1988 Aug;102(4):515–25

Antidromically identified striatonigral projection neurons in the chronically implanted behaving rat: relations of cell firing to amphetamine-induced behaviors. Ryan LJ, et al. **Behav Neurosci** 1989 Feb;103(1):3–14

Failure to perform visually triggered forelimb movements after unilateral nigrostriatal damage in monkeys. Apicella P, et al. **Brain Behav Evol** 1989;33(2-3):171–4

Experimental bradykinesia in the monkey: speed control impairments after lesion of the substantia nigra. Trouche E, et al. **Brain Behav Evol** 1989;33(2-3):183–8

Microglial response to 6-hydroxydopamine-induced substantia nigra lesions. Akiyama H, et al. **Brain Res** 1989 Jun 12;489(2):247–53

Adrenal medulla grafts enhance functional activity of the striatal dopamine system following substantia nigra lesions. Becker JB, et al. **Brain Res** 1988 Oct 18;462(2):401–6

Anticonvulsant action of GABA receptor blockade in the nigrotectal target region. Dean P, et al. **Brain Res** 1989 Jan 16;477(1-2):391–5

Responses to ramp current stimulation of the neurons in substantia nigra pars compacta in vitro. Fujimura K, et al. **Brain Res** 1988 Dec 13;475(1):177–81

Cholecystokinin antagonist lorglumide reverses chronic haloperidol-induced effects on dopamine neurons. Jiang LH, et al. **Brain Res** 1988 Nov 8;473(1):165–8

Spreading depression induced by 100 mM KCl in caudate is blocked by local anesthesia of the substantia nigra. Kasser RJ, et al. **Brain Res** 1988 Dec 20;475(2):333–44

Time-dependent changes in the sensitivity of dopamine neurons to low doses of apomorphine following amphetamine infusion. Lee TH, et al. **Brain Res** 1989 Mar 27;483(1):17–29

Potassium ions play a role in the glycine-induced inhibition of rat substantia nigra zona compacta neurones. Mercuri NB, et al. **Brain Res** 1988 Oct 11;462(1):199–203

Substantia nigra as a site of origin of dopamine-dependent motor syndromes induced by stimulation of mu and delta opioid receptors. Morelli M, et al. **Brain Res** 1989 May 15;487(1):120–30

Output pathway for turning behavior from the neostriatum and substantia nigra in cats. Motles E, et al. **Brain Res** 1988 Nov 8;473(1):65–73

Dopamine release at behaviorally relevant parameters of nigrostriatal stimulation: effects of current and frequency. Nicolaysen LC, et al. **Brain Res** 1988 Sep 13;460(1):50–9

Immunocytochemical demonstration of GABAergic synaptic connections in rat substantia nigra after different lesions of the striatonigral projection. Nitsch C, et al. **Brain Res** 1988 Sep 27;461(1):127–42

Effects of apamin on the discharge properties of putative dopamine-containing neurons in vitro. Shepard PD, et al. **Brain Res** 1988 Nov 1;463(2):380–4

Tryptamine receptors: neurochemical and electrophysiological evidence for postsynaptic and functional binding sites. van Nguyen T, et al. **Brain Res** 1989 Jan 2;476(1):85–93

Deoxyglucose analysis of the specific topographic functional interrelations between substantia nigra and globus pallidus. Savaki HE, et al. **Brain Res Bull** 1988 Dec;21(6):855–63

Effects of electroacupuncture and noxious stimuli on the discharge of substantia nigra neurons in rats. Gao DM, et al. **Chen Tzu Yen Chiu** 1988;13(3):215–20, 214

Electrophysiological analysis of dopamine cells from the substantia nigra pars compacta of circling rats. Diana M, et al. **Exp Brain Res** 1989;74(3):625–30

Electrophysiological evidence for the dendritic localization of a calcium conductance in guinea-pig substantia nigra neurones in vitro. Harris NC, et al. **Exp Brain Res** 1989; 74(2):411–6

Intrastriatal dopaminergic grafts restore inhibitory control over striatal cholinergic neurons. Herman JP, et al. **Exp Brain Res** 1988;73(2):236–48

Endogenous dopamine modifies electroresponsiveness of pars compacta cells in the guinea pig substantia nigra in vitro. Kapoor R, et al. **Exp Brain Res** 1989;74(3):653–7

Development of intracerebral dopaminergic grafts: a combined immunohistochemical and autoradiographic study of its time course and environmental influences. Abrous N, et al. **J Comp Neurol** 1988 Jul 1;273(1):26–41

Capsaicin-sensitive vasodilatatory mechanisms in the rat substantia nigra and striatum. Hajós M, et al. **J Neural Transm** 1988;74(3):129–39

gamma-Aminobutyric acid function in the rat striatum is under the double influence of nigrostriatal dopaminergic and thalamostriatal inputs: two modes of regulation?

Samuel D, et al. **J Neurochem** 1988 Dec;51(6):1704–10
Interactions of D1 and D2 dopamine receptors on the ipsilateral vs. contralateral side in rats with unilateral lesions of the dopaminergic nigrostriatal pathway. Sonsalla PK, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):180–5
On the potassium conductance increase activated by GABAB and dopamine D2 receptors in rat substantia nigra neurones. Lacey MG, et al. **J Physiol (Lond)** 1988 Jul;401:437–53
Loss of striatal mu1 opiate binding by substantia nigra lesions in the rat. Bodnar RJ, et al. **Life Sci** 1988;43(21):1697–700
Neurochemical evidence for denervation supersensitivity: the effect of unilateral substantia nigra lesions on apomorphine-induced increases in neostriatal acetylcholine levels. Fibiger HC, et al. **Life Sci** 1974 Jul 1;15(1):57–63
In vivo dopaminergic activity from nucleus accumbens, substantia nigra and ventral tegmental area in the freely moving rat: basal neurochemical output and prolactin effect. Chen JC, et al. **Neuroendocrinology** 1988 Oct; 48(4):329–35
Pentobarbital attenuates the antinociceptive effect of intranigral morphine. Baumeister AA, et al. **Neuropharmacology** 1989 Feb;28(2):194–8
Relationship between rotational behaviour induced by apomorphine and caffeine in rats with unilateral lesion of the nigrostriatal pathway. Casas M, et al. **Neuropharmacology** 1989 Apr;28(4):407–9
Behavioural and morphological changes following treatment with GM-1 ganglioside of rats with an electrolytic lesion of the substantia nigra. Jackson EA, et al. **Neuropharmacology** 1989 Jun;28(6):543–55
Interaction of cortico-subcortical systems in the organization of acts of higher nervous activity. Suvorov NF. **Neurosci Behav Physiol** 1988 Jul-Aug;18(4):330–41 (28 ref.)
Apomorphine-induced inhibition of substantia nigra dopamine neurons: effects of unilateral injection through the internal carotid artery. Akaoka H, et al. **Neurosci Lett** 1989 Mar 27;98(2):205–10
Preservation of dopamine release in the denervated striatum. Altar CA, et al. **Neurosci Lett** 1989 Jan 30;96(3):329–34
Acute haloperidol administration induces depolarization block of nigral dopamine neurons in rats after partial dopamine lesions. Hollerman JR, et al. **Neurosci Lett** 1989 Jan 2;96(1):82–8
Caudato-nigral transmission in the substantia nigra pars reticulata neurons changes with recovery from circling movements induced by microinfusion of ibotenic acid. I. Behavioral study. Udo M, et al. **Neurosci Res** 1989 Jun; 6(5):475–80
Caudato-nigral transmission in the substantia nigra pars reticulata neurons changes with recovery from circling movements induced by microinfusion of ibotenic acid. II. Electrophysiological study on synaptic transmission. Udo M, et al. **Neurosci Res** 1989 Jun;6(5):481–6
Pressure ejection of acetylcholinesterase within the guinea-pig substantia nigra has non-classical actions on the pars compacta cells independent of selective receptor and ion channel blockade. Greenfield SA, et al. **Neuroscience** 1989;29(1):21–5
Progressive pathology of the caudate nucleus, the substantia nigra pars reticulata and the deeper layers of the colliculus superior: acute behavioural and metabolic effects of intrastriatal kainic acid. Jaspers RM, et al. **Neuroscience** 1989;28(1):159–69
Electrophysiological and pharmacological evidence for the existence of distinct subpopulations of nigrostriatal dopaminergic neuron in the rat. Shepard PD, et al. **Neuroscience** 1988 Nov;27(2):537–46
Development of dopamine innervation and turning behavior in dopamine-depleted infant rats receiving unilateral nigral transplants. Snyder-Keller AM, et al. **Neuroscience** 1989; 30(3):779–94
Connectivity of striatal grafts implanted into the ibotenic acid–lesioned striatum—I. Subcortical afferents. Wictorin K, et al. **Neuroscience** 1988 Nov;27(2):547–62
Spontaneous bodily rotations and direction of locomotion at different times after radio frequency lesions at sites in and near the substantia nigra. Isaacson RL, et al. **Physiol Behav** 1988;44(2):199–204
Inhibitory effect of a selective kappa receptor agonist, U-50, 488H, on methamphetamine-elicited ipsilateral circling behavior in rats with unilateral nigral lesions. Ohno M, et al. **Psychopharmacology (Berlin)** 1989;97(2):219–21
Neurophysiological investigation of effects of the D-1 agonist SKF 38393 on tonic activity of substantia nigra dopamine neurons. Carlson JH, et al. **Synapse** 1987; 1(5):411–6
Electrophysiological and pharmacological characterization of identified nigrostriatal and mesoaccumbens dopamine neurons in the rat. Clark D, et al. **Synapse** 1988;2(5):474–85
D1 receptor activation enhances sciatic nerve stimulation-induced inhibition of nigrostriatal dopamine neurons. Kelland MD, et al. **Synapse** 1989;3(4):339–45
SKF 38393 alters the rate-dependent D2-mediated inhibition of nigrostriatal but not mesoaccumbens dopamine neurons. Kelland MD, et al. **Synapse** 1988;2(4):416–23
Antagonism of ethanol effects by Ro 15-4513: an electrophysiological analysis. Marrosu F, et al. **Synapse** 1989;3(2):117–28
Unilateral lesion of the nigrostriatal pathway decreases the firing rate and alters the firing pattern of globus pallidus neurons in the rat. Pan HS, et al. **Synapse** 1988;2(6):650–6
[Inhibitory effect of substantia nigra–stimulation on neuronal activity of nucleus raphe magnus and its mechanism] Wang DB, et al. **Sheng Li Hsueh Pao** 1988 Oct;40(5):444–51 (Eng. Abstr.) **(Chi)**
[Changes in the neuronal reactions of the substantia nigra to nociceptive stimuli during electroscupuncture] Ta TL, et al. **Biol Nauki** 1988;(7):53–8 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Dorsal raphe stimulation modulates responses of substantia nigra, pars reticulata neurons to painful stimulation. Moyanova S, et al. **Acta Physiol Pharmacol Bulg** 1988; 14(2):24–32
Rate of cell death in parkinsonism indicates active neuropathological process. McGeer PL, et al. **Ann Neurol** 1988 Oct;24(4):574–6
Involvement of nigrotecto-reticulospinal pathways in the iminodipropionitrile (IDPN) model of spasmodic dyskinesias: a 2-deoxy-D-[1-14C]glucose study in the rat. Cadet JL, et al. **Brain Res** 1989 Apr 10;484(1-2):57–64
Hemiparkinsonism in monkeys after unilateral caudate nucleus infusion of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP): behavior and histology. Imai H, et al. **Brain Res** 1988 Dec 6;474(2):327–32
The role of the nigrotegmental GABAergic pathway in the propagation of pentylenetetrazol-induced seizures. Okada R, et al. **Brain Res** 1989 Feb 20;480(1-2):383–7
Injection of benzodiazepines but not GABA or muscimol into pars reticulata substantia nigra suppresses pentylenetetrazol seizures. Zhang H, et al. **Brain Res** 1989 May 29;488(1-2):73–9
Experimental epilepsy: developmental aspects. Moshé SL, et al. **Cleve Clin J Med** 1989;56 Suppl Pt 1:S92–9; discussion S121-3 (25 ref.)
Inhibitory control by substantia nigra of generalized epilepsy in the cat. Sabatino M, et al. **Epilepsy Res** 1988 Nov-Dec; 2(6):380–6
Paraneoplastic degeneration of the substantia nigra with dystonia and parkinsonism. Golbe LI, et al. **Mov Disord** 1989;4(2):147–52
Striatonigral suppression of focal hippocampal epilepsy. Sabatino M, et al. **Neurosci Lett** 1989 Apr 10;98(3):285–90
Experimental hemiparkinsonism in the rat following chronic unilateral infusion of MPP+ into the nigrostriatal dopamine pathway—I. Behavioural, neurochemical and histological characterization of the lesion. Sirinathsinghji DJ, et al. **Neuroscience** 1988 Oct;27(1):117–28
Nigral control of hippocampal epilepsy: a dopaminergic hypothesis. Michele S, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1109–10

SECRETION

A possible ionic basis for dendritic release of dopamine in the guinea-pig substantia nigra. Nedergaard S, et al. **Acta Physiol Scand** 1989 Jan;135(1):67–8
Modulation of dendritic release of dopamine by N-methyl-D-aspartate receptors in rat substantia nigra. Araneda R, et al. **J Neurochem** 1989 Mar;52(3):962–70
Rapid release of substance P and LH-RH from synaptosomes prepared from the medial basal hypothalamus and substantia nigra. Shu C, et al. **Peptides** 1989 Jan-Feb; 10(1):131–6

SURGERY

Adrenal medullary autograft in human brain for Parkinson's disease [letter] Frank F, et al. **Acta Neurochir (Wien)** 1988; 94(3-4):162–3

TRANSPLANTATION

Fetal substantia nigra grafts. Effect on dopamine receptors in the rat corpus striatium. Korfali E, et al. **Cleve Clin J Med** 1989 May;56(3):259–62
Nigrostriatal reconstruction after 6-OHDA lesions in rats: combination of dopamine-rich nigral grafts and nigrostriatal "bridge" grafts. Dunnett SB, et al. **Exp Brain Res** 1989;75(3):523–35
Graft-derived recovery from 6-OHDA lesions: specificity of ventral mesencephalic graft tissues. Dunnett SB, et al. **Exp Brain Res** 1988;71(2):411–24
Behavioral and anatomical correlates of immunologically induced rejection of nigral xenografts. Carder RK, et al. **J Comp Neurol** 1988 Nov 15;277(3):391–402
Transplantation advances in Parkinson's disease. Sladek JR Jr, et al. **Mov Disord** 1989;4 Suppl 1:S120–5
Effect of haloperidol on transplants of fetal substantia nigra: evidence for feedback regulation of dopamine turnover in the graft and its projections. Meloni R, et al. **Prog Brain Res** 1988;78:457–61
[Transplant-induced recovery from 6-OHDA lesions of the nigro-striatal dopamine neurons in mice] Shimizu K, et al. **No To Shinkei** 1988 Jul;40(7):623–8 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Mitochondria covered with a net of parallel and latticed filaments in nigral neurons of monkeys with experimental parkinsonism. Nakamura H, et al. **Acta Neuropathol (Berl)** 1989;77(5):489–93
Substantia nigra lesions in mercaptopropionic acid induced status epilepticus: a light and electron microscopic study. Towfighi J, et al. **Acta Neuropathol (Berl)** 1989;77(6):612–20
Neurons of the substantia nigra reticulata receive a dense GABA-containing input from the globus pallidus in the rat. Smith Y, et al. **Brain Res** 1989 Jul 24;493(1):160–7
Monosynaptic striatal inputs to the nigrotegmental neurons: an electron microscopic study in the cat. Tokuno H, et al. **Brain Res** 1989 Apr 17;485(1):189–92
The cholinergic innervation of the rat substantia nigra: a light and electron microscopic immunohistochemical study. Beninato M, et al. **Exp Brain Res** 1988;72(1):178–84
Foamy spheroid bodies in the substantia nigra. Report of an unusual case with recurrent attacks of peculiar twilight state. Arai N, et al. **J Neurol** 1988 Jul;235(6):330–4
Morphological alterations of rat substantia nigra induced by short-lasting anoxia in vitro. Kida E, et al. **Neuropatol Pol** 1988;26(2):193–202
Effects of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) on ultrastructure of nigral neuromelanin in Macaca fascicularis. Levi AC, et al. **Neurosci Lett** 1989 Jan 30;96(3):271–6
Electron microscopic localization of cholinergic terminals in the rat substantia nigra: an immunocytochemical study. Martínez-Murillo R, et al. **Neurosci Lett** 1989 Jan 16; 96(2):121–6
Monosynaptic nigral inputs to the pedunculopontine tegmental nucleus neurons which send their axons to the medial reticular formation in the medulla oblongata. An electron microscopic study in the cat. Nakamura Y, et al. **Neurosci Lett** 1989 Aug 28;103(2):145–50

SUBSTRATE SPECIFICITY

Structural plasticity broadens the specificity of an engineered protease. Bone R, et al. **Nature** 1989 May 18; 339(6221):191–5
Reconstruction of an enzyme by domain substitution effectively switches substrate specificity. Houghton JE, et al. **Nature** 1989 Mar 9;338(6211):172–4
Alteration of mouse cytochrome P450coh substrate specificity by mutation of a single amino-acid residue. Lindberg RL, et al. **Nature** 1989 Jun 22;339(6226):632–4
Reversing enzyme specificity [news] Poulos TL. **Nature** 1989 Jun 22;339(6226):580–1

SUBTALAR JOINT

Inflammatory arthritis of the subtalar joint. Berger RG. **Am J Med** 1989 Jul;87(1):117–8

ABNORMALITIES

Medial talo-calcaneal coalition. Case report. Daly BD, et al. **Eur J Radiol** 1988 Nov;8(4):253–4
Subtalar joint coalition in children: new observations. Lee MS, et al. **Radiology** 1989 Sep;172(3):635–9

INJURIES

Subtalar dislocations. Zimmer TJ, et al. **Clin Orthop** 1989 Jan;(238):190–4
[Subtalar luxation] Chrintz H, et al. **Ugeskr Laeger** 1989 Jun 26;151(26):1674–5 (Eng. Abstr.) **(Dan)**
[Subtalar dislocations] Freund KG. **Ugeskr Laeger** 1988 Oct 10;150(41):2462–4 (Eng. Abstr.) **(Dan)**
[The "positioned image" of the talo-calcaneus joint in instability of the posterior distal ankle joint] Bruns J, et al. **Aktuel Traumatol** 1989 Apr;19(2):82–4 (Eng. Abstr.) **(Ger)**
[Changes in pressure and contact surface of the talar joint surface in various foot angle positions and following stepwise division of the fibular ligaments—an experimental study] Paar O, et al. **Aktuel Traumatol** 1988 Dec; 18(6):255–60 (Eng. Abstr.) **(Ger)**
[Dislocations of the talus joints] Amon K, et al. **Unfallchirurg** 1989 Jul;92(7):335–45 (Eng. Abstr.) **(Ger)**
[Increased pressure in the compartments of the sole in joint fractures of the calcaneus] Ender HG, et al. **Unfallchirurg** 1988 Nov;91(11):523–6 (Eng. Abstr.) **(Ger)**
[Indications for conservative surgical treatment of calcaneus fractures] Hörster G. **Unfallchirurg** 1988 Nov;91(11):502–6 (27 ref.) (Eng. Abstr.) **(Ger)**
[Osteosynthesis of dislocated intra-articular calcaneus fractures] Zwipp H, et al. **Unfallchirurg** 1988 Nov; 91(11):507–15 (Eng. Abstr.) **(Ger)**
[The lower ankle joint. Anatomic and pathophysiologic observations] Machan FG, et al. **Zentralbl Chir** 1989; 114(6):371–80 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Stabilizing effect of the tibiocalcaneal fascicle of the deltoid ligament on hindfoot joint movements: an experimental study. Kjaersgaard-Andersen P, et al. **Foot Ankle** 1989 Aug;10(1):30–3
Evaluation of the neutral position of the subtalar joint. Cook A, et al. **J Am Podiatr Med Assoc** 1988 Sep;78(9):449–51
Comment on 'A biomechanical analysis of the talocalcaneal joint in vitro' [letter] Evans P. **J Biomech** 1988;21(8):692
The three-dimensional kinematics and flexibility characteristics of the human ankle and subtalar joints—Part I: Kinematics. Siegler S, et al. **J Biomech Eng** 1988 Nov; 110(4):364–73

PHYSIOPATHOLOGY

Rotational equilibrium across the subtalar joint axis. Kirby KA. **J Am Podiatr Med Assoc** 1989 Jan;79(1):1–14

The three-dimensional kinematics and flexibility characteristics of the human ankle and subtalar joint—Part II: Flexibility characteristics. Chen J, et al. **J Biomech Eng** 1988 Nov;110(4):374–85

[Medial stress syndrome in military conscripts] Hald N, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2070–2 (Eng. Abstr.) **(Dan)**

RADIOGRAPHY

Comment on the article by Downey et al [letter] Kirkham BW, et al. **Arthritis Rheum** 1989 Mar;32(3):359

Subtalar and intertarsal joint involvement in hemophilia and juvenile chronic arthritis: frequency and diagnostic significance of radiographic abnormalities. Morgante D, et al. **Foot Ankle** 1988 Aug;9(1):45–8

Rigid subtalar joint—a radiographic spectrum. Bower BL, et al. **Skeletal Radiol** 1989;17(8):583–8

Radiographic observations of subtalar joint effusion in two children. Eggli KD. **Skeletal Radiol** 1989;18(3):207–9

SURGERY

A modified subtalar arthroereisis implant for the correction of flexible flatfoot in children. The STA Peg procedure. Lepow GM, et al. **Clin Podiatr Med Surg** 1989 Jul; 6(3):585–90 (5 ref.)

Subtalar distraction bone block fusion for late complications of os calcis fractures. Carr JB, et al. **Foot Ankle** 1988 Oct; 9(2):81–6

Arthroereisis of the subtalar joint. Peters PA, et al. **Foot Ankle** 1989 Aug;10(1):48–50 (19 ref.)

Dowel bone graft technique for triple arthrodesis in talocalcaneal coalition—report of a case with 12-year follow-up. Peterson HA. **Foot Ankle** 1989 Feb;9(4):201–3

Modification of fixation technique for a subtalar joint and triple arthrodesis. Kuwada GT. **J Am Podiatr Med Assoc** 1988 Sep;78(9):482–5

Isolated talocalcaneal arthrodesis. A technique using moldable bone graft. Russotti GM, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1472–8

SUBTILISINS

Assignment of histidine resonances in the 1H NMR (500 MHz) spectrum of subtilisin BPN' using site-directed mutagenesis. Bycroft M, et al. **Biochemistry** 1988 Sep 20; 27(19):7390–4

Automated protein crystallization and a new crystal form of a subtilisin:eglin complex. Kelders HA, et al. **Protein Eng** 1987 Aug–Sep;1(4):301–3

The refined crystal structure of subtilisin Carlsberg at 2.5 A resolution. Neidhart DJ, et al. **Protein Eng** 1988 Oct; 2(4):271–6

[Analysis of subtilisin by means of protein engineering] Sakiyama F. **Tanpakushitsu Kakusan Koso** 1989 Mar; 34(3):242–5 **(Jpn)**

ANALYSIS

Immobilized-metal affinity and hydroxyapatite chromatography of genetically engineered subtilisin. Chicz RM, et al. **Anal Chem** 1989 Aug 1;61(15):1742–9

Sodium dodecyl sulfate polyacrylamide gel electrophoresis as a method for studying the stability of subtilisin. Narhi LO, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):144–9

The role of Pro-239 in the catalysis and heat stability of subtilisin E. Takagi H, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):953–6

Improvement in the alkaline stability of subtilisin using an efficient random mutagenesis and screening procedure. Cunningham BC, et al. **Protein Eng** 1987 Aug–Sep; 1(4):319–25

Thermitase, a thermostable subtilisin: comparison of predicted and experimental structures and the molecular cause of thermostability. Frömmel C, et al. **Proteins** 1989; 5(1):22–37

[Detection and characterization of collagenolytic activity of serine proteases of the subtilisin type] Kulaev IS, et al. **Dokl Akad Nauk SSSR** 1988;303(2):499–502 **(Rus)**

ANTAGONISTS & INHIBITORS

Subtilisin inhibitors in legume seeds. Seidl DS, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:69–73

A novel extracellular subtilisin inhibitor produced by a Streptomyces sp. Kourteva Y, et al. **FEBS Lett** 1989 Apr 24;247(2):468–70

BIOSYNTHESIS

Protein engineering of disulfide bonds in subtilisin BPN'. Mitchinson C, et al. **Biochemistry** 1989 May 30; 28(11):4807–15

GENETICS

Yeast KEX2 genes encodes an endopeptidase homologous to subtilisin-like serine proteases. Mizuno K, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):246–54

Engineering thermostability in subtilisin BPN' by in vitro mutagenesis. Rollence ML, et al. **Crit Rev Biotechnol** 1988; 8(3):217–24

Expression and secretion of human atrial natriuretic alpha-factor in Bacillus subtilis using the subtilisin signal peptide. Wang LF, et al. **Gene** 1988 Sep 15;69(1):39–47

Molecular cloning of the structural gene for alkaline elastase YaB, a new subtilisin produced by an alkalophilic Bacillus strain. Kaneko R, et al. **J Bacteriol** 1989 Sep;171(9):5232–6

Bacillus subtilis subtilisin gene (aprE) is expressed from a sigma A (sigma 43) promoter in vitro and in vivo. Park SS, et al. **J Bacteriol** 1989 May;171(5):2657–65

Mutant subtilisin E with enhanced protease activity obtained by site-directed mutagenesis. Takagi H, et al. **J Biol Chem** 1988 Dec 25;263(36):19592–6

Pro-sequence of subtilisin can guide the refolding of denatured subtilisin in an intermolecular process. Zhu XL, et al. **Nature** 1989 Jun 8;339(6224):483–4

[Protein engineering on subtilisin] Takagi H. **Seikagaku** 1989 Mar;61(3):202–7 **(Jpn)**

ISOLATION & PURIFICATION

Surface-mediated retention effects of subtilisin site-specific variants in cation-exchange chromatography. Chicz RM, et al. **J Chromatogr** 1988 Jun 29;443:193–203

METABOLISM

Structural comparison of two serine proteinase-protein inhibitor complexes: eglin-c-subtilisin Carlsberg and CI-2-subtilisin Novo. McPhalen CA, et al. **Biochemistry** 1988 Aug 23;27(17):6582–98

Acylation of subtilisin A by aryl esters: contribution to rate limitation by a physical step preceding general acid-base catalysis. Matta MS, et al. **Biochemistry** 1988 Oct 18; 27(21):8000–7

QSAR analysis of the subtilisin hydrolysis of X-phenyl hippurates. II. A study of subtilisin BPN'. Carotti A, et al. **Chem Biol Interact** 1988;67(3–4):171–84

Stoichiometry of the interaction of human plasma alpha 1-proteinase inhibitor with subtilisin BPN'. Abe O, et al. **J Biochem (Tokyo)** 1989 Jan;105(1):66–71

Binding of the recombinant proteinase inhibitor eglin c from leech Hirudo medicinalis to human leukocyte elastase, bovine alpha-chymotrypsin and subtilisin Carlsberg: thermodynamic study. Ascenzi P, et al. **J Enzym Inhib** 1988;2(3):167–72

Comparative characterization of the substrate-binding subsites in subtilisins DY and Carlsberg by fluorescence and kinetic studies. Boteva R, et al. **J Photochem Photobiol -B-** 1988 May;1(4):461–8

RADIATION EFFECTS

Photosensitization tissue model. Schifano MJ, et al. **Photochem Photobiol** 1989 Apr;49(4):401–5

SUBTRACTION TECHNIC

Preoperative localization of parathyroid adenoma by thallium–technetium subtraction scintigraphy. Coolens JL, et al. **Acta Otorhinolaryngol Belg** 1988;42(5):598–603

Intraarterial digital subtraction venography (i.a.-DSV) of abdominal vessels. Dawson P, et al. **Acta Radiol** 1989 Jan–Feb;30(1):109–11

Demonstration of pedal arterial arcades in occlusive arteriosclerotic disease. Conventional and digital subtraction angiography compared. Hol PK, et al. **Acta Radiol** 1989 Jan–Feb;30(1):61–3

On-line monitoring of sequential blood flow reduction during splenic embolization. Link DP, et al. **Acta Radiol** 1989 Jan–Feb;30(1):101–3

Intraarterial digital subtraction angiography for definitive diagnosis of intracranial aneurysms. Touho H, et al. **AJNR** 1988 Nov–Dec;9(6):1157–61

Digital subtraction wrist arthrography: evaluation of the multiple-compartment technique. Quinn SF, et al. **AJR** 1988 Dec;151(6):1173–4

Assessment of coronary angioplasty by an automated digital angiographic method. Katritsis D, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1181–7

Review of the uses of digital "road map" techniques in interventional radiology. McDermott JC, et al. **Ann Radiol (Paris)** 1989;32(1):11–3

Intra-arterial digital subtraction angiography in the evaluation of peripheral vascular trauma. Howard CA, et al. **Ann Surg** 1989 Jul;210(1):108–11

Assessment of aortocoronary bypass graft patency by intra-arterial digital subtraction angiography compared to selective graft angiography. Grigg LE, et al. **Aust N Z J Med** 1988 Aug;18(5):651–5

Demonstration of the ascending aorta in infective endocarditis by intravenous digital subtraction angiography. Hunter GJ, et al. **Br Heart J** 1988 Sep; 60(3):252–8

Phase and amplitude analysis of exercise digital left ventriculograms in patients with coronary disease. Lyons J, et al. **Br Heart J** 1989 Aug;62(2):102–11

Demonstration of the ascending aorta in infective endocarditis by intravenous digital subtraction angiography [letter] Smyllie JH, et al. **Br Heart J** 1989 Jun;61(6):554

Central venous catheter placement for intravenous digital subtraction angiography: an assessment of technical problems and success rate. Barber CJ. **Br J Radiol** 1989 Jul;62(739):599–602

Comparison of techniques for thallium-201–technetium-99m parathyroid imaging. Brownless SM, et al. **Br J Radiol** 1989 Jun;62(738):532–5

Clinically unsuspected complications of arterial surgery shown by post-operative digital subtraction angiography. Teeuwen C, et al. **Br J Radiol** 1989 Jan;62(733):13–9

Digital subtraction angiography of the kidney. Gattoni F, et al. **Br J Urol** 1988 Sep;62(3):214–8

False-negative IV-DSA in external jugular phlebectasia. Aggarwal S, et al. **Can Assoc Radiol J** 1989 Feb;40(1):57–8

Imaging of the digital arteries: digital subtraction angiography versus conventional arteriography [published erratum appears in Can Assoc Radiol J 1989 Jun;40(3):182] Menanteau BP, et al. **Can Assoc Radiol J** 1989 Feb; 40(1):34–7

Digital subtraction spinal cord angiography in patients undergoing thoracic aneurysm surgery. Fereshetian A, et al. **Cardiovasc Intervent Radiol** 1989 Jan–Feb;12(1):7–9

Intraarterial digital subtraction angiography in detection of hepatocellular carcinoma. Takahashi K, et al. **Cardiovasc Intervent Radiol** 1989 Mar–Apr;12(2):61–5

Intra-arterial digital subtraction angiography for children with idiopathic renal bleeding: a diagnosis of nutcracker phenomenon [published erratum appears in Clin Nephrol 1989 May;31(5):280] Takahashi Y, et al. **Clin Nephrol** 1988 Sep;30(3):134–40

Parathyroid subtraction imaging—pitfalls in diagnosis. Blue PW, et al. **Clin Nucl Med** 1989 Jan;14(1):47–57 (13 ref.)

Digital subtraction angiography—a critical analysis. Dawson P. **Clin Radiol** 1988 Sep;39(5):474–7

Digital subtraction angiography [letter] Stevens J. **Clin Radiol** 1989 May;40(3):325–6

Improvement of parathyroid Tl-Tc scintigraphy by using a new image subtraction method. Liehn JC, et al. **Eur J Nucl Med** 1988;14(4):184–9

Calculation of flow velocities from the geometrical shape of contrast agent-induced time-density curves using DSA. Dölken W, et al. **Eur J Radiol** 1988 Nov;8(4):208–13

Digital subtraction radiography in voiding cystourethrography. Perri G, et al. **Eur J Radiol** 1988 Aug; 8(3):175–8

Observer variability with conventional and digital subtraction carotid angiograms. Moll FL, et al. **Eur J Vasc Surg** 1987 Oct;1(5):297–303

Arterial bolus curve after intravenous injection of ionic and nonionic contrast media. Gmelin E, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:67–9

Renal and hepatic tolerance of nonionic and ionic contrast media in intravenous digital subtraction angiography. Langer M, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:95–100

Renal excretion of iopromide and iopamidol after intravenous administration in digital subtraction angiography. Mültzel W, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:101–4

Nephrotoxicity of high and low osmolar contrast media: case control studies following digital subtraction angiography in potential risk patients. Scherberich JE, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:91–4

Influence of an ionic and a nonionic (sodium meglumine diatrizoate and iopromide) x-ray contrast medium of hemorrheology. Strecker EP, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:24–7

Digital subtraction angiography of right cervical aortic arch. Magherini A, et al. **G Ital Cardiol** 1988 Apr;18(4):339–41

Role of digital subtraction angiography in the evaluation of abdominal aortic aneurysms. Sharma S, et al. **Indian Heart J** 1988 Nov–Dec;40(6):442–7

Pulmonary artery involvement in aorto-arteritis. Tyagi S, et al. **Indian Heart J** 1987 Nov–Dec;39(6):46–50

Role of digital subtraction angiography in the evaluation of systemic hypertension. Sharma S, et al. **Indian Pediatr** 1988 Sep;25(9):834–8

The effect of balloon dilatation on post-stenotic myocardial perfusion before and after stimulation of coronary flow reserve: evaluation by the densitometric parameter 'mean rise time'. Haude M, et al. **Int J Card Imaging** 1988; 3(2–3):127–32

Correlations between quantitative cineangiography, coronary flow reserve measured with digital subtraction cineangiography and exercise thallium perfusion scintigraphy. Zijlstra F, et al. **Int J Card Imaging** 1988; 3(2–3):133–9

Tricuspid regurgitation diagnosed by intravenous digital subtraction angiography. Tomizawa T, et al. **J Cardiol** 1988 Jun;18(2):403–14

A prospective comparison of intra-arterial digital subtraction and conventional angiography prior to lower extremity revascularization. Friedman SG, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):462–6

Computer-assisted image analysis [letter] Benn DK. **J Clin Periodontol** 1988 Oct;15(9):592–3

Color conversion of alveolar bone density changes in digital subtraction images. Brägger U, et al. **J Clin Periodontol** 1989 Apr;16(4):209–14

Problems around the in vitro and in vivo application of quantitative digital subtraction radiography. Janssen PT,

et al. **J Clin Periodontol** 1989 May;16(5):323–30

The detection of in vitro produced periodontal bone lesions by conventional radiography and photographic subtraction radiography using observers and quantitative digital subtraction radiography. Janssen PT, et al. **J Clin Periodontol** 1989 Jul;16(6):335–41

The effect of in-vivo-occurring errors in the reproducibility of radiographs on the use of the subtraction technique. Janssen PT, et al. **J Clin Periodontol** 1989 Jan;16(1):53–8

Digital subtraction angiography in preoperative examination of congenital hand malformations. Mantero R, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 2):351–2

Value of blood-pool subtraction in cardiac indium-111-labeled platelet imaging. Machac J, et al. **J Nucl Med** 1989 Sep;30(9):1445–55

A contrast-correction method for digital subtraction radiography. Ohki M, et al. **J Periodont Res** 1988 Jul; 23(4):277–80

The effects of beam hardening on digital subtraction radiography. Webber RL, et al. **J Periodont Res** 1989 Jan; 24(1):53–8

Effect of periodontal therapy on alveolar bone as measured by subtraction radiography. Schmidt EF, et al. **J Periodontol** 1988 Oct;59(10):633–8

Outpatient angiographic evaluation of living renal donors. Spencer W, et al. **J Urol** 1988 Dec;140(6):1364–6

Operative angiography by intraarterial digital subtraction angiography: a new technique for quality control of carotid endarterectomy. Bredenberg CE, et al. **J Vasc Surg** 1989 Apr;9(4):530–4

Duplex ultrasound scanning in the assessment of arteriovenous fistulas created for hemodialysis access: comparison with digital subtraction angiography. Tordoir JH, et al. **J Vasc Surg** 1989 Aug;10(2):122–8

On the use of double-quantum coherence from an AX3 system (protons in lactate) for spectral editing. Nosel W, et al. **Magn Reson Med** 1989 Sep;11(3):398–404

Regional myocardial perfusion abnormality demonstrated by intra-arterial digital subtraction angiogram at capillary phase. A comparison of DSA with left ventriculography and thallium-201 myocardial scintigraphy. Takeda T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25; 48(9):1069–77

Comparison of two interpolative background subtraction methods using phantom and clinical data. Houston AS, et al. **Nucl Med Commun** 1989 Feb;10(2):121–32

A multiple regression analysis for accurate background subtraction in 99Tcm-DTPA renography. Middleton GW, et al. **Nucl Med Commun** 1989 May;10(5):315–24

Diagnosis and evaluation of diseases of the hand by intravenous digital subtraction angiography done by an improved method. Minakuchi K, et al. **Osaka City Med J** 1988 Oct;34(2):191–200

Comparison of image quality and portal vein visualization in IADSP using iopamidol, 76% urografin, and 38% urografin. Shibata T, et al. **Radiat Med** 1988 May-Jun; 6(3):120–3

Cerebrovascular disease: outpatient evaluation with selective carotid DSA performed via a transbrachial approach. Barnett FJ, et al. **Radiology** 1989 Feb;170(2):535–9

Intravenous digital subtraction renal angiography: use in screening for renovascular hypertension [letter] Millward SF. **Radiology** 1989 Oct;173(1):283

DSA in acute gastrointestinal hemorrhage: clinical and in vitro studies. Rees CR, et al. **Radiology** 1988 Nov; 169(2):499–503

Experiences with DSA in the diagnosis of pulmonary embolism. Arany L, et al. **Rontgenblatter** 1988 Oct; 41(10):426–8

Digital subtraction angiography of the foot in atherosclerotic occlusive disease. Gavant ML. **South Med J** 1989 Mar; 82(3):328–34

The use of preoperative localization of adenomas of the parathyroid glands by thallium-technetium subtraction scintigraphy, high-resolution ultrasonography and computed tomography. Roses DF, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):99–106

The value of the lateral projection in preoperative assessment of abdominal aortic aneurysms by IV-DSA. Thomas ML, et al. **Vasa** 1989;18(1):13–7

[Intra-arterial digital subtraction angiography (IADSA) of intracranial lesions (an analysis of 600 cases)] Gao PY. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Apr;23(2):69–71 (Eng. Abstr.) (Chi)

[Evaluation of digital subtraction angiography (DSA) in the diagnosis of aorto-arteritis] Li YQ. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Aug;22(4):193–5 (Eng. Abstr.) (Chi)

[Intra-arterial digital subtraction angiography (IADSA) in the investigation of intracranial diseases] Tang JF. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Aug;22(4):196–9 (Eng. Abstr.) (Chi)

[Intravenous digital subtraction angiography in diagnosing renovascular hypertension in 82 cases] Peng BR, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Jun; 16(3):156–8, 189–90 (Eng. Abstr.) (Chi)

[The significance of digital subtraction angiography in diseases of the lungs and mediastinum] Bohutová J, et al. **Cesk Radiol** 1989 Mar;43(2):73–83 (Eng. Abstr.) (Cze)

[Comparison of 2 non-ionic radiographic contrast agents in intravenous subtraction angiography] Kristensen J, et al. **Ugeskr Laeger** 1989 Jun 5;151(23):1474–5 (Eng. Abstr.) (Dan)

[Lung embolism from a diagnostic viewpoint (letter)] **Ned Tijdschr Geneeskd** 1988 Sep 24;132(39):1812–3 (Dut)

[Digital subtraction angiography in clinical practice] Ruijs JH, et al. **Ned Tijdschr Geneeskd** 1988 Sep 24; 132(39):1789–92 (24 ref.) (Dut)

[Ambulatory anesthesia in intravenous digital angiography in children. 340 cases] Walcker JL, et al. **Agressologie** 1989 Apr;30(4):163–8 (Eng. Abstr.) (Fre)

[Digitalized angiography in coronary disease] Doriot PA, et al. **Ann Cardiol Angeiol (Paris)** 1988 Dec;37(10):575–8 (Eng. Abstr.) (Fre)

[Value of digital subtraction of left ventriculographies by the venous route. Comparison with balanced scintigraphy of the heart cavities] Hueber A, et al. **Ann Cardiol Angeiol (Paris)** 1989 Jun;38(6):293–6 (Eng. Abstr.) (Fre)

[Preoperative localization of parathyroid adenoma with technetium and thallium double-labeling scintigraphy. Difficulties related to associated thyroid lesions] Valensi P, et al. **Ann Med Interne (Paris)** 1989;140(4):263–8 (Eng. Abstr.) (Fre)

[Study of velar insufficiency by digital subtraction radiography] Perri G, et al. **Ann Radiol (Paris)** 1988; 31(6):351–4 (Eng. Abstr.) (Fre)

[Digital arteriography of the lower limbs by sequential, automatic table translation. Feasibility. Preliminary results] Seka R, et al. **J Radiol** 1988 Nov;69(11):657–62 (Eng. Abstr.) (Fre)

[Superselective electronic subtraction angiography. Experience in 6 surgically treated hips using the double cup prosthesis] Schwetlick G, et al. **Rev Chir Orthop** 1988; 74(4):362–5 (Eng. Abstr.) (Fre)

[Computerized tomography and nuclear magnetic resonance tomography and digital subtraction angiography of the petrous bone and the surrounding area] Valavanis A. **Arch Otorhinolaryngol Suppl** 1989;1:41–70 (Ger)

[Digital subtraction angiography of the hand] Arlart IP. **Bildgebung** 1987–89;56(2):57–63 (Eng. Abstr.) (Ger)

[The scimitar syndrome in computed tomography and intravenous subtraction angiography] Lörcher U, et al. **Digitale Bilddiagn** 1988 Dec;8(4):184–7 (Eng. Abstr.) (Ger)

[Digital subtraction dacryocystography following surgical interventions] Mohr A, et al. **Fortschr Ophthalmol** 1989; 86(3):251–2 (Eng. Abstr.) (Ger)

[What significance does superselective angiography of the hip joint have in femur head necrosis of the adult before and after management with a vascular pedicled ileal crest graft?] Schwetlick G, et al. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):195–7 (Eng. Abstr.) (Ger)

[Dacryocystography in the digital subtraction technic] Walther EK, et al. **Laryngorhinootologie** 1989 Jul; 68(7):396–400 (Eng. Abstr.) (Ger)

[Digital subtraction angiography (i.v. DSA) in the planning of infradiaphragmatic irradiation of malignant lymphoma] Sciuk J, et al. **Radiologe** 1989 Feb;29(2):85–8 (Eng. Abstr.) (Ger)

[Radiculography using the digital subtraction technic] Voigt K, et al. **Radiologe** 1988 Nov;28(11):507–10 (Eng. Abstr.) (Ger)

[Digital subtraction angiography of the hand] Harder T, et al. **ROFO** 1989 Jul;151(1):82–8 (Eng. Abstr.) (Ger)

[Dacryocystography—conventional technic or digital subtraction technic?] Triebel HJ, et al. **ROFO** 1988 Nov; 149(5):483–8 (Eng. Abstr.) (Ger)

[Digital subtraction angiography in oncologic diagnosis] Hermann HJ. **Rontgenblatter** 1989 Jan;42(1):3–5 (Eng. Abstr.) (Ger)

[The image quality of intravenous digital subtraction angiography with special reference to therapeutic outcome in Stage II peripheral arterial occlusive diseases] Botsch H, et al. **Rontgenpraxis** 1988 Dec;41(12):421–6 (Ger)

[Angiography in peripheral arterial occlusive disease. Comparison between large-format angiography, digital subtraction angiography and intermediate-format technic] Triller J, et al. **Schweiz Med Wochenschr** 1988 Sep 3; 118(35):1248–51 (Eng. Abstr.) (Ger)

[Assessment of umbilical vein transplants using digital subtraction angiography, duplex sonography and color-coded Doppler sonography] Gritzmann N, et al. **Vasa Suppl** 1988;26:30–2 (Ger)

[Intra-arterial digital subtraction angiography and duplex sonography of hemodialysis shunts] Zwicker C, et al. **Vasa Suppl** 1988;26:42–4 (Ger)

[The reliability of angiographic volume determination of the left ventricle using digital image subtraction—significance in stress tests] Jehle J, et al. **Z Kardiol** 1989 May; 78(5):306–12 (Eng. Abstr.) (Ger)

[Digital cystography in the evaluation of vesico-ureteral reflux in childhood] Perri G, et al. **Radiol Med (Torino)** 1989 Apr;77(4):373–7 (Eng. Abstr.) (Ita)

[Quantitative analysis of the left ventricular volume curve by digital subtraction angiography] Ikeda H. **J Cardiol** 1987;17 Suppl 15:27–33 (Eng. Abstr.) (Jpn)

[New imaging technique for the cardiovascular system: introduction to DSA] Kozuka T. **J Cardiol** 1987;17 Suppl 15:19–21 (15 ref.) (Eng. Abstr.) (Jpn)

[Digital subtraction angiography of the coronary artery: evaluation of morphological aspects] Matsunaga N, et al. **J Cardiol** 1987;17 Suppl 15:41–8 (Eng. Abstr.) (Jpn)

[Assessment of myocardial perfusion using digital subtraction angiography] Ohta M. **J Cardiol** 1987;17 Suppl 15:35–9 (Eng. Abstr.) (Jpn)

[Evaluation of coronary blood flow using digital subtraction technique and cine coronary angiography: a preliminary report] Uwatoko M, et al. **J Cardiol** 1988 Jun;18(2):279–90 (Eng. Abstr.) (Jpn)

[Cardiovascular involvement in the aortitis syndrome: a study using digital subtraction angiography] Yamamoto S, et al. **J Cardiol** 1987;17 Suppl 15:23–6 (Eng. Abstr.) (Jpn)

[Optimal projection of the cervical arteries in IV-DSA—appraisal of the overlapping vessels by CT] Hashimoto T. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25;48(6):670–9 (Eng. Abstr.) (Jpn)

[Transbrachial DSA—a review of clinical usefulness and safety of the 413 examinations] Kudo S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25; 48(10):1197–203 (Eng. Abstr.) (Jpn)

[Digital subtraction angiography (DSA) in the diagnosis of gynecologic mass lesions] Matsumoto S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):939–47 (Eng. Abstr.) (Jpn)

[Detection of hepatic neoplasms by hepato-portal subtraction angiography] Takahashi K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1472–4 (Eng. Abstr.) (Jpn)

[Usefulness of intra-arterial digital subtraction angiography using carbon dioxide in hepatocellular carcinoma] Takahashi T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1326–32 (Eng. Abstr.) (Jpn)

[Intra-arterial digital subtraction angiography (IA-DSA) with carbon dioxide] Takeda T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25; 48(9):1053–60 (Eng. Abstr.) (Jpn)

[Usefulness and limitations of digital subtraction angiography in diagnosis of cerebrovascular disorders] Komiya H, et al. **Rinsho Hoshasen** 1988 Jul;33(7):845–8 (Jpn)

[Clinical evaluation of lung tumors by broncho-arterial DSA—compared with conventional film method and analysis by time density curve] Suzuki S, et al. **Rinsho Hoshasen** 1989 Jan;34(1):67–73 (Eng. Abstr.) (Jpn)

[Digital subtraction angiography] Takahashi M, et al. **Rinsho Hoshasen** 1988 Oct;33(11):1195–202 (Jpn)

[Current angiographic methods in the diagnosis of tumors of the kidneys and extremities] Zajgner J, et al. **Pol Przegl Radiol (Warszawa)** 1988 May-Jun;52(3):188–92 (Eng. Abstr.) (Pol)

[Diagnostic value of digital subtraction angiography by the intravenous method in examining the aorta and its various branches] Ziemiański A, et al. **Pol Przegl Radiol (Warszawa)** 1988 May-Jun;52(3):193–7 (Eng. Abstr.) (Pol)

[Digital subtraction angiography of patent ductus arteriosus] Savel'ev SV, et al. **Vestn Rentgenol Radiol** 1989 Jan-Feb; (1):36–9 (Eng. Abstr.) (Rus)

[Digital subtraction angiography in the diagnosis of emergency neurosurgical states] Zingerman LS, et al. **Zh Vopr Neirokhir** 1989 Mar-Apr;(2):50–3 (Eng. Abstr.) (Rus)

[The role of intravenous digital subtraction angiography in the detection of the cause of cerebral ischemia] Tomac B, et al. **Lijec Vjesn** 1989 Jan-Feb;111(1-2):33–8 (Eng. Abstr.) (Scr)

ECONOMICS

Digital subtraction angiography (DSA). Work load and financial implications for a neuroradiology department. Kingsley DP, et al. **Neuroradiology** 1989;31(3):240–6

INSTRUMENTATION

Image noise analysis in digital fluorography. Maher KP, et al. **Australas Phys Eng Sci Med** 1988 Oct-Dec;11(4):143–6

[Roadmapping in intra-arterial subtraction angiography] Hergan K. **Vasa Suppl** 1988;26:201–4 (Ger)

TRENDS

[The development of digital subtraction radiography in dentistry—a review] Brägger U. **Schweiz Monatsschr Zahnmed** 1988;98(11):1200–7 (41 ref.) (Eng. Abstr.) (Ger)

UTILIZATION

[Practical usage of digital subtraction angiography—comparison between the initial and the later stage after introduction] Hino I, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1569–74 (Eng. Abstr.) (Jpn)

SUBURBAN POPULATION

A longitudinal study of mental health problems in a suburban population in Sudan. Cederblad M, et al. **Acta Psychiatr Scand** 1989 Jun;79(6):537–43

Prevalence and incidence of eating disorders in a suburban area. Cullberg J, et al. **Acta Psychiatr Scand** 1988 Sep; 78(3):314–9

Non-returning patients: a survey of inactive patients in a suburban practice. Merenstein JH, et al. **Fam Med** 1989 May-Jun;21(3):206–10

Suburbanization and public services for the aging. Logan

JR, et al. **Gerontologist** 1988 Oct;28(5):644–7
Urban–suburban differences in the incidence of low birthweight in a metropolitan black population. Ahmed F. **J Natl Med Assoc** 1989 Aug;81(8):849–55
The socialization of infants in suburban Boston. Richman AL, et al. **New Dir Child Dev** 1988 Summer;(40):65–74
Differences between community and geographically distant breast cancer patients treated at an urban medical center. Timony D, et al. **Prog Clin Biol Res** 1989;293:373–8

SUBVALVULAR STENOSIS, IDIOPATHIC HYPERTROPHIC see **CARDIOMYOPATHY, HYPERTROPHIC**

SUCCINATE CYTOCHROME C OXIDOREDUCTASE see under **OXIDOREDUCTASES**

SUCCINATE DEHYDROGENASE

ANALYSIS

Fluctuations of succinic dehydrogenase during morphine tolerance, dependence and withdrawals in the spinal cord and medulla oblongata of mice. Josephjohn K, et al. **Acta Neurol Belg** 1988 Nov–Dec;88(5):281–9
Simultaneous histochemical assay of two dehydrogenases in the same cell. Stoward PJ, et al. **Histochem J** 1988 Nov; 20(11):610–6
Biochemical and histochemical localization of succinate dehydrogenase on nuclear membrane of rat thymocytes and splenocytes. Arifuddin M, et al. **Indian J Exp Biol** 1988 May;26(5):397–9
[Development of a test for sperm damage by measuring succinate dehydrogenase activity] Risse S. **Arch Exp Veterinarmed** 1988 Sep;42(5):769–76 (Eng. Abstr.) **(Ger)**

ANTAGONISTS & INHIBITORS

In vitro sensitivity of various human tumors to 1-beta-D-arabinofuranosylcytosine and N4-behenoyl-1-beta-D-arabinofuranosylcytosine. Maehara Y, et al. **Chemotherapy** 1989;35(3):181–6
Marked and variable inhibition by chemical fixation of cytochrome oxidase and succinate dehydrogenase in single motoneurons. Chalmers GR, et al. **J Histochem Cytochem** 1989 Jun;37(6):899–901
Succinate dehydrogenase inhibition test for evaluating head and neck tumors. Nakashima T, et al. **Oncology** 1989; 46(3):162–8
[Comparison of succinic dehydrogenase inhibition test with adenosine triphosphate inhibition assay for human solid tumors as in vitro chemosensitivity tests] Saeki T, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2025–30 (Eng. Abstr.) **(Jpn)**

BLOOD

[Species-specific reactions of succinate dehydrogenase of lymphocytes in animals to acute hypoxic hypoxia and its relation to the radiation resistance of the body] Antipov VV, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr; 23(2):63–6 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Multiple defects of the respiratory chain including complex II in a family with myopathy and encephalopathy. Desnuelle C, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):695–700
Kearns–Sayre syndrome and complex II deficiency. Rivner MH, et al. **Neurology** 1989 May;39(5):693–6
[A case of mitochondrial enzymopathy] Parafiniuk W, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):260–3 (Eng. Abstr.) **(Pol)**

GENETICS

Identification of a second gene involved in global regulation of fumarate reductase and other nitrate-controlled genes for anaerobic respiration in Escherichia coli. Kalman LV, et al. **J Bacteriol** 1989 Jul;171(7):3810–6
Transcriptional and posttranscriptional control of the Bacillus subtilis succinate dehydrogenase operon. Melin L, et al. **J Bacteriol** 1989 Apr;171(4):2110–5
Influence of nar (nitrate reductase) genes on nitrate inhibition of formate-hydrogen lyase and fumarate reductase gene expression in Escherichia coli K-12. Stewart V, et al. **J Bacteriol** 1988 Oct;170(10):4437–44
Subunit location of the iron-sulfur clusters in fumarate reductase from Escherichia coli. Johnson MK, et al. **J Biol Chem** 1988 Oct 15;263(29):14732–8
Use of the DNA polymerase chain reaction for homology probing: isolation of partial cDNA or genomic clones encoding the iron-sulfur protein of succinate dehydrogenase from several species. Gould SJ, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1934–8

ISOLATION & PURIFICATION

One-step purification from Escherichia coli of complex II (succinate: ubiquinone oxidoreductase) associated with succinate-reducible cytochrome b556. Kita K, et al. **J Biol Chem** 1989 Feb 15;264(5):2672–7

METABOLISM

Succinic dehydrogenase and cholinesterase activities in the skeletal muscles of the desert rat and the albino rat. Moustafa FA. **Acta Anat (Basel)** 1989;135(1):31–40
Skeletal muscle pathology in ovine congenital progressive muscular dystrophy. 1. Histopathology and histochemistry. Richards RB, et al. **Acta Neuropathol (Berl)** 1988; 77(2):161–7
Functional development of the visual system in normal and protein-deprived rats. VII. Lamination of oxidative enzyme activity in the visual cortex during post-natal development. Conradi NG, et al. **Acta Physiol Scand** 1989 Aug; 136(4):589–96
Interactions of oxaloacetate with Escherichia coli fumarate reductase. Ackrell BA, et al. **Arch Biochem Biophys** 1989 Jan;268(1):26–34
Differential energetic metabolism during Trypanosoma cruzi differentiation. I. Citrate synthase, NADP-isocitrate dehydrogenase, and succinate dehydrogenase. Adroher FJ, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):252–61
Polarized electric field effects on the regulation of succinate dehydrogenase activity in amphibian muscle and liver: kinetic study. Subrahamanyam K, et al. **Biochem Int** 1989 Apr;18(4):851–63
New properties of Bacillus subtilis succinate dehydrogenase altered at the active site. The apparent active site thiol of succinate oxidoreductases is dispensable for succinate oxidation. Hederstedt L, et al. **Biochem J** 1989 Jun 1; 260(2):491–7
Oxidation of malate by the mitochondrial succinate-ubiquinone reductase. Belikova YO, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):1–9
Electron spin-echo spectroscopic studies of Escherichia coli fumarate reductase. Cammack R, et al. **Biochim Biophys Acta** 1988 Oct 12;956(3):307–12
Postnatal development of the parabrachial gustatory zone in rat: dendritic morphology and mitochondrial enzyme activity. Lasiter PS, et al. **Brain Res Bull** 1988 Jul; 21(1):79–94
A study on enzyme adaptation pattern in postnatal rat liver in relation to activity rest cycle. Bhattacharya RD, et al. **Cell Mol Biol** 1988;34(4):407–17
Changes in succinate dehydrogenase zonation following cyclosporin-treatment in normal and regenerating rat liver. Garcia-Alonso I, et al. **Cell Mol Biol** 1988;34(6):605–14
Diurnal changes in succinate and D-3-hydroxybutyrate dehydrogenase activities of rat liver mitochondria after chronic alcohol consumption and withdrawal. Kaminsky YG, et al. **Comp Biochem Physiol [C]** 1988;90(1):79–82
Influence of environmental temperature and energy intake on skeletal muscle respiratory enzymes and morphology. Dauncey MJ, et al. **Eur J Appl Physiol** 1988;58(3):239–44
Covalent cofactor binding to flavoenzymes requires specific effectors. Brandsch R, et al. **Eur J Biochem** 1989 Jun 1; 182(1):125–8
ESR studies on iron–sulfur clusters of complex II in Ascaris suum mitochondria which exhibits strong fumarate reductase activity. Hata-Tanaka A, et al. **FEBS Lett** 1988 Dec 19;242(1):183–6
The development of activity of succinate dehydrogenase (EC.1.3.99.1) in the areas of the nigro-striatal pathway during the ontogenesis of a pig. Jaworska-Adamu J, et al. **Folia Histochem Cytobiol** 1989;27(2):97–106
Age-related changes in the response of hepatic succinic dehydrogenase activity to thyroxine and thiourea in lizards. Sahu N, et al. **Gerontology** 1988;34(4):179–83
Quantitative histochemical determination of succinic dehydrogenase activity in skeletal muscle fibres. Blanco CE, et al. **Histochem J** 1988 Apr;20(4):230–43
Method of quenching of muscle fibres affects apparent succinate dehydrogenase activity. Van der Laarse WJ, et al. **Histochem J** 1988 Nov;20(11):642–4
Effects of undernutrition on diaphragm fiber size, SDH activity, and fatigue resistance. Sieck GC, et al. **J Appl Physiol** 1989 May;66(5):2196–205
Single motoneuron succinate dehydrogenase activity. Chalmers GR, et al. **J Histochem Cytochem** 1989 Jul; 37(7):1107–14
Maximum rate of oxygen consumption and quantitative histochemistry of succinate dehydrogenase in single muscle fibres of Xenopus laevis. van der Laarse WJ, et al. **J Muscle Res Cell Motil** 1989 Jun;10(3):221–8
Succinate dehydrogenase and synthetic pathways of glucose 6-phosphate are also the markers of the toxicity of orally administered secondary autoxidation products of linoleic acid in rat liver. Kanazawa K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Feb;35(1):25–37
Developmental changes in the intra-acinar distribution of succinate dehydrogenase, glutamate dehydrogenase, glucose-6-phosphatase, and NADPH dehydrogenase in the rat liver. Sokal EM, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):522–7
[Histocytochemical studies on hematoporphyrin photoradiation effect on two enzymes of human liver cancer cells in nude mice] Peng Q, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):272–5 (Eng. Abstr.) **(Chi)**
[The acid phosphatase, alkaline phosphatase, lactate dehydrogenase, and succinate dehydrogenase in the endothelium on the trabecular meshwork in primary glaucoma] Wang JH, et al. **Yen Ko Hsueh Pao** 1988 Dec; 4(4):210–2, 224 (Eng. Abstr.) **(Chi)**
[Morphologic and histoenzymatic studies of rat kidneys after acute 2,4-dichlorophenoxyacetic acid (2,4-D) poisoning] Deregowski K, et al. **Patol Pol** 1988 Oct–Dec; 39(4):295–302 (Eng. Abstr.) **(Pol)**
[Effect of strophanthin and digoxin on the activity of succinate and lactate dehydrogenases and membrane Na+, K+-ATPase in the heart of rats with experimental myocarditis] Galust'ian GE, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):442–4 (Eng. Abstr.) **(Rus)**
[Cytophotometric study of catecholamines and energy metabolism enzymes in the neurons of the rat celiac plexus during cold and emotional stresses] Lapsha VI, et al. **Neirofiziologiia** 1988;20(6):743–9 (Eng. Abstr.) **(Rus)**
[The activity of alpha-ketoglutarate dehydrogenase and succinate dehydrogenase in the liver of the developing chick embryo. The relation to the rate of the tricarboxylic acid cycle] Ermolaeva LP, et al. **Ontogenez** 1988 Nov–Dec; 19(6):640–4 (Eng. Abstr.) **(Rus)**

SUCCINATES

Enzymes of carbohydrate metabolism in fast-growing Rhizobium grown on hexoses or succinate. Mandal NC, et al. **Indian J Biochem Biophys** 1989 Apr;26(2):120–2
Sodium succinate enhances the colorimetric reaction of the in vitro chemosensitivity test: MTT assay. Maehara Y, et al. **Oncology** 1988;45(6):434–6
[Activity of lipoxygenase incorporated into reversed micelles of aerosol OT in octane] Butovich IA, et al. **Ukr Biokhim Zh** 1989 Mar–Apr;61(2):54–9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Alar in apples [letter] Groth E 3d. **Science** 1989 May 19; 244(4906):755
Alar and apples [letter] Jukes TH. **Science** 1989 May 5; 244(4904):515

ANALYSIS

Effect of dioctyl sodium sulphosuccinate (DSS) on the dissolution rate of propyphenazone from tablets. Djurić M, et al. **Pharmazie** 1988 Dec;43(12):873–4

BLOOD

[A striking rise of serum guanidinosuccinic acid (s-GSA) in the critical period of CRF] Haruki K, et al. **Nippon Jinzo Gakkai Shi** 1988 Jul;30(7):821–5 (Eng. Abstr.) **(Jpn)**

METABOLISM

Growth of the syntrophic anaerobic acetogen, strain PA-1, with glucose or succinate as energy source. Brulla WJ, et al. **Appl Environ Microbiol** 1989 May;55(5):1289–90
The interaction of 3-phosphoglycerate and other substrate analogs with the glyoxylate- and succinate-binding sites of isocitrate lyase. Ko YH, et al. **Arch Biochem Biophys** 1989 Oct;274(1):155–60
N2-succinylornithine in ornithine catabolism of Pseudomonas aeruginosa. Vander Wauven C, et al. **Arch Microbiol** 1988;150(4):400–4
The role of succinate in the respiratory chain of Trypanosoma brucei procyclic trypomastigotes. Turrens JF. **Biochem J** 1989 Apr 15;259(2):363–8
Succinate transport inhibition by valproate in rat renal mitochondria. Rumbach L, et al. **Eur J Pharmacol** 1989 May 30;164(3):577–81
Polarographic observation of substrate-level phosphorylation and its stimulation by acetylcholine. Kondrashova MN, et al. **FEBS Lett** 1989 Jan 30;243(2):153–5
Succinate-dependent energy generation in Ascaris suum mitochondria. Campbell T, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):1–12
[A study of the mechanism of cyanide resistant oxidation of succinate from rat liver mitochondria in the presence of menadione] Kolesova GM, et al. **Biokhimiia** 1989 Jan; 54(1):103–11 (Eng. Abstr.) **(Rus)**
[Hysteresis behavior of complex I in delta mu H+-dependent reduction of NAD+ succinate] Kotliar AB, et al. **Biokhimiia** 1989 Jan;54(1):9–16 (Eng. Abstr.) **(Rus)**
[5-Alkyl(C19–C25) resorcinols as regulators of succinate and NAD-dependent substrate oxidation by mitochondria] Nenashev VA, et al. **Biokhimiia** 1989 May;54(5):784–7 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Contraluminal para-aminohippurate (PAH) transport in the proximal tubule of the rat kidney. IV. Specificity: mono- and polysubstituted benzene analogs. Ullrich KJ, et al. **Pflugers Arch** 1988 Dec;413(2):134–46

PHARMACOLOGY

Studies on the effect of low-molecule uremic toxins on the activity of glucose-6-phosphate dehydrogenase (E.C.1.1.1.49) and transketolase (E.C.2.2.1.1) in human red blood cells. Kopczyński Z, et al. **Acta Physiol Pol** 1988 Jul–Aug;39(4):269–75
Succinate alters respiration, membrane potential, and intracellular K+ in proximal tubule. Gullans SR, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1170–7
Effect of esters of succinic acid and other citric acid cycle

intermediates on insulin release and inositol phosphate formation by pancreatic islets. MacDonald MJ, et al. **Arch Biochem Biophys** 1989 Mar;269(2):400–6

Inhibition of lipid peroxidation by idebenone in brain mitochondria in the presence of succinate. Suno M, et al. **Arch Gerontol Geriatr** 1989 May;8(3):291–7

Enhanced Co2+ activation and inhibitor binding of carboxypeptidase M at low pH. Similarity to carboxypeptidase H (enkephalin convertase). Deddish PA, et al. **Biochem J** 1989 Jul 1;261(1):289–91

The characterization of perfluorosuccinate as an inhibitor of gluconeogenesis in isolated rat hepatocytes. Gregory RB, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2867–72

In vivo modulation of rat hypothalamic opioid peptide content by intracerebroventricular injection of guanidinoethylmercaptosuccinic acid (GEMSA): possible physiological role of enkephalin convertase. Bommer M, et al. **Brain Res** 1989 Jul 17;492(1–2):305–13

pH-dependent impairment of the neutrophil respiratory burst by the Bacteroides byproduct succinate. Rotstein OD, et al. **Clin Invest Med** 1988 Aug;11(4):259–65

[Effect of selected low molecular weight uremic toxins on fructosediphosphate aldolase and lactate dehydrogenase activities in human erythrocytes] Kopczyński Z, et al. **Pol Tyg Lek** 1988 May 16;43(20):631–4 (Eng. Abstr.) **(Pol)**

[The role of succinic acid in the biosynthesis of levorin] Namestnikova VP, et al. **Antibiot Khimioter** 1989 Mar; 34(3):189–91 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Pathways of succinate formation and their contribution to improvement of cardiac function in the hypoxic rat heart. Wiesner RJ, et al. **Biochem Med Metab Biol** 1988 Aug; 40(1):19–34

THERAPEUTIC USE

Cerebral resuscitation with succinate and fructose-1, 6-diphosphate. Cannella DM, et al. **Surg Neurol** 1989 Mar; 31(2):177–82

[The activity and tolerability of ferroproteinsuccinylate in the treatment of iron deficiency in surgery] Ambrosini A. **Boll Chim Farm** 1988 Mar;127(3):40S–43S (Eng. Abstr.) **(Ita)**

[Ferroproteinsuccinylate in iron deficiency in children] Bianchi G. **Boll Chim Farm** 1988 Mar;127(3):30S–34S (Eng. Abstr.) **(Ita)**

[Ferroproteinsuccinylate in iron deficiency in obstetric and gynecology] Bracchitta R, et al. **Boll Chim Farm** 1988 Mar; 127(3):35S–39S (Eng. Abstr.) **(Ita)**

[Comparison of the efficacy and tolerability of ferroproteinsuccinylate and ferritin preparations in iron deficiency in general medicine] Cogo R. **Boll Chim Farm** 1988 Mar;127(3):25S–29S (Eng. Abstr.) **(Ita)**

[The efficacy and tolerability of ferroproteinsuccinylate in iron deficiency] Scremin S, et al. **Boll Chim Farm** 1988 Mar;127(3):44S–49S (Eng. Abstr.) **(Ita)**

[A new therapeutic approach to iron deficiency] Manfredi B, et al. **Clin Ter** 1987 Oct 15;123(1):25–39 (Eng. Abstr.) **(Ita)**

[Effect of various biologically active substances and hormonal preparations on the pathogenetic mechanisms of manic-depressive psychoses] Sinitskiĭ VN, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):84–95 (Eng. Abstr.) **(Rus)**

TOXICITY

Evaluation of the developmental toxicity of succinate tartrates in rats. Petersen DW, et al. **Food Chem Toxicol** 1989 Apr;27(4):249–53

Subchronic oral toxicity of succinate tartrates in rats. Petersen DW, et al. **Food Chem Toxicol** 1989 May; 27(5):323–9

Acute, distribution, and subchronic toxicological studies of succinate tartrates. Petersen DW, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):137–45

DNA methylation in rat liver by daminozide, 1,1-dimethylhydrazine, and dimethylnitrosamine. Sagelsdorff P, et al. **Fundam Appl Toxicol** 1988 Nov; 11(4):723–30

Comparison of toxic effects of methylguanidine, guanidinosuccinic acid and creatinine in rats with adenine-induced chronic renal failure. Yokozawa T, et al. **Nephron** 1989;51(3):388–92

Alar: the numbers game [news] Roberts L. **Science** 1989 Mar 17;243(4897):1430

Acute nephrotoxicity induced by N-(3,5-dichlorophenyl)-3-hydroxysuccinamic acid in Fischer 344 rats. Rankin GO, et al. **Toxicol Lett** 1989 Sep; 48(3):217–23

SUCCINIC ANHYDRIDES see under **SUCCINATES**

SUCCINIC OXIDASE see **SUCCINATE DEHYDROGENASE**

SUCCINIMIDES

Diffuse reflectance infrared Fourier transform spectroscopic characterization of a silica-immobilized N-hydroxysuccinimide active ester crosslinking agent and its precursors. Warner WS, et al. **Anal Biochem** 1989 Jan; 176(1):137–49

Stopped-flow chemical modification with N-bromosuccinimide: a good probe for changes in the microenvironment of the Trp 62 residue of chicken egg white lysozyme. Ohnishi M, et al. **Arch Biochem Biophys** 1989 Jul;272(1):46–51

Bis(sulfo-N-succinimidyl) [15N,2H16]doxyl-2-spiro-4'-pimelate, a stable isotope-substituted, membrane-impermeant bifunctional spin label for studies of the dynamics of membrane proteins: application to the anion-exchange channel in intact human erythrocytes. Anjaneyulu PS, et al. **Biochemistry** 1988 Sep 6;27(18):6844–51

The influence of structural variations in the F- and FG-helix of the beta-subunit modified oxyHb-NES on the heme structure detected by resonance Raman spectroscopy. Schweitzer-Stenner R, et al. **Eur Biophys J** 1989; 17(2):87–100

Succinimide formation from aspartyl and asparaginyl peptides as a model for the spontaneous degradation of proteins. Stephenson RC, et al. **J Biol Chem** 1989 Apr 15; 264(11):6164–70

A biotin-labelled antigen radioimmunoassay (BILA) for antibodies to membrane antigens useful for monoclonal antibody screening. Jansson B, et al. **J Immunol Methods** 1988 Dec 9;115(2):219–26

Analysis of near-neighbor contacts in bacteriophage T4 wedges and hubless baseplates by using a cleavable chemical cross-linker. Watts NR, et al. **J Virol** 1989 Jun; 63(6):2427–36

BLOOD

Measurement of methsuximide and N-desmethylmethsuximide using solid-phase extraction and wide-bore capillary gas chromatography. Cardella DS, et al. **Clin Biochem** 1988 Dec;21(6):329–31

Determination of N-desmethylmethsuximide serum concentrations using enzyme-multiplied and fluorescence polarization immunoassays. Miles MV, et al. **Ther Drug Monit** 1989;11(3):337–42

CHEMICAL SYNTHESIS

N-succinimidyl methoxyphenylacetic acid ester, an amine-directed chiral derivatizing reagent suitable for enzymatic scale resolutions. Husain PA, et al. **Anal Biochem** 1989 Apr;178(1):177–83

Development of a bifunctional crosslinking agent with potential for the preparation of immunotoxins. McKenzie JA, et al. **J Protein Chem** 1988 Oct;7(5):581–92

DIAGNOSTIC USE

Preparation of reproducible alkaline phosphatase-antibody conjugates for enzyme immunoassay using a heterobifunctional linking agent. Jeanson A, et al. **Anal Biochem** 1988 Aug 1;172(2):392–6

The cholinergic rapid eye movement sleep induction test with RS-86. State or trait marker of depression? Berger M, et al. **Arch Gen Psychiatry** 1989 May;46(5):421–8

Metabolic behavior of cell surface biotinylated proteins. Hare JF, et al. **Biochemistry** 1989 Jan 24;28(2):574–80

EEG sleep and the cholinergic REM induction test in anorexic and bulimic patients. Lauer C, et al. **Psychiatry Res** 1988 Nov;26(2):171–81

METABOLISM

Partial covalent labeling with pyridoxal 5'-phosphate induces bis(sulfosuccinimidyl)suberate crosslinking of band 3 protein tetramers in intact human red blood cells. Salhany JM, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1215–22

Tachykinin binding sites in the interpeduncular nucleus of the rat: normal distribution, postnatal development and the effects of lesions. Murray M, et al. **Brain Res** 1988 Aug 30;459(1):76–92

Binding of a iodinated substance P analog to a NK-1 receptor on isolated cell membranes from rat anterior pituitary. Larsen PJ, et al. **Endocrinology** 1989 May;124(5):2548–57

Characterization of a bombesin receptor on Swiss mouse 3T3 cells by affinity cross-linking. Sinnett-Smith J, et al. **J Cell Biochem** 1988 Dec;38(4):237–49

Binding and internalization of a iodinated substance P analog by cultured anterior pituitary cells. Larsen PJ, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):91–101

Specific [125I]Bolton-Hunter substance P binding sites in human and rat skin. Deguchi M, et al. **Neurosci Lett** 1989 May 8;99(3):287–92

Effects of neonatal monosodium glutamate treatment on substance P binding sites in the rat retina. Lee CM, et al. **Neurosci Lett** 1988 Oct 17;92(3):310–4

A detailed mapping of histamine H1-receptors in guinea-pig central nervous system established by autoradiography with [125I]iodobolpyramine. Bouthenet ML, et al. **Neuroscience** 1988 Aug;26(2):553–600

Cross-linking of interleukin 4 to surface molecules on murine T and B lymphocytes. Fernandez-Botran R, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4235–9

Nephrotoxicity of N-(3,5-dichlorophenyl)succinimide metabolites in vivo and in vitro. Rankin GO, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):405–16

Acute nephrotoxicity induced by N-(3,5-dichlorophenyl)-3-hydroxysuccinamic acid in Fischer 344 rats. Rankin GO, et al. **Toxicol Lett** 1989 Sep; 48(3):217–23

PHARMACOKINETICS

Pharmacokinetics of N-desmethylmethsuximide in pediatric patients. Miles MV, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):647–50

PHARMACOLOGY

Direct evidence for modulation of porter quaternary structure by transport site ligands. Salhany JM, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1337–44

Resolution and solution behavior of crosslinked myelin basic protein. Caamaño CA, et al. **Biochem Int** 1989 Jun; 18(6):1245–51

Inhibition of human leukocyte elastase by derivatives of N-hydroxysuccinimide. A structure-activity-relationship study. Groutas WC, et al. **J Med Chem** 1989 Jul; 32(7):1607–11

The cholinergic agonist RS 86: a pharmacopsychological study. Fritze J, et al. **Neuropsychobiology** 1988;19(1):35–9

EEG sleep in depression and in remission and the REM sleep response to the cholinergic agonist RS 86. Riemann D, et al. **Neuropsychopharmacology** 1989 Jun;2(2):145–52

Effects of mephenytoin and methsuximide on the reaction time of pigeons. Blakely E, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):787–90

The interaction of RS 86, a centrally acting m-cholinoceptor agonist with M1 and M2 receptors in rat brain and rat heart, respectively. Schubert T, et al. **Pharmacopsychiatry** 1988 Nov;21(6):321–3

Endocrine parameters and biogenic amines in relationship to psychopathology after cholinergic drug challenge (RS-86). Fritze J, et al. **Psychiatry Res** 1988 Sep; 25(3):339–48

THERAPEUTIC USE

Failure of cholinergic agonist RS-86 to improve cognition and movement in PSP despite effects on sleep. Foster NL, et al. **Neurology** 1989 Feb;39(2 Pt 1):257–61

TOXICITY

Oxidative damage in the guinea pig hippocampal slice. Pellmar TC, et al. **Free Radic Biol Med** 1989;6(5):467–72

Renal and hepatic toxicity of N-arylsuccinimides in Fischer 344 rats. Rankin GO, et al. **J Appl Toxicol** 1989 Aug; 9(4):223–8

Comparative acute renal effects of three N-(3,5-dichlorophenyl)carboximide fungicides: N-(3,5-dichlorophenyl)succinimide, vinclozolin and iprodione. Rankin GO, et al. **Toxicology** 1989 Jun 16; 56(3):263–72

SUCCINYL COENZYME A SYNTHETASES see under **COENZYME A SYNTHETASES**

SUCCINYLCHOLINE

Suxamethonium in mucopolysaccharidosis [letter] Baines D. **Anaesth Intensive Care** 1989 Aug;17(3):382

Muscle pain occurs after outpatient laparoscopy despite the substitution of vecuronium for succinylcholine. Zahl K, et al. **Anesthesiology** 1989 Mar;70(3):408–11

Suxamethonium-induced facilitation of spontaneous frontal EMG activity. Tammisto T, et al. **Eur J Anaesthesiol** 1988 Nov;5(6):361–7

Malignant hyperthermia in plastic surgery. Wackym PA, et al. **Plast Reconstr Surg** 1988 Nov;82(5):878–82

[Predictive value of intradermal tests using muscle-relaxing drugs] Leynadier F, et al. **Ann Fr Anesth Reanim** 1989; 8(2):98–101 (Eng. Abstr.) **(Fre)**

[Vecuronium bromide and succinylcholine procedures in medial relaxation. A comparison of electromyography and clinical findings] Leyser KH, et al. **Anaesthesist** 1989 Jun; 38(6):288–93 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Comparison of tracheal intubating conditions and neuromuscular blocking profiles after intubating doses of mivacurium chloride or succinylcholine in surgical outpatients. Goldberg ME, et al. **Anesth Analg** 1989 Jul; 69(1):93–9

Use caution when extrapolating from a small sample size to the general population [letter; comment] Benefiel DJ. **Anesthesiology** 1989 Jan;70(1):160–1. **Comment on:** Anesthesiology 1988 Apr;68(4):644

An alternative method of paralysis for rapid-sequence induction. Cicala R, et al. **Anesthesiology** 1988 Dec; 69(6):983–6

Resistance to succinylcholine in myasthenia gravis: a dose-response study. Eisenkraft JB, et al. **Anesthesiology** 1988 Nov;69(5):760–3

Blind nasotracheal intubation using succinylcholine. Maltby JR, et al. **Anesthesiology** 1988 Dec;69(6):946–8

Underdosage with succinylcholine may lead to incorrect diagnosis of masseter spasm in children [letter] Meakin G. **Anesthesiology** 1988 Dec;69(6):1025–7

Dose-response relationship for succinylcholine in a patient with genetically determined low plasma cholinesterase activity. Smith CE, et al. **Anesthesiology** 1989 Jan; 70(1):156–8

Comparison of mivacurium and suxamethonium administered by bolus and infusion. Brandom BW, et al. **Br J Anaesth** 1989 May;62(5):488–93

Dose-response curves for suxamethonium in neonates, infants and children. Meakin G, et al. **Br J Anaesth** 1989 Jun; 62(6):655–8

[The rate of injection of succinylcholine and onset of neuromuscular action, serum potassium or myoglobin levels. Studies in men during halothane anesthesia] Plötz J, et al. **Anaesthesist** 1989 Aug;38(8):408–12 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Effects of droperidol, haloperidol and ketamine on halothane, succinylcholine and caffeine contractures: implications for malignant hyperthermia. Fletcher JE, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):187–92

Placental transfer of succinylcholine causing transient respiratory depression in the newborn. Cherala SR, et al. **Anaesth Intensive Care** 1989 May;17(2):202–4

Sinus arrest after alfentanil and suxamethonium [letter] Ananthanarayan C. **Anaesthesia** 1989 Jul;44(7):614

Fatal anaphylactic reaction to suxamethonium: new screening test suggests possible prevention. Assem ES, et al. **Anaesthesia** 1988 Nov;43(11):958–61

Anaphylaxis due to suxamethonium in a 7-year-old child: a 14-year follow-up with allergy testing. Assem ES, et al. **Anaesthesia** 1989 Feb;44(2):121–4

Hyperkalaemia and cardiac arrest after the use of suxamethonium in intensive care [letter] Horton WA, et al. **Anaesthesia** 1988 Oct;43(10):890–1

"Statistical power" and interpretation of small studies: does atracurium pretreatment reduce the incidence of succinylcholine fasciculations? [letter] Burton P, et al. **Anesth Analg** 1989 Aug;69(2):263

More on succinylcholine and trismus in children [letter] Berry FA, et al. **Anesthesiology** 1989 May;70(5):878

Succinylcholine and trismus [letter] Berry FA, et al. **Anesthesiology** 1989 Jan;70(1):161–3

Succinylcholine-induced hyperkalemia in a patient with metastatic rhabdomyosarcoma. Krikken-Hogenberk LG, et al. **Anesthesiology** 1989 Mar;70(3):553–5

Masseter muscle spasm, succinylcholine, and strabismus surgery [letter] Schwartz N, et al. **Anesthesiology** 1988 Oct; 69(4):635–6

Train-of-four fade of non depolarizing muscle relaxants: an insight into the mechanism of precurarization. Erkola O. **Ann Fr Anesth Reanim** 1988;7(4):299–304

Severe bradycardia following propofol-suxamethonium sequence. Baraka A. **Br J Anaesth** 1988 Oct;61(4):482–3

Myoneural blockers and suxamethonium [letter] Eisenkraft JB, et al. **Br J Anaesth** 1988 Nov;61(5):642

Suxamethonium and malignant hyperthermia [letter] Fletcher JE, et al. **Br J Anaesth** 1989 Apr;62(4):468–9

Parkinsonism and the anaesthetist [letter; comment] Ho AM. **Br J Anaesth** 1989 May;62(5):580–1. **Comment on:** Br J Anaesth 1988 Dec;61(6):761–70

Prolonged suxamethonium-induced neuromuscular block associated with organophosphate poisoning [letter] Weeks DB, et al. **Br J Anaesth** 1989 Feb;62(2):237

Fatal haemopathological consequences of general anaesthesia. Wright PJ, et al. **Br J Anaesth** 1989 Jan; 62(1):104–7

Asystole after alfentanil-succinylcholine [letter] Taylor B, et al. **Can J Anaesth** 1989 Mar;36(2):255–6

Automated determination of cholinesterase activity in plasma and erythrocytes by flow-injection analysis, and application to identify subjects sensitive to succinylcholine. Lainé-Cessac P, et al. **Clin Chem** 1989 Jan;35(1):77–80

Suxamethonium myalgia [editorial] **Lancet** 1988 Oct 22; 2(8617):944–5 (18 ref.)

Fatal reaction to suxamethonium: case for screening by radioallergosorbent test? Brahams D. **Lancet** 1989 Jun 17; 1(8651):1400–1

Suxamethonium anaphylaxis [letter] Watkins J. **Lancet** 1989 Jul 15;2(8655):171–2

Treatment of suxamethonium anaphylaxis [letter] Wilkes RG. **Lancet** 1989 Sep 16;2(8664):679–80

The correlation between suxamethonium injection and post-operative muscle pain in Chinese. Chu HY, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec;26(4):411–6

[The effect of succinylcholine-induced hyperkalemia following pancuronium pretreatment] Chen WB, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Sep;26(3):289–94 (Eng. Abstr.) (Chi)

[Determination of a latent sensitivity to muscle relaxants by prick tests] Moneret-Vautrin DA, et al. **Ann Fr Anesth Reanim** 1989;8(3):293–4 (Fre)

[Prolonged apnea after suxamethonium related to congenital abnormality of plasma pseudocholinesterase] Velin P, et al. **Ann Fr Anesth Reanim** 1989;8(1):73–4 (Fre)

[Allergy to muscle relaxants in general anesthesia] Vervloet D. **Presse Med** 1989 Mar 11;18(10):513–4 (Fre)

[Isoflurane and halothane. Changes in the heart rate after succinyl choline in pediatric anesthesia] Crespi G, et al. **Minerva Anestesiol** 1988 Jan–Feb;54(1–2):1–4 (Eng. Abstr.) (Ita)

[Unusual responses of muscular rigidity and hypothermia to halothane and succinylcholine; a case report of Smith–Lemli–Opitz (SLO) syndrome] Mizushima A, et al. **Masui** 1988 Sep;37(9):1118–23 (Eng. Abstr.) (Jpn)

[Genetic study in an extensive family group of a patient suffering from prolonged succinylcholine apnea] Perianes Flores E, et al. **Rev Esp Anestesiol Reanim** 1988 Nov–Dec; 35(6):329–32 (Eng. Abstr.) (Spa)

ANTAGONISTS & INHIBITORS

Nitroglycerine, succinylcholine and intraocular pressure [letter; comment] Jantzen JP, et al. **Anesth Analg** 1989 Jul; 69(1):139–41. **Comment on:** Anesth Analg 1988 Jul;67(7):631–6

Atracurium used as a pretreatment agent to inhibit succinylcholine induced increased intraocular pressure. So EC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec;26(4):387–90

BLOOD

Relationship between serum cholinesterase activity and duration of succinylcholine action in subjects with the "usual" phenotype for the enzyme. Yücel D, et al. **Clin Chem** 1988 Dec;34(12):2579–80

IMMUNOLOGY

Atopy and anaphylactic reactions to suxamethonium. Charpin D, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):356–60

PHARMACOKINETICS

In vitro metabolism of mivacurium chloride (BW B1090U) and succinylcholine. Cook DR, et al. **Anesth Analg** 1989 Apr;68(4):452–6

PHARMACOLOGY

Cardiovascular responses to induction of anaesthesia with thiopentone and suxamethonium in infants and children. Tibballs J, et al. **Anaesth Intensive Care** 1988 Aug; 16(3):278–84

The effect of H2 antagonists on duration of action of suxamethonium in the parturient. Bogod DG, et al. **Anaesthesia** 1989 Jul;44(7):591–3

Suxamethonium—the relation between dose and response. Chestnut RJ, et al. **Anaesthesia** 1989 Jan;44(1):14–8

Intra-ocular pressure changes during rapid sequence induction of anaesthesia. A comparison between thiopentone and suxamethonium and thiopentone and atracurium. Edmondson L, et al. **Anaesthesia** 1988 Dec; 43(12):1005–10

Efficacy of lignocaine in the suppression of the intra-ocular pressure response to suxamethonium and tracheal intubation. Grover VK, et al. **Anaesthesia** 1989 Jan; 44(1):22–5

Effect of plasma cholinesterase activity on the duration of action of succinylcholine in patients with genotypically normal enzyme. Ritter DM, et al. **Anesth Analg** 1988 Nov; 67(11):1123–6

Effects of succinylcholine at the masseter and adductor pollicis muscles in adults. Smith CE, et al. **Anesth Analg** 1989 Aug;69(2):158–62

Differing effect of agonist and antagonist muscle relaxants on cat jaw muscles. Van der Spek AF, et al. **Anesth Analg** 1989 Jul;69(1):76–80

The effect of cimetidine and ranitidine on the duration of action of succinylcholine. Woodworth GE, et al. **Anesth Analg** 1989 Mar;68(3):295–7

The influence of bambuterol (carbamylated terbutaline) on the duration of action of succinylcholine-induced paralysis in humans. Fisher DM, et al. **Anesthesiology** 1988 Nov; 69(5):757–9

Prolongation of succinylcholine block by metoclopramide. Kao YJ, et al. **Anesthesiology** 1989 Jun;70(6):905–8

The effects of succinylcholine on doxacurium-induced neuromuscular blockade. Katz JA, et al. **Anesthesiology** 1988 Oct;69(4):604–7

Cerebral function and muscle afferent activity following intravenous succinylcholine in dogs anesthetized with halothane: the effects of pretreatment with a defasciculating dose of pancuronium [published erratum appears in Anesthesiology 1989 Sep;71(3):482] Lanier WL, et al. **Anesthesiology** 1989 Jul;71(1):87–95

A comparison of the neuromuscular blocking and autonomic effects of two new short-acting muscle relaxants with those of succinylcholine in the anesthetized cat and pig. Muir AW, et al. **Anesthesiology** 1989 Mar;70(3):533–40

The lack of effect of succinylcholine on serum potassium in patients with Parkinson's disease [letter] Muzzi DA, et al. **Anesthesiology** 1989 Aug;71(2):322

Resistance to muscle relaxants in a patient receiving prolonged testosterone therapy. Reddy P, et al. **Anesthesiology** 1989 May;70(5):871–3

Cimetidine and succinylcholine: potential interaction and effect on neuromuscular blockade in man. Stirt JA, et al. **Anesthesiology** 1988 Oct;69(4):607–8

Effect of suxamethonium given during recovery from atracurium [letter] Black AM. **Br J Anaesth** 1989 Mar; 62(3):348–9

Influence of suxamethonium on the action of subsequently administered vecuronium or pancuronium. Ono K, et al. **Br J Anaesth** 1989 Mar;62(3):324–6

Effect of suxamethonium given during recovery from atracurium. Scott RP, et al. **Br J Anaesth** 1988 Sep; 61(3):292–6

Nifedipine attenuates the intraocular pressure response to intubation following succinylcholine. Indu B, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):269–72

The onset of ablation of the evoked adductor pollicis muscle twitch in children: a clinical perspective. Reynolds PI, et al. **Can J Anaesth** 1988 Nov;35(6):576–80

Ketamine enhances phase I and phase II neuromuscular block of succinylcholine. Tsai SK, et al. **Can J Anaesth** 1989 Mar; 36(2):120–3

The induction phase of neuromuscular block after suxamethonium and pancuronium: analysis of the time constant of single-twitch decay (tau T1). Romano E, et al. **Eur J Anaesthesiol** 1988 May;5(3):161–70

Intraocular pressure during endotracheal intubation with atracurium and succinylcholine as muscle relaxant. So EC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):195–8

The effect of midazolam and succinylcholine on systemic blood pressure and intraocular pressure. Badran I, et al. **Middle East J Anesthesiol** 1988 Oct;9(6):517–28

The response of a patient with von Recklinghausen's disease to succinylcholine and atracurium. Naguib M, et al. **Middle East J Anesthesiol** 1988 Jun;9(5):429–34

The effect of sodium thiopentone and succinylcholine on blood pressure and intraocular pressure. Ukra H, et al. **Middle East J Anesthesiol** 1988 Oct;9(6):505–15

A succinylcholine-like action of an Ipomoea carnea Jacq subsp. fistulosa (Mart. ex choisy) extract. Abdelhadi AA, et al. **Pharmacol Res** 1989 Jul–Aug;21(4):431–7

[Effect of succinylcholine on serum levels of potassium in patients treated for intracranial aneurysm] Pernia Morán J, et al. **Rev Esp Anestesiol Reanim** 1989 Mar–Apr; 36(2):85–7 (Eng. Abstr.) (Spa)

TOXICITY

Suxamethonium-induced histamine release from the heart of naïve and suxamethonium-sensitized guinea-pigs: evidence suggesting spontaneous sensitization in naïve animals, and relevance to anaphylactoid reactions in man. Assem ES, et al. **Agents Actions** 1989 Apr;27(1–2):146–9

SUCCINYLDICHOLINE see **SUCCINYLCHOLINE**

SUCKERS (FISH) see **CYPRINIFORMES**

SUCKING BEHAVIOR

Nursing interaction of Wistar rats is modified by prior experience of altered nursing bout length. Hofer MA, et al. **Dev Psychobiol** 1989 May;22(4):321–45

Relative importance of experience, social facilitation, and availability of milk in weaning of rats. Lichtman AH, et al. **Dev Psychobiol** 1989 May;22(4):347–56

Effect of nonnutritive sucking on behavioral state in preterm infants before feeding. Gill NE, et al. **Nurs Res** 1988 Nov–Dec;37(6):347–50

Suckling stimulation modulates the maintenance of postpartum aggression in mice. Garland M, et al. **Physiol Behav** 1988;44(3):301–5

Relation between sucking habits and dental characteristics in preschoolchildren with unilateral cross-bite. Lindner A, et al. **Scand J Dent Res** 1989 Jun;97(3):278–83

DRUG EFFECTS

Methysergide-induced nipple attachment depends on suckling experience in juvenile rats. Lichtman AH, et al. **Behav Neurosci** 1989 Apr;103(2):254–61

Acute administration of lithium carbonate interferes with suckling in neonatal rats. McLaughlin CR, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):453–8

PHYSIOLOGY

Morphological studies of the neuromuscular mechanism shifting from sucking to biting of mice. Kubota K, et al. **Acta Anat (Basel)** 1988;133(3):200–8

Sucking and breathing patterns during breast- and bottle-feeding in term neonates. Effects of nutrient delivery and composition. Mathew OP, et al. **Am J Dis Child** 1989 May;143(5):588–92

An efficacy study of occupational therapy with high-risk neonates. Case-Smith J. **Am J Occup Ther** 1988 Aug; 42(8):499–506

Suckling stimulation test for neonatal tremor. Linder N, et al. **Arch Dis Child** 1989 Jan;64(1 Spec No):44–6

Neural systems for early independent ingestion: regional metabolic changes during ingestive responding and dehydration. Hall WG. **Behav Neurosci** 1989 Apr; 103(2):386–411

Feeding behavior in mammals: corticobulbar projection is reorganized during conversion from sucking to chewing. Iriki A, et al. **Brain Res Dev Brain Res** 1988 Dec 1; 44(2):189–96

Dopamine D-2 receptor mediation of response suppression learning of young rats. McDougall SA, et al. **Dev Psychobiol** 1989 Apr;22(3):235–56

Nonnutritive sucking in the sick infant. Goldson E. **J Perinatol** 1987 Winter;7(1):30–4

Early suckling and postpartum haemorrhage: controlled trial in deliveries by traditional birth attendants. Bullough CH, et al. **Lancet** 1989 Sep 2;2(8662):522–5

Effect of suckling on the in vivo release of thyrotropin-releasing hormone, dopamine and adrenaline in the lactating rat. Rondeel JM, et al. **Neuroendocrinology** 1988 Jul;48(1):93–6

Organization of early forms of kitten behavior after partial oral deprivation. Lushchekin VS, et al. **Neurosci Behav Physiol** 1988 Nov–Dec;18(6):498–504

Neonatal sucking as a clinical assessment tool: preliminary findings. Medoff-Cooper B, et al. **Nurs Res** 1989 May–Jun; 38(3):162–5

Lack of improved growth outcome related to nonnutritive sucking in very low birth weight premature infants fed a controlled nutrient intake: a randomized prospective study. Ernst JA, et al. **Pediatrics** 1989 May;83(5):706–16

RADIATION EFFECTS

[Evaluation of the possible effects of phototherapy on the nonnutritive sucking patterns in newborn infants] Latini G, et al. **Pediatr Med Chir** 1989 Mar–Apr;11(2):195–6 (Eng. Abstr.) **(Ita)**

SUCRALFATE

The 5th International Sucralfate Research Conference. October 19 through 23, 1988, Miami, Florida. Proceedings. **Am J Med** 1989 Jun 9;86(6A):1–153

ADMINISTRATION & DOSAGE

Sucralfate tablets 1 g twice a day for the prevention of duodenal ulcer recurrence. Bynum TE, et al. **Am J Med** 1989 Jun 9;86(6A):127–32

Two daily doses of sucralfate or cimetidine in the healing of gastric ulcer. A comparative randomized study. Hjortrup A, et al. **Am J Med** 1989 Jun 9;86(6A):113–5

A maintenance regimen of sucralfate 2 g at night for reduced relapse rate in duodenal ulcer disease. A one-year follow-up study. Marks IN, et al. **Am J Med** 1989 Jun 9;86(6A):136–40

Sucralfate suspension 1 g four times per day in the short-term treatment of active duodenal ulcer. Martin F. **Am J Med** 1989 Jun 9;86(6A):104–7

Sucralfate as maintenance treatment for the prevention of duodenal ulcer recurrence. Paakkonen M, et al. **Am J Med** 1989 Jun 9;86(6A):133–5

Combination therapy of sucralfate and cimetidine, compared with sucralfate monotherapy, in patients with peptic reflux esophagitis. Schotborgh RH, et al. **Am J Med** 1989 Jun 9;86(6A):77–80

Twice-daily sucralfate dosing to heal acute duodenal ulcer. Multicenter Study Group. Schubert T. **Am J Med** 1989 Jun 9;86(6A):108–12

Ciprofloxacin levels when receiving sucralfate [letter] Yuk JH, et al. **JAMA** 1989 Aug 18;262(7):901

Acute treatment of severe haemorrhagic gastritis with high-dose sucralfate [letter] Tryba M, et al. **Lancet** 1988 Dec 3;2(8623):1304

[Short-term sucralfate treatment of duodenal ulcer] Michetti P, et al. **Clin Ter** 1987 Oct 15;123(1):21–4 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Esophageal medication bezoar in a patient receiving enteral feedings and sucralfate. Anderson W, et al. **Am J Gastroenterol** 1989 Feb;84(2):205–6

Side effects of stress bleeding prophylaxis. Tryba M. **Am J Med** 1989 Jun 9;86(6A):85–93 (69 ref.)

Sucralfate, intestinal aluminum absorption, and aluminum toxicity in a patient on dialysis. Robertson JA, et al. **Ann Intern Med** 1989 Jul 15;111(2):179–81

Sucralfate—warfarin interaction [letter] Braverman SE, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):913

Encephalopathy in patient taking aluminium-containing agents, including sucralfate [letter] Withers DJ, et al. **Lancet** 1989 Sep 16;2(8664):674

Acute aluminum encephalopathy in an uremic patient. Campistol JM, et al. **Nephron** 1989;51(1):103–6

ANALYSIS

Bile salt binding properties of commonly used gastrointestinal drugs: maalox, carafate, and questran. Shiau YF, et al. **J Pharm Sci** 1988 Jun;77(6):527–30

DIAGNOSTIC USE

Right colonic hemangioma diagnosed by scintigraphy with 99-mTc sucralfate. A case report. Scopinaro F, et al. **Ital J Surg Sci** 1989;19(1):89–92

Chemical aspects of labeling sucralfate with 99mTcO4. Billinghurst MW, et al. **J Nucl Med** 1989 Apr;30(4):523–30

Labelling of sucralfate using technetium labelled bovine serum albumin—an alternate to Tc99m-HSA. Sajid KM, et al. **JPMA** 1988 Sep;38(9):241–5

Sucralphate-technetium scintigraphy in inflammatory bowel disease: experience in 23 patients. Zeijen RN, et al. **Neth J Med** 1989 Aug;35(1–2):76–85

Is radiolabelled sucralphate scintigraphy of any use in the diagnosis of inflammatory bowel disease? Crama-Bohbouth GE, et al. **Nucl Med Commun** 1988 Aug;9(8):591–5

[Intestinal scintigraphy with labelled sucralfate in cryptogenetic enterocolitis: a broken promise (letter)] Macaigne O, et al. **Gastroenterol Clin Biol** 1989 Apr; 13(4):435–6 **(Fre)**

PHARMACOLOGY

Effects of food and sucralfate on the pharmacokinetics of naproxen and ketoprofen in humans. Caillé G, et al. **Am J Med** 1989 Jun 9;86(6A):38–44

Protection of rat gastric mucosa by sucralfate. Effects of luminal stasis and of inhibition of prostaglandins synthesis. Morris GP, et al. **Am J Med** 1989 Jun 9;86(6A):10–6

Prostanoid production in post-gastrectomy gastritis. Influence of sucralfate. Payno A, et al. **Am J Med** 1989 Jun 9;86(6A):17–20

Effect of sucralfate on human gastric bicarbonate secretion and local prostaglandin E2 metabolism. Shorrock CJ, et al. **Am J Med** 1989 Jun 9;86(6A):2–4

Pathways of gastrointestinal protection and repair: mechanisms of action of sucralfate. Szabo S, et al. **Am J Med** 1989 Jun 9;86(6A):23–31

Sucralfate interactions with gastric mucus. Tasman-Jones C, et al. **Am J Med** 1989 Jun 9;86(6A):5–9

Sucralfate reduces the gastrointestinal absorption of norfloxacin. Parpia SH, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):99–102

Sucralfate is protective against indomethacin-induced intestinal ulceration in the rat. Waisman Y, et al. **Digestion** 1988;41(2):78–82

Effect of sucralfate on experimental colitis in the rat. Zahavi I, et al. **Dis Colon Rectum** 1989 Feb;32(2):95–8

In vitro and in vivo interactions of furosemide and sucralfate. Hikal AH, et al. **Pharm Res** 1987 Apr;4(2):171–2

[Effects of corticoids, 5-aminosalycilic acid and sucralfate on the potential difference of the rectum in inflammatory colitis in man] Pienkowski P, et al. **Gastroenterol Clin Biol** 1989;13(2):202–7 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Sucralfate therapy for acid-induced upper gastrointestinal tract injury. Mittal PK, et al. **Am J Gastroenterol** 1989 Feb;84(2):204–5

Phosphate-binding effects of sucralfate in patients with chronic renal failure. Roxe DM, et al. **Am J Kidney Dis** 1989 Mar;13(3):194–9

Sucralfate versus cimetidine in the treatment of reflux esophagitis in children. Argüelles-Martín F, et al. **Am J Med** 1989 Jun 9;86(6A):73–6

Sucralfate maintenance therapy in duodenal ulcer disease. A review. Bolin TD. **Am J Med** 1989 Jun 9;86(6A):148–51 (26 ref.)

Comparison of sucralfate and ranitidine in the treatment of chronic nonerosive gastritis. A randomized, multicenter trial. Guslandi M. **Am J Med** 1989 Jun 9;86(6A):45–8

Sucralfate versus ranitidine in the treatment of gastric ulcer. Randomized clinical results in short-term and maintenance therapy. Herrerías-Gutierrez JM, et al. **Am J Med** 1989 Jun 9;86(6A):94–7

Effect of sucralfate and cimetidine on duodenal ulcer-associated antral gastritis and Campylobacter pylori. Hui WM, et al. **Am J Med** 1989 Jun 9;86(6A):60–5

Sucralfate and ranitidine in the treatment of acute duodenal ulcer. Healing and relapse. Ulcer Study Group. Koelz HR, et al. **Am J Med** 1989 Jun 9;86(6A):98–103

Comparison of sucralfate and ranitidine in gastroprotection against alcohol in humans. Konturek SJ, et al. **Am J Med** 1989 Jun 9;86(6A):55–9

Epidermal growth factor in the gastroprotective and ulcer-healing actions of sucralfate in rats. Konturek SJ, et al. **Am J Med** 1989 Jun 9;86(6A):32–7

Prevention of upper gastrointestinal bleeding in long-term ventilated patients. Sucralfate versus ranitidine. Lagner AN, et al. **Am J Med** 1989 Jun 9;86(6A):81–4

Implications of sucralfate-induced ulcer healing and relapse. Lam SK. **Am J Med** 1989 Jun 9;86(6A):122–6 (75 ref.)

Acid-secretory response and parietal cell sensitivity in patients with duodenal ulcer before and after treatment with sucralfate or ranitidine. Marks IN, et al. **Am J Med** 1989 Jun 9;86(6A):145–7

Comparative study of sucralfate versus cimetidine in the treatment of acute gastroduodenal ulcer. Randomized trial with 667 patients. Rey JF, et al. **Am J Med** 1989 Jun 9; 86(6A):116–21

Effect of sucralfate and cimetidine on rheumatoid patients with active gastroduodenal lesions who are taking nonsteroidal anti-inflammatory drugs. A pilot study. Shepherd HA, et al. **Am J Med** 1989 Jun 9;86(6A):49–54

Sucralfate in the treatment of gastritis. A review. Smith CL. **Am J Med** 1989 Jun 9;86(6A):70–2 (44 ref.)

Sucralfate in the prevention of porcine experimental peptic ulceration. Stapleton GN, et al. **Am J Med** 1989 Jun 9; 86(6A):21–2

Lack of gastric mucosal protection by sucralfate during long-term aspirin ingestion in humans. Stern AI, et al. **Am J Med** 1989 Jun 9;86(6A):66–9

Differences in mucosal appearances and in relapse rates in duodenal ulceration treated with sucralfate or cimetidine. Tovey FI, et al. **Am J Med** 1989 Jun 9;86(6A):141–4

Medical treatment of stomal ulcers. Hjortrup A, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):343–4

The protective effects of sucralfate and ranitidine in foals experimentally intoxicated with phenylbutazone. Geor RJ, et al. **Can J Vet Res** 1989 Apr;53(2):231–8

Ulceration after esophageal and gastric variceal sclerotherapy—influence of sucralfate and other factors on healing. Singal AK, et al. **Endoscopy** 1988 Sep;20(5):238–40

Sucralfate protection of human gastric mucosa against acute ethanol injury. Cohen MM, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):292–8

Treatment of solitary rectal ulcer syndrome with sucralfate enema [letter] Spiliadis C, et al. **Gastrointest Endosc** 1989 Mar–Apr;35(2):131–2

Sclerotherapy-associated esophageal ulcers: lessons from a double-blind, randomized comparison of sucralfate suspension versus placebo. Tabibian N, et al. **Gastrointest Endosc** 1989 Jul–Aug;35(4):312–5

Effect of intragastric pH on mucosal protective action of sucralfate. Danesh JZ, et al. **Gut** 1988 Oct;29(10):1379–85

Comparison of relapse rates and of mucosal abnormalities after healing of duodenal ulceration and after one year's maintenance with cimetidine or sucralfate: a light and electron microscopy study. Tovey FI, et al. **Gut** 1989 May; 30(5):586–93

Stress ulceration: a serious complication in critically ill patients [letter] Konopad E, et al. **Heart Lung** 1989 Mar; 18(2):214–5

Sucralfate for the prevention of early rebleeding following injection sclerotherapy for esophageal varices. Polson RJ, et al. **Hepatology** 1989 Sep;10(3):279–82

Sucralfate delays gastric emptying of liquids and solids in duodenal ulcer patients. Petersen JM, et al. **Int J Rad Appl Instrum [B]** 1989;16(4):389–95

Effects of sucralfate on gastric acid secretion and duodenal ulcer healing. Monnis M, et al. **J Assoc Physicians India** 1988 Apr;36(4):251–3

Efficacy of oral sucralfate suspension in prevention and treatment of chemotherapy-induced mucositis [published erratum appears in J Pediatr 1989 May;114(5):900] Shenep JL, et al. **J Pediatr** 1988 Oct;113(4):758–63

Sucralfate and other non-antisecretory agents in the treatment of peptic ulcer disease. May B. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:113–6 (55 ref.)

Sucralfate versus placebo in reflux esophagitis. A double-blind multicenter study. Carling L, et al. **Scand J Gastroenterol** 1988 Nov;23(9):1117–24

Sucralfate in the treatment of reflux esophagitis in children. Preliminary results. Argüelles-Martín F, et al. **Scand J Gastroenterol Suppl** 1989;156:43–7

Efficacy of sucralfate in refractory reflux esophagitis. Results of a pilot study. Ros E, et al. **Scand J Gastroenterol Suppl** 1989;156:49–55

Sucralfate in the treatment of reflux esophagitis in adults: an update. Simon B, et al. **Scand J Gastroenterol Suppl** 1989;156:37–41

[Prevention of stress hemorrhage in an internal medicine intensive care station: sucralfate versus ranitidine] Lagner AN, et al. **Anaesthesist** 1988 Nov;37(11):704–10 (Eng. Abstr.) **(Ger)**

[Sucralfate. What place does this drug have in the treatment of patients with digestive diseases?] Rydning A. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2157–8 **(Nor)**

[Multicenter clinical studies of the effectiveness of sucralfate in the treatment of peptic ulcer] Gabryelewicz A, et al. **Pol Tyg Lek** 1988 Aug 29;43(35):1123–5 (Eng. Abstr.) **(Pol)**

[Effect of sucralfate on various components of gastric juice in patients with peptic ulcer] Baniukiewicz A, et al. **Przegl Lek** 1988;45(10):713–6 (Eng. Abstr.) **(Pol)**

[Use of sucralfate in the treatment of peptic ulcer] Grigor'ev PIa, et al. **Klin Med (Mosk)** 1989 Jan;67(1):98–102 **(Rus)**

[Experience in the use of sucralfate in patients with ulcers] Orlov VA, et al. **Klin Med (Mosk)** 1988 Jul;66(7):72–4 **(Rus)**

[Treatment with sucralfate in stress ulcer reduces the number of nosocomial pneumonias] Enkvist C. **Lakartidningen** 1989 Apr 19;86(16):1469, 1471 **(Swe)**

TOXICITY

Sucralfate effects [letter] Sandberg A, et al. **Dig Dis Sci** 1989 Jun;34(6):959–60

SUCRASE

Substrate- and alkali-metal-ion-induced pK shifts in intestinal brush-border sucrase, according to the three-protons model. Vasseur M, et al. **Biochem J** 1989 Feb 15;258(1):41–8

ANALYSIS

Enzyme histochemical demonstration of lactase and sucrase activity in resin sections: the influence of fixation and processing. Hand NM. **Med Lab Sci** 1988 Apr;45(2):125–30

[Detection and characterization of a levansucrase and a sucrase in Pseudomonas syringae pv. phaseolicola] Sauerstein J, et al. **J Basic Microbiol** 1988;28(9–10):667–72 (Eng. Abstr.) **(Ger)**

ANTAGONISTS & INHIBITORS

Mulberry roots and seeds may be effective in the treatment of AIDS. Sergio W. **Med Hypotheses** 1989 May;29(1):75–6

BIOSYNTHESIS

Differential effects of thyroxine and cortisone on jejunal sucrase expression in suckling rats. Yeh KY, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G604–12

Alteration of intestinal sucrase–alpha–dextrinase structure in the congenitally diabetic BB rat. Gray GM, et al. **Trans Am Clin Climatol Assoc** 1987;99:214–23

GENETICS

Induction of saccharolytic enzymes by sucrose in Bacillus subtilis: evidence for two partially interchangeable regulatory pathways. Steinmetz M, et al. **J Bacteriol** 1989 Mar;171(3):1519–23

METABOLISM

Effect of gliadin on the distribution of sucrase among different fractions of fetal chick intestine. Mothes T, et al. **Biomed Biochim Acta** 1989;48(1):137–41

Maintenance of sucrase activity in rat small intestine. Influence of diet and age. Rosamond WD, et al. **Dig Dis Sci** 1988 Nov;33(11):1397–402

SUCRASE–ISOMALTASE COMPLEX see under MULTIENZYME COMPLEXES

SUCROSE

Intraoral intake and taste reactivity responses elicited by sucrose and sodium chloride in chronic decerebrate rats. Flynn FW, et al. **Behav Neurosci** 1988 Dec;102(6):934–41

Relative sweetness of fructose compared with sucrose in healthy and diabetic subjects. Fontvieille AM, et al. **Diabetes Care** 1989 Jul–Aug;12(7):481–6

Hyperglycemic effect of sucrose ingestion in IDDM patients controlled by artificial pancreas. Forlani G, et al. **Diabetes Care** 1989 Apr;12(4):296–8

Effects of sucrose on carbohydrate and lipid metabolism in NIDDM patients. Hollenbeck CB, et al. **Diabetes Care** 1989 Jan;12(1):62–6; discussion 81–2 (34 ref.)

Sucrose versus saccharin as an added sweetener in non–insulin–dependent diabetes: short– and medium–term metabolic effects. Cooper PL, et al. **Diabetic Med** 1988 Oct;5(7):676–80

Geographic and temporal variations of sugar and margarine consumption in relation to Crohn's disease. Sonnenberg A. **Digestion** 1988;41(3):161–71

Induction of random microtubule polymerization in cold and drug–treated PtK1 cells following hyperosmotic shock treatment. Mullins JM, et al. **Eur J Cell Biol** 1989 Jun; 49(1):149–53

The preparation and characterization of lipid vesicles containing esters of sucrose and fatty acids. Schenk P, et al. **J Microencapsul** 1989 Jan–Mar;6(1):95–103

Taste preferences of squirrel monkeys and bonnet macaques for Polycose, maltose and sucrose. Sunderland G, et al. **Physiol Behav** 1988;43(6):685–90

[Comparative studies of the cryopreservation of mouse embryos with glycerin supplemented with sucrose or royal jelly] Visintin JA, et al. **DTW** 1988 Oct;95(9):398–401 (Eng. Abstr.) (Ger)

ADMINISTRATION & DOSAGE

Quantification of incipient approximal caries during fructose and sucrose consumption. Rekola M. **Acta Odontol Scand** 1989 Apr;47(2):77–80

Comparative effects of meals high in protein, sucrose, or starch on human mineral metabolism and insulin secretion. Holl MG, et al. **Am J Clin Nutr** 1988 Nov;48(5):1219–25

Study of a lifetime of sucrose intake by the Fischer–344 rat. Smith JC, et al. **Ann N Y Acad Sci** 1989;561:291–306

Dietary sucrose and oestradiol concentration in young men. Yudkin J, et al. **Ann Nutr Metab** 1988;32(2):53–5

Effects of concentration presentation order and intraoral delivery on sucrose intake [published erratum appears in Behav Neurosci 1989 Feb;103(1):53] Flynn FW, et al. **Behav Neurosci** 1988 Dec;102(6):992–4

The importance of the form of nitrogen on microbial protein synthesis in the rumen of cattle receiving grass silage and continuous intrarumen infusions of sucrose. Rooke JA, et al. **Br J Nutr** 1989 Jan;61(1):113–21

Sugar load of oral liquid medications on chronically ill children. Kenny DJ, et al. **Can Dent Assoc J** 1989 Jan; 55(1):43–6

Per capita consumption of sugar–containing products and dental caries in Sweden from 1960 to 1985. Birkhed D, et al. **Community Dent Oral Epidemiol** 1989 Feb;17(1):41–3

Negative contrast in the consumption of sucrose and quinine adulterated sucrose solutions. Flaherty CF, et al. **J Am Coll Nutr** 1989 Feb;8(1):47–55

The effects of dietary sucrose on opiate receptor binding in genetically obese (ob/ob) and lean mice. Marks–Kaufman R, et al. **J Am Coll Nutr** 1989 Feb; 8(1):9–14

Effects of sugar (sucrose) on children's behavior. Rosén LA, et al. **J Consult Clin Psychol** 1988 Aug;56(4):583–9

The effect of previous diet on plaque pH response to different foods. Sgan–Cohen HD, et al. **J Dent Res** 1988 Nov; 67(11):1434–7

Plasma lipids, lipoproteins, and fecal excretion of neutral sterols and bile acids in rats fed various high fat diets or a low fat/high sucrose diet. Høstmark AT, et al. **J Nutr** 1989 Mar;119(3):356–63

Dietary modulation of oral amphetamine intake in rats. Kanarek RB, et al. **Physiol Behav** 1988;44(4–5):501–5

Naloxone attenuation of sham feeding is modified by manipulation of sucrose concentration. Kirkham TC, et al. **Physiol Behav** 1988;44(4–5):491–4

Correlation between caries incidence and frequency of chewing gum sweetened with sucrose or xylitol. Rekola M. **Proc Finn Dent Soc** 1989;85(1):21–4

Effects of dopamine receptor antagonists on sucrose consumption and preference. Muscat R, et al. **Psychopharmacology (Berlin)** 1989;99(1):98–102

Sugar substitutes—one consequence of the Vipeholm Study? Birkhed D. **Scand J Dent Res** 1989 Apr;97(2):126–9

Microbial aspects of frequent intake of products with high sugar concentrations. Carlsson J. **Scand J Dent Res** 1989 Apr;97(2):110–4 (29 ref.)

Distribution of mutans streptococci in populations with different levels of sugar consumption. Carlsson P. **Scand J Dent Res** 1989 Apr;97(2):120–5 (4 ref.)

Frequent sugar intake—then and now: interpretation of the main results. Newbrun E. **Scand J Dent Res** 1989 Apr; 97(2):103–9

[The effect of saccharose on the growth and structure of bone tissue] Smoliar VI, et al. **Vopr Pitan** 1989 Jan–Feb; (1):52–6 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Guttman scale analysis of dental health attitudes and knowledge. Petersen PE. **Community Dent Oral Epidemiol** 1989 Aug;17(4):170–2

Smoking and sugar intake are separate but interactive risk factors in Crohn's disease. Katschinski B, et al. **Gut** 1988 Sep;29(9):1202–6

The effects of sugars intake and frequency of ingestion on dental caries increment in a three–year longitudinal study. Burt BA, et al. **J Dent Res** 1988 Nov;67(11):1422–9 (80 ref.)

Sugar proximity and human grip strength. Quintanar AF, et al. **Percept Mot Skills** 1988 Dec;67(3):853–4

Why was the Vipeholm Study done and why have this symposium? Krasse B. **Scand J Dent Res** 1989 Apr; 97(2):99–102

Why is sucrose so cariogenic? The role of glucosyltransferase and polysaccharides. Rölla G. **Scand J Dent Res** 1989 Apr; 97(2):115–9 (31 ref.)

[Acute renal failure after treatment of a wound using sucrose (letter)] Viau F, et al. **Presse Med** 1989 Feb 11;18(5):227 (Fre)

[Review of the role of saccharose in the light of cariologic–dietetic studies. Possibilities of the prophylactic use of sugar substitutes] Végh A. **Fogorv Sz** 1989 Mar; 82(3):71–9 (64 ref.) (Hun)

ANALOGS & DERIVATIVES

Consumption of alcohol compared to another bitter solution in a limited access drinking paradigm. Linseman MA. **Alcohol** 1988 Jul–Aug;5(4):301–3

Sucrose octaacetate tasting in a heterogeneous population of CFW mice. Gannon KS, et al. **Behav Genet** 1989 May; 19(3):417–31

The B6.SW bilineal congenic sucrose octaacetate (SOA)–taster mice. Whitney G, et al. **Behav Genet** 1989 May;19(3):409–16

Synthesis of 6–deoxy–6–fluorosucrose, and its inhibition of Leuconostoc and Streptococcus D–glucansucrases. Eklund SH, et al. **Carbohydr Res** 1988 Jun 15;177:253–8

Synthesis of 4,6–dideoxysucrose, and inhibition studies of Leuconostoc and Streptococcus D–glucansucrases with deoxy and chloro derivatives of sucrose modified at carbon atoms 3, 4, and 6. Tanriseven A, et al. **Carbohydr Res** 1989 Feb 15;186(1):87–94

Influence of absorbable and nonabsorbable lipids and lipidlike substances on drug bioavailability. Roberts RJ, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):299–304

Preparation of 3–amino–3–deoxy derivatives of trehalose and sucrose and their activities. Asano N, et al. **J Antibiot (Tokyo)** 1989 Apr;42(4):585–90

Sucrose octaacetate–taster mice have more vallate taste buds than non–tasters. Miller IJ Jr, et al. **Neurosci Lett** 1989 May 22;100(1–3):271–5

[Isolation of a homogeneous functionally active beta–adrenergic receptor from bovine cerebellum using lauroyl sucrose. Effect of trypsin on receptor activity] Voeikov VL, et al. **Biokhimiia** 1988 Nov;53(11):1763–71 (Eng. Abstr.) (Rus)

ANALYSIS

Sucrose enzyme electrode. Xu YH, et al. **Anal Chem** 1989 Apr 1;61(7):782–4

The phase diagram of 1,2–dipalmitoyl–sn–glycero–3–phosphocholine/sucrose in the dry state. Sucrose substitution for water in lamellar mesophases. Hentschel M, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):169–74

Determination of acrylamide in sugar by capillary GLC with alkali flame–ionization detection. Tekel J, et al. **Food Addit Contam** 1989 Jul–Sep;6(3):377–81

Protective effect of sucrose on spray drying of oxyhemoglobin. Labrude P, et al. **J Pharm Sci** 1989 Mar; 78(3):223–9

Evaluating the fracture toughness of sucrose crystals using microindentation techniques. Duncan–Hewitt WC, et al. **Pharm Res** 1989 May;6(5):373–8

CHEMICAL SYNTHESIS

Synthesis of 4,6–dideoxysucrose, and inhibition studies of Leuconostoc and Streptococcus D–glucansucrases with deoxy and chloro derivatives of sucrose modified at carbon atoms 3, 4, and 6. Tanriseven A, et al. **Carbohydr Res** 1989 Feb 15;186(1):87–94

GENETICS

[Structural and functional organization of the transposon Tn2555 carrying saccharose utilization genes] Doroshenko VG, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):645–58 (Eng. Abstr.) (Rus)

METABOLISM

In vitro acid production from starch and sucrose in saliva. Renz CL, et al. **ASDC J Dent Child** 1989 Jul–Aug; 56(4):267–9

Decreased–activity mutants of phosphoglucose isomerase in the cytosol and chloroplast of Clarkia xantiana. Impact on mass–action ratios and fluxes to sucrose and starch, and estimation of Flux Control Coefficients and Elasticity Coefficients. Kruckeberg AL, et al. **Biochem J** 1989 Jul 15;261(2):457–67

Clinical aspects of sucrose and fructose metabolism. Bantle JP. **Diabetes Care** 1989 Jan;12(1):56–61; discussion 81–2 (29 ref.)

Intestinal disaccharidases assessed in congenital asucrasia by differential urinary disaccharide excretion. Maxton DG, et al. **Dig Dis Sci** 1989 Jan;34(1):129–31

Evidence for the presence of two distinct sites of sucrose hydrolysis and glucosyl transfer activities on 1,3–alpha–D–glucan synthase of Streptococcus mutans. Yamashita Y, et al. **FEBS Lett** 1989 Jan 30;243(2):343–6

Thermodynamics of the hydrolysis of sucrose. Goldberg RN, et al. **J Biol Chem** 1989 Jun 15;264(17):9901–4

Analysis of sucrose catabolism in Klebsiella pneumoniae and in Scr+ derivatives of Escherichia coli K12. Sprenger GA, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1635–44

Effect of dexamethasone on transport of alpha–aminoisobutyric acid and sucrose across the blood–brain barrier. Ziylan YZ, et al. **J Neurochem** 1988 Nov;51(5):1338–42

Regional alterations in blood–to–brain transfer of alpha–aminoisobutyric acid and sucrose, after chronic administration and withdrawal of dexamethasone. Ziylan YZ, et al. **J Neurochem** 1989 Mar;52(3):684–9

[Effects of 5 kinds of sugar on the pH of plaque] Li RY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Sep; 23(5):284–6, 319 (Eng. Abstr.) (Chi)

[Current diagnostic method for saccharose–isomaltose malabsorption] Micskey E, et al. **Orv Hetil** 1989 Sep 3; 130(36):1921–3 (Eng. Abstr.) (Hun)

[Change in intracellular activity and secretion of various lysosomal glycosidases of human fibroblasts cultured in medium with sucrose] Ivleva TS, et al. **Biokhimiia** 1988 Dec;53(12):2010–8 (Eng. Abstr.) (Rus)

[Sucrose utilization determinants of transposon Tn2555] Doroshenko VG, et al. **Mol Gen Mikrobiol Virusol** 1988 Nov;(11):29–35 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Perineurial permeability and endoneurial edema during Wallerian degeneration of the frog peripheral nerve. Wadhwani KC, et al. **Brain Res** 1989 Jul 31;493(2):231–9

Solvent drag of sucrose during absorption indicates paracellular water flow in the rat kidney proximal tubule. Whittembury G, et al. **Pflugers Arch** 1988 Oct;412(5):541–7

The Madin Darby canine kidney (MDCK) epithelial cell monolayer as a model cellular transport barrier. Cho MJ, et al. **Pharm Res** 1989 Jan;6(1):71–7

Neutrophil–mediated transport of liposomes across the Madin Darby canine kidney epithelial cell monolayer. Cho MJ, et al. **Pharm Res** 1989 Jan;6(1):78–84

PHARMACOLOGY

Stabilization of the attenuated poliovirus type 3 vaccine strain by sucrose. Srivastava AK. **Acta Virol (Praha)** 1989 Mar; 33(2):188–90

Stabilization of small, unilamellar phospholipid vesicles by sucrose during freezing and dehydration. Hauser H, et al. **Adv Exp Med Biol** 1988;238:71–80

Metabolic effects of adding sucrose and aspartame to the diet of subjects with noninsulin–dependent diabetes mellitus. Colagiuri S, et al. **Am J Clin Nutr** 1989 Sep; 50(3):474–8

Polycose and sucrose appetite in rats: influence of food deprivation and insulin treatment. Lucas F, et al. **Appetite** 1988 Dec;11(3):201–13

Comparison of the effects of aspartame and sucrose on appetite and food intake. Rolls BJ, et al. **Appetite** 1988;11 Suppl 1:62–7

Effect of sucrose on the dimerization of alpha–chymotrypsin. Allowance for thermodynamic nonideality arising from the presence of a small inert solute. Shearwin KE, et al. **Biophys Chem** 1988 Sep;31(3):287–94

Comparison of Lycasin versus sucrose sweets in

demineralization studies of human enamel and hydroxylapatite. Grenby TH, et al. **Caries Res** 1988; 22(5):269–75

Effects of Parafilm and cheese chewing on human dental plaque pH and metabolism. Higham SM, et al. **Caries Res** 1989;23(1):42–8

Effect of metabolic inhibitors on sucrose-induced metaphase spindle elongation and spindle recovery. Snyder JA. **Cell Motil Cytoskeleton** 1988;11(4):291–302

Effect of sucrose-containing snacks on blood glucose control. Wise JE, et al. **Diabetes Care** 1989 Jun;12(6):423–6

Effects of dietary sucrose on age-related changes in VLDL-triglyceride kinetics in the rat. Kazumi T, et al. **Diabetes Res Clin Pract** 1989 Apr 1;6(3):185–90

Combined effect of exogenous insulin and sucrose on alterations in plasma lipoproteins induced by cholesterol feeding in the rat. Kazumi T, et al. **Diabetes Res Clin Pract** 1989 Apr 1;6(3):221–6

Effect of alpha-glucosidase inhibitor on exocrine and endocrine pancreatic function in rats fed a high-carbohydrate diet consisting of sucrose or glucose. Otsuki M, et al. **Diabetes Res Clin Pract** 1988 Oct 14; 5(4):257–63

Derangement in hepatic enzymes caused by sucrose-drinking and its implication for the development of hyperglycemia in female Wistar fatty rats. Sugiyama Y, et al. **Endocrinol Jpn** 1989 Apr;36(2):245–51

Induction of saccharolytic enzymes by sucrose in Bacillus subtilis: evidence for two partially interchangeable regulatory pathways. Steinmetz M, et al. **J Bacteriol** 1989 Mar;171(3):1519–23

Evaluation of a model for short-term clinical testing of cariogenicity. Sundström F, et al. **J Biol Buccale** 1989 Jun; 17(2):115–20

Effect of sucrose diet on apolipoprotein biosynthesis in rat liver. Increase in apolipoprotein E gene transcription. Strobl W, et al. **J Biol Chem** 1989 Jan 15;264(2):1190–4

The effects of different levels of dietary sucrose on root caries subsequent to gingivectomy in conventional rats infected with Actinomyces viscosus M-100. Firestone AR, et al. **J Dent Res** 1988 Oct;67(10):1342–5

Prevention of sucrose-induced demineralization of tooth enamel by chewing sorbitol gum. Kashket S, et al. **J Dent Res** 1989 Mar;68(3):460–2

Factors affecting absorption and excretion of 54Mn in rats. Lee DY, et al. **J Nutr** 1988 Dec;118(12):1509–16

The effects of glucose, fructose, and sucrose ingestion during exercise. Murray R, et al. **Med Sci Sports Exerc** 1989 Jun; 21(3):275–82

Sucrose sham-feeding in the rat after administration of the selective dopamine D2 receptor agonist N-0437, d-amphetamine or cocaine. Cooper SJ, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):447–52

Effect of clonidine on sucrose intake and water intake varies as a function of dose, deprivation state, and duration of exposure. Flaherty CF, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):383–9

Sucrose-induced hyperphagia and obesity in rats fed a macronutrient self-selection diet. Ackroff K, et al. **Physiol Behav** 1988;44(2):181–7

Children's food intake following drinks sweetened with sucrose or aspartame: time course effects. Birch LL, et al. **Physiol Behav** 1989 Feb;45(2):387–95

Modulation of steroid affinity for the androgen receptor by sucrose. Traish AM, et al. **Steroids** 1989 Jan–Feb; 53(1–2):169–93

[Changes in the composition of fatty acids in the blood during increased sucrose intake] Rath R, et al. **Vnitr Lek** 1988 Sep;34(9):896–901 (Eng. Abstr.) **(Cze)**

[Effect of saccharose on the composition and properties of mixed saliva in children with differing caries susceptibility] Redinova TL. **Stomatologiia (Mosk)** 1989 Jan–Feb; 68(1):74–6 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Prevention of acute renal failure by SOD and sucrose. Wolgast M, et al. **Basic Life Sci** 1988;49:1053–6

Sucrose feeding prevents changes in myosin isoenzymes and sarcoplasmic reticulum Ca2+-pump ATPase in pressure-loaded rat heart. Rupp H, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):917–23

Effect of phosphate-buffered sucrose flush solution upon the initial phase of ischaemic acute renal failure in the rat. Ferwana OS, et al. **Clin Sci** 1989 Jul;77(1):77–84

TOXICITY

Ingestion of low concentrations of sucrose or hydrochloric acid solutions accelerates mortality in rats with cholestatic liver disease. Deems RO, et al. **Physiol Behav** 1988; 44(1):151–3

SUCTION

Removal of a nondeflating balloon angioplasty catheter after percutaneous aspiration [letter] Price J, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1347

Tips on broken PEEP [letter] Carelli R. **Am J Nurs** 1989 Sep;89(9):1131

Glass particle contamination: influence of aspiration methods and ampule types. Sabon RL Jr, et al. **Anesthesiology** 1989 May;70(5):859–62

Endotracheal suctioning. Stone KS, et al. **Annu Rev Nurs Res** 1989;7:27–49 (46 ref.)

Needle aspiration of nonperitonsillar head and neck abscesses. A six-year experience. Herzon FS. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1312–4

The role of percutaneous lung aspiration in the bacteriological diagnosis of pneumonia in adults. Barnes DJ, et al. **Aust N Z J Med** 1988 Oct;18(6):754–7

Repeated aspiration of breast abscesses in lactating women. Dixon JM. **BMJ** 1988 Dec 10;297(6662):1517–8

Closed suction wound drainage and lower-segment caesarean section. Saunders NJ, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):1060–2

Suction drainage of the axilla: a prospective randomized trial. Cameron AE, et al. **Br J Surg** 1988 Dec;75(12):1211

Review of a hospital experience of breast abscesses [letter] Nash AG, et al. **Br J Surg** 1989 Jan;76(1):103

Diagnosis of Legionella lung abscess by percutaneous needle aspiration. Dobranowski J, et al. **Can Assoc Radiol J** 1989 Feb;40(1):43–4

Endoscopic retrieval of ingested broken glass in the esophagus and stomach by end-hood and suction technique [letter] Tuen HH, et al. **Gastrointest Endosc** 1989 Jul–Aug; 35(4):357–8

Arterial blood gas changes with a hyperinflation and hyperoxygenation suctioning intervention in critically ill patients. Chulay M. **Heart Lung** 1988 Nov;17(6 Pt 1):654–61

Is aspiration of middle ear effusions prior to ventilation tube insertion really necessary? Youngs RP, et al. **J Otolaryngol** 1988 Aug;17(5):204–6

Tracheal suction in meconium-stained neonates [letter] Paul VK, et al. **J Pediatr** 1989 Mar;114(3):508

Management of meconium-stained neonate [letter; comment] Wiswell TE. **J Pediatr** 1989 Jul;115(1):165–6. **Comment on:** J Pediatr 1988 Apr;112(4):613–5

Negative pressure devices in the explanted penile prosthesis population. Moul JW, et al. **J Urol** 1989 Sep;142(3):729–31

Teaching and training of invasive procedures on cadavers [letter] Brattebø G, et al. **Lancet** 1988 Nov 5;2(8619):1078–9

Antibiotic sclerotherapy for renal cysts. van der Ent CK, et al. **ROFO** 1989 Mar;150(3):339–41

Fasciitis and abscesses complicating liposuction. Bello EF, et al. **West J Med** 1988 Jun;148(6):703–6

[Transvaginal aspiration of follicular fluid using a sonographic vaginal probe in an in vitro fertilization and embryo transfer program] Ventruba P, et al. **Cesk Gynekol** 1988 May;53(4):267–74 (Eng. Abstr.) **(Cze)**

[Local bronchoscopic treatment and surgical drainage of lymph node abscesses in bronchial lymph node tuberculosis in childhood] Hofmann A. **Prax Klin Pneumol** 1988 Jul; 42(7):620–4 (Eng. Abstr.) **(Ger)**

[Hypothermia and aspiration drainage in chronic osteomyelitis of tubular bones] Ermolov AS, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):110–2 **(Rus)**

[Bacteriologic and cytologic evaluation of vacuum therapy of suppurative wounds] Davydov IuA, et al. **Vestn Khir** 1988 Oct;141(10):48–52 (Eng. Abstr.) **(Rus)**

[Treatment of patients with lung abscess by local administration of papain] Udod VM, et al. **Vestn Khir** 1989 Mar;142(3):24–7 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Refractory bradycardia during aspiration of a tracheal cyst in a young infant. Uejima T, et al. **Anesthesiology** 1988 Nov;69(5):776–8

Quick isolation of vacuum suction [letter] Marchment MD. **Br Dent J** 1989 Jun 24;166(12):438–9

Unsuspected hemodynamic alterations during endotracheal suctioning. Walsh JM, et al. **Chest** 1989 Jan;95(1):162–5

Vertigo following aural suction: can it be prevented? Gray RF, et al. **Clin Otolaryngol** 1988 Aug;13(4):285–8

Bradycardic responses to endotracheal suctioning [letter] McCauley CS, et al. **Crit Care Med** 1988 Nov;16(11):1165–6

INSTRUMENTATION

An aspiration-irrigation soft contact lens for maintenance of the anterior chamber. Tsubota K. **Am J Ophthalmol** 1988 Dec 15;106(6):759–60

The suction knife in liver surgery. Haapiainen R, et al. **Am J Surg** 1989 Mar;157(3):340–2, 344–5

Implosion of a suction apparatus. Cozanitis DA, et al. **Anaesthesiol Reanim** 1988;13(4):243–4

Percutaneous nucleotomy: a new interventional radiological technique for lumbar disk removal. Weigand H, et al. **Ann Radiol (Paris)** 1989;32(1):34–7

A new pericardial sucker: Omni sucker for better aspiration of intrapericardial blood. Hosoda Y, et al. **Ann Thorac Surg** 1988 Nov;46(5):582–3

Percutaneous lumbar discectomy. An alternative to lumbar laminectomy. Brooks BJ. **AORN J** 1989 May;49(5):1332–8, 1340–1, 1344

A new intraocular aspiration probe with bipolar cautery and reflux capabilities. Fleischman J, et al. **Arch Ophthalmol** 1989 Feb;107(2):283

An automated aspirating-backflush system for fluid-gas exchange and retinal manipulation. McCuen BW 2d, et al. **Arch Ophthalmol** 1989 Jun;107(6):930

Selective left endobronchial suctioning in the intubated patient. Panacek EA, et al. **Chest** 1989 Apr;95(4):885–7

New irrigation/aspiration cannula for the superior capsular fornix. Rippel W. **J Cataract Refract Surg** 1988 Nov; 14(6):677–8

A simple and effective suction device for draining hand wounds. Wee JT. **J Hand Surg [Br]** 1988 Aug;13(3):356–7

Safety devices to prevent airborne infection from clinical suction apparatus. Blenkharn JI. **J Hosp Infect** 1988 Aug; 12(2):109–15

Infection risks from electrically operated breast pumps. Blenkharn JI. **J Hosp Infect** 1989 Jan;13(1):27–31

Choice of needle for ovum pickup. Haines CJ, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):111–2

A prospective randomized comparison of single- and double-lumen needles for transvaginal follicular aspiration. Scott RT, et al. **J In Vitro Fert Embryo Transf** 1989 Apr; 6(2):98–100

Resection of advanced stage neuroblastoma with the cavitron ultrasonic surgical aspirator. Loo R, et al. **J Pediatr Surg** 1988 Dec;23(12):1135–8

Clinical experience with a sucking sump catheter in the treatment of esophageal atresia. Ohkawa H, et al. **J Pediatr Surg** 1989 Apr;24(4):333–5

Intrapartum suctioning of meconium: comparative efficacy of bulb syringe and De Lee catheter. Cohen-Addad N, et al. **J Perinatol** 1987 Spring;7(2):111–3

Which drain? A comparison of the tensile strengths of vacuum drainage tubes. Paton RW, et al. **J R Coll Surg Edinb** 1988 Jun;33(3):127–9

Contamination of suction drainage systems in vascular surgery. Watson JD, et al. **J R Coll Surg Edinb** 1988 Jun; 33(3):130–1

Mediastinal infection after cardiac operation. A simple closed technique. Durandy Y, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):282–5

Mechanical aspiration of hematomas in an in vitro model. Kaufman HH, et al. **Neurosurgery** 1989 Sep;25(3):347–49; discussion 349–50

A new instrument for surface suction and removal of irrigation fluid during surgery. Hagan JC 3d. **Ophthalmic Surg** 1989 Feb;20(2):126–7

Plastic suction tip in anterior cruciate ligament reconstruction. Skyhar MJ, et al. **Orthop Rev** 1988 Sep; 17(9):933–5

Use of the CUSA in removal of a recurrent intraorbital mucocele. Gillespie RP, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):71–2

A study of the capillary permeability in patients with venous hypertension by a new system: the vacuum suction chamber (VSC) device. Belcaro G, et al. **Panminerva Med** 1988 Oct–Dec;30(4):201–4

Maintaining chest tube patency. Halejian BA, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):521

A history of surgical suction from Dieulafoy to Gomco. Pescovitz MD. **Surg Gynecol Obstet** 1989 Sep; 169(3):266–74

[Observations on the work by C. Schmidt et al. Studies of the efficacy of bronchial cleansing using a new double-lumen probe (letter)] Konrad F, et al. **Anaesthesist** 1989 May;38(5):266–8 **(Ger)**

[Results of the cataract peeling method with the suction-irrigation system] Riebsamen D, et al. **Fortschr Ophthalmol** 1988;85(5):497–8 (Eng. Abstr.) **(Ger)**

[Preoperative use of suction cup oculopression in comparison with Vörösmarthy oculopression] Hessemer V, et al. **Klin Monatsbl Augenheilkd** 1989 Feb;194(2):83–7 (Eng. Abstr.) **(Ger)**

[Relation of negative pressure difference and artificially elevated intraocular pressure using the suction cup method] Stodtmeister R, et al. **Klin Monatsbl Augenheilkd** 1989 Mar; 194(3):178–83 (Eng. Abstr.) **(Ger)**

[Complications of Redon drainage following hip joint replacement operations—an analysis of the causes] Kirschner P, et al. **Unfallchirurgie** 1989 Feb;15(1):24–31 (Eng. Abstr.) **(Ger)**

[AS & A (aqua-stream and aspirator) in neurosurgery: comparison with laser and CUSA] Ito H, et al. **No Shinkei Geka** 1988 Dec;16(13):1451–5 (Eng. Abstr.) **(Jpn)**

[A method of fixation of an aspirator mouthpiece] Lomachenko IN, et al. **Anesteziol Reanimatol** 1989 Jan–Feb;(1):50–1 **(Rus)**

[A device for irrigation-aspiration] Surovikin DM, et al. **Klin Khir** 1989;(1):68 **(Rus)**

[A device for sanitizing cavities and ducts] Tsybyrné KA, et al. **Klin Khir** 1988;(7):71 **(Rus)**

[A device for cryovacuum treatment] Vuraki KA, et al. **Med Tekh** 1989 Jan–Feb;(1):46–9 (Eng. Abstr.) **(Rus)**

METHODS

The use of suction curettage as adjunct to the management of lymphedema. Louton RB, et al. **Ann Plast Surg** 1989 Apr;22(4):354–7

Epidermal grafting using the tops of suction blisters in the treatment of vitiligo. Koga M. **Arch Dermatol** 1988 Nov; 124(11):1656–8

Catheter aspiration for simple pneumothorax. Experience with 114 patients. Delius RE, et al. **Arch Surg** 1989 Jul; 124(7):833–6

Elevated position of suction outflow during arthroscopic motorized surgery: an experimental study. Dolk T, et al. **Arthroscopy** 1989;5(2):97–100

Method for securing suction drains. Stacey-Clear A, et al. **Br J Surg** 1988 Dec;75(12):1195
Measuring gastric contents during general anaesthesia: evaluation of blind gastric aspiration. Taylor WJ, et al. **Can J Anaesth** 1989 Jan;36(1):51–4
Percutaneous aspiration of a coronary thrombus. Lablanche JM, et al. **Cathet Cardiovasc Diagn** 1989 Jun;17(2):97–8
Delivery room management of meconium staining of the amniotic fluid and the development of meconium aspiration syndrome. Hageman JR, et al. **J Perinatol** 1988 Spring; 8(2):127–31
Prophylactic closed suction drainage of femoral wounds in patients undergoing vascular reconstruction. Healy DA, et al. **J Vasc Surg** 1989 Aug;10(2):166–8
Two births after microsurgical sperm aspiration in congenital absence of vas deferens [letter] Patrizio P, et al. **Lancet** 1988 Dec 10;2(8624):1364
Complications of endodrainage retinotomies created during vitreous surgery for complicated retinal detachment. McDonald HR, et al. **Ophthalmology** 1989 Mar; 96(3):358–63
Oral suction in the delivery room [letter] Ballard JL. **Pediatrics** 1989 Jun;83(6):1075–6
Gastric aspiration versus antimony and glass pH electrodes. A simultaneous comparative in vivo study. Savarino V, et al. **Scand J Gastroenterol** 1989 May;24(4):434–9
A simple collecting system for leakage of ascitic fluid. Cohen SR, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):515–6
[A new technologic module (method) for performing drainage in surgical practice] Velev K. **Khirurgiia (Sofiia)** 1989;42(2):98–100 (Bul)
[Experience with the ultrasonic aspirator in surgery of benign goiter] Jung D, et al. **Helv Chir Acta** 1989 Jun; 56(1–2):147–50 (Eng. Abstr.) (Ger)
[Gravity drainage versus suction drainage: an experimental and clinical study] Gerngross H, et al. **Unfallchirurg** 1989 Jan;92(1):37–42 (Eng. Abstr.) (Ger)
[Active versus passive drainage in laparotomies] Olsen AK. **Tidsskr Nor Laegeforen** 1988 Nov 10;108(31):2864–5 (Eng. Abstr.) (Nor)
[Percutaneous drainage of liver abscesses under ultrasonic control] Elwertowski M, et al. **Pol Przegl Radiol (Warszawa)** 1988 Mar–Apr;52(2):77–81 (Eng. Abstr.) (Pol)
[Treatment of renal abscesses by percutaneous puncture and drainage under ultrasonographic control] Milewski JB, et al. **Pol Przegl Radiol (Warszawa)** 1988 Mar–Apr;52(2):82–6 (Eng. Abstr.) (Pol)
[Principles of closed aspiration-irrigation treatment of contaminated and suppurative wounds] Kanshin NN. **Khirurgiia (Mosk)** 1989 Jun;(6):112–5 (Rus)
[A method of draining the pleural cavity] Komarov NV, et al. **Klin Khir** 1988;(10):67 (Rus)
[Drainage of the uterine cavity in postpartum endometritis] Chikin VG, et al. **Sov Med** 1989;(4):20–3 (Eng. Abstr.) (Rus)
[Open treatment of postoperative peritonitis] Bytka PF, et al. **Vestn Khir** 1988 Oct;141(10):109–11 (Rus)
[Vacuum therapy of acute suppurative diseases of soft tissues and suppurative wounds] Davydov IuA, et al. **Vestn Khir** 1988 Sep;141(9):43–6 (Eng. Abstr.) (Rus)

STATISTICS & NUMERICAL DATA

Percutaneous aspiration, drainage, and biopsy in children. Liu P, et al. **J Pediatr Surg** 1989 Sep;24(9):865–6

SUCTION LIPECTOMY see **LIPECTOMY**

SUCTORIA see **CILIATA**

SUDDEN DEAFNESS see **DEAFNESS, SUDDEN**

SUDDEN INFANT DEATH

Support after sudden infant death. Woolsey SF. **Am J Nurs** 1988 Oct;88(10):1347–52
Hypoxic–ischaemic encephalopathy after near miss sudden infant death syndrome. Constantinou JE, et al. **Arch Dis Child** 1989 May;64(5):703–8
Cot death and prone sleeping position [letter] **BMJ** 1989 Jun 3;298(6686):1518–9
Sudden infant death syndrome [letter] **BMJ** 1989 Apr 8; 298(6678):958–60
Lung immunoglobulins in the sudden infant death syndrome. Forsyth KD, et al. **BMJ** 1989 Jan 7;298(6665):23–6
Iron and sudden infant death syndrome [letter] Moore A, et al. **BMJ** 1989 May 6;298(6682):1248
Sudden infant death syndrome and the media [letter] Routh C. **BMJ** 1989 Jul 8;299(6691):125
SIDS: a look into the future. May 30–31, 1988, Charleston, South Carolina. **J Perinatol** 1989 Jun;9(2):178–203
AIDS: Technology of the future. Gorsuch R. **J Perinatol** 1989 Jun;9(2):194–7
SIDS: an orchestral approach [editorial] Martin GI. **J Perinatol** 1989 Jun;9(2):125
SIDS: a look into the future. Introduction. Purohit DM, et al. **J Perinatol** 1989 Jun;9(2):178–9
Sudden infant death syndrome: resurgent research offers hope [news] Zylke JW. **JAMA** 1989 Sep 22–29;262(12):1565–6
Consumers need to be educated about SIDS [letter] Putnam A. **Mich Med** 1989 Jun;88(6):7
Haemorrhagic shock encephalopathy and sudden infant death syndromes [letter] Parsons AC, et al. **N Z Med J** 1988 Oct 26;101(856 Pt 1):672
Sudden infant death syndrome. **Pediatrician** 1988; 15(4):179–251
Sudden infant death syndrome. Drinkwater C. **Practitioner** 1988 May 23;232(1449):577–82
Marshall–Smith syndrome: further delineation. Yoder CC, et al. **South Med J** 1988 Oct;81(10):1297–300 (11 ref.)
[Virologic and morphologic study in sudden and unexpected death in children] Danes L, et al. **Cesk Pediatr** 1989 Mar; 44(3):136–40 (Eng. Abstr.) (Cze)
[Clinical and anatomo-pathologic study of 59 cases of sudden infant death] Dehan M, et al. **Arch Fr Pediatr** 1988 Oct; 45(8):541–8 (Eng. Abstr.) (Fre)
["Near miss" in the infant: a problem of terminology (letter)] Laplane R, et al. **Arch Fr Pediatr** 1989 Feb;46(2):155 (Fre)
[Sudden infant death syndrome (editorial)] Nézelof C, et al. **Arch Fr Pediatr** 1989 Jun–Jul;46(6):397–9 (Fre)
[LHRH in the human hypothalamus. Immunohistochemical mapping in normal newborn infants or in sudden death infants] Najimi M, et al. **C R Soc Biol (Paris)** 1989; 183(1):73–8 (Eng. Abstr.) (Fre)
[Sudden infant death] Veljković S, et al. **Srp Arh Celok Lek** 1988 Oct;116(10):893–900 (Eng. Abstr.) (Sec)

BLOOD

Sudden infant death and long-chain 3-hydroxyacyl-CoA dehydrogenase [letter] Wanders RJ, et al. **Lancet** 1989 Jul 1;2(8653):52–3
Fetal hemoglobin in sudden infant death syndrome [letter] Cheron G, et al. **N Engl J Med** 1989 Apr 13;320(15):1011–2

CEREBROSPINAL FLUID

Postmortem cerebrospinal fluid pleocytosis. Platt MS, et al. **Am J Forensic Med Pathol** 1989 Sep;10(3):209–12

CHEMICALLY INDUCED

[Metal pollutants in infants] Köhler-Schmidt H, et al. **Beitr Gerichtl Med** 1988;46:155–9 (Eng. Abstr.) (Ger)

COMPLICATIONS

Elevated levels of hypoxanthine in vitreous humor indicate prolonged cerebral hypoxia in victims of sudden infant death syndrome. Rognum TO, et al. **Pediatrics** 1988 Oct; 82(4):615–8
[Unexplained sudden death of an infant with Bourneville's tuberous sclerosis (letter)] Netter JC, et al. **Presse Med** 1989 May 20;18(20):1030 (Fre)

DIAGNOSIS

A practical approach to infantile apnea. Preston G. **Henry Ford Hosp Med J** 1988;36(4):204–6 (16 ref.)
A review of georgia SIDS autopsy reports for a 2-year period. Samuels BN, et al. **J Med Assoc Ga** 1989 Sep; 78(9):615–9
[Is an early selection of healthy infants at risk for SIDS possible: scoring?] Ceña Callejo R. **An Esp Pediatr** 1988 Sep;29 Suppl 32:263–6 (Spa)

EPIDEMIOLOGY

Secular trends of sudden infant death syndrome and other causes of post perinatal mortality in Norwegian birth cohorts 1967–1984. Irgens LM, et al. **Acta Paediatr Scand** 1989 Mar;78(2):228–32
Deaths from sudden infant death syndrome on public holidays and weekends. Mitchell EA, et al. **Aust N Z J Med** 1988 Dec;18(7):861–3
Sudden infant death syndrome [letter; comment] Bass M. **BMJ** 1989 May 13;298(6683):1311. **Comment on:** BMJ 1989 Mar 18;298(6675):721
Sudden infant death syndrome in Hong Kong: confirmation of low incidence [see comments] Lee NN, et al. **BMJ** 1989 Mar 18;298(6675):721. **Comment in:** BMJ 1989 May 13;298(6683):1311
Sudden infant death syndrome and near-miss episodes. Daga SR, et al. **Indian Pediatr** 1988 Sep;25(9):852–6
Leads from the MMWR. Sudden infant death syndrome as a cause of premature mortality—United States, 1984 and 1985. **JAMA** 1988 Dec 9;260(22):3255–6
Trends in unexpected infant deaths [letter] Becroft DM, et al. **Lancet** 1989 Mar 25;1(8639):673–4
Trends in unexpected infant deaths in Sheffield. Taylor EM, et al. **Lancet** 1988 Nov 12;2(8620):1121–3
Trends in unexpected infant deaths in Sheffield [letter] Wudel S, et al. **Lancet** 1989 Feb 18;1(8634):378
Narcotic addiction and the sudden infant death syndrome [letter] Thomas DB. **Med J Aust** 1988 Nov 21;149(10):562
Sudden infant death syndrome as a cause of premature mortality—United States, 1984 and 1985. **MMWR** 1988 Oct 28;37(42):644–6, 652
Selenium and the north south gradient in cot death [letter] Logan JW. **N Z Med J** 1988 Dec 14;101(859):832
Seasonality in the sudden infant death syndrome. Osmond C, et al. **Paediatr Perinat Epidemiol** 1988 Oct;2(4):337–45 (43 ref.)
Clinical implications of sudden infant death syndrome epidemiology. Peterson DR. **Pediatrician** 1988; 15(4):198–203
Comparison of infants dying from the sudden infant death syndrome with matched live controls. Bartholomew S, et al. **Soc Sci Med** 1988;27(4):393–7
[Evolution of the sudden infant death syndrome (SIDS) on the international level. Perspective in our country] Camarasa Piquer F, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 32:254–7 (Spa)

ETIOLOGY

Differentiation of fatal neonatal enzyme deficiency and sudden infant death syndrome (SIDS). Brown GW, et al. **Alaska Med** 1988 Sep–Oct;30(5):159–60
Prenatal cocaine exposure is associated with respiratory pattern abnormalities. Chasnoff IJ, et al. **Am J Dis Child** 1989 May;143(5):583–7
Intrauterine growth retardation and risk of sudden infant death syndrome (SIDS). Buck GM, et al. **Am J Epidemiol** 1989 May;129(5):874–84
The fallacy of the simultaneous sudden infant death syndrome in twins. Bass M. **Am J Forensic Med Pathol** 1989 Sep; 10(3):200–5
SIDS research that causes pain. Gino C. **Am J Nurs** 1988 Oct;88(10):1353–4
Sudden unexpected death in a neonate. Imaizumi SO, et al. **Am J Perinatol** 1989 Jul;6(3):281–3
Recurrent cot death and suffocation [letter] Meadow R. **Arch Dis Child** 1989 Jan;64(1):179–80
Suffocation and sudden infant death syndrome [letter] **BMJ** 1989 Jul 15;299(6692):178–9
Sudden infant death syndrome and postneonatal mortality in immigrants in England and Wales. Balarajan R, et al. **BMJ** 1989 Mar 18;298(6675):716–20
Cot death and prone sleeping position in The Netherlands. de Jonge GA, et al. **BMJ** 1989 Mar 18;298(6675):722
Lung immunoglobulins in the sudden infant death syndrome [letter] Matthews TG, et al. **BMJ** 1989 Feb 25; 298(6672):522
Sudden infant death syndrome [editorial] Milner AD, et al. **BMJ** 1989 Mar 18;298(6675):689–90
Iron and the sudden infant death syndrome [letter] Murphy M, et al. **BMJ** 1989 Jun 17;298(6688):1643
Cigarette smoking and early neonatal death [letter] Nicholl JP, et al. **BMJ** 1988 Aug 13;297(6646):487–8
Sudden infant death syndrome: faulty maturation of haemoglobin and immunoglobulins [letter] Stewart AM. **BMJ** 1989 Feb 25;298(6672):521–2
Neonatal cardiac arrhythmias and their potential role in sudden infant death syndrome. Gillette PC, et al. **Clin Perinatol** 1988 Sep;15(3):699–712 (30 ref.)
The predictive value of behavioural risk factors for sudden infant death. Einspieler C, et al. **Early Hum Dev** 1988 Dec; 18(2–3):101–9
'The cot in cot deaths' [letter] Norvenius SG, et al. **Eur J Pediatr** 1988 Nov;148(2):170–1
Inflammation in the lungs of infants dying suddenly. A comparative study from two countries. Lignitz E, et al. **Forensic Sci Int** 1989 Jul;42(1–2):85–94
Respiratory and heart rate patterns in term neonates. Karna P, et al. **Indian J Pediatr** 1988 Nov–Dec;55(6):883–7
Sudden infant death and immunization: an extensive epidemiological approach to the problem in France—winter 1986. Bouvier-Colle MH, et al. **Int J Epidemiol** 1989 Mar;18(1):121–6
Risk factors for sudden infant death syndrome in the US Collaborative Perinatal Project. Kraus JF, et al. **Int J Epidemiol** 1989 Mar;18(1):113–20
Theories of cardiovascular causes in sudden infant death syndrome. Guntheroth WG. **J Am Coll Cardiol** 1989 Aug; 14(2):443–7 (47 ref.)
Immunohistological demonstration of Salmonella virchow in a case of infant death [letter] Bignardi GE, et al. **J Clin Pathol** 1989 Mar;42(3):329–30
Cardiac rhabdomyoma presenting as sudden infant death syndrome. Rigle DA, et al. **J Forensic Sci** 1989 May; 34(3):694–8
Sudden infant death syndrome: four deaths in one family. Harkess JR, et al. **J Okla State Med Assoc** 1988 May; 81(5):280–2
Risk of sudden infant death syndrome among infants with in utero exposure to cocaine. Bauchner H, et al. **J Pediatr** 1988 Nov;113(5):831–4
Sudden infant death syndrome and birth weight. Grether JK, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):561–7
Infantile apnea, home monitoring, and SIDS: go back to go [editorial] Little GA. **J Perinatol** 1987 Spring;7(2):83–4 (6 ref.)
Possible mechanisms for sudden unexplained infant death. Southall DP, et al. **J Perinatol** 1989 Jun;9(2):193
Inborn errors of metabolism and unexpected infant deaths [letter] Leonard JV, et al. **Lancet** 1988 Oct 8;2(8615):854
Sleeping position and infant bedding may predispose to hyperthermia and the sudden infant death syndrome. Nelson EA, et al. **Lancet** 1989 Jan 28;1(8631):199–201
Sudden infant death syndrome [letter] Taylor RC. **Lancet** 1989 Aug 26;2(8661):508
Opioid peptides from milk as a possible cause of sudden infant death syndrome. Ramabadran K, et al. **Med Hypotheses** 1988 Nov;27(3):181–7 (76 ref.)
Sudden infant death syndrome and lipoproteins. Reid GM. **Med Hypotheses** 1989 Jun;29(2):77–80 (35 ref.)
Sleeping position and sudden infant death syndrome [letter] Beal S. **Med J Aust** 1988 Nov 21;149(10):562

Three crib deaths, etc.—Med. Sci. Law (1988), Vol. 28, No. 3, pp. 205–211 [letter] Sturner WQ. **Med Sci Law** 1989 Jan; 29(1):78–9

R. L. Naeye. Sudden infant death syndrome, is the confusion ending? [letter] Mosca L. **Mod Pathol** 1989 Mar;2(2):184

Sudden infant death syndrome, is the confusion ending? Naeye RL. **Mod Pathol** 1988 May;1(3):169–74 (78 ref.)

More on sudden infant death syndrome and water beds [letter] **N Engl J Med** 1988 Nov 24;319(21):1415

Sudden infant death [letter] Gunn T, et al. **N Z Med J** 1989 Jan 25;102(860):21

A hypothesis about cot death [letter] Hassall IB, et al. **N Z Med J** 1989 Sep 13;102(875):480

Sudden infant death syndrome [letter] Horvath CH. **N Z Med J** 1989 May 10;102(867):234

A cot death prevention trial: King v La Leche [letter] Kibblewhite KE. **N Z Med J** 1989 Jul 12;102(871):359

Cot deaths [letter] Moodie JF. **N Z Med J** 1989 Mar 22; 102(864):142

Infant with an apparent life–threatening event and possible risk for sudden infant death syndrome. Kahn A, et al. **Padiatr Padol** 1988;23(4):293–306 (54 ref.)

Assessment of in utero hypoxia and risk of sudden infant death syndrome. Buck GM, et al. **Paediatr Perinat Epidemiol** 1989 Apr;3(2):157–73

Macrosomia, microphthalmia, and early rapid or sudden infant death: a new syndrome? [letter] Teebi AS, et al. **Pediatrics** 1989 Apr;83(4 Pt 2):647–8

Eight year study of viral isolates from cot deaths in Glasgow. Patrick WJ, et al. **Scott Med J** 1989 Jun;34(3):462–4

[Sudden infant death. Vascular etiology because of inactivity?] Kjøller GN. **Ugeskr Laeger** 1989 Jan 23; 151(4):250 **(Dan)**

[Sudden infant death (letter)] Kjøller GN. **Ugeskr Laeger** 1989 May 29;151(22):1406–7 **(Dan)**

[Are there pre– or perinatal risk factors for sudden infant death?] Petru E, et al. **Geburtshilfe Frauenheilkd** 1989 May; 49(5):494–7 (Eng. Abstr.) **(Ger)**

[Perinatal stress factors and sudden infant death (SIDS)] Petru E, et al. **Gynakol Rundsch** 1988;28 Suppl 2:131–2 **(Ger)**

[Sudden and unexpected infant death] Scheidt B, et al. **Kinderarztl Prax** 1989 May;57(5):207–12 (33 ref.) (Eng. Abstr.) **(Ger)**

[The pediatric vaccination counseling facility] Wiersbitzky S, et al. **Kinderarztl Prax** 1989 Jun;57(6):295–6 **(Ger)**

[Retrospective study of incidents of sudden death (SIDS) in 80 infants] Einspieler C, et al. **Padiatr Padol** 1988; 23(3):233–43 (Eng. Abstr.) **(Ger)**

[Sudden infant death: search for cause (editorial)] Sivan Y, et al. **Harefuah** 1988 Aug;115(3–4):95–6 **(Heb)**

[Epidemiological aspects of sudden death of young children] Briazgunov IP. **Pediatriia** 1989;(2):100–4 (63 ref.) **(Rus)**

[Selection of infants at risk for sudden infant death syndrome] Hernández Serrano RA, et al. **An Esp Pediatr** 1988 Sep; 29 Suppl 32:261–2 **(Spa)**

[Do defects in fatty acid oxidation cause sudden infant death?] Hagenfeldt L, et al. **Lakartidningen** 1989 Apr 26; 86(17):1575–6 **(Swe)**

GENETICS

Suggestively increased rate of infant death in children of fra(X) positive mothers. Fryns JP, et al. **Am J Med Genet** 1988 May–Jun;30(1–2):73–5

Infants at risk for sudden infant death syndrome (SIDS): differential prediction for three siblings of SIDS infants. Thoman EB, et al. **J Behav Med** 1988 Dec;11(6):565–83

Polysomnographic sleep and waking states are similar in subsequent siblings of SIDS and control infants during the first six months of life. Hoppenbrouwers T, et al. **Sleep** 1989 Jun;12(3):265–76

IMMUNOLOGY

Interleukin–1 as intermediary causing prolonged sleep apnea and SIDS during respiratory infections. Guntheroth WG. **Med Hypotheses** 1989 Feb;28(2):121–3

METABOLISM

Beta–endorphin in the brainstem, pituitary, and spinal fluid of infants at autopsy: relation to sudden infant death syndrome. Hollander N. **Forensic Sci Int** 1988 Jul–Aug; 38(1–2):67–74

Substance P in infants with relation to the sudden infant death syndrome—a preliminary report. Scholle S, et al. **Pharmazie** 1988 Jun;43(6):439–40

MICROBIOLOGY

The nasopharyngeal bacterial flora in the sudden infant death syndrome. Telford DR, et al. **J Infect** 1989 Mar; 18(2):125–30

MORTALITY

Postneonatal mortality, sudden infant death syndrome: factors preventing the decline of infant mortality in France from 1979 to 1985. Bouvier–Colle MH, et al. **Paediatr Perinat Epidemiol** 1989 Jul;3(3):256–67

PATHOLOGY

Cytological investigations on the cerebellar cortex of sudden infant death victims. Oehmichen M, et al. **Acta Neuropathol (Berl)** 1989;78(4):404–9

Sudden infant death in Stockholm. A forensic pathology study covering ten years. Rajs J, et al. **Acta Paediatr Scand** 1988 Nov;77(6):812–20

Masque ecchymotique. Specific or nonspecific indicator for abuse. Perrot LJ. **Am J Forensic Med Pathol** 1989 Jun; 10(2):95–7

Decreased lung surfactant disaturated phosphatidylcholine in sudden infant death syndrome. Gibson RA, et al. **Early Hum Dev** 1988 Aug–Sep;17(2–3):145–55

Cardiac lesions in sudden infant death syndrome. Kariks J. **Forensic Sci Int** 1988 Dec;39(3):211–25

Pulmonary lymphatics in SIDS—a comparative morphometric study. Ogbuihi S, et al. **Forensic Sci Int** 1988 Nov;39(2):197–206

Megalencephaly in sudden infant death syndrome. Shaw CM, et al. **J Child Neurol** 1989 Jan;4(1):39–42

SIDS and autopsies: does the medico–legal system in Georgia work for SIDS deaths? Samuels BN, et al. **J Med Assoc Ga** 1988 Aug;77(8):649–53

New brain stem and bone marrow abnormalities in victims of sudden infant death syndrome. Naeye RL, et al. **J Perinatol** 1989 Jun;9(2):180–3

Autopsy and diagnosing SIDS [letter] Bass M. **JAMA** 1989 Sep 1;262(9):1184–5

Structural changes in lungs of magnesium–deficient weanling rats dying spontaneously or after spontaneous recovery from the seizure–shock episode. Possible methods for sudden infant death syndromes. Caddell JL, et al. **Magnesium** 1988;7(4):195–209

Three crib deaths, a babyminder and probable infanticide. Emery JL, et al. **Med Sci Law** 1988 Jul;28(3):205–11

Pathological considerations of sudden infant death syndrome. Krous HF. **Pediatrician** 1988;15(4):231–9 (77 ref.)

Investigation of sudden infant deaths. Smialek JE, et al. **Pediatrician** 1988;15(4):191–7 (31 ref.)

Sudden infant death syndrome: overview of recent research developments from a pediatric pathologist's perspective. Valdes–Dapena M. **Pediatrician** 1988;15(4):222–30 (42 ref.)

[Age, sex and onset of death in sudden infant death] Kleemann WJ, et al. **Beitr Gerichtl Med** 1988;46:369–73 (Eng. Abstr.) **(Ger)**

[Selected epidemiologic and morphologic results of studies of sudden infant death in the Ruhr area] Klös G, et al. **Beitr Gerichtl Med** 1988;46:363–8 (Eng. Abstr.) **(Ger)**

[Polychlorobiphenyl compounds as leading pollutants in infants with environmentally relevant chemicals] Lenz J, et al. **Beitr Gerichtl Med** 1988;46:357–62 (Eng. Abstr.) **(Ger)**

[Histologic distribution pattern of thymus hemorrhages in sudden infant death] Risse M, et al. **Beitr Gerichtl Med** 1988;46:351–5 (Eng. Abstr.) **(Ger)**

[Morphology of "asphyxia–induced epiglottis form" in newborn infants, infants and young children] Althoff H. **Z Rechtsmed** 1989;102(5):305–14 (Eng. Abstr.) **(Ger)**

[Selective detection of cytomegalovirus by in situ hybridization] Cremer U. **Z Rechtsmed** 1988;100(4):237–42 (Eng. Abstr.) **(Ger)**

[Cellular components in interstitial lung tissue in sudden infant death—immunohistochemical characterization] Ogbuihi S, et al. **Z Rechtsmed** 1989;102(2–3):133–42 (Eng. Abstr.) **(Ger)**

[Changes in the ratio of collagen type I and III in the interlobular interstitium of the lung in sudden infant death—a pilot study] Ogbuihi S, et al. **Z Rechtsmed** 1988; 101(4):247–54 (Eng. Abstr.) **(Ger)**

[Comparative histologic studies of the origin of petechial thymus hemorrhage] Risse M, et al. **Z Rechtsmed** 1989; 102(1):33–40 (Eng. Abstr.) **(Ger)**

[Incidence and forensic value of liver cell hydrops in external asphyxia and sudden infant death] Weiler G, et al. **Z Rechtsmed** 1988;100(2–3):113–21 (Eng. Abstr.) **(Ger)**

[Sudden infant death syndrome and unexplained episodes of apnea: present view of the problem] Vidal Bota J. **An Esp Pediatr** 1988 Sep;29 Suppl 32:258–9 **(Spa)**

PHYSIOPATHOLOGY

Respiratory control in infants at increased risk for sudden infant death syndrome. Parks YA, et al. **Arch Dis Child** 1989 Jun;64(6):791–7

Sleep phase and gastro–oesophageal reflux in infants at possible risk of SIDS. Paton JY, et al. **Arch Dis Child** 1989 Feb;64(2):264–9

Polygraphic features of a victim of sudden infant death syndrome and of infants with apparent life–threatening event [published erratum appears in Brain Dev 1989;11(4):277] Kohyama J, et al. **Brain Dev** 1989; 11(3):186–90

Night sleep heart rate patterns recorded by cardiopneumography at home in normal and at–risk for SIDS infants. Peirano P, et al. **Early Hum Dev** 1988 Aug–Sep;17(2–3):175–86

Heart rate variation in normal infants and victims of the sudden infant death syndrome. Schechtman VL, et al. **Early Hum Dev** 1989 Jun;19(3):167–81

Impaired arousal from sleep: relationship to sudden infant death syndrome. Hunt CE. **J Perinatol** 1989 Jun;9(2):184–7 (27 ref.)

Hepatic microsomal glucose–6–phosphatase system and sudden infant death syndrome. Burchell A, et al. **Lancet** 1989 Aug 5;2(8658):291–4

Sleeping position and cot death [letter] Engelberts AC, et al. **Lancet** 1988 Oct 15;2(8616):899–900

Spectral analysis assessment of respiratory sinus arrhythmia in normal infants and infants who subsequently died of sudden infant death syndrome. Kluge KA, et al. **Pediatr Res** 1988 Dec;24(6):677–82

Brainstem research in sudden infant death syndrome. Kinney HC, et al. **Pediatrician** 1988;15(4):240–50 (49 ref.)

Polysomnographic studies of infants who subsequently died of sudden infant death syndrome. Kahn A, et al. **Pediatrics** 1988 Nov;82(5):721–7

Pneumogram recordings in infants resuscitated for apnea of infancy. Oren J, et al. **Pediatrics** 1989 Mar;83(3):364–8

Cardiac and respiratory patterns in normal infants and victims of the sudden infant death syndrome. Schechtman VL, et al. **Sleep** 1988 Oct;11(5):413–24

[The autonomic nervous system in sudden infant death syndrome. Analysis of heart rate and sinusal variability on Holter monitoring of infants who died] Cauchemez B, et al. **Arch Mal Coeur** 1989 May;82(5):745–52 (Eng. Abstr.) **(Fre)**

[Sudden infant death—the QT interval in ECG and bradyarrhythmias] Kaada B. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):186–92 (Eng. Abstr.) **(Nor)**

[Value of polygraphic studies of sleep in infants at risk for sudden infant death syndrome] Sanmarti Vilaplana FJ. **An Esp Pediatr** 1988 Sep;29 Suppl 32:260 **(Spa)**

PREVENTION & CONTROL

Unexpected death in infants monitored at home [editorial] Beckerman RC. **Am J Dis Child** 1988 Oct;142(10):1033–4

Sudden infant death and home monitors. Meny RG, et al. **Am J Dis Child** 1988 Oct;142(10):1037–40

The prone position, scoliosis, and cot death [letter] Conner AN. **BMJ** 1989 Apr 29;298(6681):1178

Can general practitioners prevent the sudden infant death syndrome? Watkins CJ. **BMJ** 1989 May 20; 298(6684):1333–4 (6 ref.)

Apnea monitors of little use in preventing SIDS, experts say. Gilmore A. **Can Med Assoc J** 1989 May 1;140(9):1072–6

Psychological impact of home apnea monitoring: temporal effects, family resources, and maternal coping style. Phipps S, et al. **J Dev Behav Pediatr** 1989 Feb;10(1):7–12

Strategies for the prevention of sudden unexplained infant death based on the hypotheais that intrapulmonary shunting with prolonged expiratory apnea is a major contributory mechanism. Southall DP, et al. **J Perinatol** 1989 Jun; 9(2):191–2

Startle disease: an avoidable cause of sudden infant death [letter] Vigevano F, et al. **Lancet** 1989 Jan 28;1(8631):216

Infantile apnea and home monitoring. Brooks JG. **Pediatrician** 1988;15(4):212–6

Management of an infant with an apparent life–threatening event. Kahn A, et al. **Pediatrician** 1988;15(4):204–11 (53 ref.)

Can we predict or prevent sudden unexpected deaths during infancy? Southall DP. **Pediatrician** 1988;15(4):183–90 (54 ref.)

Long–term development of children monitored as infants for an apparent life–threatening event during sleep: a 10–year follow–up study. Kahn A, et al. **Pediatrics** 1989 May; 83(5):668–73

[Home monitoring of infants: a literature review (1972–1987)] l'Hoir MP, et al. **Tijdschr Kindergeneeskd** 1989 Feb; 57(1):9–13 (256 ref.) (Eng. Abstr.) **(Dut)**

[Rescue from sudden death syndrome and allergy to milk proteins (apropos of a case)] Petrus M, et al. **Allerg Immunol (Paris)** 1989 Feb;21(2):77–8 (Eng. Abstr.) **(Fre)**

[Primarily electric status epilepticus: complication of severe idiopathic malaise in infants] Nogues B, et al. **Ann Pediatr (Paris)** 1988 Sep;35(7):495–8 (Eng. Abstr.) **(Fre)**

[Home–monitoring in children at risk for sudden infant death syndrome. A comparative study of 5 apnea mattresses without cables] Behrens O, et al. **Fortschr Med** 1988 Nov 10;106(32):645–50 (Eng. Abstr.) **(Ger)**

[Effect of aminophylline therapy in mature infants with sleep apnea syndrome] Reiterer F, et al. **Monatsschr Kinderheilkd** 1988 Jul;136(7):368–71 (Eng. Abstr.) **(Ger)**

[Risk of sudden infant death: recommendation for an early detection and prevention program] Scholle S, et al. **Padiatr Grenzgeb** 1989;28(3):139–47 (Eng. Abstr.) **(Ger)**

[Can the occurrence of sudden infant death be decreased?] Lagercrantz H. **Lakartidningen** 1989 Aug 9; 86(32–33):2651–2 **(Swe)**

PSYCHOLOGY

Supporting the SIDS family. Mandell F, et al. **Pediatrician** 1988;15(4):179–82 (7 ref.)

The surviving child in the SIDS family. Mandell F, et al. **Pediatrician** 1988;15(4):217–21

SUDECK'S ATROPHY

DRUG THERAPY

[Prednisolone allergy in Sudeck therapy] Enderlein L, et al. **Beitr Orthop Traumatol** 1989 May;36(5):229–31 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Evidence for spirochetal origin of Sudeck's atrophy (algodystrophy, reflex sympathetic dystrophy). Neumann RA, et al. **Arch Orthop Trauma Surg** 1989;108(5):314–6

[Sudeck's dystrophy following arthroscopy of the knee joint—a case report] Loew M. **Aktuel Traumatol** 1988 Aug; 18(4):157–9 (Eng. Abstr.) (Ger)

PSYCHOLOGY

[Sudeck syndrome and its "psychosomatic disposition": a comparative clinico–psychologic study of the etiology in accident patients] Thali A.
Psychother Psychosom Med Psychol 1989 Jul;39(7):260–5 (Eng. Abstr.) (Ger)

[The psychosomatics of Sudeck's syndrome: results of a clinico–psychological study of accident patients with injuries of the upper extremities] Thali A.
Z Unfallchir Versicherungsmed Berufskr 1988;81(1):57–62 (Eng. Abstr.) (Ger)

RADIOGRAPHY

[Misinterpretation of a metastatic process within the scope of Sudeck's dystrophy. A case report] Sim E.
Aktuel Traumatol 1989 Apr;19(2):85–9 (Eng. Abstr.) (Ger)

[Sudeck syndrome—a combined clinico–roentgenologic–nuclear medicine study] Schurawitzki H, et al. **Unfallchirurgie** 1988 Oct; 14(5):238–46 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

Radionuclide study for assessing the effect of carbocalcitonin on Sudeck's atrophy of the foot. Vattimo A.
J Nucl Med Allied Sci 1988 Apr–Jun;32(2):87–90

REHABILITATION

[Sudeck syndrome of the hand. Historical review, treatment concept and results] von Rothkirch T, et al.
Handchir Mikrochir Plast Chir 1989 May;21(3):115–26 (59 ref.) (Eng. Abstr.) (Ger)

[Evaluation of the effectiveness of the rehabilitation treatment of patients with pathology of the locomotor system] Nechushkin AI, et al. **Sov Med** 1988;(5):115–8 (Rus)

THERAPY

[The value of physical medicine in the treatment of algodystrophies] Olivier JP, et al. **Ther Umsch** 1988 Jul; 45(7):466–73 (Eng. Abstr.) (Fre)

SUFFOCATION see ASPHYXIA

SUGAR ACIDS

Identification of 2–deoxyribonolactone at the site of neocarzinostatin–induced cytosine release in the sequence d(AGC). Kappen LS, et al. **Biochemistry** 1989 Feb 7; 28(3):1027–32

Synthesis of a trisaccharide of 3–deoxy–D–manno–2–octulopyranosylonic acid (KDO) residues related to the genus–specific lipopolysaccharide epitope of Chlamydia. Kosma P, et al. **Carbohydr Res** 1988 Dec 1;183(2):183–99

Interleukin–1 induction by lipopolysaccharides: structural requirements of the 3–deoxy–D–manno–2–octulosonic acid (KDO). Haeffner–Cavaillon N, et al. **Mol Immunol** 1989 May;26(5):485–94

ANALYSIS

Structure of the K74 antigen from Escherichia coli O44:K74:H18, a capsular polysaccharide containing furanosidic beta–KDO residues. Ahrens R, et al.
Carbohydr Res 1988 Aug 15;179:223–31

Structure of the capsular polysaccharide of Klebsiella ozaenae serotype K4 containing 3–deoxy–D–glycero–D–galacto–nonulosonic acid. Knirel YA, et al. **Carbohydr Res** 1989 Jun 1;188:145–55

Gas chromatographic determination of (phosphorylated) 2–keto–3–deoxyoctonic acid, heptoses and glucosamine in bacterial lipopolysaccharides after treatment with hydrofluoric acid, methanolysis and trifluoroacetylation. Sonesson A, et al. **J Chromatogr** 1989 Jan 27;487(1):1–7

[The structure of capsule polysaccharide of Klebsiella ozaenae K4 containing 3–deoxynonulosonic acid] Knirel' IuA, et al. **Bioorg Khim** 1988 Nov;14(11):1583–5 (Eng. Abstr.) (Rus)

CHEMICAL SYNTHESIS

A novel prodrug of an impermeant inhibitor of 3–deoxy–D–manno–2–octulosonate cytidylyltransferase has antibacterial activity. Norbeck DW, et al.
J Med Chem 1989 Mar;32(3):625–9

Synthesis of 8–substituted derivatives of the 2–deoxy analogue of 3–deoxy–beta–D–manno–2–octulopyranosonic acid (2–deoxy–beta–KDO) as inhibitors of 3–deoxy–D–manno–octulosonate cytidylyltransferase. Pring BG, et al. **J Med Chem** 1989 May;32(5):1069–74

DIAGNOSTIC USE

99mTc–cystine: a faster excreting 99mTc–glucoheptanoate analogue. Chattopadhyay M, et al.
Int J Rad Appl Instrum [B] 1988;15(5):535–41

Optimal use of 99mtechnetium–glucoheptonate scintigraphy in the detection of pyelonephritic scarring in children: a preliminary report. Shapiro E, et al. **J Urol** 1988 Nov;140(5 Pt 2):1175–7

IMMUNOLOGY

Prophylactic activity against Sendai virus infection and macrophage activation with lipophilic derivatives of N–acetylglucosaminylmuramyl tri– or tetrapeptides. Iida J, et al. **Vaccine** 1989 Jun;7(3):225–8

ISOLATION & PURIFICATION

Isolation and identification of 3–deoxy–7–O–alpha–D–galactopyranosyl–D–manno–2–octulopyranosonate+++ from the inner core region of the lipopolysaccharide of Escherichia coli EH100. Holst O, et al. **Carbohydr Res** 1989 Jun 1;188:212–8

Isolation and identification of 3–deoxy–D–threo–hexulosonic acid as a constituent of the lipopolysaccharide of Vibrio parahaemolyticus serotypes O7 and O12. Kondo S, et al. **Carbohydr Res** 1989 Jun 1;188:97–104

Identification of 3–deoxy–manno–2–octulosonic acid, 3–deoxy–5–O–methyl–manno–2–octulosonic acid and 3–deoxy–lyxo–2–heptulosaric acid in the cell wall (theca) of the green alga Tetraselmis striata Butcher (Prasinophyceae). Becker B, et al. **Eur J Biochem** 1989 Jun 1;182(1):153–60

METABOLISM

Accumulation of incomplete metabolic side products of lipid A in Salmonella typhimurium during inhibition of 3–deoxy–D–manno–octulosonate incorporation by a new class of antibacterial agents. Kadam SK, et al.
Can J Microbiol 1989 Jun;35(6):646–50

Selective pivaloylation of 2–acetamido–2–deoxy sugars. Ljevaković D, et al. **Carbohydr Res** 1988 Nov 1; 182(2):197–205

D–glucaro–1,4–lactone: its excretion in the bile and urine and effect on the biliary secretion of beta–glucuronidase after oral administration in rats. Macfadyen A, et al.
Hepatology 1989 Apr;9(4):552–6

Biosynthesis of lipopolysaccharide in Escherichia coli. Cytoplasmic enzymes that attach 3–deoxy–D–manno–octulosonic acid to lipid A. Brozek KA, et al. **J Biol Chem** 1989 Apr 25;264(12):6956–66

Behavior of 3,4–endiol form of 2,3–diketo–gulono–delta–lactone formed from dehydro–L–ascorbic acid in deoxygenated and neutral solution. Takagi M, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Feb;35(1):61–70

PHARMACOKINETICS

[Comparison of the bioavailability of fluorine from sodium fluoride alone and in combination with various calcium salts] Briançon D, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):83–6 (Fre)

PHARMACOLOGY

Stereospecific feeding modulation by endogenous organic acid gamma–lactone in rats. Sakata T, et al.
Am J Physiol 1989 Feb;256(2 Pt 2):R366–70

Direct effects of 3,4–dihydroxybutanoic acid gamma–lactone and 2,4,5–trihydroxypentanoic acid gamma–lactone on lateral and ventromedial hypothalamic neurons. Minami T, et al. **Brain Res** 1988 Oct 18;462(2):258–64

Structural characteristics of endogenous sugar acids and relations to feeding modulation. Sakata T, et al.
Brain Res 1988 Nov 8;473(1):43–50

Accumulation of incomplete metabolic side products of lipid A in Salmonella typhimurium during inhibition of 3–deoxy–D–manno–octulosonate incorporation by a new class of antibacterial agents. Kadam SK, et al.
Can J Microbiol 1989 Jun;35(6):646–50

Effects of the experimental chemopreventative agent, glucarate, on intestinal carcinogenesis in rats. Dwivedi C, et al. **Carcinogenesis** 1989 Aug;10(8):1539–41

Immunopharmacological activities of 2–keto–3–deoxyoctonic acid–(alpha 2——6)–linked 4–O–phosphono–D–glucosamine derivatives carrying N– and 3–O–acyl substituents. Kumazawa Y, et al.
Infect Immun 1989 Jun;57(6):1845–8

Dependence of proliferation of Bacteroides forsythus on exogenous N–acetylmuramic acid. Wyss C.
Infect Immun 1989 Jun;57(6):1757–9

Oxyferriscorbone elevates the total iron content of blood but not brain. Dexter DT, et al. **Mov Disord** 1989;4(2):176–82

The effect of saccharolactone on rat intestinal absorption of bilirubin in the presence of human breast milk. Gourley GR, et al. **Pediatr Res** 1989 Mar;25(3):234–8

THERAPEUTIC USE

Synergistic interaction between 13–cis–retinoic acid and glucarate: activity against rat mammary tumor induction and MCF–7 cells. Abou–Issa H, et al.
Biochem Biophys Res Commun 1989 Sep 29;163(3):1364–9

URINE

A new method for D–glucaric acid excretion measurement that is suitable for automated instruments. Mocarelli P, et al. **Clin Chem** 1988 Nov;34(11):2283–90

Urinary excretion of mutagens, thioethers and D–glucaric acid in workers exposed to bitumen fumes. Pasquini R, et al. **Int Arch Occup Environ Health** 1989;61(5):335–40

[Increased urinary excretion of D–glucaric acid in workers exposed to styrene in reinforced plastics industry] Volpi R, et al. **Med Lav** 1988 Mar–Apr;79(2):136–41 (Eng. Abstr.) (Ita)

SUGAR ALCOHOL DEHYDROGENASES

Isolation and characterisation of the glycerol dehydrogenase from Bacillus stearothermophilus. Spencer P, et al.
Biochim Biophys Acta 1989 Feb 23;994(3):270–9

Purification and characterization of sorbitol dehydrogenase from bovine brain. Wiesinger H, et al. **J Neurochem** 1989 Feb;52(2):342–8

ANALYSIS

Immunoquantitation of aldose reductase in human tissues. Grimshaw CE, et al. **Anal Biochem** 1989 Jan;176(1):66–71

Screening for thermostability and electrophoretic red blood cell sorbitol dehydrogenase (E.C.1.1.1.14) variants. Ibarra B, et al. **Ann Genet** 1989;32(2):102–5

Electrophoretic analyses of alcohol dehydrogenase, aldehyde dehydrogenase, aldehyde oxidase, sorbitol dehydrogenase and xanthine oxidase from mouse tissues. Holmes RS.
Comp Biochem Physiol [B] 1978;61(3):339–46

ANTAGONISTS & INHIBITORS

Prevention of diabetes–related retinal microangiopathy with aldose reductase inhibitors. Robison WG Jr.
Adv Exp Med Biol 1988;246:365–72 (11 ref.)

Sorbinil prevents glomerular hyperperfusion in diabetic rats. Bank N, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F1000–6

Galactose feeding causes glomerular hyperperfusion: prevention by aldose reductase inhibition. Bank N, et al.
Am J Physiol 1989 Jun;256(6 Pt 2):F994–9

Antioxidant status in an in vitro model for hyperglycemic lens cataract formation: effect of aldose reductase inhibitor statil. Hothersall JS, et al. **Biochem Med Metab Biol** 1988 Oct;40(2):109–17

Nonpolar interactions in the modification of an essential sulfhydryl of sorbitol dehydrogenase by N–alkylmaleimides. Beier KH, et al.
Biochim Biophys Acta 1989 Aug 31;997(3):236–41

Increased nerve polyol levels in experimental diabetes and their reversal by Sorbinil. Whiting PH, et al.
Br J Exp Pathol 1988 Oct;69(5):697–702

Improvement of nerve conduction velocity in mutant diabetic mice by aldose reductase inhibitor without affecting nerve myo–inositol content. Miwa I, et al.
Chem Pharm Bull (Tokyo) 1989 Jun;37(6):1581–2

Inhibition of human placenta aldose reductase by tannic acid. Sawada H, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun; 37(6):1662–4

Cataract prevention in diabetic Octodon degus with Pfizer's sorbinil. Datiles MB 3d, et al. **Curr Eye Res** 1989 Mar; 8(3):233–7

Effect of aldose reductase inhibition and insulin treatment on retinal capillary basement membrane thickening in BB rats. Chakrabarti S, et al. **Diabetes** 1989 Sep;38(9):1181–6

Aldose reductase inhibition and glomerular abnormalities in diabetic rats. Daniels BS, et al. **Diabetes** 1989 Aug; 38(8):981–6

Effects of aldose reductase inhibitor sorbinil on neuroaxonal dystrophy and levels of myo–inositol and sorbitol in sympathetic autonomic ganglia of streptozocin–induced diabetic rats. Schmidt RE, et al. **Diabetes** 1989 May; 38(5):569–79

Effect of prostaglandin E1 analogue TFC 612 on diabetic neuropathy in streptozocin–induced diabetic rats. Comparison with aldose reductase inhibitor ONO 2235. Yasuda H, et al. **Diabetes** 1989 Jul;38(7):832–8

Aldose reductase inhibition in diabetic neuropathy: clinical and neurophysiological studies of one year's treatment with sorbinil. O'Hare JP, et al. **Diabetic Med** 1988 Sep; 5(6):537–42

Contractile properties of cardiac papillary muscle in streptozotocin–diabetic rats and the effects of aldose reductase inhibition. Cameron NE, et al. **Diabetologia** 1989 Jun;32(6):365–70

Pressure–induced inhibition of fast axonal transport of proteins in the rabbit vagus nerve in galactose neuropathy: prevention by an aldose reductase inhibitor. McLean WG.
Diabetologia 1988 Jul;31(7):443–8

The effect of an aldose reductase inhibitor on lens phosphorylcholine under hyperglycemic conditions: biochemical and NMR studies. Lou MF, et al.
Exp Eye Res 1989 Jan;48(1):11–24

Effects of oxygen free radical scavengers on the membrane myoinositol dehydrogenase of Bacillus pumilus strain 5. Eze MO, et al. **Free Radic Res Commun** 1987;4(2):105–8

Effect of an aldose reductase inhibitor, AL–1576, on the development of UV–B and X–ray cataract. Schmitt C, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(5):455–60

Efficacy of glucose, ouabain and an aldose reductase inhibitor

on 2-[3H] myo-inositol uptake by human, rat and rabbit erythrocytes. Hotta N, et al. **Horm Metab Res** 1988 Jul; 20(7):387–90

Aldose reductase inhibitors and prevention of galactose cataracts in rats. Unakar N, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1623–32

Red blood cell sorbitol lowering effects and tolerance of single doses of AL 1576 (HOE 843) in diabetic patients. Averbuch M, et al. **J Clin Pharmacol** 1988 Aug; 28(8):757–61

The effects of aldose reductase inhibitors in diabetic nephropathy. McCormack AJ, et al. **J Diabetic Complications** 1989 Jan–Mar;3(1):18–26 (98 ref.)

Glomerular basement membrane thickening in streptozotocin diabetic rats despite treatment with an aldose reductase inhibitor. Osterby R, et al. **J Diabetic Complications** 1989 Jul–Sep;3(3):149–53

Computer-assisted design and synthesis of novel aldose reductase inhibitors. Butera J, et al. **J Med Chem** 1989 Apr; 32(4):757–65

N- and 2-substituted N-(phenylsulfonyl)glycines as inhibitors of rat lens aldose reductase. DeRuiter J, et al. **J Med Chem** 1989 Jan;32(1):145–51

Synthesis and in vitro aldose reductase inhibitory activity of compounds containing an N-acylglycine moiety. DeRuiter J, et al. **J Med Chem** 1989 May;32(5):1033–8

Rotationally restricted mimics of rigid molecules: nonspirocyclic hydantoin aldose reductase inhibitors. Rizzi JP, et al. **J Med Chem** 1989 Jun;32(6):1208–13

Effect of an aldose reductase inhibitor, CT–112, on healing of the corneal epithelium in galactose-fed rats. Awata T, et al. **J Ocul Pharmacol** 1988 Fall;4(3):195–201

X-ray affinity and photoaffinity inhibitor of aldose reductase. Cohen W, et al. **J Ocul Pharmacol** 1986 Spring;2(2):151–8

Corneal permeability of aldose reductase inhibitor, M79175. I. In vitro study using corneal permeability apparatus. Kato A, et al. **J Ocul Pharmacol** 1986 Summer;2(3):279–86

Corneal permeability of aldose reductase inhibitor, M79175. II. In vivo study on pharmacokinetic aspect. Kato A, et al. **J Ocul Pharmacol** 1986 Summer;2(3):287–94

High-performance liquid chromatographic assay of the aldose reductase inhibitor spiro-(2-fluoro-9H-fluorene-9,4'-imidazolidine)-2',5'-dione (AL01567) in plasma and urine and its pharmacokinetics in humans. Park YH, et al. **J Pharm Sci** 1988 Jul;77(7):591–5

Glucose inhibition of human fibroblast proliferation and response to growth factors is prevented by inhibitors of aldose reductase. Sibbitt WL Jr, et al. **Mech Ageing Dev** 1989 Mar;47(3):265–79

Sorbinil suppresses glomerular prostaglandin production in the streptozotocin diabetic rat. Craven PA, et al. **Metabolism** 1989 Jul;38(7):649–54

Inhibition of erythrocyte anion exchange by tolrestat, an inhibitor of aldose reductase. Gunn RB, et al. **Metabolism** 1989 Aug;38(8):801–4

Sorbitol metabolism in the retina, optic nerve, and sural nerve of diabetic rats treated with an aldose reductase inhibitor. Naeser P, et al. **Metabolism** 1988 Dec;37(12):1143–5

An artificial intelligence approach to the study of the structural moieties relevant to drug–receptor interactions in aldose reductase inhibitors. Klopman G, et al. **Mol Pharmacol** 1988 Dec;34(6):852–62

The protein binding of phenytoin, propranolol, diazepam, and AL01576 (an aldose reductase inhibitor) in human and rat diabetic serum. McNamara PJ, et al. **Pharm Res** 1988 May;5(5):261–5

Serum protein binding of AL01576, a new aldose reductase inhibitor. McNamara PJ, et al. **Pharm Res** 1988 May; 5(5):319–21

The existence of aldose reductase inhibitors in some kampo medicines (Oriental herb prescriptions). Aida K, et al. **Planta Med** 1989 Feb;55(1):22–6

What is the nature of the charge transfer interaction at the aldose reductase inhibitor site. Kador PF, et al. **Prog Clin Biol Res** 1989;290:237–50 (18 ref.)

Ponalrestat: a potent and selective inhibitor of bovine lens aldose reductase. Tuffin DP, et al. **Prog Clin Biol Res** 1989; 290:221–35

The medicinal chemistry of aldose reductase inhibitors. Humber LG. **Prog Med Chem** 1987;24:299–343 (138 ref.)

AL–1576, an aldose reductase inhibitor (ARI), did not prevent the decrease of norepinephrine turnover in diabetic rats. Yen TT, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):257–60

[Inhibition of rat lens aldose reductase by flavonoids–matteucinol and baicalein] Li SZ, et al. **Yen Ko Hsueh Pao** 1987 Jun;3(2):93–4, 137 (Eng. Abstr.) **(Chi)**

[Prevention of pericyte ghost formation in retinal capillaries by aldose reductase inhibitor in galactose-fed dogs with diabetic retinopathy] Akagi Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1479–84 (Eng. Abstr.) **(Jpn)**

[Diabetic changes in pupillary reactions and iris histology. No. 3. The role of aldose reductase inhibitor to iridal vessel hyperpermeability of galactose-fed rats] Kador PF, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct;92(10):1577–81 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Signal for induction of aldose reductase in renal medullary cells by high external NaCl. Uchida S, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C614–20

Aldose reductase expression in human diabetic retina and retinal pigment epithelium. Vinores SA, et al. **Diabetes** 1988 Dec;37(12):1658–64

Osmotic regulation of aldose reductase protein synthesis in renal medullary cells. Moriyama T, et al. **J Biol Chem** 1989 Oct 5;264(28):16810–4

BLOOD

Variations in serum sorbitol dehydrogenase, aspartate transaminase, and isoenzyme 5 of lactate dehydrogenase activities in horses given carbon tetrachloride. Bernard WV, et al. **Am J Vet Res** 1989 May;50(5):622–3

Human erythrocyte sorbitol metabolism and the role of sorbitol dehydrogenase. Nagasaka Y, et al. **Diabetologia** 1988 Oct;31(10):766–70

Plasma sorbitol dehydrogenase determination in experimental hepatotoxicity using the Abbott Bichromatic Analyzer. Pakuts AP, et al. **J Clin Chem Clin Biochem** 1988 Nov; 26(11):693–5

Human erythrocyte aldose and aldehyde reductase. Nakayama T, et al. **Prog Clin Biol Res** 1989;290:265–77

DEFICIENCY

Effects of fetal liver transplantation in congenitally enzyme deficient rats. Otsu I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2357–9

GENETICS

Occurrence in humans and guinea pigs of the gene related to their missing enzyme L-gulono-gamma-lactone oxidase. Nishikimi M, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):842–6

Allelic expression at the sorbitol dehydrogenase and glucosephosphate isomerase loci in an interspecific hybrid ricefish. Frankel JS. **Comp Biochem Physiol [B]** 1989; 92(3):529–32

Expression of the mutant gene for L-gulono-gamma-lactone oxidase in scurvy-prone rats. Nishikimi M, et al. **Experientia** 1989 Feb 15;45(2):126–9

The aldo-keto reductase superfamily. cDNAs and deduced amino acid sequences of human aldehyde and aldose reductases. Bohren KM, et al. **J Biol Chem** 1989 Jun 5; 264(16):9547–51

Cloning and sequence determination of human placental aldose reductase gene. Chung S, et al. **J Biol Chem** 1989 Sep 5;264(25):14775–7

Molecular cloning of cDNA coding for kidney aldose reductase. Regulation of specific mRNA accumulation by NaCl-mediated osmotic stress. Garcia-Perez A, et al. **J Biol Chem** 1989 Oct 5;264(28):16815–21

Rat lens aldose reductase: characterization of its primary structure, mRNA, and gene complexity. Nishimura C, et al. **Prog Clin Biol Res** 1989;290:211–20

ISOLATION & PURIFICATION

Bovine lens aldose reductase: identification of two enzyme forms. Del Corso A, et al. **Arch Biochem Biophys** 1989 May 1;270(2):604–10

Subunits of aldose reductase from Rhodotorula. Sheys GH, et al. **Biochim Biophys Acta** 1971 May 12;235(2):414–7

A comparison of selected physical properties of hepatic sorbitol dehydrogenases [L-iditol: NAD oxidoreductases] from four mammalian species. Walsall EP, et al. **Comp Biochem Physiol [B]** 1978;59(3):213–8

Purification and properties of a polyol dehydrogenase from the phototrophic bacterium Rhodobacter sphaeroides. Schneider KH, et al. **Eur J Biochem** 1989 Sep 1;184(1):15–9

Purification and properties of N-acyl-D-mannosamine dehydrogenase from Flavobacterium sp. 141–8. Horiuchi T, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):466–71

Aldose reductase from human psoas muscle. Purification, substrate specificity, immunological characterization, and effect of drugs and inhibitors. Morjana NA, et al. **J Biol Chem** 1989 Feb 15;264(5):2906–11

[Partial purification and properties of extracellular NADP+-dependent sorbitol dehydrogenase in Fusarium sp.] Sokolova EV. **Mikrobiol Zh** 1988 Sep–Oct;50(5):60–5 (Eng. Abstr.) **(Rus)**

METABOLISM

Aldose reductase activities in microdissected rat renal tubule segments. Sands JM, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F563–9

Electrophoretic pattern of sorbitol dehydrogenase (E.C.1.1.1.14) in human seminal plasma and spermatozoa. Perea FJ, et al. **Ann Genet** 1989;32(1):33–5

Kinetic and structural effects of activation of bovine kidney aldose reductase. Grimshaw CE, et al. **Biochemistry** 1989 Jun 27;28(13):5343–53

Characterization of aldose reductase and aldehyde reductase from rat testis. Kawasaki N, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1–2):30–6

NADPH-dependent reduction of glyceraldehyde: a unusually high activity in the lens of the camel (Camelus dromedarius). Del Corso A, et al. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):235–42

Ascorbic acid and L-gulonolactone oxidase in lagomorphs. Jenness R, et al. **Comp Biochem Physiol [B]** 1978; 61(3):395–9

Increased renal aldose reductase activity, immunoreactivity, and mRNA in streptozocin-induced diabetic rats. Ghahary A, et al. **Diabetes** 1989 Aug;38(8):1067–71

Aldose reductase and polyol in cultured pericytes of human retinal capillaries. Hohman TC, et al. **Exp Eye Res** 1989 Jan;48(1):55–60

The dog as a model for ocular manifestations of high concentrations of blood sugars. Wyman M, et al. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1153–6

Aldose reductase from human psoas muscle. Affinity labeling of an active site lysine by pyridoxal 5'-phosphate and pyridoxal 5'-diphospho-5'-adenosine. Morjana NA, et al. **J Biol Chem** 1989 Feb 15;264(5):2912–9

Aldose reductase in the etiology of diabetic complications: I. Introduction. Harrison HE, et al. **J Diabetic Complications** 1989 Jan–Mar;3(1):6–11 (50 ref.)

Aldose reductase in the etiology of diabetic complications: 2. Nephropathy. Stribling D, et al. **J Diabetic Complications** 1989 Apr–Jun;3(2):70–6 (70 ref.)

Aldose reductase in the etiology of diabetic complications. 3. Neuropathy. Stribling D, et al. **J Diabetic Complications** 1989 Jul–Sep;3(3):139–48 (117 ref.)

Chemical modification of aldehyde and aldose reductase by pyridoxal 5'-phosphate. Flynn TG, et al. **Prog Clin Biol Res** 1989;290:251–64

Activation of aldose reductase by nonenzymatic glycosylation. Srivastava SK, et al. **Prog Clin Biol Res** 1989; 304:171–84

[Hexokinase, glucose-6-phosphate dehydrogenase and aldose reductase in human fetal lenses] Cao XY, et al. **Yen Ko Hsueh Pao** 1988 Dec;4(4):204–6 (Eng. Abstr.) **(Chi)**

[Aldose reductase activity in clear and senile cataractous lenses] Du XY, et al. **Yen Ko Hsueh Pao** 1986 Jun; 2(2):126–8 (Eng. Abstr.) **(Chi)**

THERAPEUTIC USE

A protocol for the successful long-term enzyme replacement therapy of scurvy in guinea pigs. Hadley K, et al. **J Inherited Metab Dis** 1988;11(4):387–96

SUGAR ALCOHOL OXIDOREDUCTASES see **SUGAR ALCOHOL DEHYDROGENASES**

SUGAR ALCOHOLS

Sugar alcohols as bulk sweeteners. Dills WL Jr. **Annu Rev Nutr** 1989;9:161–86 (180 ref.)

ADMINISTRATION & DOSAGE

Treatment of chronic constipation with lactitol sweetened yoghurt supplemented with guar gum and wheat bran in elderly hospital in-patients. Rajala SA, et al. **Compr Gerontol [A]** 1988 Jun;2(2):83–6

ADVERSE EFFECTS

Relevance for man of the effects of lactose, polyols and other carbohydrates on calcium metabolism seen in rats: a review. Roe FJ. **Hum Toxicol** 1989 Mar;8(2):87–98 (85 ref.)

ANALYSIS

Analysis of sorbitol, galactitol, and myo-inositol in lens and sciatic nerve by high-performance liquid chromatography. Miwa I, et al. **Anal Biochem** 1988 Aug 15;173(1):39–44

Structural analysis by fast-atom-bombardment mass spectrometry of the mixture of alditols derived from the O-linked oligosaccharides of murine glycophorins. Krotkiewski H, et al. **Carbohydr Res** 1988 Dec 31;184:27–38

G.L.C.-M.S. of N-(1-deoxyalditol-1-yl)octadecylamine derivatives in the analysis of methanolysates of neoglycolipids obtained by reductive amination. van Dam JE, et al. **Carbohydr Res** 1989 Apr 1;187(1):25–34

The effects of 5% and 25% galactose diets on lens polyols, glutathione and protein glycation in male and female pigs. Birlouez-Aragon I, et al. **Curr Eye Res** 1989 May; 8(5):449–57

Evaluation of the liquid chromatographic separation of monosaccharides, disaccharides, trisaccharides, tetrasaccharides, deoxysaccharides and sugar alcohols with stable cyclodextrin bonded phase columns. Armstrong DW, et al. **J Chromatogr** 1989 Jan 13;462:219–32

Rapid analysis of sorbitol, galactitol, mannitol and myoinositol mixtures from biological sources. Eades DM, et al. **J Chromatogr** 1989 May 5;490(1):1–8

BIOSYNTHESIS

Accumulation of acyclic polyols and trehalose as related to growth form and carbohydrate source in the dimorphic fungi Mucor rouxii and Candida albicans. Pfyffer GE, et al. **Mycopathologia** 1989 Jan;105(1):25–33

BLOOD

Enantioselective measurement of fungal D-arabinitol in the sera of normal adults and patients with candidiasis. Wong B, et al. **J Clin Microbiol** 1988 Sep;26(9):1670–4

Levels of the Candida metabolite D-arabinitol in sera of

steroid–treated and untreated patients with sarcoidosis. Wong B, et al. **J Clin Microbiol** 1989 Aug;27(8):1859–62

Mannan and D–arabinitol concentrations in serum from a patient with Candida albicans endocarditis. Fujita S, et al. **Mycopathologia** 1989 Feb;105(2):87–92

CHEMICAL SYNTHESIS

Malto–oligosaccharide homologues of 3,7–anhydro–2–azi–1,2–dideoxy–D–glycero–D–gulo–octitol+ ++: improved photoaffinity reagents for labelling the malto–oligosaccharide–binding protein of Escherichia coli. Lehmann J, et al. **Carbohydr Res** 1988 Dec 31;184:113–20

A convenient synthesis of 4–amino–4–deoxy–L–arabinose and its reduction product, 1,4–dideoxy–1,4–imino–L–arabinitol. Naleway JJ, et al. **Carbohydr Res** 1988 Aug 15;179:199–209

Synthesis of (Z)–3,7–anhydro–1,2–dideoxy–2–deuterio–D–gluco–oct–2– enitol, a prochiral substrate for probing the catalytic functioning of of glucosylases. Weiser W, et al. **Carbohydr Res** 1988 Dec 1;183(2):287–99

ISOLATION & PURIFICATION

Biradical tetraether lipids from thermoacidophilic archaebacteria. Gulik A, et al. **Adv Exp Med Biol** 1988; 238:37–45

METABOLISM

Change in specificity of glycosidase inhibition by N–alkylation of amino sugars. al Daher S, et al. **Biochem J** 1989 Mar 1;258(2):613–5

Dental and metabolic effects of lactitol in the diet of laboratory rats. Grenby TH, et al. **Br J Nutr** 1989 Jan; 61(1):17–24

A 13C comparative nuclear magnetic resonance study of organic solute production and excretion by the yeasts Hansenula anomala and Saccharomyces cerevisiae in saline media. Bellinger Y, et al. **Can J Microbiol** 1988 May; 34(5):605–12

Amylolytic breakdown of Lycasin compared with other carbohydrate derivatives. Grenby TH, et al. **Caries Res** 1988;22(5):276–9

Studies of the dental properties of lactitol compared with five other bulk sweeteners in vitro. Grenby TH, et al. **Caries Res** 1989;23(5):315–9

Effect of rapid normalization of plasma glucose levels on microvascular dysfunction and polyol metabolism in diabetic rats. Rogers D, et al. **Diabetes** 1988 Dec; 37(12):1689–94

Assimilation of lactitol, an 'unabsorbed' disaccharide in the normal human colon. Grimble GK, et al. **Gut** 1988 Dec; 29(12):1666–71

Dietary restriction of maternal lactose intake does not prevent accumulation of galactitol in the amniotic fluid of fetuses affected with galactosaemia. Jakobs C, et al. **Prenat Diagn** 1988 Nov;8(9):641–5

PHARMACOKINETICS

Lactitol: gastrointestinal absorption and effect on blood lactate in healthy volunteers and patients with cirrhosis. Metzger J, et al. **Eur J Clin Pharmacol** 1988;35(1):97–9

PHARMACOLOGY

Dominance of resistance to the alkylating agent 1,2:5,6–dianhydrogalactitol in P388 mouse lymphoma hybrid cells. Pályi I, et al. **Cancer Chemother Pharmacol** 1989;23(1):41–6

Dental effects of Lycasin in the diet of laboratory rats. Grenby TH. **Caries Res** 1988;22(5):288–96

Comparison of Lycasin versus sucrose sweets in demineralization studies of human enamel and hydroxylapatite. Grenby TH, et al. **Caries Res** 1988; 22(5):269–75

Effect of Lycasin upon plaque pH when taken as a syrup or as a boiled sweet. Rugg–Gunn AJ. **Caries Res** 1988; 22(6):375–6

Effect of in vitro organic nitrate tolerance on relaxation, cyclic GMP accumulation, and guanylate cyclase activation by glyceryl trinitrate and the enantiomers of isoidide dinitrate. Bennett BM, et al. **Circ Res** 1988 Oct; 63(4):693–701

Effect of absorbable and nonabsorbable sugars on intestinal calcium absorption in humans. Griessen M, et al. **Gastroenterology** 1989 Mar;96(3):769–75

Dietary lactitol elevates liver cholesterol in rats. Beynen AC, et al. **Int J Vitam Nutr Res** 1988;58(4):471–2

Selective inhibition of glycoprotein–processing enzymes. Differential inhibition of glucosidases I and II in cell culture. Kaushal GP, et al. **J Biol Chem** 1988 Nov 25; 263(33):17278–83

Study of experimental cataract produced by sugar alcohols in the organ–cultured mammalian ocular lens. Kiessling B, et al. **Ophthalmic Res** 1988;20(4):237–44

[Metabolic processes in the rumen of diary cows during the administration of Liuos Asetona, a polyol–based anti–ketogenic preparation] Dvořák R, et al. **Vet Med (Praha)** 1988 Aug;33(8):449–58 (Eng. Abstr.) (Cze)

[Mineral metabolism in diary cows during the administration of Liuos Asetona, a polyol–based anti–ketogenic preparation] Jagoš P, et al. **Vet Med (Praha)** 1988 Aug; 33(8):459–68 (Eng. Abstr.) (Cze)

THERAPEUTIC USE

Absence of cross–resistance between two alkylating agents: BCNU vs bifunctional galactitol. Institóris E, et al. **Cancer Chemother Pharmacol** 1989;24(5):311–3

Lactitol in prevention of recurrent episodes of hepatic encephalopathy in cirrhotic patients with portal–systemic shunt. Riggio O, et al. **Dig Dis Sci** 1989 Jun;34(6):823–9

Latest state of research on lactitol and dental caries. Grenby TH. **Int Dent J** 1989 Mar;39(1):25–32 (29 ref.)

Lactitol vs. lactulose in the treatment of chronic recurrent portal–systemic encephalopathy. Heredia D, et al. **J Hepatol** 1988 Aug;7(1):106–10

Lactitol and lactulose for the treatment of subclinical hepatic encephalopathy in cirrhotic patients. A randomised, cross–over study. Morgan MY, et al. **J Hepatol** 1989 Mar; 8(2):208–17

[Dose–response curve and preliminary clinical study of a laxative, lactilol] Walder M, et al. **Schweiz Med Wochenschr** 1988 Dec 17;118(50):1925–7 (Eng. Abstr.) (Fre)

[Study of the laxative effect of Lactitol as opposed to lactulose in an open, randomized comparative study] Heitland W, et al. **Schweiz Rundsch Med Prax** 1988 May 3;77(18):493–5 (Eng. Abstr.) (Ger)

[Lactitol and neomycin: monotherapy or combined therapy in the prevention and treatment of hepatic encephalopathy?] Scevola D, et al. **Clin Ter** 1989 Apr 30; 129(2):105–11 (Eng. Abstr.) (Ita)

URINE

Determination of polyol profiles in human urine by capillary gas chromatography. Haga H, et al. **Biomed Chromatogr** 1989 Mar;3(2):68–71

Early morning urine galactitol levels in relation to galactose intake: a possible method of monitoring the diet in galactokinase deficiency. Allen JT, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:243–5

SUGAR PHOSPHATES

Structures and metabolism of inositol tetrakisphosphates and inositol pentakisphosphate in bovine adrenal glomerulosa cells. Balla T, et al. **J Biol Chem** 1989 Jun 5;264(16):9386–90

ANALYSIS

Determination of inositol 1,4,5–trisphosphate levels in Dictyostelium by isotope dilution assay. Van Haastert PJ. **Anal Biochem** 1989 Feb 15;177(1):115–9

A simple, sensitive, and specific radioreceptor assay for inositol 1,4,5–trisphosphate in biological tissues. Bredt DS, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):976–82

A novel metal–dye detection system permits picomolar–range h.p.l.c. analysis of inositol polyphosphates from non–radioactively labelled cell or tissue specimens. Mayr GW. **Biochem J** 1988 Sep 1;254(2):585–91

Structural analysis of phospho–D–mannan–protein complexes isolated from yeast and mold form cells of Candida albicans NIH A–207 serotype A strain. Shibata N, et al. **Carbohydr Res** 1989 Apr 15;187(2):239–53

A novel, specific binding protein assay for quantitation of intracellular inositol 1,3,4,5–tetrakisphosphate (InsP4) using a high–affinity InsP4 receptor from cerebellum. Donić F, et al. **FEBS Lett** 1989 Aug 28;254(1–2):155–8

The effect of heparin on the inositol 1,4,5–trisphosphate receptor in rat liver microsomes. Dependence on sulphate content and chain length. Tones MA, et al. **FEBS Lett** 1989 Jul 31;252(1–2):105–8

Structure of the phosphosaccharide–inositol core of the Leishmania donovani lipophosphoglycan. Turco SJ, et al. **J Biol Chem** 1989 Apr 25;264(12):6711–5

Determination of inositol phosphates and other anions in rat brain. Smith RE, et al. **J Chromatogr Sci** 1989 Aug; 27(8):491–5

Inositol 1,4,5–trisphosphate phosphatase deficiency and malignant hyperpyrexia in swine. Foster PS, et al. **Lancet** 1989 Jul 15;2(8655):124–7

A gas chromatographic method for the determination of inositol monophosphates in rat brain. Hirvonen MR, et al. **Neurochem Res** 1988 Oct;13(10):957–62

ANTAGONISTS & INHIBITORS

Inhibition by nicardipine of endothelin–mediated inositol phosphate formation and Ca2+ mobilization in smooth muscle cell. Xuan YT, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):758–64

BIOSYNTHESIS

Inositol lipid turnover and compartmentation in canine trachealis smooth muscle. Baron CB, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C375–83

Inositol polyphosphate production and regulation of cytosolic calcium during the biphasic activation of adrenal glomerulosa cells by angiotensin II. Balla T, et al. **Arch Biochem Biophys** 1989 Apr;270(1):398–403

Effect of esters of succinic acid and other citric acid cycle intermediates on insulin release and inositol phosphate formation by pancreatic islets. MacDonald MJ, et al. **Arch Biochem Biophys** 1989 Mar;269(2):400–6

Glyceraldehyde phosphate: an insulin secretagogue with possible effects on inositol phosphate formation in pancreatic islets. MacDonald MJ, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):194–200

Hydrolysis of inositol lipids: an early signal of human cytomegalovirus infection. Valyi–Nagy T, et al. **Arch Virol** 1988;101(3–4):199–207

Bradykinin–induced generation of inositol 1,4,5–trisphosphate in fibroblasts and neuroblastoma cells: effect of pertussis toxin, extracellular calcium, and down–regulation of protein kinase C. Fu T, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1429–35

Desensitization of inositol phosphate production after agonist stimulation of endothelial cells is not mediated by protein kinase C. Halldórsson H, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1064–9

Transient accumulation of inositol (1,3,4,5)–tetrakisphosphate in response to alpha 1–adrenergic stimulation in adult cardiac myocytes. Heathers GP, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):485–92

Norepinephrine stimulates the production of inositol trisphosphate and inositol tetrakisphosphate in rat aorta. Pijuan V, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):240–5

Bombesin and platelet–derived growth factor stimulate formation of inositol phosphates and Ca2+ mobilization in Swiss 3T3 cells by different mechanisms. Blakeley DM, et al. **Biochem J** 1989 Feb 15;258(1):177–85

Exposure of cultured hepatocytes to cyclic AMP enhances the vasopressin–mediated stimulation of inositol phosphate production. Pittner RA, et al. **Biochem J** 1989 Jan 15; 257(2):455–60

Synthesis of myo–inositol 1,3,4,5,6–pentakisphosphate from inositol phosphates generated by receptor activation. Stephens LR, et al. **Biochem J** 1988 Aug 1;253(3):721–33

Extracellular Ca2+ influences 1,2–diacylglycerol and inositol monophosphate formation in renal cortical slices stimulated with plasma obtained from uninephrectomized rats. Banfić H. **Biochim Biophys Acta** 1989 Apr 26; 1002(3):273–6

Formation of inositol polyphosphates in cultured human sweat duct cells in response to cholinergic stimulation. Doughney C, et al. **Biochim Biophys Acta** 1989 Mar 6; 1010(3):352–6

The interaction of benzodiazepines with thyrotropin–releasing hormone receptors on clonal pituitary cells. Joels LA, et al. **Br J Pharmacol** 1989 Feb; 96(2):450–6

Dopamine D2 receptor stimulation inhibits inositol phosphate generating system in rat striatal slices. Pizzi M, et al. **Brain Res** 1988 Jul 26;456(2):235–40

Temporal relationship between inositol polyphosphate formation and increases in cytosolic Ca2+ in quiescent 3T3 cells stimulated by platelet–derived growth factor, bombesin and vasopressin. Nänberg E, et al. **EMBO J** 1988 Sep;7(9):2741–7

Guanine nucleotides stimulate hydrolysis of phosphatidylinositol and polyphosphoinositides in permeabilized Swiss 3T3 cells. Taylor CW, et al. **FEBS Lett** 1988 Sep 12;237(1–2):163–7

Kinetic analysis of the formation of inositol 1:2–cyclic phosphate in carbachol–stimulated pancreatic minilobules. Half is formed by direct phosphodiesteratic cleavage of phosphatidylinositol. Dixon JF, et al. **J Biol Chem** 1989 Jul 15;264(20):11721–4

Biochemical events associated with activation of smooth muscle contraction. Miller–Hance WC, et al. **J Biol Chem** 1988 Oct 5;263(28):13979–82

T cell receptor–mediated signaling occurs in the absence of inositol phosphate production. O'Rourke AM, et al. **J Biol Chem** 1988 Dec 15;263(35):18594–7

Lowering extracellular pH evokes inositol polyphosphate formation and calcium mobilization. Smith JB, et al. **J Biol Chem** 1989 May 25;264(15):8723–8

Decreasing extracellular Na+ concentration triggers inositol polyphosphate production and Ca2+ mobilization. Smith JB, et al. **J Biol Chem** 1989 Jan 15;264(2):831–7

Inositol trisphosphate production in squid photoreceptors. Activation by light, aluminum fluoride, and guanine nucleotides. Wood SF, et al. **J Biol Chem** 1989 Aug 5; 264(22):12970–6

Coupling between inositol phosphate formation and DNA synthesis in smooth muscle cells stimulated with neurokinin A. Hultgårdh–Nilsson A, et al. **J Cell Physiol** 1988 Oct; 137(1):141–5

Angiotensin II stimulates both inositol phosphate production and human placental lactogen release from human trophoblastic cells. Petit A, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):280–6

Vasopressin V1 receptors on the principal cells of the rabbit cortical collecting tubule. Stimulation of cytosolic free calcium and inositol phosphate production via coupling to a pertussis toxin substrate. Burnatowska–Hledin MA, et al. **J Clin Invest** 1989 Jan;83(1):84–9

Receptor–mediated phagocytosis in human neutrophils is associated with increased formation of inositol phosphates and diacylglycerol. Elevation in cytosolic free calcium and formation of inositol phosphates can be dissociated from accumulation of diacylglycerol. Fällman M, et al.

J Clin Invest 1989 Sep;84(3):886–91

Enhanced inositol trisphosphate response to alpha 1–adrenergic stimulation in cardiac myocytes exposed to hypoxia. Heathers GP, et al. **J Clin Invest** 1989 Apr; 83(4):1409–13

Interaction of lymphokine–activated killer cells with susceptible targets does not induce second messenger generation and cytolytic granule exocytosis. Zanovello P, et al. **J Exp Med** 1989 Sep 1;170(3):665–77

Different patterns of inositol polyphosphate production are seen in B lymphocytes after cross–linking of sIg by anti–Ig antibody or by a multivalent anti–Ig antibody dextran conjugate. Brunswick M, et al. **J Immunol** 1989 Sep 1; 143(5):1414–21

Pretreatment of cloned helper T lymphocytes with IL–2 induces unresponsiveness to antigen and concanavalin A, associated with decreased inositol phosphate and diacylglycerol production. Schell SR, et al. **J Immunol** 1989 Sep 1;143(5):1499–505

Activation of human neutrophils by substance P. Effect on oxidative metabolism, exocytosis, cytosolic Ca2+ concentration and inositol phosphate formation. Serra MC, et al. **J Immunol** 1988 Sep 15;141(6):2118–24

Signal transduction during human natural killer cell activation: inositol phosphate generation and regulation by cyclic AMP. Windebank KP, et al. **J Immunol** 1988 Dec 1;141(11):3951–7

GABAB receptor–mediated inhibition of histamine H1–receptor–induced inositol phosphate formation in slices of rat cerebral cortex. Crawford ML, et al. **J Neurochem** 1988 Nov;51(5):1441–7

Subacute and chronic in vivo lithium treatment inhibits agonist– and sodium fluoride–stimulated inositol phosphate production in rat cortex. Godfrey PP, et al. **J Neurochem** 1989 Feb;52(2):498–506

Regional dissociation of cyclic AMP and inositol phosphate formation in response to thyrotropin–releasing hormone in the rat brain. Iriuchijima T, et al. **J Neurochem** 1989 Jun;52(6):1944–6

Effects of phorbol esters and forskolin on basal and histamine–induced accumulation of inositol phosphates in cultured bovine adrenal chromaffin cells. Wan DC, et al. **J Neurochem** 1989 Oct;53(4):1219–27

Serotonergic control of phenylephrine–induced cyclic 3,5'–adenosine monophosphate and inositol phosphates formation in rat hippocampus. Consolo S, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1187–92

Alpha–1 adrenergic stimulation of 1,4,5–inositol trisphosphate formation in ventricular myocytes. Steinberg SF, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1141–8

Effects of streptozotocin–induced hyperglycemia on agonist–stimulated phosphatidylinositol turnover in rat aorta. Legan E. **Life Sci** 1989;45(5):371–8

Bradykinin analogs antagonize bradykinin–induced second messenger production in a sensory neuron cell line. Francel PC, et al. **Mol Pharmacol** 1989 Jan;35(1):34–8

5–HT1C receptor–mediated stimulation of inositol phosphate production in pig choroid plexus. A pharmacological characterization. Hoyer D, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):252–8

Identification of the pertussis and cholera toxin substrates in normal and N–ras transformed NIH3T3 fibroblasts and an assessment of their involvement in bombesin–stimulation of inositol phospholipid metabolism. Milligan G, et al. **Oncogene** 1989 May;4(5):659–63

Muscarinic cholinergic induced secretin subsensitivity in rat isolated pancreatic acini. Effects on amylase release, cyclic adenosine monophosphate and inositol phosphate formation. Larose L, et al. **Pancreas** 1989;4(1):71–8

Generation of inositol phosphates during triggering of cytotoxicity in human natural killer and lymphokine–activated killer cells. Ståhls AK, et al. **Scand J Immunol** 1989 Feb;29(2):211–6

BLOOD

Relationship of inositol phospholipid metabolism to phospholipase A2. Lapetina EG, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:568–73

Calcium modulates the generation of inositol 1,3,4–trisphosphate in human platelets by the activation of inositol 1,4,5–trisphosphate 3–kinase. Daniel JL, et al. **Biochem J** 1988 Aug 1;253(3):789–94

Subcellular localization of the enzymes that dephosphorylate myo–inositol polyphosphates in human platelets. Molina Y Vedia L, et al. **Biochem J** 1988 Nov 1;255(3):795–800

Inhibition of protein kinase C by staurosporine promotes elevated accumulations of inositol trisphosphates and tetrakisphosphate in human platelets exposed to thrombin. King WG, et al. **J Biol Chem** 1989 Apr 15;264(11):6070–4

Mastoparan, a wasp venom peptide, identifies two discrete mechanisms for elevating cytosolic calcium and inositol trisphosphates in human polymorphonuclear leukocytes. Perianin A, et al. **J Immunol** 1989 Sep 1;143(5):1669–73

Epinephrine stimulates inositol phospholipid metabolism by activating alpha–2 adrenergic receptors in human platelets. Mori H, et al. **Life Sci** 1989;44(11):741–7

Phosphatidylinositol 4,5–bisphosphate hydrolysis in turkey erythrocytes is regulated by P2y purinoceptors. Berrie CP, et al. **Mol Pharmacol** 1989 Apr;35(4):526–32

Stimulation of inositol phosphate production by propranolol in human neutrophils. Das I, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):721–6

CHEMICAL SYNTHESIS

Rapid methods for the high yield synthesis of carbon–13 enriched intermediates of the pentose–phosphate pathway. Arora KK, et al. **Biol Chem Hoppe Seyler** 1988 Jul; 369(7):549–57

Synthesis of p–trifluoroacetamidophenyl beta–D–glucopyranoside 4–(D–ribit–5–yl phosphate) corresponding to the Haemophilus influenzae type A capsular antigen. Classon B, et al. **Carbohydr Res** 1988 Aug 15;179:31–5

Synthesis of the 3''–sulfate ester of beta–D–GalpNAc–(1——4)–beta–D–GlcpNAc–(1——2)–alpha–D–Manp. Srivastava V, et al. **Carbohydr Res** 1989 Jan 15;185(1):163–9

Chiral synthesis of D– and L–myo–inositol 1,4,5–trisphosphate. Tegge W, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):94–8

HISTORY

The isolation of a new complex lipid: triphosphoinositide from ox brain. A commentary on 'The Isolation of a New Complex Lipid: Triphosphoinositide from Ox Brain'. Dawson RM. **Biochim Biophys Acta** 1989;1000:459–61

The isolation of a new complex lipid: triphosphoinositide from ox brain. 1960 [classical article] Dittmer JC, et al. **Biochim Biophys Acta** 1989;1000:462–3

ISOLATION & PURIFICATION

Anion exchange chromatographic separation of inositol phosphates and their quantification by gas chromatography. Heathers GP, et al. **Anal Biochem** 1989 Jan;176(1):109–16

Gradient ion chromatography of inositol phosphates. Phillippy BQ, et al. **Anal Biochem** 1988 Nov 15; 175(1):162–6

The separation of [32P]inositol phosphates by ion–pair chromatography: optimization of the method and biological applications. Sulpice JC, et al. **Anal Biochem** 1989 May 15;179(1):90–7

A simple enzymic method to separate [3H]inositol 1,4,5– and 1,3,4–trisphosphate isomers in tissue extracts. Kennedy ED, et al. **Biochem J** 1989 May 15;260(1):283–6

Isolation, characterization and biological functions of myoinositol trisphosphate generated by phytase action on myoinositol hexaphosphate. Maitra R, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):655–9

Analysis of inositol tris– and tetrakisphosphate in mesangial cells by HPLC. Shin SH, et al. **Kidney Int** 1989 Jun; 35(6):1320–3

METABOLISM

Carbachol stimulation of inositol phosphate accumulation in rat submandibular gland fragments is not modified by VIP. Larsson O, et al. **Acta Physiol Scand** 1989 Mar;135(3):263–9

AGEPC: a potent calcium–dependent chemical mediator in the liver. Fisher RA, et al. **Adv Exp Med Biol** 1988; 232:203–12

Formation and metabolism of inositol phosphates: the inositol tris/tetrakisphosphate pathway. Williamson JR, et al. **Adv Exp Med Biol** 1988;232:183–95 (64 ref.)

Endothelium–derived relaxing factor release associated with increased endothelial cell inositol trisphosphate and intracellular calcium. Loeb AL, et al. **Am J Cardiol** 1988 Oct 5;62(11):36G–40G

Metabolism of inositol 1,4,5–trisphosphate to higher inositol phosphates in bovine adrenal cytosol. Guillemette G, et al. **Am J Hypertens** 1989 May;2(5 Pt 1):387–94

PTH elevates inositol polyphosphates and diacylglycerol in a rat osteoblast–like cell line. Civitelli R, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E660–7

Acute effects of phorbol esters on receptor–mediated IP3, cAMP, and progesterone levels in rat granulosa cells. Davis JS, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E368–74

Cell cycle dependence of inositol phosphate levels in neuroblastoma cells. Fleischman LF, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C531–5

Release of intracellular calcium by two different second messengers in airway epithelium. McCann JD, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L116–24

Inositol polyphosphates and intracellular calcium release. Joseph SK, et al. **Arch Biochem Biophys** 1989 Aug 15; 273(1):1–15 (124 ref.)

Reversal of epidermal hyperproliferation in essential fatty acid deficient guinea pigs is accompanied by rapid generation of inositol triphosphate. Tang W, et al. **Arch Dermatol Res** 1988;280(5):286–92

Direct activation by prostaglandin F2 alpha but not thromboxane A2 of glycogenolysis via an increase in inositol 1,4,5–trisphosphate in rat hepatocytes. Athari A, et al. **Biochem Biophys Res Commun** 1989 Sep 29; 163(3):1235–42

Mass measurements of inositol(1,4,5)trisphosphate in rat cerebral cortex slices using a radioreceptor assay: effects of neurotransmitters and depolarization. Challiss RA, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):684–91

Distinct binding sites for Ins(1,4,5)P3 and Ins(1,3,4,5)P4 in bovine parathyroid glands. Enyedi P, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):200–8

Metabolism of inositol–1,3,4,6–tetrakisphosphate to inositol pentakisphosphate in adrenal glomerulosa cells. Hunyady L, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1247–52

Possible binding sites for inositol 1,4,5–trisphosphate in macrophages. Ishimatsu T, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1173–80

Cyclic and noncyclic inositol phosphates are formed at different ratios by phospholipase C isozymes. Kim JW, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):177–82

Ca2+ influx stimulated by vasopressin is mediated by phosphoinositide hydrolysis in rat smooth muscle cells. Kondo K, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):677–82

Transient inositol (1,4,5) trisphosphate accumulation under vasopressin stimulation in WRK1 cells: correlation with intracellular calcium mobilization. Mouillac B, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):953–60

Defective formation of inositol 1,4,5–trisphosphate in bradykinin–stimulated fibroblasts from progressive systemic sclerotic patients. Seishima M, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1077–82

Low density lipoprotein and apoprotein B induce increases in inositol trisphosphate and cytosolic free Ca2+ via pertussis toxin–sensitive GTP–binding protein in vascular smooth muscle cells. Morita R, et al. **Biochem Int** 1989 Mar;18(3):647–53

Plasma from uninephrectomized rats stimulates production of inositol trisphosphates and inositol tetrakisphosphate in renal cortical slices. Banfić H, et al. **Biochem J** 1988 Oct 15;255(2):671–6

Rapid accumulation and sustained turnover of inositol phosphates in cerebral–cortex slices after muscarinic–receptor stimulation. Batty IH, et al. **Biochem J** 1989 May 15;260(1):237–41

Accumulation of inositol polyphosphate isomers in agonist–stimulated cerebral–cortex slices. Comparison with metabolic profiles in cell–free preparations. Batty IH, et al. **Biochem J** 1989 Feb 15;258(1):23–32

Formation of methylphosphoryl inositol phosphates by extractions that employ methanol. Brown JE, et al. **Biochem J** 1988 Aug 1;253(3):703–10

Inositol 1,3,4,5–tetrakisphosphate causes release of Ca2+ from permeabilized mouse lymphoma L1210 cells by its conversion into inositol 1,4,5–trisphosphate. Cullen PJ, et al. **Biochem J** 1989 May 1;259(3):931–3

Regulation of GH3–cell function via adenosine A1 receptors. Inhibition of prolactin release, cyclic AMP production and inositol phosphate generation. Delahunty TM, et al. **Biochem J** 1988 Oct 1;255(1):69–77

Cholera–toxin and corticotropin modulation of inositol phosphate accumulation induced by vasopressin and angiotensin II in rat glomerulosa cells. Guillon G, et al. **Biochem J** 1988 Aug 1;253(3):765–75

Metabolism of inositol phosphates in alpha 1–adrenoceptor–stimulated and homogenized cardiac myocytes of adult rats. Guse AH, et al. **Biochem J** 1989 Jul 1;261(1):89–92

The effect of external calcium and pH on inositol trisphosphate–mediated calcium release from cerebellum microsomal fractions. Joseph SK, et al. **Biochem J** 1989 Feb 15;258(1):261–5

Bombesin stimulation of inositol 1,4,5–trisphosphate generation and intracellular calcium release is amplified in a cell line overexpressing the N–ras proto–oncogene. Lloyd AC, et al. **Biochem J** 1989 Jun 15;260(3):813–9

Fluoroaluminates mimic muscarinic– and oxytocin–receptor–mediated generation of inositol phosphates and contraction in the intact guinea–pig myometrium. Role for a pertussis/cholera–toxin–insensitive G protein. Marc S, et al. **Biochem J** 1988 Oct 15; 255(2):705–13

Inositol 1,4–bisphosphate is an allosteric activator of muscle–type 6–phosphofructo–1–kinase. Mayr GW. **Biochem J** 1989 Apr 15;259(2):463–70

Dephosphorylation of 1D–myo–inositol 1,4–bisphosphate in rat liver. Morris AJ, et al. **Biochem J** 1988 Sep 15; 254(3):655–60

Glucagon desensitization of adenylate cyclase and stimulation of inositol phospholipid metabolism does not involve the inhibitory guanine nucleotide regulatory protein Gi, which is inactivated upon challenge of hepatocytes with glucagon. Murphy GJ, et al. **Biochem J** 1989 Apr 1;259(1):191–7

Release of Ca2+ by inositol 1,4,5–trisphosphate in platelet membrane vesicles is not dependent on cyclic AMP–dependent protein kinase. O'Rourke F, et al. **Biochem J** 1989 Feb 1;257(3):715–21

The Ins(1,4,5)P3 binding site of bovine adrenocortical microsomes: function and regulation. Palmer S, et al. **Biochem J** 1989 Jun 1;260(2):593–6

Inositol phosphate production and Ca2+ mobilization in human umbilical–vein endothelial cells stimulated by thrombin and histamine. Pollock WK, et al. **Biochem J** 1988 Dec 1;256(2):371–6

1D–myo–inositol 1,4,5–trisphosphate dephosphorylation by rat enterocytes involves an intracellular 5–phosphatase and non–specific phosphatase activity at the cell surface. Rubiera C, et al. **Biochem J** 1988 Oct 1;255(1):131–7

Early events in inositol phosphate metabolism in longitudinal

smooth muscle from guinea-pig intestine stimulated with carbachol. Salmon DM, et al. **Biochem J** 1988 Sep 1; 254(2):553–7

Metabolism of the inositol phosphates produced upon receptor activation. Shears SB. **Biochem J** 1989 Jun 1; 260(2):313–24 (150 ref.)

Synthesis of myo-inositol 1,3,4,5,6-pentakisphosphate from inositol phosphates generated by receptor activation. Stephens LR, et al. **Biochem J** 1988 Aug 1;253(3):721–33

Protein kinase C-dependent and -independent mechanisms regulating the parotid substance P receptor as revealed by differential effects of protein kinase C inhibitors. Sugiya H, et al. **Biochem J** 1988 Dec 1;256(2):677–80

Chemoattractant and guanosine 5'-[gamma-thio]triphosphate induce the accumulation of inositol 1,4,5-trisphosphate in Dictyostelium cells that are labelled with [3H]inositol by electroporation. Van Haastert PJ, et al. **Biochem J** 1989 Mar 1;258(2):577–86

Two dephosphorylation pathways of inositol 1,4,5-trisphosphate in homogenates of the cellular slime mould Dictyostelium discoideum. Van Lookeren Campagne MM, et al. **Biochem J** 1988 Sep 1;254(2):343–50

Amplification of fluoroaluminate-stimulated inositol phosphate generation in a cell line overexpressing the p21N-ras gene. Wakelam MJ. **Biochem J** 1989 May 1; 259(3):737–41

Inositol 1:2-cyclic,4,5-trisphosphate is only a weak agonist at inositol 1,4,5-trisphosphate receptors. Willcocks AL, et al. **Biochem J** 1989 Jan 1;257(1):297–300

ATP and the binding of [3H]inositol 1,4,5-trisphosphate to its receptor [letter] Willcocks AL, et al. **Biochem J** 1988 Nov 1;255(3):1061

Inositol 1,4,5-trisphosphate concentrations increase after adherence in the macrophage-like cell line J774.1. Zabrenetzky V, et al. **Biochem J** 1988 Nov 1;255(3):1037–43

Ethanol potentiates serotonin stimulated inositol lipid metabolism in primary astroglial cell cultures. Simonsson P, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2801–5

The metabolism and functions of inositol pentakisphosphate and inositol hexakisphosphate. Carpenter D, et al. **Biochem Soc Trans** 1989 Feb;17(1):3–5

Endothelium-derived relaxing factor, calcium and inositol phosphates. Lewis MJ, et al. **Biochem Soc Trans** 1988 Aug; 16(4):486–8

Receptor-mediated release of inositol 1,4,5-trisphosphate and inositol 1,4-bisphosphate in rat basophilic leukemia RBL-2H3 cells permeabilized with streptolysin O. Ali H, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):88–99

Carbamoylcholine-induced accumulation of inositol mono-, bis-, tris- and tetrakisphosphates in isolated cardiac myocytes from adult rats. Berg I, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):100–7

Insulin-like growth factor I stimulates phospholipid synthesis in renal cortical slices without production of inositol phosphate. Crljen V, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):24–8

Stimulation of inositol phosphate and diacylglycerol production by RHC 80267, a diacylglycerol-lipase inhibitor, in rat gastric parietal cells: effects on hydrogen ion secretion. Pfeiffer A, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):191–5

Dual elevation of cyclic AMP and inositol phosphates in response to mechanical deformation of murine osteoblasts. Sandy JR, et al. **Biochim Biophys Acta** 1989 Feb 9; 1010(2):265–9

The accumulation of free and phosphorylated sugars in adipocytes based on a dynamic diffusion barrier. Widdas WF, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):221–30

Long-term lithium treatment selectively reduces receptor-coupled inositol phospholipid hydrolysis in rat brain. Casebolt TL, et al. **Biol Psychiatry** 1989 Feb 1; 25(3):329–40

Effects of substance P (SP) and the N-terminal SP-analogue SP (1–4) on inositol phospholipids in rat adrenal medulla slices. Minenko A, et al. **Biomed Biochim Acta** 1988; 47(9):871–9

Stimulatory and inhibitory actions of excitatory amino acids on inositol phospholipid metabolism in rat cerebral cortex. Godfrey PP, et al. **Br J Pharmacol** 1988 Sep;95(1):131–8

Inhibition of histamine-stimulated inositol phospholipid hydrolysis by agents which increase cyclic AMP levels in bovine tracheal smooth muscle. Hall IP, et al. **Br J Pharmacol** 1989 Jun;97(2):603–13

The human astrocytoma cell line 1321 N1 contains M2-glandular type muscarinic receptors linked to phosphoinositide turnover. Kunysz EA, et al. **Br J Pharmacol** 1989 Feb;96(2):271–8

Pyrethroids: involvement of sodium channels in effects on inositol phosphate formation in guinea pig synaptoneurosomes. Gusovsky F, et al. **Brain Res** 1989 Jul 17;492(1–2):72–8

Cerebellar [3H]inositol 1,4,5-trisphosphate binding is markedly decreased in human olivopontocerebellar atrophy. Kish SJ, et al. **Brain Res** 1989 Jun 12;489(2):373–6

Actions of somatostatin on perfused bovine adrenal glands and cultured bovine adrenal medullary cells. Moeller I, et al. **Brain Res** 1989 Apr 10;484(1–2):192–202

Mapping second messenger systems in the rat hippocampus after transient forebrain ischemia: in vitro [3H]forskolin and [3H]inositol 1,4,5-trisphosphate binding. Onodera H, et al. **Brain Res** 1989 May 22;487(2):343–9

Inositol 1-phosphate formation in long-term potentiation and kindling. Stelzer A, et al. **Brain Res** 1989 Jun 19;490(1):41–7

Alterations in binding of inositol 1,4,5-trisphosphate to subcellular structures of rat liver during chronic endotoxemia. Deaciuc IV, et al. **Cell Calcium** 1989 Aug-Sep;10(6):425–32

Calcium signalling mechanisms in endoplasmic reticulum activated by inositol 1,4,5-trisphosphate and GTP. Gill DL, et al. **Cell Calcium** 1989 Jul;10(5):363–74 (39 ref.)

Does inositol tetrakisphosphate play a role in the receptor-mediated control of calcium mobilization? Petersen OH. **Cell Calcium** 1989 Jul;10(5):375–83 (57 ref.)

Isolation and functional characterization of an inositol trisphosphate receptor from brain. Snyder SH, et al. **Cell Calcium** 1989 Jul;10(5):337–42 (14 ref.)

Histamine stimulation of inositol phosphate metabolism in cultured human non-pigmented ciliary epithelial cells. Crook RB, et al. **Curr Eye Res** 1989 Apr;8(4):415–22

Influence of cAMP and calcium on [3H]inositol efflux, inositol phosphate accumulation, and insulin release from isolated rat islets [published erratum appears in Diabetes 1989 Mar;38(3):3] Zawalich WS, et al. **Diabetes** 1988 Nov; 37(11):1478–83

The effects of high extracellular Ca2+ and Mg2+ concentrations on the levels of inositol 1,3,4,5-tetrakisphosphate in bovine parathyroid cells. Hawkins D, et al. **Endocrinology** 1989 Feb;124(2):838–44

A novel inositol-phospholipid-specific phospholipase C. Rapid purification and characterization. Meldrum E, et al. **Eur J Biochem** 1989 Jul 1;182(3):673–7

Inhibitory effect of nonviable preparations from human immunodeficiency virus 1 on inositol phospholipid metabolism. Müller WE, et al. **Eur J Biochem** 1989 Aug 1;183(2):391–6

Evidence for the involvement of Na+/Ca2+ exchange in the stimulation of inositol phospholipid hydrolysis by sodium channel activation and depolarization. Benuck M, et al. **Eur J Pharmacol** 1989 Jan 10;159(2):187–90

Modulation of the accumulation of inositol phosphates and the mobilization of calcium in aortic myocytes. Berta P, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):123–9

Mass changes of inositol(1,4,5)trisphosphate in trachealis muscle following agonist stimulation. Chilvers ER, et al. **Eur J Pharmacol** 1989 May 30;164(3):587–90

Alteration of inositol phospholipid metabolism in rat cortex by lithium but not carbamazepine. Elphick M, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):411–4

Inhibition of inositol phospholipid hydrolysis in endothelial cells by pentobarbital. Robinson-White AJ, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):291–303

How do inositol phosphates regulate calcium signaling? Putney JW Jr, et al. **FASEB J** 1989 Jun;3(8):1899–905 (64 ref.)

Interactions of formylmethionyl-leucyl-phenylalanine, adenosine, and phosphodiesterase inhibitors in human monocytes. Effects on superoxide release, inositol phosphates and cAMP. Elliott KR, et al. **FEBS Lett** 1989 Aug 28;254(1–2):94–8

Platelet-activating factor increases inositol phosphate production and cytosolic free Ca2+ concentrations in cultured rat Kupffer cells. Fisher RA, et al. **FEBS Lett** 1989 Jul 17;251(1–2):22–6

Protein kinase C activators inhibit the antigen receptor-coupled polyphosphoinositide phosphodiesterase in murine B lymphocytes. Harnett MM, et al. **FEBS Lett** 1988 Nov 7;239(2):281–4

Tumor promoter 12-O-tetradecanoylphorbol 13-acetate inhibits mas/angiotensin receptor-stimulated inositol phosphate production and intracellular Ca2+ elevation in the 401L-C3 neuronal cell line. Jackson TR, et al. **FEBS Lett** 1989 Jul 17;251(1–2):27–30

Inositol trisphosphatase and bisphosphatase activities in the retina of crab. Trowell SC. **FEBS Lett** 1988 Oct 10; 238(2):281–4

Activation of polyphosphoinositide metabolism as a signal-transducing system coupled to excitatory amino acid receptors in astroglial cells. Milani D, et al. **GLIA** 1989; 2(3):161–9

Developmental changes in the chemosensitivity of rat brain synaptoneurosomes to excitatory amino acids, estimated by inositol phosphate formation. Guiramand J, et al. **Int J Dev Neurosci** 1989;7(3):257–66

Adrenergic stimulation of inositol phosphate accumulation in tracheal epithelium. Bainbridge T, et al. **J Appl Physiol** 1989 Jan;66(1):504–8

Agonist-induced regulation of inositol tetrakisphosphate isomers and inositol pentakisphosphate in adrenal glomerulosa cells. Balla T, et al. **J Biol Chem** 1989 Aug 15;264(23):13605–11

Formation of inositol 1,4,5-trisphosphate and inositol 1,3,4-trisphosphate from inositol 1,3,4,5-tetrakisphosphate and their pathways of degradation in RBL-2H3 cells. Cunha-Melo JR, et al. **J Biol Chem** 1988 Oct 5; 263(28):14245–50

Activation of inositol phospholipid breakdown in HL60 cells by P2-purinergic receptors for extracellular ATP. Evidence for mediation by both pertussis toxin-sensitive and pertussis toxin-insensitive mechanisms. Dubyak GR, et al. **J Biol Chem** 1988 Dec 5;263(34):18108–17

Generation of inositol phosphates, cytosolic Ca2+, and ionic fluxes in PC12 cells treated with bradykinin. Fasolato C, et al. **J Biol Chem** 1988 Nov 25;263(33):17350–9

Quantitative changes in polyphosphoinositides 1,2-diacylglycerol and inositol 1,4,5-trisphosphate by platelet-derived growth factor and prostaglandin F2 alpha. Fukami K, et al. **J Biol Chem** 1989 Sep 5;264(25):14985–9

Formation and metabolism of [3H]inositol phosphates in AR42J pancreatoma cells. Substance P-induced Ca2+ mobilization in the apparent absence of inositol 1,4,5-trisphosphate 3-kinase activity. Horstman DA, et al. **J Biol Chem** 1988 Oct 25;263(30):15297–303

Guanosine 5'-O-(3-thiotriphosphate) potentiates both thrombin- and platelet-derived growth factor-induced inositol phosphate release in permeabilized vascular smooth muscle cells. Signaling mechanisms distinguished by sensitivity to pertussis toxin and phorbol esters. Huang CL, et al. **J Biol Chem** 1989 Mar 15;264(8):4391–7

Source of 3H-labeled inositol bis- and monophosphates in agonist-activated rat parotid acinar cells. Hughes AR, et al. **J Biol Chem** 1989 Jun 5;264(16):9400–7

2,5-Di-(tert-butyl)-1,4-benzohydroquinone rapidly elevates cytosolic Ca2+ concentration by mobilizing the inositol 1,4,5-trisphosphate-sensitive Ca2+ pool. Kass GE, et al. **J Biol Chem** 1989 Sep 15;264(26):15192–8

Hormonal regulation of inositol 1,4,5-trisphosphate receptor in rat liver. Mauger JP, et al. **J Biol Chem** 1989 May 25; 264(15):8821–6

Cholera toxin increases the rate of antigen-stimulated calcium influx in rat basophilic leukemia cells. Narasimhan V, et al. **J Biol Chem** 1988 Dec 25;263(36):19626–32

Mannose 6-phosphate potentiates insulin-like growth factor II-stimulated inositol trisphosphate production in proximal tubular basolateral membranes. Rogers SA, et al. **J Biol Chem** 1989 Mar 15;264(8):4273–6

The inositol 1,4,5-trisphosphate-binding site in adrenal cortical cells is distinct from the endoplasmic reticulum. Rossier MF, et al. **J Biol Chem** 1989 Aug 25; 264(24):14078–84

Induction of growth-related metabolism in human vascular smooth muscle cells by low density lipoprotein. Scott-Burden T, et al. **J Biol Chem** 1989 Jul 25; 264(21):12582–9

Cadmium evokes inositol polyphosphate formation and calcium mobilization. Evidence for a cell surface receptor that cadmium stimulates and zinc antagonizes. Smith JB, et al. **J Biol Chem** 1989 May 5;264(13):7115–8

Activation of calcium entry by the tumor promoter thapsigargin in parotid acinar cells. Evidence that an intracellular calcium pool and not an inositol phosphate regulates calcium fluxes at the plasma membrane. Takemura H, et al. **J Biol Chem** 1989 Jul 25; 264(21):12266–71

A novel vasoactive peptide endothelin stimulates mitogenesis through inositol lipid turnover in Swiss 3T3 fibroblasts. Takuwa N, et al. **J Biol Chem** 1989 May 15;264(14):7856–61

Stimulation of inositol phosphate formation in R[illegible]S 17/2.8 cell membranes by guanine nucleotide, calcium, and parathyroid hormone. Cosman F, et al. **J Bone Miner Res** 1989 Jun;4(3):413–20

Effect of KT-362, a putative intracellular calcium antagonist, on norepinephrine-induced contractions and inositol monophosphate accumulation in canine femoral artery. Eskinder H, et al. **J Cardiovasc Pharmacol** 1989 Mar; 13(3):502–7

Evidence for alpha 1-adrenoceptor-mediated increase of inositol trisphosphate in the human heart. Kohl C, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):324–7

Dissociation of inositol trisphosphate from diacylglycerol production in Rous sarcoma virus-transformed fibroblasts. Martins TJ, et al. **J Cell Biol** 1989 Feb;108(2):683–91

Both homodimeric isoforms of PDGF (AA and BB) have mitogenic and chemotactic activity and stimulate phosphoinositol turnover. Hosang M, et al. **J Cell Physiol** 1989 Sep;140(3):558–64

Facilitated calcium mobilization and inositol phosphate production in the priming effect of LH-releasing hormone in the rat. Mitchell R, et al. **J Endocrinol** 1988 Nov; 119(2):293–301

Effect of sodium intake on phosphoinositides and inositol trisphosphate response to angiotensin II, K+ and ACTH in rat glomerulosa cells. Underwood RH, et al. **J Endocrinol** 1989 Jul;122(1):371–7

Regulatory role of retinoic acid on cultured mouse keratinocyte inositol phospholipid metabolism: dose-dependent release of inositol triphosphate. Tang W, et al. **J Invest Dermatol** 1989 Jan;92(1):72–7

Dual effects of K+ depolarisation on inositol polyphosphate production in rat cerebral cortex. Baird JG, et al. **J Neurochem** 1989 Sep;53(3):681–5

Kinetic analysis of A23187-mediated polyphosphoinositide breakdown in rat cortical synaptosomes suggests that inositol bisphosphate does not arise primarily by degradation of inositol trisphosphate. Brammer M, et al. **J Neurochem** 1989 Aug;53(2):399–407

Glycine potentiates the stimulation of inositol phospholipid hydrolysis by excitatory amino acids in primary cultures of cerebellar neurons. Nicoletti F, et al. **J Neurochem** 1989 Sep;53(3):724–7

ATP-evoked Ca2+ mobilisation and prostanoid release from astrocytes: P2-purinergic receptors linked to phosphoinositide hydrolysis. Pearce B, et al. **J Neurochem** 1989 Mar;52(3):971–7

Inositol phospholipid hydrolysis and potentiation of cyclic AMP formation by noradrenaline in rat cerebral cortex slices are not mediated by the same alpha-adrenoceptor

subtypes. Robinson JP, et al. **J Neurochem** 1989 Mar; 52(3):690–8

Inositol phospholipid metabolism during and following synaptic activation: role of adenosine. Rubio R, et al. **J Neurochem** 1989 Mar;52(3):797–806

Stimulation by ATP of inositol trisphosphate accumulation and calcium mobilization in cultured adrenal chromaffin cells. Sasakawa N, et al. **J Neurochem** 1989 Feb;52(2):441–7

Nerve growth factor potentiates the hormone-stimulated intracellular accumulation of inositol phosphates and Ca2+ in rat PC12 pheochromocytoma cells: comparison with the effect of epidermal growth factor. van Calker D, et al. **J Neurochem** 1989 Jan;52(1):38–45

Gamma-hydroxybutyrate stimulation of the formation of cyclic GMP and inositol phosphates in rat hippocampal slices. Vayer P, et al. **J Neurochem** 1989 May;52(5):1382–7

Translocation and activation of protein kinase C in striatal neurons in primary culture: relationship to phorbol dibutyrate actions on the inositol phosphate generating system and neurotransmitter release. Weiss S, et al. **J Neurochem** 1989 Feb;52(2):530–6

Leukotriene D4 receptor-mediated phosphoinositol hydrolysis and calcium mobilization in rat basophilic leukemic cells. Mong S, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):803–13

Species differences in the effects of prostaglandins on inositol trisphosphate accumulation, phosphatidic acid formation, myosin light chain phosphorylation and contraction in iris sphincter of the mammalian eye: interaction with the cyclic AMP system. Yousufzai SY, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1064–72

ATP and other adenine compounds increase mechanical activity and inositol trisphosphate production in rat heart. Legsayer A, et al. **J Physiol (Lond)** 1988 Jul;401:185–99

Effects of sulfhydryl reagents on [3H] inositol trisphosphate binding to dog cerebellar membranes. Yang CM, et al. **J Recept Res** 1989;9(2):159–69

Lasting increase in excitatory amino acid receptor-mediated phosphoinositide hydrolysis in the amygdala/pyriform cortex of amygdaloid kindled rats. Akiyama K, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):620–1

Neurotensin affects metabolism of opioid peptides, catecholamines and inositol phospholipids in bovine chromaffin cells. Bommer M, et al. **Life Sci** 1989; 44(5):327–35

Excitatory amino acids inhibit stimulated phosphoinositide hydrolysis in the rat prefrontal cortex. Noble EP, et al. **Life Sci** 1989;44(1):19–26

Desensitization of the Ca2+-mobilizing system to serum growth factors by Ha-ras and v-mos. Maly K, et al. **Mol Cell Biol** 1988 Oct;8(10):4212–6

Effects of human chorionic gonadotropin, prostaglandin F2 alpha and protein kinase C activators on the cyclic AMP and inositol phosphate second messenger systems in cultured human granulosa-luteal cells. Davis JS, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):187–93

Adrenocorticotropic hormone inhibits angiotensin II-stimulated inositol phosphate accumulation in rat adrenal glomerulosa cells. Woodcock EA. **Mol Cell Endocrinol** 1989 May;63(1–2):247–53

Effects of pH, reducing and alkylating reagents on the binding and Ca2+ release activities of inositol 1,4,5-triphosphate in the bovine adrenal cortex. Guillemette G, et al. **Mol Endocrinol** 1988 Dec; 2(12):1249–55

Differential effects of heparin on inositol 1,4,5-trisphosphate binding, metabolism, and calcium release activity in the bovine adrenal cortex. Guillemette G, et al. **Mol Pharmacol** 1989 Mar;35(3):339–44

Inositol 1,4,5-trisphosphate receptor localized to endoplasmic reticulum in cerebellar Purkinje neurons. Ross CA, et al. **Nature** 1989 Jun 8;339(6224):468–70

Changes in extracellular calcium within the physiological range influence receptor-mediated inositol phosphate responses in brain and tracheal smooth muscle slices. Baird JG, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):247–51

Time-course of malaoxon-induced alterations in brain regional inositol-1-phosphate levels in convulsing and nonconvulsing rats. Hirvonen MR, et al. **Neurochem Res** 1989 Feb;14(2):143–7

Assessment of rat brain alpha 1-adrenoceptor binding and activation of inositol phospholipid turnover following chronic imipramine treatment. Li PP, et al. **Neurochem Res** 1988 Dec;13(12):1111–8

K+ differentially affects the excitatory amino acids- and carbachol-elicited inositol phosphate formation in rat brain synaptoneurosomes. Guiramand J, et al. **Neurosci Lett** 1989 Mar 27;98(2):222–8

Binding of [3H]inositoltrisphosphate and [3H]phorbol 12,13-dibutyrate in rat hippocampus following transient global ischemia: a quantitative autoradiographic study. Jørgensen MB, et al. **Neurosci Lett** 1989 Aug 28; 103(2):219–24

Transforming growth factor beta stimulates phosphoinositol metabolism and translocation of protein kinase C in cultured astrocytes. Robertson PL, et al. **Neurosci Lett** 1988 Oct 31;93(1):107–13

Thyrotropin-releasing hormone stimulates porcine melanotrope cells in primary culture. Trouslard J, et al. **Neurosci Lett** 1989 Mar 27;98(2):234–9

Decreased brain [3H]inositol 1,4,5-trisphosphate binding in Alzheimer's disease. Young LT, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):198–202

Inositol phosphate metabolism and its relationship to calcium signalling. Hughes AR, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Dec 20; 64(12):1238–42

Bombesin-like peptides stimulate phosphatidylinositol turnover in rat brain slices. Hari Prasad VN, et al. **Peptides** 1988 Nov–Dec;9(6):1345–9

[3H]inositol trisphosphate specific binding in two brain regions of long and short sleep mice. Smith TL. **Pharmacol Biochem Behav** 1989 Mar;32(3):827–9

Alpha 1-adrenergic receptor subtypes, inositol phosphates, and sources of cell Ca2+. Minneman KP. **Pharmacol Rev** 1988 Jun;40(2):87–119 (371 ref.)

Convulsions and cerebral inositol-1-phosphate levels in rats treated with diisopropyl fluorophosphate. Savolainen KM, et al. **Pharmacol Toxicol** 1988 Aug;63(2):137–8

Effects of lithium ions on the metabolism of inositol phospholipids: studies with human granulocytes. van Calker D, et al. **Pharmacopsychiatry** 1988 Nov;21(6):434–5

A comparison of norepinephrine stimulated inositol phosphate accumulation in cerebral cortex of the Acomys cahirinus, the laboratory mice and the rat. Nalepa I, et al. **Pol J Pharmacol Pharm** 1988 Jul–Aug;40(4):435–8

Hepatocyte gap junctions are permeable to the second messenger, inositol 1,4,5-trisphosphate, and to calcium ions. Sáez JC, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2708–12

[3H]inositol trisphosphate specific binding in cerebella of mouse lines selectively bred for differential ethanol sensitivity. Morrow EL, et al. **Proc West Pharmacol Soc** 1988;31:269–71

Inositol phospholipids and phospholipase C in platelet receptor transduction. Lapetina EG. **Prog Clin Biol Res** 1988;283:499–511 (35 ref.)

Fibroblasts transformed with v-src show enhanced formation of an inositol tetrakisphosphate. Johnson RM, et al. **Science** 1989 Oct 6;246(4926):121–4

Dexamethasone does not interfere with hormone-sensitive PI hydrolysis. London FS, et al. **Teratology** 1989 Feb; 39(2):121–6

Thrombin stimulates inositol phosphate accumulation and prostacyclin synthesis in human endothelial cells from umbilical vein but not from omentum. Carter AJ, et al. **Thromb Haemost** 1989 Feb 28;61(1):122–6

Molecular recognition of inositol polyphosphates by intracellular receptors and metabolic enzymes. Nahorski SR, et al. **Trends Pharmacol Sci** 1989 Apr;10(4):139–44 (34 ref.)

Muscarinic stimulation of inositol phosphate formation in rat retina: developmental changes. Osborne NN. **Vision Res** 1988;28(8):875–81

[Membrane receptors and the metabolism of phosphatidylinositols: inositol triphosphate and diacylglycerol as secondary transmitters of information] Nowak JZ. **Acta Physiol Pol** 1988;39 Suppl 32:1–52 **(Pol)**

PHARMACOLOGY

Potentiation by GTP of Ins(1,4,5)P3-induced Ca2+ mobilization in permeabilized hepatocytes. Thomas AP. **Adv Exp Med Biol** 1988;232:197–201

Active Ca2+ accumulation in the endoplasmic reticulum of different hepatomas: stimulation by phosphates and Ca2+-releasing effect of IP3. Romani A, et al. **Ann N Y Acad Sci** 1988;551:249–52

Regulation of polyphosphoinositide synthesis in cardiac membranes. Quist E, et al. **Arch Biochem Biophys** 1989 May 15;271(1):21–32

Effects of heparin on inositol 1,4,5-trisphosphate and guanosine 5'-O-(3-thio triphosphate) induced calcium release in cultured smooth muscle cells from rabbit trachea. Chopra LC, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):262–8

Inositol trisphosphate induces calcium release from Neurospora crassa vacuoles. Cornelius G, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):852–6

Inositol 1,2-cyclic 4,5-trisphosphate is an order of magnitude less potent than inositol 1,4,5-trisphosphate in mobilizing intracellular stores of calcium in mouse pancreatic acinar cells. Lee CH, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):561–5

Inositol 1,3,4,5-tetrakisphosphate causes release of Ca2+ from permeabilized mouse lymphoma L1210 cells by its conversion into inositol 1,4,5-trisphosphate. Cullen PJ, et al. **Biochem J** 1989 May 1;259(3):931–3

Characterization of inositol 1,4,5-trisphosphate-stimulated calcium release from rat cerebellar microsomal fractions. Comparison with [3H]inositol 1,4,5-trisphosphate binding. Stauderman KA, et al. **Biochem J** 1988 Oct 15; 255(2):677–83

Stereospecific mobilization of intracellular Ca2+ by inositol 1,4,5-trisphosphate. Comparison with inositol 1,4,5-trisphosphorothioate and inositol 1,3,4-trisphosphate. Strupish J, et al. **Biochem J** 1988 Aug 1;253(3):901–5

Inhibitory action of cyclic AMP on inositol 1,4,5-trisphosphate-induced Ca2+ release in saponin-permeabilized platelets. Tohmatsu T, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):190–3

Inositol (1,4,5)-trisphosphate activates a calcium channel in isolated sarcoplasmic reticulum membranes. Suárez-Isla BA, et al. **Biophys J** 1988 Oct;54(4):737–41

Calcium uptake and inositol trisphosphate-induced calcium release from parathyroid gland membranes. Dean WL, et al. **Bone Miner** 1986 Feb;1(1):59–67

Modulation of intracellular free Ca2+ concentration by IP3-sensitive and IP3-insensitive nonmitochondrial Ca2+ pools. Schulz I, et al. **Cell Calcium** 1989 Jul;10(5):325–36 (64 ref.)

Egg-induced modifications of the zona pellucida of mouse eggs: effects of microinjected inositol 1,4,5-trisphosphate. Kurasawa S, et al. **Dev Biol** 1989 May;133(1):295–304

Inositol 1,3,4,5-tetrakisphosphate and inositol 1,4,5-trisphosphate act by different mechanisms when controlling Ca2+ in mouse lacrimal acinar cells. Changya L, et al. **FEBS Lett** 1989 Jul 17;251(1–2):43–8

A G-protein of sarcoplasmic reticulum of skeletal muscle is activated by caffeine or inositol trisphosphate. Hasegawa T, et al. **FEBS Lett** 1989 Feb 27;244(2):283–6

Ca2+-dependent K+ channels in neuroblastoma hybrid cells activated by intracellular inositol trisphosphate and extracellular bradykinin. Higashida H, et al. **FEBS Lett** 1988 Oct 10;238(2):395–400

Hemispheric asymmetry of rapid chloride responses to inositol trisphosphate and calcium in Xenopus oocytes. Lupu-Meiri M, et al. **FEBS Lett** 1988 Nov 21;240(1–2):83–7

Inhibition of inositol trisphosphate-stimulated calcium mobilization by calmodulin antagonists in rat liver epithelial cells. Hill TD, et al. **J Biol Chem** 1988 Nov 5; 263(31):16479–84

Activation of calcium entry by the tumor promoter thapsigargin in parotid acinar cells. Evidence that an intracellular calcium pool and not an inositol phosphate regulates calcium fluxes at the plasma membrane. Takemura H, et al. **J Biol Chem** 1989 Jul 25; 264(21):12266–71

Inositol polyphosphate-mediated repartitioning of aldolase in skeletal muscle triads and myofibrils. Thieleczek R, et al. **J Biol Chem** 1989 May 5;264(13):7349–56

Inhibition of inositol 1,4,5-trisphosphate-induced Ca2+ release in permeabilized pancreatic acinar cells by hormonal and phorbol ester pretreatment. Willems PH, et al. **J Biol Chem** 1989 Jun 15;264(17):9762–7

Microinjection of inositol 1,2-(cyclic)-4,5-trisphosphate, inositol 1,3,4,5-tetrakisphosphate, and inositol 1,4,5-trisphosphate into intact Xenopus oocytes can induce membrane currents independent of extracellular calcium. Stith BJ, et al. **J Cell Biochem** 1989 Jul;40(3):321–30

Evidence of an auxin-mediated phosphoinositide turnover and an inositol (1,4,5)trisphosphate effect on isolated membranes of Daucus carota L. Zbell BA, et al. **J Cell Biochem** 1989 Jul;40(3):331–40

Inositol 1,3,4,5-tetrakisphosphate stimulates the initiation of DNA synthesis in Ca2+-deprived rat liver cells. Hill TD, et al. **J Cell Physiol** 1989 Aug;140(2):403–7

Initiation of the cortical reaction in hamster and sheep oocytes in response to inositol trisphosphate. Cran DG, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):139–44

The Ins(1,4,5)P3-sensitive Ca2+ store of non-muscle cells: endoplasmic reticulum or calciosomes? Pozzan T, et al. **J Exp Biol** 1988 Sep;139:181–93 (38 ref.)

Inositol 1,3,4,5-tetrakisphosphate is essential for sustained activation of the Ca2+-dependent K+ current in single internally perfused mouse lacrimal acinar cells. Changya L, et al. **J Membr Biol** 1989 Jul;109(1):85–93

Characterization of inositol 1,4,5-trisphosphate-sensitive (IsCaP) and -insensitive (IisCaP) nonmitochondrial Ca2+ pools in rat pancreatic acinar cells. Thévenod F, et al. **J Membr Biol** 1989 Jul;109(2):173–86

Inositol trisphosphate and activators of protein kinase C modulate membrane currents in tail motor neurons of Aplysia. Sawada M, et al. **J Neurophysiol** 1989 Feb; 61(2):302–10

Inositol trisphosphate releases intracellularly stored calcium and modulates ion channels in molluscan neurons. Fink LA, et al. **J Neurosci** 1988 Jul;8(7):2544–55

Inhibitory effects of phytic acid and other inositol phosphates on zinc and calcium absorption in suckling rats. Lönnerdal B, et al. **J Nutr** 1989 Feb;119(2):211–4

Inositol 1,4,5-trisphosphate-induced contraction in skinned single smooth muscle cells from guinea-pig taenia coli. Ohata H, et al. **J Pharmacobiodyn** 1988 Jul;11(7):479–82

Ethanol and inositol 1,4,5-trisphosphate release calcium from separate stores of brain microsomes. Daniell LC, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):875–81

Histamine-induced intracellular free Ca++, inositol phosphates and electrical changes in murine N1E-115 neuroblastoma cells. Oakes SG, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):114–21

Inositol trisphosphate-induced membrane potential oscillations in Xenopus oocytes. Berridge MJ. **J Physiol (Lond)** 1988 Sep;403:589–99

Guanine nucleotide- and inositol 1,4,5-trisphosphate-induced calcium release in rabbit main pulmonary artery. Kobayashi S, et al. **J Physiol (Lond)** 1988 Sep;403:601–19

Ca2+ release and contraction induced by IP3 and contractile agonists in mammalian gastric smooth muscle. Makhlouf GM. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):137–43

Inositol tetrakisphosphate mobilizes calcium from cerebellum microsomes. Joseph SK, et al. **Mol Pharmacol** 1989 Sep; 36(3):391–7

Inositol 1,4,5-trisphosphate activates a channel from smooth

muscle sarcoplasmic reticulum. Ehrlich BE, et al. **Nature** 1988 Dec 8;336(6199):583–6

GTP-activated communication between distinct inositol 1,4,5–trisphosphate–sensitive and –insensitive calcium pools. Ghosh TK, et al. **Nature** 1989 Jul 20;340(6230):236–9

Opening of dihydropyridine calcium channels in skeletal muscle membranes by inositol trisphosphate. Vilven J, et al. **Nature** 1988 Dec 8;336(6199):587–9

Alteration of calcium sensitivity of skinned frog skeletal muscle fibres by inositol triphosphate and calmodulin antagonists. Isac M, et al. **Pflugers Arch** 1988 Aug; 412(3):253–7

Effects of inositol phosphates on the membrane activity of smooth muscle cells of the rabbit portal vein. Ohya Y, et al. **Pflugers Arch** 1988 Sep;412(4):382–9

Platelet plasma membrane calcium release by inositol 1,4,5–trisphosphate. Rengasamy A, et al. **Prog Clin Biol Res** 1988;283:519–22

Inositol 1,3,4,5–tetrakisphosphate induces Ca2+ sequestration in rat liver cells. Hill TD, et al. **Science** 1988 Nov 25;242(4882):1176–8

Cyclic AMP opposes IP3–induced calcium release from permeabilized human platelets. Moos M Jr, et al. **Second Messengers Phosphoproteins** 1988;12(4):163–70

Improved 72–hour renal preservation with phosphate–buffered sucrose. Lam FT, et al. **Transplantation** 1989 May;47(5):767–71

[Regulation mechanisms of receptors mediated activation of phospholipase c and inositol–1,4,5–triphosphate sensitive Ca2+ release and Ca2+ uptake in exocrine glandular cells] Schulz I, et al. **Arzneimittelforschung** 1989 Jan; 39(1A):168–73 (13 ref.) (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Role of guanine nucleotide regulatory proteins and inositol phosphates in the hormone induced mobilization of hepatocyte calcium. Blackmore PF, et al. **Adv Exp Med Biol** 1988;232:169–82

H+–dependent calcium uptake into an IP3–sensitive calcium pool from rat parotid gland. Thévenod F, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G429–40

Dissociation of alpha–adrenergic and cholinergic stimulated inositol trisphosphate–dependent calcium mobilization at the "post–receptor" level. Kowatch MA, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):347–51

Involvement of inositol 1,4,5–trisphosphate in Ca2+ influx in thrombin stimulated human platelets. Uemura Y, et al. **Biochem Int** 1989 Feb;18(2):335–41

How do inositol 1,4,5–trisphosphate and inositol 1,3,4,5–tetrakisphosphate regulate intracellular Ca2+? Irvine RF. **Biochem Soc Trans** 1989 Feb;17(1):6–9 (29 ref.)

Roles of myo–inositol 1,4,5–trisphosphate and myo–diacylglycerol in vascular smooth muscles as second messengers: in relation to actions of acetylcholine. Itoh T, et al. **Biochem Soc Trans** 1988 Aug;16(4):488–9

Inositol lipids and phosphates in growing, stimulated and differentiating cells. Michell RH. **Biochem Soc Trans** 1989 Feb;17(1):1–3 (25 ref.)

Metabolism and functions of inositol phosphates. Hughes AR, et al. **Biofactors** 1988 Jul;1(2):117–21 (64 ref.)

Effects of diacylglycerol and inositol trisphosphate on steroidogenesis by ovarian granulosa from pigs. Sadighian JJ, et al. **Biol Reprod** 1989 Feb;40(2):294–9

Inositol trisphosphate and calcium signaling. Berridge MJ, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:927–33

Molecular mechanisms of phospholipid signaling pathways in mammalian nerve cells. Hanley MR, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:435–45 (62 ref.)

Agonist–induced calcium oscillations in depolarized fibroblasts and their manipulation by photoreleased Ins(1,4,5)P3, Ca++, and Ca++ buffer. Harootunian AT, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:935–43

Inositol lipid cascade of vision studied in mutant flies. Selinger Z, et al. **Cold Spring Harb Symp Quant Biol** 1988; 53 Pt 1:333–41

Regulation of gene expression by the intracellular second messengers IP3 and diacylglycerol. Kimmel AR, et al. **Dev Genet** 1988;9(4–5):351–8

Intracellular localization of inositol–phospholipid–metabolizing enzymes in rabbit fast–twitch skeletal muscle. Can D–myo–inositol 1,4,5–trisphosphate play a role in excitation–contraction coupling? Varsányi M, et al. **Eur J Biochem** 1989 Feb 1; 179(2):473–9

Cyclic AMP enhances inositol trisphosphate–induced mobilization of intracellular Ca2+ in cultured aortic smooth muscle cells. Tawada Y, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):795–800

Inositol trisphosphate and excitation–contraction coupling in skeletal muscle. Hidalgo C, et al. **J Bioenerg Biomembr** 1989 Apr;21(2):267–81 (52 ref.)

The inositol phosphate/diacylglycerol pathway in MA–10 Leydig tumor cells. Activation by arginine vasopressin and lack of effect of epidermal growth factor and human choriogonadotropin. Ascoli M, et al. **J Biol Chem** 1989 Apr 25;264(12):6674–81

Chemoattractant receptor promotion of Ca2+ influx across the plasma membrane of HL–60 cells. A role for cytosolic free calcium elevations and inositol 1,3,4,5–tetrakisphosphate production. Pittet D, et al. **J Biol Chem** 1989 May 5;264(13):7251–61

Diacylglycerol, but not inositol 1,4,5–trisphosphate, accounts for platelet–derived growth factor–stimulated proliferation of BALB 3T3 cells. Suzuki–Sekimori R, et al. **J Cell Physiol** 1989 Sep;140(3):432–8

Inositol phosphates, G–proteins and ras genes involved in chemotactic signal transduction of Dictyostelium. Newell PC, et al. **J Cell Sci** 1988 Feb;89 (Pt 2):123–7 (36 ref.)

Intracellular calcium translocation: mechanism of activation by guanine nucleotides and inositol phosphates. Gill DL, et al. **J Exp Biol** 1988 Sep;139:105–33 (56 ref.)

Dysbalance of neuronal second messenger function in the aetiology of affective disorders: a pathophysiological concept hypothesising defects beyond first messenger receptors. Wachtel H. **J Neural Transm** 1989;75(1):21–9 (40 ref.)

Insect cardioactive neuropeptides: peptidergic modulation of the intrinsic rhythm of an insect heart is mediated by inositol 1,4,5–trisphosphate. Tublitz NJ. **J Neurosci** 1988 Nov;8(11):4394–9

Protein kinase C activators reduce the inositol trisphosphate–induced outward current and the Ca2+–activated outward current in identified neurons of Aplysia. Sawada M, et al. **J Neurosci Res** 1989 Feb; 22(2):158–66

The Albert Lasker Medical Awards. Inositol trisphosphate, calcium, lithium, and cell signaling. Berridge MJ. **JAMA** 1989 Oct 6;262(13):1834–41 (84 ref.)

Inositol phosphates and cell signalling. Berridge MJ, et al. **Nature** 1989 Sep 21;341(6239):197–205 (125 ref.)

Pulsatile intracellular calcium release does not depend on fluctuations in inositol trisphosphate concentration. Wakui M, et al. **Nature** 1989 May 25;339(6222):317–20

Inositol trisphosphate–linked calcium mobilization couples substance P receptors to conductance increase in a rat pancreatic acinar cell line. Song SY, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):143–8

Spatial and temporal aspects of cell signalling. Berridge MJ, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):325–43 (78 ref.)

Neural function: metabolism and actions of inositol metabolites in mammalian brain. Hanley MR, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):381–98 (60 ref.)

Inositol phosphates: proliferation, metabolism and function. Irvine RF, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26;320(1199):281–98 (102 ref.)

The localization of calcium release by inositol trisphosphate in Limulus photoreceptors and its control by negative feedback. Payne R, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):359–79 (99 ref.)

Inositol trisphosphate, calcium and muscle contraction. Somlyo AP, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26;320(1199):399–414 (123 ref.)

Inositolphospholipid–linked glutamate receptors mediate cerebellar parallel–fiber–Purkinje–cell synaptic transmission. Blackstone CD, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4316–20

Cyclic AMP–dependent phosphorylation of a brain inositol trisphosphate receptor decreases its release of calcium. Supattapone S, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8747–50

The Croonian lecture, 1988. Inositol lipids and calcium signalling. Berridge MJ. **Proc R Soc Lond [Biol]** 1988 Sep 22;234(1277):359–78 (103 ref.)

Role of inositol lipid second messengers in regulation of secretion: studies of thyrotropin–releasing hormone action in pituitary cells. Gershengorn MC. **Soc Gen Physiol Ser** 1989;44:1–15

Calcium and magnesium movements in cells and the role of inositol trisphosphate in muscle. Somlyo AP, et al. **Soc Gen Physiol Ser** 1987;42:77–92 (62 ref.)

Inositol phosphates: a family of signal molecules? [news] Downes CP. **Trends Neurosci** 1988 Aug;11(8):336–8 (20 ref.)

Inositol polyphosphates regulate excitability [news] Fink LA, et al. **Trends Neurosci** 1988 Aug;11(8):338–9 (28 ref.)

Inositol polyphosphates and neuronal calcium homeostasis. Nahorski SR. **Trends Neurosci** 1988 Oct;11(10):444–8 (50 ref.)

[Inositol triphosphate: a new class of intracellular second messenger] Guillon G. **Ann Endocrinol (Paris)** 1988; 49(4–5):354–7 (14 ref.) (Eng. Abstr.) **(Fre)**

[Inositol trisphosphate, a new "second messenger" for positive inotropic effects on the heart?] Scholz J. **Klin Wochenschr** 1989 Mar 1;67(5):271–9 (105 ref.) (Eng. Abstr.) **(Ger)**

[Secondary messenger level of inositol triphosphate in fibroblasts after treatment with papaverine] Vályi–Nagy T, et al. **Acta Pharm Hung** 1989 Jul;59(4):189–92 (Eng. Abstr.) **(Hun)**

[Involvement of inositol triphosphate in transmembrane signaling of photoreceptor cells] Inoue H, et al. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):566–73 **(Jpn)**

[Neuromodulation by second messengers] Higashida H. **Yakubutsu Seishin Kodo** 1988 Dec;8(4):493–6 **(Jpn)**

[Effect of vasopressin on the osmotic permeability of the bladder wall in the frog and its content of cAMP, cGMP and inositol triphosphate] Natochin IuV, et al. **Fiziol Zh SSSR** 1989 May;75(5):702–8 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Photolabile precursors of inositol phosphates. Preparation and properties of 1–(2–nitrophenyl)ethyl esters of myo–inositol 1,4,5–trisphosphate. Walker JW, et al. **Biochemistry** 1989 Apr 18;28(8):3272–80

SECRETION

Receptor density determines secretory response patterns mediate by inositol lipid–derived second messengers. Comparison of thyrotropin–releasing hormone and carbamylcholine actions in thyroid–stimulating hormone–secreting mouse pituitary tumor cells. Winicov I, et al. **J Biol Chem** 1989 Jun 5;264(16):9438–43

SUGARS see **CARBOHYDRATES**

SUGGESTION

see related

AUTOGENIC TRAINING

Suggestion under controlled surgical anesthesia [letter] Bonke B, et al. **Acta Anaesthesiol Scand** 1988 Nov;32(8):712–3

The use of indirect hypnotic suggestions for insomnia arising from generalized anxiety: a case report. Cochrane G. **Am J Clin Hypn** 1989 Jan;31(3):199–203

Suggested posthypnotic amnesia in four diagnostic groups of hospitalized psychiatric patients. Evans FJ, et al. **Am J Clin Hypn** 1989 Jul;32(1):27–35

The effects of hypnotic suggestion on pain report. Malone MD, et al. **Am J Clin Hypn** 1989 Apr;31(4):221–30

A validation study of a short–form hypnotic–experience questionnaire and its relationship to hypnotizability. Matheson G, et al. **Am J Clin Hypn** 1989 Jul;32(1):17–26

The confusion technique untangled: its theoretical rationale and preliminary classification. Otani A. **Am J Clin Hypn** 1989 Jan;31(3):164–72

Effects of hypnotic instructions on P300 event–related–potential amplitudes: research and clinical implications. Spiegel D, et al. **Am J Clin Hypn** 1988 Jul; 31(1):11–7 (39 ref.)

Ego–enhancement: a five–step approach. Stanton HE. **Am J Clin Hypn** 1989 Jan;31(3):192–8

Does suggestibility modify acute reactions to passive cigarette smoke exposure? Urch RB, et al. **Environ Res** 1988 Oct;47(1):34–47

Bimodality, dimensionality, and the notion of hypnotic types. Balthazard CG, et al. **Int J Clin Exp Hypn** 1989 Jan; 37(1):70–89 (53 ref.)

Trance–related pseudocyesis in a male. Barrett D. **Int J Clin Exp Hypn** 1988 Oct;36(4):256–61

The experience of hypnotic suggestions. Bowers P, et al. **Int J Clin Exp Hypn** 1988 Oct;36(4):336–49

The effect of hypnotically induced suggestions on reading performance. Koe GG, et al. **Int J Clin Exp Hypn** 1988 Oct;36(4):275–83

Literalness: an unsuggested (spontaneous) item of hypnotic behavior? McCue PA, et al. **Int J Clin Exp Hypn** 1988 Jul;36(3):192–7

The effectiveness of an authoritative versus permissive style of hypnotic communication. Spinhoven P, et al. **Int J Clin Exp Hypn** 1988 Jul;36(3):182–91

Changes in body attitude as a function of posthypnotic suggestions. Van Denburg EJ, et al. **Int J Clin Exp Hypn** 1989 Jan;37(1):15–30

Reality versus suggestion: pseudomemory in hypnotizable and simulating subjects. Lynn SJ, et al. **J Abnorm Psychol** 1989 May;98(2):137–44

Direct versus indirect suggestions, archaic involvement, and hypnotic experience. Lynn SJ, et al. **J Abnorm Psychol** 1988 Aug;97(3):296–301

Hypnosis, suggestion, and placebo in the reduction of experimental pain. Spanos NP, et al. **J Abnorm Psychol** 1989 Aug;98(3):285–93

Social psychological factors in the genesis of posthypnotic source amnesia. Spanos NP, et al. **J Abnorm Psychol** 1988 Aug;97(3):322–9

The effects of suggestion on the total respiratory resistance of nonasthmatic female subjects. Wigal JK, et al. **J Psychosom Res** 1988;32(4–5):409–16

Therapeutic suggestions during general anaesthesia [letter] Mackie DS. **Lancet** 1988 Oct 22;2(8617):955–6

The effects of suspiciousness and anger on suggestibility. Gudjonsson GH. **Med Sci Law** 1989 Jul;29(3):229–32

[Objective evaluation of the effect of suggestion analgesia on the pain threshold] Říha J. **Cas Lek Cesk** 1989 May 5;128(19):583–5 (Eng. Abstr.) **(Cze)**

[Reaction of the cerebral vertebrae in imagined changes in the shape of the cervical spine] Jirout J. **Cesk Neurol Neurochir** 1989 Mar;52(2):75–7 (Eng. Abstr.) **(Cze)**

[Use of subconscious and conscious suggestions combined with music as a relaxation technic] Chaloult L, et al. **Can J Psychiatry** 1988 Nov;33(8):734–40 (Eng. Abstr.) **(Fre)**

[Pseudopolyvalent drug allergy in a patient with marked hypersensitivity to penicillin] Polubiec M, et al. **Pol Tyg Lek** 1988 Oct 17–24;43(42–43):1381–2 (Eng. Abstr.) **(Pol)**

SUICIDE

Locus of control, anger and suicide. Lester D. **Act Nerv Super (Praha)** 1988 Dec;30(4):315–6
Rational choice theory and suicide. Lester D. **Act Nerv Super (Praha)** 1988 Dec;30(4):309–12
Why do people choose particular methods for suicide? Lester D. **Act Nerv Super (Praha)** 1988 Dec;30(4):312–4
Stunning device as a suicide weapon. Klun B, et al. **Acta Neurochir (Wien)** 1989;97(3–4):111–3
Language of publication of journal articles on suicide and mental disorders. Barraclough BM, et al. **Acta Psychiatr Scand** 1989 Mar;79(3):245–7
Blood serotonin levels in suicidal schizophrenic patients. Bräunig P, et al. **Acta Psychiatr Scand** 1989 Feb;79(2):186–9
Hypothalamic–pituitary–adrenal and –thyroid axis dysfunctions and decrements in the availability of L–tryptophan as biological markers of suicidal ideation in major depressed females. Maes M, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):13–7
Obtundation in the elderly patient [letter] Little N. **Am J Emerg Med** 1988 Nov;6(6):679
Unusual hanging deaths. Cooke CT, et al. **Am J Forensic Med Pathol** 1988 Dec;9(4):277–82
Suicide and Meningioma. Feigin G. **Am J Forensic Med Pathol** 1988 Dec;9(4):334–5
Suicide by driving an awl into the brain. Johansson B, et al. **Am J Forensic Med Pathol** 1988 Dec;9(4):331–3
Homicidal hanging in a dyadic death. Lew EO. **Am J Forensic Med Pathol** 1988 Dec;9(4):283–6
The mirror's use in suicide. Riddick L, et al. **Am J Forensic Med Pathol** 1989 Mar;10(1):14–6
Immolation after drinking kerosene. Shiono H, et al. **Am J Forensic Med Pathol** 1989 Sep;10(3):229–31
The seed queen. Stephens BG. **Am J Forensic Med Pathol** 1989 Jun;10(2):156–8
A fatality involving secobarbital, nitrazepam, and codeine. Tracqui A, et al. **Am J Forensic Med Pathol** 1989 Jun; 10(2):130–3
Serotonergic measures in the brains of suicide victims: 5–HT2 binding sites in the frontal cortex of suicide victims and control subjects. Arora RC, et al. **Am J Psychiatry** 1989 Jun;146(6):730–6
Suicide in emergency medicine [published erratum appears in Ann Emerg Med 1989 Aug;18(8):895] **Ann Emerg Med** 1989 Jun;18(6):718–20
Autoradiographic analysis of tritiated imipramine binding in the human brain post mortem: effects of suicide. Gross–Isseroff R, et al. **Arch Gen Psychiatry** 1989 Mar; 46(3):237–41
Trends in suicide and unemployment in Scotland, 1976–86 [see comments] Crombie IK. **BMJ** 1989 Mar 25; 298(6676):782–4. **Comment in:** BMJ 1989 Apr 29;298(6681):1180
Three cases of fatal triazolam poisoning. Sunter JP, et al. **BMJ** 1988 Sep 17;297(6650):719
Suicide, and other causes of death, following attempted suicide. Hawton K, et al. **Br J Psychiatry** 1988 Mar; 152:359–66
Brain GABAA/benzodiazepine binding sites and glutamic acid decarboxylase activity in depressed suicide victims. Cheetham SC, et al. **Brain Res** 1988 Sep 13;460(1):114–23
Sex–specific trends in suicide method, Canada, 1971–1985. Huchcroft SA, et al. **Can J Public Health** 1989 Mar–Apr; 80(2):120–3
Biological markers of suicide risk and adolescent suicide. Cohen LS, et al. **Clin Neuropharmacol** 1988 Oct; 11(5):423–35 (104 ref.)
Biological prediction of suicide: the role of serotonin. De Leo D, et al. **Crisis** 1988 Nov;9(2):109–18 (63 ref.)
Philosophical, ethical, and legal aspects of resuscitation medicine. II. Recognizing the tragic choice: food, water, and the right to assisted suicide. Schaffner KF. **Crit Care Med** 1988 Oct;16(10):1063–8
Coping with the suicidal elderly: a physician's guide. Richardson R, et al. **Geriatrics** 1989 Sep;44(9):43–7, 51
Fatal chloroquine self–poisoning. Kintz P, et al. **Hum Toxicol** 1988 Nov;7(6):541–3 (9 ref.)
Suicide with dapsone. Singhal SK. **Indian J Lepr** 1988 Jan; 60(1):87–9
Murder–suicide in Alzheimer's disease. Lecso PA. **J Am Geriatr Soc** 1989 Feb;37(2):167–8 (7 ref.)
Identification of a phosphoglucomutase 1 (PGM 1) variant in a case of murder/suicide. Franco MA, et al. **J Forensic Sci** 1988 Jul;33(4):1050–1
Operational criteria for the determination of suicide. Rosenberg ML, et al. **J Forensic Sci** 1988 Nov; 33(6):1445–56
Three deaths involving triazolam—analytical aspects. Bal TS, et al. **J Forensic Sci Soc** 1989 Mar–Apr;29(2):119–23
Death following intentional overdose of psychotropic drugs. Kasantikul V, et al. **J Med Assoc Thai** 1989 Feb; 72(2):109–11
Leads from the MMWR. Operational criteria for determining suicide. **JAMA** 1989 Jan 20;261(3):360, 366
Suicide and cocaine [letter] Clarke MJ. **JAMA** 1988 Nov 4;260(17):2506
A piece of my mind. Thanks for the memories. Collins TM. **JAMA** 1988 Dec 23–30;260(24):3654
A piece of my mind. Social Darwinism. LaCombe MA. **JAMA** 1988 Nov 18;260(19):2907
From the Office of the General Counsel. Physician participation in assisted suicide. Orentlicher D. **JAMA** 1989 Oct 6;262(13):1844–5
Death by hanging. Ficarra BJ. **Leg Med** 1987;:44–60 (37 ref.)
The coroner, the inquest and the verdict of suicide [editorial] Chambers DR. **Med Sci Law** 1989 Jul;29(3):181
Myocarditis as an incidental finding in young men dying from unnatural causes. Claydon SM. **Med Sci Law** 1989 Jan; 29(1):55–8
Operational criteria for determining suicide. **MMWR** 1988 Dec 23;37(50):773–4, 779–80
Sudden death in adolescent asthma. Lewiston NJ, et al. **N Engl Reg Allergy Proc** 1986 Sep–Oct;7(5):448–53
Brain damage due to paraquat poisoning: a fatal case with neuropathological examination of the brain. Hughes JT. **Neurotoxicology** 1988 Summer;9(2):243–8
The suicidal patient: what are your liabilities? Edwards KS. **Ohio Med** 1989 Mar;85(3):179, 181–2
Pediatric management of suicidal behavior. Trautman PD, et al. **Pediatr Ann** 1989 Feb;18(2):134, 136, 138 passim (15 ref.)
The perception of different methods for suicide. Lester D. **Percept Mot Skills** 1988 Oct;67(2):530
CSF studies on alcoholism and related behaviours. Roy A, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):505–11
The role of alcohol in suicides in Erie County, NY, 1972–84. Welte JW, et al. **Public Health Rep** 1988 Nov–Dec; 103(6):648–52
Strategies for studying suicide and suicidal behavior. **Suicide Life Threat Behav** 1989 Spring;19(1):1–146
Development of the Grief Experience Questionnaire. Barrett TW, et al. **Suicide Life Threat Behav** 1989 Summer; 19(2):201–15
Attitudes toward suicide: a comparison of Canadian and U.S. college students. Domino G, et al. **Suicide Life Threat Behav** 1989 Summer;19(2):160–72
[Suicide in a psychiatric facility] Hádlík J. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(2):143–58 (Eng. Abstr.) **(Cze)**
[Suicide in patients with disseminated sclerosis. 5 case reports (letter)] Stenager EN, et al. **Ugeskr Laeger** 1989 Aug 28; 151(35):2216–7 **(Dan)**
[Suicide: an update] Fournier JP, et al. **Union Med Can** 1989 May–Jun;118(3):106–9 (30 ref.) (Eng. Abstr.) **(Fre)**
[Acute poisoning caused by sodium azide] Wollenek G. **Wien Klin Wochenschr** 1989 Apr 28;101(9):314–7 (Eng. Abstr.) **(Ger)**
[Suicidal behavior in adolescents—characteristics and prevention] Cohen Y, et al. **Harefuah** 1988 Nov 1; 115(9):229–32 (29 ref.) **(Heb)**
[Biological aspects of suicidal behavior] De Leo D. **Minerva Psichiatr** 1988 Apr–Jun;29(2):83–6 (21 ref.) (Eng. Abstr.) **(Ita)**
[A homicidal strangulation by ligature, disguised as a suicidal hanging] Ueno Y, et al. **Nippon Hoigaku Zasshi** 1989 Feb; 43(1):46–51 (Eng. Abstr.) **(Jpn)**
[Suicide with a noose] Savchenko SV, et al. **Sud Med Ekspert** 1989 Apr–Jun;32(2):53–4 **(Rus)**
[An unusual cause of death in self–hanging] Shadymov AB. **Sud Med Ekspert** 1989 Apr–Jun;32(2):52–3 **(Rus)**
[Alcohol and suicide] Kapamadžija B, et al. **Med Pregl** 1988; 41(1–2):9–11 (Eng. Abstr.) **(Ser)**

CLASSIFICATION

Taxonomy of 130 cases of youth suicide. Bagley C. **Percept Mot Skills** 1989 Aug;69(1):318

EPIDEMIOLOGY

Psychiatric morbidity and cause of death following gastrectomy for peptic ulcer. Knop J, et al. **Acta Chir Scand Suppl** 1988;547:68–70
Suicide in Jordan 1980–1985. Daradkeh TK. **Acta Psychiatr Scand** 1989 Mar;79(3):241–4
Female independence in Portugal: effect on suicide rates. de Castro EF, et al. **Acta Psychiatr Scand** 1988 Aug; 78(2):147–55
Suicide among soldiers and young men in the Nordic countries 1977–1984. Hytten K, et al. **Acta Psychiatr Scand** 1989 Mar;79(3):224–8
Ecological correlates of suicide in the United States and Hungary. Lester D, et al. **Acta Psychiatr Scand** 1989 May; 79(5):498–9
Personal violence (suicide and homicide) in South Africa. Lester D. **Acta Psychiatr Scand** 1989 Mar;79(3):235–7
The use of motor vehicle exhaust for suicide and the availability of cars. Lester D, et al. **Acta Psychiatr Scand** 1989 Mar;79(3):238–40
Suicide in Israel: crossnational comparisons. Levav I, et al. **Acta Psychiatr Scand** 1989 May;79(5):468–73
Recent trends in methods of suicide. Moens GF, et al. **Acta Psychiatr Scand** 1989 Mar;79(3):207–15
Suicide in England and Wales 1946–1985: an age–period–cohort analysis. Surtees PG, et al. **Acta Psychiatr Scand** 1989 Mar;79(3):216–23
Youth suicide: a cross–cultural perspective. Lester D. **Adolescence** 1988 Winter;23(92):955–8
Medicolegal aspects of death of patients with cerebral palsy in Japan. Bunai Y, et al. **Am J Forensic Med Pathol** 1988 Dec;9(4):320–1
Suicide among nonwhites. The Metro Dade County experience, 1982–1986. Copeland AR. **Am J Forensic Med Pathol** 1989 Mar;10(1):10–3
Suicide in New York City nursing homes: 1980–1986 [letter] Abrams RC, et al. **Am J Psychiatry** 1988 Nov; 145(11):1487–8
Clustering of teenage suicides after television news stories about suicides: a reconsideration. Kessler RC, et al. **Am J Psychiatry** 1988 Nov;145(11):1379–83
Homicide, suicide, motor vehicle crash, and fall mortality: United States' experience in comparative perspective. Rockett IR, et al. **Am J Public Health** 1989 Oct; 79(10):1396–400
Suicide: the role of the media. Goldney RD. **Aust N Z J Psychiatry** 1989 Mar;23(1):30–4 (23 ref.)
Suicide and unemployment [letter; comment] Renvoize E, et al. **BMJ** 1989 Apr 29;298(6681):1180. **Comment on:** BMJ 1989 Mar 25;298(6676):782–4
Assessing the epidemiology of suicide and parasuicide. Farmer RD. **Br J Psychiatry** 1988 Jul;153:16–20
Sex differences in the seasonal distribution of suicides. Lester D, et al. **Br J Psychiatry** 1988 Jul;153:115–7
Suicide and parasuicide in a hill resort in Malaysia. Maniam T. **Br J Psychiatry** 1988 Aug;153:222–5
Morbidity and mortality of certified adolescent psychiatric patients. Stein BA, et al. **Can J Psychiatry** 1988 Aug; 33(6):488–93
Age, period and cohort effects on suicide: a reply. Trovato F. **Can J Public Health** 1989 Mar–Apr;80(2):149
Suicide in Zimbabwe. Lester D, et al. **Cent Afr J Med** 1988 Jul;34(7):147–9
Suicidal behavior in adolescents and young adults: the international picture. Diekstra RF. **Crisis** 1989 Apr; 10(1):16–35
The risk of suicide with antidepressants. Montgomery SA, et al. **Int Clin Psychopharmacol** 1988 Nov;3 Suppl 2:15–24 (28 ref.)
The mortality associated with depression. Sims AC. **Int Clin Psychopharmacol** 1988 Nov;3 Suppl 2:1–13 (74 ref.)
Sex–specific suicide trends in Canada, 1971–1985. Huchcroft SA, et al. **Int J Epidemiol** 1988 Dec;17(4):839–43
Geographical variation in the seasonality of suicide. Micciolo R, et al. **J Affective Disord** 1988 Sep–Oct;15(2):163–8
College student suicide in the United States: incidence data and prospects for demonstrating the efficacy of preventative programs. Schwartz AJ, et al. **J Am Coll Health** 1988 Sep;37(2):53–9 (10 ref.)
Increased suicide rate in cancer patients. A cohort study based on the Swedish Cancer–Environment Register. Allebeck P, et al. **J Clin Epidemiol** 1989;42(7):611–6
Epidemiological aspects of suicide among the young in selected European countries. Moens GF, et al. **J Epidemiol Community Health** 1988 Sep;42(3):279–85
Deriving relative risks from aggregate data. 2. An application to the relationship between unemployment and suicide. Norström T. **J Epidemiol Community Health** 1988 Dec; 42(4):336–40
Network television news stories about suicide and short–term changes in total U.S. suicides. Kessler RC, et al. **J Nerv Ment Dis** 1989 Sep;177(9):551–5
Trends in the reported rates of suicide by self–poisoning in the elderly. Nowers M, et al. **J R Coll Gen Pract** 1988 Feb;38(307):67–9
Trends in suicide among Tennessee youth aged 10 to 24 years. Hogan A. **J Tenn Med Assoc** 1989 Jan;82(1):28
Adolescent suicide. Earley K. **JAMA** 1989 Apr 7; 261(13):1977
Suicide mortality in the Maryland state prison system, 1979 through 1987. Salive ME, et al. **JAMA** 1989 Jul 21; 262(3):365–9
Handgun availability and firearm mortality [letter] Wintemute GJ. **Lancet** 1988 Nov 12;2(8620):1136–7
Adolescent suicide, homicide, and unintentional injuries. Joffe A. **Md Med J** 1988 Dec;37(12):955–8
Aboriginal deaths in custody [editorial] Goldney RD, et al. **Med J Aust** 1989 Aug 21;151(4):181–2
Commissions and omissions: the wider context of aboriginal suicides in custody. Hunter EM. **Med J Aust** 1989 Aug 21;151(4):218, 220, 223
Suicides by prisoners. Hurley W. **Med J Aust** 1989 Aug 21; 151(4):188–90
Inner urban and national suicide rates, a simple comparative study. Chambers DR, et al. **Med Sci Law** 1989 Jul; 29(3):182–5
Trends in fatal poisonings in Leeds, 1977 to 1987. Crowe MT. **Med Sci Law** 1989 Apr;29(2):124–9
Suicide in southern Sri Lanka. Hettiarachchi J, et al. **Med Sci Law** 1988 Jul;28(3):248–51
Suicide in United States Air Force personnel, 1981–1985. Rothberg JM, et al. **Milit Med** 1988 Dec;153(12):645–8
Geriatric suicide [news] **Ohio Med** 1988 Jun;84(6):429
Epidemiological trends of suicide in Puerto Rico: 1931 to 1985. González–Manrique MA, et al. **P R Health Sci J** 1988 Dec;7(3):245–50
Dying is no accident. Adolescents, violence, and intentional injury. Spivak H, et al. **Pediatr Clin North Am** 1988 Dec; 35(6):1339–47 (28 ref.)
Violent death in the pediatric age group: rural and urban differences. Gausche M, et al. **Pediatr Emerg Care** 1989 Mar;5(1):64–7
Geophysical variables and behavior: LI. Temporal variation of suicide in teens and young adults. Frank ML, et al. **Percept Mot Skills** 1988 Oct;67(2):586
Suicide by car exhaust: sex differences in response to reduced

toxicity. Lester D. **Percept Mot Skills** 1989 Apr;68(2):442
Accidental death rates as a measure of the availability of a method for suicide. Lester D, et al. **Percept Mot Skills** 1989 Feb;68(1):66
The suicide rate by drowning and the presence of oceans. Lester D. **Percept Mot Skills** 1989 Aug;69(1):338
Suicide in the major leagues. Lester D, et al. **Percept Mot Skills** 1988 Dec;67(3):934
Geophysical variables and behavior: LVI. The spatial autocorrelation of states suicide and homicide rates. Lester D. **Percept Mot Skills** 1989 Feb;68(1):218
Suicide rates by region of death and place of birth. Lester D. **Percept Mot Skills** 1988 Dec;67(3):942
Seasonal variation in suicide: is there a sex difference? Micciolo R, et al. **Psychol Med** 1989 Feb;19(1):199–203
On the age–period–cohort analysis of suicide rates. Newman SC, et al. **Psychol Med** 1988 Aug;18(3):677–81
Rates of personal violence (suicide and homicide), traffic fatalities, and alcohol consumption. Lester D. **Psychol Rep** 1988 Oct;63(2):570
Suicide among psychologists and a proposal for the American Psychological Association. Lester D. **Psychol Rep** 1989 Feb;64(1):65–6
The critical mass hypothesis applied to national suicide rates: a replication in the 1960s. Lester D. **Psychol Rep** 1989 Jun; 64(3 Pt 1):746
Opportunity–based suicide rates. Lester D. **Psychol Rep** 1988 Dec;63(3):984
Association of population growth, technological development and social integration on rates of personal violence (suicide and homicide). Lester D. **Psychol Rep** 1989 Apr;64(2):462
Suicide and homicide rates in Hungary and Czechoslovakia during the suppression of dissent. Lester D. **Psychol Rep** 1989 Apr;64(2):666
Fertility rates and suicide: time series and regional studies. Yang BY, et al. **Psychol Rep** 1989 Apr;64(2):676
Mortality and rate of suicide of first admission psychiatric patients. A 5–year follow–up of a prospective longitudinal study. Blumenthal S, et al. **Psychopathology** 1989;22(1):50–6
Suicide in the State of Maryland, 1970–80. Popoli G, et al. **Public Health Rep** 1989 May–Jun;104(3):298–301
Physical disease and disability among 416 suicide cases in Sweden. Stensman R, et al. **Scand J Soc Med** 1988; 16(3):149–53
A regional analysis of suicide: the USA vs Sri Lanka. Lester D. **Soc Psychiatry Psychiatr Epidemiol** 1989 May; 24(3):143–5
Are hospital suicides on the increase? A survey of reports on hospital suicides in the psychiatric literature of the 19th and 20th century. Wolfersdorf M, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):207–16 (90 ref.)
Suicide and increased availability of handguns in the United States. Clarke RV, et al. **Soc Sci Med** 1989;28(8):805–9
The Iowa record–linkage experience. Black DW. **Suicide Life Threat Behav** 1989 Spring;19(1):78–89
The utility of emergency room data for record linkage in the study of adolescent suicidal behavior. Deykin EY. **Suicide Life Threat Behav** 1989 Spring;19(1):90–8
Suicide clusters: a critical review. Gould MS, et al. **Suicide Life Threat Behav** 1989 Spring;19(1):17–29 (49 ref.)
The underrecording of suicides in state and national records, Alaska, 1983–1984. Hlady WG, et al. **Suicide Life Threat Behav** 1988 Fall;18(3):237–44
Miscounting suicides. Kleck G. **Suicide Life Threat Behav** 1988 Fall;18(3):219–36
An analysis of the suicide rates of birth cohorts in Canada. Lester D. **Suicide Life Threat Behav** 1988 Winter; 18(4):372–8
The epidemiology of suicide in Israel: international and intranational comparisons. Levav I, et al. **Suicide Life Threat Behav** 1989 Summer;19(2):184–200
Epidemiologic surveys as tools for studying suicidal behavior: a review. Mościcki EK. **Suicide Life Threat Behav** 1989 Spring;19(1):131–46 (24 ref.)
A consideration of the validity and reliability of suicide mortality data. O'Carroll PW. **Suicide Life Threat Behav** 1989 Spring;19(1):1–16 (40 ref.)
Suicide: media impacts in war and peace, 1910–1920. Stack S. **Suicide Life Threat Behav** 1988 Winter;18(4):342–57
The participation of females in the labor force and rates of personal violence (suicide and homicide). Yang BJ, et al. **Suicide Life Threat Behav** 1988 Fall;18(3):270–8
Suicide of AIDS patients in Texas: a preliminary report. Plott RT, et al. **Tex Med** 1989 Aug;85(8):40–3
Self–poisoning with drugs. Kerr HD. **Wis Med J** 1989 Feb; 88(2):15–8
[The suicidal patient. 1. Occurrence and relevance of contact with a general practitioner prior to the suicidal actions] Damsbo N, et al. **Ugeskr Laeger** 1989 Mar 27;151(13):826–8 (Eng. Abstr.) (Dan)
[Suicide among children and young people under 30] Krarup G, et al. **Ugeskr Laeger** 1988 Nov 28;150(48):2956–8 (Eng. Abstr.) (Dan)
[Suicide among physicians] Nordentoft M. **Ugeskr Laeger** 1988 Oct 10;150(41):2440–3 (Eng. Abstr.) (Dan)
[Epidemiology, over an 8 year period, of attempted suicides in children, seen in emergency service] Gaillard M, et al. **Ann Pediatr (Paris)** 1988 Oct;35(8):572–6 (Eng. Abstr.) (Fre)
[Demographic impact of AIDS mortality in France in 1990: AIDS before suicide and next to traffic accidents] Flandre P, et al. **Rev Epidemiol Sante Publique** 1988;36(3):196–201 (Eng. Abstr.) (Fre)
[Suicide in the aged: changes in the suicide figures of elderly patients in West Germany in the time frame 1953 to 1986] Welz R, et al. **Nervenarzt** 1988 Dec;59(12):709–13 (Ger)
[Epidemiology of ingestion accidents in children] Kleinteich B, et al. **Padiatr Grenzgeb** 1988;27(5):393–9 (Eng. Abstr.) (Ger)
[Organophosphate poisonings—accidental and with suicidal intention] Schier E, et al. **Padiatr Grenzgeb** 1988; 27(5):401–3 (Eng. Abstr.) (Ger)
[Analysis of the incidence of suicide in Nógrád County (1970–80)] Zonda T. **Orv Hetil** 1988 Sep 4;129(36):1923–5 (Eng. Abstr.) (Hun)
[Completed suicide. Methodological note about an ongoing inquiry] Santos JC, et al. **Acta Med Port** 1988 Mar–Apr; 1(2):161–4 (Eng. Abstr.) (Por)
[The epidemiology of autolytic behavior] Lăzărescu M, et al. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1989 Jan–Mar;34(1):65–74 (Rum)
[Suicide in Spain. Mortality according to geographic distribution] Ledesma Jimeno MA, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Jul–Aug;16(4):243–5 (Eng. Abstr.) (Spa)
[Suicide risk after attempted suicide (its incidence and predictive evaluation] Ramos Brieva JA, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Mar–Apr;17(2):119–25 (75 ref.) (Eng. Abstr.) (Spa)
[Prevalence of suicide in depression] Ramos Brieva JA, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 May–Jun;17(3):203–8 (48 ref.) (Eng. Abstr.) (Spa)
[Suicide among psychiatric patients] Ramos Brieva JA, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 May–Jun;17(3):209–14 (52 ref.) (Eng. Abstr.) (Spa)
[The Hofors study in primary health care: increased number of suicides using automobile exhaust after training preventive measures against gas accidents] André M. **Lakartidningen** 1988 Oct 26;85(43):3564–6 (Swe)
[Decreased number of suicides in psychiatric wards as illustrated by notifications to the National Board of Health and Welfare] Beskow J. **Lakartidningen** 1988 Oct 26; 85(43):3568–73 (Swe)

ETHNOLOGY

Aboriginal deaths in custody [letter] Spencer J. **Aust N Z J Psychiatry** 1989 Jun;23(2):164–5

HISTORY

Sodomy in enlightenment Prussia: from execution to suicide. Steakley JD. **J Homosex** 1988;16(1–2):163–75

LEGISLATION & JURISPRUDENCE

"Magical thinking," suicide, and malpractice litigation. Bursztajn H, et al. **Bull Am Acad Psychiatry Law** 1988; 16(4):369–77 (22 ref.)
Silent suicide in the elderly. Simon RI. **Bull Am Acad Psychiatry Law** 1989;17(1):83–95
The impact of litigation and court decisions on clinical practice. Menninger WW. **Bull Menninger Clin** 1989 May; 53(3):203–14 (27 ref.)
Nally II: further clarification of clergy malpractice. Griffith EE, et al. **Hosp Community Psychiatry** 1988 Oct; 39(10):1041–3
Postmortem determination of the biological distribution of sufentanil and midazolam after an acute intoxication. Ferslew KE, et al. **J Forensic Sci** 1989 Jan;34(1):249–57
Two six–shot suicides in close geographic and temporal proximity. Marsh TO, et al. **J Forensic Sci** 1989 Mar; 34(2):491–4
Fatal intoxication by Remoxipride. Segerberg–Konttinen M, et al. **J Forensic Sci** 1989 Mar;34(2):500–3
Suicide by intravenous injection of cocaine. A report of three cases. Sperry K, et al. **J Forensic Sci** 1989 Jan;34(1):244–8
Suicide and life insurance. Lester D. **Psychol Rep** 1988 Dec; 63(3):920
Social construction or causal ascription: distinguishing suicide from undetermined deaths. Platt S, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):217–21
The problem of determining the manner of death as suicide or accident in borderline cases. Huusko R, et al. **Z Rechtsmed** 1988;100(2–3):207–13
A suicide with neuromuscular blocker. Varga M, et al. **Z Rechtsmed** 1988;100(2–3):223–6
[An unusual death in water] Gerling I, et al. **Arch Kriminol** 1989 May–Jun;183(5–6):163–7 (Eng. Abstr.) (Ger)
[Unusual suicide caused by a stab wound in the neck] Klose W, et al. **Arch Kriminol** 1989 May–Jun;183(5–6):157–62 (Eng. Abstr.) (Ger)
[Carbon monoxide poisoning in the automobile—suicide or accident?] Lieske K, et al. **Arch Kriminol** 1988 Jul–Aug; 182(1–2):37–42 (Eng. Abstr.) (Ger)
[Death caused by projectile guns—a retrospective analysis of 34 cases in Berlin and Hamburg] Lignitz E, et al. **Arch Kriminol** 1988 Sep–Oct;182(3–4):83–93 (Eng. Abstr.) (Ger)
[A peculiar case of suicide] Maurri M, et al. **Arch Kriminol** 1989 Mar–Apr;183(3–4):79–86 (Eng. Abstr.) (Ger)
[The hydrodynamic effect of gunshots in cranial explosive shots] Risse M, et al. **Arch Kriminol** 1988 Sep–Oct; 182(3–4):75–82 (Eng. Abstr.) (Ger)
[Congestive hemorrhage caused by burns?] Scharschmidt A, et al. **Arch Kriminol** 1988 Sep–Oct;182(3–4):94–100 (Eng. Abstr.) (Ger)
[Practical experiences with comparative phospholipid determination in proving death by hanging] Haffner HT, et al. **Beitr Gerichtl Med** 1988;46:277–81 (Eng. Abstr.) (Ger)
[Circumstances and findings in 202 burn deaths] Maxeiner H. **Beitr Gerichtl Med** 1988;46:313–25 (Eng. Abstr.) (Ger)
[Medical guarantor responsibility and suicide of the psychiatric patient] Oehmichen M, et al. **Beitr Gerichtl Med** 1988;46:43–7 (Eng. Abstr.) (Ger)
[Proof value of matching markers for the complicated suicide] Windus G, et al. **Beitr Gerichtl Med** 1988;46:335–8 (Eng. Abstr.) (Ger)
[Criminogenic significance of depression with special reference to "general criminality"] Lammel M, et al. **Z Arztl Fortbild (Jena)** 1988;82(9):405–7 (0 ref.) (Ger)
[Fatal outcome of poisoning with ethylene glycol] Aderjan R, et al. **Z Rechtsmed** 1988;100(2–3):199–206 (Eng. Abstr.) (Ger)
[An unusual finding in a case of hypothermia] Madea B, et al. **Z Rechtsmed** 1989;102(1):59–67 (Eng. Abstr.) (Ger)
[Chemico–toxicologic findings in fatal suicidal poisoning by demeton–S–methyl] Schludecker D, et al. **Z Rechtsmed** 1988;101(1):55–60 (Eng. Abstr.) (Ger)
[Fatal diltiazem poisoning] Wiese J, et al. **Z Rechtsmed** 1988; 100(4):271–6 (Eng. Abstr.) (Ger)
[A transition zone phenomenon of the skin in cadavers lying in bath water] Wollenek G, et al. **Z Rechtsmed** 1989; 102(7):473–86 (Eng. Abstr.) (Ger)

MORTALITY

Availability of psychotropic drugs and suicidal self–poisoning mortality in Belgium from 1971–1984. Moens GF, et al. **Acta Psychiatr Scand** 1989 May;79(5):444–9
Gun ownership and suicide in the United States. Lester D. **Psychol Med** 1989 May;19(2):519–21

PATHOLOGY

Biochemical studies in suicide victims: current findings and future implications. Stanley M, et al. **Suicide Life Threat Behav** 1989 Spring;19(1):30–42 (42 ref.)

PREVENTION & CONTROL

Clinical dilemmas in the prevention of adolescent suicidal behavior. Pfeffer CR. **Adolesc Psychiatry** 1988;15:407–21
At risk for suicide.... Brown BB, et al. **Am J Nurs** 1988 Oct; 88(10):1358–61
Failure of suicide prevention measures at Risley [letter] Martin E. **BMJ** 1988 Aug 13;297(6646):483
Hospital suicides: are there preventable factors? Profile of the psychiatric hospital suicide. Goh SE, et al. **Br J Psychiatry** 1989 Feb;154:247–9
Treatment of suicidal manic depression [letter] Markar H. **Br J Psychiatry** 1989 Jan;154:123–4
Did manic–depressive patients who committed suicide receive prophylactic or continuation treatment at the time? Schou M, et al. **Br J Psychiatry** 1988 Sep;153:324–7
Long–term treatment of chronically suicidal patients. Litman RE. **Bull Menninger Clin** 1989 May;53(3):215–28 (14 ref.)
Development of a suicide screening instrument for use in a remand centre setting. Arboleda–Florez J, et al. **Can J Psychiatry** 1988 Oct;33(7):595–8
Prevention of suicidal behavior in adolescents: the role and training of teachers. Mulder AM, et al. **Crisis** 1989 Apr; 10(1):36–51
Comparison of the two telephone crisis lines in Los Angeles (USA) and in Ljubljana (Yugoslavia). Tekavcic–Grad O, et al. **Crisis** 1988 Nov;9(2):146–57
Preventing youth suicide: education is the key. Leenaars AA. **Dimens Health Serv** 1988 Oct;65(7):22–4
The role of the otolaryngologist in managing suicidal adolescents. Derkay CS, et al. **Ear Nose Throat J** 1989 Jun;68(6):438, 440–3, 447
Crisis screening and diversion services. Jacobs LS. **Hawaii Med J** 1989 Mar;48(3):73–6
Interactive videodiscs: suicide and chronic mental illness. Alger I. **Hosp Community Psychiatry** 1989 Jun;40(6):582–3
Coordinating inpatient and outpatient treatment for a chronically suicidal woman. Frances A, et al. **Hosp Community Psychiatry** 1989 May;40(5):468–70
Dice therapy: deterring suicidal behavior by a borderline patient. Kuhlman TL, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):992–4
A model for crisis intervention services within local jails. Cox JF, et al. **Int J Law Psychiatry** 1988;11(4):391–407
Preventing teenage suicide: a critical review. Shaffer D, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):675–87 (115 ref.)
Evaluation of a suicide awareness curriculum for high school students. Spirito A, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):705–11
Predictors of early suicide: identification and appropriate intervention. Fawcett J. **J Clin Psychiatry** 1988 Oct;49

Suppl:7–8
Suicide prevention update: thirty years later. Greenberg SI. **J Fla Med Assoc** 1988 Sep;75(9):610–3 (40 ref.)
Identifying suicide potential in primary care. Lin EH, et al. **J Gen Intern Med** 1989 Jan–Feb;4(1):1–6
Assessment and management of suicidal patients. Davidson L. **J Med Assoc Ga** 1988 Nov;77(11):833–4 (9 ref.)
Suicide after legal arrest: implications for suicide prevention [letter] Lester D, et al. **Med Sci Law** 1989 Jan;29(1):78
Physicians and suicidal patients. Marr J. **Mich Med** 1989 Jan; 88(1):24–5
Efficacy of a suicide detection scale in determining lethality of ideation among hospitalized veterans: a case study. Eisenberg MG, et al. **Milit Med** 1989 May;154(5):246–9
Restricting methods for suicide as a means of preventing suicide: the case of drugs. Lester D. **Percept Mot Skills** 1989 Feb;68(1):273–4
The suicide prevention contract. Assey JL. **Perspect Psychiatr Care** 1985;23(3):99–103
Message to Rhode Island physicians. Coustan DR, et al. **R I Med J** 1989 Aug;72(8):269–70
Short–term suicide awareness curriculum. Abbey KJ, et al. **Suicide Life Threat Behav** 1989 Summer;19(2):216–27
[The assessment of suicidal inclination by the nonspecialist physician] Vollmoeller W. **Dtsch Med Wochenschr** 1989 Sep 15;114(37):1422–3 (Ger)
[Psychotherapy of acute suicidality. "The anti–suicide promise" as a method of preventing suicide] Modestin J. **Psychother Psychosom Med Psychol** 1989 Mar–Apr; 39(3–4):115–20 (Eng. Abstr.) (Ger)
[Survey of elective education in crisis intervention and suicide prevention (attempt at an evaluation) at the Institute of Medical Psychology] van Oyen Z. **Wien Klin Wochenschr** 1989 Mar 3;101(5):175–6 (Ger)
[Treatment of poisoning with anti–arrhythmia agents and glycosides] Machill K, et al. **Z Arztl Fortbild (Jena)** 1989; 83(13):689–91 (Ger)
[Is electrodermal measurement a complement in assessing suicide risk?] Thorell LH. **Lakartidningen** 1989 Feb 15; 86(7):525–7 (Swe)

PSYCHOLOGY

Suicide and attempted suicide in general practice, 1979–1986. Diekstra RF, et al. **Acta Psychiatr Scand** 1989 Mar; 79(3):268–75
Suicidal ideation in a young adult population. Goldney RD, et al. **Acta Psychiatr Scand** 1989 May;79(5):481–9
Suicide and violent death among adolescent suicide attempters. Kotila L, et al. **Acta Psychiatr Scand** 1989 May; 79(5):453–9
Experience of parental loss and later suicide: data from published biographies. Lester D. **Acta Psychiatr Scand** 1989 May;79(5):450–2
Completed suicide in psychiatric inpatients and former inpatients. A comparative study. Modestin J, et al. **Acta Psychiatr Scand** 1989 Mar;79(3):229–34
Changes in suicidal behavior in child psychiatric inpatients. Pfeffer CR, et al. **Acta Psychiatr Scand** 1989 May; 79(5):431–5
Mental disorder in youth suicide. DSM–III–R Axes I and II. Runeson B. **Acta Psychiatr Scand** 1989 May;79(5):490–7
On the picture of depression and suicide in traditional societies. Jacobsson L. **Acta Psychiatr Scand Suppl** 1988; 344:55–63 (13 ref.)
Helping adolescents in crisis: a case study. Hamilton–Obaid B. **Adolescence** 1989 Spring;24(93):59–63
The use of mental status in death certification of suicide. Batten PJ, et al. **Am J Forensic Med Pathol** 1988 Sep; 9(3):203–6
Suicidal behavior in "normal" adolescents: risk and protective factors. Rubenstein JL, et al. **Am J Orthopsychiatry** 1989 Jan;59(1):59–71
Consultation to a clinic following suicide. Young JJ, et al. **Am J Orthopsychiatry** 1989 Jul;59(3):473–6
Defense mechanisms in risk of suicide and risk of violence. Apter A, et al. **Am J Psychiatry** 1989 Aug;146(8):1027–31
Anabolic androgenic steroids and suicide [letter] Brower KJ, et al. **Am J Psychiatry** 1989 Aug;146(8):1075
Depression, hopelessness, and suicidal behavior in Chinese and American psychiatric patients. Chiles JA, et al. **Am J Psychiatry** 1989 Mar;146(3):339–44
Loneliness and disturbed grief: a comparison of parents who lost a child to suicide or accidental death. Kovarsky RS. **Arch Psychiatr Nurs** 1989 Apr;3(2):86–96
On Gordian knots and nooses: aboriginal suicide in the Kimberley. Hunter EM. **Aust N Z J Psychiatry** 1988 Sep; 22(3):264–71
Aboriginal suicides in custody: a view from the Kimberley. Hunter EM. **Aust N Z J Psychiatry** 1988 Sep;22(3):273–82
Elevated CSF CRF in suicide victims. Arató M, et al. **Biol Psychiatry** 1989 Feb 1;25(3):355–9
Suicidality and corticosteroid–induced psychosis [letter] Bräunig P, et al. **Biol Psychiatry** 1989 Jun;26(2):209–10
Suicide by psychotics. Rich CL, et al. **Biol Psychiatry** 1988 Sep;24(5):595–601
Glutamine and suicide [letter] Rubin RT. **Biol Psychiatry** 1988 Oct;24(6):723–4
Suicide among Chinese schizophrenics in Hong Kong. Cheng KK, et al. **Br J Psychiatry** 1989 Feb;154:243–6
Definition of suicide [letter] Kreitman N. **Br J Psychiatry** 1988 Dec;153:343
Family history and five–year suicide risk. Scheftner WA, et al. **Br J Psychiatry** 1988 Dec;153:805–9
Completed suicide in youth. Hoberman HM, et al. **Can J Psychiatry** 1988 Aug;33(6):494–504
Predictors of suicide in borderline personality disorder. Paris J, et al. **Can J Psychiatry** 1989 Feb;34(1):8–9
Suicide notes in adolescence. Posener JA, et al. **Can J Psychiatry** 1989 Apr;34(3):171–6
Correlates of suicide and violence risk 1: the suicide risk measure. Plutchik R, et al. **Compr Psychiatry** 1989 Jul–Aug; 30(4):296–302
The meaning of suicide: implications for research. Boldt M. **Crisis** 1988 Nov;9(2):93–108
Suicidal individuals: two types of research or two types of people? Lester D. **Crisis** 1988 Nov;9(2):130–4
Suicide in young people is different. Michel K. **Crisis** 1988 Nov;9(2):135–45
Long–term course of schizoaffective disorders. Part III: Onset, type of episodes and syndrome shift, precipitating factors, suicidality, seasonality, inactivity of illness, and outcome. Marneros A, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(5):283–90
Predictors of suicide [letter] Gordon RE. **Hosp Community Psychiatry** 1988 Sep;39(9):996–7
Self poisoning in Sri Lanka: motivational aspects. Hettiarachchi J, et al. **Int J Soc Psychiatry** 1989 Summer; 35(2):204–8
The profile of parasucide repenters in Kuwait. Suleiman MA, et al. **Int J Soc Psychiatry** 1989 Summer;35(2):146–55
Validation of the reasons for living inventory in general and delinquent adolescent samples. Cole DA. **J Abnorm Child Psychol** 1989 Feb;17(1):13–27
Psychopathology of adolescent suicide: hopelessness, coping beliefs, and depression. Cole DA. **J Abnorm Psychol** 1989 Aug;98(3):248–55
Self–destructive tendencies and depression as predictors of suicidal ideation in teenagers. Lester D, et al. **J Adolesc** 1989 Jun;12(2):221–3
Study on suicide in depressed inpatients. Modestin J, et al. **J Affective Disord** 1988 Sep–Oct;15(2):157–62
Growth hormone response to desmethylimipramine in depressed and suicidal adolescents. Ryan ND, et al. **J Affective Disord** 1988 Nov–Dec;15(3):323–37
Comorbidity of mental disorders in the post–mortem diagnosis of completed suicide in children and adolescents. Shafii M, et al. **J Affective Disord** 1988 Nov–Dec; 15(3):227–33
Completed suicide in children and adolescents. Hoberman HM, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):689–95
Teen suicide: when the troubled die young. Reich M. **J Am Osteopath Assoc** 1989 Mar;89(3):393–6
Subtypes of suicidal and assaultive behaviors in adolescent psychiatric inpatients: a research note. Pfeffer CR, et al. **J Child Psychol Psychiatry** 1989 Jan;30(1):151–63
Suicide and other consequences of childhood and adolescent anxiety disorders. Mattison RE. **J Clin Psychiatry** 1988 Oct; 49 Suppl:9–11 (18 ref.)
Scale for Suicide Ideation: psychometric properties of a self–report version. Beck AT, et al. **J Clin Psychol** 1988 Jul;44(4):499–505
Identifying psychiatric suicides for research purposes. Evenson RC, et al. **J Clin Psychol** 1988 Nov;44(6):1029–32
Prediction of eventual suicide in psychiatric inpatients by clinical ratings of hopelessness. Beck AT, et al. **J Consult Clin Psychol** 1989 Apr;57(2):309–10
Suicide, hopelessness, and social desirability: a test of an interactive model. Holden RR, et al. **J Consult Clin Psychol** 1989 Aug;57(4):500–4
500 psychological autopsies. Litman RE. **J Forensic Sci** 1989 May;34(3):638–46
Depression, suicidal preoccupation, and rational thinking. Lester D. **J Gen Psychol** 1989 Apr;116(2):221–3
Adolescent suicide: an epidemic in our time. Tolmas HC. **J La State Med Soc** 1989 Aug;141(8):26–30 (13 ref.)
Race and suicide in jails and prisons. Haycock J. **J Natl Med Assoc** 1989 Apr;81(4):405–11
A study of clinical suicide. Modestin J, et al. **J Nerv Ment Dis** 1988 Nov;176(11):668–74
Suicide upon recovery from depression. A clinical note. Schweizer E, et al. **J Nerv Ment Dis** 1988 Oct; 176(10):633–6
Single–sign Rorschach suicide indicators: a validity study using a depressed inpatient population. Hansell AG, et al. **J Pers Assess** 1988 Winter;52(4):658–69
Alcohol abuse and eventual suicide: a 5– to 10–year prospective study of alcohol–abusing suicide attempters. Beck AT, et al. **J Stud Alcohol** 1989 May;50(3):202–9
A piece of my mind. Risky business. Anders DL. **JAMA** 1988 Dec 2;260(21):3184
Not choosing not to be: Victorian literary responses to suicide. Gates BT. **Lit Med** 1987;6:77–91
Coping with suicidal behavior. Gemma PB. **MCN** 1989 Mar–Apr;14(2):101–3
Suicide and suicidal behavior in children and adolescents. Brent DA. **Pediatr Rev** 1989 Mar;10(9):269–75 (10 ref.)
Knowledge about suicide as a function of experience. Durocher GJ, et al. **Percept Mot Skills** 1989 Feb;68(1):26
Major league baseball performances of players who were later suicides or homicide victims. Lester D, et al. **Percept Mot Skills** 1989 Aug;69(1):272
Application of Piotrowski's dark shading hypothesis to Sylvia Plath's poems written before her suicide. Lester D. **Percept Mot Skills** 1989 Feb;68(1):122
Locus of control and suicidal ideation. Sidrow NE, et al. **Percept Mot Skills** 1988 Oct;67(2):576
Patient suicide: its impact on the therapeutic milieu of a psychiatric unit. Landeen JJ. **Perspect Psychiatr Care** 1987–88;24(2):74–8
Suicide and parasuicide in multiple personality disorder. Ross CA, et al. **Psychiatry** 1989 Aug;52(3):365–71
Brain GABAB binding sites in depressed suicide victims. Cross JA, et al. **Psychiatry Res** 1988 Nov;26(2):119–29
Correlates of suicide and violence risk: III. A two–stage model of countervailing forces. Plutchik R, et al. **Psychiatry Res** 1989 May;28(2):215–25
Is there a relation between the seriousness of suicidal intent and the lethality of the suicide attempt? Plutchik R, et al. **Psychiatry Res** 1989 Jan;27(1):71–9
The Werther effect after television films: new evidence for an old hypothesis. Schmidtke A, et al. **Psychol Med** 1988 Aug;18(3):665–76
Profiles of youthful suicide: disrupted development and current stressors. Bagley CR. **Psychol Rep** 1989 Aug; 65(1):234
Suicide and the stress of residency training: a case report and review of the literature. Kirsling RA, et al. **Psychol Rep** 1989 Jun;64(3 Pt 1):951–9 (50 ref.)
Disagreement between therapists and subsequent suicide of the patient. Lester D. **Psychol Rep** 1989 Feb;64(1):104–6
The moral justification of suicide in suicide notes. Lester D, et al. **Psychol Rep** 1988 Aug;63(1):106
Suicides at the casino. Lester D, et al. **Psychol Rep** 1989 Feb;64(1):337–8
Applicability of Kübler–Ross's stages of dying to the suicidal individual: a review of the literature. Lester D, et al. **Psychol Rep** 1989 Apr;64(2):609–10
Birth order, depression and suicide. Lester D, et al. **Psychol Rep** 1989 Feb;64(1):18
Depression as a correlate of believing in myths about suicide. Lester D, et al. **Psychol Rep** 1988 Oct;63(2):562
An empirical investigation of the latent content of suicide notes. Mc Lister B, et al. **Psychol Rep** 1988 Aug;63(1):238
Methods of self–destructive behaviour in adolescents and young adults. Pillay AL. **Psychol Rep** 1988 Oct;63(2):552–4
Interrelationship of hypochondriacal, paranoid, depressive, and suicidal symptoms in Chinese psychiatric patients. Chiu LP, et al. **Psychopathology** 1988;21(1):38–43
The suicidal, terminally ill patient with depression. Leibenluft E, et al. **Psychosomatics** 1988 Fall;29(4):379–86
A regional analysis of suicide and homicide rates in the USA: search for broad cultural patterns. Lester D. **Soc Psychiatry Psychiatr Epidemiol** 1988 Jul;23(3):202–5
A prospective investigation of suicidal ideation in college students: a test of a model. Bonner RL, et al. **Suicide Life Threat Behav** 1988 Fall;18(3):245–58
The psychological autopsy: methodological considerations for the study of adolescent suicide. Brent DA. **Suicide Life Threat Behav** 1989 Spring;19(1):43–57 (48 ref.)
Studying adolescent suicidal ideation and behavior in primary care settings. Earls F. **Suicide Life Threat Behav** 1989 Spring;19(1):99–107
The study of suicidal behavior in the schools. Garrison CZ. **Suicide Life Threat Behav** 1989 Spring;19(1):120–30 (20 ref.)
A critical–mass theory of national suicide rates. Lester D. **Suicide Life Threat Behav** 1988 Fall;18(3):279–84
Studies of suicidal preadolescent and adolescent inpatients: a critique of research methods. Pfeffer CR. **Suicide Life Threat Behav** 1989 Spring;19(1):58–77 (51 ref.)
Cognitive predictors of depression and suicide ideation. Prezant DW, et al. **Suicide Life Threat Behav** 1988 Fall; 18(3):259–64
Perception of behavioral contagion of adolescent suicide. Range LM, et al. **Suicide Life Threat Behav** 1988 Winter; 18(4):334–41
The case against rational suicide. Richman J. **Suicide Life Threat Behav** 1988 Fall;18(3):285–9
Evaluation of suicide risk among youths in community settings. Rotheram–Borus MJ. **Suicide Life Threat Behav** 1989 Spring;19(1):108–19 (59 ref.)
Depression and suicide in schizophrenic patients. Salama AA. **Suicide Life Threat Behav** 1988 Winter;18(4):379–84
Are women's suicides really different from men's? Leenaars AA. **Women Health** 1988;14(1):17–33
[The suicidal patient. 2. Methods of suicide, diagnoses and social conditions] Damsbo N, et al. **Ugeskr Laeger** 1989 Mar 27;151(13):828–32 (Eng. Abstr.) (Dan)
[Biological markers of suicidal behavior (letter)] Razenberg TP. **Ned Tijdschr Geneeskd** 1988 Oct 1;132(40):1861 (Dut)
[Suicide and attempted suicide by throwing oneself from a high place] Bourgeois M, et al. **Ann Med Psychol (Paris)** 1988 Oct;146(10):958–65 (Fre)
[Suicide by fire] Bourgeois M, et al. **Ann Med Psychol (Paris)** 1989 Jan;147(1):87–98 (Fre)
[Suicide in adolescents] Moron P, et al. **Ann Pediatr (Paris)** 1988 Nov;35(9):677–80 (Fre)
[Suicidal behavior in the elderly] Bron B. **Fortschr Med** 1989 Apr 20;107(12):266–70 (Eng. Abstr.) (Ger)
[Suicidal behavior of schizophrenic patients. Biochemical and morphologic findings] Demling J. **Fortschr Med** 1988 Jun 20;106(18):373–4 (Ger)
[Parent, mother or father loss in childhood and suicidal behavior in adulthood] Lange E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Apr;

41(4):218–23 (Eng. Abstr.) (Ger)
[Firesetting as symbolic suicide] Lange E. **Psychiatr Neurol Med Psychol (Leipz)** 1989 May; 41(5):304–5 (Ger)
[Arson and (para–) suicide] Lange E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Nov; 40(11):647–54 (Eng. Abstr.) (Ger)
[Reactions of nursing personnel to the suicide of psychiatric patients] Heydt G, et al. **Psychiatr Prax** 1989 Mar; 16(2):66–70 (Eng. Abstr.) (Ger)
[Suicidal tendency of epilepsy patients] Möller A, et al. **Psychiatr Prax** 1989 Mar;16(2):62–5 (Eng. Abstr.) (Ger)
[Suicide of the schizophrenic patient and its relation to the therapeutic situation] Müller P. **Psychiatr Prax** 1989 Mar; 16(2):55–61 (Eng. Abstr.) (Ger)
[Suicide in schizophrenic patients] Resch F, et al. **Psychiatr Prax** 1989 Jul;16(4):136–40 (Eng. Abstr.) (Ger)
[The suicidal approach–/rejection syndrome. The assessment of suicidal risk based on communication pathology] Mitterauer B. **Schweiz Arch Neurol Psychiatr** 1989; 140(2):125–46 (Eng. Abstr.) (Ger)
[Suicide and cancer] Stiefel F, et al. **Schweiz Med Wochenschr** 1989 Jun 24;119(25):891–5 (38 ref.) (Eng. Abstr.) (Ger)
[Psychopathology and psychodynamics of self destruction] Pöldinger WJ, et al. **Schweiz Rundsch Med Prax** 1989 Feb 28;78(9):214–8 (Eng. Abstr.) (Ger)
[Suicidal behavior in the aged] Erlemeier N. **Z Gerontol** 1988 Sep–Oct;21(5):267–76 (58 ref.) (Eng. Abstr.) (Ger)
[Suicidal behavior and the broken home. Critical evaluation of a "causal hypothesis"] Schalier S, et al. **Z Kinder Jugendpsychiatr** 1988 Jun;16(2):87–98 (116 ref.) (Eng. Abstr.) (Ger)
[Interpretation of the overdose phenomenon] Gallese A, et al. **Minerva Psichiatr** 1988 Oct–Dec;29(4):231–3 (28 ref.) (Eng. Abstr.) (Ita)
[Biopsychosocial profile of rural and metropolitan suicide in the Turin area] Torre E, et al. **Minerva Psichiatr** 1989 Apr–Jun;30(2):85–8 (Eng. Abstr.) (Ita)
[Suicide in psychiatric hospitals] Kacperczyk JM. **Psychiatr Pol** 1988 Sep–Oct;22(5):368–73 (28 ref.) (Pol)
[Suicidal tendencies in endogenous and organic depression in elderly patients] Shamiev RKh. **Zh Nevropatol Psikhiatr** 1988;88(9):80–4 (Eng. Abstr.) (Rus)
[Suicide as communication—psychological analysis of Antigone's suicide] Beskow J. **Lakartidningen** 1989 Jun 21; 86(25):2393–5 (Swe)

TRENDS

Changing patterns of suicide in Australia. Hassan R, et al. **Aust N Z J Psychiatry** 1989 Jun;23(2):226–34 (59 ref.)

SUICIDE, ATTEMPTED

Stunning device as a suicide weapon. Klun B, et al. **Acta Neurochir (Wien)** 1989;97(3–4):111–3
Suicidal behavior, impulsiveness and serotonin. Roy A, et al. **Acta Psychiatr Scand** 1988 Nov;78(5):529–35 (59 ref.)
The dexamethasone suppression test and suicide attempts. Schmidtke A, et al. **Acta Psychiatr Scand** 1989 Mar; 79(3):276–82
Alcoholism, alcohol and attempted suicide. Hawton K, et al. **Alcohol Alcohol** 1989;24(1):3–9
Suicidality among opioid addicts: 2.5 year follow–up. Kosten TR, et al. **Am J Drug Alcohol Abuse** 1988;14(3):357–69
Suicide attempted by aiming slaughtering gun at pacemaker [letter] Hochmeister MN, et al. **Am J Forensic Med Pathol** 1989 Sep;10(3):268
Self–inflicted gunshot wound to the pregnant abdomen: report of a case and review of the literature. Sandy EA 2d, et al. **Am J Perinatol** 1989 Jan;6(1):30–1 (8 ref.)
Utilization review of treatment for suicide attempters. Kirstein L, et al. **Am J Psychiatry** 1975 Jan;132(1):22–7
Suicide risk among women with alcohol problems. Gomberg ES. **Am J Public Health** 1989 Oct;79(10):1363–5
Suicide in emergency medicine [published erratum appears in Ann Emerg Med 1989 Aug;18(8):895] **Ann Emerg Med** 1989 Jun;18(6):718–20
Deliberate self poisoning in adolescents [letter] Lazaro C. **Arch Dis Child** 1989 Jun;64(6):889
Parasuicide and general elections. Masterton G, et al. **BMJ** 1989 Mar 25;298(6676):803–4
The accident and emergency department management of deliberate self–poisoning. Owens DW, et al. **Br J Psychiatry** 1988 Jun;152:830–3
Severe memory impairment with acute overdose lithium toxicity. A case report. Saxena S, et al. **Br J Psychiatry** 1988 Jun;152:853–4
Ten cases of head–injured, suicide–surviving adolescents: challenges for rehabilitation. Parmelee DX, et al. **Brain Inj** 1989 Jul–Sep;3(3):295–300
Attempted suicide by means of burns. Klasen HJ, et al. **Burns** 1989 Apr;15(2):88–92
Pulmonary fibrosis following paraquat poisoning. Hettiarachchi J, et al. **Ceylon Med J** 1988 Dec;33(4):141–2
Ataxia as the only delayed neurotoxic manifestation of organophosphate insecticide poisoning. Michotte A, et al. **Eur Neurol** 1989;29(1):23–6
An attempt at self–decapitation: case report. Rosenfeld JV, et al. **Injury** 1988 Mar;19(2):115–6
Repeated suicide attempts by the intravenous injection of elemental mercury. Giombetti RJ, et al. **Int J Psychiatry Med** 1988;18(2):153–67 (19 ref.)
Deliberate self–poisoning [letter] **Med J Aust** 1989 Jun 19; 150(12):726–7
Captopril overdose [letter] Graham SR, et al. **Med J Aust** 1989 Jul 17;151(2):111
Thyroxine overdose caused by a suicide attempt in an adult. Sturgis T, et al. **N J Med** 1988 Aug;85(8):665–6
Pediatric management of suicidal behavior. Trautman PD, et al. **Pediatr Ann** 1989 Feb;18(2):134, 136, 138 passim (15 ref.)
Alcohol–related parasuicide among married people. Pillay AL, et al. **S Afr Med J** 1989 Feb 4;75(3):120–1
Perceptions of South Dakota adults concerning selected adolescent health problems. Schubot DB, et al. **S D J Med** 1989 Jun;42(6):17–20
Hydrocarbon ingestion: an unusual cause of multiple pulmonary pseudotumors. Scott PP. **South Med J** 1989 Aug;82(8):1032–3
[Hospitalization of minors at a psychiatric clinic for adults] Molčan J, et al. **Cesk Psychiatr** 1989 Jun;85(3):159–64 (Eng. Abstr.) (Cze)
[Hyperpyrexia following poisoning with a monoamine oxidase inhibitor] Nielsen K. **Ugeskr Laeger** 1989 Mar 20; 151(12):774–5 (Eng. Abstr.) (Dan)
[Emergency treatment and early reconstruction of the face in suicidal shotgun injuries] Labbé D, et al. **Ann Chir Plast Esthet** 1988;33(2):140–6 (Eng. Abstr.) (Fre)
[Prolonged hypocoagulability following the ingestion of anticoagulant raticides] Chataigner D, et al. **Ann Med Interne (Paris)** 1989;139(8):537–41 (Eng. Abstr.) (Fre)
[Organophosphorous poisoning] Olivier J, et al. **Cah Anesthesiol** 1988 Sep;36(5):371–3 (Fre)
[Computed tomography and the clinical picture of suicidal CO poisoning] Grobovschek M, et al. **Rontgenblatter** 1988 Dec;41(12):497–503 (35 ref.) (Eng. Abstr.) (Ger)
[Lidocaine treatment of poisoning with yew needles (Taxus baccata L.)] von Dach B, et al. **Schweiz Med Wochenschr** 1988 Jul 30;118(30):1113–6 (Eng. Abstr.) (Ger)
[Gastrotomy in drug poisoning with suicidal intent—a case report] Wündrich B, et al. **Zentralbl Chir** 1988; 113(13):869–71 (Ger)
[Attempted suicide with verapamil] Pap I, et al. **Orv Hetil** 1989 Apr 2;130(14):735–6 (27 ref.) (Eng. Abstr.) (Hun)
[Acute poisoning with organophosphoric esters. A case in a 24–year–old patient] Ranieri R, et al. **Clin Ter** 1989 Jun 30;129(6):483–5 (Eng. Abstr.) (Ita)
[A new therapeutic approach in the treatment of acute trichloroethylene poisoning. First clinical results] Pelaia P, et al. **Minerva Anestesiol** 1988 Jun;54(6):291–5 (Eng. Abstr.) (Ita)
[Clinical use of the RO 15–1788 antagonist in voluntary poisoning with benzodiazepine] Calimici R, et al. **Recenti Prog Med** 1988 Nov;79(11):467–72 (Eng. Abstr.) (Ita)
[Septicemia caused by Pseudomonas aeruginosa: apropos of a case of autoinoculation in an attempted suicide] da Silveira JC, et al. **AMB Rev Assoc Med Bras** 1988 Jul–Aug; 34(4):145–6 (Eng. Abstr.) (Por)
[Attempted suicide during the age of development] Popov I, et al. **Med Pregl** 1988;41(9–10):417–9 (Eng. Abstr.) (Scr)
[Triggering factors in attempted suicide] Ramírez Ortiz FM, et al. **Arch Neurobiol (Madr)** 1989 Mar–Apr;52(2):80–6 (16 ref.) (Eng. Abstr.) (Spa)
[Anti–free radical therapy in paraquat poisoning (letter)] Díaz Lobato S, et al. **Rev Clin Esp** 1988 Dec;183(9):503–4 (Spa)
[Fanconi syndrome caused by mercury chloride poisoning (letter)] García Rodríguez JF, et al. **Rev Clin Esp** 1989 Feb;184(2):111–2 (Spa)
[Attempted suicide as a reason for admittance to an intensive care unit] Nogué S, et al. **Rev Clin Esp** 1988 Jun;183(2):74–7 (Eng. Abstr.) (Spa)

CEREBROSPINAL FLUID

Biochemical correlates of suicidal behavior in arsonists. Lester D. **Psychol Rep** 1989 Feb;64(1):258

EPIDEMIOLOGY

Attempted suicide in Hong Kong. Chiu LP. **Acta Psychiatr Scand** 1989 May;79(5):425–30
Age–specific characteristics of attempted suicide in adolescence. Kotila L. **Acta Psychiatr Scand** 1989 May; 79(5):436–43
Regional use of violent suicide methods: an analysis of suicide attempts in Houston, Texas [published erratum appears in Am J Emerg Med 1989 May;7(3):349] Peterson LG, et al. **Am J Emerg Med** 1989 Jan;7(1):21–7
Attempted suicide and pregnancy [letter] Czeizel A, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):497
Suicidal tendencies in women with human immunodeficiency virus infection [letter] [published erratum appears in Am J Psychiatry 1989 Jun;146(6):818] Brown GR, et al. **Am J Psychiatry** 1989 Apr;146(4):556–7
Ontario Child Health Study: suicidal behavior in youth age 12–16 years. Joffe RT, et al. **Am J Psychiatry** 1988 Nov; 145(11):1420–3
Parasuicide in young Asian women [letter] Glover G, et al. **Br J Psychiatry** 1989 Feb;154:271–2
Repetition of parasuicide: an epidemiological and clinical study. Kreitman N, et al. **Br J Psychiatry** 1988 Dec; 153:792–800
Suicide and parasuicide in a hill resort in Malaysia. Maniam T. **Br J Psychiatry** 1988 Aug;153:222–5
The identification of clustering in parasuicide. Smeeton N, et al. **Br J Psychiatry** 1988 Aug;153:218–21
Suicidal attempts by ingestion of various substances in 2050 children and adolescents in Greece. Papathomopoulos E, et al. **Can J Psychiatry** 1989 Apr;34(3):205–10
Women who shoot themselves. Frierson RL. **Hosp Community Psychiatry** 1989 Aug;40(8):841–3
Use of antidepressants in attempted suicide [published erratum appears in Hosp Community Psychiatry 1989 May;40(5):470] Harach HR, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):990–2
Do weather, day of the week, and address affect the rate of attempted suicide in Hong Kong? Chiu LP. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):229–35
The utility of emergency room data for record linkage in the study of adolescent suicidal behavior. Deykin EY. **Suicide Life Threat Behav** 1989 Spring;19(1):90–8
The prevalence of suicidal ideation among college students. Rudd MD. **Suicide Life Threat Behav** 1989 Summer; 19(2):173–83
Prevalence of suicide attempts in a Mexican–American population: prevention implications of immigration and cultural issues. Sorenson SB, et al. **Suicide Life Threat Behav** 1988 Winter;18(4):322–33
Suicide attempts in the Epidemiologic Catchment Area Study. Mościcki EK, et al. **Yale J Biol Med** 1988 May–Jun; 61(3):259–68
[The suicidal patient. 1. Occurrence and relevance of contact with a general practitioner prior to the suicidal actions] Damsbo N, et al. **Ugeskr Laeger** 1989 Mar 27;151(13):826–8 (Eng. Abstr.) (Dan)
[Suicide among children and young people under 30] Krarup G, et al. **Ugeskr Laeger** 1988 Nov 28;150(48):2956–8 (Eng. Abstr.) (Dan)
[Epidemiology, over an 8 year period, of attempted suicides in children, seen in emergency service] Gaillard M, et al. **Ann Pediatr (Paris)** 1988 Oct;35(8):572–6 (Eng. Abstr.) (Fre)
[Epidemiologic studies of attempted suicides hospitalized at the university hospital center in Monastir] Gaha L, et al. **Tunis Med** 1988 Feb;66(2):103–6 (Eng. Abstr.) (Fre)
[Analysis of the incidence of suicide in Nógrád County (1970–80)] Zonda T. **Orv Hetil** 1988 Sep 4;129(36):1923–5 (Eng. Abstr.) (Hun)
[The epidemiology of autolytic behavior] Lăzărescu M, et al. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1989 Jan–Mar;34(1):65–74 (Rum)
[Suicide attempts at a general hospital] Martínez García JJ, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Sep–Oct;16(5):319–26 (Eng. Abstr.) (Spa)

LEGISLATION & JURISPRUDENCE

Suicide attempts and resuscitation dilemmas. Karlinsky H, et al. **Gen Hosp Psychiatry** 1988 Nov;10(6):423–30

PREVENTION & CONTROL

Toward a comprehensive strategy for the prevention of suicidal behavior: a summary of recommendations of national task forces. Diekstra RF. **Crisis** 1988 Nov; 9(2):119–29

PSYCHOLOGY

Prolonged Q–T interval and hypokalemia caused by haloperidol. Aunsholt NA. **Acta Psychiatr Scand** 1989 Apr; 79(4):411–2
Personality disorder and suicide intent. Casey PR. **Acta Psychiatr Scand** 1989 Mar;79(3):290–5
Suicide and attempted suicide in general practice, 1979–1986. Diekstra RF, et al. **Acta Psychiatr Scand** 1989 Mar; 79(3):268–75
Suicidal ideation in a young adult population. Goldney RD, et al. **Acta Psychiatr Scand** 1989 May;79(5):481–9
Repeat self–harm: an 18–month follow–up. Hassanyeh F, et al. **Acta Psychiatr Scand** 1989 Mar;79(3):265–7
Suicide and violent death among adolescent suicide attempters. Kotila L, et al. **Acta Psychiatr Scand** 1989 May; 79(5):453–9
Changes in suicidal behavior in child psychiatric inpatients. Pfeffer CR, et al. **Acta Psychiatr Scand** 1989 May; 79(5):431–5
Work stress has negative effects on the attitudes of emergency personnel towards patients who attempt suicide. Suokas J, et al. **Acta Psychiatr Scand** 1989 May; 79(5):474–80
Early separation and suicidal behaviour in the parental homes of 40 consecutive suicide attempters. Wasserman D, et al. **Acta Psychiatr Scand** 1989 Mar;79(3):296–302
Passive euthanasia in response to attempted suicide: one form of aggressiveness by relatives. Wasserman D. **Acta Psychiatr Scand** 1989 May;79(5):460–7
Adolescent suicide attempters presenting to a pediatric

facility. Jay MS, et al. **Adolescence** 1989 Summer; 24(94):467–72
The social supports of suicide attempters: the different roles of family and friends. Veiel HO, et al. **Am J Community Psychol** 1988 Dec;16(6):839–61
PTSD and suicide attempts by adolescents [letter] Crumley FE. **Am J Psychiatry** 1989 Apr;146(4):558
Suicide gestures and self-mutilation [letter] Favazza AR. **Am J Psychiatry** 1989 Mar;146(3):408–9
Fluoxetine overdose [letter] Finnegan KT, et al. **Am J Psychiatry** 1988 Dec;145(12):1604
Intent and lethality of suicide attempts among female borderline inpatients. Shearer SL, et al. **Am J Psychiatry** 1988 Nov;145(11):1424–7
Deliberate self poisoning in adolescents. Clarke CF. **Arch Dis Child** 1988 Dec;63(12):1479–83
Age of alcoholism onset. I. Relationship to psychopathology. Buydens-Branchey L, et al. **Arch Gen Psychiatry** 1989 Mar; 46(3):225–30
Cerebrospinal fluid monoamine metabolites and suicidal behavior in depressed patients. A 5-year follow-up study. Roy A, et al. **Arch Gen Psychiatry** 1989 Jul;46(7):609–12
Psychobiological concomitants of history of suicide attempts among violent offenders and impulsive fire setters. Virkkunen M, et al. **Arch Gen Psychiatry** 1989 Jul; 46(7):604–6
Depression and attempted suicide: a comparative study. Davis A. **Aust N Z J Psychiatry** 1989 Mar;23(1):59–66
Increased serotonin after a suicide attempt: coincidence or catharsis? [letter] Bräunig P, et al. **Biol Psychiatry** 1988 Oct;24(6):725–7
Suicidal behavior in depression: relationship to noradrenergic function. Roy A, et al. **Biol Psychiatry** 1989 Feb 1; 25(3):341–50
Problem drinking and parasuicide. Robinson AD. **Br J Addict** 1989 Jul;84(7):711–4 (60 ref.)
Psychological predictors of future suicidal behaviour in hospitalized suicide attempters. Petrie K, et al. **Br J Clin Psychol** 1988 Sep;27 (Pt 3):247–57
Carbon monoxide inhalation with the engine switched off [letter] **Br J Hosp Med** 1989 Mar;41(3):297–8
Intropunitiveness and parasuicide: prediction of interview response. Goldberg J, et al. **Br J Psychiatry** 1988 Dec; 153:801–4
Female unemployment and attempted suicide. Hawton K, et al. **Br J Psychiatry** 1988 May;152:632–7
Parasuicide and appendicectomy. Vassilas CA. **Br J Psychiatry** 1988 May;152:706–9
Personality and suicidal behavior in depressed patients. Joffe RT, et al. **Compr Psychiatry** 1989 Mar-Apr;30(2):157–60
A suicide attempt following removal of conversion paralysis with amobarbital [letter] Menza MA. **Gen Hosp Psychiatry** 1989 Mar;11(2):137–8
Are your patients getting away with 'chronic suicide'? [editorial] Butler RN. **Geriatrics** 1989 Sep;44(9):15
Follow-up study of patients with attempted suicide. Brauns ML, et al. **Int J Soc Psychiatry** 1988 Winter;34(4):285–91
The profile of parasucide repeaters in Kuwait. Suleiman MA, et al. **Int J Soc Psychiatry** 1989 Summer;35(2):146–55
Sociodemographic correlates of suicidal ideation and reported attempts--a brief report on a community survey. Levav I, et al. **Isr J Psychiatry Relat Sci** 1988;25(1):38–45
Attempted suicide in youth: its relationship to school achievement, educational goals, and socioeconomic status. Lewis SA, et al. **J Abnorm Child Psychol** 1988 Aug; 16(4):459–71
Common problems and coping strategies. II: Findings with adolescent suicide attempters. Spirito A, et al. **J Abnorm Child Psychol** 1989 Apr;17(2):213–21
The Hopelessness Scale for Children: psychometric properties with normal and emotionally disturbed adolescents. Spirito A, et al. **J Abnorm Child Psychol** 1988 Aug;16(4):445–58
What is the mechanism by which suicide attempts predispose to later suicide attempts? A mathematical model. Clark DC, et al. **J Abnorm Psychol** 1989 Feb;98(1):42–9
Overt behavior of adolescent suicide attempters hospitalized on a general pediatrics floor. Spirito A, et al. **J Adolesc Health Care** 1988 Nov;9(6):491–4
Suicidal behavior, depression, and conduct disorder in hospitalized adolescents. Apter A, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov;27(6):696–9
Fluoxetine overdose in an adolescent. Riddle MA, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):587–8
Hopelessness, depression, and suicidal intent among adolescent suicide attempters. Rotheram-Borus MJ, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov;27(6):700–4
Anger, hostility, and depression in assaultive vs. suicide-attempting males. Maiuro RD, et al. **J Clin Psychol** 1989 Jul;45(4):531–41
Suicide attempters in New Haven: a ten-year perspective. Baker FM. **J Natl Med Assoc** 1988 Aug;80(8):889–95
Accident or suicide? Do life change events lead to adolescent suicide? Parker SD. **J Psychosoc Nurs Ment Health Serv** 1988 Jun;26(6):15–9
Alcohol abuse and eventual suicide: a 5- to 10-year prospective study of alcohol-abusing suicide attempters. Beck AT, et al. **J Stud Alcohol** 1989 May;50(3):202–9
Suicide attempts and alcoholism. Hesselbrock M, et al. **J Stud Alcohol** 1988 Sep;49(5):436–42
A.S.A.P. Wankum J. **Mo Med** 1989 Feb;86(2):75, 74
Recent general practice contacts of hospitalised suicide attempters. Petrie K. **N Z Med J** 1989 Mar 22; 102(864):130–1
Suicide and parasuicide in multiple personality disorder. Ross CA, et al. **Psychiatry** 1989 Aug;52(3):365–71
Is there a relation between the seriousness of suicidal intent and the lethality of the suicide attempt? Plutchik R, et al. **Psychiatry Res** 1989 Jan;27(1):71–9
Increased suicidality in depression: group or subgroup characteristic? van Praag HM, et al. **Psychiatry Res** 1988 Dec;26(3):273–8
Suicide attempts correlate with delusional content in major depression. Miller FT, et al. **Psychopathology** 1988; 21(1):34–7
Suicidal behaviour, social networks and psychiatric diagnosis. Hart EE, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):222–8
Race, religion and female suicide attempters in Singapore. Kok LP. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct; 23(4):236–9
Studying adolescent suicidal ideation and behavior in primary care settings. Earls F. **Suicide Life Threat Behav** 1989 Spring;19(1):99–107
Classification of suicidal behavior: a review and step toward integration. Ellis TE. **Suicide Life Threat Behav** 1988 Winter;18(4):358–71 (30 ref.)
The study of suicidal behavior in the schools. Garrison CZ. **Suicide Life Threat Behav** 1989 Spring;19(1):120–30 (20 ref.)
Suicide and suicidology in the Soviet Union. Miller MA, et al. **Suicide Life Threat Behav** 1988 Winter;18(4):303–21 (26 ref.)
Suicidal behavior in hospitalized schizophrenics. Prasad AJ, et al. **Suicide Life Threat Behav** 1988 Fall;18(3):265–9
Evaluation of suicide risk among youths in community settings. Rotheram-Borus MJ. **Suicide Life Threat Behav** 1989 Spring;19(1):108–19 (59 ref.)
Suicide ideation and attempts in Hispanics and non-Hispanic whites: demographic and psychiatric disorder issues. Sorenson SB, et al. **Suicide Life Threat Behav** 1988 Fall; 18(3):205–18
Suicide attempts in runaway youths. Stiffman AR. **Suicide Life Threat Behav** 1989 Summer;19(2):147–59
Motivation in deliberate self-harm. Loughrey G, et al. **Ulster Med J** 1989 Apr;58(1):46–50
The rescuer. Schiedermayer DL. **Wis Med J** 1988 Aug; 87(8):6
[The suicidal patient. 2. Methods of suicide, diagnoses and social conditions] Damsbo N, et al. **Ugeskr Laeger** 1989 Mar 27;151(13):828–32 (Eng. Abstr.) **(Dan)**
[Analysis of psychosocial findings of patients admitted at an emergency service following attempted suicide] Van Heeringen C, et al. **Arch Belg** 1988;46(3-4):153–67 (Eng. Abstr.) **(Dut)**
[Suicide and attempted suicide by throwing oneself from a high place] Bourgeois M, et al. **Ann Med Psychol (Paris)** 1988 Oct;146(10):958–65 **(Fre)**
[Suicide attempts in diabetic patients with insulin and their neuropsychiatric sequelae] Hambrecht M, et al. **Nervenarzt** 1989 Jun;60(6):367–9 **(Ger)**
[Depression in para-suicidal acts from the catamnestic viewpoint] Felber W. **Psychiatr Neurol Med Psychol Beih** 1988;41:29–32 **(Ger)**
[Parent, mother or father loss in childhood and suicidal behavior in adulthood] Lange E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Apr; 41(4):218–23 (Eng. Abstr.) **(Ger)**
[Arson and (para-) suicide] Lange E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Nov; 40(11):647–54 (Eng. Abstr.) **(Ger)**
[Suicidal tendency of epilepsy patients] Möller A, et al. **Psychiatr Prax** 1989 Mar;16(2):62–5 (Eng. Abstr.) **(Ger)**
[The suicidal approach-/rejection syndrome. The assessment of suicidal risk based on communication pathology] Mitterauer B. **Schweiz Arch Neurol Psychiatr** 1989; 140(2):125–46 (Eng. Abstr.) **(Ger)**
[Psychopathology and psychodynamics of self destruction] Pöldinger WJ, et al. **Schweiz Rundsch Med Prax** 1989 Feb 28;78(9):214–8 (Eng. Abstr.) **(Ger)**
[Basic value of psychological treatment in the management of poisoning "accidents" in suicidal patients (letter)] Tekeres M. **Orv Hetil** 1988 Jul 3;129(27):1451 **(Hun)**

SULBACTAM

ADMINISTRATION & DOSAGE

Comparative efficacies of amoxicillin-clavulanic acid and ampicillin-sulbactam against experimental Bacteroides fragilis-Escherichia coli mixed infections. Gisby J, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1830–3
Clinical evaluation of sulbactam plus ampicillin in the treatment of general pediatric infections. Bassetti D, et al. **APMIS Suppl** 1989;5:41–4
Clinical evaluation of sulbactam + ampicillin in the treatment of pediatric urinary tract infections. Solbiati M, et al. **Chemioterapia** 1988 Dec;7(6):393–5
[Clinical results with sulbactam/ampicillin in a multicenter study of 425 patients] Lode H, et al. **Med Klin** 1989 May 15;84(5):236–41 (Eng. Abstr.) **(Ger)**
[Clinical laboratory approach for estimating effective administrative dose of sulbactam/cefoperazone] Uete T, et al. **Jpn J Antibiot** 1988 Nov;41(11):1578–90 (Eng. Abstr.) **(Jpn)**

ANALYSIS

New sensitive bioassay for sulbactam in bovine tissues. Keeler GH, et al. **Antimicrob Agents Chemother** 1988 Sep; 32(9):1347–9

CEREBROSPINAL FLUID

[Cerebrospinal fluid levels of sulbactam/ampicillin in rabbits with staphylococcal meningitis] Haruta T, et al. **Jpn J Antibiot** 1989 Mar;42(3):594–7 (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

Placental transfer of cefoperazone and sulbactam in the isolated in vitro perfused human placenta. Fortunato SJ, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):1002–6
The pharmacokinetics of sultamicillin. Lode H, et al. **APMIS Suppl** 1989;5:17–22 (22 ref.)
Pharmacokinetics of sulbactam and ampicillin intravenously applied in combination to healthy volunteers and patients. Determination of the ratio of the two drugs in serum and in various tissues. Wildfeuer A, et al. **Arzneimittelforschung** 1988 Nov;38(11):1640–3
Comparative pharmacokinetics of sulbactam/ampicillin and clavulanic acid/amoxycillin in human volunteers. Hampel B, et al. **Drugs** 1988;35 Suppl 7:29–33
[Diffusion of sulbactam and cefoperazone into the prostatic tissue] Okamura K, et al. **Hinyokika Kiyo** 1989 Apr; 35(4):727–34 (Eng. Abstr.) **(Jpn)**
[Transfer of injected sulbactam/cefoperazone into burn blister fluid] Aoyama H, et al. **Jpn J Antibiot** 1988 Sep; 41(9):1279–84 (Eng. Abstr.) **(Jpn)**
[Pharmacokinetic and clinical studies on sulbactam/ampicillin in children] Hattori K, et al. **Jpn J Antibiot** 1989 Mar;42(3):701–17 (Eng. Abstr.) **(Jpn)**
[Pharmacokinetic, bacteriological and clinical evaluation of sulbactam/ampicillin in pediatrics] Hayashi M, et al. **Jpn J Antibiot** 1989 Mar;42(3):743–53 (Eng. Abstr.) **(Jpn)**
[Pharmacokinetic and clinical studies on sulbactam/ampicillin in the pediatric field] Ito M, et al. **Jpn J Antibiot** 1989 Mar;42(3):651–61 (Eng. Abstr.) **(Jpn)**
[Pharmacokinetics and clinical effects of sultamicillin fine granules in pediatrics] Morita H, et al. **Jpn J Antibiot** 1988 Dec;41(12):1973–9 (Eng. Abstr.) **(Jpn)**
[Pharmacokinetic, bacteriological and clinical studies on sulbactam/ampicillin in pediatric field] Nakao Y, et al. **Jpn J Antibiot** 1989 Mar;42(3):639–50 (Eng. Abstr.) **(Jpn)**
[A study on pharmacokinetics, antimicrobial activity and clinical efficacy of sultamicillin in children] Okazaki H, et al. **Jpn J Antibiot** 1988 Dec;41(12):1940–6 (Eng. Abstr.) **(Jpn)**
[Clinical and pharmacokinetic studies on intravenous administration of sulbactam/ampicillin in pediatrics] Sato H, et al. **Jpn J Antibiot** 1989 Mar;42(3):623–38 (Eng. Abstr.) **(Jpn)**
[Clinical and pharmacokinetic studies on sultamicillin fine granules in pediatrics] Sato H, et al. **Jpn J Antibiot** 1988 Dec;41(12):1855–62 (Eng. Abstr.) **(Jpn)**
[Pharmacokinetic and clinical studies on sulbactam/ampicillin in the pediatric field] Yanagishima M, et al. **Jpn J Antibiot** 1989 Mar;42(3):754–65 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Pseudomonas cepacia susceptibility to sulbactam. Jacoby GA, et al. **Antimicrob Agents Chemother** 1989 Apr; 33(4):583–4
In vitro effects of beta-lactams combined with beta-lactamase inhibitors against methicillin-resistant Staphylococcus aureus. Kobayashi S, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):331–5
Inactivation of beta-lactamases by sulbactam and enhanced clinical activity due to target-site binding of the combination of sulbactam and ampicillin. Yokota T. **APMIS Suppl** 1989;5:9–16
In vitro activity of sulbactam/ampicillin and ampicillin against methicillin-sensitive and methicillin-resistant Staphylococcus aureus and Staphylococcus epidermidis. Fabbri A, et al. **Chemioterapia** 1988 Oct;7(5):306–8
Beta-lactamase inhibition by acetylmethylene penicillanic acid compared to that of clavulanate and sulbactam. Chin NX, et al. **Chemotherapy** 1988;34(4):318–25
Comparative activity of cefoxitin, ampicillin/sulbactam, and imipenem against clinical isolates of Escherichia coli and Klebsiella pneumoniae. Shungu DL, et al. **Clin Ther** 1989 May-Jun;11(3):315–8
Bacteriological studies with ampicillin/sulbactam on selected strains of gram-negative bacteria. Bello H, et al. **Diagn Microbiol Infect Dis** 1988 Oct;11(2):109–15
In vitro activity of ampicillin/sulbactam against enterococci determined by the time-kill method. D'Amato RF, et al. **Diagn Microbiol Infect Dis** 1989 Jan-Feb;12(1):9–11
Beta-lactamases in clinical isolates. Spectrum implications of sulbactam/ampicillin. Acar JF, et al. **Drugs** 1988;35 Suppl 7:12–6 (7 ref.)
Sulbactam and clavulanic acid: studies of enzyme kinetics and synergy with ampicillin and mezlocillin. Cullmann W, et al. **Drugs** 1988;35 Suppl 7:71–6

Sultamicillin. A review of its antibacterial activity, pharmacokinetic properties and therapeutic use. Friedel HA, et al. **Drugs** 1989 Apr;37(4):491–522 (140 ref.)

Ampicillin plus sulbactam in vitro activity against anaerobes. Heilmann F, et al. **Drugs** 1988;35 Suppl 7:84–8

In vitro activity of cefoperazone-sulbactam combinations against cefoperazone-resistant clinical bacterial isolates. Eliopoulos GM, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul;8(7):624–6

In vitro activity of sulbactam plus ampicillin against hospital isolates of coagulase-negative staphylococci and Acinetobacter species. Frank U, et al. **Infection** 1989 Jul–Aug;17(4):272–4

The effects of clavulanic acid and sulbactam on beta-lactamase biosynthesis. Farmer TH, et al. **J Antimicrob Chemother** 1988 Aug;22(2):105–11

Synergy of clavulanic acid, sulbactam and tazobactam (YTR 830) with amoxycillin against fifty beta-lactamase-producing strains of Haemophilus influenzae. Simonet M, et al. **J Antimicrob Chemother** 1989 May;23(5):798–800

[Comparison of the in vitro activity of amoxycillin + clavulanic acid and ampicillin + sulbactam combinations against 50 Haemophilus influenzae strains producing beta lactamase] Moittie D, et al. **Pathol Biol (Paris)** 1989 May; 37(5):390–3 (Eng. Abstr.) **(Fre)**

[The effect of a combination of ampicillin and sulbactam against clinical anaerobic isolates] Werner H, et al. **Arzneimittelforschung** 1988 Jul;38(7):866–8 (Eng. Abstr.) **(Ger)**

[Antimicrobial activity of sultamicillin against clinical isolates from upper respiratory tract infections II] Deguchi K, et al. **Jpn J Antibiot** 1988 Dec;41(12):2065–74 (Eng. Abstr.) **(Jpn)**

[Antimicrobial activities of sultamicillin against clinical isolates from upper respiratory tract infections] Deguchi K, et al. **Jpn J Antibiot** 1988 Sep;41(9):1194–204 (Eng. Abstr.) **(Jpn)**

[Influence of sultamicillin on intestinal bacterial flora] Iwata S, et al. **Jpn J Antibiot** 1988 Dec;41(12):2012–34 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and bacteriological studies on sulbactam/ampicillin in the field of pediatrics] Sato Y, et al. **Jpn J Antibiot** 1989 Mar;42(3):579–93 (Eng. Abstr.) **(Jpn)**

[Effects of sulbactam on the activity of cefoperazone against various clinical isolates] Uete T, et al. **Jpn J Antibiot** 1989 Apr;42(4):896–909 (Eng. Abstr.) **(Jpn)**

[The effect of sulbactam-ampicillin on renal function] Kaya IS, et al. **Mikrobiyol Bul** 1987 Jul;21(3):178–80 (Eng. Abstr.) **(Tur)**

THERAPEUTIC USE

"Sulbactam: worldwide clinical experience": a symposium. XV International Congress of Chemotherapy. Istanbul, Turkey, July 21, 1987. Proceedings. **APMIS Suppl** 1989; 5:1–69

Role of sulbactam/ampicillin and sultamicillin in the treatment of bacterial infections of the upper respiratory tract of children. Bluestone CD. **APMIS Suppl** 1989; 5:35–40 (11 ref.)

Sultamicillin versus amoxicillin in the treatment of tonsillitis and pharyngitis: a European multicenter study. Federspil P, et al. **APMIS Suppl** 1989;5:45–50

Sultamicillin experiences in the field of internal medicine. Hara K, et al. **APMIS Suppl** 1989;5:51–6

Sultamicillin in the treatment of urinary tract infections. Kawada Y. **APMIS Suppl** 1989;5:63–7

Sultamicillin versus trimethoprim/sulfamethoxazole in the treatment of urinary tract infections. Naber KG, et al. **APMIS Suppl** 1989;5:57–62

Worldwide clinical experience with sultamicillin. Pitts NE, et al. **APMIS Suppl** 1989;5:23–34 (34 ref.)

Studies on the synergism of sulbactam and beta-lactam antibiotics under in vitro conditions and in healthy volunteers after intravenous administration. Antibacterial activity in vitro, compatibility and pharmacokinetics of the drugs in combination. Wildfeuer A, et al. **Arzneimittelforschung** 1989 Jan;39(1):94–100

Relationship between bile colonization, high-risk factors and postoperative sepsis in patients undergoing biliary tract operations while receiving a prophylactic antibiotic. West of Scotland Surgical Infection Study Group. Wells GR, et al. **Br J Surg** 1989 Apr;76(4):374–7

Sulbactam/ampicillin in clinical practice. Proceedings of a symposium. Munich, 17 January 1987. **Drugs** 1988;35 Suppl 7:1–94

Sulbactam/ampicillin in the treatment of lower respiratory infections. Castellano MA. **Drugs** 1988;35 Suppl 7:53–6 (7 ref.)

Sulbactam/ampicillin in paediatric infections. Dajani AS. **Drugs** 1988;35 Suppl 7:35–8 (7 ref.)

Sulbactam/ampicillin in the treatment of epidemic meningococcal meningitis in northern Nigeria. Dutse AI, et al. **Drugs** 1988;35 Suppl 7:77–9

Clinical and pharmacokinetic studies of sulbactam/penicillin combinations in the treatment of ear, nose and throat infections. Federspil P, et al. **Drugs** 1988;35 Suppl 7:80–3

Clinical experience with intramuscular sulbactam/ampicillin in the outpatient treatment of various infections. A multicentre trial. Güneren MF. **Drugs** 1988;35 Suppl 7:57–68

Sulbactam/ampicillin versus cefoxitin for uncomplicated and complicated acute pelvic inflammatory disease. Hemsell DL, et al. **Drugs** 1988;35 Suppl 7:39–42

Sulbactam/ampicillin versus cefotaxime as initial therapy in serious soft tissue, joint and bone infections. Löffler L, et al. **Drugs** 1988;35 Suppl 7:46–52

An open evaluation study of sulbactam/ampicillin with or without probenecid in the treatment of gonococcal infections in Lagos. Odugbemi T. **Drugs** 1988;35 Suppl 7:89–91

Use of sulbactam/ampicillin in the treatment of uncomplicated gonococcal infection. Rotowa NA, et al. **Drugs** 1988;35 Suppl 7:92–3

Randomised study of prophylactic parenteral sulbactam/ampicillin and cephazolin in biliary surgery: significant benefit in jaundiced patients. Morris DL, et al. **J Hosp Infect** 1989 Apr;13(3):261–6

New drugs of 1987. Hussar DA. **Pa Med** 1988 Sep;91(9):52–6

[Use of sulbactam/ampicillin in the treatment of infections at various sites] Migliorato D, et al. **G Ital Chemioter** 1987 Jan–Dec;34(1–3):47–55 (Eng. Abstr.) **(Ita)**

[Microorganisms isolated from urinary tract infection and their beta-lactamase production and evaluation of clinical efficacy of sulperazone] Kawamura J, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1503–14 (Eng. Abstr.) **(Jpn)**

[Effects of sulbactam/cefoperazone in patients with respiratory infections in aged and/or with underlying respiratory diseases] Akutsu I, et al. **Jpn J Antibiot** 1989 Apr;42(4):910–20 (Eng. Abstr.) **(Jpn)**

[Clinical studies on sultamicillin fine granules in the urological field] Arakawa S, et al. **Jpn J Antibiot** 1988 Dec; 41(12):2044–58 (Eng. Abstr.) **(Jpn)**

[Bacteriological, pharmacokinetic and clinical studies of sulbactam/ampicillin in the pediatric field] Haruta T, et al. **Jpn J Antibiot** 1989 Mar;42(3):719–24 (Eng. Abstr.) **(Jpn)**

[Clinical experience with sultamicillin fine granules in pediatric field] Haruta T, et al. **Jpn J Antibiot** 1988 Dec; 41(12):1947–53 (Eng. Abstr.) **(Jpn)**

[Experiences with sultamicillin granules in pediatric patients] Iguchi K, et al. **Jpn J Antibiot** 1988 Dec;41(12):1906–13 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic, bacteriological and clinical studies of sultamicillin fine granule in pediatric field] Ishikawa H, et al. **Jpn J Antibiot** 1988 Dec;41(12):1895–905 (Eng. Abstr.) **(Jpn)**

[Clinical studies on sultamicillin fine granule in pediatric field] Ishikawa J, et al. **Jpn J Antibiot** 1988 Dec;41(12):1965–71 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of sulbactam/ampicillin in children] Ito S, et al. **Jpn J Antibiot** 1989 Mar;42(3):675–85 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of sultamicillin fine granules in pediatric patients] Ito S, et al. **Jpn J Antibiot** 1988 Dec; 41(12):1914–22 (Eng. Abstr.) **(Jpn)**

[Clinical studies on sulbactam/ampicillin in the field of pediatrics] Iwata S, et al. **Jpn J Antibiot** 1989 Mar; 42(3):598–611 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of sultamicillin fine granules in pediatric infections] Meguro H, et al. **Jpn J Antibiot** 1988 Dec; 41(12):1847–54 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of sulbactam/ampicillin in the pediatric infections] Meguro H, et al. **Jpn J Antibiot** 1989 Mar; 42(3):612–22 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies of sultamicillin granule in the pediatric field] Motohiro T, et al. **Jpn J Antibiot** 1988 Dec;41(12):1980–2000 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic, bacteriological and clinical studies of sulbactam/ampicillin in pediatric patients] Motohiro T, et al. **Jpn J Antibiot** 1989 Mar;42(3):773–90 (Eng. Abstr.) **(Jpn)**

[Studies on sultamicillin in the field of pediatrics] Nakamura H, et al. **Jpn J Antibiot** 1988 Dec;41(12):1874–94 (Eng. Abstr.) **(Jpn)**

[Studies on sulbactam/ampicillin in the field of pediatrics] Nakamura H, et al. **Jpn J Antibiot** 1989 Mar;42(3):662–74 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies of sultamicillin in pediatric field] Nishimura T, et al. **Jpn J Antibiot** 1988 Dec; 41(12):1923–39 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies of sulbactam/ampicillin in pediatric field] Nishimura T, et al. **Jpn J Antibiot** 1989 Mar;42(3):687–700 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy of sulbactam/ampicillin in the field of pediatrics] Ogura H, et al. **Jpn J Antibiot** 1989 Mar; 42(3):766–72 (Eng. Abstr.) **(Jpn)**

[Clinical study of sultamicillin fine granules] Okada K, et al. **Jpn J Antibiot** 1988 Dec;41(12):1954–8 (Eng. Abstr.) **(Jpn)**

[A clinical evaluation of sultamicillin fine granules in the treatment of meibomianitis] Ooishi M, et al. **Jpn J Antibiot** 1988 Dec;41(12):2059–64 (Eng. Abstr.) **(Jpn)**

[Clinical studies in sultamicillin fine granule in the field of pediatrics] Sato Y, et al. **Jpn J Antibiot** 1988 Dec; 41(12):1863–73 (Eng. Abstr.) **(Jpn)**

[Clinical experience with sulbactam/ampicillin in the pediatric field] Sekiguchi T, et al. **Jpn J Antibiot** 1989 Mar; 42(3):733–42 (Eng. Abstr.) **(Jpn)**

[Clinical studies on sultamicillin in pediatrics] Sekiguchi T, et al. **Jpn J Antibiot** 1988 Dec;41(12):1959–64 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of sultamicillin fine granules in lower respiratory tract infection] Takamoto M, et al. **Jpn J Antibiot** 1988 Dec;41(12):1841–6 (Eng. Abstr.) **(Jpn)**

[Clinical study on sulbactam/ampicillin in the pediatric field] Takeda E, et al. **Jpn J Antibiot** 1989 Mar;42(3):725–31 (Eng. Abstr.) **(Jpn)**

[Efficacy of sultamicillin fine granules in pyoderma, particularly in impetigo contagiosa] Tokuda Y, et al. **Jpn J Antibiot** 1988 Dec;41(12):2035–43 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies of sultamicillin fine granules in children] Yanagishima M, et al. **Jpn J Antibiot** 1988 Dec;41(12):2001–11 (Eng. Abstr.) **(Jpn)**

[A clinical trial with ampicillin and sulbactam in various infections] Kanra G, et al. **Mikrobiyol Bul** 1988; 22(4):284–95 (Eng. Abstr.) **(Tur)**

SULBENICILLIN see under **PENICILLIN G**

SULFACETAMIDE

THERAPEUTIC USE

Comparison of three topical antimicrobials for acute bacterial conjunctivitis. Lohr JA, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):626–9

SULFACHLORPYRIDAZINE see under **SULFANILAMIDES**

SULFADIAZINE

ADMINISTRATION & DOSAGE

Assessment of topical therapy of the burn wound with silver sulphadiazine after its use for 15 years in a burn unit. Koo DS, et al. **Burns** 1989 Jun;15(3):193–6

Pyrimethamine-sulfadiazine for treating Pneumocystis carinii pneumonia and toxoplasmosis in AIDS. Gilman TM, et al. **Clin Pharm** 1989 Feb;8(2):84, 87 (14 ref.)

Combined topical use of silver sulfadiazine and antibiotics as a possible solution to bacterial resistance in burn wounds. Modak SM, et al. **J Burn Care Rehabil** 1988 Jul–Aug; 9(4):359–63

Simple peroperative antimicrobial chemoprophylaxis in elective neurosurgical operations. Ingham HR, et al. **J Hosp Infect** 1988 Oct;12(3):225–33

Results of a multicenter outpatient burn study on the safety and efficacy of Dimac-SSD, a new delivery system for silver sulfadiazine. Deitch EA, et al. **J Trauma** 1989 Apr; 29(4):430–4

Minor burns: treatment using a new drug delivery system with silver sulfadiazine. Cruse CW, et al. **South Med J** 1989 Sep;82(9):1135–7

[Experiences on application of a silver sulphadiazine-methylene blue cream for tangential excision and escharotomy of burn wounds] Li TZ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):55–6, 49 (Eng. Abstr.) **(Chi)**

[Experiences with the use of cerium nitrate silver sulfadiazine in the local treatment of thermal injuries in childhood] Lorenz C, et al. **Zentralbl Chir** 1988;113(19):1273–9 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Leukopenia in non-septic burn patients receiving topical 1% silver sulfadiazine cream therapy: a survey. Fuller FW, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):606–9

Sulfadiazine revisited [letter] Ventura MG, et al. **J Infect Dis** 1989 Sep;160(3):556–7

Acute encephalopathy associated with sulfadiazine in a patient with AIDS-related complex [letter] Young CL. **J Infect Dis** 1989 Jul;160(1):163–4

BLOOD

High-performance liquid chromatographic method with electrochemical detection for the concomitant assay of sulphadiazine, sulphamerazine and sulphapyridine in plasma. Mallett DN, et al. **J Chromatogr** 1988 Jun 24; 428(1):190–5

PHARMACOKINETICS

Serum and synovial fluid steady-state concentrations of trimethoprim and sulfadiazine in horses with experimentally induced infectious arthritis. Bertone AL, et al. **Am J Vet Res** 1988 Oct;49(10):1681–7

Pharmacokinetics of sulfadiazine/trimethoprim in neonatal male calves: effect of age and penetration into cerebrospinal fluid. Shoaf SE, et al. **Am J Vet Res** 1989 Mar;50(3):396–403

Effect of mixing on the biopharmaceutical properties of sulfadiazine tablets. Morasso MI, et al. **Farmaco [Prat]** 1988 May;43(5):177–88

Disposition of sulphadiazine in young rhesus monkeys with protein calorie malnutrition. Nehru B, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Oct;26(10):509–12

Effect of food on the absorption and pharmacokinetics of sulphadiazine and trimethoprim after administration of Aubril to healthy human volunteers. Ghosh SS, et al.

J Assoc Physicians India 1988 Oct;36(10):607–10
Disposition kinetics of sulphadiazine in normal and diabetic rabbits. Iqbal T, et al. JPMA 1989 Feb;39(2):50–3

PHARMACOLOGY

[Induction of tolerance to sulfadiazine in a patient with acquired immunodeficiency syndrome (letter)] Gilquin J, et al. Presse Med 1988 Dec 3;17(43):2306 (Fre)

THERAPEUTIC USE

Chondritis of the burned ear: a preventable complication if ... [letter] Engrav LH, et al. Ann Plast Surg 1989 Jul; 23(1):1–2
Use of topically applied silver sulphadiazine plus cerium nitrate in major burns. Wassermann D, et al. Burns 1989 Aug;15(4):257–60
Patient compliance and efficacy of low-dose, long-term prophylaxis in patients with recurrent urinary tract infection. Westenfelder M, et al. Chemioterapia 1987 Jun; 6(2 Suppl):530–2
Silver sulphadiazine—a new drug for keratomycosis. Mohan M, et al. Indian J Ophthalmol 1987;35(5–6):83–7
Comparison of silver sulfadiazine formulations [letter] Mayor GH, et al. J Burn Care Rehabil 1989 May–Jun;10(3):285–6
Trimethoprim–sulphadiazine prophylaxis in children with vesico–ureteric reflux. Hanson E, et al. Scand J Infect Dis 1989;21(2):201–4
[Cotrimazine in the treatment of urinary tract infections in infants] Dore A, et al. Clin Ter 1988 Feb 15;124(3):187–92 (Eng. Abstr.) (Ita)

SULFADIMETHOXINE

The effect of particle size on the compaction properties and compaction mechanism of sulfadimethoxine and sulfaphenazole. Kaneniwa N, et al. Chem Pharm Bull (Tokyo) 1988 Jul;36(7):2531–7

ADVERSE EFFECTS

Goitrogenic effects in offspring of swine fed sulfadimethoxine and ormetoprim in late gestation. Blackwell TE, et al. J Am Vet Med Assoc 1989 Feb 15;194(4):519–23

ANALOGS & DERIVATIVES

Characterization of binding sites for sulfadimethoxine and its major metabolite, N4–acetylsulfadimethoxine, on human and rabbit serum albumin. Otagiri M, et al. Chem Pharm Bull (Tokyo) 1989 Feb;37(2):498–501

BLOOD

Characterization of binding sites for sulfadimethoxine and its major metabolite, N4–acetylsulfadimethoxine, on human and rabbit serum albumin. Otagiri M, et al. Chem Pharm Bull (Tokyo) 1989 Feb;37(2):498–501

PHARMACOKINETICS

Tissue sulfonamide concentration and correlation in turkeys. Epstein RL, et al. Am J Vet Res 1989 Jun;50(6):926–8
Pharmacokinetics and body fluid and endometrial concentrations of ormetoprim–sulfadimethoxine in mares. Brown MP, et al. Can J Vet Res 1989 Jan;53(1):12–6
O–demethylation and N4–acetylation of sulfadimethoxine by the snail Cepaea hortensis. Vree TB, et al. Nippon Juigaku Zasshi 1989 Apr;51(2):364–8
Disposition of sulfadimethoxine in the lobster (Homarus americanus). James MO, et al. Vet Hum Toxicol 1988;30 Suppl 1:36–40
A review of the pharmacokinetics and metabolism of sulfadimethoxine in the rainbow trout (Salmo gairdneri). Kleinow KM, et al. Vet Hum Toxicol 1988;30 Suppl 1:26–30
Sulfadimethoxine pharmacokinetics and metabolism in the channel catfish (Ictalurus punctatus). Squibb KS, et al. Vet Hum Toxicol 1988;30 Suppl 1:31–5
O–demethylation and N4–acetylation of sulphadimethoxine by the turtle Pseudemys scripta elegans. Vree TB, et al. Vet Q 1989 Jul;11(3):138–43
[Effect of probenecid on plasma concentration and tissue distribution of sulfadimethoxine in fast and slow acetylator rabbits] Imamura Y, et al. Yakugaku Zasshi 1988 Apr; 108(4):345–9 (Eng. Abstr.) (Jpn)
[Displacing effect of serum protein binding on intestinal absorption of sulfadimethoxine] Imamura Y, et al. Yakugaku Zasshi 1989 Jan;109(1):65–70 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

Anticryptosporidial activity of sulfadimethoxine [letter] Rekg JE, et al. Antimicrob Agents Chemother 1988 Dec; 32(12):1907–8
[Sulfadimethoxine as a promising drug in the treatment of infections caused by Mycobacterium kansasii and Mycobacterium xenopi—differentiation between M. kansasii and M. marinum and between M. gordonae and M. scrofulaceum by the susceptibility testing to sulfadimethoxine] Tsukamura M. Kekkaku 1989 Apr; 64(4):313–7 (Eng. Abstr.) (Jpn)

SULFADIMIDINE see SULFAMETHAZINE

SULFADOXINE see under SULFANILAMIDES

SULFAFURAZOLE see SULFISOXAZOLE

SULFAGUANIDINE see under GUANIDINES

SULFALENE see under SULFANILAMIDES

SULFAMERAZINE

Influence of relative humidity on the adhesive properties of a model interactive system. Kulvanich P, et al. J Pharm Pharmacol 1988 Jul;40(7):453–8

ADMINISTRATION & DOSAGE

[Long–term preventive use of sulfamerazine in chronic recurrent erysipelas] Härtel S, et al. Dermatol Monatsschr 1988;174(8):485–92 (Eng. Abstr.) (Ger)

THERAPEUTIC USE

[The effectiveness of antimicrobial chemotherapy in patients with acute infection of the upper respiratory tract] Kunze M, et al. Z Arztl Fortbild (Jena) 1989;83(1):29–31 (Ger)

URINE

N1–glucosides as urinary metabolites of sulphadimidine, sulphamerazine and sulphamethoxazole. Ahmad B, et al. Eur J Drug Metab Pharmacokinet 1988 Jul–Sep; 13(3):177–83

SULFAMETER see under SULFANILAMIDES

SULFAMETHAZINE

Private enterprise and federal agencies attack sulfamethazine residues [news] Gloyd JS. J Am Vet Med Assoc 1989 Jan 15;194(2):174–5

ADMINISTRATION & DOSAGE

Sulphadimidine residues [letter] Dalton JR. Vet Rec 1988 Jul 16;123(3):86–7

ANALOGS & DERIVATIVES

Rapid sample preparation methods for analysis of residues of sulfamethazine and its N4–acetyl and desamino metabolites in swine tissue by HPLC. Haagsma N, et al. Biomed Chromatogr 1987 Feb;2(1):41–5

ANALYSIS

Determination of sulphadimidine in animal feeds by high–performance liquid chromatography. Conway B. Analyst 1988 Sep;113(9):1397–400
Rapid sample preparation methods for analysis of residues of sulfamethazine and its N4–acetyl and desamino metabolites in swine tissue by HPLC. Haagsma N, et al. Biomed Chromatogr 1987 Feb;2(1):41–5
Direct competitive enzyme–linked immunosorbent assay for sulfamethazine residues in milk. Dixon–Holland DE, et al. J Assoc Off Anal Chem 1989 May–Jun;72(3):447–50
Competitive direct enzyme–linked immunosorbent assay for detection of sulfamethazine residues in swine urine and muscle tissue. Dixon–Holland DE, et al. J Assoc Off Anal Chem 1988 Nov–Dec;71(6):1137–40
Diazomethane derivatization of sulfamethazine: formation of isomeric products. Feil VJ, et al. J Assoc Off Anal Chem 1989 May–Jun;72(3):515–6
Liquid chromatographic determination of sulfamethazine in feeds. Houglum JE, et al. J Assoc Off Anal Chem 1988 Sep–Oct;71(5):1054–6
Liquid chromatographic determination of sulfamethazine in milk. Weber JD, et al. J Assoc Off Anal Chem 1989 May–Jun;72(3):445–7

BLOOD

Effect of trenbolone and testosterone on the plasma elimination rates of sulfamethazine, trimethoprim, and antipyrine in female dwarf goats. van Miert AS, et al. Am J Vet Res 1988 Dec;49(12):2060–4

ISOLATION & PURIFICATION

[Chromatographic separation and simultaneous determination of sulfathiourea, sulfamethoxypyridazine and sulfadimidine] Palló N, et al. Acta Pharm Hung 1988 May;58(3):105–13 (Eng. Abstr.) (Hun)

METABOLISM

The metabolism and desmination of [14C]sulphamethazine in a germ–free pig: the influence of nitrate and nitrite. Struble CB, et al. Food Chem Toxicol 1988 Sep; 26(9):797–801
In vivo mechanisms for the enhanced acetylation of sulfamethazine in the rabbit after hydrocortisone treatment. Reeves PT, et al. J Pharmacol Exp Ther 1989 Jan; 248(1):348–52
The effect of testosterone and rutting on the metabolism and pharmacokinetics of sulphadimidine in goats. Nouws JF, et al. J Vet Pharmacol Ther 1988 Jun;11(2):145–54

PHARMACOKINETICS

Effect of intra–articular glucocorticoids on the disposition of sulphadimidine in chronic osteoarthritis patients. Reeves PT, et al. Br J Clin Pharmacol 1988 Nov;26(5):563–8
Are the traits for drug acetylation and oxidation co–inherited? [letter] Sardaş S, et al. Clin Genet 1988 Aug; 34(2):143–4
Effect of tick–borne fever (Ehrlichia phagocytophila) and trypanosomiasis (Trypanosoma brucei 1066) on the pharmacokinetics of sulfadimidine and its metabolites in goats. van Gogh H, et al. Drug Metab Dispos 1989 Jan–Feb; 17(1):1–6
Kinetics of antipyrine and sulfamethazine in patients recovered from dihydralazine–hepatitis. Siegmund W, et al. Int J Clin Pharmacol Ther Toxicol 1989 Apr;27(4):165–9
Pharmacokinetics of oral sulfa drugs and gastric emptying in the pig. Kokue E, et al. J Pharmacobiodyn 1988 Aug; 11(8):549–54
Concentrations of sulphadimidine, oxytetracycline and penicillin G in serum, synovial fluid and tissue cage fluid after parenteral administration to calves. Bengtsson B, et al. J Vet Pharmacol Ther 1989 Mar;12(1):37–45
Pharmacokinetics and metabolism of sulphadimidine in kids at 12 and 18 weeks of age. Nouws JF, et al. J Vet Pharmacol Ther 1989 Mar;12(1):19–24
Bioavailability and pharmacokinetics of sulfamethazine in the pony. Wilson RC, et al. J Vet Pharmacol Ther 1989 Mar; 12(1):99–102
Has bovine somatotropin (BST) an effect upon drug disposition? Comparative studies in goats and cattle with sulphadimidine and antipyrine after parenteral administration of BST, zeranol and proligestone. Witkamp RF, et al. J Vet Pharmacol Ther 1989 Jun;12(2):163–78
Sulfadimidine kinetics in patients with various chronic liver diseases. Horváth T, et al. Pol J Pharmacol Pharm 1988 May–Jun;40(3):257–64
The effect of food deprivation on the rate of sulfamethazine elimination in goats. Abdullah AS, et al. Vet Res Commun 1988;12(6):441–6
Pharmacokinetics and distribution of sulphadimidine in plasma, milk and uterine fluid of female buffaloes. Singh MK, et al. Vet Res Commun 1988;12(1):41–6
[Biotransformation in patients following Depressan–induced hepatitis] Hoffmann A, et al. Gastroenterol J 1989; 49(1):8–11 (Eng. Abstr.) (Ger)

TOXICITY

Chronic toxicity/carcinogenicity studies of sulphamethazine in B6C3F1 mice. Littlefield NA, et al. Food Chem Toxicol 1989 Jul;27(7):455–63

URINE

N1–glucosides as urinary metabolites of sulphadimidine, sulphamerazine and sulphamethoxazole. Ahmad B, et al. Eur J Drug Metab Pharmacokinet 1988 Jul–Sep; 13(3):177–83

SULFAMETHIZOLE see under SULFATHIAZOLES

SULFAMETHOXAZOLE

ADMINISTRATION & DOSAGE

Long–term suppression of Salmonella aortitis with an oral antibiotic. Donabedi...n H. Arch Intern Med 1989 Jun; 149(6):1452
Stable human immunodeficiency virus encephalopathy in two infants receiving early intravenous gammaglobulin plus antimicrobial prophylaxis. Hunziker UA, et al. Eur J Pediatr 1989 Feb;148(5):417–22
Studies on efficacy of treatment with sulfamethoxazole + trimethoprim and sulfalene + pyrimethamine combinations in Plasmodium falciparum malaria of known and unknown resistant status. Barkakaty BN, et al. J Commun Dis 1988 Sep;20(3):165–74
Design and in vitro evaluation of polyvinyl chloride microcapsules containing sulphamethoxazole. Das SK, et al. J Microencapsul 1989 Jan–Mar;6(1):53–8
Stage–adapted treatment of Wegener's granulomatosis. First results of a prospective study. Steppat D, et al. Klin Wochenschr 1989 Jul 3;67(13):666–71
Treatment and prophylaxis of Isospora belli infection in patients with the acquired immunodeficiency syndrome. Pape JW, et al. N Engl J Med 1989 Apr 20;320(16):1044–7
The risks and benefits of low–dose cotrimoxazole prophylaxis for Pneumocystis pneumonia in renal transplantation. Higgins RM, et al. Transplantation 1989 Mar;47(3):558–60
[Combined treatment of chronic prostatitis with sulfamethoxazole–trimethoprim and hachimi–ji–oh–gan] Kaneko S, et al. Hinyokika Kiyo 1988 Jun;34(6):1091–5 (Eng. Abstr.) (Jpn)
[Treatment of acute urinary infection with the usual regimen and a single dose of antibiotic (letter)] Sánchez MI. Rev Med Chil 1988 Feb;116(2):184–6 (Spa)

ADVERSE EFFECTS

Therapeutic challenge for Isospora belli enteritis in an AIDS patient who developed Lyell syndrome after co–trimoxazole therapy. Romeu J, et al. Am J Gastroenterol 1989 Feb;84(2):207–9
Trimethoprim–sulfamethoxazole–associated aseptic

meningitis: case reports and review of the literature. Joffe AM, et al. **Am J Med** 1989 Sep;87(3):332–8 (90 ref.)
Acute granulomatous interstitial nephritis due to co–trimoxazole. Cryst C, et al. **Am J Nephrol** 1988; 8(6):483–8
Desensitization to trimethoprim sulfamethoxazole in patients with acquired immune deficiency syndrome and Pneumocystis carinii pneumonia. White MV, et al. **Ann Allergy** 1989 Mar;62(3):177–9
Pancytopenia and methotrexate with trimethoprim–sulfamethoxazole [letter] Jeurissen ME, et al. **Ann Intern Med** 1989 Aug 1;111(3):261
Mineralocorticoid deficiency in HIV infection [letter; comment] Murphy CE, et al. **BMJ** 1989 Apr 29; 298(6681):1181. **Comment on:** BMJ 1989 Feb 25;298(6672):496–7
Hypoglycemia induced by co–trimoxazole in AIDS. Schattner A, et al. **BMJ** 1988 Sep 17;297(6650):742
Intrahepatic cholestasis associated with co–trimoxazole. Oliver RM, et al. **Br J Clin Pract** 1987 Oct;41(10):975–6
Adverse cutaneous drug reactions in AIDS. De Raeve L, et al. **Br J Dermatol** 1988 Oct;119(4):521–3
Drug interactions with methotrexate [letter] Liddle BJ, et al. **Br J Dermatol** 1989 Apr;120(4):582–3
Reaction after re–exposure to trimethoprim–sulfamethoxazole [letter] Ulstad DR, et al. **Chest** 1989 Apr;95(4):937–8
Fixed drug eruption due to cotrimexasole [letter] Varsano I, et al. **Dermatologica** 1989;178(4):232
Comment: TMP/SMX—warfarin interaction [letter] Fredriks DA. **DICP** 1989 Jul–Aug;23(7–8):619–20
Heinz–body hemolytic anemia associated with phenazopyridine and sulfonamide. Ponte CD, et al. **DICP** 1989 Feb;23(2):140–2
Spontaneous remission of a fixed drug eruption [letter] Basomba A, et al. **J Allergy Clin Immunol** 1989 Sep; 84(3):409
Co–prescribing chloramphenicol and cotrimoxazole [letter] Agarwal BD. **J Assoc Physicians India** 1988 Mar;36(3):236
Therapy of pneumocystis carinii pneumonia after trimethoprim–sulfamethoxazole desensitization. Papakonstantinou G, et al. **Klin Wochenschr** 1989 Mar 1; 67(5):316
Fatal toxic epidermal necrolysis associated with co–trimoxazole [letter] Carmichael AJ, et al. **Lancet** 1989 Sep 30;2(8666):808–9
Toxic epidermal necrolysis and co–trimoxazole [letter] Whittington RM. **Lancet** 1989 Sep 2;2(8662):574
What influences prescribing—scientific articles or promotional pressure? [letter] Heery PJ. **Med J Aust** 1989 Mar 6;150(5):282, 284
Acute tubular necrosis following co–trimoxazole therapy [letter] Rudra T, et al. **Nephron** 1989;53(1):85–6
Thrombophlebitis migrans following co–trimoxazole therapy. Verne–Pignatelli J, et al. **Postgrad Med J** 1989 Jan; 65(759):51–2
Effect of folic and folinic acid on cytopenia occurring during co–trimoxazole treatment of Pneumocystis carinii pneumonia. Bygbjerg IC, et al. **Scand J Infect Dis** 1988; 20(6):685–6
[Reflections on the sources of cases and the information they provide. Apropos of a survey] Maury MO, et al. **Therapie** 1988 Oct–Dec;43(6):497–500 (Eng. Abstr.) **(Fre)**
[Status asthmaticus following administration of drugs] Brändli O. **Schweiz Rundsch Med Prax** 1988 Oct 18; 77(42):1136–7 (Eng. Abstr.) **(Ger)**
[Allergy to trimethoprim–sulfamethoxazole in normal, atopic and immunodepressed subjects] Pioda GB, et al. **Clin Ter** 1987 Aug 15;122(3):171–5 (Eng. Abstr.) **(Ita)**
[A case of drug–induced recurrent cholestatic hepatitis] Pavlova MV, et al. **Ter Arkh** 1989;61(2):125–7 **(Rus)**
[Cotrimoxazole–induced agranulocytosis (letter)] **Med Clin (Barc)** 1988 May 7;90(18):755 **(Spa)**
[Adverse effects of cotrimoxazole and Pneumocystis carinii pneumonia (letter)] Soler–Bel J, et al. **Rev Clin Esp** 1989 Feb;184(2):115–6 **(Spa)**

ANALOGS & DERIVATIVES

Fluorescence–based viability assay for studies of reactive drug intermediates. Leeder JS, et al. **Anal Biochem** 1989 Mar;177(2):364–72
Pharmacokinetics, metabolism and renal clearance of sulphatroxazole in calves and cows. Nouws JF, et al. **J Vet Pharmacol Ther** 1989 Mar;12(1):50–7

ANALYSIS

Stability of concentrated trimethoprim–sulfamethoxazole admixtures. Jarosinski PF, et al. **Am J Hosp Pharm** 1989 Apr;46(4):732–7
High–performance liquid chromatographic analysis of trimethoprim and sulfamethoxazole in microliter volumes of chinchilla middle ear effusion and serum. Erdmann GR, et al. **J Chromatogr** 1988 Dec 9;433:187–95
Effect of binders on sulfamethoxazole tablets. Agrawal YK, et al. **J Pharm Sci** 1988 Oct;77(10):885–8
Effect of surfactant incorporation techniques on sulphamethoxazole suppository formulations. Abd el–Gawad AH, et al. **Pharmazie** 1988 Sep;43(9):624–7

BLOOD

Dapsone, trimethoprim, and sulfamethoxazole plasma levels during treatment of Pneumocystis pneumonia in patients with the acquired immunodeficiency syndrome (AIDS). Evidence of drug interactions. Lee BL, et al. **Ann Intern Med** 1989 Apr 15;110(8):606–11

IMMUNOLOGY

Drugs as allergens: detection and combining site specificities of IgE antibodies to sulfamethoxazole. Harle DG, et al. **Mol Immunol** 1988 Dec;25(12):1347–54

PHARMACOKINETICS

Co–trimoxazole (sulphamethoxazole plus trimethoprim) peritoneal barrier transfer pharmacokinetics. Svirbely JE, et al. **Clin Pharmacokinet** 1989 May;16(5):317–25
Effects of salbutamol on the absorption and disposition of sulphamethoxazole in adult volunteers. Adebayo GI, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jan–Mar; 14(1):57–60
[Studies of the pharmacokinetics and bioavailability of a new trimethoprim/sulfamethoxazole preparation in healthy volunteers] Hutt V, et al. **Arzneimittelforschung** 1988 Sep; 38(9):1347–50 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Trimethoprim/sulphamethoxazole resistance in Escherichia coli and Klebsiella spp. urinary isolates. Obaseiki–Ebor EE. **Afr J Med Med Sci** 1988 Sep;17(3):175–9
Emergence of highly trimethoprim–sulfamethoxazole–resistant Shigella in a native American population: an epidemiologic study. Griffin PM, et al. **Am J Epidemiol** 1989 May;129(5):1042–51
Pharmacodynamic evaluation of ofloxacin and trimethoprim–sulfamethoxazole in vaginal fluid of women treated for acute cystitis. Tartaglione TA, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1640–3
Antimicrobial susceptibility patterns of Nocardia asteroides. Wallace RJ Jr, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1776–9
In vitro activity of the combination trimethoprim plus sulfamethoxazole compared with that of other chemotherapeutic agents. Focht J, et al. **Arzneimittelforschung** 1988 Aug;38(8):1085–8
Influence of cefaclor, phenethicillin, co–trimoxazole and doxycycline on colonization resistance in healthy volunteers. Vollaard EJ, et al. **J Antimicrob Chemother** 1988 Nov;22(5):747–58
In–vitro and in–vivo studies of trimethoprim–sulphamethoxazole against multiple resistant Staphylococcus aureus. Yeldandi V, et al. **J Antimicrob Chemother** 1988 Dec;22(6):873–80
Trimethoprim resistance and single–agent use [letter] Maskell R, et al. **Lancet** 1989 Sep 2;2(8662):557–8
[Susceptibility of gram negative bacteria to TMP–SMX and ofloxacin] Unal S, et al. **Mikrobiyol Bul** 1988;22(4):316–21 (Eng. Abstr.) **(Tur)**

THERAPEUTIC USE

Attempts to eradicate methicillin–resistant Staphylococcus aureus colonization with the use of trimethoprim–sulfamethoxazole, rifampin, and bacitracin. Roccaforte JS, et al. **Am J Infect Control** 1988 Aug; 16(4):141–6
Randomized, double–blind comparison of ciprofloxacin and trimethoprim–sulfamethoxazole for complicated urinary tract infections. Allais JM, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1327–30
Comparison of single–dose treatment with norfloxacin and standard 5–day treatment with trimethoprim–sulfamethoxazole for acute shigellosis in adults. Gotuzzo E, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1101–4
Early treatment of Campylobacter jejuni enteritis. Williams D, et al. **Antimicrob Agents Chemother** 1989 Feb; 33(2):248–50
Sultamicillin versus trimethoprim/sulfamethoxazole in the treatment of urinary tract infections. Naber KG, et al. **APMIS Suppl** 1989;5:57–62
The treatment of Wegener's granulomatosis with sulfamethoxazole and trimethoprim [letter] Boudes P. **Arch Intern Med** 1989 Jun;149(6):1467, 1471
Sulfamethoxazole–trimethoprim therapy for Wegener's granulomatosis. Israel HL. **Arch Intern Med** 1988 Oct; 148(10):2293–5
Wegener's granulomatosis [letter; comment] King JW, et al. **Arch Intern Med** 1989 Jul;149(7):1695, 1698. **Comment on:** Arch Intern Med 1988 Sep;148(9):2065–6
Three cases of Wegener's granulomatosis treated with an antimicrobial agent. Fukuda K, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):515–8
Wegener's granulomatosis and trimethoprim/sulfamethoxazole treatment [letter] Boudes P. **Arthritis Rheum** 1989 Aug;32(8):1052
Comment on the article by DeRemee [letter] Steppat D, et al. **Arthritis Rheum** 1989 Aug;32(8):1050–2
Trimethoprim–sulfamethoxazole v. amoxicillin in the treatment of acute otitis media. Feldman W, et al. **Can Med Assoc J** 1988 Nov 15;139(10):961–4
New forms of multidrug therapy for the treatment of leprosy. First report for the practice on rifampicin + sulfamethoxazole–trimethoprim + protionamide and rifampicin + sulfamethoxazole–trimethoprim + isoniazid. Freerksen E, et al. **Chemotherapy** 1989;35(2):133–9
Trimethoprim in pediatric urinary tract infection. Rajkumar S, et al. **Child Nephrol Urol** 1988–89;9(1–2):77–81
Oxygen consumption and central hemodynamics in septic shock treated with antibiotics, fluid infusions, and corticosteroids. Ottosson J, et al. **Crit Care Med** 1989 Aug; 17(8):772–9
Prophylactic co–trimoxazole versus norfloxacin in neutropenic children—perspective randomized study. Cruciani M, et al. **Infection** 1989 Mar–Apr;17(2):65–9
Comparison of erythromycin ethylsuccinate and co–trimoxazole for treatment of pertussis. Hoppe JE, et al. **Infection** 1989 Jul–Aug;17(4):227–31
Comparative study of ciprofloxacin versus co–trimoxazole in the treatment of Salmonella enteric fever [letter] Limson BM, et al. **Infection** 1989 Mar–Apr;17(2):105–6
Successful prophylaxis of Pneumocystis carinii pneumonia with trimethoprim–sulfamethoxazole in AIDS patients with previous allergic reactions. Shafer RW, et al. **J Acquir Immune Defic Syndr** 1989;2(4):389–93
The possible role of corticosteroid therapy for pneumocystis pneumonia in the acquired immune deficiency syndrome (AIDS). Walmsley S, et al. **J Acquir Immune Defic Syndr** 1988;1(4):354–60
Trimethoprim/sulfamethoxazole therapy of Pasteurella multocida infection [letter] Sands M, et al. **J Infect Dis** 1989 Aug;160(2):353–4
A multicenter, double–blind, trimethoprim–sulfamethoxazole controlled study of enoxacin in the treatment of patients with complicated urinary tract infections. Cox CE, et al. **J Urol** 1989 Mar;141(3):575–8
Conservative management of a seminal vesicle abscess. Kennelly MJ, et al. **J Urol** 1989 Jun;141(6):1432–3 (8 ref.)
Trial of co–trimoxazole versus procaine penicillin with ampicillin in treatment of community–acquired pneumonia in young Gambian children. Campbell H, et al. **Lancet** 1988 Nov 19;2(8621):1182–4
Co–trimoxazole in the treatment of Wegener's granulomatosis [letter] Bowden FJ, et al. **Med J Aust** 1989 Sep 4;151(5):303–4
Antibiotics may prevent PCP infections [news] **Ohio Med** 1988 Jun;84(6):427
Cost analysis of therapy of acute otitis media [letter] Stoddard J, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):189–90
Management of Pneumocystis carinii pneumonia in patients with AIDS and other conditions: experience in a Philadelphia University Teaching Hospital. Furio MM, et al. **Pharmacotherapy** 1988;8(4):221–34
TMP–SMZ in the treatment of brucellar meningitis [letter] Roldan A, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1233–4
Experience with trimethoprim–sulfamethoxazole in treatment of infective endocarditis. Street AC, et al. **Rev Infect Dis** 1988 Sep–Oct;10(5):915–21 (52 ref.)
Chronic non–specific diarrhea of infancy successfully treated with trimethoprim–sulfamethoxazole. Dahlström KA, et al. **Scand J Gastroenterol** 1989 Jun;24(5):589–92
Norfloxacin versus co–trimoxazole in the treatment of acute bacterial diarrhoea: a placebo controlled study. Lolekha S, et al. **Scand J Infect Dis Suppl** 1988;56:35–45
Norfloxacin versus co–trimoxazole for the treatment of upper urinary tract infections: a double blind trial. Tungsanga K, et al. **Scand J Infect Dis Suppl** 1988;56:28–34
Treatment of urinary tract infections in Hong Kong: a comparative study of norfloxacin and co–trimoxazole. Wong WT, et al. **Scand J Infect Dis Suppl** 1988;56:22–7
Empirical treatment without bronchoscopy for Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. Miller RF, et al. **Thorax** 1989 Jul;44(7):559–64
Brucellosis: an unusual cause of a child's fever of unknown origin. Chusid MJ, et al. **Wis Med J** 1989 Mar;88(3):11–3
[Considerable improvement of spasticity and dystonic phenomena by sulfamethoxazole–trimethoprim in Joseph's disease (letter)] Dehen H, et al. **Presse Med** 1988 Sep 10; 17(30):1543 **(Fre)**
[Favorable course under cotrimoxazole of excavated pneumopathy complicating rapidly progressive glomerulonephritis: Wegener's granulomatosis?] Pagniez D, et al. **Rev Med Interne** 1989 Mar–Apr;10(2):143–6 **(Fre)**
[Co–trimoxazole chemoprophylaxis in immunocompromised patients: analysis of the literature] Gava R, et al. **G Clin Med** 1989 Jan;70(1):37–9, 42–6 (63 ref.) **(Ita)**
[Nocardial brain abscess: case report] Yamaguchi Y, et al. **No Shinkei Geka** 1989 Mar;17(3):285–9 (14 ref.) (Eng. Abstr.) **(Jpn)**
[A single dose of sulfamethoxazole–trimethoprim vs. a 7–day course of nitrofurantoin in the treatment of acute non–complicated urinary tract infection in women] Abadi T, et al. **Rev Med Chil** 1987 Dec;115(12):1166–9 (Eng. Abstr.) **(Spa)**
[Effectiveness and tolerance of norfloxacin compared with trimethoprim–sulfamethoxazole in the treatment of uncomplicated urinary tract infections] Ballesteros JJ, et al. **Rev Med Univ Navarra** 1988 Jul–Sep;32(3):135–7 (Eng. Abstr.) **(Spa)**

TOXICITY

[Studies on nephrotoxicity of cyclosporin. II. Nephrotoxicity in rats receiving cyclosporin and sulfamethoxazole–trimethoprim] Pak K, et al.

Hinyokika Kiyo 1988 Oct;34(10):1723–31 (Eng. Abstr.) (Jpn)

URINE

N1-glucosides as urinary metabolites of sulphadimidine, sulphamerazine and sulphamethoxazole. Ahmad B, et al. Eur J Drug Metab Pharmacokinet 1988 Jul–Sep; 13(3):177–83

SULFAMETHOXYPYRIDAZINE

ADVERSE EFFECTS

Alveolitis associated with sulphamethoxypyridazine. Steinfort CL, et al. Thorax 1989 Apr;44(4):310–1

ANALYSIS

Predicting the solubility of sulfamethoxypyridazine in individual solvents. I: Calculating partial solubility parameters. Bustamante P, et al. J Pharm Sci 1989 Jul; 78(7):567–73

Predicting the solubility of sulfamethoxypyridazine in individual solvents. II: Relationship between solute–solvent interaction terms and partial solubility parameters. Martin A, et al. J Pharm Sci 1989 Aug;78(8):672–8

ISOLATION & PURIFICATION

[Chromatographic separation and simultaneous determination of sulfathiourea, sulfamethoxypyridazine and sulfadimidine] Palló N, et al. Acta Pharm Hung 1988 May;58(3):105–13 (Eng. Abstr.) (Hun)

SULFAMETHYLISOXAZOLE see SULFAMETHOXAZOLE

SULFAMONOMETHOXINE see under SULFANILAMIDES

SULFAMYL DIURETICS see DIURETICS, SULFAMYL

SULFANILAMIDES

Influence of relative humidity on the adhesive properties of a model interactive system. Kulvanich P, et al. J Pharm Pharmacol 1988 Jul;40(7):453–8

Studies on response characteristics of drug ion-selective electrodes (II)—sulpha-drug sensitive electrodes using quaternary phosphonium and arsonium compounds. Yao SZ, et al. Sci Sin [B] 1988 Oct;31(10):1222–34

ADMINISTRATION & DOSAGE

Fansimef [Fansidar plus mefloquine] is effective treatment for imported malaria in New Zealand. Ellis-Pegler RB, et al. Aust N Z J Med 1988 Aug;18(5):733–4

Studies on efficacy of treatment with sulfamethoxazole + trimethoprim and sulfalene + pyrimethamine combinations in Plasmodium falciparum malaria of known and unknown resistant status. Barkakaty BN, et al. J Commun Dis 1988 Sep;20(3):165–74

Treatment and prophylaxis of Isospora belli infection in patients with the acquired immunodeficiency syndrome. Pape JW, et al. N Engl J Med 1989 Apr 20;320(16):1044–7

Malaria in north-eastern Botswana [letter] Robinson MJ. S Afr Med J 1988 Oct 15;74(8):427

Double-blind dose finding study of mefloquine-sulfadoxine-pyrimethamine in children with acute falciparum malaria. Guo XB, et al. Trans R Soc Trop Med Hyg 1988;82(4):538–40

Parenteral Fansidar in falciparum malaria. Harinasuta T, et al. Trans R Soc Trop Med Hyg 1988;82(5):694

[Efficacy of amodiaquine, Fansidar and their combination in the treatment of chloroquine-resistant falciparum malaria] Huang QL, et al. Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1988;6(4):292–5 (Eng. Abstr.) (Chi)

ADVERSE EFFECTS

Agranulocytosis and anaemia induced by sulfametopyrazine in a sulfametopyrazine–trimethoprim combination. Teo CP, et al. Ann Acad Med Singapore 1989 May;18(3):307–10

Fatal toxic epidermal necrolysis during prophylaxis with pyrimethamine and sulfadoxine in a human immunodeficiency virus-infected person. Raviglione MC, et al. Arch Intern Med 1988 Dec;148(12):2683–5

An unusual combination of phototoxicity and Stevens-Johnson syndrome due to antimalarial therapy. Ortel B, et al. Dermatologica 1989;178(1):39–42

Leads from the MMWR. Fansidar-associated fatal reaction in an HIV-infected man. JAMA 1988 Oct 21;260(15):2193

Stevens-Johnson syndrome due to pyrimethamine/sulfadoxine during presumptive self-therapy of malaria [letter] Phillips-Howard PA, et al. Lancet 1989 Sep 30;2(8666):803–4

Sulfadoxine specific lymphocyte transformation in a patient with eosinophilic pneumonia induced by sulfadoxine-pyrimethamine (Fansidar). Daniel PT, et al. Thorax 1989 Apr;44(4):307–9

[Syndrome of chronic overdose of insulin and hypoglycemic sulfanilamide drugs] Arzumetova DS, et al. Klin Med (Mosk) 1989 Apr;67(4):99–101 (Eng. Abstr.) (Rus)

ANALOGS & DERIVATIVES

Characterization of binding sites for sulfadimethoxine and its major metabolite, N4-acetylsulfadimethoxine, on human and rabbit serum albumin. Otagiri M, et al. Chem Pharm Bull (Tokyo) 1989 Feb;37(2):498–501

ANALYSIS

[Application of factor analytical spectrophotometry in the analysis of multicomponent complex preparation] Qiu JX, et al. Yao Hsueh Hsueh Pao 1988 Feb;23(2):142–7 (Eng. Abstr.) (Chi)

[Comparison of the in vitro dissolution and the absorption of sulfametomidine and its solvates] Audran M, et al. Pharm Acta Helv 1988;63(12):343–6 (Fre)

BLOOD

Plasma concentrations of sulfadoxine in healthy and malaria infected Thai subjects. Sarikabhuti B, et al. Acta Trop (Basel) 1988 Sep;45(3):217–24

High-performance liquid chromatographic method with electrochemical detection for the concomitant assay of sulphadiazine, sulphamerazine and sulphapyridine in plasma. Mallett DN, et al. J Chromatogr 1988 Jun 24; 428(1):190–5

[Ulcerative colitis in children. Levels of salicylazosulfapyridine and sulfapyridine during treatment] Guastavino E, et al. Acta Gastroenterol Latinoam 1988; 18(2):107–13 (Eng. Abstr.) (Spa)

CHEMICAL SYNTHESIS

Portage transport of sulfanilamide and sulfanilic acid. Hwang SY, et al. J Med Chem 1989 Mar;32(3):694–8

[Modulation of brain Ca2+-calmodulin-dependent phosphodiesterase activity by naphthalene sulfamides] Shaikhin SM, et al. Biokhimiia 1988 Aug;53(8):1357–64 (Eng. Abstr.) (Rus)

HISTORY

Milestones in clinical pharmacology. Remember 1937—sulfanilamide. Farrar GE Jr. Clin Ther 1989 May-Jun;11(3):425–6

ISOLATION & PURIFICATION

[Chromatographic separation and simultaneous determination of sulfathiourea, sulfamethoxypyridazine and sulfadimidine] Palló N, et al. Acta Pharm Hung 1988 May;58(3):105–13 (Eng. Abstr.) (Hun)

PHARMACOKINETICS

Plasma concentrations of sulfadoxine in healthy and malaria infected Thai subjects. Sarikabhuti B, et al. Acta Trop (Basel) 1988 Sep;45(3):217–24

Tissue sulfonamide concentration and correlation in turkeys. Epstein RL, et al. Am J Vet Res 1989 Jun;50(6):926–8

Single dose kinetic study of the triple combination mefloquine/sulphadoxine/pyrimethamine (Fansimef) in healthy male volunteers. Mansor SM, et al. Br J Clin Pharmacol 1989 Mar;27(3):381–6

Thermodynamic study on enhancement of percutaneous penetration of drugs by Azone. Ito Y, et al. J Pharmacobiodyn 1988 Nov;11(11):749–57

Pharmacokinetics of oral sulfa drugs and gastric emptying in the pig. Kokue E, et al. J Pharmacobiodyn 1988 Aug; 11(8):549–54

Role of deacetylation in the nonlinear pharmacokinetics of sulfamonomethoxine in pigs. Shimoda M, et al. J Pharmacobiodyn 1988 Aug;11(8):576–82

An appropriate ingestion volume of oral sulfa drug suspension in pigs. Kokue E, et al. Nippon Juigaku Zasshi 1989 Jun;51(3):485–90

Oxidation and acetylation of sulfamonomethoxine by the snail Cepaea hortensis. Vree TB, et al. Nippon Juigaku Zasshi 1989 Apr;51(2):369–72

Pharmacokinetics and renal clearance of sulphadimidine, sulphamerazine and sulphadiazine and their N4-acetyl and hydroxy metabolites in pigs. Nouws JF, et al. Vet Q 1989 Apr;11(2):78–86

Oxidation and O-dealkylation of sulphamonomethoxine by the turtle Pseudemys scripta elegans. Vree TB, et al. Vet Q 1989 Jul;11(3):186–90

[Pharmacokinetic parameters in old rats as a possible cause of side effects of drugs in old age] Sallingová Z, et al. Cesk Fysiol 1989;38(3):271–7 (Slo)

PHARMACOLOGY

Sulfaquinoxaline inhibition of vitamin K epoxide and quinone reductase. Preusch PC, et al. Arch Biochem Biophys 1989 Feb 15;269(1):18–24

Histopathological study into side-effect toxicity of some drugs used in treatment of cancer. el-Shazly MO, et al. Arch Exp Veterinarmed 1989 Mar;43(2):319–26

Cellular pharmacology of chloroquinoxaline sulfonamide and a related compound in murine B16 melanoma cells. Branda RF, et al. Biochem Pharmacol 1988 Dec 1;37(23):4557–64

A comparative analysis of the synergistic interaction between N1-phenylsulfanilamides and benzylpyrimidines using qsar techniques. Coats EA, et al. J Enzym Inhib 1987; 1(4):259–66

The first report of Plasmodium falciparum resistant to chloroquine plus sulphadoxine/pyrimethamine in Rwanda. Giboda M, et al. Trans R Soc Trop Med Hyg 1988;82(3):383

[Inhibitory effect of artemisinine-sulfadoxine-pyrimethamine combination on the development of drug-resistance in Plasmodium berghei] Zhou YQ, et al. Chung Kuo Yao Li Hsueh Pao 1988 Sep;9(5):453–7 (Eng. Abstr.) (Chi)

[Chloroquine and fansidar resistance of Plasmodium falciparum now also in Ghana] Kupferschmidt HG, et al. Angew Parasitol 1988 Nov;29(4):211–3 (Eng. Abstr.) (Ger)

[Effect of sulfalene and furosemide on benzylpenicillin kinetics in rats with aseptic inflammation] Agapitova IV, et al. Antibiot Khimioter 1988 Dec;33(12):917–21 (Eng. Abstr.) (Rus)

[Sensitivity of Pseudomonas mallei to sulfanilamide combinations in vitro] Lozovaia NA. Antibiot Khimioter 1989 Jan;34(1):48–52 (Eng. Abstr.) (Rus)

POISONING

Experimental and field sulfaquinoxaline toxicosis in Leghorn chickens. Daft BM, et al. Avian Dis 1989 Jan-Mar; 33(1):30–4

THERAPEUTIC USE

Comparison of the susceptibility of falciparum malaria to mefloquine-sulphadoxine-pyrimethamine and chloroquine in Nigeria. Fadeke Aderounmu A, et al. Afr J Med Med Sci 1988 Dec;17(4):195–200

Sensitivity of Plasmodium falciparum to mefloquine-sulphadoxine-pyrimethamine (Fansimef) in vivo and to mefloquine alone in vitro in Nigeria. Salako LA, et al. Ann Trop Med Parasitol 1988 Aug;82(4):325–30

Fansimef [Fansidar plus mefloquine] is effective treatment for imported malaria in New Zealand. Ellis-Pegler RB, et al. Aust N Z J Med 1988 Aug;18(5):733–4

Fansimef in the treatment of malaria [letter] Prociv P. Aust N Z J Med 1989 Aug;19(4):411

Ineffectiveness of clorsulon against Nanophyetus salmincola in coyotes. Foreyt WJ, et al. J Am Vet Med Assoc 1986 Nov 1;189(9):1101–2

Malaria in travelers returning from Kenya: failure of self-treatment with pyrimethamine/sulfadoxine. MMWR 1989 May 26;38(20):363–4

Chemotherapy of caecal coccidiosis: efficacy of toltrazuril, sulphaquinoxaline/pyrimethamine and amprolium/ethopabate, given in drinking water, against field isolates of Eimeria tenella. Chapman HD. Res Vet Sci 1989 May;46(3):419–20

Tolerability of long-term malaria prophylaxis with the combination mefloquine + sulfadoxine + pyrimethamine (Fansimef): results of a double blind field trial versus chloroquine in Nigeria. Kollaritsch H, et al. Trans R Soc Trop Med Hyg 1988;82(4):524–9

The combined use of artemether, sulfadoxine and pyrimethamine in the treatment of uncomplicated falciparum malaria. U Thet Naing, et al. Trans R Soc Trop Med Hyg 1988;82(4):530–1

[Plasmodium falciparum drug resistance and sulfadoxine-pyrimethamine in Africa] Randriamanjaka JR, et al. Bull Soc Pathol Exot Filiales 1989;82(3):381–4 (Eng. Abstr.) (Fre)

[In vivo resistance of Plasmodium falciparum to 4-aminoquinolines and to a sulfadoxine-pyrimethamine combination. II—The Emperatriz study, Maranhão, 1983–1984] Passos AD, et al. Rev Soc Bras Med Trop 1987 Apr-Jun;20(2):109–13 (Eng. Abstr.) (Por)

[Continuous treatment with trimethoprim-sulfamethoxypyrazine of immunocompromised patients] González B, et al. Rev Chil Pediatr 1987 Nov-Dec;58(6):449–54 (Eng. Abstr.) (Spa)

SULFANILIC ACIDS see under BENZENESULFONATES

SULFAPHENAZOLE

The effect of particle size on the compaction properties and compaction mechanism of sulfadimethoxine and sulfaphenazole. Kaneniwa N, et al. Chem Pharm Bull (Tokyo) 1988 Jul;36(7):2531–7

SULFAPHENYLPYRAZOL see SULFAPHENAZOLE

SULFAPYRIDINE see under SULFANILAMIDES

SULFAQUINOXALINE see under SULFANILAMIDES

SULFASALAZINE see SALICYLAZOSULFAPYRIDINE

SULFATASES

ANALYSIS

Sanfilippo D syndrome: estimation of N-acetylglucosamine-6-sulfatase activity with a radiolabeled monosulfated disaccharide substrate. Freeman C, et al. Anal Biochem 1989 Feb 1;176(2):244–8

Arylsulfatase of sea urchin sperm—distribution of arylsulfatase in the gonads and gametes of echinoderms. Moriya T, et al. Comp Biochem Physiol [B] 1979; 64(3):293–6

Immobilized sulfatase:beta-glucuronidase enzymes for the qualitative and quantitative analysis of drug conjugates. Boppana VK, et al. **J Pharm Sci** 1989 Feb;78(2):127–31
The distinction between arylsulphatases in chorionic villi. Diukman R, et al. **Prenat Diagn** 1988 Sep;8(7):531–7
[Study on the steroid sulfatase (STS) activity in normal individuals and patients with abnormal sexual differentiation] Shinohara M.
Nippon Naibunpi Gakkai Zasshi 1989 Mar 20;65(3):161–73 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Potentiation of angiostatic steroids by a synthetic inhibitor of arylsulfatase. Chen NT, et al. **Lab Invest** 1988 Oct; 59(4):453–9

DEFICIENCY

Multiple sulfatase deficiency with a novel biochemical presentation. Constantopoulos G. **Eur J Pediatr** 1988 Aug; 147(6):634–8
Molecular heterogeneity of steroid sulfatase deficiency: a multicenter study on 57 unrelated patients, at DNA and protein levels. Ballabio A, et al. **Genomics** 1989 Jan; 4(1):36–40
Linkage analysis in X-linked ichthyosis (steroid sulfatase deficiency). Wirth B, et al. **Hum Genet** 1988 Oct; 80(2):191–2
Metabolism of 3H-dehydroepiandrosterone sulphate by subjects with steroid sulphatase deficiency. Bergner EA, et al. **J Inherited Metab Dis** 1988;11(4):403–15
Multiple sulfatase deficiency: bridge between neuronal storage diseases and leukodystrophies [published erratum appears in Pathology 1988 Oct;20(4):following 411] Kepes JJ, et al. **Pathology** 1988 Jul;20(3):285–91

GENETICS

Human glucosamine-6-sulfatase cDNA reveals homology with steroid sulfatase. Robertson DA, et al.
Biochem Biophys Res Commun 1988 Nov 30;157(1):218–24
The human X-linked steroid sulfatase gene and a Y-encoded pseudogene: evidence for an inversion of the Y chromosome during primate evolution. Yen PH, et al.
Cell 1988 Dec 23;55(6):1123–35
Structure and tissue-specific developmental expression of a sea urchin arylsulfatase gene. Yang Q, et al. **Dev Biol** 1989 Sep;135(1):53–65
Identification of incomplete coding sequences for steroid sulphatase on the human Y chromosome: evidence for an ancestral pseudoautosomal gene? Fraser N, et al.
Development 1987;101 Suppl:127–32
cDNA cloning, nucleotide sequence and expression of the gene for arylsulfatase in the sea urchin (Hemicentrotus pulcherrimus) embryo. Sasaki H, et al. **Eur J Biochem** 1988 Oct 15;177(1):9–13
X-inactivation of the Sts locus in the mouse: an anomaly of the dosage compensation mechanism. Jones J, et al.
Genet Res 1989 Jun;53(3):193–9
Chromosomal localization of ARSB, the gene for human N-acetylgalactosamine-4-sulphatase. Litjens T, et al.
Hum Genet 1989 Apr;82(1):67–8
Cloning and expression of human steroid-sulfatase. Membrane topology, glycosylation, and subcellular distribution in BHK-21 cells. Stein C, et al.
J Biol Chem 1989 Aug 15;264(23):13865–72
Molecular cloning and regulatory analysis of the arylsulfatase structural gene of Neurospora crassa. Paietta JV.
Mol Cell Biol 1989 Sep;9(9):3630–7
Structure and expression of the gene encoding the periplasmic arylsulfatase of Chlamydomonas reinhardtii. de Hostos EL, et al. **Mol Gen Genet** 1989 Aug;218(2):229–39

IMMUNOLOGY

A monoclonal antibody to rat liver arylsulfatase C and its application in immunohistochemistry. Kawano J, et al.
J Histochem Cytochem 1989 May;37(5):683–90

ISOLATION & PURIFICATION

Arylsulfatase and beta-glucuronidase expression in green sunfish, bluegill, and their reciprocal interspecific hybrids. Daniel WL, et al. **Biochem Genet** 1989 Apr;27(3–4):167–81
Human liver glucuronate 2-sulphatase. Purification, characterization and catalytic properties. Freeman C, et al. **Biochem J** 1989 Apr 1;259(1):209–16
Molecular heterogeneity of anionic arylsulphatase B from monkey brain and preliminary identification of its phosphorylated component. Mathew J, et al.
Indian J Biochem Biophys 1988 Dec;25(6):648–54

METABOLISM

Cytochemical localization of arylsulfatase in guinea-pig Kurloff cells. Bust ML, et al. **Acta Histochem (Jena)** 1988; 84(2):211–5
Eosinophilic leucocytes and arylsulfatase activity in bronchoalveolar lavage fluid of patients with bronchial asthma. Tanizaki Y, et al. **Acta Med Okayama** 1988 Aug; 42(4):227–30
Isolation and identification of intestinal steroid-desulfating bacteria from rats and humans. Van Eldere J, et al.
Appl Environ Microbiol 1988 Aug;54(8):2112–7
Estrone sulfatase activity in normal and neoplastic endometrial tissues of human uterus. Urabe M, et al.
Asia Oceania J Obstet Gynaecol 1989 Mar;15(1):101–6
Characterization of rat and human steroid sulfatases. Kawano J, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):199–205
A new type of ultrasensitive bioluminogenic enzyme substrates. I. Enzyme substrates with D-luciferin as leaving group. Miska W, et al. **Biol Chem Hoppe Seyler** 1988 May; 369(5):407–11
Comparative biochemistry of mammalian arylsulfatases A and B. Thompson DB, et al.
Comp Biochem Physiol [B] 1988;90(4):823–31
X-linked recessive ichthyosis. Enzymatic diagnosis of affected males and female carriers. Piraud M, et al.
Enzyme 1989;41(4):227–34
Arylsulfatase in coelomocytes of Holothuria polii. Canicatti C. **Experientia** 1988 Dec 1;44(11–12):1011–3
Diurnal changes in the activity of arylsulphatases A and B of rat liver. Urbanik-Brzóska A, et al.
Folia Biol (Krakow) 1988;36(3–4):173–82
Arylsulphatase activity in the oviduct of the frog Rana esculenta. II. Progesterone-induced changes following ovariectomy and hypophysectomy. Vitaioli L, et al.
Histochem J 1988 May;20(5):301–7
Ultrastructural electron probe X-ray microanalytical reaction product identification of three different enzymes in the same mouse resident peritoneal macrophage. van Dort JB, et al. **Histochemistry** 1989;92(3):243–53
Lack of effect of insulin or insulin-like growth factor I on the steroid sulfatase activity of human placental cytotrophoblasts. Nestler JE. **Horm Metab Res** 1989 May; 21(5):258–60
Mode of action of iron on arylsulphatases under acute lead acetate treated conditions in rats. Santra M, et al.
Indian J Biochem Biophys 1989 Apr;26(2):92–7
Campylobacter-Wolinella group organisms are the only oral bacteria that form arylsulfatase-active colonies on a synthetic indicator medium. Wyss C. **Infect Immun** 1989 May;57(5):1380–3
Relationship of subgingival plaque flora to lysosomal and cytoplasmic enzyme activity in gingival crevicular fluid. Harper DS, et al. **J Clin Periodontol** 1989 Mar;16(3):164–9
Secretory pattern of growth hormone regulates steroid sulfatase activity in rat liver. Eriksson L, et al.
J Steroid Biochem 1989 Sep;33(3):413–6
Partial characterization of steroid sulfohydrolase and steroid sulfotransferase activities in purified porcine Leydig cells. Hobkirk R, et al. **J Steroid Biochem** 1989 Mar;32(3):387–92
Steroid sulfate sulfatase in human benign prostatic hyperplasia: characterization and quantification of the enzyme in epithelium and stroma. Klein H, et al.
J Steroid Biochem 1989 Aug;33(2):195–200

PHYSIOLOGY

Arylsulphatase and acid phosphatase activity associated with developing and ripe spermatozoa of the mussel Mytilus edulis. Pipe RK, et al. **Histochem J** 1989 Jan;21(1):23–32

SULFATE ADENYLYLTRANSFERASE see under **NUCLEOTIDYLTRANSFERASES**

SULFATES

Sulfate anion free radical formation by the peroxidation of (Bi)sulfite and its reaction with hydroxyl radical scavengers. Mottley C, et al. **Arch Biochem Biophys** 1988 Dec;267(2):681–9
Extent of removal of sulfate and phosphate during the extraction step in the sigma enzymatic method for oxalate assay, as determined by ion chromatography [letter] Singh RP. **Clin Chem** 1988 Nov;34(11):2390
Rapid and simple synthesis for the sulphate esters of 6-hydroxy-melatonin and N-acetyl-serotonin. Leone AM, et al. **J Pineal Res** 1988;5(4):367–71
Fixative evaluation and histologic appearance of embryonic rodent tissue. Howard WB, et al. **Stain Technol** 1989 Jan; 64(1):1–8
Importance of a 3-O-sulfate group in a heparin pentasaccharide for antithrombotic activity. Walenga JM, et al. **Thromb Res** 1988 Dec 15;52(6):553–63
Radiographic examination of eyes fixed in Zenker's solution. Davidson HJ, et al. **Vet Pathol** 1989 Jan;26(1):83–5

ADMINISTRATION & DOSAGE

Blood serum vitamin E and A levels during peroral therapy of periodontal diseases with zinc sulphate. Cerná H, et al.
Acta Univ Palacki Olomuc Fac Med 1988;119:187–93
Long-term feeding of high zinc sulfate diets to lactating and gestating dairy cows. Miller WJ, et al. **J Dairy Sci** 1989 Jun;72(6):1499–508
The effect of low sulfate concentrations on the glycosaminoglycan synthesis in anatomically intact articular cartilage of the mouse. van der Kraan PM, et al. **J Orthop Res** 1989;7(5):645–53
Time-dependent changes in plasma levels of cationic electrolytes produced by hypertonic solutions of low potent substance intraperitoneally administered to rats. Yamazaki N, et al. **J Toxicol Sci** 1988 Aug;13(3):167–77
Evaluation of intravesical alum irrigation for massive bladder hemorrhage. Takashi M, et al. **Urol Int** 1988;43(5):286–8
[Peroral administration of zinc sulfate to pregnant cows and its effect on selected metabolic indicators in the dam-calf lineage] Struháriková J, et al. **Vet Med (Praha)** 1989 Apr; 34(4):193–202 (Eng. Abstr.) **(Slo)**

ADVERSE EFFECTS

Respiratory health effects associated with ambient sulfates and ozone in two rural Canadian communities. Stern B, et al. **Environ Res** 1989 Jun;49(1):20–39
Influence of sulfate in drinking water on mouse reproduction during two parities. Andres CJ, et al. **J Anim Sci** 1989 May;67(5):1313–7
The hypocalcemic effect of inorganic sulfate infusions. Cole DE, et al. **Nephron** 1989;53(1):78–80
[Persulfate asthma in hairdressers] Pankow W, et al.
Pneumologie 1989 Mar;43(3):173–5 (Eng. Abstr.) **(Ger)**

ANALYSIS

Assay of inorganic sulfate in biologic fluids by nonsuppressed (single-column) ion chromatography. Morris ME, et al.
Anal Biochem 1988 Jul;172(1):16–21
Distribution of 35S-sulfate within the transseptal ligament of the mouse. Johnson RB. **Anat Rec** 1989 Feb;223(2):121–7
Energy dispersive X-ray microanalysis of sulfated glycosaminoglycans in cartilage matrix stained with alcian blue 8GX. Módis L, et al. **Basic Appl Histochem** 1988; 32(4):415–28
Ultrastructural identification of sulphated glycoconjugates in the Golgi apparatus in human colonic absorptive cells. Malchiodi Albedi F, et al. **Histochemistry** 1989;92(1):73–9
Detection of pentachlorophenol and its glucuronide and sulfate conjugates in fish bile and exposure water. Stehly GR, et al. **J Environ Sci Health [B]** 1988 Aug;23(4):355–66
Quantification of the sulfates of 16 alpha-hydroxy androgens that are possible precursors of estriol-3-sulfate in human breast cyst fluid. Raju U, et al. **Steroids** 1987 Oct–Dec; 50(4–6):559–74

ANTAGONISTS & INHIBITORS

The effect of beta 2-glycoprotein I on the dextran sulfate and sulfatide activation of the contact system (Hageman factor system) in the blood coagulation. Schousboe I, et al. **Int J Biochem** 1988;20(8):787–92

BIOSYNTHESIS

Sulfation reactions of the epidermis. Epstein EH, et al.
Ann N Y Acad Sci 1988;548:97–101 (30 ref.)

BLOOD

Inhibition of glycosaminoglycan synthesis in anatomically intact rat patellar cartilage by paracetamol-induced serum sulfate depletion. van der Kraan PM, et al.
Biochem Pharmacol 1988 Oct 1;37(19):3683–90
Temperature dependence of anion transport in the human red blood cell. Glibowicka M, et al.
Biochim Biophys Acta 1988 Dec 22;946(2):345–58
Inhibition of inorganic anion transport across the human red blood cell membrane by chloride-dependent association of dipyridamole with a stilbene disulfonate binding site on the band 3 protein. Legrum B, et al.
Biochim Biophys Acta 1989 Feb 27;979(2):193–207
Chloride mediated inhibition of the phosphate and the sulfate transport by dipyridamole in human erythrocyte ghosts. Renner M, et al. **FEBS Lett** 1988 Sep 26;238(1):77–81
[Free and sulfoconjugated plasma catecholamines in premature infants and mature newborn infants after birth] Schwab KO, et al. **Monatsschr Kinderheilkd** 1989 Jan; 137(1):28–32 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Separation and indirect detection of alkyl sulfonates and sulfates. Pietrzyk DJ, et al. **J Chromatogr Sci** 1989 Aug; 27(8):485–90

METABOLISM

Effects of thyroid hormones on cartilage sulphation in sex-linked dwarf chickens. Hoshino S, et al.
Acta Endocrinol (Copenh) 1989 Jul;121(1):107–11
Sulphate and methionine as sulphur sources for cysteine and cephalosporin C synthesis in Cephalosporium acremonium. Lewandowska M, et al. **Acta Microbiol Pol** 1988; 37(1):17–26
Sulfate transport in human lung fibroblasts (IMR-90): effect of pH and anions. Elgavish A, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C486–94
Glucocorticoid inhibition of Na-SO4 transport by chick renal brush-border membranes. Renfro JL, et al.
Am J Physiol 1989 Jun;256(6 Pt 2):R1176–83
Use of a three-stage continuous culture system to study the effect of mucin on dissimilatory sulfate reduction and methanogenesis by mixed populations of human gut bacteria. Gibson GR, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2750–5
Characteristics of the sulfation of N-linked oligosaccharides in vesicles from Dictyostelium discoideum: in vitro sulfation of lysosomal enzymes. Lacoste CH, et al.
Arch Biochem Biophys 1989 Sep;273(2):505–15
Characterization of sulfate transport in Desulfovibrio desulfuricans. Cypionka H. **Arch Microbiol** 1989; 152(3):237–43
Alterations in the sialylation and sulfation of secreted mouse

thyrotropin in primary hypothyroidism. DeCherney GS, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):755–62

Enzymatic sulfation of salivary mucins: structural features of 35S-labeled oligosaccharides. Slomiany BL, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):61–7

A sulphate metabolizing centre in Euglena mitochondria. Saidha T, et al. **Biochem J** 1988 Jul 15;253(2):533–9

Effect of glutathione depletion on sulfate activation and sulfate ester formation in rats. Gregus Z, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4307–12

Effect of n-butyrate on the synthesis of sulfated glycosaminoglycans and hyaluronate by rat liver fat-storing cells (Ito cells). Gressner AM, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3771–6

Effect of D- or L-methionine and cysteine on the growth inhibitory effects of feeding 1% paracetamol to rats. McLean AE, et al. **Biochem Pharmacol** 1989 Jan 15; 38(2):347–52

Sulphation and glucuronidation of paracetamol in human liver: assay conditions. Pacifici GM, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4405–7

Translocation of nucleotide sugars and nucleotide sulphate across membranes of the endoplasmic reticulum and Golgi apparatus. Milla M, et al. **Biochem Soc Trans** 1989 Jun; 17(3):447–8

A differential scanning calorimetric study of the binding of sulfate ion and of Cibacron blue F3GA to yeast phosphoglycerate kinase. Hu CQ, et al. **Biochemistry** 1989 Jan 24;28(2):813–8

Secretion of 35SO4-labeled proteins from isolated rat hepatocytes. von Würtemberg MM, et al. **Biochemistry** 1989 May 2;28(9):4088–93

Taurine and glycine conjugation and sulfation of lithocholate in primary hepatocyte cultures. Galle PR, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):250–3

Sulphation causes heterogeneity of gastric mucins. van Beurden-Lamers WM, et al. **Biochim Biophys Acta** 1989 Mar 24;990(3):232–9

Biosynthesis of sulfated proteoglycans in amphibian embryonal cells. Løvtrup-Rein H. **Biosci Rep** 1989 Apr; 9(2):213–22

Effect of dose on the glucuronidation and sulphation kinetics of diflunisal in man: single dose studies. Loewen GR, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):31–9

Binding of heparin to antithrombin III: a chemical proof of the critical role played by a 3-sulfated 2-amino-2-deoxy-D-glucose residue. Petitou M, et al. **Carbohydr Res** 1988 Aug 15;179:163–72

4-(2-amino-1-methylimidazo[4,5-b]pyrid-6-yl)phenyl sulfate—a major metabolite of the food mutagen 2-amino-1-methyl-6- phenylimidazo[4,5-b]pyridine (PhIP) in the rat. Alexander J, et al. **Carcinogenesis** 1989 Aug;10(8):1543–7

The role of N-sulfation in the N-hydroxy-2-acetylaminofluorene-mediated outgrowth of diethylnitrosamine-initiated hepatocytes to gamma-glutamyltranspeptidase-positive foci in male rat liver. Kroese ED, et al. **Carcinogenesis** 1988 Nov; 9(11):1953–8

Studies on the turnover and metabolic fate of extracellular matrix components. Markson Y, et al. **Cell Mol Biol** 1988; 34(4):419–37

Sulfate transport in toad skin: evidence for mitochondria-rich cell pathways in common with halide ions. Larsen EH, et al. **Comp Biochem Physiol [A]** 1988;90(4):709–14

Transport of sulfate and phosphate in small intestine and renal proximal tubule: methods and basic properties. Murer H. **Comp Biochem Physiol [A]** 1988;90(4):749–55 (56 ref.)

A study of sulphate transport by lactating rat mammary tissue slices: evidence for anion exchange. Shennan DB. **Comp Biochem Physiol [A]** 1989;92(1):145–50

Differential regulation of glycoprotein sulfation and fucosylation during growth of Dictyostelium discoideum. Tschursin E, et al. **Differentiation** 1989 Mar;40(1):1–9

Sulfation of acetaminophen in isolated rat hepatocytes. Relationship to sulfate ion concentrations and intracellular levels of 3′-phosphoadenosine-5′-phosphosulfate. Sweeny DJ, et al. **Drug Metab Dispos** 1988 Sep-Oct;16(5):712–5

D-penicillamine metabolism: in vitro studies of S-oxidation mechanisms. Pilkington AE, et al. **Drug Metabol Drug Interact** 1988;6(1):85–93

Differential incorporation of sulfate into the chondroitin chain and complex carbohydrate chains of human thyroglobulin: studies in normal and neoplastic thyroid tissue. Schneider AB, et al. **Endocrinology** 1989 Jan; 124(1):356–62

Interrelated regulation of sulphur-containing amino-acid biosynthetic enzymes and folate-metabolizing enzymes in Aspergillus nidulans. Nadolska-Lutyk J, et al. **Eur J Biochem** 1989 Apr 15;181(1):231–5

The SO4•– -induced oxidation of 1,3,6-trimethyluracil and 1,3-dimethylthymine by potassium peroxodisulphate and oxygen in aqueous solution: an interesting contrast. von Sonntag C, et al. **Free Radic Res Commun** 1989; 6(2–3):111–2

Chemical N-desulfation of heparin negates its ability to capacitate bovine spermatozoa. Miller DJ, et al. **Gamete Res** 1989 Aug;23(4):451–65

Cupric oxide needles for grazing cattle consuming low-copper, high-molybdenum forage and high-sulfate water [published erratum appears in J Anim Sci 1989 Apr;67(4):1101] Cameron HJ, et al. **J Anim Sci** 1989 Jan; 67(1):252–61

Occurrence of sulphate-reducing bacteria in human faeces and the relationship of dissimilatory sulphate reduction to methanogenesis in the large gut. Gibson GR, et al. **J Appl Bacteriol** 1988 Aug;65(2):103–11

Competition for hydrogen between sulphate-reducing bacteria and methanogenic bacteria from the human large intestine. Gibson GR, et al. **J Appl Bacteriol** 1988 Sep; 65(3):241–7

Cytochrome components of nitrate- and sulfate-respiring Desulfovibrio desulfuricans ATCC 27774. Liu MC, et al. **J Bacteriol** 1988 Dec;170(12):5545–51

Undersulfated heparan sulfate in a Chinese hamster ovary cell mutant defective in heparan sulfate N-sulfotransferase. Bame KJ, et al. **J Biol Chem** 1989 May 15;264(14):8059–65

Characterization of a thyroid sulfotransferase responsible for the 3-O-sulfation of terminal beta-D-galactosyl residues in N-linked carbohydrate units. Kato Y, et al. **J Biol Chem** 1989 Feb 25;264(6):3364–71

Biosynthesis of heparin. O-sulfation of the antithrombin-binding region. Kusche M, et al. **J Biol Chem** 1988 Oct 25;263(30):15474–84

Sulfation of rat apolipoprotein E. Gebicke-Haerter PJ, et al. **J Neurochem** 1989 Sep;53(3):912–6

Metabolism of functional groups modifying the CNS myelin-associated glycoprotein. Toews AD, et al. **J Neurochem** 1988 Nov;51(5):1646–50

In vitro DNA binding of 2-amino-3-methylimidazo(4,5-f)[5-3H]quinoline (IQ) is modulated by sulfotransferase and sulfate levels. Lodovici M, et al. **Mutat Res** 1989 Jul;223(3):321–4

A region of a cyanobacterial genome required for sulfate transport. Green LS, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1949–53

Sulfation of tyrosine residues increases activity of the fourth component of complement. Hortin GL, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1338–42

The determination of kinetic parameters for carrier-mediated transport of non-labelled substrate analogues: a general method applied to the study of divalent anion transport in placental membrane vesicles. Deves R, et al. **Proc R Soc Lond [Biol]** 1989 Jun 22;237(1286):85–97

A new form of asymmetry in epithelia: kinetics of apical and basal sulphate transport in human placenta. Bustamante JC, et al. **Q J Exp Physiol** 1988 Nov;73(6):1013–6

The inhibition by chlorate of the sulphation of polyethyleneglycol in the isolated perfused guinea pig liver. Roy AB, et al. **Xenobiotica** 1988 Sep;18(9):1049–55

[Effect of innervation disorders on sulfate and phosphate incorporation into the mineralized tissues of the teeth and jaw bones] Varava GN, et al. **Stomatologiia (Mosk)** 1988 Sep-Oct;67(5):6–8 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Insulin-like growth factor I increase glomerular filtration rate and renal plasma flow in man. Guler HP, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):101–6

Studies on zinc sulphate microcapsules (1): Microencapsulation and in vitro dissolution kinetics. Oner L, et al. **J Microencapsul** 1988 Jul-Sep;5(3):219–23

Studies on zinc sulphate microcapsules (2): Application of factorial design. Oner L, et al. **J Microencapsul** 1988 Jul-Sep;5(3):225–9

Sulfate homeostasis. I. Effect of salicylic acid and its metabolites on inorganic sulfate in rats. Morris ME, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):945–9

Combined hepatic arterial-portal venous and hepatic arterial-hepatic venous perfusions to probe the abundance of drug metabolizing activities: perihepatic venous O-deethylation activity for phenacetin and periportal sulfation activity for acetaminophen in the once-through rat liver preparation. Pang KS, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):690–700

Distribution of inorganic sulfate between plasma, liver, and bile. Williams JA, et al. **Life Sci** 1974 Aug 15;15(4):741–9

Contraluminal para-aminohippurate (PAH) transport in the proximal tubule of the rat kidney. IV. Specificity: mono- and polysubstituted benzene analogs. Ullrich KJ, et al. **Pflugers Arch** 1988 Dec;413(2):134–46

PHARMACOLOGY

Metal-inducible pathology in the liver, pancreas, and kidney of transgenic mice expressing SV40 early region genes. Dyer KR, et al. **Am J Pathol** 1989 Aug;135(2):401–10

Influence of molybdenum and sulfur on copper metabolism in sheep: comparison of elemental sulfur and sulfate. Lamand M. **Ann Rech Vet** 1989;20(1):103–6

Effect of sulphate on glutamate synthesis by intact spinach (Spinacia oleracea) chloroplasts. Dumas R, et al. **Biochem J** 1989 May 1;259(3):769–74

Inhibition of 5 alpha-reductase activity in human skin by zinc and azelaic acid. Stamatiadis D, et al. **Br J Dermatol** 1988 Nov;119(5):627–32

The protective effect of zinc on gastric ulceration caused by ethanol treatment. Rodrigues LE, et al. **Braz J Med Biol Res** 1989;22(1):41–50

Effect of sulfate concentration on glycosaminoglycan synthesis in explant cultures of bovine articular cartilage. Brand HS, et al. **Cell Biol Int Rep** 1989 Feb;13(2):153–62

A possible protective mechanism by zinc sulfate against ethanol-induced gastric ulceration in rats. Chen SM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;41(5):323–8

Influence of sulfated carbohydrates on the accessibility of CD4 and other CD molecules on the cell surface and implications for human immunodeficiency virus infection. Thiele B, et al. **Eur J Immunol** 1989 Jun;19(6):1161–4

Effect of oral zinc sulphate on serum lipids and lipoproteins in human subjects. Shah DR, et al. **Indian J Physiol Pharmacol** 1988 Jan-Mar;32(1):47–50

The effects of an occlusive zinc medicated dressing on the bacterial flora in excised wounds in the rat. Söderberg T, et al. **Infection** 1989 Mar-Apr;17(2):81–5

Modulation of alcohol dehydrogenase isoenzyme levels in Zymomonas mobilis by iron and zinc. Mackenzie KF, et al. **J Bacteriol** 1989 Feb;171(2):1063–7

Effect of sulfate on calcium and magnesium homeostasis following urinary diversion. McDougal WS, et al. **Kidney Int** 1989 Jan;35(1):105–15

Biological deactivation and single-strand breakage of plasmid DNA by photosensitization using tris(2,2′-bipyridyl)ruthenium(II) and peroxydisulfate. Aboul-Enein A, et al. **Photochem Photobiol** 1988 Jul; 48(1):27–34

[Influence of zinc sulfate on myocardial slow response electrical activity and ouabain-induced oscillatory afterpotential] Ma X, et al. **Yao Hsueh Hsueh Pao** 1988 Jun;23(6):401–5 (Eng. Abstr.) **(Chi)**

[Changes in the activity of plasma renin and aldosterone induced by a pattern of increasing administration of zinc sulphate in normotensive individuals] Calero M, et al. **Med Clin (Barc)** 1989 May 20;92(19):729–32 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Activation of phospholipase D by the fucose-sulfate glycoconjugate that induces an acrosome reaction in spermatozoa. Domino SE, et al. **J Biol Chem** 1989 Jun 5;264(16):9412–9

POISONING

Chronic chromium poisoning with dermatitis in the leather industry. Das M, et al. **Contact Dermatitis** 1989 Mar; 20(3):221–2

Self-induced abortion and an elevated anion gap. Newell GC. **Hosp Pract [Off]** 1989 Apr 30;24(4A):33, 36

[Experimental study of the effect of rubidium on the cardiovascular system] Akinfieva TA, et al. **Gig Tr Prof Zabol** 1989;(3):16–20 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Pregnancy in a woman with Wilson's disease treated with zinc. Lao TT, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun;14(2):167–9

Effect of foot paring of sheep affected with footrot on response to zinc sulphate/sodium lauryl sulphate foot bathing treatment. Casey RH, et al. **Aust Vet J** 1988 Aug; 65(8):258–9

Thiamine and zinc in prevention or therapy of lead intoxication. Flora SJ, et al. **J Int Med Res** 1989 Jan-Feb; 17(1):68–75

A controlled trial on utility of oral zinc supplementation in acute dehydrating diarrhea in infants. Sachdev HP, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov-Dec;7(6):877–81

[Treatment of pinworms (letter)] Lomholt G. **Ugeskr Laeger** 1989 Aug 28;151(35):2216 **(Dan)**

[Nephrotoxicity of sodium fluoride. Effect of aluminum sulfate] Kessabi M, et al. **J Toxicol Clin Exp** 1985 Jul-Aug; 5(4):239–47 (Eng. Abstr.) **(Fre)**

[Treatment of Wilson's disease with Zincteral] Kuczyńska-Zardzewiały A, et al. **Neurol Neurochir Pol** 1988 May-Jun;22(3):211–5 (Eng. Abstr.) **(Pol)**

[A decrease in the acute toxicity of ethanol produced by zinc sulfate] Kampov-Polevoĭ AB, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):317–8 (Eng. Abstr.) **(Rus)**

[Bladder irrigation with alum solution for the control of severe bladder hemorrhage (letter)] Castillo O. **Rev Med Chil** 1988 May;116(5):484–5 **(Spa)**

TOXICITY

[Substantiation of the maximum permissible level of tin sulfate in the air of populated regions] Bessmertnyĭ AN, et al. **Gig Sanit** 1988 Sep;(9):62–4 **(Rus)**

[Hygienic characteristics of small doses of sodium sulfate after its inhalation] Denisov IuN, et al. **Gig Sanit** 1989 Apr; (4):69–71 **(Rus)**

[Effect of tin sulfate on various indicators of lipid metabolism in pregnant albino rats] Grin' NV, et al. **Gig Sanit** 1989 Mar;(3):94–5 **(Rus)**

[Substantiation of maximum permissible levels of antimony trioxide and pentasulfate in the atmospheric air of inhabitated places] Grin' NV, et al. **Gig Sanit** 1989 Apr; (4):68–9 **(Rus)**

URINE

Gas chromatographic determination of sulfuric acid and application to urinary sulfate. Masuoka N, et al. **Acta Med Okayama** 1988 Oct;42(5):247–52

Adaptability of marine teleost renal inorganic sulfate excretion: evidence for glucocorticoid involvement. Renfro

JL. **Am J Physiol** 1989 Sep;257(3 Pt 2):R511–6
Urinary excretion of sulfate and glucuronate conjugates in a free living population of adult males. Murano PS, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):13–6
Direct determination of four sulfates and seven glucuronides of 17-oxosteroids in urine by fluorescence "high-performance" liquid chromatography. Iwata J, et al. **Clin Chem** 1989 May;35(5):794–9
Maternal and neonatal urinary excretion of sulfate and glucuronide ritodrine conjugates. Brashear WT, et al. **Clin Pharmacol Ther** 1988 Dec;44(6):634–41
Determination of phosphate, sulfate and oxalate in urine by ion chromatography. Singh RP, et al. **J Chromatogr** 1988 Dec 9;433:373–6

SULFATES, INORGANIC see **SULFATES**

SULFATES, ORGANIC see **SULFURIC ACIDS**

SULFATHIAZOLES

Influence of relative humidity on the adhesive properties of a model interactive system. Kulvanich P, et al. **J Pharm Pharmacol** 1988 Jul;40(7):453–8

ADMINISTRATION & DOSAGE

Egg albumin microspheres containing sulphamethizole. Brophy MR, et al. **J Microencapsul** 1984 Apr–Jun; 1(2):157–68

ADVERSE EFFECTS

Death from drug-induced hemolytic anemia. Taraszewski R, et al. **Postgrad Med** 1989 May 15;85(7):79–80, 84
[Evaluation of sensitizing properties of preparations containing silver salt of sulfathiazole (cream, spray)] Stożkowska W, et al. **Przegl Dermatol** 1988 Jul–Aug; 75(4):320–2 (Eng. Abstr.) **(Pol)**

ANALYSIS

Spectrometric and thin-layer chromatographic quantification of sulfathiazole residues in honey. Sherma J, et al. **J Chromatogr** 1989 Jan 20;463(1):229–33
Polymorphism of sulfathiazole. Anwar J, et al. **J Pharm Sci** 1989 Apr;78(4):337–42
[Galenic and spectral study of sodium sulfathiazole coated with aquateric] Joachim J, et al. **J Pharm Belg** 1988 Sep–Oct;43(5):349–58 (Eng. Abstr.) **(Fre)**

DIAGNOSTIC USE

[A new device for the gastric emptying test—a sulfamethizole capsule food method] Asada T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):11–8 (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

Effect of the interaction of drug–beta-cyclodextrin complex with bile salts on the drug absorption from rat small intestinal lumen. Nakanishi K, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan;37(1):211–4

PHARMACOLOGY

The influence of ofloxacin versus trimethoprim–sulfamethoxazole on the aerobic flora in granulocytopenic subjects. Bartoloni A, et al. **J Chemother** 1989 Apr;1(2):91–4

THERAPEUTIC USE

Chemotherapeutic trial of pulmonary sarcoidosis: a possible etiotropic treatment. Giobbi A, et al. **Arch Monaldi Mal Torace** 1987 Sep–Oct;42(5):415–25
Peritonsillar abscess in an infant. Zohar S, et al. **Int J Pediatr Otorhinolaryngol** 1988 Sep;15(3):291–4

SULFATIDATE SULFATASE see **CEREBROSIDE SULFATASE**

SULFATIDES

Thermotropic behavior of mixtures of glycosphingolipids and phosphatidylcholine: effect of monovalent cations on sulfatide and galactosylceramide. Rintoul DA, et al. **Biochemistry** 1989 Jan 10;28(1):26–31

ANALYSIS

Monoclonal antibody to embryonic CNS antigen A2B5 provides evidence for the involvement of membrane components at sites of Alzheimer degeneration and detects sulfatides as well as gangliosides. Majocha RE, et al. **J Neurochem** 1989 Sep;53(3):953–61

ANTAGONISTS & INHIBITORS

The effect of beta 2-glycoprotein I on the dextran sulfate and sulfatide activation of the contact system (Hageman factor system) in the blood coagulation. Schousboe I, et al. **Int J Biochem** 1988;20(8):787–92

BIOSYNTHESIS

Warfarin administration reduces synthesis of sulfatides and other sphingolipids in mouse brain. Sundaram KS, et al. **J Lipid Res** 1988 Nov;29(11):1475–9

CHEMICAL SYNTHESIS

Synthesis of pyrene derivatives of cerebroside sulfate and their use for determining arylsulfatase A activity. Marchesini S, et al. **Biochim Biophys Acta** 1989 Mar 14; 1002(1):14–9

ISOLATION & PURIFICATION

A sulfated glucosylceramide from rat kidney. Iida N, et al. **J Biol Chem** 1989 Apr 5;264(10):5974–80

METABOLISM

Sulfated glycolipids and cell adhesion. Roberts DD, et al. **Arch Biochem Biophys** 1988 Dec;267(2):405–15 (88 ref.)
Correlation of the dispersion state of pyrene cerebroside sulfate and its uptake and degradation by cultured cells. Viani P, et al. **Biochim Biophys Acta** 1989 Mar 14; 1002(1):20–7
Association of elevated sulfatides and sulfotransferase activities with human renal cell carcinoma. Sakakibara N, et al. **Cancer Res** 1989 Jan 15;49(2):335–9
Sulphatides in the frog oviduct: response to estradiol stimulation. Vitaioli L, et al. **Cell Mol Biol** 1988; 34(4):373–82
Interaction of 1-anilinonaphthalene 8-sulfonic acid with interfaces containing cerebrosides, sulfatides and gangliosides. Montich GG, et al. **Chem Phys Lipids** 1988 Nov;49(1–2):111–7
Antistasin, an inhibitor of coagulation and metastasis, binds to sulfatide (Gal(3–SO4) beta 1–1Cer) and has a sequence homology with other proteins that bind sulfated glycoconjugates. Holt GD, et al. **J Biol Chem** 1989 Jul 25;264(21):12138–40

SULFATIDOSIS see **LEUKODYSTROPHY, METACHROMATIC**

SULFATION FACTOR see **SOMATOMEDINS**

SULFHYDRASES see under **LYASES**

SULFHYDRYL COMPOUNDS

The reaction of sulfhydryl groups with carbonyl compounds. Wlodek L. **Acta Biochim Pol** 1988;35(4):307–17
Substantia nigra lesions in mercaptopropionic acid induced status epilepticus: a light and electron microscopic study. Towfighi J, et al. **Acta Neuropathol (Berl)** 1989;77(6):612–20
N-iodoacetyltyramine: preparation and use in 125I labeling by alkylation of sulfhydryl groups. Lin CM, et al. **Anal Biochem** 1989 Jun;179(2):389–95
1-p-chlorophenyl-4,4-dimethyl-5-diethylamino-1-penten-3-one hydrobromide, a sulfhydryl-specific compound which reacts irreversibly with protein thiols but reversibly with small molecular weight thiols. Mutus B, et al. **Anal Biochem** 1989 Mar;177(2):237–43
Reaction of low molecular weight aminothiols with o-phthalaldehyde. Puri RN, et al. **Anal Biochem** 1988 Aug 15;173(1):26–32
Radical-induced degradation of organic halogen and sulfur compounds in oxygenated aqueous solutions. Asmus KD, et al. **Basic Life Sci** 1988;49:67–73
Single-strand cleavage of DNA by Cu(II) and thiols: a powerful chemical DNA-cleaving system. Reed CJ, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1111–7
Fluorescent modification and orientation of myosin sulfhydryl 2 in skeletal muscle fibers. Ajtai K, et al. **Biochemistry** 1989 Mar 7;28(5):2204–10
Flexibility of the myosin heavy chain: direct evidence that the region containing SH1 and SH2 can move 10 A under the influence of nucleotide binding. Huston EE, et al. **Biochemistry** 1988 Dec 13;27(25):8945–52
Reactivity of the thiol groups of Escherichia coli phosphofructo-1-kinase. Banas T, et al. **Biochim Biophys Acta** 1988 Nov 23;957(2):178–84
Involvement of thiol groups in the function of the dipeptide/proton cotransport system in rabbit renal brush-border membrane vesicles. Miyamoto Y, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):25–31
Distribution of distances in thiopeptides by fluorescence energy transfer and frequency-domain fluorometry. Wiczk WM, et al. **Biophys Chem** 1988 Oct;32(1):43–9
Thermodynamic analysis of the reaction of phosphoramide mustard with protector thiols. Seitz DE, et al. **Cancer Res** 1989 Jul 1;49(13):3525–8
Covalent binding of 4-nitrobenzyl mercaptan S-sulfate to the sulfhydryl groups of hepatic cytosolic proteins and bovine serum albumin with mixed disulfide bond formation. Miwa K, et al. **Chem Biol Interact** 1988;68(1–2):27–38
ESR investigations of the reactions of radiation-produced thiyl and DNA peroxyl radicals: formation of sulfoxyl radicals. Sevilla MD, et al. **Free Radic Res Commun** 1989; 6(2–3):99–102
Temperature-absorption transition spectroscopy: a technique for estimating the relative charge densities on thiolated phosphate groups in nucleic acid analogues. Das MC. **Indian J Biochem Biophys** 1989 Feb;26(1):9–13
The thiol-activated toxin streptolysin O does not require a thiol group for cytolytic activity. Pinkney M, et al. **Infect Immun** 1989 Aug;57(8):2553–8
Pneumolysin, the thiol-activated toxin of Streptococcus pneumoniae, does not require a thiol group for in vitro activity. Saunders FK, et al. **Infect Immun** 1989 Aug; 57(8):2547–52
The role of sulphur peptide functions in free radical transfer: a pulse radiolysis study. Pritz WA, et al. **Int J Radiat Biol** 1989 Apr;55(4):539–56
Photocross-linking from dinitrophenylated SH1 in myosin head. II. Cross-linked site on 50-kDa fragment. Muno D, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):427–32
Heat-induced thiol-disulfide interchange reaction on the third component of human complement, C3. Seya T, et al. **J Biochem (Tokyo)** 1988 May;103(5):792–6
Thiol-mediated oxidation of nonphenolic lignin model compounds by manganese peroxidase of Phanerochaete chrysosporium. Wariishi H, et al. **J Biol Chem** 1989 Aug 25;264(24):14185–91
Charge calculations in molecular mechanics 7: application to polar pi systems incorporating nitro, cyano, amino, C=S and thio substituents. Abraham RJ, et al. **J Comput Aided Mol Des** 1989 Jun;3(2):175–87
Thiol-sensitive mast cell lines derived from mouse bone marrow respond to a mast cell growth-enhancing activity different from both IL-3 and IL-4. Hültner L, et al. **J Immunol** 1989 May 15;142(10):3440–6
Specific [3H]SCH23390 binding to dopamine D1 receptors in cerebral cortex and neostriatum: role of disulfide and sulfhydryl groups. Dewar KM, et al. **J Neurochem** 1989 Feb;52(2):472–82
Importance of thiols in the repair mechanisms of DNA containing AP (apurinic or apyrimidinic) sites. Bailly V, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9489–96
A simple method for the introduction of thiol group at 5'-termini of oligodeoxynucleotides. Gaur RK, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4404
SH vibrational frequency and hydrogen bond in biological thiols: a critical analysis. Rosei MA. **Physiol Chem Phys Med NMR** 1988;20(3):189–91
Biological efficacy of thermal neutrons using Na2(10)B12H11SH studied in vivo on B-16 mouse melanoma. Spryshkova R, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):213–5
[The possible participation of protein SH groups and aldehydes in radiation damage of cell membranes] Proskuriakov SIa, et al. **Radiobiologiia** 1989 Jan–Feb; 29(1):13–6 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Dose-response study of oral 2,3-dimercaptosuccinic acid in children with elevated blood lead concentrations. Graziano JH, et al. **J Pediatr** 1988 Oct;113(4):751–7

ANALYSIS

Measurement of biological disulfides by postcolumn sulfitolysis following separation by HPLC. Crawhall JC, et al. **Anal Biochem** 1988 Aug 1;172(2):479–83
Use of 4-(6-methylnaphthalen-2-yl)-4-oxobut-2-enoic acid as a reagent for the spectrophotometric and fluorimetric determination of aliphatic thiol drugs. Cavrini V, et al. **Analyst** 1988 Sep;113(9):1447–52
Fluorogenic reagent for thiols: 4-(N,N-dimethylaminosulphonyl)-7-fluoro-2,1,3-benzoxadiazole. Toyo'oka T, et al. **Analyst** 1989 Apr; 114(4):413–9
Oxy radical-initiated protein S-thiolation and enzymic dethiolation. Thomas JA, et al. **Basic Life Sci** 1988;49:365–8
Glutamic acid-88 is close to SH-1 in the tertiary structure of myosin subfragment 1. Lu RC, et al. **Biochemistry** 1989 May 30;28(11):4826–9
One free sulfhydryl group of plasma fibronectin becomes titratable upon binding of the protein to solid substrates. Narasimhan C, et al. **Biochemistry** 1988 Jul 12; 27(14):4970–3
Sulfhydryl groups of an extramitochondrial acetyl-CoA hydrolase from rat liver. Nakanishi Y, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):209–13
High-performance liquid chromatography/chemiluminescence determination of biological thiols with N-[4-(6-dimethylamino-2-benzofuranyl)-phenyl]maleimide. Nakashima K, et al. **Biomed Chromatogr** 1989 Jan;3(1):39–42
A flow cytometric assay for intracellular nonprotein thiols using mercury orange. O'Connor JE, et al. **Cytometry** 1988 Nov;9(6):529–32
Sulfhydryl groups of the uncoupling protein of brown adipose tissue mitochondria. Distinction between sulfhydryl groups of the H+ channel and the nucleotide binding site. Ježek P, et al. **Eur J Biochem** 1989 Jul 15; 183(1):89–95
Acute inactivation of tryptophan hydroxylase by amphetamine analogs involves the oxidation of sulfhydryl sites. Stone DM, et al. **Eur J Pharmacol** 1989 Mar 7; 172(1):93–7
Identification of thiol groups and a disulfide crosslink site in bovine myelin proteolipid protein. Shaw SY, et al. **FEBS Lett** 1989 Jul 3;250(2):306–10
Inhibition of platelet behaviour by feverfew: a mechanism of action involving sulphydryl groups. Heptinstall S, et al. **Folia Haematol (Leipz)** 1988;115(4):447–9

The effect of experimental parameters on the cold-vapor mercury atomic absorption determination. Speciation analysis of sulfhydryl-bound mercury. Daniels RS, et al. **J Anal Toxicol** 1989 Jul-Aug;13(4):214-7

Determination of the intracellular protein thiol distribution of hepatocytes using monobromobimane derivatisation of intact cells and isolated subcellular fractions. Cotgreave IA, et al. **J Biochem Biophys Methods** 1988 Aug; 16(4):247-54

Detection of trace levels of thiodiglycol in blood, plasma and urine using gas chromatography-electron-capture negative-ion chemical ionisation mass spectrometry. Black RM, et al. **J Chromatogr** 1988 Sep 30;449(1):261-70

Separation of thiols on Spheron Ara activated with 2-nitrophenyl-hydrazonopropandinitrile ligand. Podhradský D, et al. **J Chromatogr** 1988 Nov 25;455:344-8

A method for quantitative analysis of flavor-tainting alkylphenols and aromatic thiols in fish. Heil TP, et al. **J Environ Sci Health [B]** 1988 Oct;23(5):475-88

A continuous quantitative detection method for total mercaptans, organic sulphides, H2S, and CS2 for odouriferous emissions. Vanderstraeten P, et al. **JAPCA** 1988 Oct;38(10):1271-4

Rat hepatic and renal 5'-deiodination of rT3 during fasting: supportive role of intermediate Mr cytosolic non-glutathione thiol cofactor and NADPH. Iwase K, et al. **Metabolism** 1989 Mar;38(3):230-7

Effects of benflurou metabolites on glycolysis and level of thiol groups in P388 and Ehrlich ascites cells. Miko M, et al. **Neoplasma** 1989;36(3):305-15

Thiol reduction of 3'-azidothymidine to 3'-aminothymidine: kinetics and biomedical implications. Handlon AL, et al. **Pharm Res** 1988 May;5(5):297-9

Measurement of protein thiols after heat shock using 3-(-N-maleimido-propionyl) biocytin labeled proteins separated by SDS-PAGE and electroluted onto nitrocellulose: thiol blotting. Freeman ML, et al. **Radiat Res** 1989 Feb;117(2):326-33

4-Hydroxyestradiol is conjugated with thiols primarily at C-2: evidence from regiospecific displacement of tritium by rat liver microsomes or tyrosinase. Jellinck PH. **Steroids** 1988 Mar-Apr;51(3-4):395-409

High resolution 10B and 11B nuclear magnetic resonance (NMR) spectroscopy of Na2B12H11SH impurities and metabolites. Samsel EG, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):140-1

Reduction of hepatic and renal nonprotein sulfhydryl content and increased toxicity of rubratoxin B in the Syrian hamster and Mongolian gerbil. Engelhardt JA, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):85-92

Relative contributions of protein sulfhydryl loss and lipid peroxidation to allyl alcohol-induced cytotoxicity in isolated rat hepatocytes. Hormann VA, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):375-84

Concentration-dependent depletion of non-protein sulfhydryl (NPSH) content in lung, heart and liver tissue of rats and mice after acute inhalation exposure to butadiene. Deutschmann S, et al. **Toxicol Lett** 1989 Feb; 45(2-3):175-83

Labile disulfide bonds and free thiol groups in human IgG. IV. Use of the "sigma S" value for postoperative monitoring of gynaecological malignant tumors. Schauenstein E, et al. **Wien Klin Wochenschr** 1989 Feb 3; 101(3):117-9

[SH-groups of NAD kinase from the rabbit liver] Bulygina ER, et al. **Biokhimiia** 1988 Sep;53(9):1557-62 (Eng. Abstr.) **(Rus)**

[Changes in the redox potential and the number of accessible sulfhydryl groups in Escherichia coli and Bacillus subtilis cultures during transient processes] Oktiabr'skiĭ ON, et al. **Biokhimiia** 1988 Dec;53(12):2042-50 (Eng. Abstr.) **(Rus)**

[The role of sulfur-containing compounds in the pathogenesis and treatment of chronic nonspecific lung diseases] Solopov VN, et al. **Klin Med (Mosk)** 1988 Jun;66(6):60-3 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

A novel class of "GABAergic" agents: 1-aryl-3-(aminoalkylidene)oxindoles. Sarges R, et al. **J Med Chem** 1989 Feb;32(2):437-44

BIOSYNTHESIS

Effect of calcium channel blocker diltiazem on cytoprotection and prostaglandin and sulfhydryl production by rat gastric epithelial cells. Romano M, et al. **Hepatogastroenterology** 1988 Oct;35(5):249-54

BLOOD

Conformational changes of plasma fibronectin detected upon adsorption to solid substrates: a spin-label study. Narasimhan C, et al. **Biochemistry** 1989 Jun 13; 28(12):5041-6

Effect of methionine loading and endogenous hypermethioninaemia on blood mercaptans in man. Al Mardini H, et al. **Clin Chim Acta** 1988 Aug 15;176(1):83-9

Changes in sulfhydryl compounds in plasma, liver and brain after acute and chronic acetaldehyde administration in rats. Farbiszewski R, et al. **Drug Alcohol Depend** 1988 Oct; 22(1-2):79-82

Ethanol decreases plasma sulphydryls in man: effect of disulfiram. Burgunder JM, et al. **Eur J Clin Invest** 1988 Aug;18(4):420-4

Role of thiols in human peripheral blood natural killer and killer lymphocyte activities. Stacey NH, et al. **Experientia** 1989 Feb 15;45(2):180-1

Toxicity of aromatic thiols in the human red blood cell. Amrolia P, et al. **J Appl Toxicol** 1989 Apr;9(2):113-8

Human serum biotinidase is a thiol-type enzyme. Hayakawa K, et al. **J Biochem (Tokyo)** 1988 May;103(5):773-7

Luminol dependent chemiluminescence and thiol group oxidation provoked by neutrophils is attributable to different oxidizing species. Jenner DE, et al. **J Biolumin Chemilumin** 1987 May;1(3):165-71

Changes in erythrocyte properties during the first hours of life: electron spin resonance of reacting sulfydryl groups. Bracci R, et al. **Pediatr Res** 1988 Sep;24(3):391-5

Sulfhydryl groups and peroxidase-like activity of albumin as scavenger of organic peroxides. Pirisino R, et al. **Pharmacol Res Commun** 1988 Jul;20(7):545-52

[A spectrophotometric method of determining the levels of sulfhydryl groups in blood hemolysates using sodium p-chloromercuribenzoate] Aleshina VD, et al. **Gig Sanit** 1988 Jul;(7):40-1 **(Rus)**

[Thiol compounds and erythrocyte membrane permeability in arterial hypertension] Shulutko BI, et al. **Klin Med (Mosk)** 1988 Oct;66(10):55-7 **(Rus)**

[Status of the antioxidant system and free radical lipid peroxidation in patients with chronic renal failure] Grinshteĭn IuI, et al. **Ter Arkh** 1988;60(6):54-6 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Synthesis and mucolytic-expectorant activity of 3-mercapto-2 oxo 1-pyrrolidinyl acetic acid derivatives. Coppi G, et al. **Boll Chim Farm** 1988 Jun;127(6):148-52

Interactions of thiol-containing androgens with human placental aromatase. Bednarski PJ, et al. **J Med Chem** 1989 Jan;32(1):203-13

Design of novel inhibitors of aminopeptidases. Synthesis of peptide-derived diamino thiols and sulfur replacement analogues of bestatin. Gordon EM, et al. **J Med Chem** 1988 Nov;31(11):2199-211

DIAGNOSTIC USE

99mTC dimercaptosuccinic acid (DMSA) scan in urinary tract infection [letter] Murphy AV, et al. **Arch Dis Child** 1989 May;64(5):760

99mTc dimercaptosuccinic acid (DMSA) scan in patients with established radiological renal scarring. Smellie JM, et al. **Arch Dis Child** 1988 Nov;63(11):1315-9

99mTc dimercaptosuccinic acid (DMSA) scan as first investigation of urinary tract infection. Verber IG, et al. **Arch Dis Child** 1988 Nov;63(11):1320-5

Effect of unilateral vesicoureteric reflux on renal growth and the uptake of 99mTc DMSA by the kidney. An experimental study in the minipig. Godley ML, et al. **Br J Urol** 1989 Apr;63(4):340-7

Technetium-99m pentavalent DMSA imaging detects metastases of poorly differentiated carcinoma of the thyroid. Costa DC, et al. **Clin Nucl Med** 1989 Mar; 14(3):218-21

Renal parenchymal scars in adults. Split function and extent of scars at urography and DMSA scintigraphy. Thomsen HS, et al. **Dan Med Bull** 1989 Apr;36(2):185-8

New brain perfusion imaging agents based on 99mTc-bis(aminoethanethiol) complexes: stereoisomers and biodistribution. Kung HF, et al. **J Med Chem** 1989 Feb;32(2):433-7

Quantitation of renal uptake of technetium-99m DMSA using SPECT. Groshar D, et al. **J Nucl Med** 1989 Feb; 30(2):246-50

Imaging with pentavalent [99mTc]DMSA in patients with medullary cancer of the thyroid [letter] Hilditch TE, et al. **J Nucl Med** 1988 Oct;29(10):1746-7

More on [99mTc](V)DMSA scintigraphy in patients with medullary carcinoma of the thyroid [letter] Mojiminiyi OA, et al. **J Nucl Med** 1989 Aug;30(8):1420

Technetium-99m (v) dimercaptosuccinic acid uptake in patients with head and neck squamous carcinoma: experience in imaging. Watkinson JC, et al. **J Nucl Med** 1989 Feb;30(2):174-80

The use of 99mTc(V)DMSA as imaging for the medullary thyroid carcinoma (MTC). Guerra U, et al. **J Nucl Med Allied Sci** 1988 Oct-Dec;32(4):242-7

99mtechnetium-dimercapto-succinic acid renal scanning and excretory urography in diagnosis of renal scars in children. McLorie GA, et al. **J Urol** 1989 Sep;142(3):790-2

Evaluation of 99mtechnetium-dimercapto-succinic acid renal scans in experimental acute pyelonephritis in piglets. Rushton HG, et al. **J Urol** 1988 Nov;140(5 Pt 2):1169-74

Renal parenchymal damage on DMSA-scintigraphy in pelviureteric obstruction. Kullendorff CM, et al. **Scand J Urol Nephrol** 1989;23(2):127-30

[A clinical study of the influence of percutaneous nephroureterolithotomy on renal function using 99mTc-DMSA renal scintigraphy] Chiba Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep;79(9):1479-87 (Eng. Abstr.) **(Jpn)**

[Studies on the evaluation of renal function in hydronephrosis with 99mTc-DMSA renal uptake—effect of the relief of urinary tract obstruction] Takeda M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1406-12 (Eng. Abstr.) **(Jpn)**

[Visualization of subcutaneous metastases of hypernephroid cancer using 99mTc-dimercaptosuccinic acid] Smirnov IuN, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):63-5 **(Rus)**

[The study of the structure of active center of membrane-bound cytochrome p-450 using 1-naphthoxyalcanthiols] Slyn'ko NM, et al. **Mol Biol (Mosk)** 1988 Jul-Aug;22(4):999-1004 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

The removal of exogenous thiols from proteins by centrifugal column chromatography. Bradshaw TP, et al. **J Biochem Biophys Methods** 1988 Nov;17(3):159-69

METABOLISM

Phosphorylation by casein kinase-2 and reversible alteration of thiol groups: mechanisms of control of ornithine decarboxylase? Flamigni F, et al. **Adv Exp Med Biol** 1988; 250:45-53

In vivo effects of aurothioglucose and sodium thioglucose on rat tissue sulfhydryl levels and plasma sulfhydryl reactivity. Hu ML, et al. **Agents Actions** 1988 Aug; 25(1-2):132-8

The role of thiols in lethal and mutational radiation damage. Sapora O, et al. **Ann Ist Super Sanita** 1989;25(1):115-22

Regulation of rat liver microsomal glutathione S-transferase activity by thiol/disulfide exchange. Aniya Y, et al. **Arch Biochem Biophys** 1989 Apr;270(1):330-4

Reactivity of mitochondrial sulfhydryl groups toward dithionitrobenzoic acid and bromobimanes under oligomycin-inhibited and uncoupling conditions. Freisleben HJ, et al. **Arch Biochem Biophys** 1988 Oct; 266(1):89-97

Mitochondrial sulfhydryl groups under oligomycin-inhibited, aging, and uncoupling conditions: beneficial influence of cardioprotective drugs. Fuchs J, et al. **Arch Biochem Biophys** 1988 Oct;266(1):83-8

Role of sulfhydryl groups in benzoquinone-induced Ca2+ release by rat liver mitochondria. Moore GA, et al. **Arch Biochem Biophys** 1988 Dec;267(2):539-50

Heart mitochondria metabolize 3-methylthiopropionate to CO2 and methanethiol. Scislowski PW, et al. **Arch Biochem Biophys** 1989 Sep;273(2):602-5

A mitochondrial chemiluminescence evoked by a novel mixed copper(II)-cyanide complex/acetaldehyde cyanohydrin chelate: a kinetic analysis suggesting a role for membrane-bound vicinal sulfhydryls. Steele RH, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):125-42

Effect of arsenicals on biliary excretion of endogenous non-protein thiols, mercurials and sulfobromophthalein. Gyurasics A, et al. **Arch Toxicol Suppl** 1989;13:340-2

Interactions of oxygen and sulfhydryls with free radicals in irradiated mammalian cells. Held KD. **Basic Life Sci** 1988; 49:441-8

Thiyl free radical metabolites of thiol drugs and glutathione. Knecht KT, et al. **Basic Life Sci** 1988;49:75-9

Effects of alpha, beta-unsaturated aldehydes on macrophage and neutrophil membrane function, fluidity and sulfhydryl status. Witz G, et al. **Basic Life Sci** 1988;49:849-51

Reaction of Se with SH groups in spectrin is involved in the stabilization of erythrocyte membrane skeleton. Yang FY, et al. **Biochem Int** 1989 Jun;18(6):1085-91

Involvement of thiol transferase- and thioredoxin-dependent systems in the protection of 'essential' thiol groups of ornithine decarboxylase. Flamigni F, et al. **Biochem J** 1989 Apr 1;259(1):111-5

Oxidation state of tissue thiol groups and content of protein carbonyl groups in chickens with inherited muscular dystrophy. Murphy ME, et al. **Biochem J** 1989 Jun 1; 260(2):359-64

Abilities of peroxidases to catalyse peroxidase-oxidase oxidation of thiols. Svensson BE. **Biochem J** 1988 Dec 15; 256(3):757-62

Thiols as myeloperoxidase-oxidase substrates. Svensson BE. **Biochem J** 1988 Jul 15;253(2):441-9

In vivo and in vitro studies of the hepatotoxic effects of 4-chlorophenol in mice. Phornchirasilp S, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):961-72

Urea dependence of thiol-disulfide equilibria in thioredoxin: confirmation of the linkage relationship and a sensitive assay for structure. Lin TY, et al. **Biochemistry** 1989 Jun 13;28(12):5282-7

Kinetics of inactivation of creatine kinase during modification of its thiol groups. Wang ZX, et al. **Biochemistry** 1988 Jul 12;27(14):5095-100

Citrate synthase stabilizes the enethiolate of acetyldithio coenzyme A. Wlassics ID, et al. **Biochemistry** 1989 Feb 21;28(4):1627-33

Mechanism of action of the antimitotic drug 2,4-dichlorobenzyl thiocyanate: alkylation of sulfhydryl group(s) of beta-tubulin. Bai R, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):12-20

Methanethiol and dimethylsulfide formation from 3-methylthiopropionate in human and rat hepatocytes. Blom HJ, et al. **Biochim Biophys Acta** 1988 Nov 18; 972(2):131-6

Phosphate transport protein of rat heart mitochondria: location of its SH-groups and exploration of their environment. Ligeti E, et al. **Biochim Biophys Acta** 1989

Feb 28;973(2):170–5
The role of sulfhydryl groups in sulfobromophthalein transport in rat liver plasma membrane vesicles. Passamonti S, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):294–8
Dynamics of the thiol status of rat spermatozoa during maturation: analysis with the fluorescent labeling agent monobromobimane. Shalgi R, et al. **Biol Reprod** 1989 May; 40(5):1037–45
Influence of pH on the modification of thiols by carbamoylating agents and effects on glutathione levels in normal and neoplastic cells. Hu JJ, et al. **Cancer Chemother Pharmacol** 1989;24(2):95–101
Effects of mace (Myristica fragrans, Houtt.) on cytosolic glutathione S-transferase activity and acid soluble sulfhydryl level in mouse liver. Kumari MV, et al. **Cancer Lett** 1989 Jul 15;46(2):87–91
Measurement of tissue oxidation-reduction state with carbon-13 nuclear magnetic resonance spectroscopy. Livesey JC, et al. **Cancer Res** 1989 Apr 15;49(8):1937–40
Synergism between substrate and non-substrate thiols in peroxidase-oxidase reactions. Svensson BE. **Chem Biol Interact** 1989;70(3–4):323–37
Metabolism of paeoniflorin and related compounds by human intestinal bacteria. IV. Formation and structures of adducts of a metabolic intermediate with sulfhydryl compounds by Lactobacillus brevis. Akao T, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3043–8
Ageing-associated thiol loss in Bacterionema matruchotii. Ennever J, et al. **Cytobios** 1988;55(221):81–5
Cyanine dye labeling reagents for sulfhydryl groups. Ernst LA, et al. **Cytometry** 1989 Jan;10(1):3–10
Role of glutathione and other thiols in cellular response to radiation and drugs. Biaglow JE, et al. **Drug Metab Rev** 1989;20(1):1–12 (9 ref.)
Release of growth hormone binding protein from IM-9 lymphocytes by endopeptidase is dependent on sulfhydryl group inactivation. Trivedi B, et al. **Endocrinology** 1988 Nov;123(5):2201–6
Daily variation in non-protein sulfhydryl levels of human bone marrow. Bellamy WT, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1759–62
Cell calcium, vitamin E, and the thiol redox system in cytotoxicity. Pascoe GA, et al. **Free Radic Biol Med** 1989; 6(2):209–24 (164 ref.)
Effect of varying the concentration of damage restituting species in the radical repair model. Epp ER, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1219–23
Susceptibility of lens epithelial membrane SH groups to hydrogen peroxide. Hightower KR, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):569–74
The SH-SS exchange reaction between the Ellman's reagent and protein containing SH groups as a method for determining conformational states: tubulin. Di Simplicio P, et al. **Ital J Biochem** 1989 Mar-Apr;38(2):83–90
Effects of tricyclohexylhydroxytin on the kinetics of adenosine triphosphatase system and protection by thiol reagents. Rao KS, et al. **J Biochem Toxicol** 1987 Summer; 2:125–40
The effects of mevinolin on the thiol/disulfide exchange between 3-hydroxy-3-methyglutaryl-coenzyme A reductase and glutathione. Cappel RE, et al. **J Biol Chem** 1989 Jun 5;264(16):9180–7
Histone H3 thiol reactivity and acetyltransferases in chicken erythrocyte nuclei. Chan S, et al. **J Biol Chem** 1988 Oct 25;263(30):15643–51
ATP synthase complex from beef heart mitochondria. Role of the thiol group of the 25-kDa subunit of Fo in the coupling mechanism between Fo and F1. Lippe G, et al. **J Biol Chem** 1988 Dec 15;263(35):18627–34
The "regulatory" sulfhydryl group of Penicillium chrysogenum ATP sulfurylase. Cooperative ligand binding after SH modification; chemical and thermodynamic properties. Martin RL, et al. **J Biol Chem** 1989 Jul 15; 264(20):11768–75
Kinetics of p-mercuribenzoate binding to sulfhydryl groups on the isolated cytoplasmic fragment of band 3 protein. Effect of hemoglobin binding on the conformation. Salhany JM, et al. **J Biol Chem** 1989 Jan 25;264(3):1399–404
Cross-linking of cardiac gap junction connexons by thiol/disulfide exchanges. Dupont E, et al. **J Membr Biol** 1989 Jun;108(3):247–52
Epitope characterization of acetaminophen bound to protein and nonprotein sulfhydryl groups by an enzyme-linked immunosorbent assay. Potter DW, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):182–9
Polymerization of turtle alpha-macroglobulin through newly exposed sulfhydryls reveals the location of ex-thiolester bonds. Osada T, et al. **J Ultrastruct Mol Struct Res** 1988 Oct;101(1):62–74
Topography and functions of sulfhydryl groups of the human erythrocyte glucose transport mechanism. Abbott RE, et al. **Mol Cell Biochem** 1988 Jul-Aug;82(1–2):85–90
Sulfhydryl oxidation and Ca2+ release from sarcoplasmic reticulum. Abramson JJ, et al. **Mol Cell Biochem** 1988 Jul-Aug;82(1–2):81–4
Effects of thiolation of amino groups of ovine lutropin on immunoreactivity, receptor binding and bioactivity. Singh V, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):255–62
Paraquat induced thiol modulation of Histoplasma capsulatum morphogenesis. Leith KM, et al. **Mycopathologia** 1988 Jul;103(1):21–7
Protein thiols and alpha-tocopherol in chemical cytotoxicity. **Nutr Rev** 1989 May;47(5):150–1 (7 ref.)
Species differences in biliary excretion of methylmercury—role of non-protein sulfhydryls in bile. Urano T, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov;62(2):339–51
Glutathione metabolism and utilization of external thiols by cigarette smoke-challenged, isolated rat and rabbit lungs. Joshi UM, et al. **Toxicol Appl Pharmacol** 1988 Nov; 96(2):324–35
Determination and metabolism of dithiol chelating agents. VI. Isolation and identification of the mixed disulfides of meso-2,3-dimercaptosuccinic acid with L-cysteine in human urine. Maiorino RM, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):338–49
Inhibition of doxorubicin-initiated membrane damage by N-acetylcysteine: possible mediation by a thiol-dependent, cytosolic inhibitor of lipid peroxidation. Powell SR, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):175–84
Determination and metabolism of dithiol chelating agents. VIII. Metal complexes of meso-dimercaptosuccinic acid. Rivera M, et al. **Toxicol Appl Pharmacol** 1989 Aug; 100(1):96–106
[Biochemistry of thiol groups: the role of glutathione] Sies H. **Naturwissenschaften** 1989 Feb;76(2):57–64 (121 ref.) (Eng. Abstr.) (Ger)
[Changes in the thiol group levels in human atheromatous and aged aortas] Zuch A, et al. **Rocz Akad Med Bialymstoku** 1984–85;29–30:117–27 (Eng. Abstr.) (Ger)
[Variability and inheritability of the "level of endogenous SH groups" trait in cell and clone populations of transplantable rat tumors] Ismailov BI, et al. **Eksp Onkol** 1989;11(3):73–6 (Eng. Abstr.) (Rus)
[Various changes in protein metabolism and integral indicators in rats after a single-dose exposure to phenol] Skvortsova RI, et al. **Gig Sanit** 1989 Mar;(3):79 (Rus)
[Dependence of the radioprotective effect of beta-mercaptoethylamine on the thiol level of the outer cell membrane] Konstantinova MM, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):280–2 (Eng. Abstr.) (Rus)
[Thiol antioxidants in molecular mechanisms of nonspecific reaction of the body to exposure to extreme factors (review of the literature)] Sokolovskiĭ VV. **Vopr Med Khim** 1988 Nov-Dec;34(6):2–11 (79 ref.) (Rus)

PHARMACOKINETICS

Proposed clinical trial studying the pharmacokinetics of B.S.H. Harkness WF. **Basic Life Sci** 1989;50:49–51
Uptake of boron into human gliomas of athymic mice and into syngeneic cerebral gliomas of rats after intracarotid infusion of sulfhydryl boranes. Joel DD, et al. **Basic Life Sci** 1989;50:325–32
Distributions of sulfhydryl borane monomer and dimer in rodents and monomer in humans: boron neutron capture therapy of melanoma and glioma in boronated rodents. Slatkin DN, et al. **Basic Life Sci** 1989;50:179–91
Determination and metabolism of dithiol chelating agents. IV. Urinary excretion of meso-2,3-dimercaptosuccinic acid and mercaptosuccinic acid in rabbits given meso-2,3-dimercaptosuccinic acid. Maiorino RM, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1147–54
Urinary excretion of meso-2,3-dimercaptosuccinic acid in human subjects. Aposhian HV, et al. **Clin Pharmacol Ther** 1989 May;45(5):520–6
Two routes for 99mTc-DMSA uptake into the renal cortical tubular cell. Peters AM, et al. **Eur J Nucl Med** 1988; 14(11):555–61
Renal handling of technetium-99m DMSA: evidence for glomerular filtration and peritubular uptake. de Lange MJ, et al. **J Nucl Med** 1989 Jul;30(7):1219–23
Distribution of 10B after infusion of Na210B12H11SH into a patient with malignant astrocytoma: implications for boron neutron capture therapy. Finkel GC, et al. **Neurosurgery** 1989 Jan;24(1):6–11
99Tcm-diastereomeric dimercaptosuccinic acid complexes: comparison of their biodistribution. Awh OD, et al. **Nucl Med Commun** 1989 Jun;10(6):449–54
Pharmacokinetics of BSH in patients with glioma. Harkness WF, et al. **Strahlenther Onkol** 1989 Feb-Mar; 165(2–3):242–4
Pharmacokinetics and tissue distribution of the sulfhydryl boranes (monomer and dimer) in glioma-bearing rats. Joel D, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2–3):167–70
Distribution of boron in two (B12H11SH)2—infused patients with malignant glioma. Slatkin DN, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2–3):244–6

PHARMACOLOGY

Inactivation of type MM phosphoglycerate mutase by sulfhydryl group reagents during facial embryogenesis. Granström G, et al. **Acta Odontol Scand** 1988 Oct; 46(5):273–9
The anti-inflammatory activity of Ebselen but not thiols in experimental alveolitis and bronchiolitis. Cotgreave IA, et al. **Agents Actions** 1988 Jul;24(3–4):313–9
Polymeric thiols as enzyme activators of serum creatine phosphokinase. Burdick BA, et al. **Appl Biochem Biotechnol** 1987 Sep-Dec;16:145–56
Oxidation of NADH by vanadium compounds in the presence of thiols. Keller RJ, et al. **Arch Biochem Biophys** 1989 May 15;271(1):40–8
Release of [3H]- and endogenous GABA from slices of the rat medulla oblongata: modification by 3-mercaptopropionic acid, nipecotic acid and diaminobutyric acid. Kihara M, et al. **Arch Int Pharmacodyn Ther** 1989 Mar-Apr;298:50–60
Cysteamine and pantethine effects on passive avoidance behavior, shuttle box learning, open-field activity, striatal catecholamines and somatostatin. Vécsei L, et al. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:14–27
Meso-2,3-dimercaptosuccinic acid and sodium N-benzyl-N-dithiocarboxy-D-glucamine as antagonists for cadmium intoxication. Jones MM, et al. **Arch Toxicol** 1988 Aug;62(1):29–36
Sulfhydryl-induced restoration of myocardial contractility after alteration by mercury. Halbach S. **Arch Toxicol Suppl** 1989;13:349–52
Irreversible inhibition of v-src tyrosine kinase activity by herbimycin A and its abrogation by sulfhydryl compounds. Uehara Y, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):803–9
Temperature and thiol-induced desensitization of a Ca2+-sensitive cyclic-3',5'-nucleotide phosphodiesterase from sheep lung. Radhakrishnan TS, et al. **Biochem Int** 1988 Nov;17(5):927–33
Thiol-mediated incorporation of radiolabel from 1-[14C]-methyl-4-phenyl-5-nitroso-imidazole into DNA. A model for the biological activity of 5-nitroimidazoles. Ehlhardt WJ, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1175–80
Mercaptan and dicarboxylate inhibitors of hamster dihydroorotase. Christopherson RI, et al. **Biochemistry** 1989 Jan 24;28(2):463–70
Modulation of HMG-CoA reductase activity by pantetheine/pantethine. Cighetti G, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):389–93
Quiescent LLC-PK1 cells as a model for cis-diamminedichloroplatinum(II) nephrotoxicity and modulation by thiol rescue agents. Montine TJ, et al. **Cancer Res** 1988 Nov 1;48(21):6017–24
Duration dependent effect of methylmercury chloride and antagonists on the enzymes of the central nervous system of rat: II. Acid phosphatase study on the brain. Sood PP, et al. **Cell Mol Biol** 1988;34(3):271–7
Cell cycle redistribution of cultured cells after treatment with chemical radiation protectors. Sigdestad CP, et al. **Cell Tissue Kinet** 1988 May;21(3):193–200
Effect of hydrophobic sulphydryl reagents on the uncoupling protein and inner-membrane anion channel of brown-adipose-tissue mitochondria. Rial E, et al. **Eur J Biochem** 1989 Jun 1;182(1):187–93
Specific S-thiolation of a 30-kDa cytosolic protein from rat liver under oxidative stress. Rokutan K, et al. **Eur J Biochem** 1989 Jan 15;179(1):233–9
Effects of sulfhydryl-containing compounds on nitroglycerin-induced coronary dilatation in isolated working rat hearts. Hütter J, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):215–22
The impact of thiols for insulin secretion. Ammon HP, et al. **Exp Clin Endocrinol** 1989 May;93(2–3):136–42 (42 ref.)
The effect of oxygen and thiols on the radiation damage of DNA. Schulte-Frohlinde D. **Free Radic Res Commun** 1989; 6(2–3):181–3 (24 ref.)
Sulfhydryl groups are involved in the activation of sea urchin eggs. Dale B, et al. **Gamete Res** 1988 Feb;19(2):161–8
In vitro inhibition of brain glutamic acid decarboxylase by sodium 2-mercaptoethanesulphonate and endogenous thiols and its possible in vivo consequences. Shaw IC, et al. **Hum Toxicol** 1989 May;8(3):221–4
Potentiation of renal effects of atrial natriuretic factor-(99–126) by SQ 29,072. Seymour AA, et al. **Hypertension** 1989 Jul;14(1):87–97
Protection of cultured Chinese hamster ovary cells by the aminothiol WR-255591 from the lethal and DNA-damaging effects of fast neutrons. vanAnkeren SC, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1205–8
Determinants of in vitro nitroglycerin tolerance induction and reversal: influence of dose regimen, nitrate-free period, and sulfhydryl supplementation. Henry PJ, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):31–7
Effect of differing thiols on the reversed-phase high-performance liquid chromatographic behaviour of o-phthaldialdehyde-thiol-amino acids. Euerby MR. **J Chromatogr** 1988 Nov 11;454:398–405
Mobilization of lead by esters of meso-2,3-dimercaptosuccinic acid. Singh PK, et al. **J Toxicol Environ Health** 1989;27(4):423–34
In rat gastroduodenal mucosa the cytoprotective effect of sulfhydryl drugs is not mediated via endogenous prostacyclin. Balint GA, et al. **Jpn J Exp Med** 1988 Aug; 58(4):203–5
Modulation of myoglobin-H2O2-mediated peroxidation reactions by sulfhydryl compounds. Mitsos SE, et al. **Lab Invest** 1988 Dec;59(6):824–30
Differential inactivation and G protein reconstitution of subtypes of [3H]5-hydroxytryptamine binding sites in brain. Stratford CA, et al. **Mol Pharmacol** 1988 Oct;34(4):527–36
Toxicity of paracetamol in human hepatocytes. Comparison of the protective effects of sulfhydryl compounds acting as glutathione precursors. Larrauri A, et al. **Mol Toxicol** 1987–88 Fall;1(4):301–11
Effect of thiols on beta 2-adrenoceptors in human mononuclear leucocytes. Liebl B, et al.

Naunyn Schmiedebergs Arch Pharmacol 1988 Nov; 338(5):523–8
Potent inhibition of cerebral aminopeptidases by carbaphethiol, a parenterally active compound. Gros C, et al. Neuropeptides 1988 Oct;12(3):111–8
Biochemical evidence for the GABA regulation of vasopressin levels in microdissected brain structures after servo-controlled hypotension. Magnusson A, et al. Neurosci Lett 1989 Jul 3;101(3):281–7
Rapid screening of organosulfur agents for potential chemopreventive activity using the murine NA assay. Wargovich MJ, et al. Nutr Cancer 1989;12(2):189–93
Changes in levels of the tripeptide Tyr-Gly-Gly as an index of enkephalin release in the spinal cord: effects of noxious stimuli and parenterally-active peptidase inhibitors. Llorens-Cortes C, et al. Peptides 1989 May-Jun; 10(3):609–14
Effects of cysteamine and pantethine on open-field behavior, hypothalamic catecholamine concentrations, and somatostatin-induced barrel rotation in rats. Vécsei L, et al. Pharmacol Biochem Behav 1989 Mar;32(3):629–35
Protection of DNA by thiols. Fahey RC. Pharmacol Ther 1988;39(1–3):101–8 (43 ref.)
Models for thiol protection of DNA in cells. Held KD. Pharmacol Ther 1988;39(1–3):123–31 (56 ref.)
Endogenous versus exogenous thiols in radioprotection. Vos O, et al. Pharmacol Ther 1988;39(1–3):169–77 (64 ref.)
Selective effects of mercaptoundecahydrododecaborate (Na2B12H11SH) on the hepatic microsomal mono-oxygenase enzyme system and on hexobarbital induced sleep in mice. Fontenelle LJ, et al. Proc West Pharmacol Soc 1988;31:153–6
Inhibition of the Ca pump ATPase of human red blood cell membranes by dithio compounds. Vincenzi FF, et al. Proc West Pharmacol Soc 1988;31:231–3
Protection by WR1065 and WR151326 against fission-neutron-induced mutations at the HGPRT locus in V79 cells. Grdina DJ, et al. Radiat Res 1989 Mar; 117(3):500–10
Sulfhydryl compounds as thermosensitizers. Issels RD. Recent Results Cancer Res 1988;109:22–7
Mobilization of cadmium in mice by combined treatment with N-benzyl-N-dithiocarboxy-D-glucamine and diesters of meso-2, 3-dimercaptosuccinic acid. Gale GR, et al. Res Commun Chem Pathol Pharmacol 1988 Nov; 62(2):327–37
In-vivo and in-vitro studies of the effects of mercaptoundecahydrododecaborate (BSH) on hepatic cytochrome P-450 mono-oxygenase enzyme activity and on hexobarbital (HXB) induced sleep in mice. Fontenelle L, et al. Strahlenther Onkol 1989 Feb-Mar;165(2–3):172–3
Distribution of mercury 203 in pregnant rats and their fetuses following systemic infusions with thiol-containing amino acids and glutathione during late gestation. Aschner M, et al. Teratology 1988 Aug;38(2):145–55
Esters of meso-dimercaptosuccinic acid as cadmium-mobilizing agents. Jones MM, et al. Toxicol Appl Pharmacol 1988 Sep 30;95(3):507–14
Influence of 2,3-dimercaptopropane-1-sulfonate and dimercaptosuccinic acid on the mobilization of mercury from tissues of rats pretreated with mercuric chloride, phenylmercury acetate or mercury vapors. Buchet JP, et al. Toxicology 1989 Mar;54(3):323–33
Alpha-omega alkanedithiol, inhibitors of Candida albicans germ tube autoaggregation. A study model of the adherence of pathogenic agents on host cells. Nasri I, et al. Yeast 1989 Apr;5 Spec No:S241–4
[Study on the radioprotection of thiols on mice] Hsu HY, et al. Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1988 Jul; 4(7):386–91 (Eng. Abstr.) (Chi)

PHYSIOLOGY

Involvement of cellular sulfhydryl compounds in the inhibition of RNA synthesis by selenite. Frenkel GD, et al. Biochem Pharmacol 1989 Sep 1;38(17):2849–52
Significance of gamma-glutamyl transpeptidase and thiols in amino acid uptake by rat pancreatic islets: studies with glutamine and leucine. Ammon HP, et al. Cell Biochem Funct 1988 Oct;6(4):271–4
Neutrophil membrane sulfhydryl groups are involved in stimulated neutrophil adherence to endothelium. Schwartz BR, et al. J Leukoc Biol 1989 Mar;45(3):177–82
Inhibition of hexose transport in the human erythrocyte by 5, 5'-dithiobis(2-nitrobenzoic acid): role of an exofacial carrier sulfhydryl group. May JM. J Membr Biol 1989 Jun; 108(3):227–33
Evidence for the involvement of sulfhydryl compounds in the inhibition of cellular DNA synthesis by selenite. Frenkel GD, et al. Mol Pharmacol 1988 Oct;34(4):573–7
Antioxidant and redox enzymes in radioprotection. Biaglow JE, et al. Pharmacol Ther 1988;39(1–3):275–86 (21 ref.)
Role of glutathione and other endogenous thiols in radiation protection. Mitchell JB, et al. Pharmacol Ther 1988; 39(1–3):269–74 (33 ref.)

THERAPEUTIC USE

Influence of thiamine and ascorbic acid supplementation on the antidotal efficacy of thiol chelators in experimental lead intoxication. Dhawan M, et al. Arch Toxicol 1988; 62(4):301–4
Intramuscular administration of iron during long-term chelation therapy with 2,3-dimercaptosuccinic acid in a man with severe lead poisoning. Haust HL, et al. Clin Biochem 1989 Jun;22(3):189–96
Sulfhydryls and gastric mucosa protection [letter] Evangelista S, et al. Dig Dis Sci 1988 Oct;33(10):1338–9
Protective role of sulfhydryl reagents in oxidant lung injury. Patterson CE, et al. Exp Lung Res 1988;14 Suppl:1005–19 (36 ref.)
2,3-Dimercaptosuccinic acid treatment of heavy metal poisoning in humans. Fournier L, et al. Med Toxicol Adverse Drug Exp 1988 Nov-Dec; 3(6):499–504
Model experiments to evaluate the protective role of thiols and other reductants against oxidative damage. Tamba M, et al. Pharmacol Ther 1988;39(1–3):155–6
Oral cadmium chloride intoxication in mice: effects of penicillamine, dimercaptosuccinic acid and related compounds. Andersen O, et al. Pharmacol Toxicol 1988 Nov;63(5):386–9
Chelation in metal intoxication. XXIX: Alpha-mercapto-beta-aryl acrylic acids as antidotes to mercury (II) toxicity. Kachru DN, et al. Pharmacol Toxicol 1989 Feb;64(2):182–4
Chelation in metal intoxication XXX: Alpha-mercapto-beta-aryl acrylic acids as antidotes to cadmium toxicity. Tandon SK, et al. Pharmacol Toxicol 1989 Apr;64(4):380–2
[Pantethine, diabetes mellitus and atherosclerosis. Clinical study of 1045 patients] Donati C, et al. Clin Ter 1989 Mar 31;128(6):411–22 (Eng. Abstr.) (Ita)

TOXICITY

Neuronal lesions in mercaptopropionic acid-induced status epilepticus. O'Connell BK, et al. Acta Neuropathol (Berl) 1988;77(1):47–54
Toxicities of Na2B12H11SH and Na4B24H22S2 in mice. Marshall PG, et al. Basic Life Sci 1989;50:333–51
Developmental toxicity of subcutaneously administered meso-2,3-dimercaptosuccinic acid in mice. Domingo JL, et al. Fundam Appl Toxicol 1988 Nov;11(4):715–22
Effect of pH on mutagenesis by thiols in Salmonella typhimurium TA102. Stark AA, et al. Mutat Res 1989 Sep; 224(1):89–94
Comparative behavioral toxicity of four sulfhydryl radioprotective compounds in mice: WR-2721, cysteamine, diethyldithiocarbamate, and N-acetylcysteine. Landauer MR, et al. Pharmacol Ther 1988;39(1–3):97–100
[Reaction of the immune system of the body to combined effects of chemical agents] Setko NP, et al. Gig Sanit 1989 Mar;(3):24–6 (Eng. Abstr.) (Rus)

SULFHYDRYL COMPOUNDS ANTAGONISTS see SULFHYDRYL REAGENTS

SULFHYDRYL COMPOUNDS INHIBITORS see SULFHYDRYL REAGENTS

SULFHYDRYL REAGENTS

1-p-chlorophenyl-4,4-dimethyl-5-diethylamino-1-penten-3-one hydrobromide, a sulfhydryl-specific compound which reacts irreversibly with protein thiols but reversibly with small molecular weight thiols. Mutus B, et al. Anal Biochem 1989 Mar;177(2):237–43
Triticone A: a novel bioactive lactam with potential as a molecular probe. Kenfield D, et al. Biochem Biophys Res Commun 1988 Nov 30;157(1):174–82
S-mercuric-N-dansyl-cysteine labels the free sulfhydryl groups of human serum cholinesterase. Tomlinson G, et al. Biochem Biophys Res Commun 1989 Jan 31;158(2):503–7
[Modification of human DNA polymerase alpha by N-acetylimidazole] Lavrik OI, et al. Mol Biol (Mosk) 1989 Mar-Apr;23(2):400–8 (Eng. Abstr.) (Rus)

METABOLISM

Chemical derivatization of Ca2+-pump protein from skeletal muscle with N-substituted maleimides and 5-(2-iodoacetamidoethyl)aminonaphthalene 1-sulfonate. Kawakita M, et al. Methods Enzymol 1988;157:251–61

PHARMACOLOGY

Inhibition of Na+-dependent phosphate transport by group-specific covalent reagents in rat kidney brush border membrane vesicles. Evidence for the involvement of tyrosine and sulfhydryl groups on the interior of the membrane. Pratt RD, et al. Arch Biochem Biophys 1989 Jan;268(1):9–19
Reaction between sheep liver mitochondrial aldehyde dehydrogenase and various thiol-modifying reagents. Loomes KM, et al. Biochem J 1989 Jul 1;261(1):281–4
Inactivation of chicken liver mevalonate 5-diphosphate decarboxylase by sulfhydryl-directed reagents: evidence of a functional dithiol. Alvear M, et al. Biochim Biophys Acta 1989 Jan 19;994(1):7–11
The effects of heavy metal cations and sulfhydryl reagents on degranulation from digitonin-permeabilized neutrophils. Sandborg RR, et al. Biochim Biophys Acta 1989 Mar 6; 1010(3):330–7
Creatine kinase is modified by 2-chloromercuri-4-nitrophenol at the active site thiols with complete inactivation. Wu H, et al. Biochim Biophys Acta 1989 Jul 27;997(1–2):78–82
Protection of hexaprenyl-diphosphate synthase of Micrococcus luteus B-P 26 against inactivation by sulphydryl reagents and arginine-specific reagents. Yoshida I, et al. Biochim Biophys Acta 1989 Apr 6;995(2):138–43
Evidence for a role of a vicinal dithiol in the transport of gamma-butyrobetaine in Agrobacterium sp. Nobile S, et al. Biochimie 1988 Oct;70(10):1411–6
Inhibition of the NADP-linked glutamate dehydrogenase from Trypanosoma cruzi by sulfhydryl reagents. Juan SM, et al. Comp Biochem Physiol [B] 1979;63(4):531–5
Determination of lecithin:cholesterol acyltransfer in mouse plasma and the influence of mercaptoethanol and sulphydryl blocking agents on its activity. Owen JS, et al. Comp Biochem Physiol [B] 1979;63(2):261–5
Interrelated effects of calcium and sulfhydryl reagents on renal phosphate-activated glutaminase. Kvamme E, et al. Contrib Nephrol 1988;63:156–60
The effects of sulfhydryl-modifying reagents on cholecystokinin-receptor interactions in guinea pig gastric glands. Ramani N, et al. Endocrinology 1989 Jun; 124(6):2821–9
Effect of sulfhydryl reagents on PAF binding to human neutrophils and platelets. Ng DS, et al. Eur J Pharmacol 1988 Sep 1;154(1):47–52
Human serum biotinidase is a thiol-type enzyme. Hayakawa K, et al. J Biochem (Tokyo) 1988 May;103(5):773–7
Calcium release from isolated sarcoplasmic reticulum due to 4,4'-dithiodipyridine. Nagura S, et al. J Biochem (Tokyo) 1988 Sep;104(3):461–5
The plasma membrane H+-ATPase of Neurospora crassa. Properties of two reactive sulfhydryl groups. Davenport JW, et al. J Biol Chem 1988 Nov 5;263(31):16007–13
Steroid binding to hepatoma tissue culture cell glucocorticoid receptors involves at least two sulfhydryl groups. Miller NR, et al. J Biol Chem 1988 Oct 15;263(29):15217–25
Mammalian progesterone receptor shows differential sensitivity to sulfhydryl group modifying agents when bound to agonist and antagonist ligands. Moudgil VK, et al. J Biol Chem 1989 Feb 5;264(4):2203–11
Nonequivalence of the two subunits of horse erythrocyte glutathione transferase in their reaction with sulfhydryl reagents. Ricci G, et al. J Biol Chem 1989 Apr 5; 264(10):5462–7
Effect of the thiol group inhibitor monobromobimane and other inhibitors on the composition of the platelet cytoskeletal core and its association with glycoprotein IIIa. Puszkin EG, et al. J Cell Biochem 1989 Apr;39(4):339–54
The effect of sulphydryl reagents on the human thyroid microsomal antigen. Gardas A, et al. J Endocrinol Invest 1988 May;11(5):385–8
Effects of sulfhydryl reagents on [3H] inositol trisphosphate binding to dog cerebellar membranes. Yang CM, et al. J Recept Res 1989;9(2):159–69
Stimulation of renin secretion by non-diuretic sulfhydryl reagents. Lee DY, et al. Kidney Int 1989 Mar;35(3):812–6
Selective inhibition of cytokinesis in sea urchin embryos by low concentrations of stypoldione, a marine natural product that reacts with sulfhydryl groups. O'Brien ET, et al. Mol Pharmacol 1989 May;35(5):635–42
Update on the use of sulfhydryl reagents to study acetylcholine receptor kinetics. Steinacker A. P R Health Sci J 1988 Aug;7(2):75–7
[Inhibition of lactate dehydrogenase in rat erythrocytes and liver with -SH group reagents] Gheorghiță N, et al. Rev Med Chir Soc Med Nat Iasi 1988 Oct-Dec;92(4):721–4 (Eng. Abstr.) (Rum)

TOXICITY

Four sulfhydryl-modifying compounds cause different structural damage but similar functional damage in murine lymphocytes. Duncan DD, et al. Chem Biol Interact 1988; 68(1–2):137–52

SULFIDES

Covalent chromatography and salt-promoted thiophilic adsorption. Oscarsson S, et al. Anal Biochem 1989 Feb 1; 176(2):330–7
An indirect method for quantitation of cellular zinc content of Timm-stained cerebellar samples by energy dispersive X-ray microanalysis. Farkas I, et al. Histochemistry 1988; 89(5):493–7
Mortality among pyrite miners with low-level exposure to radon daughters. Battista G, et al. Scand J Work Environ Health 1988 Oct;14(5):280–5

ADVERSE EFFECTS

Surma—a toxic cosmetic? [letter] Ali S, et al. JPMA 1988 Oct;38(10):281–2

ANALYSIS

Determination of selenols, diselenides, and selenenyl sulfides by reversed-phase liquid chromatography with electrochemical detection. Killa HM, et al. Anal Chem 1988 Oct 15;60(20):2283–7
Detection and identification of three thioether conjugates of 2-hydroxyacetanilide by liquid chromatography/electrochemistry. Rottero AE, et al. Biomed Chromatogr 1987 Feb;2(1):24–9
A sulfide detection test for field use. Van Handel E.

J Am Mosq Control Assoc 1987 Dec;3(4):644–5

Trace determination of sulfide by reversed-phase ion-interaction chromatography using pre-column derivatization. Haddad PR, et al. **J Chromatogr** 1988 Aug 26;447(2):415–20

Separation and detection of bis(alkylthio)selenides of penicillamine and glutathione by liquid chromatography with electrochemical detection. Killa HM, et al. **J Chromatogr** 1989 Mar 31;465(2):359–68

A continuous quantitative detection method for total mercaptans, organic sulphides, H2S, and CS2 for odouriferous emissions. Vanderstraeten P, et al. **JAPCA** 1988 Oct;38(10):1271–4

Boron-11 MRI and MRS of intact animals infused with a boron neutron capture agent. Kabalka GW, et al. **Magn Reson Med** 1988 Oct;8(2):231–7

Brain sulfide levels in anaesthesia: a comparison with hydrogen sulfide intoxication. Warenycia MW, et al. **Toxicol Lett** 1989 Jun;47(3):221–4

[Biomimetic oxidation of iodosylbenzyl sulfides in the presence of synthetic metalloporphyrins] Pautet F, et al. **Pharmazie** 1988 Jun;43(6):437–8 (Fre)

[Criteria of epidemiologic safety of hot water] Gasilina MM, et al. **Gig Sanit** 1988 Aug;(8):92–3 (Rus)

DIAGNOSTIC USE

Detection of lead in human teeth by exposure to aqueous sulfide solutions. Sugawara A, et al. **J Nihon Univ Sch Dent** 1989 Mar;31(1):382–96

[Evaluation on the capability of indole pyruvic acid production by members of Proteeae on different brands of sulfide-indole-motility] Tsai WC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 May;21(2):117–24 (Eng. Abstr.) (Chi)

ISOLATION & PURIFICATION

[An improved method of realgar processing] Yuan ST. **Chung Yao Tung Pao** 1988 Aug;13(8):17–21, 62 (Eng. Abstr.) (Chi)

METABOLISM

An investigation of the adrenergic uptake specificity of phenyl-2-aminoethyl sulfides. Pollock SH, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:76–86

Acute hydrogen sulfide poisoning. Demonstration of selective uptake of sulfide by the brainstem by measurement of brain sulfide levels. Warenycia MW, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):973–81

Methanethiol and dimethylsulfide formation from 3-methylthiopropionate in human and rat hepatocytes. Blom HJ, et al. **Biochim Biophys Acta** 1988 Nov 18; 972(2):131–6

Persulfide generated from L-cysteine inactivates tyrosine aminotransferase. Requirement for a protein with cysteine oxidase activity and gamma-cystathionase. Hargrove JL. **J Biol Chem** 1988 Nov 25;263(33):17262–9

Alkylaryl sulfides as peroxidase reducing substrates for prostaglandin H synthase. Probes for the reactivity and environment of the ferryl-oxo complex. Plé P, et al. **J Biol Chem** 1989 Aug 25;264(24):13983–93

Oxygen dependence of omeprazole clearance and sulfone and sulfide metabolite formation in the isolated perfused rat liver. Angus PW, et al. **J Pharmacol Exp Ther** 1989 Sep; 250(3):1043–7

PHARMACOKINETICS

Enzymatic detoxification using lipophilic hollow-fiber membranes: III. Oxidation reactions of sulfides. Yamamoto Y, et al. **Artif Organs** 1989 Apr;13(2):103–8

Uptake of boron into human gliomas of athymic mice and into syngeneic cerebral gliomas of rats after intracarotid infusion of sulfhydryl boranes. Joel DD, et al. **Basic Life Sci** 1989;50:325–32

Distributions of sulfhydryl borane monomer and dimer in rodents and monomer in humans: boron neutron capture therapy of melanoma and glioma in boronated rodents. Slatkin DN, et al. **Basic Life Sci** 1989;50:179–91

PHARMACOLOGY

Effect of coinfusion of cholic acid and sulfated cholic acid on bile formation in rats. Yousef IM, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G62–6

Effects of allyl sulfide, germanium and NaCl on the development of glutathion S-transferase P-positive rat hepatic foci initiated by diethylnitrosamine. Jang JJ, et al. **Anticancer Res** 1989 Mar–Apr;9(2):273–5

Comparison of blocked and non-blocked ricin-antibody immunotoxins against human gastric carcinoma and colorectal adenocarcinoma cell lines. Cattel L, et al. **Cancer Immunol Immunother** 1988;27(3):233–40

The inhibitory effect of bis[2-[(E)-2-octenoylamino]ethyl] disulfide on the cyclooxygenase pathway. Mimura T, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):778–80

Inhibitors for protein-tyrosine kinases, ST638 and genistein: induce differentiation of mouse erythroleukemia cells in a synergistic manner. Watanabe T, et al. **Exp Cell Res** 1989 Aug;183(2):335–42

Selenotrisulfide inhibits initiation by RNA polymerase II but not elongation. Frenkel GD, et al. **J Inorg Biochem** 1989 Mar;35(3):179–89

Catalase inhibition by sulfide and hydrogen peroxide-induced mutagenicity in Salmonella typhimurium strain TA102. Carlsson J, et al. **Mutat Res** 1988 Nov;202(1):59–64

Aminothiols: synthesis and effect on chicken brain aminopeptidases. Weiss B, et al. **Res Commun Chem Pathol Pharmacol** 1988 Oct; 62(1):113–23

Effects of garlic extracts and of three pure components isolated from it on human platelet aggregation, arachidonate metabolism, release reaction and platelet ultrastructure-comments [letter] Sharma CP, et al. **Thromb Res** 1988 Dec 1;52(5):493–4

[Calcium antagonism of allitridi] Chen SH, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):533–5 (Eng. Abstr.) (Chi)

THERAPEUTIC USE

Role of ornithine decarboxylase in diallyl sulfide inhibition of colonic radiation injury in the mouse. Baer AR, et al. **Cancer Res** 1989 Sep 15;49(18):5073–6

Chemoprevention of N-nitrosomethylbenzylamine-induced esophageal cancer in rats by the naturally occurring thioether, diallyl sulfide. Wargovich MJ, et al. **Cancer Res** 1988 Dec 1;48(23):6872–5

Dimethyl sulfoxide modulation of diabetes onset in NOD mice. Klandorf H, et al. **Diabetes** 1989 Feb;38(2):194–7

[Sulfide ooze mud and sodium chloride baths in treating osteoarthrosis patients] Novikova NV. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr; (2):35–7 (Eng. Abstr.) (Rus)

TOXICITY

Thioether formation--activation or detoxication? Eckert KG, et al. **Arch Toxicol Suppl** 1989;13:287–90

Toxicities of Na2B12H11SH and Na4B24H22S2 in mice. Marshall PG, et al. **Basic Life Sci** 1989;50:333–51

Mutagenicity of benzyl S-haloalkyl and S-haloalkenyl sulfides in the Ames-test. Vamvakas S, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):935–9

Peracute toxic effects of inhaled hydrogen sulfide and injected sodium hydrosulfide on the lungs of rats. Lopez A, et al. **Fundam Appl Toxicol** 1989 Feb;12(2):367–73

Surma--a toxic cosmetic [letter] Manser WW. **JPMA** 1989 Jul;39(7):196

URINE

The significance of urinary thioethers as indicators of exposure to alkylating agents. Karakaya AE, et al. **Arch Toxicol Suppl** 1989;13:117–9

A signal assay for the detection of genotoxic compounds: application on the urines of cancer patients on chemotherapy and of nurses handling cytotoxic drugs. Burgaz S, et al. **Hum Toxicol** 1988 Nov;7(6):557–60

Influence of diet and other factors on urinary levels of thioethers. Aringer L, et al. **Int Arch Occup Environ Health** 1988;61(1-2):123–30

Urinary excretion of mutagens, thioethers and D-glucaric acid in workers exposed to bitumen fumes. Pasquini R, et al. **Int Arch Occup Environ Health** 1989;61(5):335–40

SULFINIC ACIDS

METABOLISM

Scatchard analysis of methane sulfinic acid production from dimethyl sulfoxide: a method to quantify hydroxyl radical formation in physiologic systems. Babbs CF, et al. **Free Radic Biol Med** 1989;6(5):493–503

PHARMACOLOGY

Anti-asthmatic effects of onions. Alk(en)ylsulfinothioic acid alk(en)yl-esters inhibit histamine release, leukotriene and thromboxane biosynthesis in vitro and counteract PAF and allergen-induced bronchial obstruction in vivo. Dorsch W, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4479–86

TOXICITY

Inhalation toxicity of sulfuryl fluoride in rats and rabbits. Eisenbrandt DL, et al. **Fundam Appl Toxicol** 1989 Apr; 12(3):540–57

The effects of inhalation exposure to sulfuryl fluoride on fetal development in rats and rabbits. Hanley TR Jr, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):79–86

SULFINPYRAZONE

PHARMACOLOGY

Inhibitors of membrane transport system for organic anions block fura-2 excretion from PC12 and N2A cells. Di Virgilio F, et al. **Biochem J** 1988 Dec 15;256(3):959–63

Sulfinpyrazone prolongs survival and decreases platelet uptake of heart allografts. Bergaland J, et al. **J Surg Res** 1989 Jun;46(6):549–52

Organic-anion transport inhibitors to facilitate measurement of cytosolic free Ca2+ with fura-2. Di Virgilio F, et al. **Methods Cell Biol** 1989;31:453–62

Sulphinpyrazone inhibits platelet function and enhances blood fibrinolytic activity in the rat. Hussaini IM, et al. **Thromb Res** 1988 Nov 15;52(4):337–41

THERAPEUTIC USE

Search for drugs that may reduce the load of neutrophil azurophilic granule enzymes in the lungs of patients with emphysema. Stevens MD, et al. **Exp Lung Res** 1989 Jul; 15(4):663–80

Anturan for secondary prophylaxis of myocardial infarction. Bokarev IN, et al. **Folia Haematol (Leipz)** 1988;115(4):595–8

SULFISOXAZOLE

ADMINISTRATION & DOSAGE

Malaria prophylaxis with proguanil and sulfisoxazole in children living in a malaria endemic area. Pang LW, et al. **Bull WORLD Health Organ** 1989;67(1):51–8

PHARMACOLOGY

Effects of sulfisoxazole, hypercarbia, and hyperosmolality on entry of bilirubin and albumin into brain regions in young rats. Hansen TW, et al. **Biol Neonate** 1989;56(1):22–30

THERAPEUTIC USE

Treatment of chlamydial infections of the cervix during pregnancy. McNeeley SG Jr, et al. **Sex Transm Dis** 1989 Apr–Jun;16(2):60–2

SULFITE OXIDASES see under **OXIDOREDUCTASES**

SULFITE REDUCTASES see under **OXIDOREDUCTASES**

SULFITES

Sulfate anion free radical formation by the peroxidation of (Bi)sulfite and its reaction with hydroxyl radical scavengers. Mottley C, et al. **Arch Biochem Biophys** 1988 Dec;267(2):681–9

The reaction of bisulfite with liposomal membranes. Finch L, et al. **Biosci Rep** 1988 Oct;8(5):443–8

Chromosome alterations in Syrian hamster cells transformed in vitro by sodium bisulfite, a nonclastogenic carcinogen. Popescu NC, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7246–51

Peroxidase-catalyzed oxidation of (bi)sulfite: reaction of free radical metabolites of (bi)sulfite with (+/-)-7,8-dihydroxy-7, 8-dihydroxy[a]pyrene. Curtis JF, et al. **Carcinogenesis** 1988 Nov;9(11):2015–21

The reaction of sulfite radical anion with nucleic acid components. Erben-Russ M, et al. **Free Radic Res Commun** 1987;2(4–6):285–8

[A complex study on the effects of workplace air pollution in acid-digestion plants manufacturing sulphite cellulose on the health status of workers] Karelin OA. **Gig Tr Prof Zabol** 1989;(6):28–30 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Oral challenge test with sodium metabisulfite in steroid-dependent asthmatic patients. Prieto L, et al. **Allergol Immunopathol (Madr)** 1988 Nov–Dec;16(6):393–6

Sulfite sensitivity: relationship between sulfite plasma levels and bronchospasm: case report. Acosta R, et al. **Ann Allergy** 1989 May;62(5):402–5

Metabisulfite sensitivity and local dental anesthesia. Schwartz HJ, et al. **Ann Allergy** 1989 Feb;62(2):83–6

Studies of neutrophil chemotactic factor of anaphylaxis in metabisulfite sensitivity. Sprenger JD, et al. **Ann Allergy** 1989 Feb;62(2):117–21

Sulfite, asthma and vasoconstrictors. Pérusse R, et al. **Can Dent Assoc J** 1989 Jan;55(1):55–6 (11 ref.)

Local anesthetic intolerance due to metabisulfite. Dooms-Goossens A, et al. **Contact Dermatitis** 1989 Feb; 20(2):124–6

Sulfite-treated lettuce challenges in sulfite-sensitive subjects with asthma. Howland WC 3d, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):1079–82

[Severe complications related to metabisulfites] Maria Y, et al. **Rev Med Interne** 1989 Jan–Feb;10(1):36–40 (Eng. Abstr.) (Fre)

[Adverse reactions induced by food additives: sulfites] Montaño García ML. **Rev Alerg Mex** 1989 May–Jun; 36(3):107–9 (23 ref.) (Eng. Abstr.) (Spa)

[Prolonged neurologic deficiency after accidental spinal anesthesia] Pita-Romero Caamaño R, et al. **Rev Esp Anestesiol Reanim** 1989 Mar–Apr;36(2):110–3 (33 ref.) (Eng. Abstr.) (Spa)

ANALYSIS

Sulphite content of orange crushes and drinks produced in Zimbabwe. Benhura MA. **Cent Afr J Med** 1988 Sep; 34(9):205–7

The structural identification of a secondary dye produced from the reaction between sunset yellow and sodium metabisulphite. Damant A, et al. **Food Addit Contam** 1989 Jul–Sep;6(3):273–82

Optimized Monier-Williams method for determination of sulfites in foods: collaborative study. Hillery BR, et al. **J Assoc Off Anal Chem** 1989 May–Jun;72(3):470–5

Determination of sulfites in foods by simultaneous nitrogen purging and differential pulse polarography. Holak W, et al. **J Assoc Off Anal Chem** 1989 May–Jun;72(3):476–80

Comparison of the ion exclusion chromatographic method

with the Monier-Williams method for determination of total sulfite in foods. Kim HJ. **J Assoc Off Anal Chem** 1989 Mar-Apr;72(2):266-72

Determination of sulfite in foods by headspace liquid chromatography. Lawrence JF, et al. **J Assoc Off Anal Chem** 1988 Sep-Oct;71(5):930-3

BLOOD

Erythrocyte bisulfite transport. Labotka RJ, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):358-62

DIAGNOSTIC USE

Oral challenge test with sodium metabisulfite in steroid-dependent asthmatic patients. Prieto L, et al. **Allergol Immunopathol (Madr)** 1988 Nov-Dec;16(6):393-6

Improvement and simplification of low-background silver staining of proteins by using sodium dithionite. Rabilloud T, et al. **Electrophoresis** 1988 Jun;9(6):288-91

IMMUNOLOGY

Urticaria, asthma, and anaphylaxis due to sodium sulfite in an antifungal cream complicated by treatment with aminophylline in an ethylenediamine-sensitive person. Part I. Fisher AA. **Cutis** 1989 Jul;44(1):19-20

The laboratory evaluation of IgE antibody to metabisulfites in patients skin test positive to metabisulfites. Boxer MB, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):622-6

Specific immunological therapy with the sulfite chemicals. Hosen H. **J Asthma** 1987;24(4):219-21

METABOLISM

Kinetics and mechanism of electron transfer from dithionite to microsomal cytochrome b5 and to forms of the protein associated with charged and neutral vesicles. Davies DM, et al. **Biochem J** 1989 Mar 1;258(2):375-80

Response of allergic and normal persons to sulfiting agents in wine: determination of thiosulfate excretion in urine. Torun M, et al. **Clin Chem** 1989 Aug;35(8):1792-3

Characterization of anaerobic sulfite reduction by Salmonella typhimurium and purification of the anaerobically induced sulfite reductase. Hallenbeck PC, et al. **J Bacteriol** 1989 Jun;171(6):3008-15

Crystallographic study of the complex between sulfite and bakers' yeast flavocytochrome b2. Tegoni M, et al. **J Biol Chem** 1988 Dec 25;263(36):19278-81

PHARMACOLOGY

Effect of incubation temperature, ageing, and bisulfite content of unsupplemented Brucella agar on aerotolerance of Campylobacter jejuni. Lee MH, et al. **Can J Microbiol** 1988 Sep;34(9):1069-74

Effect of sulfite on the covalent reaction of benzo[a]pyrene metabolites with DNA. Leung KH, et al. **Carcinogenesis** 1989 Feb;10(2):259-64

Effects of sulfite on glutathione S-sulfonate and the glutathione status of lung cells. Keller DA, et al. **Chem Biol Interact** 1989;70(1-2):145-56

Effects of bisulfite and sulfite on Fc and Con A receptors of rat pulmonary macrophages. Lai MD, et al. **Chin Med J [Engl]** 1988 May;101(5):357-60

A mimic of superoxide dismutase activity protects Chlorella sorokiniana against the toxicity of sulfite. Rabinowitch HD, et al. **Free Radic Biol Med** 1989;6(1):45-8

Reactions of Saccharomyces cerevisiae and Zygosaccharomyces bailii to sulphite. Pilkington BJ, et al. **J Gen Microbiol** 1988 Oct;134 (Pt 10):2823-30

Sporulation of bacterial species in the presence of metabisulphite. Oloyede OB, et al. **Microbios** 1989; 57(230):49-63

The use of sulfite to study the mechanism of membrane fusion induced by E1 of Semliki Forest virus. Omar A, et al. **Virology** 1989 Jan;168(1):177-9

Isolation and characterization of Saccharomyces cerevisiae mutants resistant to sulphite. Casalone E, et al. **Yeast** 1989 Apr;5 Spec No:S287-91

[The Maillard reaction. 18. Radical inhibition of browning by sulfur compounds] Kroh L, et al. **Z Lebensm Unters Forsch** 1989 Feb;188(2):115-7 (Eng. Abstr.) (Ger)

THERAPEUTIC USE

[Prevention using ascorbic acid, hexamethylenetetramine and sodium metabisulfite of the blastomogenic effect caused by the combined administration into the stomach of mice of sodium nitrite with methylurea or with aminopyrine] Dzhioev FK. **Vopr Onkol** 1988;34(11):1369-73 (Eng. Abstr.) (Rus)

TOXICITY

Cooperative stimulation by sulfite and crocidolite asbestos fibres of enzyme catalyzed production of reactive oxygen species. Elstner EF, et al. **Arch Toxicol** 1988;62(6):424-7

Teratology study in mice subjected to inhalation of diethylhydroxylamine, nitroethane, and diethylamine hydrogen sulfite. Beliles RP, et al. **Environ Res** 1978 Oct; 17(2):165-76

SULFITES, INORGANIC see SULFITES

SULFOBROMOPHTHALEIN

ANALOGS & DERIVATIVES

Biliary excretion of organic anions in clotrimazole-treated rats. Tuñon MJ, et al. **Biochem Pharmacol** 1989 Aug 15; 38(16):2739-41

Dibromosulphophthalein: its pharmacokinetics and binding to hepatic cytosol proteins in rats with acute renal failure. Silberstein DJ, et al. **Br J Pharmacol** 1988 Oct;95(2):343-52

ANALYSIS

Rapid method for the determination and quantification of bromosulphophthalein and metabolites in cultured hepatocytes, culture media and bile by high-performance liquid chromatography. Van 't Klooster GA, et al. **J Chromatogr** 1988 Nov 18;432:223-31

CHEMICAL SYNTHESIS

Preparation of [35S]sulfobromophthalein of high specific activity. Kurisu H, et al. **Anal Biochem** 1989 May 15; 179(1):72-4

DIAGNOSTIC USE

A renaissance of sulfobromophthalein infusion method for animal studies of hepatobiliary function? [letter] Mikulecký M. **Am J Physiol** 1989 Aug;257(2 Pt 2):R456-7

METABOLISM

Effect of arsenicals on biliary excretion of endogenous non-protein thiols, mercurials and sulfobromophthalein. Gyurasics A, et al. **Arch Toxicol Suppl** 1989;13:340-2

Biliary excretion of organic anions in clotrimazole-treated rats. Tuñon MJ, et al. **Biochem Pharmacol** 1989 Aug 15; 38(16):2739-41

The role of sulfhydryl groups in sulfobromophthalein transport in rat liver plasma membrane vesicles. Passamonti S, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):294-8

Effect of the glutathione S-transferase inhibitor, tienilic acid, on biliary excretion of sulphobromophthalein. Fehring SI, et al. **Chem Biol Interact** 1989;69(1):23-32

The hepatocellular transport of sulfobromophthalein-glutathione by clofibrate treated, perfused rat liver. Sorrentino D, et al. **Lipids** 1989 May; 24(5):438-42

PHARMACOKINETICS

Bromsulphthalein and indocyanine green elimination from plasma, and urinary bromsulphthalein excretion, in normal cats. Middleton DJ, et al. **Res Vet Sci** 1989 Jul;47(1):97-101

Clearance of bromosulphthalein by the liver of sheep. West HJ. **Res Vet Sci** 1989 Mar;46(2):258-63

PHARMACOLOGY

Identification of the bromosulfophthalein-sensitive efflux route for methotrexate as the site of action of vincristine in the vincristine-dependent enhancement of methotrexate uptake in L1210 cells. Henderson GB, et al. **Cancer Res** 1988 Nov 1;48(21):5995-6001

Uptake of 3,5,3'-triiodothyronine by cultured rat hepatoma cells is inhibitable by nonbile acid cholephils, diphenylhydantoin, and nonsteroidal antiinflammatory drugs. Topliss DJ, et al. **Endocrinology** 1989 Feb; 124(2):980-6

Leakage of sulphobromophthalein from large simple bilayer phospholipid vesicles. Catalá A, et al. **J Microencapsul** 1988 Oct-Dec;5(4):319-24

PHYSIOLOGY

Bilitranslocase is the protein responsible for the electrogenic movement of sulfobromophthalein in plasma membrane vesicles from rat liver: immunochemical evidence using mono- and poly-clonal antibodies. Miccio M, et al. **Biochim Biophys Acta** 1989 May 19;981(1):115-20

TOXICITY

Reversible cholestasis induced by bromosulfophthalein in rabbits with enterohepatic circulation of bile acids maintained. Jiménez R, et al. **Biomed Biochim Acta** 1988; 47(2):141-7

SULFONAMIDES

Fluorogenic reagent for thiols: 4-(N,N-dimethylaminosulphonyl)-7-fluoro-2,1,3-benzoxadiazole. Toyo'oka T, et al. **Analyst** 1989 Apr; 114(4):413-9

Non-enzymatic glutathione conjugation of 2-nitroso-6-methyldipyrido [1,2-a: 3',2'-d] imidazole (NO-Glu-P-1) in vitro: N-hydroxy-sulfonamide, a new binding form of arylnitroso compounds and thiols. Umemoto A, et al. **Chem Biol Interact** 1988;68(1-2):57-69

Transformation of Penicillium chrysogenum to sulfonamide resistance. Carramolino L, et al. **Gene** 1989 Apr 15; 77(1):31-8

Nucleotide sequence of the sulfonamide resistance gene from plasmid R46. Guerineau F, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4370

Piretanide-dextran and piretanide-polyethylene glycol interact with high affinity with the Na+ 2 Cl- K+ cotransporter in the thick ascending limb of the loop of Henle. Nitschke R, et al. **Pflugers Arch** 1989 Mar; 413(5):559-61

ADMINISTRATION & DOSAGE

Topical carbonic anhydrase inhibitors. Kass MA. **Am J Ophthalmol** 1989 Mar 15;107(3):280-2

Mafenide acetate concentrations and bacteriostasis in experimental burn wounds treated with a three-layered laminated mafenide-saline dressing. Falcone PA, et al. **Ann Plast Surg** 1980 Oct;5(4):266-9

Dissolution studies of microencapsulated 4-sulphonamidophenoxyacetic acid: effect of preparative variables on dissolution. Dragan D, et al. **J Microencapsul** 1985 Jul-Sep;2(3):223-34

Preparation and pharmacokinetic and pharmacodynamic evaluation of hydroxy propyl cellulose-ethyl cellulose microcapsules containing piretanide. Tsujiyama T, et al. **J Pharmacobiodyn** 1989 Jun;12(6):311-23

ADVERSE EFFECTS

Diagnosis of sulfonamide hypersensitivity reactions by in-vitro "rechallenge" with hydroxylamine metabolites. Rieder MJ, et al. **Ann Intern Med** 1989 Feb 15;110(4):286-9

Sulfonamide-induced pancreatitis. Brazer SR, et al. **Pancreas** 1988;3(5):583-6

General case of the day. Sulfonamide crystallization in nonalkalinized urine. Neal MP Jr. **Radiographics** 1988 Sep; 8(5):993-6

Adverse reaction to potentiated sulphonamides in horses? [letter] Gray A. **Vet Rec** 1989 Aug 5;125(6):138

[Hyponatremia induced by hypoglycemic sulfonamides: a study of 70 patients] Gin H, et al. **Ann Med Interne (Paris)** 1988;139(7):455-9 (26 ref.) (Eng. Abstr.) (Fre)

ANALYSIS

Ion-pair HPLC study of sulfonamides, barbiturates and antiphlogistic acids on a dynamically modified silica gel stationary phase. Budvár-Bárány Z, et al. **Acta Pharm Hung** 1989 Mar;59(2):49-57

Titrimetric methods for the determination of some sulpha drugs using N-bromophthalimide and N-bromosaccharin. Kumar KG, et al. **Analyst** 1988 Sep;113(9):1369-72

Isoelectric points of some sulfonamides: determination by microelectrophoresis and by calculations involving acid-base strength. Schott H, et al. **J Pharm Sci** 1988 Nov; 77(11):918-20

A two-dimensional high-performance thin-layer chromatographic screening method for sulphonamides in animal tissues. Wyhowski de Bukanski B, et al. **Z Lebensm Unters Forsch** 1988 Sep;187(3):242-5

[Dissolution profiles of powdered inclusion compounds of sulfonamide drugs with beta-cyclodextrin] Chen JY, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Apr; 5(4):206-11 (Eng. Abstr.) (Chi)

CHEMICAL SYNTHESIS

NMR studies of carbonic anhydrase-fluorinated benzenesulfonamide complexes. Dugad LB, et al. **Biochemistry** 1989 May 2;28(9):3955-60

Synthesis and biological properties of 1-methyl-2-[(4-aminophenyl)-sulfonyl-]amino-5-nitro imidazole. Bertolini A, et al. **Boll Chim Farm** 1989 Feb; 128(2):71-3

Thromboxane A2 receptor antagonists. I. Synthesis and pharmacological activity of 7-oxabicyclo-[2.2.1]heptane derivatives with the benzenesulfonylamino group. Hagishita S, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb; 37(2):327-35

5-Isoquinolinesulfonamide derivatives. 2. Synthesis and vasodilatory activity of N-(2-aminoethyl)-5-isoquinolinesulfonamide derivatives. Morikawa A, et al. **J Med Chem** 1989 Jan;32(1):46-50

5-Isoquinolinesulfonamide derivatives. 1. Synthesis and vasodilatory activity of N-(2-guanidinoethyl)-5-isoquinolinesulfonamide derivatives. Morikawa A, et al. **J Med Chem** 1989 Jan; 32(1):42-6

Synthesis and alpha 2-adrenoceptor antagonist activity of some disulfonamidobenzoquinolizines. Ward TJ, et al. **J Med Chem** 1989 Jan;32(1):179-82

HISTORY

[The history of dermatology. "Sulfonamides and penicillins"—in memory of the appearance of this book and in memory of Walther Schönfeld, who was born 100 years ago] Schirren C. **Z Hautkr** 1988 Nov 15;63(11):890 (Ger)

[The 50th anniversary of the introduction of sulfonamides] Drygas A. **Arch Hist Filoz Med** 1988;51(3):383-90 (Eng. Abstr.) (Pol)

IMMUNOLOGY

[Desensitization to sulfamide in a patient with AIDS and cerebral toxoplasmosis (letter)] Laguna Cuesta F, et al. **Rev Clin Esp** 1988 Oct;183(6):332-3 (Spa)

METABOLISM

Binding of protein kinase C to N-(6-aminohexyl)-5-chloro-1-naphthalenesulfonamide through its ATP binding site. O'Brian CA, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1737-42

NMR studies of carbonic anhydrase-4-fluorobenzenesulfonamide complexes. Dugad LB, et al. **Biochemistry** 1988 Jun 14;27(12):4310-6

The stereospecificity of LY253352 for alpha 1-adrenoceptor binding sites in the brain and prostate. Lepor H, et al. **Br J Pharmacol** 1988 Sep;95(1):139-44

Relation between renal and hepatic excretion of drugs. XI. Excretion of sulfonamides with various physico-chemical properties of different ages--influence of nephrectomy or bile duct ligation. Fleck C, et al. **Exp Pathol** 1988; 35(2):115-27

N-sulfonyl imidates as a novel prodrug form for an ester function or a sulfonamide group. Bundgaard H, et al. **J Med Chem** 1988 Nov;31(11):2066-9

GR 43175: a preferential 5-HT1D agent in monkey and human 1rains as shown by autoradiography. Waeber C, et al. **Synapse** 1989;4(2):168-70

PHARMACOKINETICS

Removal of sulfonamides by hemofiltration. Yu SS, et al. **Biopharm Drug Dispos** 1989 Mar-Apr;10(2):173-85

The kinetics of 14C-GR43175 in rat and dog. Dallas FA, et al. **Cephalalgia** 1989;9 Suppl 9:53-6

Early studies with the novel 5-HT 1-like agonist GR43175 in healthy volunteers. Fowler PA, et al. **Cephalalgia** 1989; 9 Suppl 9:57-62

The influence of nonsteroidal anti-inflammatory drugs and probenecid on the renal response to and kinetics of piretanide in man. Dixey JJ, et al. **Clin Pharmacol Ther** 1988 Nov;44(5):531-9

Influence of obesity on sulfonamide disposition in Zucker rats. Kaul S, et al. **Eur J Drug Metab Pharmacokinet** 1988 Oct-Dec;13(4):273-83

Relation between renal and hepatic excretion of drugs. XII. Influence of dexamethasone, triiodothyronine, or phenobarbital on the elimination of sulfonamides in rats of different ages. Fleck C, et al. **Exp Pathol** 1989; 36(1):43-52

Pharmacokinetic and pharmacodynamic studies of piretanide in rabbits. III. Sodium and potassium excretion under different hydrated conditions. Lu W, et al. **J Pharmacobiodyn** 1988 May;11(5):314-23

Binding of sulfonamides to carbonic anhydrase: influence on distribution within blood and on pharmacokinetics. Boddy A, et al. **Pharm Res** 1989 Mar;6(3):203-9

PHARMACOLOGY

The strong contractile effect of the thromboxane receptor agonist U-46619 in isolated human pulmonary arteries and its competitive antagonism by BM-13.505. Sjöberg T, et al. **Acta Physiol Scand** 1989 Jun;136(2):161-5

Synthesis and biological evaluation of new Rh (I) complexes with sulfonamide derivatives. Craciunescu G, et al. **Anticancer Res** 1989 May-Jun;9(3):781-5

Mechanism of action and in vitro and in vivo activities of S-6123, a new oxazolidinone compound. Daly JS, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1341-6

RSF1010 and a conjugative plasmid contain sulII, one of two known genes for plasmid-borne sulfonamide resistance dihydropteroate synthase. Rådström P, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1684-92

Characterization of a streptomycin-sulfonamide resistance plasmid from Actinobacillus pleuropneumoniae. Willson PJ, et al. **Antimicrob Agents Chemother** 1989 Feb; 33(2):235-8

Sulfonamide resistance in Neisseria meningitidis isolates of clones of the ET-5 complex. Caugant DA, et al. **APMIS** 1989 May;97(5):425-8

Pharmacokinetics of triamterene in geriatric patients--influence of piretanide and hydrochlorothiazide. Mühlberg W, et al. **Arch Gerontol Geriatr** 1989 Jan; 8(1):73-85

Local tolerance and activity of MK-927, a novel topical carbonic anhydrase inhibitor. Lippa EA, et al. **Arch Ophthalmol** 1988 Dec;106(12):1694-6

Calmodulin and protein kinase C antagonists also inhibit the Ca2+-dependent protein protease, calpain I. Brumley LM, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1297-303

Na+-H+ antiport during fertilization of the sea urchin egg is blocked by W-7 but is insensitive to K252a and H-7. Shen SS. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1100-8

Beneficial effects of a thromboxane receptor antagonist (BM 13.505) on platelet hyperreactivity and thromboxane formation in cholesterol-fed rabbits. Löbel P, et al. **Biomed Biochim Acta** 1988;47(10-11):S86-9

In vitro inhibition studies of tolbutamide hydroxylase activity of human liver microsomes by azoles, sulphonamides and quinolines. Back DJ, et al. **Br J Clin Pharmacol** 1988 Jul; 26(1):23-9

Calcium/calmodulin regulation of the proliferation of human epidermal keratinocytes, dermal fibroblasts and mouse B16 melanoma cells in culture. Al-Ani AM, et al. **Br J Dermatol** 1988 Sep;119(3):295-306

Characterization of 5-HT receptors mediating contraction of canine and primate basilar artery by use of GR43175, a selective 5-HT1-like receptor agonist. Connor HE, et al. **Br J Pharmacol** 1989 Feb;96(2):379-87

The selective carotid arterial vasoconstrictor action of GR43175 in anaesthetized dogs. Feniuk W, et al. **Br J Pharmacol** 1989 Jan;96(1):83-90

GR43175, a selective agonist for the 5-HT1-like receptor in dog isolated saphenous vein. Humphrey PP, et al. **Br J Pharmacol** 1988 Aug;94(4):1123-32

5-HT1-like receptors mediate 5-hydroxytryptamine-induced contraction of human isolated basilar artery. Parsons AA, et al. **Br J Pharmacol** 1989 Feb;96(2):434-40

Plasmid mediated antimicrobial resistance in Ontario isolates of Actinobacillus (Haemophilus) pleuropneumoniae. Gilbride KA, et al. **Can J Vet Res** 1989 Jan;53(1):38-42

GR43175 does not share the complex pharmacology of the ergots. Feniuk W, et al. **Cephalalgia** 1989;9 Suppl 9:35-9

The pharmacology of the novel 5-HT1-like receptor agonist, GR43175. Humphrey PP, et al. **Cephalalgia** 1989;9 Suppl 9:23-33

Lack of effect of GR43175 on peripheral arteries in man. Nielsen TH, et al. **Cephalalgia** 1989;9 Suppl 9:93-5

The selective closure of feline carotid arteriovenous anastomoses (AVAs) by GR43175. Perren MJ, et al. **Cephalalgia** 1989;9 Suppl 9:41-6

Thromboxane A2 receptor antagonists. II. Synthesis and pharmacological activity of 6,6-dimethylbicyclo[3.1.1]heptane derivatives with the benzenesulfonylamino group. Seno K, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):948-54

Clearer demonstration of calcium/calmodulin-dependent events in synaptosomes by use of the differential effects of two calmodulin antagonists, N-(aminohexyl)-5-chloro-1-naphthalenesulfonamide and N-(6-aminohexyl)-1-naphthalenesulfonamide. Imai S, et al. **Comp Biochem Physiol [C]** 1988;91(2):535-40

W-7 specifically inhibits insulin-induced increase in glucose transport. Ishibashi O, et al. **Diabetes Res Clin Pract** 1989 Feb 15;6(2):109-13

Synthesis and cytotoxic activity of tetrahydropyridylidene-2- and -4-sulfonamides. Ho LK, et al. **Drug Des Deliv** 1989 Jan;4(1):35-43

Nimesulide. A preliminary review of its pharmacological properties and therapeutic efficacy in inflammation and pain states. Ward A, et al. **Drugs** 1988 Dec;36(6):732-53 (69 ref.)

Comparative studies on the effect of continuous intravenous infusion of some sulphonamides on blood and urine glucose levels in buffaloes. Ramadan A, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul-Aug; 96(7):376-7

Sulphonamide modulation of sodium content in rat pancreatic islets. Ali L, et al. **Eur J Pharmacol** 1988 Dec 13; 158(3):257-62

Sumatriptan (GR 43175) interacts selectively with 5-HT1B and 5-HT1D binding sites. Peroutka SJ, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):133-6

Protective action of YM-12617, an alpha 1-adrenoceptor antagonist, on the hypoxic and reoxygenated myocardium. Tanonaka K, et al. **Eur J Pharmacol** 1989 Jun 8; 165(1):97-106

The thromboxane receptor antagonist, daltroban, protects the myocardium from ischaemic injury resulting in suppression of leukocytosis. Thiemermann C, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):57-67

Reduction in blood pressure and vascular reactivities to pressor substances by chronic treatment with piretanide in spontaneously hypertensive rats. Kawashima K, et al. **Gen Pharmacol** 1989;20(2):213-7

Comparative neuropharmacology of dihydroergotamine and sumatriptan (GR 43175). McCarthy BG, et al. **Headache** 1989 Jul;29(7):420-2

Effect of protein kinase C inhibitor (H-7) and calmodulin antagonist (W-7) on pertussis toxin-induced IL-1 production by human adherent monocytes. Comparison with lipopolysaccharide as a stimulator of IL-1 production. Taniguchi H, et al. **Immunology** 1989 Jun;67(2):210-5

Action of a new non-steroid antiinflammatory drug, nimesulide, on activation of the complement system: an in vitro study. Auteri A, et al. **Int J Tissue React** 1988; 10(4):217-21

Partial agonistic activity of GR43175 at the inhibitory prejunctional 5-HT1-like receptor in rat kidney. Bond RA, et al. **J Auton Pharmacol** 1989 Jun;9(3):201-10

Inhibition of cytotoxic T lymphocyte-mediated lysis and cellular proliferation by isoquinoline sulfonamide protein kinase inhibitors. Evidence for the involvement of protein kinase C in lymphocyte function. Juszczak RJ, et al. **J Biol Chem** 1989 Jan 15;264(2):810-5

Reduction of myocardial damage and polymorphonuclear leukocyte accumulation following coronary artery occlusion and reperfusion by the thromboxane receptor antagonist BM 13.505. Smith EF 3d, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):715-22

Inhibition of macrophage activation by isoquinolinesulfonamides, phenothiazines, and a napthalenesulfonamide. Holian A, et al. **J Cell Physiol** 1988 Oct;137(1):45-54

Chemicals influencing maturation, activation, and degeneration of bovine oocytes in culture. Sato E, et al. **J Dairy Sci** 1988 Dec;71(12):3482-8

Stage-specific response of preimplantation mouse embryos to W-7, a calmodulin antagonist. Yamaura H, et al. **J Exp Zool** 1988 Oct;248(1):45-54

Crohn's disease, sulfasalazine, and mycobacteria. Van Caekenberghe D. **J Lab Clin Med** 1989 Jul;114(1):63-5

The binding of benzenesulfonamides to carbonic anhydrase enzyme. A molecular mechanics study and quantitative structure-activity relationships. Menziani MC, et al. **J Med Chem** 1989 May;32(5):951-6

N-[(arylmethoxy)phenyl] and N-[(arylmethoxy)naphthyl] sulfonamides: potent orally active leukotriene D4 antagonists of novel structure. Musser JH, et al. **J Med Chem** 1989 Jun;32(6):1176-83

Calmodulin antagonist W-7 inhibits lysosomal sphingomyelinase activity in C6 glioma cells. Masson M, et al. **J Neurochem** 1989 May;52(5):1645-7

Pharmacokinetic and pharmacodynamic studies of piretanide in rabbits. IV. Effect of piretanide on the proximal tubules and the loop of Henle under a hydrated condition. Lu W, et al. **J Pharmacobiodyn** 1988 Dec;11(12):794-800

Interaction between nonsteroidal anti-inflammatory drugs and loop diuretics: modulation by sodium balance. Herchuelz A, et al. **J Pharmacol Exp Ther** 1989 Mar; 248(3):1175-81

Effect of thromboxane receptor antagonists on venous thrombosis in rats. Schumacher WA, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1109-15

Effect of S-8666 on urinary Ca++ excretion in rats. Shimizu T, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):654-8

Additive diuretic effect of S-8666 during furosemide-induced diuresis in rats. Shimizu T, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):659-66

Effects of putative thromboxane receptor agonists and antagonists on rat small intestinal ion transport. Smith PL, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):143-9

1H-NMR studies of calmodulin: the modifying effect of W-7 (N-(6-aminohexyl)-5-chloro-1-naphthalenesulfonamide) on the calcium-induced conformational changes of calmodulin. Akiyama K, et al. **Jpn J Pharmacol** 1988 Oct; 48(2):157-64

Phase-shifts of the Bulla ocular circadian pacemaker in the presence of calmodulin antagonists. Khalsa SB, et al. **Life Sci** 1988;43(19):1551-6

Site-specific recombination promotes linkage between trimethoprim- and sulfonamide resistance genes. Sequence characterization of dhfrV and sulI and a recombination active locus of Tn21. Sundström L, et al. **Mol Gen Genet** 1988 Aug;213(2-3):191-201

CGS 9343B and W7 (calmodulin antagonists) inhibit KCl-induced increase in cytosolic free calcium and insulin secretion of RINm5F cells. Safayhi H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):8-13

Piretanide-dextran and piretanide-polyethylene glycol interact with high affinity with the Na+ 2 Cl- K+ cotransporter in the thick ascending limb of the loop of Henle. Nitschke R, et al. **Pflugers Arch** 1989 Mar; 413(5):559-61

Effects of quinine and of calmodulin inhibitors on calcium-dependent potassium channels of human aorta. Serebryakov VN, et al. **Pflugers Arch** 1989;414 Suppl 1:S185

Influence of glucose on the sodium content of beta-cell-rich pancreatic islets exposed to sulphonamides and amiloride. Wesslén N, et al. **Pharmacology** 1988;37(2):125-31

The effects of furosemide, piretanide and MK-196 on volume sensitive solute transport in fish erythrocytes. Wolowyk MW, et al. **Proc West Pharmacol Soc** 1989;32:309-11

Benzenesulfonamide inhibitors of carbonic anhydrase: study of their hydrophobicity by RPLC. Altomare C, et al. **Prog Clin Biol Res** 1989;291:79-82

Effects of the thromboxane receptor antagonist SK&F 88046 in the canine, monkey and human coronary vasculature. Ohlstein EH, et al. **Prostaglandins** 1988 Jul;36(1):69-84

Animal origin of the antibiotic resistance of human pathogenic Yersinia enterocolitica [letter] Trallero EP, et al. **Scand J Infect Dis** 1988;20(5):573

Mafenide (Sulfamylon) inhibits plasmin fibrinolytic activity. Weisdorf DJ, et al. **Thromb Haemost** 1988 Jun 16; 59(3):440-4

THERAPEUTIC USE

Protective effect of the specific thromboxane receptor antagonist, BM-13505, in reperfusion injury following acute myocardial ischemia in cats. Bhat AM, et al. **Am Heart J** 1989 Apr;117(4):799-803

Cyclical carotid artery flow reduction in conscious dogs: effect of a new thromboxane receptor antagonist. al-Wathiqui MH, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1482-7

In vitro antimicrobial activity of sulfonamides against some porcine pathogens. Mengelers MJ, et al. **Am J Vet Res** 1989 Jul;50(7):1022-8

MK-927: a topically effective carbonic anhydrase inhibitor in patients. Bron AM, et al. **Arch Ophthalmol** 1989 Aug; 107(8):1143-6

Acute and long-term renal and metabolic effects of piretanide in congestive cardiac failure. McNabb WR, et al. **Br J Clin Pharmacol** 1988 Aug;26(2):143-54

Enhancement of antineoplastic effects of cisplatin by a calmodulin antagonist (W-7) in nude mice bearing human ovarian carcinoma. Oomori K, et al. **Cancer Detect Prev** 1988;12(1-6):481-6

Treatment of acute migraine with subcutaneous GR43175 in West Germany. Baar HA, et al. **Cephalalgia** 1989;9 Suppl 9:83–7

Initial clinical experience with the use of subcutaneous GR43175 in treating acute migraine. Brion N, et al. **Cephalalgia** 1989;9 Suppl 9:79–82

Effective improvement of symptoms in patients with acute migraine by GR43175 administered in dispersible tablets. Doenicke A, et al. **Cephalalgia** 1989;9 Suppl 9:89–92

Overview of initial clinical studies with intravenous and oral GR43175 in acute migraine. Perrin VL, et al. **Cephalalgia** 1989;9 Suppl 9:63–72

Early clinical experience with subcutaneous GR43175 in acute migraine: an overview. Tfelt-Hansen P, et al. **Cephalalgia** 1989;9 Suppl 9:73–7

The effects of piretanide in patients with congestive heart failure and diabetes mellitus: a double-blind comparison with furosemide. Car N, et al. **Curr Med Res Opin** 1988; 11(2):133–41

Efficacy and pharmacokinetics of piretanide in patients with congestive heart failure. Marone C, et al. **Eur J Clin Invest** 1989 Aug;19(4):378–83

Use of 5% sulfamylon (mafenide) solution after excision and grafting of burns. Lee JJ, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):602–5

Loop diuretics combined with an ACE inhibitor for treatment of hypertension: a study with furosemide, piretanide, and ramipril in spontaneously hypertensive rats. Becker RH, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 3:S35–9

Antihypertensive efficacy of low dose torasemide in essential hypertension: a placebo-controlled study. Dupont AG, et al. **J Hum Hypertens** 1988 Dec;2(4):265–8

Comparison of nimesulide and flurbiprofen in the treatment of non-infectious acute inflammation of the upper respiratory tract. Cadeddu L, et al. **J Int Med Res** 1988 Nov–Dec;16(6):466–73

Efficacy and tolerability of nimesulide in elderly patients with osteoarthritis: double-blind trial versus naproxen. Fossaluzza V, et al. **J Int Med Res** 1989 May–Jun; 17(3):295–303

Mechanisms of reduced effects of loop diuretics in healthy volunteers and in patients with renal disease. Sjöström P. **Scand J Urol Nephrol Suppl** 1988;111:1–66

Emergency treatment of horses: RCVS warning [letter] Parsons JH. **Vet Rec** 1989 Mar 11;124(10):258

[Medical treatment of urinary infections in children] Sayed S, et al. **Tunis Med** 1987 Oct;65(10):585–9 (Fre)

[Recombinant human erythropoietin and torasemide—innovations in nephrology] **Internist (Berlin)** 1989 Mar;30(3):220 (Ger)

[Innovative aspects in clinical medicine. Nephrology—new perspectives for dialysis patients. Symposium. 25–27 November 1988, Heidelberg. Abstracts] **Klin Wochenschr** 1989 Mar;67(3 Suppl):1–23 (Ger)

[Piretanide in chronic and acute decompensated heart failure. Effect on hemodynamics and vasoactive hormones] Sievert H, et al. **Med Klin** 1989 Jun 15;84(6):282–5 (Eng. Abstr.) (Ger)

[Tolerability of nimesulide in the aged] Nante G, et al. **Clin Ter** 1988 Feb 29;124(4):295–302 (Eng. Abstr.) (Ita)

[Use of nimesulide in inflammations of the upper respiratory tract] Passàli D, et al. **Clin Ter** 1989 Jan 31;128(2):105–11 (Eng. Abstr.) (Ita)

[New therapeutic prospects in gynecologic inflammation: nimesulide] Chiantera A, et al. **Minerva Ginecol** 1988 Mar; 40(3):193–7 (Eng. Abstr.) (Ita)

[Nimesulide in oral surgery. Clinical experience in postoperative treatment] Bergamini M, et al. **Minerva Stomatol** 1988 Oct;37(10):793–6 (Eng. Abstr.) (Ita)

[Evaluation of the efficacy and tolerability of nimesulide in various odonto-stomatologic pathologies] Moniaci D, et al. **Minerva Stomatol** 1988 Apr;37(4):291–4 (Eng. Abstr.) (Ita)

[Nimesulide: multicenter clinical study for evaluation of its therapeutic effect in odontostomatology] Solimei GE, et al. **Minerva Stomatol** 1989 Feb;38(2):221–6 (Eng. Abstr.) (Ita)

[Efficacy and tolerability of nimesulide in inflammatory diseases of the genito-urinary system] Corrado F, et al. **Minerva Urol Nefrol** 1989 Apr–Jun;41(2):115–9 (Eng. Abstr.) (Ita)

[Controlled clinical study on the use of nimesulide in inflammatory diseases of the genitourinary system] Mirone V, et al. **Minerva Urol Nefrol** 1988 Oct–Dec;40(4):261–5 (Eng. Abstr.) (Ita)

[Algimaf treatment of trophic ulcers] Sogomonian LM, et al. **Vestn Dermatol Venerol** 1989;(5):69–72 (Eng. Abstr.) (Rus)

SULFONES

Response of complement and neutrophils to hydrophilized synthetic membranes. Ward RA, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):334–7

Torsional moment to failure for carbon fibre polysulphone expandable rivets as compared with stainless steel screws for carbon fibre-reinforced epoxy fracture plate fixation. Sell PJ, et al. **Biomaterials** 1989 Apr;10(3):182–4

Technical and clinical evaluation of a new synthetic low flux polysulphon membrane for hemodialysis. Ronco C, et al. **Int J Artif Organs** 1989 Jul;12(7):450–60

UDEL polysulfone for medical applications. Dickinson BL. **J Biomater Appl** 1989 Apr;3(4):605–34

Purification of uteroglobin using monospecific antibodies coupled to divinylsulphone-activated agarose. Dannhorn DR, et al. **J Immunol Methods** 1989 May 12;119(2):223–30

Protein reactions with methyl and ethyl vinyl sulfones. Masri MS, et al. **J Protein Chem** 1988 Feb;7(1):49–54

Markedly increased clearance of vancomycin during hemodialysis using polysulfone dialyzers. Lanese DM, et al. **Kidney Int** 1989 Jun;35(6):1409–12

Rapid removal of DFO-chelated aluminum during hemodialysis using polysulfone dialyzers. Molitoris BA, et al. **Kidney Int** 1988 Jul;34(1):98–101

Histopathology and clinical behavior of polysulfone intracorneal implants in the baboon model. Polysulfone lens implants. Deg JK, et al. **Ophthalmology** 1988 Apr; 95(4):506–15

[Bioresistance (drug resistance-antibiotic resistance-sulfone resistance), a general phenomenon of great importance] Floch HA. **Bull Soc Pathol Exot Filiales** 1988;81(5):881–2 (Fre)

ADMINISTRATION & DOSAGE

[Diucifon and dimocifon in the combined therapy of leprosy (14-year observation)] Goloshchapov NM, et al. **Vestn Dermatol Venerol** 1988;(7):18–22 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Granulocyte-related bioincompatibility of hemodialysis: inhibition of oxidative metabolism, degranulation reaction, enzyme release and leukocyte sequestration in the lung. Kolb G, et al. **Int J Artif Organs** 1989 May;12(5):294–8

BLOOD

Determination of methanesulphonyl fluoride in blood matrix with a fluoride ion-selective electrode. Chang CA, et al. **Analyst** 1988 Sep;113(9):1485–6

CHEMICAL SYNTHESIS

Synthesis and antinociceptive activity of 7-aryloxysulfonyl piperidines. Buolamwini JK, et al. **Drug Des Deliv** 1988 Jul;3(1):35–47

Antimicrobial activity of heteroarylazoxycyanides and heteroarylazoxysulphones [published erratum appears in Pharmazie 1988 Dec;43(12):880] Fruttero R, et al. **Pharmazie** 1988 Aug;43(8):551–2

[The synthesis and antineoplastic activity of substituted benzaldehyde arylsulfonylhydrazones] He XF, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):317–9 (Eng. Abstr.) (Chi)

HISTORY

The story of sulfones in tropical medicine and dermatology. Wozel G. **Int J Dermatol** 1989 Jan–Feb;28(1):17–21

METABOLISM

Oxygen dependence of omeprazole clearance and sulfone and sulfide metabolite formation in the isolated perfused rat liver. Angus PW, et al. **J Pharmacol Exp Ther** 1989 Sep; 250(3):1043–7

PHARMACOLOGY

Mode of action of a new type of UDP-glucose analog against herpesvirus replication. Alarcón B, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1257–61

Activity of P536, a UDP-glucose analog, against Trypanosoma cruzi. Alcina A, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1412–5

Fluorine compounds inhibit the conversion of active type-1 protein phosphatases into the ATPMg-dependent form. Bollen M, et al. **Biochem J** 1988 Oct 1;255(1):327–33

Sulfone analogues of taurine as modifiers of calcium uptake and protein phosphorylation in rat retina. Liebowitz SM, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):399–406

L-648,051, a novel cysteinyl-leukotriene antagonist is active by the inhaled route in man. Evans JM, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):125–35

Further studies on the mechanism of the late protective effects of phenylmethylsulfonyl fluoride on carbon tetrachloride-induced liver necrosis. de Ferreyra EC, et al. **Exp Mol Pathol** 1989 Apr;50(2):253–69

Effects of chlorobenzenes and their methyl sulfone metabolites on microsomal enzymes associated with drug metabolism in rat liver. Kato Y, et al. **J Pharmacobiodyn** 1988 Nov;11(11):758–62

Protection by serine peptidase inhibitors of endogenous cholecystokinin released from brain slices. Rose C, et al. **Neuroscience** 1989;29(3):583–94

Comparative QSAR analysis in dihydropteroate synthase inhibition by sulphones. Design and synthesis of some new derivatives with improved potency. De Benedetti PG, et al. **Prog Clin Biol Res** 1989;291:345–8

Contribution of methylsulfonyl metabolites of m-dichlorobenzene to the heme metabolic enzyme induction by the parent compound in rat liver. Kato Y, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):550–9

[Effect of the nonhormonal bisanionic aromatic compound IEM 967 on the pituitary-ovarian system of rats] Bekhtereva EP. **Vopr Med Khim** 1988 Jul–Aug;34(4):78–81 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Triphenyl phosphite neurotoxicity in the hen: inhibition of neurotoxic esterase and of prophylaxis by phenylmethylsulfonyl fluoride. Carrington CD, et al. **Arch Toxicol** 1988;62(5):375–80

Dimethyl sulfoxide modulation of diabetes onset in NOD mice. Klandorf H, et al. **Diabetes** 1989 Feb;38(2):194–7

A follow up study of borderline tuberculoid leprosy under sulphone monotherapy. Ramu G, et al. **Indian J Lepr** 1988 Jan;60(1):26–33

TOXICITY

[Toxicologic and hygienic characteristics of O-chlorobenzenesulfochloride] Chura DA, et al. **Gig Sanit** 1989 Apr;(4):72–3 (Rus)

SULFONIC ACIDS

Permselectivity and ion-exchange properties of Eastman-AQ polymers on glassy carbon electrodes. Wang J, et al. **Anal Chem** 1989 Jul 1;61(13):1397–400

ISOLATION & PURIFICATION

Inhibitors of cyclo-oxygenase and lipoxygenase in onions [letter] Bayer T, et al. **Lancet** 1988 Oct 15;2(8616):906

PHARMACOLOGY

Comparison of the mechanism of action of busulfan with hepsulfam, a new antileukemic agent, in the L1210 cell line. Pacheco DY, et al. **Cancer Res** 1989 Sep 15; 49(18):5108–10

SULFONIUM COMPOUNDS see under **ONIUM COMPOUNDS**

SULFONYLDIANILINE see **DAPSONE**

SULFONYLUREA COMPOUNDS

Glipizide: an oral hypoglycemic drug. Wensing G. **Am J Med Sci** 1989 Jul;298(1):69–71 (24 ref.)

[The 2d generation of sulfonylurea antidiabetic agents] Kocna A. **Cas Lek Cesk** 1989 Jun 2;128(23):726–8 (Eng. Abstr.) (Cze)

ADMINISTRATION & DOSAGE

Oral therapeutic system delivering a water insoluble drug: N-(4-[2-(3-methylpyrazole-1-carbonamide)ethyl]-benzenesulfonyl)N - cyclohexylurea (SPC-5002). Janicki S, et al. **Acta Pharm Hung** 1988 Jul;58(4):145–51

Rise of plasma t-PA fibrinolytic activity in a group of maturity onset diabetic patients shifted from a first generation (tolbutamide) to a second generation sulphonylurea (gliclazide). Gram J, et al. **J Intern Med** 1989 Apr;225(4):241–7

ADVERSE EFFECTS

Phase I clinical study of N-[(4-chlorophenyl)amino]carbonyl-2,3-dihydro-1H-indene-5-sulfonamide (LY186641). Hainsworth JD, et al. **Cancer Res** 1989 Sep 15;49(18):5217–20

Gliclazide alcohol flush [letter] Conget JI, et al. **Diabetes Care** 1989 Jan;12(1):44

Hypoglycemia in hypertensive diabetic patients treated with sulfonylureas, biguanides, and captopril [letter] Rett K, et al. **N Engl J Med** 1988 Dec 15;319(24):1609

ANALYSIS

[Attempt at determining the fragmentary constant (f) of the sulfonylurea groups] Cloux JL, et al. **J Pharm Belg** 1988 May–Jun;43(3):141–51 (Eng. Abstr.) (Fre)

BLOOD

Determination of serum sulphonylureas by high-performance liquid chromatography with fluorimetric detection. Igaki A, et al. **J Chromatogr** 1989 Aug 25;493(1):222–9

CHEMICAL SYNTHESIS

Acylureidoalkylphenylsulfonylureas with blood glucose lowering efficacy. Weyer R, et al. **Arzneimittelforschung** 1988 Aug;38(8):1079–80

METABOLISM

Antidiabetic sulfonylureas: localization of binding sites in the brain and effects on the hyperpolarization induced by anoxia in hippocampal slices. Mourre C, et al. **Brain Res** 1989 May 1;486(1):159–64

PHARMACOKINETICS

Hyperglycaemia and absorption of sulphonylurea drugs. Groop LC, et al. **Lancet** 1989 Jul 15;2(8655):129–30

[Identification, function mechanisms and regulation of potassium channels sensitive to ATP which are targets of sulfonylureas used in the treatment of type II diabetes

mellitus] Fosset M, et al.
Journ Annu Diabetol Hotel Dieu 1989;:7–11 (13 ref.)
(Fre)

[Pharmacodynamics of second-generation sulfonylureas: dose-effect curve of gliquidone in type II diabetics] Procacci V, et al. **Boll Soc Ital Biol Sper** 1988 Aug; 64(8):731–8 (Eng. Abstr.) **(Ita)**

[Pharmacodynamics of second generation sulfonylureas: dose-effect curve of gliclazide in type 2 diabetes mellitus] Procacci V, et al. **Boll Soc Ital Biol Sper** 1988 Sep; 64(9):817–24 (Eng. Abstr.) **(Ita)**

PHARMACOLOGY

Effect of glipizide on the surgically altered pancreas. Barr JD, et al. **Am J Surg** 1989 Jan;157(1):103–8

Significance of insulin receptors in the action of sulphonylurea drugs. Huupponen R. **Ann Clin Res** 1988; 20(5):373–9

Special pharmacology of the new sulfonylurea glimepiride. Geisen K. **Arzneimittelforschung** 1988 Aug;38(8):1120–30

The effects of long term gliclazide administration on insulin secretion and insulin sensitivity. Ma A, et al.
Aust N Z J Med 1989 Feb;19(1):44–9

Effects of sulphonylureas and diazoxide on insulin secretion and nucleotide-sensitive channels in an insulin-secreting cell line. Sturgess NC, et al. **Br J Pharmacol** 1988 Sep; 95(1):83–94

Glucose and sulfonylureas modify different phases of the membrane potential change during hypoxia in rat hippocampal slices. Grigg JJ, et al. **Brain Res** 1989 Jun 12;489(2):302–10

Effect of valine and the herbicide sulfometuron methyl on acetolactate synthase activity in nuclear and plasmid-borne sulphometuron methyl resistant Saccharomyces cerevisiae strains. Maiti SN, et al. **Can J Microbiol** 1988 May; 34(5):680–5

A new anticancer agent (LY186641) interferes with creatinine assay. Bonnay MM, et al. **Cancer Chemother Pharmacol** 1989;23(2):119–20

Inhibitory action of gliclazide on platelet functions. Mizuno A, et al. **Diabetes Res Clin Pract** 1989 Aug 1;7(2):141–7

Mechanism of action of sulphonylureas with special reference to the extrapancreatic effect: an overview. Beck-Nielsen H, et al. **Diabetic Med** 1988 Oct;5(7):613–20 (66 ref.)

Sulphonylurea antidiabetic drugs. An update of their clinical pharmacology and rational therapeutic use. Melander A, et al. **Drugs** 1989 Jan;37(1):58–72 (107 ref.)

Inhibition by sulphonylureas of vasorelaxation induced by K+ channel activators in vitro. Wilson C.
J Auton Pharmacol 1989 Feb;9(1):71–8

Sulfonylurea binding to adipocyte membranes and potentiation of insulin-stimulated hexose transport. Martz A, et al. **J Biol Chem** 1989 Aug 15;264(23):13672–8

Effects of an oral antidiabetic drug on the fibrinolytic system of blood in insulin-treated diabetic patients. Gram J, et al. **Metabolism** 1988 Oct;37(10):937–43

Effect of sulfonylureas on hepatic glycogen metabolism: activation of glycogen phosphorylase. Mojena M, et al. **Metabolism** 1989 May;38(5):466–70

Utilization of sulfometuron methyl, an acetolactate synthase inhibitor, in molecular biological and metabolic studies of plants and microbes. LaRossa RA, et al.
Methods Enzymol 1988;166:97–107

Glucose both inhibits and stimulates insulin secretion from isolated pancreatic islets exposed to maximally effective concentrations of sulfonylureas. Panten U, et al.
Naunyn Schmiedebergs Arch Pharmacol 1988 Oct; 338(4):459–62

Pharmacology and regulation of ATP-sensitive K+ channels. de Weille JR, et al. **Pflugers Arch** 1989;414 Suppl 1:S80–7 (63 ref.)

Piretanide-dextran and piretanide-polyethylene glycol interact with high affinity with the Na+ 2 Cl- K+ cotransporter in the thick ascending limb of the loop of Henle. Nitschke R, et al. **Pflugers Arch** 1989 Mar; 413(5):559–61

Theoretical study on conformation-related activity of hypoglycemic sulfonylureas. Brasseur R, et al.
Pharmacol Res Commun 1983 Nov;15(10):901–7

POISONING

He is happy whom the Muses love. Micronase (sulfonylurea) overdose. Mack RB. **N C Med J** 1989 Jun;50(6):312–4

THERAPEUTIC USE

Plasma activity of the enzyme N-acetil-beta-glucosaminidase in healthy and diabetic subjects: effects of treatment with a sulfonylurea drug. Giraudo JR, et al.
Adv Exp Med Biol 1988;246:321–7

Kidney disease in KK mice: effect of glipizide. Reddi AS, et al. **Adv Exp Med Biol** 1988;246:305–12

Effect of gliclazide on non-insulin dependent diabetes mellitus. Wajchenberg BJ, et al. **Adv Exp Med Biol** 1988; 246:313–9

Characteristics of non-insulin-dependent diabetic patients with secondary failure to oral antidiabetic therapy. Groop L, et al. **Am J Med** 1989 Aug;87(2):183–90

The second generation oral sulfonylureas: glyburide and glipizide. Kuhn T. **Am Pharm** 1988 Oct;NS28(10):55–61 (19 ref.)

Sulphonylureas in the treatment of non-insulin-dependent diabetes. Melander A. **Baillieres Clin Endocrinol Metab** 1988 May;2(2):443–53 (40 ref.)

Effect of chronic sulfonylurea treatment on the myocardium of insulin-dependent diabetic rats. Mozaffari MS, et al.
Can J Physiol Pharmacol 1988 Dec;66(12):1481–6

Further considerations regarding insulin secretion and metabolism after glipizide treatment [letter] Bonora E, et al. **Diabetes Care** 1988 Sep;11(8):690–2

Do sulfonylureas influence hepatic insulin clearance? [letter] Groop LC, et al. **Diabetes Care** 1988 Sep;11(8):689–90

Combination of two sulfonylureas. Does it make sense [letter] Salo S, et al. **Diabetes Care** 1988 Oct;11(9):751–3

Decreased or increased insulin metabolism after glipizide in type II diabetes [letter] Scheen AJ, et al. **Diabetes Care** 1988 Sep;11(8):687–9

Clinical comparison of glipizide and glyburide [letter] Schmitt JK. **Diabetes Care** 1989 Jan;12(1):39

Effect of gliclazide on thromboxane B2, parameters of haemostasis, fluorescent IgG and lipid peroxides in non-insulin dependent diabetes mellitus. Florkowski CM, et al. **Diabetes Res** 1988 Oct;9(2):87–90

Insulin versus insulin plus sulfonylureas in type 2 diabetic patients with secondary failure to sulfonylureas. Scheen AJ, et al. **Diabetes Res Clin Pract** 1989 May 15;6(4):S33–42; discussion S42–3 (30 ref.)

Analysis of secondary failure to sulfonylureas in type 2 diabetics. A retrospective study for 1976–1987. Stryjek-Kamińska D, et al. **Diabetes Res Clin Pract** 1989 Aug 1;7(2):149–54

Long-term gliclazide treatment improves the in vitro glucose-induced insulin release in rats with type 2 (non-insulin-dependent) diabetes induced by neonatal streptozotocin. Serradas P, et al. **Diabetologia** 1989 Aug; 32(8):577–84

The influence of glipizide on early insulin release and glucose disposal before and after dietary regulation in diabetic patients with different degrees of hyperglycaemia. Bitzén PO, et al. **Eur J Clin Pharmacol** 1988;35(1):31–7

The combined use of insulin and sulfonylurea therapy in patients with non-insulin dependent diabetes mellitus. Reaven GM, et al. **Horm Metab Res** 1989 Mar;21(3):132–6

A comparison of metformin versus guar in combination with sulphonylureas in the treatment of non insulin dependent diabetes. Wilson JA, et al. **Horm Metab Res** 1989 Jun; 21(6):317–9

Effects of improved glycaemic control on calcium and magnesium homeostasis in type II diabetes. McBain AM, et al. **J Clin Pathol** 1988 Sep;41(9):933–5

Trade-offs in treatment alternatives for non-insulin-dependent diabetes mellitus. Kaplan RM, et al. **J Gen Intern Med** 1989 Mar-Apr;4(2):167–71 (30 ref.)

Oral hypoglycemic agents. Ferner RE.
Med Clin North Am 1988 Nov;72(6):1323–35 (72 ref.)

Lipoprotein subfraction composition in non-insulin-dependent diabetes treated by diet, sulphonylurea, and insulin. Billingham MS, et al.
Metabolism 1989 Sep;38(9):850–7

Similar reduction of first- and second-phase B-cell responses at three different glucose levels in type II diabetes and the effect of gliclazide therapy. Hosker JP, et al.
Metabolism 1989 Aug;38(8):767–72

Insulin: either alone or combined with oral hypoglycemic agents. Firth RG. **Prim Care** 1988 Sep;15(3):665–83 (78 ref.)

[Preliminary results of non-insulin dependent diabetes mellitus treated with glipizide] Lu JM, et al.
Chung Hua Nei Ko Tsa Chih 1988 Mar;27(3):143–6, 196 (Eng. Abstr.) **(Chi)**

[Clinical experience with Glurenorm in type 2 diabetics with renal insufficiency] Rybka J, et al. **Vnitr Lek** 1988 Aug; 34(8):786–92 (Eng. Abstr.) **(Cze)**

[Diamicron through the European Association for the Study of Diabetes and the International Diabetes Federation congresses in Sydney in 1988] Lesobre B.
Journ Annu Diabetol Hotel Dieu 1989;:315–9 (18 ref.)
(Fre)

[Physiopathology of non-insulin-dependent diabetes. New therapeutic approaches with gliclazide] Lesobre B.
Journ Annu Diabetol Hotel Dieu 1988;:337–47 (35 ref.)
(Fre)

[Sulfonylurea compounds or biguanides in the treatment of type 2 diabetes? (editorial)] Mehnert H.
Dtsch Med Wochenschr 1989 Jul 7;114(27):1086–8 **(Ger)**

[The incidence of the secondary failure of sulfonylurea therapy. Epidemiological research] Thoelke H, et al.
Dtsch Med Wochenschr 1989 Apr 14;114(15):580–3 (Eng. Abstr.) **(Ger)**

[Effect of long-term therapy with sulfanylurea preparations on the relation of insulin secretion and the insulin-binding capacity of its receptors] Balabolkin MI, et al.
Ter Arkh 1988;60(12):91–6 **(Rus)**

[Glipizide in the treatment of non-insulin-dependent diabetes mellitus] Luis Iriarte J. **Rev Clin Esp** 1989 Jun;185(1):24–32 (Eng. Abstr.) **(Spa)**

[Cyclohexamide. A new oral hypoglycemic agent] Villaseñor A, et al. **Rev Invest Clin** 1967 Apr-Jun;19(2):149–57 (Eng. Abstr.) **(Spa)**

TOXICITY

Toxic emergencies of endocrine and metabolic therapeutic agents. Seger D. **J Emerg Med** 1988 Nov-Dec;6(6):527–37 (50 ref.)

SULFOTRANSFERASES

ANALYSIS

A radioassay of enzymes catalyzing the glucosylation and sulfation steps of glucosinolate biosynthesis in Brassica species. Jain JC, et al. **Anal Biochem** 1989 Apr; 178(1):137–40

Assay of sulfotransferase in subcellular fractions of hypothyroid mouse pituitary and liver tissue. Magner JA.
Biochem Med Metab Biol 1989 Feb;41(1):81–3

Sulphotransferase-mediated activation of the carcinogen 5-hydroxymethyl-chrysene. Species and sex differences in tissue distribution of the enzyme activity and a possible participation of hydroxysteroid sulphotransferases. Okuda H, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3003–9

Regulation of hepatic cortisol sulfotransferase in rats by pituitary growth hormone. Yamazoe Y, et al.
Mol Pharmacol 1989 May;35(5):707–12

ANTAGONISTS & INHIBITORS

Effect of ethanol on the in vitro sulfation of salivary mucin. Slomiany BL, et al. **Alcoholism (NY)** 1988 Dec;12(6):774–9

The role of N-sulfation in the N-hydroxy-2-acetylaminofluorene-mediated outgrowth of diethylnitrosamine-initiated hepatocytes to gamma-glutamyltranspeptidase-positive foci in male rat liver. Kroese ED, et al. **Carcinogenesis** 1988 Nov; 9(11):1953–8

BLOOD

[Fluorimetric determination of UDP-glucuronyltransferase and sulfotransferase activity in human blood cells] Khripach LV, et al. **Vopr Med Khim** 1988 Jul-Aug; 34(4):126–9 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Purification and characterization of human liver dehydroepiandrosterone sulphotransferase. Falany CN, et al. **Biochem J** 1989 Jun 15;260(3):641–6

METABOLISM

Characteristics of the sulfation of N-linked oligosaccharides in vesicles from Dictyostelium discoideum: in vitro sulfation of lysosomal enzymes. Lacoste CH, et al.
Arch Biochem Biophys 1989 Sep;273(2):505–15

Enzymatic sulphation of mucus glycoprotein in rat sublingual salivary gland. Slomiany A, et al. **Arch Oral Biol** 1988; 33(9):669–76

Enzymatic sulfation of salivary mucins: structural features of 35S-labeled oligosaccharides. Slomiany BL, et al.
Biochem Biophys Res Commun 1988 Nov 30;157(1):61–7

In vitro sulfation of sublingual salivary gland mucin: structures of 35S-labeled oligosaccharides. Slomiany A, et al. **Biochem Int** 1989 Mar;18(3):589–97

Modulation of testicular galactolipid sulphotransferase activity by phosphorylation. Stimulation of enzyme activity in vitro by an endogenous kinase. Sakac D, et al.
Biochem J 1989 Jul 15;261(2):423–9

Characterization and post-natal development of rat cerebellum tyrosylprotein sulfotransferase. Rens-Domiano S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2930–2

Enzymatic acetylation and sulfation of N-hydroxyarylamines in bacteria and rat livers. Yamazoe Y, et al.
Carcinogenesis 1989 Sep;10(9):1675–9

Characterization of a thyroid sulfotransferase responsible for the 3-O-sulfation of terminal beta-D-galactosyl residues in N-linked carbohydrate units. Kato Y, et al.
J Biol Chem 1989 Feb 25;264(6):3364–71

Characterization of tyrosylprotein sulfotransferase from rat liver and other tissues. Rens-Domiano S, et al.
J Biol Chem 1989 Jan 15;264(2):899–905

Biosynthesis of chondroitin sulfate. Organization of sulfation. Sugumaran G, et al. **J Biol Chem** 1989 Mar 5;264(7):3864–8

Inhibitors and dipeptide substrates for a microsomal tyrosylsulfotransferase from rat brain. Vargas F, et al.
J Enzym Inhib 1986;1(2):105–12

Increased cholesterol sulfate and cholesterol sulfotransferase activity in relation to the multi-step process of differentiation in human epidermal keratinocytes. Jetten AM, et al. **J Invest Dermatol** 1989 Feb;92(2):203–9

Age- and sex-related changes in epoxide hydrolase, UDP-glucuronosyl transferase, glutathione S-transferase, and PAPS sulphotransferase in Sprague-Dawley rats. Chengelis CP. **Xenobiotica** 1988 Nov;18(11):1225–37

[The role of UDP glucuronosyl- and sulfotransferases in the butylhydroxytoluene suppression of the mutagenic action of carcinogenic nitroso compounds and cyclophosphane] Kalinina EV, et al. **Vopr Onkol** 1989;35(2):220–5 (Eng. Abstr.) **(Rus)**

SULFOXIDES

Crystal structure of a zwitterionic detergent: n-octyl-2-hydroxyethylsulfoxide. Egner U, et al.
Biochim Biophys Acta 1989 Sep 15;992(3):404–6

[A new electron transfer system functioned as drug reducing enzyme system] Kitamura S. **Yakugaku Zasshi** 1988 Apr; 108(4):296–309 (45 ref.) (Eng. Abstr.) **(Jpn)**

METABOLISM

Impaired sulfoxidation in patients with primary biliary cirrhosis. Scharschmidt BF, et al. **Hepatology** 1989 Apr; 9(4):654–5

A proposed mechanism for chlorpromazine jaundice—defective hepatic sulphoxidation combined with rapid hydroxylation. Watson RG, et al. **J Hepatol** 1988 Aug;7(1):72–8

On the sulphoxidation of cimetidine and etintidine by rat and human liver microsomes. Schulz M, et al. **Xenobiotica** 1988 Aug;18(8):983–9

PHARMACOKINETICS

Foetoplacental drug clearance in the rabbit: studies with trimazosin, acebutolol and tolmesoxide. Prach AT, et al. **Xenobiotica** 1988 Aug;18(8):967–72

TOXICITY

Synthesis and in-vitro cytotoxic activity of phenyl-amino-4-(p-toluenesulfinyl)-trans-1,5-hexadiene. Montgomery DA, et al. **Leuk Res** 1988;12(7):591–6

SULFOXYPHENYLPYRAZOLIDIN see SULFINPYRAZONE

SULFUR

"In vivo" (35S)methionine interaction with rat liver tRNA. Kanduc D, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):255–61

ANALYSIS

A sensitive gas chromatographic method for determination of protein-associated sulfur. Hannestad U, et al. **Anal Biochem** 1989 May 1;178(2):394–8

Micromolar protein concentrations and metalloprotein stoichiometries obtained by inductively coupled plasma atomic emission spectrometric determination of sulfur. Bongers J, et al. **Anal Chem** 1988 Dec 15;60(24):2683–6

Relationship of sulphur content in tree leaves to SO2 concentration in air. Li XZ, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):878–83

Bone mineral and glycosaminoglycans in newborn and mature rabbits. Grynpas MD, et al. **J Bone Miner Res** 1988 Apr;3(2):159–64

High-performance liquid chromatographic determination of sulphur and captan in a mixture. Fedeli G, et al. **J Chromatogr** 1988 Aug 5;447(1):263–7

Synthesis of sulfur-containing analogues of bestatin. Inhibition of aminopeptidases by alpha-thiolbestatin analogues. Ocain TD, et al. **J Med Chem** 1988 Nov; 31(11):2193–9

Methionine-oxidized horse heart cytochrome c. III. Ascorbate reduction and the methionine-80-sulfur-iron linkage. Myer YP, et al. **J Protein Chem** 1989 Feb; 8(1):33–50

Sulphur gas analysis in the pulp and paper industry. de Souza TL. **JAPCA** 1988 Jun;38(6):792–5

A genetic electrophoretic variant of high-sulfur hair proteins for forensic hair comparisons. II. Practical application of electrophoretic analysis of hair protein to forensic hair comparisons. Miyake B. **Nippon Hoigaku Zasshi** 1989 Feb; 43(1):9–15

A genetic electrophoretic variant of high-sulfur hair proteins for forensic hair comparisons. I. Characterization of variant high-sulfur proteins of human hair. Miyake B. **Nippon Hoigaku Zasshi** 1989 Feb;43(1):1–8

[Genetic counseling in a case of neuro-ectodermosis: Vera Price trichothiodystrophy. Brittle hair with reduced sulfur content] Poissonnier M, et al. **J Genet Hum** 1988 Aug; 36(4):361–5 **(Fre)**

[The Schoniger method in the European Pharmacopoeia. 4. Determination of sulfur-containing drugs] Hilp M. **Arch Pharm (Weinheim)** 1988 Sep;321(9):537–40 (Eng. Abstr.) **(Ger)**

[The refractory susceptibility in determination of sulfur in organic drugs using the Schoniger method] Listov SA, et al. **Farmazie** 1988 Oct;43(10):686–9 (Eng. Abstr.) **(Ger)**

[Localization of the active centers in model molybdenum-sulfur and molybdenum-iron-sulfur proteins] Belonogova OV, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Jul-Aug;(4):613–7 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Trichothiodystrophy, a human DNA repair disorder with heterogeneity in the cellular response to ultraviolet light. Lehmann AR, et al. **Cancer Res** 1988 Nov 1;48(21):6090–6

METABOLISM

Sulphate and methionine as sulphur sources for cysteine and cephalosporin C synthesis in Cephalosporium acremonium. Lewandowska M, et al. **Acta Microbiol Pol** 1988; 37(1):17–26

Sulfur oxidation by phototrophic bacteria. Brune DC. **Biochim Biophys Acta** 1989 Jul 13;975(2):189–221 (220 ref.)

Reduction of Mo6+ with elemental sulfur by Thiobacillus ferrooxidans. Sugio T, et al. **J Bacteriol** 1988 Dec; 170(12):5956–9

Polyamines of sulfur-dependent archaebacteria and their role in protein synthesis. Friedman SM, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):1030–3

Spironolactone metabolism: steady-state serum levels of the sulfur-containing metabolites. Gardiner P, et al. **J Clin Pharmacol** 1989 Apr;29(4):342–7

Interactions of dietary cation-anion balance and phosphorus: effects on growth and serum inorganic phosphorus in dairy calves. Beighle DE, et al. **J Dairy Sci** 1988 Dec; 71(12):3362–8

An ultra-high sulfur keratin gene is expressed specifically during hair growth. McNab AR, et al. **J Invest Dermatol** 1989 Feb;92(2):263–6

The uptake of labelled sulphur by the proteins of human liver slices incubated with L-(35S)-methionine or (35S)-sulphate. Heinonen K. **Life Sci** 1974 Aug 1; 15(3):463–70

cys-3, the positive-acting sulfur regulatory gene of Neurospora crassa, encodes a protein with a putative leucine zipper DNA-binding element. Fu YH, et al. **Mol Cell Biol** 1989 Mar;9(3):1120–7

Adaptive eradication of methionine and cysteine from cyanobacterial light-harvesting proteins. Mazel D, et al. **Nature** 1989 Sep 21;341(6239):245–8

PHARMACOLOGY

Influence of molybdenum and sulfur on copper metabolism in sheep: comparison of elemental sulfur and sulfate. Lamand M. **Ann Rech Vet** 1989;20(1):103–6

Inhibitory effects of sulphur compounds, copper and tungsten on nitrate reduction by mixed rumen micro-organisms. Takahashi J, et al. **Br J Nutr** 1989 May;61(3):741–8

The effects of supplementation of the diet of young steers with Mo and S on the intracellular distribution of copper in liver and on copper fractions in blood. Wang ZY, et al. **Br Vet J** 1988 Nov-Dec;144(6):543–51

Cytotoxic activity of disulfur decafluoride (S2F10), a decomposition product of electrically-stressed SF6. Griffin GD, et al. **In Vitro Cell Dev Biol** 1989 Aug;25(8):673–5

[Different circadian influences in the administration of sulfur preparations on the metabolic liver functions] Harisch G, et al. **DTW** 1988 Sep;95(8):329–31 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Inhibition of tyrosine sulfation in the trans-Golgi retards the transport of a constitutively secreted protein to the cell surface. Friederich E, et al. **J Cell Biol** 1988 Nov; 107(5):1655–67

THERAPEUTIC USE

[Preparations for the external treatment of psoriasis] Kalamkarian AA, et al. **Vestn Dermatol Venerol** 1988; (12):47–9 (Eng. Abstr.) **(Rus)**

[Experience in the use of ditrastic in the therapy of psoriasis] Shakhtmeister IIa, et al. **Vestn Dermatol Venerol** 1989; (3):52–3 (Eng. Abstr.) **(Rus)**

TOXICITY

[Industrial hygiene and the health status of machine-tool operators working with sulfonated-chlorinated lubricants and cutting fluids] Kuzina VF, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):8–10 (Eng. Abstr.) **(Rus)**

SULFUR AMINO ACIDS see AMINO ACIDS, SULFUR

SULFUR DIOXIDE

Efficacy of fenspiride in alleviating SO2 induced chronic bronchitis in rats and allergic rhinitis in guinea pigs. Broillet A, et al. **Rhinology** 1988;Suppl 4:75–83

ADMINISTRATION & DOSAGE

Cell response in bronchoalveolar lavage fluid after sulfur dioxide exposure. Sandström T, et al. **Scand J Work Environ Health** 1989 Apr;15(2):142–6

ADVERSE EFFECTS

Cumulative arsenic exposure and lung cancer in smelter workers: a dose-response study. Järup L, et al. **Am J Ind Med** 1989;15(1):31–41

Acute effects of sulfur dioxide exposure on the middle ear mucosa. Ohashi Y, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):301–7

Measurement of respiratory morbidity in general practice in the United Kingdom during the acid transport event of January 1985. Ayres J, et al. **Environ Health Perspect** 1989 Feb;79:83–8

Effects of inhaled acids on airway mucus and its consequences for health. Holma B. **Environ Health Perspect** 1989 Feb;79:109–13 (55 ref.)

Ventilatory lung function and chronic chest symptoms among the inhabitants of urban areas with various levels of acid aerosols: prospective study in Cracow. Jedrychowski W, et al. **Environ Health Perspect** 1989 Feb; 79:101–7

Mortality and cancer morbidity in workers exposed to sulphur dioxide in a sulphuric acid plant. Englander V, et al. **Int Arch Occup Environ Health** 1988;61(3):157–62

Short-term effects of sulphur dioxide pollution on mortality in two French cities. Derriennic F, et al. **Int J Epidemiol** 1989 Mar;18(1):186–97

Sulfur dioxide and asthma—a double-edged sword? Sheppard D. **J Allergy Clin Immunol** 1988 Dec;82(6):961–4 (27 ref.)

[Air pollution with sulfur dioxide and the incidence of bronchial asthma and chronic bronchitis] May KL. **Pneumonol Pol** 1988 Jul;56(7):319–24 (Eng. Abstr.) **(Pol)**

[Environmental factors and asthma in the child population of Vizcaya] Casas Vila C, et al. **An Esp Pediatr** 1988 May; 28(5):401–4 (Eng. Abstr.) **(Spa)**

ANALYSIS

Relationship of sulphur content in tree leaves to SO2 concentration in air. Li XZ, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):878–83

Health status and sulfur dioxide exposure of nickel smelter workers and civic laborers. Broder I, et al. **J Occup Med** 1989 Apr;31(4):347–53

Transferable discharge permits for control of SO2 emissions from Illinois power plants. Diemer JS, et al. **JAPCA** 1988 Aug;38(8):997–1005

Characteristics of air pollution in Birmingham, England. II. On the significance of sampling height. Barratt RS. **Sci Total Environ** 1989 Aug;84:149–57

Contribution of SO2 sorption on particulate surface to the air pollution level in the vicinity of coal-fired power plants. Matyniak Z. **Sci Total Environ** 1989 Jul 1;83(1-2):173–9

ANTAGONISTS & INHIBITORS

Effect of metaproterenol sulfate on mild asthmatics' response to sulfur dioxide exposure and exercise. Linn WS, et al. **Arch Environ Health** 1988 Nov-Dec;43(6):399–406

HISTORY

Characterization and reconstruction of historical London, England, acidic aerosol concentrations. Ito K, et al. **Environ Health Perspect** 1989 Feb;79:35–42

PHARMACOLOGY

Sulfur dioxide does not acutely increase nasal symptoms or nasal resistance in subjects with rhinitis or in subjects with bronchial responsiveness to sulfur dioxide [published erratum appears in Am Rev Respir Dis 1989 Jun;139(6):1579] Tam EK, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1559–64

Effects of SO2 exposure on canine pulmonary epithelial functions. Man SF, et al. **Exp Lung Res** 1989 Mar; 15(2):181–98

Pulmonary effects of sulfur dioxide exposure and ipratropium bromide pretreatment in adults with nonallergic asthma. McManus MS, et al. **J Allergy Clin Immunol** 1989 Mar; 83(3):619–26

Effects of SO2 exposure on allergic sensitization in the guinea pig. Riedel F, et al. **J Allergy Clin Immunol** 1988 Oct; 82(4):527–34

[Effects of combined exposure to gamma radiation and sulfur dioxide or N-methyl-N'-nitro-N-nitrosoguanidine on bacteria and higher plants] Kal'chenko VA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov-Dec;(6):908–14 **(Rus)**

POISONING

Clinical and laboratory features of acute sulfur dioxide inhalation poisoning: two-year follow-up. Rabinovitch S, et al. **Am Rev Respir Dis** 1989 Feb;139(2):556–8

TOXICITY

Sulphur dioxide-induced airway hyperreactivity and pulmonary inflammation in dogs. Norris AA, et al. **Agents Actions** 1989 Mar;26(3-4):360–6

Acute hematologic and hemorheologic effects of sulfur dioxide inhalation. Baskurt OK. **Arch Environ Health** 1988 Sep-Oct;43(5):344–8

Is the short term limit value for sulphur dioxide exposure safe? Effects of controlled chamber exposure investigated with bronchoalveolar lavage. Sandström T, et al. **Br J Ind Med** 1989 Mar;46(3):200–3

Acid haze air pollution and breast and colon cancer mortality in 20 Canadian cities. Gorham ED, et al. **Can J Public Health** 1989 Mar-Apr;80(2):96–100

Ultrastructure in leaves of Fagus silvatica and Carpinus betulus individuals tolerant and susceptible to SO2 and heavy metal pollutants. Stirban M, et al. **Ecotoxicol Environ Safety** 1988 Aug;16(1):45–56

Biological effects of chrysotile after SO2 sorption. II. Effects on alveolar macrophages and red blood cells. Jaurand MC, et al. **Environ Res** 1978 Oct;17(2):216–27

Effects of sulfur dioxide or ammonium sulfate exposure, alone or combined, for 4 or 8 months on normal and elastase-impaired rats. Smith LG, et al. **Environ Res** 1989 Jun;49(1):60–78

Acute transient SO2-induced airway hyperreactivity: effects of nedocromil sodium. Jackson DM, et al. **J Appl Physiol** 1988 Sep;65(3):1119–24

Effects of repeated inhalation exposures to 1-nitropyrene, benzo[a]pyrene, Ga2O3 particles, and SO2 alone and in combinations on particle clearance, bronchoalveolar lavage fluid composition, and histopathology. Wolff RK, et al. **J Toxicol Environ Health** 1989;27(1):123–38

Health risks of short-term SO2 exposure to exercising asthmatics. Freudenthal PC, et al. **JAPCA** 1989 Jun; 39(6):831–5

The response phase--the first six hours after acute airway injury by SO2 inhalation: an in vivo and in vitro study. Hulbert WC, et al. **Scanning Microsc** 1989 Mar;3(1):369–78

SULFUR HEXAFLUORIDE see under **FLUORIDES**

SULFUR OXIDES

ANALYSIS

[Gas-chromatographic analysis of thionyl chloride in the air of the work area] Burina AI. **Gig Tr Prof Zabol** 1989; (3):39–41 (Eng. Abstr.) **(Rus)**

METABOLISM

Carbonyl sulfide: an alternate substrate for but not an activator of ribulose-1,5-bisphosphate carboxylase. Lorimer GH, et al. **J Biol Chem** 1989 Feb 15;264(5):2764–72

PHARMACOLOGY

Carbonyl sulfide: a copper chelating metabolite of disulfiram. Johansson B. **Drug Metab Dispos** 1989 May–Jun; 17(3):351–3

TOXICITY

Effects of sulfur oxides on eicosanoids. Chen LC, et al. **J Toxicol Environ Health** 1989;28(1):99–109

SULFUR RADIOISOTOPES

Preparation and quantification of 3'-phosphoadenosine 5'-phospho[35S]sulfate with high specific activity. Vargas F. **Anal Biochem** 1988 Jul;172(1):82–8

Incineration and monitoring of low-level 35S wastes at a biological research institution. Hamrick PE, et al. **Health Phys** 1989 Jul;57(1):191–4

Hazards of sulphur [letter] Smith I, et al. **Nature** 1989 Feb 23;337(6209):696

DIAGNOSTIC USE

In situ hybridization: an optimised detection protocol for a biotinylated DNA probe renders it more sensitive than a comparable 35S-labelled probe. Allan GM, et al. **J Virol Methods** 1989 Apr–May;24(1–2):181–90

METABOLISM

Uptake of radioactive sulphur in the endolymphatic sac. An autoradiographic study. Erwall C, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):63–70

Comparative metabolic behavior and interrelationships of Tc and S in soybean plants. Cataldo DA, et al. **Health Phys** 1989 Aug;57(2):281–7

THERAPEUTIC USE

Therapeutic effects of S-35-thiouracil in BALB/c mice carrying Harding-Passey melanoma. Fairchild RG, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):337–43

SULFURIC ACID ESTERS see under **SULFURIC ACIDS**

SULFURIC ACIDS

Predicted structures of apolipoprotein II mRNA constrained by nuclease and dimethyl sulfate reactivity: stable secondary structures occur predominantly in local domains via intraexonic base pairing. Hwang SP, et al. **J Biol Chem** 1989 May 15;264(14):8410–8

Comparison of sulphuric acid treatment and column chromatographic clean-up procedures for the gas chromatographic determination of organochlorine compounds in some food commodities. Singh PP, et al. **J Chromatogr** 1988 Dec 21;457:387–92

ADVERSE EFFECTS

Incidence of laryngeal cancer and exposure to acid mists. Steenland K, et al. **Br J Ind Med** 1988 Nov;45(11):766–76

Health effects of air pollutants: sulfuric acid, the old and the new. Amdur MO. **Environ Health Perspect** 1989 May; 81:109–13; discussion 121–2 (31 ref.)

Potential bronchoconstrictor stimuli in acid fog. Balmes JR, et al. **Environ Health Perspect** 1989 Feb;79:163–6

Human health effects of exposure to airborne acid. Folinsbee LJ. **Environ Health Perspect** 1989 Feb;79:195–9

Acid fog: effects on respiratory function and symptoms in healthy and asthmatic volunteers. Hackney JD, et al. **Environ Health Perspect** 1989 Feb;79:159–62

Effects of inhaled acids on airway mucus and its consequences for health. Holma B. **Environ Health Perspect** 1989 Feb;79:109–13 (55 ref.)

Effect of concentration and cumulative exposure of inhaled sulfuric acid on tracheobronchial particle clearance in healthy humans. Spektor DM, et al. **Environ Health Perspect** 1989 Feb;79:167–72

Extensive multi-organ necrosis secondary to sulfuric acid ingestion. Canty TG Sr. **J Pediatr Surg** 1988 Sep; 23(9):848–9

[Sclerosing lipogranuloma of the male genitals] Dimitrowa J, et al. **Z Hautkr** 1989 Mar 15;64(3):223–7 (Eng. Abstr.) **(Ger)**

ANALYSIS

Acidic sulfate aerosols: characterization and exposure. Lioy PJ, et al. **Environ Health Perspect** 1989 Feb;79:15–34 (96 ref.)

Sulfated N-linked carbohydrate chains in porcine thyroglobulin. Kamerling JP, et al. **FEBS Lett** 1988 Dec 5;241(1–2):246–50

The effect of heparin on the inositol 1,4,5-trisphosphate receptor in rat liver microsomes. Dependence on sulphate content and chain length. Tones MA, et al. **FEBS Lett** 1989 Jul 31;252(1–2):105–8

Qualitative and quantitative analyses of phenol, phenylglucuronide, and phenylsulfate in urine and plasma by gas chromatography/mass spectrometry. Pierce WM Jr, et al. **J Anal Toxicol** 1988 Nov–Dec;12(6):344–7

Purification of yolk protein 2 of Drosophila melanogaster and identification of its site of tyrosine sulfation. Baeuerle PA, et al. **J Biol Chem** 1988 Oct 15;263(29):14925–9

Occurrence of sulfate in the asparagine-linked complex carbohydrate units of thyroglobulin. Identification and localization of galactose 3-sulfate and N-acetylglucosamine 6-sulfate residues in the human and calf proteins. Spiro RG, et al. **J Biol Chem** 1988 Oct 5;263(28):14351–8

Thermal desorption-capillary gas chromatography for the quantitative analysis of dimethyl sulphate, diethyl sulphate and ethylene oxide in the workplace. Düblin T, et al. **J Chromatogr** 1988 Dec 2;456(1):233–9

Determination of residual dimethyl sulphate in a lipophilic bulk drug by wide-bore capillary gas chromatography. Seymour M. **J Chromatogr** 1989 Jan 20;463(1):216–21

BLOOD

Free and sulfoconjugated catecholamine responses to hypoxia in fetal sheep. Padbury JF, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 1):E198–202

CHEMICAL SYNTHESIS

Synthesis of the 3''-sulfate ester of beta-D-GalpNAc-(1——4)-beta-D-GlcpNAc-(1——2)-alpha-D-Manp. Srivastava V, et al. **Carbohydr Res** 1989 Jan 15;185(1):163–9

DIAGNOSTIC USE

Effect of droplet size on respiratory responses to inhaled sulfuric acid in normal and asthmatic volunteers. Linn WS, et al. **Am Rev Respir Dis** 1989 Jul;140(1):161–6

HISTORY

Characterization and reconstruction of historical London, England, acidic aerosol concentrations. Ito K, et al. **Environ Health Perspect** 1989 Feb;79:35–42

METABOLISM

Metabolic activation of the carcinogen 6-hydroxymethylbenzo[a]pyrene: formation of an electrophilic sulfuric acid ester and benzylic DNA adducts in rat liver in vivo and in reactions in vitro. Surh YJ, et al. **Carcinogenesis** 1989 Aug;10(8):1519–28

Increased sulfation of glycoconjugates by cultured nasal epithelial cells from patients with cystic fibrosis. Cheng PW, et al. **J Clin Invest** 1989 Jul;84(1):68–72

Effects of increased sulfation of dermatan sulfate on its in vitro and in vivo pharmacological properties. Dol F, et al. **Thromb Res** 1988 Oct 15;52(2):153–64

[Electrokinetic properties of Pseudomonas aeruginosa 1C—a degrader of alkylsulfates] Gordienko AS, et al. **Mikrobiol Zh** 1988 Jan–Feb;50(1):25–9 (Eng. Abstr.) **(Rus)**

[Variability of Pseudomonas aeruginosa 1C—a degrader of alkylsulfates] Stavskaia SS, et al. **Mikrobiol Zh** 1987 Mar–Apr;49(2):3–6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Acidity potentiates bronchoconstriction induced by hypoosmolar aerosols. Balmes JR, et al. **Am Rev Respir Dis** 1988 Jul;138(1):35–9

Molecular mechanisms of alkylation sensitivity in Indian muntjac cell lines. Musk SR, et al. **Carcinogenesis** 1989 Jul; 10(7):1299–306

Disinfectant effect of Persteril in combination with detergents. Melicherčíková V. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):19–28

Nicotinamide adenosine dinucleotide level in dimethylsulfate-treated or UV-irradiated mouse epidermis. Balard B, et al. **Mutat Res** 1989 Jan;219(1):71–9

The basal and the mutagen-induced levels of ADP-ribosyl transferase activity are not modified in Fanconi's anemia cells. Scovassi AI, et al. **Mutat Res** 1989 Jan–Feb; 225(1–2):65–9

PHYSIOLOGY

Interaction of heparin and antithrombin III. The role of O-sulfate groups. Petitou M, et al. **Eur J Biochem** 1988 Oct 1;176(3):637–40

POISONING

Lung injury in dimethyl sulfate poisoning. Ip M, et al. **J Occup Med** 1989 Feb;31(2):141–3

TOXICITY

The origin of DNA single strand breaks induced by ethylating agents in mammalian cells. Vitelli A, et al. **Ann Ist Super Sanita** 1989;25(1):51–5

Epidemiologic and toxicologic evidence for chronic health effects and the underlying biologic mechanisms involved in sub-lethal exposures to acidic pollutants. Soskolne CL, et al. **Arch Environ Health** 1989 May–Jun;44(3):180–91 (160 ref.)

Furnace-generated acid aerosols: speciation and pulmonary effects. Amdur MO, et al. **Environ Health Perspect** 1989 Feb;79:147–50

Sulfuric acid-induced changes in the physiology and structure of the tracheobronchial airways. Gearhart JM, et al. **Environ Health Perspect** 1989 Feb;79:127–36

Response of the tracheobronchial mucociliary clearance system to repeated irritant exposure: effect of sulfuric acid mist on function and structure. Gearhart JM, et al. **Exp Lung Res** 1988;14(5):587–605

Changes in pulmonary lavage fluid of guinea pigs exposed to ultrafine zinc oxide with adsorbed sulfuric acid. Conner MW, et al. **J Toxicol Environ Health** 1989;26(2):223–34

Induction of kinetochore positive and negative micronuclei in V79 cells by the alkylating agent diethylsulphate. Nüsse M, et al. **Mutagenesis** 1989 May;4(3):174–8

The dissimilar mutational consequences of SN1 and SN2 DNA alkylation pathways: clues from the mutational specificity of dimethylsulphate in the lacI gene of Escherichia coli. Zielenska M, et al. **Mutagenesis** 1989 May; 4(3):230–4

Comment on mutagenicity of diethyl sulfate in mice and on germ-cell mutagenicity testing. Russell WL. **Mutat Res** 1989 Mar;225(3):127–9

Respiratory dose-response study of normal and asthmatic volunteers exposed to sulfuric acid aerosol in the sub-micrometer size range. Avol EL, et al. **Toxicol Ind Health** 1988 Jun;4(2):173–84

Synergistic interaction of ozone and respirable aerosols on rat lungs. IV. Protection by quenchers of reactive oxygen species. Warren DL, et al. **Toxicology** 1988 Dec 16; 53(1):113–33

[Embryotoxic effect of tin sulfate after its inhalation] Grin' NV, et al. **Gig Sanit** 1988 Jul;(7):81–2 **(Rus)**

URINE

Gas chromatographic determination of sulfuric acid and application to urinary sulfate. Masuoka N, et al. **Acta Med Okayama** 1988 Oct;42(5):247–52

Determination of phenol and its glucurono- and sulfoconjugates in urine by gas chromatography. Bechet JP. **IARC Sci Publ** 1988;(85):281–6

SULFURTRANSFERASES

ANALYSIS

Determination of the isoelectric point value of 3-mercaptopyruvate sulfurtransferase and its shift by treatment with oxidized glutathione. Ikeda T, et al. **Acta Med Okayama** 1989 Feb;43(1):1–7

Rhodanese isozymes in human tissues. Whitehouse DB, et al. **Ann Hum Genet** 1988 Jan;52 (Pt 1):1–10

Histochemical localization of rhodanese activity in rat liver and skeletal muscle. Devlin DJ, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):247–55

The cyanide-metabolizing enzyme rhodanese in rat nasal respiratory and olfactory mucosa. Dahl AR. **Toxicol Lett** 1989 Feb;45(2–3):199–205

ANTAGONISTS & INHIBITORS

The inactivation of rhodanese by nitrite and inhibition by other anions in vitro. Alexander K, et al. **J Biochem Toxicol** 1989 Spring;4(1):29–33

Modification and inactivation of rhodanese by 2,4,6-trinitrobenzenesulphonic acid. Malliopoulou TB, et al. **J Enzym Inhib** 1988;2(2):99–115

BIOSYNTHESIS

Detection of time-dependent and oxidatively induced antigens of bovine liver rhodanese with monoclonal antibodies. Merrill GA, et al. **J Biol Chem** 1988 Dec 25; 263(36):19324–30

GENETICS

XmnI polymorphism of the human STS gene. Wirth B, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3326

ISOLATION & PURIFICATION

Bile acid sulfotransferase I from rat liver sulfates bile acids and 3-hydroxy steroids: purification, N-terminal amino acid sequence, and kinetic properties. Barnes S, et al. **J Lipid Res** 1989 Apr;30(4):529–40

METABOLISM

A rapid diethylaminoethyl paper disk assay for transfer RNA sulfurtransferase. Harris CL, et al. **Anal Biochem** 1989 Jan; 176(1):57–62

Sulphotransferase-mediated activation of the carcinogen 5-hydroxymethyl-chrysene. Species and sex differences in

tissue distribution of the enzyme activity and a possible participation of hydroxysteroid sulphotransferases. Okuda H, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3003–9

Association of elevated sulfatides and sulfotransferase activities with human renal cell carcinoma. Sakakibara N, et al. **Cancer Res** 1989 Jan 15;49(2):335–9

Comparative studies on the distribution of rhodanese and beta–mercaptopyruvate sulfurtransferase in different organs of sheep (Ovis aries) and cattle (Bos taurus). Aminlari M, et al. **Comp Biochem Physiol [C]** 1989;92(2):259–62

The influence of genetic background on the expression of mutations at the diabetes locus in the mouse. V. Interaction between the db gene and hepatic sex steroid sulfotransferases correlates with gender–dependent susceptibility to hyperglycemia. Leiter EH, et al. **Endocrinology** 1989 Feb;124(2):912–22

Soaking in Cs2SO4 reveals a caesium–aromatic interaction in bovine–liver rhodanese. Kooystra PJ, et al. **Eur J Biochem** 1988 Nov 1;177(2):345–9

Acceptor substrate–potentiated inactivation of bovine liver rhodanese. Aird BA, et al. **J Biol Chem** 1988 Oct 25; 263(30):15270–6

Undersulfated heparan sulfate in a Chinese hamster ovary cell mutant defective in heparan sulfate N–sulfotransferase. Bame KJ, et al. **J Biol Chem** 1989 May 15;264(14):8059–65

Oxidative inactivation of rhodanese by hydrogen peroxide produces states that show differential reactivation. Horowitz PM, et al. **J Biol Chem** 1989 Feb 25;264(6):3311–6

Bovine mitochondrial rhodanese is a phosphoprotein. Ogata K, et al. **J Biol Chem** 1989 Feb 15;264(5):2718–25

Reversible folding of rhodanese. Presence of intermediate(s) at equilibrium. Tandon S, et al. **J Biol Chem** 1989 Jun 15; 264(17):9859–66

Rhodanese isozymes in three subjects with Leber's optic neuropathy. Whitehouse DB, et al. **J Med Genet** 1989 Feb; 26(2):113–5

Partial characterization of steroid sulfohydrolase and steroid sulfotransferase activities in purified porcine Leydig cells. Hobkirk R, et al. **J Steroid Biochem** 1989 Mar;32(3):387–92

Role of porcine endometrial estrogen sulfotransferase in progesterone mediated downregulation of estrogen receptor. Saunders DE, et al. **J Steroid Biochem** 1989 Jun; 32(6):749–57

Sexual differentiation of rat hepatic bile salt sulfotransferase isoenzymes. Kane RE, et al. **Pediatr Res** 1988 Aug; 24(2):247–53

Characterization of sulphotransferase in human ileum and colon. Pacifici GM, et al. **Pharmacology** 1989;38(3):146–50

SULINDAC see under **INDENES**

SULOCTIDIL see under **PROPANOLAMINES**

SULPIRIDE

ADVERSE EFFECTS

Phenomenology and pathophysiology of antipsychotic withdrawal symptoms [letter] Fava GA, et al. **Acta Psychiatr Scand** 1989 Feb;79(2):205–6

Neuroleptic malignant syndrome due to sulpiride [letter] Kashihara K, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1109–10

ANALOGS & DERIVATIVES

Dopamine receptors in rabbit and rat eye: characterization and localization of DA1 and DA2 binding sites. Elena PP, et al. **Curr Eye Res** 1989 Jan;8(1):75–83

Effects of the antidopaminergic drug veralipride on LH and PRL secretion in postmenopausal women. Fioretti P, et al. **J Endocrinol Invest** 1989 May;12(5):295–301

Synthesis and D2 dopaminergic activity of pyrrolidinium, tetrahydrothiophenium, and tetrahydrothiophene analogues of sulpiride. Harrold MW, et al. **J Med Chem** 1989 Apr;32(4):874–80

Clinical and hormonal effects of long–term veralipride treatment in post–menopausal women. Verbeke K, et al. **Maturitas** 1988 Oct;10(3):225–30

Nigral dopamine autoreceptors are exclusively of the D2 type: quantitative autoradiography of [125I]iodosulpride and [125I]SCH 23982 in adjacent brain sections. Morelli M, et al. **Neuroscience** 1988 Dec;27(3):865–70

Ontogeny of dopaminergic D–2 receptors in the rat nervous system: characterization and detailed autoradiographic mapping with [125I]iodosulpride. Sales N, et al. **Neuroscience** 1989;28(3):673–700

Effects of the dopamine antagonist veralipride on hot flushes and luteinizing hormone secretion in postmenopausal women. Melis GB, et al. **Obstet Gynecol** 1988 Nov; 72(5):688–92

[A multicenter comparison of veralipride versus placebo in the vasomotor flushes of menopause. An evaluation of the prolonged effect] Boulot P, et al. **Rev Fr Gynecol Obstet** 1988 Dec;83(12):823–7 (Eng. Abstr.) **(Fre)**

DIAGNOSTIC USE

Effects of chronic sulpiride–induced hyperprolactinemia on plasma testosterone and its responses to hCG in normal men. Oseko F, et al. **J Androl** 1988 Jul–Aug;9(4):231–3

Definition of the in–vivo accumulation of [3H]spiperone in brain using haloperidol and sulpiride to determine functional dopamine receptor occupation. Chivers JK, et al. **J Pharm Pharmacol** 1988 Sep;40(9):613–9

METABOLISM

Selective cortical infarction reduces [3H]sulpiride binding in rat caudate–putamen: autoradiographic evidence for presynaptic D2 receptors on corticostriate terminals. Filloux F, et al. **Synapse** 1988;2(5):521–31

PHARMACOKINETICS

[Comparative pharmacokinetics of two sulpiride formulations in healthy volunteers] Chen IJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Apr; 5(4):222–30 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

The renal effects of atrial natriuretic peptide in man are not attenuated by (+)–sulpiride. Freestone S, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):13–8

An improved circular tilt–cage shows that intrahypothalamic injections of sulpiride increase locomotion. Parada MA, et al. **Brain Res Bull** 1988 Dec;21(6):873–80

Effects of haloperidol, sulpiride and SCH 23390 on passive avoidance learning in mice. Ichihara K, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):435–42

Lesions in suprachiasmatic nuclei simulate effects of pinealectomy on prolactin release in ovariectomized and sulpiride–treated female rats. Acuña D, et al. **Experientia** 1989 Aug 15;45(8):739–42

Cytological responses of the pituitary (rostral pars distalis) and immunoreactive corticotropin–releasing factor (CRF) in the goldfish treated with dopamine antagonists. Olivereau M, et al. **Gen Comp Endocrinol** 1988 Sep; 71(3):506–15

Castration blocks chronic sulpiride–induced desensitization of striatal D1 receptor–stimulated adenylate cyclase activity in male rats. Ryan–Jastrow T, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):626–31

Impairment of stress–induced secretion of prolactin during development: effects of adrenalectomy, TRH and sulpiride. el Feki A, et al. **J Physiol (Paris)** 1988;83(1):36–42

Behavioral recovery after irreversible inactivation of D–1 and D–2 dopamine receptors. Meller E, et al. **Life Sci** 1989; 44(15):1019–26

Antagonistic effects of sulpiride—racemic and enantiomers—on renal response to low–dose dopamine infusion in normal women. Agnoli GC, et al. **Nephron** 1989; 51(4):491–8

Comparative study of sulpiride and haloperidol on dopamine turnover in the rat brain. Imazu Y, et al. **Neurochem Res** 1989 May;14(5):459–64

Levels of insulin in the brains of rats modified by chronic administration of amphetamine, haloperidol and sulpiride. Manzanares J, et al. **Neuropharmacology** 1988 Nov; 27(11):1141–4

Puberty modifies sulpiride effects on body weight in rats. Baptista T, et al. **Neurosci Lett** 1988 Oct 5;92(2):161–4

Involvement of adenylate cyclase inhibition in dopamine autoreceptor regulation of tyrosine hydroxylase in rat nucleus accumbens. Onali P, et al. **Neurosci Lett** 1989 Jul 17;102(1):91–6

On the mechanism of neuroleptic induced increase in striatal dopamine release: brain dialysis provides direct evidence for mediation by autoreceptors localized on nerve terminals. Westerink BH, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):197–202

Progesterone feedback in normal and sulpiride–induced hyperprolactinemic postmenopausal women. Nakano R, et al. **Obstet Gynecol** 1989 Apr;73(4):617–21

Mechanism of the body weight increase induced by systemic sulpiride. Parada MA, et al. **Pharmacol Biochem Behav** 1989 May;33(1):45–50

Sulpiride injections in the lateral hypothalamus induce feeding and drinking in rats. Parada MA, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):917–23

Differential effects of neuroleptic drugs on the delayed matching–to–sample performance of pigeons. Picker MJ, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):953–7

Behavioural synergism between the dopamine agonists SKF 38393 and LY 171555 in dopamine–depleted mice: antagonism by sulpiride reveals only stimulant postsynaptic D–2 receptors. Starr MS, et al. **Pharmacol Biochem Behav** 1989 May;33(1):41–4

Inhibition of drinking by naltrexone in the rat: interaction with the dopamine D–1 antagonist SCH 23390 and the D–2 antagonist sulpiride. Ukai M, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):651–5

Dopamine D2 and muscarinic receptor binding characteristics in rat brain after withdrawal of subchronic fluphenazine and sulpiride treatment. Hietala J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):247–58

Synergistic blockade of some dopamine–mediated behaviours by (–)–sulpiride and SCH 23390 in the rat. Dall'Olio R, et al. **Psychopharmacology (Berlin)** 1989;98(3):342–6

Effects of dopamine receptor antagonists on sucrose consumption and preference. Muscat R, et al. **Psychopharmacology (Berlin)** 1989;99(1):98–102

Differences in the time course of dopaminergic supersensitivity following chronic administration of haloperidol, molindone, or sulpiride. Prosser ES, et al. **Psychopharmacology (Berlin)** 1989;99(1):109–16

On the selectivity and specificity of the antagonism of apomorphine–induced suppression of exploration by sulpiride. Ståhle L, et al. **Psychopharmacology (Berlin)** 1989; 99(1):75–9

Effects of sulpiride and chlorpromazine on regional cerebral glucose metabolism in schizophrenic patients as determined by positron emission tomography. Wik G, et al. **Psychopharmacology (Berlin)** 1989;97(3):309–18

Effects of chronic treatment with selective and nonselective antagonists on the subtypes of dopamine receptors. McGonigle P, et al. **Synapse** 1989;3(1):74–82

The effects of haloperidol and sulpiride on apomorphine–induced locomotor activity in rats. Ko WK, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Sep;87(9):845–50

[Regulation of neural transmission in the mouse vas deferens by 2 subtypes of dopaminergic receptors] Mitolo–Chieppa D, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):763–8 (Eng. Abstr.) **(Ita)**

[Difference in mechanism of action of sulpiride and haloperidol on dopamine brain turnover] Imazu Y, et al. **Seishin Shinkeigaku Zasshi** 1988;90(10):845–52 **(Jpn)**

THERAPEUTIC USE

Cross–over comparison of the therapeutic effects of sulpiride and perphenazine in schizophrenic and schizoaffective psychoses. Svestka J, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):35–6

Sulpiride and perphenazine in schizophrenia. A double–blind clinical trial. Lepola U, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):92–6

Prophylactic effects of neuroleptics in symptom–free schizophrenics: a comparative dose–response study of timiperone and sulpiride. Nishikawa T, et al. **Biol Psychiatry** 1989 Apr 1;25(7):861–6

A single–blind study of clocapramine and sulpiride in hospitalized chronic schizophrenic patients. Yamagami S, et al. **Drugs Exp Clin Res** 1988;14(11):707–13

Sulpiride treatment of acute mania with a comparison of the effects on plasma hormone concentrations of lithium and sulpiride treatment. Christie JE, et al. **J Affective Disord** 1989 Mar–Jun;16(2–3):115–20

[Three antipsychotic drugs in the treatment of schizophrenia—a controlled and double–blind study] Yang WJ. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Oct;21(5):277–80, 318–9 (Eng. Abstr.) **(Chi)**

[Sulpiride in psychiatric practice] Faltus F, et al. **Cesk Psychiatr** 1989 Jun;85(3):145–9 (Eng. Abstr.) **(Cze)**

SULTHIAME see under **THIAZINES**

SUNBURN

Sunburn. Management and prevention. White AD. **Aust Fam Physician** 1988 Nov;17(11):953–4

CHEMICALLY INDUCED

[Reactivation of sunburn by methotrexate] Lawrenz–Wolf B, et al. **Klin Padiatr** 1988 Jul–Aug;200(4):335–8 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Lichen sclerosus et atrophicus following sunburn. Milligan A, et al. **Clin Exp Dermatol** 1988 Jan;13(1):36–7

Personal risk–factor chart for cutaneous melanoma. MacKie RM, et al. **Lancet** 1989 Aug 26;2(8661):487–90

Nonfamilial cutaneous melanoma incidence in women associated with sun exposure before 20 years of age. Weinstock MA, et al. **Pediatrics** 1989 Aug;84(2):199–204

DRUG THERAPY

How much sun is enough? Sunburns and sun poisoning. **N C Med J** 1989 May;50(5):272–3

PATHOLOGY

Modification of sunburn cell production in 8–MOP sensitized mouse epidermis: a method of assessing UVA sunscreen efficacy. Garmyn M, et al. **J Invest Dermatol** 1989 Apr; 92(4):642–5

Effect of hypoxia on sunburn cell formation and inflammation induced by ultraviolet radiation. Youn JI, et al. **Photodermatol** 1988 Dec;5(6):252–6

PHYSIOPATHOLOGY

Mechanisms for hyperpigmentation in postinflammatory pigmentation, urticaria pigmentosa and sunburn. Tomita Y, et al. **Dermatologica** 1989;179 Suppl 1:49–53

PREVENTION & CONTROL

UVA filters in sunscreen preparations [letter] Diffey BL, et al. **Lancet** 1989 Jul 15;2(8655):170

High–protection sunscreen formulation prevents UVB–induced sunburn cell formation. Césarini JP, et al. **Photodermatol** 1989 Feb;6(1):20–3

[Sunburn. Irradiation, pathogenesis, therapy, prevention] Niedner R. **Med Monatsschr Pharm** 1989 May;12(5):141–6 (7 ref.) **(Ger)**

[Light protective agents] Ippen H. **Z Hautkr** 1988 Sep 15;

63(9):705 (Ger)
[Preparations containing sunscreens in West Germany 1988] Schauder S, et al. **Z Hautkr** 1988 Sep 15;63(9):707–63 (15 ref.) (Eng. Abstr.) (Ger)
[Evaluation of sunscreening agents] Schauder S. **Z Hautkr** 1988 Sep 15;63(9):764–70 (16 ref.) (Eng. Abstr.) (Ger)
[Evaluation of sunscreens by quantitative analyses of sunburn cell formation] Ohshima S. **Nippon Hifuka Gakkai Zasshi** 1988 Aug;98(9):923–30 (Eng. Abstr.) (Jpn)

SUNFISH see **PERCIFORMES**

SUNFLOWER see **HELIANTHUS**

SUNLIGHT

The role of sunlight in the cutaneous production of vitamin D3. Webb AR, et al. **Annu Rev Nutr** 1988;8:375–99 (110 ref.)
The effects of bergapten and sunlight on cutaneous pigmentation. Levine N, et al. **Arch Dermatol** 1989 Sep; 125(9):1225–30
Effects of routine pupillary dilation on functional daylight vision. O'Connor PS, et al. **Arch Ophthalmol** 1988 Nov; 106(11):1567–9
Seasonal influence on patch test results. Edman B. **Contact Dermatitis** 1989 Mar;20(3):226
Heat balance during exercise in the sun. Nielsen B, et al. **Eur J Appl Physiol** 1988;58(1–2):189–96
The use of readily available photosensitizers for vitiligo in Nigeria [letter] George AO. **Int J Dermatol** 1989 Sep; 28(7):475–7
Skin aging and photoaging: an overview. Gilchrest BA. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 2):610–3 (36 ref.)
A place in the sun does not guarantee adequate vitamin D. Morley JE. **J Am Geriatr Soc** 1989 Jul;37(7):663–4 (18 ref.)
Polycyclic aromatic compounds as phototoxic mosquito larvicides. Borovsky D, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):246–50
Effect of donor age and prior sun exposure on growth inhibition of cultured human dermal fibroblasts by all trans-retinoic acid. Stanulis-Praeger BM, et al. **J Cell Physiol** 1989 Apr;139(1):116–24
Sunlight regulates the cutaneous production of vitamin D3 by causing its photodegradation. Webb AR, et al. **J Clin Endocrinol Metab** 1989 May;68(5):882–7
Consequences of skin color and fur properties for solar heat gain and ultraviolet irradiance in two mammals. Walsberg GE. **J Comp Physiol [B]** 1988;158(2):213–21
The significance of fur structure for solar heat gain in the rock squirrel, Spermophilus variegatus. Walsberg GE. **J Exp Biol** 1988 Sep;138:243–57
Cyclobuta-dithymidine induction by solar-simulating UV radiation in human skin: II. Individual responses. Bruze M, et al. **J Invest Dermatol** 1989 Sep;93(3):341–4
Light and length of stay in hospital. Diffey BL, et al. **J R Soc Med** 1988 Nov;81(11):643
Sunlight as disinfectant [letter; comment] Acra A, et al. **Lancet** 1989 Feb 4;1(8632):280. **Comment on:** Lancet 1988 Oct 15;2(8616):912
Sunlight as disinfectant [letter] [see comments] Miller RL. **Lancet** 1988 Oct 15;2(8616):912. **Comment in:** Lancet 1989 Feb 4;1(8632):280
Sunlight, melanogenesis and radicals in the skin. Chedekel MR, et al. **Lipids** 1988 Jun;23(6):587–91 (56 ref.)
Determination of the spectrum of mutations induced by defined-wavelength solar UVB (313-nm) radiation in mammalian cells by use of a shuttle vector. Keyse SM, et al. **Mol Cell Biol** 1988 Dec;8(12):5425–31
Solar and UVC-induced mutation in human cells and inhibition by deoxynucleosides. Musk P, et al. **Mutat Res** 1989 Sep;227(1):25–30
Solar UVB-albedo of various surfaces. Blumthaler M, et al. **Photochem Photobiol** 1988 Jul;48(1):85–8
Solar spectral irradiance in the visible and infrared regions. Green AE, et al. **Photochem Photobiol** 1988 Oct; 48(4):477–86
Sunlight-induced pyrimidine dimers in human skin fibroblasts in comparison with dimerization after artificial UV-irradiation. Niggli HJ, et al. **Photochem Photobiol** 1988 Sep;48(3):353–6
Epidemiological studies of the influence of sunlight on the skin. Berg M. **Photodermatol** 1989 Apr;6(2):80–4
Measurements of the photodegradation of PABA and some PABA derivatives. Flindt-Hansen H, et al. **Photodermatol** 1988 Dec;5(6):257–60
Ultraviolet radiation at high latitudes and the risk of skin cancer. Henriksen K, et al. **Photodermatol** 1989 Jun; 6(3):110–7
Affective disorders, light and melatonin. Souêtre E, et al. **Photodermatol** 1988 Jun;5(3):107–9
Mycoflora and vitamin content of sun-dried food condiments in Nigeria. Ekundayo CA. **Plant Foods Hum Nutr** 1987; 37(3):247–52
The induction of DNA strand breaks in normal human skin fibroblasts exposed to solar ultraviolet radiation. Rosenstein BS. **Radiat Res** 1988 Nov;116(2):313–9
[Application of solar disinfection to drinking water in tropical regions] De Lorenzi G, et al. **Bull Soc Pathol Exot Filiales** 1989;82(2):255–9 (Eng. Abstr.) (Fre)
[Photo-degradation of plant-protecting agents] Goedicke HJ. **Z Gesamte Hyg** 1989 Jan;35(1):5–8 (56 ref.) (Eng. Abstr.) (Ger)
[Dynamic immunologic reactivity in healthy subjects under the influence of solar radiation] Bogolubov VM, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar-Apr; (2):6–10 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Sunlight, skin sensitivity, and senile cataract. Dolezal JM, et al. **Am J Epidemiol** 1989 Mar;129(3):559–68
Sunlight and other risk factors for cataracts: an epidemiologic study. Collman GW, et al. **Am J Public Health** 1988 Nov; 78(11):1459–62
Porphyrialike bullous dermatosis after chronic intense tanning bed and/or sunlight exposure. Poh-Fitzpatrick MB, et al. **Arch Dermatol** 1989 Sep;125(9):1236–8
Actinic cheilitis. A prospective study comparing four treatment methods. Robinson JK. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):848–52
Role of childhood in the development of skin cancer. Marks R. **Aust Paediatr J** 1988 Dec;24(6):337–8
Management of solar keratoses [editorial] White AD. **Australas J Dermatol** 1987 Dec;28(3):97
Something new under the sun. Dille JR. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1111
Health and the ozone layer [letter] Elwood JM. **BMJ** 1988 Oct 8;297(6653):918
Solar retinopathy following religious rituals. Hope-Ross M, et al. **Br J Ophthalmol** 1988 Dec;72(12):931–4
An epidemiological study on actinic effect of light in Sardinia. Serra A. **Bull Soc Belge Ophtalmol** 1987; 224:139–46
Ozone depletion and its consequences for the fluence of carcinogenic sunlight. Moan J, et al. **Cancer Res** 1989 Aug 1;49(15):4247–50
Biological amplification factor for sunlight-induced nonmelanoma skin cancer at high latitudes. Moan J, et al. **Cancer Res** 1989 Sep 15;49(18):5207–12
Deposits of immunoglobulins at the dermo-epidermal junction in chronic light-exposed skin: what is the value of the lupus band test? Gruschwitz M, et al. **Clin Exp Dermatol** 1988 Sep;13(5):303–8
Broadening of action spectrum in a patient with solar urticaria. Murphy GM, et al. **Clin Exp Dermatol** 1987 Nov; 12(6):455–6
Sun-induced aging. Clinical and laboratory observations in humans. Sams WM Jr. **Clin Geriatr Med** 1989 Feb; 5(1):223–33 (40 ref.)
The sun and water sports. Gentile DA, et al. **Clin Sports Med** 1987 Jul;6(3):669–84 (66 ref.)
The treatment of photoaged human skin by topical tretinoin. Kligman AM. **Drugs** 1989 Jul;38(1):1–8
Sun exposure and malignant melanoma among susceptible individuals. Dubin N, et al. **Environ Health Perspect** 1989 May;81:139–51
DNA strand breakage in normal and solar ultraviolet-sensitive ICR 2A frog cell lines exposed to solar ultraviolet wavelengths. Rosenstein BS. **Environ Mol Mutagen** 1989;13(1):50–3
Solar ultraviolet radiation and regional peculiarities in skin malignant melanoma incidence. Guslitser LN. **Georg Med** 1989;19:77–8
Sunlight-induced radiation recall. Del Guidice SM, et al. **Int J Dermatol** 1988 Jul-Aug;27(6):415–6
Photokeratitis: laboratory versus solar exposure [letter] Pitts DG. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1759–60
Evidence for eosinophil degranulation with deposition of granule major basic protein in solar urticaria. Leiferman KM, et al. **J Am Acad Dermatol** 1989 Jul;21(1):75–80
Spontaneous photo-onycholysis. Horio T. **J Dermatol (Tokyo)** 1988 Dec;15(6):540–2
Human melanocytic neoplasms and their etiologic relationship with sunlight. Elder DE. **J Invest Dermatol** 1989 May;92(5 Suppl):297S–303S (73 ref.)
UVA hazards in skin associated with the use of tanning equipment. Roza L, et al. **J Photochem Photobiol [B]** 1989 Apr;3(2):281–7
Tretinoin for photoaging skin: North Carolina vs New York [letter] Burke KE, et al. **JAMA** 1988 Dec 2;260(21):3130–1
Sunlight, DNA repair, and skin cancer [editorial] **Lancet** 1989 Jun 17;1(8651):1362–3
Behavioural change in adolescence: a major challenge for skin-cancer control in Australia [editorial] Marks R, et al. **Med J Aust** 1988 Nov 21;149(10):514–5
"The healthy tan": a modern misnomer [editorial] Thomas JR. **Mo Med** 1989 Jun;86(6):327–8
N-ras mutations in human cutaneous melanoma from sun-exposed body sites. van 't Veer LJ, et al. **Mol Cell Biol** 1989 Jul;9(7):3114–6
Sun protection and skin cancer. Berger RS. **N J Med** 1989 May;86(5):348–50
Xeroderma pigmentosum. Lambert WC. **N J Med** 1989 May; 86(5):383–6 (6 ref.)
Tretinoin therapy for precancerous skin. Papa CM. **N J Med** 1989 May;86(5):361–5
Actinic keratoses. Basler RS, et al. **Nebr Med J** 1989 Jul; 74(7):174–7
Long-term visual health risks from solar ultraviolet radiation. Proposals for ocular protection. Waxler M. **Ophthalmic Res** 1988;20(3):179–82
Sunburns, melanoma, and the pediatrician. Williams ML, et al. **Pediatrics** 1989 Aug;84(2):381–2
Relative repair of adenovirus damaged by sunlamp, UV and gamma-irradiation in Cockayne syndrome fibroblasts is different from that in xeroderma pigmentosum fibroblasts. Rainbow AJ. **Photochem Photobiol** 1989 Aug;50(2):201–7
Polymorphic light eruption induced by oral contraceptives and pregnancy? Boonstra H, et al. **Photodermatol** 1989 Feb; 6(1):55–6
Visual assessment of facial elastosis using photographs as a measure of cumulative ultraviolet exposure. Cameron LL, et al. **Photodermatol** 1988 Dec;5(6):277–82
Corneocyte changes after acute UV irradiation and chronic solar exposure. Corcuff P, et al. **Photodermatol** 1988 Jun; 5(3):110–5
Effect of chronic sun exposure on human Langerhans cell densities. Czernielewski JM, et al. **Photodermatol** 1988 Jun; 5(3):116–20
Solar urticaria induced by visible light and inhibited by UVA. Leenutaphong V, et al. **Photodermatol** 1988 Aug;5(4):170–4
Solar urticaria: demonstration of histamine release and effective treatment with doxepin. Neittaanmäki H, et al. **Photodermatol** 1989 Feb;6(1):52–5
Solar-ultraviolet-induced damage to DNA. Peak MJ, et al. **Photodermatol** 1989 Feb;6(1):1–15 (134 ref.)
Solar retinopathy. A photobiologic and geophysical analysis. Yannuzzi LA, et al. **Retina** 1989;9(1):28–43
Solar considerations in the development of cutaneous melanoma. Loggie BW, et al. **Semin Oncol** 1988 Dec; 15(6):494–9
Climate, diffused solar radiation and multiple sclerosis. Laborde JM, et al. **Soc Sci Med** 1988;27(3):231–8 (33 ref.)
Bilateral loss of vision in bright light. Wiebers DO, et al. **Stroke** 1989 Apr;20(4):554–8
[Solar radiation and choroidal neovascularization. An epidemiologic study] Gastro-Correia J, et al. **Ophtalmologie** 1988 Apr-Jun;2(2):177–9 (Eng. Abstr.) (Fre)
[Disseminated superficial actinic porokeratosis. A case report] Schulze R, et al. **Dermatol Monatsschr** 1989; 175(3):175–9 (Eng. Abstr.) (Ger)
[Sunburn. Irradiation, pathogenesis, therapy, prevention] Niedner R. **Med Monatsschr Pharm** 1989 May;12(5):141–6 (7 ref.) (Ger)
[Ultraviolet rays and skin melanoma] Cascinelli N. **G Ital Dermatol Venereol** 1988 Oct;123(10):449–55 (37 ref.) (Eng. Abstr.) (Ita)
[Case-control study on malignant skin melanoma in the Turin province] Zanetti R, et al. **G Ital Dermatol Venereol** 1988 Oct;123(10):461–8 (Eng. Abstr.) (Ita)
[Eye protection of reindeer breeders in the Far North from the dazzling brightness of solar radiation] Gavrishchuk VI, et al. **Gig Tr Prof Zabol** 1989;(6):55–6 (Rus)

SUNSCREENING AGENTS

Photoplex—a broad spectrum sunscreen. **Med Lett Drugs Ther** 1989 Jun 16;31(794):59–60
Sun protection. Hendricks WM. **N C Med J** 1989 Aug; 50(8):435–9

ADMINISTRATION & DOSAGE

Sun protection and skin cancer. Berger RS. **N J Med** 1989 May;86(5):348–50
[Experiences with cinnamic acid esters as sunscreening agents] Würbach G, et al. **Dermatol Monatsschr** 1989; 175(6):333–9 (Eng. Abstr.) (Ger)
[Sunburn. Irradiation, pathogenesis, therapy, prevention] Niedner R. **Med Monatsschr Pharm** 1989 May;12(5):141–6 (7 ref.) (Ger)
[Light protective agents] Ippen H. **Z Hautkr** 1988 Sep 15; 63(9):705 (Ger)
[Evaluation of sunscreening agents] Schauder S. **Z Hautkr** 1988 Sep 15;63(9):764–70 (16 ref.) (Eng. Abstr.) (Ger)
[Preparations containing sunscreens in West Germany 1988] Schauder S, et al. **Z Hautkr** 1988 Sep 15;63(9):707–63 (15 ref.) (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Photoallergy to benzophenone. Knobler E, et al. **Arch Dermatol** 1989 Jun;125(6):801–4
Chronic sunscreen use decreases circulating concentrations of 25-hydroxyvitamin D. A preliminary study. Matsuoka LY, et al. **Arch Dermatol** 1988 Dec;124(12):1802–4
Porphyrialike bullous dermatosis after chronic intense tanning bed and/or sunlight exposure. Poh-Fitzpatrick MB, et al. **Arch Dermatol** 1989 Sep;125(9):1236–8
Photoprotection and the vitamin D status of the elderly. A concern for dermatologists. Prystowsky JH. **Arch Dermatol** 1988 Dec;124(12):1844–8 (28 ref.)
Contact allergy to Eusolex 8021. Alomar A, et al. **Contact Dermatitis** 1989 Jan;20(1):74–5
Contact photoallergy testing of sunscreens in guinea pigs. Gerberick GF, et al. **Contact Dermatitis** 1989 Apr; 20(4):251–9
Cosmetic allergy to the UV-absorber bornelone. de Groot AC, et al. **Derm Beruf Umwelt** 1989 Jan-Feb;37(1):13–5
A response to concerns about sunscreens: a report from the Skin Cancer Foundation [editorial] Pathak MA, et al. **J Dermatol Surg Oncol** 1989 May;15(5):486–7

Adverse effects of sunscreens in photosensitive patients [see comments] Farr PM, et al. **Lancet** 1989 Feb 25; 1(8635):429–31. Comment in: Lancet 1989 Jun 17;1(8651):1387

[Photoallergic and allergic contact eczema caused by dibenzoylmethane compounds and other sunscreening agents] Schauder S, et al. **Hautarzt** 1988 Jul;39(7):435–40 (Eng. Abstr.) (Ger)

ANALYSIS

Determination of sun-screen agents in cosmetic products by reversed-phase high-performance liquid chromatography. Part II. Gagliardi L, et al. **J Chromatogr** 1989 Mar 3; 464(2):428–33

[Evaluation of sunscreening agents] Schauder S. **Z Hautkr** 1988;63 Suppl 1:44–8 (16 ref.) (Eng. Abstr.) (Ger)

[Sunscreening agents in West Germany 1988] Schauder S, et al. **Z Hautkr** 1988;63 Suppl 1:7–43 (15 ref.) (Eng. Abstr.) (Ger)

PHARMACOKINETICS

[The pharmacokinetics of light-protective agents by photoacoustic spectroscopy] Kölmel KF, et al. **Hautarzt** 1988 Nov;39(11):731–5 (Eng. Abstr.) (Ger)

PHARMACOLOGY

Ultraviolet radiation-induced suppression of contact hypersensitivity in relation to padimate O and oxybenzone. Fisher MS, et al. **J Invest Dermatol** 1989 Mar;92(3):337–41

Modification of sunburn cell production in 8-MOP sensitized mouse epidermis: a method of assessing UVA sunscreen efficacy. Garmyn M, et al. **J Invest Dermatol** 1989 Apr; 92(4):642–5

Early changes in dermal collagen of mice exposed to chronic UVB irradiation and the effects of a UVB sunscreen. Plastow SR, et al. **J Invest Dermatol** 1988 Dec;91(6):590–2

High-protection sunscreen formulation prevents UVB-induced sunburn cell formation. Césarini JP, et al. **Photodermatol** 1989 Feb;6(1):20–3

Sunscreen protection against UV-induced pyrimidine dimers in DNA of human skin in situ. Freeman SE, et al. **Photodermatol** 1988 Dec;5(6):243–7

[Evaluation of the protection factor (PF) against UV-A in vivo] Lecha M. **Med Cutan Ibero Lat Am** 1988;16(6):507–10 (Eng. Abstr.) (Spa)

STANDARDS

Ultraviolet A sunscreen evaluations in normal subjects. Stanfield JW, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):744–8

Sunscreen testing using the mouse ear model. Cole CA, et al. **Photodermatol** 1989 Jun;6(3):131–6

SUPPLY & DISTRIBUTION

UVA filters in sunscreen preparations [letter; comment] Summers B, et al. **Lancet** 1989 Jun 17;1(8651):1387. Comment on: Lancet 1989 Feb 25;1(8635):429–31

THERAPEUTIC USE

An evaluation of broad-spectrum sunscreens against topical PUVA-induced erythema. Kawada A, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):335–7

Sunscreens and phototesting. Lowe NJ, et al. **Clin Dermatol** 1988 Jul-Sep;6(3):40–9 (47 ref.)

Prevention and repair of photoaging: sunscreens and retinoids. Kligman LH. **Cutis** 1989 May;43(5):458–65 (35 ref.)

Assessment by mouse model of the ultraviolet A protective effect of topical sunscreens. Furukawa RD, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1031–7

Evaluating the UVA protection of sunscreens. Roelandts R, et al. **J Am Acad Dermatol** 1989 Jul;21(1):56–62

Sunscreens: a review of the skin cancer protection value and educational opportunities. Gilmore GD. **J Sch Health** 1989 May;59(5):210–3 (16 ref.)

UVA filters in sunscreen preparations [letter] Diffey BL, et al. **Lancet** 1989 Jul 15;2(8655):170

Effect of a sunscreen in photosensitive patients [letter] Farr PM, et al. **Lancet** 1989 May 13;1(8646):1087–8

Adolescent use of sun-protection measures. Cockburn J, et al. **Med J Aust** 1989 Aug 7;151(3):136–40

[Evaluation of sunscreens by quantitative analyses of sunburn cell formation] Ohshima S. **Nippon Hifuka Gakkai Zasshi** 1988 Aug;98(9):923–30 (Eng. Abstr.) (Jpn)

SUNSTROKE

CLASSIFICATION

[Classification of heat stroke and sun stroke] Chen RA. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 May; 22(3):137–9 (Eng. Abstr.) (Chi)

SUPEREGO

The ego (and its superego) reconsidered. Smith DL. **Int J Psychoanal** 1988;69 (Pt 3):401–7 (36 ref.)

SUPERINFECTION

Bacterial superinfection in RSV lower respiratory tract illnesses and the epidemiology of Chlamydia trachomatis pneumonitis of infants in Tokyo. Meguro H, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):247–52

Acute viral hepatitis in chronic carriers of hepatitis B virus: different patterns in different places. Lok A. **Hepatology** 1989 Aug;10(2):252–3

A possible misdiagnosis in patients presenting with acute HBsAg-negative hepatitis: the role of hepatitis delta virus. Caredda F, et al. **Infection** 1988;16(6):358–9

Clinical features of hepatitis delta virus infection in a northern Italian area. Pasetti G, et al. **Infection** 1988;16(6):345–8

Effects of HIV superinfection on HBV replication in a chronic HBsAg carrier with liver disease. Pastore G, et al. **J Hepatol** 1988 Oct;7(2):164–8

[Tinea capitis presenting as staphylococcal pyodermatitis of the scalp] Bigel ML, et al. **Arch Fr Pediatr** 1989 May; 46(5):363–5 (Eng. Abstr.) (Fre)

[Tularemia in Switzerland. Observation of 3 cases] Meier FP, et al. **Rev Med Suisse Romande** 1988 Aug;108(8):671–6 (Fre)

COMPLICATIONS

[HBV carriers and HDV superinfection--studies on the cases of HBsAg clearance] Tamura I, et al. **Kansenshogaku Zasshi** 1989 Feb;63(2):103–8 (Eng. Abstr.) (Jpn)

DRUG THERAPY

A rapid high-performance liquid chromatography method for determining beta-lactam antibiotics in biological fluids and tissues. Condomines M, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):251–3

[Treatment of superinfections caused by pyocyanic bacillus in patients with mucoviscidosis. Efficacy of cefsulodin in combination with an aminoglycoside] Jehanne M. **Pathol Biol (Paris)** 1989 May;37(5):500–3 (Eng. Abstr.) (Fre)

[Therapy and prevention of secondary infection in patients with atopic dermatitis] Lesnik NV, et al. **Vestn Dermatol Venerol** 1988;(5):58–60 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

[Mixed urogenital infections in patients with syphilis] Borisenko KK, et al. **Vestn Dermatol Venerol** 1988;(5):32–5 (Eng. Abstr.) (Rus)

[Epidemiological study of the associations of Staphylococcus aureus and Pseudomonas aeruginosa in the pulmonology clinic] Sologub VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):8–11 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Fusion of inclusions following superinfection of HeLa cells by two serovars of Chlamydia trachomatis. Ridderhof JC, et al. **Infect Immun** 1989 Oct;57(10):3189–93

Hepatitis B-DNA replication and histological patterns in liver biopsy specimens of chronic HBsAg positive patients with and without hepatitis delta virus superinfection. Villari D, et al. **J Clin Pathol** 1989 Jul;42(7):689–93

[Concomitant superinfection by non-specific bacteria in urogenital tuberculosis] Maganto Pavón E, et al. **Actas Urol Esp** 1988 Jul-Aug;12(4):315–20 (Eng. Abstr.) (Spa)

MORTALITY

[The incidence of lung infection in patients with mucoviscidosis and the disease course with various pathogen spectra] Dietzsch HJ, et al. **Kinderarztl Prax** 1989 Feb;57(2):81–7 (Eng. Abstr.) (Ger)

PATHOLOGY

Hepatitis A virus and non-A, non-B virus superinfections in HBsAg chronic carriers. Sansonno DE, et al. **Digestion** 1988;39(4):197–203

[Unusual healing of tendon sheath tuberculosis by intercurrent streptococcal phlegmon] Pfeiffer KM. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):218–9 (Eng. Abstr.) (Ger)

SUPERINVASION, MICROBIAL see **SUPERINFECTION**

SUPERIOR COLLICULUS

[Transplanted rat retina do not project in a topographic order to the host brain] Galli L. **Ann Ist Super Sanita** 1988; 24(4):505–6 (Ita)

ANALYSIS

Immunocytochemical localization of gamma-aminobutyric acid (GABA) in the cat superior colliculus. Mize RR. **J Comp Neurol** 1988 Oct 8;276(2):169–87

ANATOMY & HISTOLOGY

Distribution of retinal ganglion cells projecting into the nucleus of the optic tract in rat. Urushibata T, et al. **Adv Otorhinolaryngol** 1988;41:95–7

Auditory pathways in the budgerigar. II. Intratelencephalic pathways. Brauth SE, et al. **Brain Behav Evol** 1988; 32(4):193–207

Horseradish peroxidase study of tectal afferents in Xenopus laevis with special emphasis on their relationship to the lateral-line system. Zittlau KE, et al. **Brain Behav Evol** 1988;32(4):208–19

Avian nucleus isthmi ventralis projects to the contralateral optic tectum. Martínez S, et al. **Brain Res** 1989 Feb 27; 481(1):181–4

Pretectal and tectal projections to the homologue of the dorsal lateral geniculate nucleus in the pigeon: an anterograde and retrograde tracing study with cholera toxin conjugated to horseradish peroxidase. Wild JM. **Brain Res** 1989 Feb 6;479(1):130–7

The projection from superior colliculus to cuneiform area in the rat. II. Defence-like responses to stimulation with glutamate in cuneiform nucleus and surrounding structures. Mitchell IJ, et al. **Exp Brain Res** 1988;72(3):626–39

The projection from superior colliculus to cuneiform area in the rat. I. Anatomical studies. Redgrave P, et al. **Exp Brain Res** 1988;72(3):611–25

Morphometric parameters of the superior colliculus of albino and pigmented rats. Albers FJ, et al. **J Comp Neurol** 1988 Aug 15;274(3):357–70

Neuroanatomical studies of the nigrotectal projection in the cat. Harting JK, et al. **J Comp Neurol** 1988 Dec 22; 278(4):615–31

Normal and regenerating optic fibers in goldfish tectum: HRP-EM evidence for rapid synaptogenesis and optic fiber-fiber affinity. Hayes WP, et al. **J Comp Neurol** 1988 Aug 22;274(4):516–38

Optic synapse number but not density is constrained during regeneration onto surgically halved tectum in goldfish: HRP-EM evidence that optic fibers compete for fixed numbers of postaynaptic sites on the tectum. Hayes WP, et al. **J Comp Neurol** 1988 Aug 22;274(4):539–59

New view of the organization of the pulvinar nucleus in Tupaia as revealed by tectopulvinar and pulvinar-cortical projections. Luppino G, et al. **J Comp Neurol** 1988 Jul 1;273(1):67–86

Two distinct visual pathways through the superficial pretectum in a percomorph teleost. Striedter GF, et al. **J Comp Neurol** 1989 May 15;283(3):342–54

Visual projections to the pontine nuclei in the rabbit: orthograde and retrograde tracing studies with WGA-HRP. Wells GR, et al. **J Comp Neurol** 1989 Jan 22;279(4):629–52

Putative cholinergic projections from the nucleus isthmi and the nucleus reticularis mesencephali to the optic tectum in the goldfish (Carassius auratus). Zottoli SJ, et al. **J Comp Neurol** 1988 Jul 15;273(3):385–98

Anatomical organization of the superior colliculus in monkeys: corticotectal pathways for visual and visuomotor functions. Cusick CG. **Prog Brain Res** 1988;75:1–15 (75 ref.)

BLOOD SUPPLY

Angiogenesis on the optic tectum of albino Xenopus laevis tadpoles. Rovainen CM, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):197–213

CYTOLOGY

Responses of single neurons in the pretectum of monkeys to visual stimuli in three-dimensional space. Hoffmann KP. **Ann N Y Acad Sci** 1988;545:180–6 (23 ref.)

The cholinergic input to the superficial layers of the superior colliculus: an ultrastructural immunocytochemical study in the ferret. Henderson Z. **Brain Res** 1989 Jan 2; 476(1):149–53

Striped pattern of labeling in ground squirrel superior colliculus following intraocular HRP injections. Petry HM, et al. **Brain Res** 1989 Jun 5;489(1):199–203

A study of the retinal ganglion cell which has an uncrossed bifurcating axon in the albino rat. Yamadori T, et al. **Brain Res** 1989 May 29;488(1-2):143–8

Projection from the superficial layers of the tectum to the pretectal complex in the cat. Kubota T, et al. **Brain Res Bull** 1989 Feb;22(2):373–8

The mosaic of the uncrossed retinal projection in the superior colliculus of the cat. Illing RB. **Exp Brain Res** 1989; 74(3):641–4

The orientation of horizontal cell dendrites in the superior colliculus of the hamster: an analysis based on three-dimensional reconstruction of intracellularly injected neurons. Rhoades RW, et al. **Exp Brain Res** 1989; 76(1):229–38

Collateral projections of predorsal bundle cells of the superior colliculus in the rat. Bickford ME, et al. **J Comp Neurol** 1989 May 1;283(1):86–106

Changes in the nuclei of dying neurons as studied with thymidine autoradiography. Clarke PG, et al. **J Comp Neurol** 1989 May 15;283(3):438–49

Endocytosis and autophagy in dying neurons: an ultrastructural study in chick embryos. Hornung JP, et al. **J Comp Neurol** 1989 May 15;283(3):425–37

Descending pathways to the spinal cord: II. Quantitative study of the tectospinal tract in 23 mammals. Nudo RJ, et al. **J Comp Neurol** 1989 Aug 1;286(1):96–119

Nigrotectal projection to the inferior colliculus: horseradish

peroxidase transport and tyrosine hydroxylase immunohistochemical studies in rats, cats, and bats. Olazábal UE, et al. **J Comp Neurol** 1989 Apr 1; 282(1):98–118

Organization of the projection from the superficial to the deep layers of the hamster's superior colliculus as demonstrated by the anterograde transport of Phaseolus vulgaris leucoagglutinin. Rhoades RW, et al. **J Comp Neurol** 1989 May 1;283(1):54–70

Dorsal raphe serotoninergic branching neurons projecting both to the lateral geniculate body and superior colliculus: a combined retrograde tracing–immunohistochemical study in the rat. Villar MJ, et al. **J Comp Neurol** 1988 Nov 1; 277(1):126–40

Neuronal typology of Gallotia galloti optic tectum. Morales MC, et al. **J Hirnforsch** 1989;30(2):175–83

Cells of origin of spinothalamic, spinotectal, spinoreticular and spinocerebellar pathways in the pigeon as studied by the retrograde transport of horseradish peroxidase. Necker R. **J Hirnforsch** 1989;30(1):33–43

Quantitative analysis of visual receptive fields of neurons in nucleus of the optic tract and dorsal terminal nucleus of the accessory optic tract in macaque monkey. Hoffmann KP, et al. **J Neurophysiol** 1989 Aug;62(2):416–28

Nociceptive neurons in rat superior colliculus: response properties, topography, and functional implications. McHaffie JG, et al. **J Neurophysiol** 1989 Aug;62(2):510–25

Lack of axon regeneration of isthmic neurons in juvenile Xenopus. McCart R, et al. **Neurosci Lett** 1988 Oct 5; 92(2):143–8

The retinopetal system in the rat. Labandeira-Garcia JL. **Neurosci Res** 1988 Oct;6(1):88–95

The neurons of the substantia nigra and zona incerta which project to the cat superior colliculus are GABA immunoreactive: a double-label study using GABA immunocytochemistry and lectin retrograde transport. Ficalora AS, et al. **Neuroscience** 1989;29(3):567–81

Collateral branches of cerebellopontine axons reach the thalamus, superior colliculus, or inferior olive: a double-fluorescence and combined fluorescence–horseradish peroxidase study in the rat. Lee HS, et al. **Neuroscience** 1989;28(3):725–34

Retinal ganglion beta cells project transiently to the superior colliculus during development. Ramoa AS, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2061–5

Control of cell number in the developing mammalian visual system. Finlay BL, et al. **Prog Neurobiol** 1989;32(3):207–34 (227 ref.)

DRUG EFFECTS

Excitatory and inhibitory action of GABA on synaptic transmission in slices of guinea pig superior colliculus. Arakawa T, et al. **Eur J Pharmacol** 1988 Dec 13; 158(3):217–24

Intratectal glutamate suppresses pentylenetetrazole-induced spike-and-wave discharges. Redgrave P, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):283–7

Pharmacology of a novel effect of gamma-aminobutyric acid on the frog optic tectum in vitro. Sivilotti L, et al. **Eur J Pharmacol** 1989 May 19;164(2):205–12

Progressive pathology of the caudate nucleus, the substantia nigra pars reticulata and the deeper layers of the colliculus superior: acute behavioural and metabolic effects of intrastriatal kainic acid. Jaspers RM, et al. **Neuroscience** 1989;28(1):159–69

Neuron development in the superior colliculus of the fetal mouse following maternal alcohol exposure. Zajac CS, et al. **Teratology** 1988 Jul;38(1):37–43

EMBRYOLOGY

Thy-1 expression in the retinotectal system of the chick. Sheppard AM, et al. **Brain Res** 1988 Sep 1;471(1):49–60

Spatial arrangement of radial glia and ingrowing retinal axons in the chick optic tectum during development. Vanselow J, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):15–27

Morphometric analysis on the effects of hypoxia during the central nervous system vasculogenesis. Ribatti D, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):135–42

Prenatal development of retinocollicular projections in the rabbit: an HRP study. Crabtree JW. **J Comp Neurol** 1989 Aug 22;286(4):504–13

Radial arrangement of clonally related cells in the chicken optic tectum: lineage analysis with a recombinant retrovirus. Gray GE, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7356–60

[Corticosteroids and cerebral vessel permeability during embryonic development] Ribatti D, et al. **Medicina (Firenze)** 1989 Jan-Mar;9(1):62–3 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

Adenosine deaminase containing fiber pathway from the superior colliculus to the lateral posterior nucleus of the rat. Miguel-Hidalgo JJ, et al. **Brain Res** 1989 Jan 2; 476(1):189–93

Acetylcholinesterase distribution and choline acetyltransferase and acetylcholinesterase activities in the optic tectum of the frog during metamorphosis. Franceschini V, et al. **Cell Mol Biol** 1988;34(6):615–9

Spatial relation of the acetylcholinesterase-rich domain to the visual topography in the feline superior colliculus. Illing RB. **Exp Brain Res** 1988;73(3):589–94

Origin of high acetylcholinesterase activity in the mouse superior colliculus. Wallace MN, et al. **Exp Brain Res** 1988; 72(2):335–46

Laminar and sublaminar ultracytochemical localization of cytochrome oxidase in the optic tectum of normal goldfish. Kageyama GH, et al. **J Comp Neurol** 1988 Dec 22; 278(4):498–520

Laminar histochemical and cytochemical localization of cytochrome oxidase in the goldfish retina and optic tectum in response to deafferentation and during regeneration. Kageyama GH, et al. **J Comp Neurol** 1988 Dec 22; 278(4):521–42

Regional and laminar distribution of choline acetyltransferase immunoreactivity in the cat superior colliculus. Hashikawa T. **Neurosci Res** 1989 Jun;6(5):426–37

GROWTH & DEVELOPMENT

Expanded retinofugal projections to the dorsal lateral geniculate nucleus and superior colliculus after unilateral enucleation in the wallaby Setonix brachyurus, quokka. Coleman LA, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):273–91

Development of the optic tecta in the frog Limnodynastes dorsalis. Dann JF, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):21–35

Afferent control of neuron numbers in the developing brain. Linden R, et al. **Brain Res Dev Brain Res** 1988 Dec 1; 44(2):291–5

Development of tectal neurons in the perciform teleost Haplochromis burtoni. A Golgi study. Wilm C, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):35–52

Recognition of position-specific properties of tectal cell membranes by retinal axons in vitro. Walter J, et al. **Development** 1987 Dec;101(4):685–96

Changing patterns of binocular visual connections in the intertectal system during development of the frog, Xenopus laevis. II. Abnormalities following early visual deprivation. Grant S, et al. **Exp Brain Res** 1989;75(1):117–32

Changing patterns of binocular visual connections in the intertectal system during development of the frog, Xenopus laevis. I. Normal maturational changes in response to changing binocular geometry. Grant S, et al. **Exp Brain Res** 1989;75(1):99–116

Astroglial differentiation in the opossum superior colliculus. Barradas PC, et al. **GLIA** 1989;2(2):103–11

Control of tectal cell number during larval development in Rana pipiens. Kollros JJ, et al. **J Comp Neurol** 1988 Dec 15;278(3):430–45

Developing retinotectal projection in larval goldfish. Stuermer CA, et al. **J Comp Neurol** 1989 Mar 22; 281(4):630–40

Effects of intraocular tetrodotoxin on the development of the retinocollicular pathway in the Syrian hamster. Thompson I, et al. **J Comp Neurol** 1989 Apr 15; 282(3):371–88

Synaptogenesis in the stratum griseum superficiale of the rat superior colliculus. Warton SS, et al. **Synapse** 1989; 3(2):136–48

IMMUNOLOGY

Degeneration of optic axons induces the expression of major histocompatibility antigens. Rao K, et al. **Brain Res** 1989 May 29;488(1–2):332–5

An aberrant retinal pathway and visual centers in Xenopus tadpoles share a common cell surface molecule, A5 antigen. Fujisawa H, et al. **Dev Biol** 1989 Oct;135(2):231–40

Enkephalin-like immunoreactivity in the cat superior colliculus: distribution, ultrastructure, and colocalization with GABA. Mize RR. **J Comp Neurol** 1989 Jul 1; 285(1):133–55

METABOLISM

Laminar distribution of GABA (gamma-aminobutyric acid) in the dorsal lateral geniculate nucleus, Area 17 and Area 18 of the visual cortex, and the superior colliculus of the cat. Kanno S, et al. **Brain Res** 1988 Jun 7;451(1–2):172–8

Nucleotide sequences of two embryonic drebrins, developmentally regulated brain proteins, and developmental change in their mRNAs. Kojima N, et al. **Brain Res** 1988 Nov;464(3):207–15

Quantitative autoradiographic localization of NMDA, quisqualate and PCP receptors in the frog tectum. McDonald JW, et al. **Brain Res** 1989 Mar 13;482(1):155–8

Distribution of benzodiazepine receptors in the rat superior colliculus: a light and electron microscope quantitative autoradiographic study. Pinard R, et al. **Brain Res** 1988 Nov 22;474(1):48–65

Dopaminergic nigrotectal projection in the rat. Takada M, et al. **Brain Res** 1988 Aug 2;457(1):165–8

Different metabolic changes in the lateral geniculate nucleus and the superior colliculus of adult rats after simultaneous or delayed double enucleation. Zilles K, et al. **Brain Res** 1989 May 29;488(1–2):14–21

Origin, distribution, and morphology of serotonergic afferents to the cat superior colliculus: a light and electron microscope immunocytochemistry study. Mize RR, et al. **Exp Brain Res** 1989;75(1):83–98

Distribution of opiate receptors within visual structures of the cat brain. Walker JM, et al. **Exp Brain Res** 1988; 73(3):523–32

Effects of prolonged retinal ganglion cell inactivity on superior colliculus glucose metabolism in the mature hooded rat. Thurlow GA, et al. **Exp Neurol** 1989 Jun; 104(3):272–8

Glial fibrillary acidic protein (GFAP) from goldfish: its localisation in visual pathway. Nona SN, et al. **GLIA** 1989; 2(3):189–200

Developmental accumulation and heterogeneity of myelin basic protein transcripts in the chick visual system. Zopf D, et al. **GLIA** 1989;2(4):241–9

A critical period of the development of beta-adrenergic receptor binding in the visual system of rat during visual deprivation. Aurich M, et al. **Int J Dev Neurosci** 1988; 6(4):351–7

Laminar and segregated distribution of immunoreactivities for some neuropeptides and adenosine deaminase in the superior colliculus of the rat. Miguel-Hidalgo JJ, et al. **J Comp Neurol** 1989 Feb 15;280(3):410–23

Calcium-dependent evoked release of N-[3H]acetylaspartylglutamate from the optic pathway. Tsai G, et al. **J Neurochem** 1988 Dec;51(6):1956–9

Separation of quisqualate- and kainate-selective glutamate receptors in cultured neurons from the rat superior colliculus. Perouansky M, et al. **J Neurosci** 1989 Jan; 9(1):70–80

Nicotinic acetylcholine receptor-like molecules in the retina, retinotectal pathway, and optic tectum of the frog. Sargent PB, et al. **J Neurosci** 1989 Feb;9(2):565–73

Association of axonally transported heparan sulfate with isolated synaptic plasma membrane. Elam JS, et al. **Neurochem Res** 1988 Aug;13(8):715–20

Amino acid profiles in Long-Evans rat superior colliculus, visual cortex, and inferior colliculus. Golden GT, et al. **Neurochem Res** 1989 May;14(5):465–72

Uptake, release, and modulation of release of noradrenaline in rabbit superior colliculus. Wichmann T, et al. **Neuroscience** 1988 Aug;26(2):621–34

MICROBIOLOGY

Retrograde transneuronal transport of herpes simplex virus in the retina after injection in the superior colliculus, hypothalamus and optic chiasm. Norgren RB Jr, et al. **Brain Res** 1989 Feb 13;479(2):374–8

PHYSIOLOGY

Columnar organization of the optic tectum in the frog. Lázár G. **Acta Biol Hung** 1988;39(2–3):211–6

Synaptic organization of retinotectal connections of the frog application of pulse triggered averaging. Matsumoto N. **Acta Biol Hung** 1988;39(2–3):217–20

Dendritic anatomy and electrotonic transfer properties of cat superior colliculus neurons. Schierwagen A. **Acta Biol Hung** 1988;39(2–3):221–7

The orienting ocular-following reflex in pretrigeminal cats with lesions of visual and oculomotor systems. Zernicki B. **Acta Neurobiol Exp (Warsz)** 1988;48(5):223–38

Effects of pretectal lesions in monkeys on two components of optokinetic nystagmus. Ikarashi T, et al. **Adv Otorhinolaryngol** 1988;41:98–103

Interocular transfer of preoperatively trained visual discriminations in goldfish (Carassius auratus) following selective commissure transections. Hemsley JP, et al. **Behav Brain Res** 1989 Apr 1;32(3):297–304

Intensity difference thresholds after lesions of ectostriatum in pigeons. Hodos W, et al. **Behav Brain Res** 1988 Sep 1;30(1):43–53

Detection of visual stimuli after lesions of the superior colliculus in the rat; deficit not confined to the far periphery. Overton P, et al. **Behav Brain Res** 1988 Nov 1;31(1):1–15

Head and body movements evoked electrically from the caudal superior colliculus of rats: pulse frequency effects. Tehovnik EJ. **Behav Brain Res** 1989 Aug 1;34(1–2):71–8

Rules of retinotectal mapmaking. Easter SS Jr. **Bioessays** 1986 Oct;5(4):158–62 (22 ref.)

A nonlinear model for collicular spatial interactions underlying the metrical properties of electrically elicited saccades. Van Opstal AJ, et al. **Biol Cybern** 1989; 60(3):171–83

A model for collicular efferent mechanisms underlying the generation of saccades. van Opstal AJ, et al. **Brain Behav Evol** 1989;33(2–3):90–4

Aberrant growth of regenerating retinotectal axons subsequent to optic tract ablation in goldfish. Airhart MJ, et al. **Brain Res** 1988 Sep 20;460(2):383–8

Anticonvulsant action of GABA receptor blockade in the nigrotectal target region. Dean P, et al. **Brain Res** 1989 Jan 16;477(1–2):391–5

Differential turnover of tubulin and neurofilament proteins in central nervous system neuron terminals. Garner JA. **Brain Res** 1988 Aug 23;458(2):309–18

Thyroxine influences neuronal connectivity in the adult frog brain. Hofmann MH, et al. **Brain Res** 1989 Jul 17; 492(1–2):389–91

Role of the nucleus of the optic tract of monkeys in optokinetic nystagmus and optokinetic after-nystagmus. Kato I, et al. **Brain Res** 1988 Nov 22;474(1):16–26

The pretectum as a site for relaying dorsal column input to thalamic VL neurons. Mackel R, et al. **Brain Res** 1989 Jan 2;476(1):135–9

Plasticity of behavioural response to repeated injection of

glutamate in cuneiform area of rat. Mitchell IJ, et al. **Brain Res** 1988 Sep 20;460(2):394–7

Effects of kainic acid lesions in rat ventral lateral geniculate nucleus upon field potentials of the superior colliculus: correlation between morphological and physiological observations. Nagata T, et al. **Brain Res** 1989 Mar 27; 483(1):50–60

Control of cell number in the developing neocortex. I. Effects of early tectal ablation. Pallas SL, et al. **Brain Res** 1988 Sep 1;471(1):1–11

Auditory and visual neurons in the cat's superior colliculus selective for the direction of apparent motion stimuli. Rauschecker JP, et al. **Brain Res** 1989 Jun 19;490(1):56–63

Adaptive changes in the central noradrenergic system in monocular deprived rats. Aurich M, et al. **Brain Res Bull** 1989 Feb;22(2):173–80

Efferent tectal cells of crucian carp: physiology and morphology. Niida A, et al. **Brain Res Bull** 1989 Feb; 22(2):389–98

Saccadic command signals in the superior colliculus: implications for sensorimotor transformations. Sparks DL. **Can J Physiol Pharmacol** 1988 Apr;66(4):527–31 (19 ref.)

Target stimulation of developing visual neurites. Carri NG, et al. **Cell Biol Int Rep** 1988 Nov;12(11):991

The effects of tectal lesion on the survival of isthmic neurones in Xenopus. Straznicky C, et al. **Development** 1987 Dec; 101(4):869–76

Avoidance of posterior tectal membranes by temporal retinal axons. Walter J, et al. **Development** 1987 Dec;101(4):909–13

A functional analysis of the collicular output pathways: a dissociation of deficits following lesions of the dorsal tegmental decussation and the ipsilateral collicular efferent bundle in the Mongolian gerbil. Ellard CG, et al. **Exp Brain Res** 1988;71(2):307–19

Transplanted rat retinae do not project in a topographic fashion on the host tectum. Galli L, et al. **Exp Brain Res** 1989;74(2):427–30

The organization of descending tectofugal pathways underlying orienting in the frog, Rana pipiens. II. Evidence for the involvement of a tecto-tegmento-spinal pathway. Masino T, et al. **Exp Brain Res** 1989;75(2):245–64

The organization of descending tectofugal pathways underlying orienting in the frog, Rana pipiens. I. Lateralization, parcellation, and an intermediate spatial representation. Masino T, et al. **Exp Brain Res** 1989; 75(2):227–44

Behavior evoked by electrical stimulation of the hamster superior colliculus. Northmore DP, et al. **Exp Brain Res** 1988;73(3):595–605

Enhanced sprouting of retinotectal fibers after early superior colliculus lesions in hamsters treated with gangliosides. Sabel BA, et al. **Exp Brain Res** 1988;71(2):365–76

The principle of "conservation of total axonal arborizations": massive compensatory sprouting in the hamster subcortical visual system after early tectal lesions. Sabel BA, et al. **Exp Brain Res** 1988;73(3):505–18

Superior colliculus neurons provide the saccadic motor error signal. Waitzman DM, et al. **Exp Brain Res** 1988; 72(3):649–52

Common interneurones mediating cortical and tectal excitation of abducens motoneurones in the cat. Yamagata Y, et al. **Exp Brain Res** 1988;71(2):279–90

Small lateral suprasylvian cortex lesions produce visual neglect and decreased visual activity in the superior colliculus. Hardy SC, et al. **J Comp Neurol** 1988 Jul 22; 273(4):527–42

Effects of very early monocular and binocular enucleation on primary visual centers in the tammar wallaby (Macropus eugenii). Marotte LR, et al. **J Comp Neurol** 1989 Apr 22; 282(4):535–54

Recovery from cortical blindness mediated by destruction of nontectotectal fibers in the commissure of the superior colliculus in the cat. Wallace SF, et al. **J Comp Neurol** 1989 Jun 15;284(3):429–50

Quantitative studies on ipsilateral type 2 retinotectotectal (IRTT) units in frogs: homologies with R3 ganglion cells. Garcia R, et al. **J Comp Physiol [A]** 1989 Jan;164(3):377–89

Convergence of retinal W-cell and corticotectal input to cells of the cat superior colliculus. Berson DM. **J Neurophysiol** 1988 Dec;60(6):1861–73

Electrophysiology of mammalian tectal neurons in vitro. II. Long-term adaptation. Llinás R, et al. **J Neurophysiol** 1988 Sep;60(3):869–78

Electrophysiology of mammalian tectal neurons in vitro. I. Transient ionic conductances. Lopez-Barneo J, et al. **J Neurophysiol** 1988 Sep;60(3):853–68

Synaptic organization of the tectal-facial pathways in the cat. I. Synaptic potentials following collicular stimulation. Vidal PP, et al. **J Neurophysiol** 1988 Aug;60(2):769–97

Relationships between segregated afferents and postsynaptic neurones in the optic tectum of three-eyed frogs. Katz LC, et al. **J Neurosci** 1988 Sep;8(9):3160–80

Neural maps of interaural time and intensity differences in the optic tectum of the barn owl. Olsen JF, et al. **J Neurosci** 1989 Jul;9(7):2591–605

Monocular eye movement in the cat: its corticotectal pathway. Tamai Y, et al. **Jpn J Physiol** 1988;38(4):569–75

Effects of moving textured background on neuronal responses in the toad's optic tectum. Tsai H, et al. **Naturwissenschaften** 1989 Jan;76(1):37–8

Formation of long-term potentiation in superior colliculus slices from the guinea pig. Okada Y, et al. **Neurosci Lett** 1989 Jan 2;96(1):108–13

The effect of GABA on neurotransmission in frog tectal slices. Arakawa T, et al. **Neurosci Res** 1989 Apr;6(4):363–8

Effects of ketamine, naloxone, and physostigmine on flash evoked potentials in rat superior colliculus. Hetzler BE, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):511–8

Effects of superior colliculus lesion upon a black–white discrimination learning in the albino rat with one eye removed at birth. Ikeda Y, et al. **Physiol Behav** 1988; 43(5):657–63

Retinal transplant-mediated learning in a conditioned suppression task in rats. Coffey PJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7248–9

Retinal and cortical inputs to cat superior colliculus: composition, convergence and laminar specificity. Berson DM. **Prog Brain Res** 1988;75:17–26 (40 ref.)

Organisation of efferent projections from superior colliculus to brainstem in rat: evidence for functional output channels. Dean P, et al. **Prog Brain Res** 1988;75:27–36 (40 ref.)

Descending cortical and tectal control of dorsal neck motoneurons via reticulospinal neurons in the cat. Iwamoto Y, et al. **Prog Brain Res** 1988;76:97–108 (44 ref.)

The consequences of the superior colliculus output on lateral geniculate and pulvinar responses. Molotchnikoff S, et al. **Prog Brain Res** 1988;75:67–74

Superior colliculus–mediated visual behaviors in cat and the concept of two corticotectal systems. Stein BE. **Prog Brain Res** 1988;75:37–53 (75 ref.)

Event or emergency? Two response systems in the mammalian superior colliculus. Dean P, et al. **Trends Neurosci** 1989 Apr;12(4):137–47 (66 ref.)

[Retinotectal and tectopontine projection in the guinea pig: experimental, anatomical and electrophysiological study] Iida J. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Jan; 92(1):51–60 (Eng. Abstr.) **(Jpn)**

[Functional reorganization in the system of corticotectal connections after unilateral deafferentation of the cortex] Loseva IV, et al. **Fiziol Zh SSSR** 1989 Feb;75(2):153–60 (Eng. Abstr.) **(Rus)**

[Facial motor responses to microstimulation of the superior colliculi in the white mouse] Pronichev IV, et al. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb;25(1):81–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Involvement of nigrotecto-reticulospinal pathways in the iminodipropionitrile (IDPN) model of spasmodic dyskinesias: a 2-deoxy-D-[1-14C]glucose study in the rat. Cadet JL, et al. **Brain Res** 1989 Apr 10;484(1–2):57–64

The role of the nigrotegmental GABAergic pathway in the propagation of pentylenetetrazol-induced seizures. Okada R, et al. **Brain Res** 1989 Feb 20;480(1–2):383–7

Travel vision: "collicular visual system"? Jan JE, et al. **Pediatr Neurol** 1986 Nov–Dec;2(6):359–62

SURGERY

[A study of visual function in congenital nystagmus—mechanism of visual improvement after stereotactic superior colliculectomy] Funahashi K. **No To Shinkei** 1988 Sep;40(9):841–8 (Eng. Abstr.) **(Jpn)**

TRANSPLANTATION

Cultured fetal tectal tissue grafted to the midbrain of newborn rats: morphology of grafts and innervation by host retinal and cortical axons. Harvey AR, et al. **Brain Res** 1988 Oct 11;462(1):89–98

Morphological and functional studies of rat tectal transplants. Golden GT, et al. **Brain Res Bull** 1989 Feb;22(2):461–8

ULTRASTRUCTURE

Ultrastructural analysis of primary cilium in the embryonic nervous tissue of mouse. Cohen E, et al. **Int J Dev Neurosci** 1987;5(1):43–51

Compartmentalization of anterogradely and retrogradely transported organelles in axons and growth cones from chick optic tectum. Cheng TP, et al. **J Neurosci** 1988 Sep; 8(9):3190–9

Normal numbers of retinotectal synapses during the activity-sensitive period of optic regeneration in goldfish: HRP–EM evidence implicating synapse rearrangement and collateral elimination during map refinement. Hayes WP, et al. **J Neurosci** 1989 Apr;9(4):1400–13

SUPERIOR MESENTERIC ARTERY SYNDROME see under **DUODENAL OBSTRUCTION**

SUPERIOR VENA CAVA OBSTRUCTION see **SUPERIOR VENA CAVA SYNDROME**

SUPERIOR VENA CAVA SYNDROME

Translumbar inferior vena cava Groshong catheter placement in a patient with superior vena cava occlusion. Knox MF, et al. **J Arkansas Med Soc** 1989 Jan;85(8):325–6

[Superior vena cava syndrome—clinical analysis of 92 cases] Huang JS, et al. **Chang Keng I Hsueh** 1988 Jun;11(2):107–15 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

An unusual case of stridor. Black A, et al. **Anaesthesia** 1988 Oct;43(10):870–1

[Combined superior and inferior vena caval obstruction syndrome: a case report] Guan H, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Feb;26(2):78–9, 125 (Eng. Abstr.) **(Chi)**

[Complications and results of diagnostic procedures in the vena cava superior syndrome] Belderbos HN, et al. **Ned Tijdschr Geneeskd** 1989 Mar 25;133(12):613–5 (Eng. Abstr.) **(Dut)**

[Aortic aneurysm with vena cava thrombosis occurring in Behcet's disease] De Gennes C, et al. **J Mal Vasc** 1989; 14(3):236–9 (Eng. Abstr.) **(Fre)**

[A case of pulmonary artery aneurysm associated with atrial septal defect, pulmonary hypertension, absent right superior vena cava and persistent left superior vena cava] Nagayoshi M, et al. **Kyobu Geka** 1988 Aug;41(9):772–6 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Thrombosis of the superior vena cava as an early manifestation of Behçet's disease. Presentation of 2 cases] Martínez-Orozco F, et al. **Rev Clin Esp** 1989 May; 184(8):415–7 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

[Pulsed Doppler in the diagnosis of obstruction of the superior vena cava. Apropos of a case] Martínez Romero P, et al. **Rev Esp Cardiol** 1989 Feb;42(2):142–4 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Successful urokinase therapy for superior vena cava syndrome in a premature infant [letter] Griffin MP, et al. **Am J Dis Child** 1988 Dec;142(12):1267–8

Urokinase. A cost-effective alternative treatment of superior vena cava thrombosis and obstruction. Meister FL, et al. **Arch Intern Med** 1989 May;149(5):1209–10

Successful treatment of superior vena cava syndrome with urokinase in an infant with a central venous catheter. Caglar MK, et al. **Helv Paediatr Acta** 1989 Jun; 43(5–6):483–6

Thrombolytic therapy for superior vena cava syndrome [letter] Fine DG, et al. **Lancet** 1989 May 27;1(8648):1200–1

ETIOLOGY

Venous involvement in Takayasu's disease: does it exist? Bardi K, et al. **Ann Vasc Surg** 1988 Jul;2(3):231–4

Innominate vein compression syndrome. Wurtz A, et al. **Br J Surg** 1989 Jun;76(6):575–6

Filarial mediastinal lymphadenitis. Another cause of superior vena caval syndrome. Seetharaman ML, et al. **Chest** 1988 Oct;94(4):871–2

Cardiac manifestations of noncardiac tumors. Part II: Direct effects. Weinberg BA, et al. **Clin Cardiol** 1989 Jun; 12(6):347–54 (123 ref.)

Superior vena cava syndrome in infants. Raszka WV Jr, et al. **Clin Pediatr (Phila)** 1989 Apr;28(4):195–8

Intracardiac causes of superior vena cava obstruction. Rein AJ, et al. **Eur J Pediatr** 1988 Nov;148(2):98–100

Superior vena caval syndrome due to substernal goitre. Wesseling GJ, et al. **Eur Respir J** 1988 Jul;1(7):666–9

Intermittent superior caval venous syndrome due to permanent transvenous electrode. Antonelli D, et al. **Int J Cardiol** 1989 Apr;23(1):125–7

Catheter tip position in central vein thrombosis. Pithie A, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec; 12(6):613–4

Management of an unusual case of congenital lobar emphysema. Hill RC, et al. **Pediatr Pulmonol** 1988; 5(4):252–4

Aneurysms of aberrant right subclavian artery: a rare cause of the superior vena cava syndrome. Yavuzer S, et al. **Vasa** 1989;18(1):69–73 (39 ref.)

[Fibrinolytic treatment of superior vena cava syndrome, a complication of a central venous catheter] Wolters J, et al. **Anaesthesist** 1989 Jan;38(1):40–3 (Eng. Abstr.) **(Ger)**

[The vena cava superior syndrome in sarcoidosis] Wurm K, et al. **Radiologe** 1988 Sep;28(9):424–8 (Eng. Abstr.) **(Ger)**

[Congenital heart disease causing superior vena cava syndrome] Simcha A, et al. **Harefuah** 1988 Aug; 115(3–4):66–7 (Eng. Abstr.) **(Heb)**

PATHOLOGY

Reevaluation of transthoracic fine needle aspiration biopsy in diagnosing superior vena cava syndrome. Adler OB, et al. **ROFO** 1988 Nov;149(5):470–2

PHYSIOPATHOLOGY

Thromboembolic events in patients with malignant superior vena cava syndrome and the role of anticoagulation. Adelstein DJ, et al. **Cancer** 1988 Nov 15;62(10):2258–62

Downhill azygos vein secondary to occlusion of the superior vena cava in Behçet's disease. Sukigara M, et al. **Chest** 1988 Dec;94(6):1308–9

[Heart disease and bronchial circulation] Nagai A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr; 26(4):347–51 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Intracaval and intracardiac extension of malignant thymoma: CT diagnosis. Korobkin M, et al.

J Comput Assist Tomogr 1989 Mar-Apr;13(2):348-50
Computed tomography of mediastinal collaterals in SVC syndrome. Mendelson DS, et al.
J Comput Assist Tomogr 1988 Sep-Oct;12(5):881-4
Pulmonary venous collaterals secondary to superior vena cava stenosis: a rare cause of right-to-left shunting following repair of a sinus venosus atrial septal defect. Weber HS, et al. Pediatr Cardiol 1989 Winter;10(1):49-51
Diseases of the major thoracic vessels with emphasis on CT: Seminar B. Semin Roentgenol 1989 Apr;24(2):69-141
CT findings in superior vena cava obstruction. Yedlicka JW, et al. Semin Roentgenol 1989 Apr;24(2):84-90 (20 ref.)

RADIONUCLIDE IMAGING

Discrepant sulfur colloid and radioparticle liver uptake in superior vena cava obstruction: case report. Suneja SK, et al. J Nucl Med 1989 Jan;30(1):113-6

RADIOTHERAPY

Need for invasive diagnostic procedures in the management of superior vena cava syndrome. Kumar PP, et al. J Natl Med Assoc 1989 Jan;81(1):41-7

SURGERY

Pedicled right atrial-pericardial tissue conduit for bypass of the obstructed superior vena cava in children. Lemmer JH Jr, et al. J Thorac Cardiovasc Surg 1989 Sep;98(3):417-20
[An experimental study on the use of the umbilical vein in blood vessel transplantation and its clinical application] Sun JX. Chung Hua Wai Ko Tsa Chih 1989 Feb;27(2):114-5, 127 (Eng. Abstr.) (Chi)
[Reconstructive interventions of the superior vena cava] Denck H. Langenbecks Arch Chir 1988;Suppl 2:187-9 (Eng. Abstr.) (Ger)
[Percutaneous transluminal angioplasty of the brachiocephalic vein in sarcoidosis with superior inflow obstruction] Werner WR, et al. Radiologe 1988 Sep; 28(9):429-32 (Eng. Abstr.) (Ger)
[Parietal infiltration of the superior vena cava during bronchogenic cancer: problems of treatment] Iarussi T, et al. Chir Ital 1988 Jun;40(3):219-24 (Eng. Abstr.) (Ita)
[Venous reconstruction of superior vena cava syndrome with thymoma] Tago M, et al. Kyobu Geka 1988 Sep; 41(10):814-6 (Eng. Abstr.) (Jpn)
[Surgical treatment of superior vena cava syndrome (SVC)] Yamashita C, et al. Kyobu Geka 1989 Feb;42(2):129-34 (Eng. Abstr.) (Jpn)
[Elements of vascular surgery in surgery of the lungs and mediastinal organs] Vishnevskiĭ AA, et al. Khirurgiia (Mosk) 1989 Mar;(3):68-72 (Eng. Abstr.) (Rus)

THERAPY

Percutaneous treatment of superior vena cava syndrome. Capek P, et al. AJR 1989 Jan;152(1):183-4
Percutaneous recanalization and dilatation of a thrombotically occluded superior vena cava in a patient with a peritoneovenous shunt. Meinertz T, et al. J Hepatol 1989 Jul;9(1):91-4
Superior vena cava syndrome. Current management concepts. Frank AR. Nebr Med J 1989 Jan;74(1):8-16
[Treatment of the superior vena cava syndrome] Vodvářka P. Cesk Radiol 1989 May;43(3):185-93 (Eng. Abstr.) (Cze)
[Superior vena cava syndrome] Trakhtenberg AKh, et al. Sov Med 1989;(4):42-8 (54 ref.) (Rus)

SUPERIOR VENA CAVA THROMBOSIS see **SUPERIOR VENA CAVA SYNDROME**

SUPEROVULATION see under **OVULATION**

SUPEROXIDE

Leukotrienes and reactive oxygen species as mediators of glomerular injury. Ardaillou R, et al. Am J Nephrol 1989; 9 Suppl 1:17-22 (41 ref.)
Does copper (II) ethylenediaminetetraacetate disproportionate superoxide? Beyer WF Jr, et al. Anal Biochem 1988 Aug 15;173(1):160-5
Analysis of horseradish peroxidase-amplified chemiluminescence produced by human neutrophils reveals a role for the superoxide anion in the light emitting reaction. Lock R, et al. Anal Biochem 1988 Sep; 173(2):450-5
The involvement of superoxide anions in the nitro blue tetrazolium chloride reduction mediated by NADH and phenazine methosulfate. Van Noorden CJ, et al. Anal Biochem 1989 Jan;176(1):170-4
The role of metals in aqueous superoxide chemistry. Bielski BH. Basic Life Sci 1988;49:123-30
Superoxide chemistry in non-aqueous media. Frimer AA. Basic Life Sci 1988;49:29-38 (62 ref.)
Peroxy radicals and singlet oxygen (1O2) from the addition of superoxide ion ($O_2^{\cdot-}$) to CCl4, CF3CCl3, PhCCl3, N-BuBr and N-BuCl in acetonitrile. Matsumoto S, et al. Basic Life Sci 1988;49:39-42
ESR evidence for superoxide, hydroxyl radicals and singlet oxygen produced from hydrogen peroxide and nickel(II) complex of glycylglycyl-L-histidine. Inoue S, et al. Biochem Biophys Res Commun 1989 Mar 15;159(2):445-51
Superoxide generation by photomediated redox cycling of anthraquinones. Hartman PE, et al. Environ Mol Mutagen 1989;14(1):42-7
Pulse radiolysis study of the reactivity of Trolox C phenoxyl radical with superoxide anion. Cadenas E, et al. FEBS Lett 1989 Aug 14;253(1-2):235-8
The antioxidant action of N-acetylcysteine: its reaction with hydrogen peroxide, hydroxyl radical, superoxide, and hypochlorous acid. Aruoma OI, et al. Free Radic Biol Med 1989;6(6):593-7
The effect of oxygen, antioxidants, and superoxide radical on tyrosine phenoxyl radical dimerization. Hunter EP, et al. Free Radic Biol Med 1989;6(6):581-5
Superoxide reaction with nitroxide spin-adducts. Samuni A, et al. Free Radic Biol Med 1989;6(2):141-8
Inhibition of O2-.- and HO.- mediated processes by a new class of free radical scavengers: the N-acyl dehydroalanines. Buc-Calderon P, et al. Free Radic Res Commun 1988;5(3):159-68
Evidence for the addition of the superoxide anion to the anti-oxidant n-propyl gallate in aqueous solution. Deeble DJ, et al. Free Radic Res Commun 1987;2(4-6):351-8
Oxygen activation and deactivation in the presence of simple metal-chelates. Duchstein HJ. Free Radic Res Commun 1987;4(1):61-7
Pulse radiolysis of catalase in solution. I. Reactions of O2- with catalase and its compound I. Gębicka L, et al. Int J Radiat Biol 1989 Jan;55(1):45-50
Role of the superoxide anion in the oxidative activation of the new antitumor drug BD40: a radiolysis study. Sekaki A, et al. Int J Radiat Biol 1989 Jun;55(6):901-11
Photosensitization with alpha-terthienyl: the formation of superoxide ion in aqueous media. Kagan J, et al. J Photochem Photobiol [B] 1989 Apr;3(2):165-74
Endothelium-derived contracting factor: endothelin and/or superoxide anion? Vanhoutte PM, et al. Trends Pharmacol Sci 1988 Jul;9(7):229-30 (23 ref.)
[Increase in the generation of superoxide radicals and in the inhibitory effect on Yoshida sarcoma of anthracycline antitumor agents by ultrasound] Yumita N, et al. Nippon Gan Chiryo Gakkai Shi 1989 Jan 20;24(1):63-8 (Eng. Abstr.) (Jpn)
[Arachidonic acid cascade and radical peroxidation] Fujita T, et al. Nippon Rinsho 1988 Oct;46(10):2155-60 (Jpn)
[Reactive oxygen species and methods of measuring radical scavenger enzymes] Oyanagui Y. Nippon Rinsho 1988 Oct; 46(10):2142-8 (Jpn)
[Carbohydrates and active oxygen: recent developments in the study of reducing sugar autoxidation and depolymerization of polysaccharides by oxygen radicals] Kashimura N. Tanpakushitsu Kakusan Koso 1988 Dec; 33(16):3116-26 (Jpn)
[Life time of active oxygens and their physiological significance] Kobayashi K. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):2678-83 (Jpn)
[E. coli genes to enhance tolerance to paraquat] Morimyo M. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):3178-83 (Jpn)
[Inactivation of enzymes by active oxygen] Nakamura K. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):3074-9 (Jpn)
[Chemistry of active oxygen species] Saito I, et al. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):2665-77 (Jpn)
[Microbial killing by oxygen radicals from phagocytes] Sasada M. Tanpakushitsu Kakusan Koso 1988 Dec; 33(16):3024-30 (Jpn)
[Bioluminescence and action mechanism of activated oxygen species] Suzuki N, et al. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):3037-41 (Jpn)
[Anti-tumor effect by leukocyte-derived active oxygens] Yamazaki M, et al. Tanpakushitsu Kakusan Koso 1988 Dec; 33(16):3031-6 (Jpn)
[Mechanism of the induction of adaptive response against oxygen stresses] Yonei S, et al. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):3169-77 (Jpn)
[Biochemical reactions of superoxygenase with activated oxygen species] Yoshida R. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):3048-53 (Jpn)

ADMINISTRATION & DOSAGE

Experimental evaluation of oxygen free radical scavengers in the prevention of reperfusion injury to skeletal muscle. Feller AM, et al. Ann Plast Surg 1989 Apr;22(4):321-31

ADVERSE EFFECTS

Mesangiolysis and endothelial lesions due to peroxidative damage in rabbits. Stratta P, et al. Nephron 1989;51(2):250-6
Oxygen free radicals in the genesis of traumatic and peritumoral brain edema. Ikeda Y, et al. Neurosurgery 1989 May;24(5):679-85

ANALYSIS

The enzymatic reduction of actinomycin D to a free radical species. Flitter WD, et al. Arch Biochem Biophys 1988 Dec; 267(2):632-9
Superoxide production in aprotic interior of chloroplast thylakoids. Takahashi M, et al. Arch Biochem Biophys 1988 Dec;267(2):714-22
Superoxide anion measurement by sulfonated phenyl isothiocyanate cytochrome c. Morel F, et al. Biochem Biophys Res Commun 1988 Nov 15;156(3):1175-81
Spin trapping of the superoxide anion: complications in the use of the water-soluble nitroso-aromatic reagent DBNBS. Mani V, et al. J Biochem Biophys Methods 1989 Mar; 18(2):91-6
[Measurements of active oxygen by cytochemical demonstration procedures] Hirai K, et al. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):2708-16 (Jpn)
[Measurements of active oxygen by chemiluminescence] Nakano M. Tanpakushitsu Kakusan Koso 1988 Dec; 33(16):2699-707 (Jpn)
[Measurements of active oxygen by chemical and biochemical procedures] Nakano M. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):2684-92 (Jpn)
[Measurements of active oxygen by electron spin resonance] Tero-Kubota S. Tanpakushitsu Kakusan Koso 1988 Dec; 33(16):2693-8 (Jpn)

ANTAGONISTS & INHIBITORS

Superoxide anion scavenging effect and superoxide dismutase activity of Ginkgo biloba extract. Pincemail J, et al. Experientia 1989 Aug 15;45(8):708-12
Inhibition of O2- generation by dexamethasone is mimicked by lipocortin I in alveolar macrophages. Maridonneau-Parini I, et al. J Clin Invest 1989 Jun; 83(6):1936-40

BIOSYNTHESIS

Functional characteristics of macrophages in glomerulonephritis in the rat. O2- generation, MHC class II expression, and eicosanoid synthesis. Cook HT, et al. Am J Pathol 1989 Feb;134(2):431-7
Inhalation of ozone produces a decrease in superoxide anion radical production in mouse alveolar macrophages. Ryer-Powder JE, et al. Am Rev Respir Dis 1988 Nov; 138(5):1129-33
Superoxide production of peritoneal macrophages in experimental gram-negative sepsis; influence of in vitro and in vivo supplements of zinc. Srinivas U, et al. APMIS 1989 Aug;97(8):682-8
Superoxide production by neutrophils in a model of adult respiratory distress syndrome. Holman RG, et al. Arch Surg 1988 Dec;123(12):1491-5
Evidence for two platelet activating factor receptors on eosinophils: dissociation between PAF-induced intracellular calcium mobilization degranulation and superoxides anion generation in eosinophils. Kroegel C, et al. Biochem Biophys Res Commun 1989 Jul 14; 162(1):511-21
Extracellular ATP triggers superoxide production in human neutrophils. Kuroki M, et al. Biochem Biophys Res Commun 1989 Jul 14;162(1):377-80
Parameters of activation of the membrane-bound O2-generating oxidase from bovine neutrophils in a cell-free system. Pilloud MC, et al. Biochem Biophys Res Commun 1989 Mar 15;159(2):783-90
Beneficial effects of trimetazidine on mitochondrial function and superoxide production in the cardiac muscle of monocrotaline-treated rats. Guarnieri C, et al. Biochem Pharmacol 1988 Dec 15;37(24):4685-8
NAD(P)H oxidation elicits anion superoxide formation in radish plasmalemma vesicles. Vianello A, et al. Biochim Biophys Acta 1989 Apr 14;980(2):202-8
H2-antagonist inhibition of human neutrophil superoxide anion synthesis. Zimmerman J, et al. Clin Pharmacol Ther 1989 May;45(5):487-94
Evidence that de novo protein synthesis participates in a time-dependent augmentation of the chemotactic peptide-induced respiratory burst in neutrophils. Effects of recombinant human colony stimulating factors and dihydrocytochalasin B. Woodman RC, et al. Free Radic Biol Med 1988;5(5-6):355-61
A monoclonal antibody to CD11c antigen inhibits the production of superoxide anion induced by concanavalin A in PMA-differentiated U-937 cells. Cabañas C, et al. Immunol Lett 1989 Feb;20(3):193-7
Different effects of bacterial lipopolysaccharide on superoxide anion production by macrophages from normal and tumor-bearing rats. Altavilla D, et al. Immunopharmacology 1989 Mar-Apr;17(2):99-106
Phorbol myristate acetate modulates calcium ion-dependent superoxide anion generation induced by a monoclonal antibody raised against polymorphonuclear leukocytes. Ichinose Y, et al. Infect Immun 1989 Aug;57(8):2529-33
Prolonged exposure of neutrophils to saline or bronchoalveolar lavage fluid does not alter superoxide anion generation. Nguyen P, et al. Int Arch Allergy Appl Immunol 1989;89(2-3):301-5
Increased superoxide anion production and glutathione peroxidase activity in peritoneal macrophages from autoimmune-prone MRL/Mp-Ipr/Ipr mice. Rokutan K, et al. Int Arch Allergy Appl Immunol 1988;87(2):113-9
Modulation of human peripheral blood eosinophil function by tumor necrosis factor-alpha. Whitcomb EA, et al. Int Arch Allergy Appl Immunol 1989;89(2-3):250-5
Suppression of neutrophil superoxide production by conventional peritoneal dialysis solution. Ing BL, et al. Int J Artif Organs 1988 Sep;11(5):351-4

Superoxide production by porcine retinal pigment epithelium in vitro. Dorey CK, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1047–54

The effect of azelastine on neutrophil and eosinophil generation of superoxide. Busse W, et al. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 1):400–5

Superoxide generation and its modulation by adenosine in the neutrophils of subjects with asthma. Meltzer S, et al. **J Allergy Clin Immunol** 1989 May;83(5):960–6

Dopamine inhibition of superoxide anion production by polymorphonuclear leukocytes. Yamazaki M, et al. **J Allergy Clin Immunol** 1989 May;83(5):967–72

Superoxide anion is the initial product in the hydrogen peroxide formation catalyzed by NADPH oxidase in porcine thyroid plasma membrane. Nakamura Y, et al. **J Biol Chem** 1989 Mar 25;264(9):4759–61

A novel mechanism for the generation of superoxide anions in hematoporphyrin derivative-mediated cutaneous photosensitization. Activation of the xanthine oxidase pathway. Athar M, et al. **J Clin Invest** 1989 Apr; 83(4):1137–43

Functional defect in neutrophil cytosols from two patients with autosomal recessive cytochrome-positive chronic granulomatous disease. Curnutte JT, et al. **J Clin Invest** 1989 Apr;83(4):1236–40

Protease-modulation of neutrophil superoxide response. Kusner DJ, et al. **J Immunol** 1989 Sep 1;143(5):1696–702

Phorbol ester-stimulated superoxide production by murine bone marrow-derived macrophages requires preexposure to cytokines. Phillips WA, et al. **J Immunol** 1989 Apr 1; 142(7):2445–9

Characterization of arachidonic acid metabolism, superoxide production, and bacterial killing in bovine circulating neutrophils and elicited alveolar neutrophils. Heidel JR, et al. **J Leukoc Biol** 1989 Jul;46(1):41–50

Both recombinant interleukin-1 (beta) and purified human monocyte interleukin-1 prime human neutrophils for increased oxidative activity and promote neutrophil spreading. Sullivan GW, et al. **J Leukoc Biol** 1989 May; 45(5):389–95

Immunoglobulin G coating on crystals and ceramics enhances polymorphonuclear cell superoxide production: correlation with immunoglobulin G adsorbed. Nagase M, et al. **J Rheumatol** 1989 Jul;16(7):971–6

The beneficial effects of ibuprofen on a lethal live E. coli septic shock model and the relationship of these effects to superoxide radical production. Schmeling DJ, et al. **Prog Clin Biol Res** 1989;299:53–61

Auranofin modulates human neutrophil superoxide production and protein phosphorylation. Hurst NP, et al. **Rheumatol Int** 1989;8(6):245–50

Two forms of autosomal chronic granulomatous disease lack distinct neutrophil cytosol factors. Nunoi H, et al. **Science** 1988 Dec 2;242(4883):1298–301

BLOOD

Acute hemorrhage and oxygen free radicals. Prasad K, et al. **Angiology** 1988 Dec;39(12):1005–13

Blood monocyte oxidative burst activity in acute P. falciparum malaria. Nielsen H, et al. **APMIS** 1989 May; 97(5):469–71

Kawasaki disease, oxygen radicals and high dose gammaglobulin therapy. Kuratsuji T, et al. **Basic Life Sci** 1988;49:997–1003

The role of hemoglobin in generating oxyradicals. Rifkind JM, et al. **Basic Life Sci** 1988;49:157–62

Inhibition by prostacyclin analogs of .O2- production in human polymorphonuclear leukocytes. Stahlberg HJ, et al. **Basic Life Sci** 1988;49:991–5

Superoxide generation of phagocytizing polymorphonuclear leukocytes from patients with chronic renal failure. Tanigawa T, et al. **Basic Life Sci** 1988;49:857–61

Reactions of myeloperoxidase with superoxide and hydrogen peroxide: significance for its function in the neutrophil. Winterbourn CC, et al. **Basic Life Sci** 1988;49:823–7

Superoxide generation by the electrogenic NADPH oxidase of human neutrophils is limited by the movement of a compensating charge. Henderson LM, et al. **Biochem J** 1988 Oct 1;255(1):285–90

A study on the role of protein kinase C and intracellular calcium in the activation of superoxide generation. Christiansen NO, et al. **Biochim Biophys Acta** 1988 Oct 7;971(3):317–24

Stimulated human neutrophils damage cardiac sarcoplasmic reticulum function by generation of oxidants. Kukreja RC, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):198–205

Effects of prostacyclin analogs on cyclic adenosine monophosphate and superoxide formation in human polymorphonuclear leukocytes stimulated by formyl-methionyl-leucyl-phenylalanine. Stahlberg HJ, et al. **Biol Chem Hoppe Seyler** 1988 May;369(5):329–36

Metabolism of stimulated polymorphonuclear leukocytes. Takeshige K, et al. **Biomed Biochim Acta** 1989; 48(2-3):S25–30

Inhibitory effect of retinoic acid on the respiratory burst of adult and cord blood neutrophils and macrophages: potential implication to bronchopulmonary dysplasia. Wolfson M, et al. **Clin Exp Immunol** 1988 Jun;72(3):505–9

Effect of colforsin on human neutrophil superoxide production and intracellular calcium mobilization. Furui H, et al. **Clin Exp Pharmacol Physiol** 1989 Mar; 16(3):199–209

A time-course study on superoxide generation and protein kinase C activation in human neutrophils. Christiansen NO. **FEBS Lett** 1988 Nov 7;239(2):195–8

GTP-dependent and -independent activation of superoxide producing NADPH oxidase in a neutrophil cell-free system. Ishida K, et al. **FEBS Lett** 1989 Jan 30; 243(2):169–72

Conversion of superoxide generated by polymorphonuclear leukocytes to hydroxyl radical: a direct spectrophotometric detection system based on degradation of deoxyribose. Greenwald RA, et al. **Free Radic Biol Med** 1989; 6(4):385–92

Superoxide anion generation, erythrocytes superoxide dismutase activity, and lipid peroxidation during hemoperfusion and hemodialysis in chronic uremic patients. Trznadel K, et al. **Free Radic Biol Med** 1989;6(4):393–7

Subcellular localization and dynamics of components of the respiratory burst oxidase. Borregaard N. **J Bioenerg Biomembr** 1988 Dec;20(6):637–51 (80 ref.)

Activation of the neutrophil respiratory burst by chemoattractants: regulation of the N-formyl peptide receptor in the plasma membrane. Jesaitis AJ, et al. **J Bioenerg Biomembr** 1988 Dec;20(6):679–707 (151 ref.)

Activation of the respiratory burst oxidase in neutrophils: on the role of membrane-derived second messengers, Ca++, and protein kinase C. Lambeth JD. **J Bioenerg Biomembr** 1988 Dec;20(6):709–33 (173 ref.)

The superoxide-generating respiratory burst oxidase of human neutrophil plasma membrane. Phosphatidylserine as an effector of the activated enzyme. Tamura M, et al. **J Biol Chem** 1988 Nov 25;263(33):17621–6

Neutrophil oxidative metabolism after exposure to bacterial phospholipase C. Styrt B, et al. **J Lab Clin Med** 1989 Jul; 114(1):51–7

Occult intracellular calcium pools: relevance to neutrophil oxidant production. Weisdorf DJ, et al. **J Lab Clin Med** 1989 Sep;114(3):260–5

Endotoxemia and enhanced generation of oxygen radicals by neutrophils from patients undergoing cardiopulmonary bypass. Kharazmi A, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):381–5

Mechanisms for luminol-augmented chemiluminescence from neutrophils induced by leukotriene B4 and N-formyl-methionyl-leucyl-phenylalanine. Gyllenhammar H. **Photochem Photobiol** 1989 Feb; 49(2):217–23

Superoxide production by phagocytic leukocytes: transmembrane signalling and potential interactions of the second messengers in cell stimulation. Badwey JA, et al. **Prog Clin Biol Res** 1988;282:209–21

Effect of the 5-lipoxygenase inhibitor piriprost on superoxide production by human neutrophils. Flament J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Dec; 34(3):175–80

Superoxide anion scavenging property of dipyridamole [letter] Iuliano L, et al. **Thromb Haemost** 1989 Feb 28; 61(1):149

[Enzymatic production of superoxide by human polymorphonuclear leukocytes in burns] Karelin AA, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):107–10 (Eng. Abstr.) **(Rus)**

[Circadian variations in the production of superoxide and liberation of lysosomal enzymes of neutrophils in peripheral blood] Muniain MA, et al. **Rev Clin Esp** 1989 Jan; 184(1):20–3 (Eng. Abstr.) **(Spa)**

METABOLISM

Superoxide and superoxide dismutase in bronchial asthma. Kuratsuji T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):680–5

The effect of adherence on the generation of reactive oxygen species by human neutrophilic granulocytes. Neumann M, et al. **Agents Actions** 1989 Jan;26(1-2):183–5

Association between nonspecific bronchial hyperreactivity and superoxide anion production by polymorphonuclear leukocytes in chronic airflow obstruction. Renkema TE, et al. **Agents Actions** 1989 Jan;26(1-2):52–4

A kinetic model of superoxide production from single pulmonary alveolar macrophages. DiGregorio KA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C405–12

Protection of Ca pump of coronary artery against inactivation by superoxide radical. Grover AK, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C666–73

Superoxide anion is an endothelium-derived contracting factor. Katusic Z., et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H33–7

Oxidative metabolism of the bovine alveolar macrophage. Dyer RM, et al. **Am J Vet Res** 1989 Apr;50(4):448–54

The role of arachidonic acid and oxygen radical metabolites in the pathogenesis of vasogenic brain edema and astrocytic swelling. Chan PH, et al. **Ann N Y Acad Sci** 1989; 559:237–47

External messengers and erythropoietin production. Fisher JW, et al. **Ann N Y Acad Sci** 1989;554:9–20

First electron spin resonance evidence for the generation of the daunomycin free radical and superoxide by red blood cell membranes. Pedersen JZ, et al. **Ann N Y Acad Sci** 1988;551:121–7

Ischemic injury in the brain. Role of oxygen radical-mediated processes. Watson BD, et al. **Ann N Y Acad Sci** 1989; 559:269–81 (97 ref.)

The reactions of horseradish peroxidase, lactoperoxidase, and myeloperoxidase with enzymatically generated superoxide. Metodiewa D, et al. **Arch Biochem Biophys** 1989 Jul; 272(1):245–53

Synergism between protein kinase C activator and fatty acids in stimulating superoxide anion production in guinea pig polymorphonuclear leukocytes. Ozawa M, et al. **Arch Biochem Biophys** 1989 Sep;273(2):491–6

Dioxathiadiaza-heteropentalenes mediate superoxide and hydrogen peroxide production in Escherichia coli. Takahashi M, et al. **Arch Biochem Biophys** 1989 Jan; 268(1):137–43

Influence of the surface area of different dialysis membranes on granulocyte adherence and superoxide generation. Paul JL, et al. **Artif Organs** 1988 Aug;12(4):341–4

Generation of reactive oxygen metabolites by phagocytosing endothelial cells. Görög P, et al. **Atherosclerosis** 1988 Jul; 72(1):19–27

An endogenous source of the superoxide anion in the central nervous system. Colton CA, et al. **Basic Life Sci** 1988; 49:1005–10

Membrane permeability and oxidant induced injury. Forman HJ, et al. **Basic Life Sci** 1988;49:523–30

Generation of superoxide by the microsomal mixed-function oxidase system. Morehouse LA, et al. **Basic Life Sci** 1988; 49:517–21

Superoxide radical release into the cytoplasm of heart cells by an NADH-driven oxygen activator. Nohl H. **Basic Life Sci** 1988;49:898–903

Phosphorylation of both 47 and 49kDa proteins accompanies superoxide release by neutrophils. Badwey JA, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1029–35

Effect of interferon inducers on superoxide anion generation from rat liver microsomes detected by lucigenin chemiluminescence. Ischiropoulos H, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1042–8

Changes in the levels of superoxide anion radical and superoxide dismutase during the estrous cycle of Rattus norvegicus and induction of superoxide dismutase in rat ovary by lutropin. Laloraya M, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):146–53

Temperature-dependent inhibition of fmet-leu-phe-stimulated superoxide generation by C-I and H-7 in human neutrophils. Nath J, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1376–82

Platelet activating factor is a potent stimulant of the production of active oxygen species by human monocyte-derived macrophages. Rouis M, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1293–301

Studies on opsonized zymozan, FMLP, carbachol, PMA and A23187 stimulated respiratory burst of human PMNLs. Fülöp T Jr, et al. **Biochem Int** 1988 Sep;17(3):419–26

Inhibition of superoxide anion radical production by ebselen (PZ51) and its sulfur analogue (PZ25) in guinea pig alveolar macrophages. Leurs R, et al. **Biochem Int** 1989 Feb; 18(2):295–9

A comparative study of serum proteins ability to scavenge active oxygen species: O2-. and OCl-. Sharonov BP, et al. **Biochem Int** 1988 Oct;17(4):783–90

Synthesis of nitric oxide from L-arginine by neutrophils. Release and interaction with superoxide anion. McCall TB, et al. **Biochem J** 1989 Jul 1;261(1):293–6

The superoxide-dependent transfer of iron from ferritin to transferrin and lactoferrin. Monteiro HP, et al. **Biochem J** 1988 Dec 15;256(3):923–8

Cleavage of folates during ethanol metabolism. Role of acetaldehyde/xanthine oxidase-generated superoxide. Shaw S, et al. **Biochem J** 1989 Jan 1;257(1):277–80

Evidence for intracellular superoxide formation following the exposure of guinea pig enterocytes to bleomycin. Turner MJ 3d, et al. **Biochem Pharmacol** 1989 Jan 1; 38(1):85–90

Auto-oxidation of dialuric acid, divicine and isouramil. Superoxide dependent and independent mechanisms. Winterbourn CC, et al. **Biochem Pharmacol** 1989 Feb 15; 38(4):611–8

Glutathione-mediated redox cycling of alloxan. Mechanisms of superoxide dismutase inhibition and of metal-catalyzed OH. formation. Winterbourn CC, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):271–7

Room temperature electron spin resonance of superoxide dismutase-loaded liposomes and erythrocytes. A direct approach to the interaction of O2- with cells. Marcocci L, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):99–104

Kinetics of the reaction of superoxide anion with ferric horseradish peroxidase. Shimizu N, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):133–7

Mechanism of O2- generation in reduction and oxidation cycle of ubiquinones in a model of mitochondrial electron transport systems. Sugioka K, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):377–85

Impairment of superoxide release by alveolar macrophage in rats exposed to oxygen and vitamin E. Nakamura H, et al. **Biol Neonate** 1988;54(1):29–34

Effect of alkylated and intercalated DNA on the generation of superoxide anion by riboflavin. Naseem I, et al. **Biosci Rep** 1988 Oct;8(5):485–92

Enhancement of superoxide anion release by granulocytes harvested from patients receiving granulocyte-macrophage colony-stimulating factor. Sullivan R, et al. **Br J Haematol** 1989 Apr;71(4):475–9

Superoxide radical production in plasma membrane samples

from regressing rat corpora lutea. Sawada M, et al. **Can J Physiol Pharmacol** 1989 May;67(5):465–71

Superoxide dismutase–mediated reversible conversion of 3–hydroxyamino–1–methyl–5H–pyrido[4,3–b]indole, the N–hydroxy derivative of Trp–P–2, into its nitroso derivative. Hiramoto K, et al. **Carcinogenesis** 1988 Nov; 9(11):2003–8

Tumor promoters differ in their ability to stimulate superoxide anion radical production by murine peritoneal exudate cells following in vivo administration. Witz G, et al. **Carcinogenesis** 1989 May;10(5):807–11

Superoxide production by human umbilical vein endothelial cells in an anoxia–reoxygenation model. Schinetti ML, et al. **Cardiovasc Res** 1989 Jan;23(1):76–80

Scavenging effect of extracts of green tea and natural antioxidants on active oxygen radicals. Zhao BL, et al. **Cell Biophys** 1989 Apr;14(2):175–85

The role of iron in oxygen radical mediated lipid peroxidation. Minotti G, et al. **Chem Biol Interact** 1989; 71(1):1–19 (57 ref.)

Free radical effects on lung metabolism. Jenkinson SG. **Clin Chest Med** 1989 Mar;10(1):37–47 (51 ref.)

A sensitive and specific chemiluminescence method for estimating the ability of human granulocytes and monocytes to generate O2–. Nishida A, et al. **Clin Chim Acta** 1989 Feb 15;179(2):177–81

Effects of arachidonic acid and inhibitors of arachidonic acid metabolism on phagocyte–induced sister chromatid exchanges. Weitberg AB. **Clin Genet** 1988 Nov; 34(5):288–92

Effect of metallothionein on granulocyte chemotaxis and superoxide generation. Hanada K, et al. **Dermatologica** 1989;179 Suppl 1:143

Possible role of H2O2–mediated complement activation and cytokines–mediated fibroblasts superoxide generation on skin inflammation. Shingu M, et al. **Dermatologica** 1989;179 Suppl 1:107–12

Ca2+ requirement of prostanoid but not of superoxide production by rat Kupffer cells. Dieter P, et al. **Eur J Biochem** 1988 Oct 15;177(1):61–7

Modulatory activity of 9–hydroxy– and 9–hydroperoxy–octadecadienoic acid towards reactive oxygen species from guinea–pig pulmonary macrophages. Engels F, et al. **Eur J Biochem** 1989 Sep 1;184(1):197–203

Protease inhibitor eglin–c affects superoxide anion release but not bacterial killing by human polymorphonuclear leukocytes. Esposito AL, et al. **Exp Lung Res** 1988; 14(6):743–56

Assessment of superoxide–mediated release of vascular–inhibitory factor(s) from endothelial cells by using a two–bath system. Hong KW, et al. **Experientia** 1989 Apr 15;45(4):320–2

Synthesis of acylated SOD derivatives which bind to the biomembrane lipid surface and dismutate extracellular superoxide radicals. Ando Y, et al. **FEBS Lett** 1988 Nov 21;240(1–2):216–20

Phosphoinositide breakdown and superoxide anion release in formyl–peptide–stimulated human alveolar macrophages. Comparison between quiescent and activated cells. Damon M, et al. **FEBS Lett** 1988 Nov 7;239(2):169–73

Interactions of formylmethionyl–leucyl–phenylalanine, adenosine, and phosphodiesterase inhibitors in human monocytes. Effects on superoxide release, inositol phosphates and cAMP. Elliott KR, et al. **FEBS Lett** 1989 Aug 28;254(1–2):94–8

Enhancement by streptozotocin of O2– radical generation by the xanthine oxidase system of pancreatic beta–cells. Nukatsuka M, et al. **FEBS Lett** 1988 Nov 7;239(2):295–8

Generation of O2– and tyrosine cation–mediated chemiluminescence during the fertilization of sea urchin eggs. Takahashi A, et al. **FEBS Lett** 1989 Mar 27; 246(1–2):117–9

Halothane, an inhalation anesthetic, activates protein kinase C and superoxide generation by neutrophils. Tsuchiya M, et al. **FEBS Lett** 1988 Dec 19;242(1):101–5

Electron paramagnetic resonance evidence that cellular oxygen toxicity is caused by the generation of superoxide and hydroxyl free radicals. Zweier JL, et al. **FEBS Lett** 1989 Jul 31;252(1–2):12–6

Relationship between superoxide anion radical generation and aging in the housefly, Musca domestica. Farmer KJ, et al. **Free Radic Biol Med** 1989;7(1):23–9

Detection of oxygen radicals during reperfusion of intestinal cells in vitro. Nilsson UA, et al. **Free Radic Biol Med** 1989; 6(3):251–9

2,3,7,8, tetrachlorodibenzo–p–dioxin induces oxygen activation associated with cell respiration. Nohl H, et al. **Free Radic Biol Med** 1989;6(4):369–74

Adhering lung macrophages produce superoxide demonstrated with desferal–Mn(IV). Ryer–Powder JE, et al. **Free Radic Biol Med** 1989;6(5):513–8

The cellular–induced decay of DMPO spin adducts of .OH and .O2. Samuni A, et al. **Free Radic Biol Med** 1989; 6(2):179–83

Mechanism of the interaction of superoxide ion and ascorbate with anthracycline antibiotics. Afanas'ev IB, et al. **Free Radic Res Commun** 1987;3(1–5):141–50

Superoxide radical generation by Amadori compounds. Azevedo M, et al. **Free Radic Res Commun** 1988;4(5):331–5

Studies on the nature and activation of O2(–)–forming NADPH oxidase of leukocytes. Identification of a phosphorylated component of the active enzyme. Bellavite P, et al. **Free Radic Res Commun** 1985;1(1):11–29

The kinetics of the reaction of ferritin with superoxide. Buettner GR, et al. **Free Radic Res Commun** 1987; 2(4–6):369–72

What is unique about superoxide toxicity as compared to other biological reductants? A hypothesis [published erratum appears in Free Radic Res Commun 1988;5(2):129–30] Czapski G, et al. **Free Radic Res Commun** 1988;4(4):231–6

The uniqueness of superoxide dismutase (SOD)—why cannot most copper compounds substitute SOD in vivo? Czapski G, et al. **Free Radic Res Commun** 1988;4(4):225–9

Effect of ischemia on heart submitochondrial superoxide production. Guarnieri C, et al. **Free Radic Res Commun** 1985;1(2):123–8

Vanadate–stimulated NADH oxidation requires polymeric vanadate, phosphate and superoxide. Patole MS, et al. **Free Radic Res Commun** 1988;4(4):201–7

An unusual NAD(P)H–dependent O2–.–enerating redox system in hepatoma 22a nuclei. Peskin AV, et al. **Free Radic Res Commun** 1987;3(1–5):47–55

Cysteamine oxygenase: possible involvement of superoxide ion in the catalytic mechanism. Ricci G, et al. **Free Radic Res Commun** 1987;3(6):365–71

Effect of endotoxin on release of reactive oxygen intermediates by rat hepatic macrophages. Arthur MJ, et al. **Gastroenterology** 1988 Dec;95(6):1588–94

Mechanisms of fibre–induced superoxide release from alveolar macrophages and induction of superoxide dismutase in the lungs of rats inhaling crocidolite. Mossman BT, et al. **IARC Sci Publ** 1989;(90):81–92

Modulation of human neutrophil and monocyte chemotaxis and superoxide responses by recombinant TNF–alpha and GM–CSF. Kharazmi A, et al. **Immunobiology** 1988 Sep; 177(4–5):363–70

Generation of superoxide anion by alveolar macrophages in sarcoidosis: evidence for the activation of the oxygen metabolism in patients with high–intensity alveolitis. Cassatella MA, et al. **Immunology** 1989 Mar;66(3):451–8

Linoleic acid–deficient rat neutrophils show decreased bactericidal capacity, superoxide formation and membrane depolarization. Gyllenhammar H, et al. **Immunology** 1989 Apr;66(4):616–20

Glutathione & its redox system, superoxide anion & superoxide dismutases of polymorphonuclear leukocytes in essential hypertension. Rahman I, et al. **Indian J Med Res** 1988 Jul;88:64–70

Independence of neutrophil respiratory burst oxidant generation from the early cytosolic calcium response after stimulation with unopsonized Candida albicans hyphae. Wysong DR, et al. **Infect Immun** 1989 May;57(5):1499–505

Ontogeny of inflammatory cell responsiveness: superoxide anion generation by phorbol ester–stimulated fetal, neonatal, and adult bovine neutrophils. Clifford CB, et al. **Inflammation** 1989 Apr;13(2):221–31

Effects on extra– and intracellularly localized, chemoattractant–induced, oxygen radical production in neutrophils following modulation of conditions for ligand–receptor interaction. Dahlgren C. **Inflammation** 1988 Aug;12(4):335–49

Antiarthritic synergism of combined oral and parenteral chrysotherapy. II. Increased inhibition of activated leukocyte oxygen burst by combined gold action. Finkelstein AE, et al. **Inflammation** 1988 Aug;12(4):383–90

Lipoteichoic acid–antilipoteichoic acid complexes induce superoxide generation by human neutrophils. Ginsburg I, et al. **Inflammation** 1988 Dec;12(6):525–48

Lysophosphatides enhance superoxide responses of stimulated human neutrophils. Ginsburg I, et al. **Inflammation** 1989 Apr;13(2):163–74

Stimulation of guinea pig neutrophil superoxide anion–producing system with thymol. Suzuki Y, et al. **Inflammation** 1988 Dec;12(6):575–84

Macrophage–produced oxygen radical generating activities for polymorphonuclear leukocytes. Tsukamoto Y, et al. **Inflammation** 1989 Jun;13(3):259–66

Changes in respiratory burst activity during human monocyte differentiation in suspension culture. Zeller JM, et al. **Inflammation** 1988 Dec;12(6):585–95

Inverse relationship between superoxide anion production of guinea pig alveolar macrophages and tracheal beta–adrenergic receptor function; influence of dietary polyunsaturated fatty acids. Loesberg C, et al. **Int J Immunopharmacol** 1989;11(2):165–71

Escherichia coli proteins inducible by oxidative stress mediated by the superoxide radical. Walkup LK, et al. **J Bacteriol** 1989 Mar;171(3):1476–84

Effect of 2',3'–dialdehyde NADPH on activation of superoxide–producing NADPH oxidase in a cell–free system of pig neutrophils. Takasugi S, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):155–7

Dynamics of the respiratory burst oxidase. **J Bioenerg Biomembr** 1988 Dec;20(6):633–757

Iron ion–dependent modification of bases in DNA by the superoxide radical–generating system hypoxanthine/xanthine oxidase. Aruoma OI, et al. **J Biol Chem** 1989 Aug 5;264(22):13024–8

Intracellular Mn (II)–associated superoxide scavenging activity protects Cu,Zn superoxide dismutase–deficient Saccharomyces cerevisiae against dioxygen stress. Chang EC, et al. **J Biol Chem** 1989 Jul 25;264(21):12172–8

Effects of tryptophan and pH on the kinetics of superoxide radical binding to indoleamine 2,3–dioxygenase studied by pulse radiolysis. Kobayashi K, et al. **J Biol Chem** 1989 Sep 15;264(26):15280–3

Inhibition of the high affinity Fc receptor (Fc gamma RI) on human monocytes by porphyrin photosensitization is highly specific and mediated by the generation of superoxide radicals. Krutmann J, et al. **J Biol Chem** 1989 Jul 5;264(19):11407–13

Inhibition of superoxide and ferritin–dependent lipid peroxidation by ceruloplasmin. Samokyszyn VM, et al. **J Biol Chem** 1989 Jan 5;264(1):21–6

Activation of the superoxide forming NADPH oxidase in a cell–free system by sodium dodecyl sulfate. Absolute lipid dependence of the solubilized enzyme. Shpungin S, et al. **J Biol Chem** 1989 Jun 5;264(16):9195–203

Pholasin chemiluminescence detects mostly superoxide anion released from activated human neutrophils. Müller T, et al. **J Biolumin Chemilumin** 1989 Jul–Sep;3(3):105–13

Effects of extracellular pH on neutrophil superoxide anion production, and chemiluminescence augmented with luminol, lucigenin or DMNH. Gyllenhammar H. **J Clin Lab Immunol** 1989 Feb;28(2):97–102

Effect of cepharanthin on superoxide anion (O2–) production by macrophages. Sawamura D, et al. **J Dermatol (Tokyo)** 1988 Aug;15(4):304–7

Guinea pig Kupffer cells can be activated in vitro to an enhanced superoxide response. I. Comparison with peritoneal macrophages. Rieder H, et al. **J Hepatol** 1988 Dec;7(3):338–44

Guinea pig Kupffer cells can be activated in vitro to an enhanced superoxide response. II. Involvement of eicosanoids. Rieder H, et al. **J Hepatol** 1988 Dec; 7(3):345–51

A phospholipase A2–activating protein (PLAP) stimulates human neutrophil aggregation and release of lysosomal enzymes, superoxide, and eicosanoids. Bomalaski JS, et al. **J Immunol** 1989 Jun 1;142(11):3957–62

Involvement of guanine nucleotides in superoxide release by fluoride–treated neutrophils. Implications for a role of a guanine nucleotide regulatory protein. English D, et al. **J Immunol** 1989 Sep 1;143(5):1685–91

Endotoxin suppresses the generation of O2– and H2O2 by "resting" and lymphokine–activated human blood–derived macrophages. Rellstab P, et al. **J Immunol** 1989 Apr 15; 142(8):2813–20

IFN–gamma and LPS overcome glucocorticoid inhibition of priming for superoxide release in human monocytes. Evidence that secretion of IL–1 and tumor necrosis factor–alpha is not essential for monocyte priming. Szefler SJ, et al. **J Immunol** 1989 Jun 1;142(11):3985–92

Gamma irradiation as a substitute for H2O2 in peroxidase–labelled enzyme immunoassays. Schuler G, et al. **J Immunol Methods** 1989 Jan 6;116(1):27–9

Erythromycin and roxithromycin potentiate human neutrophil locomotion in vitro by inhibition of leukoattractant–activated superoxide generation and autooxidation. Anderson R. **J Infect Dis** 1989 May; 159(5):966–73

Modulation of macrophage superoxide–induced cytochrome c reduction by mast cells. Dileepan KN, et al. **J Lab Clin Med** 1989 May;113(5):577–85

Phorbol myristate acetate–treated endothelium stimulates polymorphonuclear leukocyte adhesion and superoxide secretion. Gudewicz PW, et al. **J Lab Clin Med** 1989 Jun; 113(6):708–16

Inhibition of neutrophil superoxide anion generation by platelet products: role of adenine nucleotides. McGarrity ST, et al. **J Leukoc Biol** 1988 Nov;44(5):411–21

Effect of granulocyte–macrophage colony–stimulating factor on superoxide production in cytoplasts and intact human neutrophils: role of protein kinase and G–proteins. Mege JL, et al. **J Leukoc Biol** 1989 Aug;46(2):161–8

Superoxide anion production in glass–adherent polymorphonuclear leukocytes and its relationship to calcium movement. Rebut–Bonneton C, et al. **J Leukoc Biol** 1988 Nov;44(5):402–10

Influence of platelet activating factor and a nonmetabolizable analogue on superoxide production by bone marrow derived macrophages. Storch J, et al. **J Leukoc Biol** 1988 Nov;44(5):385–90

Characterization of murine bronchoalveolar macrophage respiratory burst: comparison of soluble and particulate stimuli. Sugar AM, et al. **J Leukoc Biol** 1988 Dec; 44(6):500–7

Excitatory amino acid release from rat hippocampal slices as a consequence of free–radical formation. Pellegrini–Giampietro DE, et al. **J Neurochem** 1988 Dec; 51(6):1960–3

Effect of metal containing compounds on superoxide release from phorbol myristate acetate stimulated murine peritoneal macrophages: inhibition by auranofin and spirogermanium. Mirabelli CK, et al. **J Rheumatol** 1988 Jul;15(7):1064–9

Deferoxamine reduces neutrophil–mediated free radical production during cardiopulmonary bypass in man. Menasché P, et al. **J Thorac Cardiovasc Surg** 1988 Oct; 96(4):582–9

Suppression of leukocyte function and intracellular content of ATP in hyperosmotic condition comparable to the renal medulla. Matsumoto T, et al. **J Urol** 1989 Aug;142(2):399–402

Effect of etizolam (Depas) on production of superoxide anion

by platelet-activating factor and N-formyl-methionyl-leucyl-phenylalanine-stimulated guinea pig polymorphonuclear leukocytes. Aratani H, et al. **Jpn J Pharmacol** 1988 Jun;47(2):200-3

Glomerular macrophages produce reactive oxygen species in experimental glomerulonephritis. Boyce NW, et al. **Kidney Int** 1989 Mar;35(3):778-82

Human colonic (Na+ + K+)-ATPase and specific ouabain binding are not influenced by lipoxygenase products or superoxide radicals. Allgayer H, et al. **Klin Wochenschr** 1988 Jul 1;66(13):599-600

The selective and superoxide-independent diarruption of intestinal epithelial tight junctions during leukocyte transmigration. Nash S, et al. **Lab Invest** 1988 Oct; 59(4):531-7

Superoxide radical generation by inflamed human synovium after hypoxia [letter] Allen RE, et al. **Lancet** 1989 Jul 29; 2(8657):282-3

Effects of sera from patients with obstructive jaundice on the generation of oxygen intermediates by normal polymorphonuclear leukocytes. Ohshio G, et al. **Liver** 1988 Dec;8(6):366-71

Arachidonic acid release is closely related to the Fc gamma receptor-mediated superoxide generation in macrophages. Ida E, et al. **Microbiol Immunol** 1988;32(11):1127-43

Effect of C-reactive protein on peritoneal macrophages. II. Human C-reactive protein activates peritoneal macrophages of guinea pigs to release superoxide anion in vitro. Miyagawa N, et al. **Microbiol Immunol** 1988; 32(7):721-31

Different priming on human neutrophil respiratory burst by lipopolysaccharides from phase I and phase II Coxiella burnetii. Fumarulo R, et al. **Microbiologica** 1989 Jan; 12(1):55-60

Ca2+ ionophores inhibit superoxide generation by chemotactic peptide in rabbit neutrophils and the correlation with intracellular calcium. Jacob J. **Mol Cell Biochem** 1988 Nov;84(1):97-103

Effect of cisplatin, lipopolysaccharide, muramyl dipeptide and recombinant interferon-gamma on murine macrophages in vitro. II. Production of H2O2, O2- and interleukin-1. Sodhi A, et al. **Nat Immun Cell Growth Regul** 1989;8(2):108-16

NPGB-induced inhibition of superoxide anion production by normal Lewis rat macrophages. Arduini A, et al. **Neurochem Res** 1989 Jan;14(1):55-61

Respiratory burst oxidase of fertilization. Heinecke JW, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1259-63

Correlation between neutrophil superoxide formation, luminol-augmented chemiluminescence and intracellular Ca2+ levels upon stimulation with leukotriene B4, formylpeptide and phorbolester. Gyllenhammar H. **Scand J Clin Lab Invest** 1989 Jun;49(4):317-22

Oxygen free radicals mediate ischemia-induced lung injury. Klausner JM, et al. **Surgery** 1989 Feb;105(2 Pt 1):192-9

Possible mechanism of chrysotile asbestos-stimulated superoxide anion production in guinea pig alveolar macrophages. Roney PL, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):132-44

Nitrofurantoin-stimulated superoxide production by channel catfish (Ictalurus punctatus) hepatic microsomal and soluble fractions. Washburn PC, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):363-77

Effect of NaCl and urea concentration comparable to renal medulla on superoxide production by human polymorphonuclear leukocytes. Matsumoto T, et al. **Urol Res** 1988;16(5):367-71

Effects of asymmetrical triazine copper complexes on superoxide radical formation and on the Sendai virus multiplication. Zuivertz A, et al. **Virologie** 1988 Jul-Sep; 39(3):217-20

[The significance of oxygen radicals in the pathogenesis of interstitial pulmonary processes] Homolka J. **Cas Lek Cesk** 1989 Apr 28;128(18):555-8 (Eng. Abstr.) (Cze)

[Reactive oxygen species and inflammation] Müller-Peddinghaus R. **DTW** 1989 Apr;96(4):210-2 (107 ref.) (Eng. Abstr.) (Ger)

[Production of leukotrienes and superoxide from neutrophil-rich fraction of bronchial asthmatics] Takahashi K, et al. **Arerugi** 1988 Jun;37(6):322-30 (Eng. Abstr.) (Jpn)

[Effect of thiamylal on superoxide generation in the cells and on lipid peroxidation of biological membranes] Nishiyama K, et al. **Masui** 1989 Feb;38(2):202-10 (Eng. Abstr.) (Jpn)

[The effects of 1-methyl-4-phenylpyridine (MPP+) on O2- generation by neutrophils] Nozuhara T. **Nippon Ika Daigaku Zasshi** 1989 Feb;56(1):14-21 (Eng. Abstr.) (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in diabetes mellitus] Hayakawa M, et al. **Nippon Rinsho** 1988 Oct;46(10):2230-5 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in liver and pancreatic diseases] Kamada T, et al. **Nippon Rinsho** 1988 Oct;46(10):2236-40 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in the effects of carcinogens and antineoplastic agents] Kodama M. **Nippon Rinsho** 1988 Oct; 46(10):2257-61 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in hemolysis] Miki M. **Nippon Rinsho** 1988 Oct;46(10):2217-22 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in skin diseases] Miyachi Y. **Nippon Rinsho** 1988 Oct;46(10):2252-6 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in inflammation] Mizushima Y. **Nippon Rinsho** 1988 Oct;46(10):2203-7 (Jpn)

[Mechanisms of the biosynthesis of free radicals of reactive oxygen] Niki E. **Nippon Rinsho** 1988 Oct;46(10):2125-9 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in the immune response and autoimmune diseases] Shingu M. **Nippon Rinsho** 1988 Oct; 46(10):2208-16 (Jpn)

[Mononuclear phagocytes and reactive oxygen species] Yamazaki M. **Nippon Rinsho** 1989 Mar;47(3):550-3 (Jpn)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in gastrointestinal diseases] Yoshikawa T, et al. **Nippon Rinsho** 1988 Oct;46(10):2241-5 (Jpn)

[Production of active oxygen by autooxidation] Asada K, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2776-80 (Jpn)

[Production, scavenging and action of active oxygen] Asada K. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2659-64 (Jpn)

[Ferric nitrilotriacetate (Fe3+-NTA) produces active oxygens and induces malignant transformation on cultured rat liver cells] Awai M. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2844-54 (Jpn)

[Generation of singlet oxygen and oxy-radicals via photosensitization processes] Ito A, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2795-802 (Jpn)

[Role of active oxygen species in aging] Kator K. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3127-35 (Jpn)

[Scavenging of active oxygen by manganese catalase] Kono Y. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2940-8 (Jpn)

[Paraquat, an active-oxygen producing herbicide] Matsunaka S. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2790-4 (Jpn)

[Active oxygen production in myeloperoxidase system] Nakano M, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2770-5 (Jpn)

[Generation of oxygen-derived radicals in mitochondria and their damages] Nishida T, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2717-22 (Jpn)

[Inflammation and active oxygens] Oyanagui Y. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3144-52 (Jpn)

[Generation of active oxygen by environmental factors; radiation] Ozawa T. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2811-7 (Jpn)

[Production of active oxygen in microsomes] Shimada O, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2737-43 (Jpn)

[Generation of active oxygen by environmental factors; high concentration oxygen] Takahashi H. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2818-23 (Jpn)

[Production of superoxide radicals in thylakoid membranes] Takahashi M. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2723-9 (Jpn)

[Superoxide formation by neutrophils] Takeshige K, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2744-55 (Jpn)

[NADPH oxidase--O2- -generating system in phagocytes] Tanaka T, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2756-62 (Jpn)

[Production of active oxygen by autooxidation; quinone antineoplastic agents] Totsune H. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2781-9 (Jpn)

[Reaction mechanism and physiological function of superoxide dismutase] Yamakura F. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2875-82 (Jpn)

[Quantitative determination of the rate of superoxide radical formation in mitochondrial membranes by electron paramagnetic resonance] Rashba IuE, et al. **Biofizika** 1989 Jan-Feb;34(1):57-62 (Eng. Abstr.) (Rus)

[Dismutation of superoxide radicals by ceruloplasmin--details of the mechanism] Vasil'ev VB, et al. **Biokhimiia** 1988 Dec;53(12):2051-8 (Eng. Abstr.) (Rus)

[Intercellular contact interactions stimulate production of superoxide radical in granulocytes and macrophages] Subbotin SM, et al. **Dokl Akad Nauk SSSR** 1988; 301(5):1265-8 (Rus)

[Growth and DNA synthesis inhibition and superoxide anion formation by iminoquinones in Trypanosoma cruzi] Schwarcz de Tarlovsky MN, et al. **Rev Argent Microbiol** 1988 Oct-Dec;20(4):183-93 (Eng. Abstr.) (Spa)

[Effects of low density lipoproteins on uric acid crystals] Muniain Ezcurra MA, et al. **Rev Clin Esp** 1988 Oct; 183(5):232-4 (Eng. Abstr.) (Spa)

PHARMACOLOGY

Superoxide anion may trigger DNA strand breaks in human granulocytes by acting at a membrane target. Birnboim HC. **Ann N Y Acad Sci** 1988;551:83-93; discussion 93-4

Corneal oxygen scavenging systems: lysis of corneal epithelial cells by superoxide anions. Crouch R, et al. **Basic Life Sci** 1988;49:1043-6

Cytochrome P-448 induction restores the propagation of .O2- induced lipid peroxidation in hepatoma microsomes. Galeotti T, et al. **Basic Life Sci** 1988;49:513-6

Inactivation of creatine phosphokinase by superoxide during reperfusion injury. McCord JM, et al. **Basic Life Sci** 1988; 49:869-73

Mechanism of O2- (-) and H2O2-induced stimulation of sugar transport in mouse fibroblast BALB/3T3 cells. Kitagawa K, et al. **Biochim Biophys Acta** 1988 Dec 9; 972(3):293-8

Differential oxygen radical susceptibility of adriamycin-sensitive and -resistant MCF-7 human breast tumor cells. Mimnaugh EG, et al. **Cancer Res** 1989 Jan 1;49(1):8-15

Oxidation and cross-linking of human hemoglobins by activated oxygen species. Thillet J, et al. **Free Radic Res Commun** 1985;1(2):89-100

Antioxidant systems in Schistosoma mansoni: correlation between susceptibility to oxidant killing and the levels of scavengers of hydrogen peroxide and oxygen free radicals. Mkoji GM, et al. **Int J Parasitol** 1988 Jul;18(5):661-6

Evidence for three differentially regulated catalase genes in Neurospora crassa: effects of oxidative stress, heat shock, and development. Chary P, et al. **J Bacteriol** 1989 May; 171(5):2646-52

The roles of superoxide anion and methylene blue in the reductive activation of indoleamine 2,3-dioxygenase by ascorbic acid or by xanthine oxidase-hypoxanthine. Sono M. **J Biol Chem** 1989 Jan 25;264(3):1616-22

Role of superoxide anion radicals in ethanol metabolism by blood monocyte-derived human macrophages. Wickramasinghe SN. **J Exp Med** 1989 Mar 1;169(3):755-63

Myocardial dysfunction and ultrastructural alterations mediated by oxygen metabolites. Miki S, et al. **J Mol Cell Cardiol** 1988 Nov;20(11):1009-24

[Formation of superoxide anion radicals and their interaction with organic pollutants during the physicochemical purification of industrial wastes] Faingol'd ZL, et al. **Antibiot Khimioter** 1988 Jul;33(7):545-8 (41 ref.) (Rus)

[Effect of the superoxide radical on lymphocyte proliferation stimulated by a mitogen] Vol'skil' NN, et al. **Tsitologiia** 1988 Jul;30(7):898-902 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Coupling of a proton pump with superoxide radical-superoxide dismutase system in maturing mammalian spermatozoa and its association with sperm motility. Kumar GP, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):771-5

A possible role of superoxide anion radical in the process of blastocyst implantation in Mus musculus. Laloraya M, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):762-70

Manganous superoxide dismutase is essential for cellular resistance to cytotoxicity of tumor necrosis factor. Wong GH, et al. **Cell** 1989 Sep 8;58(5):923-31

Superoxide, iron, vascular endothelium and reperfusion injury. Halliwell B. **Free Radic Res Commun** 1989; 5(6):315-8 (39 ref.)

Role of reactive oxygen species in reperfusion injury of the rabbit lung. Kennedy TP, et al. **J Clin Invest** 1989 Apr; 83(4):1326-35

Superoxide anion participation in human monocyte-mediated oxidation of low-density lipoprotein and conversion of low-density lipoprotein to a cytotoxin. Cathcart MK, et al. **J Immunol** 1989 Mar 15;142(6):1963-9

Superoxide-dependent nitroblue tetrazolium reduction and expression of cytochrome b-245 components by human tonsillar B lymphocytes and B cell lines. Maly FE, et al. **J Immunol** 1989 Feb 15;142(4):1260-7

Role of oxygen free radical scavengers in preservation of intestinal villi in the presence of ischemia. Mittal VK, et al. **Transplant Proc** 1988 Oct;20(5):1045-7

RADIATION EFFECTS

[Photogeneration of the superoxide anion oxygen radical and its role in the inactivation of yeast cells by long-wave UV light] Pospelov ME, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Mar-Apr;(2):308-11 (Eng. Abstr.) (Rus)

TOXICITY

The uniqueness both of superoxide toxicity and of the protective role of superoxide dismutase. Czapski G, et al. **Basic Life Sci** 1988;49:43-6

Free radicals and heart disease. McCord JM. **Bibl Nutr Dieta** 1989;(43):327-37 (48 ref.)

Release of iron from ferritin and its role in oxygen radical toxicities. Samokyszyn VM, et al. **Drug Metab Rev** 1988; 19(3-4):283-303 (44 ref.)

[Oxygen radicals--"Life or death?"] Ballmer PE, et al. **Schweiz Med Wochenschr** 1988 Aug 27;118(34):1195-8 (59 ref.) (Ger)

[Role of polymorphonuclear leukocytes and oxygen-derived free radicals in the formation of gastric mucosal lesions induced by platelet-activating factor] Yoshikawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):858-64

(Eng. Abstr.) (Jpn)
[Carcinogens in food-pyrolysates, and active oxygens] Hiramoto K, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2869–74 (Jpn)
[Oxygen free radical production and DNA damage induced by metal compounds and hydrogen peroxide] Kawanishi S, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2838–43 (Jpn)
[Role of active oxygen species in carcinogenesis] Kodama M. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3136–43 (Jpn)
[Degradation of nucleic acids by active oxygen species] Nagano T, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):3094–101 (Jpn)
[Generation of active oxygen by environmental factors; mutagenicity and active oxygen species] Sofuni T, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2830–7 (Jpn)

SUPEROXIDE DISMUTASE

Characterization of a superoxide dismutase mimic prepared from desferrioxamine and MnO2. Beyer WF Jr, et al. **Arch Biochem Biophys** 1989 May 15;271(1):149–56
Crystallographic characterization and three-dimensional model of yeast Cu,Zn superoxide dismutase. Frigerio F, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):677–81
An ENDOR study of human and bovine erythrocyte superoxide dismutase: 1H and 14N interactions. Hüttermann J, et al. **Biochim Biophys Acta** 1988 Sep 21; 956(2):173–88
The amino-acid sequence of rabbit Cu-Zn superoxide dismutase. Reinecke K, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):715–25
Lipid peroxides and superoxide dismutase (SOD) induction in skin inflammatory diseases, and treatment with SOD preparations. Niwa Y. **Dermatologica** 1989;179 Suppl 1:101–6 (15 ref.)
Twentieth anniversary of the discovery of superoxide dismutase. A tribute to Irwin Fridovich and Joe McCord. **Free Radic Biol Med** 1988;5(5–6):269–419
Characterization of crystals of genetically engineered human manganese superoxide dismutase. Wagner UG, et al. **J Mol Biol** 1989 Apr 20;206(4):787–8
Structural identity between the iron- and manganese-containing superoxide dismutases. Parker MW, et al. **Protein Eng** 1987 Oct-Nov;1(5):393–7
Free radicals and liver ischemia–reperfusion injury. Lambotte L, et al. **Transplant Proc** 1988 Oct;20(5):977
[Clinical application and significance of drug delivery systems. Targeting SOD by gene and protein engineering] Inoue M, et al. **Nippon Rinsho** 1989 Jun;47(6):1340–6 (Jpn)
[Free radicals and lipid peroxidation. Biochemistry of superoxide dismutase—species, distribution, structure and genes] Miyata K. **Nippon Rinsho** 1988 Oct;46(10):2167–73 (Jpn)
[Modulation of in vivo behavior of SOD by protein-bioengineering] Inoue M, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2889–98 (Jpn)
[The models of superoxide dismutase] Kimura E, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2914–20 (Jpn)
[Three-dimensional structure of superoxide dismutase] Kitagawa Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2883–8 (Jpn)
[Posttranslational modification of superoxide dismutase in cells; glycation and inactivation of Cu, Zn-superoxide dismutase] Taniguchi N, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2921–6 (Jpn)
[Reaction mechanism and physiological function of superoxide dismutase] Yamakura F. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2875–82 (Jpn)

ADMINISTRATION & DOSAGE

Intra-articular orgotein in osteoarthritis of the knee: a placebo-controlled efficacy, safety, and dosage comparison. McIlwain H, et al. **Am J Med** 1989 Sep; 87(3):295–300
Superoxide dismutase conjugated to polyethylene glycol provides sustained protection against myocardial ischemia/reperfusion injury in canine heart. Tamura Y, et al. **Circ Res** 1988 Nov;63(5):944–59
Effect of liposomal-encapsulated superoxide dismutase on active oxygen-related human disorders. A preliminary study. Niwa Y, et al. **Free Radic Res Commun** 1985; 1(2):137–53
Effects of liposomal superoxide dismutase on human neutrophil activity. Somiya K, et al. **Free Radic Res Commun** 1986;1(5):329–37
Allopurinol and superoxide dismutase administration in prevention of rat kidney ischemic injury. Rosati R, et al. **Transplant Proc** 1988 Oct;20(5):928–30

ANALYSIS

Micromethods in single muscle fibers. 1. Determination of catalase and superoxide dismutase. Austin L, et al. **Anal Biochem** 1988 Nov 1;174(2):568–74
An assay for superoxide dismutase activity in mammalian tissue homogenates. Spitz DR, et al. **Anal Biochem** 1989 May 15;179(1):8–18
The heat shock response of Neurospora crassa: stress-induced thermotolerance in relation to peroxidase and superoxide dismutase levels. Kapoor M, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1097–102
Changes in CuZn-superoxide dismutase during induced differentiation of murine erythroleukemia cells. Paoletti F, et al. **Cancer Res** 1988 Dec 1;48(23):6674–7
Analysis of polyethylene glycol modified superoxide dismutase by chromatographic, electrophoretic, light scattering, chemical and enzymatic methods. McGoff P, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3079–91
Improved superoxide dismutase assay for clinical use [letter] Sun L, et al. **Clin Chem** 1989 Jun;35(6):1265–6
Polymorphic tetrameric superoxide dismutase in the pike Esox lucius L. (Pisces; Esocidae). Healy JA, et al. **Comp Biochem Physiol [B]** 1979;62(4):563–5
Physico-chemical characteristics of superoxide dismutase in Ascaris suum. Sanchez-Moreno M, et al. **Comp Biochem Physiol [B]** 1989;92(4):737–40
Several animal models of oxidative stress to the skin. Miyachi Y, et al. **Dermatologica** 1989;179 Suppl 1:141
Plasmodium falciparum: inhibitor sensitivity of the endogenous superoxide dismutase. Ranz A, et al. **Exp Parasitol** 1989 Aug;69(2):125–8
Is the activity-linked electrostatic gradient of bovine Cu, Zn superoxide dismutases conserved in homologous enzymes irrespective of the number and distribution of charges? Desideri A, et al. **Free Radic Biol Med** 1988;5(5–6):313–7
Development of O2 tolerance in rabbits with no increase in antioxidant enzymes. Baker RR, et al. **J Appl Physiol** 1989 Apr;66(4):1679–84
Comparison of properties between human recombinant and placental copper-zinc SOD. Kajihara J, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):851–4
Physicochemical properties of charge isomers of recombinant human superoxide dismutase. Kajihara J, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):638–42
Histochemical study of superoxide dismutase in the ovary of the rat during the oestrous cycle. Laloraya M, et al. **J Reprod Fertil** 1989 Jul;86(2):583–7
Effect of adriamycin on the activities of superoxide dismutase, glutathione peroxidase and catalase in tissues of mice. Sazuka Y, et al. **Jpn J Cancer Res** 1989 Jan; 80(1):89–94
Subcellular localization of superoxide dismutases, glutathione peroxidase and catalase in developing rat cerebral cortex. Del Maestro R, et al. **Mech Ageing Dev** 1989 Apr; 48(1):15–31
Preferential localization of copper zinc superoxide dismutase in the vulnerable cortical neurons in Alzheimer's disease. Delacourte A, et al. **Neurosci Lett** 1988 Oct 17;92(3):247–53
Protective effect of vitamin E on cadmium-induced alterations in lipofuscin and superoxide dismutase in rat brain regions. Shukla GS, et al. **Pharmacol Toxicol** 1988 Oct;63(4):305–6
[Measurement of superoxide dismutase activity in normal skin by electron spin resonance-spin trapping method] Yamagishi R, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Feb; 99(2):163–6 (Eng. Abstr.) (Jpn)
[Reactive oxygen species and methods of measuring radical scavenger enzymes] Oyanagui Y. **Nippon Rinsho** 1988 Oct; 46(10):2142–8 (Jpn)
[Assay methods for superoxide dismutase] Oyanagui Y. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2906–13 (Jpn)

ANTAGONISTS & INHIBITORS

Chemical modification of iron- and manganese-containing superoxide dismutases from Escherichia coli. Borders CL Jr, et al. **Arch Biochem Biophys** 1989 Jan;268(1):74–80
Superoxide dismutase in cestodes. Isoenzymatic characterization and studies of inhibition by a series of benzimidazoles and by pyrimidine derivatives of recent synthesis. Sanchez-Moreno M, et al. **Arzneimittelforschung** 1989 Jul;39(7):759–61
Microsomal fatty acid composition and Ca2+ uptake modifications induced by SOD depletion in rat liver. Bartoli GM, et al. **Basic Life Sci** 1988;49:717–20
Glutathione-mediated redox cycling of alloxan. Mechanisms of superoxide dismutase inhibition and of metal-catalyzed OH. formation. Winterbourn CC, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):271–7
Reaction of bovine-liver copper-zinc superoxide dismutase with hydrogen peroxide. Evidence for reaction with H2O2 and HO2- leading to loss of copper. Jewett SL, et al. **Eur J Biochem** 1989 Apr 1;180(3):569–75
Use of the inhibition of enzymatic antioxidant systems in order to evaluate their physiological importance. Michiels C, et al. **Eur J Biochem** 1988 Nov 1;177(2):435–41
Superoxide anion scavenging effect and superoxide dismutase activity of Ginkgo biloba extract. Pincemail J, et al. **Experientia** 1989 Aug 15;45(8):708–12

BIOSYNTHESIS

Induction of superoxide dismutase activity by paraquat or EDU in human gingival fibroblasts. Kerr JS, et al. **Basic Life Sci** 1988;49:695–8
Induction of manganese superoxide dismutase by tumor necrosis factor in human breast cancer MCF-7 cell line and its TNF-resistant variant. Asoh K, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):794–801
Synthesis and processing of the precursor for human mangano-superoxide dismutase. Wispé JR, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):30–6
The induction of manganese superoxide dismutase in response to stress in Nicotiana plumbaginifolia. Bowler C, et al. **EMBO J** 1989 Jan;8(1):31–8
Induction of mitochondrial manganese superoxide dismutase by interleukin 1. Masuda A, et al. **FASEB J** 1988 Dec; 2(15):3087–91
Effect of temperature and htpR on the biosynthesis of superoxide dismutase in Escherichia coli. Hassan HM, et al. **FEMS Microbiol Lett** 1989 Apr;49(2–3):133–7
Biosynthesis and regulation of superoxide dismutases. Hassan HM. **Free Radic Biol Med** 1988;5(5–6):377–85 (103 ref.)
Reactive oxygen intermediates inactivate Mycobacterium leprae in the phagocytes from human peripheral blood. Marolia J, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun; 57(2):483–91
Induction of the manganese-containing superoxide dismutase in Escherichia coli is independent of the oxidative stress (oxyR-controlled) regulon. Bowen SW, et al. **J Biol Chem** 1988 Oct 15;263(29):1480–11
Anaerobic induction of ProMn-superoxide dismutase in Escherichia coli. Privalle CT, et al. **J Biol Chem** 1989 Feb 15;264(5):2758–63
Cerebral superoxide anion generation during seizures in newborn pigs. Armstead WM, et al. **J Cereb Blood Flow Metab** 1989 Apr;9(2):175–9
Induction of manganous superoxide dismutase by tumor necrosis factor: possible protective mechanism. Wong GH, et al. **Science** 1988 Nov 11;242(4880):941–4
Induction of superoxide dismutase by methanol and structural modifications in Candida albicans. Paganelli M, et al. **Yeast** 1989 Apr;5 Spec No:S431–5
[Mechanism of the induction of adaptive response against oxygen stresses] Yonei S, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3169–77 (Jpn)

BLOOD

Effect of free radical scavengers on superoxide dismutase (SOD) enzyme in patients with alcoholic cirrhosis. Fehér J, et al. **Acta Med Hung** 1988;45(3–4):265–76
Serum lipid peroxide level and blood superoxide dismutase activity in rats with hydralazine-induced collagenosis-like syndrome. Jendryczko A, et al. **Acta Med Pol** 1988; 29(1–2):89–93
Some aspects of antioxidant status in blood from alcoholics. Bjørneboe GE, et al. **Alcoholism (NY)** 1988 Dec; 12(6):806–10
The exploration of the active-site cavity of copper-zinc superoxide dismutase. Bertini I, et al. **Ann N Y Acad Sci** 1988;542:37–52
Copper activation of superoxide dismutase in rat erythrocytes. DiSilvestro RA. **Arch Biochem Biophys** 1989 Oct;274(1):298–303
Extracellular superoxide dismutase in the vascular system of mammals. Karlsson K, et al. **Biochem J** 1988 Oct 1; 255(1):223–8
Effect of erythropoietin on membrane lipid peroxidation, superoxide dismutase, catalase, and glutathione peroxidase of rat RBC. Chakraborty M, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):8–18
Heparin-, dextran sulfate- and protamine-induced release of extracellular-superoxide dismutase to plasma in pigs. Karlsson K, et al. **Biochim Biophys Acta** 1988 Oct 13; 967(1):110–4
SOD-1 activity and platelet membrane fluidity in Alzheimer's disease. Zubenko GS, et al. **Biol Psychiatry** 1989 Mar 15;25(6):671–8
Superoxide dismutase and myeloperoxidase activity in polymorphonuclear leukocytes, and serum ceruloplasmin and copper levels, in psoriasis. Doğan P, et al. **Br J Dermatol** 1989 Feb;120(2):239–44
Comparative study: the antioxidant enzymes and lipid peroxidation in cord and maternal red blood cell haemolysates [letter] Novák Z, et al. **Clin Chim Acta** 1989 Mar 15;180(1):103–5
Human serum immuno-reactive copper, zinc-superoxide dismutase assayed with an enzyme monoclonal immunosorbent in patients with digestive cancer. Oka S, et al. **Clin Chim Acta** 1989 Jun 30;182(2):209–19
The effect of MS 222 an anaesthetic on the peroxide metabolism enzymes in erythrocytes of freshwater and marine fish species. Gabryelak T, et al. **Comp Biochem Physiol [C]** 1989;92(1):5–8
Diminished serotonin uptake in platelets of transgenic mice with increased Cu/Zn-superoxide dismutase activity. Schickler M, et al. **EMBO J** 1989 May;8(5):1385–92
Superoxide dismutase activity in the erythrocyte of the term newborn and premature. Fattal A, et al. **Enzyme** 1989; 41(4):187–90
Lipid peroxidation and superoxide dismutase activity in muscle and erythrocytes in adult muscular dystrophies and neurogenic atrophies. Diószeghy P, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):175–7
Highly sensitive and reliable chemiluminescence method for

the assay of superoxide dismutase in human erythrocytes. Kimura H, et al. **FEBS Lett** 1988 Nov 7;239(2):347–50

Inactivation of intracellular copper–zinc superoxide dismutase by copper chelating agents without glutathione depletion and methemoglobin formation. Kelner MJ, et al. **Free Radic Biol Med** 1989;6(4):355–60

From haemocuprein to copper–zinc superoxide dismutase: a history on the fiftieth anniversary of the discovery of haemocuprein and the twentieth anniversary of the discovery of superoxide dismutase. Bannister WH. **Free Radic Res Commun** 1988;5(1):35–42 (49 ref.)

Effect of (+)cyanidanol-3 on cellular immune reactions and on superoxide dismutase activity in vitro. Láng I, et al. **Free Radic Res Commun** 1987;4(1):51–60

Effect of lentinan on superoxide dismutase enzyme activity in vitro. Fehér J, et al. **Immunopharmacol Immunotoxicol** 1989;11(1):55–61

Chemical modification of superoxide dismutase. Extension of plasma half life of the enzyme through its reversible binding to the circulating albumin. Ogino T, et al. **Int J Pept Protein Res** 1988 Aug;32(2):153–9

The effect of a low copper diet on blood cholesterol and enzymic antioxidant defense mechanisms in male and female rats. Carville DG, et al. **Int J Vitam Nutr Res** 1988; 58(4):456–61

Changes and correlations of antioxidant enzymes, lipid peroxidation and serum neutral lipids due to haemodialysis treatment in chronic uraemic patients. Matkovics B, et al. **Int Urol Nephrol** 1988;20(5):539–64

Changes in selenium and antioxidant status during DMBA–induced mammary carcinogenesis in rats. L'Abbé MR, et al. **J Nutr** 1989 May;119(5):766–71

Erythrocyte antioxidant enzymes are reduced in patients with rheumatoid arthritis. Imadaya A, et al. **J Rheumatol** 1988 Nov;15(11):1628–31

Human plasma superoxide dismutase (SOD) activity on reperfusion injury with successful thrombolysis in acute myocardial infarction. Kodama K, et al. **Jpn J Med** 1989 Mar–Apr;28(2):202–6

Leucocyte superoxide dismutase levels in acute and chronic leukemias. Kökoğlu E, et al. **Leuk Res** 1989;13(6):457–8

Neutrophil chemotaxis, phagocytosis and parameters of reactive oxygen species in human aging: cross–sectional and longitudinal studies. Niwa Y, et al. **Life Sci** 1989; 44(22):1655–64

Biochemical examination on the increased superoxide dismutase–like plasma substance observed in a state of acute gastric mucosal lesions. Ohara T, et al. **Life Sci** 1989; 44(20):1499–504

Superoxide dismutase, glutathione peroxidase, and catalase activities in equine erythrocytes. Ono K, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):656–8

Inactivation of erythrocyte Cu–Zn–superoxide dismutase through nonenzymatic glycosylation. Taniquchi N, et al. **Prog Clin Biol Res** 1989;304:277–90

Effect of venous stasis and physical exercise on plasma extracellular–superoxide dismutase. Nilsson S, et al. **Scand J Clin Lab Invest** 1988 Sep;48(5):441–4

[Observations on the activity and immunologic properties of CuZn–SOD of whole blood in cancer patients] Liu ZF, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Apr;69(4):212–3 (Chi)

[Antioxidant enzymes in asthmatic patients] Jadot G, et al. **Bull Acad Natl Med (Paris)** 1988 May;172(5):693–700 (Eng. Abstr.) (Fre)

[Biochemical study on nonenzymatic glycosylation of human erythrocyte Cu–Zn–superoxide dismutase] Arai K. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):925–37 (Eng. Abstr.) (Jpn)

[Serum levels of zinc and copper and erythrocyte superoxide dismutase activity in alcoholic patients] do Carmo M das G. **Arch Latinoam Nutr** 1988 Mar;38(1):81–92 (Eng. Abstr.) (Por)

[Anti–aggregative activity of the vascular wall, blood coagulation and the status of the physiologic antioxidant system in patients with ischemic heart disease and in healthy persons practicing jogging] Mishchenko VP. **Kardiologiia** 1988 Nov;28(11):110–2 (Rus)

[Comparative analysis of the superoxide dismutase and catalase activity of erythrocytes and whole blood of newborn infants with chronic hypoxia] Dubinina EE, et al. **Lab Delo** 1988;(8):16–9 (Eng. Abstr.) (Rus)

[Complex determination of superoxide dismutase and glutathione reductase activity in the erythrocytes of patients with chronic diseases of the liver] Makarenko EV. **Lab Delo** 1988;(11):48–50 (Eng. Abstr.) (Rus)

[Immunological indicators and superoxide dismutase activity in the erythrocytes of patients with viral hepatitis] Zhurkin AT, et al. **Ter Arkh** 1989;61(2):58–60 (Eng. Abstr.) (Rus)

[Changes in glyceraldehydephosphate dehydrogenase, glucose–6–phosphate dehydrogenase, superoxide dismutase, and catalase activity in erythrocytes depending upon the rate of glucose utilization] Storozhuk PG, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):93–6 (Eng. Abstr.) (Rus)

[Activity of the antioxidant defense system and oxidative aggression in erythrocytes of low birth weight newborn infants and at various gestational ages] Cañas P, et al. **Rev Chil Pediatr** 1988 Mar–Apr;59(2):83–8 (Eng. Abstr.) (Spa)

DEFICIENCY

Superoxide dismutase deficiency and the toxicity of the products of autooxidation of polyunsaturated fatty acids in yeast. Biliński T, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):102–6

Response of hydroperoxidase and superoxide dismutase deficient mutants of Escherichia coli K–12 to oxidative stress. Schellhorn HE, et al. **Can J Microbiol** 1988 Oct; 34(10):1171–6

Deficiency of superoxide dismutase in endemic goiter tissue. Sugawara M, et al. **J Clin Endocrinol Metab** 1988 Dec; 67(6):1156–61

[Free radicals and diseases of the digestive organs (a review of the foreign literature)] Radbil' OS. **Klin Med (Mosk)** 1989 Mar;67(3):17–21 (28 ref.) (Rus)

GENETICS

Endotoxin increases lung Cu,Zn superoxide dismutase mRNA: O2 raises enzyme synthesis. Iqbal J, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L61–4

Primary structure from amino acid and cDNA sequences of two Cu,Zn superoxide dismutase variants from Xenopus laevis. Schininà ME, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):507–15

Sequence of complementary DNA encoding human extracellular–superoxide dismutase and production of recombinant enzyme. Marklund SL, et al. **Basic Life Sci** 1988;49:683–7

A cSOD–null mutant of Drosophila confers sensitivity to paraquat and reduced longevity. Phillips JP. **Basic Life Sci** 1988;49:689–93

Isolation and characterization of a cDNA for mitochondrial manganese superoxide dismutase (SOD–3) of maize and its relation to other manganese superoxide dismutases. White JA, et al. **Biochim Biophys Acta** 1988 Nov 10; 951(1):61–70

The expression of the superoxide dismutase gene in Halobacterium cutirubrum and Halobacterium volcanii. May BP, et al. **Can J Microbiol** 1989 Jan;35(1):171–5

Radiation sensitivity of Down's syndrome fibroblasts might be due to overexpressed Cu/Zn–superoxide dismutase (EC 1.15.1.1). Schwaiger H, et al. **Eur J Cell Biol** 1989 Feb; 48(1):79–87

Schistosoma mansoni: identification and analysis of an mRNA and a gene encoding superoxide dismutase (Cu/Zn). Simurda MC, et al. **Exp Parasitol** 1988 Oct;67(1):73–84

Conservation of local electric fields in the evolution of Cu,Zn superoxide dismutase. Desideri A, et al. **FEBS Lett** 1989 Jun 19;250(1):45–8

Molecular genetics of superoxide dismutases. Touati D. **Free Radic Biol Med** 1988;5(5–6):393–402 (104 ref.)

Isolation and nucleotide sequence of rat Cu/Zn superoxide dismutase cDNA clones. Puga A, et al. **Free Radic Res Commun** 1987;3(6):337–46

Cloning and determination of the nucleotide sequence of the Mn–containing superoxide dismutase gene from Halobacterium halobium. Salin ML, et al. **Gene** 1988 Oct 15;70(1):153–9

Functional expression of the yeast Mn–superoxide dismutase gene in Escherichia coli requires deletion of the signal peptide sequence. Schrank IS, et al. **Gene** 1988 Dec 15; 73(1):121–30

Cloning, sequence analysis and chromosomal localization of the Cu–Zn superoxide dismutase gene of Drosophila melanogaster. Seto NO, et al. **Gene** 1989 Jan 30;75(1):85–92

General method for site–directed mutagenesis in Escherichia coli O18ac:K1:H7: deletion of the inducible superoxide dismutase gene, sodA, does not diminish bacteremia in neonatal rats. Bloch CA, et al. **Infect Immun** 1989 Jul; 57(7):2141–8

Intracellular Mn (II)–associated superoxide scavenging activity protects Cu,Zn superoxide dismutase–deficient Saccharomyces cerevisiae against dioxygen stress. Chang EC, et al. **J Biol Chem** 1989 Jul 25;264(21):12172–8

Genetically engineered polymers of human CuZn superoxide dismutase. Biochemistry and serum half–lives. Hallewell RA, et al. **J Biol Chem** 1989 Mar 25;264(9):5260–8

Evolution and regulation of the gene encoding superoxide dismutase from the archaebacterium Halobacterium cutirubrum. May BP, et al. **J Biol Chem** 1989 Jul 25; 264(21):12253–8

Rat lung Cu,Zn superoxide dismutase. Isolation and sequence of a full–length cDNA and studies of enzyme induction. Hass MA, et al. **J Clin Invest** 1989 Apr;83(4):1241–6

Premature aging changes in neuromuscular junctions of transgenic mice with an extra human CuZnSOD gene: a model for tongue pathology in Down's syndrome. Yarom R, et al. **J Neurol Sci** 1988 Dec;88(1–3):41–53

Cloning and characterization of an Anacystis nidulans R2 superoxide dismutase gene. Laudenbach DE, et al. **Mol Gen Genet** 1989 Apr;216(2–3):455–61

High levels of manganese–containing superoxide dismutase and thermally induced DNA disruption in a dnaK7(Ts) mutant of Escherichia coli K12. Taniguchi H, et al. **Mol Gen Genet** 1989 Jun;217(2–3):317–23

Drosophila virilis Cu–Zn superoxide dismutase gene sequence. Kwiatowski J, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2133

Drosophila simulans Cu–Zn superoxide dismutase gene sequence. Kwiatowski J, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6735

Drosophila melanogaster Cu, Zn superoxide dismutase gene sequence. Kwiatowski J, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1264

A plant manganese superoxide dismutase is efficiently imported and correctly processed by yeast mitochondria. Bowler C, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3237–41

Cloning and characterization of a cDNA encoding the chloroplastic copper/zinc–superoxide dismutase from pea. Scioli JR, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(20):7661–5

[Recombinant human superoxide dismutase (r–hSOD)] Sukenaga Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2899–905 (Jpn)

IMMUNOLOGY

Microinjection of antibodies against superoxide dismutase and glutathione peroxidase. Michiels C, et al. **Exp Cell Res** 1988 Dec;179(2):581–9

ISOLATION & PURIFICATION

Identification of different classes of superoxide dismutase in carnation petals. Droillard MJ, et al. **Electrophoresis** 1989 Jan;10(1):46–8

Isolation and characterization of superoxide dismutase: a personal history and tribute to Joe McCord and Irwin Fridovich. Bannister WH, et al. **Free Radic Biol Med** 1988; 5(5–6):371–6

Superoxide dismutase from Ascaris suum. Sanchez–Moreno M, et al. **Parasitology** 1988 Oct;97 (Pt 2):345–53

METABOLISM

Superoxide and superoxide dismutase in bronchial asthma. Kuratsuji T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):680–5

Studies on the nature of superoxide dismutase activity in sheep liver subcellular fractions. Konstantinova SG, et al. **Acta Physiol Pharmacol Bulg** 1988;14(4):71–7

Blood cell superoxide dismutase and enolase activities as markers of alcoholic and nonalcoholic liver diseases. Ledig M, et al. **Alcohol** 1988 Sep–Oct;5(5):387–91

Protection of Ca pump of coronary artery against inactivation by superoxide radical. Grover AK, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C666–73

Reactivation of inactivated enzyme superoxide dismutase by using the conformation rebuilding method. Luo GM, et al. **Ann N Y Acad Sci** 1988;542:75–8

A new metal–peptide complex displays the activity of superoxide dismutase. Luo GM, et al. **Ann N Y Acad Sci** 1988;542:79–82

Active–site modification of superoxide dismutase by H2O2 studied through 1H NMR of the cobalt derivatives. Bertini I, et al. **Arch Biochem Biophys** 1989 Mar;269(2):586–94

Inactivation of human arginine–143, lysine–143, and isoleucine–143 Cu,Zn superoxide dismutases by hydrogen peroxide: multiple mechanisms for inactivation. Horton PJ, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):114–24

An electron spin resonance study of oxyradical generation in superoxide dismutase– and catalase–deficient mutants of Escherichia coli K–12. Schellhorn HE, et al. **Arch Biochem Biophys** 1989 Jun;271(2):323–31

Organ–specific effects of naphthalene on tissue peroxidation, glutathione peroxidases and superoxide dismutase in the rat. Germansky M, et al. **Arch Toxicol** 1988;61(6):480–3

Alterations in cultured rat pulmonary artery endothelial cells with hyperoxia; effect of age. Chuknyiska RS, et al. **Basic Life Sci** 1988;49:975–8

The uniqueness both of superoxide toxicity and of the protective role of superoxide dismutase. Czapski G, et al. **Basic Life Sci** 1988;49:43–6

Extracellular–superoxide dismutase association with cell surface–bound sulfated glucosaminoglycans. Karlsson K, et al. **Basic Life Sci** 1988;49:647–50

Superoxide dismutase in cultured benign and malignant tumors of the colon. Nelson RL. **Basic Life Sci** 1988; 49:699–702

Adaptations to plant pro–oxidants in a phytophagous insect model: enzymatic protection from oxidative stress. Pardini RS, et al. **Basic Life Sci** 1988;49:725–8

Bacterial superoxide dismutases. Steinman HM. **Basic Life Sci** 1988;49:641–6 (26 ref.)

Probing enzyme–substrate recognition and catalytic mechanism in Cu,Zn superoxide dismutase. Tainer JA, et al. **Basic Life Sci** 1988;49:635–40

Electron microscopic evidence for endocytosis of superoxide dismutase by hepatocytes using protein–gold adducts. Dini L, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):940–4

Coupling of a proton pump with superoxide radical–superoxide dismutase system in maturing mammalian spermatozoa and its association with sperm motility. Kumar GP, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):771–5

Changes in the levels of superoxide anion radical and superoxide dismutase during the estrous cycle of Rattus norvegicus and induction of superoxide dismutase in rat ovary by lutropin. Laloraya M, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):146–53

Binding of human extracellular superoxide dismutase C to sulphated glycosaminoglycans. Karlsson K, et al. **Biochem J** 1988 Nov 15;256(1):29–33

Hepatic antioxidant enzymes and lipid peroxidation in carbon tetrachloride–induced liver cirrhosis in rats. Nadkarni GD, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):42–5

Differences between the manganese– and the iron–containing superoxide dismutases of Escherichia coli detected through sedimentation equilibrium, hydrodynamic, and spectroscopic studies. Beyer WF Jr, et al. **Biochemistry** 1989 May 16;28(10):4403–9

Superoxide dismutase activity in thymus cell suspension: effects of methionine–enkephalin and morphine. Endrőczi E, et al. **Biomed Biochim Acta** 1988;47(12):1007–11

Effect of a superoxide dismutase derivative on cold–induced brain edema. Ando Y, et al. **Brain Res** 1989 Jan 16; 477(1–2):286–91

Anti–oxidant enzymes in fetal guinea pig brain during development and the effect of maternal hypoxia. Mishra OP, et al. **Brain Res** 1988 Aug 1;470(2):173–9

Superoxide dismutase activity in Alzheimer's disease: possible mechanism for paired helical filament formation. Zemlan FP, et al. **Brain Res** 1989 Jan 2;476(1):160–2

The role of antioxidant enzymes in benzo(a)pyrene–induced carcinogenesis. Liotti FS, et al. **Bull Cancer (Paris)** 1989; 76(1):43–50

Elevated superoxide dismutase in Bloom's syndrome: a genetic condition of oxidative stress. Nicotera TM, et al. **Cancer Res** 1989 Oct 1;49(19):5239–43

Superoxide dismutase–mediated reversible conversion of 3–hydroxyamino–1–methyl–5H–pyrido[4,3–b]indole, the N–hydroxy derivative of Trp–P–2, into its nitroso derivative. Hiramoto K, et al. **Carcinogenesis** 1988 Nov; 9(11):2003–8

Influence of cell cycle on glutathione–S–transferase, selenium–dependent glutathione peroxidase, superoxide dismutase and glutathione levels in human myeloid leukaemia cell lines. Tihan T, et al. **Carcinogenesis** 1989 Sep;10(9):1709–12

The level of antioxidant enzymes in alveolar and peritoneal macrophages. Duran HA, et al. **Cell Mol Biol** 1988; 34(5):507–15

Studies of copper–binding behavior of copper–free and apo–superoxide dismutase by high–performance liquid chromatography. Hirose J, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2103–8

A comparative characterization of cytosolic superoxide dismutase/(SOD) from hog liver and erythrocytes. Bartkowiak A, et al. **Comp Biochem Physiol [B]** 1979; 62(1):61–6

A comparative study of some more important experimental animal peroxide metabolism enzymes. Matkovics B, et al. **Comp Biochem Physiol [B]** 1977;56(4):397–402

Comparison of peroxide metabolism enzymes in organs of congenic mice. Novák R, et al. **Comp Biochem Physiol [B]** 1978;60(2):149–50

Some comparative aspects of the organ distribution of superoxide dismutase activity in the freshwater turtle, Pseudemys scripta elegans. Simon LM, et al. **Comp Biochem Physiol [B]** 1977;58(4):377–9

Superoxide dismutase in normal and malignant tissues in different species. Van Balgooy JN, et al. **Comp Biochem Physiol [B]** 1979;62(3):263–8

Superoxide dismutase activity and growth of retinal pigment epithelial cells are suppressed by 20% oxygen in vitro. Akeo K, et al. **Curr Eye Res** 1988 Oct;7(10):961–7

Antioxidant and free radical–scavenging enzymes in chronically ethanol–consuming rats: controversy over hepatic lipid peroxidation. Nadkarni GD, et al. **Drug Alcohol Depend** 1988 Oct;22(1–2):161–4

Water in the active cavity of copper/zinc superoxide dismutase. A water 1H–nuclear–magnetic–relaxation–dispersion study. Banci L, et al. **Eur J Biochem** 1989 Sep 1;184(1):125–9

Effect of hydrogen peroxide administration on life span, superoxide dismutase, catalase, and glutathione in the adult housefly, Musca domestica. Sohal RS. **Exp Gerontol** 1988; 23(3):211–6

Correlation among lung damage after radiation, amount of lipid peroxides, and antioxidant enzyme activities. Nozue M, et al. **Exp Mol Pathol** 1989 Apr;50(2):239–52

Synthesis of acylated SOD derivatives which bind to the biomembrane lipid surface and dismutate extracellular superoxide radicals. Ando Y, et al. **FEBS Lett** 1988 Nov 21;240(1–2):216–20

Substitution of arginine for lysine 134 alters electrostatic parameters of the active site in shark Cu,Zn superoxide dismutase. Calabrese L, et al. **FEBS Lett** 1989 Jun 19; 250(1):49–52

Decrease in CuZn–superoxide dismutase mRNA level during differentiation of human monocytic and promyelotic leukemia cells. Saito H, et al. **FEBS Lett** 1989 Jun 5; 249(2):253–6

Effect of superoxide dismutase on the autoxidation of various hydroquinones—a possible role of superoxide dismutase as a superoxide:semiquinone oxidoreductase. Cadenas E, et al. **Free Radic Biol Med** 1988;5(2):71–9

Superoxide dismutase, glutathione peroxidase, catalase, and lipid peroxidation in the major organs of the aging rats. Cand F, et al. **Free Radic Biol Med** 1989;7(1):59–63

Superoxide dismutase: the first twenty years (1968–1988). McCord JM, et al. **Free Radic Biol Med** 1988;5(5–6):363–9

Manganese superoxide dismutase in normal and transformed human embryonic lung fibroblasts. Oberley LW, et al. **Free Radic Biol Med** 1989;6(4):379–84

A mimic of superoxide dismutase activity protects Chlorella sorokiniana against the toxicity of sulfite. Rabinowitch HD, et al. **Free Radic Biol Med** 1989;6(1):45–8

Superoxide dismutase is preferentially degraded by a proteolytic system from red blood cells following oxidative modification by hydrogen peroxide. Salo DC, et al. **Free Radic Biol Med** 1988;5(5–6):335–9

Irradiation increases superoxide dismutase in rat intestinal smooth muscle. Summers RW, et al. **Free Radic Biol Med** 1989;6(3):261–70

Photoreactivation of superoxide dismutase by intensive red (laser) light. Vladimirov YA, et al. **Free Radic Biol Med** 1988;5(5–6):281–6

Antioxidant enzymes of larvae of the cabbage looper moth, Trichoplusia ni: subcellular distribution and activities of superoxide dismutase, catalase and glutathione reductase. Ahmad S, et al. **Free Radic Res Commun** 1988;4(6):403–8

Antioxidant systems in tumour cells: the levels of antioxidant enzymes, ferritin, and total iron in a human hepatoma cell line. Bannister WH, et al. **Free Radic Res Commun** 1986; 1(6):361–7

Factor analysis of the activities of superoxide dismutase, catalase and glutathione peroxidase in normal tissues and neoplastic cell lines. Bannister WH, et al. **Free Radic Res Commun** 1987;4(1):1–13

Effect of silibinin on the activity and expression of superoxide dismutase in lymphocytes from patients with chronic alcoholic liver disease. Fehér J, et al. **Free Radic Res Commun** 1987;3(6):373–7

Age–dependent resistance to the toxic effects of paraquat in relation to superoxide dismutase activity in rat lung. Petrović VM, et al. **Free Radic Res Commun** 1986; 1(5):305–9

Copper–zinc containing and manganese containing superoxide dismutase in the ground squirrel/Citellus citellus/—the effect of hibernation. Petrović VM, et al. **Free Radic Res Commun** 1986;1(5):339–46

Superoxide dismutase activity during dimethylhydrazine colon carcinogenesis and the effects of cholic acid and indole. Sun Y, et al. **Free Radic Res Commun** 1988; 4(5):299–309

Serum activity and hepatic localization of superoxide dismutase in alcoholics. Inagaki T, et al. **Gastroenterol Jpn** 1989 Jun;24(3):277–83

The ultrastructural immunocytochemical localization of superoxide dismutase in the amphibian urinary bladder: effect of aldosterone. Davis WL, et al. **Histochem J** 1989 Apr;21(4):203–9

The immunohistochemical localization of superoxide dismutase activity in the avian epithelial growth plate. Davis WL, et al. **Histochem J** 1989 Apr;21(4):210–5

The immunocytochemical localization of superoxide dismutase in the enterocytes of the avian intestine: the effect of vitamin D3. Davis WL, et al. **Histochem J** 1989 Apr; 21(4):194–202

Alterations of the plasma selenium concentrations and the activities of tissue peroxide metabolism enzymes in streptozotocin–induced diabetic rats. Dohi T, et al. **Horm Metab Res** 1988 Nov;20(11):671–5

Mechanisms of fibre–induced superoxide release from alveolar macrophages and induction of superoxide dismutase in the lungs of rats inhaling crocidolite. Mossman BT, et al. **IARC Sci Publ** 1989;(90):81–92

Glutathione & its redox system, superoxide anion & superoxide dismutases of polymorphonuclear leukocytes in essential hypertension. Rahman I, et al. **Indian J Med Res** 1988 Jul;88:64–70

Escherichia coli proteins inducible by oxidative stress mediated by the superoxide radical. Walkup LK, et al. **J Bacteriol** 1989 Mar;171(3):1476–84

Relation between ESR–detectable Cu(II) and superoxide dismutase activity. Kajihara J, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):855–7

Interactions between human extracellular superoxide dismutase C and sulfated polysaccharides. Adachi T, et al. **J Biol Chem** 1989 May 25;264(15):8537–41

Cyanide and azide behave in a similar fashion versus cuprozinc–superoxide dismutase. Banci L, et al. **J Biol Chem** 1989 Jun 15;264(17):9742–4

The interaction between Cu(I) superoxide dismutase and hydrogen peroxide. Cabelli DE, et al. **J Biol Chem** 1989 Jun 15;264(17):9967–71

A monoclonal antibody against COOH–terminal peptide of human liver manganese superoxide dismutase. Kawaguchi T, et al. **J Biol Chem** 1989 Apr 5;264(10):5762–7

Superoxide dismutase mimics based on iron in vivo. Nagano T, et al. **J Biol Chem** 1989 Jun 5;264(16):9243–9

A novel metal–free low molecular weight superoxide dismutase mimic. Samuni A, et al. **J Biol Chem** 1988 Dec 5;263(34):17921–4

Superoxide dismutase amplifies organismal sensitivity to ionizing radiation. Scott MD, et al. **J Biol Chem** 1989 Feb 15;264(5):2498–501

Molecular immunocytochemistry of the CuZn superoxide dismutase in rat hepatocytes. Chang LY, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2169–79

Superoxide dismutase activities of differentiating clones from an immortal cell line. Oberley LW, et al. **J Cell Physiol** 1989 Jan;138(1):50–60

Gastric mucosal protection and superoxide dismutase. Ogino K, et al. **J Clin Gastroenterol** 1988;10 Suppl 1:S129–32

Differential binding of anions to the active site of Cu,Zn superoxide dismutase. A study of the Co,Zn enzyme derivative. Desideri A, et al. **J Inorg Biochem** 1988 Aug; 33(4):277–83

Reduced superoxide dismutase activity in xeroderma pigmentosum fibroblasts. Nishigori C, et al. **J Invest Dermatol** 1989 Oct;93(4):506–10

Oxygen toxicity protecting enzymes in the human brain. Marttila RJ, et al. **J Neural Transm** 1988;74(2):87–95

A selective increase in particulate superoxide dismutase activity in parkinsonian substantia nigra. Saggu H, et al. **J Neurochem** 1989 Sep;53(3):692–7

Longitudinal studies of the neurobiology of vitamin E and other antioxidant systems, and neurological function in the vitamin E deficient rat. Goss–Sampson MA, et al. **J Neurol Sci** 1988 Oct;87(1):25–35

Oxygen toxicity protecting enzymes in Parkinson's disease. Increase of superoxide dismutase–like activity in the substantia nigra and basal nucleus. Marttila RJ, et al. **J Neurol Sci** 1988 Sep;86(2–3):321–31

Superoxide dismutase and cytochrome oxidase activities in light and heavy synaptic mitochondria from rat cerebral cortex during aging. Vanella A, et al. **J Neurosci Res** 1989 Mar;22(3):351–5

Plasmodium falciparum: association with erythrocytic superoxide dismutase. Arias AE, et al. **J Protozool** 1988 Aug;35(3):348–51

Role of superoxide dismutase in the pathogenesis of pyelonephritis: immunological localization of superoxide dismutase in human renal tissues. Strand WR, et al. **J Urol** 1989 Aug;142(2 Pt 2):616–8; discussion 619

Changes in lipid peroxidation and activities of xanthine oxidase, superoxide dismutase and catalase in kidneys of cephaloridine–administered rats. Suzuki Y, et al. **Jpn J Pharmacol** 1989 Jan;49(1):43–51

Binding of human extracellular–superoxide dismutase C to cultured cell lines and to blood cells. Karlsson K, et al. **Lab Invest** 1989 May;60(5):659–66

Follow–up study of lipid peroxides, superoxide dismutase and glutathione peroxidase in the synovial membrane, serum and liver of young and old mice with collagen–induced arthritis. Kasama T, et al. **Life Sci** 1988;43(23):1887–96

Superoxide dismutase activity in the BB rat: a dynamic time–course study. Pisanti FA, et al. **Life Sci** 1988; 43(20):1625–32

Effect of Streptococcus lactis preparation in diet of mice on inhibiting age–dependent loss of superoxide dismutase activity in tissues. Abe N, et al. **Mech Ageing Dev** 1989 Jul;49(1):87–92

Radioprotection by antioxidant enzymes and enzyme mimetics. Kumar KS, et al. **Pharmacol Ther** 1988; 39(1–3):301–9 (44 ref.)

Superoxide dismutase as an amplifier of the chemical reactivity of porphyrin radical–cations. Bazin M, et al. **Photochem Photobiol** 1988 Aug;48(2):177–80

Skeletal muscle antioxidant enzyme levels in rats after simulated weightlessness, exercise and dobutamine. Girten B, et al. **Physiologist** 1989 Feb;32(1 Suppl):S59–60

Deletion analysis of the maize mitochondrial superoxide dismutase transit peptide. White JA, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3534–8

Copper deficiency depresses rat aortae superoxide dismutase activity and prostacyclin synthesis. Mitchell LL, et al. **Prostaglandins** 1988 Jun;35(6):977–86

Effect of pregnancy and fetal development on sheep liver superoxide dismutase activity. Konstantinova SG, et al. **Res Vet Sci** 1988 Nov;45(3):287–90

Superoxide dismutase and catalase activities of cultured erythrocytes infected with Plasmodium falciparum. Areekul S, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):601–7

Physiological antioxidants and antioxidative enzymes in vitamin E–deficient rats. De AK, et al. **Toxicol Lett** 1988 Nov;44(1–2):47–54

Changes in activity of oxygen free radical scavengers and in levels of endogenous antioxidants during hepatic ischemia and subsequent reperfusion. Marubayashi S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1317–8

Mitochondrial respiratory function, adenine nucleotides and antioxygenic enzymes in pig liver transplantation. Sakurada M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1321–2

[The significance of superoxide dismutase in the development of the post–irradiation syndrome. XII. Activity of superoxide dismutase isoenzymes in the bone marrow of rats after irradiation] Kovářová H, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(1):37–44 (Eng. Abstr.) (Cze)

[Determination of the activity of superoxide dismutase in terms of rea substrate conversion] Grunow M, et al. **Biomed Biochim Acta** 1989;48(4):185–99 (Eng. Abstr.) (Ger)

[Tissue distribution and mechanism of action of radical scavengers of reactive oxygen] Kono Y. **Nippon Rinsho** 1988 Oct;46(10):2130–7 (Jpn)

[Role of active oxygen species in aging] Kator K. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3127–35 (Jpn)

[Nickel chloride and alloxan. I. Determination of glucose, insulin and superoxide dismutase in blood and pancreas of rats] Novelli EL, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(3):377–93 (Eng. Abstr.) (Por)

[The growth of yeast and the activity of cellular enzymes in a medium with methanol and glucose] Denchev D, et al. **Acta Microbiol Bulg** 1988;23:29–33 (Eng. Abstr.) (Rus)

[Effect of a highly dispersed copper powder on superoxide dismutase and glutathione peroxidase activities in experimental myocardial infarct] Konovalova GG, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):154–7 (Eng. Abstr.) (Rus)

[Effect of adaptation to hypoxia on the antioxidant enzyme activity in the liver in animals that have undergone stress] Tverdokhlib VP, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):528–9 (Eng. Abstr.) (Rus)

[Effect of isomers and the basic metabolites of endosulfan on the status of the microsomal system of the liver] Koshkarian AO, et al. **Gig Sanit** 1989 Mar;(3):93–4 (Rus)

PHARMACOKINETICS

Plasma elimination kinetics and renal handling of copper/zinc superoxide dismutase in the rat. Bayati A, et al. **Acta Physiol Scand** 1988 Sep;134(1):65–74

The elimination of injected superoxide dismutase from synovial fluid of the horse. Auer DE, et al. **Aust Vet J** 1989 Apr;66(4):117–9

Renal handling of bovine I125-superoxide dismutase in the avian kidney. Short communication. Milton A, et al. **Ups J Med Sci** 1988;93(3):297–9

PHARMACOLOGY

Reperfusion arrhythmias: dose-related protection by anti-free radical interventions. Bernier M, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1344–52

Copper complexes with superoxide dismutase activity enhance oxygen-mediated toxicity in human erythroleukemia cells. Steinkühler C, et al. **Ann N Y Acad Sci** 1988;551:133–6

Role of feces, necrotic tissue, and various blocking agents in the prevention of adhesions [letter] Tsimoyiannis EC. **Ann Surg** 1989 Apr;209(4):502–3

Inhibition of autoxidation of divicine and isouramil by the combination of superoxide dismutase and reduced glutathione. Winterbourn CC. **Arch Biochem Biophys** 1989 Jun;271(2):447–55

Studies on the effect of superoxide dismutase (peroxinorm) on interleukin-1 activity. Gieldanowski J, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):245–8

The effects of allopurinol and superoxide dismutase in a rat model of skin flap necrosis. Pokorny AT, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):207–12

Natural inhibitors of complement. IV. Systemic toxicity of the complement inhibitor from pokeweed fruits and the effect of antioxidizing enzymes, glutathione and phenobarbital. Popescu C, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jan–Mar; 47(1):37–41

Prophylactic and curative effects of recombinant human superoxide dismutase in lethal rat endotoxemia. Schneider J. **Arzneimittelforschung** 1988 Sep;38(9):1381–6

Microinjection of antioxidant enzymes to protect cells from oxygen derived free radicals. Michiels C, et al. **Basic Life Sci** 1988;49:703–6

The role of allopurinol and oxygen free radical scavengers in liver preservation. Toledo-Pereyra LH. **Basic Life Sci** 1988;49:1047–52

Superoxide dismutase decreases early reperfusion release of conjugated dienes following regional canine ischemia. Lesnefsky EJ, et al. **Basic Res Cardiol** 1989 Mar–Apr; 84(2):191–6

Superoxide dismutase amplifies dye photosensitized production of desferal free radical: an electron spin resonance study. Li AS, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1055–60

Effect of various oxygen free radical scavengers in preventing tissue injury caused by Escherichia coli in pyelonephritic mice. Kaur A, et al. **Biochem Int** 1988 Jun; 16(6):1083–93

6-Hydroxydopamine toxicity to dopamine neurons in culture: potentiation by the addition of superoxide dismutase and N-acetylcysteine. Mytilineou C, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1872–5

Comparison of the effects of superoxide dismutase and cytochrome c on luminol chemiluminescence produced by xanthine oxidase-catalyzed reactions. Radi RA, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):89–93

Superoxide dismutase does not improve penetration of endothelium-derived relaxing factor (EDRF) through the vessel wall. Grüser T, et al. **Biomed Biochim Acta** 1989; 48(4):351–3

Sympathetic denervation caused by long-term noradrenaline infusions; prevention by desipramine and superoxide dismutase. Albino Teixeira A, et al. **Br J Pharmacol** 1989 May;97(1):95–102

Effect of allopurinol or superoxide dismutase plus catalase on cardiovascular function after burn injury in the anaesthetized rat. Speakman EA, et al. **Burns** 1989 Jun; 15(3):147–51

Enhanced activity of peritoneal cells after aclacinomycin injection: effect of pretreatment with superoxide dismutase on aclacinomycin-induced cytological alterations and antitumoral activity. Bravo-Cuellar A, et al. **Cancer Res** 1989 Mar 15;49(6):1578–86

"Reperfusion injury" by oxygen-derived free radicals? Effect of superoxide dismutase plus catalase, given at the time of reperfusion, on myocardial infarct size, contractile function, coronary microvasculature, and regional myocardial blood flow. Przyklenk K, et al. **Circ Res** 1989 Jan;64(1):86–96

Coronary blood flow and cardiac adenine nucleotides in E. coli endotoxemia in dogs: effects of oxygen radical scavengers. Laughlin MH, et al. **Circ Shock** 1988 Jul; 25(3):173–85

Effect of superoxide dismutase on liver ischemia-reperfusion injury in the rat: a biochemical monitoring. Romani F, et al. **Eur Surg Res** 1988;20(5–6):335–40

Effects of oxygen free radical scavengers on the membrane myoinositol dehydrogenase of Bacillus pumilus strain 5. Eze MO, et al. **Free Radic Res Commun** 1987;4(2):105–8

Anti-inflammatory activity of superoxide dismutases: inhibition of adriamycin induced edema in rats. Jadot G, et al. **Free Radic Res Commun** 1986;2(1–2):19–26

In vitro damage to rat lens by lumazine and xanthine oxidase: prevention by superoxide dismutase. Varma SD, et al. **Free Radic Res Commun** 1987;4(2):77–82

Activation of rat liver microsomal glutathione S-transferase by reduced oxygen species. Aniya Y, et al. **J Biol Chem** 1989 Feb 5;264(4):1998–2002

Effect of intracoronary superoxide dismutase on regional function in stunned myocardium. Buchwald A, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):258–64

Superoxide dismutase induces differentiation of Friend erythroleukemia cells. Beckman BS, et al. **J Cell Physiol** 1989 May;139(2):370–6

Electrophysiological effects of anti-free radical interventions in canine Purkinje fibers. Rosenthal JE, et al. **J Mol Cell Cardiol** 1988 Nov;20(11):1053–67

Oxygenated perfluorocarbon, recombinant human superoxide dismutase, and catalase ameliorate free radical induced myocardial injury during heart preservation and transplantation. Bando K, et al. **J Thorac Cardiovasc Surg** 1988 Dec;96(6):930–8

The beneficial effect of superoxide dismutase on the rat liver graft. Mizuta T, et al. **Jpn J Surg** 1989 Mar;19(2):208–12

Influence of epirubicin and epurox treatment on mouse peritoneal macrophages. Daicoviciu D, et al. **Morphol Embryol (Bucur)** 1988 Oct–Dec;34(4):281–9

Mesangiolysis and endothelial lesions due to peroxidative damage in rabbits. Stratta P, et al. **Nephron** 1989;51(2):250–6

Effect of superoxide dismutase on X-ray induced chromosome aberrations and cell cycle delay in muntjac lymphocytes. Chatterjee A, et al. **Pharmacol Ther** 1988; 39(1–3):323–5

Oxygen radical scavengers improve vascular patency and bone-muscle cell survival in an ischemic extremity replant model. Weiss AP, et al. **Plast Reconstr Surg** 1989 Jul; 84(1):117–23

Leukocyte neutral proteinase inhibitor of the pig: modification by eglin C and superoxide dismutase of the response to shock. Siebeck M, et al. **Prog Clin Biol Res** 1989;308:945–51

Intermediate normothermic hemoperfusion of rat kidneys: functional aspects and a study into the effect of free radical scavengers. Gaber AO, et al. **Transplant Proc** 1988 Oct; 20(5):896–8

Role of free radicals in entero-hepatic dysfunction caused by portal circulatory disturbance: effect of SOD derivative. Kawamoto S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1287–9

[Pathophysiological mechanism of ischemic acute renal failure: protective effect of coenzyme Q10, Ca channel blocker, superoxide dismutase and protease inhibitor against ischemic acute renal failure] Higuchi C. **Nippon Jinzo Gakkai Shi** 1989 Jan;31(1):15–24 (Eng. Abstr.) (Jpn)

[Superoxide dismutase overcomes 2-cell block in mouse embryos] Noda Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):751–2 (Jpn)

[Dismutation of superoxide radicals by ceruloplasmin—details of the mechanism] Vasil'ev VB, et al. **Biokhimiia** 1988 Dec;53(12):2051–8 (Eng. Abstr.) (Rus)

[The effect of superoxide dismutase and its inhibitor, diethyldithiocarbamate on antibody formation] Petrov RV, et al. **Dokl Akad Nauk SSSR** 1988;302(3):753–4 (Rus)

PHYSIOLOGY

Membrane modifications induced by superoxide dismutase depletion as a model of oxidative stress. Palozza P, et al. **Ann N Y Acad Sci** 1988;551:131–2

Room temperature electron spin resonance of superoxide dismutase-loaded liposomes and erythrocytes. A direct approach to the interaction of O2- with cells. Marcocci L, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):99–104

Manganous superoxide dismutase is essential for cellular resistance to cytotoxicity of tumor necrosis factor. Wong GH, et al. **Cell** 1989 Sep 8;58(5):923–31

Lethality of hydrogen peroxide in wild type and superoxide dismutase mutants of Escherichia coli. (A hypothesis on the mechanism of H2O2-induced inactivation of Escherichia coli). Cantoni O, et al. **Chem Biol Interact** 1989; 70(3–4):281–8

Effect of superoxide dismutase and catalase infusion at reflow on cardiopulmonary function after lung ischemia in dogs breathing room air. Paull DE, et al. **Curr Surg** 1988 Jul–Aug;45(4):292–4

Superoxide dismutases. An adaptation to a paramagnetic gas. Fridovich I. **J Biol Chem** 1989 May 15;264(14):7761–4 (94 ref.)

Role of reactive oxygen species in reperfusion injury of the rabbit lung. Kennedy TP, et al. **J Clin Invest** 1989 Apr; 83(4):1326–35

Role of antioxidant enzymes in cell immortalization and transformation. Oberley LW, et al. **Mol Cell Biochem** 1988 Dec;84(2):147–53 (24 ref.)

Lack of sex differences in antioxidant enzyme development in the fetal rabbit lung. Sosenko IR, et al. **Pediatr Res** 1989 Jul;26(1):16–9

Null mutation of copper/zinc superoxide dismutase in Drosophila confers hypersensitivity to paraquat and reduced longevity. Phillips JP, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2761–5

[Effect of superoxide dismutase on the secretory function of the stomach] Zvershkhanovskiĭ FA, et al. **Fiziol Zh** 1988 Nov–Dec;34(6):55–9 (Eng. Abstr.) (Rus)

[The biological role of superoxide dismutase] Poberezkina NB, et al. **Ukr Biokhim Zh** 1989 Mar–Apr;61(2):14–27 (114 ref.) (Eng. Abstr.) (Rus)

RADIATION EFFECTS

[The importance of superoxide dismutase in the development of the post-irradiation syndrome. XI. The effect of diet and irradiation on superoxide dismutase activity and lipoperoxidation in vivo] Stoklasová A, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(3):403–11 (Eng. Abstr.) (Cze)

[Reactivation of superoxide dismutase by the helium-neon laser irradiation] Gorbatenkova EA, et al. **Biofizika** 1988 Jul–Aug;33(4):717–9 (Eng. Abstr.) (Rus)

[The red light of the helium-neon laser reactivates superoxide dismutase] Gorbatenkova EA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):302–5 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Effect on biochemical markers of brain injury of therapy with deferoxamine or superoxide dismutase following cardiac arrest. White BC, et al. **Am J Emerg Med** 1988 Nov;6(6):569–76

Polyethylene glycol-conjugated superoxide dismutase and catalase reduce ischemic brain injury. Liu TH, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H589–93

SOD prevents damage and attenuates eicosanoid release in a rabbit model of necrotizing enterocolitis. Miller MJ, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G556–65

Oxygen-derived free radical scavengers and skeletal muscle ischemic/reperfusion injury. Faust KB, et al. **Am Surg** 1988 Dec;54(12):709–19

Administration of bovine superoxide dismutase prevents sequelae of spinal cord ischemia in the rabbit. Cuevas P, et al. **Anat Embryol (Berl)** 1989;179(3):251–5

Re: The use of superoxide dismutase in the syndrome of ischemic injury following abdominoplasty [letter] Goddio AS. **Ann Plast Surg** 1989 Sep;23(3):274

Pharmacologic modulation of experimental postischemic hepatic function. Ontell SJ, et al. **Ann Surg** 1989 Feb; 209(2):200–10

Free radicals and myocardial protection: a surgical viewpoint. Menasché P, et al. **Ann Thorac Surg** 1989 Jun; 47(6):939–45 (63 ref.)

The use of oxygen free radical scavengers in the rat peritonitis model. Limm WM, et al. **Basic Life Sci** 1988; 49:721–4

Equieffective protection by human and bovine SOD against renal reperfusion damage in rats. Schneider J, et al. **Basic Life Sci** 1988;49:891–4

Oxygen radical scavengers and myocardial preservation during transplantation: role of xanthine oxidase. Stewart JR, et al. **Basic Life Sci** 1988;49:957–62 (21 ref.)

Prevention of acute renal failure by SOD and sucrose. Wolgast M, et al. **Basic Life Sci** 1988;49:1053–6

Cardioprotective actions of human superoxide dismutase in two reperfusion models of myocardial ischaemia in the rat. Aoki N, et al. **Br J Pharmacol** 1988 Nov;95(3):735–40

Effect of superoxide dismutase plus catalase on myocardial infarct size in rabbits. Miura T, et al. **Can J Cardiol** 1988 Nov–Dec;4(8):407–11

Superoxide dismutase plus catalase improves post-ischaemic recovery in the diabetic heart. Pieper GM. **Cardiovasc Res** 1988 Dec;22(12):916–26

Effect of superoxide dismutase on myocardial infarct size in the canine heart after 6 hours of regional ischemia and reperfusion: a demonstration of myocardial salvage. Chi LG, et al. **Circ Res** 1989 Apr;64(4):665–75

Can superoxide dismutase alter myocardial infarct size? Engler R, et al. **Circulation** 1989 May;79(5):1137–42 (50 ref.)

Superoxide dismutase reduces reperfusion arrhythmias but fails to salvage regional function or myocardium at risk in conscious dogs. Nejima J, et al. **Circulation** 1989 Jan; 79(1):143–53

Treatment of radiofibrosis with liposomal superoxide dismutase. Preliminary results of 50 cases. Baillet F, et al. **Free Radic Res Commun** 1986;1(6):387–94

The uniqueness of superoxide dismutase (SOD)—why cannot most copper compounds substitute SOD in vivo? Czapski G, et al. **Free Radic Res Commun** 1988;4(4):225–9

Comparative anti-inflammatory activity of different superoxide dismutases and liposomal SOD in ischemia. Jadot G, et al. **Free Radic Res Commun** 1987;3(6):389–94

Anti-inflammatory activity of superoxide dismutases: inhibition of carrageenan induced edema in rats. Jadot G, et al. **Free Radic Res Commun** 1986;1(6):395–403

Anti-inflammatory activity of superoxide dismutases: studies on adjuvant induced polyarthritis in rats. Jadot G, et al. **Free Radic Res Commun** 1986;2(1–2):27–42

Treatment of brain trauma with liposomal superoxide dismutase. Michelson AM, et al. **Free Radic Res Commun** 1988;4(4):209–24

Anti-inflammatory activity of superoxide dismutases: comparison of enzymes from different sources in different models in rats: mechanism of action. Michelson AM, et al. **Free Radic Res Commun** 1986;2(1–2):43–56

Suppressions of ischemic paw oedema in mice, rats and guinea pigs by superoxide dismutases from different sources. Oyanagui Y, et al. **Free Radic Res Commun** 1988; 4(6):385–96

Evidence for a role of oxygen derived free radicals in the pathogenesis of caerulein induced acute pancreatitis in rats. Wisner J, et al. **Gut** 1988 Nov;29(11):1516–23

The effects of oxygen free radicals on wound healing. Foschi D, et al. **Int J Tissue React** 1988;10(6):373–9

The role of oxygen-derived free radicals in burn-induced myocardial contractile depression. Horton JW, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):589–98

Beneficial effects of coronary venous retroinfusion of superoxide dismutase and catalase on reperfusion arrhythmias, myocardial function, and infarct size in dogs. Hatori N, et al. **J Cardiovasc Pharmacol** 1989 Sep; 14(3):396–404

Extended cardiopulmonary preservation for heart–lung transplantation: a comparative study of superoxide dismutase. Bando K, et al. **J Heart Transplant** 1989 Jan–Feb;8(1):59–66

Oxygen free radical scavengers to prevent pulmonary reperfusion injury after heart–lung transplantation. Cremer J, et al. **J Heart Transplant** 1989 Jul–Aug;8(4):330–6

Effects of polyoxyethylene-modified superoxide dismutase on reperfusion induced arrhythmias in isolated rat and guinea-pig hearts. Yamakawa T, et al. **J Mol Cell Cardiol** 1989 May;21(5):441–52

Ischemic injury to newborn rabbit ileum: protective role of human superoxide dismutase. Vohra K, et al. **J Pediatr Surg** 1989 Sep;24(9):893–8

Spinal cord ischemia: an evaluation of pharmacologic agents in minimizing paraplegia after aortic occlusion. Kirshner DL, et al. **J Vasc Surg** 1989 Feb;9(2):305–8

Are free radical scavengers beneficial in the treatment of compartment syndrome after acute arterial ischemia? Ricci MA, et al. **J Vasc Surg** 1989 Feb;9(2):244–50

Superoxide dismutase for therapeutic use: clinical experience, dead ends and hopes. Flohé L. **Mol Cell Biochem** 1988 Dec;84(2):123–31 (73 ref.)

Effect of superoxide dismutase on early radiation injury of lungs in the rat. Malaker K, et al. **Mol Cell Biochem** 1988 Dec;84(2):141–5

Protection of bone marrow progenitor cells by superoxide dismutase. Petkau A. **Mol Cell Biochem** 1988 Dec; 84(2):133–40

Effect of antioxidant enzymes on experimental uveitis in rats. de Kozak Y, et al. **Ophthalmic Res** 1989;21(3):230–4

Parenteral superoxide dismutase plus catalase diminishes pancreatic edema in sodium taurocholate-induced pancreatitis in the rat. Blind PJ, et al. **Pancreas** 1988; 3(5):563–7

The effect of superoxide dismutase on the pathogenesis of radiation-induced pulmonary damage in the rat. Malaker K, et al. **Pharmacol Ther** 1988;39(1–3):327–30

Protection by recombinant human superoxide dismutase in lethal rat endotoxemia. Schneider J, et al. **Prog Clin Biol Res** 1989;308:913–7

Oxygen radicals in influenza-induced pathogenesis and treatment with pyran polymer-conjugated SOD. Oda T, et al. **Science** 1989 May 26;244(4907):974–6

First clinical experiences with superoxide dismutase in kidney transplantation—results of a double-blind randomized study. Schneeberger H, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1245–6

[The surgeon and superoxide dismutase. Review of its use in medicine and surgery. Study of its tolerability based on animal experiments and use in man] Goddio AS, et al. **Ann Chir** 1988;42(6):413–22 (63 ref.) (Eng. Abstr.) **(Fre)**

[A test for superoxide dismutase (Cu Zn SOD) in the treatment of Crohn disease] Emerit J, et al. **Chirurgie** 1988; 114(9):715–22 (Eng. Abstr.) **(Fre)**

[Studies on reperfusion injury of rat hindlimb] Narita Y. **Hokkaido Igaku Zasshi** 1989 May;64(3):309–17 (Eng. Abstr.) **(Jpn)**

[Limitation of myocardial infarct size by polyethylene glycol-conjugated superoxide dismutase in a canine model of 90 min coronary occlusion followed by 4 days of reperfusion] Tamura Y, et al. **Kokyu To Junkan** 1989 Feb; 37(2):201–8 (Eng. Abstr.) **(Jpn)**

[Trends in the development of SOD preparations and their clinical applications: clinical efficacy and problems] Yanagawa A, et al. **Nippon Rinsho** 1988 Oct;46(10):2277–85 **(Jpn)**

[Effect of superoxide dismutase and catalase on acute hepatic cell necrosis model] Sakagami Y. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2474 **(Jpn)**

[Anti-free radical therapy in paraquat poisoning (letter)] Diaz Lobato S, et al. **Rev Clin Esp** 1988 Dec;183(9):503–4 **(Spa)**

SUPERSTITIONS

Superstitions in pediatric illnesses among rural mothers. Taneja DK, et al. **Indian Pediatr** 1988 May;25(5):447–52

[The attitude and behavior toward superstitions and proverbs] Okamoto Y. **Shinrigaku Kenkyu** 1988 Jun; 59(2):106–12 (Eng. Abstr.) **(Jpn)**

[Comparison of the results of a study on superstitiousness in patients with schizophrenia and in a control group] Okruhlica L, et al. **Bratisl Lek Listy** 1989 Mar;90(3):186–9 (Eng. Abstr.) **(Slo)**

HISTORY

The persistence of superstition. "The superstitious mind: French peasants and the supernatural in the nineteenth century." By Judith Devlin. Essay review. Ramsey M. **Bull Hist Med** 1989 Spring;63(1):136–40

SUPINATION

The lung volume at which shunting occurs with inhalation anesthesia. Dueck R, et al. **Anesthesiology** 1988 Dec; 69(6):854–61

Total skin electron arc irradiation using a reclined patient position. Gerbi BJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):397–404

Positional oculogyric crises. Case report. Heimburger RF. **J Neurosurg** 1988 Dec;69(6):951–3

Early functional treatment of supination–eversion stage–II ankle fractures: preliminary results. Veldhuizen JW, et al. **Neth J Surg** 1988 Dec;40(6):155–7

Supine position and sleep loss each reduce prolonged maximal voluntary ventilation. Keeling WF, et al. **Respiration** 1988;54(2):119–26

Posture and nocturnal asthma. Whyte KF, et al. **Thorax** 1989 Jul;44(7):579–81

SUPINE POSITION see **SUPINATION**

SUPPOSITORIES

Suppositories formulation and drug release. Moes AJ. **Boll Chim Farm** 1989 Jan;128(1):5–12 (27 ref.)

Comparison of packages for suppositories by patients with rheumatoid arthritis. Verheggen-Laming BN, et al. **Scand J Rheumatol** 1988;17(3):161–5

[A new concept in the suppository therapy of proctological diseases—aluminum hydroxychloride foam suppository] Schlumpf R, et al. **Schweiz Rundsch Med Prax** 1988 Oct 4;77(40):1066–8 (Eng. Abstr.) **(Ger)**

[Preparation and in vitro study of suppositories containing No-Spa. II. Determination of release of the active principle by membrane diffusion methods] Regdon G, et al. **Acta Pharm Hung** 1989 Jan;59(1):32–41 (Eng. Abstr.) **(Hun)**

[Vaginal suppositories with specific drugs prepared in the pharmacies of the city of Lublin] Wieluńska Z. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:1–4 (Eng. Abstr.) **(Pol)**

ANALYSIS

Liquid chromatographic determination of miconazole nitrate in creams and suppositories. Tyler TA, et al. **J Assoc Off Anal Chem** 1989 May–Jun;72(3):442–4

[The determination of the real dissolution rate of drug substances in melted suppository masses] Schöbel H, et al. **Pharmazie** 1988 Sep;43(9):650–1 **(Ger)**

STANDARDS

[Study on the polymorphic transition of semisynthetic triglycerides of fatty acid suppository bases] Xie XH, et al. **Yao Hsueh Hsueh Pao** 1988 May;23(5):388–93 (Eng. Abstr.) **(Chi)**

SUPPRESSION, GENETIC

Oncogenes and tumor suppressor genes. Klein G. **Acta Oncol** 1988;27(4):427–37 (123 ref.)

Abstracts of the symposium: Oncogenes and onco-suppressor genes. March 30–April 1, 1989, Athens, Greece. **Anticancer Res** 1989 Mar–Apr;9(2):511–33

Onco-suppressor genes and their involvement in cancer (review). Anderson ML, et al. **Anticancer Res** 1988 Sep–Oct;8(5A):873–9 (79 ref.)

Mutation in a locus linked to penB-nmp causes suppression of the Mtr phenotype of Neisseria gonorrhoeae [published erratum appears in Antimicrob Agnets Chemother 1988 Nov;32(11):1746] Shinners EN, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):971–7

Molecular characterization of suppressor-mutator (Spm)-induced mutations at the bronze-1 locus in maize: the bz-m13 alleles. Schiefelbein JW, et al. **Basic Life Sci** 1988;47:261–78

Genetic principles of tumor suppression. Schwab M. **Biochim Biophys Acta** 1989 Jul 28;989(1):49–64 (79 ref.)

Reversion of trpA nonsense mutations by deletion of the chain-termination codons. Tucker SD, et al. **Biochimie** 1989 Jun;71(6):721–8

Missense and nonsense suppressors can correct frameshift mutations. Tucker SD, et al. **Biochimie** 1989 Jun; 71(6):729–39

Mutations, epimutations, and the developmental programming of the maize Suppressor-mutator transposable element. Fedoroff N, et al. **Bioessays** 1989 May;10(5):139–44 (46 ref.)

Improved suppressor tRNA cloning vectors and plasmid-phage recombination. Huang HV, et al. **Biotechnology** 1988;10:269–83 (45 ref.)

Epidemiologic studies of the molecular genetics of cancer. Taylor JA. **Birth Defects** 1989;25(2):83–93 (49 ref.)

Deoxyuridine suppression: biochemical basis and diagnostic applications. Wickramasinghe SN, et al. **Blood Rev** 1988 Sep;2(3):168–77 (86 ref.)

Tumour suppressor genes. Vile R. **BMJ** 1989 May 20; 298(6684):1335–6 (17 ref.)

The normal human H-ras1 gene can act as an onco-suppressor. Spandidos A, et al. **Br J Cancer Suppl** 1988 Dec;9:67–71

Loss of constitutional heterozygosity in colorectal tumors from patients with familial polyposis coli and those with nonpolyposis colorectal carcinoma. Sasaki M, et al. **Cancer Res** 1989 Aug 15;49(16):4402–6

A suppressor of a HIS4 transcriptional defect encodes a protein with homology to the catalytic subunit of protein phosphatases. Arndt KT, et al. **Cell** 1989 Feb 24; 56(4):527–37

The retinoblastoma protein is phosphorylated during specific phases of the cell cycle. Buchkovich K, et al. **Cell** 1989 Sep 22;58(6):1097–105

A putative protein kinase overcomes pheromone-induced arrest of cell cycling in S. cerevisiae. Courchesne WE, et al. **Cell** 1989 Sep 22;58(6):1107–19

The product of the retinoblastoma suaceptibility gene has properties of a cell cycle regulatory element. DeCaprio JA, et al. **Cell** 1989 Sep 22;58(6):1085–95

SPT15, the gene encoding the yeast TATA binding factor TFIID, is required for normal transcription initiation in vivo. Eisenmann DM, et al. **Cell** 1989 Sep 22;58(6):1183–91

Isolation of the gene encoding the yeast TATA binding protein TFIID: a gene identical to the SPT15 suppressor of Ty element insertions. Hahn S, et al. **Cell** 1989 Sep 22; 58(6):1173–81

Structure of the gene of tum– transplantation antigen P91A: the mutated exon encodes a peptide recognized with Ld by cytolytic T cells. Lurquin C, et al. **Cell** 1989 Jul 28; 58(2):293–303

Regulation of the activity of a new inhibitor of angiogenesis by a cancer suppressor gene. Rastinejad F, et al. **Cell** 1989 Feb 10;56(3):345–55

Critical events in tumour suppression. **Ciba Found Symp** 1989; 142:234–41

General models for the generation and suppression of malignancy. **Ciba Found Symp** 1989;142:242–7

The biology of tumour suppression. Harris H. **Ciba Found Symp** 1989;142:199–208; discussion 208–13

Molecular basis for the regulation of cell fate by the lethal (2) giant larvae tumour suppressor gene of Drosophila melanogaster. Mechler BM, et al. **Ciba Found Symp** 1989; 142:166–78; discussion 178–80

Cell differentiation and tumour suppresion. Sachs L. **Ciba Found Symp** 1989;142:217–31; discussion 231–3

Suppression of genetic melanoma in the fish Xiphophorus. Schwab M. **Ciba Found Symp** 1989;142:181–97; discussion 197–8

A genetic basis for tumour suppression. Stanbridge EJ. **Ciba Found Symp** 1989;142:149–59; discussion 159–65

The allosuppressor gene SAL4 encodes a protein important for maintaining translational fidelity in Saccharomyces cerevisiae. Crouzet M, et al. **Curr Genet** 1988 Dec; 14(6):537–43

Ammonium ion sensitivity is a ribosomal phenotype associated with suppressor mutations in the suaC gene of Aspergillus nidulans. Martinelli SD, et al. **Curr Genet** 1988 Nov;14(5):431–6

A mitochondrial frameshift suppressor maps in the tRNASer-var1 region of the mitochondrial genome of the yeast S. cerevisiae. Weiss-Brummer B, et al. **Curr Genet** 1989 Apr;15(4):239–46

Genetic interactions of the suppressor 2 of zeste region genes. Adler PN, et al. **Dev Genet** 1989;10(3):249–60

Identification of an amber nonsense mutation in the rosy516 gene by germline transformation of an amber suppressor tRNA gene. Doerig RE, et al. **EMBO J** 1988 Aug; 7(8):2579–84

Suppression in Drosophila: su(Hw) and su(f) gene products interact with a region of gypsy (mdg4) regulating its transcriptional activity. Mazo AM, et al. **EMBO J** 1989 Mar;8(3):903–11

Suppression of lens gamma-crystallin encoded by Len-1 in the mutant mouse with eye lens obsolescence (Elo). Masaki S, et al. **Exp Eye Res** 1988 Nov;47(5):727–35

Effects of dominant-negative lac repressor mutations on operator specificity and protein stability. Betz JL, et al. **Gene** 1988 Jul 30;67(2):147–58

The C-terminal part of a gene partially homologous to CDC 25 gene suppresses the cdc25-5 mutation in Saccharomyces cerevisiae. Boy-Marcotte E, et al. **Gene** 1989 Apr 15; 77(1):21-30

Distribution of introns in frameshift-suppressor proline-tRNA genes of Saccharomyces cerevisiae. Winey M, et al. **Gene** 1989 Mar 15;76(1):89-97

Molecular mechanisms in the developmental regulation of the maize Suppressor-mutator transposable element. Banks JA, et al. **Genes Dev** 1988 Nov;2(11):1364-80

Alteration of hsp82 gene expression by the gypsy transposon and suppressor genes in Drosophila melanogaster. Dorsett D, et al. **Genes Dev** 1989 Apr;3(4):454-68

The Drosophila su(Hw) gene, which controls the phenotypic effect of the gypsy transposable element, encodes a putative DNA-binding protein. Parkhurst SM, et al. **Genes Dev** 1988 Oct;2(10):1205-15

The Drosophila melanogaster suppressor of Hairy-wing protein binds to specific sequences of the gypsy retrotransposon. Spana C, et al. **Genes Dev** 1988 Nov; 2(11):1414-23

New suppressors of signal-sequence mutations, prlG, are linked tightly to the secE gene of Escherichia coli. Stader J, et al. **Genes Dev** 1989 Jul;3(7):1045-52

Codon usage as a reason for unsuccessful search for amber-suppressor mutants in Streptomyces lividans? Schmieger H, et al. **Genet Res** 1988 Dec;52(3):163-7

Dominant suppressors of yeast actin mutations that are reciprocally suppressed. Adams AE, et al. **Genetics** 1989 Apr;121(4):675-83

Position effect variegation in Drosophila melanogaster: relationship between suppression effect and the amount of Y chromosome. Dimitri P, et al. **Genetics** 1989 Aug; 122(4):793-800

A genetic analysis of suppressors of the PF10 mutation in Chlamydomonas reinhardtii. Dutcher SK, et al. **Genetics** 1988 Dec;120(4):965-76

Is the Suppressor-mutator element controlled by a basic developmental regulatory mechanism? Fedoroff NV, et al. **Genetics** 1988 Oct;120(2):559-77

Formal relations between Om mutants and their suppressors in Drosophila ananassae. Hinton CW. **Genetics** 1988 Dec; 120(4):1035-42

cdc2 and the regulation of mitosis: six interacting mcs genes. Molz L, et al. **Genetics** 1989 Aug;122(4):773-82

Suppressors of yeast actin mutations. Novick P, et al. **Genetics** 1989 Apr;121(4):659-74

Developmental genetics of loci at the base of the X chromosome of Drosophila melanogaster. Perrimon N, et al. **Genetics** 1989 Feb;121(2):313-31

Mutations in elongation factor EF-1 alpha affect the frequency of frameshifting and amino acid misincorporation in Saccharomyces cerevisiae. Sandbaken MG, et al. **Genetics** 1988 Dec;120(4):923-34

Genetic and molecular characterization of suppressors of SIR4 mutations in Saccharomyces cerevisiae. Schnell R, et al. **Genetics** 1989 May;122(1):29-46

Molecular and genetic organization of the suppressor of sable and minute (1) 1B region in Drosophila melanogaster. Voelker RA, et al. **Genetics** 1989 Jul;122(3):625-42

Tumour suppressor genes: oncogenesis update. Paul J. **Histopathology** 1989 Jul;15(1):1-9 (33 ref.)

Suppression of transformed phenotypes and c-myc expression in a mouse plasmacytoma line after cell fusion with normal fibroblasts. Oikawa T, et al. **IARC Sci Publ** 1988;(92):32-42

Suppression of transformation and immortality in human/Chinese hamster fibroblast hybrids—a model for suppressor gene isolation. Wynford-Thomas D, et al. **Int J Cancer** 1989 Feb 15;43(2):293-9

The Fine Page: antioncogenes and familial cancer. Fine RM. **Int J Dermatol** 1989 Jun;28(5):311-2

Genetic characterization of frameshift suppressors with new decoding properties. Hughes D, et al. **J Bacteriol** 1989 Feb; 171(2):1028-34

Genetic suppression of a dnaG mutation in Escherichia coli. Katayama T, et al. **J Bacteriol** 1989 Mar;171(3):1485-91

Conditionally lethal and recessive UGA-suppressor mutations in the prfB gene encoding peptide chain release factor 2 of Escherichia coli. Kawakami K, et al. **J Bacteriol** 1988 Nov;170(11):5378-81

Suppression of a -1 frameshift mutation by a recessive tRNA suppressor which causes doublet decoding. O'Mahony DJ, et al. **J Bacteriol** 1989 Jul;171(7):3824-30

Genetic analysis of transcriptional activation and repression in the Tn21 mer operon. Ross W, et al. **J Bacteriol** 1989 Jul;171(7):4009-18

Distinct mutation sites in prlA suppressor mutant strains of Escherichia coli respond either to suppression of signal peptide mutations or to blockage of staphylokinase processing. Sako T, et al. **J Bacteriol** 1988 Nov; 170(11):5389-91

Suppression of the Escherichia coli rpoH opal mutation by ribosomes lacking S15 protein. Yano R, et al. **J Bacteriol** 1989 Mar;171(3):1712-7

Chloroplast intragenic suppression enhances the low CO2/O2 specificity of mutant ribulose-bisphosphate carboxylase/oxygenase. Chen ZX, et al. **J Biol Chem** 1989 Feb 25;264(6):3051-3

Insulin suppresses hepatitis B surface antigen expression in human hepatoma cells. Chou CK, et al. **J Biol Chem** 1989 Sep 15;264(26):15304-8

Mutants of translational components that alter reading frame by two steps forward or one step back. Falahee MB, et al. **J Biol Chem** 1988 Dec 5;263(34):18099-103

Retardation of folding as a possible means of suppression of a mutation in the leader sequence of an exported protein. Liu GP, et al. **J Biol Chem** 1988 Oct 15;263(29):14790-3

Control of low density lipoprotein receptor gene promoter activity. Ketoconazole inhibits serum lipoprotein but not oxysterol suppression of gene transcription. Takagi K, et al. **J Biol Chem** 1989 Jul 25;264(21):12352-7

A gene for the suppression of anchorage independence is located in rat chromosome 5 bands q22-23, and the rat alpha-interferon locus maps at the same region. Islam MQ, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):147-62

Evidence for a dominant gene that suppresses hypercholesterolemia in a family with defective low density lipoprotein receptors. Hobbs HH, et al. **J Clin Invest** 1989 Aug;84(2):656-64

Differential effects of mutations in the protein and RNA moieties of RNase P on the efficiency of suppression by various tRNA suppressors. Kirsebom LA, et al. **J Mol Biol** 1988 Dec 20;204(4):879-88

PrlC, a suppressor of signal sequence mutations in Escherichia coli, can direct the insertion of the signal sequence into the membrane. Trun NJ, et al. **J Mol Biol** 1989 Feb 20;205(4):665-76

Keeping cells in their place: the role of tumor suppressor genes [news] Blume E. **J Natl Cancer Inst** 1989 Oct 4; 81(19):1440-1

Evidence from neuronal heterokaryons for a trans-acting factor suppressing Thy-1 expression during neuronal development. Saleh M, et al. **J Neurosci Res** 1989 Aug; 23(4):406-15

Control of angiogenic activity in carcinogen-initiated and neoplastic hamster pouch keratinocytes and their hybrid cells. Polverini PJ, et al. **J Oral Pathol** 1988 Nov; 17(9-10):522-7

Suppression of UAA and UGA termination codons in mutant murine leukemia viruses. Feng YX, et al. **J Virol** 1989 Jun; 63(6):2870-3

Temperature-sensitive mutants with alterations in ribosomal protein L24 and isolation of intra- and extragenic suppressor mutants. Schnier J, et al. **Methods Enzymol** 1988; 164:706-9

Transfer ribonucleic acid-mediated suppression of termination codons in Escherichia coli. Eggertsson G, et al. **Microbiol Rev** 1988 Sep;52(3):354-74 (231 ref.)

Normal human chromosome 11 suppresses tumorigenicity of human cervical tumor cell line SiHa. Koi M, et al. **Mol Carcinog** 1989;2(1):12-21

Yeast pheromone response pathway: characterization of a suppressor that restores mating to receptorless mutants. Clark KL, et al. **Mol Cell Biol** 1989 Jun;9(6):2682-94

Differential expression of five tRNA(UAGTrp) amber suppressors in Caenorhabditis elegans. Kondo K, et al. **Mol Cell Biol** 1988 Sep;8(9):3627-35

KEX2 mutations suppress RNA polymerase II mutants and alter the temperature range of yeast cell growth. Martin C, et al. **Mol Cell Biol** 1989 Jun;9(6):2341-9

Role of SGP2, a suppressor of a gpa1 mutation, in the mating-factor signaling pathway of Saccharomyces cerevisiae. Nakayama N, et al. **Mol Cell Biol** 1988 Dec; 8(12):5410-6

Integrative suppression of dnaA46 by broad host-range plasmid R1162. Brasch MA, et al. **Mol Gen Genet** 1988 Dec;215(1):139-45

Suppression of the Escherichia coli dnaA46 mutation by a mutation in trxA, the gene for thioredoxin. Hupp TR, et al. **Mol Gen Genet** 1988 Aug;213(2-3):471-8

A nuclear gene essential for mitochondrial replication suppresses a defect of mitochondrial transcription in Saccharomyces cerevisiae. Lisowsky T, et al. **Mol Gen Genet** 1988 Oct;214(2):218-23

Release factor competition is equivalent at strong and weakly suppressed nonsense codons. Martin R, et al. **Mol Gen Genet** 1988 Jul;213(1):144-9

Requirement of the Escherichia coli dnaA gene function for integrative suppression of dnaA mutations by plasmid R 100-1. Nagata T, et al. **Mol Gen Genet** 1988 Jul; 213(1):163-5

DNA supercoiling in Escherichia coli: topA mutations can be suppressed by DNA amplifications involving the tolC locus. Dorman CJ, et al. **Mol Microbiol** 1989 Apr; 3(4):531-40

Mutations that alter the helix-turn-helix region of the spollAC protein: a Bacillus subtilis sporulation-specific sigma factor. Yudkin MD, et al. **Mol Microbiol** 1989 Feb; 3(2):257-9

On the nature of suppression by Escherichia coli HF4714. Chambers RW. **Mutat Res** 1989 Jan;210(1):207-9

Use of supF, an Escherichia coli tyrosine suppressor tRNA gene, as a mutagenic target in shuttle-vector plasmids. Kraemer KH, et al. **Mutat Res** 1989 Mar-May; 220(2-3):61-72

Strategies for inhibiting multistage carcinogenesis based on signal transduction pathways. Weinstein IB. **Mutat Res** 1988 Dec;202(2):413-20 (82 ref.)

An eIF-4A-like protein is a suppressor of an Escherichia coli mutant defective in 50S ribosomal subunit assembly [published erratum appears in Nature 1989 Jul 20;340(6230):246] Nishi K, et al. **Nature** 1988 Dec 1; 336(6198):496-8

Introduction of an intervening sequence into a human serine suppressor tRNA gene: effects on gene expression in vitro and in vivo. Drabkin HJ. **Nucleic Acids Res** 1988 Dec 23; 16(24):11591-606

Substitution of an invariant nucleotide at the base of the highly conserved '530-loop' of 15S rRNA causes suppression of yeast mitochondrial ochre mutations. Shen ZH, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4535-9

Identification by a random linker insertion method of a region which suppresses the transforming activity of the raf oncogene. Ishikawa F, et al. **Nucleic Acids Symp Ser** 1988; (19):39-42

Selenocysteine on glutathione peroxidase may be converted from phosphoserine on the apo-enzyme synthesized with an opal suppressor phosphoseryl-tRNA. Mizutani T, et al. **Nucleic Acids Symp Ser** 1988;(19):203-6

Studies of the retinoblastoma gene in human sarcomas. Reissmann PT, et al. **Oncogene** 1989 Jul;4(7):839-43

Mutations in RNA polymerase II enhance or suppress mutations in GAL4. Allison LA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2794-8

PrlA is important for the translocation of exported proteins across the cytoplasmic membrane of Escherichia coli. Bieker KL, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):968-72

Yeast translation initiation suppressor sui2 encodes the alpha subunit of eukaryotic initiation factor 2 and shares sequence identity with the human alpha subunit. Cigan AM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2784-8

Construction, stable transformation, and function of an amber suppressor tRNA gene in Drosophila melanogaster. Laski FA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6696-8

Mobility of the maize suppressor-mutator element in transgenic tobacco cells. Masson P, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2219-23

Dilute suppressor dsu acts semidominantly to suppress the coat color phenotype of a deletion mutation, dl20J, of the murine dilute locus. Moore KJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8131-5

Human immunodeficiency virus type 1 negative factor is a transcriptional silencer. Niederman TM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1128-32

Detection of genes with a potential for suppressing the transformed phenotype associated with activated ras genes. Noda M, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(1):162-6

Hypertension induces tissue-specific gene suppression of a fatty acid binding protein in rat aorta. Sarzani R, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7777-81

Gene Q antiterminator proteins of Escherichia coli phages 82 and lambda suppress pausing by RNA polymerase at a rho-dependent terminator and at other sites. Yang XJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5301-5

Suppressible insertion-induced mutations in Drosophila. Zachar Z, et al. **Prog Nucleic Acid Res Mol Biol** 1989; 36:87-98 (31 ref.)

Site-directed mutagenesis to fine-tune enzyme specificity. Uemura H, et al. **Protein Eng** 1988 Oct;2(4):293-6

The transformation-suppressive function is lost in tumorigenic cells and is restored upon transfer of a suppressor gene. Iten E, et al. **Recent Results Cancer Res** 1989;113:78-89

A yeast actin-binding protein is encoded by SAC6, a gene found by suppression of an actin mutation. Adams AE, et al. **Science** 1989 Jan 13;243(4888):231-3

Pretranslational suppression of an insulin-responsive glucose transporter in rats with diabetes mellitus. Garvey WT, et al. **Science** 1989 Jul 7;245(4913):60-3

Suppression of the neoplastic phenotype by replacement of the RB gene in human cancer cells. Huang HJ, et al. **Science** 1988 Dec 16;242(4885):1563-6

Genetic and pharmacological suppression of oncogenic mutations in ras genes of yeast and humans. Schafer WR, et al. **Science** 1989 Jul 28;245(4916):379-85

Tumor suppressor genes and inherited predisposition to malignancy. Skuse GR, et al. **Semin Oncol** 1989 Apr; 16(2):128-37 (107 ref.)

Oncogenes and tumor suppressor genes. Weinberg RA. **Trans Stud Coll Physicians Phila** 1988 Dec;10(1-4):83-94 (20 ref.)

'Omnipotent' nonsense suppressors: new clues to an old puzzle. Surguchov AP. **Trends Biochem Sci** 1988 Apr; 13(4):120-3 (30 ref.)

The role of operator position in SV40 T-antigen-mediated repression. Cox M, et al. **Virology** 1988 Nov;167(1):293-5

An MuLV transmission vector system designed to permit recovery in E. coli of proviral and cellular flanking sequences. Jørgensen P, et al. **Virus Genes** 1988 Mar; 1(2):221-33

The psi factor of yeast: a problem in inheritance. Cox BS, et al. **Yeast** 1988 Sep;4(3):159-78 (86 ref.)

Isolation and characterization of a phosphoprotein phosphatase-deficient mutant in yeast. Matsumoto K, et al. **Yeast** 1985 Sep;1(1):25-38

[Immunogenetic analysis of Cryptomeria pollinosis. Evidence for the HLA-linked immune suppression gene to Cryptomeria japonica pollen antigen] Honda K. **Fukuoka Igaku Zasshi** 1989 Jan;80(1):28-37 (Eng. Abstr.) **(Jpn)**

[Antioncogene] Akiyama T. **Gan To Kagaku Ryoho** 1989 May;16(5):1969-75 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Natural UAG suppressor glutamine tRNA in retrovirus

infected cells] Kuchino Y. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):522–9 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Nonsense-suppression during amplification of the gene coding for protein translation factor] Chernov IuO, et al. **Dokl Akad Nauk SSSR** 1988;301(5):1227–9 **(Rus)**

[Selective systems for obtaining recessive ribosomal suppressors in saccharomycete yeasts] Inge-Vechtomov SG, et al. **Genetika** 1988 Jul;24(7):1159–65 (Eng. Abstr.) **(Rus)**

[The relationship of cytoplasmic and mitochondrial protein synthesis in yeasts: the mapping of mitochondrial mutations neutralizing the exhibition of nuclear omnipotent suppressors] Mironova LN, et al. **Genetika** 1988 Jun; 24(6):1008–17 (Eng. Abstr.) **(Rus)**

[Interaction of products of su(Hw) and su(f) genes with MDG4 region regulating its transcription suppresses mutations in Drosophila caused by insertion of this gene] Mizrokhi LIu, et al. **Genetika** 1989 May;25(5):784–98 (Eng. Abstr.) **(Rus)**

[Reversible suppression and activation of immunoglobulin genes in differentiated IgG+ sublines of human RPMI-6410t B-cells] Seregina TM, et al. **Ontogenez** 1988 Jul-Aug;19(4):366–70 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Inhibition of expression of natural UAG suppressor glutamine tRNA in HIV-infected human H9 cells in vitro by Avarol. Müller WE, et al. **AIDS Res Hum Retroviruses** 1988 Aug; 4(4):279–86

Critical factors in genetic risk assessment of human exposure to environmental chemicals. de Serres FJ. **Birth Defects** 1988;24(5):13–24 (65 ref.)

Reversible suppression of c-myc expression in a human colon carcinoma line by the anticancer agent N-methylformamide [published erratum appears in Cancer Res 1989 Sep 15;49(18):5236] Chatterjee D, et al. **Cancer Res** 1989 Jul 15;49(14):3910–6

Structure, turnover, and heme-mediated suppression of the level of mRNA encoding rat liver delta-aminolevulinate synthase. Yamamoto M, et al. **J Biol Chem** 1988 Nov 5; 263(31):15973–9

Theoretical mechanisms for synthesis of carcinogen-induced embryonic proteins: XX. Embryonic gene perturbations expressed in terms of matrix algebra. Hancock RL. **Med Hypotheses** 1988 Sep;27(1):15–8

Tumor necrosis factor suppresses transcription of the thrombomodulin gene in endothelial cells. Conway EM, et al. **Mol Cell Biol** 1988 Dec;8(12):5588–92

Rapid and profound suppression of messenger ribonucleic acid encoding follicle-stimulating hormone beta by inhibin from primate Sertoli cells. Attardi B, et al. **Mol Endocrinol** 1989 Feb;3(2):280–7

Aminoglycoside suppression at UAG, UAA and UGA codons in Escherichia coli and human tissue culture cells. Martin R, et al. **Mol Gen Genet** 1989 Jun;217(2-3):411–8

Calcium channel antagonists delay regression of androgen-dependent tissues and suppress gene activity associated with cell death. Connor J, et al. **Prostate** 1988; 13(2):119–30

[Methods used in evaluating mutagenic and genotoxic properties of chemical compounds. II. The Ames test (an abridged version)] Janik-Spiechowicz E. **Med Pr** 1989; 40(1):28–37 (Eng. Abstr.) **(Pol)**

RADIATION EFFECTS

Anti-mutagenic effect of ultraviolet light on spontaneous tyrosine tRNA ochre suppressor mutations in Escherichia coli. Bockrath R, et al. **Mol Gen Genet** 1988 Oct; 214(2):361–4

SUPPRESSOR CELLS

Circulating activated suppressor T lymphocytes in hepatitis-associated aplastic anaemia. Kojima S, et al. **Br J Haematol** 1989 Jan;71(1):147–51

T lymphocyte subset abnormalities and HLA antigens in scleroderma (systemic sclerosis). Barnett AJ, et al. **Clin Exp Immunol** 1989 Apr;76(1):24–9

Polyclonal proliferation of activated suppressor/cytotoxic T cells with transient depression of natural killer cell function in acute infectious mononucleosis. Williams ML, et al. **Clin Exp Immunol** 1989 Jul;77(1):71–6

Presumptive evidence for an immunosuppressor susceptibility gene, linked to HLA, in rheumatic fever. Hafez M, et al. **Dis Markers** 1987 Sep;5(3):177–85

Alterations in T-helper and T-suppressor lymphocyte populations after multiple injuries. Fosse E, et al. **Injury** 1987 May;18(3):199–202

The proportion of suppressor-inducer T-lymphocytes is reduced in recurrent aphthous stomatitis. Savage NW, et al. **J Oral Pathol** 1988 Jul;17(6):293–7

Variation in T helper cell/T cytotoxic-suppressor cell index during cardiac operations. Navarro M, et al. **J Thorac Cardiovasc Surg** 1988 Dec;96(6):962–6

A biometrical view on normal values of CD4 and CD8 lymphocyte counts in peripheral blood. Zachar V, et al. **Pathology** 1988 Oct;20(4):358–60

Suppression needs a new hypothesis. Eichmann K. **Scand J Immunol** 1988 Sep;28(3):273–6 (20 ref.)

Suppressor activity as a composite property. Mitchison NA. **Scand J Immunol** 1988 Sep;28(3):271–3 (10 ref.)

[T4/T8 ratio in bronchoalveolar lavage fluid: sensitivity and specificity for the diagnosis of sarcoidosis] Zaiss AW, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:233–4 (Eng. Abstr.) **(Ger)**

[Prevalence of HIV infection and changes in CD4/CD8 ratio in asymptomatic drug addicts] Marra R, et al. **G Clin Med** 1989 Feb;70(2):105–7 (Eng. Abstr.) **(Ita)**

[Changes in the lymphocyte subpopulations and the clinical picture in patients with dilated cardiomyopathy (editorial)] Obbiassi M. **G Ital Cardiol** 1989 Feb;19(2):166–9 **(Ita)**

[Progressive changes in the lymphocyte subpopulations and the clinical picture in 2 brothers with familial dilated cardiomyopathy] Pozzi R, et al. **G Ital Cardiol** 1989 Feb; 19(2):161–5 (Eng. Abstr.) **(Ita)**

ANALYSIS

Soluble factors in tolerance and contact sensitivity to 2,4-dinitro-fluorobenzene in mice. IX. A monoclonal T cell suppressor molecule is structurally and serologically related to the alpha/beta T cell receptor. Fairchild RL, et al. **J Immunol** 1988 Nov 15;141(10):3342–8

CLASSIFICATION

Seasonal variation in suppressor T cell subsets and non-specific suppressor cell function in hay fever sufferers. Fennerty AG, et al. **Allergy** 1989 Feb;44(2):103–7

The discrimination between CD8+ cytotoxic and CD8+ suppressor lymphocyte subsets within cutaneous infiltrates [letter] De Panfilis G. **Arch Dermatol** 1989 Jun;125(6):844–5

Identification of activated T cells and the suppressor/inducer subset in patients suffering from severe aplastic anemia. Köller U, et al. **Blut** 1989 Jan;58(1):21–6

Concomitant augmentation of CD4+ CD45R+ suppressor/inducer subset and diminution of CD4+ CDw29+ helper/inducer subset during rush hyposensitization in hymenoptera venom allergy. Tilmant L, et al. **Clin Exp Immunol** 1989 Apr;76(1):13–8

Inverted T helper/T suppressor lymphocyte ratio is not a reliable indicator of coexistent HIV infection in the presence of carcinoma: report of a patient with ovarian carcinoma and inverted TH/TS ratio. Fromowitz FB, et al. **Gynecol Oncol** 1989 Jul;34(1):119–121

Philadelphia chromosome without breakpoint cluster region rearrangement in a case of Lennert's lymphoma of suppressor phenotype. Terjanian T, et al. **Hematol Oncol** 1989 May-Jun;7(3):189–94

Generation and characterization of continuous lines of CD8+ suppressor T lymphocytes. Aune TM, et al. **J Immunol** 1989 Jun 1;142(11):3731–9

T cell-induced Ig allotypic suppression in mice. II. Both CD4+ CD8- and CD4- CD8+ T cell subsets from sensitized Igha mice are required to induce suppression of Igh-1b allotype expression. Benaroch P, et al. **J Immunol** 1989 Jan 1;142(1):1–7

The selection of effector T cell phenotype by contrasuppression modulates susceptibility to autoimmune injury. Kelly CJ, et al. **J Immunol** 1988 Nov 1;141(9):3022–8

Identification of a T cell subset using a rabbit antibody raised against a T suppressor molecule. North J, et al. **J Immunol** 1988 Oct 1;141(7):2268–74

In vitro generation of suppressor T cells. Induction of CD3+, IgH-restricted suppressor cells. O'Hara RM Jr, et al. **J Immunol** 1988 Nov 1;141(9):2935–42

Cloned natural suppressor cell lines express the CD3+CD4-CD8- surface phenotype and the alpha, beta heterodimer of the T cell antigen receptor. Strober S, et al. **J Immunol** 1989 Aug 15;143(4):1118–22

Development of an antigen-specific CD8 suppressor effector clone in man. Takeuchi T, et al. **J Immunol** 1988 Nov 1; 141(9):3010–5

The development of a lymphocyte population with suppressor phenotype after successful liver transplantation. McDiarmid SV, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):423–4

Molecular characterization of suppressor T cells. Weiner DB, et al. **Transplant Proc** 1988 Dec;20(6):1151–3 (13 ref.)

[Quantitative study of the "T" subpopulations in subjects with bronchiolitis] Santangelo G, et al. **Boll Ist Sieroter Milan** 1988;67(2):156–8 (Eng. Abstr.) **(Ita)**

[The majority of suppressor T lymphocytes (CD4- CD8+ CD11+) expresses S-100 protein] Torresani C, et al. **Medicina (Firenze)** 1988 Jan-Mar;8(1):70–3 (Eng. Abstr.) **(Ita)**

CYTOLOGY

Distribution of lymphocytes in intermingled skin grafts. Kistler D, et al. **Burns** 1989 Apr;15(2):85–7

Antigen presented in the local lymph node by cells from dimethylbenzanthracene-treated murine epidermis activates suppressor cells. Halliday GM, et al. **Cell Immunol** 1988 Dec;117(2):289–302

A role for L3T4+ T cells and their lymphokines in the generation of suppressor effector (TS3) cells. O'Hara RM Jr, et al. **Cell Immunol** 1988 Oct 15;116(2):423–38

Decrease in phenotypically defined T helper inducer cells (T4+4B4+) and increase in T suppressor effector cells (T8+2H4+) in stable renal allograft recipients. Ramos EL, et al. **Transplantstion** 1989 Mar;47(3):465–71

DRUG EFFECTS

Cyclophosphamide-induced immunologically mediated regression of a cyclophosphamide-resistant murine tumor: a consequence of eliminating precursor L3T4+ suppressor T-cells. Awwad M, et al. **Cancer Res** 1989 Apr 1; 49(7):1649–54

Overcoming suppression of antitumor immune reactivity in tumor-bearing rats by treatment with bleomycin. Xu ZY, et al. **Cancer Res** 1988 Dec 1;48(23):6658–63

Regulation of tumor-induced myelopoiesis and the associated immune suppressor cells in mice bearing metastatic Lewis lung carcinoma by prostaglandin E2. Young MR, et al. **Cancer Res** 1988 Dec 1;48(23):6826–31

The induction of T-suppressor cells with a soluble extract of Candida albicans. Cuff CF, et al. **Cell Immunol** 1989 Aug;122(1):71–82

Effect of gangliosides on primary and secondary plaque-forming cells responses and on suppressor T-cells induction. Jeng KC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Aug;21(3):151–7

Presence of an IL-3-producing suppressor T cell resistant to cyclosporin A in the peripheral blood of patients with systemic lupus erythematosus. Alcocer-Varela, et al. **Clin Exp Immunol** 1988 Sep;73(3):424–9

Procainamide in vivo modulates suppressor T lymphocyte activity. Green BJ, et al. **Clin Invest Med** 1988 Dec; 11(6):425–9

Increased concanavalin A-induced suppressor cell activity in humans with occupational lead exposure. Cohen N, et al. **Environ Res** 1989 Feb;48(1):1–6

Cyclosporin A blocks the generation of alloindifferent but not of allospecific suppressive cells. Pawelec G, et al. **Immunol Lett** 1988 Aug;18(4):293–6

Cyclophosphamide (Cy)-facilitated adoptive immunotherapy of a Cy-resistant tumour. Evidence that Cy permits the expression of adoptive T-cell mediated immunity by removing suppressor T cells rather than by reducing tumour burden. Awwad M, et al. **Immunology** 1988 Sep; 65(1):87–92

"Immunoregulatory effects of cimetidine: inhibition of suppressor cell effector function in vivo". Kumar A, et al. **Immunopharmacol Immunotoxicol** 1988;10(3):327–32

Inhibition of graft-vs-host induced immunodeficiency with immunosuppressive therapy. Smith SR, et al. **Immunopharmacol Immunotoxicol** 1988;10(4):545–78

Suppression of allograft immunity by 3,4,5,3',4',5'-hexachlorobiphenyl. II. Effects of exposure on mixed lymphocyte reactivity and induction of suppressor cell activity in vitro. Kerkvliet NI, et al. **Immunopharmacology** 1988 Jul-Aug;16(1):13–23

Abrogation of spleen macrophage suppressive activity by 15-deoxyspergualin. Yamamura T, et al. **Int Arch Allergy Appl Immunol** 1989;89(2-3):211–6

Decrease in disease activity and concomitant increase in the percentage of peripheral blood suppressor T-cells in rheumatoid arthritis by a newly synthesized slow-acting anti-rheumatic drug (Bucillamine). Goto M, et al. **Int J Immunopharmacol** 1989;11(4):327–31

In vitro effect of TP-1 (a calf thymic extract) on suppressor T-cell function of patients with autoimmune chronic active hepatitis. O'Brien CJ, et al. **Int J Immunopharmacol** 1988; 10(6):651–6

Autoantibody formation in burn patients after inhibition of suppressor T cell activity with polymyxin B. Moran KT, et al. **J Burn Care Rehabil** 1989 May-Jun;10(3):213–5

Cellular immunity and suppressor T cell function in asthmatic children on prolonged ketotifen therapy. Schlesinger M, et al. **J Clin Lab Immunol** 1988 Nov;27(3):139–41

Treatment of severe psoriasis with low dose cyclosporin A and the effect on the helper-suppressor T cell ratio in peripheral blood. Sasaki T, et al. **J Dermatol (Tokyo)** 1988 Dec;15(6):480–6

Functional analysis of mononuclear cells infiltrating into tumors. V. A. soluble factor involved in the regulation of cytotoxic/suppressor T cell infiltration into tumors. Shijubo N, et al. **J Immunol** 1989 Apr 15;142(8):2961–7

Phorbol esters of different biological activities may preferentially act as mitogens of human suppressor T-cells and are equi-effective mitogens of IL-2 dependent cells. Edwards MC, et al. **J Pharm Pharmacol** 1989 Mar; 41(3):164–7

Effects of heptaminol AMP amidate on suppressor and helper function of murine T cells. Saha AR, et al. **Jpn J Pharmacol** 1988 Dec;48(4):417–22

Altered T-cell helper/suppressor ratio in mice chronically exposed to amyl nitrite. Ortiz JS, et al. **NIDA Res Monogr** 1988;83:59–74

Low doses of chemotherapy to inhibit suppressor T cells. Berd D. **Prog Clin Biol Res** 1989;288:449–58

Selective killing of CD4+ and CD8+ cells with immunotoxins containing saporin. Barbieri L, et al. **Scand J Immunol** 1989 Sep;30(3):369–72

Alloreactive T suppressor cells in the rat. I. Evidence of three distinct subsets of splenic suppressor T cells resistant to cyclosporine. Rodrigues MA, et al. **Transplantation** 1989 May;47(5):847–52

Effect of a new immunosuppresive agent, FK506, on human lymphocyte responses in vitro. I. Inhibition of expression of alloantigen-activated suppressor cells, as well as induction of alloreactivity. Yoshimura N, et al. **Transplantation** 1989 Feb;47(2):351–6

[Experimental study of qi deficiency syndrome and Codonopsis pillosulae and Astragalus injection on the immune response in mice] Zhou Y, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 May;9(5):286–8, 262 (Eng. Abstr.) **(Chi)**

[The action of tuftsin on the reaction of macrophage–suppressor formation in vitro and in vivo] Voevodin DA. **Biull Eksp Biol Med** 1988 Nov; 106(11):559–61 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

T-cell acute lymphoblastic leukemia with severe leukopenia: evidence for suppression of myeloid progenitor cells by leukemic blasts. Douer D, et al. **Acta Haematol (Basel)** 1988;80(4):185–9

Suppression of immunoglobulin production by germinal centre HNK–1+ CD3+ cells. Banerjee D, et al. **Adv Exp Med Biol** 1988;237:421–5

Role of the galt contrasuppressor T cell circuit in isotype–specific immunoregulation. Fujihashi K, et al. **Adv Exp Med Biol** 1988;237:649–53

CD4+, CD8+ cells, IgE and prick test in infants allergic to cow's milk. Vanella L, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct;16(5):327–31

HLA–DR–positive keratinocytes are associated with suppressor lymphocyte epidermotropism. A biomathematical study. Smolle J, et al. **Am J Dermatopathol** 1988 Apr;10(2):128–32

Trophoblast induction of suppressor–type cell activity in human endometrial tissue. Daya S, et al. **Am J Reprod Immunol** 1989 Feb;19(2):65–72

Concanavalin A–induced suppressor cell activity in intestinal mucosal leukocytes obtained from healthy cows. Nagi AM, et al. **Am J Vet Res** 1989 Aug;50(8):1266–71

Immunoregulation in rapidly progressive multiple sclerosis. Arnason BG, et al. **Ann N Y Acad Sci** 1988;540:4–12 (25 ref.)

Down–regulation of cytotoxic T lymphocyte generation by two distinct suppressor–cell systems. Battisto JR, et al. **Ann N Y Acad Sci** 1988;532:177–98

Loss of functional suppression is linked to decreases in circulating suppressor–inducer (CD4+ 2H4+) T cells in multiple sclerosis. Chofflon M, et al. **Ann N Y Acad Sci** 1988;540:330–2

A suppressor cell line that prevents the adoptive transfer of EAE in Lewis rats. Ellerman K, et al. **Ann N Y Acad Sci** 1988;540:364–6

Effects of OX8+ lymphocytes on in vitro lymphocyte reactivity during experimental allergic encephalomyelitis. Essayan DM, et al. **Ann N Y Acad Sci** 1988;540:715–7

Immunohistochemical analysis of suppressor–inducer and helper–inducer T cells in multiple sclerosis brain tissue. Sobel RA, et al. **Ann N Y Acad Sci** 1988;540:306–8

Suppressor cell regulation of chronic relapsing experimental allergic encephalomyelitis. Whitham RH, et al. **Ann N Y Acad Sci** 1988;540:537–9

Activated suppressor cell function in severely disabled patients with multiple sclerosis. Antel JP, et al. **Ann Neurol** 1989 Feb;25(2):204–7

Decrease of suppressor inducer (CD4+2H4+) T cells in multiple sclerosis cerebrospinal fluid. Chofflon M, et al. **Ann Neurol** 1989 May;25(5):494–9

Loss of functional suppression is linked to decreases in circulating suppressor inducer (CD4+ 2H4+) T cells in multiple sclerosis. Chofflon M, et al. **Ann Neurol** 1988 Aug; 24(2):185–91

Fluctuations of CD4+ T–cell subsets in remitting–relapsing multiple sclerosis. Rose LM, et al. **Ann Neurol** 1988 Aug; 24(2):192–9

Lymphocyte subsets in the cerebrospinal fluid in active multiple sclerosis. Salonen R, et al. **Ann Neurol** 1989 May; 25(5):500–2

Correlation of immunological studies and disease progression in chronic progressive multiple sclerosis. Trotter JL, et al. **Ann Neurol** 1989 Feb;25(2):172–8

Prolymphocytic leukemia with suppressor T–cell phenotype: report of two cases. Jehn U, et al. **Anticancer Res** 1989 Jan–Feb;9(1):115–8

Autoimmunity and T–cell subpopulations in old age. Menzel EJ, et al. **Arch Gerontol Geriatr** 1988 Dec;7(4):249–60

Effect of hemodialysis on T lymphocyte subsets, con–A–activated suppressor cell activity, and interleukin–2 receptor expression on lymphocytes in chronic uremic patients. Tchórzewski H, et al. **Artif Organs** 1989 Jun; 13(3):185–9

Defective T suppressor–inducer cell function in human immune deficiency virus–seropositive hemophilia patients. Sjamsoedin–Visser LJ, et al. **Blood** 1988 Nov;72(5):1474–7

Helper and suppressor T–cell function in HIV–infected hemophilia patients. Weimer R, et al. **Blood** 1989 Jul; 74(1):298–302

Suppressor T cells in allogeneic bone marrow chimeras. Leshem B, et al. **Bone Marrow Transplant** 1987 Aug; 2(2):123–32

OKT4/OKT8 ratio in asymptomatic heroin addicts. Marra R, et al. **Br J Addict** 1989 Jul;84(7):815–6

Identification of CD4+, 2H4+ (T8 gamma +) suppressor–inducer cells in normal human epidermis and superficial dermis. Rowden G, et al. **Br J Dermatol** 1988 Aug;119(2):147–54

T–cell lymphocytic leukaemia with the CD4+, CD45R+, CD29– surface phenotype functioned as T suppressor inducer for B–cell immunoglobulin synthesis [letter] Imamura N, et al. **Br J Haematol** 1989 Apr;71(4):566–7

Lymphokine–activated suppressor (LAS) cells in patients with gastric carcinoma. Ebihara T, et al. **Cancer Immunol Immunother** 1989;28(3):218–24

The functional deficiency of B lymphocytes in patients with lung cancer is due to inadequate T–cell help and excessive suppression by T and non–T cells. Venkataraman M, et al. **Cancer Invest** 1989;7(1):7–16

Regulation of immune responses by T suppressor cells and by serum in chronic paracoccidioidomycosis. Castaneda E, et al. **Cell Immunol** 1988 Nov;117(1):1–11

An approach to the unification of suppressor T cell circuits: a simplified assay for the induction of suppression by T cell–derived, antigen–binding molecules (T–ABM). Chue B, et al. **Cell Immunol** 1989 Jan;118(1):30–40

Soluble factors in tolerance and contact sensitivity to DNFB in mice. VIII. Regulation of T suppressor cell function by autoreactive T helper cells. Fairchild RL, et al. **Cell Immunol** 1988 Nov;117(1):35–44

Cell interactions in alveolar macrophage–mediated suppression of the immune response: an unusual suppressor pathway involving a population of T–cells that express Lyt–1, L3T4, and I–J. Ferrick DA, et al. **Cell Immunol** 1988 Oct 1;116(1):183–94

Altered immune response patterns in murine syngeneic pregnancy: presence of natural null suppressor cells in maternal spleen identifiable by monoclonal antibodies. Hoskin DW, et al. **Cell Immunol** 1989 Apr 15;120(1):42–60

PHA activation of encephalitogenic T cells: in vitro line selection overcomes splenic suppression. Jones RE, et al. **Cell Immunol** 1989 Oct 1;123(1):60–9

Induction of suppressor cells to T– and B–cell proliferative responses and immunoglobulin production by monoclonal antibodies recognizing the CD3 T–cell differentiation antigen. Kunicka JE, et al. **Cell Immunol** 1988 Oct 1; 116(1):195–215

Con A–stimulated thymocytes produce interleukin 2 after removal of Lyt–1 positive cells. Lindqvist C, et al. **Cell Immunol** 1988 Oct 1;116(1):12–23

IL–2 influences the balance between immunity and unresponsiveness in the picryl (TNP) contact sensitivity system by blocking the development or action of an Lyt–2+, I–J+ T suppressor cell. Madar J, et al. **Cell Immunol** 1988 Nov;117(1):209–17

Regulation of IgG responses by helper and suppressor T cells activated by pneumococcal capsular polysaccharides. Milligan GN, et al. **Cell Immunol** 1989 Mar;119(1):222–32

Secretion of a suppressor cell inducing factor by an interleukin 3–dependent cell line with natural cytotoxic activity. III. Comparison with other interleukin 3–dependent cell lines. Pope BL, et al. **Cell Immunol** 1988 Oct 1;116(1):1–11

Natural suppressor–like cells in local graft–vs–host disease. Prud'homme GJ, et al. **Cell Immunol** 1989 Feb; 118(2):516–25

Fractionation of T cell subsets on Ig anti–Ig columns: isolation of helper T cells from nonresponder mice, demonstration of antigen–specific T suppressor cells, and selection of CD–3 negative variants of Jurkat T cells. Rubin B, et al. **Cell Immunol** 1989 Apr 1;119(2):327–40

Amplification of suppressor inducer pathway with monoclonal antibody, anti–2H4, identifying a novel epitope of the common leukocyte antigen/T200 antigen. Takeuchi T, et al. **Cell Immunol** 1989 Jan;118(1):68–84

The induction of antigen–specific thymic regulatory cells in the mouse [published erratum appears in Cell Immunol 1989 Feb;118(2):532] Talor E, et al. **Cell Immunol** 1988 Oct 1; 116(1):24–34

CD8 suppressor cell activity and its effect on CD4 helper cell–dependent growth of SJL/J B–cell lymphomas. Thrush GR, et al. **Cell Immunol** 1989 Sep;122(2):555–62

Regulation of autoimmunity in normal and rheumatoid individuals by bone marrow–derived natural suppressor cells and their suppressor factor: BDSF. Weingust RW, et al. **Cell Immunol** 1989 Aug;122(1):154–63

T suppressor efferent circuit which affects contact sensitivity to picryl chloride: the late–acting, second nonspecific T suppressor factor bears I–A determinants which are responsible for the I–A genetic restriction in its interaction with its target cell. Zembala M, et al. **Cell Immunol** 1988 Oct 1;116(1):172–82

Cross–reactivity between human and canine helper and suppressor T cell antigens using monoclonal antibodies RPA–T4 and HuLy–m8. Iwamoto K, et al. **Cell Mol Biol** 1989;35(3):271–8

T lymphocytes in Graves' disease [letter] Volpé R. **Clin Endocrinol (Oxf)** 1988 Aug;29(2):195–6

Suppressor cell activity of human alveolar macrophages in interstitial lung diseases. Fireman EM, et al. **Clin Exp Immunol** 1988 Jul;73(1):111–6

Modulation of cellular anti–tumour responses by tumour–specific T suppressor lymphocytes. Haubeck HD, et al. **Clin Exp Immunol** 1988 Oct;74(1):47–52

Selective in–vitro activation of BALB/c T suppressor lymphocytes specific for syngeneic ADJ–PC–5 plasmacytoma cells. Haubeck HD, et al. **Clin Exp Immunol** 1988 Oct;74(1):53–8

Specific maternal anti–fetal lymphoproliferative responses and their regulation by natural immunosuppressive factors. Hoskin DW, et al. **Clin Exp Immunol** 1989 May;76(2):262–7

Lymphocyte subpopulations in Bancroftian filariasis: activated (DR+) CD8+ T cells in patients with chronic lymphatic obstruction. Lal RB, et al. **Clin Exp Immunol** 1989 Jul;77(1):77–82

Characterization of lymphocytes that suppress IL–2 production in systemic lupus erythematosus. Linker–Israeli M, et al. **Clin Exp Immunol** 1988 Aug;73(2):236–41

Role of the spleen in immunosuppression of gastric cancer: predominance of suppressor precursor and suppressor inducer T cells in the recirculating spleen cells. Toge T, et al. **Clin Exp Immunol** 1988 Dec;74(3):409–12

Resistance to experimental autoimmune thyroiditis: L3T4+ cells as mediators of both thyroglobulin–activated and TSH–induced suppression. Kong YM, et al. **Clin Immunol Immunopathol** 1989 Apr;51(1):38–54

The relationship between HLA–DR3 and T–cell regulation of immunoglobulin production in primary sclerosing cholangitis. Magrin S, et al. **Clin Immunol Immunopathol** 1989 Feb;50(2):205–12

The interaction of interleukin 2 with its receptor in the generation of suppressor T cells in antigen–specific and antigen–nonspecific systems in vitro. Oh–Ishi T, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):447–59

Autologous CD8–positive cells suppress T cell proliferation in response to thyroid antigens in Hashimoto's thyroiditis. Weetman AP. **Clin Immunol Immunopathol** 1989 May; 51(2):303–10

Suppression of CML reactivity by non–T cells from miniature swine tolerant of a class I mismatched renal allograft. Kortz EO, et al. **Curr Surg** 1989 Mar–Apr; 46(2):107–10

Two–color flow cytometry analysis in alopecia areata. Lutz G, et al. **Dermatologica** 1989;178(2):64–6

Maternal antigenic stimulation actively produces suppressor activity in offspring. Koshimo H, et al. **Dev Comp Immunol** 1989 Winter;13(1):79–85

Suppressor T–cell abnormality in NOD mice before onset of diabetes. Hatamori N, et al. **Diabetes Res Clin Pract** 1989 May 15;6(4):265–70

Phenotypic characteristics of cells involved in induced suppression to murine experimental autoimmune thyroiditis. Parish NM, et al. **Eur J Immunol** 1988 Sep;18(9):1463–7

The molecular context of determinants within the priming antigen establishes a hierarchy of T cell induction: T cell specificities induced by peptides of beta–galactosidase vs. the whole antigen. Shivakumar S, et al. **Eur J Immunol** 1989 Apr;19(4):681–7

Different mechanisms account for the suppression of interleukin 2 production and the suppression of interleukin 2 receptor expression in Trypanosoma brucei–infected mice. Sileghem M, et al. **Eur J Immunol** 1989 Jan; 19(1):119–24

Regulatory circuits in autoimmunity: recruitment of counter–regulatory CD8+ T cells by encephalitogenic CD4+ T line cells. Sun D, et al. **Eur J Immunol** 1988 Dec;18(12):1993–9

Clinical studies on cell–mediated immunity in patients with urinary bladder carcinoma. Depression of cell–mediated immunity by adherent cells. Ikemoto S, et al. **Eur Urol** 1988;15(3–4):252–5

Reduced proliferation in T lymphocytes in aged humans is predominantly in the CD8+ subset, and is unrelated to defects in transmembrane signaling which are predominantly in the CD4+ subset. Grossmann A, et al. **Exp Cell Res** 1989 Feb;180(2):367–82

Regulation of the systemic immune response by visible light and the eye. Ferguson TA, et al. **FASEB J** 1988 Nov; 2(14):3017–21

Induction of indomethacin–sensitive suppressor cells by xenogeneic blood transfusion in mice. Kubera M, et al. **Folia Biol (Krakow)** 1989;37(1–2):73–82

The role of prostaglandin E in the natural suppressor activity of spleen cells from newborn rats. Bubak–Satora M, et al. **Folia Biol (Praha)** 1988;34(3):202–6

Defective suppression in the autologous mixed lymphocyte reaction in patients with Crohn's disease. Kelleher D, et al. **Gut** 1989 Jun;30(6):839–44

Defective immunoregulation in primary biliary cirrhosis: CD4+, Leu–8+ T cells have abnormal activation and suppressor function in vitro. Suou T, et al. **Hepatology** 1989 Oct;10(4):408–13

Human suppressor T cells induced in vitro with an autologous renal allograft–derived T cell line. I. Suppressor cell induction, function, and specificity. Emara M, et al. **Hum Immunol** 1988 Nov;23(3):223–40

Activation of human CD8+ suppressor T cells by an antigen–specific CD4+ T–cell line in vitro. Fukunaga M, et al. **Hum Immunol** 1989 Jul;25(3):157–68

Suppression of antigraft immunity by preimmunization. V. Characterization of suppressor T memory cells. Molendijk A, et al. **Immunobiology** 1989 Feb;178(4–5):351–60

MHC– and Igh–unrestricted interaction between L3T4+, Lyt–2– Ts inducer cells and L3T4–, Lyt–2+ Ts effector cells is required for T cell–dependent suppression of DTH to histocompatibility antigens. Molendijk A, et al. **Immunobiology** 1989 Mar;179(1):56–67

Regulation of allospecific suppressive cell generation in vitro. Pawelec G, et al. **Immunol Lett** 1988 Oct;19(2):121–6

Suppressor Lyt 2+ T–cells demonstrated in mice late after thermal injury. Suzuki F, et al. **Immunol Lett** 1988 Sep; 19(1):33–9

Comparisons between helper and suppressor T–cell induction. Ishikura H, et al. **Immunol Rev** 1988 Dec;

106:93–114 (79 ref.)
Speculations on the specificity of suppression. Batchelor JR, et al. **Immunol Today** 1989 Feb;10(2):37–40 (32 ref.)
CD8+ cells sustain spontaneous IgG production in SLE [letter] Linker-Israeli M. **Immunol Today** 1989 Feb;10(2):36
Human naive and memory T cells: reinterpretation of helper-inducer and suppressor-inducer subsets. Sanders ME, et al. **Immunol Today** 1988 Jul–Aug;9(7–8):195–9
The thymus selects the useful, neglects the useless and destroys the harmful. von Boehmer H, et al. **Immunol Today** 1989 Feb;10(2):57–61 (34 ref.)
Induction of suppressor cells by staphylococcal enterotoxin B: identification of a suppressor cell circuit in the generation of suppressor-effector cells. Holly M, et al. **Immunology** 1988 Aug;64(4):643–8
Down-regulation of suppressor cell induction. Kuchroo VK, et al. **Immunology** 1988 Aug;64(4):633–42
Protein malnutrition reduces the IgA immune response to oral antigen by altering B-cell and suppressor T-cell functions. McGee DW, et al. **Immunology** 1988 Aug; 64(4):697–702
The role of CD4+ lymphocytes in the activation of non-specific suppressor cells by antigen. Stefanovic H, et al. **Immunology** 1989 Jul;67(3):339–43
Observations on T-cell sub-populations in type II reactions. Kalyanasundaram K, et al. **Indian J Lepr** 1989 Jan; 61(1):79–83
Effect of suppressor cells on antibody producing cells in mice infected with Mycobacterium leprae. Vaishnavi C, et al. **Indian J Lepr** 1989 Jan;61(1):72–8
Two types of suppressor T cells that inhibit delayed-type hypersensitivity to Mycobacterium intracellulare in mice. Nakamura RM, et al. **Infect Immun** 1989 Mar;57(3):779–84
CD8+ T cells inhibit Plasmodium falciparum-induced lymphoproliferation and gamma interferon production in cell preparations from some malaria-immune individuals. Riley EM, et al. **Infect Immun** 1989 Apr;57(4):1281–4
Reduced suppressor cell response to Mycobacterium leprae in lepromatous leprosy. Sasiain MD, et al. **Infect Immun** 1989 Mar;57(3):951–6
Neuroimmunomodulation in cancer patients: correlations between melatonin and beta-endorphin blood levels and T helper/suppressor ratio. Barni S, et al. **Int J Biol Markers** 1988 Apr–Jun;3(2):82–6
Development of splenic natural suppressor (NS) cells in Ehrlich tumor-bearing mice. Subiza JL, et al. **Int J Cancer** 1989 Aug 15;44(2):307–14
Cellular immunity and suppressor T cell function in asthmatic children on prolonged theophylline therapy. Bibi H, et al. **Int J Tissue React** 1988;10(5):305–10
In vivo effects of antibodies to immune response gene products. II. Suppression of humoral immune responses with monoclonal anti-I-A is due to suppressor cells. Adelman NE, et al. **Int Rev Immunol** 1988 Aug;3(4):333–44 (51 ref.)
Characterization of antigen-binding molecules from T suppressor hybridomas. Chan A, et al. **Int Rev Immunol** 1988 Apr;3(3):175–204 (41 ref.)
Understanding suppressor cells: where have we gone wrong? Dorf ME, et al. **Int Rev Immunol** 1988 Aug;3(4):375–92 (123 ref.)
Antigen specific down regulation of murine collagen induced arthritis: T suppressor cell circuits in arthritis immunotherapy. Kresina TF. **Int Rev Immunol** 1988 Sep; 4(1):91–106 (79 ref.)
Collagen arthritis in rats: the importance of humoral immunity in the initiation of the disease and perpetuation of the disease by suppressor T cells. Takagishi K, et al. **Int Rev Immunol** 1988 Sep;4(1):35–48 (29 ref.)
Molecular analysis of suppressor T cell receptors. Taniguchi M, et al. **Int Rev Immunol** 1988 Apr;3(3):229–39 (11 ref.)
T lymphocytes and cervical intraepithelial neoplasia. Turner MJ, et al. **Ir J Med Sci** 1988 Jun;157(6):184
Lymphocyte subclasses and depression. Denney DR, et al. **J Abnorm Psychol** 1988 Nov;97(4):499–502
The role of Lyt-2+ T cells in the regulation of autoimmunity in murine lupus. Wofsy D. **J Autoimmun** 1988 Apr; 1(2):207–17
Abnormal differentiation of immunoregulatory T-lymphocyte subpopulations in the major histocompatibility complex (MHC) class II antigen deficiency syndrome. Clement LT, et al. **J Clin Immunol** 1988 Nov;8(6):503–12
T cells expressing high levels of non-major histocompatibility complex (MHC)-restricted cytotoxicity are present in early and late clinical phases of human immunodeficiency virus 1 (HIV-1) infection. Morgan JE, et al. **J Clin Immunol** 1989 Mar;9(2):97–102
Deterioration in immunologic status of human immunodeficiency virus (HIV)-infected homosexual men with lymphadenopathy: prognostic implications. Spira TJ, et al. **J Clin Immunol** 1989 Mar;9(2):132–8
Class II (DR) antigen expression on CD8+ lymphocyte subsets in acquired immune deficiency syndrome (AIDS). Ziegler-Heitbrock HW, et al. **J Clin Immunol** 1988 Nov; 8(6):473–8
Defective expression of the 2H4 molecule after autologous mixed lymphocyte reaction activation in systemic lupus erythematosus patients. Takeuchi T, et al. **J Clin Invest** 1988 Oct;82(4):1288–94
Spontaneous improvement of juvenile rheumatoid arthritis after T lymphocytosis with suppressor phenotype and function. Ichikawa M, et al. **J Clin Lab Immunol** 1988 Dec; 27(4):197–201
Emergence of activated lymphocytes in CD4 and CD8 subpopulations of multiple myeloma: correlation with the expansion of suppressor T-cells (CD8+ OKM1+) and ecto-5'nucleotidase deficiency. Massaia M, et al. **J Clin Lab Immunol** 1988 Jun;26(2):89–95
Distinct mitogens reveal different mechanisms of suppressor activity in human cord blood. Papadogiannakis N, et al. **J Clin Lab Immunol** 1988 May;26(1):37–41
Interleukins production and responsiveness in Fisher rats with adjuvant-induced disease: role of suppressor cells. Yiangou M, et al. **J Clin Lab Immunol** 1989 Feb;28(2):85–90
T helper and T suppressor cell reversal during the development of induced rat periapical lesions. Stashenko P, et al. **J Dent Res** 1989 May;68(5):830–4
Immunologically mediated regression of a murine lymphoma after treatment with anti-L3T4 antibody. A consequence of removing L3T4+ suppressor T cells from a host generating predominantly Lyt-2+ T cell-mediated immunity. Awwad M, et al. **J Exp Med** 1988 Dec 1; 168(6):2193–206
Cellular induction of chronic allotype suppression of IgG2a in Igh b/b homozygous mice and its abrogation by in vivo treatment with anti-CD8 monoclonal antibody. Benaroch P, et al. **J Exp Med** 1988 Sep 1;168(3):891–904
Prostaglandins from human T suppressor/cytotoxic cells modulate natural killer antibacterial activity. Garcia-Peñarrubia P, et al. **J Exp Med** 1989 Aug 1; 170(2):601–6
Elimination of CD4+ suppressor T cells from susceptible BALB/c mice releases CD8+ T lymphocytes to mediate protective immunity against Leishmania. Hill JO, et al. **J Exp Med** 1989 May 1;169(5):1819–27
Generation of T cell repertoire. Two distinct mechanisms for generation of T suppressor cells, T helper cells, and T augmenting cells. Asano Y, et al. **J Immunol** 1989 Jan 15;142(2):365–73
Antipeptide antibody specific for the N-terminal of soluble immune response suppressor neutralizes concanavalin A and IFN-induced suppressor cell activity in an in vitro cytotoxic T lymphocyte response. Devens BH, et al. **J Immunol** 1988 Nov 1;141(9):3148–55
A role for isotype-specific binding factors in the regulation of IgA- and IgG-specific responses by the anti/contrasuppressor T cell circuit. Ernst PB, et al. **J Immunol** 1989 Sep 1;143(5):1426–32
The immune response and the eye. III. Anterior chamber-associated immune deviation can be adoptively transferred by serum. Ferguson TA, et al. **J Immunol** 1989 Aug 1;143(3):821–6
The induction of peripheral T cell unresponsiveness in adult mice by monomeric human gamma-globulin. Gahring LC, et al. **J Immunol** 1989 Oct 1;143(7):2094–100
Role of IL-2 in the generation of CD4+ suppressors of human B cell responsiveness. Hirohata S, et al. **J Immunol** 1989 May 1;142(9):3104–12
Functional analysis of cloned macrophage hybridomas. VII. Modulation of suppressor T cell-inducing activity. Ishikura H, et al. **J Immunol** 1989 Jul 15;143(2):414–9
Construction of antigen-specific suppressor T cell hybridomas from spleen cells of mice primed for the persistent IgE antibody formation. Iwata M, et al. **J Immunol** 1988 Nov 15;141(10):3270–7
Cell-mediated suppression of HIV-specific cytotoxic T lymphocytes. Joly P, et al. **J Immunol** 1989 Oct 1; 143(7):2193–201
Requirements for suppressor cell activation. Role of accessory cells. Kuchroo VK, et al. **J Immunol** 1989 Apr 1;142(7):2192–9
Murine natural suppressor cells in the newborn, in bone marrow, and after cyclophosphamide. Genetic variations and dependence on IFN-gamma. Maier T, et al. **J Immunol** 1989 Jul 15;143(2):491–8
Suppressor T cells regulating the cell-mediated immune response to Pseudomonas aeruginosa can be generated by immunization with anti-bacterial T cells. Markham RB, et al. **J Immunol** 1988 Dec 1;141(11):3975–9
Plasticity of T cell function. Cloned EL-4 lymphoma cells may help or suppress a primary antibody response depending on their own concentration and the assay system. Melchers I, et al. **J Immunol** 1988 Nov 1; 141(9):2873–81
Development of self-tolerance in normal mice. Appearance of suppressor cells that maintain adult self-tolerance follows the neonatal autoantibody response. Miller RD, et al. **J Immunol** 1988 Oct 1;141(7):2206–10
A virus-sensitive suppressor cell is involved in the regulation of human allospecific T cell-mediated cytotoxicity. Muluk SC, et al. **J Immunol** 1989 Oct 1;143(7):2209–15
The molecular basis of granuloma formation in schistosomiasis. II. Analogies of a T cell-derived suppressor effector factor to the T cell receptor. Perrin PJ, et al. **J Immunol** 1989 Feb 1;142(3):985–91
Transfusion induces blood donor-specific suppressor cells. Quigley RL, et al. **J Immunol** 1989 Jan 15;142(2):463–70
The role of natural suppressor and natural killer activities in resistance to hemopoietic transplantation in unirradiated hosts. Sadelain MW, et al. **J Immunol** 1989 Apr 1; 142(7):2270–8
A monoclonal antibody raised to lipomodulin recognizes T suppressor factors in two independent hapten-specific suppressor networks. Steele JK, et al. **J Immunol** 1989 Apr 1;142(7):2213–20
Immunodeficiency in graft-versus-host disease (GVHD). II. Effects of GVHD-induced suppressor cells on CD4+ T cell clones. Wall DA, et al. **J Immunol** 1989 Jul 1; 143(1):74–8
Differential in vitro activation of CD4+CD8- and CD8+CD4- herpes simplex virus-specific human cytotoxic T cells. Yasukawa M, et al. **J Immunol** 1989 Sep 15;143(6):2051–7
Estimation of guinea pig antigen-specific and non-specific suppressor cell activity. Haajov K, et al. **J Immunol Methods** 1989 Jun 2;120(1):85–91
Suppressor T cells in mice made unresponsive to skin allografts. Ishii N, et al. **J Invest Dermatol** 1988 Oct; 91(4):333–5
Quantitation and cloning of human urushiol specific peripheral blood T-cells: isolation of urushiol triggered suppressor T-cells. Kalish RS, et al. **J Invest Dermatol** 1989 Jan;92(1):46–52
Differential induction of hematopoiesis and immune suppressor cells in the bone marrow versus in the spleen by Lewis lung carcinoma variants. Young MR, et al. **J Leukoc Biol** 1989 Mar;45(3):262–73
Suppressor T-cell activity in chronic hepatitis B-virus infection: relationship with the presence of HBV-DNA in serum. Iraburu M, et al. **J Med Virol** 1989 Jan; 27(1):39–43
Induction of suppression by a murine nonspecific suppressor-inducer cell line (M1-A5). III. Partial purification of the suppressor cell-inducing factors. Almawi WY, et al. **J Mol Cell Immunol** 1987;3(3):157–66
Activation of help and contrasuppression as essential prerequisites for immune response. Andrighetto G, et al. **J Mol Cell Immunol** 1987;3(4):199–214
Ontogeny of MHC-linked, T cell-mediated suppression is regulated by the T cell genotype. Araneo BA. **J Mol Cell Immunol** 1986;2(4):219–31
Mechanisms involved in the Ir-gene control of T suppressor cell response to lactate dehydrogenase B. Baxevanis CN, et al. **J Mol Cell Immunol** 1984;1(4):201–10
A cloned, antigen-specific, Is-restricted Lyt-1+,2- T cell with suppressive activity. Bottomly K, et al. **J Mol Cell Immunol** 1983;1(1):42–9
The role of suppressor cells in maintaining tolerance to self molecules—a commentary. Flood PM. **J Mol Cell Immunol** 1985;2(3):140–2
The putative I-Jk- strain AKR/J synthesizes I-Jk+ molecules: implications for Jt gene control of I-J expression. Flood PM, et al. **J Mol Cell Immunol** 1985; 2(2):95–103
B cell-deprived mice lack functional expression of certain T suppressor cell subsets. Flood PM, et al. **J Mol Cell Immunol** 1984;1(3):167–76
Discrimination of 2 types of suppressor T cells by cell surface phenotype and by function: the ability to regulate the contrasuppressor circuit. Green DR, et al. **J Mol Cell Immunol** 1983;1(1):19–30
Cloned Lyt-1+, 2- T suppressor cells—a commentary. Hodes RJ. **J Mol Cell Immunol** 1985;2(1):14–6 (12 ref.)
Immunoregulatory pathways in adult responder mice. III. Establishment of a GAT-specific suppressor T cell clone from GAT-tolerant responders which afferently regulates DTH responses. Jenkins MK, et al. **J Mol Cell Immunol** 1985;2(1):1–13
Stimulation of helper T cells and dominant suppressor T cells that recognize autologous insulin. Jensen PE, et al. **J Mol Cell Immunol** 1985;2(3):133–9
The role of suppressor T cells in the expression of immune response gene function. Jensen PE, et al. **J Mol Cell Immunol** 1987;3(5):267–75
Limiting dilution analysis of T cells suppressing the primary antibody response to sheep erythrocytes. Melchers I. **J Mol Cell Immunol** 1987;3(1):1–12
Idiotype-specific T cell suppression of light chain mRNA expression in MOPC-315 cells is accompanied by a posttranscriptional inhibition of heavy chain expression. Milburn GL, et al. **J Mol Cell Immunol** 1984;1(2):115–23
Acquisition of repertoires of suppressor T cells under the influence of macrophages. Soejima T, et al. **J Mol Cell Immunol** 1988;4(2):87–95
The origin of MHC-restriction of suppressor T cells—a commentary. Tada T, et al. **J Mol Cell Immunol** 1986; 2(4):232–3
The expression of idiotypic determinants on suppressor T cells is independent of T cell Igh genotype. Usui M, et al. **J Mol Cell Immunol** 1984;1(5):293–304
Regulation of experimental autoimmune encephalomyelitis. Specificity of the 'recovery-associated' suppressor cells. Varriale S, et al. **J Neuroimmunol** 1989 Mar;22(1):31–40
Dual labelling of circulating CD8 cells in patients with multiple sclerosis. Hughes PJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):118–21
Peripheral blood lymphocyte phenotype and function in multiple sclerosis. Hughes PJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1187–92
Immunoregulatory defects in juvenile rheumatoid arthritis. Comparison between patients with the systemic or polyarticular forms. Alarcon-Riquelme ME, et al. **J Rheumatol** 1988 Oct;15(10):1547–50
Rheumatoid arthritis with T cell subsets suggesting chronic viral infection [letter] Faure GC, et al. **J Rheumatol** 1988

Oct;15(10):1590–1
Autocytotoxic cells in rheumatoid synovial fluids. Sugiyama E, et al. **J Rheumatol** 1989 Mar;16(3):276–9
The regulation of natural killer cell activity by splenic nonspecific suppressor cells and its modification in cancer patients. Yanagawa E, et al. **Jpn J Surg** 1988 Nov; 18(6):660–7
Analysis of immunocompetent cells following inner ear immunostimulation. Takahashi M, et al. **Laryngoscope** 1988 Oct;98(10):1133–8
T cell subsets in patients with systemic lupus erythematosus. Kucharz EJ, et al. **Med Interne** 1988 Jul–Sep;26(3):227–33
Epstein–Barr virus immunosuppression: II. Generation of nonspecific suppressor T lymphocytes in vitro. Sundar SK, et al. **Microb Pathog** 1987 Apr;2(4):259–67
Suppressor T cells in myasthenia gravis. Clementi F, et al. **Monogr Allergy** 1988;25:41–9 (32 ref.)
Suppression of the immune response by cytotoxic T cells [news] Simpson E. **Nature** 1988 Dec 1;336(6198):426
Cellular and humoral immunity in various cohorts of male homosexuals in relation to infection with human immunodeficiency virus. Roos MT, et al. **Neth J Med** 1989 Apr;34(3–4):132–41
Recurrent encephalomyelitis associated with incontinentia pigmenti. Brunquell PJ. **Pediatr Neurol** 1987 May–Jun; 3(3):174–7
Expression of CD3–associated antigen–binding receptors on suppressor T cells. Kuchroo VK, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9209–13
Virus–induced delayed–type hypersensitivity reaction is sequentially mediated by CD8+ and CD4+ T lymphocytes. Moskophidis D, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3291–5
Natural suppressor cells. Maier T, et al. **Prog Clin Biol Res** 1989;288:235–44 (35 ref.)
T cells as helpers and suppressor cells in immunity. Sorensen CM, et al. **Prog Clin Biol Res** 1989;288:109–18
Psychological and immunological predictors of genital herpes recurrence. Kemeny ME, et al. **Psychosom Med** 1989 Mar–Apr;51(2):195–208
Psychoimmunological dysregulation in multiple sclerosis. Foley FW, et al. **Psychosomatics** 1988 Fall;29(4):398–403
26th forum in immunology. Regulation of antibody production by suppressor T cells. **Res Immunol** 1989 Mar–Apr;140(3):285–345
Suppressor cells in rats that have recovered from autoimmune disease. Brostoff SW. **Res Immunol** 1989 Mar–Apr; 140(3):334–7; discussion 339–45
Murine suppressor T cells: mirage or cloudy reality? Herzenberg LA. **Res Immunol** 1989 Mar–Apr;140(3):337–8; discussion 339–45
T suppressor lymphocytes and aspects of immunological tolerance. Kölsch E. **Res Immunol** 1989 Mar–Apr; 140(3):286–90; discussion 339–45 (20 ref.)
Specificity and interactions of CD8+ T suppressor cells. Krzych U, et al. **Res Immunol** 1989 Mar–Apr;140(3):302–7; discussion 339–45 (23 ref.)
Suppressor T cells: an appraisal of their role by in vivo elimination. Leclerc C. **Res Immunol** 1989 Mar–Apr; 140(3):318–23; discussion 339–45 (24 ref.)
Suppressor cells for cell–mediated immunity in infectious diseases. Liew FY. **Res Immunol** 1989 Mar–Apr; 140(3):328–33; discussion 339–45 (16 ref.)
Suppression in an adoptive hapten–carrier system. Pritchard–Briscoe H, et al. **Res Immunol** 1989 Mar–Apr; 140(3):313–7; discussion 339–45
Present understanding of suppressor T cells. Tada T, et al. **Res Immunol** 1989 Mar–Apr;140(3):291–4; discussion 339–45
Suppressor T cells belong to the self–reactive repertoire. Taniguchi M. **Res Immunol** 1989 May;140(4):391–8 (30 ref.)
Are Ts cells involved in isotype–specific regulation? Teillaud JL, et al. **Res Immunol** 1989 Mar–Apr;140(3):323–8; discussion 339–45 (34 ref.)
Immunopathology of human schistosomiasis mansoni. I. Immunomodulatory influences on T cell function. Aldrey O, et al. **Rev Inst Med Trop Sao Paulo** 1988 Nov–Dec; 30(6):393–9
Sporozoite vaccine induces genetically restricted T cell elimination of malaria from hepatocytes. Hoffman SL, et al. **Science** 1989 Jun 2;244(4908):1078–81
Cutaneous T cell lymphoma with suppressor phenotype and function. Salmeron G, et al. **South Med J** 1989 Apr; 82(4):520–4
In vitro suppression of alloreactivity by rhesus monkey bone marrow cells. Carver M, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):231–2
Bone marrow cells that prolong graft survival in ALS–treated mice: suppressor activity in mixed cell culture. De Fazio SR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):228–30
Function and specificity of suppressor T–cells and factors derived from a human renal allograft recipient. Emara M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):361–4
The influence of MHC subregions on the induction of suppressor cells after orthotopic rat liver transplantation. Engemann R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):427–8
Suppression of second–set rejection by cyclosporine–resistant suppressor cells in a rat renal allograft model. Freitas Rodrigues MA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):365–6
Phenotypic characterization of T–suppressor lymphocytes induced by orthotopic rat liver transplantation. Gassel HJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):429–30
Donor–specific transfusion (DST) with intermittent administration of azathioprine induces suppressor T cells and MLR–inhibiting factors without sensitization. Haisa M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1814–7
Regulation of syngeneic graft–versus–host disease by autosuppressor mechanisms. Hess AD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3013–5
Transfusion–induced T suppressor cell activity and experimental tumor growth. Lenhard V, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):580–3
Prolongation of cardiac allograft survival by suppressor T cells (Ts) generated in vitro using cyclosporine. Lenrow DA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):473–4
Differential immunoregulatory effect of allosensitized suppressor T cells on CD4– and CD8–positive T lymphocytes. Loertscher R. **Transplant Proc** 1988 Dec; 20(6):1184–5
The genetic control of the immune response to insulin in the rat. Mizuno K, et al. **Transplant Proc** 1989 Apr; 21(2):3257–8
Functional and phenotypic characteristics of suppressor T–cells in unresponsive rats pretreated with UV–B irradiated donor lymphocytes combined with peritransplant cyclosporine. Oluwole SF, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):484–6
Induction of suppressor T cells by cytokines. Rich RR, et al. **Transplant Proc** 1988 Dec;20(6):1156–7 (7 ref.)
Induction of suppressor T cells in vitro by an autologous alloreactive T cell line propagated from a DSBT–enhanced rat renal allograft. Ruiz P, et al. **Transplant Proc** 1989 Apr; 21(2):3289–91
The role of natural suppression in mediating resistance to antibody–facilitated bone marrow engraftment. Sadelain MW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2982–4
Selective sparing of T suppressor cells by anti interleukin–2 receptor monoclonal antibodies (IL–2R mAbs) in vitro correlates with their therapeutic effects in vivo. Tanaka K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):475–6
Are DST/allograft–induced suppressor cells donor specific? Wakely E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):488–90
Characterization of cloned human suppressor T cells generated from one–way MLC. Yahata H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):224–7
A new immunosuppressive agent, FK506, inhibits the expression of alloantigen–activated suppressor cells as well as the induction of alloreactivity. Yoshimura N, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1045–7
Human suppressor T cells induced in vitro with an autologous renal allograft–derived T cell line. II. Activity and specificity of a soluble suppressor factor. Emara M, et al. **Transplantation** 1989 Feb;47(2):364–71
Differential regulation of activation–associated receptor expression on CD4– and CD8–positive T lymphocytes by allosensitized suppressor T cells. Loertscher R, et al. **Transplantation** 1989 Sep;48(3):473–8
Characteristics and function of suppressor T lymphocytes in immunologically unresponsive rats following pretreatment with UV–B–irradiated donor leukocytes and peritransplant cyclosporine. Oluwole SF, et al. **Transplantation** 1989 Jun;47(6):1001–7
The mechanism of the induction of immunologic unresponsiveness to rat cardiac allografts by recipient pretreatment with donor lymphocyte subsets. Oluwole SF, et al. **Transplantation** 1989 Aug;48(2):281–8
Mediation of the induction of immunologic unresponsiveness following antigen pretreatment by a CD4 (W3/25+) T cell appearing transiently in the splenic compartment and subsequently in the TDL. Quigley RL, et al. **Transplantation** 1989 Apr;47(4):689–96
Mediation of antigen–induced suppression of renal allograft rejection by a CD4 (W3/25+) T cell. Quigley RL, et al. **Transplantation** 1989 Apr;47(4):684–8
Natural suppressor cells derived from adult spleen and thymus. Schwadron RB, et al. **Transplantation** 1989 Jul; 48(1):107–10
Selective sparing of suppressor cells generated in mixed lymphocyte response by an anti–interleukin–2 receptor antibody. Turka LA, et al. **Transplantation** 1989 Jan; 47(1):182–8
Lack of secondary suppressor response in enhanced allografted rats with endogenous suppressor activity in spleen and diminished cytotoxic T cell response. Weir MR, et al. **Transplantation** 1988 Nov;46(5):731–9
Presence of natural suppressor cells in the chicken embryo spleen and the effect of virus infection of the embryo on suppressor cell activity. Sharma JM. **Vet Immunol Immunopathol** 1988 Jul;19(1):51–66
The regulation of herpes simplex virus–specific CTL induction by suppressor cells. Horohov DW, et al. **Viral Immunol** 1987 Spring;1(1):55–68
[In vitro demonstration of a deficit in suppressor T–cell function in alcoholic cirrhosis. Role of hepatitis B virus infection] Vetter D, et al. **Gastroenterol Clin Biol** 1989 Jan; 13(1):60–5 (Eng. Abstr.) **(Fre)**
[T–cell subpopulations and suppressor activity in atopic and infection–induced asthma] Gamkrelidse A, et al. **Allerg Immunol (Leipz)** 1988;34(4):255–9 (Eng. Abstr.) **(Ger)**
[Free T8 antigen and soluble interleukin 2 receptor molecule in patients with sterility] Moncayo–Naveda H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:61–2 **(Ger)**
[Selective effect of personality markers and psychosocial stress on T lymphocyte subpopulations] Kropiunigg U, et al. **Psychother Psychosom Med Psychol** 1989 Jan; 39(1):18–25 (Eng. Abstr.) **(Ger)**
[Cell membrane changes and skin diseases] Rácz I. **Z Hautkr** 1988 Oct 15;63(10):840–5 (Eng. Abstr.) **(Ger)**
[Suppressor T cell function in undifferentiated collagenoses] Becker H, et al. **Z Rheumatol** 1988 May–Jun;47(3):143–5 (Eng. Abstr.) **(Ger)**
[Immunoregulation during aging] Doria G. **Recenti Prog Med** 1988 Jul–Aug;79(7–8):310–3 (Eng. Abstr.) **(Ita)**
[Activation of human CD8+ suppressor T cells by an antigen specific CD4+T cell line] Fukunaga M. **Fukuoka Igaku Zasshi** 1988 Dec;79(12):906–13 (Eng. Abstr.) **(Jpn)**
[Suppressor T cells against delayed type hypersensitivity to Mycobacterium intracellulare] Kitamura K. **Nippon Ika Daigaku Zasshi** 1989 Apr;56(2):187–95 (Eng. Abstr.) **(Jpn)**
[Studies on immune deficiency in chronic renal failure. I. Lymphocyte subset and ConA–induced suppressor cell activity in chronic hemodialysis patients] Yoshida K. **Nippon Jinzo Gakkai Shi** 1988 Jun;30(6):713–9 (Eng. Abstr.) **(Jpn)**
[Effect of cinnarizine on subpopulations of thymus–dependent lymphocytes in the elderly] Małkowska W, et al. **Pol Tyg Lek** 1988 Apr 25;43(17):539–41 (Eng. Abstr.) **(Pol)**
[Effect of lymphoid cells of Peyer's patches on the immunologic response in mice] Gryglewski A, et al. **Przegl Lek** 1988;45(11):765–9 (Eng. Abstr.) **(Pol)**
[Cytotoxic and suppressor activity of human peripheral blood lymphocytes stimulated by interleukin–2 and phytohemagglutinin before and after fractionation in the percoll gradient] Abronina IF, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):327–30 (Eng. Abstr.) **(Rus)**
[Conditions for antitumor cytotoxic T–lymphocyte formation and inhibition of their activity by T–suppressors in mixed culture of human lymphocytes and tumor cells] Abronina IF, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):473–6 (Eng. Abstr.) **(Rus)**
[Suppressor function of the blood lymphocytes in patients with stomach cancer undergoing gastrectomy combined with splenectomy] Kadagidze ZG, et al. **Eksp Onkol** 1988; 10(4):46–9 (Eng. Abstr.) **(Rus)**
[Functional activity of nonspecific suppressors and indicators of lymphocyte blast transformation in patients with occupational allergy] Dovzhanskiĭ IS. **Gig Tr Prof Zabol** 1988 Nov;(11):51–3 **(Rus)**
[The effect of acute respiratory diseases during pregnancy on several characteristics of the T–immunity system in newborn infants] Gambarov SS, et al. **Pediatriia** 1989; (6):18–20 (Eng. Abstr.) **(Rus)**
[T–suppressors and their functional activity in tuberculosis in middle–aged and elderly subjects] Adambekov DA, et al. **Probl Tuberk** 1989;(1):32–4 (Eng. Abstr.) **(Rus)**
[Disturbance of immunogenesis in patients with systemic lupus erythematosus] Adamian NV, et al. **Ter Arkh** 1989; 61(5):43–5 (Eng. Abstr.) **(Rus)**
[Blood T–helper and T–suppressor count of patients with gonorrheal orchido–epididymitis] Glozman VN, et al. **Vestn Dermatol Venerol** 1988;(5):63–5 (Eng. Abstr.) **(Rus)**
[Natural killer cells and T–suppressors in patients with chronic gastritis] Ostrovskiĭ AB. **Vopr Onkol** 1988; 34(12):1464–8 (Eng. Abstr.) **(Rus)**
[The role of suppressor cells in congenital influenza infection in mice] Mirchink EP, et al. **Vopr Virusol** 1988 Nov–Dec; 33(6):659–61 (Eng. Abstr.) **(Rus)**
[Specificity of suppressor cells of the delayed hypersensitivity type for Staphylococcus studied by immunoadsorption] Bekhalo VA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):49–51 (Eng. Abstr.) **(Rus)**
[A study of the ability of Bordetella pertussis toxin to induce the formation of B–suppressors] Pinegin BV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):69–73 (Eng. Abstr.) **(Rus)**

METABOLISM

Divalent metal requirement for soluble immune response suppressor (SIRS) activity. Schnaper HW. **Cell Immunol** 1989 Jan;118(1):157–65
Suppression of interleukin 2 production by sera obtained from hypersensitivity granuloma–bearing mice with defective T cell–mediated immune responses. Kobayashi K, et al. **Immunobiology** 1989 Feb;178(4–5):329–39
Biochemical characterization of an antigen–specific suppressor T cell factor. Matsushita E, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):323–31
1 Alpha,25–dihydroxyvitamin D3 receptor distribution and effects in subpopulations of normal human T lymphocytes. Provvedini DM, et al. **J Clin Endocrinol Metab** 1989 Apr; 68(4):774–9
Production of and response to interleukin–2 in Graves' disease. Eisenstein Z, et al. **J Clin Immunol** 1988 Sep; 8(5):349–55
Specific suppression of anti–DNA production in vitro. Liebling MR, et al. **J Clin Immunol** 1988 Sep;8(5):362–71

Prostaglandin E2 selectively increases interferon gamma receptor expression on human CD8+ lymphocytes. elMasry MN, et al. **J Clin Invest** 1989 Apr;83(4):1436–40

Spontaneous IFN–beta production. A common feature of natural suppressor systems. Cleveland MG, et al. **J Immunol** 1988 Sep 15;141(6):2043–9

Oestrogen and human T lymphocytes: presence of specific receptors in the T–suppressor/cytotoxic subset. Stimson WH. **Scand J Immunol** 1988 Sep;28(3):345–50

Dissociated expression of receptors for interleukin 2 and transferrin in the presence of preformed suppressor T cells and interleukin 2. Loertscher R. **Transplant Proc** 1988 Dec; 20(6):1258–9

PATHOLOGY

The pseudo–Sézary syndrome with CD8 phenotype in a patient with the acquired immunodeficiency syndrome (AIDS). Janier M, et al. **Ann Intern Med** 1989 May 1; 110(9):738–40

T–cell subsets in the cerebrospinal fluid in the course of inflammatory neurological diseases. Stark E. **J Neuroimmunol** 1988 Dec;20(2–3):259–60

Depressed helper–to–suppressor T–cell ratios in early–onset forms of periodontal disease. Kinane DF, et al. **J Periodont Res** 1989 May;24(3):161–4

T suppressor cell index in transplant rejection [letter] Tripathi K, et al. **Nephron** 1989;51(1):122–3

Inflammatory synovial T cells in different activity subgroups of patients with rheumatoid arthritis and juvenile rheumatoid arthritis. Thoen J, et al. **Scand J Rheumatol** 1989;18(2):77–88

PHYSIOLOGY

The effect of in vivo T helper and T suppressor lymphocyte depletion on wound healing. Barbul A, et al. **Ann Surg** 1989 Apr;209(4):479–83

Age–related changes within a suppressor T cell circuit. Doria G, et al. **Cell Immunol** 1989 Aug;122(1):20–32

A soluble factor produced by bone marrow natural suppressor cells blocks interleukin 2 production and activity. Maes LY, et al. **Cell Immunol** 1988 Oct 1; 116(1):35–43

Concanavalin A induced suppressor activity exerted by peripheral blood mononuclear cells—with special reference to chronic inflammatory bowel disease. Davidsen BD. **Dan Med Bull** 1988 Jun;35(3):201–22 (198 ref.)

The interaction between bone marrow immune suppression and hematopoiesis. Michelson JD, et al. **Exp Hematol** 1988 Nov;16(10):815–9

Maternal autoimmune disease influences self–tolerance in offspring: the role of suppressor cells and materno–foetal cell traffic. Gibson J, et al. **Immunol Cell Biol** 1988 Apr; 66 (Pt 2):85–96

Is suppression a function of class II—restricted cytotoxic T cells? Lanzavecchia A. **Immunol Today** 1989 May; 10(5):157–9

Phenotypic analyses and concanavalin–A–induced suppressor cell dysfunction of intrathyroidal lymphocytes from patients with Graves' disease. Ueki Y, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):1018–24

Immunosuppressor response triggers by the interaction of lymphocytes with chagasic IgG. Borda ES, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:280–3

Human suppressor T lymphocyte growth and differentiation. Rich RR, et al. **Trans Am Clin Climatol Assoc** 1987;99:32–40

[Suppressor cell activity in patients with idiopathic dilated cardiomyopathy] Qian H, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr; 16(2):68–71, 125 (Eng. Abstr.) **(Chi)**

[Cytotoxic NK cells: their role and function in the body. III. Mechanism of the cytolytic reaction, the activators and inhibitors of the NK cells, cytokine production and the immunoregulatory function of the NK cells and the effect of the NK cells on the hematopoiesis] Frydecka I. **Przegl Lek** 1988;45(6):535–8 **(Pol)**

RADIATION EFFECTS

The role of suppressor factors in the regulation of immune responses by ultraviolet radiation–induced suppressor T lymphocytes. I. Activity of suppressor cell culture supernatants. Yee GK, et al. **Cell Immunol** 1989 Jun; 121(1):74–87

Ultraviolet–induced suppressor T cells and factor(s) in murine contact photosensitivity. II. Igh–V restriction of T–cell–suppressor factor. Tokura Y, et al. **Clin Immunol Immunopathol** 1989 Apr;51(1):83–90

[Changes in T lymphocyte functions after UV irradiation] Orlicz–Welcz B, et al. **Med Dosw Mikrobiol** 1988; 40(2):103–8 (Eng. Abstr.) **(Pol)**

SECRETION

Suppressor factor secreted by T hybridoma established from peripheral blood lymphocytes of a bone marrow transplantation patient. I. Establishment of human T–cell hybridoma and partial characterization of suppressor factor. Matsuo T, et al. **Cell Immunol** 1988 Oct 15; 116(2):450–66

TRANSPLANTATION

Immediate, long–lasting suppression of autoimmune encephalomyelitis by cell–bound neuroantigen. Hugh AR, et al. **Cell Immunol** 1989 Oct 1;123(1):108–17

Mechanisms maintaining antibody–induced enhancement of allografts. II. Mediation of specific suppression by short lived CD4+ T cells. Pearce NW, et al. **J Immunol** 1989 Jul 15;143(2):499–506

Tolerogen–mediated suppression of the immune response. Suppressor cells as passive transfer agents. Dintzis RZ, et al. **Scand J Immunol** 1988 Dec;28(6):747–57

Suppressor cells and mediators as immunoregulators. Maki T. **Transplant Proc** 1988 Dec;20(6):1204–6 (19 ref.)

Alloantibody and transferable suppressor activity induced by cyclosporine and blood transfusions in the rat. Jones MC, et al. **Transplantation** 1988 Nov;46(5):645–9

In vivo activity of mixed lymphocyte response–generated suppressor cells and ability to prolong cardiac allograft survival in rats. Turka LA, et al. **Transplantation** 1989 Feb; 47(2):388–90

SUPPRESSOR FACTORS, IMMUNOLOGIC

Soluble factors in tolerance and contact sensitivity to 2,4–dinitro–fluorobenzene in mice. IX. A monoclonal T cell suppressor molecule is structurally and serologically related to the alpha/beta T cell receptor. Fairchild RL, et al. **J Immunol** 1988 Nov 15;141(10):3342–8

Identification of the Fc gamma RII–related component of murine IgG–BF. Blank U, et al. **Mol Immunol** 1989 Feb; 26(2):107–14

The soluble immune response suppressor pathway in nephrotic syndrome. Schnaper HW. **Semin Nephrol** 1989 Mar;9(1):107–11 (38 ref.)

ADMINISTRATION & DOSAGE

Preadministration of a T–suppressor factor enhances tumor immunity in DBA/2 mice. Deal H, et al. **Cancer Immunol Immunother** 1989;28(3):193–8

The molecular basis of granuloma formation in schistosomiasis. III. In vivo effects of a T cell–derived suppressor effector factor and IL–2 on granuloma formation. Perrin PJ, et al. **J Immunol** 1989 Jul 15; 143(2):649–54

ANALYSIS

Trophoblast–derived immunoregulatory factor: demonstration of the biological function and the physicochemical characteristics of the factor derived from choriocarcinoma cell lines. Matsuzaki N, et al. **Am J Reprod Immunol** 1989 Apr;19(4):121–7

Serum suppressive activity of HIV seropositive patients. Israel–Biet D, et al. **Clin Exp Immunol** 1988 Nov; 74(2):185–9

Immune modulation by Coxiella burnetii: characterization of a phase I immunosuppressive complex differentially expressed among strains. Waag DM, et al. **Immunopharmacol Immunotoxicol** 1988;10(2):231–60

Biochemical characterization of an antigen–specific suppressor T cell factor. Matsushita E, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):323–31

A circulating suppressive factor of platelet cytotoxic functions after rush immunotherapy in Hymenoptera venom hypersensitivity. Tsicopoulos A, et al. **J Immunol** 1989 Apr 15;142(8):2683–8

Modulation of the immunosuppressive activities by blastocoelic fluid during rabbit pregnancy. Lambert RD, et al. **J Reprod Immunol** 1989 Jul;15(3):257–68

Function and specificity of suppressor T–cells and factors derived from a human renal allograft recipient. Emara M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):361–4

Characterization and analysis of soluble suppressor factor from early human decidual cells. Matsui S, et al. **Transplantation** 1989 Apr;47(4):678–83

BIOSYNTHESIS

Identification of two suppressor factors induced by early pregnancy factor. Rolfe BE, et al. **Clin Exp Immunol** 1988 Aug;73(2):219–25

Role of T–lymphocytes in production of a cancer–associated protein factor in serum from lung cancer patients. Kotlar HK, et al. **Eur J Cancer Clin Oncol** 1988 Nov; 24(11):1763–70

Human suppressor factors constitutively produced by T–T cell hybridomas: functional and biochemical characterization. Kunicka JE, et al. **Hybridoma** 1989 Apr; 8(2):127–51

Human immunosuppressive factors produced by T cell hybridoma. Tsunetsugu–Yokota Y, et al. **Hybridoma** 1989 Aug;8(4):391–400

Nude mice produce a T cell–derived antigen–binding factor that mediates the early component of delayed–type hypersensitivity. Herzog WR, et al. **J Immunol** 1989 Mar 15;142(6):1803–12

Functional analysis of cloned macrophage hybridomas. VII. Modulation of suppressor T cell–inducing activity. Ishikura H, et al. **J Immunol** 1989 Jul 15;143(2):414–9

Production of human bone marrow–derived suppressor factor. Effect on antibody synthesis and lectin–activated cell proliferation. Mortari F, et al. **J Immunol** 1988 Nov 1;141(9):3037–42

Immunomodulatory activity of staphylococcal enterotoxin–B. The induction of an I–J–restricted suppressor factor. Taub DD, et al. **J Immunol** 1989 Aug 1;143(3):813–20

A helper T cell clone produces an antigen–specific molecule (T–ABM) which functions in the induction of suppression. Green DR, et al. **J Mol Cell Immunol** 1987;3(2):95–108

Effect of IL–2 on suppressor factor production. Freire–Moar J, et al. **Lymphokine Res** 1989 Spring;8(1):9–18

A human acute leukemia–derived T–cell line produces two inhibitor factors which suppress lymphocyte proliferation: characterization and purification of the molecules. Montaldo PG, et al. **Lymphokine Res** 1988 Winter; 7(4):413–27

Formation of IgE–binding factors by T cells of patients infected with human immunodeficiency virus type 1. Carini C, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9214–8

BLOOD

Detection of immunoregulatory factors in retroplacental serum in human pregnancy. Yoshida M, et al. **Am J Reprod Immunol** 1989 Apr;19(4):141–5

Serum immunoinhibitory factors in stroke patients. Kostić V, et al. **Eur Neurol** 1988;28(6):331–4

IFN–gamma is not the only mediator of suppressed myelopoiesis produced by mononuclear cells from aplastic anemia patients. Laskay T, et al. **J Biol Regul Homeost Agents** 1987 Jan–Mar;1(1):37–44

The immune response and the eye. III. Anterior chamber–associated immune deviation can be adoptively transferred by serum. Ferguson TA, et al. **J Immunol** 1989 Aug 1;143(3):821–6

Soluble suppressor factor occurring in tolerant baboons conditioned with total lymphoid irradiation. Stark JH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1110–1

DEFICIENCY

Natural killer cell and cytotoxic/suppressor T cell deficiency in peripheral blood in subjects with alopecia areata. Lutz G, et al. **Australas J Dermatol** 1988 Apr;29(1):29–32

IMMUNOLOGY

Production of immunosuppressor factor(s) by preimplantation human embryos [letter] Adinolfi M. **Am J Reprod Immunol Microbiol** 1988 Aug;17(4):156–7

An approach to the unification of suppressor T cell circuits: a simplified assay for the induction of suppression by T cell–derived, antigen–binding molecules (T–ABM). Chue B, et al. **Cell Immunol** 1989 Jan;118(1):30–40

Immunoregulatory effects of a suppressor factor from healthy pregnant women's lymphocytes after progesterone induction. Szekeres–Bartho J, et al. **Cell Immunol** 1989 Sep; 122(2):281–94

T suppressor efferent circuit which affects contact sensitivity to picryl chloride: the late–acting, second nonspecific T suppressor factor bears I–A determinants which are responsible for the I–A genetic restriction in its interaction with its target cell. Zembala M, et al. **Cell Immunol** 1988 Oct 1;116(1):172–82

Ultraviolet–induced suppressor T cells and factor(s) in murine contact photosensitivity. II. Igh–V restriction of T–cell–suppressor factor. Tokura Y, et al. **Clin Immunol Immunopathol** 1989 Apr;51(1):83–90

The suppressor factor NBxFO is not species–specific. Barton BE. **Dev Comp Immunol** 1989 Spring;13(2):197–204

Human hybridoma suppressor factor (HSF) inhibits IL2 production in addition to suppressing immunoglobulin production. Murakami M, et al. **Hybridoma** 1988 Dec; 7(6):595–608

Hybridoma–derived human suppressor factors: differential effects on mouse lymphocytes. Telerman A, et al. **Hybridoma** 1989 Feb;8(1):25–36

The nature and functions of inducer factor and suppressor factor in T cell dialysates. Lawrence HS, et al. **Immunol Lett** 1989 Apr;21(1):75–80

T cell factors involved in the isotype–specific regulation of the IgE antibody response. Ishizaka K. **Int Rev Immunol** 1987 Jan;2(1):1–26 (61 ref.)

IgE class–specific regulatory factor(s) and Fc epsilon receptors on lymphocytes. Suemura M, et al. **Int Rev Immunol** 1987 Jan;2(1):27–42 (26 ref.)

Impaired late suppression of Epstein–Barr virus (EBV)–induced immunoglobulin synthesis: a common feature of autoimmune disease. Shore A, et al. **J Clin Immunol** 1989 Mar;9(2):103–10

Antipeptide antibody specific for the N–terminal of soluble immune response suppressor neutralizes concanavalin A and IFN–induced suppressor cell activity in an in vitro cytotoxic T lymphocyte response. Devens BH, et al. **J Immunol** 1988 Nov 1;141(9):3148–55

Identification of a T cell subset using a rabbit antibody raised against a T suppressor molecule. North J, et al. **J Immunol** 1988 Oct 1;141(7):2268–74

Modulation of experimental allergic encephalomyelitis with anti–T suppressor factor antibodies. Perry LL, et al. **J Immunol** 1988 Nov 1;141(9):3016–21

A monoclonal antibody raised to lipomodulin recognizes T suppressor factors in two independent hapten–specific suppressor networks. Steele JK, et al. **J Immunol** 1989 Apr 1;142(7):2213–20

Biologically active molecules regulating the IgE antibody system: biochemical and biological comparisons of

suppressive factor of allergy (SFA) and enhancing factor of allergy (EFA). Katz DH, et al. **J Mol Cell Immunol** 1984;1(3):157–66

Possible involvement of Ly-1 B cells in the effector phase of IgG suppression mediated by suppressor T cell factor. Ono K, et al. **J Mol Cell Immunol** 1987;3(3):167–75

T-cell suppressor factors play an integral role in preventing fetal rejection. Ribbing SL, et al. **J Reprod Immunol** 1988 Oct;14(1):83–95

Direct demonstration that an antigen-specific suppressor factor purified from extracts of T cell hybridomas binds antigen and bears I-J determinants. Krupen KI, et al. **Lymphokine Res** 1988 Winter;7(4):429–44

ISOLATION & PURIFICATION

Partial characterization of suppressor factors in spleen cell culture supernatants of Mycobacterium lepraemurium–infected mice. Richard L, et al. **Adv Exp Med Biol** 1988;239:279–85

Hydatidiform mole macromolecules inhibit interleukin-2–mediated murine lymphocyte proliferation in vitro. Bennett WA, et al. **Am J Reprod Immunol Microbiol** 1988 Nov;18(3):76–80

Delineation between T- and B-suppressive molecules from human seminal plasma: I. Partial characterization of a 180-kD protein inhibiting the B response to T-independent antigens. Bouvet JP, et al. **Am J Reprod Immunol Microbiol** 1988 Nov;18(3):87–93

Partial purification of an immunosuppressive protein from a human tumor cell line and analysis of its relationship to transforming growth factor beta. Romeo DS, et al. **Cell Immunol** 1989 Sep;122(2):483–92

Purification of a suppressor lymphokine (SL) from a human T-cell line. Abolhassani M, et al. **Immunol Invest** 1989 Jul; 18(6):741–51

Human embryo associated immunosuppressor factor(s) from pre- and post-implantation stages share some similarities. Bose R. **Immunol Lett** 1989 Mar;20(4):261–7

Lung derived surface active material (SAM) inhibits natural killer cell tumor cytotoxicity. Baughman RP, et al. **J Clin Lab Immunol** 1989 Feb;28(2):51–4

Purification and analysis of an antigen-specific suppressor factor from a T cell hybridoma specific for phenyltrimethylamino hapten. Webb DR, et al. **J Immunol** 1989 Jan 1;142(1):224–9

Induction of suppression by a murine nonspecific suppressor-inducer cell line (M1–A5). III. Partial purification of the suppressor cell–inducing factors. Almawi WY, et al. **J Mol Cell Immunol** 1987;3(3):157–66

Chemical features of an antigen-specific suppressor T cell factor composed of two polypeptide chains. Saito T, et al. **J Mol Cell Immunol** 1984;1(3):137–45

Purification and characterisation of an immunosuppressive factor from normal human seminal plasma. Saxena S, et al. **J Reprod Immunol** 1988 Jul;13(2):133–46

Soluble suppressor factor from human decidual cells. Matsui S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):569–71

METABOLISM

Divalent metal requirement for soluble immune response suppressor (SIRS) activity. Schnaper HW. **Cell Immunol** 1989 Jan;118(1):157–65

Expression of low-affinity receptor for IgE (Fc epsilon RII, CD23) and IgE-BF (soluble CD23) release by lymphoblastoid B-cell line RPMI-8866 and human peripheral lymphocytes of normal and atopic donors. Bujanowski-Weber J, et al. **Immunology** 1989 Apr; 66(4):505–11

PHARMACOLOGY

Inhibition of lymphocyte-mediated antibacterial activity by human seminal plasma. De Simone C, et al. **Am J Reprod Immunol Microbiol** 1988 May;17(1):1–4

The induction of T-suppressor cells with a soluble extract of Candida albicans. Cuff CF, et al. **Cell Immunol** 1989 Aug;122(1):71–82

Regulation of autoimmunity in normal and rheumatoid individuals by bone marrow-derived natural suppressor cells and their suppressor factor: BDSF. Weingust RW, et al. **Cell Immunol** 1989 Aug;122(1):154–63

Suppression of polyclonal B cell proliferation mediated by supernatants from human myeloma bone marrow cell cultures. Peest D, et al. **Clin Exp Immunol** 1989 Feb; 75(2):252–7

Down-regulation of suppressor cell induction. Kuchroo VK, et al. **Immunology** 1988 Aug;64(4):633–42

The glioblastoma-derived T-cell suppressor factor/transforming growth factor beta 2 inhibits the generation of lymphokine-activated killer (LAK) cells. Kuppner MC, et al. **Int J Cancer** 1988 Oct 15;42(4):562–7

Blocking of lymphocyte surface binding sites for the soluble suppressor factor by protein-bound polysaccharide, PSK. Toge T, et al. **Int J Immunopharmacol** 1989;11(1):9–12

Analysis of site of action of a choriocarcinoma-derived immunoregulatory factor on IL-2–mediated T cell responses. Matsuzaki N, et al. **J Reprod Immunol** 1989 Jul; 15(3):181–94

Prevention of tumor growth and enhancement of cell-mediated immunity by an antigen-specific contrasuppressor factor from a T cell hybridoma. Friedman AM, et al. **Prog Clin Biol Res** 1989;288:281–8

PHYSIOLOGY

Glioblastoma-cell-derived T-cell suppressor factor (G-TsF). Sequence analysis and biologic mechanism of G-TsF. Siepl C, et al. **Ann N Y Acad Sci** 1988;540:437–9

Suppression of the generation of lymphokine-activated killer (LAK) cells by serum-free supernatants of in vitro maintained tumour cell lines. Guillou PJ, et al. **Br J Cancer** 1989 Apr;59(4):515–21

A soluble factor produced by bone marrow natural suppressor cells blocks interleukin 2 production and activity. Maes LY, et al. **Cell Immunol** 1988 Oct 1; 116(1):35–43

Mode of action of monoclonal-nonspecific suppressor factor (MNSF) produced by murine hybridoma. Nakamura M, et al. **Cell Immunol** 1988 Oct 1;116(1):230–9

The role of suppressor factors in the regulation of immune responses by ultraviolet radiation–induced suppressor T lymphocytes. I. Activity of suppressor cell culture supernatants. Yee GK, et al. **Cell Immunol** 1989 Jun; 121(1):74–87

The role of suppressor factors in the regulation of immune responses by ultraviolet radiation–induced suppressor T lymphocytes. II. Activity of suppressor cell culture sonicates. Yee GK, et al. **Cell Immunol** 1989 Jun; 121(1):88–98

Characterization of a suppressive factor of platelet cytotoxic functions in human and rat schistosomiasis mansoni. Pancré V, et al. **Clin Exp Immunol** 1989 Jun;76(3):417–21

Characterization of the macrophage subset affected and its response to a T suppressor factor (TsFmp) found in cryptococcosis. Blackstock R, et al. **Infect Immun** 1989 Oct; 57(10):2931–7

Characterization of a suppressor factor that regulates phagocytosis by macrophages in murine cryptococcosis. Blackstock R, et al. **Infect Immun** 1989 Jun;57(6):1773–9

Isotype-specific suppression of IgE synthesis in a human myeloma cell line (U-266) by an IgE-binding protein derived from normal human peripheral blood cells. Jernberg H, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):114–5

IgE-dependent killing of Schistosoma mansoni schistosomula by human platelets: modulation by T cell products. Pancré V, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):371–5

Immunoregulation of human natural killer cells (NK) by corticosteroids: inhibitory effect of culture supernatants. Nair MP, et al. **J Allergy Clin Immunol** 1988 Dec; 82(6):1089–97

Active suppression of host-vs graft reaction in pregnant mice. IX. Soluble suppressor activity obtained from allopregnant mouse decidua that blocks the cytolytic effector response to IL-2 is related to transforming growth factor-beta. Clark DA, et al. **J Immunol** 1988 Dec 1;141(11):3833–40

The antigen-binding T cell factor PCI-F sensitizes mast cells for in vitro release of serotonin. Comparison with monoclonal IgE antibody. Meade R, et al. **J Immunol** 1988 Oct 15;141(8):2704–13

The molecular basis of granuloma formation in schistosomiasis. II. Analogies of a T cell–derived suppressor effector factor to the T cell receptor. Perrin PJ, et al. **J Immunol** 1989 Feb 1;142(3):985–91

Suppressor cells and mediators as immunoregulators. Maki T. **Transplant Proc** 1988 Dec;20(6):1204–6 (19 ref.)

SECRETION

Inhibition of bovine peripheral blood mononuclear cell blastogenesis by fractionated mammary secretion. Torre PM, et al. **Comp Biochem Physiol [B]** 1989;92(1):157–65

Human hybridoma suppressor factor acts selectively on CD4+ cells. Tomita Y, et al. **Immunopharmacology** 1988 Nov-Dec;16(3):199–205

Suppression of lymphocyte proliferation by proteins secreted by cultured Sertoli cells. Wyatt CR, et al. **J Reprod Immunol** 1988 Oct;14(1):27–40

SUPPRESSOR MUTATION see SUPPRESSION, GENETIC

SUPPRESSOR T-CELL FACTORS see SUPPRESSOR FACTORS, IMMUNOLOGIC

SUPPRESSOR TRANSFER RNA see RNA, TRANSFER

SUPPURATION

BLOOD

[The relation of the erythrocyte sedimentation rate and leukocyte count in children with pyo-inflammatory diseases] Akhmedov MA, et al. **Lab Delo** 1989;(1):59 (Rus)

DRUG THERAPY

[Use of decamethoxine in treating suppurative-inflammatory diseases in children] Palii GK, et al. **Klin Khir** 1988;(6):48–9 (Eng. Abstr.) (Rus)

ETIOLOGY

Transient hypopyon with marked anterior chamber fibrin following pars plana vitrectomy and silicone oil injection. Johnson RN, et al. **Arch Ophthalmol** 1989 May;107(5):683–6

[Development of a data bank for control of antibiotic resistant causative agents of purulent-inflammatory diseases and complications] Bekbergenov BM, et al. **Antibiot Khimioter** 1988 Oct;33(10):782–5 (Eng. Abstr.) (Rus)

METABOLISM

Change of glycosaminoglycan in pus of patients with purulent pleurisy. Masuda H, et al. **Biochem Med Metab Biol** 1989 Apr;41(2):155–63

MICROBIOLOGY

Importance of group G streptococci in human pyogenic infections. Brahmadathan KN, et al. **J Trop Med Hyg** 1989 Feb;92(1):35–8

[Seasonal changes in the frequency of isolating strict anaerobes in purulent-inflammatory processes] Bazhenov LG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr; (4):35–7 (Eng. Abstr.) (Rus)

[Comparative study of the microflora in suppurative-inflammatory diseases of various sites] Pashkov EP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):52–6 (Rus)

SURGERY

[Closed active drainage of postoperative and postinjection suppurative complications] Pushkarev NI, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):78 (Rus)

THERAPY

[Endovascular laser irradiation of the blood in the combined treatment of suppurative-septic diseases in children] Sychev PS, et al. **Klin Khir** 1988;(6):45–7 (Eng. Abstr.) (Rus)

SUPRACHIASMATIC NUCLEUS

ANATOMY & HISTOLOGY

Morphometric analysis of the suprachiasmatic and paraventricular nuclei in the human brain: sex differences and age-dependent changes. Hofman MA, et al. **J Anat** 1988 Oct;160:127–43

CYTOLOGY

The retinohypothalamic tract in the cat: retinal ganglion cell morphology and pattern of projection. Murakami DM, et al. **Brain Res** 1989 Mar 20;482(2):283–96

Organization of lateral geniculate-hypothalamic connections in the rat. Card JP, et al. **J Comp Neurol** 1989 Jun 1; 284(1):135–47

Retinotopic organization of central optic projections in Rana pipiens. Montgomery N, et al. **J Comp Neurol** 1989 May 22;283(4):526–40

Plasticity of postsynaptic density material in optic synapses of the suprachiasmatic nucleus in the senescent rat. Güldner FH, et al. **Mech Ageing Dev** 1988 Aug;44(2):169–74

DRUG EFFECTS

Bilateral suprachiasmatic injection of naloxone disrupts circadian rhythm of food intake. Reghunandanan V, et al. **Indian J Exp Biol** 1988 Dec;26(12):954–6

Changes in the feeding behavior of rats elicited by histamine infusion. Itowi N, et al. **Physiol Behav** 1988;44(2):221–6

Perturbations of locomotor activity rhythms following suprachiasmatic bungarotoxin infusion. Pauly JR, et al. **Physiol Behav** 1988;43(6):859–65

EMBRYOLOGY

Direct in utero perception of light by the mammalian fetus. Weaver DR, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):151–5

GROWTH & DEVELOPMENT

Anatomic and functional development of the suprachiasmatic nuclei in the gray short-tailed opossum. Rivkees SA, et al. **J Neurosci** 1988 Nov;8(11):4269–76

METABOLISM

Diurnal variation in vasopressin and oxytocin messenger RNAs in hypothalamic nuclei of the rat. Burbach JP, et al. **Brain Res** 1988 Sep;464(2):157–60

No evidence for a circadian rhythm of protein synthesis in the rat suprachiasmatic nuclei. Scammell TE, et al. **Brain Res** 1989 Aug 7;494(1):155–8

Nerve growth factor receptor immunoreactivity in the rat suprachiasmatic nucleus. Sofroniew MV, et al. **Brain Res** 1989 Jan 9;476(2):358–62

Localization of vasoactive intestinal peptide and peptide histidine isoleucine immunoreactivity and mRNA within the rat suprachiasmatic nucleus. Stopa EG, et al. **Brain Res** 1988 Dec;464(4):319–25

The serotonin-immunoreactive system of the suprachiasmatic nucleus in the hibernating ground squirrel, Spermophilus richardsonii. Nürnberger F, et al. **Cell Tissue Res** 1989 Jun; 256(3):593–9

Lactation elevates vasoactive intestinal peptide messenger ribonucleic acid in rat suprachiasmatic nucleus. Gozes I, et al. **Endocrinology** 1989 Jan;124(1):181–6

Diurnal rhythm of melatonin binding in the rat suprachiasmatic nucleus. Laitinen JT, et al. **Endocrinology** 1989 Mar;124(3):1585–7

Changes in the cytoplasmic RNA content in neurons of the nucleus suprachiasmaticus following a single dose of kainic acid. Lach H, et al. **Folia Biol (Krakow)** 1989;37(1–2):55–9

Ultrastructural relationships of serotonin and GABA terminals in the rat suprachiasmatic nucleus. Evidence for a close interconnection between the two afferent systems. Bosler O. **J Neurocytol** 1989 Feb;18(1):105–13

Effects of ovariectomy and estradiol replacement on the binding of 125I–neurotensin in rat suprachiasmatic nucleus. Moyse E, et al. **Neuroendocrinology** 1988 Jul;48(1):53–60

Vasoactive intestinal peptide (VIP)–like immunoreactive neurons located in the rat suprachiasmatic nucleus receive a direct retinal projection. Ibata Y, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):1–5

Circadian changes in the RNA content of rat hypothalamic nuclei in relation to food intake. Noskovič P, et al. **Physiol Bohemoslov** 1989;38(2):127–33

PATHOLOGY

Lesions in suprachiasmatic nuclei simulate effects of pinealectomy on prolactin release in ovariectomized and sulpiride–treated female rats. Acuña D, et al. **Experientia** 1989 Aug 15;45(8):739–42

PHYSIOLOGY

The central regulation of circadian rhythms or: the story of a biological clockwork pattern. Rietveld WJ. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):317–25

Inhibitor of protein synthesis phase shifts a circadian pacemaker in mammalian SCN. Inouye ST, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R1055–8

Suprachiasmatic nucleus: phase–dependent activation during the hibernation cycle. Kilduff TS, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R605–12

Suprachiasmatic nuclei influence torpor and circadian temperature rhythms in hamsters. Ruby NF, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R210–5

SCN lesions abolish ultradian and circadian components of activity rhythms in LEW/Ztm rats. Wollnik F, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1027–39

Influences of the paraventricular and suprachiasmatic nuclei and olfactory bulbs on melatonin responses in the golden hamster. Bittman EL, et al. **Biol Reprod** 1989 Jan; 40(1):118–26

Responses of the suprachiasmatic nucleus to retinohypothalamic tract volleys in a slice preparation of the mouse hypothalamus. Cahill GM, et al. **Brain Res** 1989 Feb 6;479(1):65–75

Effects of excitatory amino acid receptor antagonists and agonists on suprachiasmatic nucleus responses to retinohypothalamic tract volleys. Cahill GM, et al. **Brain Res** 1989 Feb 6;479(1):76–82

Circadian variation of [14C]2–deoxyglucose uptake within the suprachiasmatic nucleus of the house sparrow, Passer domesticus. Cassone VM. **Brain Res** 1988 Aug 30; 459(1):178–82

Circadian rhythm of the rat suprachiasmatic brain slice is rapidly reset by daytime application of cAMP analogs. Gillette MU, et al. **Brain Res** 1988 Dec 6;474(2):348–52

Single unit response of suprachiasmatic neurons to arginine vasopressin (AVP) is mediated by a V1–like receptor in the hamster. Liou SY, et al. **Brain Res** 1989 Jan 16; 477(1–2):336–43

Suprachiasmatic nucleus responsiveness to photic and basal hypothalamic stimulation. Kreisel B, et al. **Brain Res Bull** 1978 Nov–Dec;3(6):707–14

Periodic feeding of SCN–lesioned pregnant rats entrains the fetal biological clock. Weaver DR, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):291–6

Lack of similarity between the effect of lesions of the suprachiasmatic nucleus and subparaventricular hypothalamic zone on behavioral circadian rhythms. Cipolla–Neto J, et al. **Braz J Med Biol Res** 1988;21(3):653–4

Lithium chloride SCN injection alters the circadian rhythm of food intake. Reghunandanan V, et al. **Chronobiol Int** 1989;6(2):123–9

The need for both macroscopy and microscopy in dealing with spectral structure. Cornélissen G, et al. **Chronobiologia** 1988 Oct–Dec;15(4):323–7

The master clock illusion. Powell EW. **Chronobiologia** 1988 Oct–Dec;15(4):321–2

Central administration of muscimol phase–shifts the mammalian circadian clock. Smith RD, et al. **J Comp Physiol [A]** 1989 Feb;164(6):805–14

Specificity of circadian function in transplants of the fetal suprachiasmatic nucleus. Earnest DJ, et al. **J Neurosci** 1989 Aug;9(8):2671–7

Synaptogenesis in the rat suprachiasmatic nucleus demonstrated by electron microscopy and synapsin I immunoreactivity. Moore RY, et al. **J Neurosci** 1989 Jun; 9(6):2151–62

The mammalian circadian clock in the suprachiasmatic nuclei is reset in vitro by cAMP. Prosser RA, et al. **J Neurosci** 1989 Mar;9(3):1073–81

Electrical properties and activities of single neurons in rat suprachiasmatic nuclei. Akasu T, et al. **Kurume Med J** 1988; 35(4):217–20

The pharmacologic induction of prolactin release in the medial preoptic/suprachiasmatic nuclei–lesioned, estrogen–treated ovariectomized rat. Pan JT, et al. **Life Sci** 1988;43(23):1929–34

The electrophysiological effects of melatonin and a putative melatonin antagonist (N–acetyltryptamine) on rat suprachiasmatic neurones in vitro. Mason R, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):296–301

Two brain nuclei controlling circadian rhythms are identified by GFAP immunoreactivity in hamsters and rats. Morin LP, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):55–60

Effects of methamphetamine upon circadian rhythms in multiple unit activity inside and outside the suprachiasmatic nucleus in the golden hamster (Mesocricetus auratus). Omata K, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):218–22

Effects of melatonin on neuronal activity in the rat suprachiasmatic nucleus in vitro. Shibata S, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):140–4

Propranolol and methylatropine antagonize the cardiovascular effects produced by microinjection of the TRH analog MK–771 into the preoptic suprachiasmatic nucleus. Sills MA, et al. **Peptides** 1988 Jul–Aug;9(4):893–8

Methamphetamine induced locomotor rhythm entrains to restricted daily feeding in SCN lesioned rats. Honma S, et al. **Physiol Behav** 1989 May;45(5):1057–65

Rhythms in behaviors, body temperature and plasma corticosterone in SCN lesioned rats given methamphetamine. Honma S, et al. **Physiol Behav** 1988; 44(2):247–55

Running wheel activity in hamsters with hypothalamic damage. Johnson RF, et al. **Physiol Behav** 1988; 43(6):755–63

Neurophysiology of the suprachiasmatic circadian pacemaker in rodents. Meijer JH, et al. **Physiol Rev** 1989 Jul; 69(3):671–707 (282 ref.)

cGMP induces phase shifts of a mammalian circadian pacemaker at night, in antiphase to cAMP effects. Prosser RA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6812–5

[Effect of destruction of the hypothalamic suprachiasmatic nuclei on the dynamics of swimming and haloperidol–induced catalepsy in rats] Arushanian EB, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1221–7 (Eng. Abstr.) **(Rus)**

SURGERY

Effects of suprachiasmatic nuclear ablation and melatonin on delayed implantation in the spotted skunk. Berria M, et al. **Neuroendocrinology** 1988 Oct;48(4):371–5

ULTRASTRUCTURE

An ultrastructural study of the geniculo–suprachiasmatic projection in the rat. Cosenza RM. **Microsc Electron Biol Celular** 1987 Dec;11(2):159–65

[Morphometrical analysis over a 24–hour period in the rat suprachiasmatic nucleus under the different lighting conditions] Tamai K. **Fukuoka Igaku Zasshi** 1988 Dec; 79(12):879–905 (Eng. Abstr.) **(Jpn)**

SUPRANUCLEAR PALSY, PROGRESSIVE

[Progressive supranuclear palsy in a 29–year–old woman. Birth of a normal child (letter)] Leroy F, et al. **Presse Med** 1989 Feb 4;18(4):182 **(Fre)**

CEREBROSPINAL FLUID

Decrease in a proenkephalin peptide in cerebrospinal fluid in Huntington's disease and progressive supranuclear palsy. Iadarola MJ, et al. **Brain Res** 1989 Feb 13;479(2):397–401

COMPLICATIONS

Seizures in progressive supranuclear palsy. Nygaard TG, et al. **Neurology** 1989 Jan;39(1):138–40

Dementia and communication pathology: two case examples. Penn C, et al. **S Afr J Commun Disord** 1988;35:65–74

[Progressive supranuclear palsy accompanied with progressive subcortical vascular encephalopathy of Binswanger type—a case report] Kohara N, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):191–5 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Parkinson's mime. Kedas A, et al. **Geriatr Nurs (New York)** 1989 Jul–Aug;10(4):182–3

MR imaging in progressive supranuclear palsy and Shy–Drager syndrome. Savoiardo M, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):555–60

Progressive supranuclear palsy: a case report. Scholer SG, et al. **Nebr Med J** 1988 Aug;73(8):263–5

DRUG THERAPY

Progressive supranuclear palsy with agitation: response to trazodone but not to thiothixine or carbamazepine. Schneider LS, et al. **J Geriatr Psychiatry Neurol** 1989 Apr–Jun;2(2):109–12

Failure of cholinergic agonist RS–86 to improve cognition and movement in PSP despite effects on sleep. Foster NL, et al. **Neurology** 1989 Feb;39(2 Pt 1):257–61

[Treatment of progressive supranuclear palsy] Finali G, et al. **Clin Ter** 1989 Jun 15;129(5):339–51 (153 ref.) (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

Antigenic characteristics of neurofibrillary tangles in progressive supranuclear palsy. Galloway PG. **Neurosci Lett** 1988 Aug 31;91(2):148–53

METABOLISM

Cerebral hypometabolism in progressive supranuclear palsy studied with positron emission tomography. Foster NL, et al. **Ann Neurol** 1988 Sep;24(3):399–406

Positron tomography demonstrates frontal lobe hypometabolism in progressive supranuclear palsy. Goffinet AM, et al. **Ann Neurol** 1989 Feb;25(2):131–9

Alz 50 recognizes abnormal filaments in Alzheimer's disease and progressive supranuclear palsy. Tabaton M, et al. **Ann Neurol** 1988 Sep;24(3):407–13

[3H]GBR 12935 binding to dopamine uptake sites: subcellular localization and reduction in Parkinson's disease and progressive supranuclear palsy. Maloteaux JM, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):331–40

Somatostatin concentrations and binding sites in human frontal cortex are differentially affected in Parkinson's disease associated dementia and in progressive supranuclear palsy. Epelbaum J, et al. **J Neurol Sci** 1988 Nov; 87(2–3):167–74

D1 and D2–type dopamine receptors in patients with Parkinson's disease and progressive supranuclear palsy. Pierot L, et al. **J Neurol Sci** 1988 Sep;86(2–3):291–306

Decrease of serotonin–S2 receptors in temporal cortex of patients with Parkinson's disease and progressive supranuclear palsy. Maloteaux JM, et al. **Mov Disord** 1988; 3(3):255–62

Striatal phosphoproteins in Parkinson disease and progressive supranuclear palsy. Girault JA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2493–7

NURSING

Progressive supranuclear palsy: nursing care implications. Christensen RS. **J Neurosci Nurs** 1988 Oct;20(5):296–302

PATHOLOGY

Progressive supranuclear palsy with hypertrophy of the olives. An immunocytochemical study of the cytoskeleton of argyrophilic neurons. Giaccone G, et al. **Acta Neuropathol (Berl)** 1988;77(1):14–20

Pathology of the dentate nucleus in progressive supranuclear palsy: a histological, immunohistochemical and ultrastructural study. Mizusawa H, et al. **Acta Neuropathol (Berl)** 1989;78(4):419–28

Progressive supranuclear palsy: extensive neuropil threads in addition to neurofibrillary tangles. Very similar antigenicity of subcortical neuronal pathology in progressive supranuclear palsy and Alzheimer's disease. Probst A, et al. **Acta Neuropathol (Berl)** 1988;77(1):61–8

Selective decrease of large neurons in the neostriatum in progressive supranuclear palsy. Oyanagi K, et al. **Brain Res** 1988 Aug 23;458(2):218–23

Severe cerebral atrophy in progressive supranuclear palsy: a case report. Akashi T, et al. **Clin Neuropathol** 1989 Jul–Aug;8(4):195–9

Early progressive supranuclear palsy: pathology and clinical presentation. Kleinschmidt–DeMasters BK. **Clin Neuropathol** 1989 Mar–Apr;8(2):79–84

Neuropathologic findings in progressive supranuclear palsy. A brief review with two additional case reports. Kida M, et al. **J Clin Neuro Ophthalmol** 1988 Sep;8(3):161–70 (36 ref.)

A case of progressive subcortical gliosis presenting clinically as Steele–Richardson–Olszewski syndrome. Will RG, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1224–7

"Grumose degeneration" of the dentate nucleus. A light and electron microscopic study in progressive supranuclear palsy and dentatorubropallidoluysial atrophy. Arai N. **J Neurol Sci** 1989 Apr;90(2):131–45

Properties of antigenic determinants that distinguish neurofibrillary tangles in progressive supranuclear palsy and Alzheimer's disease. Schmidt ML, et al. **Lab Invest** 1988 Oct;59(4):460–6

[The reappraisal study of the ultrastructure of Alzheimer's neurofibrillary tangles in three cases of progressive supranuclear palsy] Amano N, et al. **No To Shinkei** 1989 Jan;41(1):35–44 (27 ref.) (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Sleep abnormalities in progressive supranuclear palsy. Aldrich MS, et al. **Ann Neurol** 1989 Jun;25(6):577–81

Slowing of cognitive processing in progressive supranuclear palsy. A comparison with Parkinson's disease. Dubois B, et al. **Arch Neurol** 1988 Nov;45(11):1194–9

Lateral visually–guided saccades in progressive supranuclear palsy. Pierrot–Deseilligny C, et al. **Brain** 1989 Apr;112 (Pt 2):471–87

Increased wave P 300 latency in progressive supranuclear palsy. Pierrot–Deseilligny C, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):656–8

[Inability to voluntarily close the eyes. Discussion of supranuclear disorders in palpebral closure based on 2 cases, with a review of the literature] Ghika J, et al. **Schweiz Arch Neurol Psychiatr** 1988;139(6):5–21 (86 ref.)

(Eng. Abstr.) (Fre)
[Ocular motor abnormalities in progressive supranuclear palsy] Okuma Y, et al. **No To Shinkei** 1989 Feb;41(2):125–32 (Eng. Abstr.) (Jpn)

PSYCHOLOGY

Memory impairment in patients with progressive supranuclear palsy. Litvan I, et al. **Arch Neurol** 1989 Jul; 46(7):765–7

RADIOGRAPHY

Computed tomographic findings in progressive supranuclear palsy: correlation with clinical grade. Schonfeld SM, et al. **Mov Disord** 1987;2(4):263–78

SURGERY

Autologous adrenal medullary transplant in progressive supranuclear palsy. Koller WC, et al. **Neurology** 1989 Aug; 39(8):1066–8

SUPRAOPTIC NUCLEUS

ANALYSIS

A versatile means of intracellular labeling: injection of biocytin and its detection with avidin conjugates. Horikawa K, et al. **J Neurosci Methods** 1988 Aug;25(1):1–11
[Decrease in the immunoreactivity of protein 7B2 in vasopressinergic cells in the supraoptic nucleus and in fibers of the neurohypophysis, in Brattleboro rats] Marcinkiewicz M, et al. **C R Acad Sci [III]** 1988;307(12):689–94 (Eng. Abstr.) (Fre)

CYTOLOGY

Diagonal band projection towards the hypothalamic supraoptic nucleus: light and electron microscopic observations in the rat. Jhamandas JH, et al.
J Comp Neurol 1989 Apr 1;282(1):15–23
[Electrophysiologic study of hippocampal projections to the neurosecretory cells of the supraoptic nucleus in rats] Prutskova NP, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):297–304 (Eng. Abstr.) (Rus)

DRUG EFFECTS

A karyometric study of the supraoptic and paraventricular nuclei of the hypothalamus of kainic acid–treated mice. Srebro Z, et al. **Folia Biol (Krakow)** 1988;36(1–2):53–8
Changes in cytoplasmic RNA content in neurons of the supraoptic and paraventricular nuclei in mice treated with kainic acid. Srebro Z, et al. **Folia Biol (Krakow)** 1988; 36(1–2):103–8
Influence of vincristine on the neurosecretory nuclei of the hypothalamo–neurohypophyseal system of the developing rat. Pietrzak M. **Neuropatol Pol** 1988;26(4):521–35
Sex-specific effects of met-enkephalin treatment on vasopressin immunoreactivity in the rat supraoptic nucleus. Blanco E, et al. **Neuropeptides** 1989 Feb–Mar;13(2):115–20

EMBRYOLOGY

Quantitative and morphometric parameters determining the development of the supraoptic nucleus in the albino rat. Bentura Remacha ML, et al. **Acta Anat (Basel)** 1988; 133(2):111–7
The vasopressin gene is expressed prior to regulation in the supraoptic nuclei of fetal rats. Reppert SM, et al.
Brain Res 1988 Jul 26;456(2):392–6

ENZYMOLOGY

Tyrosine hydroxylase–containing neurons in the supraoptic and paraventricular nuclei of the adult human. Li YW, et al. **Brain Res** 1988 Sep 27;461(1):75–86
Choline acetyltransferase immunocytochemical staining of the rat supraoptic nucleus and its surroundings. A light- and electron-microscopic study. Theodosis DT, et al.
Cell Tissue Res 1988 Oct;254(1):119–24
Acetylcholinesterase and choline acetyltransferase activity in some hypothalamic nuclei under immobilization stress in rats. Fatranská M, et al. **Endocrinol Exp** 1989 Mar; 23(1):3–10
[Influence of electro acupuncture and electroacupuncture–adrenalectomy upon 5'-nucleotidase in the nuclets supraopticus] Wang ZY, et al.
Chen Tzu Yen Chiu 1988;13(2):110–3, 118 (Eng. Abstr.) (Chi)

GROWTH & DEVELOPMENT

Topographical development of the supraoptic nucleus of the rat. Lazcano MA, et al. **Arch Histol Cytol** 1988 Oct; 51(4):349–59
Vasopressin and oxytocin gene expression in the supraoptic and paraventricular nucleus of the spontaneously hypertensive rat (SHR) during development of hypertension. van Tol HH, et al. **Brain Res** 1988 Dec; 464(4):303–11
Nucleoli numbers and neuronal growth in supraoptic nucleus neurons during postnatal development in the rat. Crespo D, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):151–5

METABOLISM

Cultured hypothalamic explants from spontaneously hypertensive rats have decreased vasopressin and oxytocin content and release. Bennett BA, et al.
Am J Hypertens 1989 Jan;2(1):46–51
Diurnal variation in vasopressin and oxytocin messenger RNAs in hypothalamic nuclei of the rat. Burbach JP, et al. **Brain Res** 1988 Sep;464(2):157–60
Does acute, intense stimulation of oxytocin neurones in the supraoptic nucleus increase their content of oxytocin mRNA? Sumner BE, et al. **Brain Res** 1989 Jun 12; 489(2):283–90
Cytophotometric analysis of T-2 toxin induced alterations in chromatin condensation and neuronal nuclear volume of rat supraoptic–magnocellular neurons. Ballough GP, et al. **Life Sci** 1989;45(2):189–96
Immuno-gold staining of leu-enkephalin in the rat hypothalamic neurosecretory nuclei. Gajkowska B, et al. **Neuropatol Pol** 1988;26(2):203–10
Modulation of hypothalamic cholecystokinin receptor density with changes in magnocellular activity: a quantitative autoradiographic study. Day NC, et al.
Neuroscience 1989;29(2):371–83
Oxytocin release evoked by electrical stimulation of the medial forebrain in the rat: analysis of stimulus parameters and supraoptic neuronal activity. Ingram CD, et al.
Neuroscience 1988 Nov;27(2):597–605
Differential distribution of acetylcholinesterase activity among vasopressin- and oxytocin-containing supraoptic magnocellular neurons. Pow DV, et al. **Neuroscience** 1989; 28(1):109–19

PHYSIOLOGY

The effect of substance P (SP) infusion above the supraoptic nuclei of hypothalamus on the vasopressin content in the posterior pituitary lobe after haemorrhage in rats. Rubacha G, et al. **Acta Physiol Pol** 1988 May–Jun;39(3):175–82
Angiotensin II may mediate excitatory neurotransmission from the subfornical organ to the hypothalamic supraoptic nucleus: an anatomical and electrophysiological study in the rat. Jhamandas JH, et al. **Brain Res** 1989 May 15; 487(1):52–61
Fetal hypothalamic transplants promote survival and functional regeneration of axotomized adult supraoptic magnocellular neurons. Marciano FF, et al. **Brain Res** 1989 Mar 27;483(1):135–42
Activation of supraoptic magnocellular neurons by gamma 2-melanocyte stimulating hormone (gamma 2-MSH). Mitchell LD, et al. **Brain Res** 1989 Feb 20;480(1–2):388–92
Direct evidence for electrical coupling among rat supraoptic nucleus neurons. Yang QZ, et al. **Brain Res** 1988 Oct 25; 463(1):47–56
Paraventricular and supraoptic bursting oxytocin cells in rat are locally regulated by oxytocin and functionally related. Moos F, et al. **J Physiol (Lond)** 1989;408:1–18
Comparison of the effects between the conventional and electrical acupuncture on some cytochemical components of median eminentia and supraoptic nucleus. Ge Z, et al.
J Tradit Chin Med 1989 Mar;9(1):57–62
The supraoptic nucleus: afferents from areas involved in control of body fluid homeostasis. Wilkin LD, et al.
Neuroscience 1989;28(3):573–84
[Effect of injection of 6-hydroxydopamine into the regions of the supraoptic and paraventricular nuclei on the response produced by stimulation of the locus coeruleus in rats] Jin XJ, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):382–5 (Eng. Abstr.) (Chi)
[Inhibitory reactions of the neurosecretory cells of the supraoptic hypothalamic nucleus in lactating rats to subiculum stimulation] Alekseev NP, et al.
Neirofiziologiia 1988;20(4):431–7 (Eng. Abstr.) (Rus)
[Effect of electric stimulation of the supraoptic nucleus on mammillary polydipsia] Morales A, et al.
Arch Neurobiol (Madr) 1988 May–Jun;51(3):154–8 (Eng. Abstr.) (Spa)

RADIATION EFFECTS

Reaction of some enzymes in nucleus supraopticus of rats irradiated with 300 Gy of gamma radiation. Dosoudilová M, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:71–8
Histochemical study of reaction of the nucleus supraopticus of rat brain to irradiation with 500 Gy. Dosoudilová M, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:59–63

SECRETION

[Influence of the feeding regimen on the rhythmicity of the processes of secretion of the supraoptic nucleus in C57Bl mice] Iushkantseva SI. **Arkh Anat Gistol Embriol** 1988 Jul; 95(7):24–8 (Eng. Abstr.) (Rus)
[Vasopressin secretion in hypertension of the hypothalamic origin] Slavnov VN, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):74–8 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Ultrastructural changes of synapses in supraoptic nucleus of hedgehog during hibernation. Malínský J, et al.
Acta Univ Palacki Olomuc Fac Med 1988;120:117–26
Ultrastructural peculiarities of the supraoptic nucleus of Mauremys caspica (turtle): its evolutionary interest in reptiles. Paz Doel R, et al. **Anat Anz** 1988;167(1):35–8
Alterations in supraoptic nucleus ultrastructure of maternally behaving virgin rats. Salm AK, et al. **Brain Res Bull** 1988 Oct;21(4):685–91
Local synaptic organization of cholinergic neurons in the basolateral hypothalamus. Meeker RB, et al.
J Comp Neurol 1988 Oct 8;276(2):157–68
Neuropeptide Y-like immunoreactivity is present in boutons synapsing on vasopressin-containing neurons in rabbit supraoptic nucleus. Beroukas D, et al.
Neuroendocrinology 1989 Aug;50(2):222–8
[Effect of complete cerebral ischemia on the ultrastructure of the hypothalamo–hypophyseal neurosecretory system of rats] Gajkowska B, et al. **Neuropatol Pol** 1988; 26(3):317–33 (Eng. Abstr.) (Pol)
[Electron-microscopic studies of cytoskeletal elements of the neurosecretory hypothalamic nuclei in rats] Walski M, et al. **Neuropatol Pol** 1988;26(2):233–43 (Eng. Abstr.) (Pol)
[Ultrastructure of neurosecretory cells of the hypothalamic supraoptic nuclei of albino rats during nociceptive stress and aging] Pelevin IuM, et al. **Neirofiziologiia** 1989; 21(3):389–96 (Eng. Abstr.) (Rus)

SUPRAPUBIC CYSTOSTOMY see **CYSTOSTOMY**

SUPRASELLAR CYST see **CRANIOPHARYNGIOMA**

SUPRATENTORIAL NEOPLASMS

Supratentorial neurofibroma unassociated with cranial nerves. Ng HK, et al. **Aust N Z J Surg** 1988 Jul;58(7):594–7 (26 ref.)
[Supratentorial intracerebral neurilemmoma] Rozumenko VD, et al. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):53–5 (Rus)

ANALYSIS

Neuropeptide Y, somatostatin, and cholecystokinin neurone preservation in anaplastic astrocytomas. Przedborski S, et al. **Acta Neuropathol (Berl)** 1988;76(5):507–10

CEREBROSPINAL FLUID

[Intracranial epidural implantation of a Gaeltec ICT/b sensor in the light of our experience] Lebkowski W, et al.
Neurol Neurochir Pol 1988 Sep–Oct;22(5):476–8 (Pol)

COMPLICATIONS

Leptomeningeal gliomatosis with spinal cord or cauda equina compression: a complication of supratentorial gliomas in adults. Delattre JY, et al. **Acta Neurol Scand** 1989 Feb; 79(2):133–9

DIAGNOSIS

Positron emission tomography compared with magnetic resonance imaging and computed tomography in supratentorial gliomas using multiple stereotactic biopsies as reference. Mosskin M, et al. **Acta Radiol** 1989 May–Jun; 30(3):225–32
Hemispheric cavernous angiomas: presumptive preoperative diagnosis. Voci A, et al. **J Neurosurg Sci** 1988 Oct–Dec; 32(4):169–78
[Supratentorial hemangioblastoma] Bataille B, et al.
Neurochirurgie 1988;34(5):348–51 (Eng. Abstr.) (Fre)
[NMR, CT and PET in brain tumors] Schober O, et al.
Radiol Diagn (Berl) 1988;29(3):457–62 (Eng. Abstr.) (Ger)

DRUG THERAPY

Effect of HECNU in malignant supratentorial gliomas—a phase II study. Georges P, et al. **J Neurooncol** 1988 Nov; 6(3):211–9

MORTALITY

Intracranial ependymomas: prognostic aspects. Ernestus RI, et al. **Neurosurg Rev** 1989;12(2):157–63

RADIONUCLIDE IMAGING

[The remote effects of brain tumors on cerebral blood flow as measured by single photon emission CT] Araki Y, et al. **No To Shinkei** 1989 Apr;41(4):367–74 (Eng. Abstr.) (Jpn)

RADIOTHERAPY

Treatment of supratentorial high grade gliomas with split course high fractional dose postoperative radiotherapy. Marcial-Vega VA, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1419–24
Postoperative radiotherapy of supratentorial low-grade gliomas. Shaw EG, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):663–8
A proposed protocol for clinical trials of boron neutron capture therapy in glioblastoma multiforme. Dorn RV 3d, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):233–4

SURGERY

Cardiovascular and respiratory complications after elective supratentorial craniotomy. Gilsanz F, et al.
J Neurosurg Sci 1988 Oct–Dec;32(4):147–51
Supratentorial hemangioblastoma. Report of a case and

review of the literature. Ferrante L, et al. **Zentralbl Neurochir** 1988;49(3):151–61 (69 ref.)

[ECG of patients with brain tumors during neurosurgical operations] Antonov VA, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):3–6 (Eng. Abstr.) **(Rus)**

THERAPY

Results of a randomized trial comparing BCNU plus radiotherapy, streptozotocin plus radiotherapy, BCNU plus hyperfractionated radiotherapy, and BCNU following misonidazole plus radiotherapy in the postoperative treatment of malignant glioma. Deutsch M, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1389–96

SUPROFEN see under **PHENYLPROPIONATES**

SURAL NERVE see under **SPINAL NERVES**

SURAMIN

METABOLISM

Influence of pH on the binding of suramin to human serum albumin. Vansterkenburg EL, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3029–35

PHARMACOLOGY

Effects of suramin, HPA-23 and 3'-azidothymidine triphosphate on the reverse transcriptase of bovine leukaemia virus. Reimer K, et al. **Acta Virol (Praha)** 1989 Jan;33(1):43–9

Association of increased intracellular free Ca2+ by platelet-derived growth factor with mitogenesis but not with proteoglycan synthesis in chondrocytes—effect of suramin. Fukuo K, et al. **Cell Calcium** 1989 Jan;10(1):29–35

Suramin inhibits binding and degradation of platelet-derived growth factor in arterial smooth muscle cells but does not interfere with autocrine stimulation of DNA synthesis. Sjölund M, et al. **Cell Tissue Res** 1989 Apr;256(1):35–43

Modulation by suramin of NK and monocytic cell-mediated cytotoxicity in human and murine cells. Zhang HX, et al. **Int J Immunopharmacol** 1988;10(6):695–707

Insulin secretion and islet lysosomal enzyme activities in the mouse. Effects of suramin. Skoglund G, et al. **Int J Pancreatol** 1989 Feb;4(1):29–40

Suramin inhibits cell growth and glycolytic activity and triggers differentiation of human colic adenocarcinoma cell clone HT29-D4. Fantini J, et al. **J Biol Chem** 1989 Jun 15;264(17):10282–6

The inhibition of human adrenal steroidogenic enzyme activities by suramin. Ashby H, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):505–8

Heparin analogues: a new family of anticancer drugs [news] Corliss J. **J Natl Cancer Inst** 1989 Sep 20;81(18):1346–7

Anion channel blockers cause apparent inhibition of exocytosis by reacting with agonist or secretory product, not with cell. Vostal JG, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5839–43

Suramin inhibits in vitro infection by duck hepatitis B virus, Rous sarcoma virus, and hepatitis delta virus. Petcu DJ, et al. **Virology** 1988 Dec;167(2):385–92

THERAPEUTIC USE

Suramin: an anticancer drug with a unique mechanism of action. Stein CA, et al. **J Clin Oncol** 1989 Apr;7(4):499–508

Suramin for treatment of adrenocortical carcinoma [letter] Allolio B, et al. **Lancet** 1989 Jul 29;2(8657):277

Effect of suramin in a patient with adrenocortical carcinoma [letter] Vierhapper H, et al. **Lancet** 1989 May 27; 1(8648):1207–8

Suramin and metronidazole in the treatment of Trypanosoma brucei rhodesiense. Arroz J, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):421

[Treatment of metastatic adrenal carcinoma with suramin] Allolio B, et al. **Dtsch Med Wochenschr** 1989 Mar 10; 114(10):381–4 (Eng. Abstr.) **(Ger)**

SURFACE-ACTIVE AGENTS

see related
PULMONARY SURFACTANTS

Surfactant influence on disintegration time and other characteristics of propyphenazone-metamizol tablets. Duric M, et al. **Acta Pharm Hung** 1988 Jul;58(4):153–7

Antigenic reactivity of matrix protein and nucleoprotein of influenza virus as detected by EIA after dissociation with different detergents. Khristova ML, et al. **Acta Virol (Praha)** 1989 Jan;33(1):1–7

Stereoselective recognition in phospholipid monolayers. Arnett EM, et al. **Adv Exp Med Biol** 1988;238:21–36

Laser-assisted contact angle measurements. Bush JF, et al. **Am J Optom Physiol Opt** 1988 Sep;65(9):722–8

Parameter and environmental influences on rigid contact lens wettability. Huff JW, et al. **Am J Optom Physiol Opt** 1988 Sep;65(9):717–21

Current use of skin and wound cleansers and antiseptics. Laufman H. **Am J Surg** 1989 Mar;157(3):359–65 (76 ref.)

Sensitivity and variability of the Bradford protein assay in the presence of detergents. Friedenauer S, et al. **Anal Biochem** 1989 May 1;178(2):263–8

The use of high-dose lidocaine in wetting solutions for lipoplasty. Lewis CM, et al. **Ann Plast Surg** 1989 Apr; 22(4):307–9

Activation of HIV-enhancer binding activity by mild detergents in human T cells. Harel-Bellan A, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):238–43

Solubilization, characterization, and detergent interactions of lymphocyte 5'-nucleotidase. Loe DW, et al. **Biochem Cell Biol** 1989 Apr–May;67(4–5):214–23

Reconstitution of Na+/K+-ATPase into phosphatidylcholine vesicles by dialysis of nonionic alkyl maltoside detergents. Alpes H, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):379–88

Crystal structure of a zwitterionic detergent: n-octyl-2-hydroxyethylsulfoxide. Egner U, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):404–6

Perfluorochemical emulsions with fluorinated surfactants and anticancer drugs. Fung BM, et al. **Biomater Artif Cells Artif Organs** 1988;16(1-3):439–40

Design, synthesis and evaluation of fluorocarbons and surfactants for in vivo applications. New perfluoroalkylated polyhydroxylated surfactants. Riess JG, et al. **Biomater Artif Cells Artif Organs** 1988;16(1-3):421–30 (11 ref.)

Adulterants causing false negatives in illicit drug testing. Mikkelsen SL, et al. **Clin Chem** 1988 Nov;34(11):2333–6

Shampoos and hair conditioners. Bouillon C. **Clin Dermatol** 1988 Jul–Sep;6(3):83–92

Detergents, bath preparations, and other skin cleansers. Oestreicher MI. **Clin Dermatol** 1988 Jul–Sep;6(3):29–36 (25 ref.)

Effect of a non-hygroscopic surfactant coating upon fluorescein absorption from the respiratory tract. Hickey AJ, et al. **Drug Des Deliv** 1987 Sep;2(1):35–9

Interaction of non-classical detergents with the mitochondrial porin. A new purification procedure and characterization of the pore-forming unit. De Pinto V, et al. **Eur J Biochem** 1989 Jul 15;183(1):179–87

Apoptotic hepatocytes become insoluble in detergents and chaotropic agents as a result of transglutaminase action. Fesus L, et al. **FEBS Lett** 1989 Mar 13;245(1-2):150–4

Characterization of integral membrane proteins of Leishmania major by Triton X-114 fractionation and analysis of vaccination effects in mice. Murray PJ, et al. **Infect Immun** 1989 Jul;57(7):2203–9

Effectiveness of soap formulations containing deet and permethrin as personal protection against outdoor mosquitoes in Malaysia. Yap HH. **J Am Mosq Control Assoc** 1986 Mar;2(1):63–7

Urine odor eliminators [letter] Price PM. **J Am Vet Med Assoc** 1989 Aug 15;195(4):424

Detergent structure and associated lipid as determinants in the stabilization of solubilized Ca2+-ATPase from sarcoplasmic reticulum. Lund S, et al. **J Biol Chem** 1989 Mar 25;264(9):4907–15

Zwitterionic and anionic forms of a serotonin analog as transport substrates. Rudnick G, et al. **J Biol Chem** 1989 Sep 5;264(25):14865–8

Effect of surfactants on the intensity of chemiluminescence emission from acridinium ester labelled proteins. Bagazgoitia FJ, et al. **J Biolumin Chemilumin** 1988 Jul–Sep; 2(3):121–8

Protein-resistant surfaces prepared by PEO-containing block copolymer surfactants. Lee JH, et al. **J Biomed Mater Res** 1989 Mar;23(3):351–68

Comparison of non-ionic detergents for extraction and ion-exchange high-performance liquid chromatography of Sendai virus integral membrane proteins. Van Ede J, et al. **J Chromatogr** 1989 Aug 4;476:319–27

Effect of detergents on the structure of integral membrane proteins of Sendai virus studied with size-exclusion high-performance liquid chromatography and monoclonal antibodies. Welling-Wester S, et al. **J Chromatogr** 1988 Jun 29;443:255–66

A comparison of two bactericidal handwashing agents containing chlorhexidine. Lee MG, et al. **J Hosp Infect** 1988 Jul;12(1):59–63

Low-temperature washing of patients' clothing; effects of detergent with disinfectant and a tunnel drier on bacterial survival. Tompkins DS, et al. **J Hosp Infect** 1988 Jul; 12(1):51–8

Spontaneous association of purified major histocompatibility class I antigens with recipient cells after removal of detergent. Eriksson H. **J Immunol Methods** 1988 Nov 25; 115(1):133–9

Restoration of antibody binding to blotted meningococcal outer membrane proteins using various detergents. Wedege E, et al. **J Immunol Methods** 1988 Oct 4;113(1):51–9

The effect of niosomes and polysorbate 80 on the metabolism and excretion of methotrexate in the mouse. Azmin MN, et al. **J Microencapsul** 1986 Apr–Jun;3(2):95–100

The effect of surfactants on the microencapsulation and release of phenobarbitone from gelatin-acacia complex coacervate microcapsules. Duquemin SJ, et al. **J Microencapsul** 1986 Apr–Jun;3(2):89–93

Will bleach decontaminate needles during cocaine binges in shooting galleries? [letter] Friedman SR, et al. **JAMA** 1989 Sep 15;262(11):1467

The use of xylene (xylol) in medical laboratories [letter] McDougall AC. **Lepr Rev** 1989 Mar;60(1):67

Size and shape of membrane protein-detergent complexes: hydrodynamic studies. Clarke S, et al. **Methods Enzymol** 1989;172:696–709

Critical micellar concentrations of detergents. Zulauf M, et al. **Methods Enzymol** 1989;172:528–38

Daedalus. Flying dust [news] Jones D. **Nature** 1989 Aug 24; 340(6235):602

Detergent structure in crystals of a bacterial photosynthetic reaction center. Roth M, et al. **Nature** 1989 Aug 24; 340(6235):659–62

Quantitative precipitation of short oligonucleotides with low concentrations of cetyltrimethylammonium bromide. Jost JP, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2143

Deprotonation dynamics of local anesthetics in hydrophobic media: dibucaine.HCl in water/alcohol or surfactant mixtures. Lin CT, et al. **Photochem Photobiol** 1988 Dec; 48(6):733–40

Spontaneous vesicle formation in aqueous mixtures of single-tailed surfactants. Kaler EW, et al. **Science** 1989 Sep 22;245(4924):1371–4

Controlled organization of multimolecular complexes of enveloped virus glycoproteins: study of immunogenicity. Berezin VE, et al. **Vaccine** 1988 Oct;6(5):450–6

[Interactions of detergents with phospholipid bilayers at sublytic concentrations—partition or binding?] Koelsch R, et al. **Biomed Biochim Acta** 1989;48(1):13–7 (Eng. Abstr.) **(Ger)**

[Eustachian tube surfactant: morphology, physiopathology and pharmacologic aspects] **Acta Otorhinolaryngol Ital** 1987;7 Suppl 16:1–69 **(Ita)**

[An experimental clinical study on the bactericidal and bacteriostatic action of a disinfectant soap] Di Gaetano G. **Clin Ter** 1987 Aug 31;122(4):263–9 (Eng. Abstr.) **(Ita)**

[Eudermic activity of 2 dermo-protective products on the skin of the atopic child] Bleidl D, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):XIX-XXII (Eng. Abstr.) **(Ita)**

[Chemoprophylactic activity of soaps containing essential oil from the fruit of Pterodon pubescens in schistosomiasis mansoni] Santos Filho D, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:343–5 (Eng. Abstr.) **(Por)**

[Dissociation of hexamers of cytochrome P-450 LM2 in the presence of the non-ionic detergent emulgin 913] Berndt P, et al. **Biokhimiia** 1989 Feb;54(2):338–41 (Eng. Abstr.) **(Rus)**

[Detergent properties of apolipoprotein A1 in micellar complexes with dimyristoyl phosphatidylcholine] Misharin AIu, et al. **Bioorg Khim** 1989 Jun;15(6):773–80 (Eng. Abstr.) **(Rus)**

[Construction of conjugates of natural and synthetic macromolecules using inversed micelles as microreactors] Kabanov AV, et al. **Dokl Akad Nauk SSSR** 1988; 302(3):735–8 **(Rus)**

[Use of the zwitterion detergent Sulfobetain-12 for preparation of virosomes and investigation of their immunogenic and protective properties] Mazhul' LA, et al. **Mol Gen Mikrobiol Virusol** 1988 Dec;(12):42–7 (Eng. Abstr.) **(Rus)**

[Adaptation of pathogens of purulent infections to surface-active antiseptics] Gudz' OV. **Vrach Delo** 1989 Feb; (2):105–7 (Eng. Abstr.) **(Rus)**

[Soap and water as good disinfectants of the skin in vaginal labor] Berg G, et al. **Lakartidningen** 1989 Aug 9; 86(32–33):2657 **(Swe)**

ADMINISTRATION & DOSAGE

A physical and microbiological evaluation of the re-use of non-sterile gloves. Martin MV, et al. **Br Dent J** 1988 Nov 5;165(9):321–4

A placebo-controlled trial of the effect of two preoperative baths or showers with chlorhexidine detergent on postoperative wound infection rates [letter] Rotter ML. **J Hosp Infect** 1988 Aug;12(2):137–8

Adriamycin-loaded niosomes: drug entrapment, stability and release. Rogerson A, et al. **J Microencapsul** 1987 Oct–Dec; 4(4):321–8

[Tear substitutes. Experimental and clinical observations] Brewitt H. **Klin Monatsbl Augenheilkd** 1988 Sep; 193(3):275–82 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Deleterious effect of Brij 35 on alkyl 2-pyrones and other hydrophobic inhibitors of human sputum and leucocyte elastase. Cook L, et al. **Biochem Int** 1988 Oct;17(4):637–46

Can eardrops induce a shampoo dermatitis? A case study. Dooms-Goossens A, et al. **Contact Dermatitis** 1988 Aug; 19(2):143–5

Allergic contact dermatitis from para-chloro-meta-xylenol in Lurosep soap. Libow LF, et al. **Contact Dermatitis** 1989 Jan;20(1):67–8

The influence of repeated exposure to surfactants on the human skin as determined by transepidermal water loss and visual scoring. Tupker RA, et al. **Contact Dermatitis** 1989 Feb;20(2):108–14

Cleansing of hands with emulsion—a solution to skin problems of hospital staff? Kolari PJ, et al. **J Hosp Infect** 1989 May;13(4):377–86

Cyclosporin encephalopathy associated with fat embolism induced by the drug's solvent [letter] Hoefnagels WA, et al. **Lancet** 1988 Oct 15;2(8616):901

Health hazard from mercury soap [letter] Mucklow ES. **Lancet** 1989 Feb 25;1(8635):448

The hazards of automatic-dishwasher detergent. Kynaston

JA, et al. **Med J Aust** 1989 Jul 3;151(1):5-7
Hair shampooing technique and pediatric vulvovaginitis [letter] Brown JL. **Pediatrics** 1989 Jan;83(1):146
Serious respiratory consequences of detergent ingestions in children. Einhorn A, et al. **Pediatrics** 1989 Sep;84(3):472-4 (3 ref.)
Rug shampoo and Kawasaki disease. Fatica NS, et al. **Pediatrics** 1989 Aug;84(2):231-4
Menstrual disorders among dry-cleaning workers [letter] Zielhuis GA, et al. **Scand J Work Environ Health** 1989 Jun;15(3):238
[Evaluating skin tolerance. Study of skin cleansing agents in modifications of the Duhring chamber test] Kresken J, et al. **Derm Beruf Umwelt** 1989 Mar-Apr;37(2):63-6 (Eng. Abstr.) (Ger)
[Clinical and experimental studies of the effect of cationic detergent in liquid "K"] Starzycki Z, et al. **Przegl Dermatol** 1988 Mar-Apr;75(2):129-35 (Eng. Abstr.) (Pol)
[Surface-active agents in the environment and human health] Voloshchenko OI, et al. **Gig Sanit** 1988 Nov;(11):58-61 (36 ref.) (Rus)
[Problems of occupational hygiene in the production of synthetic detergents (review of the literature)] Kalashnikov AA. **Gig Tr Prof Zabol** 1988 Oct;(10):37-9 (19 ref.) (Rus)
[Hygienic problems in irrigating agricultural lands with sewage containing surface-active substances] Mudri IV. **Vrach Delo** 1989 Apr;(4):105-7 (Eng. Abstr.) (Rus)
[Morphometric characteristics of the glomerular zone--reparative processes after the administration of detergent] Novakov A, et al. **Med Pregl** 1989;42(1-2):29-32 (Eng. Abstr.) (Scr)
[Gastroesophageal caustic lesions caused by the use of MASH 10 in cafeterias] Alonso Franch M, et al. **An Esp Pediatr** 1989 Mar;30(3):217-9 (Spa)

ANALYSIS

Quantitative determination of surfactants in aqueous eluents from the horny layer of the epidermis. Kašpárková V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:325-35
Diffusion of micelle-bound molecules to electrodes in solutions of ionic surfactants. Rusling JF, et al. **Anal Chem** 1988 Jul 1;60(13):1260-7
Studies on the degradation of synthetic detergents by sewage. Abdel-Shafy HI, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):310-6
Interaction of surfactants with bilayer of negatively charged lipid: effect on gel-to-liquid-crystalline phase transition of dilauroylphosphatidic acid vesicle membrane. Inoue T, et al. **Chem Phys Lipids** 1988 Oct;48(3-4):189-96
Colloid osmotic pressure of artificial tears. Holly FJ, et al. **J Ocul Pharmacol** 1985 Winter;1(4):327-36
Solubility and polarity parameters of polyoxyethylene glycol dialkyl ethers. Szymanowski J, et al. **J Pharm Sci** 1988 Oct;77(10):893-7
[Homogeneous immunoenzyme analysis in reverse micelle systems of surface-active compounds in organic solvents] Kabanov AV, et al. **Dokl Akad Nauk SSSR** 1989;305(5):1253-6 (Rus)
[Photometric determination of cationic detergents] Zhebentiaev AI, et al. **Gig Sanit** 1989 May;(5):56-7 (Rus)

CHEMICAL SYNTHESIS

Synthesis and characterization of 6-O-(N-heptylcarbamoyl)-methyl-alpha-D-glucopyranoside, a new surfactant for membrane studies. Plusquellec D, et al. **Anal Biochem** 1989 May 15;179(1):145-53

CLASSIFICATION

The significance of the zein test in the classification of cationic tensides. Gehring W, et al. **Contact Dermatitis** 1989 May;20(5):386-7

DEFICIENCY

[Role of surfactant in the pathogenesis of secretory otitis media] Van Cauwenberge PB, et al. **Acta Otorhinolaryngol Ital** 1987;7 Suppl 16:45-9 (23 ref.) (Eng. Abstr.) (Ita)

DIAGNOSTIC USE

Modification of a trypsin-detergent method for DNA flow cytometry of human epidermis. Stough DB, et al. **Cytometry** 1989 Jan;10(1):90-3
[Preparation of the type-82 polyether antifoaming agent and its use in double contrast gastrointestinal studies] Shi WL. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Jun;22(3):129-32 (Eng. Abstr.) (Chi)

IMMUNOLOGY

Antigenicity of low molecular weight surfactant species. Strayer DS, et al. **Am J Pathol** 1989 Apr;134(4):723-32
Stimulation of liposome-induced humoral immune responses by non-ionic block polymer surfactants in Xid mice. Zigterman GJ, et al. **Immunology** 1988 Sep;65(1):37-42
Adjuvant activity of water-insoluble surfactants. Woodard LF. **Lab Anim Sci** 1989 May;39(3):222-5

ISOLATION & PURIFICATION

Solid phase extraction of the zwitterionic detergent chaps. Hall SW, et al. **Prep Biochem** 1989;19(1):1-11
[Hygienic evaluation of a microbiological method of purifying industrial waste water from a fine organic synthesis plant] Goncharuk EI, et al. **Gig Sanit** 1989 May;(5):80-1 (Rus)

METABOLISM

Gestation-dependent effects of the combined treatment of glucocorticoids and thyrotropin-releasing hormone on surfactant production by fetal rabbit lung. Oulton M, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):961-7
The role of detergents in membrane reconstitution. Reynolds JA, et al. **Subcell Biochem** 1989;14:1-24 (35 ref.)
Surfactant production by neoplastic type II pneumocytes. Vazquez M, et al. **Ultrastruct Pathol** 1988 Nov-Dec;12(6):605-12
[Surface active compounds present in the dialysate from patients with uremia] Cichocki T, et al. **Przegl Lek** 1988;45(7):549-54 (Eng. Abstr.) (Pol)
[Directed screening of bacteria--destructive agents of surface-active substances] Shcheglova MK, et al. **Antibiot Khimioter** 1989 Mar;34(3):192-4 (Eng. Abstr.) (Rus)

PHARMACOLOGY

The water barrier function of the skin in relation to the water content of stratum corneum, pH and skin lipids. The effect of alkaline soap and syndet on dry skin in elderly, non-atopic patients. Thune P, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):277-83
Surfactant-induced liposome fusion: molecular mechanisms and biotechnological applications. Goñi FM, et al. **Adv Exp Med Biol** 1988;238:81-103
Application of nonionic polyoxyethylene detergents in studies of phosphatidylinositol kinase. Ganong BR, et al. **Anal Biochem** 1989 May 15;179(1):66-71
The influence of a non-ionic surfactant on rectal absorption of virus particles. Sechter I, et al. **Arch Virol** 1989;106(1-2):141-3
The effects of anticalcification treatments on bioprosthetic heart valves implanted in sheep. Jones M, et al. **ASAIO Trans** 1988 Oct-Dec;34(4):1027-30
Supramolecular surfactants: amphiphilic polymers designed to disrupt lipid membranes. Regen SL, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):566-71
The detergent Solulan C-24 reveals properties of the olfactory adenylate cyclase system. Robinson CJ, et al. **Biochem J** 1989 Jun 15;260(3):683-7
Effects of lysosomotropic detergents on the human malarial parasite Plasmodium falciparum in in vitro culture. Cabantchik ZI, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1271-7
Membrane solubilization by detergent: use of brominated phospholipids to evaluate the detergent-induced changes in Ca2+-ATPase/lipid interaction. de Foresta B, et al. **Biochemistry** 1989 Mar 21;28(6):2558-67
Ethoxylated alcohol (Neodol-12) and other surfactants in the assay of protein kinase C. Abidi TF, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):362-8
Vesiculation induced by amphiphiles in erythrocytes. Hägerstrand H, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):179-86
In vitro detergent activation of lysosomal acid beta-glucosidase in the spleen of normal and type 1 Gaucher patients is not accompanied by change in aggregation state. Maret A, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):254-6
The solubilization and morphological change of human platelets in various detergents. Shiao YJ, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):56-68
Effects of detergent on the binding of solubilized sodium channels to immobilized wheat germ agglutinin: structural implications. Weiner JS, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):521-6
Receptor-mediated activation of detergent-solubilized guanylate cyclase. Bentley JK, et al. **Biol Reprod** 1988 Oct;39(3):639-47
Surfactant stimulates prostaglandin E production in human amnion. López Bernal A, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):1013-7
In vitro effect of linear alkylbenzene sulphonate (LAS) on some enzymes in liver and gills of the teleost Channa punctatus. Gupta BN, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):375-81
Investigations into the application of tri(n-butyl)phosphate/detergent mixtures to blood derivatives. Horowitz B. **Curr Stud Hematol Blood Transfus** 1989;(56):83-96 (17 ref.)
Effects of surface-active agents on drug susceptibility levels and ultrastructure of Mycobacterium avium complex organisms isolated from AIDS patients. Naik SP, et al. **Diagn Microbiol Infect Dis** 1988 Sep;11(1):11-9
Inactivation of human immunodeficiency virus in serum specimens as a safety measure for diagnostic immunoassays. Ukkonen P, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):518-23
The effects of a mixture of surface-active agents (Sonarex) on upper airways resistance and snoring in anaesthetized dogs. Widdicombe JG, et al. **Eur Respir J** 1988 Oct;1(9):785-91
Promotion of survival and neurite outgrowth of cultured peripheral neurons by exogenous lipids and detergents. Unsicker K, et al. **Exp Cell Res** 1988 Oct;178(2):377-89
A spin label study of perturbation effects of N-(1-methyldodecyl)-N, N, N-trimethylammonium bromide and N-(1-methyldodecyl)-N, N-dimethylamine oxide on model membranes prepared from Escherichia coli-isolated lipids. Seršeň F, et al. **Gen Physiol Biophys** 1989 Apr;8(2):133-56
Nonionic block polymer surfactants modulate the humoral immune response against Streptococcus pneumoniae-derived hexasaccharide-protein conjugates. Zigterman GJ, et al. **Infect Immun** 1989 Sep;57(9):2712-8
Efficacy of Arosurf MSF and formulations of Bacillus thuringiensis var. israelensis against Anopheles albimanus: laboratory bioassay. Perich MJ, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):485-8
Lipid binding by Escherichia coli pyruvate oxidase is disrupted by small alterations of the carboxyl-terminal region. Grabau C, et al. **J Biol Chem** 1989 Jul 25;264(21):12510-9
Nucleotide specificity of canine cardiac sarcoplasmic reticulum. Differential alteration of enzyme properties by detergent treatment. Tate CA, et al. **J Biol Chem** 1989 May 15;264(14):7809-13
Bioluminescent monitoring of ATP release from human red blood cells treated with nonionic detergent. Köszegi T, et al. **J Clin Chem Clin Biochem** 1988 Oct;26(10):599-604
Separation of functional West Nile virus replication complexes from intracellular membrane fragments. Grun JB, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3121-7
A method to evaluate the cleaning and disinfectant action of surface disinfectants. Walder M, et al. **J Hosp Infect** 1989 Feb;13(2):149-59
Effect of detergents on pathogenicity plasmids of escherichias. Krivoshein YuS, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(3):345-52
Disinfectant effect of Persteril in combination with detergents. Melicherčíková V. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):19-28
Effect of surface active agents on drug release from polylactic acid-hydrocortisone microcapsules. Leelarasamee N, et al. **J Microencapsul** 1988 Jan-Mar;5(1):37-46
Controlled release captopril microcapsules: effect of non-ionic surfactants on release from ethyl cellulose microcapsules. Singh J, et al. **J Microencapsul** 1988 Apr-Jun;5(2):129-37
Non-ionic surfactant effects on hairless mouse skin permeability characteristics. Walters KA, et al. **J Pharm Pharmacol** 1988 Aug;40(8):525-9
Penetration of theophylline and adenosine into excised human skin from binary and ternary vehicles: effect of a nonionic surfactant. Kadir R, et al. **J Pharm Sci** 1989 Feb;78(2):149-53
Protective effect of surface-active phospholipids against the acid-inducing inhibition of the tracheal mucociliary transport. Kai H, et al. **Jpn J Pharmacol** 1989 Mar;49(3):375-80
The effects of cetrimide and potassium bromate on the potassium ion concentration in the inner ear fluid of the guinea-pig. Morizono T, et al. **Physiol Bohemoslov** 1988;37(3):241-7
Lecithin:cholesterol acyltransferase activation by synthetic amphipathic peptides. Subbarao NK, et al. **Proteins** 1988;3(3):187-98
Effect of the application of an anionic detergent combined with FABRY's tincture and its components on human skin resident flora. Part 2: Dermofug solution combined with either salicylic acid tincture or phenol acid tincture. Hartmann AA, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug;186(5-6):536-44
Effect of the application of an anionic detergent combined with FABRY's tincture and its components on human skin resident flora. Part 1: Dermofug solution combined with either FABRY's tincture or 50 v/v% isopropanol. Hartmann AA, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug;186(5-6):526-35
[Disorganization of the structure of gap junctions isolated from rat liver and treated by the action of a mixture of 2 detergents] Mazet F, et al. **C R Acad Sci [III]** 1988;307(12):679-84 (Eng. Abstr.) (Fre)
[Effect of natural or synthetic detergents on the transport of D-glucose in the membranes of vesicles of the brush border of the intestine of the rabbit] Favilli F, et al. **C R Soc Biol (Paris)** 1988;182(3):256-65 (Eng. Abstr.) (Fre)
[A compensatory low-energy shift in the respiration of liver mitochondria exposed to a detergent] Zhivotnikova NV, et al. **Gig Sanit** 1988 Dec;(12):80-1 (Rus)
[Substantiation of the system of sanitary-hygienic procedures] Berlin AA. **Kosm Biol Aviakosm Med** 1989 Mar-Apr;23(2):21-6 (Eng. Abstr.) (Rus)
[Use of substances of microbial origin as components of detergent-disinfectant agents] Garagulia AD, et al. **Mikrobiol Zh** 1987 Jan-Feb;49(1):91-3 (Eng. Abstr.) (Rus)
[Antimicrobial properties of surface-active antiseptic agents--polymethylene diamine derivatives] Gudz' OV, et al. **Mikrobiol Zh** 1987 Mar-Apr;49(2):82-5 (Eng. Abstr.)

(Rus)

[Isolation of influenza virus hemagglutinin by solubilization with the nonionic detergent O-14] Krivorutchenko IuL, et al. **Mikrobiol Zh** 1987 May-Jun;49(3):72-5 (Eng. Abstr.) (Rus)

[Antimicrobial properties of the new synthetic detergent "Fiton"] Vasilevskaia IA, et al. **Mikrobiol Zh** 1983 May-Jun;45(3):62-6 (Eng. Abstr.) (Rus)

PHYSIOLOGY

[Surface activity of gastric juice in peptide ulcer] Ivashkevich GA, et al. **Sov Med** 1988;(5):22-5 (Eng. Abstr.) (Rus)

POISONING

The toxicology of detergents, bleaches, antiseptics and disinfectants in small animals. Coppock RW, et al. **Vet Hum Toxicol** 1988 Oct;30(5):463-73 (36 ref.)

Profile of accidental ingestion calls received via a toll-free line on detergent product labels. Petersen DW. **Vet Hum Toxicol** 1989 Apr;31(2):125-7

Lemon aesthetics in hand dishwashing detergents do not influence reported accidental ingestion frequency and volume. Petersen DW. **Vet Hum Toxicol** 1989 Jun; 31(3):257-8

THERAPEUTIC USE

Indications for alcohol or bland soap in removal of aerobic gram-negative skin bacteria: assessment by a novel method. Eckert DG, et al. **Infect Control Hosp Epidemiol** 1989 Jul; 10(7):306-11

Studies on the effect of toothpaste rinses on plaque regrowth. (I). Influence of surfactants on chlorhexidine efficacy. Addy M, et al. **J Clin Periodontol** 1989 Jul;16(6):380-4

A placebo-controlled trial of the effect of two preoperative baths or showers with chlorhexidine detergent on postoperative wound infection rates [letter] Hayek L. **J Hosp Infect** 1989 Feb;13(2):202-4

Surfactant for respiratory distress syndrome [letter] Bierman SF. **N Engl J Med** 1989 Sep 21;321(12):834

[Exogenous surfactants (editorial)] Dehan M, et al. **Arch Fr Pediatr** 1989 Feb;46(2):85-7 (26 ref.) (Fre)

[Effect of detergent and glycerin on the efficacy of nasal immunotherapy with allergens and on the level of the lymphocyte subpopulation in the organs of local immunity] Sukhodoeva GS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):94-8 (Eng. Abstr.) (Rus)

TOXICITY

Liquid automatic dishwashing detergents: a profile of toxicity. Krenzelok EP. **Ann Emerg Med** 1989 Jan; 18(1):60-3

Effect of an anionic detergent on the lipid moieties of various cell types in the opercular epidermis of Rita rita. Roy D. **Bull Environ Contam Toxicol** 1988 Sep;41(3):352-9

Comparative effects of four surfactants on growth, contraction and adhesion of cultured human fibroblasts. Benoit J, et al. **Cell Biol Toxicol** 1988 Mar;4(1):111-22

Detergent-induced changes in the mapping of certain enzymes in various cell types of Rita rita. I. Opercular epidermis. Roy D. **Ecotoxicol Environ Safety** 1989 Feb; 17(1):59-66

Statistical analysis of anionic detergent-induced changes in the goblet mucous cells of opercular epidermis and gill epithelium of Rita rita (Ham.) (Bagridae: Pisces). Roy D. **Ecotoxicol Environ Safety** 1988 Jun;15(3):260-71

Detergent-induced changes in the mapping of certain enzymes in various cell types of Rita rita. II. Gill epithelium. Roy D. **Ecotoxicol Environ Safety** 1989 Feb; 17(1):67-74

Subchronic percutaneous toxicity testing of two liquid hand dishwashing detergents. Petersen DW. **Food Chem Toxicol** 1988 Sep;26(9):803-6

The mutagenic effect of five oil dispersants and of ethyleneglycolmonobutylether in bacteriophage T4D. Kvelland I. **Hereditas** 1988;109(1):149-50

Validation of the red blood cell test system as in vitro assay for the rapid screening of irritation potential of surfactants. Pape WJ, et al. **Mol Toxicol** 1987-88 Fall;1(4):525-36

Skin irritancy of commercially available alkyl ether sulphate surfactants: is there a difference between those with alkyl chains consisting of even or odd numbers of carbon atoms? Pemberton MA, et al. **Toxicol Lett** 1988 Nov;44(1-2):85-90

[Effect of catamine AB on the generative function and chromosome apparatus of the bone marrow cells in white rats] Korolev VA, et al. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):62-5 (Eng. Abstr.) (Rus)

[Study of the mutagenic effect of various chemical substances on Drosophila] Komissarova LA, et al. **Gig Sanit** 1989 Mar; (3):81-2 (Rus)

[Study of the mechanisms of the harmful effect of the synthetic detergent "Lotos"] Krivonosov MV, et al. **Gig Sanit** 1989 Apr;(4):88-90 (Rus)

[Hygienic standardization of rubber in relation to its designation] Shumskaia NI, et al. **Gig Sanit** 1989 Apr; (4):85-6 (Rus)

[Evaluation of the combined effect of sherp and sintamide 5 in acute experiments] Tiul'menkov VV. **Gig Sanit** 1989 Jan;(1):71-2 (Rus)

[The effect of surface active substances on the barrier properties of the skin] Arkhipenko VI, et al. **Vrach Delo** 1989 May;(5):107-9 (Eng. Abstr.) (Rus)

[The effect of detergents on the histoenzyme characteristics of the adrenal glomerular zone] Devečerski V, et al. **Med Pregl** 1988;41(5-6):181-8 (Eng. Abstr.) (Scr)

SURFACE ANTIGENS see **ANTIGENS, SURFACE**

SURFACE GLYCOPROTEINS see **MEMBRANE GLYCOPROTEINS**

SURFACE MARKERS, IMMUNOLOGICAL see **ANTIGENS, SURFACE**

SURFACE PROPERTIES

Monopolar surfaces. van Oss CJ, et al. **Adv Colloid Interface Sci** 1987 Nov;28(1):35-64 (63 ref.)

Vibrational spectroscopic studies of the structure of species derived from the chemisorption of hydrocarbons on metal single-crystal surfaces. Sheppard N. **Annu Rev Phys Chem** 1988;39:589-644 (169 ref.)

Characteristic effects of taste-compounds on the dynamic behavior of oleate-monolayer. Yoshikawa K, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):699-704

Surface characteristics of Pseudomonas aeruginosa grown in a chamber implant model in mice and rats. Kelly NM, et al. **Infect Immun** 1989 Feb;57(2):344-50

Inhibition of platelet adhesion to glow discharge modified surfaces. Sharma CP, et al. **J Biomater Appl** 1987 Apr; 1(4):533-52

Surface characterization of the cuticle of Dirofilaria immitis. Bilge FH, et al. **J Biomed Mater Res** 1989 Sep; 23(9):1027-47

Effects of a grooved titanium-coated implant surface on epithelial cell behavior in vitro and in vivo. Chehroudi B, et al. **J Biomed Mater Res** 1989 Sep;23(9):1067-85

Kinetics of antigen-antibody reactions at solid-liquid interfaces. Stenberg M, et al. **J Immunol Methods** 1988 Oct 4;113(1):3-15 (55 ref.)

The role of protein surface charges in ion binding. Linse S, et al. **Nature** 1988 Oct 13;335(6191):651-2

SURFACE PROTEINS see **MEMBRANE PROTEINS**

SURFACE VARIANT GLYCOPROTEINS, TRYPANOSOMA see **VARIANT SURFACE GLYCOPROTEINS, TRYPANOSOMA**

SURFACTANT, PULMONARY see **PULMONARY SURFACTANTS**

SURFACTANTS see **SURFACE-ACTIVE AGENTS**

SURGERY

Cognitive nonsense [editorial] Fischer JE. **Am J Surg** 1989 Mar;157(3):275

The delivery of critical care in Canada [letter] Girotti MJ, et al. **Ann Surg** 1988 Nov;208(5):666-7

Evaluation of an intervention aimed at reducing inappropriate use of preoperative blood coagulation tests. Mozes B, et al. **Arch Intern Med** 1989 Aug;149(8):1836-8

American College of Surgeons offers Congress a new deal. Foreman J. **Arch Ophthalmol** 1989 Apr;107(4):496

Assistants at cataract surgery [letter] Hoffer KJ. **Arch Ophthalmol** 1989 Jul;107(7):952

Seldom come by. The worthwhileness of a career in surgery. Hiebert CA. **Arch Surg** 1989 May;124(5):530-4

The new biology [editorial] Clunie GJ. **Aust N Z J Surg** 1988 Apr;58(4):261

Funding problems in surgical research [editorial] O'Brien BM. **Aust N Z J Surg** 1989 Mar;59(3):197-8

Usage of statistics in the surgical literature and the 'orphan P' phenomenon. Oliver D, et al. **Aust N Z J Surg** 1989 Jun;59(6):449-51

Sir Albert Coates 1895-1977. Webb R. **Aust N Z J Surg** 1988 May;58(5):419-22

Surgical training in the private sector [letter] **BMJ** 1988 Sep 10;297(6649):683

Introducing aptitude testing into medicine [editorial] Gough M, et al. **BMJ** 1989 Apr 15;298(6679):975-6

Surgeons' posture and kungfu. Yip YL. **BMJ** 1988 Dec 24-31;297(6664):1690-1

Should the royal colleges be the employers' watchdogs? [letter] Weale F. **Br J Hosp Med** 1989 Mar;41(3):298

Radiation dose to urological surgeons during X-ray fluoroscopy for percutaneous stone extraction. Law J, et al. **Br J Radiol** 1989 Feb;62(734):185-7

Editorial process at the British Journal of Surgery [editorial] Dudley HA. **Br J Surg** 1989 Mar;76(3):211-2

Risk to surgeons [letter] Matta H, et al. **Br J Surg** 1988 Sep; 75(9):931-2

Surgeons and computers. Young AE. **Br J Surg** 1989 Jan; 76(1):1-2

AIDS: the contamination risk in urological surgery. McNicholas TA, et al. **Br J Urol** 1989 Jun;63(6):565-8

Doctor or mister? [letter] Cairns JD. **Can J Surg** 1989 Mar; 32(2):83-4

Doctor or mister? [letter] Eibel P. **Can J Surg** 1989 Sep; 32(5):321

Surgical research: its importance in the evolution of the specialty of general surgery. Langer B. **Can J Surg** 1989 May;32(3):154-8

General surgeon: philosopher or technician? Rhea WG Jr. **Curr Surg** 1988 Nov-Dec;45(6):451-3

How to evaluate a surgical article: how much do "statistics" help? Schenk WG Jr. **Curr Surg** 1988 Jul-Aug;45(4):274-6

Who should be the responsible surgeon in the surgical intensive care unit? Schenk WG Jr. **Curr Surg** 1988 Sep-Oct;45(5):361-2

The practice of paediatric surgery at a rural district hospital in Kenya. Nyarango PM. **East Afr Med J** 1987 Oct; 64(10):683-93

The ergonomics of ventilated operating theatre clothing. Ross I, et al. **Ergonomics** 1988 Jul;31(7):1103-13

The scientific tour of China and Hong Kong by the British Association of Surgical Oncology. Rosin D, et al. **Eur J Surg Oncol** 1989 Aug;15(4):390-6

Surgeon-specific infection rates [letter] Ferraz EM. **Infect Control Hosp Epidemiol** 1988 Nov;9(11):484

Sedation for dermatologic surgery. Weber PJ, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):815-26 (38 ref.)

Canonical form as a model for surgical illustration. McConathy D. **J Biocommun** 1989;16(2):20-7 (22 ref.)

Needlestick injuries at operations for trauma. Are surgical gloves an effective barrier? McLeod GG. **J Bone Joint Surg [Br]** 1989 May;71(3):489-91

The dermatologist as a liposuction surgeon [editorial] Coleman WP 3d. **J Dermatol Surg Oncol** 1988 Oct; 14(10):1057-8

Experience as a factor in the efficacy of the surgical scrub. Nasadowski R, et al. **J Foot Surg** 1988 Sep-Oct;27(5):440-6

Protection of the pediatric surgeon from heat stress caused by the overhead radiant heater during surgery. Bar-Maor JA, et al. **J Pediatr Surg** 1988 Sep;23(9):846-7

The academic surgeon in an era of socioeconomic and litigious restraint. Bland KI. **J Surg Res** 1989 Apr; 46(4):275-85

Career change: in quest of a controllable lifestyle. Schwartz RW, et al. **J Surg Res** 1989 Sep;47(3):189-92

Surgery. Organ CH Jr. **JAMA** 1989 May 19;261(19):2892-4

Called to account. Surgery. Orthopedics. **Lancet** 1989 Apr 1;1(8640):714-6

Hepatitis B infections after gynaecological surgery. Welch J, et al. **Lancet** 1989 Jan 28;1(8631):205-7

The Shamanic side of surgery [editorial] Lamb JM. **Milit Med** 1988 Oct;153(10):541-2

Staff surgeon stress syndrome [letter] Lamb JM. **Milit Med** 1988 Oct;153(10):540

Third World surgical rotations. One resident's perspective. Thomason RB 3d. **N C Med J** 1989 Apr;50(4):218-22

Cataract extractions for senior surgeons. Pizzarello LD, et al. **Ophthalmic Surg** 1988 Sep;19(9):629-32

A pediatrician's view [editorial] Levine MI. **Pediatr Ann** 1989 Mar;18(3):157-8

Surgical training [letter; comment] Finch JS. **Pharos** 1989 Winter;52(1):35-6. **Comment on:** Pharos 1988 Fall;51(4):22-4

Communication. The GP's view. Humby M. **Practitioner** 1988 Mar 22;232(1445):308

Communication. The surgeon's view. Northover JM. **Practitioner** 1988 Mar 22;232(1445):309

Traditional thought and modern Western surgery. Katz P, et al. **Soc Sci Med** 1988;26(12):1175-81

There oughtta be a law. Mabry RL. **South Med J** 1988 Oct; 81(10):1295-6

HIV transmission to surgeons. Assessment of risk, infection control precautions, and standards of conduct. Schecter WP. **State Art Rev Occup Med** 1989;4 Suppl:65-9

Diagnostic and therapeutic laparoscopy. An entity often overlooked by the surgeon. Fermelia D, et al. **Surg Endosc** 1987;1(2):73-7

Abstract renders the summary superfluous [published erratum appears in Surg Gynecol Obstet 1989 Aug;169(2):178] Didolkar MS, et al. **Surg Gynecol Obstet** 1989 Mar; 168(3):259-62

The neurosurgeon as chairman of surgery. Popp AJ. **Surg Neurol** 1989 Feb;31(2):92-5

Medicine and the media: social and legislative issues symposium of the Society of University Surgeons. King M, et al. **Surgery** 1989 Apr;105(4):549-52

Progress symposium—Surgical decision making. **World J Surg** 1989 May-Jun;13(3):239-99

Decision making in surgical practice. Clarke JR. **World J Surg** 1989 May-Jun;13(3):245-51 (14 ref.)

The surgeon's role in breast screening. Forrest AP. **World J Surg** 1989 Jan-Feb;13(1):19-24 (19 ref.)

Theoretical surgery: a new specialty in operative medicine. Lorenz W, et al. **World J Surg** 1989 May-Jun;13(3):292-9

Percutaneous transluminal angioplasty: the surgeon's role. Menges HW, et al. **World J Surg** 1988 Dec;12(6):788-97

[Ethical problems in surgery] Pafko P. **Cas Lek Cesk** 1988 Aug 19;127(34):1057-9 (Eng. Abstr.) (Cze)

[The position of pediatric surgery in Czechoslovakia] Kabelka M. **Cesk Pediatr** 1989 Apr;44(4):230-3 (Cze)

[The Royal Belgian Society of Surgery. Composition of the society] **Acta Chir Belg** 1989;Suppl 2:1-27 (Dut, Fre)

[Percutaneous transluminal angioplasty. Is there still a role for the surgeon?] Cherrier F, et al. **Ann Cardiol Angeiol (Paris)** 1988 Dec;37(10):553-7 (22 ref.) (Eng. Abstr.) (Fre)

[Aspects of general surgery in humanitarian missions] Leclerc du Sablon M, et al. **Ann Chir** 1989;43(5):337-41 (Fre)

[Is there a radiologists behind the scanner console?] Alexandre G, et al. **Rev Chir Orthop** 1988;74 Suppl 2:249–51 **(Fre)**

[The Chaux-de-Fonds Hospital—homage to Dr. S. Schneider] **Rev Med Suisse Romande** 1988 Dec; 108(12):1003–83 **(Fre)**

[Sonography and endoscopy] **Chirurg** 1989 May;60(5):suppl 80 **(Ger)**

[A glance over the border] Hempel K. **Chirurg** 1989 May; 60(5):suppl 69–71 **(Ger)**

[Tradition and a lack of rhyme in surgical nomenclature] Stelzner F. **Chirurg** 1989 May;60(5):371–5 **(Ger)**

[What should surgeons know about Campylobacter pylori?] Altorfer J, et al. **Langenbecks Arch Chir** 1989;374(2):125–8 **(Ger)**

[Health policy considerations on the AIDS problems and risks in surgery] Fuchs C. **Langenbecks Arch Chir** 1988; Suppl 2:51–6 (Eng. Abstr.) **(Ger)**

[Surgical emergency and the "limit" situation] Beltrami V. **Ann Ital Chir** 1987;59(1–6):35–8 **(Ita)**

[Costs and benefits in surgery (yesterday, today, tomorrow). General problems and assessment] Borgonovi E. **Minerva Chir** 1989 Feb 28;44(4):785–7 **(Ita)**

[Surgery and plastic surgery] Onizuka T. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1151–4 **(Jpn)**

[Second primary tumors: the role of the head and neck surgeon] Cernea CR, et al. **Rev Paul Med** 1988 Jul–Aug; 106(4):201–4 (13 ref.) (Eng. Abstr.) **(Por)**

[Organization of a surgical service for children in a district hospital] Komarov NV. **Khirurgiia (Mosk)** 1988 Jul; (7):113–5 **(Rus)**

[Readers' conference on the work of the editorial board of the journal "Vestnik khirurgii im. I.I. Grekova"] **Vestn Khir** 1989 Jan;142(1):3–6 **(Rus)**

CLASSIFICATION

[Relaparotomy: its meaning and classification] Gubov IuP, et al. **Vestn Khir** 1987 Dec;139(12):58–9 **(Rus)**

ECONOMICS

Surgonomics. Health care financing policy for hospitalized otolaryngology patients. Muñoz E, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1317–20

Surgeons trace factors that affect practice. Koska MT. **Hospitals** 1988 Dec 5;62(23):41

EDUCATION

The educational value of community preceptorships in surgery. Rambo WM, et al. **Acad Med** 1989 Jul;64(7):405–7

An analysis of the fourth year of medical school for students pursuing surgical careers. DaRosa DA, et al. **Am J Surg** 1989 Feb;157(2):245–9

Reliability of different grading systems used in evaluating surgical students. Reznick RK, et al. **Am J Surg** 1989 Mar; 157(3):346–9

The role of the specialist in undergraduate surgical education. Snow N. **Am J Surg** 1989 May;157(5):523–7

Reduction of fresh frozen plasma use with a simple education program. Ayoub MM, et al. **Am Surg** 1989 Sep;55(9):563–5

The impact of video endoscopy on surgical training. Satava RM, et al. **Am Surg** 1989 May;55(5):263–6

Training for surgical oncology. Clunie GJ. **Ann Acad Med Singapore** 1988 Jan;17(1):118–9

Personality assessment techniques and aptitude testing as aids to the selection of surgical trainees. Symposium. England, 18 November 1987. **Ann R Coll Surg Engl** 1988 Sep; 70(5):265–79

Overseas Doctors Training Scheme in Surgery. Bevan PG, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4 Suppl):65

The place of research in surgical training. Blandy JP, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4 Suppl):64

Structure of examinations of trainees in surgery [letter] Chalmers J. **Ann R Coll Surg Engl** 1989 Jul;71(4 Suppl):58–9

Council discussion topic—surgical examinations [editorial] Kirk RM. **Ann R Coll Surg Engl** 1989 Mar;71(2 Suppl):29–30

Halstedian technique revisited. Innovations in teaching surgical skills. Barnes RW, et al. **Ann Surg** 1989 Jul; 210(1):118–21

The training and utilization of surgical physician assistants. A retrospective study. Brandt LB, et al. **Arch Surg** 1989 Mar;124(3):348–51

The Veterans Administration and surgical education in the United States [editorial] Guernsey JM. **Arch Surg** 1989 Apr; 124(4):407

How should we select surgical trainees? Gough MH. **Aust Clin Rev** 1988 Dec;8(31):163–9

Place and training of the surgeon in breast cancer screening. Blamey R. **Aust N Z J Surg** 1989 Apr;59(4):303–6

What are the roles of a surgical mentor? Cox K. **Aust N Z J Surg** 1989 Aug;59(8):601–9

Advanced surgical training in Australia and New Zealand and the Part II FRACS examination. Ham JM. **Aust N Z J Surg** 1988 Dec;58(12):937–40

Trainee surgery in teaching hospitals: is there a cost? Martin L, et al. **Aust N Z J Surg** 1989 Mar;59(3):257–60

Training of surgical registrars: a regional audit. Diggory RT. **BMJ** 1988 Aug 13;297(6646):455–6

The MD and MS degrees in Britain [letter] Kelly MJ. **BMJ** 1988 Sep 10;297(6649):687

A survey of surgical rotations for oral & maxillofacial surgery trainees. Altman K. **Br J Oral Maxillofac Surg** 1989 Feb; 27(1):12–5

A more realistic way of practising surgical knots using a surgical glove. Younger AS, et al. **Br J Surg** 1989 Apr; 76(4):347

What's wrong with general surgery training [letter] Woodbury DF. **Conn Med** 1989 Jul;53(7):439–40

The balance between service and education in surgical residency training. Folse R, et al. **Curr Surg** 1989 May–Jun; 46(3):193–202

The effects of acute sleep deprivation on level of resident training. Light AI, et al. **Curr Surg** 1989 Jan–Feb; 46(1):29–30

A surgical diary: concepts and tenets. Rodning CB. **Curr Surg** 1989 Jul–Aug;46(4):271–5

Alton Ochsner Oration. The role of the Royal Medical Colleges in postgraduate education. Todd IP. **Dis Colon Rectum** 1989 Jul;32(7):552–4

Surgeon and family physician opinions of the general surgical needs of family practice residents: a pilot study. Quirk M, et al. **Fam Pract Res J** 1988 Summer;7(4):219–26

A teaching model for endoscopic surgery: hysteroscopy and pelviscopic surgery. Wolfe WM, et al. **Fertil Steril** 1988 Oct;50(4):662–4

Editing surgical videotapes. Gilder RS. **J Audiov Media Med** 1988 Oct;11(4):117–20

The use of live pigs in the surgical training of dermatology residents. Anders KH, et al. **J Dermatol Surg Oncol** 1989 Jul;15(7):734–6

Decision factors in the choice of a surgical residency program. Horan SA. **J Med Educ** 1988 Nov;63(11):866–7

The role of pediatric surgery in the medical school curriculum. Karp MP, et al. **J Pediatr Surg** 1989 Jan; 24(1):39–40; Discussion 41

Higher intercollegiate examinations in surgical specialties [letter] Zaman K. **J R Coll Surg Edinb** 1988 Dec; 33(6):342–3

Surgical training—the next forty years [editorial] Springall RG. **J R Soc Med** 1988 Oct;81(10):561–3

Examining surgeons [letter] **Lancet** 1988 Nov 5;2(8619):1078

Surgical clerk's case experience: a learning experience? Forse RA. **Med Teach** 1988;10(1):41–8

Trabeculectomy as an introduction to intraocular surgery in an ophthalmic training program. Morrell AJ, et al. **Ophthalmic Surg** 1989 Aug;20(8):557–60

The education and training of surgeons [see comments] Ravitch MM. **Pharos** 1988 Fall;51(4):22–4. **Comment in:** Pharos 1989 Winter;52(1):35–6

A schema for teaching differential diagnosis. Brawer MK, et al. **Proc Annu Conf Res Med Educ** 1988;27:162–6

Pedigrees of southern surgical chairmen. Cohn I Jr. **South Med J** 1989 Jul;82(7):892–6

The development and evaluation of a clinical test of surgical resident proficiency. Anderson BO, et al. **Surgery** 1989 Aug;106(2):347–52; discussion 352–3

Presidential address: outsiders in surgical education—are the voluntary faculty worth more than they are paid? Elliott DW. **Surgery** 1988 Oct;104(4):585–91

Society of University Surgeons: present and future horizons. Ferguson RM. **Surgery** 1989 Feb;105(2 Pt 2):328–30

The evolution of the university surgeon. Ferguson RM. **Surgery** 1989 Aug;106(2):115–9

Critical care education in general surgery residencies. Meyer AA, et al. **Surgery** 1989 Aug;106(2):392–7; discussion 397–9

A good offense [editorial] Norton LW, et al. **Surgery** 1989 Jun;105(6):808–9

Using animals for the training of physicians and surgeons. English DC. **Theor Med** 1989 Mar;10(1):43–52

Decision analysis in surgical education. Elstein AS. **World J Surg** 1989 May–Jun;13(3):287–91

[Postgraduate surgical training in South Africa] Mieny CJ. **S Afr Med J** 1989 Jun 17;75(12):563–4 **(Afr)**

[On the article, "Evaluation of education in surgery in Belgium. A survey conducted in 2 French-language universities" (letter)] Rombouts JJ, et al. **Acta Chir Belg** 1987 Sep–Oct;87(5):341–2 **(Fre)**

[Anatomy and surgical training] Dimaria G, et al. **Chirurgie** 1988;114(10):746–8 (Eng. Abstr.) **(Fre)**

[The French degree in Surgical Research. Evaluation after 18 months] Huguier M, et al. **Chirurgie** 1988;114(10):733–9 (Eng. Abstr.) **(Fre)**

[Harmonization in the education of surgeons in Europe] **J Chir (Paris)** 1989 May;126(5):344–6 **(Fre)**

[Perspectives of maxillary surgery in Switzerland] Spiessl B. **Helv Chir Acta** 1989 Apr;55(6):953–8 (Eng. Abstr.) **(Ger)**

[Temporary and permanent recurrent laryngeal nerve paralysis following thyroid surgery. Modifying factors: the educational status of the surgeon] Weitensfelder W, et al. **Zentralbl Chir** 1989;114(9):583–9 (Eng. Abstr.) **(Ger)**

[Practical and education-oriented aspects of surgical health care in advanced age] Müller T, et al. **ZFA** 1989 Jan–Feb; 44(1):61–4 (Eng. Abstr.) **(Ger)**

[Experience of a study trip to the Surgical Clinic I. of the Vienna University School of Medicine] Márkus B. **Orv Hetil** 1988 Nov 6;129(45):2415 **(Hun)**

[Multiple choice questions in educational assessment: proposal of a computerized program (editorial)] Beghi M, et al. **Minerva Chir** 1989 May 31;44(10):1435–9 (Eng. Abstr.) **(Ita)**

[Training of surgical specialists in England. A report and personal reflections] Myhre U. **Tidsskr Nor Laegeforen** 1989 Mar 30;109(9):979–81 (Eng. Abstr.) **(Nor)**

[Definition of educational objectives and evaluation methods in the teaching of surgical technics] Gonçalves EL, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Nov–Dec; 43(6):298–306 (Eng. Abstr.) **(Por)**

[From the history of surgical training in Russia in the 18th century] Mirskii MB. **Khirurgiia (Mosk)** 1988 Nov; (11):145–7 **(Rus)**

[Attestation examination and its role in the evaluation of the degree of professional qualifications of a surgeon] Mura'ev MV, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):96–8 **(Rus)**

[Experience using clinical games in training in clinical surgery] Tsukanov IuT. **Khirurgiia (Mosk)** 1989 Jun;(6):5–8 (Eng. Abstr.) **(Rus)**

[Methodologic requirements for the independent work of students at a department of surgery] Belik IE, et al. **Klin Khir** 1988;(11):38–40 **(Rus)**

[The value of student scientific circles in increasing the efficacy of a course in general surgery] Chernov VN, et al. **Klin Khir** 1989;(5):51–2 **(Rus)**

[Optimization of the teaching of practical skills to students at a department of surgical diseases] Gredzhev AF, et al. **Klin Khir** 1988;(11):40–1 **(Rus)**

[Means of activating cognitive activity and the development of clinical thinking in students at departments of surgical diseases] Gusak VK, et al. **Klin Khir** 1989;(5):50 **(Rus)**

[Means of improving the practical training of subordinate surgeons at a surgical clinic] Gusak VK, et al. **Klin Khir** 1988;(11):36–8 **(Rus)**

[Use of diagnostic algorithms at a surgical disease clinic] Ivashchenko VV. **Klin Khir** 1989;(1):46–7 **(Rus)**

[Independent student work at surgery departments] Kharaberiush VA, et al. **Klin Khir** 1988;(10):51–3 **(Rus)**

[Organizational methodologic aspects of surgical training of specialists for foreign countries] Kharaberiush VA, et al. **Klin Khir** 1988;(11):43–6 **(Rus)**

[Experience in training interns in pediatric surgery] Kushch NL, et al. **Klin Khir** 1988;(6):59–60 **(Rus)**

[Ambulatory care of the population and its role in the mastery of practical skills by subordinate surgeons] Mazurik MF. **Klin Khir** 1989;(5):52–3 **(Rus)**

[Current problems of training students in orthopedics–traumatology and military and field surgery at the medical institutes of the country] Trubnikov VF, et al. **Ortop Travmatol Protez** 1988 Nov;(11):68–70 **(Rus)**

[Work experience of the Association of the All-Union Research Center on Surgery of the Academy of Medical Sciences of the USSR and the Department of Hospital Surgery of the I. M. Sechenov 1st Moscow Medical Institute] Efimov BI, et al. **Sov Med** 1988;(6):63–6 **(Rus)**

[Training of the general practice physician in the problems of emergency surgical care] Mil'kov BO, et al. **Sov Zdravookhr** 1988;(7):46–8 (Eng. Abstr.) **(Rus)**

[Reorganization of surgical education] D'iachenko PK, et al. **Vestn Khir** 1988 Sep;141(9):138–40 **(Rus)**

[Improvement in the military medical training of students (we discuss the problems of teaching military field surgery and military field therapy in the medical institute)] Zybov AM. **Voen Med Zh** 1988 Jun;(6):23–4 **(Rus)**

[Mexico: comparative evaluation of 2 study plans for the career of surgeon. Academic effectiveness] Pontes González E, et al. **Educ Med Salud** 1988;22(2):115–27 (Eng. Abstr.) **(Spa)**

[Relation of patients and students during clinical training. A study of the hospital activity of the surgical undergraduate] Díez Miralles M, et al. **Rev Clin Esp** 1988 Oct;183(5):273–7 (Eng. Abstr.) **(Spa)**

[Great variations in the guidance medical students receive in medicine and surgery] Agner O, et al. **Lakartidningen** 1989 Apr 12;86(15):1344–5 **(Swe)**

[Examination of undergraduate medical students in surgery in 1973–1984. What is done with the ones who failed?] Holmström B, et al. **Lakartidningen** 1988 Oct 12; 85(41):3351–2 **(Swe)**

HISTORY

Glimpses of Alaskan medical history. Fortuine R. **Alaska Med** 1989 Jan–Feb;31(1):33

Alexis Carrel. A century later. Edwards WS. **Arch Surg** 1989 Sep;124(9):1014

The American College of Surgeons [editorial] Ebert PA. **Aust N Z J Surg** 1988 Dec;58(12):927–8

Gordon-Taylor memorial lecture. The history of basic surgical science examinations in the Royal Australasian College of Surgeons. Heslop JH. **Aust N Z J Surg** 1988 Jul;58(7):529–36

Gordon-Taylor memorial lecture. The history of basic surgical science examinations in the Royal Australasian College of Surgeons. Heslop JH. **Aust N Z J Surg** 1988 Jul;58(7):529–36

Herbert Moran memorial lecture. Abraham Colles and the Australian connection. O'Brien BM. **Aust N Z J Surg** 1988 Oct;58(10):781–9

Rupert Downes memorial lecture: distinguished Australian military surgeons. Smithurst BA. **Aust N Z J Surg** 1989 Sep;59(9):731–41

The legacy of the giants (Gillies memorial lecture 1985). Hughes N. **Br J Plast Surg** 1988 Nov;41(6):588–92

Doctor or Mister (the correct appellation of British

surgeons). Eibel P. **Can J Surg** 1988 Nov;31(6):452–3
Reflections on medicine. Successful surgery. Massey RU. **Conn Med** 1989 Apr;53(4):243
Arkansas and the Southern Surgical Association. Campbell GS. **J Arkansas Med Soc** 1989 Jan;85(8):341–4
The Australian Bicentenary Issue [editorial] **J Cardiovasc Surg (Torino)** 1988 Nov–Dec;29(6):621–3
A history of the American Association for the Surgery of Trauma: the first 50 years. Peltier LF, et al. **J Trauma** 1989 Feb;29(2):143–51
Surgery, in the days of controversy. Crile G Jr. **JAMA** 1989 Jul 14;262(2):256–8
A seventeenth-century German barber-surgeon and his patients. Jütte R. **Med Hist** 1989 Apr;33(2):184–98
The First Fleet surgeons [letter] **Med J Aust** 1989 Apr 3; 150(7):412
Nathan Womack and the First Department of Surgery at the University of North Carolina. Peacock EE Jr. **N C Med J** 1989 Jan;50(1):31–7
Excellence in search of recognition. The continuing struggle over subspecialty certification. Johnson DG. **Pediatr Neurosci** 1987;13(6):281–92
Saudade 1944: working with the Brazilian medical corps. Weinberger LM. **Pharos** 1989 Summer;52(3):17–20
Early surgical research at the University of Cape Town. The beginning of the J. S. Marais Research Laboratory, 1937–1957. Goetz RH. **S Afr J Surg** 1988 Dec;26(4):140–7
Surgical research at the University of Cape Town from 1967. Hickman R. **S Afr J Surg** 1988 Dec;26(4):148–52
Surgical research at the University of Cape Town. Louw JH. **S Afr J Surg** 1988 Dec;26(4):137–40
Guy de Chauliac and the Grand Surgery. Johnson PC. **Surg Gynecol Obstet** 1989 Aug;169(2):172–6
Gilbert Horrax the complete surgeon: postoperative drawings. Rossitch E Jr, et al. **Surg Neurol** 1989 Jun; 31(6):477–9
50th anniversary meeting of the Society of University Surgeons. Feb. 9–11, 1989. Proceedings. **Surgery** 1989 Feb; 105(2 Pt 2):241–330
Society of University Surgeons. The Halsted centennial. Bahnson HT. **Surgery** 1989 Feb;105(2 Pt 2):268–70
Surgery and the Society of University Surgeons. Ballinger WF, et al. **Surgery** 1989 Feb;105(2 Pt 2):253–5
Harvey Williams Cushing: founder of the Society of Clinical Surgery. Cameron JL. **Surgery** 1989 Apr;105(4):543–8
Society of University Surgeons. The Social and Legislative Issues Committee. Cohn LH. **Surgery** 1989 Feb;105(2 Pt 2):310–2
The Society of University Surgeons and the American Board of Surgery: twenty-five years together. Griffen WO Jr. **Surgery** 1989 Feb;105(2 Pt 2):286–9
Society of University Surgeons. The ill-fated Tripartite Meeting of 1976. Miller LD. **Surgery** 1989 Feb;105(2 Pt 2):303–8
The Ethicon-Society of University Surgeons Surgical Research Fellowship. Pitt HA. **Surgery** 1989 Feb;105(2 Pt 2):322–4
University Surgical Residents' Conference. Schwartz SJ. **Surgery** 1989 Feb;105(2 Pt 2):278–80
Society of University Surgeons. The Lockwood amendment. Shumacker HB Jr. **Surgery** 1989 Feb;105(2 Pt 2):262–4
A founder recalls the birth of the Society of University Surgeons. Zollinger RM. **Surgery** 1989 Feb;105(2 Pt 2):245–50
The Sir Harry Annamunthodo lecture. From Hans Sloane to Aubrey McFarlane. Golding J. **West Indian Med J** 1989 Jun;38(2):61–70
[First episode of Chinese biliary surgery—Chengdu experience in 1940s] Yang ZH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):329–31 **(Chi)**
[Notes on paleosurgery] Kenesi C. **Chirurgie** 1988; 114(7–8):579–84 (Eng. Abstr.) **(Fre)**
[The rapport between medicine and surgery in the great English school of William and John Hunter] Keel PO. **Gesnerus** 1988;45 Pt 3–4:323–41 (Eng. Abstr.) **(Fre)**
[The founding year of the East German Society for Surgery] Matthes T. **Z Exp Chir Transplant Kunstliche Organe** 1988; 21(5):238–43 **(Ger)**
[Carl Thiem. Prominent surgeon and founder of the Cottbus Hospital] Horntrich J, et al. **Zentralbl Chir** 1989; 114(12):800–3 **(Ger)**
[Our surgical heritage. The surgical clinic of the Berlin Charité and its contribution to progress in surgical medicine in the past and present] Luther B, et al. **Zentralbl Chir** 1988;113(19):1289–303 (Eng. Abstr.) **(Ger)**
[Our surgical heritage. The Thuringian Society of Surgery. A short retrospect of 4 decades] Usbeck W. **Zentralbl Chir** 1988;113(15):1002–7 **(Ger)**
[The history, development, trends and prospectives of the state of hand surgery in Hungary] Renner A. **Orv Hetil** 1988 Nov 20;129(47):2503–11 (26 ref.) (Eng. Abstr.) **(Hun)**
[The Mayo Clinic. An American story] Campanacci M. **Chir Organi Mov** 1988 Oct–Dec;73(4):299–305 **(Ita)**
[The evolution of pediatric surgery] Esposito G, et al. **Minerva Chir** 1989 Feb 28;44(4):703–8 (Eng. Abstr.) **(Ita)**
[Surgical treatment of children in Poland in the 19th century] Rejmanowski T. **Arch Hist Filoz Med** 1988;51(2):213–9 (Eng. Abstr.) **(Pol)**
[Contribution of E.E. Eichvald to the development of Russian medicine] Krylov AA, et al. **Sov Zdravookhr** 1989; (6):65–7 **(Rus)**
[Moscow in the life of N.I. Pirogov] Serebrennikov AB. **Sov Zdravookhr** 1989;(6):56–60 **(Rus)**
[Soviet memorial medals dedicated to the scientists of the Academy of Medical Sciences of the USSR and its scientific institutions] Barshtein IuA. **Vestn Akad Med Nauk SSSR** 1989;(2):87–95 **(Rus)**
[The 150th anniversary of the publication of N.I. Pirogov's work "Surgical anatomy of arterial trunks and fascia"] Dyskin EA, et al. **Vestn Khir** 1987 Dec;139(12):102–3 **(Rus)**
[A visit by I.I. Grekov to the grave and home of N.I. Pirogov in Vishnia] Klantsa PA, et al. **Vestn Khir** 1989 Feb; 142(2):135–9 **(Rus)**
[The academician A.G. Savinykh and the development of morphologic studies in Tomsk (on the centenary of his birth)] Saks FF, et al. **Vestn Khir** 1988 Sep;141(9):148–50 **(Rus)**
[The surgical prize of I.F. Bush (on the 150th anniversary of its establishment] Shabunin AV. **Vestn Khir** 1989 Mar; 142(3):123–5 **(Rus)**
[The first scientist-surgeon of the Don (on the 130th anniversary of the birth of Prof. Nikolai Vasil'evich Parinskii)] Zarubinskaia LG, et al. **Vestn Khir** 1989 Mar; 142(3):120–1 **(Rus)**
[The man behind the syndrome: Max Wilms. A famous pathologist and a skillful surgeon] Abon P, et al. **Lakartidningen** 1989 Jul 26;86(30–31):2604–5 **(Swe)**

LEGISLATION & JURISPRUDENCE

Final plea for Medicare payment for assistant surgeons. Foreman J. **Arch Ophthalmol** 1989 Mar;107(3):329
Hospitalization and surgery [editorial] Goode AW, et al. **Med Sci Law** 1988 Jul;28(3):185–6

MANPOWER

The surgical work force and women surgeons. Dalessandri K. **J Am Med Wom Assoc** 1988 Nov–Dec;43(6):169–70
Women surgeons: a national survey. Ramos SM, et al. **J Am Med Wom Assoc** 1989 Jan–Feb;44(1):21–5

ORGANIZATION & ADMINISTRATION

[Practice organization and practice equipment for an operatively active newly established surgeon] Schade G. **Chirurg** 1989 Jun;60(6):suppl 96–8 **(Ger)**
[Characteristics of the work organization of a specialized military field surgical hospital for head, neck and spinal wounds] Khil'ko VA, et al. **Voen Med Zh** 1988 Sep;(9):11–3 **(Rus)**

STANDARDS

The skill, science, and soul of the surgeon. Najarian JS. **Ann Surg** 1989 Sep;210(3):257–67
The CEPOD report and its consequences. Devlin HB. **Aust Clin Rev** 1988 Dec;8(31):174–6
Surgical audit: do we need it? Dudley HA. **Aust Clin Rev** 1988 Dec;8(31):198–200
Surgical audit—the clinical implications. Gunn AA. **Aust Clin Rev** 1988 Dec;8(31):194–7
Self-improvement at court [editorial] Cox K. **Aust N Z J Surg** 1988 Dec;58(12):927
How to set up an audit. Ellis BW. **BMJ** 1989 Jun 17; 298(6688):1635–7
Surgeon-specific wound surveillance: the family or the bean counters? Bryan CS. **Infect Control Hosp Epidemiol** 1989 Aug;10(8):376–8
Basic principles of dermatologic surgery. Frumkin A, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):808–14
Surgical insurrection [editorial][see comments] **Lancet** 1988 Oct 15;2(8616):884–5. **Comment in:** Lancet 1989 Jan 14;1(8629):104
Better surgeons get better results [letter] Novell R, et al. **Lancet** 1988 Dec 17;2(8625):1428–9
Screening criteria for prior authorization for ten surgical procedures. **R I Med J** 1989 Feb;72(2):67–70
[Comment on the article "Continuing education as part of quality assurance" by M. Popović] Schega W. **Ann Laringol Otol Rinol Faringol** 1989 Jun;60(6):suppl 93 **(Ger)**
[Is a rebuke for surgical treatment errors foreseeable?] Ekkernkamp A, et al. **Chirurg** 1989 May;60(5):suppl 73–6 **(Ger)**
[Surgery in our time—stability in transition] Heberer G. **Chirurg** 1989 Jun;60(6):suppl 85–92 **(Ger)**
[Extent of postoperative care and protection from spurious accusations] Müller-Osten W. **Chirurg** 1989 Jun;60(6):suppl 98–101 **(Ger)**

TRENDS

Thoughts while scrubbing. Ahlquist RE Jr. **Am J Surg** 1989 May;157(5):454–6
Surgery and the ultimate public good. Polk HC Jr. **Ann Surg** 1989 May;209(5):505–12
The surgeon and biliary lithotripsy [editorial] Nahrwold DL. **Arch Surg** 1989 Jul;124(7):769–70
More on surgery and the new biology [editorial] Ludbrook J. **Aust N Z J Surg** 1988 Nov;58(11):841
Pax chirurgica—the surgical peace. Ryan P. **Dis Colon Rectum** 1989 Jul;32(7):549–51
Paediatric surgery in Kenya [editorial] **East Afr Med J** 1987 Oct;64(10):637
Surgeon, surgery and clinical research [editorial] Banerjee DK. **J Indian Med Assoc** 1989 Feb;87(2):25–6
A big man in the world of surgery [interview by R.L Reece] Najarian JS. **Minn Med** 1989 Jun;72(6):327–9
What's new in pediatric surgery—1988. Grosfeld JL. **Pediatrics** 1989 Apr;83(4):586–90 (59 ref.)
Progress in and alternatives to surgery. Clark A. **Practitioner** 1988 Mar 22;232(1445):313–4, 317 (3 ref.)
Is surgical endoscopy necessary? [editorial] Berci G. **Surg Endosc** 1987;1(1):2–3
[The achievements of Soviet surgery and its influence on Bulgarian surgery] Altünkov P. **Khirurgiia (Sofiia)** 1988; 41(5):88–91 **(Bul)**
[Surgery and the media in search of conflict resolution. The radio] Krautkrämer H. **Langenbecks Arch Chir** 1988;Suppl 2:335–9 **(Ger)**
[Developments in pediatric surgery] Berg U. **Z Aerztl Fortbild (Jena)** 1988;82(16):775–8 **(Ger)**
[Possibilities of increasing surgical safety at the turn of the millennium] Széll K. **Orv Hetil** 1988 Sep 4;129(36):1903–8, 1911 (25 ref.) (Eng. Abstr.) **(Hun)**
[Future of the Japan Surgical Society] **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1487–505 **(Jpn)**
[From the time of surgical art to the time of modern technology] Bastos J. **Acta Med Port** 1988 Mar–Apr; 1(2):167–9 (Eng. Abstr.) **(Por)**
[Status and outlook for the development of surgical services in the Ukrainian SSR] Romanenko AE. **Klin Khir** 1989; (3):1–6 **(Rus)**
[The achievements and pathway of development of reconstructive surgery in the USSR] Petrovskii BV. **Klin Med (Mosk)** 1988 Sep;66(9):6–11 **(Rus)**
[Various aspects of perestroika in surgery and blood transfusion] Golovin GV. **Vestn Khir** 1988 Jun;140(6):3–7 (Eng. Abstr.) **(Rus)**
[The status and means for the further improvement of specialized surgical care] Lisitsyn KM. **Voen Med Zh** 1988 Aug;(8):3–7 **(Rus)**

SURGERY DEPARTMENT, HOSPITAL see under **HOSPITAL DEPARTMENTS**

SURGERY, LASER see **LASER SURGERY**

SURGERY, MINOR

Even minor surgery can go wrong [letter] **Br J Hosp Med** 1988 Aug;40(2):148
[Anesthesia with alfentanyl in minor surgery] Venuti FS, et al. **Minerva Anestesiol** 1988 Dec;54(12):509–14 (Eng. Abstr.) **(Ita)**

METHODS

Setting up your practice for minor surgery. Williamson B. **Practitioner** 1988 Mar 8;232(1444):229–30, 232, 234–5

SURGERY, OFFICE see **AMBULATORY SURGERY**

SURGERY, OPERATIVE

see related
INTRAOPERATIVE COMPLICATIONS
OPERATING ROOMS
POSTOPERATIVE COMPLICATIONS

Experience with vecuronium during long-lasting surgery. Eriksson LI, et al. **Acta Anaesthesiol Scand** 1988 Nov; 32(8):619–22
Beta-receptor blocker withdrawal. A preoperative problem in general surgery? Pontén J, et al. **Acta Anaesthesiol Scand Suppl** 1982;76:32–7
Perioperative myocardial ischaemia and infarction in connection with cardiac and non-cardiac surgery. De Hert SG, et al. **Acta Chir Belg** 1989 Mar–Apr;89(2):66–72 (41 ref.)
Effects of operations on lymphocyte glucocorticoid receptors. Krasznai A, et al. **Acta Chir Hung** 1989; 30(1):39–43
Influence of anesthetic procedures on surgical sequelae. An update. Holland, September 7–9, 1987. **Acta Chir Scand Suppl** 1989;550:1–193
Anesthetic risk factors. Haljamäe H. **Acta Chir Scand Suppl** 1989;550:11–9; discussion 19–21 (66 ref.)
The stress response to surgery: release mechanisms and the modifying effect of pain relief. Kehlet H. **Acta Chir Scand Suppl** 1989;550:22–8 (75 ref.)
Host defense mechanisms in surgical patients: effect of surgery and trauma. Meakins JL. **Acta Chir Scand Suppl** 1989;550:43–51; discussion 51–3 (29 ref.)
Important factors in the maintenance of homeostasis in the surgical patient. Shires GT. **Acta Chir Scand Suppl** 1989; 550:29–33; discussion 34–5
Hormonal responses to surgical stress. Udelsman R, et al. **Adv Exp Med Biol** 1988;245:265–72
Current status of blood therapy in surgery. Collins JA. **Adv Surg** 1989;22:75–104 (103 ref.)
Preoperative evaluation of the elderly patient [letter] Last EC. **Am Fam Physician** 1989 Aug;40(2):58, 61

Usefulness of the severity and extent of reversible perfusion defects during thallium-dipyridamole imaging for cardiac risk assessment before noncardiac surgery. Lette J, et al. **Am J Cardiol** 1989 Aug 1;64(5):276–81

Evaluation of factor VIII pharmacokinetics in hemophilia–A subjects undergoing surgery and description of a nomogram for dosing calculations. Longo G, et al. **Am J Hematol** 1989 Mar;30(3):140–9

Multidisciplinary approach to improving documentation of medications used during surgical procedures. Donnelly AJ. **Am J Hosp Pharm** 1989 Apr;46(4):724–8

Summary of National Institutes of Health consensus development statement on perioperative red cell transfusion. **Am J Obstet Gynecol** 1989 Jan;160(1):278 (0 ref.)

Early reexploration of the parotid wound following parotidectomy. Chaffoo RA, et al. **Am J Otolaryngol** 1989 Jan–Feb;10(1):38–41

Papers of the Southwestern Surgical Congress, 40th annual meeting. Phoenix, Arizona, April 10–13, 1988. **Am J Surg** 1988 Dec;156(6):429–561

The effect of intravenous nutrition on muscle mass and exercise capacity in perioperative patients. Wood CD, et al. **Am J Surg** 1989 Jul;158(1):63–7

Delirium in the surgical patient. Golinger RC. **Am Surg** 1989 Sep;55(9):549–51

Successful use of fibrin glue during 2 years of surgery at a university medical center. Spotnitz WD, et al. **Am Surg** 1989 Mar;55(3):166–8

Sepsis and antithrombin III, prekallikrein, and fibronectin levels in surgical patients. Wilson RF, et al. **Am Surg** 1989 Jul;55(7):450–6

Neurological monitoring during anaesthesia and surgery. McMeniman WJ, et al. **Anaesth Intensive Care** 1988 Aug; 16(3):358–67 (40 ref.)

Experience with the preoperative invasive measurement of haemodynamic, respiratory and renal function in 100 elderly patients scheduled for major abdominal surgery. Older P, et al. **Anaesth Intensive Care** 1988 Nov; 16(4):389–95

Prophylaxis against acid aspiration syndrome. Single oral dose of H2-antagonist on the evening before elective surgery. Gallagher EG, et al. **Anaesthesia** 1988 Dec; 43(12):1011–4

The effect of tracheal intubation and surgical stimulation on median nerve somatosensory evoked potentials during anaesthesia. Sebel PS, et al. **Anaesthesia** 1988 Oct; 43(10):857–60

Pharmacodynamics of vecuronium and atracurium in the obese surgical patient. Weinstein JA, et al. **Anesth Analg** 1988 Dec;67(12):1149–53

Evaluation of a blood gas and chemistry monitor for use during surgery. Bashein G, et al. **Anesthesiology** 1989 Jan; 70(1):123–7

Coagulation changes during packed red cell replacement of major blood loss. Murray DJ, et al. **Anesthesiology** 1988 Dec;69(6):839–45

A review of 25 patients with hereditary angioedema requiring surgery. Wall RT, et al. **Anesthesiology** 1989 Aug; 71(2):309–11

Abstracts. The Scandinavian Surgical Society, 44th Congress. Helsinki, June 15–17, 1989. **Ann Chir Gynaecol Suppl** 1989;204:1–59

Striving for excellence in breast reconstruction: the salvage of poor results. Kroll SS, et al. **Ann Plast Surg** 1989 Jan; 22(1):58–64

Trends towards increasing specialisation of the consultant surgeon in the United Kingdom [letter] Bem C. **Ann R Coll Surg Engl** 1989 Jul;71(4 Suppl):59

Immune and metabolic effects of arginine in the surgical patient. Daly JM, et al. **Ann Surg** 1988 Oct;208(4):512–23

Fractional change in blood volume following normal saline infusion in high-risk patients before noncardiac surgery. Mullins RJ, et al. **Ann Surg** 1989 Jun;209(6):651–9; discussion 659–61

Disposition of ceftazidime in surgical patients with intra-abdominal infection. Heim-Duthoy KL, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1845–7

Perioperative blood glucose levels. A study to determine the effect of surgery. Keith KS, et al. **AORN J** 1989 Jul; 50(1):103–4, 106–7, 109–10

The value of second-look operation in patients with advanced epithelial ovarian carcinoma. Sevelda P, et al. **Arch Gynecol Obstet** 1989;244(2):79–86

Papers read before the 96th annual meeting of the Western Surgical Association. San Diego, Calif, November 14–16, 1988—Part II. **Arch Surg** 1989 Aug;124(8):885–951

Papers read before the 69th annual meeting of the New England Surgical Society. Montreal, Canada, Sept 15 to Sept 17, 1988. **Arch Surg** 1989 May;124(5):530–628

Errors in estimating energy expenditure in critically ill surgical patients. Cortes V, et al. **Arch Surg** 1989 Mar; 124(3):287–90

Management of non-cardiac operative procedures in patients with mechanical heart valves on chronic anticoagulation therapy. Thulin LI. **Arq Bras Cardiol** 1988 Jun;50(6):381–3

Transient changes of serum lipoprotein(a) as an acute phase protein. Maeda S, et al. **Atherosclerosis** 1989 Aug; 78(2–3):145–50

Place of second-look laparotomy after 18 courses of chemotherapy in epithelial ovarian cancer. Ngan HY, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):52–4

Abstracts from the annual meeting of the Surgical Research Society of Australasia. Westmead, Sydney, NSW, 15–17 September 1988. **Aust N Z J Surg** 1989 Mar;59(3):261–82

Prognostic factors in relation to second-look laparotomy in ovarian cancer. Creasman WT, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):183–90 (10 ref.)

Diagnostic versus therapeutic second-look surgery in patients with ovarian cancer. Janisch H, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):191–200 (17 ref.)

A tumour-marker combination versus second-look surgery in ovarian cancer. I. Clinical experience. Lahousen M, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):201–8 (5 ref.)

The second-look operation for ovarian cancer. Rutledge FN. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):175–82 (20 ref.)

A tumour-marker combination versus second-look surgery in ovarian cancer. II. Mathematical model. Stettner H. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):209–12

Perfluorocarbon as blood substitute in clinical applications and in war casualties. Chen HS, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):403–9

Orthopaedic surgery: a health hazard. Dias JJ, et al. **BMJ** 1988 Dec 24–31;297(6664):1637–8

Does wearing two pairs of gloves protect operating theatre staff from skin contamination? Matta H, et al. **BMJ** 1988 Sep 3;297(6648):597–8

Anesthetic complications of a weight reducing regimen [letter] Selsby DS. **BMJ** 1989 Jan 7;298(6665):51

A different slant on surgery and HIV. Stotter A. **BMJ** 1989 Feb 25;298(6672):536

The anaesthetist's activities in the operating theatre [letter] Goodman NW. **Br J Anaesth** 1989 Jun;62(6):700

Surgical stress: the role of pain and analgesia. Kehlet H. **Br J Anaesth** 1989 Aug;63(2):189–95 (46 ref.)

The coagulation and fibrinolytic response to surgery [letter] Lavies NG. **Br J Anaesth** 1988 Oct;61(4):513–4

Pharmacokinetics of droperidol in surgical patients under different conditions of anaesthesia. Lehmann KA, et al. **Br J Anaesth** 1988 Sep;61(3):297–301

Oxygen consumption and carbon dioxide elimination in infants and children during anaesthesia and surgery. Lindahl SG. **Br J Anaesth** 1989 Jan;62(1):70–6

A time and motion study of the anaesthetist's intraoperative time. McDonald JS, et al. **Br J Anaesth** 1988 Dec; 61(6):738–42

Risk of myocardial ischaemia during anaesthesia in treated and untreated hypertensive patients. Stone JG, et al. **Br J Anaesth** 1988 Dec;61(6):675–9

Surgical Research Society abstracts. **Br J Surg** 1989 Jun; 76(6):625–49

The seventh tripartite meeting of the Surgical Research Society held in conjunction with the Society of University Surgeons and the European Surgical Research Society. 6, 7 and 8 July 1988, Bristol. Abstracts. **Br J Surg** 1988 Dec; 75(12):1229–75

Need for surgical wound dressing. Chrintz H, et al. **Br J Surg** 1989 Feb;76(2):204–5

Surgical nutrition: time for some clinical common sense. Hill GL. **Br J Surg** 1988 Aug;75(8):729–30

Leucine kinetics in surgical patients [letter] Ward HC. **Br J Surg** 1989 Aug;76(8):878

Nutritional support in the perioperative period. Burns HJ. **Br Med Bull** 1988 Apr;44(2):357–73 (87 ref.)

Evaluation of the risks of surgery. Carter DC, et al. **Br Med Bull** 1988 Apr;44(2):322–40 (44 ref.)

Balancing benefits and burdens in surgery. Jennett B. **Br Med Bull** 1988 Apr;44(2):499–513 (41 ref.)

Effect of anaesthesia and surgery on pharmacokinetics and pharmacodynamics. Nimmo WS, et al. **Br Med Bull** 1988 Apr;44(2):286–301 (46 ref.)

General patient management. Telfer AB. **Br Med Bull** 1988 Apr;44(2):235–46 (20 ref.)

Anaesthesia for patients with congenital heart disease. Duncan PG. **Can Anaesth Soc J** 1983 May;30(3 Pt 2):S20–6 (8 ref.)

Complications during anaesthesia in patients with Duchenne's muscular dystrophy (a retrospective study). Larsen UT, et al. **Can J Anaesth** 1989 Jul;36(4):418–22

The effect of preoperative apple juice on gastric contents, thirst, and hunger in children. Splinter WM, et al. **Can J Anaesth** 1989 Jan;36(1):55–8

Incidence and importance of bacteriuria in postoperative, short-term urinary catheterization. Nickel JC, et al. **Can J Surg** 1989 Mar;32(2):131–2

Basis of thermal changes during anaesthesia and surgery: a review. Chinyanga HM. **Cent Afr J Med** 1988 Jul; 34(7):161–4 (28 ref.)

Comparison of hemodynamic and oxygen transport effects of dopamine and dobutamine in critically ill surgical patients. Shoemaker WC, et al. **Chest** 1989 Jul;96(1):120–6

Prospective trial of supranormal values of survivors as therapeutic goals in high-risk surgical patients. Shoemaker WC, et al. **Chest** 1988 Dec;94(6):1176–86

Hypertension in the surgical patient: management of blood pressure and anesthesia. Estafanous FG. **Cleve Clin J Med** 1989 Jun;56(4):385–93 (42 ref.)

Impact of immediate acidification of blood on measurement of plasma tissue plasminogen activator (tPA) activity in surgical patients. Nilsson TK, et al. **Clin Chem** 1989 Sep; 35(9):1999

The response of plasma oxytocin to surgical stress. Nussey SS, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):277–82

Intravenous fluids and blood component therapy. Magrina JF. **Clin Obstet Gynecol** 1988 Sep;31(3):636–99

Ethical dilemmas of neonatal—perinatal surgery. Rostain AL, et al. **Clin Perinatol** 1989 Mar;16(1):275–302 (62 ref.)

The role of nicardipine during anesthesia and surgery. Kaplan JA. **Clin Ther** 1989;11(1):84–93 (20 ref.)

A census of patients waiting for treatment or consultation in surgical specialties in an English health region. Donaldson LJ, et al. **Community Med** 1989 Feb;11(1):13–20

Systemic responses to anesthesia and operation. **Crit Care Clin** 1987 Apr;3(2):241–444

Immune response following surgical trauma. Gupta S. **Crit Care Clin** 1987 Apr;3(2):405–15 (33 ref.)

Excessive blood loss and its relationship to clotting system changes during and after major surgery. Newman RS. **Crit Care Clin** 1987 Apr;3(2):417–27 (62 ref.)

Mediators of altered perioperative physiology. O'Neal K, et al. **Crit Care Clin** 1987 Apr;3(2):359–71 (49 ref.)

Effect of anesthesia and surgery on renal function. Sladen RN. **Crit Care Clin** 1987 Apr;3(2):373–93 (64 ref.)

The critically ill surgical patient: nutritional considerations. Starker PM, et al. **Crit Care Clin** 1987 Jan;3(1):205–16 (74 ref.)

Hemodynamic and metabolic changes during and following operation. Waxman K. **Crit Care Clin** 1987 Apr;3(2):241–50 (38 ref.)

Immunological aspects of anaesthesia and surgery—with special reference to NK cells. Tønnesen E. **Dan Med Bull** 1989 Jun;36(3):263–81 (292 ref.)

Managing diabetic surgical patients with glucose-free saline and insulin. Sato T, et al. **Diabetes Res Clin Pract** 1988 Sep 5;5(3):191–5

Antibiotic usage in surgical practice [letter] Marchand H. **Ear Nose Throat J** 1988 Aug;67(8):608–10

Polychemotherapy and second-look laparotomy in the management of the ovarian cancer. Draca P. **Eur J Gynaecol Oncol** 1988;9(5):410–4

European Society for Surgical Research, 22nd congress. Aarhus, May 10–13, 1987. Abstracts. **Eur Surg Res** 1987; 19 Suppl 1:1–125

European Society for Surgical Research, 24th congress. Brussels, May 29–31, 1989. Abstracts. **Eur Surg Res** 1989; 21 Suppl 2:1–103

Long acting cephalosporins in surgery. World Congress of the International College of Surgeons. Milan, July 3–9, 1988. Proceedings. **Eur Surg Res** 1989;21 Suppl 1:1–58

Beta-endorphin and ACTH levels in the perioperative period. Marschall K, et al. **Gen Pharmacol** 1989; 20(4):399–402

Predicting pressure ulcer development in surgical patients. Stotts NA. **Heart Lung** 1988 Nov;17(6 Pt 1):641–7

Changes in the respiratory quotient during surgery with or without carbohydrate loading [published erratum appears in Hiroshima J Med Sci 1988 Sep;37(3):149] Kawachi S, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):83–7

Effect of varying intervals of starvation on perioperative blood glucose levels. Gurha P, et al. **Indian J Pediatr** 1988 Sep–Oct;55(5):783–7

Neonatal and pediatric stress responses to anesthesia and operation. Anand KJ, et al. **Int Anesthesiol Clin** 1988 Fall; 26(3):218–25 (62 ref.)

Operation, anesthesia, and the endorphin system. Carr DB, et al. **Int Anesthesiol Clin** 1988 Fall;26(3):199–205 (86 ref.)

Anesthetic and surgical stress in the diabetic patient: carbohydrate homeostasis. Daykin AP. **Int Anesthesiol Clin** 1988 Fall;26(3):206–12 (52 ref.)

The effects of acupuncture on operative pain and the hormonal responses to stress. Leong RJ, et al. **Int Anesthesiol Clin** 1988 Fall;26(3):213–7 (47 ref.)

Guidelines for corticosteroid use in anesthetic and surgical stress. Napolitano LM, et al. **Int Anesthesiol Clin** 1988 Fall; 26(3):226–32 (27 ref.)

Catecholamines in anesthetic and surgical stress. Zaloga GP. **Int Anesthesiol Clin** 1988 Fall;26(3):187–98 (106 ref.)

Proceedings of the III International Symposium on Pediatric Surgical and Neonatal Intensive Care. **Intensive Care Med** 1989;15 Suppl 1:S1–79

The use of multiple logistic function to predict surgical risk. De Ritis G, et al. **Ital J Surg Sci** 1988;18(3):207–15

Surgery and human immunodeficiency virus disease. Scannell KA. **J Acquir Immune Defic Syndr** 1989;2(1):43–53

Postoperative temperature and infection in patients undergoing general surgery. Payman BC, et al. **J Adv Nurs** 1989 Mar;14(3):198–202

A patient with new Q waves: methods for decision making in the individual patient. Moskowitz AJ, et al. **J Am Coll Cardiol** 1989 Sep;14(3 Suppl A):29A–37A

Delayed hypersensitivity on a surgical service. Lefemine A, et al. **J Am Coll Nutr** 1988 Oct;7(5):355–9

An all-purpose photo utility belt. Thomas RJ. **J Biol Photogr** 1989 Apr;57(2):50

Perioperative alteration of neutrophil functions after open heart and other major surgeries. A comparative study. Utoh J, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug; 30(4):692–5

Cataract surgical suture marking device for the intraoperative control of astigmatism. Soll DB, et al. **J Cataract Refract Surg** 1988 Sep;14(5):571–3

Preoperative evaluation of the elderly surgical patient.

Galazka SS. **J Fam Pract** 1988 Dec;27(6):622–32 (119 ref.)
The sinking of the "captain of the ship". Reexamining the vicarious liability of an operating surgeon for the negligence of assisting hospital personnel. Price SH. **J Leg Med** 1989 Jun;10(2):323–56
Successful implementation of Maximum Surgical Blood Order Schedule. Lowery TA, et al. **J Med Assoc Ga** 1989 Mar;78(3):155–8
Is routine pre-operative electrocardiogram necessary? Yipintsoi T, et al. **J Med Assoc Thai** 1989 Jan;72(1):16–20
Papers presented at the 19th annual meeting of the Canadian Association of Paediatric Surgeons. Manitoba, Canada, September 9–12, 1987. **J Pediatr Surg** 1988 Aug; 23(8):695–783
Papers presented at the 36th annual meeting of the Surgical Section of the American Academy of Pediatrics. New Orleans, Louisiana, October 31–November 2, 1987. Part 2. **J Pediatr Surg** 1988 Jul;23(7):599–673
Papers presented at the 37th annual meeting of the Surgical Section of the American Academy of Pediatrics. San Francisco, California, October 15–17, 1988. Part 2. **J Pediatr Surg** 1989 Aug;24(8):729–845
Malignant hyperthermia: experience in the prospective management of eight children. Dubrow TJ, et al. **J Pediatr Surg** 1989 Feb;24(2):163–6
Resting energy expenditure in children following major operative procedures. Groner JI, et al. **J Pediatr Surg** 1989 Aug;24(8):825–7; discussion 827–8
Surgery, sepsis, and nonspecific immune function in neonates. Madden NP, et al. **J Pediatr Surg** 1989 Jun;24(6):562–6
Outpatient bowel preparation in children. Tuggle DW, et al. **J Pediatr Surg** 1989 Jul;24(7):703–4
Analysis of energy and macronutrient balance in the postoperative infant. Winthrop AL, et al. **J Pediatr Surg** 1989 Jul;24(7):686–8; discussion 688–9
Second meeting of the Academic Department of Surgery In Europe. Edinburgh, 8–9 April 1988. Abstracts. **J R Coll Surg Edinb** 1988 Aug;33(4):204–15
Ventilatory support of the surgical patient. Grant IS, et al. **J R Coll Surg Edinb** 1988 Oct;33(5):235–43 (32 ref.)
Papers presented at the annual meeting of the Association for Academic Surgery. Salt Lake City, Utah, November 16–19, 1988. **J Surg Res** 1989 May;46(5):401–525
Extracorporeal shock wave lithotripsy is a surgical operation, albeit noninvasive [letter] Drach GW. **J Urol** 1989 May; 141(5):1213–4
Consensus conference. Perioperative red blood cell transfusion. **JAMA** 1988 Nov 11;260(18):2700–3 (0 ref.)
The outcome of surgery in patients more than 90 years old [letter] Phipps EJ. **JAMA** 1989 Aug 18;262(7):900
Muscle protein metabolism of rats in surgical trauma. Lee VM, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct; 12(5):445–51
Postsurgical muscle protein turnover in perfused hindquarters of the rat. Lee VM, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):452–6
Protein-sparing effect of substrate infusion in surgical patients is governed by the clinical state, and not by the individual substrate infused. Shaw JH, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):433–40
Urine human epidermal growth factor (hEGF) levels following surgery. Abe Y, et al. **Jpn J Surg** 1988 Nov; 18(6):641–6
Routine H2-receptor antagonists before elective surgery? [editorial] **Lancet** 1989 Jun 17;1(8651):1363–4
Parenteral peptide supplements after major surgery [letter] Cynober L, et al. **Lancet** 1989 May 13;1(8646):1085–6
Palliative percutaneous aortic balloon valvuloplasty before noncardiac operations and invasive diagnostic procedures. Hayes SN, et al. **Mayo Clin Proc** 1989 Jul;64(7):753–7
Morning admission for a same-day surgical procedure: resolution of a blood bank problem. Moore SB, et al. **Mayo Clin Proc** 1989 Apr;64(4):406–8
Risk of noncardiac surgical procedures in patients with aortic stenosis. O'Keefe JH Jr, et al. **Mayo Clin Proc** 1989 Apr; 64(4):400–5
Patients' reactions and physician–patient communication in a mandatory surgical second-opinion program. Rosenberg SN, et al. **Med Care** 1989 May;27(5):466–77
The surgeon as a patient [letter] Arnold M. **Med J Aust** 1989 Feb 20;150(4):223
Unreasonable refusal of medical treatment. Levi J. **Med Law** 1988;7(3):303–4
Perioperative red cell transfusion. **Natl Inst Health Consensus Dev Conf Consensus Statement** 1988 Jun 27–29;7(4):1–6 (0 ref.)
More assured in-the-bag placement of C-loop posterior chamber intraocular lenses. Kietzman B. **Ophthalmic Surg** 1989 Jun;20(6):403–5
Infected uncemented hip arthroplasty. Preserving the femoral stem with a two-stage revision procedure. Struhl S, et al. **Orthop Rev** 1989 Jun;18(6):707–12 (14 ref.)
A device for the intraoperative identification of the recurrent laryngeal nerve in piglets. Smith DB, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):137–45
A pointer on pointers [letter] Hoehn JG. **Plast Reconstr Surg** 1989 Aug;84(2):364
The medical evaluation of the elderly preoperative patient. Daly MP. **Prim Care** 1989 Jun;16(2):361–76 (46 ref.)
Surgical treatment of bilateral Wilms' tumours with special reference to second operations in metachronous disease. Pumberger W, et al. **Prog Pediatr Surg** 1989;23:96–103
Measurement of 6-keto-PGF1 alpha and thromboxane B2 levels in critically ill surgical patients. Vassar MJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Aug; 33(2):129–35
Nutritional assessment of surgical patients. Brown CS, et al. **QRB** 1988 Oct;14(10):302–6
Postoperative complications in same day admission surgery. Llewellyn J, et al. **QRB** 1989 Feb;15(2):49–53
Improving peri-operative pain control [editorial] Shipton EA. **S Afr Med J** 1989 Sep 16;76(6):240–1
Findings and implications from preadmission screening of elderly patients waiting for elective surgery. Reardon GT, et al. **Soc Work Health Care** 1988;13(3):51–63
Histological, biochemical and clinical findings in hepatitis B carriers undergoing elective abdominal surgery. Pramoolsinsap C, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):571–8
Present indications and future expectations of ultrasound in surgery. Röthlin M, et al. **Surg Endosc** 1988;2(3):176–9
Papers presented at the fiftieth annual meeting of the Society of University Surgeons. Baltimore, Md., Feb. 9–11, 1989. **Surgery** 1989 Aug;106(2):115–456
Surgical procedures in patients during the tenth decade of life. Cohen JR, et al. **Surgery** 1988 Oct;104(4):646–51
The role of intraoperative two-dimensional echocardiography in the assessment of thoracic aorta pathology. Schippers OA, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):208–13
Intraoperative EEG monitoring: (II). Similarity analysis using density-modulated t array. Kinefuchi Y, et al. **Tokai J Exp Clin Med** 1988 Feb;13(1):63–70
Intraoperative EEG monitoring: (I). Parametric representation of processed EEG during anesthesia. Kinefuchi Y, et al. **Tokai J Exp Clin Med** 1988 Feb; 13(1):53–61
Detailed diagnoses and procedures for patients discharged from short-stay hospitals. Graham D. **Vital Health Stat [13]** 1988 May;(95):1–400
Implications of utilization of a maximum surgical blood order schedule. Kuriyan M, et al. **Vox Sang** 1989;57(2):152–4
A new scoring system for disease intensity in a surgical intensive care unit. Lehmkuhl P, et al. **World J Surg** 1989 May–Jun;13(3):252–8
[Surgical interventions in hemophiliac patients] Lisichkov T. **Khirurgiia (Sofiia)** 1988;41(6):35–40 (Eng. Abstr.) (Bul)
[Immunomodulatory effect of ginsenoside on cell-mediated immunity with operative stress in the mouse] Yang GZ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Aug;8(8):479–80, 454 (Eng. Abstr.) (Chi)
[Incidence of nosocomial infections in the surgical department] Lovečková J, et al. **Cas Lek Cesk** 1988 Aug 19;127(34):1072–5 (Eng. Abstr.) (Cze)
[Cross-sectional studies of nosocomial infections in a surgery workplace] Pazdiora P, et al. **Cesk Epidemiol Mikrobiol Imunol** 1988 Nov;37(6):354–60 (Eng. Abstr.) (Cze)
[Surgical diseases in children in Czechoslovakia] Rödling J, et al. **Cesk Pediatr** 1989 Apr;44(4):227–30 (Eng. Abstr.) (Cze)
[Waiting lists for surgical interventions] Jørgensen J, et al. **Ugeskr Laeger** 1988 Oct 31;150(44):2664 (Dan)
[Variation in operation pattern between academic and general hospitals] Merkelbach JW. **Ned Tijdschr Geneeskd** 1988 Nov 26;132(48):2194–5 (Dut)
[Index for the years 1982–1987] **Acta Chir Belg** 1988 Jul–Aug; 88(4):191–299 (Fre)
[The surgeon and superoxide dismutase. Review of its use in medicine and surgery. Study of its tolerability based on animal experiments and use in man] Goddio AS, et al. **Ann Chir** 1988;42(6):413–22 (63 ref.) (Eng. Abstr.) (Fre)
[Propofol in emergency anesthesia] Cauhépé C, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):45–8 (Eng. Abstr.) (Fre)
[Characteristics of anesthesia in children with cardiomyopathies subjected to a non-cardiac intervention] Deswarte-Pipien I. **Cah Anesthesiol** 1989 May;37(3):171–9 (5 ref.) (Fre)
[The neuroendocrine response during surgery and in the first 5 postoperative days in a patient under continuous peridural analgesia] Lanza V, et al. **Cah Anesthesiol** 1989 Mar–Apr; 37(2):107–12 (Fre)
[Autologous transfusion in surgery. Experience of transfusion centers at the Saint-Antoine and Foch hospitals] Habibi B, et al. **Chirurgie** 1988;114(10):749–57 (Eng. Abstr.) (Fre)
[Surgery and humanitarian help. The experience of "Médecins sans frontières"] Gossot D, et al. **J Chir (Paris)** 1988 Aug–Sep;125(8–9):528–30 (Fre)
[Statistics in daily practice. A surgeon's reflections] Patel JC. **Presse Med** 1988 Sep 10;17(30):1519–21 (Fre)
[Preoperative autotransfusion for elective surgery] Lambermont M, et al. **Rev Med Brux** 1989 Apr; 10(4):138–40 (Eng. Abstr.) (Fre)
[Hemodilution in general surgery] Sýkora V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:319–22 (Ger)
[Intraoperative, direct and continuous measurement of stomach pH following pretreatment with ranitidine or sodium citrate] Kuster M, et al. **Anaesthesist** 1989 Feb; 38(2):59–64 (Eng. Abstr.) (Ger)
[The quality of life from the surgical viewpoint—a new assessment of old criteria?] Kümmerle F. **Dtsch Med Wochenschr** 1989 Aug 18;114(33):1260–3 (Ger)
[Prevention of HIV infections in surgery (editorial)] Farthmann EH. **Fortschr Med** 1988 Dec 20;106(36):12–3 (Ger)
[Swiss Society of Surgery, 75th annual meeting. 23–25 June 1988, Montreux. Held jointly with the 11th annual meeting of the Swiss Society of Senology. Proceedings] **Helv Chir Acta** 1989 Jun;56(1–2):1–300 (Ger)
[Swiss Society of Surgery, 75th annual meeting. 23–25 June 1988, Montreux. Held jointly with the 11th annual meeting of the Swiss Society of Senology. Proceedings] **Helv Chir Acta** 1989 Apr;55(6):741–945 (Ger)
[Swiss Society of Surgery. 74th annual meeting. 7–9 May 1987, Lugano. 4] **Helv Chir Acta** 1988 Jun;55(1–2):1–252 (Ger)
[Swiss Society of Surgery, 75th annual meeting. 23–25 June 1988, Montreux. Held jointly with the 11th annual meeting of the Swiss Society of Senology. Proceedings] **Helv Chir Acta** 1989 Jan;55(5):537–730 (Ger)
[Immunosuppression caused by surgery and severe trauma] Holch M, et al. **Helv Chir Acta** 1989 Jun;56(1–2):121–4 (Eng. Abstr.) (Ger)
[Proceedings of the German Surgical Society, 105th session. 6–9 April 1988] **Langenbecks Arch Chir** 1988;Suppl 2:1–720 (Ger)
[AIDS—current significance in surgery] Gürtler L, et al. **Langenbecks Arch Chir** 1989;374(1):60–4 (Ger)
[84th annual meeting of the German Society of Pediatrics. 7–10 September 1988, Mainz. Held jointly with the 26th annual meeting of the German Society of Pediatric Surgery and the 40th annual meeting of the German Society of Social Pediatrics. Abstracts] **Monatsschr Kinderheilkd** 1988 Aug;136(8):481–589 (Ger)
[Perspectives on surgery and anesthesiology in Sri Lanka. A report on the experiences of a surgical team at the Justus Liebig University] Adams HA, et al. **Unfallchirurgie** 1988 Aug;14(4):218–23 (Ger)
[The health and will of the patient—applied to extended surgical procedures] Bauer G, et al. **Wien Klin Wochenschr** 1988 Nov 18;100(22):725–9 (12 ref.) (Eng. Abstr.) (Ger)
[Northwest German Surgery Association. 139th meeting. 11–13 June 1987, Neumünster. Abstracts] **Zentralbl Chir** 1988;113(14):920–39 (Ger)
[Intra-anesthetic awareness] Eldor J. **Harefuah** 1989 Mar 15; 116(6):322–5 (48 ref.) (Heb)
[Effects of chlordemethyldiazepam on blood cortisol during surgical stress] D'Eramo C, et al. **Acta Biomed Ateneo Parmense** 1988;59(5–6):199–204 (Eng. Abstr.) (Ita)
[Evaluation of the severity of infection in surgery] Altomare DF. **Ann Ital Chir** 1988;60(1):17–24 (Ita)
[Microbiology of surgical infections] Barbuti S. **Ann Ital Chir** 1988;60(1):9–12 (Ita)
[Infectious complications in a surgical intensive care unit] Bruno F. **Ann Ital Chir** 1988;60(1):35–8 (Ita)
[Surgical infections—study methods] Rubino M. **Ann Ital Chir** 1988;60(1):7–8 (Ita)
[Fibrin sealant: personal experience in general surgical practice] Eppinger S, et al. **Chir Ital** 1988 Aug–Oct; 40(4–5):340–4 (Eng. Abstr.) (Ita)
[Atracurium besylate in general surgery. Our experience in 100 cases] Casciani M, et al. **Minerva Anestesiol** 1988 Sep; 54(9):359–62 (Eng. Abstr.) (Ita)
[Physiopathology of intraoperative and postoperative pain] Giron GP, et al. **Minerva Anestesiol** 1988 Apr;54(4):115–22 (21 ref.) (Ita)
[Reduction of surgical risk in patients with chronic renal insufficiency] Giusti A, et al. **Minerva Anestesiol** 1988 Oct; 54(10):421–30 (Eng. Abstr.) (Ita)
[A post-operative prognostic index: final form and validation] Verde G, et al. **Minerva Anestesiol** 1988 Dec; 54(12):499–508 (Eng. Abstr.) (Ita)
[Proceedings of the meeting of the Italian Section of the International College of Surgeons. III. "The development of surgery from the time of Pietro Valdoni to the present". Rome, 16–20 February 1987] **Minerva Chir** 1989 Feb 28; 44(4):547–826 (Ita)
[Proceedings of the meeting of the Italian Section of the International College of Surgeons. II. "The development of surgery from the time of Pietro Valdoni to the present". Rome, 16–20 February 1987] **Minerva Chir** 1989 Feb 15; 44(3):267–546 (Ita)
[Evaluation of risk in surgery. Proposal of an original method] De Ritis GC, et al. **Minerva Chir** 1989 Jan 31; 44(1–2):241–4 (Ita)
[AIDS and surgery: surgical risk] Do D, et al. **Minerva Chir** 1988 Jun 30;43(12):1061–4 (Eng. Abstr.) (Ita)
[Endocrino-metabolic response to anesthesia and surgical stress] Sarcinelli L. **Minerva Chir** 1989 Jan 31;44(1–2):233–5 (Ita)
[Second look yes, second look no, in the surgical therapy of intestinal infarct] Zanetti PP, et al. **Minerva Chir** 1989 Mar 31;44(6):953–7 (Eng. Abstr.) (Ita)
[Proceedings of the meeting of the Italian Section of the International College of Surgeons—I. Rome, 16–20 February 1987] **Minerva Med** 1989 Jul;80(7):645–814 (Ita)
[Pharmacologic prevention of deep postoperative venous

tnrombosis in general surgery] Lippi G, et al. **Minerva Med** 1989 Mar;80(3):275–80 (28 ref.) (Eng. Abstr.) (Ita)

[Study of several proteins of the acute phase of surgical intervention] Pensabeni L, et al. **Quad Sclavo Diagn** 1987 Dec;23(4):395–401 (Eng. Abstr.) (Ita)

[Effect of anesthesia and surgery on immunity in patients with benign and malignant diseases] Hosokawa T, et al. **Masui** 1989 Mar;38(3):343–9 (Eng. Abstr.) (Jpn)

[The effect of acetate Ringer dextrose (5%) and lactate Ringer dextrose (5%) in surgical patients] Masuda K, et al. **Masui** 1989 Mar;38(3):320–8 (Eng. Abstr.) (Jpn)

[Monitoring of brain and spinal cord function during surgery and intensive care] Shimoji K, et al. **Masui** 1988 Nov; 37(11):1300–13 (23 ref.) (Jpn)

[The effect of anesthesia and surgery on human plasma levels of vitamins A, E, B12, pre-albumin, retinol binding protein and zinc] Shirasaki S, et al. **Masui** 1988 Sep;37(9):1096–100 (Eng. Abstr.) (Jpn)

[Effects of famotidine on plasma pentazocine concentration in surgical patients] Takahashi S, et al. **Masui** 1988 Jun; 37(6):701–6 (Eng. Abstr.) (Jpn)

[89th meeting of the Japan Surgical Society. Tokyo, 29–31 March 1989. Abstracts] **Nippon Geka Gakkai Zasshi** 1989 Feb;90 Suppl:79–538 (Jpn)

[Indication for surgical treatment in the elderly] Noro T, et al. **Nippon Ronen Igakkai Zasshi** 1988 May;25(3):253–7 (Jpn)

[Effect of extradural marcaine analgesia on the phagocytic activity of granulocytes in the NBT test] Gajdosz R, et al. **Wiad Lek** 1988 Aug 1;41(15):1005–9 (Eng. Abstr.) (Pol)

[Surgery in the elderly patient: diseases and postoperative complications] Pires PW, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jan–Feb; 43(1):45–50 (Eng. Abstr.) (Por)

[Percutaneous control of gas exchange levels during surgery with hyperbaric oxygenation] Iushkov MA, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):23–5 (Eng. Abstr.) (Rus)

[Anesthesiological aspects of using the method of evoked potentials of the brain] Papin AA, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):70–4 (78 ref.) (Rus)

[Use of transcutaneous peripheral electrostimulation in anesthesiologic support of surgical operations] Tikhonova GP. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):43–5 (Eng. Abstr.) (Rus)

[Concentration of beta-endorphin and met-enkephalin in the blood of surgical patients in critical states] Zoloev GK, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):21–4 (Eng. Abstr.) (Rus)

[Topographical anatomy in the practical activities of pathology: autopsy after surgery] Skorniakov VS. **Arkh Patol** 1989;51(4):92–3 (Rus)

[Fibrin glue in surgery (a review of the literature)] Fedorov VD, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):122–4 (25 ref.) (Rus)

[Simultaneous surgery in gastroduodenal ulcer] Myshkin KI, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):3–6 (Eng. Abstr.) (Rus)

[A method of reinfusion of blood] Sukhorukov VP, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):116–8 (Rus)

[Enteral tube feeding of surgical patients (a review of the literature)] Tsatsanidi KN, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):124–31 (107 ref.) (Rus)

[Experience with the use of methods of improving the healing of surgical wounds in children] Bushmelev VA. **Klin Khir** 1989;(6):51–2 (Eng. Abstr.) (Rus)

[Status of and outlook for sorption detoxification in surgery] Genyk SN, et al. **Vestn Akad Med Nauk SSSR** 1988; (9):87–94 (71 ref.) (Rus)

[State of the reaction of peroxidation of lipids and alpha-tocopherol in children in the early postoperative period] Mikhel'son VA, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):56–61 (Eng. Abstr.) (Rus)

[Use of plasmapheresis in surgery] Gromov MI. **Vestn Khir** 1989 Jan;142(1):134–8 (31 ref.) (Rus)

[Value of dosimetric control of ultraviolet irradiation of autologous blood in surgical practice] Marchenko AV, et al. **Vestn Khir** 1988 Aug;141(8):99–101 (Eng. Abstr.) (Rus)

[Reparative processes and the possibilities of their stimulation in the over-cooled body] Popov SD, et al. **Vestn Khir** 1987 Dec;139(12):98–101 (37 ref.) (Rus)

[Combined surgery in cancer of the colon] Bondar' GV, et al. **Vopr Onkol** 1989;35(7):866–9 (Eng. Abstr.) (Rus)

[Proceedings of the 14th Intersectional Meeting of the Surgical Sections of the Socialist Republics of Bosnia-Hercegovina, Montenegro, and Serbia, including the Serbian Autonomous Territories of Kosovo, Vojvodina, and Macedonia. Struga, 10–12 September 1987. Abstracts] **Acta Chir Iugosl** 1988;35 Suppl 1:1–291 (Ser)

[The effect of anesthesia and surgery on hypertensive patients treated with beta receptor blockers] Bačić A, et al. **Acta Med Iugosl** 1988;42(3):207–12 (Eng. Abstr.) (Ser)

[Total parenteral and enteral nutrition in general surgical practice] Džupa K. **Rozhl Chir** 1989 Apr;68(4):280–7 (Eng. Abstr.) (Slo)

[Hygienic study of surgical wound healing in patients operated on during 1976–1981 after the reconstruction of the First Surgical Clinic of Comenius University Medical School in Bratislava] Gybeľová T, et al. **Rozhl Chir** 1988 Dec;67(12):829–35 (Eng. Abstr.) (Slo)

[Effect of surgical trauma on the concentration of ascorbic acid in plasma and leukocytes] Vega-Franco L, et al. **Bol Med Hosp Infant Mex** 1988 Dec;45(12):831–6 (Eng. Abstr.) (Spa)

[Disseminated cryptococcosis in a surgical patient] Macías AE, et al. **Rev Invest Clin** 1988 Oct–Dec;40(4):419–21 (Eng. Abstr.) (Spa)

[Simplified severity index in postoperative critically ill patients] Buckel E, et al. **Rev Med Chil** 1988 May; 116(5):455–7 (Eng. Abstr.) (Spa)

[Plasma leukocyte elastase in septic processes. Experience in surgical patients] León G, et al. **Rev Med Chil** 1988 May; 116(5):449–54 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

The modifying effect of anesthetic technique on the metabolic and endocrine responses to anesthesia and surgery. Kehlet H. **Acta Anaesthesiol Belg** 1988;39(3):143–6 (17 ref.)

The relevance of metabolic and endocrine responses to anesthesia and surgery. Salo M. **Acta Anaesthesiol Belg** 1988;39(3):133–41 (55 ref.)

The relevance of immunologic responses to anesthesia and surgery. Watkins J. **Acta Anaesthesiol Belg** 1988; 39(3):129–32 (12 ref.)

Popular pills and popular procedures [letter] Morgan CC. **Ala J Med Sci** 1988 Jul;25(3):330

Acute blood pressure increase during the perioperative period. Heuser D, et al. **Am J Cardiol** 1989 Feb 2; 63(6):26C–31C (46 ref.)

Reconstruction of nasal fistulas of the medial canthus. Putterman AM. **Am J Ophthalmol** 1989 Jul 15;108(1):68–74

Surgical morbidity in patients with systemic lupus erythematosus. Papa MZ, et al. **Am J Surg** 1989 Mar; 157(3):295–8

Medical aspects of surgery in the elderly patient. Seymour DG. **Baillieres Clin Obstet Gynaecol** 1988 Jun;2(2):269–87 (97 ref.)

Surgery in patients with von Willebrand's disease. Blombäck M, et al. **Br J Surg** 1989 Apr;76(4):398–400

Aging and alfentanil disposition in healthy volunteers and surgical patients. Sitar DS, et al. **Can J Anaesth** 1989 Mar; 36(2):149–54

The pattern of leucocyte response to surgical trauma in the African Negro. Kehinde MO, et al. **Clin Lab Haematol** 1988;10(3):285–93

Cardiovascular effects of anesthesia and operation. Barker SJ, et al. **Crit Care Clin** 1987 Apr;3(2):251–68 (106 ref.)

Plasma catecholamine concentrations in rainbow trout (Salmo gairdneri) at rest and after anesthesia and surgery. Gingerich WH, et al. **Gen Comp Endocrinol** 1989 Mar; 73(3):390–7

Surgical assessment in the elderly. Johnson JC. **Geriatrics** 1988 Dec;43 Suppl:83–90 (22 ref.)

Response to surgeon-specific infection rates [letter] Rose RC 3d, et al. **Infect Control Hosp Epidemiol** 1989 Apr;10(4):142

Evaluation of postoperative blood coagulation changes in elderly patients undergoing major surgery. Caporale A, et al. **Ital J Surg Sci** 1989;19(1):51–6

Endocrine, hematological and immunological changes in surgical patients undergoing general anesthesia. Costa A, et al. **Ital J Surg Sci** 1989;19(1):41–9

Surgical monitoring with auditory evoked potentials. Lüders H. **J Clin Neurophysiol** 1988 Jul;5(3):261–85 (47 ref.)

Transection of radial digital nerve of the thumb during trigger release. Carrozzella J, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):198–200

The effects of anesthesia and surgery on lymphocyte populations and function in infants and children. Platt MP, et al. **J Pediatr Surg** 1989 Sep;24(9):884–7

Effects of previous ovarian surgery on the follicular response to ovulation induction in an in vitro fertilization program. Hornstein MD, et al. **J Reprod Med** 1989 Apr;34(4):277–81

Outcomes of surgery in patients 90 years of age and older. Hosking MP, et al. **JAMA** 1989 Apr 7;261(13):1909–15

Cardiac risk of non-cardiac surgery. Vine DL. **Kans Med** 1989 Jun;90(6):199–200

Neonatal pain associated with caregiving procedures. Marshall RE. **Pediatr Clin North Am** 1989 Aug; 36(4):885–903 (82 ref.)

Graduation of immunosuppression after surgery or severe trauma. Holch MW, et al. **Prog Clin Biol Res** 1989; 308:491–4

Surveillance for postoperative myocardial infarction after noncardiac operations. Charlson ME, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):407–14

Modulation of inflammatory reactions by surgical trauma: lack of relationship with corticosteroid secretion. Kinnaert P, et al. **World J Surg** 1989 Jul–Aug;13(4):478–83

[Cardiac risk in non-cardiac operations (letter)] Knape JT. **Ned Tijdschr Geneeskd** 1988 Nov 26;132(48):2217 (Dut)

[Ischemic postural intraoperative rhabdomyolysis] Cohendy R, et al. **Cah Anesthesiol** 1988 Sep;36(5):375–7 (12 ref.) (Fre)

[43d national meeting of the Italian Society of Anesthesia, Analgesia, Resuscitation and Intensive Therapy—I. (Modena, 8–11 June 1989)] **Minerva Anestesiol** 1988 Oct; 54(10):387–455 (Ita)

[Surgical and anesthesiological risk. Analysis and control strategy] Barbieri GC, et al. **Minerva Anestesiol** 1988 Oct; 54(10):387–94 (Eng. Abstr.) (Ita)

[Psycho-neuro-immunological aspects in the evaluation and prevention of anesthesiologic-surgical risk] Caregnato L, et al. **Minerva Anestesiol** 1988 Oct;54(10):439–43 (Eng. Abstr.) (Ita)

[Water-electrolyte imbalance] Tassi A, et al. **Minerva Anestesiol** 1988 Oct;54(10):401–4 (Eng. Abstr.) (Ita)

[Surgical stress and immunosuppression in cancer patients] Toge T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1115–21 (Eng. Abstr.) (Jpn)

[Effects of ulinastatin on operative stress in major surgery] Ota K, et al. **Masui** 1989 Apr;38(4):540–5 (Eng. Abstr.) (Jpn)

[Abnormal hemodynamic responses in patients with diabetic autonomic neuropathy during anesthesia and surgery] Takeshima R, et al. **Masui** 1988 Oct;37(10):1249–54 (Eng. Abstr.) (Jpn)

[Sleep disturbances complicated by surgical stress; a questionnaire survey of 50 patients] Yasuma F, et al. **Masui** 1989 Jan;38(1):66–70 (Eng. Abstr.) (Jpn)

[Facilitation of tumor metastasis to the lung by operative stress in the rat—influence of adrenocortical hormones and preoperative administration of OK-432] Kida H, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1692–8 (Eng. Abstr.) (Jpn)

[Surgical trauma and the adequacy of the anesthesiologic service] Shifrin GA, et al. **Klin Khir** 1988;(12):45–8 (66 ref.) (Rus)

[Iatrogenic injuries of the major blood vessels] Svitich IuM. **Sov Med** 1989;(2):54–7 (Rus)

[Preoperative psychoprophylaxis in childhood. Results of a hospital program] Admetlla i Admetlla IA, et al. **An Esp Pediatr** 1988 May;28(5):433–6 (Eng. Abstr.) (Spa)

CLASSIFICATION

[Extension of the ICD-9-CM classification of surgical interventions (letter)] Estrada JA, et al. **Gac Sanit** 1987 Sep–Oct;1(2):83 (Spa)

ECONOMICS

Utilization and outcome in the medical patient referred to surgery [published erratum appears in Am J Surg 1989 Apr;157(4):A10] Muñoz E, et al. **Am J Surg** 1989 Feb; 157(2):237–40

The identifier concept: clinical variables and patient costs for general surgical diagnosis-related groups. Munoz E, et al. **Curr Surg** 1989 Mar–Apr;46(2):91–6

Pharmacoeconomic impact of critically ill surgical patients. Dasta JF, et al. **Drug Intell Clin Pharm** 1988 Dec; 22(12):994–8

Hospital costs, cancer patients, and surgical diagnostic related groups. Muñoz E, et al. **J Surg Oncol** 1989 May;41(1):47–51

Resource-based relative values for invasive procedures performed by eight surgical specialties. Hsiao WC, et al. **JAMA** 1988 Oct 28;260(16):2418–24

On innovative analyses of health care data [letter] West SS. **Stat Bull Metrop Insur Co** 1989 Jul–Sep;70(3):31

Surgonomics as a health care financing policy for hospitalized surgical patients. Muñoz E, et al. **Surg Gynecol Obstet** 1989 May;168(5):421–5

INSTRUMENTATION

Tips of the trade #11. A technique for tendon and capsule separation in shoulder surgery. O'Neill DB, et al. **Orthop Rev** 1989 Apr;18(4):504–7

METHODS

Consultation section. **J Cataract Refract Surg** 1989 Jan; 15(1):109–13

Longitudinal incision for trigger finger release. Stefanich RJ, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):316–7

The role of standard technique in modern sinus surgery. Friedman WH, et al. **Otolaryngol Clin North Am** 1989 Aug; 22(4):759–75

How study design affects outcomes in comparisons of therapy. II: Surgical. Miller JN, et al. **Stat Med** 1989 Apr; 8(4):455–66

[Minor surgery] Feil W. **Wien Med Wochenschr** 1989 Jan 31;139(1–2):3–40 (0 ref.) (Eng. Abstr.) (Ger)

[Principles of choosing the surgical approach] Ratner GL. **Khirurgiia (Mosk)** 1988 Nov;(11):92–6 (Rus)

MORTALITY

Surgery in a geriatric population. Barlow AP, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):110–4

Oxygen consumption as an outcome predictor [letter] Shoemaker WC. **Intensive Care Med** 1988;15(1):64–6

Surgical audit [letter] Kidson IG, et al. **Lancet** 1988 Dec 3;2(8623):1312–3

[Results of treatment in patients over 80] Krenzien J, et al. **Z Arztl Fortbild (Jena)** 1988;82(10):449–54 (Ger)

[Surgical risk in the elderly] Krenzien J, et al. **Zentralbl Chir** 1988;113(23):1530–9 (Eng. Abstr.) (Ger)

[Surgical mortality in patients over 75 years of age. Our experience in 199 consecutive cases] Tonietto G, et al. **Minerva Chir** 1988 Jun 15;43(11):943–6 (Eng. Abstr.) (Ita)

[Surgery in the very old—an analysis of patients over the

age of 85 at a department of general surgery] Sandell C, et al. **Lakartidningen** 1989 Mar 15;86(11):972–3 **(Swe)**

PSYCHOLOGY

"Psychic surgery" in the Philippines as a form of group hypnosis. Azuma N, et al. **Am J Clin Hypn** 1988 Jul; 31(1):61–7 (20 ref.)

Life after.... Kendrick PR. **Conn Med** 1988 Dec;52(12):711–3

Using videotape modeling to prepare children psychologically for surgery: influence of parents and costs versus benefits of providing preparation services. Pinto RP, et al. **Health Psychol** 1989;8(1):79–95

Nurses' perception of stress in preoperative surgical patients. Biley FC. **J Adv Nurs** 1989 Jul;14(7):575–81

The other side of the bedpan. Moore D. **J Am Med Wom Assoc** 1989 Jul–Aug;44(4):127–8

The measurement of preoperative anxiety. Hicks JA, et al. **J R Soc Med** 1988 Sep;81(9):517–9

From the other side. Rockwell SV. **JAMA** 1988 Nov 4; 260(17):2592

Stress management during noxious medical procedures: an evaluative review of outcome studies. Ludwick–Rosenthal R, et al. **Psychol Bull** 1988 Nov;104(3):326–42 (94 ref.)

Psychological consequences of surgery. O'Hara MW, et al. **Psychosom Med** 1989 May–Jun;51(3):356–70

Patient involvement in decision-making in surgical and orthopaedic practice: the Project Perioperative Risk. Larsson US, et al. **Soc Sci Med** 1989;28(8):829–35

[Anxiety before an operation in children and their mothers] Torbahn A. **Prax Kinderpsychol Kinderpsychiatr** 1988 Sep; 37(7):247–52 (Eng. Abstr.) **(Ger)**

[Preoperative anxiety and coping with anxiety: psychodiagnostic problems and therapeutic implications from the psychoanalytic viewpoint] Götze P, et al. **Psychother Psychosom Med Psychol** 1988 Jul;38(7):232–9 (66 ref.) (Eng. Abstr.) **(Ger)**

[Prevention and treatment of neuro-psychological disorders in surgical patients] Iaremchuk AIa, et al. **Klin Khir** 1989; (1):41–3 (Eng. Abstr.) **(Rus)**

STANDARDS

How much is an injury worth? Murphy EK. **AORN J** 1989 Aug;50(2):222–3, 226

Surgical quality control in head and neck cancer. Study 73–03 of the Radiation Therapy Oncology Group. Jacobs JR, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr; 115(4):489–93

Extending surgical audit: the assessment of postoperative outcome. Macintyre IM. **Br J Surg** 1989 Jun;76(6):531–2

A simple solution to decreasing the hazards of carbon dioxide laser plume in the operating room [letter] Milstein HG. **J Am Acad Dermatol** 1989 Apr;20(4):708

PRO review Part II: Surgical review activities. Murphy RA, et al. **J Med Assoc Ga** 1989 Sep;78(9):607–9

STATISTICS & NUMERICAL DATA

Surgeon volume vs hospital volume: which matters more? [editorial] Garnick DW, et al. **JAMA** 1989 Jul 28; 262(4):547–8

[Operations in academic and other general hospitals] Hoogendoorn D. **Ned Tijdschr Geneeskd** 1988 Nov 26; 132(48):2204–8 (Eng. Abstr.) **(Dut)**

[Operations before and after the beginning of budgeting; ever better results from medical practice] Hoogendoorn D. **Ned Tijdschr Geneeskd** 1989 Jan 28;133(4):162–7 (Eng. Abstr.) **(Dut)**

TRENDS

Uganda safari (American surgeon visits east Africa). Preston DJ. **Del Med J** 1989 Apr;61(4):217–8, 222–3

Problems of rural surgical practice [letter] De S. **J Indian Med Assoc** 1989 Mar;87(3):76

Changing pattern of general surgery in the elderly. Barlow AP, et al. **J R Coll Surg Edinb** 1988 Aug;33(4):182–4

What can epidemiological methods mean to surgical research? Adami HO. **Ups J Med Sci** 1988;93(2):155–60

[Conflicts from the viewpoint of the surgeon] Imdahl H. **Langenbecks Arch Chir** 1988;Suppl 2:347–53 (Eng. Abstr.) **(Ger)**

[Conflicts from the viewpoint of the journalist] Lempke K. **Langenbecks Arch Chir** 1988;Suppl 2:355–60 **(Ger)**

[Principles of technology assessment in surgical diagnosis] Lorenz W, et al. **Langenbecks Arch Chir** 1988;Suppl 2:369–76 (20 ref.) (Eng. Abstr.) **(Ger)**

[The informed society: television and surgery] Mohl H. **Langenbecks Arch Chir** 1988;Suppl 2:341–5 (Eng. Abstr.) **(Ger)**

[Evaluating ultrasound] Rothmund M, et al. **Langenbecks Arch Chir** 1988;Suppl 2:377–84 (23 ref.) (Eng. Abstr.) **(Ger)**

[Evaluating computerized tomography and other procedures] Thelen M. **Langenbecks Arch Chir** 1988;Suppl 2:393–6 (Eng. Abstr.) **(Ger)**

[Evaluating endoscopy] Troidl H, et al. **Langenbecks Arch Chir** 1988;Suppl 2:385–92 (22 ref.) (Eng. Abstr.) **(Ger)**

UTILIZATION

Paediatric anaesthesia in a district general hospital. Bowhay AR, et al. **Anaesthesia** 1989 Feb;44(2):139–42

Role of the private sector in elective surgery in England and Wales, 1986. Nicholl JP, et al. **BMJ** 1989 Jan 28; 298(6668):243–7

Unnecessary surgery. Leape LL. **Health Serv Res** 1989 Aug; 24(3):351–407 (84 ref.)

Patterns of surgical and nonsurgical hospital use in Michigan communities from 1980 through 1984. Wolfe RA, et al. **Health Serv Res** 1989 Apr;24(1):67–82

Relation between surgeons' practice volumes and geographic variation in the rate of carotid endarterectomy. Leape LL, et al. **N Engl J Med** 1989 Sep 7;321(10):653–7

[Statistics on operations at the Hara Genitourinary Hospital (1971–1986)] Hara S, et al. **Hinyokika Kiyo** 1988 Dec; 34(12):2205–12 (Eng. Abstr.) **(Jpn)**

SURGERY, ORAL

The use of sedation in outpatients. Based on a symposium on sedation in dentistry and oral surgery. Jönköping, Sweden, January 28–30, 1987. **Acta Anaesthesiol Scand Suppl** 1988;88:1–44

Clean vs sterile technique for pediatric dental patients in the operating room. Helpin ML, et al. **ASDC J Dent Child** 1988 Nov–Dec;55(6):449–51

What's in a name? [editorial] Harcourt JK. **Aust Dent J** 1988 Jun;33(3):237–8

A career survey of dental graduates who subsequently qualified in medicine between 1970 and 1979, with special reference to oral and maxillofacial surgery. Langton SG. **Br Dent J** 1988 Sep 10;165(5):174–6

Oral surgery. Redpath TH. **Br Dent J** 1988 Aug 6; 165(3):102–3

The microbiology and management of acute dentoalveolar abscess: views of British oral and maxillofacial surgeons. Gill Y, et al. **Br J Oral Maxillofac Surg** 1988 Dec; 26(6):452–7

Citation for the presentation of the 1987 Down Surgical Prize to Mr. Peter Banks. Harris M. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):171

An oral surgeon's approach to the fearful patient. Intravenous sedation and general anesthesia. Trieger N. **Dent Clin North Am** 1988 Oct;32(4):817–22

Anesthesia for dental and oral surgery. **Int Anesthesiol Clin** 1989 Summer;27(2):61–131

Anesthesia management in pediatric and special needs patients undergoing dental and oral surgery. Frassica JJ, et al. **Int Anesthesiol Clin** 1989 Summer;27(2):109–15 (11 ref.)

Intravenous sedation in dentistry and oral surgery. Trieger N. **Int Anesthesiol Clin** 1989 Summer;27(2):83–91 (59 ref.)

Statement of the American Association of Oral and Maxillofacial Surgeons. Babbush CA. **J Dent Educ** 1988 Dec;52(12):768–9

American Association of Oral and Maxillofacial Surgeons, 71st annual meeting and scientific sessions. September 20–24, 1989, San Francisco. Educational summaries and outlines. **J Oral Maxillofac Surg** 1989 Aug;47(8 Suppl 1):1–152

Quality and appropriateness of surgical care. Ebert PA. **J Oral Maxillofac Surg** 1989 Jul;47(7):730–2

Survey of TMJ arthroscopy in oral and maxillofacial surgery residency programs. Greene MW, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):574–6

Choosing your treatments with care [editorial] Laskin DM. **J Oral Maxillofac Surg** 1989 Jan;47(1):1

Quicker dissemination of information [letter] Salon JM. **J Oral Maxillofac Surg** 1988 Oct;46(10):824

Oral and maxillofacial surgery [letter] Levant BA. **Med J Aust** 1989 Jan 16;150(2):112

Hemostatic effect of tranexamic acid mouthwash in anticoagulant-treated patients undergoing oral surgery. Sindet-Pedersen S, et al. **N Engl J Med** 1989 Mar 30; 320(13):840–3

Third molar teeth: differing concepts of oral surgeons and other dentists. Yablon P, et al. **N Y State Dent J** 1988 Oct;54(8):27–31

Pain development and consumption of analgesics after oral surgery in relation to personality characteristics. Hansson P, et al. **Pain** 1989 Jun;37(3):271–7

Calypsol anaesthesia in oral surgical practice. Inovay J, et al. **Ther Hung** 1988;36(2):77–80

[The 50th anniversary of the Department of Dental Surgery of the Rókus Hospital] Latinka R. **Fogorv Sz** 1989 Jun; 82(6):161–3 (Eng. Abstr.) **(Hun)**

[Comparative analysis of clinical indications and cephalometry in orthognathic surgery. II.] Cassarino G, et al. **Minerva Stomatol** 1988 Dec;37(12):997–1003 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

[Analgesic and anti-inflammatory treatment with sodium naproxen in odontostomatology] Moniaci D, et al. **Minerva Stomatol** 1988 Dec;37(12):1011–3 (Eng. Abstr.) **(Ita)**

EDUCATION

A simple teaching model for mucoperiosteal flaps and suturing techniques. Anwar M, et al. **Br Dent J** 1989 Jan 21;166(2):38

Oral surgery and orthodontic training [letter] Broadway RT. **Br Dent J** 1989 Feb 25;166(4):108–9

Teaching of oral medicine, periodontology and oral surgery: students' opinions. Downer CS, et al. **Br Dent J** 1988 Dec 10;165(11):403–6

Oral surgery and orthodontic training [letter] Hall AM. **Br Dent J** 1989 May 6;166(9):319

What becomes of the trainee hospital dental surgeon? A 10-year review of the Glasgow Rotation. Stirrups DR, et al. **Br Dent J** 1989 May 6;166(9):349–51

A survey of surgical rotations for oral & maxillofacial surgery trainees. Altman K. **Br J Oral Maxillofac Surg** 1989 Feb; 27(1):12–5

A short guide to studying medicine for the dental graduate. Langton SG, et al. **Br J Oral Maxillofac Surg** 1989 Aug; 27(4):287–90

Careers of dentists undertaking a medical qualification. Levers BG, et al. **Br J Oral Maxillofac Surg** 1988 Dec; 26(6):443–51

Training in the speciality [letter] Mitchell DA. **Br J Oral Maxillofac Surg** 1989 Aug;27(4):350

Training in oral and maxillofacial surgery. What's in a name? [editorial] Stoelinga PJ. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):129

Will oral and maxillofacial surgeons need a medical degree in the future? Peterson LJ, et al. **J Dent Educ** 1989 Feb; 53(2):132–4

Double-degree oral and maxillofacial surgeons: was it worth it? Barber HD, et al. **J Oral Maxillofac Surg** 1988 Oct; 46(10):872–4

The effects of changes in the education of oral and maxillofacial surgeons [letter] Blum B. **J Oral Maxillofac Surg** 1989 May;47(5):549

The future of oral and maxillofacial surgery [letter] Davis WM Jr. **J Oral Maxillofac Surg** 1989 May;47(5):547

Who should determine the future of our specialty? [letter] Elias AC. **J Oral Maxillofac Surg** 1989 May;47(5):547

Halting the trend toward a double degree [letter] Himmelfarb R. **J Oral Maxillofac Surg** 1989 May;47(5):548–9

Achieving educational uniformity [editorial] Laskin DM. **J Oral Maxillofac Surg** 1988 Nov;46(11):917

Accreditation and certification in oral and maxillofacial fellowships [editorial] Laskin DM. **J Oral Maxillofac Surg** 1989 Jul;47(7):665

A second look at the double degree [editorial] Laskin DM. **J Oral Maxillofac Surg** 1989 Jun;47(6):553

Making two equal one [letter] Miller KG. **J Oral Maxillofac Surg** 1989 May;47(5):548

Concern for the future of our specialty [letter] Sachs SA. **J Oral Maxillofac Surg** 1989 May;47(5):547–8

[Teaching surgery at a stomatologic faculty] Vavrik ZhM, et al. **Klin Khir** 1988;(11):41–3 **(Rus)**

[Intensification of the instruction and the development of the creative activities of students in a department of oral surgery] Pantiukhin AI, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):86–7 **(Rus)**

HISTORY

The Northern Ireland Plastic Surgery and Maxillo-Facial Unit. Hughes NC. **Br J Plast Surg** 1989 Mar;42(2):235–9

The building of a specialty: oral and maxillofacial surgery in the United States. **J Oral Maxillofac Surg** 1989 Oct;47(10 Suppl 2):1–271

INSTRUMENTATION

[Experience in the use of an ultrasonic scalpel in the ambulatory practice of a dental surgeon] Bolko VZ. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):74 **(Rus)**

LEGISLATION & JURISPRUDENCE

Orthognathic surgery [letter] Douglas BL. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):22A–23A

METHODS

Intravenous or rectal administration of sedatives in outpatient oral surgery. Lundgren S. **Acta Anaesthesiol Scand Suppl** 1988;88:24–6

Protection against the transmission of hepatitis B virus in dental practitioners: better gloves, earlier vaccination, or both? Koff RS. **Hepatology** 1989 Jun;9(6):902

[10 years' experience of cryosurgery in the maxillofacial area] Pässler L, et al. **Zahn Mund Kieferheilkd** 1989;77(1):34–9 (Eng. Abstr.) **(Ger)**

[Premedication of middle-aged and elderly patients undergoing ambulatory dental surgery under local anesthesia] Khimich IV, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):48–51 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Patients' attitudes toward surgery [letter] Cattino CL. **J Oral Maxillofac Surg** 1989 Jul;47(7):772–3

[An analysis of the psychoemotional tension in patients before oral surgery in relation to their psychological personality traits] Sinichkin VV, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):28–9 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

Retrospective evaluation of general anesthesia for oral and maxillofacial surgery during a 10-year period (1976–1985). Chen JJ, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Mar; 27(1):27–34

TRENDS

The 1988 anesthesia survey of the Southern California Society of Oral and Maxillofacial Surgeons. Lytle JJ, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):834–42

The future of oral and maxillofacial surgery. McCallum CA. **J Oral Maxillofac Surg** 1989 Jun;47(6):610–5

SURGERY, ORAL, PREPROSTHETIC

Tissue response to subperiosteal implantation of dense hydroxyapatite: case report. Craig GT, et al. **Biomaterials** 1989 Mar;10(2):133–5

Surgical stents and major oral maxillofacial surgery. Small SA. **Dent Clin North Am** 1989 Jul;33(3):497–509 (19 ref.)

The hydroxylapatite–bone interface. Studies on a human biopsy. Blijdorp PA, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):354–7

Fibrin glue as cement for HA–granules. Wittkampf AR. **J Craniomaxillofac Surg** 1989 May;17(4):179–81

Bone mineral content of the maxilla estimated by dual–photon absorptiometry after augmentation with bone or hydroxyapatite. von Wowern N, et al. **J Dent Res** 1988 Nov;67(11):1405–8

Origin of HA–fibrin glue mixture for ridge augmentation [letter] Bochlogyros PN. **J Oral Maxillofac Surg** 1989 Aug; 47(8):891

Use of collagen tubes containing particulate hydroxylapatite for augmentation of the edentulous atrophic maxilla: a preliminary report. Collins TA. **J Oral Maxillofac Surg** 1989 Feb;47(2):137–41

Zygomatic and mandibular augmentation with proplast and porous hydroxyapatite in rhesus monkeys. el Deeb M, et al. **J Oral Maxillofac Surg** 1989 May;47(5):480–8

Standardized panoramic radiography in assessment of mandibular augmentation with hydroxylapatite material: preliminary report. el Deeb M, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):724–9

Most ideal esthetics with prosthodontic treatment [letter] Balshi TJ. **J Prosthet Dent** 1988 Aug;60(2):260

The carbon dioxide laser in soft tissue preprosthetic surgery. Pogrel MA. **J Prosthet Dent** 1989 Feb;61(2):203–8

[Experimental study and clinical application of alveolar ridge augmentation with bioactive glass ceramics] Wang SA. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):65–8, 126 (Eng. Abstr.) (Chi)

METHODS

The transmandibular implant: a 12–year follow–up study. Bosker H, et al. **J Oral Maxillofac Surg** 1989 May; 47(5):442–50

Two–stage combined vestibuloplasty and partial mandibular ridge augmentation with hydroxyapatite. Brook IM, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):331–5

Porous hydroxylapatite granules and blocks as alveolar ridge augmentation materials: a preliminary report. el Deeb ME, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):955–70 (29 ref.)

Collagen/hydroxylapatite implant for augmenting deficient alveolar ridges: twelve–month clinical data. Mehlisch DR, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):839–43

Technical considerations in mandibular ridge reconstruction with collagen/hydroxylapatite implants. Taylor TD, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):422–5

Short–term experience with the subperiosteal tissue expander in reconstruction of the mandibular alveolar ridge. Wittkampf AR. **J Oral Maxillofac Surg** 1989 May; 47(5):469–74

Augmentation of the maxillary alveolar ridge with hydroxylapatite and fibrin glue. Wittkampf AR. **J Oral Maxillofac Surg** 1988 Nov;46(11):1019–21

Alveolar ridge augmentation with bioactive glass ceramics: a histological study. Wang SA, et al. **J Oral Rehabil** 1989 May;16(3):229–39

Correction of alveolar ridge deformities with titanium implants. Block PL, et al. **J Prosthet Dent** 1988 Aug; 60(2):221–5

Collagen tube containers in alveolar ridge augmentation. Gongloff RK, et al. **J Prosthet Dent** 1989 Jun;61(6):722–6

The role of the prosthodontist in the correction of swallowing disorders. Hurst PS. **Otolaryngol Clin North Am** 1988 Nov;21(4):771–81 (38 ref.)

The role of rigid skeletal fixation in bone–graft augmentation of the craniofacial skeleton. LaTrenta GS, et al. **Plast Reconstr Surg** 1989 Oct;84(4):578–88

[Restoration of the alveolar crest with a biomaterial filler. A clinical and histological study] Chomette G, et al. **Rev Stomatol Chir Maxillofac** 1988;89(5):276–80 (Eng. Abstr.) (Fre)

[Implants—preprosthetic surgery. Endosseous implants and simultaneous preprosthetic operations on the mandible: the technic and results] Hardt N, et al. **Schweiz Monatsschr Zahnmed** 1989;99(5):574–85 (Ger, Fre)

[Hemisection of the mandibular molars and their use for orthodontic purposes] Kozhokaru MP, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):58–9 (Eng. Abstr.) (Rus)

TRENDS

[Our current concept of preprosthetic surgery] Grimm G, et al. **Zahn Mund Kieferheilkd** 1988;76(5):482–5 (Eng. Abstr.) (Ger)

SURGERY, OUTPATIENT see AMBULATORY SURGERY

SURGERY, PLASTIC

Surgical correction of deformation of the facial skeleton in patients with hemifacial microsomia. Bezrukov VM, et al. **Acta Chir Plast** 1988;30(4):202–14

Plastic operations of burns using cultured epithelium. Tumanov VP, et al. **Acta Chir Plast** 1989;31(1):15–21

Mammary asymmetry: a brief classification. Juri J. **Aesthetic Plast Surg** 1989 Winter;13(1):47–53

Suggested nomenclature for aesthetic and reconstructive surgery of the breasts. IV: Congenital anomalies of the breast. Letterman G, et al. **Aesthetic Plast Surg** 1989 Winter;13(1):59–61

Immediate microvascular reconstruction of combined palatal and midfacial defects. Shestak KC, et al. **Am J Surg** 1988 Oct;156(4):252–5

Bilateral visual loss after blepharoplasty. Anderson RL, et al. **Ann Plast Surg** 1980 Oct;5(4):288–92

Preoperative and postoperative considerations in elective breast operations. Cathcart RS 3d, et al. **Ann Plast Surg** 1989 Jun;22(6):533–8

Implant descent: a complication of augmentation mammaplasty and its correction. Clarendon CC. **Ann Plast Surg** 1988 Nov;21(5):452–7

Piggyback composite ear grafts in nasal ala reconstruction. Cosman B. **Ann Plast Surg** 1980 Oct;5(4):293–7

Use of skin staples in plastic surgery. Georgiade G, et al. **Ann Plast Surg** 1980 Oct;5(4):324–5

The inferior dermal–pyramidal type breast reduction: long–term evaluation. Georgiade GS, et al. **Ann Plast Surg** 1989 Sep;23(3):203–11

One–stage body contouring. Hauben DJ, et al. **Ann Plast Surg** 1988 Nov;21(5):472–9

Augmentation blepharoplasty. Lewis JM. **Ann Plast Surg** 1988 Nov;21(5):434–8

The dermal pursestring suture: a new technique for a short inframammary scar in reduction mammaplasty and dermal mastopexy. Marconi F. **Ann Plast Surg** 1989 Jun; 22(6):484–93; discussion 494

An approach to mandibular reconstruction. Pearl RM, et al. **Ann Plast Surg** 1988 Nov;21(5):401–17

Nerve endings in palm skin grafts. Wada H, et al. **Ann Plast Surg** 1989 Jun;22(6):461–6

Tarsoconjunctival flap for upper eyelid reconstruction. Jordan DR, et al. **Arch Ophthalmol** 1989 Apr; 107(4):599–603

Management of cosmetically objectionable veins in the lower eyelids. Kersten RC, et al. **Arch Ophthalmol** 1989 Feb; 107(2):278–80

Intraoperative crushed ice compresses during oculoplastic surgery [letter] Kim DK, et al. **Arch Ophthalmol** 1989 Sep; 107(9):1275

Lower lid reconstruction using tarsoconjunctival grafts and bipedicle skin–muscle flap. Leone CR Jr, et al. **Arch Ophthalmol** 1989 May;107(5):758–60

A photographic method for evaluation of oculoplastic surgery [letter] Patel BC, et al. **Arch Ophthalmol** 1988 Oct; 106(10):1346–7

Ethical use of Yellow Pages listings by physicians. Denenberg SM, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1392–4

Immediate reconstruction of pharyngoesophageal defects. Preference or reference. Lam KH, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):608–12

The Jack R. Anderson Lecture. Sarver DM. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):566–7

Breast cancer diagnosis in the augmented patient [letter] Brody GS, et al. **Arch Surg** 1989 Feb;124(2):256–8

Oncological aspects of immediate breast reconstruction following mastectomy for malignancy. Johnson CH, et al. **Arch Surg** 1989 Jul;124(7):819–23; discussion 823–4

Craniofacial surgery: the interface [editorial] David DJ, et al. **Aust N Z J Surg** 1989 Apr;59(4):299–301

Catching up the orthopods [letter] Ashall G, et al. **BMJ** 1988 Dec 10;297(6662):1540

Successful pregnancy after radical surgery for diethylstilboestrol (DES)–related vaginal adenocarcinoma. Case report. Hudson CN, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):818–9

10 year cumulative index, 1978–1987. **Br J Plast Surg** 1989; :1–55

Glove perforation during plastic surgery. Cole RP, et al. **Br J Plast Surg** 1989 Jul;42(4):481–3

Outpatient clinics [editorial] Griffiths RW. **Br J Plast Surg** 1988 Sep;41(5):555–6

Custom–made nipple–areola prostheses in breast reconstruction. Roberts AC, et al. **Br J Plast Surg** 1988 Nov;41(6):586–7

Pterygium colli: surgical treatment. Rossillon D, et al. **Br J Plast Surg** 1989 Mar;42(2):178–83

Breast reconstruction following mastectomy. Bostwick J 3d. **CA** 1989 Jan–Feb;39(1):40–9

Plastic and reconstructive breast surgery. **Clin Plast Surg** 1988 Oct;15(4):517–735

Foam–covered mammary implants. Brand KG. **Clin Plast Surg** 1988 Oct;15(4):533–9

Silicone technology for the plastic surgeon. Brody GS. **Clin Plast Surg** 1988 Oct;15(4):517–20

Informed consent: considerations in aesthetic and reconstructive surgery of the breast. Cole NM. **Clin Plast Surg** 1988 Oct;15(4):541–8

Nasofacial defect following fibrosarcoma excision and radiotherapy [clinical conference] Burget GL, et al. **Head Neck Surg** 1988 May–Jun;10(5):350–6

Reconstruction of the lower lid using the upper lid. Betharia SM, et al. **Indian J Ophthalmol** 1988 Jul–Sep;36(3):113–5

Late cosmetic outcome after conservative surgery and radiotherapy: analysis of causes of cosmetic failure. Olivotto IA, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct; 17(4):747–53

Bureaucratic breakthrough for Iowa [letter] Stallings JO. **Iowa Med** 1988 Aug;78(8):371–3

A stereophotogrammetric technique for the quantification of tissue expansion procedures in plastic surgery. Fleming CM. **J Audiov Media Med** 1988 Oct;11(4):125–7

Carbon dioxide laser blepharoplasty: conjunctival temperature during surgery. David LM, et al. **J Dermatol Surg Oncol** 1989 Apr;15(4):421–3

Ketamine–diazepam anaesthesia in surface and major plastic surgical operations. Sajjan R, et al. **J Indian Med Assoc** 1989 Feb;87(2):37–9

Heterogeneity among isolates of rapidly growing mycobacteria responsible for infections following augmentation mammaplasty despite case clustering in Texas and other southern coastal states. Wallace RJ Jr, et al. **J Infect Dis** 1989 Aug;160(2):281–8

Cranioplasty with Palacos R in reconstruction of frontal sinus defects. Mann W, et al. **J Laryngol Otol** 1988 Sep; 102(9):824–7

Transoral submental lipectomy: an adjunct to orthognathic surgery. Epker BN, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):795–803

Modified reduction genioplasty. Putnam JM, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):203–5

Anterior skull defect reconstruction with methyl methacrylate. Robinson AC, et al. **J Otolaryngol** 1989 Aug; 18(5):241–4

Juvenile gigantomastia. Samuelov R, et al. **J Pediatr Surg** 1988 Nov;23(11):1014–5

The 14th annual meeting of the Japanese Society of Reconstructive Microsurgery. Tsukuba City, Japan, December 5, 1987. Abstracts. **J Reconstr Microsurg** 1989 Apr;5(2):175–90

Use of leeches in plastic and reconstructive surgery: a review. Kraemer BA, et al. **J Reconstr Microsurg** 1988 Oct; 4(5):381–6 (62 ref.)

Arachidonic acid metabolites: basic concepts relevant to plastic surgery. Proctor KG, et al. **J Reconstr Microsurg** 1988 Oct;4(5):421–6 (55 ref.)

Plastic repair of elongated, hypertrophic labia minora. A case report. Chavis WM, et al. **J Reprod Med** 1989 May; 34(5):373–5

The craniofacial center: advances in the treatment of facial deformities. Sargent LA. **J Tenn Med Assoc** 1989 Jul; 82(7):355–8

Phallic reconstruction during exenterative surgery for invasive urethral carcinoma. McDougal WS, et al. **J Urol** 1989 May;141(5):1201–3

Aphallia: its classification and management. Skoog SJ, et al. **J Urol** 1989 Mar;141(3):589–92

Plastic surgery. Stalnecker MC. **JAMA** 1989 May 19; 261(19):2877–9

Chest wall resection and reconstruction for locoregionally advanced or recurrent breast cancer. Izuo M, et al. **Jpn J Surg** 1988 Nov;18(6):687–93

Histology of partial thickness double composite eyelid graft. Budenz DL, et al. **Ophthalmic Surg** 1989 May;20(5):362–6

The use of free periosteal grafts in extensive lower lid reconstruction. Hurwitz JJ, et al. **Ophthalmic Surg** 1989 Jun;20(6):415–9

Polytetrafluoroethylene as an interpositional graft material for the correction of lower eyelid retraction. Karesh JW, et al. **Ophthalmology** 1989 Apr;96(4):419–23

Multidisciplinary approach to the management of complex bony and soft tissue orbitocranial disorders. Toth BA, et al. **Ophthalmology** 1988 Aug;95(8):1013–26

Restoration of the mandible and condylar head. Cheng EY, et al. **Otolaryngol Head Neck Surg** 1988 Nov;99(5):513–9

Ear reduction with or without setback otoplasty. Argamaso RV. **Plast Reconstr Surg** 1989 Jun;83(6):967–75

The use of adhesive tape to inform the patient preoperatively [letter] Botti G. **Plast Reconstr Surg** 1989 Mar;83(3):571

Cosmetic surgery: a theological comment [editorial] Carey JS. **Plast Reconstr Surg** 1989 Jan;83(1):139–42

Reconstructive surgery for immunosuppressed organ–transplant recipients. Cohen M, et al. **Plast Reconstr Surg** 1989 Feb;83(2):291–5

Have we really come this far?[editorial] Curtin JW. **Plast Reconstr Surg** 1989 Aug;84(2):340–1

Drain removal in the presence of a breast implant [letter] Dowden RV. **Plast Reconstr Surg** 1989 Jan;83(1):199

The modeling of skin expanders. Duits EH, et al. **Plast Reconstr Surg** 1989 Feb;83(2):362–7

Malignant hyperthermia revisited [editorial] Eichhorn JH. **Plast Reconstr Surg** 1988 Nov;82(5):883–5

Uvulopalatopharyngoplasty [letter] Finkelstein Y, et al. **Plast Reconstr Surg** 1989 Mar;83(3):577–8

Overobliging and underappreciated [editorial] Goldwyn RM. **Plast Reconstr Surg** 1989 Feb;83(2):326–7

Charity, plastic surgery, and malpractice [letter; comment] Goodman RC. **Plast Reconstr Surg** 1989 Feb;83(2):387. **Comment on:** Plast Reconstr Surg 1988 Jul;82(1):147–50

Plasma lidocaine levels during augmentation mammaplasty and suction–assisted lipectomy. Gumucio CA, et al. **Plast Reconstr Surg** 1989 Oct;84(4):624–7

Experience with the modified Putterman procedure. Guyuron B, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):775–80

Projection geometry and stress–reduction techniques in craniofacial surgery. Hendel PM, et al. **Plast Reconstr Surg** 1989 Feb;83(2):217–27

Sterilization of the bone pencil [letter] Husami T, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1100

Continuing medical education [letter] Johnson HA. **Plast Reconstr Surg** 1989 Feb;83(2):387

Using the suction apparatus of the laser machine to get rid of smoke from electrocoagulation [letter] Karaca AR. **Plast Reconstr Surg** 1989 Aug;84(2):372

Workaholics and editorials [letter] Kirk RG. **Plast Reconstr Surg** 1989 Apr;83(4):751

Reconstructive surgery in Nicaragua [letter] Linesweaver WC. **Plast Reconstr Surg** 1989 Aug;84(2):363–4

In support of the certificate of added qualifications in hand surgery [letter] McCormack RM. **Plast Reconstr Surg** 1989 Aug;84(2):372

The oculocardiac reflex in blepharoplasty surgery. Matarasso A. **Plast Reconstr Surg** 1989 Feb;83(2):243–50

Legal, ethical, and moral issues in plastic surgery [letter] Porterfield HW. **Plast Reconstr Surg** 1989 Mar;83(3):577

Management of advanced foot deformities in dystrophic epidermolysis bullosa. Resnick JI, et al. **Plast Reconstr Surg** 1988 Nov;82(5):888–91

Testing surgical success [letter] Ross RB. **Plast Reconstr Surg** 1988 Nov;82(5):921–2

Use of the expander for estimating required volume for breast reconstruction [letter] Shafir R, et al. **Plast Reconstr Surg** 1989 Feb;83(2):397–8

A simple technique for preoperative teaching and planning [letter] Shatkin S Jr, et al. **Plast Reconstr Surg** 1989 Feb; 83(2):394–5

Appearance ratings before and after craniofacial surgery [letter] Trisdorfer A, et al. **Plast Reconstr Surg** 1989 Jun; 83(6):1080–2

Malignant hyperthermia in plastic surgery. Wackym PA, et al. **Plast Reconstr Surg** 1988 Nov;82(5):878–82

The ear model: an aid for total ear reconstruction. Wellisz T. **Plast Reconstr Surg** 1988 Dec;82(6):1079–80

Iatrogenic instrumentation–induced plastic surgical referrals. Widgerow AD. **Plast Reconstr Surg** 1988 Dec; 82(6):1083–90

Augmentation and reduction mammaplasty: demographic and obstetric differences in women attending a National Health Service clinic. Birtchnell S, et al. **Postgrad Med J** 1988 Aug;64(754):587–9

The image of plastic surgery. Gault D, et al. **Practitioner** 1988 Jun 22;232(1451):709–11

What's new in plastic surgery. Ward DJ. **Practitioner** 1988 Mar 22;232(1445):329–35 (9 ref.)

Mammography after prosthesis placement for augmentation or reconstructive mammoplasty. Dershaw DD, et al. **Radiology** 1989 Jan;170(1 Pt 1):69–74

Reconstruction of the penis using a radial forearm free flap. A case report. Mackay DR, et al. **S Afr Med J** 1989 Sep 16;76(6):278–80

The advantage of wide subperiosteal exposure in primary surgical correction of labial maxillary clefts. Delaire J, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988; 22(2):147–51

Tubed free flap combined with split–rib–graft for reconstruction of multiple oral cavity defects. A case report. Larson O, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(2):187–91

Caudal musculocutaneous trapezius flaps for reconstruction of soft tissue defects. Relander M, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(2):159–62

Primary hereditary systemic amyloidosis (Meretoja's syndrome): clinical features and treatment by plastic surgery. Rintala AE, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(2):141–5

Subcutaneous silicone implants in pectus excavatum. Sørensen JL. **Scand J Plast Reconstr Surg Hand Surg** 1988; 22(2):173–6

Breast reconstruction after mastectomy. Bostwick J 3d. **Semin Surg Oncol** 1988;4(4):274–9 (26 ref.)

[Plastic reconstruction of burned hand deformities in the late stage] Gao XS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Mar;1(1):56–7 **(Chi)**

[Further comment on double eyelid operation] Song RY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):6–9 **(Chi)**

[Application of running W–plasty on the face region] Tao ZL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):29–30 (Eng. Abstr.) **(Chi)**

[Pollicization of fingers for aplasia of the thumb] Wang W. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):249–51 **(Chi)**

[Early repair of deep burns in the male perineal region, report of 5 cases] Zhu ZX. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):101–2, 157 (Eng. Abstr.) **(Chi)**

[Superacryl in plastic surgery in depressions of the forehead and its biological tolerance] Voldřich Z, et al. **Cesk Otolaryngol** 1988 Jul;37(4):227–33 (Eng. Abstr.) **(Cze)**

[Liposuction in cosmetic surgery] Erichsen B. **Ugeskr Laeger** 1989 Jul 3;151(27):1756–9 (Eng. Abstr.) **(Dan)**

[Craniofacial volume dysharmonies. Clinical study and new therapeutic approach: subperiosteal malleable onlays. Preliminary report] Besins T, et al. **Ann Chir Plast Esthet** 1988;33(3):225–35 (Eng. Abstr.) **(Fre)**

[The choice of prosthesis in breast reconstruction] Bricout N, et al. **Ann Chir Plast Esthet** 1988;33(3):264–7 (Eng. Abstr.) **(Fre)**

[Uncommon facial mutilation by camel bite] el Danaf A, et al. **Ann Chir Plast Esthet** 1988;33(4):369–72 (Eng. Abstr.) **(Fre)**

[Supplemented local anesthesia in plastic surgery] Favarger N, et al. **Ann Chir Plast Esthet** 1989;34(1):60–4 (Eng. Abstr.) **(Fre)**

[A new concept in plastic surgery: fixed points and their surgical consequences] Illouz YG. **Ann Chir Plast Esthet** 1988;33(3):237–46 (Eng. Abstr.) **(Fre)**

[The pendular nipple. Technic of correction] Julliard AF. **Ann Chir Plast Esthet** 1989;34(1):58–9 (Eng. Abstr.) **(Fre)**

[Subperiosteal face–lift] Krastinova–Lolov D. **Ann Chir Plast Esthet** 1989;34(3):199–211 (Eng. Abstr.) **(Fre)**

[Advancement genioplasty with miniaturized Paulus plates] Labbe D, et al. **Ann Chir Plast Esthet** 1989;34(3):263–8 (Eng. Abstr.) **(Fre)**

[Reconstruction following an orbital tumor in children] Montandon D, et al. **Ann Chir Plast Esthet** 1989;34(1):15–23 (Eng. Abstr.) **(Fre)**

[Esthetic surgery of eyelids (interview)] Mouly R. **Ann Chir Plast Esthet** 1988;33(2):187–94 (Eng. Abstr.) **(Fre)**

[Refusal of reconstruction after mastectomy for cancer of the breast] Pasqualin F, et al. **Ann Chir Plast Esthet** 1988; 33(2):127–9 (Eng. Abstr.) **(Fre)**

[Subperiosteal face–lift] Tessier P. **Ann Chir Plast Esthet** 1989;34(3):193–7 (Eng. Abstr.) **(Fre)**

[Medicolegal aspects of esthetic surgery] Senechal G, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(5):387–90 (Eng. Abstr.) **(Fre)**

[Therapeutic measure in the repair of traumatic loss of substance of the scalp] Harbon S, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):241–6 (Eng. Abstr.) **(Fre)**

[Late orbital complications following subcutaneous silicone injection] Hennekes R, et al. **Fortschr Ophthalmol** 1989; 86(3):249–50 (Eng. Abstr.) **(Ger)**

[Rate of local recurrence and survival in patients with breast reconstruction following mastectomy] Kaufmann M, et al. **Geburtshilfe Frauenheilkd** 1988 Jul;48(7):524–7 (Eng. Abstr.) **(Ger)**

[New construction of the Hornheide specialty clinic for tumors, tuberculosis and reconstructive surgery of the face and skin of the Westphalia Wilhelms University in Munster] Rauh WD. **Hautarzt** 1989 Apr;40(4):247 **(Ger)**

[Reconstruction of deformities of the external ear] Deutinger M, et al. **Wien Klin Wochenschr** 1989 Jan 20;101(2):75–8 (Eng. Abstr.) **(Ger)**

[Cervical cutaneous expansion: treatment of post–burn keloids. Personal cases] Monti M, et al. **Ann Ital Chir** 1987; 59(1–6):285–92 (Eng. Abstr.) **(Ita)**

[Late and deferred reconstruction after mastectomy] Ambroggio GP, et al. **Minerva Chir** 1988 Sep 30;43(18 Suppl):41–5 **(Ita)**

[Computerization of the operating room service in the department of plastic surgery at the San Camillo Hospital] Caldani P, et al. **Minerva Chir** 1988 Sep 15;43(17):1385–8 (Eng. Abstr.) **(Ita)**

[Possibilities and limitations of a myocutaneous rectus abdominis flap in the reconstruction of the breast after mastectomy] Dominici C, et al. **Minerva Chir** 1988 Jun 30;43(12):1103–6 (Eng. Abstr.) **(Ita)**

[Bilateral reconstruction of the breast simultaneous with bilateral mastectomy for cancer] Musiani R, et al. **Minerva Chir** 1988 Apr 30;43(8):695–700 (Eng. Abstr.) **(Ita)**

[Use of Lyodura in fractures of the orbital floor] Berrone S, et al. **Minerva Stomatol** 1989 Jan;38(1):79–84 (Eng. Abstr.) **(Ita)**

[Diagnosis and therapeutic programming of mandibular symphysis dysmorphisms in patients with dento–osseous malformations] Iannetti G, et al. **Minerva Stomatol** 1989 Jan;38(1):57–70 (Eng. Abstr.) **(Ita)**

[Enlargement labial commissuroplasty using the Préaux–Texier–Réal method. Our personal experience] Volpato B, et al. **Minerva Stomatol** 1989 Jun;38(6):645–50 (Eng. Abstr.) **(Ita)**

[Surgery and plastic surgery] Onizuka T. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1151–4 **(Jpn)**

[Clinical studies on the reconstructed cases after the total layer resection of chest wall] Kobayashi S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2319–24 (Eng. Abstr.) **(Jpn)**

[Cosmetic cranioplasty using the bone chips and Biobond (EDH–adhesive): technical note] Tsuchimochi H, et al. **No Shinkei Geka** 1989 May;17(5):457–9 (Eng. Abstr.) **(Jpn)**

[Large breasts—big problems?] Dahl BH. **Tidsskr Nor Laegeforen** 1989 Jun 20;109(17–18):1881–2 (Eng. Abstr.) **(Nor)**

[Radical removal of desmoid with simultaneous plastic surgery of the defect in the anterior abdominal wall] Adamian AA, et al. **Khirurgiia (Mosk)** 1989 May;(5):123–4 **(Rus)**

[Reconstruction of the size and shape of the breast using the rectus abdominalis muscle (review of the literature)] Vishnevskii AA, et al. **Khirurgiia (Mosk)** 1989 May; (5):130–3 (37 ref.) **(Rus)**

[Errors and complications of plastic surgery of defects and false joints of the humerus using free vascularized bone autografts] Golubev VG, et al. **Ortop Travmatol Protez** 1989 Mar;(3):24–7 (Eng. Abstr.) **(Rus)**

[Reconstructive surgery in post–traumatic lesions of the thyreohyoid membrane] Tsvetkov EA, et al. **Vestn Otorinolaringol** 1989 May–Jun;(3):53–6 (Eng. Abstr.) **(Rus)**

[Plastic surgery of postoperative defects in patients with tumors of the maxillofacial area] Stadin GI, et al. **Vopr Onkol** 1989;35(7):853–6 (Eng. Abstr.) **(Rus)**

[Neurotization with autoplasty of the ulnar nerve in simultaneous injuries of the brachial plexus and ulnar nerve] Stashkevich A. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):56–7 **(Rus)**

[A warning against non–competent cosmetic surgery. More and more complications and bad therapeutic results] Lennholm B. **Lakartidningen** 1989 Apr 12;86(15):1398–9 **(Swe)**

ADVERSE EFFECTS

Scleral show. Loeb R. **Aesthetic Plast Surg** 1988 Aug; 12(3):165–70

Postoperative sequelae of augmentation mammaplasty by injection method in Japan. Ohtake N, et al. **Aesthetic Plast Surg** 1989 Spring;13(2):67–74

Systemic sclerosis after augmentation mammoplasty with silicone implants. Varga J, et al. **Ann Intern Med** 1989 Sep 1;111(5):377–83 (32 ref.)

Capsular contracture: hard breasts, soft data. Burkhardt BR. **Clin Plast Surg** 1988 Oct;15(4):521–32 (66 ref.)

Management of mammary subpectoral implant distortion. Maxwell GP, et al. **Clin Plast Surg** 1988 Oct;15(4):601–11

Cosmetic surgery: greater duty to warn of risks. Brahams D. **Lancet** 1988 Dec 17;2(8625):1434

Management of blindness in the practice of cosmetic surgery. Castillo GD. **Otolaryngol Head Neck Surg** 1989 Jun; 100(6):559–62

Galactorrhea after reduction mammaplasty [letter] Bronson DL. **Plast Reconstr Surg** 1989 Mar;83(3):580

Isolated necrosis of deep tissue as a complication of rapid tissue expansion [letter] Lawrence WT. **Plast Reconstr Surg** 1989 Jul;84(1):172

Mammography of the augmented breast [letter] Miller SH, et al. **Plast Reconstr Surg** 1988 Nov;82(5):922

Keloid formation after cleft lip repair [letter] Nichter LS, et al. **Plast Reconstr Surg** 1988 Nov;82(5):923–4

Pseudocyst formation after rectus flap breast reconstruction: diagnosis and treatment. Slavin SA, et al. **Plast Reconstr Surg** 1989 Apr;83(4):670–5

Complications of Oriental blepharoplasty. Weng CJ, et al. **Plast Reconstr Surg** 1989 Apr;83(4):622–8

[Abdominoplasty—hazardous surgery?] Dillerud E. **Tidsskr Nor Laegeforen** 1989 May 20;109(14):1517–20 (Eng. Abstr.) **(Nor)**

[Cosmetic surgery. Is it dangerous?] Dillerud E, et al. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2159–63 (Eng. Abstr.) **(Nor)**

[Abdominoplasty. How to avoid complications? (letter)] Gundersen J. **Tidsskr Nor Laegeforen** 1989 Jun 30; 109(19–21):2050–1 **(Nor)**

EDUCATION

Challenges in developing resident training in aesthetic surgery. Freiberg A. **Ann Plast Surg** 1989 Mar;22(3):184–7

The Toronto residency program [editorial] Manktelow RT. **Ann Plast Surg** 1989 Mar;22(3):180–1

Plastic surgery at the University of Southern California. Reinisch JF. **Ann Plast Surg** 1988 Sep;21(3):198–200

Computer imaging for instruction in facial plastic surgery in a residency program. Papel ID, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec; 114(12):1454–60

Continuing medical education and international romance [letter] Johnson HA. **Plast Reconstr Surg** 1989 May; 83(5):928

Determining undergraduate curriculum content in plastic surgery. Prater MA, et al. **Plast Reconstr Surg** 1989 Sep; 84(3):529–33

HISTORY

Folds, bags and wrinkles of the skin about the eyes and their eradication by simple surgical methods. By Charles C. Miller and Florence Miller, 1907 [classical article] Miller CC, et al. **Aesthetic Plast Surg** 1988 Aug;12(3):157–8

The excision of bag-like folds of skin from the region about the eyes. By Charles C. Miller, 1906 [classical article] Miller CC. **Aesthetic Plast Surg** 1988 Aug;12(3):155–6
Zeis' manual of plastic surgery (1838): translated by T.J.S. Patterson—a commentary and book review. Rogers BO. **Aesthetic Plast Surg** 1988 Nov;12(4):239–46
History of oculoplastic surgery: the contributions of plastic surgery. Rogers BO. **Aesthetic Plast Surg** 1988 Aug; 12(3):129–52
Possibilities in the reconstruction of the human form 1922. [classical article] Thorek M. **Aesthetic Plast Surg** 1989 Winter;13(1):55–8
Brief history and biology of skin grafting. Chick LR. **Ann Plast Surg** 1988 Oct;21(4):358–65 (62 ref.)
A short history of plastic surgery in The Netherlands. Haeseker B. **Ann Plast Surg** 1988 Dec;21(6):506–16
History of the University of Toronto plastic surgery training program [editorial] Lindsay WK. **Ann Plast Surg** 1989 Mar; 22(3):182–3
The deformity termed 'pug nose' and its correction by a simple operation. By John Orlando Roe, 1887 [classical article] Roe JO. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):156–7
The Northern Ireland Plastic Surgery and Maxillo-Facial Unit. Hughes NC. **Br J Plast Surg** 1989 Mar;42(2):235–9
A short history of the Oxford Plastic Surgery Unit. Poole MD. **Br J Plast Surg** 1989 May;42(3):349–52
Plastic surgery in Leeds. Shaw WM. **Br J Plast Surg** 1989 Jan;42(1):107–13
Editing and auditing: a crisis in communication (Gillies Memorial Lecture 1987). Tempest MN. **Br J Plast Surg** 1989 Jan;42(1):1–11
Historical review and present status of free fat graft autotransplantation in plastic and reconstructive surgery. Billings E Jr, et al. **Plast Reconstr Surg** 1989 Feb; 83(2):368–81
William S. Halsted: plastic surgeon. Schusterman MA, et al. **Plast Reconstr Surg** 1989 Jan;83(1):179–87
[The introduction of the principles of plastic surgery in general surgery in The Dutch East Indies, from the First World War to the Japanese occupation] Haeseker B. **Ned Tijdschr Geneeskd** 1988 Dec 24;132(52):2357–63 (Dut)
[Pioneers in plastic surgery. Suzanne Noël (1878–1954)] Glicenstein J. **Ann Chir Plast Esthet** 1988;33(4):389–94 (Eng. Abstr.) (Fre)
[Dujarier's case] Glicenstein J. **Ann Chir Plast Esthet** 1989; 34(3):290–2 (Eng. Abstr.) (Fre)
[150 years of the "Handbook of Plastic Surgery"—in memory of Eduard Zeis (1807–1868)] Sebastian G. **Hautarzt** 1989 Jan;40(1):45–52 (Eng. Abstr.) (Ger)

INSTRUMENTATION

Practice of facial plastic surgery [letter] Pajarillo PR. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):85
Self-retaining weighted retractors for hand surgery. Arem AJ. **Ann Plast Surg** 1980 Oct;5(4):326–7
The use of tissue expanders in scalp alopecia. Doyle MA, et al. **Aust N Z J Surg** 1988 Apr;58(4):321–5
A control unit for maximal-rate continuous tissue expansion (CTE). Logan SE, et al. **Biomed Sci Instrum** 1989;25:27–33
Skin marking made easy and economical. Govila A. **Br J Plast Surg** 1988 Sep;41(5):554
Inelastic tape to treat problems of tissue expansion [letter] Saxby PJ. **Br J Plast Surg** 1988 Nov;41(6):666–7
An improvised mould for vaginoplasty. Viegas T, et al. **Br J Plast Surg** 1989 Jul;42(4):487–9
Instrumentation for cosmetic surgery. Goldman MP, et al. **Clin Dermatol** 1988 Jul–Sep;6(3):108–21 (33 ref.)
Computer helps surgeon mold faces. Carlson MJ. **Ohio Med** 1988 Nov;84(11):863–4
Use of a scalp vein infusion set in oculoplastic surgery. Custer PL. **Ophthalmic Surg** 1989 Jan;20(1):68–9
Animal models of human tissue expansion. Bartell TH, et al. **Plast Reconstr Surg** 1989 Apr;83(4):681–6
Fire hazard of the ophthalmic cautery [letter] Bortolussi ME, et al. **Plast Reconstr Surg** 1989 Apr;83(4):753
Use of a permanent tissue expander for breast reconstruction. Gibney J. **Plast Reconstr Surg** 1989 Oct;84(4):607–17; discussion 618–20
Usefulness of the silicone microsurgical background [letter] Isogai N, et al. **Plast Reconstr Surg** 1989 Aug;84(2):366–7
Expanders with a stylette to position the tubing [letter] Jackson IT. **Plast Reconstr Surg** 1989 Jun;83(6):1082
Scleroderma after silicone augmentation mammaplasty: is there a causative relationship? [letter] Jankauskas S. **Plast Reconstr Surg** 1989 Jan;83(1):198
Stretching and tissue expansion for rhytidectomy: an improved approach. Man D. **Plast Reconstr Surg** 1989 Oct; 84(4):561–9; discussion 570–1
Silicon-rubber vaginal stent [letter] Nicolai JP, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1105–6
With reference to the caulking gun syringe [letter] Palmer JH. **Plast Reconstr Surg** 1989 Jun;83(6):1075
Ear models [letter] Rueckert F. **Plast Reconstr Surg** 1989 Aug;84(2):370
Use of the expander to estimate the volume required in reconstructing the breast [letter] Shafir R, et al. **Plast Reconstr Surg** 1989 Mar;83(3):580
W-plasty: make it easy [letter] Sokolowich D, et al. **Plast Reconstr Surg** 1989 May;83(5):928–9
Trouble with skin grafts [letter] Tolhurst DE. **Plast Reconstr Surg** 1989 May;83(5):930
Quantitative analysis of the thickness of human skin and subcutaneous tissue following controlled expansion with a silicone implant [letter] van Damme PA, et al. **Plast Reconstr Surg** 1989 Oct;84(4):705–6
[The application of plastic splints in burns and reconstruction surgery] Guo ZR, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Mar;1(1):45–6 (Chi)
[Development and application of skin tissue expanders produced in China] Ai YF. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):610–1, 638 (Eng. Abstr.) (Chi)
[Skin expansion prosthesis and their use outside breast reconstruction. Apropos of 54 cases] Baux S, et al. **Ann Chir Plast Esthet** 1988;33(2):159–62 (Eng. Abstr.) (Fre)
[The value of a high-frequency bistoury in plastic surgery] Henry F. **Ann Chir Plast Esthet** 1989;34(1):65–8 (Eng. Abstr.) (Fre)
[Expansion prostheses in restorative and esthetic surgery of the head] Ricbourg B, et al. **Rev Stomatol Chir Maxillofac** 1989;90(2):79–83 (Eng. Abstr.) (Fre)
[Tissue expanders in plastic surgery of the head and neck. Indications and use] Mayer B, et al. **Laryngorhinootologie** 1989 Jun;68(6):313–8 (19 ref.) (Eng. Abstr.) (Ger)
[An instrument for skin retention in plastic surgery] Gornik AA. **Ortop Travmatol Protez** 1988 Jun;(6):55–6 (Rus)

LEGISLATION & JURISPRUDENCE

Informed consent [letter] Altchek ED. **Plast Reconstr Surg** 1988 Nov;82(5):920
[Breast prosthesis. Medicolegal aspects] Rouge D, et al. **Ann Chir Plast Esthet** 1988;33(4):355–61 (11 ref.) (Eng. Abstr.) (Fre)

METHODS

Corrective otoplasty. Krýslová I, et al. **Acta Chir Plast** 1988; 30(2):105–12
Contour plasty of the face using allogenous fascia. Titova AT, et al. **Acta Chir Plast** 1988;30(2):94–104
Breast reconstruction after mastectomy. Krag C. **Acta Oncol** 1988;27(6A):687–90
Laryngotracheal reconstruction following trauma or cancer ablative surgery. Schuller DE, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:144–50
Recent advances in laryngo, pharyngo, esophageal reconstruction. Shumrick DA, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:190–3
Aesthetic aspects in reconstructive microsurgery. Berger A, et al. **Aesthetic Plast Surg** 1989 Spring;13(2):115–20
Medial thighplasty, prevention of scar migration, and labial flattening. Hodgkinson DJ. **Aesthetic Plast Surg** 1989 Spring;13(2):111–4
Present results of fat injection. Illouz YG. **Aesthetic Plast Surg** 1988 Aug;12(3):175–81
Capsular contracture after breast reconstruction with the lateral thoracodorsal flap. Lossing C, et al. **Aesthetic Plast Surg** 1989 Spring;13(2):81–4
Immediate reconstruction after subcutaneous mastectomy. Maillard GF, et al. **Aesthetic Plast Surg** 1989 Winter; 13(1):23–6
Immediate breast reconstruction with subpectoral implantation after transaxillary subcutaneous mastectomy for siliconoma. Megumi Y. **Aesthetic Plast Surg** 1989 Winter;13(1):27–32
Radical abdominoplasty, including body shaping: representative cases. Mühlbauer W. **Aesthetic Plast Surg** 1989 Spring;13(2):105–10
The Regnault "B" technique in mastopexy and breast reduction: a 12-year review. Parenteau JM, et al. **Aesthetic Plast Surg** 1989 Spring;13(2):75–9
Mammoplasty using liposuction and the periareolar incision. Toledo LS, et al. **Aesthetic Plast Surg** 1989 Winter; 13(1):9–13
Lipocauterization and thermal fixation in blepharoplasty. Leone CR Jr, et al. **Am J Ophthalmol** 1988 Nov 15; 106(5):635–7
The use of a tissue expander to enlarge a graft for surgical treatment of a pressure ulcer in a quadriplegic. Case report. Braddom RL, et al. **Am J Phys Med Rehabil** 1989 Apr; 68(2):70–2
Eliminating the dog-ear in modified radical mastectomy. Farrar WB, et al. **Am J Surg** 1988 Nov;156(5):401–2
The role of surgery in advanced carcinoma of the breast. Bennett RC, et al. **Ann Acad Med Singapore** 1988 Jan; 17(1):29–35
A simple approach to blepharoplasty using the Angres II blepharopigmentation lid clamp. Angres GG. **Ann Ophthalmol** 1988 Sep;20(9):349–51
A new method of oral reconstruction using a free composite foot flap. Bell MS, et al. **Ann Plast Surg** 1980 Oct;5(4):281–7
Sex reassignment surgery in male to female transsexuals. Bouman FG. **Ann Plast Surg** 1988 Dec;21(6):526–31
An alternative technique for correction of cryptotia. Elsahy NI. **Ann Plast Surg** 1989 Jul;23(1):66–73
The result of breast reconstruction after mastectomy for breast cancer in 109 patients. Houpt P, et al. **Ann Plast Surg** 1988 Dec;21(6):516–25
Repair of severe tissue loss and deformity of maxillofacial area. How XK, et al. **Ann Plast Surg** 1985 Dec;15(6):501–14
A simple method for the treatment of the inverted nipple. Kami T, et al. **Ann Plast Surg** 1988 Oct;21(4):316–21
A quick stapler tie-over fixation for skin grafts. Kaplan HY. **Ann Plast Surg** 1989 Feb;22(2):173–4
Use of Van der Meulen principles in repair of hypospadias cripples without chordee. Kon M, et al. **Ann Plast Surg** 1988 Dec;21(6):544–9
Advances in burn scar reconstruction: the use of tissue expansion. Neligan PC, et al. **Ann Plast Surg** 1989 Mar; 22(3):203–10
Electrical burns of the oral commissure: treatment results and principles of reconstruction. Su CT, et al. **Ann Plast Surg** 1980 Oct;5(4):251–9
One-stage reconstruction of the penis with composite iliac crest and lateral groin skin flap. Sun GC, et al. **Ann Plast Surg** 1985 Dec;15(6):519–28
Aesthetic refinements in reconstructive microsurgery. Toth BA, et al. **Ann Plast Surg** 1989 Feb;22(2):117–25 (13 ref.)
Craniofacial contouring and porous acrylic cement. Vaandrager JM, et al. **Ann Plast Surg** 1988 Dec; 21(6):583–93
Mammaplasty for the tuberous breast [letter] Wilkinson TS. **Ann Plast Surg** 1988 Sep;21(3):294–6
Plastic surgery for cardiac valves: 15 years' experience. Konstantinov BA, et al. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S77–8
Grafts and flaps in plastic surgery. An overview. Goodman T. **AORN J** 1988 Oct;48(4):650–5, 658–63 (13 ref.)
Tetralogy of Fallot. Using pulmonary allograft conduits to reconstruct the right ventricular outflow tract. Maloney SM. **AORN J** 1989 Sep;50(3):554–5, 557–9, 561–2
Orthognathic surgery. Restoring form and function of the jaw. Steuer K, et al. **AORN J** 1989 Sep;50(3):536–7, 539–43, 546–51 (5 ref.)
The versatile midforehead browlift. Cook TA, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):163–8
Histoacryl. Its use in aesthetic facial plastic surgery. Kamer FM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb; 115(2):193–7
Pericranial free grafts in the face. Powell NB, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):187–92
Reconstruction of the middle-aged torn earlobe: a new method [letter] Arora PK. **Br J Plast Surg** 1989 Jan; 42(1):118
Syndactyly correction. Colville J. **Br J Plast Surg** 1989 Jan; 42(1):12–6
Free serratus anterior muscle transplantation for hand reconstruction. Logan SE, et al. **Br J Plast Surg** 1988 Nov; 41(6):639–43
A new method of auriculoplasty for protruding ears. Madzharov MM. **Br J Plast Surg** 1989 May;42(3):285–90
A simple, direct correction of the constricted ear. Millard DR, et al. **Br J Plast Surg** 1988 Nov;41(6):619–23
The effect of tissue expansion on peripheral nerves. Milner RH. **Br J Plast Surg** 1989 Jul;42(4):414–21
Aesthetic considerations related to repair of the bilateral cleft lip nasal deformity. Pigott RW. **Br J Plast Surg** 1988 Nov; 41(6):593–607
Expansion augmentation. Becker H. **Clin Plast Surg** 1988 Oct; 15(4):587–93
Augmentation mammaplasty: retropectoral versus retromammary implantation. Biggs TM, et al. **Clin Plast Surg** 1988 Oct;15(4):549–55
Surgical alternatives in subcutaneous mastectomy reconstruction. Fisher J, et al. **Clin Plast Surg** 1988 Oct; 15(4):667–76
Reduction mammoplasty utilizing nipple-areola transplantation. Gradinger GP. **Clin Plast Surg** 1988 Oct; 15(4):641–54
The transverse abdominal island flap for breast reconstruction. A 7-year experience. Hartrampf CR Jr. **Clin Plast Surg** 1988 Oct;15(4):703–16
Central breast pedicle and "free-hand" technique for alteration of volume and skin envelope of the breast. Hester TR Jr, et al. **Clin Plast Surg** 1988 Oct;15(4):613–25
A 5-year experience with polyurethane-covered mammary prostheses for treatment of capsular contracture, primary augmentation mammoplasty, and breast reconstruction. Hester TR Jr, et al. **Clin Plast Surg** 1988 Oct;15(4):569–85
Analysis of long-term results of 326 breast reconstructions. Lejour M, et al. **Clin Plast Surg** 1988 Oct;15(4):689–701
Early and late capsular "deformation" as a cause of unsatisfactory results in the latissimus dorsi breast reconstruction. McCraw JB, et al. **Clin Plast Surg** 1988 Oct;15(4):717–26
Mammaplasty with a short horizontal scar. Evaluation and results after 9 years. Marchac D, et al. **Clin Plast Surg** 1988 Oct;15(4):627–39
Reconstruction of the burned hand. Parry SW. **Clin Plast Surg** 1989 Jul;16(3):577–86 (21 ref.)
The minus-plus mastopexy. Regnault P, et al. **Clin Plast Surg** 1988 Oct;15(4):595–600
Small flap coverage of hand and digit defects. Rose EH. **Clin Plast Surg** 1989 Jul;16(3):427–42 (55 ref.)
Management of fingertip injuries. Russell RC, et al. **Clin Plast Surg** 1989 Jul;16(3):405–25 (72 ref.)
Restoration of sensibility in mutilating hand injuries. Swartz WM. **Clin Plast Surg** 1989 Jul;16(3):515–29 (24 ref.)
Transaxillary subpectoral augmentation mammaplasty: a 9-year experience. Tebbetts JB. **Clin Plast Surg** 1988 Oct;

15(4):557–68
Thumb reconstruction—great toe transfer. Valauri FA, et al. **Clin Plast Surg** 1989 Jul;16(3):475–89 (76 ref.)
Rigid internal fixation and vascularized bone grafting in mandibular reconstruction. Wenig BL, et al. **Clin Plast Surg** 1989 Jan;16(1):125–31 (71 ref.)
Rational use of autologous transfusion for elective reconstructive procedures. Marschall MA, et al. **Curr Surg** 1988 Nov–Dec;45(6):459–62
Is a gastric replacement reservoir essential with total gastrectomy? Pathophysiologic update. Nadrowski L. **Curr Surg** 1989 Jul–Aug;46(4):276–84 (65 ref.)
Cosmetic surgery of black skin. Pierce HE Jr. **Dermatol Clin** 1988 Jul;6(3):377–85 (14 ref.)
Facial plastic surgery for children with Down syndrome. Pueschel SM. **Dev Med Child Neurol** 1988 Aug;30(4):540–3 (19 ref.)
Surgical treatment of macrocheilia. Pitanguy I, et al. **Head Neck Surg** 1988 May–Jun;10(5):309–18 (28 ref.)
The primary reconstruction of the anterior floor of mouth by the intraoral cheek transposition flap. Zoellner J. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):107–8
Reality in plastic surgery. A plea for complete disclosure of results. Goldwyn RM. **J Am Podiatr Med Assoc** 1988 Oct;78(10):539–42
Facial augmentation by injectable silicone: CT appearance. Som PM, et al. **J Comput Assist Tomogr** 1988 Sep–Oct; 12(5):896–7
Reconstruction of the zygomatic area. A comparison between osteotomy and onlay techniques. Freihofer PM, et al. **J Craniomaxillofac Surg** 1989 Aug;17(6):243–8
Extensive scalp–lifting [letter] Brandy DA. **J Dermatol Surg Oncol** 1989 May;15(5):563–4
Vermilionectomy using the W-plasty technique. Fernandez Vozmediano JM, et al. **J Dermatol Surg Oncol** 1989 Jun; 15(6):627–9
Blunt liposuction cannula dissection with and without suction–assisted lipectomy in reconstructive surgery. Field LM, et al. **J Dermatol Surg Oncol** 1988 Oct;14(10):1116–22
Postirradiation extensive cicatricial scalp alopecia treated by tissue expansion. Moscona R, et al. **J Dermatol Surg Oncol** 1989 Mar;15(3):337–41
Anesthesia for outpatient dermatologic cosmetic surgery: midazolam—low–dosage ketamine anesthesia. Scarborough DA, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):658–63
Microtia: reconstruction of the auricle. Mentz HA, et al. **J La State Med Soc** 1988 Oct;140(10):15–8 (13 ref.)
Experience with reconstructive surgery in 137 cases of head and neck cancer. Boysen M, et al. **J Otolaryngol** 1988 Aug; 17(5):237–40
The fourth annual meeting of the American Society for Reconstructive Microsurgery. Baltimore, Maryland, September 17–19, 1988. Abstracts. **J Reconstr Microsurg** 1989 Jul;5(3):275–300
The ninth symposium of the International Society of Reconstructive Microsurgery. April 17–22, 1988, Yamanashi, Japan. Abstracts. **J Reconstr Microsurg** 1988 Oct;4(5):427–69
Complications of bladder mucosal graft. Ehrlich RM, et al. **J Urol** 1989 Aug;142(2 Pt 2):626–7; discussion 631
Use of dermal graft and free urethral graft in penile reconstruction. Hendren WH, et al. **J Urol** 1988 Nov;140(5 Pt 2):1265–9
A new 1–stage procedure for clitorovaginoplasty in severely masculinized female pseudohermaphrodites. Passerini–Glazel G. **J Urol** 1989 Aug;142(2 Pt 2):565–8; discussion 572
Facial analysis. Larrabee WF Jr, et al. **Laryngoscope** 1988 Nov;98(11):1273–5
Thumb reconstruction in the severely damaged hand using finger remnants. Dijkstra R. **Neth J Surg** 1989 Feb; 41(1):11–4
Surgical reconstruction of the congenitally atretic cervix: two cases. Jacob JH, et al. **Obstet Gynecol Surv** 1989 Jul; 44(7):556–69 (24 ref.)
Free omental flap reconstruction of complicated head and neck wounds. Panje WR, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):588–93
A new maneuver in deepithelialization of skin in reduction mammaplasty [letter] Abu Jamra FN. **Plast Reconstr Surg** 1988 Dec;82(6):1100–1
Harvesting skin with an adhesive [letter] Ashall G. **Plast Reconstr Surg** 1989 Oct;84(4):701
Oriental blepharoplasty: single–stitch, nonincision technique. Baek SM, et al. **Plast Reconstr Surg** 1989 Feb;83(2):236–42
The prominent mandibular angle: preoperative management, operative technique, and results in 42 patients. Baek SM, et al. **Plast Reconstr Surg** 1989 Feb;83(2):272–80
Happy ending to suffering [letter] Bartkowski SB. **Plast Reconstr Surg** 1989 Mar;83(3):575–6
An approach to excision of congenital giant pigmented nevi in infancy and early childhood. Bauer BS, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1012–21
Grafts and flaps [letter] Bennett JE. **Plast Reconstr Surg** 1989 Jan;83(1):194
Lidocaine permeability in silicone tissue expanders: an in vitro analysis. Berman DE, et al. **Plast Reconstr Surg** 1989 Oct;84(4):621–3
On reconstructing the ptotic breast with an expander [letter] Berrino P. **Plast Reconstr Surg** 1988 Dec;82(6):1101–2
Abdominoplasty: a new concept and classification for treatment. Bozola AR, et al. **Plast Reconstr Surg** 1988 Dec; 82(6):983–93
Removing part of the dermis in reduction by the inferior pedicle technique [letter] Climo MS. **Plast Reconstr Surg** 1989 Jan;83(1):196
Caulking gun for tissue expansion [letter] Cuono CB. **Plast Reconstr Surg** 1989 May;83(5):923–4
Anatomy of the buccal fat pad and its clinical significance. Dubin B, et al. **Plast Reconstr Surg** 1989 Feb;83(2):257–64
Superomedial pedicle technique of reduction mammaplasty. Finger RE, et al. **Plast Reconstr Surg** 1989 Mar; 83(3):471–80
The questionable value of free muscle grafts [letter; comment] Gormley DE. **Plast Reconstr Surg** 1989 May;83(5):923. **Comment on:** Plast Reconstr Surg 1988 Oct;82(4):725
Reconstruction of the external genitalia in the adrenogenital syndrome by means of a personal one–stage procedure. Hinderer UT. **Plast Reconstr Surg** 1989 Aug;84(2):325–37
A simple technique for locating the umbilicus in abdominoplasty. Hoffman S. **Plast Reconstr Surg** 1989 Mar; 83(3):537–8
Mammography as a cause of firmness after augmentation mammaplasty [letter] James NJ. **Plast Reconstr Surg** 1989 Mar;83(3):577
Extensive and complex defects of the scalp, middle third of the face, and palate: the role of microsurgical reconstruction. Jones NF, et al. **Plast Reconstr Surg** 1988 Dec;82(6):937–52
Autologous blood transfusions and plastic surgery. Kruskall MS. **Plast Reconstr Surg** 1989 Oct;84(4):662–4
Creating a curvilinear scar. Manstein CH, et al. **Plast Reconstr Surg** 1989 May;83(5):914–5
Stabilization of the midface with a cranium–to–alveolus bone graft. Mixter RC, et al. **Plast Reconstr Surg** 1989 Feb; 83(2):348–55
Physical, biomechanical, histologic, and biochemical effects of rapid versus conventional tissue expansion. Mustoe TA, et al. **Plast Reconstr Surg** 1989 Apr;83(4):687–91
Use of transillumination in tissue expansion [letter] O'Connell JB, et al. **Plast Reconstr Surg** 1989 Mar;83(3):574–5
Creating an inframammary crease with a liposuction cannula [letter] Pinnella JW. **Plast Reconstr Surg** 1989 May; 83(5):925
Porous hydroxyapatite as an onlay bone–graft substitute for maxillofacial surgery. Salyer KE, et al. **Plast Reconstr Surg** 1989 Aug;84(2):236–44
Dual–pedicle dermoparenchymal mastopexy. Ship AG, et al. **Plast Reconstr Surg** 1989 Feb;83(2):281–90
Intradermal tattoo as an adjunct to nipple–areola reconstruction. Spear SL, et al. **Plast Reconstr Surg** 1989 May;83(5):907–11
The medial periareolar approach to submuscular augmentation mammaplasty under local anesthesia. Spear SL, et al. **Plast Reconstr Surg** 1989 Oct;84(4):599–606
Passot and fat grafts [letter] Stephenson KL. **Plast Reconstr Surg** 1989 Oct;84(4):700–1
Involutional entropion revisited [letter] Tanenbaum M. **Plast Reconstr Surg** 1989 Feb;83(2):392–4
Priority in using staples to secure skin grafts [letter] Tipton JB. **Plast Reconstr Surg** 1989 Jan;83(1):194–5
Unilateral cleft lip nose correction [letter] Tolhurst DE. **Plast Reconstr Surg** 1989 Jun;83(6):1082–3
Precision in breast reduction [letter] Van Rooyan KW. **Plast Reconstr Surg** 1989 Jun;83(6):1083–4
A more cost–effective method of preoperative computerized imaging. Webber WB. **Plast Reconstr Surg** 1989 Jul; 84(1):143–57
Mini–abdominoplasty [letter] Wilkinson TS. **Plast Reconstr Surg** 1988 Nov;82(5):917–8
Our method of correcting cryptotia. Yanai A, et al. **Plast Reconstr Surg** 1988 Dec;82(6):965–72
The use of tissue expansion in lower extremity wounds in paraplegic patients. Yuan RT. **Plast Reconstr Surg** 1989 May;83(5):892–5
Error in thick gauging of brown dermatome and its correction [letter] Zandi I. **Plast Reconstr Surg** 1988 Nov; 82(5):923
Augmentation mammoplasty. Michelow BJ, et al. **S Afr J Surg** 1988 Sep;26(3):113–4 (27 ref.)
Crouzon's disease. Part I. One–stage correction by combined face and forehead advancement. Losken HW, et al. **S Afr Med J** 1989 Mar 18;75(6):274–9
Changes of the profile after advancement genioplasty. Wittbjer J, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):65–70
Reduction mammaplasty: central cone technique for maximal preservation of vascular and nerve supply. Hagerty RC, et al. **South Med J** 1989 Feb;82(2):183–5
Comprehensive experience of tissue expander applied to the reconstructive surgery. Chen MT, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):427–36
Tissue expansion of underdeveloped scrotum to accommodate large testicular prosthesis. A technique. Lattimer JK, et al. **Urology** 1989 Jan;33(1):6–9
[A new supporting material–bovine septal cartilage (laboratory research and clinical observation in plastic surgery)] Ling YC, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Mar;1(1):23–4, 33 (Eng. Abstr.) (Chi)
[On double eyelid operation] Song RY, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Mar;1(1):3–8 (Eng. Abstr.) (Chi)
[Clinical application of an axial temporal fascia flap with or without scalp] Wang LN, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Mar;1(1):14–7 (Eng. Abstr.) (Chi)
[Intraoral horizontal osteotomy genioplasty] Wang X. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):96–9, 127 (Eng. Abstr.) (Chi)
[Reconstruction of the face after mandibular resection for sarcoma] Andrle J, et al. **Rozhl Chir** 1989 Mar;68(3):145–52 (Eng. Abstr.) (Cze)
[Corrective surgery for protruding ears] Králová M. **Rozhl Chir** 1988 Jul;67(7):517–20 (Eng. Abstr.) (Cze)
[Personal experience with dermolipectomy of the abdominal wall] Měšťák J, et al. **Rozhl Chir** 1988 Nov;67(11):742–7 (Eng. Abstr.) (Cze)
[Mastectomy incisions and biopsy technics in view of subsequent reconstructive surgery in breast cancer] Kiil J, et al. **Ugeskr Laeger** 1989 Jul 24;151(30):1914–7 (Eng. Abstr.) (Dan)
[Immediate breast reconstruction: indications and technics. Apropos of 120 cases treated at the Institut Gustave–Roussy] Barreau–Pouhaer L, et al. **Ann Chir Plast Esthet** 1989;34(2):97–102 (Eng. Abstr.) (Fre)
[Concept and technic of malleable subperiosteal onlay. Toward a new dimension in facial rejuvenation surgery] Besins T, et al. **Ann Chir Plast Esthet** 1989;34(3):212–9 (Eng. Abstr.) (Fre)
[Tonsure reduction. Principles and innovation: scalp lift] Dardour JC. **Ann Chir Plast Esthet** 1989;34(3):234–42 (Eng. Abstr.) (Fre)
[Combined transposition of the latissimus dorsi and serratus anterior muscles in cervical and thoracic reconstructive surgery. Results of 40 anatomical dissections and clinical applications in 21 cases] Guédon C, et al. **Ann Chir Plast Esthet** 1988;33(4):321–8 (Eng. Abstr.) (Fre)
[The use of the platysma and the skin of the neck as a myocutaneous flap in reconstructing cheek defects. Technic and results apropos of 5 cases] Ioannovich I, et al. **Ann Chir Plast Esthet** 1989;34(1):43–7 (Eng. Abstr.) (Fre)
[A new approach to reconstructive plastic surgery: reimplantation of adipose tissue fragments obtained by liposuction] Lafontan M, et al. **Ann Chir Plast Esthet** 1989; 34(1):77–81 (27 ref.) (Fre)
[Value of soft prosthetic implants in facial rejuvenation surgery] Mole B. **Ann Chir Plast Esthet** 1989;34(3):227–33 (Eng. Abstr.) (Fre)
[Poor esthetic results after conservative treatment of breast cancer. Technics of partial breast reconstruction] Petit JY, et al. **Ann Chir Plast Esthet** 1989;34(2):103–8 (Eng. Abstr.) (Fre)
[Technics of velopalatal reconstruction] Reychler H. **Ann Chir Plast Esthet** 1989;34(2):129–35 (92 ref.) (Eng. Abstr.) (Fre)
[Prefabricated free transplants. Experimentation] Germain MA, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(5):351–3 (Eng. Abstr.) (Fre)
[Breast reconstruction following breast cancer] Calteux N, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1988; 125(1):15–26 (Fre)
[Value of an emergency opposition plasty in total anterior hemisection of the wrist] Mitz V, et al. **Chirurgie** 1988; 114(7–8):621–7 (17 ref.) (Eng. Abstr.) (Fre)
[Long term results of 68 cases of breast reduction performed at a university surgical service] Meredith P, et al. **Helv Chir Acta** 1989 Apr;55(6):887–94 (Eng. Abstr.) (Fre)
[Long–term results following breast reconstruction] Petit JY, et al. **Helv Chir Acta** 1989 Apr;55(6):869–77 (Eng. Abstr.) (Fre)
[Technic of tissue expansion] Saouma S, et al. **J Chir (Paris)** 1989 Jan;126(1):34–9 (Eng. Abstr.) (Fre)
[The treatment of late damage following burns of the head, neck and face] Akuamoa–Boateng E, et al. **Fortschr Kiefer Gesichtschir** 1989;34:80–4 (Ger)
[Esthetic surgery of the eyelids] Bier J, et al. **Fortschr Kiefer Gesichtschir** 1989;34:13–4 (Ger)
[Possibilities for plastic surgery correction of chronic facial paralyses and follow–up results] Bonorden SW, et al. **Fortschr Kiefer Gesichtschir** 1989;34:66–71 (Ger)
[Esthetic aspects of the chin area in causal therapy of skeletal dysgnathias] Brachvogel P, et al. **Fortschr Kiefer Gesichtschir** 1989;34:31–4 (Ger)
[Esthetic and functional aspects of replacement–plasties of the upper lip] Cornelius CP, et al. **Fortschr Kiefer Gesichtschir** 1989;34:171–4 (Ger)
[Improving the contour of the face with alloplastic materials] Dielert E, et al. **Fortschr Kiefer Gesichtschir** 1989;34:93–5 (Ger)
[Long–term results of Reichert corrective surgery of protruding ears] Engleder R, et al. **Fortschr Kiefer Gesichtschir** 1989;34:139–41 (Ger)
[Long–term results of Pitanguy external ear correction] Esser E. **Fortschr Kiefer Gesichtschir** 1989;34:136–9 (Ger)
[Correction of the narrow margin: lip margin eversion versus Gillies operation] Farmand M, et al. **Fortschr Kiefer Gesichtschir** 1989;34:114–7 (Ger)
[Correction of the whistling defect] Fleiner B, et al. **Fortschr Kiefer Gesichtschir** 1989;34:117–20 (Ger)
[Experiences with preserved fascia lata in various methods of facial nerve replacement–plasty] Gehrke G, et al.

Fortschr Kiefer Gesichtschir 1989;34:72–5 (Ger)
[New aspects of planning and implementing profile-plasties] Gottsauner A, et al. Fortschr Kiefer Gesichtschir 1989; 34:20–3 (Ger)
[Esthetic premises in the choice of the surgical approach to the orbit] Heesen J, et al. Fortschr Kiefer Gesichtschir 1989; 34:180–3 (Ger)
[Long-term studies of improved planning of genioplasty] Herbring M, et al. Fortschr Kiefer Gesichtschir 1989; 34:27–31 (Ger)
[Tattooing—possibilities for removal] Jaspers U, et al. Fortschr Kiefer Gesichtschir 1989;34:77–80 (Ger)
[Surgical lengthening of the short upper lip] Krüger E. Fortschr Kiefer Gesichtschir 1989;34:111–4 (Ger)
[Significance of the chin for the esthetics of the face] Luhr HG. Fortschr Kiefer Gesichtschir 1989;34:23–7 (Ger)
[Reconstruction of facial esthetics with homologous tissue bank cartilage transplants] Matras H, et al. Fortschr Kiefer Gesichtschir 1989;34:96–8 (Ger)
[Orbital surgery as a part of esthetic rehabilitation] Mühling J, et al. Fortschr Kiefer Gesichtschir 1989;34:177–80 (Ger)
[Reconstruction of external ears following traumatic amputation and congenital defects] Neumann HJ. Fortschr Kiefer Gesichtschir 1989;34:144–6 (Ger)
[Experiences with chondroplast in esthetic facial surgery] Noverraz PM, et al. Fortschr Kiefer Gesichtschir 1989; 34:100–3 (Ger)
[Differential therapeutic aspects of anthelixplasties] Platen H, et al. Fortschr Kiefer Gesichtschir 1989;34:142–3 (Ger)
[Esthetic aspects in the management of facial defects] Riediger D. Fortschr Kiefer Gesichtschir 1989;34:154–7 (Ger)
[Critical evaluation of masseter reduction as a method for reducing facial width] Sailer HF, et al. Fortschr Kiefer Gesichtschir 1989;34:87–90 (Ger)
[Correction of esthetic disorders following cleft lip-plasties] Scheunemann H, et al. Fortschr Kiefer Gesichtschir 1989; 34:109–11 (Ger)
[Esthetic reconstruction in defects of the orbital soft tissues and loss of the eye] Schumann D, et al. Fortschr Kiefer Gesichtschir 1989;34:183–6 (Ger)
[Profile-plasty] Schwenzer N. Fortschr Kiefer Gesichtschir 1989;34:17–9 (Ger)
[Mustardé external ear relief-plasty] Viereck E, et al. Fortschr Kiefer Gesichtschir 1989;34:132–5 (Ger)
[Relief-plasty of the external ear] von Domarus H, et al. Fortschr Kiefer Gesichtschir 1989;34:129–32 (Ger)
[Breast reconstruction using a skin expander prostheses following modified radical mastectomy] Schmidt R, et al. Geburtshilfe Frauenheilkd 1988 Oct;48(10):701–4 (Eng. Abstr.) (Ger)
[Autologous injection of fatty tissue following liposuction—not a method for breast augmentation] Hörl HW, et al. Handchir Mikrochir Plast Chir 1989 Mar; 21(2):59–61 (Eng. Abstr.) (Ger)
[10 years results following augmentation-plasty] Wintsch K, et al. Helv Chir Acta 1989 Apr;55(6):879–86 (Eng. Abstr.) (Ger)
[Immediate reconstruction of the breast following mastectomy] Bohmert H. Langenbecks Arch Chir 1988; Suppl 2:459–64 (19 ref.) (Eng. Abstr.) (Ger)
[Plastic surgery reconstruction following irradiation] Exner K, et al. Langenbecks Arch Chir 1988;Suppl 2:471–4 (Eng. Abstr.) (Ger)
[Immediate plastic reconstruction following tumor removal in the area of the head and neck] Mühlbauer W. Langenbecks Arch Chir 1988;Suppl 2:453–8 (0 ref.) (Eng. Abstr.) (Ger)
[Surgical reconstruction possibilities in facial paralysis] Lüscher NJ. Schweiz Rundsch Med Prax 1989 Jun 13; 78(24):681–2 (Ger)
[Transareomamillary incision in gynecomastia] Babayan R. Zentralbl Chir 1989;114(1):49–54 (Ger)
[Mammographic findings following reduction mammaplasty] Buhtz C, et al. Zentralbl Chir 1989;114(1):36–9 (Eng. Abstr.) (Ger)
[Abdominoplasty—personal surgical guidelines] Pitanguy I, et al. Zentralbl Chir 1988;113(12):765–71 (Eng. Abstr.) (Ger)
[Reconstructive surgery after total or partial laryngectomy] Serafini I. Acta Otorhinolaryngol Ital 1988;8 Suppl 20:37–48 (18 ref.) (Eng. Abstr.) (Ita)
[Timing and method of breast reconstruction after mastectomy] Errichi BM, et al. Ann Ital Chir 1987; 59(1–6):103–7 (Eng. Abstr.) (Ita)
[Use of pro-ulna radius in resection of proximal ulna] Toni A, et al. Chir Organi Mov 1988 Jul–Sep;73(3):277–80 (Eng. Abstr.) (Ita)
[Current approaches on the subject of breast reconstruction after mastectomy because of tumor] Donati L, et al. Minerva Chir 1989 Feb 15;44(3):437–9 (11 ref.) (Ita)
[Role of the general surgeon in the preparation for breast reconstruction] Gucciardo G. Minerva Chir 1989 Feb 15; 44(3):441–4 (0 ref.) (Ita)
[Use of skin expansion in reconstructive skin surgery] Moscati F, et al. Minerva Chir 1988 Nov 30;43(22):1947–53 (Eng. Abstr.) (Ita)
[Technic development in the reconstruction of the breast. Our experience with 102 operated on cases] Pelle Ceravolo M, et al. Minerva Chir 1989 Feb 28;44(4):575–7 (Ita)
[Reconstruction of the breast] Piotti F. Minerva Chir 1989 Feb 15;44(3):445–51 (0 ref.) (Ita)
[Autotransplantation of nipple-areolar complex in a modified radical mastectomy—indications and three-stage breast reconstruction] Ishikawa H, et al. Nippon Geka Gakkai Zasshi 1988 Nov;89(11):1879–85 (Eng. Abstr.) (Jpn)
[Use of surgical methods in dermatology] Bogdanowski T. Przegl Dermatol 1988 Sep–Oct;75(5):337–45 (Pol)
[The planning of local plastic operations after the radiation therapy of malignant tumors of the head taking into account the blood microcirculation of the skin] Dmitrieva VS, et al. Stomatologiia (Mosk) 1989 May–Jun;68(3):39–41 (Eng. Abstr.) (Rus)
[Creating a Cupid's bow in lip deformities] Vissarionov VA. Vestn Khir 1988 Jun;140(6):101–3 (Eng. Abstr.) (Rus)
[The free TRAM (transverse rectus abdominis myocutaneous) flap—a new possibility in breast reconstruction] Arnež Z, et al. Acta Chir Iugosl 1989; 36(1):143–57 (Eng. Abstr.) (Scr)

MORTALITY

Relative risk: mortality probability and plastic surgery. Griffiths RW. Br J Plast Surg 1988 Nov;41(6):660–5 (47 ref.)

PSYCHOLOGY

Social, psychological and cultural dimensions of cosmetic and reconstructive plastic surgery. Macgregor FC. Aesthetic Plast Surg 1989 Winter;13(1):1–8
The role of psychiatry in aesthetic surgery. Ohjimi H, et al. Aesthetic Plast Surg 1988 Aug;12(3):187–90
Growing pains: the psychological experience of breast reconstruction with tissue expansion. Goin MK, et al. Ann Plast Surg 1988 Sep;21(3):217–22
The psychiatric assessment of the patient requesting facial surgery. Schweitzer I. Aust N Z J Psychiatry 1989 Jun; 23(2):249–54 (21 ref.)
The benefits and hazards of cosmetic surgery. Harris D. Br J Hosp Med 1989 Jun;41(6):540–5
Negative bodily experience and prevalence of depression in patients who request augmentation mammoplasty. Schlebusch L. S Afr Med J 1989 Apr 1;75(7):323–6

STANDARDS

Quality assurance (QA). Br J Plast Surg 1989 May; 42(3):364–5

TRENDS

Plastic surgery in The Netherlands. Huffstadt AJ. Ann Plast Surg 1988 Dec;21(6):504–5
Oculoplastic surgery [editorial] Rogers PA. Aust N Z J Ophthalmol 1988 Nov;16(4):271–2
Microsurgery in China and the development of Western reconstructive microsurgery. Cooney WP. Microsurgery 1988;9(2):75–7
Oculoplastic surgery. Wojno TH. Ophthalmology 1989 Feb; 96(2):270–4
[Plastic surgery in America] Tobin H. Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Mar;4(1):23–4 (Chi)
[Reconstructive surgery will reach a higher degree of development] Zederfeldt B. Lakartidningen 1988 Dec 28; 85(52):4629 (Swe)

UTILIZATION

Waiting lists. Br J Plast Surg 1989 Jul;42(4):490–1

VETERINARY

Reconstruction of the distal trunk of an African elephant. Caffee HH. Plast Reconstr Surg 1989 Jun;83(6):1049–51
The use of skin expansion to repair cosmetic defects in animals. Madison JB, et al. Vet Surg 1989 Jan–Feb; 18(1):15–21

SURGERY, VETERINARY see under **VETERINARY MEDICINE**

SURGICAL ANASTOMOSIS see **ANASTOMOSIS, SURGICAL**

SURGICAL DIATHERMY see **ELECTROCOAGULATION**

SURGICAL EQUIPMENT

Improved endonasal sinus surgery by use of an operating microscope and a self-retaining retractor speculum. Park IY. Acta Otolaryngol Suppl (Stockh) 1988;458:27–33
Axillary dissection: use of a mechanical retractor. Delaney JP. Am J Surg 1989 Apr;157(4):436–7
Modified anesthetic screen for pediatric surgery [letter] Yamashita M. Anesthesiology 1988 Oct;69(4):636–7
Management of hemorrhage from severe scalp lacerations with Raney clips. Sykes LN Jr, et al. Ann Emerg Med 1989 Sep;18(9):995–6
Product selection in the OR. A decision-making model. Baird MV. AORN J 1988 Sep;48(3):512–3, 516–7
A draping technique for spinal surgery using the Stagnara wake-up test. Huss GK, et al. AORN J 1988 Sep; 48(3):530–5
Modification of an ophthalmic laser for use in sedated, reclining children. Kaufman LM. Arch Ophthalmol 1989 Jun;107(6):928–9
Comparison of absorbable materials for surgical haemostasis. Blair SD, et al. Br J Surg 1988 Oct;75(10):969–71
Use of overhead hooks in burn surgery. Davis JW, et al. J Burn Care Rehabil 1988 Sep–Oct;9(5):492
Use of vascular clips to approximate skin grafts. Perry AW, et al. J Burn Care Rehabil 1988 Sep–Oct;9(5):490–1
Knee prop for knee surgery. LeNoir JL. Orthop Rev 1988 Nov;17(11):1167–8
Using the suction apparatus of the laser machine to get rid of smoke from electrocoagulation [letter] Karaca AR. Plast Reconstr Surg 1989 Aug;84(2):372
Nasal surgery: does the type of nasal pack influence the results? Watson MG, et al. Rhinology 1989 Jun;27(2):105–11
Hydraulic bedscale lift for retracting and holding large lesions. Morris DM, et al. South Med J 1989 Jun; 82(6):796–7
Use of a new retractor for the upper part of the abdomen. Neshat AA, et al. Surg Gynecol Obstet 1989 Oct;169(4):365
Improved design for microsurgery table. Lewis EL, et al. Urology 1988 Nov;32(5):452–3
[A new positioning aid for administering axillary plexus anesthesia] Donner B, et al. Anasth Intensivther Notfallmed 1989 Apr;24(2):103–4 (Eng. Abstr.) (Ger)
[CAS (computer assisted surgery). A new procedure in head and neck surgery] Schlöndorff G, et al. HNO 1989 May; 37(5):187–90 (Eng. Abstr.) (Ger)
[Our subcostal retractor] Bonini CA, et al. Minerva Chir 1989 Jun 15;44(11):1605–9 (Eng. Abstr.) (Ita)
[Experience and clinical assessment in using disposable medical linens in surgical gynecology] Kulakov VI, et al. Akush Ginekol (Mosk) 1988 May;(5):72–3 (Rus)
[Universal litters for transporting patients from the operating table] Aliev RG. Klin Khir 1988;(8):75 (Rus)
[A device for irrigation-aspiration] Surovikin DM, et al. Klin Khir 1989;(1):68 (Rus)
[A fixation device for holding tubular bone grafts] Varnavskii VN. Ortop Travmatol Protez 1988 May;(5):65–6 (Rus)
[The Spasatel' AN-26 M resuscitation-surgical aircraft] Stremedlovskii NV. Voen Med Zh 1988 May;(5):73 (Rus)

ADVERSE EFFECTS

Local anesthesia prevents hypertension following application of the Mayfield skull-pin head holder. Levin R, et al. Acta Anaesthesiol Scand 1989 May;33(4):277–9

HISTORY

Upgrading surgeons' autoclaves [letter] Møller HJ. J Infect 1988 Nov;17(3):274–5
Upgrading surgeons' autoclaves [letter] Pilsworth R. J Infect 1988 Nov;17(3):275–6

STANDARDS

A new quantitative measurement for surgical needle ductility. Abidin MR, et al. Ann Emerg Med 1989 Jan;18(1):64–8
Error in thick gauging of brown dermatome and its correction [letter] Zandi I. Plast Reconstr Surg 1988 Nov; 82(5):923
[AS & A (aqua-stream and aspirator) in neurosurgery: comparison with laser and CUSA] Ito H, et al. No Shinkei Geka 1988 Dec;16(13):1451–5 (Eng. Abstr.) (Jpn)

SURGICAL FLAPS

Non microsurgical transfer of dorsalis pedis neurovascular island flap to distant defect using nerve sharing technique. Govila A. Acta Chir Plast 1988;30(3):153–61
Flap operations for Dupuytren's contracture. Králová M, et al. Acta Chir Plast 1988;30(2):113–21
Arterial cutaneous and myocutaneous flaps in the reconstruction of devastating tissue-loss surgery. Laca L, et al. Acta Chir Plast 1988;30(4):240–9
Vertical back fasciocutaneous flap in reconstruction of the back. Maruyama Y, et al. Acta Chir Plast 1988;30(3):147–52
A wrap-around procedure using the gluteus maximus muscle for the functional reconstruction of the sphincter in a case of anal incontinence. Onishi K, et al. Acta Chir Plast 1989; 31(1):56–63
Reconstruction of craniofacial microsomia and hemifacial atrophy with free latissimus dorsi flap. Pisarek W. Acta Chir Plast 1988;30(4):194–201
Experimental two-layer flap for plantar dermatoplasty of skin defects. Pyslar SI, et al. Acta Chir Plast 1988;30(4):215–21
Vascularised fasciocutaneous flap for reconstruction of the hypopharynx. Delaere P, et al. Acta Otorhinolaryngol Belg 1988;42(4):557–63
Increased survival of ischaemic musculocutaneous flaps in rats after acupuncture. Jansen G, et al. Acta Physiol Scand 1989 Apr;135(4):555–8
Aesthetic total lower eyelid reconstruction. Fuertes-Lanzuela S. Aesthetic Plast Surg 1988 Aug; 12(3):159–63
Nailplasty using a distally based ulnar finger dorsum flap. Kasai K, et al. Aesthetic Plast Surg 1989 Spring;13(2):125–8
Capsular contracture after breast reconstruction with the lateral thoracodorsal flap. Lossing C, et al.

Aesthetic Plast Surg 1989 Spring;13(2):81–4
Covering defects in the breast region by the slide–swing plasty. Schrudde J, et al. **Aesthetic Plast Surg** 1989 Winter; 13(1):41–6
Gracilis myocutaneous vaginal reconstruction concurrent with total pelvic exenteration. Copeland LJ, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1095–101
Free tissue transfer in head and neck reconstruction. Arena S, et al. **Am J Otolaryngol** 1989 Mar–Apr;10(2):110–23
The use of computed tomography in assessing oral cancer recurrence after flap reconstruction. Brown DH, et al. **Am J Otolaryngol** 1989 May–Jun;10(3):161–4
Liposuction to debulk the pectoralis major myocutaneous flap. Cueva R, et al. **Am J Otolaryngol** 1988 May–Jun; 9(3):106–10
The superiorly based auricular flap. Hoffman HT, et al. **Am J Otolaryngol** 1988 Sep–Oct;9(5):232–7
Free gastroomental flap for head and neck reconstruction: assessment in an animal model. Moran WJ, et al. **Am J Otolaryngol** 1989 Jan–Feb;10(1):55–60
The use of a tissue expander to enlarge a graft for surgical treatment of a pressure ulcer in a quadriplegic. Case report. Braddom RL, et al. **Am J Phys Med Rehabil** 1989 Apr; 68(2):70–2
The role of radiotherapy and musculocutaneous flaps in oropharyngocutaneous fistulas. Brown PF 3d, et al. **Am J Surg** 1988 Oct;156(4):256–60
Reconstruction of posterior neck and skull with vertical trapezius musculocutaneous flap. Mathes SJ, et al. **Am J Surg** 1988 Oct;156(4):248–51
Immediate microvascular reconstruction of combined palatal and midfacial defects. Shestak KC, et al. **Am J Surg** 1988 Oct;156(4):252–5
Hemilaryngeal reconstruction using an axial island cheek flap supported by Marlex and stainless steel wire mesh. Winek TG, et al. **Am J Surg** 1988 Oct;156(4):235–7
Management of postirradiation recurrent enterocutaneous fistula by muscle flaps. Lui RC, et al. **Am Surg** 1989 Jul; 55(7):403–7
The effect of hemoglobin and hematocrit levels on free flap survival. Velanovich V, et al. **Am Surg** 1988 Nov; 54(11):659–63
A distally based dorsal and triangular tendinous flap for direct access to the proximal interphalangeal joint. Chamay A. **Ann Chir Main** 1988;7(2):179–83 (Eng, Fre)
Conjunctival flaps in the treatment of refractory pseudomonas corneal abscess. Buxton JN, et al. **Ann Ophthalmol** 1986 Nov;18(11):315–8
Advantages of the rotary door flap in laryngotracheal reconstruction: is skeletal support necessary? Eliachar I, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):37–40
Newer techniques of laryngeal reinnervation. Maniglia AJ, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):8–14
The effect of prior elevation of skin flaps and ischemia on blood thromboxane levels. Angel MF, et al. **Ann Plast Surg** 1989 Jun;22(6):501–4
The effect of time of vascular island skin flap elevation on tolerance to warm ischemia. Angel MF, et al. **Ann Plast Surg** 1989 May;22(5):426–8
A new method of oral reconstruction using a free composite foot flap. Bell MS, et al. **Ann Plast Surg** 1980 Oct;5(4):281–7
Preoperative TRAM flap planning for postmastectomy breast reconstruction. Berrino P, et al. **Ann Plast Surg** 1988 Sep; 21(3):264–72
Forehead expansion and total nasal reconstruction. Bolton LL, et al. **Ann Plast Surg** 1988 Sep;21(3):210–6
An evaluation of the pedicled thoracoumbilical flap in upper extremity reconstruction. Boyd JB, et al. **Ann Plast Surg** 1989 Mar;22(3):236–42
The sensory potential of free flap donor sites. Brown CJ, et al. **Ann Plast Surg** 1989 Aug;23(2):135–40
The inferior trapezius musculocutaneous flap in head and neck reconstruction. Chandrasekhar B, et al. **Ann Plast Surg** 1988 Sep;21(3):201–9
Latissimus dorsi free flap for restoration of facial contour defects. de la Fuente A, et al. **Ann Plast Surg** 1989 Jan; 22(1):1–8
The vascular microanatomy of skin territory of posterior forearm and its clinical application. Ding YC, et al. **Ann Plast Surg** 1989 Feb;22(2):126–34
V–Y advancement flaps for tumor excision defects of the eyelids. Doermann A, et al. **Ann Plast Surg** 1989 May; 22(5):429–35
Segmental latissimus dorsi free flap: clinical applications. Elliott LF, et al. **Ann Plast Surg** 1989 Sep;23(3):231–8
Latissimus dorsi musculocutaneous flap model in the rabbit: a hemodynamic and anatomical study. Forrest CR, et al. **Ann Plast Surg** 1988 Oct;21(4):335–41
Axial flap from the inferior pole of the breast. Franco T. **Ann Plast Surg** 1980 Oct;5(4):260–5
Arteriovenous shunts in free vascularized tissue transfer for extremity reconstruction. Freedman AM, et al. **Ann Plast Surg** 1989 Aug;23(2):123–8
Failure of pentoxifylline to enhance skin flap survival in the rat. Freedman AM, et al. **Ann Plast Surg** 1989 Jul; 23(1):31–4
The extended digitorum brevis muscle flap. Gahhos FN, et al. **Ann Plast Surg** 1989 Sep;23(3):255–62
Growing pains: the psychological experience of breast reconstruction with tissue expansion. Goin MK, et al. **Ann Plast Surg** 1988 Sep;21(3):217–22
Reconstruction of ear helix: use of self-tubing pedicle flap. Goldstein JA, et al. **Ann Plast Surg** 1988 Aug;21(2):149–51
Upper lid musculocutaneous flap. Guerrissi JO, et al. **Ann Plast Surg** 1988 Aug;21(2):108–15
Congenital ear deformity: reconstruction using composite graft. Hall JD, et al. **Ann Plast Surg** 1988 Aug;21(2):145–8
Polyglactin 910 mesh for support of the donor defect of the double-pedicled rectus abdominis musculocutaneous flap. Hallock GG, et al. **Ann Plast Surg** 1989 Apr;22(4):358–64
The extended temporoparietal fascia "non-free" flap. Hallock GG. **Ann Plast Surg** 1989 Jan;22(1):65–8
The role of external cranial fixation in simplifying scalp composite tissue transfer. Hallock GG. **Ann Plast Surg** 1989 Jan;22(1):76–9
Venous outflow simplified by the cephalic vein loop. Hallock GG. **Ann Plast Surg** 1988 Nov;21(5):427–9
External longitudinal splitting of the biceps brachii muscle for coverage of repaired brachial vessels: an anatomical study and clinical application. Har-Shai Y, et al. **Ann Plast Surg** 1988 Aug;21(2):158–64
Subcutaneous V–Y advancement flap for closure of nasal tip defect. Hauben DJ. **Ann Plast Surg** 1989 Sep; 23(3):239–44
Complications of reduction mammaplasty: comparison of nipple-areolar graft and pedicle. Hawtof DB, et al. **Ann Plast Surg** 1989 Jul;23(1):3–10
Neovascularized free cutaneous cartilage flap transfer with microsurgical anastomosis: an experimental model in the rabbit. Hirasé Y, et al. **Ann Plast Surg** 1988 Oct;21(4):342–7
Experiences with the lateral calcaneal artery flap. Hovius SE, et al. **Ann Plast Surg** 1988 Dec;21(6):532–5
Medial leg skin flap: vascular anatomy and clinical applications. Hwang WY, et al. **Ann Plast Surg** 1985 Dec; 15(6):489–91
The application of free twin flaps in one-stage treatment of severe hand deformity. Hwang WY, et al. **Ann Plast Surg** 1988 Nov;21(5):430–3
Routine use of laser Doppler flowmetry for monitoring autologous tissue transplants. Jenkins S, et al. **Ann Plast Surg** 1988 Nov;21(5):423–6
Clinical application of the free scapular fascial flap. Jin YT, et al. **Ann Plast Surg** 1989 Aug;23(2):170–7
Closure of defects from pressure sores requiring proximal femoral resection. Klein NE, et al. **Ann Plast Surg** 1988 Sep;21(3):246–50
The free or pedicled saphenous flap. Koshima I, et al. **Ann Plast Surg** 1988 Oct;21(4):369–74
The free or pedicled anteromedial thigh flap. Koshima I, et al. **Ann Plast Surg** 1988 Nov;21(5):480–5
Midline fascial preservation in double-pedicle TRAM flap breast reconstruction. Kroll SS. **Ann Plast Surg** 1989 Aug; 23(2):104–11
Striving for excellence in breast reconstruction: the salvage of poor results. Kroll SS, et al. **Ann Plast Surg** 1989 Jan; 22(1):58–64
The reverse digital artery flap for fingertip reconstruction. Lai CS, et al. **Ann Plast Surg** 1989 Jun;22(6):495–500
Surgical treatment of the penoscrotal Paget's disease. Lai CS, et al. **Ann Plast Surg** 1989 Aug;23(2):141–6
The use of scrotal septal neurovascular pedicle island skin flap in one-stage repair of hypospadias. Li SY, et al. **Ann Plast Surg** 1985 Dec;15(6):529–33
Immediate skin grafting on microvascular free tissue transfers. Lineaweaver W, et al. **Ann Plast Surg** 1988 Aug; 21(2):124–6
Subtransversalis passage of a rectus abdominis island flap for treatment of osteomyelitis of the posterior superior iliac spine. Lineaweaver WC, et al. **Ann Plast Surg** 1989 Jun; 22(6):539–42
Hematoma in a latissimus dorsi donor site 21 months after surgery. Lineaweaver WC, et al. **Ann Plast Surg** 1988 Aug; 21(2):143–4
Salvage of the infected groin vascular graft with muscle flaps. Mahoney J. **Ann Plast Surg** 1989 Mar;22(3):252–6
The effect of tension on muscle flaps. Manstein CH, et al. **Ann Plast Surg** 1988 Aug;21(2):116–20
Primary lymphedema of the scrotum: surgical treatment and reconstruction. Martínez RE, et al. **Ann Plast Surg** 1988 Oct;21(4):354–7
Coverage of chest wall and pelvic defects with the external oblique musculofasciocutaneous flap. Meland NB, et al. **Ann Plast Surg** 1988 Oct;21(4):297–302
On expander pressure and skin blood flow during tissue expansion in the pig. Min Z, et al. **Ann Plast Surg** 1988 Aug;21(2):134–9
Experience with the ipsilateral upper TRAM flap for postmastectomy breast reconstruction. Mukherjee RP, et al. **Ann Plast Surg** 1989 Sep;23(3):187–96
Efficacy of verapamil in the salvage of failing random skin flaps. Nichter LS, et al. **Ann Plast Surg** 1988 Sep; 21(3):242–5
The use of wall suction as a lipoaspirator. Nichter LS, et al. **Ann Plast Surg** 1988 Sep;21(3):261–3
Closure of nasal septal perforation with a cutaneous flap and a perichondrocutaneous graft. Ohlsén L. **Ann Plast Surg** 1988 Sep;21(3):276–88
Lower eyelid reconstruction by V–Y advancement cheek flap. Peled I, et al. **Ann Plast Surg** 1980 Oct;5(4):321–3
The innervated tensor fasciae latae flap in patients with meningomyelocele. Posma AN. **Ann Plast Surg** 1988 Dec; 21(6):594–6
A subcutaneous pedicle flap for perineal reconstruction. Sakai S, et al. **Ann Plast Surg** 1989 May;22(5):440–3
Distally based lateral plantar artery island flap. Sakai S, et al. **Ann Plast Surg** 1988 Aug;21(2):165–9
Distally based ulnar artery island forearm flap for the large defect of the ulnar side of the hand. Sakai S, et al. **Ann Plast Surg** 1989 Sep;23(3):266–8
Lower leg reconstruction using a sural fasciocutaneous flap. Satoh K, et al. **Ann Plast Surg** 1989 Aug;23(2):97–103
Carotid–cavernous sinus fistula complicating a complex shotgun facial injury. Sherman R, et al. **Ann Plast Surg** 1988 Sep;21(3):251–6
Evaluation of reconstructive techniques of oropharyngeal defects. Stern JR, et al. **Ann Plast Surg** 1989 Apr; 22(4):332–6
Eye socket reconstruction with free radial forearm flap. Tahara S, et al. **Ann Plast Surg** 1989 Aug;23(2):112–6
Reconstruction of cupid's bow: a quadrilateral flap technique. Thomson HG, et al. **Ann Plast Surg** 1989 Mar;22(3):195–202
Aesthetic refinements in reconstructive microsurgery. Toth BA, et al. **Ann Plast Surg** 1989 Feb;22(2):117–25 (13 ref.)
Reconstruction of bone and soft tissue defects with free fibula transfer. van Twisk R, et al. **Ann Plast Surg** 1988 Dec; 21(6):555–8
Microvascular free tissue transfer after arterial revascularization in the elderly: an alternative to amputation. Verga MP, et al. **Ann Plast Surg** 1988 Oct; 21(4):348–53
Comparative response of muscle and subcutaneous tissue pH during arterial and venous occlusion in musculocutaneous flaps. Warner KG, et al. **Ann Plast Surg** 1989 Feb; 22(2):108–16
A comparative analysis of the ability of five classes of pharmacological agents to augment skin flap survival in various models and species: an attempt to standardize skin flap research. Waters LM, et al. **Ann Plast Surg** 1989 Aug; 23(2):117–22
Calcitonin gene-related peptide delays the no-reflow phenomenon in the rat island flap. Westin M, et al. **Ann Plast Surg** 1988 Oct;21(4):329–34
Multiple microvascular transplants: a preliminary report of simultaneous versus sequential reconstruction. Whitney TM, et al. **Ann Plast Surg** 1989 May;22(5):391–404 (30 ref.)
Correction of penile curvatures caused by unsuccessful hypospadias repair using the scrotal septum pedicled skin tube principle combined with corporoplasty and a modified meatoglanuloplasty. Yachia D. **Ann Plast Surg** 1989 Sep; 23(3):269–73
Median forehead island skin flap for the correction of severely collapsed nose. Zhou LY, et al. **Ann Plast Surg** 1989 Jun;22(6):516–22
Free musculocutaneous flap transfer of extensor digitorum brevis muscle by microvascular anastomosis for restoration of function of thenar and adductor pollicis muscles. Zhu SX, et al. **Ann Plast Surg** 1985 Dec;15(6):481–8
The anesthetic management of patients undergoing free flap reconstructive surgery following resection of head and neck neoplasms—a review of 64 patients [letter] Cox RG. **Ann R Coll Surg Engl** 1989 Mar;71(2):143–4
Latissimus dorsi dynamic cardiomyoplasty. Chachques JC, et al. **Ann Thorac Surg** 1989 Apr;47(4):600–4
Gastric vascular pedicle patch esophagoplasty for stricture. Ramirez Schon G, et al. **Ann Thorac Surg** 1989 Sep; 48(3):356–8
Localized pericardial flap to prevent tension on left internal mammary artery grafts. Starr DS, et al. **Ann Thorac Surg** 1989 Apr;47(4):623–4
Congenital absence of the vagina. Surgical treatment and perioperative care. Fliegner JR, et al. **AORN J** 1989 Mar; 49(3):789, 791–5, 798–800
Grafts and flaps in plastic surgery. An overview. Goodman T. **AORN J** 1988 Oct;48(4):650–5, 658–63 (13 ref.)
Muscle vascularized pedicle free flap. Correcting one patient's facial deformity. Parkinson ME. **AORN J** 1989 Jun;49(6):1550–62
Microvascular tissue transfer. Perioperative nursing considerations. Swain D, et al. **AORN J** 1989 Apr; 49(4):1032–6, 1038–40, 1042–3
The bilobed flap for nasal reconstruction. Zitelli JA. **Arch Dermatol** 1989 Jul;125(7):957–9
The five-flap technique for blepharophimosis. Anderson RL, et al. **Arch Ophthalmol** 1989 Mar;107(3):448–52
Tarsoconjunctival flap for upper eyelid reconstruction. Jordan DR, et al. **Arch Ophthalmol** 1989 Apr; 107(4):599–603
Lower lid reconstruction using tarsoconjunctival grafts and bipedicle skin–muscle flap. Leone CR Jr, et al. **Arch Ophthalmol** 1989 May;107(5):758–60
Orbital surgery. The technique of coronal scalp flap approach to the qateral orbitotomy. Stewart WB, et al. **Arch Ophthalmol** 1988 Dec;106(12):1724–6
Anterior craniofacial resection for ethmoid and nasal cancer with free flap reconstruction. Bridger GP, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):308–12
Hypopharyngeal stenosis and fistulas. Use of the radial forearm flap. Delaere PR, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1326–9
New concepts in hair replacement. Fleming RW, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):278–9
Clavicular division technique. A new approach for lengthening the pectoralis flap. Freeman MS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):224–7
Extension of neuromuscular pedicles and direct nerve

implants in the rabbit. Goding GS Jr, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):217–23

Compound pharyngeal myocutaneous flap. Goldsmith MM, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1288–9

Leeches. Objective monitoring of altered perfusion in congested flaps. Hayden RE, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1395–9

The nasolabial flap. Axial or random? Hynes B, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec; 114(12):1389–91

Compound pharyngeal myocutaneous flap [letter] Kavanagh KT, et al. **Arch Otolaryngol Head Neck Surg** 1989 May; 115(5):633

Recent experience with reconstructive surgery following major glossectomy. Keyserlingk JR, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):331–8

Measurement of interstitial tissue compliance in skin flaps. Odland RM, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov;114(11):1276–9

Improved survival of acute skin flaps with amino acids as free radical scavengers. Paniello RC, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1400–3

The effects of allopurinol and superoxide dismutase in a rat model of skin flap necrosis. Pokorny AT, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):207–12

Acute blood flow changes in rapidly expanded and adjacent skin. Ricciardelli EJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):182–6

Further experience with the myomucosal tracheoesophageal shunt. Strome M, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1303–6

Geometry of the vascular pedicle in free tissue transfers to the head and neck. Urken ML, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):954–60

The internal oblique–iliac crest osseomyocutaneous free flap in oromandibular reconstruction. Report of 20 cases. Urken ML, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar; 115(3):339–49

Fate of skin element of pectoralis major flap in intraoral reconstruction. Wei WI, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):360–3

Microvascular free flap reconstruction for head and neck defects. Wenig BL, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1118–20

The effects of pentoxifylline on random skin flap survival. Yessenow RS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):179–81

Microvascular free-tissue transfer. The Atlanta Veterans Administration Medical Center experience. Carlson GW, et al. **Arch Surg** 1989 Apr;124(4):438–40

Angiotropin treatment prevents flap necrosis and enhances dermal regeneration in rabbits. Höckel M, et al. **Arch Surg** 1989 Jun;124(6):693–8

Pericardial flaps prevent wound complications [letter] Zollinger RW 2d. **Arch Surg** 1988 Dec;123(12):1526

Pedicle flaps for cicatricial ectropion. Keillor RB, et al. **Aust N Z J Ophthalmol** 1988 Nov;16(4):303–7

Eyelid reconstruction using a monopedicle flap and buccal mucosa: report of 15 cases. Whitehouse GM, et al. **Aust N Z J Ophthalmol** 1988 Nov;16(4):295–301

Cost-effectiveness of free tissue transfer. Katsaros J, et al. **Aust N Z J Surg** 1988 May;58(5):373–6

Changes in the blood biochemistry following experimental flap ischaemia. Knight KR, et al. **Aust N Z J Surg** 1988 May;58(5):413–8

The fillet foot for endweight-bearing cover of below knee amputations. Singer DI, et al. **Aust N Z J Surg** 1988 Oct; 58(10):817–23

Free tissue transfer to the lower extremity. Tan E, et al. **Aust N Z J Surg** 1988 May;58(5):369–72

A control unit for maximal-rate continuous tissue expansion (CTE). Logan SE, et al. **Biomed Sci Instrum** 1989;25:27–33

A simple teaching model for mucoperiosteal flaps and suturing techniques. Anwar M, et al. **Br Dent J** 1989 Jan 21;166(2):38

Suturing techniques in periodontal surgery. Galgut PN. **Br Dent J** 1989 Jul 8;167(1):29–31

The intramandibular sliding myo–osseous graft for delayed reconstruction of selected mandibular defects. A preliminary report. Browne GA, et al. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):472–8

Shrinkage of muscle flaps [letter] Irvine GH. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):173

Preoperative angiography in reconstructive microsurgery of the maxillofacial region. Kärcher H, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):317–21

The masseter muscle cross-over flap—a versatile flap for reconstruction in the oral cavity. Langdon JD. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):124–31

Side-by-side double paddle pectoralis major flap for cheek defects. Ord RA, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):177–85

Reconstruction of the palate using bilateral temporalis muscle flaps: a case report. Phillips JG, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):322–5

The pectoralis major muscle flap without skin in intra–oral reconstruction. Phillips JG, et al. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):479–85

The effect of deferoxamine on tolerance to secondary ischaemia caused by venous obstruction. Angel MF, et al. **Br J Plast Surg** 1989 Jul;42(4):422–4

Breast reconstruction by the free lower transverse rectus abdominis musculocutaneous flap. Arnež ZM, et al. **Br J Plast Surg** 1988 Sep;41(5):500–5

The folded, bipaddled pectoralis major composite flap in oral cancer reconstruction. Bhathena HM, et al. **Br J Plast Surg** 1989 Jul;42(4):441–6

Reconstruction of the alar groove. Chait LA, et al. **Br J Plast Surg** 1989 May;42(3):281–4

The trapezoid release for scar contractures: early experience. Dunkley MP, et al. **Br J Plast Surg** 1989 Mar;42(2):173–7

The transverse forked flap in columella reconstruction. Earley MJ, et al. **Br J Plast Surg** 1989 May;42(3):270–3

Microvascular surgery as an adjunct to craniomaxillofacial reconstruction. Fisher J, et al. **Br J Plast Surg** 1989 Mar; 42(2):146–54

Primary reconstruction of a major loss of lower jaw by an animal bite using a "rib sandwich" pectoralis major island flap. Govila A, et al. **Br J Plast Surg** 1989 Jan;42(1):101–3

Impedance monitoring for subcutaneous free flap transfers. Harrison DH, et al. **Br J Plast Surg** 1989 May;42(3):318–23

The use of the anteromedial thigh fasciocutaneous flap in the reconstruction of the lower abdomen and inguinal region; a report of two cases. Hayashi A, et al. **Br J Plast Surg** 1988 Nov;41(6):633–8

Modified gluteus maximus V–Y advancement flaps. Heywood AJ, et al. **Br J Plast Surg** 1989 May;42(3):263–5

Creation of neovascularised free flaps using vein grafts as pedicles: a preliminary report on experimental models. Hirasé Y, et al. **Br J Plast Surg** 1989 Mar;42(2):216–22

An experimental model for ear reconstruction with moulded perichondrial flaps: a preliminary report. Hirasé Y, et al. **Br J Plast Surg** 1989 Mar;42(2):223–7

Sternal osteomyelitis: treatment with rectus abdominis muscle. Iacobucci JJ, et al. **Br J Plast Surg** 1989 Jul; 42(4):452–9

Finger pulp reconstruction with a free sensory medial plantar flap. Inoue T, et al. **Br J Plast Surg** 1988 Nov;41(6):657–9

Reconstruction of a large full thickness chest wall defect by a double-folded vertical rectus abdominis musculocutaneous flap. Kiyoizumi T, et al. **Br J Plast Surg** 1989 Jul;42(4):460–2

The anterolateral thigh flap; variations in its vascular pedicle. Koshima I, et al. **Br J Plast Surg** 1989 May;42(3):260–2

The lower posterolateral thigh flap. Laitung JK. **Br J Plast Surg** 1989 Mar;42(2):133–9

The reverse flow ulnar artery island flap: 42 clinical cases. Li ZT, et al. **Br J Plast Surg** 1989 May;42(3):256–9

Upper lip reconstruction: use of the free superficial temporal artery hair-bearing flap. Lyons GB, et al. **Br J Plast Surg** 1989 May;42(3):333–6

Controlling the medicinal leech. Martin DL, et al. **Br J Plast Surg** 1989 Jan;42(1):116

Popliteo–posterior thigh fasciocutaneous island flap for closure around the knee. Maruyama Y, et al. **Br J Plast Surg** 1989 Mar;42(2):140–3; discussion 144–5

The cervicofacial flap. Mercer DM. **Br J Plast Surg** 1988 Sep;41(5):470–4

Surgical correction of complete bifid scrotum using subcutaneous pedicle flaps; a report of two cases. Nakajima T, et al. **Br J Plast Surg** 1989 May;42(3):328–32

A new technique for reconstructing half of the skin of the upper or lower lip. Orticochea M. **Br J Plast Surg** 1988 Sep;41(5):544–7

Anomalous blood supply to the serratus anterior/rib composite flap. Percival NJ, et al. **Br J Plast Surg** 1989 Jan;42(1):98–100

Pharyngostome closure using the radial forearm free flap. Percival NJ, et al. **Br J Plast Surg** 1989 Jul;42(4):473–7

Free flap surgery: the Welsh Regional Unit experience. Percival NJ, et al. **Br J Plast Surg** 1989 Jul;42(4):435–40

A composite flap for early treatment of hemifacial microsomia. Poole MD. **Br J Plast Surg** 1989 Mar; 42(2):163–72

Augmentation of skin flap survival by parenteral pentoxifylline. Roth AG, et al. **Br J Plast Surg** 1988 Sep; 41(5):515–20

L-shaped flap for triangular skin defects. Sakai S, et al. **Br J Plast Surg** 1988 Nov;41(6):628–32

A compound radial artery forearm flap for the reconstruction of lip and chin defect. Sakai S, et al. **Br J Plast Surg** 1989 May;42(3):337–8

External oblique musculocutaneous flap for the reconstruction of a lumbo–sacral defect. Sakai S, et al. **Br J Plast Surg** 1988 Sep;41(5):551–3

Reverse-flow anterior tibial flap type III. Satoh K, et al. **Br J Plast Surg** 1988 Nov;41(6):624–7

Accidental reinnervation as a complication of latissimus dorsi free flap to the face and scalp. Stranc MF, et al. **Br J Plast Surg** 1989 May;42(3):341–3

Osteogenic capacity of vascularised periosteum: experimental study using rib periosteum in rabbits. Takato T, et al. **Br J Plast Surg** 1988 Sep;41(5):528–32

Cephalic venous flap: a series of 8 cases and a preliminary report on the use of 99mTc labelled RBCs to study the saphenous venous flap in dogs. Thatte MR, et al. **Br J Plast Surg** 1989 Mar;42(2):193–8

Static and dynamic computerised radioactive tracer studies, vital dye staining and theoretical mathematical calculations to ascertain the mode of survival of single cephalad channel venous island flaps. Thatte MR, et al. **Br J Plast Surg** 1989 Jul;42(4):405–13

The saphenous venous flap. Thatte RL, et al. **Br J Plast Surg** 1989 Jul;42(4):399–404

An improved model for tissue expansion and flap research in the rabbit. Timmenga EJ, et al. **Br J Plast Surg** 1989 May;42(3):301–5

Utility of the "seagull" flap for unoperated simple complete syndactyly in adults. Uzunismail A. **Br J Plast Surg** 1988 Sep;41(5):548–50

The "tadpole flap"—its role in closure of palatal fistulae. Watson JD, et al. **Br J Plast Surg** 1988 Sep;41(5):485–7

Experimental reconstruction of cutaneous defects with microvascular jejunal transplants. Wells MD, et al. **Br J Plast Surg** 1989 Jul;42(4):425–8

Rectus abdominis muscle flap [letter] Heaton ND, et al. **Br J Surg** 1989 May;76(5):525

Free-flap reconstruction of heel pad after femorotibial bypass salvage graft. McFarland RJ, et al. **Br J Surg** 1989 Feb; 76(2):158–9

Primary anoplasty with skin flaps in posterior sagittal anorectoplasty. Ng WD, et al. **Br J Surg** 1988 Aug; 75(8):795

Omental transposition in the treatment of locally advanced and recurrent breast cancer. Williams RJ, et al. **Br J Surg** 1989 Jun;76(6):559–63

Protection of the infected aortic stump: submucosal mesenteric pedicle grafts. Wolfe JH, et al. **Br J Surg** 1988 Dec;75(12):1200

Rectus abdominis muscle flap for persistent perineal sinus. Young MR, et al. **Br J Surg** 1988 Dec;75(12):1228

One-stage pedicle scrotal flap urethroplasty. De Carvalho HA, et al. **Br J Urol** 1988 Sep;62(3):279

One-stage repair of hypospadias using split preputial flaps (Harris). The first 100 patients treated. Harris DL, et al. **Br J Urol** 1989 Apr;63(4):401–7

Re: One-stage pedicle scrotal flap urethroplasty [letter] Yaxley RP. **Br J Urol** 1989 Apr;63(4):444–5

Use of a free temporoparietal flap in hand reconstruction: a case report. Kuschner SH, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall;48(2):191–6

Immediate reconstruction following resection of oral cancer with pectoralis major myocutaneous flap. Kusama M, et al. **Bull Tokyo Med Dent Univ** 1988 Jun;35(1–2):1–9

Repair of burns of the scrotum using a gracilis myocutaneous flap. Tripathi FM, et al. **Burns** 1989 Jun;15(3):181–2

Long-term comparison of two surgical flap designs for third molar surgery on the health of the periodontal tissue of the second molar tooth. Schofield ID, et al. **Can Dent Assoc J** 1988 Sep;54(9):689–91

Omental pedicle grafting in the treatment of poststernotomy mediastinitis. Bédard JP, et al. **Can J Surg** 1989 Sep; 32(5):328–30

Meatal-based tubularized skin flap for distal hypospadias repair. Gleave M, et al. **Can J Surg** 1989 May;32(3):150–3

Arterialized free flap. Report of four cases. Gu YD, et al. **Chin Med J [Engl]** 1989 Feb;102(2):140–4

Omental lengthening. Report of 70 patients. Wu WL, et al. **Chin Med J [Engl]** 1988 Jun;101(6):423–6

The effect of transposition of pedicled omentum to spinal cord ischemia segments. An animal experiment. Zhan MS, et al. **Chin Med J [Engl]** 1989 Mar;102(3):214–8

Thumb reconstruction with free rib segment and big toe nail flap. Report of 6 cases. Zhang GL, et al. **Chin Med J [Engl]** 1989 Feb;102(2):114–5

Endourethral urethroplasty with prepuce graft for long posterior urethral stricture. Zhang JL, et al. **Chin Med J [Engl]** 1989 Mar;102(3):165–8

Transposition of iliac periosteum with vascular pedicle and compression screw fixation for transcervical fracture of femur. Experimental research and clinical application. Zhu SX, et al. **Chin Med J [Engl]** 1989 Jan;102(1):34–40

The fate of buccal mucosal flaps in primary palatal repair. Freedlander E, et al. **Cleft Palate J** 1989 Apr;26(2):110–2; discussion 112–3

The effect of intravelar veloplasty on velopharyngeal competence following pharyngeal flap surgery. Jarvis BL, et al. **Cleft Palate J** 1988 Oct;25(4):389–94

Maxillary dental arch dimensions following pharyngeal-flap surgery. Keller BG, et al. **Cleft Palate J** 1988 Jul; 25(3):248–57

Changes in articulation and resonance after tongue flap closure of palatal fistulas: case reports. Kummer AW, et al. **Cleft Palate J** 1989 Jan;26(1):51–5

Deepithelialized mucosal–submucosal flaps to correct the "whistling lip" deformity. Rodgers CM, et al. **Cleft Palate J** 1989 Apr;26(2):136–40

The use of videonasopharyngoscopy for biofeedback therapy in adults after pharyngeal flap surgery. Witzel MA, et al. **Cleft Palate J** 1989 Apr;26(2):129–34; discussion 135

Soft-tissue reconstruction in severe lower extremity trauma. A review. Gorman PW, et al. **Clin Orthop** 1989 Jun; (243):57–64 (39 ref.)

The use of a flexor carpi ulnaris muscle flap in the treatment of an infected nonunion of the proximal ulna. A case report. Meals RA. **Clin Orthop** 1989 Mar;(240):168–72

Free tissue transfer for reconstruction of the weight-bearing portion of the foot. Sinha AK, et al. **Clin Orthop** 1989 May; (242):269–71

The veno-arteriolar reflex in free skin flaps. Zoltie N, et al. **Clin Physiol** 1989 Apr;9(2):183–8

The use of lipoplasty in contouring and debulking of flaps. Baird W, et al. **Clin Plast Surg** 1989 Apr;16(2):395–9

Replacement of the canine infrarenal aorta with an

autogenous, living, tissue graft. Coltharp WH. **Curr Surg** 1988 Sep-Oct;45(5):371-2

Recurrent squamous-cell carcinoma arising in pilonidal sinus tract--multiple flap reconstructions. Report of a case. Fasching MC, et al. **Dis Colon Rectum** 1989 Feb; 32(2):153-8

Gracilis muscle repair of rectovaginal fistula after restorative proctocolectomy. Report of two cases. Gorenstein L, et al. **Dis Colon Rectum** 1988 Sep;31(9):730-4

Repair of simple rectovaginal fistulas. Influence of previous repairs. Lowry AC, et al. **Dis Colon Rectum** 1988 Sep; 31(9):676-8

Temporalis-pericranial muscle flap with split-thickness skin graft for coverage of large midfacial defects. Broniatowski M. **Ear Nose Throat J** 1988 Dec;67(12):893-4, 897-8

The use of a latissimus dorsi myocutaneous flap to cover an axillobifemoral vascular prosthetic graft. Brooks SG, et al. **Eur J Vasc Surg** 1989 Aug;3(4):367-8

One-stage penile cutaneous island flap repair for hypospadias in circumcized patients. Ntia IO, et al. **Eur Urol** 1988; 14(6):450-3

Urethral placement through a bilateral myocutaneous gracilis flap neovagina. Wheelock JB, et al. **Gynecol Oncol** 1989 Jan;32(1):88-90

Microvascular free-tissue transfers to the hand and upper extremity. Kleinman WB, et al. **Hand Clin** 1989 Aug; 5(3):423-44 (151 ref.)

The dorsal middle phalangeal finger flap. Büchler U, et al. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):239-43

Intraoral and oropharyngeal reconstruction using a de-epithelialized forearm flap. Kawashima T, et al. **Head Neck** 1989 Jul-Aug;11(4):358-63

Lateral arm free flap in oral cavity reconstruction: a functional evaluation. Matloub HS, et al. **Head Neck** 1989 May-Jun;11(3):205-11

Management of necrotic neck wounds with a "sandwich" pectoralis myocutaneous flap. Goldstein RD, et al. **Head Neck Surg** 1988 Mar-Apr;10(4):246-51

Pharyngeal repair after laryngopharyngectomy: 4-year experience. Rifai M, et al. **Head Neck Surg** 1987 Nov-Dec; 10(2):99-101

The use of controlled tissue expansion for secondary reconstruction in injury. Dent AR, et al. **Injury** 1987 Jul; 18(4):278-82

Local muscle flaps in the treatment of chronic osteomyelitis--the introduction of new vasculature. Ngoi SS, et al. **Injury** 1987 Sep;18(5):350-3

Radial forearm flap cover of the elbow joint. Small JO, et al. **Injury** 1988 Jul;19(4):287-9

Dynamic cardiomyoplasty: a surgical approach for ventricular assistance. Chachques JC, et al. **Int J Artif Organs** 1988 Nov;11(6):469-74

Resurfacing the vulva and vagina. Cronjé HS, et al. **Int J Gynaecol Obstet** 1988 Aug;27(1):113-8

Bilateral vermilion flap. A modification of Goldstein's technique. Sawada Y, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):257-9

The primary reconstruction of the anterior floor of mouth by the intraoral cheek transposition flap. Zoeller J. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):107-8

Limbus-based versus Fornix-based conjunctival flap in filtering surgery. A randomized prospective study. Grehn F, et al. **Int Ophthalmol** 1989 Jan;13(1-2):139-43

The subcutaneous overturned skin flap in continuity according to the "double door" technique. Brunelli F. **Ital J Orthop Traumatol** 1988 Jun;14(2):195-200

Reconstruction of the heel by a medial plantar flap. Caleffi E, et al. **Ital J Orthop Traumatol** 1989 Jun;15(2):191-6

Repair of a distal leg defect using the latissimus dorsi free flap. Harrell JF, et al. **J Am Osteopath Assoc** 1988 Dec; 88(12):1516-8

In vitro preservation of traumatic human skin autografts in a massive degloving injury. Hoogeboom JE, et al. **J Am Osteopath Assoc** 1989 Aug;89(8):1066-8

Cross-leg full-thickness skin graft. A case report. Kalish S, et al. **J Am Podiatr Med Assoc** 1988 Dec;78(12):632-5

Reconstruction of large diaphyseal defects, without free fibular transfer, in Grade-IIIB tibial fractures. Christian EP, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):994-1004

Amputation after tibial fracture: preservation of length by use of a neurovascular island (fillet) flap of the foot [letter] Frieden RA. **J Bone Joint Surg [Am]** 1989 Aug; 71(7):1109-10

A fasciocutaneous transposition flap for coverage of defects of the lower extremity. Louton RB, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):988-94

Amputation after tibial fracture: preservation of length by use of a neurovascular island (fillet) flap of the foot. A brief note. Sanders WE. **J Bone Joint Surg [Am]** 1989 Mar; 71(3):435-7

The extensor hallucis brevis muscle flap. Crocker AD, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):532

Long posterior flap versus equal sagittal flaps in below-knee amputation for ischaemia. Falstie-Jensen N, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):102-4

Pronator quadratus pedicled bone graft for old scaphoid fractures. Kawai H, et al. **J Bone Joint Surg [Br]** 1988 Nov; 70(5):829-31

Treatment of chronic osteomyelitis of the leg by peroneal myocutaneous island flap transfer. Yoshimura M, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):593-6

A new alternative in burn reconstruction: the muscle vascularized pedicle flap. Grotting JC, et al. **J Burn Care Rehabil** 1988 Nov-Dec;9(6):652-6

Sartorius muscle coverage for the treatment of complicated vascular surgical wounds. Kaufman JL, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):479-83

Remodelling of interdental alveolar bone after periodontal flap procedures assessed by means of computer-assisted densitometric image analysis (CADIA). Brägger U, et al. **J Clin Periodontol** 1988 Oct;15(9):558-64

Placement of a porous membrane underneath the mucoperiosteal flap and its effect on periodontal wound healing in dogs. Claffey N, et al. **J Clin Periodontol** 1989 Jan;16(1):12-6

Tongue flap repair of oro-nasal fistulae in cleft palate patients. A review of 20 patients. Coghlan K, et al. **J Craniomaxillofac Surg** 1989 Aug;17(6):255-9

The myocutaneous platysma flap for the reconstruction of intraoral defects after radical tumour resection. Howaldt HP, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):237-40

Blunt liposuction cannula dissection with and without suction-assisted lipectomy in reconstructive surgery. Field LM, et al. **J Dermatol Surg Oncol** 1988 Oct;14(10):1116-22

The preauricular tubed pedicle flap. Field LM. **J Dermatol Surg Oncol** 1989 Jun;15(6):614-8 (13 ref.)

The perialar arc rotation skin flap. Hill TG. **J Dermatol Surg Oncol** 1989 Jan;15(1):78-83

Refinements of the island median forehead flap for reconstruction of the medial canthal area. Sakai S, et al. **J Dermatol Surg Oncol** 1989 May;15(5):524-30

The large flap sculptured facelift. Shire JR, et al. **J Dermatol Surg Oncol** 1988 Dec;14(12):1352-6

The sandwich switch flap. Ersek RA, et al. **J Hand Surg [Am]** 1989 Jul;14(4):746-8

Restoration of sensibility in fingers repaired with free sensory flaps from the toe. Kato H, et al. **J Hand Surg [Am]** 1989 Jan;14(1):49-54

Treatment of duplicated thumb using a ligamentous/periosteal flap. Manske PR. **J Hand Surg [Am]** 1989 Jul;14(4):728-33

Anatomical basis of dorsal forearm flap. Based on posterior interosseous vessels. Bayon P, et al. **J Hand Surg [Br]** 1988 Nov;13(4):435-9

The first web hand flap. Earley MJ. **J Hand Surg [Br]** 1989 Feb;14(1):65-9

Ulnar fasciocutaneous flap of the wrist. Elliot D, et al. **J Hand Surg [Br]** 1988 Aug;13(3):311-2

Homodigital neurovascular island flaps for digital pulp loss. Foucher G, et al. **J Hand Surg [Br]** 1989 May;14(2):204-8

Pain relief after free flap reconstruction in adriamycin necrosis on the dorsum of the hand. A case report. Nettelblad H, et al. **J Hand Surg [Br]** 1989 Feb;14(1):45-6

The posterior interosseous artery free flap. Tonkin MA, et al. **J Hand Surg [Br]** 1989 May;14(2):215-7

Full thickness grafts taken from the plantar instep for syndactyly release. Zoltie N, et al. **J Hand Surg [Br]** 1989 May;14(2):201-3

Versatility of the free temporoparietal fascial flap in upper and lower extremity reconstruction. Martinez R, et al. **J La State Med Soc** 1988 Dec;140(12):26-30

Two-stage temporalis flap reconstruction for facial paralysis. Buchholtz BD, et al. **J Laryngol Otol** 1989 Jul;103(7):672-4

The repair of defects in the head and neck region with the latissimus dorsi myocutaneous flap. Chowdhury CR, et al. **J Laryngol Otol** 1988 Dec;102(12):1127-32

Role of masseter crossover flap in oropharyngeal reconstruction. Tiwari RM, et al. **J Laryngol Otol** 1989 Mar;103(3):298-301

Myringoplasty with three meatal flaps. Zaman K, et al. **J Laryngol Otol** 1988 Sep;102(9):777-8

Transmaxillary temporalis transfer for reconstruction of a large palatal defect: report of a case. Demas PN, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):197-202

The use of a pedicled temporalis muscle-pericranial flap for replacement of the TMJ disc: preliminary report. Feinberg SE, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):142-6

Modified Y-closure after exposure of osseointegrated implants in the maxilla. Jensen OT. **J Oral Maxillofac Surg** 1989 Mar;47(3):310

The use of tissue expanders in the correction of avulsive injuries of the mandible: report of two cases. Lew D, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):892-9

Effect of muscle flap coverage on bone blood flow following devascularization of a segment of tibia: an experimental investigation in the dog. Richards RR, et al. **J Orthop Res** 1989;7(4):550-8

Soft tissue coverage for lower-extremity trauma: current practice and techniques. A review. Greene TL, et al. **J Orthop Trauma** 1988;2(2):158-73 (49 ref.)

A review of reduction and internal fixation of adult femoral neck fractures in a county hospital. Johnson KD, et al. **J Orthop Trauma** 1989;3(2):83-96 (30 ref.)

Reconstruction of intermediate sized mucosal defects with the pectoralis major myofascial flap. Moloy PJ. **J Otolaryngol** 1989 Feb;18(1):32-5

An alternative treatment modality in closing bladder exstrophy: use of rectus abdominus muscle flap--preliminary results in a rat model. Büyükünal SN, et al. **J Pediatr Surg** 1989 Jun;24(6):586-9

Effect of collagen solution application on healing following surgical treatment in colony-bred monkeys. Minabe M, et al. **J Periodont Res** 1988 Sep;23(5):313-7

Coronal positioning of existing gingiva: short term results in the treatment of shallow marginal tissue recession. Allen EP, et al. **J Periodontol** 1989 Jun;60(6):316-9

Clinical evaluation of the use of citric acid and autologous fibronectin in periodontal surgery. Caffesse RG, et al. **J Periodontol** 1988 Sep;59(9):565-9

The effect of various concentrations of collagen barrier on periodontal wound healing. Kodama T, et al. **J Periodontol** 1989 Apr;60(4):205-10

Different cross-linked types of collagen implanted in rat palatal gingiva. Minabe M, et al. **J Periodontol** 1989 Jan; 60(1):35-43

Effects of an air-powder abrasive device used during periodontal flap surgery in dogs. Pippin DJ, et al. **J Periodontol** 1988 Sep;59(9):584-8

The effect of an antimicrobial mouthrinse on early healing of gingival flap surgery wounds. Zambon JJ, et al. **J Periodontol** 1989 Jan;60(1):31-4

Current thoughts on soft tissue repair of compound injuries of the lower limb (excluding the foot). McGregor JC. **J R Coll Surg Edinb** 1988 Dec;33(6):294-8

Surgical treatment of a case of severe hemifacial atrophy. McGregor JC, et al. **J R Coll Surg Edinb** 1988 Jun; 33(3):165-9

Soft tissue management of compound leg fractures: a 5-year experience. Mercer NS, et al. **J R Coll Surg Edinb** 1988 Oct;33(5):263-6

The 14th annual meeting of the Japanese Society of Reconstructive Microsurgery. Tsukuba City, Japan, December 5, 1987. Abstracts. **J Reconstr Microsurg** 1989 Apr;5(2):175-90

Prior elevation of vascular island skin flaps: intolerance to ischemia caused by venous obstruction. Angel MF, et al. **J Reconstr Microsurg** 1989 Apr;5(2):163-5

Forehead reconstruction with a modified radial forearm flap: a case report. Baird WL, et al. **J Reconstr Microsurg** 1988 Oct;4(5):363-7

Angiologic observations following autologous vein grafting and free radial artery flap elevation. Brenner P, et al. **J Reconstr Microsurg** 1988 Jul;4(4):297-301

The degeneration and regeneration of cutaneous nerves in experimental flaps in rats. Chang CC, et al. **J Reconstr Microsurg** 1989 Apr;5(2):157-62

Perfusion washout: increasing a microvascular free flap tolerance to ischemia. Douglas BK, et al. **J Reconstr Microsurg** 1989 Apr;5(2):151-5

Free abdominal flaps: variations in design and application to soft tissue defects of the head. Ebihara H, et al. **J Reconstr Microsurg** 1989 Jul;5(3):193-201

Microvascular thrombolysis to salvage a free flap using human recombinant tissue plasminogen activator. Fudem GM, et al. **J Reconstr Microsurg** 1989 Jul;5(3):231-4

The importance of venous drainage in rat flaps: an experimental study. Fukui A, et al. **J Reconstr Microsurg** 1989 Jan;5(1):19-30

Factors influencing the failure of microsurgical composite tissue transplantation. Fukui A, et al. **J Reconstr Microsurg** 1988 Jul;4(4):285-90

Pedicled and "flow-through" venous flaps: clinical applications. Fukui A, et al. **J Reconstr Microsurg** 1989 Jul;5(3):235-43

Aesthetic approach to the rectus abdominis free tissue transfer. Hallock GG. **J Reconstr Microsurg** 1989 Jan; 5(1):69-73

Experimental studies of skin flaps with subcutaneous veins. Inada Y, et al. **J Reconstr Microsurg** 1989 Jul;5(3):249-61

Arterialized venous flap coverage for skin defects of the hand or foot. Inoue G, et al. **J Reconstr Microsurg** 1988 Jul; 4(4):259-66

Remote monitoring of free flaps with telephonic transmission of photoplethysmograph waveforms. Jones JW, et al. **J Reconstr Microsurg** 1989 Apr;5(2):141-4

The osteomusculocutaneous musculoperitoneal groin flap in head and neck reconstruction. Kärcher H, et al. **J Reconstr Microsurg** 1989 Jan;5(1):31-5

Free combined anterolateral thigh flap and vascularized iliac bone graft with double vascular pedicle. Koshima I, et al. **J Reconstr Microsurg** 1989 Jan;5(1):55-61

The pulse oximeter in free muscle flap surgery. "A microvascular surgeon's sleep aid". Menick FJ. **J Reconstr Microsurg** 1988 Jul;4(4):331-4

Replacing losses in kind: improved sensation following heel reconstruction using the free instep flap. Nohira K, et al. **J Reconstr Microsurg** 1989 Jan;5(1):1-6

The influence of postoperative vessel occlusion on the viability of free microvascular skin-fat flaps and island flaps in rats. Oswald P, et al. **J Reconstr Microsurg** 1988 Oct; 4(5):403-7

Mechanical sensibility in free and island flaps of the foot. Rautio J, et al. **J Reconstr Microsurg** 1989 Apr;5(2):119-25

The value of the photoplethysmograph in monitoring skin closure in microsurgery. Scheker LR, et al. **J Reconstr Microsurg** 1985 Oct;2(1):1-5

Neurotization of the remaining latissimus dorsi muscle following muscle flap transplant. Serra JM, et al. **J Reconstr Microsurg** 1988 Oct;4(5):415-20

Total penile and urethral reconstruction with an expanded sensate lateral arm flap: case report. Shenaq SM, et al. **J Reconstr Microsurg** 1989 Jul;5(3):245-8

Nasal alar reconstruction with an ear helix free flap. Shenaq SM, et al. **J Reconstr Microsurg** 1989 Jan;5(1):63-7

The internal oblique-iliac crest osseomyocutaneous microvascular free flap in head and neck reconstruction.

Urken ML, et al. **J Reconstr Microsurg** 1989 Jul; 5(3):203–14; discussion 215–6
Use of the lateral portion of the pectoralis major muscle to cover exposed axillary structures. Brown MF, et al. **J Surg Oncol** 1988 Dec;39(4):271–3
Use of contralateral rectus femoris flap: an alternative for covering exposed femoral vessels of the thigh. Madariaga J, et al. **J Surg Oncol** 1989 Jul;41(3):206–9
Tissue oxygen tension in random pattern skin flaps during normovolemic hemodilution. Hansen ES, et al. **J Surg Res** 1989 Jul;47(1):24–9
Xanthine:acceptor oxidoreductase activities in ischemic rat skin flaps. Im MJ, et al. **J Surg Res** 1989 Mar;46(3):230–4
The role of metal ions in ischemia/reperfusion injury in skin flaps. Yoon JO, et al. **J Surg Res** 1989 Feb;46(2):163–5
Pedicled right atrial–pericardial tissue conduit for bypass of the obstructed superior vena cava in children. Lemmer JH Jr, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):417–20
Myocardial aneurysm of the ascending thoracic aorta: management with pericardial patch and bilateral pectoralis muscle flaps [letter] Peniston C, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):308–10
Local fasciocutaneous flaps for cutaneous coverage of lower extremity wounds. Hallock GG. **J Trauma** 1989 Sep; 29(9):1240–4
Preservation of devitalized calvarium following high-voltage electrical injury: case reports. Hartford CE. **J Trauma** 1989 Mar;29(3):391–4
Experience with the island radial forearm flap in local hand coverage. Meland NB, et al. **J Trauma** 1989 Apr; 29(4):489–93
Coverage of acute vascular injuries of the axilla and groin with transposition muscle flaps: case reports. Strinden WD, et al. **J Trauma** 1989 Apr;29(4):512–6
De-epithelialized skin flap coverage in hypospadias repair. Belman AB. **J Urol** 1988 Nov;140(5 Pt 2):1273–6
Repair of proximal hypospadias using a preputial free graft for neourethral construction and a preputial pedicle flap for ventral skin coverage. Kaplan GW. **J Urol** 1988 Nov; 140(5 Pt 2):1270–2
Urethral replacement with tunica vaginalis: a pilot study. Khoury AE, et al. **J Urol** 1989 Aug;142(2 Pt 2):628–30; discussion 631
Laser welding of pedicled flap skin tubes. Mininberg DT, et al. **J Urol** 1989 Aug;142(2 Pt 2):623–5; discussion 631
Exposed synthetic vascular grafts of the groin: graft preservation by means of a tensor fasciae latae flap. Ammar AD, et al. **J Vasc Surg** 1989 Aug;10(2):202–4
The use of sartorius muscle rotation-transfer in the management of wound complications after infrainguinal vein bypass: a report of eight cases and description of the technique. Meyer JP, et al. **J Vasc Surg** 1989 May; 9(5):731–5
Rotational muscle flaps: a new technique for covering infected vascular grafts. Mixter RC, et al. **J Vasc Surg** 1989 Mar;9(3):472–8
A latissimus dorsi muscle flap used for repair of the esophagus after enucleation of a giant leiomyoma—a case report. Fujita H, et al. **Jpn J Surg** 1988 Jul;18(4):460–4
Surgical treatment of recurrent tracheo-esophageal fistula using a latissimus dorsi pedicled muscle flap—report of a case. Fujita H, et al. **Jpn J Surg** 1989 Jan;19(1):78–81
Diaphragmatic reconstruction using a latissimus dorsi muscle flap following wide resection of the diaphragm combined with esophago-gastrectomy for cardial cancer. Fujita H, et al. **Jpn J Surg** 1988 Jul;18(4):480–1
Reconstruction of circumferential defect of the hypopharynx: experimental studies and clinical application of a new method. Chang SY. **Laryngoscope** 1989 Jul;99(7 Pt 1):736–40
Pectoralis major myocutaneous flap reconstruction of the laryngopharynx and cervical esophagus. Fabian RL. **Laryngoscope** 1988 Nov;98(11):1227–31
The sternocleidomastoid myoperiosteal flap for esophagopharyngeal reconstruction and fistula repair: clinical and experimental study. Friedman M, et al. **Laryngoscope** 1988 Oct;98(10):1084–91
A porcine model for multiple musculocutaneous flaps. Haughey BH, et al. **Laryngoscope** 1989 Feb;99(2):204–12
Neurotization of pectoralis major myocutaneous flap by the hypoglossal nerve in tongue reconstruction: clinical and experimental observations. Katsantonis GP. **Laryngoscope** 1988 Dec;98(12):1313–23
The use of pentoxifylline in a pig random skin flap model. Knox RD, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):582–5
Lateral skull base surgery for cancer. Krespi YP. **Laryngoscope** 1989 May;99(5):514–24
Forehead flap nasal reconstruction with tissue expansion and delayed pedicle separation. Kroll SS. **Laryngoscope** 1989 Apr;99(4):448–52
Treatment of the intractable chronically draining mastoid cavity with hydroxylapatite covered with temporalis flap. Lenis A. **Laryngoscope** 1988 Nov;98(11):1271–2
Zenker's diverticulum flap. Liston SL, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):764–5
The pericranial flap for reconstruction of anterior skull base defects. Price JC, et al. **Laryngoscope** 1988 Nov; 98(11):1159–64
Replacement of upper esophagus: results with myocutaneous flap and with gastric transposition. Silver CE, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):819–21
Revision procedure for the tracheoesophageal puncture. Singer MI, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):761–3
Advantages of pectoralis musculocutaneous flap pharyngeal reconstruction. Stein DW, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):691–6
Reconstruction of full-thickness cheek defects with combined cervicopectoral and pectoralis major myocutaneous flaps. Strasnick B, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):757–60
The pleural osteomuscular flap in oropharyngeal reconstruction. Stromberg BV. **Laryngoscope** 1989 Mar; 99(3):339–41
Septal chondromucosal flap with preservation of septal integrity. Weisman RA. **Laryngoscope** 1989 Mar; 99(3):267–71
Thin cutaneous flap for intra oral reconstruction: the dorsalis pedis free flap revisited. Banis JC Jr. **Microsurgery** 1988; 9(2):132–40
Mandibular reconstruction in the young adult using free vascularized iliac crest. Boyd JB. **Microsurgery** 1988; 9(2):141–9
Treatment of skin and median nerve defects with peroneal neurofasciocutaneous flap. Fukui A, et al. **Microsurgery** 1989;10(2):87–92
Postoperative monitoring of microsurgical free tissue transfers for head and neck reconstruction. Jones NF. **Microsurgery** 1988;9(2):159–64 (60 ref.)
Vascularized iliac osteocutaneous flap based on the deep circumflex iliac vessels: experience in 13 cases. Minami A, et al. **Microsurgery** 1989;10(2):99–102
Reconstruction of complex cranial and craniofacial defects utilizing iliac crest–internal oblique microsurgical free flap. Shenaq SM. **Microsurgery** 1988;9(2):154–8
Heel reconstruction with an iliac osteocutaneous free flap in a child. Shenaq SM, et al. **Microsurgery** 1989;10(2):93–8
Immediate microvascular reconstruction of combined palatal and midfacial defects using soft tissue only. Shestak KC, et al. **Microsurgery** 1988;9(2):128–31
Microvascular approaches to nasal reconstruction. Swartz WM. **Microsurgery** 1988;9(2):150–3
The role of microvascular surgery in head and neck reconstruction. Swartz WM. **Microsurgery** 1988;9(2):115
A free flap system in sleep. Zoltie N, et al. **Microsurgery** 1988;9(3):213–6
En bloc hemicolectomy with anterior abdominal wall resection for colon carcinoma: immediate reconstruction with rectus femoris myocutaneous flap: a case report. Campbell J, et al. **Milit Med** 1988 Nov;153(11):568–72
Spontaneous reinnervation of a free muscle flap. Sardo MJ, et al. **Muscle Nerve** 1988 Sep;11(9):908–14
Treatment of high anorectal fistulas by anoplasty. Rutten H, et al. **Neth J Surg** 1988 Jun;40(4):93–6
Surgical treatment of pressure sores in paraplegic patients: an evaluation. Spauwen PH, et al. **Neth J Surg** 1989 Jun; 41(3):68–70
Rotational tarsal conjunctival flap in the treatment of scleral necrosis. Rootman DS, et al. **Ophthalmic Surg** 1988 Nov; 19(11):808–10
Vascularized tissue transfer. An adjunct to the treatment of osteomyelitis. Hanel DP. **Orthop Rev** 1989 May; 18(5):595–608
Treatment of hemophilic pseudotumor with radical debridement and free tissue transfer. A case report. Carroll C 4th, et al. **Orthopedics** 1989 Apr;12(4):561–5
Direct nerve implantation vs. nerve-muscle pedicle: a comparative study of reinnervation in the rabbit. Broniatowski M, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):126–33
Experience with surgical management of velopharyngeal incompetence. Crockett DM, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):1–9
Tracheostomal reconstruction with the latissimus dorsi myocutaneous flap. Granick MS, et al. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):427–9
Cerebral shift after lateral craniofacial resection and flap reconstruction. Haughey BH, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):79–86
Breast cancer within a pectoralis major myocutaneous flap. Maas CS, et al. **Otolaryngol Head Neck Surg** 1988 Dec; 99(6):594–6
Free omental flap reconstruction of complicated head and neck wounds. Panje WR, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):588–93
Mechanics of movement for rotation flaps and a local flap template. Ahuja RB. **Plast Reconstr Surg** 1989 Apr; 83(4):733–7
Bilobed flap in the release of postburn mentosternal contracture. Aranmolate S, et al. **Plast Reconstr Surg** 1989 Feb;83(2):356–61
Intrathoracic muscle flaps: a 10-year experience in the management of life-threatening infections. Arnold PG, et al. **Plast Reconstr Surg** 1989 Jul;84(1):92–8; discussion 99
A reliable method for monitoring the microvascular patency of free jejunal transfers in reconstructing the pharynx and cervical esophagus. Bafitis H, et al. **Plast Reconstr Surg** 1989 May;83(5):896–8
Grafts and flaps [letter] Bennett JE. **Plast Reconstr Surg** 1989 Jan;83(1):194
The buccinator musculomucosal flap: anatomic study and clinical application. Bozola AR, et al. **Plast Reconstr Surg** 1989 Aug;84(2):250–7
Nasal support and lining: the marriage of beauty and blood supply. Burget GC, et al. **Plast Reconstr Surg** 1989 Aug; 84(2):189–202
Elbow joint salvage with the transverse rectus island flap: a new application. Burstein FD, et al. **Plast Reconstr Surg** 1989 Sep;84(3):492–7; discussion 498
Expanded tubed flap in scalp reconstruction: a modern option in an old technique. Caleffi E, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1075–8
Fluorometric analysis of an attempt to reclaim ischemic flaps in rats with Fluosol. Campbell SP, et al. **Plast Reconstr Surg** 1989 Sep;84(3):484–91
A reliable approach to the closure of large acquired midline defects of the back. Casas LA, et al. **Plast Reconstr Surg** 1989 Oct;84(4):632–41
The parascapular flap for treatment of lower extremity disorders. Chen D, et al. **Plast Reconstr Surg** 1989 Jul; 84(1):108–16
Difficult reconstruction of an extensive injury in the lower extremity with a large cross-leg microvascular composite-tissue flap containing fibula. Chen HC, et al. **Plast Reconstr Surg** 1989 Apr;83(4):723–7
Vaginal reconstruction with an axial subcutaneous pedicle flap from the inferior abdominal wall: a new method. Chen ZJ, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1005–12
Free transplantation of venous network pattern skin flap. Chia SL, et al. **Plast Reconstr Surg** 1988 Nov;82(5):892–5
The lack of effect of pentoxifylline on random skin flap survival. Chu BC, et al. **Plast Reconstr Surg** 1989 Feb; 83(2):315–8
Groin flap design and versatility. Chuang DC, et al. **Plast Reconstr Surg** 1989 Jul;84(1):100–7
The role of gingival mucoperiosteal flaps in the repair of alveolar clefts. Cohen M, et al. **Plast Reconstr Surg** 1989 May;83(5):812–9
A comparative study of the skin envelope of the unilateral cleft lip nose subsequent to rotation-advancement and triangular flap lip repairs. Cutting CB, et al. **Plast Reconstr Surg** 1989 Sep;84(3):409–17; discussion 418–9
Carcinoma of the breast occurring in routine reduction mammaplasty. Dinner MI, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1042–4
Conchal transposition flap for postburn ear deformities. Donelan MB. **Plast Reconstr Surg** 1989 Apr;83(4):641–54
Reconstruction of the mediastinal trachea with a tubed pectoralis major myocutaneous flap. Fleischer A, et al. **Plast Reconstr Surg** 1989 Aug;84(2):342–6
Measuring the area of a lesion or flap [letter] Furnas H. **Plast Reconstr Surg** 1989 Aug;84(2):364
Division of the pedicle in the Abbé flap [letter] Garcia A, et al. **Plast Reconstr Surg** 1989 Jul;84(1):173
Extensor digitorum brevis as an island flap in the reconstruction of soft-tissue defects in the lower limb. Giordano PA, et al. **Plast Reconstr Surg** 1989 Jan; 83(1):100–9
A new technique for brachioplasty. Goddio AS. **Plast Reconstr Surg** 1989 Jul;84(1):85–91
Extracorporeal tissue transfer [letter] Govila A. **Plast Reconstr Surg** 1989 Aug;84(2):367–9
Salvage of jeopardized total-knee prosthesis: the role of the gastrocnemius muscle flap. Greenberg B, et al. **Plast Reconstr Surg** 1989 Jan;83(1):85–9, 97–9
Conventional TRAM flap versus free microsurgical TRAM flap for immediate breast reconstruction. Grotting JC, et al. **Plast Reconstr Surg** 1989 May;83(5):828–41; discussion 842–4
The radial forearm donor site: a locus minoris resistentiae [letter] Hallock GG. **Plast Reconstr Surg** 1989 Mar; 83(3):579
Extended applications of the carbon dioxide laser for skin deepithelialization. Hallock GG. **Plast Reconstr Surg** 1989 Apr;83(4):717–21
Free-flap coverage of the exposed Achilles tendon. Hallock GG. **Plast Reconstr Surg** 1989 Apr;83(4):710–6
One-stage reconstruction of a large upper lid defect in a newborn. Hauben DJ, et al. **Plast Reconstr Surg** 1989 Feb; 83(2):337–40
The "reduced" latissimus dorsi musculocutaneous flap. Hayashi A, et al. **Plast Reconstr Surg** 1989 Aug;84(2):290–5
Early circulatory and metabolic events in island skin flaps of the pig. Hedén P, et al. **Plast Reconstr Surg** 1989 Sep; 84(3):468–74; discussion 482–3
Circulatory and metabolic events in pig island skin flaps after arterial or venous occlusion. Hedén P, et al. **Plast Reconstr Surg** 1989 Sep;84(3):475–81; discussion 482–3
Fibula free flap: a new method of mandible reconstruction. Hidalgo DA. **Plast Reconstr Surg** 1989 Jul;84(1):71–9
Primary nonmicrosurgical reconstruction following ear avulsion using the temporoparietal fascial island flap. Jenkins AM, et al. **Plast Reconstr Surg** 1989 Jan; 83(1):148–52
Orofacial and mandibular reconstruction with the iliac crest free flap: a review of 60 cases and a new method of classification. Jewer DD, et al. **Plast Reconstr Surg** 1989 Sep;84(3):391–403; discussion 404–5
The dark side of methylene blue [letter] Johnson PC, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1076–7
Computer-aided analysis of Z-plasties. Kawabata H, et al. **Plast Reconstr Surg** 1989 Feb;83(2):319–25
Nipple reconstruction with the double-opposing-tab flap. Kroll SS, et al. **Plast Reconstr Surg** 1989 Sep;84(3):520–5
Multiple and repetitive uses of the extended hamstring V-Y

myocutaneous flap. Kroll SS, et al. **Plast Reconstr Surg** 1989 Aug;84(2):296–302
Muscle–flap coverage of exposed endoprostheses. Lesavoy MA, et al. **Plast Reconstr Surg** 1989 Jan;83(1):90–9
The implantable Doppler probe [letter] Lineaweaver WC. **Plast Reconstr Surg** 1988 Dec;82(6):1099–100
Salvage of chronically exposed Gore–Tex vascular access grafts in the hemodialysis patient. McKenna PJ, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1046–51
Transplantation and transposition of skeletal muscles into the faces of monkeys. Markley JM Jr, et al. **Plast Reconstr Surg** 1989 Sep;84(3):424–31; discussion 432–3
Chest–wall reconstruction by contralateral latissimus dorsi musculocutaneous flap. Matsuo K, et al. **Plast Reconstr Surg** 1988 Dec;82(6):994–9
Salvage of a failing microvascular free muscle flap by direct continuous intravascular infusion of heparin: a case report. May JW Jr, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1045–8
Experience with 80 rectus abdominis free–tissue transfers. Meland NB, et al. **Plast Reconstr Surg** 1989 Mar; 83(3):481–7
The nutrient flap: a new concept of the role of the flap and application to the salvage of arteriosclerotic lower limbs. Mimoun M, et al. **Plast Reconstr Surg** 1989 Sep; 84(3):458–67
The vascular anatomy of rectus abdominis musculocutaneous flaps based on the deep superior epigastric system. Moon HK, et al. **Plast Reconstr Surg** 1988 Nov;82(5):815–32
Effect of capsulectomy on the hemodynamics and viability of random–pattern skin flaps raised on expanded skin in the pig. Morris SF, et al. **Plast Reconstr Surg** 1989 Aug; 84(2):314–22; discussion 323–4
Primary treatment of the infected sternotomy wound with muscle flaps: a review of 211 consecutive cases. Nahai F, et al. **Plast Reconstr Surg** 1989 Sep;84(3):434–41
Complications of controlled tissue expansion in the pediatric burn patient. Neale HW, et al. **Plast Reconstr Surg** 1988 Nov;82(5):840–8
Effects of hyperbaric oxygen on skin flap survival in the pig [letter] Nemiroff PM, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1077–9
The VY tensor fasciae latae musculocutaneous flap. Paletta CE, et al. **Plast Reconstr Surg** 1989 May;83(5):852–7; discussion 858
The short–lip deformity after triangular flap repair: a lengthening technique. Park C, et al. **Plast Reconstr Surg** 1989 Sep;84(3):517–8; discussion 519
Free–flap reconstruction of large defects of the scalp and calvarium. Pennington DG, et al. **Plast Reconstr Surg** 1989 Apr;83(4):655–61
Medial gastrocnemius myocutaneous flap [letter] Podlewski J. **Plast Reconstr Surg** 1989 Mar;83(3):578–9
Closing a difficult defect of the scalp [letter] Ramaswamy CN. **Plast Reconstr Surg** 1989 Feb;83(2):387–91
Reconstruction of nonmarginal defects of the ear with chondrocutaneous advancement flaps. Ramirez OM, et al. **Plast Reconstr Surg** 1989 Jul;84(1):32–40
About the W abdominoplasty [letter] Regnault P. **Plast Reconstr Surg** 1989 Jun;83(6):1084
Periosteal flaps and grafts in primary cleft repair: a follow–up study. Rintala AE, et al. **Plast Reconstr Surg** 1989 Jan; 83(1):17–24
Reconstruction of large cranial defects in the presence of heavy radiation damage and infection utilizing tissue transferred by microvascular anastomoses. Robson MC, et al. **Plast Reconstr Surg** 1989 Mar;83(3):438–42
The extended vertical rectus abdominis myocutaneous flap for breast reconstruction. Sakai S, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1061–7; discussion 1068–9
Late results of free–muscle flaps and delayed bone grafting in the secondary treatment of open distal tibial fractures. Seyfer AE, et al. **Plast Reconstr Surg** 1989 Jan;83(1):77–84
The effectiveness of the superiorly based pharyngeal flap in relation to the type of palatal defect and timing of the operation. Seyfer AE, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):760–4
Reconstruction of infant thoracic wounds. Stahl RS, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1000–11
VY bipedicle flap for resurfacing the nasal supratip region. Strauch B, et al. **Plast Reconstr Surg** 1989 May; 83(5):899–903
Extended transverse rectus abdominis musculocutaneous flap. Takayanagi S, et al. **Plast Reconstr Surg** 1989 Jun; 83(6):1057–60
Protection of abdominal flaps from self–mutilation in the rat [letter] Tark KC. **Plast Reconstr Surg** 1989 Aug;84(2):376–7
Pectoralis minor: a unique muscle for correction of facial palsy. Terzis JK. **Plast Reconstr Surg** 1989 May; 83(5):767–76
Deepithelialized turnover flaps [letter; comment] Thatte RL. **Plast Reconstr Surg** 1989 Jul;84(1):172–3. **Comment on:** Plast Reconstr Surg 1988 Aug;82(2):262–6
Fasciocutaneous flaps: an experimental model in the pig. Thomson JG, et al. **Plast Reconstr Surg** 1989 Jan; 83(1):110–7
Dermofluorometry: thresholds for predicting flap survival. Thomson JG, et al. **Plast Reconstr Surg** 1989 May; 83(5):859–64; discussion 865
Complications and vascular salvage of free–tissue transfers to the extremities. Tsai TM, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1022–6
Free–flap free flap. Valauri FA, et al. **Plast Reconstr Surg** 1989 Jul;84(1):133–5
A new technique of vaginal reconstruction using neurovascular pudendal–thigh flaps: a preliminary report. Wee JT, et al. **Plast Reconstr Surg** 1989 Apr;83(4):701–9
The S nipple–areola reconstruction. Weiss J, et al. **Plast Reconstr Surg** 1989 May;83(5):904–6
Error in thick gauging of brown dermatome and its correction [letter] Zandi I. **Plast Reconstr Surg** 1988 Nov; 82(5):923
One–stage preputial pedicle flap repair for hypospadias: experience with 100 patients. Frey P, et al. **Prog Pediatr Surg** 1989;23:181–91
The pectoralis major flap for reconstruction of septic wounds. Joseph CA, et al. **S Afr J Surg** 1988 Sep; 26(3):107–9
Skin flap circulation. Simultaneous monitoring with laser Doppler and electromagnetic flowmeters in the pig island buttock flap. Hedén P, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):1–9
Increased skin flap survival and arterial dilation by calcitonin gene–related peptide. A study in the pig. Hedén P, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):11–6
The anatomy and histology of the cranially based dorsal musculocutaneous flap of the rat. Kjartansson J, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):223–7
Tubed free flap combined with split–rib–graft for reconstruction of multiple oral cavity defects. A case report. Larson O, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(2):187–91
The morphological sequences in man of de– and reinnervation in free muscle transfer with microneurovascular anastomoses. Oldfors A, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):35–42
Caudal musculocutaneous trapezius flaps for reconstruction of soft tissue defects. Relander M, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(2):159–62
Free rectus abdominis muscle flap: advantages in lower extremity reconstruction. Reath DB, et al. **South Med J** 1989 Sep;82(9):1143–6
Reconstruction of heel defects. Shenaq SM, et al. **South Med J** 1989 May;82(5):596–601
Chest–wall reconstruction. **Surg Clin North Am** 1989 Oct; 69(5):899–1122
Reconstruction of the radiation–damaged chest wall. Arnold PG, et al. **Surg Clin North Am** 1989 Oct;69(5):1081–9 (27 ref.)
Preoperative evaluation and general preparation for chest–wall operations. Azarow KS, et al. **Surg Clin North Am** 1989 Oct;69(5):899–910 (23 ref.)
Rectus abdominis muscle–musculocutaneous flap in chest–wall reconstruction. Coleman JJ 3d, et al. **Surg Clin North Am** 1989 Oct;69(5):1007–27 (30 ref.)
Use of the omentum in chest–wall reconstruction. Fix RJ, et al. **Surg Clin North Am** 1989 Oct;69(5):1029–46
Use of prosthetic materials in chest–wall reconstruction. Assets and liabilities. McCormack PM. **Surg Clin North Am** 1989 Oct;69(5):965–76 (29 ref.)
Repair of the dehisced median sternotomy incision. Miller JI, et al. **Surg Clin North Am** 1989 Oct;69(5):1091–102 (21 ref.)
Latissimus dorsi muscle–musculocutaneous flap in chest–wall reconstruction. Moelleken BR, et al. **Surg Clin North Am** 1989 Oct;69(5):977–90 (68 ref.)
Intrathoracic transfer of flaps for fistulas, exposed prosthetic devices, and reinforcement of suture lines. Pairolero PC, et al. **Surg Clin North Am** 1989 Oct;69(5):1047–59 (20 ref.)
Resection and debridement of chest–wall tumors and general aspects of reconstruction. el–Tamer M, et al. **Surg Clin North Am** 1989 Oct;69(5):947–64 (70 ref.)
Pectoralis major muscle–musculocutaneous flap for chest–wall reconstruction. Tobin GR. **Surg Clin North Am** 1989 Oct;69(5):991–1006 (30 ref.)
Repair of the diaphragm with an external oblique muscle flap. Shimamura Y, et al. **Surg Gynecol Obstet** 1989 Aug; 169(2):159–60
Preservation of craniotomy bone flaps under the scalp. Korfali E, et al. **Surg Neurol** 1988 Oct;30(4):269–72
Anatomic basis of a fascio–cutaneous flap supplied by the perforating branch of the peroneal artery. Beveridge J, et al. **Surg Radiol Anat** 1988;10(3):195–9
Anatomic study of the vascularization of the pericardial fat: application to pedicled flaps. Brizard C, et al. **Surg Radiol Anat** 1989;11(1):80–1
Anatomic basis for the construction of a musculotendinous flap derived from the pectoralis major muscle. Chaffaï MA, et al. **Surg Radiol Anat** 1988;10(4):273–82
Dorsal vascular network of the first web space. Anatomical bases of the kite flap. Dautel G, et al. **Surg Radiol Anat** 1989;11(2):109–13
The distal anastomoses of the medial plantar artery: surgical aspects (2.10.1987). Masquelet AC, et al. **Surg Radiol Anat** 1988;10(3):247–9
Anatomic basis of a pedicled extensor digitorum brevis muscle flap. Massin P, et al. **Surg Radiol Anat** 1988; 10(4):267–72
The venous blood–flow of the flexor aspect of the human forearm. Clinical relevance to the distally–pedicled forearm flap. Piza–Katzer H, et al. **Surg Radiol Anat** 1988; 10(3):229–32
Anatomic and surgical basis of a technique for total replacement of the trachea by a heterotopically transplanted reinforced pedicled musculocutaneous flap. Riquet M, et al. **Surg Radiol Anat** 1988;10(4):333–4
Vascularization of the inner border of the foot: surgical applications (24.06.88). Romana MC, et al. **Surg Radiol Anat** 1989;11(2):177–8
Anatomic basis of serratus anterior muscle flap transposition. Vu P, et al. **Surg Radiol Anat** 1988;10(3):173–85
Reconstruction of a functional hemidiaphragm with use of omentum and latissimus dorsi flaps. Edington HD, et al. **Surgery** 1989 Mar;105(3):442–5
Comprehensive experience of tissue expander applied to the reconstructive surgery. Chen MT, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):427–36
One stage repair for an oesophageal fistula after pneumonectomy using an omental pedicle flap. Asaoka M, et al. **Thorax** 1988 Nov;43(11):943–4
The use of the reverse latissimus dorsi flap in the closure of lower spinal defects. McGeorge DD, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:30–2
[Reconstruction of large facial and neck defects with skin–muscle flaps] Anastasov K, et al. **Khirurgiia (Sofiia)** 1989;42(1):64–8 (Eng. Abstr.) **(Bul)**
[Complications of facial flaps] Becker FF. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):9–11 **(Chi)**
[Treatment of electrical contact burns by early debridement and flap transplantation] Cai BR. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):116–7 **(Chi)**
[Improvement and clinical application of a free abdominal flap with a deep inferior epigastric pedicle] Cai JF. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):98–100, 157 (Eng. Abstr.) **(Chi)**
[Cutaneous flaps in the treatment of electrical burns in special areas] Chang GH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):36–7 **(Chi)**
[The effect of tolazoline and phentolamine on the survival of skin flap—experimental study] Gao JH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):57–9 **(Chi)**
[Double V–Y flap for the repair of flexion contracture of proximal interphalangeal joint of the hand] Heng DH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):276–7 **(Chi)**
[Heel coverage by a plantar myocutaneous and fasciocutaneous island pedicle flaps—report of 10 cases] Hou CL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):146–7 **(Chi)**
[Use of the fasciocutaneous flaps in the treatment of post–burn cases] Ji ZL, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Mar;1(1):54–5, 59 (Eng. Abstr.) **(Chi)**
[Treatment of severe electric burn of the knee by a pedicled gastrocnemius musculocutaneous flap] Li SR. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):118–9 **(Chi)**
[Gastrocnemius musculus myocutaneous flap in the repair of soft tissue defects of lower extremities] Li ZF. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):60–1 **(Chi)**
[The use of pedunculated myocutaneous or muscular flap of musculus latissimus dorsi in treatment of chronic localized pyothorax—report of 2 cases] Liu JM. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):67–8 **(Chi)**
[Axial and composite flaps—experiences of 230 instances] Lu KH, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):294–6 **(Chi)**
[A new free skin flap—anterolateral femoral flap—its anatomy and clinical application] Luo LS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):50–2 (Eng. Abstr.) **(Chi)**
[One–stage repair of a soft tissue defect around the knee joint with a posterior calf fascio–cutaneous island flap] Qian YL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):95–7 **(Chi)**
[The use of abdominal pedicle flap in repairing of hand trauma (a report of 36 cases)] Qu YC. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):43–4 (Eng. Abstr.) **(Chi)**
[The application of myocutaneous flap for repairing deep defects of soft tissue (report of 31 cases and 39 operations)] Shi D. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):254–6 **(Chi)**
[The application of myocutaneous flap for the repair of defects on trunk and limbs following excision of tumors] Shi SS, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):257–8 **(Chi)**
[The study and use of a post–auricular flap] Song RY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):1–3 **(Chi)**
[Frontalis muscle flap for the treatment of severe ptosis] Song YG, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):34–6 (Eng. Abstr.) **(Chi)**
[Repair of the adduction contracture of the thumb–index web

space with the dorsal flap of the index finger] Sun GC, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 May;1(2):65–6, 54 (Eng. Abstr.) (Chi)
[Clinical application of an axial temporal fascia flap with or without scalp] Wang LN, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Mar;1(1):14–7 (Eng. Abstr.) (Chi)
[Pedicled vermilion flap in the treatment of vermilion defect following surgical repair of cleft lip] Wang XL.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Mar;4(1):12–3 (Chi)
[Axial skin flap and musculocutaneous flap in the treatment of bedsores—report of 8 cases] Wu JX.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Jun;4(2):112–3, 158 (Eng. Abstr.) (Chi)
[A plastic technique of using the forearm island-like flap to transplant the thumb] Xu GB, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Mar;1(1):36–7 (Chi)
[Surgical treatment of ulcerative wound by a rotation flap] Xu SM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Dec;2(4):271–2 (Eng. Abstr.) (Chi)
[One stage reconstruction for the repair in "Romberg's disease" by using a free latissimus dorsi muscle flap] Yang PY, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Mar;1(1):40–2 (Eng. Abstr.) (Chi)
[Application of a free nail skin flap of a big toe in emergency reconstruction of the thumb] Yang ZX.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Dec;2(4):241–3 (Eng. Abstr.) (Chi)
[Five-flap plasty and its modification in the treatment of web scar contracture—preliminary experience] Yao MH.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Jun;4(2):109–11, 157 (Eng. Abstr.) (Chi)
[Reconstruction of a buttock and perineal defect with a gluteal thigh flap] Zhang XP.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 May;1(2):71, 73 (Chi)
[The use of reversed forearm pedicled fascio-cutaneous flap in the treatment of hand trauma and deformity (report of 10 cases)] Zhang YT.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Mar;4(1):41–2 (Chi)
[The use of a Y-shape hypogastric-inguinal flap in hand surgery] Zhang ZS.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Dec;2(4):270 (Chi)
[Free flap transplantation by using a blood vessel anastomosing ring—report of 20 cases] Zhou G.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Jun;4(2):103–5 (Chi)
[Modified frontal myocutaneous flap for the repair of severe blepharoptosis] Zhou G.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Dec;2(4):262–3 (Chi)
[Use of a myofascial flap of frontal muscle of the eyebrow region for the treatment of ptosis—report of 133 cases] Zhou LY.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 May;1(2):37–40 (Chi)
[Nursing for patients with chronic empyema treated by transplantation of pedicled omentum to thoracic cavity] Zhou SZ, et al. **Chung Hua Hu Li Tsa Chih** 1988 Sep; 23(9):523–4 (Chi)
[Lateral calcaneal artery flap] Chang KC, et al.
Chung Hua I Hsueh Tsa Chih 1989 Feb;43(2):89–96 (Eng. Abstr.) (Chi)
[The reconstruction of circumferential defects of the hypopharynx with a new type of partially tubed myocutaneous flap—experimental studies and clinical application] Chang SY. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;42(4):269–74 (Eng. Abstr.) (Chi)
[Clinical evaluation of results following periodontal flap surgery with and without periodontal dressing] Li YH.
Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Jul; 23(4):221–4, 255 (Eng. Abstr.) (Chi)
[Use of the temporoparietal fascial island flap in cheek reconstruction] Shen C.
Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Mar; 23(2):87–9 (Chi)
[A clinical report of 74 mandibles reconstructed with osteomyocutaneous flaps] Song BZ.
Chung Hua Kou Chiang Hsueh Tsa Chih 1988 May; 23(3):129–32, 190 (Eng. Abstr.) (Chi)
[Methods to measure blood supply and detect the viability of the osteomyocutaneous flap] Song BZ.
Chung Hua Kou Chiang Hsueh Tsa Chih 1989 Jan; 24(1):43–5, 63 (Eng. Abstr.) (Chi)
[Arterial applied anatomy for the platysma myocutaneous flap] Song FJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan;24(1):24–6 (Chi)
[Reconstruction of massive oral and maxillofacial defects with free combined scapular and latissimus dorsi myocutaneous flaps with a pedicle to the subscapular artery] Tang YS.
Chung Hua Kou Chiang Hsueh Tsa Chih 1989 Jan;24(1):52–4 (Chi)
[Micro-surgical anatomical study and clinical use of the scapular flap with nerves] Chen SZ.
Chung Hua Wai Ko Tsa Chih 1988 Mar;26(3):179–80, 192 (Eng. Abstr.) (Chi)
[Pedicled osteocutaneous flap of the fibula for the treatment of tibial defects] Chen ZW, et al.
Chung Hua Wai Ko Tsa Chih 1988 Jan;26(1):32–3, 61 (Eng. Abstr.) (Chi)
[Use of a pedicled latissimus dorsi flap in plastic reconstruction after radical mastectomy] Li JZ.
Chung Hua Wai Ko Tsa Chih 1988 Nov;26(11):651–2, 700–1 (Eng. Abstr.) (Chi)
[Clinical uses of the scapular flap] Lin ZH, et al.
Chung Hua Wai Ko Tsa Chih 1988 Jan;26(1):41–3, 62 (Eng. Abstr.) (Chi)
[Penile reconstruction using a complex island flap and the iliac crest with two vascular pedicles] Long DC.
Chung Hua Wai Ko Tsa Chih 1988 Dec;26(12):747–9, 783 (Eng. Abstr.) (Chi)
[Experimental study of the seromuscular pedicle flap graft in repair of large bile duct defects] Pen QF, et al.
Chung Hua Wai Ko Tsa Chih 1988 Feb;26(2):101–2, 126 (Eng. Abstr.) (Chi)
[Using a lower trapezius myocutaneous flap to repair defects in head and neck surgery] Tian AL.
Chung Hua Wai Ko Tsa Chih 1988 Oct;26(10):612–3, 638 (Eng. Abstr.) (Chi)
[One-stage urethroplasty using an island skin tube from the perineum and scrotum in the treatment of complex stricture of the posterior urethra] Wang LL.
Chung Hua Wai Ko Tsa Chih 1988 Sep;26(9):565–7, 575 (Eng. Abstr.) (Chi)
[Reconstruction of anal sphincter with a double-split gluteus maximus muscle flap in carcinoma of the lower rectum and anal canal] Wu LY. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):503–4, 512 (Eng. Abstr.) (Chi)
[A pedicled skin flap and pedicled myocutaneous flap in the treatment of soft tissue defects] Zhang GL.
Chung Hua Wai Ko Tsa Chih 1988 Sep;26(9):550–1, 574 (Eng. Abstr.) (Chi)
[Experimental study on the treatment of spinal cord injury with transplantation of the greater omentum] Zheng WJ. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):93–5, 125 (Eng. Abstr.) (Chi)
[Covering a skin defect using a bilobed flap transfer] Měšťák J, et al. **Rozhl Chir** 1988 Nov;67(11):772–4 (Eng. Abstr.) (Cze)
[Use of myocutaneous flaps in the treatment of decubitus ulcer] Pintér L, et al. **Rozhl Chir** 1988 Nov;67(11):723–8 (Eng. Abstr.) (Cze)
[Covering skin defects of the sole of the foot using free sensory flap transfer] Tvrdek M. **Rozhl Chir** 1988 Nov; 67(11):705–9 (Eng. Abstr.) (Cze)
[Breast reconstruction after mastectomy. II. Use of a musculo-cutaneous flap without prosthetic implants] Kramhøft M, et al. **Ugeskr Laeger** 1988 Oct 24; 150(43):2571–5 (Eng. Abstr.) (Dan)
[Below-knee amputations. A retrospective study of below-knee amputations performed with equally large sagittal flaps or a long posterior flap] Leicht BP, et al. **Ugeskr Laeger** 1988 Oct 24;150(43):2585–6 (Eng. Abstr.) (Dan)
[Analysis of 163 latissimus dorsi muscle flaps] Duchateau J, et al. **Acta Chir Belg** 1987 Sep-Oct;87(5):275–81 (Eng. Abstr.) (Fre)
[Amputation of the heel in children. The value of medial plantar flaps] Schuind F, et al. **Acta Orthop Belg** 1988; 54(3):299–301 (Eng. Abstr.) (Fre)
[Unusual use of myocutaneous pedicled grafts in cervico-facial cancer] Moreau P, et al.
Acta Otorhinolaryngol Belg 1988;42(4):548–56 (Eng. Abstr.) (Fre)
[Bipedicled rectangular palmar sliding flap in distal tissue loss of the fingers] Alnot JY, et al. **Ann Chir Main** 1988; 7(2):151–7 (Fre)
[The cubital flap] Becker C, et al. **Ann Chir Main** 1988; 7(2):136–42 (Eng. Abstr.) (Fre)
[Anatomic variations of the vascular network of the first dorsal commissure. Uses of the kite flap] Dautel G, et al. **Ann Chir Main** 1989;8(1):53–8; discussion 59 (Eng. Abstr.) (Fre)
[Indications for small island flaps in hand surgery] Foucher G, et al. **Ann Chir Main** 1988;7(2):163–5 (Fre)
[Island flaps in hand surgery. Introduction] Glicenstein J. **Ann Chir Main** 1988;7(2):120–1 (Fre)
[The cubital island flap in surgery of the hand. Experimental study—dissection technic] Guimberteau JC, et al.
Ann Chir Main 1988;7(2):143–6 (Fre)
[Venous drainage of Littler's neurovascular pedicle flap] Lebreton E, et al. **Ann Chir Main** 1988;7(2):126–9 (Eng. Abstr.) (Fre)
[Forearm radial flap—anatomy and surgical application] Marin-Braun F, et al. **Ann Chir Main** 1988;7(2):130–5 (60 ref.) (Fre)
[The kite flap] Marin-Braun F, et al. **Ann Chir Main** 1988; 7(2):147–50 (Fre)
[Results of unipedicled island flaps to the same finger] Massart P, et al. **Ann Chir Main** 1988;7(2):158–62 (Fre)
[Cutaneous arterial supply of the hand. Application in the creation of island flaps] Oberlin C, et al.
Ann Chir Main 1988;7(2):122–5 (Fre)
[Skin expansion prosthesis and their use outside breast reconstruction. Apropos of 54 cases] Baux S, et al.
Ann Chir Plast Esthet 1988;33(2):159–62 (Eng. Abstr.) (Fre)
[Lateral musculocutaneous flap of the trapezius muscle. Anatomic study of the venous drainage] Bessede JP, et al. **Ann Chir Plast Esthet** 1989;34(2):119–22 (Eng. Abstr.) (Fre)
[Cervical reconstruction, after burns, using a free parascapular flap. Apropos of 2 cases] Boucq D, et al.
Ann Chir Plast Esthet 1988;33(4):315–20 (11 ref.) (Eng. Abstr.) (Fre)
[Congenital midline cervical cleft] Breton P, et al.
Ann Chir Plast Esthet 1989;34(1):73–6 (Eng. Abstr.) (Fre)
[Use of the myocutaneous flap of the latissimus dorsi in the losses of substance of the cheek] Bricout N, et al.
Ann Chir Plast Esthet 1988;33(2):113–8 (Eng. Abstr.) (Fre)
[Microsurgical esopharyngoplasties using a free digestive graft] Chavoin JP, et al. **Ann Chir Plast Esthet** 1988; 33(4):363–8 (14 ref.) (Eng. Abstr.) (Fre)
[Use of a expansion prosthesis in the treatment of male baldness] Dardour JC. **Ann Chir Plast Esthet** 1988; 33(4):347–9 (Eng. Abstr.) (Fre)
[A superior pedicle pharyngoplasty flap and hearing in children operated on for cleft lip and palate] Frechette C. **Ann Chir Plast Esthet** 1988;33(4):309–13 (13 ref.) (Eng. Abstr.) (Fre)
[Reconstruction of losses of substance of the lower limbs: musculocutaneous flaps or cutaneo-aponeurotic flaps] Gheita AA. **Ann Chir Plast Esthet** 1988;33(4):329–34 (28 ref.) (Eng. Abstr.) (Fre)
[Use of a distal pedicle medial hemisoleus flap in the treatment of residual osteitis of the lower quarter of the leg] Ginouves P, et al. **Ann Chir Plast Esthet** 1988; 33(4):350–4 (Eng. Abstr.) (Fre)
[The use of the platysma and the skin of the neck as a myocutaneous flap in reconstructing cheek defects. Technic and results apropos of 5 cases] Ioannovich I, et al. **Ann Chir Plast Esthet** 1989;34(1):43–7 (Eng. Abstr.) (Fre)
[Experimental study of the neovascularization of a flap created from a vascular axial loop] Le Danvic M, et al.
Ann Chir Plast Esthet 1988;33(4):377–81 (Eng. Abstr.) (Fre)
[Breast reconstruction combined with treatment of chronic lymphedema of the arm] Muller GH.
Ann Chir Plast Esthet 1989;34(1):83–5 (Eng. Abstr.) (Fre)
[The lower transverse abdominal flap of the rectus abdominis for breast reconstruction. An evaluation of 40 cases] Petoin DS, et al. **Ann Chir Plast Esthet** 1988;33(2):135–9 (Eng. Abstr.) (Fre)
[Pharyngo-esophageal reconstruction with a free forearm flap] Petoin DS. **Ann Chir Plast Esthet** 1988;33(2):195–8 (Eng. Abstr.) (Fre)
[Mechanism of venous return in the radial forearm flap, island type, with distal pedicle] Satoh K, et al.
Ann Chir Plast Esthet 1988;33(3):215–22 (12 ref.) (Eng. Abstr.) (Fre)
[Peroneal flaps with or without vascularized fibular bone graft in reconstructions of the lower limb] Satoh K, et al.
Ann Chir Plast Esthet 1988;33(2):119–26 (Eng. Abstr.) (Fre)
[The peroneal flap: its value in distal covering of the lower limbs] Schoofs M, et al. **Ann Chir Plast Esthet** 1988; 33(3):273–6 (Eng. Abstr.) (Fre)
[Treatment of acquired stenoses of the external auditory canal. Value of pedicle flaps] Sénéchal G, et al.
Ann Chir Plast Esthet 1988;33(4):342–6 (Eng. Abstr.) (Fre)
[Complex reconstruction using amputation tissues] Waterhouse N, et al. **Ann Chir Plast Esthet** 1988; 33(3):268–72 (Eng. Abstr.) (Fre)
[Filling of the residual depression after parotidectomy with a composite arterial subcutaneous flap] Zaoli G.
Ann Chir Plast Esthet 1989;34(2):123–7 (Eng. Abstr.) (Fre)
[The Chinese flap in reconstructing the posterior pharyngolaryngeal wall, mouth cavity and in reoperation after failure of pedicled digestive transfer] Trotoux J, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(5):354–9 (Eng. Abstr.) (Fre)
[Direct cutaneous ureterostomy with myoplasty using a pedicled flap of the rectus abdominis] Grise P, et al.
Ann Urol (Paris) 1988;22(4):291–5 (Eng. Abstr.) (Fre)
[Cystoplasty using a resorbable polyglactin prosthesis covered by a free peritoneal flap] Youssef M, et al.
Ann Urol (Paris) 1988;22(4):263–7 (Eng. Abstr.) (Fre)
[Cardiomyoplasty. Experimental bases, operative technic, indications] Chachques JC, et al. **Arch Mal Coeur** 1989 Jun;82(6):919–26 (30 ref.) (Eng. Abstr.) (Fre)
[Extensive cutaneous lesions in Crohn's disease. Apropos of a case treated by musculocutaneous flap] Adloff M, et al.
Chirurgie 1988;114(5):377–82 (29 ref.) (Eng. Abstr.) (Fre)
[Treatment of large recurrent abdominal hernias using vascularized dermal flaps. A critical study of 12 cases] Baruch J, et al. **Chirurgie** 1988;114(7–8):592–7 (Eng. Abstr.) (Fre)
[Epiplooplasty with microsurgery. Apropos of 96 cases] Patricio J, et al. **Chirurgie** 1988;114(5):394–404 (56 ref.) (Eng. Abstr.) (Fre)
[The in situ hidden cutaneous flap in the treatment of postoperative eventration] Stoppa R, et al. **Chirurgie** 1988;

114(7–8):651–4 (Fre)
[Free total skin graft in loss of cutaneous substance of the hand. Apropos of 60 cases] Loup J. **J Chir (Paris)** 1989 Feb;126(2):127–30 (Eng. Abstr.) (Fre)
[The nutrient flap. Its application in saving lower limbs involved in stage IV arteritis] Mimoun M, et al. **J Chir (Paris)** 1988 Jun–Jul;125(6–7):431–9 (Eng. Abstr.) (Fre)
[Prefabricated free flaps. In rats (letter)] Germain MA, et al. **Presse Med** 1989 Apr 1;18(13):683–4 (Fre)
[Repair of severe ruptures of the rotator cuff of the shoulder] Augereau B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:59–62 (Fre)
[Repair using a deltoid flap of an extensive loss of substance of the rotary cuff of the shoulder] Augereau B, et al. **Rev Chir Orthop** 1988;74(4):298–301 (Fre)
[Compound open injuries of the wrist. Apropos of 15 cases] Dap F, et al. **Rev Chir Orthop** 1988;74 Suppl 2:149–52 (Fre)
[2-stage reconstruction in large loss of substance of the thigh using a fasciocutaneous flap and later on massive bone allograft] Le Huec JC, et al. **Rev Chir Orthop** 1989; 75(2):125–9 (Eng. Abstr.) (Fre)
[Value of sural fascio-cutaneous flaps with distal pedicle for covering tissue loss of the lower third of the leg] Le Huec JC, et al. **Rev Chir Orthop** 1988;74 Suppl 2:324–7 (Fre)
[Treatment of severe loss of cutaneous tissue of the upper limb. The value of new technics] Magalon G, et al. **Rev Chir Orthop** 1988;74 Suppl 2:50–2 (Fre)
[Vascularization of the skin of the limbs and surgical applications] Masquelet AC, et al. **Rev Chir Orthop** 1988; 74(7):669–76 (11 ref.) (Eng. Abstr.) (Fre)
[Vascularized periosteal grafts. Anatomic description, experimental study, preliminary report of clinical experience] Masquelet AC, et al. **Rev Chir Orthop** 1988; 74 Suppl 2:240–3 (Fre)
[Microvascular transfer of the heel pad to a thigh stump. Functional benefit of the distal support in prosthetic fitting of the amputated thigh] Ménager D, et al. **Rev Chir Orthop** 1988;74(2):183–9 (Eng. Abstr.) (Fre)
[The trans-acromioclavicular approach with preservation of a digastric trapezo-deltoid flap in surgery of the rotator cuff] Mestdagh H, et al. **Rev Chir Orthop** 1988;74 Suppl 2:62–5 (Fre)
[Covering losses of cutaneous substance of the leg and foot using skin flaps. Apropos of 76 cases] Oberlin C, et al. **Rev Chir Orthop** 1988;74(6):526–38 (Eng. Abstr.) (Fre)
[Muscle flap from the foot in tissue loss of the distal part of the lower limb. Anatomical study and technical application] Péquignot JP, et al. **Rev Chir Orthop** 1988;74 Suppl 2:167–70 (Fre)
[Use of a temporoparietal fascial flap in difficult reconstructions of the external ear] Boudard P, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):219–22 (Eng. Abstr.) (Fre)
[Possibilities of the use of the Converse scalp flap in maxillofacial surgery. Review of 13 cases] Labbé D, et al. **Rev Stomatol Chir Maxillofac** 1988;89(4):214–9 (Eng. Abstr.) (Fre)
[The latissimus dorsi flap: anatomic value and clinical application. Apropos of 15 cases] Guiga M, et al. **Tunis Med** 1987 Jun–Jul;65(6–7):411–3 (Eng. Abstr.) (Fre)
[The Wise technic in the repair of urethro-cutaneous fistula] Nouri A, et al. **Tunis Med** 1988 Aug–Sep;66(8–9):605–8 (Eng. Abstr.) (Fre)
[Significance of microsurgery revascularized soft tissue and bone transplants in plastic reconstructive interventions of the extremities] Rönner H, et al. **Aktuel Traumatol** 1988 Oct;18(5):215–8 (Eng. Abstr.) (Ger)
[Comment on the contribution by Ch. Papp et al.: The fasciocutaneous VY flap for covering decubitus ulcers (letter)] Kunert P. **Chirurg** 1988 Dec;59(12):856–7 (Ger)
[The parascapular cutaneous latissimus dorsi osteomycutaneous double flap. Free monobloc transfer in facial reconstruction] Nassif TM, et al. **Chirurg** 1988 Nov; 59(11):793–6 (Ger)
[The anterior tibial muscle as a distal pedicled osteomuscular transposition flap] Papp C, et al. **Chirurg** 1988 Sep; 59(9):610–3 (Ger)
[Post-traumatic soft tissue defects of the heel] Steinau HU, et al. **Chirurg** 1989 Apr;60(4):287–94 (Eng. Abstr.) (Ger)
[Differential indications of subcutaneous and vascular pedicled island flaps of the face] Bock NJ, et al. **Fortschr Kiefer Gesichtschir** 1989;34:168–70 (Ger)
[Esthetic and functional aspects of replacement-plasties of the upper lip] Cornelius CP, et al. **Fortschr Kiefer Gesichtschir** 1989;34:171–4 (Ger)
[Skin replacement with special reference to the tissue expander] Ehrenfeld M, et al. **Fortschr Kiefer Gesichtschir** 1989;34:161–4 (Ger)
[Hatchet-form flap as a method of esthetic reconstruction of the nose] Horwath H, et al. **Fortschr Kiefer Gesichtschir** 1989;34:151–3 (Ger)
[Nevi of the face] Oswald J, et al. **Fortschr Kiefer Gesichtschir** 1989;34:165–7 (Ger)
[Esthetic challenges in covering tumor-induced nose defects] Radtke J, et al. **Fortschr Kiefer Gesichtschir** 1989;34:148–50 (Ger)
[Esthetic aspects of various flap technics for covering defects of the facial skin] Reich RH, et al. **Fortschr Kiefer Gesichtschir** 1989;34:157–60 (Ger)
[Reconstruction of the lateral skull contour following temporal muscle flap-plasty] Spitzer WJ, et al. **Fortschr Kiefer Gesichtschir** 1989;34:103–5 (Ger)
[Transposition and myocutaneous island flaps in primary or secondary locoregional surgical therapy of breast cancer] Kaufmann M, et al. **Geburtshilfe Frauenheilkd** 1988 Aug; 48(8):584–7 (Eng. Abstr.) (Ger)
[Reconstructive measures in radical vulva operations] Knapstein PG, et al. **Gynakologe** 1988 Dec;21(4):294–7 (Ger)
[The ulnar flap] Becker C, et al. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):180–3 (Eng. Abstr.) (Ger)
[A sub-pectoral gliding flap for covering the lateral triangle of the neck] Millesi W, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):26–8 (Eng. Abstr.) (Ger)
[Blood supply of free skin flaps] Smahel J. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):244–8 (Eng. Abstr.) (Ger)
[Multi-sided free transplants for closure of multifocal tissue defects] Steinau HU, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):23–5 (Eng. Abstr.) (Ger)
[The neurovascular pedicled abductor digiti minimi muscle flap for covering the median nerve or its branches] Ulmer J, et al. **Handchir Mikrochir Plast Chir** 1988 Nov; 20(6):338–41 (Eng. Abstr.) (Ger)
[Muscle-flap plasty in fractures of the tibial pilon] Ganzoni N, et al. **Helv Chir Acta** 1989 Jun;56(1–2):255–8 (Eng. Abstr.) (Ger)
[Improvement of perineal wound healing following rectum amputation by omentum flap] John H, et al. **Helv Chir Acta** 1989 Jan;55(5):673–7 (Eng. Abstr.) (Ger)
[Microvascular tissue transplantation of the ear, nose and throat] Bootz F, et al. **HNO** 1988 Nov;36(11):456–61 (Eng. Abstr.) (Ger)
[The free forearm flap in covering defects of the pharynx and oral cavity] Bootz F. **HNO** 1988 Nov;36(11):462–6 (Eng. Abstr.) (Ger)
[The bridge flap concept in closure of large defects of the nasal septum] Schultz-Coulon HJ. **HNO** 1989 Apr; 37(4):123–7 (Eng. Abstr.) (Ger)
[Submicroscopic changes in the jejunum in ectopic sites. A scanning and transmission electron microscopy study following free, microvascular jejunum transfer] Vollrath M, et al. **HNO** 1989 Apr;37(4):133–9 (Eng. Abstr.) (Ger)
[Reconstruction of the side of the nose and the columella using an oblique forehead flap] von Szalay L. **HNO** 1988 Jul;36(7):293–4 (Eng. Abstr.) (Ger)
[Modified full-lid transplants ("tarsomarginal transplants") in reconstructive eyelid surgery] Hübner H. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):647–50 (Eng. Abstr.) (Ger)
[Surgical treatment of severe lower lid ectropion with a transplant of skin and perichondrium] Lessa S, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):207–10 (Eng. Abstr.) (Ger)
[Morphologic changes in the epithelium of myocutaneous pectoralis major islands flaps. A light and electron optic study] Beigel A, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):586–9 (Eng. Abstr.) (Ger)
[Free microvascular tissue transfer. Clinical significance in reconstructive surgery of the head and neck] Mees K. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):12–8 (Eng. Abstr.) (Ger)
[Microvascular facial profile-plasty in facial hemiatrophy] Mees K, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct; 67(10):547–8 (Ger)
[The lateral forehead flap in the management of defects of the exterior aspect of the nose] Rauchfuss A. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):590–2 (Eng. Abstr.) (Ger)
[The temporalis muscle fascia flap for covering defects in the oropharynx. Report of 4 years experiences with 26 cases] Hüttenbrink KB. **Laryngorhinootologie** 1989 May; 68(5):272–7 (Eng. Abstr.) (Ger)
[Tissue expanders in plastic surgery of the head and neck. Indications and use] Mayer B, et al. **Laryngorhinootologie** 1989 Jun;68(6):313–8 (19 ref.) (Eng. Abstr.) (Ger)
[How do I prepare a myocutaneous pectoralis major flap?] Wustrow TP, et al. **Laryngorhinootologie** 1989 May; 68(5):306–8 (Ger)
[Ability to transport oxygen of temporary full and split-skin transplants] Bäumer F, et al. **Unfallchirurg** 1989 Apr; 92(4):206–8 (Eng. Abstr.) (Ger)
[The peroneus brevis muscle flap-plasty. A simple procedure for covering fibular soft tissue defects after osteosynthesis] Eyssel M, et al. **Unfallchirurg** 1989 Feb;92(2):85–91 (Eng. Abstr.) (Ger)
[Treatment of chronic decubitus ulcers by fascio-cutaneous and cutaneous flaps in paraplegic patients] Lessan-Salmassi D. **Unfallchirurg** 1989 Jul;92(7):358–62 (Eng. Abstr.) (Ger)
[The interposition technic. A possibility for avoiding the end-to- side technic in free microvascular myocutaneous flap transfer of the latissimus dorsi muscle] Müller JE, et al. **Unfallchirurg** 1988 Sep;91(9):402–4 (Eng. Abstr.) (Ger)
[Results of single-stage repair of distal hypospadias using the King modification] Zumbé J, et al. **Urologe [A]** 1988 Jul;27(4):246–9 (Eng. Abstr.) (Ger)
[Fractures and soft tissue damage] Kunze K. **Versicherungsmedizin** 1988 Jul 1;40(4):109–11 (Eng. Abstr.) (Ger)
[Surgical therapy of the acne tetrad] Käufer C, et al. **Z Hautkr** 1988 Jul 15;63(7):597–8, 601–4, 609 (Eng. Abstr.) (Ger)
[Free skin transplants] Müller RP. **Z Hautkr** 1988;63 Suppl 2:35–40 (0 ref.) (Eng. Abstr.) (Ger)
[Pedicle flap-plasties] Petres J. **Z Hautkr** 1988 Oct 15; 63(10):846–52 (20 ref.) (Eng. Abstr.) (Ger)
[Pedicled flap-plasties] Petres J. **Z Hautkr** 1988;63 Suppl 2:30–4 (20 ref.) (Eng. Abstr.) (Ger)
[Fixateur externe stabilization and early soft tissue coverage in tibial fractures with soft tissue defects] Käch K, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(2):137–40 (Ger)
[Bulbocavernosus fatty tissue flap-plasty] Wandschneider G, et al. **Z Urol Nephrol** 1988 Nov;81(11):685–8 (Eng. Abstr.) (Ger)
[Technic, limits and complications of breast reconstruction with island flaps of the rectus abdominis muscle] Babayan R. **Zentralbl Chir** 1988;113(12):758–64 (Eng. Abstr.) (Ger)
[Experimental microbiological criteria for the banking of full-thickness skin] Bäumer F, et al. **Zentralbl Chir** 1988; 113(12):793–800 (Eng. Abstr.) (Ger)
[Covering a defect of the Achilles heel with a dorsalis pedis flap] Boschnakow K. **Zentralbl Chir** 1988;113(12):790–2 (Ger)
[Is there a renaissance of the Sauerbruch kineplasty?] Brückner L, et al. **Zentralbl Chir** 1988;113(19):1253–62 (Eng. Abstr.) (Ger)
[Reconstruction of dia- and metaphyseal post-traumatic cortical bone defects] Hildebrandt G, et al. **Zentralbl Chir** 1988;113(19):1233–44 (Eng. Abstr.) (Ger)
[Fasciocutaneous flaps in reconstructive plastic surgery] Moscona AR, et al. **Harefuah** 1988 Nov 15;115(10):265–9 (Eng. Abstr.) (Heb)
[Anatomical bases of a latissimus dorsi skin-muscle-bone flap] Borbély L, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1988; 31(3):209–14 (Eng. Abstr.) (Hun)
[Reconstruction of the hypopharynx using skin flaps: functional and oncological evaluation in 38 cases] Lo Russo D, et al. **Acta Otorhinolaryngol Ital** 1988 May–Jun; 8(3):273–80 (Eng. Abstr.) (Ita)
[Local flaps in the reconstruction of the hypopharyngeal-esophageal tract] Micali G, et al. **Acta Otorhinolaryngol Ital** 1989 Jan–Feb;9(1):41–54 (Eng. Abstr.) (Ita)
[The median bipediculate dermal flap in the treatment of laparocele. A technical note] Di Chio AM, et al. **Minerva Chir** 1989 Apr 15;44(7):1079–81 (Eng. Abstr.) (Ita)
[Possibilities and limitations of a myocutaneous rectus abdominis flap in the reconstruction of the breast after mastectomy] Dominici C, et al. **Minerva Chir** 1988 Jun 30;43(12):1103–6 (Eng. Abstr.) (Ita)
[Treatment of tissue loss in surgery of the scalp. An analysis of 89 patients brought to our attention] Elia L, et al. **Minerva Chir** 1989 Jun 15;44(11):1601–3 (Eng. Abstr.) (Ita)
[Surgical treatment of skin loss on the lower extremities] Moscati F, et al. **Minerva Chir** 1988 Oct 15;43(19):1601–4 (Eng. Abstr.) (Ita)
[Myocutaneous flaps of the greater pectoral muscle in cervico-maxillo-facial oncologic surgery] D'Ascanio G, et al. **Minerva Stomatol** 1989 Apr;38(4):427–31 (Eng. Abstr.) (Ita)
[Treatment of gingival recession with a coronal flap] Matarasso S, et al. **Minerva Stomatol** 1988 Apr;37(4):279–85 (18 ref.) (Eng. Abstr.) (Ita)
[A case of advanced penile cancer treated with multimodal therapy--combination with tensor fascia lata myocutaneous flap] Inagaki N, et al. **Hinyokika Kiyo** 1988 Sep; 34(9):1661–4 (Eng. Abstr.) (Jpn)
[Reconstruction using the gulteus maximus myocutaneous flap following resection of vulval cancer] Ogino M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1475–8 (Jpn)
[Radiological findings on the chest roentgenogram after reconstructive surgery in head and neck cancer with the pectoralis major musculocutaneous flap] Itabashi K, et al. **Rinsho Hoshasen** 1988 Jun;33(6):657–62 (Eng. Abstr.) (Jpn)
[Aneurysm after patch graft aortoplasty in aortic coarctation] Rostad H, et al. **Tidsskr Nor Laegeforen** 1989 Apr 20; 109(11):1163–5 (Eng. Abstr.) (Nor)
[Radial artery flap] Rusli T. **Tidsskr Nor Laegeforen** 1989 Feb 20;109(5):593–4 (Eng. Abstr.) (Nor)
[A new experimental model for direct in vivo observation of microcirculation in microsurgery] Siemionow M. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):1–7 (Eng. Abstr.) (Pol)
[Reconstruction of the breast after mastectomy using an island flap from the latissimus dorsi muscle without endoprosthesis] Towpik E. **Pol Tyg Lek** 1988 Aug 15; 43(33):1060–2 (Eng. Abstr.) (Pol)
[Partial thickness graft of the scalp] Mariani U. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Nov–Dec;

43(6):267–71 (Eng. Abstr.) (Por)
[The inferior epigastric flap: experimental study] Modolin M, et al. **Rev Paul Med** 1988 May–Jun;106(3):169–72 (Eng. Abstr.) (Por)
[Colpopoiesis using an epidermo–dermal flap in vaginal aplasia] Omarov SM, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):59–60 (Rus)
[Anatomo–experimental parallels in the elaboration of methods of increasing the viability of non–free muscle flaps used for sphincteroplasty] Tat'ianchenko VK, et al. **Arkh Anat Gistol Embriol** 1988 Jun;94(6):60–3 (Eng. Abstr.) (Rus)
[Use of surgical flaps in the treatment of ulcers in the region of the Achilles tendon] Grishkevich VM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):113–5 (Rus)
[The use of tissue megacomplexes in plastic surgery of patients with extensive injuries of the extremities] Belousov AE, et al. **Klin Khir** 1989;(3):58–61 (Eng. Abstr.) (Rus)
[A method of trapezoid skin plasty of the anal region in thrombosis of the external hemorrhoidal nodes] Enfendzhian AK, et al. **Klin Khir** 1989;(2):70 (Rus)
[The rotation forearm flap] Kumsiashvili DB. **Klin Khir** 1988; (7):58–9 (Eng. Abstr.) (Rus)
[The choice of surgical tactics in the treatment of extensive scalp wounds in children] Kuznechikhin EP, et al. **Klin Khir** 1989;(6):54–5 (Eng. Abstr.) (Rus)
[Topographic and anatomical substantiation of variants of the "saphenous" flap formation] Ostrovskiĭ NV, et al. **Klin Khir** 1989;(1):20–1 (Eng. Abstr.) (Rus)
[The lateral surface of the thigh as a donor site for the formation of complex skin flaps with an axial type of blood supply] Shalaev SA, et al. **Klin Khir** 1988;(12):8–10 (Eng. Abstr.) (Rus)
[The treatment of postoperative abdominal hernia] Shevchenko PV. **Klin Khir** 1989;(2):4–6 (Eng. Abstr.) (Rus)
[Creation of an artificial smooth muscle rectal sphincter in children] Sitkovskiĭ NB, et al. **Klin Khir** 1989;(6):20–3 (Eng. Abstr.) (Rus)
[Modification of a method of inguinal hernioplasty] Trach BP. **Klin Khir** 1989;(2):66 (Rus)
[Bone–muscle autoplasty in the treatment of aseptic necrosis of the femur head] Agadzhanian VV, et al. **Ortop Travmatol Protez** 1988 Oct;(10):24–6 (Rus)
[A method of microautotransplantation for healing deep and extensive skin wounds] Losev NI, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug;(4):75–6 (Rus)
[Non–free osteochondrous autoplasty in surgery of tuberculosis of the knee joint] Marakusha IG. **Probl Tuberk** 1989;(6):7–10 (Eng. Abstr.) (Rus)
[Replacement of bone cavities in the lower jaw by a pedicled muscle flap] Luk'ianenko VT, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):75–7 (Rus)
[Effect of physical exercises on the blood flow in a pedicled skin flap] Pekhov IuI, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):79–80 (Rus)
[A method of correcting ankylosis of the temporomandibular joint using an isolated muscle flap] Sheĭnman VIu, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):74–5 (Rus)
[Variants of microsurgical autologous transplantation of composite skin flaps from the external surface of the hip] Belousov AE, et al. **Vestn Khir** 1987 Dec;139(12):73–7 (Eng. Abstr.) (Rus)
[Islet flaps from the forearm in plastic surgery of the hand] Belousov AE, et al. **Vestn Khir** 1988 Sep;141(9):85–8 (Eng. Abstr.) (Rus)
[Accelerated plastic surgery using inguinal flap on temporary feeding pedicle] Skvortsov IuR, et al. **Vestn Khir** 1988 May; 140(5):86–8 (Eng. Abstr.) (Rus)
[The first experience with crural plastic surgery using island composite skin flaps] Vikhriev BS, et al. **Vestn Khir** 1988 Jun;140(6):96–101 (Eng. Abstr.) (Rus)
[Dermatoplasty using flaps with an axial blood supply in certain forms of surgical pathology] Vikhriev BS, et al. **Voen Med Zh** 1988 Oct;(10):30–3 (Rus)
[Morphological characteristics of the double–layer skin pedicle] Fedotov AF, et al. **Vrach Delo** 1988 Jul;(7):88–90 (Eng. Abstr.) (Rus)
[The medial gastrocnemius flap in the reconstruction of skin defects of the lower legs] Viknjić M. **Acta Chir Iugosl** 1988; 35(2):233–47 (Eng. Abstr.) (Scr)
[The free TRAM (transverse rectus abdominis myocutaneous) flap—a new possibility in breast reconstruction] Arnež Z, et al. **Acta Chir Iugosl** 1989; 36(1):143–57 (Eng. Abstr.) (Scr)
[Reconstruction of open fractures of the leg associated with extensive loss of skin and soft tissues using muscular and cutaneo–muscular flaps] Petrovič S. **Acta Chir Orthop Traumatol Cech** 1989 Jun;56(3):207–17 (Eng. Abstr.) (Slo)
[A personal technic using a pediculate flap in the treatment of postmastectomy lymphedema] Alejo Enrici E, et al. **Angiologia.** 1989 May–Jun;41(3):112–6 (23 ref.) (Eng. Abstr.) (Spa)
[Protection of the bronchial anastomosis with omental pedicle in unilateral lung transplant] Santillán–Doherty P, et al. **Rev Invest Clin** 1989 Apr–Jun;41(2):117–22 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Pharmacological augmentation of skin flap viability: a hypothesis to mimic the surgical delay phenomenon or a wishful thought. Pang CY, et al. **Ann Plast Surg** 1989 Apr; 22(4):293–306 (140 ref.)
Carcinoma of the tonsillar region: surgical complications relative to the type of reconstruction. Suarez Nieto C, et al. **Clin Otolaryngol** 1989 Apr;14(2):141–5
Drainage of seromas after latissimus dorsi myocutaneous flap breast reconstruction [letter] Slavin SA. **Plast Reconstr Surg** 1989 May;83(5):925–6

HISTORY

Wilhelm Wagner (1848–1900). Part 2: The osteoplastic flap. Buchfelder M, et al. **Surg Neurol** 1988 Dec;30(6):428–33

METHODS

Closure of a sternal defect with the rectus abdominis muscle after sacrifice of both internal mammary arteries. Fernando B, et al. **Ann Plast Surg** 1988 Nov;21(5):468–71
Superiorly based osteoplastic flap for frontal sinus disease. Kudryk WH, et al. **J Otolaryngol** 1988 Dec;17(7):395–7
Versatility of soft–tissue free tissue transfers. Lamont A, et al. **S Afr J Surg** 1988 Sep;26(3):98–101
[Anatomical basis of the transposition of the serratus anterior muscle. Study of 40 dissections] Vu P, et al. **J Chir (Paris)** 1989 Jan;126(1):45–53 (Eng. Abstr.) (Fre)

VETERINARY

Attempts to restore abduction of the paralyzed equine arytenoid cartilage. I. Nerve–muscle pedicle transplants. Ducharme NG, et al. **Can J Vet Res** 1989 Apr;53(2):202–9
The porcine gracilis musculocutaneous flap model [letter] Haughey BH, et al. **Plast Reconstr Surg** 1989 Feb; 83(2):395–6
Proximal urethral reconstruction using a distally based ventral bladder tube flap. An experimental study. Fowler JD, et al. **Vet Surg** 1987 Mar–Apr;16(2):139–45
Transfer of free vascular cutaneous flaps by microvascular anastomosis. Results in six dogs. Fowler JD, et al. **Vet Surg** 1987 Nov–Dec;16(6):446–50
Axial pattern flap based on the superficial brachial artery in the dog. Henney LH, et al. **Vet Surg** 1988 Nov–Dec; 17(6):311–7
Axial pattern flap based on the genicular branch of the saphenous artery in the dog. Kostolich M, et al. **Vet Surg** 1987 May–Jun;16(3):217–22
Transfer of deep circumflex iliac flaps to the tarsus by microvascular anastomosis in the horse. Lees MJ, et al. **Vet Surg** 1989 Jul–Aug;18(4):292–9
Postoperative examination of the biceps femoris muscle sling used in excision of the femoral head and neck in dogs. Lewis DD, et al. **Vet Surg** 1988 Sep–Oct;17(5):269–77
A comparison of standard femoral head and neck excision and femoral head and neck excision using a biceps femoris muscle flap in the dog. Mann FA, et al. **Vet Surg** 1987 May–Jun;16(3):223–30
A mucosal flap technique for correction of laryngeal webbing. Results in four dogs. Matushek KJ, et al. **Vet Surg** 1988 Nov–Dec;17(6):318–20
A comparison of the cutaneous trunci myocutaneous flap and latissimus dorsi myocutaneous flap in the dog. Pavletic MM, et al. **Vet Surg** 1987 Jul–Aug;16(4):283–93
Repair of a traumatically induced oronasal fistula in a cat with a rostral tongue flap. Robertson JJ, et al. **Vet Surg** 1987 Mar–Apr;16(2):164–6
Delayed repair of an extensive lip laceration in a colt using an Estlander flap. Smyth GB, et al. **Vet Surg** 1988 Nov–Dec;17(6):350–2
Caudal sartorius muscle flap in the dog. Weinstein MJ, et al. **Vet Surg** 1988 Jul–Aug;17(4):203–10
Cranial sartorius muscle flap in the dog. Weinstein MJ, et al. **Vet Surg** 1989 Jul–Aug;18(4):286–91
Myocutaneous flap models in the rat. Anatomy, histology and operative technique of the latissimus dorsi myocutaneous flap. Tilgner A, et al. **Z Versuchstierkd** 1988; 31(5):225–32
[Temperature determination of the skin surface for the estimation of blood supply disorders in myocutaneous island flaps of rats] Herrberger U, et al. **Z Versuchstierkd** 1989;32(1):33–9 (Eng. Abstr.) (Ger)

SURGICAL INSTRUMENTS

Improved endonasal sinus surgery by use of an operating microscope and a self–retaining retractor speculum. Park IY. **Acta Otolaryngol Suppl (Stockh)** 1988;458:27–33
Reducing risk of accidental injury from scalpel blades [letter] Hansen ME, et al. **AJR Am J Roentgenol** 1989 Jul; 153(1):193–4
Treatment of symptomatic peripheral atherosclerotic disease with a rotational atherectomy device. Zacca NM, et al. **Am J Cardiol** 1989 Jan 1;63(1):77–80
An illuminated blade for vitreoretinal membrane dissection. Han DP, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):200–1
Axillary dissection: use of a mechanical retractor. Delaney JP. **Am J Surg** 1989 Apr;157(4):436–7
Radiologic methods of bile duct stone extraction. Geisinger MA, et al. **Am J Surg** 1989 Sep;158(3):222–7 (36 ref.)
The suction knife in liver surgery. Haapiainen R, et al. **Am J Surg** 1989 Mar;157(3):340–2, 344–5
Properties of electromagnetic field focusing probe. Yamanashi WS, et al. **Angiology** 1988 Nov;39(11):953–9
Self–retaining weighted retractors for hand surgery. Arem AJ. **Ann Plast Surg** 1980 Oct;5(4):326–7
An efficient device to collect bone dust. Nichter LS, et al. **Ann Plast Surg** 1988 Sep;21(3):260
A new graft spreader. Vadodaria SJ, et al. **Ann Plast Surg** 1988 Nov;21(5):496–7
A method of retraction during reoperative coronary operations using the Favaloro retractor. Antinori CH, et al. **Ann Thorac Surg** 1989 Sep;48(3):440
Retrieval of metallic objects from the pericardial cavity [letter] Kalmbach T, et al. **Ann Thorac Surg** 1988 Oct; 46(4):484
New clamp for intraoperative chest tube placement. Stern H, et al. **Ann Thorac Surg** 1989 Jun;47(6):926
Lisibility for waived or inaccurate instrument counts. Murphy EK. **AORN J** 1989 Jul;50(1):14, 16–7, 19
Magnetized forceps for metallic corneal foreign bodies [letter] Arnold RW, et al. **Arch Ophthalmol** 1988 Nov; 106(11):1502
Tandem Jaffe lid specula for external approach to the orbital floor [letter] Khan JA, et al. **Arch Ophthalmol** 1989 Jun; 107(6):791–2
New spatula for epiretinal membrane separation [letter] Kuhn F. **Arch Ophthalmol** 1989 Mar;107(3):317
A caliper–hook for strabismus surgery. Lingua RW, et al. **Arch Ophthalmol** 1989 Sep;107(9):1387
Temporary iris fixation with a micro–iris retractor. McCuen BW 2d, et al. **Arch Ophthalmol** 1989 Jun;107(6):925–7
An automated aspirating–backflush system for fluid–gas exchange and retinal manipulation. McCuen BW 2d, et al. **Arch Ophthalmol** 1989 Jun;107(6):930
A modified soft tissue retractor for meniscal repair. Bach BR Jr. **Arthroscopy** 1988;4(4):295–6
The blood lancet in regional anaesthesia [letter] De Andres JA. **Br J Anaesth** 1989 Mar;62(3):348
Using stainless steel tape and artery clips to hold miniplates. Magennis P, et al. **Br J Oral Maxillofac Surg** 1989 Aug; 27(4):316–7
Simplified microvascular clamps. Govila A. **Br J Plast Surg** 1989 May;42(3):347–8
Risk to surgeons [letter] Matta H, et al. **Br J Surg** 1988 Sep; 75(9):931–2
The use of the venous stripper for graft removal in arterial reoperations. Shifrin EG, et al. **Eur J Vasc Surg** 1987 Oct; 1(5):351–2
Extensive disobliteration of the aorto–iliac and common femoral arteries using the LeVeen plaque cracker. Willekens FG, et al. **Eur J Vasc Surg** 1987 Dec;1(6):391–5
Electrical resistance of appliances as a cause of urethral stricture following transurethral resection of prostate. Morishita H, et al. **Eur Urol** 1989;16(5):340–2
Washer–decontaminator—an evaluation. Crow S. **Infect Control Hosp Epidemiol** 1989 May;10(5):220–1
Guidewire centering instrument. Elkousy MA, et al. **Injury** 1988 Sep;19(5):321–2
New tunneler for inserting long–term central venous catheters. Rubio PA. **Int Surg** 1989 Jan–Mar;74(1):43–4
Biomechanics of curved surgical needle bending. Abidin MR, et al. **J Biomed Mater Res** 1989 Apr;23(A1 Suppl):129–43
The use of the bone curet in debridement of the burn wound and graft recipient sites. Davis JW, et al. **J Burn Care Rehabil** 1989 Jan–Feb;10(1):99
Comparison of hand–held, suction, and automated trephines on experimental corneal wound size. Insler MS, et al. **J Cataract Refract Surg** 1989 Mar;15(2):217–20
Peeling technique for cataracta secundaria associated with posterior chamber lenses. Trinkmann R, et al. **J Cataract Refract Surg** 1989 Mar;15(2):212–4
Instrumentation [letter] Adnot J. **J Dermatol Surg Oncol** 1989 Jul;15(7):775
Instrumentation for the dermatologic surgeon. Grande DJ, et al. **J Dermatol Surg Oncol** 1989 Mar;15(3):288–97 (4 ref.)
Electrodes for high–frequency electrosurgery. Sebben JE. **J Dermatol Surg Oncol** 1989 Aug;15(8):805–10
The kind of the cut [editorial] Rosen P. **J Emerg Med** 1988 Nov–Dec;6(6):543
Influence of cutting edge configuration on surgical needle penetration forces. Towler MA, et al. **J Emerg Med** 1988 Nov–Dec;6(6):475–81
Cleaning of bipolar diathermy forceps during operation. Graham PY. **J Hand Surg [Br]** 1988 Aug;13(3):356
A new instrument for heart transplantation. Copeland JG. **J Heart Transplant** 1988 Sep–Oct;7(5):388–9
Evolution of the crossed–action intracranial aneurysm clip. Technical note. McFadden JT. **J Neurosurg** 1989 Aug; 71(2):293–6
Vertebral body impactor for posterior lateral decompression of thoracic and lumbar fractures. Technical note. Oro J, et al. **J Neurosurg** 1989 Feb;70(2):285–6
Temporomandibular joint retractors. Thomson ER. **J Oral Maxillofac Surg** 1989 Jan;47(1):98
New technique for producing uniform partial lacerations of tendons. Hitchcock TF, et al. **J Orthop Res** 1989;7(3):451–5
Closed femoral shortening modification using an internal splint. Oppenheim WL, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):609–12
Resection of advanced stage neuroblastoma with the cavitron ultrasonic surgical aspirator. Loo R, et al. **J Pediatr Surg** 1988 Dec;23(12):1135–8
A new shoulder retractor. Dias JJ. **J R Coll Surg Edinb** 1988 Aug;33(4):216
Obturating anorectal tube for transanal resection of rectal tumours. Lee JO. **J R Coll Surg Edinb** 1989 Feb;34(1):53

Use of the vascular punch in microsurgery. Pederson WC, et al. **J Reconstr Microsurg** 1989 Apr;5(2):115–8
Microvenous end-to-side anastomosis: an experimental study comparing the Unilink system and sutures. Ragnarsson R, et al. **J Reconstr Microsurg** 1989 Jul;5(3):217–24
A versatile retractor for use in harvesting the internal mammary artery and performing standard cardiac operations. Phillips SJ, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):633–5
Penile retractor. Gelbard MK. **J Urol** 1989 Jan;141(1):91
Sachse optical urethrotomy, a modified technique: 6 years of experience. Sandozi S, et al. **J Urol** 1988 Nov; 140(5):968–9
Prevention of urethral stricture formation after transurethral resection of the prostate: a controlled randomized study of Otis urethrotomy versus urethral dilation and the use of the polytetrafluoroethylene coated versus the uninsulated metal sheath. Schultz A, et al. **J Urol** 1989 Jan;141(1):73–5
Use of a modified microdrill in endoscopic sinus surgery for improved exposure and reduced adhesions. Gaskins RE Jr. **Laryngoscope** 1989 May;99(5):556–7
Intraoral approach to rigid internal fixation of anterior mandibular fractures. Klotch DW, et al. **Laryngoscope** 1989 Mar;99(3):344–5
Comparison of wound healing between chopped mode–superpulse mode CO2 laser and steel knife incision. Ben–Baruch G, et al. **Lasers Surg Med** 1988;8(6):596–9
Laser instrumentation: a microtenaculum for laser tissue fusion. White JV. **Lasers Surg Med** 1988;8(4):433–4
Strain–gauged haemostatic forceps for clinical and experimental use. Nissan M, et al.
Med Biol Eng Comput 1988 Jul;26(4):448–50
Experience with the ultrasonic surgical aspirator in a cavernous hemangioma of the cavernous sinus. Kudo T, et al. **Neurosurgery** 1989 Apr;24(4):628–31
A new instrument for surface suction and removal of irrigation fluid during surgery. Hagan JC 3d.
Ophthalmic Surg 1989 Feb;20(2):126–7
The Gass hook as an aid in inferior oblique recession. Parker AV, et al. **Ophthalmic Surg** 1989 Apr;20(4):294–5
An unusual complication of nasolacrimal duct probing. Yeatts RP, et al. **Ophthalmic Surg** 1989 Jul;20(7):490–3
Tips of the trade #10. Timesaving instruments for removing the distal interlock of a Brooker–Wills femoral intramedullary rod. Bear JV, et al. **Orthop Rev** 1989 Mar; 18(3):360, 362
Spinal techniques. **Orthopedics** 1988 Oct;11(10):1363–502
Use of the CUSA in removal of a recurrent intraorbital mucocele. Gillespie RP, et al.
Otolaryngol Head Neck Surg 1988 Jul;99(1):71–2
Modification of horizontal jaws of alligator forceps. Haberman RS 2d. **Otolaryngol Head Neck Surg** 1988 Sep; 99(3):346–7
Lip retractors [letter] Haedicke GJ, et al.
Plast Reconstr Surg 1989 Jun;83(6):1085–6
Forceps in repairing torn earlobes [letter] Hintzman D, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1106–7
Disposable battery–driven lighted retractor [letter] Rees TD. **Plast Reconstr Surg** 1989 Apr;83(4):754
An ultrasonic cleaning bath in general practice. Brown JS. **Practitioner** 1988 Apr 8;232(1446):377
A "surgical clip" artifact. Malott JC, et al.
Radiol Technol 1989 Jan–Feb;60(3):229–30
Emergency cricothyrotomy: a flexible device in the operating room. Klein DS, et al. **South Med J** 1989 May;82(5):661
The use of the Roticulator TA device as a protractor and technical aid in performing double–stapled anastomosis of the colon and rectum. Kolachalam RB, et al.
Surg Gynecol Obstet 1989 Jun;168(6):549
[Autostatic lumbar retractor] Lesoin F, et al. **Ann Chir** 1989; 43(4):309–10 (Eng. Abstr.) **(Fre)**
[The value of a high–frequency bistoury in plastic surgery] Henry F. **Ann Chir Plast Esthet** 1989;34(1):65–8 (Eng. Abstr.) **(Fre)**
[2 double–running cannulas: value in surgery of retinal detachment] Gastaud P, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):1083–6 (Eng. Abstr.) **(Fre)**
[Lamellar keratoplasty with the Barraquer microkeratome. Preliminary clinical study apropos of 7 cases] Hanna K, et al. **J Fr Ophtalmol** 1988;11(5):419–23 (Eng. Abstr.) **(Fre)**
[Development of bone cutting tools for medicine exemplified by the spiral drill] Fuchsberger A.
Beitr Orthop Traumatol 1988 Jul;35(7):339–48 (Eng. Abstr.) **(Ger)**
[Theoretical temperature calculation in the cutting area in drilling cortical bones] Schmitt W, et al.
Biomed Tech (Berlin) 1989 Mar;34(3):53–6 (Eng. Abstr.) **(Ger)**
[A new instrument for bone chip and spongiosa–plasty] Wicki O, et al. **Chirurg** 1988 Jun;59(6):437–8 **(Ger)**
["Insitutom RC": a new instrument for valve incision in in–situ vein bypass] Berger T, et al. **Helv Chir Acta** 1989 Jun;56(1–2):285–8 (Eng. Abstr.) **(Ger)**
[Machining of bone with rotary cutting burrs] Fuchsberger A. **Unfallchirurgie** 1989 Apr;15(2):59–72 (Eng. Abstr.) **(Ger)**
[Damaging temperature during the machining of bone] Fuchsberger A. **Unfallchirurgie** 1988 Aug;14(4):173–83 (Eng. Abstr.) **(Ger)**
[Possibilities of using the CO2 laser in gynecology] Shakhmatova MP, et al. **Akush Ginekol (Mosk)** 1989 Apr; (4):43–5 (Eng. Abstr.) **(Rus)**
[Methods of rapid anterior vertebral canal dissection using a Gigli wire saw] Koshcher SI. **Arkh Patol** 1989;51(2):81–3 (Eng. Abstr.) **(Rus)**
[A scalpel with a mobile cutting part] Gaponov VV, et al. **Klin Khir** 1989;(1):70 **(Rus)**
[Forceps for gripping the destructively changed appendix] Levkovskil AV, et al. **Klin Khir** 1989;(4):72 **(Rus)**
[A method of excising a fibrous echinococcal capsule] Tsybyrné KA, et al. **Klin Khir** 1989;(1):69–70 **(Rus)**
[A modified U–shaped forceps–claw for implantation of intraocular lenses] Baranov IIa, et al. **Oftalmol Zh** 1989; (1):64 **(Rus)**
[An instrument for skin retention in plastic surgery] Gornik AA. **Ortop Travmatol Protez** 1988 Jun;(6):55–6 **(Rus)**
[An instrument for the osteosynthesis of the internal malleolus] Kuznetsov BV. **Ortop Travmatol Protez** 1988 Sep;(9):69 **(Rus)**
[A surgical chisel] Ukhanov NIu. **Ortop Travmatol Protez** 1988 Sep;(9):68–9 **(Rus)**
[Experience in the use of an ultrasonic scalpel in the ambulatory practice of a dental surgeon] Bolko VZ.
Stomatologiia (Mosk) 1988 Jul–Aug;67(4):74 **(Rus)**
[A device for the debridement of tissues] Izmailov GA, et al. **Vestn Khir** 1988 May;140(5):116 **(Rus)**
[Spring retractors] Zatonskikh BIa. **Vestn Khir** 1988 Dec; 141(12):90–1 **(Rus)**
[Tracheotomy using an ultrasonic scalpel] Ferkel'man LA, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):32–4 (Eng. Abstr.) **(Rus)**
[An elevator scalpel for the submucosal resection of the nasal septum] Freze IuV. **Voen Med Zh** 1988 Jun;(6):60 **(Rus)**
[A mobilization knife for extraction of the sural nerve] Govenko FS. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):59–61 **(Rus)**
[An instrument for operations on the spine] Nikolaev VN, et al. **Zh Vopr Neirokhir** 1989 Mar–Apr;(2):58–9 **(Rus)**

ADVERSE EFFECTS

Air embolism during total hip replacement: comparison of two surgical techniques. Evans RD, et al. **Br J Anaesth** 1989 Mar;62(3):243–7

HISTORY

Underwater discovery of Roman surgical equipment. Edge C, et al. **BMJ** 1988 Dec 24–31;297(6664):1645–6
Joseph–Frédéric–Benoît Charrière (1803–1876): Paris surgical instrument maker from Switzerland. Boschung U. **Caduceus** 1988 Summer;4(2):34–46
Charrière's instruments in America. Edmonson JM.
Caduceus 1988 Summer;4(2):47–57
The surgical instrument maker: an historical perspective. Weston–Davies WH. **J R Soc Med** 1989 Jan;82(1):40–3
A history of surgical suction from Dieulafoy to Gomco. Pescovitz MD. **Surg Gynecol Obstet** 1989 Sep; 169(3):266–74

STANDARDS

Enhanced accuracy is necessary for refractive surgery instrumentation. Neumann AC, et al.
J Cataract Refract Surg 1989 Mar;15(2):220–6
The sharpness of incision instruments in corneal tissue. Huebscher HJ, et al. **Ophthalmic Surg** 1989 Feb;20(2):120–3
[A method of low–temperature strengthening of microtome knives and medical cutting instruments] Stepanov PF, et al. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):77 **(Rus)**
[Evaluation of the healing of skin wounds inflicted by steel scalpels with various degrees of sharpness] Izmailov GA, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):75–8 (Eng. Abstr.) **(Rus)**

VETERINARY

Efficacy of heartworm removal in dogs with dirofilarial hemoglobinuria using flexible alligator forceps. Ishihara K, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):739–45
Clinical effects after heartworm removal from pulmonary arteries using flexible alligator forceps in dogs with common dirofilariasis. Ishihara K, et al.
Nippon Juigaku Zasshi 1988 Jun;50(3):723–30
Changes in cardiopulmonary values after heartworm removal from pulmonary artery using flexible alligator forceps. Ishihara K, et al. **Nippon Juigaku Zasshi** 1988 Jun; 50(3):731–8
Scalpel blade contamination with skin bacteria during orthopedic and neurosurgical procedures in dogs. Straw RC, et al. **Vet Surg** 1987 Jan–Feb;16(1):25–30

SURGICAL MESH

Polyglycolic acid (Dexon) mesh graft for abdominal wound support in healing–compromised patients. Brismar B, et al. **Acta Chir Scand** 1988 Sep;154(9):509–10
Primary Marlex–mesh reconstruction in partial resections of the hemipelvis. Report of 2 cases. Sternberg A, et al.
Acta Orthop Scand 1989 Jun;60(3):365–8
Hemilaryngeal reconstruction using an axial island cheek flap supported by Marlex and stainless steel wire mesh. Winek TG, et al. **Am J Surg** 1988 Oct;156(4):235–7
Polypropylene mesh closure of infected abdominal wounds. Jones JW, et al. **Am Surg** 1989 Jan;55(1):73–6
Use of Vicryl mesh in prevention of postrhinoplasty dorsal irregularities. Gilmore J. **Ann Plast Surg** 1989 Feb; 22(2):105–7
Polyglactin 910 mesh for support of the donor defect of the double–pedicled rectus abdominis musculocutaneous flap. Hallock GG, et al. **Ann Plast Surg** 1989 Apr;22(4):358–64
Prolene plug repair for femoral hernia. Allan SM, et al.
Ann R Coll Surg Engl 1989 Jul;71(4):220–1
The preperitoneal approach and prosthetic buttress repair for recurrent hernia. The evolution of a technique [see comments] Nyhus LM, et al. **Ann Surg** 1988 Dec; 208(6):733–7. **Comment in:** Ann Surg 1989 Jul;210(1):126
Severe intra–abdominal sepsis and open management [letter] Schein M, et al. **Arch Surg** 1988 Oct;123(10):1287
Development of an antithrombogenic cardiac wall substitute which can be reconstructed by infiltration of host cells. Okoshi T, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):532–7
The Mersilene mesh sling—a new concept in ptosis surgery. Downes RN, et al. **Br J Ophthalmol** 1989 Jul;73(7):498–501
Refinement of the scrap technique of skin grafting. Sawada Y, et al. **Burns** 1989 Aug;15(4):268–70
Surfasoft used for meshed skin grafts [letter] Teepe RG, et al. **Burns Incl Therm Inj** 1988 Jun;14(3):254
Comparison of Marlex and Gore–tex to repair abdominal wall defects in the rat. Murphy JL, et al. **Can J Surg** 1989 Jul; 32(4):244–7
Results of total hip reconstruction using acetabular mesh in patients with central acetabular deficiency. Jasty M, et al. **Clin Orthop** 1988 Dec;(237):142–9
Reconstruction of neglected Achilles tendon rupture with Marlex mesh. Ozaki J, et al. **Clin Orthop** 1989 Jan; (238):204–8
Technique of insertion of pelvic Vicryl mesh sling to avoid postradiation enteritis. Deutsch AA, et al.
Dis Colon Rectum 1989 Jul;32(7):628–30
Absorbable mesh in the treatment of rectal prolapse. Arndt M, et al. **Int J Color Dis** 1988 Aug;3(3):141–3
Characterization of morphologic and mechanical properties of surgical mesh fabrics. Chu CC, et al.
J Biomed Mater Res 1985 Oct;19(8):903–16
Porosity of surgical mesh fabrics: new technology. Pourdeyhimi B. **J Biomed Mater Res** 1989 Apr;23(A1 Suppl):145–52
Subtotal mesh–wrapping in the treatment for abdominal aortic aneurysm. Bos JC, et al.
J Cardiovasc Surg (Torino) 1988 Sep–Oct;29(5):522–9
Polyurethane–coated Dacron mesh tray for temporary mandibular reconstruction following resection of oral cancer: clinical results of 27 cases. Eckardt A, et al.
J Oral Maxillofac Surg 1989 Jan;47(1):21–4
Dura versus Gore–Tex as an abdominal wall prosthesis in an open and closed infected model. Smith S, et al.
J Pediatr Surg 1989 Jun;24(6):519–21
Long–term results of the clinical use of an expanded polytetrafluoroethylene surgical membrane as a pericardial substitute. Harada Y, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):811–5
Conservative treatment of renal allograft rupture with polyglactin 910 mesh and gelatin resorcin formaldehyde glue. Chopin DK, et al. **J Urol** 1989 Aug;142(2):363–5
Repair of orbital floor fractures with Marlex mesh. Scapini DA, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):697–701
Recurrent inguinal hernia repaired with mesh (Teflon). van Ooijen B, et al. **Neth J Surg** 1989 Jun;41(3):61–4
Titanium mesh and acrylic cranioplasty. Malis LI.
Neurosurgery 1989 Sep;25(3):351–5
An alternative to the classical nerve graft for the management of the short nerve gap. Dellon AL, et al.
Plast Reconstr Surg 1988 Nov;82(5):849–56
Reinforcement of bone cement using metal meshes. Taylor D, et al. **Proc Inst Mech Eng [H]** 1989;203(H1):49–53
Use of prosthetic materials in chest–wall reconstruction. Assets and liabilities. McCormack PM.
Surg Clin North Am 1989 Oct;69(5):965–76 (29 ref.)
A technique for early wound management using polypropylene mesh reconstruction of the abdominal wall. Johnson PC, et al. **Surg Gynecol Obstet** 1988 Nov; 167(5):435–6
Technique and complications of reconstruction of the pelvic floor with polyglactin mesh. Sener SF, et al.
Surg Gynecol Obstet 1989 Jun;168(6):475–80
Absorbable versus permanent mesh in abdominal operations. Tyrell J, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):227–32
Chest wall resection—alloplastic replacement. Lampl LH, et al. **Thorac Cardiovasc Surg** 1988 Jun;36(3):157–8
[The use of Ampoxen in treating a large hemangioma of the liver] Avramov T, et al. **Khirurgiia (Sofiia)** 1989;42(2):83–4 **(Bul)**
[A case of a giant postoperative hernia successfully treated with Bulgarian antimicrobial polyamide mesh] Totev T. **Khirurgiia (Sofiia)** 1988;41(6):77–9 **(Bul)**
[Employment of prolene net in ventral hernia] Aasted A, et al. **Ugeskr Laeger** 1989 May 8;151(19):1182–4 (Eng. Abstr.) **(Dan)**
[A spleen–preserving method in splenic rupture using an absorbable net] Leemans R, et al.
Ned Tijdschr Geneeskd 1988 Oct 29;132(44):2016–7 (Eng. Abstr.) **(Dut)**
[Anastomoses of the small intestine in a septic environment protected by polyglactin 910–collagen mesh. Experimental study in rats] Siksik JM, et al. **Ann Chir** 1989;43(3):236–40 (Eng. Abstr.) **(Fre)**

[Textile foreign bodies retained in the abdomen] Slim K, et al. **Ann Chir** 1989;43(4):285–8 (11 ref.) (Eng. Abstr.) **(Fre)**

[Cystoplasty using a resorbable polyglactin prosthesis covered by a free peritoneal flap] Youssef M, et al. **Ann Urol (Paris)** 1988;22(4):263–7 (Eng. Abstr.) **(Fre)**

[Injuries of the spleen. Value of an absorbable perisplenic mesh. 15 cases] Feneyrou B, et al. **Presse Med** 1988 Sep 17;17(31):1570–2 (Eng. Abstr.) **(Fre)**

[Complete wrapping of the liver with resorbable mesh for hepatic rupture with persistent hemorrhage (letter)] Spay G, et al. **Presse Med** 1988 Oct 15;17(35):1816–7 **(Fre)**

[Prevention of cement extravasation into soft tissues in compound osteosyntheses] Poigenfürst J. **Aktuel Traumatol** 1988 Oct;18(5):233 **(Ger)**

[Repair of a gap in the abdominal wall using intraperitoneal Seblon mesh] Vándor B, et al. **Orv Hetil** 1988 Jul 31; 129(31):1649–50 (Eng. Abstr.) **(Hun)**

[Surgical therapy of prolapse of the vaginal vault. Abdominal sacropexy with Gore-tex mesh] Pierluigi G, et al. **Minerva Ginecol** 1988 Nov;40(11):639–41 (Eng. Abstr.) **(Ita)**

[The use of perforated foil in free autodermoplasty] Bik VG, et al. **Klin Khir** 1989;(5):68 **(Rus)**

ADVERSE EFFECTS

Marlex mesh erosion: a complication of horizontal banded gastroplasty. Fardy J, et al. **Gastrointest Endosc** 1988 Nov–Dec;34(6):461–2

[Jejunocutaneous fistula following the use of a polyester net for treating eventration] Duca S, et al. **Rev Chir [Chir]** 1988 Sep–Oct;37(5):387–91 (Eng. Abstr.) **(Rum)**

STANDARDS

[Polymer fibers in surgery. III] Privalova LG, et al. **Polim Med** 1988;18(1–2):67–89 (Eng. Abstr.) **(Rus)**

SURGICAL NURSING

Surgical wound healing. A review for perioperative nurses. Wysocki AB. **AORN J** 1989 Feb;49(2):502, 504–6, 508 passim (48 ref.)

EDUCATION

Specialization in adult health/medical surgical nursing: what does it mean? Kitchens EK, et al. **J Nurs Educ** 1989 May; 28(5):221–6

MANPOWER

[Occupational toxicity secondary to inhalant anesthetics] Moral V, et al. **Rev Esp Anestesiol Reanim** 1988 Jul–Aug; 35(4):199–204 (Eng. Abstr.) **(Spa)**

SURGICAL REPLANTATION see **REPLANTATION**

SURGICAL SCRUB see **HANDWASHING**

SURGICAL STAPLERS

Esophageal transection with automatic stapler device for bleeding esophageal varices. Case report and review of the literature. Bayer I, et al. **Acta Chir Iugosl** 1989;36(1):127–35

Use of skin staples in plastic surgery. Georgiade G, et al. **Ann Plast Surg** 1980 Oct;5(4):324–5

A quick stapler tie-over fixation for skin grafts. Kaplan HY. **Ann Plast Surg** 1989 Feb;22(2):173–4

Some clinical and technical aspects of circular stapled anastomoses of rectum and oesophagus. Dickson GH. **Ann R Coll Surg Engl** 1989 Jan;71(1):59–63

Ligation of the left atrial appendage using an automatic surgical stapler. DiSesa VJ, et al. **Ann Thorac Surg** 1988 Dec;46(6):632–3

Stapling of left atrial appendage [letter] Landymore RW. **Ann Thorac Surg** 1989 May;47(5):794

Use of a new stapling instrument for permanent occlusion of the aorta in the surgical procedure for thromboexclusion. Odagiri S, et al. **Ann Thorac Surg** 1989 Mar;47(3):466–9

Metaphyseal aspects of stapling. An experimental study in pigs. Karbowski A, et al. **Arch Orthop Trauma Surg** 1989; 108(4):195–202

Staple line healing in gastric surgery [letter] Owen ER. **Arch Surg** 1989 Jun;124(6):752

Arthroscopic stapling repair for shoulder instability: a retrospective study of 50 cases. Hawkins RB. **Arthroscopy** 1989;5(2):122–8

Open mandibular condylotomy (osteotomy) with precision scaphoid staple osteosynthesis and meniscopexy. A description of the operation. Norman JE, et al. **Aust Dent J** 1988 Jun;33(3):212–7

Intrathoracic stapled anastomosis after oesophagectomy for cancer. Woods SD, et al. **Aust N Z J Surg** 1989 Aug; 59(8):647–51

Stapling v. sutures for anastomoses [letter] Dowse J. **Br J Hosp Med** 1988 Jul;40(1):80

Radiological appearances of colonic ring staple anastomoses. Daly BD, et al. **Br J Radiol** 1989 Mar;62(735):256–9

Use of skin staples for fashioning colostomies. Antrum RM, et al. **Br J Surg** 1988 Aug;75(8):736

Use of staplers on oesophagogastric varices. Cai CJ, et al. **Br J Surg** 1988 Nov;75(11):1098–9

Stapling technique for pouch-anal anastomosis without the need for purse-string sutures. Williams NS. **Br J Surg** 1989 Apr;76(4):348–9

Stapled bypass procedure for unresectable pancreatic carcinoma. Simon FL, et al. **Can J Surg** 1989 Mar; 32(2):85–7

Stapling air leaks [letter] Cole PH. **Chest** 1988 Nov;94(5):1118

Clinical and manometric evaluation of anorectal function following low anterior resection with low anastomotic line using an EEA stapler for rectal cancer. Nakahara S, et al. **Dis Colon Rectum** 1988 Oct;31(10):762–6

Early infective complications and late recurrent cancer in stapled colonic anastomoses. Sauven P, et al. **Dis Colon Rectum** 1989 Jan;32(1):33–5 (18 ref.)

Local recurrence after low anterior resection using the EEA stapling device. Ziv Y, et al. **Dis Colon Rectum** 1988 Dec; 31(12):945–7

Reduced blood loss during caesarean section due to a controlled stapling technique. van Dongen PW, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):95–102

An endoscopic stapling device: the development of a new flexible endoscopically controlled device for placing multiple transmural staples in gastrointestinal tissue. Swain CP, et al. **Gastrointest Endosc** 1989 Jul–Aug;35(4):338–9

Use of a linear stapler in excision of Zenker's diverticulum. Talmi YP, et al. **Head Neck** 1989 Mar–Apr;11(2):150–2

Evaluation of the 3M staplizer: a new internal fixation system. Ostgaard HC, et al. **Injury** 1988 Jan;19(1):28–30

Four hundred esophageal anastomoses with a stapler. Fekete F, et al. **Int Surg** 1989 Apr–Jun;74(2):69–72

Experience with the EEA stapler for esophagojejunostomy. Habu H, et al. **Int Surg** 1989 Apr–Jun;74(2):73–6

Evaluation of automatic disposable rotating cartridge skin staplers. Phung D, et al. **J Burn Care Rehabil** 1988 Sep–Oct; 9(5):538–46

Akin osteotomy using the 3M Shapiro Staplizer. Lerman BI. **J Foot Surg** 1989 Jan–Feb;28(1):64–7

Invention of the infraorbital rim staple [letter] **J Oral Maxillofac Surg** 1988 Nov;46(11):918, 1025

Internal fixation of ipsilateral trochanteric and femoral shaft fractures by staples and Kuntscher nail. Majeed SA, et al. **J Orthop Trauma** 1988;2(1):33–5

Stapled partial splenectomy for splenic abscess in a child. Bhattacharyya N, et al. **J Pediatr Surg** 1989 Mar; 24(3):316–7

Diffuse cavernous hemangioma of the rectosigmoid and low anterior resection using the autostapler. Corbally MT, et al. **J Pediatr Surg** 1988 Nov;23(11):1032–3

Reinforced staple line in severely emphysematous lungs. Juettner FM, et al. **J Thorac Cardiovasc Surg** 1989 Mar; 97(3):362–3

Anastomotic narrowing after esophagogastrectomy with the EEA stapling device. Muehrcke DD, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):434–8

A simple bolster technique for skin grafting. Hoffman HT, et al. **Laryngoscope** 1989 May;99(5):558–9

GIA stapler in radical neck dissection. Isaacs JH Jr. **Laryngoscope** 1989 Feb;99(2):225–6

Cesarean delivery and hysterotomy using an absorbable stapling device. Bond SJ, et al. **Obstet Gynecol** 1989 Jul; 74(1):25–8

Comparison of copolymer staple versus chromic suture during hysterectomy: gross, histologic, and microbiologic findings [see comments] McNeeley SG Jr, et al. **Obstet Gynecol** 1988 Dec;72(6):862–5. **Comment in:** Obstet Gynecol 1989 May;73(5 Pt 1):829–30

Priority in using staples to secure skin grafts [letter] Tipton JB. **Plast Reconstr Surg** 1989 Jan;83(1):194–5

Ankle fractures osteosynthesized with the 3M staplizer. A new internal fixation system compared with a routine method. Ostgaard HC, et al. **Rev Chir Orthop** 1988;74 Suppl 2:284–5

Cancer of the rectum—sphincter-saving operation. Stapling techniques. Fazio VW. **Surg Clin North Am** 1988 Dec; 68(6):1367–82 (33 ref.)

Use of EEA stapler in reconstruction after gastric resection. Dewan S, et al. **Surg Gynecol Obstet** 1989 Jan;168(1):59–62

The use of the Roticulator TA device as a protractor and technical aid in performing double-stapled anastomosis of the colon and rectum. Kolachalam RB, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):549

A method of stapled skin closure by one surgeon. Le T, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):67

Use of the circular stapler in construction of the duodenoneocystostomy for drainage into the bladder in transplants involving the whole pancreas. Pescovitz MD, et al. **Surg Gynecol Obstet** 1989 Aug;169(2):169–71

The use of mechanical sutures in the treatment of gastric duplications. Izzidien al-Samarrai AY, et al. **Z Kinderchir** 1989 Jun;44(3):186–7

[Clinical experience with staplers in gastrointestinal surgery] Lin CH. **Chung Hua Wai Ko Tsa Chih** 1988 Oct; 26(10):590–2, 636–7 (Eng. Abstr.) **(Chi)**

[Clinical application of gastro-intestinal staplers] Zou ZS. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):373–6, 384 (Eng. Abstr.) **(Chi)**

[Colonic vascularization does not change by circular stapling: an angiographic study in dogs] Lehur PA, et al. **Ann Chir** 1989;43(4):315–9 (Eng. Abstr.) **(Fre)**

[Pericardio-peritoneal shunt with the automatic stapler EEA] Obadia JF, et al. **Presse Med** 1988 Nov 5;17(39):2081–2 (Eng. Abstr.) **(Fre)**

[The double stapling technic of the esophagus. Mechanical esophagojejunostomy without purse-string suture] Fasching W. **Chirurg** 1989 Apr;60(4):301–2 **(Ger)**

[Removal of Zenker's diverticula using automatic staplers] Lersmacher J, et al. **Chirurg** 1989 Mar;60(3):163–7 (Eng. Abstr.) **(Ger)**

[The premium curved end-to-end anastomosis instrument. Further development of mechanical anastomosis instruments] Moritz E. **Chirurg** 1989 Feb;60(2):121–2 **(Ger)**

[Is in esophago-intestinal anastomosis the use of mechanical staplers an advantage?] Burri G, et al. **Helv Chir Acta** 1989 Jan;55(5):707–10 (Eng. Abstr.) **(Ger)**

[Gambee single modified all-layer suture] Mendel V, et al. **Helv Chir Acta** 1989 Jun;56(1–2):99–102 (Eng. Abstr.) **(Ger)**

[Experiences with 169 mechanical colorectal anastomoses (1981–1984)] Wehrli H, et al. **Helv Chir Acta** 1989 Jan; 55(5):649–54 (Eng. Abstr.) **(Ger)**

[Errors and dangers of mechanical suture instruments—correction and prevention] Seufert RM, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:206 **(Ger)**

[Shoulder stiffness and metal allergy—a possible link? A single case report] Theermann R, et al. **Z Orthop** 1989 Jan–Feb;127(1):65–7 (Eng. Abstr.) **(Ger)**

[Use of surgical staplers in gastrointestinal surgery] Lorenz D, et al. **Zentralbl Chir** 1988;113(18):1196–203 (Eng. Abstr.) **(Ger)**

[Ano-rectal function in stapled low colo-rectal reconstruction] Bezzi M, et al. **Minerva Chir** 1989 Feb 28; 44(4):745–8 **(Ita)**

[Total gastrectomy after introduction of the stapler and total parenteral nutrition] De Toma G. **Minerva Chir** 1989 Feb 28;44(4):567–70 (22 ref.) **(Ita)**

[Low colorectal anastomosis using mechanical staplers] Gramegna A. **Minerva Chir** 1988 Oct 31;43(20):1683–6 (Eng. Abstr.) **(Ita)**

[Skin suture with skin stapler in general surgery] Lugani P, et al. **Minerva Chir** 1989 May 15;44(9):1365–9 (Eng. Abstr.) **(Ita)**

[Use of surgical staplers in pulmonary surgery] Occhipinti S, et al. **Minerva Chir** 1989 Feb 15;44(3):381–3 (14 ref.) **(Ita)**

[Comparative study of mechanical and microsurgical anastomosis of small-diameter arteries] Santoro G, et al. **Minerva Chir** 1988 Apr 15;43(7):567–74 (Eng. Abstr.) **(Ita)**

[Total gastrectomy. Comparison of manual and mechanical anastomosis in our experience] Taschieri AM, et al. **Minerva Chir** 1988 Sep 15;43(17):1315–8 (Eng. Abstr.) **(Ita)**

[Experience with circular mechanical sutures in rectal surgery] Turra G, et al. **Minerva Med** 1989 Jul;80(7):725–8 **(Ita)**

[Simplified technique for closure of median sternotomy incision: the use of bone stapler] Hashiguchi M, et al. **Kyobu Geka** 1989 Mar;42(3):203–5 (Eng. Abstr.) **(Jpn)**

[Power staple fixation of the sternum after refractory mediastinitis following A–C bypass; key points of sternal fixation] Okada M, et al. **Kyobu Geka** 1988 Jul;41(8):641–3 (Eng. Abstr.) **(Jpn)**

[Mechanical suture in gastric resection] Kostin AE. **Klin Khir** 1988;(8):61–2 **(Rus)**

ADVERSE EFFECTS

Iatrogenic vagina dentata [letter] Davies JN. **Am J Forensic Med Pathol** 1989 Sep;10(3):269

Problems associated with the EEA stapling technique for esophagojejunostomy after total gastrectomy. Kataoka M, et al. **Ann Surg** 1989 Jan;209(1):99–104

Complications after esophagogastrectomy using stapling instruments. Muehrcke DD, et al. **Ann Thorac Surg** 1989 Aug;48(2):257–62

Hinged staples [letter] Temes GD. **Chest** 1988 Nov;94(5):1112

Stapler closure of the bronchial stump [letter] Weissberg D. **Chest** 1988 Dec;94(6):1316

Comparison of copolymer staple versus chromic suture during hysterectomy: gross, histologic, and microbiologic findings [letter; comment] Weinstein SA. **Obstet Gynecol** 1989 May;73(5 Pt 1):829–30. **Comment on:** Obstet Gynecol 1988 Dec;72(6):862–5

[Complications of mechanical sutures in colorectal surgery. 5-year experience] Liboni A, et al. **Minerva Chir** 1988 Jun 15;43(11):903–13 (65 ref.) (Eng. Abstr.) **(Ita)**

[Complications from the use of mechanical suturing devices in digestive system surgery. Our experience] Pramaggiore P, et al. **Minerva Med** 1989 Jul;80(7):809–10 **(Ita)**

[An analysis of the problems correlated with the use of mechanical suturing devices in surgery of the gastrointestinal tract] Turra G, et al. **Minerva Med** 1989 Jul;80(7):811–4 **(Ita)**

ECONOMICS

[Stapled versus manual sutures] Piegari V, et al. **Minerva Chir** 1989 Feb 28;44(4):801–10 (72 ref.) **(Ita)**

STANDARDS

Evaluation of surgical staples in cesarean section. Burkett G, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):540–5; discussion 545–7

VETERINARY

Comparison of staple and suture techniques for end-to-end anastomosis of the small colon in horses. Hanson RR, et al. **Am J Vet Res** 1988 Sep;49(9):1621-8

Use of a linear stapling device to construct an inverted, triangulated, end-to-end anastomosis of the equine jejunum. Bristol DG, et al. **Cornell Vet** 1989 Jul; 79(3):217-30

Billroth II gastrojejunostomy in dogs. Stapling technique and postoperative complications. Ahmadu-Suka F, et al. **Vet Surg** 1988 Jul-Aug;17(4):211-9

Lung resection using surgical staples in dogs and cats. LaRue SM, et al. **Vet Surg** 1987 May-Jun;16(3):238-40

A potential technique error in stapled side-to-side anastomosis of the small intestine of the horse. Mackey VS, et al. **Vet Surg** 1987 May-Jun;16(3):189-92

SURGICAL WOUND DEHISCENCE

Abdominal wound dehiscence: a review of 60 cases at the University College Hospital, Ibadan. Senbanjo RO, et al. **Afr J Med Med Sci** 1988 Sep;17(3):133-40

Dehiscence, evisceration, and other complications. Daly JW. **Clin Obstet Gynecol** 1988 Sep;31(3):754-60

Bursting strength in CO2 laser-assisted microvascular anastomoses. Ruiz-Razura A, et al. **J Reconstr Microsurg** 1988 Jul;4(4):291-6

CLASSIFICATION

[Classification of postoperative eventration] Lokhvitskiĭ SV, et al. **Klin Khir** 1989;(1):37-9 (Eng. Abstr.) (Rus)

COMPLICATIONS

Consultation section. **J Cataract Refract Surg** 1989 Jan; 15(1):109-13

Epithelial downgrowth following wound dehiscence after extracapsular cataract extraction and posterior chamber lens implantation: surgical management. Schaeffer AR, et al. **J Cataract Refract Surg** 1989 Jul;15(4):437-41

[Diagnosis and treatment of postoperative peritonitis (review of foreign literature 1980-1985)] Bachev II. **Khirurgiia (Mosk)** 1988 Sep;(9):148-51 (51 ref.) (Rus)

[A method of treating diffuse postoperative peritonitis] Shalimov SA, et al. **Klin Khir** 1989;(4):44-7 (Eng. Abstr.) (Rus)

[Erosion-induced hemorrhage after surgical treatment of acute obstruction of major arteries of the lower extremities] Stepanov NV, et al. **Vestn Khir** 1989 Feb;142(2):82-4 (Eng. Abstr.) (Rus)

DIAGNOSIS

Intraoperative testing of the integrity of left-sided colorectal anastomoses: a technique of value to the surgeon in training [letter] Aukland P. **Ann R Coll Surg Engl** 1988 Sep; 70(5):338

Palpation of the uterine scar after vaginal delivery [letter] Schneider G. **Can Med Assoc J** 1989 Jul 15;141(2):98

[Diagnosis and treatment of incompetence of sutures of the duodenal stump] Godlevskiĭ AI. **Vestn Khir** 1987 Dec; 139(12):83-5 (Eng. Abstr.) (Rus)

ETIOLOGY

Rupture and dehiscence of cesarean section scar during pregnancy and delivery. Nielsen TF, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):569-73

Ruptured globe after radial keratotomy. Pearlstein ES, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):755-6

Complications of controlled tissue expansion in the pediatric burn patient. Neale HW, et al. **Plast Reconstr Surg** 1988 Nov;82(5):840-8

[Anastomoses of the large intestine in standardized diffuse peritonitis in the rat] Wilker D, et al. **Zentralbl Chir** 1988; 113(15):993-1001 (Eng. Abstr.) (Ger)

[Eventration in acute cholecystitis in middle-aged and elderly patients] Prikupets VL, et al. **Klin Khir** 1988;(9):46-7 (Rus)

MORTALITY

[The effect of early urologic complications on the prognosis of kidney transplantation] Konert J, et al. **Z Urol Nephrol** 1989 Jul;82(7):355-60 (Eng. Abstr.) (Ger)

PATHOLOGY

Traumatic dehiscence of incisions seven years after radial keratotomy. Glasgow BJ, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):703-7

Closure of rabbit ileum enterotomies with the argon and CO2 lasers: bursting pressures and histology. Vlasak JW, et al. **Lasers Surg Med** 1988;8(5):527-32

PHYSIOPATHOLOGY

Impact of long-term relative bowel rest on conditions for colonic surgery. Udén P, et al. **Am J Surg** 1988 Nov; 156(5):381-5

PREVENTION & CONTROL

Early laparotomy wound dehiscence: a randomized comparison of three suture materials and two methods of fascial closure. Savolainen H, et al. **Ann Chir Gynaecol** 1988;77(3):111-3

Interlocking figure-of-8 closure of the sternum. Di Marco RF Jr, et al. **Ann Thorac Surg** 1989 Jun;47(6):927-9

Initial continence testing of sleeved monolayer colonic anastomoses in sheep. A comparative bench study. Percival HG. **Dis Colon Rectum** 1989 Jan;32(1):21-5

The place of intraoperative antegrade colonic irrigation in emergency left-sided colonic surgery. Saadia R, et al. **Dis Colon Rectum** 1989 Jan;32(1):78-81 (45 ref.)

Prevention of postoperative wound dehiscence in high risk patients. A randomized comparison of internally applied resorbable polyglactin 910 mesh and externally applied polyamide fiber mesh. Gainant A, et al. **Int Surg** 1989 Jan-Mar;74(1):55-7

Abdominal incision: decision or indecision? Cahalane MJ, et al. **Lancet** 1989 Jan 21;1(8630):146-8 (25 ref.)

Primary mass closure of midline incisions with a continuous running monofilament suture in gynecologic patients. Gallup DG, et al. **Obstet Gynecol** 1989 Apr;73(4):675-7

Prevention of wound dehiscence in severely obese patients with jejuno-ileal by-pass: the role of hyaluronic acid. Trabucchi E, et al. **Pharmatherapeutica** 1988;5(4):233-9

An aseptic method to loosen tight, relaxing sutures. Konomi K, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):354-5

Continent gastrostomies. Nelson RE. **Surg Gynecol Obstet** 1989 Sep;169(3):259-60

[Our experience in preventing incompetence of the appendiceal stump] Moshev B. **Khirurgiia (Sofiia)** 1988; 41(6):98-9 (Bul)

[Theory and practice of continuous laparotomy suture (abdominal wound dehiscence and incisional hernia)] Stelzner F. **Chirurg** 1988 Oct;59(10):654-60 (Eng. Abstr.) (Ger)

[Protection of the pancreatico-digestive anastomosis following resection of the head of the pancreas by pancreatic duct occlusion with fibrin (-glue). Animal experiment and clinical experiences] Waclawiczek HW, et al. **Chirurg** 1989 Jun;60(6):403-9 (Eng. Abstr.) (Ger)

[Anastomotic dehiscence in colorectal surgery and the total parenteral nutrition. A clinical study] Angelici A, et al. **Minerva Chir** 1989 Apr 15;44(7):1095-8 (Eng. Abstr.) (Ita)

[Experimental evaluation of the possibility of fixing uterine sutures after cesarean section using polymer materials] Makarov IO, et al. **Akush Ginekol (Mosk)** 1989 Mar; (3):33-6 (Eng. Abstr.) (Rus)

[Preventing incompetence of uterine sutures after cesarean section] Sidorova IS, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):30-3 (Eng. Abstr.) (Rus)

[A method for preventing suture incompetence of the duodenal stump after gastric resection] Kostin AE, et al. **Klin Khir** 1988;(8):73 (Rus)

[Treatment of "kissing" duodenal ulcers] Mitiuk II, et al. **Sov Med** 1989;(2):76-7 (Rus)

[Healing of esophagogastric anastomosis performed with the use of compression suturing equipment] Pirogov AI, et al. **Sov Med** 1989;(4):12-5 (Eng. Abstr.) (Rus)

[Prevention of postoperative eventration] Balmyshev ES, et al. **Vestn Khir** 1988 Jul;141(7):119-20 (Rus)

[Complex prevention of suture incompetence of the duodenal stump in penetrating duodenal ulcers] Godlevskiĭ AI. **Vestn Khir** 1989 Mar;142(3):32-4 (Eng. Abstr.) (Rus)

[Ways to increase the competence of sutures of the duodenal stump in the surgical treatment of complicated gastroduodenal ulcers] Papazov FK, et al. **Vestn Khir** 1989 Feb;142(2):111-3 (Eng. Abstr.) (Rus)

[Complex prevention of suture incompetence of the duodenal stump] Ruchkin VI, et al. **Vestn Khir** 1988 Jul;141(7):19-22 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Radiological appearances of colonic ring staple anastomoses. Daly BD, et al. **Br J Radiol** 1989 Mar;62(735):256-9

[Contribution of imaging in complications of colo-anal anastomoses. Apropos of 61 cases] Bléry M, et al. **J Radiol** 1989 Feb;70(2):69-74 (Eng. Abstr.) (Fre)

SURGERY

Reconstruction of posterior neck and skull with vertical trapezius musculocutaneous flap. Mathes SJ, et al. **Am J Surg** 1988 Oct;156(4):248-51

Closure of a sternal defect with the rectus abdominis muscle after sacrifice of both internal mammary arteries. Fernando B, et al. **Ann Plast Surg** 1988 Nov;21(5):468-71

Wound repairs. Unusual problems and solutions. Gormley DE. **Dermatol Clin** 1989 Jan;7(1):111-21

Improved results following use of an advancement technique in the treatment of ileoanal anastomotic complications. Fleshman JW, et al. **Int J Color Dis** 1988 Aug;3(3):161-5

The use of sartorius muscle rotation-transfer in the management of wound complications after infrainguinal vein bypass: a report of eight cases and description of the technique. Meyer JP, et al. **J Vasc Surg** 1989 May; 9(5):731-5

A reliable approach to the closure of large acquired midline defects of the back. Casas LA, et al. **Plast Reconstr Surg** 1989 Oct;84(4):632-41

Muscle-flap coverage of exposed endoprostheses. Lesavoy MA, et al. **Plast Reconstr Surg** 1989 Jan;83(1):90-9

Repair of the dehisced median sternotomy incision. Miller JI, et al. **Surg Clin North Am** 1989 Oct;69(5):1091-102 (21 ref.)

[Transseptal suture fixation in the management of prosthetic valve dehiscence] Kuribayashi R, et al. **Kyobu Geka** 1989 Jan;42(1):15-8 (Eng. Abstr.) (Jpn)

[A method of suturing the laparotomy wound in postoperative eventration] Izmailov GA, et al. **Vestn Khir** 1988 Jul;141(7):120-2 (Rus)

[Collagenoplasty in surgery of the abdominal wall] Nagibin VI, et al. **Vestn Khir** 1988 May;140(5):61 (Rus)

[Results of the treatment of external gastric and duodenal fistula] Obatnin IuI, et al. **Vestn Khir** 1988 Dec;141(12):20-2 (Eng. Abstr.) (Rus)

[Surgical treatment of postoperative ventral hernia using a modification of the Napalkov method] Uglov FG, et al. **Vestn Khir** 1989 Jan;142(1):100-4 (Eng. Abstr.) (Rus)

[Early reintervention in dehiscence of the anastomosis of the small intestine and colonic perforation at the site of the serous lesion] Dizdarević S, et al. **Acta Chir Iugosl** 1987; 34(1):69-73 (Eng. Abstr.) (Scr)

THERAPY

Hydrocolloid for deep wound dehiscence. Latham W, et al. **J Am Podiatr Med Assoc** 1989 Feb;79(2):74-6

Surgical removal of cyanoacrylate adhesive after accidental instillation in the anterior chamber. Siegal JE, et al. **Ophthalmic Surg** 1989 Mar;20(3):179-81

The use of cyanoacrylate adhesive with a collagen shield in leaking filtering blebs. Weber PA, et al. **Ophthalmic Surg** 1989 Apr;20(4):284-5

Role of interventional radiology in the management of major esophageal leaks. Maroney TP, et al. **Radiology** 1989 Mar; 170(3 Pt 2):1055-7

[Parenteral or enteral hyperalimentation in the treatment of enterocutaneous fistulas?] Wolf G, et al. **Zentralbl Chir** 1988;113(15):973-87 (Eng. Abstr.) (Ger)

SURGICAL WOUND INFECTION

Post-operative wound infection in thoracic patients: a preliminary report. Adebo OA, et al. **Afr J Med Med Sci** 1988 Sep;17(3):145-8

A new cause of chronic meningitis: infected lumbar pseudomeningocele. Koo J, et al. **Am J Med** 1989 Jan; 86(1):103-4

Citrobacter diversus endophthalmitis following penetrating keratoplasty. Insler MS, et al. **Am J Ophthalmol** 1988 Nov 15;106(5):632-3

Post-caesarean wound infection: a review of the risk factors. Webster J. **Aust N Z J Obstet Gynaecol** 1988 Aug; 28(3):201-7 (16 ref.)

Prosthetic vascular graft infections: diagnosis and treatment. Williamson MR, et al. **CRC Crit Rev Diagn Imaging** 1989; 29(2):181-213 (121 ref.)

Necrotizing fasciitis following percutaneous endoscopic gastrostomy [letter] Haas DW, et al. **Gastrointest Endosc** 1988 Nov-Dec;34(6):487-8

Validation of the ASEPSIS method of wound scoring in patients undergoing general surgical operations. Byrne DJ, et al. **J R Coll Surg Edinb** 1988 Jun;33(3):154-5

Candida sp. infection-late complication of a double valve replacement. Szuman JE, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):214-6

[Postoperative infections (letter) (published erratum appears in Ugeskr Laeger 1988 Sep 26;150(39):2358)] Bremmelgard A, et al. **Ugeskr Laeger** 1988 Sep 5;150(36):2130-1 (Dan)

[...fections on foreign material] Leport C. **Presse Med** 1989 Jan 21;18(2):50-2 (Fre)

[Monitoring critically ill patients during transport by helicopter using a patient with abdomen apertum as an example] Mertzlufft FO, et al. **Anaesthesist** 1989 Feb; 38(2):89-94 (Eng. Abstr.) (Ger)

[Wound infection following appendectomy. Metronidazole vs ornidazole as single-dose prophylaxis in non-perforated appendix] Barth A, et al. **Schweiz Med Wochenschr** 1988 Oct 1;118(39):1403-5 (Eng. Abstr.) (Ger)

[Surgical infections in orthopedics: an updating note] Di Scioscio M, et al. **Chir Organi Mov** 1988 Jul-Sep; 73(3):187-93 (16 ref.) (Eng. Abstr.) (Ita)

BLOOD

Reticuloendothelial failure in chronic intra-abdominal sepsis: the role of opsonic fibronectin. Cheslyn-Curtis S, et al. **Br J Surg** 1989 Feb;76(2):161-4

CLASSIFICATION

[A classification of intraocular bacteriologic findings following lens implantation] Wenzel M, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):589-93 (Eng. Abstr.) (Ger)

COMPLICATIONS

Management of difficult sternal closure after sternal infection [letter] Vasu MA, et al. **Ann Thorac Surg** 1989 Aug; 48(2):315

Scarring following herpes simplex infection of postsurgical cutaneous sites. Dzubow LM. **J Dermatol Surg Oncol** 1989 Jan;15(1):65-70

Postoperative fistula following insertion of a penile prosthesis

in a diabetic patient. Bamberger MH, et al. **N Y State J Med** 1989 Jun;89(6):359–60

Occult infections causing persistent low-back pain. Schofferman L, et al. **Spine** 1989 Apr;14(4):417–9

[Condition of the liver in patients operated on for cholelithiasis complicated by infection] Narbutas PV, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):59–62 (Eng. Abstr.) (Rus)

DIAGNOSIS

Failure of preoperative cultures to predict development of Staphylococcus aureus wound infections after cardiac surgery. Taylor G, et al. **Can J Surg** 1989 Mar;32(2):128–30

Ovarian abscess following cesarean section. A case report and review of literature. Bracha J, et al. **Clin Exp Obstet Gynecol** 1988;15(4):134–6 (22 ref.)

Should the temperature chart influence management in cardiac operations? Result of a prospective study in 314 patients. Wilson AP, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):518–23

Diagnosis and management of the infected total knee arthroplasty. Rand JA, et al. **Orthop Clin North Am** 1989 Apr;20(2):201–10 (62 ref.)

[Aspects on the diagnostic relevance of plasma neutral proteinases in cardiology and cardiac surgery] Reichelt D. **Z Med Lab Diagn** 1989;30(1):15–7 (Ger)

[Assessment of specific indicators for determining postoperative infectious complications] Abri O, et al. **Zentralbl Chir** 1988;113(21):1393–405 (Eng. Abstr.) (Ger)

[Diagnosis and treatment of suppurative processes caused by non-clostridial anaerobic microflora] Ofanesian SS. **Khirurgiia (Mosk)** 1989 Jun;(6):68–71 (Eng. Abstr.) (Rus)

DRUG THERAPY

Management of severe incisional abscesses following laparotomy. Early reclosure under cover of metronidazole and ampicillin. Gottrup F, et al. **Arch Surg** 1989 Jun; 124(6):702–4

Reduction in amputation stump infection by antiseptic pre-operative preparation. Payne JE, et al. **Aust N Z J Surg** 1989 Aug;59(8):637–40

Local antiseptic treatment of infected prosthetic vascular grafts in the groin. Moran KT, et al. **Br J Surg** 1988 Oct; 75(10):1037–8

Cefotetan in the treatment of post-operative infections following obstetric and gynecological surgery. Cianci A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):537–8

Myonecrosis of the abdominal wall, complicating radical hysterectomy. Giamarellou H. **Chemioterapia** 1987 Jun;6(2 Suppl):616–8

Combination of ofloxacin and amikacin in the treatment of sternotomy wound infection. Yew WW, et al. **Chest** 1989 May;95(5):1051–5

Ceftriaxone versus clavulanate-potentiated amoxycillin for prophylaxis against post-operative sepsis in biliary surgery: a prospective randomized study in 200 patients. el-Mufti M, et al. **Curr Med Res Opin** 1989;11(6):354–9

Successful treatment of an infected vascular graft with gentamicin beads. Bailey IS, et al. **Eur J Vasc Surg** 1987 Apr;1(2):143–4

How to choose antimicrobials for surgical prophylaxis. Hell K. **J Chemother** 1989 Feb;1(1):24–9 (25 ref.)

Emergence of imipenem-resistant Pseudomonas aeruginosa during treatment of intra-abdominal infection in a patient with ovarian carcinoma. Sze EH, et al. **J Natl Med Assoc** 1988 Oct;80(10):1133–5

Infections after gynecologic surgery. Hemsell DL. **Obstet Gynecol Clin North Am** 1989 Jun;16(2):381–400 (79 ref.)

[Administration of Decaris (levamisole) patients with complicationspón surgical wound healing] Fried M, et al. **Rozhl Chir** 1989 Apr;68(4):294–6 (Eng. Abstr.) (Cze)

[Uses and advantages of a computer-assisted microbiologic diagnosis and database system for antibiotic therapy in surgery] Manncke K, et al. **Langenbecks Arch Chir** 1989; 374(2):77–83 (Eng. Abstr.) (Ger)

[Non-surgical management of an infected ventriculo-atrial shunt] Zink PM, et al. **Neurochirurgia (Stuttg)** 1989 Mar; 32(2):61–4 (Eng. Abstr.) (Ger)

[Local antibiotic therapy in postoperative and post-traumatic osteitis with the Septopal chain] Weise K, et al. **Unfallchirurg** 1988 Sep;91(9):416–21 (Eng. Abstr.) (Ger)

[Antibiotic therapy in hip endoprosthesis surgery] Krismer M. **Wien Klin Wochenschr** 1989 Mar 31;101(7):236–7 (Eng. Abstr.) (Ger)

[Infectious complications in the early phase following kidney transplantation] Spielberger M, et al. **Wien Klin Wochenschr** 1989 Mar 31;101(7):238–41 (Eng. Abstr.) (Ger)

[Pefloxacin in the treatment of severe infections in intensive care] Gritti G, et al. **Minerva Anestesiol** 1988 Sep; 54(9):367–72 (Eng. Abstr.) (Ita)

[A multicenter study in the evaluation of the efficacy and tolerability of cefoperazone in the therapy of postoperative infections of the abdominal region] Paradisi F, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2091–8 (Eng. Abstr.) (Ita)

[Immunomodulators in the complex therapy of newborn infants with suppurative surgical infections] Samsygin SA, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):101–6 (Eng. Abstr.) (Rus)

[Lymphotropic antibiotic therapy] Saidzhanov AS, et al. **Klin Khir** 1989;(1):68–9 (Rus)

[Bilateral deafness after intra-lumbar administration of kanamycin] Blagoveshchenskaia NS, et al. **Zh Vopr Neirokhir** 1988 Jul-Aug;(4):56–7 (Rus)

ECONOMICS

[Prevention of infections in surgery. Costs and benefits of infections of surgical wounds and of their prevention with antibiotics] Germiniani R. **Minerva Chir** 1989 Feb 28; 44(4):789–92 (Ita)

EPIDEMIOLOGY

Clinical review of urinary tract infections and wound infections. Hogarth HJ, et al. **Aust Clin Rev** 1988 Jun; 8(29):83–4

Ten-year computerized audit of infection after abdominal surgery. Krukowski ZH, et al. **Br J Surg** 1988 Sep; 75(9):857–61

The decreasing incidence of postoperative infection rates. Gilmore OJ. **Chemioterapia** 1987 Jun;6(2 Suppl):558–60

Surgeon-specific infection rates [letter] Ferraz EM. **Infect Control Hosp Epidemiol** 1988 Nov;9(11):484

Improved perioperative antibiotic use and reduced surgical wound infections through use of computer decision analysis. Larsen RA, et al. **Infect Control Hosp Epidemiol** 1989 Jul;10(7):316–20

Computer-aided surveillance of surgical infections and identification of risk factors. Bremmelgaard A, et al. **J Hosp Infect** 1989 Jan;13(1):1–18

Postoperative wound infection: relation to different types of operation and wound contamination categories in orthopaedic surgery. Gästrin B, et al. **J Hosp Infect** 1989 May;13(4):387–93

The DANOP-DATA system: a low-cost personal computer based program for monitoring of wound infections in surgical ward. Kjaeldgaard P, et al. **J Hosp Infect** 1989 Apr;13(3):273–9

Infection following caesarean section. Parrott T, et al. **J Hosp Infect** 1989 May;13(4):349–54

Surgical service nosocomial infections at a Veterans Administration medical center. Hinahon J, et al. **J Natl Med Assoc** 1988 Sep;80(9):999–1005

Intra-abdominal sepsis following liver trauma. Bender JS, et al. **J Trauma** 1989 Aug;29(8):1140–4; discussion 1144–5

Predictors of surgical wound infection in Australia: a national study. McLaws ML, et al. **Med J Aust** 1988 Dec 5–19; 149(11–12):591–5

[The Danop Data System for decentralized postoperative surveillance of wound infections] Kjaeldgaard P, et al. **Nord Med** 1989;104(2):48–9, 64 (Eng. Abstr.) (Dan)

[Wound infection following heart surgery] Garne E, et al. **Ugeskr Laeger** 1989 Aug 28;151(35):2192–3 (Eng. Abstr.) (Dan)

[Registration of postoperative wound infections by ADB. A trial of the Danop program] Kjaersgaard E, et al. **Ugeskr Laeger** 1989 Apr 17;151(16):994–6 (Eng. Abstr.) (Dan)

[Late postoperative wound infection] Krogh J, et al. **Ugeskr Laeger** 1989 Jan 9;151(2):100–1 (Eng. Abstr.) (Dan)

[Postoperative wound infections at a mixed surgical department. 1 year's registration employing a PC-based system] Sejberg D, et al. **Ugeskr Laeger** 1989 Apr 17; 151(16):991–4 (Eng. Abstr.) (Dan)

[Adjustment to an ADB infection registration system at a surgical department] Sejbjerg D, et al. **Ugeskr Laeger** 1989 Apr 17;151(16):997–9 (Eng. Abstr.) (Dan)

[Hospital infections. Epidemiological study in a general surgery department] Valente F, et al. **Minerva Chir** 1988 Apr 30;43(8):701–14 (Eng. Abstr.) (Ita)

[Various problems of epidemiology and prevention of suppurative-inflammatory complications in surgery] Olefnik SV, et al. **Vestn Khir** 1988 Oct;141(10):99–101 (Eng. Abstr.) (Rus)

[Registration of postoperative wound infections. A tool for self scrutiny (editorial)] Kahlmeter G, et al. **Lakartidningen** 1989 Aug 23;86(34):2731–2 (Swe)

ETIOLOGY

Bacterial corneoscleritis complicating pterygium excision. Farrell PL, et al. **Am J Ophthalmol** 1989 May 15; 107(5):515–7

Percutaneous endoscopic gastrostomy. New technique—old complications. Steffes C, et al. **Am Surg** 1989 May; 55(5):273–7

Wound infection after breast biopsy. Dixon JM, et al. **Br J Surg** 1988 Sep;75(9):918–9

Relationship between bile colonization, high-risk factors and postoperative sepsis in patients undergoing biliary tract operations while receiving a prophylactic antibiotic. West of Scotland Surgical Infection Study Group. Wells GR, et al. **Br J Surg** 1989 Apr;76(4):374–7

Long-standing indolent blastomycosis at internal opening of tracheostomy. Christie AJ, et al. **Chest** 1989 Apr; 95(4):932–3

Delayed microbial keratitis following radial keratotomy. Insler MS, et al. **CLAO J** 1988 Jul-Sep;14(3):163–4

Disc space infection and vertebral osteomyelitis as a complication of percutaneous lateral discectomy [letter] Onik G, et al. **Clin Orthop** 1989 May;(242):311–2

Early infective complications and late recurrent cancer in stapled colonic anastomoses. Sauven P, et al. **Dis Colon Rectum** 1989 Jan;32(1):33–5 (18 ref.)

Complications following vasectomy. A comparison between Mersilene and autosuture surgiclips. Zeegers AG, et al. **Eur Urol** 1988;14(4):294–7

Infected fractures of the hand and wrist. Szabo RM, et al. **Hand Clin** 1988 Aug;4(3):477–89 (58 ref.)

Effect of prior radiotherapy on postsurgical wound infection. Johnson JT, et al. **Head Neck** 1989 Mar-Apr;11(2):132–6

Corynebacterium JK: surgical infections in non-immunosuppressed patients. Lepape A, et al. **Intensive Care Med** 1988;15(1):23–6

Infection in total joint arthroplasty from distal intravenous lines. A case report. Friedman RJ. **J Arthroplasty** 1988;3 Suppl:S69–71

Recurrent infection of a total hip arthroplasty associated with radiation-induced ulcerative colitis. A case report. Passick J, et al. **J Arthroplasty** 1989;4(1):87–90

Clostridium perfringens infection in a total knee arthroplasty. A case report. Stern SH, et al. **J Arthroplasty** 1988;3 Suppl:S37–40

Infection in bone allografts. Incidence, nature, and treatment [letter] Gaines ST. **J Bone Joint Surg [Am]** 1988 Oct; 70(9):1430–1

Suture problems [letter] Epstein E. **J Cataract Refract Surg** 1989 Jan;15(1):116

Aeromonas hydrophila infection complicating digital replantation and revascularization. Lowen RM, et al. **J Hand Surg [Am]** 1989 Jul;14(4):714–8 (60 ref.)

Non-menstrual toxic shock syndrome complicating orthopaedic surgery [letter] Croall J, et al. **J Infect** 1989 Mar;18(2):195–6

Heterogeneity among isolates of rapidly growing mycobacteria responsible for infections following augmentation mammaplasty despite case clustering in Texas and other southern coastal states. Wallace RJ Jr, et al. **J Infect Dis** 1989 Aug;160(2):281–8

The effect of method of biopsy and timing of mastectomy on the development of postmastectomy nosocomial wound infection. Morris DM, et al. **J La State Med Soc** 1988 Aug; 140(8):37–41

Prosthetic graft infection after aortofemoral grafting for peripheral limb ischaemia [letter] Adamson AS. **J R Coll Surg Edinb** 1988 Dec;33(6):342

Postoperative Pseudomonas urinary tract infections as a source of bacterial contamination of an autogenous vein graft. Campbell DR, et al. **J Vasc Surg** 1987 Mar;5(3):492–4

Glove perforation during sternotomy closure [letter] Hosie KB, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1500

Transport of biologically active material in laser cutting. Frenz M, et al. **Lasers Surg Med** 1988;8(6):562–6

Rhizopus oligosporus as a cause of mucormycosis in man. Tintelnot K, et al. **Mycoses** 1989 Mar;32(3):115–8

Microbial keratitis complicating penetrating keratoplasty. Fong LP, et al. **Ophthalmology** 1988 Sep;95(9):1269–75

Chronic vitritis with macrophagic inclusions. A sequela of treated endophthalmitis due to a coryneform bacterium. Margo CE, et al. **Ophthalmology** 1988 Feb;95(2):156–61

Complications of controlled tissue expansion in the pediatric burn patient. Neale HW, et al. **Plast Reconstr Surg** 1988 Nov;82(5):840–8

Gonococcal wound infection. Rutherford EJ, et al. **South Med J** 1989 Sep;82(9):1194 (3 ref.)

[Suppuration caused by Corynebacterium 12 (letter)] Riche O, et al. **Presse Med** 1989 May 20;18(20):1033–4 (Fre)

[Severe bacterial infections in gynecology and obstetrics] Fuith LC, et al. **Wien Klin Wochenschr** 1989 May 12; 101(10):350–2 (Eng. Abstr.) (Ger)

[Epidemiology of nosocomial infections in urology. 1: Nature and incidence of nosocomial infections in urologic patients] Friedrich M, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):145–8 (Ger)

[Epidemiology of nosocomial infections in urology. 2: Risk of nosocomial infection in urologic patients caused by dispositional influences] Friedrich M, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):149–53 (Ger)

[Effect of age on the incidence of postoperative wound infections] Hopfer F. **Zentralbl Chir** 1988;113(15):968–72 (Eng. Abstr.) (Ger)

[Experiences of postoperative staphylococcal enteritis caused by methicillin-cephem resistant Staphylococcus aureus (MRSA) and the state of the isolation of MRSA] Takahashi M, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):517–23 (Eng. Abstr.) (Jpn)

[Necrotizing fasciitis of the abdominal wall] Czekanowski R, et al. **Ginekol Pol** 1988 Dec;59(12):763–5 (Eng. Abstr.) (Pol)

[Microbiological aspects of suppurative-inflammatory complications (pericultitis) after hysterectomy] Danilov AIu. **Akush Ginekol (Mosk)** 1989 Apr;(4):36–9 (Eng. Abstr.) (Rus)

[Acute appendicitis in patients with diabetes mellitus] Grishchenko EE. **Khirurgiia (Mosk)** 1989 Jun;(6):36–8 (Eng. Abstr.) (Rus)

[Study of regional blood flow in the prognosis of the process of healing of postoperative wounds] Kuleshov EV, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):78–81 (Eng. Abstr.) (Rus)

[Effect of contamination by opportunistic microflora on the incidence of wound infection in a surgical hospital]

Mokhniuk IuN, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):22–3 (Eng. Abstr.) **(Rus)**

[Immunoallergic criteria in the prognosis of suppurative postoperative complications in patients with pulmonary tuberculosis] Morozov VL, et al. **Probl Tuberk** 1988; (10):36–9 (Eng. Abstr.) **(Rus)**

[Errors in the organization of medical services, diagnosis and treatment causing the development of septicemia in patients with suppurative–inflammatory diseases] Dolidze NG, et al. **Vestn Khir** 1989 Jan;142(1):118–20 **(Rus)**

[Postoperative subdiaphragmatic abscesses and their treatment] Gulevskiĭ BA, et al. **Vestn Khir** 1988 Oct; 141(10):102–5 (Eng. Abstr.) **(Rus)**

[Post–splenectomy pancreatitis] Utkin VV, et al. **Vestn Khir** 1988 Jul;141(7):102–5 **(Rus)**

[Prosthetic fungal endocarditis] Zorin AB, et al. **Vestn Khir** 1988 Jul;141(7):70–1 **(Rus)**

[Wound infections after surgery. The interaction of surgical substances and bacteria] Wadström T. **Nord Med** 1989; 104(4):117–8 (Eng. Abstr.) **(Swe)**

HISTORY

[Paul Leopold Friedrich—the founder of primary wound management] Luther B. **Z Arztl Fortbild (Jena)** 1989; 83(5):275–6 **(Ger)**

IMMUNOLOGY

Immune–inflammatory response in infected arthroplasties. Santavirta S, et al. **Acta Orthop Scand** 1989 Feb;60(1):116–8

Tumour necrosis factor and bacterial sepsis. Michie HR, et al. **Br J Surg** 1989 Jul;76(7):670–1 (23 ref.)

A systemic study of enhancement of host defense processes against bacterial infection. Polk HC Jr. **Jpn J Surg** 1988 Nov;18(6):609–14 (14 ref.)

Spontaneous lymphocyte proliferation during trauma and infection. Soop M, et al. **Scand J Immunol** 1988 Dec; 28(6):659–65

[Comparative characteristics of various indicators of body reactivity in patients with septic complications after cesarean section and in women with a normal course of the postoperative period] Khodzhaeva AS, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):57–9 (Eng. Abstr.) **(Rus)**

[A method of early diagnosis of postoperative wound infection] Paevskiĭ SA. **Lab Delo** 1988;(8):55–7 (Eng. Abstr.) **(Rus)**

METABOLISM

[Disorders of protein metabolism in surgical infection] Matveev DV, et al. **Vestn Khir** 1988 May;140(5):130–5 (67 ref.) **(Rus)**

MICROBIOLOGY

Microbiology of wound infection after head and neck cancer surgery. Brook I, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):323–5

Surgical glove perforation. Dodds RD, et al. **Br J Surg** 1988 Oct;75(10):966–8

Wound infection after appendicectomy [letter] Raahave D. **Br J Surg** 1989 Mar;76(3):315

Pseudomonas cepacia keratitis. Levy JH, et al. **Cornea** 1989; 8(1):67–71

Role of aerobic gram–negative rods, anaerobes, and fungi in wound infection after head and neck surgery: implications for antibiotic prophylaxis. Johnson JT, et al. **Head Neck** 1989 Jan–Feb;11(1):27–9

Coagulase–negative staphylococcal infections in vascular surgery: epidemiology and pathogenesis. Edmiston CE Jr, et al. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):111–7 (58 ref.)

Microbiology of postthoractomy sternal wound infection. Brook I. **J Clin Microbiol** 1989 May;27(5):806–7

Wound infection caused by Branhamella catarrhalis. Gray LD, et al. **J Clin Microbiol** 1989 May;27(5):818–20

A bacteriological survey of amputation wound sepsis. Berridge DC, et al. **J Hosp Infect** 1989 Feb;13(2):167–72

Septic complications in relation to factors influencing the gastric microflora in patients undergoing gastric surgery. Sjöstedt S, et al. **J Hosp Infect** 1989 Feb;13(2):191–7

Vascular prosthetic infection with Staphylococcus epidermidis: experimental study of pathogenesis and therapy. Martin LF, et al. **J Vasc Surg** 1989 Mar; 9(3):464–71

Sclerotium formation in an Aspergillus flavus wound infection. Frank KA, et al. **Mycopathologia** 1988 Jun; 102(3):185–8

Nocardia asteroides brain abscess following mastoidectomy. Cox F, et al. **Pediatr Neurol** 1986 May–Jun;2(3):183–4

Multiply beta–lactam resistant Enterobacter cloacae infections linked to the environmental flora in a unit for cardiothoracic and vascular surgery. Andersen BM, et al. **Scand J Infect Dis** 1989;21(2):181–91

[Keratomycosis caused by Candida albicans] Arocker–Mettinger E, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):192–4 (Eng. Abstr.) **(Ger)**

[Pathogen spectrum and resistance status of infections following orthopedic operations—an evaluation of 5 years] Carstens C, et al. **Z Orthop** 1989 May–Jun;127(3):367–70 (Eng. Abstr.) **(Ger)**

[Sensitivity to cephalosporin antibiotics of infectious causative agents in surgery] Bekbergenov BM, et al. **Antibiot Khimioter** 1988 Aug;33(8):597–601 (Eng. Abstr.) **(Rus)**

[Ways of transmitting wound infection pathogens at a hospital] Filippenko LI, et al. **Vrach Delo** 1989 Feb; (2):102–5 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Mycobacterium chelonae scleral abscess after removal of a scleral buckle. Pope J Jr, et al. **Am J Ophthalmol** 1989 May 15;107(5):557–8

Postoperative Trichosporon beigelii soft tissue infection. Greenberg RG, et al. **J Dermatol Surg Oncol** 1989 Apr; 15(4):432–4

PREVENTION & CONTROL

Antibiotic prophylaxis in colorectal surgery. Combined doxycycline–tinidazole vs. doxycycline alone. Gerner T, et al. **Acta Chir Scand** 1989 Feb;155(2):121–4

Failure of topically applied antibiotics, added to systemic prophylaxis, to reduce perineal wound infection in abdominoperineal excision of the rectum. Moesgaard F, et al. **Acta Chir Scand** 1988 Oct;154(10):589–92

Application of immunotherapy in proctosurgery. Skácel V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:335–42

Technician intervention in use of nonformulary antimicrobial agents in the surgical suite. Underhill AL, et al. **Am J Hosp Pharm** 1989 Feb;46(2):312–3

Guideline for use of topical antimicrobial agents. Larson E. **Am J Infect Control** 1988 Dec;16(6):253–66 (124 ref.)

Antibiotic beads in the management of surgical infections. Calhoun JH, et al. **Am J Surg** 1989 Apr;157(4):443–9 (73 ref.)

Current use of skin and wound cleansers and antiseptics. Laufman H. **Am J Surg** 1989 Mar;157(3):359–65 (76 ref.)

Ceftriaxone versus povidone iodine in preventing wound infections following biliary surgery. Kiff RS, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):313–6

Preincisional intraparietal Augmentin in abdominal operations. Pollock AV, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):97–100

Antibiotic prophylaxis in acute nonperforated appendicitis. The Danish Multicenter Study Group III. Bauer T, et al. **Ann Surg** 1989 Mar;209(3):307–11

Antimicrobial prophylaxis for major head and neck surgery in cancer patients. Gerard M, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1557–9

Suppression of colonic microflora by cefoperazone and evaluation of the drug as potential prophylaxis in bowel surgery. Silva M, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):835–8

Prophylactic perioperative use of clindamycin and metronidazole in vaginal hysterectomy without pelvic floor repair. Egarter C, et al. **Arch Gynecol Obstet** 1988; 244(1):53–7

Flucloxacillin compared with cefazolin in short–term prophylaxis for clean orthopedic surgery. Van Meirhaeghe J, et al. **Arch Orthop Trauma Surg** 1989;108(5):308–13

Oral prophylaxis with neomycin and erythromycin in colorectal surgery. More proof for efficacy than failure. Kling PA, et al. **Arch Surg** 1989 Jun;124(6):705–7

A controlled trial on wound drainage in caesarean section. Loong RL, et al. **Aust N Z J Obstet Gynaecol** 1988 Nov; 28(4):266–9

Cephalosporin prophylaxis in abdominal surgery. Ridley PD, et al. **Br J Clin Pract** 1988 Aug;42(8):337–42

Cost–benefit analysis of cephradine and mezlocillin prophylaxis for abdominal and vaginal hysterectomy. Davey PG, et al. **Br J Obstet Gynaecol** 1988 Nov; 95(11):1170–7

Wound sterilization: CO2 laser versus iodine. al–Qattan MM, et al. **Br J Plast Surg** 1989 Jul;42(4):380–4

Preventing wound infection after appendicectomy: a review. Krukowski ZH, et al. **Br J Surg** 1988 Oct;75(10):1023–33 (118 ref.)

Prophylactic antibiotics in elective colorectal surgery. Lau WY, et al. **Br J Surg** 1988 Aug;75(8):782–5

Antibiotic prophylaxis and postoperative sepsis after cholecystectomy [letter] Menzies D, et al. **Br J Surg** 1989 Jul;76(7):764

Infection: prophylaxis. Keighley MR. **Br Med Bull** 1988 Apr; 44(2):374–402 (173 ref.)

Mezlocillin and prophylaxis of postoperative infections in biliary surgery. Balbo G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):592–3

Preventive preoperative chemotherapy with ceftriaxone or cefotaxime in abdominal surgery. Blatzas G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):591

Systemic chemoprophylaxis in pacemaker surgery: a prospective randomized study. Bonini W, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):584–5

Evaluation of mezlocillin versus placebo as a prophylactic agent in cesarean section. Conturso R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):611–3

Intraoperative microbiological sampling is unhelpful after prophylactic antibiotic. Cooper M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):563

Short–term antibiotic prophylaxis in elective oral and maxillofacial surgery with mezlocillin and oxacillin. Dumbach J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):570–2

Results of antibiotic prophylaxis in head and neck surgery. Elies W. **Chemioterapia** 1987 Jun;6(2 Suppl):575–6

Perioperative antibiotic prophylaxis in mandibular fracture treatment. Gerlach K, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):568

Wound sepsis after colorectal surgery: the effect of cefotetan lavage. Greig J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):595–6

Prophylactic use of mezlocillin in acute cholecystitis. Groezinger KH. **Chemioterapia** 1987 Jun;6(2 Suppl):590

One versus three doses of metronidazole/mezlocillin for antibiotic prophylaxis in colon surgery. Grundmann R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):604–5

Single–dose prophylaxis with cefotetan in elective abdominal surgery. A controlled trial. Gruwez JA, et al. **Chemioterapia** 1988 Aug;7(4):218–22

Effectiveness of perioperative prophylaxis with ceftriaxone and cefotaxime in vaginal hysterectomy with and without anterior and/or posterior colporrhaphy. Harms E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):622–3

A prospective comparative study of cefotetan with piperacillin for prophylaxis against infection in elective colorectal surgery. Hershman M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):600

A prospective controlled study of cefotetan versus cefotaxime in the treatment of infections in trauma patients undergoing surgery. Hessler H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):438–9

Surgery prophylaxis with mezlocillin versus other beta–lactams. Isabella V, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):588–9

Single–dose prophylaxis of ceftriaxone versus standard dosage of cefotaxime in the prophylaxis of bacterial complications in orthopedic surgery. Karachalios T, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):573–5

Perioperative prophylaxis and postoperative treatment of pneumonia with oxacillin and acylureidopenicillin in thoracic surgery. Koch A, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):583

The pharmacokinetic properties of cefotetan and its relevance for prophylaxis in elective colorectal surgery. Kujath P, et al. **Chemioterapia** 1988 Aug;7(4):229–32

The results of perioperative prophylaxis in thoracic surgery. Lenz J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):578

Comparison of cefotetan and gentamicin/ampicillin in high–risk biliary tract surgery. McArdle C, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):593–4

Single–shot antibiotic prophylaxis in colon surgery. Mendel V, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):597–600

Perioperative cefotetan one–shot prophylaxis in gynecologic/vaginal and abdominal surgery. Michel RT. **Chemioterapia** 1987 Jun;6(2 Suppl):627–8

A comparison of cefuroxime and cefotetan in the prevention of wound sepsis after gastrointestinal surgery. Morran C, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):586–8

Prophylaxis in gynaecological and obstetric surgery: a comparative randomised multicentre study of single–dose cefotetan versus two doses of cefazolin. Periti P, et al. **Chemioterapia** 1988 Aug;7(4):245–52

Systemic versus systemic plus oral chemoprophylaxis in elective colorectal surgery. Peruzzo L, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):601–3

Single–dose prophylaxis with ceftriaxone and ornidazole in elective colon surgery. Reers B. **Chemioterapia** 1987 Jun; 6(2 Suppl):606–7

Antibiotic prophylaxis of infection after gynecologic surgery: a prospective randomized trial between cefotetan and piperacillin. Regallo M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):624–6

Perioperative prophylaxis in neurosurgery with ceftriaxone. Rehn H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):566–8

Cefotetan vs. cefoxitin in short–term antibacterial prophylaxis in urological surgery. Rizzo M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):609–11

Short–term prophylaxis in thoracic surgery: what regimen? Serrano S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):579–80

Abdominal hysterectomy prophylaxis with mezlocillin. Valsecchi A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):620–1

Flucloxacillin and ceftriaxone in the perioperative prophylaxis of patients undergoing prosthetic hip and knee surgery by a prospective randomized trial. Winter M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):577

Perioperative infection prophylaxis in colon surgery. Wohlfahrt R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):603–4

Study on the efficacy of nosocomial infection control (SENIC Project): results and implications for the future. Hughes JM. **Chemotherapy** 1988;34(6):553–61

Multicenter study of aztreonam in the prophylaxis of colorectal, gynecologic and urologic surgery. Mozzillo N, et al. **Chemotherapy** 1989;35 Suppl 1:58–71

Antibiotic prophylaxis for abdominal hysterectomy. Mele G, et al. **Clin Exp Obstet Gynecol** 1988;15(4):154–6

Antimicrobial prophylaxis for vaginal hysterectomy: comparison of two regimens. Mele G, et al. **Clin Exp Obstet Gynecol** 1988;15(4):174–7

Ultrasound scanning of post–operative wounds [letter] **Clin Radiol** 1988 Nov;39(6):690–1

Intraoperative colonic irrigation with povidone iodine. An effective method of wound sepsis prevention. Banich FE, et al. **Dis Colon Rectum** 1989 Mar;32(3):219–22

Metronidazole vs. erythromycin, neomycin, and cefazolin in prophylaxis for colonic surgery. Khubchandani IT, et al.

Dis Colon Rectum 1989 Jan;32(1):17–20

Intrainsciasonal antibiotic in addition to systemic antibiotic treatment fails to reduce wound infection rates in contaminated abdominal surgery. A controlled clinical trial. Moesgaard F, et al. Dis Colon Rectum 1989 Jan;32(1):36–8

Single-dose cefotetan vs. multiple-dose cefoxitin—antimicrobial prophylaxis in colorectal surgery. Results of a prospective, multicenter, randomized study. Periti P, et al. Dis Colon Rectum 1989 Feb;32(2):121–7

The place of intraoperative antegrade colonic irrigation in emergency left-sided colonic surgery. Saadia R, et al. Dis Colon Rectum 1989 Jan;32(1):78–81 (45 ref.)

Studies on improvement of pharmaceutical preparations prescribed in hospitals. II: Study on pharmaceutical manufacturing of dibekacin sulfate gauze tampon. Namiki N, et al. Drug Des Deliv 1986 Aug;1(1):71–81

Systemic perioperative prophylaxis in elective oncological colorectal surgery: cefotetan versus clindamicin plus aztreonam. Bellantone R, et al. Drugs Exp Clin Res 1988; 14(12):763–6

Chemoprophylaxis in the surgical ward: results of a national survey in Italy. Mozzillo N, et al. Eur J Epidemiol 1988 Sep;4(3):357–9

Selection of pre-operative haematobiochemical parameters for the identification of patients 'at risk of infection' undergoing surgery for gastro-intestinal cancer. Cafiero F, et al. Eur J Surg Oncol 1989 Jun;15(3):247–52

Do preoperative chlorhexidine baths reduce the risk of infection after vascular reconstruction? Earnshaw JJ, et al. Eur J Vasc Surg 1989 Aug;3(4):323–6

Infections and antibiotic prophylaxis in reconstructive vascular surgery. Herbst A, et al. Eur J Vasc Surg 1989 Aug;3(4):303–7

Long acting cephalosporins in surgery. World Congress of the International College of Surgeons. Milan, July 3–9, 1988. Proceedings. Eur Surg Res 1989;21 Suppl 1:1–58

Surgeon-specific wound surveillance: the family or the bean counters? Bryan CS. Infect Control Hosp Epidemiol 1989 Aug;10(8):376–8

Pneumococcal endophthalmitis after corneal transplantation: control by modification of harvesting techniques. Moore PJ, et al. Infect Control Hosp Epidemiol 1989 Mar; 10(3):102–5

Prospective multihospital surveillance studies—a controversy [letter] Simchen E, et al. Infect Control Hosp Epidemiol 1989 Mar;10(3):94–5, 98

Controlled trial of cephradine versus cefuroxime in vascular surgery. Barlow IW, et al. Int J Clin Pharmacol Res 1989; 9(3):223–7

Prophylaxis against post-appendicectomy wound infection. A controlled clinical trial of intravenous (i.v.) metronidazole versus i.v. metronidazole–ampicillin–gentamicin. Grant C, et al. Int Surg 1989 Apr–Jun;74(2):129–32

Effectiveness of antibiotic prophylaxis according to the nutritional status in patients undergoing contaminated procedures. Di Palo S, et al. Ital J Surg Sci 1988; 18(3):223–6

The importance of tissue antibiotic activity in the prevention of operative wound infection. Bergamini TM, et al. J Antimicrob Chemother 1989 Mar;23(3):301–13 (97 ref.)

Prophylaxis in caesarean section with cefmetazole and cefoxitin. Crombleholme WR, et al. J Antimicrob Chemother 1989 Apr;23 Suppl D:97–104

Single-dose cefmetazole versus multiple dose cefoxitin for prophylaxis in abdominal surgery. DiPiro JT, et al. J Antimicrob Chemother 1989 Apr;23 Suppl D:71–7

Prevention of infection after vascular reconstruction. Earnshaw JJ. J Antimicrob Chemother 1989 Apr; 23(4):480–3 (23 ref.)

Amoxycillin–clavulanic acid (Augmentin) antibiotic prophylaxis against wound infections in renal failure patients. Evans CM, et al. J Antimicrob Chemother 1988 Sep;22(3):363–9

Comparison of single-dose cefmetazole and cefotetan prophylaxis in women undergoing primary caesarean section. Galask RP, et al. J Antimicrob Chemother 1989 Apr;23 Suppl D:105–8

A randomized prospective study of antibiotic prophylaxis during abdominal surgery. Gaskill HV 3d, et al. J Antimicrob Chemother 1989 Apr;23 Suppl D:79–83

The role of cephalosporins in surgical prophylaxis. Gorbach SL. J Antimicrob Chemother 1989 Apr;23 Suppl D:61–70 (60 ref.)

Cefmetazole versus cefoxitin in prevention of infections after abdominal surgery. Plouffe JF. J Antimicrob Chemother 1989 Apr;23 Suppl D:85–8

Serum concentrations of cephalosporins and the cell saver in cardiopulmonary bypass surgery [letter] Rooney R, et al. J Antimicrob Chemother 1988 Aug;22(2):266–8

Comparative efficacy and safety of cefmetazole or cefoxitin in the prevention of postoperative infection following vaginal and abdominal hysterectomy. Roy S, et al. J Antimicrob Chemother 1989 Apr;23 Suppl D:109–17

The use of bacitracin irrigation to prevent infection in postoperative skeletal wounds. An experimental study. Rosenstein BD, et al. J Bone Joint Surg [Am] 1989 Mar; 71(3):427–30

Sterile technique and the prevention of wound infection in office surgery—Part I. Sebben JE. J Dermatol Surg Oncol 1988 Dec;14(12):1364–71 (39 ref.)

Sterile technique and the prevention of wound infection in office surgery—Part II. Sebben JE. J Dermatol Surg Oncol 1989 Jan;15(1):38–48 (94 ref.)

Efficacy of perioperative cefamandole with postoperative cephalexin in the primary outpatient treatment of open wounds of the hand. Peacock KC, et al. J Hand Surg [Am] 1988 Nov;13(6):960–4

Antibiotic prophylaxis in transurethral resection of the prostate [letter] J Hosp Infect 1989 Jul;14(1):79–83

A trial of mezlocillin versus cefuroxime with or without metronidazole for the prevention of wound sepsis after biliary and gastrointestinal surgery. Cann KJ, et al. J Hosp Infect 1988 Oct;12(3):207–14

Five days versus one day of penicillin as prophylaxis in elective neurosurgical operations. Cartmill TD, et al. J Hosp Infect 1989 Jul;14(1):63–8

The effect of incisional plastic drapes and redisinfection of operation site on wound infection following caesarean section. Cordtz T, et al. J Hosp Infect 1989 Apr; 13(3):267–72

A prospective randomized trial to compare triple dose mezlocillin with triple dose cefuroxime plus metronidazole as prophylaxis in colorectal surgery. Diamond T, et al. J Hosp Infect 1988 Oct;12(3):215–9

Changes in hygienic procedures reduce infection following caesarean section. Frost L, et al. J Hosp Infect 1989 Feb; 13(2):143–8

A placebo-controlled trial of the effect of two preoperative baths or showers with chlorhexidine detergent on postoperative wound infection rates [letter] Hayek L. J Hosp Infect 1989 Feb;13(2):202–4

Simple peroperative antimicrobial chemoprophylaxis in elective neurosurgical operations. Ingham HR, et al. J Hosp Infect 1988 Oct;12(3):225–33

A placebo-controlled trial of the effect of two preoperative baths or showers with chlorhexidine detergent on postoperative wound infection rates [letter] Rotter ML. J Hosp Infect 1988 Aug;12(2):137–8

Guidelines for the prevention of surgical wound infections. The Hospital Infection Control Group of Thailand. J Med Assoc Thai 1989 Jul;72 Suppl 2:76–7

Ceftriaxone prophylaxis in cardiovascular surgery in children. Sueblinvong V, et al. J Med Assoc Thai 1989 Apr;72(4):218–22

A comparative study of two prophylactic antibiotic regimens in abdominal hysterectomy. Suvonnakote T. J Med Assoc Thai 1988 Aug;71(8):431–5

Implant infections and antibiotic-impregnated silicone rubber coating. Rushton DN, et al. J Neurol Neurosurg Psychiatry 1989 Feb;52(2):223–9

Severe open tibial fractures: a study protocol. Johnson KD, et al. J Orthop Trauma 1988;2(3):175–80

Systemic plus local metronidazole and cephazolin in complicated appendicitis: a prospective controlled trial. el-Sefi TA, et al. J R Coll Surg Edinb 1989 Feb;34(1):13–6

Prevention of vascular prosthetic infection with an antibiotic-bonded Dacron graft. Shue WB, et al. J Vasc Surg 1988 Nov;8(5):600–5

Use of prophylactic antibiotic in clean surgical cases—a prospective trial of various regimens. Sultan S, et al. JPMA 1989 Jan;39(1):9–12

Antimicrobial prophylaxis in ear surgery. Jackson CG. Laryngoscope 1988 Oct;98(10):1116–23

Use of bacitracin for neurotologic surgery. Kartush JM, et al. Laryngoscope 1988 Oct;98(10):1050–4

Prophylaxis in appendicectomy with cefoxitin or ceftriaxone. Lang SD, et al. N Z Med J 1988 Nov 23;101(858):781–3

Clinical trials are usually beneficial to patients and hospitals. Morris WT, et al. N Z Med J 1989 Sep 13;102(875):472–4

Intrathecal infusion test and decrease in shunt revisions and infections. Costabile G, et al. Neurochirurgia (Stuttg) 1988 Jul;31(4):134–5

Efficacy of antibiotic prophylaxis in clean neurosurgical operations. Haines SJ. Neurosurgery 1989 Mar;24(3):401–5 (30 ref.)

Antibiotic prophylaxis. Faro S. Obstet Gynecol Clin North Am 1989 Jun;16(2):279–89 (43 ref.)

Outpatient topical use of povidone-iodine in preparing the eye for surgery. Apt L, et al. Ophthalmology 1989 Mar; 96(3):289–92

Intraoperative controls for bacterial contamination during total knee replacement. Ritter MA. Orthop Clin North Am 1989 Jan;20(1):49–53

Surgical prophylaxis: how far have we really come? Kernodle DS. Pharmacotherapy 1988;8(6 Pt 2):11S–13S (12 ref.)

In vitro release of gentamicin from beads, an original galenic form, and in vivo efficacy in abdomino-perineal surgery. Arminot du Chatelet AM, et al. Pharmazie 1989 Feb; 44(2):131–2

Intrathoracic muscle flaps: a 10-year experience in the management of life-threatening infections. Arnold PG, et al. Plast Reconstr Surg 1989 Jul;84(1):92–8; discussion 99

Surgical prophylaxis and treatment of surgical infections with quinolones. Nord CE. Rev Infect Dis 1989 Jul–Aug;11 Suppl 5:S1287–91 (14 ref.)

Advances in the control of perioperative sepsis in total joint replacement. Maguire JH. Rheum Dis Clin North Am 1988 Dec;14(3):519–35 (103 ref.)

Prevention of infection in colonic surgery by rifaximin. A controlled, prospective, randomized trial. Gruttadauria G, et al. Riv Eur Sci Med Farmacol 1987 Mar;9(1):101–5

Fundamentals in the prophylaxis of septic surgical complications. Midtvedt T. Scand J Gastroenterol Suppl 1988;149:93–101 (34 ref.)

Antibiotic prophylaxis in craniotomy: a prospective double-blind placebo-controlled study. van Ek B, et al. Scand J Infect Dis 1988;20(6):633–9

Routine bile cultures during elective cholecystectomy. Cull DL, et al. South Med J 1988 Nov;81(11):1358–60

Infection and rejection of primary hepatic transplant in 93 consecutive patients treated with triple immunosuppressive therapy. Ascher NL, et al. Surg Gynecol Obstet 1988 Dec; 167(6):474–84

Pharmacodynamics of antibiotic penetration of tissue and surgical prophylaxis. Bergamini TM, et al. Surg Gynecol Obstet 1989 Mar;168(3):283–9 (46 ref.)

Re-emphasis of priorities in surgical antibiotic prophylaxis. Galandiuk S, et al. Surg Gynecol Obstet 1989 Sep; 169(3):219–22

A multicenter study to compare cefotetan alone with cefotetan and metronidazole as prophylaxis against infection in elective colorectal operations. Morton AL, et al. Surg Gynecol Obstet 1989 Jul;169(1):41–5

Five year experience with tape closure of abdominal wounds. Pepicello J, et al. Surg Gynecol Obstet 1989 Oct; 169(4):310–4 (9 ref.)

No effect of topical ampicillin prophylaxis in elective operations of the colon or rectum. Raahave D, et al. Surg Gynecol Obstet 1989 Feb;168(2):112–4

Factors involved in antibiotic selection in elective colon and rectal surgery. Coppa GF, et al. Surgery 1988 Nov; 104(5):853–8

[Anastomoses of the small intestine in a septic environment protected by polyglactin 910–collagen mesh. Experimental study in rats] Siksik JM, et al. Ann Chir 1989;43(3):236–40 (Eng. Abstr.) (Fre)

[Rate reduction of wall abscesses in daily abdominal surgery by repeated lavage with solutions of polyvidone iodine. 4006 cases] Lesur A, et al. Chirurgie 1988;114(2):160–5 (Eng. Abstr.) (Fre)

[Total hip prosthesis with or without preventive use of antibiotics] Demartines N, et al. Helv Chir Acta 1989 Jun; 56(1–2):85–9 (Eng. Abstr.) (Fre)

[Prevention of infection at the operative site: irrigation with iodine derivatives, or NaCl. A prospective and randomized study in general surgery] Oestreicher M, et al. Helv Chir Acta 1989 Jun;56(1–2):133–7 (Eng. Abstr.) (Fre)

[Anti-infection prophylaxis in cardiac surgery: comparison of single-dose ceftriaxone and cefamandole in repeat doses] Badel P, et al. Schweiz Rundsch Med Prax 1989 May 30; 78(22):643–5 (Eng. Abstr.) (Fre)

[Antibiotic treatment in accident surgery. A status determination] Hansis M. Aktuel Traumatol 1988 Jul;18 Suppl 1:81–5 (7 ref.) (Eng. Abstr.) (Ger)

[Hospital health and infectiology in anesthesia and intensive care medicine] Geiss HK, et al. Anasth Intensivther Notfallmed 1989 Jun;24(3):129–32 (8 ref.) (Ger)

[Preventive use of antibiotics in colorectal interventions. Short-term versus one-shot prevention—a multicenter study] Tuchmann A, et al. Fortschr Med 1988 Sep 10; 106(26):537–40 (Eng. Abstr.) (Ger)

[Peri-operative preventive use of antibiotics in abdominal hysterectomy] Fischbach F, et al. Geburtshilfe Frauenheilkd 1988 Dec;48(12):889–92 (Eng. Abstr.) (Ger)

[Preoperative assessment of at-risk patients in traumatology] Bodoky A, et al. Helv Chir Acta 1989 Jun;56(1–2):91–5 (Eng. Abstr.) (Ger)

[Antibiotic prophylaxis in colon surgery: cefazolin (Kefzol–ornidazole (Tiberal) versus cephazolin–placebo] Zuber M, et al. Helv Chir Acta 1989 Jun;56(1–2):211–5 (Eng. Abstr.) (Ger)

[Prevention of infection in implantation of femur head prostheses] Kwasny O, et al. Langenbecks Arch Chir 1989; 374(4):227–31 (Eng. Abstr.) (Ger)

[Evaluation of technical indoor air ventilation systems in operating departments from the health viewpoint] Bahr E, et al. Off Gesundheitswes 1989 Jan;51(1):21–6 (Eng. Abstr.) (Ger)

[Wound infection following appendectomy. Metronidazole vs ornidazole as single-dose prophylaxis in non-perforated appendix] Barth A, et al. Schweiz Med Wochenschr 1988 Oct 1;118(39):1403–5 (Eng. Abstr.) (Ger)

[Risk of infection and prevention of infection in changing the surgical procedure from fixateur externe to tibial intramedullary nailing] Hansis M, et al. Unfallchirurg 1988 Oct;91(10):465–8 (Eng. Abstr.) (Ger)

[Prevention of infection in teflon prostheses for dialysis access. Experiences with a resorbable combined collagen–antibiotic system] Horch R, et al. Vasa 1989; 18(1):30–4 (Eng. Abstr.) (Ger)

[Antibiotic prophylaxis and therapy in the surgical management of closed limb injuries] Kwasny O, et al. Z Unfallchir Versicherungsmed Berufskr 1988;81(1):40–9 (Eng. Abstr.) (Ger)

[Chloramine T solution for intraoperative peritoneal lavage. A statistical analysis] Effenberger T. Zentralbl Chir 1988; 113(15):959–67 (Eng. Abstr.) (Ger)

[Preoperative hemodilution for the prevention of postoperative deep venous thrombosis and early infectious complications in colorectal resections] Vara-Thorbeck R,

et al. **Zentralbl Chir** 1988;113(18):1204–9 (Eng. Abstr.) (Ger)

[Effectiveness of perioperative preventive use of antibiotics with ampicillin/gentamycin or cefotiam in abdominal cesarean section] Gerber B, et al. **Zentralbl Gynakol** 1989; 111(10):658–63 (Eng. Abstr.) (Ger)

[Preventive use of antibiotics in obstetric–gynecologic operations] Gerstner GJ. **Zentralbl Gynakol** 1988; 110(19):1218–23 (6 ref.) (Eng. Abstr.) (Ger)

[Follow-up and wound healing following cesarean section with prophylactic use of Vagimid in comparison with the puerperal course without the use of Vagimid] Sokolowski H, et al. **Zentralbl Gynakol** 1989;111(7):461–5; discussion 466–8 (Eng. Abstr.) (Ger)

[Antibiotic prophylaxis in cesarean section using a single dose of rocephin] Nagy P, et al. **Orv Hetil** 1989 May 14; 130(20):1053–5 (Eng. Abstr.) (Hun)

[Antibiotic prophylaxis in elective cholecystectomy: comparison of ceftriaxone and cefotaxime (controlled clinical research)] Germiniani R, et al. **Ann Ital Chir** 1988; 60(1):75–9 (Eng. Abstr.) (Ita)

[Prevention of postoperative infections] Lupo L. **Ann Ital Chir** 1988;60(1):29–34 (Ita)

[Use of azlocillin–mezlocillin combinations in orthopedic surgery prophylaxis] Broggi S. **Boll Chim Farm** 1988 Nov–Dec;127(11–12):65S–66S (Eng. Abstr.) (Ita)

[Antimicrobial chemoprophylaxis with ceftriaxone in surgical implantation of a non-cemented hip prosthesis: comparison of 2 dosage schemes] Centulio F, et al. **Chir Organi Mov** 1988 Oct–Dec;73(4):357–61 (Eng. Abstr.) (Ita)

[Use of cefotetan in antibiotic prevention in gynecologic surgical interventions] Signorelli C, et al. **Clin Ter** 1988 Jun 15;125(5):345–51 (Eng. Abstr.) (Ita)

[Antibiotic prevention of surgical infections] Dominioni L, et al. **Medicina (Firenze)** 1989 Jan–Mar;9(1):1–8 (11 ref.) (Eng. Abstr.) (Ita)

[Preoperative topical antibiotics in patients subjected to short term prophylaxis for colorectal surgery] Di Palo S, et al. **Minerva Chir** 1989 Mar 31;44(6):1029–31 (Eng. Abstr.) (Ita)

[Use of sodium cefoxitin in the prevention of infections in patients subjected to general surgery] Giron GP, et al. **Minerva Chir** 1988 Nov 30;43(22):1959–62 (Eng. Abstr.) (Ita)

[Prevention of surgical infections] Perrone G, et al. **Minerva Chir** 1988 Oct 31;43(20):1721–8 (Eng. Abstr.) (Ita)

[Comparison of multidose cefazolin and single-dose ceftriaxone in antibiotic prophylaxis in a general surgery department] Sartori CA, et al. **Minerva Chir** 1988 Jun 15; 43(11):965–7 (Eng. Abstr.) (Ita)

[Comparative study of short-term antimicrobial chemoprophylaxis in gynecologic surgery: cefotetan versus cefazolin] Baldoni A, et al. **Minerva Ginecol** 1989 Mar; 41(3):149–55 (45 ref.) (Eng. Abstr.) (Ita)

[Use of ceftriaxone in short-term antimicrobial chemoprophylaxis in gynecologic surgery] Consiglio GC, et al. **Minerva Ginecol** 1988 Aug;40(8):475–9 (42 ref.) (Eng. Abstr.) (Ita)

[Cefotiam concentration in the peritoneum in infants during surgery] Obata K, et al. **Jpn J Antibiot** 1989 Apr; 42(4):1014–6 (Eng. Abstr.) (Jpn)

[Preventive administration of antibiotics before cesarean section conducted after premature rupture of fetal membranes] Krasnodębski J, et al. **Przegl Lek** 1988; 45(4):374–7 (Eng. Abstr.) (Pol)

[Effectiveness of antibiotic therapy in a case of an unknown infective factor after surgery of the abdominal cavity] Witkiewicz W, et al. **Wiad Lek** 1988 Oct 15;41(20):1351–6 (Eng. Abstr.) (Pol)

[Comparative evaluation of various methods of preventing infectious complications after planned gynecologic surgery] Evseev AA. **Akush Ginekol (Mosk)** 1989 Apr;(4):33–6 (Rus)

[Use of biocompatible resorbable films and medicinal plates in vascular surgery] Lemenev VL, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):100–3 (Eng. Abstr.) (Rus)

[Prevention and treatment of postoperative wound suppuration in destructive appendicitis and peritonitis in children] Roshal' LM, et al. **Khirurgiia (Mosk)** 1988 Jul; (7):120–5 (Rus)

[Surgical drainage in the treatment of suppurative postoperative wounds and cavities (review of the literature)] Tolstykh PI, et al. **Khirurgiia (Mosk)** 1989 May; (5):133–9 (133 ref.) (Rus)

[Prevention of infectious complications in vascular surgery] Polous IuM, et al. **Klin Khir** 1988;(7):65–6 (Rus)

[Antibacterial sutures "Capromed DQ" in abdominal surgery] Polous IuM, et al. **Klin Khir** 1989;(1):13–5 (Eng. Abstr.) (Rus)

[Prevention of suppuration of surgical wounds] Tsybin AA, et al. **Klin Khir** 1989;(1):64–5 (Rus)

[Immunological approaches to the prevention of suppurative postoperative complications in patients with pulmonary tuberculosis] Morozov VL, et al. **Probl Tuberk** 1988; (7):37–9 (Eng. Abstr.) (Rus)

[Use of taktivin in postoperative intensive therapy in oncology] Gadalov VP, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):68–73 (Eng. Abstr.) (Rus)

[Enterosorption in the preparation of patients for surgery of the large intestine] Beliakov NA, et al. **Vestn Khir** 1989 Feb;142(2):30–3 (Eng. Abstr.) (Rus)

[On the 120th anniversary of the antiseptic method of Joseph Lister (1867–1987)] Breido IS. **Vestn Khir** 1988 May; 140(5):123–5 (Rus)

[Prevention of suppurative complications after a trans-sternal approach to the organs of the anterior mediastinum] Chupryna VV, et al. **Vestn Khir** 1988 Sep;141(9):52–3 (Rus)

[Prevention of wound suppuration after appendectomy] Riabukhin IA, et al. **Vestn Khir** 1988 Sep;141(9):61–2 (Rus)

[Possible correction of chemotactic activity of peripheral blood leukocytes before surgical treatment of patients with chronic pneumonia] Sel'vashchuk AP, et al. **Vestn Khir** 1988 Jun;140(6):130–1 (Rus)

[Use of kanoxicel, hemostatic viscose and gauze and feracryl in otorhinolaryngologic practice] Nasyrov VA, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):78–9 (Rus)

[Organizational problems of preventing hospital infection in a department of suppurative surgery] Peregudov IG, et al. **Voen Med Zh** 1988 Jun;(6):53–4 (Rus)

[Discriminant analysis of risk factors of postoperative infections in gastroduodenal surgery] Bolufer Cano JM, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):645–50 (Eng. Abstr.) (Spa)

[Antibiotic prevention in gastroduodenal surgery] Bolufer Cano JM, et al. **Rev Esp Enferm Apar Dig** 1989 Jan; 75(1):47–52 (Eng. Abstr.) (Spa)

[Wound infections after surgery—hospital hygiene] **Lakartidningen** 1988 Dec 7;85(49):4342–6 (Swe)

[Registration of postoperative wound infections—a method to prevent infections] Darle N, et al. **Lakartidningen** 1989 Aug 23;86(34):2779–81 (Swe)

RADIOGRAPHY

Confirmation of infection of an aortic graft. Harris KA, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):230–2

[Contribution of imaging in complications of colo–anal anastomoses. Apropos of 61 cases] Bléry M, et al. **J Radiol** 1989 Feb;70(2):69–74 (Eng. Abstr.) (Fre)

[Infectious damage to the intervertebral disk—before and following discotomy] Weber M. **Z Orthop** 1988 Sep–Oct; 126(5):555–62 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

Radioisotope imaging in the evaluation of vascular grafts [letter] Carlson GL, et al. **Br J Surg** 1989 Jul;76(7):765

Utility of the indium 111-labeled human immunoglobulin G scan for the detection of focal vascular graft infection. LaMuraglia GM, et al. **J Vasc Surg** 1989 Jul;10(1):20–7; discussion 27–8

99Tcm hexamethylpropyleneamineoxime-labelled leucocyte scanning for detection of infection in orthopaedic surgery—first results. Winker KH, et al. **Nucl Med Commun** 1988 Oct;9(10):771–4

99mTc-leukocyte scintigraphy in prosthetic vascular graft infections. Vorne M, et al. **Nuklearmedizin** 1989 Jun; 28(3):95–9

Postoperative infection with the automatic implantable cardioverter defibrillator: clinical presentation and use of the gallium scan in diagnosis. Kelly PA, et al. **PACE** 1988 Aug;11(8):1220–5

[Diagnosis of infection in surgery of the locomotor system with Tc-99m-HMPAO leukocyte scintigraphy] Winker KH, et al. **Langenbecks Arch Chir** 1989;374(4):200–7 (Eng. Abstr.) (Ger)

RADIOTHERAPY

[Clinico-morphologic validation of the therapeutico-prophylactic use of decimeter waves following obstetric surgery] Zheleznova EB, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar-Apr; (2):51–3 (Rus)

SURGERY

Polypropylene mesh closure of infected abdominal wounds. Jones JW, et al. **Am Surg** 1989 Jan;55(1):73–6

Salvage of the infected groin vascular graft with muscle flaps. Mahoney J. **Ann Plast Surg** 1989 Mar;22(3):252–6

The management of infected median sternotomy wounds. Martin RD. **Ann Plast Surg** 1989 Mar;22(3):243–51

Delayed primary closure after sternal wound infection. Johnson JA, et al. **Ann Thorac Surg** 1989 Feb;47(2):270–3

Treatment of median sternotomy wound infection and sternal necrosis in an infant. Terranova W, et al. **Ann Thorac Surg** 1989 Jul;48(1):122–3

Femorofemoral cross-perineal infrascrotal bypass [letter] Johnson HA, et al. **Ann Vasc Surg** 1988 Oct;2(4):425

Obturator bypass with nonreversed translocated saphenous vein. Panetta T, et al. **Ann Vasc Surg** 1989 Jan;3(1):56–62

Arthroscopic irrigation and debridement of infected total knee arthroplasty: report of two cases. Flood JN, et al. **Arthroscopy** 1988;4(3):182–6

Management of infection after prosthetic abdominal rectopexy (Wells' procedure). Ross AH, et al. **Br J Surg** 1989 Jun;76(6):610–2

Successful treatment of early, postoperative, necrotizing infection of the abdominal wall. Howard CA, et al. **Crit Care Med** 1989 Jun;17(6):586–7

Groin infections following vascular surgery: obturator bypass (BYP) versus "biologic coverage" (TRP)—a comparative analysis. Kretschmer G, et al. **Eur J Vasc Surg** 1989 Feb; 3(1):25–9

Transposition of the sartorius muscle in the treatment of infected vascular grafts in the groin. Laustsen J, et al. **Eur J Vasc Surg** 1988 Apr;2(2):111–3

Exposed subcutaneous vein graft in the calf: coverage by conversion to a deep anatomic position. Eldrup-Jorgensen J, et al. **J Vasc Surg** 1989 Mar;9(3):502–4

Rotational muscle flaps: a new technique for covering infected vascular grafts. Mixter RC, et al. **J Vasc Surg** 1989 Mar;9(3):472–8

Improved management of aortic graft infection: the influence of operation sequence and staging. Reilly LM, et al. **J Vasc Surg** 1987 Mar;5(3):421–31

Managing the patient with infection around a polyurethane implant [letter] Gruver D. **Plast Reconstr Surg** 1989 May; 83(5):927

Primary treatment of the infected sternotomy wound with muscle flaps: a review of 211 consecutive cases. Nahai F, et al. **Plast Reconstr Surg** 1989 Sep;84(3):434–41

Reconstruction of large cranial defects in the presence of heavy radiation damage and infection utilizing tissue transferred by microvascular anastomoses. Robson MC, et al. **Plast Reconstr Surg** 1989 Mar;83(3):438–42

Reconstruction of infant thoracic wounds. Stahl RS, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1000–11

The pectoralis major flap for reconstruction of septic wounds. Joseph CA, et al. **S Afr J Surg** 1988 Sep; 26(3):107–9

[Therapy of joint infections] Hansis M, et al. **Aktuel Traumatol** 1988 Aug;18(4):160–2 (12 ref.) (Eng. Abstr.) (Ger)

[Postoperative wound infection in trauma surgery] Knapp U. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:76–80 (11 ref.) (Eng. Abstr.) (Ger)

[Observations on post-traumatic osteitis] Stuhldreier G, et al. **Aktuel Traumatol** 1989 Feb;19(1):28–34 (Eng. Abstr.) (Ger)

[Change in the therapeutic concept of deep wound infection following vascular surgery interventions] Hepp W, et al. **Chirurg** 1989 May;60(5):340–5 (Eng. Abstr.) (Ger)

[Multi-sided free transplants for closure of multifocal tissue defects] Steinau HU, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):23–5 (Eng. Abstr.) (Ger)

[Treatment of infected total hip endoprostheses] Zilkens KW, et al. **Unfallchirurg** 1989 Jul;92(7):352–7 (Eng. Abstr.) (Ger)

[Revision interventions in aseptic and infected loose knee endoprostheses] Trepte CT, et al. **Z Orthop** 1989 May–Jun; 127(3):315–21 (Eng. Abstr.) (Ger)

[Basic principles of the treatment of inflammatory processes in surgical patients] Podilchak MD, et al. **Klin Khir** 1989; (1):47–52 (61 ref.) (Rus)

[Suppurative-inflammatory complications after emergency surgery of the abdominal organs as a cause of repeated hospital admissions] Shapiro IaL, et al. **Klin Khir** 1989; (1):52–3 (Rus)

[Radical treatment of patients with deep wound suppuration after appendectomy] Shepelev VG, et al. **Klin Khir** 1989; (4):73–4 (Rus)

[Reconstructive operations in suppurative and septic complications of vascular surgery] Lemenev VL, et al. **Vestn Khir** 1988 Jul;141(7):57–60 (Eng. Abstr.) (Rus)

[Obturator shunting in suppuration of vascular prostheses] Zatevakhin II, et al. **Vestn Khir** 1988 Jun;140(6):35–8 (Eng. Abstr.) (Rus)

THERAPY

Infection management in total hip replacement. Härle A. **Arch Orthop Trauma Surg** 1989;108(2):63–71

Effects of interferon-gamma treatment on surgically simulated wound infection in mice. Hershman MJ, et al. **Microb Pathog** 1988 Feb;4(2):165–8

"Conservative" treatment of intra-abdominal complications after total gastrectomy with interventional radiological techniques. Jähne J, et al. **Surg Endosc** 1989;3(1):16–20

[Experiences with a new fat emulsion in surgical intensive care medicine] Mertes N, et al. **Infusionstherapie** 1989 Jun; 16(3):114–7 (Eng. Abstr.) (Ger)

[Treatment of infections of the deep soft tissues in reconstructive vascular surgery] Pallua N, et al. **Minerva Chir** 1989 Apr 30;44(8):1197–202 (Eng. Abstr.) (Ita)

[Ambulatory treatment of suppurative wounds with cooled glycerin] Bozhenkov IuG. **Khirurgiia (Mosk)** 1989 Jun; (6):72–4 (Eng. Abstr.) (Rus)

[Effect of low- and moderate-frequency ultrasonic waves on the course of suppurative wound process] Pavlov IuI. **Khirurgiia (Mosk)** 1989 Jun;(6):62–5 (Eng. Abstr.) (Rus)

[Use of the indices of the kallikrein-kinin system of the blood in evaluating the efficacy of the prevention and treatment of postoperative purulent complications in oncologic patients] Kaban AP, et al. **Klin Khir** 1989;(5):10–2 (Eng. Abstr.) (Rus)

[Complex therapy of suppurative wounds with jet-aerosol ultrasonic treatment and transcutaneous electro-neurostimulation] Bashirov EB, et al. **Sov Med** 1988;(7):99–102 (Rus)

[Sorption methods and laser irradiation in the treatment of suppurative and septic diseases] Dedenko IK, et al. **Vestn Khir** 1989 Mar;142(3):12–6 (Eng. Abstr.) **(Rus)**
[Preformed physical factors in the prevention and treatment of wound infection after obstetrical operations] Zheleznova EB, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun;(3):75–7 (55 ref.) **(Rus)**

TRANSMISSION

Dangers of "eye–to–eye" contact [letter] Hibberd PL, et al. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):99–101
Analysis of matched samples. Woolson RF, et al. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):123–6

VETERINARY

Factors affecting incisional complication rates associated with colic surgery in horses: 78 cases (1983–1985). Kobluk CN, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):639–42
Prevention and control of surgical wound infection. Romatowski J. **J Am Vet Med Assoc** 1989 Jan 1; 194(1):107–14 (70 ref.)
Infection rates in contaminated surgical procedures: a comparison of prophylactic treatment for one day or four days. Klein WR, et al. **Vet Rec** 1988 Nov 26;123(22):564–6
Infection rates in clean surgical procedures with and without prophylactic antibiotics. Klein WR, et al. **Vet Rec** 1988 Nov 19;123(21):542–3
The timing of antibiotic administration for antimicrobial prophylaxis in surgery [editorial] Rosin E. **Vet Surg** 1988 Jul–Aug;17(4):181
Antimicrobial susceptibility of microorganisms isolated from equine orthopedic patients. Snyder JR, et al. **Vet Surg** 1987 May–Jun;16(3):197–201
Scalpel blade contamination with skin bacteria during orthopedic and neurosurgical procedures in dogs. Straw RC, et al. **Vet Surg** 1987 Jan–Feb;16(1):25–30
Surgical wound infection rates in dogs and cats. Data from a teaching hospital. Vasseur PB, et al. **Vet Surg** 1988 Mar–Apr;17(2):60–4

SURGICENTERS

Are there ethical problems posed by multiple small transplant centres? Morris PJ. **Transpl Int** 1988 Apr;1(1):47–8
[Liver transplantation—the experience of the center in Cambridge (England)] Ninkov P. **Khirurgiia (Sofiia)** 1988; 41(5):84–7 **(Bul)**
[Means of improving the practical training of subordinate surgeons at a surgical clinic] Gusak VK, et al. **Klin Khir** 1988;(11):36–8 **(Rus)**

MANPOWER

Opening an outpatient facility. Conducting a mock run. Walz MJ. **AORN J** 1989 Sep;50(3):583–5

ORGANIZATION & ADMINISTRATION

[Ways of increasing surgical activity at a polyclinic] Malinovskiĭ NN, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):3–5 (Eng. Abstr.) **(Rus)**
[Experience using automated medical history records in a cardiosurgical clinic] Burakovskiĭ VI, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):70–7 (Eng. Abstr.) **(Rus)**
[Work experience at a one–day pediatric surgical hospital] Gaprindashvili DN, et al. **Vestn Khir** 1988 Aug; 141(8):115–7 **(Rus)**
[Pediatric surgical one–day hospital] Pulatov AT, et al. **Vestn Khir** 1988 May;140(5):99–102 (Eng. Abstr.) **(Rus)**
[Interprovince neurosurgical centers in the RSFSR] Lebedev ED. **Zh Vopr Neirokhir** 1988 Nov–Dec;(6):47–8 **(Rus)**

STANDARDS

Quality assurance guidelines. Developing standards for a freestanding ambulatory surgery unit. King PL. **AORN J** 1989 Jul;50(1):98–102

SURROGATE MOTHERS see under MOTHERS

SURVEY METHODS see DATA COLLECTION

SURVIVAL

Attitudes toward death in adolescent offspring of Holocaust survivors: a comparison of Israeli and American adolescents. Schneider S. **Adolescence** 1988 Fall; 23(91):703–10
Mourning and longing from generation to generation. Shoshan T. **Am J Psychother** 1989 Apr;43(2):193–207
Toward a psychology of human survival: psychological approaches to contemporary global threats. Walsh R. **Am J Psychother** 1989 Apr;43(2):158–80 (76 ref.)
Assessment of the survivors of major trauma accidents. Horne G, et al. **Aust N Z J Surg** 1989 Jun;59(6):465–70
Experiences of rocket seat ejections in the Swedish Air Force: 1967–1987. Sandstedt P. **Aviat Space Environ Med** 1989 Apr;60(4):367–73
Object relations, Holocaust survival and family therapy. Müller UF, et al. **Br J Med Psychol** 1989 Mar;62 (Pt 1):13–21
Psychological distress of Holocaust survivors and offspring in Israel, forty years later: a review. Dasberg H. **Isr J Psychiatry Relat Sci** 1987;24(4):243–56 (54 ref.)
Imagining and remembering. Kestenberg JS. **Isr J Psychiatry Relat Sci** 1987;24(4):229–41
Forty years later: long–term consequences of massive traumatization as manifested by Holocaust survivors from the city and the Kibbutz. Nadler A, et al. **J Consult Clin Psychol** 1989 Apr;57(2):287–93
Do we survive with survival suits? Herrmann R. **J R Nav Med Serv** 1988 Winter;74(3):147–51
Prolonged human survival alone at sea: a prospective study. Mallory DL, et al. **Milit Med** 1988 Sep;153(9):459–64
Child survivors of the holocaust. **Psychoanal Rev** 1988 Winter;75(4):495–662
Intergenerational group therapy: child survivors of the Holocaust and offspring of survivors. Fogelman E. **Psychoanal Rev** 1988 Winter;75(4):619–40
The analysis of a latency–age survivor of the Holocaust. Haber CH. **Psychoanal Rev** 1988 Winter;75(4):641–51
Child survivors of the Holocaust. Kestenberg JS. **Psychoanal Rev** 1988 Winter;75(4):495–7
The sense of belonging and altruism in children who survived the Holocaust. Kestenberg M, et al. **Psychoanal Rev** 1988 Winter;75(4):533–60
Technological disaster—survival and bereavement. Hodgkinson PE. **Soc Sci Med** 1989;29(3):351–6
[Psychological sequelae of persecution. The survivor syndrome] Peters UH. **Fortschr Neurol Psychiatr** 1989 May; 57(5):169–91 (160 ref.) (Eng. Abstr.) **(Ger)**
[The "birth" of a living infant after compression of the pregnant uterus in automobile trauma] Kononenko VI, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):48–9 **(Rus)**

SUSPENDING AGENTS see EXCIPIENTS

SUSPENSIONS

Proliferation and maturation of human erythroid progenitors in liquid culture. Fibach E, et al. **Blood** 1989 Jan;73(1):100–3

SUSTAINED–RELEASE PREPARATIONS see DELAYED–ACTION PREPARATIONS

SUTURE TECHNICS

The effect of suture removal on postkeratoplasty astigmatism [letter] Binder PS. **Am J Ophthalmol** 1988 Oct 15;106(4):507
Corneal compression sutures for the reduction of astigmatism after penetrating keratoplasty. Limberg MB, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):36–42
Eversion of difficult ileostomies by guy rope suture technique. Kittur DS, et al. **Am J Surg** 1989 Jun; 157(6):593–4
Incisional closure in morbidly obese patients. Cleveland RD, et al. **Am Surg** 1989 Jan;55(1):61–3
Early laparotomy wound dehiscence: a randomized comparison of three suture materials and two methods of fascial closure. Savolainen H, et al. **Ann Chir Gynaecol** 1988;77(3):111–3
Repair of parallel lacerations and flaps [letter] Arthur DC. **Ann Emerg Med** 1988 Nov;17(11):1263
The dermal pursestring suture: a new technique for a short inframammary scar in reduction mammaplasty and dermal mastopexy. Marconi F. **Ann Plast Surg** 1989 Jun; 22(6):484–93; discussion 494
"Insert sutures first, tie later": new microvascular anastomosis techniques. Tark KC, et al. **Ann Plast Surg** 1989 Apr; 22(4):343–6
Pain quantum and wound healing: a comparison of interrupted inversion PDS and standard nylon sutures in abdominal skin closure. Cassie AB, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):339–42
To stitch or not to stitch the fat? Ferris BD, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):115–6
Pain quantum and wound healing: a comparison of interrupted inversion PDS and standard nylon sutures in abdominal skin closure [letter] Johnson CD. **Ann R Coll Surg Engl** 1989 Mar;71(2):145
Interlocking figure–of–8 closure of the sternum. Di Marco RF Jr, et al. **Ann Thorac Surg** 1989 Jun;47(6):927–9
Freehand homograft aortic valve replacement—the learning curve: a technical analysis of the first 31 patients. Jones EL. **Ann Thorac Surg** 1989 Jul;48(1):26–32
Aortic stump closure: a new technique. Bacourt F, et al. **Ann Vasc Surg** 1986 Sep;1(2):271–2
Closure of wounds under tension. The horizontal mattress suture. Coldiron BM. **Arch Dermatol** 1989 Sep; 125(9):1189–90
Fixation of posterior chamber lenses by transscleral sutures: technique and preliminary results [letter] Grehn F, et al. **Arch Ophthalmol** 1989 Jul;107(7):954–5
Scleral–fixated intraocular lenses [letter] Malbran ES, et al. **Arch Ophthalmol** 1988 Oct;106(10):1347–8
Transcleral ciliary sulcus fixation of posterior chamber intraocular lens implants. Agapitos PJ, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):169–72
Complicated strabismus and adjustable sutures. Pratt–Johnson JA. **Aust N Z J Ophthalmol** 1988 May; 16(2):87–92
A simple teaching model for mucoperiosteal flaps and suturing techniques. Anwar M, et al. **Br Dent J** 1989 Jan 21;166(2):38
Suturing techniques in periodontal surgery. Galgut PN. **Br Dent J** 1989 Jul 8;167(1):29–31
Stapling v. sutures for anastomoses [letter] Dowse J. **Br J Hosp Med** 1988 Jul;40(1):80
Stabilisation of refraction following cataract surgery. Baranyovits PR. **Br J Ophthalmol** 1988 Nov;72(11):815–9
Stability of one–stage adjustable suture for the correction of horizontal strabismus. Chow PC. **Br J Ophthalmol** 1989 Jul;73(7):541–6
Treatment of ptosis by levator resection with adjustable sutures via the anterior approach. Hylkema HA, et al. **Br J Ophthalmol** 1989 Jun;73(6):416–8
Proposition for a new continuous suturing technique for microvascular anastomosis: a comparative study. Adani A, et al. **Br J Plast Surg** 1988 Sep;41(5):506–8
The stretched scar: the benefit of prolonged dermal support. Elliot D, et al. **Br J Plast Surg** 1989 Jan;42(1):74–8
Loop mattress suture' [letter] Bandoh Y. **Br J Surg** 1989 Jan;76(1):103
Continuous single–layer gastrointestinal anastomosis: a prospective audit. Sarin S, et al. **Br J Surg** 1989 May; 76(5):493–5
Techniques for better suturing. Seki S. **Br J Surg** 1988 Dec; 75(12):1181–4
Method for securing suction drains. Stacey–Clear A, et al. **Br J Surg** 1988 Dec;75(12):1195
A more realistic way of practising surgical knots using a surgical glove. Younger AS, et al. **Br J Surg** 1989 Apr; 76(4):347
Meniscal suture. An experimental study in the dog. Kawai Y, et al. **Clin Orthop** 1989 Jun;(243):286–93
Visual loss following suture removal postkeratoplasty. Spigelman AV, et al. **Cornea** 1988;7(3):214–7
Tips for wound closure. Pearls for minimizing dog–ears and applications of periosteal sutures. Zitelli JA. **Dermatol Clin** 1989 Jan;7(1):123–8
Operator safety and skin biopsy in HIV–seropositive patients [letter] Green ST, et al. **Dermatologica** 1988;177(4):247
Rectal anastomosis with application of luminal fibrin adhesive in the rectum of dogs. An experimental study. Hjortrup A, et al. **Dis Colon Rectum** 1989 May;32(5):422–5
Suture or graft? Changing trends in melanoma wound closure. Pritchard GA, et al. **Eur J Surg Oncol** 1988 Oct; 14(5):371–7
Stabilizing sutures for percutaneous endoscopic gastrostomy. Rogers BH, et al. **Gastrointest Endosc** 1989 May–Jun; 35(3):241–3
Comparative study of single layer and conventional closure of uterine incision in cesarean section. Lal K, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):349–52
Practical aspects of the adjustable suture technique for strabismus surgery. Wright KW. **Int Ophthalmol Clin** 1989 Spring;29(1):10–5
Arthroscopic suture of peripheral meniscal tears. Johannsen HV, et al. **Int Orthop** 1988;12(4):287–90
Ventricular entrapment of a Swan–Ganz catheter: a technique for nonsurgical removal. Lazzam C, et al. **J Am Coll Cardiol** 1989 May;13(6):1422–4
Fabrication of a teaching aid for dental soft tissue management and suturing. Meyer RD, et al. **J Am Dent Assoc** 1989 Mar;118(3):345–6
Prevention and treatment of postimplantation astigmatism. Cory CC. **J Cataract Refract Surg** 1989 Jan;15(1):58–60
Suture marking device [letter] Frank MG. **J Cataract Refract Surg** 1989 Jan;15(1):115
Astigmatism control for the cataract surgeon: a comprehensive review of surgically tailored astigmatism reduction (STAR). Maloney WF, et al. **J Cataract Refract Surg** 1989 Jan;15(1):45–54 (15 ref.)
Keratorefractive aspects of the scleral pocket incision and closure method for cataract surgery. Masket S. **J Cataract Refract Surg** 1989 Jan;15(1):70–7 (30 ref.)
Refilling the lens of the rabbit eye after intercapsular cataract surgery using an endocapsular balloon and an anterior capsule suturing technique. Nishi O. **J Cataract Refract Surg** 1989 Jul;15(4):450–4
Induced astigmatism in small incision cataract surgery. Shepherd JR. **J Cataract Refract Surg** 1989 Jan;15(1):85–8
The buried running dermal subcutaneous suture technique. Ftaiha Z, et al. **J Dermatol Surg Oncol** 1989 Mar; 15(3):264–6
The application of the tie–down suture to the excision of cutaneous tumors. Ocampo J, et al. **J Dermatol Surg Oncol** 1988 Dec;14(12):1357–60
The subcutaneous stitch revisited [letter] Presser SE. **J Dermatol Surg Oncol** 1989 Mar;15(3):342
The shorthand vertical mattress stitch—a rapid skin everting suture technique. Snow SN, et al. **J Dermatol Surg Oncol** 1989 Apr;15(4):379–81
Reusable loop stitches for inspection of grafts. Snow SN, et al. **J Dermatol Surg Oncol** 1989 Aug;15(8):799–801
Buried vertical mattress suture. Zitelli JA, et al. **J Dermatol Surg Oncol** 1989 Jan;15(1):17–9
Comparative mechanical analysis of a looped–suture tendon repair. Haddad RJ Jr, et al. **J Hand Surg [Am]** 1988 Sep; 13(5):709–13
Flexor tendon repair: significant gain in strength from the Halsted peripheral suture technique. Wade PJ, et al. **J Hand Surg [Br]** 1989 May;14(2):232–5
Surgical repair of defects in the rabbit temporomandibular joint disc: a comparison of various techniques. Eppley BL, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):587–95

Technique for placement of a discal traction suture during temporomandibular joint arthroscopy. Israel HA. **J Oral Maxillofac Surg** 1989 Mar;47(3):311–3

The 'hitch-stitch' and drain technique for the prevention of inguinoscrotal haematoma following complicated inguinoscrotal surgery. Joseph MG, et al. **J R Coll Surg Edinb** 1989 Apr;34(2):104–5

Closure of the patent ductus arteriosus on cardiopulmonary bypass: use of the Fogarty balloon catheter and transpulmonary suture–ligation. Majid A. **J R Coll Surg Edinb** 1989 Apr;34(2):63–5

A secure method of anchoring nasogastric tubes. Oates J, et al. **J R Coll Surg Edinb** 1988 Aug;33(4):217

Vessel anastomosis using a venous cuff and two sutures: an experimental study in rat femoral and epigastric vessels. Nakayama Y, et al. **J Reconstr Microsurg** 1988 Jul; 4(4):335–9

Microvenous end–to–side anastomosis: an experimental study comparing the Unilink system and sutures. Ragnarsson R, et al. **J Reconstr Microsurg** 1989 Jul;5(3):217–24

Delayed sternal closure: a lifesaving maneuver after early operation for complex congenital heart disease in the neonate. Odim JN, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):413–6

Abdominal incision [letter] Abrahamson J, et al. **Lancet** 1989 Apr 15;1(8642):847

Abdominal incision [letter] Jenkins TP. **Lancet** 1989 Feb 25; 1(8635):433–4

The relationship between structural features of peripheral nerves and suture methods for nerve repair. Zhong SZ, et al. **Microsurgery** 1988;9(3):181–7

The Hustinx–closure of the duodenal stump. Sybrandy R. **Neth J Surg** 1988 Dec;40(6):165

Primary mass closure of midline incisions with a continuous running monofilament suture in gynecologic patients. Gallup DG, et al. **Obstet Gynecol** 1989 Apr;73(4):675–7

Technique of intraocular lens placement to facilitate graft survival in pseudophakic eyes. Alpar JJ. **Ophthalmic Surg** 1989 Aug;20(8):595–8

The effect of selective suture removal on astigmatism following penetrating keratoplasty. Burk LL, et al. **Ophthalmic Surg** 1988 Dec;19(12):849–54

Modified Spigelman technique [letter] Maza CE, et al. **Ophthalmic Surg** 1989 Jan;20(1):74

A new suturing technique for ciliary sulcus fixation in the absence of posterior capsule. Pannu JS. **Ophthalmic Surg** 1988 Oct;19(10):751–4

Experimental and clinical investigations on the suitability of polydioxanone threads for cerclage of the eyeball. Biardzka B, et al. **Ophthalmologica** 1988;197(1):47–50

Length–tension diagrams of medial rectus muscles after Cüppers' fadenoperation. Surgical assessment of the reversibility of posterior fixation sutures. Castanera AM. **Ophthalmologica** 1989;198(1):46–52

Corneal astigmatism after penetrating keratoplasty. The role of suture technique. Musch DC, et al. **Ophthalmology** 1989 May;96(5):698–703

Ninety-ninety intraosseous wiring for internal fixation of the digital skeleton. Zimmerman NB, et al. **Orthopedics** 1989 Jan;12(1):99–104

Effects of fibrin glue on rat facial nerve regeneration. Medders G, et al. **Otolaryngol Head Neck Surg** 1989 Feb; 100(2):106–9

The intracuticular suture [letter] Garcia AH. **Plast Reconstr Surg** 1989 Oct;84(4):698

Suturing skin under tension [letter] Gault D, et al. **Plast Reconstr Surg** 1989 Feb;83(2):391

Creating a curvilinear scar. Manstein CH, et al. **Plast Reconstr Surg** 1989 May;83(5):914–5

Finding sutures [letter] Mills DC 2d. **Plast Reconstr Surg** 1989 Feb;83(2):392

Synthesis of surgical wounds without skin suture [letter] Petroianu A. **Plast Reconstr Surg** 1988 Nov;82(5):919–20

Suturing and wound care. Humby M. **Practitioner** 1988 Mar 8;232(1444):247–52

Methods of vaginal cuff closure during vaginal hysterectomy. Cruikshank SH. **South Med J** 1988 Nov;81(11):1375–8

Evaluation of dural closure techniques. Suture methods, fibrin adhesive sealant, and cyanoacrylate polymer. Cain JE Jr, et al. **Spine** 1988 Jul;13(7):720–5

Experimental scoliosis in the rat. I. Methodology, anatomic features and neurologic characterization. Sarwark JF, et al. **Spine** 1988 May;13(5):466–71

A technique for suturing soft visceral using compression sutures. Grice OD. **Surg Gynecol Obstet** 1988 Dec; 167(6):522–4

A method of stapled skin closure by one surgeon. Le T, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):67

Modified mattress suture for closure of difficult wounds. Moreira RC, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):545

Sidewinder retention sutures for closure of the abdominal wall. Rappaport WD, et al. **Surg Gynecol Obstet** 1989 Jul; 169(1):73–4

Sutures for anterior segment surgery. McPherson SD Jr. **Surv Ophthalmol** 1972 Mar–Apr;16(5):305–12 (6 ref.)

[The gastrointestinal suture] Iarŭmov N, et al. **Khirurgiia (Sofiia)** 1988;41(5):105–8 (16 ref.) (Eng. Abstr.) (Bul)

[Comparison of vascular anastomosis between using CO2 laser and conventional suture: an experimental study on cats] Lu SB, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Feb; 26(2):117–20, 127 (Eng. Abstr.) (Chi)

[Personal experience with uterine sutures in cesarean section over a 12–year–period] Černý F. **Cesk Gynekol** 1988 Jul; 53(6):412–5 (Eng. Abstr.) (Cze)

[Esophagoplasties] Celerier M. **Ann Chir** 1989;43(1):5–9 (Fre)

[Role of mechanical sutures in perforations of the thoracic esophagus. Apropos of 11 cases] Gayet B, et al. **Ann Chir** 1988;42(7):452–5 (Eng. Abstr.) (Fre)

[Colonic vascularization does not change by circular stapling: an angiographic study in dogs] Lehur PA, et al. **Ann Chir** 1989;43(4):315–9 (Eng. Abstr.) (Fre)

[Microvascular sutures using a CO2 laser. Initial clinical applications. Apropos of 6 cases] Travers V, et al. **Ann Chir** 1989;43(5):377–9 (Eng. Abstr.) (Fre)

[Pharyngo–esophageal reconstruction with a free forearm flap] Petoin DS. **Ann Chir Plast Esthet** 1988;33(2):195–8 (Eng. Abstr.) (Fre)

[Repair of the facial nerve exclusively by fibrin glue. 56 cases] Sterkers O, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(3):176–81 (17 ref.) (Eng. Abstr.) (Fre)

[Surgical treatment of complete atrioventricular canal. Value of the "composite double patch" technic] Champsaur G, et al. **Arch Mal Coeur** 1989 May;82(5):715–8 (Eng. Abstr.) (Fre)

[Technic of epikeratoplasty] Colin J, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):137–8 (Fre)

[Residual astigmatism in corneal grafts. Results of a prospective study comparing the overcasting suture and separated suture points] Lagoutte F, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):269–72 (Fre)

[One–stage excision and anastomosis of left colonic obstruction surgically treated as an emergency] Ambrosetti P, et al. **Chirurgie** 1988;114(9):661–8 (15 ref.) (Eng. Abstr.) (Fre)

[Bivalve fundoplication or esophago–gastro–phrenopexy using Barbin's technic] Barbin JY, et al. **Chirurgie** 1988; 114(9):723–4 (Eng. Abstr.) (Fre)

[Sacro–rectopexy by a posterior intersphincteric approach with anteroposterior perineoplasty and mucosal resection. Therapeutic proposal in descending peritoneum syndrome. Apropos of 23 cases] Costalat G, et al. **J Chir (Paris)** 1989 Apr;126(4):265–73 (37 ref.) (Eng. Abstr.) (Fre)

[Suture of flexor tendon injury of the hand] Iselin F. **J Chir (Paris)** 1988 Jun–Jul;125(6–7):440–2 (Fre)

[Exteriorized suture of injuries of the colon] Palot JP, et al. **J Chir (Paris)** 1988 Aug–Sep;125(8–9):525–7 (16 ref.) (Eng. Abstr.) (Fre)

[Complete rupture of the right diaphragm: sutures combined with resorbable mesh] Steiner E, et al. **J Chir (Paris)** 1989 Apr;126(4):274 (Fre)

[Treatment in a ventral position of vesicovaginal fistula by ordinary suture or autoplasty of the labia majora] Zerbib M, et al. **J Chir (Paris)** 1988 Nov;125(11):657–60 (Eng. Abstr.) (Fre)

[Dura mater healing after repair with aponeurotic plasty. Comparison of results between classical sutures and fibrin adhesive glue. Fibrin adhesive in frontobasal injuries. An experimental study] Dehesdin D, et al. **Neurochirurgie** 1988; 34(5):311–4 (Eng. Abstr.) (Fre)

[Post–pneumonectomy bronchial fistula. Treatment by resection of the carina] Christides C, et al. **Presse Med** 1988 Dec 3;17(43):2299–301 (Eng. Abstr.) (Fre)

[Lasers and microsurgery. The use of the CO2 laser in microsurgical vascular sutures. Experimental study of 240 anastomoses and initial clinical cases] Travers V, et al. **Rev Chir Orthop** 1988;74 Suppl 2:252–4 (Fre)

[Simple suture technic in gastroduodenal perforation] Lavigne JP, et al. **Rev Med Liege** 1988 Sep 1;43(17):558–62 (Fre)

[Anastomosis technics in biliary surgery] Bodner E. **Chirurg** 1988 Dec;59(12):815–9 (9 ref.) (Ger)

[Primary suture of older and contaminated wounds. A prospective clinical study] Bongartz W, et al. **Chirurg** 1988 Nov;59(11):767–70 (Eng. Abstr.) (Ger)

[The double stapling technic of the esophagus. Mechanical esophagojejunostomy without purse–string suture] Fasching W. **Chirurg** 1989 Apr;60(4):301–2 (Ger)

[Pancreas anastomoses] Reding R. **Chirurg** 1988 Dec; 59(12):820–7 (15 ref.) (Ger)

[Theory and practice of continuous laparotomy suture (abdominal wound dehiscence and incisional hernia)] Stelzner F. **Chirurg** 1988 Oct;59(10):654–60 (Eng. Abstr.) (Ger)

[Sutures, anastomosis and drainage technics of the liver] Trede M, et al. **Chirurg** 1988 Dec;59(12):805–14 (18 ref.) (Ger)

[Management of conjunctival wounds with suture or fibrin glue following intraocular lens implantation—a comparative study] Mellin KB, et al. **Fortschr Ophthalmol** 1989;86(2):129–31 (Eng. Abstr.) (Ger)

[Adjustable procedures in eye muscle operations] Roggenkämper P, et al. **Fortschr Ophthalmol** 1988; 85(5):484–5 (Eng. Abstr.) (Ger)

[Results following primary nerve sutures] Mailänder P, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):342–3 (Eng. Abstr.) (Ger)

[Gambee single modified all–layer suture] Mendel V, et al. **Helv Chir Acta** 1989 Jun;56(1–2):99–102 (Eng. Abstr.) (Ger)

[Prospective assessment study of 586 consecutive continuous, single layer, extra–mucosal colon anastomoses] Vogelbach P, et al. **Helv Chir Acta** 1989 Jan;55(5):655–8 (Eng. Abstr.) (Ger)

[Intraluminal splinting of problematic intestinal anastomoses with biomaterial tubes] Winkeltau G, et al. **Langenbecks Arch Chir** 1989;374(1):32–8 (Eng. Abstr.) (Ger)

[Hemorrhoid excision with primary wound closure] Gemsenjäger E. **Schweiz Med Wochenschr** 1989 Feb 25; 119(8):259–61 (Eng. Abstr.) (Ger)

[Ferguson's closed hemorrhoidectomy—method of choice?] Baumann R, et al. **Schweiz Rundsch Med Prax** 1988 Oct 4;77(40):1075–7 (Eng. Abstr.) (Ger)

[Early results following suture and augmentation of the ruptured anterior cruciate ligament. Arthrotomy versus arthroscopic surgical technic] Boszotta H, et al. **Unfallchirurg** 1988 Oct;91(10):459–64 (Eng. Abstr.) (Ger)

[Results of follow–up studies of 340 flexor tendon reconstructions. A comparative study of various methods of treatment] Knopp W, et al. **Unfallchirurg** 1988 Dec; 91(12):565–70 (Eng. Abstr.) (Ger)

[A comparative study of the single knot and continuous suture technic of the aorta of the growing rat] Zöch G, et al. **Vasa** 1988;17(3):171–6 (Eng. Abstr.) (Ger)

[Suture technics] Diem EG. **Z Hautkr** 1988;63 Suppl 2:11–2 (3 ref.) (Eng. Abstr.) (Ger)

[Follow–up studies of transosseous capsule–ligament sutures of the basal joint of the thumb using a standardized holder] Lütten C, et al. **Z Orthop** 1989 Jan–Feb;127(1):82–8 (Eng. Abstr.) (Ger)

[Comparison of simple suture and suture reinforced with semitendinous tendon in the treatment of acute lesions of the anterior cruciate ligament] Costa P, et al. **Chir Organi Mov** 1988 Oct–Dec;73(4):329–34 (Eng. Abstr.) (Ita)

[Experimental study of colonic anastomoses. Comparison of different suture methods in the rat] Bonoldi AP, et al. **Minerva Chir** 1989 Apr 15;44(7):1071–4 (Eng. Abstr.) (Ita)

[Fibrin glue in gastroenteric surgery] Giordano L, et al. **Minerva Chir** 1989 May 15;44(9):1371–4 (Eng. Abstr.) (Ita)

[Stapled versus manual sutures] Piegari V, et al. **Minerva Chir** 1989 Feb 28;44(4):801–10 (72 ref.) (Ita)

[Comparative study of mechanical and microsurgical anastomosis of small–diameter arteries] Santoro G, et al. **Minerva Chir** 1988 Apr 15;43(7):567–74 (Eng. Abstr.) (Ita)

[Long–term evaluation of the treatment of perforated gastroduodenal ulcer using a median suture] Uccheddu A, et al. **Minerva Chir** 1989 Jun 30;44(12):1637–41 (Eng. Abstr.) (Ita)

[Transseptal suture fixation in the management of prosthetic valve dehiscence] Kuribayashi R, et al. **Kyobu Geka** 1989 Jan;42(1):15–8 (Eng. Abstr.) (Jpn)

[Single–layer sutures in the surgical treatment of the large intestine] Docevski B. **Acta Chir Iugosl** 1987;34 Suppl 2:51–65 (Eng. Abstr.) (Mac)

[Proximal gastric vagotomy with single–layer sutures—the method of choice in perforated duodenal ulcers (15 years' experience)] Peev A, et al. **Acta Chir Iugosl** 1987;34 Suppl 2:43–9 (Eng. Abstr.) (Mac)

[Skin closure. A prospective randomized study] Lundblad R, et al. **Tidsskr Nor Laegeforen** 1989 Apr 30; 109(12):1307–9 (Eng. Abstr.) (Nor)

[Microsurgical sutures of the trachea and bronchi (experimental study)] Biriukov IuV, et al. **Grudn Khir** 1989 Mar–Apr;(2):55–9 (Eng. Abstr.) (Rus)

[Formation of an invagination esophageal–gastric (intestinal) anastomosis using Bloxhin's expanding suture] Musulmanbekov KZh, et al. **Grudn Khir** 1988 Jul–Aug; (4):69–71 (Eng. Abstr.) (Rus)

[Sutures and anastomoses of the aorta and large arteries] Solov'ev GM, et al. **Grudn Khir** 1989 Jan–Feb;(1):13–6 (Eng. Abstr.) (Rus)

[Prevention of suture incompetence in end–to–end anastomoses] Butsenko VN, et al. **Klin Khir** 1989;(2):35–7 (Eng. Abstr.) (Rus)

[A method for preventing suture incompetence of the duodenal stump after gastric resection] Kostin AE, et al. **Klin Khir** 1988;(8):73 (Rus)

[A method of closing phlebectomy wounds with indurative changes in the skin] Medvedenko AF, et al. **Klin Khir** 1988; (7):67–8 (Rus)

[A method of applying a single–layer buried suture for esophageal anastomosis in treating atresia in newborn infants] Pavliuk AD. **Klin Khir** 1988;(6):78–9 (Rus)

[Hemostatic suture in microsurgery of the liver] Safin IA. **Klin Khir** 1988;(9):72 (Rus)

[Endoscopic control following the suturing of perforated gastric and duodenal ulcers] Sakhautdinov VG, et al. **Klin Med (Mosk)** 1988 Nov;66(11):75–7 (Eng. Abstr.) (Rus)

[Experimental substantiation of a precision technic of creating an interintestinal anastomosis in acute intestinal obstruction] Eriukhin IA, et al. **Vestn Khir** 1989 Jan;142(1):15–9 (Eng. Abstr.) (Rus)

[Complex prevention of suture incompetence of the duodenal stump in penetrating duodenal ulcers] Godlevskil AI. **Vestn Khir** 1989 Mar;142(3):32–4 (Eng. Abstr.) (Rus)

[A method of suturing the laparotomy wound in postoperative eventration] Izmailov GA, et al. **Vestn Khir** 1988 Jul;141(7):120–2 (Rus)

[Ways to increase the competence of sutures of the duodenal stump in the surgical treatment of complicated gastroduodenal ulcers] Papazov FK, et al. **Vestn Khir** 1989 Feb;142(2):111–3 (Eng. Abstr.) **(Rus)**

[Principles of creating anastomoses of hollow organs of the gastrointestinal tract with reference to characteristics of their regeneration] Zemlianol AG, et al. **Vestn Khir** 1989 Mar;142(3):91–5 (Eng. Abstr.) **(Rus)**

[Single-layer closure of a subcostal incision using a monofilament absorbable suture material—comparison of polydioxanone (PDS) and polyglyconate (Maxon)] Vračko J, et al. **Acta Chir Iugosl** 1989;36(1):15–25 (Eng. Abstr.) **(Ser)**

ADVERSE EFFECTS

The effect of suture removal on postkeratoplasty astigmatism [letter] Girard LJ. **Am J Ophthalmol** 1989 Jan 15; 107(1):92–3

Tissue reaction and surgical knots: the effect of suture size, knot configuration, and knot volume. van Rijssel EJ, et al. **Obstet Gynecol** 1989 Jul;74(1):64–8

EDUCATION

An aid for teaching periodontal suturing techniques. Hawkins CH. **J Dent Educ** 1989 Apr;53(4):253–4

INSTRUMENTATION

Evaluation of surgical staples in cesarean section. Burkett G, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):540–5; discussion 545–7

Calibration of the Terry keratometer. House PH, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):500–2

Iris suture hook for pupillary dilation in vitreoretinal surgery. Madeira D, et al. **Am J Ophthalmol** 1988 Dec 15; 106(6):743–5

New straumatic rounded-edge surgical needle holder jaws. Abidin MR, et al. **Am J Surg** 1989 Feb;157(2):241–2

A modified retention suture technique with external and internal "booties" to close difficult abdominal wounds. Chardavoyne R, et al. **Am Surg** 1989 Sep;55(9):573–5

A combined needle holder and scissors. Patel BC, et al. **Arch Ophthalmol** 1988 Oct;106(10):1472

Needle holder with gap joints [letter] Mackintosh GI, et al. **Br J Ophthalmol** 1989 Jul;73(7):581

Swivel purse-string instrument for low anterior resection. Al-Humadi AH. **Dis Colon Rectum** 1988 Dec;31(12):977–8

The scissors approach to a chicken bone lodged in the esophagus [letter] Farr CM, et al. **Gastrointest Endosc** 1989 Jul–Aug;35(4):357

Cataract surgical suture marking device for the intraoperative control of astigmatism. Soll DB, et al. **J Cataract Refract Surg** 1988 Sep;14(5):571–3

Button bolsters in dermatologic surgery. Adnot J, et al. **J Dermatol Surg Oncol** 1989 Jan;15(1):59–61

Clip appendectomy. Bellina JH, et al. **J Reprod Med** 1989 Jul;34(7):475–8

Method for measuring suture tension in surgery. Bassini R, et al. **Med Biol Eng Comput** 1988 Jul;26(4):451–4

Transvaginal needle bladder neck suspension procedures for stress urinary incontinence: a comprehensive review. Karram MM, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):906–14 (57 ref.)

A tendon approximator. LaLonde DH. **Plast Reconstr Surg** 1989 May;83(5):912–3

A technical aid in stapled esophagojejunal anastomosis. Basso N, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):525–6

An aseptic method to loosen tight, relaxing sutures. Konomi K, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):354–5

A technique for fixation of retention sutures using two bolsters. Molea J, et al. **Surg Gynecol Obstet** 1989 Aug; 169(2):167–8

[Skin suture with skin stapler in general surgery] Lugani P, et al. **Minerva Chir** 1989 May 15;44(9):1365–9 (Eng. Abstr.) **(Ita)**

[Experience with circular mechanical sutures in rectal surgery] Turra G, et al. **Minerva Med** 1989 Jul;80(7):725–8 **(Ita)**

[Experimental evaluation of the possibility of fixing uterine sutures after cesarean section using polymer materials] Makarov IO, et al. **Akush Ginekol (Mosk)** 1989 Mar; (3):33–6 (Eng. Abstr.) **(Rus)**

[Use of Soviet-made organ-suturing equipment of the UDO type during performing "triangular" anastomoses with an everted suture] Akopov EM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):102–7 **(Rus)**

[Hemorrhoidectomy using suturing devices] Dul'tsev IuV, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):115–8 **(Rus)**

[An instrument for the removal of ligatures from fistulas] Tupchiĭ VM. **Klin Khir** 1988;(7):71 **(Rus)**

[New suturing devices in pulmonary surgery] Lukomskiĭ GI, et al. **Sov Med** 1988;(11):22–4 (Eng. Abstr.) **(Rus)**

[Healing of esophagogastric anastomosis performed with the use of compression suturing equipment] Pirogov AI, et al. **Sov Med** 1989;(4):12–5 (Eng. Abstr.) **(Rus)**

[Right-sided hemicolectomy using a compression suture] Khamidov AI, et al. **Vestn Khir** 1988 Aug;141(8):111–4 (Eng. Abstr.) **(Rus)**

STANDARDS

Subcuticular, continuous and mechanical skin closure: cosmetic results of a prospective randomized trial. Zwart HJ, et al. **Neth J Surg** 1989 Jun;41(3):57–60

[Preventing incompetence of uterine sutures after cesarean section] Sidorova IS, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):30–3 (Eng. Abstr.) **(Rus)**

VETERINARY

Comparison of staple and suture techniques for end-to-end anastomosis of the small colon in horses. Hanson RR, et al. **Am J Vet Res** 1988 Sep;49(9):1621–8

Bar suture (toggle pin) vs open surgical abomasopexy for treatment of left displaced abomasum in dairy cattle. Kelton DF, et al. **J Am Vet Med Assoc** 1988 Sep 1;193(5):557–9

Enterotomy technique in the descending colon of the horse. Effect of location and suture pattern. Beard WL, et al. **Vet Surg** 1989 Mar–Apr;18(2):135–40

Knot security of suture materials. Rosin E, et al. **Vet Surg** 1989 Jul–Aug;18(4):269–73

Effect of fascial closure technique on strength of healing abdominal incision in the dog. A biomechanical study. Rosin E, et al. **Vet Surg** 1987 Jul–Aug;16(4):269–72

[Suture methods for cornea covering] Röcken H. **Berl Munch Tierarztl Wochenschr** 1989 Jan 1;102(1):18–9 (Eng. Abstr.) **(Ger)**

SUTURES

Preoperative embolization of arteriovenous malformations with polylene threads: techniques with wing microcatheter and pathologic results. Benati A, et al. **AJNR** 1989 May–Jun;10(3):579–86

Incisional closure in morbidly obese patients. Cleveland RD, et al. **Am Surg** 1989 Jan;55(1):61–3

Early laparotomy wound dehiscence: a randomized comparison of three suture materials and two methods of fascial closure. Savolainen H, et al. **Ann Chir Gynaecol** 1988;77(3):111–3

A new double-armed microsuture. Hallock GG, et al. **Ann Plast Surg** 1988 Aug;21(2):183–5

Sutures for inguinal herniorrhaphy—a comparison of monofilaments with PTFE. Cahill J, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):128–30

Surgical manipulation and the tensile strength of polypropylene sutures. Dobrin PB. **Arch Surg** 1989 Jun; 124(6):685–8

The effect of new monofilament absorbable sutures on the healing of musculoaponeurotic incisions, gastrotomies, and colonic anastomoses. Foresman PA, et al. **Arch Surg** 1989 Jun;124(6):708–10

Common bile duct healing. Do different absorbable sutures affect stricture formation and tensile strength? Sharp KW, et al. **Arch Surg** 1989 Apr;124(4):408–14

The effect of suture material on platelet deposition onto prosthetic material. Connolly R, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):874–7

End-to-end oesophageal anastomosis: an experimental study in the rat. Man DW, et al. **Aust N Z J Surg** 1988 Dec; 58(12):975–8

Magnetic resonance imaging and intracranial aneurysm clips. Condon PM, et al. **Australas Radiol** 1988 Nov;32(4):493–6

Tensile characteristics of PTFE sutures. Hertweck SP, et al. **Biomaterials** 1988 Sep;9(5):457–9

Tensile properties of suture materials. von Fraunhofer JA, et al. **Biomaterials** 1988 Jul;9(4):324–7

Creep rupture of polypropylene sutures as a function of diameter, radiation dose and temperature. Whitley JQ, et al. **Biomaterials** 1988 Nov;9(6):538–46

A new synthetic material for the brow suspension procedure. Cole MD, et al. **Br J Ophthalmol** 1989 Jan;73(1):35–8

Histopathological evaluation of rotation sutures for involutional entropion. Seiff SR, et al. **Br J Ophthalmol** 1989 Aug;73(8):628–32

The stretched scar: the benefit of prolonged dermal support. Elliot D, et al. **Br J Plast Surg** 1989 Jan;42(1):74–8

Use of deep tension sutures and buttress plates for frequent relaparotomy. Lansdown MR, et al. **Br J Surg** 1989 Apr; 76(4):400

Anastomotic suture materials and implantation metastasis: an experimental study [published erratum appears in Br J Surg 1989 Jun;76(6):655] McGregor JR, et al. **Br J Surg** 1989 Apr;76(4):331–4

Natural history of vertical abdominal parietal closure: Prolene versus Dexon. Lewis RT, et al. **Can J Surg** 1989 May;32(3):196–200

Suture materials. Stone IK. **Clin Obstet Gynecol** 1988 Sep; 31(3):712–7

Strength retention of chromic gut and monofilament synthetic absorbable suture materials in joint tissues. Walton M. **Clin Orthop** 1989 May;(242):303–10

Stainless steel as suturing material in human- and rabbit corneas: a SEM-study. Jongebloed WL, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):145–54

A thread as a nidus of a common bile duct calculus—findings during endoscopic lithotripsy. Ormann W. **Endoscopy** 1989 Jul;21(4):191–2

Absorbable polydioxanone suture for venous anastomoses: experimental studies using venography and transluminal angioscopy. Torsello G, et al. **Eur J Vasc Surg** 1987 Oct; 1(5):319–25

Complications following vasectomy. A comparison between Mersilene and autosuture surgiclips. Zeegers AG, et al. **Eur Urol** 1988;14(4):294–7

The outcome of pregnancies complicated by preterm rupture of the membranes with and without cerclage. Blickstein I, et al. **Int J Gynaecol Obstet** 1989 Mar;28(3):237–42

Facial nerve graft repair: suture versus laser-assisted anastomosis. Eppley BL, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):50–4

Primary wound closure in haemophiliacs undergoing dental extractions. Stajčić Z, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):14–6

Use of fast absorption material for skin closure in young children. Canarelli JP, et al. **Int Surg** 1988 Jul–Sep; 73(3):151–2

Pericardial heterografts: a comparative study of suture pull-out and tissue strength. Trowbridge EA, et al. **J Biomed Eng** 1989 Jul;11(4):311–4

Tendon cell outgrowth rates and morphology associated with kevlar-49. Zimmerman M, et al. **J Biomed Mater Res** 1988 Dec;22(3 Suppl):339–50

Evaluation of the expanded polytetrafluoroethylene (EPTFE) suture in peripheral vascular surgery using EPTFE prosthetic vascular grafts. Gayle RG, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct;29(5):556–9

Long-term corneal astigmatism related to selected elastic, monofilament, nonabsorbable sutures. Cravy TV. **J Cataract Refract Surg** 1989 Jan;15(1):61–9

Comparison of suture materials for closure of the scleral pocket incision. Masket S. **J Cataract Refract Surg** 1988 Sep;14(5):548–51

Metacarpal fracture fixation with interosseous nylon suture in a patient with metal allergies. Haas SB, et al. **J Hand Surg [Am]** 1989 Jan;14(1):107–10

A prospective randomized trial of suture material in aural wound closure. Willatt DJ, et al. **J Laryngol Otol** 1988 Sep;102(9):788–90

Histologic response to microsuture materials. Beauchamp PJ, et al. **J Reprod Med** 1988 Jul;33(7):615–23

Clip appendectomy. Bellina JH, et al. **J Reprod Med** 1989 Jul;34(7):475–8

Prevention of hemorrhage by elastic suture material used for securing intravenous catheters within major branches of the portal vein. Sugarbaker PH. **J Surg Oncol** 1988 Dec; 39(4):269–70

Some mechanical properties of polypropylene sutures: relationship to the use of polypropylene in vascular surgery. Dobrin PB. **J Surg Res** 1988 Dec;45(6):568–73

Intestinal anastomosis in the rat facilitated by a rapidly digested internal splint and indigestible but absorbable sutures. Kiernan JA. **J Surg Res** 1988 Nov;45(5):427–31

Polydioxanone and polypropylene suture material in free internal mammary artery graft anastomoses. Aarnio P, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):741–5

Generation of chordae tendineae with polytetrafluoroethylene stents. Results of mitral valve chordal replacement in sheep. Revuelta JM, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):98–103

Quantifying thread tension is of clinical use in Stamey bladder neck suspension: analysis of clinical parameters. Kondo A, et al. **J Urol** 1989 Jan;141(1):38–42

The use of chitin as a new absorbable suture material—an experimental study. Tachibana M, et al. **Jpn J Surg** 1988 Sep;18(5):533–9

Experimental studies on the application of various surgical threads used for reconstruction of fresh injuries of the calcaneal tendon. Synder M, et al. **Mater Med Pol** 1988 Oct–Dec;20(4):278–80

Strength of microvascular anastomoses: comparison between the unilink anastomotic system and sutures. Gilbert RW, et al. **Microsurgery** 1989;10(1):40–6

Comparison of copolymer staple versus chromic suture during hysterectomy: gross, histologic, and microbiologic findings [see comments] McNeeley SG Jr, et al. **Obstet Gynecol** 1988 Dec;72(6):862–5. **Comment in:** Obstet Gynecol 1989 May;73(5 Pt 1):829–30

Nonabsorbable suture material in corneoscleral sections—a comparison of novafil and nylon. McClellan KA, et al. **Ophthalmic Surg** 1989 Jul;20(7):480–5

Experimental and clinical investigations on the suitability of polydioxanone threads for cerclage of the eyeball. Biardzka B, et al. **Ophthalmologica** 1988;197(1):47–50

Nylon suture toxicity after cataract surgery [see comments] Balyeat HD, et al. **Ophthalmology** 1988 Nov;95(11):1509–14 . **Comment in:** Ophthalmology 1989 Jun;96(6):927–8

Suture toxicity [letter; comment] Salamon SM. **Ophthalmology** 1989 Jun;96(6):927–8. **Comment on:** Ophthalmology 1988 Nov;95(11):1509–14

Repair of motor nerve defects: comparison of suture and fibrin adhesive techniques. Nishihira S, et al. **Otolaryngol Head Neck Surg** 1989 Jan;100(1):17–21

Finding sutures [letter] Mills DC 2d. **Plast Reconstr Surg** 1989 Feb;83(2):392

Suture calcification mimicking recurrence in the irradiated breast: a potential pitfall in mammographic evaluation. Davis SP, et al. **Radiology** 1989 Jul;172(1):247–8

New absorbable synthetic explants for the treatment of retinal detachment [letter] Wilson RS. **Retina** 1989;9(2):155

Sutures for anterior segment surgery. McPherson SD Jr. **Surv Ophthalmol** 1972 Mar–Apr;16(5):305–12 (6 ref.)

Migrating suture masquerading as a renal pelvic carcinoma: an unusual complication of the Kock pouch. Klotz LH, et al. **Urol Radiol** 1989;11(2):100–1

[Suturing splenic injuries in adults] Trnka J. **Rozhl Chir** 1988 Dec;67(12):808–9 (Eng. Abstr.) **(Cze)**

[Intracutaneous closure of inguinal incisions in children. A controlled comparison between plain soft catgut and Supramid] Eldrup J, et al. **Ugeskr Laeger** 1988 Nov 7; 150(45):2739–41 (Eng. Abstr.) **(Dan)**

[Chronic intermittent volvulus of the stomach: difficult diagnosis, simple treatment] van Vroonhoven TJ. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):273–5 **(Dut)**

[A comparison of suturing and non-suturing of scrotal wounds following castration in stallions] Homburg-van den Broek FT, et al. **Tijdschr Diergeneeskd** 1989 May 1; 114(9):489–92 (Eng. Abstr.) **(Dut)**

[Experience with synthetic explants in the treatment of retinal detachment] Marti R, et al. **Ophtalmologie** 1988 Nov–Dec; 2(5):403–5 (Eng. Abstr.) **(Fre)**

[Bassini operation with polyglycolic acid or polyester. A prospective randomized study of 300 cases] Fuchsjäger N, et al. **Chirurg** 1989 Apr;60(4):273–6 (Eng. Abstr.) **(Ger)**

[Experimental studies of stabilization of refixation following median sternotomy] Schade K, et al. **Langenbecks Arch Chir** 1989;374(1):20–4 (Eng. Abstr.) **(Ger)**

[Refixation in osteochondrosis dissecans with resorbable material using magnetic resonance tomography in follow-up monitoring] Lütten C, et al. **Sportverletz Sportschaden** 1988 Jun;2(2):61–8 (Eng. Abstr.) **(Ger)**

[Suture materials in dermatology] Hundeiker M. **Z Hautkr** 1988;63 Suppl 2:7–10 (18 ref.) (Eng. Abstr.) **(Ger)**

[Resorbable augmentationplasty and functional after care in fresh rupture of the anterior cruciate ligament. An improved treatment concept] Lobenhoffer P, et al. **Z Orthop** 1988 May–Jun;126(3):296–9 (Eng. Abstr.) **(Ger)**

[Polydioxanone and polyglactin 910 in gynecological microsurgery. Experimental study] Formelli G, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1007–11 (Eng. Abstr.) **(Ita)**

[Experimental evaluation of 4 different suture materials in colo-colic anastomoses (in the rat)] Bonoldi AP, et al. **Chir Ital** 1988 Aug–Oct;40(4–5):265–71 (Eng. Abstr.) **(Ita)**

[Comparison of simple suture and suture reinforced with semitendinous tendon in the treatment of acute lesions of the anterior cruciate ligament] Costa P, et al. **Chir Organi Mov** 1988 Oct–Dec;73(4):329–34 (Eng. Abstr.) **(Ita)**

[Reabsorption of sutures of the abdominal wall] Caron R, et al. **Minerva Chir** 1988 Oct 15;43(19):1605–7 (Eng. Abstr.) **(Ita)**

[Suturing of duodenal perforations using a jejunal patch] Gui D, et al. **Minerva Chir** 1988 Sep 30;43(18):1473–5 (Eng. Abstr.) **(Ita)**

[Experimental study of motor nerve repair: comparison of nylon suture and two component fibrin adhesive techniques] Nishihira S. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug;91(8):1208–12 (Eng. Abstr.) **(Jpn)**

[Experimental evaluation of the possibility of fixing uterine sutures after cesarean section using polymer materials] Makarov IO, et al. **Akush Ginekol (Mosk)** 1989 Mar; (3):33–6 (Eng. Abstr.) **(Rus)**

[Use of Soviet-made organ-suturing equipment of the UDO type during performing "triangular" anastomoses with an everted suture] Akopov EM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):102–7 **(Rus)**

[A method of forming an end-to-end invaginated entero-colonic anastomosis using a shuttle suture] Musulmanbekov KZh, et al. **Khirurgiia (Mosk)** 1989 Feb; (2):106–8 **(Rus)**

[Use of glue and biocompatible sutures in surgery] Kirillov IuB, et al. **Klin Khir** 1989;(1):62–3 **(Rus)**

[Biocompatibility of microsurgical suture material modified with element-organic compounds] Makeev SD, et al. **Klin Khir** 1989;(1):19–20 (Eng. Abstr.) **(Rus)**

[Antibacterial sutures "Capromed DQ" in abdominal surgery] Polous IuM, et al. **Klin Khir** 1989;(1):13–5 (Eng. Abstr.) **(Rus)**

[A subcutaneous continuous twisted crossing suture for obliteration of varicose veins] Tupchil VM. **Klin Khir** 1988; (7):67 **(Rus)**

[The results of outpatient observation of patients who have undergone a cerclage operation with silicone-beaded thread in retinal detachment] Vodovozov AM, et al. **Oftalmol Zh** 1988;(6):335–8 (Eng. Abstr.) **(Rus)**

[The use of a removable capron suture in the plastic repair of skull defects] Biriuchkov IuV, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):57–9 **(Rus)**

[Single-layer closure of a subcostal incision using a monofilament absorbable suture material—comparison of polydioxanone (PDS) and polyglyconate (Maxon)] Vračko J, et al. **Acta Chir Iugosl** 1989;36(1):15–25 (Eng. Abstr.) **(Scr)**

[Repeated failure of the suture line of an aortic valve prosthesis. Treatment by implantation of a valvular tube in the supra-coronary position] Nottin R, et al. **Arch Inst Cardiol Mex** 1989 Mar–Apr;59(2):107–12 (Eng. Abstr.) **(Spa)**

[Re-permeabilization of the intestinal lumen after obliteration of digestive transit with non-absorbable material. Experimental study in the rat] Caralt Mestres E, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):199–203 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Serratia marcescens infected silk suture rejected by combined acupuncture, moxibustion and low-power laser therapy from the abdominal fascia. Sternfeld M, et al. **Am J Chin Med** 1988;16(1–2):81–2

Biliary tract complications in orthotopic adult liver transplantation. Wilson BJ, et al. **Am J Surg** 1989 Jul; 158(1):68–70

Suture granuloma [letter] Hunter DC, et al. **Br J Surg** 1988 Nov;75(11):1149–50

Internal jugular vein cannulation [letter] Rogers HS, et al. **Br J Surg** 1988 Aug;75(8):828–9

Suture problems [letter] Epstein E. **J Cataract Refract Surg** 1989 Jan;15(1):116

Surgical catgut: the myth of allergy. Carroll RE. **J Hand Surg [Br]** 1989 May;14(2):218–20

Silk lesions after gastric surgery. Al-Atrakchi HA. **J R Coll Surg Edinb** 1988 Aug;33(4):189–91

Acute subdural hematoma during tack-up suture of the dura mater—case report. Aoki N. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):994–5

Tissue reaction and surgical knots: the effect of suture size, knot configuration, and knot volume. van Rijssel EJ, et al. **Obstet Gynecol** 1989 Jul;74(1):64–8

Comparison of copolymer staple versus chromic suture during hysterectomy: gross, histologic, and microbiologic findings [letter; comment] Weinstein SA. **Obstet Gynecol** 1989 May;73(5 Pt 1):829–30. **Comment on:** Obstet Gynecol 1988 Dec;72(6):862–5

Jejunal carcinoma associated with non-absorbable suture material. Leinhardt DJ, et al. **Postgrad Med J** 1988 Sep; 64(755):716–7

Suture extrusion in small arteries and veins. Morecraft RJ, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988; 22(2):121–6

[Intracutaneous closure of inguinal incisions in children. A controlled comparison between plain soft catgut and Supramid] Eldrup J, et al. **Ugeskr Laeger** 1988 Nov 7; 150(45):2739–41 (Eng. Abstr.) **(Dan)**

[The foreign body granuloma after pyeloplasty: report of a case] Ishida A, et al. **Hinyokika Kiyo** 1989 Mar;35(3):485–8 (Eng. Abstr.) **(Jpn)**

[Treatment of suture-thread stones in the kidney by percutaneous nephrolithotripsy. Report of a case] Matsuda S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr; 80(4):607–10 (9 ref.) (Eng. Abstr.) **(Jpn)**

[Anuria caused by ligation of both ureters during cesarean section] Budner M, et al. **Ginekol Pol** 1988 Jan;59(1):59–62 (Eng. Abstr.) **(Pol)**

[Evaluation of the blood supply to the bronchial stump following resection of the lungs using a mechanical suture in the diagnosis and treatment of pulmonary hemorrhage] Volynskii IuD, et al. **Grudn Khir** 1989 Jan–Feb;(1):52–5 (Eng. Abstr.) **(Rus)**

[Lavsan ligatures as the cause of choledocholithiasis following resection of the stomach] Egorov VP, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):96–7 **(Rus)**

[Prognostication of incompetence of duodenal stump sutures after stomach resection] Kostin AE, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):130–1 **(Rus)**

[Ligature cholelithiasis] Lapkin KV, et al. **Khirurgiia (Mosk)** 1989 May;(5):103–8 **(Rus)**

[Diagnosis and treatment of incompetence of sutures of the duodenal stump] Godlevskii AI. **Vestn Khir** 1987 Dec; 139(12):83–5 (Eng. Abstr.) **(Rus)**

[Erosion-induced hemorrhage after surgical treatment of acute obstruction of major arteries of the lower extremities] Stepanov NV, et al. **Vestn Khir** 1989 Feb;142(2):82–4 (Eng. Abstr.) **(Rus)**

[Bladder calculus formed on chromic suture] Barajas de Frutos D, et al. **Actas Urol Esp** 1989 Jan–Feb;13(1):69–70 (Eng. Abstr.) **(Spa)**

[Choledocholithiasis over a migrating silk thread (letter)] Caralt Mestres E, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):189–90 **(Spa)**

HISTORY

A century's worth of arterial sutures. Barker WF. **Ann Vasc Surg** 1988 Jan;2(1):85–91

STANDARDS

Inflammatory synovial fluid and absorbable suture strength. Barber FA, et al. **Arthroscopy** 1988;4(4):272–7

Efficacy of a modified oxidized cellulose fabric in the prevention of adhesion formation. Maxson WS, et al. **Gynecol Obstet Invest** 1988;26(2):160–5

Quantitative evaluation of stiffness of commercial suture materials. Chu CC, et al. **Surg Gynecol Obstet** 1989 Mar; 168(3):233–8

[Studies on perfecting Polish-made linen threads for surgical use] Jarosz-Cichulska H. **Polim Med** 1988;18(1–2):3–49 (Eng. Abstr.) **(Pol)**

[Preventing incompetence of uterine sutures after cesarean section] Sidorova IS, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):30–3 (Eng. Abstr.) **(Rus)**

[Polymer fibers in surgery. III] Privalova LG, et al. **Polim Med** 1988;18(1–2):67–89 (Eng. Abstr.) **(Rus)**

[Effect of the duodenal contents on changes in catgut sutures] Kostin AE, et al. **Vestn Khir** 1989 Jan;142(1):52–3 **(Rus)**

VETERINARY

Continuous absorbable suture pattern in the closure of ventral midline abdominal incisions in horses. Turner AS, et al. **Equine Vet J** 1988 Nov;20(6):401–5

Comparison of adhesive polyurethane membrane and polypropylene sutures for closure of skin incisions in cats. Court MH, et al. **Vet Surg** 1989 May–Jun;18(3):211–5

Tissue reaction to suture material in the feline linea alba. A retrospective, prospective, and histologic study. Freeman LJ, et al. **Vet Surg** 1987 Nov–Dec;16(6):440–5

Calcinosis circumscripta associated with polydioxanone suture in two young dogs. Kirby BM, et al. **Vet Surg** 1989 May–Jun;18(3):216–20

Knot security of suture materials. Rosin E, et al. **Vet Surg** 1989 Jul–Aug;18(4):269–73

SUXAMETHONIUM see **SUCCINYLCHOLINE**

SV40 T ANTIGENS see **ANTIGENS, POLYOMAVIRUS TRANSFORMING**

SV40 T PROTEINS see **ANTIGENS, POLYOMAVIRUS TRANSFORMING**

SV40 VIRUS

The role of N-linked glycosylation in the regulation of activity of 3-hydroxy-3-methylglutaryl-coenzyme A reductase and proliferation of SV40-transformed 3T3 cells. Larsson O, et al. **Biochem J** 1989 Jun 1;260(2):597–600

Reduced lateral mobility of a fluorescent lipid analog in cell membranes of rat fibroblasts transformed by simian virus 40. Kawasaki Y, et al. **FEBS Lett** 1989 Mar 27; 246(1–2):65–8

Response of simian virus 40 (SV40)-transformed, cultured human marrow stromal cells to hematopoietic growth factors. Nemunaitis J, et al. **J Clin Invest** 1989 Feb; 83(2):593–601

Gangliosides in SV-40-transformed cells derived from Tay-Sachs disease fetal brain. Hoffman LM, et al. **Metab Brain Dis** 1989 Jun;4(2):87–93

p53 is associated with a 35 kD protein in cells transformed by simian virus 40. Milner J, et al. **Oncogene** 1989 May; 4(5):665–8

Further studies of the induction and intracellular repair of DNA strand breaks using intranuclear SV40 as a test system. Krisch RE, et al. **Radiat Res** 1988 Dec; 116(3):462–71

[Coprecipitation of proteins and DNA-protein complexes with magnesium sarcolysate: research on an association of topoisomerase I and RNA polymerase with DNA] Vasetskii ES, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jan–Feb;(1):148–51 (Eng. Abstr.) **(Rus)**

GENETICS

Cloning of human thymic subcapsular cortex epithelial cells with SV40 origene. Mizutani S, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):539–41

Carcinogen-induced mutagenesis in the simian virus 40 genome. Gentil A, et al. **Ann Ist Super Sanita** 1989; 25(1):171–6

A dual-circular plasmid structure dependent on DNA replication generated in monkey COS7 cells and cell extracts. Jenab S, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):53–9

Regulation of SV40 early gene expression. Wildeman AG. **Biochem Cell Biol** 1988 Jun;66(6):567–77 (97 ref.)

Further serum related alterations in the activities of some membrane marker enzymes in normal and virus transformed cells. Tenang EM, et al. **Biochem Int** 1989 Jan; 18(1):197–202

DNA binding properties and replication activity of the T antigen related D2 phosphoprotein. Klausing K, et al. **Biochemistry** 1989 Mar 7;28(5):2238–44

Partial purification and characterization of a cellular protein that binds to the SV40 core origin of DNA replication. Alliger P, et al. **Biochim Biophys Acta** 1988 Dec 20; 951(2–3):396–402

Protein-DNA interactions at the simian virus 40 origin of replication. Baur CP, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2–3):388–95

Identification of cellular components required for SV40 DNA replication in vitro. Fairman M, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2–3):382–7

Inhibition of expression of SV40 virus large T-antigen by antisense oligodeoxyribonucleotides. Westermann P, et al. **Biomed Biochim Acta** 1989;48(1):85–93

Reversion to normal phenotype induced by SV40 in a spontaneously transformed malignant Chinese hamster cell line. Rayevskaya GB, et al. **Cancer Genet Cytogenet** 1989 Jan;37(1):39–47

Characterization of hamster tumors induced by simian virus 40 small t deletion mutants as true histiocytic lymphomas. Carbone M, et al. **Cancer Res** 1989 Mar 15;49(6):1565–71

Properties of N-methyl-N-nitrosourea-resistant, Mex- derivatives of an SV40-immortalized human fibroblast cell line. Green MH, et al. **Carcinogenesis** 1989 May;10(5):893–8

Defective repair of UV-damaged DNA in human tumor and SV40-transformed human cells but not in adenovirus-transformed human cells. Rainbow AJ. **Carcinogenesis** 1989 Jun;10(6):1073–7

Stimulated production of ATP by H2O2 disproportionation in extracts from normal and xeroderma pigmentosum skins, and from normal, xeroderma pigmentosum, ataxia telangiectasia and simian virus 40 transformed cell lines. Vuillaume M, et al. **Carcinogenesis** 1989 Aug;10(8):1375–81

The murine p53 protein blocks replication of SV40 DNA in vitro by inhibiting the initiation functions of SV40 large T antigen. Wang EH, et al. **Cell** 1989 May 5;57(3):379–92

Localized melting and structural changes in the SV40 origin of replication induced by T-antigen. Borowiec JA, et al. **EMBO J** 1988 Oct;7(10):3149–58

Transcription factors AP-3 and AP-2 interact with the SV40 enhancer in a mutually exclusive manner. Mercurio F, et al. **EMBO J** 1989 May;8(5):1455–60

Rat calvarial cell lines immortalized with SV-40 large T antigen: constitutive and retinoic acid-inducible expression of osteoblastic features. Heath JK, et al. **Endocrinology** 1989 Jun;124(6):3060–8

Interleukin 1 and tumor necrosis factor enhance transcription from the SV40 early promoter in a T cell line. Plaetinck G, et al. **Eur J Immunol** 1989 May;19(5):897–904

Instability of extrachromosomal cosmid DNA in SV40-transformed human (ataxia-telangiectasia) cells. Dean SW, et al. **Exp Cell Res** 1989 Aug;183(2):473–83

Isolation of novel cDNA transformation markers from SV40-transformed human keratinocytes. Morris AE, et al. **Exp Cell Res** 1989 Jun;182(2):461–72

Transformation of human epidermal cells by transfection with plasmid containing simian virus 40 DNA linked to a neomycin gene in a defined medium. Su RT, et al. **Exp Cell Res** 1989 Jan;180(1):117–33

Hemi-methylation dictates strand selection in repair of G/T and A/C mismatches in SV40. Hare JT, et al. **Gene** 1988 Dec 25;74(1):159–61

High-level transient expression of influenza virus proteins from a series of SV40 late and early replacement vectors. Huylebroeck D, et al. **Gene** 1988 Jun 30;66(2):163–81

High-level expression of the simian virus 40 genes LP1, VP1 and VP2 as fusion proteins in Escherichia coli. Lowman HB, et al. **Gene** 1988 Aug 15;68(1):23–33

Helpers for efficient encapsidation of SV40 pseudovirions. Oppenheim A, et al. **Gene** 1989 Apr 15;77(1):79–86

Transcription termination in animal viruses and cells. Resnekov O, et al. **Gene** 1988 Dec 10;72(1-2):91–104

Identification and purification of EBP1: a HeLa cell protein that binds to a region overlapping the 'core' of the SV40 enhancer. Clark L, et al. **Genes Dev** 1988 Aug;2(8):991–1002

An excised SV40 intron accumulates and is stable in Xenopus laevis oocytes. Michaeli T, et al. **Genes Dev** 1988 Aug; 2(8):1012–20

Alternative splicing of SV40 early pre-mRNA is determined by branch site selection. Noble JC, et al. **Genes Dev** 1988 Nov;2(11):1460–75

SV40 transfection of human kidney epithelial cells and stability of chromosome 11. Poirier V, et al. **Int J Cancer** 1988 Dec 15;42(6):887–94

Molecular cloning and characterization of endogenous SV40 DNA from human HBL-100 cells. Saint-Ruf C, et al. **Int J Cancer** 1989 Aug 15;44(2):367–72

Receptor-mediated phosphoinositide hydrolysis in human ocular ciliary epithelial cells. Wax MB, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1675–9

Mammalian topoisomerase II activity is modulated by the DNA minor groove binder distamycin in simian virus 40 DNA. Fesen M, et al. **J Biol Chem** 1989 Jul 5; 264(19):11354–9

Complete enzymatic synthesis of DNA containing the SV40 origin of replication. Ishimi Y, et al. **J Biol Chem** 1988 Dec 25;263(36):19723–33

SV40 DNA replication. Kelly TJ. **J Biol Chem** 1988 Dec 5;263(34):17889–92 (71 ref.)

RNA secondary structure is an integral part of the in vitro mechanism of attenuation in simian virus 40. Resnekov O, et al. **J Biol Chem** 1989 Jun 15;264(17):9953–9

Identification of cellular proteins required for simian virus 40 DNA replication. Wold MS, et al. **J Biol Chem** 1989 Feb 15;264(5):2801–9

Mithramycin blocks protein binding and function of the SV40 early promoter. Ray R, et al. **J Clin Invest** 1989 Jun; 83(6):2003–7

Effect of interferon on the accumulation of RNA transcripts of genes coding for cellular and viral proteins. Lambropoulos AF, et al. **J Gen Virol** 1989 May;70 (Pt 5):1267–71

Herpes simplex virus causes amplification of recombinant plasmids containing simian virus 40 sequences. Matz B. **J Gen Virol** 1989 Jun;70 (Pt 6):1347–58

Fine mapping of an H-2Kk restricted cytotoxic T lymphocyte epitope in SV40 T antigen by using in-frame deletion mutants and a synthetic peptide. Rawle FC, et al. **J Immunol** 1988 Oct 15;141(8):2734–9

Protein-induced bending of the simian virus 40 origin of replication. Baur CP, et al. **J Mol Biol** 1988 Oct 20; 203(4):1009–19

Excision of integrated simian virus 40 DNA involving homologous recombination between viral DNA sequences. Dora S, et al. **J Mol Biol** 1989 Mar 5;206(1):81–90

Helicase, DNA-binding, and immunological properties of replication-defective simian virus 40 mutant T antigens. Auborn K, et al. **J Virol** 1989 Feb;63(2):912–8

A transcription factor from simian virus 40 chromosomes which activates the viral late promoter in vitro. Beard P, et al. **J Virol** 1988 Nov;62(11):4296–302

Hybrid genomes of the polyomaviruses JC virus, BK virus, and simian virus 40: identification of sequences important for efficient transformation. Bollag B, et al. **J Virol** 1989 Feb;63(2):863–72

Characterization of a minimal simian virus 40 late promoter: enhancer elements in the 72-base-pair repeat not required. Dynan WS, et al. **J Virol** 1989 Mar;63(3):1420–7

Spontaneous rearrangement of integrated simian virus 40 DNA in nine transformed rodent cell lines. Gurney T Jr, et al. **J Virol** 1989 Jan;63(1):165–74

Comeasurement of simian virus 40 early and late promoter activity in HeLa and 293 cells in the presence of T antigen. Kelly JJ, et al. **J Virol** 1989 Jan;63(1):383–91

The zinc finger region of simian virus 40 large T antigen. Loeber G, et al. **J Virol** 1989 Jan;63(1):94–100

Large T-antigen mutants define multiple steps in the initiation of simian virus 40 DNA replication. Mohr IJ, et al. **J Virol** 1989 Oct;63(10):4181–8

Distinct factors bind the AP-1 consensus sites in gibbon ape leukemia virus and simian virus 40 enhancers. Quinn JP, et al. **J Virol** 1989 Apr;63(4):1737–42

Simian virus 40 late transcripts lacking excisable intervening sequences are defective in both stability in the nucleus and transport to the cytoplasm. Ryu WS, et al. **J Virol** 1989 Oct;63(10):4386–94

Leader-encoded open reading frames modulate both the absolute and relative rates of synthesis of the virion proteins of simian virus 40. Sedman SA, et al. **J Virol** 1989 Sep; 63(9):3884–93

High recombination rate of an Epstein-Barr virus-simian virus 40 hybrid shuttle vector in human cells. Stary A, et al. **J Virol** 1989 Sep;63(9):3837–43

Cell-line specific activation of SV40 transcriptional enhancer by p40tax of HTLV-1. Fujisawa J, et al. **Jpn J Cancer Res** 1988 Jul;79(7):800–4

Immortalization and malignant transformation of hepatocytes by transforming genes of polyoma virus and of SV40 virus in vitro and in vivo. Paul D, et al. **Klin Wochenschr** 1988; 66 Suppl 11:134–9 (54 ref.)

Application of nucleases to visualizing chromatin organization at replication forks. Cusick ME, et al. **Methods Enzymol** 1989;170:290–316

Frequency of cell transformation by the small DNA tumor viruses: infection of proliferating cells and quiescent cells. Matsuzaki A, et al. **Microbiol Immunol** 1989;33(8):657–67

Requirement for the simian virus 40 small tumor antigen in tumorigenesis in transgenic mice. Choi YW, et al. **Mol Cell Biol** 1988 Aug;8(8):3382–90

Herpes simplex virus induces the replication of foreign DNA. Danovich RM, et al. **Mol Cell Biol** 1988 Aug;8(8):3272–81

Cell-dependent efficiency of reiterated nuclear signals in a mutant simian virus 40 oncoprotein targeted to the nucleus. Fischer-Fantuzzi L, et al. **Mol Cell Biol** 1988 Dec; 8(12):5495–503

Multiple cis-acting sequence elements are required for efficient splicing of simian virus 40 small-t antigen pre-mRNA. Fu XY, et al. **Mol Cell Biol** 1988 Sep; 8(9):3582–90

Fidelity of DNA synthesis in a mammalian in vitro replication system. Hauser J, et al. **Mol Cell Biol** 1988 Aug; 8(8):3267–71

Cell lines established by a temperature-sensitive simian virus 40 large-T-antigen gene are growth restricted at the nonpermissive temperature. Jat PS, et al. **Mol Cell Biol** 1989 Apr;9(4):1672–81

Stimulation of the acute-phase response in simian virus 40-hepatocyte cell lines. Liao WS, et al. **Mol Cell Biol** 1989 Jul;9(7):2779–86

Mapping in vivo topoisomerase I sites on simian virus 40 DNA: asymmetric distribution of sites on replicating molecules. Porter SE, et al. **Mol Cell Biol** 1989 Feb; 9(2):541–50

Use of a simian virus 40-based shuttle vector to analyze enhanced mutagenesis in mitomycin C-treated monkey cells. Roilides E, et al. **Mol Cell Biol** 1988 Sep;8(9):3943–6

Generation of murine stromal cell lines supporting hematopoietic stem cell proliferation by use of recombinant retrovirus vectors encoding simian virus 40 large T antigen. Williams DA, et al. **Mol Cell Biol** 1988 Sep;8(9):3864–71

Tumorigenicity of simian virus 40-hepatocyte cell lines: effect of in vitro and in vivo passage on expression of liver-specific genes and oncogenes. Woodworth CD, et al. **Mol Cell Biol** 1988 Oct;8(10):4492–501

From simian virus 40 to transient shuttle vectors in mutagenesis studies. Bourre F, et al. **Mutat Res** 1989 Mar-May;220(2-3):107–13 (43 ref.)

Modified SV40 for analysis of mismatch repair in simian and human cells. Brown TC, et al. **Mutat Res** 1989 Mar-May; 220(2-3):115–23

Studies on direct and indirect effects of DNA damage on mutagenesis in monkey cells using an SV40-based shuttle vector. Dixon K, et al. **Mutat Res** 1989 Mar-May; 220(2-3):73–82

Construction of a shuttle vector containing a single O6-methylguanine: a probe for mutagenesis in mammalian cells. Ellison KS, et al. **Mutat Res** 1989 Mar-May; 220(2-3):93–100

Comparative study of Epstein-Barr virus and SV40-based shuttle-expression vectors in human repair-deficient cells. James MR, et al. **Mutat Res** 1989 Mar-May; 220(2-3):169–85

Comparing the frequency and spectra of mutations induced when an SV-40 based shuttle vector containing covalently bound residues of structurally-related carcinogens replicates in human cells. Maher VM, et al. **Mutat Res** 1989 Mar-May;220(2-3):83–92

SV40-based shuttle viruses. Menck CF, et al. **Mutat Res** 1989 Mar-May;220(2-3):101–6 (16 ref.)

The development of transient SV40 based shuttle vectors for mutagenesis studies: problems and solutions. Seidman M. **Mutat Res** 1989 Mar-May;220(2-3):55–60

Analysis of recombination in mammalian cells using SV40 and SV40-derived vectors. Subramani S. **Mutat Res** 1989 Mar-May;220(2-3):221–34 (70 ref.)

Efficient expression of small RNA polymerase III genes from a novel simian virus 40 vector and their effect on viral gene expression. Bhat RA, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1159–76

Foreign transcriptional enhancers in yeast. I. Interactions of papovavirus transcriptional enhancers and a quiescent pseudopromoter on supercoiled plasmids [published erratum appears in Nucleic Acids Res 1988 Dec 9;16(23):11398–9] Ciaramella M, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8847–68

Deletions in the SV40 late polyadenylation region downstream of the AATAAA mediate similar effects on expression in various mammalian cell lines. Gimmi ER, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8977–97

Helper activity for gene expression, a novel function of the SV40 enhancer. Graessmann M, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6603–12

Topoisomerase I interaction with SV40 DNA in the presence and absence of camptothecin. Jaxel C, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11157–70

A novel enhancement of SV40 enhancer activity by treatment of mouse neuroblastoma N18TG2 with protein kinase inhibitor H-7. Kikuchi K, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10171–81

The regulation of SV40 early gene expression in embryonal carcinoma stem cells—faithful transcriptional regulation in vitro. La Thangue NB, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11417–30

Stereospecific relationships between elements in an SV40/adenovirus-2 heterologous promoter. Lennard AC, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):6903–14

Oligonucleotide-targeted degradation of U1 and U2 snRNAs reveals differential interactions of simian virus 40 pre-mRNAs with snRNPs. Pan ZQ, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6553–68

Effects of VM26, a specific inhibitor of type II DNA topoisomerase, on SV40 chromatin replication in vitro. Richter A, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10119–29

Sequence independent duplex DNA opening reaction catalysed by SV40 large tumor antigen. Scheffner M, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):93–106

Overlapping redundant septuplets identical with regulatory elements of HIV-1 and SV40. Seto MH, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2783–800

Sequence and structural requirements for primase initiation in the SV40 origin of replication. Tseng BY, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1953–63

Functional analysis of point mutations in the AAUAAA motif of the SV40 late polyadenylation signal. Wilusz J, et al. **Nucleic Acids Res** 1989 May 25;17(10):3899–908

Paradoxical effect of Simian virus 40 enhancer on the function of mouse DNA polymerase beta gene promoter. Yamaguchi M, et al. **Nucleic Acids Res** 1989 May 25; 17(10):3725–34

Viral growth, origin binding, and p53 binding properties of simian virus 40 large T antigen transformation and replication mutants. Rutila JE, et al. **Oncogene Res** 1989; 4(4):303–10

Analysis of temperature-sensitive mutations in the simian virus 40 gene encoding virion protein 1. Behm M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9421–5

Retroviral vector-mediated high-efficiency expression of adenosine deaminase (ADA) in hematopoietic long-term cultures of ADA-deficient marrow cells. Bordignon C, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6748–52

Initiation of simian virus 40 DNA replication in vitro: pulse-chase experiments identify the first labeled species as topologically unwound. Bullock PA, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3944–8

An inhibitor of the in vitro elongation reaction of simian virus 40 DNA replication is overcome by proliferating-cell nuclear antigen. Lee SH, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9469–73

Sequence recognition protein for the 17-base-pair A + T-rich tract in the replication origin of simian virus 40 DNA. Malkas LH, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):70–4

Overexpression of amyloid precursor protein A4 (beta-amyloid) immunoreactivity in genetically transformed cells: implications for a cellular model of Alzheimer amyloidosis. Marotta CA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):337–41

Production of simian virus 40 large tumor antigen in bacteria: altered DNA-binding specificity and dna-replication activity of underphosphorylated large tumor antigen. Mohr IJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6479–83

Simian virus 40 (SV40) large tumor antigen causes stepwise changes in SV40 origin structure during initiation of DNA

replication. Roberts JM. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3939–43

Nonterminal differentiation represses the neoplastic phenotype in spontaneously and simian virus 40–transformed cells. Scott RE, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1652–6

Efficient transactivation and morphologic transformation by bovine papillomavirus genes expressed from a bovine papillomavirus/simian virus 40 recombinant virus. Settleman J, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9007–11

Transactivation of both early and late simian virus 40 promoters by large tumor antigen does not require nuclear localization of the protein. Wildeman AG. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2123–7

Template supercoiling during ATP-dependent DNA helix tracking: studies with simian virus 40 large tumor antigen. Yang L, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6121–5

The expression of viral and cellular genes in papillomas of the choroid plexus induced in transgenic mice. Marks J, et al. **Prog Clin Biol Res** 1988;284:163–86

The role of operator position in SV40 T-antigen–mediated repression. Cox M, et al. **Virology** 1988 Nov;167(1):293–5

Generation of a nucleosome-free promoter region in SV40 does not require T-antigen binding to site I. Kube D, et al. **Virology** 1989 Sep;172(1):100–5

Mutants with changes within or near a hydrophobic region of simian virus 40 large tumor antigen are defective for binding cellular protein p53. Peden KW, et al. **Virology** 1989 Jan;168(1):13–21

Extension of JC virus host range to monkey cells by insertion of a simian virus 40 enhancer into the JC virus regulatory region. Vacante DA, et al. **Virology** 1989 Jun;170(2):353–61

Transcriptional activation is not responsible for increased levels of autonomously expressed simian virus 40 T-antigen in herpes simplex virus–infected cells. Blair ED, et al. **Virus Genes** 1989 May;2(3):253–67

[In vitro replication of SV40 and polyoma virus DNA] Murakami Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(11):1766–73 **(Jpn)**

[The use of retrovirus vectors for the expression of chromosomal genes within introns: synthesis of biologically active tumor necrosis factor—human beta (lymphotoxin)] Prasolov VS, et al. **Dokl Akad Nauk SSSR** 1988; 300(6):1498–502 **(Rus)**

GROWTH & DEVELOPMENT

Azapyrimidine analogues: inhibition of viral DNA synthesis and protein synthesis in SV40 infected BSC-1 cells. Johnson-Thompson M, et al. **In Vitro Cell Dev Biol** 1988 Nov;24(11):1114–20

Purification of replication protein C, a cellular protein involved in the initial stages of simian virus 40 DNA replication in vitro. Virshup DM, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3584–8

IMMUNOLOGY

Membrane D2 T antigen: characterization and comparison with its nuclear counterpart. Ismail AA, et al. **Biochem Cell Biol** 1988 Aug;66(8):928–34

The cellular 107K protein that binds to adenovirus E1A also associates with the large T antigens of SV40 and JC virus. Dyson N, et al. **Cell** 1989 Jul 28;58(2):249–55

Effects of the cellular p53 protein on Simian-virus-40–T-antigen-catalyzed DNA unwinding in vitro. Kienzle H, et al. **Eur J Biochem** 1989 Sep 1; 184(1):181–6

Induction of simian virus 40 transplantation immunity in hamsters by gel-purified SV40 large T antigen. Haddada H, et al. **Immunol Lett** 1988 Jul;18(3):225–9

Autoimmune expression of a cytoplasmic protein p60 in mice bearing metastasizing SV40-transformed tumors. Manneck HE, et al. **Int J Cancer** 1988 Dec 15;42(6):906–12

Epitopes on the major capsid protein of simian virus 40. Babé LM, et al. **J Biol Chem** 1989 Feb 15;264(5):2665–71

Preferential binding of simian virus 40 T-antigen dimers to origin region I. Deb SP, et al. **J Virol** 1989 Jul;63(7):2901–7

Analysis of a large-T-antigen variant expressed in simian virus 40–transformed mouse cell line mKS-A. Dora S, et al. **J Virol** 1989 Jun;63(6):2820–8

Inhibition of simian virus 40 T-antigen expression by cellular differentiation. Estervig DN, et al. **J Virol** 1989 Jun; 63(6):2718–25

Monoclonal antibody analysis of simian virus 40 small t-antigen expression in infected and transformed cells. Montano X, et al. **J Virol** 1989 Jul;63(7):3128–34

Alterations in the structure of new and old forms of simian virus 40 large T antigen (T) defined by age-dependent epitope changes: new T is the same as ATPase-active T. Tack LC, et al. **J Virol** 1989 May;63(5):2352–6

Properties of a simian virus 40 mutant T antigen substituted in the hydrophobic region: defective ATPase and oligomerization activities and altered phosphorylation accompany an inability to complex with cellular p53. Tack LC, et al. **J Virol** 1989 Aug;63(8):3362–7

Persistence of abnormal chloride conductance regulation in transformed cystic fibrosis epithelia. Jetten AM, et al. **Science** 1989 Jun 23;244(4911):1472–5

METABOLISM

Characterization of simian virus 40 receptor moieties on the surfaces of Vero C1008 cells. Clayson ET, et al. **J Virol** 1989 Mar;63(3):1095–100

Factor interactions with the simian virus 40 early pre-mRNA influence branch site selection and alternative splicing. Noble JC, et al. **Mol Cell Biol** 1989 May;9(5):2007–17

Studies on the DNA elongation inhibitor and its proliferating cell nuclear antigen–dependent control in simian virus 40 DNA replication in vitro. Lee SH, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4877–81

[Topoisomerase I is connected with the regulatory zone of transcripted active mini-chromosomes of the SV40 virus] Vasetskiĭ ES, et al. **Mol Biol (Mosk)** 1989 Jan–Feb; 23(1):165–74 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

Class I major histocompatibility proteins as cell surface receptors for simian virus 40. Atwood WJ, et al. **J Virol** 1989 Oct;63(10):4474–7

PHYSIOLOGY

Release of simian virus 40 virions from epithelial cells is polarized and occurs without cell lysis. Clayson ET, et al. **J Virol** 1989 May;63(5):2278–88

Nuclear subcompartmentalization of simian virus 40 large T antigen: evidence for in vivo regulation of biochemical activities. Schirmbeck R, et al. **J Virol** 1989 May; 63(5):2308–16

Cooperation of V-oncogenes in human epithelial cell transformation. Rhim JS, et al. **Leukemia** 1988 Dec;2(12 Suppl):151S–159S

Entry of simian virus 40 is restricted to apical surfaces of polarized epithelial cells. Clayson ET, et al. **Mol Cell Biol** 1988 Aug;8(8):3391–6

Origin auxiliary sequences can facilitate initiation of simian virus 40 DNA replication in vitro as they do in vivo. Guo ZS, et al. **Mol Cell Biol** 1989 Sep;9(9):3593–602

Simian virus 40 DNA replication in vitro: identification of multiple stages of initiation. Tsurimoto T, et al. **Mol Cell Biol** 1989 Sep;9(9):3839–49

SV40-induced expression of mouse gene 24p3 involves a post-transcriptional mechanism. Hraba-Renevey S, et al. **Oncogene** 1989 May;4(5):601–8

Cotransfection of granulosa cells with simian virus 40 and Ha-RAS oncogene generates stable lines capable of induced steroidogenesis. Amsterdam A, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7582–6

[Molecular mechanism of initiation of DNA replication in eukaryotic cells] Ariga H. **Seikagaku** 1988 Jul;60(7):517–31 (84 ref.) **(Jpn)**

RADIATION EFFECTS

Replication of simian virus 40 DNA after UV irradiation: evidence of growing fork blockage and single-stranded gaps in daughter strands. Mezzina M, et al. **J Virol** 1988 Nov;62(11):4249–58

ULTRASTRUCTURE

The capsid of small papova viruses contains 72 pentameric capsomeres: direct evidence from cryo-electron-microscopy of simian virus 40. Baker TS, et al. **Biophys J** 1989 Feb;55(2):243–53

Affinity isolation of replicating simian virus 40 chromosomes. Herman TM. **Methods Enzymol** 1989;170:41–52

Preparation of simian virus 40 minichromosomes. Oudet P, et al. **Methods Enzymol** 1989;170:14–25

Electron microscopy of simian virus 40 minichromosomes. Oudet P, et al. **Methods Enzymol** 1989;170:166–79

SWALLOWING see **DEGLUTITION**

SWAMP FEVER see **EQUINE INFECTIOUS ANEMIA**

SWAMP FEVER VIRUS see **EQUINE INFECTIOUS ANEMIA VIRUS**

SWAN-GANZ CATHETERIZATION see **CATHETERIZATION, SWAN-GANZ**

SWAYBACK see under **SHEEP DISEASES**

SWEAT

[Pruritus caused by sweat: prevention by ablutions using Vichy Saint-Yorre water (letter)] Dupond JL. **Presse Med** 1988 Oct 29;17(38):2038 **(Fre)**

ANALYSIS

Calf sweat lactate in peripheral arterial occlusive disease. Fellmann N, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H395–8

Interpretation of sweat sodium results—the effect of patient age. Kirk JM, et al. **Ann Clin Biochem** 1989 Jan;26 (Pt 1):38–43

Sweat tests and flucloxacillin [letter] Walsh DB. **Arch Dis Child** 1989 Feb;64(2):308

Differences in composition of sweat induced by thermal exposure and by running exercise. Fukumoto T, et al. **Clin Cardiol** 1988 Oct;11(10):707–9

Iron, copper and zinc concentrations in human sweat and plasma; the effect of exercise. Aruoma OI, et al. **Clin Chim Acta** 1988 Sep 30;177(1):81–7

Radioimmunoassay detection limits for 19-OH F1 alpha/F2 alpha prostaglandin in normal, infertile and vasectomized semen stains. Analysis of saliva, sweat and urine for possible non-specific or matrix effects. King SJ, et al. **Forensic Sci Int** 1989 Mar;40(3):221–9

Analysis of methamphetamine in hair, nail, sweat, and saliva by mass fragmentography. Suzuki S, et al. **J Anal Toxicol** 1989 May–Jun;13(3):176–8

Identification of secretory immunoglobulin A in human sweat and sweat glands [letter] Gebhart W, et al. **J Invest Dermatol** 1989 Apr;92(4):648

Effect of different work-loads on sweat production and composition in man. Pilardeau PA, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):247–52

The use of sweat to monitor lead absorption through the skin. Lilley SG, et al. **Sci Total Environ** 1988 Oct 15; 76(2–3):267–78

A comparative study of copper, lead, cadmium and zinc in human sweat and blood. Stauber JL, et al. **Sci Total Environ** 1988 Aug 1;74:235–47

[Evaluation of a measurement method for perspiration volume using newly developed equipment for continuous recording of local perspiration volume (Kenz-Perspiro) (I)] Kanno K, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Feb; 99(2):135–9 (Eng. Abstr.) **(Jpn)**

[Substantiation of the system of sanitary-hygienic procedures] Berlin AA. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):21–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Elevated sweat potassium, hyperaldosteronism and pseudo-Bartter's syndrome: a spectrum of disorders associated with cystic fibrosis. Devlin J, et al. **J R Soc Med** 1989;82 Suppl 16:38–43

[The secretory performance of eccrine sweat glands from the nephrologic viewpoint—II: Middle molecules] Kobau F, et al. **Z Gesamte Inn Med** 1989 May 1;44(9):257–60 (Eng. Abstr.) **(Ger)**

SECRETION

Beards, baldness, and sweat secretion. Cabanac M, et al. **Eur J Appl Physiol** 1988;58(1–2):39–46

[Mechanisms of diaphoresis during muscular work] Ioffe LA, et al. **Fiziol Cheloveka** 1988 Nov–Dec;14(6):1008–11 **(Rus)**

[Age-related characteristics of sweat-secreting function in children] Tsariuk NB, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):702–5 **(Rus)**

SWEAT GLAND DISEASES

[Peritoneo-gluteal suppurative hidradenitis] Kassab S, et al. **Presse Med** 1988 Oct 1;17(33):1689–92 (21 ref.) (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

Hidradenitis suppurativa associated with use of oral contraceptives. Stellon AJ, et al. **BMJ** 1989 Jan 7; 298(6665):28–9

Neutrophilic eccrine hidradenitis. Evidence implicating bleomycin as a causative agent. Scallan PJ, et al. **Cancer** 1988 Dec 15;62(12):2532–6

Chemotherapy-associated eccrine hidradenitis: neutrophilic eccrine hidradenitis reevaluated: the role of neutrophilic infiltration. Greenbaum BH, et al. **Med Pediatr Oncol** 1988; 16(5):351–5

Neutrophilic eccrine hidradenitis: a case report and review of the literature. Bailey DL, et al. **Pediatr Dermatol** 1989 Mar;6(1):33–8 (12 ref.)

DRUG THERAPY

Successful treatment of hidradenitis suppurativa with acitretin [letter] Hogan DJ, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):355–6

ETIOLOGY

Endocrine basis for the clinical presentation of hidradenitis suppurativa. Harrison BJ, et al. **Br J Surg** 1988 Oct; 75(10):972–5

METABOLISM

The symptomatology of hidradenitis suppurativa in women. Jemec GB. **Br J Dermatol** 1988 Sep;119(3):345–50

PATHOLOGY

Pathologic quiz case 1. Sudoriferous cysts (cysts of Moll's glands). Flaiz RA, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):752–4

[Apocrine chromhidrosis] Schwarz T, et al. **Hautarzt** 1989 Feb;40(2):106–9 (Eng. Abstr.) **(Ger)**

SURGERY

A new splint for use in axillary surgery. Walker SJ, et al. **Br J Plast Surg** 1989 Jan;42(1):114–5

SWEAT GLAND NEOPLASMS

Metastatic eccrine sweat gland carcinoma: case report. Borradori L, et al. **Dermatologica** 1988;177(5):295–9
Metastatic sweat gland carcinoma in an adolescent: a case report. Morrissey K, et al. **Foot Ankle** 1988 Oct;9(2):96–100

ANALYSIS

Immunohistochemistry of gross cystic disease fluid protein (GCDFP–15) in 65 benign sweat gland tumors of the skin. Mazoujian G, et al. **Am J Dermatopathol** 1988 Feb; 10(1):28–35
Isolation of 16,000–dalton parathyroid hormone–like proteins from two animal tumors causing humoral hypercalcemia of malignancy. Weir EC, et al. **Endocrinology** 1988 Dec; 123(6):2744–51

COMPLICATIONS

Vulvar syringoma associated with epidermal cyst [letter] Zhu WY. **Int J Dermatol** 1989 Mar;28(2):142–3
Multiple eruptive syringomas associated with Down's syndrome [letter] Carey AB, et al. **J Am Acad Dermatol** 1988 Oct;19(4):759–60

DRUG THERAPY

Response of eccrine adenocarcinoma to tamoxifen. Sridhar KS, et al. **Cancer** 1989 Jul 15;64(2):366–70
Metastatic sweat gland carcinoma: response to 5–fluorouracil infusion. Swanson JD Jr, et al. **J Surg Oncol** 1989 Sep; 42(1):69–72

GENETICS

Familial occurrence of eccrine tumours in a family with ectodermal dysplasia. Nordin H, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):523–30
[Familial eruptive syringoma] Patrone P, et al. **G Ital Dermatol Venereol** 1988 Jul–Aug;123(7–8):363–5 (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

An immunohistologic study on eccrine gland carcinoma. Mita H, et al. **J Am Acad Dermatol** 1989 Apr;20(4):693–6
[Immunohistochemical studies on localization of CA 19–9 in normal human skin and tumors of the sweat apparatus] Horiuchi C. **Nippon Hifuka Gakkai Zasshi** 1988 Nov; 98(12):1197–203 (Eng. Abstr.) **(Jpn)**

METABOLISM

Secretory immunoglobulin A in sweat gland tumors. Metze D, et al. **J Cutan Pathol** 1989 Jun;16(3):126–32
A monoclonal antibody, SKH1, reacts with 40 Kd sweat gland–associated antigen. Suzuki Y, et al. **J Cutan Pathol** 1989 Apr;16(2):66–71

PATHOLOGY

Multiple eccrine poromas arising in chronic radiation dermatitis. Ullah K, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):70–3
Nevus sebaceus is associated with unusual neoplasms. An atlas. Alessi E, et al. **Am J Dermatopathol** 1988 Apr; 10(2):116–27
Papillary eccrine adenoma [letter] Kanitakis J, et al. **Am J Dermatopathol** 1988 Apr;10(2):180–2
Congenital spiradenoma. Schmoeckel C, et al. **Am J Dermatopathol** 1988 Dec;10(6):541–5
Sweat gland carcinoma ex eccrine spiradenoma. Wick MR, et al. **Am J Dermatopathol** 1987 Apr;9(2):90–8
Infiltrating syringomatous adenoma of the nipple. A clinical and pathological study of 11 cases. Jones MW, et al. **Am J Surg Pathol** 1989 Mar;13(3):197–201
Pathologic quiz case 1. Mucinous eccrine carcinoma. Feldman JI. **Arch Otolaryngol Head Neck Surg** 1989 Feb; 115(2):244–6
Sudoriferous hamartoma. Mayou SC, et al. **Clin Exp Dermatol** 1988 Mar;13(2):107–8
Eccrine–pilar angiomatous nevus. Velasco JA, et al. **Dermatologica** 1988;177(5):317–22 (18 ref.)
Apocrine adenoma presenting as gynaecomastia in a 14–year–old boy. De Potter CR, et al. **Histopathology** 1988 Dec;13(6):697–9
Apocrine carcinoma and apocrine metaplasia. Yates AJ, et al. **Histopathology** 1988 Aug;13(2):228–31
Eccrine syringofibroadenoma [letter] Sanusi ID, et al. **Int J Dermatol** 1988 Sep;27(7):523–5
Vulvar syringomas occurring in a 9–year–old child [letter] Scherbenske JM, et al. **J Am Acad Dermatol** 1988 Sep; 19(3):575–7
Porokeratotic eccrine ostial and dermal duct nevus. Report of a case of adult onset. Stoof TJ, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):924–7
Syringoma associated with milium–like lesions [letter] Zhu WY. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):360–1
Immunohistochemically detectable duct–like structures in benign and malignant eccrine poromas: CEA and involucrin immunostaining. Tokura Y, et al. **J Dermatol** 1989 Apr;16(2):133–41
Microcystic adnexal carcinoma: a case showing eccrine duct differentiation. Ceballos PI, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1236–9
Submammary syringoma—report of a case. Dekio S, et al. **J Dermatol (Tokyo)** 1988 Aug;15(4):351–2
[Clinical manifestations and treatment of sweat gland carcinoma—analysis of 22 cases] Qi HZ. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):467–9 (Eng. Abstr.) **(Chi)**
[Differentiated tubulopapillary adenoma of the skin glands] Mikuláštík J, et al. **Cesk Patol** 1988 Aug;24(3):161–7 (Eng. Abstr.) **(Cze)**
[Eccrine epitheliomas] Mikuláštík J, et al. **Cesk Patol** 1988 Aug;24(3):168–78 (Eng. Abstr.) **(Cze)**
[Eccrine sweat gland nevus—immunohistochemical demonstration of MAM–3 and MAM–6 antigens] Wätzig V, et al. **Hautarzt** 1989 Mar;40(3):164–6 (Eng. Abstr.) **(Ger)**
[Analysis of the histogenesis of skin gland tumors using histochemical and immunohistochemical technics] Cannavò SP, et al. **G Ital Dermatol Venereol** 1988 Jun;123(6):319–23 (Eng. Abstr.) **(Ita)**
[Papillary eccrine adenoma] Tellechea O, et al. **Med Cutan Ibero Lat Am** 1989;17(2):85–91 (25 ref.) (Eng. Abstr.) **(Por)**
[Ductal tumor of the eccrine sweat glands] Sangüeza P, et al. **Med Cutan Ibero Lat Am** 1989;17(3):166–8 (Eng. Abstr.) **(Spa)**

SURGERY

Treatment of multiple apocrine hidrocystomas with the carbon dioxide (CO_2) laser. Bickley LK, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):599–602
A modified technique for excision of syringomas. Moreno–González J, et al. **J Dermatol Surg Oncol** 1989 Aug;15(8):796–8
Sweat gland carcinoma of the hand (malignant acrospiroma). Wilson KM, et al. **J Hand Surg [Am]** 1989 May;14(3):531–5 (18 ref.)
[Giant nevus comedonicus] Bogdanowski T, et al. **Przegl Dermatol** 1988 Jul–Aug;75(4):305–7 (Eng. Abstr.) **(Pol)**

ULTRASTRUCTURE

Clear–cell syringoma. Immunohistochemistry and electron microscopy study. Ambrojo P, et al. **Dermatologica** 1989; 178(3):164–6
Papillary eccrine adenoma: an electron microscopic study. Jerasutus S, et al. **J Am Acad Dermatol** 1989 Jun; 20(6):1111–4
Clear cell hidradenoma with whorl formation of squamoid cells: immunohistochemical and electron microscopic studies. Satoh T, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):271–7
[A case of eccrine spiradenoma electron microscopic and immunohistochemical features] Serikawa K, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Aug;98(9):879–889 (Eng. Abstr.) **(Jpn)**

SWEAT GLANDS

Response of eccrine adenocarcinoma to tamoxifen. Sridhar KS, et al. **Cancer** 1989 Jul 15;64(2):366–70
Metastatic eccrine sweat gland carcinoma: case report. Borradori L, et al. **Dermatologica** 1988;177(5):295–9
Treatment of apocrine chromhidrosis with topical capsaicin. Marks JG Jr. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):418–20
Ectopic apocrine cyst in the facial area. Miller RI, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):401–2
[Peritoneo–gluteal suppurative hidradenitis] Kassab S, et al. **Presse Med** 1988 Oct 1;17(33):1689–92 (21 ref.) (Eng. Abstr.) **(Fre)**

ABNORMALITIES

Familial simple hypohidrosis with abnormal palmar dermal ridges. Frydman M, et al. **Am J Med Genet** 1988 Nov; 31(3):591–6
Hypohidrotic ectodermal dysplasia: a genealogic, stereomicroscope, and scanning electron microscope study. Norval EJ, et al. **Pediatr Dermatol** 1988 Aug;5(3):159–66

ANALYSIS

An NADH–linked luciferase assay for glycogen: the preparation of glycogen–free, viable human eccrine sweat glands. Welch C, et al. **Anal Biochem** 1989 Feb 1; 176(2):228–33
Presence of cytokeratins in human eccrine sweat gland epithelia—an immunocytochemical study of the monoclonal antibodies KL1, CK 8.60, PKK2, CK 8.12, CK 8.13, CK 4.62, and RPN 1160 using the APAAP technique. Kurokawa I, et al. **J Dermatol (Tokyo)** 1988 Aug;15(4):308–15
Identification of secretory immunoglobulin A in human sweat and sweat glands [letter] Gebhart W, et al. **J Invest Dermatol** 1989 Apr;92(4):648
The effects of thermally–induced activity in vivo upon the ultrastructure and Na, K and Cl composition of the epithelial cells of sweat glands from patients with cystic fibrosis. Wilson SM, et al. **Tissue Cell** 1988;20(5):691–700

ANATOMY & HISTOLOGY

A population study on the density of palmar sweat pores. Jorgenson RJ, et al. **Birth Defects** 1988;24(2):51–63
A quantitative morphological examination of bovine vulval skin glands. Blazquez NB, et al. **J Anat** 1987 Dec; 155:153–63
Morphological connections of the human apocrine and eccrine sweat gland—occurrence of the so–called "mixed sweat glands"—a review. Ito T. **Okajimas Folia Anat Jpn** 1988 Dec;65(5):315–35 (24 ref.)
[Theoretical and practical aspects of the classification of mammalian sweat glands] Sokolov VE, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov–Dec;(6):814–23 (47 ref.) **(Rus)**

CYTOLOGY

Dye–coupling compartments in the human eccrine sweat gland. Jones CJ, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C478–85
Human sweat duct cells in primary culture. Basic bioelectric properties of cultures derived from normals and patients with cystic fibrosis. Pedersen PS. **In Vitro Cell Dev Biol** 1989 Apr;25(4):342–52
NCL–SG3: a human eccrine sweat gland cell line that retains the capacity for transepithelial ion transport. Lee CM, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):241–9
Patch–clamp study of cultured human sweat duct cells: amiloride–blockable Na+ channel. Joris L, et al. **Pflugers Arch** 1989 Jul;414(3):369–72
[Histochemical method of differentiating 2 types of sweat glands by the isoelectrical points of mitochondrial ribonucleoproteins] Sokolov VE, et al. **Dokl Akad Nauk SSSR** 1988 Jul–Aug;301(1):218–21 **(Rus)**

DRUG EFFECTS

Seasonal variation in responsiveness of human eccrine sweat glands to phenylephrine. Banjar WM, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):276–8
Methylcholine–activated eccrine sweat gland density and output as a function of age. Kenney WL, et al. **J Appl Physiol** 1988 Sep;65(3):1082–6
Lipogenesis by isolated human apocrine sweat glands: testosterone has no effect during long–term organ maintenance. Barth JH, et al. **J Invest Dermatol** 1989 Mar; 92(3):333–6

EMBRYOLOGY

The early ontogeny of the afferent nerves and papillary ridges in human digital glabrous skin. Moore SJ, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):119–41

IMMUNOLOGY

An immunohistologic study on eccrine gland carcinoma. Mita H, et al. **J Am Acad Dermatol** 1989 Apr;20(4):693–6
Localization of prolactin–like immunoreactivity in grafted human sweat glands. Robertson MT, et al. **J Histochem Cytochem** 1989 May;37(5):625–8
Immunohistochemical demonstration of immunoglobulin A in human sebaceous and sweat glands. Metze D, et al. **J Invest Dermatol** 1989 Jan;92(1):13–7

INJURIES

Cholinergic phenotype developed by noradrenergic sympathetic neurons after innervation of a novel cholinergic target in vivo. Schotzinger RJ, et al. **Nature** 1988 Oct 13;335(6191):637–9

INNERVATION

Substance P–, VIP– and CGRP–like immunoreactivities coexist in a population of cholinergic postganglionic sympathetic nerves innervating sweat glands in the cat. Lindh B, et al. **Acta Physiol Scand** 1988 Dec;134(4):569–70
Effect of age on collateral reinnervation of sweat glands in the mouse. Navarro X, et al. **Brain Res** 1988 Oct 25; 463(1):174–81
Developmental interactions between sweat glands and the sympathetic neurons which innervate them: effects of delayed innervation on neurotransmitter plasticity and gland maturation. Stevens LM, et al. **Dev Biol** 1988 Dec; 130(2):703–20
Sweat gland reinnervation by sudomotor regeneration after different types of lesions and graft repairs. Navarro X, et al. **Exp Neurol** 1989 Jun;104(3):229–34
Reinnervation of sweat glands in the rat hind paw following peripheral nerve injury. Bharali LA, et al. **J Auton Nerv Syst** 1988 Aug;23(2):125–9

METABOLISM

Formation of inositol polyphosphates in cultured human sweat duct cells in response to cholinergic stimulation. Doughney C, et al. **Biochim Biophys Acta** 1989 Mar 6; 1010(3):352–6
Phytohemagglutinin–binding sites in the skin. A useful histochemical marker of acrosyringium and distal portions of intradermal sweat ducts. Saida T, et al. **Dermatologica** 1989;179(1):25–8
The cytochemistry of glycoconjugates in the planum nasolabial gland of the goat as studied by electron microscopic methods. Tsukise A, et al. **Histochem J** 1988 Nov;20(11):617–23

Distribution of a prolactinlike material in human eccrine sweat glands. Walker AM, et al. **J Invest Dermatol** 1989 Jul;93(1):50–3

Electron probe X-ray microanalysis of cellular ions in the eccrine secretory coil cells during methacholine stimulation. Saga K, et al. **J Membr Biol** 1989 Jan; 107(1):13–24

K+ efflux from the monkey eccrine secretory coil during the transient of stimulation with agonists. Saga K, et al. **J Physiol (Lond)** 1988 Nov;405:205–17

Ulex europaeus agglutinin I binding in the apocrine glands of the interdigital gland and skin in the Japanese serow Capricornis crispus. Atoji Y, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):194–6

The control of potassium (86Rb+) efflux in the isolated human sweat gland. Bovell DL, et al. **Q J Exp Physiol** 1989 May;74(3):267–76

[The secretory performance of eccrine sweat glands from the nephrologic viewpoint—II: Middle molecules] Koban F, et al. **Z Gesamte Inn Med** 1989 May 1;44(9):257–60 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Eccrine sweat gland reaction. A histological and immunocytochemical study. Luther H, et al. **Am J Dermatopathol** 1988 Oct;10(5):390–8

A monoclonal antibody which identifies an epitope in eccrine duct and acrosyringium. Penneys NS, et al. **Dermatologica** 1989;179(1):21–4

Eccrine–pilar angiomatous nevus. Velasco JA, et al. **Dermatologica** 1988;177(5):317–22 (18 ref.)

Effects of season and lower ambient temperature on the structure of the sweat glands in anhidrotic horses. Jenkinson DM, et al. **Equine Vet J** 1989 Jan;21(1):59–65

Clear cell metaplasia of the breast: a lesion showing eccrine differentiation. Viña M, et al. **Histopathology** 1989 Jul; 15(1):85–92

Apocrine carcinoma and apocrine metaplasia. Yates AJ, et al. **Histopathology** 1988 Aug;13(2):228–31

Porokeratotic eccrine ostial and dermal duct nevus. Fernández-Redondo V, et al. **J Cutan Pathol** 1988 Dec; 15(6):393–5

Microcystic adnexal carcinoma: a case showing eccrine duct differentiation. Ceballos PI, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1236–9

[Virilization caused by 21-hydroxylase deficiency and axillary sweat gland hyperplasia] Jourdain JC, et al. **Ann Dermatol Venereol** 1988;115(11):1136–8 **(Fre)**

[Apocrine chromhidrosis] Schwarz T, et al. **Hautarzt** 1989 Feb;40(2):106–9 (Eng. Abstr.) **(Ger)**

[Eccrine sweat gland nevus—immunohistochemical demonstration of MAM-3 and MAM-6 antigens] Wätzig V, et al. **Hautarzt** 1989 Mar;40(3):164–6 (Eng. Abstr.) **(Ger)**

[Ductal tumor of the eccrine sweat glands] Sangüeza P, et al. **Med Cutan Ibero Lat Am** 1989;17(3):166–8 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

What is new on sweat glands [editorial] Gebhart W. **Dermatologica** 1989;178(3):121–2

Retention of basic electrophysiologic properties by human sweat duct cells in primary culture. Reddy MM, et al. **In Vitro Cell Dev Biol** 1988 Sep;24(9):905–10

Biology of sweat glands and their disorders. I. Normal sweat gland function. Sato K, et al. **J Am Acad Dermatol** 1989 Apr;20(4):537–63 (134 ref.)

Human eccrine sweat gland epithelial cultures express ductal characteristics. Brayden DJ, et al. **J Physiol (Lond)** 1988 Nov;405:657–75

[The number of active sweat glands (PSI, palmar sweat index) as a psychophysiologic parameter] Köhler T, et al. **Z Exp Angew Psychol** 1989;36(1):89–100 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Ion channels in normal human and cystic fibrosis sweat gland cells. Krouse ME, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C129–40

Horner's syndrome. Sweat gland and pupillary responsiveness in two cases with a probable 3rd neurone dysfunction. Salvesen R, et al. **Cephalalgia** 1989 Mar; 9(1):63–70

SECRETION

[Age-related characteristics of sweat-secreting function in children] Tsariuk NB, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):702–5 **(Rus)**

SURGERY

Prophylactic antibiotics in surgical treatment of axillary hyperhidrosis. Ma S, et al. **Ann Plast Surg** 1989 May; 22(5):436–9

A new splint for use in axillary surgery. Walker SJ, et al. **Br J Plast Surg** 1989 Jan;42(1):114–5

SWEATING

see related
HYPERHIDROSIS

HYPOHIDROSIS

Diaphoresis as an angina equivalent [letter] Cheng TO. **Am J Med** 1989 Jun;86(6 Pt 1):639

Control of thermoregulatory sweating during exercise in the heat. Sawka MN, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R311–6

Correlations between two-feet–one-hand dermatophytosis, palmar sweating, and handedness. Bender S, et al. **Ann N Y Acad Sci** 1988;544:588–9

Effect of head or neck cooling used with a liquid-conditioned vest during simulated aircraft sorties. Cohen JB, et al. **Aviat Space Environ Med** 1989 Apr;60(4):315–20

Cluster headache: combined assessment with pupillometry and evaporimetry. Salvesen R, et al. **Cephalalgia** 1988 Sep; 8(3):211–8

Cluster headache: forehead sweating pattern during heating and pilocarpine tests. Variation as a function of time. Salvesen R, et al. **Cephalalgia** 1988 Dec;8(4):245–53

Shortlasting unilateral neuralgiform headache attacks with conjunctival injection, tearing, sweating, and rhinorrhea. Sjaastad O, et al. **Cephalalgia** 1989 Jun;9(2):147–56

Chronic paroxysmal hemicrania. XIII. The pupillometric pattern. Souza Souza Carvalho D, et al. **Cephalalgia** 1988 Sep;8(3):219–26

Differences in composition of sweat induced by thermal exposure and by running exercise. Fukumoto T, et al. **Clin Cardiol** 1988 Oct;11(10):707–9

Predictors of sweat loss in man during prolonged exercise. Greenhaff PL, et al. **Eur J Appl Physiol** 1989;58(4):348–52

Control of sweating during the human menstrual cycle. Kolka MA, et al. **Eur J Appl Physiol** 1989;58(8):890–5

Effect of physical training on peripheral sweat production. Buono MJ, et al. **J Appl Physiol** 1988 Aug;65(2):811–4

Effect of cerebrospinal fluid hyperosmolality on sweating in the heat-stressed patas monkey. Owen MD, et al. **J Appl Physiol** 1989 Jul;67(1):128–33

Excessive sweating: a misinterpreted sign of pheochromocytoma [letter] Cignarelli M, et al. **J Endocrinol Invest** 1989 Jan;12(1):75–6

Local sweating responses of different body areas in dehydration–hydration experiments. Libert JP, et al. **J Physiol (Paris)** 1988;83(1):19–25

Effect of different work-loads on sweat production and composition in man. Pilardeau PA, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):247–52

Effect of physical training on exercise induced sweating in men. Pilardeau PA, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):176–80

Effect of facial cooling during heat acclimation process on adaptive changes in sweating activity. Ogawa T, et al. **Jpn J Physiol** 1988;38(4):479–90

Reduced sweating in adults with growth hormone deficiency [letter] Pedersen SA, et al. **Lancet** 1989 Sep 16; 2(8664):681–2

Thermoregulatory sweating abnormalities in diabetes mellitus. Fealey RD, et al. **Mayo Clin Proc** 1989 Jun; 64(6):617–28

Sweating abnormalities and other autonomic disorders in diabetes mellitus. Stewart JD. **Mayo Clin Proc** 1989 Jun; 64(6):712–5

Sweating it out. Segal H. **Psychoanal Study Child** 1988; 43:167–75

[Apocrine chromhidrosis] Schwarz T, et al. **Hautarzt** 1989 Feb;40(2):106–9 (Eng. Abstr.) **(Ger)**

[The number of active sweat glands (PSI, palmar sweat index) as a psychophysiologic parameter] Köhler T, et al. **Z Exp Angew Psychol** 1989;36(1):89–100 (Eng. Abstr.) **(Ger)**

[A new apparatus for continuous recording of sweating rate by use of a hygrometer] Sakaguchi M, et al. **Iyodenshi To Seitai Kogaku** 1988 Dec;26(4):213–7 (Eng. Abstr.) **(Jpn)**

[Evaluation of a measurement method for perspiration volume using newly developed equipment for continuous recording of local perspiration volume (Kenz-Perspiro) (I)] Kanno K, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Feb; 99(2):135–9 (Eng. Abstr.) **(Jpn)**

[Characteristics of sweating during work-related hyperthermia] Pavlov AS. **Fiziol Cheloveka** 1988 May–Jun; 14(3):434–40 **(Rus)**

DRUG EFFECTS

Cervicogenic headache: the forehead sweating pattern. Fredriksen TA. **Cephalalgia** 1988 Sep;8(3):203–9

Re: Nocturnal diaphoresis and coronary artery spasm [letter] Cheng TO. **Cleve Clin J Med** 1988 Nov–Dec;55(6):565

Effects of CSF ANG II and AVP on sweating in the heat-stressed patas monkey. Owen MD, et al. **J Appl Physiol** 1989 Jul;67(1):134–40

Managing antidepressant-induced sweating [letter] Butt MM. **J Clin Psychiatry** 1989 Apr;50(4):146–7

[Efficacy of tropatepine in paroxysmal sweats in a parkinsonian patient (letter)] Devoize JL, et al. **Presse Med** 1989 May 27;18(21):1079 **(Fre)**

[Effects of ceruletide and LH-RH on human sudomotor function] Murakami K, et al. **Rinsho Shinkeigaku** 1988 Jul; 28(7):797–802 (Eng. Abstr.) **(Jpn)**

SWEATING, GUSTATORY

DIAGNOSIS

Auriculotemporal syndrome seen clinically as food allergy. Beck SA, et al. **Pediatrics** 1989 Apr;83(4):601–3

DRUG THERAPY

Frey's syndrome: treatment with topical glycopyrrolate. May JS, et al. **Head Neck** 1989 Jan–Feb;11(1):85–9

Treatment of Frey's syndrome (gustatory sweating) with topical glycopyrrolate: case report [letter] Stegehuis HR, et al. **N Z Med J** 1989 Sep 13;102(875):479

[How should Frey's syndrome be treated?] Wustrow TP. **Laryngorhinootologie** 1989 Jun;68(6):361–2 **(Ger)**

ETIOLOGY

An assessment for auriculotemporal syndrome following temporomandibular joint surgery through the preauricular approach. Kryshtalskyj B, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):3–6

SWEETENING AGENTS

Diabetics in long-term care. Effect of sweetness on dietary intake. Endres J, et al. **Ann N Y Acad Sci** 1989;561:157–61

Sugar alcohols as bulk sweeteners. Dills WL Jr. **Annu Rev Nutr** 1989;9:161–86 (180 ref.)

Sweeteners in diabetes. 20 March 1987, San Francisco, California. **Diabetes Care** 1989 Jan;12(1):47–82

Xylitol [letter] Vorster M. **Diabetes Care** 1989 Feb; 12(2):171–2

Dietary fructose as a natural sweetener in poorly controlled type 2 diabetes: a 12-month crossover study of effects on glucose, lipoprotein and apolipoprotein metabolism. Osei K, et al. **Diabetic Med** 1989 Aug;6(6):506–11

The genetics of tasting in mice. VI. Saccharin, acesulfame, dulcin and sucrose. Lush IE. **Genet Res** 1989 Apr; 53(2):95–9

Usefulness of palatinose as a caloric sweetener for diabetic patients. Kawai K, et al. **Horm Metab Res** 1989 Jun; 21(6):338–40

Sweeteners and diabetes. DeLawter DE. **Md Med J** 1989 Jun;38(6):463

Acesulfame—a new artificial sweetener. **Med Lett Drugs Ther** 1988 Dec 16;30(781):116

Intensely sweet compounds of natural origin. Kinghorn AD, et al. **Med Res Rev** 1989 Jan–Mar;9(1):91–115 (39 ref.)

Sweet-taste receptor recognition of the conformationally flexible aldoxime molecule. Venanzi TJ, et al. **Prog Clin Biol Res** 1989;291:321–4

[What is the ideal sweetener?] Melga P, et al. **Riv Eur Sci Med Farmacol** 1987 Mar;9(1):39–48 (52 ref.) (Eng. Abstr.) **(Ita)**

[Formulation, preparation and evaluation of shortening, laminated and cut biscuits, for diabetic patients] Wittig de Penna E, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):532–46 (Eng. Abstr.) **(Spa)**

ADMINISTRATION & DOSAGE

Mechanisms from models—actual effects from real life: the zero-calorie drink-break option. Booth DA. **Appetite** 1988; 11 Suppl 1:94–102 (26 ref.)

Human studies of sweeteners and intake. Rolls BJ. **Appetite** 1988;11 Suppl 1:92–3

Patterns of artificial sweetener use and weight change in an American Cancer Society prospective study. Stellman SD, et al. **Appetite** 1988;11 Suppl 1:85–91

Uncoupling sweet taste and calories: comparison of the effects of glucose and three intense sweeteners on hunger and food intake. Rogers PJ, et al. **Physiol Behav** 1988; 43(5):547–52

Sugar substitutes—one consequence of the Vipeholm Study? Birkhed D. **Scand J Dent Res** 1989 Apr;97(2):126–9

ADVERSE EFFECTS

Histologic changes in the urinary bladder in relation to cigarette smoking and use of artificial sweeteners. Auerbach O, et al. **Cancer** 1989 Sep 1;64(5):983–7

[Polyols as sweetening agents; swallowing everything?] van Gelderen CE, et al. **Ned Tijdschr Geneeskd** 1989 Jul 1; 133(26):1300–2 **(Dut)**

ANALYSIS

Determination of seven artificial sweeteners in diet food preparations by reverse-phase liquid chromatography with absorbance detection. Lawrence JF, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):934–7

Separation of natural product sweetening agents using overpressured layer chromatography. Fullas F, et al. **J Chromatogr** 1989 Feb 17;464(1):213–9

Crystal structures of two intensely sweet proteins. Kim SH, et al. **Trends Biochem Sci** 1988 Jan;13(1):13–5 (15 ref.)

METABOLISM

Amylolytic breakdown of Lycasin compared with other carbohydrate derivatives. Grenby TH, et al. **Caries Res** 1988;22(5):276–9

Studies of the dental properties of lactitol compared with five other bulk sweeteners in vitro. Grenby TH, et al.

Caries Res 1989;23(5):315–9
Nutritional assessment in humans and rats of leucrose [D–glucopyranosyl–alpha(1——5)–D–fructopyranose] as a sugar substitute. Ziesenitz SC, et al. **J Nutr** 1989 Jul; 119(7):971–8

PHARMACOLOGY

Sweeteners, appetite and obesity. Workshop on "The effect of sweeteners on food intake". Meeting of the North American Association for the Study of Obesity. Boston, Massachusetts, 14 October 1987. Proceedings. **Appetite** 1988;11 Suppl 1:1–102
Factors influencing the effects of nutritive and non–nutritive sweeteners on energy intake and body weight in rats. Kanarek RB, et al. **Appetite** 1988;11 Suppl 1:16–9 (21 ref.)
The effect of non–nutritive sweeteners on body weight in rats. Porikos KP, et al. **Appetite** 1988;11 Suppl 1:12–5
How do non–nutritive sweeteners increase food intake? Tordoff MG. **Appetite** 1988;11 Suppl 1:5–11 (20 ref.)
Dental effects of Lycasin in the diet of laboratory rats. Grenby TH. **Caries Res** 1988;22(5):288–96
Comparison of Lycasin versus sucrose sweets in demineralization studies of human enamel and hydroxylapatite. Grenby TH, et al. **Caries Res** 1988; 22(5):269–75
Effect of Lycasin upon plaque pH when taken as a syrup or as a boiled sweet. Rugg–Gunn AJ. **Caries Res** 1988; 22(6):375–6
Evaluation of a model for short–term clinical testing of cariogenicity. Sundström F, et al. **J Biol Buccale** 1989 Jun; 17(2):115–20
The sweet taste in the calf. I. Chorda tympani proper nerve responses to taste stimulation of the tongue. Segerstad CH, et al. **Physiol Behav** 1989 Mar;45(3):633–8

THERAPEUTIC USE

Latest state of research on lactitol and dental caries. Grenby TH. **Int Dent J** 1989 Mar;39(1):25–32 (29 ref.)
[Review of the role of saccharose in the light of cariologic–dietetic studies. Possibilities of the prophylactic use of sugar substitutes] Végh A. **Fogorv Sz** 1989 Mar; 82(3):71–9 (64 ref.) **(Hun)**

SWIFT'S DISEASE see **ACRODYNIA**

SWIMBLADDER see **AIR SACS**

SWIMMING

Iron deficiency in athletes. Insights from high school swimmers. Rowland TW, et al. **Am J Dis Child** 1989 Feb; 143(2):197–200
Enhancement of blood lactate clearance following maximal swimming. Effect of velocity of recovery swimming. McMaster WC, et al. **Am J Sports Med** 1989 Jul–Aug; 17(4):472–7
Illness and absence among wrestlers, swimmers, and gymnasts at a large university. Strauss RH, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):653–55
Thermic effect of food at rest and following swim exercise in trained college men and women. Nichols J, et al. **Ann Nutr Metab** 1988;32(4):215–9
Health status of active winter swimmers. Kauppinen K, et al. **Arctic Med Res** 1988 Apr;47(2):71–82
Thoracic back pain in rowers and butterfly swimmers—costo vertebral subluxation [letter] Thomas PL. **Br J Sports Med** 1988 Jun;22(2):81
Differential effect of physical exercise routines on ventricular myosin and peripheral catecholamine stores in normotensive and spontaneously hypertensive rats. Rupp H. **Circ Res** 1989 Aug;65(2):370–7
Water contamination and swimming with the open mastoid cavity. Bingham BJ, et al. **Clin Otolaryngol** 1988 Oct; 13(5):347–50
Orthopedic aspects of competitive swimming. Richardson AB. **Clin Sports Med** 1987 Jul;6(3):639–45 (7 ref.)
Sodium bicarbonate ingestion improves performance in interval swimming. Gao JP, et al. **Eur J Appl Physiol** 1988; 58(1–2):171–4
The aerobic demand of backstroke swimming, and its relation to body size, stroke technique, and performance. Smith HK, et al. **Eur J Appl Physiol** 1988;58(1–2):182–8
Epidemiological significance of microbiological pollution criteria for river recreational waters. Ferley JP, et al. **Int J Epidemiol** 1989 Mar;18(1):198–205
Psychological prediction of injury in elite swimmers. Bond JW, et al. **Int J Sports Med** 1988 Oct;9(5):345–8
A comparative study of blood lactate tests in swimming. Keskinen KL, et al. **Int J Sports Med** 1989 Jun; 10(3):197–201
Influence of exercise in water on hormonal, metabolic and adrenergic receptor changes in man. Lenz T, et al. **Int J Sports Med** 1988 Aug;9 Suppl 2:S125–31
Plasma volume responses associated with a sprint triathlon in novice triathletes. McNaughton LR. **Int J Sports Med** 1989 Jun;10(3):161–4 (42 ref.)
Growth and pubertal development of young female gymnasts and swimmers: a correlation with parental data. Theintz GE, et al. **Int J Sports Med** 1989 Apr;10(2):87–91
Differences in sympathoadrenal, hormonal, and metabolic adaptation to submaximal and maximal arm and leg work compared with whole stroke in breast–style swimming. Weiss M, et al. **Int J Sports Med** 1988 Aug;9 Suppl 2:S118–24
Swimming safety. **Iowa Med** 1988 Sep;78(9):435–6
Effect of swim exercise training on human muscle fiber function. Fitts RH, et al. **J Appl Physiol** 1989 Jan; 66(1):465–75
Propelling efficiency of front–crawl swimming. Toussaint HM, et al. **J Appl Physiol** 1988 Dec;65(6):2506–12
Flow visualization of competitive swimming techniques: the tufts method. Hay JG, et al. **J Biomech** 1989;22(1):11–9
Pritt Tak: another hazard of grommets and swimming. Clark DR. **J Laryngol Otol** 1988 Nov;102(11):1039
Swimming in chlorinated water and its effect on Eustachian tube function. Morgan DW, et al. **J Laryngol Otol** 1989 Mar;103(3):257–8
Function of identified motoneurones and co–ordination of primary and secondary motor systems during zebra fish swimming. Liu DW, et al. **J Physiol (Lond)** 1988 Sep; 403:73–89
Peak physiological function and performance of recreational triathletes. Loftin M, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):330–5
Pulmonary diffusing capacity as a predictor of performance in competitive swimming. Miller RL, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):91–6 (14 ref.)
A comparison of various exercise challenge tests on airway reactivity in atopical swimmers. Reggiani E, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):394–401
Cardiac dimensions and physical profile of masters level swimmers. Swan PD, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):97–103 (26 ref.)
Exercise training, fitness, and asthma [letter] Plaut GS. **Lancet** 1989 May 20;1(8647):1147
Cold–induced pulmonary oedema in scuba divers and swimmers and subsequent development of hypertension. Wilmshurst PT, et al. **Lancet** 1989 Jan 14;1(8629):62–5
Cardiovascular and thermal responses of triathlon performance. Kreider RB, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):385–90
Mood disturbance following increased training in swimmers. Morgan WP, et al. **Med Sci Sports Exerc** 1988 Aug; 20(4):408–14
Menarche in athletes: the influence of genetics and prepubertal training. Stager JM, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):369–73
Effect of a triathlon wet suit on drag during swimming. Toussaint HM, et al. **Med Sci Sports Exerc** 1989 Jun; 21(3):325–8
Body surfing as a cause of luxatio erecta: report of four cases. Kahn ML, et al. **Orthop Rev** 1987 Oct;16(10):729–33
Effects of aquatic training on swimming skill development of preschool children. Erbaugh SJ. **Percept Mot Skills** 1986 Apr;62(2):439–46
The iceberg profile and young competitive swimmers. Furst DM, et al. **Percept Mot Skills** 1988 Oct;67(2):478
Performance of the vertical position in synchronized swimming as a function of skill, proprioceptive and visual feedback. Starkes JL, et al. **Percept Mot Skills** 1989 Aug; 69(1):225–6
Training–dependent decay in performance produced by the neuroleptic cis(Z)–flupentixol on spatial navigation by rats in a swimming pool. Whishaw IQ, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):211–20
The modified forced–swim test in rats: influence of rope– or straw–suspension on climbing behavior. Nishimura H, et al. **Physiol Behav** 1988;43(5):665–8
Propulsion of a fin whale (Balaenoptera physalus): why the fin whale is a fast swimmer. Bose N, et al. **Proc R Soc Lond [Biol]** 1989 Jul 22;237(1287):175–200
The prevention and treatment of injuries to the shoulder in swimming. Ciullo JV, et al. **Sports Med** 1989 Mar; 7(3):182–204 (60 ref.)
Pulmonary structure and function in swimmers. Cordain L, et al. **Sports Med** 1988 Nov;6(5):271–8 (33 ref.)
[Effect of hydrocortisone on physical endurance and various biochemical indicators in rats] Marev R, et al. **Eksp Med Morfol** 1988;27(3):31–4 (Eng. Abstr.) **(Bul)**
[Mechanism of action of clonidine in the forced–swimming test in mice] Malinge M, et al. **Encephale** 1989 Jan–Feb; 15(1):37–41 (Eng. Abstr.) **(Fre)**
[Muscular imbalance in elite swimmers and the resulting sports damage of the lumbar spine and knee joints] Pieper HG, et al. **Sportverletz Sportschaden** 1989 Mar;3(1):29–31 (Eng. Abstr.) **(Ger)**
[Triathlon—continuous stress on muscles, tendons and bones?] Sell S, et al. **Sportverletz Sportschaden** 1988 Sep; 2(3):112–4 (Eng. Abstr.) **(Ger)**
[Behavior of heart rate, blood pressure, lactate, glucose, noradrenaline and adrenaline level in coronary heart disease patients in the course of light swimming stress] Lehmann M, et al. **Z Kardiol** 1988 Aug;77(8):508–14 (Eng. Abstr.) **(Ger)**
[Effect of various types of sports on the anatomy of the common carotid artery and the internal jugular vein] Mikhallova OM, et al. **Arkh Anat Gistol Embriol** 1988 Oct; 95(10):47–50 (Eng. Abstr.) **(Rus)**
[Effect of various types of sports on the pulmonary rheogram of young school age children] Il'nitskiĭ VI, et al. **Fiziol Zh** 1989 Jan–Feb;35(1):44–52 (Eng. Abstr.) **(Rus)**
[Age–related dynamics of physical development of schoolchildren with various patterns of motor activity] Eremeev VIa, et al. **Gig Sanit** 1989 May;(5):12–5 (Eng. Abstr.) **(Rus)**
[Swimming by infants] Aleksandrovich NZh. **Pediatriia** 1989; (4):80–4 **(Rus)**
[Characteristics of the neuropsychological development of infants during the first year of life, engaged in swimming] Kliorin AI, et al. **Pediatriia** 1989;(2):16–8 (Eng. Abstr.) **(Rus)**
[Health status and the characteristics of autonomic reactions in infants engaged in swimming] Serebriakova TM, et al. **Pediatriia** 1989;(2):12–5 (Eng. Abstr.) **(Rus)**
[Human infectivity with enterobacteria and enteroviruses while swimming depending on the level of microbial water pollution] Popovich GG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):45–7 (Eng. Abstr.) **(Rus)**
[Swim training of patients after myocardial infarct] Lončarić J, et al. **Reumatizam** 1987;34(1–6):10–5 (Eng. Abstr.) **(Scr)**

SWIMMING POOLS

Extended wear contact lens movement under swimming pool conditions. Diefenbach CB, et al. **Am J Optom Physiol Opt** 1988 Sep;65(9):710–6
An outbreak of an enterovirus–like illness at a community wading pool: implications for public health inspection programs. Lenaway DD, et al. **Am J Public Health** 1989 Jul;79(7):889–90
Factors contributing to child drownings and near–drownings in residential swimming pools. Rodgers GB. **Hum Factors** 1989 Apr;31(2):123–32
Water hygiene of two swimming pools: microbial indicators. Tosti E, et al. **J Appl Bacteriol** 1988 Jul;65(1):87–91
Evaluation of flotation devices for deep–water exercise. Becker DG, et al. **J Burn Care Rehabil** 1988 Jul–Aug; 9(4):407–12
Swimming in chlorinated water and its effect on Eustachian tube function. Morgan DW, et al. **J Laryngol Otol** 1989 Mar;103(3):257–8
Bacteremic Citrobacter freundii cellulitis associated with tub immersion in a patient with the nephrotic syndrome. Hicks CB, et al. **Milit Med** 1988 Aug;153(8):400–1
Dermatophytes and swimming pools: seasonal fluctuations. Detandt M, et al. **Mycoses** 1988 Oct;31(10):495–500
Hydrostatic pressure–induced colon trauma from a pool whip. Tong TK, et al. **Pediatr Emerg Care** 1989 Mar; 5(1):29–30
Chlorine poisoning at the swimming pool revisited: anatomy of two minidisasters. Decker WJ. **Vet Hum Toxicol** 1988 Dec;30(6):584–5
Fungi in two swimming pools in Assiut town, Egypt. Maghazy SM, et al. **Zentralbl Mikrobiol** 1989;144(3):213–6
[Influence of cyanuric acid on virucidal effect of chlorine and the comparative study in actual swimming pool waters] Yamashita T, et al. **Kansenshogaku Zasshi** 1988 Mar; 62(3):200–5 (Eng. Abstr.) **(Jpn)**

STANDARDS

[Use of ozone in the preparation of swimming and bathing water in West Germany] Eichelsdörfer D, et al. **Off Gesundheitswes** 1988 Jul;50(7):363–6 (Eng. Abstr.) **(Ger)**
[Disinfection of swimming pool water and its outcome] Hässelbarth U. **Off Gesundheitswes** 1988 Jul;50(7):360–2 (15 ref.) (Eng. Abstr.) **(Ger)**
[The public health relevance of various microbiologic marker pathogens for assessing bathing water] Müller HE. **Off Gesundheitswes** 1989 May;51(5):233–7 (Eng. Abstr.) **(Ger)**
[Critical observations on suitability testing of synthetic pool liners] Pacik D. **Off Gesundheitswes** 1988 Jul;50(7):377–81 (Eng. Abstr.) **(Ger)**
[Multilayer filtration in the preparation of bathing water—performance of the biofilter] van der Hoeve A, et al. **Off Gesundheitswes** 1988 Jul;50(7):372–6 (Eng. Abstr.) **(Ger)**
[Enterobacteria as quality criteria in unprocessed, drinking and swimming pool water. Comparative study of the occurrence of enterobacteria, Escherichia coli, coliforms, colony count, fecal streptococci and Pseudomonas aeruginosa] Wiedenmann A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Dec; 187(2):91–106 (Eng. Abstr.) **(Ger)**
[The health significance of the presence of viruses in water for drinking and recreational use] Nestor I. **Rev Ig [Bacteriol]** 1988 Oct–Dec;33(4):289–306 (158 ref.) (Eng. Abstr.) **(Rum)**
[Microbiologic analysis of water used in swimming pools] Birk KF, et al. **Gig Sanit** 1988 Aug;(8):75–6 **(Rus)**

SWINE

Respiratory symptoms among Swedish swine producers. Wilhelmsson J, et al. **Am J Ind Med** 1989;15(3):311–8
Code of practice for the use of schedule 4 substances in the pig industry [news] **Aust Vet J** 1989 Jun;66(6):suppl 177–9
A modified Thomas cannula for duodenal cannulation in pigs. Landers BR, et al. **Aust Vet J** 1989 Jun;66(6):182–3
Avoiding injuries caused by pigs [editorial] Garner P. **BMJ** 1989 Apr 1;298(6677):848
Environmental and health studies of farm workers in Swedish

swine confinement buildings. Donham K, et al. **Br J Ind Med** 1989 Jan;46(1):31–7

Developments in modern intensive and conventional pig housing. Kingston NG. **Br Vet J** 1989 Jul–Aug; 145(4):312–20 (14 ref.)

Behaviour of groups of weaner pigs in three different housing systems. McKinnon AJ, et al. **Br Vet J** 1989 Jul–Aug; 145(4):367–72

Pig bite injuries and infection: report of seven human cases. Barnham M. **Epidemiol Infect** 1988 Dec;101(3):641–5

No effects of high intake of nitrate in drinking-water on urinary mutagenicity and cytogenetic tests in pigs. Persson L, et al. **Hereditas** 1988;108(2):223–6

Experimental ventricular hypertrophy in growing pigs. Guerreiro D, et al. **Int J Cardiol** 1988 Dec;21(3):311–22

A large animal model (swine) to study the diagnosis and treatment of cholelithiasis. Griffith SL, et al. **Invest Radiol** 1989 Feb;24(2):110–4

The use of live pigs in the surgical training of dermatology residents. Anders KH, et al. **J Dermatol Surg Oncol** 1989 Jul;15(7):734–6

Respiratory symptoms and alterations in pulmonary function tests in swine producers in Saskatchewan: results of a survey of farmers. Dosman JA, et al. **J Occup Med** 1988 Sep;30(9):715–20

The use of a diffusion test for the detection of antibiotics in the tissues of slaughter stock. Lloyd DN, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):183–6

A survey of wild swine in the United States for evidence of hog cholera. Nettles VF, et al. **J Wildl Dis** 1989 Jan; 25(1):61–5

Periodontal disease in southern African bushpigs (Potamochoerus porcus) and warthogs (Phacochoerus aethiopicus). Woodall PF. **J Wildl Dis** 1989 Jan;25(1):66–9

Cardiopulmonary responses to Pseudomonas septicemia in swine: an improved model of the adult respiratory distress syndrome. Mustard RA, et al. **Lab Anim Sci** 1989 Jan; 39(1):37–43

Injuries caused by pigs in Papua New Guinea. Barss P, et al. **Med J Aust** 1988 Dec 5–19;149(11–12):649–56

Male pronuclear formation by a boar spermatozoon with hairpin-curved tail in zona-free hamster egg. Yoshida M, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):428–30

Response of various animal species to experimental infection with different strains of Staphylococcus aureus. Kohrman KA, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S231–6; discussion S236–7

Sow welfare indicators [letter] Broom D. **Vet Rec** 1988 Aug 27;123(9):235

Water supply for pigs [letter] [see comments] Carr J, et al. **Vet Rec** 1989 Feb 25;124(8):204. **Comment in:** Vet Rec 1989 Apr 1;124(13):354

Withdrawal times in pig meat [letter] Douglas RG, et al. **Vet Rec** 1989 Apr 15;124(15):409–10

Sow welfare [letter] Ewer TK. **Vet Rec** 1988 Sep 3; 123(10):280

Sow welfare [letter] Jennings DS. **Vet Rec** 1988 Dec 10; 123(24):631

Sow welfare [letter] Peet B. **Vet Rec** 1988 Oct 22;123(17):451

[Paracetamol poisoning in a swine model] Henne-Bruns D, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988; 21(5):255–63 (Eng. Abstr.) **(Ger)**

[The effect of iodized mineral substance mixtures for cattle and swine on iodine requirements and struma prevention] Anke M, et al. **Z Gesamte Inn Med** 1989 Jan 15;44(2):41–4 (Eng. Abstr.) **(Ger)**

[Experience with an experimental device "Biogas-301 C" in recycling waste from swine-breeding farms using a method of anaerobic fermentation] Butenko VN, et al. **Gig Sanit** 1989 Apr;(4):64–5 **(Rus)**

[Evaluation of the motility of boar sperm using computer technics] Massanyi L. **Vet Med (Praha)** 1989 Mar; 34(3):163–70 (Eng. Abstr.) **(Slo)**

ABNORMALITIES

Renal dysplasia in a pig. Anderson WI, et al. **Cornell Vet** 1988 Oct;78(4):347–50

ANATOMY & HISTOLOGY

Cellular heterogeneity and insulin-like growth factor I immunoreactivity among epiphysial growth plate chondrocytes in the pig. Simon MR, et al. **Acta Anat (Basel)** 1988;133(1):66–9

Fine structure of the porcine myometrium during the oestrous cycle. Thilander G, et al. **Acta Anat (Basel)** 1989; 134(2):160–70

Structural changes in the luminal epithelium of the porcine uterus between days 10 and 19 of the estrous cycle. Keys JL, et al. **Am J Anat** 1989 May;185(1):42–57

Porcine colonic lymphoglandular complex: distribution, structure, and epithelium. Morfitt DC, et al. **Am J Anat** 1989 Jan;184(1):41–51

Granular mucosal lymphocytes in porcine small intestine. Chu RM, et al. **Am J Vet Res** 1988 Sep;49(9):1456–9

Echocardiographic assessment of cardiac chamber size and functional performance in swine. Gwathmey JK, et al. **Am J Vet Res** 1989 Feb;50(2):192–7

Localization of proprioceptive neurons innervating the muscle spindles of pig extraocular muscles studied by horseradish peroxidase labelling. Kubota K, et al. **Anat Anz** 1988;166(1–5):117–31

Changes of noradrenaline content in the adrenergic nerves of the pig ovaries different periods of the oestrous cycle. Lakomy M, et al. **Anat Anz** 1988;166(1–5):149–55

The ultrastructure of the trophoblast fossal regions in the pig placenta during pregnancy. Its steroidogenic features. Czarnowska E. **Anat Histol Embryol** 1988 Sep;17(3):207–25

The shield of the domestic boar (Sus scrofa L.): its gross anatomy, histology and possible function. McCarthy PH, et al. **Anat Histol Embryol** 1988 Sep;17(3):232–45

Chromogranin- and somatostatin-containing neuroendocrine cells in the porcine uterus. An immunocytochemical study. Vittoria A, et al. **Anat Histol Embryol** 1989 Jun; 18(2):136–42

Histochemistry of intrafusal fibers in extraocular muscles of the sheep and pig. Lalatta Costerbosa G, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1013–5

Teaching fibreoptic intubation [letter] Forbes R, et al. **Br J Anaesth** 1989 Jan;62(1):113–4

A stereotaxic apparatus for the study of the central nervous structures in the pig. Marcilloux JC, et al. **Brain Res Bull** 1989 Mar;22(3):591–7

Co-existence and origin of peptidergic and adrenergic nerves in the guinea pig uterus. Retrograde tracing and immunocytochemistry, effects of chemical sympathectomy, capsaicin treatment and pregnancy. Alm P, et al. **Cell Tissue Res** 1988;254(3):517–30

Different intrafusal fiber composition of spindles in sheep and pig extraocular muscles [published erratum appears in Experientia 1989 Aug 15;45(8):784] Lalatta Costerbosa G, et al. **Experientia** 1989 Jun 15;45(6):563–7

Pineal gland ultrastructure in wild boar and miniature pig. Wyrzykowski Z, et al. **Folia Morphol (Warsz)** 1987; 46(3–4):161–73

Adrenergic innervation of the ureters, urinary bladder, and urethra in pigs. Lakomy M, et al. **Gegenbaurs Morphol Jahrb** 1989;135(2):347–55

Effect of dietary soybean meal on the microscopic anatomy of the small intestine in the early-weaned pig. Dunsford BR, et al. **J Anim Sci** 1989 Jul;67(7):1855–63

Cytochemistry for lectins, actin, nucleotide tetrazolium reductases and several phosphatases in the porcine semitendinosus muscle: vascular development in young pigs. Hausman GJ. **J Anim Sci** 1989 May;67(5):1375–86

Effect of feed intake and exogenous porcine somatotropin on longissimus muscle fiber characteristics of pigs weighing 55 kilograms live weight. Solomon MB, et al. **J Anim Sci** 1988 Dec;66(12):3279–84

Using ultrasound technology to predict pork carcass composition. Terry CA, et al. **J Anim Sci** 1989 May; 67(5):1279–84

Effect of initial length of uterus per embryo on fetal survival and development in the pig. Wu MC, et al. **J Anim Sci** 1989 Jul;67(7):1767–72

Renal structural flexibility in response to environmental water stress in feral hogs. Zervanos SM, et al. **J Exp Zool** 1988 Sep;247(3):285–8

Comparative response of lean or genetically obese swine and their progeny to severe feed restriction during gestation. Pond WG, et al. **J Nutr** 1988 Oct;118(10):1223–31

A histochemical and immunohistochemical study of the autonomic innervation of the lower urinary tract of the female pig. Is the pig a good model for the human bladder and urethra? Crowe R, et al. **J Urol** 1989 Feb;141(2):414–22

High resolution nuclear magnetic resonance imaging of pig knees at 4.7 T. Robinson EM, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):591–4

Acid alpha-naphthyl acetate esterase (ANAE) staining of porcine lymphocytes. Inoue T, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1169–76

The fine structure of the blood-testis barrier in the boar. Yazama F, et al. **Nippon Juigaku Zasshi** 1988 Dec; 50(6):1259–61

A new origin of the chief cells in the swine fundic gland. Imai M, et al. **Okajimas Folia Anat Jpn** 1988 Oct; 65(4):221–33

Morphological defects of the acrosome in boar spermatozoa. Revell SG, et al. **Res Vet Sci** 1988 Sep;45(2):149–51

Blood vessels within lymph nodes: a comparison between pigs and sheep. Spalding HJ, et al. **Res Vet Sci** 1989 Jan; 46(1):43–8

Segmental pancreatic autotransplantation in the pig. Shokouh-Amiri MH, et al. **Transplantation** 1989 Jan; 47(1):42–4

Synaptophysinlike immunoreactivity in the Merkel cells of pig-snout skin. García-Caballero T, et al. **Ultrastruct Pathol** 1989 Jan–Feb;13(1):55–61

Influence of biotin supplementation on pig claw horn: a scanning electron microscopic study. Kempson SA, et al. **Vet Rec** 1989 Jan 14;124(2):37–40

The effect of estradiol on quantitative changes in the ultrastructure of pinealocyte structures in sexually immature female domestic pigs. Przybylska B, et al. **Z Mikrosk Anat Forsch** 1988;102(4):533–40

"Light" and "dark" pinealocytes of the porcine pineal gland. Przybylska B. **Z Mikrosk Anat Forsch** 1989;103(2):329–35

Distribution of adrenergic and cholinergic nerves in the porcine myometrium during the oestrous cycle. A histochemical investigation. Thilander G, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):276–84

[Atrophic rhinitis: assessing the length of swine heads in the slaughtering line-up in determining the incidence and degree of conchae atrophy (letter)] Frankena K. **Tijdschr Diergeneeskd** 1989 Apr 15;114(8):470–2 **(Dut)**

[The histology of the adenohypophysis in swine (Sus scrofa dom.)] Gutte G, et al. **Arch Exp Veterinarmed** 1988 Sep; 42(5):683–92 (Eng. Abstr.) **(Ger)**

[Histomorphologic studies of the effect of various estrogen and gestagen preparations on the endometrium of nonpregnant ovariectomized gilts] Schnurrbusch U, et al. **Arch Exp Veterinarmed** 1988 Nov;42(6):793–806 (Eng. Abstr.) **(Ger)**

[Histometric studies of the effect of various estrogen and gestagen preparations on the uterus of nonpregnant ovariectomized gilts] Schnurrbusch U, et al. **Arch Exp Veterinarmed** 1988 Nov;42(6):807–19 (Eng. Abstr.) **(Ger)**

[Scanning electron and light microscopic studies of the surface epithelium of the rete testis and epididymis of the boar. I. Rete testis and efferent ducts] Wystub T, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):384–9 (Eng. Abstr.) **(Ger)**

[Normal cyclical morphology of the endometrium and ovary of swine] Leiser R, et al. **Tierarztl Prax** 1988;16(3):261–80 (Eng. Abstr.) **(Ger)**

[Light microscopic studies of the intramural coronary arteries in the trabecula septomarginalis of the right heart ventricle of cattle, swine and dwarf goats] Lorenz G, et al. **Z Mikrosk Anat Forsch** 1989;103(1):139–50 (Eng. Abstr.) **(Ger)**

[Morphostructural features of the pleural lymphatic circulation in the pig] Paino G, et al. **Boll Soc Ital Biol Sper** 1989 Apr;65(4):289–94 (Eng. Abstr.) **(Ita)**

[Prenatal development of muscle spindles in pig extraocular muscles and its significance] Matsuyama S. **Kaibogaku Zasshi** 1988 Oct;63(5):419–31 (Eng. Abstr.) **(Jpn)**

BLOOD

Hypophosphatemia induced by dietary aluminium hydroxide supplementation in pigs: effects on growth, blood variables, organ weights and renal morphology. Håglin L, et al. **Acta Vet Scand** 1988;29(1):91–9

Hematologic changes induced by intravenous administration of diacetoxyscirpenol in pigs, dogs, and calves. Coppock RW, et al. **Am J Vet Res** 1989 Mar;50(3):411–5

Consistent capacity for adrenocortical response to ACTH administration in pigs. Hennessy DP, et al. **Am J Vet Res** 1988 Aug;49(8):1276–83

The influence of insulin loading tests per os on insulin and glucose concentrations in blood of piglets within 40 hours from birth. Nowak J. **Arch Exp Veterinarmed** 1989 Jan; 43(1):67–72

Isolation of 11 beta-hydroxylated androgens from testicular vein blood of the mature boar. Raeside JI, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1194–9

Monoclonal antibodies against porcine platelet membrane glycoproteins Ib and IIb/IIIa. Takami H, et al. **Blood** 1988 Nov;72(5):1740–7

Isolation and chemical composition of the leucocytes from donkey, horse, mule and pig. Rocha M, et al. **Comp Biochem Physiol [B]** 1978;60(3):239–44

Comparative study on the activity, pH optimum and thermal stability of some glycosidases and acid phosphatase from pig and mule leukocytes. Sevillano FI, et al. **Comp Biochem Physiol [B]** 1978;60(4):413–7

Purification of the serum acid-stable insulin-like growth factor binding protein from the pig (Sus scrofa). Walton PE, et al. **Comp Biochem Physiol [B]** 1989;92(3):561–7

Plasma ferritin of sows during pregnancy and lactation. Calvo JJ, et al. **Cornell Vet** 1989 Jul;79(3):273–82

Measurement of urinary and plasma estrone sulphate concentrations from pregnant sows. Atkinson S, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):133–8

Determination of circulating levels of insulin-like growth factor II (IGF-II) in swine. Buonomo FC, et al. **Domest Anim Endocrinol** 1988 Oct;5(4):323–9

Determination of insulin-like growth factor I (IGF1) and IGF binding protein levels in swine. Buonomo FC, et al. **Domest Anim Endocrinol** 1987 Jan;4(1):23–31

Contribution of the photoperiod to circadian variations in serum cortisol and melatonin in boars. Minton JE, et al. **Domest Anim Endocrinol** 1989 Apr;6(2):177–81

Postnatal changes in circulating concentrations of growth hormone, somatomedin C and thyroid hormones in pigs. Scanes CG, et al. **Domest Anim Endocrinol** 1987 Oct; 4(4):253–7

The insulin-like growth factor-binding proteins of porcine serum: endocrine and nutritional regulation. McCusker RH, et al. **Endocrinology** 1989 Jul;125(1):501–9

Hormonal changes during lactation in sows: influence of spontaneous suckling on prolactin, oxytocin and corticoids concentrations. Okrasa S, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):95–103

Administration of recombinant human insulin-like growth factor I to pigs: determination of circulating half-lives and chromatographic profiles. Walton PE, et al. **Horm Res** 1989;31(3):138–42

Anticholesteremic property of Lactobacillus acidophilus yogurt fed to mature boars. Danielson AD, et al. **J Anim Sci** 1989 Apr;67(4):966–74

The effect of insulin on primary cultures of rat preadipocytes grown in fetal or postnatal pig serum. Hausman GJ, et al. **J Anim Sci** 1988 Dec;66(12):3267–78

Sera-controlled presdipocyte growth in culture: an ontogeny study with sera from lean and obese pigs. Jewell DE, et al. **J Anim Sci** 1988 Sep;66(9):2393–400

Serum zinc, iron and copper status during early gestation in sows fed a folic acid–supplemented diet. Tremblay GF, et al. **J Anim Sci** 1989 Mar;67(3):733–7

Kinetics of radiolabeled neutrophils in swine. Ohgami M, et al. **J Appl Physiol** 1989 Apr;66(4):1881–5

Comparison of plasma progesterone profiles in cyclic, pregnant, pseudopregnant and hysterectomized pigs between 8 and 27 days after oestrus. King GJ, et al. **J Endocrinol** 1988 Oct;119(1):111–6

Pharmacokinetics of oral sulfa drugs and gastric emptying in the pig. Kokue E, et al. **J Pharmacobiodyn** 1988 Aug; 11(8):549–54

Blood chemical parameters in the warthog Phacochoerus aethiopicus. Keffen RH, et al. **J S Afr Vet Assoc** 1987 Sep; 58(3):137–42

Chronic central vein catheterization for intraoperative and long-term venous access in swine. Moritz MW, et al. **Lab Anim Sci** 1989 Mar;39(2):153–5

A technique to study splanchnic metabolism in the unrestrained conscious pig. van Berlo CL, et al. **Lab Anim Sci** 1988 Aug;38(4):463–6

Indium-111–oxinate labeled swine platelets and their survival in vivo. Zoghbi SS, et al. **Lab Anim Sci** 1988 Aug; 38(4):444–7

Plasma lactose after weaning and its relationship with lactose content of milk, post-weaning plasma oestradiol-17 beta and weaning to mating interval in sows. Matte JJ, et al. **Reprod Nutr Dev** 1989;29(1):75–82

Plasma protein binding of an N-pyrrolyl derivative penicillin in several mammalian species. Teran MT, et al. **Res Vet Sci** 1988 Jul;45(1):132–3

Comparative study of the effect of the effect of carbadox, olaquindox and cyadox on aldosterone, sodium and potassium plasma levels in weaned pigs. van der Molen EJ, et al. **Res Vet Sci** 1989 Jul;47(1):11–6

Limitations of salivary and blood cortisol determinations in pigs. Blackshaw JK, et al. **Vet Res Commun** 1989; 13(4):265–71

Intravenous catheters for long-term blood collection in adult boars. Gutzwiller A. **Zentralbl Veterinarmed [A]** 1988 Dec; 35(10):770–4

LH-patterns in jugular plasma and oestradiol-17 beta and progesterone in utero-ovarian and jugular plasma of primiparous sows around weaning. Rojanasthien S. **Zentralbl Veterinarmed [A]** 1988 Aug;35(7):498–505

[Blood collection in pigs] Oskam JP. **Tijdschr Diergeneeskd** 1989 Apr 1;114(7):376–80 (Eng. Abstr.) **(Dut)**

[Determination of estrone sulfate levels in the blood and urine of pigs] Wellenberg GJ, et al. **Tijdschr Diergeneeskd** 1989 Jan 1;114(1):14–6 (Eng. Abstr.) **(Dut)**

[The development of a method for the sensitive radioimmunologic determination of insulin for veterinary medicine based on the ROTOP radioimmunoassay of the Isocommerz Corporation (East Germany)] Deutschmann B, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):622–7 (Eng. Abstr.) **(Ger)**

[Labelling of B lymphocytes from the peripheral blood of swine] Hruban V, et al. **Arch Exp Veterinarmed** 1988 Sep; 42(5):764–8 (Eng. Abstr.) **(Ger)**

[Experimental studies on the stimulation of prenatal development in swine by PMSG treatment in early pregnancy. 2. Analytic studies of hormones in young sows after PMSG treatment on the 11th day of pregnancy] Kanitz E, et al. **Arch Exp Veterinarmed** 1989 May; 43(3):359–66 (Eng. Abstr.) **(Ger)**

[The results of experimental studies on the modification of litter size in swine by exogenous sex steroid supplementation in early pregnancy. 2. The effect of hormonal intervention in early pregnancy on the level of 17beta-estradiol and progesterone in plasma] Rudolph K, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):509–17 (Eng. Abstr.) **(Ger)**

[The use of partly-hydrolyzed straw meal in the feeding of weaned piglets. 3. The concentration of several parameters of protein, fat, carbohydrate and mineral metabolism in the blood serum during the use of rations with different portions of partly-hydrolyzed straw meal] Münchow H, et al. **Arch Tierernahr** 1988 Dec;38(12):1107–18 (Eng. Abstr.) **(Ger)**

[The kinetics of creatine kinase and aspartate aminotransferase (ASAT) in the blood plasma of swine of different ages] Grocholl G, et al. **Berl Munch Tierarztl Wochenschr** 1988 Oct 1; 101(10):347–52 (Eng. Abstr.) **(Ger)**

[Health and hygiene aspects of the destination for human consumption of protein obtained from animal plasma] De Giusti M, et al. **Nuovi Ann Ig Microbiol** 1988 Nov–Dec; 39(6):617–35 (Eng. Abstr.) **(Ita)**

[Alanine and aspartate transaminase and acid and alkaline phosphatase activities in the blood serum in relation to the protein and energy levels in the pigs' feeds] Truchliński J, et al. **Pol Arch Weter** 1987;27(2–3):129–36 (Eng. Abstr.) **(Pol)**

EMBRYOLOGY

An immunohistochemical study on the embryonic development of renin-containing cells in the mouse and pig. Kon Y, et al. **Anat Histol Embryol** 1989 Mar; 18(1):14–26

Distribution of fibronectins and laminin in the early pig embryo. Richoux V, et al. **Anat Rec** 1989 Jan;223(1):72–81

Porcine conceptuses secrete an interferon during the preattachment period of early pregnancy. Cross JC, et al. **Biol Reprod** 1989 May;40(5):1109–18

Fetal hypophysectomy causes a decrease in preadipocyte growth and insulin like growth factor-1 in pigs. Jewell DE, et al. **Domest Anim Endocrinol** 1989 Jul;6(3):243–52

In vitro model of the first phase of testicular descent: identification of a low molecular weight factor from fetal testis involved in proliferation of gubernaculum testis cells and distinct from specified polypeptide growth factors and fetal gonadal hormones. Fentener van Vlissingen JM, et al. **Endocrinology** 1988 Dec;123(6):2868–77

Pattern and tissue distribution of catechol estrogen forming activity by pig conceptuses during the peri-implantation period. Chakraborty C, et al. **J Anim Sci** 1989 Apr; 67(4):991–8

Suppressed development of cultured mouse and swine embryos by diethylstilbestrol [published erratum appears in J Anim Sci 1988 Nov;66(11):3019] Gardiner CS, et al. **J Anim Sci** 1988 Sep;66(9):2401–6

Histochemical studies of muscle development in decapitated and hypophysectomized pig fetuses: blood vessel development. Hausman GJ. **J Anim Sci** 1989 May; 67(5):1367–74

Comparison of in vitro development of embryos collected from the same gilts at first and third estrus. Menino AR Jr, et al. **J Anim Sci** 1989 May;67(5):1387–93

Pig blastocyst development in vitro is affected by amino acids. Rosenkrans CF Jr, et al. **J Anim Sci** 1989 Jun; 67(6):1503–8

Survival rate and development of fetuses during the first 30 days of gestation after folic acid addition to a swine diet. Tremblay GF, et al. **J Anim Sci** 1989 Mar;67(3):724–32

Development of porcine embryos from the one-cell stage to blastocyst in mouse oviducts maintained in organ culture. Krisher RL, et al. **J Exp Zool** 1989 Feb;249(2):235–9

Pituitary-adrenocortical activity in the fetal pig in the last third of gestation. Silver M, et al. **Q J Exp Physiol** 1989 Mar;74(2):197–206

Birth of piglets from frozen embryos. Hayashi S, et al. **Vet Rec** 1989 Jul 8;125(2):43–4

GENETICS

Polymorphism of the SLB serologically defined (non-MHC) alloantigenic system in pigs. Hruban V, et al. **Anim Genet** 1988;19(3):285–90

Association of restriction fragment length polymorphisms of swine leucocyte antigen class I genes with production traits of Duroc and Hampshire boars. Jung YC, et al. **Anim Genet** 1989;20(1):79–91

The swine leucocyte antigen (SLA) complex and Sinclair swine cutaneous malignant melanoma. Tissot RG, et al. **Anim Genet** 1989;20(1):51–7

Heterosynapsis in a heterozygous fertile boar carrier of a 3;7 translocation. Gabriel-Robez O, et al. **Chromosoma** 1988;97(1):26–32

Plasminogen polymorphism in swine. Rapacz J Jr, et al. **Comp Biochem Physiol [B]** 1989;93(2):325–31

Cloning and developmental regulation of alpha 1 acid glycoprotein in swine. Stone RT, et al. **Dev Genet** 1987; 8(4):295–304

Nucleotide sequences and expression of cDNA clones for boar and bull transition protein 1 and its evolutionary conservation in mammals. Kremling H, et al. **Differentiation** 1989 Jun;40(3):184–90

Standard karyotype of the domestic pig. Committee for the Standardized Karyotype of the Domestic Pig. Gustavsson I. **Hereditas** 1988;109(2):151–7

Reciprocal translocation in four boars producing decreased litter size. Gustavsson I. **Hereditas** 1988;109(2):159–68

Chromosome banding studies and synaptonemal complex analyses of four reciprocal translocations in the domestic pig. Gustavsson I, et al. **Hereditas** 1988;109(2):169–84

Estimates of genetic parameters for carcass measures of body composition and growth in swine. Bereskin B, et al. **J Anim Sci** 1988 Oct;66(10):2498–507

Isolation and characterization of recombinant cDNA clones corresponding to developmentally regulated genes in pig liver. Stone RT. **J Anim Sci** 1989 Apr;67(4):1082–9

A male-specific repeated DNA sequence in the domestic pig. McGraw RA, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10389

The nucleotide sequence of a boar protamine 1 cDNA. Maier WM, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11826

Isolation of a porcine male specific DNA sequence. Mileham AJ, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11842

Pig Hox-2.4 has accumulated a frameshift mutation relative to mouse Hox-2.4. Miller JR, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10364

Nucleotide sequence of porcine preprolactin cDNA. Schulz-Aellen MF, et al. **Nucleic Acids Res** 1989 Apr 25; 17(8):3295

Nucleotide sequence of porcine liver albumin. Weinstock J, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9045

[Phospholipid content of subcellular structures in skeletal muscles after halothane loading in Landrace swine in relation to mating variants and genotype] Adam H, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):293–9 (Eng. Abstr.) **(Ger)**

[Gene transfer in swine by DNA microinjection into zygotes] Brem G, et al. **Tierarztl Prax** 1989;Suppl 4:31–4 (7 ref.) (Eng. Abstr.) **(Ger)**

[Embryo transfer in swine in relation to a gene transfer program] Springmann K, et al. **Tierarztl Prax** 1989;Suppl 4:21–5 (Eng. Abstr.) **(Ger)**

[Genetic relationship of the loci of phosphohexose isomerase and G-system blood groups in swine] Kniazev SP, et al. **Genetika** 1988 Jun;24(6):1089–97 (Eng. Abstr.) **(Rus)**

[Allotypes of swine serum proteins] Mitichashvili RS, et al. **Genetika** 1988 Sep;24(9):1665–70 (Eng. Abstr.) **(Rus)**

[Detailed analysis of a new translocation in a domestic pig] Astakhova NM, et al. **Tsitol Genet** 1988 Sep–Oct;22(5):26–9 (Eng. Abstr.) **(Rus)**

[Dynamics of microevolutionary processes during the use of pigs of various types under conditions at an industrial complex] Plakhotnikov AG, et al. **Tsitol Genet** 1989 Jan–Feb;23(1):51–5 (Eng. Abstr.) **(Rus)**

[Effect of selection on heterozygosity of farm animals] Rozhkov IuI, et al. **Tsitol Genet** 1989 Jan–Feb;23(1):36–9 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Distribution of the mineralized tissues in the nasal ventral conchae (os conchae nasalis ventralis) of piglets after birth: relationship with atrophic rhinitis. Trépanier H, et al. **Anat Rec** 1988 Nov;222(3):237–44

The influence of sulphur, molybdenum and cadmium exposure on the growth of goat, cattle and pig. Anke M, et al. **Arch Tierernahr** 1989 Jan–Feb;39(1–2):221–8

Aspects of linear growth of muscles in the indigenous Nigerian pig. Essien AI, et al. **Beitr Trop Landwirtsch Veterinarmed** 1988;26(4):413–23

Estimating the mature body weight of indigenous Nigerian pigs using body weight and tissue composition changes with age. Essien AI, et al. **Beitr Trop Landwirtsch Veterinarmed** 1988;26(2):197–203

Effects of sex, age, and body weight on the growth of selected organs and body parts of indigenous Nigerian pigs. Essien AI, et al. **Beitr Trop Landwirtsch Veterinarmed** 1988; 26(3):309–17

Vasoactive compound effects on autoregulating versus nonautoregulating intestinal and renal circulations in young swine. Buckley NM, et al. **Biol Neonate** 1988;54(1):49–59

Prolactin in the developing pig. Meijer JC, et al. **Biol Reprod** 1988 Sep;39(2):264–9

The economics of pig production. Ridgeon RF. **Br Vet J** 1988 Sep–Oct;144(5):434–48

Effect of colostrum intake on plasma glucose, non-esterified fatty acid and glucoregulatory hormone patterns in the neonatal pig. Lepine AJ, et al. **Domest Anim Endocrinol** 1989 Jul;6(3):231–41

Placental and fetal development in straightbred and reciprocal crosses of Yorkshire and Ossabaw swine. Gilbertson-Beadling SK, et al. **Growth Dev Aging** 1988 Summer;52(2):97–101

Effect of vitamin C and space allowance on performance of weanling pigs. NCR-89 Committee on Confinement Management of Swine. **J Anim Sci** 1989 Mar;67(3):624–7

Secretory patterns and metabolic clearance rate of porcine growth hormone in swine selected for growth. Arbona JR, et al. **J Anim Sci** 1988 Dec;66(12):3068–72

Effects of feed or water restriction, antibiotic injection and receiving diet management on commingled feeder pig performance. Brumm MC, et al. **J Anim Sci** 1989 May; 67(5):1183–8

Reproductive and growth responses of gilts to exogenous porcine pituitary growth hormone. Bryan KA, et al. **J Anim Sci** 1989 Jan;67(1):196–205

Effects of exogenous porcine growth hormone administration between 30 and 60 kilograms on the subsequent and overall performance of pigs grown to 90 kilograms. Campbell RG, et al. **J Anim Sci** 1989 May;67(5):1265–71

Interrelationships between sex and exogenous growth hormone administration on performance, body composition and protein and fat accretion of growing pigs. Campbell RG, et al. **J Anim Sci** 1989 Jan;67(1):177–86

The effect of tropical ambient temperature on growth and metabolism in pigs. Christon R. **J Anim Sci** 1988 Dec; 66(12):3112–23

Pituitary porcine growth hormone (pGH) and a recombinant pGH analog stimulate pig growth performance in a similar manner. Evock CM, et al. **J Anim Sci** 1988 Aug; 66(8):1928–41

Effect of elevated ambient temperatures on puberty in gilts. Flowers B, et al. **J Anim Sci** 1989 Mar;67(3):779–84

An evaluation of barley in starter diets for swine. Goodband RD, et al. **J Anim Sci** 1988 Dec;66(12):3086–93

Local and general anesthetic effects on behavior and performance of two- and seven-week-old castrated and uncastrated piglets. McGlone JJ, et al. **J Anim Sci** 1988 Dec;66(12):3049–58

Responses of Beijing black hogs to porcine somatotropin. McLaughlin CL, et al. **J Anim Sci** 1989 Jan;67(1):116–27

Comparative response of swine and rats to high-fiber or high-protein diets. Pond WG, et al. **J Anim Sci** 1989 Mar; 67(3):716–23

Fumaric and citric acids as feed additives in starter pig diets: effect on performance and nutrient balance. Radecki SV, et al. **J Anim Sci** 1988 Oct;66(10):2598–605

Reduction of carcass fat in swine with dietary addition of dihydroxyacetone and pyruvate. Stanko RT, et al.

J Anim Sci 1989 May;67(5):1272–8

Effect of birth and fraternal litter size and cross-fostering on growth and reproduction in swine. Stewart TS, et al. J Anim Sci 1989 Mar;67(3):635–40

Nutritional value of quality protein maize and food corn for starter and growth pigs. Sullivan JS, et al. J Anim Sci 1989 May;67(5):1285–92

Genetic correlations between test station and on-farm performance for growth rate and backfat in pigs. Van Diepen TA, et al. J Anim Sci 1989 Jun;67(6):1425–31

Evaluation of cimaterol for finishing swine including a drug withdrawal period. Walker WR, et al. J Anim Sci 1989 Jan;67(1):168–76

Proopiomelanocortin opioids in brain, CSF, and plasma of piglets during hypoxia. Moss IR, et al. J Appl Physiol 1989 May;66(5):2280–6

Introduction of a porcine growth hormone fusion gene into transgenic pigs promotes growth. Vize PD, et al. J Cell Sci 1988 Jun;90 (Pt 2):295–300

Effects of dietary fiber and protein concentration on growth, feed efficiency, visceral organ weights and large intestine microbial populations of swine. Anugwa FO, et al. J Nutr 1989 Jun;119(6):879–86

Alteration in cardiovascular function of piglets during the growth process. Kuwahara M, et al. Nippon Juigaku Zasshi 1988 Oct;50(5):990–5

Amino acid imbalance in the pig. Nutr Rev 1988 Oct; 46(10):360–3 (17 ref.)

Onthogenic changes in the orientation of the ventricular activation and recovery mean vector in pig. Rubio MD, et al. Rev Esp Fisiol 1989 Jun;45(2):145–50

Effect of age on the orientation of the auricular activation vector in pig. Rubio MD, et al. Rev Esp Fisiol 1989 Jun; 45(2):151–5

Rate of claw horn growth and wear in biotin-supplemented and non-supplemented pigs. Johnston AM, et al. Vet Rec 1989 Aug 5;125(6):130–2

The effect of a diet with a high or low content of vitamin E on different skeletal muscles and myocardium in pigs. Jensen M, et al. Zentralbl Veterinarmed [A] 1988 Aug; 35(7):487–97

[The effect of aflatoxins on growth in pigs and the biological value of the meat] Drábek J, et al. Vet Med (Praha) 1989 Apr;34(4):223–9 (Eng. Abstr.) (Cze)

[The effectiveness of and requirements for selected amino acids in growing female swine. 6. Summarizing discussion, evaluation and recommendations for use of the method presented] Liebert F, et al. Arch Tierernahr 1988 Jun; 38(6):453–62 (Eng. Abstr.) (Ger)

[The performance of weaned piglets after a five week weaning period in relation to the weaning weight, the feed composition and the use of an effective ergotropic] Schöne F, et al. Arch Tierernahr 1988 Oct;38(10):861–77 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Binding of swine IgM immunoglobulins to peripheral nerve myelin sheaths in electron microscopic immunocytochemistry. Sommer C, et al. Acta Neuropathol (Berl) 1988;77(1):100–3

Some immune reactions induced in pigs by an attenuated Aujeszky's disease vaccine. Tuboly S, et al. Acta Vet Hung 1988;36(1–2):11–20

Ochratoxin A as a suppressor of mitogen-induced blastogenesis of porcine blood lymphocytes. Holmberg T, et al. Acta Vet Scand 1988;29(2):219–23

The influence of regular physical activity on the cell-mediated immunity in pigs. Jensen M. Acta Vet Scand 1989;30(1):19–26

Efficacy of an inactivated porcine parvovirus (PPV) vaccine under field conditions. Sørensen KJ, et al. Acta Vet Scand 1988;29(3–4):295–302

Xenogeneic lymphocyte migration in the foetal lamb and unsuckled neonatal piglet: evidence for the evolutionary conservation and heterogeneity of migration determinants. Binns RM, et al. Adv Exp Med Biol 1988;237:533–9

Immunodeficiency in young pigs. Hammerberg C, et al. Am J Vet Res 1989 Jun;50(6):868–74

Use of monoclonal antibodies to serotype-specific antigens of Haemophilus pleuropneumoniae serotype 2 in passive immunization. Korvuo A, et al. Am J Vet Res 1988 Dec; 49(12):2072–5

Effects of an orally administered live Escherichia coli pilus vaccine on duration of lacteal immunity to enterotoxigenic Escherichia coli in swine. Moon HW, et al. Am J Vet Res 1988 Dec;49(12):2068–71

Production and characterization of monoclonal antibodies to porcine immunoglobulin gamma, alpha, and light chains. Paul PS, et al. Am J Vet Res 1989 Apr;50(4):471–9

Ontogeny of the third component of complement in neonatal swine. Tyler JW, et al. Am J Vet Res 1989 Jul;50(7):1141–4

Humoral recognition of lipopolysaccharide core antigens of gram-negative bacteria in neonatal swine. Tyler JW, et al. Am J Vet Res 1989 Jan;50(1):126–30

Preferential decay of passively acquired immunoglobulins recognizing shared gram-negative core antigens in neonatal swine. Tyler JW, et al. Am J Vet Res 1989 Apr;50(4):480–2

Antibodies to parainfluenza virus type 3 in Minnesota swine. Tehteh E, et al. Br Vet J 1988 Nov-Dec;144(6):613–5

Influence of sodium diethyldithiocarbamate (Imuthiol) on lymphocyte function and growth in weanling pigs. Flaming KP, et al. Comp Immunol Microbiol Infect Dis 1988; 11(3–4):181–7

Disulfide-linked receptors for mitogenic lectins on piglet lymphocytes. Chilson OP, et al. Eur J Immunol 1988 Oct; 18(10):1581–6

Ontogeny of T lymphocytes in the pig. Trebichavský I, et al. Folia Microbiol (Praha) 1988;33(4):329–31

Activation of swine peripheral blood lymphocytes with human recombinant interleukin-2. Bhagyam RC, et al. Immunology 1988 Aug;64(4):607–13

Preparation and characterization of murine monoclonal antibodies to swine lymphocyte antigens. Lie WR, et al. Immunology 1988 Aug;64(4):599–605

Porcine immunoglobulin transfer after prepartum treatment with selenium or vitamin E. Hayek MG, et al. J Anim Sci 1989 May;67(5):1299–306

Effects of biotin and high copper levels on performance and immune response of weanling pigs. Kornegay ET, et al. J Anim Sci 1989 Jun;67(6):1471–7

Fluctuating ambient temperature for weaned pigs: effects on performance and immunological and endocrinological functions. Minton JE, et al. J Anim Sci 1988 Aug; 66(8):1907–14

Histological and immunohistochemical studies on the localization of immunoglobulins in porcine placenta. Yano K, et al. Jpn J Vet Res 1988 Oct;36(3–4):205–21

In vitro blastogenesis of porcine peripheral blood lymphocytes. Onyekaba C. Microbiologica 1988 Jul; 11(3):201–5

Evaluation of the pathogenicity and immunogenicity of vaccinia virus to piglets. Imada T, et al. Nippon Juigaku Zasshi 1989 Feb;51(1):96–104

Turbidimetric measurement of immunoglobulin G in serum using an automatic centrifugal analyser. Brun E, et al. Res Vet Sci 1989 Mar;46(2):168–71

Immune system of swine: dissection of mononuclear leucocyte subpopulations by means of two-colour cytofluorometric analysis. Saalmüller A, et al. Res Vet Sci 1988 Nov;45(3):311–6

Specific antibody containing cells in the porcine respiratory tract following intraperitoneal and intratracheal immunisation. Sheldrake RF, et al. Res Vet Sci 1988 Nov; 45(3):369–73

Effect of age on absorption and immune responses to weaning or introduction of novel dietary antigens in pigs. Wilson AD, et al. Res Vet Sci 1989 Mar;46(2):180–6

Characteristics of Yorkshire swine natural killer cells. Pinto A, et al. Vet Immunol Immunopathol 1988 Dec;20(1):15–29

Aujeszky's disease ELISA: cross-reactions with other herpesvirus antisera. Banks M. Vet Microbiol 1989 May; 20(1):1–8

Immune response and protection of cattle and pigs generated by a vaccinia virus recombinant expressing the F protein of rinderpest virus. Belsham GJ, et al. Vet Rec 1989 Jun 24;124(25):655–8

Control of Aujeszky's disease. Kit S, et al. Vet Rec 1989 Jun 17;124(24):635

Comparison of two ELISAs for detecting antibodies to glycoprotein I of Aujeszky's disease virus. Van Oirschot JT, et al. Vet Rec 1989 Jul 15;125(3):63–4

Quantification of serum IgM in pigs by monoclonal antibody: enzyme-linked immunosorbent assay, "dot immunobinding" assay, and radial immunodiffusion. Dvořák P, et al. Zentralbl Veterinarmed [B] 1988 Jun; 35(5):361–7

The effect of vitamin E on the cell-mediated immune response in pigs. Jensen M, et al. Zentralbl Veterinarmed [B] 1988 Aug;35(7):549–55

Variations in number and functional capacity of blood mononuclear cells during the peripartal period in the gilt. Magnusson U, et al. Zentralbl Veterinarmed [B] 1988 Oct; 35(8):570–8

On the suitability of the MTT-assay for the evaluation of mitogenic lymphocyte blastogenesis in swine. Reubel GH, et al. Zentralbl Veterinarmed [B] 1989 Feb;36(1):35–42

[Surveillance of antibodies to human influenza A and B virus in swine population in different seasons in Chengdu] Mu SH, et al. Hua Hsi I Ko Ta Hsueh Hsueh Pao 1988 Jun; 19(2):177–9 (Eng. Abstr.) (Chi)

[Use of the tetrazolium salt reduction test in the detection of phagocytic activity in pigs] Granátová M. Vet Med (Praha) 1989 Apr;34(4):231–8 (Eng. Abstr.) (Cze)

[Semiquantitative determination of IgM levels in the blood of pigs using the dot immunoenzyme test on nitrocellulose] Mádr P, et al. Vet Med (Praha) 1989 Feb;34(2):101–6 (Eng. Abstr.) (Cze)

[Immunologic skin tests in piglets] Raszyk J, et al. Vet Med (Praha) 1989 May;34(5):275–86 (Eng. Abstr.) (Cze)

[Serologic studies on the presence of antibodies against Haemophilus (Actinobacillus) pleuropneumoniae at swine breeding farms in North Brabant] Hunneman WA, et al. Tijdschr Diergeneeskd 1989 May 15;114(10):551–6 (Eng. Abstr.) (Dut)

[Immunomorphological studies of swine vaccinated with an attenuated vaccine against swine fever] Dshurov A, et al. Arch Exp Veterinarmed 1988 May;42(3):347–59 (Eng. Abstr.) (Ger)

[Studies on the detection of antibodies to Japanese encephalitis virus in pigs during the epidemic season by use of enzyme-linked immunosorbent assay] Yamamoto T. Kansenshogaku Zasshi 1988 Mar;62(3):235–41 (Eng. Abstr.) (Jpn)

METABOLISM

Counter current transfer of polypeptide hormones from uterus to ovary in gilts using insulin as a model. Koziorowski M, et al. Acta Physiol Pol 1988 Mar-Apr; 39(2):121–8

Influence of the local tolerance on the pharmokinetics of two penicillin G preparations in cattle and swine. Luthman J, et al. Acta Vet Scand 1988;29(2):199–206

Tissue residues of diacetoxyscirpenol in pigs and calves after intravenous dosing. Coppock RW, et al. Am J Vet Res 1988 Nov;49(11):1997–9

Bioavailability, pharmacokinetics, and plasma concentration of tetracycline hydrochloride fed to swine. Kniffen TS, et al. Am J Vet Res 1989 Apr;50(4):518–21

In vitro effects of a mixture of Escherichia coli heat-stable enterotoxins on chloride flux in everted jejunal sacs of male pigs. Panichkriangkrai W, et al. Am J Vet Res 1988 Oct; 49(10):1695–8

Biotechnology aids to improve feed and feed digestion: enzymes and fermentation. Dierick NA. Arch Tierernahr 1989 Mar;39(3):241–61 (149 ref.)

Quantitative measurement of endogenous amino acid absorption in unanaesthetized pigs. Rerat A, et al. Arch Tierernahr 1988 Jun;38(6):463–79

Deoxyribonuclease II purified from the isolated lysosomes of porcine spleen and from porcine liver homogenates. Comparison with deoxyribonuclease II purified from porcine spleen homogenates. Liao TH, et al. Biochim Biophys Acta 1989 Jan 23;1007(1):15–22

Neonatal and adult copper-64 metabolism in the pig and the possible relationship between the ontogeny of copper metabolism and Wilson's disease. Bingle CD, et al. Biol Neonate 1988;54(5):294–300

Purification, characterization, and immunocytochemical localization of the major basic protein of pig blastocysts. Baumbach GA, et al. Biol Reprod 1988 Dec;39(5):1171–82

Differences in aromatase activity between Leydig cells from the scrotal and abdominal testis in the naturally unilateral-cryptorchid boar. Raeside JI, et al. Biol Reprod 1988 Oct;39(3):566–72

Associative effects between two fibre sources on ileal and overall digestibilities of amino acids, energy and cell-wall components in growing pigs. Laplace JP, et al. Br J Nutr 1989 Jan;61(1):75–87

Effects of guar gum on plasma urea, insulin and glucose in the growing pig. Malmlöf K, et al. Br J Nutr 1989 Jan; 61(1):67–73

Salivary cortisol in pigs following adrenocorticotrophic hormone stimulation: comparison with plasma levels. Parrott RF, et al. Br Vet J 1989 Jul-Aug;145(4):362–6

The relationships between glycogen stores and muscle ultimate pH in commercially slaughtered pigs. Warriss PD, et al. Br Vet J 1989 Jul-Aug;145(4):378–83

Serum growth hormone release in response to a growth hormone-releasing factor analog during and after anesthesia in pigs. Dubreuil P, et al. Can J Vet Res 1988 Jul;52(3):304–7

Casein kinases I and II bound to pig brain microtubules. Risnik VV, et al. Cell Mol Neurobiol 1988 Sep;8(3):315–24

Androgenic control of antagglutinin secretion in the boar epididymal epithelium. An immunocytochemical study. Dacheux F, et al. Cell Tissue Res 1989 Feb;255(2):371–8

Comparative specificities of trehalases from various species. Labat-Robert J, et al. Comp Biochem Physiol [B] 1978; 61(1):111–4

Ontogenic development of swine (Sus domesticus) adipose tissue lipases. Steffen DG, et al. Comp Biochem Physiol [B] 1978;59(3):195–8

Isozymes of alpha-amylase in the porcine pancreas: population distribution. Strumeyer DH, et al. Comp Biochem Physiol [B] 1988;91(2):351–7

The influence of growth hormone injections on the endocrine and metabolic status of gilts. Kirkwood RN, et al. Domest Anim Endocrinol 1989 Apr;6(2):167–76

Interleukin-2 receptor/p55(Tac)-inducing activity in porcine follicular fluids. Takakura K, et al. Endocrinology 1989 Aug;125(2):618–23

Technetium metabolism in goats and swine. Jones BE. Health Phys 1989 Aug;57(2):331–6

An immunocytochemical study of thyrotropin releasing hormone in the porcine, ovine and rodent pineal gland. Lew GM. Histochemistry 1989;91(1):43–6

Plasma concentrations of oxytetracycline in swine after administration of the drug intramuscularly and orally in feed. Hall WF, et al. J Am Vet Med Assoc 1989 May 1; 194(9):1265–8

Dietary protein-induced changes in porcine muscle respiration, protein synthesis and adipose tissue metabolism. Adeola O, et al. J Anim Sci 1989 Mar;67(3):664–73

Interrelationships of exogenous porcine growth hormone administration and feed intake level affecting various tissue levels of iron, copper, zinc and bone calcium of growing pigs. Caperna TJ, et al. J Anim Sci 1989 Mar;67(3):654–63

Effect of predigestion factors on the apparent digestibility of protein for swine determined by the Mobile Nylon Bag Technique. Cherian G, et al. J Anim Sci 1988 Aug; 66(8):1963–8

The effect of tropical ambient temperature on growth and metabolism in pigs. Christon R. J Anim Sci 1988 Dec; 66(12):3112–23

The effect of feeding different protein-free diets on the recovery and amino acid composition of endogenous protein collected from the distal ileum and feces in pigs. de Lange CF, et al. **J Anim Sci** 1989 Mar;67(3):746–54

The effect of protein status of the pig on the recovery and amino acid composition of endogenous protein in digesta collected from the distal ileum. de Lange CF, et al. **J Anim Sci** 1989 Mar;67(3):755–62

Influence of diet composition on intestinal volatile fatty acid and nutrient absorption in unanesthetized pigs. Giusi-Perier A, et al. **J Anim Sci** 1989 Feb;67(2):386–402

Effects of porcine growth hormone on glucose metabolism of pigs: I. Acute and chronic effects on plasma glucose and insulin status. Gopinath R, et al. **J Anim Sci** 1989 Mar; 67(3):682–8

Effects of porcine growth hormone on glucose metabolism of pigs: II. Glucose tolerance, peripheral tissue insulin sensitivity and glucose kinetics. Gopinath R, et al. **J Anim Sci** 1989 Mar;67(3):689–97

Effect of pelleting and beta-glucanase supplementation on the ileal and fecal digestibility of a barley-based diet in the pig. Graham H, et al. **J Anim Sci** 1989 May;67(5):1293–8

A review of lipoprotein cholesterol metabolism: importance to ovarian function. Grummer RR, et al. **J Anim Sci** 1988 Dec;66(12):3160–73 (106 ref.)

Histidine requirement of the young pig. Izquierdo OA, et al. **J Anim Sci** 1988 Nov;66(11):2886–92

Vitamin E requirement of growing swine. Jensen M, et al. **J Anim Sci** 1988 Dec;66(12):3101–11

Quantitation of prolactin-dependent responses in porcine mammary explants. Jerry DJ, et al. **J Anim Sci** 1989 Apr; 67(4):1013–9

Apparent digestibility of nitrogen and amino acids in protein feedstuffs by growing pigs. Knabe DA, et al. **J Anim Sci** 1989 Feb;67(2):441–58

Raw mung beans as a protein source for bred gilts. Luce WG, et al. **J Anim Sci** 1989 Feb;67(2):329–33

Relationships among prolactin binding, prolactin concentrations in plasma and metabolic activity of the porcine mammary gland. Plaut KI, et al. **J Anim Sci** 1989 Jun;67(6):1509–19

Glycerolipid biosynthesis in porcine adipose tissue in vitro: effect of adiposity and depot site. Rule DC, et al. **J Anim Sci** 1989 Feb;67(2):364–73

The digestibility of biotin in protein supplements and cereal grains for growing pigs. Sauer WC, et al. **J Anim Sci** 1988 Oct;66(10):2583–9

The evaluation of the mobile nylon bag technique for determining the apparent protein digestibility in a wide variety of feedstuffs for pigs. Sauer WC, et al. **J Anim Sci** 1989 Feb;67(2):432–40

The effects of dietary fat or fiber addition on energy and nitrogen digestibility in lactating, primiparous sows housed in a warm or hot environment. Schoenherr WD, et al. **J Anim Sci** 1989 Feb;67(2):473–81

Chronic effects of recombinant porcine growth hormone on adrenal weight and activity in pigs. Sillence MN, et al. **J Anim Sci** 1989 Jul;67(7):1740–3

Differential growth factor content of uterine luminal fluids from large white and prolific Meishan pigs during the estrous cycle and early pregnancy. Simmen RC, et al. **J Anim Sci** 1989 Jun;67(6):1538–45

Fluid distribution in pork, measured by x-ray diffraction, interference microscopy and centrifugation compared to paleness measured by fiber optics. Swatland HJ, et al. **J Anim Sci** 1989 Jun;67(6):1465–70

Utero-placental transfer of octanoic, palmitic and linoleic acids during late gestation in gilts. Thulin AJ, et al. **J Anim Sci** 1989 Mar;67(3):738–45

Effect of protein and(or) carbohydrate fractions of dried whey on performance and nutrient digestibility of early weaned pigs. Tokach MD, et al. **J Anim Sci** 1989 May; 67(5):1307–12

Control of luteinizing hormone in postpubertal boars with large testes. Wolfe PL, et al. **J Anim Sci** 1989 May; 67(5):1334–40

The uptake of fluorescein-conjugated dextran 70,000 by the small intestinal epithelium of the young rat and pig in relation to macromolecular transmission into the blood. Ekström GM, et al. **J Dev Physiol** 1988 Jun;10(3):227–33

Episodic evolution in the stomach lysozymes of ruminants. Jollès J, et al. **J Mol Evol** 1989 Jun;28(6):528–35

Protein digestion in weanling pigs: effect of dietary protein source. Asche GL, et al. **J Nutr** 1989 Aug;119(8):1093–9

Protein digestion in weanling pigs: effect of feeding regimen and endogenous protein secretion. Asche GL, et al. **J Nutr** 1989 Aug;119(8):1083–92

Effects of dietary beef and soy protein on tissue composition and low density lipoprotein uptake in young pigs. Johnson JA, et al. **J Nutr** 1989 May;119(5):696–705

Transport of selenoamino acids and their sulfur analogues across the intestinal brush border membrane of pigs. Wolffram S, et al. **J Nutr** 1989 May;119(5):706–12

Role of deacetylation in the nonlinear pharmacokinetics of sulfamonomethoxine in pigs. Shimoda M, et al. **J Pharmacobiodyn** 1988 Aug;11(8):576–82

Evidence for a switch in the site of relaxin production from small theca-derived cells to large luteal cells during early pregnancy in the pig. Denning-Kendall PA, et al. **J Reprod Fertil** 1989 Jan;85(1):261–71

Effect of in-vitro heat stress on prostaglandin and protein secretion by endometrium from pregnant and cyclic gilts at day 14 after oestrus. Gross TS, et al. **J Reprod Fertil** 1989 Mar;85(2):541–50

Similarity of vasopressin receptors in seminal vesicles and renal medulla of pigs. Maggi M, et al. **J Reprod Fertil** 1988 Nov;84(2):401–7

Multiple intravenous dose pharmacokinetics and residue depletion profile of gentamicin in pigs. Riond JL, et al. **J Vet Pharmacol Ther** 1988 Jun;11(2):210–4

Luteinizing hormone secretion following intracerebroventricular administration of morphine in the prepuberal gilt. Barb CR, et al. **Life Sci** 1989;45(8):691–6

Heterogeneity of insulin-like growth factor binding proteins in swine. Veomett GE, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):49–57

Inhibition by gossypol of cyclic nucleotide-independent phosvitin kinase from pig testis. Katoh N, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):105–9

An appropriate ingestion volume of oral sulfa drug suspension in pigs. Kokue E, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):485–90

Effect of dihydroheptaprenol on nitroblue tetrazolium reduction by swine alveolar macrophages. Watari T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):630–1

Processing and secretion of prosomatostatin by the pig pancreas. Holst JJ, et al. **Pancreas** 1988;3(6):653–61

Developmental biology of oxidant-producing enzymes and antioxidants in the piglet intestine. Crissinger KD, et al. **Pediatr Res** 1989 Jun;25(6):612–6

Pancreastatin distribution and plasma levels in the pig. Bretherton-Watt D, et al. **Peptides** 1988 Sep–Oct; 9(5):1005–14

Changes in plasma renin activity and renal immunohistochemically demonstrated renin in carbadox treated pigs. van der Molen EJ, et al. **Res Vet Sci** 1989 May;46(3):401–5

The absorption of a new sustained release furazolidone formulation from the digestive tract of piglets and calves. Hekman P, et al. **Vet Q** 1988 Oct;10(4):265–9

Pharmacokinetics, renal clearance and metabolism of ciprofloxacin following intravenous and oral administration to calves and pigs. Nouws JF, et al. **Vet Q** 1988 Jul; 10(3):156–63

Pharmacokinetics and renal clearance of sulphadimidine, sulphamerazine and sulphadiazine and their N4-acetyl and hydroxy metabolites in pigs. Nouws JF, et al. **Vet Q** 1989 Apr;11(2):78–86

A longitudinal study of starvation in piglets and the introduction of a modified liver biopsy technique. van Lith PM, et al. **Vet Q** 1988 Jul;10(3):145–50

Effect of feeding 5 per cent glucose solution or milk replacer to newborn piglets on intestinal permeability to macromolecules [published erratum appears in Vet Rec 1988 Nov 19;123(21):532] Vellenga L, et al. **Vet Rec** 1988 Oct 8;123(15):395–7

The vitamin E concentration in pig muscle biopsy specimens. A methodological study. Jensen M. **Zentralbl Veterinarmed [A]** 1989 May;36(5):354–60

Studies on the bioavailability of tetracycline chloride after oral administration to calves and pigs. Luthman J, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):261–8

[Postmortem formation of inorganic phosphorus in the skeletal muscles of pigs in relation to the detection of PSE in meat] Novotná B, et al. **Vet Med (Praha)** 1988 Oct; 33(10):617–23 **(Cze)**

[The effect of polychlorinated biphenyls on the vitamin A, vitamin E, and ascorbic acid status in young pigs] Dvořák M. **Arch Exp Veterinarmed** 1989 Jan;43(1):51–60 (Eng. Abstr.) **(Ger)**

[Experimental endocrinological studies in gilts near the time of ovulation using Gn-RH vet. "Berlin Chemistry"] George G, et al. **Arch Exp Veterinarmed** 1989 Jan; 43(1):23–37 (Eng. Abstr.) **(Ger)**

[The content of ascorbic acids in different tissues of cattle, normally developed piglets, splay-legged piglets, adult swine and dogs] Kolb E, et al. **Arch Exp Veterinarmed** 1989 May;43(3):327–34 (Eng. Abstr.) **(Ger)**

[Methods for the simplification of chemico-physical testing of protein silage mixtures] Mehnert E, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):603–9 (Eng. Abstr.) **(Ger)**

[Histochemical and biochemical studies of the effect of various estrogen and gestagen preparations on the uterus of nonpregnant ovariectomized gilts] Schnurrbusch U, et al. **Arch Exp Veterinarmed** 1988 Nov;42(6):820–39 (Eng. Abstr.) **(Ger)**

[Gas metabolism and body temperature during submaximal, maximal and supramaximal physical activity of swine] Steinhardt M, et al. **Arch Exp Veterinarmed** 1989 Mar; 43(2):301–8 (Eng. Abstr.) **(Ger)**

[The oxygen uptake capacity of swine] Steinhardt M, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):309–14 (Eng. Abstr.) **(Ger)**

[The significance of fiber for swine nutrition with special reference to HCl-treated straw meal] Bergner H. **Arch Tierernahr** 1988 Dec;38(12):1071–87 (45 ref.) (Eng. Abstr.) **(Ger)**

[Physiologic nutrition studies in swine with ileorectal anastomoses. 2. The effect of nourseothricin on nutrient digestibility, amino acid absorption, protein utilization and mineral balance of a rye diet] Hennig U, et al. **Arch Tierernahr** 1988 Jul-Aug;38(7–8):585–601 (Eng. Abstr.) **(Ger)**

[The energy preservation requirements of growing pigs of different sexes fed normal and high protein diets. 5. Comparison with the results obtained from castrated pigs, sows and boars] Jentsch W, et al. **Arch Tierernahr** 1989 Mar;39(3):279–97 (Eng. Abstr.) **(Ger)**

[The energy maintenance requirement of growing pigs of different sexes give normal and high protein diets. 2. Experiments in sows] Jentsch W, et al. **Arch Tierernahr** 1989 Jan-Feb;39(1–2):25–42 (Eng. Abstr.) **(Ger)**

[The energy maintenance requirement of growing pigs of different sexes given normal and high protein diets. 3. Experiments in boars] Jentsch W, et al. **Arch Tierernahr** 1989 Jan-Feb;39(1–2):43–60 (Eng. Abstr.) **(Ger)**

[The apparent prececal and fecal crude protein digestibility and amino acid absorption of coarse animal feed in fattening pigs] Kreienbring F, et al. **Arch Tierernahr** 1988 Jul-Aug; 38(7–8):573–84 (Eng. Abstr.) **(Ger)**

[Mechanism of action of lysine in relation to its form of supply in swine] Liebert F, et al. **Arch Tierernahr** 1989 Apr-May;39(4–5):405–13 (Eng. Abstr.) **(Ger)**

[The phosphorus supply of pigs in the body weight category of 11–38 kg. 1. The effect of the phosphorus supply on the performance, nutrient digestibility, protein and fat content in soft tissue and skeleton and protein and fat deposits] Lüdke H, et al. **Arch Tierernahr** 1989 Jan-Feb; 39(1–2):61–71 (Eng. Abstr.) **(Ger)**

[The feeding of differently treated straw materials to piglets after various weaning times. 2. Fatty acids in the large intestine and parameters of protein, fat, carbohydrate and mineral metabolism in the blood serum during the feeding of untreated, HCl-treated and partly-hydrolysed straw meal] Münchow H, et al. **Arch Tierernahr** 1989 Mar; 39(3):299–309 (Eng. Abstr.) **(Ger)**

[The energy maintenance requirement of growing pigs of different sexes given normal and high protein diets. 1. Experiments in castrates] Schiemann R, et al. **Arch Tierernahr** 1989 Jan-Feb;39(1–2):5–24 (Eng. Abstr.) **(Ger)**

[Evaluation of the protein quality of silaged corn ear products with different crude fiber contents] Wecke C, et al. **Arch Tierernahr** 1988 Nov;38(11):983–93 (Eng. Abstr.) **(Ger)**

[The energy metabolism of swine at a feed level of "live weight equilibrium"] Wiesemüller W, et al. **Arch Tierernahr** 1988 Jul-Aug;38(7–8):603–17 (Eng. Abstr.) **(Ger)**

[The energy preservation requirement of growing pigs of different sexes fed normal and high protein diets. 4. Determination of parameters in the blood for estimating metabolic status] Wittenburg H, et al. **Arch Tierernahr** 1989 Mar;39(3):263–77 (Eng. Abstr.) **(Ger)**

[The optimal selenium supplement in non-pregnant and pregnant sows] Neumann UF, et al. **Zentralbl Veterinarmed [A]** 1988 Nov;35(9):673–82 (Eng. Abstr.) **(Ger)**

[Chlorinated hydrocarbon levels in swine adipose tissue, liver and pork] Amarowicz R, et al. **Rocz Panstw Zakl Hig** 1988; 39(3):193–7 (Eng. Abstr.) **(Pol)**

[The enzyme activity of carbohydrate metabolism in the liver of swine during the transition from prenatal to postnatal development] Snitinskii VV. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):702–7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Streptococcus suis isolated from pigs in Finland. Sihvonen L, et al. **Acta Vet Scand** 1988;29(1):9–13

Detection of swine pox and buffalo pox viruses in cell culture using a protein A-horseradish peroxidase conjugate. Mohanty PK, et al. **Acta Virol (Praha)** 1989 May; 33(3):290–6

Enumeration of selected anaerobic bacterial groups in cecal and colonic contents of growing-finishing pigs. Butine TJ, et al. **Appl Environ Microbiol** 1989 May;55(5):1112–6

Serological characterisation of Australian isolates of Actinobacillus pleuropneumoniae. Eaves LE, et al. **Aust Vet J** 1988 Dec;65(12):379–81

The interferon sensitivity of selected porcine viruses. Derbyshire JB. **Can J Vet Res** 1989 Jan;53(1):52–5

Influenza in swine in Belgium (1969–1986): epizootiologic aspects. Haesebrouck F, et al. **Comp Immunol Microbiol Infect Dis** 1988;11(3–4):215–22

Transfer of plasmid Hly in vivo in pigs intestine. Klimuszko D, et al. **Comp Immunol Microbiol Infect Dis** 1989; 12(1–2):29–38

Genes coding for Shiga-like toxin and heat-stabile enterotoxin in porcine strains of Escherichia coli. Meyer T, et al. **FEMS Microbiol Lett** 1989 Mar;49(1):115–9

Binding of cholera toxin to pig intestinal mucosa glycosphingolipids: relationship with the ABO blood group system. Bennun FR, et al. **Infect Immun** 1989 Mar; 57(3):969–74

Studies on antagonism between porcine skin bacteria. Allaker RP, et al. **J Appl Bacteriol** 1989 Jun;66(6):507–14

Olaquindox resistance in the coliform flora of pigs and their environment: an ecological study. Hedges AJ, et al. **J Appl Bacteriol** 1988 May;64(5):429–43

Rapid radiometric detection of mycobacterial growth from smear-positive tissue samples from pigs. Hoffner SE, et al. **J Appl Bacteriol** 1989 Jan;66(1):65–7

Monitoring for the development of antimicrobial resistance during the use of olaquindox as a feed additive on commercial pig farms. Linton AH, et al.

J Appl Bacteriol 1988 Apr;64(4):311–27

Antigenic characterization of swine rotaviruses in Argentina. Mattion NM, et al. **J Clin Microbiol** 1989 Apr;27(4):795–8

Molecular and antigenic characterization of porcine rotavirus YM, a possible new rotavirus serotype [published erratum appears in J Virol 1989 Feb;63(2):1022] Ruiz AM, et al. **J Virol** 1988 Nov;62(11):4331–6

Studies on the prevalence and the transmission of lung and stomach nematodes of the wild boar (Sus scrofa) in France. Humbert JF, et al. **J Wildl Dis** 1989 Jul;25(3):335–41

Plasmid profiles of Mycobacterium avium complex isolated from swine. Masaki S, et al. **Microbiol Immunol** 1989; 33(5):429–33

Susceptibility of fecal anaerobic bacteria from pigs and chickens to five polyether antibiotics for growth promotion. Benno Y, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):783–90

Antibiotic susceptibility of serotype 2 and 5 strains of Actinobacillus (Haemophilus) pleuropneumoniae isolated from swine from 1974 to 1986. Kawahara K, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):359–63

Purification of K88 and K99 pili from porcine enterotoxigenic Escherichia coli by affinity chromatography. Kuzuya M, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):951–3

Serotyping of Actinobacillus (Haemophilus) pleuropneumoniae isolates from pigs in slaughterhouse. Suzuki S, et al. **Nippon Juigaku Zasshi** 1988 Dec; 50(6):1264–7

Comparative adhesion of protein A–positive and protein A–negative strains of porcine Staphylococcus hyicus subsp. hyicus to Vero cells. Teranishi H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):825–7

The first isolations of Campylobacter mucosalis from pigs in South Africa. van der Walt ML, et al. **Onderstepoort J Vet Res** 1988 Sep;55(3):165–8

Antimicrobial resistance of fecal coliforms from pigs in a herd not exposed to antimicrobial agents for 126 months. Langlois BE, et al. **Vet Microbiol** 1988 Oct;18(2):147–53

Prevention of exudative epidermitis in gnotobiotic piglets by bacterial interference. Allaker RP, et al. **Vet Rec** 1988 Dec 3;123(23):597–8

[Study on the surveillance of house-rat type epidemic haemorrhagic fever] Su T. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Jun; 9(3):141–4 (Eng. Abstr.) **(Chi)**

[Veterinarians, watch your affairs! (2) (letter)] Lycklama à Nijeholt P. **Tijdschr Diergeneeskd** 1989 Jan 15;114(2):102–3 **(Dut)**

[The detection of Clostridium botulinum in fecal samples of cattle and swine and in the raw material and animal meal of different animal body rendering plants] Klarmann D. **Berl Munch Tierarztl Wochenschr** 1989 Mar 1;102(3):84–6 (Eng. Abstr.) **(Ger)**

[Temperature-related production of enterotoxin by Yersinia enterocolitica isolated from healthy swine] Bielecka Z, et al. **Med Dosw Mikrobiol** 1988;40(3):124–9 (Eng. Abstr.) **(Pol)**

[Immunobiologic properties of swine rotavirus] Rukhadze GG. **Vopr Virusol** 1988 Nov–Dec;33(6):717–22 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Adaptation of the pig parasite Trypanosoma simiae to the laboratory rat. Opiyo EA, et al. **Ann Trop Med Parasitol** 1988 Aug;82(4):397–8

Parasites of domestic and wild animals in South Africa. XXIII. Helminth and arthropod parasites of warthogs, Phacochoerus aethiopicus, in the eastern Transvaal Lowveld. Horak IG, et al. **Onderstepoort J Vet Res** 1988 Sep;55(3):145–52

[Epidemiologic studies of worm burden in the Swabia piglet production and fattening industry] Muss C, et al. **DTW** 1989 Feb;96(2):73–5 (Eng. Abstr.) **(Ger)**

[Urgent epidemiologic and epizootic problems of trichinosis in the world] Pawłowski Z. **Wiad Parazytol** 1988; 34(4–6):597–600 **(Pol)**

PHYSIOLOGY

The effect of transportation/relocation on cortisol, CBG and induction of puberty in gilts with delayed puberty. Dalin AM, et al. **Acta Vet Scand** 1988;29(2):207–18

A long term study of the health status and performance of sows on different feed allowances during late pregnancy. I. Clinical observations, with special reference to agalactia post partum. Persson A, et al. **Acta Vet Scand** 1989; 30(1):9–17

Effect of transportation and relocation in post-weaning anoestrous primiparous sows. Rojanasthien S. **Acta Vet Scand** 1989;30(1):1–8

The analysis of variance adjustment to chi-square tests when there is litter or herd correlation in surveys or field trials. Donald A, et al. **Acta Vet Scand Suppl** 1988;84:490–2

Multifactorial analysis of return to oestrus and low litter size in the sow. Madec F. **Acta Vet Scand Suppl** 1988;84:167–9

Clinical, morphological and endocrinological studies in post-weaning anoestrous sows. Rojanasthien S, et al. **Acta Vet Scand Suppl** 1988;83:117–27

Blastocyst development on days 10 or 14 after consumption of zearalenone by sows on days 7 to 10 after breeding. Diekman MA, et al. **Am J Vet Res** 1989 Aug;50(8):1224–7

Anovulation and plasma hormone concentrations after administration of dexamethasone during the middle of the luteal phase in sows undergoing estrous cycles. Frautschy SA, et al. **Am J Vet Res** 1988 Aug;49(8):1270–5

Neonatal survival in swine: effects of low birth weight and clinical disease. Gardner IA, et al. **Am J Vet Res** 1989 May;50(5):792–7

Evaluation of diets contaminated with aflatoxin and ochratoxin fed to growing pigs. Harvey RB, et al. **Am J Vet Res** 1989 Aug;50(8):1400–5

Absence of brain opioid peptide modulation of luteinizing hormone secretion in the prepubertal gilt. Barb CR, et al. **Biol Reprod** 1988 Oct;39(3):603–9

Localization of luteinizing hormone–releasing hormone in the forebrain of the pig. Kineman RD, et al. **Biol Reprod** 1988 Oct;39(3):665–72

Effect of electrocautery of nonovulated day 1 follicles on subsequent morphological variation among day 11 porcine embryos. Pope WF, et al. **Biol Reprod** 1988 Nov; 39(4):882–7

Stimulatory effect of phorbol diester on relaxin release by porcine luteal cells in culture. Taylor MJ, et al. **Biol Reprod** 1988 Oct;39(3):743–50

An in vitro method for studying digestion in the pig. 2. Comparison with in vivo ileal and faecal digestibilities. Graham H, et al. **Br J Nutr** 1989 May;61(3):689–98

An in vitro method for studying digestion in the pig. 1. Stimulating digestion in the different compartments of the intestine. Löwgren W, et al. **Br J Nutr** 1989 May; 61(3):673–87

Sound localization, use of binaural cues and the superior olivary complex in pigs. Heffner RS, et al. **Brain Behav Evol** 1989;33(4):248–58

A model for acute haemodynamic studies in the ascending aorta in pigs. Hasenkam JM, et al. **Cardiovasc Res** 1988 Jul;22(7):464–71

Effect of acute changes in heart rate on Doppler pulmonary artery acceleration time in a porcine model. Gardin JM, et al. **Chest** 1988 Nov;94(5):994–7

Heat production in growing pigs calculated according to the RQ and CN methods. Christensen K, et al. **Comp Biochem Physiol [A]** 1988;91(3):463–8

Cardiovascular hemodynamics in the swine following long-term placement of prosthetic grafts post right ventriculotomy. Cissik JH, et al. **Comp Biochem Physiol [A]** 1989;92(3):327–30

Quantitation of calmodulin in the mammary gland of the lactating sow. Alston-Mills B, et al. **Domest Anim Endocrinol** 1989 Jan;6(1):79–83

The GNRH/gonadotropin axis in the ewe, cow and sow. Clarke IJ. **Domest Anim Endocrinol** 1989 Jan;6(1):1–14 (114 ref.)

Influence of follicular ablation during lactation on postweaning interval to estrus, ovulation rate, and endocrine function in sows. Cox NM, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):87–93

Castration and testosterone effects on endogenous and somatocrinin-induced growth hormone release in intact and castrated male pigs. Dubreuil P, et al. **Domest Anim Endocrinol** 1989 Jan;6(1):15–24

Influence of age and sex on basal secretion of growth hormone (GH) and on GH-induced release by porcine GH-releasing factor pGRF(1–29NH2) in growing pigs. Dubreuil P, et al. **Domest Anim Endocrinol** 1987 Oct; 4(4):299–307

Serum growth hormone release during a 60-hour period in growing pigs. Dubreuil P, et al. **Domest Anim Endocrinol** 1988 Apr;5(2):157–64

The influence of exogenous pituitary growth hormone on the ovulatory response to PMSG and hCG and the LH response to estradiol benzoate in prepubertal gilts. Kirkwood RN, et al. **Domest Anim Endocrinol** 1988 Oct; 5(4):317–22

The influence of duration of photoperiod and hemicastration on growth and testicular and endocrine functions of boars. Minton JE, et al. **Domest Anim Endocrinol** 1988 Jan; 5(1):71–80

Exogenous pituitary and recombinant growth hormones induce insulin and insulin-like growth factor 1 resistance in pig adipose tissue. Walton PE, et al. **Domest Anim Endocrinol** 1987 Jul;4(3):183–9

Response to luteinizing hormone releasing hormone in postpubertal boars with large testes. Wolfe PL, et al. **Domest Anim Endocrinol** 1989 Jul;6(3):211–8

Evaluation of assay conditions for the zona-free hamster ova bioassay of boar sperm fertility. Berger T, et al. **Gamete Res** 1988 Jan;19(1):101–11

Characterization of actin isoforms in ejaculated boar spermatozoa. Casale A, et al. **Gamete Res** 1988 Jun; 20(2):133–44

Effect of follicle somatic cells during pig oocyte maturation on egg penetrability and male pronucleus formation. Mattioli M, et al. **Gamete Res** 1988 Jun;20(2):177–83

Enhanced conception by stored porcine sperm stimulated with chloroquine. Egbunike GN. **Int J Androl** 1989 Feb; 12(1):80–4

Use of farrowing rate as a measure of fertility of boars. Clark LK, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):239–43

Effects of glycerol concentration, equilibration time and temperature of glycerol addition on post-thaw viability of boar spermatozoa frozen in straws. Almlid T, et al. **J Anim Sci** 1988 Nov;66(11):2899–905

Influence of sulfate in drinking water on mouse reproduction during two parities. Andres CJ, et al. **J Anim Sci** 1989 May;67(5):1313–7

Morphine suppresses luteinizing hormone concentrations in transiently weaned sows and delays onset of estrus after weaning. Armstrong JD, et al. **J Anim Sci** 1988 Sep; 66(9):2216–23

Effects of salinomycin on sow weight change during lactation and on sow reproductive performance. Bane DP, et al. **J Anim Sci** 1988 Dec;66(12):3094–100

Effect of fasting and transportation on various physiological parameters and meat quality of slaughter hogs. Becker BA, et al. **J Anim Sci** 1989 Feb;67(2):334–41

Integration of ovulation rate, potential embryonic viability and uterine capacity into a model of litter size in swine. Bennett GL, et al. **J Anim Sci** 1989 May;67(5):1230–41

Influence of energy and protein intake during lactation on body composition of primiparous sows. Brendemuhl JH, et al. **J Anim Sci** 1989 Jun;67(6):1478–88

Induction of fertile estrus in prepuberal gilts by treatment with a combination of pregnant mare's serum gonadotropin and human chorionic gonadotropin. Britt JH, et al. **J Anim Sci** 1989 May;67(5):1148–53

Effects of the oviduct and wheat germ agglutinin on enzymatic digestion of porcine zona pellucidae. Broermann DM, et al. **J Anim Sci** 1989 May;67(5):1324–9

Effect of dietary potassium chloride on feeder pig performance, market shrink, carcass traits and selected blood parameters. Brumm MC, et al. **J Anim Sci** 1989 Jun; 67(6):1411–7

Reproductive and growth responses of gilts to exogenous porcine pituitary growth hormone. Bryan KA, et al. **J Anim Sci** 1989 Jan;67(1):196–205

Influence of dietary protein, fat or amino acids on the response of weanling swine to aflatoxin B1. Coffey MT, et al. **J Anim Sci** 1989 Feb;67(2):465–72

Effects of additional feed during late gestation on reproductive performance of sows: a cooperative study. Cromwell GL, et al. **J Anim Sci** 1989 Jan;67(1):3–14

Effects of dietary salt level during gestation and lactation on reproductive performance of sows: a cooperative study. Cromwell GL, et al. **J Anim Sci** 1989 Feb;67(2):374–85

Effects of sow-crate design on health and performance of sows and piglets. Curtis SE, et al. **J Anim Sci** 1989 Jan; 67(1):80–93

Long-term liquid storage of porcine spermatozoa separated using a discontinuous bovine serum albumin gradient. Estienne MJ, et al. **J Anim Sci** 1989 Jun;67(6):1497–502

Endocrine changes associated with a dietary-induced increase in ovulation rate (flushing) in gilts. Flowers B, et al. **J Anim Sci** 1989 Mar;67(3):771–8

Differentiation of sexual behavior in cattle, sheep and swine. Ford JJ, et al. **J Anim Sci** 1989 Jul;67(7):1816–23 (64 ref.)

Effect of confinement method on physiology and production of gestating gilts. Friend TH, et al. **J Anim Sci** 1988 Nov; 66(11):2906–15

Effect of exogenous thyroxine on the interval from weaning to estrus of the primiparous sow. Giesemann MA, et al. **J Anim Sci** 1989 Jan;67(1):157–67

Effects of amperozide and azaperone on aggression and productivity of growing-finishing pigs. Gonyou HW, et al. **J Anim Sci** 1988 Nov;66(11):2856–64

Structural and mechanical changes of uterine arteries during pregnancy in the pig. Guenther AE, et al. **J Anim Sci** 1988 Dec;66(12):3144–52

Effect of lasalocid on reproductive performance and subsequent lactation in the sow. Haydon KD, et al. **J Anim Sci** 1988 Aug;66(8):1877–84

Mycotoxin interactions in poultry and swine. Huff WE, et al. **J Anim Sci** 1988 Sep;66(9):2351–5

Relationship between body fat and postweaning interval to estrus in primiparous sows. Johnston LJ, et al. **J Anim Sci** 1989 Apr;67(4):943–50

Influence of prenatal and postnatal fraternity size on reproduction in swine. Kirkpatrick BW, et al. **J Anim Sci** 1988 Oct;66(10):2530–7

Effect of colostrum or medium-chain triglyceride supplementation on the pattern of plasma glucose, non-esterified fatty acids and survival of neonatal pigs. Lepine AJ, et al. **J Anim Sci** 1989 Apr;67(4):983–90

Folic acid supplementation to diets of gestating-lactating swine over multiple parities. Lindemann MD, et al. **J Anim Sci** 1989 Feb;67(2):459–64

Photoperiod and heat stress influence on lactating sow performance and photoperiod effects on nursery pig performance. McGlone JJ, et al. **J Anim Sci** 1988 Aug; 66(8):1915–9

Ovarian function and hormone secretion of gilts actively immunized against androstenedione. McKinnie MR, et al. **J Anim Sci** 1988 Dec;66(12):3131–43

Effect of postnatal nutritional status on subsequent growth and reproductive performance of gilts. Martin RE, et al. **J Anim Sci** 1989 Apr;67(4):975–82

Effects of intramuscular injections of folic acid during lactation on folates in serum and milk and performance of sows and piglets. Matte JJ, et al. **J Anim Sci** 1989 Feb; 67(2):426–31

Fluctuating ambient temperature for weaned pigs: effects on performance and immunological and endocrinological functions. Minton JE, et al. **J Anim Sci** 1988 Aug; 66(8):1907–14

Effect of creep partitions on teat-seeking behavior of newborn piglets. Rohde Parfet KA, et al. **J Anim Sci** 1988

Sep;66(9):2165–73

Effects of sow–crate design on sow and piglet behavior. Rohde Parfet KA, et al. **J Anim Sci** 1989 Jan;67(1):94–104

The effects of dietary fat or fiber addition on yield and composition of milk from sows housed in a warm or hot environment. Schoenherr WD, et al. **J Anim Sci** 1989 Feb; 67(2):482–95

Effects of litter size and light regimen imposed during lactation on ovarian follicular population at weaning in third–parity sows. Simoneau C, et al. **J Anim Sci** 1988 Oct; 66(10):2606–13

Pulsatile administration of gonadotropin–releasing hormone agonist to gilts actively immunized against gonadotropin–releasing hormone. Traywick GB, et al. **J Anim Sci** 1988 Sep;66(9):2209–15

Energetics of sows and gilts in gestation crates in the cold. Verstegen MW, et al. **J Anim Sci** 1988 Nov;66(11):2865–75

Effect of stage of gestation, litter size and uterine space on the incidence of mummified fetuses in pigs. Wu MC, et al. **J Anim Sci** 1988 Dec;66(12):3202–7

Ovarian influence on uterine growth in prepubertal gilts. Wu MC, et al. **J Anim Sci** 1988 Nov;66(11):2893–8

Expression of airway contractile properties and acetylcholinesterase activity in swine. Murphy TM, et al. **J Appl Physiol** 1989 Jul;67(1):174–80

Airway epithelium modulates the responsiveness of porcine bronchial smooth muscle. Stuart–Smith K, et al. **J Appl Physiol** 1988 Aug;65(2):721–7

Effects of vasomotor– and mediator–induced hypotension on bronchomotor tone in swine. White SR, et al. **J Appl Physiol** 1989 Apr;66(4):1852–9

Cardiovascular response to histamine during normoxaemia and hypoxaemia in piglets. Taylor BJ. **J Dev Physiol** 1989 Feb;11(2):117–21

Decrease in intestinal permeability to polyethylene glycol 1000 during development in the pig. Weström BR, et al. **J Dev Physiol** 1989 Feb;11(2):83–7

Changes in serum concentrations of inhibin in cyclic pigs. Hasegawa Y, et al. **J Endocrinol** 1988 Aug;118(2):211–9

Effects of morphine and naloxone on plasma levels of LH, FSH, prolactin and growth hormone in the immature male pig. Trudeau VL, et al. **J Endocrinol** 1988 Dec;119(3):501–8

The length dependence of the series elasticity of pig bladder smooth muscle. Van Mastrigt R. **J Muscle Res Cell Motil** 1988 Dec;9(6):525–32

A swine model for studying intestinal circulation of the newborn. Bustamante SA, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr;8(3):376–83

Conceptus development in large white and prolific Chinese Meishan pigs. Bazer FW, et al. **J Reprod Fertil** 1988 Sep; 84(1):37–42

Effect of temperature on the fluidity of boar sperm membranes. Canvin AT, et al. **J Reprod Fertil** 1989 Mar; 85(2):533–40

Morphological and biochemical characteristics during ovarian follicular development in the pig. Grant SA, et al. **J Reprod Fertil** 1989 May;86(1):171–83

Histological evidence for heterogeneity in the development of preovulatory pig follicles. Hunter MG, et al. **J Reprod Fertil** 1989 May;86(1):165–70

In–vitro fertilization of pig oocytes by frozen boar spermatozoa. Nagai T, et al. **J Reprod Fertil** 1988 Nov; 84(2):585–91

Growth and differentiation of the gubernaculum testis during testicular descent in the pig: changes in the extracellular matrix, DNA content, and hyaluronidase, beta–glucuronidase, and beta–N–acetylglucosaminidase activities. Fentener van Vlissingen JM, et al. **J Urol** 1989 Sep;142(3):837–45

The effects of salbutamol on blood pressure and heart rate in Large White and Pietrain–cross breeds of pig. White DG, et al. **J Vet Pharmacol Ther** 1989 Jun;12(2):179–88

Vagal vasodilatory mechanisms in the pig bronchial circulation preferentially involves sensory nerves. Martling CR, et al. **Neurosci Lett** 1989 Jan 30;96(3):306–11

Effect of intraperitoneal administration of amino acids on the food intake of piglets on a liquid diet during the first month after birth. Baranyiová E, et al. **Physiol Bohemoslov** 1989;38(3):267–74

Luteinizing hormone secretion in hypophysial stalk–transected pigs given progesterone and pulsatile gonadotropin–releasing hormone. Estienne MJ, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):14–7

Plasma adrenocorticotropic hormone and cortisol in pigs: effects of time of day on basal and stressor–altered concentrations. Klemcke HG, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):42–53

Circulatory shock in long and short pigs. Phillips RW. **Prog Clin Biol Res** 1989;299:265–75 (27 ref.)

Control of gastric emptying in the pig: influence of duodenal infusions of glucose and emulsified fat. Gregory PC, et al. **Q J Exp Physiol** 1989 Mar;74(2):109–19

Biliary and pancreatic secretory component of the migrating myoelectric complex in the pig. Effect on intraduodenal pH. Abello J, et al. **Reprod Nutr Dev** 1988;28(4A):953–67

Effects of blood sampling procedures, grouping and adrenal stimulation on stress responses in the growing pig. Baldi A, et al. **Reprod Nutr Dev** 1989;29(1):95–103

Solubilization and purification of the lutropin (LH) receptor from porcine testes. Jallal B, et al. **Reprod Nutr Dev** 1988; 28(4B):1177–92

Acetaminophen–induced acute hepatic failure in pigs: controversical results to other animal models. Henne–Bruns D, et al. **Res Exp Med (Berl)** 1988;188(6):463–72

Intestinal absorption of colostral lymphoid cells in newborn piglets. Tuboly S, et al. **Vet Immunol Immunopathol** 1988 Dec;20(1):75–85

Water supply for pigs [letter; comment] Brooks PH. **Vet Rec** 1989 Apr 1;124(13):354. **Comment on:** Vet Rec 1989 Feb 25;124(8):204

Use of an on–farm progesterone assay kit to determine pregnancy in sows. Glossop CE, et al. **Vet Rec** 1989 Feb 4;124(5):115–7

Welfare of intensively housed animals [letter] Hughes BO. **Vet Rec** 1988 Oct 1;123(14):378

Sow welfare [letter] Penny RH. **Vet Rec** 1988 Nov 12; 123(20):528

Control of oestrus and ovulation in peri–pubertal gilts with allyltrenbolone or a combination of natural gonadotrophins. Varley MA, et al. **Vet Rec** 1989 Feb 25;124(8):186–9

Total and differential cell counts and N–acetyl–beta–D–glucosaminidase activity in sow milk during lactation. Hurley WL, et al. **Vet Res Commun** 1988; 12(2–3):149–53

A study on puberty and oestrus in gilts. Eliasson L. **Zentralbl Veterinarmed [A]** 1989 Jan;36(1):46–54

Feed refusal of pigs caused by Fusarium mycotoxins in Argentina. Marpegan MR, et al. **Zentralbl Veterinarmed [A]** 1988 Sep;35(8):610–6

Clinical signs and performance of pigs during the administration of different levels of carbadox and after withdrawal. Nabuurs MJ, et al. **Zentralbl Veterinarmed [A]** 1989 Mar;36(3):209–17

Influence of age on the electrical auricular systole in swine. Rubio D, et al. **Zentralbl Veterinarmed [A]** 1989 Jan; 36(1):64–70

[Trends in research related to the health of pigs] van Leeuwen JM. **Tijdschr Diergeneeskd** 1988 Nov 1; 113(21):1172–80 (Eng. Abstr.) **(Dut)**

[Characterization of the nutritional status of wild boars in forest surroundings on the basis of mesenteric fat and blood parameters] Mauget R, et al. **Reprod Nutr Dev** 1988; 28(4A):969–78 (Eng. Abstr.) **(Fre)**

[Use of the chitin biosynthesis inhibitor diflubenzuron (dimilin WP 25) in swine for the control of sty flies in intensive housing conditions] Betke P, et al. **Arch Exp Veterinarmed** 1988 May;42(3):458–69 (Eng. Abstr.) **(Ger)**

[Electrophysiologic studies of uterine motility during estrus in young female swine after ovulation synchronization] Brüssow KP, et al. **Arch Exp Veterinarmed** 1988 Nov; 42(6):933–43 (Eng. Abstr.) **(Ger)**

[The results of experimental studies on the modification of litter size in swine by exogenous sex steroid supplementation during early pregnancy. 1. Progesterone levels in plasma without and after hormonal substitution during early pregnancy in swine] Elze K, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):502–8 (Eng. Abstr.) **(Ger)**

[Development of a test for sperm damage by measuring succinate dehydrogenase activity] Risse S. **Arch Exp Veterinarmed** 1988 Sep;42(5):769–76 (Eng. Abstr.) **(Ger)**

[The course of ovulation in gilts after the use of two GnRH injections for ovulation stimulation] Schlegel W, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):101–5 (Eng. Abstr.) **(Ger)**

[The course of ovulation in gilts after the partial replacement of HCG by GnRH for ovulation stimulation] Schlegel W, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):97–100 (Eng. Abstr.) **(Ger)**

[The effect of noxious chemicals on the sperm quality of boars used for insemination. 1. The fly control agent "omexan"] Schulz O, et al. **Arch Exp Veterinarmed** 1988 May;42(3):435–43 (Eng. Abstr.) **(Ger)**

[The influence of chemical noxae on the sperm quality of boars used for insemination. 2. Mercury] Schulz O, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):610–7 (Eng. Abstr.) **(Ger)**

[Experimental studies on the stimulation of prenatal development in swine by PMSG treatment in early pregnancy. 1. Clinical results of embryonic development in young slaughtered sows and litter results in young and old sows after PMSG treatment on the 11th day of pregnancy] Spitschak K, et al. **Arch Exp Veterinarmed** 1989 May;43(3):351–7 (Eng. Abstr.) **(Ger)**

[Gas exchange in boars of different development stages during motor activity] Steinhardt M, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):121–8 (Eng. Abstr.) **(Ger)**

[Gas exchange in swine before, during and after motor activity of different intensity and length] Steinhardt M, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):111–9 (Eng. Abstr.) **(Ger)**

[The sperm quality of 4 boars during the assimilation of mycotoxin–containing feed (ochratoxin A) amd after changing the feed—a case study] Ewald C, et al. **Berl Munch Tierarztl Wochenschr** 1989 Aug 1;102(8):261–6 (Eng. Abstr.) **(Ger)**

[The effect of light intensity and the length of time under natural daylight or artificial lighting on the seasonal fertility rhythm of swine] Lahrmann KH. **Berl Munch Tierarztl Wochenschr** 1989 Jul 1;102(7):227–33 (Eng. Abstr.) **(Ger)**

[The humane conditions of swine housing—a summary of various results] Marx D, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jul 1;102(7):218–23 (15 ref.) (Eng. Abstr.) **(Ger)**

[CO2–stunning of swine for slaughter from the anesthesiological viewpoint] Erhardt W, et al. **DTW** 1989 Mar;96(3):92–9 (Eng. Abstr.) **(Ger)**

[Ethically chosen studies with early–weaned piglets during their raising in pens with different applications of straw. 1. The effects of different applications of straw and different floor conditions in areas of uniform size] Marx D, et al. **DTW** 1989 Jan;96(1):20–6 (Eng. Abstr.) **(Ger)**

[The electric stunning of pigs for slaughter] Troeger K, et al. **DTW** 1989 Mar;96(3):100–3 (Eng. Abstr.) **(Ger)**

[Sialic acid in boar sperm—the relation to qualitative and quantitative ejaculate parameters] Wemheuer WE, et al. **DTW** 1988 Jul–Aug;95(7):277–83 (Eng. Abstr.) **(Ger)**

[Expert opinion on the division of the idea of covering and fertilization inability in boars] Weitze KF. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):392–3 **(Ger)**

[Endogenous opioids and their effects on reproduction] effects] Behrens S, et al. **Tierarztl Prax** 1988;16(3):213–7 (40 ref.) (Eng. Abstr.) **(Ger)**

[The optimal selenium supplementation in reproducing sows] Neumann UF, et al. **Zentralbl Veterinarmed [A]** 1989 Mar; 36(3):175–87 (Eng. Abstr.) **(Ger)**

[The role of the cholinergic system in the regulation of blood flow through the reproductive organs of swine during the estrous cycle] Dynarowicz I, et al. **Pol Arch Weter** 1987; 27(4):69–83 (Eng. Abstr.) **(Pol)**

[The role of riboflavin and pantothenic acid in the reproductive function of swine] Pocherniaeva GM. **Fiziol Zh** 1989 Mar–Apr;35(2):69–74 (Eng. Abstr.) **(Rus)**

SURGERY

Stress–induced changes in plasma concentrations of immunoreactive beta–endorphin and cortisol in response to routine surgical procedures in lambs. Shutt DA, et al. **Aust J Biol Sci** 1987;40(1):97–103

Bilateral removal of the cauda epididymides in the neonatal pig as a technique for creating teaser boars. Arkins S, et al. **J Anim Sci** 1989 Jan;67(1):15–9

Local and general anesthetic effects on behavior and performance of two– and seven–week–old castrated and uncastrated piglets. McGlone JJ, et al. **J Anim Sci** 1988 Dec;66(12):3049–58

A technique for creating a porcine end colostomy. Jochen RF, et al. **Lab Anim Sci** 1988 Aug;38(4):485–7

An efficient, inexpensive teaching model for venous cut down procedures. Kanter RK, et al. **Pediatr Emerg Care** 1988 Sep;4(3):203–4

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. I. Clinical observations] Wawron W. **Pol Arch Weter** 1987;27(2–3):29–40 (Eng. Abstr.) **(Pol)**

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. II. Hematological studies] Wawron W. **Pol Arch Weter** 1987;27(2–3):41–50 (Eng. Abstr.) **(Pol)**

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. III. Serum electrolyte levels] Wawron W. **Pol Arch Weter** 1987;27(2–3):51–60 (Eng. Abstr.) **(Pol)**

URINE

Measurement of urinary and plasma estrone sulphate concentrations from pregnant sows. Atkinson S, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):133–8

[The importance of exogenous factors on the composition of the urine of breeding sows] Bollwahn W, et al. **Tierarztl Prax** 1989;17(1):43–6 (Eng. Abstr.) **(Ger)**

SWINE DISEASES

A critical analysis of swine medicine in American veterinary schools. Backstrom L. **J Am Vet Med Assoc** 1989 Feb 15; 194(4):502–7

Aflatoxicosis in Iowa swine: eight cases (1983–1985). Cook WO, et al. **J Am Vet Med Assoc** 1989 Feb 15;194(4):554–8

Haemophilus pleuropneumonine in pigs: a review. Veary CM. **J S Afr Vet Assoc** 1989 Mar;60(1):56–61 (18 ref.)

A murine model of Streptococcus suis type 2 meningitis in the pig. Williams AE, et al. **Res Vet Sci** 1988 Nov; 45(3):394–9

[Parvovirus infection of swine (literature review)] Liebermann H, et al. **Arch Exp Veterinarmed** 1988 Nov; 42(6):890–904 (109 ref.) (Eng. Abstr.) **(Ger)**

[Streptococcus porcinus—as a cause of abortion in swine] Plagemann O. **Zentralbl Veterinarmed [B]** 1988 Dec; 35(10):770–2 (Eng. Abstr.) **(Ger)**

BLOOD

Serum chemical profile of feeder pigs, as influenced by market stress and feeding regimen. Clemens ET, et al. **Am J Vet Res** 1989 Jul;50(7):1114–7

Porcine malignant hyperthermia susceptibility: halothane–induced increase in cytoplasmic free calcium in lymphocytes. O'Brien PJ, et al. **Am J Vet Res** 1989 Jan; 50(1):131–5

Porcine stress syndrome, free radicals and vitamin E. Duthie

G, et al. **Basic Life Sci** 1988;49:605–9

Association of the early stage of the subclinical form of atrophic rhinitis with hypothyroidism in growing pigs. Slebodziński AB, et al. **Br Vet J** 1988 Jul–Aug; 144(4):395–402

Open canalicular system of platelets in porcine stress syndrome. Basrur PK, et al. **Can J Vet Res** 1988 Jul; 52(3):380–5

Blood gas stability and hematological changes in experimentally-induced acute porcine pleuropneumonia. Kiorpes AL, et al. **Can J Vet Res** 1989 Jan;53(1):95–9

Reduced 125I-hGH binding by serum of dwarf pigs but not by serum of dwarfed poodles. Lauteric TJ, et al. **Comp Biochem Physiol [A]** 1988;91(1):15–9

Sera from pigs infected with Sarcocystis suicanis and cachectin decrease preadipocyte differentiation in primary cell culture. Jewell DE, et al. **J Anim Sci** 1988 Nov; 66(11):2992–9

Blood lactate as a prognosticator of survival following hemorrhage in conscious swine. Wade CE, et al. **Lab Anim Sci** 1989 Jan;39(1):44–6

Platelet interaction with vessel wall and collagen in pigs with homozygous von Willebrand's disease associated with abnormal collagen aggregation. Badimon L, et al. **Thromb Haemost** 1989 Feb 28;61(1):57–64

Stress resistant and stress susceptible landrace pigs: comparison of blood variables after exposure to halothane or exercise on a treadmill. Heinze PH, et al. **Vet Rec** 1989 Feb 18;124(7):163–8

Erythrocyte osmotic fragility in porcine malignant hyperthermia and effects of halothane. Reiner G, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):269–75

[Results of several blood studies in sows with acute urinary tract inflammation] Stirnimann J. **Schweiz Arch Tierheilkd** 1988 Nov;130(11):599–604 (Eng. Abstr.) **(Ger)**

CHEMICALLY INDUCED

Effects of aflatoxin, deoxynivalenol, and their combinations in the diets of growing pigs. Harvey RB, et al. **Am J Vet Res** 1989 Apr;50(4):602–7

Goitrogenic effects in offspring of swine fed sulfadimethoxine and ormetoprim in late gestation. Blackwell TE, et al. **J Am Vet Med Assoc** 1989 Feb 15;194(4):519–23

Dwarfism in a swine herd: suspected vitamin A toxicosis. Doige CE, et al. **J Am Vet Med Assoc** 1988 Sep 15; 193(6):691–3

Cottonseed meal (gossypol) toxicosis in a swine herd. Haschek WM, et al. **J Am Vet Med Assoc** 1989 Sep 1; 195(5):613–5

Persistence of carbadox-induced adrenal lesions in pigs following drug withdrawal and recovery of aldosterone plasma concentrations. van der Molen EJ, et al. **J Comp Pathol** 1989 Apr;100(3):295–304

Experimental induction of splayleg in piglets by pyrimethamine. Ohnishi M, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):146–50

Accidental carbadox overdosage in pigs in an Irish weaner-producing herd. Power SB, et al. **Vet Rec** 1989 Apr 8;124(14):367–70

[A case of common salt poisoning in slaughtering pigs] Baars AJ, et al. **Tijdschr Diergeneeskd** 1988 Sep 1;113(17):933–5 (Eng. Abstr.) **(Dut)**

[A case of selenium poisoning in weaned piglets; the persistent one wins] Oskam JP, et al. **Tijdschr Diergeneeskd** 1989 Mar 15;114(6):322–6 (Eng. Abstr.) **(Dut)**

CONGENITAL

Livestock models of human birth defects, reviewed in relation to poisonous plants. Keeler RF. **J Anim Sci** 1988 Sep;66(9):2414–27 (87 ref.)

Demonstration of Toxoplasma gondii antigen in stillborn piglets using immunoperoxidase technique. Haritani M, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):954–6

Coarctatio aortae in pigs: a morphological approach. van Nie CJ. **Vet Q** 1988 Oct;10(4):234–9

DIAGNOSIS

Relevance in epidemiology of infectious diseases of a rapid immunofluorescence technique for diagnosis: preliminary works about acute viral respiratory problems in fattening pigs. Onno M, et al. **Acta Vet Scand Suppl** 1988;84:256–8

Turbinate perimeter ratio as an indicator of conchal atrophy for diagnosis of atrophic rhinitis in pigs. Collins MT, et al. **Am J Vet Res** 1989 Mar;50(3):421–4

Increased peroxidation of erythrocytes of stress-susceptible pigs: an improved diagnostic test for porcine stress syndrome. Duthie GG, et al. **Am J Vet Res** 1989 Jan; 50(1):84–7

Studies on the ability of a 98-kilodalton pseudorabies virus diagnostic antigen to detect latent infections induced by low-dose exposure to the virus. McGinley MJ, et al. **Am J Vet Res** 1988 Sep;49(9):1489–93

Use of an enzyme-linked immunosorbent assay for detection of Treponema hyodysenteriae infection in swine. Wright JC, et al. **J Clin Microbiol** 1989 Mar;27(3):411–6

Comparative evaluation of various immunodiagnostic tests for the diagnosis of Taenia solium cysticercosis in pigs, using fractionated antigens. Kumar D, et al. **J Helminthol** 1989 Mar;63(1):13–7

Development of an ELISA for detection of antibodies to glycoprotein I of Aujeszky's disease virus: a method for the serological differentiation between infected and vaccinated pigs. van Oirschot JT, et al. **J Virol Methods** 1988 Dec;22(2–3):191–206

An enzyme-linked immunosorbent assay for detection of antibodies to porcine parvovirus. Westenbrink F, et al. **J Virol Methods** 1989 Feb;23(2):169–78

Mapping of porcine parvovirus DNA and development of a diagnostic DNA probe. Krell PJ, et al. **Vet Microbiol** 1988 May;17(1):29–43

Evaluation of excretory-secretory antigens for the serodiagnosis of swine trichinellosis. Gamble HR, et al. **Vet Parasitol** 1988 Dec;30(2):131–7

A method for bronchoalveolar lavage in live pigs. van Leengoed LA, et al. **Vet Q** 1989 Apr;11(2):65–72

Swine cysticercosis: detection of parasite products in serum. Rodriguez-del-Rosal E, et al. **Vet Rec** 1989 May 6; 124(18):488

Rapid diagnosis of Aujeszky's disease in pigs by improved in situ hybridization using biotinylated probes on paraffin-embedded tissue sections. Belák K, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):10–20

Evaluation of the Staph-Zym-system for identification of Staphylococcus hyicus and Staphylococcus intermedius. Lämmler C. **Zentralbl Veterinarmed [B]** 1989 May; 36(3):180–4

Differentiation of hog cholera and bovine virus diarrhoea viruses in pigs using monoclonal antibodies. Zhou Y, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):76–80

[The reproduction of eperythrozoonosis of swine by animal experiments after splenectomy] Bugnowski H, et al. **Arch Exp Veterinarmed** 1989 May;43(3):391–403 (Eng. Abstr.) **(Ger)**

[Fluorescence serological and culture detection of Mycoplasma hyopneumoniae and Mycoplasma hyorhinis in swine lungs] Binder A, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jan 1;102(1):11–3 (Eng. Abstr.) **(Ger)**

[Rhinitis atrophicans (RA) of swine: a skin test for the detection of antitoxic Pasteurella multocida antibodies] Schimmelpfennig H, et al. **DTW** 1988 Jul–Aug;95(7):285–6 (Eng. Abstr.) **(Ger)**

[A test for the rapid diagnosis of Aujeszky's disease (AK) in swine] Seidler M, et al. **DTW** 1988 Nov–Dec;95(10):468 **(Ger)**

DRUG THERAPY

Efficacy of an in-feed ivermectin formulation against gastrointestinal helminths, lungworms, and sarcoptic mites in swine. Alva-Valdes R, et al. **Am J Vet Res** 1989 Aug; 50(8):1392–5

The effect of monensin against swine dysentery. Kyriakis SC. **Br Vet J** 1989 Jul–Aug;145(4):373–7

Evaluation of tiamulin for treatment of mycoplasmal pneumonia in swine. Ross RF, et al. **J Am Vet Med Assoc** 1988 Aug 15;193(4):441–6

Wasting pig syndrome (WPS) in weaners—treatment with amperozide. Kyriakis SC, et al. **J Vet Pharmacol Ther** 1989 Jun;12(2):232–6

Therapy of Aujeszky's disease (pseudorabies) in naturally infected and artificially inoculated piglets using BW B759U (9-[1,3-dihydroxy-2-propoxymethyl] guanine). Rollinson EA, et al. **Res Vet Sci** 1988 Jul;45(1):54–61

A dose-response investigation on the level of resistance to pyrantel citrate in nodular worms of pigs. Bjørn H, et al. **Vet Parasitol** 1989 Jun;31(3–4):259–67

Efficacy of flubendazole against gastrointestinal and lung nematodes in pigs. Vanparijs O, et al. **Vet Rec** 1988 Sep 24;123(13):337–9

Effect of antisecretory drugs on experimentally induced weanling diarrhoea in piglets. Cox E, et al. **Vet Res Commun** 1989;13(2):159–70

Effect of chlorpromazine on experimental diarrhoea in just-weaned piglets. Cox E, et al. **Zentralbl Veterinarmed [A]** 1989 Feb;36(2):142–51

Effect of an alpha 2-adrenoceptor agonist on experimentally induced diarrhoea in newly-weaned piglets. Cox E, et al. **Zentralbl Veterinarmed [A]** 1988 Dec;35(10):744–54

[The treatment of acute urinary tract inflammation in the sow] Stirnimann J. **Schweiz Arch Tierheilkd** 1988 Nov; 130(11):605–11 (Eng. Abstr.) **(Ger)**

ECONOMICS

Effective use of slaughter checks to determine economic losses from morbidity in swine. Boessen CR, et al. **Acta Vet Scand Suppl** 1988;84:366–8

Economic impact of urogenital diseases in the gilt: the use of portfolio theory to minimize economic risk associated with post-epidemic breeding management. Parsons TD, et al. **Acta Vet Scand Suppl** 1988;84:415–8

Abattoir condemnation of pigs and its economic implications in Singapore. Tiong CK, et al. **Br Vet J** 1989 Jan–Feb; 145(1):77–84

Economic aspects of common health and fertility problems for the individual pig producer: an overview. Dijkhuizen AA. **Vet Q** 1989 Apr;11(2):116–24

ENZYMOLOGY

[Activity of selected dehydrogenases and monoamine oxidases in the small intestine of gnotobiotic piglets infected with the coccidium Isospora suis] Kudweis M, et al. **Vet Med (Praha)** 1989 May;34(5):287–96 (Eng. Abstr.) **(Cze)**

[Alkaline phosphatase activity levels during infection with the coccidia Isospora suis in piglets] Kudweis M, et al. **Vet Med (Praha)** 1989 Mar;34(3):157–62 (Eng. Abstr.) **(Cze)**

EPIDEMIOLOGY

Epidemiological studies of piglet diarrhoea in intensively managed Danish sow herds. I. Pre-weaning diarrhoea. Svensmark B, et al. **Acta Vet Scand** 1989;30(1):43–53

Epidemiological studies of piglet diarrhoea in intensively managed Danish sow herds. II. Post-weaning diarrhoea. Svensmark B, et al. **Acta Vet Scand** 1989;30(1):55–62

Epidemiological studies of piglet diarrhoea in intensively managed Danish sow herds. III. Rotavirus infection. Svensmark B, et al. **Acta Vet Scand** 1989;30(1):63–70

Swine ascariasis: impact on production and abattoir surveillance. Bernardo TM, et al. **Acta Vet Scand Suppl** 1988;84:265–7

Descriptive analysis of diagnostic test results of quarantined pigs and cattle imported into the People's Republic of China from the United States. Cowen P, et al. **Acta Vet Scand Suppl** 1988;84:271–3

A Cox regression analysis of risk factors related to Mycoplasma suipneumoniae reinfection in Danish SPF-herds. Jorsal SE, et al. **Acta Vet Scand Suppl** 1988; 84:436–8

The western Australian pig health monitoring scheme. Mercy AR, et al. **Acta Vet Scand Suppl** 1988;84:212–4

Chronic pleurisy in pigs: the relationship between weight, age and frequency in 3 conventional herds. Mousing J. **Acta Vet Scand Suppl** 1988;84:253–5

Survey of internal parasites in Western Australian pig herds. 1. Prevalence. Mercy AR, et al. **Aust Vet J** 1989 Jan; 66(1):4–6

Survey of internal parasites in Western Australian pig herds. 2. Relationship to anthelmintic usage and parasite control practices. Mercy AR, et al. **Aust Vet J** 1989 Jan;66(1):6–9

An evaluation of three serological tests for antibody to Brucella suis in pigs. Rogers RJ, et al. **Aust Vet J** 1989 Mar;66(3):77–80

Economically significant enteric infections in domestic animals in Australia. Tzipori S. **Br Vet J** 1988 Nov–Dec; 144(6):521–3

The prevalence of leptospirosis and its association with multifocal interstitial nephritis in swine at slaughter. Baker TF, et al. **Can J Vet Res** 1989 Jul;53(3):290–4

Prevalence of trichinosis in Canadian swine determined serologically by enzyme-linked immunosorbent assay. Smith HJ, et al. **Can J Vet Res** 1988 Jul;52(3):392–3

Porcine neonatal coccidiosis in Cuba. Koudela B, et al. **Folia Parasitol (Praha)** 1989;36(1):31–2

Survey of selected diseases in wild swine in Texas. Corn JL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1029–32

Dermacentor (Indocentor) steini (Acari: Ixodoides: Ixodidae): hosts, distribution in the Malay Peninsula, Indonesia, Borneo, Thailand, and Philippines, and New Guinea. Wassef HY, et al. **J Med Entomol** 1988 Sep; 25(5):315–20

Helminth parasites of intermingling axis deer, wild swine and domestic cattle from the island of Molokai, Hawaii. McKenzie ME, et al. **J Wildl Dis** 1989 Apr;25(2):252–7

Periodontal disease in southern African bushpigs (Potamochoerus porcus) and warthogs (Phacochoerus aethiopicus). Woodall PF. **J Wildl Dis** 1989 Jan;25(1):66–9

A serological survey of swine parvovirus infection in Italy. Foni E, et al. **Microbiologica** 1989 Jul;12(3):241–5

A serologic survey of encephalomyocarditis virus infection in pigs in Italy. Gualandi GL, et al. **Microbiologica** 1989 Apr;12(2):129–32

Nematode parasite infections of domestic pigs in a sub-tropical and high-rainfall area of India. Yadav AK, et al. **Vet Parasitol** 1989 May;31(2):133–9

Swine brucellosis in Indonesia. van der Giessen JW, et al. **Vet Q** 1988 Jul;10(3):172–6

Rectal prolapse in pigs [letter] Garden S. **Vet Rec** 1988 Dec 17;123(25):654

Patterns and determinants of rectal prolapse in a herd of pigs. Gardner IA, et al. **Vet Rec** 1988 Aug 27;123(9):222–5

Monitoring for atrophic rhinitis: the problem of higher snout scores. Goodwin RF. **Vet Rec** 1988 Nov 26;123(22):566–8

Clinical observations on seasonal infertility in sows in Cornwall. Hancock RD. **Vet Rec** 1988 Oct 15; 123(16):413–6

Prevalence of pleurisy in pigs at slaughter. Hartley PE, et al. **Vet Rec** 1988 Aug 13;123(7):173–5

Prevalence of Streptococcus suis types 1 and 2 in domestic pigs in Australia and New Zealand. Robertson ID, et al. **Vet Rec** 1989 Apr 15;124(15):391–4

The incidence of microangiopathy (Mulberry heart disease) in necropsied pigs in Finland. Korpela H, et al. **Zentralbl Veterinarmed [A]** 1988 Nov;35(9):705–8

Detection of antibodies against human influenza A virus (H1N1) in swine sera in the Federal Republic of Germany. Zhang XM, et al. **Zentralbl Veterinarmed [B]** 1988 Jul; 35(6):474–6

[Dermatitis in slaughtering pigs. A study of the incidence, pathology and its economic significance] Smeets JF, et al. **Tijdschr Diergeneeskd** 1989 Jun 1;114(11):603–10 (Eng. Abstr.) **(Dut)**

[The occurrence of toxin-forming Pasteurella multocida strains in the tonsil and nose of piglets from breeding stocks unsuspected of atrophic rhinitis] Bechmann G, et al. **DTW** 1988 Jul-Aug;95(7):283-5 (Eng. Abstr.) (Ger)

[Urgent epizootic and epidemiologic problems of trichinosis in Poland] Ramisz A. **Wiad Parazytol** 1988;34(4-6):601-6 (Pol)

ETIOLOGY

A long term study of the health status and performance of sows on different feed allowances during late pregnancy. I. Clinical observations, with special reference to agalactia post partum. Persson A, et al. **Acta Vet Scand** 1989; 30(1):9-17

Toxicosis in pigs fed selenium-accumulating Astragalus plant species or sodium selenate. Baker DC, et al. **Am J Vet Res** 1989 Aug;50(8):1396-9

Induction of nasal turbinate atrophy in germ-free pigs, using Pasteurella multocida as well as bacterium-free crude and purified dermonecrotic toxin of P multocida. Kamp EM, et al. **Am J Vet Res** 1988 Nov;49(11):1844-9

Adonis microcarpa (pheasant's eye) toxicity in pigs fed field pea screenings. Davies RL, et al. **Aust Vet J** 1989 May; 66(5):141-3

Potential allergens in oil emulsion foot-and-mouth disease vaccines for pigs. Black L, et al. **Epidemiol Infect** 1988 Oct;101(2):477-80

Blue-green algae (Anabaena spiroides) toxicosis in pigs. Chengappa MM, et al. **J Am Vet Med Assoc** 1989 Jun 15; 194(12):1724-5

Some husbandry factors influencing weaning stresses in piglets. Spencer BT, et al. **J S Afr Vet Assoc** 1989 Mar; 60(1):62-4 (19 ref.)

Effect of high temperature and humidity in the periovulatory phase on swine ovarian function. Ogasa A, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):627-9

Necrotizing tracheobronchitis following high-frequency ventilation: effect of lung deflation. Cordero L, et al. **Pediatr Pathol** 1988;8(5):525-33

Rate of development of oesophagogastric parakeratosis in the growing pig: some effects of finely ground barley diets, genotype and previous husbandry. Potkins ZV, et al. **Res Vet Sci** 1989 Jul;47(1):68-74

Oesophagogastric parakeratosis in the growing pig: effects of the physical form of barley-based diets and added fibre. Potkins ZV, et al. **Res Vet Sci** 1989 Jul;47(1):60-7

A toxin from Pasteurella multocida type D causes acute hepatic necrosis in pigs. Cheville NF, et al. **Vet Pathol** 1988 Nov;25(6):518-20

Mulberry heart disease in young pigs without vitamin E and selenium deficiency. Nielsen TK, et al. **Vet Rec** 1989 May 20;124(20):535-7

[Heart failure in a pig chronically infected with Sarcocystis miescheriana--a case report] Daugschies A, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jun 1;102(6):184-7 (Eng. Abstr.) (Ger)

[The significance of mycotoxin assimilation for the productivity and health of animals] Schuh M. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul-Aug; 96(7):353-5 (Eng. Abstr.) (Ger)

[Diaphragmatic eventration in a breeding sow] Bacowsky H, et al. **Tierarztl Prax** 1989;17(2):159-61 (Eng. Abstr.) (Ger)

[The role of Mycobacterium avium-intracellulare in the development of infection in humans and animals] Zórawski C. **Przegl Epidemiol** 1988;42(4):354-9 (Eng. Abstr.) (Pol)

GENETICS

Porcine malignant hyperthermia carrier detection and chromosomal assignment using a linked probe. Davies W, et al. **Anim Genet** 1988;19(3):203-12

The swine leucocyte antigen (SLA) complex and Sinclair swine cutaneous malignant melanoma. Tissot RG, et al. **Anim Genet** 1989;20(1):51-7

Comparative response of lean or genetically obese swine and their progeny to severe feed restriction during gestation. Pond WG, et al. **J Nutr** 1988 Oct;118(10):1223-31

[The relationship between hereditary characteristics in the blood (Phi-PO2-Pgd) and susceptibility to stress in swine. A pilot study] Oskam JP, et al. **Tijdschr Diergeneeskd** 1989 Jun 15;114(12):668-75 (Eng. Abstr.) (Dut)

IMMUNOLOGY

Specific antibody against the Aujeszky's disease virus in the complex cumulus oophorus-oocyte of sows. Jeřábek J, et al. **Acta Histochem (Jena)** 1989;85(1):101-8

Antibody response of pseudorabies virus subunit-vaccinated pigs to viral nucleocapsid proteins following low-dose virus challenge of immunity. McGinley MJ, et al. **Am J Vet Res** 1989 Aug;50(8):1290-3

Preparation of Mycoplasma hyopneumoniae antigen for the enzyme-linked immunosorbent assay. Kazama S, et al. **Can J Vet Res** 1989 Apr;53(2):176-81

Effect of fenbendazole and pyrantel tartrate on the induction of protective immunity in pigs naturally or experimentally infected with Ascaris suum. Southern LL, et al. **J Anim Sci** 1989 Mar;67(3):628-34

Influence of helminth parasite exposure and strategic application of anthelmintics on the development of immunity and growth of swine. Urban JF Jr, et al. **J Anim Sci** 1989 Jul;67(7):1668-77

Studies of the protective effect of different fractions of sera from pigs immune to Streptococcus suis type 2 infection. Holt ME, et al. **J Comp Pathol** 1989 May;100(4):435-42

Demonstration of viral antigen and immunoglobulin (IgG and IgM) in brain tissue of pigs experimentally infected with haemagglutinating encephalomyelitis virus. Narita M, et al. **J Comp Pathol** 1989 Feb;100(2):119-28

Detection of antibodies to Aujeszky's disease virus by enzyme-linked immunosorbent assay in pigs. Shibata I, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):828-31

Immunoblotting analysis of antibody response in swine experimentally inoculated with Mycoplasma hyopneumoniae. Mori Y, et al. **Vet Immunol Immunopathol** 1988 Oct;19(3-4):239-50

Detection of antibodies against porcine parvovirus in swine sera by enzyme-linked immunosorbent assay. Hohdatsu T, et al. **Vet Microbiol** 1988 May;17(1):11-9

Characterization of isolated porcine intestinal mucosal mast cells following infection with Ascaris suum. Ashraf M, et al. **Vet Parasitol** 1988 Sep;29(2-3):143-58

Immunogenetic analysis of Trichinella spiralis infections in swine. Lunney JK, et al. **Vet Parasitol** 1988 Sep; 29(2-3):179-93

The serological response of pigs experimentally infected with a species of Taenia from Taiwan. Rhoads ML, et al. **Vet Parasitol** 1989 Mar;30(4):279-85

Infection with porcine respiratory coronavirus does not fully protect pigs against intestinal transmissible gastroenteritis virus. van Nieuwstadt AP, et al. **Vet Rec** 1989 Jul 15; 125(3):58-60

Studies on maternally derived antibodies to Aujeszky's disease virus in piglets born to naturally or experimentally infected sows. Iglesias G, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):57-62

Evidence of protection against diarrhoea in suckling piglets by a hormone-like protein in the sow's milk. Lönnroth I, et al. **Zentralbl Veterinarmed [B]** 1988 Oct;35(8):628-35

Humoral immunity of neonatal swine after FMD vaccination. Panjević D, et al. **Zentralbl Veterinarmed [B]** 1989 Mar; 36(2):119-22

METABOLISM

Clinical and endocrine response to repeated daily administration of endotoxin in pigs. Yagoda C, et al. **Acta Vet Scand** 1988;29(2):267-9

Ca-induced Ca release in malignant hyperthermia-susceptible pig skeletal muscle. Ohta T, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C358-67

Transverse tubule calcium regulation in malignant hyperthermia. Ervasti JM, et al. **Arch Biochem Biophys** 1989 Mar;269(2):497-506

Altered transverse tubule dihydropyridine receptor binding in malignant hyperthermia. Ervasti JM, et al. **J Biol Chem** 1989 Feb 15;264(5):2711-7

Increased indices of lipid peroxidation in stress-susceptible pigs and effects of vitamin E. Duthie GG, et al. **Res Vet Sci** 1989 Mar;46(2):226-30

Determination of beta-adrenoceptors and cAMP in muscle from normal and splayleg Belgian Landrace pigs. Roets E, et al. **Vet Res Commun** 1989;13(4):273-86

Intestinal permeability to macromolecules during colibacillosis in piglets. Vellenga L, et al. **Vet Res Commun** 1988;12(4-5):305-11

Changes in the relative concentrations of surfactant phospholipids in young pigs with experimental pneumonia. Sachse K. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):385-90

MICROBIOLOGY

Epidemiological studies of piglet diarrhoea in intensively managed Danish sow herds. IV. Pathogenicity of porcine rotavirus. Svensmark B, et al. **Acta Vet Scand** 1989; 30(1):71-6

Comparative virulence of two porcine group-A rotavirus isolates in gnotobiotic pigs. Collins JE, et al. **Am J Vet Res** 1989 Jun;50(6):827-35

Identification of Mycoplasma hyopneumoniae in formalin-fixed porcine lung, using an indirect immunoperoxidase method. Doster AR, et al. **Am J Vet Res** 1988 Oct;49(10):1719-21

Pathogenicity of Escherichia coli O115:K"V165" strains isolated from pigs with diarrhea. Fairbrother JM, et al. **Am J Vet Res** 1989 Jul;50(7):1029-36

In vitro antimicrobial activity of sulfonamides against some porcine pathogens. Mengelers MJ, et al. **Am J Vet Res** 1989 Jul;50(7):1022-8

Sites of virus replication in the genital organs of boars inoculated in the cavum vaginale with pseudorabies virus. Miry C, et al. **Am J Vet Res** 1989 Mar;50(3):345-8

Effects of weaning on diarrhea caused by enterotoxigenic Escherichia coli in three-week-old pigs. Sarmiento JI, et al. **Am J Vet Res** 1988 Dec;49(12):2030-3

Differences in virulence between two strains of Streptococcus suis type II after experimentally induced infection of newborn germ-free pigs. Vecht U, et al. **Am J Vet Res** 1989 Jul;50(7):1037-43

Distribution of persistent Salmonella typhimurium infection in internal organs of swine. Wood RL, et al. **Am J Vet Res** 1989 Jul;50(7):1015-21

Atypical rotaviruses in Australian pigs. Nagesha HS, et al. **Arch Virol** 1988;102(1-2):91-8

Characterisation and antimicrobial sensitivity of haemophili isolated from pigs. Eaves LE, et al. **Aust Vet J** 1989 Jan; 66(1):1-4

Encephalomyocarditis virus infection in pigs. Mercy AR, et al. **Aust Vet J** 1988 Nov;65(11):355

Requirement for capsular antigen KX105 and fimbrial antigen CS1541 in the pathogenicity of porcine enterotoxigenic Escherichia coli O8:KX105 strains. Broes A, et al. **Can J Vet Res** 1989 Jan;53(1):43-7

Mycoplasma hyopneumoniae increases the susceptibility of pigs to experimental Pasteurella multocida pneumonia. Ciprián A, et al. **Can J Vet Res** 1988 Oct;52(4):434-8

Characteristics of verotoxigenic Escherichia coli from pigs. Gannon VP, et al. **Can J Vet Res** 1988 Jul;52(3):331-7

Environmental source of mycobacteriosis in a California swine herd. Gardner IA, et al. **Can J Vet Res** 1989 Jan; 53(1):33-7

Single and mixed infections of neonatal pigs with rotaviruses and enteroviruses: virological studies. Janke BH, et al. **Can J Vet Res** 1988 Jul;52(3):360-3

The pathogenicity of Yersinia enterocolitica for piglets. Schiemann DA. **Can J Vet Res** 1988 Jul;52(3):325-30

Analysis of Haemophilus parasuis isolates from southern Ontario swine by restriction endonuclease fingerprinting. Smart NL, et al. **Can J Vet Res** 1988 Jul;52(3):319-24

Age-specific colonization of porcine intestinal epithelium by 987P-piliated enterotoxigenic Escherichia coli. Dean EA, et al. **Infect Immun** 1989 Jan;57(1):82-7

Campylobacter pylori virulence factors in gnotobiotic piglets. Eaton KA, et al. **Infect Immun** 1989 Apr;57(4):1119-25

Nature and distribution of mucosal lesions associated with enteropathogenic and enterohemorrhagic Escherichia coli in piglets and the role of plasmid-mediated factors. Tzipori S, et al. **Infect Immun** 1989 Apr;57(4):1142-50

Changes in the susceptibility of Actinobacillus pleuropneumoniae to antimicrobial agents in Quebec (1981-1986). Vaillancourt JP, et al. **J Am Vet Med Assoc** 1988 Aug 15;193(4):470-3

Phenotypic and genotypic characterization of enterotoxigenic Escherichia coli serotype O8:KX105 and O8:K"2829" strains isolated from piglets with diarrhea. Broes A, et al. **J Clin Microbiol** 1988 Nov;26(11):2402-9

Extensive colonization of the porcine colonic epithelium by a spirochete similar to Treponema innocens. Jacques M, et al. **J Clin Microbiol** 1989 May;27(5):1139-41

Isolation and characterization of mutant strains of Bordetella bronchiseptica lacking dermonecrotic toxin-producing ability. Nagano H, et al. **J Clin Microbiol** 1988 Oct; 26(10):1983-7

An acute pleuropneumonia in a pig caused by Chromobacterium violaceum. Liu CH, et al. **J Comp Pathol** 1989 May;100(4):459-63

Association of Treponema hyodysenteriae with porcine intestinal mucosa. Kennedy MJ, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1565-76

Cloning and nucleotide sequence analysis of the genes determining verocytotoxin production in a porcine edema disease isolate of Escherichia coli. Gyles CL, et al. **Microb Pathog** 1988 Dec;5(6):419-26

Characterization of a parvovirus isolated from a pig fetus. Foni E, et al. **Microbiologica** 1989 Jul;12(3):277-80

Evaluation of the pathogenicity and immunogenicity of vaccinia virus to piglets. Imada T, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):96-104

Relationship between serotypes, dermonecrotic toxin production of Pasteurella multocida isolates and pneumonic lesions of porcine lung. Iwamatsu S, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1200-6

Experimental infection of Getah virus in swine. Izumida A, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):679-84

Antimicrobial susceptibility of Campylobacter jejuni, Campylobacter coli, and Campylobacter laridis from cats, dogs, pigs, and seagulls. Kaneuchi C, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):685-91

An extended serotyping scheme for Campylobacter mucosalis isolated from proliferative enteritis in swine. Ohya T, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):971-6

Antimicrobial susceptibility of Actinobacillus (Haemophilus) pleuropneumoniae isolated from pigs with pleuropneumonia. Suzuki S, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):450-2

Characterization of a parvovirus isolated from the diarrheic feces of a pig. Yasuhara H, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):337-44

Interactions between Bordetella bronchiseptica and toxigenic Pasteurella multocida in atrophic rhinitis of pigs. Chanter N, et al. **Res Vet Sci** 1989 Jul;47(1):48-53

Natural transmission of group A rotavirus within a pig population. Fu ZF, et al. **Res Vet Sci** 1989 May;46(3):312-7

Detection of leptospires in pig kidney using DNA hybridisation. McCormick BM, et al. **Res Vet Sci** 1989 Jul; 47(1):134-5

Reproduction of proliferative enteritis in gnotobiotic pigs. McOrist S, et al. **Res Vet Sci** 1989 Jan;46(1):27-33

Natural infections of pigs with bovine viral diarrhoea virus associated with signs resembling swine fever. Terpstra C, et al. **Res Vet Sci** 1988 Sep;45(2):137-42

Bovine viral diarrhoea virus infections in piglets born to sows vaccinated against swine fever with contaminated vaccine. Wensvoort G, et al. **Res Vet Sci** 1988 Sep;45(2):143-8

Experimental vesicular stomatitis virus infection of swine: extent of infection and immunological response. Redelman D, et al. **Vet Immunol Immunopathol** 1989 Mar;20(4):345-61

Porcine cytomegalovirus (PCMV) in early gestation. Edington N, et al. **Vet Microbiol** 1988 Jun;17(2):117–28

Biochemical and serological properties of Actinobacillus pleuropneumoniae biotype 2 strains isolated from swine. Fodor L, et al. **Vet Microbiol** 1989 Jun;20(2):173–80

Quantitation, biological and physicochemical properties of cell culture–adapted porcine epidemic diarrhea coronavirus (PEDV). Hofmann M, et al. **Vet Microbiol** 1989 Jun; 20(2):131–42

Antibodies to Escherichia coli J5 core glycolipids in gnotobiotic and conventionally reared piglets. McVey DS, et al. **Vet Microbiol** 1989 Mar;19(3):283–9

Unusual serotypes of Escherichia coli from piglet diarrhea in north Spain. Suárez S, et al. **Vet Microbiol** 1988 Aug; 17(4):375–7

Early lesions of proliferative enteritis in pigs and hamsters. McOrist S, et al. **Vet Pathol** 1989 May;26(3):260–4

The role of endotoxin in the pathogenesis of coliform mastitis in sows. de Ruijter K, et al. **Vet Q** 1988 Jul;10(3):186–90

Porcine Clostridium perfringens type A spores, enterotoxin and antibody to enterotoxin. Estrada Correa AE, et al. **Vet Rec** 1989 Jun 10;124(23):606–10

Isolation of infective and non–infective Eperythrozoon suis bodies from the whole blood of infected swine. Hall SM, et al. **Vet Rec** 1988 Dec 17;123(25):651

Proliferative enteropathies: Campylobacter species in the faeces of normal and contact pigs. McOrist S, et al. **Vet Rec** 1989 Jan 14;124(2):40

Survival of influenza virus in pig tissues after slaughter. Romijn PC, et al. **Vet Rec** 1989 Mar 4;124(9):224

Isolation of a TGE virus–related respiratory coronavirus causing fatal pneumonia in pigs. van Nieuwstadt AP, et al. **Vet Rec** 1989 Jan 14;124(2):43–4

[Morphologic studies of virus infection of the intestinal tract—virus replication and cytopathology in cell cultures and enterocytes in piglets. 2. Coronavirus replication in cell cultures and enterocytes] Granzow H, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):571–83 (Eng. Abstr.) (Ger)

[Lobar deposition of radioactively–labeled Pasteurella multocida aerosols in the lungs of piglets and calves] Heilmann P, et al. **Arch Exp Veterinarmed** 1988 Jul; 42(4):490–501 (Eng. Abstr.) (Ger)

[The disposition and clearance of inhaled bacteria (Staphylococcus aureus) in the lungs of piglets] Kastner P, et al. **Arch Exp Veterinarmed** 1989 May;43(3):379–89 (Eng. Abstr.) (Ger)

[Direct detection of Actinobacillus (Haemophilus) pleuropneumoniae in the lungs of swine] Bunka S, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):371–3 (Eng. Abstr.) (Ger)

[Electron microscopic virus detection in fecal samples from swine with enteric diseases between 1981 and 1987] Herbst W, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May; 96(6):294, 296 (Eng. Abstr.) (Ger)

[Detection of virions morphologically identical to the influenza virus in the small intestine of piglets] Kupchinskii LG, et al. **Mikrobiol Zh** 1988 Jul–Aug;50(4):92–4 (Eng. Abstr.) (Rus)

MORTALITY

Neonatal survival in swine: effects of low birth weight and clinical disease. Gardner IA, et al. **Am J Vet Res** 1989 May;50(5):792–7

PARASITOLOGY

Influence of sarcoptic mange and cold and ambient temperature on blastogenic responses of lymphocytes and serum cortisol concentrations of pigs. Wooten–Saadi E, et al. **Am J Vet Res** 1988 Sep;49(9):1555–9

Synergistic effect of migrating Ascaris larvae and Escherichia coli in piglets. Adedeji SO, et al. **J Helminthol** 1989 Mar; 63(1):19–24

Prevalence of Pneumocystis carinii in slaughtered pigs. Fujita M, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):200–2

Mixed outbreak of trypanosomiasis and babesiosis in pigs in Nigeria. Ocholi RA, et al. **Trop Anim Health Prod** 1988 Aug;20(3):140

Effects of the chitin synthesis inhibitor diflubenzuron on development of Ascaris suum and Haemonchus contortus. Fetterer RH, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):181–92

Pig hydatidosis in Uttar Pradesh. Singh BP, et al. **Vet Rec** 1988 Sep 10;123(11):299–300

[The observation of coccidia in swine] Löwenstein M, et al. **Angew Parasitol** 1989 May;30(2):117–26 (Eng. Abstr.) (Ger)

[Epidemiologic studies of worm burden in the Swabia piglet production and fattening industry] Muss C, et al. **DTW** 1989 Feb;96(2):73–5 (Eng. Abstr.) (Ger)

[Natural infection of a pig (Sus scrofa) by Leishmania in a recent focus of cutaneous leishmaniasis on the Island of São Luis, Maranhão] Brazil RP, et al. **Mem Inst Oswaldo Cruz** 1987 Jan–Mar;82(1):145 (Por)

PATHOLOGY

Pancreatic duct obstruction in the pig: electron microscopy of chronic pancreatitis. Rahko T, et al. **Acta Vet Scand** 1988;29(2):255–8

Distribution of the mineralized tissues in the nasal ventral conchae (os conchae nasalis ventralis) of piglets after birth: relationship with atrophic rhinitis. Trépanier H, et al. **Anat Rec** 1988 Nov;222(3):237–44

Campylobacter associated intestinal pathology in pigs. Pointon AM. **Aust Vet J** 1989 Mar;66(3):90–1

Pasteurella multocida and Bordetella bronchiseptica in atrophic rhinitis and pneumonia in swine. Cowart RP, et al. **Can J Vet Res** 1989 Jul;53(3):295–300

Single and mixed infections of neonatal pigs with rotaviruses and enteroviruses: clinical signs and microscopic lesions. Janke BH, et al. **Can J Vet Res** 1988 Jul;52(3):364–9

Morphometric evaluation of myofibrillar hypoplasia in splayleg piglets. Curvers P, et al. **DTW** 1989 Apr; 96(4):189–91

Atypical rotavirus and villous epithelial cell syncytia in piglets. Chasey D, et al. **J Comp Pathol** 1989 Feb; 100(2):217–22

Histological progression of follicular centre cell lymphomas to immunoglobulin–producing tumours in two pigs. Kadota K, et al. **J Comp Pathol** 1988 Aug;99(2):145–58

Immunopathological and ultrastructural studies on the tonsil of gnotobiotic pigs infected with strain 67N of haemagglutinating encephalomyelitis virus. Narita M, et al. **J Comp Pathol** 1989 Apr;100(3):305–12

Bone lesions in pigs with locomotor dysfunction of hind legs. Yamasaki K, et al. **J Comp Pathol** 1989 Apr;100(3):313–22

Ultrastructural observation on cultured cells from swine immunoblastic sarcoma. Kadota K, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1127–30

Lymphoplasmacytic lymphoma with cytoplasmic immunoglobulin–G in a pig. Nakajima H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):835–7

Pathogenicity of experimental infection with 'pneumotropic' porcine coronavirus. O'Toole D, et al. **Res Vet Sci** 1989 Jul;47(1):23–9

The pathogenesis of turbinate atrophy in pigs caused by Bordetella bronchiseptica. Magyar T, et al. **Vet Microbiol** 1988 Oct;18(2):135–46

Scanning electron microscopy of sarcoptic mange lesions in swine. Morsy GH, et al. **Vet Parasitol** 1989 Jun; 31(3–4):281–8

Porcine mast cell leukemia with systemic mastocytosis. Bean–Knudsen DE, et al. **Vet Pathol** 1989 Jan;26(1):90–2

Natural infection of porcine ileal dome M cells with rotavirus and enteric adenovirus. Buller CR, et al. **Vet Pathol** 1988 Nov;25(6):516–7

Degeneration of cartilage canal vessels associated with lesions of osteochondrosis in swine. Carlson CS, et al. **Vet Pathol** 1989 Jan;26(1):47–54

The influence of pleural lesions in the pig at slaughter on the duration of the fattening period: an on–farm study. Hartley PE, et al. **Vet Rec** 1988 Aug 20;123(8):208

Malignant luteoma in a sow. Hashimoto N, et al. **Zentralbl Veterinarmed** [A] 1989 May;36(5):386–92

Experimentally induced testicular alterations in boars: histological and ultrastructural findings. Malmgren L, et al. **Zentralbl Veterinarmed** [A] 1989 Jan;36(1):3–14

Electron microscopic study of an experimental combined infection of just–weaned piglets with transmissible gastroenteritis virus and K88ac positive enterotoxigenic Escherichia coli. Cox E, et al. **Zentralbl Veterinarmed** [B] 1988 Jun;35(5):317–30

[The ratio of enterocytes and goblet cells in the mucosa of the small intestine in experimental infection of piglets with the coccidium Isospora suis] Kudweis M, et al. **Vet Med (Praha)** 1989 Jan;34(1):33–8 (Eng. Abstr.) (Cze)

[Atrophic rhinitis: assessment of the longitudinal section of the head of pigs in the slaughter line for the determination of incidence and extent of concha atrophy] Visser IJ, et al. **Tijdschr Diergeneeskd** 1988 Dec 15;113(24):1345–55 (Eng. Abstr.) (Dut)

[The force of evidence of quantitative morphological heart studies on normal slaughtered and transport–killed swine of the Schwerfurt mest breed (formerly line 150)] Berg R, et al. **Arch Exp Veterinarmed** 1988 Sep;42(5):718–24 (Eng. Abstr.) (Ger)

[Morphologic studies of virus infection of the intestinal tract—virus replication and cytopathology in cell cultures and enterocytes in piglets. 1. Ultrastructure of intestinal epithelium without viral infiltration and in rotavirus infection] Granzow H, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):558–70 (Eng. Abstr.) (Ger)

[Frequency and diagnosis of chronic changes in the mammary glands of sows (abattoir findings)] Bollwahn W, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jul 1; 102(7):223–7 (Eng. Abstr.) (Ger)

[Myeloid leukemia in a Göttingen miniature swine] Ganter M, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jul 1; 102(7):241–4 (Eng. Abstr.) (Ger)

[The pathomorphology of endocardiosis in swine] Guarda F, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):377–9 (Eng. Abstr.) (Ger)

[Changes in the myocardium in encephalomyocarditis of pigs] Tsangaris T, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(6):301–3 (Eng. Abstr.) (Ger)

[The pathology of mitral valve prolapse in swine] Guarda F, et al. **Schweiz Arch Tierheilkd** 1988 Oct;130(10):583–90 (Eng. Abstr.) (Ita)

PHYSIOPATHOLOGY

Study on boar infertilities: epididymal dysfunction. Kunavongkrit A, et al. **Acta Vet Scand Suppl** 1988; 83:128–32

Halothane induced vasomotion of coronary, renal and iliac arterial rings in malignant hyperthermia susceptible swine. DeRoth L, et al. **Can J Vet Res** 1988 Oct;52(4):407–10

Effects of halothane on the mechanical responses in vitro of coronary arterial rings of malignant hyperthermia susceptible swine. DeRoth L, et al. **J Vet Pharmacol Ther** 1988 Dec;11(4):402–4

Beta–adrenergic responsiveness in stress–sensitive and stress–resistant pigs. Jones CA, et al. **J Vet Pharmacol Ther** 1989 Mar;12(1):14–8

Pathophysiology of diarrhoea induced by a combined infection with transmissible gastroenteritis virus and enterotoxigenic Escherichia coli in newly–weaned piglets and the effect of flurbiprofen treatment. Cox E, et al. **Vet Res Commun** 1988;12(4–5):383–99

Escherichia coli sepsis and endotoxemia in conscious young pigs. Schrauwen E, et al. **Vet Res Commun** 1988; 12(4–5):295–303

[Pathologic consequences of a severe influenza outbreak (swine virus A/H1N1) under natural conditions in the non–immune sow at the beginning of pregnancy] Madec F, et al. **Comp Immunol Microbiol Infect Dis** 1989; 12(1–2):17–27 (Eng. Abstr.) (Fre)

[Various heart arrhythmias in swine (short communication)] Bickhardt K, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jul 1;102(7):244–6 (Eng. Abstr.) (Ger)

[The effect of an acute Sarcocystis suihominis infection on the fattening weight of market piglets] Heydorn AO, et al. **Berl Munch Tierarztl Wochenschr** 1988 Sep 1; 101(9):307–10 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Epizootiological studies on porcine atrophic rhinitis. XV. Results of local immunization with a live Bordetella bronchiseptica strain in a large–scale pig herd affected by atrophic rhinitis. Eliás B, et al. **Acta Vet Hung** 1988; 36(3–4):195–204

Actinobacillus pleuropneumoniae serotype 5, subtypes a and b: cross protection experiments. Nielsen R. **Acta Vet Scand** 1988;29(1):67–75

Consequences for swine farm income of depopulation as a disease control measure. Marsh WE. **Acta Vet Scand Suppl** 1988;84:363–5

Control of preweaning diarrhea in piglets by acupuncture and Chinese medicine. Lin JH, et al. **Am J Chin Med** 1988; 16(1–2):75–80

Effect of vaccination with a bacterin containing Leptospira interrogans serovar bratislava on the breeding performance of swine herds. Frantz JC, et al. **Am J Vet Res** 1989 Jul; 50(7):1044–7

Prevention of aflatoxicosis by addition of hydrated sodium calcium aluminosilicate to the diets of growing barrows. Harvey RB, et al. **Am J Vet Res** 1989 Mar;50(3):416–20

Advances in control of ectoparasites in large animals. Hiepe T. **Angew Parasitol** 1988 Nov;29(4):201–10 (28 ref.)

Protection against enzootic pneumonia of pigs: intraperitoneal inoculation with live LKR strain of Mycoplasma hyopneumoniae. Lloyd LC, et al. **Aust Vet J** 1989 Jan;66(1):9–12

Prevention of Leptospira interrogans serovar pomona infection in domestic pigs by vaccination. Palit A, et al. **Aust Vet J** 1988 Sep;65(9):289–90

Influence of a high–fat ration on parameters of defence against infection in weaned pigs. Riedel–Caspari G, et al. **DTW** 1988 Jul–Aug;95(7):287–91

Influence of magnesium gluconate on stress reactions in rats. Kietzmann M. **DTW Dtsch Tierarztl Wochenschr** 1989 May; 96(6):292–3

Randomized efficacy trials of long–acting oxytetracycline in neonatal pigs. Gardner IA, et al. **J Am Vet Med Assoc** 1989 Mar 1;194(5):659–63

Immunisation of pigs with live cultures of Streptococcus suis type 2. Holt ME, et al. **Res Vet Sci** 1988 Nov;45(3):349–52

Towards a live oral vaccine against enterotoxigenic Escherichia coli of swine. Attridge S, et al. **Vaccine** 1988 Oct;6(5):387–9

Development and protective efficacy of a recombinant–DNA derived fimbrial vaccine against enterotoxic colibacillosis in neonatal piglets. Greenwood PE, et al. **Vaccine** 1988 Oct;6(5):389–92

Effect of a high affinity aluminosilicate sorbent on prevention of aflatoxicosis in growing pigs. Colvin BM, et al. **Vet Hum Toxicol** 1989 Feb;31(1):46–8

Mechanism of protection induced in mice against Erysipelothrix rhusiopathiae infection by treatment with porcine antiserum to the culture filtrate of an attenuated strain. Sawada T, et al. **Vet Microbiol** 1988 May;17(1):65–74

Immunisation of pigs with Streptococcus suis type 2. **Vet Rec** 1989 May 20;124(20):538

Anthrax vaccination [letter] Edginton AB. **Vet Rec** 1989 Jun 24;124(25):668

Protection against progressive atrophic rhinitis by vaccination with Pasteurella multocida toxin purified by monoclonal antibodies. Foged NT, et al. **Vet Rec** 1989 Jul 1;125(1):7–11

Porcine parvovirus vaccination [letter] Hardy BD, et al. **Vet Rec** 1988 Aug 27;123(9):235

Alternative approaches to eliminating endemic diseases and improving performance of pigs. Harris DL. **Vet Rec** 1988 Oct 15;123(16):422–3

An evaluation in pigs of Nobi–Vac AR and an experimental atrophic rhinitis vaccine containing P multocida

DNT-toxoid and B bronchiseptica. Kobisch M, et al. **Vet Rec** 1989 Jan 21;124(3):57–61

Duration of immunity in swine inoculated with a monovalent foot-and-mouth disease oil emulsion vaccine. Buonavoglia C, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):397–401

[Trends in research related to the health of pigs] van Leeuwen JM. **Tijdschr Diergeneeskd** 1988 Nov 1; 113(21):1172–80 (Eng. Abstr.) (Dut)

[Comparative clinical testing of Bordetella and Pasteurella adsorbate vaccines for the immunoprevention of respiratory tract diseases in swine. 1. Results from a large swine breeding unit] Bugnowski H, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):541–57 (Eng. Abstr.) (Ger)

[The prevention of atrophic rhinitis of swine] Bilkei G. **Berl Munch Tierarztl Wochenschr** 1989 Apr 1;102(4):109–11 (Eng. Abstr.) (Ger)

[Experiences with vaccination against Haemophilus pleuropneumonia of swine] Ewald C, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jan 1;102(1):6–11 (Eng. Abstr.) (Ger)

[Animal welfare and disease control regulations for killing cattle, swine and sheep with the help of a transportable electric stunning facility (SCHERMER, type EC)] von Mickwitz G, et al. **DTW** 1989 Mar;96(3):127–33 (Eng. Abstr.) (Ger)

[Experiences with the control of a foot-and-mouth disease outbreak in the government district of Hannover] Knösel H, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May; 96(5):269–71 (Eng. Abstr.) (Ger)

[Enzootic pneumonia (EP): the partial curing of EP-reinfected swine herds as an alternative to total cure] Zimmermann W, et al. **Schweiz Arch Tierheilkd** 1989; 131(4):179–86, 191 (Eng. Abstr.) (Ger)

[The role of the public health physician in preventing the spread of zoonoses from industrial swine-breeding complexes in the environment and among the population] Okladnikov NI. **Gig Sanit** 1988 Dec;(12):55–8 (Rus)

RADIOGRAPHY

Comparative analysis of human and porcine neurocysticercosis by computed tomography. Flisser A, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):739–42

SURGERY

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. III. Serum electrolyte levels] Wawron W. **Pol Arch Weter** 1987;27(2–3):51–60 (Eng. Abstr.) (Pol)

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. II. Hematological studies] Wawron W. **Pol Arch Weter** 1987;27(2–3):41–50 (Eng. Abstr.) (Pol)

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. I. Clinical observations] Wawron W. **Pol Arch Weter** 1987;27(2–3):29–40 (Eng. Abstr.) (Pol)

THERAPY

Effect of acupuncture on young pigs with induced enteropathogenic Escherichia coli diarrhea. Hwang YC, et al. **Am J Vet Res** 1988 Sep;49(9):1641–3

TRANSMISSION

Contamination of a live virus vaccine against pseudorabies (Aujeszky's disease) by an ovine pestivirus pathogen for the pig. Vannier P, et al. **Ann Rech Vet** 1988;19(4):283–90

Horizontal transmission of Aujeszky's disease virus from sheep to pigs. Mocsári E, et al. **Vet Microbiol** 1989 Mar; 19(3):245–52

[Urgent epidemiologic and epizootic problems of trichinosis in the world] Pawlowski Z. **Wiad Parazytol** 1988; 34(4–6):597–600 (Pol)

URINE

[The importance of exogenous factors on the composition of the urine of breeding sows] Bollwahn W, et al. **Tierarztl Prax** 1989;17(1):43–6 (Eng. Abstr.) (Ger)

SWINE ERYSIPELAS see under **ERYSIPELOTHRIX INFECTIONS**

SWINE FEVER VIRUS see **HOG CHOLERA VIRUS**

SWINE, MINIATURE

Toxicity of staphylococcal toxic shock syndrome toxin 1 for germ-free and conventional piglets. Bulanda M, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S248–53

Porcine mast cell leukemia with systemic mastocytosis. Bean-Knudsen DE, et al. **Vet Pathol** 1989 Jan;26(1):90–2

[Myeloid leukemia in a Göttingen miniature swine] Ganter M, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jul 1; 102(7):241–4 (Eng. Abstr.) (Ger)

ANATOMY & HISTOLOGY

Gross and histological characterization of endometrial tissues from SLA miniature pigs with cystic endometrial hyperplasia. Lipetz KJ, et al. **Acta Anat (Basel)** 1987; 130(2):137–42

Histochemical fiber type composition in 12 skeletal muscles of miniature pigs. Horák V. **Anat Anz** 1988;167(3):231–8

Pineal gland ultrastructure in wild boar and miniature pig. Wyrzykowski Z, et al. **Folia Morphol (Warsz)** 1987; 46(3–4):161–73

Collagen organisation in the interspinous ligament and its relationship to tissue function. Aspden RM, et al. **J Anat** 1987 Dec;155:141–51

Morphology of the minipig kidney. Dobyan DC, et al. **J Electron Microsc Tech** 1988 Jul;9(3):213–34

Intraperineural localization of lamellated sensory corpuscles in the skin and oral mucosae of the adult cat and miniature pig. Tachibana T, et al. **J Neurocytol** 1989 Feb;18(1):61–9

[Distribution of motor endplates in the muscles of the hindlimb in minipigs] Kubišová I. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(1):45–51 (Eng. Abstr.) (Cze)

[Functional morphology of the maxillo-mandibular apparatus in the miniature swine MINI-LEWE. 8. The development of the intramuscular nerve ramification pattern in the masticatory muscles] Koppe T, et al. **Anat Anz** 1988; 166(1–5):97–104 (Eng. Abstr.) (Ger)

[Functional morphology of the maxillo-mandibular apparatus in the miniature swine MINI-LEWE. 10. Dentition] Schumacher KU, et al. **Anat Anz** 1989;168(4):323–7 (Eng. Abstr.) (Ger)

BLOOD

Comparison of experimental hypercholesterolemia and atherosclerosis in male and female mini-pigs of the Göttingen strain. Jacobsson L. **Artery** 1989;16(2):105–17

[Labelling of B lymphocytes from the peripheral blood of swine] Hruban V, et al. **Arch Exp Veterinarmed** 1988 Sep; 42(5):764–8 (Eng. Abstr.) (Ger)

EMBRYOLOGY

[The prenatal development of deferent sperm ducts in swine] Branscheid W, et al. **Arch Exp Veterinarmed** 1988 Sep; 42(5):750–63 (Eng. Abstr.) (Ger)

GENETICS

Influence of major histocompatibility genes on serum hemolytic complement activity in miniature swine. Mallard BA, et al. **Am J Vet Res** 1989 Mar;50(3):359–63

Genetic and other effects on antibody and cell mediated immune response in swine leucocyte antigen (SLA)-defined miniature pigs. Mallard BA, et al. **Anim Genet** 1989;20(2):167–78

Influence of SLA haplotype on preimplantation embryonic cell number in miniature pigs. Ford SP, et al. **J Reprod Fertil** 1988 Sep;84(1):99–104

GROWTH & DEVELOPMENT

Proopiomelanocortin opioids in brain, CSF, and plasma of piglets during hypoxia. Moss IR, et al. **J Appl Physiol** 1989 May;66(5):2280–6

[The tongue as a factor in craniofacial growth. 2. The influence of the width dimension of the lower jaw] Becker R, et al. **Anat Anz** 1988;167(2):81–6 (Eng. Abstr.) (Ger)

[The tongue as a factor in craniofacial growth. 3. The influence of the height and angle of the lower jaw] Hübner A, et al. **Anat Anz** 1988;167(3):191–7 (Eng. Abstr.) (Ger)

[The tongue as a factor in craniofacial growth. 4. Results of animal experiments] Pommerenke F, et al. **Anat Anz** 1988;167(4):281–7 (51 ref.) (Eng. Abstr.) (Ger)

[The functional morphology of the maxillomandibular apparatus of the miniature swine MINI-LEWE. 9. Metric studies of the skull and mandible] Schumacher B, et al. **Anat Anz** 1989;168(1):27–36 (Eng. Abstr.) (Ger)

[The tongue as a factor in craniofacial growth. 1. Modification of the linear dimensions of the lower jaw] Schumacher GH, et al. **Anat Anz** 1988;166(1–5):309–15 (Eng. Abstr.) (Ger)

IMMUNOLOGY

The tissue distribution of Ia- and IgM-positive cells in adult and newborn miniature pigs. Horák V, et al. **Anat Histol Embryol** 1989 Jun;18(2):157–64

Stimulating effect of Streptococcus faecalis on phagocytosis in gnotobiotic piglets. Mandel L, et al. **Folia Microbiol (Praha)** 1989;34(1):68–76

Immunological state of adult germfree miniature Minnesota pigs. Trávníček J, et al. **Folia Microbiol (Praha)** 1989; 34(2):157–64

Lymphocyte subsets in jejunal and ileal Peyer's patches of normal and gnotobiotic minipigs. Rothkötter HJ, et al. **Immunology** 1989 May;67(1):103–8

The influence of the swine major histocompatibility genes (SLA) on variation in serum immunoglobulin (Ig) concentration. Mallard BA, et al. **Vet Immunol Immunopathol** 1989 Jun;21(2):139–51

METABOLISM

Bone mineral content reflects total body calcium in neonatal miniature piglets. Abrams SA, et al. **Pediatr Res** 1988 Dec; 24(6):693–5

PHYSIOLOGY

Preliminary studies on the cultivation and characterization of mini-pig prostate epithelial cells. Costello LC, et al. **Cell Biol Int Rep** 1988 Aug;12(8):637–46

Quinidine enhancement of digoxin toxicity in rats and minipigs. Thompson TJ, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):204–9

Drinking and vasopressin release following central injections of angiotensin II in minipigs. Thornton SN, et al. **Q J Exp Physiol** 1989 Mar;74(2):211–4

Effects of continuous and pulsed microwave irradiation on distribution of heat in the gluteal region of minipigs. A comparative study. Conradi E, et al. **Scand J Rehabil Med** 1989;21(1):59–62

SURGERY

Pancreatectomized swine as a model of diabetes mellitus. Stump KC, et al. **Lab Anim Sci** 1988 Aug;38(4):439–43

SWINE VESICULAR DISEASE see under **ENTEROVIRUS INFECTIONS**

SWINEPOX VIRUS see **POXVIRIDAE**

SWISS BLUE see **METHYLENE BLUE**

SWITCH REGION GENES see **IMMUNOGLOBULIN SWITCH REGION**

SWITCH REGION, IG see **IMMUNOGLOBULIN SWITCH REGION**

SWITCHBOARD SERVICE see **TELEPHONE**

SYCOSIS see **FOLLICULITIS**

SYDNONES see under **OXADIAZOLES**

SYLVIAN VEIN see **CEREBRAL VEINS**

SYMBIOSIS

Glutamine synthetase specific activity and protein concentration in symbiotic Anabaena associated with Azolla caroliniana. Lee KY, et al. **Antonie Van Leeuwenhoek** 1988;54(4):345–55

An unusual gene cluster for the cytochrome bc1 complex in Bradyrhizobium japonicum and its requirement for effective root nodule symbiosis. Thöny-Meyer L, et al. **Cell** 1989 May 19;57(4):683–97

Bacterium release into host cells of nitrogen-fixing soybean nodules: the symbiosome membrane comes from three sources. Roth LE, et al. **Eur J Cell Biol** 1989 Jun; 49(1):13–23

Cytoplasmic membrane systems involved in bacterium release into soybean nodule cells as studied with two Bradyrhizobium japonicum mutant strains. Roth LE, et al. **Eur J Cell Biol** 1989 Jun;49(1):24–32

Symbiosis, the family, and natural systems. Noone RJ. **Fam Process** 1988 Sep;27(3):285–92

Biochemical and molecular aspects of endosymbiosis in insects. Ishikawa H. **Int Rev Cytol** 1989;116:1–45 (216 ref.)

Lipopolysaccharide mutants of Rhizobium meliloti are not defective in symbiosis. Clover RH, et al. **J Bacteriol** 1989 Jul;171(7):3961–7

Protoporphyrinogen oxidation, a step in heme synthesis in soybean root nodules and free-living rhizobia. Jacobs NJ, et al. **J Bacteriol** 1989 Jan;171(1):573–6

Isolation of a Rhizobium phaseoli cytochrome mutant with enhanced respiration and symbiotic nitrogen fixation. Soberón M, et al. **J Bacteriol** 1989 Jan;171(1):465–72

Symbiotic properties of rhizobia containing a flavonoid-independent hybrid nodD product. Spaink HP, et al. **J Bacteriol** 1989 Jul;171(7):4045–53

Pea aphid symbiont relationships established by analysis of 16S rRNAs. Unterman BM, et al. **J Bacteriol** 1989 Jun; 171(6):2970–4

Symbiotic phenotypes of auxotrophic mutants of Rhizobium meliloti 104A14. Kerppola TK, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):913–9

Fatty acids as biological markers for bacterial symbionts in sponges. Gillan FT, et al. **Lipids** 1988 Dec;23(12):1139–45

Influence of the endosymbiont on the interaction of Crithidia deanei with macrophages. Rozental S, et al. **Microsc Electron Biol Celular** 1987 Dec;11(2):167–77

Differential regulation of soybean chalcone synthase genes in plant defence, symbiosis and upon environmental stimuli. Wingender R, et al. **Mol Gen Genet** 1989 Aug;218(2):315–22

Flavonoids in the Rhizobium-legume symbiosis. Okker RJ, et al. **Prog Clin Biol Res** 1988;280:71–6

Symbiotic marine bacteria chemically defend crustacean embryos from a pathogenic fungus. Gil-Turnes MS, et al. **Science** 1989 Oct 6;246(4926):116–8

[Food specialization in ruminants: the role of endosymbiosis in its formation] Sokolov VE, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Mar–Apr;(2):165–75 (Eng. Abstr.) (Rus)

[The role of chemotaxis genes in establishing the associative relations between Azospirillum brasilense and wheat] Bakanchikova TI, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr;(4):24–32 (Eng. Abstr.) (Rus)

SYMBIOTIC RELATIONS (PSYCHOLOGY) see OBJECT ATTACHMENT

SYMBOLISM (PSYCHOLOGY)

Moral medicine: symbolic content in 19th century Shaker therapeutics. Idler EL. **Cult Med Psychiatry** 1989 Mar; 13(1):1–24

Language and the emerging symbol. Brown A. **J Anal Psychol** 1988 Jul;33(3):277–97

Developmental levels of processing in metaphor interpretation. Johnson J, et al. **J Exp Child Psychol** 1989 Aug;48(1):1–31

The challenge to biomedicine: a foundations perspective. Foss L. **J Med Philos** 1989 Apr;14(2):165–91

Effects of symbolic play intervention with children who have mental retardation. Kim YT, et al. **Ment Retard** 1989 Jun; 27(3):159–65

Symbols and symptoms. Wilson FC. **Perspect Biol Med** 1989 Spring;32(3):449–54

Alexithymia and symbolic function in the obese. Legorreta G, et al. **Psychother Psychosom** 1988;50(2):88–94

Symbolic, ritual and social dynamics of spiritual healing. Glik DC. **Soc Sci Med** 1988;27(11):1197–206

The concept of flow in Rwandan popular medicine. Taylor CC. **Soc Sci Med** 1988;27(12):1343–8

[From the archives of psychoanalysis. Bertram D. Lewin. The body as phallus] **Psyche (Stuttg)** 1989 Feb;43(2):150–70 **(Ger)**

[Symbolic interactionism and psychoanalysis. On the history and significance of a theoretical relation] Weiss E. **Psyche (Stuttg)** 1988 Sep;42(9):795–830 (150 ref.) (Eng. Abstr.) **(Ger)**

[Firesetting as symbolic suicide] Lange E. **Psychiatr Neurol Med Psychol (Leipz)** 1989 May; 41(5):304–5 **(Ger)**

SYMPAETHAMIN see SYNEPHRINE

SYMPATHECTOMY

Purinergic supersensitivity following sympathectomy adds further support to co-transmission in the rat vas deferens. Rohde GC, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:99–111

Renal denervation with releasing renal capsule incision in the loin pain/haematuria syndrome. Blacklock AR. **Br J Urol** 1989 Aug;64(2):203–4

The effect of electrical stimulation on capillary blood flow in the sympathectomized rabbit ear model. Nachbar JM, et al. **Curr Surg** 1989 Jan–Feb;46(1):31–3

Sympathectomy for chronic arterial ischaemia. Campbell WB. **Eur J Vasc Surg** 1988 Dec;2(6):357–64 (67 ref.)

Intraocular pressure effects of water loading and venous compression tests in normal and denervated pigmented rabbits. Gual A, et al. **Exp Eye Res** 1989 Mar;48(3):365–74

Antiarrhythmic actions of left stellectomy in digitalis-mediated malignant ventricular arrhythmias in the postinfarcted canine heart. Nelson SD, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):196–207

The early use of operative lumbar sympathectomy in peripheral vascular disease. Norman PE, et al. **J Cardiovasc Surg (Torino)** 1988 Nov–Dec;29(6):717–22

Dopamine actions in vitro on enzyme and electrolyte secretion from normal and sympathectomized rat parotid glands. Danielsson A, et al. **J Physiol (Lond)** 1988 Oct; 404:145–56

The effects of atropine and chronic sympathectomy on maximal parasympathetic stimulation of parotid saliva in rats. Ekström J, et al. **J Physiol (Lond)** 1988 Sep;403:105–16

Effect of local cardiac sympathectomy on regional myocardial contraction. Komatsu E, et al. **Jpn Circ J** 1988 Jul;52(7):617–23

Decrease in neuronal uptake of noradrenaline simply explains the supersensitivity after sympathectomy in the rat iris dilator. Shibata K, et al. **Jpn J Pharmacol** 1989 May; 50(1):19–29

[Surgical aspects in the therapy of Buerger's disease] Aschieri F, et al. **J Mal Vasc** 1989;14(1):47–9 (Eng. Abstr.) **(Fre)**

[Sympathectomy in causalgia pain caused by arteriovenous malformations of the upper extremity] Stölzel U, et al. **Med Klin** 1988 Jul 15;83(15):470–2 **(Ger)**

[The influence of truncal vagotomy or surgical sympathectomy on the pancreatic trophic effect of trypsin inhibitor upon normal rats and major pancreatectomized rats] Aki T, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):586–97 (Eng. Abstr.) **(Jpn)**

[Experimental studies on sympathetic innervation of lower urinary tract. Quantitation of nerve terminals and urethral pressure response after hypogastric denervation] Park YC, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr; 80(4):569–73 (Eng. Abstr.) **(Jpn)**

[Effect of ovarian hormones on mast cells in the denervated uterus of rats] Popova LA. **Fiziol Zh** 1989 Mar–Apr; 35(2):75–80 (Eng. Abstr.) **(Rus)**

[Evaluation of the effectiveness of sympathectomy using the skin oximetry method] Prokhorov GG, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):44–7 (Eng. Abstr.) **(Rus)**

[Androgenic function of the adrenal glands in patients with severe stages of obliterative arteriosis before and after complex treatment using unilateral resection of the adrenal gland and lumbar sympathectomy] Skripnichenko DF, et al. **Klin Khir** 1988;(7):34–6 (Eng. Abstr.) **(Rus)**

[Acid-base equilibrium, tissue oxygenation and hemodynamics in arteriosclerosis obliterans after sympathectomy] Peregudov IG, et al. **Vestn Khir** 1989 Feb; 142(2):45–9 (Eng. Abstr.) **(Rus)**

[Prognostic value of indicators of muscular blood flow in the legs after lumbar sympathectomy] Polous IuM, et al. **Vestn Khir** 1989 Feb;142(2):55–6 **(Rus)**

ADVERSE EFFECTS

Neuralgia following lumbar sympathectomy. Buche M, et al. **Ann Vasc Surg** 1988 Jul;2(3):279–81

[Expediency of combined lumbar sympathectomy with reconstructive-restorative operations in arteriosclerotic lesion of the aorto-femoral segment] Gusak VK, et al. **Vestn Khir** 1987 Dec;139(12):46–9 (Eng. Abstr.) **(Rus)**

INSTRUMENTATION

Electrophysiological aid in high thoracic sympathectomy for palmar hyperhidrosis. Lindquist C, et al. **Neurosurgery** 1989 Mar;24(3):449–52

METHODS

Ventricular arrhythmias and local electrograms after chronic regional denervation of the ischemic area in the pig heart. Cinca J, et al. **J Am Coll Cardiol** 1989 Jul;14(1):225–32

[Thoracoscopic sympathectomy in hyperhidrosis] Toomes H, et al. **Pneumologie** 1989 Feb;43(2):107–8 (Eng. Abstr.) **(Ger)**

[New approaches to the surgical treatment of coronary arteriosclerosis] Lebedev LV, et al. **Kardiologiia** 1988 Jun; 28(6):29–33 (Eng. Abstr.) **(Rus)**

[Evaluation of surgical approaches to the execution of thoracic sympathectomy] Klimenko VN. **Klin Khir** 1988; (7):56–8 (Eng. Abstr.) **(Rus)**

SYMPATHECTOMY, CHEMICAL

Sympathectomy provides evidence of dopamine storage in rat laryngeal nerve paraganglia. Dahlqvist A, et al. **Acta Physiol Scand** 1989 Feb;135(2):189–95

Chronic whole body sympathectomy fails to protect ischemic rabbit hearts. Matsuki T, et al. **Am J Physiol** 1989 May; 256(5 Pt 2):H1322–7

Sympathectomy augments the severity of experimental allergic encephalomyelitis in rats. Chelmicka-Schorr E, et al. **Ann N Y Acad Sci** 1988;540:707–8

Alteration in the histochemical presence of tyrosine hydroxylase and CGRP-immunoreactivities in the eye following chronic sympathetic or sensory denervation. Unger WG, et al. **Curr Eye Res** 1988 Aug;7(8):761–9

Regulation of nerve growth factor mRNA levels in developing rat heart ventricle is not altered by sympathectomy. Clegg DO, et al. **Dev Biol** 1989 Jul; 134(1):30–7

Pulmonary vascular responses to surgical chemodenervation and chemical sympathectomy in dogs. Naeije R, et al. **J Appl Physiol** 1989 Jan;66(1):42–50

Phenol sympathectomy for symptomatic fibromuscular angiodysplasia of the lower limb. Mashiah A, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):244–5

Trophic control of lung development by sympathetic neurons: effects of neonatal sympathectomy with 6-hydroxydopamine. Slotkin TA, et al. **J Dev Physiol** 1988 Dec;10(6):577–90

Sympathetic nerves modify mitochondrial and capillary growth in normotensive and hypertensive rats. Tomanek RJ. **J Mol Cell Cardiol** 1989 Aug;21(8):755–64

Variability among brain regions in the specificity of 6-hydroxydopamine (6-OHDA)-induced lesions. Commins DL, et al. **J Neural Transm** 1989;77(2–3):197–210

Chemical sympathectomy and utilization of coronary capillary reserve in rabbits. Acad BA, et al. **Microvasc Res** 1988 Nov;36(3):250–61

Guanethidine-induced sympathectomy in the nude rat. Juul A, et al. **Pharmacol Toxicol** 1989 Jan;64(1):20–2

Effects of simulated weightlessness and sympathectomy on maximum VO2 of male rats. Woodman CR, et al. **Physiologist** 1989 Feb;32(1 Suppl):S35–6

Heterogeneous rotational responsiveness in 6-hydroxydopamine-denervated rats: pharmacological and neurochemical characterization. Liebman JM, et al. **Psychopharmacology (Berlin)** 1988;96(4):477–83

Ovulatory response to the sequential administration of follicle stimulating hormone and human chorionic gonadotropin by autografted ovary in unilaterally ovariectomized adult rat with peripheral denervation induced by guanethidine treatment. Ayala ME, et al. **Rev Invest Clin** 1988 Apr–Jun; 40(2):149–55

[Blood pressure lability in the sympathectomized rat] Julien C, et al. **C R Acad Sci [III]** 1989;308(8):219–22 (Eng. Abstr.) **(Fre)**

[Receptor events after peripheral chemical sympathectomy] Ankermann H. **Biomed Biochim Acta** 1988;47(8):809–11 (Eng. Abstr.) **(Ger)**

[Noradrenaline denervation supersensitivity of the urethra in patients with neurogenic bladder] Yamashiro Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):673–7 (Eng. Abstr.) **(Jpn)**

[The effect of chemical sympathectomy on the cell kinetics of gastric mucosa in golden hamsters] Nakajima C, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):685–93 (Eng. Abstr.) **(Jpn)**

[Study of species differences on chemical sympathectomy: rats and guinea pigs] Furukawa K, et al. **Nippon Yakurigaku Zasshi** 1988 Nov;92(5):283–95 (Eng. Abstr.) **(Jpn)**

[Compensatory-restorative processes of the thyroid gland in 1- and 3-month-old rats in health and in desympathization] Riashchikov SN, et al. **Arkh Anat Gistol Embriol** 1989 May; 96(5):62–8 (Eng. Abstr.) **(Rus)**

[Cytochemical study of the neurocytes of the rat locus coeruleus after guanethidine sympathectomy] Altan G, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):242–5 (Eng. Abstr.) **(Rus)**

[Characteristics of the recovery processes in the resected thyroid of adult rats after sympathectomy] Riashchikov SN, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):353–6 (Eng. Abstr.) **(Rus)**

[Adaptation of animals to hypoxic-hypercapnic effects under desympathization conditions] Mikhalkina NI, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):562–6 (Eng. Abstr.) **(Rus)**

[Effect of chemical sympathectomy on the function of the pulmonary surfactant system in white rats] Sluka BA, et al. **Fiziol Zh SSSR** 1988 Jun;74(6):853–9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

[Multiradicular impairment of the lower limbs after phenol sympathectomy (letter)] Bertrand P, et al. **Presse Med** 1989 Feb 25;18(8):434 **(Fre)**

METHODS

[Initial experience with transabdominal chemical sympathectomy in arterial occlusive diseases of the lower extremities using directed computer tomography] Dolanský J, et al. **Cesk Radiol** 1989 May;43(3):178–54 (Eng. Abstr.) **(Cze)**

[Arteritis and lumbar sympatholysis guided by x-ray computed tomography. Our experience apropos of 322 procedures] Giron J, et al. **Ann Radiol (Paris)** 1988; 31(6):337–44 (Eng. Abstr.) **(Fre)**

[Chemical lumbar sympathectomy] Embey-Izmin D. **Orv Hetil** 1988 Sep 11;129(37):1969–70, 1973 (Eng. Abstr.) **(Hun)**

SYMPATHETIC BLOCKING AGENTS see SYMPATHOLYTICS

SYMPATHETIC FIBERS see ADRENERGIC FIBERS

SYMPATHETIC GANGLIA see GANGLIA, SYMPATHETIC

SYMPATHETIC NERVE BLOCK see AUTONOMIC NERVE BLOCK

SYMPATHETIC NERVOUS SYSTEM

Horner's syndrome due to superior-mediastinal schwannoma [letter] Mathew BG, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1460–1

[Malignant pheochromocytoma of both adrenals combined with sympathetic nervous system tumors of the small intestine] Iakimov A, et al. **Khirurgiia (Sofiia)** 1988; 41(6):49–53 (Eng. Abstr.) **(Bul)**

[Forms of the compression syndrome in nodular and retrosternal struma in advanced age] Oravec D, et al. **Z Gesamte Inn Med** 1988 Aug 1;43(15):425–7 (Eng. Abstr.) **(Ger)**

[Morphologic retinal changes in experimental disorders of the sympathetico-adrenal system] Smoliakova GP, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):58–61 (Eng. Abstr.) **(Rus)**

[Neurilemmoma of the vagus nerve and the cervical section of the marginal sympathetic trunk] Prokof'ev VA, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):66 **(Rus)**

ANALYSIS

[Localization of efferent sympathetic neurons and afferent neurons in dorsal root ganglia innervating the heart] Fateev MM, et al. **Neirofiziologiia** 1989;21(1):106–11 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Sympathetic innervation of the reproductive organs of the male opossum, Didelphis albiventris (Lund, 1841). Maruch SM, et al. **Acta Anat (Basel)** 1989;134(3):257–62

Sympathetic innervation of the cardiovascular system in the giraffe. Nilsson O, et al. **Blood Vessels** 1988;25(6):299–307

Scintigraphic assessment of regional cardiac adrenergic innervation. Dae MW, et al. **Circulation** 1989 Mar; 79(3):634–44

Monoaminergic nerves in the skin of plaice Pleuronectes platessa (L.). Fernando MM. **Comp Biochem Physiol [C]** 1989;92(1):1–4

Sensory and sympathetic innervation of the mammalian cornea. A retrograde tracing study. Marfurt CF, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):461–72

Sympathetic postganglionic innervation of the cardiac coronary artery in cats. Wu JJ, et al.

J Auton Nerv Syst 1988 Oct;24(3):215–20

Adrenergic innervation of the large arteries and veins of the aestivoarboreal rat snake Elaphe obsoleta. Donald JA, et al. J Morphol 1988 Oct;198(1):25–31

The autonomic innervation of the human vocal cord: neuropeptides. Basterra J, et al. Laryngoscope 1989 Mar; 99(3):293–6

Sympathetic and afferent neurons projecting in the splenic nerve of the cat. Baron R, et al. Neurosci Lett 1988 Nov 22;94(1–2):109–13

[Localization of neurons, making projections via the postganglionic nerves of the stellate ganglion] Kade AKh, et al. Arkh Anat Gistol Embriol 1988 Oct;95(10):22–5 (Eng. Abstr.) (Rus)

[Comparative characteristics of adrenergic innervation of the cerebrospinal arteries of vertebrates and man] Pigolkin IuI. Arkh Anat Gistol Embriol 1988 Oct;95(10):36–43 (Eng. Abstr.) (Rus)

[Adrenergic innervation of the kidneys in man and various laboratory animals] Shvalev VN, et al. Arkh Anat Gistol Embriol 1988 Jul;95(7):28–31 (Eng. Abstr.) (Rus)

[The metasympathetic nervous system. Its organizational elements] Nozdrachev AD. Nerv Sist 1988;27:92–9 (29 ref.) (Rus)

CYTOLOGY

A general pattern of CNS innervation of the sympathetic outflow demonstrated by transneuronal pseudorabies viral infections. Strack AM, et al. Brain Res 1989 Jul 3; 491(1):156–62

Glial cells promote dendritic development in rat sympathetic neurons in vitro. Tropea M, et al. GLIA 1988;1(6):380–92

Origins of the renal innervation in the primate, Macaca fascicularis. Marfurt CF, et al. J Auton Nerv Syst 1989 Jul;27(2):113–26

Non-neuronal cell-conditioned medium regulates muscarinic receptor expression in cultured sympathetic neurons. Smith KE, et al. J Neurosci 1988 Jul;8(7):2406–13

Age-related changes of enkephalinergic innervation of human sympathetic neurons. Järvi R, et al. Mech Ageing Dev 1988 Aug;44(2):143–51

Purine metabolite inosine is an adrenergic neurotrophic substance for cultured chicken sympathetic neurons. Zurn AD, et al. Proc Natl Acad Sci U S A 1988 Nov; 85(21):8301–5

DRUG EFFECTS

Influence of intraperitoneal anesthesia on pain and the sympathoadrenal response to abdominal surgery. Wallin G, et al. Acta Anaesthesiol Scand 1988 Oct;32(7):553–8

Sympathetic activation on effort in patients with chronic heart failure. Long term effects of captopril. Boschetti E, et al. Acta Cardiol (Brux) 1988;43(5):569–82

L-arginine inhibits noradrenaline release in sympathetically stimulated rabbit hearts. Karwatowska-Prokopczuk E, et al. Acta Physiol Scand 1989 Mar;135(3):419–20

Potassium channel blocking agents induce occasional spontaneous action potentials and multiquantal ATP release in sympathetic nerve terminals. Msghina M, et al. Acta Physiol Scand 1989 Apr;135(4):593–4

Release and vasoconstrictor effects of neuropeptide Y in relation to non-adrenergic sympathetic control of renal blood flow in the pig. Pernow J, et al. Acta Physiol Scand 1989 Aug;136(4):507–17

Possible involvement of neuropeptide Y in sympathetic vascular control of canine skeletal muscle. Pernow J, et al. Acta Physiol Scand 1988 Jan;132(1):43–50

Renal sympathetic nerve activation in relation to reserpine-induced depletion of neuropeptide Y in the kidney of the rat. Pernow J, et al. Acta Physiol Scand 1988 Sep;134(1):53–9

Relationship between renal sympathetic activity and diuretic effects of atrial natriuretic peptide (ANP) in the rat. Pettersson A, et al. Acta Physiol Scand 1989 Mar; 135(3):323–33

Some pharmacological applications of an extracellular recording method to study secretion of a sympathetic co-transmitter, presumably ATP. Stjärne L, et al. Acta Physiol Scand 1989 Mar;135(3):227–39

Adenosine as a modulator of sympathetic nerve-stimulation-induced release of noradrenaline from the isolated rabbit heart. Wennmalm M, et al. Acta Physiol Scand 1988 Apr;132(4):487–94

Acute hemodynamic effects of pindolol and propranolol in patients with dilated cardiomyopathy: relevance of intrinsic sympathomimetic activity. Shanes JG, et al. Am Heart J 1988 Nov;116(5 Pt 1):1268–75

Effect of chloride on blood pressure and sympathetic nervous system activity in deoxycorticosterone acetate-treated rats. Miki T, et al. Am J Hypertens 1989 Apr;2(4):253–5

Atrial natriuretic peptide attenuates the reflex sympathetic responses to lower body negative pressure. Imam K, et al. Am J Med Sci 1989 Jul;298(1):1–7

Central effects of somatostatin: pressor response, AVP release, and sympathoinhibition. Rettig R, et al. Am J Physiol 1989 Sep;257(3 Pt 2):R588–94

The opiate antagonist naloxone counteracts the inhibition of sympathetic nerve activity caused by halothane anesthesia in rats. Delle M, et al. Anesthesiology 1989 Feb;70(2):309–17

Participation of sympathetic and vagal tones in the hypotensive and bradycardic effects of some 5-HT1-like receptor agonists in the rat. Cherqui C, et al. Arch Int Pharmacodyn Ther 1988 Nov-Dec;296:18–28

Effects of nisoldipine on sympathetic activity, the renin-angiotensin-aldosterone system, and water-sodium-calcium metabolism in patients with essential hypertension. Iimura O, et al. Arzneimittelforschung 1989 Jun;39(6):710–4

The adrenergic properties of ring-brominated isoprenaline analogues. Langenhoven JH, et al. Arzneim'ttelforschung 1989 May;39(5):545–7

Antihypertensive mechanism of alacepril. Effects of its metabolites on the peripheral sympathetic nervous system. Minato H, et al. Arzneimittelforschung 1989 Mar; 39(3):319–24

Effect of atracurium and laudanosine on the release of 3H-noradrenaline. Kinjo M, et al. Br J Anaesth 1989 Jun; 62(6):683–90

Selective depression by alfentanil of group III and IV somatosympathetic reflexes in the dog. Swenzen GO, et al. Br J Anaesth 1988 Oct;61(4):441–5

Sympathetic influences on the consensual ophthalmotonic reaction. Gibbens MV. Br J Ophthalmol 1988 Oct; 72(10):750–3

Selective blockade by nifedipine of 'purinergic' rather than adrenergic nerve-mediated vasopressor responses in the pithed rat. Bulloch JM, et al. Br J Pharmacol 1988 Nov; 95(3):695–700

The mechanism of action of AMP-induced inhibition of sympathetic neurotransmission in the isolated vas deferens of the rat and guinea-pig. Dalziel HH, et al. Br J Pharmacol 1988 Jul;94(3):961–7

Inhibition of Ca-spikes in rat preganglionic cervical sympathetic nerves by sympathomimetic amines. Elliott P, et al. Br J Pharmacol 1989 Jan;96(1):65–76

Peripheral sympatho-inhibitory cardiovascular effects of opioid peptides in anaesthetized rabbits. Szabo B, et al. Br J Pharmacol 1988 Jul;94(3):781–8

Adenosine enhancement of adrenergic neuroeffector transmission in guinea-pig pulmonary artery. Wiklund NP, et al. Br J Pharmacol 1989 Feb;96(2):425–33

Elevation of intracellular cyclic AMP concentration fails to inhibit adrenaline-induced hyperpolarization in amphibian sympathetic neurons. Zidichouski JA, et al. Br J Pharmacol 1989 Apr;96(4):779–84

Modulation of central nervous system actions of corticotropin-releasing factor by dynorphin-related peptides. Overton JM, et al. Brain Res 1989 May 29; 488(1–2):233–40

Hemodynamic and adrenergic responses of bevantolol and propranolol in hypertensives. Snedden W, et al. Can J Cardiol 1989 Jan-Feb;5(1):37–41

Effects of verapamil on sympathetic tone in normal and chronic sinoaortic-denervated conscious dogs. Damase-Michel C, et al. Can J Physiol Pharmacol 1989 May;67(5):428–30

Sympathoinhibitory responses to digitalis glycosides in heart failure patients. Direct evidence from sympathetic neural recordings. Ferguson DW, et al. Circulation 1989 Jul; 80(1):65–77

Persistence of sympathetic-mediated forearm vasoconstriction after alpha-blockade in hypertensive patients. Taddei S, et al. Circulation 1989 Sep;80(3):485–90

Sympathetic response to oral glucose load is altered in hypertensive subjects. Tomita Y, et al. Clin Exp Hypertens [A] 1989;11 Suppl 1:323–8

Contributions of the sympathetic nervous system, vasopressin and baroreceptor function in brain angiotensin II excess-induced hypertension in the dog. Yamamoto K, et al. Clin Exp Hypertens [A] 1988;10 Suppl 1:309–16

Effect of bunazosin on cardiac sympathetic nerve activity in anesthetized rats. Yoshioka M, et al. Clin Exp Hypertens [A] 1989;11(1):137–47

Resistance of sympathetic cardiac nerve function in the pithed rat to prejunctional effects of angiotensin II. Rechtman MP, et al. Clin Exp Pharmacol Physiol 1988 Dec; 15(12):913–8

Differential effect of high-dose naloxone on the plasma adrenaline response to the cold-pressor test. Bouloux PM, et al. Clin Sci 1989 Jun;76(6):625–30

Inhibitory effect of ketanserin on sympathetic nerve activity in rats. Yoshioka M, et al. Drugs 1988;36 Suppl 1:97–101

Effects of human ANF-(99–126) on sympathetic nerve function, hemodynamic parameters and plasma cGMP levels in anesthetized, ganglion-blocked dogs. Bergey JL, et al. Eur J Pharmacol 1989 Jan 10;159(2):103–12

The differential effects of prazosin and hydralazine on sympathoadrenal activity in conscious rats. Keeton TK, et al. Eur J Pharmacol 1989 May 30;164(3):479–86

Ventrolateral medullary pressor area: site of hypotensive and sympatho-inhibitory effects of (+/-)8-OH-DPAT in anaesthetized dogs. Laubie M, et al. Eur J Pharmacol 1989 Feb 7;160(3):385–94

Pharmacological characterization of neuropeptide Y and noradrenaline mechanisms in sympathetic control of pig spleen. Lundberg JM, et al. Eur J Pharmacol 1989 Apr 12;163(1):103–13

Nisoldipine inhibits adrenergic responses in the hindquarters vascular bed of the cat. Minkes RK, et al. Eur J Pharmacol 1989 Jun 20;165(2–3):259–67

Evidence that the novel antihypertensive agent, flesinoxan, causes differential sympathoinhibition and also increases vagal tone by a central action. Ramage AG, et al. Eur J Pharmacol 1988 Jul 14;151(3):373–9

Adrenergic and purinergic neurotransmission in arterial resistance vessels of the cat intestinal circulation. Taylor EM, et al. Eur J Pharmacol 1989 May 2;164(1):23–33

Lack of presynaptic effects of ketanserin on cardiac noradrenergic nerve terminals in the SHR. Scalbert E, et al. Fundam Clin Pharmacol 1988;2(4):295–9

Compound 48/80 elicits cholinergic contraction through histamine release in the chick oesophagus. Taneike T, et al. Gen Pharmacol 1988;19(5):689–95

Discrepancy between central sympathoinhibitory action and peripheral hemodynamic effects of pindolol in anesthetized rats. Yoshioka M, et al. Hokkaido Igaku Zasshi 1988 Nov; 63(6):957–62

Dissociation of renal nerve and excretory responses to volume expansion in prehypertensive Dahl salt-sensitive and Dahl salt-resistant rats. Veelken R, et al. Hypertension 1989 Jun;13(6 Pt 2):822–7

Rilmenidine (S 3341) and the sympathoadrenal system: adrenoreceptors, plasma and adrenal catecholamines in dogs. Valet P, et al. J Auton Pharmacol 1988 Dec; 8(4):319–26

The sympathetic nervous system and converting enzyme inhibition. Ball SG. J Cardiovasc Pharmacol 1989;13 Suppl 3:S17–21 (45 ref.)

Inhibitors of prostaglandin synthesis reverse the effects of chronic beta-receptor blockade to attenuate adrenergic neurovascular transmission in dogs. Daniell HB, et al. J Cardiovasc Pharmacol 1988 Sep;12(3):300–7

Modulation of adrenergic neurotransmission in the rat tail artery by dietary lipids. Semafuko WE, et al. J Cardiovasc Pharmacol 1989 Jan;13(1):138–45

Thromboxane mimetics enhance adrenergic neurotransmission in the rabbit-isolated portal vein. Stein EA, et al. J Cardiovasc Pharmacol 1989 Sep;14(3):469–74

Sympathoadrenal responses during bradycardia-hypotension associated with combined infusion of atrial natriuretic factor and prostaglandin E2. McMurray J, et al. J Hum Hypertens 1989 Feb;3(1):61–3

Adrenaline-induced amplification of sympathetic activity during rest and stress: inhibition by non-selective and beta 1-selective beta-adrenoceptor blockade. van den Meiracker AH, et al. J Hypertens Suppl 1988 Dec; 6(4):S558–61

Cinanergoline lowers intraocular pressure in rabbits and monkeys and inhibits contraction of the cat nictitans by suppressing sympathetic neuronal function. Potter DE, et al. J Ocul Pharmacol 1987 Winter;3(4):309–21

Effects of methylene blue on the uptake, release and metabolism of noradrenaline in mesenteric arterial vessels. Soares-da-Silva P, et al. J Pharm Pharmacol 1988 Aug; 40(8):534–8

Prenatal exposure to nicotine via maternal infusions: effects on development of catecholamine systems. Navarro HA, et al. J Pharmacol Exp Ther 1988 Mar;244(3):940–4

Mechanisms of central hemodynamic and sympathetic regulation by mu opioid receptors: effects of dermorphin in the conscious rat. Sirén AL, et al. J Pharmacol Exp Ther 1989 Feb;248(2):596–604

Epidural morphine decreases postoperative hypertension by attenuating sympathetic nervous system hyperactivity. Breslow MJ, et al. JAMA 1989 Jun 23–30;261(24):3577–81

Effect of ketanserin on adrenal sympathetic nerve activity in rats. Matsumoto M. Jpn J Pharmacol 1988 Sep; 48(1):57–66

Sympathoadrenal activity and sympathoinhibitory hormones during acute and chronic nicotine application in dogs. Bassenge E, et al. Klin Wochenschr 1988;66 Suppl 11:12–20

AF-DX 116 differentiates between prejunctional muscarine receptors located on noradrenergic and cholinergic nerves. Dammann F, et al. Naunyn Schmiedebergs Arch Pharmacol 1989 Mar; 339(3):268–71

The depolarizing action of 5-hydroxytryptamine on rabbit isolated preganglionic cervical sympathetic nerves. Elliott P, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Dec; 338(6):608–15

The effect of (+/-)-dobutamine on adrenergic nerve endings. Fischer P, et al. Naunyn Schmiedebergs Arch Pharmacol 1989 Jan-Feb; 339(1–2):79–84

Capsaicin-sensitive afferents in the rat urinary bladder activate a spinal sympathetic cardiovascular reflex. Giuliani S, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Oct; 338(4):411–6

Examination of the effects of some 5-HT2 receptor antagonists on central sympathetic outflow and blood pressure in anaesthetised cats. Ramage AG. Naunyn Schmiedebergs Arch Pharmacol 1988 Dec; 338(6):601–7

Estrous cycle delay and inhibition of gonadotropin and prolactin release during sympathetic nerve degeneration after superior cervical ganglionectomy of rats. Cardinali DP, et al. Neuroendocrinology 1989 Jul;50(1):59–65

Extent of sympathetic blockade after stellate ganglion block with bupivacaine. Hardy PA, et al. Pain 1989 Feb; 36(2):193–6

Central sympathoinhibitory effect of ketanserin in the spontaneously hypertensive rat. Gradin K, et al. Pharmacol Toxicol 1989 Apr;64(4):352–5

Effect of etorphine on adrenergic neurotransmission in the

rat and guinea pig heart. Semafuko WE, et al. **Pharmacology** 1988;37(3):195–202

Compensatory changes of sympathetic tone, the renin–angiotensin–aldosterone system, vasopressin, and ANF as potential therapeutic targets in congestive heart failure. van Zwieten PA. **Z Kardiol** 1988;77 Suppl 5:67–76 (38 ref.)

[Research on the mechanism and effect of cold and hot compound prescriptions and rhizoma anemarrhenae on the sympathetic nervous system] Liang YH, et al. **Chung Yao Tung Pao** 1988 Nov;13(11):48–50, 64 (Eng. Abstr.) **(Chi)**

[Sympatho–adrenergic reactions following theophylline administration with the use of various anesthesia technics] Adams HA, et al. **Anaesthesist** 1989 Jun;38(6):309–16 (Eng. Abstr.) **(Ger)**

[Clinical significance of intrinsic sympathomimetic activity of the beta blocker carteolol. II: Comparative studies of carteolol and pindolol in patients with bradycardia] Lohmöller G, et al. **Med Klin** 1989 Feb 15;84(2):81–5 (Eng. Abstr.) **(Ger)**

[Modification of the autonomic vascular reaction and peripheral circulation in the handgrip and orthostasis test by beta–blockage in patients with and without peripheral arterial occlusive disease] Valentin A, et al. **Vasa Suppl** 1988;26:220–2 **(Ger)**

[Interaction of chronic inhibition of the angiotensin–converting enzyme and the sympathetic system: effect of added sodium chloride load] Dominiak P, et al. **Z Kardiol** 1988;77 Suppl 3:29–33 **(Ger)**

[Analysis of the baroreflex activation of the sympathetic system in waking cats induced by urapidil and sodium nitroprusside] Medvedev OS, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):53–6 (Eng. Abstr.) **(Rus)**

[Function of the sympathetic–adrenal system in workers at a coke chemical plant] Rudnev AS, et al. **Vrach Delo** 1988 Aug;(8):94–6 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Development of neuropeptides in the sympathoadrenal system of birds and mammals. A short review. Garcia–Arraras JE, et al. **P R Health Sci J** 1988 Aug; 7(2):88–93 (65 ref.)

Cellular 'heoteny': a possible developmental basis for chromaffin cell plasticity. Anderson DJ. **Trends Genet** 1989 Jun;5(6):174–8 (25 ref.)

ENZYMOLOGY

Tyrosine hydroxylase activity in sympathetic nervous system of rats with streptozocin–induced diabetes. Schmidt RE, et al. **Diabetes** 1989 Aug;38(8):959–68

L–glutamate decarboxylase immunoreactivity in developing sympathetic tissues of the rat. Ahonen M, et al. **J Auton Nerv Syst** 1989 Jul;27(2):155–64

Immunocytochemical localization of L–glutamate decarboxylase and catecholamine–synthesizing enzymes in the retroperitoneal sympathetic tissue of the newborn rat. Ahonen M, et al. **J Auton Nerv Syst** 1989 Mar;26(2):89–96

Is aromatic L–amino acid decarboxylase immunoreactivity a marker for noradrenergic sympathetic axons? [letter] Bell C. **J Histochem Cytochem** 1989 Jun;37(6):919, 921

Secretin and vasoactive intestinal peptide activate tyrosine hydroxylase in sympathetic nerve endings. Schwarzschild MA, et al. **J Neurosci** 1989 Jan;9(1):160–6

Reflection of central aminergic–cholinergic imbalance by peripheral enzymes in psychiatric disorders? Fritze J, et al. **Pharmacopsychiatry** 1988 Jul;21(4):182–5

GROWTH & DEVELOPMENT

Age–related changes in the recovery of noradrenaline content in sympathetic fibres after reserpine treatment. Paparelli A, et al. **Acta Histochem (Jena)** 1988;84(2):121–5

Parallel development of noradrenergic innervation and cellular compartmentation in the rat spleen. Ackerman KD, et al. **Exp Neurol** 1989 Mar;103(3):239–55

Sympathetic response to exercise in various tissues with advancing age. Mazzeo RS, et al. **J Appl Physiol** 1989 Mar; 66(3):1506–8

IMMUNOLOGY

Anti–sympathetic nervous system autoantibodies. Diminished catecholamines with orthostasis. Brown FM, et al. **Diabetes** 1989 Jul;38(7):938–41

Double labeling of the paravertebral sympathetic C system in the bullfrog with antisera to LHRH and NPY. Horn JP, et al. **J Auton Nerv Syst** 1988 Jun;23(1):17–24

INJURIES

Effect of laser radiation on post–traumatic restoration of interneuronal connections of the sympathetic trunk. Rakhishev AR, et al. **Neurosci Behav Physiol** 1989 May–Jun;19(3):203–7

METABOLISM

Transfer of DOPA from the sympatho–adrenal system to the pancreas, liver and kidney via the blood circulation. Andén NE, et al. **Acta Physiol Scand** 1989 May;136(1):75–9

Substance P–, VIP– and CGRP–like immunoreactivities coexist in a population of cholinergic postganglionic sympathetic nerves innervating sweat glands in the cat. Lindh B, et al. **Acta Physiol Scand** 1988 Dec;134(4):569–70

Co–release and functional interactions of neuropeptide Y and noradrenaline in peripheral sympathetic vascular control. Pernow J. **Acta Physiol Scand Suppl** 1988;568:1–56

Postmortem metabolic indices of antemortem adrenergic stimulation. Ianuzzo CD, et al. **Am J Forensic Med Pathol** 1989 Mar;10(1):42–6

Implications of plasma levels of catechols in the evaluation of sympathoadrenomedullary function. Goldstein DS, et al. **Am J Hypertens** 1989 Mar;2(3 Pt 2):133S–139S (19 ref.)

Metabolic and sympathetic nerve activities of brown adipose tissue in tube–fed rats. Saito M, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E374–8

Adrenal and sympathetic catecholamines in exercising rats. Scheurink AJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R155–60

Sympathoadrenal influence on glucose, FFA, and insulin levels in exercising rats. Scheurink AJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R161–8

An investigation of the adrenergic uptake specificity of phenyl–2–aminoethyl sulfides. Pollock SH, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:76–86

Cardiac and whole body [3H]noradrenaline kinetics in ischaemic heart disease: contrast between unstable anginal syndromes and pacing induced ischaemia. McCance AJ, et al. **Br Heart J** 1989 Mar;61(3):238–47

Release of [3H]–noradrenaline from the sympathetic nerves to bovine mesenteric lymphatic vessels and its modification by alpha–agonists and antagonists. Allen JM, et al. **Br J Pharmacol** 1988 Jul;94(3):823–33

Possible mechanism of acetaldehyde–induced noradrenaline release from sympathetic nerve terminals in isolated blood vessels. Chiba S, et al. **Br J Pharmacol** 1988 Sep; 95(1):177–82

Facilitation of noradrenaline release from sympathetic nerves through activation of ACTH receptors, beta–adrenoceptors and angiotensin II receptors. Costa M, et al. **Br J Pharmacol** 1988 Nov;95(3):993–1001

Facilitation of noradrenaline release from sympathetic nerves in rat anococcygeus muscle by activation of prejunctional beta–adrenoceptors and angiotensin receptors. Li CG, et al. **Br J Pharmacol** 1988 Oct;95(2):385–92

Identification of M1 muscarinic receptors in pulmonary sympathetic nerves in the guinea–pig by use of pirenzepine. Maclagan J, et al. **Br J Pharmacol** 1989 Jun;97(2):499–505

Platelet–activating factor: lack of direct action on guinea pig myocardium and possible transmitter release from cardiac sympathetic nerve endings at high concentrations. Shigenobu K, et al. **Can J Physiol Pharmacol** 1989 Jun; 67(6):669–74

Alterations in sympathetic nervous system activity with intraoperative hypothermia during coronary artery bypass surgery. Reed HL, et al. **Chest** 1989 Mar;95(3):616–22

Continuous infusion of tracer norepinephrine may miscalculate unidirectional nerve uptake of norepinephrine in humans. Henriksen JH, et al. **Circ Res** 1989 Aug; 65(2):388–95

Functional relationship between platelet alpha 2–adrenoceptors and sympathetic nerve activity in man. Noshiro T, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:287–94

Inhibition of transmitter release from sympathetic nerve endings by omega–conotoxin. Brock JA, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):333–9

Renal sympathetic nerve activity measured by norepinephrine spillover rate in response to changes in blood pressure in conscious rabbits. Sano N, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):319–22

Plasma dihydroxyphenylglycol for estimation of noradrenaline neuronal re–uptake in the sympathetic nervous system in vivo. Eisenhofer G, et al. **Clin Sci** 1989 Feb;76(2):171–82

Sympatho–adrenal response to hypoglycaemia in infants. Stanek B, et al. **Eur J Pediatr** 1988 Dec;148(3):253–6

Presynaptic alpha 2–adrenoceptor modulation of 5–hydroxytryptamine and noradrenaline release from vascular adrenergic nerves. Kawasaki H, et al. **Eur J Pharmacol** 1989 May 2;164(1):35–43

Sodium–azide–evoked noradrenaline and catecholamine release from peripheral sympathetic nerves and chromaffin cells. Török TL, et al. **Gen Pharmacol** 1989;20(2):143–9

Evidence that dopaminergic sympathetic axons supply the medullary arterioles of human kidney. Bell C, et al. **Histochemistry** 1989;91(5):361–4

Alterations in serotonin and neuropeptide Y content of cerebrovascular sympathetic nerves following experimental subarachnoid hemorrhage. Jackowski A, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):271–9

Neuropeptide Y–like immunoreactivity in relation to the distribution of sympathetic nerve fibers in the heart conduction system. Forsgren S. **J Mol Cell Cardiol** 1989 Mar;21(3):279–90

Effect of lithium chloride on the neurotransmitter release from adrenergic nerve terminals of guinea–pig atria. Mantelli L, et al. **J Pharm Pharmacol** 1989 Mar;41(3):203–5

Thromboxane synthesis and actions in isolated adrenergic nerve (pheochromocytoma–12) cells. Trachte GJ, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):43–6

Inhibitory actions of captopril on norepinephrine release from adrenergic nerve endings in spontaneously hypertensive rats. Tsuda K, et al. **Jpn Heart J** 1988 Jul;29(4):475–83

Characterization of prejunctional purinoceptors on adrenergic nerves of the rat caudal artery. Shinozuka K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):221–7

Central nervous system and insulin secretion. Strubbe JH. **Neth J Med** 1989 Apr;34(3–4):154–67 (24 ref.)

Neuropeptide Y, peptide YY, and sympathetic control of rectal tone and anal canal pressure in the cat. Hellström PM, et al. **Scand J Gastroenterol** 1989 Mar;24(2):231–43

Specific dynamic action revisited: studies of hormonal regulation of energy expenditure in man. Campbell RG, et al. **Trans Am Clin Climatol Assoc** 1987;99:136–43

[The participation of the sympathetic nervous system in thromboxane A2 release induced by limb ischemia] Sakio H, et al. **Masui** 1989 Feb;38(2):211–5 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

[Intrathoracic tumors of the sympathetic nervous system—characteristics of their biological behavior] Anders M, et al. **Padiatr Grenzgeb** 1988;27(6):503–9 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Interactions between noradrenergic and cholinergic mechanisms involved in spinal nociceptive processing. Gordh T Jr, et al. **Acta Anaesthesiol Scand** 1989 Jan; 33(1):39–47

Emerging aspects of the adrenergic nervous systems. Svensson T. **Acta Anaesthesiol Scand Suppl** 1982;76:8–11 (32 ref.)

Sympathetic modulation of the jaw–opening reflex in anaesthetized rabbits. Aars H, et al. **Acta Physiol Scand** 1988 Nov;134(3):319–25

Age–related variations in the relative importance of noradrenaline and ATP as mediators of the contractile response of rat tail artery to sympathetic nerve stimulation. Bao JX, et al. **Acta Physiol Scand** 1989 Jun;136(2):287–8

Neuropeptide Y (NPY) induced inhibition of preganglionic nerve stimulation evoked release of adrenalin and noradrenaline in the pithed rat. Dahlöf P, et al. **Acta Physiol Scand** 1988 Jan;132(1):51–7

Renal sympathetic nerve activity during morphine abstinence in sino–aortic baroreceptor–denervated rats. Delle M, et al. **Acta Physiol Scand** 1988 Dec;134(4):479–91

Influences of the sympatho–adrenal system on gastric motility and acid secretion and on gastroduodenal bicarbonate secretion in the cat. Fändriks L, et al. **Acta Physiol Scand** 1989 Mar;135(3):285–92

Increase in proximal tubular fluid reabsorption by renal nerve stimulation. A split oil droplet study. Göransson A, et al. **Acta Physiol Scand** 1988 Aug;133(4):455–8

Evidence for sympathetic regulation of the hydraulic conductance of rat jejunal mucosa in vivo. Hemlin M, et al. **Acta Physiol Scand** 1989 Apr;135(4):459–67

Sympathetic vascular control of the pig nasal mucosa (III): Co–release of noradrenaline and neuropeptide Y. Lacroix JS, et al. **Acta Physiol Scand** 1989 Jan;135(1):17–28

Sympathetic vascular control of the pig nasal mucosa: (I). Increased resistance and capacitance vessel responses upon stimulation with irregular bursts compared to continuous impulses. Lacroix JS, et al. **Acta Physiol Scand** 1988 Jan; 132(1):83–90

Renal interaction between sympathetic activity and ANP in rats with chronic ischaemic heart failure. Pettersson A, et al. **Acta Physiol Scand** 1989 Apr;135(4):487–92

Effects of hypovolaemia or isoprenaline infusion on the sympathetic reflex response to PEEP ventilation in rats. Selldén H, et al. **Acta Physiol Scand** 1988 Sep;134(1):101–7

Sympathetic transmission in small mesenteric arteries from the rat: highly calcium–dependent at low stimulation rates. Sjöblom–Widfeldt N, et al. **Acta Physiol Scand** 1989 Apr; 135(4):505–11

Basic features of an extracellular recording method to study secretion of a sympathetic co–transmitter, presumably ATP. Stjärne L, et al. **Acta Physiol Scand** 1989 Mar; 135(3):217–26

An electrophysiological in–vivo study on the effects of nerve stimulation, drugs and denervation in the parotid gland of the rat. Thesleff P. **Acta Physiol Scand** 1989 Jun; 136(2):235–43

Reflex activation of renal nerves in humans: differential effects on noradrenaline, dopamine and renin overflow to renal venous plasma. Tidgren B, et al. **Acta Physiol Scand** 1988 Sep;134(1):23–34

Effect of hypoxia on nerve–stimulation–induced release of noradrenaline from the rabbit heart. Wennmalm M. **Acta Physiol Scand** 1988 May;133(1):25–33

Adrenergic and non–adrenergic mechanisms in sympathetic vascular control of the nasal mucosa. Lacroix JS. **Acta Physiol Scand Suppl** 1989;581:1–63

Is the noradrenergic neuron system in the brain stem related to motion sickness in rats? Takeda N, et al. **Adv Otorhinolaryngol** 1988;42:234–7

Cardiac denervation and long QT interval [letter] Finley JP, et al. **Am J Cardiol** 1989 Sep 15;64(10):696

Renin response to sympathetic stimulation in cyclosporin–treated heart–transplant patients. Held P, et al. **Am J Cardiol** 1989 May 1;63(15):1142–4

Effect of the venodilated state on sympathetic–induced venoconstriction in normal subjects. Sumner A, et al. **Am J Cardiol** 1989 Apr 15;63(13):973–6

Effect of passive tilt on sympathetic and parasympathetic components of heart rate variability in normal subjects. Vybiral T, et al. **Am J Cardiol** 1989 May 1;63(15):1117–20

Obesity, metabolism, and the sympathetic nervous system. Landsberg L, et al. **Am J Hypertens** 1989 Mar;2(3 Pt 2):125S–132S (72 ref.)

Contribution of the renin–angiotensin system and of the sympathetic nervous system to blood pressure homeostasis during chronic restriction of sodium intake. Volpe M, et al. **Am J Hypertens** 1988 Oct;1(4 Pt 1):353–8

Activation of renal sympathetic outflow by intracisternal hypertonic NaCl in dogs. Abe I, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H411–6

Differential sympathetic regulation of automatic, conductile, and contractile tissue in dog heart. Ardell JL, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1050–9

Axon destruction and adrenergic systems mediate pressor responses after AV3V lesions. Bealer SL, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R80–6

Renal sympathetic nerve activity and norepinephrine release in rats. Deka-Starosta A, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R229–36

Exercise training attenuates baroreflex regulation of nerve activity in rabbits. DiCarlo SE, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H974–9

Nonadrenergic sympathetic neural influences on basal pancreatic hormone secretion. Dunning BE, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E785–92

Influence of renal sympathetic nerve stimulation on renal function in the primate. Echtenkamp SF, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):F204–9

Reserpine but not surgical denervation regulates rat renal beta-adrenergic receptors. Fortin TL, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F532–9

Sympathetic activity remains synchronized in presence of a glutamate antagonist. Gebber GL, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R722–32

Stimulation of parabrachial neurons elicits a sympathetically mediated pressor response in cats. Hade JS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1349–58

Central respiratory modulation of medullary sympathoexcitatory neurons in rat. Haselton JR, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R739–50

Neurogenic and humoral factors maintaining arterial pressure in conscious dogs. Hasser EM, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R693–8

Changes in AdSNA and arterial catecholamines to coronary occlusion in cats. Honda T, et al. **Am J Physiol** 1988 Oct; 255(4 Pt 2):H704–10

Involvement of sympathetic nervous system and brown fat in endotoxin-induced fever in rats. Jepson MM, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E617–20

Increase in sympathetic outflow by paraventricular nucleus stimulation in awake rats. Kannan H, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1325–30

Oxygen consumption after massive sympathetic nervous system discharge. Lang SA, et al. **Am J Physiol** 1989 Mar; 256(3 Pt 1):E345–51

GABA-mediated inhibition of sympathoexcitatory neurons by midline medullary stimulation. McCall RB. **Am J Physiol** 1988 Oct;255(4 Pt 2):R605–15

Electrophysiological study of micturition reflexes in rats. Mallory B, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R410–21

Anesthetic effects on tonic and reflex renal sympathetic nerve activity in awake cats. Matsukawa K, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R371–8

Stimulatory effects of neuronally released norepinephrine on renin release in vitro. Matsumura Y, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F614–20

Renal sympathetic nerve activity and renal responses during head-up tilt in conscious dogs. Miki K, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R337–43

Effects of brain natriuretic peptide on renal nerve activity in conscious rabbits. Morita H, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R792–6

Reticulospinal vasomotor neurons in the RVL mediate the somatosympathetic reflex. Morrison SF, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1084–97

Determinants of arterial pressure after chronic spinal transection in rats. Osborn JW, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R666–73

Influence of sympathetic discharge pattern on norepinephrine and neuropeptide Y release. Pernow J, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H866–72

Modulation of natriuresis by sympathetic nerves and angiotensin II in conscious dogs. Persson PB, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):F485–9

Blockade of spinal pathways decreases pre- and postganglionic discharge differentially. Qu L, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R946–51

Role of renal sympathetic nerves in renin inhibition by elevated left atrial pressure. Scheuer DA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R413–20

Intramural distribution of intestinal blood flow during sympathetic stimulation. Shepherd AP, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1091–5

Sympathetic tone affects human limb vascular resistance during a maximal metabolic stimulus. Sinoway LI, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H937–46

Reflex sympathetic activation in humans is accompanied by inhibition of gastric HCO_3^- secretion. Sjövall H, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G752–8

Effect of sympathetic blockade on diurnal variation of hemodynamic patterns. Talan MI, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R778–85

Sympathetic outflow to resting muscles during static handgrip and postcontraction muscle ischemia. Wallin BG, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H105–10

Tonic influences from the rostral medulla affect sympathetic nerves differentially. Yardley CP, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R323–31

Let's have "sympathy" [letter] Bosnjak ZJ. **Anesthesiology** 1988 Nov;69(5):806

Changes in muscle sympathetic nerve activity, venous plasma catecholamines, and calf vascular resistance during mechanical ventilation with PEEP in humans. Selldén H, et al. **Anesthesiology** 1989 Feb;70(2):243–50

Intrinsic sympathomimetic activity counteracts beta-blocker inhibition of renin activation. Ruddy MC, et al. **Angiology** 1989 Jan;40(1):45–50

The N-type Ca channel in frog sympathetic neurons and its role in alpha-adrenergic modulation of transmitter release. Kongsamut S, et al. **Ann N Y Acad Sci** 1989; 560:312–33 (63 ref.)

Sympathetic–parasympathetic mediation of the cardiac defense response in humans. Fernández MC, et al. **Biol Psychol** 1989 Apr;28(2):123–33

Actions of PGE2 and indomethacin on adrenergic neuroeffector transmission in the rabbit coeliac artery. Malomvölgyi B, et al. **Biomed Biochim Acta** 1988; 47(10–11):S129–32

Hypernoradrenergic innervation: its relationship to functional and hyperplastic changes in the vasculature of the spontaneously hypertensive rat. Head RJ. **Blood Vessels** 1989;26(1):1–20 (115 ref.)

Role of sympathetic nerves in disposition and metabolism of intraluminal and extraluminal noradrenaline in the rabbit ear artery. Venning MG, et al. **Blood Vessels** 1988; 25(5):232–9

Sympathetic denervation caused by long-term noradrenaline infusions; prevention by desipramine and superoxide dismutase. Albino Teixeira A, et al. **Br J Pharmacol** 1989 May;97(1):95–102

Opioid modulation of non-cholinergic neural bronchoconstriction in guinea-pig in vivo. Belvisi MG, et al. **Br J Pharmacol** 1988 Oct;95(2):413–8

The beta 1-adrenoceptor antagonist, betaxolol, is not released from the heart of the anaesthetized dog during sympathetic nerve stimulation. Duval N, et al. **Br J Pharmacol** 1988 Nov;95(3):683–8

Interactions between angiotensin II, sympathetic nerve-mediated pressor response and cyclo-oxygenase products in the pithed rat. Grant TL, et al. **Br J Pharmacol** 1988 Dec;95(4):1220–8

Sex-related differences in central adrenergic function and responsiveness to repeated administration of desipramine or electroconvulsive shock. Heal DJ, et al. **Br J Pharmacol** 1989 May;97(1):111–8

Noradrenaline release evoked by a physiological irregular sympathetic discharge pattern is modulated by prejunctional alpha- and beta-adrenoceptors in vivo. Kahan T, et al. **Br J Pharmacol** 1988 Dec;95(4):1101–8

Cardiovascular interactions between vasopressin, angiotensin and noradrenaline in the Brattleboro rat. Laycock JF, et al. **Br J Pharmacol** 1989 Feb;96(2):347–55

Arterial catecholamine levels in morphine-treated rats subjected to sympathetic nerve stimulation. Leung CM, et al. **Br J Pharmacol** 1989 Apr;96(4):888–94

Neuropeptide Y and reserpine-resistant vasoconstriction evoked by sympathetic nerve stimulation in the dog skeletal muscle. Pernow J, et al. **Br J Pharmacol** 1988 Jul; 94(3):952–60

Neurophysiological aspects of penile erection: the role of the sympathetic nervous system. Jünemann KP, et al. **Br J Urol** 1989 Jul;64(1):84–92

Sympathetic neural modulation of the immune system. I. Depression of T cell immunity in vivo and vitro following chemical sympathectomy. Madden KS, et al. **Brain Behav Immun** 1989 Mar;3(1):72–89

Changes in glomus cell membrane properties in response to stimulants and depressants of carotid nerve discharge. Eyzaguirre C, et al. **Brain Res** 1989 Jan 16;477(1–2):265–79

Identification of serotonergic and sympathetic neurons in medullary raphe nuclei. McCall RB, et al. **Brain Res** 1989 Jan 16;477(1–2):172–82

Accelerated norepinephrine turnover in peripheral tissues after ventromedial hypothalamic stimulation in rats. Saito M, et al. **Brain Res** 1989 Mar 6;481(2):298–303

Paramedian reticular nucleus—sympathetic inhibition in spontaneously hypertensive rats. Lin AM, et al. **Brain Res Bull** 1988 Oct;21(4):651–7

Occlusion of pressor responses to posterior diencephalic stimulation and muscular contraction. Rybicki KJ, et al. **Brain Res Bull** 1989 Feb;22(2):305–12

Sympathetic activity following paraventricular injections of glucose and insulin. Sakaguchi T, et al. **Brain Res Bull** 1988 Jul;21(1):25–9

Measurements of renal sympathetic nerve activity in conscious sinoaortic denervated rats. Irigoyen MC, et al. **Braz J Med Biol Res** 1988;21(4):869–72

Adenosine modulation of vasoconstrictor responses to stimulation of sympathetic nerves and norepinephrine infusion in the superior mesenteric artery of the cat. Lautt WW, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):937–41

Central noradrenergic activity in intact and sinoaortic denervated Dahl rats. Patel KP, et al. **Can J Physiol Pharmacol** 1989 May;67(5):450–5

Altered peripheral noradrenergic activity in intact and sinoaortic denervated Dahl rats. Peuler JD, et al. **Can J Physiol Pharmacol** 1989 May;67(5):442–9

Role of vagal and sympathetic afferents in reflex respiratory responses to capsaicin in dogs. Ravi K. **Can J Physiol Pharmacol** 1988 Jul;66(7):946–50

Effect of 6-hydroxydopamine on gastric carcinogenesis and tetragastrin inhibition of gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Cancer Res** 1989 Aug 1;49(15):4199–203

Chronotropic responsiveness of developing sinoatrial and ventricular rat myocytes to autonomic agonists following adrenergic and cholinergic innervation in vitro. Atkins DL, et al. **Circ Res** 1989 Jun;64(6):1051–62

Cardiac sympathetic afferent cell bodies are located in the peripheral nervous system of the cat. Bosnjak ZJ, et al. **Circ Res** 1989 Mar;64(3):554–62

Reflex modulation of lymphatic pumping in sheep. McHale NG, et al. **Circ Res** 1989 Jun;64(6):1165–71

Arteriolar wall thickening in hypertensive rats unrelated to pressure or sympathoadrenergic influences. Plunkett WC, et al. **Circ Res** 1988 Nov;63(5):937–43

Inhibition of adrenergic vasoconstriction by endothelial cell shear stress. Tesfamariam B, et al. **Circ Res** 1988 Oct; 63(4):720–5

Effects of partial neuromuscular blockade on sympathetic nerve responses to static exercise in humans. Victor RG, et al. **Circ Res** 1989 Aug;65(2):468–76

Stimulation of renal sympathetic activity by static contraction: evidence for mechanoreceptor-induced reflexes from skeletal muscle. Victor RG, et al. **Circ Res** 1989 Mar;64(3):592–9

Angiotensin converting enzyme inhibition and the upper limit of cerebral blood flow autoregulation: effect of sympathetic stimulation. Waldemar G, et al. **Circ Res** 1989 Jun; 64(6):1197–204

Role of vagosympathetic fibers in the control of adrenocorticotropic hormone, vasopressin, and renin responses to hemorrhage in fetal sheep. Wood CE, et al. **Circ Res** 1989 Mar;64(3):515–23

Pressor effect of nalbuphine in hemorrhagic shock is dependent on the sympathoadrenal system. Muldoon SM, et al. **Circ Shock** 1988 Sep;26(1):89–98

Nifedipine potentiates cardiopulmonary baroreflex control of sympathetic nerve activity in healthy humans. Direct evidence from microneurographic studies. Ferguson DW, et al. **Circulation** 1989 Aug;80(2):285–98

Scintigraphic and electrophysiological evidence of canine myocardial sympathetic denervation and reinnervation produced by myocardial infarction or phenol application. Minardo JD, et al. **Circulation** 1988 Oct;78(4):1008–19

Role of renal nerves in experimental hypertension: evaluation of neurogenic mechanisms. Barrés CP, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:117–24

Neuropeptide Y in the sympathetic control of blood pressure in hypertensive subjects. Chalmers J, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:59–66

Studies on the origin and generation of sympathetic nerve activity. Gebber GL, et al. **Clin Exp Hypertens [A]** 1988; 10 Suppl 1:33–44

2-Deoxy-D-glucose-induced central glycopenia differentially influences renal and adrenal nerve activity in awake SHR rats. Medvedev OS, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:375–81

Central and baroreflex control of sympathetic nerve activity to the heart and kidney in a daily life of the cat. Ninomiya I, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:19–31

Abnormalities in the sodium transport as the causative factor for enhanced norepinephrine overflow in the spontaneously hypertensive rat. Steenberg ML, et al. **Clin Exp Hypertens [A]** 1988;10(5):833–41

Evidence against the central nervous system involved in altered reflex control of sympathetic nerve activity by atrial natriuretic peptide. Suzuki S, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:263–8

Effects of atropine on adrenergic responsiveness and reflex vasoconstriction in humans. Takata S, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:295–301

Barosensory neurons in the rostral ventrolateral medulla mediate the renal-sympathetic reflex in rabbits. Terui N, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:269–74

Venous versus arterial forearm catecholamines as an index of overall sympatho-adrenomedullary activity. van den Meiracker AH, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:345–51

Human sympathetic nerve activity and blood pressure regulation. Wallin BG. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:91–101 (25 ref.)

Paradoxical effects of endothelin on cardiovascular noradrenergic neurotransmission. Wong-Dusting HK, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):229–33

Presynaptic inhibition of sympathetic fibers participating in vasodilatation in response to K^+-induced contraction of frog skeletal muscle. Fuglsang A, et al. **Clin Invest Med** 1988 Oct;11(5):357–65

Angiotensin II augments sympathetically induced venoconstriction in man. Benjamin N, et al. **Clin Sci** 1988 Oct;75(4):337–40

Salivation in the red kangaroo (Macropus rufus) during sympathetic nerve stimulation. Beal AM. **Comp Biochem Physiol [A]** 1989;92(4):495–7

Sympatho–adrenal activity and metabolic responses in fasted rats—the role of interscapular brown adipose tissue. Davidović V, et al. **Comp Biochem Physiol [A]** 1988; 91(4):697–700

Differences in the protein composition of rat parotid salivas evoked by sympathetic and parasympathetic nerve stimulation. Proctor GB, et al. **Comp Biochem Physiol [A]** 1989;92(4):589–92

The effect of sympathetic and parasympathetic activity on QT duration. Clinical study in patients with normal and prolonged QT time. Solti F, et al. **Cor Vasa** 1989;31(1):9–15

Plasma free and sulfoconjugated dopamine in man: relationship to sympathetic activity, adrenal function and meals. Eldrup E, et al. **Dan Med Bull** 1988 Jun;35(3):291–4

Developmental interactions between sweat glands and the sympathetic neurons which innervate them: effects of delayed innervation on neurotransmitter plasticity and gland maturation. Stevens LM, et al. **Dev Biol** 1988 Dec; 130(2):703–20

Changes in sensitivity of rat heart to norepinephrine and isoproterenol during pre– and postnatal development and its relation to sympathetic innervation. Shigenobu K, et al. **Dev Pharmacol Ther** 1988;11(4):226–36

The accommodative response, refractive error and mental effort: 1. The sympathetic nervous system. Bullimore MA, et al. **Doc Ophthalmol** 1988 Aug;69(4):385–97

Sympathetic skin response in healthy man. Baba M, et al. **Electromyogr Clin Neurophysiol** 1988 Jun–Jul;28(5):277–83

Thermogenic effects of the antiglucocorticoid RU–486 in the rat: involvement of corticotropin–releasing factor and sympathetic activation of brown adipose tissue. Hardwick AJ, et al. **Endocrinology** 1989 Apr;124(4):1684–8

Sympathoadrenomedullary inhibition by chronic glucocorticoid treatment in conscious rats. Szemeredi K, et al. **Endocrinology** 1988 Nov;123(5):2585–90

Respective role of sympathetic tone and of cardiac pauses in the genesis of 62 cases of ventricular fibrillation recorded during Holter monitoring. Leclercq JF, et al. **Eur Heart J** 1988 Dec;9(12):1276–83

The endothelium modulates adrenergic neurotransmission to canine pulmonary arteries and veins. Greenberg S, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):67–80

Vessel reactivity and prejunctional modulatory changes in the portal vein of mature spontaneously hypertensive rats. Reilly WM, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):283–9

Muscarinic receptors on cultured cells of rat hippocampus: cholinergic regulation and presence of subtypes. Rimvall K, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):1–9

Electrophysiology of neurones projections from the rat A1 noradrenergic region to the medial preoptic/anterior hypothalamic area: lack of effect of the oestrous cycle on their excitability. Kaba H, et al. **Exp Clin Endocrinol** 1988 Dec;92(2):217–24

Collateral axonal projections from the A1 noradrenergic cell group to the paraventricular nucleus and bed nucleus of the stria terminalis in the rat. Woulfe JM, et al. **Exp Neurol** 1988 Oct;102(1):121–4

Measurements of postcoital sympathetic activity in females by means of vanillylmandelic acid. Ende N, et al. **Horm Behav** 1989 Mar;23(1):150–6

Neural control of renal function: cardiovascular implications. DiBona GF. **Hypertension** 1989 Jun;13(6 Pt 1):539–48 (67 ref.)

Central vasopressin raises arterial pressure by sympathetic activation and vasopressin release. Janiak P, et al. **Hypertension** 1989 Jun;13(6 Pt 2):935–40

Neurogenic pressor episodes fail to cause hypertension, but do induce cardiac hypertrophy. Julius S, et al. **Hypertension** 1989 May;13(5):422–9

Impairment of baroreceptor reflex control of heart rate but not sympathetic efferent discharge by central neuroadministration of ethanol. Zhang X, et al. **Hypertension** 1989 Sep;14(3):282–92

The sympathetic neuro–melanophore transmission in a fresh–water Indian major carp, Labeo rohita (Ham.). Patil S, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun; 33(2):101–6

Presynaptic modulation of sympathetic nerve transmission—an element in vasomotor control. Fuglsang A, et al. **Int J Microcirc Clin Exp** 1989 Feb;8(1):71–84

Body weight and cardiovascular response to sympathetic stimulation in childhood. Aldo Ferrara L, et al. **Int J Obes** 1989 Jun;13(3):271–7

Sympathetic activity and food intake of rats with ventromedial hypothalamic lesions. Sakaguchi T, et al. **Int J Obes** 1988;12(4):285–91

Human Pavlovian HR–decelerative conditioning with negative tilt as US: evidence of vagal and sympathetic influences on the UR in dogs. Furedy JJ, et al. **Int J Psychophysiol** 1989 Mar;7(1):25–33

Sympathoadrenergic influence on hormonal, metabolic, and cardiovascular functions during exercise. **Int J Sports Med** 1988 Aug;9 Suppl 2:S65–150

Cardiopulmonary baroreflexes fail to modulate sympathetic responses during isometric exercise in humans: direct evidence from microneurographic studies. Sanders JS, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1241–51

Measurement of sympathetic nerve activity in the unanesthetized rat. Flückiger JP, et al. **J Appl Physiol** 1989 Jul;67(1):250–5

Analysis of responses to sympathetic nerve stimulation in the feline pulmonary vascular bed. Hyman AL, et al. **J Appl Physiol** 1989 Jul;67(1):371–6

Sympathetic nerve activity in arm and leg muscles during lower body negative pressure in humans. Rea RF, et al. **J Appl Physiol** 1989 Jun;66(6):2778–81

Hypoxemia raises muscle sympathetic activity but not norepinephrine in resting humans. Rowell LB, et al. **J Appl Physiol** 1989 Apr;66(4):1736–43

Sympathetic activation is associated with increases in EMG during fatiguing exercise. Seals DR, et al. **J Appl Physiol** 1989 Jan;66(1):88–95

Plasma norepinephrine and muscle sympathetic discharge during rhythmic exercise in humans. Seals DR, et al. **J Appl Physiol** 1988 Aug;65(2):940–4

Sympathetic neural discharge and vascular resistance during exercise in humans. Seals DR. **J Appl Physiol** 1989 May; 66(5):2472–8

Preganglionic sympathetic neurones innervating the rat adrenal medulla: immunocytochemical evidence of synaptic input from nerve terminals containing substance P, GABA or 5–hydroxytryptamine. Bacon SJ, et al. **J Auton Nerv Syst** 1988 Sep;24(1–2):97–122 (110 ref.)

Evidence that blood vessels in guinea–pig lung are supplied by both noradrenergic and dopaminergic axons. Bakhle YS, et al. **J Auton Nerv Syst** 1989 Mar;26(2):169–75

Sympathetic terminal mediation of the acute cardiovascular response of gamma 2–MSH. Callahan MF, et al. **J Auton Nerv Syst** 1988 Sep;24(1–2):179–82

Adrenergic and VIP–ergic relaxatory mechanisms of the feline extrahepatic biliary tree. Dahlstrand C, et al. **J Auton Nerv Syst** 1989 Mar;26(2):97–106

Sympathetic nerve fibers in peripheral sensory and motor nerves in the face of the rat. Johansson K, et al. **J Auton Nerv Syst** 1988 Jun;23(1):83–6

Reflex increase in renal nerve activity during acutely altered portal venous pressure. Koyama S, et al. **J Auton Nerv Syst** 1988 Jun;23(1):55–62

Effects of neuropeptide Y on the renal, mesenteric and hindlimb vascular beds of the conscious rabbit. Minson R, et al. **J Auton Nerv Syst** 1989 Jul;27(2):139–46

Evidence that neuropeptide Y released from noradrenergic axons causes prolonged contraction of the guinea–pig uterine artery. Morris JL, et al. **J Auton Nerv Syst** 1988 Oct;24(3):241–9

Tonic descending inhibition of the spinal cardio–sympathetic reflex in the cat. Müller UW, et al. **J Auton Nerv Syst** 1988 Aug;23(2):111–23

Comparison of resting and stimulus–evoked catecholamine release from the femoral and renal vascular beds of the dog. Petrovic T, et al. **J Auton Nerv Syst** 1988 Dec; 25(2–3):195–203

Effects of middle cerebral artery occlusion on baroreceptor reflex control of heart rate in the rat. Saad MA, et al. **J Auton Nerv Syst** 1989 Jul;27(2):165–72

Effects of activating spinal alpha–adrenoreceptors on sympathetic nerve activity in the rat. Shi H, et al. **J Auton Nerv Syst** 1988 Jun;23(1):69–78

Evidence for a sympathoexcitatory pathway from the nucleus tractus solitarii to the ventrolateral medullary pressor area. Urbanski RW, et al. **J Auton Nerv Syst** 1988 Aug; 23(2):161–74

Spinal sympathetic conduction velocity in humans. Wallin BG, et al. **J Auton Nerv Syst** 1988 Oct;24(3):221–5

Patterns of activity in sympathetic postganglionic nerves to skeletal muscle, skin and kidney during stimulation of the medullary raphe area of the rat. Yusof AP, et al. **J Auton Nerv Syst** 1988 Sep;24(1–2):71–9

Different receptor subtypes mediate the dual presynaptic effects of 5–hydroxytryptamine on peripheral sympathetic neurones. Adler–Graschinsky E, et al. **J Auton Pharmacol** 1989 Feb;9(1):3–13

Enhanced presynaptic facilitation of vascular adrenergic neurotransmission in spontaneously hypertensive rats. Draper AJ, et al. **J Auton Pharmacol** 1989 Apr;9(2):103–11

Functional studies on the cholinergic and sympathetic innervation of the rat proximal urethra: effect of pelvic ganglionectomy or experimental diabetes. Maggi CA, et al. **J Auton Pharmacol** 1989 Aug;9(4):231–41

Vascular smooth muscle responses in normo– and hypertensive rats to sympathetic nerve stimulation and putative transmitters. Muir TC, et al. **J Auton Pharmacol** 1989 Feb;9(1):23–34

Adrenergic influences on ischemic and reperfusion arrhythmias in a canine model with diminished collateral blood flow. Euler DE, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):430–7

Cardiovascular responses induced by intrathecal substance P in the conscious freely moving rat. Hassésian H, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):594–602

Sympathetic stimulation of ischemic myocardium: role of plasma free fatty acids and potassium. Opie LH **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S31–8 (33 ref.)

Alpha–adrenoceptor influence on plasma levels of neuropeptide Y–like immunoreactivity and catecholamines during rest and sympathoadrenal activation in humans. Pernow J, et al. **J Cardiovasc Pharmacol** 1988;12(5):593–9

Sympathetic nerve discharge is coupled to muscle cell pH during exercise in humans [published erratum appears in J Clin Invest 1988 Dec;82(6):following 2181] Victor RG, et al. **J Clin Invest** 1988 Oct;82(4):1301–5

Development of prejunctional alpha 2 adrenergic receptor mediated feedback control of the pressor response to sympathetic nerve stimulation in hypertensive and normotensive rats. Mills E, et al. **J Dev Physiol** 1988 Dec; 10(6):567–76

Trophic control of lung development by sympathetic neurons: effects of neonatal sympathectomy with 6–hydroxydopamine. Slotkin TA, et al. **J Dev Physiol** 1988 Dec;10(6):577–90

Activation of the adrenal cortex or the peripheral sympatho–adrenomedullary system does not necessarily influence milk ejection in the rat. Lau C. **J Endocrinol** 1988 Sep;118(3):399–405

A functional study of the development of the cardiac sympathetic neuroeffector junction in the SHR. Dyke AC, et al. **J Hypertens** 1989 May;7(5):345–53

Sympathetic and parasympathetic influence on blood pressure and heart rate variability in Wistar–Kyoto and spontaneously hypertensive rats. Friberg P, et al. **J Hypertens Suppl** 1988 Dec;6(4):S58–60

Involvement of neuropeptide Y in sympathetic vascular control of skeletal muscle in vivo. Kahan T, et al. **J Hypertens Suppl** 1988 Dec;6(4):S532–4

Sympathetically mediated vasoconstriction is augmented by angiotensin II in man. Webb DJ, et al. **J Hypertens Suppl** 1988 Dec;6(4):S542–3

Sympathetic nerves modify mitochondrial and capillary growth in normotensive and hypertensive rats. Tomanek RJ. **J Mol Cell Cardiol** 1989 Aug;21(8):755–64

Neither the pituitary gland nor the sympathetic nervous system is responsible for eliciting the large drop in elevated rat pineal melatonin levels due to swimming. Troiani ME, et al. **J Neural Transm** 1988;74(3):149–60

Lateral tegmental field neurons of cat medulla: a source of basal activity of raphespinal sympathoinhibitory neurons. Barman SM, et al. **J Neurophysiol** 1989 May;61(5):1011–24

Distribution and phosphorylation of the growth–associated protein GAP–43 in regenerating sympathetic neurons in culture. Meiri KF, et al. **J Neurosci** 1988 Jul;8(7):2571–81

On the mechanism involved in the ability of meptazinol to potentiate the effects of sympathetic nerve stimulation. el–Mas M, et al. **J Pharm Pharmacol** 1989 Apr;41(4):242–6

A possible crossed histamine–containing pathway adjacent to the sympathetic system of the rat vas deferens. Campos HA. **J Pharmacol Exp Ther** 1988 Mar;244(3):1121–7

Effects of neuropeptide Y on the response of isolated blood vessels to norepinephrine and sympathetic field stimulation. Hieble JP, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):523–8

Defective modulation of noradrenergic neurotransmission by endogenous prostaglandins in aging spontaneously hypertensive rats. Jackson EK. **J Pharmacol Exp Ther** 1989 Jul;250(1):9–21

Inhibition of vagal transmission by cardiac sympathetic nerve stimulation in the dog: possible involvement of opioid receptor. Koyanagawa H, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1092–6

Effects of opioid agonists on sympathetic and parasympathetic transmission to the dog heart. Musha T, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1087–91

Time course of transmitter action at the sympathetic neuroeffector junction in rodent vascular and non–vascular smooth muscle. Astrand P, et al. **J Physiol (Lond)** 1988 Jul;401:657–70

Dependence of non–adrenergic inhibition of cardiac vagal action on peak frequency of sympathetic stimulation in the dog. Gardner TD, et al. **J Physiol (Lond)** 1988 Nov; 405:115–22

The functional significance of the sympathetic innervation of mucous glands in the bronchi of man. Pack RJ, et al. **J Physiol (Lond)** 1988 Sep;403:211–9

Dynamic study of nervous control on prostatic contraction and fluid excretion in the dog. Watanabe H, et al. **J Urol** 1988 Dec;140(6):1567–70

Central and peripheral mechanisms of the enhanced hypertension following long–term salt loading in spontaneously hypertensive rats. Takata Y, et al. **Jpn Circ J** 1988 Nov;52(11):1317–22

Adrenergic function and the development of analgesic tolerance to morphine. Kihara T, et al. **Jpn J Pharmacol** 1989 Aug;50(4):397–401

High threshold aortic baroreceptors afferents in the sympathetic nerve of monkey. Koley B, et al. **Jpn J Physiol** 1989;39(1):145–53

Effects of baroceptor reflex on cardiac and renal sympathetic nerve activity before and after atropinization in awake cats at rest. Ninomiya I, et al. **Jpn J Physiol** 1988;38(4):491–506

Adrenergic control of cAMP generation in rat inner medullary collecting tubule cells. Teitelbaum I, et al. **Kidney Int** 1989 Feb;35(2):647–53

Facilitation of nicotinic acetylcholine responses during the late slow EPSP in a subpopulation of bullfrog sympathetic neurons. Hasuo H, et al. **Kurume Med J** 1988;35(1):43–8

Sympathoadrenomedullary hyper–responsiveness to yohimbine in juvenile spontaneously hypertensive rats. Szemeredi K, et al. **Life Sci** 1988;43(13):1063–8

Cholinergic phenotype developed by noradrenergic sympathetic neurons after innervation of a novel cholinergic target in vivo. Schotzinger RJ, et al. **Nature** 1988 Oct 13;335(6191):637–9

Evidence that a substance P–like peptide mediates the non–cholinergic excitatory response of the carp intestinal

bulb (Cyprinus carpio). Kitazawa T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):68–73

Probable involvement of vascular angiotensin II formation in the beta 2-adrenoceptor-mediated facilitation of the neurogenic vasopressor response in the pithed rat. Schlicker E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):536–42

alpha-Fluoromethylhistidine decreases the histamine content of the rat right atrium under the influence of sympathetic activity. Yoshitomi I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):528–32

Plasma levels of catechols during reflexive changes in sympathetic nerve activity. Garty M, et al. **Neurochem Res** 1989 Jun;14(6):523–31

Effect of CH-38083, a selective antagonist of alpha 2-adrenoceptors, on renal sympathetic function. Dóda M, et al. **Neuropharmacology** 1989 Feb;28(2):135–40

Failure of non-adrenergic transmission in the rat vas deferens. Ebong OO, et al. **Neuropharmacology** 1989 Apr; 28(4):335–41

Pharmacological evidence that the sympathetic nervous system mediates the increase in renin secretion produced by immobilization and head-up tilt in rats. Golin RM, et al. **Neuropharmacology** 1988 Dec;27(12):1209–13

Modulation of sympathetic discharge by a hypothalamic GABAergic mechanism. Waldrop TG, et al. **Neuropharmacology** 1989 Mar;28(3):263–9

The effects of phenylpropanolamine on human sympathetic nervous system function. Lake CR, et al. **Neuropsychopharmacology** 1988 May;1(2):163–8

Sympathetic nerve activity during VVI and DDD pacing [letter] Pehrsson SK, et al. **PACE** 1989 May;12(5):877

Cardiac vagal and sympathetic nerve responses to baroreceptor stimulation in the dog. Kollai M, et al. **Pflugers Arch** 1989 Feb;413(4):365–71

Agonists at presynaptic receptors on sympathetic nerves differentially affect two phases of the contractile response in the rat vas deferens. Mottram DR. **Pharmacol Res Commun** 1988 Nov;20(11):963–73

Plasma catecholamines as markers for sympatho-adrenal activity in human primary hypertension. Hjemdahl P. **Pharmacol Toxicol** 1988;63 Suppl 1:27–31 (20 ref.)

Relationship between sympathetic nerve traffic and plasma concentrations of noradrenaline in man. Wallin BG. **Pharmacol Toxicol** 1988;63 Suppl 1:9–11

Liver phosphorylase activation during early phase of feeding behavior: a neurohumoral regulation. Hell NS, et al. **Physiol Behav** 1988;43(3):383–7

Sympathetic neuroeffector transmission in arteries and arterioles. Hirst GD, et al. **Physiol Rev** 1989 Apr; 69(2):546–604 (263 ref.)

The Ferrier lecture, 1986. The actions of parasympathetic and sympathetic nerves in human micturition, erection and seminal emission, and their restoration in paraplegic patients by implanted electrical stimulators. Brindley GS. **Proc R Soc Lond [Biol]** 1988 Nov 22;235(1279):111–20 (21 ref.)

Kinetics of adenosine antagonism of sympathetic nerve induced vasoconstriction. Lockhart LK, et al. **Proc West Pharmacol Soc** 1988;31:105–7

Differences between Ca2+- and Sr2+-activated gK+ in bullfrog sympathetic neurons. Riker WK, et al. **Proc West Pharmacol Soc** 1988;31:1–3

Differences in adrenergic stimulated lipolysis in rat and human adipose tissue. Skaggs S, et al. **Proc West Pharmacol Soc** 1989;32:151–3

Sympathetic-vagal interactions in the sinus and atrioventricular nodes. Levy MN. **Prog Clin Biol Res** 1988; 275:187–97 (22 ref.)

Behavioral effects of (+-) 3,4-methylenedioxyamphetamine (MDA) and (+-) 3,4-methylenedioxymethamphetamine (MDMA) in the pigeon: interactions with noradrenergic and serotonergic systems. Nader MA, et al. **Psychopharmacology (Berlin)** 1989;98(2):183–8

Advantages of burst stimulation for inducing sympathetic salivary secretion in rats. Anderson LC, et al. **Q J Exp Physiol** 1988 Nov;73(6):1025–8

Physical exercise provokes platelet desensitization in men who smoke cigarettes—involvement of sympathoadrenergic mechanisms—a study of monozygotic twin pairs discordant for smoking. Lassila R, et al. **Thromb Res** 1988 Jul 15;51(2):145–55

Sympathetic purinergic transmission in small blood vessels. Burnstock G. **Trends Pharmacol Sci** 1988 Apr;9(4):116–7 (25 ref.)

Physiology of the adrenal medulla. Tsapatsaris NP, et al. **Urol Clin North Am** 1989 Aug;16(3):439–45 (30 ref.)

Neurophysiology of penile erection. Jünemann KP, et al. **Urol Res** 1989;17(4):213–7

[Inhibition of renal sympathetic efferent activities induced by stimulation of the paraventricular nucleus of the hypothalamus(PVH) in rabbits] Fu WJ, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):111–9 (Eng. Abstr.) (Chi)

[Influence of stimulation of the skin receptive field on evoked discharges of the polymodal nociceptors in rats] Hu SJ, et al. **Sheng Li Hsueh Pao** 1988 Oct;40(5):437–43 (Eng. Abstr.) (Chi)

[Sympathicus stimulates gastrin release in vagotomized rats] Qian W, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):390–4 (Eng. Abstr.) (Chi)

[Change of sympathetic efferent discharges in different regions during the Bezold-Jarisch reflex in rabbit] Sun SY, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):85–90 (Eng. Abstr.) (Chi)

[The effects of cerebellar fastigial stimulation on blood pressure and renal sympathetic nerve activity] Tong G, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):356–64 (Eng. Abstr.) (Chi)

[Effect of cardiac sympathetic nerves on changes of TXB2 and 6-keto-PGF1 alpha in venous blood of ischemic myocardium] Zhao ZQ, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):30–9 (Eng. Abstr.) (Chi)

[Effects of endogenous opiate substances on the sympathoadrenal medullar system in shock] Liu TE, et al. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):366–9 (44 ref.) (Chi)

[Peripheral interaction of the sympathetico-vagal nerves on the heart function] Yang TE. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):213–7 (46 ref.) (Chi)

[Neurotransmission and the lower urinary tract] Jurascheck F. **Ann Urol (Paris)** 1988;22(5):309–20 (180 ref.) (Eng. Abstr.) (Fre)

[Implication of spinal catecholaminergic pathways in sympathetic pressor responses] Elghozi JL, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:267–70 (Eng. Abstr.) (Fre)

[Blood pressure lability in the sympathectomized rat] Julien C, et al. **C R Acad Sci [III]** 1989;308(8):219–22 (Eng. Abstr.) (Fre)

[Lymph mobilization] Froneberg W, et al. **Z Lymphol** 1989 Jul;13(1):39–41 (25 ref.) (Eng. Abstr.) (Ger)

[The effect of halothane on the somato-sympathetic reflex] Saeki S, et al. **Masui** 1988 Dec;37(12):1518–28 (Eng. Abstr.) (Jpn)

[Sympathetic skin response as an objective indicator of sympathetic activity] Shimoda O, et al. **Masui** 1989 Jan; 38(1):27–32 (Eng. Abstr.) (Jpn)

[Experimental studies on sympathetic innervation of lower urinary tract. Quantitation of nerve terminals and urethral pressure response after hypogastric denervation] Park YC, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr; 80(4):569–73 (Eng. Abstr.) (Jpn)

[Effects of low calorie regimen in blood pressure of obese hypertensive subjects: relation to sympathetic activity] Koyama K, et al. **Nippon Jinzo Gakkai Shi** 1988 Aug; 30(8):1047–52 (Eng. Abstr.) (Jpn)

[The effects of the intracerebroventricular administration of cimetidine on hemodynamics in conscious rats: relation to the sympathetic nervous system] Ishizaki M, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 May 20;65(5):473–82 (Eng. Abstr.) (Jpn)

[Physiological significance of plasma free and conjugated dopamine in healthy volunteers—with special reference to sympathetic nerve activity] Nishimura M, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jun 20;64(6):506–13 (Eng. Abstr.) (Jpn)

[Studies on the regulation mechanism for sympathetic nervous system activity—using hypothalamic obese mice] Nishioka H, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jul 20;64(7):554–63 (Eng. Abstr.) (Jpn)

[The influence of increased uterine resting tonus on renal sympathetic nerve activity in pregnant rabbit] Kitanaka T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun; 41(6):639–46 (Eng. Abstr.) (Jpn)

[Studies on renal sympathetic nerve activity related to the existence of a utero-renal reflex in pregnant rabbit] Kitanaka T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):669–75 (Eng. Abstr.) (Jpn)

[Role of cardiac nerves in determination and modulation of blood pressure oscillation pattern] Kaneko M. **Nippon Seirigaku Zasshi** 1988;50(10):684–95 (Eng. Abstr.) (Jpn)

[Experimental cerebral vasospasm induced by oxyhemoglobin and the sympathetic nervous system (Part 1): Effect of alpha-adrenergic receptor blockers] Iwai R, et al. **No To Shinkei** 1988 Jun;40(6):547–52 (Eng. Abstr.) (Jpn)

[Experimental cerebral vasospasm induced by oxyhemoglobin and the sympathetic nervous system (Part 2): An investigation into denervation supersensitivity] Iwai R, et al. **No To Shinkei** 1988 Jul;40(7):603–8 (Eng. Abstr.) (Jpn)

[The sympathetico-adrenal, hypophyseo-adrenal and kallikrein-kinin systems in the regulation of hemodynamics during normovolemic hemodilution] Sergeeva NA, et al. **Anesteziol Reanimatol** 1988 Nov-Dec;(6):16–9 (Eng. Abstr.) (Rus)

[Comparative analysis of the efficacy of sympathetic effects on resistive vessels in spontaneously hypertensive and normotensive rats undergoing perfusion at a constant flow rate and under constant pressure] Rodionov IM, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):645–8 (Eng. Abstr.) (Rus)

[Interrelation of the sympatho-adrenal and hypothalamo-hypophyseo-adrenal system and sports results (correlation analysis)] Shrelberg GL, et al. **Fiziol Cheloveka** 1989 Mar-Apr;15(2):108–14 (Rus)

[Characteristics of thermograms of the skin of the anterior surface of the trunk in persons with various tonus of the sympathetic and parasympathetic nervous system] Andreichin MA, et al. **Fiziol Zh** 1989 Mar-Apr;35(2):57–61 (Eng. Abstr.) (Rus)

[Electrical activity of the cardiac and vertebral sympathetic nerves with cardiogenic depressor reflexes] Shaban VM, et al. **Fiziol Zh** 1988 Nov-Dec;34(6):102–5 (Eng. Abstr.) (Rus)

[Comparative study of the discharges of sympathetic and parasympathetic nerves during stimulation of the visceral field of the limbic cortex] Baklavadzhian OG, et al. **Fiziol Zh SSSR** 1989 Feb;75(2):161–70 (Eng. Abstr.) (Rus)

[Interrelations of macro- and microhemodynamics and lymph outflow in the cat liver during stimulation of the hepatic nerves] Kostiushina NV, et al. **Fiziol Zh SSSR** 1989 Mar;75(3):359–66 (Eng. Abstr.) (Rus)

[The blood supply and oxygen balance of the different tissues of the extremities following experimental sympathectomy] Prokhorov GG. **Fiziol Zh SSSR** 1988 Oct;74(10):1447–53 (Eng. Abstr.) (Rus)

[Dependence of the prostaglandin level of the adrenals on efferent sympathetic activity] Solttanov VV, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):1037–40 (Rus)

[The heart and catecholamines from the viewpoint of the adaptive-trophic function of the sympathetico-adrenal system] Kiseleva ZM. **Kardiologiia** 1988 Aug;28(8):10–4 (Eng. Abstr.) (Rus)

[Study of the activity of various systems of neurohumoral body regulation and ways of its correction in an arid area] Davydova NA, et al. **Kosm Biol Aviakosm Med** 1989 Jan-Feb;23(1):56–61 (Eng. Abstr.) (Rus)

[Activity of the sympathetico-adrenal system in humans during modeling of weightlessness] Vasil'ev VN, et al. **Kosm Biol Aviakosm Med** 1989 Mar-Apr;23(2):34–40 (Eng. Abstr.) (Rus)

[Dynamics of postnatal histogenesis of the thyroid in normal rats and after sympathectomy] Riashchikov SN, et al. **Ontogenez** 1988 May-Jun;19(3):258–63 (Eng. Abstr.) (Rus)

[The sympathetic nervous system and body temperature regulation in endothermic animals] Gurin VN. **Usp Fiziol Nauk** 1989 Apr-Jun;20(2):3–25 (135 ref.) (Rus)

[The noncholinergic-nonadrenergic nervous system] Bauer V. **Cesk Fysiol** 1986;35(5):399–413 (76 ref.) (Slo)

PHYSIOPATHOLOGY

Relationship between sagittal sinus pressure and cerebrospinal fluid pressure during sympathetic stimulation, hypoxia and hypercapnia in the rat. Pinardi G, et al. **Acta Cient Venez** 1987;38(3):386–7

Sympathoadrenal medullary system and stress. Kopin IJ, et al. **Adv Exp Med Biol** 1988;245:11–23 (27 ref.)

The relationship of the sympathetic nervous system and the renin-angiotensin system in congestive heart failure. Francis GS. **Am Heart J** 1989 Sep;118(3):642–8 (58 ref.)

Altered sympathetic system and adrenoceptors during the development of cardiac hypertrophy. Ganguly PK, et al. **Am Heart J** 1989 Sep;118(3):520–5

Electrophysiologic alterations produced by hypoxia in the canine heart. Krause PC, et al. **Am Heart J** 1989 Mar; 117(3):550–61

Differential effect of nicotine on plasma norepinephrine levels in normal humans and in patients with congestive heart failure. Goldsmith SR, et al. **Am J Cardiol** 1989 Jan 1; 63(1):122–3

Altered ventricular repolarization in central sympathetic dysfunction associated with spinal cord injury. Lehmann KG, et al. **Am J Cardiol** 1989 Jun 15;63(20):1498–504

Symposium. Blood pressure mechanisms and the sympathetic nervous system. June 20, 1988, New York. Proceedings. **Am J Hypertens** 1989 Mar;2(3 Pt 2):101S–52S

Sympathetic nervous system influences on the kidney. Role in hypertension. DiBona GF. **Am J Hypertens** 1989 Mar; 2(3 Pt 2):119S–124S (35 ref.)

Sympathetic nervous control of blood pressure. Role in primary hypertension. Folkow B. **Am J Hypertens** 1989 Mar;2(3 Pt 2):103S–111S (45 ref.)

Facilitatory effects of ouabain and digitalis-like substance on adrenergic transmission in hypertension. Tsuda K, et al. **Am J Hypertens** 1989 Jun;2(6 Pt 1):465–7

Sympathetic augmentation of cardiac function in developing hypertension in conscious dogs. Gelpi RJ, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1525–34

Regional venous outflow, blood volume, and sympathetic nerve activity during severe hypoxia. Hoka S, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H162–70

Two-phase change of sympathetic rhythms in brain ischemia, Cushing reaction, and asphyxia. Kocsis B, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R120–32

Renal sympathetic nerve activity and natriuresis during water immersion in conscious dogs. Miki K, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R299–305

Role of renal nerves in control of sodium excretion in chronic congestive heart failure. Mizelle HL, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F1084–93

Effects of hypertension and sympathetic denervation on cerebral blood flow in newborn pigs. Fletcher AM, et al. **Am J Vet Res** 1989 May;50(5):754–7

Forearm vascular tone and reactivity during lumbar epidural anesthesia. Baron JF, et al. **Anesth Analg** 1988 Nov; 67(11):1065–70

The effect of advancing age on the sympathetic response to laryngoscopy and tracheal intubation. Bullington J, et al. **Anesth Analg** 1989 May;68(5):603–8

Sufentanil does not block sympathetic responses to surgical stimuli in patients having coronary artery revascularization surgery. Sonntag H, et al. **Anesth Analg** 1989 May; 68(5):584–92

Profound sympathoinhibition complicating hypovolemia in humans. Sanders JS, et al. **Ann Intern Med** 1989 Sep 1; 111(5):439–41

A comparison of sympathoadrenal activity and cardiac performance at rest and during exercise in patients with ventricular demand or atrial synchronous pacing. Pehrsson SK, et al. **Br Heart J** 1988 Sep;60(3):212–20

Participation of the sympathetic system in acetic acid–induced writhing in mice. Duarte ID, et al. **Braz J Med Biol Res** 1988;21(2):341–3

Observations on the hypoxic depression of sympathetic discharge in sinoaortic–denervated cats. Rohlicek CV, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):413–8

Dysfunction of the sympathetic nervous system in cluster headache. Drummond PD. **Cephalalgia** 1988 Sep;8(3):181–6

Differential control of adrenal and renal sympathetic nerve activity during hemorrhagic hypotension in rats. Victor RG, et al. **Circ Res** 1989 Apr;64(4):686–94

Importance of aortic baroreflex in regulation of sympathetic responses during hypotension. Evidence from direct sympathetic nerve recordings in humans. Sanders JS, et al. **Circulation** 1989 Jan;79(1):83–92

Sympathetic vasoconstriction during exercise in ambulatory patients with left ventricular failure. Wilson JR, et al. **Circulation** 1989 May;79(5):1021–7

A rare case of recurrent vasodepressive attacks of 2–hours duration: analysis of the mechanism by muscle sympathetic nerve activity recording. Yatomi A, et al. **Clin Cardiol** 1989 Mar;12(3):164–8

Sympathetic function and human hypertension. Satellite symposium of the 12th scientific meeting of the International Society of Hypertension. Sapporo, Japan, May 29–30, 1988. Proceedings. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:1–458

The sympatho–adrenal tone and reactivity in human hypertension. de Champlain J, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:159–71 (29 ref.)

Salt sensitivity in human essential hypertension: effect of renin–angiotensin and sympathetic nervous system blockade. Dichtchekenian V, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:379–87

Pharmacologic and tracer methods to study sympathetic function in primary hypertension. Goldstein DS, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:173–89

Pathophysiological significance of sympathetic function in essential hypertension. Iimura O. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:103–15 (20 ref.)

Blood pressure and sympathetic activity following responses to aerobic exercise in patients with essential hypertension. Jo Y, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:411–7

Neurogenic abnormalities in young borderline hypertensives. Miyajima E, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:209–23

Increased sympathetic nerve activity at home in young subjects with hypertension. Saito I, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:389–95

Sympathetic nervous function and erythrocyte cation transport systems in normotensive individuals with family history of hypertension. Saito T, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:353–61

Sympathetic activation by hypoxia and hypercapnia—implications for sleep apnea. Somers VK, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:413–22 (23 ref.)

Effects of ketanserin, verapamil and diltiazem on vascular sympathetic nerve activity in hypertension. Tsuda K, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:435–40

Neural influences on the pulmonary vascular bed in man. Moruzzi P, et al. **Clin Sci** 1989 Apr;76(4):363–8

Pitfalls in the assessment of cardiovascular reflexes in patients with sympathetic failure but intact vagal control. van Lieshout JJ, et al. **Clin Sci** 1989 May;76(5):523–8

Association between renal and sympathetic responses to nonhypotensive systemic sepsis. Cumming AD, et al. **Crit Care Med** 1988 Nov;16(11):1132–7

Sympathetic skin response in diabetic neuropathy. Watahiki Y, et al. **Electromyogr Clin Neurophysiol** 1989 Apr; 29(3):155–9

Sympathetic nervous system derived trophic factor augments growth of human neuroblastoma in vitro. Chelmicka–Schorr E, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):393–4

Neurogenic urethra: clinical relevance of isolated neuropathic dysfunction of the urethra, and the denervation supersensitivity of the urethra revisited. Koyanagi T, et al. **Ear Urol** 1988;15(1–2):77–83

Evaluation of the vagal–sympathetic interaction in diabetics with autonomic neuropathy through power spectrum density analysis of the heart rate. A critical revision of the natural history of diabetic autonomic neuropathy is possible. Bellavere F, et al. **Funct Neurol** 1989 Apr–Jun; 4(2):177–81

Increased sympathetic tone in the left arm of patients affected by symptomatic myocardial ischemia. Casale R, et al. **Funct Neurol** 1989 Apr–Jun;4(2):161–3

Disordered sympathetic reactivity in menstrual migraine. A cardiopressor and biochemical evaluation. Cavallini A, et al. **Funct Neurol** 1989 Jan–Mar;4(1):85–9

Sympathetic skin response in chronic renal failure and correlation with sensorimotor neuropathy. Dellantonio R, et al. **Funct Neurol** 1989 Apr–Jun;4(2):173–5

Sensitized nociceptors in reflex sympathetic dystrophies. Marchettini P, et al. **Funct Neurol** 1989 Apr–Jun; 4(2):135–40 (28 ref.)

The sympathetic system and pain. Nathan PW. **Funct Neurol** 1989 Jan–Mar;4(1):11–5 (4 ref.)

Algodystrophy: pathophysiological considerations. Restelli L, et al. **Funct Neurol** 1989 Apr–Jun;4(2):149–51 (21 ref.)

Clinical features of algodystrophy: is the sympathetic nervous system involved? Schott G. **Funct Neurol** 1989 Apr–Jun; 4(2):131–4 (19 ref.)

Cardiovascular sympathetic hypofunction in muscle contraction headache and migraine. Mikamo K, et al. **Headache** 1989 Feb;29(2):86–9

The pericarotid region and cluster headache [letter] Vijayan N, et al. **Headache** 1989 Mar;29(3):189

Primary hypertension: left ventricular mass and function, sympathetic nervous system activity, and therapy. DeQuattro V, et al. **Health Psychol** 1988;7 Suppl:165–73

Differential development of vascular and cardiac hypertrophy in genetic hypertension. Relation to sympathetic function. Adams MA, et al. **Hypertension** 1989 Aug;14(2):191–202

Elevated sympathetic nerve activity in borderline hypertensive humans. Evidence from direct intraneural recordings. Anderson EA, et al. **Hypertension** 1989 Aug; 14(2):177–83

Postexercise hypotension and sympathoinhibition in borderline hypertensive men. Floras JS, et al. **Hypertension** 1989 Jul;14(1):28–35

Age–related changes in muscle sympathetic nerve activity in essential hypertension. Yamada Y, et al. **Hypertension** 1989 Jun;13(6 Pt 2):870–7

Study of neurotropic influences in vitiligo. Kaur A, et al. **Indian J Dermatol** 1988 Jul;33(3):33–6

Renin–angiotensin modulation of sympathetic reflex function in essential hypertension and in the elderly. Ajayi AA, et al. **Int J Clin Pharmacol Res** 1988;8(5):327–33

Ventricular premature beats and sympathetic nerve activity [letter] Floras JS. **J Am Coll Cardiol** 1989 Jun;13(7):1693–4

Enhancement of sympathetic nerve activity by single premature ventricular beats in humans. Welch WJ, et al. **J Am Coll Cardiol** 1989 Jan;13(1):69–75

Does acute hypoxemia blunt sympathetic activity in hyperthermia? Rowell LB, et al. **J Appl Physiol** 1989 Jan; 66(1):28–33

Responses in muscle sympathetic activity to acute hypoxia in humans. Saito M, et al. **J Appl Physiol** 1988 Oct; 65(4):1548–52

Effects of vasomotor– and mediator–induced hypotension on bronchomotor tone in swine. White SR, et al. **J Appl Physiol** 1989 Apr;66(4):1852–9

Plasma lipoproteins, cardiovascular reactivity and the sympathetic nervous system. Howes LG, et al. **J Auton Pharmacol** 1989 Aug;9(4):293–301 (54 ref.)

Selective suppression of pressor and sympathetic responses to centrally infused TRH in hypothyroid rats. Buñag RD, et al. **J Cardiovasc Pharmacol** 1988 Jul;12(1):51–7

Sympathetic hyperactivity in early stages of hypertension: the Ann Arbor data set. Julius S, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 3:S121–9 (40 ref.)

Vascular reactivity, adrenergic mechanisms, and arteriolar resistance in hypertension. Reid JL. **J Cardiovasc Pharmacol** 1988;12 Suppl 3:S114–20 (62 ref.)

Adrenergic mechanisms in myocardial infarction: cardiac and systemic catecholamine release. Schömig A. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S1–7 (41 ref.)

Pancreatic noradrenergic nerves are activated by neuroglucopenia but not by hypotension or hypoxia in the dog. Evidence for stress–specific and regionally selective activation of the sympathetic nervous system. Havel PJ, et al. **J Clin Invest** 1988 Nov;82(5):1538–45

Pathophysiology of sympathoadrenal system. Giorgino R. **J Endocrinol Invest** 1988 Dec;11(11):817–29 (139 ref.)

Impaired sympathetic nervous system response to cognitive effort in early Alzheimer's disease. Borson S, et al. **J Gerontol** 1989 Jan;44(1):M8–12

Enhanced sympathoadrenal reactivity to haemorrhagic stress in DOCA–salt hypertensive rats. Drolet G, et al. **J Hypertens** 1989 Mar;7(3):237–42

Sympathetic predominance in essential hypertension: a study employing spectral analysis of heart rate variability. Guzzetti S, et al. **J Hypertens** 1988 Sep;6(9):711–7

Attenuated cardiovascular and sympathetic nerve responses to aortic nerve stimulation in DOCA–salt hypertensive rats. Takeda K, et al. **J Hypertens** 1988 Jul;6(7):559–63

Participation of the sympathetic nervous system in hypertension in rats with subtotal renal ablation. Yuhara M, et al. **J Hypertens** 1989 Jun;7(6):443–6

Sympathetic activity in borderline and established hypertension in the elderly. Cerasola G, et al. **J Hypertens Suppl** 1988 Nov;6(1):S55–8

Is high and fluctuating muscle nerve sympathetic activity in the sleep apnoea syndrome of pathogenetic importance for the development of hypertension? Hedner J, et al. **J Hypertens Suppl** 1988 Dec;6(4):S529–31

Angiotensin II inhibits baroreflex control of muscle sympathetic nerve activity and the heart rate in patients with essential hypertension. Matsukawa T, et al. **J Hypertens Suppl** 1988 Dec;6(4):S501–4

Relationship between the sympathetic nervous system and sodium potassium adenosine triphosphatase inhibitor in salt–sensitive patients with essential hypertension. Nishio I, et al. **J Hypertens Suppl** 1988 Dec;6(4):S216–8

Sympathetic nervous system response to mechanical stress of the spinal column in rats [letter] Jarmel ME. **J Manipulative Physiol Ther** 1989 Jun;12(3):242–3

Altered responsiveness to sympathetic nerve stimulation and agonists of isolated left atria of diabetic rats: no evidence for involvement of hypothyroidism. Sato N, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):367–71

Influence of endogenous opiates and cardiac afferents on renal nerve activity during haemorrhage in conscious rabbits. Burke SL, et al. **J Physiol (Lond)** 1988 Aug; 402:9–27

Interaction between sympathetic nerve activity and atrial natriuretic peptide with respect to the effects on renal hemodynamics in patients with cardiovascular diseases. Hirata Y, et al. **Jpn Circ J** 1989 May;53(5):446–52

Evidence for increased sympatho–adrenomedullary activity in young subjects with borderline hypertension. Ito Y, et al. **Jpn Circ J** 1988 Nov;52(11):1326–34

Evidence in volume–dependent hypertension for an augmenting factor for norepinephrine overflow from sympathetic nerve endings. Shima H, et al. **Jpn Circ J** 1988 Nov;52(11):1277–85

Inhibition of adrenergic transmission by methionine– and leucine–enkephalins is impaired in the mesenteric vasculatures of spontaneously hypertensive rats. Tsuda K, et al. **Jpn Circ J** 1989 Mar;53(3):255–60

Relationship between cardiac function and the sympathetic nervous system during exercise in patients with essential hypertension. Yasuda M, et al. **Jpn Circ J** 1988 Oct; 52(10):1121–31

Relation of sodium–potassium adenosine triphosphatase inhibitor to sympathetic nervous system during salt–loading in essential hypertension. Shima H, et al. **Jpn J Med** 1989 Mar–Apr;28(2):165–9

Update on renal neurology: role of the renal nerves in formation of edema [editorial] DiBona GF. **Mayo Clin Proc** 1989 Apr;64(4):469–72

Bilateral involvement and the effect of sympathetic blockade on skin microcirculation in the sympathetic dystrophies. Rosén L, et al. **Microvasc Res** 1989 May;37(3):289–97

Comparison of sympathetic skin response with quantitative sudomotor axon reflex test in diabetic neuropathy. Maselli RA, et al. **Muscle Nerve** 1989 May;12(5):420–3

Concomitant sympathetic and parasympathetic disturbances of myocardial electrogenesis after cerebral contusion in man. Moldoveanu V. **Neurol Psychiatr (Bucur)** 1988 Oct–Dec;26(4):251–7

Inhibition of renal sympathetic nerve activity by the nucleus tractus solitarii (NTS) in exaggerated natriuresis of hypertension. Kawamura H, et al. **Nippon Jinzo Gakkai Shi** 1988 Mar;30(3):285–90

Neonatal sympathoadrenal response to acute hypoxia: impairment after experimental intrauterine growth retardation. Shaul PW, et al. **Pediatr Res** 1989 May; 25(5):466–72

Lymphocyte adenylate cyclase: a model for putative adrenergic–cholinergic imbalances in affective disorders? Fritze J, et al. **Pharmacopsychiatry** 1988 Nov;21(6):436–7

Sympathetic–adrenal medullary response to stress in hyperactive and hypertensive rats. Hendley ED, et al. **Physiol Behav** 1988;44(1):47–51

Sympathetic–adrenal medullary responses to acute stress in Dahl hypertensive (S/JR) rats. Murphy CA, et al. **Physiol Behav** 1989 Jan;45(1):27–31

Peripheral somatic sensory neuropathy and skin galvanic response in the feet of patients with diabetes. Wieman TJ, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):501–6

[Central control of the baroreflex response to phenylephrine by dihydropyridines in the anesthetized rat] Lacolley P, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:119–23 (Eng. Abstr.) **(Fre)**

[Influence of hypertension and age on the sympathetic and parasympathetic components of cardiac baroreflex in the conscious rat] Lo M, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:113–7 (Eng. Abstr.) **(Fre)**

[Hypotension in insulin hypoglycemia in diabetics with autonomic neuropathy] Holländer E. **Orv Hetil** 1989 May 14;130(20):1045–9 (20 ref.) (Eng. Abstr.) **(Hun)**

[Estimation of myocardial sympathetic neuronal function with I–123 metaiodobenzylguanidine (MIBG) in patients with acute myocardial infarction undergoing percutaneous transluminal coronary thrombolysis (PTCR)] Tanaka T, et al. **Kaku Igaku** 1988 Dec;25(12):1425–9 (Eng. Abstr.) **(Jpn)**

[Estimation of regional myocardial sympathetic neuronal function with I–123 metaiodobenzylguanidine (MIBG) myocardial images in patients with cardiomyopathy] Tanaka T, et al. **Kaku Igaku** 1989 Feb;26(2):257–61 (Eng. Abstr.) **(Jpn)**

[Studies on systemic hemodynamics and sympathetic nervous activity in portal hypertension] Nikkuni K. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1672–85 (Eng. Abstr.) **(Jpn)**

[Contribution of the sympathetic nervous system to benign prostatic hypertrophy—neural regulation versus humoral regulation] Park YC. **Nippon Hinyokika Gakkai Zasshi** 1988

Feb;79(2):203–13 (Eng. Abstr.) (Jpn)
[The role of the sympatho–adrenomedullary system and adrenergic receptors in the pathogenesis of orthostatic hypotension in diabetes mellitus] Ueno S. **Nippon Naibunpi Gakkai Zasshi** 1988 Dec 20; 64(12):1293–312 (Eng. Abstr.) (Jpn)
[Catecholamine kinetics in cardiac disease] Komatsu E, et al. **Rinsho Byori** 1989 Jan;37(1):13–8 (Jpn)
[Echocardiogram and activity of the sympathetic nervous system in patients with primary arterial hypertension] Deka–Starosta A, et al. **Kardiol Pol** 1988;31(4):216–28 (Eng. Abstr.) (Pol)
[Effect of long–term treatment with nifedipine on the activity of the sympathetic–adrenal system, lipids and beta–thromboglobulin in patients with primary arterial hypertension] Knypl K, et al. **Kardiol Pol** 1988;31 Suppl 1:8–15 (Eng. Abstr.) (Pol)
[The sympathetico–adrenal system in functional disorders of various endocrine glands] Orgacka H, et al. **Pol Arch Med Wewn** 1985 Nov–Dec;74(5–6):363–70 (0 ref.) (Pol)
[Effect of controlled normovolemic hemodilution on the activity of neurohumoral adaptive reactions in patients after operations on the abdominal organs] Kuznetsov NA, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):51–3 (Eng. Abstr.) (Rus)
[Status of the sympathetic–adrenal, hypophyseal–adrenal and serotonin systems during surgery with the use of electro–acupuncture combined with amitriptyline and local anesthesia] Malygina SI, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):48–50 (Eng. Abstr.) (Rus)
[Suppression of the sympathetic component of the baroreceptor reflex in patients with arterial hypertension] Kuz'min AI, et al. **Fiziol Cheloveka** 1989 Mar–Apr; 15(2):78–84 (Rus)
[Activity of the sympathetic nervous system and the levels of prostaglandins and intracellular electrolytes in patients with arterial hypertension and low plasma renin activity] Votsial' B, et al. **Kardiologia** 1988 Dec;28(12):34–7 (Eng. Abstr.) (Rus)
[Changes in the functional activity of the sympathetico–adrenal system after correction of electrolyte metabolism in patients with hypertension] Bakhshaliev AV, et al. **Klin Med (Mosk)** 1989 May;67(5):64–7 (Eng. Abstr.) (Rus)
[Sympathetic innervation of the heart and long Q–T syndrome] Bobkova VM, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):49–51 (Eng. Abstr.) (Rus)
[Pharmacologic analysis of the sympathico–adrenal system in animals with alloxan diabetes] Khegai MD. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):51–4 (Eng. Abstr.) (Rus)
[Interrelations between blood circulation and the activity of the sympathetic–adrenal system in infants with acute pneumonia and its suppurative complications] Arinchin VN, et al. **Pediatriia** 1989;(2):18–23 (Eng. Abstr.) (Rus)
[Disordered sympathetic mediation in the genesis of aphthous stomatitis] Banchenko GV, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):11–5 (Eng. Abstr.) (Rus)
[Function of the sympathetic–adrenal system in patients with heart defects undergoing dental preparation] Dzhumadillaev DN. **Stomatologiia (Mosk)** 1989 Mar–Apr; 68(2):73 (Rus)
[Indicators of the sympathetico–adrenal system in patients with peritonitis after hyperbaric oxygenation] Belokurov IuN, et al. **Vestn Khir** 1989 Feb;142(2):37–41 (Eng. Abstr.) (Rus)
[Function of the sympathetico–adrenal system and the acid–base equilibrium in newborn infants with a hypoxic lesion of the central nervous system] Mialksoo MIa, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):52–4 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

Iodine–123 meta–iodobenzylguanidine scintigraphy: a noninvasive method to demonstrate myocardial adrenergic nervous system disintegrity in patients with idiopathic dilated cardiomyopathy. Schofer J, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1252–8
Neuronal uptake and metabolism of 2– and 6–fluorodopamine: false neurotransmitters for positron emission tomographic imaging of sympathetically innervated tissues. Eisenhofer G, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):419–27

SECRETION

Cd2+ may inhibit ATP secretion from sympathetic nerves in rat tail artery by an 'upstream' effect without blocking the Ca2+ component of the action potential in the terminals. Stjärne L, et al. **Acta Physiol Scand** 1989 Jun; 136(2):299–300
Does clonidine– or neuropeptide Y–mediated inhibition of ATP secretion from sympathetic nerves operate primarily by increasing a potassium conductance? Stjärne L, et al. **Acta Physiol Scand** 1989 May;136(1):137–8
Is cyclic AMP the intra–axonal messenger 'X' mediating 'upstream' control of sympathetic transmitter secretion? Stjärne L, et al. **Acta Physiol Scand** 1989 Aug;136(4):617–8
Platelet–generated thromboxane A2 enhances norepinephrine release from adrenergic nerves. Trachte GJ, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1139–45
Phentolamine, a deceptive tool to investigate sympathetic nervous control of insulin release. Schulz A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):637–43

ULTRASTRUCTURE

Nonregenerative axonal growth within the mature mammalian brain: ultrastructural identification of sympathohippocampal sprouts. Crutcher KA, et al. **J Neurosci** 1988 Jul;8(7):2289–302

SYMPATHETIC TRANSMITTER RELEASERS see **SYMPATHOMIMETICS**

SYMPATHINS see **CATECHOLAMINES**

SYMPATHOLYTICS

The antiadrenergic effect of neuropeptide Y on the ventricular cardiomyocyte. Millar BC, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):426–9
Role of cyclic GMP in the modulation by endothelium of the adrenolytic action of prazosin in the rat isolated aorta. DeFeudis FV. **Rev Clin Basic Pharm** 1988 Jan–Dec; 7(1–4):209–10

ADMINISTRATION & DOSAGE

[Chemical lumbar sympathectomy] Embey–Isztin D. **Orv Hetil** 1988 Sep 11;129(37):1969–70, 1973 (Eng. Abstr.) (Hun)

ADVERSE EFFECTS

Effects of bethanechol and adreno–blockers on thermoregulation in spinal cord injury. Berard EJ, et al. **Paraplegia** 1989 Feb;27(1):46–50

PHARMACOKINETICS

Labetalol reduces iodine–131 MIBG uptake by pheochromocytoma and normal tissues. Khafagi FA, et al. **J Nucl Med** 1989 Apr;30(4):481–9
Quantitative study of radioiodinated metaiodobenzylguanidine uptake in children with neuroblastoma: correlation with tumor histopathology. Moyes JS, et al. **J Nucl Med** 1989 Apr;30(4):474–80

PHARMACOLOGY

The influence of sympathomimetic and sympatholytic agents on the salivary flow rate and concentration of Ca, P and protein in the parotid gland of the goat. Isac MD, et al. **Acta Physiol Hung** 1988;72(3–4):291–6
Alpha–and beta–components of the popliteal efferent lymph flow response to intra–arterial catecholamine infusions in the sheep. Thornbury KD, et al. **Blood Vessels** 1989; 26(2):107–18
The effects of intracerebroventricular administration of adrenergic agonists and antagonists on adrenaline secretion from the adrenal medulla in stressed conscious rats. Nakamura M, et al. **J Pharmacobiodyn** 1988 Sep;11(9):600–6
Presynaptic interactions between acetylcholine and adrenergic antagonists on norepinephrine release. Kalsner S, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):879–91
Effect of adrenergic agents on urethral pressure and urethral compliance measurements in dog proximal urethra. Harada T, et al. **J Urol** 1989 Jul;142(1):189–92
Regulation of bronchomotor tone in conscious calves. Gustin P, et al. **J Vet Pharmacol Ther** 1989 Mar;12(1):58–64
Extent of sympathetic blockade after stellate ganglion block with bupivacaine. Hardy PA, et al. **Pain** 1989 Feb; 36(2):193–6
Blood flow distribution with adrenergic and histaminergic antagonists. Baker CH, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):260–7
[Anti–tachycardiac effect of a direct–acting vasodilator, budralazine] Yoshioka M. **Hokkaido Igaku Zasshi** 1989 May;64(3):255–68 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Neuro–endocrine changes as new targets in the drug treatment of congestive heart failure. van Zwieten PA. **Pharmacol Res Commun** 1988 Dec;20(12):1017–23
[Receptor diseases. 1: Disorders of adrenergic receptors, cholinergic receptors and neurotransmitters] Nestele M. **Med Monatsschr Pharm** 1989 May;12(5):147–52 (0 ref.) (Ger)

SYMPATHOMIMETICS

Nebivolol is devoid of intrinsic sympathomimetic activity. Janssens WJ, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):89–95

ADMINISTRATION & DOSAGE

Sympathomimetics in acute severe asthma: inhaled or parenteral, nebulizer or spacer? Noseda A, et al. **Eur Respir J** 1989 Apr;2(4):377–82 (58 ref.)
[Drugs of choice in obstructive respiratory tract diseases. Prof. Dr. med. Dr. h. c. W. T. Ulmer, Bochum, establishes the role of modern beta 2–sympathomimetic drugs and the possibility for new aerosol technics (interview)] Ulmer WT. **Fortschr Med** 1989 Mar 15;107(8):51 (Ger)

ADVERSE EFFECTS

Fetal and neonatal cardiovascular complications from beta–sympathomimetic therapy for tocolysis. Katz VL, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):1–4
Maternal use of prescribed drugs associated with recognized fetal adverse drug reactions. Piper JM, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1173–7
Systemic side effects of glaucoma medications. Cantor LB. **Indiana Med** 1989 Feb;82(2):105–7
Non–prescription sympathomimetic agents and hypertension. Chua SS, et al. **Med Toxicol Adverse Drug Exp** 1988 Sep–Oct;3(5):387–417 (213 ref.)
[Refractory chest pain caused by sympathomimetic aerosols] Walamies M, et al. **Duodecim** 1988;104(14):1067–9 (Fin)

ANALYSIS

Formation of 2,6–dimethoxy–1,4–benzoquinone, a highly genotoxic compound, from the reaction of sodium nitrite with the sympathomimetic drug dimethophrine in acidic aqueous solution. Mazzei M, et al. **Farmaco [Sci]** 1988 Jun; 43(6):523–38
Detection of oxilofrine in plasma and urine by high–performance liquid chromatography with electrochemical detection and comparison with gas chromatography–mass spectrometry. Kauert G, et al. **J Chromatogr** 1988 Jul 15;428(2):291–300

METABOLISM

Sympathetic activity response to changes in the intake of sodium in chronic renal failure. Solski J, et al. **Int Urol Nephrol** 1988;20(5):533–8
Distinction between adrenergic and serotonergic receptor subtypes: specificity of drugs and absence of cooperative interactions between adrenergic and serotonergic receptor binding sites. Leysen JE, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S78–87
Deamination of hordenine by monoamine oxidase and its action on vasa deferentia of the rat. Barwell CJ, et al. **J Pharm Pharmacol** 1989 Jun;41(6):421–3

PHARMACOKINETICS

Pharmacokinetics of non–prescription sympathomimetic agents. Chua SS, et al. **Biopharm Drug Dispos** 1989 Jan–Feb;10(1):1–14 (91 ref.)
Influence of ion–pair–formation on the pharmacokinetic properties of drugs. Part 3: Influence of hexylsalicylic acid on the pharmacokinetics of pholedrine. Neubert R, et al. **Pharmazie** 1988 Sep;43(9):632–3

PHARMACOLOGY

The influence of sympathomimetic and sympatholytic agents on the salivary flow rate and concentration of Ca, P and protein in the parotid gland of the goat. Isac MD, et al. **Acta Physiol Hung** 1988;72(3–4):291–6
Effect of beta–adrenergic blockade and sympathetic stimulation on canine bronchial mast cell response to immune degranulation in vivo. White SR, et al. **Am Rev Respir Dis** 1989 Jan;139(1):73–9
Dissociation of alpha–adrenergic and cholinergic stimulated inositol trisphosphate–dependent calcium mobilization at the "post–receptor" level. Kowatch MA, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):347–51
Inhibition of Ca–spikes in rat preganglionic cervical sympathetic nerves by sympathomimetic amines. Elliott P, et al. **Br J Pharmacol** 1989 Jan;96(1):65–76
Effects of concurrent manipulations of cholinergic and noradrenergic function on learning and retention in mice. Decker MW, et al. **Brain Res** 1989 Jan 16;477(1–2):29–37
Responses of the isolated rectum of the rainbow lizard (Agama agama) to sympathomimetics. Inyang AL, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):68–71
Adrenergic effects on secretion of amylase from the rat salivary glands. Skov Olsen P, et al. **Digestion** 1988; 41(1):34–8
Molecular mechanism of beta–adrenergic receptor blockers with intrinsic sympathomimetic activity. Jasper JR, et al. **FASEB J** 1988 Oct;2(13):2891–4
Xylamine enhances pineal gland N–acetyltransferase activity in vitro. Haak KA, et al. **Gen Pharmacol** 1989;20(1):77–80
Lipolytic response of bovine adipose tissue to alpha and beta adrenergic agents 30 days pre– and 120 days postpartum. Smith DJ, et al. **Gen Pharmacol** 1989;20(3):369–74
Dose difference in beta–adrenergic blockers with intrinsic sympathomimetic action to block beta–adrenoceptors and induce sympathomimetic action. Takayanagi I, et al. **Gen Pharmacol** 1989;20(4):417–9
Skeletal muscle beta 2–adrenoreceptors and the effect of adrenergic drugs on plasma potassium in perinephritis hypertension in rabbits. Elfellah MS, et al. **J Auton Pharmacol** 1989 Apr;9(2):113–8
Effects of adrenergic agents on alpha–chymotrypain–induced ocular hypertension in albino and pigmented rabbits: a comparative study. Himber J, et al. **J Ocul Pharmacol** 1989 Summer;5(2):93–8
Hypothermia induces supersensitivity of mouse vas deferens to adrenergic agonists: evidence for postjunctional alpha 2–adrenoceptors. Goncalves J, et al. **J Pharm Pharmacol** 1989 Jan;41(1):52–4

Adrenergic agonists and the Na+-K+-adenosine triphosphatase from rabbit proximal tubules and their basolateral membranes. Podevin RA, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):672–7

Luminal adrenergic agents modulate intestinal transport. Bastidas JA, et al. **J Surg Res** 1989 May;46(5):484–9

Effect of adrenergic agents on urethral pressure and urethral compliance measurements in dog proximal urethra. Harada T, et al. **J Urol** 1989 Jul;142(1):189–92

Regulation of bronchomotor tone in conscious calves. Gustin P, et al. **J Vet Pharmacol Ther** 1989 Mar;12(1):58–64

Suppression of intercellular communication in acinar cells from rat submandibular gland by cholinergic and adrenergic agonists. Sasaki Y, et al. **Jpn J Physiol** 1988; 38(4):531–43

Facilitation of gamma-aminobutyric acid-induced depression by (+)PCMP and dexoxadrol in the cerebellar Purkinje neurons of the rat. Wang Y, et al. **Neuropharmacology** 1989 Apr;28(4):343–50

Feeding elicited by cholinergic and adrenergic hypothalamic stimulation of anorectic tumor-bearing rats. Chance WT, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):209–13

DSP4 and Herrnstein's equation: further evidence for a role of noradrenaline in the maintenance of operant behaviour by positive reinforcement. Morley MJ, et al. **Psychopharmacology (Berlin)** 1988;96(4):551–6

[Bronchial adrenergic receptors and asthma. Tachyphylaxis and its prevention] Pauwels R. **Allerg Immunol (Paris)** 1988 Sep;20(7):261–5 (14 ref.) (Eng. Abstr.) **(Fre)**

[Intrinsic sympathicomimetic activity of beta blockers] Beckers J. **Rev Med Liege** 1988 Oct 1;43(19):613–22 (33 ref.) **(Fre)**

[Recovery of bronchial sensitivity to sympathomimetics after administration of corticosteroids] Zennaro R, et al. **Clin Ter** 1988 Jul 31;126(2):109–18 (Eng. Abstr.) **(Ita)**

[Effects of autonomic agents and chemical mediators on ion transport by canine tracheal epithelium] Baba T, et al. **Masui** 1988 Jun;37(6):638–45 (Eng. Abstr.) **(Jpn)**

[A study on the effect of adrenergic drugs upon the urethral compliance in dogs] Kumazaki T. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):254–64 (Eng. Abstr.) **(Jpn)**

[Adrenergic regulation of the level of enkephalins in the myocardium] Maslov LN, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):26–9 (Eng. Abstr.) **(Rus)**

[Adrenergic receptors and active ion transport of kidney cortex slices in guinea pigs] Yaris GI, et al. **Acta Cient Venez** 1988;39(3):237–44 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Fish oil diet rich in eicosapentaenoic acid increases bleeding time in the rat by interaction with sympathetic transmitters. Juan H, et al. **Agents Actions** 1989 Aug;28(1-2):130–6

POISONING

Hemodynamic effects following ingestion of an imidazoline-containing product. Jensen P, et al. **Pediatr Emerg Care** 1989 Jun;5(2):110–2

THERAPEUTIC USE

Influence of regional anesthesia, local anesthetics, and sympathicomimetics on the pathophysiology of deep vein thrombosis. Modig J. **Acta Chir Scand Suppl** 1989; 550:119–24; discussion 124–7 (35 ref.)

Use of adrenergic bronchodilators by pediatric allergists and pulmonologists. Newcomb RW. **Am J Dis Child** 1989 Apr; 143(4):481–5

Carteolol, an antihypertensive beta-blocker with intrinsic sympathomimetic activity, reduces ECG evidence of left ventricular hypertrophy. Rosales OR, et al. **Chest** 1989 Jan; 95(1):43–7

Global perspectives in the management of asthma. Falliers CJ. **J Asthma** 1988;25(5):285–91 (28 ref.)

[Adrenergic substances in asthma] Gervais P. **Allerg Immunol (Paris)** 1988 Sep;20(7):251 **(Fre)**

[Treatment of poisoning by aluminum phosphide ingestion: experimental approach] Bouzoubaa A, et al. **J Toxicol Clin Exp** 1988 May-Jun;8(3):193–9 (Eng. Abstr.) **(Fre)**

[Receptor diseases. 1: Disorders of adrenergic receptors, cholinergic receptors and neurotransmitters] Nestele M. **Med Monatsschr Pharm** 1989 May;12(5):147–52 (0 ref.) **(Ger)**

[Sympathomimetic drugs in the treatment of acute circulatory insufficiency] Abbakumov VV, et al. **Anesteziol Reanimatol** 1988 May-Jun;(3):8–12 (Eng. Abstr.) **(Rus)**

[Use of alpha- and beta-adrenomimetics in the intensive therapy of traumatic and cardiogenic shock and their effect on the blood circulation] Apanasenko BG, et al. **Anesteziol Reanimatol** 1988 Nov-Dec;(6):24–7 (Eng. Abstr.) **(Rus)**

SYMPHYSIOTOMY

Splitting the pubis for exposure in difficult reconstructions for incontinence. Peters CA, et al. **J Urol** 1989 Aug;142(2 Pt 2):527–31; discussion 542–3

HISTORY

[The long and difficult birth of symphysiotomy or from Severin Pineau to Jean-Rene Sigault] Dumont M. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):11–21 (Eng. Abstr.) **(Fre)**

SYNAPSES

Synaptic and non-synaptic communication in the brain: morphological, physiological and behavioral aspects. Proceedings of a workshop. Nijmegan, The Netherlands, November 29, 1988. **Acta Morphol Neerl Scand** 1988–89; 26(2-3):65–190

The distribution of intracellular acetylcholine receptors and nuclei in developing avian fast-twitch muscle fibres during synapse elimination. Phillips WD, et al. **J Neurocytol** 1989 Apr;18(2):241–55

ANALYSIS

Synaptic plasticity in the hypoglossal nucleus of female canaries: structural correlates of season, hemisphere, and testosterone treatment. Clower RP, et al. **Behav Neural Biol** 1989 Jul;52(1):63–77

Characterization of novel glycoprotein components of synaptic membranes and postsynaptic densities, gp65 and gp55, with a monoclonal antibody. Hill IE, et al. **Brain Res** 1988 Sep 27;461(1):27–43

Synaptic analysis of amacrine cells with neuropeptide Y-like immunoreactivity in turtle retina. Isayama T, et al. **J Comp Neurol** 1988 Sep 15;275(3):452–9

Synaptic connectivity of tyrosine hydroxylase immunoreactive nerve terminals in the striatum of normal, heterozygous and homozygous weaver mutant mice. Triarhou LC, et al. **J Neurocytol** 1988 Apr;17(2):221–32

Corticotropin-releasing factor synapses within the paraventricular nucleus of the hypothalamus. Silverman AJ, et al. **Neuroendocrinology** 1989 Mar;49(3):291–9

Immunohistochemical quantification of the synapse-related protein synaptophysin in Alzheimer disease. Masliah E, et al. **Neurosci Lett** 1989 Aug 28;103(2):234–9

CYTOLOGY

Plasticity of postsynaptic density material in optic synapses of the suprachiasmatic nucleus in the senescent rat. Güldner FH, et al. **Mech Ageing Dev** 1988 Aug;44(2):169–74

Neural cell adhesion molecule (N-CAM) is elevated in adult avian slow muscle fibers with multiple terminals. Bleisch W, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6403–7

DRUG EFFECTS

Synaptic changes in the rat cerebellum following pre- and postnatal alcohol exposure. Lolov V, et al. **Acta Physiol Pharmacol Bulg** 1988;14(2):40–8

Spinal cord cultured neurons: an in vitro model to study GABA synaptic pharmacology. Ticku M, et al. **Adv Biochem Psychopharmacol** 1988;45:151–9

Hippocampal mossy fiber-CA3 synapses after chronic alcohol consumption and withdrawal. Cadete-Leite A, et al. **Alcohol** 1989 Jul-Aug;6(4):303–10

Lambert-Eaton myasthenic syndrome IgG depletes presynaptic membrane active zone particles by antigenic modulation. Nagel A, et al. **Ann Neurol** 1988 Oct; 24(4):552–8

Presynaptic actions of beta-carboline on the spinal cord. Galindo JO, et al. **Arch Invest Med (Mex)** 1988 Apr-Jun; 19(2):149–56

Quinoxalinediones selectively block quisqualate and kainate receptors and synaptic events in rat neocortex and hippocampus and frog spinal cord in vitro. Fletcher EJ, et al. **Br J Pharmacol** 1988 Oct;95(2):585–97

Synaptic restructuring during long-term facilitation at the crayfish neuromuscular junction. Wojtowicz JM, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):167–71

The venom of Ampulex compressa—effects on behaviour and synaptic transmission of cockroaches. Piek T, et al. **Comp Biochem Physiol [C]** 1989;92(2):175–83

Orotate improves memory and enhances synaptic long-term potentiation in active avoidance behaviour in rats with perforant path stimulation as the conditioned stimulus. Bergado JA, et al. **Eur J Pharmacol** 1988 Nov 22; 157(2-3):155–63

Effect of 4-aminopyridine on the postsynaptic action of polymyxin B. Brazil OV, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):47–51

The action of hydrogen peroxide on paired pulse and long-term potentiation in the hippocampus. Colton CA, et al. **Free Radic Biol Med** 1989;7(1):3–8

Effect of spider venom on cochlear nerve activity consistent with glutamatergic transmission at hair cell-afferent dendrite synapse. Cousillas H, et al. **Hear Res** 1988 Nov; 36(2-3):213–20

Responses of cholinergic markers to a pre- or a postsynaptic pharmacological blockage in the developing chick embryo spinal cord. Thiriet G, et al. **Int J Dev Neurosci** 1988; 6(3):309–16

Kainate receptor-mediated synaptic currents in mudpuppy inner retinal neurons reduced by D-O-phosphoserine. Coleman PA, et al. **J Neurophysiol** 1989 Aug;62(2):495–500

Voltage-clamp analysis of taurine-induced suppression of excitatory postsynaptic potentials in frog spinal motoneurons. Yasunami T, et al. **J Neurophysiol** 1988 Oct; 60(4):1405–18

Effects of clinically effective concentrations of halothane on adrenergic and cholinergic synapses in rat brain in vitro. Bazil CW, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):143–8

Pre- and postsynaptic effects of p-tyramine and p-octopamine in the prostatic portion of the rat vas deferens. Celuch SM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):39–46

Effect of calcium on synaptic facilitation by potassium channel blockers in superior cervical ganglion of rat. Alkadhi KA, et al. **Neuropharmacology** 1989 Jan; 28(1):75–81

Presynaptic action of uranyl nitrate on the phrenic nerve-diaphragm preparation of the mouse. Lin RH, et al. **Neuropharmacology** 1988 Aug;27(8):857–63

Effect of minaprine on synaptic transmission in the neocortex of the rat in vivo. Okuyama S, et al. **Neuropharmacology** 1988 Sep;27(9):915–22

Pre- and postjunctional actions of neuropeptide Y and related peptides. Potter EK, et al. **Regul Pept** 1989 May; 25(2):167–77

Diazepam potentiates postsynaptic inhibition in bulbar respiratory neurons of cats. Takeda R, et al. **Respir Physiol** 1989 Aug;77(2):173–86

Blocking effects of tetanus toxin and its fragment [A-B] on the excitatory and inhibitory synapses of the spinal motoneurone of the cat. Takano K, et al. **Toxicon** 1989; 27(3):385–92

[Effects of benzodiazepines on the excitatory and inhibitory synaptic transmissions in the rat dentate gyrus] Suzuki H, et al. **Masui** 1988 Oct;37(10):1199–205 (Eng. Abstr.) **(Jpn)**

[The action of the venom of the spider Eresus niger on the neuromuscular synapses of the frog] Usmanov PB, et al. **Biol Nauki** 1988;(11):20–3 (Eng. Abstr.) **(Rus)**

[Presynaptic action of tubocurarine during frequent stimulation of a motor nerve] Grigor'ev VM, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):28–32 (Eng. Abstr.) **(Rus)**

[Analysis of the effect of quisqualate, N-methyl-D- aspartate and several blockers of amino acid receptors on synaptic transmission in the ampullae of Lorenzini] Akoev GN, et al. **Neirofiziologiia** 1989;21(2):160–7 (Eng. Abstr.) **(Rus)**

[Effect of antagonists of excitatory amino acids on synaptic transmission in the electroreceptors (Lorenzini's ampullae) in skates] Akoev GN, et al. **Neirofiziologiia** 1988; 20(4):457–63 (Eng. Abstr.) **(Rus)**

[Voltage dependence of the cobalt-induced blockage of synaptic transmission between the photoreceptors and horizontal cells of the retina] Byzov AL. **Neirofiziologiia** 1988;20(3):374–83 (Eng. Abstr.) **(Rus)**

[Effect of a brain extract containing the postural asymmetry factor on the frog neuromuscular synapse] Drabkina TM, et al. **Neirofiziologiia** 1988;20(4):554–7 (Eng. Abstr.) **(Rus)**

[Reactivating and cholinolytic action of dipyroxime in the myoneural synapse of warm-blooded animals] Giniatullin RA, et al. **Neirofiziologiia** 1988;20(3):351–7 (Eng. Abstr.) **(Rus)**

[Background impulsation of cortical neurons during blockade of synaptic inhibition in vital slices] Karnup SV. **Neirofiziologiia** 1989;21(1):16–24 (Eng. Abstr.) **(Rus)**

[Furosemide depression of the dorsal root potentials and of the presynaptic inhibition of monosynaptic reflexes in the cat spinal cord] Ruchinskaia TIu, et al. **Neirofiziologiia** 1988;20(4):561–3 (Eng. Abstr.) **(Rus)**

[The action of metabolites on the frog neuromuscular synapse] Drabkina TM, et al. **Nerv Sist** 1988;27:23–30 **(Rus)**

[Effect of hydrocortisone on synaptic transmission in surviving slices of the olfactory cortex from the rat brain] Mokrushin AA, et al. **Probl Endokrinol (Mosk)** 1988 Nov-Dec;34(6):52–6 (Eng. Abstr.) **(Rus)**

[Comparative research on synaptic transmission in the sympathetic ganglia of rabbits and frogs during acetylcholinesterase inhibition] Lukomskaia NIa, et al. **Zh Evol Biokhim Fiziol** 1988 Sep-Oct;24(5):668–78 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Basal lamina components are concentrated in premuscle masses and at early acetylcholine receptor clusters in chick embryo hindlimb muscles. Godfrey EW, et al. **Dev Biol** 1988 Dec;130(2):471–86

ENZYMOLOGY

Brain cytochrome oxidase activity of synaptic and nonsynaptic mitochondria during aging. Gorini A, et al. **Basic Appl Histochem** 1989;33(2):139–45

Synaptic acetylcholinesterase of chicken muscle changes during development from a hybrid to a homogeneous enzyme. Tsim KW, et al. **EMBO J** 1988 Aug;7(8):2451–6

Distribution of glutamate-decarboxylase-immunoreactive neurons and synapses in the rat and monkey hippocampus: light and electron microscopy. Babb TL, et al. **J Comp Neurol** 1988 Dec 1;278(1):121–38

Regulatory properties of calcium/calmodulin-dependent protein kinase II in rat brain postsynaptic densities. Rich DP, et al. **J Neurochem** 1989 Sep;53(3):807–16

Ultrastructural changes in acetylcholinesterase activity in the deafferented spinal trigeminal nucleus. Wilson FR, et al.

Synapse 1988;2(4):341–52

GROWTH & DEVELOPMENT

Fine structure of synaptogenesis in the vertebrate central nervous system. Vaughn JE. **Synapse** 1989;3(3):255–85 (296 ref.)

METABOLISM

Synaptic and nonsynaptic release of neuromediators in the central nervous system. Buma P.
Acta Morphol Neerl Scand 1988–89;26(2–3):81–113 (65 ref.)

Localization and pharmacology of some dopamine receptor complexes in the striatum and the pituitary gland: synaptic and non–synaptic communication. Stoof JC.
Acta Morphol Neerl Scand 1988–89;26(2–3):115–30 (53 ref.)

Neurochemical changes in the cholinergic system of the rat lateral vestibular nucleus following hemilabyrinthectomy. Yamada C, et al. **Arch Otorhinolaryngol** 1988; 245(4):197–202

Triphasic effects of short chain n–alcohols on synaptic membrane transport of choline and of gamma–aminobutyric acid. Mrak RE, et al.
Biochim Biophys Acta 1989 Aug 21;984(1):97–103

Presynaptic muscarinic receptors inhibiting endogenous noradrenaline release in the portal vein of the freely moving rat. Remie R, et al. **Br J Pharmacol** 1989 Jun;97(2):586–90

Electron microscopic immunocytochemical evidence for the existence of bidirectional synaptic connections between growth hormone–releasing hormone– and somatostatin–containing neurons in the hypothalamus of the rat. Horváth S, et al. **Brain Res** 1989 Feb 27;481(1):8–15

Ultrastructural localization of neuropeptide Y and galanin immunoreactivity in the paraventricular nucleus of the hypothalamus in the rat. Sawchenko PE, et al.
Brain Res 1988 Dec 6;474(2):231–45

Direct synaptic contacts of catecholamine fibers on neuropeptide Y–containing neurons of the rat cerebral cortex. Tsuchiyama M, et al. **Brain Res** 1989 Aug 7; 494(1):168–71

Immunocytochemical evidence for direct connections between neurotensin–containing axons and dopaminergic neurons in the rat ventral midbrain tegmentum. Woulfe J, et al. **Brain Res** 1989 Feb 13;479(2):402–6

Neurochemical characteristics of a postsynaptic density fraction isolated from adult canine hippocampus. Wu K, et al. **Brain Res** 1988 Aug 2;457(1):98–112

The influence of cholesterol on synaptic fluidity and dopamine uptake. Maguire PA, et al. **Brain Res Bull** 1989 Feb;22(2):431–7

A depolarizing inhibitory postsynaptic potential activated by synaptically released gamma–aminobutyric acid under physiological conditions in rat hippocampal pyramidal cells. Perreault P, et al. **Can J Physiol Pharmacol** 1988 Aug; 66(8):1100–2

Immunological approaches to the study of synaptic glycoproteins. Beesley PW. **Comp Biochem Physiol [A]** 1989;93(1):255–66 (108 ref.)

Alkaloid neurotoxins–dependent sodium transport in insect synaptic nerve–ending particles. Dwivedy AK.
Comp Biochem Physiol [C] 1988;91(2):349–54

Effect of aging on presynaptic alpha 2–adrenoceptor mechanisms in guinea pig ileum. Takayanagi I, et al.
Comp Biochem Physiol [C] 1989;92(2):419–23

Presynaptic alpha 2–adrenoceptor modulation of 5–hydroxytryptamine and noradrenaline release from vascular adrenergic nerves. Kawasaki H, et al.
Eur J Pharmacol 1989 May 2;164(1):35–43

Effects of botulinum A toxin on presynaptic modulation of evoked transmitter release. Nakov R, et al.
Eur J Pharmacol 1989 May 2;164(1):45–53

Synaptic localization of a 66–kDa soluble protein from skeletal muscle: evidence for its developmental and neural regulation. Comella JX, et al. **Exp Neurol** 1989 Aug; 105(2):211–8

The effects of intrauterine growth retardation on synaptogenesis and mitochondrial formation in the cerebral and cerebellar cortices of fetal sheep. Bisignano M, et al.
Int J Dev Neurosci 1988;6(5):453–60

GABA–like immunoreactivity in the cat retina: electron microscopy. Chun MH, et al. **J Comp Neurol** 1989 Jan 1;279(1):55–67

Ultrastructural analysis of somatostatin–immunoreactive neurons and synapses in the temporal and occipital cortex of the macaque monkey. de Lima AD, et al.
J Comp Neurol 1989 May 8;283(2):212–27

Synaptophysin expression during synaptogenesis in the rat cerebellar cortex. Leclerc N, et al. **J Comp Neurol** 1989 Feb 8;280(2):197–212

Organization and synaptic interconnections of GABAergic and cholinergic elements in the rat amygdaloid nuclei: single– and double–immunolabeling studies. Nitecka L, et al. **J Comp Neurol** 1989 Jan 15;279(3):470–88

Highly basic 30– and 32–kilodalton proteins associated with synapse formation on polylysine–coated beads in enriched neuronal cell cultures. Burry RW, et al. **J Neurochem** 1989 Feb;52(2):551–60

Release of purines from postsynaptic structures of amphibian ganglia. Rubio R, et al. **J Neurochem** 1988 Dec; 51(6):1717–23

FMRFamide peptides in Helisoma: identification and physiological actions at a peripheral synapse. Bulloch AG, et al. **J Neurosci** 1988 Sep;8(9):3459–69

Selection of postsynaptic serotonin receptors during reinnervation of an identified leech neuron in culture. Drapeau P, et al. **J Neurosci** 1988 Dec;8(12):4718–27

The relationship between the number of synaptic vesicles and the amount of transmitter released. Koenig JH, et al. **J Neurosci** 1989 Jun;9(6):1937–42

Acetylcholine receptor–like molecules are found in both synaptic and extrasynaptic clusters on the surface of neurons in the frog cardiac ganglion. Sargent PB, et al. **J Neurosci** 1989 Mar;9(3):1062–72

Agrin–induced specializations contain cytoplasmic, membrane, and extracellular matrix–associated components of the postsynaptic apparatus. Wallace BG. **J Neurosci** 1989 Apr;9(4):1294–302

Electrophysiological correlates of presynaptic alpha 2–receptor–mediated inhibition of norepinephrine release at locus coeruleus synapses in dentate gyrus. Washburn M, et al. **J Neurosci** 1989 Jun;9(6):2131–40

A laminin–like adhesive protein concentrated in the synaptic cleft of the neuromuscular junction. Hunter DD, et al.
Nature 1989 Mar 16;338(6212):229–34

Only activated but not non–activated presynaptic alpha 2–autoreceptors interfere with neighbouring presynaptic receptor mechanisms. Limberger N, et al.
Naunyn Schmiedebergs Arch Pharmacol 1988 Jul; 338(1):62–7

Localization of calcitonin gene–related peptide (CGRP) at a neuronal nicotinic synapse. Peng HB, et al.
Neurosci Lett 1988 Dec 19;95(1–3):75–80

Synaptology of luteinizing hormone–releasing hormone neurons in the preoptic area of the male rat: effects of gonadectomy. Witkin JW. **Neuroscience** 1989;29(2):385–90

[A mathematical model of the system controlling mediator release from presynaptic endings] Pokrovskiĭ N.
Biofizika 1989 May–Jun;34(3):400–4 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Transsynaptic spread of varicella zoster virus through the visual system: a mechanism of viral dissemination in the central nervous system [published erratum appears in Hum Pathol 1989 Aug;20(8):820] Rostad SW, et al.
Hum Pathol 1989 Feb;20(2):174–9

PATHOLOGY

Purkinje cell abnormalities and synaptogenesis in genetically jaundiced rats (Gunn rats). Takagishi Y, et al.
Brain Res 1989 Jul 17;492(1–2):116–28

The threshold concentration of dietary ethanol necessary to produce toxic effects on hippocampal cells and synapses in the mouse. Phillips SC. **Exp Neurol** 1989 Apr; 104(1):68–72

Synaptic loss in Alzheimer's disease and other dementias. Hamos JE, et al. **Neurology** 1989 Mar;39(3):355–61

PHYSIOLOGY

Synaptic organization of retinotectal connections of the frog application of pulse triggered averaging. Matsumoto N.
Acta Biol Hung 1988;39(2–3):217–20

Synaptic development of regenerating retinotectal projection of goldfish. Matsumoto N. **Acta Biol Hung** 1988; 39(2–3):197–200

Synaptic connections between primary afferents and motoneurons in the spinal cord of anuran larvae. Shupliakov OV. **Acta Biol Hung** 1988;39(2–3):127–34

Synaptic and non–synaptic striatal dopamine D2 receptors: possible implications in normal and pathological behaviour. Korf J, et al. **Acta Morphol Neerl Scand** 1988–89; 26(2–3):177–90 (42 ref.)

Possible synapse formation by embryonic cerebellar tissue grafted into the cerebellum of the weaver mutant mouse. Takayama H, et al. **Acta Neurochir Suppl (Wien)** 1988; 43:154–8

Effects of synaptic blockade on thermosensitive neurons in rat diencephalon in vitro. Dean JB, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R65–73

Patterns of fast synaptic cholinergic activation of neurons in the celiac ganglia of cats. Niel JP, et al.
Am J Physiol 1988 Dec;255(6 Pt 1):G759–66

The inhibitory effects of omega–conotoxins on Ca channels and synapses. Yoshikami D, et al. **Ann N Y Acad Sci** 1989; 560:230–48

Short–term synaptic plasticity. Zucker RS.
Annu Rev Neurosci 1989;12:13–31 (148 ref.)

Autophosphorylation of the type II calmodulin–dependent protein kinase is essential for formation of a proteolytic fragment with catalytic activity. Implications for long–term synaptic potentiation. Kwiatkowski AP, et al.
Biochemistry 1989 Jun 27;28(13):5380–5

Mechanisms underlying induction and maintenance of long–term potentiation in the hippocampus. Lynch MA.
Bioessays 1989 Feb–Mar;10(2–3):85–90 (57 ref.)

The silicon synapse or, neural net computing. Frenger P.
Biomed Sci Instrum 1989;25:267–73 (52 ref.)

Associative neural network model for the generation of temporal patterns. Theory and application to central pattern generators [published erratum appears in Biophys J 1989 Mar;55(3):following 583] Kleinfeld D, et al.
Biophys J 1988 Dec;54(6):1039–51

Sequential model to describe the nicotinic synaptic current. Parnas H, et al. **Biophys J** 1989 May;55(5):875–84

Optical recording of the electrical activity of synaptically interacting Aplysia neurons in culture using potentiometric probes. Parsons TD, et al. **Biophys J** 1989 Jul;56(1):213–21

A local circuit neocortical synapse that operates via both NMDA and non–NMDA receptors. Thomson AM, et al.
Br J Pharmacol 1989 Feb;96(2):406–8

Qualitative morphogenesis of synaptic glomeruli in the rat cerebellum. Miyazaki M, et al. **Brain Dev** 1988;10(6):360–4

Synaptic plasticity in the hippocampus is modulated by behavioral state. Bramham CR, et al. **Brain Res** 1989 Jul 24;493(1):74–86

Evidence for excitatory amino acid transmission between mesencephalic nucleus of V afferents and jaw–closer motoneurons in the guinea pig. Chandler SH.
Brain Res 1989 Jan 16;477(1–2):252–64

Commissural synapses, but not mossy fiber synapses, in hippocampal field CA3 exhibit associative long–term potentiation and depression. Chattarji S, et al.
Brain Res 1989 Aug 21;495(1):145–50

Enkephalins modulate excitatory synaptic transmission in the superficial dorsal horn by acting at mu–opioid receptor sites. Jeftinija S. **Brain Res** 1988 Sep 20;460(2):260–8

Prolonged exposure to high potassium concentration results in irreversible loss of synaptic transmission in hippocampal tissue slices. Kawasaki K, et al. **Brain Res** 1988 Aug 9; 457(2):322–9

Habituation of monosynaptic field potentials in the dentate gyrus of freely moving rats interferes with LTP. Krug M, et al. **Brain Res** 1989 Jan 2;476(1):163–6

Neuropeptide Y–immunoreactive neurons receive synaptic inputs from dopaminergic axon terminals in the rat neostriatum. Kubota Y, et al. **Brain Res** 1988 Aug 23; 458(2):389–93

Theta pattern stimulation and the induction of LTP: the sequence in which synapses are stimulated determines the degree to which they potentiate. Larson J, et al.
Brain Res 1989 Jun 5;489(1):49–58

Long–term enhancement (LTE) of postsynaptic potentials following neural conditioning, in mammalian sympathetic ganglia. Libet B, et al. **Brain Res** 1988 Nov 15;473(2):271–82

Excitatory amino acid receptors intrinsic to synaptic transmission in nucleus tractus solitarii. Miller BD, et al.
Brain Res 1988 Jul 26;456(2):333–43

Synaptic action of layer I fibers on cells in cat striate cortex. Nakajima S, et al. **Brain Res** 1988 Aug 2;457(1):176–80

Immunocytochemical demonstration of GABAergic synaptic connections in rat substantia nigra after different lesions of the striatonigral projection. Nitsch C, et al.
Brain Res 1988 Sep 27;461(1):127–42

Effects of bath–applied L–glutamate and related chemicals on the afferent synapse of the Plotosus electroreceptor. Okano K, et al. **Brain Res** 1988 Aug 2;457(1):79–88

Two pharmacologically distinct receptors mediate two postsynaptic potential (PSP) components in the afferent synapse of the Plotosus eletroreceptor. Okano K.
Brain Res 1988 Aug 2;457(1):89–97

The effects of serotonin on N–methyl–D–aspartate and synaptically evoked depolarizations in rat neocortical neurons. Reynolds JN, et al. **Brain Res** 1988 Jul 26; 456(2):286–92

Neuronal–glial and synaptic plasticity in the adult rat paraventricular nucleus. Theodosis DT, et al. **Brain Res** 1989 Apr 10;484(1–2):361–6

Evidence for the independent role of GABA synapses of the zona incerta–lateral hypothalamic region in haloperidol–induced catalepsy. Wardas J, et al.
Brain Res 1988 Oct 18;462(2):378–82

A test for modulation of synaptic efficacy by induced membrane potential variance. Gardner D.
Brain Res Bull 1988 Sep;21(3):521–8

Synaptogenesis in the hippocampal dentate gyrus: effects of in utero ethanol exposure. Hoff SF. **Brain Res Bull** 1988 Jul;21(1):47–54

Pre– and postsynaptic actions of GABA on the release of hypothalamic gonadotropin–releasing hormone (GnRH). Nikolarakis KE, et al. **Brain Res Bull** 1988 Oct;21(4):677–83

Quantitation of synaptic, neuronal and glial development in the intermediate and medial hyperstriatum ventrale (IMHV) of the chick Gallus domesticus, pre– and post–hatch. Curtis EM, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):105–18

The involvement of nonspiking cells in long–term potentiation of synaptic transmission in the hippocampus. Sastry BR, et al. **Can J Physiol Pharmacol** 1988 Jun; 66(6):841–4

Synaptic regulation of paraventricular arginine vasopressin–containing neurons by neuropeptide Y–containing monoaminergic neurons in rats. Electron–microscopic triple labeling. Kagotani Y, et al.
Cell Tissue Res 1989 Aug;257(2):269–78

In vitro analysis of specificity during nerve–muscle synaptogenesis. Sanes DH, et al. **Ciba Found Symp** 1988; 138:116–30

Reorganization of synaptic inputs to developing skeletal muscle fibres. Vrbová G, et al. **Ciba Found Symp** 1988; 138:131–51

Beta–adrenergic supersensitivity of the transplanted human heart is presynaptic in origin. Gilbert EM, et al.
Circulation 1989 Feb;79(2):344–9

Stimulation of norepinephrine release by peripheral presynaptic beta–adrenoceptors. Chang PC, et al.
Clin Exp Hypertens [A] 1989;11 Suppl 1:311–21

Presynaptic inhibition of sympathetic fibers participating in vasodilatation in response to K+-induced contraction of frog skeletal muscle. Fuglsang A, et al. **Clin Invest Med** 1988 Oct;11(5):357–65

The role of arachidonic acid metabolites in signal transduction in an identified neural network mediating presynaptic inhibition in Aplysia. Shapiro E, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:425–33

Molecular convergence of presynaptic inhibition and presynaptic facilitation on common substrate proteins of individual sensory neurons of Aplysia. Sweatt D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:395–405

The Retzius cells in the leech: a review of their properties and synaptic connections. Carretta M. **Comp Biochem Physiol [A]** 1988;91(3):405–13 (74 ref.)

Central cholinergic pathways and learning and memory processes: presynaptic aspects. Durkin T. **Comp Biochem Physiol [A]** 1989;93(1):273–80 (37 ref.)

Hippocampal synaptic transmission: regulation of the NMDA receptor–mediated component. Herron CE, et al. **Comp Biochem Physiol [A]** 1989;93(1):203–10 (84 ref.)

Characterization of deep dorsal horn neurones in the rat spinal cord in vitro: synaptic and excitatory amino acid induced excitations. King AE, et al. **Comp Biochem Physiol [A]** 1989;93(1):171–5

The role of excitatory amino acids in synaptic transmission in the hippocampus. Lambert JD, et al. **Comp Biochem Physiol [A]** 1989;93(1):195–201 (64 ref.)

Properties of synaptic transmission at the neuromuscular junction of the squid, Loligo opalescens. Stockbridge N, et al. **Comp Biochem Physiol [A]** 1988;91(3):557–64

Function of synapses in the CA1 region of the hippocampus: their contribution to the generation or control of epileptiform activity. Wheal HV. **Comp Biochem Physiol [A]** 1989;93(1):211–20 (96 ref.)

Special cellular and synaptic mechanisms in motor pattern generation. Hartline DK, et al. **Comp Biochem Physiol [C]** 1988;91(1):115–31

Slowing of synapse elimination by alpha-bungarotoxin superfusion of the neonatal rabbit soleus muscle. Callaway EM, et al. **Dev Biol** 1989 Feb;131(2):356–65

Variation among acetylcholine receptor clusters induced by ciliary ganglion neurons in vitro. Dubinsky JM, et al. **Dev Biol** 1988 Nov;130(1):209–19

Effects of hypothermia on auditory brain-stem and somatosensory evoked responses. A model of a synaptic and axonal lesion. Sohmer H, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan–Feb; 74(1):50–7

Immunocytochemical and physiological evidence of a synapse between dopamine– and luteinizing hormone releasing hormone–containing neurons in the ewe median eminence. Kuljis RO, et al. **Endocrinology** 1989 Mar; 124(3):1579–81

Anticonvulsant action of the nucleoside transport inhibitor, soluflazine, on synaptic and non-synaptic epileptogenesis in the guinea-pig hippocampus. Ashton D, et al. **Epilepsy Res** 1988 Mar–Apr;2(2):65–71

Dopamine (DA) autoreceptor efficacy of 3-PPP enantiomers after short-term synaptic DA deprivation. Hjorth S, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):207–15

Synaptic and non-synaptic mechanisms underlying low calcium bursts in the in vitro hippocampal slice. Agopyan N, et al. **Exp Brain Res** 1988;73(3):533–40

Human fetal dopamine neurons grafted in a rat model of Parkinson's disease: ultrastructural evidence for synapse formation using tyrosine hydroxylase immunocytochemistry. Clarke DJ, et al. **Exp Brain Res** 1988;73(1):115–26

Lesion-induced vestibular plasticity in the frog: are N-methyl-D-aspartate receptors involved? Knöpfel T, et al. **Exp Brain Res** 1988;72(1):129–34

Additive feature of long-term potentiation and phorbol ester–induced synaptic enhancement in the mossy fiber–CA3 synapse. Kamiya H, et al. **Exp Neurol** 1988 Dec; 102(3):314–7

Synaptic structural plasticity following repetitive activation in the rat hippocampus. Petit TL, et al. **Exp Neurol** 1989 Jul;105(1):72–9

Glucocorticoid suppression of lesion-induced synaptogenesis: effect of temporal manipulation of steroid treatment. Scheff SW, et al. **Exp Neurol** 1989 Sep;105(3):260–4

Late inhibitory postsynaptic potentials in rat prefrontal cortex may be mediated by GABAB receptors. Karlsson G, et al. **Experientia** 1989 Feb 15;45(2):157–8

Light chain of tetanus toxin intracellularly inhibits acetylcholine release at neuro–neuronal synapses, and its internalization is mediated by heavy chain. Mochida S, et al. **FEBS Lett** 1989 Aug 14;253(1–2):47–51

A model proposing synaptic and extra-synaptic influences on the responses of cochlear nerve fibres. Hill KG, et al. **Hear Res** 1989 May;39(1–2):75–90 (78 ref.)

Synapse formation and development of neurotransmitter functions in neuronal cells from chick brain cultured in a serum-free, defined medium. Langui D, et al. **Int J Dev Neurosci** 1988;6(2):137–47

Secondary late components of the muscarinic postsynaptic potentials, in rabbit superior cervical ganglion. Mochida S, et al. **J Auton Nerv Syst** 1988 Sep;24(1–2):41–9

Enhancement of peptidergic synaptic transmission by catecholamines in the bullfrog sympathetic ganglion. Ushijima H, et al. **J Auton Nerv Syst** 1988 Aug;23(2):95–102

Presynaptic alpha 2-adrenoreceptors affecting terminal synaptic transmission by the nervi cardiaci accelerantes in the rat. Rose Meyer CM, et al. **J Auton Pharmacol** 1989 Apr;9(2):119–27

Synaptic organization of serotonin–immunoreactive fibers in primary visual cortex of the macaque monkey. de Lima AD, et al. **J Comp Neurol** 1988 Aug 8;274(2):280–94

Neuronal and glial changes in the rat phrenic nucleus occurring within hours after spinal cord injury. Goshgarian HG, et al. **J Comp Neurol** 1989 Jun 22;284(4):519–33

Optic synapse number but not density is constrained during regeneration onto surgically halved tectum in goldfish: HRP–EM evidence that optic fibers compete for fixed numbers of postsynaptic sites on the tectum. Hayes WP, et al. **J Comp Neurol** 1988 Aug 22;274(4):539–59

Modification of left-right pairing during the development of individual crest synapses in the rat interpeduncular nucleus. Lenn NJ, et al. **J Comp Neurol** 1989 Mar 1; 281(1):136–42

Relationship between synaptogenesis and cytochrome oxidase activity in Purkinje cells of the developing rat cerebellum. Mjaatvedt AE, et al. **J Comp Neurol** 1988 Nov 8;277(2):155–82

Ultrastructural and neurochemical analysis of synaptic input to trigemino–thalamic projection neurones in lamina I of the rat: a combined immunocytochemical and retrograde labelling study. Priestley JV, et al. **J Comp Neurol** 1989 Jul 22;285(4):467–86

Cellular mechanisms controlling the strength of synapses. Wilson CJ. **J Electron Microsc Tech** 1988 Nov; 10(3):293–313 (65 ref.)

Kappa-bungarotoxin blocks nicotinic transmission at an identified invertebrate central synapse. Chiappinelli VA, et al. **J Exp Biol** 1989 Jan;141:61–71

Quasielastic laser light scattering and laser Doppler electrophoresis as probes of synaptic and secretory terminal function. Sattelle DB. **J Exp Biol** 1988 Sep;139:233–52 (39 ref.)

Presynaptic calcium currents and facilitation of serotonin release at synapses between cultured leech neurones. Stewart RR, et al. **J Exp Biol** 1989 Jul;144:1–12

Analysis of synaptic inputs to on–off amacrine cells of the carp retina. Kujiraoka T, et al. **J Gen Physiol** 1988 Oct; 92(4):475–87

The effects of haloperidol on synaptic plasticity in rat's medial prefrontal cortex. Klintzova AJ, et al. **J Hirnforsch** 1989;30(1):51–7

The effects of amphetamine on synaptic plasticity in rat's medial prefrontal cortex. Uranova NA, et al. **J Hirnforsch** 1989;30(1):45–50

The importance of cnidarian synapses for neurobiology. Anderson PA, et al. **J Neurobiol** 1989 Jul;20(5):435–57 (62 ref.)

Structural plasticity at identified synapses during long-term memory in Aplysia. Bailey CH, et al. **J Neurobiol** 1989 Jul;20(5):356–72 (50 ref.)

Absence of competitive interactions among axon terminals of regenerating motor neurons. Denburg JL, et al. **J Neurobiol** 1988 Oct;19(7):656–65

Parallel processing and selection of the responses to serotonin during reinnervation of an identified leech neuron. Drapeau P, et al. **J Neurobiol** 1989 Jul;20(5):312–25 (42 ref.)

The differential regulation of formation of chemical and electrical connections in Helisoma. Haydon PG, et al. **J Neurobiol** 1988 Oct;19(7):636–55

The use of hormonally induced mosaics to study alterations in the synaptic connections made by persistent sensory neurons during insect metamorphosis. Levine RB, et al. **J Neurobiol** 1989 Jul;20(5):326–38

The refinement of invertebrate synapses during development. Lnenicka GA, et al. **J Neurobiol** 1989 Jul;20(5):339–55 (75 ref.)

Fly photoreceptor synapses: their development, evolution, and plasticity. Meinertzhagen IA. **J Neurobiol** 1989 Jul; 20(5):276–94 (68 ref.)

Cell death of motoneurons in the chick embryo spinal cord. X. Synapse formation on motoneurons following the reduction of cell death by neuromuscular blockade. Okada A, et al. **J Neurobiol** 1989 Jun;20(4):219–33

Presynaptic aspects of cotransmission: relationship between vesicles and neurotransmitters. Boarder MR. **J Neurochem** 1989 Jul;53(1):1–11 (88 ref.)

Presynaptic mechanisms underlying the gamma-aminobutyric acid–evoked receptor–independent release of [3H]norepinephrine in rat hippocampus. Bonanno G, et al. **J Neurochem** 1989 Jun;52(6):1854–8

4-[18F]fluoro-L-m-tyrosine: an L-3,4-dihydroxyphenylalanine analog for probing presynaptic dopaminergic function with positron emission tomography. Melega WP, et al. **J Neurochem** 1989 Jul; 53(1):311–4

Inositol phospholipid metabolism during and following synaptic activation: role of adenosine. Rubio R, et al. **J Neurochem** 1989 Mar;52(3):797–806

Reinstatement of synaptic connectivity in the striatum of weaver mutant mice following transplantation of ventral mesencephalic anlagen. Triarhou LC, et al. **J Neurocytol** 1988 Apr;17(2):233–43

An investigation of possible transynaptic neuronal degeneration in human spinal cord injury. Kaelan C, et al. **J Neurol Sci** 1988 Sep;86(2–3):231–7

Synaptic inputs and morphology of sustained ON–ganglion cells in the mudpuppy retina [published erratum appears in J Neurophysiol 1988 Nov;60(5):preceding 1523] Arkin MS, et al. **J Neurophysiol** 1988 Sep;60(3):1143–59

Bipolar origin of synaptic inputs to sustained OFF–ganglion cells in the mudpuppy retina. Arkin MS, et al. **J Neurophysiol** 1988 Sep;60(3):1122–42

Postsynaptic control of the induction of long-term changes in efficacy of transmission at neocortical synapses in slices of rat brain. Bindman LJ, et al. **J Neurophysiol** 1988 Sep; 60(3):1053–65

Synaptic effects of intercostal tendon organs on membrane potentials of medullary respiratory neurons. Bolser DC, et al. **J Neurophysiol** 1989 May;61(5):918–26

Unitary conductance changes at teleost Mauthner cell glycinergic synapses: a voltage-clamp and pharmacologic analysis. Faber DS, et al. **J Neurophysiol** 1988 Dec; 60(6):1982–99

Sets of synaptic currents paired by common presynaptic or postsynaptic neurons. Gardner D. **J Neurophysiol** 1989 Apr;61(4):845–53

Synaptic integrative properties at hyperbaric pressure. Grossman Y, et al. **J Neurophysiol** 1988 Oct;60(4):1497–512

Analysis of effective synaptic currents generated by homonymous Ia afferent fibers in motoneurons of the cat. Heckman CJ, et al. **J Neurophysiol** 1988 Dec;60(6):1946–66

A differential synaptic input to the motor nuclei of triceps surae from the caudal and lateral cutaneous sural nerves. LaBella LA, et al. **J Neurophysiol** 1989 Feb;61(2):291–301

Impulse activity of a crayfish motoneuron regulated its neuromuscular synaptic properties. Lnenicka GA, et al. **J Neurophysiol** 1989 Jan;61(1):91–6

Theory of dynamic similarity in neuronal systems. MacGregor RJ, et al. **J Neurophysiol** 1988 Aug; 60(2):751–68

GABA- and glutamate-mediated synaptic potentials in rat dorsal raphe neurons in vitro. Pan ZZ, et al. **J Neurophysiol** 1989 Apr;61(4):719–26

5-HT-mediated synaptic potentials in the dorsal raphe nucleus: interactions with excitatory amino acid and GABA neurotransmission. Pan ZZ, et al. **J Neurophysiol** 1989 Aug;62(2):481–6

The development of transmission at an identified molluscan synapse. I. The emergence of synaptic plasticities. Pawson PA, et al. **J Neurophysiol** 1988 Dec;60(6):2196–210

The development of transmission at an identified molluscan synapse. II. A quantal analysis of transmission. Pawson PA, et al. **J Neurophysiol** 1988 Dec;60(6):2211–22

Effects of low concentrations of 4-aminopyridine on CA1 pyramidal cells of the hippocampus. Perreault P, et al. **J Neurophysiol** 1989 May;61(5):953–70

Analysis of synaptic events in the opossum piriform cortex with improved current source-density techniques. Rodriguez R, et al. **J Neurophysiol** 1989 Apr;61(4):702–18

Voltage-dependent currents prolong single-axon postsynaptic potentials in layer III pyramidal neurons in rat neocortical slices. Thomson AM, et al. **J Neurophysiol** 1988 Dec;60(6):1896–907

Deep neurons in piriform cortex. II. Membrane properties that underlie unusual synaptic responses. Tseng GF, et al. **J Neurophysiol** 1989 Aug;62(2):386–400

Deep neurons in piriform cortex. I. Morphology and synaptically evoked responses including a unique high-amplitude paired shock facilitation. Tseng GF, et al. **J Neurophysiol** 1989 Aug;62(2):369–85

Membrane properties and synaptic responses of the guinea pig nucleus accumbens neurons in vitro. Uchimura N, et al. **J Neurophysiol** 1989 Apr;61(4):769–79

Effects of preventing reinnervation on axotomized spinal motoneurons in the cat. II. Changes in group Ia synaptic function. Vanden Noven S, et al. **J Neurophysiol** 1989 Aug; 62(2):325–33

Synaptic organization of the tectal-facial pathways in the cat. I. Synaptic potentials following collicular stimulation. Vidal PP, et al. **J Neurophysiol** 1988 Aug;60(2):769–97

Effects of spatial and temporal dispersion of synaptic input on the time course of synaptic potentials. Walmsley B, et al. **J Neurophysiol** 1989 Apr;61(4):681–7

Nonuniform release probabilities underlie quantal synaptic transmission at a mammalian excitatory central synapse. Walmsley B, et al. **J Neurophysiol** 1988 Sep;60(3):889–908

Primary afferent-evoked synaptic responses and slow potential generation in rat substantia gelatinosa neurons in vitro. Yoshimura M, et al. **J Neurophysiol** 1989 Jul; 62(1):96–108

Time course of structural changes at identified sensory neuron synapses during long-term sensitization in Aplysia. Bailey CH, et al. **J Neurosci** 1989 May;9(5):1774–80

Evidence for transsynaptic regulation of calmodulin-dependent cyclic nucleotide phosphodiesterase in cerebellar Purkinje cells. Balaban CD, et al. **J Neurosci** 1989 Jul;9(7):2374–81

Evidence that glycine mediates the postsynaptic potentials that inhibit lumbar motoneurons during the atonia of active sleep. Chase MH, et al. **J Neurosci** 1989 Mar;9(3):743–51

Do N-methyl-D-aspartate receptors mediate synaptic responses in the mudpuppy retina? Coleman PA, et al. **J Neurosci** 1988 Dec;8(12):4728–33

Signaling properties of Ascaris motorneurons: graded active responses, graded synaptic transmission, and tonic transmitter release. Davis RE, et al. **J Neurosci** 1989 Feb; 9(2):415–25

Studies of nerve–muscle interactions in Xenopus cell culture:

analysis of early synaptic currents. Evers J, et al. **J Neurosci** 1989 May;9(5):1523–39

Synaptic specificity in frog sympathetic ganglia during reinnervation, sprouting, and embryonic development. Feldman DH. **J Neurosci** 1988 Nov;8(11):4367–78

The ON-alpha ganglion cell of the cat retina and its presynaptic cell types. Freed MA, et al. **J Neurosci** 1988 Jul;8(7):2303–20

Bursting induces persistent all-or-none EPSPs by an NMDA-dependent process in piriform cortex. Hoffman WH, et al. **J Neurosci** 1989 Jan;9(1):206–15

Transneuronal regulation of protein synthesis in the brain-stem auditory system of the chick requires synaptic activation. Hyson RL, et al. **J Neurosci** 1989 Aug; 9(8):2835–45

NMDA- and non-NMDA-receptor components of excitatory synaptic potentials recorded from cells in layer V of rat visual cortex. Jones KA, et al. **J Neurosci** 1988 Sep;8(9):3522–34

The role of gonadal hormones in neuromuscular synapse elimination in rats. I. Androgen delays the loss of multiple innervation in the levator ani muscle. Jordan CL, et al. **J Neurosci** 1989 Jan;9(1):229–38

The role of gonadal hormones in neuromuscular synapse elimination in rats. II. Multiple innervation persists in the adult levator ani muscle after juvenile androgen treatment. Jordan CL, et al. **J Neurosci** 1989 Jan;9(1):239–47

Relationships between segregated afferents and postsynaptic neurones in the optic tectum of three-eyed frogs. Katz LC, et al. **J Neurosci** 1988 Sep;8(9):3160–80

The development of sensorimotor synaptic connections in the lumbosacral cord of the chick embryo. Lee MT, et al. **J Neurosci** 1988 Jul;8(7):2530–43

Disuse-induced enhancement of Ia synaptic transmission in spinal motoneurons of the rat. Manabe T, et al. **J Neurosci** 1989 Jul;9(7):2455–61

Androgen regulates synaptic input to motoneurons of the adult rat spinal cord. Matsumoto A, et al. **J Neurosci** 1988 Nov;8(11):4168–76

Synaptogenesis in the rat suprachiasmatic nucleus demonstrated by electron microscopy and synapsin I immunoreactivity. Moore RY, et al. **J Neurosci** 1989 Jun; 9(6):2151–62

Expression of calcium/calmodulin-dependent protein kinase in relation to dopamine islands and synaptic maturation in the cat striatum. Newman-Gage H, et al. **J Neurosci** 1988 Sep;8(9):3360–75

Motor activity in the isolated spinal cord of the chick embryo: synaptic drive and firing pattern of single motoneurons. O'Donovan MJ. **J Neurosci** 1989 Mar; 9(3):943–58

Activation of GABAB receptors causes presynaptic inhibition at synapses between muscle spindle afferents and motoneurons in the spinal cord of bullfrogs. Peng YY, et al. **J Neurosci** 1989 May;9(5):1502–15

Activation of GABAA receptors causes presynaptic and postsynaptic inhibition at synapses between muscle spindle afferents and motoneurons in the spinal cord of bullfrogs. Peng YY, et al. **J Neurosci** 1989 May;9(5):1516–22

Cholinergic synapses and the organization of contrast detection in the crayfish optic lobe. Pfeiffer C, et al. **J Neurosci** 1989 Jun;9(6):1872–82

Ultrastructural demonstration of a gastric monosynaptic vagal circuit in the nucleus of the solitary tract in rat. Rinaman L, et al. **J Neurosci** 1989 Jun;9(6):1985–96

Amplitude fluctuations in small EPSPs recorded from CA1 pyramidal cells in the guinea pig hippocampal slice. Sayer RJ, et al. **J Neurosci** 1989 Mar;9(3):840–50

Evidence that guanosine triphosphate (GTP)-binding proteins control a synaptic response in brain: effect of pertussis toxin and GTP gamma S on the late inhibitory postsynaptic potential of hippocampal CA3 neurons. Thalmann RH. **J Neurosci** 1988 Dec;8(12):4589–602

Synaptic organization of individual neurons in the macaque lateral geniculate nucleus. Wilson JR. **J Neurosci** 1989 Aug; 9(8):2931–53

Presynaptic long-term facilitation at the crayfish neuromuscular junction: voltage-dependent and ion-dependent phases. Wojtowicz JM, et al. **J Neurosci** 1988 Dec;8(12):4667–74

The effects of postsynaptic levels of cyclic AMP on excitatory and inhibitory responses of an identified central neuron. Wolszon LR, et al. **J Neurosci** 1989 Mar; 9(3):784–97

Piriform cortex brain slices: techniques for isolation of synaptic inputs. Hori N, et al. **J Neurosci Methods** 1988 Oct;25(3):197–208

How synaptic noise may affect cross-correlations. Midroni G, et al. **J Neurosci Methods** 1989 Feb;27(1):1–12

Synaptic currents recorded from the dendritic field of an insect giant interneurone. Mony L, et al. **J Neurosci Methods** 1988 Sep;25(2):103–9

Corticorubral connections: ultrastructural evidence for homotypical synaptic reinnervation after developmental deafferentation. Fisher RS, et al. **J Neurosci Res** 1988 Oct-Dec;21(2–4):438–46

Serotonin agonists inhibit synaptic potentials in the rat locus ceruleus in vitro via 5-hydroxytryptamine1A and 5-hydroxytryptamine1B receptors. Bobker DH, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):37–43

Presynaptic activation of the spinal serotonergic system in the rat by phencyclidine in vitro. Ohno Y, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):177–83

Temperature and synaptic efficacy in frog skeletal muscle. Adams BA. **J Physiol (Lond)** 1989;408:443–55

Quantal secretion at release sites of nerve terminals in toad (Bufo marinus) muscle during formation of topographical maps. Bennett MR, et al. **J Physiol (Lond)** 1988 Jul; 401:567–79

Synaptic potentials in rat locus coeruleus neurones. Cherubini E, et al. **J Physiol (Lond)** 1988 Dec;406:431–42

Further evidence for synaptic actions of muscle spindle secondaries in the middle lumbar segments of the cat spinal cord. Harrison PJ, et al. **J Physiol (Lond)** 1988 Aug; 402:671–86

Activity-dependent and -independent synaptic interactions during reinnervation of partially denervated rat muscle. Ribchester RR. **J Physiol (Lond)** 1988 Jul;401:53–75

Synaptic control of hindlimb motoneurones during three forms of the fictive scratch reflex in the turtle. Robertson GA, et al. **J Physiol (Lond)** 1988 Oct;404:101–28

Inhibition of norepinephrine release by presynaptic alpha 2-adrenoceptors in mesenteric vasculature preparations from chronic DOCA-salt hypertensive rats. Tsuda K, et al. **Jpn Heart J** 1989 Mar;30(2):231–9

Acute kindling: discrepancy between lengthening of after-discharge duration and increase of field EPSP evoked in kindled site during interstimulation interval. Jibiki I, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):323–30

The organization of the cholinergic synapse. Whittaker VP. **Keio J Med** 1988 Sep;37(3):234–54 (62 ref.)

Facilitation of nicotinic acetylcholine responses during the late slow EPSP in a subpopulation of bullfrog sympathetic neurons. Hasuo H, et al. **Kurume Med J** 1988;35(1):43–8

Neurochemical correlates of synaptically active amino acids. Bennett JP Jr, et al. **Life Sci** 1974 Sep 15;15(6):1045–56 (37 ref.)

Selective vulnerability of brain: new insights from the excitatory synapse. Collins RC. **Metab Brain Dis** 1986 Dec; 1(4):231–40 (96 ref.)

NMDA and non-NMDA receptors are co-localized at individual excitatory synapses in cultured rat hippocampus. Bekkers JM, et al. **Nature** 1989 Sep 21;341(6239):230–3

Rapid increase of an immediate early gene messenger RNA in hippocampal neurons by synaptic NMDA receptor activation. Cole AJ, et al. **Nature** 1989 Aug 10; 340(6233):474–6

Learning by handshake? [letter] Collingridge GL, et al. **Nature** 1989 Jun 22;339(6226):588

Temporally distinct pre- and post-synaptic mechanisms maintain long-term potentiation. Davies SN, et al. **Nature** 1989 Apr 6;338(6215):500–3

A histamine-activated chloride channel involved in neurotransmission at a photoreceptor synapse. Hardie RC. **Nature** 1989 Jun 29;339(6227):704–6

Cellular neurobiology. Synaptic memory molecules [news] Kennedy MB. **Nature** 1988 Oct 27;335(6193):770–2

An essential role for postsynaptic calmodulin and protein kinase activity in long-term potentiation. Malenka RC, et al. **Nature** 1989 Aug 17;340(6234):554–7

Persistent protein kinase activity underlying long-term potentiation. Malinow R, et al. **Nature** 1988 Oct 27; 335(6193):820–4

Synaptic transmission. Broad minded on narrow spikes [news] Meech R. **Nature** 1989 Aug 24;340(6235):594 (12 ref.)

Memory. Must what goes up come down? [news] Morris RG, et al. **Nature** 1989 May 18;339(6221):175–6

Associative long-term depression in the hippocampus induced by hebbian covariance. Stanton PK, et al. **Nature** 1989 May 18;339(6221):215–8

Strengthening the synapses [news] Stevens CF. **Nature** 1989 Apr 6;338(6215):460–1

Effects of transmitter antagonists on monopolar postsynaptic potentials. Straka H, et al. **Naturwissenschaften** 1988 Oct; 75(10):521–3

Characterization and presynaptic modulation of stimulation-evoked exocytotic co-release of noradrenaline and neuropeptide Y in guinea pig heart. Haass M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):71–8

Age-dependent alterations in hippocampal synaptic plasticity: relation to memory disorders. deToledo-Morrell L, et al. **Neurobiol Aging** 1988 Sep-Dec;9(5-6):581–90 (88 ref.)

Changes in the amounts of amino acids associated with nerve endings (synaptosomes) during synaptogenesis. Helgason CD, et al. **Neurochem Res** 1989 Apr;14(4):297–300

Postsynaptic effects of prolactin and estrogen on arcuate neurons in rat hypothalamic slices. Nishihara M, et al. **Neuroendocrinology** 1989 Feb;49(2):215–8

Comparison of monosynaptic and polysynaptic Ia reflexes in the evaluation of hyporeflexia. Deuschl G, et al. **Neurology** 1988 Nov;38(11):1810–1

Contribution of pre- and post-synaptic components to heightened central cholinergic activity in spontaneously hypertensive rats. Makari NF, et al. **Neuropharmacology** 1989 Apr;28(4):379–86

Synaptic plasticity and learning. II: Do different kinds of plasticity underlie different kinds of learning? Morris RG, et al. **Neuropsychologia** 1989;27(1):41–59

Possible mechanisms of synapse formation in ontogeny. Bogolepov NN, et al. **Neurosci Behav Physiol** 1989 May-Jun;19(3):177–85

Electrotonic synapses in the spinal cord of mammals. Motorina MV. **Neurosci Behav Physiol** 1989 Jan-Feb; 19(1):72–8

Formation of serotoninergic and GABAergic mechanisms of synaptic transmission in the cat neocortex during early ontogenesis. Raevskii VV. **Neurosci Behav Physiol** 1988 May-Jun;18(3):230–6

Sexual differentiation of the neuronal plasma membrane: neonatal levels of sex steroids modulate the number of exo-endocytotic images in the developing rat arcuate neurons. Garcia-Segura LM, et al. **Neurosci Lett** 1988 Aug 15;91(1):19–23

Ultrastructure of synapses in the cerebellar cortex after long-term activation of climbing fibres. Hawdon G, et al. **Neurosci Lett** 1988 Aug 15;91(1):7–13

Different susceptibilities of long-term potentiations in CA3 and CA1 regions of guinea pig hippocampal slices to nootropic drugs. Satoh M, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):236–41

Simultaneous recording of presynaptic spikes and excitatory postsynaptic potentials from monosynaptically connected hippocampal neurons. Sawada S, et al. **Neurosci Lett** 1989 Aug 14;103(1):34–8

Synaptic transmission between cultured rat hippocampal neurons is enhanced by activation of protein kinase-C. Segal M. **Neurosci Lett** 1989 Jun 19;101(2):169–74

Reorganization of cerebellar cell suspension transplanted into the weaver mutant cerebellum and immunohistochemical detection of synaptic formation. Kohsaka S, et al. **Neurosci Res** 1988 Dec;6(2):162–6

Dopaminergic neuromodulation in the retinas of lower vertebrates. Weiler R, et al. **Neurosci Res Suppl** 1988; 8:S183–96 (21 ref.)

Non-cholinergic synaptic potentials mediated by lumbar colonic nerve in the guinea-pig inferior mesenteric ganglion in vitro. Hankins MW, et al. **Neuroscience** 1988 Sep;26(3):1073–81

Enkephalin fibers synapse on cholinergic neurons in the rat sacral intermediolateral nucleus: a double-immunostaining at the light and electron microscopic levels. Kohno J, et al. **Neuroscience** 1989;28(2):487–94

Early onset of synapse formation in the human hippocampus: a correlation with Nissl-Golgi architectonics in 15- and 16.5-week-old fetuses. Kostović I, et al. **Neuroscience** 1989; 30(1):105–16

Denervation reveals two components of neurotransmission in electroreceptor synapses. Peters RC, et al. **Neuroscience** 1988 Dec;27(3):1049–53

Synapse-competence of LA-N-2 human neuroblastoma cells in coculture with rat striated muscle cells. Yeh HH, et al. **Neuroscience** 1988 Oct;27(1):309–15

Effects of neurotoxicants on synaptic transmission: lessons learned from electrophysiological studies. Atchison WD. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):393–416 (206 ref.)

Triethyltin exposure suppresses synaptic transmission in area CA1 of the rat hippocampal slice. Fountain SB, et al. **Neurotoxicol Teratol** 1988 Nov-Dec;10(6):539–48

Specificity of synapse formation in the cockroach. Blagburn JM. **P R Health Sci J** 1988 Aug;7(2):171–6

Primary afferent depolarization and presynaptic inhibition in the mammalian spinal cord. Rudomin P. **P R Health Sci J** 1988 Aug;7(2):155–66 (82 ref.)

Pre- and post-synaptic muscarinic receptors of the rat vas deferens: an update. Silva WI, et al. **P R Health Sci J** 1988 Aug;7(2):105–10

Alteration of identified output synapses spared by axotomy. Titmus MJ, et al. **P R Health Sci J** 1988 Aug;7(2):181–2

Cholecystokinin and cholecystokinin antagonists enhance postsynaptic excitability in the dentate gyrus. Sinton CM. **Peptides** 1988 Sep-Oct;9(5):1049–53

Presynaptic inhibition of cholinergic transmission by peptidergic neurons in bullfrog sympathetic ganglia. Hasuo H, et al. **Pflugers Arch** 1988 Dec;413(2):206–8

Synaptic potentials induced by postganglionic stimulations in cat bladder parasympathetic neurones. Kumamoto E. **Pflugers Arch** 1989 Jun;414(2):235–44

Nicotinic acetylcholine receptor-ion channels involved in synaptic currents in bullfrog sympathetic ganglion cells and effects of atropine. Minota S, et al. **Pflugers Arch** 1989 Jul; 414(3):249–56

A method to estimate the effects of parallel inputs on neuronal discharge probability. Windhorst U, et al. **Pflugers Arch** 1989 Apr;413(6):622–8

Anatomical plasticity of synapses in the lamina of the optic lobe of the fly. Kral K, et al. **Philos Trans R Soc Lond [Biol]** 1989 Feb 27; 323(1214):155–83

Modulation of neurotransmitter release by presynaptic autoreceptors. Starke K, et al. **Physiol Rev** 1989 Jul; 69(3):864–989 (716 ref.)

Long-term sensitization in Aplysia increases the number of presynaptic contacts onto the identified gill motor neuron L7. Bailey CH, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9356–9

Inositolphospholipid-linked glutamate receptors mediate cerebellar parallel-fiber-Purkinje-cell synaptic transmission. Blackstone CD, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4316–20

Synaptogenesis in visual cortex of normal and preterm monkeys: evidence for intrinsic regulation of synaptic overproduction. Bourgeois JP, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4297–301

Synergism at central synapses due to lateral diffusion of

transmitter. Faber DS, et al.
Proc Natl Acad Sci U S A 1988 Nov;85(22):8708–12

Intermittent chaos, self-organization, and learning from synchronous synaptic activity in model neuron networks. Hoppensteadt FC. **Proc Natl Acad Sci U S A** 1989 May; 86(9):2991–5

Relationship of insulin-like growth factor II gene expression in muscle to synaptogenesis. Ishii DN.
Proc Natl Acad Sci U S A 1989 Apr;86(8):2898–902

ATP-dependent directional movement of rat synaptic vesicles injected into the presynaptic terminal of squid giant synapse. Llinás R, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5656–60

Long-term potentiation differentially affects two components of synaptic responses in hippocampus. Muller D, et al.
Proc Natl Acad Sci U S A 1988 Dec;85(23):9346–50

The glutamate analog 2-amino-4-phosphonobutyrate antagonizes synaptic transmission from cones to horizontal cells in the goldfish retina. Nawy S, et al.
Proc Natl Acad Sci U S A 1989 Mar;86(5):1726–30

Growth and elimination of nerve terminals at synaptic sites during polyneuronal innervation of muscle cells: a trophic hypothesis. Bennett MR, et al. **Proc R Soc Lond [Biol]** 1989 Jan 23;235(1281):299–320

Role of excitatory amino acid receptors in synaptic transmission in area CA1 of rat hippocampus. Davies SN, et al. **Proc R Soc Lond [Biol]** 1989 May 22;236(1285):373–84

Effects of calcitonin gene-related peptide on synaptic acetylcholine receptor-channels in rat muscle fibres. Eusebi F, et al. **Proc R Soc Lond [Biol]** 1988 Aug 23; 234(1276):333–42

Steps in the development of chemical and electrical synapses by pairs of identified leech neurons in culture. Liu Y, et al. **Proc R Soc Lond [Biol]** 1989 Apr 22;236(1284):253–68

The effect of photoreceptor coupling and synapse nonlinearity on signal:noise ratio in early visual processing. Tessier-Lavigne M, et al. **Proc R Soc Lond [Biol]** 1988 Jul 22;234(1275):171–97

Multiple effects of capsaicin on synaptic transmission in a mammalian sympathetic ganglion in vitro. Anthony TL, et al. **Proc West Pharmacol Soc** 1988;31:5–8

Cisapride potentiates fast nicotinic synaptic potentials in the myenteric plexus of the guinea pig ileum. Galligan JJ, et al. **Proc West Pharmacol Soc** 1988;31:9–11

Synaptic organization of the lateralis
medialis–suprageniculate nuclear (LM–Sg) complex in the cat. Norita M, et al. **Prog Brain Res** 1988;75:109–19 (30 ref.)

Synapse regulation by transplanted astrocytes: a tissue culture study. Seil FJ, et al. **Prog Brain Res** 1988;78:395–9 (24 ref.)

Electrically coupled but chemically isolated synapses: dendritic spines and calcium in a rule for synaptic modification. Wickens J. **Prog Neurobiol** 1988;31(6):507–28 (281 ref.)

Evidence for post-synaptic changes mediating increased behavioural sensitivity to dopamine receptor agonists in hypothyroid rats. Crocker AD, et al.
Prog Neuropsychopharmacol Biol Psychiatry 1988; 12(5):607–15

New evidence that L-glutamate is a transmitter at the squid giant synapse. De Santis A, et al. **Q J Exp Physiol** 1989 Mar;74(2):219–22

Simulation of action potential propagation in terminal arborizations of cultured sensory ganglia. Braschler U, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):13–8

Re-development of synaptic connections after implanted single 5-HT containing neuron in isolated leech ganglia. Zhang RJ. **Sci China [B]** 1989 Jan;32(1):88–95

Long-term synaptic potentiation. Brown TH, et al.
Science 1988 Nov 4;242(4879):724–8 (44 ref.)

Synaptic transmission between dissociated adult mammalian neurons and attached synaptic boutons. Drewe JA, et al. **Science** 1988 Sep 30;241(4874):1810–3

A pertussis toxin-sensitive G protein in hippocampal long-term potentiation. Goh JW, et al. **Science** 1989 May 26;244(4907):980–3

Central synaptic inputs to identified leech neurons determined by peripheral targets. Loer CM, et al.
Science 1989 Apr 7;244(4900):64–6

Postsynaptic calcium is sufficient for potentiation of hippocampal synaptic transmission. Malenka RC, et al.
Science 1988 Oct 7;242(4875):81–4

Inhibition of postsynaptic PKC or CaMKII blocks induction but not expression of LTP. Malinow R, et al. **Science** 1989 Aug 25;245(4920):862–6

Effect of serotonergic afferents on quantal release at central inhibitory synapses. Mintz I, et al. **Science** 1989 Jul 14; 245(4914):190–2

Contributions of quisqualate and NMDA receptors to the induction and expression of LTP. Muller D, et al.
Science 1988 Dec 23;242(4886):1694–7

Synaptic connections in vitro: modulation of number and efficacy by electrical activity. Nelson PG, et al. **Science** 1989 May 5;244(4904):585–7

Neuronal cytomechanics: the actin-based motility of growth cones. Smith SJ. **Science** 1988 Nov 4;242(4879):708–15 (60 ref.)

Fingering the trigger for neurotransmitter secretion: studies on the calcium channels of squid giant presynaptic terminals. Augustine GJ, et al. **Soc Gen Physiol Ser** 1989; 44:203–23

Pharmacological aspects of excitatory synaptic transmission to second-order vestibular neurons in the frog. Cochran SL, et al. **Synapse** 1987;1(1):102–23

Recollections on the early concepts of the synapse. Eccles JC. **Synapse** 1987;1(2):131–2

Primordial synaptic structures and synaptogenesis in rat olfactory cortex. Kunkel DD, et al. **Synapse** 1987; 1(2):191–201

Synaptic structural plasticity: role of synaptic shape. Markus EJ, et al. **Synapse** 1989;3(1):1–11 (63 ref.)

Induction of hippocampal long-term potentiation in the absence of extracellular Ca2+. May PB, et al. **Synapse** 1987;1(3):273–8

Cytology and immunocytochemistry of the nucleus of the lateral line lobe in the electric fish Gnathonemus petersii (Mormyridae): evidence suggesting that GABAergic synapses mediate an inhibitory corollary discharge. Mugnaini E, et al. **Synapse** 1987;1(1):32–56

Development of presynaptic specializations induced by basic polypeptide-coated latex beads in spinal cord cultures. Peng HB, et al. **Synapse** 1987;1(1):10–9

Sexual dimorphism in the synaptogenic effect of estradiol in prepuberal female rats. Rodriguez-Sierra JF, et al.
Synapse 1987;1(3):258–64

Cholinergic transmission at newly formed synapses made by retinal neurons in culture. Stockbridge N, et al. **Synapse** 1987;1(2):214–20

Presence of ghost doublets of coded neuronal patterns: relation to synaptic memory storage. Strehler BL, et al. **Synapse** 1989;3(1):19–29

Afferent axons from the antenna influence the number and placement of intrinsic synapses in the antennal lobes of Manduca sexta. Tolbert LP. **Synapse** 1989;3(1):83–95

Synaptogenesis in the stratum griseum superficiale of the rat superior colliculus. Warton SS, et al. **Synapse** 1989; 3(2):136–48

Calcium ions, active zones and synaptic transmitter release. Smith SJ, et al. **Trends Neurosci** 1988 Oct;11(10):458–64 (69 ref.)

Transmitter release from brain slices elicited by single pulses: a powerful method to study presynaptic mechanisms. Singer EA. **Trends Pharmacol Sci** 1988 Aug;9(8):274–6 (19 ref.)

[The learning dependent long-term synaptic potentiation in the rat hippocampal CA3 region] Yi L, et al.
Sheng Li Hsueh Pao 1989 Jun;41(3):223–30 (Eng. Abstr.) (Chi)

[Synapses of Hebb and epigenesis of the visual cortex] Fregnac Y, et al. **Arch Int Physiol Biochim** 1988 Sep; 96(4):A175–7 (12 ref.) (Fre)

[Regulation of synaptogenesis in the adult skeletal muscle] Sanes JR, et al. **Reprod Nutr Dev** 1988;28(3B):733–52 (72 ref.) (Eng. Abstr.) (Fre)

[Molecular biology of the inhibitory synapse] Betz H.
Arzneimittelforschung 1989 Jan;39(1A):138–43 (31 ref.) (Eng. Abstr.) (Ger)

[High extracellular concentrations of potassium and rubidium modulate the synaptic transmission in the frog labyrinth] Rossi ML, et al. **Boll Soc Ital Biol Sper** 1989 Jan;65(1):23–7 (Eng. Abstr.) (Ita)

[Endogenous factors involved in synapse formation] Taniura H, et al. **Tanpakushitsu Kakusan Koso** 1988 Aug; 33(10):1658–66 (67 ref.) (Jpn)

[Changes in synaptic potentials and axonal delays as factors causing epileptic instability of neuronal networks] Trąbka W, et al. **Neurol Neurochir Pol** 1988 Sep–Oct;22(5):429–38 (Eng. Abstr.) (Pol)

[Regulating interpretation of the mechanisms of occurrence of epileptic activity in neuronal networks. III. Synchronization, continuous epileptic activity and possible epileptic destabilization of the central nervous system] Trąbka W. **Przegl Lek** 1989;46(2):306–10 (19 ref.) (Pol)

[Information characteristics of neuronal and synaptic plasticity] Frolov AA, et al. **Biofizika** 1988 Jul–Aug; 33(4):659–66 (Eng. Abstr.) (Rus)

[Ineffective synapses in hippocampal slices in vitro] Voronin LL, et al. **Dokl Akad Nauk SSSR** 1988;302(3):746–9 (Rus)

[An analysis of transmission in the interneuronal synapses using a convolution of binomial distributions] Bart AG, et al. **Neirofiziologiia** 1988;20(4):487–94 (Eng. Abstr.) (Rus)

[Quantal analysis of the postsynaptic potentials in interneuronal synapses: the recovery of the signal from the noise] Bart AG, et al. **Neirofiziologiia** 1988;20(4):479–87 (Eng. Abstr.) (Rus)

[A model of the interaction of chemical synapses] Poliakov AM. **Neirofiziologiia** 1988;20(4):503–9 (Eng. Abstr.) (Rus)

[Reorganization of the synaptic inputs of the sensorimotor cortex to the red nucleus after the destruction of the cerebellar nucleus interpositus in adult cats] Sarkisian DS, et al. **Neirofiziologiia** 1988;20(4):564–7 (Eng. Abstr.) (Rus)

[Influence of monoamines on heterosynaptic facilitation in giant neurons of Planorbis corneus] Storozhuk VM, et al. **Neirofiziologiia** 1989;21(2):224–32 (Eng. Abstr.) (Rus)

[Modern approaches to the study of cellular and synaptic mechanisms of the so-called dominant] Batuev AS.
Nerv Sist 1988;26:34–44 (27 ref.) (Rus)

[Nonsynaptic regulation of rhythmic electrical activity in foci of stable excitation] Rusinov VS, et al. **Nerv Sist** 1988; 26:44–59 (Rus)

[Synaptic transmission in the receptors of the lateral acoustic system] Akoev GN, et al. **Usp Fiziol Nauk** 1988 Jul–Sep; 19(3):81–98 (127 ref.) (Rus)

[Electrophysiological analysis of the phenomenon of "blocked" neuromuscular synapses in patients with myasthenia gravis] Gekht BM, et al.
Zh Nevropatol Psikhiatr 1989;89(3):96–102 (Eng. Abstr.) (Rus)

[The analysis of the impulse activity of 2 neurons monosynaptically excitable by a 3rd using cross-correlation histograms and Cox's method. The potential for detecting neuronal and synaptic plasticity] Zosimovskiĭ VA.
Zh Vysh Nerv Deiat 1989 Mar–Apr;39(2):334–42 (Eng. Abstr.) (Rus)

[Possibilities of detecting the plasticity of monosynaptic excitable connections during the analysis of impulse activity of neurons using cross-correlation histograms and Cox's method] Zosimovskiĭ VA. **Zh Vysh Nerv Deiat** 1989 Jan–Feb;39(1):110–7 (Eng. Abstr.) (Rus)

[Mechanisms of synaptic plasticity] Bělušková L.
Cesk Fysiol 1988;37(5):387–400 (91 ref.) (Slo)

PHYSIOPATHOLOGY

[Study of the mechanisms of the development of epileptic activity in neuronal networks using a simulation model] Trąbka W, et al. **Neurol Neurochir Pol** 1988 Sep–Oct; 22(5):421–8 (Eng. Abstr.) (Pol)

RADIATION EFFECTS

[Synaptic function of the cerebral cortex in gamma irradiation] Gaĭdamakin NA, et al.
Zh Nevropatol Psikhiatr 1988;88(7):11–6 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

New synapses associated with the granule-containing cells of rat sympathetic ganglia. Mekhail NA, et al.
Acta Anat (Basel) 1988;133(2):102–6

Ultrastructure and synaptic architecture of spinal motoneurons in the frog (Rana catesbeiana). Wang CL, et al. **Acta Anat (Basel)** 1989;134(1):1–11

An electron microscopic study of inclusion bodies in synaptic terminals of scrapie-infected animals. Gibson PH, et al.
Acta Neuropathol (Berl) 1989;77(4):420–5

Ultrastructural changes of synapses in supraoptic nucleus of hedgehog during hibernation. Malínský J, et al.
Acta Univ Palacki Olomuc Fac Med 1988;120:117–26

Quantitative morphology and synaptology of cerebellar glomeruli in the rat. Jakab RL, et al.
Anat Embryol (Berl) 1988;179(1):81–8

Effects of electrical stimulation of the superior cervical ganglia on the number of "synaptic" ribbons and the activity of melatonin-forming enzymes in the rat pineal gland. Reuss S, et al. **Anat Embryol (Berl)** 1989;179(4):341–5

Morphometric analysis of mitochondria and boutons in the dentate gyrus molecular layer of aged rats. Toussaint C, et al. **Anat Embryol (Berl)** 1989;179(4):411–4

Perisynaptic satellite cells in human external intercostal muscle: a quantitative and qualitative study. Wokke JH, et al. **Anat Rec** 1989 Feb;223(2):174–80

Perforated synapses on double-headed dendritic spines: a possible structural substrate of synaptic plasticity. Geinisman Y, et al. **Brain Res** 1989 Feb 20;480(1–2):326–9

Synapses from bipolar cells onto dopaminergic amacrine cells in cat and rabbit retinas. Hokoç JN, et al. **Brain Res** 1988 Sep 27;461(1):17–26

High-voltage electron microscopy of E-PTA-stained synaptic junctions in the rat frontal cortex. Igarashi H, et al. **Brain Res** 1988 Nov 15;473(2):365–8

Regional, reversible ultrastructural changes in rat brain with chronic neuroleptic treatment. Meshul CK, et al.
Brain Res 1989 Jun 12;489(2):338–46

Synaptic organization of the pedunculopontine tegmental nucleus of the cat. Moriizumi T, et al. **Brain Res** 1989 Jan 30;478(2):315–25

Monosynaptic striatal inputs to the nigrotegmental neurons: an electron microscopic study in the cat. Tokuno H, et al. **Brain Res** 1989 Apr 17;485(1):189–92

Monosynaptic connections between serotonin-containing neurones labelled by 5,6-dihydroxytryptamine-induced pigmentation in the snail Helix pomatia L. Vehovszky A, et al. **Brain Res** 1989 Apr 10;484(1–2):404–7

Entorhinal fibers form synaptic contacts on parvalbumin-immunoreactive neurons in the rat fascia dentata. Zipp F, et al. **Brain Res** 1989 Aug 21;495(1):161–6

Anatomic evidence suggestive of dendrodendritic synapses in the opossum basilar pons. Mihailoff GA.
Brain Res Bull 1978 Jul–Aug;3(4):333–40

Projection pathways, co-existence of peptides and synaptic organization of nerve fibers in the inferior mesenteric ganglion of the guinea-pig. Masuko S, et al.
Cell Tissue Res 1988 Sep;253(3):507–16

The ultrastructure of the central nucleus of the inferior colliculus of the genetically epilepsy-prone rat. Roberts RC, et al. **Epilepsy Res** 1988 May–Jun;2(3):196–214

Characterization of input synapses on intracellularly stained neurons in hippocampal slices: an HRP/EM study. Frotscher M, et al. **Exp Brain Res** 1989;75(2):327–34

Mossy fiber synapses on glutamate
decarboxylase-immunoreactive neurons: evidence for feed-forward inhibition in the CA3 region of the

hippocampus. Protscher M. **Exp Brain Res** 1989; 75(2):441–5
Ultrastructural identification of synaptic terminals from cortical axons and from collateral axons of geniculo-cortical relay cells in the perigeniculate nucleus of the cat. Montero VM. **Exp Brain Res** 1989;75(1):65–72
Distribution of synaptic inputs onto goldfish retinal ganglion cell dendrites. Marshak D, et al. **Exp Eye Res** 1988 Jun; 46(6):965–78
Decreased density of synaptic formation in the frontal cortex of neonatal rats exposed to ethanol in utero. Inomata K, et al. **Int J Dev Neurosci** 1987;5(5–6):455–60
Ultrastructural study of calycine synaptic endings of colossal vestibular fibers in the cristae ampullares of the developing chick. Peusner KD, et al. **Int J Dev Neurosci** 1988; 6(3):267–83
Synaptic endfeet in the 'acoustic nerve nucleus' of the rat. An electron microscopic study. Alvarez-Bolado G, et al. **J Anat** 1988 Aug;159:19–28
The cytoskeletal architecture of the presynaptic terminal and molecular structure of synapsin I. Hirokawa N, et al. **J Cell Biol** 1989 Jan;108(1):111–26
Mamillary body in the rat: topography and synaptology of projections from the subicular complex, prefrontal cortex, and midbrain tegmentum. Allen GV, et al. **J Comp Neurol** 1989 Aug 15;286(3):311–36
Richness of environment affects the number of contacts formed by boutons containing flat vesicles but does not alter the number of these boutons per neuron. Beaulieu C, et al. **J Comp Neurol** 1988 Aug 15;274(3):347–56
Ultrastructural analysis of axosomatic contacts on functionally identified primate spinothalamic tract neurons. Carlton SM, et al. **J Comp Neurol** 1989 Mar 22; 281(4):555–66
Changes in dorsal horn synaptic disc numbers following unilateral dorsal rhizotomy. Chung K, et al. **J Comp Neurol** 1989 May 22;283(4):568–77
Morphology of afferent synapses in the Mauthner cell of larval Xenopus laevis. Cioni C, et al. **J Comp Neurol** 1989 Jun 8;284(2):205–14
Ultrastructure of taste cells and synapses in the mudpuppy Necturus maculosus. Delay RJ, et al. **J Comp Neurol** 1988 Nov 8;277(2):268–80
Ultrastructure of ChAT-immunoreactive synaptic terminals in the thalamic reticular nucleus of the rat. Hallanger AE, et al. **J Comp Neurol** 1988 Dec 22;278(4):486–97
Morphology and distribution of synapses onto a type of large field ganglion cell in the retina of the goldfish. Hitchcock PF. **J Comp Neurol** 1989 May 8;283(2):177–88
Rapidly adapting pulmonary receptor afferents: II. Fine structure and synaptic organization of central terminal processes in the nucleus of the tractus solitarius. Kalia M, et al. **J Comp Neurol** 1988 Aug 22;274(4):574–94
Ultrastructure and synaptic organization of luteinizing hormone-releasing hormone (LHRH) neurons in the anestrous ewe. Lehman MN, et al. **J Comp Neurol** 1988 Jul 22;273(4):447–58
Numbers of synapses in laminae I–IV of the rat dorsal horn. McNeill DL, et al. **J Comp Neurol** 1988 Dec 15; 278(3):453–60
Local synaptic organization of cholinergic neurons in the basolateral hypothalamus. Meeker RB, et al. **J Comp Neurol** 1988 Oct 8;276(2):157–68
Number of parallel fiber synapses on an individual Purkinje cell in the cerebellum of the rat. Napper RM, et al. **J Comp Neurol** 1988 Aug 8;274(2):168–77
Chemical and electrical synapses between photoreceptors in the retina of the turtle, Chelydra serpentina. Owen WG. **J Comp Neurol** 1985 Oct 22;240(4):423–33
Red nucleus of Macaca fascicularis: an electron microscopic study of its synaptic organization. Ralston DD, et al. **J Comp Neurol** 1989 Jun 22;284(4):602–20
Density of neurons and synapses in the cerebral cortex of the mouse. Schüz A, et al. **J Comp Neurol** 1989 Aug 22; 286(4):442–55
Structure of a tonically transmitting synapse between identified interneurone in the locust brain. Simmons PJ, et al. **J Comp Neurol** 1989 May 1;283(1):129–42
Auditory receptor of the red-eared turtle: II. Afferent and efferent synapses and innervation patterns. Sneary MG. **J Comp Neurol** 1988 Oct 22;276(4):588–606
Bouton ultrastructure and synaptic growth in a frog autonomic ganglion. Streichert LC, et al. **J Comp Neurol** 1989 Mar 1;281(1):159–68
Regional specialisation for synaptic input and output on a locust intersegmental interneurone with multiple spike-initiating zones. Watson AH, et al. **J Comp Neurol** 1989 Jan 22;279(4):515–27
Synaptic organization of enkephalinlike-immunoreactive amacrine cells in the goldfish retina. Watt CB. **J Comp Neurol** 1989 May 15;283(3):333–41
Ultrastructure of synaptic remodeling in piriform cortex of adult rats after neonatal olfactory bulb removal: an immunocytochemical study. Westenbroek RE, et al. **J Comp Neurol** 1988 Aug 15;274(3):334–46
Morphology and synaptic connections of HRP-filled, axon-bearing horizontal cells in the Xenopus retina. Witkovsky P, et al. **J Comp Neurol** 1988 Sep 1;275(1):29–38
Synaptic organization of the globus pallidus. Difiglia M, et al. **J Electron Microsc Tech** 1988 Nov;10(3):247–63 (62 ref.)
Synaptic organization of primary axons in trigeminal nucleus oralis. Falls WM. **J Electron Microsc Tech** 1988 Nov; 10(3):213–27
Synaptic organization of the striatum. Gerfen CR. **J Electron Microsc Tech** 1988 Nov;10(3):265–81 (97 ref.)
Chemical synapses in the mammalian central nervous system: an introduction. King JS. **J Electron Microsc Tech** 1988 Oct;10(2):205–10 (35 ref.)
A review of recent observations concerning the synaptic organization of the basilar pontine nuclei. Mihailoff GA, et al. **J Electron Microsc Tech** 1988 Nov;10(3):229–46 (59 ref.)
Morphology of synapses in the autonomic nervous system. Smolen AJ. **J Electron Microsc Tech** 1988 Oct; 10(2):187–204 (97 ref.)
Fine structure of synapses in the vestibular ganglion of the cat. Spassova I. **J Hirnforsch** 1988;29(4):385–91
Nexus junctions between vascular smooth muscle cells in the media of the thoracic aorta in normal and hypertensive rats. A freeze-fracture study. Berry CL, et al. **J Hypertens** 1989 Jun;7(6):507–13
Synaptic connections of an interneuron with axonal arcades in the cat visual cortex. DeFelipe J, et al. **J Neurocytol** 1988 Jun;17(3):313–23
Ultrastructure and synaptic relationships of calbindin-reactive, Dogiel type II neurons, in myenteric ganglia of guinea-pig small intestine. Pompolo S, et al. **J Neurocytol** 1988 Dec;17(6):771–82
Localization of GABA and glycine in goldfish retina by electron microscopic postembedding immunocytochemistry: improved visualization of synaptic structures with LR white resin. Studholme KM, et al. **J Neurocytol** 1988 Dec;17(6):859–70
Ribbon synapses of the mammalian retina contain two types of synaptic bodies—ribbons and spheres. Vollrath L, et al. **J Neurocytol** 1989 Feb;18(1):115–20
Normal numbers of retinotectal synapses during the activity-sensitive period of optic regeneration in goldfish: HRP-EM evidence implicating synapse rearrangement and collateral elimination during map refinement. Hayes WP, et al. **J Neurosci** 1989 Apr;9(4):1400–13
Stereotypic morphology of glutamatergic synapses on identified muscle cells of Drosophila larvae. Johansen J, et al. **J Neurosci** 1989 Feb;9(2):710–25
An EM study of the dorsal nucleus of the lateral lemniscus: inhibitory, commissural, synaptic connections between ascending auditory pathways. Oliver DL, et al. **J Neurosci** 1989 Mar;9(3):967–82
Synaptic ultrastructure of functionally and morphologically characterized neurons of the superficial spinal dorsal horn of cat. Réthelyi M, et al. **J Neurosci** 1989 Jun;9(6):1846–63
In vivo visualization of pre- and postsynaptic changes during synapse elimination in reinnervated mouse muscle. Rich MM, et al. **J Neurosci** 1989 May;9(5):1781–805
Congenital paucity of secondary synaptic clefts (CPSC) syndrome in 2 adult sibs. Wokke JH, et al. **Neurology** 1989 May;39(5):648–54
Electron microscopic study on the synaptic glomeruli of rat cerebellum: quantitative and qualitative analyses using the ethanol-phosphotungustic acid (E-PTA) procedure. Miyazaki M. **Neuropediatrics** 1989 May;20(2):73–8
Ultrastructural changes in neurons and interneuronal synapses of the hypothalamus in progeny of morphine-dependent rats. Kolusheva GV. **Neurosci Behav Physiol** 1989 May-Jun;19(3):186–90
Synaptic cytoarchitecture of the cat septum pellucidum. Lazriev IL, et al. **Neurosci Behav Physiol** 1989 Jan-Feb; 19(1):83–7
Ultrastructural evidence for direct monosynaptic rubrospinal connections to motoneurons in Macaca mulatta. Ralston DD, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):102–6
Neuropeptide Y afferents have synaptic interactions with histaminergic (histidine decarboxylase-immunoreactive) neurons in the rat brain. Tamiya R, et al. **Neurosci Lett** 1989 May 8;99(3):241–5
Ultrastructural changes of synaptic glomeruli following intrathecal injection of distilled water to rats. Inomata K, et al. **Neuroscience** 1988 Dec;27(3):1001–5
Synaptic formations of the corticospinal tract in the rat spinal cord. Miyabayashi T, et al. **Okajimas Folia Anat Jpn** 1988 Aug;65(2–3):117–39
Three-dimensional structure of bidirectional, excitatory chemical synapses in the jellyfish Cyanea capillata. Anderson PA, et al. **Synapse** 1988;2(6):606–13
Ultrastructure of stratum lacunosum-moleculare interneurons of hippocampal CA1 region. Kunkel DD, et al. **Synapse** 1988;2(4):382–94
Ultrastructure of cortical synapses in the brain of schizophrenics. Soustek Z. **Zentralbl Allg Pathol** 1989; 135(1):25–32
[Synaptic ribbons in pinealocytes of olfactory bulbectomized rats under experimental conditions] Cos S, et al. **J Hirnforsch** 1989;30(1):91–8 (Eng. Abstr.) (Ger)
[Ultrastructural organization of the synapses in ganglia of the hen intestinal nerve under various conditions of its activity] Archakova LI, et al. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):26–30 (Eng. Abstr.) (Rus)
[Detection of the neuromuscular synapses in isolated muscle fibers] Danilov RK, et al. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):81–3 (Rus)
[Structural aspects of the functional activity of the cerebral cortex synapses in the early postresuscitation period] Semchenko VV, et al. **Biull Eksp Biol Med** 1989 Feb; 107(2):164–6 (Eng. Abstr.) (Rus)
[Synaptic density in the associative area (field 5b) of the cerebral cortex of the cat] Serkov FN, et al. **Fiziol Zh** 1988 Sep-Oct;34(5):21–6 (Eng. Abstr.) (Rus)
[Status of the synapses of the end brain of rats exposed to the factors of space flight] Antipov VV, et al. **Kosm Biol Aviakosm Med** 1988 Jul-Aug;22(4):54–61 (Eng. Abstr.) (Rus)
[Stereometric characteristics of the ultrastructure of presynaptic terminals in the dorsal horn of the cat spinal cord] Rusakov DA, et al. **Neirofiziologiia** 1989;21(3):403–10 (Eng. Abstr.) (Rus)
[Characteristics of the synaptic apparatus of the parietal associative cortex (area 5b) in the cat brain] Serkov FN, et al. **Neirofiziologiia** 1989;21(2):174–85 (Eng. Abstr.) (Rus)
[Changes in the ultrastructure and morphometric parameters of the cortical axospinal synapses as affected by a calcium-free medium] Pavlenko IN, et al. **Tsitologiia** 1988 May;30(5):532–8 (Eng. Abstr.) (Rus)
[Synaptogenesis in the neural ganglia of the heart in the human embryo] Sosunov AA, et al. **Tsitologiia** 1988 Sep; 30(9):1067–72 (Eng. Abstr.) (Rus)
[Comparative organization of the neuromuscular synapses of the phasic skeletal muscles in vertebrates] Balezina OP. **Usp Fiziol Nauk** 1989 Jan-Mar;20(1):68–89 (81 ref.) (Rus)
[Reorganization of the synaptic architectonics of the cerebral cortex in antigenic sensitization of the brain and in convulsive paroxysms] Savchenko IuN, et al. **Zh Nevropatol Psikhiatr** 1988;88(6):3–6 (Eng. Abstr.) (Rus)
[Ultrastructural changes in cortical neuron synapses during their functional isolation using EGTA iontophoresis] Kotliar BI, et al. **Zh Vyssh Nerv Deiat** 1989 Jan-Feb; 39(1):145–7 (Rus)

SYNAPTIC MEMBRANES

ANALYSIS

A library of monoclonal antibodies for exploring unknown functional molecules on the surface of synaptic membrane. Kuroda Y, et al. **Adv Exp Med Biol** 1988;236:153–61
Microelectrophoretic fractionation of RNA from rat brain subsynaptosomal fractions. Di Battista A, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1025–32
Characterization of novel glycoprotein components of synaptic membranes and postsynaptic densities, gp65 and gp55, with a monoclonal antibody. Hill IE, et al. **Brain Res** 1988 Sep 27;461(1):27–43
Agrin-related molecules are concentrated at acetylcholine receptor clusters in normal and aneural developing muscle. Fallon JR, et al. **J Cell Biol** 1989 Apr;108(4):1527–35

DRUG EFFECTS

Pertussis toxin pretreatment discriminates between pre- and postsynaptic actions of baclofen in rat dorsal raphe nucleus in vitro. Colmers WF, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):300–6
Pyritinol inhibition of the GABA and benzodiazepine receptor. Turský T. **Physiol Bohemoslov** 1988;37(5):417–26

ENZYMOLOGY

Changes in apparent functions of component proteins of adenylate cyclase system in rat brain by drugs acting on the central nervous system. Ishibashi S, et al. **Adv Exp Med Biol** 1988;236:287–99
Neuropeptide-degrading endopeptidase activity of locust (Schistocerca gregaria) synaptic membranes. Isaac RE. **Biochem J** 1988 Nov 1;255(3):843–7
Metalloendopeptidase (EC 3.4.24.11) but not angiotensin converting enzyme is involved in the inactivation of substance P by synaptic membranes of the rat substantia nigra. Oblin A, et al. **Life Sci** 1989;44(20):1467–74
Does vanadyl affect adenylate cyclase? Křivánek J, et al. **Physiol Bohemoslov** 1988;37(4):289–98

IMMUNOLOGY

A juxta-membrane epitope on the human acetylcholine receptor recognized by T cells in myasthenia gravis. Harcourt GC, et al. **J Clin Invest** 1988 Oct;82(4):1295–300

METABOLISM

Phospholipid methylation participates in H2-receptor mediated stimulation of adenylate cyclase in rat brain. Segawa T, et al. **Adv Exp Med Biol** 1988;236:329–41
Microbial methodological artifacts in [3H]glutamate receptor binding assays. Yoneda Y, et al. **Anal Biochem** 1989 Mar; 177(2):250–5
Dendrotoxin acceptor from bovine synaptic plasma membranes. Binding properties, purification and subunit composition of a putative constituent of certain voltage-activated K+ channels. Parcej DN, et al. **Biochem J** 1989 Feb 1;257(3):899–903
Partition of Ca2+ antagonists in brain plasma membranes. Carvalho CM, et al. **Biochem Pharmacol** 1989 Jul 1; 38(13):2121–7
N-methyl-D-aspartate-sensitive [3H]glutamate binding sites in brain synaptic membranes treated with Triton X-100. Yoneda Y, et al. **Biochim Biophys Acta** 1989 Jun 15;

1012(1):74–80
Interactions between discrete neuronal membrane binding sites for the putative K+–channel ligands beta–bungarotoxin, dendrotoxin and mast–cell–degranulating peptide. Breeze AL, et al. **Eur J Biochem** 1989 Jan 2;178(3):771–8
Solubilization and reconstitution of the sodium–and–chloride–coupled glycine transporter from rat spinal cord. Lopez–Corcuera B, et al. **Eur J Biochem** 1989 May 1;181(2):519–24
Myristic acid is the NH2–terminal blocking group of the 43–kDa protein of Torpedo nicotinic post–synaptic membranes. Carr C, et al. **FEBS Lett** 1989 Jan 16; 243(1):65–9
Identification and properties of very high affinity brain membrane–binding sites for a neurotoxic phospholipase from the taipan venom. Lambeau G, et al. **J Biol Chem** 1989 Jul 5;264(19):11503–10
Asynchronous assembly of the acetylcholine receptor and of the 43–kD nu1 protein in the postsynaptic membrane of developing Torpedo marmorata electrocyte. Kordeli E, et al. **J Cell Biol** 1989 Jan;108(1):127–39
Na+ dependence of tyrosine transport across the synaptosomal membrane reflects changes in the morphology of synaptosomes. Diez–Guerra FJ, et al. **J Neurochem** 1989 May;52(5):1366–74
Limited tryptic proteolysis of the benzodiazepine binding proteins in different species reveals structural homologies. Friedl W, et al. **J Neurochem** 1988 Dec;51(6):1877–81
Glutamate transport and not glutamate receptor binding is stimulated by gangliosides in a Ca2+–dependent manner in rat brain synaptic plasma membranes. Hollmann M, et al. **J Neurochem** 1989 Sep;53(3):716–23
Affinity labelling and identification of the high–affinity choline carrier from synaptic membranes of Torpedo electromotor nerve terminals with [3H]choline mustard. Rylett RJ. **J Neurochem** 1988 Dec;51(6):1942–5
Acute and chronic effects of ethanol on transbilayer membrane domains. Wood WG, et al. **J Neurochem** 1989 Jun;52(6):1925–30
A radiolabel and electron microscopy study of the interaction of liposomes with synaptosomal membranes. Schreier H. **Life Sci** 1989;44(3):193–200
Effect of Na+ on Ca–uptake of the synaptic plasma membrane. Yoshida H, et al. **Life Sci** 1974 Aug 15; 15(4):685–93
Postsynaptic gamma–aminobutyric acid receptors in hepatic coma following portacaval shunt and hepatic artery ligation in the rat. Ferenci P, et al. **Metab Brain Dis** 1987 Sep; 2(3):195–200
High–affinity binding of proline to mouse brain synaptic membranes. Ortiz JG, et al. **Neurochem Res** 1989 Feb; 14(2):139–42
[Lyophilized membranes as a test system for analyzing the properties of neuromediator receptors and activity of neurotropic agents] Evdokimenko SG, et al. **Biol Nauki** 1989;(5):24–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Depolarization increases chloride–dependent glutamate sequestration in synaptic membranes of rat cerebral cortex. Iwata H, et al. **J Neurochem** 1989 Feb;52(2):354–9
Presynaptic spike broadening reduces junctional potential amplitude. Spencer AN, et al. **Nature** 1989 Aug 24; 340(6235):636–8
Momentary alteration of the postsynaptic membrane during transmission of a single nerve impulse. Dunant Y, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1717–20
Nonanesthetic alcohols dissolve in synaptic membranes without perturbing their lipids. Miller KW, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1084–7
[Properties of extracellular monosynaptic potential of a single afferent in the light of the theory of dendrites with N–shaped volt–ampere characteristics] Gutman AM, et al. **Biofizika** 1989 Jan–Feb;34(1):124–9 (Eng. Abstr.) **(Rus)**
[Reconstruction of single calcium channels of synaptic membranes on artificial phospholipid membranes] Sokolov IuV. **Dokl Akad Nauk SSSR** 1988;300(2):469–71 **(Rus)**
[The nature of local hyperpolarization of the subsynaptic membrane in rat muscle fibers] Surovtsev VA, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1327–30 **(Rus)**

ULTRASTRUCTURE

The cytoskeletal architecture of the presynaptic terminal and molecular structure of synapsin 1. Hirokawa N, et al. **J Cell Biol** 1989 Jan;108(1):111–26
Junction between parent and daughter axons in regenerating myelinated nerve: properties of structure and rapid axonal transport. Chan H, et al. **J Comp Neurol** 1989 May 15; 283(3):391–404
Membrane and cytoplasmic structure at synaptic junctions in the mammalian central nervous system. Landis DM. **J Electron Microsc Tech** 1988 Oct;10(2):129–51 (111 ref.)
Ion channel of acetylcholine receptor reconstructed from images of postsynaptic membranes. Toyoshima C, et al. **Nature** 1988 Nov 17;336(6196):247–50
Synaptic interconnections among growth hormone–releasing hormone (GHRH)–containing neurons in the arcuate nucleus of the rat hypothalamus. Horváth S, et al. **Neuroendocrinology** 1988 Nov;48(5):471–6
Ethanol–induced differential disordering of the surface of synaptic plasma membranes from mice selected for genetic differences in ethanol intoxication. Schueler HE, et al. **Prog Clin Biol Res** 1989;292:425–34

SYNAPTIC RECEPTORS

Novel neurotrophic factors, receptors, and oncogenes. Walicke PA. **Annu Rev Neurosci** 1989;12:103–26 (195 ref.)
Excitatory amino acid receptor subtypes and specific antagonists. Honoré T. **Med Res Rev** 1989 Jan–Mar; 9(1):1–23 (134 ref.)
[Biochemical effects of electroconvulsotherapy] Benkelfat C. **Encephale** 1988 Jul–Aug;14(4):273–81 (97 ref.) (Eng. Abstr.) **(Fre)**
[Progress in the study of brain receptors] Ogawa N, et al. **Nippon Rinsho** 1988 Sep;46(9):2098–107 (21 ref.) **(Jpn)**

ANALYSIS

Neurotransmitters, receptors and neuropeptides in post–mortem brains of chronic schizophrenic patients. Toru M, et al. **Acta Psychiatr Scand** 1988 Aug;78(2):121–37
Substance P: mechanism of action and receptor distribution at the feline ileocecal sphincter region. Rothstein RD, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G447–53
Neuromedin B receptor in esophagus: evidence for subtypes of bombesin receptors. Von Schrenck T, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G747–58
Biochemical characterization of an autoradiographic method for studying excitatory amino acid receptors using L–[3H]glutamate. Cincotta M, et al. **Anal Biochem** 1989 Feb 15;177(1):150–5
Evidence for the existence of at least two different binding sites for 5HT–reuptake inhibitors within the 5HT–reuptake system from human platelets. Biessen EA, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3959–66
Identification of two taurine receptor subtypes on the primary afferent terminal of frog spinal cord. Kudo Y, et al. **Br J Pharmacol** 1988 Aug;94(4):1051–6
[3H]imipramine binding sites are decreased in platelets of chronic pain patients. Magni G, et al. **Clin Neuropharmacol** 1987 Apr;10(2):175–7
Isolation, immunochemical characterization and localization of the kainate sub–class of glutamate receptor from chick cerebellum. Gregor P, et al. **EMBO J** 1988 Sep;7(9):2673–9
Molecular target size analyses of the NMDA–receptor complex in rat cortex. Honoré T, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):239–47
Apparent molecular weight of the substance P binding site in rat brain. Nakata Y, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):171–4
Quantitative receptor autoradiography in the human brain. Methodical aspects. Zilles K, et al. **Histochemistry** 1988; 90(2):129–37
Absence of N–methyl–D–aspartate receptors on ovine cerebral microvessels. Beart PM, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):879–82
Glycine receptor immunoreactivity in the ventral cochlear nucleus of the guinea pig. Wenthold RJ, et al. **J Comp Neurol** 1988 Oct 15;276(3):423–35
Anti–idiotypic antibodies as a tool for cytochemical identification of substance P receptors in the central nervous system. Conrath M, et al. **J Histochem Cytochem** 1988 Nov;36(11):1397–401
Horizontal cells isolated from catfish retina contain two types of excitatory amino acid receptors. O'Dell TJ, et al. **J Neurophysiol** 1989 Jun;61(6):1097–109
Quantitative autoradiography of major neurotransmitter receptors in the monkey striate and extrastriate cortex. Rakic P, et al. **J Neurosci** 1988 Oct;8(10):3670–90
Comparison of muscarinic cholinergic and alpha adrenergic receptors in canine ileum, colon, intestinal urinary reservoirs and bladder. Lepor H, et al. **J Urol** 1989 Jul; 142(1):204–8
Kinin receptors. Regoli D, et al. **Methods Enzymol** 1988; 163:210–30
Evidence for a pulmonary B3 bradykinin receptor. Farmer SG, et al. **Mol Pharmacol** 1989 Jul;36(1):1–8
Characterization of opioid, sigma, and phencyclidine receptors in the neuroblastoma–brain hybrid cell line NCB–20. Kushner L, et al. **Mol Pharmacol** 1988 Nov; 34(5):689–94
Synaptic localization of striatal NMDA, quisqualate and kainate receptors. Greenamyre JT, et al. **Neurosci Lett** 1989 Jun 19;101(2):133–7
Molecular target size of an L–glutamate receptor from the cockroach central nervous system. Sepúlveda MI, et al. **Neurosci Lett** 1989 May 22;100(1–3):210–4
Visualizing receptors for neurotransmitters in the human brain with autoradiography. Palacios JM, et al. **Neurosurg Rev** 1989;12(1):11–20
Conserved quaternary structure of ligand–gated ion channels: the postsynaptic glycine receptor is a pentamer. Langosch D, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7394–8
A comparison of the distribution of substance P and calcitonin gene–related peptide receptors in the rat bladder. Nimmo AJ, et al. **Q J Exp Physiol** 1988 Sep;73(5):789–92
Localization of substance P binding sites in submucous plexus of guinea pig ileum, using whole–mount autoradiography. Burcher E, et al. **Synapse** 1988;2(3):232–9
A tachykinin peptide receptor joins an elite club. Buck SH, et al. **Trends Pharmacol Sci** 1988 Jan;9(1):3–5 (30 ref.)
[Is Alzheimer's senile dementia associated with the phenomena of reactive synaptogenesis in the hippocampus?] Represa A, et al. **C R Acad Sci [III]** 1988; 306(19):575–7 (Eng. Abstr.) **(Fre)**

ANTAGONISTS & INHIBITORS

Pulsatile release of gonadotropin–releasing hormone from hypothalamic explants is restrained by blockade of N–methyl–D,L–aspartate receptors. Bourguignon JP, et al. **Endocrinology** 1989 Aug;125(2):1090–6
NMDA receptor antagonists that bind to the strychnine–insensitive glycine site and inhibit NMDA–induced Ca2+ fluxes and [3H]GABA release. Reynolds IJ, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):9–17
The kainate/quisqualate receptor antagonist, CNQX, blocks the fast component of spontaneous epileptiform activity in organotypic cultures of rat hippocampus. McBain CJ, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):341–5

BIOSYNTHESIS

NIH3T3 fibroblasts transformed by the dbl oncogene show altered expression of bradykinin receptors: effect on inositol lipid turnover. Ruggiero M, et al. **Oncogene** 1989 Jun; 4(6):767–71
[Search for and study of cDNA coding synthesis of glutamate receptors of the human brain] Smirnova TM, et al. **Dokl Akad Nauk SSSR** 1988;303(3):756–9 **(Rus)**

CLASSIFICATION

A comment on the classification and nomenclature of phencyclidine and sigma receptor sites [letter] Kemp JA, et al. **Trends Neurosci** 1988 Sep;11(9):388–9

DEFICIENCY

Deficit of spinal cord glycine/strychnine receptors in inherited myoclonus of Poll Hereford calves. Gundlach AL, et al. **Science** 1988 Sep 30;241(4874):1807–10

DRUG EFFECTS

The development of understanding of the mechanism of action of antidepressant drugs. Vetulani J. **Act Nerv Super (Praha)** 1989 Apr;31(1):24–5
Stimulation of D1 dopamine receptors reveals direct effects of the preferential dopamine autoreceptor agonist B–HT 920 on postsynaptic dopamine receptors. Andén NE, et al. **Acta Physiol Scand** 1988 Oct;134(2):285–90
Excitatory amino acids and cerebrovascular tone. Hardebo JE, et al. **Acta Physiol Scand** 1989 Jul;136(3):483–5
Substance P receptors in the rat spinal cord: the effect of GTP and of chronic antidepressant treatment. Iverfeldt K, et al. **Acta Physiol Scand** 1988 Feb;132(2):175–9
Monoamine oxidase inhibitor withdrawal phenomena: symptoms and pathophysiology. Dilsaver SC. **Acta Psychiatr Scand** 1988 Jul;78(1):1–7 (53 ref.)
Neuroreceptor changes in the putamen of alcohol abusers. Freund G, et al. **Alcoholism (NY)** 1989 Apr;13(2):213–8
A tachykinin receptor antagonist inhibits and an inhibitor of tachykinin metabolism potentiates toluene diisocyanate–induced airway hyperresponsiveness in guinea pigs. Sheppard D, et al. **Am Rev Respir Dis** 1988 Sep; 138(3):547–51
Dexmedetomidine diminishes halothane anesthetic requirements in rats through a postsynaptic alpha 2 adrenergic receptor. Segal IS, et al. **Anesthesiology** 1988 Dec;69(6):818–23
Effects of drugs on the electrical activity of the red nucleus in the rabbit. Activation of benzodiazepine and barbiturate receptors. Longo VG, et al. **Ann Ist Super Sanita** 1988; 24(3):371–5
Modulation of glutamate receptors: molecular mechanisms and functional implications. Wroblewski JT, et al. **Annu Rev Pharmacol Toxicol** 1989;29:441–74 (290 ref.)
Identification of a dihydropyridine–sensitive calcium channel in chick brain by a monoclonal antibody. Takahashi M, et al. **Biochem Biophys Res Commun** 1989 Sep 15; 163(2):1182–8
Effect of trypsinization in cell culture on bradykinin receptors in vascular endothelial cells. Sung CP, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):696–9
N–methyl–D–aspartate–sensitive [3H]glutamate binding sites in brain synaptic membranes treated with Triton X–100. Yoneda Y, et al. **Biochim Biophys Acta** 1989 Jun 15; 1012(1):74–80
An analogue of substance P with broad receptor antagonist activity. Zhang L, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):37–44
Differences between sodium–dependent and desipramine–defined [3H]imipramine binding in intact human platelets. Hrdina PD. **Biol Psychiatry** 1989 Mar 1; 25(5):576–84
General anaesthetic modification of synaptic facilitation and long–term potentiation in hippocampus. MacIver MB, et al. **Br J Anaesth** 1989 Mar;62(3):301–10
Quinoxalinediones selectively block quisqualate and kainate receptors and synaptic events in rat neocortex and hippocampus and frog spinal cord in vitro. Fletcher EJ, et al. **Br J Pharmacol** 1988 Oct;95(2):585–97
Inhibition of bradykinin–induced bronchoconstriction in the guinea–pig by a synthetic B2 receptor antagonist. Jin LS, et al. **Br J Pharmacol** 1989 Jun;97(2):598–602
Characterization of the binding of [3H]–CGS 19755: a novel

N-methyl-D-aspartate antagonist with nanomolar affinity in rat brain. Murphy DE, et al. **Br J Pharmacol** 1988 Nov; 95(3):932–8

Tricyclic antidepressants block N-methyl-D-aspartate receptors: similarities to the action of zinc. Reynolds IJ, et al. **Br J Pharmacol** 1988 Sep;95(1):95–102

N-methyl-D-aspartate (NMDA) receptors are inactivated by trypsin. Allen CN, et al. **Brain Res** 1988 Aug 16; 458(1):147–50

Analogies and differences in the mode of action and properties of binding sites (localization and mutual interactions) of two K+ channel toxins, MCD peptide and dendrotoxin I. Bidard JN, et al. **Brain Res** 1989 Aug 21; 495(1):45–57

Excitatory amino acid receptors in piriform cortex do not show receptor desensitization. Hori N, et al. **Brain Res** 1988 Aug 9;457(2):350–4

Taurine and beta-alanine act on both GABA and glycine receptors in Xenopus oocyte injected with mouse brain messenger RNA. Horikoshi T, et al. **Brain Res** 1988 Sep; 464(2):97–105

Lack of desensitization to neurokinin A due to partial agonist property of this peptide at parotid substance P receptors. McMillian MK, et al. **Brain Res** 1989 Feb 20;480(1-2):330–4

Comparison of the properties of
[3H]-D-2-amino-5-phosphonopentanoic acid and
[3H]-DL-2-amino-7-phosphonoheptanoic acid binding to homogenates of rat cerebral cortex. Manallack DT, et al. **Clin Exp Pharmacol Physiol** 1989 Jan;16(1):49–58

Influence of age on effects induced by intermittent ethanol treatment on the ethanol drinking pattern and related neurochemical changes in the rat. Wahlström G, et al. **Drug Alcohol Depend** 1988 Oct;22(1-2):117–28

Kynurenic acid antagonises responses to NMDA via an action at the strychnine-insensitive glycine receptor. Birch PJ, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):85–7

6,7-Dinitro-quinoxaline-2,3-dion and
6-nitro,7-cyano-quinoxaline-2,3-dion antagonise responses to NMDA in the rat spinal cord via an action at the strychnine-insensitive glycine receptor. Birch PJ, et al. **Eur J Pharmacol** 1988 Oct 26;156(1):177–80

A re-examination of the interaction of
N-acetyl-L-aspartyl-L-glutamate with a subpopulation of rat brain membrane L-[3H]glutamate binding sites. Blakely RD, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):419–26

Tetrahydroaminoacridine selectively attenuates NMDA receptor-mediated neurotoxicity. Davenport CJ, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):73–8

[Phe8 psi(CH2-NH)Arg9]bradykinin, a B2 receptor selective agonist which is not broken down by either kininase I or kininase II. Drapeau G, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):193–5

1-Aminocyclobutane-1-carboxylate (ACBC): a specific antagonist of the N-methyl-D-aspartate receptor coupled glycine receptor. Hood WF, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):281–2

Dimerization of neurokinin A and B COOH-terminal heptapeptide fragments enhanced the selectivity for tachykinin receptor subtypes. Kodama H, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):317–20

CGS 19755 is a potent and competitive antagonist at NMDA-type receptors. Lehmann J, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):89–93

1-Aminocyclopropane-1-carboxylic acid (ACC) mimics the effects of glycine on the NMDA receptor ion channel. Nadler V, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):115–6

Thiocyanate stabilizes AMPA binding to the quisqualate receptor. Nielsen EO, et al. **Eur J Pharmacol** 1988 Nov 22;157(2-3):197–203

N-methyl-D-aspartate receptor-mediated increase in intracellular calcium is reduced by ketamine and phencyclidine. O'Shaughnessy CT, et al. **Eur J Pharmacol** 1988 Aug 24;153(2-3):201–9

Kynurenic acid and AP5 distinguish between NMDA receptor agonists. Williams TL, et al. **Exp Neurol** 1988 Dec; 102(3):366–7

Antagonists of B2 bradykinin receptors. Steranka LR, et al. **FASEB J** 1989 Jul;3(9):2019–25 (42 ref.)

Comparative neuropharmacology of dihydroergotamine and sumatriptan (GR 43175). McCarthy BG, et al. **Headache** 1989 Jul;29(7):420–2

Effect of spider venom on cochlear nerve activity consistent with glutamatergic transmission at hair cell-afferent dendrite synapse. Cousillas H, et al. **Hear Res** 1988 Nov; 36(2-3):213–20

The active process is affected first by intense sound exposure. Puel JL, et al. **Hear Res** 1988 Dec;37(1):53–63

Cardiovascular effects of the N-methyl-D-aspartate receptor antagonist MK-801 in conscious rats. Lewis SJ, et al. **Hypertension** 1989 Jun;13(6 Pt 2):759–65

Reduced peptide bond pseudopeptide analogues of substance P. A new class of substance P receptor antagonists with enhanced specificity. Qian JM, et al. **J Biol Chem** 1989 Oct 5;264(28):16667–71

Neuroreceptor science: a clarification of terms. Nutt DJ, et al. **J Clin Psychopharmacol** 1988 Dec;8(6):387–9

Alterations in the stereochemistry of the kappa-selective opioid agonist U50,488 result in high-affinity sigma ligands. de Costa BR, et al. **J Med Chem** 1989 Aug;32(8):1996–2002

Evaluation and synthesis of aminohydroxyisoxazoles and pyrazoles as potential glycine agonists. Drummond J, et al. **J Med Chem** 1989 Sep;32(9):2116–28

2H-[1]benzopyrano[3,4-b]pyridines: synthesis and activity at central monoamine receptors. Hutchison A, et al. **J Med Chem** 1989 Mar;32(3):720–7

Synthesis and pharmacology of a series of 3- and 4-(phosphonoalkyl)pyridine- and -piperidine-2-carboxylic acids. Potent N-methyl-D-aspartate receptor antagonists. Ornstein PL, et al. **J Med Chem** 1989 Apr;32(4):827–33

Dramatic synergism between MK-801 and clonidine with respect to locomotor stimulatory effect in monoamine-depleted mice. Carlsson M, et al. **J Neural Transm** 1989;77(1):65–71

Beta-N-oxalylamino-L-alanine action on glutamate receptors. Ross SM, et al. **J Neurochem** 1989 Sep; 53(3):710–5

Kainate receptor-mediated synaptic currents in mudpuppy inner retinal neurons reduced by D-O-phosphoserine. Coleman PA, et al. **J Neurophysiol** 1989 Aug;62(2):495–500

Sites of antagonist action on N-methyl-D-aspartic acid receptors studied using fluctuation analysis and a rapid perfusion technique. Mayer ML, et al. **J Neurophysiol** 1988 Aug;60(2):645–63

L-glutamate increases internal free calcium levels in synaptoneurosomes from immature rat brain via quisqualate receptors. Benavides J, et al. **J Neurosci** 1988 Oct; 8(10):3607–15

HA-966 antagonizes N-methyl-D-aspartate receptors through a selective interaction with the glycine modulatory site. Foster AC, et al. **J Neurosci** 1989 Jun;9(6):2191–6

Neocortical epileptogenesis in vitro: studies with N-methyl-D-aspartate, phencyclidine, sigma and dextromethorphan receptor ligands. Aram JA, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):320–8

Substitution and antagonism in rats trained to discriminate (+)-N-allylnormetazocine from saline. Balster RL. **J Pharmacol Exp Ther** 1989 Jun;249(3):749–56

Behavioral pharmacological profile of CGS 19755, a competitive antagonist at N-methyl-D-aspartate receptors. Bennett DA, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):454–60

Ifenprodil and SL 82.0715 as cerebral anti-ischemic agents. II. Evidence for N-methyl-D-aspartate receptor antagonist properties. Carter C, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1222–32

Neuroanatomically selective down-regulation of beta adrenergic receptors by chronic imipramine treatment: relationships to the topography of [3H]imipramine and [3H] desipramine binding sites. Duncan GE, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):470–7

Pharmacological profile of NPC 12626, a novel, competitive N-methyl-D-aspartate receptor antagonist. Ferkany JW, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):100–9

Ifenprodil and SL 82.0715 as cerebral anti-ischemic agents. I. Evidence for efficacy in models of focal cerebral ischemia. Gotti B, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):1211–21

[3H]MK801 binding to the N-methyl-D-aspartate receptor reveals drug interactions with the zinc and magnesium binding sites. Reynolds IJ, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1025–31

Interaction of 6-cyano-7-nitroquinoxaline-2,3-dione with the N-methyl-D-aspartate receptor-associated glycine binding site. Lester RA, et al. **Mol Pharmacol** 1989 May; 35(5):565–70

N-methyl-D-aspartate/glycine and quisqualate/kainate receptors expressed in Xenopus oocytes: antagonist pharmacology. Verdoorn TA, et al. **Mol Pharmacol** 1989 Mar;35(3):360–8

Structure-activity studies of neurokinin A. Rovero P, et al. **Neuropeptides** 1989 May-Jun;13(4):263–70

Kynurenic acid inhibits the activation of kainic and N-methyl-D-aspartic acid-sensitive ionotropic receptors by a different mechanism. Bertolino M, et al. **Neuropharmacology** 1989 May;28(5):453–7

Phencyclidine suppresses hippocampal long-term potentiation through stereospecific activation of phencyclidine receptors. Bourne GW, et al. **Neuropharmacology** 1989 Jan;28(1):49–56

Glycine and D-serine increase the affinity of N-methyl-D-aspartate sensitive glutamate binding sites in rat brain synaptic membranes. Fadda E, et al. **Neuropharmacology** 1988 Nov;27(11):1183–5

The relationship between anticonvulsant activity and receptor affinity of N-methyl-D-aspartate antagonists in epileptic fowl. Pedder SC, et al. **Neuropharmacology** 1989 Jul;28(7):753–6

The noncompetitive N-methyl-D-aspartate receptor antagonist, MK-801 profoundly reduces volatile anesthetic requirements in rabbits. Scheller MS, et al. **Neuropharmacology** 1989 Jul;28(7):677–81

Psychopharmacological effects in the radial-arm maze. Levin ED. **Neurosci Biobehav Rev** 1988 Summer;12(2):169–75 (82 ref.)

Effects of neonatal monosodium glutamate treatment on substance P binding sites in the rat retina. Lee CM, et al. **Neurosci Lett** 1988 Oct 17;92(3):310–4

Non-competitive antagonists of N-methyl-D-aspartate receptors protect cortical and hippocampal cell cultures against glutamate neurotoxicity. Rondouin G, et al. **Neurosci Lett** 1988 Aug 31;91(2):199–203

Trans-2-carboxy-3-pyrrolidineacetic acid (CPAA), a novel agonist at NMDA-type receptors. Tsai C, et al. **Neurosci Lett** 1988 Oct 17;92(3):298–302

Linear relation between the magnitude of long-term potentiation in the dentate gyrus and associative learning in the rat. A demonstration using commissural inhibition and local infusion of an N-methyl-D-aspartate receptor antagonist. Laroche S, et al. **Neuroscience** 1989; 28(2):375–86

Agonist-induced substance P receptor down-regulation in rat central nervous system. Inoue A, et al. **Pharm Res** 1988 Dec;5(12):795–9

Phencyclidine receptors and N-methyl-D-aspartate antagonism: electrophysiologic data correlates with known behaviours. Martin D, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):279–86

Synthesis and characterization of a series of diarylguanidines that are noncompetitive N-methyl-D-aspartate receptor antagonists with neuroprotective properties. Keana JF, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5631–5

The effect of MK-801 and other antagonists of NMDA-type glutamate receptors on brain-stimulation reward. Herberg LJ, et al. **Psychopharmacology (Berlin)** 1989;99(1):87–90

Hallucinogenic drug interactions with neurotransmitter receptor binding sites in human cortex. Pierce PA, et al. **Psychopharmacology (Berlin)** 1989;97(1):118–22

Indole-2-carboxylic acid: a competitive antagonist of potentiation by glycine at the NMDA receptor. Huettner JE. **Science** 1989 Mar 24;243(4898):1611–3

MK-801 prevents cognitive and behavioral deficits produced by NMDA receptor overstimulation in the rat hippocampus. Rogers BC, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):445–53

Phenylalkylamines are promiscuous receptor blockers [letter] Insel PA. **Trends Pharmacol Sci** 1988 Jan;9(1):10

[Glutamate receptor antagonists from the spider Argiope lobata venom] Grishin EV, et al. **Bioorg Khim** 1988 Jul; 14(7):883–92 (Eng. Abstr.) **(Rus)**

[Quantitative patterns of tubocurarine action on the synaptic potentials of frog muscle] Grigor'ev VM, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1228–34 (Eng. Abstr.) **(Rus)**

[The function of the cholinoreactive systems of the postsynaptic neuron under the action of nerve growth factor] Kaliunov VN, et al. **Nerv Sist** 1988;27:41–8 **(Rus)**

GENETICS

Platelets of alcoholics, and of subjects genetically at risk for alcoholism, share the same abnormality of imipramine binding sites [letter] Suranyi-Cadotte B, et al. **Br J Addict** 1989 Apr;84(4):437–8

Protein kinase C modulates neurotransmitter responses in Xenopus oocytes injected with rat brain RNA. Moran O, et al. **Brain Res Mol Brain Res** 1989 May;5(3):193–202

Molecular cloning of gltS and gltP, which encode glutamate carriers of Escherichia coli B. Deguchi Y, et al. **J Bacteriol** 1989 Mar;171(3):1314–9

RFLPs of the gene for the human glycine receptor on the X-chromosome. Siddique T, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1785

mRNA from NCB-20 cells encodes the N-methyl-D-aspartate/phencyclidine receptor: a Xenopus oocyte expression study. Lerma J, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1708–11

Expression of GABA and glycine receptors by messenger RNAs from the developing rat cerebral cortex. Carpenter MK, et al. **Proc R Soc Lond [Biol]** 1988 Jul 22; 234(1275):159–70

Selective breeding in rats for extreme densities of platelet 3H-imipramine binding sites: evidence against a trait hypothesis. Gentsch C, et al. **Psychiatry Res** 1989 Mar; 27(3):287–95

Genetic hypothesis of idiopathic schizophrenia: its exorphin connection. Dohan FC. **Schizophr Bull** 1988;14(4):489–94 (20 ref.)

Heterogeneity of glycine receptors and their messenger RNAs in rat brain and spinal cord. Akagi H, et al. **Science** 1988 Oct 14;242(4876):270–3

Selective amplification and cloning of four new members of the G protein-coupled receptor family. Libert F, et al. **Science** 1989 May 5;244(4904):569–72

ISOLATION & PURIFICATION

Solubilization, partial purification, and properties of omega-conotoxin receptors associated with voltage-dependent calcium channels from rat brain synaptosomes. Rosenberg RL, et al. **Ann N Y Acad Sci** 1989;560:39–52

Solubilization of a glutamate-binding protein from brain membranes. Kuonen DR, et al. **Biochem Soc Trans** 1988 Aug;16(4):446–50

Identification and characterization of the ligand binding subunit of a kainic acid receptor using monoclonal antibodies and peptide mapping. Hampson DR, et al. **J Biol Chem** 1989 Aug 5;264(22):13329–35

Purification of the neurotensin receptor from mouse brain by affinity chromatography. Mazella J, et al. **J Biol Chem** 1989 Apr 5;264(10):5559–63

Solubilization of the N-methyl-D-aspartate receptor channel complex from rat and porcine brain. McKernan RM, et al. **J Neurochem** 1989 Mar;52(3):777–85

A kainate binding protein in pigeon cerebellum: purification and localization by monoclonal antibody. Klein AU, et al.

Neurosci Lett 1988 Dec 19;95(1–3):359–64

METABOLISM

Imipramine binding in depressive patients diagnosed according to different criteria. Plenge P, et al. **Acta Psychiatr Scand** 1988 Aug;78(2):156–61 (44 ref.)

Adrenoceptor and imipramine receptor binding during the menstrual cycle. Stowell LI, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):366–8

Imipramine binding in depression and other psychiatric conditions. Mellerup ET, et al. **Acta Psychiatr Scand Suppl** 1988;345:61–8 (51 ref.)

Localization of the glycine receptors in the rat central nervous system: an immunocytochemical analysis. Murakami T, et al. **Adv Exp Med Biol** 1988;236:71–80

Bradykinin receptors localized by quantitative autoradiography in kidney, ureter, and bladder. Manning DC, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F909–15

Substance P: the relationship between receptor distribution in rat lung and the capacity of substance P to stimulate vascular permeability. Sertl K, et al. **Am Rev Respir Dis** 1988 Jul;138(1):151–9

Microbial methodological artifacts in [3H]glutamate receptor binding assays. Yoneda Y, et al. **Anal Biochem** 1989 Mar; 177(2):250–5

Properties of the calcium channel associated omega-conotoxin receptor in rat brain. Martin-Moutot N, et al. **Ann N Y Acad Sci** 1989;560:53–5

Receptors for neurokinins, tachykinins, and bombesin: a pharmacological study. Regoli D, et al. **Ann N Y Acad Sci** 1988;547:158–73 (55 ref.)

Neuroleptic binding to human brain receptors: relation to clinical effects. Richelson E. **Ann N Y Acad Sci** 1988; 537:435–42 (24 ref.)

Neurotransmitter receptors and phosphoinositide turnover. Chuang DM. **Annu Rev Pharmacol Toxicol** 1989;29:71–110 (236 ref.)

Modulation of glutamate receptors: molecular mechanisms and functional implications. Wroblewski JT, et al. **Annu Rev Pharmacol Toxicol** 1989;29:441–74 (290 ref.)

Autoradiographic analysis of tritiated imipramine binding in the human brain post mortem: effects of suicide. Gross-Isseroff R, et al. **Arch Gen Psychiatry** 1989 Mar; 46(3):237–41

Changes in [3H]-imipramine binding sites in relation to muricide following olfactory bulbectomy and the effect of nomifensine in brain of rats. Al-Khatib IM, et al. **Arch Int Pharmacodyn Ther** 1988 Nov-Dec;296:282–92

B2-kinin receptor like binding in rat glomerular membranes. Bascands JL, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):99–104

Chemical modification of the glycine receptor with fluorescein isothiocyanate specifically affects the interaction of glycine with its binding site. Ruiz Gómez A, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):374–81

Two modes of regulation of the phospholipase C-linked substance-P receptor in rat parotid acinar cells. Sugiya H, et al. **Biochem J** 1988 Jul 15;253(2):459–66

Presence of sigma and phencyclidine (PCP)-like receptors in membrane preparations of bovine adrenal medulla. Rogers C, et al. **Biochem Pharmacol** 1989 Aug 1; 38(15):2467–72

Sidedness and chemical and kinetic properties of the vesamicol receptor of cholinergic synaptic vesicles. Kornreich WD, et al. **Biochemistry** 1988 Jul 12; 27(14):5262–7

1-(m-chlorophenyl)piperazine (mCPP) interactions with neurotransmitter receptors in the human brain. Hamik A, et al. **Biol Psychiatry** 1989 Mar 1;25(5):569–75

Plasma of depressed patients enhances platelet imipramine binding [letter] Marazziti D, et al. **Biol Psychiatry** 1989 Apr 1;25(7):985–7

Platelet 3H-clonidine and 3H-imipramine binding and plasma cortisol level in depression. Takeda T, et al. **Biol Psychiatry** 1989 May;26(1):52–60

1H-NMR studies of receptor-selective substance P analogues reveal distinct predominant conformations in DMSO-d6. Levian-Teitelbaum D, et al. **Biopolymers** 1989 Jan; 28(1):51–64

Selective agonists for receptors of substance P and related neurokinins. Regoli D, et al. **Biopolymers** 1989 Jan; 28(1):81–90

Near death experience and the NMDA receptor [letter] Jansen K. **BMJ** 1989 Jun 24;298(6689):1708

Kinins act on B1 or B2 receptors to release conjointly endothelium-derived relaxing factor and prostacyclin from bovine aortic endothelial cells. D'Orléans-Juste P, et al. **Br J Pharmacol** 1989 Apr;96(4):920–6

Agonists, antagonists and modulators of excitatory amino acid receptors in the guinea-pig myenteric plexus. Luzzi S, et al. **Br J Pharmacol** 1988 Dec;95(4):1271–7

What confers specificity on glycine for its receptor site? Tokutomi N, et al. **Br J Pharmacol** 1989 Jun;97(2):353–60

Modulation of glutamate receptors by phencyclidine and glycine in the rat cerebellum: cGMP increase in vivo. Danysz W, et al. **Brain Res** 1989 Feb 13;479(2):270–6

Substance P receptors in the human spinal cord: decrease in amyotrophic lateral sclerosis. Dietl MM, et al. **Brain Res** 1989 Mar 27;483(1):39–49

Autoradiographic localization of mu-opioid and neurotensin receptors within the mesolimbic dopamine system. Dilts RP, et al. **Brain Res** 1989 May 29;488(1-2):311–27

Kainyl-bovine serum albumin: a novel ligand of the kainate sub-type of glutamate receptor with a very high binding affinity. Eshhar N, et al. **Brain Res** 1989 Jan 2;476(1):57–70

The distribution of neurotensin receptors and acetylcholinesterase in the human caudate nucleus: evidence for the existence of a third neurochemical compartment. Faull RL, et al. **Brain Res** 1989 May 29; 488(1-2):381–6

CNQX (6-cyano-7-nitroquinoxaline-2,3-dione) antagonizes NMDA-evoked [3H]GABA release from cultured cortical neurons via an inhibitory action at the strychnine-insensitive glycine site. Harris KM, et al. **Brain Res** 1989 Jun 5;489(1):185–9

Evoked release of endogenous adenosine from rat cortical slices by K+ and glutamate. Hoehn K, et al. **Brain Res** 1989 Jan 23;478(1):149–51

Modulatory effects of aluminum, calcium, lithium, magnesium, and zinc ions on [3H]MK-801 binding in human cerebral cortex. Hubbard CM, et al. **Brain Res** 1989 May 1;486(1):170–4

Autoradiographic localization of binding sites for 125I-substance P on neurones from cultured rat superior cervical ganglion. James S, et al. **Brain Res** 1988 Aug 23; 458(2):205–11

[3H]glycine binding sites, NMDA and PCP receptors have similar distributions in the human hippocampus: an autoradiographic study. Jansen KL, et al. **Brain Res** 1989 Mar 13;482(1):174–8

Quinoxaline derivatives are high-affinity antagonists of the NMDA receptor-associated glycine sites. Kessler M, et al. **Brain Res** 1989 Jun 12;489(2):377–82

Autoradiographic localization of substance P ligand binding sites and distribution of immunoreactive neurons in the periaqueductal gray of the rat. Liu RP, et al. **Brain Res** 1988 Dec 13;475(1):73–9

Interaction of insecticides of the pyrethroid family with specific binding sites on the voltage-dependent sodium channel from mammalian brain. Lombet A, et al. **Brain Res** 1988 Aug 30;459(1):44–53

Quantitative autoradiographic localization of NMDA, quisqualate and PCP receptors in the frog tectum. McDonald JW, et al. **Brain Res** 1989 Mar 13;482(1):155–8

Common receptors for hallucinogens in rat brain: a comparative autoradiographic study using [125I]LSD and [125I]DOI, a new psychotomimetic radioligand. McKenna DJ, et al. **Brain Res** 1989 Jan 2;476(1):45–56

Glucose deprivation neuronal injury in cortical culture. Monyer H, et al. **Brain Res** 1989 Apr 3;483(2):347–54

[3H]MK-801 binding sites in neonate rat brain. Morin AM, et al. **Brain Res** 1989 May 22;487(2):376–9

Tachykinin binding sites in the interpeduncular nucleus of the rat: normal distribution, postnatal development and the effects of lesions. Murray M, et al. **Brain Res** 1988 Aug 30;459(1):76–92

Glutamate becomes neurotoxic via the N-methyl-D-aspartate receptor when intracellular energy levels are reduced. Novelli A, et al. **Brain Res** 1988 Jun 7;451(1-2):205–12

N-methyl-D-aspartate receptor autoradiography in rat brain after angular bundle kindling. Okazaki MM, et al. **Brain Res** 1989 Mar 20;482(2):359–64

Coupling of receptors in brain membranes by fusion to the adenylate cyclase system of a foreign effector cell. Olasmaa M, et al. **Brain Res** 1988 Nov 8;473(1):29–36

Glutamate receptors and phosphoinositide metabolism: stimulation via quisqualate receptors is inhibited by N-methyl-D-aspartate receptor activation. Palmer E, et al. **Brain Res** 1988 Sep;464(2):161–5

L-beta-methylaminoalanine inhibits [3H]glutamate binding in the presence of bicarbonate ions. Richter KE, et al. **Brain Res** 1989 Jul 17;492(1-2):385–8

Mild stress stimulates rat hippocampal glucose utilization transiently via NMDA receptors, as assessed by lactography. Schasfoort EM, et al. **Brain Res** 1988 Dec 13;475(1):58–63

Cotransmitters: differential effects of serotonin (5-HT)-depleting drugs on levels of 5-HT and TRH and their receptors in rat brain and spinal cord. Sharif NA, et al. **Brain Res** 1989 Feb 20;480(1-2):365–71

A conformationally restricted analogue of L-glutamate, the (2S,3R,4S) isomer of L-alpha-(carboxycyclopropyl)glycine, activates the NMDA-type receptor more markedly than NMDA in the isolated rat spinal cord. Shinozaki H, et al. **Brain Res** 1989 Feb 20;480(1-2):355–9

Regional changes in [3H]D-aspartate and [3H]TCP binding sites in Alzheimer's disease brains. Simpson MD, et al. **Brain Res** 1988 Oct 11;462(1):76–82

Reduced D-[3H]aspartate binding in Down's syndrome brains. Simpson MD, et al. **Brain Res** 1989 Apr 10; 484(1-2):273–8

Effect of tunicamycin on the expression of functional brain neurotransmitter receptors and voltage-operated channels in Xenopus oocytes. Sumikawa K, et al. **Brain Res** 1988 Nov;464(3):191–9

L-glutamate binding sites of normal and atrophic human cerebellum. Tsiotos P, et al. **Brain Res** 1989 Feb 27; 481(1):87–96

Cytosolic free calcium and NAD/NADH redox state in the cat cortex during in vivo activation of NMDA receptors. Uematsu D, et al. **Brain Res** 1989 Mar 13;482(1):129–35

Reduced glutamate binding in rat dorsal vagal complex after nodose ganglionectomy. Lewis SJ, et al. **Brain Res Bull** 1988 Dec;21(6):913–6

Divergent ontogeny of sigma and phencyclidine binding sites in the rat brain. Majewska MD, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):13–8

Domoic acid, the alleged "mussel toxin," might produce its neurotoxic effect through kainate receptor activation: an electrophysiological study in the dorsal hippocampus. Debonnel G, et al. **Can J Physiol Pharmacol** 1989 Jan; 67(1):29–33

Effects of long-term administration of antidepressants and neuroleptics on receptors in the central nervous system. Baker GB, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):1–44 (192 ref.)

The study of tachykinin receptors. Burcher E. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):539–43 (25 ref.)

Localization and measurement of neurotransmitter receptors in rat and human brain by quantitative autoradiography. Ko GN, et al. **Comput Med Imaging Graph** 1989 Jan-Feb; 13(1):37–45

Distribution of vasoactive intestinal polypeptide and substance P receptors in human colon and small intestine. Korman LY, et al. **Dig Dis Sci** 1989 Jul;34(7):1100–8

A Markov process based model of the neurotransmitter-receptor binding process in the brain. Elkarmi AZ, et al. **Drug Des Deliv** 1988 Jul;3(1):69–76

Functional expression in Xenopus oocytes of the strychnine binding 48 kd subunit of the glycine receptor. Schmieden V, et al. **EMBO J** 1989 Mar;8(3):695–700

Binding of a iodinated substance P analog to a NK-1 receptor on isolated cell membranes from rat anterior pituitary. Larsen PJ, et al. **Endocrinology** 1989 May;124(5):2548–57

Differences between seizure-prone and non-seizure-prone mice with regard to glutamate and GABA receptor binding in the hippocampus and other regions of the brain. Frandsen A, et al. **Epilepsy Res** 1987 Mar;1(2):107–13

Stimulation of peripheral cholinergic nerves by glutamate indicates a new peripheral glutamate receptor. Ass P, et al. **Eur J Pharmacol** 1989 May 2;164(1):93–102

Neuropeptide K, scyliorhinin I and II: new tools in the tachykinin receptor field. Beaujouan JC, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):353–4

Ifenprodil and SL 82.0715 are antagonists at the polyamine site of the N-methyl-D-aspartate (NMDA) receptor. Carter C, et al. **Eur J Pharmacol** 1989 May 30;164(3):611–2

Bidirectional transport of NMDA receptor and ionophore in the vagus nerve. Cincotta M, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):167–71

Effect of ischemia and intra-amygdaloid kainate injection on the density of NMDA binding sites in the hippocampal CA1 region. Crepel V, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):355–6

Radiohistochemical demonstration of NMDA/glycine-channel activation in rat hippocampus. Hosford DA, et al. **Eur J Pharmacol** 1988 Jul 14; 151(3):501–3

N-methyl-D-aspartate receptor involvement in lactate production following ischemia or convulsion in rats. Kuhr WG, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):145–9

Hippocampal NMDA/phencyclidine receptor binding sites are reduced following forebrain ischaemia in the gerbil. Leach MJ, et al. **Eur J Pharmacol** 1988 Jul 26; 152(1-2):189–92

Effects of microgravity on brain neurotransmitter receptors. Miller JD, et al. **Eur J Pharmacol** 1989 Feb 28; 161(2-3):165–71

Glycine and kynurenate modulate the glutamate receptors in the myenteric plexus and in cortical membranes. Moroni F, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):123–6

Angiotensin converting enzyme inhibitors and expression of des-Arg9-BK (kinin B1) receptors in vivo. Nwator IA, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):125–32

Complex interaction between quisqualate and kainate receptors as revealed by measurement of GABA release from striatal neurons in primary culture. Pin JP, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):81–91

In vivo labelling of the NMDA receptor channel complex by [3H]MK-801. Price GW, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):279–82

Presynaptic alpha 2-adrenoceptors modulate the release of [3H]noradrenaline from rat spinal cord dorsal horn neurones. Reimann W, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):161–6

NMDA receptor antagonists that bind to the strychnine-insensitive glycine site and inhibit NMDA-induced Ca2+ fluxes and [3H]GABA release. Reynolds IJ, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):9–17

Receptors for kinins in isolated arterial vessels of dogs. Rhaleb NE, et al. **Eur J Pharmacol** 1989 Mar 29; 162(3):419–27

Sigma and PCP receptors in human frontal cortex membranes. Tam SW, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):343–4

The behavioural effects of MK-801: a comparison with antagonists acting non-competitively and competitively at the NMDA receptor. Tricklebank MD, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):127–35

Identification of L-glutamate binding sites in chick brain by photoaffinity labeling. Voukelatou G, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):179–83

The effects of non-competitive NMDA receptor antagonists

on rats exposed to hyperbaric pressure. Wardley-Smith B, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):107–12

The actions of cyclopentane analogues of glutamic acid at binding sites for kainic and glutamic acids. McLennan H, et al. **Exp Brain Res** 1988;72(2):436–8

Structural requirements for activation of excitatory amino acid receptors in the rat spinal cord in vitro. Magnuson DS, et al. **Exp Brain Res** 1988;73(3):541–5

Neurotransmitters, neuropeptides and binding sites in the rat mediobasal hypothalamus: effects of monosodium glutamate (MSG) lesions. Meister B, et al. **Exp Brain Res** 1989;76(2):343–68

Neuronal death in vitro: parallelism between survivability of hippocampal neurones and sustained elevation of cytosolic Ca2+ after exposure to glutamate receptor agonist. Ogura A, et al. **Exp Brain Res** 1988;73(3):447–58

Differential regulation of sigma and PCP receptors after chronic administration of haloperidol and phencyclidine in mice. Itzhak Y, et al. **FASEB J** 1989 May;3(7):1868–72

Different tachykinin receptor subtypes are coupled to the phosphoinositide or cyclic AMP signal transduction pathways in rat submandibular cells. Laniyonu A, et al. **FEBS Lett** 1988 Nov 21;240(1–2):186–90

Etoxadrol-meta-isothiocyanate: a potent, enantioselective, electrophilic affinity ligand for the phencyclidine-binding site. Thurkauf A, et al. **FEBS Lett** 1988 Oct 10; 238(2):369–74

Imipramine binding sites in brain and platelets: role in affective disorders. Hrdina PD. **Int J Clin Pharmacol Res** 1989;9(2):119–22 (26 ref.)

Gestational exposure to phencyclidine (PCP) in rats decreases PCP binding sites in term fetal brain. Ali SF, et al. **Int J Dev Neurosci** 1988;6(6):547–52

L-aspartate and L-glutamate binding sites in developing normal and 'nervous' mutant mouse cerebellum. Angelatou F, et al. **Int J Dev Neurosci** 1987;5(5–6):373–81

A developmental influence of substance P on its receptors. Handelmann GE, et al. **Int J Dev Neurosci** 1987;5(1):11–5

Glycinergic systems in the brain stem of developing and adult mice: effects of taurine. Kontro P, et al. **Int J Dev Neurosci** 1987;5(5–6):461–70

Isolated hippocampal neurons in cryopreserved long-term cultures: development of neuroarchitecture and sensitivity to NMDA. Mattson MP, et al. **Int J Dev Neurosci** 1988; 6(5):439–52

On the receptor binding site of relaxins. Büllesbach EE, et al. **Int J Pept Protein Res** 1988 Nov;32(5):361–7

NMDA receptor channels: labeling of MK-801 with iodine-125 and fluorine-18. Wieland DM, et al. **Int J Rad Appl Instrum [A]** 1988;39(12):1219–25

Platelet 3H-imipramine binding sites in depressed patients and healthy controls: a comparison between morning and afternoon samples. Gentsch C, et al. **J Affective Disord** 1989 Jan-Feb;16(1):65–70

Platelet serotonin uptake and 3H-imipramine binding in panic disorder. Norman TR, et al. **J Affective Disord** 1989 Jul-Aug;17(1):77–81

Decreased platelet 3H-imipramine binding in primary major depression compared with depression secondary to medical illness in elderly outpatients. Schneider LS, et al. **J Affective Disord** 1988 Sep-Oct;15(2):195–200

Phototherapy increases platelet 3H-imipramine binding in patients with winter depression. Szádóczky E, et al. **J Affective Disord** 1989 Mar-Jun;16(2-3):121–5

Distribution of substance P binding sites in guinea-pig heart and pharmacological effects of substance P. Hoover DB, et al. **J Auton Nerv Syst** 1988 Sep;23(3):189–97

Characterization and partial purification of a chloride- and calcium-dependent glutamate-binding protein from rat brain. Brose N, et al. **J Biol Chem** 1989 Jun 5; 264(16):9619–25

Coupling of bradykinin receptors to phospholipase C in cultured fibroblasts is mediated by a G-protein. Etscheid BG, et al. **J Cell Physiol** 1989 Aug;140(2):264–71

Calcium uptake evoked by electrical stimulation is enhanced postischemically and precedes delayed neuronal death in CA1 of rat hippocampus: involvement of N-methyl-D-aspartate receptors. Andiné P, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):799–807

Alterations in the N-methyl-D-aspartate receptor complex following focal cerebral ischemia. Dewar D, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):709–12

Substance P receptors in human pituitary: a potential inhibitor of luteinizing hormone secretion. Wormald PJ, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):612–5

Distribution of glycine receptor immunoreactivity in the spinal cord of the rat: cytochemical evidence for a differential glycinergic control of lamina I and V nociceptive neurons. Basbaum AI. **J Comp Neurol** 1988 Dec 15;278(3):330–6

Neuroanatomical distribution of receptors for three potential inhibitory neurotransmitters in the brainstem auditory nuclei of the cat. Glendenning KK, et al. **J Comp Neurol** 1988 Sep 8;275(2):288–308

Correspondence between high affinity 125I-neurotensin binding sites and dopaminergic neurons in the rat substantia nigra and ventral tegmental area: a combined radioautographic and immunohistochemical light microscopic study. Szigethy E, et al. **J Comp Neurol** 1989 Jan 1;279(1):128–37

4-(Phosphonoalkyl)- and 4-(phosphonoalkenyl)-2-piperidinecarboxylic acids: synthesis, activity at N-methyl-D-aspartic acid receptors, and anticonvulsant activity. Hutchison AJ, et al. **J Med Chem** 1989 Sep;32(9):2171–8

[3H]MK-801 binding sites in postmortem brain regions of schizophrenic patients. Kornhuber J, et al. **J Neural Transm** 1989;77(2–3):231–6

Adrenergic, serotoninergic, histaminergic, and imipramine binding sites in post-mortal human cerebral microvessel preparations. O'Neill C, et al. **J Neural Transm** 1988; 73(3):177–89

Muscarinic and quisqualate receptor-induced phosphoinositide hydrolysis in primary cultures of striatal and hippocampal neurons. Evidence for differential mechanisms of activation. Ambrosini A, et al. **J Neurochem** 1989 Sep;53(3):825–33

Sensitive immunoassay shows selective association of peripheral and integral membrane proteins of the inhibitory glycine receptor complex. Becker CM, et al. **J Neurochem** 1989 Jul;53(1):124–31

Characterisation, density, and distribution of kainate receptors in normal and Alzheimer's diseased human brain. Cowburn RF, et al. **J Neurochem** 1989 Jan;52(1):140–7

Construction of a physiologically active photoaffinity probe based on the structure of bradykinin: labelling of angiotensin converting enzyme but not candidate bradykinin receptors on NG108-15 cells. de Vries JG, et al. **J Neurochem** 1989 May;52(5):1508–16

Solubilisation and characterisation of a putative quisqualate-type glutamate receptor from chick brain. Henley JM, et al. **J Neurochem** 1989 Jul;53(1):140–8

Kainate receptors in Xenopus central nervous system: solubilisation with n-octyl-beta-D-glucopyranoside. Henley JM, et al. **J Neurochem** 1989 Jan;52(1):31–7

Glutamate transport and not glutamate receptor binding is stimulated by gangliosides in a Ca2+-dependent manner in rat brain synaptic plasma membranes. Hollmann M, et al. **J Neurochem** 1989 Sep;53(3):716–23

A glycine site associated with N-methyl-D-aspartic acid receptors: characterization and identification of a new class of antagonists. Kessler M, et al. **J Neurochem** 1989 Apr; 52(4):1319–28

Homocysteic acid as a putative excitatory amino acid neurotransmitter: I. Postsynaptic characteristics at N-methyl-D-aspartate-type receptors on striatal cholinergic interneurons. Lehmann J, et al. **J Neurochem** 1988 Dec;51(6):1765–70

Regulation of substance P receptor affinity by guanine nucleotide-binding proteins. Macdonald SG, et al. **J Neurochem** 1989 Jul;53(1):264–72

1-Aminocyclopropane carboxylic acid: a potent and selective ligand for the glycine modulatory site of the N-methyl-D-aspartate receptor complex. Marvizón JC, et al. **J Neurochem** 1989 Mar;52(3):992–4

Characterization of a [3H]glycine recognition site as a modulatory site of the N-methyl-D-aspartate receptor complex. Monahan JB, et al. **J Neurochem** 1989 Aug; 53(2):370–5

Regulation of the vesamicol receptor in cholinergic synaptic vesicles by acetylcholine and an endogenous factor. Noremberg K, et al. **J Neurochem** 1989 Mar;52(3):913–20

Reduced glycine stimulation of [3H]MK-801 binding in Alzheimer's disease. Procter AW, et al. **J Neurochem** 1989 Sep;53(3):698–704

L-[3H]glutamate binding to a membrane preparation from crayfish muscle. Syvertsen C, et al. **J Neurochem** 1989 Mar; 52(3):755–60

Tachykinin receptors of the NK1 type (substance P) coupled positively to phospholipase C on cortical astrocytes from the newborn mouse in primary culture. Torrens Y, et al. **J Neurochem** 1989 Jun;52(6):1913–8

Changes in excitatory amino acid receptor binding in the intact and decorticated rat neostriatum following insulin-induced hypoglycemia. Westerberg E, et al. **J Neurochem** 1989 May;52(5):1340–7

Solubilization of quisqualate-sensitive [3H]glutamate binding activity from rat retina. Yoneda Y, et al. **J Neurochem** 1989 May;52(5):1501–7

The location and function of NMDA receptors in cat and kitten visual cortex. Fox K, et al. **J Neurosci** 1989 Jul; 9(7):2443–54

Autoradiographic localization and characterization of tachykinin receptor binding sites in the rat brain and peripheral tissues. Mantyh PW, et al. **J Neurosci** 1989 Jan; 9(1):258–79

Separation of quisqualate- and kainate-selective glutamate receptors in cultured neurons from the rat superior colliculus. Perouansky M, et al. **J Neurosci** 1989 Jan; 9(1):70–80

Distribution of glycine receptors on the membrane of a central neuron: an immunoelectron microscopy study. Seitanidou T, et al. **J Neurosci** 1988 Nov;8(11):4319–33

Substance P receptors on canine chief cells: localization, characterization, and function. Vigna SR, et al. **J Neurosci** 1989 Aug;9(8):2878–86

Omega-conotoxin GVIA binding to a high-affinity receptor in brain: characterization, calcium sensitivity, and solubilization. Wagner JA, et al. **J Neurosci** 1988 Sep; 8(9):3354–9

Flow cytometric identification and purification of cells by ligand-induced changes in intracellular calcium. Schieren I, et al. **J Neurosci Methods** 1988 Nov;26(1):35–44

Guanine nucleotides are competitive inhibitors of N-methyl-D-aspartate at its receptor site both in vitro and in vivo. Baron BM, et al. **J Pharmacol Exp Ther** 1989 Jul; 250(1):162–9

Behavioral tolerance and sensitization to CGS 19755, a competitive N-methyl-D-aspartate receptor antagonist. Boast CA, et al. **J Pharmacol Exp Ther** 1988 Nov; 247(2):556–61

Characterization of the binding of radioligands to the N-methyl-D-aspartate, phencyclidine, and glycine receptors in buffy coat membranes. Jones SM, et al. **J Pharmacol Methods** 1989 Apr;21(2):161–8

Calcium-mobilizing receptors, polyphosphoinositides, generation of second messengers and contraction in the mammalian iris smooth muscle: historical perspectives and current status. Abdel-Latif AA. **Life Sci** 1989;45(9):757–86 (91 ref.)

The asymmetry of 3H-imipramine binding may predict psychiatric illness. Demeter E, et al. **Life Sci** 1989; 44(19):1403–10

Characterization of [3H]bradykinin binding sites in guinea-pig central nervous system: possible existence of B2 subtypes. Fujiwara Y, et al. **Life Sci** 1989;44(22):1645–53

Gastrointestinal tachykinin receptors. Jacoby HI. **Life Sci** 1988;43(26):2203–8 (25 ref.)

Synthesis and characterization of a radiolabelled derivative of the phencyclidine/N-methyl-D-aspartate receptor ligand (+) MK-801 with high specific radioactivity. Keana JF, et al. **Life Sci** 1988;43(12):965–73

Solubilization of phencyclidine receptors from rat cerebral cortex in an active ligand binding state. McVittie LD, et al. **Life Sci** 1989;44(23):1793–802

Involvement of serotonin system in bulimia. Marazziti D, et al. **Life Sci** 1988;43(25):2123–6

Radioligand-binding assays for study of neurotensin receptors. Goedert M. **Methods Enzymol** 1989;168:462–81

Biexponential kinetics of [3H]MK-801 binding: evidence for access to closed and open N-methyl-D-aspartate receptor channels. Javitt DC, et al. **Mol Pharmacol** 1989 Apr; 35(4):387–93

Fractional vesamicol receptor occupancy and acetylcholine active transport inhibition in synaptic vesicles. Kaufman R, et al. **Mol Pharmacol** 1989 Sep;36(3):452–8

Selectivity of quinoxalines and kynurenines as antagonists of the glycine site on N-methyl-D-aspartate receptors. Kleckner NW, et al. **Mol Pharmacol** 1989 Sep;36(3):430–6

Receptor site topographies for phencyclidine-like and sigma drugs: predictions from quantitative conformational, electrostatic potential, and radioreceptor analyses. Manallack DT, et al. **Mol Pharmacol** 1988 Dec;34(6):863–79

Tricyclic antidepressants and dextromethorphan bind with higher affinity to the phencyclidine receptor in the absence of magnesium and L-glutamate. Sills MA, et al. **Mol Pharmacol** 1989 Jul;36(1):160–5

Neurobiology. Glycine maintains excitement [news] Foster AC, et al. **Nature** 1989 Mar 30;338(6214):377–8

Zinc and LTP [letter] Weiss JH, et al. **Nature** 1989 Mar 16; 338(6212):212

Spinal action of neurokinins producing cardiovascular responses in the conscious freely moving rat: evidence for a NK-1 receptor mechanism. Hasséssian H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):649–54

Substance p in the median eminence and pituitary of the rat: demonstration of immunoreactive fibers and specific binding sites. Mikkelsen JD, et al. **Neuroendocrinology** 1989 Jul;50(1):100–8

Molecular characteristics and peptide specificity of bradykinin binding sites in intact neuroblastoma-glioma cells in culture (NG 108-15). Lee RT, et al. **Neuropeptides** 1989 Jul;14(1):51–7

The binding of [3H]thienyl cyclohexylpiperidine ([3H]TCP) to the NMDA-phencyclidine receptor complex. Stirling JM, et al. **Neuropharmacology** 1989 Jan;28(1):1–7

Diurnal and circannual variation in platelet 3H-imipramine binding: comparative data on normal and affectively ill subjects. Baron M, et al. **Neuropsychobiology** 1988; 19(1):9–11

Unaltered platelet [3H]-imipramine binding in dementia of the Alzheimer type. Weizman R, et al. **Neuropsychobiology** 1988;19(2):69–72

Biochemical, behavioral, and electrophysiologic actions of the selective sigma receptor ligand (+)-pentazocine. Steinfels GF, et al. **Neuropsychopharmacology** 1988 Dec; 1(4):321–7

Reduction of (3H)-imipramine binding sites on platelets of conduct-disordered children. Stoff DM, et al. **Neuropsychopharmacology** 1987 Dec;1(1):55–62

Expression of glycine and other amino acid receptors by rat spinal cord mRNA in Xenopus oocytes. Akagi H, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):262–8

Reduction in [3H]glutamate binding in the visual cortex after unilateral orbital enucleation. Chalmers DT, et al. **Neurosci Lett** 1989 Feb 27;97(3):298–304

Kynurenate and 2-amino-5-phosphonovalerate interact with multiple binding sites of the N-methyl-D-aspartate-sensitive glutamate receptor domain. Danysz W, et al. **Neurosci Lett** 1989 Jan 30; 96(3):340–4

Specific [125I]Bolton-Hunter substance P binding sites in human and rat skin. Deguchi M, et al. **Neurosci Lett** 1989 May 8;99(3):287–92

Substance P-induced cutaneous plasma extravasation in rats

is mediated by NK-1 tachykinin receptors. Devor M, et al. **Neurosci Lett** 1989 Aug 28;103(2):203–8

6,7-Dichloro-3-hydroxy-2-quinoxalinecarboxylic acid is a relatively potent antagonist at NMDA and kainate receptors. Frey P, et al. **Neurosci Lett** 1988 Aug 31; 91(2):194–8

Cation interactions with putative NMDA receptor-gated channels labeled by [3H]MK-801 in rat cerebral cortex. Greenberg DA, et al. **Neurosci Lett** 1988 Dec 19; 95(1-3):236–40

Effects of age on binding sites for calcitonin gene-related peptide in the rat central nervous system. Guidobono F, et al. **Neurosci Lett** 1989 Jul 17;102(1):20–6

D-cycloserine: a ligand for the N-methyl-D-aspartate coupled glycine receptor has partial agonist characteristics. Hood WF, et al. **Neurosci Lett** 1989 Mar 13;98(1):91–5

Differential expression of glutamate receptors in Xenopus oocytes injected with messenger RNA from lobster muscle. Kawai N, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):203–7

Stereoselective antagonism of NMDA-stimulated noradrenaline release from rat hippocampal slices by MK-801. Lalies M, et al. **Neurosci Lett** 1988 Sep 12; 91(3):339–42

Ontogeny of neurotensin receptor binding sites in the rat visual cortex. Lobo DH, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):152–7

[3H]MK-801 binding in Alzheimer's disease. Mouradian MM, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):225–30

Differential effects of competitive and non-competitive N-methyl-D-aspartate antagonists on glucose use in the limbic system. Nehls DG, et al. **Neurosci Lett** 1988 Aug 31;91(2):204–10

Ring-substituted amphetamine interactions with neurotransmitter receptor binding sites in human cortex. Pierce PA, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):208–12

Loss of glycine-dependent radioligand binding to the N-methyl-D-aspartate-phencyclidine receptor complex in patients with Alzheimer's disease. Procter AW, et al. **Neurosci Lett** 1989 Jun 5;101(1):62–6

Transient increase of NMDA-binding sites in human hippocampus during development. Represa A, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):61–6

Characterization of glutamate receptors induced in Xenopus oocytes after injection of rat brain mRNA. Hirono C, et al. **Neurosci Res** 1988 Dec;6(2):106–14

Neurotensin receptors in the human spinal cord: a quantitative autoradiographic study. Faull RL, et al. **Neuroscience** 1989;29(3):603–13

Subchronic administration of MK-801 in the rat decreases cortical binding of [3H]D-AP5, suggesting down-regulation of the cortical N-methyl-D-aspartate receptors. Manallack DT, et al. **Neuroscience** 1989; 30(1):87–94

Prenatal ethanol exposure decreases hippocampal 3H-vinylidene kainic acid binding in 45-day-old rats. Farr KL, et al. **Neurotoxicol Teratol** 1988 Nov-Dec;10(6):563–8

Behavioral and autonomic correlates of the tactile evoked allodynia produced by spinal glycine inhibition: effects of modulatory receptor systems and excitatory amino acid antagonists. Yaksh TL. **Pain** 1989 Apr;37(1):111–23

Comparison of neurotensin levels, receptors and actions in LS/Ibg and SS/Ibg mice. Erwin VG, et al. **Peptides** 1989 Mar-Apr;10(2):435–40

Identification of B2 bradykinin binding sites in the guinea pig nasal turbinate. Fujiwara Y, et al. **Peptides** 1989 May-Jun;10(3):701–3

Substance P and substance K receptor binding sites in the human gastrointestinal tract: localization by autoradiography. Gates TS, et al. **Peptides** 1988 Nov-Dec; 9(6):1207–19

Substance P binding sites in the nucleus tractus solitarius of the cat. Maley BE, et al. **Peptides** 1988 Nov-Dec; 9(6):1301–6

Anatomical substrate for neurotensin-acetylcholine interactions in the rat basal forebrain. Szigethy E, et al. **Peptides** 1988 Nov-Dec;9(6):1227–34

Synthesis and receptor binding studies of (+/-)1-iodo-MK-801. Yang DJ, et al. **Pharm Res** 1989 Jun;6(6):474–6

Role of the aromatic group in the inhibition of phencyclidine binding and dopamine uptake by PCP analogs. Chaudieu I, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):699–705

Receptors for substance P and related neurokinins. Regoli D, et al. **Pharmacology** 1989;38(1):1–15 (54 ref.)

Perfection of a synaptic receptor: kinetics and energetics of the acetylcholine receptor. Jackson MB. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2199–203

Interaction of [3H]MK-801 with multiple states of the N-methyl-D-aspartate receptor complex of rat brain. Javitt DC, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(2):740–4

Substance P receptor binding sites are expressed by glia in vivo after neuronal injury. Mantyh PW, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5193–7

Receptor interactions through phosphorylation and methylation pathways in bacterial chemotaxis. Sanders DA, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8425–9

Multiple receptors for the tachykinin peptides. Buck SH. **Proc West Pharmacol Soc** 1988;31:45–7 (33 ref.)

Platelet [3H]-imipramine binding is not modified in Alzheimer's disease. Galzin AM, et al. **Psychiatry Res** 1989 Jun;28(3):289–94

A longitudinal study of intact platelet 3H-imipramine binding in 12 normal human subjects. Goziotis A, et al. **Psychiatry Res** 1988 Nov;26(2):157–62

Sleep deprivation and imipramine binding sites in depressed patients and healthy subjects. Haug HJ, et al. **Psychiatry Res** 1988 Aug;25(2):135–44

Platelet 3H-imipramine binding in psychogenic pain patients. Mellerup ET, et al. **Psychiatry Res** 1988 Nov;26(2):149–56

Platelet tritiated imipramine binding and MAO activity in Alzheimer's disease patients with agitation and delusions. Schneider LS, et al. **Psychiatry Res** 1988 Sep;25(3):311–22

3H-imipramine binding to freshly prepared platelet membranes in depression. Theodorou AE, et al. **Psychiatry Res** 1989 Jul;29(1):87–103

Repeated electroconvulsive shock increases the number of [3H]desipramine binding sites in rat cerebral cortex. Gleiter CH, et al. **Psychopharmacology (Berlin)** 1988;96(3):426–7

Receptor function and drug action in the lower urinary tract. Wein AJ. **Semin Neurol** 1988 Summer;8(2):121–30 (53 ref.)

Phencyclidine and sigma receptors in rat spinal cord: binding characterization and quantitative autoradiography. Aanonsen LM, et al. **Synapse** 1989;4(1):1–10

Differential sparing of somatostatin-neuropeptide Y and cholinergic neurons following striatal excitotoxin lesions. Beal MF, et al. **Synapse** 1989;3(1):38–47

Biochemical and behavioral effects of sigma and PCP ligands. Contreras PC, et al. **Synapse** 1988;2(3):240–3

The novel N-methyl-D-aspartate (NMDA) antagonist CGS 19755 prevents ischemia-induced reductions of adenosine A1, NMDA, and PCP receptors in gerbil brain. Jarvis MF, et al. **Synapse** 1988;2(6):577–84

PCP-induced alterations in cerebral glucose utilization in rat brain: blockade by metaphit, a PCP-receptor-acylating agent. Tamminga CA, et al. **Synapse** 1987;1(5):497–504

Cloning of serotonin and substance K receptors by functional expression in frog oocytes [news] Levitan ES. **Trends Neurosci** 1988 Feb;11(2):41–3 (16 ref.)

A new mechanism for glutamate receptor action: phosphoinositide hydrolysis. Sladeczek F, et al. **Trends Neurosci** 1988 Dec;11(12):545–9 (46 ref.)

The use of Xenopus oocytes to probe synaptic communication. Snutch TP. **Trends Neurosci** 1988 Jun; 11(6):250–6 (55 ref.)

New selective agonists for neurokinin receptors: pharmacological tools for receptor characterization. Regoli D, et al. **Trends Pharmacol Sci** 1988 Aug;9(8):290–5 (31 ref.)

Multiple bradykinin B2 receptors [letter] Regoli D. **Trends Pharmacol Sci** 1989 Apr;10(4):138

[Activated amino acid receptors in normal and pathologic brain function] Tacke U. **Duodecim** 1988;104(5):311–5 (38 ref.) **(Fin)**

[Abnormalities of neurotransmitters in Alzheimer's disease. Neurotransmitters and receptors] Ogawa N, et al. **Nippon Rinsho** 1988 Jul;46(7):1496–501 **(Jpn)**

[The sites of high affinity binding of L-[3H]glutamic acid in human platelets. A new type of platelet receptor?] Almazov VA, et al. **Biokhimiia** 1988 May;53(5):848–52 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Two classes of N-methyl-D-aspartate recognition sites: differential distribution and differential regulation by glycine. Monaghan DT, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9836–40

PHARMACOLOGY

NMDA receptors activate the arachidonic acid cascade system in striatal neurons. Dumuis A, et al. **Nature** 1988 Nov 3;336(6194):68–70

PHYSIOLOGY

Calcium accumulation by glutamate receptor activation is involved in hippocampal cell damage after ischemia. Benveniste H, et al. **Acta Neurol Scand** 1988 Dec; 78(6):529–36

Pharmacological receptors: the membrane receptors for neurotransmitters and drugs. Vetulani J. **Acta Physiol Pol** 1988 Mar-Apr;39(2):81–97 (62 ref.)

Evidence that prejunctional adenosine receptors regulating acetylcholine release from rat hippocampal slices are linked to an N-ethylmaleimide-sensitive G-protein, but not to adenylate cyclase or dihydropyridine-sensitive Ca2+-channels. Dunér-Engström M, et al. **Acta Physiol Scand** 1988 Sep;134(1):119–26

Selective innervation of neonatal fast and slow muscle fibres before net loss of synaptic terminals in the mouse soleus muscle. Fladby T, et al. **Acta Physiol Scand** 1988 Dec; 134(4):561–2

Neuroreceptors and signal transduction. Proceedings of the International Symposium on Neurotransmitter Receptors. October 6-7, 1987, Hiroshima, Japan. **Adv Exp Med Biol** 1988;236:1–367

Multiple bradykinin receptors: results of studies using a novel class of receptor antagonists. Steranka LR, et al. **Adv Exp Med Biol** 1988;236:111–27 (56 ref.)

The role of NMDA and non-NMDA receptors in the central vestibular synaptic transmission. Knöpfel T, et al. **Adv Otorhinolaryngol** 1988;42:229–33

The glutamate antagonist MK-801 reduces focal ischemic brain damage in the rat. Park CK, et al. **Ann Neurol** 1988 Oct;24(4):543–51

The effect of MK-801 on kindled seizures: implications for use and limitations as an antiepileptic drug. Williamson JM, et al. **Ann Neurol** 1989 Jul;26(1):85–90

Antiepileptic effects of the excitatory amino acid antagonist cis-2,3 piperidine-dicarboxylic acid depend on non-N-methyl-d-aspartate receptors. Sagratella S, et al. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:28–34

Different forms of post-training memory processing. Izquierdo I. **Behav Neural Biol** 1989 Mar;51(2):171–202 (155 ref.)

Antagonism of NMDA receptors impairs acquisition but not retention of olfactory memory. Staubli U, et al. **Behav Neurosci** 1989 Feb;103(1):54–60

Retention of maze performance inversely correlates with N-methyl-D-aspartate receptor number in hippocampus and frontal neocortex in the rat. Wenk GL, et al. **Behav Neurosci** 1989 Jun;103(3):688–90

Participation of NMDA-receptors in ischemic changes of calcium homeostasis in rabbit brain. Salinska E, et al. **Biomed Biochim Acta** 1989;48(2-3):S170–3

Activation of a bradykinin receptor in peripheral nerve and spinal cord in the neonatal rat in vitro. Dray A, et al. **Br J Pharmacol** 1988 Dec;95(4):1008–10

Central nervous system kinin receptors and the hypertensive response mediated by bradykinin. Lindsey CJ, et al. **Br J Pharmacol** 1989 Jul;97(3):763–8

A local circuit neocortical synapse that operates via both NMDA and non-NMDA receptors. Thomson AM, et al. **Br J Pharmacol** 1989 Feb;96(2):406–8

Effects of the NMDA receptor/channel antagonists CPP and MK801 on hippocampal field potentials and long-term potentiation in anesthetized rats. Abraham WC, et al. **Brain Res** 1988 Oct 11;462(1):40–6

Evidence for a specific role for cortical NMDA receptors in slow-wave sleep. Armstrong-James M, et al. **Brain Res** 1988 Jun 7;451(1-2):189–96

NMDA receptor antagonists block norepinephrine-induced long-lasting potentiation and long-term potentiation in rat dentate gyrus. Burgard EC, et al. **Brain Res** 1989 Mar 20; 482(2):351–5

Progesterone effects upon dopamine release from the corpus striatum of female rats. II. Evidence for a membrane site of action and the role of albumin. Dluzen DE, et al. **Brain Res** 1989 Jan 9;476(2):338–44

Chloride channels gated by extrajunctional glutamate receptors (H-receptors) on locust leg muscle. Dudel J, et al. **Brain Res** 1989 Mar 6;481(2):215–20

The effect of K+ and glutamate receptor agonists on the membrane potential of suspensions of primary cultures of rat astrocytes as measured with a cyanine dye, DiS-C2-(5). Enkvist MO, et al. **Brain Res** 1988 Oct 11;462(1):67–75

The NMDA-receptor antagonist, MK-801, suppresses limbic kindling and kindled seizures. Gilbert ME. **Brain Res** 1988 Oct 25;463(1):90–9

Taurine modulates glycine response in Xenopus oocytes injected with messenger RNA from mouse brain. Horikoshi T, et al. **Brain Res** 1988 Nov;464(3):243–6

Hypothermia enhances protective effect of MK-801 against hypoxic/ischemic brain damage in infant rats. Ikonomidou C, et al. **Brain Res** 1989 May 15;487(1):184–7

Epileptiform events induced by GABA-antagonists in entorhinal cortical cells in vitro are partly mediated by N-methyl-D-aspartate receptors. Jones RS. **Brain Res** 1988 Aug 2;457(1):113–21

Single channel studies of non-competitive antagonism of a quisqualate-sensitive glutamate receptor by argiotoxin636—a fraction isolated from orb-web spider venom. Kerry CJ, et al. **Brain Res** 1988 Sep 6;459(2):312–27

Paradoxical convulsant action of a novel non-competitive N-methyl-D-aspartate (NMDA) antagonist, tiletamine. Klockgether T, et al. **Brain Res** 1988 Oct 4;461(2):343–8

N-methyl-D-aspartate receptors mediate tonic vasodepressor control in the caudal ventrolateral medulla of the rat. Kubo T, et al. **Brain Res** 1988 Jun 7; 451(1-2):366–70

Functional substance P receptors on a human astrocytoma cell line (U-373 MG). Lee CM, et al. **Brain Res** 1989 May 29;488(1-2):328–31

APV, an N-methyl-D-aspartate receptor antagonist, blocks the hippocampal theta rhythm in behaving rats. Leung LW, et al. **Brain Res** 1988 Oct 25;463(1):148–52

Evidence for a role of the N-methyl-D-aspartate (NMDA) receptor in cortical spreading depression in the rat. Marrannes R, et al. **Brain Res** 1988 Aug 9;457(2):226–40

Stimulation of the N-methyl-D-aspartate receptor promotes the biochemical differentiation of cerebellar granule neurons and not astrocytes. Moran J, et al. **Brain Res** 1989 May 1;486(1):15–25

Suppression of amygdaloid kindled convulsion following unilateral injection of 2-amino-7-phosphonoheptanoic acid (2-APH) into the substantia innominata of rats. Mori N, et al. **Brain Res** 1989 May 1;486(1):141–6

The NMDA receptor-mediated components of responses evoked by patterned stimulation are not increased by long-term potentiation. Muller D, et al. **Brain Res** 1989 Jan 16;477(1-2):396–9

Epileptiform bursts elicited in CA3 hippocampal neurons by a variety of convulsants are not blocked by N-methyl-D-aspartate antagonists. Neuman R, et al. **Brain Res** 1988 Sep 6;459(2):265–74

Two pharmacologically distinct receptors mediate two

postsynaptic potential (PSP) components in the afferent synapse of the Plotosus eletroreceptor. Okano K. **Brain Res** 1988 Aug 2;457(1):89–97

Effects of bath–applied L–glutamate and related chemicals on the afferent synapse of the Plotosus electroreceptor. Okano K, et al. **Brain Res** 1988 Aug 2;457(1):79–88

Glutamate receptors and phosphoinositide metabolism: stimulation via quisqualate receptors is inhibited by N–methyl–D–aspartate receptor activation. Palmer E, et al. **Brain Res** 1988 Sep;464(2):161–5

Modulation of NMDA receptor–mediated responses by glycine and D–serine in the rat thalamus in vivo. Salt TE. **Brain Res** 1989 Mar 6;481(2):403–6

NMDA receptor activation by residual glutamate in glutamine preparations: a cautionary note regarding weak NMDA receptor agonists. Sands SB, et al. **Brain Res** 1989 Aug 21;495(1):193–7

Anticonvulsant action of a non–competitive antagonist of NMDA receptors (MK–801) in the kindling model of epilepsy. Sato K, et al. **Brain Res** 1988 Oct 25;463(1):12–20

Ischemia triggers NMDA receptor–linked cytoskeletal proteolysis in hippocampus. Seubert P, et al. **Brain Res** 1989 Jul 17;492(1–2):366–70

Stimulation of NMDA receptors induces proteolysis of spectrin in hippocampus. Seubert P, et al. **Brain Res** 1988 Sep 13;460(1):189–94

N–methyl–D–aspartate antagonist applied to the spinal cord hindlimb enlargement reduces the amplitude of flexion reflex in the turtle. Stein PS, et al. **Brain Res** 1989 Feb 13;479(2):379–83

Transient increased density of NMDA binding sites in the developing rat hippocampus. Tremblay E, et al. **Brain Res** 1988 Oct 4;461(2):393–6

Ion channels activated by quinolinic acid in cultured rat hippocampal neurons. Tsuzuki K, et al. **Brain Res** 1989 Mar 6;481(2):258–64

Cardiovascular effects of substance P receptor stimulation in the ventrolateral medullary pressor and depressor areas. Urbanski RW, et al. **Brain Res** 1989 Jul 10;491(2):383–9

Two distinct quisqualate receptor systems are present on striatal neurons. Weiss S. **Brain Res** 1989 Jul 3; 491(1):189–93

Auditory nerve neurotransmitter acts on a kainate receptor: evidence from intracellular recordings in brain slices from mice. Wickesberg RE, et al. **Brain Res** 1989 May 1; 486(1):39–48

The development of N–methyl–D–aspartate receptors in cat visual cortex. Bode–Greuel KM, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):197–204

Blockade of NMDA–receptors prevents ocularity changes in kitten visual cortex after reversed monocular deprivation. Gu QA, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):281–8

Calcium–dependent, slow desensitization distinguishes different types of glutamate receptors. Zorumski CF, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):95–104

A "glutamatergic hypothesis" of schizophrenia. Rationale for pharmacotherapy with glycine. Deutsch SI, et al. **Clin Neuropharmacol** 1989 Feb;12(1):1–13 (56 ref.)

Hippocampal synaptic transmission: regulation of the NMDA receptor–mediated component. Herron CE, et al. **Comp Biochem Physiol [A]** 1989;93(1):203–10 (84 ref.)

Glycine receptor heterogeneity in rat spinal cord during postnatal development. Becker CM, et al. **EMBO J** 1988 Dec 1;7(12):3717–26

Selective inhibition of synaptic versus non–synaptic epileptogenesis by NMDA antagonists in the in vitro hippocampus. Ashton D, et al. **Epilepsy Res** 1988 May–Jun; 2(3):219–22

Induction of delayed synchronized bursts in hippocampal slices by weak sine–wave stimulation; role of the NMDA receptor. Bawin SM, et al. **Epilepsy Res** 1989 Jan–Feb; 3(1):41–8

Suppression of ictal–like activity by kynurenic acid does not correlate with its efficacy as an NMDA receptor antagonist. Brady RJ, et al. **Epilepsy Res** 1988 Jul–Aug; 2(4):232–8

Potentiation of kainic acid epileptogenicity and sparing from neuronal damage by an NMDA receptor antagonist. Fariello RG, et al. **Epilepsy Res** 1989 May–Jun;3(3):206–13

Zinc and glycine do not modify low–magnesium–induced epileptiform activity in the immature neocortex in vitro. Hegstad E, et al. **Epilepsy Res** 1989 Mar–Apr;3(2):174–7

A1 adenosine receptor–mediated block of epileptiform activity induced in zero magnesium in rat neocortex in vitro. O'Shaughnessy CT, et al. **Epilepsy Res** 1988 Sep–Oct; 2(5):294–301

Epileptiform activity induced by lowering extracellular [Mg2+] in combined hippocampal–entorhinal cortex slices: modulation by receptors for norepinephrine and N–methyl–D–aspartate. Stanton PK, et al. **Epilepsy Res** 1987 Jan;1(1):53–62

The NMDA receptor: central role in pain inhibition in rat perisqueductal gray. Jacquet YF. **Eur J Pharmacol** 1988 Sep 23;154(3):271–6

Structural requirements for activation of the glycine receptor that modulates the N–methyl–D–aspartate operated ion channel. Snell LD, et al. **Eur J Pharmacol** 1988 Oct 26; 156(1):105–10

Specific receptors for bradykinin–induced cardiac sympathetic chemoreflex in the dog. Staszewska–Woolley J, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):309–14

Glutamate receptor activation in cultured cerebellar granule cells increases cytosolic free Ca2+ by mobilization of cellular Ca2+ and activation of Ca2+ influx. Bouchelouche P, et al. **Exp Brain Res** 1989;76(2):281–91

Synchronized neuronal activities in neocortical explant cultures. Gutnick MJ, et al. **Exp Brain Res** 1989; 76(1):131–40

Lesion–induced vestibular plasticity in the frog: are N–methyl–D–aspartate receptors involved? Knöpfel T, et al. **Exp Brain Res** 1988;72(1):129–34

Differences in magnesium and calcium effects on N–methyl–D–aspartate– and quisqualate–induced decreases in extracellular sodium concentration in rat hippocampal slices. Köhr G, et al. **Exp Brain Res** 1988;71(2):425–30

The involvement of excitatory amino acid receptors within the prepiriform cortex in pilocarpine–induced limbic seizures in rats. Millan MH, et al. **Exp Brain Res** 1988; 72(3):517–22

NMDA receptor antagonists can enhance or impair learning performance in animals. Mondadori C, et al. **Exp Brain Res** 1989;75(3):449–56

Intra–ventricular infusion of the NMDA antagonist AP5 impairs performance on a non–spatial operant DRL task in the rat. Tonkiss J, et al. **Exp Brain Res** 1988;73(1):181–8

Substance P receptor–mediated secretion of respiratory glycoconjugate from feline airways in vitro. Lundgren JD, et al. **Exp Lung Res** 1989;15(1):17–29

Seizures evoked from area tempestas are subject to control by GABA and glutamate receptors in substantia nigra. Maggio R, et al. **Exp Neurol** 1989 Aug;105(2):184–8

Effects of the NMDA receptor antagonist MK–801 against amygdaloid–kindled seizures in the rat. Young NA, et al. **Exp Neurol** 1989 Feb;103(2):199–202

Guanine nucleotide–dependent, pertussis toxin–insensitive regulation of phosphoinositide turnover by bradykinin in bovine pulmonary artery endothelial cells. Voyno–Yasenetskaya TA, et al. **FASEB J** 1989 Jan; 3(1):44–51

Calcium mobilization by angiotensin II and neurotransmitter receptors expressed in Xenopus laevis oocytes. Sandberg K, et al. **FEBS Lett** 1988 Dec 5;241(1–2):177–80

Activation of substance P receptors leads to membrane potential responses in cultured astrocytes. Wienrich M, et al. **GLIA** 1989;2(3):155–60

A molecular view of neurotransmitter receptors and ionic channels. Numa S. **Harvey Lect** 1987–88;83:121–65 (153 ref.)

Alcoholism: scientific basis of a neuropsychogenetic disease. Blum K, et al. **Int J Addict** 1988 Aug;23(8):781–96 (39 ref.)

Effects of tachykinins and selective tachykinin receptor agonists on vascular permeability in the rat lower urinary tract: evidence for the involvement of NK–1 receptors. Abelli L, et al. **J Auton Pharmacol** 1989 Aug;9(4):253–63

Reinforcement of signal generation at B2 bradykinin receptors by insulin, epidermal growth factors, and other growth factors. Pandiella A, et al. **J Biol Chem** 1989 Feb 25;264(6):3122–30

Phorbol ester and neomycin dissociate bradykinin receptor–mediated arachidonic acid release and polyphosphoinositide hydrolysis in Madin–Darby canine kidney cells. Evidence that bradykinin mediates noninterdependent activation of phospholipases A2 and C. Slivka SR, et al. **J Biol Chem** 1988 Oct 15;263(29):14640–7

Enhancement of desensitization of quisqualate–type glutamate receptor by the dissociative anaesthetic ketamine. Ashford ML, et al. **J Exp Biol** 1989 Jan;141:73–86

The NMDA antagonist MK–801 causes marked locomotor stimulation in monoamine–depleted mice. Carlsson M, et al. **J Neural Transm** 1989;75(3):221–6

Subsensitivity of serotonin and substance P receptors involved in nociception after repeated administration of a serotonin receptor agonist. Eide PK, et al. **J Neural Transm** 1989;77(1):1–10

Modulation of dendritic release of dopamine by N–methyl–D–aspartate receptors in rat substantia nigra. Araneda R, et al. **J Neurochem** 1989 Mar;52(3):962–70

Direct evidence that excitotoxicity in cultured neurons is mediated via N–methyl–D–aspartate (NMDA) as well as non–NMDA receptors. Frandsen A, et al. **J Neurochem** 1989 Jul;53(1):297–9

Thermodynamics of agonist and antagonist interaction with the strychnine–sensitive glycine receptor. Ruiz–Gómez A, et al. **J Neurochem** 1989 Jun;52(6):1775–80

In vivo modulation of the N–methyl–D–aspartate receptor complex by D–serine: potentiation of ongoing neuronal activity as evidenced by increased cerebellar cyclic GMP. Wood PL, et al. **J Neurochem** 1989 Sep;53(3):979–81

Effect of calcitonin gene–related peptide on skeletal muscle via specific binding site and G protein. Takamori M, et al. **J Neurol Sci** 1989 Mar;90(1):99–109

Excitatory neurotransmission activates voltage–dependent properties in neurons in spinal motor system of lamprey. Alford S, et al. **J Neurophysiol** 1989 Aug;62(2):334–41

EPSPs in rat neocortical neurons in vitro. II. Involvement of N–methyl–D–aspartate receptors in the generation of EPSPs. Sutor B, et al. **J Neurophysiol** 1989 Mar; 61(3):621–34

Endogenous activation of glycine and NMDA receptors in lamprey spinal cord during fictive locomotion. Alford S, et al. **J Neurosci** 1989 Aug;9(8):2792–800

Do N–methyl–D–aspartate receptors mediate synaptic responses in the mudpuppy retina? Coleman PA, et al. **J Neurosci** 1988 Dec;8(12):4728–33

Neuroprotective effects of MK–801 in vivo: selectivity and evidence for delayed degeneration mediated by NMDA receptor activation. Foster AC, et al. **J Neurosci** 1988 Dec; 8(12):4745–54

NMDA– and non–NMDA–receptor components of excitatory synaptic potentials recorded from cells in layer V of rat visual cortex. Jones KA, et al. **J Neurosci** 1988 Sep;8(9):3522–34

Glycine potentiates strychnine–induced convulsions: role of NMDA receptors. Larson AA, et al. **J Neurosci** 1988 Oct; 8(10):3822–6

Rat hippocampal slices 'in vitro' display spontaneous epileptiform activity following long–term organotypic culture. McBain CJ, et al. **J Neurosci Methods** 1989 Feb; 27(1):35–49

Comparative aspects of hippocampal and neocortical long–term potentiation. Teyler TJ. **J Neurosci Methods** 1989 May;28(1–2):101–8 (33 ref.)

Pharmacological characterization of the glutamate receptor in cultured astrocytes. Backus KH, et al. **J Neurosci Res** 1989 Mar;22(3):274–82

Pretreatment with phencyclidine, an N–methyl–D–aspartate antagonist, attenuates long–term behavioral deficits in the rat produced by traumatic brain injury. Hayes RL, et al. **J Neurotrauma** 1988;5(4):259–74

Combined pretrauma scopolamine and phencyclidine attenuate posttraumatic increased sensitivity to delayed secondary ischemia. Jenkins LW, et al. **J Neurotrauma** 1988;5(4):275–87

Delayed rescue of N–methyl–D–aspartate receptor–mediated neuronal injury in cortical culture. Hartley DM, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):752–8

Characterization and function of bradykinin receptors in vascular endothelial cells. Sung CP, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):8–13

Glutamate receptors of ganglion cells in the rabbit retina: evidence for glutamate as a bipolar cell transmitter. Massey SC, et al. **J Physiol (Lond)** 1988 Nov;405:635–55

Rat brain glutamate receptors activate chloride channels in Xenopus oocytes coupled by inositol trisphosphate and Ca2+. Oosawa Y, et al. **J Physiol (Lond)** 1989;408:223–32

Peptidergic inhibition of cholinergic transmission in bullfrog sympathetic ganglia. Hasuo H, et al. **Jpn J Physiol** 1988; 38(5):643–58

Tachykinin receptor subtype that mediates the increase in vascular permeability in guinea pig skin. Iwamoto I, et al. **Life Sci** 1989;44(16):1089–95

Interaction between GABAergic anticonvulsants and the NMDA receptor antagonist MK 801 against MES– and picrotoxin–induced convulsions in rats. Kulkarni SK, et al. **Life Sci** 1989;44(18):1317–23

Neurotransmitter systems and receptor plasticity in brain aging. Racagni G, et al. **Mod Probl Pharmacopsychiatry** 1989;23:21–7 (26 ref.)

Properties of the kainate channel in rat brain mRNA injected Xenopus oocytes: ionic selectivity and blockage. Randle JC, et al. **Mol Cell Biochem** 1988 Mar–Apr;80(1–2):121–32

Glycine regulation of the N–methyl–D–aspartate receptor–gated ion channel in hippocampal membranes. Bonhaus DW, et al. **Mol Pharmacol** 1989 Aug;36(2):273–9

A phencyclidine recognition site is associated with N–methyl–D–aspartate inhibition of carbachol–stimulated phosphoinositide hydrolysis in rat cortical slices. Gonzales RA, et al. **Mol Pharmacol** 1989 Jun;35(6):787–94

Two distinct quisqualate receptors regulate Ca2+ homeostasis in hippocampal neurons in vitro. Murphy SN, et al. **Mol Pharmacol** 1989 May;35(5):671–80

In primary cultures of cerebellar granule cells the activation of N–methyl–D–aspartate–sensitive glutamate receptors induces c–fos mRNA expression. Szekely AM, et al. **Mol Pharmacol** 1989 Apr;35(4):401–8

Defining the role of protein kinase C in epinephrine– and bradykinin–stimulated arachidonic acid metabolism in Madin–Darby canine kidney cells. Weiss BA, et al. **Mol Pharmacol** 1989 Aug;36(2):317–26

NMDA and non–NMDA receptors are co–localized at individual excitatory synapses in cultured rat hippocampus. Bekkers JM, et al. **Nature** 1989 Sep 21;341(6239):230–3

Rapid increase of an immediate early gene messenger RNA in hippocampal neurons by synaptic NMDA receptor activation. Cole AJ, et al. **Nature** 1989 Aug 10; 340(6233):474–6

Endothelium–derived relaxing factor release on activation of NMDA receptors suggests role as intercellular messenger in the brain. Garthwaite J, et al. **Nature** 1988 Nov 24;336(6197):385–8

Regulation of NMDA receptor desensitization in mouse hippocampal neurons by glycine. Mayer ML, et al. **Nature** 1989 Mar 30;338(6214):425–7

Glycine enhances NMDA–receptor mediated synaptic potentials in neocortical slices. Thomson AM, et al. **Nature** 1989 Mar 30;338(6214):422–4

N–methyl–D–aspartate (NMDA) receptor–mediated stimulation of noradrenaline release, but not release of other neurotransmitters, in the rat brain cortex: receptor location, characterization and desensitization. Fink K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):514–21

Localization of nerve growth factor receptors in the normal human brain and in Alzheimer's disease. Hefti F, et al. **Neurobiol Aging** 1989 Jan–Feb;10(1):75–87

Functional change in the 5-HT presynaptic receptor in spinal cord of aged rats. Murphy RM, et al. **Neurobiol Aging** 1989 Jan-Feb;10(1):95-7

Direct activation of gonadotropin-releasing hormone secretion through different receptors to neuroexcitatory amino acids. Bourguignon JP, et al. **Neuroendocrinology** 1989 Apr;49(4):402-8

Glycine and D-serine act as positive modulators of signal transduction at N-methyl-D-aspartate sensitive glutamate receptors in cultured cerebellar granule cells. Wroblewski JT, et al. **Neuropharmacology** 1989 May;28(5):447-52

MK801-induced antagonism of NMDA-preferring excitatory amino acid receptors in horizontal cells of the turtle retina. Anderton PJ, et al. **Neurosci Lett** 1989 Jul 3;101(3):331-6

Direct demonstration of an N-methyl-D-aspartate receptor mediated component of excitatory synaptic transmission in area CA1 of the rat hippocampus. Andreasen M, et al. **Neurosci Lett** 1988 Oct 31;93(1):61-6

N-methyl-D-aspartate promotes the survival of cerebellar granule cells: pharmacological characterization. Balázs R, et al. **Neurosci Lett** 1989 Jul 3;101(3):241-6

NMDA receptor regulation of neuronal morphology in cultured hippocampal neurons. Brewer GJ, et al. **Neurosci Lett** 1989 May 8;99(3):268-73

N-methyl-D-aspartate raises cytosolic calcium concentration in rat cerebellar granule cells in culture. Burgoyne RD, et al. **Neurosci Lett** 1988 Aug 15;91(1):47-52

Glycine action on N-methyl-D-aspartate receptors in rat hippocampal neurons. Chizhmakov IV, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):131-6

Ketamine blocks an NMDA receptor-mediated component of synaptic transmission in rat hippocampus in a voltage-dependent manner. Davies SN, et al. **Neurosci Lett** 1988 Oct 5;92(2):213-7

Primary afferent depolarization in the rat spinal cord is mediated by pathways utilising NMDA and non-NMDA receptors. Evans RH, et al. **Neurosci Lett** 1989 May 22; 100(1-3):231-6

Quisqualate neurotoxicity: a delayed, CNQX-sensitive process triggered by a CNQX-insensitive mechanism in young rat hippocampal slices. Garthwaite G, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):113-8

Synaptic transmission at the Schaffer-CA1 synapse is blocked by 6,7-dinitro-quinoxaline-2,3-dione. An in vivo brain dialysis study in the rat. Herreras O, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):119-24

Glutamate receptor agonists increase intracellular Ca2+ independently of voltage-gated Ca2+ channels in rat cerebellar granule cells. Holopainen I, et al. **Neurosci Lett** 1989 Mar 13;98(1):57-62

NMDA receptor antagonists CPP and MK-801 partially suppress the epileptiform discharges induced by the convulsant drug bicuculline in the rat neocortex. Hwa GG, et al. **Neurosci Lett** 1989 Mar 27;98(2):189-93

Excitatory transmission in the dorsal horn is in part mediated through APV-sensitive NMDA receptors. Jeftinija S. **Neurosci Lett** 1989 Jan 16;96(2):191-6

Activation of N-methyl-D-aspartate receptors contributes to the EPSP at perforant path synapses in the rat dentate gyrus in vitro. Lambert JD, et al. **Neurosci Lett** 1989 Feb 27;97(3):323-8

Characteristics of glycine-activated conductances in cultured medullary neurons from embryonic rat. Lewis CA, et al. **Neurosci Lett** 1989 Jan 16;96(2):185-90

Glutamate induces a depolarization of adult rat dorsal root ganglion neurons that is mediated predominantly by NMDA receptors. Lovinger DM, et al. **Neurosci Lett** 1988 Dec 5;94(3):314-20

The tachykinin NH2-senktide, a selective neurokinin B receptor agonist, is a very potent inhibitor of salt appetite in the rat. Massi M, et al. **Neurosci Lett** 1988 Oct 17; 92(3):341-6

Extracellular taurine increase in rat hippocampus evoked by specific glutamate receptor activation is related to the excitatory potency of glutamate agonists. Menéndez N, et al. **Neurosci Lett** 1989 Jul 17;102(1):64-9

Quisqualate receptor-mediated rhythmic bursting of rat hypothalamic neurons in dissociated cell culture. Misgeld U, et al. **Neurosci Lett** 1989 Apr 10;98(3):291-6

Requirement of NMDA receptor/channels for intracellular high-energy phosphates and the extent of intraneuronal calcium buffering in cultured mouse hippocampal neurons. Mody I, et al. **Neurosci Lett** 1988 Oct 31;93(1):73-8

An N-methyl-D-aspartate receptor mediated excitatory postsynaptic potential evoked in subthalamic neurons in an in vitro slice preparation of the rat. Nakanishi H, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):130-6

Formation of long-term potentiation in superior colliculus slices from the guinea pig. Okada Y, et al. **Neurosci Lett** 1989 Jan 2;96(1):108-13

Experimental ischemia induces a persistent depolarization blocked by decreased calcium and NMDA antagonists. Rader RK, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):125-30

Glycine modulation of NMDA-evoked release of [3H]acetylcholine and [3H]dopamine from rat striatal slices. Ransom RW, et al. **Neurosci Lett** 1989 Jan 30;96(3):323-8

A specific quisqualate agonist inhibits kainate responses induced in Xenopus oocytes injected with rat brain RNA. Rassendren FA, et al. **Neurosci Lett** 1989 May 8;99(3):333-9

N-methyl-D-aspartate receptor activation is required for the induction of both early and late phases of long-term potentiation in rat hippocampal slices. Reymann KG, et al. **Neurosci Lett** 1989 Jan 2;96(1):96-101

Peculiarities of receptor-channel complexes for inhibitory mediators in the membranes of lamprey spinal cord neurones. Safronov BV, et al. **Neurosci Lett** 1989 Jul 17; 102(1):82-6

Inositol trisphosphate-linked calcium mobilization couples substance P receptors to conductance increase in a rat pancreatic acinar cell line. Song SY, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):143-8

NMDA receptor dependent paroxysmal discharges in the dentate gyrus. Stringer JL, et al. **Neurosci Lett** 1988 Sep 23;92(1):69-75

Long-term potentiation in frontal cortex: role of NMDA-modulated polysynaptic excitatory pathways. Sutor B, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):111-7

Calcium influx through N-methyl-D-aspartate channels activates a potassium current in postnatal rat hippocampal neurons. Zorumski CF, et al. **Neurosci Lett** 1989 May 8; 99(3):293-9

Zinc ion enhances the blocking potency of synthetic analogs of spider toxin (JSTX) on the glutamate receptor. Kawai N, et al. **Neurosci Res** 1989 Apr;6(4):358-62

Synaptic activation of N-methyl-D-aspartate and non-N-methyl-D-aspartate receptors in the mossy fibre pathway in adult and immature rat cerebellar slices. Garthwaite J, et al. **Neuroscience** 1989;29(2):401-12

Differential effects of (D)- and (L)-homocysteic acid on the membrane potential of cat caudate neurons in situ. Herrling PL, et al. **Neuroscience** 1989;31(1):213-7

Modulation of glutamate-activated channels in primary culture of cortical neurons. Vinini S, et al. **P R Health Sci J** 1988 Aug;7(2):93-5

A potent and selective agonist for NK-2 tachykinin receptor. Rovero P, et al. **Peptides** 1989 May-Jun;10(3):593-5

Phencyclidine/SKF-10,047 binding sites: evaluation of function. McCann DJ, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):87-94

Anticataleptic effects of the N-methyl-D-aspartate antagonist MK-801 in rats. Schmidt WJ, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):621-3

Agonists at presynaptic receptors on sympathetic nerves differentially affect two phases of the contractile response in the rat vas deferens. Mottram DR. **Pharmacol Res Commun** 1988 Nov;20(11):963-73

Inositolphospholipid-linked glutamate receptors mediate cerebellar parallel-fiber-Purkinje-cell synaptic transmission. Blackstone CD, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4316-20

Concanavalin A selectively reduces desensitization of mammalian neuronal quisqualate receptors. Mayer ML, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1411-5

Visual responses in adult cat visual cortex depend on N-methyl-D-aspartate receptors. Miller KD, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5183-7

A glutamate receptor regulates Ca2+ mobilization in hippocampal neurons. Murphy SN, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8737-41

Role of excitatory amino acid receptors in synaptic transmission in area CA1 of rat hippocampus. Davies SN, et al. **Proc R Soc Lond [Biol]** 1989 May 22;236(1285):373-84

The regulation of NMDA receptors in the central nervous system. MacDonald JF, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3-4):481-8 (19 ref.)

NMDA-coupled and uncoupled forms of the PCP receptor: preliminary in vivo evidence for PCP receptor subtypes. Wood PL, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3-4):519-23

Neurochemical and receptor theories of depression. Nair NP, et al. **Psychiatr J Univ Ottawa** 1989 Jun;14(2):328-41; discussion 349-51 (191 ref.)

On the neurobiology of depression: research based on heterogeneous diagnostic groups produces heterogeneous biological data. Richardson JS. **Psychiatr J Univ Ottawa** 1989 Jun;14(2):433-4 (9 ref.)

Is the discriminative stimulus produced by phencyclidine due to an interaction with N-methyl-D-aspartate receptors? Jackson A, et al. **Psychopharmacology (Berlin)** 1988; 96(1):87-92

The NK-3 tachykinin agonist senktide elicits yawning and chewing mouth movements following subcutaneous administration in the rat. Evidence for cholinergic mediation. Stoessl AJ, et al. **Psychopharmacology (Berlin)** 1988;95(4):502-6

The promise of receptor studies in psychophysiologic research. Mills PJ, et al. **Psychosom Med** 1988 Nov-Dec; 50(6):555-66 (59 ref.)

Recent developments in neurobiology: Part III. Effectors of transmitter action. Hyman SE. **Psychosomatics** 1988 Fall; 29(4):373-8 (51 ref.)

The role of excitatory amino acids and NMDA receptors in traumatic brain injury. Faden AI, et al. **Science** 1989 May 19;244(4906):798-800

Contributions of quisqualate and NMDA receptors to the induction and expression of LTP. Muller D, et al. **Science** 1988 Dec 23;242(4886):1694-7

NMDA antagonists differentiate epileptogenesis from seizure expression in an in vitro model. Stasheff SF, et al. **Science** 1989 Aug 11;245(4918):648-51

Short-term lithium treatment enhances responsiveness of postsynaptic 5-HT1A receptors without altering 5-HT autoreceptor sensitivity: an electrophysiological study in the rat brain. Blier P, et al. **Synapse** 1987;1(3):225-32

Further evidence demonstrating that N-methyl-D-aspartate and kainate activate distinct ion channels. Fong TM, et al. **Synapse** 1989;4(1):88-95

N-methyl-D-aspartate receptor-mediated component of synaptic responses to single-pulse stimulation in rat hippocampal slices. Muller D, et al. **Synapse** 1988; 2(6):666-8

Receptor-mediated control of neurotransmitter release from brain slices or synaptosomes. Middlemiss DN. **Trends Pharmacol Sci** 1988 Mar;9(3):83-4 (29 ref.)

Coexistence of NMDA and non-NMDA receptors on turtle horizontal cells revealed using isolated retina preparations. Miyachi E, et al. **Vision Res** 1989;29(4):385-8

[Progress in research on neurotransmitter receptors using recombinant DNA technics] Gao EW, et al. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):296-303 (40 ref.) **(Chi)**

[N-methyl-D-aspartate receptor channel complex] Huang YY. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):67-9 (19 ref.) **(Chi)**

[Hormone and neurotransmitter receptors; their mechanism of action] Bockaert J. **Arch Int Physiol Biochim** 1988 Sep; 96(4):A171-4 **(Fre)**

[Synaptic transmission from photoreceptors to horizontal and bipolar cells in the vertebrate retina] Tachibana M. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):642-51 **(Jpn)**

[Trace postsynaptic reactions in neuromuscular junctions] Magazanik LG. **Zh Evol Biokhim Fiziol** 1988 Sep-Oct; 24(5):657-67 (32 ref.) (Eng. Abstr.) **(Rus)**

[The cholinergic system of the forebrain modulates the activity of the GABA-ergic interneurons which realize presynaptic regulation in the neocortex of kittens] Raevskiĭ VV, et al. **Zh Vyssh Nerv Deiat** 1988 Nov-Dec; 38(6):1068-75 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Modification of diurnal changes in the ultrastructure of synaptic ribbons of the turtle. Abe H, et al. **Tohoku J Exp Med** 1988 Dec;156(4):381-93

[The distribution of glutamate receptors in cultures of the motor area of the rat cerebral cortex studied by an immunoelectron microscopic method] Bobryshev IuV, et al. **Tsitologiia** 1989 Feb;31(2):176-81 (Eng. Abstr.) **(Rus)**

SYNAPTIC VESICLES

ANALYSIS

Modification of vesicular dopamine and norepinephrine by monoamine oxidase inhibitors. Basu NT. **Biochem Pharmacol** 1989 May 15;38(10):1685-92

Microelectrophoretic fractionation of RNA from rat brain subsynaptosomal fractions. Di Battista A, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1025-32

GBP: a membrane protein of presynaptic vesicles which specifically binds gangliosides. Popoli M, et al. **Boll Soc Ital Biol Sper** 1988 Jul;64(7):655-62

Synaptobrevin: an integral membrane protein of 18,000 daltons present in small synaptic vesicles of rat brain. Baumert M, et al. **EMBO J** 1989 Feb;8(2):379-84

Demonstration of immunochemical identity between the synaptic vesicle proteins synaptin and synaptophysin/p38. Gaardsvoll H, et al. **FEBS Lett** 1988 Dec 19;242(1):117-20

Fractionation of synaptophysin-containing vesicles from rat brain and cultured PC12 pheochromocytoma cells. Wiedenmann B, et al. **FEBS Lett** 1988 Nov 21; 240(1-2):71-7

Most synaptic vesicles isolated from rat brain carry three membrane proteins, SV2, synaptophysin, and p65. Floor E, et al. **J Neurochem** 1989 May;52(5):1433-7

Ganglioside composition of synaptic vesicles from Torpedo electric organ. Ledeen RW, et al. **J Neurochem** 1988 Nov; 51(5):1465-9

In adrenal medulla synaptophysin (protein p38) is present in chromaffin granules and in a special vesicle population. Obendorf D, et al. **J Neurochem** 1988 Nov;51(5):1573-80

Molecular biology of synaptic vesicle-associated proteins [news] Trimble WS, et al. **Trends Neurosci** 1988 Jun; 11(6):241-2 (18 ref.)

CLASSIFICATION

A morphometric analysis of synaptic vesicle distributions. Fox GQ. **Brain Res** 1988 Dec 13;475(1):103-17

CYTOLOGY

Differential effect of alpha-latrotoxin on exocytosis from small synaptic vesicles and from large dense-core vesicles containing calcitonin gene-related peptide at the frog neuromuscular junction [published erratum appears in Proc Natl Acad Sci U S A 1989 Feb;86(4):1416] Matteoli M, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7366-70

DRUG EFFECTS

Inhibition of norepinephrine transport into synaptic vesicles by amphetamine analogs. Knepper SM, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):487-94

ENZYMOLOGY

Synaptic vesicle ceramide kinase. A calcium-stimulated lipid kinase that co-purifies with brain synaptic vesicles. Bajjalieh SM, et al. **J Biol Chem** 1989 Aug 25; 264(24):14354–60

Characterization of a H+-ATPase in rat brain synaptic vesicles. Coupling to L-glutamate transport. Cidon S, et al. **J Biol Chem** 1989 May 15;264(14):8281–8

Hydrodynamic molecular weight of solubilized cholinergic synaptic vesicle glycoprotein ATPase. Yamagata SK, et al. **J Neurochem** 1989 Jan;52(1):168–73

IMMUNOLOGY

Calcitonin gene-related peptide and chromogranin A: presence and intra-axonal transport in lumbar motor neurons in the rat, a comparison with synaptic vesicle antigens in immunohistochemical studies. Böö] S, et al. **Neuroscience** 1989;30(2):479–501

METABOLISM

Vesicular accumulation of dopamine following L-DOPA administration. Buu NT. **Biochem Pharmacol** 1989 Jun 1; 38(11):1787–92

Cholinergic synaptic vesicle heterogeneity: evidence for regulation of acetylcholine transport. Grasz LM, et al. **Biochemistry** 1988 Jul 12;27(14):5268–74

Sidedness and chemical and kinetic properties of the vesamicol receptor of cholinergic synaptic vesicles. Kornreich WD, et al. **Biochemistry** 1988 Jul 12; 27(14):5262–7

Ultrastructural localization of N-acetylaspartylglutamate in synaptic vesicles of retinal neurons. Williamson LC, et al. **Brain Res** 1988 Jul 26;456(2):375–81

Postnatal development of protein P-38 ('synaptophysin') immunoreactivity in pontine and medullary gustatory zones of rat. Lasiter PS, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):27–33

Uptake of GABA by rat brain synaptic vesicles isolated by a new procedure. Hell JW, et al. **EMBO J** 1988 Oct; 7(10):3023–9

Characterization of the solubilized and reconstituted ATP-dependent vesicular glutamate uptake system. Carlson MD, et al. **J Biol Chem** 1989 May 5; 264(13):7369–76

Glutamate uptake by brain synaptic vesicles. Energy dependence of transport and functional reconstitution in proteoliposomes. Maycox PR, et al. **J Biol Chem** 1988 Oct 25;263(30):15423–8

Interactions of synapsin I with small synaptic vesicles: distinct sites in synapsin I bind to vesicle phospholipids and vesicle proteins. Benfenati F, et al. **J Cell Biol** 1989 May; 108(5):1863–72

Membrane and cytoplasmic structure at synaptic junctions in the mammalian central nervous system. Landis DM. **J Electron Microsc Tech** 1988 Oct;10(2):129–51 (111 ref.)

The interaction of homologous series of alkanols with sodium channels in nerve membrane vesicles. Rodríguez N, et al. **J Membr Biol** 1988 Sep;104(2):139–46

AH5183 and cetiedil: two potent inhibitors of acetylcholine uptake into isolated synaptic vesicles from Torpedo marmorata. Diebler MF, et al. **J Neurochem** 1989 Mar; 52(3):813–21

Comparison of the properties of gamma-aminobutyric acid and L-glutamate uptake into synaptic vesicles isolated from rat brain. Fykse EM, et al. **J Neurochem** 1989 Mar; 52(3):946–51

Regulation of the vesamicol receptor in cholinergic synaptic vesicles by acetylcholine and an endogenous factor. Noremberg K, et al. **J Neurochem** 1989 Mar;52(3):913–20

Thiamine-like molecules in the cerebellar cortex of the rat: light and electron microscopic immunocytochemical investigation. Martínez-Rodriguez R, et al. **J Neurosci Res** 1989 Aug;23(4):447–53

Fractional vesamicol receptor occupancy and acetylcholine active transport inhibition in synaptic vesicles. Kaufman R, et al. **Mol Pharmacol** 1989 Sep;36(3):452–8

Stereoselectivity of noradrenaline uptake into synaptic vesicles of the rat brain. Matthaei H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):621–5

Changes in expression of a synaptic vesicle antigen in aging sympathetic neurons. Greif KF, et al. **Neurobiol Aging** 1989 Jan-Feb;10(1):51–4

Regional distribution of gamma-aminobutyrate and L-glutamate uptake into synaptic vesicles isolated from rat brain. Fykse EM, et al. **Neurosci Lett** 1989 May 8; 99(3):300–4

Ontogeny of glutamate accumulating activity in rat brain synaptic vesicles. Kish PE, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):185–90

Time required for transmitter accumulation inside monoaminergic storage vesicles differs in peripheral and in central systems. Scherman D, et al. **Neuroscience** 1988 Dec;27(3):1029–35

The p65 protein is a calmodulin-binding protein present in several types of secretory vesicles. Trifaró JM, et al. **Neuroscience** 1989;29(1):1–8 (67 ref.)

Dopamine-regulated phosphorylation of synaptic vesicle-associated proteins in rat neostriatum and substantia nigra. Walaas SI, et al. **Neuroscience** 1989;29(1):9–19

Active transport of gamma-aminobutyric acid and glycine into synaptic vesicles. Kish PE, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3877–81

Quantitation of nerve terminal populations: synaptic vesicle-associated proteins as markers for synaptic density in the rat neostriatum. Walaas SI, et al. **Synapse** 1988; 2(5):516–20

PHYSIOLOGY

Fusion of synaptic vesicle membranes with planar bilayer membranes. Perin MS, et al. **Biophys J** 1989 May; 55(5):973–86

Effects of an inhibitor of the synaptic vesicle acetylcholine transport system on quantal neurotransmitter release: an electrophysiological study. Lupa MT. **Brain Res** 1988 Sep 27;461(1):118–26

Presynaptic aspects of cotransmission: relationship between vesicles and neurotransmitters. Boarder MR. **J Neurochem** 1989 Jul;53(1):1–11 (88 ref.)

Reversible effect of depolarization by K-propionate on sub-miniature endplate potential to bell-miniature endplate potential ratios, on miniature endplate potential frequencies and amplitudes, and on synaptic vesicle diameters and densities in frog neuromuscular junctions. Florey E, et al. **Neuroscience** 1988 Dec;27(3):1055–72

ATP-dependent directional movement of rat synaptic vesicles injected into the presynaptic terminal of squid giant synapse. Llinás R, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5656–60

Synapsins: mosaics of shared and individual domains in a family of synaptic vesicle phosphoproteins. Südhof TC, et al. **Science** 1989 Sep 29;245(4925):1474–80 (39 ref.)

ULTRASTRUCTURE

Ultrastructural differences between pallidohabenular terminals and pallidothalamic terminals. Tokuno H, et al. **Brain Res** 1988 Dec 6;474(2):390–3

The cytoskeletal architecture of the presynaptic terminal and molecular structure of synapsin 1. Hirokawa N, et al. **J Cell Biol** 1989 Jan;108(1):111–26

Synaptic organization of the thalamic reticular nucleus. Ohara PT. **J Electron Microsc Tech** 1988 Nov;10(3):283–92

Structural and functional correlates of synaptic transmission in the vertebrate neuromuscular junction. Rash JE, et al. **J Electron Microsc Tech** 1988 Oct;10(2):153–85 (185 ref.)

The relationship between the number of synaptic vesicles and the amount of transmitter released. Koenig JH, et al. **J Neurosci** 1989 Jun;9(6):1937–42

A new method for electron microscopic observation of isolated synaptic vesicles labelled with monoclonal antibody. Nishiye H, et al. **Neurosci Res** 1988 Aug; 5(6):567–76

Alignment and intracytoplasmic disintegration of synaptic vesicles in the brain cortex. González-Aguilar F, et al. **Neuroscience** 1989;30(2):521–34

Identification of synaptophysin as a hexameric channel protein of the synaptic vesicle membrane. Thomas L, et al. **Science** 1988 Nov 18;242(4881):1050–3

[Microvesicles of secretory nerve endings of the neurohypophysis are biochemically similar to small synaptic vesicles of nerve terminals] Navone F, et al. **Ann Ist Super Sanita** 1988;24(4):507–10 (Eng. Abstr.) **(Ita)**

SYNAPTONEMAL COMPLEX see under MEIOSIS

SYNAPTOSOMES

Heterogeneity of a crude synaptosomal preparation, studied by affinity partitioning using hexaethonium-poly(ethylene glycol). Olde B, et al. **Mol Cell Biochem** 1989 Jun 1; 87(2):153–60

ANALYSIS

Solubilization, partial purification, and properties of omega-conotoxin receptors associated with voltage-dependent calcium channels from rat brain synaptosomes. Rosenberg RL, et al. **Ann N Y Acad Sci** 1989;560:39–52

Microelectrophoretic fractionation of RNA from rat brain subsynaptosomal fractions. Di Battista A, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1025–32

Isolation and reconstitution of the high-affinity choline carrier. Knipper M, et al. **FEBS Lett** 1989 Mar 13; 245(1-2):235–7

Extraction of major acidic Ca2+ dependent phosphoproteins from synaptic membranes. Perrone-Bizzozero NI, et al. **J Neurosci Res** 1988 Jul;20(3):346–50

Differential distribution of 5-hydroxytryptamine and substance P in synaptosomal vesicles of rat ventral spinal cord. Fried G, et al. **Neurosci Lett** 1988 Sep 12;91(3):315–20

[Effects of K+-depolarization on the physical state of membrane lipids in brain synaptosomes of the rat] Timofeev AA, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):24–7 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Increase in synaptosomal acidic phospholipids after intermittent but not continuous ethanol exposure. Gustavsson L, et al. **Alcohol Alcohol** 1989;24(3):193–6

Effect of acute ethanol on uptake of [3H]adenosine by rat cerebellar synaptosomes. Clark M, et al. **Alcoholism (N Y)** 1989 Jun;13(3):371–7

Modulatory effect of neurotransmitters and neurotropic drugs on the release of 3H-D-aspartic acid from synaptosomes. Rayevsky KS, et al. **Ann Ist Super Sanita** 1988;24(3):383–8

Membrane aspects of chronic stress: effects of psychotropic drugs. Valdman AV, et al. **Ann Ist Super Sanita** 1988; 24(3):437–42

Menadione-treated synaptosomes as a model for post-ischaemic neuronal damage. White EJ, et al. **Biochem J** 1988 Jul 15;253(2):425–33

Role of ion channels and intraterminal calcium homeostasis in the action of deltamethrin at presynaptic nerve terminals. Clark JM, et al. **Biochem Pharmacol** 1989 Jul 15; 38(14):2233–45

The mechanism by which monoamine oxidase inhibitors give rise to a non-calcium-dependent component in the depolarization-induced release of 5-HT from rat brain synaptosomes. Evans SM, et al. **Br J Pharmacol** 1988 Nov; 95(3):950–6

Influence of beta-adrenoceptor blocking drugs on lipid-protein interaction in synaptosomal membranes. An ESR study. Ondriaš K, et al. **Chem Biol Interact** 1989; 69(1):87–97

Enhancement of endogenous GABA release from rat synaptosomal preparations is mediated by alpha 2-adrenoceptors pharmacologically different from alpha 2-autoreceptors. Maura G, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):23–9

Charybdotoxin blocks both Ca-activated K channels and Ca-independent voltage-gated K channels in rat brain synaptosomes. Schneider MJ, et al. **FEBS Lett** 1989 Jul 3;250(2):433–6

Toluene-induced alterations in rat synaptosomal membrane composition and function. Le Bel CP, et al. **J Biochem Toxicol** 1988 Winter;3:279–93

Effects of tricyclohexylhydroxytin on the kinetics of adenosine triphosphatase system and protection by thiol reagents. Rao KS, et al. **J Biochem Toxicol** 1987 Summer; 2:125–40

Neuropeptide Y increases the inhibitory effects of clonidine on potassium evoked 3H-noradrenaline but not 3H-5-hydroxytryptamine release from synaptosomes of the hypothalamus and the frontoparietal cortex of the male Sprague-Dawley rat. Martire M, et al. **J Neural Transm** 1989;78(1):61–72

L-glutamate increases internal free calcium levels in synaptoneurosomes from immature rat brain via quisqualate receptors. Benavides J, et al. **J Neurosci** 1988 Oct; 8(10):3607–15

Cellular mechanisms underlying the increase in cytosolic free calcium concentration induced by methylmercury in cerebrocortical synaptosomes from guinea pig. Kauppinen RA, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1248–54

Exposure of striatal [corrected] synaptosomes to L-dopa increases levels of oxidized glutathione [published erratum appears in J Pharmacol Exp Ther 1989 Jan;248(1):478] Spina MB, et al. **J Pharmacol Exp Ther** 1988 Nov; 247(2):502–7

Psychotomimetic sigma-ligands, dexoxadrol and phencyclidine block the same presynaptic potassium channel in rat brain. Bartschat DK, et al. **J Physiol (Lond)** 1988 Sep;403:341–53

Effect of selected insecticides on rat brain synaptosomal adenylate cyclase and phosphodiesterase. Kodavanti PR, et al. **J Toxicol Environ Health** 1988;25(2):207–15

The effect of Triton X-100 on bovine brain synaptic membranes. O'Neill C, et al. **Neurochem Res** 1988 Sep; 13(9):871–7

A comparison of the effects of the selective 5-HT uptake inhibitor WY 27587 on 5-HT uptake into platelets and synaptosomes in the rat. Billingsley AJ, et al. **Neuropharmacology** 1989 Jan;28(1):33–6

Effects of lindane on calcium fluxes in synaptosomes. Hawkinson JE, et al. **Neurotoxicology** 1989 Spring; 10(1):29–39

Characterization of dihydropyridine-sensitive calcium channels in rat brain synaptosomes. Woodward JJ, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7389–93

Effects of mercuric chloride on [3H]dopamine release from rat brain striatal synaptosomes. Hare MF, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):266–75

Effects of methylmercury on neurotransmitter release from rat brain synaptosomes. Minnema DJ, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):510–21

beta-Bungarotoxin-induced phospholipid hydrolysis in rat brain synaptosomes: effect of replacement of calcium by strontium. Ghassemi A, et al. **Toxicon** 1988;26(5):509–14

[Effect of NH4+ on synaptosomal membrane potential in the rat brain] Fukunaga R, et al. **Nippon Yakurigaku Zasshi** 1988 Dec;92(6):359–64 (Eng. Abstr.) **(Jpn)**

[Protection of the monoamine oxidase in brain synaptosomes by fat- and water-soluble antioxidants during lipid peroxidation] Antipov AD, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):169–71 (Eng. Abstr.) **(Rus)**

[The action of a homologous series of ubiquinols on lipid peroxidation in brain mitochondrial and synaptosomal membranes] Kagan VE, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):420–2 (Eng. Abstr.) **(Rus)**

[Mechanisms of the regulation of membrane receptor activity by synthetic antioxidants of the screened phenol class]

Kokhlov AP. **Biull Eksp Biol Med** 1988 Oct;106(10):440–4 (Eng. Abstr.) **(Rus)**

[Electron microscopic-cytochemical study of the effect of vinblastine on synaptosome adenylate cyclase in the rat cerebral cortex] Rostomian MA, et al. **Tsitologiia** 1989 Mar; 31(3):282–6 (Eng. Abstr.) **(Rus)**

[Effect of bilirubin and serum albumin on the Na,K-ATPase activity in the synaptosomal membrane] Tkachenko AV. **Tsitologiia** 1988 Jul;30(7):849–54 (Eng. Abstr.) **(Rus)**

[Selective sensitivity of synaptosomal cyclases to glutamic acid] Rostomian MA. **Zh Evol Biokhim Fiziol** 1988 Nov–Dec;24(6):829–34 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Na+–K+–ATPase pump function in rat brain synaptosomes is different in males and females. Fraser CL, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E284–9

Stimulation of phospholipase A2 of synaptosomes of guinea-pig brain by noradrenaline and other amines [Retracted by Rowe CE. In: Biochem J 1977 Apr 15;164(1);287–8] Gullis RJ, et al. **Biochem Soc Trans** 1973 Jul;1(4):849

Putative interaction of presynaptic dopamine and serotonin receptors modulating synaptosomal tyrosine hydroxylase activity in the nucleus accumbens of rats. Hetey L. **Biomed Biochim Acta** 1988;47(12):1089–92

Effects of hypoxic hypoxia on the kinetics of synaptosomal Ca2+–ATPase activity in newborn piglets and young rabbits. Schaller R, et al. **Biomed Biochim Acta** 1989; 48(2–3):S208–11

Tyrosine hydroxylase phosphorylation in rat brain striatal synaptosomes. Colby KA, et al. **Brain Res** 1989 Jan 23; 478(1):103–11

Evidence that adenosine A2 and dopamine autoreceptors antagonistically regulate tyrosine hydroxylase activity in rat striatal synaptosomes. Onali P, et al. **Brain Res** 1988 Jul 26;456(2):302–9

A critique on the preparation and enzymatic characterization of synaptic and nonsynaptic mitochondria from hippocampus. Villa RF, et al. **Cell Mol Neurobiol** 1989 Jun; 9(2):247–62

Comparative study of GABA-T from glial cells, neuronal perikarya cells and synaptosomes. Bedoya MP, et al. **Comp Biochem Physiol [C]** 1988;90(1):61–4

Autophosphorylation and activation of Ca2+/calmodulin-dependent protein kinase II in intact nerve terminals. Gorelick FS, et al. **J Biol Chem** 1988 Nov 25;263(33):17209–12

A synaptosomal protein kinase is regulated by phosphatidylinositol 4-phosphate and Mg2+. Sahyoun NE, et al. **J Biol Chem** 1989 Jan 15;264(2):1062–7

Inhibition of dihydropteridine reductase in rat striatal synaptosomes and from human liver by metabolites of biogenic amines. Shen RS. **J Enzym Inhib** 1985;1(1):61–6

Rat striatal synaptosomes as a model system for studying the inhibition of dihydropteridine reductase activity. Shen RS, et al. **J Enzym Inhib** 1987;1(3):223–9

Rat brain synaptosomal ATP:AMP-phosphotransferase activity. Nagy AK, et al. **J Neurochem** 1989 Oct; 53(4):1166–72

Oxidation of N-methyl-1,2,3,4-tetrahydroisoquinoline into the N-methyl-isoquinolinium ion by monoamine oxidase. Naoi M, et al. **J Neurochem** 1989 Feb;52(2):653–5

Synaptosomal "membrane-bound" choline acetyltransferase is most sensitive to inhibition by choline mustard. Rylett RJ. **J Neurochem** 1989 Mar;52(3):869–75

Tyrosine hydroxylase content of residual striatal dopamine nerve terminals following 6-hydroxydopamine administration: a flow cytometric study. Wolf ME, et al. **J Neurochem** 1989 Sep;53(3):879–85

Effect of lithium and of other drugs used in the treatment of manic illness on the cation-transporting properties of Na+,K+-ATPase in mouse brain synaptosomes. Wood AJ, et al. **J Neurochem** 1989 Apr;52(4):1042–9

Inhibition of synaptosomal (Na+ + K+)-ATPase activity by lysophosphatidic acid: its possible role in membrane depolarization. Nishikawa T, et al. **Jpn J Pharmacol** 1988 Jun;47(2):143–50

Alterations in synaptosomal membrane Na,K-ATPase of the gerbil cortex and hippocampus following reversible brain ischemia. Stojanović T, et al. **Metab Brain Dis** 1988 Dec; 3(4):265–72

Calmodulin selectively modulates the guanylate cyclase activity by repressing the lipid phase separation temperature in the inner half of the bilayer of rat brain synaptosomal plasma membranes. Kopeikina-Tsiboukidou L, et al. **Neurochem Res** 1989 Feb;14(2):119–27

Choline acetyltransferase-like activity bound to neuronal plasma membranes. Massarelli R, et al. **Neurochem Res** 1988 Dec;13(12):1193–8

Localization of aromatase in synaptosomal and microsomal subfractions of quail (Coturnix coturnix japonica) brain. Schlinger BA, et al. **Neuroendocrinology** 1989 Apr; 49(4):434–41

Receptor-mediated activation of tyrosine hydroxylase by corticotropin-releasing factor in striatal synaptosomes. Olianas MC, et al. **Pharmacol Res Commun** 1988 Dec; 20(12):1097–8

Comparison of intra- and extrasynaptosomal monoamine oxidase-A and -B activities in the striatum and frontal cortex of two mice strains with different sensitivities to the neurotoxic actions of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine. Stenström A, et al. **Pharmacol Toxicol** 1989 Mar;64(3):276–81

Phosphorylation and associated translocation of the 87-kDa protein, a major protein kinase C substrate, in isolated nerve terminals. Wang JK, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2253–6

Inhibition of synaptosome membrane-bound integral enzymes by organic solvents. Korpela M. **Scand J Work Environ Health** 1989 Feb;15(1):64–8

[Effect of pyrethroids on rat brain synaptosomal ATPase activities] Tang CY. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):80–2 (Eng. Abstr.) **(Chi)**

[Effects of phospholipase A2 and alpha-tocopherol on the activity of adenylate cyclase of rat brain synaptosomes] Gorbunov NV, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):438–40 (Eng. Abstr.) **(Rus)**

[The interrelationship of the processes of lipid peroxidation and lipid phospholipase hydrolysis in the synaptosomes] Nikushkin EV, et al. **Biull Eksp Biol Med** 1989 Feb; 107(2):174–7 (Eng. Abstr.) **(Rus)**

METABOLISM

Relationship between cytosolic free calcium ion concentration and the control of pyruvate dehydrogenase in isolated cardiac myocytes and synaptosomes. Hansford RG. **Adv Exp Med Biol** 1988;232:230–43

Effect of chronic renal failure and parathyroid hormone on phospholipid content of brain synaptosomes. Islam A, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F705–10

Inhibition of high-affinity synaptosomal uptake of gamma-aminobutyric acid by a bicyclo-heptane derivative. Kovács I, et al. **Arzneimittelforschung** 1989 Mar;39(3):295–7

4,4-Diphenylpiperidine derivates and their sila analogues. A comparative study of their interaction with neural receptor biding sites and synaptosomal monoamine uptake. Stasch JP, et al. **Arzneimittelforschung** 1988 Aug;38(8):1075–8

Hydrogen peroxide production in dopamine neurons. Spina MB, et al. **Basic Life Sci** 1988;49:1011–4

ATP-dependent H+ transport in synaptosomal membrane vesicles of the rat brain. Fukunaga R, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1045–50

Caffeine-sensitive calcium stores in presynaptic nerve endings: a physiological role? Martínez-Serrano A, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):965–71

Evoked effects of cholesterol binding on integral proteins and lipid fluidity of dog brain synaptosomal plasma membranes. Deliconstantinos G, et al. **Biochem Cell Biol** 1989 Jan;67(1):16–24

Amino acid neurotransmitters and their receptors in the brain synaptosomes of acute hepatic failure rats. Watanabe A, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):247–52

Ruthenium red inhibits the voltage-dependent increase in cytosolic free calcium in cortical synaptosomes from guinea-pig. Taipale HT, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1109–13

Multiple calcium channels in synaptosomes: voltage dependence of 1,4-dihydropyridine binding and effects on function. Dunn SM. **Biochemistry** 1988 Jul 12; 27(14):5275–81

Fluorescence measurements of anion transport by the GABAA receptor in reconstituted membrane preparations. Dunn SM, et al. **Biochemistry** 1989 Mar 21;28(6):2551–7

Multiple components of synaptosomal [3H]-gamma-aminobutyric acid release resolved by a rapid superfusion system. Turner TJ, et al. **Biochemistry** 1989 Jan 24;28(2):586–93

On the mechanism by which extracellular sodium depletion causes 5-hydroxytryptamine release from rat brain synaptosomes. Collard KJ. **Biochim Biophys Acta** 1989 Sep 18;984(3):319–25

'Slow' K+-stimulated Ca2+ influx is mediated by Na+–Ca2+ exchange: a pharmacological study. Nachshen DA, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):305–10

Glutaminase inhibition and the release of neurotransmitter glutamate from synaptosomes. Bradford HF, et al. **Brain Res** 1989 Jan 2;476(1):29–34

Uptake of gamma-aminobutyric acid and L-glutamic acid by synaptosomes from postmortem human cerebral cortex: multiple sites, sodium dependence and effect of tissue preparation. Dodd PR, et al. **Brain Res** 1989 Jun 26; 490(2):320–31

L(+)-2-amino-4-phosphonobutyrate inhibits the release of both glutamate and dynorphin from guinea pig but not rat hippocampal mossy fiber synaptosomes. Gannon RL, et al. **Brain Res** 1989 Aug 21;495(1):151–5

L-[35S]cysteic acid selectively detects chloride-dependent L-glutamate transporters in synaptic membrane. Koyama Y, et al. **Brain Res** 1989 May 15;487(1):113–9

Time resolved dopamine overflow from synaptosomes and chopped striatal tissue with rapid superfusion. Kristensen EW, et al. **Brain Res** 1988 Sep 27;461(1):44–52

Studies on the ionic mechanism for the neuromodulatory actions of adenosine in the brain. Michaelis ML, et al. **Brain Res** 1988 Nov 15;473(2):249–60

Temperature-dependent and -independent apparent binding activities of [3H]glutathione in brain synaptic membranes. Ogita K, et al. **Brain Res** 1988 Oct 25;463(1):37–46

Calcitonin gene-related peptide modulates calcium mobilization in synaptosomes of rat spinal dorsal horn. Oku R, et al. **Brain Res** 1988 Dec 20;475(2):356–60

A spider toxin (JSTX) inhibits L-glutamate uptake by rat brain synaptosomes. Pan-Hou H, et al. **Brain Res** 1989 Jan 9;476(2):354–7

5-Hydroxytryptamine releases adenosine from primary afferent nerve terminals in the spinal cord. Sweeney M, et al. **Brain Res** 1988 Oct 18;462(2):346–9

Structure-activity studies on inhibition of choline uptake by a mouse brain synaptosomal preparation: basic data. Tamaru M, et al. **Brain Res** 1988 Nov 15;473(2):205–26

Veratridine-induced release of endogenous glutamate from rat brain cortex slices: a reappraisal of the role of calcium. Villanueva S, et al. **Brain Res** 1988 Oct 4;461(2):377–80

Differential sensitivity of synaptosomal calcium entry and endogenous dopamine release to omega-conotoxin. Woodward JJ, et al. **Brain Res** 1988 Dec 13;475(1):141–5

Calcium-dependent and -independent release of endogenous dopamine from rat striatal synaptosomes. Woodward JJ, et al. **Brain Res** 1988 Nov 8;473(1):91–8

Protein phosphorylation in human synaptosomal membranes: evidence for the presence of substrates for cyclic nucleotide guanosine 3'-5'-monophosphate dependent protein kinases. Boehme DH, et al. **Brain Res Bull** 1978 Nov-Dec; 3(6):697–700

The influence of cholesterol on synaptic fluidity and dopamine uptake. Maguire PA, et al. **Brain Res Bull** 1989 Feb;22(2):431–7

Glutamate and dynorphin release from a subcellular fraction enriched in hippocampal mossy fiber synaptosomes. Terrian DM, et al. **Brain Res Bull** 1988 Sep;21(3):343–51

Effects of soman and sarin on high affinity choline uptake by rat brain synaptosomes. Whalley CE, et al. **Brain Res Bull** 1989 May;22(5):853–8

Circadian variation in the uptake of tryptophan by cortical synaptosomes of the rat brain. Loizou G, et al. **Chronobiol Int** 1988;5(4):331–6

Synaptosomal high-affinity noradrenaline uptake does not differ between mice susceptible (DBA/2J) and resistant (C57 BL/6) to audiogenic seizures. Jazrawi SP, et al. **Epilepsy Res** 1987 Mar;1(2):139–41

Generation of hydrogen peroxide by cerebral-cortex synaptosomes. Stimulation by ionomycin and plasma-membrane depolarization. Zoccarato F, et al. **Eur J Biochem** 1989 Mar 15;180(2):473–8

Intrasynaptosomal free calcium concentration is increased by phorbol esters via a 1,4-dihydropyridine-sensitive (L-type) Ca2+ channel. Adamson P, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):59–66

5 alpha-pregnan-3 alpha,20 alpha-diol behaves like a partial agonist in the modulation of GABA-stimulated chloride ion uptake by synaptoneurosomes. Belelli D, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):173–6

GABAB autoreceptors in rat cortex synaptosomes: response under different depolarizing and ionic conditions. Bonanno G, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):41–9

Depolarization-evoked release of N-acetyl-L-aspartyl-L-glutamate from rat brain synaptosomes. Pittaluga A, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):263–6

Facilitation of [3H]acetylcholine and [3H]5-hydroxytryptamine release from rat cerebral cortex synaptosomes by a factor extracted from the skin of the Australian frog Pseudophryne coriacea. Raiteri M, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):223–9

Interaction of dihydrotetrabenazine binding activity with immobilized lectins. Vincent MS, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):317–9

Peroxidation induced changes in synaptosomal transport of dopamine and gamma-aminobutyric acid. Rafalowska U, et al. **Free Radic Biol Med** 1989;6(5):485–92

Dopaminergic and adrenergic binding affinities in rabbit retinal synaptosomes. Malik FY, et al. **Gen Pharmacol** 1988; 19(5):735–9

Kappa-receptor mechanisms in synaptosomal Ca uptake. Toru T, et al. **Gen Pharmacol** 1989;20(2):249–52

Norepinephrine release and reuptake by hypothalamic synaptosomes of spontaneously hypertensive rats. Hano T, et al. **Hypertension** 1989 Mar;13(3):250–5

Immunological characterization of papain-induced fragments of Clostridium botulinum type A neurotoxin and interaction of the fragments with brain synaptosomes. Kozaki S, et al. **Infect Immun** 1989 Sep;57(9):2634–9

Studies of blocking mechanisms of carbachol-induced polyphosphoinositide turnover in rat cortical synaptosomes by neuroactive drugs. Wei JW, et al. **Int J Biochem** 1989; 21(1):59–65

Effects of contrast media on neural tissue glucose uptake in vitro. Ekholm SE, et al. **Invest Radiol** 1989 Feb; 24(2):145–9

Calcium/calmodulin inhibits direct binding of spectrin to synaptosomal membranes. Steiner JP, et al. **J Biol Chem** 1989 Feb 15;264(5):2783–91

Effect of linoleic acid-rich infant formula feeding on brain synaptosomal lipid accretion and enzyme thermotropic behavior in the piglet. Hrboticky N, et al. **J Lipid Res** 1989 Aug;30(8):1173–84

Alpha 2-adrenergic, kappa-opiate, and P1-purinergic autoreceptors have mutually antagonistic effects: a new regulatory mechanism? Adamson P, et al. **J Neurochem** 1989 Oct;53(4):1077–82

Kinetic analysis of A23187-mediated polyphosphoinositide breakdown in rat cortical synaptosomes suggests that inositol bisphosphate does not arise primarily by degradation of inositol trisphosphate. Brammer M, et al.

J Neurochem 1989 Aug;53(2):399–407

Protein kinase C activation enhances K+-stimulated endogenous dopamine release from rat striatal synaptosomes in the absence of an increase in cytosolic Ca2+. Chandler LJ, et al. J Neurochem 1989 Jun; 52(6):1905–12

Effect of acute ethanol on release of endogenous adenosine from rat cerebellar synaptosomes. Clark M, et al. J Neurochem 1989 Jun;52(6):1859–65

Na+ dependence of tyrosine transport across the synaptosomal membrane reflects changes in the morphology of synaptosomes. Diez-Guerra FJ, et al. J Neurochem 1989 May;52(5):1366–74

Stimulation of the Na+/K+ pump activity during electrogenic uptake of acidic amino acid transmitters by rat brain synaptosomes. Erecińska M. J Neurochem 1989 Jan;52(1):135–9

Compared effects of two vesicular acetylcholine uptake blockers, AH5183 and cetiedil, on cholinergic functions in Torpedo synaptosomes: acetylcholine synthesis, choline transport, vesicular uptake, and evoked acetylcholine release. Gaudry-Talarmain YM, et al. J Neurochem 1989 Mar;52(3):822–9

Effect of age on K+-induced cytosolic Ca2+ changes in rat cortical synaptosomes. Giovannelli L, et al. J Neurochem 1989 Aug;53(2):392–8

Interrelationships between glucose metabolism, energy state, and the cytosolic free calcium concentration in cortical synaptosomes from the guinea pig. Kauppinen RA, et al. J Neurochem 1989 Sep;53(3):766–71

Chloride-dependent uncoupling of oxidative phosphorylation by triethyllead and triethyltin increases cytosolic free calcium in guinea pig cerebral cortical synaptosomes [published erratum appears in J Neurochem 1989 Feb;52(2):661] Kauppinen RA, et al. J Neurochem 1988 Nov;51(5):1617–25

Neurotransmitter amino acid release from synaptosomes [letter] Levi G, et al. J Neurochem 1989 Oct;53(4):1324–6

Glutamate release from guinea-pig synaptosomes: stimulation by reuptake-induced depolarization. McMahon HT, et al. J Neurochem 1989 Jul;53(1):71–9

Reduction of K+-stimulated 45Ca2+ influx in synaptosomes with age involves inactivating and noninactivating calcium channels and is correlated with temporal modifications in protein dephosphorylation. Martínez-Serrano A, et al. J Neurochem 1989 Feb;52(2):576–84

Introduction of impermeant molecules into synaptosomes using freeze/thaw permeabilization. Nichols RA, et al. J Neurochem 1989 Feb;52(2):521–9

Is the augmentation of K+-evoked intrasynaptosomal Ca2+ concentration due to the influx of Ca2+ in rat brain synaptosomes? Okada M, et al. J Neurochem 1989 Jun; 52(6):1837–42

Binding of [3H]hemicholinium-3 to the high-affinity choline transporter in electric organ synaptosomal membranes. O'Regan S. J Neurochem 1988 Dec;51(6):1682–8

Inhibition by cyclic AMP of phorbol ester-potentiated norepinephrine release from guinea pig brain cortical synaptosomes. Shuntoh H, et al. J Neurochem 1988 Nov; 51(5):1565–72

Further characterization of phasic calcium influx in rat cerebrocortical synaptosomes: inferences regarding calcium channel type(s) in nerve endings. Suszkiw JB, et al. J Neurochem 1989 Apr;52(4):1260–9

Dendrotoxin, 4-aminopyridine, and beta-bungarotoxin act at common loci but by two distinct mechanisms to induce Ca2+-dependent release of glutamate from guinea-pig cerebrocortical synaptosomes. Tibbs GR, et al. J Neurochem 1989 Jan;52(1):201–6

Evaluation of the Ca2+ concentration in purified nerve terminals: relationship between Ca2+ homeostasis and synaptosomal preparation. Verhage M, et al. J Neurochem 1988 Dec;51(6):1667–74

Effect of taurine on neurotransmitter release from insect synaptosomes. Whitton PS, et al. J Neurochem 1988 Nov; 51(5):1356–60

2-Oxoglutarate: oxidation and role as a potential precursor of cytosolic acetyl-CoA for the synthesis of acetylcholine in rat brain synaptosomes. Willoughby J, et al. J Neurochem 1989 Mar;52(3):896–901

1-Methyl-4-phenylpyridinium uptake by human and rat striatal synaptosomes. Willoughby J, et al. J Neurochem 1989 Feb;52(2):627–31

Effects of DL-2-amino-5-phosphonovalerate on metabolism of catecholamines in synaptosomes from rat brain. Yee DK, et al. J Neurochem 1989 Jan;52(1):54–60

Aplysia synaptosomes. II. Release of transmitters. Chin GJ, et al. J Neurosci 1989 Jan;9(1):49–55

Inhibition of voltage-gated K channels in synaptosomes by sn-1,2-dioctanoylglycerol, an activator of protein kinase C. Colby KA, et al. J Neurosci 1988 Dec;8(12):4685–92

Selective effects of hyperprolactinemia on in vitro dopamine release from median eminence synaptosomes. Gregerson KA, et al. J Neurosci 1988 Jul;8(7):2477–84

Age-related modification of enzyme activities in synaptosomes isolated from rat cerebral cortex. Curti D, et al. J Neurosci Res 1989 Mar;22(3):346–50

Inhibition of Na+,K+-ATPase activity by phospholipase A2 and several lysophospholipids: possible role of phospholipase A2 in noradrenaline release from cerebral cortical synaptosomes. Nishikawa T, et al. J Pharm Pharmacol 1989 Jul;41(7):450–8

Block of 45Ca uptake into synaptosomes by methylmercury: Ca++- and Na+-dependence. Shafer TJ, et al. J Pharmacol Exp Ther 1989 Feb;248(2):696–702

[3H]zonisamide binding in rat brain. Mimaki T, et al. Jpn J Psychiatry Neurol 1988 Sep;42(3):640–2

A bumetanide-sensitive, potassium carrier-mediated transport system in excitable tissues. Babila T, et al. Life Sci 1989;44(22):1665–75

Release of endogenous glutamate from rat cerebellar synaptosomes: interactions with adenosine and ethanol. Clark M, et al. Life Sci 1989;44(22):1625–35

A possible mechanism for the anti-depressant activity of thyrotropin releasing hormone. Horst WD, et al. Life Sci 1974 Sep 15;15(6):1073–82

LY227942, an inhibitor of serotonin and norepinephrine uptake: biochemical pharmacology of a potential antidepressant drug. Wong DT, et al. Life Sci 1988; 43(24):2049–57

The role of a transmembrane pH gradient in uptake and release of imipramine and haloperidol in synaptosomes. Schmalzing G. Mol Pharmacol 1988 Dec;34(6):888–95

The effect of selective type A or type B monoamine oxidase inhibition on the intrasynaptosomal deamination of (3H)serotonin in rat spinal cord tissue. Azzaro AJ, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Jul; 338(1):9–13

Identification of presynaptic 5-HT1 autoreceptors in pig brain cortex synaptosomes and slices. Fink K, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Jul; 338(1):14–8

Ouabain induces acetylcholine release from pure cholinergic synaptosomes independently of extracellular calcium concentration. Blasi JM, et al. Neurochem Res 1988 Nov; 13(11):1035–41

Dipalmitoylphosphatidylcholine liposomes reduce [3H]acetylcholine levels in an eserine-sensitive manner in rat cerebral cortical synaptosomes. Bottiglieri D, et al. Neurochem Res 1989 Feb;14(2):161–7

Association of axonally transported heparan sulfate with isolated synaptic plasma membrane. Elam JS, et al. Neurochem Res 1988 Aug;13(8):715–20

A protein-free diet changes synaptosomal membrane fluidity and tyrosine and glutamate transport. Felipo V, et al. Neurochem Res 1989 May;14(5):431–5

Cytosolic-free calcium and neurotransmitter release with decreased availability of glucose or oxygen. Gibson GE, et al. Neurochem Res 1989 May;14(5):437–43

High-affinity binding of proline to mouse brain synaptic membranes. Ortiz JG, et al. Neurochem Res 1989 Feb; 14(2):139–42

Glutamine and 2-oxoglutarate as metabolic precursors of the transmitter pools of glutamate and GABA: correlation of regional uptake by rat brain synaptosomes. Shank RP, et al. Neurochem Res 1989 Apr;14(4):371–6

Isolation of metabolically distinct synaptosomes on Percoll gradients. Sherman AD. Neurochem Res 1989 Jan; 14(1):97–101

Lack of excitatory amino acid-induced effects on calcium fluxes measured with 45Ca2+ in rat cerebral cortex synaptosomes. Simonato M, et al. Neurochem Res 1989 Jul; 14(7):677–82

Amplification by glycine of the effect of the GABA transport inhibitor THPO on synaptosomal GABA level. Wood JD, et al. Neurochem Res 1988 Oct;13(10):917–21

Iron-induced lipid peroxidation and inhibition of dopamine synthesis in striatum synaptosomes. Zaleska MM, et al. Neurochem Res 1989 Jul;14(7):597–605

L-glutamate stimulates the efflux of newly taken up glutamine from astroglia but not from synaptosomes of the rat. Albrecht J. Neuropharmacology 1989 Aug;28(8):885–7

Efflux of rubidium in rat cortical synaptosomes is blocked by sigma and dextromethorphan binding site ligands. Fletcher EJ, et al. Neuropharmacology 1989 Jul;28(7):661–6

The effects of GABAB receptor agonists and antagonists on potassium-stimulated [Ca2+]i in rat brain synaptosomes. Stirling JM, et al. Neuropharmacology 1989 Jul; 28(7):699–704

Modulation of gamma-aminobutyric acid uptake of rat brain synaptosomes by thyroid hormones. Mason GA, et al. Neuropsychopharmacology 1987 Dec;1(1):63–70

Correlation between changes in LH-RH content in the synaptosomal fraction of the olfactory bulb and some hypothalamic zones and level of sexual activity in male rats. El'seva TV, et al. Neurosci Behav Physiol 1989 May-Jun;19(3):212–6

Binding of [3H]diazepam to the synaptic membranes of the rat neocortex after development of a conditioned reflex of bilateral avoidance. Zhulin VV. Neurosci Behav Physiol 1989 Jan-Feb;19(1):40–1

K+ differentially affects the excitatory amino acids- and carbachol-elicited inositol phosphate formation in rat brain synaptoneurosomes. Guiramand J, et al. Neurosci Lett 1989 Mar 27;98(2):222–8

Modulation of catecholamine metabolism in synaptosomes by a neuroregulatory factor from mammalian brain. Pastuszko A, et al. Neurosci Lett 1989 Mar 13;98(1):111–7

Effect of in vivo glucocorticoid administration on histamine metabolism in rat brain synaptosomes. Walajtys-Rode E, et al. Neurosci Lett 1989 Feb 27;97(3):340–4

Aging does not alter the voltage-dependent release of endogenous dopamine from mouse striatal synaptosomes. Woodward JJ, et al. Neurosci Lett 1989 Feb 13; 97(1-2):191–7

Ca2+-dependent and Ca2+-independent glutamate release, energy status and cytosolic free Ca2+ concentration in isolated nerve terminals following metabolic inhibition: possible relevance to hypoglycaemia and anoxia. Kauppinen RA, et al. Neuroscience 1988 Oct;27(1):175–82

GABAergic modulation of acetylcholine release in cholinergic synaptosomes from Torpedo marmorata electric organ. Ramírez G, et al. Neuroscience 1989; 30(1):251–5

Microwave radiation, in the absence of hyperthermia, has no detectable effect on synapsin I levels or phosphorylation. Browning MD, et al. Neurotoxicol Teratol 1988 Sep-Oct;10(5):461–4

Lindane-induced modulation of calcium levels within synaptosomes. Bondy SC, et al. Neurotoxicology 1988 Winter;9(4):645–52

Proline binding to mouse brain synaptosomes. Negron AE, et al. P R Health Sci J 1988 Aug;7(2):101–3

Role of the aromatic group in the inhibition of phencyclidine binding and dopamine uptake by PCP analogs. Chaudieu I, et al. Pharmacol Biochem Behav 1989 Mar;32(3):699–705

Synaptosomal dopamine autoreceptors: sensitivity changes after in vitro and in vivo treatments. Tissari AH. Pharmacol Res Commun 1988 Nov;20(11):1001–11

The effects of inorganic lead on the spontaneous and potassium-evoked release of 3H-5-HT from rat cortical synaptosome interaction with calcium. Oudar P, et al. Pharmacol Toxicol 1989 May;64(5):459–63

Formation of nitric oxide from L-arginine in the central nervous system: a transduction mechanism for stimulation of the soluble guanylate cyclase. Knowles RG, et al. Proc Natl Acad Sci U S A 1989 Jul;86(13):5159–62

Effects of ifenprodil tartrate on calcium flux in arteries and brain synaptosomes. Honda H, et al. Proc West Pharmacol Soc 1989;32:155–8

The chronic effects of desipramine and sertraline on platelet and synaptosomal 5HT uptake in olfactory bulbectomised rats. Butler J, et al. Prog Neuropsychopharmacol Biol Psychiatry 1988; 12(5):585–94

Effects of lithium on synaptosomal Ca2+ fluxes. Koenig ML, et al. Psychopharmacology (Berlin) 1988;96(2):267–72

Inhibition of synaptosomal serotonin uptake by Ketalar. Martin DC, et al. Res Commun Chem Pathol Pharmacol 1988 Oct;62(1):129–32

Hypoxia and ischemia modifies histamine metabolism and transport in brain synaptosomes. Waskiewicz J, et al. Resuscitation 1988 Oct;16(4):287–93

The role of the plasma membrane and intracellular organelles in synaptosomal calcium regulation. Nicholls DG, et al. Soc Gen Physiol Ser 1987;42:31–43 (40 ref.)

Effects of hypothyroidism on high-affinity vasopressin binding sites in developing hippocampal synaptosomes. Rami A, et al. Synapse 1989;3(3):200–4

Receptor-mediated control of neurotransmitter release from brain slices or synaptosomes. Middlemiss DN. Trends Pharmacol Sci 1988 Mar;9(3):83–4 (29 ref.)

Effect of carbon monoxide-induced hypoxia on synaptosomal uptake and release of dopamine in rat striatum. Chai KJ, et al. Yonsei Med J 1988;29(2):129–38

Distribution of lectin receptors in rat brain synaptosomes. Vancova M, et al. Z Mikrosk Anat Forsch 1988; 102(6):985–92

[Changes in the distribution of negatively charged sites of the synaptosomal membrane in adult rats] Ichev K, et al. Eksp Med Morfol 1989;28(2):1–4 (Eng. Abstr.) (Bul)

[Antagonistic effects of angiotensin II and morphine on synaptosomal calcium uptake] Wang XM, et al. Sheng Li Hsueh Pao 1989 Apr;41(2):179–83 (Eng. Abstr.) (Chi)

[Peroxidative vulnerability of synaptosomal high affinity Ca++-ATPase and pharmacologic effects] Blaschke M, et al. Biomed Biochim Acta 1988;47(9):887–93 (Eng. Abstr.) (Ger)

[Lipid peroxidation in the synaptosomal and mitochondrial fractions of separate brain structures in hypoxia] Dzhafarov AI, et al. Biull Eksp Biol Med 1989 Mar;107(3):305–7 (Eng. Abstr.) (Rus)

[Peculiarities of H3-muscimol binding to neocortex membranes of rats exposed to the effects of ethanol in the prenatal period] Zhulin VV, et al. Biull Eksp Biol Med 1988 Oct;106(10):460–2 (Eng. Abstr.) (Rus)

[Dependence of changes in the luliberin level in the synaptosomal fraction of the olfactory bulbs and various areas of the hypothalamus on the level of sexual activity in male rats] El'seva TV, et al. Probl Endokrinol (Mosk) 1988 Sep-Oct;34(5):48–51 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Role of ions and membrane potential in uptake of serotonin into plasma membrane vesicles from mouse brain. Reith ME, et al. Biochem Pharmacol 1989 Jul 1;38(13):2091–7

Adenosine and ATP: presynaptic effects at the cholinergic nerve terminal. Brown SJ. Biochem Soc Trans 1988 Aug; 16(4):442–3

Clearer demonstration of calcium/calmodulin-dependent events in synaptosomes by use of the differential effects of two calmodulin antagonists, N-(aminohexyl)-5-chloro-1-naphthalenesulfonamide and N-(6-aminohexyl)-1-naphthalenesulfonamide. Imai S, et

al. **Comp Biochem Physiol [C]** 1988;91(2):535–40
Normal and regenerating optic fibers in goldfish tectum: HRP–EM evidence for rapid synaptogenesis and optic fiber–fiber affinity. Hayes WP, et al. **J Comp Neurol** 1988 Aug 22;274(4):516–38
Interactions between alpha–latrotoxin and trivalent cations in rat striatal synaptosomal preparations. Scheer HW. **J Neurochem** 1989 May;52(5):1590–7
Ca2+–dependent regulation of presynaptic stimulus–secretion coupling. Verhage M, et al. **J Neurochem** 1989 Oct;53(4):1188–94
Effect of cocaine and cocaine congeners on veratridine–induced depolarization in mouse cerebrocortical synaptoneurosomes. Zimányi I, et al. **J Neurosci Res** 1989 Feb;22(2):201–8
Effects of MPTP, MPP+ and paraquat on mitochondrial potential and oxidative stress. Lambert CE, et al. **Life Sci** 1989;44(18):1277–84
GABAB receptor activation inhibits Ca2+–activated potassium channels in synaptosomes: involvement of G–proteins. Ticku MK, et al. **Life Sci** 1989;44(18):1271–6
Botulinum toxin type A blocks the morphological changes induced by chemical stimulation on the presynaptic membrane of Torpedo synaptosomes. Marsal J, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):372–6

PHYSIOPATHOLOGY

Effects of lactic acidosis on the function of cerebral cortical synaptosomes. White EJ, et al. **J Neurochem** 1989 Jan; 52(1):154–61

SECRETION

The secretory effect of canatoxin on rat brain synaptosomes involves a lipoxygenase–mediated pathway. Barja–Fidalgo C, et al. **Braz J Med Biol Res** 1988;21(3):549–52
Involvement of the constituent chains of botulinum neurotoxins A and B in the blockade of neurotransmitter release. Maisey EA, et al. **Eur J Biochem** 1988 Nov 15; 177(3):683–91
K+ channel and adenylate cyclase involvement in regulation of Ca2+–evoked release of [3H]dopamine from synaptosomes. Bowyer JF, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):514–20
Differential effects of 4–aminopyridine on acetylcholine release triggered by K+ depolarization, veratridine, or A23187 in rat cerebral cortical synaptosomes. Meyer EM, et al. **Neurochem Res** 1989 Feb;14(2):157–60
Rapid release of substance P and LH–RH from synaptosomes prepared from the medial basal hypothalamus and substantia nigra. Shu C, et al. **Peptides** 1989 Jan–Feb; 10(1):131–6
[H3–dopamine release in experimental mild cranio–cerebral trauma] Parkhomets VP, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):34–7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Partition and counter–current distribution of membrane particles in aqueous dextran–poly(ethylene glycol) two–phase systems with special reference to synaptosomes. Johansson G, et al. **J Biochem Biophys Methods** 1988 Dec; 17(4):285–95
Aplysia synaptosomes. I. Preparation and biochemical and morphological characterization of subcellular membrane fractions. Chin GJ, et al. **J Neurosci** 1989 Jan;9(1):38–48
The immunolysis, isolation, and properties of subpopulations of mammalian brain synaptosomes. Bradford HF, et al. **Neurochem Res** 1989 Apr;14(4):301–10

SYNCHROCYCLOTRONS see PARTICLE ACCELERATORS

SYNCHROTRONS see PARTICLE ACCELERATORS

SYNCOPE

Syncope in the elderly. Manolis AS. **Compr Ther** 1989 Jun; 15(6):31–42 (30 ref.)
Presyncope and syncope. How to find the cause and avoid staggering costs. von Dohlen TW, et al. **Postgrad Med** 1989 Aug;86(2):85–8, 91, 94–6 (13 ref.)
[Ambulatory electrocardiography in aged patients with syncope] Di Biase A, et al. **Minerva Med** 1989 Jun; 80(6):353–5 (Eng. Abstr.) **(Ita)**

BLOOD

Endocrine response to syncope in panic disorder. Nutt DJ. **Psychiatry Res** 1989 Jun;28(3):351–3

CHEMICALLY INDUCED

Isoproterenol induction of vasodepressor–type reaction in vasodepressor–prone persons. Waxman MB, et al. **Am J Cardiol** 1989 Jan 1;63(1):58–65

COMPLICATIONS

Acute type A hepatitis presenting with hypotension, bradycardia, and sinus arrest. Gordon SC, et al. **J Med Virol** 1989 Aug;28(4):219–22

DIAGNOSIS

Misleading presentation of epilepsy in elderly people. Godfrey JB. **Age Ageing** 1989 Jan;18(1):17–20
Diagnosis and natural history of syncope and the role of invasive electrophysiologic testing. Kapoor WN, et al. **Am J Cardiol** 1989 Mar 15;63(11):730–4 (40 ref.)
AIDS presenting as syncope. Ratner SJ. **Am J Med** 1988 Nov;85(5):742
Malignant vasovagal syncope: prolonged asystole provoked by head–up tilt. Case report and review of diagnosis, pathophysiology, and therapy. Maloney JD, et al. **Cleve Clin J Med** 1988 Nov–Dec;55(6):542–8 (32 ref.)
Evaluation of the patient with syncope [editorial] Scheinman M. **Cleve Clin J Med** 1988 Nov–Dec;55(6):503–4
Diagnostic value of longterm ambulatory ECG in patients with syncope, dizziness or palpitations. Ringqvist I, et al. **Clin Physiol** 1989 Feb;9(1):47–55
Syncope in children and adolescents. Pratt JL, et al. **Pediatr Emerg Care** 1989 Jun;5(2):80–2
A case of pallid syncope. Sagar JE, et al. **Practitioner** 1988 Apr 22;232(1447):440
[Difficulties in the differential diagnosis of primary and secondary (post–traumatic) subarachnoid hemorrhage] Kawiak W, et al. **Wiad Lek** 1988 Oct 15;41(20):1390–2 (Eng. Abstr.) **(Pol)**
[Fainting—a dramatic symptom often with good prognosis] Stenström G. **Lakartidningen** 1989 Jun 14;86(24):2302–5 **(Swe)**

EPIDEMIOLOGY

[Syncope: epidemiological characteristics of a hospital series] Garcia Civera R, et al. **Med Clin (Barc)** 1989 May 13; 92(18):684–90 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Carotid sinus hypersensitivity in patients with unexplained syncope: clinical, electrophysiologic, and long–term follow–up observations. Huang SK, et al. **Am Heart J** 1988 Oct;116(4):989–96
Variant angina provoked by isoproterenol: an unusual cause of syncope. Jones SE, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1628–30
Recurrent syncope of unknown origin diagnosed by ambulatory continuous loop ECG recording. Linzer M, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1632–4
The noninvasive evaluation of syncope of suspected cardiovascular origin. Strasberg B, et al. **Am Heart J** 1989 Jan;117(1):160–3
Pacemaker syndrome in activity–responsive VVI pacing. Liebert HP, et al. **Am J Cardiol** 1989 Jul 1;64(1):124–6
Ventricular fibrillation during rectal examination. Munter DW, et al. **Am J Emerg Med** 1989 Jan;7(1):57–60
Blood–injury phobia [letter] **Am J Psychiatry** 1989 Apr; 146(4):564–5
Simultaneous monitoring of electrocardiogram and arterial blood pressure during exercise–induced syncope in a patient with severe aortic stenosis—a case report. Yano K, et al. **Angiology** 1989 Feb;40(2):143–8
Dizziness and syncope in the elderly. Tonkin AM. **Aust Fam Physician** 1988 Aug;17(8):651, 654–6 (1 ref.)
Vasodepressor syncope induced by lower body negative pressure: possible relevance to +Gz–stress training—a case report. Hilton F, et al. **Aviat Space Environ Med** 1989 Jan; 60(1):61–3
Syncope associated with hair–grooming. Igarashi M, et al. **Brain Dev** 1988;10(4):249–51
Efficacy of empirical cardiac pacing in syncope of unknown cause. Rattes MF, et al. **Can Med Assoc J** 1989 Feb 15; 140(4):381–5
Head–up tilt table evaluation in a trained athlete with recurrent vaso–vagal syncope. Rechavia E, et al. **Chest** 1989 Mar;95(3):689–91
Holter monitoring findings in patients with syncope or presyncope. Liu PH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Feb;41(2):115–22
A rare case of recurrent vasodepressive attacks of 2–hours duration: analysis of the mechanism by muscle sympathetic nerve activity recording. Yatomi A, et al. **Clin Cardiol** 1989 Mar;12(3):164–8
Swallowing. An unusual cause of syncope. Kalloo AN, et al. **Dig Dis Sci** 1989 Jul;34(7):1117–20
Long–term follow–up of patients with unexplained syncope and negative electrophysiologic study. Raviele A, et al. **Eur Heart J** 1989 Feb;10(2):127–32
Syncope in the elderly. Valle BK, et al. **Heart Lung** 1989 Jul;18(4):426–9
Cough–induced syncope [clinical conference] Vincent JL, et al. **Intensive Care Med** 1988;14(6):591–4
An adolescent girl with headache and syncope. Smith MS, et al. **J Adolesc Health Care** 1989 Jan;10(1):54–6
Natural history of patients with unexplained syncope and a nondiagnostic electrophysiologic study. Kushner JA, et al. **J Am Coll Cardiol** 1989 Aug;14(2):391–6
Sudden collapse of a young, healthy man. **J Tenn Med Assoc** 1989 Aug;82(8):430–1
Heat symptom–complex with cold limbs in traditional Chinese medicine: observations and discussion. Yan YG, et al. **J Tradit Chin Med** 1988 Sep;8(3):213–5
Syncope in aortic stenosis during continuous electrocardiographic monitoring—a case report. Satoh M, et al. **Jpn Circ J** 1988 Dec;52(12):1415–8
Tilting towards a diagnosis in recurrent unexplained syncope. Fitzpatrick A, et al. **Lancet** 1989 Mar 25;1(8639):658–60
Evaluation of syncope from head and neck cancer. Papay FA, et al. **Laryngoscope** 1989 Apr;99(4):382–8
Nose pain and syncope in a patient with coronary artery disease. Soffer AD, et al. **Mo Med** 1987 Mar;84(3):141–2
The vexing prognosis of unexplained syncope (CT and Holter negative). A community hospital study. Spadis EV, et al. **N C Med J** 1989 Jan;50(1):6–8
Ventricular syncope: is the heart a sensory organ? [editorial] Abboud FM. **N Engl J Med** 1989 Feb 9;320(6):390–2
Provocation of bradycardia and hypotension by isoproterenol and upright posture in patients with unexplained syncope [see comments] Almquist A, et al. **N Engl J Med** 1989 Feb 9;320(6):346–51. **Comment in:** N Engl J Med 1989 Aug 3;321(5):331
Tilt–induced syncope [letter; comment] Fitzpatrick AP, et al. **N Engl J Med** 1989 Aug 3;321(5):331. **Comment on:** N Engl J Med 1989 Feb 9;320(6):346–51
Recurrent syncope [letter] Bhatt MC, et al. **N Y State J Med** 1988 Nov;88(11):605
Orthostatic hypotension. Khurana RK. **N Y State J Med** 1988 Nov;88(11):570–2
The usefulness of head–up tilt testing and hemodynamic investigations in the workup of syncope of unknown origin. Abi–Samra F, et al. **PACE** 1988 Aug;11(8):1202–14
Is DDD superior to VVI pacing in mixed carotid sinus syndrome? An acute and medium–term study. Brignole M, et al. **PACE** 1988 Nov;11(11 Pt 2):1902–10
Natural and unnatural history of patients with severe carotid sinus hypersensitivity: a preliminary study. Brignole M, et al. **PACE** 1988 Nov;11(11 Pt 2):1628–35
Asystole with syncope secondary to hyperventilation in three young athletes. Buja G, et al. **PACE** 1989 Mar;12(3):406–12
Cough syncope caused by sinus arrest in a patient with sick sinus syndrome. Choi YS, et al. **PACE** 1989 Jun;12(6):883–6
Pacemaker syndrome with AAI rate variable pacing: importance of atrioventricular conduction properties, medication, and pacemaker programmability. den Dulk K, et al. **PACE** 1988 Aug;11(8):1226–33
Carotid sinus hypersensitivity (CSH) is an uncommon but potentially curable cause leading to syncope [letter] Hori S. **PACE** 1989 Feb;12(2):398
Assessment of VVI diagnostic pacing mode in patients with cardioinhibitory carotid sinus syndrome. Menozzi C, et al. **PACE** 1988 Nov;11(11 Pt 2):1641–6
Upright body tilt for evaluation of patients with recurrent, unexplained syncope. Milstein S, et al. **PACE** 1989 Jan;12(1 Pt 1):117–24 (57 ref.)
Pacing rate increase as cause of syncope in a patient with severe cardiomyopathy. Moreira LF, et al. **PACE** 1989 Jul; 12(7 Pt 1):1027–9
Cardiac causes of syncope. Ruckman RN. **Pediatr Rev** 1987 Oct;9(4):101–8 (0 ref.)
Late stage Lyme borreliosis in children. Leff RD, et al. **South Med J** 1989 Aug;82(8):954–6
[Acquired QT–syndrome with syncopes in hypoparathyroidism] Hartmann–Hornberger F, et al. **Dtsch Med Wochenschr** 1988 Sep 30;113(39):1515–9 (Eng. Abstr.) **(Ger)**
[Definition and delineation of syncopes and drop attacks] Müller D. **Wien Klin Wochenschr** 1988 Nov 18; 100(22):741–2 (Eng. Abstr.) **(Ger)**
[Problems in the differential diagnosis of cerebral seizures] Müller D. **Z Arztl Fortbild (Jena)** 1988;82(20):989–92 **(Ger)**
[Evaluation of cardiovascular syncope] Sagie A, et al. **Harefuah** 1989 Jan 1;116(1):64–7 (34 ref.) **(Heb)**
[The glossopharyngeal nerve: a cardiological nerve] Cicogna R, et al. **Cardiologia** 1988 Jul;33(7):651–4 **(Ita)**
[A new reflex cardiovascular syndrome: recurrent vasodepressive syncope caused by lesions or tumors of the parapharyngeal space. Etiopathogenesis, clinical picture, differential diagnosis with carotid sinus syndrome and glossopharyngeal neuralgia–asystole syndrome. Therapy by intracranial resection of the 9th cranial nerve] Cicogna R, et al. **G Ital Cardiol** 1988 May;18(5):361–8 (Eng. Abstr.) **(Ita)**
[Syncope and cardiac arrest induced by stress. Presentation of 2 cases] Dalmasso M, et al. **Minerva Cardioangiol** 1988 Sep;36(9):461–3 (Eng. Abstr.) **(Ita)**
[Clinical assessment of syncopes] Casadei B, et al. **Recenti Prog Med** 1989 Feb;80(2):87–91 (36 ref.) (Eng. Abstr.) **(Ita)**
[A case of primary aldosteronism with syncopal attack as an initial diagnostic clue] Kodera K, et al. **Kokyu To Junkan** 1988 Jul;36(7):793–9 (Eng. Abstr.) **(Jpn)**
[Clinical features in 87 patients with syncope] Samukawa M, et al. **Kokyu To Junkan** 1988 Jul;36(7):773–7 (Eng. Abstr.) **(Jpn)**
[A case of syncope attack due to vagal reflex of rest angina] Ohyagi Y, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):883–6 (Eng. Abstr.) **(Jpn)**
[Syncope: the initial approach] de Vecchi RD, et al. **Rev Paul Med** 1988 Jan–Feb;106(1):9–13 (Eng. Abstr.) **(Por)**
[The significance of longitudinal Holter electrocardiogram monitoring in the differential diagnosis of syncope in elderly patients] Dukát A, et al. **Cesk Neurol Neurochir** 1989 Mar;52(2):98–102 (Eng. Abstr.) **(Slo)**
[Old age and antihypertensive therapy—causes of

nitroglycerin-induced syncope] Nilsson G, et al. **Lakartidningen** 1988 Dec 14;85(50):4423-5 (Eng. Abstr.) (Swe)

PHYSIOPATHOLOGY

Is the adaptation of right ventricular refractoriness to an abrupt increase in heart rate impaired in chronic heart failure? Denardo SJ, et al. **Am Heart J** 1989 Mar; 117(3):585-9

Long-term prognosis of patients undergoing electrophysiologic studies for syncope of unknown origin. Buss EB, et al. **Am J Cardiol** 1988 Dec 1;62(17):1186-91

Cardiac electrophysiologic and hemodynamic correlates of neurally mediated syncope. Chen MY, et al. **Am J Cardiol** 1989 Jan 1;63(1):66-72

Clinical implications of electrophysiology study findings in patients with chronic bifascicular block and syncope. Twidale N, et al. **Aust N Z J Med** 1988 Dec;18(7):841-7

Temporal lobe syncope: clinical variants. Jacome DE. **Clin Electroencephalogr** 1989 Jan;20(1):58-65

Syncope: neuroscience nursing assessment based on an understanding of underlying pathophysiological mechanisms. Boss BJ, et al. **J Neurosci Nurs** 1988 Aug; 20(4):245-52 (13 ref.)

A 12-year-old boy with reflex exertion syncope due to breath-holding. Chigyo Y, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):605-6

Carotid sinus hypersensitivity and the carotid sinus syndrome. Strasberg B, et al. **Prog Cardiovasc Dis** 1989 Mar-Apr; 31(5):379-91 (86 ref.)

[Electrophysiologic study of syncope. Prediction of results] Haissaguerre M, et al. **Presse Med** 1989 Feb 11;18(5):212-4, 219-20 (Eng. Abstr.) (Fre)

[Electrophysiologic study in patients with syncope of unknown cause] Gössinger H, et al. **Z Kardiol** 1988 Jul; 77(7):444-51 (Eng. Abstr.) (Ger)

[Syncope in the act of swallowing (swallowing syncope)] Ickrath O, et al. **Z Kardiol** 1988 Jul;77(7):452-5 (Eng. Abstr.) (Ger)

[The choice of stimulation mode in patients with cardioinhibitory or mixed carotid sinus hypersensitivity, with or without associated sinus dysfunction] Brignole M, et al. **G Ital Cardiol** 1989 Jan;19(1):28-34 (Eng. Abstr.) (Ita)

[Sudden death in underwater sports. A possible case prevented] Minutiello L, et al. **Minerva Cardioangiol** 1988 May;36(5):245-8 (Eng. Abstr.) (Ita)

[Valsalva's maneuver in vasodepressive syncope] Lagi A, et al. **Recenti Prog Med** 1988 Dec;79(12):506-8 (Eng. Abstr.) (Ita)

PREVENTION & CONTROL

'Dental sedation' [letter] Bourne JG. **Br Dent J** 1988 Nov 19;165(10):355

Ventricular and dual chamber pacing for treatment of carotid sinus syndrome. Brignole M, et al. **PACE** 1989 Apr;12(4 Pt 1):582-90

[Prevention of acute neurovascular disorders of the syncope type in flight personnel] Topuriia GI, et al. **Voen Med Zh** 1988 Jun;(6):48 (Rus)

PSYCHOLOGY

Specificity and psychosocial correlates of blood/injury fear and fainting. Kleinknecht RA. **Behav Res Ther** 1988; 26(4):303-9

Epidurals for labour, and fainting fathers [letter] Crosby ET, et al. **Can J Anaesth** 1989 Jul;36(4):482

SYNDACTYLIA

Moebius and Poland syndromes: a report of a case. Koroluk LD, et al. **Can Dent Assoc J** 1989 Aug;55(8):647-8

Poland's syndrome. A report of two cases. Babu KM, et al. **J Assoc Physicians India** 1988 Dec;36(12):731-3

Poland's syndrome: variable expression and associated anomalies. Wilson MR, et al. **J Hand Surg [Am]** 1988 Nov; 13(6):880-2

Limb anomalies in the CHARGE association. Meinecke P, et al. **J Med Genet** 1989 Mar;26(3):202-3

Syndactyly, ectodermal dysplasia, and cleft lip and palate [letter] Zlotogora J, et al. **J Med Genet** 1988 Jul;25(7):503

The occurrence of a fibro-osseous lesion and multiple dental anomalies in a patient with the Greig cephalopolysyndactyly syndrome. Pliskin ME, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):475-9

COMPLICATIONS

Foot-like congenital macrodactyly with syndactyly of the hand. Lauschke H. **J Hand Surg [Br]** 1988 Aug;13(3):353-5

[Causes of perceptible breast asymmetry and post-pubertal management] Rintala AE, et al. **Duodecim** 1989; 105(8):764-71 (Fin)

[Total congenital leukonychia] Patrizi A, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):547-9 (Ita)

[Poland syndrome and myasthenia gravis] Padua-Gabriel A, et al. **Rev Invest Clin** 1989 Jan-Mar;41(1):63-5 (Eng. Abstr.) (Spa)

ETIOLOGY

Real-time echo-Doppler Duplex Scanner in the evaluation of patients with Poland sequence. Merlob P, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):103-8

GENETICS

Recessive inheritance of apparent Apert syndrome with polysyndactyly? [letter] Sidhu SS, et al. **Am J Med Genet** 1988 Sep;31(1):179-80

Aarskog syndrome in Hungary [letter] Kiss P. **Clin Genet** 1989 Jul;36(1):73-4

Regional and physical mapping studies characterizing the Greig polysyndactyly 3;7 chromosome translocation, t(3;7)(p21.1;p13). Drabkin H, et al. **Genomics** 1989 May; 4(4):518-29

Auralcephalosyndactyly: a new hereditary craniosynostosis syndrome. Kurczynski TW, et al. **J Med Genet** 1988 Jul; 25(7):491-3

Deletion (12)(q15q21.2). Watson MS, et al. **J Med Genet** 1989 May;26(5):343-4

[Meyer-Schwickerath syndrome] Huet F, et al. **Bull Soc Ophtalmol Fr** 1988 Aug-Sep;88(8-9):1017-9 (Eng. Abstr.) (Fre)

[Expressivity of familial forms of Fraser syndrome] Lambert JC, et al. **J Genet Hum** 1989 Jun;37(2):119-26 (23 ref.) (Eng. Abstr.) (Fre)

[Syndactylia associated with multiple malformation syndromes. Observation of a new symptomatologic complex in 3 brothers] Garau A, et al. **Pediatr Med Chir** 1988 Mar-Apr;10(2):227-32 (Eng. Abstr.) (Ita)

PATHOLOGY

Fraser syndrome (cryptophthalmos-syndactyly syndrome): a review of eleven cases with postmortem findings. Boyd PA, et al. **Am J Med Genet** 1988 Sep;31(1):159-68

[Poland syndrome] Gunâ M. **Rev Pediatr Obstet Ginecol [Pediatr]** 1988 Jul-Sep; 37(3):267-9 (Rum)

RADIOGRAPHY

[Role of computerized tomography in Poland syndrome] Genovese MG, et al. **Minerva Chir** 1989 May 15; 44(9):1375-7 (Eng. Abstr.) (Ita)

SURGERY

Poland's anomaly. Natural history and long-term results of chest wall reconstruction in 33 patients. Seyfer AE, et al. **Ann Surg** 1988 Dec;208(6):776-82

Syndactyly correction. Colville J. **Br J Plast Surg** 1989 Jan; 42(1):12-6

Utility of the "seagull" flap for unoperated simple complete syndactyly in adults. Uzunismail A. **Br J Plast Surg** 1988 Sep;41(5):548-50

A complicated incomplete syndactylism. Morreale PF, et al. **J Foot Surg** 1988 Sep-Oct;27(5):428-32 (19 ref.)

Desyndactyly without skin graft: case presentation and literature review. Roh JA, et al. **J Foot Surg** 1988 Jul-Aug; 27(4):359-61

Syndactyly: a review of the factors which influence surgical treatment. Percival NJ, et al. **J Hand Surg [Br]** 1989 May; 14(2):196-200

Full thickness grafts taken from the plantar instep for syndactyly release. Zoltie N, et al. **J Hand Surg [Br]** 1989 May;14(2):201-3

Cleft lip and palate, lower lip pits, and limb deficiency defects [see comments] Küster W, et al. **J Med Genet** 1988 Aug; 25(8):565-7. **Comment in:** J Med Genet 1989 May;26(5):347-8

Surgical treatment of thoracic deformity in Poland's syndrome. Shamberger RC, et al. **J Pediatr Surg** 1989 Aug; 24(8):760-5; discussion 766

Reconstruction of congenital chest-wall deformities. Garcia VF, et al. **Surg Clin North Am** 1989 Oct;69(5):1103-18 (36 ref.)

[Results of surgical treatment of syndactylia of the hand] Bastian H, et al. **Beitr Orthop Traumatol** 1989 Jun; 36(6):267-74 (Eng. Abstr.) (Ger)

[Late results following surgical correction of syndactyly and symbrachydactyly] Deutinger M, et al. **Z Kinderchir** 1989 Feb;44(1):50-4 (Eng. Abstr.) (Ger)

SYNDROME see under **DISEASE**

SYNEPHRINE

PHARMACOLOGY

Activities of octopamine and synephrine stereoisomers on octopaminergic receptor subtypes in locust skeletal muscle. Evans PD, et al. **J Pharm Pharmacol** 1988 Dec; 40(12):855-61

THERAPEUTIC USE

Anti-shock effects of synthetic effective compositions of fructus aurantii immaturus. Experimental study and clinical observation. Zhao XW, et al. **Chin Med J [Engl]** 1989 Feb; 102(2):91-3

SYNGAMIASIS

EPIDEMIOLOGY

[3 cases of human syngamiasis in Guadeloupe] Cunnac M, et al. **Rev Pneumol Clin** 1988;44(3):140-2 (30 ref.) (Eng. Abstr.) (Fre)

RADIOGRAPHY

Syngamosis: two new Brazilian cases and evidence of a possible pulmonary cycle. Severo LC, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):467-8

SYNOSTOSIS

Congenital talonavicular synostosis. A review of the literature and a case report. Bonk JH, et al. **J Am Podiatr Med Assoc** 1989 Apr;79(4):186-9 (22 ref.)

[Clinical significance of congenital fusion of cervical vertebrae: a report of 87 cases] Yin HF, et al. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):75-7, 124 (Eng. Abstr.) (Chi)

COMPLICATIONS

Triquetral-lunate arthritis secondary to synostosis. Gross SC, et al. **J Hand Surg [Am]** 1989 Jan;14(1):95-102

[Hereditary syndromes accompanied by pronounced deformity of the spine] Semiachkina AN, et al. **Pediatriia** 1989;(1):104-5 (Rus)

CONGENITAL

[Congenital radio-ulnar synostosis in a boy with Williams-Beuren syndrome] Bzdúch V, et al. **Acta Chir Orthop Traumatol Cech** 1988 Oct;55(5):473-6 (Eng. Abstr.) (Slo)

EMBRYOLOGY

Radioulnar synostosis in Williams syndrome [letter] Bzdúch V, et al. **J Pediatr** 1989 Jul;115(1):165

ETHNOLOGY

Symphalangism in Hawaii: a study of three distinct ethnic pedigrees. Gaal SA, et al. **J Hand Surg [Am]** 1988 Sep; 13(5):783-7

GENETICS

Antley-Bixler syndrome from a prognostic perspective [letter] DeLozier-Blanchet CD. **Am J Med Genet** 1989 Feb; 32(2):262-3

Humero-radial synostosis with ulnar defects in sibs. Ramer JC, et al. **Am J Med Genet** 1989 Jun;33(2):176-9 (24 ref.)

[The os lunato-triquetrum] Förstner H. **Z Orthop** 1989 Mar-Apr;127(2):174-82 (Eng. Abstr.) (Ger)

PATHOLOGY

Skeletal dysplasia syndrome with progeroid appearance, characteristic facial and limb anomalies, multiple synostoses, and distinct skeletal changes: a variant example of the Lenz-Majewski syndrome. Chrzanowska KH, et al. **Am J Med Genet** 1989 Apr;32(4):470-4

Humero-radio-ulnar synostosis: a new case and review. Hersh JH, et al. **Am J Med Genet** 1989 Jun;33(2):170-1

RADIOGRAPHY

Congenital radio-ulnar synostosis. Results of eight cases and review. Hardin GT, et al. **Mo Med** 1986 Oct;83(10):684-6, 690 (11 ref.)

Congenital radioulnar synostosis. Radiological characteristics and hand function: case reports. Bauer M, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):251-5

SURGERY

Sagittal synostosis—its clinical significance and the results of three different methods of craniectomy [see comments] Kaiser G. **Childs Nerv Syst** 1988 Aug;4(4):223-30. **Comment in:** Childs Nerv Syst 1989 Apr;5(2):53

Keyhole craniectomy for correction of sagittal synostosis. McDermott MW, et al. **Childs Nerv Syst** 1989 Feb;5(1):50-1

Post-traumatic proximal radio-ulnar synostosis. Results of surgical treatment. Failla JM, et al. **J Bone Joint Surg [Am]** 1989 Sep;71(8):1208-13

[Congenital changes in the elbow joint] Banniza von Bazan U, et al. **Orthopade** 1988 Aug;17(4):347-52 (15 ref.) (Eng. Abstr.) (Ger)

[Contribution to the treatment of congenital radio-ulnar synostosis] Zwierzchowska D, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(5):409-11 (Eng. Abstr.) (Pol)

SYNOVIAL CYST

The natural history of ganglia in children. Rosson JW, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):707-8

Intra-osseous ganglion. Report of four cases and review of the literature. Pope TL Jr, et al. **Skeletal Radiol** 1989; 18(3):185-7 (13 ref.)

Synovial cyst at the craniovertebral junction. Miller JD, et al. **Surg Neurol** 1989 Mar;31(3):239-42

COMPLICATIONS

Popliteal artery occlusion by a popliteal (Baker's) cyst. Clarke JM, et al. **Eur J Vasc Surg** 1988 Feb;2(1):61–3

Giant synovial cyst causing deep venous thrombosis: brief report. Van Mourik JB, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):841

Ganglion cysts and carpal tunnel syndrome. Kerrigan JJ, et al. **J Hand Surg [Am]** 1988 Sep;13(5):763–5

Posterior interosseous nerve palsy caused by ganglions of the proximal radioulnar joint. McCollam SM, et al. **J Hand Surg [Am]** 1988 Sep;13(5):725–8

AAEE case report #15: ulnar neuropathy at or distal to the wrist. Olney RK, et al. **Muscle Nerve** 1988 Aug; 11(8):828–32

DIAGNOSIS

Synovial cysts in the lumbar spine: MR characteristics. Rosenblum J, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S94

Magnetic resonance imaging of ruptured Baker's cyst. Lieberman JM, et al. **Can Assoc Radiol J** 1988 Dec; 39(4):295–7

Benign cystic lesions of peripheral nerves. Høgh J. **Int Orthop** 1988;12(4):269–71

A synovial ganglion of the popliteus tendon simulating a parameniscal cyst. Two case reports [letter] Fowler AW. **J Bone Joint Surg [Am]** 1989 Mar;71(3):474–5

Intra-articular ganglion blocking extension of the knee: brief report. Yasuda K, et al. **J Bone Joint Surg [Br]** 1988 Nov; 70(5):837

Diagnosis of ganglion in Guyon's canal by magnetic resonance imaging. Subin GD, et al. **J Hand Surg [Am]** 1989 Jul;14(4):640–3

Diagnosis of synovial cysts in children by magnetic resonance imaging. Stannard MW, et al. **J Rheumatol** 1989 Apr; 16(4):540–1

A painful, swollen lower extremity. **J Tenn Med Assoc** 1989 Apr;82(4):198

Acute alcoholic myopathy and ruptured popliteal cysts. The pseudothrombophlebitis syndrome revisited. Lyon MG, et al. **Mo Med** 1986 Dec;83(12):797–800

Midline lumbar ganglion/synovial cyst mimicking an epidural tumor: case report and review of pathogenesis. Azzam CJ. **Neurosurgery** 1988 Aug;23(2):232–4 (35 ref.)

General case of the day. Giant osteoarthritic subchondral cyst with a pathologic fracture. Conway WF, et al. **Radiographics** 1988 Jul;8(4):818–22

Intraspinal synovial cysts: MR imaging. Jackson DE Jr, et al. **Radiology** 1989 Feb;170(2):527–30

Giant rheumatoid cyst of the calf simulating a soft tissue tumour. Kristiansen B, et al. **Scand J Rheumatol** 1988; 17(4):297–9

Case report 555: Intraosseous ganglion cyst of the distal end of tibia. Dungan DH, et al. **Skeletal Radiol** 1989;18(5):385–8

Magnetic resonance imaging of para-articular and ectopic ganglia. Feldman F, et al. **Skeletal Radiol** 1989;18(5):353–8

[Imitation of acute, deep venous thrombosis of the lower leg by a ruptured Baker's cyst] Hoffmann R, et al. **Vasa** 1989;18(1):74–7 (Eng. Abstr.) **(Ger)**

[Cysts of the popliteal cavity: use of echographic examination] Tricarico A, et al. **Chir Organi Mov** 1988 Jan–Mar;73(1):59–63 (Eng. Abstr.) **(Ita)**

[Hygroma of the popliteal region in children] Kushch NL, et al. **Ortop Travmatol Protez** 1989 Feb;(2):24–6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Medical treatment of synovial cysts of the zygapophyseal joints: four cases with long-term followup [letter] Mariette X, et al. **Arthritis Rheum** 1989 May;32(5):660–1

ETIOLOGY

Metaplastic synovial cyst after partial excision of nevus sebaceus. Stern DR, et al. **Am J Dermatopathol** 1988 Dec; 10(6):531–5

Bilateral Baker's cyst as the presenting symptom of paraneoplastic syndrome. Shapira A, et al. **Arch Orthop Trauma Surg** 1988;107(6):385–7

Development of a synovial cyst after arthroscopy of the shoulder. A brief note. Moran MC, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):127–9

Ruptured pyogenic Baker's cyst. Mannino M, et al. **J Natl Med Assoc** 1988 Sep;80(9):1018–9, 1022

Dorsal ganglion of the wrist—pathogenesis and biomechanics. Operative v. conservative treatment. de Villiers CM, et al. **S Afr Med J** 1989 Mar 4;75(5):214–6

[Popliteal cysts in rheumatoid arthritis] Mikolajewski J, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):281–6 (Eng. Abstr.) **(Pol)**

METABOLISM

SPECT using Bremsstrahlung to quantify 90Y uptake in Baker's cysts: its application in radiation synovectomy of the knee. Smith T, et al. **Eur J Nucl Med** 1988; 14(9–10):498–503

PATHOLOGY

Symptomatic intraspinal ganglion cyst of the nerve root sheath. Hemmati M, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S100

Ganglion of the temporomandibular joint. Case report and literature survey. el-Massry MA, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):67–70 (9 ref.)

An unusual presentation of Baker's cyst in a patient with rheumatoid arthritis [letter] Samanta A, et al. **Br J Rheumatol** 1988 Dec;27(6):500

Cystic myxomatous degeneration of the femoral vein. O'Neill JS, et al. **Eur J Vasc Surg** 1987 Oct;1(5):359–61

A surface ultrastructure study of ganglia and digital mucous cysts. Loder RT, et al. **J Hand Surg [Am]** 1988 Sep; 13(5):758–62

Clinical and chemical characterization of an adventitial popliteal cyst. Jay GD, et al. **J Vasc Surg** 1989 Mar; 9(3):448–51

Ganglions of the temporomandibular joint [letter] **Plast Reconstr Surg** 1989 Mar;83(3):574

[Synovial cysts and synovialomas of the lumbar spine. Histo-pathologic and neuro-surgical aspects apropos of 8 cases] Rousseaux P, et al. **Neurochirurgie** 1989;35(1):31–9 (50 ref.) (Eng. Abstr.) **(Fre)**

[A case of popliteal cyst of unusual dimensions] Galletti S, et al. **Chir Organi Mov** 1988 Jul–Sep;73(3):273–5 (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

Synovial cyst of the hip: an unusual cause of an inguinal mass. Forster BB, et al. **Can J Surg** 1989 Mar;32(2):133–4

An unusual intra-articular ganglion of the knee with interosseous extension. A case report. Kaempffe F, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):773–5

Post-traumatic spinal synovial cyst with spondylolysis: CT features. Awwad EE, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):334–7

Case report 551: Intraosseous ganglion of olecranon with vacuum phenomenon. Ehara S, et al. **Skeletal Radiol** 1989; 18(4):329–30

Gas-filled intraspinal synovial cyst. A case report. Fardon DF, et al. **Spine** 1989 Jan;14(1):127–9

Recurrent rupture of a popliteal cyst in a patient with chronic tophaceous gout. Rumfeld WR, et al. **Z Rheumatol** 1988 May–Jun;47(3):182–3

[Value of the scanner for diagnosing synovial cysts of the hip. Apropos of 2 cases. Review of the literature] Mainard D, et al. **Rev Chir Orthop** 1989;75(4):271–7 (52 ref.) (Eng. Abstr.) **(Fre)**

[Pseudophlebitis without popliteal cyst. Apropos of 7 case reports] Fournié B, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1019–21 **(Fre)**

[Arthrocele of the knee joint—a differential diagnosis to deep venous thrombosis] Krause P, et al. **Z Gesamte Inn Med** 1989 Mar 15;44(6):188–91 (29 ref.) (Eng. Abstr.) **(Ger)**

[Double-contrast arthrography in secondary popliteal cysts] Lupi L, et al. **Radiol Med (Torino)** 1989 May;77(5):461–5 (Eng. Abstr.) **(Ita)**

[Computed tomography of intraspinal ganglion cysts and synovial cysts: our cases and review of the literature] Terae S, et al. **Rinsho Hoshasen** 1988 Jun;33(6):691–6 (24 ref.) (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Triple phase bone scanning of an intraosseous ganglion: case report and discussion. Wardlaw JM, et al. **Clin Nucl Med** 1988 Sep;13(9):647–8

SURGERY

Results of our operations for carpal ganglion. Gurin J, et al. **Acta Chir Hung** 1988;29(3):299–304

Baker's cyst connected to popliteal artery cyst. Schroë H, et al. **Ann Vasc Surg** 1988 Oct;2(4):385–9

Ganglion cysts of the anterior cruciate ligament. A case report. Chang W, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall;48(2):182–6

Cryosurgical management of myxoid cysts. Böhler-Sommeregger K, et al. **J Dermatol Surg Oncol** 1988 Dec;14(12):1405–8

Presentation of a unique ganglionic cyst. Schram AJ, et al. **J Foot Surg** 1988 Nov–Dec;27(6):530–2 (13 ref.)

Excision of a ganglion. Ahmad N. **JPMA** 1989 Apr; 39(4):115–6

[Synovial cysts in regions of the limbs] Bieniawska M, et al. **Pathologica** 1988 Jul–Aug;80(1068):419–31 **(Fre)**

[Intraosseous ganglion in the phalanx of the ring finger. A case report] Hahn P. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):349–50 (Eng. Abstr.) **(Ger)**

[Dorsal ganglion of the wrist joint: a trivial, minor surgery intervention?] Meier U. **Helv Chir Acta** 1989 Jun; 56(1–2):73–7 (Eng. Abstr.) **(Ger)**

[Intraneural ganglion of the ulnar nerve. A case report] Hanis M, et al. **Unfallchirurg** 1988 Sep;91(9):405–7 (Eng. Abstr.) **(Ger)**

[Surgical treatment of popliteal cysts in patients with rheumatoid arthritis] Kubacki J, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):287–92 (Eng. Abstr.) **(Pol)**

THERAPY

Treatment of mucoid cysts of fingers and toes by injection of sclerosant. Audebert C. **Dermatol Clin** 1989 Jan; 7(1):179–81

SYNOVIAL FLUID

Inflammatory synovial fluid and absorbable suture strength. Barber FA, et al. **Arthroscopy** 1988;4(4):272–7

Quantification of knee joint fluid volume by MR imaging and CT using three-dimensional data processing. Heuck AF, et al. **J Comput Assist Tomogr** 1989 Mar–Apr; 13(2):287–93

[Post-traumatic synovial chylous effusion. Apropos of a case] Ristori JM, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep; 55(9):701–3 (22 ref.) **(Fre)**

ANALYSIS

Measurement of sulphated glycosaminoglycans and proteoglycan fragments in arthritic synovial fluid. Carroll G. **Ann Rheum Dis** 1989 Jan;48(1):17–24

Chondronectin in human synovial fluid. Carsons S, et al. **Ann Rheum Dis** 1988 Oct;47(10):797–800

Tumour necrosis factor in synovial exudates. Di Giovine FS, et al. **Ann Rheum Dis** 1988 Sep;47(9):768–72

Correlation between synovial neopterin and inflammatory activity in rheumatoid arthritis. Krause A, et al. **Ann Rheum Dis** 1989 Aug;48(8):636–40

Increased concentrations of proteoglycan components in the synovial fluids of patients with acute but not chronic joint disease. Ratcliffe A, et al. **Ann Rheum Dis** 1988 Oct; 47(10):826–32

Determination of synovial fluid hyaluronate concentration and polymerisation by high performance liquid chromatography. Saari H, et al. **Ann Rheum Dis** 1989 Jul; 48(7):565–70

Interleukin-2 inhibitor and measurement of interleukin-2 in synovial fluid of patients with rheumatoid arthritis [letter] Emery P, et al. **Arthritis Rheum** 1988 Dec;31(12):1590–1

The changes in human synovial fluid osmolality associated with traumatic or mechanical abnormalities of the knee. Newman PJ, et al. **Arthroscopy** 1988;4(3):179–81

Quantification of leukotriene B4 in synovial fluid by gas chromatography/tandem mass spectrometry. Dawson M, et al. **Biomed Environ Mass Spectrom** 1988 Sep;17(3):205–11

Rheumatoid factor has increased reactivity with IgG from synovial fluids of patients with rheumatoid arthritis and osteoarthritis. Carter SD, et al. **Br J Rheumatol** 1989 Jun; 28(3):233–8

Quantitative detection of class-specific rheumatoid factors using mouse monoclonal antibodies and the biotin/streptavidin enhancement system. Otten HG, et al. **Br J Rheumatol** 1989 Aug;28(4):310–6

Interleukin-2 secretion by synovial fluid lymphocytes in rheumatoid arthritis. Ruschen S, et al. **Br J Rheumatol** 1988 Oct;27(5):350–6

1H nuclear magnetic resonance investigation of synovial fluid components in osteoarthritis, rheumatoid arthritis and traumatic effusions. Williamson MP, et al. **Br J Rheumatol** 1989 Feb;28(1):23–7

Interleukin-6 in synovial fluid from patients with arthritis. Waage A, et al. **Clin Immunol Immunopathol** 1989 Mar; 50(3):394–8

Synovial oxygen partial pressure after experimental microtraumatic joint affection. Fengler H, et al. **Clin Rheumatol** 1988 Dec;7(4):459–64

Sequential clinical and synovial fluid changes associated with acute infectious arthritis in the horse. Tulamo RM, et al. **Equine Vet J** 1989 Sep;21(5):325–31

The influence of corticosteroids on sequential clinical and synovial fluid parameters in joints with acute infectious arthritis in the horse. Tulamo RM, et al. **Equine Vet J** 1989 Sep;21(5):332–7

Plasma and synovial fluid meclofenamic acid concentrations in patients with rheumatoid arthritis of the knee. Koup JR, et al. **Eur J Clin Pharmacol** 1988;35(2):199–202

The determination of dehydroascorbic acid and ascorbic acid in the serum and synovial fluid of patients with rheumatoid arthritis (RA). Lunec J, et al. **Free Radic Res Commun** 1985;1(1):31–9

Transsynovial kinetics of indoprofen in patients with rheumatoid arthritis and cyclooxygenase-inhibition in vitro. Kurowski M, et al. **Int J Clin Pharmacol Res** 1988; 8(4):287–93

Dendritic cell–lymphocyte clusters that form spontaneously in rheumatoid arthritis synovial effusions differ from clusters formed in human mixed leukocyte reactions. Tsai V, et al. **J Clin Invest** 1988 Nov;82(5):1731–45

Cytokines in chronic inflammatory arthritis. II. Granulocyte-macrophage colony-stimulating factor in rheumatoid synovial effusions. Xu WD, et al. **J Clin Invest** 1989 Mar;83(3):876–82

IL-6/IFN-beta 2 in synovial effusions of patients with rheumatoid arthritis and other arthritides. Identification of several isoforms and studies of cellular sources. Bhardwaj N, et al. **J Immunol** 1989 Oct 1;143(7):2153–9

Multiple forms of IFN-beta 2/IL-6 in serum and body fluids during acute bacterial infection. Helfgott DC, et al. **J Immunol** 1989 Feb 1;142(3):948–53

Isolation of interleukin 1 from joint fluids of patients with Lyme disease. Beck G, et al. **J Rheumatol** 1989 Jun; 16(6):800–6

Interleukin 2 and interleukin 2 inhibitors in human serum and synovial fluid. I. Characterization of the inhibitor and its mechanism of action. Smith MD, et al. **J Rheumatol** 1989 Feb;16(2):149–57

Densitometric determination of ketoprofen in synovial fluid.

Gliković L, et al. **Pharmazie** 1989 Apr;44(4):298–9
Crystal identification in human synovial fluids. Methods and interpretation. McCarty DJ. **Rheum Dis Clin North Am** 1988 Aug;14(2):253–67 (37 ref.)
DNA synthesis in CD4- and CD8-positive cells in synovial fluid of patients with reactive and rheumatoid arthritis. Nordström DC. **Rheumatol Int** 1989;8(6):269–72
Interleukin-6 (IL-6) in synovial fluid and serum of patients with rheumatic diseases. Swaak AJ, et al. **Scand J Rheumatol** 1988;17(6):469–74
[C-reactive protein in inflammatory articular diseases: comparison of concentrations in blood and synovial fluid] Delpuech P, et al. **Clin Biochem** 1989 Aug;22(4):305–8 (Eng. Abstr.) (Fre)
[Determination of the macromolecules in the extracellular matrix or of their antibodies in biological fluids in joint disease] Hartmann DJ, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):187–9 (Fre)
[Prognostic value of an interleukin 2 inhibitor present in the synovial fluid in rheumatoid polyarthritis] Miossec P, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):53–5 (Fre)
[Current state of studies of the synovial fluid] Schlapbach P. **Dtsch Med Wochenschr** 1988 Nov 18;113(46):1808–11 (37 ref.) (Ger)
[Possibilities of biochemical differentiation of reactive effusions of the knee joint] Dingerkus MD, et al. **Sportverletz Sportschaden** 1987 Jun;1(2):86–90 (Eng. Abstr.) (Ger)
[Cefotaxime levels in synovial fluid following intravenous administration] Härle A, et al. **Z Orthop** 1988 Jul–Aug; 126(4):425–30 (Eng. Abstr.) (Ger)
[Importance of determining the beta2-microglobulin level in biological fluids in patients with rheumatoid arthritis] Trusov VV, et al. **Ter Arkh** 1989;61(5):46–8 (Eng. Abstr.) (Rus)
[Determination of matrix components in the synovial fluid and blood—a novel approach to studying cartilage involvement in joint disease] Saxne T. **Nord Med** 1989; 104(6–7):184–6, 188 (Eng. Abstr.) (Swe)

CYTOLOGY

Synovial fluid eosinophilia in Lyme disease. Kay J, et al. **Arthritis Rheum** 1988 Nov;31(11):1384–9
Structure of T cell antigen receptor beta chain in synovial fluid cells from patients with rheumatoid arthritis. Keystone EC, et al. **Arthritis Rheum** 1988 Dec;31(12):1555–7
Very late activation antigen on synovial fluid T cells from patients with rheumatoid arthritis and other rheumatic diseases. Laffon A, et al. **Arthritis Rheum** 1989 Apr; 32(4):386–92
Synovial fluid characteristics and the lupus erythematosus cell phenomenon in drug-induced lupus. Findings in three patients and review of pertinent literature. Vivino FB, et al. **Arthritis Rheum** 1989 May;32(5):560–8
Cytological assessment of knee effusions. Older J, et al. **Arthroscopy** 1988;4(3):174–8
Elevation of PMN cytosolic free calcium and locomotion stimulated by novel peptides from IL-1-treated human synovial cell cultures. Watson ML, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1154–60
The enzymatic evaluation of procollagenase and collagenase inhibitors in crude biological media. Lefebvre V, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):355–61
Joint size influence on the leucocyte count of inflammatory synovial fluids. Pascual-Gómez E. **Br J Rheumatol** 1989 Feb;28(1):28–30
Synovial fluid lymphocytes in eosinophilic fasciitis. Campbell SM, et al. **J Rheumatol** 1989 Feb;16(2):239–44
Synovial lymphocyte responses to microbial antigens differentiate the arthritis of enteric reactive arthritis from the arthritis of inflammatory bowel disease. Ford DK, et al. **J Rheumatol** 1988 Aug;15(8):1239–42
Synovial fluid findings early in traumatic arthritis [letter] Freemont AJ, et al. **J Rheumatol** 1988;15(5):881–2
Synovial fluid T cells and 65 kD heat-shock protein [letter] **Lancet** 1988 Oct 8;2(8615):856–7
The adenylate cyclase of rheumatoid synovial fluid macrophages is more sensitive for dl-5E, 19,14-di dehydro-carbo-prostacyclin, a stable prostacyclin analogue, than for prostaglandin E2. Elliott GR, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Aug; 33(2):105–10
Evidence for activation of platelets in the synovial fluid from patients with rheumatoid arthritis. Endresen GK. **Rheumatol Int** 1989;9(1):19–24
Synovial dendritic cells and T cells in rheumatoid arthritis. Tsai V, et al. **Scand J Rheumatol Suppl** 1988;74:79–88 (35 ref.)
[The study of intra-articular infectious agents in reactive arthritis] Cunningham T, et al. **Ther Umsch** 1989 Apr; 46(4):241–4 (Eng. Abstr.) (Fre)
[Study of the synovial fluid in rheumatoid arthritis] Zakharova MM, et al. **Ter Arkh** 1988;60(7):79–84 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Changes in equine carpal joint synovial fluid in response to the injection of two local anesthetic agents. White KK, et al. **Cornell Vet** 1989 Jan;79(1):25–38
Effects of tiaprofenic acid on interleukin 1, phospholipase A2 activity, prostaglandins, neutral protease, and collagenase activity in rheumatoid synovial fluid. Vignon E, et al. **Semin Arthritis Rheum** 1989 Feb;18(3 Suppl 1):11–5

ENZYMOLOGY

Detection of granulocyte elastase specific IgG split products in rheumatoid synovial fluid. Eckle I, et al. **Adv Exp Med Biol** 1988;240:531–4
Lysosomal enzymes and granulocyte elastase in synovial fluid after multiple traumatic injuries. Hörl M, et al. **Adv Exp Med Biol** 1988;240:519–22
Inhibition of human non-pancreatic phospholipases A2 by retinoids and flavonoids. Mechanism of action. Fawzy AA, et al. **Agents Actions** 1988 Dec;25(3–4):394–400
A novel method for the sampling of synovial fluid in mice. Assay of a synovial lysosomal enzyme in zymosan-induced arthritis. Folliard F, et al. **Agents Actions** 1988 Aug; 25(1–2):139–45
Synovial fluid phospholipase A2s and inflammation. Gonzalez-Buritica H, et al. **Ann Rheum Dis** 1989 Apr; 48(4):267–9 (34 ref.)
Characterisation of soluble and cell associated phospholipase A2 from rheumatoid synovial fluid. Gonzalez-Buritica H, et al. **Ann Rheum Dis** 1989 Jul;48(7):557–64
A tissue kallikrein in the synovial fluid of patients with rheumatoid arthritis. Selwyn BM, et al. **Ann Rheum Dis** 1989 Feb;48(2):128–33
The elimination of injected superoxide dismutase from synovial fluid of the horse. Auer DE, et al. **Aust Vet J** 1989 Apr;66(4):117–9
Phospholipase A2 from human synovial fluid: purification and structural homology to the placental enzyme. Lai CY, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):488–93
The precursor of a metalloendopeptidase from human rheumatoid synovial fibroblasts. Purification and mechanisms of activation by endopeptidases and 4-aminophenylmercuric acetate. Okada Y, et al. **Biochem J** 1988 Sep 15;254(3):731–41
Activities of dipeptidyl peptidase II and dipeptidyl peptidase IV in synovial fluid from patients with rheumatoid arthritis and osteoarthritis. Gotoh H, et al. **Clin Chem** 1989 Jun; 35(6):1016–8
Degradation of type IX collagen by matrix metalloproteinase 3 (stromelysin) from human rheumatoid synovial cells. Okada Y, et al. **FEBS Lett** 1989 Feb 27;244(2):473–6
Amino acid composition and NH2-terminal amino acid sequence of human phospholipase A2 purified from rheumatoid synovial fluid. Hara S, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):326–8
Purification and characterization of extracellular phospholipase A2 from human synovial fluid in rheumatoid arthritis. Hara S, et al. **J Biochem (Tokyo)** 1989 Mar; 105(3):395–9
Multiple forms of phospholipase A2 in arthritic synovial fluid. Seilhamer JJ, et al. **J Biochem (Tokyo)** 1989 Jul; 106(1):38–42
Interaction of human rheumatoid synovial collagenase (matrix metalloproteinase 1) and stromelysin (matrix metalloproteinase 3) with human alpha 2-macroglobulin and chicken ovostatin. Binding kinetics and identification of matrix metalloproteinase cleavage sites. Enghild JJ, et al. **J Biol Chem** 1989 May 25;264(15):8779–85
Structure and properties of a human non-pancreatic phospholipase A2. Kramer RM, et al. **J Biol Chem** 1989 Apr 5;264(10):5768–75
Cloning and recombinant expression of phospholipase A2 present in rheumatoid arthritic synovial fluid. Seilhamer JJ, et al. **J Biol Chem** 1989 Apr 5;264(10):5335–8
Collagenase expression and endogenous activation in rabbit synovial fibroblasts stimulated by the calcium ionophore A23187. Unemori EN, et al. **J Biol Chem** 1988 Nov 5; 263(31):16252–9
Phospholipase A2 activity associated with synovial fluid cells. Pruzanski W, et al. **J Rheumatol** 1988;15(5):791–4
Secretory synovial fluid phospholipase A2 and its role in the pathogenesis of inflammation in arthritis. Pruzanski W, et al. **J Rheumatol** 1988 Nov;15(11):1601–3 (31 ref.)
Cleavage of collagen type X by human synovial collagenase and neutrophil elastase. Gadher SJ, et al. **Matrix** 1989 Mar; 9(2):109–15
[Inhibition of synovial collagenase by actinonin. Study of structure/activity relationship] Lelièvre Y, et al. **Pathol Biol (Paris)** 1989 Jan;37(1):43–6 (Eng. Abstr.) (Fre)
[Serum and synovial alkaline phosphatases in diffuse articular chondrocalcinosis] Mathieu P, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):197–9 (Fre)
[A study of acid deoxyribonuclease and acid phosphatase activity in rheumatoid synovial fluid] Ikeda M. **Igaku Kenkyu** 1988 Jan;58(1):32–41 (Eng. Abstr.) (Jpn)

IMMUNOLOGY

Immune-inflammatory response in infected arthroplasties. Santavirta S, et al. **Acta Orthop Scand** 1989 Feb;60(1):116–8
Spontaneously increased B cell growth factor and B cell differentiation factor activities in the synovial fluid of patients with rheumatoid arthritis. Mulero J, et al. **Ann Rheum Dis** 1989 May;48(5):400–5
Antikeratin antibodies in synovial fluid in rheumatoid arthritis. Kirstein H, et al. **APMIS** 1989 Feb;97(2):185–9
Another interpretation of the role of T helper cells in the rheumatoid synovium [editorial] Salmon M, et al. **Arthritis Rheum** 1989 Jun;32(6):795–6
Synovial T lymphocyte recognition of organisms that trigger reactive arthritis. Gaston JS, et al. **Clin Exp Immunol** 1989 Jun;76(3):348–53
Response of synovial fluid T cell clones to Yersinia enterocolitica antigens in patients with reactive Yersinia arthritis. Hermann E, et al. **Clin Exp Immunol** 1989 Mar; 75(3):365–70
Cytokines in synovial fluid: II. The presence of tumour necrosis factor and interferon. Hopkins SJ, et al. **Clin Exp Immunol** 1988 Jul;73(1):88–92
Cytokines in synovial fluid. I. The presence of biologically active and immunoreactive IL-1. Hopkins SJ, et al. **Clin Exp Immunol** 1988 Jun;72(3):422–7
Spontaneous and LPS-stimulated production of intracellular IL-1 beta by synovial macrophages in rheumatoid arthritis is inhibited by IFN-gamma. Ruschen S, et al. **Clin Exp Immunol** 1989 May;76(2):246–51
Pathogenesis of ovine lentivirus-induced arthritis: phenotypic evaluation of T lymphocytes in synovial fluid, synovium, and peripheral circulation. Kennedy-Stoskopf S, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):323–30
A defect in immunoregulatory synovial fluid T cells in Behçet's syndrome. Alcocer-Varela J, et al. **Clin Rheumatol** 1989 Mar;8(1):80–6
Persistent synovial lymphocyte responses to mumps and adenovirus antigens. Ford DK, et al. **J Rheumatol** 1988 Nov;15(11):1717–9
Rheumatoid adherent synovial cells produce B cell differentiation factor activity neutralizable by antibody to B cell stimulatory factor-2/interleukin 6. Harigai M, et al. **J Rheumatol** 1988 Nov;15(11):1616–22
Autocytotoxic cells in rheumatoid synovial fluids. Sugiyama E, et al. **J Rheumatol** 1989 Mar;16(3):276–9
Interleukin-2 secretion in vivo and in vitro by synovial fluid lymphocytes in rheumatoid arthritis. Warnatz H, et al. **Mol Immunol** 1988 Nov;25(11):1209–11
Activation of rheumatoid synovial mast cells. Role of IgE-associated antiglobulins. Gruber B. **Monogr Allergy** 1989;26:120–34 (59 ref.)
Yersinia antigens in synovial-fluid cells from patients with reactive arthritis [see comments] Granfors K, et al. **N Engl J Med** 1989 Jan 26;320(4):216–21. **Comment in:** N Engl J Med 1989 Jul 20;321(3):189–90
Isolation of CD4- CD8- mycobacteria-reactive T lymphocyte clones from rheumatoid arthritis synovial fluid. Holoshitz J, et al. **Nature** 1989 May 18;339(6221):226–9
Clonal heterogeneity of synovial fluid T lymphocytes from patients with rheumatoid arthritis. Duby AD, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6206–10
A functional study of purified CD4+ and CD8+ cells isolated from synovial fluid of patients with rheumatoid arthritis and other arthritides. Hovdenes J, et al. **Scand J Immunol** 1989 Jun;29(6):641–9
Expression of activation markers on CD4+ and CD8+ cells from synovial fluid, synovial tissue, and peripheral blood of patients with inflammatory arthritides. Hovdenes J, et al. **Scand J Immunol** 1989 Jun;29(6):631–9
Immunocytology of synovial fluid cells. A prognostic indicator in inflammatory arthritis? Poulter LW, et al. **Scand J Rheumatol** 1988;17(3):213–7
Neoantigenic group on Fc fragments in rheumatoid arthritis synovial fluids. Kolb G, et al. **Scand J Rheumatol Suppl** 1988;75:179–89
The role of inflammation and crystals in the pain of osteoarthritis. Schumacher R Jr. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):81–5 (39 ref.)
Epstein-Barr virus (EBV). VII. Established lymphoid cell line (IVPat-88) obtained from synovial fluid of a patient with aseptic arthritis. Pătrașcu IV, et al. **Virologie** 1989 Jan-Mar;40(1):35–8
[Detection of interleukin 1 activity in synovial fluid in rheumatoid arthritis and osteoarthritis] Witt M, et al. **Beitr Orthop Traumatol** 1988 Dec;35(12):612–6 (Eng. Abstr.) (Ger)
[A study on lymphocyte subsets of peripheral blood and synovial fluid using monoclonal antibodies in patients with rheumatoid arthritis] Kajino A. **Nippon Ika Daigaku Zasshi** 1989 Apr;56(2):179–86 (Eng. Abstr.) (Jpn)
[Opsonic and anti-opsonic effects of the synovial fluid in patients with rheumatoid arthritis based on its effect on the complement-dependent adhesion of neutrophils] Salikhov IG, et al. **Lab Delo** 1989;(2):9–12 (Eng. Abstr.) (Rus)

METABOLISM

Effects of diclofenac, indomethacin, tolfenamic acid and hydrocortisone on prostanoid production in healthy and rheumatic synovial cells. Moilanen E. **Agents Actions** 1989 Mar;26(3–4):342–9
Kinetics of non-steroidal anti-inflammatory drugs in synovial fluid. Graham GG. **Agents Actions Suppl** 1988;24:66–75 (16 ref.)
Is it mandatory to examine synovial fluids promptly after arthrocentesis? Kerolous G, et al. **Arthritis Rheum** 1989 Mar;32(3):271–8
Participation of synovial mast cells in intermittent hydrarthrosis [letter] Malone DG, et al. **Arthritis Rheum** 1989 Mar;32(3):357–8
Insulin-like growth factor stimulation of chondrocyte

proteoglycan synthesis by human synovial fluid. Schalkwijk J, et al. **Arthritis Rheum** 1989 Jan;32(1):66–71
Lipid microspherules in synovial fluid of patients with pigmented villonodular synovitis. Ugai K, et al. **Arthritis Rheum** 1988 Nov;31(11):1442–6
Extracellular appearance of calpain and calpastatin in the synovial fluid of the knee joint. Fukui I, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):559–66
Naproxen kinetics in synovial fluid of patients with osteoarthritis. Bruno R, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):41–4
Effect of diclofenac on prostaglandin E and hyaluronic acid production by human synovial fibroblasts stimulated with interleukin-1. Meyer FA, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):193–6
Tumour necrosis factor activity in joint fluids from rheumatoid arthritis patients. Neale ML, et al. **Br J Rheumatol** 1989 Apr;28(2):104–8
Plasma and synovial fluid lanthanides in rheumatoid arthritis: variations after intra-articular therapy. Cutolo M, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):243–6
The influence of intra-articular hyaluronic acid on PGE2 and cAMP of synovial fluid. Punzi L, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):247–50
Lipoprotein oxidation and induction of ferroxidase activity in stored human extracellular fluids. Winyard PG, et al. **Free Radic Res Commun** 1989;5(4–5):227–35
Effect of piroxicam therapy on granulocyte function and granulocyte elastase concentration in peripheral blood and synovial fluid of rheumatoid arthritis patients. Montecucco C, et al. **Inflammation** 1989 Apr;13(2):211–20
Edema-inducing activity of phospholipase A2 purified from human synovial fluid and inhibition by aristolochic acid. Vishwanath BS, et al. **Inflammation** 1988 Dec;12(6):549–61
Synovial fluid concentrations of interleukin-1 beta and proteoglycans are inversely related. Saxne T, et al. **J Autoimmun** 1988 Aug;1(4):373–80
Synovium as a source of interleukin 6 in vitro. Contribution to local and systemic manifestations of arthritis. Guerne PA, et al. **J Clin Invest** 1989 Feb;83(2):585–92
Active and latent forms of transforming growth factor beta activity in synovial effusions. Fava R, et al. **J Exp Med** 1989 Jan 1;169(1):291–6
Increased carbonyl content of proteins in synovial fluid from patients with rheumatoid arthritis. Chapman ML, et al. **J Rheumatol** 1989 Jan;16(1):15–8
Synovial fluid acidosis correlates with radiological joint destruction in rheumatoid arthritis knee joints. Geborek P, et al. **J Rheumatol** 1989 Apr;16(4):468–72
Altered formation of leukotriene B4 in vitro by synovial fluid neutrophils in rheumatoid arthritis. Poubelle PE, et al. **J Rheumatol** 1989 Mar;16(3):280–4
Cytokines in synovial fluid in rheumatoid arthritis [letter] Smith MD. **J Rheumatol** 1989 May;16(5):706–7
Interleukin 2 and interleukin 2 inhibitors in human serum and synovial fluid. II. Mitogenic stimulation, interleukin 2 production and interleukin 2 receptor expression in rheumatoid arthritis, psoriatic arthritis and Reiter's syndrome. Smith MD, et al. **J Rheumatol** 1989 Jul; 16(7):897–903
Multiple cytokine activities and loss of interleukin 2 inhibitor in synovial fluids of patients with rheumatoid arthritis. Yamagata N, et al. **J Rheumatol** 1988 Nov;15(11):1623–7
Immunoreactive tachykinins, calcitonin gene-related peptide and neuropeptide Y in human synovial fluid from inflamed knee joints. Larsson J, et al. **Neurosci Lett** 1989 May 22; 100(1–3):326–30
15-Hydroxy-eicosatetraenoic acid (15-HETE) inhibits carrageenan-induced experimental arthritis and reduces synovial fluid leukotriene B4 (LTB4). Fogh K, et al. **Prostaglandins** 1989 Feb;37(2):213–28
Slow-reacting substance of anaphylaxis (SRS-A) activity in the synovial fluids of rabbits with antigen-induced arthritis. Brum-Fernandes AJ, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar;63(3):471–4
Antigen-induced arthritis in rabbits: a suitable experimental model for the study of arachidonic acid metabolites in articular inflammatory processes. de Brum-Fernandes AJ, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 May–Jun; 43(3):142–5
Plasma and synovial fluid concentrations of sulphasalazine and two of its metabolites in rheumatoid arthritis. Farr M, et al. **Rheumatol Int** 1985;5(6):247–51
Autometallographic demonstration of gold uptake in cultured synovial fluid cells from patients with rheumatoid arthritis. Jacobsen E, et al. **Scand J Rheumatol** 1989;18(3):161–4
Plasma proteins in synovial fluids of normal human joints. Weinberger A, et al. **Semin Arthritis Rheum** 1989 Aug; 19(1):66–76 (44 ref.)
Integrated plasma and synovial fluid pharmacokinetics of tenoxicam in patients with rheumatoid arthritis and osteoarthritis: factors determining the synovial fluid/plasma distribution ratio. Hinderling PH, et al. **Ther Drug Monit** 1988;10(3):250–60
[Synovial fluid changes in joint diseases] Arai M. **Ryumachi** 1989 Apr;29(2):143–9 (51 ref.) (Jpn)
[Importance of beta-glucuronidase activity and glycosaminoglycan concentration in synovial fluid in patients with rheumatoid arthritis in estimating local inflammation] Astakhova TA, et al. **Ter Arkh** 1989; 61(5):55–7 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Blood culture bottles improve microbe isolation rate from joint fluids [letter] von Essen R. **Am J Clin Pathol** 1989 Apr;91(4):501–3
Cultivation of Borrelia burgdorferi from joint fluid three months after treatment of facial palsy due to Lyme borreliosis [letter] Schmidli J, et al. **J Infect Dis** 1988 Oct; 158(4):905–6

PATHOLOGY

Lymphoid dendritic cells in rheumatoid tissue and normal blood—characteristics and functions. Waalen K, et al. **Adv Exp Med Biol** 1988;237:751–5
Acute monoarthritis associated with intracellular positively birefringent Maltese cross appearing spherules. Gardner GC, et al. **J Rheumatol** 1989 Mar;16(3):394–6 (14 ref.)
Sickled cells in synovial fluid: clue to unsuspected hemoglobinopathy. Glickstein SL, et al. **South Med J** 1989 Jun;82(6):769–71 (12 ref.)

PHYSIOLOGY

The influence of synovial fluids from patients with rheumatic diseases on chick embryo fibroblasts. Partsch G, et al. **Int J Tissue React** 1988;10(2):67–77
Boundary conditions at the cartilage-synovial fluid interface for joint lubrication and theoretical verifications. Hou JS, et al. **J Biomech Eng** 1989 Feb;111(1):78–87
Oligolamellar lubrication of joints by surface active phospholipid. Hills BA. **J Rheumatol** 1989 Jan;16(1):82–91
Rheumatoid factors and physiology of synovial joints. Ahlqvist J. **Scand J Rheumatol Suppl** 1988;75:278–83
[The synovial medium of the joint in Perthes disease (echographic research)] Dol'nitskiĭ OV, et al. **Ortop Travmatol Protez** 1988 Oct;(10):1–6 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Suppression of glycosaminoglycan synthesis by articular cartilage, but not of hyaluronic acid synthesis by synovium, after exposure to radiation. Hugenberg ST, et al. **Arthritis Rheum** 1989 Apr;32(4):468–74

SYNOVIAL MEMBRANE

Arthroscopy and synovial hemangioma or giant cell tumour of the knee. Juhl M, et al. **Arch Orthop Trauma Surg** 1989; 108(4):250–2
The clinical use of immunohistopathology [editorial] Hedfors E. **Br J Rheumatol** 1989 Aug;28(4):278–80
Synovial osteochondroma of the knee in Tc-99m HMDP bone imaging. Shih WJ, et al. **Clin Nucl Med** 1988 Aug; 13(8):617–8
Scintigraphic presentation of hip joint synovial chondromatosis. Zwas ST, et al. **Eur J Nucl Med** 1988; 14(7–8):411–3
Synovial chondromatosis of the temporomandibular joint. Review of the literature and case report. Lustmann J, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):90–4 (43 ref.)
Synovial chondromatosis. Maurice H, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):807–11
Familial synovial chondromatosis: brief report. Steinberg GG, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):144–5
Synovial chondromatosis of the temporomandibular joint with intracranial extension. Case report. Daspit CP, et al. **J Neurosurg** 1989 Jan;70(1):121–3
Characterization of the translocation between chromosomes X and 18 in human synovial sarcomas. Reeves BR, et al. **Oncogene** 1989 Mar;4(3):373–8
Chronic metastatic arthritis as the first symptom of lung adenocarcinoma. Alvarez Lario B, et al. **Scand J Rheumatol** 1989;18(3):169–70
[Synovial osteochondromatosis of the elbow in a 60-year-old woman] Meziane A, et al. **Acta Orthop Belg** 1988; 54(3):363–5 (Eng. Abstr.) (Fre)
[Synovial amyloidosis disclosing myeloma. Clinical, arthroscopic and immunochemical aspects] Krause E, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):689–92 (20 ref.) (Fre)
[The synoviorthesis] Kchir MM, et al. **Tunis Med** 1989 Mar; 67(3):145–9 (42 ref.) (Fre)
[Ultrastructural cytochemistry of epithelial gland-like component in synovial sarcoma] Mii Y, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):25–32 (Eng. Abstr.) (Jpn)

ABNORMALITIES

Plica synovialis mediopatellaris. Brabants K, et al. **Acta Orthop Belg** 1988;54(4):474–6
[The mediopatellar synovial fold syndrome and osteochondropathy of the femoral condyle] Beloenko ED. **Ortop Travmatol Protez** 1988 Oct;(10):50–1 (Rus)

ANALYSIS

Amyloid localized to tenosynovium at carpal tunnel release. Natural history of 124 cases. Kyle RA, et al. **Am J Clin Pathol** 1989 Apr;91(4):393–7 (14 ref.)
Presence of platelet glycoproteins Ib and IIb-IIIa in inflammatory and noninflammatory synovium. Konttinen YT, et al. **J Rheumatol** 1989 May;16(5):578–84
[Expression of the interleukin-2 receptor in T lymphocytes of the rheumatoid synovial membrane] Ballardini P, et al. **Boll Soc Ital Biol Sper** 1989 Jan;65(1):85–7 (Eng. Abstr.) (Ita)

BLOOD SUPPLY

Direct assessment of synovial blood flow and its relation to induced hydrostatic pressure changes. Geborek P, et al. **Ann Rheum Dis** 1989 Apr;48(4):281–6
Fenestration of tenosynovial capillaries. Neal C, et al. **Br J Rheumatol** 1989 Feb;28(1):31–3
[Binding studies with Ulex europaeus agglutinin I (UEA-I) of the vascular endothelium of the synovial membrane] Zachäbitz A, et al. **Z Orthop** 1988 Sep–Oct;126(5):579–81 (Eng. Abstr.) (Ger)
[Vasculitis with anemia infarcts of the villi of the synovial membrane in rheumatoid arthritis] Geiler G, et al. **Z Rheumatol** 1989 Mar–Apr;48(2):63–7 (Eng. Abstr.) (Ger)

CYTOLOGY

Leukocyte migration in synovial tissue. Leukocyte distribution, orientation, and migratory pattern after immune complex deposition in rabbit knee joints. Thomsen P, et al. **Am J Pathol** 1989 Jun;134(6):1213–26
Synovial macrophage response to aluminium oxide ceramic and cobalt-chrome alloy wear particles in rats. Howie DW, et al. **Biomaterials** 1988 Sep;9(5):442–8
Decreased production of suppressive-B-cell factor by synovial membrane B-lymphocytes in rheumatoid arthritis. Fisko EJ, et al. **Clin Exp Rheumatol** 1988 Jul–Sep; 6(3):239–45
Cartilaginous transdifferentiation of rat tenosynovial cells under the influence of bone morphogenetic protein in tissue culture. Sato K, et al. **Clin Orthop** 1988 Nov;(236):233–9
HIG-82: an established cell line from rabbit periarticular soft tissue, which retains the "activatable" phenotype. Georgescu HI, et al. **In Vitro Cell Dev Biol** 1988 Oct; 24(10):1015–22
Synovial fibroblasts. Konttinen YT, et al. **Scand J Rheumatol Suppl** 1988;76:95–103 (16 ref.)
[Effects of unsaponifiable extracts of avocado/soy beans (PIAS) on the production of collagen by cultures of synoviocytes, articular chondrocytes and skin fibroblasts] Mauviel A, et al. **Rev Rhum Mal Osteoartic** 1989 Feb; 56(2):207–11 (Fre)

DRUG EFFECTS

Inflammatory cytokines induce synthesis and secretion of gro protein and a neutrophil chemotactic factor but not beta 2-microglobulin in human synovial cells and fibroblasts. Golds EE, et al. **Biochem J** 1989 Apr 15;259(2):585–8
Increased vascular permeability and polymorphonuclear leucocyte accumulation in vivo in response to recombinant cytokines and supernatant from cultures of human synovial cells treated with interleukin 1. Watson ML, et al. **Br J Exp Pathol** 1989 Feb;70(1):93–101
Characteristics of human synovial fibroblast activation by IL-1 beta and TNF alpha. Gitter BD, et al. **Immunology** 1989 Feb;66(2):196–200
Effects of an in vivo D-penicillamine treatment on glycosaminoglycan biosynthesis by synovial fibroblasts from arthritic-rendered rabbits. Legendre P, et al. **Int J Tissue React** 1988;10(3):121–32

ENZYMOLOGY

Multicentric reticulohistiocytosis. Report of three cases with the evaluation of tissue proteinase activity. Lotti T, et al. **Am J Dermatopathol** 1988 Dec;10(6):497–504
Immunolocalization of matrix metalloproteinase 3 (stromelysin) in rheumatoid synoviocytes (B cells): correlation with rheumatoid arthritis. Okada Y, et al. **Ann Rheum Dis** 1989 Aug;48(8):645–53
Evidence that human rheumatoid synovial matrix metalloproteinase 3 is an endogenous activator of procollagenase. Ito A, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):211–6
Interleukin-1 stimulation of phospholipase activity in rat synovial fibroblasts. Possible regulation by cyclooxygenase products. Godfrey RW, et al. **Arthritis Rheum** 1988 Nov; 31(11):1421–8
Phorbol diesters regulate expression of the membrane neutral metalloendopeptidase (EC 3.4.24.11) in rabbit synovial fibroblasts and mammary epithelial cells. Werb Z, et al. **J Biol Chem** 1989 Jun 5;264(16):9111–3
DNA synthesis in prolyl 4-hydroxylase positive fibroblasts in situ in synovial tissue. An autoradiography-immunoperoxidase double labeling study. Konttinen YT, et al. **J Rheumatol** 1989 Mar;16(3):339–45
In vivo effects of antirheumatic drugs on neutral collagenolytic proteases in human rheumatoid arthritis cartilage and synovium. Martel-Pelletier J, et al. **J Rheumatol** 1988 Aug;15(8):1198–204
Autocrine induction of collagenase by serum amyloid A-like and beta 2-microglobulin-like proteins. Brinckerhoff CE, et al. **Science** 1989 Feb 3;243(4891):655–7

IMMUNOLOGY

Synovial T cells detect polymorphism of class II HLA antigens. Gaston JS, et al. **Adv Exp Med Biol** 1988; 237:387–92

Immunohistochemical localization of HTLV-I p19- and p24-related antigens in synovial joints of patients with rheumatoid arthritis. Ziegler B, et al. **Am J Pathol** 1989 Jul;135(1):1–5

IL-6 is the principal factor produced by synovia of patients with rheumatoid arthritis that induces B-lymphocytes to secrete immunoglobulins. Nawata Y, et al. **Ann N Y Acad Sci** 1989;557:230–8, discussion 239

Immunohistological features of synovitis in ankylosing spondylitis: a comparison with rheumatoid arthritis. Kidd BL, et al. **Ann Rheum Dis** 1989 Feb;48(2):92–8

Secretion of antibodies to types I and II collagen by synovial tissue cells in patients with rheumatoid arthritis. Tarkowski A, et al. **Arthritis Rheum** 1989 Sep;32(9):1087–92

Immunophotometric quantification of extravascular immunoglobulin deposits in the synovial membrane of patients with osteoarthritis and rheumatoid arthritis. Fritz P, et al. **Basic Appl Histochem** 1988;32(4):455–69

In vivo and in vitro evidence of cell recovery from complement attack in rheumatoid synovium. Morgan BP, et al. **Clin Exp Immunol** 1988 Sep;73(3):467–72

Pathogenesis of ovine lentivirus-induced arthritis: phenotypic evaluation of T lymphocytes in synovial fluid, synovium, and peripheral circulation. Kennedy-Stoskopf S, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):323–30

The antigen receptor of an autoreactive T-cell clone from human rheumatic synovia. Hinkkanen AE, et al. **Immunogenetics** 1989;29(2):131–3

Neutrophil stimulation by recombinant cytokines and a factor produced by IL-1-treated human synovial cell cultures. Watson ML, et al. **Immunology** 1988 Dec;65(4):567–72

Intercellular adhesion molecule-1 (ICAM-1) is involved in the cytolytic T lymphocyte interaction with a human synovial cell line. Mentzer SJ, et al. **J Cell Physiol** 1988 Oct;137(1):173–8

Preincubation of human synovial cells with IL-1 modulates prostaglandin E2 release in response to bradykinin. Bathon JM, et al. **J Immunol** 1989 Jul 15;143(2):579–86

Inhibition of IFN-gamma-induced Ia antigen expression on synovial fibroblasts by IL-1. Johnson WJ, et al. **J Immunol** 1989 Sep 1;143(5):1614–8

Platelet-derived growth factor and IL-1 interactions in rheumatoid arthritis. Regulation of synoviocyte proliferation, prostaglandin production, and collagenase transcription. Kumkumian GK, et al. **J Immunol** 1989 Aug 1;143(3):833–7

Neuropeptides in synovium of patients with rheumatoid arthritis and osteoarthritis. Grönblad M, et al. **J Rheumatol** 1988 Dec;15(12):1807–10

Persistence of collagen type II-specific T-cell clones in the synovial membrane of a patient with rheumatoid arthritis. Londei M, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(2):636–40

Expression of activation markers on CD4+ and CD8+ cells from synovial fluid, synovial tissue, and peripheral blood of patients with inflammatory arthritides. Hovdenes J, et al. **Scand J Immunol** 1989 Jun;29(6):631–9

Immunoregulatory lymphokines in rheumatoid joints. III. B cell growth promoting activity of cells eluted from rheumatoid synovial tissue. Hovdenes J, et al. **Scand J Rheumatol** 1988;17(5):371–8

Synovial expression of HLA-B27 related antigens in ankylosing spondylitis. Husby G, et al. **Scand J Rheumatol Suppl** 1988;76:23–5

The role of inflammation and crystals in the pain of osteoarthritis. Schumacher R Jr. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):81–5 (39 ref.)

INJURIES

Rupture of the knee capsule from articular hyperpressure. Experiments in cadaver knees. Burgaard P, et al. **Acta Orthop Scand** 1988 Dec;59(6):692–4

INNERVATION

Pain fibers in osteoarthritis: a review. Konttinen YT, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):35–40 (26 ref.)

METABOLISM

Glycosaminoglycan polysulfate-induced stimulation of hyaluronic acid synthesis in rabbit knee synovial membrane: involvement of binding protein and calcium ion. Nishikawa H, et al. **Arch Biochem Biophys** 1988 Oct;266(1):201–9

Increased expression of p150,95 and CR3 leukocyte adhesion molecules by mononuclear phagocytes in rheumatoid synovial membranes. Comparison with osteoarthritic and normal synovial membranes. Allen CA, et al. **Arthritis Rheum** 1989 Aug;32(8):947–54

Increased expression of HLA-DQ antigens by interstitial cells and endothelium in the synovial membrane of rheumatoid arthritis patients compared with reactive arthritis patients. Barkley D, et al. **Arthritis Rheum** 1989 Aug;32(8):955–63

Stimulation of the hyaluronic acid levels of human synovial fibroblasts by recombinant human tumor necrosis factor alpha, tumor necrosis factor beta (lymphotoxin), interleukin-1 alpha, and interleukin-1 beta. Butler DM, et al. **Arthritis Rheum** 1988 Oct;31(10):1281–9

Synovial fibroblast-like cells synthesize seven proteins of the complement system. Katz Y, et al. **Arthritis Rheum** 1988 Nov;31(11):1365–70

Some recombinant human cytokines stimulate glycosaminoglycan synthesis in human synovial fibroblast cultures and inhibit it in human articular cartilage cultures. Yaron I, et al. **Arthritis Rheum** 1989 Feb;32(2):173–80

The small dermatan sulphate proteoglycans synthesized by fibroblasts derived from skin, synovium and gingiva show tissue-related heterogeneity. Larjava H, et al. **Biochem J** 1988 Nov 15;256(1):35–40

Characterisation of chondrocyte activation in response to cytokines synthesised by a synovial cell line. Sung K, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):148–56

Insulin metabolism and action on amino acid uptake in human synoviocytes. Modifications induced by rheumatoid disease. Aussel C, et al. **Cell Mol Biol** 1988;34(5):539–51

Constitutive production of interleukin 6/B cell stimulatory factor-2 from inflammatory synovium. Miyasaka N, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):238–47

Cytokine production in culture by cells isolated from the synovial membrane. Brennan FM, et al. **J Autoimmun** 1989 Jun;2 Suppl:177–86

Synovial localization of tumor necrosis factor in patients with rheumatoid arthritis. Husby G, et al. **J Autoimmun** 1988 Aug;1(4):363–71

Neutral amino acid transport in human synovial cells: substrate specificity of adaptative regulation and transinhibition. Aussel C, et al. **J Cell Physiol** 1989 Oct; 141(1):103–10

Stimulation of human synovial fibroblast DNA synthesis by platelet-derived growth factor and fibroblast growth factor. Differences to the activation by IL-1. Butler DM, et al. **J Immunol** 1989 May 1;142(9):3098–103

Transforming growth factor-beta production by synovial tissues from rheumatoid patients and streptococcal cell wall arthritic rats. Studies on secretion by synovial fibroblast-like cells and immunohistologic localization. Lafyatis R, et al. **J Immunol** 1989 Aug 15;143(4):1142–8

Plasminogen activator and prostaglandin E2 levels in human synovial fibroblasts. Differential stimulation by synovial activator and other cytokines. Leizer T, et al. **J Immunol** 1989 Aug 1;143(3):971–8

Production of catabolin by synovium from an experimental model of osteoarthritis. Sabiston CP, et al. **J Orthop Res** 1989;7(4):519–29

Modulation of cartilage proteoglycan synthesis by osteoarthritic synovium. Appel AM, et al. **J Rheumatol** 1988 Oct;15(10):1515–24

Stimulation of human synovial fibroblast DNA synthesis by recombinant human cytokines. Butler DM, et al. **J Rheumatol** 1988 Oct;15(10):1463–70

In vitro effect of select nonsteroidal antiinflammatory drugs on the synthesis and activity of anabolic regulatory factors produced by osteoarthritic and rheumatoid synovial tissue. Herman JH, et al. **J Rheumatol** 1989 Jan;16(1):75–81

Superoxide radical generation by inflamed human synovium after hypoxia [letter] Allen RE, et al. **Lancet** 1989 Jul 29; 2(8657):282–3

Inhibitory effect of TNF alpha antibodies on synovial cell interleukin-1 production in rheumatoid arthritis. Brennan FM, et al. **Lancet** 1989 Jul 29;2(8657):244–7

Follow-up study of lipid peroxides, superoxide dismutase and glutathione peroxidase in the synovial membrane, serum and liver of young and old mice with collagen-induced arthritis. Kasama T, et al. **Life Sci** 1988;43(23):1887–96

The degradation of collagen in pig synovium in vitro and the effect of colchicine. Fell HB, et al. **Matrix** 1989 Mar; 9(2):116–26

Glucocorticoid receptors in human synovial tissue and relative receptor affinities of glucocorticoid-21-esters. Pörtner M, et al. **Pharm Res** 1988 Oct;5(10):623–7

Identity of the E-aeries prostaglandin produced by equine chondrocytes and synovial cells in response to a variety of stimuli. May SA, et al. **Res Vet Sci** 1989 Jan;46(1):54–7

Stimulation of interleukin 6-like B-cell differentiation factor production in human adherent synovial cells by recombinant interleukin 1. Harigai M, et al. **Scand J Immunol** 1989 Mar;29(3):289–97

Mapping of synovial fibroblast proteins by high resolution two-dimensional polyacrylamide electrophoresis. Glennås A, et al. **Scand J Rheumatol Suppl** 1988;76:105–9

[Trans-synovial kinetics of tiaprofenic acid] Kurowski M. **Z Rheumatol** 1988 May-Jun;47(3):173–6 (Eng. Abstr.) **(Ger)**

MICROBIOLOGY

Ultrastructure of Borrelia burgdorferi in tissues of patients with Lyme disease. Hulínská D, et al. **J Basic Microbiol** 1989;29(2):73–83

Case report of synovial sporotrichosis involving both wrists. Wilson SD, et al. **J Med Vet Mycol** 1988;26(5):307–9

Comparison of aerobic culturette, synovial membrane biopsy, and blood culture medium in detection of canine bacterial arthritis. Montgomery RD, et al. **Vet Surg** 1989 Jul-Aug; 18(4):300–3

PATHOLOGY

Coexpression of cytokeratins and vimentin in hyaluronic acid-rich tissues. Kasper M, et al. **Acta Histochem (Jena)** 1988;84(1):107–8

Acute non-infectious arthritis of the hip in rheumatoid arthritis: synovial membrane findings. Wohlgethan JR, et al. **Ann Rheum Dis** 1989 Mar;48(3):250–3

Phenotypic analysis of synovial tissue and peripheral blood lymphocytes isolated from patients with rheumatoid arthritis. Cush JJ, et al. **Arthritis Rheum** 1988 Oct; 31(10):1230–8

Changes in lymphocyte infiltration of the synovial membrane and the clinical course of rheumatoid arthritis. Rooney M, et al. **Arthritis Rheum** 1989 Apr;32(4):361–9

Synovial chondromatosis of the temporomandibular joint. Von Arx DP, et al. **Br J Oral Maxillofac Surg** 1988 Aug; 26(4):297–305 (38 ref.)

Immunohistological features in the synovium obtained from clinically uninvolved knee joints of patients with rheumatoid arthritis. Soden M, et al. **Br J Rheumatol** 1989 Aug;28(4):287–92

Synovial plica syndrome of the knee and related anatomy. Dai SY, et al. **Chin Med J [Engl]** 1988 Jul;101(7):529–32

Multiple synovial swellings in BT leprosy. A case report. Chattopadhyay SP, et al. **Indian J Lepr** 1989 Apr; 61(2):263–5

The plica syndrome. O'Dwyer KJ, et al. **Injury** 1988 Sep; 19(5):350–2

Synovial chondromatosis of the temporomandibular joint. Report of a case and review of the literature. Forssell K, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):237–41 (49 ref.)

Synovial chondromatosis of the temporomandibular joint. Jian XC, et al. **Int J Oral Maxillofac Surg** 1988 Oct; 17(5):307–9

Carpal tunnel syndrome. Anatomical and clinical correlations and morphological and ultrastructural aspects of the tenosynovial sheath. Scelsi R, et al. **Ital J Orthop Traumatol** 1989 Mar;15(1):75–80

Synovial sarcoma associated with total hip replacement. A case report. Lamovec J, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1558–60 (20 ref.)

Anchorage-independent growth of synoviocytes from arthritic and normal joints. Stimulation by exogenous platelet-derived growth factor and inhibition by transforming growth factor-beta and retinoids. Lafyatis R, et al. **J Clin Invest** 1989 Apr;83(4):1267–76

Representative sample of rheumatoid synovium: a morphometric study. Kennedy TD, et al. **J Clin Pathol** 1988 Aug;41(8):841–6

Morphometric comparison of synovium from patients with osteoarthritis and rheumatoid arthritis. Kennedy TD, et al. **J Clin Pathol** 1988 Aug;41(8):847–52

Synovial osteochondromatosis of the shoulder: MR findings. Tuckman G, et al. **J Comput Assist Tomogr** 1989 Mar-Apr; 13(2):360–1

Pigmented villonodular synovitis of the extensor tendon sheaths in a child. Hansen P, et al. **J Hand Surg [Br]** 1988 Aug;13(3):313–4

Synovial chondromatosis of the temporomandibular joint diagnosed by magnetic resonance imaging: report of a case. Dolan EA, et al. **J Oral Maxillofac Surg** 1989 Apr; 47(4):411–3

Synovial chondromatosis associated with experimental osteoarthritis in adult monkeys. Helmy ES, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):823–7

Inflammation after blood injection into a synovial-like space is a result of the cellular component rather than the plasma. Tate G, et al. **J Rheumatol** 1988 Nov;15(11):1686–92

Plica synovialis (synovial fold) of the elbow. Report on one case. Commandre FA, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):209–10 (7 ref.)

Synovial chondromatosis of the temporomandibular joint: a light and electron microscopic study. de Bont LG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):593–8

Mononuclear cells recovered from inflammatory synovial membrane using fine-needle biopsy. Geborek P, et al. **Rheumatol Int** 1988;8(3):101–5

Inflammatory synovial T cells in different activity subgroups of patients with rheumatoid arthritis and juvenile rheumatoid arthritis. Thoen J, et al. **Scand J Rheumatol** 1989;18(2):77–88

Evidence for activation of rheumatoid synovial T lymphocytes—development of rheumatoid T cell clones. Førre O, et al. **Scand J Rheumatol Suppl** 1988;76:153–60 (33 ref.)

Characterization of synovial macrophages by monoclonal antibodies in rheumatoid arthritis and osteoarthritis. Helbig B, et al. **Scand J Rheumatol Suppl** 1988;76:61–6

The synovial lining cell and synovitis. Henderson B. **Scand J Rheumatol Suppl** 1988;76:33–8 (33 ref.)

Abnormalities of T cell activation in the rheumatoid synovium detected with monoclonal antibodies to CD3. Talal N, et al. **Scand J Rheumatol Suppl** 1988;76:175–82

Arthroscopic and synovial correlates of pain in osteoarthritis. Lindblad S. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):91–3

Autometallographic demonstration of gold in rheumatoid synovial tissue. Graudal H, et al. **Z Rheumatol** 1988 Sep-Oct;47(5):347–50

[Echographic measurement of synovial thickening of the hip. Value in evaluating joint disease in dialyzed patients (letter)] Laurent G, et al. **Presse Med** 1989 May 6;18(18):939 **(Fre)**

[Arthrotomy—a prearthrotic factor?] Lukoschek M, et al. **Aktuel Traumatol** 1988 Aug;18(4):163–7 (Eng. Abstr.) **(Ger)**

[Reflection of local inflammatory activity in rheumatic diseases in synovial imprint cytology] Schwenke R, et al.

Z Rheumatol 1988 Sep–Oct;47(5):329–32 (Eng. Abstr.) (Ger)
[Pathology of rheumatoid synovitis: what's known and unknown in 1988] Kyogoku M. Ryumachi 1989 Feb; 29(1):66–80 (Jpn)
[The synovial medium of the joint in Perthes disease (echographic research)] Dol'nitskiĭ OV, et al. Ortop Travmatol Protez 1988 Oct;(10):1–6 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Heat shock of rabbit synovial fibroblasts increases expression of mRNAs for two metalloproteinases, collagenase and stromelysin. Vance BA, et al. J Cell Biol 1989 Jun; 108(6):2037–43
The First International Conference on Synovitis—Characteristics and Functions of Synovial Cells. Oslo, Norway, 9–12 June 1988. Abstracts. Scand J Immunol 1988 Oct;28(4):495–508
The First International Conference on Synovitis—Characteristics and Functions of Synovial Cells. Oslo, Norway, 9–12 June 1988. Scand J Rheumatol Suppl 1988;76:1–310

PHYSIOPATHOLOGY

Synovial plicae syndrome. Morrison RJ. J Manipulative Physiol Ther 1988 Aug;11(4):296–9 (31 ref.)
Functional heterogeneity of human rheumatoid synovial tissue macrophages. Koch AE, et al. J Rheumatol 1988 Jul;15(7):1058–63
Synovial processes in rheumatoid arthritis. Fassbender HG, et al. Scand J Rheumatol Suppl 1988;76:1–7

RADIATION EFFECTS

Radiation synovectomy stimulates glycosaminoglycan synthesis by normal articular cartilage. Myers SL, et al. J Lab Clin Med 1989 Jul;114(1):27–35
Radiopharmaceuticals for radiation synovectomy: evaluation of two yttrium-90 particulate agents. Davis MA, et al. J Nucl Med 1989 Jun;30(6):1047–55
[Radioisotope synovectomy in multi-modality treatment of rheumatoid arthritis] Oliunin IuA, et al. Ter Arkh 1989; 61(5):58–62 (Eng. Abstr.) (Rus)

RADIOGRAPHY

[The synovial cavity of the knee joint and its major communicating bursae] Schäfer H. ROFO 1989 Jan; 150(1):32–8 (Eng. Abstr.) (Ger)

SURGERY

The pathological plica in the knee. Results after arthroscopic resection. Hansen H, et al. Arch Orthop Trauma Surg 1989; 108(5):282–4
Arthroscopic synovectomy by rheumatologists: time for a new look. Arnold WJ, et al. Arthritis Rheum 1989 Jan; 32(1):109–11
Resection of the patellar ligament: a complication of arthroscopic synovectomy. Bachner EJ, et al. Arthroscopy 1989;5(1):76–8
Arthroscopic treatment of synovial chondromatosis of the knee. Dorfmann H, et al. Arthroscopy 1989;5(1):48–51
Arthroscopic treatment of chronic synovitis of the ankle. Martin DF, et al. Arthroscopy 1989;5(2):110–4
Arthroscopic versus open synovectomy in the rheumatoid knee. Matsui N, et al. Int Orthop 1989;13(1):17–20
Arthroscopic management of synovial chondromatosis of the knee. Findings and results in 18 cases. Coolican MR, et al. J Bone Joint Surg [Br] 1989 May;71(3):498–500
Arthroscopic surgery for synovial chondromatosis of the hip. Okada Y, et al. J Bone Joint Surg [Br] 1989 Mar;71(2):198–9
Synovectomy of the elbow in rheumatoid arthritis. Long-term results. Tulp NJ, et al. J Bone Joint Surg [Br] 1989 Aug;71(4):664–6
Multicenter evaluation of synovectomy in the treatment of rheumatoid arthritis. Report of results at the end of five years. McEwen C. J Rheumatol 1988;15(5):765–9
Evaluation of synovectomy in rheumatoid arthritis [letter] Neustadt DH. J Rheumatol 1988 Dec;15(12):1874
Multicenter evaluation of synovectomy [letter] Shott S. J Rheumatol 1989 Jun;16(6):848–50
Successful use of recombinant factor VIIa in patient with severe haemophilia A during synovectomy [letter] Hedner U, et al. Lancet 1988 Nov 19;2(8621):1193
Patellar subluxation following plica resection. Limbird TJ. Orthop Rev 1988 Mar;17(3):282–5
Synovectomy of the knee in young patients with hemophilia. Canale ST, et al. South Med J 1988 Dec;81(12):1480–6
[Arthroscopic synovectomy in the treatment of rheumatoid arthritis] Xu JS. Chung Hua Wai Ko Tsa Chih 1988 Sep; 26(9):545–6, 574 (Eng. Abstr.) (Chi)
[Plica syndrome of the knee] Xu JS, et al. Chung Hua Wai Ko Tsa Chih 1988 Jan;26(1):30–1, 61 (Eng. Abstr.) (Chi)
[Osteotomy-synovectomy in rheumatoid arthritis of the knee] Blaimont P, et al. Acta Orthop Belg 1988;54(2):155–7 (Eng. Abstr.) (Fre)
[Synovectomy. Long-term results] Gschwend N. Acta Orthop Belg 1988;54(2):148–54 (Eng. Abstr.) (Fre)
[Synovial osteochondromatosis of the elbow in a 60-year-old woman] Meziane A, et al. Acta Orthop Belg 1988; 54(3):363–5 (Eng. Abstr.) (Fre)
[Synovial osteochondromatosis of the elbow in a 60-year-old woman] Meziane A, et al. Ann Chir 1989;43(3):252–4 (Eng. Abstr.) (Fre)
[The importance of knee arthroscopy in rheumatology] Miehlke RK. Beitr Orthop Traumatol 1989 Jan–Feb; 36(1–2):58–61 (Ger)
[Loeffler's capsuiotomy in advanced varus gonarthrosis] Reichel F, et al. Beitr Orthop Traumatol 1988 Sep; 35(9):453–7 (Eng. Abstr.) (Ger)
[Roentgenologic evaluation of postoperative carpal collapse and ulnar translocation in patients with chronic polyarthritis] Schmidt A, et al. Handchir Mikrochir Plast Chir 1989 May;21(3):134–7 (Eng. Abstr.) (Ger)
[Structure and function of the "neosynovial membrane." Light and transmission electron microscopy studies of regenerated synovial membranes following surgical synovectomy] Rohe K, et al. Unfallchirurgie 1989 Feb; 15(1):1–8 (Eng. Abstr.) (Ger)
[Late synovectomy of the elbow and resection of the radius head in chronic polyarthritis] Grimm J. Z Orthop 1989 Jan–Feb;127(1):77–81 (Eng. Abstr.) (Ger)
[Arthroscopic surgical synovectomy of the knee joint (indications, technic, follow-up results)] Jensen KU, et al. Z Orthop 1988 Sep–Oct;126(5):513–8 (Eng. Abstr.) (Ger)
[Results of late synovectomy of the knee joint in patients with rheumatoid arthritis] Kubacki J, et al. Chir Narzadow Ruchu Ortop Pol 1988;53(5):378–83 (Eng. Abstr.) (Pol)
[Value of chemical and surgical synovectomy in the treatment of children and adolescents with rheumatoid arthritis] Szymańska-Jagiełło W, et al. Pediatr Pol 1988 Jul;63(7):414–23 (Eng. Abstr.) (Pol)

ULTRASTRUCTURE

Ultrastructural study of synovial membrane from the antebrachiocarpal joint of calves. Leach DH, et al. Acta Anat (Basel) 1988;133(3):234–46
Malignant giant cell tumor of synovium and locally destructive pigmented villonodular synovitis: ultrastructural and immunohistochemical study and review of the literature. Nielsen AL, et al. Hum Pathol 1989 Aug; 20(8):765–71
Characterization of human synovial mast cells. Kopicky-Burd JA, et al. J Rheumatol 1988 Sep; 15(9):1326–33
Progressive ankylosis (ank/ank) in mice: an animal model of spondyloarthropathy. II. Light and electron microscopic findings. Mahowald ML, et al. J Rheumatol 1989 Jan; 16(1):60–6
Scanning and transmission electron microscopy on the synovial membrane in the rabbit. Chen WJ, et al. Prog Clin Biol Res 1989;295:127–31
Ultrastructural characterisation of macrophages (type A cells) in the synovial lining. Mapp PI, et al. Rheumatol Int 1988;8(4):171–6

SYNOVIOMA

Oral synovial sarcoma: report of a case. de Araújo VC, et al. J Oral Maxillofac Surg 1989 Sep;47(9):1001–3 (19 ref.)

COMPLICATIONS

Bilateral spontaneous pneumothorax due to metastatic synovial sarcoma. Kapoor R, et al. Indian J Chest Dis Allied Sci 1988 Oct–Dec;30(4):273–5

DIAGNOSIS

Osseous invasion by soft-tissue sarcoma seen better on MR than on CT [letter] Berthoty D, et al. AJR Am J Roentgenol 1989 May;152(5):1131
Endolaryngeal synovial sarcoma: case report with immunohistochemical studies. Pruszczynski M, et al. Head Neck 1989 Jan–Feb;11(1):76–80 (20 ref.)
Synovial sarcoma: MR imaging. Mahajan H, et al. Magn Reson Imaging 1989 Mar–Apr;7(2):211–6
MR evaluation of giant cell tumors of the tendon sheath. Sherry CS, et al. Magn Reson Imaging 1989 Mar–Apr; 7(2):195–201

GENETICS

Cytogenetic findings in two synovial sarcomas. Limon J, et al. Cancer Genet Cytogenet 1989 Apr;38(2):215–22
Chromosomal analysis and the classification of soft tissue sarcomas. Molenaar WM, et al. Lab Invest 1989 Feb; 60(2):266–74

METABOLISM

Epithelial markers in synovial sarcoma. An immunohistochemical study on paraffin embedded tissues. Wrba F, et al. Virchows Arch [A] 1989;415(3):253–8

PATHOLOGY

Synovial sarcoma—report of two cases. Mačák J, et al. Acta Univ Palacki Olomuc Fac Med 1988;120:199–209
A biphasic tumor of the mediastinum with features of synovial sarcoma. A report of four cases. Witkin GB, et al. Am J Surg Pathol 1989 Jun;13(6):490–9
Prognostic factors in synovial sarcoma. Rööser B, et al. Cancer 1989 Jun 1;63(11):2182–5
[Establishment and characteristics of a human synovial sarcoma cell line] Hu MY, et al. Chung Hua Chung Liu Tsa Chih 1988 May;10(3):174–6 (Eng. Abstr.) (Chi)
[Synovialosarcoma] Vignon-Pennamen MD, et al. Ann Dermatol Venereol 1988;115(11):1192–4 (Fre)
[Immunohistochemical study of 20 synovial sarcomas in children] Sastre-Garau X, et al. Ann Pathol 1989; 9(2):109–14 (Eng. Abstr.) (Fre)
[A left axillary synovial sarcoma—a case report] Yokozaki H, et al. Gan No Rinsho 1988 Sep;34(11):1619–23 (Eng. Abstr.) (Jpn)

SECONDARY

Synovial cell sarcoma with pulmonary metastases—a case report. Aggarwal P, et al. J Assoc Physicians India 1988 Oct;36(10):617–8

SURGERY

Radical resection of the shoulder girdle for a malignant tumor: four case reports. Di XY, et al. Orthopedics 1989 Jul;12(7):1017–22
Management of synovial sarcoma of the median nerve at the elbow. Rinehart GC, et al. Plast Reconstr Surg 1989 Mar; 83(3):528–32
[Unusual course of malignant synovioma of the flexor tendon sheath of the hand] Pfeiffer KM, et al. Handchir Mikrochir Plast Chir 1989 Jul;21(4):210–2 (Eng. Abstr.) (Ger)
[Synovial sarcomas of the neck] Abrams J, et al. Laryngorhinootologie 1989 Jun;68(6):333–6 (Eng. Abstr.) (Ger)

ULTRASTRUCTURE

Malignant giant cell tumor of synovium and locally destructive pigmented villonodular synovitis: ultrastructural and immunohistochemical study and review of the literature. Nielsen AL, et al. Hum Pathol 1989 Aug; 20(8):765–71

SYNOVITIS

The First International Conference on Synovitis—Characteristics and Functions of Synovial Cells. Oslo, Norway, 9–12 June 1988. Scand J Rheumatol Suppl 1988;76:1–310

CHEMICALLY INDUCED

Cidex-induced synovitis. Harner CD, et al. Am J Sports Med 1989 Jan–Feb;17(1):96–102
Aseptic synovitis. Barone JG, et al. N J Med 1989 Jun; 86(6):473–4

COMPLICATIONS

Streptococcal antigen-induced dislocation and dysplasia of the hip in newborn rats. Radiologic and histologic evaluation of a model of congenital dislocation of the hip. Parker MD, et al. Invest Radiol 1989 Aug;24(8):604–8
Pigmented villonodular synovitis involving bone. A case report and literature review. Young G, et al. J Am Podiatr Med Assoc 1989 Jul;79(7):345–7 (27 ref.)
Arthroscopic and synovial correlates of pain in osteoarthritis. Lindblad S. Semin Arthritis Rheum 1989 May;18(4 Suppl 2):91–3
[Synovitis-acne-pustulosis-hyperostosis-osteitis (SAPHO) syndrome] Benhamou C, et al. Ann Dermatol Venereol 1988;115(5):613–8 (23 ref.) (Fre)

DIAGNOSIS

Pitfalls in ultrasonography of hip joint synovitis in the child. Egund N, et al. Acta Radiol 1989 Jul–Aug;30(4):375–9
Imaging of pigmented villonodular synovitis with emphasis on MR imaging. Jelinek JS, et al. AJR 1989 Feb; 152(2):337–42
Magnetic resonance imaging in the diagnosis of aggressive villonodular synovitis. Weisz GM, et al. Clin Orthop 1988 Nov;(236):303–6
High-resolution hip ultrasound in the limping child. Alexander JE, et al. JCU 1989 Jan;17(1):19–24
Pigmented villonodular synovitis presenting as a large lateral knee mass. Case report and review of the literature. Robinson DL, et al. Orthop Rev 1988 Jan;17(1):59–63 (29 ref.)
Radiologic case study. Diffuse pigmented villonodular synovitis. Kerr R. Orthopedics 1989 Jul;12(7):1008, 1010–2
Pigmented villonodular synovitis. Diagnosis and differential diagnosis. Goldman AB, et al. Radiol Clin North Am 1988 Nov;26(6):1327–47 (40 ref.)
Chronic hip pain and limp in a 3-year-old girl [clinical conference] Salzman AL, et al. Rev Infect Dis 1989 Mar–Apr;11(2):341–8
Ultrasonographic evidence of hip synovitis in patients with rheumatoid arthritis. Koski JM. Scand J Rheumatol 1989; 18(3):127–31
[Quiz case. Pigmented villonodular synovitis] Pignatti G, et al. Chir Organi Mov 1988 Apr–Jun;73(2):179–81 (Ita)
[Clinical and morphologic parallels in children with rheumatoid mono- and oligoarthritis] Iakovleva AA, et

al. **Pediatriia** 1989;(4):27–32 (Eng. Abstr.) (Rus)
[Significance of the changes in the level of expression of HLA antigens on the surface of T lymphocytes in differential diagnosis of joint diseases of different nature] Konenkov VI, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):36–40 (Eng. Abstr.) (Rus)

DRUG THERAPY

Scintimetric assessment of synovitis activity [letter] Smythe HA. **Ann Rheum Dis** 1989 Aug;48(8):702–3
Evaluation of a modified hexose sugar, amiprilose hydrochloride, in experimental models of synovitis. Kieval RI, et al. **J Rheumatol** 1989 Jan;16(1):67–74
[Clinical and experimental study on synovitis granules in the treatment of genual hydroarthrosis] Zhou P. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Apr;8(4):210–2, 196 (Eng. Abstr.) (Chi)
[Treatment of postoperative synovitis following meniscus operations with ibuprofen] Darsow F, et al. **Beitr Orthop Traumatol** 1988 Dec;35(12):616–20 (Eng. Abstr.) (Ger)

ETIOLOGY

Synovitis in chronically unstable ankles. Larsen E, et al. **Acta Orthop Scand** 1989 Jun;60(3):340–4
Leukemic synovitis. Holdrinet RS, et al. **Am J Med** 1989 Jan;86(1):123–6
Chronic synovitis of the shoulder in familial Mediterranean fever: a disease of symptoms not signs. Hughes RA, et al. **Ann Rheum Dis** 1989 Feb;48(2):163–5
Synovial hand infection from Mycobacterium terrae. Deenstra W. **J Hand Surg [Br]** 1988 Aug;13(3):335–6
Chronic inflammatory arthropathy associated with HTLV-I [letter] Nishioka K, et al. **Lancet** 1989 Feb 25;1(8635):441
Mechanisms of persistent synovitis. Merry P, et al. **Scand J Rheumatol Suppl** 1988;76:85–93 (72 ref.)
Role of cytokines in rheumatoid synovitis. Ziff M. **Scand J Rheumatol Suppl** 1988;76:211–5 (27 ref.)
Cytokines in chronic inflammatory synovitis. Zvaifler NJ, et al. **Scand J Rheumatol Suppl** 1988;76:203–10 (20 ref.)
Pain, synovitis, and articular cartilage changes in osteoarthritis. Brandt KD. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):77–80 (16 ref.)
Silicone synovitis: clinical, radiologic, and histologic features. Shergy WJ, et al. **South Med J** 1989 Sep;82(9):1156–8
[Scapular-humeral retractile capsulitis during dermato- and sclero-dermatopolymyositis (letter)] Beaurain D, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):629–30 (Fre)
[Benign acute edematous polyarthritis in the elderly. Apropos of 4 cases] Chaouat D, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):895–9 (Eng. Abstr.) (Fre)

IMMUNOLOGY

Immunohistological features of synovitis in ankylosing spondylitis: a comparison with rheumatoid arthritis. Kidd BL, et al. **Ann Rheum Dis** 1989 Feb;48(2):92–8
Immunohistologic analysis of the distribution of cell adhesion molecules within the inflammatory synovial microenvironment. Hale LP, et al. **Arthritis Rheum** 1989 Jan;32(1):22–30
Experimental synovitis induced by collagen-specific T cell lines. Brahn E, et al. **Cell Immunol** 1989 Feb;118(2):491–503
Role of cytokines in rheumatoid synovitis. Ziff M. **Recenti Prog Med** 1988 Jul–Aug;79(7–8):318–22

METABOLISM

D-penicillamine metabolism in an in-vivo model of inflamed synovium. Joyce DA, et al. **Agents Actions** 1988 Dec; 25(3–4):336–43
Lipid microspherules in synovial fluid of patients with pigmented villonodular synovitis. Ugai K, et al. **Arthritis Rheum** 1988 Nov;31(11):1442–6
Constitutive production of interleukin 6/B cell stimulatory factor-2 from inflammatory synovium. Miyasaka N, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):238–47

PATHOLOGY

Knee arthroscopy after yttrium or osmic acid injection. Guaydier-Souquieres C, et al. **Arthroscopy** 1989;5(1):70–5
Synovial plica syndrome of the knee and related anatomy. Dai SY, et al. **Chin Med J [Engl]** 1988 Jul;101(7):529–32
Synovitis–acne–pustulosis hyperostosis–osteomyelitis syndrome (SAPHO). A new syndrome among the spondyloarthropathies? Benhamou CL, et al. **Clin Exp Rheumatol** 1988 Apr–Jun;6(2):109–12
Malignant giant cell tumor of synovium and locally destructive pigmented villonodular synovitis: ultrastructural and immunohistochemical study and review of the literature. Nielsen AL, et al. **Hum Pathol** 1989 Aug; 20(8):765–71
Pigmented villonodular synovitis of the extensor tendon sheaths in a child. Hansen P, et al. **J Hand Surg [Br]** 1988 Aug;13(3):313–4
The temporomandibular joint: a comparison of clinical and arthroscopic findings. Holmlund A, et al. **J Prosthet Dent** 1989 Jul;62(1):61–5
Presence of platelet glycoproteins Ib and IIb-IIIa in inflammatory and noninflammatory synovium. Konttinen YT, et al. **J Rheumatol** 1989 May;16(5):578–84
The immunohistologic features of synovitis, disease activity and in vitro IgM rheumatoid factor synthesis by blood mononuclear cells in rheumatoid arthritis. Rooney M, et al. **J Rheumatol** 1989 Apr;16(4):459–67
Pathogenesis of discovertebral and manubriosternal joint abnormalities in rheumatoid arthritis: a cadaveric study. Schils JP, et al. **J Rheumatol** 1989 Mar;16(3):291–7
Inflammation after blood injection into a synovial-like space is a result of the cellular component rather than the plasma. Tate G, et al. **J Rheumatol** 1988 Nov;15(11):1686–92
Plica synovialis (synovial fold) of the elbow. Report on one case. Commandre FA, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):209–10 (7 ref.)
Test and teach. Number Fifty-eight. Pigmented villonodular synovitis of the hip with invasion of pelvic bone. Chan CW, et al. **Pathology** 1988 Oct;20(4):338–9, 391–2
Synovial involvement by Mycobacterium marinum. A histopathological study of 25 culture-proven cases. Collins RJ, et al. **Pathology** 1988 Oct;20(4):340–5
Mononuclear cells recovered from inflammatory synovial membrane using fine-needle biopsy. Geborek P, et al. **Rheumatol Int** 1988;8(3):101–5
The synovial lining cell and synovitis. Henderson B. **Scand J Rheumatol Suppl** 1988;76:33–8 (33 ref.)
Recent progress in the study of synovitis by macroscopic and microscopic examination—a review. Lindblad S. **Scand J Rheumatol Suppl** 1988;76:27–32 (55 ref.)
[Synovial cysts and synovialomas of the lumbar spine. Histo-pathologic and neuro-surgical aspects apropos of 8 cases] Rousseaux P, et al. **Neurochirurgie** 1989;35(1):31–9 (50 ref.) (Eng. Abstr.) (Fre)
[Role of interleukin 1 in lymphocyte migration during rheumatoid synovitis] Miossec P, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):533–7 (30 ref.) (Fre)
[Synovitis and pigmented villonodular tenosynovitis: apropos of 3 cases] Ben Rejeb A, et al. **Tunis Med** 1988 May; 66(5):485–9 (24 ref.) (Eng. Abstr.) (Fre)
[Synovitis of the wrist joint following silicone replacement of the carpal bones] Martini AK, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):295–300 (Eng. Abstr.) (Ger)
[Chronic gait disorder caused by pigmented villonodular synovitis of the sole of the foot] Millner M, et al. **Monatsschr Kinderheilkd** 1988 Jul;136(7):387–9 (Eng. Abstr.) (Ger)
[Detritus synovitis in chronic polyarthritis: a clinical and operation histologic evaluation] Menninger H, et al. **Z Rheumatol** 1989 Mar–Apr;48(2):89–94 (Eng. Abstr.) (Ger)
[Pathology of rheumatoid synovitis: what's known and unknown in 1988] Kyogoku M. **Ryumachi** 1989 Feb; 29(1):66–80 (Jpn)
[Synovitis in osteoarthrosis (clinico-morphologic research)] Kop'eva TN, et al. **Revmatologiia (Moskva)** 1988 Oct–Dec; (4):47–52 (Eng. Abstr.) (Rus)
[Evolution of the morphological manifestations of synovitis in patients in the initial stage of rheumatoid arthritis with different variants of its further course] Shekhter AB, et al. **Revmatologiia (Moskva)** 1988 Apr–Jun;(2):3–16 (Eng. Abstr.) (Rus)
[Microcrystalline arthrosynovitis] Borrachero del Campo J. **An R Acad Nac Med (Madr)** 1988;105(4):461–81 (0 ref.) (Spa)

PHYSIOPATHOLOGY

Lymphatic transport from normal and synovitic knees in rabbits. Reimann I, et al. **Acta Orthop Scand** 1989 Apr; 60(2):185–7
Do mast cells intervene in the vasoproliferative process of the rheumatoid synovitis? Ribatti D, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):635–7
Hypoxic-reperfusion injury in the inflamed human joint. Blake DR, et al. **Lancet** 1989 Feb 11;1(8633):289–93
The First International Conference on Synovitis—Characteristics and Functions of Synovial Cells. Oslo, Norway, 9–12 June 1988. Abstracts. **Scand J Immunol** 1988 Oct;28(4):495–508

RADIOGRAPHY

Pigmented villonodular synovitis of the talus in a child. Aghasi MK, et al. **Foot Ankle** 1988 Dec;9(3):139–42
The pronator quadratus sign: its classification and diagnostic usefulness for injury and inflammation of the wrist. Sasaki Y, et al. **J Hand Surg [Br]** 1989 Feb;14(1):80–3
Synovial chondromatosis of the hip joint. Friedman B, et al. **Orthop Rev** 1988 Oct;17(10):994–8
Pigmented villonodular synovitis of the shoulder. Flandry F, et al. **Orthopedics** 1989 May;12(5):715–8 (16 ref.)
[Role of arteriography and x-ray computed tomography in the current evaluation of pigmented villonodular synovitis] Darrason R, et al. **J Radiol** 1988 Nov;69(11):645–50 (6 ref.) (Eng. Abstr.) (Fre)

RADIONUCLIDE IMAGING

Scintimetry in transient synovitis of the hip in the child. Hasegawa Y, et al. **Acta Orthop Scand** 1988 Oct;59(5):520–5
Scintimetric assessment of synovitis activity during treatment with disease modifying antirheumatic drugs. Olsen N, et al. **Ann Rheum Dis** 1988 Dec;47(12):995–1000
Quantitative computerized joint scanning in rheumatoid arthritis: an accurate reproducible method of quantitating synovitis—preliminary report. Wallace DJ, et al. **Mt Sinai J Med (NY)** 1989 Jan;56(1):46–52

RADIOTHERAPY

SPECT using Bremsstrahlung to quantify 90Y uptake in Baker's cysts: its application in radiation synovectomy of the knee. Smith T, et al. **Eur J Nucl Med** 1988; 14(9–10):498–503
Radiopharmaceuticals for radiation synovectomy: evaluation of two yttrium-90 particulate agents. Davis MA, et al. **J Nucl Med** 1989 Jun;30(6):1047–55

SURGERY

Treatment of chronic knee synovitis with arthroscopic synovectomy after failure of intraarticular injection of radionuclide. Combe B, et al. **Arthritis Rheum** 1989 Jan; 32(1):10–4
Inflammatory synovial fluid and absorbable suture strength. Barber FA, et al. **Arthroscopy** 1988;4(4):272–7
Pigmented villonodular synovitis of the knee: results from 13 cases. Beguin J, et al. **Arthroscopy** 1989;5(1):62–4
Arthroscopic treatment of chronic synovitis of the ankle. Martin DF, et al. **Arthroscopy** 1989;5(2):110–4
The treatment of pigmented villonodular synovitis of the hip. A case report and literature review. Gitelis S, et al. **Clin Orthop** 1989 Feb;(239):154–60
[Arthroscopic surgical synovectomy of the knee joint (indications, technic, follow-up results)] Jensen KU, et al. **Z Orthop** 1988 Sep–Oct;126(5):513–8 (Eng. Abstr.) (Ger)
[Pigmented villonodular synovitis of the hand] Lazarev AA, et al. **Ortop Travmatol Protez** 1989 Jan;(1):47–9 (Rus)

THERAPY

Synovial plicae syndrome. Morrison RJ. **J Manipulative Physiol Ther** 1988 Aug;11(4):296–9 (31 ref.)

VETERINARY

Skeletal and tendon lesions of male broiler-breeders reared on elevated slats. Hill JE, et al. **Avian Dis** 1988 Jul–Sep; 32(3):540–3
Effect of experimental synovitis on disposition of penicillin and oxytetracycline in neonatal calves. Guard CL, et al. **Cornell Vet** 1989 Apr;79(2):161–71
Idiopathic gonitis in heifers: 34 cases (1976–1986). Madison JB, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):273–7

SYNOVITIS, PIGMENTED VILLONODULAR see under **SYNOVITIS**

SYNSTIGMIN see **NEOSTIGMINE**

2-5A SYNTHETASE see **2',5'-OLIGOADENYLATE SYNTHETASE**

SYNTHETASES see **LIGASES**

SYPHACIA see **OXYUROIDEA**

SYPHILIDS see **SYPHILIS, CUTANEOUS**

SYPHILIS

To cast a pox. The iconography of syphilis. Ober WB. **Am J Dermatopathol** 1989 Feb;11(1):74–86
Syphilis. Musher DM. **Infect Dis Clin North Am** 1987 Mar; 1(1):83–95 (44 ref.)

BLOOD

[The significance of the TPI indices with an increased blood serum volume in removing patients from the syphilis registry] Magaryshkina OV, et al. **Vestn Dermatol Venerol** 1988;(11):54–7 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

Invasion of the central nervous system by Treponema pallidum: implications for diagnosis and treatment. Lukehart SA, et al. **Ann Intern Med** 1988 Dec 1; 109(11):855–62
[Clinico-biochemical parallels in patients with early forms of syphilis and pathology of the cerebrospinal fluid] Platonov SI, et al. **Vestn Dermatol Venerol** 1989;(5):58–62 (Eng. Abstr.) (Rus)

COMPLICATIONS

The diagnostic significance of serological screening of patients with uveitis. Noor Sunba MS, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):709–12
Iridoschisis associated with syphilitic interstitial keratitis. Pearson PA, et al. **Am J Ophthalmol** 1989 Jan 15; 107(1):88–90
Secondary syphilis of the tonsil. Shimizu T, et al. **Arch Otorhinolaryngol** 1989;246(2):117–20
Atypical early syphilis in an hiv-infected homosexual male. Cusini M, et al. **Dermatologica** 1988;177(5):300–4
AIDS meets syphilis: changing patterns of the syphilitic infection and its treatment. Kinloch-de Loës S, et al. **Dermatologica** 1988;177(5):261–4

Cardiolipin-fluorescent (M1) antimitochondrial antibody and cholestatic hepatitis in secondary syphilis. Comer GM, et al. **Dig Dis Sci** 1989 Aug;34(8):1298–302

Bone invasion in secondary syphilis [letter] Davidson F, et al. **Genitourin Med** 1989 Jan;65(1):60

Syphilitic gastritis: demonstration of Treponema pallidum with the use of fluorescent treponemal antibody absorption complement and immunoperoxidase stains. Chung KY, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):183–5

Human immunodeficiency virus infection and syphilis. Fiumara N. **J Am Acad Dermatol** 1989 Jul;21(1):141–2

Untreated relapsing secondary syphilis with meningitis. Fiumara NJ, et al. **J Am Acad Dermatol** 1989 Apr; 20(4):682–3

Syphilis and HIV infection. Hook EW 3d. **J Infect Dis** 1989 Sep;160(3):530–4 (21 ref.)

Polyarthritis as the initial symptom of secondary syphilis: case report and review. Kazlow PG, et al. **Mt Sinai J Med (NY)** 1989 Jan;56(1):65–7 (13 ref.)

Nephrotic syndrome and hepatitis in early syphilis. Tang AL, et al. **Postgrad Med J** 1989 Jan;65(759):14–5

Syphilis detection in cerebrovascular disease. Kelley RE, et al. **Stroke** 1989 Feb;20(2):230–4

[2 men with active syphilis infection and HIV-I infection] de Hoop D, et al. **Ned Tijdschr Geneeskd** 1989 Apr 8; 133(14):731–3 (Eng. Abstr.) **(Dut)**

[An uncommon and curable cause of polyarthritis: secondary syphilis (letter)] Dell'Isola B, et al. **Ann Med Interne (Paris)** 1989;140(2):152 **(Fre)**

[Syphilis and HIV infection] Scolari F. **Rev Med Suisse Romande** 1989 Feb;109(2):139–44 (58 ref.) **(Fre)**

[Luetic uveitis in a patient with AIDS. Case report] Hungerbühler U, et al. **Schweiz Med Wochenschr** 1988 Nov 26;118(47):1762–6 (Eng. Abstr.) **(Ger)**

[The atypical course of syphilis in HIV infection] Mahrle G, et al. **Z Hautkr** 1989 May 15;64(5):393–4, 397 (Eng. Abstr.) **(Ger)**

[A case of early syphilitic hepatitis] Suzuki K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1699–702 **(Jpn)**

[Mixed urogenital infections in patients with syphilis] Borisenko KK, et al. **Vestn Dermatol Venerol** 1988;(5):32–5 (Eng. Abstr.) **(Rus)**

[Phagedenic hard chancre] Koliadenko VG, et al. **Vestn Dermatol Venerol** 1988;(10):63–5 (Eng. Abstr.) **(Rus)**

[Secondary relapsing syphilis in a patient with an infection caused by the human immunodeficiency virus] Potekaev NS, et al. **Vestn Dermatol Venerol** 1988;(12):55–9 (Eng. Abstr.) **(Rus)**

[Syphilitic nephropathy. Apropos of 3 cases] Suris Granell JC, et al. **An Esp Pediatr** 1988 Jun;28(6):545–7 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Syphilitic interstitial keratitis masquerading as staphylococcal marginal keratitis. Martinez JA, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):431–3

Testing for syphilis [letter] Kim HW, et al. **Ann Emerg Med** 1989 Jul;18(7):802–3

From the MMWR. Recommendations for diagnosing and treating syphilis in HIV-infected patients. **Arch Dermatol** 1989 Jan;125(1):15–6

False-positive seroreactions for syphilis as a harbinger of disease revisited. Koskenvuo M, et al. **Clin Exp Rheumatol** 1989 Jan–Feb;7(1):75–8

Line immunoassay and enzyme-linked line immunofiltration assay for simultaneous detection of antibody to two treponemal antigens. Ijsselmuiden OE, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug;8(8):716–21

Gastric lesions in secondary syphilis. Bottari M, et al. **Gastrointest Endosc** 1988 Sep–Oct;34(5):437–9

Primary syphilis of the eyelid: case report. Jeyakumar W, et al. **Genitourin Med** 1989 Jun;65(3):192–3

Overproduction and purification of Treponema pallidum recombinant-DNA-derived proteins TmpA and TmpB and their potential use in serodiagnosis of syphilis. Schouls LM, et al. **Infect Immun** 1989 Sep;57(9):2612–23

Ocular manifestations of syphilis. Tierney DW. **J Am Optom Assoc** 1989 Jun;60(6):463–6

Leads from the MMWR. Recommendations for diagnosing and treating syphilis in HIV-infected patients. **JAMA** 1988 Nov 4;260(17):2488–9

Secondary syphilis in a prepubertal child. Differentiating condylomata lata from condylomata acuminata. Goldenring JM. **N Y State J Med** 1989 Mar;89(3):180–1

Syphilis. Mallory SB, et al. **Pediatr Dermatol** 1989 Mar; 6(1):51–2

[Suspected syphilis during pregnancy due to cross reactions in Borrelia infection] Enders G, et al. **Dtsch Med Wochenschr** 1988 Sep 30;113(39):1511–4 (Eng. Abstr.) **(Ger)**

[In situ immunological identification of Treponema pallidum as an aid in the diagnosis of syphilis] Barbareschi M, et al. **G Ital Dermatol Venereol** 1988 Jun;123(6):315–8 (Eng. Abstr.) **(Ita)**

[A case of syphilitic ulceration of the rectum examined by ultrasonics] Cygan M. **Nowotwory** 1988 Oct–Dec; 38(4):281–2 (Eng. Abstr.) **(Pol)**

[Primary atypical syphilis (bifocal, tonsillar and perianal)] Golumba R, et al. **Rev Chir [Otorinolaringol]** 1988 Jul–Sep; 33(3):213–6 (Eng. Abstr.) **(Rum)**

[2 cases of error in the diagnosis of syphilis] Khangel'dov AE, et al. **Vestn Dermatol Venerol** 1989;(5):62–4 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Possible penicillin treatment failure in primary syphilis. George D, et al. **Ala J Med Sci** 1988 Oct;25(4):427–9

Therapy for syphilis [letter] Matz R. **Ann Intern Med** 1989 Mar 15;110(6):496

How much penicillin cures early syphilis? Musher DM. **Ann Intern Med** 1988 Dec 1;109(11):849–51 (14 ref.)

Vesicular Jarisch-Herxheimer reaction. Rosen T, et al. **Arch Dermatol** 1989 Jan;125(1):77–81 (46 ref.)

Comparative study of ceftriaxone and benzathine penicillin G in the treatment of primary and secondary syphilis. Katsambas A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):549–50

Ceftriaxone for the treatment of primary and secondary syphilis. Schöfer H, et al. **Chemotherapy** 1989;35(2):140–5

Eradication of endemic syphilis in Bosnia. Arslanagić N, et al. **Genitourin Med** 1989 Jan;65(1):4–7

Are serological tests of value in diagnosing and monitoring response to treatment of syphilis in patients infected with human immunodeficiency virus? Terry PM, et al. **Genitourin Med** 1988 Aug;64(4):219–22

Penicillin concentrations in cerebrospinal fluid (CSF) during repository treatment regimen for syphilis. van der Valk PG, et al. **Genitourin Med** 1988 Aug;64(4):223–5

Ceftriaxone therapy for incubating and early syphilis. Hook EW 3d, et al. **J Infect Dis** 1988 Oct;158(4):881–4

Effectiveness of benzathine penicillin regimen in the treatment of syphilis in pregnancy. Phaosavasdi S, et al. **J Med Assoc Thai** 1989 Feb;72(2):101–8

Central nervous system involvement in early and late syphilis: the problem of asymptomatic neurosyphilis. Wolters EC, et al. **J Neurol Sci** 1988 Dec;88(1–3):229–39

Role of ceftriaxone in sexually transmitted diseases. Le Saux N, et al. **Rev Infect Dis** 1989 Mar–Apr;11(2):299–309 (112 ref.)

Tissue fluid penetration and anti-treponemal activity of trospectomycin (a new spectinomycin analog) in the rabbit syphilis model. Rice RJ, et al. **Sex Transm Dis** 1988 Jul–Sep;15(3):152–5

[Use of splenin for the purpose of immunocorrection in patients with seroresistance following syphilis treatment] Bakhmet'eva TM, et al. **Vestn Dermatol Venerol** 1988; (10):38–42 (Eng. Abstr.) **(Rus)**

[Means of enhancing treatment effectiveness in syphilis patients] Borisenko KK, et al. **Vestn Dermatol Venerol** 1988; (6):68–70 (Eng. Abstr.) **(Rus)**

[Improved treatment of patients with recurrent secondary syphilis] Glavinskaia TA, et al. **Vestn Dermatol Venerol** 1988;(9):40–3 (Eng. Abstr.) **(Rus)**

[The combined treatment of patients with infectious forms of syphilis] Platonov SI, et al. **Vestn Dermatol Venerol** 1988; (9):44–6 (Eng. Abstr.) **(Rus)**

[Late results in treating syphilis patients by reserve methods] Vinokurov IN, et al. **Vestn Dermatol Venerol** 1988;(6):70–3 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Risk factors for the spread of AIDS in rural Africa: evidence from a comparative seroepidemiological survey of AIDS, hepatitis B and syphilis in southwestern Uganda. Hudson CP, et al. **Aids** 1988 Aug;2(4):255–60

An outbreak of syphilis on an Indian reservation: descriptive epidemiology and disease-control measures. Gerber AR, et al. **Am J Public Health** 1989 Jan;79(1):83–5

Relationship of syphilis to drug use and prostitution—Connecticut and Philadelphia, Pennsylvania. **Arch Dermatol** 1989 Feb;125(2):169–70

The perpetual lessons of syphilis. Rolfs RT, et al. **Arch Dermatol** 1989 Jan;125(1):107–9

Syphilis in Greenland 1970–1987. The number of cases and their distribution. Jørgensen BB, et al. **Arctic Med Res** 1988 Apr;47(2):54–61

A serological mass examination for syphilis in Greenland in 1987. Misfeldt J, et al. **Arctic Med Res** 1988 Oct;47(4):173–8

Update on infectious syphilis in Canada—1986. Hutchinson KS, et al. **Can Dis Wkly Rep** 1988 Jan 9;14(1):1–2 **(Eng, Fre)**

Relationship of syphilis to drug use and prostitution: Connecticut and Philadelphia, Pennsylvania. Centers for Disease Control. **Conn Med** 1989 Jan;53(1):35–7

Primary and secondary syphilis, 20 years' experience. 2. Clinical features. Mindel A, et al. **Genitourin Med** 1989 Jan;65(1):1–3

Leads from the MMWR. Relationship of syphilis to drug use and prostitution—Connecticut and Philadelphia, Pennsylvania. **JAMA** 1989 Jan 20;261(3):353, 357

HIV infection, hepatitis, and syphilis in Spanish prisons [letter] Acedo A, et al. **Lancet** 1989 Jul 22;2(8656):226

Relationship of syphilis to drug use and prostitution—Connecticut and Philadelphia, Pennsylvania. **MMWR** 1988 Dec 16;37(49):755–8, 764

Syphilis. The resurgence of an old disease. Porter KR. **N C Med J** 1989 Mar;50(3):124–6

Congenital syphilis—who is at risk? A prevalence study at Baragwanath Hospital, Johannesburg, 1985–1986. Venter A, et al. **S Afr Med J** 1989 Aug 5;76(3):93–5

Time series analysis of syphilis surveillance data. Zaidi AA, et al. **Stat Med** 1989 Mar;8(3):353–62; discussion 363

[An epidemic of syphilis among homosexual and bisexual men. Results of tracing the sources of infection] Brandrup F, et al. **Ugeskr Laeger** 1988 Jan 18;150(3):141–2 (Eng. Abstr.) **(Dut)**

[Sero-epidemiologic study of several sexually transmitted diseases (including HIV infection) in a rural zone of the Central African Republic] Belec PL, et al. **Bull Soc Pathol Exot Filiales** 1988;81(4):692–8 (Eng. Abstr.) **(Fre)**

[Seroprevalence of syphilis in urban and semi-rural populations of Gabon] Dupont A, et al. **Bull Soc Pathol Exot Filiales** 1988;81(4):699–704 (Eng. Abstr.) **(Fre)**

[A clinical and serologic survey of bejel in north Burkina Faso] Gazin P, et al. **Bull Soc Pathol Exot Filiales** 1988; 81(5):827–31 (Eng. Abstr.) **(Fre)**

[Syphilis: epidemiology, clinical aspects, diagnosis and therapy] Breustedt W, et al. **Z Arztl Fortbild (Jena)** 1988; 82(23):1175–81 (15 ref.) **(Ger)**

[Incidence of syphilis among drug addicts. Report II] Stapiński A, et al. **Przegl Dermatol** 1988 Jul–Aug; 75(4):308–13 (Eng. Abstr.) **(Pol)**

ETHNOLOGY

Race and the prevalence of syphilis seroreactivity in the United States population: a national sero-epidemiologic study. Hahn RA, et al. **Am J Public Health** 1989 Apr; 79(4):467–70

Serological screening for syphilis during pregnancy in a multiethnic Asian population. Goh TH, et al. **Asia Oceania J Obstet Gynaecol** 1989 Mar;15(1):67–70

ETIOLOGY

Schizophrenia: recency theory and syphilis [letter] Oyebode F. **Br J Psychiatry** 1989 Feb;154:269

HISTORY

Syphilis in a Renaissance Italian mummy [letter] Fornaciari G, et al. **Lancet** 1989 Sep 9;2(8663):614

On the antiquity of treponemal infection. Rothschild BM. **Med Hypotheses** 1989 Mar;28(3):181–4

The syphilized world. Benditt J. **Sci Am** 1989 Mar;260(3):30

[2 case histories from around 1800] Fuldauer A, et al. **Ned Tijdschr Geneeskd** 1988 Dec 24;132(52):2363–7 **(Dut)**

[Paleopathologic data on syphilis in the Baltic area] Derums W, et al. **Dermatol Monatsschr** 1988;174(9):554–61 (Eng. Abstr.) **(Ger)**

[Syphilis and AIDS. Historical parallels] Krech T. **Fortschr Med** 1988 Jul 20;106(21):439–42 (Eng. Abstr.) **(Ger)**

[Tertiary bone syphilis from the Middle Ages. A paleopathology study] Scheidegger S. **Pathologe** 1989 May; 10(3):177–81 **(Ger)**

[In memory of Sahachiro Hata (1873–1938), the co-discoverer of salvarans (on the occasion of the 50th anniversary of his death)] Holubar K. **Wien Klin Wochenschr** 1988 Nov 18;100(22):747–9 (Eng. Abstr.) **(Ger)**

[AIDS and syphilis: the lessons of history] **Bol Of Sanit Panam** 1988 Mar;104(3):272–3 **(Spa)**

IMMUNOLOGY

The specificity of anti-cardiolipin antibodies from syphilis patients and from patients with systemic lupus erythematosus. Mouritsen S, et al. **Clin Exp Immunol** 1989 May;76(2):178–83

Kinetics of pathogen-specific humoral response in Treponema pallidum-infected young and old inbred strain 2 guinea pigs. Wicher V, et al. **Clin Exp Immunol** 1989 Jul;77(1):144–50

Experimental syphilis in guinea pig. Wicher K, et al. **CRC Crit Rev Microbiol** 1989;16(3):181–234 (159 ref.)

Treponema pallidum-immobilizing antibodies in guinea pig experimental syphilis. Wicher K, et al. **Infect Immun** 1989 Sep;57(9):2900–2

Analysis of the humoral immune response to Treponema pallidum in the different stages of untreated human syphilis. Moskophidis M. **Int J Med Microbiol** 1989 Jul;271(2):171–9

Development of cellular immunity to individual soluble antigens of Treponema pallidum during experimental syphilis. Baker-Zander SA, et al. **J Immunol** 1988 Dec 15; 141(12):4363–9

Macrophage-mediated suppression of con A-induced IL-2 production in spleen cells from syphilitic rabbits. Tomai MA, et al. **J Immunol** 1989 Jul 1;143(1):309–14

Resistance of mice to genital infection with Neisseria gonorrhoeae. Johnson AP, et al. **J Med Microbiol** 1989 Sep;30(1):33–6

[Detection of antibodies to Neisseria gonorrhoeae in cervicovaginal secretion and in serum] Koch HJ, et al. **Z Hautkr** 1988 Nov 15;63(11):897–8, 905–6 (Eng. Abstr.) **(Ger)**

[Nonspecific immobilizing activity factor (NIA) in the blood serum of donors and persons having sexual contact with syphilis patients] Borisenko KK, et al. **Vestn Dermatol Venerol** 1988;(11):19–22 (Eng. Abstr.) **(Rus)**

[Phagocytic activity of leukocytes in syphilis] Kapkaev RA, et al. **Vestn Dermatol Venerol** 1988;(7):69–73 (Eng. Abstr.) (Rus)

[Clinico-immunologic characteristics of patients with seroresistant syphilis] Markin IIa, et al. **Vestn Dermatol Venerol** 1989;(5):52–5 (Eng. Abstr.) (Rus)

[A case of recurrent secondary syphilis with a negative standard serologic test] Milich MV, et al. **Vestn Dermatol Venerol** 1988;(9):68–9 (Eng. Abstr.) (Rus)

[Immunologic aspects of the pathogenesis of latent and seroresistant forms of syphilis] Shetsiruli LT, et al. **Vestn Dermatol Venerol** 1989;(5):55–8 (Eng. Abstr.) (Rus)

METABOLISM

Experimental syphilitic orchitis. Relationship between Treponema pallidum infection and testis synthesis of proteoglycans. Strugnell RA, et al. **Am J Pathol** 1988 Oct; 133(1):110–7

MICROBIOLOGY

Interactions of Treponema pallidum with endothelial cell monolayers. Thomas DD, et al. **Eur J Epidemiol** 1989 Mar; 5(1):15–21

In vitro model of Treponema pallidum invasiveness. Riviere GR, et al. **Infect Immun** 1989 Aug;57(8):2267–71

Unusual manifestations of syphilis with human immunodeficiency virus infection [letter] McDaniel WE. **J Am Acad Dermatol** 1988 Sep;19(3):578

[Ultrastructural analysis of the interrelation of the causative agents of urogenital infections with the cells of the macro-organism in syphilis patients] Delektorskii VV, et al. **Vestn Dermatol Venerol** 1988;(8):26–9 (Eng. Abstr.) (Rus)

PATHOLOGY

Secondary syphilis. A clinicopathological study. Jordaan HF. **Am J Dermatopathol** 1988 Oct;10(5):399–409

Gummatous penile ulceration and generalised lymphadenopathy in homosexual man: case report. Kitchen VS, et al. **Genitourin Med** 1988 Aug;64(4):276–9

Infiltrate of syphilitic lesions before and after treatment. Tosca A, et al. **Genitourin Med** 1988 Oct;64(5):289–93

Acquired syphilis. Gaikwad AV, et al. **Indian J Pediatr** 1988 Jul–Aug;55(4):631–3

[Pathologico-anatomic data on persons on the syphilis registry] Milich MV, et al. **Vestn Dermatol Venerol** 1988; (11):50–4 (Eng. Abstr.) (Rus)

[Endocrine cells of the internal ear in the normal state and in specific labyrinthine lesion in rabbits] Soldatov IB, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):20–4 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

The effects of syphilis on endocrine function of the fetoplacental unit. Parker CR Jr, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1327–31

[Bone and air conduction in syphilis] Levin MM, et al. **Vestn Dermatol Venerol** 1988;(5):70–1 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

The infamous Tuskegee Study [letter] Silver GA. **Am J Public Health** 1988 Nov;78(11):1500

Prevention of congenital syphilis. Chattopadhyay B. **Br J Hosp Med** 1988 Jul;40(1):68–70

[Detection of syphilis during pregnancy] Juan B, et al. **Rev Chil Obstet Ginecol** 1986;51(2):124–32 (Eng. Abstr.) (Spa)

SURGERY

Management of vertigo in patients with syphilis: is endolymphatic shunt surgery appropriate? Shih L, et al. **Otolaryngol Head Neck Surg** 1988 Dec;99(6):574–7

THERAPY

Diagnosis and treatment of syphilis in HIV-infected patients. Goldschmidt RH. **J Am Board Fam Pract** 1989 Jul–Sep; 2(3):154–5

Syphilis evaluation and therapy: a study of current practices in a university hospital. Whiteside C, et al. **J Gen Intern Med** 1988 Nov–Dec;3(6):547–51

TRANSMISSION

Transmission of syphilis between sexual partners in Gabon. Schrijvers D, et al. **Genitourin Med** 1989 Apr;65(2):84–5

Treatment of sexual contacts of syphilitic pregnant women. Phaosavasdi S, et al. **J Med Assoc Thai** 1989 Mar; 72(3):132–7

Resurgence of heterosexually acquired early syphilis in London [letter] Tang A, et al. **Lancet** 1989 Jul 15; 2(8655):166–7

[An unusual genital ulcer in Algeria: soft chancre] Boudghene-Stambouli O, et al. **Bull Soc Pathol Exot Filiales** 1989;82(2):199–200 (Eng. Abstr.) (Fre)

[Epidemiologic aspects of early latent syphilis] Golovinov ED, et al. **Vestn Dermatol Venerol** 1988;(12):59–61 (Eng. Abstr.) (Rus)

VETERINARY

Existence of syphilis in a Pleistocene bear [letter] Rothschild BM. **Nature** 1988 Oct 13;335(6191):595

SYPHILIS, CARDIOVASCULAR

COMPLICATIONS

[A rare case of rupture of a syphilitic aortic aneurysm into the esophagus] Zagrebin VM, et al. **Ter Arkh** 1988; 60(10):70–1 (Eng. Abstr.) (Rus)

DIAGNOSIS

Severe syphilitic aortic regurgitation with bilateral critical coronary ostial stenosis. Somanath HS, et al. **Indian Heart J** 1989 May–Jun;41(3):196–8

HISTORY

Background of the prevention of cardiovascular disease. I. Nutritional, infectious, and alcoholic heart disease. Paul O. **Circulation** 1989 Jun;79(6):1361–8

RADIOGRAPHY

[Syphilitic cerebral arteritis. Therapeutic evaluation by angiography (letter)] Borg M, et al. **Presse Med** 1989 May 20;18(20):1034 (Fre)

SYPHILIS, CONGENITAL

Syphilis among mothers and children. Fiumara NJ. **Ann N Y Acad Sci** 1988;549:187–92

Congenital syphilis—a report of 3 cases. Chia F, et al. **Singapore Med J** 1988 Aug;29(4):402–5

COMPLICATIONS

Congenital syphilis in the newborn. Chawla V, et al. **Arch Dis Child** 1988 Nov;63(11):1393–4

Persistent histological and immunological abnormalities in congenital syphilitic glomerulonephritis after disappearance of proteinuria. Chen WP, et al. **Child Nephrol Urol** 1988–89; 9(1–2):93–7

Multiple intrauterine/neonatal infections. Kagalwala TY, et al. **Indian Pediatr** 1989 Feb;26(2):177–80

Sarcoid reactions in a patient with congenital syphilis. Nakamura S, et al. **J Dermatol (Tokyo)** 1988 Apr; 15(2):188–90

Intestinal obstruction in the newborn with congenital syphilis. Siplovich L, et al. **J Pediatr Surg** 1988 Sep;23(9):810–3

Congenital syphilis and necrotizing funisitis. Fojaco RM, et al. **JAMA** 1989 Mar 24–31;261(12):1788–90

Solitary gumma in a neonate. A case report. Heydenrych JJ, et al. **S Afr Med J** 1988 Nov 5;74(9):464–5

[Bone disorders due to congenital syphilis] den Boer JA, et al. **Tijdschr Kindergeneeskd** 1988 Dec;56(6):265–7 (Eng. Abstr.) (Dut)

DIAGNOSIS

Enzyme-linked immunosorbent assays for detection of immunoglobulin M to nontreponemal and treponemal antigens for the diagnosis of congenital syphilis. Pedersen NS, et al. **J Clin Microbiol** 1989 Aug;27(8):1835–40

Molecular analysis of the fetal IgM response to Treponema pallidum antigens: implications for improved serodiagnosis of congenital syphilis. Sánchez PJ, et al. **J Infect Dis** 1989 Mar;159(3):508–17

Probable late congenital syphilis presenting as Clutton joints. Kabuubi JB. **J R Army Med Corps** 1989 Jun;135(2):88–90

Congenital syphilis and necrotizing funisitis [letter] Benirschke K. **JAMA** 1989 Aug 18;262(7):904

Syphilis. Mallory SB, et al. **Pediatr Dermatol** 1989 Mar; 6(1):51–2

[Dynamic serologic reactions during the continuous method of treating children born to mothers with syphilis and a history of the disease] Bednova VN, et al. **Vestn Dermatol Venerol** 1988;(11):47–50 (Eng. Abstr.) (Rus)

DRUG THERAPY

[The treatment of congenital syphilis with penicillin (letter)] Prinsloo JG, et al. **S Afr Med J** 1989 Sep 16;76(6):282 (Afr)

EPIDEMIOLOGY

Congenital syphilis—who is at risk? A prevalence study at Baragwanath Hospital, Johannesburg, 1985–1986. Venter A, et al. **S Afr Med J** 1989 Aug 5;76(3):93–5

Time series analysis of syphilis surveillance data. Zaidi AA, et al. **Stat Med** 1989 Mar;8(3):353–62; discussion 363

[Congenital syphilis: proposition for action] Iñiguez Carbonell JC, et al. **An Esp Pediatr** 1988 Dec;29(6):470–4 (Spa)

ETIOLOGY

Congenital syphilis in The Netherlands: cause and parental characteristics. Boot JM, et al. **Genitourin Med** 1988 Oct; 64(5):298–302

HISTORY

A case of late congenital syphilis at the Metropolitan Museum of Art, New York. Borroni G. **Am J Dermatopathol** 1988 Oct;10(5):448–50

IMMUNOLOGY

Characterization of the components in circulating immune complexes from infants with congenital syphilis. Dobson SR, et al. **J Infect Dis** 1988 Nov;158(5):940–7

Congenital syphilis: immunologic challenges. Baughn RE. **Pathol Immunopathol Res** 1989;8(3–4):161–78 (91 ref.)

PATHOLOGY

Nonsyndromatic paucity of intrahepatic bile ducts in congenital syphilis. A case report. Sugiura H, et al. **Acta Pathol Jpn** 1988 Aug;38(8):1061–8

Congenital syphilis. Judge DM. **Prog Clin Biol Res** 1988; 281:87–106 (36 ref.)

[A case of early active congenital syphilis] Kekilova GA, et al. **Vestn Dermatol Venerol** 1988;(8):72–5 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Prevention of congenital syphilis. Chattopadhyay B. **Br J Hosp Med** 1988 Jul;40(1):68–70

Influence of antenatal screening on perinatal mortality caused by syphilis in Swaziland. Guinness LF, et al. **Genitourin Med** 1988 Oct;64(5):294–7

Effectiveness of benzathine penicillin regimen in the treatment of syphilis in pregnancy. Phaosavasdi S, et al. **J Med Assoc Thai** 1989 Feb;72(2):101–8

[Prevention of congenital syphilis] Zenin BA, et al. **Vestn Dermatol Venerol** 1988;(5):65–8 (Eng. Abstr.) (Rus)

SYPHILIS, CUTANEOUS

COMPLICATIONS

Lichenoid granulomatous papular dermatosis associated with human immunodeficiency virus infection [letter] Heymann WR. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):589

DRUG THERAPY

Failure of erythromycin to cure secondary syphilis in a patient infected with the human immunodeficiency virus. Duncan WC. **Arch Dermatol** 1989 Jan;125(1):82–4

Secondary syphilis treated with parenteral cephalosporin [letter] Parish LC, et al. **Int J Dermatol** 1989 Jan–Feb; 28(1):58

PATHOLOGY

Ringworm-like late syphilides. Starzycki Z. **Acta Derm Venereol (Stockh)** 1989;69(2):173–4

A young woman with nodules on her face and trunk. Tertiary (tubercular) syphilis. Ghigliotti G, et al. **Arch Dermatol** 1989 Apr;125(4):551, 554

Condylomata lata. al-Harmozi SA, et al. **Cutis** 1989 Jul; 44(1):87–8

Condylomata lata of the eyelids. Sharma VK, et al. **Genitourin Med** 1989 Apr;65(2):124–5

[Skin manifestations of syphilis maligna in HIV infection. Clinical observations in 3 cases] Schröter R, et al. **Hautarzt** 1988 Jul;39(7):463–6 (Eng. Abstr.) (Ger)

[Malignant centroblastic-centrocytic lymphoma: a differential diagnostic alternative in syphilis II] Leicht E, et al. **Med Klin** 1989 May 15;84(5):271–2 (Ger)

[Syphilitic ecthyma on the soles of a patient with malignant syphilis] Grakovich RI, et al. **Vestn Dermatol Venerol** 1988; (5):68–70 (Eng. Abstr.) (Rus)

SYPHILIS, LATENT

COMPLICATIONS

Otologic manifestations of AIDS: the otosyphilis connection. Smith ME, et al. **Laryngoscope** 1989 Apr;99(4):365–72

DIAGNOSIS

Probable late congenital syphilis presenting as Clutton joints. Kabuubi JB. **J R Army Med Corps** 1989 Jun;135(2):88–90

[Selected aspects of syphilis serology] Gschnait F. **Z Hautkr** 1989 May 15;64(5):398–400 (12 ref.) (Eng. Abstr.) (Ger)

EPIDEMIOLOGY

[Epidemiologic aspects of early latent syphilis] Golovinov ED, et al. **Vestn Dermatol Venerol** 1988;(12):59–61 (Eng. Abstr.) (Rus)

IMMUNOLOGY

[Immunologic aspects of the pathogenesis of latent and seroresistant forms of syphilis] Shetsiruli LT, et al. **Vestn Dermatol Venerol** 1989;(5):55–8 (Eng. Abstr.) (Rus)

PATHOLOGY

[Tardive syphilis of hepatic localization] Tomidei M, et al.

G Ital Dermatol Venereol 1988 Oct;123(10):509–11 (Eng. Abstr.) (Ita)

SYPHILIS SERODIAGNOSIS

Race and the prevalence of syphilis seroreactivity in the United States population: a national sero-epidemiologic study. Hahn RA, et al. **Am J Public Health** 1989 Apr; 79(4):467–70

Clinical significance of cerebrospinal fluid tests for neurosyphilis. Davis LE, et al. **Ann Neurol** 1989 Jan; 25(1):50–5

Serological screening for syphilis during pregnancy in a multiethnic Asian population. Goh TH, et al. **Asia Oceania J Obstet Gynaecol** 1989 Mar;15(1):67–70

Is it time to review antenatal screening for syphilis? Holland EF, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):1005–6

Are serological tests of value in diagnosing and monitoring response to treatment of syphilis in patients infected with human immunodeficiency virus? Terry PM, et al. **Genitourin Med** 1988 Aug;64(4):219–22

Evaluation of NCS rapid plasma reagin card test, a new screening kit for syphilis. Fischer GS, et al. **J Clin Microbiol** 1989 Jan;27(1):188–9

Sensitivity and specificity of an enzyme-linked immunosorbent assay using the recombinant DNA-derived Treponema pallidum protein TmpA for serodiagnosis of syphilis and the potential use of TmpA for assessing the effect of antibiotic therapy. Ijsselmuiden OE, et al. **J Clin Microbiol** 1989 Jan;27(1):152–7

Enzyme-linked immunosorbent assays for detection of immunoglobulin M to nontreponemal and treponemal antigens for the diagnosis of congenital syphilis. Pedersen NS, et al. **J Clin Microbiol** 1989 Aug;27(8):1835–40

Panuveitis with positive serological tests for syphilis and Lyme disease. Zierhut M, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):71–5; discussion 76–8

Rapid Plasma Reagin test (RPR) compared to Venereal Diseases Research Laboratory test (VDRL) for the diagnosis of syphilis in pregnancy. Phaosavasdi S, et al. **J Med Assoc Thai** 1989 Apr;72(4):202–6

Biologic false-positive serologic tests for syphilis and other serologic abnormalities in autoimmune hemolytic anemia and thrombocytopenic purpura. Conley CL, et al. **Medicine (Baltimore)** 1989 Mar;68(2):67–84 (239 ref.)

[A clinical and serologic survey of bejel in north Burkina Faso] Gazin P, et al. **Bull Soc Pathol Exot Filiales** 1988; 81(5):827–31 (Eng. Abstr.) (Fre)

[Suspicion of syphilis from cross reactions in Borrelia infection (letter)] Müller F. **Dtsch Med Wochenschr** 1989 Feb 10;114(6):236–7 (Ger)

[A case of cerebral infarction with lupus anticoagulant positive, presenting thrombocytopenia, recurrent fetal loss and biological false-positive in syphilis] Kitabayashi T, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):702–3 (Jpn)

[Passive microhemagglutination reaction to Treponema pallidum in the cerebrospinal fluid in the diagnosis of neurosyphilis] Machado A de B, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):369–73 (Eng. Abstr.) (Por)

[Use of splenin for the purpose of immunocorrection in patients with seroresistance following syphilis treatment] Bakhmet'eva TM, et al. **Vestn Dermatol Venerol** 1988; (10):38–42 (Eng. Abstr.) (Rus)

[Dynamic serologic reactions during the continuous method of treating children born to mothers with syphilis and a history of the disease] Bednova VN, et al. **Vestn Dermatol Venerol** 1988;(11):47–50 (Eng. Abstr.) (Rus)

[A quantitative version of the precipitation microreaction with the cardiolipin antigen in syphilis] D'iachenko LA, et al. **Vestn Dermatol Venerol** 1988;(12):44–6 (Eng. Abstr.) (Rus)

[Errors in the diagnosis of early forms of syphilis] Iakovleva NI. **Vestn Dermatol Venerol** 1989;(1):60–4 (Eng. Abstr.) (Rus)

[A case of recurrent secondary syphilis with a negative standard serologic test] Milich MV, et al. **Vestn Dermatol Venerol** 1988;(9):68–9 (Eng. Abstr.) (Rus)

METHODS

Evaluation of Western immunoblotting technique in the serological diagnosis of human syphilitic infections. Dettori G, et al. **Eur J Epidemiol** 1989 Mar;5(1):22–30

An IgM capture enzyme linked immunosorbent assay to detect IgM antibodies to treponemes in patients with syphilis. Ijsselmuiden OE, et al. **Genitourin Med** 1989 Apr; 65(2):79–83

Screening for treponemal infection by a new enzyme immunoassay. Young H, et al. **Genitourin Med** 1989 Apr; 65(2):72–8

[Neurosyphilis in 1988: a serological diagnosis?] Frijns CJ, et al. **Ned Tijdschr Geneeskd** 1988 Dec 3;132(49):2225–7 (Dut)

[Syphilis: epidemiology, clinical aspects, diagnosis and therapy] Breustedt W, et al. **Z Arztl Forthild (Jena)** 1988; 82(23):1175–81 (15 ref.) (Ger)

[Selected aspects of syphilis serology] Gschnait F. **Z Hautkr** 1989 May 15;64(5):398–400 (12 ref.) (Eng. Abstr.) (Ger)

[Current methods of laboratory diagnosis of syphilis of the central nervous system] Manikowska-Lesińska W, et al. **Przegl Dermatol** 1986 Jul-Aug;73(4):273–9 (Eng. Abstr.) (Pol)

[The dynamics of antibodies with IgD-class cardiolipin and treponemal group specificity in syphilis assessed quantitatively by radial immunodiffusion] Ionescu DA, et al. **Rev Ig [Bacteriol]** 1989 Apr-Jun;34(2):141–54 (Eng. Abstr.) (Rum)

[A specific stimulation test of the peripheral blood lymphocytes in the diagnosis of syphilis] Astaf'ev AV, et al. **Vestn Dermatol Venerol** 1989;(5):16–9 (Eng. Abstr.) (Rus)

[The specific lymphocytolysis reaction in syphilis patients] Rodin IuA, et al. **Vestn Dermatol Venerol** 1988;(11):57–9 (Eng. Abstr.) (Rus)

STANDARDS

[Syphilis advances. The diagnosis improves?] Camargo ME. **AMB Rev Assoc Med Bras** 1988 Jan-Feb;34(1):19–23 (Eng. Abstr.) (Por)

SYRINGES

Multiple insulin injections in adolescent diabetics using a pen-type syringe. Sasaki N, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Jun;29(3):368–72

Clinical use of a portable infusion pump and pen-type injector in type 1 diabetes mellitus. Tsuchiya Y, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Jun;29(3):361–7

Changes in HIV risk behaviour in clients of syringe-exchange schemes in England and Scotland. Donoghoe MC, et al. **Aids** 1989 May;3(5):267–72

Evaluation of needle exchange in central London: behaviour change and anti-HIV status over one year. Hart GJ, et al. **Aids** 1989 May;3(5):261–5

Syringe-exchange programmes for injecting drug users. Stimson GV. **Aids** 1989 May;3(5):253–60 (73 ref.)

Syringe HIV seroprevalence and behavioural and demographic characteristics of intravenous drug users in Sydney, Australia, 1987. Wolk J, et al. **Aids** 1988 Oct; 2(5):373–7

An automatic syringe for coronary occlusion in long-term collateralization studies. Caldwell WM, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1707–10

Maximum transfusion rate through 24G cannulae [letter] Yamashita M, et al. **Anaesth Intensive Care** 1989 Feb; 17(1):109

Caution when using a Tubex cartridge without the injector [letter; comment] Lewis ET. **Anesthesiology** 1989 Feb; 70(2):374. **Comment on:** Anesthesiology 1988 Sep;69(3):440

A pressure and volume-limited inflation syringe. Walling PT, et al. **Anesthesiology** 1989 Aug;71(2):283–8

Effect on biochemical parameters of blood collected into heparinised syringes. O'Leary TD, et al. **Ann Clin Biochem** 1989 Jan;26 (Pt 1):106–7

Prevention of human immunodeficiency virus infection among intravenous drug users in New South Wales, Australia: the needles and syringes distribution programme through retail pharmacies. Tsai R, et al. **Asia Pac J Public Health** 1988;2(4):245–51

Risk of sharing injection equipment [letter] McKeganey N, et al. **BMJ** 1988 Dec 3;297(6661):1472

HIV transmission risk behaviour of clients attending syringe-exchange schemes in England and Scotland. Stimson GV, et al. **Br J Addict** 1988 Dec;83(12):1449–55

Syringe-exchange schemes: part of the necessary package: a reply to Spencer Madden [letter] Stimson GV. **Br J Addict** 1989 Jun;84(6):698–9

Variations in the gliding characteristics of 10-ml plastic syringes used to locate the extradural space by "loss of resistance" techniques. Bricker SR, et al. **Br J Anaesth** 1988 Dec;61(6):776–81

The effects of the liberalization of syringe sales on the behaviour of intravenous drug users in France. Ingold FR, et al. **Bull Narc** 1989;41(1–2):67–81

Multi-dose vials of xylocaine: does re-use predispose to HBV or HIV transmission? **Can Dis Wkly Rep** 1989 Feb 18; 15(7):34–5 (Eng, Fre)

A microbiological study of the contamination of the syringes used in anaesthesia practice. Lessard MR, et al. **Can J Anaesth** 1988 Nov;35(6):567–9

Contamination of multiple-dose vials due to repeat use of syringes. **Can Med Assoc J** 1989 Mar 1;140(5):529–31

Safety and convenience of a mechanical injector pump for coronary angiography. Ireland MA, et al. **Cathet Cardiovasc Diagn** 1989 Mar;16(3):199–201

Use of flocculated human insulin in jet infusion devices [letter] Lindsay R. **Diabetes Care** 1989 Jan;12(1):42–3

Reevaluation of single-use insulin syringes. McCarthy JA, et al. **Diabetes Care** 1988 Nov-Dec;11(10):817–8

More on insulin-compatible materials [letter] Massey EH. **Diabetes Care** 1983 Sep-Oct;6(5):526

Contamination of insulin by silicone oil: a potential hazard of plastic insulin syringes. Baldwin RN. **Diabetic Med** 1988 Nov;5(8):789–90

Autoinjection of corpus cavernosum with papaverine: a practical application device. Telöken C, et al. **Eur Urol** 1989;16(2):123–4

NAS research unit supports ready access to condoms, drug treatment to halt AIDS spread [news] **Hosp Community Psychiatry** 1989 Jul;40(7):763–4

Should syringes be redesigned? [letter] Kulkarni KB. **Indian Pediatr** 1989 Mar;26(3):302–3

Should the syringe be redesigned? [letter] Singh S, et al. **Indian Pediatr** 1988 Apr;25(4):394–5

Clinical experience in oral surgery with 2 different automatic aspirating syringes. Meechan JG, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):87–9

Why the syringe and not the suction machine? Fournier PF. **J Dermatol Surg Oncol** 1988 Oct;14(10):1062–71

Disposable insulin syringe reuse and aseptic practices in diabetic patients. Thomas DR, et al. **J Gen Intern Med** 1989 Mar-Apr;4(2):97–100

Reuse of disposable insulin syringes and needles in diabetic children. Panamonta O, et al. **J Med Assoc Thai** 1989 Jun; 72(6):314–6

A grid system and a microsyringe for single cell recording. Crist CF, et al. **J Neurosci Methods** 1988 Dec;26(2):117–22

The "exploding" syringe [letter] Fenton RS. **J Otolaryngol** 1989 Feb;18(1):75

The tissue expander syringe: an aid to liposuction surgery [letter] Middleton WG. **J Otolaryngol** 1988 Dec;17(7):412–3

Dual chamber prefill syringes. Michaels TM Jr. **J Parenter Sci Technol** 1988 Nov-Dec;42(6):199–202

Intrapartum suctioning of meconium: comparative efficacy of bulb syringe and De Lee catheter. Cohen-Addad N, et al. **J Perinatol** 1987 Spring;7(2):111–3

An alternative method of border molding. Lipkin LS. **J Prosthet Dent** 1988 Sep;60(3):399

AIDS and drug addiction needle exchange schemes [letter] Loza N. **J R Soc Med** 1989 Feb;82(2):123

Simple method to sterilize syringes and needles [letter] Ramachandran CR. **J Trop Pediatr** 1988 Oct;34(5):261–2

Simple aid for upright voiding after partial penectomy. Manson AL. **J Urol** 1989 Apr;141(4):895

Changes in needle sharing and syringe cleaning among San Francisco drug abusers [letter] Sorensen JL, et al. **N Engl J Med** 1989 Mar 23;320(12):807

Changing needles: a dangerous custom without foundation [letter] Walterspiel JN. **Pediatr Infect Dis J** 1988 Sep; 7(9):675–6

The intraligamental dental syringe facilitates steroid injection into hypertrophic scars and keloids [letter] Sagher U. **Plast Reconstr Surg** 1989 Sep;84(3):542

Clinical experience with NovoPen II and insulin Protaphane HM Penfill. Kølendorf K, et al. **Postgrad Med J** 1988;64 Suppl 3:14–6; discussion 21

Field evaluation of a simplified unit-dose syringe for administration of measles vaccine. Halsey NA, et al. **Rev Infect Dis** 1989 May-Jun;11 Suppl 3:S631–8

[Syringe pumps: be careful with syringes! (letter)] Denizet E. **Ann Fr Anesth Reanim** 1989;8(3):295 (Fre)

[The significance of the material in syringes used for the sampling of arterial blood for gas analysis] Wollmer P, et al. **Lakartidningen** 1988 Dec 7;85(49):4311–2 (Swe)

[Swedish physicians and social workers in a fight for free syringes for narcotic addicts] Finer D. **Nord Med** 1989; 104(8–9):227 (Swe)

STANDARDS

Flow rate variability from selected syringe and mobile infusion pumps. Farrington EA, et al. **Drug Intell Clin Pharm** 1988 Sep;22(9):687–90

Bacterial contamination of re-usable and disposable syringes and needles. Danchaivijitr S, et al. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:26–8

[The role of AFNOR in the standardization of equipment for injections and in particular for perfusion] Briant M. **Agressologie** 1988 Dec;29(12 Spec No):829–32 (Eng. Abstr.) (Fre)

VETERINARY

Flying syringes [letter] Jessup DA. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1361

SYRINGOMA, CHONDROID see **HIDRADENOMA**

SYRINGOMYELIA

Syringomyelia: clinical analysis of 12 cases. Tsai SY, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):205–12

[Pathogenesis and therapeutic possibilities in syringomyelia] Rasmussen G, et al. **Ugeskr Laeger** 1988 Nov 21; 150(47):2886–9 (30 ref.) (Eng. Abstr.) (Dan)

CEREBROSPINAL FLUID

[Cerebrospinal fluid dynamics in syringomyelia] Kruse A, et al. **Ugeskr Laeger** 1988 Nov 28;150(48):2966–8 (Eng. Abstr.) (Dan)

COMPLICATIONS

Syringomyelia in association with posterior fossa cysts. Banna M. **AJNR** 1988 Sep;9(5):867–73

Isolated central respiratory failure due to syringomyelia and Arnold-Chiari malformation. Bullock R, et al. **BMJ** 1988 Dec 3;297(6661):1448–9

Obstructive sleep apnea leading to increased intracranial pressure in a patient with hydrocephalus and syringomyelia. Pasterkamp H, et al. **Chest** 1989 May; 95(5):1064–7

Hemifacial oedema complicating a case of syringomyelia.

McFadden JP, et al. **Clin Exp Dermatol** 1988 Jan;13(1):42–3
Association of ganglioneuroblastoma with syringomyelia. Case report. Saltuari L, et al. **Clin Neurol Neurosurg** 1989; 91(2):139–43
Asymmetrical growth of scalp hair in syringomyelia. Soria E, et al. **Cutis** 1989 Jan;43(1):33–6
Charcot shoulder as the initial symptom in Arnold–Chiari malformation with hydromyelia: case report. Davis RP, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):406–8
The association of papilledema with syringomyelia: case report. Marks SJ, et al. **Mt Sinai J Med (NY)** 1988 Sep; 55(4):333–8
Sternocleidomastoid and trapezius dissociation [letter] **Neurology** 1989 Mar;39(3):454–6
Scoliosis in syringomyelia. Bertrand SL, et al. **Orthopedics** 1989 Feb;12(2):335–7
Neuropathic sternoclavicular joint secondary to syringomyelia. A case report. Chidgey LK, et al. **Orthopedics** 1988 Nov;11(11):1571–3
[Combined medullary hemangioblastoma and syringomyelia in a patient with von Hippel–Lindau disease: pathological study] Pou Serradell A, et al. **Rev Neurol (Paris)** 1988; 144(6–7):456–8 (Eng. Abstr.) **(Fre)**
[Arthropathy of the shoulder joint in syringomyelia—a case report] Simon M, et al. **Beitr Orthop Traumatol** 1988 Aug; 35(8):388–92 (Eng. Abstr.) **(Ger)**
[Clinico–roentgenologic characteristics of syringomyelic osteo– and arthropathies in children] Shchitova NN, et al. **Pediatriia** 1989;(7):61–5 **(Rus)**

DIAGNOSIS

Syringomyelia: how MRI aids diagnosis and management. Powell M. **Acta Neurochir Suppl (Wien)** 1988;43:17–21
Magnetic resonance (MR) imaging in the management of primary and secondary syringomyelic cavities, and of other cystic lesions of the spinal cord. Roosen N, et al. **Acta Neurochir Suppl (Wien)** 1988;43:13–6
Magnetic resonance imaging (MRI) of pseudosyrinxes. Houang MT, et al. **Australas Radiol** 1988 May;32(2):178–83
Magnetic resonance imaging (MRI) appearances of syringohydromyelia. Houang MT, et al. **Australas Radiol** 1988 May;32(2):172–7
Magnetic resonance imaging in patients with progressive myelopathy following spinal surgery. Avrahami E, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):176–81
Identification of acute posttraumatic spinal cord cyst by magnetic resonance imaging: a case report and review of the literature. Gabriel KR, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):710–4
MR imaging of syringobulbia with giant syrinx. Abe K, et al. **Neuroradiology** 1988;30(5):442–3
Exophthalmos and basilar impression. A contribution to differential diagnosis of endocrine orbitopathy. Kahaly G, et al. **Neurosurg Rev** 1988;11(3–4):287–92
Scoliosis in myelomeningocele. Significance of syringohydromyelia and Chiari malformations studied with magnetic resonance imaging. Samuelsson L, et al. **Rev Chir Orthop** 1988;74 Suppl 2:310–1
[Syringomyelia: correlation of magnetic resonance tomographic and clinical findings before and after surgery] Schroth G, et al. **ROFO** 1988 Dec;149(6):587–93 (Eng. Abstr.) **(Ger)**
[Thermographic findings of syringomyelia] Koyanagi I, et al. **No Shinkei Geka** 1988 Sep;16(10):1149–54 (Eng. Abstr.) **(Jpn)**
[Evaluation of the magnetic resonance images in 67 cases of syringomyelia] González Alenda FJ, et al. **Rev Clin Esp** 1988 Jul;183(3):124–8 **(Spa)**

ETIOLOGY

Posttraumatic syringomyelia associated with heavy weightlifting exercises: case report. Balmaseda MT Jr, et al. **Arch Phys Med Rehabil** 1988 Nov;69(11):970–2
Etiology of syringomyelia [letter] Sullivan LP, et al. **Neurology** 1989 Feb;39(2 Pt 1):308
Cordectomy for syringobulbo–myelia with sleep apnea secondary to a spinal extramedullary tumor: case report. Tokoro K, et al. **Neurosurgery** 1989 Jan;24(1):118–24
Central dysesthesia syndrome in spinal cord injury patients. Berić A, et al. **Pain** 1988 Aug;34(2):109–16
A case of post–traumatic syringomyelia. Neuropathological findings after 1 year of cystic drainage. Foo D, et al. **Paraplegia** 1989 Feb;27(1):63–9
Posttraumatic syringomyelia. La Haye PA, et al. **West J Med** 1988 Jun;148(6):657–63
[Atlanto–occipital luxation and syringomyelia: 2 rare complications of cervical injury. Diagnostic and therapeutic effects. Apropos of a case] Colnet G, et al. **Neurochirurgie** 1989;35(1):58–63 (27 ref.) (Eng. Abstr.) **(Fre)**
[An extramedullary spinal cord tumor associated with syringomyelia: a case report] Nishiura I, et al. **No Shinkei Geka** 1989 Feb;17(2):181–5 (Eng. Abstr.) **(Jpn)**
[A case of intramedullary spinal cavitation after minor trauma] Satoh S, et al. **No Shinkei Geka** 1989 Feb; 17(2):187–91 (Eng. Abstr.) **(Jpn)**
[Syringomyelia following tuberculous meningitis—report of three cases diagnosed by MR imaging] Tsuchiya K, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1589–92 (Eng. Abstr.) **(Jpn)**

METABOLISM

Clinical and experimental studies on permeability of tracers in normal spinal cord and syringomyelia. Ikata T, et al. **Spine** 1988 Jul;13(7):737–41

PATHOLOGY

Pathological findings in suboccipital decompression in 63 patients with syringomyelia. Bidziński J. **Acta Neurochir Suppl (Wien)** 1988;43:26–8
Syringomyelia associated with developmental anomalies and clinically pure motor presentation. Siriaungkul S, et al. **J Med Assoc Thai** 1988 Jun;71(6):345–9
Ultrastructure of the human posttraumatic syrinx. Reddy KK, et al. **J Neurosurg** 1989 Aug;71(2):239–43
[A case of syringomyelia with atypical neurological signs and myopathic changes in muscle morphology] Kunimoto M, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1054–7 (Eng. Abstr.) **(Jpn)**
[Pathologic cataract in pseudosyringomyelic ulceromutilating acropathy] Vilă F. **Rev Chir [Oftalmol]** 1988 Jul–Sep; 32(3):207–10 (Eng. Abstr.) **(Rum)**

PHYSIOPATHOLOGY

Two point sensory discrimination in syringomyelia. McFadden JP, et al. **Br J Clin Pract** 1988 Jun;42(6):233–4
[Suprasegmental autonomic regulation in syringomyelia patients and its alteration during radionuclide therapy] Shutov AA, et al. **Zh Nevropatol Psikhiatr** 1988; 88(10):28–33 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Experimental hydrocephalus and hydrosyringomyelia. Computertomographic studies. Donauer E, et al. **Neurosurg Rev** 1988;11(1):87–94
[Efficacy of CT omnipaque myelography in the demonstration of intraspinal space–occupying diseases (report of 77 cases)] Wang YS. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb;23(1):11–3 (Eng. Abstr.) **(Chi)**

SURGERY

Late results of the surgical treatment of syringomyelia. Bidziński J. **Acta Neurochir Suppl (Wien)** 1988;43:29–31
Treatment of syringomyelia by syringo–peritoneal shunt. Philippon J, et al. **Acta Neurochir Suppl (Wien)** 1988; 43:32–4
Operative treatment of Chiari malformation with syringomyelia. Tokuno H, et al. **Acta Neurochir Suppl (Wien)** 1988;43:22–5
Foramen magnum decompression versus terminal ventriculostomy for the treatment of syringomyelia. Filizzolo F, et al. **Acta Neurochir (Wien)** 1988;93(3–4):96–9
Multicystic syringomyelia treated with a single, non–valved syringoperitoneal shunt: fast and near–complete MRI normalization. Wester K, et al. **Acta Neurochir (Wien)** 1989; 98(3–4):148–52
Lumboperitoneal shunt combined with myelotomy for treatment of syringohydromyelia. Park TS, et al. **J Neurosurg** 1989 May;70(5):721–7
Surgical management of syringomyelia—current results. Matsumoto T, et al. **Surg Neurol** 1989 Oct;32(4):258–65
Surgical treatment of syringomyelia: favorable results with syringosubarachnoid shunting. Padovani R, et al. **Surg Neurol** 1989 Sep;32(3):173–80
Spinal cord damage caused by rotation of a T–drain in a patient with syringoperitoneal shunt. Wester K, et al. **Surg Neurol** 1989 Mar;31(3):224–7
[Syringomyelia from the neurosurgical viewpoint] Wiedemayer H, et al. **Nervenarzt** 1989 Jan;60(1):17–25 (Eng. Abstr.) **(Ger)**
[A syringoperitoneal shunt. A promising treatment in syringomyelia] Wester K, et al. **Tidsskr Nor Laegeforen** 1988 Sep 30;108(27):2275–8 (Eng. Abstr.) **(Nor)**

THERAPY

[Management of pregnancy and labor in women with syringomyelia] Shinkareva LF, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):65–8 **(Rus)**

SYSTEMS ANALYSIS

see related
RESEARCH
SYSTEMS THEORY
TASK PERFORMANCE AND ANALYSIS

Technical intuition in system diagnosis, or accessing the libraries of the mind. Gott SP. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A59–64
Systems dynamics in clinical pharmacokinetics. An introduction. van Rossum JM, et al. **Clin Pharmacokinet** 1989 Jul;17(1):27–44 (64 ref.)
Increasing the relevancy and usefulness of programme evaluation: a comprehensive evaluation. Favaro P, et al. **Hygie** 1988 Jun;7(2):28–32
Policy process framework: a systems approach to policy development. Burian B. **J Allied Health** 1989 Jan;18(1):95–9
Surgical unit time utilization review: resource utilization and management implications. Gordon T, et al. **J Med Syst** 1988 Jun;12(3):169–79 (27 ref.)
Systemic approach to the detection, identification and assessment of the influence of risk factors on the occurrence of borderline neuropsychic disorders. Petrakov BD. **Sante Publique (Bucur)** 1988 Oct–Dec;31(4):325–30
[Functional systems case analysis—a possibility of explaining and avoiding failure] Schrems HT, et al. **Fortschr Kieferorthop** 1988 Oct;49(5):454–62 (Eng. Abstr.) **(Ger)**
[Systems analysis in hospital management] Caltagirone P, et al. **Minerva Med** 1989 Jun;80(6):581–5 (Eng. Abstr.) **(Ita)**
[The operative management of the anesthesiology–resuscitation service of a hospital based on a systems approach and computerization] Nedashkovskiĭ EV. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):54–6 (Eng. Abstr.) **(Rus)**
[Elements of the systems approach in studying and using antiviral preparations] Pshenichnov VA. **Vopr Virusol** 1989 Mar–Apr;34(2):139–45 (17 ref.) **(Rus)**
[Epidemiologic surveillance as a system] Vasil'ev KG. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):90–4 **(Rus)**

SYSTEMS THEORY

see related
MODELS, THEORETICAL

Closing the gap between grand theory and mental health practice with families. Part 1: The framework of systemic organization for nursing of families and family members. Friedemann ML. **Arch Psychiatr Nurs** 1989 Feb;3(1):10–9
A nursing reformulation of Bowen's family systems theory. McFarlane AJ. **Arch Psychiatr Nurs** 1988 Oct;2(5):319–24 (19 ref.)
The biological significance of behavioral learning from a systems view. Germana J. **Behav Sci** 1989 Jul;34(3):228–37
Autopoiesis: the status of its system logic. Fleischaker GR. **Biosystems** 1988;22(1):37–49
Computer prediction of congestion in the obstetric ward. Kubo T, et al. **Comput Biomed Res** 1989 Oct;22(5):454–60
[The renin–angiotensin system (RAS) as a unitary circulating hormonal and tissue system] Haulică I. **Physiologie** 1989 Jan–Mar;26(1):7–15 (44 ref.) **(Fre)**
[Possibilities and limits of the systems theory approach in psychopathology] Frommer J. **Nervenarzt** 1989 Feb; 60(2):65–70 (62 ref.) **(Ger)**
[Effects of systemic thinking on the human concept of the therapist and his therapeutic work] Rotthaus W. **Prax Kinderpsychol Kinderpsychiatr** 1989 Jan;38(1):10–6 (17 ref.) (Eng. Abstr.) **(Ger)**
[A systems theory approach to the solution of the Bieri trilemma] Schmidt EG. **Psychother Psychosom Med Psychol** 1989 Jul;39(7):268–9 (Eng. Abstr.) **(Ger)**
[Systems theory in medicine and biology] Feigl W, et al. **Wien Med Wochenschr** 1989 Mar 15;139(5):87–91 (40 ref.) (Eng. Abstr.) **(Ger)**
[Specific and nonspecific effects of psychoactive drugs on the interactions of the physician–patient–environment system] Governa R, et al. **Minerva Psichiatr** 1988 Apr–Jun; 29(2):105–8 (Eng. Abstr.) **(Ita)**
[An alternative theory and practice on preventive medicine with special emphasis on total cancer studies] Maruchi N, et al. **Gan No Rinsho** 1989 Jan;35(2):156–62 (Eng. Abstr.) **(Jpn)**
[Mathematical model of the stochastic interaction of a living system with the environment] Kornikov VV, et al. **Biol Nauki** 1988;(7):68–70 **(Rus)**
[Integrative properties of the microsystem of cortical neurons during repeated local stimulation] Kotliar BI, et al. **Biol Nauki** 1988;(9):42–60 (Eng. Abstr.) **(Rus)**
[Human immune status. II. First successes of the systems approach] Lebedev KA, et al. **Fiziol Cheloveka** 1989 Mar–Apr;15(2):115–26 (75 ref.) **(Rus)**
[The principle of the so–called dominant in the mechanisms of systems of self–organization of individual development (the mechanisms determining the information capacity of the developing organism)] Arshavskiĭ IA, et al. **Nerv Sist** 1988;26:130–48 **(Rus)**
[A systems model of the reproductive death of mammalian cells. A comparison with experimental data and the biological meaning of the parameters of the model] Moiseenko VV, et al. **Radiobiologiia** 1989 May–Jun; 29(3):305–9 **(Rus)**
[Systems organization of the higher sections of the auditory analyzer] Komissarov VI. **Usp Fiziol Nauk** 1988 Oct–Dec; 19(4):33–53 **(Rus)**
[From the theory of the epidemic process to the theory of the "self–regulation" of parasitic systems] Cherkasskiĭ BL. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):110–2 **(Rus)**
[Methodologic aspects of the theory of self–regulation of parasitic systems] Gorin NS. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):90–3 **(Rus)**
[The organization of time in biological systems] MikhallovskiiUi GE. **Zh Obshch Biol** 1989 Jan–Feb; 50(1):72–81 (Eng. Abstr.) **(Rus)**
[Brain function as a neurophysiologic system mechanism of the conditioned reflex] Kotliar BI, et al. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):607–13 (30 ref.) **(Rus)**
[Development of the theory of systemogenesis at the present

stage] Shulelkina KV, et al. **Zh Vysh Nerv Deiat** 1989 Jan-Feb;39(1):3-19 (88 ref.) **(Rus)**
[The patient and the health system. The function of the general physician based on the systems theory] Corral Corral C. **Med Clin (Barc)** 1989 Mar 4;92(8):306-8 (19 ref.) **(Spa)**

SYSTOLE see under **MYOCARDIAL CONTRACTION**

SYSTOLIC CLICK-MURMUR SYNDROME see **MITRAL VALVE PROLAPSE**

SZONDI TEST see under **PROJECTIVE TECHNICS**

2,4,5-T see **2,4,5-TRICHLOROPHENOXYACETIC ACID**

T-2 TOXIN see under **SESQUITERPENES**

T4 CELLS see **T4 LYMPHOCYTES**

T-ALL see **LEUKEMIA, T-CELL, ACUTE**

T ANTIGENS see **ANTIGENS, VIRAL, TUMOR**

T-CELL ANTIGEN RECEPTOR ALPHA CHAIN GENE REARRANGEMENT see **GENE REARRANGEMENT, ALPHA CHAIN T-CELL ANTIGEN RECEPTOR**

T-CELL ANTIGEN RECEPTOR BETA CHAIN GENE REARRANGEMENT see **GENE REARRANGEMENT, BETA CHAIN T-CELL ANTIGEN RECEPTOR**

T-CELL ANTIGEN RECEPTOR GAMMA CHAIN GENE REARRANGEMENT see **GENE REARRANGEMENT, GAMMA CHAIN T-CELL ANTIGEN RECEPTOR**

T-CELL GENE REARRANGEMENT see **GENE REARRANGEMENT, T-LYMPHOCYTE**

T-CELL GROWTH FACTOR see **INTERLEUKIN 2**

T-CELL GROWTH FACTOR RECEPTORS see **RECEPTORS, INTERLEUKIN 2**

T-CELL LEUKEMIA see **LEUKEMIA, T-CELL**

T-CELL LEUKEMIA, ACUTE see **LEUKEMIA, T-CELL, ACUTE**

T-CELL LEUKEMIA, ADULT see **LEUKEMIA, T-CELL**

T-CELL LEUKEMIA, CHRONIC see **LEUKEMIA, T-CELL, CHRONIC**

T-CELL LEUKEMIA-LYMPHOMA, ADULT see **LEUKEMIA-LYMPHOMA, T-CELL, ACUTE, HTLV-I-ASSOCIATED**

T-CELL LEUKEMIA-LYMPHOMA, HTLV-I-ASSOCIATED see **LEUKEMIA-LYMPHOMA, T-CELL, ACUTE, HTLV-I-ASSOCIATED**

T-CELL LEUKEMIA-LYMPHOMA VIRUS ANTIBODIES, HUMAN see **HTLV ANTIBODIES**

T-CELL LEUKEMIA-LYMPHOMA VIRUS ANTIGENS, HUMAN see **HTLV ANTIGENS**

T-CELL LEUKEMIA VIRUS I, HUMAN see **HTLV-I**

T-CELL LEUKEMIA VIRUS I ANTIBODIES, ADULT see **HTLV-I ANTIBODIES**

T-CELL LEUKEMIA VIRUS I ANTIBODIES, HUMAN see **HTLV-I ANTIBODIES**

T-CELL LEUKEMIA VIRUS I ANTIGENS, ADULT see **HTLV-I ANTIGENS**

T-CELL LEUKEMIA VIRUS I ANTIGENS, HUMAN see **HTLV-I ANTIGENS**

T-CELL LEUKEMIA VIRUS II, HUMAN see **HTLV-II**

T-CELL LEUKEMIA VIRUS II ANTIBODIES, HUMAN see **HTLV-II ANTIBODIES**

T-CELL LEUKEMIA VIRUSES, HUMAN see **HTLV VIRUSES**

T-CELL SUPPRESSIVE FACTORS see **SUPPRESSOR FACTORS, IMMUNOLOGIC**

T-INDEPENDENT ANTIGENS see **ANTIGENS, T-INDEPENDENT**

T-MYCOPLASMA see **UREAPLASMA**

T-PHAGES

Oligonucleotide duplexes containing CC(A/T)GG stimulate cleavage of refractory DNA by restriction endonuclease EcoRII. Pein CD, et al. **FEBS Lett** 1989 Mar 13; 245(1-2):141-4
Nucleotide sequence and complementation studies of the gene 10 region of bacteriophage T3. Condreay JP, et al. **J Mol Biol** 1989 Jun 5;207(3):555-61
Mutants of bacteriophage T7 that escape F restriction. Molineux IJ, et al. **J Mol Biol** 1989 Jun 5;207(3):563-74
Bacteriophage T4 resistant mutants of the plant pathogen Erwinia carotovora. Pirhonen M, et al. **Microb Pathog** 1988 May;4(5):359-67

ANALYSIS

Prediction of DNA-binding regulatory proteins in bacteriophage T7. White SW. **Protein Eng** 1987 Oct-Nov; 1(5):373-6
[The role of structural changes in T4 bacteriophage tail proteins] Veprintseva OD, et al. **Biofizika** 1988 Nov-Dec; 33(6):954-61 (Eng. Abstr.) **(Rus)**
[The effect of nucleotides on the sedimentation properties of contracted sheath of bacteriophage T4] Seryshcva II, et al. **Dokl Akad Nauk SSSR** 1988 Nov-Dec;303(1):245-8 **(Rus)**

DRUG EFFECTS

Mutagenicity of topoisomerase-active agents in bacteriophage T4. DeMarini DM, et al. **Teratogenesis Carcinog Mutagen** 1988;8(5):293-301

ENZYMOLOGY

Bacteriophage-T4 and Micrococcus luteus UV endonucleases are not endonucleases but beta-elimination and sometimes beta delta-elimination catalysts. Bailly V, et al. **Biochem J** 1989 May 1;259(3):751-9
Low-temperature unfolding of a mutant of phage T4 lysozyme. 1. Equilibrium studies. Chen BL, et al. **Biochemistry** 1989 Jan 24;28(2):685-91
Low-temperature unfolding of a mutant of phage T4 lysozyme. 2. Kinetic investigations. Chen BL, et al. **Biochemistry** 1989 Jan 24;28(2):691-9
DNA substrate structural requirements for the exonuclease and polymerase activities of procaryotic and phage DNA polymerases. Cowart M, et al. **Biochemistry** 1989 Mar 7; 28(5):1975-83
Optically detected magnetic resonance study of tyrosine residues in point-mutated bacteriophage T4 lysozyme. Ghosh S, et al. **Biochemistry** 1988 Oct 4;27(20):7816-20
A scanning calorimetric study of the thermal denaturation of the lysozyme of phage T4 and the Arg 96——His mutant form thereof. Kitamura S, et al. **Biochemistry** 1989 May 2;28(9):3788-92
T7 RNA polymerase does not interact with the 5'-phosphate of the initiating nucleotide. Martin CT, et al. **Biochemistry** 1989 Apr 4;28(7):2760-2
Processivity of proteolytically modified forms of T7 RNA polymerase. Muller DK, et al. **Biochemistry** 1988 Jul 26; 27(15):5763-71
Mutation induced in vitro on a C-8 guanine aminofluorene containing template by a modified T7 DNA polymerase. Sahm J, et al. **Biochemistry** 1989 Apr 4;28(7):2836-43
High-resolution structure of the temperature-sensitive mutant of phage lysozyme, Arg 96——His. Weaver LH, et al. **Biochemistry** 1989 May 2;28(9):3793-7
Cytosine photoproduct-DNA glycosylase in Escherichia coli and cultured human cells. Weiss RB, et al. **Biochemistry** 1989 Feb 21;28(4):1488-92
Comparative triplet-state properties of the three tryptophan residues in bacteriophage T4 lysozyme and in the enzyme complex with methylmercury(II). Zang LH, et al. **Biochemistry** 1988 Oct 4;27(20):7820-5
Perturbation of tryptophan residues by point mutations in bacteriophage T4 lysozyme studied by optical detection of triplet-state magnetic resonance spectroscopy. Zang LH, et al. **Biochemistry** 1989 Mar 7;28(5):2245-51
Replication of RNA by the DNA-dependent RNA polymerase of phage T7. Konarska MM, et al. **Cell** 1989 May 5;57(3):423-31
RNA synthesis: strategies for the use of bacteriophage RNA polymerases. Krupp G. **Gene** 1988 Dec 10;72(1-2):75-89
Single amino acid changes which alter the sequence specificity of the T4 and T2 (Dam) DNA-adenine methyltransferases. Miner Z, et al. **Gene** 1988 Dec 25; 74(1):275-6
A multisite-directed mutagenesis using T7 DNA polymerase: application for reconstructing a mammalian gene. Su TZ, et al. **Gene** 1988 Sep 15;69(1):81-9
Specificity of the nick-closing activity of bacteriophage T4 DNA ligase. Wu DY, et al. **Gene** 1989;76(2):245-54
Phage T4 polynucleotide kinase. Folk WR. **Gene Amplif Anal** 1981;2:299-311 (42 ref.)
T4 RNA ligase as a nucleic acid synthesis and modification reagent. Gumport RI, et al. **Gene Amplif Anal** 1981; 2:313-45 (91 ref.)
Role of exonuclease III and endonuclease IV in repair of pyrimidine dimers initiated by bacteriophage T4 pyrimidine dimer-DNA glycosylase. Saporito SM, et al. **J Bacteriol** 1989 May;171(5):2542-6
Sequence-specific pausing during in vitro DNA replication on double-stranded DNA templates. Bedinger P, et al. **J Biol Chem** 1989 Oct 5;264(28):16880-6
Purification of the 56-kDa component of the bacteriophage T7 primase/helicase and characterization of its nucleoside 5'-triphosphatase activity. Bernstein JA, et al. **J Biol Chem** 1988 Oct 15;263(29):14891-9
Characterization of the helicase and primase activities of the 63-kDa component of the bacteriophage T7 gene 4 protein. Bernstein JA, et al. **J Biol Chem** 1989 Aug 5; 264(22):13066-73
Benzo[a]pyrene-DNA adducts inhibit translocation by the gene 4 protein of bacteriophage T7. Brown WC, et al. **J Biol Chem** 1989 Apr 25;264(12):6748-54
Common sites for recombination and cleavage mediated by bacteriophage T4 DNA topoisomerase in vitro. Chiba M, et al. **J Biol Chem** 1989 Aug 5;264(22):12785-90
Structural and enzymatic studies of the T4 DNA replication system. I. Physical characterization of the polymerase accessory protein complex. Jarvis TC, et al. **J Biol Chem** 1989 Jul 25;264(21):12709-16
Structural and enzymatic studies of the T4 DNA replication system. II. ATPase properties of the polymerase accessory protein complex. Jarvis TC, et al. **J Biol Chem** 1989 Jul 25;264(21):12717-29
Structural studies of mutants of T4 lysozyme that alter hydrophobic stabilization. Matsumura M, et al. **J Biol Chem** 1989 Sep 25;264(27):16059-66
Mechanism of stimulation of T7 DNA polymerase by Escherichia coli single-stranded DNA binding protein (SSB). Myers TW, et al. **J Biol Chem** 1988 Nov 15; 263(32):17006-15
A site-targeted recombinant nuclease probe of DNA structure. Panayotatos N, et al. **J Biol Chem** 1989 Sep 5; 264(25):15070-3
Characterization of the bacteriophage T4 gene 41 DNA helicase. Richardson RW, et al. **J Biol Chem** 1989 Mar 15;264(8):4725-31
Trypsin cleavage in the COOH terminus of the bacteriophage T4 gene 41 DNA helicase alters the primase-helicase activities of the T4 replication complex in vitro. Richardson RW, et al. **J Biol Chem** 1989 Mar 15;264(8):4732-9
Relative efficiency of utilization of promoter and termination sites by bacteriophage T3 RNA polymerase. Sengupta D, et al. **J Biol Chem** 1989 Aug 25;264(24):14246-55
Thioredoxin reductase-dependent insulin disulfide reduction by phage T7 DNA polymerase reflects dissociation of the enzyme into subunits. Slaby I, et al. **J Biol Chem** 1989 Oct 5;264(28):16502-6
Selective inactivation of the exonuclease activity of bacteriophage T7 DNA polymerase by in vitro mutagenesis. Tabor S, et al. **J Biol Chem** 1989 Apr 15; 264(11):6447-58
Essential role of T4 phage deoxycytidylate hydroxymethylase in a multienzyme complex for deoxyribonucleotide synthesis. Thylén C, et al. **J Biol Chem** 1989 Sep 15;264(26):15169-72
Crystallization and preliminary X-ray studies of T4 phage beta-glucosyltransferase. Freemont PS, et al. **J Mol Biol** 1988 Sep 20;203(2):525-6
Structure and stability of mRNA synthesized by vaccinia virus-encoded bacteriophage T7 RNA polymerase in mammalian cells. Importance of the 5' untranslated leader. Fuerst TR, et al. **J Mol Biol** 1989 Mar 20;206(2):333-48
Preliminary crystallographic study of pyrimidine dimer-specific excision-repair enzyme from bacteriophage T4. Morikawa K, et al. **J Mol Biol** 1988 Aug 5;202(3):683-4
Treatment of genomic DNA with T4 DNA ligase improves Southern blot analysis. Koch JE, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10387
Abortive initiation by bacteriophage T3 and T7 RNA polymerases under conditions of limiting substrate [published erratum appears in Nucleic Acids Res 1989 Jun 12;17(11):4430] Ling ML, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1605-18
Comparison of phage T4 denV endonuclease V and M. luteus UV-DNA endonuclease by serology and DNA hybridization. Yarosh DB, et al. **Photochem Photobiol** 1989 Jan;49(1):53-7
DNA polymerase of bacteriophage T4 is an autogenous translational repressor. Andrake M, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7942-6
T5 DNA polymerase: structural—functional relationships to other DNA polymerases. Leavitt MC, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4465-9
Stabilization of phage T4 lysozyme by engineered disulfide bonds. Matsumura M, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6562-6
Effect of manganese ions on the incorporation of dideoxynucleotides by bacteriophage T7 DNA polymerase and Escherichia coli DNA polymerase I. Tabor S, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4076-80
The role of cysteine oxidation in the thermal inactivation of T4 lysozyme. Perry LJ, et al. **Protein Eng** 1987 Feb-Mar; 1(2):101-5
[RNA synthesis using T7 phage RNA polymerase: transcription of synthetic DNA templates in solution and on polymer support] Elov AA, et al. **Bioorg Khim** 1989 Feb;15(2):159-65 (Eng. Abstr.) **(Rus)**
[Localization of a lysine residue near the site of initiating substrate binding of T7 bacteriophage RNA polymerase] Maksimova TG, et al. **Bioorg Khim** 1989 Jan;15(1):18-23 (Eng. Abstr.) **(Rus)**
[Substrate specificity of T4 RNA-ligase. The effect of the nucleotide composition of substrates and the size of phosphate donor on the effectiveness of intermolecular ligation] Zhenodarova SM, et al. **Bioorg Khim** 1989 Apr;

15(4):478–83 (Eng. Abstr.) (Rus)
[Controlled ligation of oligodeoxyribonucleotides of DNA-ligase of the T4 phage] Koroleva ON, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1632–41 (Eng. Abstr.) (Rus)
[T4–DNA ligase: substrate properties of synthetic DNA–duplexes with structural anomalies] Tsytovich AV, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):690–9 (Eng. Abstr.) (Rus)
[Affinity modification of DNA–dependent RNA–polymerase of phage T7 with 5'-p–fluorosulfonylbenzoyladenosine] Tunitskaia VL, et al. **Mol Biol (Mosk)** 1988 Nov–Dec; 22(6):1642–9 (Eng. Abstr.) (Rus)

GENETICS

The construction of the hybrid plasmid containing genes of the central part of phage T4 baseplate and gene 29 product separation. Nieradko J, et al. **Acta Biochim Pol** 1988; 35(4):357–66
Terminator–distal sequences determine the in vitro efficiency of the early terminators of bacteriophages T3 and T7. Telesnitsky A, et al. **Biochemistry** 1989 Jun 13; 28(12):5210–8
Sequence–dependent termination of bacteriophage T7 transcription in vitro by DNA–binding drugs. White RJ, et al. **Biochemistry** 1989 May 16;28(10):4277–83
Inhibition of DNA–dependent RNA synthesis by 8–methoxypsoralen. Gniazdowski M, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):346–53
Intron mobility in the T–even phages: high frequency inheritance of group I introns promoted by intron open reading frames. Quirk SM, et al. **Cell** 1989 Feb 10; 56(3):455–65
Avoidance of DNA methylation. A virus–encoded methylase inhibitor and evidence for counterselection of methylase recognition sites in viral genomes. Krüger DH, et al. **Cell Biophys** 1989 Aug–Oct;15(1–2):87–95 (38 ref.)
Using transposon Tn5 insertions to sequence bacteriophage T4 gene 11. Barrett BK, et al. **DNA** 1989 May;8(4):287–95
Processing of unstable bacteriophage T4 gene 32 mRNAs into a stable species requires Escherichia coli ribonuclease E. Mudd EA, et al. **EMBO J** 1988 Nov;7(11):3601–7
Two early genes of bacteriophage T5 encode proteins containing an NTP–binding sequence motif and probably involved in DNA replication, recombination and repair. Blinov VM, et al. **FEBS Lett** 1989 Jul 31;252(1–2):47–52
Binding properties of T4 gene 32 protein fragments carrying partially cleaved terminal domains. Casas–Finet JR. **FEBS Lett** 1989 Jun 5;249(2):396–400
Stability of group I intron RNA in Escherichia coli and its potential application in a novel expression vector. Chan WK, et al. **Gene** 1988 Dec 20;73(2):295–304
Targeting bacteriophage T7 RNA polymerase to the mammalian cell nucleus. Dunn JJ, et al. **Gene** 1988 Sep 7;68(2):259–66
Use of bacterial virus T7 as a tool for the study of DNA methylation. Krüger DH, et al. **Gene** 1988 Dec 25; 74(1):85–7
Cloning, sequence, and expression of the temperature–dependent phage T4 capsid assembly gene 31. Nivinskas R, et al. **Gene** 1988 Dec 15;73(1):251–7
The T7 phage gene 10 leader RNA, a ribosome–binding site that dramatically enhances the expression of foreign genes in Escherichia coli. Olins PO, et al. **Gene** 1988 Dec 15; 73(1):227–35
Symmetric transcription of bacteriophage T4 base plate genes. Santoro M, et al. **Gene** 1988 Dec 10;72(1–2):241–5
The DNA [adenine–N6]methyltransferase (Dam) of bacteriophage T4. Schlagman SL, et al. **Gene** 1988 Dec 20;73(2):517–30
Genes within genes: independent expression of phage T4 intron open reading frames and the genes in which they reside. Gott JM, et al. **Genes Dev** 1988 Dec;2(12B):1791–9
On the role of homologous sequences in chromosomal rearrangements. Singer BS. **Genes Dev** 1988 Dec; 2(12B):1800–11
The functions of the phage T4 immunity and spackle genes in genetic exclusion. Obringer JW. **Genet Res** 1988 Oct; 52(2):81–90
Regulation of two nested proteins from gene 49 (recombination endonuclease VII) and of a lambda RexA–like protein of bacteriophage T4. Barth KA, et al. **Genetics** 1988 Oct;120(2):329–43
Genetic definition of two functional elements in a bacteriophage T4 host–range "cassette". Snyder M, et al. **Genetics** 1989 Jul;122(3):471–9
The mutagenic effect of five oil dispersants and of ethyleneglycolmonobutylether in bacteriophage T4D. Kvelland I. **Hereditas** 1988;109(1):149–50
Bacteriophage T4 genetic homologies with bacteria and eucaryotes. Bernstein H, et al. **J Bacteriol** 1989 May; 171(5):2265–70 (64 ref.)
Effect of DNA sequence and structure on nuclease activity of the DexA protein of bacteriophage T4. Gruber H, et al. **J Bacteriol** 1988 Dec;170(12):5830–6
Cloning and identification of bacteriophage T4 gene 2 product gp2 and action of gp2 on infecting DNA in vivo. Lipinska B, et al. **J Bacteriol** 1989 Jan;171(1):488–97
Molecular cloning, sequencing, and mapping of the bacteriophage T2 dam gene. Miner Z, et al. **J Bacteriol** 1988 Nov;170(11):5177–84
Impaired expression of certain prereplicative bacteriophage T4 genes explains impaired T4 DNA synthesis in Escherichia coli rho (nusD) mutants. Stitt BL, et al. **J Bacteriol** 1989 Jul;171(7):3872–80
Overproduced bacteriophage T4 gene 33 protein binds RNA polymerase. Williams KP, et al. **J Bacteriol** 1989 Jun; 171(6):3579–82
Transcript analyses of the uvsX–40–41 region of bacteriophage T4. Changes in the RNA as infection proceeds. Hinton DM. **J Biol Chem** 1989 Aug 25; 264(24):14432–9
Altered expression of the bacteriophage T4 gene 41 (primase–helicase) in an Escherichia coli rho mutant. Hinton DM. **J Biol Chem** 1989 Aug 25;264(24):14440–6
The phage T4 uvs Y recombination protein stabilizes presynaptic filaments. Kodadek T, et al. **J Biol Chem** 1989 Oct 5;264(28):16451–7
The 44P subunit of the T4 DNA polymerase accessory protein complex catalyzes ATP hydrolysis. Rush J, et al. **J Biol Chem** 1989 Jul 5;264(19):10943–53
Total sequence, flanking regions, and transcripts of bacteriophage T4 nrdA gene, coding for alpha chain of ribonucleoside diphosphate reductase. Tseng MJ, et al. **J Biol Chem** 1988 Nov 5;263(31):16242–51
Evidence that the intron open reading frame of the phage T4 td gene encodes a specific endonuclease. West DK, et al. **J Biol Chem** 1989 Jun 25;264(18):10343–6
Synergistic action of three recombination gene products of bacteriophage T4, uvsX, uvsY, and gene 32 proteins. Yonesaki T, et al. **J Biol Chem** 1989 May 15; 264(14):7814–20
Clone size distributions of mutations induced by ethyl methanesulfonate in bacteriophage T4. Drake JW. **J Mol Biol** 1988 Jul 5;202(1):11–6
Receptor specificity of the Escherichia coli T–even type phage Ox2. Mutational alterations in host range mutants. Drexler K, et al. **J Mol Biol** 1989 Jun 20;207(4):797–803
UvsY protein of bacteriophage T4 is an accessory protein for in vitro catalysis of strand exchange. Harris LD, et al. **J Mol Biol** 1989 Mar 5;206(1):19–27
Specific duplications fostered by a DNA structure containing adjacent inverted repeat sequences. McClain WH. **J Mol Biol** 1988 Nov 5;204(1):27–40
Genetic analysis of structure and function in phage T4 tRNASer. McClain WH, et al. **J Mol Biol** 1988 Oct 5; 203(3):549–53
Initiation of DNA replication at cloned origins of bacteriophage T7. Rabkin SD, et al. **J Mol Biol** 1988 Dec 20;204(4):903–16
Amino acid changes coded by bacteriophage T4 DNA polymerase mutator mutants. Relating structure to function. Reha–Krantz LJ. **J Mol Biol** 1988 Aug 20; 202(4):711–24
Deletion formation in bacteriophage T4. Singer BS, et al. **J Mol Biol** 1988 Jul 20;202(2):233–43
Linear dichroism of the complex between the gene 32 protein of bacteriophage T4 and poly(1,N6–ethenoadenylic acid). van Amerongen H, et al. **J Mol Biol** 1988 Nov 20; 204(2):397–405
The immunity (imm) gene of Escherichia coli bacteriophage T4. Lu MJ, et al. **J Virol** 1989 Aug;63(8):3472–8
Extension inhibition analysis of translation initiation complexes. Hartz D, et al. **Methods Enzymol** 1988; 164:419–25
Bacteriophage T4 DNA polymerase determines the amount and specificity of ultraviolet mutagenesis. Drake JW. **Mol Gen Genet** 1988 Nov;214(3):547–52
Genetic deletions between directly repeated sequences in bacteriophage T7. Pierce JC, et al. **Mol Gen Genet** 1989 Jun;217(2–3):215–22
Ribonucleotide reductase: a determinant of 5–bromodeoxyuridine mutagenesis in phage T4. Sargent RG, et al. **Mol Gen Genet** 1989 May;217(1):13–9
Structure–function studies of the T4 endonuclease V repair enzyme. Dodson ML, et al. **Mutat Res** 1989 Sep; 218(2):49–65 (111 ref.)
Exon shuffling by recombination between self–splicing introns of bacteriophage T4. Hall DH, et al. **Nature** 1989 Aug 17;340(6234):575–6
Bacteriophage T4 gene 25. Gruidl ME, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9862
Organization of the bacteriophage T4 genome between map positions 150.745 and 145.824. Hahn S, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6729
Nucleotide sequence of the alt gene of bacteriophage T4. Hilse D, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6731
The nucleotide sequence of the region of bacteriophage T5 early genes D10–D15. Kaliman AV, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10353–4
Sequencing, cloning and overexpression of genes of bacteriophage T4 between map positions 74.325 and 77.184. Koch T, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4392
Nucleotide sequences of the bacteriophage T2 and T6 gene 32 mRNAs. McPheeters DS, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9341
Nucleotide sequences of bacteriophage T4 genes 9, 10 and 11. Prilipov AG, et al. **Nucleic Acids Res** 1989 Apr 25; 17(8):3303
Nucleotide and deduced amino acid sequence of bacteriophage T4 gene wac. Prilipov AG, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10361
The inconsistent distribution of introns in the T–even phages indicates recent genetic exchanges. Quirk SM, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):301–15
Excess information at bacteriophage T7 genomic promoters detected by a random cloning technique. Schneider TD, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):659–74
Nucleotide sequences of bacteriophage T4 genes 13, 14 and 15. Selivanov NA, et al. **Nucleic Acids Res** 1989 May 11; 17(9):3583
Computer–aided detection and alignment of weakly homologous amino acid sequences of RNA replicase beta (MS2 phage) and DNA polymerases (T7 phage and E. coli). Ohnishi K. **Nucleic Acids Symp Ser** 1988;(19):193–7
denV gene of bacteriophage T4 restores DNA excision repair to mei–9 and mus201 mutants of Drosophila melanogaster. Banga SS, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3227–31
Regulated expression of foreign genes in mammalian cells under the control of coliphage T3 RNA polymerase and lac repressor. Deuschle U, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5400–4
Cap–independent translation of mRNA conferred by encephalomyocarditis virus 5' sequence improves the performance of the vaccinia virus/bacteriophage T7 hybrid expression system. Elroy–Stein O, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6126–30
Bacteriophage T4 DNA topoisomerase is the target of antitumor agent 4'-(9–acridinylamino)methanesulfon–m–anisidide (m–AMSA) in T4–infected Escherichia coli. Huff AC, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1307–11
A nuclease that cuts specifically in the ribosome binding site of some T4 mRNAs. Uzan M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8895–9
Hierarchical strategy for protein folding and design: synthesis and expression of T4 lysozyme gene and two putative folding mutants. Narang SA, et al. **Protein Eng** 1987 Dec; 1(6):481–5
Crystal structure of T4–lysozyme generated from synthetic coding DNA expressed in Escherichia coli. Rose DR, et al. **Protein Eng** 1988 Oct;2(4):277–82
Enhancement of bacteriophage T4 late transcription by components of the T4 DNA replication apparatus. Herendeen DR, et al. **Science** 1989 Sep 1;245(4921):952–8
Packaging and transduction of non–T3 DNA by bacteriophage T3. Hashimoto C, et al. **Virology** 1988 Oct; 166(2):432–9
Bacteriophage T4 late gene expression: overlapping promoters direct divergent transcription of the base plate gene cluster. Scarlato V, et al. **Virology** 1989 Aug; 171(2):475–83
[Kinetic features of aberration occurrence in thermally–induced reorganization of T4 phage] Khusainov AA, et al. **Biofizika** 1989 May–Jun;34(3):396–9 (Eng. Abstr.) (Rus)
[Vector system for gene expression based on the use of bacteriophage T7 RNA polymerase] Il'ichev AA, et al. **Dokl Akad Nauk SSSR** 1988;303(2):496–8 (Rus)
[Cloning and study of the structural organization of regions of the inh(lip)–hoc genes of bacteriophage T4] Kaliman AV, et al. **Dokl Akad Nauk SSSR** 1988;303(6):1486–9 (Rus)
[Kinetics of inhibition by 8–oxy–GTP and 8–bromo–GTP of Escherichia coli RNA–polymerase synthesis of pppApU dinucleotide on the promotor a1 of phage T7deltaD111 DNA in a limited set of substrates] Kuriavyĭ VV, et al. **Mol Biol (Mosk)** 1989 May–Jun;23(3):822–9 (Eng. Abstr.) (Rus)
[Nucleotide sequence of gene 31 of the T4 bacteriophage] Nivinskas RG, et al. **Mol Biol (Mosk)** 1988 Nov–Dec; 22(6):1507–16 (Eng. Abstr.) (Rus)
[A new early gene in front of the middle gene 31 of bacteriophage T4: cloning and expression] Nivinskas RG, et al. **Mol Biol (Mosk)** 1989 May–Jun;23(3):739–49 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

A simple method of distinguishing the bacterial viruses T3 and T7, and a critical reevaluation of their heterologous and homologous exclusion. Krüger DH, et al. **J Basic Microbiol** 1988;28(1–2):45–53
[A method of identifying coliphages in drinking water] Lovtsevich EL, et al. **Gig Sanit** 1988 Aug;(8):41–3 (Rus)

METABOLISM

NMR spectroscopy of 113Cd(II)–substituted gene 32 protein. Giedroc DP, et al. **Biochemistry** 1989 Mar 21;28(6):2410–8
Formation of D loops by the UvsX protein of T4 bacteriophage: a comparison of the reaction catalyzed in the presence or absence of gene 32 protein. Harris LD, et al. **Biochemistry** 1988 Sep 6;27(18):6954–9
T7 RNA polymerase interacts with its promoter from one side of the DNA helix. Muller DK, et al. **Biochemistry** 1989 Apr 18;28(8):3306–13
The bacteriophage T4 DNA replication fork. Only DNA helicase is required for leading strand DNA synthesis by the DNA polymerase holoenzyme. Cha TA, et al. **J Biol Chem** 1989 Jul 25;264(21):12220–5
Synthesis of the capsid protein inhibits development of bacteriophage T3 mutants that abortively infect F plasmid–containing cells. Condreay JP, et al. **J Mol Biol** 1989 Jun 5;207(3):543–54

Photochemical crosslinking of bacteriophage T4 single-stranded DNA-binding protein (gp32) to oligo-p(dT)8: identification of phenylalanine-183 as the site of crosslinking. Shamoo Y, et al. **Proteins** 1988;4(1):1-6

PATHOGENICITY

[Suppression of a viral infection with the use of a photoimmunotoxin] Savitskif AL, et al. **Dokl Akad Nauk SSSR** 1989;304(5):1258-61 (Rus)

PHYSIOLOGY

A component of the side tail fiber of Escherichia coli bacteriophage lambda can functionally replace the receptor-recognizing part of a long tail fiber protein of the unrelated bacteriophage T4. Montag D, et al. **J Bacteriol** 1989 Aug;171(8):4378-84

Movable Finite Automata (MFA) models for biological systems. I: Bacteriophage assembly and operation. Thompson RL, et al. **J Theor Biol** 1988 Apr 7;131(3):351-85

ColIb plasmid genes that inhibit the replication of T5 and T7 bacteriophage. Duckworth DH, et al. **Plasmid** 1988 Nov;20(3):182-93

RADIATION EFFECTS

Role of primary photoacceptors in low-power laser effects: action of He-Ne laser radiation on bacteriophage T4-Escherichia coli interaction. Tiphlova O, et al. **Lasers Surg Med** 1989;9(1):67-9

[Effect of He-Ne laser radiation on the bacteriophage T4-Escherichia coli system] Tiflova OA, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):278-80 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Head structure of bacteriophages T2 and T4. Baschong W, et al. **J Ultrastruct Mol Struct Res** 1988 Jun;99(3):189-202

Analysis of near-neighbor contacts in bacteriophage T4 wedges and hubless baseplates by using a cleavable chemical cross-linker. Watts NR, et al. **J Virol** 1989 Jun; 63(6):2427-36

Ultra-high resolution scanning electron microscopy of biological materials. Tanaka K, et al. **Prog Clin Biol Res** 1989;295:21-30

Imaging of metal-coated biological samples by scanning tunneling microscopy. Garcia R, et al. **Ultramicroscopy** 1989 May 11;27(4):367-73

[Preparation and length measurements of the total deoxyribonucleic acid content of T2 bacteriophages. 1962 (classical article)] Kleinschmidt AK, et al. **Biochim Biophys Acta** 1989;1000:41-8 (Eng. Abstr.) (Ger)

[Attachment of long fibrils at various stages of assembly of the virus particle of a bacteriophage] Abuladze NK, et al. **Mikrobiologiia** 1988 Jul-Aug;57(4):623-8 (Eng. Abstr.) (Rus)

T RNA METHYLTRANSFERASES see RNA, TRANSFER, METHYLTRANSFERASES

T-SUPPRESSOR FACTORS see SUPPRESSOR FACTORS, IMMUNOLOGIC

TABES DORSALIS

[2 cases of tabetic arthropathy] Abdullaev AKh, et al. **Vestn Dermatol Venerol** 1989;(3):76-8 (Eng. Abstr.) (Rus)

COMPLICATIONS

Severe lightning pain after spinal anesthesia in a patient with tabes dorsalis [letter] Sugiyama D, et al. **Anesth Analg** 1989 Aug;69(2):268-9

Meningovascular syphilis of the spinal cord presenting with incomplete Brown-Séquard syndrome: case report. Terry PM, et al. **Genitourin Med** 1989 Jun;65(3):189-91

[Changes in the femoral neck in tabes dorsalis. Case report] Kopecký I, et al. **Acta Chir Orthop Traumatol Cech** 1989 Feb;56(1):78-83 (Eng. Abstr.) (Cze)

DIAGNOSIS

Tabes dorsalis: electrodiagnostic features. Donofrio PD, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1097-9

PATHOLOGY

[Peripheral nerve involvement in tabes dorsalis (tabetic polyneuropathy)—histopathologic studies of sural nerve biopsies] Kita K, et al. **Rinsho Shinkeigaku** 1988 Jun; 28(6):674-80 (Eng. Abstr.) (Jpn)

[A case of tabes dorsalis] Kotov AA. **Vestn Dermatol Venerol** 1988;(5):72-3 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Central motor and sensory conduction in adrenoleukomyeloneuropathy, cerebrotendinous xanthomatosis, HTLV-I-associated myelopathy and tabes dorsalis. Ugawa Y, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1069-74

TABLETS

Error in facts and comparisons [letter] Marsh CC. **Am J Hosp Pharm** 1989 Aug;46(8):1550

Tablet change not just cosmetic [letter] Worthen DB. **Am Pharm** 1989 May;NS29(5):7

Recent advances in tableting science. Doelker E. **Boll Chim Farm** 1988 Feb;127(2):37-49 (79 ref.)

The effect of crystal hardness on compaction propensity. Ichikawa J, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul; 36(7):2699-702

The effect of machine speed on the consolidation of four directly compressible tablet diluents. Armstrong NA, et al. **J Pharm Pharmacol** 1989 Mar;41(3):149-51

Variations in the friction coefficients of tablet lubricants and relationship to their physicochemical properties. Baichwal AR, et al. **J Pharm Pharmacol** 1988 Aug;40(8):569-71

Methodology for a better evaluation of the relation between mechanical strength of solids and polymorphic form. Kopp S, et al. **J Pharm Pharmacol** 1989 Feb;41(2):79-82

Oesophageal transit of small tablets. Robertson CS, et al. **J Pharm Pharmacol** 1988 Aug;40(8):595-6

Simulation of the disintegration process of pharmaceutical tablets. Colombo P, et al. **Pharm Acta Helv** 1988; 63(8):221-3

Comparison of the dissolution behaviour of tablets containing the drug in a polyethyleneglycol solid dispersion with direct compressed tablets. Kinget R. **Pharm Acta Helv** 1989; 64(3):90-3

Radiolabeling of intact dosage forms by neutron activation: effects on in vitro performance. Parr A, et al. **Pharm Res** 1987 Dec;4(6):524-30

Evaluation of a novel cellulose powder as a filler-binder for direct compression of tablets. Pesonen T, et al. **Pharm Weekbl [Sci]** 1989 Feb 24;11(1):13-9

A methodological comparison of two formulations of temazepam in pharmacokinetic and pharmacodynamic aspects. Tuomainen P. **Pharmacol Toxicol** 1989 Jan; 64(1):28-32

[A study by infrared spectroscopy of interactions between the time of disintegration of tablets and liberation of the active principal] Casahoursat L, et al. **Pharm Acta Helv** 1989;64(8):225-30 (Eng. Abstr.) (Fre)

[Mucoadhesive tablets for the buccal cavity] Jacques Y, et al. **Pharm Acta Helv** 1989;64(5-6):163-7 (Fre)

[Formulation of effervescent tablets containing acetylsalicylic acid. II. Investigation of parameters of effervescent tablets] Dévay A, et al. **Acta Pharm Hung** 1988 May;58(3):101-3 (Eng. Abstr.) (Hun)

[Formulation of effervescent tablets containing acetylsalicylic acid. I. Investigation of granulation parameters] Dévay A, et al. **Acta Pharm Hung** 1988 May;58(3):97-100 (Eng. Abstr.) (Hun)

[Formulation of effervescent tablets containing acetylsalicylic acid. III. Investigation of the stability of the active principles of tablets] Dévay A, et al. **Acta Pharm Hung** 1989 Jan;59(1):11-5 (Eng. Abstr.) (Hun)

[Effect of gelatin solution on parameters of tablets containing well-compressible active principles] Pintyéné HK, et al. **Acta Pharm Hung** 1989 May;59(3):127-36 (Eng. Abstr.) (Hun)

ANALYSIS

Optical fiber spectrometry in turbid solutions by multivariate calibration applied to tablet dissolution testing. Josefson M, et al. **Anal Chem** 1988 Dec 15;60(24):2666-71

Study of content and uniformity of content of tablets prepared with a low concentration in active ingredient. Gayot A, et al. **Boll Chim Farm** 1988 Sep-Oct; 127(9-10):218-20

TABLETS, ENTERIC-COATED

Supersaturation mechanism of drugs from solid dispersions with enteric coating agents. Hasegawa A, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4941-50

Buoyant sustained release tablets based on chitosan. Inouye K, et al. **Drug Des Deliv** 1988 Feb;2(3):165-75

Drug release from tablets containing cellulose acetate phthalate as an additive or enteric-coating material. Lin SY, et al. **Pharm Res** 1987 Feb;4(1):70-4

Kinetics of release from enteric-coated tablets. Ozturk SS, et al. **Pharm Res** 1988 Sep;5(9):550-65

TABOO

Food taboos in maternal and child health: the views of traditional healers in Ile-Ife, Nigeria. Odebiyi AI. **Soc Sci Med** 1989;28(9):985-96

[Transference, taboo and truth] Bloom H. **Psyche (Stuttg)** 1989 May;43(5):397-414 (Eng. Abstr.) (Ger)

TAC PEPTIDE see RECEPTORS, INTERLEUKIN 2

TAC P55 PEPTIDE see RECEPTORS, INTERLEUKIN 2

TACHYCARDIA

"Torsade de pointes". Brugada P. **PACE** 1988 Dec; 11(12):2246-9

[The problem of ventricular tachycardia with torsade de pointes and its rational therapy] Fragola PV, et al. **Clin Ter** 1988 May 31;125(4):251-69 (210 ref.) (Eng. Abstr.) (Ita)

[Diagnosis and treatment of ventricular tachyarrhythmia in children] Bokeriia LA, et al. **Pediatriia** 1988;(9):76-83 (46 ref.) (Rus)

BLOOD

Increased circulating atrial natriuretic factor (ANF) release during induced ventricular tachycardia. Ellenbogen KA, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1233-8

Comparison of disposition values obtained by two assay methods for quinidine gluconate in patients with ventricular tachycardia. Ackerman BH, et al. **Pharmacotherapy** 1989; 9(4):220-5

CHEMICALLY INDUCED

Adverse reactions to non-ionic iodinated contrast media do occur during general anesthesia [letter] Jantzen JP, et al. **Anesthesiology** 1989 Mar;70(3):561

Flecainide-induced ventricular tachycardia and fibrillation in patients treated for atrial fibrillation. Falk RH. **Ann Intern Med** 1989 Jul 15;111(2):107-11

Amiodarone and torsade de pointes. Lazzara R. **Ann Intern Med** 1989 Oct 1;111(7):549-51 (16 ref.)

Amiodarone in patients with previous drug-mediated torsade de pointes. Long-term safety and efficacy. Mattioni TA, et al. **Ann Intern Med** 1989 Oct 1;111(7):574-80

Flecainide toxicity. Russell GA, et al. **Arch Dis Child** 1989 Jun;64(6):860-2

The effect of caffeine on ventricular ectopic activity in patients with malignant ventricular arrhythmia. Graboys TB, et al. **Arch Intern Med** 1989 Mar;149(3):637-9

Fetal tachyarrhythmia and maternal antidepressant treatment. Prentice A, et al. **BMJ** 1989 Jan 21;298(6667):190

Torsade de pointes ventricular tachycardia associated with astemizole overdose. Snook J, et al. **Br J Clin Pract** 1988 Jun;42(6):257-9

Torsades de pointes during intravenous pentamidine isethionate therapy. Mitchell P, et al. **Can Med Assoc J** 1989 Jan 15;140(2):173-4

Recurrent ventricular tachycardia due to pentamidine-induced cardiotoxicity. Bibler MR, et al. **Chest** 1988 Dec;94(6):1303-6

Basic mechanisms underlying prenylamine-induced 'torsade de pointes': differences between prenylamine and fendiline due to basic actions of the isomers. Bayer R, et al. **Curr Med Res Opin** 1988;11(4):254-72 (60 ref.)

Arrhythmogenic effects of antiarrhythmic drugs: a study of 506 patients treated for ventricular tachycardia or fibrillation. Stanton MS, et al. **J Am Coll Cardiol** 1989 Jul; 14(1):209-15; discussion 216-7

The effects of carbon monoxide on persistent changes in young rat heart: cardiomegaly, tachycardia and altered DNA content. Penney DG, et al. **J Appl Toxicol** 1988 Aug; 8(4):275-83

A canine model of torsades de pointes. Leichter D, et al. **PACE** 1988 Dec;11(12):2235-45

Survival after massive overdose of slow-release potassium. Colledge NR, et al. **Scott Med J** 1988 Jun;33(3):279

[Late arrhythmia after poisoning with MAO inhibitors] Launbjerg J, et al. **Ugeskr Laeger** 1988 Jan 18;150(3):167-8 (Eng. Abstr.) (Dut)

[Sotalol-induced torsades de pointe in the conscious dog with atrioventricular block. Role of hypokalemia] Davy JM, et al. **Arch Mal Coeur** 1988 Sep;81(9):1117-24 (Eng. Abstr.) (Fre)

[QT prolongation and induction of torsades de pointe by flecainide. Apropos of a case] Wickers F, et al. **Arch Mal Coeur** 1988 Oct;81(10):1283-5 (Eng. Abstr.) (Fre)

[Lidocaine treatment of poisoning with yew needles (Taxus baccata L.)] von Dach B, et al. **Schweiz Med Wochenschr** 1988 Jul 30;118(30):1113-6 (Eng. Abstr.) (Ger)

[Ventricular tachyarrhythmia induced by low doses of sotalol: torsade de pointes or polymorphous ventricular tachycardia?] Ophoff N, et al. **Z Kardiol** 1988 Jun; 77(6):393-7 (Eng. Abstr.) (Ger)

[Torsade de pointes following intravenous infusion of amiodarone] Chinaglia A, et al. **Cardiologia** 1989 Feb; 34(2):177-80 (Eng. Abstr.) (Ita)

COMPLICATIONS

Accelerated ventricular rhythm in a 13-year-old male. Yokota Y, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct; 29(5):781-3

Ebstein's anomaly with ventricular tachycardia: evidence for the arrhythmogenic role of the atrialized ventricle. Lo HM, et al. **Am Heart J** 1989 Apr;117(4):959-62

Unstable angina with tachycardia: clinical and therapeutic implications. Sclarovsky S, et al. **Am Heart J** 1988 Nov; 116(5 Pt 1):1188-93

Macroreentrant ventricular tachycardia and coronary artery disease in cerebrotendinous xanthomatosis. Chen PS, et al. **Am J Cardiol** 1989 Sep 15;64(10):680-2

Bundle branch block during orthodromic reciprocating tachycardia onset in infants. Goldstein M, et al. **Am J Cardiol** 1989 Feb 1;63(5):301-6

Clinical sustained uniform ventricular tachycardia in hypertrophic cardiomyopathy: association with left ventricular apical aneurysm. Alfonso F, et al.

Br Heart J 1989 Feb;61(2):178–81

Influence of tachycardia and arterial hypertension on infarct size in the pig. Garcia-Dorado D, et al. **Cardiovasc Res** 1988 Sep;22(9):620–6

The anti-arrhythmic effects of myocardial ischaemia. Relation to reperfusion arrhythmias? Podzuweit T, et al. **Cardiovasc Res** 1989 Feb;23(2):81–90

Ventricular dimensions and wall motion assessed by echocardiography in patients with arrhythmogenic right ventricular dysplasia. Blomström-Lundqvist C, et al. **Eur Heart J** 1988 Dec;9(12):1291–302

Reversible congestive cardiomyopathy due to chronic ventricular tachycardia. Rakovec P, et al. **PACE** 1989 Apr; 12(4 Pt 1):542–5

Sudden cardiac death during ambulatory ECG monitoring. A report of 2 cases. Badenhorst JC, et al. **S Afr Med J** 1989 Sep 2;76(5):223–6

[Association of sustained ventricular tachycardia and a mid-systolic click: a case report] Suzuki K, et al. **J Cardiol** 1989;19 Suppl 21:119–25, discussion 126–7 (Eng. Abstr.) **(Jpn)**

[Four cases of mitral valve prolapse associated with ventricular tachycardia] Watanabe I, et al. **J Cardiol** 1988; 18 Suppl 18:55–63, discussion 64–5 (Eng. Abstr.) **(Jpn)**

[A case of myocardial infarction with ventricular tachycardia, which had discrepancy of defect size between 123I-MIBG and 201TlCl myocardial imaging] Nishimura T, et al. **Kaku Igaku** 1989 Mar;26(3):419–23 (Eng. Abstr.) **(Jpn)**

[A case of anomalous origin of right coronary artery from the left sinus of Valsalva with ventricular aneurysm ventricular tachycardia and paroxysmal A-V block] Nishimura N, et al. **Kokyu To Junkan** 1989 Jan;37(1):97–100 (Eng. Abstr.) **(Jpn)**

[Exercise stress thallium-201 myocardial imaging in hypertrophic cardiomyopathy with ventricular tachycardia] Tanabe Y, et al. **Kokyu To Junkan** 1988 Sep; 36(9):981–5 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Complete atrioventricular dissociation and His bundle tachycardia in a newborn: problems in prenatal diagnosis and postnatal management. Polak PE, et al. **Int J Cardiol** 1989 Feb;22(2):269–71

[Therapy of fetal cardiac arrhythmia ante partum and sub partu] Wunderlich M. **Zentralbl Gynakol** 1988; 110(20):1263–71 (30 ref.) (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Exercise testing in patients with life-threatening ventricular tachyarrhythmias: results and correlation with clinical and arrhythmia factors. Allen BJ, et al. **Am Heart J** 1988 Oct; 116(4):997–1002

Facilitation of localized conduction block with procainamide during entrainment of sustained ventricular tachycardia. Okumura K, et al. **Am Heart J** 1989 Sep;118(3):630–2

The natural history of benign and potentially malignant ventricular arrhythmias with special reference to nonsustained ventricular tachycardia. Pratt CM, et al. **Am Heart J** 1988 Oct;116(4):897–903

Usefulness of echocardiographic left ventricular hypertrophy, ventricular tachycardia and complex ventricular arrhythmias in predicting ventricular fibrillation or sudden cardiac death in elderly patients. Aronow WS, et al. **Am J Cardiol** 1988 Nov 15;62(16):1124–5

Supraventricular tachycardia mimicking ventricular tachycardia during flecainide treatment. Crijns HJ, et al. **Am J Cardiol** 1988 Dec 1;62(17):1303–6

Effect of preexisting bundle branch block on the electrocardiographic diagnosis of ventricular tachycardia. Kremers MS, et al. **Am J Cardiol** 1988 Dec 1; 62(17):1208–12

Nonsustained ventricular tachycardia arising from the right ventricular outflow tract. Ritchie AH, et al. **Am J Cardiol** 1989 Sep 15;64(10):594–8

Reproducibility of exercise-induced ventricular arrhythmia in patients undergoing evaluation for malignant ventricular arrhythmia. Saini V, et al. **Am J Cardiol** 1989 Mar 15; 63(11):697–701

Wide QRS-complex tachycardia [letter] Wrenn KD. **Ann Intern Med** 1989 Mar 1;110(5):412

Transesophageal electrocardiography and atrial pacing in acute cardiac care: diagnostic and therapeutic value. Twidale N, et al. **Aust N Z J Med** 1989 Feb;19(1):11–5

Left ventricular function during stable sustained ventricular tachycardia. Hemodynamic and echo-Doppler analysis. Baron SB, et al. **Chest** 1989 Aug;96(2):275–80

Instantaneous electrocardiography. A simple screening technique for cardiac exercise programs. Franklin BA, et al. **Chest** 1989 Jul;96(1):174–7

Spontaneous compared with induced onset of sustained ventricular tachycardia. Berger MD, et al. **Circulation** 1988 Oct;78(4):885–92

Nonischemic ventricular tachycardia. Clinical course and long-term follow-up in patients without clinically overt heart disease. Lemery R, et al. **Circulation** 1989 May; 79(5):990–9

Potential mapping in septal tachycardia. Evaluation of a new intraoperative mapping technique. Tweddell JS, et al. **Circulation** 1989 Sep;80(3 Pt 1):197–108

Evaluation and acute treatment of wide complex tachycardias. Rinkenberger RL, et al. **Crit Care Clin** 1989 Jul;5(3):599–641 (7 ref.)

Spectral mapping of the electrocardiogram with Fourier transform for identification of patients with sustained ventricular tachycardia and coronary artery disease. Haberl R, et al. **Eur Heart J** 1989 Apr;10(4):316–22

Why are so many critical care nurses unable to recognize ventricular tachycardia in the 12-lead electrocardiogram? Cooper J, et al. **Heart Lung** 1989 May;18(3):243–7

Wide-complex tachycardia, possibly WPW syndrome. Hancock EW. **Hosp Pract [Off]** 1988 Oct 15;23(10):65, 68–9

Chaotic electrocardiogram in a teenager. Hancock EW. **Hosp Pract [Off]** 1989 Aug 15;24(8):135, 138

Surface electrocardiography: can arrhythmia circuits be localized? Cassidy DM, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):901–3

Electrocardiographic localization of the site of origin of ventricular tachycardia in patients with prior myocardial infarction. Kuchar DL, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):893–903

Significance of signal-averaged electrocardiography in relation to endomyocardial biopsy and ventricular stimulation studies in patients with ventricular tachycardia without clinically apparent heart disease. Mehta D, et al. **J Am Coll Cardiol** 1989 Aug;14(2):372–9; discussion 380–1

Effect of changes in the definition of ventricular tachycardia on the prevalence of complex ventricular ectopy. Insel J, et al. **J Electrocardiol** 1989 Jan;22(1):21–5

Electrophysiologic studies on ventricular tachyarrhythmias in a chronic canine infarct model. Moore EN, et al. **J Electrocardiol** 1988;21 Suppl:S64–7

Ventricular tachycardia masquerading as supraventricular tachycardia: a wolf in sheep's clothing. Olshansky B. **J Electrocardiol** 1988 Nov;21(4):377–84

Advantages of an acute experimental preparation that mimics clinical arrhythmias. Scherlag BJ, et al. **J Electrocardiol** 1988;21 Suppl:S61–3

ECG of the month. Twisting and turning. Torsades de pointes. Martinez-Lopez JI. **J La State Med Soc** 1988 Oct; 140(10):11–3

Hemodynamic responses to rapid pacing: a model for tachycardia differentiation. Cohen TJ, et al. **PACE** 1988 Nov;11(11 Pt 1):1522–8

Perspectives on clinical decision-making: the application of pattern analysis. Knoebel SB. **PACE** 1988 Nov;11(11 Pt 2):2077–81

Noninvasive recording of late potentials: current state of the art. Kuchar DL, et al. **PACE** 1989 Sep;12(9):1538–51 (59 ref.)

Right ventricular tachycardia with left bundle branch block and inferior axis morphology: clinical and arrhythmological characteristics in 15 patients. Proclemer A, et al. **PACE** 1989 Jun;12(6):977–89

Atrial sensing to augment ventricular tachycardia detection by the automatic implantable cardioverter defibrillator: a utility study. Schuger CD, et al. **PACE** 1988 Oct; 11(10):1456–64

[Signal averaging of late potential recordings. A noninvasive method of detecting malignant ventricular arrhythmia] Hu DY. **Chung Hua Nei Ko Tsa Chih** 1988 Aug;27(8):505–7 (13 ref.) **(Chi)**

[Repetitive ventricular tachycardia. A type of arrhythmia with good prognosis] Nielsen H, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2089–90 (Eng. Abstr.) **(Dan)**

[The differential diagnosis of cardiac arrhythmias and epilepsy] Nousiainen U, et al. **Duodecim** 1988;104(4):266–70 **(Fin)**

[Assessment of susceptibility to ventricular tachycardia following myocardial infarction by non-dipolarity of QRST area maps] Tsunakawa H, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):987–92 **(Jpn)**

[New-onset stenocardia: the detection of clinical variants of ventricular arrhythmia] Areshev GP, et al. **Kardiologiia** 1988 Aug;28(8):40–3 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

The inverse relationship between baseline left ventricular ejection fraction and outcome of antiarrhythmic therapy: a dangerous imbalance in the risk-benefit ratio. Pratt CM, et al. **Am Heart J** 1989 Sep;118(3):433–40

Treatment of torsade de pointes with intravenous magnesium [letter] Banai S, et al. **Am J Cardiol** 1989 Jun 15; 63(20):1539–40

Electrophysiologic effects and efficacy of recainam for sustained ventricular tachycardia. de Buitleir M, et al. **Am J Cardiol** 1989 Jan 1;63(1):116–8

Recurrence of ventricular tachycardia after conversion from proprietary to generic procainamide. Grubb BP. **Am J Cardiol** 1989 Jun 15;63(20):1532–3

Comparison of twice daily with thrice daily administered encainide for benign or potentially lethal ventricular arrhythmias. Hohnloser SH, et al. **Am J Cardiol** 1989 Jan 1;63(1):73–6

Values and limitations of programmed stimulation and ambulatory monitoring in the management of ventricular tachycardia. Kim SG. **Am J Cardiol** 1988 Nov 3; 62(14):7I–12I (47 ref.)

Usefulness of sotalol in suppressing ventricular tachycardia or ventricular fibrillation in patients with healed myocardial infarcts. Kuchar DL, et al. **Am J Cardiol** 1989 Jul 1; 64(1):33–6

A simple method of monitoring antiarrhythmic drugs during short- and long-term therapy. McCollam PL, et al. **Am J Cardiol** 1989 May 15;63(17):1273–5

Intravenous amiodarone for the rapid treatment of life-threatening ventricular arrhythmias in critically ill patients with coronary artery disease. Ochi RP, et al. **Am J Cardiol** 1989 Sep 15;64(10):599–603

Conversion of sustained into nonsustained ventricular tachycardia during therapy assessment by programmed ventricular stimulation: criterion for a positive drug effect? Schoels W, et al. **Am J Cardiol** 1989 Aug 1;64(5):329–34

A randomized, double-blind, placebo-controlled study of verapamil and metoprolol in treatment of multifocal atrial tachycardia [published erratum appears in Am J Med 1989 Jan;86(1):142] Arsura E, et al. **Am J Med** 1988 Oct; 85(4):519–24

Lack of effectiveness of lidocaine for sustained, wide QRS complex tachycardia. Armengol RE, et al. **Ann Emerg Med** 1989 Mar;18(3):254–7

Fetal tachycardias [letter] Cameron AD, et al. **BMJ** 1988 Sep 3;297(6648):623

Atenolol, but not mexiletine, protects against stimulus-induced ventricular tachycardia in a chronic canine model. Uprichard AC, et al. **Br J Pharmacol** 1989 Jan;96(1):220–6

Recurrent sustained ventricular tachycardia solely responsive to verapamil in a patient with a remote myocardial infarction. Belhassen B, et al. **Cardiology** 1988;75(4):294–300

Bepridil versus nifedipine for ventricular tachycardia induced in the late postinfarction phase in conscious dogs. Brachmann J, et al. **Cardiology** 1989;76(3):211–21

Flecainide acetate in dogs with ischemic tachyarrhythmia. An electrophysiologic study. Cha YM, et al. **Chin Med J [Engl]** 1988 Oct;101(10):710–4

The ESVEM trial. Electrophysiologic Study Versus Electrocardiographic Monitoring for selection of antiarrhythmic therapy of ventricular tachyarrhythmias. The ESVEM Investigators. **Circulation** 1989 Jun; 79(6):1354–60

Amiloride. Antiarrhythmic and electrophysiologic actions in patients with inducible sustained ventricular tachycardia. Duff HJ, et al. **Circulation** 1989 Jun;79(6):1257–63

Serum reverse T3 and amiodarone efficacy. Haberman RJ, et al. **Clin Cardiol** 1989 Mar;12(3):140–4

Concentration-response relationships of disopyramide in patients with ventricular tachycardia. Duff HJ, et al. **Clin Pharmacol Ther** 1989 May;45(5):542–7

Use of Holter functions of the implantable pacemaker to control antiarrhythmic therapy of supraventricular and ventricular recurrent tachycardias. Luki J. **Cor Vasa** 1988; 30(6):413–22

Use of labetalol in trauma. Harrier HD. **Crit Care Med** 1988 Nov;16(11):1159–60

Low-dose oral sotalol for monomorphic ventricular tachycardia: effects during programmed electrical stimulation and follow-up. Jordaens LJ, et al. **Eur Heart J** 1989 Mar;10(3):218–26

The effects of PAF antagonists on arrhythmias and platelets during acute myocardial ischaemia and reperfusion. Wainwright CL, et al. **Eur Heart J** 1989 Mar;10(3):235–43

Cardiac tachyarrhythmia in the fetus: diagnosis, treatment and prognosis. Stewart PA, et al. **Fetal Ther** 1987;2(1):7–16

Magnesium sulfate therapy in torsades de pointes. Kothari SS, et al. **Indian Heart J** 1988 May-Jun;40(3):210–1

Amiodarone in pregnancy. Case report and review of the literature. Foster CJ, et al. **Int J Cardiol** 1988 Sep; 20(3):307–16 (17 ref.)

Usefulness of sotalol for drug-refractory malignant ventricular arrhythmias. Gonzalez R, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1568–72

Long-term results of amiodarone therapy in patients with recurrent sustained ventricular tachycardia or ventricular fibrillation. Herre JM, et al. **J Am Coll Cardiol** 1989 Feb; 13(2):442–9

Arrhythmogenic effects of antiarrhythmic drugs: a study of 506 patients treated for ventricular tachycardia or fibrillation. Stanton MS, et al. **J Am Coll Cardiol** 1989 Jul; 14(1):209–15; discussion 216–7

Effects of angiotensin II and captopril on inducible sustained ventricular tachycardia two weeks after myocardial infarction in the pig. de Langen CD, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):186–91

Pharmacodynamics of procainamide in patients with ventricular tachyarrhythmias. Liem LB, et al. **J Clin Pharmacol** 1988 Nov;28(11):984–9

Adjuvant xamoterol or metoprolol in patients with malignant ventricular arrhythmia resistant to amiodarone. Paul V, et al. **Lancet** 1989 Aug 5;2(8658):302–5

Cardiac arrhythmia suppression trial and flecainide [letter] [see comments] Ward D, et al. **Lancet** 1989 Jun 3; 1(8649):1267–8. **Comment in:** Lancet 1989 Jun 17;1(8651):1383

Stability of electrophysiological parameters after acute amiodarone loading: implications for patient management. Greenberg ML, et al. **PACE** 1989 Jul;12(7 Pt 1):1038–43 (23 ref.)

Efficacy and safety of low doses of beta-blocker agents combined with amiodarone in refractory ventricular tachycardia. Tonet J, et al. **PACE** 1988 Nov;11(11 Pt 2):1984–9

The efficacy of amiodarone in the treatment of ventricular tachycardia or ventricular fibrillation. Greene HL. **Prog Cardiovasc Dis** 1989 Mar-Apr;31(5):319–54 (358 ref.)

The use of intravenous amiodarone in the acute therapy of life-threatening tachyarrhythmias. Kadish A, et al. **Prog Cardiovasc Dis** 1989 Jan-Feb;31(4):281-94 (85 ref.)

Alcohol-induced coagulation necrosis in cardiac tissue: a new concept in the surgical management of recurrent ventricular arrhythmias. Ayisi K, et al. **Thorac Cardiovasc Surg** 1989 Apr;37(2):76-9

[Proarrhythmic effect of ajmaline in idiopathic ventricular tachycardia] Schmitt C, et al. **Dtsch Med Wochenschr** 1989 Jan 20;114(3):99-102 (Eng. Abstr.) (Ger)

[Drug therapy of tachycardic ventricular arrhythmias] Höpp HW, et al. **Med Klin** 1988 Nov 25;83(23):800-8 (40 ref.) (Ger)

[Dose-dependent anti-arrhythmia effect of retard metoprolol in coronary disease patients with ventricular arrhythmia] Hartwig CA, et al. **Z Kardiol** 1988 Nov;77(11):704-12 (Eng. Abstr.) (Ger)

[Successful treatment of stress-induced therapy refractory ventricular tachycardia with verapamil] Kühlkamp V, et al. **Z Kardiol** 1989 Jun;78(6):405-7 (Eng. Abstr.) (Ger)

[Effect of a new class I anti-arrhythmia agent cibenzoline in patients with therapy refractory, sustained ventricular tachycardias] Kühlkamp V, et al. **Z Kardiol** 1988 Sep; 77(9):595-9 (Eng. Abstr.) (Ger)

[Hemodynamics in ventricular arrhythmias and in their treatment] Lüderitz B, et al. **Z Kardiol** 1988;77 Suppl 5:143-9 (21 ref.) (Eng. Abstr.) (Ger)

[Anti-arrhythmic and cardiodepressive effects of anti-arrhythmia agents] Scholz H. **Z Kardiol** 1988;77 Suppl 5:113-9 (43 ref.) (Eng. Abstr.) (Ger)

[Clinical viewpoints of hemodynamics in cardiac arrhythmias and during anti-arrhythmia treatment] Thormann J. **Z Kardiol** 1988;77 Suppl 5:121-36 (33 ref.) (Eng. Abstr.) (Ger)

[Efficacy of flecainide in the treatment of ventricular tachycardia in the elderly. Dynamic electrocardiographic study] Filice A, et al. **Clin Ter** 1989 Jun 30;129(6):459-64 (Eng. Abstr.) (Ita)

[The problem of ventricular tachycardia with torsade de pointes and its rational therapy] Fragola PV, et al. **Clin Ter** 1988 May 31;125(4):251-69 (210 ref.) (Eng. Abstr.) (Ita)

[2 cases of lidocaine-resistant ventricular tachycardia treated with i.v. mexiletine during complicated acute myocardial infarct] Romanò M, et al. **Clin Ter** 1987 Nov 30; 123(4):297-301 (Eng. Abstr.) (Ita)

ETIOLOGY

Hypokalemia and ventricular arrhythmias in acute myocardial infarction. Clausen TG, et al. **Acta Med Scand** 1988;224(6):531-7

Predictors of sustained ventricular tachycardia inducibility in patients with nonsustained ventricular tachycardia and chronic coronary artery disease. Furukawa T, et al. **Am Heart J** 1989 May;117(5):1050-9

Endomyocardial trauma during balloon mitral valvuloplasty. Ramsdale DR, et al. **Am Heart J** 1989 Mar;117(3):685-7

Value of programmed ventricular stimulation from the right ventricular outflow tract [letter] Belhassen B. **Am J Cardiol** 1988 Nov 15;62(16):1152

Pacemaker-induced ventricular tachycardia in normally functioning ventricular demand pacemakers. Karbenn U, et al. **Am J Cardiol** 1989 Jan 1;63(1):120-2

Pacemaker failure associated with therapeutic radiation. Brooks C, et al. **Am J Emerg Med** 1988 Nov;6(6):591-3

Cardiac problems in ECT [letter] Dennison S, et al. **Am J Psychiatry** 1989 Jul;146(7):939

Pacemaker-mediated tachycardia induced by intraoperative somatosensory evoked potential stimuli. Merritt WT, et al. **Anesthesiology** 1988 Nov;69(5):766-8

The role of prostacyclin in the mesenteric traction syndrome during anesthesia for abdominal aortic reconstructive surgery. Gottlieb A, et al. **Ann Surg** 1989 Mar;209(3):363-7

Acceleration tolerance of asymptomatic aircrew with mitral valve prolapse and significant +Gz-induced ventricular dysrhythmias. Whinnery JE, et al. **Aviat Space Environ Med** 1988 Aug;59(8):711-7

Recurrent ventricular tachycardia in hypothyroidism--report of a case and review of the literature. Nesher G, et al. **Cardiology** 1988;75(4):301-6 (8 ref.)

Differential response to right and left ansae subclaviae stimulation of early afterdepolarizations and ventricular tachycardia induced by cesium in dogs. Ben-David J, et al. **Circulation** 1988 Nov;78(5 Pt 1):1241-50

Swallowing-induced arrhythmia. Matsubara K, et al. **Clin Cardiol** 1988 Nov;11(11):798-800

Runaway pacemaker: a still existing complication and therapeutic guidelines. Mickley H, et al. **Clin Cardiol** 1989 Jul;12(7):412-4

Cardiac dysrhythmias, carbon dioxide tensions and blood halothane concentrations during dental anaesthesia. Hamilton-Farrell MR, et al. **Eur J Anaesthesiol** 1988 Sep; 5(5):323-9

Arrhythmogenic right ventricular dysplasia. Parikh JA, et al. **Indian Heart J** 1988 Jul-Aug;40(4):268-70

Comparison of immediate versus day to day variability of ventricular tachycardia induction by programmed stimulation. Cooper MJ, et al. **J Am Coll Cardiol** 1989 Jun; 13(7):1599-607

Inducibility of sustained monomorphic ventricular tachycardia as a prognostic indicator in survivors of recent myocardial infarction: a prospective evaluation in relation to other prognostic variables. Cripps T, et al. **J Am Coll Cardiol** 1989 Aug;14(2):289-96

Comparison of endocardial and epicardial programmed stimulation for the induction of ventricular tachycardia. Dailey SM, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1608-12

What is the role of vagal tone in the genesis of life-threatening ventricular tachyarrhythmias in humans? [letter] Santinelli V, et al. **J Am Coll Cardiol** 1989 Jun; 13(7):1694

Successful resection of cardiac fibroma with ventricular tachycardia. Nakazawa S, et al. **J Cardiovasc Surg (Torino)** 1989 Jan-Feb;30(1):44-6

Hypocalcemic Torsades de Pointes. Akiyama T, et al. **J Electrocardiol** 1989 Jan;22(1):89-92

Application of the signal-averaged electrocardiogram in patients with nonsustained ventricular tachycardia after myocardial infarction: implications for prediction of sudden cardiac death risk. Buxton AE, et al. **J Electrocardiol** 1988; 21 Suppl:S40-5

Fetal heart rate monitoring casebook. Fetal heart block in presence of maternal hypokalemia. Brookes CM. **J Perinatol** 1988 Spring;8(2):171-3

Cardiac risk of non-cardiac surgery. Vine DL. **Kans Med** 1989 Jun;90(6):199-200

Life-threatening torsade de pointes arrhythmia associated with head injury. Rotem M, et al. **Neurosurgery** 1988 Jul; 23(1):89-92

Ventricular tachycardia with alternating cycle lengths: self-entrainment of parasystolic rhythm? Castellanos A, et al. **PACE** 1988 Sep;11(9):1291-5

Induced sustained ventricular tachycardia in nonischemic dilated cardiomyopathy: dependence on clinical presentation and response to antiarrhythmic agents. Constantin L, et al. **PACE** 1989 May;12(5):776-83

Swallowing-induced tachycardia: electrophysiologic and pharmacologic observations. Greenspon AJ, et al. **PACE** 1988 Nov;11(11 Pt 1):1566-70

Entrainment of ventricular tachycardia in postoperative tetralogy of Fallot. Kremers MS, et al. **PACE** 1988 Sep; 11(9):1310-4

Clinical and electrophysiologic mechanisms of exercise-induced ventricular tachyarrhythmias. Sung RJ, et al. **PACE** 1988 Sep;11(9):1347-57 (34 ref.)

Dysrhythmias after the modified Fontan procedure. Chen SC, et al. **Pediatr Cardiol** 1988;9(4):215-9

Acute bilateral diffuse pulmonary shadowing after evacuation of hydatid mole. Pope TL Jr, et al. **South Med J** 1989 Mar;82(3):377-9

[Kearns-Sayre syndrome: complete auriculoventricular block, torsade de pointes and ventricular fibrillation] Biard F, et al. **Ann Cardiol Angeiol (Paris)** 1988 Nov;37(9):529-34 (19 ref.) (Eng. Abstr.) (Fre)

[Ventricular dysplasia. Nosology and sudden death] Fontaine G, et al. **Ann Cardiol Angeiol (Paris)** 1988 Jul-Sep; 37(7):347-55 (44 ref.) (Eng. Abstr.) (Fre)

[Arrhythmogenic dysplasia of the right ventricle in a 16-month-old child] Makanda A, et al. **Arch Mal Coeur** 1989 May;82(5):811-4 (Eng. Abstr.) (Fre)

[Acquired QT-syndrome with syncopes in hypoparathyroidism] Hartmann-Hornberger F, et al. **Dtsch Med Wochenschr** 1988 Sep 30;113(39):1515-9 (Eng. Abstr.) (Ger)

[Exertional dyspnea, fatigue, palpitations (clinical conference)] Geller JC, et al. **Schweiz Rundsch Med Prax** 1989 Jan 24;78(4):70-3 (Eng. Abstr.) (Ger)

[Simulated tachyarrhythmia. A case report] Hartwig CA, et al. **Z Kardiol** 1989 May;78(5):294-9 (Eng. Abstr.) (Ger)

[Ventricular tachycardia and ventricular fibrillation following myocardial infarct: determinants of prognosis and disease course] Trappe HJ, et al. **Z Kardiol** 1988 Nov; 77(11):687-95 (Eng. Abstr.) (Ger)

[Cardiologic aspects of carbon monoxide poisoning] San Lorenzo IS, et al. **Cardiologia** 1989 May;34(5):439-46 (Eng. Abstr.) (Ita)

[Intraoperative ventricular torsade de pointes tachycardia. Description of a case] Pelosi G, et al. **Minerva Anestesiol** 1988 Dec;54(12):527-9 (Eng. Abstr.) (Ita)

[Electrocardiographic, clinical and prognostic evaluation of sustained ventricular tachycardia in acute and chronic ischemic heart disease] Boriani G, et al. **Minerva Cardioangiol** 1989 Apr;37(4):185-92 (Eng. Abstr.) (Ita)

[A case of cardiac sarcoidosis with various electrocardiographic change] Hokamura Y, et al. **Kokyu To Junkan** 1989 May;37(5):547-52 (Eng. Abstr.) (Jpn)

[Three cases of Torsades de pointes] Nanimatsu H, et al. **Kokyu To Junkan** 1989 May;37(5):535-9 (Eng. Abstr.) (Jpn)

[Torsade de pointes: clinical experience of 9 patients] González R, et al. **Rev Med Chil** 1988 Feb;116(2):130-5 (Eng. Abstr.) (Spa)

GENETICS

Juvenile sudden death and effort ventricular tachycardias in a family with right ventricular cardiomyopathy. Nava A, et al. **Int J Cardiol** 1988 Nov;21(2):111-26

METABOLISM

Pharmacokinetics and dromotropic activity of ajmaline in rats with hyperthyroidism. Hashimoto Y, et al. **Br J Pharmacol** 1989 Jan;96(1):163-9

Effect of induced ventricular tachycardia on atrial natriuretic peptide in humans. Fromer M, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1395-9

Extracellular potassium ion dynamics and ventricular arrhythmias in the canine heart. Pelleg A, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):941-50

MORTALITY

Computer-detected ventricular tachycardia in the coronary care unit: prognosis in patients with and without acute myocardial infarction. Feleke E, et al. **J Intern Med** 1989 Feb;225(2):117-21

Survival of patients with the automatic implantable cardioverter defibrillator. Mercando AD, et al. **PACE** 1988 Nov;11(11 Pt 2):2059-63

[Prognosis of ventricular tachycardia] Djiane P, et al. **Arch Mal Coeur** 1988 Oct;81(10):1167-72 (Eng. Abstr.) (Fre)

PATHOLOGY

Histopathological analysis of surgically resected myocardium in patients with sustained ventricular tachycardia. Yutani C, et al. **Acta Pathol Jpn** 1988 May;38(5):605-13

PHYSIOPATHOLOGY

Arrhythmogenic right ventricular dysplasia: case report presentation and review of the literature. Kouvaras G, et al. **Acta Cardiol (Brux)** 1988;43(5):615-23

Bundle branch reentrant ventricular tachycardia [letter] Tchou P, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1647-8

Role of bandpass filters in optimizing the value of the signal-averaged electrocardiogram as a predictor of the results of programmed stimulation. Caref EB, et al. **Am J Cardiol** 1989 Jul 1;64(1):16-26

Influence of isoproterenol on the left ventricular response to right ventricular extrastimuli. Constantin L, et al. **Am J Cardiol** 1989 May 1;63(15):1132-4

Hemodynamic and hormone changes during induced ventricular tachycardia secondary to coronary artery disease. Crozier IG, et al. **Am J Cardiol** 1989 Mar 1; 63(9):618-21

Electrophysiologic evaluation of antiarrhythmic therapy for ventricular tachyarrhythmias. Kuchar DL, et al. **Am J Cardiol** 1988 Oct 19;62(12):39H-45H (68 ref.)

Prognostic value of early electrophysiologic studies for ventricular tachycardia recurrence in patients with coronary artery disease treated with amiodarone. Manolis AS, et al. **Am J Cardiol** 1989 May 1;63(15):1052-7

Echocardiographic and histologic evaluation of the right ventricle in ventricular tachycardias of left bundle branch block morphology without overt cardiac abnormality. Mehta D, et al. **Am J Cardiol** 1989 Apr 15;63(13):939-44

Differentiation between late potentials of right ventricular and of left ventricular origin. Ohe T, et al. **Am J Cardiol** 1989 Jul 1;64(1):37-41

Procainamide-induced slowing of ventricular tachycardia with insights from analysis of resetting response patterns. Stamato NJ, et al. **Am J Cardiol** 1989 Jun 15;63(20):1455-61

Long-term arrhythmic outcome in survivors of ventricular fibrillation with absence of inducible ventricular tachycardia. Zheutlin TA, et al. **Am J Cardiol** 1988 Dec 1;62(17):1213-7

Left ventricular hypertrophy as a factor in arrhythmias and sudden death. McLenachan JM, et al. **Am J Hypertens** 1989 Feb;2(2 Pt 1):128-31 (21 ref.)

Atrial natriuretic factor induces natriuresis during pacing tachycardia in dogs. Christensen G, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1245-9

Wide QRS complex tachycardia. Reappraisal of a common clinical problem. Akhtar M, et al. **Ann Intern Med** 1988 Dec 1;109(11):905-12

Right ventricular free wall isolation: effects on regional myocardial blood flow. Damiano RJ Jr, et al. **Ann Thorac Surg** 1988 Oct;46(4):391-5

Halothane anesthesia reduces inducibility of ventricular tachyarrhythmias in chronic canine myocardial infarction. Denniss AR, et al. **Basic Res Cardiol** 1989 Jan-Feb; 84(1):5-12

Enhanced myocardial contractility but not tachycardia persists in isolated working hyperthyroid rat hearts. Wheatley AM, et al. **Basic Res Cardiol** 1988 Nov-Dec; 83(6):634-46

Fatal repetitive ventricular tachycardia in a child. Johnson CD. **Bol Asoc Med P R** 1988 Nov;80(11):420-3

Pre- and intraoperative identification of multiple accessory pathways. Experience of 19 pathways in 9 patients. Blomström P, et al. **Cardiology** 1989;76(1):42-52

Vagally induced block and delayed conduction as a mechanism for circus movement tachycardia in frog atria. Rosenshtraukh LV, et al. **Circ Res** 1989 Feb;64(2):213-26

Activation mapping of reentry around an anatomic barrier in the canine atrium. Observations during entrainment and termination. Boyden PA, et al. **Circulation** 1989 Feb; 79(2):406-16

Signal-averaged electrocardiography and the significance of late potentials in patients with "idiopathic" ventricular

tachycardia: a review. Mehta D, et al. **Clin Cardiol** 1989 Jun;12(6):307–12 (39 ref.)

Ventricular dimensions and wall motion assessed by echocardiography in patients with arrhythmogenic right ventricular dysplasia. Blomström-Lundqvist C, et al. **Eur Heart J** 1988 Dec;9(12):1291–302

The role of collateral blood supply in ventricular tachycardia after myocardial infarction. Brugada P, et al. **Eur Heart J** 1988 Oct;9(10):1104–11

The influence of nitroglycerine on the inducibility of sustained ventricular tachycardia in coronary artery disease. Probst P, et al. **Eur Heart J** 1988 Dec;9 Suppl N:136–8

Value of induction of pleomorphic ventricular tachycardia during programmed stimulation. Trappe HJ, et al. **Eur Heart J** 1989 Feb;10(2):133–41

Ventricular tachycardia induced by Valsalva's manoeuvre in a patient with hypertrophic cardiomyopathy. Bhattacharya S, et al. **Int J Cardiol** 1988 Nov;21(2):187–9

Arrhythmia occurring in hypertrophic cardiomyopathy [letter] Crick JC, et al. **Int J Cardiol** 1989 Apr;23(1):139–40

Shortening of ventriculoatrial intervals with left bundle branch block during orthodromic reciprocating tachycardia in three patients with a right-sided accessory atrioventricular pathway. Baerman JM, et al. **J Am Coll Cardiol** 1989 Jan;13(1):215–9

Changes in spontaneous sinus node rate as an estimate of cardiac autonomic tone during stable and unstable ventricular tachycardia. Huikuri HV, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):646–52

Influence of infarct age on reproducibility of ventricular tachycardia induction in a canine model. Hunt GB, et al. **J Am Coll Cardiol** 1989 Sep;14(3):765–73; discussion 774–6

Use of electrophysiologic testing in patients with nonsustained ventricular tachycardia: prognostic and therapeutic implications. Klein RC, et al. **J Am Coll Cardiol** 1989 Jul;14(1):155–61; discussion 162–3

Nonischemic sustained ventricular tachycardia: clinical outcome in 12 patients with arrhythmogenic right ventricular dysplasia. Lemery R, et al. **J Am Coll Cardiol** 1989 Jul;14(1):96–105

Rapid self-terminating ventricular tachycardia induced during electrophysiologic study: a prospective evaluation. Sager PT, et al. **J Am Coll Cardiol** 1989 Feb;13(2):385–90

Quinidine-induced long QTU interval and torsade de pointes: role of bradycardia-dependent early afterdepolarizations. el-Sherif N, et al. **J Am Coll Cardiol** 1989 Jul;14(1):252–7

Electrophysiologic substrate of torsade de pointes: dispersion of repolarization or early afterdepolarizations? Surawicz B. **J Am Coll Cardiol** 1989 Jul;14(1):172–84 (136 ref.)

Predictors of inducible sustained ventricular tachyarrhythmias in patients with coronary artery disease [published erratum appears in J Am Coll Cardiol 1989 May;13(6):1452] Vorperian VR, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):637–45

Role of signal averaging of the surface QRS complex in selecting patients with nonsustained ventricular tachycardia and high grade ventricular arrhythmias for programmed ventricular stimulation. Winters SL, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1481–7

Effects of pimobendan (UD-CG 115 BS), a new positive inotropic agent, on ventricular tachycardia and ischemic ventricular fibrillation in a conscious canine model of recent myocardial infarction. Lynch JJ, et al. **J Cardiovasc Pharmacol** 1988;12(5):547–54

Depression of systolic and diastolic myocardial reserve during atrial pacing tachycardia in patients with dilated cardiomyopathy. Feldman MD, et al. **J Clin Invest** 1988 Nov;82(5):1661–9

Electrophysiologic characteristics of sudden QRS axis deviation during orthodromic tachycardia. Role of functional fascicular block in localization of accessory pathway. Jazayeri MR, et al. **J Clin Invest** 1989 Mar; 83(3):952–9

ECG of the month. Triumvirate. Martinez-Lopez JI. **J La State Med Soc** 1988 Aug;140(8):7–9

Intraoperative evaluation of ventricular tachycardia [letter] LoCicero J 3d, et al. **J Thorac Cardiovasc Surg** 1989 Jan; 97(1):152

Wide QRS tachycardia in the conscious adult. Ventricular tachycardia is the most frequent cause. Steinman RT, et al. **JAMA** 1989 Feb 17;261(7):1013–6

Contrast effects of isoproterenol and ouabain on left ventricular diastolic relaxation dysfunction in isolated, blood-perfused rabbit hearts. Isoyama S, et al. **Jpn Circ J** 1989 Mar;53(3):261–9

A comparative study of two different methods for detecting late potentials in patients with and without ventricular tachycardia. Yoneda N, et al. **Jpn Circ J** 1989 Mar; 53(3):197–205

Bidirectional tachycardia. A sustained form, not related to digitalis intoxication, in an adult without apparent cardiac disease. Martini B, et al. **Jpn Heart J** 1988 May;29(3):381–7

Bilateral carotid body resection in man enhances hypoxic tachycardia. Honda Y, et al. **Jpn J Physiol** 1988; 38(6):917–28

Fascicular parasystole associated with tachycardia-dependent right bundle branch block. Hirai J, et al. **PACE** 1989 Sep;12(9):1451–7

Entrainment of ventricular tachycardia by AV nodal reentrant tachycardia. Kay GN, et al. **PACE** 1989 Jan;12(1 Pt 1):2–15

Bidirectional tachycardia: a new look on the mechanism. Lévy S, et al. **PACE** 1989 May;12(5):827–34 (27 ref.)

Identification of ventricular tachycardia using intracavitary ventricular electrograms: analysis of time and frequency domain patterns. Lin DP, et al. **PACE** 1988 Nov;11(11 Pt 1):1592–606

Chronotropic effects of progressive hypoxia and hypercapnia. Sanders MH, et al. **Respiration** 1989; 55(1):1–10

[Electrophysiologic studies of ventricular tachycardia in cardiomyopathy] Jiang WP, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr; 16(2):72–5, 125–6 (Eng. Abstr.) **(Chi)**

[Pressure determination in tachycardia. Improved approximation using a stage-by-stage technic] Berger JP. **Schweiz Med Wochenschr** 1988 Sep 17;118(37):1304–10 (Eng. Abstr.) **(Fre)**

[Ventricular cardiac arrhythmia in patients with terminal renal failure and chronic dialysis] Grossmann R, et al. **Med Klin** 1988 Nov 11;83(22):735–9 (Eng. Abstr.) **(Ger)**

[Late potentials and ventricular arrhythmia in patients with chronic coronary heart disease] Eberli FR, et al. **Schweiz Med Wochenschr** 1989 Jan 28;119(4):116–24 (Eng. Abstr.) **(Ger)**

[Tachycardic arrhythmias—references for the procedure in ambulatory care] Wunderlich E, et al. **Z Arztl Fortbild (Jena)** 1988;82(14):647–9 (4 ref.) **(Ger)**

[Observations of the clinical characteristics of patients with ventricular tachyarrhythmias—1978 to 1985] Podczeck A, et al. **Z Kardiol** 1988 Aug;77(8):515–22 (Eng. Abstr.) **(Ger)**

[Spontaneous variability of ventricular arrhythmias in relation to the kind and extent of underlying heart disease] Schmidt G, et al. **Z Kardiol** 1988 Aug;77(8):523–6 (Eng. Abstr.) **(Ger)**

[Circadian variation in ventricular tachycardia] Casolo GC, et al. **Cardiologia** 1988 Jul;33(7):675–80 (Eng. Abstr.) **(Ita)**

[A case of intra-ventricular dissociation with dual ventricular tachycardia] Shizukuda Y, et al. **Kokyu To Junkan** 1989 May;37(5):579–83 (Eng. Abstr.) **(Jpn)**

[Clinical characteristics of chronic recurrent ventricular tachycardia] Ino T. **Nippon Ika Daigaku Zasshi** 1989 Jun; 56(3):267–80 (Eng. Abstr.) **(Jpn)**

[Atypical bidirectional tachycardias] Morell Cabedo JS, et al. **Rev Esp Cardiol** 1989 Feb;42(2):138–41 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Failure of corticosteroid therapy to prevent induction of ventricular tachycardia in sarcoidosis. Belhassen B, et al. **Chest** 1989 Apr;95(4):918–20

Termination of ouabain-induced ventricular tachycardia by flunarizine in conscious dogs. Vos MA, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):139–45

Prophylactic automatic implantable cardioverter-defibrillator patches in patients at high risk for postoperative ventricular tachyarrhythmias. Manolis AS, et al. **J Am Coll Cardiol** 1989 May;13(6):1367–73

Amiodarone prophylaxis in hypertrophic obstructive cardiomyopathy [letter] Kenny D. **Lancet** 1989 Mar 25; 1(8639):671

Coronary revascularization and implantation of the automatic cardioverter/defibrillator: reliability of immediate intraoperative testing. Blakeman BM, et al. **PACE** 1989 Jan;12(1 Pt 1):86–91

Pacemaker-mediated tachycardia: engineering solutions. Calfee RV. **PACE** 1988 Nov;11(11 Pt 2):1917–28

Prevention and termination of pacemaker-mediated tachycardia in a new DDD pacing system (Siemens-Pacesetter model 2010T). Duncan JL, et al. **PACE** 1988 Nov;11(11 Pt 2):1679–83

Termination of malignant ventricular tachycardias by use of an automatical defibrillator (AICD) in combination with an antitachycardial pacemaker. Greve H, et al. **PACE** 1988 Nov;11(11 Pt 2):2040–4

A new algorithm for a high level of protection against pacemaker-mediated tachycardia. Lamaison D, et al. **PACE** 1988 Nov;11(11 Pt 2):1715–21

Atrial electrogram analysis: antegrade versus retrograde. McAlister HF, et al. **PACE** 1988 Nov;11(11 Pt 2):1703–7

Implantable defibrillation: eight years clinical experience. Thomas AC, et al. **PACE** 1988 Nov;11(11 Pt 2):2053–8

Failure of thromboxane synthetase inhibition to protect the postinfarcted heart against the induction of ventricular tachycardia and ventricular fibrillation in a conscious canine model of sudden coronary death. Kitzen JM, et al. **Pharmacology** 1988;37(3):171–86

[Amiodarone prophylaxis of ventricular tachycardia in ischemic cardiopathy] Bernasconi M, et al. **Cardiologia** 1989 Apr;34(4):357–63 (Eng. Abstr.) **(Ita)**

RADIONUCLIDE IMAGING

Characterization of right or left ventricular contraction heterogeneity using Fourier phase analysis. Application to a group of patients with severe ventricular arrhythmias. Itti R, et al. **Eur J Nucl Med** 1988;14(4):196–202

The usefulness of equilibrium radionuclide ventriculography in the diagnosis of arrhythmogenic right ventricular dysplasia and a report of cases of a familial occurrence. Hirooka Y, et al. **Jpn Circ J** 1988 Jun;52(6):511–7

SURGERY

Manifest and concealed accessory pathways: behavior after catheter ablation of the atrioventricular conducting system. Lemery R, et al. **Am Heart J** 1989 Jul;118(1):188–91

Low-energy electrical catheter ablation of sustained ventricular tachycardia originating from the right ventricle. Niwano S, et al. **Am Heart J** 1989 May;117(5):1155–7

Results of operative therapy in the permanent form of junctional reciprocating tachycardia. O'Neill BJ, et al. **Am J Cardiol** 1989 May 1;63(15):1074–9

Results of direct surgical ablation of ventricular tachycardia not due to ischemic heart disease. Lawrie GM, et al. **Ann Surg** 1989 Jun;209(6):716–27 (45 ref.)

Electrode catheter ablation for ventricular tachycardia: efficacy of a single cathodal shock. Hauer RN, et al. **Br Heart J** 1989 Jan;61(1):38–45

Clinical experience with fulguration and antiarrhythmic therapy for the treatment of ventricular tachycardia. Long-term follow-up of 43 patients. Fontaine G, et al. **Chest** 1989 Apr;95(4):785–97

Patient selection criteria and results of surgery for refractory ischemic ventricular tachycardia. Cox JL. **Circulation** 1989 Jun;79(6 Pt 2):I163–77 (65 ref.)

Risk stratification and management of patients with recurrent ventricular tachycardia and other malignant ventricular arrhythmias. Hargrove WC, et al. **Circulation** 1989 Jun;79(6 Pt 2):I178–81

Surgical treatment of ventricular tachycardia. Regional cryoablation guided by computerized epicardial and endocardial mapping. Pagé PL, et al. **Circulation** 1989 Sep; 80(3 Pt 1):I124–34

Treatment of recurrent ventricular tachycardia and operation for combined ischemia and valvular disease. Willman VL. **Circulation** 1989 Jun;79(6 Pt 2):I191–2

Value of post-operative programmed ventricular stimulation after map-guided surgery for ventricular tachyarrhythmias—epicardial versus endocardial stimulation. Borggrefe M, et al. **Eur Heart J** 1988 Sep; 9(9):969–78

Left ventricular segmental wall motion score as a criterion for selecting patients for direct surgery in the treatment of postinfarction ventricular tachycardia. van Hemel NM, et al. **Eur Heart J** 1989 Apr;10(4):304–15

Cryosurgery for ventricular bigeminy using a transaortic closed ventricular approach. Vermeulen FE, et al. **Eur Heart J** 1988 Sep;9(9):979–90

Catheter technique for ablation of accessory atrioventricular pathway: long-term results. Weber H, et al. **Eur Heart J** 1989 May;10(5):388–99

Surgical ablative therapy for life-threatening ventricular tachyarrhythmias: an evolutionary process. Greenspan AM. **J Am Coll Cardiol** 1989 May;13(6):1374–5

Surgical therapy for drug-refractory ventricular tachycardia: results with mapping-guided subendocardial resection. Manolis AS, et al. **J Am Coll Cardiol** 1989 Jul;14(1):199–208

Surgical decisions in the management of sudden cardiac death and malignant ventricular arrhythmias. Subendocardial resection, the automatic internal defibrillator, or both. Hargrove WC 3d, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):923–8

Balloon electric shock ablation. Effects on ventricular structure, function, and electrophysiology. Mickleborough LL, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):135–46

The effect of electrode design on the efficiency of delivery of radiofrequency energy to cardiac tissue in vitro. Blouin LT, et al. **PACE** 1989 Jan;12(1 Pt 2):136–43

Advances in catheter ablation use of unipolar electrograms. Fletcher R, et al. **PACE** 1989 Jan;12(1 Pt 2):225–30

Identification of a zone of slow conduction appropriate for VT ablation: theoretical and practical considerations. Fontaine G, et al. **PACE** 1989 Jan;12(1 Pt 2):262–7

Fulguration of ventricular tachycardia using high cumulative energy: results in thirty-one patients with a mean follow-up of twenty-seven months. Haissaguerre M, et al. **PACE** 1989 Jan;12(1 Pt 2):245–51

Electrical ablation with a balloon electrode array: chronic electrophysiologic response. Harris L, et al. **PACE** 1988 Sep;11(9):1262–6

Results of catheter ablation of ventricular tachycardia using direct current shocks. Morady F, et al. **PACE** 1989 Jan; 12(1 Pt 2):252–7

Catheter ablation of tachycardias with laser energy: issues and answers. Saksena S. **PACE** 1989 Jan;12(1 Pt 2):196–203 (46 ref.)

Bundle branch reentrant tachycardia treated by transvenous catheter ablation of the right bundle branch. Volkmann H, et al. **PACE** 1989 Jan;12(1 Pt 2):258–61

Fulguration of accessory pathways in any location: report of seventy cases. Warin JF, et al. **PACE** 1989 Jan;12(1 Pt 2):215–8

Surgery of ventricular tachycardia and ventricular fibrillation in patients with coronary artery disease and LV-aneurysms. Kromann-Hansen O, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):87–93

Ten years electrophysiologically guided direct operations for malignant ischemic ventricular tachycardia—results. Ostermeyer J, et al. **Thorac Cardiovasc Surg** 1989 Feb; 37(1):20–7

[Treatment of refractory ventricular tachycardia using cumulative high-energy fulguration] Haissaguerre M, et al. **Arch Mal Coeur** 1988 Jul;81(7):879–86 (Eng. Abstr.) **(Fre)**

[Surgical therapy of life-threatening tachycardic cardiac arrhythmias in children] Frank G, et al. **Monatsschr Kinderheilkd** 1989 May;137(5):269–74 (Eng. Abstr.) **(Ger)**

[The incidence of ventricular arrhythmia following direct current ablation, high-frequency current ablation and laser photo-ablation] Hindricks G, et al. **Z Kardiol** 1988 Nov; 77(11):696–703 (Eng. Abstr.) **(Ger)**

[A successful cryosurgical treatment of malignant ventricular tachycardia following left ventricular aneurysm] Koyanagi T, et al. **Kyobu Geka** 1989 Jan;42(1):19–23 (Eng. Abstr.) **(Jpn)**

[Direct arrhythmia surgery in ventricular tachycardia: an experience with 18 consecutive patients] Watanabe S, et al. **Kyobu Geka** 1989 Apr;42(4):270–80 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of nonischemic ventricular tachycardia arising from left ventricular apex] Misaki T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1245–9 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of ventricular tachycardia caused by abnormal muscle band] Mukai A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):738–41 (Eng. Abstr.) **(Jpn)**

[Left ventricular performance before and after left ventriculotomy and removal of a left ventricular aneurysm] Watanabe G, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):34–9 (Eng. Abstr.) **(Jpn)**

[Technics of catheter ablation (fulguration). Initial experience] Sosa E, et al. **Arq Bras Cardiol** 1988 Apr; 50(4):253–8 (Eng. Abstr.) **(Por)**

[Surgery of tachyarrhythmias of non-coronary origin] Bokeriia LA, et al. **Grudn Khir** 1988 Nov–Dec;(6):16–21 (Eng. Abstr.) **(Rus)**

THERAPY

Conversion of induced ventricular tachycardia by single and serial chest thumps: a study in domestic pigs 1 week after experimental myocardial infarction. Gertsch M, et al. **Am Heart J** 1989 Aug;118(2):248–55

Adverse response to ventricular pacing but favorable response to atrial pacing in polymorphous ventricular tachycardia. Hill PE, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1355–7

Clinical experience in seventy-seven patients with the automatic implantable cardioverter defibrillator. Manolis AS, et al. **Am Heart J** 1989 Sep;118(3):445–50

General anesthesia for intractable ventricular tachycardia. Bitar J, et al. **Am J Cardiol** 1988 Dec 1;62(17):1318

External cardiac programmed stimulation for noninvasive termination of sustained supraventricular and ventricular tachycardia. Estes NA 3d, et al. **Am J Cardiol** 1989 Jan 15;63(3):177–83

Treatment of macroreentrant ventricular tachycardia with radiofrequency ablation of the right bundle branch. Langberg JJ, et al. **Am J Cardiol** 1989 Apr 15;63(13):1010–3

Magnesium sulfate termination of torsades de pointes following failure of cardioversion [letter] Warden T, et al. **Am J Emerg Med** 1989 Jan;7(1):126–7

Pacemaker endless loop tachycardia: termination by simple techniques other than magnet application. Barold SS, et al. **Am J Med** 1988 Dec;85(6):817–22

Termination of magnet-unresponsive pacemaker endless loop tachycardia by carotid sinus massage [letter] Friart A. **Am J Med** 1989 Jul;87(1):1–2

Antitachycardia pacing and implantable cardioverter defibrillators. Furman S, et al. **Annu Rev Med** 1989; 40:123–36

Median sternotomy for implantable cardioverter/defibrillator. Blakeman BM, et al. **Arch Surg** 1989 Sep;124(9):1065–6

Automatic implantable defibrillators. Crozier IG, et al. **Br J Hosp Med** 1988 Aug;40(2):136–9 (12 ref.)

Termination of sustained ventricular tachycardia with a new antitachycardia pacemaker: role of the nonautomatic mode to follow pacemaker function. Fromer M, et al. **Can J Cardiol** 1989 Jan–Feb;5(1):42–6

Device therapy of ventricular tachyarrhythmias. Rosenfeld LE. **Cardiol Clin** 1988 Aug;6(3):437–48 (73 ref.)

Ventricular arrhythmias: medical therapy, device treatment, and indications for electrophysiologic study. Sager PT, et al. **Cardiol Clin** 1988 Feb;6(1):37–47 (102 ref.)

Transcoronary chemical ablation of ventricular tachycardia. Brugada P, et al. **Circulation** 1989 Mar;79(3):475–82

Termination of sustained ventricular tachycardia by ultrarapid subthreshold stimulation in humans. Shenasa M, et al. **Circulation** 1988 Nov;78(5 Pt 1):1135–43

Implantable electrical devices in the management of tachyarrhythmias. de Belder MA, et al. **Clin Cardiol** 1989 Aug;12(8):461–8 (68 ref.)

Termination of ventricular tachycardia by carotid sinus stimulation. Grubb BP. **Int J Cardiol** 1989 Jun;23(3):397–9

Transient complete atrioventricular block induced by a chest thump in a patient with ventricular tachycardia. Katz A, et al. **Int J Cardiol** 1989 Jun;23(3):395–6

Long-term outcome with the automatic implantable cardioverter-defibrillator. Winkle RA, et al. **J Am Coll Cardiol** 1989 May;13(6):1353–61

New approach to defibrillator insertion. Hartz RS, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):920–2

Fusion with the prolonged first postpacing interval in pacing of ventricular tachycardia. Aizawa Y, et al. **PACE** 1989 Apr;12(4 Pt 1):563–8

Actuarial incidence and pattern of occurrence of shocks following implantation of the automatic implantable cardioverter defibrillator. Fogoros RN, et al. **PACE** 1989 Sep;12(9):1465–73

AICD benefit [editorial] Furman S. **PACE** 1989 Mar; 12(3):399–400

Ablation of ventricular tachycardia of right ventricular origin with low energy shocks. Jordaens L, et al. **PACE** 1989 Jun;12(6):911–6

Therapeutic and diagnostic benefits of intentional crosstalk mediated ventricular output inhibition. Levine PA, et al. **PACE** 1988 Aug;11(8):1194–201

Long-term follow-up of patients treated with automatic scanning antitachycardia pacemaker. Møller M, et al. **PACE** 1989 Mar;12(3):425–30

Permanent antitachycardia pacemaker therapy for ventricular tachycardia. Newman DM, et al. **PACE** 1989 Aug; 12(8):1387–95 (21 ref.)

Evaluating AICD therapy [letter] Singer I, et al. **PACE** 1989 Sep;12(9):1552–3

The effect of an entrainment protocol on ouabain-induced ventricular tachycardia. Vos MA, et al. **PACE** 1989 Sep; 12(9):1485–93

Use of transient entrainment during ventricular tachycardia to localize a critical area in the reentry circuit for ablation. Waldo AL, et al. **PACE** 1989 Jan;12(1 Pt 2):231–44

Therapeutic options in the management of life-threatening arrhythmias [clinical conference] Herre JM, et al. **West J Med** 1989 Jul;151(1):56–62

[Immediate complications of fulguration of ventricular tachycardia and accessory pathways. Analysis of 318 endocavitary shocks] Montserrat P, et al. **Ann Cardiol Angeiol (Paris)** 1989 Apr;38(4):191–6 (Eng. Abstr.) **(Fre)**

[Transesophageal stimulation in the treatment of atrial flutter and tachysystole. Factor influencing immediate results] Girardot C, et al. **Arch Mal Coeur** 1988 Nov;81(11):1379–84 (Eng. Abstr.) **(Fre)**

[Torsade de pointes ventricular tachycardia in idiopathic QT syndrome: successful treatment with AAI pacing (published erratum appears in Z Kardiol 1988 Aug;77(8):543)] Trappe HJ, et al. **Z Kardiol** 1988 Jun; 77(6):389–92 (Eng. Abstr.) **(Ger)**

[Regression of high-grade tachycardia under conservative treatment. Apropos of a case] Carretti N, et al. **Minerva Ginecol** 1988 Mar;40(3):215–8 (Eng. Abstr.) **(Ita)**

[Value of cardiac stimulation in the treatment of ventricular tachycardia of the torsade de pointes type] Zerbe F. **Kardiol Pol** 1988;31(10):639–42 (Eng. Abstr.) **(Pol)**

[Cardiac stimulation in the treatment of tachyarrhythmias] Drăghici D. **Rev Med Interna [Med Interna]** 1988 Mar–Apr; 40(2):129–36 **(Rum)**

VETERINARY

Reversal of atrial tachycardia with intravenous administration of verapamil in a dog. Foodman MS, et al. **J Am Vet Med Assoc** 1989 Mar 15;194(6):800–2

ECG of the month. Ventricular tachycardia. Fucci V. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1400–1

ECG of the month. Hyperkalemia in a mare. Hardy J. **J Am Vet Med Assoc** 1989 Feb 1;194(3):356–7

Incessant atrial tachycardias in a dog with tricuspid dysplasia. Clinical management and electrophysiology. de Madron E, et al. **J Vet Intern Med** 1987 Oct–Dec;1(4):163–9

TACHYCARDIA, ATRIOVENTRICULAR NODAL REENTRY see under **TACHYCARDIA, SUPRAVENTRICULAR**

TACHYCARDIA, ECTOPIC ATRIAL see under **TACHYCARDIA, SUPRAVENTRICULAR**

TACHYCARDIA, ECTOPIC JUNCTIONAL see under **TACHYCARDIA, SUPRAVENTRICULAR**

TACHYCARDIA, PAROXYSMAL

Continuous epidural lidocaine infusion in the parturient with paroxysmal ventricular tachycardia. Juneja MM, et al. **Anesthesiology** 1989 Aug;71(2):305–8

CHEMICALLY INDUCED

[Study of spontaneous acetylcholine-dependent tachyarrhythmias using isolated specimens of the right canine atrium by bilateral mapping of the spread of excitation] Zaĭtsev AV, et al. **Kardiologiia** 1989 Jun; 29(6):80–5 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

[Paroxysmal wide QRS tachycardia] Wang YS, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Dec; 16(6):332–5, 382 (Eng. Abstr.) **(Chi)**

[Classification of ventricular arrhythmias in patients with ischemic heart disease (data of 24-hour ECG monitoring] Orlov VN, et al. **Kardiologiia** 1988 Jul;28(7):95–7 **(Rus)**

COMPLICATIONS

Cardiac rhythm disorders in various types of hypertrophic cardiomyopathies. Gregor P, et al. **Cor Vasa** 1989; 31(1):16–24

DIAGNOSIS

[Asymptomatic brief paroxysmal atrial tachycardia] Yin QX, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Dec;27(12):730–3, 781 (Eng. Abstr.) **(Chi)**

[Value of transesophageal stimulation in the diagnosis of paroxysmal nodal tachycardia] Telichowski C, et al. **Kardiol Pol** 1988;31(11):705–10 (Eng. Abstr.) **(Pol)**

[Value of simultaneous 24-hour ECG monitoring and recording of transesophageal cardiac electrogram in the diagnosis of disorders of cardiac rhythm and conductivity] Makhotina VN, et al. **Kardiologiia** 1989 Jan;29(1):91–2 **(Rus)**

[Erroneous diagnosis of ventricular tachycardia—dangerous but unnecessary?] Edvardsson N, et al. **Lakartidningen** 1989 Mar 15;86(11):962–5 **(Swe)**

DRUG THERAPY

Efficacy, safety, and tolerance of d-sotalol in patients with refractory supraventricular tachyarrhythmias. Sahar DI, et al. **Am Heart J** 1989 Mar;117(3):562–8

Effect of intravenous propranolol or verapamil on infant orthodromic reciprocating tachycardia. Silberbach M, et al. **Am J Cardiol** 1989 Feb 15;63(7):438–42

Termination of paroxysmal supraventricular tachycardia by intravenous adenosine in a child. Chow AE, et al. **Anaesthesia** 1989 Apr;44(4):322–3

Paroxysmal supraventricular tachycardia: experience with propafenone. Santinelli V, et al. **Angiology** 1989 Jun; 40(6):563–8

Epinephrine-induced reversal of verapamil's electrophysiologic and therapeutic effects in patients with paroxysmal supraventricular tachycardia. Morady F, et al. **Circulation** 1989 Apr;79(4):783–90

Electrophysiological effects and clinical efficacy of propafenone in children with recurrent paroxysmal supraventricular tachycardia. Musto B, et al. **Circulation** 1988 Oct;78(4):863–9

Designing clinical trials for paroxysmal atrial tachycardia and other paroxysmal arrhythmias. Pritchett EL, et al. **J Clin Epidemiol** 1988;41(9):851–8

An interindividual variability in the sensitivity of atrioventricular node to diltiazem in patients with paroxysmal supraventricular tachycardia. Fukuhara S, et al. **J Clin Pharmacol** 1989 Feb;29(2):102–6

[Use of non-invasive transdermal stimulation of the heart in selecting an anti-arrhythmia drug in a patient with supraventricular paroxysmal tachycardia with a re-entry mechanism within the atrioventricular node] Prochaczek F, et al. **Kardiol Pol** 1988;31(6):337–42 (Eng. Abstr.) **(Pol)**

[Use of isometric load for evaluation of the anti-arrhythmia effect of drugs] Gel'fgat EB, et al. **Kardiologiia** 1988 Dec; 28(12):66–8 (Eng. Abstr.) **(Rus)**

[Combined effects of cordarone and ritmilen on the contractile function of the myocardium after intravenous and oral administration of loading doses] Gushchin IV, et al. **Kardiologiia** 1988 Oct;28(10):103–4 **(Rus)**

[Comparative effectiveness of finoptin and phosphobion in treating attacks of supraventricular tachycardia] Lukoshiavichiute AI, et al. **Kardiologiia** 1989 Apr; 29(4):64–9 (Eng. Abstr.) **(Rus)**

[Anti-arrhythmia effectiveness of phosphobion and finoptin in the treatment of atrioventricular retrograde paroxysmal tachycardia] Lukoshiavichiute AI, et al. **Kardiologiia** 1989 Jan;29(1):21–5 (Eng. Abstr.) **(Rus)**

[Single-stage peroral treatment of paroxysmal tachycardia] Shevchenko NM, et al. **Kardiologiia** 1988 Oct;28(10):108–9 **(Rus)**

[Use of digoxin in patients with paroxysmal supraventricular tachycardia] Smetnev AS, et al. **Kardiologiia** 1989 Apr; 29(4):61–4 (Eng. Abstr.) **(Rus)**

[Treatment of supraventricular paroxysmal tachycardia by intravenous administration of ATP] Nesterov IuI, et al. **Klin Med (Mosk)** 1989 Mar;67(3):87–8 (Eng. Abstr.) **(Rus)**

[Clinical effectiveness of ethacizine in the treatment of supraventricular paroxysmal tachycardia] Lukoshiavichiute AI, et al. **Ter Arkh** 1988;60(8):41–6 (Eng. Abstr.) **(Rus)**

[Study of the comparative anti-arrhythmic effectiveness of allapinin, ethacizine and mexitil in patients with ventricular disorders of cardiac rhythm] Smetnev AS, et al. **Ter Arkh** 1988;60(8):34–8 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Silent myocardial ischaemia and life threatening ventricular arrhythmias. Pedersen F, et al. **Ann Clin Res** 1988; 20(6):404–9

Acute pancreatitis associated with paroxysmal atrial fibrillation. A case report. Gullo L, et al. **Panminerva Med** 1988 Apr–Jun;30(2):111–3

[Atrial lipoma as a cause of tachycardiac arrhythmia] Rebeski HP, et al. **Dtsch Med Wochenschr** 1989 Jul 14; 114(28–29):1110–3 (Eng. Abstr.) **(Ger)**

[Latent Clerc-Levy-Cristesco syndrome as an electrophysiologic basis for paroxysmal reciprocal atrioventricular nodal tachycardia] Sulimov VA. **Kardiologiia** 1988 Oct;28(10):60–8 (Eng. Abstr.) **(Rus)**

[Asymptomatic common truncus arteriosus in a 25-year-old patient with paroxysmal tachycardia and truncal valve

insufficiency] del Campo F, et al. **Rev Esp Cardiol** 1989 May;42(5):343–5 (Eng. Abstr.) **(Spa)**

METABOLISM

[Supply of nonesterified fatty acids and their use by the myocardium in patients with paroxysmal tachycardia] Kuz'min AI, et al. **Fiziol Cheloveka** 1988 Sep–Oct; 14(5):812–7 **(Rus)**

PHYSIOPATHOLOGY

Transesophageal atrial pacing in paroxysmal supraventricular tachycardia in infants and children. Fujiseki Y, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):605–13

Tachycardial disorders of cardiac rhythm as a cause of left ventricular dysfunction. Bredikis YY, et al. **Cor Vasa** 1989; 31(2):110–7

Interatrial conduction block and retrograde activation of the left atrium and paroxysmal supraventricular tachyarrhythmia. Bayés de Luna A, et al. **Eur Heart J** 1988 Oct;9(10):1112–8

Pneumocardiogram casebook. Paroxysmal atrial tachycardia. Kelly D. **J Perinatol** 1987 Summer;7(3):262–3

[Paroxysmal, refractory tachycardia] Haberl R, et al. **Internist (Berlin)** 1989 Jul;30(7):454–7 **(Ger)**

[Electrophysiologic characteristics and hemodynamic behavior of paroxysmal supraventricular tachycardia] Sganzerla P, et al. **Cardiologia** 1988 Sep;33(9):867–73 (Eng. Abstr.) **(Ita)**

[Paroxysmal tachycardia with long QRS (left branch block type) in a female patient with accessory nodo–ventricular pathway. Role of the anomalous pathway in the electrogenesis of the arrhythmia] Guaragna RF, et al. **G Ital Cardiol** 1989 May;19(5):448–52 (Eng. Abstr.) **(Ita)**

[Study of thyroid function in patients with paroxysmal supraventricular tachycardia] Vanin LN, et al. **Kardiologiia** 1989 Jan;29(1):71–4 (Eng. Abstr.) **(Rus)**

[Thyroid function in patients with ventricular arrhythmia] Vanin LN, et al. **Kardiologiia** 1989 Feb;29(2):64–7 (Eng. Abstr.) **(Rus)**

[Features of central hemodynamics in paroxysmal ventricular tachycardia in humans] Chestukhin VV, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):48–53 (Eng. Abstr.) **(Rus)**

[Paroxysmal intra–atrial tachycardia] Pella J, et al. **Vnitr Lek** 1988 Nov;34(11):1082–6 (Eng. Abstr.) **(Slo)**

[Electrophysiological characteristics of 2 modalities of incessant reciprocating tachycardia] González R, et al. **Rev Med Chil** 1987 Oct;115(10):970–5 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Role of invasive electrophysiologic testing in the management of life–threatening ventricular arrhythmias. Wyndham CR. **Am J Cardiol** 1988 Nov 3;62(14):13I–17I (23 ref.)

[Anti–arrhythmia efficacy of propafenone per os in the prevention of paroxysmal supraventricular arrhythmia resistant to class Ia agents] Boutaud P, et al. **Ann Cardiol Angeiol (Paris)** 1989 Jan;38(1):37–42 (Eng. Abstr.) **(Fre)**

[Painless delivery under lumbar epidural anesthesia for a pregnant woman with syncope caused by paroxysmal ventricular tachycardia] Nakagawa H, et al. **Masui** 1989 Apr;38(4):560–2 (Eng. Abstr.) **(Jpn)**

SURGERY

Transcatheter electrical shock ablation of a concealed accessory pathway. Belhassen B, et al. **Cardiology** 1988; 75(4):289–93

[Fulguration of accessory pathways in children. Value of two–dimensional echocardiography] Clementy J, et al. **Arch Mal Coeur** 1989 Jun;82(6):861–7 (Eng. Abstr.) **(Fre)**

[Transvenous high frequency current ablation of atrioventricular conduction in therapy refractory tachycardic atrial fibrillation] Hief C, et al. **Wien Klin Wochenschr** 1989 Mar 17;101(6):188–91 (Eng. Abstr.) **(Ger)**

[Transluminal electric catheter ablation in the treatment of drug–refractory focal ventricular tachycardias] Volkmann H, et al. **Z Gesamte Inn Med** 1988 Jul 15;43(14):373–7 (Eng. Abstr.) **(Ger)**

[General anesthesia in the surgical treatment of tachycardia] Darbinian TM, et al. **Anesteziol Reanimatol** 1988 May–Jun; (3):3–8 (Eng. Abstr.) **(Rus)**

THERAPY

Reversion by vagal reflex of a fetal paroxysmal atrial tachycardia detected by echocardiography. Fernández C, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):860–1

[Termination of idiopathic ventricular tachycardia with QRS morphology of right bundle branch block and anterior fascicular hemiblock (fascicular tachycardia) by vagal maneuvers. Presentation of 4 cases] Buja G, et al. **G Ital Cardiol** 1988 Jul;18(7):560–6 (Eng. Abstr.) **(Ita)**

[Cataract and retinal detachment due to ocular compression for paroxysmal supraventricular tachycardia: a case report] Horio S. **Nippon Geka Hokan** 1988 May 1;57(3):240–3 (Eng. Abstr.) **(Jpn)**

[Electric stimulation of the heart in disorders of atrio–ventricular conduction and paroxysmal supraventricular tachycardia in patients with sick sinus syndrome] Egorov DF, et al. **Kardiologiia** 1989 Jan; 29(1):36–40 (Eng. Abstr.) **(Rus)**

VETERINARY

ECG of the month. Atrial premature complexes and paroxysmal atrial tachycardia. Miller MW, et al. **J Am Vet Med Assoc** 1989 Apr 1;194(7):906–7

TACHYCARDIA, SINOATRIAL NODAL REENTRY see under **TACHYCARDIA, SUPRAVENTRICULAR**

TACHYCARDIA, SINUS see under **TACHYCARDIA, SUPRAVENTRICULAR**

TACHYCARDIA, SUPRAVENTRICULAR

Diagnosis and management of postoperative junctional ectopic tachycardia [editorial] Gillette PC. **Am Heart J** 1989 Jul;118(1):192–4

Multifocal atrial tachycardia: mechanisms, clinical correlates, and treatment. Scher DL, et al. **Am Heart J** 1989 Sep; 118(3):574–80 (49 ref.)

Spectrum of supraventricular tachycardias. Brugada P, et al. **Am J Cardiol** 1988 Dec 20;62(19):4L–7L (25 ref.)

Alcohol use and supraventricular arrhythmia [letter] Engel TR. **Am J Cardiol** 1989 Jan 15;63(3):262

Neonatal cardiac arrhythmias and their potential role in sudden infant death syndrome. Gillette PC, et al. **Clin Perinatol** 1988 Sep;15(3):699–712 (30 ref.)

[Permanent idiopathic sinus tachycardia in pregnancy. Description of a case] Proclemer A, et al. **G Ital Cardiol** 1988 Apr;18(4):333–8 (Eng. Abstr.) **(Ita)**

BLOOD

Natriuresis associated with elevated plasma atrial natriuretic hormone during supraventricular tachycardia. Nicklas JM, et al. **Am Heart J** 1989 Feb;117(2):377–81

Coronary sinus norepinephrine concentrations during ventricular tachycardia induced by left stellate ganglion stimulation in dogs. Nadeau R, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):419–21

[Pharmacokinetics of oral propafenone in patients with supraventricular arrhythmia] Buoncuore A, et al. **Therapie** 1989 Mar–Apr;44(2):79–85 (Eng. Abstr.) **(Fre)**

[Atrial natriuretic factor in acute atrial hyperkinetic arrhythmia and chronic atrial fibrillo–flutter] Fontana F, et al. **G Ital Cardiol** 1989 May;19(5):417–27 (Eng. Abstr.) **(Ita)**

CHEMICALLY INDUCED

Transient neonatal ventricular tachycardia associated with maternal cocaine use. Geggel RL, et al. **Am J Cardiol** 1989 Feb 1;63(5):383–4

Prolonged Q–T interval following astemizole overdose. Bishop RO, et al. **Arch Emerg Med** 1989 Mar;6(1):63–5

Supraventricular bigeminy following a stingray envenomation: a case report. Ikeda T. **Hawaii Med J** 1989 May;48(5):162, 164

Supraventricular tachycardia caused by nebulised ipratropium bromide. O'Driscoll BR. **Thorax** 1989 Apr; 44(4):312

[Ventricular tachycardia and ventricular fibrillation as complications of intravenous administration of ethacizine] Lukoshiavichiute AI, et al. **Kardiologiia** 1988 Dec; 28(12):117–20 **(Rus)**

[Study of spontaneous acetylcholine–dependent tachyarrhythmias using isolated specimens of the right canine atrium by bilateral mapping of the spread of excitation] Zaĭtsev AV, et al. **Kardiologiia** 1989 Jun; 29(6):80–5 (Eng. Abstr.) **(Rus)**

[Acute poisoning by tetracaine following topical oropharyngeal administration (letter)] Luis M, et al. **Rev Esp Anestesiol Reanim** 1988 Sep–Oct;35(5):275 **(Spa)**

CLASSIFICATION

Evaluation and treatment of narrow complex tachycardias. Rinkenberger RL, et al. **Crit Care Clin** 1989 Jul;5(3):569–97 (17 ref.)

COMPLICATIONS

Pseudocardiomyopathy secondary to chronic incessant supraventricular tachycardia. Gladman G, et al. **Arch Dis Child** 1989 Mar;64(3):402–4

Charcot–Marie–Tooth disease and cardiac arrhythmias. Battistella PA, et al. **Brain Dev** 1988;10(4):262–3

Reversible cardiomyopathy following chronic supraventricular tachycardia. Belli B, et al. **Cardiologia** 1988 Jul;33(7):709–11

Cardiac rhythm disorders in various types of hypertrophic cardiomyopathies. Gregor P, et al. **Cor Vasa** 1989; 31(1):16–24

Incidence and prognostic significance of asymptomatic ischaemia in patients with sustained ventricular arrhythmias. Jordaens L, et al. **Eur Heart J** 1988 Dec;9 Suppl N:128–35

Chronic supraventricular tachycardia can cause severe ventricular dysfunction, which can be surgically repaired. Brown JM, et al. **J Thorac Cardiovasc Surg** 1988 Nov; 96(5):796–9

Sheehan's syndrome with hypomagnesemia and polymorphous ventricular tachycardia. Nunoda S, et al. **Jpn Heart J** 1989 Mar;30(2):251–6

Childhood stroke and supraventricular tachycardia. Atluru VL, et al. **Pediatr Neurol** 1985 Jan–Feb;1(1):54–6

[A case of polyradiculitis with EKG deviations and weakened heart sounds] Salminen K. **Duodecim** 1989; 105(1):71 **(Fin)**

[Reversible cardiomyopathy caused by chronic tachyarrhythmia (editorial)] Critelli G. **Cardiologia** 1988 Jul;33(7):713–5 **(Ita)**

[The mechanism of polyuria associated with paroxysmal supraventricular tachycardia] Fujii T, et al. **Nippon Jinzo Gakkai Shi** 1988 Apr;30(4):347–53 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Supraventricular tachycardia mimicking ventricular tachycardia during flecainide treatment. Crijns HJ, et al. **Am J Cardiol** 1988 Dec 1;62(17):1303–6

Fast–slow form of "atrioventricular nodal" reentrant tachycardia suggesting atrial participation in the reentrant circuit. Suzuki F, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1413–6

ECG artifact simulating supraventricular tachycardia during automated percutaneous lumbar discectomy. Lampert BA, et al. **Anesth Analg** 1988 Nov;67(11):1096–8

Rate–dependent ST segment depression—a case report. Akgün G, et al. **Angiology** 1989 Sep;40(9):844–8

Polymorphic ventricular tachycardia. O'Dea DJ, et al. **Ann Emerg Med** 1989 Jan;18(1):100–2

Transesophageal electrocardiography and atrial pacing in acute cardiac care: diagnostic and therapeutic value. Twidale N, et al. **Aust N Z J Med** 1989 Feb;19(1):11–5

Cases from the aerospace medicine residents' teaching file. Case #26. A fighter pilot with a single left frontal lobe infarction and probable mitral valve prolapse and supraventricular arrhythmias. Gray GW, et al. **Aviat Space Environ Med** 1988 Oct;59(10):994–6

Isoprenaline as an aid to the induction of catecholamine dependent supraventricular tachycardias during programmed stimulation. Brembilla–Perrot B, et al. **Br Heart J** 1989 Apr;61(4):348–55

Fetal supraventricular tachycardia: detection by routine auscultation and successful in–utero management. Case report. Macphail S, et al. **Br J Obstet Gynaecol** 1988 Oct; 95(10):1073–6

Ventricular rhythm with intermediate rate in the neonate without heart disease. Scagliotti D, et al. **Clin Perinatol** 1988 Sep;15(3):609–18 (16 ref.)

Atrial flutter or atrial tachycardia? Hancock EW. **Hosp Pract [Off]** 1989 Apr 15;24(4):107, 110, 112

Evaluation of techniques for recognition of ventricular arrhythmias by implanted devices. Ripley KL, et al. **IEEE Trans Biomed Eng** 1989 Jun;36(6):618–24

Permanent form of junctional reciprocating tachycardia with only even–numbered beats. Medeiros CM, et al. **J Electrocardiol** 1989 Jul;22(3):249–56

ECG of the month. Medicate or mediate? Martinez–Lopez JI. **J La State Med Soc** 1988 Nov;140(11):7–10

Diagnostic value of comparison of ventriculoatrial interval during junctional tachycardia and right ventricular apical pacing. Crozier I, et al. **PACE** 1989 Jun;12(6):942–53

Clinical, electrophysiological, and histopathological observations in supraventricular tachycardia. Kobayashi Y, et al. **PACE** 1988 Aug;11(8):1154–67

"Clockwise" and "counterclockwise" bundle branch reentry as a mechanism for sustained ventricular tachycardia masquerading as supraventricular tachycardia. Wang PJ, et al. **PACE** 1989 Aug;12(8):1426–32

[Evaluation of the Pv1–PE interval in the differential diagnosis of supraventricular tachycardia] Huang ZZ, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Dec; 16(6):321–4, 381 (Eng. Abstr.) **(Chi)**

[Application of electrophysiologic examination by transesophageal auricular stimulation] Jiang WP. **Chung Hua I Hsueh Tsa Chih** 1989 Feb;69(2):111–2 **(Chi)**

[Noninvasive locational diagnosis of concealed accessory pathways in the heart] Lu CY. **Chung Hua I Hsueh Tsa Chih** 1989 Feb;69(2):72–5, 6 (Eng. Abstr.) **(Chi)**

[The diagnostic value of quantitative atrial activation mapping for localization of cardiac accessory pathways] Lu CY. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Feb; 11(1):69–73 (Eng. Abstr.) **(Chi)**

[Transesophageal pacing in the diagnosis of accelerated atrioventricular conduction] Patruno N, et al. **Cardiologia** 1989 Jan;34(1):87–91 (Eng. Abstr.) **(Ita)**

[Reciprocating atrioventricular tachycardia caused by a re–entry circuit involving an occult left atrioventricular anomalous pathway. A possible diagnosis with surface ecg] Vitali A, et al. **Minerva Cardioangiol** 1988 Oct; 36(10):499–502 (Eng. Abstr.) **(Ita)**

[Value of transesophageal stimulation in the diagnosis of paroxysmal nodal tachycardia] Telichowski C, et al. **Kardiol Pol** 1988;31(11):705–10 (Eng. Abstr.) **(Pol)**

[Diagnosis of atrioventricular nodal reentry tachycardia and recurrent arrhythmia in patients with concealed accessory pathway based on rapid atrial stimulation] Telichowski C, et al. **Kardiol Pol** 1988;31(6):343–9 (Eng. Abstr.) **(Pol)**

[Evaluation of arrhythmia and electrophysiologic properties of the conduction pathways in patients with WPW syndrome based on 24–hour electrocardiographic monitoring] Telichowski C, et al. **Kardiol Pol** 1988; 31(7):465–71 (Eng. Abstr.) **(Pol)**

[The first experience using a Soviet–made device for recording late ventricular potentials] Solov'eva NV, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):82–7 (Eng. Abstr.) **(Rus)**

[Dynamics of cardiac rhythm disorders in patients with myocardial infarction studied by 24–hour ECG monitoring] Dobrotvorskaia TE, et al. **Kardiologiia** 1989 Jan;29(1):44–8 (Eng. Abstr.) **(Rus)**

[Study of the informative value of Holter ECG monitoring and exercise test in ventricular arrhythmia in patients with ischemic heart disease and a high degree of myocardial electric instability, based on the data of programmed electric stimulation of the heart ventricles] Kaĭn IuL, et al. **Kardiologiia** 1989 Mar;29(3):13–7 (Eng. Abstr.) **(Rus)**

[A simplified method of intraoperative diagnosis and surgical treatment of ventricular tachycardia] Laurushonis KA. **Kardiologiia** 1989 Jan;29(1):92–3 **(Rus)**

[Value of simultaneous 24–hour ECG monitoring and recording of transesophageal cardiac electrogram in the diagnosis of disorders of cardiac rhythm and conductivity] Makhotina VN, et al. **Kardiologiia** 1989 Jan;29(1):91–2 **(Rus)**

[Diagnosis of cardiac rhythm disorders in pilots using 24–hour ECG monitoring] Sinopal'nikov VI, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):80–3 (Eng. Abstr.) **(Rus)**

[Chronic sinus tachycardia in children] Shkol'nikova MA, et al. **Pediatriia** 1988;(10):24–9 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Atrial automatic ectopic tachycardia successfully treated with encainide in a 4–week–old infant after Senning procedure. Hays MD, et al. **Am Heart J** 1989 Feb; 117(2):489–92

Efficacy, safety, and tolerance of d–sotalol in patients with refractory supraventricular tachyarrhythmias. Sahar DI, et al. **Am Heart J** 1989 Mar;117(3):562–8

Flecainide acetate in the treatment of supraventricular tachycardias: value of programmed electrical stimulation for long–term prognosis. van Wijk LM, et al. **Am Heart J** 1989 Feb;117(2):365–9

A symposium: The use of encainide in supraventricular tachycardias. June 3 and 4, 1988, Bermuda. Proceedings. **Am J Cardiol** 1988 Dec 20;62(19):1L–84L

Role of adrenergic stimulation by isoproterenol in reversal of effects of encainide in supraventricular tachycardia. Akhtar M, et al. **Am J Cardiol** 1988 Dec 20;62(19):45L–49L

Encainide versus flecainide for chronic atrial and junctional ectopic tachycardia. Kuck KH, et al. **Am J Cardiol** 1988 Dec 20;62(19):37L–44L

Comparison of encainide and quinidine for supraventricular tachyarrhythmias. Mäkynen PJ, et al. **Am J Cardiol** 1988 Dec 20;62(19):55L–59L

Encainide for treatment of atrioventricular reciprocating tachycardia in the Wolff–Parkinson–White syndrome. Miles WM, et al. **Am J Cardiol** 1988 Dec 20; 62(19):20L–25L

Efficacy and electrophysiologic effects of encainide for atrioventricular nodal reentrant tachycardia. Naccarelli GV, et al. **Am J Cardiol** 1988 Dec 20;62(19):31L–36L

Advances in the treatment of supraventricular tachycardia. Naccarelli GV, et al. **Am J Cardiol** 1988 Dec 20; 62(19):1L–3L

Treatment of ectopic atrial arrhythmias and premature atrial complexes in adults with encainide. Pool PE, et al. **Am J Cardiol** 1988 Dec 20;62(19):60L–62L

Adenosine in altering short– and long–term treatment of supraventricular tachycardia in infants. Rossi AF, et al. **Am J Cardiol** 1989 Sep 15;64(10):685–6

Safety considerations and dosing guidelines for encainide in supraventricular arrhythmias. Soyka LF. **Am J Cardiol** 1988 Dec 20;62(19):63L–68L

Encainide for resistant supraventricular tachycardia in children: follow–up report. Strasburger JF, et al. **Am J Cardiol** 1988 Dec 20;62(19):50L–54L

Atenolol in children with supraventricular tachycardia. Trippel DL, et al. **Am J Cardiol** 1989 Jul 15;64(3):233–6

Antiarrhythmic drugs for supraventricular tachycardia. Wellens HJ, et al. **Am J Cardiol** 1988 Dec 20; 62(19):69L–73L (29 ref.)

Effect of intravenous magnesium sulfate on supraventricular tachycardia. Wesley RC Jr, et al. **Am J Cardiol** 1989 May 1;63(15):1129–31

Termination of paroxysmal supraventricular tachycardia by intravenous adenosine in a child. Chow AE, et al. **Anaesthesia** 1989 Apr;44(4):322–3

Use of esmolol during anesthesia to treat tachycardia and hypertension. Gold MI, et al. **Anesth Analg** 1989 Feb; 68(2):101–4

Paroxysmal supraventricular tachycardia: experience with propafenone. Santinelli V, et al. **Angiology** 1989 Jun; 40(6):563–8

Cardiovascular collapse after verapamil in supraventricular tachycardia [letter] Zatuchni J. **Arch Dis Child** 1988 Sep; 63(9):1115–6

Reassessment of indications for digoxin. Are patients being withdrawn? Sueta CA, et al. **Arch Intern Med** 1989 Mar; 149(3):609–12

Paediatric use of flecainide in supraventricular tachycardia: clinical efficacy and pharmacokinetics. Till JA, et al. **Br Heart J** 1989 Aug;62(2):133–9

Fetal supraventricular tachycardia: detection by routine auscultation and successful in–utero management [letter] Mills MS. **Br J Obstet Gynaecol** 1989 Apr;96(4):501–2

Oral propafenone therapy for patients with paroxysmal supraventricular tachyarrhythmia. Allen BJ, et al. **Chest** 1988 Oct;94(4):853–4

Critical dose of digoxin for treating supraventricular tachycardias after heart surgery. Krohn BG, et al. **Chest** 1989 Apr;95(4):729–34

Electropharmacology of amiodarone therapy initiation. Time courses of onset of electrophysiologic and antiarrhythmic effects. Mitchell LB, et al. **Circulation** 1989 Jul;80(1):34–42

Epinephrine–induced reversal of verapamil's electrophysiologic and therapeutic effects in patients with paroxysmal supraventricular tachycardia. Morady F, et al. **Circulation** 1989 Apr;79(4):783–90

Electrophysiological effects and clinical efficacy of propafenone in children with recurrent paroxysmal supraventricular tachycardia. Musto B, et al. **Circulation** 1988 Oct;78(4):863–9

The usefulness of amiodarone in management of refractory supraventricular tachyarrhythmias. Tuzcu EM, et al. **Cleve Clin J Med** 1989 May;56(3):238–42

The effects of adenosine on sinus node reentrant tachycardia. Griffith MJ, et al. **Clin Cardiol** 1989 Jul;12(7):401–11

Management of supraventricular tachyarrhythmias. Aronow WS. **Compr Ther** 1989 Apr;15(4):11–6 (17 ref.)

Comparison of the effects of intravenous and oral betaxolol on antegrade and retrograde conduction in patients with atrioventricular nodal reentrant and atrioventricular reentrant tachycardia. Kühlkamp V, et al. **Eur Heart J** 1989 Jun;10(6):493–501

Interatrial conduction block with retrograde activation of the left atrium and paroxysmal supraventricular tachyarrhythmias: influence of preventive antiarrhythmic treatment. Bayés de Luna A, et al. **Int J Cardiol** 1989 Feb; 22(2):147–50

Intravenous diltiazem in patients with paroxysmal re–entrant supraventricular tachycardia. Frabetti L, et al. **Int J Cardiol** 1989 May;23(2):215–21

Intravenous diltiazem for termination of reentrant supraventricular tachycardia: a placebo–controlled, randomized, double–blind, multicenter study. Huycke EC, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):538–44

Preferential effect of procainamide on the reentrant circuit of ventricular tachycardia. Kay GN, et al. **J Am Coll Cardiol** 1989 Aug;14(2):382–90

Treatment of atrioventricular node reentrant tachycardia with encainide: reversal of drug effect with isoproterenol. Niazi I, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):904–10

Designing clinical trials for paroxysmal atrial tachycardia and other paroxysmal arrhythmias. Pritchett EL, et al. **J Clin Epidemiol** 1988;41(9):851–8

Efficacy of esmolol in the treatment and transfer of patients with supraventricular tachyarrhythmias to alternate oral antiarrhythmic agents. Das G, et al. **J Clin Pharmacol** 1988 Aug;28(8):746–50

Terminating SVT–mediated recurrent ventricular fibrillation with verapamil. Applebaum D. **J Emerg Med** 1988 May–Jun;6(3):189–92

Sustained ventricular tachycardia responsive to verapamil in patients with hypertrophic cardiomyopathy. Clinical and electrophysiological assessment of drug efficacy. Miyajima S, et al. **Jpn Heart J** 1989 Mar;30(2):241–9

Degeneration of junctional tachycardia to pre–excited atrial fibrillation after intravenous verapamil [letter] Garratt C, et al. **Lancet** 1989 Jul 22;2(8656):219

Use of flecainide in children [letter] Till JA, et al. **Lancet** 1989 Aug 5;2(8658):326

Uses of calcium channel blocking agents and beta blocking agents in the control of supraventricular arrhythmias. Krikler DM. **Prog Clin Biol Res** 1988;275:301–17 (17 ref.)

Flecainide acetate in the treatment of resistant supraventricular arrhythmias. Epstein M, et al. **S Afr Med J** 1988 Dec 3;74(11):559–62

A case of left atrial automatic tachycardia successfully treated with aprindine. Kuriyama M, et al. **Sangyo Ika Daigaku Zasshi** 1988 Dec 1;10(4):417–22

Control and long–term inhibition of foetal supraventricular tachyarrhythmia with a cardioselective beta–receptor blocker administered to the mother. Resch B, et al. **Ther Hung** 1988;36(4):164–9

Hemodynamic consequences of supraventricular tachycardias and their antiarrhythmic treatment. Yusoff K, et al. **Z Kardiol** 1988;77 Suppl 5:137–42 (14 ref.)

[Acute electrophysiologic effects of intravenous ethmozin in patients with paroxysmal supraventricular tachycardia due to WPW syndrome] Pu JL, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Dec; 16(6):329–31, 381–2 (Eng. Abstr.) **(Chi)**

[Effects of intravenous propafenone on patients with supraventricular tachycardia evaluated with esophageal programmed electrical stimulation] Song YC, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr; 16(2):81–3, 126 (Eng. Abstr.) **(Chi)**

[Propafenone. An antiarrhythmic agent for both ventricular and supraventricular arrhythmia] Madsen JK, et al. **Ugeskr Laeger** 1988 Dec 12;150(50):3132–3 **(Dan)**

[Efficacy of intravenous sotalol in the treatment of supraventricular tachycardia] Denis J, et al. **Ann Cardiol Angeiol (Paris)** 1988 Jul–Sep;37(7):387–91 (15 ref.) (Eng. Abstr.) **(Fre)**

[Anti–arrhythmic effects of intravenous magnesium sulfate in paroxysmal supraventricular tachycardia] Etienne Y, et al. **Ann Cardiol Angeiol (Paris)** 1988 Nov;37(9):535–8 (Eng. Abstr.) **(Fre)**

[Fetal supraventricular tachycardias and their treatment. Apropos of 23 cases] Colin A, et al. **Arch Fr Pediatr** 1989 May;46(5):335–40 (41 ref.) (Eng. Abstr.) **(Fre)**

[Electrophysiologic effects of intravenous flecainide in intranodal junctional tachycardia in 30 patients] Haissaguerre M, et al. **Arch Mal Coeur** 1988 Dec; 81(12):1493–8 (Eng. Abstr.) **(Fre)**

[Treatment of junctional tachycardia with high doses of flecainide in infants (letter)] Chantepie A, et al. **Presse Med** 1988 Sep 17;17(31):1587–8 **(Fre)**

[Supraventricular tachycardia in the newborn infant. Role of injectable diltiazem (letter)] Lepoittevin L, et al. **Presse Med** 1989 Jan 21;18(2):82–3 **(Fre)**

[Electrophysiologic effects of betaxolol on conduction properties of the antegrade and retrograde pathway in patients with typical atrioventricular node reentry tachycardia following intravenous and oral administration] Kühlkamp V, et al. **Z Kardiol** 1988 Aug;77(8):527–33 (Eng. Abstr.) **(Ger)**

[Anti–arrhythmia therapy with Ca++–antagonists] Fazekas T. **Orv Hetil** 1989 Jun 4;130(23):1195–200 (45 ref.) (Eng. Abstr.) **(Hun)**

[Lv. propafenone in supraventricular paroxysmal tachyarrhythmias in patients with Wolff–Parkinson–White syndrome. 2 clinical cases] Barbieri O, et al. **Clin Ter** 1988 Jan 15;124(1):17–23 **(Ita)**

[Pindolol treatment of intraoperative supraventricular arrhythmia] Bandiera A, et al. **Minerva Anestesiol** 1987 Nov;53(11):613–6 (Eng. Abstr.) **(Ita)**

[Use of non–invasive transdermal stimulation of the heart in selecting an anti–arrhythmia drug in a patient with supraventricular paroxysmal tachycardia with a re–entry mechanism within the atrioventricular node] Prochaczek F, et al. **Kardiol Pol** 1988;31(6):337–42 (Eng. Abstr.) **(Pol)**

[Clinical pharmacology of flecainide] Słowiński S, et al. **Wiad Lek** 1988 Nov 1;41(21):1439–43 (24 ref.) (Eng. Abstr.) **(Pol)**

[Effect of hemodynamic changes on cardiac rhythm disorders: experience with long–term intravenous administration of nitroglycerin in patients with chronic heart failure] Kazeĭ DV, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):20–5 (Eng. Abstr.) **(Rus)**

[Pharmacokinetics and pharmacodynamics of the new Russian anti–arrhythmia drug allapinin] Abdalla A, et al. **Kardiologiia** 1989 Jan;29(1):32–6 (Eng. Abstr.) **(Rus)**

[Hemodynamic effects of mesotrin after its intravenous administration] Dzhishambaev ED, et al. **Kardiologiia** 1988 Oct;28(10):51–4 (Eng. Abstr.) **(Rus)**

[Use of isometric load for evaluation of the anti–arrhythmia effect of drugs] Gel'gat EB, et al. **Kardiologiia** 1988 Dec; 28(12):66–8 (Eng. Abstr.) **(Rus)**

[Combined effects of cordarone and ritmilen on the contractile function of the myocardium after intravenous and oral administration of loading doses] Gushchin IV, et al. **Kardiologiia** 1988 Oct;28(10):103–4 **(Rus)**

[Use of prolecofen in the treatment of arrhythmia in patients with ischemic heart disease] Liusov VA, et al. **Kardiologiia** 1989 Mar;29(3):24–7 (Eng. Abstr.) **(Rus)**

[Comparative effectiveness of finoptin and phosphobion in treating attacks of supraventricular tachycardia] Lukoshiavichiute AI, et al. **Kardiologiia** 1989 Apr; 29(4):64–9 (Eng. Abstr.) **(Rus)**

[Anti–arrhythmia effectiveness of phosphobion and finoptin in the treatment of atrioventricular retrograde paroxysmal tachycardia] Lukoshiavichiute AI, et al. **Kardiologiia** 1989 Jan;29(1):21–5 (Eng. Abstr.) **(Rus)**

[Use of digoxin in patients with paroxysmal supraventricular tachycardia] Smetnev AS, et al. **Kardiologiia** 1989 Apr; 29(4):61–4 (Eng. Abstr.) **(Rus)**

[A variant of the pre–fibrillation form of ventricular tachycardia] Zabela PV, et al. **Kardiologiia** 1989 Mar; 29(3):104–6 **(Rus)**

[2 cases of complications after intravenous administration of ethacizine] Grosu AA, et al. **Klin Med (Mosk)** 1989 Apr; 67(4):115–6 **(Rus)**

[Treatment of supraventricular paroxysmal tachycardia by intravenous administration of ATP] Nesterov IuI, et al. **Klin Med (Mosk)** 1989 Mar;67(3):87–8 (Eng. Abstr.) **(Rus)**

[Clinical effectiveness of ethacizine in the treatment of supraventricular paroxysmal tachycardia] Lukoshiavichiute AI, et al. **Ter Arkh** 1988;60(8):41–6 (Eng. Abstr.) **(Rus)**

[Study of the comparative anti–arrhythmic effectiveness of allapinin, ethacizine and mexitil in patients with ventricular disorders of cardiac rhythm] Smetnev AS, et al. **Ter Arkh** 1988;60(8):34–8 (Eng. Abstr.) **(Rus)**

[Evaluation of the anti–arrhythmia effect of intravenous flecainide in supraventricular tachyarrhythmias] Garre L,

et al. **Arch Inst Cardiol Mex** 1989 May-Jun;59(3):241-4 (Eng. Abstr.) **(Spa)**

[Amiodarone treatment in supraventricular tachycardias in childhood] Cabrera A, et al. **Rev Esp Cardiol** 1988 Dec; 41(10):602-6 (25 ref.) (Eng. Abstr.) **(Spa)**

ETIOLOGY

The mechanisms of exercise provocation of supraventricular tachycardia. Yeh SJ, et al. **Am Heart J** 1989 May; 117(5):1041-9

Alcohol use and supraventricular arrhythmia. Cohen EJ, et al. **Am J Cardiol** 1988 Nov 1;62(13):971-3

Hypoglycemia associated with supraventricular tachycardia in an infant. White SE, et al. **Anesthesiology** 1988 Dec; 69(6):944-5

Pompe's disease presenting as supraventricular tachycardia. Fung KP, et al. **Aust Paediatr J** 1989 Apr;25(2):101-2

Contribution of cross-sectional echocardiography to the diagnosis of right ventricular dysplasia at the asymptomatic stage. Scognamiglio R, et al. **Eur Heart J** 1989 Jun; 10(6):538-42

ECG casebook. What kind of supraventricular tachycardia? Hancock EW. **Hosp Pract [Off]** 1989 Jun 15;24(6):41, 44, 48

A manifestation of theophylline toxicity. Williams J, et al. **J Tenn Med Assoc** 1989 Mar;82(3):127-8

Successful excision of a right ventricular fibroma associated with ventricular tachycardia. Report of a six year survival. Kimura M, et al. **Jpn Heart J** 1988 Sep;29(5):753-9

DDD-pacemaker pseudomalfunction during supraventricular tachycardia. Fontaine JM, et al. **PACE** 1988 Oct;11(10):1380-5

Refractory supra-ventricular tachyarrhythmias due to early posterior pericardial effusion following open-heart surgery. Angelini GD, et al. **Thorac Cardiovasc Surg** 1988 Jun; 36(3):162-3

[Atrial tachycardia after anatomic repair of transposition of the great vessels (letter)] Vaksmann G, et al. **Presse Med** 1989 Jan 21;18(2):79-80 **(Fre)**

[A case of three different reciprocal tachycardias due to left concealed accessory pathway and dual A-V nodal pathways] Bando S, et al. **Kokyu To Junkan** 1988 Nov; 36(11):1241-6 (Eng. Abstr.) **(Jpn)**

[A case of Wolff-Parkinson-White syndrome with 2 accessory pathways] Musial WJ, et al. **Kardiol Pol** 1988; 31(6):383-90 (Eng. Abstr.) **(Pol)**

[Susceptibility to the development of supraventricular arrhythmia in patients with mitral valve prolapse syndrome] Grochowicz U, et al. **Pol Tyg Lek** 1988 Oct 10;43(41):1323-4 **(Pol)**

[Supraventricular arrhythmia in patients with paroxysmal atrial fibrillation] Banasiak W, et al. **Wiad Lek** 1988 Jul 15;41(14):905-9 (Eng. Abstr.) **(Pol)**

[Latent Clerc-Levy-Cristesco syndrome as an electrophysiologic basis for paroxysmal reciprocal atrioventricular nodal tachycardia] Sulimov VA. **Kardiologiia** 1988 Oct;28(10):60-8 (Eng. Abstr.) **(Rus)**

[A case of supraventricular tachycardia due to an inadequate physical load] Miagkov II, et al. **Vrach Delo** 1988 Sep; (9):48-9 **(Rus)**

HISTORY

The first implanted tachycardia-terminating pacemaker. Barold SS, et al. **PACE** 1989 May;12(5):870-4

PATHOLOGY

Ultrastructure of electrophysiologically identified human sinoatrial nodes. Lowe JE, et al. **Basic Res Cardiol** 1988 Jul-Aug;83(4):401-9

Science and serendipity: the morphology of the conduction system and surgery for supraventricular arrhythmia. Sealy WC. **J Med Assoc Ga** 1989 Mar;78(3):147-53

[Histopathological examination of endomyocardial biopsy in the cases of supraventricular tachycardia in children] Yonesaka S, et al. **Kokyu To Junkan** 1988 Nov; 36(11):1221-5 (Eng. Abstr.) **(Jpn)**

[Biopsy of the myocardium in patients with ventricular arrhythmia of unknown etiology] Wlodarska EK, et al. **Kardiol Pol** 1988;31(8):488-96 (Eng. Abstr.) **(Pol)**

PHYSIOPATHOLOGY

The relation between supraventricular tachyarrhythmias and left ventricular dysfunction after acute myocardial infarction. Zoni Berisso M, et al. **Acta Cardiol (Brux)** 1988; 43(6):689-701

Transesophageal atrial pacing in paroxysmal supraventricular tachycardia in infants and children. Fujiseki Y, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):605-13

Is the adaptation of right ventricular refractoriness to an abrupt increase in heart rate impaired in chronic heart failure? Denardo SJ, et al. **Am Heart J** 1989 Mar; 117(3):585-9

Atrial automatic tachycardia with two different types of electrophysiologic characteristics. Fujiki A, et al. **Am Heart J** 1989 Mar;117(3):699-701

Thresholds, refractory periods, and conduction times of the normal and diseased human atrium. Simpson RJ Jr, et al. **Am Heart J** 1988 Oct;116(4):1080-90

Effect of selective intracoronary antiarrhythmic drug administration in sustained ventricular tachycardia. Friedman PL, et al. **Am J Cardiol** 1989 Sep 1;64(8):475-80

Use of intracardiac recordings to determine the site of drug action in paroxysmal supraventricular tachycardia. Jackman WM, et al. **Am J Cardiol** 1988 Dec 20; 62(19):8L-19L (101 ref.)

Electrophysiologic manifestations of the excitable gap of orthodromic atrioventricular reciprocating tachycardia demonstrated by single extrastimulation. Lai WT, et al. **Am J Cardiol** 1989 Mar 1;63(9):545-55

Electrophysiological study of young patients with exercise related paroxysms of palpitation: role of atropine and isoprenaline for initiation of supraventricular tachycardia. Toda I, et al. **Br Heart J** 1989 Mar;61(3):268-73

Autonomic function and the sinus tachycardia of Duchenne muscular dystrophy. Miller G, et al. **Brain Dev** 1989; 11(4):247-50

Atrioventricular nodal tachycardia in the absence of retrograde conduction. Molina RZ, et al. **Can J Cardiol** 1989 Apr;5(3):143-6

Electrophysiological and anatomic differences between canine hearts with inducible ventricular tachycardia and fibrillation associated with chronic myocardial infarction. Dennis AR, et al. **Circ Res** 1989 Jan;64(1):155-66

Sustained bundle branch reentry as a mechanism of clinical tachycardia. Caceres J, et al. **Circulation** 1989 Feb; 79(2):256-70

Oscillations of conduction, action potential duration, and refractoriness. A mechanism for spontaneous termination of reentrant tachycardias. Frame LH, et al. **Circulation** 1988 Nov;78(5 Pt 1):1277-87

Predicting ventricular tachycardia cycle length after procainamide by assessing cycle length-dependent changes in paced QRS duration. Marchlinski FE, et al. **Circulation** 1989 Jan;79(1):39-46

The excitable gap in atrioventricular nodal reentrant tachycardia. Characterization with ventricular extrastimuli and pharmacologic intervention. Schuger CD, et al. **Circulation** 1989 Aug;80(2):324-34

Nonuniform recovery of excitability in the left ventricle. Vassallo JA, et al. **Circulation** 1988 Dec;78(6):1365-72

Exercise response before and after termination of atrial tachycardia after congenital heart disease surgery. Wessel HU, et al. **Circulation** 1989 Jul;80(1):106-11

Tachycardial disorders of cardiac rhythm as a cause of left ventricular dysfunction. Bredikis YY, et al. **Kor Vasa** 1989; 31(2):110-7

Disposition of 3-hydroxyquinidine in patients receiving initial intravenous quinidine gluconate for electrophysiology testing of ventricular tachycardia. Ackerman BH, et al. **DICP** 1989 May;23(5):375-8

Supraventricular tachycardia after heterotopic heart transplantation. Alexopoulos D, et al. **Eur Heart J** 1988 Nov;9(11):1266-8

Interatrial conduction block and retrograde activation of the left atrium and paroxysmal supraventricular tachyarrhythmia. Bayés de Luna A, et al. **Eur Heart J** 1988 Oct;9(10):1112-8

Physiological variation in the termination window of re-entry tachycardia studied by non-invasive programmed stimulation. Schmidinger H, et al. **Eur Heart J** 1988 Sep; 9(9):997-1002

Electrophysiologic and haemodynamic correlates in supraventricular tachycardia. Sganzerla P, et al. **Eur Heart J** 1989 Jan;10(1):32-9

Induction of supraventricular tachyarrhythmia at rest and during exercise with transoesophageal atrial pacing in the electrophysiological evaluation of asymptomatic athletes with Wolff-Parkinson-White syndrome. Vergara G, et al. **Eur Heart J** 1988 Oct;9(10):1119-25

Palpitation and abnormal ECG in muscular dystrophy. Hancock EW. **Hosp Pract [Off]** 1989 Jul 15;24(7):21, 24

Functional abnormalities of the conduction system in children with an atrial septal defect. Bink-Boelkens MT, et al. **Int J Cardiol** 1988 Aug;20(2):263-72

A case of left ventricular aneuryam of uncertain etiology presenting as ventricular tachycardia. Inoue D, et al. **Int J Cardiol** 1988 Nov;21(2):135-41

Alternate Wenckebach conduction through the right bundle branch. Medeiros CM, et al. **Int J Cardiol** 1989 Jun; 23(3):400-2

Concealed anterograde accessory pathway conduction during the induction of orthodromic reciprocating tachycardia. Kou WH, et al. **J Am Coll Cardiol** 1989 Feb; 13(2):391-8

Paroxysmal atrial fibrillation with and without primary atrial vulnerability. Clinical and electrophysiological differences. Fujiki A, et al. **J Electrocardiol** 1989 Apr;22(2):153-8

The paradox of sudden slowing of idioventricular rhythm during exercise in complete heart block: modulation of automatic focus, concealed reentry, or Wedensky inhibition? Klein HO, et al. **J Electrocardiol** 1988 Aug; 21(3):289-91

Three types of atrioventricular reciprocating tachycardia using bilateral accessory pathways in a patient with Wolff-Parkinson-White syndrome. Liu PH, et al. **J Electrocardiol** 1989 Apr;22(2):173-80

Compensating conduction times as a mechanism of alternating reentry tachycardia: computer modelling experiments. Malik M, et al. **J Electrocardiol** 1989 Jan; 22(1):73-80

ECG of the month. Triumvirate. Martinez-Lopez JI. **J La State Med Soc** 1988 Aug;140(8):7-9

AV nodal reentrant tachycardia with a bystander Mahaim fiber. Aizawa Y, et al. **Jpn Heart J** 1988 Nov;29(6):891-6

A model of atrial ectopic tachycardia in the rat. Tribble J, et al. **Methods Find Exp Clin Pharmacol** 1988 Aug; 10(8):521-6

Fast-slow type of atrioventricular nodal reentrant tachycardia: horizontal dissociation of the AV node during tachycardia. Fujiki A, et al. **PACE** 1988 Nov;11(11 Pt 1):1559-65

Entrainment of ventricular tachycardia by AV nodal reentrant tachycardia. Kay GN, et al. **PACE** 1989 Jan;12(1 Pt 1):2-15

Pleomorphic ventricular tachycardia: demonstration of conduction reversal within the reentry circuit. Kuck KH, et al. **PACE** 1989 Jul;12(7 Pt 1):1055-64 (18 ref.)

Double atrial and double ventricular responses during slow-fast fast-slow atrioventricular nodal reentrant tachycardia. Matsuhisa M, et al. **PACE** 1989 Aug; 12(8):1381-6

Alternating sequence of retrograde atrial activation in patients with dual AV nodal physiology. Singer I, et al. **PACE** 1989 Jan;12(1 Pt 1):80-5

The use of isometric exercise as a means of evaluating the parasympathetic contribution to the tachycardia induced by dynamic exercise in normal man. Gallo L Jr, et al. **Pflugers Arch** 1988 Jul;412(1-2):128-32

The role of the sinus node in supraventricular arrhythmias. Allessie MA, et al. **Prog Clin Biol Res** 1988;275:53-66 (32 ref.)

[Patterns of ventriculoatrial conduction in patients with atrioventricular accessory pathway during ventricular programmed stimulation] Guo CY, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Dec; 16(6):325-8, 381 (Eng. Abstr.) **(Chi)**

[Electrophysiologic studies on supraventricular tachycardias with wide QRS] Jiang WP, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Aug; 16(4):209-13, 253-4 (Eng. Abstr.) **(Chi)**

[Primary studies on transesophageal atrial activation mapping] Deng ZW. **Chung Hua I Hsueh Tsa Chih** 1989 Feb;69(2):66-8, 6 (Eng. Abstr.) **(Chi)**

[Dual AV nodal pathways in patients with AV reentrant tachycardia] Guo CY. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;68(10):578-81, 40 (Eng. Abstr.) **(Chi)**

[Electrophysiologic study of concealed accessory A-V pathway] Guo CY, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Feb;28(2):85-8, 126 (Eng. Abstr.) **(Chi)**

[Deglutition-induced supraventricular tachycardias] Bischoff KH, et al. **Z Gesamte Inn Med** 1989 May 15;44(10):307-9 (Eng. Abstr.) **(Ger)**

[Electrophysiologic characteristics and hemodynamic behavior of paroxysmal supraventricular tachycardia] Sganzerla P, et al. **Cardiologia** 1988 Sep;33(9):867-73 (Eng. Abstr.) **(Ita)**

[Current knowledge and problems of accelerated idioventricular rhythm. Clinical observations and indications for therapy] Fragola PV, et al. **Clin Ter** 1989 Jan 15;128(1):3-11 (62 ref.) (Eng. Abstr.) **(Ita)**

[Supraventricular tachycardias and paroxysmal atrial fibrillation] Hashiba K. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1789-800 **(Jpn)**

[Asymmetrical changes in electrical activity of Purkinje fibers and muscle cells after administration of BAY K 8644. A new model of cardiac arrhythmia] Undrovinas AI, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):6-11 (Eng. Abstr.) **(Rus)**

[Study of thyroid function in patients with paroxysmal supraventricular tachycardia] Vanin LN, et al. **Kardiologiia** 1989 Jan;29(1):71-4 (Eng. Abstr.) **(Rus)**

[Thyroid function in patients with ventricular arrhythmia] Vanin LN, et al. **Kardiologiia** 1989 Feb;29(2):64-7 (Eng. Abstr.) **(Rus)**

[Paroxysmal intra-atrial tachycardia] Pella J, et al. **Vnitr Lek** 1988 Nov;34(11):1082-6 (Eng. Abstr.) **(Slo)**

[Electrophysiological characteristics of 2 modalities of incessant reciprocating tachycardia] González R, et al. **Rev Med Chil** 1987 Oct;115(10):970-5 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Atenolol for the prevention of arrhythmias following coronary artery bypass grafting. Matangi MF, et al. **Can J Cardiol** 1989 May;5(4):229-34

Use of flecainide in children [letter] Till JA, et al. **Lancet** 1989 Aug 5;2(8658):326

Modification of the DDD pacing mode to prevent junctional reentry tachycardia: computer modelling experiments. Malik M, et al. **PACE** 1988 Oct;11(10):1465-78

Supraventricular tachyarrhythmias after coronary bypass surgery--a double blind randomized trial of prophylactic low dose propranolol. Martinussen HJ, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):206-7

Does low-dose propranolol reduce the incidence of supraventricular tachyarrhythmias following myocardial revascularisation? A clinical study. Shafei H, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):202-5

[Prevention of supraventricular tachyarrhythmia and tachycardia with kordaron] Mirchev V. **Vutr Boles** 1988; 27(6):25-31 (Eng. Abstr.) **(Bul)**

[Anti-arrhythmia efficacy of propafenone per os in the prevention of paroxysmal supraventricular arrhythmia resistant to class Ia agents] Boutaud P, et al.

Ann Cr rdiol Angeiol (Paris) 1989 Jan;38(1):37–42 (Eng. Abstr.) (Fre)

[Study of excitation circulation around an unexcitable myocardial obstacle] Medvinskiĭ AB, et al. **Kardiologiia** 1989 Jan;29(1):84–8 (Eng. Abstr.) (Rus)

PSYCHOLOGY

Anxiety and anger in patients with ventricular tachyarrhythmias. Responses after automatic internal cardioverter defibrillator implantation. Vlay SC, et al. **PACE** 1989 Feb;12(2):366–73

SURGERY

Cryoablation of refractory sustained ventricular tachycardia due to coronary artery disease. Caceres J, et al. **Am J Cardiol** 1989 Feb 1;63(5):296–300

Nonpharmacologic treatment of supraventricular tachycardia. Prystowsky EN, et al. **Am J Cardiol** 1988 Dec 20;62(19):74L–77L (35 ref.)

Cryoablation of septal pathways in patients with supraventricular tachyarrhythmias. Lee AW, et al. **Ann Thorac Surg** 1989 Apr;47(4):566–8

Transcatheter electrical shock ablation of a concealed accessory pathway. Belhassen B, et al. **Cardiology** 1988; 75(4):289–93

Catheter ablation of atrioventricular bypass tracts. Still an investigational procedure. Buxton AE. **Circulation** 1989 Jun;79(6):1388–90

Potential distribution mapping. New method for precise localization of intramural septal origin of ventricular tachycardia. Harada A, et al. **Circulation** 1988 Nov;78(5 Pt 2):III137–47

Long-term results of catheter ablation of a posteroseptal accessory atrioventricular connection in 48 patients. Morady F, et al. **Circulation** 1989 Jun;79(6):1160–70

Catheter ablation of accessory pathways with a direct approach. Results in 35 patients. Warin JF, et al. **Circulation** 1988 Oct;78(4):800–15

Catheter ablation of ventricular tachycardia using defibrillator pulses: electrophysiological findings and long-term results. Borggrefe M, et al. **Eur Heart J** 1989 Jul;10(7):591–601

Direct surgery for ventricular tachycardia: is nonguided misguided? Fisher JD, et al. **J Am Coll Cardiol** 1989 Jan; 13(1):163–4

Direct surgical treatment of atrioventricular node reentrant tachycardia. Gartman DM, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):63–71; discussion 71–2

Surgical procedures on the atrioventricular node [editorial] Pritchett EL. **Mayo Clin Proc** 1988 Oct;63(10):1050–2

Cryosurgical modification of atrioventricular conduction for treatment of atrioventricular node reentrant tachycardia. Wood DL, et al. **Mayo Clin Proc** 1988 Oct;63(10):988–92

Closed-chest ablation of retrograde conduction in patients with atrioventricular nodal reentrant tachycardia. Haissaguerre M, et al. **N Engl J Med** 1989 Feb 16; 320(7):426–33

Catheter techniques for ablation of supraventricular tachycardia [editorial] Scheinman MM. **N Engl J Med** 1989 Feb 16;320(7):460–1

Catheter ablation without fulguration: design and performance of a new system. Ahsan AJ, et al. **PACE** 1989 Jan;12(1 Pt 2):131–5

Transvascular argon laser ablation of atrioventricular conduction in dogs: feasibility and morphological results. Curtis AB, et al. **PACE** 1989 Feb;12(2):347–57

Catheter ablation for recurrent tachyarrhythmias. Clinical experience with two different techniques of ablation in 21 patients. Goy JJ, et al. **PACE** 1988 Nov;11(11 Pt 2):1945–53

Direct endocardial recording and catheter ablation of an accessory pathway in a patient with incessant supraventricular tachycardia. Webb JG, et al. **PACE** 1988 Nov;11(11 Pt 1):1533–9

Nonpharmacologic management of patients with supraventricular tachyarrhythmias. Branyas NA, et al. **Prog Clin Biol Res** 1988;275:319–35 (31 ref.)

[Development of catheter system for thermal ablation of endocardium; a preliminary report] Niwano S, et al. **Iyodenshi To Seitai Kogaku** 1988 Dec;26(4):227–30 (Eng. Abstr.) (Jpn)

[Surgical treatment of nodal reentry tachycardia. Initial experiences] Sosa E, et al. **Arq Bras Cardiol** 1988 Nov; 51(5):397–401 (Eng. Abstr.) (Por)

[General anesthesia in the surgical treatment of tachycardia] Darbinian TM, et al. **Anesteziol Reanimatol** 1988 May–Jun; (3):3–8 (Eng. Abstr.) (Rus)

[Experience with the surgical treatment of cardiac rhythm disorders] Belichenko IA, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):42–4 (Eng. Abstr.) (Rus)

[Ablation of the bundle of His in patients with drug resistant supraventricular tachycardia] Topalov V, et al. **Med Pregl** 1988;41(7–8):309–12 (Eng. Abstr.) (Ser)

[Cardiac fulguration. A healing treatment for intranodal re-entry tachycardias refractory to medication] Moro C, et al. **Rev Esp Cardiol** 1989 Jun–Jul;42(6):389–93 (Eng. Abstr.) (Spa)

[AV fulguration using high frequency (radio frequency) current: an alternative therapy for supraventricular tachyarrhythmias] Sanjuán R, et al. **Rev Esp Cardiol** 1988 Aug–Sep;41(7):405–13 (Eng. Abstr.) (Spa)

THERAPY

External cardiac programmed stimulation for noninvasive termination of sustained supraventricular and ventricular tachycardia. Estes NA 3d, et al. **Am J Cardiol** 1989 Jan 15;63(3):177–83

Multicenter long-term results of antitachycardia pacing for supraventricular tachycardias. Kappenberger L, et al. **Am J Cardiol** 1989 Jul 15;64(3):191–3

Treatment of paroxysmal supraventricular tachycardia in the emergency department by clinical decision analysis. Ornato JP, et al. **Am J Emerg Med** 1988 Nov;6(6):555–60

Digital rectal message for PSVT [letter] Weiss LD. **Ann Emerg Med** 1989 Mar;18(3):330–1

Do it yourself cardioversion. McKnight JA, et al. **BMJ** 1988 Dec 24–31;297(6664):1641

Clinical application of antitachycardia pacemaker. A report of 6 cases. Sun RL, et al. **Chin Med J [Engl]** 1988 Oct; 101(10):731–6

Termination of re-entrant ventricular tachycardia by subthreshold stimulus applied to the zone of slow conduction. Podczeck A, et al. **Eur Heart J** 1988 Oct; 9(10):1146–50

Ventricular paired pacing to control intractable junctional tachycardia following open heart surgery in a child. Sluysmans T, et al. **Intensive Care Med** 1989;15(3):203–5

Advances in the treatment of supraventricular tachycardia. Gillette PC, et al. **J S C Med Assoc** 1989 Jun;85(6):275–8

Treatment of ventricular and supraventricular tachyarrhythmias by transcutaneous cardiac pacing. Altamura G, et al. **PACE** 1989 Feb;12(2):331–8

Evaluation and management of a supraventricular tachycardia with a standard bradycardia support pacemaker [published erratum appears in PACE 1989 Mar;12(3):preceding 399] Estrada AQ, et al. **PACE** 1988 Dec;11(12):2193–7

Long-term follow-up of atrioventricular junctional transcatheter electrical ablation. Lévy S, et al. **PACE** 1988 Aug;11(8):1149–53

Long-term follow-up of patients treated with automatic scanning antitachycardia pacemaker. Møller M, et al. **PACE** 1989 Mar;12(3):425–30

Chronic rapid atrial pacing to maintain atrial fibrillation: use to permit control of ventricular rate in order to treat tachycardia induced cardiomyopathy. Moreira DA, et al. **PACE** 1989 May;12(5):761–75

Problems of sensing tachyarrhythmias by an antitachycardia pacemaker (Symbios 7008). Nürnberg M, et al. **PACE** 1989 Apr;12(4 Pt 1):537–41

Long-term results of antitachycardia pacing in patients with supraventricular tachycardia. Schnittger I, et al. **PACE** 1989 Jun;12(6):936–41

Emergency cardiac maneuvers [letter] Cheng TO. **South Med J** 1989 Aug;82(8):1066

[Current progress and clinical practice in treating supraventricular tachycardias] Tomov I. **Vutr Boles** 1989; 28(2):5–13 (20 ref.) (Bul)

[Transesophageal supra-burst pacing to terminate paroxysmal supraventricular tachycardia] Guo JH. **Chung Hua I Hsueh Tsa Chih** 1989 Feb;69(2):69–71, 6 (Eng. Abstr.) (Chi)

[Anti-tachycardia pacemakers: welcome alternative in the therapy of paroxysmal supraventricular tachycardia] Mohacsi P, et al. **Schweiz Med Wochenschr** 1988 Dec 24; 118(51):1950–2 (Eng. Abstr.) (Ger)

[Supraventricular tachycardia: therapy with a variable antitachycardia stimulation program] Pfitzner P, et al. **Z Kardiol** 1988 Jun;77(6):366–72 (Eng. Abstr.) (Ger)

[Cataract and retinal detachment due to ocular compression for paroxysmal supraventricular tachycardia: a case report] Horio S. **Nippon Geka Hokan** 1988 May 1;57(3):240–3 (Eng. Abstr.) (Jpn)

[Electric stimulation of the heart in disorders of atrio-ventricular conduction and paroxysmal supraventricular tachycardia in patients with sick sinus syndrome] Egorov DF, et al. **Kardiologiia** 1989 Jan; 29(1):36–40 (Eng. Abstr.) (Rus)

[Long-term treatment of ventricular arrhythmia caused by electrocardiographic long QT syndrome] Popov SV, et al. **Kardiologiia** 1988 Jul;28(7):92–5 (Rus)

[Increased incidence of supraventricular tachycardia attacks: characteristics of its clinical picture] Stirbis PP, et al. **Kardiologiia** 1989 Mar;29(3):110–1 (Rus)

URINE

Urinary excretion of atrial natriuretic peptide during saline infusion and supraventricular tachycardia. Kojima S, et al. **Nephron** 1989;51(2):283–4

VETERINARY

ECG of the month. Sinus tachycardia and hyperkalemia in a horse. Castex AM, et al. **J Am Vet Med Assoc** 1989 Mar 1;194(5):654–5

Verapamil administration for acute termination of supraventricular tachycardia in dogs. Kittleson M, et al. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1525–9

Sustained supraventricular tachycardia in a horse. Guthrie AJ, et al. **J S Afr Vet Assoc** 1989 Mar;60(1):46–7

TACHYKININS

Recombinant human enkephalinase (neutral endopeptidase) prevents cough induced by tachykinins in awake guinea pigs. Kohrogi H, et al. **J Clin Invest** 1989 Sep;84(3):781–6

ANALYSIS

Expression of tachykinins by ileal and lung carcinoid tumors assessed by combined in situ hybridization, immunocytochemistry, and radioimmunoassay. Bishop AE, et al. **Cancer** 1989 Mar 15;63(6):1129–37

Recognition, purification, and structural elucidation of mammalian physalaemin-related molecules. Lazarus LH, et al. **Methods Enzymol** 1989;168:444–62

ANTAGONISTS & INHIBITORS

A tachykinin receptor antagonist inhibits and an inhibitor of tachykinin metabolism potentiates toluene diisocyanate-induced airway hyperresponsiveness in guinea pigs. Sheppard D, et al. **Am Rev Respir Dis** 1988 Sep; 138(3):547–51

BIOSYNTHESIS

Tachykinin production in granulomas of murine schistosomiasis mansoni. Weinstock JV, et al. **J Immunol** 1989 May 1;142(9):3256–61

BLOOD

Effect of a long-acting somatostatin analogue (octreotide) on circulating tachykinins and the pentagastrin-induced carcinoid flush. Balks HJ, et al. **Eur J Clin Pharmacol** 1989; 36(2):133–7

GENETICS

Subarachnoid blood and headache: altered trigeminal tachykinin gene expression. Linnik MD, et al. **Ann Neurol** 1989 Feb;25(2):179–84

Changes in tachykinin and actin gene expression in rat sensory neurones after cutting or crushing the sciatic nerve. Nielsch U, et al. **Biochem Soc Trans** 1988 Aug;16(4):465–6

The polyprotein nature of substance P precursors. Krause JE, et al. **Biocessays** 1989 Feb–Mar;10(2–3):62–9 (74 ref.)

Expression of substance P/neurokinin A-encoding preprotachykinin messenger ribonucleic acids in the rat enteric nervous system. Sternini C, et al. **Gastroenterology** 1989 Aug;97(2):348–56

Evidence for dual mechanisms involved in methamphetamine-induced increases in striatal preprotachykinin mRNA. Haverstick DM, et al. **J Biol Chem** 1989 Aug 5;264(22):13140–4

Multiple tachykinins are produced and secreted upon post-translational processing of the three substance P precursor proteins, alpha-, beta-, and gamma-preprotachykinin. Expression of the preprotachykinins in AtT-20 cells infected with vaccinia virus recombinants. MacDonald MR, et al. **J Biol Chem** 1989 Sep 15;264(26):15578–92

Posttranslational processing of alpha-, beta-, and gamma-preprotachykinins. Cell-free translation and early posttranslational processing events. MacDonald MR, et al. **J Biol Chem** 1988 Oct 15;263(29):15176–83

In situ hybridization of mRNA for beta-preprotachykinin and preprosomatostatin in adult rat dorsal root ganglia: comparison with immunocytochemical localization [published erratum appears in J Neurocytol 1989 Feb;18(1):139] Henken DB, et al. **J Neurocytol** 1988 Oct; 17(5):671–81

Striatal tachykinin gene expression regulated by interaction of D-1 and D-2 dopamine receptors. Haverstick DM, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):858–62

Lithium increases rat striatal beta- and gamma-preprotachykinin messenger RNAs. Sivam SP, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1297–301

IMMUNOLOGY

Reduced numbers of calcitonin gene-related peptide-(CGRP-) and tachykinin-immunoreactive sensory neurones associated with greater enkephalin immunoreactivity in the dorsal horn of a mutant rat with hereditary sensory neuropathy. Kar S, et al. **Cell Tissue Res** 1989 Feb;255(2):451–66

Retrograde neuronal labelling and double-staining immunohistochemistry of tachykinin- and calcitonin gene-related peptide-immunoreactive pathways in the carotid sinus nerve of the guinea pig. Kummer W. **J Auton Nerv Syst** 1988 Aug;23(2):131–41

Synthesis and immunological evaluation of N-terminal, noncrossreactive tachykinin antigens. Neugebauer W, et al. **J Med Chem** 1988 Oct;31(10):1907–10

ISOLATION & PURIFICATION

Isolation of the tachykinin, des[Ser1Pro2]scyliorhinin II from the intestine of the ray, Torpedo marmorata. Conlon JM, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):383–8

Heterogeneity of tachykinin-like immunoreactive peptides in rat spinal cord and dorsal root ganglia. Too HP, et al. **Peptides** 1989 Jan–Feb;10(1):25–30

METABOLISM

Release of multiple tachykinins from capsaicin-sensitive sensory nerves in the lung by bradykinin, histamine, dimethylphenyl piperazinium, and vagal nerve stimulation. Saria A, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1330–5

Receptors for neurokinins, tachykinins, and bombesin: a pharmacological study. Regoli D, et al. **Ann N Y Acad Sci** 1988;547:158–73 (55 ref.)

Reciprocal regulation of tachykinin- and vasoactive intestinal peptide-gene expression in rat sensory neurones following cut and crush injury. Nielsch U, et al. **Brain Res** 1989 Feb 27;481(1):25–30

A noxious stimulus induces the preprotachykinin-A gene expression in the rat dorsal root ganglion: a quantitative study using in situ hybridization histochemistry. Noguchi K, et al. **Brain Res** 1988 Aug;464(1):31–5

Distribution of tachykinin- and enkephalin-immunoreactive fibers in the human thalamus. Hirai T, et al. **Brain Res Brain Res Rev** 1989 Jan–Mar;14(1):35–52

Tachykinins and calcitonin gene-related peptide: co-existence in sensory nerves of the nasal mucosa and effects on blood flow. Stjärne P, et al. **Cell Tissue Res** 1989 Jun;256(3):439–46

The study of tachykinin receptors. Burcher E. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):539–43 (25 ref.)

Neuropeptide K, scyliorhinin I and II: new tools in the tachykinin receptor field. Beaujouan JC, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):353–4

Subchronic haloperidol treatment decreases the in vivo release of tachykinins in rat substantia nigra. Lindefors N, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):95–8

Tissue levels and in vivo release of tachykinins and GABA in striatum and substantia nigra of rat brain after unilateral striatal dopamine denervation. Lindefors N, et al. **Exp Brain Res** 1989;74(3):527–34

Preprotachykinin gene expression in the mediobasal hypothalamus of estrogen-treated and ovariectomized control rats. Romano GJ, et al. **Exp Brain Res** 1989; 76(1):21–6

Gastrointestinal tachykinin receptors. Jacoby HI. **Life Sci** 1988;43(26):2203–8 (25 ref.)

Regional differences in substance P-like immunoreactivity in the striatum correlate with levels of pre-protachykinin mRNA. Chesselet MF, et al. **Neurosci Lett** 1989 Jan 2; 96(1):47–53

Substance P-induced cutaneous plasma extravasation in rats is mediated by NK-1 tachykinin receptors. Devor M, et al. **Neurosci Lett** 1989 Aug 28;103(2):203–8

Immunoreactive tachykinins, calcitonin gene-related peptide and neuropeptide Y in human synovial fluid from inflamed knee joints. Larsson J, et al. **Neurosci Lett** 1989 May 22; 100(1–3):326–30

Enhancement of preprotachykinin A gene expression by adjuvant-induced inflammation in the rat spinal cord: possible involvement of substance P-containing spinal neurons in nociception. Minami M, et al. **Neurosci Lett** 1989 Mar 13;98(1):105–10

Tachykinins, calcitonin gene-related peptide and neuropeptide Y in nerves of the mammalian thymus: interactions with mast cells in autonomic and sensory neuroimmunomodulation? Weihe E, et al. **Neurosci Lett** 1989 May 22;100(1–3):77–82

Morphological demonstration of retinal neuroreceptors and mRNA: immunohistochemical demonstration of adrenergic receptor and visualization of preprotachykinin A mRNA by in situ hybridization histochemistry. Kiyama H, et al. **Neurosci Res Suppl** 1988;8:S167–81 (41 ref.)

Multiple receptors for the tachykinin peptides. Buck SH. **Proc West Pharmacol Soc** 1988;31:45–7 (33 ref.)

PHARMACOKINETICS

Label distribution after injection of labelled tachykinins into the rat lateral cerebroventricle. Saija A, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr; 64(1):99–110

PHARMACOLOGY

Calcitonin gene-related peptide and tachykinins in relation to local sensory control of cardiac contractility and coronary vascular tone. Franco-Cereceda A. **Acta Physiol Scand Suppl** 1988;569:1–63

Selective agonists for receptors of substance P and related neurokinins. Regoli D, et al. **Biopolymers** 1989 Jan; 28(1):81–90

Interactions between the tachykinins and calcitonin gene-related peptide lead to the modulation of oedema formation and blood flow in rat skin. Brain SD, et al. **Br J Pharmacol** 1989 May;97(1):77–82

Comparison of the effects of epithelium removal and of an enkephalinase inhibitor on the neurokinin-induced contractions of guinea-pig isolated trachea. Devillier P, et al. **Br J Pharmacol** 1988 Jul;94(3):675–84

Facilitation by tachykinins of neurotransmission in guinea-pig pulmonary parasympathetic nerves. Hall AK, et al. **Br J Pharmacol** 1989 May;97(1):274–80

Effect of nedocromil sodium on bronchoconstriction induced by adenosine and tachykinins. Pauwels R, et al. **Drugs** 1989; 37 Suppl 1:87–93 discussion 127–36

Effect of thiorphan on response of the guinea-pig gallbladder to tachykinins. Maggi CA, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):51–61

Gamma-preprotachykinin-(72–92)-peptide amide potentiates substance P-induced salivation. Takeda Y, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):267–71

Activation of substance P receptors leads to membrane potential responses in cultured astrocytes. Wienrich M, et al. **GLIA** 1989;2(3):155–60

Effects of tachykinins and selective tachykinin receptor agonists on vascular permeability in the rat lower urinary tract: evidence for the involvement of NK-1 receptors. Abelli L, et al. **J Auton Pharmacol** 1989 Aug;9(4):253–63

Differential effects of tachykinins injected intranigrally on striatal dopamine metabolism. Tan DP, et al. **J Neurochem** 1988 Nov;51(5):1333–7

Tachykinins modulate multiple ionic conductances in voltage-clamped rat spinal dorsal horn neurons. Murase K, et al. **J Neurophysiol** 1989 Apr;61(4):854–65

Influence of epithelium on guinea pig airway responses to tachykinins: role of endopeptidase and cyclooxygenase. Frossard N, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):292–8

Effect of thiorphan on tachykinin-induced potentiation of nerve-mediated contractions of the rat isolated vas deferens. Patacchini R, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):678–81

Effect of synthetic physalaemin on splanchnic circulation in dogs. Takaori K, et al. **Life Sci** 1989;44(10):667–72

The tachykinin NH2-senktide, a selective neurokinin B receptor agonist, is a very potent inhibitor of salt appetite in the rat. Massi M, et al. **Neurosci Lett** 1988 Oct 17; 92(3):341–6

Tachykinins enhance the depression of spinal nociceptive neurons caused by cutaneously applied vibration in the cat. Salter MW, et al. **Neuroscience** 1988 Oct;27(1):243–9

Tachykinins protect against ethanol-induced gastric lesions in rats. Evangelista S, et al. **Peptides** 1989 Jan–Feb; 10(1):79–81

Tachykinin-induced vasodilatation in rat skin measured with a laser-Doppler flowmeter: evidence for receptor-mediated effects. Andrews PV, et al. **Regul Pept** 1989 Jun–Jul;25(3):267–75

The effect of tachykinins and CGRP on the obstructed ureter—a study on capsaicin-sensitive sensory nerves in the guinea-pig. Kinn AC, et al. **Scand J Urol Nephrol Suppl** 1988;110:291–7

PHYSIOLOGY

The mechanism of tachykinin-induced bronchoconstriction in the rat. Joos GF, et al. **Am Rev Respir Dis** 1988 May; 137(5):1038–44

Tachykinin involvement in parasympathetic nerve-evoked salivation of the ferret. Ekström J, et al. **Br J Pharmacol** 1988 Jul;94(3):707–12

Tachykinin involvement in cutaneous anaphylaxis in the guinea pig. Hamel R, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1361–7

Different tachykinin receptor subtypes are coupled to the phosphoinositide or cyclic AMP signal transduction pathways in rat submandibular cells. Laniyonu A, et al. **FEBS Lett** 1988 Nov 21;240(1–2):186–90

Neutral endopeptidase modulates tachykinin-induced increase in vascular permeability in guinea pig skin. Iwamoto I, et al. **Int Arch Allergy Appl Immunol** 1989; 88(3):288–93

A potent and selective agonist for NK-2 tachykinin receptor. Rovero P, et al. **Peptides** 1989 May–Jun;10(3):593–5

[Neuropeptides in sensory neurons in relation to peripheral functions] Hua XY. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):304–9 (30 ref.) **(Chi)**

[Effects of tachykinins on respiratory epithelial functions] Tamaoki J. **Kokyu To Junkan** 1989 May;37(5):487–92 **(Jpn)**

SECRETION

Carcinoid tumour cells in long-term culture: release of serotonin but not of tachykinins on stimulation with adrenoceptor agonists. Ahlman H, et al. **Int J Cancer** 1988 Oct 15;42(4):506–10

TACHYPHYLAXIS

Reversal of vascular tachyphylaxis to catecholamines and histamine in the feline lung. Cutaia M, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1336–42

Absence of tachyphylaxis to inhaled atropine in patients with chronic obstructive pulmonary disease. Klaustermeyer WB, et al. **Am Rev Respir Dis** 1989 Sep;140(3):582–5

Tachyphylaxis to systemic but not to airway responses during prolonged therapy with high dose inhaled salbutamol in asthmatics. Lipworth BJ, et al. **Am Rev Respir Dis** 1989 Sep;140(3):586–92

Tachyphylaxis associated with repeated epidural injections of lidocaine is not related to changes in distribution or the rate of elimination from the epidural space. Mogensen T, et al. **Anesth Analg** 1989 Aug;69(2):180–4

Tachyphylaxis to local anesthetics does not result from reduced drug effectiveness at the nerve itself. Lipfert P, et al. **Anesthesiology** 1989 Jan;70(1):71–5

Tachyphylaxis with amrinone therapy: association with sequestration and down-regulation of lymphocyte beta-adrenergic receptors. Maisel AS, et al. **Ann Intern Med** 1989 Feb 1;110(3):195–201

Histamine tachyphylaxis in young dog airway—compared with adult dog. Watanabe T, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:204–10

Angiotensin tachyphylaxis in normal and everted rings of rabbit aorta. Silva EG, et al. **Eur J Pharmacol** 1988 Aug 24;153(2–3):185–90

Neurally mediated increase in vascular permeability in the rat trachea: onset, duration, and tachyphylaxis. Brokaw JJ, et al. **Exp Lung Res** 1988;14(6):757–67

Insulin blockade of norepinephrine tachyphylaxis in the perfused kidney. Costa e Forti A, et al. **Horm Metab Res** 1989 May;21(5):232–5

Characteristics of tachyphylaxis to inhaled histamine in anesthetized dogs. Antol PJ, et al. **J Appl Physiol** 1988 Nov;65(5):1938–43

Histamine tachyphylaxis in canine airways despite prostaglandin synthesis inhibition. Antol PJ, et al. **J Appl Physiol** 1988 Nov;65(5):1944–9

Evidence for platelet-activating factor secretion during immune activation in dogs. Munoz NM, et al. **J Appl Physiol** 1989 Apr;66(4):1860–6

Effect of halothane concentration on tachyphylaxis to sodium nitroprusside. Bloor BC, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):398–404

Involvement of calcitonin gene-related peptide in the positive chronotropic and inotropic effects of piperine and development of cross-tachyphylaxis between piperine and capsaicin in the isolated rat atria. Miyauchi T, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):816–24

Arteriolar vasoconstriction and tachyphylaxis with intraarterial angiotensin II. Vicaut E, et al. **Microvasc Res** 1989 Jan;37(1):28–41

Role of sodium ions in angiotensin tachyphylaxis in the guinea-pig ileum and taenia coli. Paiva TB, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):656–60

[Long-term therapy with beta-2 mimetics: role of tachyphylaxis] Clauzel AM, et al. **Allerg Immunol (Paris)** 1988 Oct;20(8):298, 301, 303–5 (23 ref.) (Eng. Abstr.) **(Fre)**

[Bronchial adrenergic receptors and asthma. Tachyphylaxis and its prevention] Pauwels R. **Allerg Immunol (Paris)** 1988 Sep;20(7):261–5 (14 ref.) (Eng. Abstr.) **(Fre)**

[Escape or tachyphylaxis. Hypotension controlled by nitroglycerin is amenable to stabilization by enflurane (letter)] Mechelany-Leroy L, et al. **Cah Anesthesiol** 1988 Sep;36(5):339 **(Fre)**

[Tachyphylaxis to local anesthetics (letter)] Frey HH. **Reg Anaesth** 1989 Jul;12(4):84–5 **(Ger)**

[Tachyphylaxis to local anesthetics] Lipfert P. **Reg Anaesth** 1989 Jan;12(1):13–20 (79 ref.) (Eng. Abstr.) **(Ger)**

[Tachyphylaxis induced by repeated inhalation of bradykinin in asthmatic patients] Polosa R. **Medicina (Firenze)** 1989 Jan–Mar;9(1):59–62 (Eng. Abstr.) **(Ita)**

TACHYPLEUS see **HORSESHOE CRABS**

TACRINE see under **AMINOACRIDINES**

TAENIA

CLASSIFICATION

Biochemical and molecular identification of species of Taenia. Lymbery AJ, et al. **Aust Vet J** 1989 Jul;66(7):227

EMBRYOLOGY

[Embryonic development of Taenia pisiformis and T. hydatigena (Cestoidea, Cyclophyllidea)] Romanenko LN, et al. **Parazitologiia** 1988 May–Jun;22(3):216–23 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Purification and properties of cytoplasmic malate dehydrogenase from Taenia crassiceps (Zeder, 1800) cysticerci. Zenka J, et al. **Folia Parasitol (Praha)** 1989; 36(1):59–65

GENETICS

Translation of Taenia crassiceps mRNA in cell-free heterologous systems. Agosin M, et al. **Comp Biochem Physiol [B]** 1978;60(2):183–7

Molecular cloning of Taenia solium genomic DNA and characterization of taeniid cestodes by DNA analysis. Rishi AK, et al. **Parasitology** 1988 Aug;97 (Pt 1):161–76

GROWTH & DEVELOPMENT

Postoncospheral development and cycle of Taenia polyacantha Leuckart, 1856 (Cestoda: Taeniidae). First part. Rausch RL, et al. **Ann Parasitol Hum Comp** 1988; 63(4):263–77

Postoncospheral development and cycle of Taenia polyacantha Leuckart, 1856 (Cestoda: Taeniidae). Second part. Rausch RL, et al. **Ann Parasitol Hum Comp** 1988; 63(5):334–48 (45 ref.)

IMMUNOLOGY

Identification of Taenia solium antigens in cerebrospinal fluid and larval antigens from patients with neurocysticercosis.

Estrada JJ, et al. **Am J Trop Med Hyg** 1989 Jul;41(1):50–5

Deciphering western blots of tapeworm antigens (Taenia solium, Echinococcus granulosus, and Taenia crassiceps) reacting with sera from neurocysticercosis and hydatid disease patients. Larralde C, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):282–90

Erythro-lectin immuno test (Erythro-LIT) in the immunodiagnosis of neurocysticercosis. Rossi CL, et al. **Braz J Med Biol Res** 1989;22(1):69–75

Activation of the alternative pathway of complement by larval Taenia taeniaeformis in resistant and susceptible strains of mice. Davis SW, et al. **Int J Parasitol** 1988 Jul; 18(5):591–7

Comparative evaluation of various immunodiagnostic tests for the diagnosis of Taenia solium cysticercosis in pigs, using fractionated antigens. Kumar D, et al. **J Helminthol** 1989 Mar;63(1):13–7

An enzyme-linked immunoelectrotransfer blot assay and glycoprotein antigens for diagnosing human cysticercosis (Taenia solium). Tsang VC, et al. **J Infect Dis** 1989 Jan; 159(1):50–9

Evidence for selective incorporation of host immunoglobulin by strobilocerci of Taenia taeniaeformis. Hayunga EG, et al. **J Parasitol** 1989 Aug;75(4):638–42

Vaccination against ovine cysticercosis using a defined recombinant antigen. Johnson KS, et al. **Nature** 1989 Apr 13;338(6216):585–7

Immunization procedure-related immunoglobulin levels in the development of antibodies against Cysticercus cellulosae. Contrafatto G, et al. **Onderstepoort J Vet Res** 1988 Sep;55(3):169–72

Specific detection of circulating surface/secreted glycoproteins of viable cysticerci in Taenia saginata cysticercosis. Harrison LJ, et al. **Parasite Immunol** 1989 Jul;11(4):351–70

Immunoelectrophoretic analyses of antigens shared by the vesicular fluid and cyst wall of Taenia crassiceps and Taenia saginata metacestodes. Kalinna B, et al. **Parasitol Res** 1989;75(7):568–74

Passive haemagglutination test for human neurocysticercosis immunodiagnosis. I. Standardization and evaluation of the passive haemagglutination test for the detection of anti-Cysticercus cellulosae antibodies. Ueda M, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jan-Feb;30(1):51–6

Passive haemagglutination test for human neurocysticercosis immunodiagnosis. II—Comparison of two standardized procedures for the passive haemagglutination reagent in the detection of anti-Cysticercus cellulosae antibodies in cerebrospinal fluids. Ueda M, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jan-Feb;30(1):57–62

Immunity in mice to an oncosphere infection by using oncospheral antigens from Taenia solium or Taeniarhynchus saginatus. Molinari JL, et al. **Rev Latinoam Microbiol** 1988 Oct-Dec;30(4):325–33

The serological response of pigs experimentally infected with a species of Taenia from Taiwan. Rhoads ML, et al. **Vet Parasitol** 1989 Mar;30(4):279–85

Swine cysticercosis: detection of parasite products in serum. Rodriguez-del-Rosal E, et al. **Vet Rec** 1989 May 6; 124(18):488

[Seroepidemiological survey of human cysticercosis in the Nehe County of Heilongjiang Province] Xu ZJ, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):171–3 (Eng. Abstr.) **(Chi)**

[Immunodiagnosis of neurocysticercosis: immunoenzymatic assay with antigens chemically bound to supports to detect antibodies in serum and cerebrospinal fluid] Vaz AJ, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jan-Feb;30(1):1–10 (Eng. Abstr.) **(Por)**

[Antigenic affinity of cestodes in the genus Taenia] Berezhko VK, et al. **Parazitologiia** 1989 Mar-Apr;23(2):153–8 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Specific detection of Taenia saginata eggs by DNA hybridisation [letter] Flisser A, et al. **Lancet** 1988 Dec 17; 2(8625):1429–30

[Cysticercus bovis. I. Evagination assays] Costa HM, et al. **Rev Inst Med Trop Sao Paulo** 1988 Mar-Apr;30(2):68–71 (Eng. Abstr.) **(Por)**

METABOLISM

Cysticercus bovis: pinocytosis in the Cysticercus tegument. Schramlová J, et al. **Folia Parasitol (Praha)** 1988; 35(3):223–6

Excreted/secreted products of developing Taenia saginata metacestodes. Joshua GW, et al. **Parasitology** 1988 Dec;97 (Pt 3):477–87

PHYSIOLOGY

An attempt to evaluate the spreading of Taenia saginata eggs in the environment. Kyvsgaard NC, et al. **Acta Vet Scand** 1988;29(3-4):511-3

ULTRASTRUCTURE

[Observation on ultrastructure of Cysticercus cellulosae] Hou YS, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):121–2 (Eng. Abstr.) **(Chi)**

[Scanning electron microscopic representation of the tegument of the cysticercus of Taenia saginata] Engelbrecht H, et al. **Angew Parasitol** 1988 Jun;29(2):91–100 (Eng. Abstr.) **(Ger)**

TAENIA INFECTIONS see **TAENIASIS**

TAENIACIDES see **ANTICESTODAL AGENTS**

TAENIARHYNCHUS see **TAENIA**

TAENIASIS

see related
CYSTICERCOSIS

DIAGNOSIS

[Evaluation of ovoscopic methods in the diagnosis of invasion with the tapeworm, Taenia saginata] Straka S, et al. **Cas Lek Cesk** 1989 Jan 6;128(2):56–8 (Eng. Abstr.) **(Slo)**

DRUG THERAPY

Praziquantel for the treatment of tapeworms in Kenya. Chunge CN. **East Afr Med J** 1987 Oct;64(10):672–4

Open study in the treatment of Trichuris trichiura and Taenia saginata with 800 mg albendazole as a single dose. Pamba HO, et al. **East Afr Med J** 1987 Sep;64(9):590–4

The optimum dose of Puag-Haad in the treatment of taeniasis. Charoenlarp P, et al. **J Med Assoc Thai** 1989 Feb; 72(2):71–3

[Efficacy of a single dose of praziquantel as treatment for Taenia saginata and Hymenolepis nana] Bourée P. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):759–61 (Eng. Abstr.) **(Fre)**

[Treatment of taeniasis] Kuźmicki R. **Wiad Parazytol** 1988; 34(4-6):515–8 (Eng. Abstr.) **(Pol)**

[Our experience in the treatment of Taenia saginata (Goenze, 1762) with praziquantel] Ruiz Pérez A, et al. **Rev Cubana Med Trop** 1989 Jan-Apr;41(1):49–55 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Taenia solium taeniasis and cysticercosis in a Mexican village. Sarti-Gutierrez EJ, et al. **Trop Med Parasitol** 1988 Sep; 39(3):194–8

IMMUNOLOGY

Taenia taeniaeformis: cellular reconstruction of athymic mice and role of L3T4+ helper T lymphocytes in the early infection. Letonja T, et al. **J Parasitol** 1988 Dec; 74(6):985–92

PHYSIOPATHOLOGY

[Studies of secretory activity and pathomorphology of the gastric mucosa in taeniasis (Taenia saginata)] Stefaniak J. **Wiad Parazytol** 1989;35(2):93–114 (Eng. Abstr.) **(Pol)**

THERAPY

Effect of T-activin on the course of experimental infection with Taenia crassiceps (Zeder, 1800) in mice. Heřmánek J, et al. **Folia Parasitol (Praha)** 1989;36(2):117–26

TRANSMISSION

An attempt to evaluate the spreading of Taenia saginata eggs in the environment. Kyvsgaard NC, et al. **Acta Vet Scand** 1988;29(3-4):511–3

VETERINARY

Dose titration and confirmation tests for determination of cesticidal efficacy of epsiprantel in dogs. Corwin RM, et al. **Am J Vet Res** 1989 Jul;50(7):1076–7

Excreted/secreted products of developing Taenia saginata metacestodes. Joshua GW, et al. **Parasitology** 1988 Dec;97 (Pt 3):477–87

The serological response of pigs experimentally infected with a species of Taenia from Taiwan. Rhoads ML, et al. **Vet Parasitol** 1989 Mar;30(4):279–85

TAIL

Muscle fibre composition of the bovine tail: a pilot study. Young OA, et al. **Anat Histol Embryol** 1989 Mar;18(1):52–7

ABNORMALITIES

Kinked tail in Sprague-Dawley rats. Yamasaki K, et al. **Lab Anim Sci** 1989 Jan;39(1):77–8

ANALYSIS

Histochemistry and isomyosins of tail musculature in Xenopus. Kordylewski L, et al. **J Muscle Res Cell Motil** 1989 Aug;10(4):290–6

ANATOMY & HISTOLOGY

Genetic evidence for two t complex tail interaction (tct) loci in t haplotypes. Nadeau JH, et al. **Genetics** 1989 Aug; 122(4):895–903

BLOOD SUPPLY

On pre- and/or post-junctional roles of ATP and an unknown 'substance X' as sympathetic co-transmitters in rat tail artery. Bao JX, et al. **Acta Physiol Scand** 1989 Jan; 135(1):65–6

Inhibition of noradrenaline release by omega-conotoxin GVIA in the rat tail artery. Claubrummel B, et al. **Br J Pharmacol** 1989 Jan;96(1):101–10

The canine tail artery as a model for cerebral aneurysm studies. Boyce TT, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):34–9

Potassium conductance and oscillatory contractions in tail arteries from genetically hypertensive rats. Lamb FS, et al. **J Hypertens** 1989 Jun;7(6):457–63

Alpha-1 and alpha-2 adrenoceptor agonists induce vasoconstriction of the normotensive rat caudal artery in vitro by stimulation of a heterogeneous population of alpha-1 adrenoceptors. Atkinson J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):529–35

Release of vesicular noradrenaline in the rat tail artery induced by cocaine. Palatý V. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):510–6

[Risks of intravenous injection into the tail of cattle] Schlerka G, et al. **Berl Munch Tierarztl Wochenschr** 1989 Mar 1; 102(3):77–84 (Eng. Abstr.) **(Ger)**

[A new modification to an indirect method of recording the arterial pressure in the tail artery of rats] Lapshin DN, et al. **Fiziol Zh SSSR** 1989 Feb;75(2):282–6 **(Rus)**

[The blood-perfused tail artery of the rat as a model for studying spontaneous vascular tonus] Mashina SIu, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1341–4 **(Rus)**

CYTOLOGY

Cell death in the anuran tadpole tail: thyroid hormone induces keratinization and tail-specific growth inhibition of epidermal cells. Nishikawa A, et al. **Dev Biol** 1989 Feb; 131(2):337–44

DRUG EFFECTS

The effect of methylxanthines on morphine analgesia in mice and rats. Malec D, et al. **Pol J Pharmacol Pharm** 1988 May-Jun;40(3):223–32

EMBRYOLOGY

Origin of the notochord in the rat embryo tail. Gajović S, et al. **Anat Embryol (Berl)** 1989;179(3):305–10

Studies of neural tube development in the chicken embryo tail. Uehara M, et al. **Anat Embryol (Berl)** 1988; 179(2):149–55

The morphogenesis of the posterior neural tube and tail in Monodelphis domesticus. Zehr KJ, et al. **Arch Histol Cytol** 1989 May;52(2):95–108

[Ultrastructural aspects of the skeletal striated muscle, macrophages and fibroblasts during the regression of tadpole tails] Mora OA, et al. **Rev Bras Biol** 1989 Feb; 49(1):285–90 (Eng. Abstr.) **(Por)**

INNERVATION

[Early morphological diagnosis of twitcher mice by the clipped tail] Okuno A, et al. **No To Hattatsu** 1989 Jan; 21(1):38–41 (Eng. Abstr.) **(Jpn)**

METABOLISM

Alanine aminopeptidase activity and autolysis in the tails of Rana catesbeiana larvae during metamorphosis. Little GH, et al. **Comp Biochem Physiol [B]** 1979;62(2):163–5

PHYSIOLOGY

Apparent hyperalgesia in the mouse tail-flick test due to increased tail skin temperature after lesioning of serotonergic pathways. Eide PK, et al. **Acta Physiol Scand** 1988 Nov;134(3):413–20

The role of tail skin temperature in the facilitation of the tail-flick reflex after spinal transection or interference with descending serotonergic neurotransmission. Eide PK, et al. **Acta Physiol Scand** 1989 Apr;135(4):427–33

Early stages of spinal ganglion formation during tail regeneration in the newt, Notophthalmus viridescens. Géraudie J, et al. **Am J Anat** 1988 Dec;183(4):359–70

Expression of muscle actin genes in early differentiation stages of tail regeneration of the urodele amphibian Pleurodeles waltlii. Khrestchatisky M, et al. **Cell Differ Dev** 1988 Dec;25(3):203–12

Metabolic rate, heart rate, and tailbeat frequency during sustained swimming in the leopard shark Triakis semifasciata. Scharold J, et al. **Exp Biol** 1989;48(4):223–30

Local and systemic alterations in cholinesterase activity during tail regeneration in normal and adrenal suppressed Gekkonid lizards Hemidactylus flaviviridis. Abraham S, et al. **Indian J Exp Biol** 1988 Oct;26(10):755–8

Preliminary evidence for pineal-mediated extraretinal photoreception in relation to tail regeneration in the Gekkonid lizard, Hemidactylus flaviviridis. Ramachandran AV, et al. **J Pineal Res** 1989;6(2):121–34

[Effect of permanent magnetic fields on the regeneration of the tail in amphibian larvae] Kudokotsev VP, et al. **Ontogenez** 1988 Sep-Oct;19(5):508–12 (Eng. Abstr.) **(Rus)**

SURGERY

Rings versus knife for docking and castration of lambs [letter] Mellor DJ, et al. **Aust Vet J** 1988 Dec;65(12):403–4
Changes in the cortisol responses of lambs to tail docking, castration and ACTH injection during the first seven days after birth. Mellor DJ, et al. **Res Vet Sci** 1989 May; 46(3):392–5
Effects of tail docking and castration on behaviour and plasma cortisol concentrations in young lambs. Mellor DJ, et al. **Res Vet Sci** 1989 May;46(3):387–91
Castration and docking [letter] Humphreys PN. **Vet Rec** 1989 May 13;124(19):520
Castration and docking [letter] Mellor DJ. **Vet Rec** 1989 Jul 1;125(1):24–5

ULTRASTRUCTURE

[Ultrastructure of the tail appendage in microphallid cercariae (Trematoda, Microphallidae)] Malkova II. **Parazitologiia** 1989 Mar–Apr;23(2):159–65 (Eng. Abstr.) (Rus)

TAKA-AMYLASE A see ALPHA-AMYLASE

TAKAYASU SYNDROME see under AORTIC ARCH SYNDROMES

TALAMPICILLIN see under AMPICILLIN

TALC

Talc granulomatosis in the rat: the relationship between osteoblast insufficiency and adjacent bone marrow hyperplasia. Vukičević S, et al. **Exp Hematol** 1988 Oct; 16(9):735–40
Contamination of ionization chambers by talcum powder. Hanson WF, et al. **Med Phys** 1988 Sep–Oct;15(5):776–7
[pH of the aqueous extracts from talc prepared for the food additive] Ishiwata H, et al. **Eisei Shikenjo Hokoku** 1988; (106):128–30 (Eng. Abstr.) (Jpn)

ADMINISTRATION & DOSAGE

[Value of talc administration using thoracoscopy in the symptomatic treatment of recurrent pleurisy. Apropos of 302 cases] Boniface E, et al. **Rev Mal Respir** 1989; 6(2):133–40 (Eng. Abstr.) (Fre)
[Talc pleural symphysis using thoracoscopy (editorial)] Boutin C. **Rev Mal Respir** 1989;6(2):91–3 (Fre)
[Results of talc administration using thoracoscopy in neoplastic pleurisies. Apropos of 218 cases] Ladjimi S, et al. **Rev Mal Respir** 1989;6(2):147–50 (Eng. Abstr.) (Fre)
[Pneumothorax: indications for thoracoscopic talc insufflation] Grossenbacher M, et al. **Schweiz Rundsch Med Prax** 1989 Mar 28;78(13):359–61 (40 ref.) (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

A case-control study of borderline ovarian tumors: the influence of perineal exposure to talc. Harlow BL, et al. **Am J Epidemiol** 1989 Aug;130(2):390–4
Long-term follow-up of drug abusers with intravenous talcosis. Paré JP, et al. **Am Rev Respir Dis** 1989 Jan; 139(1):233–41
Erythematous cutaneous nodules caused by adulterated cocaine. Heng MC, et al. **J Am Acad Dermatol** 1989 Sep; 21(3 Pt 1):570–2
Pulmonary talc granulomatosis due to intravenous ritalin. Williams J, et al. **J Tenn Med Assoc** 1988 Sep;81(9):560–1
Normal pulmonary function after baby powder inhalation causing adult respiratory distress syndrome. Reyes de la Rocha S, et al. **Pediatr Emerg Care** 1989 Mar;5(1):43–8
Long term sequelae after talc pleurodesis for spontaneous pneumothorax. Viskum K, et al. **Pneumologie** 1989 Feb; 43(2):105–6
Bronchoalveolar lavage in talc induced lung disease. Redondo AA, et al. **Thorax** 1988 Dec;43(12):1019–21
[Exposure to asbestos dust and asbestosis of employees in a Thüringen rubber industry] Schunk W, et al. **Z Gesamte Hyg** 1989 Mar;35(3):152–4 (Eng. Abstr.) (Ger)
[Talcosis as an occupational disease. Case histories] Avolio G, et al. **Minerva Med** 1989 Mar;80(3):269–73 (Eng. Abstr.) (Ita)
[Granulomatous peritonitis due to starch. Apropos of a case] Urdiales Cabal G, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):411–3 (Eng. Abstr.) (Spa)

ANALYSIS

[Application of X-ray analytical scanning electron microscopy to the detection of asbestos in talc] Imazawa T, et al. **Eisei Shikenjo Hokoku** 1988;(106):73–7 (Eng. Abstr.) (Jpn)

METABOLISM

Copper levels in the bronchoalveolar lavage (BAL) fluid and blood of talcosis patients. A case series. Avolio G, et al. **Panminerva Med** 1988 Apr–Jun;30(2):121–3

PHARMACOKINETICS

Talc deposition and effects after 20 days of repeated inhalation exposure of rats and mice to talc. Pickrell JA, et al. **Environ Res** 1989 Aug;49(2):233–45

PHARMACOLOGY

Immunosuppression induced by talc granulomatosis in the rat. Radić I, et al. **Clin Exp Immunol** 1988 Aug;73(2):316–21

THERAPEUTIC USE

Lung function 22–35 years after treatment of idiopathic spontaneous pneumothorax with talc poudrage or simple drainage. Lange P, et al. **Thorax** 1988 Jul;43(7):559–61

TALENT see APTITUDE

TALIPES CAVUS see FOOT DEFORMITIES

TALIPES EQUINOVARUS see CLUBFOOT

TALOCALCANEAL JOINT see SUBTALAR JOINT

TALUS

Posterior instability of the talus: an anatomic evaluation. Harper MC. **Foot Ankle** 1989 Aug;10(1):36–9
Unicameral bone cyst of the talus. Chieppa WA, et al. **J Am Podiatr Med Assoc** 1989 Sep;79(9):441–6 (36 ref.)
Sinus tarsi syndrome: presentation of seven cases and review of the literature. Kjaersgaard-Andersen P, et al. **J Foot Surg** 1989 Jan–Feb;28(1):3–6 (27 ref.)
Chondroblastoma of the foot. Wu KK. **J Foot Surg** 1989 Jan–Feb;28(1):72–7
Benign chondroblastoma of the talus. Khan FA. **J R Coll Surg Edinb** 1988 Aug;33(4):222–4
Limping child—osteochondritis dissecans of the talus [letter] Green NE. **Orthop Rev** 1988 Dec;17(12):1194, 1196
Limping child—osteochondritis dissecans of the talus. A case report. Madhok R. **Orthop Rev** 1987 Oct;16(10):757–9
Case report 533: Tuberculosis of calcaneus and talus with negative tuberculin skin test. Nielsen FF, et al. **Skeletal Radiol** 1989;18(2):153–5

ABNORMALITIES

Congenital talonavicular synostosis. A review of the literature and a case report. Bonk JH, et al. **J Am Podiatr Med Assoc** 1989 Apr;79(4):186–9 (22 ref.)

ANATOMY & HISTOLOGY

Talar articular facets (facies articulares talares) in human calcanei. Forriol Campos F, et al. **Acta Anat (Basel)** 1989; 134(2):124–7
The role of the anterior tibio-fibular ligament in talar rotation: an anatomical study. Sarsam IM, et al. **Injury** 1988 Mar;19(2):62–4

INJURIES

Arthroscopic treatment of transchondral talar dome fractures. Van Buecken K, et al. **Am J Sports Med** 1989 May–Jun;17(3):350–5; discussion 355–6
Avascular necrosis of the talus following apparently minor ankle injury: a case report. Feller JA, et al. **Injury** 1988 May;19(3):213–6
Centrally located osteochondral fractures. Borrelli AH, et al. **J Am Podiatr Med Assoc** 1988 Oct;78(10):526–8
Osteochondral fractures of the dome of the talus. Anderson IF, et al. **J Bone Joint Surg [Am]** 1989 Sep;71(8):1143–52
Total dislocation of the talus. Case report with a 13-year follow up and review of the literature. Ries M, et al. **Orthop Rev** 1988 Jan;17(1):76–80 (20 ref.)
Radiologic case study. Osteochondral fracture of the talus. Kerr R. **Orthopedics** 1988 Sep;11(9):1337, 1340–3
[Osteochondral fractures of the talus (osteochondritis)] Docquier J, et al. **Acta Orthop Belg** 1988;54(4):439–46 (Eng. Abstr.) (Fre)
[Talus necrosis and its treatment] Trauth J, et al. **Aktuel Traumatol** 1988 Aug;18(4):152–6 (Eng. Abstr.) (Ger)
[Dislocations of the talus joints] Amon K, et al. **Unfallchirurg** 1989 Jul;92(7):335–45 (Eng. Abstr.) (Ger)
[Osteochondral lesions of the talus] Biedert R. **Unfallchirurg** 1989 Apr;92(4):199–205 (Eng. Abstr.) (Ger)
[Fractures and dislocations of the talus] Hendrich V. **Unfallchirurg** 1989 Mar;92(3):110–6 (15 ref.) (Eng. Abstr.) (Ger)
[Osteochondral involvement in fibulotalar ligament ruptures] Schütze F, et al. **Z Kinderchir** 1989 Apr;44(2):91–3 (Eng. Abstr.) (Ger)
[Treatment of flake fracture of the talus] Ittner G, et al. **Z Orthop** 1989 Mar–Apr;127(2):183–6 (Eng. Abstr.) (Ger)
[Morphologic and functional sequelae of talus injury] Ivan H. **Reumatizam** 1987;34(1–6):48–52 (Eng. Abstr.) (Ser)

RADIOGRAPHY

Chronic lateral instability of the ankle. Roentgen stereophotogrammetry of talar position. Löfvenberg R, et al. **Acta Orthop Scand** 1989 Feb;60(1):34–9
Pigmented villonodular synovitis of the talus in a child. Aghasi MK, et al. **Foot Ankle** 1988 Dec;9(3):139–42
Osteochondritis dissecans of the dome of the talus. Computed tomography scanning in the diagnosis and follow-up [letter; comment] Bueche MJ. **J Bone Joint Surg [Am]** 1989 Apr;71(4):632. **Comment on:** J Bone Joint Surg [Am] 1988 Aug;70(7):1017–9

RADIONUCLIDE IMAGING

Osteoid osteoma of the neck of the talus. Panni AS, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):584–8

SURGERY

Revascularization of a partially necrotic talus with a vascularized bone graft from the iliac crest. Hussl H, et al. **Arch Orthop Trauma Surg** 1989;108(1):27–9
Arthroscopic treatment of osteochondral lesions of the talar dome. Frank A, et al. **Arthroscopy** 1989;5(1):57–61
Excision of posterolateral talar dome lesions through a medial transmalleolar approach. Ove PN, et al. **Foot Ankle** 1989 Feb;9(4):171–5
Dowel bone graft technique for triple arthrodesis in talocalcaneal coalition—report of a case with 12-year follow-up. Peterson HA. **Foot Ankle** 1989 Feb;9(4):201–3
Osteochondritis dissecans of the lateral ridge of the talus in a dog. van Ee RT, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1284–6
60-year follow-up of talectomy for congenital talipes equinovarus: brief report. Burkhart SS, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):325–6
Ground reaction forces on the plantar surface of the foot after talectomy in the myelomeningocele. Sherk HH, et al. **J Pediatr Orthop** 1989 May–Jun;9(3):269–75
[Partial or total enucleation of the talus. Value of conservative treatment. Apropos of 8 cases] Asselineau A, et al. **Rev Chir Orthop** 1989;75(1):34–9 (7 ref.) (Eng. Abstr.) (Fre)
[Arthroscopic treatment of osteochondral lesions of the astragalar dome] Frank A, et al. **Rev Chir Orthop** 1988;74 Suppl 2:233–7 (Fre)

TAMARINS see CALLITHRICIDAE

TAMIAS see SCIURIDAE

TAMOXIFEN

The history of Nolvadex. Richardson DN. **Drug Des Deliv** 1988 Jul;3(1):1–14 (59 ref.)

ADMINISTRATION & DOSAGE

Treatment of premenstrual mastalgia with tamoxifen. Messinis IE, et al. **Acta Obstet Gynecol Scand** 1988; 67(4):307–9
Tamoxifen withdrawal response. Report of a case. Belani CP, et al. **Arch Intern Med** 1989 Feb;149(2):449–50
Dosage and duration of tamoxifen treatment for mastalgia: a controlled trial. Fentiman IS, et al. **Br J Surg** 1988 Sep; 75(9):845–6
Long-term tamoxifen therapy for breast cancer. Jordan VC. **Important Adv Oncol** 1989;:179–92 (117 ref.)
Improvement of spermatogenesis after treatment with the antiestrogen tamoxifen in a man with the incomplete androgen insensitivity syndrome. Gooren L. **J Clin Endocrinol Metab** 1989 Jun;68(6):1207–10
Influence of tamoxifen-medroxyprogesterone sequential therapy on estrogen and progesterone receptor contents of breast cancer. Noguchi S, et al. **Jpn J Cancer Res** 1989 Mar;80(3):244–8
[A case of breast cancer with multiple bone metastases effectively treated with UFT and tamoxifen] Endo F, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):851–4 (Eng. Abstr.) (Jpn)
[The role of adjuvant endocrine therapy in the management of operable breast cancer] Miura S, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3203–13 (25 ref.) (Eng. Abstr.) (Jpn)
[A comparison of two doses of tamoxifen in patients with advanced breast cancer: 20 mg/day versus 40 mg/day] Takatsuka Y, et al. **Gan To Kagaku Ryoho** 1989 May; 16(5):2093–7 (Eng. Abstr.) (Jpn)

ADVERSE EFFECTS

Tamoxifen–warfarin interaction: the Aberdeen hospitals drug file. Ritchie LD, et al. **BMJ** 1989 May 6;298(6682):1253
Life threatening interaction between tamoxifen and warfarin. Tenni P, et al. **BMJ** 1989 Jan 14;298(6666):93
Tamoxifen, serum lipoproteins and cardiovascular risk. Bruning PF, et al. **Br J Cancer** 1988 Oct;58(4):497–9
Bone mineral content of women receiving tamoxifen for mastalgia. Fentiman IS, et al. **Br J Cancer** 1989 Aug; 60(2):262–4
The Wisconsin Tamoxifen Study: toxicity in node-negative postmenopausal women. Love RR. **Cancer Invest** 1988; 6(5):601–5 (16 ref.)
Tamoxifen: transition from the laborstory to clinical preventive chemosuppression. Tormey DC. **Cancer Invest** 1988;6(5):597–600 (18 ref.)
Endometrial polyps in postmenopausal patients receiving tamoxifen. Nuovo MA, et al. **Int J Gynecol Pathol** 1989; 8(2):125–31
Thromboembolic risk of tamoxifen in patients with stage II breast cancer [letter] Levine M. **J Clin Oncol** 1989 Oct; 7(10):1579–80

Tamoxifen and the uterus and endometrium [letter] **Lancet** 1989 Feb 18;1(8634):375–6
Priapism in patient on tamoxifen [letter] Fernando IN, et al. **Lancet** 1989 Feb 25;1(8635):436
Adjuvant tamoxifen in early breast cancer: occurrence of new primary cancers. Fornander T, et al. **Lancet** 1989 Jan 21;1(8630):117–20
Pelvic irradiation and tamoxifen as risk factors for carcinoma of corpus uteri [letter] Hardell L. **Lancet** 1988 Dec 17; 2(8625):1432
Tamoxifen and endometrial cancer [letter] Jordan VC. **Lancet** 1989 Apr 1;1(8640):733–4
Tamoxifen and endometrial cancer [letter] Jordan VC. **Lancet** 1988 Oct 29;2(8618):1019
Adverse effect of tamoxifen with LHRH agonist on oestrogen–receptor–negative mammary carcinoma [letter] Szende B, et al. **Lancet** 1989 Jul 22;2(8656):222–3
[Ophthalmologic complications of low–dose tamoxifen in the treatment of breast carcinoma (letter)] **Ned Tijdschr Geneeskd** 1989 Apr 29;133(17):903–4 **(Dut)**
[Ophthalmologic complications of low–dosage tamoxifen in the treatment of breast carcinoma] de Jong–Busnac M. **Ned Tijdschr Geneeskd** 1989 Mar 11;133(10):514–6 (Eng. Abstr.) **(Dut)**
[Paradoxical effects of tamoxifen on the woman's uterus. Apropos of 7 cases of myoma that appeared while under anti–estrogen treatment] Boudouris O, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(3):372–8 (Eng. Abstr.) **(Fre)**
[Hepatitis during treatment with tamoxifen. Effects on the kinetics of epirubicin (letter)] Bressollette L, et al. **Therapie** 1989 Mar–Apr;44(2):151–2 **(Fre)**
[Menstrual abnormality in patients with breast cancer receiving adjuvant endocrine–chemotherapy] Yasumura T, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2947–52 (Eng. Abstr.) **(Jpn)**

ANALOGS & DERIVATIVES

The significance of estrogen receptors in tamoxifen and toremifene therapy. Valavaara R, et al. **Ann Clin Res** 1988; 20(5):380–8
Pharmacological activities of droloxifene isomers. Löser R, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1271–4
Regulation of epidermal growth factor–receptor by estrogen and antiestrogen in the human breast cancer cell line MCF–7. Berthois Y, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):126–31
Effect of estradiol and antiestrogens on cholesterol biosynthesis in hormone–dependent and –independent breast cancer cell lines. Cypriani B, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):167–78
The effect of sex hormones and tamoxifen on the growth of human gastric and colorectal cancer cell lines. Harrison JD, et al. **Cancer** 1989 Jun 1;63(11):2148–51
Stimulatory effects of 4–hydroxytamoxifen on proliferation of human endometrial adenocarcinoma cells (Ishikawa line). Anzai Y, et al. **Cancer Res** 1989 May 1;49(9):2362–5
Distribution of 4–hydroxy–N–desmethyltamoxifen and other tamoxifen metabolites in human biological fluids during tamoxifen treatment. Lien EA, et al. **Cancer Res** 1989 Apr 15;49(8):2175–83
Tamoxifen and hydroxytamoxifen isomers versus estradiol effects on normal human breast cells in culture. Malet C, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7193–9
Antiestrogenic action of toremifene on hormone–dependent, –independent, and heterogeneous breast tumor growth in the athymic mouse. Robinson SP, et al. **Cancer Res** 1989 Apr 1;49(7):1758–62
Effects of tamoxifen, tamoxifen metabolites, and nafoxidine on adenosine 3',5'–monophosphate phosphodiesterase: correlations with growth inhibitory activities but not estrogen receptor affinities. Fanidi A, et al. **Endocrinology** 1989 Sep;125(3):1187–93
Serum and monohydroxytamoxifen inhibit progesterone receptor concentrations in primary rat uterine cells grown in serum–free medium. Greco TL, et al. **Endocrinology** 1989 Jun;124(6):2837–43
Antiestrogens antagonize the stimulatory effect of epidermal growth factor on the induction of progesterone receptor in fetal uterine cells in culture. Sumida C, et al. **Endocrinology** 1989 Feb;124(2):591–7
Antitumor actions of toremifene in the 7,12–dimethylbenzanthracene (DMBA)–induced rat mammary tumor model. Robinson SP, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1817–21
Autoradiographic localization of [3H]hydroxytamoxifen to uterine oestrogen– and antioestrogen–binding sites. Ennis BW, et al. **Histochem J** 1989 Jan;21(1):52–60
Comparative double–tracer whole–body autoradiography: uptake of 11C–, 18F– and 3H–labeled compounds in rat tumors. d'Argy R, et al. **Int J Rad Appl Instrum [B]** 1988; 15(5):577–85
The interaction site for tamoxifen aziridine with the bovine estrogen receptor. Ratajczak T, et al. **J Biol Chem** 1989 Aug 15;264(23):13453–9
Effect of continuous vs intermittent application of 3–OH–tamoxifen or tamoxifen on the proliferation of the human breast cancer cell line MCF–7 M1. Dietel M, et al. **J Cancer Res Clin Oncol** 1989;115(1):36–40
Toremifene: pharmacologic and pharmacokinetic basis of reversing multidrug resistance. DeGregorio MW, et al. **J Clin Oncol** 1989 Sep;7(9):1359–64
Structure–activity relationship of antiestrogens: a study using triarylbutenone, benzofuran, and triarylfuran analogues as models for triarylethylenes and triarylpropenones. Durani N, et al. **J Med Chem** 1989 Aug;32(8):1700–7
Differential inhibition of estrogen and antiestrogen binding to the estrogen receptor by diethylpyrocarbonate. Borgna JL, et al. **J Steroid Biochem** 1988 Oct;31(4A):427–36
Growth inhibitory effect of 4–hydroxy–tamoxifen on the BT–20 mammary cancer cell line. Chouvet C, et al. **J Steroid Biochem** 1988 Oct;31(4B):655–63
Role of estrogen receptors and antiestrogen binding sites in an early effect of antiestrogens, the inhibition of cholesterol biosynthesis. Cypriani B, et al. **J Steroid Biochem** 1988 Nov; 31(5):763–71
Binding of estrogen and antiestrogen in uterine cell nuclei: in vivo autoradiographic studies. Ennis BW, et al. **J Steroid Biochem** 1988 Oct;31(4A):405–9
Antiestrogen(4–hydroxytamoxifen)–charged estrogen receptor binding to nuclei from normal and neoplastic rat mammary tissues is not affected by host hormonal status. Klinge CM, et al. **J Steroid Biochem** 1989 Sep;33(3):335–40
Non–isomerisable antiestrogens related to tamoxifen. McCague R, et al. **J Steroid Biochem** 1988 Oct; 31(4B):545–7
Biodistribution and scintigraphy of 11C–toremifene in rats bearing DMBA–induced mammary carcinoma. Kangas L, et al. **Pharmacol Toxicol** 1989 Apr;64(4):373–7
Rats with mammary cancer treated with toremifene and interferon: morphometry and needle aspiration biopsy for determination of ATP and 14C–fluorodeoxyglucose content. Kangas L, et al. **Res Exp Med (Berl)** 1989; 189(2):113–9
A comparison of 11 beta–chloromethylestradiol and tamoxifen aziridine as affinity labeling reagents for estrogen receptors. Ratajczak T, et al. **Steroids** 1988 May–Jun; 51(5–6):499–518
Droloxifene—a novel antiestrogen in endocrine dependent human tumors xenotransplanted into nude mice. Stelzer P, et al. **Strahlenther Onkol** 1989 Jul;165(7):559–60
[Hormone dependence of malignant ovarian tumors—an in vitro model] Schieder K, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):437–41 (Eng. Abstr.) **(Ger)**

ANALYSIS

Simultaneous determination of tamoxifen citrate and its E isomer impurity in bulk drug and tablets by high–performance liquid chromatography. Jalonen HG. **J Pharm Sci** 1988 Sep;77(9):810–3

BLOOD

Influence of adjuvant tamoxifen on blood lymphocytes. Rotstein S, et al. **Breast Cancer Res Treat** 1988 Sep; 12(1):75–9
Elevated plasma tamoxifen levels in a patient with liver obstruction [letter] DeGregorio MW, et al. **Cancer Chemother Pharmacol** 1989;23(3):194–5

CEREBROSPINAL FLUID

Inability of tamoxifen to penetrate into cerebrospinal fluid [letter] Noguchi S, et al. **Breast Cancer Res Treat** 1988 Dec;12(3):317–8

HISTORY

The development of tamoxifen for breast cancer therapy: a tribute to the late Arthur L. Walpole. Jordan VC. **Breast Cancer Res Treat** 1988 Jul;11(3):197–209

METABOLISM

Tumor and serum tamoxifen concentrations in the athymic nude mouse. DeGregorio MW, et al. **Cancer Chemother Pharmacol** 1989;23(2):68–70
Distribution of 4–hydroxy–N–desmethyltamoxifen and other tamoxifen metabolites in human biological fluids during tamoxifen treatment. Lien EA, et al. **Cancer Res** 1989 Apr 15;49(8):2175–83

PHARMACOKINETICS

Microbial transformation of tamoxifen. el–Sharkawy S, et al. **Pharm Res** 1987 Aug;4(4):353–4

PHARMACOLOGY

The effect of clomiphene citrate and tamoxifen on the cervical mucus. Tepper R, et al. **Acta Obstet Gynecol Scand** 1988;67(4):311–4
Effects of estrogen and tamoxifen on secretory glycoprotein synthesis in mouse Leydig cell tumor in vivo. Nishizawa Y, et al. **Anticancer Res** 1988 Jul–Aug;8(4):557–62
In vitro inhibition of hepatic steroid hydroxylation by tamoxifen, a series of tamoxifen analogues and related compounds. Reidy GF, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):195–9
Effect of estradiol and antiestrogens on cholesterol biosynthesis in hormone–dependent and –independent breast cancer cell lines. Cypriani B, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):167–78
Effect of antineoplastic drugs and estradiol on leucine uptake and proliferation of Ehrlich tumor cells. Levin E, et al. **Biomed Pharmacother** 1989;43(3):215–7
Characterisation of a tamoxifen–resistant variant of the ZR–75–1 human breast cancer cell line (ZR–75–9a1) and ability of the resistant phenotype. van den Berg HW, et al. **Br J Cancer** 1989 Apr;59(4):522–6
Adjuvant tamoxifen in primary breast cancer: influence on plasma lipids and antithrombin III levels. Bertelli G, et al. **Breast Cancer Res Treat** 1988 Dec;12(3):307–10
Cell cycle synchronization induced by tamoxifen and 17 beta–estradiol on MCF–7 cells using flow cytometry and a monoclonal antibody against bromodeoxyuridine. Bruno S, et al. **Breast Cancer Res Treat** 1988 Jul;11(3):221–9
Regulation of human estrogen receptor gene, epidermal growth factor receptor gene, and oncogenes by estrogen and antiestrogen in MCF–7 breast cancer cells. Murayama Y, et al. **Cancer Detect Prev** 1988;13(2):103–7
Effect on growth and cell cycle kinetics of estradiol and tamoxifen on MCF–7 human breast cancer cells grown in vitro and in nude mice. Brünner N, et al. **Cancer Res** 1989 Mar 15;49(6):1515–20
Involvement of the polyamine pathway in antiestrogen–induced growth inhibition of human breast cancer. Cohen FJ, et al. **Cancer Res** 1988 Dec 1; 48(23):6819–25
Effect of tamoxifen on plasma insulin–like growth factor I in patients with breast cancer. Colletti RB, et al. **Cancer Res** 1989 Apr 1;49(7):1882–4
Effects of type I and II interferons on cultured human breast cells: interaction with estrogen receptors and with tamoxifen. Goldstein D, et al. **Cancer Res** 1989 May 15; 49(10):2698–702
Inhibition of tamoxifen–stimulated growth of an MCF–7 tumor variant in athymic mice by novel steroidal antiestrogens. Gottardis MM, et al. **Cancer Res** 1989 Aug 1;49(15):4090–3
Differential ability of antiestrogens to stimulate breast cancer cell (MCF–7) growth in vivo and in vitro. Gottardis MM, et al. **Cancer Res** 1989 Sep 1;49(17):4765–9
Up–regulation of estrogen receptors by nonsteroidal antiestrogens in human breast cancer. Kiang DT, et al. **Cancer Res** 1989 Oct 1;49(19):5312–6
Effects of triiodothyronine and tamoxifen on cell transformation induced by an activated c–Ha–ras oncogene. Lopez CA, et al. **Cancer Res** 1989 Feb 15;49(4):895–8
Tamoxifen and hydroxytamoxifen isomers versus estradiol effects on normal human breast cells in culture. Malet C, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7193–9
Metabolic studies of estrogen– and tamoxifen–treated human breast cancer cells by nuclear magnetic resonance spectroscopy. Neeman M, et al. **Cancer Res** 1989 Feb 1; 49(3):589–94
Chemopreventive efficacy of combined retinoid and tamoxifen treatment following surgical excision of a primary mammary cancer in female rats. Ratko TA, et al. **Cancer Res** 1989 Aug 15;49(16):4472–6
Effects of opiate receptor blockade on gonadotrophin secretion before and after administration of the oestrogen receptor blocker tamoxifen in eugonadal men. Spijkstra JJ, et al. **Clin Endocrinol (Oxf)** 1988 Aug;29(2):179–88
Effect of tamoxifen on hepatic regeneration in male rats. Kahn D, et al. **Dig Dis Sci** 1989 Jan;34(1):27–32
Tamoxifen. A reappraisal of its pharmacodynamic and pharmacokinetic properties, and therapeutic use. Buckley MM, et al. **Drugs** 1989 Apr;37(4):451–90 (190 ref.)
Effects of tamoxifen, tamoxifen metabolites, and nafoxidine on adenosine 3',5'–monophosphate phosphodiesterase: correlations with growth inhibitory activities but not estrogen receptor affinities. Fanidi A, et al. **Endocrinology** 1989 Sep;125(3):1187–93
Serum and monohydroxytamoxifen inhibit progesterone receptor concentrations in primary rat uterine cells grown in serum–free medium. Greco TL, et al. **Endocrinology** 1989 Jun;124(6):2837–43
Antiestrogens antagonize the stimulatory effect of epidermal growth factor on the induction of progesterone receptor in fetal uterine cells in culture. Sumida C, et al. **Endocrinology** 1989 Feb;124(2):591–7
Effect of estradiol and tamoxifen on the anchorage–independent growth of the subpopulations derived from MCF–7 breast carcinoma cells: cytogenetic analysis of the stem cell subpopulation. Podhajcer OL, et al. **Exp Cell Res** 1988 Nov;179(1):58–64
The effect of estrogen and tamoxifen on hepatocyte proliferation in vivo and in vitro. Francavilla A, et al. **Hepatology** 1989 Apr;9(4):614–20
Paradoxical hypermasculinization of the zebra finch song system by an antiestrogen. Mathews GA, et al. **Horm Behav** 1988 Dec;22(4):540–51
Effects of preovulatory tamoxifen in regularly cycling women on folliculogenesis, oocyte recovery and luteal function. Thatcher SS, et al. **Hum Reprod** 1988 Nov; 3(8):935–8
Suppression of lymphocyte mitogenesis by tamoxifen. Baral E, et al. **Immunopharmacology** 1989 Jul–Aug;18(1):57–62
Ovarian hormones, antiestrogen and pregnancy effects on the expression of class II histocompatibility antigens by N–nitroso–N–methylurea–induced rat mammary carcinomas. Bernard DJ, et al. **Immunopharmacology** 1989 May–Jun;17(3):147–55
The potential of antiestrogens as centrally–acting antihostility agents: recent animal data. Brain PF, et al. **Int J Neurosci** 1988 Aug;41(3–4):169–77
Effect of continuous vs intermittent application of

3-OH-tamoxifen or tamoxifen on the proliferation of the human breast cancer cell line MCF-7 M1. Dietel M, et al. **J Cancer Res Clin Oncol** 1989;115(1):36-40

Effect of tamoxifen on oestrogen binding, lipid and lipoprotein concentrations and blood clotting parameters in premenopausal women with breast pain. Caleffi M, et al. **J Endocrinol** 1988 Nov;119(2):335-9

Anti-estrogens and aromatase inhibitors: tamoxifen and testolactone. Sciarra F. **J Endocrinol Invest** 1988 Nov; 11(10):755-62 (33 ref.)

Effects of antioestrogens on the proliferation of MCF-7 human breast cancer cells. Wakeling AE, et al. **J Mol Endocrinol** 1989 May;2(3):225-34

Tamoxifen decreases the estradiol induced progesterone receptors by interfering with nuclear estrogen receptor accumulation. Castellano-Díaz E, et al. **J Steroid Biochem** 1989 Jul;33(1):133-9

Comparative effects of 17 beta-estradiol, progestin R5020, tamoxifen and RU38486 on lactate dehydrogenase activity in MCF-7 human breast cancer cells. Thomas M, et al. **J Steroid Biochem** 1989 Feb;32(2):271-7

Effects of oestrogen and the antioestrogens, tamoxifen and LY117018, on four oestrogen-regulated RNAs in the EFM-19 breast cancer cell line. Westley BR, et al. **J Steroid Biochem** 1989 Mar;32(3):365-72

Inhibitory effect of tamoxifen on diethylstilbestrol-promoted hepatic tumorigenesis in male rats and its possible mechanism of action. Kohigashi K, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1335-9

The effect of tamoxifen on the reproductive traits in White Leghorn cockerels. Rozenboim I, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):377-81

Medroxyprogesterone acetate and tamoxifen do not decrease aggressive behavior in CF-1 male mice. Simon NG, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):829-33

Tamoxifen specifically inhibits oestrogen-induced dopaminergic striatal supersensitivity. Ferretti C, et al. **Pharmacol Res** 1989 Jan-Feb;21(1):93-4

Fertile semen from 9-week-old chicks treated with tamoxifen. Rozenboim I, et al. **Poult Sci** 1988 Nov; 67(11):1642-3

Early estrogen-induced metabolic changes and their inhibition by actinomycin D and cycloheximide in human breast cancer cells: 31P and 13C NMR studies. Neeman M, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5585-9

Requirement for estrogen in implantation and post implantation survival of blastocyst in the bonnet monkey. Moudgal NR, et al. **Prog Clin Biol Res** 1989;294:277-88

Effects of steroids and their antagonists on breast cancer cells: therapeutic implications. Darbre PD, et al. **Recent Results Cancer Res** 1989;113:16-28

Role of SBP evaluation to better understand the tamoxifen-induced changes of endocrine milieu. Fortunati N, et al. **Steroids** 1988 Oct;52(4):409-10

[A trial of stimulation with tamoxifen of progesterone nuclear receptors in patients with kidney cancer] Jacqmin D, et al. **J Urol (Paris)** 1988;94(9-10):435-6 (Eng. Abstr.) **(Fre)**

[Cancer of the breast, mechanism of action of anti-estrogens] Pasqualini JR, et al. **Pathol Biol (Paris)** 1988 Oct; 36(8):979-82 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Adjuvant treatment of postmenopausal patients with high risk primary breast cancer. Results from the Danish adjuvant trials DBCG 77 C and DBCG 82 C. Mouridsen HT, et al. **Acta Oncol** 1988;27(6A):699-705

The significance of estrogen receptors in tamoxifen and toremifene therapy. Valavaara R, et al. **Ann Clin Res** 1988; 20(5):380-8

Tamoxifen and premenopausal breast cancer [letter] Haq AU. **Ann Intern Med** 1988 Dec 15;109(12):992-3

Modulation of receptor levels in canine breast tumors by administration of tamoxifen and etretinate either alone or in combination. Cappelletti V, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1297-301

Tamoxifen as an alternative to surgical resection for selected geriatric patients with primary breast cancer. Margolese RG, et al. **Arch Surg** 1989 May;124(5):548-50; discussion 550-1

Efficacy of tamoxifen as the primary treatment of operable breast cancer in the high risk patient. Falk GL, et al. **Aust N Z J Surg** 1989 Jul;59(7):543-5

Anti-oestrogens in the treatment of breast and gynaecological cancers. Furr BJ. **Baillieres Clin Obstet Gynaecol** 1988 Sep;2(3):567-80 (76 ref.)

Tamoxifen and mastectomy for elderly patients with operable breast cancer [letter] Forrest AP, et al. **BMJ** 1988 Oct 8; 297(6653):917-8

Comparison of mastectomy with tamoxifen for treating elderly patients with operable breast cancer. Robertson JF, et al. **BMJ** 1988 Aug 20-27;297(6647):511-4

Oestrogenic activity of tamoxifen and its metabolites on gene regulation and cell proliferation in MCF-7 breast cancer cells. Johnson MD, et al. **Br J Cancer** 1989 May; 59(5):727-38

Histiocytic lymphoma of breast responds to tamoxifen. Millis RR, et al. **Br J Cancer** 1988 Dec;58(6):808-9

Prednisolone improves the response to primary endocrine treatment for advanced breast cancer. Rubens RD, et al. **Br J Cancer** 1988 Nov;58(5):626-30

The relationship of body weight to response to endocrine therapy, steroid hormone receptors and survival of patients with advanced cancer of the breast. Williams G, et al. **Br J Cancer** 1988 Nov;58(5):631-4

Tamoxifen: use in benign conditions. Fentiman IS. **Br J Clin Pract** 1988 Sep;42(9):384-7 (24 ref.)

Autoimmune progesterone dermatitis responding to Tamoxifen. Stephens CJ, et al. **Br J Dermatol** 1989 Jul; 121(1):135-7

Role of clinical trials in evaluation of cancer therapy [letter] Baum M. **Br J Radiol** 1988 Nov;61(731):1089

Tamoxifen comes of age. Forrest AP. **Br J Surg** 1989 Apr; 76(4):325-6 (11 ref.)

Results of salvage hormonal therapy and salvage chemotherapy in women failing adjuvant chemotherapy after mastectomy for breast cancer. Buckner JC, et al. **Breast Cancer Res Treat** 1989 Mar;13(2):135-42

Bone mineral density in women with breast cancer treated with adjuvant tamoxifen for at least two years. Love RR, et al. **Breast Cancer Res Treat** 1988 Dec;12(3):297-302

The effects of tamoxifen on the osteopenia induced by sciatic neurotomy in the rat: a histomorphometric study. Wakley GK, et al. **Calcif Tissue Int** 1988 Dec;43(6):383-8

The effect of tamoxifen and estrogen receptor status on survival in gastric carcinoma. Harrison JD, et al. **Cancer** 1989 Sep 1;64(5):1007-10

Randomized trial to evaluate the addition of tamoxifen to cyclophosphamide, 5-fluorouracil, prednisone adjuvant therapy in premenopausal women with node-positive breast cancer. Ingle JN, et al. **Cancer** 1989 Apr 1; 63(7):1257-64

Inhibition of radiogenic mammary carcinoma in rats by estriol or tamoxifen. Lemon HM, et al. **Cancer** 1989 May 1;63(9):1685-92

Tamoxifen treatment increases the concentration of 52K-cathepsin D and its precursor in breast cancer tissue. Maudelonde T, et al. **Cancer** 1989 Apr 1;63(7):1265-70

Response of eccrine adenocarcinoma to tamoxifen. Sridhar KS, et al. **Cancer** 1989 Jul 15;64(2):366-70

Chemosuppression of breast cancer with tamoxifen: laboratory evidence and future clinical investigations. Jordan VC. **Cancer Invest** 1988;6(5):589-95 (42 ref.)

Project of experimental bioassays on chemoprevention agents performed at the Bologna Institute of Oncology: report on tamoxifen control of spontaneous mammary tumors on Sprague-Dawley rats. Maltoni C, et al. **Cancer Invest** 1988; 6(5):643-58

A feasibility trial of tamoxifen chemoprevention of breast cancer in Great Britain. Powles TJ, et al. **Cancer Invest** 1988;6(5):621-4

Antioestrogens in the management of hormone-dependent cancer. Litherland S, et al. **Cancer Treat Rev** 1988 Sep; 15(3):183-94 (68 ref.)

Use of tamoxifen in stage I breast cancer. Munar MY, et al. **Clin Pharm** 1988 Sep;7(9):640, 643

Reversal of vocal cord palsy by tamoxifen. Irwin CJ, et al. **Clin Radiol** 1989 Mar;40(2):199

Endocrine and antitumor effects of combined treatment with an antiprogestin and antiestrogen or luteinizing hormone-releasing hormone agonist in female rats bearing mammary tumors. Bakker GH, et al. **Endocrinology** 1989 Sep;125(3):1593-8

The expression of milk fat globule antigens within human mammary tumours: relationship to steroid hormone receptors and response to endocrine treatment. Baildam AD, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):459-67

The definition of the 'no change' category in patients treated with endocrine therapy and chemotherapy for advanced carcinoma of the breast. Howell A, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1567-72

Locally advanced breast cancer: the contribution of cytotoxic and endocrine treatment to radiotherapy. An EORTC Breast Cancer Co-operative Group Trial (10792). Rubens RD, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):667-78

Tamoxifen and testolactone in therapy of oligozoospermia: results of a randomized study. Maier U, et al. **Eur Urol** 1988;14(6):447-9

Inhibition of mammary carcinoma growth by retinoidal benzoic acid derivatives. Fontana JA, et al. **Exp Cell Biol** 1988;56(5):254-63

Hormonal changes in tamoxifen treated men with idiopathic oligozoospermia. Hampl R, et al. **Exp Clin Endocrinol** 1988 Dec;92(2):211-6

Efficacy of sequential cyclical hormonal therapy in endometrial cancer and its correlation with steroid hormone receptor status. Ayoub J, et al. **Gynecol Oncol** 1988 Oct;31(2):327-37

Tamoxifen therapy in advanced/recurrent endometrial carcinoma. Quinn MA, et al. **Gynecol Oncol** 1989 Jan; 32(1):1-3

Laboratory studies on the mode of action and application of antiestrogen for breast cancer therapy. Jordan VC. **Int J Biol Markers** 1988 Jan-Mar;3(1):53-4 (4 ref.)

Changes in receptor status after treatment with tamoxifen in endometrial cancer. Oriana S, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):233-6

Endocrine treatment of primary and advanced breast cancer. Rose C. **Int J Biol Markers** 1988 Jan-Mar;3(1):55-6

Radiotherapy, chemotherapy, and tamoxifen as adjuncts to surgery in early breast cancer: a summary of three randomized trials. Rutqvist LE, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):629-39

Testing "the soft option": trials of adjuvant endocrine therapy for the primary treatment of breast cancer. Ebbs SR, et al. **Isr J Med Sci** 1988 Sep-Oct;24(9-10):552-6

Tamoxifen therapy in primary breast cancer: biology, efficacy, and side effects. Love RR. **J Clin Oncol** 1989 Jun;7(6):803-15 (113 ref.)

The relationship between hormone receptor content and the effect of adjuvant tamoxifen in operable breast cancer. Rutqvist LE, et al. **J Clin Oncol** 1989 Oct;7(10):1474-84

Desmoid tumors: report of a case responsive to antiestrogen and review of the literature. Balducci L, et al. **J Miss State Med Assoc** 1988 Aug;29(8):227-9 (10 ref.)

Effects of tamoxifen on spinal bone density in women with breast cancer. Turken S, et al. **J Natl Cancer Inst** 1989 Jul 19;81(14):1086-8

Stabilisation of a severe case of P.O.E.M.S. syndrome after tamoxifen administration [letter] Barrier JH, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):286

Adjuvant systemic treatment for breast cancer meta-analysed [editorial] **Lancet** 1989 Jan 14;1(8629):80-1

Who needs steroid receptor assays? [letter] Baum M. **Lancet** 1989 Jul 29;2(8657):282

Adjuvant therapy with tamoxifen in operable breast cancer. 10 year results of the Naples (GUN) study. Bianco AR, et al. **Lancet** 1988 Nov 12;2(8620):1095-9

Adjuvant tamoxifen and second cancers [letter] Fornander T, et al. **Lancet** 1989 Mar 18;1(8638):616

Relation between immunocytochemical estimation of oestrogen receptor in elderly patients with primary breast cancer and response to tamoxifen. Gaskell DJ, et al. **Lancet** 1989 May 13;1(8646):1044-6

Expression of epidermal growth factor receptors associated with lack of response to endocrine therapy in recurrent breast cancer. Nicholson S, et al. **Lancet** 1989 Jan 28; 1(8631):182-5

Effects of adjuvant tamoxifen and of cytotoxic therapy on mortality in early breast cancer. An overview of 61 randomized trials among 28,896 women. Early Breast Cancer Trialists' Collaborative Group [see comments] **N Engl J Med** 1988 Dec 29;319(26):1681-92. **Comment in:** N Engl J Med 1989 Jun 8;320(23):1558

A randomized clinical trial evaluating tamoxifen in the treatment of patients with node-negative breast cancer who have estrogen-receptor-positive tumors. Fisher B, et al. **N Engl J Med** 1989 Feb 23;320(8):479-84

Tamoxifen instead of mastectomy in elderly women with breast cancer [editorial] Dent DM, et al. **S Afr Med J** 1989 Mar 18;75(6):257

[Current status of hormonotherapy of metastatic cancer of the breast] Namer M. **Bull Cancer (Paris)** 1989;76(1):65-73 (Eng. Abstr.) **(Fre)**

[An innovative protocol, cyclic hormone-chemotherapy in the treatment of high-risk localized endometrial cancer] Audet-Lapointe P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):751-5 **(Fre)**

[Effect of cytostatic therapy on bone metabolism] Heytmanek G, et al. **Gynakol Rundsch** 1988;28 Suppl 2:193-5 **(Ger)**

[Neo-adjuvant chemotherapy] Bumma C, et al. **Minerva Chir** 1988 Sep 30;43(18 Suppl):55-8 (18 ref.) **(Ita)**

[Adjuvant therapy in breast carcinoma. A specific immunologic preliminary contribution] Fazio M, et al. **Minerva Chir** 1988 Sep 30;43(18 Suppl):59-62 **(Ita)**

[The significance of hormone receptors in hormone therapy of gastric cancers] Furukawa H, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2156-60 (33 ref.) (Eng. Abstr.) **(Jpn)**

[Chemo-endocrine therapy of advanced breast cancer] Nomura Y. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3214-20 (Eng. Abstr.) **(Jpn)**

[Endocrine therapy of lung cancer] Sagara N, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):859-61 **(Jpn)**

[The effect of danazol and tamoxifen on endometrial hyperplasia] Soh E. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1612-22 (Eng. Abstr.) **(Jpn)**

[Serum estrone sulfate levels in patients with breast cancer] Yasumura T, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug; 89(8):1267-72 (Eng. Abstr.) **(Jpn)**

[Effects of tamoxifen and oxyprogesterone caproate on steroid hormone receptors in tumors and indicators of reproductive homeostasis in patients with cancer of the uterine body] Vishnevskiĭ AS, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):33-6 (Eng. Abstr.) **(Rus)**

[Tamoxifen in the treatment of cancer of the uterine body] Chulkova OV, et al. **Sov Med** 1989;(5):118 **(Rus)**

[Effect of tamoxifen on the content of cytoplasmic steroid hormone receptors of the tumor in patients with cancer of the corpus uteri] Tsyrlina EV, et al. **Vopr Onkol** 1989; 35(6):675-80 (Eng. Abstr.) **(Rus)**

TOXICITY

Induction and promotion of gamma-glutamyltranspeptidase-positive foci in the liver of female rats treated with ethinyl estradiol, clomiphene, tamoxifen and their associations. Ghia M, et al. **Cancer Lett** 1989 Aug;46(3):195-202

Alterations in developing rat uterine cell populations after neonatal exposure to estrogens and antiestrogens. Branham WS, et al. **Teratology** 1988 Sep;38(3):271-9

TAMPONS

Quantification of urinary incontinence in elderly women with the 48-hour pad test. Ekelund P, et al. **Arch Gerontol Geriatr** 1988 Dec;7(4):281-7

Posterior nasal packing. Are intravenous antibiotics really necessary? Derkay CS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):439-41

The Gynaesecal diaphragm tampon. Cattanach JF. **Aust Fam Physician** 1988 Oct;17(10):867-9

Studies on improvement of pharmaceutical preparations prescribed in hospitals. II: Study on pharmaceutical manufacturing of dibekacin sulfate gauze tampon. Namiki N, et al. **Drug Des Deliv** 1986 Aug;1(1):71-81

The examination of vaginally inserted plastic tampon applicators for genetic markers and evidence of prior sexual intercourse. Springer EE, et al. **J Forensic Sci** 1988 Sep; 33(5):1139-45

Regulation and control of toxic shock syndrome toxin 1: overview. Bergdoll MS. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S142-4 (16 ref.)

Cervicovaginal opsonic activity, immunoglobulins, complement, and soluble fibronectin in healthy women randomly assigned to tampon or napkin use. Chow AW, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S270-4

Sequential assessment of vaginal microflora in healthy women randomly assigned to tampon or napkin use. Chow AW, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S68-73; discussion S73-4

Role of air in growth and production of toxic shock syndrome toxin 1 by Staphylococcus aureus in experimental cotton and rayon tampons. Fischetti VA, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S176-81

Magnesium and the pathogenesis of toxic shock syndrome. Kass EH. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S167-73; discussion S173-5

Normal vaginal microflora during use of various forms of catamenial protection. Onderdonk AB, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S61-7

Effect of tampon wraps on production of toxic shock syndrome toxin 1. Robbins RN, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S197-202

Ecology of toxic shock syndrome: amplification of toxic shock syndrome toxin 1 by materials of medical interest. Tierno PM Jr, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S182-6; discussion S186-7

[Temporary occlusion of the bronchi in the combined treatment of pyopneumothorax] Grishakov SV, et al. **Voen Med Zh** 1988 Sep;(9):59-60 **(Rus)**

ADVERSE EFFECTS

Study of the vaginal mucous membrane following tampon utilisation; aspect on colposcopy, scanning electron microscopy and transmission electron microscopy. Raudrant D, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Apr;31(1):53-65

Vaginal tampon model for toxic shock syndrome. Melish ME, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S238-46; discussion S246-7

Risk factors for menstrual toxic shock syndrome: results of a multistate case-control study. Reingold AL, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S35-41; discussion S41-2

TANGIER DISEASE see under **HYPOLIPOPROTEINEMIA**

TANNIC ACID see under **TANNINS**

TANNING

Nitrosamine in leather dust extracts. Lahiri VL, et al. **Br J Ind Med** 1988 Sep;45(9):647-8

Hair chromium as an index of chromium exposure of tannery workers. Randall JA, et al. **Br J Ind Med** 1989 Mar; 46(3):171-5

Chronic chromium poisoning with dermatitis in the leather industry. Das M, et al. **Contact Dermatitis** 1989 Mar; 20(3):221-2

Motoneuron disease: a disorder secondary to solvent exposure? Hawkes CH, et al. **Lancet** 1989 Jan 14; 1(8629):73-6

Motoneuron disease and exposure to solvents [letter] Martyn CN. **Lancet** 1989 Feb 18;1(8634):394

Release of mutagens from finished leather. Clonfero E, et al. **Mutat Res** 1989 Aug;226(4):229-33

A tanned, sheep dermal collagen graft as a dressing for split-skin graft donor sites. van Gulik TM, et al. **Neth J Surg** 1989 Jun;41(3):65-7

[Occupationally-induced skin tumors in East Germany. Increased risk of basalioma in furriers and hide processors?] Ziegler V, et al. **Dermatol Monatsschr** 1989;175(2):76-81 (Eng. Abstr.) **(Ger)**

[Immunologic shifts in tanners under the influence of potassium bichromate contact] Medvid' IV, et al. **Vestn Dermatol Venerol** 1989;(5):39-43 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Testicular cancer in leather workers--Fulton County, New York. **MMWR** 1989 Feb 24;38(7):105-6, 111-4

TANNINS

An improved method for preserving the cellular membrane ultrastructure of in vitro cultivated cells using tannic acid. Wahnschaffe U. **Exp Pathol** 1988;34(2):79-84

Dual effect of tannic acid on the preservation and ultrastructure of phosphatidyl choline vesicles. Schrijvers AH, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24; 88(1-2):91-6

ADVERSE EFFECTS

Evaluation of the contribution of tannin to the acute pulmonary inflammatory response against inhaled cotton mill dust. Lauque DE, et al. **Am J Pathol** 1988 Oct; 133(1):163-72

ANALYSIS

Spectrophotometric determination of tannins in tea and beer samples with iron(III) and 1,10-phenanthroline as reagents. Lau OW, et al. **Analyst** 1989 May;114(5):631-3

Relationship between content and intake of bean polyphenolics and protein digestibility in humans. Bressani R, et al. **Plant Foods Hum Nutr** 1988;38(1):5-21

Anthocyanins and tannins from wine: organoleptic properties. Glories Y. **Prog Clin Biol Res** 1988;280:123-34

[Some changes in the chemical components and tissue structure of radix Sanguisorbae by charcoal-processing] Wang YQ. **Chung Yao Tung Pao** 1988 Sep;13(9):18-20, 62 (Eng. Abstr.) **(Chi)**

BIOSYNTHESIS

Biosynthesis of gallotannins: beta-glucogallin-dependent formation of 1,2,3,4,6-pentagalloylglucose by enzymatic galloylation of 1,2,3,6-tetragalloylglucose. Cammann J, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):58-63

ISOLATION & PURIFICATION

[Extraction, separation and quantitative determination of gallotannin in Apocynum ventum Linn. leaf] Jiang PF. **Chung Yao Tung Pao** 1988 Sep;13(9):36-7, 63 (Eng. Abstr.) **(Chi)**

METABOLISM

In vitro availability of iron and zinc in white and coloured ragi (Eleusine coracana): role of tannin and phytate. Udayasekhara Rao P, et al. **Plant Foods Hum Nutr** 1988; 38(1):35-41

PHARMACOLOGY

Tannin-mediated secretion of a neutrophil chemotactic factor from alveolar macrophages. Potential contribution to the acute pulmonary inflammatory reaction associated with byssinosis. Rohrbach MS, et al. **Am Rev Respir Dis** 1989 Jan;139(1):39-45

Tannin induces endothelium-dependent contraction and relaxation of rabbit pulmonary artery. Russell JA, et al. **Am Rev Respir Dis** 1989 Feb;139(2):498-503

Inhibitory effect of tannin on poly(ADP-ribose) glycohydrolase from human placenta. Tanuma S, et al. **Biochem Int** 1989 Apr;18(4):701-8

Effects of condensed tannins prepared from leaves of fodder plants on digestive enzymes in vitro and in the intestine of rats. Horigome T, et al. **Br J Nutr** 1988 Sep;60(2):275-85

Effect of tannin-rich leaves of oak (Quercus incana) on various microbial enzyme activities of the bovine rumen. Makkar HP, et al. **Br J Nutr** 1988 Sep;60(2):287-96

Inhibition of the skin tumorigenicity of (+/-)-7 beta,8 alpha-dihydroxy-9 alpha,10 alpha-epoxy-7,8,9,10-tetrahydrobenzo[a]pyrene by tannic acid, green tea polyphenols and quercetin in Sencar mice. Khan WA, et al. **Cancer Lett** 1988 Sep-Oct;42(1-2):7-12

Studies on crude drugs effective on visceral larva migrans. III. The bursting activity of tannins on dog roundworm larva. Kiuchi F, et al. **Chem Pharm Bull (Tokyo)** 1988 May; 36(5):1796-802

Inhibition of human placenta aldose reductase by tannic acid. Sawada H, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun; 37(6):1662-4

Tannins and digestibility in the steenbok (Raphicerus campestris). Hay L, et al. **Comp Biochem Physiol [A]** 1988; 91(3):509-11

Cotton bract tannin: a novel human T-lymphocyte mitogen and a possible causative agent of byssinosis. Vuk-Pavlović Z, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):14-8

Effects of tannins on the oxidative damage of mouse ocular lens. I. Using the oxidative damage model induced by the xanthine-xanthine oxidase system. Iwata S, et al. **J Ocul Pharmacol** 1987 Fall;3(3):227-38

Is tannin really bactericidal? [letter] Koffler M, et al. **Lancet** 1989 Aug 26;2(8661):503

Effects of tannins from different sources on airway epithelial and platelet function. Cloutier MM, et al. **Lung** 1989; 167(2):117-28

Tannin mediated alveolar macrophage protein phosphorylation. Hempel SL, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):163-70

Suppressing effect of tannic acid on the frequencies of mutagen-induced sister-chromatid exchanges in mammalian cells. Sasaki YuF, et al. **Mutat Res** 1989 Aug; 213(2):195-203

Ellagitannins as active constituents of medicinal plants. Okuda T, et al. **Planta Med** 1989 Apr;55(2):117-22 (52 ref.)

Active oxygen free radicals are scavenged by condensed tannins. Uchida S, et al. **Prog Clin Biol Res** 1988;280:135-8

[Evaluation of the analgesic effect of RG-tannin using the "hot plate" and "tail flick" method in mice] Starec M, et al. **Cesk Farm** 1988 Sep;37(7):319-21 (Eng. Abstr.) **(Cze)**

[Trends in the development of new antioxidants and the clinical studies. Chinese herbal drugs as antioxidants] Kimura Y, et al. **Nippon Rinsho** 1988 Oct;46(10):2286-92 **(Jpn)**

[Studies on inhibition mechanism of autoxidation by tannins and flavonoids. III. Inhibition mechanism of tannins isolated from medicinal plants and related compounds on autoxidation of methyl linoleate] Fujita Y, et al. **Yakugaku Zasshi** 1988 Jun;108(6):528-37 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Tannins and plant-animal interactions. Waterman PG. **Prog Clin Biol Res** 1988;280:77-91 (43 ref.)

THERAPEUTIC USE

Protection against chemically induced skin tumorigenesis in SENCAR mice by tannic acid. Das M, et al. **Int J Cancer** 1989 Mar 15;43(3):468-70

Tannin-rich carob pod for the treatment of acute-onset diarrhea. Loeb H, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):480-5

Tannic acid for smear layer removal: pilot study with scanning electron microscope. Bitter NC. **J Prosthet Dent** 1989 Apr;61(4):503-7

A 25% tannic acid solution as a root canal irrigant cleanser: a scanning electron microscope study. Bitter NC. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):333-7

[Personal experiences with naturopathy. Wound treatment with plant products. Wound medicines containing tannic acid (II)] Zimmermann W. **Fortschr Med** 1989 Mar 10; 107(7):20 **(Ger)**

TOXICITY

Plant constituents of cotton dust and lung effects after inhalation. Rylander R. **Eur Respir J** 1988 Oct;1(9):812-7

TANTALUM

Tantalum vascular stents: in vivo evaluation with MR imaging. Matsumoto AH, et al. **Radiology** 1989 Mar;170(3 Pt 1):753-5

TAPE RECORDING

Simple music/audio system for patients having MR imaging [letter] Miyamoto AT, et al. **AJR** 1988 Nov;151(5):1060

Comparison of self-directed and tape-assisted self-hypnosis. Hammond DC, et al. **Am J Clin Hypn** 1988 Oct; 31(2):129-37

Audiotape playback as a technique in the treatment of schizophrenic patients. Satel SL, et al. **Am J Psychiatry** 1989 Aug;146(8):1012-6

Effects of a taped-words treatment on reading proficiency. Shapiro ES, et al. **Except Child** 1989 Jan;55(4):321-5

Repeated readings using audiotaped material enhances oral reading in children with reading difficulties. Conte R, et al. **J Commun Disord** 1989 Feb;22(1):65-79

Magnetic tape recording and playback for ST-segment analysis. Schluter P. **J Electrocardiol** 1988;21 Suppl:S20-6

Tape recorder effects on jitter and shimmer extraction. Doherty ET, et al. **J Speech Hear Res** 1988 Sep; 31(3):485-90

Increasing breast milk production for premature infants with a relaxation/imagery audiotape. Feher SD, et al. **Pediatrics** 1989 Jan;83(1):57-60

Stress-relieving relaxation audio-tape for supportive care of cancer patients: developmental studies. Presant CA, et al. **Prog Clin Biol Res** 1988;278:151-8

[A verbal form of the Columbus Test for visually handicapped patients] Schlaginhaufen F, et al. **Prax Kinderpsychol Kinderpsychiatr** 1989 Apr;38(4):133-7 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

Effects on media materials of storage in proximity to a magnetic resonance imaging scanner. Kittle PW. **Bull Med Libr Assoc** 1989 Jan;77(1):67-9

Tracker--an ambulatory recorder for ST-segment monitoring? Tayler D, et al. **Eur Heart J** 1988 Aug; 9(8):906-12

Improved cassette recording of multichannel analyzer data. Latner N, et al. **Health Phys** 1989 Apr;56(4):561-3

Cassette electroencephalographic recording of neonates with apneic episodes. Bridgers SL, et al. **Pediatr Neurol** 1985 Jul-Aug;1(4):219-22

Long term cassette EEG monitoring of childhood seizures. Duchowny MS, et al. **Pediatr Neurol** 1985 Jan-Feb; 1(1):38-41

[A simple procedure for quantitative and time coded detection of snoring sounds in apnea and snoring patients] Schäfer J. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep; 67(9):449-52 (Eng. Abstr.) **(Ger)**

LEGISLATION & JURISPRUDENCE

Patients' surreptitious taping of forensic psychiatric examinations [letter] Goldstein RL. **Am J Psychiatry** 1989 Feb;146(2):279–80

METHODS

[A method of data collection in the acoustic evaluation of the effect of phonosurgical operations on the larynx] Zaleska-Krecicka M, et al. **Otolaryngol Pol** 1988; 42(5):356–64 (Eng. Abstr.) (Pol)

TAPE RECORDING, VIDEO see VIDEOTAPE RECORDING

TAPEWORM INFECTION see CESTODE INFECTIONS

TAPEWORMS see CESTODA

TARICHA see SALAMANDRIDAE

TARICHATOXIN see TETRODOTOXIN

TARS

ADMINISTRATION & DOSAGE

Behavioral and biochemical effects of gradual reductions in cigarette yields in pregnant and nonpregnant smokers. Kabela E, et al. **Addict Behav** 1988;13(3):231–43

ADVERSE EFFECTS

Tar content of cigarettes in relation to lung cancer. Kaufman DW, et al. **Am J Epidemiol** 1989 Apr;129(4):703–11

Field survey of circadian rhythm in PEF of electronics workers suffering from colophony-induced asthma. Randem B, et al. **Chronobiol Int** 1987;4(2):263–71

Cytogenetic activities of tobacco particulate matter (TPM) derived from a low to middle tar British cigarette. Lafi A, et al. **Mutat Res** 1988 Oct;201(2):365–74

[Effect of cigarette-smoke tar on oxygenation activity of granulocytes detected by luminol- and lucigenin-enhanced chemiluminescence response of rabbit whole blood] Zhang RQ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Feb;11(1):25–9 (Eng. Abstr.) (Chi)

[Benign symmetrical lipomatosis—an occupational disease following exposure to tar?] Röcken M. **Derm Beruf Umwelt** 1988 Nov-Dec;36(6):188–90 (42 ref.) (Eng. Abstr.) (Ger)

[Effect of the level of "tar" in tobacco smoke on the risk of the occurrence of malignant tumors] Zaridze DG. **Eksp Onkol** 1989;11(1):3–6 (16 ref.) (Eng. Abstr.) (Rus)

ANALYSIS

Evidence for limits on the acceptability of lowest-tar cigarettes. Kozlowski LT. **Am J Public Health** 1989 Feb; 79(2):198–9

Tobacco-specific nitrosamines in mainstream smoke of West German cigarettes—tar alone is not a sufficient index for the carcinogenic potential of cigarette smoke. Fischer S, et al. **Carcinogenesis** 1989 Jan;10(1):169–73

Monitoring of harmful constituents of cigarettes and tobacco in Pakistan. Asghar M, et al. **JPMA** 1989 Mar;39(3):66–8

Health and public policy implications of the "low yield" cigarette [editorial] Benowitz NL. **N Engl J Med** 1989 Jun 15;320(24):1619–21

Long-term effects of switching to cigarettes with lower tar and nicotine yields. Guyatt AR, et al. **Psychopharmacology (Berlin)** 1989;99(1):80–6

[Characteristics of the structure of a solid phase of ore aerosol during the operation of power-driven Diesel equipment] Chebotarev AG, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):50–2 (Rus)

PHARMACOLOGY

Effect of smoked tobacco tar on the growth, cytolytic action, DNA synthesis, and gene expression of herpes simplex virus. Oh JS, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):189–94

TOXICITY

[Identification of volatile products of the pyrolysis of brown coal and their hygienic standardization in the air] Tepikina LA, et al. **Gig Sanit** 1988 Sep;(9):66–7 (Rus)

TARSAL BONES

Osteomalacia secondary to osteosarcoma. A case report. Cheng CL, et al. **J Bone Joint Surg [Am]** 1989 Feb; 71(2):288–92

Case report 523: Osteoblastic osteosarcoma of the navicular. Moss CS, et al. **Skeletal Radiol** 1989;18(1):70–4

ABNORMALITIES

Tarsal coalition: a review of the literature and presentation of 13 cases. Percy EC, et al. **Foot Ankle** 1988 Aug;9(1):40–4 (32 ref.)

Congenital talonavicular synostosis. A review of the literature and a case report. Bonk JH, et al. **J Am Podiatr Med Assoc** 1989 Apr;79(4):186–9 (22 ref.)

Roentgen rounds #91. Calcaneonavicular coalition. Ehara S, et al. **Orthop Rev** 1987 Oct;16(10):777–9

[Tarsal coalition] Skov O. **Ugeskr Laeger** 1988 Nov 28; 150(48):2952–3 (Eng. Abstr.) (Dan)

ANATOMY & HISTOLOGY

[Models of the geometry of the human ankle bone pulley: two series of geometric models for demonstrating the biomechanics of the ankle joint] Reimann R, et al. **Gegenbaurs Morphol Jahrb** 1988;134(3):351–80 (Eng. Abstr.) (Ger)

INJURIES

Tarsal coalition. A followup of adolescent athletes. O'Neill DB, et al. **Am J Sports Med** 1989 Jul-Aug;17(4):544–9 (14 ref.)

Dislocation of the cuboid bone without fracture. Gough DT, et al. **Ann Emerg Med** 1988 Oct;17(10):1095–7

Talonavicular dislocations and midfoot arthropathy in neuropathic diabetic feet. Natural course and principles of treatment. Lesko P, et al. **Clin Orthop** 1989 Mar; (240):226–31

Isolated dislocation of the tarsal navicular: a case report. Pathria MN, et al. **Foot Ankle** 1988 Dec;9(3):146–9

Soft-tissue swelling following fractures of the ankle. Drabu KJ. **Injury** 1987 Nov;18(6):401–3

Operation for non-union of stress fracture of the tarsal navicular. Fitch KD, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):105–10

Isolated calcaneo-cuboid dislocation: brief report. Kollmannsberger A, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):323

Stress fracture of the tarsal navicular: two unusual case reports. Dennis L, et al. **J Foot Surg** 1988 Nov-Dec; 27(6):511–4

Diagnostic imaging of tarsal and metatarsal stress fractures. Part II. Santi M, et al. **Orthop Rev** 1989 Mar;18(3):305–10

Bilateral stress fracture of the navicular in a non-athlete. Ehara S, et al. **Radiat Med** 1988 Nov-Dec;6(6):259–62

[Dislocation of the os naviculare pedis following basal lamella rupture caused by tarsal sprain] Meyer HH, et al. **Beitr Orthop Traumatol** 1988 Oct;35(10):508–12 (Eng. Abstr.) (Ger)

[Dislocation fractures of the Chopart and Lisfranc joint] Suren EG, et al. **Unfallchirurg** 1989 Mar;92(3):130–9 (Eng. Abstr.) (Ger)

[Osteosynthesis in various types of fractures using pins made of corundum ceramics] Gruntovskii GKh, et al. **Ortop Travmatol Protez** 1988 Dec;(12):33–4 (Eng. Abstr.) (Rus)

PATHOLOGY

Reply: nonseptic tarsal disintegration in leprosy [letter] **Lepr Rev** 1989 Mar;60(1):70–5

PHYSIOLOGY

Evaluation of various fibro-osseous tunnel pressures (carpal, cubital and tarsal) in normal human subjects. Kumar K, et al. **Indian J Physiol Pharmacol** 1988 Apr-Jun; 32(2):139–45

PHYSIOPATHOLOGY

Nonseptic tarsal disintegration in leprosy [letter] Andersen JG. **Lepr Rev** 1988 Jun;59(2):187

SURGERY

Dowel bone graft technique for triple arthrodesis in talocalcaneal coalition—report of a case with 12-year follow-up. Peterson HA. **Foot Ankle** 1989 Feb;9(4):201–3

A modified technique for subtalar arthrodesis. Howie CR, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):533

TARSAL JOINT

The rheumatoid heel: its relationship to other disorders in the rheumatoid foot. Bouysset M, et al. **Clin Rheumatol** 1989 Jun;8(2):208–14

[Foot root arthrosis] Claustre J, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):539–43 (Fre)

ANATOMY & HISTOLOGY

First tarsometatarsal joint: anatomical biomechanical study. Wanivenhaus A, et al. **Foot Ankle** 1989 Feb;9(4):153–7

INJURIES

Isolated plantar midtarsal dislocation. Ruthman JC, et al. **Am J Emerg Med** 1988 Nov;6(6):599–601

Occult fracture-subluxation of the midtarsal joint. Tountas AA. **Clin Orthop** 1989 Jun;(243):195–9

Foot pain in a diabetic patient. Baird KM, et al. **Indiana Med** 1989 Feb;82(2):109–10

Open reduction of Lisfranc's dislocation. Wojciehoski RF, et al. **J Am Podiatr Med Assoc** 1989 Feb;79(2):86–8

Fractures and Fracture-Dislocations of the Tarsometatarsal Joint [letter] Harper MC. **J Bone Joint Surg [Am]** 1989 Jul;71(6):952–3

Dislocation of the tarsometatarsal joint [editorial] Reinherz RP, et al. **J Foot Surg** 1989 Jan-Feb;28(1):1–2

Tarsometatarsal fractures and dislocations. Pérez Blanco R, et al. **J Orthop Trauma** 1988;2(3):188–94

Lisfranc fracture-dislocations of the foot: a clinical-kinesiological study. Wiss DA, et al. **J Orthop Trauma** 1987;1(4):267–74

[Comminuted .intra-articular fractures of the calcaneus] Iakimov LA, et al. **Vestn Khir** 1988 Sep;141(9):77–80 (Eng. Abstr.) (Rus)

PATHOLOGY

Collagen-induced arthritis in Biozzi mice. Joint involvement is not correlated with collagen II IgG2a autoantibodies nor restricted to only H-2q and H-2r. Bouvet JP, et al. **J Immunol** 1989 Sep 1;143(5):1537–42

PHYSIOLOGY

Forces loading the tarsal joint in the hind limb of the horse, determined from in vivo strain measurements of the third metatarsal bone. Schamhardt HC, et al. **Am J Vet Res** 1989 May;50(5):728–33

Kinematics of the ankle/foot complex—Part 3: Influence of leg rotation. Lundberg A, et al. **Foot Ankle** 1989 Jun; 9(6):304–9

Kinematics of the ankle/foot complex—Part 2: Pronation and supination. Lundberg A, et al. **Foot Ankle** 1989 Apr; 9(5):248–53

Kinematics of the ankle/foot complex: plantarflexion and dorsiflexion. Lundberg A, et al. **Foot Ankle** 1989 Feb; 9(4):194–200

Comment on 'A Biomechanical Analysis of the Talocalcaneal Joint—In Vitro' [letter] Spoor CW, et al. **J Biomech** 1988; 21(11):993–4

PHYSIOPATHOLOGY

Aberrancy of the midtarsal locking mechanism as a causative factor in recurrent ankle sprains. Michaud TC. **J Manipulative Physiol Ther** 1989 Apr;12(2):135–41

Musculoskeletal manifestations in patients with hypercholesterolemia. Wysenbeek AJ, et al. **J Rheumatol** 1989 May;16(5):643–5

RADIOGRAPHY

Radiographic evaluation of inflammatory arthritis of the foot. Oloff LM. **Clin Podiatr Med Surg** 1988 Oct;5(4):831–48 (48 ref.)

Subtalar and intertarsal joint involvement in hemophilia and juvenile chronic arthritis: frequency and diagnostic significance of radiographic abnormalities. Morgante D, et al. **Foot Ankle** 1988 Aug;9(1):45–8

Isolated dislocation of the tarsal navicular: a case report. Pathria MN, et al. **Foot Ankle** 1988 Dec;9(3):146–9

SURGERY

Modified Lapidus procedure for hallux valgus. Sangeorzan BJ, et al. **Foot Ankle** 1989 Jun;9(6):262–6

Peroneal tendon balance procedure. Grumbine NA, et al. **J Am Podiatr Med Assoc** 1989 Jan;79(1):15–23 (81 ref.)

Critical analysis of results in club feet treated surgically along the Norris Carroll approach: seven years of experience. Porat S, et al. **J Pediatr Orthop** 1989 Mar-Apr;9(2):137–43

TARSAL TUNNEL SYNDROME

Anterior tarsal tunnel syndrome. Adelman KA, et al. **J Foot Surg** 1988 Jul-Aug;27(4):299–302

DIAGNOSIS

Neurilemoma of the sciatic nerve mimicking tarsal tunnel syndrome. Report of a case. Wolock BS, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):932–4

PATHOLOGY

Tibial nerve branching in the tarsal tunnel. Havel PE, et al. **Foot Ankle** 1988 Dec;9(3):117–9

TARSIIDAE see PROSIMII

TARSIUS see PROSIMII

TARSUS

see related
TARSAL BONES

INJURIES

Diagnostic imaging of tarsal and metatarsal stress fractures. Part I. Santi M, et al. **Orthop Rev** 1989 Feb;18(2):178–85 (31 ref.)

[Dislocation of the os naviculare pedis following basal lamella rupture caused by tarsal sprain] Meyer HH, et al. **Beitr Orthop Traumatol** 1988 Oct;35(10):508–12 (Eng. Abstr.) (Ger)

[The ankle joint fork and tarsus] Schmit-Neuerburg KP, et al. **Langenbecks Arch Chir** 1988;Suppl 2:225–32 (Eng. Abstr.) (Ger)

INNERVATION

Tibial nerve branching in the tarsal tunnel. Havel PE, et al. **Foot Ankle** 1988 Dec;9(3):117–9

RADIOGRAPHY

[Angular measurements of the hindfoot in CT] Frahm R, et al. **ROFO** 1989 Jul;151(1):77–81 (Eng. Abstr.) **(Ger)**

TARSUS, ANIMAL

ABNORMALITIES

Histomorphometry and vitamin D metabolism of valgus–varus deformity in broiler chickens. Newbrey JW, et al. **Avian Dis** 1988 Oct–Dec;32(4):704–12

Development of a quantitative method for the evaluation of varus–angular bone deformity in chickens. Harter–Dennis JM, et al. **Poult Sci** 1988 Nov; 67(11):1647–50

ANATOMY & HISTOLOGY

Osteochondral fragments within the dorsal pouch or dorsal joint capsule of the proximal intertarsal joint of the horse. Stephens PR, et al. **Vet Surg** 1989 Mar–Apr;18(2):151–7

INJURIES

Orthopedics in greyhounds [letter] Boudrieau RJ, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):10–1

Tarsal fractures in a heifer and a bull. Welker FH, et al. **J Am Vet Med Assoc** 1989 Jul 15;195(2):240–1

Central tarsal implant in a racing greyhound. Yocham GD, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):840–2

METABOLISM

Eicosanoic fatty acid reduction in the tibiotarsus of biotin–deficient chicks. Watkins BA, et al. **Calcif Tissue Int** 1989 Jul;45(1):41–6

RADIOGRAPHY

[The radiologic image of the normal equine tarsus] Dahn M, et al. **Schweiz Arch Tierheilkd** 1989;131(4):165–75 (Eng. Abstr.) **(Fre)**

[The optimal radiologic presentation of the horse digit under practice conditions] Tellhelm B, et al. **Tierarztl Prax** 1988; 16(4):395–401 (Eng. Abstr.) **(Ger)**

SURGERY

Histological analysis of a central tarsal implant in a racing greyhound. Bloebaum RD, et al. **Vet Rec** 1989 Apr 1; 124(13):339–42

Transfer of deep circumflex iliac flaps to the tarsus by microvascular anastomosis in the horse. Lees MJ, et al. **Vet Surg** 1989 Jul–Aug;18(4):292–9

TARSUS OSSEUS see **TARSUS**

TARTRATES

Calcium tartrate gel. Akhrem AA, et al. **Anal Biochem** 1989 May 15;179(1):86–9

Purification and characterization of a tartrate–resistant acid phosphatase from human osteoclastomas. Hayman AR, et al. **Biochem J** 1989 Jul 15;261(2):601–9

Expression of tartrate–resistant acid phosphatase in B–CLL treated with phorbol ester or phorbol ester plus calcium ionophore. Drexler HG, et al. **Eur J Haematol** 1988 Sep; 41(3):250–7

A rheological study of the role of additives on the setting of glass–ionomer cements. Hill RG, et al. **J Dent Res** 1988 Dec;67(12):1446–50

Fourier transform infrared spectroscopic study of the role of tartaric acid in glass–ionomer dental cements. Nicholson JW, et al. **J Dent Res** 1988 Dec;67(12):1451–4

A comparative trial of garlic, its extract and ammonium–potassium tartrate as anthelmintics in carp. Peña N, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):199–203

METABOLISM

Leucosporidium fellii sp. nov., a basidiomycetous yeast that degrades L(+)–tartaric acid. Gimenez–Jurado G, et al. **Antonie Van Leeuwenhoek** 1989;55(2):133–41

Transmembrane channels based on tartaric acid–gramicidin A hybrids. Stankovic CJ, et al. **Science** 1989 May 19; 244(4906):813–7

PHARMACOLOGY

Tartrate–resistant acid phosphatase activity in tibial osteoclasts and cells elicited by ectopic bone and suture implants in normal and osteopetrotic rats. Walters LM, et al. **Bone Miner** 1988 Apr;4(1):49–62

Tartrate–resistant acid phosphatase activity in rat osteoblasts and osteocytes. Bianco P, et al. **Calcif Tissue Int** 1988 Sep; 43(3):167–71

Serum tartrate–resistant acid phosphatase and bone mineral content in postmenopausal osteoporosis. de la Piedra C, et al. **Calcif Tissue Int** 1989 Jul;45(1):58–60

Different tartrate sensitivity and pH optimum for two isoenzymes of acid phosphatase in osteoclasts. An electron–microscopic enzyme–cytochemical study. Akisaka T, et al. **Cell Tissue Res** 1989 Jan;255(1):69–76

Tartrate–resistant acid ATPase as a cytochemical marker for osteoclasts. Andersson GN, et al. **J Histochem Cytochem** 1989 Jan;37(1):115–7

Identification of semen in stain by determination of the specific activity of L–tartrate–inhibitable acid phosphatase. Tamaki K, et al. **Z Rechtsmed** 1989;102(7):429–36

TARTRAZINE see under **AZO COMPOUNDS**

TARTRONATES

CHEMICAL SYNTHESIS

Enzymatic synthesis and inhibitory characteristics of tartronate semialdehyde phosphate. Weiss PM, et al. **Biochemistry** 1989 Feb 21;28(4):1634–41

TASK PERFORMANCE AND ANALYSIS

Effect of reinforcement on infants' performance in a preferential looking acuity task. Stephens BR, et al. **Am J Optom Physiol Opt** 1988 Aug;65(8):637–43

Out–patient session case times [letter] Stoodley BJ. **Ann R Coll Surg Engl** 1989 Mar;71(2 Suppl):33

Measuring moment–to–moment pilot workload using synchronous presentations of secondary tasks in a motion–based trainer. Bortolussi MR, et al. **Aviat Space Environ Med** 1989 Feb;60(2):124–9

Interactive effects of heat, physical work, and CO exposure on metabolism and cognitive task performance. Bunnell DE, et al. **Aviat Space Environ Med** 1989 May;60(5):428–32

Multidimensional scaling analysis of simulated air combat maneuvering performance data. Polzella DJ, et al. **Aviat Space Environ Med** 1989 Feb;60(2):141–4

Detection efficiency on an air traffic control monitoring task with and without computer aiding. Thackray RI, et al. **Aviat Space Environ Med** 1989 Aug;60(8):744–8

Windermere relativities inquiry. Nettley MP, et al. **Br Dent J** 1988 Sep 10;165(5):188–92

The anaesthetist's activities in the operating theatre [letter] Goodman NW. **Br J Anaesth** 1989 Jun;62(6):700

A time and motion study of the anaesthetist's intraoperative time. McDonald JS, et al. **Br J Anaesth** 1988 Dec; 61(6):738–42

Construction and reconstruction of memories. Izquierdo I, et al. **Braz J Med Biol Res** 1988;21(1):9–25 (77 ref.)

Symmetric and asymmetric manual materials handling, Part 2: Biomechanics. Drury CG, et al. **Ergonomics** 1989 Jun; 32(6):565–83

Isoinertial tests to predict lifting performance. Stevenson JM, et al. **Ergonomics** 1989 Feb;32(2):157–66

An audit of wart treatment in a Scottish dermatology department. Keefe M, et al. **Health Bull (Edinb)** 1989 Jan; 47(1):13–20

Physician managers: personal characteristics versus institutional demands. Tabenkin H, et al. **Health Care Manage Rev** 1989 Spring;14(2):7–12 (27 ref.)

Maximum voluntary hand grip torque for circular electrical connectors. Adams SK, et al. **Hum Factors** 1988 Dec; 30(6):733–45

Using physician time and complexity to identify mispriced procedures. Cromwell J, et al. **Inquiry** 1989 Spring; 26(1):7–23

Effects of experimental and habitual lunch–size on performance, arousal, hunger and mood. Craig A, et al. **Int Arch Occup Environ Health** 1989;61(5):313–9

Daytime napping and its effects on alertness and short–term memory performance in shiftworkers. Härmä M, et al. **Int Arch Occup Environ Health** 1989;61(5):341–5

Central station data displays: an experimental evaluation of observer performance. Part 1: Number of displays and observation time. Crew AD, et al. **Intensive Care Med** 1989; 15(5):314–8

Performance time and gloves [letter] Oliver WH. **J Am Dent Assoc** 1989 Jan;118(1):10

An evaluation of labeling–then–doing with moderately handicapped persons: acquisition and generalization with complex tasks. Wacker DP, et al. **J Appl Behav Anal** 1988 Winter;21(4):369–80

Performance flaws in root canal therapy by undergraduate students. Ritchie GM, et al. **J Dent Educ** 1989 Feb; 53(2):135–8

Manual performance in the cold: a review of some of the critical factors. Litchfield P. **J R Nav Med Serv** 1987 Winter;73(3):173–7 (25 ref.)

Prehospital venous access in an urban paramedic system—a prospective on–scene analysis. Pons PT, et al. **J Trauma** 1988 Oct;28(10):1460–3

Evaluating the occupational physical fitness of Canadian forces infantry personnel. Jetté M, et al. **Milit Med** 1989 Jun;154(6):318–22

Emergency room visit time: changes over a 16–year period. Abramowitz S, et al. **N Y State J Med** 1989 Aug; 89(8):446–9

Substitution of self–reporting for observing time spent on work activities by mental health professionals. Foster B, et al. **Psychol Rep** 1989 Jun;64(3 Pt 1):945–6

Sex hormones linked to task performance [news] Barnes DM. **Science** 1988 Dec 16;242(4885):1509

[Results of work schedule studies of hospital physicians of the Cottbus district hospital] Hoffmann W, et al. **Z Gesamte Hyg** 1989 Apr;35(4):228–31 (Eng. Abstr.) **(Ger)**

[Effects of stimulus modality and task instruction upon the orienting response] Imai A. **Shinrigaku Kenkyu** 1988 Apr; 59(1):30–6 (Eng. Abstr.) **(Jpn)**

[Effects of task attentiveness on task–irrelevant activity and boredom in the signal detection tasks] Tsuda K. **Shinrigaku Kenkyu** 1988 Apr;59(1):53–6 (Eng. Abstr.) **(Jpn)**

TASTE

Breakdown of dietary restraint following mere exposure to food stimuli: interrelationships between restraint, hunger, salivation, and food intake. Rogers PJ, et al. **Addict Behav** 1989;14(4):387–97

Consumption of alcohol compared to another bitter solution in a limited access drinking paradigm. Linseman MA. **Alcohol** 1988 Jul–Aug;5(4):301–3

Oral ethanol self–administration in free–feeding rhesus monkeys. Grant KA, et al. **Alcoholism (NY)** 1988 Dec; 12(6):780–4

Gustatory function and dietary habits in users and nonusers of smokeless tobacco. Mela DJ. **Am J Clin Nutr** 1989 Mar; 49(3):482–9

Activation by saccharides of a cation–selective pathway on canine lingual epithelium. Simon SA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R394–402

Male and female correlations for taster (P.T.C.) phenotypes and rate of adolescent development. Whissell–Buechy D, et al. **Ann Hum Biol** 1989 Mar–Apr;16(2):131–46

Nutrition and the chemical senses in aging: recent advances and current research needs. **Ann N Y Acad Sci** 1989; 561:1–339

Sensory preferences for fat and sugar in adolescence and adult life. Drewnowski A. **Ann N Y Acad Sci** 1989; 561:243–50

Nutrition and the chemical senses. Problems and opportunities. Hegsted DM. **Ann N Y Acad Sci** 1989; 561:1–11

Aging and chemosensory perception of and preference for nutritionally significant stimuli. Murphy C. **Ann N Y Acad Sci** 1989;561:251–66

Uncoupling sweetness and calories: methodological aspects of laboratory studies on appetite control. Blundell JE, et al. **Appetite** 1988;11 Suppl 1:54–61 (24 ref.)

Starch–based conditioned flavor preferences in rats: influence of taste, calories and CS–US delay. Elizalde G, et al. **Appetite** 1988 Dec;11(3):179–200

Carbohydrate appetite in rats: taste and postingestive factors. Sclafani A. **Appetite** 1988;11 Suppl 1:20–5 (19 ref.)

Drinking saccharin increases food intake and preference—III. Sensory and associative factors. Tordoff MG, et al. **Appetite** 1989 Feb;12(1):23–36

Role of telereceptive and interoceptive (taste) cues in ingestional neophobia in chicks (Gallus domesticus). Franchina JJ, et al. **Behav Neural Biol** 1989 Jul;52(1):116–22

Effects of flavor salience on aversion performance following relatively long–delay backward conditioning procedures. Franchina JJ. **Behav Neural Biol** 1989 Mar;51(2):127–35

Salience and the effects of CS preexposure on aversion conditioning. Franchina JJ, et al. **Behav Neural Biol** 1988 Nov;50(3):367–73

Age–dependent facilitation of taste–footshock conditioning by prior exposure to the training context. Miller JS, et al. **Behav Neural Biol** 1989 Jul;52(1):123–130

Early (preweanling) recognition of alcohol's orosensory cues resulting from acute ethanol intoxication. Molina JC, et al. **Behav Neural Biol** 1989 May;51(3):307–25

Conditioned taste aversions are not readily disrupted by external excitation. Holder MD, et al. **Behav Neurosci** 1989 Jun;103(3):605–11

Conditioned taste aversion in humans using motion–induced sickness as the US. Arwas S, et al. **Behav Res Ther** 1989; 27(3):295–301

Interleukin–1 induces conditioned taste aversion in rats: a possible explanation for its pituitary–adrenal stimulating activity. Tazi A, et al. **Brain Res** 1988 Nov 15;473(2):369–71

Postnatal development of the parabrachial gustatory zone in rat: dendritic morphology and mitochondrial enzyme activity. Lasiter PS, et al. **Brain Res Bull** 1988 Jul; 21(1):79–94

Postnatal development of the rostral solitary nucleus in rat: dendritic morphology and mitochondrial enzyme activity. Lasiter PS, et al. **Brain Res Bull** 1989 Feb;22(2):313–21

Differential facial responses to four basic tastes in newborns. Rosenstein D, et al. **Child Dev** 1988 Dec;59(6):1555–68

Electrophysiology of taste and smell. Plattig KH. **Clin Phys Physiol Meas** 1989 May;10(2):91–125 (170 ref.)

Molecular transduction in smell and taste. Lancet D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:343–8 (57 ref.)

Soy flavor and its improvement. MacLeod G, et al. **CRC Crit Rev Food Sci Nutr** 1988;27(4):219–400 (721 ref.)

Genes for salivary proline–rich proteins and taste for phenylthiourea are not closely linked in humans. O'Hanlon K, et al. **Cytogenet Cell Genet** 1988;49(4):315–7

Development of salt aversion in the Fischer–344 rat. Bernstein IL. **Dev Psychobiol** 1988 Nov;21(7):663–70

Relative sweetness of fructose compared with sucrose in healthy and diabetic subjects. Fontvieille AM, et al. **Diabetes Care** 1989 Jul–Aug;12(7):481–6

Chemosensory neuroanatomy and physiology. Frank ME, et al. **Ear Nose Throat J** 1989 Apr;68(4):291–2, 294, 296 (14 ref.)

Seasonal variation of taste threshold for sucrose in a prosimian species, Microcebus murinus. Simmen B, et al. **Folia Primatol (Basel)** 1988;51(2-3):152-7
The genetics of tasting in mice. V. Glycine and cycloheximide. Lush IE, et al. **Genet Res** 1988 Dec; 52(3):207-12
Synthesis, taste properties, and conformational analysis of four stereoisomeric cyclopropane analogs of aspartame. Mapelli C, et al. **Int J Pept Protein Res** 1988 Dec; 32(6):484-95
Pleasantness perception of salt in young vs. elderly adults. Chauhan J. **J Am Diet Assoc** 1989 Jun;89(6):834-5
Relationships between sour and salt taste perception and selected subject attributes. Chauhan J. **J Am Diet Assoc** 1989 May;89(5):652-8
Assessment of the taste interaction between two qualitatively similar-tasting substances: a comparison between comparison rules. De Graaf C, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):526-38
Attempts to train novices for beer flavor discrimination: a matter of taste. Peron RM, et al. **J Gen Psychol** 1988 Oct; 115(4):403-18
Rapid discrimination of the stimulus properties of 5-hydroxytryptamine agonists using conditioned taste aversion. Lucki I. **J Pharmacol Exp Ther** 1988 Dec; 247(3):1120-7
Taste discrimination of traditional and 'health' modified recipes. Chauhan J. **J R Soc Health** 1989 Apr;109(2):39-41
Analogue measurement of alcohol consumption: effects for task type and correspondence with self-report measurement. George WH, et al. **J Stud Alcohol** 1988 Sep; 49(5):450-5
Behavioral assessment of the toxicity of aspartame. Holder MD, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):17-26
Conditioned taste aversions as a behavioral baseline for drug discrimination learning: an assessment with phencyclidine. Mastropaolo JP, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):1-8
Attenuation and cross-attenuation in taste aversion learning in the rat: studies with ionizing radiation, lithium chloride and ethanol. Rabin BM, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):909-18
The spontaneously hypertensive rat's preference for salted foods. Bertino M, et al. **Physiol Behav** 1988;44(3):285-9
Quality specific differences in human taste detection thresholds as a function of stimulus volume. Brosvic GM, et al. **Physiol Behav** 1989 Jan;45(1):15-20
Suprathreshold sour taste intensity and pleasantness perception with age. Chauhan J, et al. **Physiol Behav** 1988; 43(5):601-7
Stressors in the learned helplessness paradigm: effects on body weight and conditioned taste aversion in rats. Dess NK, et al. **Physiol Behav** 1988;44(4-5):483-90
Sugar and fat: sensory and hedonic evaluation of liquid and solid foods. Drewnowski A, et al. **Physiol Behav** 1989 Jan; 45(1):177-83
The effect of cooling on the perception of carbohydrate and intensive sweeteners. Green BG, et al. **Physiol Behav** 1988; 43(4):515-9
Adjustment to intermittent access in rats drinking saccharin: I. Pauses in drinking. Mook DG, et al. **Physiol Behav** 1988; 44(1):21-6
Dietary hyperphagia and obesity: what causes them? Ramirez I, et al. **Physiol Behav** 1989 Jan;45(1):163-8 (90 ref.)
Overeating, overweight and obesity induced by an unpreferred diet. Ramirez I. **Physiol Behav** 1988; 43(4):501-6
Effects of water temperature and flavoring on voluntary dehydration in men. Szlyk PC, et al. **Physiol Behav** 1989 Mar;45(3):639-47
Taste-to-postingestive consequence conditioning: is the rise in sham feeding with repeated experience a learning phenomenon? Weingarten HP, et al. **Physiol Behav** 1989 Mar;45(3):471-6
Role of the CS-US interval in the US preexposure effect. Misanin JR, et al. **Psychol Rep** 1989 Apr;64(2):611-4
Infusion of gamma 2-MSH produce a conditioned taste aversion in morphine-dependent rats. Mucha RF, et al. **Psychopharmacology (Berlin)** 1989;99(1):140-2
Separate effects of cigarette smoke yield and smoke taste on smoking behavior. Nil R, et al. **Psychopharmacology (Berlin)** 1989;99(1):54-9
Palatability shift of a salt-associated incentive during sodium depletion. Berridge KC, et al. **Q J Exp Psychol [B]** 1989 May;41(2):121-38
An assessment of the behavioral toxicity of high-energy iron particles compared to other qualities of radiation. Rabin BM, et al. **Radiat Res** 1989 Jul;119(1):113-22

DRUG EFFECTS

An analysis of residual NaCl taste response after amiloride. Formaker BK, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R1002-7
Use of flavor-amplified foods to improve nutritional status in elderly patients. Schiffman SS, et al. **Ann N Y Acad Sci** 1989;561:267-76
Effect of dexfenfluramine on taste preferences and aversions in rats. Carlton J, et al. **Appetite** 1988 Jun;10(3):221-5
Chronic voluntary nicotine drinking enhances nicotine palatability in rats. Flynn FW, et al. **Behav Neurosci** 1989 Apr;103(2):356-64
Prefrontal cortex lesions differentially disrupt cocaine-reinforced conditioned place preference but not conditioned taste aversion. Isaac WL, et al. **Behav Neurosci** 1989 Apr;103(2):345-55
Conditional immunomodulation following training with cyclophosphamide. MacQueen GM, et al. **Behav Neurosci** 1989 Jun;103(3):638-47
Central mediation of naloxone-induced anorexia in the ventral tegmental area. Segall MA, et al. **Behav Neurosci** 1989 Aug;103(4):857-64
Characteristic effects of taste-compounds on the dynamic behavior of oleate-monolayer. Yoshikawa K, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):699-704
Effects of the imidazobenzodiazepine Ro 15-4513 on saccharin choice and acceptance, and on food intake, in the rat. Cooper SJ, et al. **Brain Res** 1989 Aug 7;494(1):172-6
Specific L-arginine taste receptor sites in the catfish, Ictalurus punctatus: biochemical and neurophysiological characterization. Kalinoski DL, et al. **Brain Res** 1989 May 29;488(1-2):163-73
Within-compound learning with US presentation in taste aversion. Heth CD, et al. **Can J Psychol** 1987 Dec; 41(4):501-9
Methotrexate-induced impairment of taste acuity. Duhra P, et al. **Clin Exp Dermatol** 1988 Mar;13(2):126-7
On the mechanism of action of dexfenfluramine: effect on alliesthesia and appetite motivation in lean and obese subjects. Blundell JE, et al. **Clin Neuropharmacol** 1988;11 Suppl 1:S121-34
Bitter taste responses to phenylthiocarbamide are not related to dietary goitrogen intake in human beings. Mattes R, et al. **J Am Diet Assoc** 1989 May;89(5):692-4
ACE inhibitors in hypertension: assessment of taste and smell function in clinical trials. Neil-Dwyer G, et al. **J Hum Hypertens** 1989 Jun;3 Suppl 1:169-76
Ab initio molecular electrostatic potentials of perillartine analogues: implications for sweet-taste receptor recognition. Venanzi TJ, et al. **J Med Chem** 1988 Oct; 31(10):1879-85
Taste aversion involving central opioid antagonism is potentiated in morphine-dependent rats. Mucha RF. **Life Sci** 1989;45(8):671-8
Conditioned taste aversions induced by phencyclidine and other antagonists of N-methyl-D-aspartate. Jackson A, et al. **Neuropharmacology** 1989 May;28(5):459-64
Conditioned taste aversion to injected flavor: differential effect of anesthesia on the formation of the gustatory trace and on its association with poisoning in rats. Bures J, et al. **Neurosci Lett** 1989 Apr 10;98(3):305-9
Conditioned flavor aversion induced by inhaled p-xylene in rats [published erratum appears in Neurotoxicol Teratol 1988 Nov-Dec;10(6):585] Bushnell PJ, et al. **Neurotoxicol Teratol** 1988 May-Jun;10(3):273-7
Conditioned saccharin taste aversion induced by mycotoxins in rats: lack of effect of ochratoxin A. Clark DE, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):819-21
Selective D1 and D2 dopamine agonists produce opposing effects in place conditioning but not in conditioned taste aversion learning. Hoffman DC, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):1-8
Morphine preexposure attenuates the aversive properties of opiates without preexposure to the aversive properties. Martin GM, et al. **Pharmacol Biochem Behav** 1988 Jul; 30(3):687-92
Attenuation of conditioned taste aversions by external stressors. Revusky S, et al. **Pharmacol Biochem Behav** 1989 May;33(1):219-26
The dopamine innervation of the visceral cortex mediates the aversive effects of opiates. Zito KA, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):693-9
Conditioned taste aversion produced by 2-deoxy-D-glucose in rats and hamsters. Dibattista D. **Physiol Behav** 1988; 44(2):189-92
The influence of steroid hormones on competing sexual and ingestive behavior in the male rat. Hawkins CA, et al. **Physiol Behav** 1988;44(3):291-300
Naloxone attenuation of sham feeding is modified by manipulation of sucrose concentration. Kirkham TC, et al. **Physiol Behav** 1988;44(4-5):491-4
Profile of the selective dopamine D-2 receptor agonist N-0437: its effects on palatability- and deprivation-induced feeding, and operant responding for food. Rusk IN, et al. **Physiol Behav** 1988;44(4-5):545-53
D-1 and D-2 receptor antagonists decrease corn oil sham feeding in rats. Weatherford SC, et al. **Physiol Behav** 1988; 44(4-5):569-72
Flavour aversions conditioned by dl-fenfluramine: a volume independent mechanism. Barnfield AM, et al. **Psychopharmacology (Berlin)** 1989;98(1):108-12
Conditioned taste preference produced by pairing a taste with a low dose of morphine or sufentanil. Lett BT, et al. **Psychopharmacology (Berlin)** 1989;98(2):236-9
Glucocorticoids attenuate taste aversions produced by toxins in rats. Revusky S, et al. **Psychopharmacology (Berlin)** 1988; 96(3):400-7
Toxicosis affects instrumental behaviour in rats. Meachum CL. **Q J Exp Psychol [B]** 1988 Aug;40(3):209-28
Potentiation by a novel flavour of conditioned place aversions based on both toxicosis and shock. Westbrook RF, et al. **Q J Exp Psychol [B]** 1988 Nov;40(4):305-19
Not just a matter of taste [news] Izquierdo I. **Trends Pharmacol Sci** 1989 Apr;10(4):129-30

PHYSIOLOGY

Electrogustometry of the soft palate as a topographic diagnostic method for facial paralysis. Kikuchi T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:134-8
A new gustometer for computer evaluation of taste responses in men and animals. Plattig KH, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:123-8
Area postrema and alcohol: effects of area postrema lesions on ethanol self-administration, pharmacokinetics, and ethanol-induced conditioned taste aversion. Stewart RB, et al. **Alcoholism (NY)** 1988 Oct;12(5):698-704
Postabsorptive glucose decreases excitatory effects of taste on ingestion. Bédard M, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1142-7
Swallowing reflex elicited by water and taste solutions in humans. Shingai T, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R822-6
Taste. Robust across the age span? Bartoshuk LM. **Ann N Y Acad Sci** 1989;561:65-75
Relationships between taste and smell across the adult life span. Cowart BJ. **Ann N Y Acad Sci** 1989;561:39-55
Food quality reports from noninstitutionalized aged. Stevens JC. **Ann N Y Acad Sci** 1989;561:87-93
Assessment of chemosensory functioning in aging. Subjective and objective procedures. Weiffenbach JM. **Ann N Y Acad Sci** 1989;561:56-64
The cell biology of vertebrate taste receptors. Roper SD. **Annu Rev Neurosci** 1989;12:329-53 (128 ref.)
Biochemistry of vertebrate olfaction and taste. Bruch RC, et al. **Annu Rev Nutr** 1988;8:21-42 (125 ref.)
Orosensory suppression of saccharin drinking in rat: the response, not the taste. Mook DG, et al. **Appetite** 1989 Aug; 13(1):1-13
Responses of lean and obese subjects to preloads, deprivation, and palatability. Spiegel TA, et al. **Appetite** 1989 Aug; 13(1):45-69
A comparison of the effects of tasting and chewing foods on the flow rate of whole saliva in man. Watanabe S, et al. **Arch Oral Biol** 1988;33(10):761-4
Electrical intracerebral stimulation of the area postrema on taste aversion learning. Gallo M, et al. **Behav Brain Res** 1988 Oct;30(3):289-96
Sucrose octaacetate tasting in a heterogeneous population of CFW mice. Gannon KS, et al. **Behav Genet** 1989 May; 19(3):417-31
The B6.SW bilineal congenic sucrose octaacetate (SOA)-taster mice. Whitney G, et al. **Behav Genet** 1989 May;19(3):409-16
Conditioned taste aversion induced by motion is prevented by selective vagotomy in the rat. Fox RA, et al. **Behav Neural Biol** 1988 Nov;50(3):275-84
Chronic sweet intake lowers pain thresholds without changing brain mu- or delta-opiate receptors. Holder MD, et al. **Behav Neural Biol** 1988 Nov;50(3):335-43
Odor and taste aversions conditioned in anesthetized rats. Bermudez-Rattoni F, et al. **Behav Neurosci** 1988 Oct; 102(5):726-32
Taste reactivity analysis of 6-hydroxydopamine-induced aphagia: implications for arousal and anhedonia hypotheses of dopamine function. Berridge KC, et al. **Behav Neurosci** 1989 Feb;103(1):36-45
Sodium depletion increases rats' preferences for salted food. Bertino M, et al. **Behav Neurosci** 1988 Aug;102(4):565-73
Differences in cyclophosphamide-induced suppression of cricket predation in selectively bred strains of taste-aversion prone and resistant rats. Elkins RL, et al. **Behav Neurosci** 1989 Feb;103(1):112-6
Intraoral intake and taste reactivity responses elicited by sucrose and sodium chloride in chronic decerebrate rats. Flynn FW, et al. **Behav Neurosci** 1988 Dec;102(6):934-41
Acquisition and reversal of taste/tactile discrimination after forebrain noradrenaline depletion. Jarbe TU, et al. **Behav Neurosci** 1988 Dec;102(6):925-33
Alcohol aversion generalization in rats: specific disruption of taste and odor cues with gustatory neocortex or olfactory bulb ablations. Kiefer SW, et al. **Behav Neurosci** 1988 Oct;102(5):733-9
Disruption of the connections between the mediodorsal and sulcal prefrontal cortices alters the associability of rewarding medial cortical stimulation to place and taste stimuli in rats. Robertson A, et al. **Behav Neurosci** 1989 Aug;103(4):770-8
Cryptopsychobiology: the appearance, disappearance, and reappearance of a species-typical action pattern during early development. Smotherman WP, et al. **Behav Neurosci** 1989 Apr;103(2):246-53
Taste reactivity as a dependent measure of the rapid formation of conditioned taste aversion: a tool for the neural analysis of taste-visceral associations. Spector AC, et al. **Behav Neurosci** 1988 Dec;102(6):942-52
Hormone and metabolite plasma levels after oral glucose in bulimia and healthy controls. Casper RC, et al. **Biol Psychiatry** 1988 Oct;24(6):663-74
Anaphylactic shock-induced conditioned taste aversion. II. Correlation between taste aversion and indicators of anaphylactic shock. Djurić VJ, et al. **Brain Behav Immun** 1988 Mar;2(1):24-31
Anaphylactic shock-induced conditioned taste aversion. I. Demonstration of the phenomenon by means of three modes of CS-US presentation. Marković BM, et al. **Brain Behav Immun** 1988 Mar;2(1):11-23
Fetal brain grafts induce recovery of learning deficits and

connectivity in rats with gustatory neocortex lesion. Escobar M, et al. **Brain Res** 1989 Jan 30;478(2):368–74
Characteristics of rat lateral hypothalamic neuron responses to smell and taste in emotional behavior. Nakamura K, et al. **Brain Res** 1989 Jul 3;491(1):15–32
Mechanism of the water response in frog gustation: possible significance of surface potential. Sugawara M, et al. **Brain Res** 1989 May 8;486(2):269–73
Efferent projections from the anterior nucleus of the solitary tract of the hamster. Travers JB. **Brain Res** 1988 Aug 2; 457(1):1–11
Taste effects of 'umami' substances in hamsters as studied by electrophysiological and conditioned taste aversion techniques. Yamamoto T, et al. **Brain Res** 1988 Jun 7; 451(1–2):147–62
Response properties of lateral hypothalamic neurons during ingestive behavior with special reference to licking of various taste solutions. Yamamoto T, et al. **Brain Res** 1989 Mar 6;481(2):286–97
Tolerance to morphine analgesia from brief exposure to a palatable solution. Klein SP, et al. **Brain Res Bull** 1988 Dec;21(6):963–5
Organization of GABA and GABA–transaminase containing neurons in the gustatory zone of the nucleus of the solitary tract. Lasiter PS, et al. **Brain Res Bull** 1988 Oct; 21(4):623–36
Elevated NADH–dehydrogenase activity characterizes the rostral gustatory zone of the solitary nucleus in rat. Lasiter PS, et al. **Brain Res Bull** 1989 Apr;22(4):777–81
Postnatal development of protein P–38 ('synaptophysin') immunoreactivity in pontine and medullary gustatory zones of rat. Lasiter PS, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):27–33
Selective procaine inhibition of rat chorda tympani responses to electric taste stimulation. Ninomiya Y, et al. **Comp Biochem Physiol [A]** 1989;92(2):185–8
Behavioral discrimination between glutamate and the four basic taste substances in mice. Ninomiya Y, et al. **Comp Biochem Physiol [A]** 1989;92(3):365–70
Peripheral neural basis for behavioural discrimination between glutamate and the four basic taste substances in mice. Ninomiya Y, et al. **Comp Biochem Physiol [A]** 1989; 92(3):371–6
Cross–adapted sugar responses in the mouse taste cell. Tonosaki K, et al. **Comp Biochem Physiol [A]** 1989; 92(2):181–3
Biochemical studies of taste sensation—VIII. Partial characterization of alanine–binding taste receptor sites of catfish Ictalurus punctatus using mercurials, sulfhydryl reagents, trypsin and phospholipase C. Zelson PR, et al. **Comp Biochem Physiol [B]** 1979;64(2):141–7
Effect of alcohol content on beer consumption by rats. Jones LC, et al. **Drug Alcohol Depend** 1988 Oct;22(1–2):101–4
Receptive field properties of thalamo–cortical taste relay neurons in the parvicellular part of the posteromedial ventral nucleus in rats. Ogawa H, et al. **Exp Brain Res** 1988;73(2):364–70
Phenylthiocarbamide taste sensitivity revisited: complete sorting test supports residual family resemblance. Reddy BM, et al. **Genet Epidemiol** 1989;6(3):413–21
The genetics of tasting in mice. VI. Saccharin, acesulfame, dulcin and sucrose. Lush IE. **Genet Res** 1989 Apr; 53(2):95–9
Gustatory rhinorrhoea syndrome: result of misreinnervation in leprosy. Soni NK. **Indian J Lepr** 1988 Jul;60(3):418–21
Gustatory–salivary reflex: neural activity of sympathetic and parasympathetic fibers innervating the submandibular gland of the hamster. Matsuo R, et al. **J Auton Nerv Syst** 1989 Apr;26(3):187–97
A Golgi analysis of the gustatory zone of the nucleus of the solitary tract in the adult hamster. Davis BJ, et al. **J Comp Neurol** 1988 Dec 15;278(3):388–96
Forebrain connections of the gustatory system in ictalurid catfishes. Kanwal JS, et al. **J Comp Neurol** 1988 Dec 15; 278(3):353–76
Sensory characterization of human milk. McDaniel MR, et al. **J Dairy Sci** 1989 May;72(5):1149–58
Sugar–activated ion transport in canine lingual epithelium. Implications for sugar taste transduction. Mierson S, et al. **J Gen Physiol** 1988 Jul;92(1):87–111
Distribution of ion channels on taste cells and its relationship to chemosensory transduction. Roper SD, et al. **J Membr Biol** 1989 Jul;109(1):29–39
Involvement of smell and taste in giant cell arteritis [letter] Schon F. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1594
Cross–correlation analysis of taste neuron pairs in rat solitary tract nucleus. Adachi M, et al. **J Neurophysiol** 1989 Aug; 62(2):501–9
Gustatory responsiveness of fibers in the hamster glossopharyngeal nerve. Hanamori T, et al. **J Neurophysiol** 1988 Aug;60(2):478–98
Neural coding of gustatory information in the thalamus of Macaca mulatta. Pritchard TC, et al. **J Neurophysiol** 1989 Jan;61(1):1–14
Taste responses of cortical neurons in freely ingesting rats. Yamamoto T, et al. **J Neurophysiol** 1989 Jun;61(6):1244–58
Sensory inputs from the oral region to the cerebral cortex in behaving rats: an analysis of unit responses in cortical somatosensory and taste areas during ingestive behavior. Yamamoto T, et al. **J Neurophysiol** 1988 Oct;60(4):1303–21
Minerals and vitamin–A status in relation to gustatory functions for salt in healthy female college students. Suzuki T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr; 34(2):209–22
Taste responses in the nucleus tractus solitarius of sodium–deprived rats. Jacobs KM, et al. **J Physiol (Lond)** 1988 Dec;406:393–410
Effects of dietary restriction on radial–arm maze performance and flavor memory in aged rats. Bond NW, et al. **Neurobiol Aging** 1989 Jan–Feb;10(1):27–30
Gustatory pain: a complication of carotid endarterectomy. Truax BT. **Neurology** 1989 Sep;39(9):1258–60
Mathematical modeling of the reactivity of analyzer systems during the course of adaptation. Prisnyakov VF, et al. **Neurosci Behav Physiol** 1988 Nov–Dec;18(6):474–80
Sucrose octaacetate–taster mice have more vallate taste buds than non–tasters. Miller IJ Jr, et al. **Neurosci Lett** 1989 May 22;100(1–3):271–5
Oral cavity representation at the frontal operculum of macaque monkeys. Ogawa H, et al. **Neurosci Res** 1989 Apr; 6(4):283–98
Tyrosine hydroxylase–like and dopamine beta–hydroxylase–like immunoreactivity in the gustatory zone of the nucleus of the solitary tract in the hamster: light– and electron–microscopic studies. Davis BJ, et al. **Neuroscience** 1988 Dec;27(3):949–64
Aging of the upper airway and the senses of taste and smell. Leopold DA, et al. **Otolaryngol Head Neck Surg** 1989 Apr; 100(4):287–9
Aversiveness of denatonium saccharide and quinine in grasshopper mice Onychomys leukogaster. Langley WM, et al. **Percept Mot Skills** 1989 Apr;68(2):551–7
Changes in salt taste in dialysis and their relationship to blood constituents. Shepherd R, et al. **Percept Mot Skills** 1986 Apr;62(2):343–7
Behavioral consequences of intestinal distention: aversivity and discomfort. Bardos G. **Physiol Behav** 1989 Jan; 45(1):79–85
A comparison of taste reactivity changes induced by ventromedial hypothalamic lesions and stria terminalis transections. Black RM, et al. **Physiol Behav** 1988; 44(6):699–708
Sodium chloride preference is altered in a rat model of liver disease. Deems RO, et al. **Physiol Behav** 1988;43(4):521–5
Preference threshold for NaCl solutions and sodium homeostasis in hypophysectomized rats. Fregly MJ, et al. **Physiol Behav** 1989 Apr;45(4):825–9
Olfactory and visceral projections to the nucleus of the solitary tract. Garcia–Diaz DE, et al. **Physiol Behav** 1988; 44(4–5):619–24
The sweet taste in the calf. II. Glossopharyngeal nerve responses to taste stimulation of the tongue. Hård af Segerstad CH, et al. **Physiol Behav** 1989 May;45(5):1043–7
Evidence for serotonergic modulation of sucrose sham–feeding in the gastric–fistulated rat. Neill JC, et al. **Physiol Behav** 1988;44(4–5):453–9
A theoretical model for perceived intensity in human taste and smell. II. Temporal integration and reaction times. Overbosch P, et al. **Physiol Behav** 1989 Mar;45(3):607–13
Effects of gustation and gastric loading on rapid calorie metering in rats. Prabhakar E, et al. **Physiol Behav** 1989 Apr;45(4):685–8
Electrophysiology of taste, feeding and reward in lateral hypothalamus of rabbit. Schwartzbaum JS. **Physiol Behav** 1988;44(4–5):507–26
The sweet taste in the calf. I. Chorda tympani proper nerve responses to taste stimulation of the tongue. Segerstad CH, et al. **Physiol Behav** 1989 Mar;45(3):633–8
Feeding related lateral hypothalamic neuron responses to odors depend on food deprivation in rats. Shiraishi T. **Physiol Behav** 1988;44(4–5):591–7 (48 ref.)
Taste thresholds in the elderly. Lassila V, et al. **Proc Finn Dent Soc** 1988;84(5–6):305–10
A bitter substance induces a rise in intracellular calcium in a subpopulation of rat taste cells. Akabas MH, et al. **Science** 1988 Nov 18;242(4881):1047–50
Influences of dietary sodium on functional taste receptor development: a sensitive period. Hill DL, et al. **Science** 1988 Sep 30;241(4874):1826–8
Taste transduction: a diversity of mechanisms. Kinnamon SC. **Trends Neurosci** 1988 Nov;11(11):491–6 (42 ref.)
[Factors of quantitative variation in taste sensitivity] Faurion A. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):278–80 (Eng. Abstr.) **(Fre)**
[A study on taste–sensitivity in healthy adults—relation to habit of smoking] Minohara M, et al. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):607–15 (Eng. Abstr.) **(Jpn)**
[Sensitivity of chemosensory systems of amphibia and reptiles to amino acids] Manteifel' IuB, et al. **Zh Evol Biokhim Fiziol** 1989 Mar–Apr;25(2):246–52 (30 ref.) **(Rus)**
[Ontogenetic characteristics of the acquisition and extinction of a taste aversion in dogs following damage to the dorsal area of the hippocampus] Vavilova NM, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):454–9 (Eng. Abstr.) **(Rus)**

TASTE BUDS

ANATOMY & HISTOLOGY

Variation in human taste bud density as a function of age. Miller IJ Jr. **Ann N Y Acad Sci** 1989;561:307–19

CYTOLOGY

An immunohistochemical demonstration of neuron–specific enolase in the Merkel cells of the frog taste organ. Toyoshima K, et al. **Arch Histol Cytol** 1988 Jul;51(3):295–7
Amiloride–blockable sodium currents in isolated taste receptor cells. Avenet P, et al. **J Membr Biol** 1988 Nov; 105(3):245–55

ENZYMOLOGY

Sweet tastants stimulate adenylate cyclase coupled to GTP–binding protein in rat tongue membranes. Striem BJ, et al. **Biochem J** 1989 May 15;260(1):121–6

GROWTH & DEVELOPMENT

Proliferation of taste buds in the foliate and vallate papillae of postnatal hamsters. Miller IJ Jr, et al. **Growth Dev Aging** 1988 Autumn;52(3):123–31

INNERVATION

Comparative lectin histochemical investigation of the taste buds of different vertebrates. Witt M, et al. **Acta Histochem Suppl (Jena)** 1988;36:405–8
Gustatory innervation in the rabbit: central distribution of sensory and motor components of the chorda tympani, glossopharyngeal, and superior laryngeal nerves. Hanamori T, et al. **J Comp Neurol** 1989 Apr 1;282(1):1–14
Gustatory responsiveness of fibers in the hamster glossopharyngeal nerve. Hanamori T, et al. **J Neurophysiol** 1988 Aug;60(2):478–98
The ability of gustatory stimuli to modify the cardiac sympathetic and vagus nerve activities. Yonemura K, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):85–90

METABOLISM

Immunocytochemical localizations of neuron–specific proteins in the taste bud of the guinea pig. Yoshie S, et al. **Arch Histol Cytol** 1988 Oct;51(4):379–84
Specific L–arginine taste receptor sites in the catfish, Ictalurus punctatus: biochemical and neurophysiological characterization. Kalinoski DL, et al. **Brain Res** 1989 May 29;488(1–2):163–73
Lipid characterization and 14C–acetate metabolism in catfish taste epithelium. Brand JG, et al. **Experientia** 1989 Jan 15; 45(1):77–81

PHYSIOLOGY

Electrogustometry of the soft palate as a topographic diagnostic method for facial paralysis. Kikuchi T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:134–8
Anatomy and neurophysiology of the taste system in aged animals. Mistretta CM. **Ann N Y Acad Sci** 1989;561:277–90
The cell biology of vertebrate taste receptors. Roper SD. **Annu Rev Neurosci** 1989;12:329–53 (128 ref.)
Signalling in taste receptor cells: cAMP–dependent protein kinase causes depolarization by closure of 44 pS K–channels. Avenet P, et al. **Comp Biochem Physiol [A]** 1988;90(4):681–5
Ionic basis of receptor potential of frog taste cells induced by acid stimuli. Miyamoto T, et al. **J Physiol (Lond)** 1988 Nov;405:699–711
Sucrose octaacetate–taster mice have more vallate taste buds than non–tasters. Miller IJ Jr, et al. **Neurosci Lett** 1989 May 22;100(1–3):271–5
A comparison of the effects of bilateral sections of the chorda tympani nerve and extirpation of the submaxillary and sublingual salivary glands on the eating and drinking patterns of the rat. Smith JC, et al. **Physiol Behav** 1988; 44(4–5):435–44
A bitter substance induces a rise in intracellular calcium in a subpopulation of rat taste cells. Akabas MH, et al. **Science** 1988 Nov 18;242(4881):1047–50
[The effect of taste deafferentation on the phenomenon of pre–exposure taste solutions in rats] Serova ON, et al. **Vopr Pitan** 1989 Mar–Apr;(2):42–4 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Sodium chloride preference is altered in a rat model of liver disease. Deems RO, et al. **Physiol Behav** 1988;43(4):521–5

SECRETION

Exocytotic release of neurotransmitter substances from nerve endings in the taste buds of rat circumvallate papillae. Endo Y. **Arch Histol Jpn** 1988 Dec;51(5):489–94

ULTRASTRUCTURE

Changes in soft palate taste buds of rats due to aging and zinc deficiency—scanning electron microscopic observation. Naganuma M, et al. **Auris Nasus Larynx** 1988; 15(2):117–27
Ultrastructural and histochemical localization of acetylcholinesterase in the taste bud of mouse vallate papilla. Kudoh M. **Fukushima J Med Sci** 1988 Jun; 34(1):27–44
Ultrastructure of taste cells and synapses in the mudpuppy Necturus maculosus. Delay RJ, et al. **J Comp Neurol** 1988 Nov 8;277(2):268–80

Modified endoplasmic reticulum in taste bud cells of the Japanese monkey. Toyoshima K, et al. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):205–10

Olfactory and nasal respiratory epithelia, and foliate taste buds visualized with rapid-freeze freeze-substitution and Lowicryl K11M embedding. Ultrastructural and initial cytochemical studies. Menco BP. **Scanning Microsc** 1989 Mar;3(1):257–72

TASTE DISORDERS

Taste and smell disorders: part 2. **Ear Nose Throat J** 1989 May;68(5):351–405

CHEMICALLY INDUCED

Ageusia associated with transdermal nitroglycerin. Ewing RC, et al. **Clin Pharm** 1989 Feb;8(2):146–7

[Dysgeusia during treatment with enalapril (letter)] Perronne C, et al. **Therapie** 1989 Jan–Feb;44(1):67 (Fre)

DIAGNOSIS

Assessment of patients with taste and smell disorders. Smith DV. **Acta Otolaryngol Suppl (Stockh)** 1988;458:129–33 (26 ref.)

Clinical evaluation of the sense of taste. Bartoshuk L. **Ear Nose Throat J** 1989 Apr;68(4):331–7 (38 ref.)

Initial otolaryngologic assessment of patients with taste and smell disorders. Hill DP, et al. **Ear Nose Throat J** 1989 May;68(5):362, 365–6, 368 passim

[Experiences with smell and taste studies in 798 patients] Lamprecht A, et al. **HNO** 1988 Jul;36(7):282–5 (Eng. Abstr.) (Ger)

DIET THERAPY

Nutritional management of patients with chemosensory disturbances. Duffy VB, et al. **Ear Nose Throat J** 1989 May; 68(5):395–7 (7 ref.)

ETIOLOGY

Persistent high-altitude headache and ageusia without anosmia. Kassirer MR, et al. **Arch Neurol** 1989 Mar; 46(3):340–1

Neurologic evaluation of taste and smell disorders. Barwick MC. **Ear Nose Throat J** 1989 May;68(5):354, 357, 361

Ageusia as an initial manifestation of cranial arteritis [letter] Deleu D, et al. **Ear Nose Throat J** 1988 Aug;67(8):608

Oral evaluation of patients with chemosensory disorders. Kadi J, et al. **Ear Nose Throat J** 1989 May;68(5):373, 377–8, 380 (7 ref.)

Hypergeusia as the presenting symptom of a posterior fossa lesion [letter] Noda S, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):804–5

Taste disorder from zinc deficiency after tonsillectomy. Bicknell JM, et al. **West J Med** 1988 Oct;149(4):457–60

[Gustatory function in patients with hepatitis and cirrhosis] Zhai Q, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Dec; 27(12):741–2, 782 (Eng. Abstr.) (Chi)

[Glossopharyngeal nerve neuralgia: not just a sore throat] Brekelmans GJ, et al. **Ned Tijdschr Geneeskd** 1989 Apr 8;133(14):720–3 (Eng. Abstr.) (Dut)

[Disorders of taste and smell in alcoholics undergoing detoxification therapy] Valette ML, et al. **Ann Med Psychol (Paris)** 1988 Jun;146(6):577–81 (Fre)

[Taste variations after radiotherapy of neoplasms of the pharynx and oral cavity] Barbieri M, et al. **Acta Otorhinolaryngol Ital** 1988 Jul–Aug;8(4):397–404 (Eng. Abstr.) (Ita)

GENETICS

Alternative genetic models for the inheritance of the phenylthiocarbamide taste deficiency. Olson JM, et al. **Genet Epidemiol** 1989;6(3):423–34

PHYSIOPATHOLOGY

Taste impairment and related factors in type I diabetes mellitus. Le Floch JP, et al. **Diabetes Care** 1989 Mar; 12(3):173–8

Clinical characteristics of taste and smell disorders. Scott AE. **Ear Nose Throat J** 1989 Apr;68(4):297–8, 301, 304–10 passim (25 ref.)

SURGERY

Surgical management of chemosensory disorders. Jafek BW, et al. **Ear Nose Throat J** 1989 May;68(5):398, 400, 402–4 (21 ref.)

THERAPY

Medical management of taste and smell disorders. Scott AE. **Ear Nose Throat J** 1989 May;68(5):386, 388–90, 392 (32 ref.)

TASTE THRESHOLD see under **TASTE**

TATTOOING

Laws regulating tattooing [letter] Stauter RL. **Am J Public Health** 1989 Sep;79(9):1308–9

Mascara and eyelining tattoos: MRI artifacts. Weiss RA, et al. **Ann Ophthalmol** 1989 Apr;21(4):129–31

Dermabrasion of traumatic tattoos: simple, inexpensive, effective. Horowitz J, et al. **Ann Plast Surg** 1988 Sep; 21(3):257–9

Tattooing for the management of white patches. Vadodaria SJ, et al. **Ann Plast Surg** 1989 Jul;23(1):81–3

The treatment of decorative tattoos with the carbon dioxide laser. Lanigan SW, et al. **Br J Dermatol** 1989 Jun; 120(6):819–25

Histopathological findings in blepharopigmentation (eyelid tattoo). Hurwitz JJ, et al. **Can J Ophthalmol** 1988 Oct; 23(6):267–9

Foreign body epithelioid granuloma after cosmetic eyebrow tattooing. Yang DS, et al. **Cutis** 1989 Mar;43(3):244–7

Tattoos. Lindsay DG. **Dermatol Clin** 1989 Jan;7(1):147–53

Marking the spot. Epstein E. **J Dermatol Surg Oncol** 1989 Mar;15(3):273–4

Tattoo removal with minimal scarring: the chemo-laser technique. Ruiz-Esparza J, et al. **J Dermatol Surg Oncol** 1988 Dec;14(12):1372–6

Marking the spot [letter] Wagner RF Jr. **J Dermatol Surg Oncol** 1989 Aug;15(8):882–3

Cultured composite skin grafts: biological skin equivalents permitting massive expansion. Nanchahal J, et al. **Lancet** 1989 Jul 22;2(8656):191–3

Tattooing in reconstruction of the nipple and areola: a new method. Masser MR, et al. **Plast Reconstr Surg** 1989 Oct; 84(4):677–81

Intradermal tattoo as an adjunct to nipple-areola reconstruction. Spear SL, et al. **Plast Reconstr Surg** 1989 May;83(5):907–11

[Tattooing dyes] Lehmann G, et al. **Derm Beruf Umwelt** 1988 Sep–Oct;36(5):152–6 (Eng. Abstr.) (Ger)

[Tattooing—possibilities for removal] Jaspers U, et al. **Fortschr Kiefer Gesichtschir** 1989;34:77–80 (Ger)

ADVERSE EFFECTS

Immunohistochemical studies of lymphadenosis benigna cutis occurring in a tattoo. Rijlaarsdam JU, et al. **Am J Dermatopathol** 1988 Dec;10(6):518–23

Aluminum-induced granulomas in a tattoo. McFadden N, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):903–8

Tattooing in maxillo-facial surgery. Müller H, et al. **J Craniomaxillofac Surg** 1988 Nov;16(8):382–4

Red tattoo reactions: treatment with the carbon dioxide laser. Kyanko ME, et al. **J Dermatol Surg Oncol** 1989 Jun; 15(6):652–6

Complications of blepharopigmentation. Goldberg RA, et al. **Ophthalmic Surg** 1989 Jun;20(6):420–3

Clinicopathological aspects of liver diseases associated with early history of tattooing. Iwamura K. **Tokai J Exp Clin Med** 1988 Dec;13(4–5):191–218

[Tattooing. A review with special reference to adverse side effects] Geier J, et al. **Derm Beruf Umwelt** 1989 Jan–Feb; 37(1):4–12 (49 ref.) (Eng. Abstr.) (Ger)

[Responsibilities of the public health office in monitoring tattooing establishments] Hartung M. **Off Gesundheitswes** 1988 Dec;50(12):677–9 (Eng. Abstr.) (Ger)

METHODS

[Tattoos] Stolz E, et al. **Ned Tijdschr Geneeskd** 1988 Dec 24;132(52):2380–5 (Dut)

VETERINARY

Papilloma of the ears of calves following tattooing. Studdert MJ, et al. **Aust Vet J** 1988 Dec;65(12):399

TAURINE

Photooxidation of hypotaurine to taurine in the presence of flavins. Ricci G, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Apr;35(2):143–53

ADMINISTRATION & DOSAGE

Taurine and other dietary considerations for cats [letter] Remillard RL. **J Am Vet Med Assoc** 1989 Jun 15; 194(12):1679

Taurine in pediatric nutrition: review and update. Gaull GE. **Pediatrics** 1989 Mar;83(3):433–42 (99 ref.)

Taurine supplementation of formulas [letter] Sturman JA, et al. **Pediatrics** 1989 Oct;84(4):745–6

Randomized trial of taurine supplementation for infants less than or equal to 1,300-gram birth weight: effect on auditory brainstem-evoked responses. Tyson JE, et al. **Pediatrics** 1989 Mar;83(3):406–15

[Effect of taurine on cytogenetic disorders in murine cornea caused by 9GeV proton irradiation] Vorozhtsova SV, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):86–9 (Rus)

ANALOGS & DERIVATIVES

Treatment of refractory cancer-associated hypercalcemia with aminohydroxypropylidene diphosphonate. Heaf JG, et al. **Acta Med Scand** 1988;224(3):287–8

Spatial working memory in rats: the effect of the dipeptide gamma-L-glutamyl-taurine and haloperidol. Schulz H. **Acta Physiol Hung** 1988;72(3–4):263–7

Taurine and osmoregulation. II. Administration of taurine analogues affords cerebral osmoprotection during chronic hypernatremic dehydration. Trachtman H, et al. **Am J Dis Child** 1988 Nov;142(11):1194–8

Cholinergic contractions induced by GABA-A receptor activation in the guinea-pig ileum are inhibited by alpha-chymotrypsin and potentiated by diazepam. Tonini M, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec; 296:173–83

Synthesis and channel properties of [Tau 16]gramicidin A. Roeske RW, et al. **Biochim Biophys Acta** 1989 Jul 10; 982(2):223–7

Pharmacokinetics of tauromustine in cancer patients. Phase I studies. Gunnarsson PO, et al. **Cancer Chemother Pharmacol** 1989;23(3):176–80

Anti-tumour activity of TCNU in a panel of transplantable murine colon tumours. Bibby MC, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1361–4

Phase II study of TCNU in advanced breast cancer. Dombernowsky P, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1377–8

Effects of routes of administration of TCNU on its plasma, tissue and tumour concentrations. Double JA, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1355–60

TCNU (LS 2667), a new active drug in the treatment of advanced colorectal cancer. EORTC Early Clinical Trials Group. Gundersen S, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1095–7

Phase II study of tauromustine in disseminated malignant melanoma. Nolte H, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):655–7

In vitro and in vivo responses of a panel of murine colon tumours to TCNU: a positive correlation. Phillips RM, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1365–71

Randomized phase II trial of TCNU versus mitozolomide in malignant melanoma. EORTC Early Clinical Trials Group. Smyth JF, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):755–7

Effects of chlorinated amines on endothelial and epithelial barriers in vitro and ex vivo. Shasby DM, et al. **Exp Lung Res** 1989 May;15(3):345–57

Antioxidant properties of conjugated bilirubin and biliverdin: biologically relevant scavenging of hypochlorous acid. Stocker R, et al. **Free Radic Res Commun** 1989;6(1):57–66

Inhibitory effect of taurolipids on Clostridium perfringens sialidase. Nohara-Uchida K, et al. **J Biochem (Tokyo)** 1988 May;103(5):840–2

Photooxidation of hypotaurine to taurine in the presence of flavins. Ricci G, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Apr;35(2):143–53

Analogues of taurine as stimulators and inhibitors of ATP-dependent calcium ion uptake in rat retina: combination kinetics. Lombardini JB, et al. **Mol Pharmacol** 1989 Aug;36(2):256–64

gamma-L-glutamyl-taurine (Litoralon) prevents the micronucleus formation induced by mitomycin C. Tóth S, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):85–9

Increased seizure susceptibility induced by guanidinoethane sulfonate in E1 mice and its relation to glutamatergic neurons. Hiramatsu M, et al. **Neurochem Res** 1989 Jan; 14(1):85–9

Effects of glutaurine treatment on electroshock-induced amnesia. Antiamnesic action of glutaurine. Balázs M, et al. **Neuropeptides** 1988 Aug–Sep;12(2):55–8

Effects of tauromustine, a water-soluble nitrosourea compound on NMU-1 murine lung tumor. Pratesi G, et al. **Oncology** 1989;46(2):132–5

Reinforcing and discriminative stimulus effects of Ca-acetyl homotaurine in animals. Grant KA, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):607–11

The effect of estramustine, nor-nitrogen mustard and tauromustine on macromolecular labelling in the human prostatic tumour cell line 1013L. Kruse E, et al. **Pharmacol Toxicol** 1989 Jan;64(1):9–13

ANALYSIS

Quantitative assessment of taurine-like immunoreactivity in different cell types and processes in rat cerebellum: an electronmicroscopic study based on a postembedding immunogold labelling procedure. Ottersen OP. **Anat Embryol (Berl)** 1988;178(5):407–21

Immunocytochemical localization of taurine in the mammalian retina. Lake N, et al. **Curr Eye Res** 1989 Feb; 8(2):163–73

Immunocytochemical evidence suggests that taurine is colocalized with GABA in the Purkinje cell terminals, but that the stellate cell terminals predominantly contain GABA: a light- and electronmicroscopic study of the rat cerebellum. Ottersen OP, et al. **Exp Brain Res** 1988; 72(2):407–16

HPLC analysis of the phenylisothiocyanate (PITC) derivatives of taurine from physiologic samples. Lippincott SE, et al. **J Am Coll Nutr** 1988 Dec;7(6):491–7

Reversed-phase high-performance liquid chromatography technique for taurine quantitation. Porter DW, et al. **J Chromatogr** 1988 Nov 11;454:311–6

gamma-Aminobutyric acid, glutamate, glycine and taurine analysis using reversed-phase high-performance liquid chromatography and ultraviolet detection of dansyl chloride derivatives. Saller CF, et al. **J Chromatogr** 1989 Jan 27;487(1):167–72

Is taurine a marker for retinitis pigmentosa? Benini G, et al. **Ophthalmologica** 1988;197(3):130–5

BIOSYNTHESIS

In vivo studies of cysteine metabolism. Use of D-cysteinesulfinate, a novel cysteinesulfinate decarboxylase inhibitor, to probe taurine and pyruvate synthesis. Weinstein CL, et al. **J Biol Chem** 1988 Nov 15; 263(32):16568–79

BLOOD

Changes in serum concentrations of taurine and other amino acids in clinical antihypertensive exercise therapy. Tanabe Y, et al. **Clin Exp Hypertens [A]** 1989;11(1):149–65

Antiepileptic drugs and plasma and platelet taurine in epilepsy. Goodman HO, et al. **Epilepsia** 1989 Mar–Apr; 30(2):201–7

Bile acid glycine and taurine conjugates in serum of patients with primary biliary cirrhosis: effect of ursodeoxycholic treatment. Chretien Y, et al. **Gut** 1989 Aug;30(8):1110–5

Liquid chromatographic determination of taurine in whole blood, plasma and platelets. Anderson GM, et al. **J Chromatogr** 1988 Oct 14;431(2):400–5

CHEMICAL SYNTHESIS

Application of the synthetic method to other amines. Sparkes MJ, et al. **Biochem J** 1989 May 15;260(1):296–7

Simple peptides. III. Syntheses and properties of taurine–oligopeptides containing an acidic alpha–amino acid. Ienaga K, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug; 36(8):2796–801

DEFICIENCY

Taurine deficiency myocardial failure: new evidence for old theories. Pion PD. **Cornell Vet** 1989 Jan;79(1):5–9 (32 ref.)

Taurine for cats [letter] Pion PD, et al. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1005–6

Cystine neurotoxicity is increased by taurine deficiency. Sturman JA, et al. **Neurotoxicology** 1989 Spring;10(1):15–28

Taurine deficiency as a cause of dilated cardiomyopathy in cats. Pion PD, et al. **Tijdschr Diergeneeskd** 1989 Apr;114 Suppl 1:62S–64S

Taurine deficiency syndrome in cats. Hayes KC, et al. **Vet Clin North Am Small Anim Pract** 1989 May; 19(3):403–13 (30 ref.)

Taurine depletion leads to loss of rat optic nerve axons. Lake N, et al. **Vision Res** 1988;28(10):1071–6

METABOLISM

Active transport of taurine in rabbit jejunal brush-border membrane vesicles. Miyamoto Y, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G65–72

Anion dependence of taurine transport by rat renal brush–border membrane vesicles. Zelikovic I, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F646–55

Taurine uptake by normal and cystic fibrosis fibroblasts. Thompson GN. **Biochem Cell Biol** 1988 Jul;66(7):702–6

The antioxidant action of taurine, hypotaurine and their metabolic precursors. Aruoma OI, et al. **Biochem J** 1988 Nov 15;256(1):251–5

The accumulation of cystamine and its metabolism to taurine in rat lung slices. Lewis CP, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):481–8

Taurine binding to the purified insulin receptor. Maturo J, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3755–60

Taurine and glycine conjugation and sulfation of lithocholate in primary hepatocyte cultures. Galle PR, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):250–3

A chloride-dependent component of the release of labeled GABA and taurine from the chick retina. Pasantes–Morales H, et al. **Brain Res** 1988 Aug 30;459(1):120–30

Inhibition of sodium–dependent taurine transport in red blood cells from the marine polychaete, Glycera dibranchiata, after exposure to mercury. Preston RL, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):620–7

Taurine transport across the small intestine of adult and suckling rats. Sharafuddin M, et al. **Comp Biochem Physiol [A]** 1988;91(1):33–6

Reduced uptake and release of 5–hydroxytryptamine and taurine in the cerebral cortex of epileptic El mice. Hiramatsu M, et al. **Epilepsy Res** 1987 Jan;1(1):40–5

Increased levels of amino acid neurotransmitters in the inferior colliculus of the genetically epilepsy–prone rat. Ribak CE, et al. **Epilepsy Res** 1988 Jan–Feb;2(1):9–13

Changes in taurine in aging fruit flies and mice. Massie HR, et al. **Exp Gerontol** 1989;24(1):57–65

Increased Na+–taurine symporter in rat renal brush border membranes: preformed or newly synthesized? Chesney RW, et al. **FASEB J** 1989 Jul;3(9):2081–5

Spatial distribution of glutamate, taurine and GABA in teleosts and mammals retina: in vivo and in vitro study. Lima L, et al. **Int J Dev Neurosci** 1989;7(3):295–300

Taurine uptake by isolated alveolar macrophages and type II cells. Banks MA, et al. **J Appl Physiol** 1989 Mar; 66(3):1079–86

Taurine transport across hepatocyte plasma membranes: analysis in isolated rat liver sinusoidal plasma membrane vesicles. Inoue M, et al. **J Biochem (Tokyo)** 1988 Jul; 104(1):155–8

Effects of pregnancy on the contents of water, taurine, and total amino nitrogen in rat cerebral cortex. Law RO. **J Neurochem** 1989 Jul;53(1):300–2

Release of endogenous taurine and gamma–aminobutyric acid from brain slices from the adult and developing mouse. Oja SS, et al. **J Neurochem** 1989 Apr;52(4):1018–24

Potassium–stimulated release of [3H]taurine from cultured GABAergic and glutamatergic neurons. Schousboe A, et al. **J Neurochem** 1989 Oct;53(4):1309–15

Colocalization of taurine– and cysteine sulfinic acid decarboxylase–like immunoreactivity in the cerebellum of the rat with monoclonal antibodies against taurine. Magnusson KR, et al. **J Neurosci** 1988 Dec;8(12):4551–64

Spontaneous and beta–adrenergic receptor–mediated taurine release from astroglial cells are independent of manipulations of intracellular calcium. Shain W, et al. **J Neurosci** 1989 Jul;9(7):2306–12

Effect of HEPES on the taurine uptake by cultured glial cells. Lleu PL, et al. **J Neurosci Res** 1989 May;23(1):78–86

Adenosine stimulates cAMP–mediated taurine release from LRM55 glial cells. Madelian V, et al. **J Neurosci Res** 1988; 20(2):176–81

Stimulus–coupled taurine efflux from cerebellar neuronal cultures: on the roles of Ca+ + and Na+. Philibert RA, et al. **J Neurosci Res** 1989 Feb;22(2):167–71

Adaptive decreases in amino acids (taurine in particular), creatine, and electrolytes prevent cerebral edema in chronically hyponatremic mice: rapid correction (experimental model of central pontine myelinolysis) causes dehydration and shrinkage of brain. Thurston JH, et al. **Metab Brain Dis** 1987 Dec;2(4):223–41

Changes with aging in the levels of amino acids in rat CNS structural elements. II. Taurine and small neutral amino acids. Banay–Schwartz M, et al. **Neurochem Res** 1989 Jun; 14(6):563–70

Effects of beta–alanine treatment on the taurine and DNA content of the rat heart and retina. Lake N, et al. **Neurochem Res** 1988 Oct;13(10):1003–6

K+–evoked taurine efflux from cerebellar astrocytes: on the roles of Ca2+ and Na+. Philibert RA, et al. **Neurochem Res** 1989 Jan;14(1):43–8

Brain taurine content as a function of cerebral metabolic rate: osmotic regulation of glucose derived water production. van Gelder NM. **Neurochem Res** 1989 Jun;14(6):495–7

Phorbol ester and dibutyryl cyclic AMP reduce content and efflux of taurine in primary cerebellar astrocytes in culture. Philibert RA, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):323–8

Does taurine act as an osmoregulatory substance in the rat brain? Solís JM, et al. **Neurosci Lett** 1988 Aug 15;91(1):53–8

Release of taurine from cultured cerebellar granule cells and astrocytes: co–release with glutamate. Holopainen I, et al. **Neuroscience** 1989;29(2):425–32

Release of taurine and GABA from cerebellar slices from developing and adult mice. Kontro P, et al. **Neuroscience** 1989;29(2):413–23

Ultrastructural description of taurine–like immunoreactive cells and processes in the rat hippocampus. Clements JR, et al. **Synapse** 1989;4(1):70–9

Colocalization of taurine– and cysteine sulfinic acid decarboxylase–like immunoreactivity in the hippocampus of the rat. Magnusson KR, et al. **Synapse** 1989;4(1):55–69

Synthesis of taurine– and/or acetyl group–conjugated poly(D–Glu, D–Lys) derivatives and their effects on fibrinolysis. Soeda S, et al. **Thromb Res** 1988 Oct 15; 52(2):101–10

[Familial Friedreich's ataxia (review of foreign literature)] Magalov ShI, et al. **Zh Nevropatol Psikhiatr** 1989; 89(3):136–41 (93 ref.) **(Rus)**

PHARMACOKINETICS

A study of taurine transport and absorption in placenta and neonatal intestine and kidney. Moriyama IS, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Dec;29(6):807–14

Release of taurine from astrocytes during potassium–evoked swelling. Pasantes–Morales H, et al. **GLIA** 1989;2(1):45–50

A volume–dependent, chloride–sensitive component of taurine release stimulated by potassium from retina. Domínguez L, et al. **J Neurosci Res** 1989 Mar;22(3):356–61

Spontaneous and beta–adrenergic receptor–mediated taurine release from astroglial cells do not require extracellular calcium. Martin DL, et al. **J Neurosci Res** 1989 Jun; 23(2):191–7

Volume regulation in astrocytes: a role for taurine as an osmoeffector. Pasantes Morales H, et al. **J Neurosci Res** 1988 Aug;20(4):503–9

Taurine and beta–alanine uptake in primary astrocytes differentiating in culture: effects of ions. Holopainen I. **Neurochem Res** 1988 Sep;13(9):853–8

Glial uptake system of GABA distinct from that of taurine in the bullfrog sympathetic ganglia. Tasaka J, et al. **Neurochem Res** 1989 Mar;14(3):271–7

PHARMACOLOGY

Taurine modulates platelet aggregation in cats and humans. Hayes KC, et al. **Am J Clin Nutr** 1989 Jun;49(6):1211–6

Taurine and osmoregulation. II. Administration of taurine analogues affords cerebral osmoprotection during chronic hypernatremic dehydration. Trachtman H, et al. **Am J Dis Child** 1988 Nov;142(11):1194–8

Sulfone analogues of taurine as modifiers of calcium uptake and protein phosphorylation in rat retina. Liebowitz SM, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):399–406

Taurine modulates glycine response in Xenopus oocytes injected with messenger RNA from mouse brain. Horikoshi T, et al. **Brain Res** 1988 Nov;464(3):243–6

Taurine and beta–alanine act on both GABA and glycine receptors in Xenopus oocyte injected with mouse brain messenger RNA. Horikoshi T, et al. **Brain Res** 1988 Sep; 464(2):97–105

Mechanism of the protective action of taurine against isoprenaline induced myocardial damage. Ohta H, et al. **Cardiovasc Res** 1988 Jun;22(6):407–13

Taurine: effect on myocardial relaxation. Rahimi AR, et al. **Clin Exp Pharmacol Physiol** 1989 Jan;16(1):41–7

The cardiovascular effects of centrally administered taurine in anaesthetised and conscious rats. Petty MA, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):359–64

Glycine and other amino compounds prevent chromatin precipitation at physiological ionic strength. Buche A, et al. **FEBS Lett** 1989 Apr 24;247(2):367–70

The interaction of substrate and taurine modulates the outgrowth from regenerating goldfish retinal explants. Lima L, et al. **Int J Dev Neurosci** 1989;7(4):375–82

Taurine effect on neuritic growth from goldfish retinal explants. Lima L, et al. **Int J Dev Neurosci** 1988;6(5):417–24

Influence of endogenous opiates on the hypotensive action of taurine in DOCA–salt rats. Sato Y, et al. **J Hypertens Suppl** 1988 Dec;6(4):S375–7

Protective effect of taurine on the irregular beating pattern of cultured myocardial cells induced by high and low extracellular calcium ion. Takahashi K, et al. **J Mol Cell Cardiol** 1988 May;20(5):397–403

Effect of taurine on neurotransmitter release from insect synaptosomes. Whitton PS, et al. **J Neurochem** 1988 Nov; 51(5):1356–60

Voltage–clamp analysis of taurine–induced suppression of excitatory postsynaptic potentials in frog spinal motoneurons. Yasunami T, et al. **J Neurophysiol** 1988 Oct; 60(4):1405–18

Preventive effect of taurine against acute paraquat intoxication in beagles. Izumi K, et al. **Jpn J Pharmacol** 1989 Jun;50(2):229–33

Membrane channels activated by taurine in cultured mouse spinal cord neurons. Mathers DA, et al. **Neurosci Lett** 1989 Mar 27;98(2):229–33

The effects of strychnine on neurons in cat somatosensory cortex and its interaction with the inhibitory amino acids, glycine, taurine and beta–alanine. Tremblay N, et al. **Neuroscience** 1988 Sep;26(3):745–62

Taurine and auditory system maturation. Perlman M. **Pediatrics** 1989 May;83(5):796–8

Effect of taurine on ethanol–induced sleep time in mice genetically bred for differences in ethanol sensitivity. Ferko AP, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):667–73

Enhancing effect of taurine in the rat caudate spindle. II. Effect of bilateral 6–hydroxydopamine lesions of the nigro–striatal dopamine system. Hashimoto–Kitsukawa S, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):417–23

Enhancing effect of taurine on the rat caudate spindle. I: Interaction of taurine with the nigro–striatal dopamine system. Hashimoto–Kitsukawa S, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):411–6

Effects of taurine on bleomycin–induced lung fibrosis in hamsters. Wang QJ, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):330–8

Effect of ICV taurine on the impairment of learning, convulsions and death caused by hypoxia. Malcangio M, et al. **Psychopharmacology (Berlin)** 1989;98(3):316–20

[Influence of oral taurine supplementation on the intraduodenal concentration and conjugation of bile acids in full–term newborn infants] Ghisolfi J, et al. **Presse Med** 1988 Sep 24;17(32):1621–4 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Regulation of calcium transport in drug–induced taurine–depleted hearts. Harada H, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):273–8

Further evidence in support of taurine as a mediator of synaptic transmission in the frog spinal cord. Padjen AL, et al. **Brain Res** 1989 May 29;488(1–2):288–96

Effect of taurine on the isolated retinal pigment epithelium of the frog: electrophysiologic evidence for stimulation of an apical, electrogenic Na+–K+ pump. Scharschmidt BF, et al. **J Membr Biol** 1988 Nov;106(1):71–81

Taurine in development. Sturman JA. **J Nutr** 1988 Oct; 118(10):1169–76 (124 ref.)

Taurine: an overview of its role in preventive medicine. Kendler BS. **Prev Med** 1989 Jan;18(1):79–100 (135 ref.)

Taurine in the central nervous system and the mammalian actions of taurine. Huxtable RJ. **Prog Neurobiol** 1989; 32(6):471–533 (763 ref.)

SECRETION

Inactivation of cyclic AMP–dependent taurine release from astroglia. Shain W, et al. **J Neurochem** 1989 May; 52(5):1455–60

THERAPEUTIC USE

Retardation of the development of hypertension in DOCA salt rats by taurine supplement. Inoue A, et al. **Cardiovasc Res** 1988 May;22(5):351–8

Taurine treatment of dyskinesias: an attempt. Nyland H, et al. **Eur Neurol** 1989;29(3):121–3

Failure of taurine to improve fat absorption in cystic fibrosis.

Thompson GN. **J Inherited Metab Dis** 1988;11 Suppl 2:158–60
More on taurine [letter] Tyson JE, et al. **Pediatrics** 1989 Jun; 83(6):1072–3

TOXICITY

Embryonic exposure to high taurine: a possible nutritional contribution to Friedreich's ataxia. van Gelder NM, et al. **J Neurosci Res** 1988 Jul;20(3):383–9
Intrathecal GABA, glycine, taurine or beta-alanine elicits dyskinetic movements in mice. Larson AA. **Pharmacol Biochem Behav** 1989 Feb;32(2):505–9

URINE

Urinary levels of taurine in mentally retarded children. Nalini K, et al. **J Ment Defic Res** 1989 Jun;33 (Pt 3):271–4
Urinary excretion of taurine in epilepsy. Hartley SG, et al. **Neurochem Res** 1989 Feb;14(2):149–52
Development of renal amino acid transport systems. Zelikovic I, et al. **Semin Nephrol** 1989 Mar;9(1):49–55 (38 ref.)

TAURINE CHOLATE see TAUROCHOLIC ACID

TAUROCHENODEOXYCHOLIC ACID see under CHENODEOXYCHOLIC ACID

TAUROCHOLATE see TAUROCHOLIC ACID

TAUROCHOLIC ACID

Interaction of bile salt monomer and cholesterol in the aqueous phase. Chijiiwa K, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):111–4
Acetaminophen directly protects human gastric epithelial cell monolayers against damage induced by sodium taurocholate. Romano M, et al. **Digestion** 1988;40(3):181–90
Effects of somatostatin on acute pancreatitis induced in rats by injection of taurocholate and trypsin into a temporarily closed duodenal loop. De Rai P, et al. **Int J Pancreatol** 1988 Jul;3(5):367–73

ANALOGS & DERIVATIVES

Bile acid binding proteins in hepatocellular membranes of newborn and adult rats. Identification of transport proteins with azidobenzamidotauro[14C]cholate ([14C]ABATC). Ziegler K, et al. **Biochim Biophys Acta** 1989 Apr 14; 980(2):161–8
Bile acid malabsorption demonstrated by SeHCAT in chronic diarrhoea, with special reference to the impact of cholecystectomy. Suhr O, et al. **Scand J Gastroenterol** 1988 Dec;23(10):1187–94
Comparison of maximal postprandial serum cholylglycine concentration with the retention of 75Se-homotaurocholic acid in ileal dysfunction. Karbach U, et al. **Z Gastroenterol** 1989 May;27(5):258–62
[The 75Se homotaurocholic acid test in chronic inflammatory bowel diseases] Kruis W. **Z Gastroenterol [Verh]** 1989 Jul; 24:38–9 (16 ref.) **(Ger)**

ANALYSIS

The histoautoradiographic localization of taurocholate in rat liver after bile duct ligation. Evidence for ongoing secretion and reabsorption processes. Buscher HP, et al. **J Hepatol** 1989 Mar;8(2):181–91

METABOLISM

Biliary obstruction dissipates bioelectric sinusoidal-canalicular barrier without altering taurocholate uptake. Cotting J, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G312–8
Compartmental modeling of the hepatic transport of taurocholate in the rat in vivo. Deroubaix X, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G210–20
Comparison of taurocholate accumulation in cultured hepatocytes of pig, rat and man. Kwekkeboom J, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):619–25
Effects of chlorpromazine on taurocholate transport in isolated rat hepatocytes. Stacey NH. **Biochem Pharmacol** 1988 Nov 1;37(21):4129–34
Kinetics of acylglycerol sequential hydrolysis by human milk bile salt activated lipase and effect of taurocholate as fatty acid acceptor. Wang CS, et al. **Biochemistry** 1988 Jun 28; 27(13):4834–40
Determination of the apparent functional molecular mass of the hepatocellular sodium-dependent taurocholate transporter by radiation inactivation. Elsner R, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):113–7
Taurocholate transport by basolateral plasma membrane vesicles isolated from human liver. Novak DA, et al. **Hepatology** 1989 Oct;10(4):447–53
Taurocholate transport by liver plasma membrane vesicles is not altered in cirrhotic rats. Krähenbühl S, et al. **J Hepatol** 1989 Jul;9(1):1–9
Effect of plasma protein binding on elimination of taurocholate by isolated perfused rat liver: comparison of venous equilibrium, undistributed and distributed sinusoidal, and dispersion models. Smaliwood RH, et al. **J Pharmacokinet Biopharm** 1988 Aug;16(4):377–96
Models of hepatic elimination: implications from studies of the simultaneous elimination of taurocholate and diazepam by isolated rat liver under varying conditions of binding. Ching MS, et al. **J Pharmacol Exp Ther** 1989 Sep; 250(3):1048–54
Multispecificity of Na+-dependent taurocholate uptake in basolateral (sinusoidal) rat liver plasma membrane vesicles. Zimmerli B, et al. **J Pharmacol Exp Ther** 1989 Jul; 250(1):301–8

PHARMACOKINETICS

Inhibition of taurocholate transport by cyclosporin A in cultured rat hepatocytes. Kukongviriyapan V, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):685–9

PHARMACOLOGY

Voltage-driven, taurocholate-dependent secretion in isolated hepatocyte couplets. Weinman SA, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G826–32
Down-regulation of pancreatic growth and gallbladder contractility by bile salts. Gomez G, et al. **Am J Surg** 1989 Jan;157(1):20–6
Differences in the release of cholesterol from taurocholate versus taurochenodeoxycholate micellar solutions. Chijiiwa K, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):208–13
Bile protein secretion in the rat stimulated by taurocholate: effect of chloroquine. Marinelli RA, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):749–53
DNA methylation in rat stomach and duodenum following chronic exposure to N-methyl-N'-nitro-N-nitrosoguanidine and the effect of dietary taurocholate. Kobori O, et al. **Carcinogenesis** 1988 Dec;9(12):2271–4
Effect of barrier-breaking agents on intracellular pH and epithelial membrane resistances: studies in isolated Necturus antral mucosa exposed to luminal acid. Kiviluoto T, et al. **Gastroenterology** 1989 Jun;96(6):1410–8
Taurocholate increases the biliary output of bilirubin pigments in the rat, due to haemolysis. Mesa VA, et al. **J Hepatol** 1989 Jul;9(1):10–5
Interactions between hemolytic saponins, bile salts and small intestinal mucosa in the rat. Gee JM, et al. **J Nutr** 1988 Nov;118(11):1391–7
Intestinal absorption of drugs. I: The influence of taurocholate on the absorption of dantrolene in the small intestine of the rat. Poelma FG, et al. **J Pharm Sci** 1989 Apr;78(4):285–9
Effects of chronic alcohol intake and secretory stimulation on sodium taurocholate-induced pancreatic necrosis in the rat. Grönroos JM, et al. **J Surg Res** 1989 Oct;47(4):360–4
Effects of oleic acid and bile salts on canine villous motility. Mailman D, et al. **Life Sci** 1989;45(5):455–61
[Susceptibility of the gastric mucosa to the damaging action of a bile salt in chronic chagasic rats] Troncon LE, et al. **Rev Soc Bras Med Trop** 1987 Oct-Dec;20(4):199–204 (Eng. Abstr.) **(Por)**

TOXICITY

Light microscopic quantitative investigation on the effects of prostaglandin E2 (PGE2) on the lectin binding pattern in rat gastric mucosa injured by ethanol or sodium taurocholate. Fringes B, et al. **Acta Histochem Suppl (Jena)** 1988;36:263–72
Determinants of biliary secretory pressure: the effects of two different bile acids. Cole MJ, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1303–7

TAURODEOXYCHOLIC ACID see under DEOXYCHOLIC ACID

TAUROLITHOCHOLIC ACID see under LITHOCHOLIC ACID

TAUSSIG-BING ANOMALY see DOUBLE OUTLET RIGHT VENTRICLE

TAX EQUITY AND FISCAL RESPONSIBILITY ACT see under TAXES

TAXES

Taxation—medical practitioners. Palmer PS. **Aust Fam Physician** 1976 Sep;5(8):1116, 1118
NHS: a time to choose [editorial] Smith T. **BMJ** 1989 Jan 7;298(6665):1–2
Make it too costly for people to smoke, finance minister advised. Sullivan P. **Can Med Assoc J** 1989 Mar 1; 140(5):546
Federal sales tax initiative fiscal reforms or reversals? Caro DH, et al. **Dimens Health Serv** 1989 Apr;66(3):14–7, 34
Excise tax on retirement benefits. Bedel EE. **Indiana Med** 1988 Dec;81(12):1038
Are veterinarians health professionals? [news] Brody M. **J Am Vet Med Assoc** 1989 Feb 15;194(4):460, 464
Welfare benefits may be taxable [news] Kennedy JP. **J Am Vet Med Assoc** 1989 Feb 15;194(4):450–1
Fleecing the taxpayer to develop a fire-safe cigarette [letter] Popp MJ. **JAMA** 1988 Nov 11;260(18):2664
The taxes of sin: do smokers pay their way? [letter] Rufleth P. **JAMA** 1989 Aug 18;262(7):901
"Donations" to in-vitro fertilization programmes [letter] Gerber P. **Med J Aust** 1988 Nov 7;149(9):512
Social Security financing in North America. Ballantyne HC. **Soc Secur Bull** 1989 Apr;52(4):2–13
Effects of a 7-cent tobacco tax hike. Bullock B. **Tex Med** 1989 Apr;85(4):69–70
The sin revenue enhancement or 'sin tax'. Atkinson BM. **W V Med J** 1989 Mar;85(3):102
Cigarette taxes—regressive or progressive? [letter] Leigh JP. **West J Med** 1989 Apr;150(4):467

ECONOMICS

Hospital responses to Medicare's Prospective Payment System. Zuckerman S, et al. **Bull N Y Acad Med** 1988 Jan-Feb;64(1):52–62

LEGISLATION & JURISPRUDENCE

Alcohol taxes: do the poor pay more than the rich? Ashton T, et al. **Br J Addict** 1989 Jul;84(7):759–66
Changes to watch for in the tax laws—maybe the only really certain thing in life is change.... Fulton KH. **Colo Med** 1989 May 1;86(9):152–3
Public opinion on tobacco advertising, sports sponsorships and taxation prior to the Victorian Tobacco Act, 1987. Hill D. **Community Health Stud** 1988;12(3):282–8
Politics kills indigent care 'sin' tax and lottery. Larkin H. **Hospitals** 1989 Sep 5;63(17):70, 72
Taxes and health policy: worlds apart. Robinson ML. **Hospitals** 1989 Mar 20;63(6):52–6, 58
States may tax hospitals for Medicaid expansion. Robinson ML. **Hospitals** 1989 Sep 5;63(17):20, 22
Congressmen recognize Section 89 needs overhaul. Wright G. **Indiana Med** 1989 Jun;82(6):472–3
Section 89—no relief in sight. Wright G. **Indiana Med** 1989 Jan;82(1):32–3
The shadow price of pluralism: the use of tax expenditures to subsidize hospital care in the United States. Falcone D, et al. **J Health Polit Policy Law** 1988 Winter;13(4):735–52 (39 ref.)
Gas taxes and motor vehicle fatalities. Leigh JP, et al. **J Health Polit Policy Law** 1988 Winter;13(4):723–34
Fighting cancer with cigarette taxes [news] Mahaney FX Jr. **J Natl Cancer Inst** 1989 May 10;81(10):726–8
Amend retirement plans for 1986 law changes. Health Care Group. **Pa Med** 1989 Jan;92(1):42–5

TRENDS

Data Note-15. Alcohol and tobacco tax in the European Community. Powell M. **Br J Addict** 1988 Aug;83(8):971–8

TAY-SACHS DISEASE

[Infantile gangliosidosis GM2 type B or Tay-Sachs disease] Oueslati A, et al. **Tunis Med** 1988 Nov;66(11):783–6 (15 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Pitfalls in Tay-Sachs carrier detection: physician referral patterns and patient ignorance. Shapiro DA, et al. **N Y State J Med** 1989 Jun;89(6):317–9
B1 variant of GM2 gangliosidosis in a 12-year-old patient. Goebel HH, et al. **Pediatr Res** 1989 Jan;25(1):89–93

ENZYMOLOGY

Multiple abnormal beta-hexosaminidase alpha chain mRNAs in a compound-heterozygous Ashkenazi Jewish patient with Tay-Sachs disease. Ohno K, et al. **J Biol Chem** 1988 Dec 5;263(34):18563–7
Tay-Sachs disease: B1 variant. Gordon BA, et al. **Pediatr Neurol** 1988 Jan-Feb;4(1):54–7

GENETICS

The mutation mechanism causing juvenile-onset Tay-Sachs disease among Lebanese. Hechtman P, et al. **Clin Genet** 1989 May;35(5):364–75
The major defect in Ashkenazi Jews with Tay-Sachs disease is an insertion in the gene for the alpha-chain of beta-hexosaminidase. Myerowitz R, et al. **J Biol Chem** 1988 Dec 15;263(35):18587–9
The mutations in Ashkenazi Jews with adult GM2 gangliosidosis, the adult form of Tay-Sachs disease. Navon R, et al. **Science** 1989 Mar 17;243(4897):1471–4

METABOLISM

Gangliosides in SV-40-transformed cells derived from Tay-Sachs disease fetal brain. Hoffman LM, et al. **Metab Brain Dis** 1989 Jun;4(2):87–93

TC 99M-ALBUMIN see TECHNETIUM TC 99M AGGREGATED ALBUMIN

TC 99M-ALBUMIN COLLOID see TECHNETIUM TC 99M AGGREGATED ALBUMIN

TC-99M MDP see TECHNETIUM TC 99M MEDRONATE

TC-99M SULFUR COLLOID see TECHNETIUM TC 99M SULFUR COLLOID

TCGF see INTERLEUKIN 2

TEA

see related

THEOPHYLLINE

Tea consumption and serum lipids in a Libyan population in Benghazi. Sheriff DS, et al. **Ann Clin Biochem** 1988 Nov; 25 (Pt 6):670–2

Inhibition of salivary amylase by water–soluble extracts of tea. Kashket S, et al. **Arch Oral Biol** 1988;33(11):845–6

Diaper dermatitis: another simple remedy [letter] Despard C. **Can Med Assoc J** 1988 Oct 15;139(8):706

Protection against polycyclic aromatic hydrocarbon–induced skin tumor initiation in mice by green tea polyphenols. Wang ZY, et al. **Carcinogenesis** 1989 Feb;10(2):411–5

Scavenging effect of extracts of green tea and natural antioxidants on active oxygen radicals. Zhao BL, et al. **Cell Biophys** 1989 Apr;14(2):175–85

Weekly variation in work–output of pluckers in tea gardens in northern West Bengal. Roy SK, et al. **J Biosoc Sci** 1988 Oct;20(4):485–8

Coffee and tea consumption, dietary fat intake and serum cholesterol concentration of Finnish men and women. Aro A, et al. **J Intern Med** 1989 Aug;226(2):127–32

Atropine as possible contaminant of comfrey tea [letter; comment] Awang DV, et al. **Lancet** 1989 Jul 1;2(8653):44 . **Comment on:** Lancet 1989 Apr 29;1(8644):963–4

Chromosome aberrations induced by aflatoxin B1 in rat bone marrow cells in vivo and their suppression by green tea. Ito Y, et al. **Mutat Res** 1989 Mar;222(3):253–61

Crude tea extracts decrease the mutagenic activity of N–methyl–N'–nitro–N–nitrosoguanidine in vitro and in intragastric tract of rats. Jain AK, et al. **Mutat Res** 1989 Jan;210(1):1–8

Antimutagenic activity of green tea polyphenols. Wang ZY, et al. **Mutat Res** 1989 Jul;223(3):273–85

Possible contribution of green tea drinking habits to the prevention of stroke. Sato Y, et al. **Tohoku J Exp Med** 1989 Apr;157(4):337–43

[The effect of Chinese teas on the occurrence of oesophageal tumor caused by N–nitrosomethylbenzylamine in rats] Han C, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar; 23(2):67–70 (Eng. Abstr.) **(Chi)**

[The influence of green tea upon the improvement of iron deficiency anemia with pregnancy treated by sodium ferrous citrate] Mitamura T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):688–94 (Eng. Abstr.) **(Jpn)**

[Studies on hypoglycemic constituents of Japanese tea] Shimizu M, et al. **Yakugaku Zasshi** 1988 Oct;108(10):964–70 (Eng. Abstr.) **(Jpn)**

[Status of regional hemodynamics of upper extremities in female tea leaf pickers] Chiabrishvili AG, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):48–50 **(Rus)**

[Respiratory and immunologic changes in tea workers] Zuškin E, et al. **Arh Hig Rada Toksikol** 1988 Sep; 39(3):297–305 (Eng. Abstr.) **(Ser)**

ADVERSE EFFECTS

Tea and premenstrual syndrome in the People's Republic of China. Rossignol AM, et al. **Am J Public Health** 1989 Jan;79(1):67–9

Tea consumption and cancer. Kinlen LJ, et al. **Br J Cancer** 1988 Sep;58(3):397–401

Tea asthma: response to specific and non–specific challenges. Lewis J, et al. **Br J Ind Med** 1989 May;46(5):350–1

Tea–dust induced asthma. Roberts JA, et al. **Eur Respir J** 1988 Aug;1(8):769–70

Effect of consumption of green and black tea on the level of various enzymes in rats. Ali M, et al. **Experientia** 1989 Jan 15;45(1):112–4

Comfrey herb tea and hepatic veno–occlusive disease. Ridker PM, et al. **Lancet** 1989 Mar 25;1(8639):657–8

[The role of tea consumption in dental fluorosis in Jordan] Fraysse C, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jan; 32(1):39–46 (Eng. Abstr.) **(Fre)**

ANALYSIS

Spectrophotometric determination of tannins in tea and beer samples with iron(III) and 1,10–phenanthroline as reagents. Lau OW, et al. **Analyst** 1989 May;114(5):631–3

Tea, aluminium and Alzheimer's disease [letter] Flaten TP, et al. **Food Chem Toxicol** 1988 Nov–Dec;26(11–12):959–60

Dietary aluminium and Alzheimer's disease. French P, et al. **Food Chem Toxicol** 1989 Jul;27(7):495–8

Chernobyl radioactivity in Turkish tea. Gedikoğlu A, et al. **Health Phys** 1989 Jan;56(1):97–101

Comments on internal dose resulting from drinking Turkish tea harvested in 1986 [letter] Scott LM, et al. **Health Phys** 1989 Jul;57(1):205–6

Chernobyl radioactivity in Turkish tea: a response [letter] Yule L, et al. **Health Phys** 1989 Sep;57(3):495

Caesium–137 and caesium–134 levels in soil in a tea plantation in Turkey after the Chernobyl accident. Yeşin T, et al. **Int J Rad Appl Instrum [A]** 1989;40(3):209–11

Large–volume spotting apparatus and its application to the semi–quantitative determination of organochlorine pesticides in tea. Wan H. **J Chromatogr** 1989 May 19; 469:403–5

TEACHING

Implications of time–on–task research for teachers of the hearing impaired. Daniele VA, et al. **Am Ann Deaf** 1988 Jul;133(3):207–11

Report of the Task Force on Teaching Human Genetics in North American Medical Schools. Graham JM Jr, et al. **Am J Hum Genet** 1989 Jan;44(1):161–5

Comparison of parent and teacher ratings of adaptive behavior of children with mental retardation. Foster–Gaitskell D, et al. **Am J Ment Retard** 1989 Sep; 94(2):177–81

Developing information–seeking skills in occupational therapy students. Mularski CA, et al. **Am J Occup Ther** 1989 Feb;43(2):110–4

Parent, teacher, and hospital staff evaluations of severely disturbed children. Kazdin AE, et al. **Am J Orthopsychiatry** 1988 Oct;58(4):512–23

Countertransference and supervision [letter] Weiler MA. **Am J Psychiatry** 1989 Feb;146(2):290–1

The role of the specialist in undergraduate surgical education. Snow N. **Am J Surg** 1989 May;157(5):523–7

A modified expiratory valve for teaching. Sansome AJ, et al. **Anaesthesia** 1989 May;44(5):425–7

Psychoanalysis and the acquisition of knowledge [letter] Gaughwin P. **Aust N Z J Psychiatry** 1988 Sep;22(3):232–3

Effects of gender on type A assessment with the Matthews Youth Test for Health (MYTH). Mittelmark MB, et al. **Behav Med** 1988 Fall;14(3):134–40

Responsibility of the educator. Anderson WE. **BMJ** 1989 Jun 24;298(6689):1699–701

Teaching of oral medicine, periodontology and oral surgery: students' opinions. Downer CS, et al. **Br Dent J** 1988 Dec 10;165(11):403–6

Badges of the dental profession. BDA University Teachers' and Research Workers' Group. Hancocks SA. **Br Dent J** 1989 Jan 7;166(1):30

Training the trainers. Lowndes PR, et al. **Br Dent J** 1988 Aug 20;165(4):147–9

Some vocational trainees' perceptions of the tasks of the trainer. Pendlebury ME. **Br Dent J** 1988 Dec 10; 165(11):408–9

The teaching of physics and related courses to residents in radiation oncology. Dunscombe P. **Can Assoc Radiol J** 1989 Aug;40(4):211–2

An eye on Nepal: we have much to teach, and much to learn. Spencer M. **Can Med Assoc J** 1988 Oct 15;139(8):775, 778–80

Factors involved in nurses' teaching breast self–examination. Clarke DE, et al. **Cancer Nurs** 1989 Feb;12(1):41–6

Student/teacher relations and attitudes toward mathematics before and after the transition to junior high school. Midgley C, et al. **Child Dev** 1989 Aug;60(4):981–92

Prevention of suicidal behavior in adolescents: the role and training of teachers. Mulder AM, et al. **Crisis** 1989 Apr; 10(1):36–51

The special education professional. Greer JV. **Except Child** 1988 Oct;55(2):103–5

Another perspective and some immoderate proprosals on "teacher empowerment". Greer JV. **Except Child** 1989 Jan; 55(4):294–7

Special education teacher preparation: a synthesis of four research studies. McLaughlin MJ, et al. **Except Child** 1988 Nov;55(3):215–21

Teachers' perceptions of problem behavior in general and special education. Ritter DR. **Except Child** 1989 Apr; 55(6):559–64

Is teaching and research in respiratory medicine keeping pace with the clinical needs? Jain SK. **Indian J Chest Dis Allied Sci** 1988 Jan–Mar;30(1):1–4

Attitudes of elementary, middle and high school teachers toward mainstreaming: implications for job satisfaction. Lombardo E, et al. **Int J Rehabil Res** 1987;10(4):405–10

Computerized data base of teaching conference cases. Creasy JL, et al. **Invest Radiol** 1988 Nov;23(11):866–8

Learning clinical teaching skills at the baccalaureate level. Byrne C, et al. **J Adv Nurs** 1989 Aug;14(8):678–85

Marginality and the role of the clinical teacher. Smyth T. **J Adv Nurs** 1988 Sep;13(5):621–30

Changing the school system [letter] Masters KJ. **J Am Acad Child Adolesc Psychiatry** 1989 May;28(3):458

Increasing implementation of special education instruction in mainstream preschools: direct and generalized effects of nondirective consultation. Peck CA, et al. **J Appl Behav Anal** 1989 Summer;22(2):197–210

A comparison of teacher and parent views of autism. Stone WL, et al. **J Autism Dev Disord** 1988 Sep;18(3):403–14

How good are my grades? Chambers DW. **J Dent Educ** 1988 Oct;52(10):579–83

Perceived value of mock interviews as preparation for seeking employment. Everett–Gutmann M. **J Dent Educ** 1988 Oct;52(10):571–3

The teacher simulation exercise: changes in physician teaching emphasis and strategy. The SGIM Task Force on the Medical Interview. Rost K, et al. **J Gen Intern Med** 1989 Mar–Apr;4(2):121–6

Residents' perceptions of their role as teachers. Apter A, et al. **J Med Educ** 1988 Dec;63(12):900–5

Survey of practices in evaluating teaching in U.S. medical schools, 1978 and 1986. Lancaster CJ, et al. **J Med Educ** 1988 Dec;63(12):912–4

Teaching communication and interviewing skills to medical students preparing for residency interviews. Regan–Smith MG, et al. **J Med Educ** 1988 Oct;63(10):801–3

Some reflections on learning and teaching [editorial] Benoliel JQ. **J Nurs Educ** 1988 Oct;27(8):340–1

The clinical teaching associate model: advantages and disadvantages in practice. De Voogd R, et al. **J Nurs Educ** 1989 Jun;28(6):276–7

Reality shock in the nurse educator. Locasto LW, et al. **J Nurs Educ** 1989 Feb;28(2):79–81

Nursing education component in master's programs. Oermann MH, et al. **J Nurs Educ** 1989 Jun;28(6):252–5

Wrestling with the larger picture: placing ethical behavior in clinical situations in context. Ryden MB, et al. **J Nurs Educ** 1989 Jun;28(6):271–5

Addressing challenges in nursing informatics instruction. Sinclair VG. **J Nurs Educ** 1989 Feb;28(2):82–4

Teaching geriatric nursing to registered nurses. Ziv L. **J Nurs Educ** 1989 May;28(5):234–5 (10 ref.)

The path of giants: reflections on teaching clinical medicine. Smith WO. **J Okla State Med Assoc** 1989 Feb;82(2):69–71

The teaching of palliative care within the context of an undergraduate course on death, dying, and bereavement. Morgan JD. **J Palliat Care** 1988 May;4(1–2):32–3

Institutional strategies, a key to successful curriculum change. Sellers EM, et al. **J Palliat Care** 1988 May;4(1–2):34–7

Faculty practice: unifier of nursing education and nursing service? Lambert CE Jr, et al. **J Prof Nurs** 1988 Sep–Oct; 4(5):345–55 (102 ref.)

Teacher stress and health; examination of a model. DeFrank RS, et al. **J Psychosom Res** 1989;33(1):99–109

Oral health knowledge and attitudes of elementary schoolteachers in Michigan. Lang P, et al. **J Public Health Dent** 1989 Winter;49(1):44–50

HIV infection: educational programs and policies for school personnel. Black JL, et al. **J Sch Health** 1988 Oct; 58(8):317–22

Teacher needs assessment for the educational management of children with chronic illnesses. Johnson MP, et al. **J Sch Health** 1988 Aug;58(6):232–5

Evaluation of training effects on teacher attitudes and concerns prior to implementing a human sexuality education program. Levenson–Gingiss P, et al. **J Sch Health** 1989 Apr;59(4):156–60

Inquiry mode, occupational stress, and preferred leadership style among American elementary school teachers. Kagan DM. **J Soc Psychol** 1989 Jun;129(3):297–305

Teachers, stress, and mortality [letter] Herloff B, et al. **Lancet** 1989 Jan 21;1(8630):159–60

Teachers, stress, and mortality [letter] Jackson JR. **Lancet** 1989 Feb 18;1(8634):388

The teaching of leprosy in the university. Furtado T. **Lepr Rev** 1988 Sep;59(3):259–62

Evaluation of a teaching skills improvement programme for residents. Edwards JC, et al. **Med Educ** 1988 Nov; 22(6):514–7

Learning the educator role: a course for medical students. Sobral DT. **Med Educ** 1989 Jan;23(1):70–6

Congruence between student and instructor perceptions of clinical teaching in paediatrics. Wolf FM, et al. **Med Educ** 1989 Mar;23(2):161–7

A packaged workshop for teaching critical reading of the medical literature. Alguire PC, et al. **Med Teach** 1988; 10(1):85–90

General practice through the medical students' eyes. Chan CS, et al. **Med Teach** 1987;9(4):465–71

Self–directed learning to educate medical educators, Part 2: Why do we use self–directed learning? Collins R, et al. **Med Teach** 1987;9(4):425–32

Preparing medical students to teach: an educational program using three approaches. Greenberg LW, et al. **Med Teach** 1987;9(4):409–14

Training health profession students to be effective patient teachers. Lorenz RA, et al. **Med Teach** 1987;9(4):403–8

Questionnaires in medical education. Morris JG. **Med Teach** 1987;9(4):395–402

Critical person–in–environment transitions in medical education. Quirk M, et al. **Med Teach** 1987;9(4):415–23

Practitioners and teaching [letter] Burton JF. **N Z Dent J** 1989 Jan;85(379):27

Teaching ethics in nursing curricula. Traditional and contemporary models. Fry ST. **Nurs Clin North Am** 1989 Jun;24(2):485–97 (26 ref.)

Perceptions on teaching. Gregory RL. **Perception** 1988; 17(2):143–6

School–based smoking prevention: the teacher training process. Tortu S, et al. **Prev Med** 1989 Mar;18(2):280–9

Career orientations and psychological burnout in teachers. Burke RJ, et al. **Psychol Rep** 1988 Aug;63(1):107–16

It may be lonely at the top but it's less stressful: psychological burnout in public schools. Burke RJ, et al. **Psychol Rep** 1989 Apr;64(2):615–23

Sex differences in psychological burnout in teachers. Burke RJ, et al. **Psychol Rep** 1989 Aug;65(1):55–63

Comparisons of parents', teachers', and students' perceptions of self–concept in children from one– and two–parent families. Ensink T, et al. **Psychol Rep** 1989 Aug;65(1):201–2

A factorial, reliability, and validity study of the Devereux Elementary School Behavior Rating Scale. Finkelman D, et al. **Psychol Rep** 1989 Apr;64(2):535–47

Novice home visitors teaching/learning needs. Davis JH, et al. **Public Health Nurs** 1988 Dec;5(4):214–8

Empathy and burnout in male and female helping

professionals. Williams CA. **Res Nurs Health** 1989 Jun; 12(3):169–78

The effect of social influence on cognitive development and school performance. Hartmann E, et al. **Scand J Psychol** 1989;30(1):52–63

Work-related stress in baccalaureate nurse educators. Langemo DV. **West J Nurs Res** 1988 Jun;10(3):327–34

[Student evaluation of university instruction] Mareš J. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(4):553–64 (Eng. Abstr.) (Cze)

[Should one teach false theories: a reflection on the teaching of science] Vollmer G. **Naturwissenschaften** 1989 May; 76(5):185–93 (Eng. Abstr.) (Ger)

[Psychologically conspicuous children in kindergarten: on the consultation and education of teachers] Wolfram WW. **Prax Kinderpsychol Kinderpsychiatr** 1989 Jul–Aug; 38(6):201–4 (Eng. Abstr.) (Ger)

[Factor analysis of psychoneuronal disorders in pedagogues— professional communication. Studies of the causes of psychoneuronal disorders in pedagogues—a factor analytic consideration of assessments of the supervisor and pedagogic activity] Fikentscher E, et al. **Z Gesamte Hyg** 1988 Jul;34(7):427–31 (Eng. Abstr.) (Ger)

[A practical guide for teachers in dealing with health requirements] Israel K, et al. **Z Gesamte Hyg** 1988 Nov; 34(11):650–2 (Eng. Abstr.) (Ger)

[Differences in stress of vocational education and polytechnical school teachers in teaching activities] Knothe M, et al. **Z Gesamte Hyg** 1988 Nov;34(11):644–5 (Eng. Abstr.) (Ger)

[Remarks on the contribution by B. Rudow. "Status, results and perspectives of psychological research on job satisfaction—exemplified by teaching activities"] Mikulas J. **Z Gesamte Hyg** 1989 Mar;35(3):172 (Ger)

[Status, results and perspectives of psychological research on job satisfaction—exemplified by teaching] Rudow B. **Z Gesamte Hyg** 1988 May;34(5):330–3 (Eng. Abstr.) (Ger)

[Assessing the stress tolerance of teachers by psychophysiologic laboratory studies] Scheuch K, et al. **Z Gesamte Hyg** 1988 Nov;34(11):646–7 (Eng. Abstr.) (Ger)

[Factors influencing the health status of teachers] Vogel H, et al. **Z Gesamte Hyg** 1988 Nov;34(11):642–3 (Eng. Abstr.) (Ger)

[Cultural attitudes in the comparison of alcoholic beverages: a survey on teachers of the local health unit 18 of the Veneto Region] Sartori P, et al. **Epidemiol Prev** 1988 Jun; 10(35):22–8 (Eng. Abstr.) (Ita)

[Importance of the university library for scientific research and teaching] Romano G. **Minerva Med** 1988 Sep; 79(9):797–8 (Eng. Abstr.) (Ita)

[Increased importance of teaching qualifications? Reality or only empty words?] Jensen P, et al. **Tidsskr Nor Laegeforen** 1989 Jun 20;109(17–18):1902–3 (Eng. Abstr.) (Nor)

[Perception of teachers in the educational system of the State of São Paulo on their training in the health of school children] Temporini ER. **Rev Saude Publica** 1988 Oct; 22(5):411–21 (Eng. Abstr.) (Por)

[Training of students of the pedagogical college in anti-alcoholism propaganda at school and in the family] Potashniuk RZ, et al. **Gig Sanit** 1989 Feb;(2):44–7 (Rus)

[Problems in teaching ophthalmology] Zhaboedov GD, et al. **Oftalmol Zh** 1989;(1):57–8 (Rus)

[Deontology in the teaching of pediatrics at medical institutes] Zernov NG. **Pediatriia** 1988;(11):58–61 (Rus)

[Experience in teaching military naval therapy] Sukhanova GI, et al. **Voen Med Zh** 1989 Apr;(4):33–4 (Rus)

[Aggressiveness and the teaching function] Ledesma Jimeno A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 May–Jun;17(3):153–9 (Eng. Abstr.) (Spa)

[Pedagogical training of those responsible for continuing education] Mejía de Rodas I, et al. **Educ Med Salud** 1989 Jul–Sep;23(3):283–95 (Spa)

HISTORY

Clinical teaching, past and present. Proceedings of a symposium. Leiden, August 1986. **Clio Med** 1987–88; 21(1–4):1–188

Clinical instruction in hospitals: the Boerhaavian tradition in Leyden, Edinburgh, Vienna and Pavia. Risse GB. **Clio Med** 1987–88;21(1–4):1–19

The doctor as naturalist: the idea and practice of clinical teaching and research in British policlinics 1770–1850. Tröhler U. **Clio Med** 1987–88;21(1–4):21–34

[250 years of the teaching of physiology at the Petersburg–Leningrad University] Nozdrachev AD, et al. **Fiziol Zh SSSR** 1988 Jun;74(6):886–900 (Rus)

MANPOWER

Health teams in school. A step towards primary prevention. Bergström E. **Pediatrician** 1988;15(3):137–42

[Gynecological morbidity in teachers] Dimitrov I. **Akush Ginekol (Sofiia)** 1989;28(2):42–7 (Eng. Abstr.) (Bul)

METHODS

Evaluation of clinical instructors by third-year medical students. Donnelly MB, et al. **Acad Med** 1989 Mar; 64(3):159–64

An experiment involving reading assignments in a medicine clerkship. Hering P, et al. **Acad Med** 1989 Mar;64(3):168–9

Teaching and funding nutrition instruction in family practice education. Nuhlicek DR, et al. **Acad Med** 1989 Feb; 64(2):103–4

Teaching first-year students the interpersonal recall process for patient interviews. Paniagua FA, et al. **Acad Med** 1989 Mar;64(3):170–1

Simulated job interviews as learning devices. Rangachari PK. **Acad Med** 1989 Aug;64(8):438–9

A program to teach residents humanistic skills for notifying survivors of a patient's death. Tolle SW, et al. **Acad Med** 1989 Sep;64(9):505–6

A study of student attitude toward traditional and generative models of instruction. Maroufi C. **Adolescence** 1989 Spring; 24(93):65–72

On teaching radiology to medical students: challenges for the nineties. Squire LF. **AJR** 1989 Mar;152(3):457–63

Innovations in human genetics education. Alternative methods of instruction in medical genetics. King CR. **Am J Hum Genet** 1989 Jul;45(1):182–4

Videotaped versus live instruction in demonstrating evaluation skills to occupational therapy students. Bazyk S, et al. **Am J Occup Ther** 1989 Jul;43(7):465–8

Fieldwork education: shaping a foundation for clinical reasoning. Cohn ES. **Am J Occup Ther** 1989 Apr; 43(4):240–4

Use of frog ventricle to examine mechanical and electrical activity of heart. Knight VA, et al. **Am J Physiol** 1989 Jun;256(6 Pt 3):S9–13

An agenda for research on teaching of physiology. Michael JA. **Am J Physiol** 1989 Jun;256(6 Pt 3):S14–7

Can technology replace live preparations in student laboratories? Modell HI. **Am J Physiol** 1989 Jun;256(6 Pt 3):S18–20

Evaluation of the efficacy of simulation games in traffic safety education of kindergarten children. Renaud L, et al. **Am J Public Health** 1989 Mar;79(3):307–9

Halstedian technique revisited. Innovations in teaching surgical skills. Barnes RW, et al. **Ann Surg** 1989 Jul; 210(1):118–21

Feminist pedagogy: nurturing the ethical ideal. Crowley MA. **ANS** 1989 Apr;11(3):53–61

Perioperative study for nurses. An on-site, independent study program. Rothrock JC, et al. **AORN J** 1988 Sep;48(3):490, 492–3, 495–7

Time to revamp the college training and examination [letter] Mellsop G. **Aust N Z J Psychiatry** 1989 Mar;23(1):9–10

Training parents to become better behavior managers. The need for a competency-based approach. Rickert VI, et al. **Behav Modif** 1988 Oct;12(4):475–96

Graduate education in biochemistry and molecular biology: learning by accident or by deliberate plan? Vella F. **Bioessays** 1988 Oct;9(4):132–4

A modular analog neuron-model for research and teaching. Koch UT, et al. **Biol Cybern** 1988;59(4–5):303–12

The role of closed circuit television in the teaching of operative dentistry. Smart ER, et al. **Br Dent J** 1989 Mar 25;166(6):229–34

Teacher expectations in infant school: associations with attainment and progress, curriculum coverage and classroom interaction. Blatchford P, et al. **Br J Educ Psychol** 1989 Feb;59 (Pt 1):19–30

Can log books improve the standard of doctors' training? [letter] **Br J Hosp Med** 1989 May;41(5):497

Innovation and education: unlimited potential for the teaching library. Moore M. **Bull Med Libr Assoc** 1989 Jan; 77(1):26–32

Brief communication: a simple model for teaching double-contrast examinations of the gastrointestinal tract. Munro TG. **Can Assoc Radiol J** 1989 Jun;40(3):162–3

Evaluation of an animal model for teaching fibreoptic tracheal intubation. Forbes RB, et al. **Can J Anaesth** 1989 Mar;36(2):141–4

Teacher training for medical faculty and residents. Craig JL. **Can Med Assoc J** 1988 Nov 15;139(10):949–52

At Queen's, students learn the ropes at the old house on Stuart Street. Trent B. **Can Med Assoc J** 1989 Aug 1; 141(3):241–2

The effect of brain hemisphere dominance on learning by computer assisted instruction and the traditional lecture method. Benedict SC, et al. **Comput Nurs** 1989 Jul–Aug; 7(4):152–6

Experiences with running a programme of education for diabetic children and their parents. Court S, et al. **Diabetic Med** 1989 May–Jun;6(4):366–8

Preparing presentations: how to make yours a hit (Part 2). Mitchell D, et al. **Dimens Health Serv** 1988 Oct;65(7):28–9

Preparing presentations: how to make yours a hit (Part 1). Mitchell D, et al. **Dimens Health Serv** 1988 Sep;65(6):32–4

Review of comparative studies in the instruction of students with moderate and severe handicaps. Ault MJ, et al. **Except Child** 1989 Jan;55(4):346–56 (45 ref.)

Classwide peer tutoring with mildly handicapped high school students. Maheady L, et al. **Except Child** 1988 Sep; 55(1):52–9

Effects of a taped-words treatment on reading proficiency. Shapiro ES, et al. **Except Child** 1989 Jan;55(4):321–5

Evaluation of an evaluation [letter] Gillette RD. **Fam Med** 1985 Sep–Oct;17(5):232–3

An experimental study of two methods for teaching sexual history taking skills. Liese BS, et al. **Fam Med** 1989 Jan–Feb;21(1):21–4

A self-scored medical history teaching technique. Urberg MM, et al. **Fam Med** 1988 Nov–Dec;20(6):458–60

A record-keeping format for training systemic therapists. Bernstein RM, et al. **Fam Process** 1988 Sep;27(3):339–49

The future of teaching nursing homes. Walsh MB, et al. **Geriatr Nurs (New York)** 1988 Nov–Dec;9(6):354–6

A problem-based, student-centered approach to teaching geriatrics in the classroom. Whitman N, et al. **Gerontol Geriatr Educ** 1987–88;8(1–2):101–12

The case presentation: narrative or teaching tool? [letter; comment] Cass RM. **Hosp Pract [Off]** 1989 Feb 15;24(2):22 . **Comment on:** Hosp Pract [Off] 1988 Jul 15;23(7):21, 25–6, 29

Learning clinical reasoning from examples. Kassirer JP, et al. **Hosp Pract [Off]** 1989 Mar 15;24(3):27, 32–4, 44–5

The direct access method of teaching reading and the diagnosis and remediation of reading disability. Kaliski M, et al. **Int J Neurosci** 1989 Jun;46(3–4):101–8

Nursing education at a distance: using technology to advantage in undergraduate and graduate degree programs in Alberta, Canada. Kerr JR. **Int J Nurs Stud** 1988; 25(4):301–6

The effect of education and written material on compliance of pediatric clients. Zahr LK, et al. **Int J Nurs Stud** 1989; 26(3):213–20

Diagnostic radiology. One week prelude to the clinical continuum. Edeiken-Monroe BS, et al. **Invest Radiol** 1988 Dec;23(12):945–9

Preparing teachers for the performance and evaluation of gaming-simulation in experiential learning climates. Barber P, et al. **J Adv Nurs** 1989 Feb;14(2):146–51

Strategies and conditions for teaching theoretical nursing: an international perspective. Meleis AI, et al. **J Adv Nurs** 1988 Sep;13(5):592–604

A practical approach to creative teaching: an experiment. Parfitt BA. **J Adv Nurs** 1989 Aug;14(8):665–77

A model for teaching about interdisciplinary practice in health care settings. Ivey SL, et al. **J Allied Health** 1988 Aug;17(3):189–95

Comparison of conventional and videotaped diabetic exchange lists instruction. Bethea CD, et al. **J Am Diet Assoc** 1989 Mar;89(3):405–6

Building response classes: a comparison of two procedures for teaching generalized pouring to learners with severe disabilities. Day HM, et al. **J Appl Behav Anal** 1989 Summer;22(2):223–9

Acquisition, generalization, and maintenance of question-answering skills in autistic children. Secan KE, et al. **J Appl Behav Anal** 1989 Summer;22(2):181–96

Comparison of response prompting procedures in teaching numeral identification to autistic subjects. Ault MJ, et al. **J Autism Dev Disord** 1988 Dec;18(4):627–36

Teaching clinical pharmacology: coordination with medical pharmacology courses. Lathers CM, et al. **J Clin Pharmacol** 1989 Jul;29(7):581–97 (50 ref.)

An aid for teaching periodontal suturing techniques. Hawkins CH. **J Dent Educ** 1989 Apr;53(4):253–4

A mock surgery laboratory experience in implant dentistry. Huebner GR, et al. **J Dent Educ** 1989 Aug;53(8):495

The advantages of self-study CPR. Watson RE, et al. **J Dent Educ** 1989 Feb;53(2):139–41

Is dependence on phonological information in children's reading a product of instructional approach? Johnston RS, et al. **J Exp Child Psychol** 1989 Aug;48(1):131–45

Comparison between videotape and personalized patient education for anticoagulant therapy. Stone S, et al. **J Fam Pract** 1989 Jul;29(1):55–7

Is teaching worth the risk? [letter] Pearl AJ. **J Fla Med Assoc** 1989 Feb;76(2):241–2

Bibliography of clinical teaching. Snell L. **J Gen Intern Med** 1988 Nov–Dec;3(6):611–5

Bedside case presentations: why patients like them but learners don't. Wang-Cheng RM, et al. **J Gen Intern Med** 1989 Jul–Aug;4(4):284–7

Workshops and lectures [letter] Farnsworth WE. **J Med Educ** 1988 Oct;63(10):809

A qualitative study of initial faculty tutors in a problem-based curriculum. Wilkerson L, et al. **J Med Educ** 1988 Dec; 63(12):892–9

Seminars, clinics, and laboratories on medical ignorance. Witte MH, et al. **J Med Educ** 1988 Oct;63(10):793–5

Multidisciplinary teaching in a formal medical ethics course for clinical students. Irwin WG, et al. **J Med Ethics** 1988 Sep;14(3):125–8

The importance of listening to medical students' experiences when teaching them medical ethics. Osborne LW, et al. **J Med Ethics** 1989 Mar;15(1):35–8

An experimental case-conference programme for obstetrics and gynaecology clinical students. ten Have H, et al. **J Med Ethics** 1989 Jun;15(2):94–8

Clinical teaching is more than evaluation alone! Flagler S, et al. **J Nurs Educ** 1988 Oct;27(8):342–8

Classification of teacher written comments on student assignments. Lutz EM. **J Nurs Educ** 1989 May;28(5):227–9 (15 ref.)

Literature and music: an educational strategy in psychiatric mental health nursing. Peterson LC, et al. **J Nurs Educ** 1988 Oct;27(8):374–7

Developing case situations for ethics education in nursing. Waithe ME, et al. **J Nurs Educ** 1989 Apr;28(4):175–80

Anatomy of a training seminar. Teaching and learning in Angola. Raisler J. **J Nurse Midwifery** 1989 Jan–Feb; 34(1):36–40

How do we teach pathology? The Oxford Clinical Pathology Course. Athanasou NA, et al. **J Pathol** 1988 Nov; 156(3):267–9

Concept analysis: an approach to teaching physiologic variables. Goosen GM. **J Prof Nurs** 1989 Jan–Feb;5(1):31–8

A clinical teaching project: examination of a clinical teaching model. Infante MS, et al. **J Prof Nurs** 1989 May–Jun; 5(3):132–9

Small group teaching [letter] Shaw R. **J R Coll Gen Pract** 1988 Apr;38(309):175

Interactive television teaching: a student's point of view. Salame MY. **J R Soc Med** 1989 May;82(5):292

Preactive planning and conceptions of success in elementary health education. Carter JA, et al. **J Sch Health** 1989 Jan; 59(1):13–7

Teaching the unreliability of testimonials. Lindsay GB, et al. **J Sch Health** 1988 Nov;58(9):382–3

Constructing concept maps for health instruction. Maylath NS. **J Sch Health** 1989 Aug;59(6):269–70

Privacy circles: an affective teaching technique for controversial topics. Rose–Colley M, et al. **J Sch Health** 1989 Apr;59(4):165–6

Tobacco use prevention and health facilitator effectiveness. Young RL, et al. **J Sch Health** 1988 Nov;58(9):370–3

Safety education and training of Swedish farmer–loggers. Jansson BR. **J Soc Occup Med** 1988 Winter;38(4):113–7

Multi–disciplinary, problem–based, self–directed training in occupational health. Verma DK, et al. **J Soc Occup Med** 1988 Winter;38(4):101–4

Learning theories and medical lectures: add little to little and there will be a big pile [letter] **JAMA** 1989 Sep 15; 262(11):1472

Learning theories implicit in medical school lectures. Cook RI. **JAMA** 1989 Apr 21;261(15):2244–5

Impact of a medical journal club on house–staff reading habits, knowledge, and critical appraisal skills. A randomized control trial. Linzer M, et al. **JAMA** 1988 Nov 4;260(17):2537–41

The synergistic triangle [editorial] Ross RS. **JAMA** 1989 Jun 2;261(21):3163–4

Medical grand rounds at Hopkins [editorial] Stobo JD, et al. **JAMA** 1989 Jun 2;261(21):3164

Clinical algorithms teach pediatric decisionmaking more effectively than prose. Margolis CZ, et al. **Med Care** 1989 Jun;27(6):576–92

The foam sponge as a teaching aid in the examination of the chest [letter] Benbassat J, et al. **Med Educ** 1988 Nov; 22(6):554–5

Teaching psychiatric ethics. Bloch S. **Med Educ** 1988 Nov; 22(6):550–3

Group training of general practitioners: evaluation based on participants' expectations of an educational programme. Hoftvedt BO, et al. **Med Educ** 1988 Sep;22(5):445–8

Problem–solving instruction during the clinical clerkship: description and preliminary evaluation of a programme. Lernau OZ. **Med Educ** 1989 Mar;23(2):179–83

Learning human anatomy: student preferences of methods in a Nigerian medical school. Nnodim JO. **Med Educ** 1988 Sep;22(5):412–7

A new approach to preparing students for academic medicine. Ross JM, et al. **Med Educ** 1989 May;23(3):265–9

The development and evaluation of a method of teaching liaison psychiatry to medical students. Sensky T, et al. **Med Educ** 1989 Mar;23(2):174–8

Observation as a method of learning: a useful learning experience or a waste of time? Tiberius RG, et al. **Med Educ** 1988 Jul;22(4):287–93

Teaching basic science: Dr Fox in the physiology chicken coop. Whitman N, et al. **Med Educ** 1988 Sep;22(5):393–7

Medical students, Aborigines and migrants: evaluation of a teaching programme. Copeman RC. **Med J Aust** 1989 Jan 16;150(2):84–7

Evaluation of teaching effectiveness using student performance in pre–post tests. Cariappa A, et al. **Med Teach** 1988;10(3–4):313–21

Twelve mistakes made by university lecturers. Carruthers DB. **Med Teach** 1988;10(2):165–7

Twelve tips on preparing 35 mm slides. Laidlaw JM. **Med Teach** 1987;9(4):389–93

Twelve tips for lecturers. Laidlaw JM. **Med Teach** 1988; 10(1):13–7

How to ... set up a course in objective methods of clinical practice. Lavelle SM. **Med Teach** 1989;11(1):59–73

Twelve tips for using a public address system. Leiper JM. **Med Teach** 1988;10(3–4):273–6

Graduate teaching practicum: preparation for careers in academic medicine. Markus JF, et al. **Med Teach** 1987; 9(4):479–81

The role of undergraduate project work in clinical audit in general practice. Neville RG, et al. **Med Teach** 1987; 9(4):473–7

Active, small group learning with a large group in a lecture theatre: a practical example. Schwartz PL. **Med Teach** 1989;11(1):81–6

The effectiveness of alternative instructional media in physiology practical teaching. Tan CM. **Med Teach** 1988; 10(3–4):333–44

Patient teaching for elders. Kick E. **Nurs Clin North Am** 1989 Sep;24(3):681–6

Teaching strategies in a BSN outreach program. Emerson RJ, et al. **Nurs Outlook** 1989 Jan–Feb;37(1):43–4

On improving the lecture. Herbert WN. **Obstet Gynecol** 1988 Dec;72(6):937–9

Effects of visual aids on acquisition of selected tennis skills. Miller G, et al. **Percept Mot Skills** 1988 Oct;67(2):603–6

Training versus nontraining of mothers as home reading tutors. Wilks RT, et al. **Percept Mot Skills** 1988 Aug; 67(1):135–42

Images and emotion in patient–centered clinical teaching. Plauche WC, et al. **Perspect Biol Med** 1988 Summer; 31(4):602–9

Improving physical therapy students' clinical problem–solving skills: an analytical questioning model. Slaughter DS, et al. **Phys Ther** 1989 Jun;69(6):441–7

Colored scanning electron microscopic pictures in teaching anatomy. Motta PM, et al. **Prog Clin Biol Res** 1989; 295:629–34

The radiographer's role as clinical teacher. Fauber TL. **Radiol Technol** 1989 Jul–Aug;60(6):519–23

"Just tell them what they need to know...". Hulse SF. **Radiol Technol** 1988 Sep–Oct;60(1):49–50

Instructional objectives within the cognitive domain. Hulse SF. **Radiol Technol** 1989 Jul–Aug;60(6):527–30

Teaching by lecture. Hulse SF. **Radiol Technol** 1989 Mar–Apr;60(4):335–7

Objectively speaking. Hulse SF. **Radiol Technol** 1988 Nov–Dec;60(2):147–9

Components of clinical teaching. Hulse SF. **Radiol Technol** 1989 May–Jun;60(5):434–5

Integrating values education into an allied health curriculum. Part I. McKenna A, et al. **Radiol Technol** 1989 Jul–Aug; 60(6):499–502

Establishing control by spoken words with profoundly mentally retarded individuals. Stoddard LT, et al. **Res Dev Disabil** 1989;10(2):141–51

Teaching effective communication on ward rounds. van der Merwe N. **S Afr Med J** 1989 Jul 15;76(2):47

Application of the drawing paper method on clinical teaching of nursing. Maruyama M. **Sangyo Ika Daigaku Zasshi** 1988 Dec 1;10(4):365–71

Success of didactic gastroenterology teaching for postgraduate medical residents. Terry SI, et al. **West Indian Med J** 1989 Jun;38(2):71–4

The newspaper as a tool for introducing research. Coppens NM. **West J Nurs Res** 1988 Oct;10(5):677–9

Strategies for teaching nursing research. Even in research, the medium is the message. Fawdry MK, et al. **West J Nurs Res** 1989 Aug;11(4):502–5

Strategies for teaching nursing research. The critique. Feldman HR. **West J Nurs Res** 1988 Aug;10(4):515–8

Strategies for teaching nursing research. Role–play to simulate application of research findings. Levin RF. **West J Nurs Res** 1988 Dec;10(6):782–5

Visual estimation accuracy. Moss JR, et al. **West J Nurs Res** 1989 Jun;11(3):352–60

Strategies for teaching nursing research. Writing to learn nursing research. Sorrell J. **West J Nurs Res** 1988 Aug; 10(4):510–4

How to make manuals for health workers. Dowling MA. **World Health Forum** 1988;9(3):414–9

[Systematic competency training as preparation for clerkship] Metz JC, et al. **Ned Tijdschr Geneeskd** 1989 Mar 18; 133(11):561–4 (Dut)

[Comments on the didactics of infectious diseases] Caban J, et al. **Przegl Epidemiol** 1988;42(4):414–6 (Pol)

[Continuity in the teaching of the sensory organs at departments of anatomy, histology, and physiology] Kapinosov IK. **Arkh Anat Gistol Embriol** 1988 Jun; 94(6):90–2 (Rus)

[Active methods of teaching histology to students] Kimbarovskaia EM, et al. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):97–9 (Rus)

[Round table discussion: One of the effective forms for advanced training of teachers] Klishov AA, et al. **Arkh Anat Gistol Embriol** 1989 May;96(5):83–5 (Rus)

[Experience using clinical games in training in clinical surgery] Tsukanov IuT. **Khirurgiia (Mosk)** 1989 Jun;(6):5–8 (Eng. Abstr.) (Rus)

[Optimization of the teaching of practical skills to students at a department of surgical diseases] Gredzhev AF, et al. **Klin Khir** 1988;(11):40–1 (Rus)

[Independent student work at surgery departments] Kharaberiush VA, et al. **Klin Khir** 1988;(10):51–3 (Rus)

[Teaching surgery at a stomatologic faculty] Vavrik ZhM, et al. **Klin Khir** 1988;(11):41–3 (Rus)

[Experience with teaching clinical electrocardiography at postgraduate training courses] Arleevskii IP, et al. **Klin Med (Mosk)** 1989 May;67(5):141–2 (Rus)

[Teaching nephrology at postgraduate courses for the head and leading therapists] Burtsev VI, et al. **Klin Med (Mosk)** 1989 May;67(5):142–4 (Rus)

[Comprehensive teaching of radiodiagnosis in a medical institute] Sapozhkova LP, et al. **Med Radiol (Mosk)** 1988 Oct;33(10):20–4 (Rus)

[Mathematical analysis of the results of academic experiments in practical exercises on pathological physiology] Zviagintsev NF. **Patol Fiziol Eksp Ter** 1988 Sep–Oct; (5):80–2 (Eng. Abstr.) (Rus)

[Experience of teaching in a topical lecture series on gastroenterology in childhood] Aleksandrova NI, et al. **Pediatriia** 1988;(11):65–7 (Rus)

[Interdisciplinary approach to the instruction of students in pediatrics] Alferov VP, et al. **Pediatriia** 1988;(11):61–5 (Rus)

[Practical clinical role–playing at medical institutes] Deshchekina MF, et al. **Pediatriia** 1989;(3):69–72 (Rus)

[Problem of postgraduate training of phthisiologists] Kucher VA. **Probl Tuberk** 1989;(4):15–9 (Eng. Abstr.) (Rus)

[The history of medicine science during the period of perestroika] Georgievskii AS, et al. **Sov Zdravookhr** 1989; (4):62–4 (Rus)

[Organization of the extracurricular training of students in a department of social hygiene and public health organization] Miniaev VA, et al. **Sov Zdravookhr** 1988; (7):48–50 (Rus)

[Systematic approach to the structure of training and improving the qualifications of public health administrators] Murav'ev MV. **Sov Zdravookhr** 1989; (4):54–7 (Rus)

[Experience with the methodologic guidance of intern training in pediatric dentistry] Mel'nichenko EM, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):85 (Rus)

[The teaching of the section on maxillofacial neoplasms at a dentistry department] Neustroev VV, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):86 (Rus)

[Intensification of the instruction and the development of the creative activities of students in a department of oral surgery] Pantiukhin AI, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):86–7 (Rus)

[Experience in conducting a practical exercise utilizing outlines of the orientational basis of action and situational tasks] Robustova TG, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):82–4 (Rus)

[Use of an automated teaching system in the postgraduate training of therapists] Iakovlev GM, et al. **Vestn Akad Med Nauk SSSR** 1988;(8):79–83 (Eng. Abstr.) (Rus)

[Professional orientation in the teaching of social and political disciplines at the military medicine department] Arenko VA, et al. **Voen Med Zh** 1988 Aug;(8):16–9 (Rus)

[Teaching the problems of organizing treatment and prevention work in the troop unit] Osipov NA, et al. **Voen Med Zh** 1988 Aug;(8):14–6 (Rus)

[A method for conducting exercises in the basics of organizing epidemic control measures in a troop unit] Podkorytov IuA, et al. **Voen Med Zh** 1988 Oct;(10):27 (Rus)

[Problems in the teaching of physiotherapy and health resort medicine to physicians] Ulashchik VS. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr;(2):1–5 (Rus)

[Methodological aspects of the teaching of epidemiology] Siniak KM, et al. **Vrach Delo** 1988 Aug;(8):112–4 (Rus)

[Let us improve the training of physicians with an epidemiological profile] Chernenko VD, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):104–5 (Rus)

[Experience in the teaching of selected questions of applied immunology to students of a department of physician advanced training] Sokhin AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):101–4 (Rus)

[Model of a program of clinical investigation at the first level of medical care] Herrero–Ricaño R, et al. **Salud Publica Mex** 1989 Jan–Feb;31(1):117–23 (Eng. Abstr.) (Spa)

[Problem–based clinical learning] Westman G. **Lakartidningen** 1989 May 3;86(18):1664–6 (Swe)

[Guidance—a clinical teaching form] Westman G. **Lakartidningen** 1989 Apr 26;86(17):1562, 1567 (Swe)

STANDARDS

The regulation of hospital–based medical education [editorial] Miller RL. **Acad Med** 1989 Apr;64(4):197

Residents' hours and supervision. Petersdorf RG, et al. **Acad Med** 1989 Apr;64(4):175–81

Teaching effectiveness analysis plan applied to lectures in medical physiology. Casteel CP, et al. **Am J Physiol** 1989 Jun;256(6 Pt 3):S3–8

Health care delivery: not conducive to teaching palliative care. Benoliel JQ. **J Palliat Care** 1988 May;4(1–2):41–2

Why not base clinical education in general practice? Oswald N. **Lancet** 1989 Jul 15;2(8655):148–9

An audit of clinical teaching: an approach to one performance indicator of educational competence. Castleden WM. **Med Educ** 1988 Sep;22(5):435–7

Inter–rater variability in an advanced cardiac life support course: a case study. Swanson R, et al. **Med Teach** 1987; 9(4):447–9

[The training of anesthesiologists in Europe. The teaching programs] Gemperle M. **Cah Anesthesiol** 1988 Sep; 36(5):401–2 (Fre)

[Physiologic, hygienic and pedagogic aspects of the use of computers in the process of improving the qualifications of specialists in vocational training] Zbarovskii VS, et al. **Gig Sanit** 1989 Apr;(4):12–4 (Rus)

[A method of evaluating the effectiveness of advanced training courses for phthisiologists] Borisova NK, et al. **Probl Tuberk** 1989;(4):13–5 (Eng. Abstr.) (Rus)

[Activities of the organizational–methodologic council with regard to controlling the quality of the training of physicians] Shendrik IuG. **Sov Zdravookhr** 1989;(1):59–62 (Eng. Abstr.) (Rus)

[Evaluation of the work of the teacher] Frolov SS. **Voen Med Zh** 1988 Aug;(8):19–22 **(Rus)**

[Irregular–staff school for health instructors—a new form of training youth for military service] Vlasenko VF, et al. **Voen Med Zh** 1988 Aug;(8):24–5 **(Rus)**

[Improvement in the military medical training of students (we discuss the problems of teaching military field surgery and military field therapy in the medical institute)] Zybov AM. **Voen Med Zh** 1988 Jun;(6):23–4 **(Rus)**

[Objectives of improving the system of teaching children with various forms of intellectual impairment] Kovalev VV, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):43–7 (Eng. Abstr.) **(Rus)**

TRENDS

The dental education experience: seniors see a marked improvement. Solomon ES. **J Dent Educ** 1989 Sep; 53(9):552–5

[Teaching–learning. The reform of the study plan and new didactic modalities] Calcagnini G, et al. **Minerva Med** 1989 Jan;80(1):1–4 **(Ita)**

[The main trends of perestroika in the teaching of forensic medicine at medical education institutions] Gromov AP. **Sud Med Ekspert** 1988 Oct–Dec;31(4):37–41 **(Rus)**

[Perestroika in the teaching of dermatology and venereology at medical institutes] Il'in II, et al. **Vestn Dermatol Venerol** 1988;(8):4–6 (Eng. Abstr.) **(Rus)**

[The past and future (editorial)] Pasqualini RQ. **Medicina (B Aires)** 1987;47(5):546–8 **(Spa)**

TEACHING MATERIALS

Video filming and pollution measurement as a teaching aid in reducing exposure to airborne pollutants. Rosén G, et al. **Ann Occup Hyg** 1989;33(1):137–44

Halstedian technique revisited. Innovations in teaching surgical skills. Barnes RW, et al. **Ann Surg** 1989 Jul; 210(1):118–21

Cardiac arrest card: a new idea for teaching CPR [letter] Chikhani CG, et al. **Arch Emerg Med** 1988 Dec;5(4):248–50

A training module on health leadership development. **Asia Pac J Public Health** 1988;2(3):202

Problem–solving model in radiology for medical students. Blane CE, et al. **Australas Radiol** 1989 May;33(2):173–4

Pictorial fetal movement charts in a multiracial antenatal clinic. Shafi MI, et al. **BMJ** 1989 Jun 24;298(6689):1688

A simple teaching model for mucoperiosteal flaps and suturing techniques. Anwar M, et al. **Br Dent J** 1989 Jan 21;166(2):38

Phantoms in Wrexham. Parkhouse RC. **Br Dent J** 1988 Nov 5;165(9):316

Training aids for instruction in the initial management of injury casualties and in resuscitation procedures. Klausner JM, et al. **Injury** 1987 Mar;18(2):139–41

Fabrication of a teaching aid for dental soft tissue management and suturing. Meyer RD, et al. **J Am Dent Assoc** 1989 Mar;118(3):345–6

A strategy for designing effective patient education materials. McCabe BJ, et al. **J Am Diet Assoc** 1989 Sep;89(9):1290–2, 1295

Repeated readings using audiotaped material enhances oral reading in children with reading difficulties. Conte R, et al. **J Commun Disord** 1989 Feb;22(1):65–79

An aid for teaching periodontal suturing techniques. Hawkins CH. **J Dent Educ** 1989 Apr;53(4):253–4

The Arkansas Family Life Education Project: the training component. Hart SJ, et al. **J Sch Health** 1988 Aug; 58(6):249–50

The Open University pack on coronary heart disease: reactions of Welsh general practitioners. Pill R, et al. **Med Educ** 1988 Nov;22(6):543–9

Student handbook revised [letter] McArthur JE. **N Z Med J** 1989 Mar 22;102(864):140

A simple analogue teaching device for demonstrating visual–receptive–field properties. Moulden B, et al. **Perception** 1988;17(6):819–25

Assessing the need for instructional media support materials. Watkins GL. **Radiol Technol** 1989 Jan–Feb;60(3):237–9

[The importance of technical teaching aids in optimizing the academic process] Pakhunov OF, et al. **Voen Med Zh** 1988 Oct;(10):26–7 **(Rus)**

[The use of an expert consultative testing system in the medical education process] Baran LN, et al. **Vrach Delo** 1989 Jun;(6):121–3 **(Rus)**

[General medicine video–magazines are a complement to traditional teaching materials] Hey M. **Lakartidningen** 1988 Sep 7;85(36):2873–4 **(Swe)**

METHODS

Pictures for the developing world [letter] Gibson T. **Lancet** 1988 Oct 15;2(8616):909

STANDARDS

Creating community resource pamphlets. Giarratano S, et al. **J Sch Health** 1988 Dec;58(10):417–8

SUPPLY & DISTRIBUTION

The availability of educational and training materials on men's reproductive health. Forrest KA, et al. **Fam Plann Perspect** 1989 May–Jun;21(3):120–2 (5 ref.)

TEAR GASES

Physicians with Georgia on their minds [news] Goldsmith MF. **JAMA** 1989 Aug 4;262(5):603–4

ADVERSE EFFECTS

Tear gas—harassing agent or toxic chemical weapon? Hu H, et al. **JAMA** 1989 Aug 4;262(5):660–3 (48 ref.)

[CS tear gas spray as an injurious agent. Clinical aspects] Petersen KK, et al. **Ugeskr Laeger** 1989 May 29; 151(22):1388–9 (Eng. Abstr.) **(Dan)**

TEARS

Occult haemolacria in Eskimos. Norn M. **Arctic Med Res** 1988 Apr;47(2):89–91

An unusual complication of anticoagulant therapy: bloody tears. Kleis W, et al. **Bol Asoc Med P R** 1989 Jul;81(7):275–6

Biomicroscopy of the tear film: the tear film of the pekingese dog. Carrington SD, et al. **Vet Rec** 1989 Apr 1; 124(13):323–8

[Permanent wear rigid gas–permeable contact lenses. The value of current tests of the tear factor in the prediction of lens coating. Apropos of 50 cases] Laroche JM, et al. **Ophtalmologie** 1988 Jan–Mar;2(1):57–61 (Eng. Abstr.) **(Fre)**

ANALYSIS

Tear urea nitrogen and creatinine levels in renal patients. Kang J, et al. **Acta Ophthalmol (Copenh)** 1988 Aug; 66(4):407–12

Tear stix tests for leucocyte–esterase, nitrite, haemoglobin, and albumin in normals and in a clinical series. Norn M. **Acta Ophthalmol (Copenh)** 1989 Apr;67(2):192–8

Elevation of tear fluid plasmin in corneal disease. Tervo T, et al. **Acta Ophthalmol (Copenh)** 1988 Aug;66(4):393–9

Genetic polymorphism of tear proteins in the rat. Kondo Y, et al. **Biochem Genet** 1988 Dec;26(11–12):683–91

Effect of punctal occlusion by Freeman silicone plug insertion on tear osmolarity in dry eye disorders. Gilbard JP, et al. **CLAO J** 1989 Jul–Sep;15(3):216–8

Tear lysozyme and lactoferrin levels in giant papillary conjunctivitis and vernal conjunctivitis. Rapacz P, et al. **CLAO J** 1988 Oct–Dec;14(4):207–9

Electrolyte composition of lacrimal gland fluid and tears of normal and vitamin A–deficient rabbits. Rismondo V, et al. **CLAO J** 1989 Jul–Sep;15(3):222–8

Gel electrophoresis of human tears reveals various forms of tear lactoferrin. Kijlstra A, et al. **Curr Eye Res** 1989 Jun; 8(6):581–8

Tear film stability and tear surface tension. Tiffany JM, et al. **Curr Eye Res** 1989 May;8(5):507–15

Contact lens wear is associated with the appearance of plasmin in the tear fluid—preliminary results. Tervo T, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):42–4

Epidermal growth factor is a constant component of normal human tear fluid. van Setten GB, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(2):184–7

Cornea thickness and tear glucose levels in diabetes mellitus and normal persons. Desai BM, et al. **Indian J Ophthalmol** 1987;35(5–6):130–2

Evaluation of precorneal tear film in leprosy. Lamba PA, et al. **Indian J Ophthalmol** 1987;35(5–6):125–9

Alpha–1 antitrypsin and serum albumin levels in tear fluid of healthy subjects and in persons with conjunctival diseases. Sen DK, et al. **Indian J Ophthalmol** 1988 Jan–Mar; 36(1):22–6

Electrophoresis combined with immunologic identification of human tear proteins. Coyle PK, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1872–8

IgG and IgA antibody in tears of rabbits immunized by topical application of ovalbumin. Hall JM, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):138–44

Presence of epidermal growth factor in human tears. Ohashi Y, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1879–82

Effects of ocular inflammation on tear proteins. I. Thiol protease inhibitors. Davis WL, et al. **J Ocul Pharmacol** 1986 Winter;2(1):31–40

Colloid osmotic pressure of artificial tears. Holly FJ, et al. **J Ocul Pharmacol** 1985 Winter;1(4):327–36

The significance of tear film break–up time in the diagnosis of dry eye syndrome. Lee JH, et al. **Korean J Ophthalmol** 1988 Dec;2(2):69–71

A non–invasive method of blood glucose evaluation by tear glucose measurement, for the detection and control of diabetic states. Romano A, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):78–80

Lysosomal enzyme activities in ocular tissues and adnexa of rabbits. Yamaguchi K, et al. **Ophthalmic Res** 1989; 21(3):187–90

Tear mucus crystallization in children with cystic fibrosis. Rolando M, et al. **Ophthalmologica** 1988;197(4):202–6

An instrument for in vivo tear film interferometry. Doane MG. **Optom Vis Sci** 1989 Jun;66(6):383–8

Levels of erythromycin in tear fluid and serum in infants with conjunctivitis. Sandström I, et al. **Scand J Infect Dis** 1988;20(4):429–33

A simple test for detecting CSF [letter] Ackerman WE, et al. **South Med J** 1989 Jan;82(1):94

[Passage of proteins through the hemato–lacrimal barrier] Batellier L, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):111–3 (Eng. Abstr.) **(Fre)**

[Crystallization of the tears of trachoma patients] Hussein FA, et al. **Ophtalmologie** 1988 Jul–Sep;2(3):255–6 (Eng. Abstr.) **(Fre)**

[Electrophoresis of lacrimal proteins and immunoglobulins in Egyptian patients with trachoma] Sabry N, et al. **Ophtalmologie** 1988 Oct;2(4):349–51 (Eng. Abstr.) **(Fre)**

[Estimation of corneoconjunctival damage due to topical ophthalmic agents by biochemical analysis of tear fluid] Hiraki S, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep; 92(9):1553–64 (Eng. Abstr.) **(Jpn)**

[The effect of the method of collecting lacrimal fluid on its composition] Terekhina NA, et al. **Lab Delo** 1989;(6):27–30 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Observation of two structures of the tear film lipid layer. Forst G. **Ophthalmic Physiol Opt** 1988;8(2):190–2

CYTOLOGY

Cell content of tears following overnight wear of a contact lens. Wilson G, et al. **Curr Eye Res** 1989 Apr;8(4):329–35

Immune–reactive cells in multiple sclerosis mucosal secretions. Coyle PK, et al. **Neurology** 1989 Mar; 39(3):378–80

DRUG EFFECTS

Tear secretion and lacrimal gland function of rabbits treated with isotretinoin. Rismondo V, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):280–5

ENZYMOLOGY

Activity of the gamma–glutamyltransferase, leucine aminopeptidase and alkaline phosphatase enzymes in human tear fluid. Calderón de la Barca Gázquez JM, et al. **Enzyme** 1989;41(2):116–9

Fibrinolytic activity in human tears [letter] van Haeringen NJ, et al. **Exp Eye Res** 1989 Mar;48(3):461–4

Improvement of tear lysosomal enzyme levels after treatment with bone marrow transplantation in a patient with I–cell disease. Yamaguchi K, et al. **Ophthalmic Res** 1989; 21(3):226–9

[Content of LDH isoenzyme and immunoglobulin in tears of patients with epidemic hemorrhagic conjunctivitis] Chen DN. **Chung Hua Yen Ko Tsa Chih** 1988 Sep;24(5):277–8 (Eng. Abstr.) **(Chi)**

[Infectious conjunctivitis. The tear leukocyte esterase reaction (TLE) as a diagnostic aid] Norn MS. **Ugeskr Laeger** 1989 Mar 13;151(11):697–8 (Eng. Abstr.) **(Dan)**

[The peroxidase content of human tears] Buchberger W, et al. **Fortschr Ophthalmol** 1989;86(2):164–6 (Eng. Abstr.) **(Ger)**

[The prediction of relapses of herpetic keratitis by determining dehydrogenase activity in the lacrimal fluid] Terekhina NA, et al. **Vestn Oftalmol** 1988 Nov–Dec; 104(6):42–5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Tear film flow and stability in seropositive patients of rheumatoid arthritis. Khurana AK, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):705–8

The measurement of IgE in tear fluid: a comparison of collection by sponge or capillary. Tuft SJ, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):301–5

The effect of Harderian adenectomy on the antibody response in chickens. Montgomery RD, et al. **Avian Dis** 1989 Jul–Sep;33(3):392–400

The ocular secretory immune system: a review. Franklin RM. **Curr Eye Res** 1989 Jun;8(6):599–606 (63 ref.)

Harderian gland dependency of immunoglobulin A production in the lacrimal fluid of chicken. Baba T, et al. **Immunology** 1988 Sep;65(1):67–71

Viral antibodies in normal tears. Coyle PK, et al. **Invest Ophthalmol Vis Sci** 1988 Oct;29(10):1552–8

[Immunological approach to vernal keratoconjunctivitis] Li Q. **Chung Hua Yen Ko Tsa Chih** 1988 Mar;24(2):94–7 (Eng. Abstr.) **(Chi)**

[Immunoglobulins and complement C3 in tears in Mooren's ulcer] Qu X. **Chung Hua Yen Ko Tsa Chih** 1988 Mar; 24(2):91–3 (Eng. Abstr.) **(Chi)**

[Characteristics of local immunity in newborn infants] Chernyshov VP, et al. **Pediatriia** 1989;(6):20–4 (Eng. Abstr.) **(Rus)**

METABOLISM

Noninvasive estimation of blood alcohol concentrations by eye vapor analysis using an electrochemical fuel cell detector. Giles HG, et al. **Alcoholism (N Y)** 1989 Jun; 13(3):461–4

Tear pH, air pollution, and contact lenses. Andrés S, et al. **Am J Optom Physiol Opt** 1988 Aug;65(8):627–31

Tonicity of human tear fluid sampled from the cul–de–sac. Benjamin WJ, et al. **Br J Ophthalmol** 1989 Aug;73(8):624–7

Rapid appearance of plasmin in tear fluid after ocular allergen exposure. Salonen EM, et al. **Clin Exp Immunol** 1988 Jul; 73(1):146–8

Clinical ophthalmological tests for the diagnosis of keratoconjunctivitis sicca. Prause JU. **Clin Exp Rheumatol** 1989 Mar–Apr;7(2):141–4

Sjögren's syndrome and tear function parameters. van

Bijsterveld OP, et al. **Clin Exp Rheumatol** 1989 Mar–Apr; 7(2):151–4

The role of tears in preventing protein deposition on contact lenses. Boot N, et al. **Curr Eye Res** 1989 Feb;8(2):185–8

Fluorophotometric measurement of human tear turnover rate. Occhipinti JR, et al. **Curr Eye Res** 1988 Oct; 7(10):995–1000

Buffering in human tears: pH responses to acid and base challenge. Carney LG, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):747–54

Tear glucose level in diabetes mellitus—a preliminary study. **J Assoc Physicians India** 1988 Feb;36(2):183–4

Ocular disposition of inulin from single & multiple doses of positively charged multilamellar liposomes: evidence for alterations in tear dynamics and ocular surface characteristics. Lee VH, et al. **J Ocul Pharmacol** 1986 Fall; 2(4):353–64

Tear protein analyses in 30 patients before and after penetrating keratoplasty. Lundh RL, et al. **Ophthalmologica** 1989;198(1):20–9

Tear function parameters in keratoconjunctivitis sicca with and without the association of Sjögren's syndrome. Mackor AJ, et al. **Ophthalmologica** 1988;196(4):169–74

MICROBIOLOGY

Detection of HBs antigen, DNA polymerase activity, and hepatitis B virus DNA in tears: relevance to hepatitis B transmission by tears. Gastaud P, et al. **Br J Ophthalmol** 1989 May;73(5):333–6

PHYSIOLOGY

Tear fluid pH in normals, contact lens wearers, and pathological cases. Norn MS. **Acta Ophthalmol (Copenh)** 1988 Oct;66(5):485–9

Eyelid secretions and the prevention and production of disease. Bron AJ. **Eye** 1988;2 (Pt 2):164–71 (66 ref.)

Tear function in relation to the World Health Organization classification of cicatrization in trachoma. el–Rakhawy KE, et al. **Int Ophthalmol** 1988;12(1):31–5

Effect of removal of lacrimal and third eyelid glands on Schirmer tear test results in cats. McLaughlin SA, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):820–2

Biomicroscopy of the tear film: aqueous and lipid tear substitutes in the normal and abnormal eye. Carrington S, et al. **Vet Rec** 1988 Sep 24;123(13):329–35

[Clinical examination of the stability of a film of tears in young subjects] Zygulska–Mach H. **Ophtalmologie** 1988 Oct;2(4):341–3 (Eng. Abstr.) **(Fre)**

[Stability and flexibility of the lipid layer of the tear film and their pathologic changes in a biophysical experiment] Kaercher T, et al. **Fortschr Ophthalmol** 1989;86(3):245–8 (Eng. Abstr.) **(Ger)**

SECRETION

Increased tear secretion in pancreatic cholera: a newly recognized symptom in an experiment of nature. Gilbard JP, et al. **Am J Med** 1988 Oct;85(4):552–4

Shortlasting unilateral neuralgiform headache attacks with conjunctival injection, tearing, sweating, and rhinorrhea. Sjaastad O, et al. **Cephalalgia** 1989 Jun;9(2):147–56

Steroid induced tear film abnormality—role of mucous in its pathogenesis. **Indian J Ophthalmol** 1987;35(5–6):455–60

Relative canalicular tear flow as assessed by dacryoscintigraphy. White WL, et al. **Ophthalmology** 1989 Feb;96(2):167–9

Age-related changes in precorneal tear film stability. Patel S, et al. **Optom Vis Sci** 1989 Mar;66(3):175–8

Relation between precorneal tear film stability and tear production rate in normal eyes. Patel S, et al. **Optom Vis Sci** 1989 May;66(5):300–3

The effect of unilateral corneal anesthesia on the Schirmer test. Crabtree G, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):631–2

Pediatric case of the day. Triple A syndrome: achalasia, alacrima and ACTH insensitivity. Fernbach SK, et al. **Radiographics** 1989 May;9(3):563–4

[Lacrymal hyposecretion in young patients] Cavallaro N, et al. **Ophtalmologie** 1988 Oct;2(4):345–7 (Eng. Abstr.) **(Fre)**

[The Schirmer–Jones test in West Africa] Diallo JS. **Ophtalmologie** 1988 Apr–Jun;2(2):115–6 (Eng. Abstr.) **(Fre)**

[Reproducibility of the break–up time test] Santori M, et al. **Ophtalmologie** 1988 Nov–Dec;2(5):411–3 (Eng. Abstr.) **(Fre)**

[Beta–blockers in the treatment of glaucomatous and dry eyes] Strempel I. **Ophtalmologie** 1988 Apr–Jun;2(2):149–52 (Eng. Abstr.) **(Fre)**

[Effects of triphasic oral contraceptives on lacrimal secretion] Valdé G, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):129–30 (Eng. Abstr.) **(Fre)**

[Clinical, secretory and immunologic studies in Terrien disease] Gornig H, et al. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):465–70 (Eng. Abstr.) **(Ger)**

[Cotton thread method for measuring tear secretion, suitable for soft contact lens wearers (method no. 3)] Kurihashi K, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):202–6 (Eng. Abstr.) **(Ger)**

[Epiphora as an expression of dry eye] Avisar R, et al. **Harefuah** 1989 Feb 15;116(4):192–3 (Eng. Abstr.) **(Heb)**

TEAS, MEDICINAL see **BEVERAGES**

TECHNETIUM

An improved method for the in vivo labelling of red blood cells with 99mTc in gated cardiac imaging. Bekdik CF, et al. **Eur J Nucl Med** 1988;14(7–8):408–10

The use of the effective dose equivalent, HE, for 99mTc labelled radiopharmaceuticals. Huda W, et al. **Eur J Nucl Med** 1989;15(4):174–9

Evaluation of a new leukocyte labeling procedure with 99mTc–HMPAO. Kelbaek H, et al. **Eur J Nucl Med** 1988; 14(12):621–3

Significance of alteration in biodistribution of labeled lymphocytes exposed to stannous ion. Tatum JL, et al. **Eur J Nucl Med** 1989;15(4):201–3

Evaluation in vitro and in vivo of two labelling techniques of different 99mTc–dextrans for lymphoscintigraphy. Wingårdh K, et al. **Eur J Nucl Med** 1989;15(3):146–51

Quality control of 99mTc–labeled dextran for lymphoscintigraphy. Yang KT, et al. **Eur J Nucl Med** 1989; 15(4):171–3

The behavior of technetium in terrestrial and aquatic environs: a symposium. 5–10 May 1986, Seattle, WA. Dedicated to Drs. C. Myttenaere and R. L. Watters. **Health Phys** 1989 Aug;57(2):235–350

Cytological effects of Tc on young soybean plants. Neel JW, et al. **Health Phys** 1989 Aug;57(2):289–98

Interaction of some sterilizing filter materials with some technetium–99m radiopharmaceuticals. Billinghurst MW, et al. **Int J Rad Appl Instrum [A]** 1988;39(12):1255–8

Technetium carboxylate complexes—I. A review of Tc, Re and Mo carboxylate chemistry. Kennedy CM, et al. **Int J Rad Appl Instrum [A]** 1988;39(11):1159–65 (44 ref.)

Technetium carboxylate complexes—II. Structural and chemical studies. Kennedy CM, et al. **Int J Rad Appl Instrum [A]** 1988;39(11):1167–77 (50 ref.)

Technetium carboxylate complexes—III. A new synthetic route to hexakis–(isonitrile) technetium(I) salts. Kennedy CM, et al. **Int J Rad Appl Instrum [A]** 1988;39(11):1179–86

Improvement of the reproducibility of ion–pair HPLC of 99mTc(Sn)EHDP complexes and the influence of the Sn(II) concentration on the composition of the reaction mixture. Nieuwland RJ, et al. **Int J Rad Appl Instrum [A]** 1989;40(2):153–7

A novel method for labelling of leukocytes with technetium–99m and its comparative evaluation for abscess scintigraphy. Babbar A, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):689–94

A new method for protein labeling with 99mTc. Blok D, et al. **Int J Rad Appl Instrum [B]** 1989;16(1):11–6

Three approaches to radiolabeling antibodies with 99mTc. Eckelman WC, et al. **Int J Rad Appl Instrum [B]** 1989; 16(2):171–6 (24 ref.)

Technetium–99m complexes of dimethylaminomethylene diphosphonate (DMAD)—I. Anion exchange HPLC characterization of 99mTc(NaBH4)–DMAD mixtures. Holland ME, et al. **Int J Rad Appl Instrum [B]** 1989; 16(3):301–11

Technetium–99m complexes of dimethylaminomethylene diphosphonate (DMAD)—II. Biological distributions of 99mTc–DMAD components isolated by anion exchange HPLC. Holland ME, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):313–7

Synthesis and biological properties of the lipophilic technetium–99m complex 99mTc(acac)3. Packard AB, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):291–4

Monoclonal antibodies as agents for selective radiolabeling of human neutrophils. Thakur ML, et al. **J Nucl Med** 1988 Nov;29(11):1817–25

Third International Symposium on Technetium in Chemistry and Nuclear Medicine. Padua (Italy), september 6–8, 1989. Abstracts of the communications. **J Nucl Med Allied Sci** 1989 Jul–Sep;33(3):265–328

Stability studies of 99m technetium labeled radiopharmaceuticals. Chervu LR, et al. **J Nucl Med Allied Sci** 1988 Oct–Dec;32(4):234–6

Use of sodium iodide to overcome the eluate age restriction for Ceretec reconstitution. Bayne VJ, et al. **Nucl Med Commun** 1989 Jan;10(1):29–33

Sites of deposition of aqueous aerosols: a study of efficiency of delivery systems for lung ventilation imaging in man. Woolman PS, et al. **Nucl Med Commun** 1989 Mar; 10(3):171–80

The influence of experimental conditions on the preparation of 99mTc–pyrrolidino–methyl tetracycline [99mTc–PMT] in the form of an instant kit. Shafiq YF, et al. **Nuklearmedizin** 1988 Aug;27(4):154–6

[Behavior of technetium—current importance of technetium research and its physical and chemical properties] Yoshihara K, et al. **Radioisotopes** 1989 Feb;38(2):80–9 (85 ref.) **(Jpn)**

ADMINISTRATION & DOSAGE

Gastrointestinal scintiscanning: dosimetry. Madsen JL, et al. **Eur J Nucl Med** 1989;15(5):260–1

Effect of liposome surface charge on the stability of technetium (99mTc) radiolabelled liposomes. Love WG, et al. **J Microencapsul** 1989 Jan–Mar;6(1):105–13

The adsorption of 99Tcm radiopharmaceuticals onto injection vials [letter] Millar AM, et al. **Nucl Med Commun** 1985 Feb;6(2):115–6

The particle size distribution of technegas and its influence on regional lung deposition. Strong JC, et al. **Nucl Med Commun** 1989 Jun;10(6):425–30

ADVERSE EFFECTS

Radiation exposure by technitium–99m MAG3 [letter] Bubeck B. **J Nucl Med** 1989 May;30(5):720–1

ANALYSIS

Technetium–99m DTPA does not break down during ultrasound nebulization. Groth S, et al. **Clin Physiol** 1989 Apr;9(2):151–9

Effect of smear method on detection of 99mTc radiopharmaceuticals. Kawano T, et al. **Health Phys** 1989 Apr;56(4):543–6

Synopsis of French experimental and in situ research on the terrestrial and marine behavior of Tc. Masson M, et al. **Health Phys** 1989 Aug;57(2):269–79 (24 ref.)

Long–term availability of Tc deposited on soil after accidental releases. Vandecasteele CM, et al. **Health Phys** 1989 Aug;57(2):247–54

Assessment of dose to man from releases of 99Tc in fresh water systems. Zeevaert T, et al. **Health Phys** 1989 Aug; 57(2):337–43 (12 ref.)

Assessment of the arterial input curve for [99mTc]–d,l–HM–PAO by rapid octanol extraction. Andersen AR, et al. **J Cereb Blood Flow Metab** 1988 Dec; 8(6):S23–30

Anion–exchange high–performance liquid chromatography of technetium–labeled phosphonoacetic acid skeletal imaging agent preparations. Abdelnasser MA, et al. **J Chromatogr** 1989 Mar 24;488(2):463–9

Technetium–99m radiochemical assay by rapid filtration: a superior alternative to chromatography. Coupal JJ. **J Pharm Sci** 1989 Jun;78(6):490–3

[Determination and distribution of technetium in the environment] Seki R. **Radioisotopes** 1989 Mar;38(3):155–61 **(Jpn)**

DIAGNOSTIC USE

The contribution of 99mTc–pyrophosphate tomoscintigraphy in the evaluation of necrotic myocardial lesions. Bourgeois P, et al. **Acta Cardiol** 1989;44(3):195–202

Combined 99mTc–sulfide colloid and 99mTc–RBC studies for localization of gastrointestinal bleeding sites [letter] Chu DD, et al. **AJR** 1989 Mar;152(3):653–4

Distinction between hemangioma of the liver and hepatocellular carcinoma: value of labeled RBC–SPECT scanning. Kudo M, et al. **AJR Am J Roentgenol** 1989 May; 152(5):977–83

Pancreas transplants: evaluation using perfusion scintigraphy. Kuni CC, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):57–61

Cardiac imaging and myocardial kinetics of technetium–tertiary butyl–isonitrile during dipyridamole–induced hyperemia. Okada RD, et al. **Am Heart J** 1988 Oct;116(4):979–88

Radionuclide imaging of myocardial perfusion and viability in assessment of acute myocardial infarction. Berman DS, et al. **Am J Cardiol** 1989 Jul 18;64(4):9B–16B

Myocardial infarction determined by technetium–99m pyrophosphate single–photon tomography complicating elective coronary artery bypass grafting for angina pectoris. Burns RJ, et al. **Am J Cardiol** 1989 Jun 15;63(20):1429–34

Usefulness of technetium pyrophosphate scintigraphy in demonstrating cardiac amyloidosis in persons aged 85 years and older. Goldstein SA, et al. **Am J Cardiol** 1989 Mar 15;63(11):752–3

Use of technetium–99m isonitrile (RP–30A) in assessing left ventricular perfusion and function at rest and during exercise in coronary artery disease, and comparison with coronary arteriography and exercise thallium–201 SPECT imaging. Iskandrian AS, et al. **Am J Cardiol** 1989 Aug 1; 64(5):270–5

Intrarenal blood flow distribution in dog kidney determined by 99mTc microaggregates and 201Tl. Abildgaard U, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1535–41

Using the "integral spleen" method of radiorenogram analysis and a baboon model to compare the diagnostic usefulness of technetium–99m–diethylenetriamine pentaacetic acid to that of various technetium–99m–mercaptoacetyltriglycene formulations and iodine–123–hippuran. Dormehl IC, et al. **Am J Physiol Imaging** 1989;4(1):23–7

Comparison of four technetium–99m radiopharmaceuticals for detection and localization of gastrointestinal bleeding in a sheep model. Owunwanne A, et al. **Am J Physiol Imaging** 1988;3(4):192–6

Investigative study of radiopharmaceuticals useful for imaging skeletal muscle injury in experimental animals. Owunwanne A, et al. **Am J Physiol Imaging** 1989;4(2):62–5

Scintigraphic determination of the effect of metoclopramide and morphine on small intestinal transit time. Prokop EK, et al. **Am J Physiol Imaging** 1988;3(4):201–4

Technetium–99m haemaccel: a new lymphoscintigraphic agent. Sadek S, et al. **Am J Physiol Imaging** 1989;4(2):46–9

An improved noninvasive method for measurement of cardiac output and evaluation of left–sided cardiac valve incompetence. Kelbaek H. **Angiology** 1989 May; 40(5):458–63

Evaluation by TC–99m leukocyte scan [letter] Freed HA. **Ann Emerg Med** 1989 Mar;18(3):333–4

Red blood cell scan in cavernous hemangioma of the larynx.

Finkelstein DM, et al. **Ann Otol Rhinol Laryngol** 1989 Sep; 98(9):707–12

99mTC dimercaptosuccinic acid (DMSA) scan in urinary tract infection [letter] Murphy AV, et al. **Arch Dis Child** 1989 May;64(5):760

99mTc dimercaptosuccinic acid (DMSA) scan in patients with established radiological renal scarring. Smellie JM, et al. **Arch Dis Child** 1988 Nov;63(11):1315–9

99mTc dimercaptosuccinic acid (DMSA) scan as first investigation of urinary tract infection. Verber IG, et al. **Arch Dis Child** 1988 Nov;63(11):1320–5

Imaging human atherosclerosis with 99mTc-labeled low density lipoproteins. Lees AM, et al. **Arteriosclerosis** 1988 Sep–Oct;8(5):461–70

Bone scintigraphy in the evaluation of ejection injuries. Bury RF. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A16–7

Static and dynamic computerised radioactive tracer studies, vital dye staining and theoretical mathematical calculations to ascertain the mode of survival of single cephalad channel venous island flaps. Thatte MR, et al. **Br J Plast Surg** 1989 Jul;42(4):405–13

Comparison of techniques for thallium-201–technetium-99m parathyroid imaging. Brownless SM, et al. **Br J Radiol** 1989 Jun;62(738):532–5

99Tcm-HMPAO single photon emission tomography in the diagnosis of cerebral barotrauma. Macleod MA, et al. **Br J Radiol** 1988 Dec;61(732):1106–9

Technetium-99m hydroxymethylene diphosphonate scanning of acute injuries to the lateral ligaments of the ankle. Maurice H, et al. **Br J Radiol** 1989 Jan;62(733):31–4

Technetium-99m HMPAO imaging in patients with basal ganglia disease. Smith FW, et al. **Br J Radiol** 1988 Oct; 61(730):914–20

The localization of myocardial ischaemia with technetium-99m methoxy isobutyl isonitrile and single photon emission computed tomography. West DJ, et al. **Br J Radiol** 1989 Apr;62(736):303–13

Effect of unilateral vesicoureteric reflux on renal growth and the uptake of 99mTc DMSA by the kidney. An experimental study in the minipig. Godley ML, et al. **Br J Urol** 1989 Apr;63(4):340–7

Comparison of the pharmacokinetics of 14C-labelled APD and 99mTc-labelled APD in the mouse [letter] Fogelman I, et al. **Calcif Tissue Int** 1989 Sep;45(3):198–9

Preoperative cutaneous lymphoscintigraphy in malignant melanoma. Lock-Andersen J, et al. **Cancer** 1989 Jan 1; 63(1):77–82

Mechanism of tumor transport of 99mTc-DL-homocysteine, a possible tumor-imaging agent. Takeda A, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2570–5

Quantitative rotational tomography with 201Tl and 99mTc 2-methoxy-isobutyl-isonitrile. A direct comparison in normal individuals and patients with coronary artery disease. Kahn JK, et al. **Circulation** 1989 Jun;79(6):1282–93

Results of hepatobiliary imaging using Tc-99m EHIDA. Ansari SM, et al. **Clin Nucl Med** 1989 May;14(5):354–6

Technetium-99m RBC bleeding images in normal subjects: confusion with gastrointestinal bleeding sites. Boyd CM, et al. **Clin Nucl Med** 1989 Mar;14(3):202–9

Technetium-99m pentavalent DMSA imaging detects metastases of poorly differentiated carcinoma of the thyroid. Costa DC, et al. **Clin Nucl Med** 1989 Mar; 14(3):218–21

Coexistence of cerebral infarct and arteriovenous malformation demonstrated by Tc-99m HMPAO and Tc-99m RBC SPECT imaging. Gini A, et al. **Clin Nucl Med** 1989 Apr;14(4):303–5

Technetium-99m white blood cell imaging: false-negative result in salmonella osteomyelitis associated with sickle cell disease. Guze BH, et al. **Clin Nucl Med** 1989 Feb; 14(2):104–6

Atypical scintigraphic pattern of liver hemangioma. Hardoff R, et al. **Clin Nucl Med** 1989 May;14(5):376–7

Comparison of delayed imaging with Tc-99m PMT and Tc-99m DEIDA for visualization of hepatoma. Hasegawa Y, et al. **Clin Nucl Med** 1989 Jul;14(7):526–31

Uptake and kinetics of Tc-99m hexakis 2-methoxy isobutyl isonitrile in benign and malignant lesions in the lungs. Hassan IM, et al. **Clin Nucl Med** 1989 May;14(5):333–40

Problems of duodenogastric reflux in Tc-99m Hexa MIBI planar, tomographic and bull's eye display. Hassan IM, et al. **Clin Nucl Med** 1989 Apr;14(4):286–9

Double inferior vena cava diagnosis by technetium-99m labeled RBC study. Howard JL, et al. **Clin Nucl Med** 1988 Sep;13(9):671–2

Lymphedema of the lower extremities: evaluation by microcolloidal imaging. Intenzo CM, et al. **Clin Nucl Med** 1989 Feb;14(2):107–10

Gallbladder visualization during technetium-99m RBC blood pool imaging. Case report and literature review. Kotlyarov EV, et al. **Clin Nucl Med** 1988 Jul;13(7):515–6 (3 ref.)

Scintigraphic criteria for the diagnosis of obstructive hepatobiliary diseases with Tc-99m IDA. Krishnamurthy S, et al. **Clin Nucl Med** 1988 Oct;13(10):704–9

Unusual manifestations of hemorrhage during technetium-99m red cell blood pool imaging. Moreno AJ, et al. **Clin Nucl Med** 1989 Jun;14(6):470–1

Clinical usefulness of technetium-99m HM-PAO labeled white blood cell imaging in abscesses. Mortelmans L, et al. **Clin Nucl Med** 1989 Feb;14(2):127–9

Esophageal reflux: massive hiatus hernia on hepatobiliary study. Peracha HU, et al. **Clin Nucl Med** 1988 Oct; 13(10):772–3

Myocardial scintigraphy with Tc-99m TBI in a 6-month-old infant with myocardial infarction after Mustard operation. Sandrock D, et al. **Clin Nucl Med** 1989 May;14(5):381

Bile leakage accumulating in the gallbladder bed mimicking normal visualization of gallbladder in technetium-99m DISIDA hepatobiliary imaging. Shih WJ, et al. **Clin Nucl Med** 1989 Mar;14(3):222–3

Extensive extraosseous localization of bone imaging agent in a patient with renal failure and rhabdomyolysis accompanied by combined hypercalcemia and hyperphosphatemia. Shih WJ, et al. **Clin Nucl Med** 1989 Mar;14(3):163–7

The detection of inferior vena cava obstruction using Tc-99m RBC venography. Skarzynski JJ, et al. **Clin Nucl Med** 1988 Oct;13(10):763–4

Delayed accumulation (flip flop) of Tc-99m DTPA in a leiomyosarcoma. Slavin JD Jr, et al. **Clin Nucl Med** 1988 Sep;13(9):654–6

Myocardial perfusion imaging with a new radiotracer, technetium-99m-hexamibi (methoxy isobutyl isonitrile): comparison with thallium-201 imaging. Taillefer R, et al. **Clin Nucl Med** 1989 Feb;14(2):89–96

Pulmonary alveolar microlithiasis with the absence of technetium-99m MDP uptake of lungs. Turktas H, et al. **Clin Nucl Med** 1988 Dec;13(12):883–5

Parathyroid adenoma associated with neurofibromatosis: correlative scintigraphic and magnetic resonance imaging. Vogelzang PJ, et al. **Clin Nucl Med** 1989 Mar;14(3):168–70

Tc-99m pyrophosphate localization in chest wall muscles after bench pressing. Williamson MR, et al. **Clin Nucl Med** 1989 Jul;14(7):546

Intravenous radionuclide total body arteriography: a new technique. Yang DC, et al. **Clin Nucl Med** 1988 Oct; 13(10):696–700

Renal parenchymal scars in adults. Split function and extent of scars at urography and DMSA scintigraphy. Thomsen HS, et al. **Dan Med Bull** 1989 Apr;36(2):185–8

Bone turnover in postmenopausal osteoporosis. Determined by whole body retention and urinary excretion of 99m-technetium diphosphonate. Thomsen K. **Dan Med Bull** 1988 Oct;35(5):468–79 (140 ref.)

Recovery of left ventricular function after myocardial infarction can be predicted immediately after thrombolysis by semiquantitative intracoronary thallium and technetium pyrophosphate scintigraphy. Schofer J, et al. **Eur Heart J** 1988 Oct;9(10):1088–97

Radiolabelling of human platelets with 99mTc-HMPAO. Vorne M, et al. **Eur J Haematol** 1989 May;42(5):487–91

Tc-99m-HMPAO labelled human platelets: in vitro and in vivo results. Becker W, et al. **Eur J Nucl Med** 1989; 15(6):296–301

Kinetic data of in-vivo labeled granulocytes in humans with a murine Tc-99m-labelled monoclonal antibody. Becker W, et al. **Eur J Nucl Med** 1989;15(7):361–6

Evaluation of six new 99mTc-IDA agents for hepatobiliary imaging. Chervu LR, et al. **Eur J Nucl Med** 1988; 14(9–10):441–5

Clinical experience with Tc-99m HM-PAO high resolution SPECT of the brain in patients with cerebrovascular accidents. De Roo M, et al. **Eur J Nucl Med** 1989; 15(1):9–15

99mTc-labelling of leucocytes with 99mTc-DPO: a complex developed for myocardial imaging. Endert G, et al. **Eur J Nucl Med** 1989;15(5):262–4

Comparison of delayed hepatobiliary imaging using 99mTc-Sn-N-pyridoxyl-5-methyltryptophan and 67Ga-citrate imaging for diagnosis of hepatocellular carcinoma. Hasegawa Y, et al. **Eur J Nucl Med** 1988; 14(7–8):414–8

In vivo labelling of granulocytes with 99mTc anti-NCA monoclonal antibodies for imaging inflammation. Joseph K, et al. **Eur J Nucl Med** 1988;14(7–8):367–73

A new 99mTc-red blood cell labeling procedure for cardiac blood pool imaging: clinical results. Kelbaek H, et al. **Eur J Nucl Med** 1989;15(7):333–5

Parametric imaging in cerebral radionuclide angiography (RNA) by planar imaging improving presentation and objectivation of cerebral blood flow. Lerch H, et al. **Eur J Nucl Med** 1989;15(2):96–9

Clinical evaluation of the 99mTc-CPI myocardial perfusion imaging. Liu XJ, et al. **Eur J Nucl Med** 1989;15(6):277–9

Density analysis of scintigram with flow dynamics at bolus radionuclide venography: count correction with velocity. Márk B, et al. **Eur J Nucl Med** 1989;15(2):93–5

Gastrointestinal scintigraphy with 99mTc-DTPA labeled tablets in fed and fasting subjects. Maublant JC, et al. **Eur J Nucl Med** 1989;15(3):143–5

The behavior of 99mTc-hexamethylpropyleneamineoxime (99mTc-HMPAO) in blood and brain. Nakamura K, et al. **Eur J Nucl Med** 1989;15(2):100–7

Uptake of 99mTc-phytate in osteosarcoma cases. Rao PN, et al. **Eur J Nucl Med** 1989;15(3):162–4

Radionuclide venography: two stage—flow and equilibrium technique using 99mTc pertechnetate, and 99mTc RBC labelled "in vivo". Szarski AM. **Eur J Nucl Med** 1989; 15(3):137–42

Clinical comparison between thallium-201 and Tc-99m-methoxy isobutyl isonitrile (hexamibi) myocardial perfusion imaging for detection of coronary artery disease. Taillefer R, et al. **Eur J Nucl Med** 1989;15(6):280–6

Same day injections of Tc-99m methoxy isobutyl isonitrile (hexamibi) for myocardial tomographic imaging: comparison between rest-stress and stress-rest injection sequences. Taillefer R, et al. **Eur J Nucl Med** 1989; 15(3):113–7

99mTc-DTPA clearance measured by a dual head gamma camera in healthy subjects and patients with sarcoidosis. Studies of reproducibility and relation to bronchoalveolar lavage findings. Thunberg S, et al. **Eur J Nucl Med** 1989; 15(2):71–7

Kinetics of Tc-99m hexakis t-butyl isonitrile in normal and ischemic canine myocardium. Williams SJ, et al. **Eur J Nucl Med** 1989;15(6):287–91

A progressive radiorenographic (99mTc-DTPA) presentation of surgically induced renal vein hypertension in baboons. Van Wyk F, et al. **Eur Urol** 1988;14(4):315–22

Diagnostic evaluation of hepatobiliary scintigraphy using 99mTc-N-pyridoxyl-5-methyltryptophan in acute cholecystitis. Takada T, et al. **Gastroenterol Jpn** 1988 Oct; 23(5):553–8

Technetium 99m phagocyte scanning in inflammatory bowel disease [letter] Becker W, et al. **Gastroenterology** 1989 Jul; 97(1):249–50

Uptake of technetium 99m hepatobiliary imaging agents by cultured rat hepatocytes. Lan JA, et al. **Gastroenterology** 1988 Dec;95(6):1625–31

Scintigraphic assessment of bowel involvement and disease activity in Crohn's disease using technetium 99m-hexamethyl propylene amine oxine as leukocyte label. Schölmerich J, et al. **Gastroenterology** 1988 Nov; 95(5):1287–93

Quantitative 99mTc-DISIDA scanning and endoscopic biliary manometry in sphincter of Oddi dysfunction. Fullarton GM, et al. **Gut** 1988 Oct;29(10):1397–401

Significance of transplant perfusion index in the diagnosis of acute rejection in live related renal allograft recipients. Padhy AK, et al. **Indian J Med Res** 1989 Apr;90:113–23

Study of capillary filtration by double labelling I131-albumin and Tc99m red cells. Application to the pharmacodynamic activity of Daflon 500 mg. Behar A, et al. **Int Angiol** 1988 Apr–Jun;7(2 Suppl):35–8

Testing minimal transit time in the venous system of the lower limbs using dynamic radionuclide venography. Márk B, et al. **Int Angiol** 1988 Jul–Sep;7(3):231–3

First passage radionuclide cardiography for determination of cardiac output: evaluation of an improved method. Kelbaek H, et al. **Int J Cardiol** 1989 Apr;23(1):79–85

99mTc hexakis-t-butyl isonitrile (TBI): an agent for the diagnosis of coronary artery diseases. Mousa SA, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Feb;27(2):66–75

In-house production and control of a few 99mTc-radiopharmaceuticals. Noronha OP. **Int J Rad Appl Instrum [A]** 1986;37(11):1150–4

Synthesis of p-aminohippuric acid analog and its labeling by technetium-99m. Zmbova B, et al. **Int J Rad Appl Instrum [A]** 1989;40(3):225–34

99mTc-nitrido radiopharmaceuticals based on nitrogen heterocyclic ligands containing a thiol group. Baldas J, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):451–7

Hemoglobin radiolabeling: in vitro and in vivo comparison of iodine labeling with iodogen and a new method for technetium labeling. Bleeker WK, et al. **Int J Rad Appl Instrum [B]** 1989;16(4):365–9

99mTc-cystine: a faster excreting 99mTc-glucoheptanoate analogue. Chattopadhyay M, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):535–41

99mTc(Cu)-mannitol complex: a new agent for dynamic renal function studies. Chauhan UP, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):283–9

Dual-isotope measurement of lung water. Chu RY, et al. **Int J Rad Appl Instrum [B]** 1989;16(4):419–21

The Noah's Ark experiment: species dependent biodistributions of cationic 99mTc complexes. Deutsch E, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):191–232 (31 ref.)

Red blood cell volume (RBCV) and blood volume (BV) in male albino (NZW) rabbits with 99mTc. Karatzas ND, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):525–8

Preparation and evaluation of technetium-99m labeled cardiac glycoside derivatives as potential myocardial imaging agent. Misra M, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):409–17

Radiopharmacological profiles of tracers under pathophysiological conditions. Bone uptake of 99mTc-phytate in vitamin D deficient rats. Noronha OP, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):261–7

Reproducibility in the analysis of multigated radionuclide studies of left ventricular ejection fraction. Gjørup T, et al. **Invest Radiol** 1989 Feb;24(2):104–9

Diagnosis of common bile duct leakage by cholescintigraphy. Lantsberg L, et al. **Isr J Med Sci** 1989 Mar;25(3):158–60

Right colonic hemangioma diagnosed by scintigraphy with 99-mTc sucralfate. A case report. Scopinaro F, et al. **Ital J Surg Sci** 1989;19(1):89–92

Pulmonary clearance of radiotracers after positive end-expiratory pressure or acute lung injury. Barrowcliffe MP, et al. **J Appl Physiol** 1989 Jan;66(1):288–94

Simultaneous measurement of lung clearance rates for Tc- and In-DTPA in normal and damaged lungs. O'Brodovich H, et al. **J Appl Physiol** 1989 May;66(5):2293–7

Effects of vinyl chloride on liver function of exposed workers, evaluated by measurements of plasma clearance of the 99mTc-N-2,4-dimethylacetanilido-iminodiacetate

complex. Studniarek M, et al. **J Appl Toxicol** 1989 Aug; 9(4):213–8

Hexamethyl–propylene amine oxime (MM–PAO). Papers presented at a symposium. September 1987, Copenhagen, Denmark. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S1–126

CBF tomograms with [99mTc–HM–PAO in patients with dementia (Alzheimer type and HIV) and Parkinson's disease—initial results. Costa DC, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S109–15

Linearization correction of 99mTc–labeled hexamethyl–propylene amine oxime (HM–PAO) image in terms of regional CBF distribution: comparison to C15O2 inhalation steady–state method measured by positron emission tomography. Inugami A, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S52–60

Tomographic studies of rCBF with [99mTc]–HM–PAO SPECT in patients with brain tumors: comparison with C15O2 continuous inhalation technique and PET. Langen KJ, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S90–4

Technetium–99m–d,l–HM–PAO, the development of a new class of 99mTc–labeled tracers: an overview. Lassen NA, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S1–3

[99mTc]–HM–PAO SPECT in Parkinson's disease. Pizzolato G, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S101–8

SPECT measurements with 99mTc–HM–PAO in focal epilepsy. Ryding E, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S95–100

The use of technetium–99m–HM–PAO in the assessment of patients with dementia and other neuropsychiatric conditions. Smith FW, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S116–22

The use of [99mTc]–HM–PAO in the diagnosis of primary degenerative dementia. Testa HJ, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S123–6

SPECT with [99mTc]–d,l–hexamethyl–propylene amine oxime (HM–PAO) compared with regional cerebral blood flow measured by PET: effects of linearization. Yonekura Y, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S82–9

Delayed cholescintigraphy in the diagnosis of unilateral hepatic duct obstruction in the nonicteric patient. Thomas E, et al. **J Clin Gastroenterol** 1989 Feb;11(1):116–8

SPECT imaging of moyamoya disease using 99mTc–HM–PAO. Comparison with computed tomography findings. Mountz JM, et al. **J Comput Tomogr** 1988 Oct;12(4):247–50

Melanoma update: advances in diagnostic technique. Rogers GS. **J Dermatol Surg Oncol** 1989 Jun;15(6):605–7

New brain perfusion imaging agents based on 99mTc–bis(aminoethanethiol) complexes: stereoisomers and biodistribution. Kung HF, et al. **J Med Chem** 1989 Feb;32(2):433–7

Simultaneous technetium–99m MIBI angiography and myocardial perfusion imaging. Baillet GY, et al. **J Nucl Med** 1989 Jan;30(1):38–44

Chemical aspects of labeling sucralfate with 99mTcO4. Billinghurst MW, et al. **J Nucl Med** 1989 Apr;30(4):523–30

Pharmacokinetic evaluation of technetium–99–metallothionein–conjugated mouse monoclonal antibody B72.3 in rhesus monkeys. Burchiel SW, et al. **J Nucl Med** 1989 Aug;30(8):1351–7

Technetium–99m DISIDA hepatobiliary agent in diagnosis of hepatocellular carcinoma: relationship between detectability and tumor differentiation [see comments] Calvet X, et al. **J Nucl Med** 1988 Dec;29(12):1916–20. **Comment in:** J Nucl Med 1989 Jul;30(7):1278–80

Renal artery stenosis detection by combined Gates' technique and captopril test in hypertensive patients. Cuocolo A, et al. **J Nucl Med** 1989 Jan;30(1):51–6

Evaluation of hypertensive patients by means of captopril enhanced renal scintigraphy with technetium–99m DTPA. Dondi M, et al. **J Nucl Med** 1989 May;30(5):615–21

Successful imaging of malignant melanoma with technetium–99m–labeled monoclonal antibodies. Eary JF, et al. **J Nucl Med** 1989 Jan;30(1):25–32

Redistribution of visceral blood volume in upright exercise in healthy volunteers. Froelich JW, et al. **J Nucl Med** 1988 Oct;29(10):1714–8

Tracer kinetic modeling approaches for the quantification of hepatic function with technetium–99m DISIDA and scintigraphy. Gambhir SS, et al. **J Nucl Med** 1989 Sep; 30(9):1507–18

Cationic complexes of technetium for myocardial imaging. Gerundini P, et al. **J Nucl Med** 1989 Aug;30(8):1415–9 (37 ref.)

Quantitation of renal uptake of technetium–99m DMSA using SPECT. Groshar D, et al. **J Nucl Med** 1989 Feb; 30(2):246–50

Filling out phenomenon with technetium–99m HM–PAO brain SPECT at the site of mild cerebral ischemia. Hayashida K, et al. **J Nucl Med** 1989 May;30(5):591–8

Imaging with pentavalent [99mTc]DMSA in patients with medullary cancer of the thyroid [letter] Hilditch TE, et al. **J Nucl Med** 1988 Oct;29(10):1746–7

Comparison of technetium–99m pyrophosphate and technetium–99m DTPA aerosols for SPECT ventilation lung imaging. Isitman AT, et al. **J Nucl Med** 1988 Nov; 29(11):1761–7

Demonstration of reperfusion after thrombolysis with technetium–99m isonitrile myocardial imaging. Kayden DS, et al. **J Nucl Med** 1988 Nov;29(11):1865–7

Comparison of the clearance of technetium–99m MAG3 and iodine–131 OIH [letter] Kim CK, et al. **J Nucl Med** 1988 Nov;29(11):1878–9

Quantitative measurement of renal perfusion following transplant surgery [published erratum appears in J Nucl Med 1988 Dec;29(12):2021] Lear JL, et al. **J Nucl Med** 1988 Oct;29(10):1656–61

Comparison of different radioactive renal agents in cisplatin–induced tubular toxicity in rats. McAfee JG, et al. **J Nucl Med** 1989 May;30(5):659–65

Gastrointestinal transit of technetium–99m–labeled cellulose fiber and indium–111–labeled plastic particles. Madsen JL, et al. **J Nucl Med** 1989 Mar;30(3):402–6

Calculation of portal contribution to hepatic blood flow with 99mTc–microcolloids. A noninvasive method to diagnose liver graft rejection. Martin–Comin J, et al. **J Nucl Med** 1988 Nov;29(11):1776–80

Evaluation of cerebral collateral circulation by technetium–99m HM–PAO brain SPECT during Matas test: report of three cases. Matsuda H, et al. **J Nucl Med** 1988 Oct;29(10):1724–9

Comparison between 180 degrees and 360 degrees data collection in technetium–99m MIBI SPECT of the myocardium. Maublant JC, et al. **J Nucl Med** 1989 Mar; 30(3):295–300

Comparison of hypoxia and ouabain effects on the myocardial uptake kinetics of technetium–99m hexakis 2–methoxyisobutyl isonitrile and thallium–201. Meerdink DJ, et al. **J Nucl Med** 1989 Sep;30(9):1500–6

More on [99mTc](V)DMSA scintigraphy in patients with medullary carcinoma of the thyroid [letter] Mojiminiyi OA, et al. **J Nucl Med** 1989 Aug;30(8):1420

Technetium–99m pyrophosphate scintigraphy in a patient with malignant hyperthermia [letter] Murakawa M, et al. **J Nucl Med** 1989 May;30(5):718–9

Comparative study of regional cerebral blood flow images by SPECT using xenon–133, iodine–123 IMP, and technetium–99m HM–PAO. Nakano S, et al. **J Nucl Med** 1989 Feb;30(2):157–64

Dynamic SPECT with technetium–99m HM–PAO in meningiomas—a comparison with iodine–123 IMP. Nakano S, et al. **J Nucl Med** 1989 Jun;30(6):1101–5

Ultrasonic guidance for internal mammary lymphoscintigraphy [letter] Neils EW, et al. **J Nucl Med** 1988 Oct;29(10):1744–5

Comparison of the biodistribution of gadolinium–153 DTPA and technetium–99m DTPA in rats. Prato FS, et al. **J Nucl Med** 1988 Oct;29(10):1683–7

Quantitation of renal function with technetium–99m MAG3. Russell CD, et al. **J Nucl Med** 1988 Dec;29(12):1931–3

Quantitative planar imaging with technetium–99m methoxyisobutyl isonitrile: comparison of uptake patterns with thallium–201. Sinusas AJ, et al. **J Nucl Med** 1989 Sep; 30(9):1456–63

Radiation dosimetry in radionuclide hysterosalpingography with technetium–99m [letter] Stabin M. **J Nucl Med** 1989 Mar;30(3):415–6

Abnormal captopril renogram with a technetium–99m–labeled hippuran analog. Thorstad BL, et al. **J Nucl Med** 1988 Oct;29(10):1730–7

Technetium–99m HM–PAO–labeled leukocytes in detection of inflammatory lesions: comparison with gallium–67 citrate. Vorne M, et al. **J Nucl Med** 1989 Aug;30(8):1332–6

Technetium–99m (v) dimercaptosuccinic acid uptake in patients with head and neck squamous carcinoma: experience in imaging. Watkinson JC, et al. **J Nucl Med** 1989 Feb;30(2):174–80

Radiation absorbed dose from technetium–99m–labeled bone imaging agents. Task Group of the Medical Internal Radiation Dose Committee, The Society of Nuclear Medicine. Weber DA, et al. **J Nucl Med** 1989 Jun; 30(6):1117–22

Uptake of myocardial imaging agents by rejecting and nonrejecting cardiac transplants. A comparative clinical study of thallium–201, technetium–99m, and gallium–67. Yamamoto S, et al. **J Nucl Med** 1989 Sep;30(9):1464–9

A radiopharmaceutical for the study of the liver: 99mTc–DTPA–asialo–orosomucoid. I: Radiochemical and animal distribution studies. Galli G, et al. **J Nucl Med Allied Sci** 1988 Apr–Jun;32(2):110–6

A radiopharmaceutical for the study of the liver: 99mTc–DTPA–asialo–orosomucoid. II: Human dynamic and imaging studies. Galli G, et al. **J Nucl Med Allied Sci** 1988 Apr–Jun;32(2):117–26

The use of 99mTc(V)DMSA as imaging for the medullary thyroid carcinoma (MTC). Guerra U, et al. **J Nucl Med Allied Sci** 1988 Oct–Dec;32(4):242–7

Monodisperse labeled aerosol to visualize airflow redistribution in the lung after a mucokinetic drug. Pulerà N, et al. **J Nucl Med Allied Sci** 1989 Jul–Sep;33(3):258–63

Three–phase [99mTc]diphosphonate scintimetry in septic and nonseptic arthritis of the immature knee: an experimental investigation in dogs. Hansen ES, et al. **J Orthop Res** 1989; 7(4):543–9

Imaging with technetium 99m–labeled erythrocytes in evaluation of the Kasabach–Merritt syndrome. Loh W Jr, et al. **J Pediatr** 1988 Nov;113(5):856–9

Functional assessment of colonic interposition with 99Tcm–labeled milk. Sutton R, et al. **J Pediatr Surg** 1989 Sep;24(9):874–81

Blood clearance of 99mTc–phytate for evaluation of hepatic dysfunction in dogs. Shibata H, et al. **J Toxicol Sci** 1988 Aug;13(3):151–9

Clinical efficacy of 99mtechnetium mercaptoacetylglycine kit formulation in routine renal scintigraphy. duCret RP, et al. **J Urol** 1989 Jul;142(1):19–22

Correlates of diuretic renography in experimental hydronephrosis. Kekomäki M, et al. **J Urol** 1989 Feb; 141(2):391–4

Optimal use of 99mtechnetium–glucoheptonate scintigraphy in the detection of pyelonephritic scarring in children: a preliminary report. Shapiro E, et al. **J Urol** 1988 Nov;140(5 Pt 2):1175–7

Labelling of sucralfate using technetium labelled bovine serum albumin—an alternate to Tc99m–HSA. Sajid KM, et al. **JPMA** 1988 Sep;38(9):241–5

Tc–99m DTPA dynamic renal scintigraphy in the evaluation of renal transplants: the importance of perfusion index in the diagnosis of renal allograft rejection. Siraj QH, et al. **JPMA** 1988 May;38(5):139–48

An evaluation of technetium–99m tin colloid—its value in the diagnosis of renal transplant rejection. Wijeyesinghe EC, et al. **Nephrol Dial Transplant** 1988;3(2):209–13

Filtration fraction.noninvasive measurement with Tc–99m DTPA and changes induced by angiotensin–converting enzyme inhibition in hypertension. Peters AM, et al. **Nephron** 1989;51(4):470–3

Sucralphate–technetium scintigraphy in inflammatory bowel disease: experience in 23 patients. Zeijen RN, et al. **Neth J Med** 1989 Aug;35(1–2):76–85

Comparison of 99Tcm–mercaptoacetyltriglycine and 131I–orthoiodohippurate in determination of effective renal plasma flow (ERPF). Abdel–Dayem HM, et al. **Nucl Med Commun** 1989 Feb;10(2):99–107

99Tcm–labelled anti–CEA monoclonal antibody for tumour immunoscintigraphy: first clinical results. Baum RP, et al. **Nucl Med Commun** 1989 May;10(5):345–52

Radiolabelled granulocytes in inflammatory bowel disease: diagnostic possibilities and clinical indications. Becker W, et al. **Nucl Med Commun** 1988 Oct;9(10):693–701 (34 ref.)

99Tcm hexamethylpropyleneamineoxime (HMPAO) as a platelet label: evaluation of labelling parameters and first in vivo results. Becker W, et al. **Nucl Med Commun** 1988 Oct;9(10):831–42

Comparison of 99Tcm–labelled MDP and DMAD bone scanning agents in patients with advanced breast cancer. Coleman RE, et al. **Nucl Med Commun** 1988 Jul;9(7):481–5

White cells radiolabelled with 111In and 99Tcm—a study of relative sensitivity and in vivo viability. Costa DC, et al. **Nucl Med Commun** 1988 Oct;9(10):725–31

Is radiolabelled sucralphate scintigraphy of any use in the diagnosis of inflammatory bowel disease? Crama–Bohbouth GE, et al. **Nucl Med Commun** 1988 Aug;9(8):591–5

DISIDA kinetics measure liver function in dogs. Fraser IA, et al. **Nucl Med Commun** 1989 Jun;10(6):435–47

99Tcm–labelled leucocyte imaging in active rheumatoid arthritis. Al–Janabi MA, et al. **Nucl Med Commun** 1988 Dec;9(12):987–91

Imaging of inflammation with granulocytes labelled in vivo. Joseph K, et al. **Nucl Med Commun** 1988 Oct;9(10):763–9

Parasternal lymphoscintigraphy using 99Tcm–dextran. Karayalcin B, et al. **Nucl Med Commun** 1988 Sep; 9(9):657–62

Gallbladder function and fasting enterogastric bile reflux. Kennedy NS, et al. **Nucl Med Commun** 1989 Mar; 10(3):193–8

Detection of splenosis: 99Tcm tin colloid scanning and computed transmission tomography compared. Logan H, et al. **Nucl Med Commun** 1988 Dec;9(12):993–7

Non–inflammatory applications in vivo of radiolabelled leucocytes: a review. McAfee JG. **Nucl Med Commun** 1988 Oct;9(10):733–44 (40 ref.)

The diagnosis of acute mesenteric ischaemia using 99Tcm–labelled 50H.19, a monoclonal antibody reacting with platelets. Oster ZH, et al. **Nucl Med Commun** 1988 Oct;9(10):843–7

Background in 99Tcm DTPA renography evaluated by the impact of its components on individual kidney glomerular filtration rate. Peters AM, et al. **Nucl Med Commun** 1988 Aug;9(8):545–52

Appropriate selection of background for 99Tcm–DTPA renography. Peters AM, et al. **Nucl Med Commun** 1988 Dec;9(12):973–85

Review of platelet labelling and kinetics. Peters AM. **Nucl Med Commun** 1988 Oct;9(10):803–8 (5 ref.)

Immunoscintigraphy in intraocular malignant melanoma. Scheidhauer K, et al. **Nucl Med Commun** 1988 Sep; 9(9):669–78

Comparison of 123I monoclonal granulocyte antibody and 99Tcm–HMPAO–labelled leucocytes in the detection of inflammation. Vorne M, et al. **Nucl Med Commun** 1988 Sep;9(9):623–9

99mTc–aminohexylidendiphosphonate and 99mTc–pyrophosphate in the scintigraphic diagnosis of experimental myocardial infarction in dogs. Dutka F, et al. **Nuklearmedizin** 1988 Oct;27(5):226–7

99mTc–leukocyte scintigraphy in prosthetic vascular graft infections. Vorne M, et al. **Nuklearmedizin** 1989 Jun; 28(3):95–9

Clinical significance of 99mTc–N–pyridoxyl–5–methyltryptophan (99mTc–PMT) in the diagnosis of intrahepatic masses. Oyamada H, et al. **Radioisotopes** 1989 May;38(5):244–51

Tc–99m antifibrin Fab' fragments for imaging venous thrombi: evaluation in a canine model. Knight LC, et al. **Radiology** 1989 Oct;173(1):163–9

Mesenteric vascular occlusion: a new diagnostic method using a radiolabeled monoclonal antibody reactive with platelets. Oster ZH, et al. **Radiology** 1989 Jun;171(3):653–6

Clinical comparison of I-131 orthoiodohippurate and the kit formulation of Tc-99m mercaptoacetyltriglycine. Taylor A Jr, et al. **Radiology** 1989 Mar;170(3 Pt 1):721–5

99m-technetium labeled red blood cells in determining the site of intermittent colonic bleeding. Mazzuca N, et al. **Rays** 1988 Jan-Apr;13(1):57–9

Gated blood pool scintigraphy (GBPS) for optimal setting of programmable cardiac pacemakers. Otto HJ, et al. **Rays** 1988 May-Aug;13(2):69–73

External 113Inm and 99Tcm radiation detection of lung edema induced by oleic acid in the guinea pig. Hultkvist U, et al. **Res Exp Med (Berl)** 1988;188(4):277–88

Renal parenchymal damage on DMSA-scintigraphy in pelviureteric obstruction. Kullendorff CM, et al. **Scand J Urol Nephrol** 1989;23(2):127–30

Prospective management of neonates with pelviureteric junction stenosis. Therapeutic strategy based on 99m Tc-DPTA studies. Piepsz A, et al. **Scand J Urol Nephrol** 1989;23(1):31–6

Technetium-labeled monoclonal antibodies for imaging metastatic melanoma: results of a multicenter clinical study [published erratum appears in Semin Oncol 1989 Jun;16(3):xxiv] Salk D. **Semin Oncol** 1988 Dec;15(6):608–18

Scintigraphic differentiation of congenital soft-tissue extremity enlargement with Tc-99m DTPA. Mandell GA, et al. **Skeletal Radiol** 1989;18(1):33–41

Tc-NGA imaging in liver transplantation: preliminary clinical experience. Woodle ES, et al. **Surgery** 1989 Mar; 105(3):401–7

Diagnosis of pancreatic rejection with Tc-99m DTPA scintigraphy. Nghiem DD, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2791–2

Serial radionuclide determinations of graft perfusion in pancreas transplantation. Teule GJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2795–6

Spontaneous perforation of the ureter diagnosed on technetium 99m DTPA excretory urography. Barasch E, et al. **Urol Radiol** 1988;10(2):107–9

Evaluation of Tc-99m-DTPA for renal clearance studies in the pig. Worthley CS, et al. **Urol Res** 1988;16(6):449–54

[A new lymph node imaging agent—99mTc-polyphase liposome oleatis (99mTc-plo)] Yu BF. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):270–3 (Eng. Abstr.) (Chi)

[Reappraisal of T1-Tc scanning in the preoperative localization of hyperfunctioning parathyroid glands] Kung SP, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan; 88(1):78–82 (Eng. Abstr.) (Chi)

[New indications of kidney function by gamma imaging] Soini I, et al. **Duodecim** 1989;105(9):839–45 (Fin)

[Preoperative localization of parathyroid adenoma with technetium and thallium double-labeling scintigraphy. Difficulties related to associated thyroid lesions] Valensi P, et al. **Ann Med Interne (Paris)** 1989;140(4):263–8 (Eng. Abstr.) (Fre)

[Does radioisotope methodology justify the existence of acupuncture meridians?] Simon J, et al. **Bull Acad Natl Med (Paris)** 1988 Mar;172(3):363–8 (Eng. Abstr.) (Fre)

[Theoretical and practical problems posed by the measurement of capillary filtration by radioactive tracers] Comet M. **J Mal Vasc** 1989;14(3):226–30 (Eng. Abstr.) (Fre)

[Thallium-technetium scintigraphy for presurgical localization of parathyroid adenomas and hyperplasia] Amico S, et al. **Nephrologie** 1988;9(5):211–5 (Eng. Abstr.) (Fre)

[Technetium 99m pyrophosphate scintigraphy in cardiac amyloidosis (letter)] Guy JM, et al. **Presse Med** 1988 Sep 17;17(31):1588 (Fre)

[Bone and spinal tuberculosis: rare cause of false negative diagnosis with technetium scintigraphy (letter)] Martin A, et al. **Presse Med** 1988 Sep 17;17(31):1587 (Fre)

[The peroperative isotopic location of osteoid osteomas and other lesions exhibiting increased uptake on scintigraphy] Augereau B, et al. **Rev Chir Orthop** 1988;74(8):764–70 (Eng. Abstr.) (Fre)

[Value of thallium-technetium scintigraphy in the preoperative localization of parathyroid adenoma. Apropos of 30 cases] Gautier D, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):501–4 (44 ref.) (Fre)

[HMPAO-SPECT in cerebral seizures] Grünwald F, et al. **Nuklearmedizin** 1988 Dec;27(6):248–51 (Eng. Abstr.) (Ger)

[Perfusion scintigraphy using 99mTc-labeled microspheres in the functional evaluation of an implanted portsystem for intraarterial cytostatic treatment of liver metastases] Madler M, et al. **Nuklearmedizin** 1988 Oct;27(5):228–30 (Eng. Abstr.) (Ger)

[SPECT findings in the hemiparkinson syndrome using 99mTc-HMPAO] Neumann C, et al. **Nuklearmedizin** 1989 Jun;28(3):92–4 (Eng. Abstr.) (Ger)

[Parametric representation of kidney function using 99mTc-mercaptoacetyltriglycine (MAG3)] Szabó Z, et al. **Nuklearmedizin** 1989 Jun;28(3):73–83 (Eng. Abstr.) (Ger)

[Preliminary results of 99mTc-HMPAO-SPECT studies in endogenous psychoses] Wilhelm KR, et al. **Nuklearmedizin** 1989 Jun;28(3):88–91 (Eng. Abstr.) (Ger)

[Possibilities of the use of radioactively labeled metabolites of hemoglobin-bilirubin for testing liver function. 1. Labeling of bilirubin with 99m technetium] Kämpfer I, et al. **Radiol Diagn (Berl)** 1988;29(3):471–6 (Eng. Abstr.) (Ger)

[Does technetium scintigraphy in combination with gallium scintigraphy improve the differential diagnosis of aseptic and septic endoprosthesis loosening?] Lütten C, et al. **Rontgenblatter** 1989 Jun;42(6):262–7 (Eng. Abstr.) (Ger)

[Immunoscintigraphy of a colorectal tumor recurrence using a 99mTc-labeled anti-CEA-antibody] Rilinger N, et al. **Rontgenpraxis** 1989 Jul;42(7):245–7 (Ger)

[Role of Tc 99m pyrophosphate cardiac scintigraphy in the diagnosis of perioperative infarction in myocardial revascularization] Mercanti CA, et al. **Cardiologia** 1988 Oct; 33(10):927–30 (Eng. Abstr.) (Ita)

[Myocardial scintigraphy using 99m-technetium pyrophosphate in the diagnosis of acute myocardial infarct. Comparison of planar and tomographic imaging] Santoro GM, et al. **G Ital Cardiol** 1989 Apr;19(4):295–302 (Eng. Abstr.) (Ita)

[Study of myocardial perfusion at rest using technetium Tc 99m methoxy-isobutylisonitrile: comparison with labeled microspheres and thallium 201] Santoro GM, et al. **G Ital Cardiol** 1988 Nov;18(11):907–13 (Eng. Abstr.) (Ita)

[Dual energy emission computed tomography with 99mTc pyrophosphate and 201Tl in evaluating coronary reperfusion therapy in patients with acute myocardial infarction] Hashimoto T, et al. **J Cardiol** 1988 Jun; 18(2):291–7 (Eng. Abstr.) (Jpn)

[New application of myocardial infarct map using a dual isotope single photon emission computed tomography (SPECT) of [99mTc]pyrophosphate and [201Tl]chloride in patients with acute myocardial infarction] Hiroe M, et al. **Kaku Igaku** 1988 Oct;25(10):1125–9 (Eng. Abstr.) (Jpn)

[Technetium-99m-pyrophosphate single photon emission computed tomography of the heart in familial amyloid polyneuropathy: comparison with thallium-201 myocardial scintigraphy—a case report] Imamoto T, et al. **Kaku Igaku** 1988 Oct;25(10):1117–23 (Eng. Abstr.) (Jpn)

[Study of mammary lymph node scintigraphy by Tc-99m labeled activated carbon microspheres] Maeda M, et al. **Kaku Igaku** 1988 Aug;25(8):809–12 (Eng. Abstr.) (Jpn)

[Clinical evaluation of 99mTc-DTPA-HSA in patients with cerebrovascular diseases: assessment of perfusion reserve with SPECT] Nishizawa S, et al. **Kaku Igaku** 1988 Nov; 25(11):1189–200 (Eng. Abstr.) (Jpn)

[Clinical usefulness of physiologic components obtained by factor analysis—application to 99mTc-DTPA renography] Ohtake E, et al. **Kaku Igaku** 1989 Jan;26(1):89–93 (Eng. Abstr.) (Jpn)

[A case of Creutzfeldt-Jakob disease followed up by N-isopropyl-[123I]-p-iodoamphetamine and 99mTc-hexamethylpropyleneamine oxime SPECT] Ono S, et al. **Kaku Igaku** 1989 Jan;26(1):77–88 (Eng. Abstr.) (Jpn)

[Renal function assessed by 99mTc-DMSA scintigraphy before and after percutaneous nephrostolithotripsy (PNL)] Sakurai M, et al. **Kaku Igaku** 1988 Nov;25(11):1215–20 (Eng. Abstr.) (Jpn)

[The clinical usefulness of portal venous flow ratio by hepatic angiography with 99mTc-Sn colloid in chronic liver diseases: a comparison with histological finding] Takegoshi K, et al. **Kaku Igaku** 1989 Apr;26(4):499–505 (Eng. Abstr.) (Jpn)

[A multi-center clinical trial on 99mTc-DTPA-HSA, a new radiopharmaceutical for cardiovascular system imaging] Torizuka K, et al. **Kaku Igaku** 1988 Nov;25(11):1201–13 (Eng. Abstr.) (Jpn)

[Diagnosis of left atrial thrombus by technetium-99m radionuclide angiography] Uehara T, et al. **Kaku Igaku** 1988 Jun;25(6):513–23 (Eng. Abstr.) (Jpn)

[Clinical studies of radionuclide angiography with a new radioactive tracer, 99mTc-DTPA-human serum albumin] Yamada M, et al. **Kaku Igaku** 1988 Nov;25(11):1291–7 (Jpn)

[Quantification of myocardial infarct size by technetium-99m pyrophosphate single photon emission computed tomography] Yamamoto H, et al. **Kaku Igaku** 1989 Apr; 26(4):469–76 (Eng. Abstr.) (Jpn)

[Lymphoscintigraphy of the breast using labeled activated carbon by 99mTc: preliminary report] Saeki T, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1752 (Jpn)

[Diagnostic value of the reflux sign in cholescintigraphy after administration of a gallbladder contracting agent—a comparison with X-ray cholangiography] Itoh H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25; 49(1):66–72 (Eng. Abstr.) (Jpn)

[Measurement of effective hepatic blood flow using 99mTc-PMT SPECT and single blood sampling] Sakuma H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25;49(1):62–5 (Eng. Abstr.) (Jpn)

[Relation between Tc-99m-PYP and Tl-201 scintigraphic findings and left ventricular function in acute myocardial infarction with early reperfusion] Mori T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):993–8 (Jpn)

[Analysis of hepatic hemodynamics by a new method of per-rectal portal scintigraphy using 99mTcO4- (direct intramural administration of radioisotope)] Ohe T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):715–24 (Eng. Abstr.) (Jpn)

[Evaluation of gallbladder emptying in patients with chronic liver disease by 99mTc-EHIDA hepatobiliary scintigraphy] Kurihara N, et al. **Radioisotopes** 1989 Jun; 38(6):269–74 (Eng. Abstr.) (Jpn)

[An evaluation of predicting postoperative residual liver function using 99mTc tin colloid] Tamai T, et al. **Radioisotopes** 1988 Oct;37(10):558–63 (Eng. Abstr.) (Jpn)

[Scintigraphy presentation: Dual SPECT imaging of the myocardium with 201Tl and 99mTc] Kojima Y, et al. **Rinsho Hoshasen** 1988 Aug;33(8):897–8 (Jpn)

[Comparison of the usefulness of Technetium 99m-labeled ethylidene-1-hydroxy-1,1'-diphosphonic acid (EHDP) and methylene diphosphonic acid (MDP) of Polish production for the diagnosis of bone metastases in patients treated at the Oncology Center, Institute of Oncology in Warsaw 1979-1987] Kozłowicz-Gudzińska I, et al. **Nowotwory** 1988 May-Jun;38(3):161–4 (Eng. Abstr.) (Pol)

[Scintigraphic evaluation of the efficacy of treatment of cancer of the breast with bone metastases] Gabuniia RI, et al. **Med Radiol (Mosk)** 1989 Apr;34(4):49–53 (Eng. Abstr.) (Rus)

[Osteoscintigraphy and dynamic studies of the kidneys using 99mTc-pyrophosphate in tumors of the retroperitoneal space in children] Siniuta BF. **Med Radiol (Mosk)** 1988 Oct;33(10):13–8 (Eng. Abstr.) (Rus)

[Visualization of subcutaneous metastases of hypernephroid cancer using 99mTc-dimercaptosuccinic acid] Smirnov IuN, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):63–5 (Rus)

[Gammagraphic evaluation of myocardial necrosis using antimyosin monoclonal antibodies] Sampere JJ, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:61–9 (Eng. Abstr.) (Spa)

ISOLATION & PURIFICATION

Improvement of the reproducibility of ion-pair HPLC of 99mTc(Sn)EHDP complexes and the influence of the Sn(II) concentration on the composition of the reaction mixture. Nieuwland RJ, et al. **Int J Rad Appl Instrum [A]** 1989;40(2):153–7

METABOLISM

Dual pathway clearance of 99mTc-DTPA from the bronchial mucosa. Bennett WD, et al. **Am Rev Respir Dis** 1989 May;139(5):1132–8

Permeability of the bronchial mucosa to 99mTc-DTPA in asthma. Ilowite JS, et al. **Am Rev Respir Dis** 1989 May; 139(5):1139–43

Comparative metabolic behavior and interrelationships of Tc and S in soybean plants. Cataldo DA, et al. **Health Phys** 1989 Aug;57(2):281–7

Bioavailability of Tc incorporated in plant material. Dehut JP, et al. **Health Phys** 1989 Aug;57(2):263–7

Technetium-99 cycling in maple trees: characterization of changes in chemical form. Garten CT Jr, et al. **Health Phys** 1989 Aug;57(2):299–307

99mTc bone scanning agents—VI. Gel chromatographic analysis of the plasma protein binding of 99mTc(Sn)pyrophosphate, 99mTc(Sn)MDP and 99mTc(Sn)HMDP. Kroesbergen J, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):479–87

Extraction of [99mTc]-d,l-HM-PAO across the blood-brain barrier. Andersen AR, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S44–51

Kinetic sensitivity of a receptor-binding radiopharmaceutical: technetium-99m galactosyl-neoglycoalbumin. Vera DR, et al. **J Nucl Med** 1989 Sep;30(9):1519–30

99mTc-HMPAO washout in prognosis of stroke [letter] Limburg M, et al. **Lancet** 1989 Apr 15;1(8642):839–40

The effect of eating on transit through the small intestine. Mundy MJ, et al. **Nucl Med Commun** 1989 Jan;10(1):45–50

Binding and diffusion characteristics of 14C EDTA and 99mTc DTPA in respiratory tract mucus glycoprotein from patients with chronic bronchitis. Cheema MS, et al. **Thorax** 1988 Sep;43(9):669–73

PHARMACOKINETICS

Whole body and regional retention of Tc-99m-labeled diphosphonates with a whole-body counter: a study with normal males. Molloi S, et al. **Calcif Tissue Int** 1989 May; 44(5):322–9

Liver-spleen visualization following aerosol lung ventilation with technetium-99m DTPA. Goyer P, et al. **Clin Nucl Med** 1989 Feb;14(2):141–2

Technetium-99m uptake in neonatal breast. Hurst RW, et al. **Clin Nucl Med** 1989 Jan;14(1):61

Uptake and release of two new Tc-99m labeled myocardial blood flow imaging agents in cultured cardiac cells. Maublant JC, et al. **Eur J Nucl Med** 1989;15(4):180–2

Retention of [99mTc]-d,l-HM-PAO in rat brain: an autoradiographic study. Hoffman TJ, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S38–43

The retention of [99mTc]-d,l-HM-PAO in the human brain after intracarotid bolus injection: a kinetic analysis. Lassen NA, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S13–22

Initial cerebral HM-PAO distribution compared to LCBF: use of a model which considers cerebral HM-PAO trapping kinetics. Lear JL. **J Cereb Blood Flow Metab** 1988

Dec;8(6):S31-7
Determination of flow and rate constants in a kinetic model of [99mTc]-hexamethyl-propylene amine oxime in the human brain. Matsuda H, et al.
J Cereb Blood Flow Metab 1988 Dec;8(6):S61-8
The retention mechanism of technetium-99m-HM-PAO: intracellular reaction with glutathione. Neirinckx RD, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S4-12
Renal handling of amino acid 99mtechnetium chelates. Chattopadhyay M, et al. **J Inorg Biochem** 1988 Sep; 34(1):25-40
Technetium-99m MAG-3 clearances after captopril in experimental renovascular hypertension. Lee HB, et al.
J Nucl Med 1989 May;30(5):666-71
Technetium-99m ECD: a new brain imaging agent: in vivo kinetics and biodistribution studies in normal human subjects. Vallabhajosula S, et al. **J Nucl Med** 1989 May; 30(5):599-604
The influence of age on the pulmonary clearance of 99Tcm-DTPA radioaerosol. Pigorini F, et al.
Nucl Med Commun 1988 Dec;9(12):965-71
[Percutaneous reabsorption of Tc 99m heparinoid] Klug W, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988; 21(5):281-4 (Eng. Abstr.) **(Ger)**
[99mTc-fosfon distribution in the hip joints and femoral arteries in femur head osteochondropathy in children] Kovalenko IuD, et al. **Med Radiol (Mosk)** 1989 Jul; 34(7):29-36 (Eng. Abstr.) **(Rus)**
[Radiopharmacokinetics of 99mTc-atropine in 2 healthy volunteers and biodistribution in mice] Arteaga de Murphy C, et al. **Rev Invest Clin** 1988 Oct-Dec;40(4):399-404 (Eng. Abstr.) **(Spa)**

STANDARDS

Microbiological contamination of 99Tcm eluates [letter] Vinberg N, et al. **Nucl Med Commun** 1988 Dec;9(12):972

SUPPLY & DISTRIBUTION

DOE's suspension of enriched uranium shipments at Savannah River puts Mo-99/Tc-99m supply in jeopardy [news] Tilyou SM. **J Nucl Med** 1989 Jul;30(7):1139-40, 1146

THERAPEUTIC USE

Quantitative measurements of cerebral blood flow using SPECT and [99mTc]-d,l-HM-PAO compared to xenon-133. Andersen AR, et al.
J Cereb Blood Flow Metab 1988 Dec;8(6):S69-81

TOXICITY

Toxicity of 99Tc: can it represent a risk to man? Gerber GB, et al. **Health Phys** 1989 Aug;57(2):345-50

URINE

Bone turnover determined by urinary excretion of [99mTc]diphosphonate in the prediction of postmenopausal bone loss. Thomsen K, et al. **Bone Miner** 1987 Apr; 2(2):125-31

TECHNETIUM METHYLENE DIPHOSPHONATE see **TECHNETIUM TC 99M MEDRONATE**

TECHNETIUM SULFUR COLLOID see **TECHNETIUM TC 99M SULFUR COLLOID**

TECHNETIUM TC 99M AGGREGATED ALBUMIN

Phagocytic labeling of leukocytes with 99mTc-albumin colloid for nuclear imaging. Marcus CS, et al.
Int J Rad Appl Instrum [B] 1988;15(6):673-82
Density and radioactivity distribution of respirable range human serum albumin aerosol. Raghunath B, et al.
Int J Rad Appl Instrum [B] 1988;15(5):587-8

BLOOD

[Metabolic products of technetium human serum albumin D (99mTc) in the human blood and urine] Shirakami Y, et al. **Kaku Igaku** 1989 Feb;26(2):279-82 **(Jpn)**

DIAGNOSTIC USE

99mTc-nanocolloid bone marrow scintigraphy in prostatic cancer. Haddock G, et al. **Br J Urol** 1989 May; 63(5):497-502
Scintigraphic demonstration of restored Denver peritoneovenous shunt patency using urokinase. Balon H, et al. **Clin Nucl Med** 1989 Apr;14(4):310-1
Demonstration of periorbital cerebrospinal fluid leak by radionuclide cisternography. Barette R, et al.
Clin Nucl Med 1989 Apr;14(4):309
Sequential dose injections. A new technique for technetium-99m colloid gastrointestinal bleeding studies. Delaplain CB, et al. **Clin Nucl Med** 1988 Nov;13(11):783-5
Abnormal Tc-99m MAA accumulation. Hiltz A, et al.
Clin Nucl Med 1988 Oct;13(10):727-9
Tc-99m serum albumin lymphoscintigraphy of upper limbs. Nawaz K, et al. **Clin Nucl Med** 1989 May;14(5):384-6
Spinal cerebrospinal fluid leak demonstrated by radioisotopic cisternography. Primeau M, et al. **Clin Nucl Med** 1988 Oct; 13(10):701-3
Intravenous digital subtraction angiography and lung imaging: compared value in the diagnosis of pulmonary embolism. Rosso J, et al. **Clin Nucl Med** 1989 Mar; 14(3):183-6
Detection of pulmonary telangiectasia using dynamic pulmonary perfusion imaging in patients with liver cirrhosis. Shijo H, et al. **Clin Nucl Med** 1989 Mar; 14(3):179-82
Technetium-99m particle imaging: acquired pulmonary micro-arteriovenous fistulae. Sty JR, et al.
Clin Nucl Med 1989 Mar;14(3):212-3
Quantification of right to left shunt through pulmonary arteriovenous malformations using 99Tcm albumin microspheres. Chilvers ER, et al. **Clin Radiol** 1988 Nov; 39(6):611-4
Localization of enteral protein loss by 99m-technetium-albumin-scintigraphy. Hildebrand P, et al. **Eur J Nucl Med** 1989;15(4):217-8
Determinants of diagnostic accuracy in pulmonary scintigraphy for pulmonary capillary protein leak associated with adult respiratory distress syndrome (ARDS): a technical note. Tatum J, et al.
Eur J Nucl Med 1989;15(2):67-70
Non-homogeneous intrahepatic drug distribution in intraportal infusional chemotherapy demonstrated by Tc-99m-MAA perfusion SPECT. Aeberhard P, et al.
Eur J Surg Oncol 1989 Apr;15(2):119-23
Gastric emptying in marathon runners. Carrió I, et al.
Gut 1989 Feb;30(2):152-5
Comparison of three tracers for detecting lung epithelial injury in anesthetized sheep. Peterson BT, et al.
J Appl Physiol 1989 May;66(5):2374-83
Variable patterns of technetium-99m MAA perfusion in the therapeutically embolized liver. Hall JT, et al.
J Nucl Med 1989 Jun;30(6):1012-7
Right-to-left shunting via persistent left superior vena cava identified by perfusion lung scintigraphy. Rosenbaum RC, et al. **J Nucl Med** 1989 Mar;30(3):412-4
Radiolabeled, nonspecific, polyclonal human immunoglobulin in the detection of focal inflammation by scintigraphy: comparison with gallium-67 citrate and technetium-99m-labeled albumin. Rubin RH, et al.
J Nucl Med 1989 Mar;30(3):385-9
Discrepant sulfur colloid and radioparticle liver uptake in superior vena cava obstruction: case report. Suneja SK, et al. **J Nucl Med** 1989 Jan;30(1):113-6
Monodisperse labeled aerosol to visualize airflow redistribution in the lung after a mucokinetic drug. Pulerà N, et al. **J Nucl Med Allied Sci** 1989 Jul-Sep;33(3):258-63
Severity of cardiac failure from the standpoint of pulmonary circulation: studies centered on distribution of pulmonary perfusion. Tanaka T, et al. **Jpn Circ J** 1989 Feb; 53(2):155-64
Radioisotopic assessment of hepatic arterial flow to evaluate perfusion patterns of totally implanted drug-delivery systems. Dondi M, et al. **Life Support Syst** 1983;1 Suppl 1:82-4
Aerosol-perfusion lung scintigraphy: value of ventilation subtraction. Peltier P, et al. **Nucl Med Commun** 1988 Aug; 9(8):565-76
Diagnosis of thrombosis of the deep veins of the lower extremities and pelvis and pulmonary thromboembolism using 99Tcm human serum albumin macroaggregates. Stevan M, et al. **Nucl Med Commun** 1989 Mar;10(3):141-7
Radioisotope evidence of varying transit of solid food in gastrectomized patients with and without dumping syndrome. Palermo F, et al. **Nuklearmedizin** 1988 Oct; 27(5):195-9
Technetium-99m hysterosalpingography in infertility: an accurate alternative to contrast hysterosalpingography. Angtuaco TL, et al. **Radiographics** 1989 Jan;9(1):115-28
Radioisotopic method for nasal mucociliary function evaluation. Paludetti G, et al. **Rhinology** 1988 Dec; 26(4):257-62
[99mTc-nanocolloid: clinical results of its use as a new inflammation marker] Bostel F, et al. **ROFO** 1988 Dec; 149(6):648-53 (Eng. Abstr.) **(Ger)**
[Evaluation of 99mTc-albumin distribution ratio in the cardiac chambers and lungs] Fujii T, et al. **Kaku Igaku** 1989 Jan;26(1):23-33 (Eng. Abstr.) **(Jpn)**
[Clinical application of Tc-99m DTPA-HSA to cardiac pool scan in pediatrics] Hayashida K, et al. **Kaku Igaku** 1988 Oct;25(10):1155-62 **(Jpn)**
[Dynamic local cerebral circulation study in patients with cerebral diseases—using 99mTc-HSA-D mainly compared with 99mTc-HSA] Ishii K, et al. **Kaku Igaku** 1989 Jan; 26(1):35-44 (Eng. Abstr.) **(Jpn)**
[Clinical application of 99mTc-DTPA-HSA—comparison with 99mTc-human serum albumin] Kawamura Y, et al. **Kaku Igaku** 1989 Mar;26(3):433-8 **(Jpn)**
[Clinical evaluation of 99mTc-DTPA-HSA in patients with cerebrovascular diseases: assessment of perfusion reserve with SPECT] Nishizawa S, et al. **Kaku Igaku** 1988 Nov; 25(11):1189-200 (Eng. Abstr.) **(Jpn)**
[A measurement of V/V distribution by intravenous injection of Kr-81m and Tc-99m-MAA—a comparative study with Xe-133 inhalation method] Ohtani Y, et al. **Kaku Igaku** 1988 Apr;25(4):323-9 (Eng. Abstr.) **(Jpn)**
[Phase I clinical study of 99mTc-DTPA-human serum albumin] Tamaki N, et al. **Kaku Igaku** 1988 Jun; 25(6):579-88 **(Jpn)**
[A multi-center clinical trial on 99mTc-DTPA-HSA, a new radiopharmaceutical for cardiovascular system imaging] Torizuka K, et al. **Kaku Igaku** 1988 Nov;25(11):1201-13 (Eng. Abstr.) **(Jpn)**
[Clinical studies of radionuclide angiography with a new radioactive tracer, 99mTc-DTPA-human serum albumin] Yamada M, et al. **Kaku Igaku** 1988 Nov;25(11):1291-7 **(Jpn)**
[Lung perfusion scintigraphy with 99mTc-MAA in 46 patients with chronic airway disease] Tomioka H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):975-82 (Eng. Abstr.) **(Jpn)**
[Evaluation of left atrial function by 99mTc gated blood pool scan] Kawamura Y, et al. **Radioisotopes** 1989 Feb; 38(2):63-7 (Eng. Abstr.) **(Jpn)**
[Clinical comparison of 99mTc-diethylenetriaminepentaacetic acid-human serum albumin (99mTc-HSA-D) and 99mTc-human serum albumin (99mTc-HSA) for cardiac blood pool imaging] Mabuchi N, et al. **Radioisotopes** 1988 Jul;37(7):380-6 (Eng. Abstr.) **(Jpn)**
[Detection of varicocele by using 99mTc-diethylenetriamine pentaacetic acid human serum albumin (99mTc-DTPA human serum albumin)] Otsuka N, et al. **Radioisotopes** 1988 Jun;37(6):330-5 (Eng. Abstr.) **(Jpn)**
[Evaluation of left ventricular function using 99mTc-diethylenetriamine-pentaacetic acid-human serum albumin (DTPA-HSA)] Sumita Y, et al. **Radioisotopes** 1988 Sep;37(9):502-8 (Eng. Abstr.) **(Jpn)**
[Quantitative measurement of gastrointestinal protein loss using 99mTc-labelled albumin in a patient with Ménétrier's disease] Sakamoto H, et al. **Rinsho Hoshasen** 1988 Nov; 33(12):1593-6 (Eng. Abstr.) **(Jpn)**
[Evaluation of the severity of damage of the lungs in chronic nonspecific diseases based on a microstructural analysis of scintigrams] Vidiukov VI, et al. **Med Radiol (Mosk)** 1989 Apr;34(4):35-8 (Eng. Abstr.) **(Rus)**
[Diagnosis of thrombosis of the deep veins of the lower extremity and the pelvis and pulmonary thromboembolism using 99m Tc HSA, MAA] Marković S, et al.
Vojnosanit Pregl 1988 Nov-Dec;45(6):421-4 (Eng. Abstr.) **(Scr)**

ISOLATION & PURIFICATION

Preparation of tin-albumin nanospheres for labelling with 99mTc and application in liver scintigraphy. Knop G, et al. **J Microencapsul** 1984 Jul-Sep;1(3):249-52

PHARMACOKINETICS

Hepatic localization of Tc-99m MAA during lower extremity venography. Kolla I, et al. **Clin Nucl Med** 1989 Jun; 14(6):433-5

TECHNETIUM TC 99M MEDRONATE

ADVERSE EFFECTS

Severe reaction to diphosphonate: implications for treatment of Paget's disease. Elliott AT, et al. **BMJ** 1988 Sep 3; 297(6648):592-3

ANALOGS & DERIVATIVES

Technetium-99m hydroxymethylene diphosphonate scanning of acute injuries to the lateral ligaments of the ankle. Maurice H, et al. **Br J Radiol** 1989 Jan;62(733):31-4
Hand and forearm Tc-99m HMDP bone image findings of reflex sympathetic dystrophy similar to those of radiopharmaceutical arterial administration in the arm. Shih WJ, et al. **Clin Nucl Med** 1989 Apr;14(4):298-300
Intense bone imaging agent uptake in the soft tissues of the lower legs and feet relating to ischemia and cold exposure. Shih WJ, et al. **Eur J Nucl Med** 1988;14(7-8):419-21
99mTc bone scanning agents—VI. Gel chromatographic analysis of the plasma protein binding of 99mTc(Sn)pyrophosphate, 99mTc(Sn)MDP and 99mTc(Sn)HMDP. Kroesbergen J, et al.
Int J Rad Appl Instrum [B] 1988;15(5):479-87
Detection of noncalcified splenic hemangioma by radionuclide bone scan. Cooper SG, et al. **J Nucl Med** 1989 Jun;30(6):1111-2
[Accumulation of 99mTc-phosphorous compounds uptake by liver tumors] Otsuka N, et al. **Kaku Igaku** 1989 Apr; 26(4):559-63 **(Jpn)**
[Accumulation velocity of 99mTc-HMDP in hip joint diseases] Torizumi K, et al. **Radioisotopes** 1988 Jul; 37(7):398-401 (Eng. Abstr.) **(Jpn)**

DIAGNOSTIC USE

Predictive value of the three-phase technetium bone scan in diagnosis of reflex sympathetic dystrophy syndrome. Davidoff G, et al. **Arch Phys Med Rehabil** 1989 Feb; 70(2):135-7
Ipsilateral craniofacial uptake of Tc-99m MDP in nasopharyngeal carcinoma: incidence and implication. Nuruddin RN, et al. **Australas Radiol** 1989 Feb;33(1):93-6
51Cr-EDTA/99Tcm-MDP ratio: a simple non-invasive method for assessing renal osteodystrophy. Nisbet AP, et al. **Br J Radiol** 1989 May;62(737):438-42
Anatomic and position-induced increased radiopharmaceutical uptake in the cervical spine on bone imaging. Black RR, et al. **Clin Nucl Med** 1988 Jul;

13(7):483–5
Uptake of Tc-99m MDP in soft tissue calcific deposits due to the tumor lysis syndrome. Fig LM, et al. **Clin Nucl Med** 1988 Oct;13(10):765–7
Neuroblastoma: imaging evaluation by sequential Tc-99m MDP, I-131 MIBG, and Ga-67 citrate studies. Garty I, et al. **Clin Nucl Med** 1989 Jul;14(7):515–22
The nuclear medicine bone image and myositis ossificans progressiva. Guze BH, et al. **Clin Nucl Med** 1989 Mar; 14(3):161–2
Diffuse muscle uptake of technetium-99M MDP in a patient with lung cancer. Krasnow AZ, et al. **Clin Nucl Med** 1988 Jul;13(7):538–40
Extensive soft tissue uptake of bone tracer in amyloidosis. Lee KJ, et al. **Clin Nucl Med** 1988 Sep;13(9):675–6
Pathophysiologic interpretation of time activity curves in dynamic bone imaging. McCullough RW, et al. **Clin Nucl Med** 1988 Jul;13(7):517–24 (45 ref.)
Detection of osseous lesions in Gorlin's syndrome by technetium-99m MDP. Peracha HU, et al. **Clin Nucl Med** 1988 Jul;13(7):549–50
Tc-99m diphosphonate uptake in malignant fibrous histiocytoma: a possible iron-related effect. Spencer RP, et al. **Clin Nucl Med** 1988 Oct;13(10):734–5
Significance of solitary spine abnormalities on technetium-99m bone imaging. Thivolle P, et al. **Clin Nucl Med** 1988 Jul;13(7):527–8
Tc-99m MDP uptake in ischemic hepatopathy. Timmons JH, et al. **Clin Nucl Med** 1988 Oct;13(10):759–60
Pulmonary alveolar microlithiasis with the absence of technetium-99m MDP uptake of lungs. Turktas H, et al. **Clin Nucl Med** 1988 Dec;13(12):883–5
Triple phase bone scanning of an intraosseous ganglion: case report and discussion. Wardlaw JM, et al. **Clin Nucl Med** 1988 Sep;13(9):647–8
Prediction of the healing potential of closed adult tibial shaft fractures by bone scintigraphy. Oni OO, et al. **Clin Orthop** 1989 Aug;(245):239–45
Isotope retention for assessment of bone turnover in involutional osteoporosis. Passeri M, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:35–40
The visualization of femoral vessels in delayed bone scans—a sign of arteriosclerosis? A comparison of 99mTc-MDP and 99mTc-DPD. Lantto T, et al. **Eur J Nucl Med** 1989; 15(5):265–8
Increased cartilagenous uptake on bone scintigraphy in a patient with relapsing polychondritis. ter Borg EJ, et al. **Eur J Nucl Med** 1988;14(7–8):427–8
Muscular injury in a child diagnosed by 99mTc-MDP bone scan. Tondeur M, et al. **Eur J Nucl Med** 1989;15(6):328–9
Quantitative bone scintigraphy: usefulness in the survey of patients treated for bone metastasis of prostatic cancer. Grob JC, et al. **Eur Urol** 1988;15(3–4):193–5
Nuclear medicine studies of aging—IV. Femoral proximal to distal radionuclide uptake gradient. Grimmond AP, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):529–30
Radiopharmacological profiles of tracers under pathophysiological conditions. 99mTc-methylene diphosphonate uptake by bone in altered thyroid status. Pahuja DN, et al. **Int J Rad Appl Instrum [B]** 1988; 15(5):573–6
Factors affecting the sensitivity and specificity of the three-phase technetium bone scan in the diagnosis of reflex sympathetic dystrophy syndrome in the upper extremity. Werner R, et al. **J Hand Surg [Am]** 1989 May;14(3):520–3
Bone secondaries in breast cancer: the solitary metastasis. Boxer DI, et al. **J Nucl Med** 1989 Aug;30(8):1318–20
Quantitative bone scintigraphy using SPECT. Front D, et al. **J Nucl Med** 1989 Feb;30(2):240–5
Detection of obstructive uropathy by bone scintigraphy. Haden HT, et al. **J Nucl Med** 1988 Nov;29(11):1781–5
Role of technetium-99m phosphonate bone and indium-111 leukocyte scanning for detecting the infected hip prosthesis [letter] Mountford PJ, et al. **J Nucl Med** 1989 Apr; 30(4):562–3
Three-phase bone scan and indium white blood cell scintigraphy following porous coated hip arthroplasty: a prospective study of the prosthetic tip. Oswald SG, et al. **J Nucl Med** 1989 Aug;30(8):1321–31
Combined bone scintigraphy and indium-111 leukocyte scans in neuropathic foot disease. Schauwecker DS, et al. **J Nucl Med** 1988 Oct;29(10):1651–5
Renal uptake of technetium-99m methylene diphosphonate following therapeutic radiation for vertebral metastases. Titelbaum DS, et al. **J Nucl Med** 1989 Jun;30(6):1113–6
Reversible pulmonary uptake and hypertrophic pulmonary osteoarthropathic distribution of technetium-99m methylene diphosphonate in a case of Pneumocystis carinii pneumonia. Vaquer RA, et al. **J Nucl Med** 1989 Sep; 30(9):1563–7
Vanishing "ureterohydronephrosis" on technetium-99m-MDP bone scanning. De Geeter F, et al. **J Nucl Med Allied Sci** 1989 Jan–Mar;33(1):42–4
Experimental study of vascularized bone: quantitative analysis of bone scintigraphy and histology. Takato T, et al. **J Reconstr Microsurg** 1988 Oct;4(5):391–7
Comparison of 99Tcm-labelled MDP and DMAD bone scanning agents in patients with advanced breast cancer. Coleman RE, et al. **Nucl Med Commun** 1988 Jul;9(7):481–5
Uptake of 99Tcm-MDP in lung metastasis from osteosarcoma: clinical and animal studies. Tsuji T, et al. **Nucl Med Commun** 1988 Dec;9(12):947–54
Incidental detection of adult polycystic kidney disease on routine bone scan. Axelrod MS, et al. **Nuklearmedizin** 1989 Apr;28(2):121–2
Renal metastases shown by 99mTc-methylene diphosphonate scintigram which failed to detect vertebral metastases. Kreel L, et al. **Postgrad Med J** 1989 Jan;65(759):22–6
Evaluation by using radionuclide uptake of bone in Paget's disease of bone: special reference to treatment with calcitonin. Dokoh S, et al. **Radioisotopes** 1988 Jun; 37(6):339–42
[Clinical usage of indium-111 labeled leukocyte scintigraphy and technetium-99m methylene diphosphonate scintigraphy in patients with total hip replacement] Terauchi T, et al. **Kaku Igaku** 1988 Oct;25(10):1103–9 (Eng. Abstr.) **(Jpn)**
[Usefulness of bone imaging in diagnosis of sternocostoclavicular hyperostosis] Sakata H, et al. **Radioisotopes** 1989 Feb;38(2):76–9 (Eng. Abstr.) **(Jpn)**
[Accumulation of 99mTc-phosphorous compounds in primary hepatic tumors associated with hypercalcemia] Otsuka N, et al. **Rinsho Hoshasen** 1989 Feb;34(2):293–5 (Eng. Abstr.) **(Jpn)**
[Comparison of the usefulness of Technetium 99m-labeled ethylidene-1-hydroxy-1,1'-diphosphonic acid (EHDP) and methylene diphosphonic acid (MDP) of Polish production for the diagnosis of bone metastases in patients treated at the Oncology Center, Institute of Oncology in Warsaw 1979–1987] Kozłowicz-Gudzińska I, et al. **Nowotwory** 1988 May–Jun;38(3):161–4 (Eng. Abstr.) **(Pol)**
[Osteoscintigraphy in the evaluation of a bone transplant in cranioplasty in children] Mytnikov AM, et al. **Med Radiol (Mosk)** 1989 Apr;34(4):46–9 (Eng. Abstr.) **(Rus)**

METABOLISM

The relation of radionuclide uptake by bone to the rate of calcium mineralization. II: Patient studies using 99Tcm-MDP. Budd RS, et al. **Br J Radiol** 1989 Apr; 62(736):318–20
The relation of radionuclide uptake by bone to the rate of calcium mineralization. I: Experimental studies using 45Ca, 32P and 99Tcm-MDP. Budd RS, et al. **Br J Radiol** 1989 Apr;62(736):314–7
Splenic accumulation of technetium 99m in chronic lymphocytic leukaemia. McHugh K, et al. **Br J Radiol** 1988 Oct;61(730):957–9
99mTc bone scanning agents—VI. Gel chromatographic analysis of the plasma protein binding of 99mTc(Sn)pyrophosphate, 99mTc(Sn)MDP and 99mTc(Sn)HMDP. Kroesbergen J, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):479–87

PHARMACOKINETICS

Transient myocardial uptake of Tc-99m methylene diphosphonate in a patient with amyloidosis. Kinney EL, et al. **Am J Med Sci** 1988 Dec;296(6):413–6
Splenic accumulation of 99Tcm-methylene diphosphonate [letter] Alevizaki C, et al. **Br J Radiol** 1989 May;62(737):497
Whole body and regional retention of Tc-99m-labeled diphosphonates with a whole-body counter: a study with normal males. Molloi S, et al. **Calcif Tissue Int** 1989 May; 44(5):322–9
Tc-99m MDP uptake in hepatoblastoma. Elgazzar AH, et al. **Clin Nucl Med** 1989 Feb;14(2):143
Tc-99m MDP uptake by metastatic chondrosarcoma in the lung. Mekhmandarov S, et al. **Clin Nucl Med** 1989 May; 14(5):369–71
99mTc-MDP uptake and histological changes during rat bone marrow regeneration. Chisin R, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):469–76
[Accumulation of 99mTc-phosphorous compounds uptake by liver tumors] Otsuka N, et al. **Kaku Igaku** 1989 Apr; 26(4):559–63 **(Jpn)**

TECHNETIUM TC 99M PERTECHNETATE

Bioaccumulation and chemical modification of Tc by soil bacteria. Henrot J. **Health Phys** 1989 Aug;57(2):239–45

ADMINISTRATION & DOSAGE

Per-rectal portal scintigraphy: comparison between technetium-99m, thallium-201, and iodine-123-HIPDM [letter] Urbain D, et al. **J Nucl Med** 1988 Dec;29(12):2020–1
[Clinical evaluation of a new alternative venography: radionuclide venography of lower-limbs by subcutaneous injection at acupuncture points B-60 and K-3] Wu CC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Dec; 4(12):688–99 (Eng. Abstr.) **(Chi)**
[Inhalation scintigraphy of the lung using the new ultrafine aerosol Technegas (published erratum appears in Nuklearmedizin 1989 Jun;28(3):46)] Kropp J, et al. **Nuklearmedizin** 1989 Apr;28(2):113–20 (Eng. Abstr.) **(Ger)**

ANALYSIS

Quantitative HPLC determination of [99mTc]-pertechnetate in radiopharmaceuticals and biological samples—I. Technique development. Zhou TZ, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):493–8

DIAGNOSTIC USE

Modified in vitro method to label equine red blood cells with technetium 99m in concentrated whole blood. Koblik PD, et al. **Am J Vet Res** 1989 Apr;50(4):531–5
Initial experience with Technegas—a new ventilation agent. Fawdry RM, et al. **Australas Radiol** 1988 May;32(2):232–8
The value of SPECT imaging in the diagnosis of hepatic hemangioma. Brunetti JC, et al. **Clin Nucl Med** 1988 Nov; 13(11):800–4
Technetium-99m pertechnetate and gallium-67 imaging in salivary gland disease. Higashi T, et al. **Clin Nucl Med** 1989 Jul;14(7):504–14
Technetium pertechnetate esophageal imaging for detection of Barrett's esophagus. Yegelwel EJ, et al. **Dig Dis Sci** 1989 Jul;34(7):1075–8
99mTc-labelling of leucocytes with 99mTc-DPO: a complex developed for myocardial imaging. Endert G, et al. **Eur J Nucl Med** 1989;15(5):262–4
Improvement of parathyroid Tl-Tc scintigraphy by using a new image subtraction method. Liehn JC, et al. **Eur J Nucl Med** 1988;14(4):184–9
Radionuclide venography: two stage—flow and equilibrium technique using 99mTc pertechnetate, and 99mTc RBC labelled "in vivo". Snarski AM. **Eur J Nucl Med** 1989; 15(3):137–42
Radionuclide evaluation of ventricular function at rest and during exercise in double inlet ventricle. Rapezzi C, et al. **Int J Cardiol** 1989 Apr;23(1):99–104
Scintigraphic and ultrasound features of giant hemangiomas of the liver. Lisbona R, et al. **J Nucl Med** 1989 Feb; 30(2):181–6
Dependence of technetium-99m red blood cell labeling efficiency on red cell surface charge. Seldin DW, et al. **J Nucl Med** 1988 Oct;29(10):1710–3
Quantitative estimation of compliance of human systemic veins by occlusion plethysmography with radionuclide—methodology and the effect of nitroglycerin. Takatsu H, et al. **Jpn Circ J** 1989 Mar;53(3):245–54
201Tl-99mTc subtraction scintigraphy in secondary hyperparathyroidism of chronic renal failure. Moolenaar W, et al. **Nephrol Dial Transplant** 1988;3(2):166–8
Pertechnetate uptake in the prediction of early outcome after radioiodine therapy. Gimlette TM. **Nuklearmedizin** 1989 Feb;28(1):21–5
The use of preoperative localization of adenomas of the parathyroid glands by thallium-technetium subtraction scintigraphy, high-resolution ultrasonography and computed tomography. Roses DF, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):99–106
[Are there regional differences in Tc uptake?] Wieler H, et al. **Nuklearmedizin** 1989 Aug;28(4):137–8 (Eng. Abstr.) **(Ger)**
[The combination of scintigraphy and sonography in the diagnosis of an autonomous adenoma of the thyroid gland. Determination of the impulse-thickness-quotient] Klaua M, et al. **Radiobiol Radiother (Berl)** 1988;29(4):469–74 (Eng. Abstr.) **(Ger)**
[Imaging of a duplication of the small intestine using 99mTc pertechnetate] Döge H, et al. **ROFO** 1989 Jul;151(1):106–7 **(Ger)**
[A simple isotope method for studying of gastric emptying of solid foods] Dobó I, et al. **Orv Hetil** 1989 May 7; 130(19):995–7 (23 ref.) (Eng. Abstr.) **(Hun)**
[Usefulness of a study with 99m Tc-labelled erythrocytes for the recognition of hepatic angioma in the staging of cancer patients] Ugolotti G, et al. **Radiol Med (Torino)** 1988 Oct;76(4):308–10 (Eng. Abstr.) **(Ita)**
[A comparative evaluation of radionuclide and ultrasonic studies of the thyroid] Epshtein EV, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):9–13 (Eng. Abstr.) **(Rus)**
[Diagnostic imaging using 201Tl and 99mTc-pertechnetate in hyperparathyroidism] Gimlette TM, et al. **Med Radiol (Mosk)** 1989 May;34(5):32–44 **(Rus)**
[Local radiometry of tumors of the breast] Kiuldzhiev V, et al. **Med Radiol (Mosk)** 1989 Aug;34(8):45–7 (Eng. Abstr.) **(Rus)**
[Radionuclide ventriculography in the evaluation of the functional state of the left heart ventricle in patients following myocardial infarct] Sledzevskaia IK, et al. **Med Radiol (Mosk)** 1989 Mar;34(3):38–43 (Eng. Abstr.) **(Rus)**
[Diagnosis of hemangioma of the liver with 99mTc labeled erythrocytes] Janković Z, et al. **Vojnosanit Pregl** 1988 Jul–Aug;45(4):273–5 (Eng. Abstr.) **(Ser)**

ISOLATION & PURIFICATION

Electronic interaction chromatography on porous graphitic carbon. Separation of [99mTc]pertechnetate and perrhenate anions. Lim CK. **Biomed Chromatogr** 1989 Mar;3(2):92–3

METABOLISM

Technetium metabolism by lactating goats. Ennis ME Jr, et al. **Health Phys** 1989 Aug;57(2):321–30
Technetium metabolism in goats and swine. Jones BE. **Health Phys** 1989 Aug;57(2):331–6
Reaction mechanisms responsible for transformation of pertechnetate in photoautotrophic organisms. Lembrechts JF, et al. **Health Phys** 1989 Aug;57(2):255–62

The uptake of TcO-4 by plants: a mathematical description. Van Loon LR, et al. **Health Phys** 1989 Aug;57(2):309–14

A comparison of the rate of clearance of xenon (133Xe) and pertechnetate ion (99mTcO4-) in murine tumors and normal leg muscles. Brown SL, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):381–90

PHARMACOKINETICS

Blood–brain barrier to pertechnetate following drug–induced hypotension. Cook PR, et al. **Br J Anaesth** 1989 Apr; 62(4):402–8

Factors influencing pertechnetate uptake by rabbit knees. Bard DR, et al. **Br J Rheumatol** 1989 Feb;28(1):34–9

Mediastinal uptake of Tc–99m pertechnetate in a thymona. Jimenez–Heffernan A, et al. **Clin Nucl Med** 1989 May; 14(5):375

Absorption of Tc–99m pertechnetate from the augmented bladder during direct nuclear cystography. Lowe B, et al. **Clin Nucl Med** 1989 May;14(5):347–9

Technetium absorption and turnover in monogastric and polygastric animals. Gerber GB, et al. **Health Phys** 1989 Aug;57(2):315–9

[Pharmacokinetics of intradermally–administered drugs] Corbel D, et al. **Bull Acad Natl Med** 1989 Feb;173(2):223–7 (Eng. Abstr.) **(Fre)**

STANDARDS

Radiation dose to various age groups from radionuclide impurities in 99mTc–pertechnetate (fission product 99Mo generator) radiopharmaceutical preparations. Nagarstnam A, et al. **Eur J Nucl Med** 1988;14(7–8):331–6

TECHNETIUM TC 99M SULFUR COLLOID

BLOOD

Binding of 99Tcm sulphur colloid to blood components: implications in renal transplant rejection. Nadkarni GD, et al. **Nucl Med Commun** 1988 Nov;9(11):899–905

DIAGNOSTIC USE

Combined 99mTc–sulfide colloid and 99mTc–RBC studies for localization of gastrointestinal bleeding sites [letter] Chu DD, et al. **AJR** 1989 Mar;152(3):653–4

Nuclear cystography and renal sonography: findings in girls with urinary tract infection. Strife JL, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):115–9

Radionuclide assessment of patency of pericardio–peritoneal shunt. Jost GM, et al. **Australas Radiol** 1988 Nov; 32(4):510–1

Preoperative cutaneous lymphoscintigraphy in malignant melanoma. Lock–Andersen J, et al. **Cancer** 1989 Jan 1; 63(1):77–82

Homogeneity of bronchopulmonary distribution of 99mTc aerosol in normal subjects and in cystic fibrosis patients. Laube BL, et al. **Chest** 1989 Apr;95(4):822–30

Incidental skeletal metastases from prostate cancer detected by sulfur colloid liver–spleen imaging. Koci TM, et al. **Clin Nucl Med** 1989 Mar;14(3):225–6

Diagnosis of a liver abscess with Ga–67 and radiocolloid tomography. Sangar VK, et al. **Clin Nucl Med** 1989 Jun; 14(6):443–5

Unusual pattern of lung uptake of technetium–99m sulfur colloid seen on the liver scan of a patient with pulmonary tuberculosis. Stewart CA, et al. **Clin Nucl Med** 1989 Apr; 14(4):271–4

Left anterior oblique projection and peak–to–scatter ratio for attenuation compensation of gastric emptying studies. Fahey FH, et al. **J Nucl Med** 1989 Feb;30(2):233–9

Diffuse lung uptake of technetium–99m sulfur colloid in malaria. Leclerc Y, et al. **J Nucl Med** 1989 Jan;30(1):117–9 (16 ref.)

Scintigraphic and ultrasound features of giant hemangiomas of the liver. Lisbona R, et al. **J Nucl Med** 1989 Feb; 30(2):181–6

Optimum processing protocols for volume determination of the liver and spleen from SPECT imaging with technetium–99m sulfur colloid. Mut F, et al. **J Nucl Med** 1988 Nov;29(11):1768–75

Reproducibility of Hepatic Perfusion Index [letter] Parkin A, et al. **J Nucl Med** 1988 Oct;29(10):1747–8

An improved radiolabeling technique of ivalon and its use for dynamic monitoring of complications during therapeutic transcatheter embolization. Sirr SA, et al. **J Nucl Med** 1989 Aug;30(8):1399–404

Discrepant sulfur colloid and radioparticle liver uptake in superior vena cava obstruction: case report. Suneja SK, et al. **J Nucl Med** 1989 Jan;30(1):113–6

Aerosol–perfusion lung scintigraphy: value of ventilation subtraction. Peltier P, et al. **Nucl Med Commun** 1988 Aug; 9(8):565–76

PHARMACOKINETICS

Renal accumulation of technetium–99m sulfur colloid. Hiltz A, et al. **Clin Nucl Med** 1989 Feb;14(2):118–20

Absorption of Tc–99m pertechnetate from the augmented bladder during direct nuclear cystography. Lowe B, et al. **Clin Nucl Med** 1989 May;14(5):347–9

Effect of alterations in erythropoiesis on distribution of 99mTc sulfur colloid in the rat. Henry RE, et al. **Life Sci** 1974 Oct 1;15(7):1343–51

TECHNOLOGY

Hedge against extinction. LaCombe MA. **Am J Med** 1989 Jan;86(1):91–2

Occupational therapy knowledge: from practice to theory. 1988 Eleanor Clarke Slagle lecture. Henderson A. **Am J Occup Ther** 1988 Sep;42(9):567–76 (61 ref.)

Can technology replace live preparations in student laboratories? Modell HI. **Am J Physiol** 1989 Jun;256(6 Pt 3):S18–20

Who's in charge? [editorial] Thurow RC. **Angle Orthod** 1988 Jul;58(3):194–6

Communicating technological risk: the social construction of risk perception. Nelkin D. **Annu Rev Public Health** 1989; 10:95–113 (68 ref.)

The role of biomaterials science in the next generation of artificial organ technology. Rosen JJ. **ASAIO Trans** 1988 Jul–Sep;34(3):163–7

Technology, change and society [editorial] Elmslie RG. **Aust Fam Physician** 1988 Sep;17(9):727

Society and the future. Jones BO. **Aust N Z J Psychiatry** 1988 Dec;22(4):358–65

Can bibliometric indicators assess science and technology? The Western World, Italian institutions, and biophysics as test cases. Balla MI, et al. **Cell Biophys** 1989 Feb; 14(1):99–116

The impact of technology: protection in Norway and Denmark. **Int Nurs Rev** 1989 Mar–Apr;36(2):43–6

Is research worthwhile? Booth CC. **J Laryngol Otol** 1989 Apr;103(4):351–6

Nobelists emphasize interdependence in global science and technology [news] Kangilaski J. **JAMA** 1989 Jul 21; 262(3):323–6

The Nobel Prize and medical progress through technology [editorial] Hutten H. **Med Prog Technol** 1988;14(1):5–6

The impact of technology on the clinical decision making of house staff. Seifer DB, et al. **N Y State J Med** 1989 Aug;89(8):444–5

The public perception of science (7): Clubs for inventors? Gregory RL. **Perception** 1988;17(3):285–7

Technology, power and the state. Mazzeo JA. **Women Health** 1987;13(1–2):211–5

[The Veterinary Service Board. Establishment of the Commission on Advice, Ethics and Biotechnology for Animals.] **Tijdschr Diergeneeskd** 1989 May 15; 114(10):585–6 **(Dut)**

[Scientific and technical progress: working conditions and the health of the workers] Chikin SIa. **Vestn Akad Med Nauk SSSR** 1989;(4):9–14 **(Rus)**

INSTRUMENTATION

[The elderly and new media] Straka GA. **Z Gerontol** 1988 Jul–Aug;21(4):217–21 (40 ref.) (Eng. Abstr.) **(Ger)**

[Hygienic problems of using pesticides in relation to the introduction of new technological processes in plant protection] Polishchuk DI. **Gig Sanit** 1988 Jul;(7):8–10 **(Rus)**

STANDARDS

[Planning of working conditions and tasks in creating optimal standards of technology in coal mines] Meniallo NI, et al. **Gig Tr Prof Zabol** 1989;(5):5–8 (Eng. Abstr.) **(Rus)**

[Problems of improving working conditions for workers engaged in the production of nitrogen mineral fertilizers] Rumiantsev GI, et al. **Gig Tr Prof Zabol** 1989;(3):1–4 (Eng. Abstr.) **(Rus)**

TECHNOLOGY ASSESSMENT, BIOMEDICAL

High–technology i.v. infusion devices. Kwan JW. **Am J Hosp Pharm** 1989 Feb;46(2):320–35 (17 ref.)

The role of ultrasonography and amniocentesis in the evaluation of pregnancies at risk for neural tube defects. Hogge WA, et al. **Am J Obstet Gynecol** 1989 Sep; 161(3):520–3; discussion 523–4

Pneumonia during pregnancy: has modern technology improved maternal and fetal outcome? Madinger NE, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):657–62

New horizons for liaison psychiatry: biomedical technologies and human rights [editorial] Brody EB. **Am J Psychiatry** 1989 Mar;146(3):293–5

Survival data in patients with acute and chronic lung disease requiring mechanical ventilation. Hudson LD. **Am Rev Respir Dis** 1989 Aug;140(2 Pt 2):S19–24 (36 ref.)

National Institutes of Health Consensus Development Conference statement on cochlear implants. Consensus Development Panel. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):31–6 (0 ref.)

Commercialising biomedical technology. Craig DL. **Australas Phys Eng Sci Med** 1989 Jun;12(2):107–10

Mammographic screening and mortality from breast cancer: the Malmö mammographic screening trial. Andersson I, et al. **BMJ** 1988 Oct 15;297(6654):943–8

Cardiac surgery in the elderly. Elder AT, et al. **BMJ** 1989 Jul 15;299(6692):140–1 (23 ref.)

Technological innovations in health care: the need for technology assessment. Angus DE. **Can J Public Health** 1988 Nov–Dec;79(6):414–5

HHS boosts funds for outcomes research. Robinson ML. **Hospitals** 1989 Apr 20;63(8):20–1

Access to technology–assessment data needed. Robinson ML. **Hospitals** 1988 Oct 20;62(20):18

Shifting or expanding medical paradigm? [editorial] Fletcher RH, et al. **J Gen Intern Med** 1989 Jul–Aug;4(4):357–8

Philosophy, medicine and its technologies. Almond B. **J Med Ethics** 1988 Dec;14(4):173–8

Bone mineral densitometry: SNM/ACNP opposes HCFA's intention to deny Medicare coverage [news] Tilyou S. **J Nucl Med** 1989 Feb;30(2):139–40

Inpatient vs outpatient treatment of renal calculi utilizing extracorporeal shock wave lithotripsy. Mays JE, et al. **J Okla State Med Assoc** 1988 Sep;81(9):559–62

Effectiveness in health care. An initiative to evaluate and improve medical practice. Roper WL, et al. **N Engl J Med** 1988 Nov 3;319(18):1197–202

Guidelines for medical care; the relationship between medical decision making, technology assessment and quality assurance [editorial] Casparie AF. **Neth J Med** 1988 Aug; 33(1–2):1–4

Value of laser–assisted angioplasty in the community hospital. Levy JM, et al. **Radiology** 1989 Mar;170(3 Pt 2):1017–8

Consensus and consensus conferences. Lynöe N. **Scand J Soc Med** 1988;16(4):193–5

Lung transplantation: an emerging technology. Lawrence EC, et al. **Tex Med** 1988 Dec;84(12):61–7 (27 ref.)

Prospective scenarios: a method of evaluating new decision tools. Dudley HA, et al. **World J Surg** 1989 May–Jun; 13(3):277–80

[Evaluation of medical technics: myth or reality?] Rene L. **Cah Sociol Demogr Med** 1988 Oct–Dec;28(4):395–9 **(Fre)**

[Evaluation of medical technology] Jacobsen G, et al. **Tidsskr Nor Laegeforen** 1988 Oct 25;108(29B):2631–4 **(Nor)**

[Technological development in the context of the National Health Program] Martuscelli–Quintana J, et al. **Salud Publica Mex** 1988 Nov–Dec;30(6):853–8 (Eng. Abstr.) **(Spa)**

ECONOMICS

Cost–effectiveness of outpatient parenteral antibiotics: a review of the literature. Balinsky W, et al. **Am J Med** 1989 Sep;87(3):301–5 (18 ref.)

Regulatory, coverage, and reimbursement changes. Implications for diffusion of technology in radiology. McGivney WT. **Invest Radiol** 1988 Oct;23(10):795–8

Cost effectiveness as a criterion for Medicare coverage. Leaf A. **N Engl J Med** 1989 Sep 28;321(13):898–900

Tissue culture–based rabies vaccines: vaccine production technology transfer. Halstead SB. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S764–5

HISTORY

Technology assessment in medicine. The role of the American Medical Association. McGivney WT, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1181–5

METHODS

Impact of technology on healthcare: a European perspective. Jolly D, et al. **Aust Clin Rev** 1989;9(1):39–45

The poor quality of early evaluations of MRI [letter] **JAMA** 1988 Nov 11;260(18):2661–4

PET scans and technology assessment [editorial] Chalmers TC. **JAMA** 1988 Nov 11;260(18):2713–5

Toward an applied technology for quality measurement in health care. Berwick DM. **Med Decis Making** 1988 Oct–Dec;8(4):253–8

Focusing technology assessment using medical decision theory. Phelps CE, et al. **Med Decis Making** 1988 Oct–Dec; 8(4):279–89

ORGANIZATION & ADMINISTRATION

New Canadian priority: cohesive tech assessment. Souhrada L. **Hospitals** 1989 Sep 5;63(17):44

CEO represents hospitals on technology council. Souhrada L. **Hospitals** 1989 Mar 20;63(6):72

System execs overcome barriers to tech assessment. Souhrada L. **Hospitals** 1989 Aug 5;63(15):38–43

STANDARDS

The early evaluations of MR imaging. Friedman PJ. **AJR** 1988 Nov;151(5):860–1

The assessment of MR imaging. Hillman BJ. **AJR** 1988 Nov; 151(5):858–60

Constraints and limitations of clinical investigations in radiology. Rosenquist CJ. **AJR** 1988 Nov;151(5):862–3

The poor quality of early evaluations of MR imaging: a reply. Shuman WP. **AJR** 1988 Nov;151(5):857–8

Standards of quality in medical research: who decides? Stark DD. **AJR** 1988 Nov;151(5):863–4

The tail wags the perinatal dog or beyond orthodox perinatal technology assessment. Wagner MG. **Paediatr Perinat Epidemiol** 1989 Apr;3(2):111–3

A clearer mirror: medical technology assessment. McGuire LB. **Va Med** 1988 Sep;115(9):438–41

TECHNOLOGY, DENTAL

Dental technology: knocking at high tech's door. **J Am Dent Assoc** 1989 Mar;118(3):285–8, 291–4

[Dental prostheses made of base alloys with multilayer compositional coatings] Panchokha VP, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):58–60 (Eng. Abstr.) **(Rus)**

[Electrochemical treatment of the metal framework of dental prostheses] Poluev VI, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):54–6 (Eng. Abstr.) **(Rus)**

[A method of preparing an orthodontic crown] Telebaeva GT, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):53–4 (Eng. Abstr.) **(Rus)**

ECONOMICS

[Results of studying the piecework method of manufacturing dental prostheses from precious metals] Gusev IuP, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):56–8 (Eng. Abstr.) **(Rus)**

EDUCATION

Dental technology education in Canada. Sykora O. **Can Dent Assoc J** 1989 May;55(5):375–80

Advisory committees for dental technology. Rogers WA. **J Dent Educ** 1989 Feb;53(2):142–3

INSTRUMENTATION

[An amalgam mixer for dental work] Semiusov GG. **Med Tekh** 1989 Jan–Feb;(1):58–60 (Eng. Abstr.) **(Rus)**

METHODS

[Improving the quality of refractory molds for casting the frameworks of removable dental prostheses] Kovalenko AF, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):64–6 (Eng. Abstr.) **(Rus)**

ORGANIZATION & ADMINISTRATION

[The Stomatology All-Union Scientific and Manufacturing Association] **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):4–6 **(Rus)**

TRENDS

Challenges for dental researchers in the '90's [editorial] Mandel ID. **J Dent Res** 1988 Oct;67(10):1362

TECHNOLOGY, FOOD see FOOD TECHNOLOGY

TECHNOLOGY, HIGH-COST

High-tech medicine and the control of health care costs [see comments] Stiller CR. **Can Med Assoc J** 1989 Apr 15; 140(8):905–8, **Comment in:** Can Med Assoc J 1989 Jul 15;141(2):96–7

The technology fallacy [letter] Bradley JG. **Hastings Cent Rep** 1989 Jan–Feb;19(1):43

In Colombia, dealing with death and technology. Llano-Escobar A. **Hastings Cent Rep** 1988 Aug–Sep; 18(4):suppl 23–4

High-tech specialties generate top dollars. Koska MT. **Hospitals** 1988 Oct 20;62(20):72, 74

Teaching hospitals face high-tech catch-22. Souhrada L. **Hospitals** 1989 Aug 20;63(16):33

Digital archiving requirements and technology. Jost RG, et al. **Invest Radiol** 1988 Nov;23(11):803–9

Commercial research and development in times of financial restraint. Spackman TJ, et al. **Invest Radiol** 1988 Oct; 23(10):791–4

High technology in medicine—ethical aspects. Ishay R. **Isr J Med Sci** 1989 May;25(5):274–8 (31 ref.)

High-tech and high-priced medicine [editorial] Lacsamana RG. **J Fla Med Assoc** 1989 Feb;76(2):233

Ethics committees for "high tech" innovations in Japan. Kimura R. **J Med Philos** 1989 Aug;14(4):457–64

In laboratory research, yesterday's visions are today's tools—and they are expensive [news] Ruddon K. **J Natl Cancer Inst** 1989 Feb 15;81(4):254–6

Rehumanizing maternal-child nursing. Phillips CR. **MCN** 1988 Sep–Oct;13(5):313–4, 316, 318

The high price of "sleep": can Australia afford high-technology anaesthesia? [see comments] Riley R. **Med J Aust** 1989 Apr 17;150(8):454, 457. **Comment in:** Med J Aust 1989 Jul 17;151(2):112

Technology: the elderly's fountain of youth? Carlson MJ. **Ohio Med** 1988 Jun;84(6):450–3

Lifeline and Smart House: technology comes home. Pomidor WJ. **Ohio Med** 1988 Jun;84(6):456–62

ECONOMICS

Quicker and sicker. Richards G. **Am J Nurs** 1989 Sep; 89(9):1152A–1152B

New regulations to alter technology innovation [interview by Michele Robinson] Cotter D. **Hospitals** 1989 Apr 20; 63(8):73–4

Technology and costs: complex relationship. Samuel FE Jr. **Hospitals** 1988 Dec 5;62(23):72

Technology and the allocation of resources. McGregor M. **N Engl J Med** 1989 Jan 12;320(2):118–20

Is high technology medicine cost effective? Maynard A. **Phys Med Biol** 1989 Apr;34(4):407–18

[Evaluation of medical technology] Jacobsen G, et al. **Tidsskr Nor Laegeforen** 1988 Oct 25;108(29B):2631–4 **(Nor)**

SUPPLY & DISTRIBUTION

Davis: needy people deserve high-tech care, too. Souhrada L. **Hospitals** 1989 Jul 20;63(14):32

Technology and the allocation of resources [letter] **N Engl J Med** 1989 Jun 15;320(24):1629–30

TRENDS

Advances in medical technology over the next 20 years. Spiby J. **Community Med** 1988 Nov;10(4):273–8

Researchers shifting focus to neurology in 1989. Souhrada L. **Hospitals** 1989 Jan 5;63(1):25

Technology forces delicate issues on hospitals. Souhrada L. **Hospitals** 1988 Dec 20;62(24):72

TECHNOLOGY, MEDICAL

Deciding on new technologies: the Catch '89 factor [interview] Duncan B. **Am J Cardiol** 1989;63 Suppl:15F–16F

An explosion of technology. Greenfield JC Jr. **Am J Cardiol** 1988 Oct 1;62(10 Pt 2):1F–2F

Reproductive technology [letter] **ANS** 1989 Jan;11(2):vii–ix

Prevention in the era of high-tech medicine [letter; comment] Bokhout M. **Can Med Assoc J** 1989 Jul 15;141(2):96–7. **Comment on:** Can Med Assoc J 1989 Apr 15;140(8):905–8

High-tech medicine and the control of health care costs [see comments] Stiller CR. **Can Med Assoc J** 1989 Apr 15; 140(8):905–8. **Comment in:** Can Med Assoc J 1989 Jul 15;141(2):96–7

Life-sustaining technology and the elderly. Prolonged mechanical ventilation factors influencing the treatment decision. Goldberg AI. **Chest** 1988 Dec;94(6):1277–82

Humanism and technology [editorial] Ninos NP. **Crit Care Med** 1988 Dec;16(12):1252–3

Zen and the art of brain maintenance. Severinghaus JW. **Crit Care Med** 1988 Oct;16(10):1019–21

Home care goes 'high-tech'. Champlin L. **Geriatrics** 1989 Jul;44(7):83–6

Tripping over technology. Hagen MD, et al. **Hosp Pract [Off]** 1989 Feb 15;24(2):25–8, 33–5

Technician dismissed for refusal to do AIDS tests. **Indiana Med** 1989 Jul;82(7):563

Transfer of medical technology from a developed to a developing country. Kouris K, et al. **J Biomed Eng** 1988 Jul;10(4):326–30

Advancements change nature of medicine. Butler ME. **J Fla Med Assoc** 1988 Sep;75(9):616–7

Advances in rehabilitation technology. NSC-88. North Sea Conference on Biomedical Engineering. Maastricht, The Netherlands, April 13–15, 1988. Proceedings. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):1–157

Responsibilities of vascular surgeons to study and control the field of endovascular surgery [letter] Elsey JK. **J Vasc Surg** 1989 Aug;10(2):213–4

A piece of my mind. Windows. Campion FD. **JAMA** 1989 Jul 28;262(4):556

Nurses' attitudes toward conventional and automated vital signs measurement methods. Campbell-Heider N, et al. **Med Instrum** 1988 Oct;22(5):257–62

The challenge of ethics. Hill TP, et al. **N J Med** 1989 Jan; 86(1):43–4

The Japanese watch syndrome [editorial] LaManna JR Jr. **Ohio Med** 1989 Jun;85(6):419–20

New technology—new pressures [editorial] Spaeth GL. **Ophthalmic Surg** 1988 Sep;19(9):617–20

Otology—current concepts and technology. **Otolaryngol Clin North Am** 1989 Feb;22(1):1–252

Digital hearing aid technology: medical perspective. Hecox KE. **Otolaryngol Clin North Am** 1989 Feb;22(1):129–42 (10 ref.)

New technology in infant hearing screening. Northern JL, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):75–87 (19 ref.)

State of the art of lasers in oncologic surgery. Aronoff BL. **Semin Surg Oncol** 1989;5(1):3–5

Laser technology in the diagnosis and treatment of head and neck cancer. Shapshay SM. **Semin Surg Oncol** 1989; 5(1):61–6 (10 ref.)

Medical technologies in developing countries: issues of technology development, transfer, diffusion and use. Bonair A, et al. **Soc Sci Med** 1989;28(8):769–81 (60 ref.)

A different sort of diagnosis. Kelleher JF. **South Med J** 1989 Apr;82(4):496–8

The yin and yang of medical practice [letter] Pratt M. **West J Med** 1988 Oct;149(4):466

[Rational use of medical technology] Sørensen HT, et al. **Ugeskr Laeger** 1989 Jan 23;151(4):264 **(Dan)**

[Investigation of accidents by the Special Inspection for Electrical Electrical Medical Equipment] Fønstelien E, et al. **Tidsskr Nor Laegeforen** 1989 Jun 10;109(16):1801–3 (Eng. Abstr.) **(Nor)**

[Calculation of parameters and the technology for making biolenses in epikeratophakia] Mamikonian VR, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):21–4 (Eng. Abstr.) **(Rus)**

[Bases for the evaluation of the technology and quality of health care] Frenk J, et al. **Salud Publica Mex** 1988 May–Jun;30(3):405–15 (Eng. Abstr.) **(Spa)**

ECONOMICS

The economic impact of technology on diagnostic imaging at a university medical center. Evens RG. **AJR Am J Roentgenol** 1989 Jul;153(1):179–83

The doctor as medical entrepreneur: there are still MDs willing to take the plunge. Milne M. **Can Med Assoc J** 1989 Mar 15;140(6):691–5

Diagnostic tests: clinical use, cost-containment and evaluation. McDonald IG. **Int J Cardiol** 1988 Aug; 20(2):165–71 (29 ref.)

High-tech and high-priced medicine [editorial] Lacsamana RG. **J Fla Med Assoc** 1989 Feb;76(2):233

Can health care inflation be controlled? Handler S. **Minn Med** 1989 Jan;72(1):21–3

Health care technology, inflation, and outcomes: take heart. Reece RL. **Minn Med** 1989 Jun;72(6):323, 325

[The financing of medico-technical activities. The example of a scanner in France (1986)] Meyer C, et al. **J Radiol** 1988 Oct;69(10):587–95 (Eng. Abstr.) **(Fre)**

[The economics of medical technology in the internist's practice. Current situation and possible alternatives] Hennig AE. **Fortschr Med** 1989 Jan 15;107(1):51–3 **(Ger)**

EDUCATION

Test-taking intervention: associated effects on an allied health certifying examination. Frierson HT Jr. **J Allied Health** 1985 May;14(2):223–9

Determination of passing scores on certification examinations: an unresolved issue. Karni KR, et al. **J Allied Health** 1985 Nov;14(4):415–26

Training and proficiency of physicians' office personnel with a new diagnostic test for theophylline. Fischer PM, et al. **J Fam Pract** 1988 Nov;27(5):497–501

Education in the medical laboratory sciences: the past, and future developments. Jones RT. **Med Lab Sci** 1987 Oct; 44(4):388–92

HISTORY

A short history of the Institute of Medical Laboratory Sciences [published erratum appears in Med Lab Sci 1988 Jan;45(1):preceding 1] Farr AD. **Med Lab Sci** 1987 Oct; 44(4):393–5

A history of medical technology education at the University of Nebraska Medical Center. Muellenberg P, et al. **Nebr Med J** 1989 Feb;74(2):32–6

[Ethical problems in medical treatment from the medical history viewpoint] Böhmer W. **Med Klin** 1988 Nov 11; 83(22):769–73 **(Ger)**

[The organization of the technical supplies of the medical service of the Armed Forces in the prewar years] Chirkov AI, et al. **Voen Med Zh** 1989 Apr;(4):68–70 **(Rus)**

[Measuring devices and equipment in the practical work of medical personnel during World War II] Kuvshinskii VD, et al. **Voen Med Zh** 1989 Feb;(2):77 **(Rus)**

INSTRUMENTATION

Implications of research and high technology for neonatal intensive care [editorial] Stahlman M. **JAMA** 1989 Mar 24–31;261(12):1791

Guide to biotechnology products and instruments. Guide to scientific instruments. **Science** 1989 Feb 24;243 Pt 2:G1–211

[Simple self-production of flow cuvettes] Gaunitz U. **Z Med Lab Diagn** 1989;30(4):244–5 **(Ger)**

[Microprocessors and microcomputers in the manufacture of medical instruments] Akhutin VM, et al. **Med Tekh** 1989 May–Jun;(3):3–8 **(Rus)**

[A personal system of automated planning of microprocessor printing plates for radio-electronic medical equipment] Galaĭ IuP, et al. **Med Tekh** 1989 May–Jun;(3):42–8 (Eng. Abstr.) **(Rus)**

[A complex of microprocessor facilities for medical technology] Mamdzhian GG, et al. **Med Tekh** 1989 May–Jun;(3):54–61 **(Rus)**

[Inventors and innovators in medicine (2)] **Voen Med Zh** 1989 Apr;(4):64–5 **(Rus)**

[Inventors and innovators in medicine (1)] **Voen Med Zh** 1989 Mar;(3):57–8 **(Rus)**

[Ways to enhance the operating efficiency of medical equipment] Dovgan' VG, et al. **Voen Med Zh** 1989 Feb; (2):51–2 **(Rus)**

LEGISLATION & JURISPRUDENCE

"So quick bright things come to confusion". Capron AM. **Am J Law Med** 1987;13(2–3):169–87 (41 ref.)

Biology and the Bill of Rights: can science reframe the Constitution? Jasanoff S. **Am J Law Med** 1987; 13(2–3):249–89 (170 ref.)

The new import policy—a bold step in the right direction [editorial] Fernandez ST. **Indian J Ophthalmol** 1988 Apr–Jun;36(2):61–2

NIH, Inc.: the CRADA boom [news] Culliton BJ. **Science** 1989 Sep 8;245(4922):1034–6

STANDARDS

[Industrial standards for maintaining medical equipment (principles of development and application)] Matveenko AF, et al. **Med Tekh** 1988 Sep–Oct;(5):31–6 **(Rus)**

TRENDS

Medical ethics in the new era. Abram MB. **Ala J Med Sci** 1988 Jul;25(3):320–5

Technologic anarchy? [editorial] Wick MR. **Am J Clin Pathol** 1989 Apr;91(4 Suppl 1):S1

Quest for the philosopher's stone [editorial] Carlon GC. **Crit Care Med** 1989 May;17(5):477–8

"Yesterday, today and tomorrow"—fifty exciting years: the Second Nelson Awori memorial lecture. Hicks A. **East Afr Med J** 1989 Jan;66(1):40–9

Health technology and schools of public health. Coe GA. **Educ Med Salud** 1988 Oct–Dec;22(4):504–15

Is clinical medicine being replaced by commercial medicine [editorial] Mehta PJ, et al. **J Assoc Physicians India** 1988 May;36(5):301

AIDS: Technology of the future. Gorsuch R. **J Perinatol** 1989 Jun;9(2):194–7

The use of high technology for health care at home: issues and implications. Liebig PS. **Med Instrum** 1988 Oct; 22(5):222–5 (31 ref.)

Technology in health care—you don't need a lithotriptor to solve the problem of cracking nuts [editorial] Lazarus R, et al. **Med J Aust** 1989 Jul 17;151(2):58–60

A big man in the world of surgery [interview by RL Reece] Najarian JS. **Minn Med** 1989 Jun;72(6):327–9

Life after Cartwright. Hopkins J. **N Z Med J** 1989 Feb 22; 102(862):71

Developments in hearing aid fitting and delivery. A decade of revolution. Smriga DJ, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):105–27

Technological innovation and the labour process in health care. Daly J, et al. **Soc Sci Med** 1989;28(11):1149–57 (51 ref.)

The limits of medicine: women's perception of medical technology. Gabe J, et al. **Soc Sci Med** 1989;28(3):223–31

Fifty years of change. Monroe WM. **Va Med** 1989 Jun; 116(6):281–2

[Assessment of technology in intensive care medicine] Dick W. **Langenbecks Arch Chir** 1988;Suppl 2:397–400 (Eng. Abstr.) (Ger)

[Principles of technology assessment in surgical diagnosis] Lorenz W, et al. **Langenbecks Arch Chir** 1988;Suppl 2:369–76 (20 ref.) (Eng. Abstr.) (Ger)

[New technics in cancer surgery (editorial)] Schreiber HW. **Laryngorhinootologie** 1989 May;68(5):271 (Ger)

[The physician in the field spanning the art of healing and medical technic] Hartmann F. **Med Klin** 1988 Jun 17; 83(13–14):456–60 (Ger)

[Technic in conflict with humanity in medical care?] Lindner H. **Z Arztl Fortbild (Jena)** 1988;82(24):1272–4 (Ger)

[Various key problems of current laboratory diagnosis] Krawczyński J. **Wiad Lek** 1988 Nov 15;41(22):1541–6 (Pol)

[The medical technology industry: current status and outlook] Glushnev VD. **Med Tekh** 1988 Jul–Aug;(4):3–5 (Rus)

[Development of medical technology in a scientific and technical revolution] Rusaev VF. **Med Tekh** 1988 Jul–Aug; (4):33–9 (50 ref.) (Eng. Abstr.) (Rus)

[Development of medical technologies for emergency medical services] Terliaev VG, et al. **Sov Med** 1989;(3):65–8 (Rus)

[Scientific and technical progress and medical matters] Shtark MB. **Vestn Akad Med Nauk SSSR** 1988;(8):18–24 (Eng. Abstr.) (Rus)

[Towards a further rise in innovation and efficiency work] Marasanov RA. **Voen Med Zh** 1988 Dec;(12):3–8 (Rus)

[The fifth meeting: the process of technological development in medicine] **Educ Med Salud** 1988 Oct–Dec;22(4):499–503 (Spa)

[Technological development in the context of the National Health Program] Martuscelli-Quintana J, et al. **Salud Publica Mex** 1988 Nov–Dec;30(6):853–8 (Eng. Abstr.) (Spa)

TECHNOLOGY, PHARMACEUTICAL

see related
DRUG INDUSTRY

The product is the sum of its parts. D'Arcy PF, et al. **J Clin Pharm Ther** 1988 Oct;13(5):313–5

Optimization of a fluid bed spray coating process using reduced factorial design. Johansson ME, et al. **J Microencapsul** 1987 Jul–Sep;4(3):217–22

Preparation of microcapsules from complex coacervation of Gantrez–gelatin. I. Development of the technique. Mortada SA, et al. **J Microencapsul** 1987 Jan–Mar;4(1):11–21

An evaluation of albumin microcapsules prepared using a multiple emulsion technique. Shah MV, et al. **J Microencapsul** 1987 Jul–Sep;4(3):223–38

The Parenteral Drug Association Foundation for Pharmaceutical Sciences: past, present, and future. Kirsch NC. **J Parenter Sci Technol** 1989 Jul–Aug;43(4):191–4

Fear and the inhibition of progress [editorial] Schwartz JB. **J Parenter Sci Technol** 1989 May–Jun;43(3):103

An automated method for vacuum testing pharmaceutical vials. Wu V, et al. **J Parenter Sci Technol** 1989 Jul–Aug; 43(4):179–82

Fourth annual meeting and exposition. American Association of Pharmaceutical Scientists. October 22–26, 1989, Atlanta, Georgia. Abstracts. **Pharm Res** 1989 Sep;6(9 Suppl):S1–254

Third annual meeting and exposition. American Association of Pharmaceutical Scientists. October 30–November 3, 1988, Orlando, Florida. Abstracts. **Pharm Res** 1988 Oct; 5(10 Suppl):S5–269

Use of vaccinia virus to express biopharmaceutical products. Hruby DE, et al. **Pharm Res** 1987 Apr;4(2):92–7 (41 ref.)

Evaluation of a novel cellulose powder as a filler–binder for direct compression of tablets. Pesonen T, et al. **Pharm Weekbl [Sci]** 1989 Feb 24;11(1):13–9

The role of commercial sources in the adoption of a new drug. Peay MY, et al. **Soc Sci Med** 1988;26(12):1183–9

[A study on traditional processing methods using drug juice] Xu CJ, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Mar; 14(3):22–5, 63 (Eng. Abstr.) (Chi)

[The position of processing in traditional Chinese medicine] Yuan ST. **Chung Kuo Chung Yao Tsa Chih** 1989 Apr; 14(4):195–7, 253 (Eng. Abstr.) (Chi)

[Study on the technology of anti-inflammatory injections using the method of orthogonal experiment] Qu YL. **Chung Yao Tung Pao** 1988 May;13(5):30–1, 62–3 (Eng. Abstr.) (Chi)

["Pharmacotechnical models" a concept, a strategy] Thomas C, et al. **J Pharm Belg** 1988 Jul–Aug;43(4):272–86 (Eng. Abstr.) (Fre)

[Application of a factorial experimental project for optimization of manufacturing technology for theophylline suppositories] Dévay A, et al. **Acta Pharm Hung** 1988 Sep; 58(5):201–7 (Eng. Abstr.) (Hun)

[The microbiologic quality of an oral preparation as the result of proper formulation and technological design] Anastasio P, et al. **Boll Chim Farm** 1988 Nov–Dec;127(11–12):245–8 (Eng. Abstr.) (Ita)

[Direct screening for producers of antibiotics among the Micromonospora] Bibikova MV, et al. **Antibiot Khimioter** 1989 Apr;34(4):248–51 (Eng. Abstr.) (Rus)

[Status and problems of Soviet radiopharmaceutics] Tarasov NF. **Med Radiol (Mosk)** 1989 Jun;34(6):3–8 (Eng. Abstr.) (Rus)

HISTORY

[The history of the processing of rhubarb] Jiang WJ. **Chung Yao Tung Pao** 1988 Oct;13(10):3–6, 61 (33 ref.) (Eng. Abstr.) (Chi)

[70 years of Bioveta] Krupka V, et al. **Vet Med (Praha)** 1988 Nov;33(11):641–2 (Cze)

INSTRUMENTATION

A procedure to verify the lower counting limit of optical particle counters. Caldow R, et al. **J Parenter Sci Technol** 1989 Jul–Aug;43(4):174–9

Design and use of a novel peracetic acid sterilizer for absolute barrier sterility testing chambers. Davenport SM. **J Parenter Sci Technol** 1989 Jul–Aug;43(4):158–66

Acceleration of heat transfer in vial freeze–drying of pharmaceuticals. I: Corrugated aluminum quilt. Patel SD, et al. **J Parenter Sci Technol** 1989 Jan–Feb;43(1):8–14

Validation of an automated filter integrity tester for use in bubble point testing. Sechovec KS. **J Parenter Sci Technol** 1989 Jan–Feb;43(1):23–6

METHODS

The recovery of highly purified biopharmaceuticals from perfusion cell culture bioreactors. Prior CP, et al. **J Parenter Sci Technol** 1989 Jan–Feb;43(1):15–23

STANDARDS

Efficacy and immunogenicity of acellular pertussis vaccine by manufacturer and patient age. Aoyama T, et al. **Am J Dis Child** 1989 Jun;143(6):655–9

Modified allergens: criteria for standardisation. Overell BG. **Arb Paul Ehrlich Inst Bundesamt Sera Impfstoffe Frankf A M** 1988;(82):233–41 (8 ref.)

Parenteral Drug Association response to the FDA compliance policy guide, #7132a.13, entitled, "Parametric release—terminally heat sterilized drug products". **J Parenter Sci Technol** 1988 Jul–Aug;42(4):105

Good clinical practice in clinical research. Gerlis L. **Lancet** 1989 May 6;1(8645):1008–9

[Working conditions at the final stages in the production of water-soluble vitamins] Nemchinov NN, et al. **Gig Sanit** 1989 Apr;(4):79–80 (Rus)

TRENDS

Emerging trends in biotechnology: a perspective from the pharmaceutical industry. Szkrybalo W. **Pharm Res** 1987 Oct;4(5):361–3

Organizing for drug discovery. Williams M, et al. **Prog Drug Res** 1988;32:329–75 (65 ref.)

TECHNOLOGY, RADIOLOGIC

Mammographic film–processor temperature, development time, and chemistry: effect on dose, contrast, and noise. Kimme–Smith C, et al. **AJR** 1989 Jan;152(1):35–40

A radiographic technique of interest to physical anthropologists. Fairgrieve SI, et al. **Am J Phys Anthropol** 1988 Sep;77(1):23–6

Proposed recommended practices. Radiological safety in the operating room. **AORN J** 1989 Feb;49(2):630, 632–3, 635 passim

Roentgenographic measurement of pedicle screw penetration. Whitecloud TS, et al. **Clin Orthop** 1989 Aug; (245):57–68 (34 ref.)

Stray radiation from baggage x-ray equipment: results and implications. Maharaj HP. **Health Phys** 1989 Jul; 57(1):141–8

Computers in medicine. Lewellen TK, et al. **Invest Radiol** 1988 Nov;23(11):857–65 (43 ref.)

Reproduction of radiographs for 2 X 2 transparencies. Creasey MG, et al. **J Audiov Media Med** 1987 Oct; 10(4):138–41

Teleradiology for a family practice center. Franken EA Jr, et al. **JAMA** 1989 May 26;261(20):3014–5

Tissue compensators made of solid water or lead for megavoltage X-ray radiotherapy. Constantinou C, et al. **Med Dosim** 1989;14(1):41–7

Design and beam characteristics of the Siemens Stabilipan Orthovoltage Unit for intraoperative radiation therapy. Mondalek PM, et al. **Med Dosim** 1988 Mar;13(1):1–6

Limitations of retracted missing tissue compensators: an experimental analysis. Robinson DM, et al. **Med Dosim** 1989;14(1):49–54

Polyethylene–lead tissue compensators for megavoltage radiotherapy. Spicka J, et al. **Med Dosim** 1988 Mar; 13(1):25–7

Grey level linearising circuit for computer–interfaced display devices. Woldeselassie T, et al. **Phys Med Biol** 1989 Jul; 34(7):851–8

Prevention of radiogenic cancers through changes in procedure. Matthews IP, et al. **Radiography** 1988 Jan–Feb; 54(613):3–8

The professional status of the radiologic technologist. **Radiol Technol** 1989 Jan–Feb;60(3):246–55

Radiation therapy technology ... a career choice that dares to touch your heart. Dickey EK. **Radiol Technol** 1989 Jul–Aug;60(6):525–6

Death and dying. Part II—The hospice project. Fulton J, et al. **Radiol Technol** 1989 Jul–Aug;60(6):537–9

Computers: who needs 'em? Hage SJ. **Radiol Technol** 1989 Jan–Feb;60(3):258–9

Professionalism and the radiologic technologist [editorial] Nielson ER. **Radiol Technol** 1988 Sep–Oct;60(1):59–60

Expanding the discipline—recognition of the limited technologists [letter] Thaler D. **Radiol Technol** 1989 Mar–Apr;60(4):343

Limited technologists—another opinion [letter] Vandervest L. **Radiol Technol** 1989 Mar–Apr;60(4):343–4

Abdominal air—the radiologist's enemy and friend. Khan O, et al. **West Indian Med J** 1988 Sep;37(3):179–84

[Radiography of the digestive tract] Nanaumi K. **Rinsho Hoshasen** 1988 Oct;33(11):1451–60 (Jpn)

[The problem of complex radiologic examinations] Marciniak R. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun;52(3):147–8 (Eng. Abstr.) (Pol)

[Report on the 6th European Congress on Radiology, Lisbon, May 31–June 6, 1987] Niezabitowski K, et al. **Pol Przegl Radiol (Warszawa)** 1988 Mar–Apr;52(2):96–109 (Pol)

ECONOMICS

Commercial research and development in times of financial restraint. Spackman TJ, et al. **Invest Radiol** 1988 Oct; 23(10):791–4

The decline of diagnostic radiology: call to action. 1989 Dotter lecture. Meaney TF. **Radiology** 1989 Sep;172(3 Pt 2):889–92

EDUCATION

Multicompetency education in radiologic technology. Russell DD, et al. **J Allied Health** 1989 Spring;18(3):281–9

Limited licensing: why is the ARRT involved? Part I. **Radiol Technol** 1988 Nov–Dec;60(2):168–9

The radiographer's role as clinical teacher. Fauber TL. **Radiol Technol** 1989 Jul–Aug;60(6):519–23

Admissions criteria: eenie, meenie, miney, moe? Hulse SF. **Radiol Technol** 1989 Jan–Feb;60(3):240–2

Objectively speaking. Hulse SF. **Radiol Technol** 1988 Nov–Dec;60(2):147–9

Components of clinical teaching. Hulse SF. **Radiol Technol** 1989 May–Jun;60(5):434–5

Clinical assessment of affective behaviors. Ledbetter ME, et al. **Radiol Technol** 1989 May–Jun;60(5):401–7

The hospital "exodus" from in–house sponsored education programs. Ludema DC. **Radiol Technol** 1989 Mar–Apr; 60(4):329–32

Radiographic examinations. McAndrews NK. **Radiol Technol** 1988 Sep–Oct;60(1):62

Education requirements [letter] McDonald S. **Radiol Technol** 1989 Jul–Aug;60(6):536

Student attrition rates equal fewer R.T.(T)s. Pales G. **Radiol Technol** 1988 Nov–Dec;60(2):143–4

A crash course in crammimg. Roberts GH. **Radiol Technol** 1989 May–Jun;60(5):431–2

Assessment of the continuing education needs of California's radiologic technologists. Slechta A, et al. **Radiol Technol** 1989 Mar–Apr;60(4):313–7

Comments and solutions on limited licensure [letter] Smorra S. **Radiol Technol** 1989 May–Jun;60(5):441

What radiologic technology educators should know about due process of law. Ward MD, et al. **Radiol Technol** 1989

Jan-Feb;60(3):223-7
Assessing the need for instructional media support materials. Watkins GL. **Radiol Technol** 1989 Jan-Feb;60(3):237-9
Textbook selection for radiography programs: a checklist approach. Wedel CS. **Radiol Technol** 1988 Sep-Oct; 60(1):45-7
Radiologist site visitors sought [letter] Fay M. **Radiology** 1989 Apr;171(1):286

HISTORY

The American Registry of X-Ray Technicians. Twenty-two years of achievement. 1945 [classical article] Greene AB. **Radiol Technol** 1989 Jul-Aug;60(6):543-5

INSTRUMENTATION

An iodine-125 applicator designed for irradiating blood vessels growing into the cornea of the eye. Hering ER, et al. **Br J Radiol** 1989 Mar;62(735):266-8
A low-energy x-ray irradiator for electrophysiological studies. Schauer DA, et al. **Int J Rad Appl Instrum [A]** 1989;40(1):7-17
Radiology in developing countries. A one-year experience in Rwanda with the Basic Radiologic System equipped with a panel-type image intensifier and linear echography. Van Tiggelen R, et al. **J Belge Radiol** 1988;71(5):623-6
Standard compensators for ENT therapy fields. Clark BG, et al. **Med Dosim** 1988 Dec;13(4):173-7
A light source for testing radiological television cameras. Rowlands JA, et al. **Med Phys** 1989 Jan-Feb;16(1):1-6
Imaging plate illuminates many fields. Amemiya Y, et al. **Nature** 1988 Nov 3;336(6194):89-90
Stripes in the abdomen. **Radiol Technol** 1989 Jul-Aug; 60(6):511-2
Peak kilovoltage meter readings. Stears JG, et al. **Radiol Technol** 1989 Jan-Feb;60(3):233-6
Radiologic exchange. Patient dose can be reduced by using 105 mm photofluoro spot films instead of the screen-film cassette spot radiographs. Stears JG, et al. **Radiol Technol** 1989 Jul-Aug;60(6):515-6
Radiographic equipment and the Pepsi syndrome. Stockburger WT. **Radiol Technol** 1989 Jul-Aug;60(6):531-2
Ultra-high-speed teleradiology with ISDN technology. Lear JL, et al. **Radiology** 1989 Jun;171(3):862-3
New interventional devices and the need for restraint. Ring EJ. **Radiology** 1989 Mar;170(3 Pt 2):945-6
[Software for record reporting and filing with the personal computer] Di Giandomenico E, et al. **Radiol Med (Torino)** 1989 Mar;77(3):246-9 (Eng. Abstr.) **(Ita)**
[A vacuum-capture manipulator of radiation sources] Drygin VN, et al. **Med Radiol (Mosk)** 1989 Jul;34(7):62-3 **(Rus)**
[The main trends and prospects of using electronic-computer technology and mathematical methods in clinical roentgenology] Kishkovskiĭ AN, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):83-7 **(Rus)**

MANPOWER

Radiation therapy technology: manpower survey 1987. Browning D, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb; 16(2):519-24
The discontinuation of reciprocity agreements. **Radiol Technol** 1988 Sep-Oct;60(1):63-5
Radiation therapy technology shortage and recruitment. Arazie J, et al. **Radiol Technol** 1989 Mar-Apr;60(4):327-8
Males in mammography—a silly suggestion [letter] Durand D. **Radiol Technol** 1989 Mar-Apr;60(4):342-3
Innovation and improvements the answer to technology recruitment [letter] Nordling C. **Radiol Technol** 1989 Jul-Aug;60(6):535-6
No males in mammography [letter] Volk B. **Radiol Technol** 1989 Mar-Apr;60(4):342

METHODS

Reducing the radiation dosage in patients with a scoliosis. Lescrève JP, et al. **Int Orthop** 1989;13(1):47-50 (21 ref.)
[A comparison of various methods of x-ray sensitometry] Maslov LA, et al. **Med Tekh** 1988 Sep-Oct;(5):36-41 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Prestige: radiologic technologists rate themselves and other allied health professionals. Glazer-Waldman HR, et al. **Radiol Technol** 1989 May-Jun;60(5):419-23

STANDARDS

Limited licensure facts, not fiction [editorial] DiStefano MG, et al. **Radiol Technol** 1989 Jan-Feb;60(3):256-7
Limited licensing: why is the ARRT involved? Part II. Hanson JW. **Radiol Technol** 1989 Jan-Feb;60(3):263-5
A case for the limited scope technologist [editorial] Rhatigan L. **Radiol Technol** 1988 Nov-Dec;60(2):164
[The art of traditional roentgen diagnosis (letter)] Fehérvári S. **Orv Hetil** 1989 Jul 9;130(28):1521 **(Hun)**

SUPPLY & DISTRIBUTION

Mobile technology takes radiology on the road. Powills S. **Hospitals** 1988 Nov 5;62(21):80

TRENDS

Research in departments of diagnostic radiology: a question of method limitation. Northway WH Jr. **Radiology** 1989 Jun;171(3):873-5
[Results and future of the activities of the Department of Medical Radiation Physics of the Central Scientific Research Roentgenoradiology Institute of the USSR Ministry of Public Health] Ermakov IA, et al. **Med Radiol (Mosk)** 1988 Nov;33(11):31-6 (Eng. Abstr.) **(Rus)**

VETERINARY

[A simple test phantom in the form of a staircase for running control of the image in veterinary roentgenology] Parisot M. **Berl Munch Tierarztl Wochenschr** 1989 Apr 1; 102(4):117-23 (Eng. Abstr.) **(Ger)**

TECTORIAL MEMBRANE see under **COCHLEA**

TECTUM MESENCEPHALI see **CORPORA QUADRIGEMINA**

TEENAGE PREGNANCY see **PREGNANCY IN ADOLESCENCE**

TEFLON see **POLYTETRAFLUOROETHYLENE**

TEGMENTUM MESENCEPHALI

Neuroanatomical organization of dopamine neurons in the ventral tegmental area. Domesick VB. **Ann N Y Acad Sci** 1988;537:10-26 (62 ref.)

ANATOMY & HISTOLOGY

Neuroanatomical organization of dopamine neurons in the ventral tegmental area. Domesick VB. **Ann N Y Acad Sci** 1988;537:10-26 (62 ref.)
Projections from the ventral tegmental area and mesencephalic raphe to the dorsal raphe nucleus in the rat. Evidence for a minor dopaminergic component. Kalén P, et al. **Exp Brain Res** 1988;73(1):69-77
Topographic projections from the basal ganglia to the nucleus tegmenti pedunculopontinus pars compacta of the cat with special reference to pallidal projection. Moriizumi T, et al. **Exp Brain Res** 1988;71(2):298-306
Projections between the interpeduncular nucleus and basal forebrain in the rat as demonstrated by the anterograde and retrograde transport of WGA-HRP. Vertes RP, et al. **Exp Brain Res** 1988;73(1):23-31
Mamillary body in the rat: topography and synaptology of projections from the subicular complex, prefrontal cortex, and midbrain tegmentum. Allen GV, et al. **J Comp Neurol** 1989 Aug 15;286(3):311-36
Projections of the dorsal and lateral terminal accessory optic nuclei and of the interstitial nucleus of the superior fasciculus (posterior fibers) in the rabbit and rat. Giolli RA, et al. **J Comp Neurol** 1988 Nov 22;277(4):608-20
Cholinergic vs. noncholinergic efferents from the mesopontine tegmentum to the extrapyramidal motor system nuclei. Lee HJ, et al. **J Comp Neurol** 1988 Sep 22; 275(4):469-92
Connections of the dorsal nucleus of the lateral lemniscus: an inhibitory parallel pathway in the ascending auditory system? Shneiderman A, et al. **J Comp Neurol** 1988 Oct 8;276(2):188-208
Superior olivary and lateral lemniscal neurons projecting to the cochlea in the guinea pig. Tokunaga A. **Neurosci Res** 1988 Oct;6(1):20-30

BLOOD SUPPLY

Nimodipine enhances growth and vascularization of neural grafts. Finger S, et al. **Exp Neurol** 1989 Apr;104(1):1-9

CYTOLOGY

Cholinergic projections from the laterodorsal and pedunculopontine tegmental nuclei to the pontine gigantocellular tegmental field in the cat. Mitani A, et al. **Brain Res** 1988 Jun 7;451(1-2):397-402
Evidence for a morphologically distinct subpopulation of striatipetal axons following injections of WGA-HRP into the ventral tegmental area in the rat. Zahm DS. **Brain Res** 1989 Mar 13;482(1):145-54
Evidence for a projection from the B9 serotonergic cell group to the median raphe nucleus. Stratford TR, et al. **Brain Res Bull** 1988 Aug;21(2):325-8
Selective association of dopamine axons with their striatal target cells in vitro. Won L, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):93-100
Clonidine modulates dopamine cell firing in rat ventral tegmental area. Grenhoff J, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):11-8
Retrograde double-labeling study of the mammillothalamic and the mammillotegmental projections in the rat. Hayakawa T, et al. **J Comp Neurol** 1989 Jun 1;284(1):1-11
EM autoradiographic study of the projections from the dorsal nucleus of the lateral lemniscus: a possible source of inhibitory inputs to the inferior colliculus. Shneiderman A, et al. **J Comp Neurol** 1989 Aug 1;286(1):28-47
A quantitative study of the torus semicircularis of Barbus meridionalis Risso. Cuadrado MI. **J Hirnforsch** 1989; 30(3):371-4
Topical organization of the projections of neurons of the substantia nigra and the ventral field of the tegmentum of the midbrain to the head of the caudate nucleus of the cat. Gorbachevskaya IA. **Neurosci Behav Physiol** 1989 May-Jun;19(3):196-203
Cholinergic projections to the substantia nigra from the pedunculopontine and laterodorsal tegmental nuclei. Gould E, et al. **Neuroscience** 1989;28(3):611-23
Projections from the intracerebellar nuclei to the ventral midbrain tegmentum in the rat. Perciavalle V, et al. **Neuroscience** 1989;29(1):109-19

DRUG EFFECTS

The excitatory amino acid antagonist kynurenate induces pacemaker-like firing of dopamine neurons in rat ventral tegmental area in vivo. Grenhoff J, et al. **Acta Physiol Scand** 1988 Dec;134(4):567-8
Central mediation of naloxone-induced anorexia in the ventral tegmental area. Segall MA, et al. **Behav Neurosci** 1989 Aug;103(4):857-64
The histological effects of intracerebral injection or infusion of MPTP (1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine) and MPP+ (1-methyl-4-phenylpyridinium) in rat and mouse. Gibb WR, et al. **Brain Res** 1988 Oct 4;461(2):361-6
Microinjections of Sch-23390 into the ventral tegmental area and substantia nigra pars reticulata attenuate the development of sensitization to the locomotor activating effects of systemic amphetamine. Stewart J, et al. **Brain Res** 1989 Aug 28;495(2):401-6
Major depression in Parkinson's disease and the mood response to intravenous methylphenidate: possible role of the "hedonic" dopamine synapse. Cantello R, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):724-31
Effects of N-n-propylnorapomorphine enantiomers on single unit activity of substantia nigra pars compacta and ventral tegmental area dopamine neurons. Cox RF, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):355-62
Phencyclidine-induced activation of ventral tegmental A10 dopamine neurons is differentially affected by lesions of the nucleus accumbens and medial prefrontal cortex. Ceci A, et al. **Life Sci** 1989;45(7):637-46
Neurokinin-alpha injected into the ventral tegmental area elicits a dopamine-dependent behavioral activation in the rat. Burns LH, et al. **Pharmacol Biochem Behav** 1988 Oct; 31(2):255-63
Cholinergic antagonists in ventral tegmentum elevate thresholds for lateral hypothalamic and brainstem self-stimulation. Kofman O, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):547-59
[Toxophilic effects of morphinomimetic substances. Dopamine/enkephalin interactions in the ventral tegmental area and in the nucleus accumbens] Stinus L, et al. **Encephale** 1989 Jan-Feb;15 Spec No:95-104 **(Fre)**

ENZYMOLOGY

Neurotoxic lesions of the dorsolateral pontomesencephalic tegmentum-cholinergic cell area in the cat. I. Effects upon the cholinergic innervation of the brain. Jones BE, et al. **Brain Res** 1988 Jun 7;451(1-2):13-32

GROWTH & DEVELOPMENT

Neurogenesis and cell death in the isthmic nuclei of the frog Limnodynastes dorsalis. Dann JF, et al. **J Comp Neurol** 1989 May 1;283(1):28-37

METABOLISM

Substance P, neurotensin and enkephalin injections into the ventral tegmental area: comparative study on dopamine turnover in several forebrain structures. Cador M, et al. **Brain Res** 1989 May 8;486(2):357-63
Immunocytochemical evidence for direct connections between neurotensin-containing axons and dopaminergic neurons in the rat ventral midbrain tegmentum. Woulfe J, et al. **Brain Res** 1989 Feb 13;479(2):402-6
Asymmetrical distribution of neurotensin immunoreactivity following unilateral injection of 6-hydroxydopamine in rat ventral tegmental area (VTA). Zahm DS, et al. **Brain Res** 1989 Apr 3;483(2):301-11
Substance P-like immunoreactive fibres in the ventromedial mesencephalic tegmentum of rat. Halliday G, et al. **Brain Res Bull** 1988 Oct;21(4):659-70
Serotonin-like immunoreactive cells and fibres in the rat ventromedial mesencephalic tegmentum. Halliday GM, et al. **Brain Res Bull** 1989 Apr;22(4):725-35
Correspondence between high affinity 125I-neurotensin binding sites and dopaminergic neurons in the rat substantia nigra and ventral tegmental area: a combined radioautographic and immunohistochemical light microscopic study. Szigethy E, et al. **J Comp Neurol** 1989 Jan 1;279(1):128-37
Electron microscopic localization of neurotensin binding sites in the midbrain tegmentum of the rat. I. Ventral tegmental area and the interfascicular nucleus. Dana C, et al. **J Neurosci** 1989 Jul;9(7):2247-57
Cocaine increases extracellular dopamine in rat nucleus accumbens and ventral tegmental area as shown by in vivo microdialysis. Bradberry CW, et al. **Neurosci Lett** 1989 Aug 14;103(1):97-102
Afferents to the basal forebrain cholinergic cell area from

pontomesencephalic--catecholamine, serotonin, and acetylcholine--neurons. Jones BE, et al. **Neuroscience** 1989; 31(1):37–61

Dopamine D-2 receptors in the ventral tegmental area mediate behavioural and electrocortical sleep of dopaminergic drugs in rats. Bagetta G, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1091–2

[The role of the neurons of the locus coeruleus and ventral tegmental area in the development of catecholamine-deficient conditions] Kucherenko RP, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):110–2 (Eng. Abstr.) **(Rus)**

PATHOLOGY

The pedunculopontine nucleus in Parkinson's disease. Zweig RM, et al. **Ann Neurol** 1989 Jul;26(1):41–6

The substantia nigra and ventral tegmental area in Alzheimer's disease and Down's syndrome. Gibb WR, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):193–200

MPTP-induced ventral mesencephalic cell loss in the cat. Williams JL, et al. **Neurosci Lett** 1989 Jul 3;101(3):258–62

The pontomesencephalotegmental cholinergic system does not degenerate in Alzheimer's disease. Woolf NJ, et al. **Neurosci Lett** 1989 Jan 30;96(3):277–82

PHYSIOLOGY

Firing patterns of midbrain dopamine neurons: differences between A9 and A10 cells. Grenhoff J, et al. **Acta Physiol Scand** 1988 Sep;134(1):127–32

Local cooling of pre-frontal cortex induces pacemaker-like firing of dopamine neurons in rat ventral tegmental area in vivo. Svensson TH, et al. **Acta Physiol Scand** 1989 May; 136(1):135–6

The functional role of the pedunculopontine nucleus in the regulation of the electrical activity of entopeduncular neurons in the rat. Scarnati E, et al. **Arch Ital Biol** 1988 Jun;126(3):145–63

Influence of the mesocortical dopaminergic system on activity, food hoarding, social-agonistic behavior, and spatial delayed alternation in male rats. Stam CJ, et al. **Behav Neurosci** 1989 Feb;103(1):24–35

Ventral tegmental area: site through which dopamine D2-receptor agonists evoke behavioural and electrocortical sleep in rats. Bagetta G, et al. **Br J Pharmacol** 1988 Nov; 95(3):860–6

Intracellular analysis of excitatory subthalamic inputs to the pedunculopontine neurons. Granata AR, et al. **Brain Res** 1989 May 29;488(1–2):57–72

Monoamine and metabolite levels in the prefrontal cortex and the mesolimbic forebrain following neonatal lesions of the ventral tegmental area. Kalsbeek A, et al. **Brain Res** 1989 Feb 13;479(2):339–43

Neuronal origin of parallel suppression of postural tone and respiration elicited by stimulation of midpontine dorsal tegmentum in the decerebrate cat. Kawahara K, et al. **Brain Res** 1988 Dec 6;474(2):403–6

Evidence that NPY-containing neurons in the brainstem project into selected hypothalamic nuclei: implication in feeding behavior. Sahu A, et al. **Brain Res** 1988 Aug 9; 457(2):376–8

A comparison of the effects of electrical stimulation of the amygdala and hippocampus on subpallidal output neurons to the pedunculopontine nucleus. Tsai CT, et al. **Brain Res** 1989 Aug 7;494(1):22–9

Neurotoxic lesions of the dorsolateral pontomesencephalic tegmentum-cholinergic cell area in the cat. II. Effects upon sleep-waking states. Webster HH, et al. **Brain Res** 1988 Aug 23;458(2):285–302

Effects of naltrexone on nucleus accumbens, lateral hypothalamic and ventral tegmental self-stimulation rate-frequency functions. West TE, et al. **Brain Res** 1988 Oct 11;462(1):126–33

In vitro electrophysiology of neurons in the lateral dorsal tegmental nucleus. Wilcox KS, et al. **Brain Res Bull** 1989 Mar;22(3):557–60

A functional analysis of the collicular output pathways: a dissociation of deficits following lesions of the dorsal tegmental decussation and the ipsilateral collicular efferent bundle in the Mongolian gerbil. Ellard CG, et al. **Exp Brain Res** 1988;71(2):307–19

Facilitatory effect of ventral tegmental area A10 region on the attack behaviour in the cat: possible dopaminergic role in selective attention. Piazza PV, et al. **Exp Brain Res** 1988; 72(1):109–16

Functional properties of presumed dopamine-containing and other ventral tegmental area neurons in conscious rats. Kiaytkin EA. **Int J Neurosci** 1988 Sep;42(1–2):21–43

Intracellular recording from putative dopamine-containing neurons in the ventral tegmental area of Tsai in a brain slice preparation. Mueller AL, et al. **J Neurosci Methods** 1989 May;28(1–2):15–22

In vivo dopaminergic activity from nucleus accumbens, substantia nigra and ventral tegmental area in the freely moving rat: basal neurochemical output and prolactin effect. Chen JC, et al. **Neuroendocrinology** 1988 Oct; 48(4):329–35

Differential effects of ascending neurons containing dopamine and noradrenaline in the control of spontaneous activity and of evoked responses in the rat prefrontal cortex. Mantz J, et al. **Neuroscience** 1988 Nov;27(2):517–26

Potentiation of morphine-elicited circling by dopaminergic uptake blockade. Gratton A, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1077–9

Comparative studies of locomotor behavior following microinjections of muscimol into various sites in the paramedian tegmentum. Wirtshafter D, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):625–8

Monkeys with unilateral ventromedial tegmental lesions of the brain stem: models for Parkinson's disease and Lesch-Nyhan syndrome. Goldstein M. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):311–8

Differential effects of cholinergic drugs on discriminative cues and self-stimulation produced by electrical stimulation of the ventral tegmental area. Druhan JP, et al. **Psychopharmacology (Berlin)** 1989;97(3):331–8

Neurotensin, substance P, neurokinin-alpha, and enkephalin: injection into ventral tegmental area in the rat produces differential effects on operant responding. Kelley AE, et al. **Psychopharmacology (Berlin)** 1989;97(2):243–52

Microinjection of cholecystokinin into the rat ventral tegmental area potentiates dopamine-induced hypolocomotion. Crawley JN. **Synapse** 1989;3(4):346–55

Increased neuronal responsiveness to cholecystokinin and dopamine induced by lesioning mesolimbic dopaminergic neurons: an electrophysiological study in the rat. Debonnel G, et al. **Synapse** 1988;2(5):537–45

[Therapeutic value of the coexistence of cholecystokinin and dopamine. Electrophysiological studies in the rat] Debonnel G, et al. **Encephale** 1989 Jan-Feb;15 Spec No:157–63 **(Fre)**

[Reciprocal interactions between the noradrenergic and dopaminergic systems in the prefrontal cortex and ventral tegmental area] Hervé D, et al. **Encephale** 1989 Jan-Feb; 15 Spec No:133–8 (45 ref.) **(Fre)**

[Functional properties of the neurons of the ventral tegmentum and adjacent areas of the midbrain in waking rats] Kiiatkin EA. **Izv Akad Nauk SSSR [Biol]** 1988 Sep-Oct;(5):683–93 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Effect of noxious tail pinch on the discharge rate of mesocortical and mesolimbic dopamine neurons: selective activation of the mesocortical system. Mantz J, et al. **Brain Res** 1989 Jan 9;476(2):377–81

ULTRASTRUCTURE

Synaptic organization of the pedunculopontine tegmental nucleus of the cat. Moriizumi T, et al. **Brain Res** 1989 Jan 30;478(2):315–25

Monosynaptic striatal inputs to the nigrotegmental neurons: an electron microscopic study in the cat. Tokuno H, et al. **Brain Res** 1989 Apr 17;485(1):189–92

Monosynaptic nigral inputs to the pedunculopontine tegmental nucleus neurons which send their axons to the medial reticular formation in the medulla oblongata. An electron microscopic study in the cat. Nakamura Y, et al. **Neurosci Lett** 1989 Aug 28;103(2):145–50

TEICHOIC ACIDS

ANALYSIS

Electron microscopic demonstration of carbohydrates and lipoteichoic acid in cell envelopes of streptococci by lectins labelled with ferritin or gold. Wagner M, et al. **Acta Histochem Suppl (Jena)** 1988;36:409–13

Bacterial cell walls and membranes. Discovery of the teichoic acids. Baddiley J. **Bioessays** 1989 Jun;10(6):207–10 (27 ref.)

Determination of viridans streptococci surface lipoteichoic acid by enzyme linked immune sorbent assay. Hogg SD, et al. **FEMS Microbiol Lett** 1989 Apr;49(2–3):239–42

Sandwich immunoassay for the detection of lipoteichoic acid. Tadler MB, et al. **J Clin Lab Anal** 1989;3(1):21–5

Electron microscopic localization of lipoteichoic acid on group A streptococci. Rýc M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):168–78

BIOSYNTHESIS

The function of beta-N-acetyl-D-glucosaminyl monophosphorylundecaprenol in biosynthesis of lipoteichoic acids in a group of Bacillus strains. Shimada A, et al. **Eur J Biochem** 1988 Oct 1;176(3):559–65

Structure and glycosylation of lipoteichoic acids in Bacillus strains. Iwasaki H, et al. **J Bacteriol** 1989 Jan;171(1):424–9

Function of alpha-D-glucosyl monophosphorylpolyprenol in biosynthesis of cell wall teichoic acids in Bacillus coagulans. Shimada A, et al. **J Bacteriol** 1989 May; 171(5):2835–41

Biosynthesis of linkage units for teichoic acids in gram-positive bacteria: distribution of related enzymes and their specificities for UDP-sugars and lipid-linked intermediates. Yokoyama K, et al. **J Bacteriol** 1989 Feb; 171(2):940–6

GENETICS

The essential nature of teichoic acids in Bacillus subtilis as revealed by insertional mutagenesis. Mauël C, et al. **Mol Gen Genet** 1989 Feb;215(3):388–94

IMMUNOLOGY

Serum IgG antibodies reactive with lipoteichoic acid in adult patients with periodontitis. Monefeldt K, et al. **J Clin Periodontol** 1989 Sep;16(8):519–24

A protective monoclonal antibody that reacts with a novel antigen of pneumococcal teichoic acid. McDaniel LS, et al. **Microb Pathog** 1987 Oct;3(4):249–60

Immunomodulatory effects of staphylococcal lipoteichoic acid in early Listeria monocytogenes infection in Balb/c-mice. Ohshima Y, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):251–6

Immunostimulating staphylococcal lipoteichoic acid prevents pulmonary tumor colonization in BALB/c-mice. Ohshima Y, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):213–8

ISOLATION & PURIFICATION

[Isolation, purification and identification of protective substances from a culture broth of germinating Bacillus cereus spores] Pronin SV, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jan-Feb;(1):88–94 (Eng. Abstr.) **(Rus)**

METABOLISM

Lipoteichoic acid-antilipoteichoic acid complexes induce superoxide generation by human neutrophils. Ginsburg I, et al. **Inflammation** 1988 Dec;12(6):525–48

Localization of a lipoteichoic acid binding site to a 24-kilodalton NH2-terminal fragment of fibronectin. Courtney HS, et al. **Rev Infect Dis** 1988 Jul-Aug;10 Suppl 2:S360–2

PHARMACOLOGY

Production of interleukin-1 but not tumor necrosis factor by human monocytes stimulated with pneumococcal cell surface components. Riesenfeld-Orn I, et al. **Infect Immun** 1989 Jul;57(7):1890–3

Inhibition of adhesion of viridans streptococci to fibronectin-coated hydroxyapatite beads by lipoteichoic acid. Hogg SD, et al. **J Appl Bacteriol** 1988 Dec;65(6):483–9

TELANGIECTASIA, HEREDITARY HEMORRHAGIC

Familial occurrence of congenital pulmonary arteriovenous fistulas in octogenarian siblings without telangiectasis. Wong LB, et al. **Am J Cardiol** 1988 Nov 15;62(16):1149–50

[Rendu-Osler-Weber disease. A clinical case] Volpe C, et al. **G Clin Med** 1988 Dec;69(12):781–3, 786–7 **(Ita)**

BLOOD

[Reduced platelet aggregation in hereditary haemorrhagic telangiectasia] Endo Y. **Rinsho Byori** 1989 Apr;Spec No 81:46–53 **(Jpn)**

[Changes in iron metabolism in Osler-Rendu disease] Livandovskii IuA. **Ter Arkh** 1989;61(2):109–10 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Asymptomatic cerebral arteriovenous angioma in patient with serious clinical evidences of hereditary haemorrhagic telangiectasia. Dimanico U, et al. **Acta Neurol (Napoli)** 1988 Feb;10(1):20–4

Portosystemic encephalopathy in hereditary hemorrhagic telangiectasia. Fagel WJ, et al. **Am J Med** 1988 Dec; 85(6):858–60

Brain abscess: association with pulmonary arteriovenous fistula and hereditary hemorrhagic telangiectasia: report of three cases. Gelfand MS, et al. **Am J Med** 1988 Nov; 85(5):718–20

Ocular manifestations in hereditary hemorrhagic telangiectasia (Rendu-Osler-Weber disease). Brant AM, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):642–6 (32 ref.)

Duodenal ulcer in hereditary haemorrhagic telangiectasia. Ridley N, et al. **Cent Afr J Med** 1988 Jul;34(7):164–6

A case of adenocarcinoma of the colon in a patient with hereditary hemorrhagic telangiectasis. Goldman K, et al. **Cutis** 1989 Apr;43(4):371–2

Familial occurrence of hyperdynamic circulation status due to intrahepatic fistulae in hereditary hemorrhagic telangiectasia. Nikolopoulos N, et al. **Hepatogastroenterology** 1988 Aug;35(4):167–8

Local oestrogen for recurrent epistaxis caused by familial telangiectasia [letter] Tombleson PM. **J R Coll Gen Pract** 1988 May;38(310):227

[Chronic anemia] Härkönen M. **Duodecim** 1989; 105(13–14):1277,1287 **(Fin)**

[Cerebral abscess and Osler-Rendu disease. Apropos of 4 cases] Peruzzi P, et al. **Neurochirurgie** 1988;34(3):179–87 (48 ref.) (Eng. Abstr.) **(Fre)**

[Pulmonary arteriovenous aneurysm coexisting with rheumatic mitral valvulopathy in Rendu-Osler-Weber syndrome. Image diagnosis using bidimensional and Doppler echocardiography] Rubino A, et al. **G Ital Cardiol** 1989 May;19(5):444–7 (Eng. Abstr.) **(Ita)**

[Development of racemose angiomas in hereditary hemorrhagic telangiectasia] Massini R, et al. **Medicina (Firenze)** 1988 Apr-Jun;8(2):193–4 (Eng. Abstr.)

(Ita)

[A family of pernicious anemia associated with Osler's disease] Koizumi K, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1731–5 (Jpn)

[A case of development of liver cirrhosis in Rendu–Osler disease] Lazdin OA. **Klin Med (Mosk)** 1989 Jan;67(1):125–6 (Rus)

[Vascular malformations of the gastrointestinal tract in children] Torres Alvarez P, et al. **GEN** 1987 Apr–Jun; 41(2):48–52 (Eng. Abstr.) (Spa)

DIAGNOSIS

Diffuse calvarial hemangiomatosis associated with hereditary hemorrhagic telangiectasia. Abdullah DC, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S59

Osler–Weber–Rendu disease: MR findings in the liver. Varma DG, et al. **J Comput Assist Tomogr** 1989 Jan–Feb; 13(1):134–5

[Pulmonary arteriovenous fistula in a newborn infant with hereditary telangiectasis] Kristensen K. **Ugeskr Laeger** 1989 Apr 17;151(16):1001–2 (Eng. Abstr.) (Dan)

[Specific detection of various stages of Osler's disease of the brain using high field magnetic resonance tomography (1.5 Tesla)] Billet F, et al. **Rontgenblatter** 1988 Aug;41(8):320–3 (Eng. Abstr.) (Ger)

[Rendu–Osler–Weber disease as a source of diagnostic difficulties in gastrointestinal hemorrhage] Gemke GR, et al. **Klin Med (Mosk)** 1988 Jun;66(6):107–9 (Rus)

[A rare case of multiple arteriovenous malformations of the lungs] Livandovskiĭ IuA, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):98–9 (Rus)

DRUG THERAPY

Estrogen–progesterone treatment of Osler–Weber–Rendu disease. Van Cutsem E, et al. **J Clin Gastroenterol** 1988 Dec;10(6):676–9

GENETICS

Hereditary hemorrhagic telangiectasia: family study and review. Flint SR, et al.
Oral Surg Oral Med Oral Pathol 1988 Oct;66(4):440–4 (20 ref.)

[Familial Osler's disease with lung involvement] Grimm–Eckardt A, et al. **ROFO** 1989 Jun;150(6):687–90 (Eng. Abstr.) (Ger)

PATHOLOGY

Hereditary haemorrhagic telangiectasia in Nigeria: case report. Jaiyesimi AE, et al. **Cent Afr J Med** 1989 Mar; 35(3):363–5

Osler–Weber–Rendu disease in an infant. Reyes–Mújica M, et al. **Hum Pathol** 1988 Oct;19(10):1243–6

Skin fibroblasts from patients with the genetic disorder hereditary hemorrhagic telangiectasia compared with ataxia–telangiectasia fibroblasts in their response to the radiomimetic drug neocarzinostatin. Becker Y, et al.
Isr J Med Sci 1989 Feb;25(2):81–6

[The generalized form of Rendu–Osler–Weber disease (a practical case)] Sgibneva OV, et al.
Zh Nevropatol Psikhiatr 1988;88(6):113–6 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Age-related clinical profile of hereditary hemorrhagic telangiectasia in an epidemiologically recruited population. Plauchu H, et al. **Am J Med Genet** 1989 Mar;32(3):291–7

RADIOGRAPHY

[Arteriovenous fistula of the lung] Schultebraucks R, et al. **Prax Klin Pneumol** 1988 Dec;42(12):872–7 (Eng. Abstr.) (Ger)

SURGERY

Laser treatment of intestinal vascular abnormalities. Mathus–Vliegen EM. **Int J Color Dis** 1989;4(1):20–5

THERAPY

[Therapeutic possibilities in Rendu–Osler–Weber disease] Abbasciano V, et al. **Clin Ter** 1987 Dec 31;123(6):441–7 (34 ref.) (Eng. Abstr.) (Ita)

TELANGIECTASIS

CHEMICALLY INDUCED

[Unilateral nevoid telangiectasia and hyperestrogenism. A new case [letter] Scocco GL, et al.
G Ital Dermatol Venereol 1988 Sep;123(9):448 (Eng. Abstr.) (Ita)

COMPLICATIONS

Pulmonary hypertension in the CREST syndrome: variant of systemic sclerosis (scleroderma)—a case report. Lie JT. **Angiology** 1989 Aug;40(8):764–7

Gastrointestinal angiodysplasia in renal failure. Marcuard SP, et al. **J Clin Gastroenterol** 1988 Oct;10(5):482–4

Coexistence of CREST syndrome and primary biliary cirrhosis. Serological studies of two cases. Hirakata M, et al. **J Rheumatol** 1988 Jul;15(7):1166–70

Hemoptysis secondary to respiratory tract telangiectasias in CREST syndrome [letter] Newman ED, et al.
J Rheumatol 1988 Dec;15(12):1874–6

[Antral vascular ectasia and scleroderma. Endoscopic, radiologic and anatomopathologic aspects of an uncommon association] Jouanolle H, et al. **Gastroenterol Clin Biol** 1989; 13(2):217–21 (36 ref.) (Eng. Abstr.) (Fre)

[The CREST syndrome. Apropos of a case with Wolff–Parkinson–White type B syndrome] Ben Abdeladhim A, et al. **Tunis Med** 1988 May;66(5):481–3 (11 ref.) (Eng. Abstr.) (Fre)

[Plaque-formed cutaneous mucinosis with telangiectasis] Weindorf N, et al. **Hautarzt** 1988 Sep;39(9):589–92 (Eng. Abstr.) (Ger)

[Zinsser–Engman–Cole syndrome (dyskeratosis congenita) in a 13-year-old boy] Kopyść Z, et al. **Wiad Lek** 1988 Apr 15;41(8):525–30 (Eng. Abstr.) (Pol)

CONGENITAL

Cutis marmorata telangiectatica congenita with terminal transverse limb defects. Björnsdottir US, et al.
Acta Paediatr Scand 1988 Sep;77(5):780–2

Limb defects with cutis marmorata teleangiectatica congenita: Adams–Oliver syndrome [letter] Küster W.
Acta Paediatr Scand 1989 Jul;78(4):627–8

Cutis marmorata telangiectatica congenita—a report of two cases occurring in male children. Lewis–Jones MS, et al.
Clin Exp Dermatol 1988 Mar;13(2):97–9

Congenital glaucoma and cutis marmorata telangiectatica: report of the second case [letter] Vázquez F, et al.
Dermatologica 1988;177(3):193–4

[Congenital phlebectasia and body hemihypertrophy] Lévy C, et al. **Ann Dermatol Venereol** 1989;116(4):319–21 (16 ref.) (Fre)

DIAGNOSIS

Organ manifestations in 100 patients with progressive systemic sclerosis: a comparison between the CREST syndrome and diffuse scleroderma. Akesson A, et al.
Br J Rheumatol 1989 Aug;28(4):281–6

Cutis marmorata telangiectatica congenita: clinicopathologic characteristics and differential diagnosis. Cohen PR, et al.
Cutis 1988 Dec;42(6):518–22

DRUG THERAPY

Response to tetracycline of telangiectasias in a male hemophiliac with human immunodeficiency virus infection [letter] Jiménez–Acosta F, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):369–70

Treatment of essential telangiectasia: effects of increasing concentrations of polidocanol. Norris MJ, et al.
J Am Acad Dermatol 1989 Apr;20(4):643–9

ETIOLOGY

Alpha–interferon therapy and cutaneous vascular lesions [letter] Dreno B, et al. **Ann Intern Med** 1989 Jul 1; 111(1):95–6

Spiders and capillaries. Sherlock S. **Hepatology** 1989 Sep; 10(3):388–9

Facial telangiectasia associated with long–term application of a topical corticosteroid to the scalp. Hogan DJ, et al.
J Am Acad Dermatol 1989 Jun;20(6):1129–30

Repair capacity and kinetics of human skin during fractionated radiotherapy: erythema, desquamation, and telangiectasia after 3 and 5 year's follow–up. Turesson I, et al. **Radiother Oncol** 1989 Jun;15(2):169–88

GENETICS

[Micronodular generalized familial angiomatosis (generalized essential telangiectasia): clinical cases; ultrastructural study] Bourlond A, et al. **Ann Dermatol Venereol** 1988; 115(9):909–17 (Eng. Abstr.) (Fre)

[Leukoplakic nevus of the mouth mucosa. A contribution to diagnosis, etiopathogenesis and nosology] Raschke N, et al. **Dermatol Monatsschr** 1989;175(5):302–6 (Eng. Abstr.) (Ger)

PATHOLOGY

White sponge nevus with epidermolytic changes. Aloi FG, et al. **Dermatologica** 1988;177(5):323–6

Neuroendocrine cell proliferations in gastric antral vascular ectasia. Lowes JR, et al. **Gastroenterology** 1989 Jul; 97(1):207–12

Cutis marmorata telangiectatica congenita: report of 22 cases. Picascia DD, et al. **J Am Acad Dermatol** 1989 Jun; 20(6):1098–1104 (23 ref.)

[Traction detachment in Coats disease] Wiedemann P, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):200–1 (Eng. Abstr.) (Ger)

[Cutis marmorata telangiectatica congenita: apropos of 2 cases] Martín Moreno L, et al.
Med Cutan Ibero Lat Am 1988;16(5):393–6 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

[Juxtafoveolar telangiectasia and its complications] Streicher T, et al. **Cesk Oftalmol** 1989 May;45(3):214–22 (Eng. Abstr.) (Slo)

RADIONUCLIDE IMAGING

Detection of pulmonary telangiectasia using dynamic pulmonary perfusion imaging in patients with liver cirrhosis. Shijo H, et al. **Clin Nucl Med** 1989 Mar; 14(3):179–82

SURGERY

Treatment of Coats' disease with the binocular indirect argon laser photocoagulator [letter] Sneed SR, et al.
Arch Ophthalmol 1989 Jun;107(6):789–90

Painless cauterization of spider veins with the use of iontophoretic local anesthesia. Bezzant JL, et al.
J Am Acad Dermatol 1988 Nov;19(5 Pt 1):869–75

Intraoperative endoscopic localization of jejunal angiodysplasia as a source of massive rectal bleeding. Steele JT, et al. **Surg Endosc** 1989;3(1):56–9; discussion 59–60

[Microsurgical treatment of telangiectasis] Bacci PA.
Phlebologie 1988 Jul–Oct;41(3):714–6 (Fre)

THERAPY

Compression sclerotherapy techniques. Green D.
Dermatol Clin 1989 Jan;7(1):137–46 (15 ref.)

Sclerotherapy for telangiectasia of the lower extremity. Sebben JE. **Dermatol Clin** 1989 Jan;7(1):129–35 (32 ref.)

Cosmetic varicectomy versus sclerotherapy [letter] Galimberti–Bencini M, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):684–5

Compression in the treatment of leg telangiectasia: theoretical considerations. Goldman MP. **J Dermatol Surg Oncol** 1989 Feb;15(2):184–8 (56 ref.)

Telangiectasia and sclerotherapy. Ouvry PA.
J Dermatol Surg Oncol 1989 Feb;15(2):177–81 (28 ref.)

Injection sclerotherapy for spider telangiectasias: a 20–year experience with sodium tetradecyl sulfate. Tretbar LL.
J Dermatol Surg Oncol 1989 Feb;15(2):223–5

[Chromatic micropuncture in the treatment of telangiectasias using the 1000 CMP phlebotome] Umansky S, et al.
Phlebologie 1988 Nov–Dec;41(4):790–1 (Fre)

TELECOMMUNICATIONS

Fax and communication [letter] Harrison PV, et al. **BMJ** 1989 Mar 18;298(6675):748–9

Increased incidence of malignant melanoma of the skin in workers in a telecommunications industry. De Guire L, et al. **Br J Ind Med** 1988 Dec;45(12):824–8

First Pan American Teleconference on AIDS.
Bull Pan Am Health Organ 1989;23(1–2):162–73

Digital teleradiology: Seaforth—London network. Carey LS, et al. **Can Assoc Radiol J** 1989 Apr;40(2):71–4

A model for teleconferencing in geriatric education. Wood JB, et al. **Gerontol Geriatr Educ** 1988;8(3–4):81–93

Extension of health and nutrition services via advanced telecommunications. Gooder JB, et al. **J Am Diet Assoc** 1989 Jun;89(6):821–5

NeuroSIG: the computer network of the Congress of Neurological Surgeons. Reid SA. **Neurosurgery** 1988 Oct; 23(4):519–24

Satellite technology for primary health care [letter] Jovanović P. **World Health Forum** 1988;9(3):386–7

[Lead level of the hair in persons occupationally exposed to it in selected work places] Zaborowska W, et al.
Med Pr 1989;40(1):38–43 (Eng. Abstr.) (Pol)

INSTRUMENTATION

Fetal heart rate transmission with the facsimile telecopier in rural areas. Clark SL, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1040–2

A hospital microwave system for library telecommunication. Hempel RM, et al. **Bull Med Libr Assoc** 1988 Oct; 76(4):339–42

Telecommunications. High–tech execs. Droste T.
Hospitals 1989 Aug 5;63(15):48

Telecommunications. Efficient nurses. Eubanks P.
Hospitals 1989 Aug 5;63(15):50

Telecommunications. Paging all MDs. Koska MT.
Hospitals 1989 Aug 5;63(15):52

Diagnostic accuracy of a teleradiology image transmission system. Markivee CR, et al. **MD Comput** 1989 Mar–Apr; 6(2):88–93

TELECONFERENCE see **TELECOMMUNICATIONS**

TELEMETRY

Computerized and telemetric management of diabetic pregnancy in Cambridge. Davies HA, et al.
J Perinat Med 1988;16(4):381–9

Teleradiology for a family practice center. Franken EA Jr, et al. **JAMA** 1989 May 26;261(20):3014–5

Design dependent loss of telemetry: uplink telemetry hold. Lindenberg BS, et al. **PACE** 1989 May;12(5):823–6

INSTRUMENTATION

Diagnostic utility of memory equipped transtelephonic monitors. Schmidt SB, et al. **Am J Med Sci** 1988 Nov; 296(5):299–302

Perioral force measurement by a radiotelemetry device. Kato Y, et al. **Am J Orthod Dentofacial Orthop** 1989 May; 95(5):410–4

A miniaturized ultrasonic flowmeter and telemetry transmitter for chronic animal blood flow measurements. Yonezawa Y, et al. **Biomed Sci Instrum** 1989;25:107–11

Telemetry of human electrocardiograms in aerial and aquatic environments. Utsuyama N, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):881–4

Comment on 'Multi-channel strain-gauged telemetry for orthopaedic implants' [letter] **Mann RW. J Biomech** 1989; 22(1):77–8

Use of telemetry to record body temperature and activity in mice. Clement JG, et al. **J Pharmacol Methods** 1989 Apr;21(2):129–40

Simple decoder for PPM multichannel biotelemetry. Crenner F. **Med Biol Eng Comput** 1988 Jan;26(1):105–9

Development of a wireless stethoscope for auscultatory monitoring during anaesthesia. Hök B, et al. **Med Biol Eng Comput** 1988 May;26(3):317–20

Remote vital-signs monitor using a dial-up telephone line. Rezazadeh M, et al. **Med Biol Eng Comput** 1988 Sep; 26(5):557–61

Monitoring of the effects of antidepressant drugs in the freely moving rat by radioelectroencephalography (tele-stereo-EEG). Dimpfel W, et al. **Neuropsychobiology** 1988;19(2):116–20

Longterm heartrate telemetry in small mammals: a comprehensive approach as a prerequisite for valid results. Stöhr W. **Physiol Behav** 1988;43(5):567–76

[A telemetric transmission system for in vivo measuring of hip joint force with instrument-implanted prostheses] Graichen F, et al. **Biomed Tech (Berlin)** 1988 Dec; 33(12):305–12 (Eng. Abstr.) **(Ger)**

[Microcomputer-assisted telemetry system for recording ultradian temperature rhythms in large animals] Mohr E, et al. **Zentralbl Veterinarmed [A]** 1989 May;36(5):331–9 (Eng. Abstr.) **(Ger)**

[Development of passive telemetry system for intracranial pressure measurement with corrector of errors caused by temperature variation] **Magara M, et al. Iyodenshi To Seitai Kogaku** 1989 Mar;27(1):35–44 (Eng. Abstr.) **(Jpn)**

[A modification of the determination of intra-organ proteolysis using Ferment-2MT equipment] Shmykov Iu1s. **Lab Delo** 1989;(2):77–8 **(Rus)**

METHODS

[Telethermovision studies in Perthes disease] Bajtay A. **Z Orthop** 1988 Sep-Oct;126(5):484–6 (Eng. Abstr.) **(Ger)**

[Automatic electrocardiographic diagnosis of the main types of arrhythmia at a remote cardiologic consultation and diagnostic center] Khalfen ÉSh, et al. **Kardiologiia** 1989 Jan;29(1):25–9 (Eng. Abstr.) **(Rus)**

TELENCEPHALON

Diagnosis of unilateral telencephalic hearing disorders. Evaluation of a simple psychoacoustic pattern discrimination test. Blaettner U, et al. **Brain** 1989 Feb;112 (Pt 1):177–95

ABNORMALITIES

Mediobasal prosencephalic defects, including holoprosencephaly and cyclopia, in relation to the development of the human forebrain. Müller F, et al. **Am J Anat** 1989 Aug;185(4):391–414

ANATOMY & HISTOLOGY

A Golgi and electron microscope study of the precommissural dorsal septum in the reptile: Podarcis hispanica. Martín-Pérez V, et al. **Anat Anz** 1988; 166(1-5):195–207

Auditory pathways in the budgerigar. II. Intratelencephalic pathways. Brauth SE, et al. **Brain Behav Evol** 1988; 32(4):193–207

Retinal projection to mammalian telencephalon. Cooper HM, et al. **Brain Res** 1989 Jan 16;477(1-2):350–7

A stereotaxic atlas for the telencephalon of the Siamese fighting fish (Betta splendens). Marino-Neto J, et al. **Braz J Med Biol Res** 1988;21(5):971–86

Studies on the cellular architecture of the bed nuclei of the stria terminalis in the rat: I. Cytoarchitecture. Ju G, et al. **J Comp Neurol** 1989 Feb 22;280(4):587–602

Telencephalic cholinergic system of the New World monkey (Cebus apella): morphological and cytoarchitectonic assessment and analysis of the projection to the amygdala. Kordower JH, et al. **J Comp Neurol** 1989 Jan 22; 279(4):528–45

Immunohistochemical study of the telencephalon of the spiny dogfish, Squalus acanthias. Northcutt RG, et al. **J Comp Neurol** 1988 Nov 8;277(2):250–67

The structure of chicken ectostriatum. I. Golgi study. Tömböl T, et al. **J Hirnforsch** 1988;29(5):525–46

Hippocampal specialization of food-storing birds. Krebs JR, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1388–92

BLOOD SUPPLY

Vasoconstriction in telencephalic microvessels: a response to one model for intraventricular hemorrhage in beagle pups. Leuschen MP, et al. **Anat Rec** 1989 Aug; 224(4):534–40

Effects of asphyxia on telencephalic microvessels of premature beagle pups. Leuschen MP, et al. **J Perinatol** 1987 Spring;7(2):93–9

A modified four-vessel occlusion model for inducing incomplete forebrain ischemia in rats. Schmidt-Kastner R, et al. **Stroke** 1989 Jul;20(7):938–46

CYTOLOGY

Telencephalic projections of the A8 dopamine cell group. Deutch AY, et al. **Ann N Y Acad Sci** 1988;537:27–50 (64 ref.)

Anatomical study of the wulst in the parakeet (Aratinga canalicularis). Diaz-Cintra S, et al. **Bol Estud Med Biol** 1988;36(1-4):25–34

The sensitive period for the morphological effects of monocular deprivation in two nuclei of the tectofugal pathway of zebra finches. Herrmann K, et al. **Brain Res** 1988 Jun 7;451(1-2):43–53

Identification of an insulin-like factor in astrocyte conditioned medium. Kadle R, et al. **Brain Res** 1988 Sep 13;460(1):60–7

The origin of tyrosine hydroxylase-immunoreactive fibers in the regions of the nucleus basalis magnocellularis of the rat. Martinez-Murillo R, et al. **Brain Res** 1988 Jun 7; 451(1-2):227–36

Neuronal organization of the supracommissural ventral telencephalon and the nucleus preopticus periventricularis in the himé salmon (landlocked red salmon, Oncorhynchus nerka): a Golgi study. Shiga T, et al. **J Hirnforsch** 1989; 30(2):153–61

Cell types of the paleostriatal complex of the domestic chicken (Gallus domesticus): a Golgi study. Tömböl T, et al. **J Hirnforsch** 1988;29(5):493–507

Localization of GABA-like immunoreactivity in the ectostriatum of domestic chicks: GABA immunocytochemistry combined with Golgi impregnation. Csillag A, et al. **J Neurocytol** 1989 Jun;18(3):369–79

Cyclic AMP reduces adhesion of isolated neuronal growth cones from developing rat forebrain to an astrocytic cell line from embryonic mouse striatum. Lockerbie RO, et al. **Neuroscience** 1989;28(2):443–54

DRUG EFFECTS

Nerve growth factor promotes survival of retrogradely labeled hippocampus-projecting neurons in the rat basal forebrain in vitro. Arimatsu Y, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):297–301

The effects of perinatal diazepam exposure on stress-induced activation of the mesotelencephalic dopamine system. Deutch AY, et al. **Neuropsychopharmacology** 1989 Jun; 2(2):105–14

EMBRYOLOGY

[Tecto-thalamo-telencephalic visual system of the brain in 13-day-old chick embryos] Ozirskaia EV, et al. **Zh Evol Biokhim Fiziol** 1988 May-Jun;24(3):404–13 (Eng. Abstr.) **(Rus)**

[The development of connections in the tecto-thalamo-telencephalic visual system of the brain in 13-day-old chick embryos] Tumanova NL, et al. **Zh Evol Biokhim Fiziol** 1989 Jan-Feb;25(1):119–22 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Halothane anesthesia alters cerebral enzymes: a histochemical study in the rat. Trulson ME, et al. **Acta Anat (Basel)** 1987; 130(2):163–7

GROWTH & DEVELOPMENT

Transient increases and individual variations in preprocholecystokinin gene expression in rat telencephalic regions during postnatal development: a quantitative comparison between preprocholecystokinin mRNA and preproenkephalin mRNA. Yoshikawa K, et al. **Brain Res** 1988 Sep;464(2):87–96

Development of neurons in the ectostriatum of normal and monocularly deprived zebra finches: a quantitative Golgi study [published erratum appears in J Comp Neurol 1989 Feb 22;280(4):preceding index] Herrmann K, et al. **J Comp Neurol** 1988 Nov 1;277(1):141–54

Comparative study of the early postnatal chicken and pigeon brain. A Golgi-study of telencephalon and cerebellum. Tömböl T. **J Hirnforsch** 1988;29(5):557–67

Cyclic AMP-dependent protein phosphorylation in isolated neuronal growth cones from developing rat forebrain. Lockerbie RO, et al. **J Neurochem** 1989 Mar;52(3):786–96

Developmental changes in the calcium dependency of gamma-aminobutyric acid release from isolated growth cones: correlation with growth cone morphology. Taylor J, et al. **J Neurochem** 1989 Sep;53(3):834–43

IMMUNOLOGY

Demyelination in brain cell aggregate cultures, induced by a monoclonal antibody against the myelin/oligodendrocyte glycoprotein (MOG). Honegger P, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):10–3

METABOLISM

Distribution of nicotinic cholinergic receptors in the rat tel- and diencephalon: a quantitative receptor autoradiographical study using [3H]-acetylcholine, [alpha-125I]bungarotoxin and [3H]nicotine. Härfstrand A, et al. **Acta Physiol Scand** 1988 Jan;132(1):1–14

Accumulation of estrogen in a vocal control brain region of a duetting song bird. Brenowitz EA, et al. **Brain Res** 1989 Feb 20;480(1-2):119–25

Thalamic nuclei that project to reptilian telencephalon lack GABA and GAD immunoreactive neurons and puncta. Pritz MB, et al. **Brain Res** 1988 Aug 2;457(1):154–9

Utilization of 3-hydroxybutyrate by chick cerebral hemispheres during postnatal maturation. Nehlig A, et al. **Comp Biochem Physiol [B]** 1978;61(1):59–64

Developmental expression of glial fibrillary acidic protein and glutamine synthetase in serum-free aggregating cell cultures of fetal rat telencephalon. Monnet-Tschudi F, et al. **Dev Neurosci** 1988;10(3):165–72

Neo-Timm and selenium stainable glial cells of the rat telencephalon. Holm IE. **Histochemistry** 1989;91(2):133–41

Rapid reduction in [3H]prazosin binding to gerbil forebrain membranes during bilateral common carotid artery occlusion. Nishino K, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):358–63

Studies on the cellular architecture of the bed nuclei of the stria terminalis in the rat: II. Chemoarchitecture. Ju G, et al. **J Comp Neurol** 1989 Feb 22;280(4):603–21

Distribution of mu, delta, and kappa opiate receptor types in the forebrain and midbrain of pigeons. Reiner A, et al. **J Comp Neurol** 1989 Feb 15;280(3):359–82

Ontogenesis of alpha 2-adrenoceptor coupling with GTP-binding proteins in the rat telencephalon. Kitamura Y, et al. **J Neurochem** 1989 Jul;53(1):249–57

Muscarinic agonists cause calcium influx and calcium mobilization in forebrain neurons in vitro. Reynolds IJ, et al. **J Neurochem** 1989 Jul;53(1):226–33

Vascular cholinesterases and choline uptake in isolated rat forebrain microvessels: a possible link. Shimon M, et al. **J Neurochem** 1989 Aug;53(2):561–5

Influence of monensin on ganglioside anabolism and neurite stability in cultured chick neurons. Hogan MV, et al. **J Neurosci Res** 1988 Jul;20(3):390–4

Developmental appearance of nerve growth factor in the rat brain: significant deficits in the aged forebrain. Lärkfors L, et al. **Prog Brain Res** 1988;78:27–31

PHYSIOLOGY

Telencephalic and pretectal modulation of the directional selectivity of accessory optic neurons in the pigeon. Hamasaki DE, et al. **Braz J Med Biol Res** 1988; 21(3):649–52

Electrical activity of the toad telencephalon during tonic immobility (animal hypnosis). Hoffmann A, et al. **Braz J Med Biol Res** 1988;21(1):141–5

Swimming escape learning in rats with telencephalic lesions. Tomaz C, et al. **Braz J Med Biol Res** 1989;22(1):61–4

Flash evoked potentials in the ectostriatum of the zebra finch: a current source-density analysis. Engelage J, et al. **Exp Brain Res** 1989;74(3):563–72

Cholinergically mediated reduction of locomotor activity from the basal forebrain of the rat. Brudzynski SM, et al. **Exp Neurol** 1989 Aug;105(2):197–205

The effects of hyperstriatal lesions on one-trial passive-avoidance learning in the chick. Davies DC, et al. **J Neurosci** 1988 Dec;8(12):4662–6

Oculomotor nucleus afferents from the interstitial nucleus of Cajal and the region surrounding the fasciculus retroflexus in the rabbit. Labandeira-Garcia JL, et al. **Neurosci Lett** 1989 Jun 5;101(1):11–6

Electrosensory activity in the telencephalon of the axolotl. Northcutt RG, et al. **Neurosci Lett** 1989 Apr 24; 99(1-2):79–84

Conditioned circling in rats: bilateral involvement of the mesotelencephalic dopamine system demonstrated following unilateral 6-hydroxydopamine lesions. Szostak C, et al. **Neuroscience** 1988 Aug;26(2):395–401

Flight behavior induced by microinjection of GABA antagonists into periventricular structures in detelencephalated rats. Tomaz C, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):337–42

PHYSIOPATHOLOGY

Neuroethological evaluation of audiogenic seizures in hemidetelencephalated rats. Garcia-Cairasco N, et al. **Behav Brain Res** 1989 May 1;33(1):65–77

Effect of avian basal forebrain lesions, including septum, on heart rate conditioning. Cohen DH, et al. **Brain Res Bull** 1978 Jul-Aug;3(4):311–8

TRANSPLANTATION

[Morphogenesis of neural derivates after transplantation of the rat embryo telencephalon to the testis of sexually mature animals] Dyban PA. **Biull Eksp Biol Med** 1989 Jan; 107(1):87–9 (Eng. Abstr.) **(Rus)**

TELEOLOGICAL ETHICS see **ETHICS**

TELEPATHY

[A telepathic phenomenon] Leuschner W. **Psyche (Stuttg)** 1989 May;43(5):415–28 (Eng. Abstr.) **(Ger)**

TELEPHONE

Domiciliary fetal monitoring via telephone. A preliminary report. Feijen HL. **Acta Obstet Gynecol Scand** 1988; 67(3):229–32

Echocardiography by telephone—evaluation of pediatric heart disease at a distance. Finley JP, et al. **Am J Cardiol** 1989 Jun 15;63(20):1475–7

Telephone etiquette: the telephone, one of the physician's most necessary and, at times, most hated devices [letter] Stickler GB. **Am J Dis Child** 1989 May;143(5):520

Improving medical communication with facsimile (fax) transmission. Yamamoto LG, et al. **Am J Emerg Med** 1989 Mar;7(2):203–8

Diagnostic utility of memory equipped transtelephonic monitors. Schmidt SB, et al. **Am J Med Sci** 1988 Nov; 296(5):299–302

Follow-up phone calls after discharge. Cave LA. **Am J Nurs** 1989 Jul;89(7):942–3

Validity of telephone surveys in assessing cigarette smoking in young adults. Luepker RV, et al. **Am J Public Health** 1989 Feb;79(2):202–4

Emergency department telephone advice. Verdile VP, et al. **Ann Emerg Med** 1989 Mar;18(3):278–82

For whom the (phone) bell tolls [editorial] Wolcott BW. **Ann Emerg Med** 1989 Mar;18(3):323

Telephone speech comprehension with use of the nucleus cochlear implant. Cohen NL, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Aug;142:8–11

Telephone hearing screening. **ASHA** 1988 Nov;30(11):53

An extension and refinement of telephone emergency-skills training. A comparison of training methods. Rivera-Tovar LA, et al. **Behav Modif** 1988 Jul;12(3):445–65

Hospital emergency numbers [letter] Davies MW. **BMJ** 1988 Dec 17;297(6663):1606

Fetal heart rate monitoring by telephone. I. Development of an integrated system in Cardiff. Dawson AJ, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):1018–23

Fetal heart rate monitoring by telephone. II. Clinical experience in four centres with a commercially produced system. James D, et al. **Br J Obstet Gynaecol** 1988 Oct; 95(10):1024–9

Psychoanalysis by telephone. Lindon JA. **Bull Menninger Clin** 1988 Nov;52(6):521–8

Increasing response rates in community health surveys administered by telephone. Allison KR, et al. **Can J Public Health** 1989 Jan–Feb;80(1):67–70

"Teleauscultation": the next best thing to being there [letter] Fallis G, et al. **Can Med Assoc J** 1989 May 15; 140(10):1129–31

"Teleauscultation": the next best thing to being there [letter] Sennett ES. **Can Med Assoc J** 1989 Aug 15;141(4):277–8

Doctor-consultation in Hong Kong: a comparison between findings of a telephone interview with the general household survey. Lam TH, et al. **Community Med** 1988 Aug;10(3):175–9

Documentation of after-hours telephone contacts by family medicine residents. Hamadeh G. **Fam Med** 1989 Jul–Aug; 21(4):305–6

You've got a lot to answer for, Mr Bell. A review of the use of the telephone in primary care. Hallam L. **Fam Pract** 1989 Mar;6(1):47–57 (78 ref.)

Medical advice by telephone at Swedish health centres: who calls and what are the problems? Marklund B, et al. **Fam Pract** 1989 Mar;6(1):42–6

A romance with pain: a telephone perversion in a woman? Richards AK. **Int J Psychoanal** 1989;70 (Pt 1):153–64

Family phone therapy in university counseling and psychological service centers: a family systems approach. DeSalvo FJ Jr. **J Am Coll Health** 1988 Sep;37(2):71–6

Telephone communication with the primary physician by staff of a long-term care facility [letter] Rezvan A. **J Am Geriatr Soc** 1989 Mar;37(3):289–90

Computerized telephone assessment of the "concrete" needs of chemotherapy outpatients: a feasibility study. Siegel K, et al. **J Clin Oncol** 1988 Nov;6(11):1760–7

Efficacy of a telephone follow-up system in the emergency department. Jones J, et al. **J Emerg Med** 1988 May–Jun; 6(3):249–54

Effectiveness of follow-up reminder methods [letter] Cherkin D. **J Fam Pract** 1989 Jan;28(1):20

Patient telephone call documentation. Quality implications and an attempted intervention. Daugird AJ, et al. **J Fam Pract** 1988 Oct;27(4):420–1

Characteristics of patients who highly utilize telephone medical care in a private practice. Daugird AJ, et al. **J Fam Pract** 1989 Jul;29(1):59–63; discussion 63–4

Chiropractic in the yellow pages: a content analysis study [see comments] Hurwitz EL, et al. **J Manipulative Physiol Ther** 1988 Aug;11(4):281–9. **Comment in:** J Manipulative Physiol Ther 1989 Jun;12(3):236

Polemics in perinatology: an econium to Alexander Graham Bell. Schiffin BS. **J Perinatol** 1987 Winter;7(1):47–8

Agreement between face-to-face and telephone-administered versions of the depression section of the NIMH Diagnostic Interview Schedule. Wells KB, et al. **J Psychiatr Res** 1988;22(3):207–20

Telephone management of out-of-hours calls [letter] **J R Coll Gen Pract** 1988 Jan;38(306):35–6

Remote monitoring of free flaps with telephonic transmission of photoplethysmograph waveforms. Jones JW, et al. **J Reconstr Microsurg** 1989 Apr;5(2):141–4

Telephone-mediated lightning injury: an Australian survey. Andrews CJ, et al. **J Trauma** 1989 May;29(5):665–71

Physician advertising in 1886: touting by telephone [letter] Hayes H. **JAMA** 1989 Jan 20;261(3):379

FAX technology, a useful medical tool. Oster HG. **Md Med J** 1989 May;38(5):395–6

Remote vital-signs monitor using a dial-up telephone line. Rezazadeh M, et al. **Med Biol Eng Comput** 1988 Sep; 26(5):557–61

The effect of a telephone family assessment intervention on the functional health of patients with elevated family stress. Parkerson GR Jr, et al. **Med Care** 1989 Jul;27(7):680–93

Telephone patient management by primary care physicians. Radecki SE, et al. **Med Care** 1989 Aug;27(8):817–22

Teleradiology at Gunma University Hospital. Heshiki A, et al. **Med Inf (Lond)** 1988 Oct–Dec;13(4):295–301

Comparison of treatments to teach number matching skills to adults with moderate mental retardation. Lalli JS, et al. **Ment Retard** 1989 Apr;27(2):75–83

402–393–3216. Raymond R. **Nebr Med J** 1989 Sep;74(9):289

Third-party payor calls—nuisance or necessity? **Ohio Med** 1989 Aug;85(8):615–8, 620

Telephone contact with the patient. **Ohio Med** 1988 Nov; 84(11):885, 895

Acoustic trauma caused by the telephone. Report of two cases. Guyot JP. **ORL J Otorhinolaryngol Relat Spec** 1988; 50(5):313–8

Telephone management curriculum for pediatric interns: a controlled trial. Wood PR, et al. **Pediatrics** 1989 Jun; 83(6):925–30

Factorial and criterion validities of telephone-assessed cognitive ability measures. Age and gender comparisons in adult twins. Nesselroade JR, et al. **Res Aging** 1988 Jun; 10(2):220–34

[Initial experience with modification of dosage of anti-arrhythmic agents using telephone transmission of the electrocardiogram] Bartuněk E, et al. **Cas Lek Cesk** 1989 Jan 20;128(4):114–6 (Eng. Abstr.) **(Cze)**

[Ambulatory monitoring and telephone transmission of uterine activity. Preliminary study on the evaluation of the TOKOS system] Pons JC, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(8):1031–6 (Eng. Abstr.) **(Fre)**

[Vandalism of public telephones according to paragraph 204 of the federal penal code. Coin alot/coin return tray of a coin-operated telephone—vaginal substitute for abnormal sexual gratification] Lange E. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Mar; 41(3):170–1 (Eng. Abstr.) **(Ger)**

[Transmitters for autotranslation of electrocardiographic signals via telephone communication channels] Koltun VM, et al. **Med Tekh** 1988 Jul–Aug;(4):41–4 (Eng. Abstr.) **(Rus)**

[X-ray pictures via picture-telephone as a possibility for consulting physicians] Lönnroth CG. **Lakartidningen** 1989 Feb 8;86(6):428–9 **(Swe)**

[Telephone consultation—an extensive activity at health care centers] Marklund B, et al. **Lakartidningen** 1988 Nov 30; 85(48):4226–8 **(Swe)**

ECONOMICS

Tracking availability of beds in community residences through a talking telephone system. Schwartz MD. **Hosp Community Psychiatry** 1989 Jun;40(6):571–2

INSTRUMENTATION

Epidemic of "shocks" in telephone operators: lessons for the medical community. Yassi A, et al. **Can Med Assoc J** 1989 Apr 1;140(7):816–20

Hospitals examine automated operator systems. Holthaus D. **Hospitals** 1989 Sep 20;63(18):92

[Cardiotelephone with memory (CTM) in basic medicine. Presentation of cases of a pilot study] Balbi M, et al. **Minerva Cardioangiol** 1988 Nov;36(11):579–82 (Eng. Abstr.) **(Ita)**

METHODS

Telemedicine: the best is yet to come, experts say. Michaels E. **Can Med Assoc J** 1989 Sep 15;141(6):612–4

[Evaluation of the effectiveness of informing the population about AIDS by means of a telephone questionnaire] Pokrovskiĭ VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):20–2 (Eng. Abstr.) **(Rus)**

UTILIZATION

Use of telephone prompts at an inner-city outpatient clinic. Shivack IM, et al. **Hosp Community Psychiatry** 1989 Aug; 40(8):851–3

Very low birth-weight infants: parental visiting and telephoning during initial infant hospitalization. Brown LP, et al. **Nurs Res** 1989 Jul–Aug;38(4):233–6

TELEPHONE HOTLINES see **HOTLINES**

TELERADIOISOTOPE THERAPY see **RADIOISOTOPE TELETHERAPY**

TELESCOPIC PROSTHESIS see **DENTURE, OVERLAY**

TELEVISION

Youth and alcohol in television stories, with suggestions to the industry for alternative portrayals. De Foe JR, et al. **Adolescence** 1988 Fall;23(91):533–50

Television and vision: reading captions when vision is blurred. Thorn S, et al. **Am Ann Deaf** 1989 Mar;134(1):35–8

Effects of a televised smoking cessation intervention among low-income and minority smokers. Jason LA, et al. **Am J Community Psychol** 1988 Dec;16(6):863–76

Nuclear indices and survival in cutaneous melanoma. Heenan PJ, et al. **Am J Dermatopathol** 1989 Aug;11(4):308–12

Exposure to television as a risk factor for violence. Centerwall BS. **Am J Epidemiol** 1989 Apr;129(4):643–52

NBC's tinsel handmaidens [editorial] Mallison MB. **Am J Nurs** 1989 Apr;89(4):453

Clustering of teenage suicides after television news stories about suicides: a reconsideration. Kessler RC, et al. **Am J Psychiatry** 1988 Nov;145(11):1379–83

One year follow-up of the Chicago televised smoking cessation program. Flay BR, et al. **Am J Public Health** 1989 Oct;79(10):1377–80

Television viewing and obesity in adult males. Tucker LA, et al. **Am J Public Health** 1989 Apr;79(4):516–8

Videoendoscopy for difficult anastomoses. Chung RS. **Am Surg** 1989 Feb;55(2):129–32

Video display for teaching fiberoptic intubations [letter] Dubin SA, et al. **Anesthesiology** 1989 Jul;71(1):167

Results of a television-advertised public screening program for colorectal cancer. McGarrity TJ, et al. **Arch Intern Med** 1989 Jan;149(1):140–4

Analysis of patient response to preoperative computerized video imaging. Thomas JR, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):793–6

Measurement of arteriole diameter changes by analysis of television images. Neild TO. **Blood Vessels** 1989; 26(1):48–52

Sudden infant death syndrome and the media [letter] Routh C. **BMJ** 1989 Jul 8;299(6691):125

The role of closed circuit television in the teaching of operative dentistry. Smart ER, et al. **Br Dent J** 1989 Mar 25;166(6):229–34

Television advertisements for alcoholic drinks do reinforce under-age drinking. Aitken PP, et al. **Br J Addict** 1988 Dec;83(12):1399–419

Bronchial television endoscopy. Ikeda S. **Chest** 1989 Jul;96(1 Suppl):41S–42S

Imitation of televised models by infants. Meltzoff AN. **Child Dev** 1988 Oct;59(5):1221–9

Family ecology and child characteristics that predict young children's educational television viewing. Pinon MF, et al. **Child Dev** 1989 Aug;60(4):846–56

Closed-circuit television as an electronic visual aid. Sun BC, et al. **Chin Med J [Engl]** 1988 Nov;101(11):803–6

Another perspective on television. Lynch KB. **Del Med J** 1989 Jul;61(7):371–2

Pattern reversal electroretinograms: TV or projector system? Yoshii M. **Fortschr Ophthalmol** 1988;85(3):304–7

Digital videofluorography for direct digital spot filming of gastrointestinal studies. Steiner E, et al. **Gastrointest Radiol** 1989 Summer;14(3):193–201

Prime-time television portrayals of older adults in the context of family life. Dail PW. **Gerontologist** 1988 Oct;28(5):700–6

Telecommunications. Pleasing patients. Lappa K. **Hospitals** 1989 Aug 5;63(15):54, 56

Requirements on resolution of digital imaging equipment in the cardiac catheterization laboratory. Schnell N, et al. **Int J Card Imaging** 1988;3(2–3):111–6

The use of video imaging techniques to study ultrafiltration and blood flow in the normal and diseased kidney. Savin VJ. **Int Rev Exp Pathol** 1988;30:321–55 (45 ref.)

Epidemiological observations in the AIDS clinic at the Hadassah University Hospital in Jerusalem. Maayan S, et al. **Isr J Med Sci** 1989 Jun;25(6):309–13

Attitudes of adolescents and parents of adolescents concerning condom advertisements on television. Buchta RM. **J Adolesc Health Care** 1989 May;10(3):220–3

Teaching self-protection to children using television techniques. Poche C, et al. **J Appl Behav Anal** 1988 Fall; 21(3):253–61

Television's influence on children's diet and physical activity. Taras HL, et al. **J Dev Behav Pediatr** 1989 Aug; 10(4):176–80

Television-inspired autoerotic asphyxiation [letter; comment] Dietz PE. **J Forensic Sci** 1989 May;34(3):528–9. **Comment on:** J Forensic Sci 1988 Nov;33(6):1491–2

Autoerotic asphyxial death following television broadcast [see comments] O'Halloran RL, et al. **J Forensic Sci** 1988 Nov;33(6):1491–2. **Comment in:** J Forensic Sci 1989 May;34(3):528–9

Network television news stories about suicide and short-term changes in total U.S. suicides. Kessler RC, et al. **J Nerv Ment Dis** 1989 Sep;177(9):551–5

Preventive intervention to improve children's discrimination of the persuasive tactics in televised advertising. Peterson L, et al. **J Pediatr Psychol** 1988 Jun;13(2):163–70

Interactive television teaching: a student's point of view. Salame MY. **J R Soc Med** 1989 May;82(5):292

The great Australian salt search [letter] Chapman S, et al. **Med J Aust** 1988 Dec 5–19;149(11–12):714

Improvement of spatial resolution properties of image intensifier-TV digital systems with a multiple-narrow-slit

beam imaging technique. Kume Y, et al. **Med Phys** 1988 Nov–Dec;15(6):846–52
Optical image processing with liquid–crystal display for image intensifier/television systems. Lam KL, et al. **Med Phys** 1988 Nov–Dec;15(6):838–45
What is ... distance learning? Harden RM. **Med Teach** 1988; 10(2):139–45
Characteristics of low light level television cameras. Spring KR, et al. **Methods Cell Biol** 1989;29:269–89 (16 ref.)
Child abuse in Christchurch [letter] Dobson J. **N Z Med J** 1989 May 24;102(868):259
Assessment: intensive EEG/video monitoring for epilepsy. Report of the American Academy of Neurology, Therapeutics and Technology Assessment Subcommittee. **Neurology** 1989 Aug;39(8):1101–2
Nursing's image [letter] **Nurs Outlook** 1989 May–Jun; 37(3):146
Television therapy. Young GG. **Ohio Med** 1988 Jun; 84(6):465–71
Effect of magnification and field of view on reading speed using a CCTV. Lovie–Kitchin JE, et al. **Ophthalmic Physiol Opt** 1988;8(2):139–45
Regaining control of the television set [letter] Agre F. **Pediatrics** 1989 Aug;84(2):404–5
Field experiments of television violence with children: evidence for an environmental hazard? Gadow KD, et al. **Pediatrics** 1989 Mar;83(3):399–405 (52 ref.)
Children, adolescents, and television—1989: I. Television violence: a critique. Singer DG. **Pediatrics** 1989 Mar; 83(3):445–6
Children, adolescents, and television—1989: II. The role of pediatricians. Strasburger VC. **Pediatrics** 1989 Mar; 83(3):446–8
Visual superiority effect in televised prevention of victimization programs for preschool children. Ginsburg HJ, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1179–82
The television school and family smoking prevention and cessation project. I. Theoretical basis and program development. Flay BR, et al. **Prev Med** 1988 Sep; 17(5):585–607
The Werther effect after television films: new evidence for an old hypothesis. Schmidtke A, et al. **Psychol Med** 1988 Aug;18(3):665–76
Results of a one–year worksite and mass media based intervention on health behaviour and chronic disease risk factors. Puska P, et al. **Scand J Soc Med** 1988;16(4):241–50
[The clinical use of the closed circuit TV as a visual aid] Sun BC. **Chung Hua Yen Ko Tsa Chih** 1988 Jul;24(4):230–2 (Eng. Abstr.) **(Chi)**
[Health hazards from radiation from broadcasting equipment] Laerum OD. **Nord Med** 1989;104(2):58–60 **(Nor)**
[Medicine and the media] Nylenna M. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):309–310 **(Nor)**
[Characteristics of the functional status of the cardiovascular system of female workers at an assembly plant] Makarychev VA, et al. **Gig Sanit** 1988 Dec;(12):85–6 **(Rus)**
[Bases of measures aimed at improving working conditions for women employed in manufacturing of television sets] Gruznevich AP. **Gig Tr Prof Zabol** 1989;(6):19–22 (Eng. Abstr.) **(Rus)**
[Scenes related to the use of tobacco in television programs in Santiago] Cornejo E, et al. **Rev Med Chil** 1987 Sep; 115(9):830–5 (Eng. Abstr.) **(Spa)**
[Improvement of clinical competence in internal medicine of medical students, by means of television] Schiappacasse E, et al. **Rev Med Chil** 1987 Dec;115(12):1205–9 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

A television/computer three–dimensional surface shape measurement system. Turner–Smith AR. **J Biomech** 1988; 21(6):515–29
Telemedicine. Watson DS. **Med J Aust** 1989 Jul 17; 151(2):62–6, 68, 71
A video–based patient contour acquisition system for the design of radiotherapy compensators. Andrew JW, et al. **Med Phys** 1989 May–Jun;16(3):425–30
A light source for testing radiological television cameras. Rowlands JA, et al. **Med Phys** 1989 Jan–Feb;16(1):1–6
Variable–image videoconfrontation as a method of assessing body image: a technical report and comparison with similar techniques. McCrea C, et al. **Percept Mot Skills** 1988 Aug; 67(1):121–2
[A trial of and prospects for the use of computerized television analyzers for the quantitative microscopy of normal and pathological brain tissue] Adrianov OS, et al. **Vestn Akad Med Nauk SSSR** 1988;(8):13–8 **(Rus)**

METHODS

[Use of digital technology in x–ray television imaging] Leonov BI, et al. **Med Tekh** 1989 Mar–Apr;(2):3–10 (Eng. Abstr.) **(Rus)**

STANDARDS

[Protection of the population from the effects of electromagnetic radiation emitted by radiotechnological devices] Romanov VA, et al. **Gig Sanit** 1988 Jul;(7):16–8 **(Rus)**

TRENDS

The response of New Zealand boys to corporate and sponsorship alcohol advertising on television. Wyllie A, et al. **Br J Addict** 1989 Jun;84(6):639–46
[The informed society: television and surgery] Mohl H. **Langenbecks Arch Chir** 1988;Suppl 2:341–5 (Eng. Abstr.) **(Ger)**

TELLURIUM

Comparative dosimetry of 124Te(p, 2n)123I and 124Xe(p, 2m)123I. Maguire WJ. **Health Phys** 1989 Jul;57(1):195–7
Characteristics of RP4 tellurite–resistance transposon Tn521. Bradley DE, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):2009–18
Tellurium–induced neuropathy: metabolic alterations associated with demyelination and remyelination in rat sciatic nerve. Harry GJ, et al. **J Neurochem** 1989 Mar; 52(3):938–45

ANALYSIS

Use of platinum as a modifier in the sensitive detection of tellurium in biological samples. Siddik ZH, et al. **Anal Biochem** 1988 Jul;172(1):190–6

METABOLISM

Reduction of tellurite and deesterification of fluorescein diacetate are not well correlated with the viability of mycobacteria. Mor N, et al. **Ann Inst Pasteur Microbiol** 1988 May–Jun;139(3):279–88
Determination of tellurium in biological fluids by means of electrothermal vaporization–inductively coupled plasma–mass spectrometry (ETV–ICP–MS). Newman RA, et al. **Clin Chim Acta** 1989 Feb 15;179(2):191–6

PHARMACOLOGY

Irreversible erythrocyte volume expansion induced by tellurite. Kurantsin–Mills J, et al. **Br J Haematol** 1988 Nov; 70(3):369–74
The nucleotide sequence of a plasmid determinant for resistance to tellurium anions. Jobling MG, et al. **Gene** 1988 Jun 30;66(2):245–58
[Evaluation of selective properties of Mac Conkey's medium enriched with potassium tellurite for growing Shigella and Yersinia strains] Bielecka Z, et al. **Med Dosw Mikrobiol** 1988;40(4):206–12 (Eng. Abstr.) **(Pol)**

TOXICITY

Proliferation of rat intraspinal Schwann cells following tellurium intoxication. Hammang JP, et al. **Acta Neuropathol (Berl)** 1988;76(6):624–7
Hypomyelination in the neonatal rat central and peripheral nervous systems following tellurium intoxication. Jackson KF, et al. **Acta Neuropathol (Berl)** 1989;78(3):301–9
Developmental toxicology investigation of tellurium. Johnson EM, et al. **Fundam Appl Toxicol** 1988 Nov; 11(4):691–702
Comparison of tellurite resistance determinants from the IncP alpha plasmid RP4Ter and the IncHII plasmid pHH1508a. Walter EG, et al. **J Bacteriol** 1989 Apr;171(4):2160–5
Tellurium–induced demyelination: an electrophysiological and morphological study. Uncini A, et al. **Muscle Nerve** 1988 Aug;11(8):871–9
Temporal relationship of blood–nerve barrier breakdown to the metabolic and morphologic alterations of tellurium neuropathy. Bouldin TW, et al. **Neurotoxicology** 1989 Spring;10(1):79–89

TELOPHASE

Plant actin filament and microtubule interactions during anaphase—telophase transition: effects of antagonist drugs. Schmit AC, et al. **Biol Cell** 1988;64(3):309–19
Cell cycle: progression from interphase to telophase. Lee G. **Science** 1989 Aug 18;245(4919):766–7

TEMAZEPAM see under **BENZODIAZEPINE TRANQUILIZERS**

TEMPERAMENT see under **PERSONALITY**

TEMPERANCE

Alcoholism: abstinence, improvement, and no improvement in general population. Hayes GA, et al. **Adv Alcohol Subst Abuse** 1989;8(2):87–96
Acetylation phenotype in abstinent alcoholics. Guthrie SK, et al. **Alcoholism (NY)** 1989 Feb;13(1):66–8
Limitation and potential hazards of MAOI's for the treatment of depressive symptoms in abstinent alcoholics. Schottenfeld RS, et al. **Am J Drug Alcohol Abuse** 1989; 15(3):339–44
Immunological, psychological and sociological studies in alcohol abusers and long–term abstainers. Pogády J, et al. **Bratisl Lek Listy** 1989 Jan;90(1):17–31 **(Eng, Slo)**
Men who do not drink [letter] Burton J. **Int J Epidemiol** 1988 Dec;17(4):927–8
Changes in depression among abstinent alcoholics. Brown SA, et al. **J Stud Alcohol** 1988 Sep;49(5):412–7
The validity of self–report data [letter] Frawley PJ. **J Stud Alcohol** 1988 Sep;49(5):479–80
Reasons students give for limiting drinking: a factor analysis with implications for research and practice. Greenfield TK, et al. **J Stud Alcohol** 1989 Mar;50(2):108–15
Predictors of reduction and cessation of drinking in community–dwelling men: results from the normative aging study. Hermos JA, et al. **J Stud Alcohol** 1988 Jul; 49(4):363–8
Abnormal thyroid stimulating hormone, prolactin, and growth hormone responses to thyrotropin releasing hormone in abstinent alcoholic men with cerebral atrophy. Marchesi C, et al. **Psychiatry Res** 1989 Apr;28(1):89–96
Endocrinological studies in alcoholics during withdrawal and after abstinence. Müller N, et al. **Psychoneuroendocrinology** 1989;14(1–2):113–23
The relationship between alexithymia and depressive symptoms in a sample of newly abstinent alcoholic inpatients. Haviland MG, et al. **Psychother Psychosom** 1988; 49(1):37–40
[Prevention of blood pressure diseases and non–drug management] Pietinen P, et al. **Duodecim** 1989; 105(16):1402–9 (41 ref.) **(Fin)**
[Viscosity of the blood in patients with chronic alcoholism in periods of hard drinking and abstinence] Stanevskaia TIu, et al. **Lab Delo** 1988;(7):15–8 (Eng. Abstr.) **(Rus)**
[Reversibility of alcoholic myocardiopathy with abstinence: presentation of 2 cases] Estruch R, et al. **Med Clin (Barc)** 1989 Jan 21;92(2):69–71 (Eng. Abstr.) **(Spa)**

HISTORY

Emil Kraepelin, teetotaler [editorial] Wortis J. **Biol Psychiatry** 1989 Mar 1;25(5):527–8
Making king alcohol tremble: the juvenile work of the woman's Christian Temperance Union, 1874–1900. Erickson JB. **J Drug Educ** 1988;18(4):333–52

TEMPERATURE

see related
BODY TEMPERATURE
THERMOMETERS

Low temperature restriction of charge shift in the primary reaction of the bacteriorhodopsin photocycle. Dioumaev AK, et al. **Acta Biochim Biophys Hung** 1988;23(3–4):271–8
Temperature–dependence of rod photoresponses from the aspartate–treated retina of the frog (Rana temporaria). Donner K, et al. **Acta Physiol Scand** 1988 Dec; 134(4):535–41
The effect of temperature and stimulation scheme on fatigue and recovery in Xenopus muscle fibres. Lännergren J, et al. **Acta Physiol Scand** 1988 May;133(1):73–82
Changes in colour temperature characteristic of cholesteric temperature indicators provoked by UV radiation. Pospíšil E, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:23–30
Effect of thermal conditions on the acceptability of respiratory protective devices on humans at rest. Gwosdow AR, et al. **Am Ind Hyg Assoc J** 1989 Apr;50(4):188–95
Gastric acid secretion, gastrin release, and gastric emptying in humans as affected by liquid meal temperature. McArthur KE, et al. **Am J Clin Nutr** 1989 Jan;49(1):51–4
The effect of temperature change of composites on the bonding strength of orthodontic brackets. Bishara SE, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):440–1
Intracranial ethanol and ambient anoxia elicit selection of cooler water by goldfish. Crawshaw LI, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R133–7
Thermal acclimation induces adaptive changes in subcellular structure of fish skeletal muscle. Egginton S, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R1–9
Influence of sarcoptic mange and cold and ambient temperature on blastogenic responses of lymphocytes and serum cortisol concentrations of pigs. Wooten–Saadi E, et al. **Am J Vet Res** 1988 Sep;49(9):1555–9
Nonspecific bronchial hyperresponsiveness to inhaled histamine and hyperventilation of cold dry air in subjects with respiratory symptoms of uncertain etiology. Desjardins A, et al. **Am Rev Respir Dis** 1988 May; 137(5):1020–5
Dissociation of temperature–gradient and evaporative heat loss during cold gas hyperventilation in cold–induced asthma. Ingenito E, et al. **Am Rev Respir Dis** 1988 Sep; 138(3):540–6
Comparison of intraairway temperatures in normal and asthmatic subjects after hyperpnea with hot, cold, and ambient air. Zawadski DK, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1553–8
Effect of altered environmental temperature on established infection. Lewis GB. **Anaesth Intensive Care** 1988 Aug; 16(3):338–41
Temperature and chemical stability [letter] **Anesthesiology** 1989 Jul;71(1):165–6
An effect of temperature on anesthetic solubility and partial pressure: clinical importance [letter] Eger EI 2d. **Anesthesiology** 1989 Aug;71(2):321
Lack of effect of overnight storage of heparinised blood at 4 degrees C on plasma phosphate concentration. Bosomworth MP, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):300–1
Effect of environmental temperature on dietary obesity in Osborne–Mendel rats. Goubern M, et al. **Ann Nutr Metab** 1988;32(5–6):340–6

Effect of temperature on fixation suppression ability in normal subjects: the need for temperature- and age-dependent normal values. Jacobson GP, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):369–72

Effect of temperature on erythrocyte-free Plasmodium yoelii. Izumo A, et al. **Ann Trop Med Parasitol** 1988 Aug; 82(4):389–91

Effect of temperature cycling on the activity and productivity of immobilized beta-galactosidase in a thermally reversible hydrogel bead reactor. Park TG, et al. **Appl Biochem Biotechnol** 1988 Oct;19(1):1–9

The thermal environment in which 3–4 month old infants sleep at home. Wailoo MP, et al. **Arch Dis Child** 1989 Apr; 64(4):600–4

Long-term effect of elevated temperatures on SSPE virus expression in persistently infected rat glial cells. Ogura H, et al. **Arch Virol** 1989;104(3–4):259–69

Inability of translation of mRNA for HVJ (Sendai virus) M protein in a rat glioma cell line at nonpermissive temperatures. Ogura H, et al. **Arch Virol** 1988; 102(3–4):263–8

Temperature dependence of macromolecular sieving across plasma fractionating membranes. Leypoldt JK, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):420–4

The effect of cooled dialysate on thermal energy balance in hemodialysis patients. Provenzano R, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):515–8

Thermopreferendum of the rat: inter- and intra-subject variabilities. Refinetti R, et al. **Behav Neural Biol** 1989 Jul; 52(1):87–94

Temperature dependence of plasma membrane physical state in living Madin–Darby canine kidney cells. Giocondi MC, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1004–9

The evaluation of the temperature effect and hydrolysis conditions for amino acid analysis. Chiou SH. **Biochem Int** 1988 Nov;17(5):981–7

Effect of cholesterol and temperature perturbations on membrane hydrolases and transport of calcium and glucose in guinea pig brush border membrane vesicles. Minocha R, et al. **Biochem Int** 1988 Jun;16(6):1019–25

Temperature and thiol-induced desensitization of a Ca2+-sensitive cyclic-3',5'-nucleotide phosphodiesterase from sheep lung. Radhakrishnan TS, et al. **Biochem Int** 1988 Nov;17(5):927–33

Temperature- and pH-dependence of the oxygen-binding reaction of human fetal haemoglobin. Doyle ML, et al. **Biochem J** 1989 Jun 1;260(2):617–9

Effect of ATP depletion and temperature on the transferrin-mediated uptake and release of iron by BeWo choriocarcinoma cells. van der Ende A, et al. **Biochem J** 1989 May 1;259(3):685–92

The effects of calcium, temperature and phospholamban phosphorylation on the dynamics of the calcium-stimulated ATPase of canine cardiac sarcoplasmic reticulum. Fowler C, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):348–56

Yeast, Saccharomyces cerevisiae, cell-free translation: the inhibition of translation by high temperature is reversible. Mandel T, et al. **Biochim Biophys Acta** 1989 Jan 23; 1007(1):80–3

Temperature-sensitive release of adriamycin, an amphiphilic antitumor agent, from dipalmitoylphosphatidylcholine-cholesterol liposomes. Tomita T, et al. **Biochim Biophys Acta** 1989 Jan 30; 978(2):185–90

Model investigations of the temperature dependence of demyelinated and reorganized axonal membrane. Stephanova DI. **Biol Cybern** 1989;60(6):439–43

Photoperiod and temperature affect reproductive and nonreproductive functions in male prairie voles (Microtus ochrogaster). Nelson RJ, et al. **Biol Reprod** 1989 Mar; 40(3):481–5

Diffusion of rat atrial natriuretic factor in thermoreversible poloxamer gels. Juhasz J, et al. **Biomaterials** 1989 May; 10(4):265–8

Temperature changes of materials during impression taking. Jamani KD, et al. **Br Dent J** 1988 Aug 20;165(4):129–32

Effect of temperature on rate of left ventricular pressure fall in humans. Luke RA, et al. **Br Heart J** 1989 May; 61(5):426–31

The effect of temperature on the GABA-induced chloride current in isolated sensory neurones of the frog. ffrench-Mullen JM, et al. **Br J Pharmacol** 1988 Nov; 95(3):753–62

Temperature-dependence of the kinetics of the binding of [3H]-(+)-N-methyl-4-methyldiphenhydramine to the histamine H1-receptor: comparison with the kinetics of [3H]-mepyramine. Treherne JM, et al. **Br J Pharmacol** 1988 Jul;94(3):811–22

Effect of intraperitoneal saline irrigation at different temperatures on adhesion formation. Kappas AM, et al. **Br J Surg** 1988 Sep;75(9):854–6

Effect of temperature during induced moulting on plumage renewal and subsequent production. Herremans M, et al. **Br Poult Sci** 1988 Dec;29(4):853–61

Effects of temperature alterations on population and cellular activities in hippocampal slices from mature and immature rabbit. Shen KF, et al. **Brain Res** 1988 Dec 20;475(2):305–16

DNA synthetic ability in cerebella from temperature and handling stressed neonatal rats. Griffin WS, et al. **Brain Res Bull** 1978 Jul–Aug;3(4):365–7

Effect of cooling and warming on the vasodilator response of the isolated dog saphenous artery to acetylcholine. de Moura RS, et al. **Braz J Med Biol Res** 1988;21(1):157–9

Influence of temperature on the release of plasminogen activator. Fracasso JF, et al. **Braz J Med Biol Res** 1988; 21(1):31–3

Effect of test meal temperature on the gastric emptying of liquids. Troncon LE, et al. **Braz J Med Biol Res** 1988; 21(1):57–60

Effect of temperature on the chronic toxicity of Hydrothol-191 to the fathead minnow (Pimephales promelas). Keller AE, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):770–5

Temperature and humidity dependence of formaldehyde release from selected building materials. van Netten C, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):558–65

Stability of rabies suckling mouse brain vaccine stored at different temperatures. Díaz AM, et al. **Bull Pan Am Health Organ** 1988;22(3):281–91

Effects of rearing temperature and level of food intake on organ size and tissue composition in piglets. Heath ME. **Can J Physiol Pharmacol** 1989 May;67(5):526–32

Effects of elevated temperature on misonidazole O-demethylation by mouse liver microsomes: kinetic and stability studies of a model mixed-function oxidase reaction. Walton MI, et al. **Cancer Chemother Pharmacol** 1989; 24(3):172–6

Comparison of iced and room temperature injectate for thermodilution cardiac output. Bourdillon PD, et al. **Cathet Cardiovasc Diagn** 1989 Jun;17(2):116–20

Effect of storage temperature on concentrations of digoxin-like immunoreactive factor(s) in plasma [letter] Krivoy N, et al. **Clin Chem** 1989 May;35(5):895–6

The new International Temperature Scale of 1990 (ITS-90). Mangum BW. **Clin Chem** 1989 Mar;35(3):503–5

Changes in forearm blood flow at elevated ambient temperature and their role in the apparent impairment of glucose tolerance. Frayn KN, et al. **Clin Sci** 1989 Mar; 76(3):323–8

Temperature-mediated processes in teleost immunity: homeoviscous adaptation by channel catfish peripheral blood cells. Bly JE, et al. **Comp Biochem Physiol [A]** 1988; 91(3):481–5

Adaptation of Drosophila enzymes to temperature—I. Acetylcholinesterase and NADP-dependent isocitrate-dehydrogenase. Alahiotis S, et al. **Comp Biochem Physiol [B]** 1978;61(2):199–202

Temperature acclimation in the Mongolian gerbil (Meriones unguiculatus): biochemical and organ weight changes. Steffen JM, et al. **Comp Biochem Physiol [B]** 1977; 58(3):237–42

Temperature regulation following nickel intoxication in the mouse: effect of ambient temperature. Gordon CJ, et al. **Comp Biochem Physiol [C]** 1989;92(1):73–6

Effects of osmotic stress on rabbit corneal endothelium. Armitage WJ, et al. **Cryobiology** 1988 Oct;25(5):425–39

The effect of temperature on the renaturation of alpha-crystallin. Clauwaert J, et al. **Curr Eye Res** 1989 Apr; 8(4):397–403

Genetic analysis of modifiers affecting sexual dimorphism and temperature sensitivity of bx1 in Drosophila melanogaster. Larsen E. **Dev Genet** 1989;10(2):106–11

Combined effect of exercise and ambient temperature on insulin absorption and postprandial glycemia in type I patients. Rönnemaa T, et al. **Diabetes Care** 1988 Nov–Dec; 11(10):769–73

Temperature-dependent gonadal differentiation in the turtle Emys orbicularis: concordance between sexual phenotype and serological H-Y antigen expression at threshold temperature. Zaborski P, et al. **Differentiation** 1988 Jun; 38(1):17–20

Calculating "threeborate" ion mobilities at different ionic strengths and temperatures. Michov BM. **Electrophoresis** 1988 Feb;9(2):105–6

Influence of environmental temperature and energy intake on skeletal muscle respiratory enzymes and morphology. Dauncey MJ, et al. **Eur J Appl Physiol** 1988;58(3):239–44

Fat energy use and plasma lipid changes associated with exercise intensity and temperature. Sink KR, et al. **Eur J Appl Physiol** 1989;58(5):508–13

Temperature-sensitive steps in the secretory pathway for von Willebrand factor in endothelial cells. Roarke MC, et al. **Eur J Cell Biol** 1989 Apr;48(2):337–43

Temperature-dependent formation of vacuolar and canalicular systems in association with degranulation in stimulated neutrophils. Hara Y, et al. **Eur J Haematol** 1989 May;42(5):474–80

Room temperature influences output from the Wright jet nebulizer. Kongerud J, et al. **Eur Respir J** 1989 Jul; 2(7):681–4

Effect of temperature on the ovipositional biology and egg viability of the cattle tick Boophilus annulatus (Acari: Ixodidae). Davey RB. **Exp Appl Acarol** 1988 Sep; 5(1–2):1–14

Effect of acclimation and fixation temperatures on the number of lamellae and periodicity of myelin in fibres of the optic nerve of goldfish. Matheson DF, et al. **Exp Brain Res** 1988;72(1):63–70

A cell cycle G0-ts mutant, tsJT60, becomes lethal at the nonpermissive temperature after transformation with adenovirus 12 E1B 19K mutant. Tai YY, et al. **Exp Cell Res** 1988 Nov;179(1):50–7

Phosphorescence measurements of calf gamma-II, III, and IV crystallins at 77 and 293 K. Berger JW, et al. **Exp Eye Res** 1989 May;48(5):627–39

Potential risk of light and room temperature exposure to preimplantation embryos. Fischer B, et al. **Fertil Steril** 1988 Dec;50(6):938–44

Effect of environmental temperature and photoperiod on the melatonin levels in the pineal, lateral eye, and plasma of the frog, Rana perezi: importance of ocular melatonin. Delgado MJ, et al. **Gen Comp Endocrinol** 1989 Jul; 75(1):46–53

Effect of ambient temperature on serotonin, norepinephrine, and epinephrine contents in the pineal-paraphyseal complex of the soft-shelled turtle (Lissemys punctata punctata). Mahapatra MS, et al. **Gen Comp Endocrinol** 1989 May;74(2):215–20

Effects of photoperiod and temperature on gonadal maturation, and plasma steroid and gonadotropin levels in a cyprinid fish, the honmoroko Gnathopogon caerulescens. Okuzawa K, et al. **Gen Comp Endocrinol** 1989 Jul; 75(1):139–47

Multicopy expression vector based on temperature-regulated lac repressor: expression of human immunodeficiency virus env gene in Escherichia coli. Bukrinsky MI, et al. **Gene** 1988 Oct 30;70(2):415–7

Regulatory genes in the thermoregulation of Escherichia coli pili gene transcription. Göransson M, et al. **Genes Dev** 1989 Jan;3(1):123–30

Effect of low temperatures on the metabolism of corneal cultures. Reim M, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):353–6

Room temperature storage of pooled platelet concentrates in gas-permeable plastic bags for five days. Rácz Z, et al. **Haematologia (Budap)** 1989;22(2):89–96

The effect of temperature on the tuning and physiology of insect auditory receptors. Oldfield BP. **Hear Res** 1988 Sep 15;35(2–3):151–8

Estimation of the energy of cytoplasmic movements by magnetometry: effects of temperature and intracellular concentration of ATP. Nemoto I, et al. **IEEE Trans Biomed Eng** 1989 Jun;36(6):598–607

Temperature dependence of the atractyloside-induced mitochondrial Ca2+ release. Chávez E, et al. **Int J Biochem** 1988;20(7):731–6

Temperature and water quality effects in simulated woodland pools on the infection of Culex mosquito larvae by Lagenidium giganteum (Oomycetes: Lagenidiales) in North Carolina. Guzman DR, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):211–8

Energy uptake and utilization by limit- and ad libitum-fed growing horses. Cymbaluk NF, et al. **J Anim Sci** 1989 Feb; 67(2):403–13

Fluctuating ambient temperature for weaned pigs: effects on performance and immunological and endocrinological functions. Minton JE, et al. **J Anim Sci** 1988 Aug; 66(8):1907–14

The effects of dietary fat or fiber addition on energy and nitrogen digestibility in lactating, primiparous sows housed in a warm or hot environment. Schoenherr WD, et al. **J Anim Sci** 1989 Feb;67(2):473–81

The effects of dietary fat or fiber addition on yield and composition of milk from sows housed in a warm or hot environment. Schoenherr WD, et al. **J Anim Sci** 1989 Feb; 67(2):482–95

Modelling the growth response of Staphylococcus xylosus to changes in temperature and glycerol concentration/water activity. Chandler RE, et al. **J Appl Bacteriol** 1989 Jun;66(6):543–8

The effect of incubation temperature and magnesium chloride concentration on growth of salmonella in home-made and in commercially available dehydrated Rappaport-Vassiliadis broths. Peterz M, et al. **J Appl Bacteriol** 1989 Jun;66(6):523–8

Effects of temperature and composition on the viscosity of respiratory gases. Turner MJ, et al. **J Appl Physiol** 1989 Jul;67(1):472–7

Temperature inhibition of siderophore production in Azospirillum brasilense. Bachhawat AK, et al. **J Bacteriol** 1989 Jul;171(7):4092–4

Characterization of two mutant metJ proteins with reduced, temperature-dependent capacity to regulate Escherichia coli K-12 met regulon elements. Bala GA, et al. **J Bacteriol** 1989 Jul;171(7):4095–9

Thermoregulation-dependent expression of Yersinia enterocolitica protein 1 imparts serum resistance to Escherichia coli K-12. Martinez RJ. **J Bacteriol** 1989 Jul; 171(7):3732–9

The adaptation of biological membranes to temperature and pressure: fish from the deep and cold. Cossins AR, et al. **J Bioenerg Biomembr** 1989 Feb;21(1):115–35 (75 ref.)

Membrane acclimation by unicellular organisms in response to temperature change. Thompson GA Jr. **J Bioenerg Biomembr** 1989 Feb;21(1):43–60 (57 ref.)

Thermodynamic analysis of the activation of glycogen phosphorylase b over a range of temperatures. Barón C, et al. **J Biol Chem** 1989 Aug 5;264(22):12872–8

Further demonstration of the ambient temperature dependence of the annual biological cycles in the edible dormouse, Glis glis. Jallageas M, et al. **J Comp Physiol [B]** 1989;159(3):333–8

pH-temperature interactions on protein function and hibernation: GDP binding to brown adipose tissue mitochondria. Malan A, et al. **J Comp Physiol [B]** 1988;

158(4):487–93
Chilled drinking water effects on lactating Holstein cows in summer. Baker CC, et al. **J Dairy Sci** 1988 Oct; 71(10):2699–708
The importance of water temperature in denture cleaning procedures. Arab J, et al. **J Dent** 1988 Dec;16(6):277–81
Pediatric burn prevention: an evaluation of the efficacy of a strategy to reduce tap water temperature in a population at risk for scalds. Webne S, et al. **J Dev Behav Pediatr** 1989 Aug;10(4):187–91
Effect of ambient temperature changes on chronic toxoplasmosis in rats. Hamadto HH, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):527–32
An accurate temperature monitoring device for Balzers rotary cold tables. VanWinkle WB, et al. **J Electron Microsc Tech** 1988 Sep;10(1):45–51
Application of convergent beam electron diffraction in the structural study of high-temperature superconducting oxides. Zou XD, et al. **J Electron Microsc Tech** 1987 Dec; 7(4):269–75
The effect of temperature on the formation of ethanol by Candida albicans in blood. Chang J, et al. **J Forensic Sci** 1989 Jan;34(1):105–9
In vivo environmental temperature and the in vitro pattern of luminal acidification in turtle bladders. Evidence for HCO3 ion reabsorption. Schilb TP, et al. **J Gen Physiol** 1988 Nov;92(5):613–42
Beta-adrenergic modulation of cardiac ion channels. Differential temperature sensitivity of potassium and calcium currents. Walsh KB, et al. **J Gen Physiol** 1989 May;93(5):841–54
Temperature requirements and kinetics of T cell signaling. Velocity of triggering correlates with functional effects of anti-CD3 mAb. Abdi K, et al. **J Immunol** 1989 May 1; 142(9):2971–80
Fc region-dependence of IgG3 anti-streptococcal group A carbohydrate antibody functional affinity. I. The effect of temperature. Greenspan NS, et al. **J Immunol** 1988 Dec 15;141(12):4276–82
Characterization of N-formyl-methionyl-leucyl-phenylalanine receptors on human neutrophils. Effects of isolation and temperature on receptor expression and functional activity. Tennenberg SD, et al. **J Immunol** 1988 Dec 1;141(11):3937–44
The effect of the incubation temperature on the cleavage rate of mouse embryos in vitro. Lavy G, et al. **J In Vitro Fert Embryo Transf** 1988 Jun;5(3):167–70
Temperature dependence of the structure of aggregates of tobacco mosaic virus protein at pH 7.2. Static synchrotron small-angle X-ray scattering. Hiragi Y, et al. **J Mol Biol** 1988 Nov 5;204(1):129–40
The influence of temperature on the distribution and intensity of the reaction product in rat muscle fibers obtained with the histochemical method for myosin ATPase. Kirkeby S, et al. **J Neurosci Methods** 1989 Jan;26(3):189–94
Effects of temperature and temperature gradients on ion-sensitive microelectrodes. Reid KH, et al. **J Neurosci Methods** 1988 Aug;25(1):49–57
Low inspired gas temperature and respiratory complications in very low birth weight infants. Tarnow-Mordi WO, et al. **J Pediatr** 1989 Mar;114(3):438–42
Temperature and synaptic efficacy in frog skeletal muscle. Adams BA. **J Physiol (Lond)** 1989;408:443–55
Effects of urethane, ambient temperature and injection route on rat body temperature and metabolism due to endotoxins. Bibby DC, et al. **J Physiol (Lond)** 1988 Nov;405:547–62
Pineal response in the cichlid fish Oreochromis mossambicus to extreme osmolality, pH, and temperature. Relkin R. **J Pineal Res** 1989;7(1):37–43
Effect of temperature on the fluidity of boar sperm membranes. Canvin AT, et al. **J Reprod Fertil** 1989 Mar; 85(2):533–40
Testicular migration, spermatogenesis, temperature regulation and environment of the sheath-tail bat, Taphozous georgianus. Jolly SE, et al. **J Reprod Fertil** 1988 Nov;84(2):447–55
Influence of visible light and room temperature on cell proliferation in preimplantation rabbit embryos. Schumacher A, et al. **J Reprod Fertil** 1988 Sep; 84(1):197–204
The effect of pancreatic warm ischemia on islet isolation in rats and dogs. Corlett MP, et al. **J Surg Res** 1988 Dec; 45(6):531–6
The effect of ischemic time and temperature on lung preservation in a simple ex vivo rabbit model used for functional assessment. Wang LS, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):333–42
Soman toxicity during and after exposure to different environmental temperatures. Wheeler TG. **J Toxicol Environ Health** 1989;26(3):349–60
Temperature-sensitive activation of G-protein regulating the resting membrane conductance of Aplysia neurons. Hakozaki S, et al. **Jpn J Physiol** 1989;39(1):115–30
Health in the greenhouse [editorial] **Lancet** 1989 Apr 15; 1(8642):819–20
Impedancimetric bacterial detection: theoretical and experimental aspects. Felice CJ, et al. **Med Prog Technol** 1988;14(1):25–33
The influence of temperature and serum deprivation on the synthesis of heat-shock proteins and alpha and beta tubulin in promastigotes of Leishmania major. Toye P, et al. **Mol Biochem Parasitol** 1989 Jun 1;35(1):1–10
KEX2 mutations suppress RNA polymerase II mutants and alter the temperature range of yeast cell growth. Martin C, et al. **Mol Cell Biol** 1989 Jun;9(6):2341–9
Growth of immortal simian virus 40 tsA-transformed human fibroblasts is temperature dependent. Radna RL, et al. **Mol Cell Biol** 1989 Jul;9(7):3093–6
RNA polymerase II subunit RPB4 is essential for high- and low-temperature yeast cell growth. Woychik NA, et al. **Mol Cell Biol** 1989 Jul;9(7):2854–9
Functional analysis of the dna (Ts) mutants of Bacillus subtilis: plasmid pUB110 replication as a model system. Alonso JC, et al. **Mol Gen Genet** 1988 Nov;214(3):482–9
Temperature effects on renal membrane ionic permeability [letter] Schell RE. **Nephron** 1989;53(1):89
Temperature-dependence of reflex transmission in the neonatal rat spinal cord, in vitro: influence on strychnine- and bicuculline-sensitive inhibition. Deshpande SB, et al. **Neuropharmacology** 1988 Oct;27(10):1033–7
Responses of anterior hypothalamic-preoptic thermosensitive neurons to thyrotropin releasing hormone and cyclo(His-Pro). Hori T, et al. **Neuropharmacology** 1988 Sep;27(9):895–901
Lead exposure, environmental temperature, nesting and consummatory behavior of adult male mice of two ages. DeLuca J, et al. **Neurotoxicol Teratol** 1989 Jan-Feb; 11(1):7–11
Direct recovery of in vitro transcripts in a protected form suitable for prolonged storage and shipment at ambient temperatures. Jupin I, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):815
Temperature-dependent subconducting states and kinetics of deltamethrin-modified sodium channels of neuroblastoma cells. Chinn K, et al. **Pflugers Arch** 1989 Apr;413(6):571–9
3H-ouabain binding sites in porcine skeletal muscle as influenced by environmental temperature and energy intake. Dauncey MJ, et al. **Pflugers Arch** 1989 Jul; 414(3):317–23
The effects of temperature on relaxation in frog skeletal muscle: the role of parvalbumin. Iaizzo PA. **Pflugers Arch** 1988 Jul;412(1–2):195–202
A temperature and solution control system for the measurement of single channel currents in excised membrane patches. Lynch JW, et al. **Pflugers Arch** 1988 Aug;412(3):322–7
Voltage and temperature dependence of normal and chemically modified inactivation of sodium channels. Quantitative description by a cyclic three-state model. Schmidtmayer J. **Pflugers Arch** 1989 Jul;414(3):273–81
Effects of environmental temperature on the development of a noradrenergic thermoregulatory mechanism in the rat. Young AA, et al. **Pflugers Arch** 1988 Jul;412(1–2):141–6
Kinetics of drug decomposition by heat conduction calorimetry. Hansen LD, et al. **Pharm Res** 1989 Jan; 6(1):20–7
Temperature and pH dependence of fluocinolone acetonide degradation in a topical cream formulation. Kenley RA, et al. **Pharm Res** 1987 Aug;4(4):342–7
Responses of the microcirculation to hot and cold environments. Grayson J. **Pharmacol Ther** 1988; 38(2):201–14 (41 ref.)
Adult susceptibility induced by preweaning shifts of zeitgeber in rats (I). Knaepen E, et al. **Physiol Behav** 1988;44(6):763–7
Effects of food temperature and ambient temperature during a meal on food intake in the rat. Refinetti R. **Physiol Behav** 1988;43(2):245–7
Effects of water temperature and flavoring on voluntary dehydration in men. Szlyk PC, et al. **Physiol Behav** 1989 Mar;45(3):639–47
Temperature mapping with MR imaging of molecular diffusion: application to hyperthermia. Le Bihan D, et al. **Radiology** 1989 Jun;171(3):853–7
Direct effects of altered temperature on renal structure and function. Kasiske BL, et al. **Renal Physiol Biochem** 1988 Jan-Feb;11(1–2):80–8
Effect of environmental temperature on the vector competence of Aedes fowleri for Rift Valley fever virus. Turell MJ. **Res Virol** 1989 Mar-Apr;140(2):147–54
Effects of water temperature on pulmonary volumes in immersed human subjects. Choukroun ML, et al. **Respir Physiol** 1989 Mar;75(3):255–65
The effect of temperature on immunoreactive glucagon plasma level in carp Cyprinus carpio. Blasco J, et al. **Rev Esp Fisiol** 1988 Jun;44(2):157–61
Tympanometer behaviour after storage at extreme temperatures [letter] Zielhuis GA, et al. **Scand Audiol** 1988; 17(4):251–2
Effect of electrode temperature on orthostatic changes in forefoot transcutaneous oxygen tension (tc-PO2). Aabech J, et al. **Scand J Clin Lab Invest** 1988 Sep;48(5):475–80
Temperature and animal cells. Proceedings of a meeting. Durham, England, 10–12 September 1986. **Symp Soc Exp Biol** 1987;41:1–460
Adaptive responses of animal cell membranes to temperature. Cossins AR, et al. **Symp Soc Exp Biol** 1987;41:95–111 (49 ref.)
Temperature effects on red cell membrane transport processes. Ellory JC, et al. **Symp Soc Exp Biol** 1987; 41:53–66 (56 ref.)
Water, temperature and life. Franks F. **Symp Soc Exp Biol** 1987;41:1–20 (45 ref.)
Temperature effects on different organization levels in animals. Lagerspetz KY. **Symp Soc Exp Biol** 1987; 41:429–49 (78 ref.)
The effects of temperature on biological membranes and their models. Lee DC, et al. **Symp Soc Exp Biol** 1987;41:35–52 (63 ref.)
Temperature and macromolecular structure and function. Pain RH. **Symp Soc Exp Biol** 1987;41:21–33 (39 ref.)
Temperature dependence of phenytoin-protein binding in serum: effects of uremia and hypoalbuminemia. Allison TB, et al. **Ther Drug Monit** 1988;10(4):376–81
NCRP-AIUM models for temperature calculations. Nyborg WL. **Ultrasound Med Biol** 1989;15 Suppl 1:37–40
Effect of temperature on development of the free-living stages of Ostertagia circumcincta. Pandey VS, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):193–7
Effect of environmental temperature and relative humidity on breathing pattern and heart rate in ponies during and after standardised exercise. Art T, et al. **Vet Rec** 1988 Sep 10;123(11):295–9
[Effect of temperature on the expression of bobbed mutations in Drosophila melanogaster] Dardour Z, et al. **C R Soc Biol (Paris)** 1988;182(4):382–90 (Eng. Abstr.) (Fre)
[The effect of room air temperature and humidity and differential ventilation on the mental performance of students] Schrader G, et al. **Z Gesamte Hyg** 1988 Nov; 34(11):612–4 (Eng. Abstr.) (Ger)
[Effect of the outdoor climate on microclimatic conditions of work sites in buildings] Sickert P, et al. **Z Gesamte Hyg** 1988 Aug;34(8):481–3 (Eng. Abstr.) (Ger)
[Influence of temperature on the function of the human testes] Namiki M, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1767–70 (Eng. Abstr.) (Jpn)
[Development of passive telemetry system for intracranial pressure measurement with corrector of errors caused by temperature variation] Magara M, et al. **Iyodenshi To Seitai Kogaku** 1989 Mar;27(1):35–44 (Eng. Abstr.) (Jpn)
[Influence of ambient thermal conditions on the immune response in mice] Kikuchi M. **Nippon Eiseigaku Zasshi** 1988 Oct;43(4):833–44 (Eng. Abstr.) (Jpn)
[Effects of room temperature on body movements of the aged in a special nursing home during sleep] Ohnaka T, et al. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):622–7 (Eng. Abstr.) (Jpn)
[Changes in temperature and humidity at different layers inside clothing during rest, exercise, and recovery] Shimizu H, et al. **Nippon Eiseigaku Zasshi** 1989 Feb;43(6):1130–9 (Eng. Abstr.) (Jpn)
[Effects of electrolyte composition and temperature of extra-cellular fluid on coronary artery contraction] Yoshida K. **Nippon Geka Gakkai Zasshi** 1989 Feb; 90(2):291–7 (Eng. Abstr.) (Jpn)
[Temperature influence on testicular function--effect of temperature on DNA synthesis by human testis in-vitro] Nakamura M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1653–6 (Eng. Abstr.) (Jpn)
[Local hyperthermia using a device made of temperature-sensitive ferrite. The first report: temperature, output characteristics] Sato T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):314–26 (Eng. Abstr.) (Jpn)
[Effect of changes in the temperature of dialysis fluid on the efficiency of peritoneal dialysis] Panasiuk E, et al. **Pol Arch Med Wewn** 1985 Nov-Dec;74(5–6):327–33 (Eng. Abstr.) (Pol)
[Relation between inter- and intracellular action potentials of frog isolates muscle fiber at various temperatures] Gerilovski L, et al. **Biofizika** 1988 Sep-Oct;33(5):855–9 (Eng. Abstr.) (Rus)
[Thermotropic behavior of intact human erythrocyte membranes detected by measuring their surface conductivity] Ivanov IT, et al. **Biofizika** 1988 Sep-Oct; 33(5):834–6 (Eng. Abstr.) (Rus)
[Trigger mechanism of temperature switching off of Src oncogene TS-mutant in the Georgiev model] Kovarskii VA, et al. **Biofizika** 1989 Mar-Apr;34(2):259–62 (Eng. Abstr.) (Rus)
[Effect of temperature and pH on the environment of tryptophan residues in alpha-actinin] Permiakov EA, et al. **Biofizika** 1988 Sep-Oct;33(5):754–7 (Eng. Abstr.) (Rus)
[Effect of temperature and pH on magnetic properties of human erythrocytes] Shalygin AN, et al. **Biofizika** 1988 May-Jun;33(3):529–30 (Eng. Abstr.) (Rus)
[Tension response in skinned Ca-activated skeletal muscle fibers of the frog to temperature jump following stepwise changes in the fiber length] Tsaturian AK, et al. **Biofizika** 1988 May-Jun;33(3):505–7 (Eng. Abstr.) (Rus)
[Research on high-temperature transition in liposomes made from egg yolk lecithin] Makarov TB, et al. **Biol Nauki** 1988; (5):23–31 (Eng. Abstr.) (Rus)
[A theory of signal detection and characteristics of the temperature analyzer] Kul'kov AP, et al. **Dokl Akad Nauk SSSR** 1988;300(3):752–5 (Rus)
[Biological equivalents of noise, local vibration, temperature and air mobility during their combined action on the human body] Gorban' VS. **Fiziol Zh** 1988 Nov-Dec;34(6):97–101 (Eng. Abstr.) (Rus)
[Effect of temperature on the spontaneous rhythmic activity of the neurons in the spinal centers of the frog lymphatic hearts] Ruchinskaia TIu, et al. **Fiziol Zh SSSR** 1989 Feb;

75(2):212–7 (Eng. Abstr.) (Rus)
[Characteristics of the heat exchange of the body with the environment (research on a heat physics model)] Rumiantsev GV, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1321–6 (Eng. Abstr.) (Rus)
[Hygienic standardization of the intensity of heat emission in passenger compartments] Sergeev EP, et al. **Gig Sanit** 1989 Feb;(2):15–9 (Rus)
[Survivability and adaptation of individual fungal species of the genus Fusarium Lk.: Fr. at low soil temperatures] Alton LV. **Mikrobiol Zh** 1987 Jan–Feb;49(1):47–51 (Eng. Abstr.) (Rus)
[Effect of the cultivation temperature on the physicochemical properties of the DNA-dependent RNA-polymerase of Yersinia pestis] Kurennaia II, et al. **Mikrobiol Zh** 1988 Jan–Feb;50(1):69–74 (Eng. Abstr.) (Rus)
[Kinetics of the radial growth of Aspergillus colonies at various temperatures] Malama AA, et al. **Mikrobiol Zh** 1987 Nov–Dec;49(6):46–9 (Eng. Abstr.) (Rus)
[Complementation analysis of ts mutants of the temperate phage 59 of Erwinia carotovora 268] Mukvich NS, et al. **Mikrobiol Zh** 1987 Jan–Feb;49(1):12–7 (Eng. Abstr.) (Rus)
[Effect of microwave irradiation and temperature on the spontaneous impulse activity of the ventral spinal roots in the frog] Pakhomov AG. **Neirofiziologiia** 1988;20(6):723–8 (Eng. Abstr.) (Rus)
[Temperature dependence of neuronal activity in hypothalamic and hippocampal slices of the guinea-pig] Vasilenko VIu, et al. **Neirofiziologiia** 1989;21(3):358–65 (Eng. Abstr.) (Rus)
[Characteristics of temperature dependence of Na,K-ATPase] Boldyrev AA. **Ukr Biokhim Zh** 1988 Jul–Aug;60(4):96–102 (29 ref.) (Eng. Abstr.) (Rus)
[The effect of temperature acclimation on NADP-dependent dehydrogenase activity in the carp liver and various mechanisms of its regulation] Sautin IuIu, et al. **Ukr Biokhim Zh** 1988 Nov–Dec;60(6):29–34 (Eng. Abstr.) (Rus)
[The effect of physical loads and temperature-humidity conditions on the functional status of the serviceman] Shabalin VA. **Voen Med Zh** 1989 May;(5):54–5 (Rus)
[Effect of temperature on the infectivity of the iridovirus and densonucleosis virus of blood-sucking mosquitoes] Buchatskiĭ LP, et al. **Vopr Virusol** 1988 Sep–Oct; 33(5):603–6 (Eng. Abstr.) (Rus)
[The biochemical adaptation of the photoreceptor membrane proteins in vertebrate retinal rods to temperature conditions as the evolutionary mechanism maintaining homeostasis at the cellular level] Berman AL, et al. **Zh Evol Biokhim Fiziol** 1989 May–Jun;25(3):379–89 (Rus)
[Characteristics of the process of transferrin iron utilization by Yersinia pestis at various incubation temperatures] Tianianova VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):3–7 (Eng. Abstr.) (Rus)
[Correlation between the prevalence of diabetes mellitus and the average annual temperature] Ania BJ. **Medicina (B Aires)** 1988;48(3):251–4 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Effect of high temperature and humidity in the periovulatory phase on swine ovarian function. Ogasa A, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):627–9

TEMPERATURE SENSE

Consensus Conference on Diabetic Peripheral Neuropathy, February 8–10, 1988, San Antonio, Texas [letter] Assal JP, et al. **Muscle Nerve** 1989 Mar;12(3):246
SDT analysis of experimental thermal pain, with "signal" and "no-signal" being determined psychophysically. Lautenbacher S, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1019–30
Effect of temperature and expectations on liking for beverages. Zellner DA, et al. **Physiol Behav** 1988;44(1):61–8
[Quantitative estimation of thermal and vibration sensations in diabetic neuropathy] Inoue M, et al. **Rinsho Byori** 1988 Jun;36(6):719–24 (Jpn)
[Method for bed-side measurement of thermal sensation in diabetic neuropathy] Majima M, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1137–41 (Eng. Abstr.) (Jpn)

PHYSIOLOGY

Thermal gradients [letter] Miller R, et al. **Br J Surg** 1989 Apr;76(4):422–3
Local thermal sensation and finger vasoconstriction in the locally heated hand. Hirata K, et al. **Eur J Appl Physiol** 1988;58(1–2):92–6
Rapidly reversible enzyme inhibition in a temperature-sensitive mammalian cell mutant lacks thermotolerance. Vidair CA, et al. **J Cell Physiol** 1989 Aug; 140(2):227–32
The conduction velocities of peripheral nerve fibres conveying sensations of warming and cooling. Fowler CJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep; 51(9):1164–70
The conduction velocities of peripheral nerve fibres conveying sensations of warming and cooling [letter] Fuller GN, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun; 52(6):810–2
Cerebral cortical potentials to pure non-painful temperature stimulation: an objective technique for the assessment of small fibre pathway in man. Jamal GA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):99–105
Evaluation of thermal, pain, and vibration sensation thresholds in newly diagnosed type 1 diabetic patients. Ziegler D, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1420–4
Sensory thresholds among construction trade painters: a cross-sectional study using new methods for measuring temperature and vibration sensitivity. Bove FJ, et al. **J Occup Med** 1989 Apr;31(4):320–5
Temperature and the two-point threshold. Stevens JC. **Somatosens Mot Res** 1989;6(3):275–84
[Cutaneous vibration and thermal-cooling threshold in control subjects] Ohnishi A, et al. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1;10(3):283–7 (Eng. Abstr.) (Jpn)

TEMPLATES

Simple template method for targeting brain loci in small animal stereotaxy. Dixon RG, et al. **Brain Res Bull** 1978 Nov–Dec;3(6):721–2
Correlation of pause sites in MDV-1 RNA replication with kinetic refolding of the growing chain. A Monte Carlo simulation of the Markov process. Fernández A. **Eur J Biochem** 1989 Jun 1;182(1):161–3
Factor C from rabbit liver. A new poly(dC) and poly[d(G–C)] template-selective stimulatory protein of DNA polymerases. Asna N, et al. **J Biol Chem** 1989 Mar 25;264(9):5245–52
Recognition and binding of template-primers containing defined abasic sites by Drosophila DNA polymerase alpha holoenzyme. Ng L, et al. **J Biol Chem** 1989 Aug 5; 264(22):13018–23
Template-directed synthesis of acyclic oligonucleotide analogues. Visscher J, et al. **J Mol Evol** 1988 Dec–1989 Feb;28(1–2):3–6
Changes in the template activity of chromatin isolated from sarcoma-180 ascites cells treated with mitomycin C and gamma irradiation in vivo. Karuri A, et al. **Neoplasma** 1989; 36(3):321–6
Inhibition of DNA synthesis by cross-linking the template to platinum-thiol derivatives of complementary oligodeoxynucleotides. Chu BC, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4783–98
Detection of single DNA base differences by competitive oligonucleotide priming. Gibbs RA, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2437–48
The use of filter-bound DNA fragments as templates for radiolabelling by random priming. Hirst MC, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2872
Mispair formation in DNA can involve rare tautomeric forms in the template. Strazewski P. **Nucleic Acids Res** 1988 Oct 25;16(20):9377–98 (133 ref.)
Generation of labeled RNA probes from enzymatically amplified DNA templates. Weier HU, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11836
Tetrahymena telomerase contains an internal RNA template. Lamond AI. **Trends Biochem Sci** 1989 Jun;14(6):202–4 (11 ref.)
Inhibition of human immunodeficiency virus reverse transcriptase by 2',3'-dideoxynucleoside triphosphates: template dependence, and combination with phosphonoformate. Starnes MC, et al. **Virus Genes** 1989 May;2(3):241–51
[What sequence must have an 8-nucleotide anticodon loop so that tRNA would not shift the reading frame?] Shteinberg SV. **Bioftizika** 1988 Jul–Aug;33(4):576–9 (Eng. Abstr.) (Rus)
[Effectiveness of translation initiation on specific template polynucleotides in Escherichia coli cell-free systems] Berzin' VM, et al. **Dokl Akad Nauk SSSR** 1988;301(2):470–3 (Rus)
[Display of 8-hydroxy-GTP substrate properties of UTP in the reaction of polynucleotide synthesis catalyzed by RNA-polymerase from Escherichia coli in the presence of poly[d(AT).d(AT)] template] Bruskov VI, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):726–30 (Eng. Abstr.) (Rus)
[Template activity of poly(A+) and poly(A–) messenger RNA of pathogenic arenaviruses] Scheslenok EP, et al. **Mol Gen Mikrobiol Virusol** 1988 Jul;(7):29–31 (Eng. Abstr.) (Rus)

TEMPORAL ARTERIES

Arteriovenous fistula following punch-graft hair transplantation. Semashko DC, et al. **J Dermatol Surg Oncol** 1989 Jul;15(7):754–5
Aneurysms and pseudoaneurysms of the superficial temporal artery caused by trauma. Peick AL, et al. **J Vasc Surg** 1988 Nov;8(5):606–10 (30 ref.)
Aneurysm of the superficial temporal artery [letter] Locatelli D, et al. **Neurosurgery** 1989 Sep;25(3):480–1
[Myeloma complicated by amyloidosis of the temporal artery simulating Horton's disease (letter)] Taillan B, et al. **Ann Med Interne (Paris)** 1989;140(4):335 (Fre)
[Aneurysm of the superficial temporal artery following extra-intracranial arterial bypass. A case report] Schön R, et al. **Zentralbl Neurochir** 1988;49(3):220–3 (Eng. Abstr.) (Ger)
[Superficial temporal artery aneurysm associated with pathological changes mimicking cystic medial necrosis. Case report] Ikeda S, et al. **Neurol Med Chir (Tokyo)** 1988 Dec;28(12):1223–7 (30 ref.) (Eng. Abstr.) (Jpn)
[A case of spontaneous superficial temporal artery aneurysm] Nishioka T, et al. **No Shinkei Geka** 1988 Jul;16(8):1009–12 (Eng. Abstr.) (Jpn)
[A method for the temporary arrest of external arterial hemorrhage from the vessels of the neck and head] Tsybyrné GA, et al. **Voen Med Zh** 1988 Jun;(6):62–4 (Rus)

IMMUNOLOGY

HLA-DR expression in the vascular lesion and circulating T lymphocytes of patients with giant cell arteritis. Andersson R, et al. **Clin Exp Immunol** 1988 Jul;73(1):82–7

METABOLISM

Immunohistochemical study of intimal protein deposits in the aging vascular wall of normo- and hypertensive patients. Fischer S, et al. **Atherosclerosis** 1988 Oct;73(2–3):161–72
Pharmacological characterization of histamine receptors in the human temporal artery. Ottosson A, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):139–45

PATHOLOGY

Temporal arteritis: a decision-analytic approach to temporal artery biopsy. Nadeau SE. **Acta Neurol Scand** 1988 Aug; 78(2):90–100
Immunohistochemical analysis of lymphoid and macrophage cell subsets and their immunologic activation markers in temporal arteritis. Influence of corticosteroid treatment. Cid MC, et al. **Arthritis Rheum** 1989 Jul;32(7):884–93
Temporal artery biopsy [editorial] Allison MC. **BMJ** 1988 Oct 15;297(6654):933–4
Temporal artery biopsy [letter] Kearns P. **BMJ** 1988 Nov 26;297(6660):1404
Sixth nerve palsies, temporal artery biopsy, and necrotizing vasculitis. Sedwick LA, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):119–21
Diagnostic value of the history and examination in giant cell arteritis: a clinical pathological study of 81 temporal artery biopsies. Robb-Nicholson C, et al. **J Rheumatol** 1988 Dec; 15(12):1793–6
Temporary artery biopsy in suspected temporal arteritis: a five year survey. Stuart RA. **N Z Med J** 1989 Aug 23; 102(874):431–3
Temporal artery biopsies. Correlation of light microscopy and immunofluorescence microscopy. Wells KK, et al. **Ophthalmology** 1989 Jul;96(7):1058–64
Clinical efficacy of temporal artery biopsy in Nashville, Tennessee. Ikard RW. **South Med J** 1988 Oct;81(10):1222–4 (18 ref.)
Temporal artery biopsy [letter] Sergent JS. **South Med J** 1989 May;82(5):670
[The course of the superficial temporal artery. Anatomic studies as a prerequisite to arterial biopsy] Daumann C, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):37–41 (Eng. Abstr.) (Ger)
[Diagnostic efficacy of temporal artery biopsy (editorial)] Cid MC, et al. **Med Clin (Barc)** 1989 Jan 28;92(3):95–7 (Spa)
[Usefulness of temporal artery biopsy: analysis of 100 cases] Domínguez-Castellano A, et al. **Med Clin (Barc)** 1989 Jan 28;92(3):81–5 (Eng. Abstr.) (Spa)

PHYSIOLOGY

Role of Doppler ultrasound flow studies in the diagnosis of temporal arteritis. Friedman G, et al. **Isr J Med Sci** 1988 Nov;24(11):686–7

PHYSIOPATHOLOGY

[Experimental simulation study on EC-IC bypass: Part 2, Hemodynamics of superficial temporal artery and clinical application of the stenosis model] Nagasawa S, et al. **No Shinkei Geka** 1989 Feb;17(2):125–32 (Eng. Abstr.) (Jpn)
[Local ischemia in the basin of the superficial temporal artery as a factor activating blood flow in the ophthalmic artery] Shilkin GA, et al. **Oftalmol Zh** 1988;(6):349–53 (Eng. Abstr.) (Rus)

SURGERY

[Surgical results of dissection of the superficial temporal artery in patients with preglaucoma and initial open-angle glaucoma] Shilkin GA, et al. **Oftalmol Zh** 1989;(2):93–6 (Eng. Abstr.) (Rus)

TEMPORAL ARTERITIS

Giant cell arteritis [editorial] Andersson R. **Acta Med Scand** 1988;224(3):193–4
Temporal arteritis [clinical conference] Kujala GA.

W V Med J 1988 Nov;84(11):515–8
[Horton's disease] Liozon F. Ann Med Interne (Paris) 1989; 140(2):122–41 (324 ref.) (Fre)
[Vasculitis of the central nervous system and giant cell arteritis (letter)] Cid MC. Med Clin (Barc) 1989 Jan 14; 92(1):38–9 (Spa)

BLOOD

Selective depletion and activation of CD8+ lymphocytes from peripheral blood of patients with polymyalgia rheumatica and giant cell arteritis. Dasgupta B, et al. Ann Rheum Dis 1989 Apr;48(4):307–11
Erythrocyte sedimentation rate and C reactive protein in the assessment of polymyalgia rheumatica/giant cell arteritis on presentation and during follow up. Kyle V, et al. Ann Rheum Dis 1989 Aug;48(8):667–71
Monitoring the acute phase response [letter] [published erratum appears in BMJ 1989 Jan 28;298(6668):258] Freeman AG. BMJ 1989 Jan 7;298(6665):50–1
Giant cell arteritis with normal erythrocyte sedimentation rate: a management dilemma. Nevyas JY, et al. Metab Pediatr Syst Ophthalmol 1987;10(1):18–21

CHEMICALLY INDUCED

[Ergotism revealing Horton's disease] Zouiten F, et al. Tunis Med 1987 Oct;65(10):617–22 (Eng. Abstr.) (Fre)

COMPLICATIONS

Temporal arteritis revealed by a syndrome of inappropriate secretion of antidiuretic hormone. Gentric A, et al. Am J Med 1988 Oct;85(4):559–60
The clinical neuro–ophthalmologic spectrum of temporal arteritis. Mehler MF, et al. Am J Med 1988 Dec; 85(6):839–44 (77 ref.)
Syndrome of inappropriate secretion of antidiuretic hormone and temporal arteritis [letter] Tanneau RS. Am J Med 1989 May;86(5):633
Concurrent Churg–Strauss syndrome and temporal arteritis in a young patient with pulmonary nodules. Amato MB, et al. Am Rev Respir Dis 1989 Jun;139(6):1539–42
Bilateral internuclear ophthalmoplegia—an unusual initial presenting sign of giant cell arteritis. Crompton JL, et al. Aust N Z J Ophthalmol 1989 Feb;17(1):71–4
Hypothyroidism in polymyalgia rheumatica and giant cell arteritis. Wiseman P, et al. BMJ 1989 Mar 11; 298(6674):647–8
Skin necrosis in giant cell (temporal) arteritis: report of three cases. Abdullah AN, et al. Br J Dermatol 1989 Jun; 120(6):843–6
Giant cell arteritis with pulmonary involvement. Doyle L, et al. Br J Dis Chest 1988 Jan;82(1):88–92
Giant cell arteritis presenting as unilateral foot drop. Sachdev D, et al. Br J Hosp Med 1988 Jul;40(1):70–2
Giant cell (temporal) arteritis following polyarteritis nodosa [letter] Jawad AS, et al. Br J Rheumatol 1989 Jun; 28(3):268–70
Mononeuritis multiplex and occipital infarction complicating giant cell arteritis. McAlindon TE, et al. Br J Rheumatol 1989 Jun;28(3):257–8
Hypothyroidism and temporal arteritis presenting concurrently [letter] Melsom RD, et al. Br J Rheumatol 1988 Oct;27(5):409
Temporal arteritis in seropositive rheumatoid arthritis with rheumatoid nodule. Broggini M, et al. Clin Exp Rheumatol 1988 Apr–Jun;6(2):141–3
Ageusia as an initial manifestation of cranial arteritis [letter] Deleu D, et al. Ear Nose Throat J 1988 Aug;67(8):608
Occult temporal arteritis: a cause of complete blindness [letter] Sullivan RJ Jr. J Am Geriatr Soc 1989 Feb;37(2):194
Giant cell arteritis associated with progressive systemic sclerosis. Hupp SL. J Clin Neuro Ophthalmol 1989 Jun; 9(2):126–30
Giant cell arteritis presenting as limb claudication. Watts RA, et al. J R Soc Med 1989 Jan;82(1):51–2 (9 ref.)
Giant cell arteritis associated with pericarditis and pancreatic insufficiency in a patient with psoriatic arthritis. Clementz GL, et al. J Rheumatol 1989 Jan;16(1):128–9
Hemidiaphragm paralysis: a new pulmonary manifestation of giant cell arteritis [letter] Hong MK, et al. J Rheumatol 1989 Feb;16(2):253–4
Internuclear ophthalmoplegia in giant cell arteritis. Thomson GT, et al. J Rheumatol 1989 May;16(5):693–5
Temporal arteritis and intestinal perforation. Report of three cases. Patsner B, et al. N Y State J Med 1989 Aug; 89(8):476–7
Tongue necrosis by giant cell arteritis and fatal pacemaker embolism. Peetermans WE, et al. Neth J Med 1988 Dec; 33(5–6):232–5
Cranial diabetes insipidus caused by giant cell arteritis. Radhamanohar M. Postgrad Med J 1988 Dec;64(758):947–9
Primary biliary cirrhosis, temporal arteritis (giant cell arteritis) and polymyalgia rheumatica in a single patient. Gagnerie F, et al. Scand J Rheumatol 1988;17(3):231–2
[Ischemic papilledema in Horton's disease] Mazal Z. Cesk Oftalmol 1988 Sep;44(5):357–61 (Eng. Abstr.) (Cze)
[Giant cell arteritis and gangrene of the tongue] Hønberg PZ. Ugeskr Laeger 1989 Mar 6;151(10):637–8 (Eng. Abstr.) (Dan)
[Vesical neuropathy in systemic vasculitis: 3 cases] Amarenco P, et al. Ann Med Interne (Paris) 1988;139(3):183–5 (Eng. Abstr.) (Fre)
[Horton's disease and Gougerot–Sjögren syndrome: fortuitous or rare association? (letter)] Ponge T, et al. Ann Med Interne (Paris) 1988;139(3):227 (Fre)
[Triangular syndromes symptomatic of Horton's disease] Saudax E, et al. Bull Soc Ophtalmol Fr 1988 Mar; 88(3):433–5 (Eng. Abstr.) (Fre)
[Anicteric cholestasis disclosing Horton's disease (letter)] Bremondy A, et al. Presse Med 1988 Oct 22;17(36):1859–60 (Fre)
[Coronary localization of Horton's disease (letter)] Guillausseau PJ, et al. Presse Med 1988 Sep 24;17(32):1650 (Fre)
[Myasthenia associated with Horton's disease (letter)] Lioté F, et al. Presse Med 1988 Sep 10;17(30):1543 (Fre)
[Blindness of unusual mechanism disclosing Horton's disease (letter)] Plouvier B, et al. Presse Med 1989 Jan 7–14; 18(1):33 (Fre)
[Horton's disease revealed by a trismus. 2 new cases] Taillan B, et al. Rev Rhum Mal Osteoartic 1988 Nov;55(11):955–6 (Fre)
[Peripheral facial paralysis disclosing Horton's disease (letter)] Taillan B, et al. Rev Rhum Mal Osteoartic 1989 Mar 15;56(4):342 (Fre)
[Tongue necrosis following subtotal struma resection caused by Horton giant cell arteritis] Fabian W. Chirurg 1989 Apr; 60(4):305–6 (Ger)
[Tongue necrosis as a complication of giant cell arteritis] Müller PR, et al. Chirurg 1989 Apr;60(4):303–4 (Ger)
[Temporal arteritis in a patient with long–standing migraine] Blaser KU, et al. Schweiz Rundsch Med Prax 1988 Dec 6;77(49):1355–6 (Eng. Abstr.) (Ger)
[Coexistence of polymyalgia rheumatica/temporal arteritis and chronic polyarthritis] Brückle W, et al. Z Rheumatol 1989 Jan–Feb;48(1):1–5 (43 ref.) (Eng. Abstr.) (Ger)
[Joint involvement in polymyalgia rheumatica/temporal arteritis] Brückle W, et al. Z Rheumatol 1989 Jan–Feb; 48(1):19–25 (74 ref.) (Eng. Abstr.) (Ger)
[A patient with temporal arteritis presenting corneal ulcer as his first symptom] Aonuma Y, et al. Nippon Naika Gakkai Zasshi 1989 May;78(5):704–5 (Jpn)
[A case of temporal arteritis complicated with bilateral scalp ulcerations] Haba T, et al. Nippon Naika Gakkai Zasshi 1989 Mar;78(3):428–9 (Jpn)
[A case of temporal arteritis with polyneuropathy, posterior ischemic optic neuropathy (PION), and enhanced platelet adhesion and aggregation] Kohtoku N, et al. Ryumachi 1988 Jun;28(3):156–63 (Eng. Abstr.) (Jpn)
[Vasculitis of the central nervous system and giant cell arteritis (letter)] Cobeta García JC, et al. Med Clin (Barc) 1989 Apr 8;92(13):516–7 (Spa)
[Gangrene of the tongue. A form of presentation of temporal arteritis] Maxit MJ, et al. Medicina (B Aires) 1988; 48(2):186–8 (Eng. Abstr.) (Spa)

DIAGNOSIS

Temporal arteritis in blacks. Bielory L, et al. Am J Med 1989 Jun;86(6 Pt 1):707–8
Giant cell arteritis (Horton's disease) of the axillary artery—case reports. Van Damme H, et al. Angiology 1989 Jun;40(6):593–601
Ocular pneumoplethysmography in giant–cell arteritis [letter] Bates JH. Arch Ophthalmol 1989 Sep;107(9):1279
Ocular pneumoplethysmography can help in the diagnosis of giant–cell arteritis. Bosley TM, et al. Arch Ophthalmol 1989 Mar;107(3):379–81
Temporal artery biopsy [letter] Kopelman H. BMJ 1988 Dec 3;297(6661):1470
Temporal arteritis presenting with scalp necrosis and a normal erythrocyte sedimentation rate. Berth–Jones J, et al. Clin Exp Dermatol 1988 May;13(3):200–1
Role of Doppler ultrasound flow studies in the diagnosis of temporal arteritis. Friedman G, et al. Isr J Med Sci 1988 Nov;24(11):686–7
Giant cell arteritis. Ishak AW, et al. J Am Optom Assoc 1988 Nov;59(11):864–8
Unilateral painful shoulder: a very unusual presenting form of giant cell arteritis [letter] Cid MC, et al. J Rheumatol 1988 Aug;15(8):1312–3
Temporal arteritis: clinical aids to diagnosis [published erratum appears in J Rheumatol 1989 Feb;16(2):260] Fernandez–Herlihy L. J Rheumatol 1988 Dec; 15(12):1797–801
Giant cell arteritis of the female reproductive tract associated with temporal arteritis. Kohn NN. J Rheumatol 1989 Jun; 16(6):832–3
Lingual and scalp infarction as a manifestation of giant cell arteritis: delay in diagnosis leading to blindness [letter] Pye M. J Rheumatol 1988 Oct;15(10):1597–8
[Acute chorio–epithelial ischemia revealing Horton's disease] De Galleani B, et al. Ophtalmologie 1988 Nov–Dec; 2(5):393–6 (Eng. Abstr.) (Fre)
[The temporal arteritis syndrome] Adoue D, et al. Presse Med 1988 Oct 15;17(35):1818 (Fre)
[Doppler sonography findings in arteriitis temporalis] Brunhölzl C, et al. Ultraschall Med 1988 Oct;9(5):232–6 (Eng. Abstr.) (Ger)
[The value of anamnesis, clinical findings and laboratory parameters in the diagnosis of giant cell arteritis] Pompecki R, et al. Z Gerontol 1988 Sep–Oct;21(5):253–6 (Eng. Abstr.) (Ger)
[Temporal arteritis—diagnosis and therapeutic control] Ulrich C, et al. Z Gesamte Inn Med 1988 Sep 15; 43(18):526–30 (Eng. Abstr.) (Ger)
[Giant cell arteritis] Suchnicka R, et al. Wiad Lek 1989 Dec 1;41(23):1607–10 (Eng. Abstr.) (Pol)
[A case of Horton–Marath–Brown syndrome] Bondarev LS, et al. Klin Med (Mosk) 1989 Apr;67(4):123–4 (Rus)
[Clinico–morphological diagnosis of temporal arteritis in acute optic vascular neuropathies] Eremenko AI, et al. Oftalmol Zh 1988;(4):219–21 (Eng. Abstr.) (Rus)
[Horton's disease] Bunchuk NV, et al. Revmatologiia (Moskva) 1988 Apr–Jun;(2):56–63 (67 ref.) (Rus)
[Temporal arteritis: diagnostic considerations (editorial)] Aguirre Errasti C, et al. Rev Clin Esp 1989 Feb;184(2):55–6 (Spa)

DRUG THERAPY

Dapsone in the long–term treatment of temporal arteritis [letter; comment] Demaziere A. Am J Med 1989 Jul;87(1):3 . Comment on: Am J Med 1988 Sep;85(3):456–7
Polymyalgia rheumatica and temporal arteritis: a retrospective analysis of prognostic features and different corticosteroid regimens (11 year survey of 210 patients). Delecoeuillerie G, et al. Ann Rheum Dis 1988 Sep; 47(9):733–9
Treatment of polymyalgia rheumatica and giant cell arteritis. II. Relation between steroid dose and steroid associated side effects. Kyle V, et al. Ann Rheum Dis 1989 Aug; 48(8):662–6
Treatment of polymyalgia rheumatica and giant cell arteritis. I. Steroid regimens in the first two months. Kyle V, et al. Ann Rheum Dis 1989 Aug;48(8):658–61
Corticosteroid dosage for temporal arteritis [letter] Richard AJ. Ann Rheum Dis 1989 Apr;48(4):352
Methotrexate for corticosteroid–resistant polymyalgia rheumatica and giant cell arteritis. Krall PL, et al. Cleve Clin J Med 1989 May;56(3):253–7
Giant cell arteritis: loss of vision during corticosteroid therapy. Faarvang KL, et al. J Intern Med 1989 Mar; 225(3):215–6
Dapsone in temporal arteritis and polymyalgia rheumatica [letter] Boesen P, et al. J Rheumatol 1988;15(5):879–80
Prolonged corticosteroid treatment in the management of temporal arteritis. Friedman G, et al. Klin Wochenschr 1988 Dec 1;66(23):1167–70
[Interaction of rifampicin and prednisolone. Apropos of 2 cases occurring in Horton's disease] Bitaudeau P, et al. Rev Rhum Mal Osteoartic 1989 Jan;56(1):87–8 (Fre)

EPIDEMIOLOGY

Giant–cell arteritis in the southern United States. An 11–year retrospective study from the Texas Gulf Coast. Gonzalez EB, et al. Arch Intern Med 1989 Jul;149(7):1561–5

ETIOLOGY

Temporal arteritis associated with Borrelia infection. A case report. Pizzarello LD, et al. J Clin Neuro Ophthalmol 1989 Mar;9(1):3–6
[The significance of inflammatory vascular diseases] Voigt H, et al. Z Gesamte Inn Med 1988 Sep 15;43(18):509–10 (29 ref.) (Eng. Abstr.) (Ger)

GENETICS

HLA class II genes polymorphism in DR4 giant cell arteritis patients. Bignon JD, et al. Tissue Antigens 1988 Nov; 32(5):254–8

IMMUNOLOGY

HLA–DR expression in the vascular lesion and circulating T lymphocytes of patients with giant cell arteritis. Andersson R, et al. Clin Exp Immunol 1988 Jul;73(1):82–7
Behaviour of von Willebrand factor antigen in follow–up of polymyalgia rheumatica/giant cell arteritis. Ciompi ML, et al. Scand J Rheumatol 1988;17(6):491–5

PATHOLOGY

Temporal arteritis: a decision–analytic approach to temporal artery biopsy. Nadeau SE. Acta Neurol Scand 1988 Aug; 78(2):90–100
Immunohistochemical analysis of lymphoid and macrophage cell subsets and their immunologic activation markers in temporal arteritis. Influence of corticosteroid treatment. Cid MC, et al. Arthritis Rheum 1989 Jul;32(7):884–93
Temporal artery biopsy [editorial] Allison MC. BMJ 1988 Oct 15;297(6654):933–4
Temporal artery biopsy [letter] Kearns P. BMJ 1988 Nov 26;297(6660):1404
Necrosis of choroidal melanoma: in ciliary artery involvement with temporal arteritis. Wolter JR. Br J Ophthalmol 1989 Mar;73(3):216–9
Inflammatory arteritis with reversible coronary localization in a 70–year–old woman. Cherin P, et al. Eur Heart J 1989 Jun;10(6):577–80
Anterior ischemic optic neuropathy: nonarteritic form in small and giant cell arteritis in normal sized optic discs. Jonas JB, et al. Int Ophthalmol 1988;12(2):119–25
Temporal arteritis revealed by upper limb gangrene. de Gennes C, et al. J Rheumatol 1989 Jan;16(1):130–2

Diagnostic value of the history and examination in giant cell arteritis: a clinical pathological study of 81 temporal artery biopsies. Robb-Nicholson C, et al. **J Rheumatol** 1988 Dec; 15(12):1793–6

Temporary artery biopsy in suspected temporal arteritis: a five year survey. Stuart RA. **N Z Med J** 1989 Aug 23; 102(874):431–3

Temporal artery biopsies. Correlation of light microscopy and immunofluorescence microscopy. Wells KK, et al. **Ophthalmology** 1989 Jul;96(7):1058–64

Clinical efficacy of temporal artery biopsy in Nashville, Tennessee. Ikard RW. **South Med J** 1988 Oct;81(10):1222–4 (18 ref.)

[The course of the superficial temporal artery. Anatomic studies as a prerequisite to arterial biopsy] Daumann C, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):37–41 (Eng. Abstr.) (Ger)

[Horton's arteritis. Anatomical-clinical study of 12 cases] Terribile Wiel Marin V, et al. **Pathologica** 1987 Sep–Oct; 79(1063):539–53 (Eng. Abstr.) (Ita)

[Intracranial giant cell arteritis] Elsås T, et al. **Tidsskr Nor Laegeforen** 1988 Sep 30;108(27):2279–80 (Eng. Abstr.) (Nor)

PHYSIOPATHOLOGY

Loss of the ocular pulse in the acute phase of temporal arteritis. Bienfang DC. **Acta Ophthalmol Suppl (Copenh)** 1989;191:35–7

Parasympathetic pupillary involvement in biopsy-proven temporal arteritis. Rabinowich L, et al. **Ann Ophthalmol** 1988 Oct;20(10):400–2

Involvement of smell and taste in giant cell arteritis [letter] Schon F. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1594

SURGERY

Arm ischemia secondary to giant cell arteritis. Halpin DP, et al. **Ann Vasc Surg** 1988 Oct;2(4):381–4

TEMPORAL BONE

see related
LABYRINTH

Carcinoma of the middle ear and temporal bone. Arena S, et al. **Am J Otol** 1988 Sep;9(5):351–6 (42 ref.)

CT and MRI of the ear and temporal bone: current state of the art and future prospects. Jackler RK. **Am J Otol** 1988 May;9(3):232–9 (111 ref.)

An implantable bone conduction hearing device. Johnson R, et al. **Am J Otol** 1988 Dec;9 Suppl:93–100

Magnetic resonance imaging in the diagnosis of temporal bone and skull base lesions. Meyerhoff WL, et al. **Am J Otol** 1989 Mar;10(2):131–7

Osteogenesis imperfecta of the temporal bone and its relation to otosclerosis. Nager GT. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):585–93

Pathologic quiz case 2. Monostotic fibrous dysplasia of the temporal bone. Talmi YP, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1136–7, 1139

Magnetic resonance with gadolinium DTPA for the investigation of temporal bone tumours. Phelps PD, et al. **Clin Otolaryngol** 1989 Jun;14(3):251–62

Tumors and tumorlike lesions of the ear and temporal bone in children. Cunningham MJ, et al. **Ear Nose Throat J** 1988 Oct;67(10):726, 729–30, 733 passim (79 ref.)

Low cost device for removing human and small primate temporal bone plugs. Trune DR, et al. **Hear Res** 1989 Jan; 37(2):189–90

What is your diagnosis? Lysis of the right temporal bone adjacent to the temporomandibular joint. Stickle R, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):119–20

Non-Hodgkins lymphoma of the temporal bone. Nicolaides A, et al. **J Laryngol Otol** 1988 Oct;102(10):928–31

Primary chondroid chordoma of the base of the petrous temporal bone. Rupa V, et al. **J Laryngol Otol** 1989 Aug; 103(8):771–3

Benign osteitis of the external auditory meatus. Youngs R, et al. **J Otolaryngol** 1988 Oct;17(6):302–7

Stylohyoid syndrome [letter] Jan A. **JPMA** 1989 Jan;39(1):23

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 14–1989. An 82-year-old woman with a complete left facial palsy and a left mastoid mass. **N Engl J Med** 1989 Apr 6; 320(14):924–30

Threaded Steinmann pin embedded in the glenoid fossa. Kreutz RW, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):228–9

Radiation-induced sarcoma of the skull: a case report. Garner FT, et al. **Otolaryngol Head Neck Surg** 1988 Sep; 99(3):326–9

Intracranial and intratemporal meningiomas with primary otologic symptoms. Kumar A, et al. **Otolaryngol Head Neck Surg** 1988 Nov;99(5):444–54

Papillary adenoma of the temporal bone in von Hippel-Lindau disease. Palmer JM, et al. **Otolaryngol Head Neck Surg** 1989 Jan;100(1):64–8

Cardiac myxoma metastatic to the temporal bone. Jungreis CA, et al. **Radiology** 1989 Jan;170(1 Pt 1):244

Osteomyelitis of the skull base. Farrior J. **South Med J** 1989 Jun;82(6):719–22

[Giant cell reparative granuloma in temporal bone—report of a case] Lin CL, et al. **Chang Keng I Hsueh** 1989 Mar 20;12(1):62–6 (Eng. Abstr.) (Chi)

[Differential diagnosis in rhabdomyosarcoma and inflammation of the middle ear in children] Kabelka Z, et al. **Cesk Otolaryngol** 1988 Jul;37(4):234–8 (Eng. Abstr.) (Cze)

[Giant cell tumor of the temporal bone. Clinical study of a case. Histologic and therapeutic remarks] Bessede JP, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(3):201–5 (21 ref.) (Eng. Abstr.) (Fre)

[Temporal xanthomatosis and hyperlipoproteinemia] Justrabo E, et al. **Arch Anat Cytol Pathol** 1988;36(5–6):245–9 (27 ref.) (Eng. Abstr.) (Fre)

[Metastatic location in the temporal bone of a primary bladder carcinoma] Africano R, et al. **Pathologica** 1989 Mar–Apr;81(1072):213–7 (Eng. Abstr.) (Ita)

[Evaluation of temporal bone pneumatization on high resolution CT (HRCT) measurements of the temporal bone in normal and otitis media group and their correlation to measurements of internal auditory meatus, vestibular or cochlear aqueduct] Nakamura M. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jul;91(7):1002–11 (Eng. Abstr.) (Jpn)

[Chondroma of the temporal bone—two cases] Tsubakimoto M, et al. **Rinsho Hoshasen** 1988 Jun;33(6):703–6 (Eng. Abstr.) (Jpn)

[Glomus tumors of the temporal bone: a report of 6 cases] Arruda WO, et al. **Arq Neuropsiquiatr** 1989 Mar; 47(1):51–60 (Eng. Abstr.) (Por)

ABNORMALITIES

Temporal bone findings in a newborn infant with multiple congenital anomalies. Yoshihara T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:120–5

The large vestibular aqueduct syndrome in children. A review of 12 cases and the description of a new clinical entity. Levenson MJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):54–8 (12 ref.)

Computed tomographic findings of a high jugular bulb with bony dehiscence. Tyan YS, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Sep;40(3):341–4

The Tessier number 9 cleft. David DJ, et al. **Plast Reconstr Surg** 1989 Mar;83(3):520–7

[Malformation of the facial canal, meningitis and cerebrospinal otorrhea] Legent F, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(3):197–200 (8 ref.) (Eng. Abstr.) (Fre)

[Radiodiagnosis of temporal bone anomalies] Schratter M, et al. **Radiologe** 1988 Oct;28(10):481–8 (15 ref.) (Eng. Abstr.) (Ger)

ANATOMY & HISTOLOGY

Functional and morphologic considerations of the articular eminence. Widman DJ. **Angle Orthod** 1988 Jul;58(3):221–36

Thickness of the lateral surface of the temporal bone in children. Simms DL, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):726–31

Computer-aided three-dimensional reconstruction: a method of measuring temporal bone structures including the length of the cochlea. Takagi A, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):515–22

Dimensions of the extended facial recess. Young YS, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):336–8

Differentiation of cartilage and bone in human fetal temporal bones with Luxol fast blue stain. Declau F, et al. **Arch Otorhinolaryngol** 1988;245(4):218–20

The shape of the glenoid fossa affects the growth of the mandible. Kantomaa T. **Eur J Orthod** 1988 Aug; 10(3):249–54

The relation between mandibular configuration and the shape of the glenoid fossa in the human. Kantomaa T. **Eur J Orthod** 1989 Feb;11(1):77–81

Sectional anatomy of the human temporal bone. Olszewski J. **Folia Morphol (Warsz)** 1987;46(3–4):235–9

Persistent foramen of Huschke: possible risk factor for otologic complications after arthroscopy of the temporomandibular joint. Herzog S, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):267–70

Imaging contribution to temporal bone anatomy. Muren C. **Scand Audiol Suppl** 1988;30:139–43

Imaging contributions to the temporal bone anatomy (high jugular fossae). Wadin K. **Scand Audiol Suppl** 1988;30:145–8

[Huschke's foramen] Ars B. **Acta Otorhinolaryngol Belg** 1988; 42(5):654–8 (Eng. Abstr.) (Fre)

[Intratemporal course of the facial nerve in magnetic resonance imaging] Traxler M, et al. **HNO** 1989 Jan; 37(1):19–22 (Eng. Abstr.) (Ger)

[Organization of the temporal bone system of the skull. II. The petro-squamous system] Pędziwiatr ZF. **Otolaryngol Pol** 1988;42(4):253–64 (Eng. Abstr.) (Pol)

[Organization of the temporal system of the skull. III. The peripheral pneumatic system of the ear] Pędziwiatr ZF. **Otolaryngol Pol** 1988;42(5):318–32 (Eng. Abstr.) (Pol)

BLOOD SUPPLY

[Surgical approach to the distal extracranial part of the internal carotid artery at the base of the skull] Pauliukas PA. **Khirurgiia (Mosk)** 1989 Mar;(3):35–40 (Eng. Abstr.) (Rus)

EMBRYOLOGY

[Process of the development of pneumatization in human fetal temporal bone—compared with the results of pneumatization by the experimental study of pigs] Aoki K, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug; 91(8):1220–7 (Eng. Abstr.) (Jpn)

GROWTH & DEVELOPMENT

Eminence development of the postnatal human temporomandibular joint. Nickel JC, et al. **J Dent Res** 1988 Jun;67(6):896–902

A theoretical model of loading and eminence development of the postnatal human temporomandibular joint. Nickel JC, et al. **J Dent Res** 1988 Jun;67(6):903–10

Growth of the lateral surface of the temporal bone in children. Simms DL, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):795–9

IMMUNOLOGY

Preparation of human temporal bone for immunohistochemical investigation. Altermatt HJ, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(2):83–7

INJURIES

Pneumolabyrinth as a late sequela of temporal bone fracture. Nurre JW, et al. **Am J Otol** 1988 Nov;9(6):489–93

Temporal bone fractures: a clinical diagnosis. Waldron J, et al. **Arch Emerg Med** 1988 Sep;5(3):146–50

Basilar skull fractures in children. Liu-Shindo M, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):109–17

Post-traumatic cholesteatoma. McKennan KX, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):779–82

[Temporoparietal bone defects] Bauer T, et al. **Radiologe** 1988 Nov;28(11):541–2 (Ger)

[High resolution computerized tomography in the study of traumatic pathology of the temporal bone] Monti C, et al. **Radiol Med (Torino)** 1988 Sep;76(3):158–63 (Eng. Abstr.) (Ita)

[A case of cerebrospinal fluid otorrhea 6 years after temporal bone fracture] Suyama K, et al. **No Shinkei Geka** 1989 May; 17(5):473–6 (Eng. Abstr.) (Jpn)

[Diagnosis of injuries and diseases of the temporal bone by using computed tomography] Kishkovskiĭ AN, et al. **Voen Med Zh** 1988 Dec;(12):29–31 (Rus)

[Endoscopic anatomy of acute temporo-tentorial herniation] Karakhan VB, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct; (5):50–5 (Rus)

INNERVATION

Computed tomographic analysis of the intratemporal facial nerve and facial nerve neuromas. Shankar L, et al. **Can Assoc Radiol J** 1989 Jun;40(3):150–5

The effect of patient positioning on MR imaging of the internal auditory canal. Daniels DL, et al. **Neuroradiology** 1988;30(5):395–8

PATHOLOGY

The histopathology of the human temporal bone and auditory central nervous system following cochlear implantation in a patient. Correlation with psychophysics and speech perception results. Clark GM, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;448:1–65

Temporal bone histopathology over 15 years post-stapedectomy. Himi T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:126–34

Temporal bone pathology of metastatic T-cell lymphoma. Kobayashi K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 447:113–9 (12 ref.)

Temporal bone findings in cloverleaf skull syndrome. Miyata H, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:105–12

Sellar abscess associated with tuberculous osteomyelitis of the skull: MR findings. Gupta RK, et al. **AJNR** 1989 Mar–Apr;10(2):448

Long-term histologic study of a new carbon-carbon ossicular replacement prosthesis. Podoshin L, et al. **Am J Otol** 1988 Sep;9(5):366–75

Quantitative evaluation of sensorineural structures following stapes surgery. Nelson EG, et al. **Am J Otolaryngol** 1989 Jan-Feb;10(1):13–25

Otologic histopathology of Fabry's disease. Schachern PA, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):359–63

Magnetic resonance imaging of the posterior cranial fossa. Valvassori GE, et al. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):594–8

Eagle's syndrome: an atypical cause of dysphonia. Blatchford SJ, et al. **Ear Nose Throat J** 1989 Jan;68(1):48–51

Usher's syndrome, temporal bone pathology. Cremers CW, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct;16(1):23–30

Nasopharyngeal teratoma involving the temporal bone. de Vries EJ, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov; 16(2):167–73

Frequency and localization of congenital anomalies of the middle and inner ears: a human temporal bone histopathological study. Sando I, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct;16(1):1–22

Rheumatoid nodule of the temporal bone. Hoffman RA, et al. **J Laryngol Otol** 1989 Aug;103(8):768–70

Metastasis to the temporal bone, secondary to carcinoma of the bladder. Saldanha CB, et al. **J Laryngol Otol** 1989 Jun; 103(6):599–601

Gadolinium-enhanced magnetic resonance imaging in temporal bone lesions. Millen SJ, et al. **Laryngoscope** 1989 Mar;99(3):257–60

New imaging techniques in diagnosis of cerebrospinal fluid fistula. Nicklaus P, et al. **Laryngoscope** 1988 Oct; 98(10):1065–8

Systemic vasculitis: a temporal bone histopathologic study. Yoon TH, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):600–9

I. Stylohyoid chain ossification: a discussion of etiology. Camarda AJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):508–14 (35 ref.)

II. Stylohyoid chain ossification: a discussion of etiology. Camarda AJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):515–20

Current imaging approach to the temporal bone. Swartz JD. **Radiology** 1989 May;171(2):309–17

[Spontaneous remission in disseminated histiocytosis X] Fasshauer A, et al. **Monatsschr Kinderheilkd** 1989 Feb; 137(2):105–7 (Eng. Abstr.) **(Ger)**

[Histiocytosis X with involvement of the temporal bone. Apropos of a case] Lahoz Zamarro MT, et al. **An Otorrinolaringol Ibero Am** 1988;15(5):471–80 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Conduction of thermal stimuli in the human temporal bone. Keck W, et al. **Arch Otorhinolaryngol** 1988;245(6):335–9

RADIOGRAPHY

Microradiographic and histological study of the styloid process of the temporal bone. Lengele B, et al. **Acta Anat (Basel)** 1989;135(3):193–9

CT of the temporal bone in achondroplasia. Cobb SR, et al. **AJNR** 1988 Nov–Dec;9(6):1195–9

CT evaluation of the temporal bone ossicles by using oblique reformations: a technical note. Lee BC, et al. **AJNR** 1989 Mar–Apr;10(2):431–3

Correlation of high-resolution computed tomography and gross anatomic sections of the temporal bone: II. Vestibular apparatus. Archer CR, et al. **Am J Otol** 1988 Jul; 9(4):276–81

Temporal bone computed tomography in the preoperative evaluation for cochlear implantation. Mueller DP, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):346–9

Radiological evaluation of temporal bone disease: high-resolution computed tomography versus conventional X-ray diagnosis. Fritz P, et al. **Br J Radiol** 1989 Feb; 62(734):107–13

Temporal bone venous anomaly of surgical significance. Shotton JC, et al. **J Laryngol Otol** 1989 Jan;103(1):101–6

Computed tomographic findings of brain and skull in myotonic dystrophy [letter] Cornacchia L, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1463–4

Temporal bone pneumatization in cystic fibrosis patients. Todd NW, et al. **Laryngoscope** 1988 Oct;98(10):1046–9

Facial nerve palsy secondary to a dural cavernous angioma of the middle cranial fossa eroding the tegmen tympani. Pozzati E, et al. **Neurosurgery** 1988 Aug;23(2):245–7

Cholesteatomas of the temporal bone. Preoperative C-T versus peroperative findings. Freng A, et al. **Scand Audiol Suppl** 1988;30:185–8

[The "normal" pneumatization of the temporal bone] Dietzel K. **HNO** 1989 Feb;37(2):39–47 (Eng. Abstr.) **(Ger)**

[Multiplanar imaging of the temporal bone. Initial results] Grevers G, et al. **Laryngorhinootologie** 1989 Jul;68(7):392–5 (Eng. Abstr.) **(Ger)**

[Monostotic fibrous dysplasia of the temporal bone. Diagnostic usefulness of computed tomography] Gugliantini P, et al. **Radiol Med (Torino)** 1989 Apr; 77(4):413–5 (Eng. Abstr.) **(Ita)**

[Clinical investigation on pneumatization of the temporal bone. 3. Comparison of the size of the mastoid air cell system of patients with Menière's disease and normals] Yachiyama H. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov; 91(11):1928–32 (Eng. Abstr.) **(Jpn)**

SURGERY

Total temporal bone resection. A radical but life-saving procedure. Sataloff RT, et al. **AORN J** 1988 Nov; 48(5):932–48

Total temporal bone resection for osteogenic sarcoma. Sataloff RT, et al. **Ear Nose Throat J** 1988 Sep;67(9):626–7, 630–2, 634 passim (22 ref.)

A temporal bone preparation for the study of cochlear micromechanics at the cellular level. Ulfendahl M, et al. **Hear Res** 1989 Jun 15;40(1–2):55–64

Articular eminectomy for long-standing luxation of the mandible. Report of 2 cases. Mizuno A, et al. **Int J Oral Maxillofac Surg** 1988 Oct;17(5):303–6

The surgical approach to orbital space-occupying lesions. Mohr C, et al. **J Craniomaxillofac Surg** 1989 May; 17(4):149–54

A temporal approach to anterior communicating artery aneurysms. Technical note. Poletti CE. **J Neurosurg** 1989 Jul;71(1):144–6

Eminectomy and discoplasty for correction of the displaced temporomandibular joint disc. Kerstens HC, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):150–4

Myxoma of the skull and orbit. Maiuri F, et al. **Neurochirurgia (Stuttg)** 1988 Jul;31(4):136–8

The lateral facial approach to the nasopharynx and infratemporal fossa. Gates GA. **Otolaryngol Head Neck Surg** 1988 Sep;99(3):321–5

Improved preservation of facial nerve function in the infratemporal approach to the skull base. Leonetti JP, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):74–8

MR imaging of facial nerve enhancement in Bell palsy or after temporal bone surgery. Daniels DL, et al. **Radiology** 1989 Jun;171(3):807–9

[Temporal bone of the rabbit in the otologic microsurgery training] Nosengo S, et al. **Acta Otorhinolaryngol Ital** 1986 Sep–Oct;6(5):535–40 (Eng. Abstr.) **(Ita)**

[General anesthesia with kalipsol during operations on the temporal bone in children] Tikhonova GV. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):61–2 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

[Electron microscopic observation on monostotic fibrous dysplasia of temporal bones] Hattori Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep;91(9):1366–74 (Eng. Abstr.) **(Jpn)**

TEMPORAL LOBE

The microvascular architecture of human malignant glioma. A scanning electron microscopic study of a vascular cast. Orita T, et al. **Acta Neuropathol (Berl)** 1988;76(3):270–4

Speech manifestations in lateralization of temporal lobe seizures. Gabr M, et al. **Ann Neurol** 1989 Jan;25(1):82–7

Aetiological variation in the amnesic syndrome: comparisons using the Brown–Peterson task. Leng NR, et al. **Cortex** 1989 Jun;25(2):251–9

The effects of lesions of superior temporal gyrus and inferior parietal lobe on temporal and vertex components of the human AEP. Knight RT, et al. **Electroencephalogr Clin Neurophysiol** 1988 Dec; 70(6):499–509

CT features of primary cerebral lymphoma in AIDS and non-AIDS patients. Poon T, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):6–9

Parkinsonism as a feature of temporal lobe glioma. Kumar S, et al. **J Indian Med Assoc** 1988 Jul;86(7):180–1

Short-term psychological outcome of anterior temporal lobectomy. Hermann BP, et al. **J Neurosurg** 1989 Sep; 71(3):327–34

Ipsilateral symptomatology in left temporal lobe lesions. Vaquero J, et al. **J Neurosurg Sci** 1988 Jul–Sep;32(3):127–30

[Rolandic spikes as an electroencephalography manifestation of oligodendroglioma] Kaschnitz W, et al. **Padiatr Padol** 1988;23(4):313–9 (Eng. Abstr.) **(Ger)**

[A case of temporal lobe epidermoid cyst] Hwang WZ, et al. **Rinsho Hoshasen** 1989 Mar;34(3):355–8 (Eng. Abstr.) **(Jpn)**

[Supratentorial hemangiomas in Von Hippel–Lindau disease (letter)] Chamorro Sánchez A, et al. **Med Clin (Barc)** 1988 Dec 3;91(19):759 **(Spa)**

ABNORMALITIES

MR imaging of middle cranial fossa arachnoid cysts: temporal lobe agenesis syndrome revisited. Robertson SJ, et al. **AJNR** 1989 Sep–Oct;10(5):1007–10

ANALYSIS

Human cytomegalovirus DNA in the temporal cortex of a schizophrenic patient. Moises HW, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(2):110–3

ANATOMY & HISTOLOGY

Normal sonographic findings of the infant temporal lobe in coronal sections. Sasaki M, et al. **Brain Dev** 1989; 11(4):230–5

Cortical integration of parallel pathways in the visual system of primates. Krubitzer LA, et al. **Brain Res** 1989 Jan 23; 478(1):161–5

Connectional analysis of the ipsilateral and contralateral afferent neurons of the superior temporal region in the rhesus monkey. Cipolloni PB, et al. **J Comp Neurol** 1989 Mar 22;281(4):567–85

Association fiber pathways to the frontal cortex from the superior temporal region in the rhesus monkey. Petrides M, et al. **J Comp Neurol** 1988 Jul 1;273(1):52–66

Thalamic connections of the cortex of the superior temporal sulcus in the rhesus monkey. Yeterian EH, et al. **J Comp Neurol** 1989 Apr 1;282(1):80–97

Anterior temporal lobes and hippocampal formations: normative volumetric measurements from MR images in young adults. Jack CR Jr, et al. **Radiology** 1989 Aug; 172(2):549–54

BLOOD SUPPLY

Altered glucose metabolism in microvessels from patients with Alzheimer's disease. Marcus DL, et al. **Ann Neurol** 1989 Jul;26(1):91–4

Permanent cerebral blindness after cardiac catheterization. Thomas TD, et al. **Cathet Cardiovasc Diagn** 1989 Aug; 17(4):228–30

Aneurysm of the superficial temporal artery. Lee KS, et al. **Neurosurgery** 1988 Oct;23(4):499–500

[Effect of classical exclusion of aneurysm of the internal carotid artery on late structural and functional changes at the site of the operation] Slósarek J, et al. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):330–4 (Eng. Abstr.) **(Pol)**

ENZYMOLOGY

Increased activity of choline acetyltransferase and acetylcholinesterase in actively epileptic human cerebral cortex. Kish SJ, et al. **Epilepsy Res** 1988 Jul–Aug; 2(4):227–31

IMMUNOLOGY

Presence of T-cytotoxic suppressor and leucocyte common antigen positive cells in Alzheimer's disease brain tissue. Itagaki S, et al. **Neurosci Lett** 1988 Sep 12;91(3):259–64

INJURIES

Mania following head injury [letter] McKeown SP, et al. **Br J Psychiatry** 1987 Dec;151:867–8

Manic-like state after bilateral orbitofrontal and right temporoparietal injury: efficacy of clonidine. Bakchine S, et al. **Neurology** 1989 Jun;39(6):777–81

Stab wounds to the temporal fossa. Haworth CS, et al. **Neurosurgery** 1988 Oct;23(4):431–5

METABOLISM

Increased temporal lobe glucose use in chronic schizophrenic patients. DeLisi LE, et al. **Biol Psychiatry** 1989 Apr 1; 25(7):835–51

Effect of high-intensity sound on local cerebral glucose utilization in fetal sheep. Abrams RM, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):1–10

Ultrastructural analysis of somatostatin-immunoreactive neurons and synapses in the temporal and occipital cortex of the macaque monkey. de Lima AD, et al. **J Comp Neurol** 1989 May 8;283(2):212–27

Regional distribution of cholecystokinin receptors in macaque medial temporal lobe determined by in vitro receptor autoradiography. Kritzer MF, et al. **J Comp Neurol** 1988 Oct 8;276(2):219–30

Frontal cortical and left temporal glutamatergic dysfunction in schizophrenia. Deakin JF, et al. **J Neurochem** 1989 Jun; 52(6):1781–6

Loss of muscarinic cholinergic receptors from the temporal cortex of alcohol abusers. Freund G, et al. **Metab Brain Dis** 1989 Jun;4(2):121–41

Decrease of serotonin-S2 receptors in temporal cortex of patients with Parkinson's disease and progressive supranuclear palsy. Maloteaux JM, et al. **Mov Disord** 1988; 3(3):255–62

PATHOLOGY

Temporal lobe pathology in schizophrenia: a quantitative magnetic resonance imaging study. Suddath RL, et al. **Am J Psychiatry** 1989 Apr;146(4):464–72

Temporal lobe structure as determined by nuclear magnetic resonance in schizophrenia and bipolar affective disorder. Johnstone EC, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):736–41

A morphological study comparing cortical neurons of focal epilepsy in humans with those of cobalt-induced focal epilepsy in cats. Koyama I, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):653–5

Multiple, primary multifocal brain astrocytoma. Case report. Godlewski A, et al. **Neuropatol Pol** 1988;26(1):111–22

Diagnostic difficulties in a case of subacute sclerosing encephalitis. Light and electron-microscopic studies. Liberski PP, et al. **Neuropatol Pol** 1988;26(1):97–110

Symptomatic subependymoma with nuclear polymorphism. Matsumura A, et al. **Neurosurg Rev** 1987;10(4):291–3

Use of MR imaging for quantitative evaluation of resection for temporal lobe epilepsy. Jack CR Jr, et al. **Radiology** 1988 Nov;169(2):463–8

[Pilomotor seizures: a new case (letter)] Dupuy M, et al. **Ann Med Interne (Paris)** 1989;140(1):70–2 (19 ref.) **(Fre)**

[Otogenic brain abscess with rupture into the lateral ventricle] Bliouras K, et al. **HNO** 1989 Jul;37(7):303–5 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

An experimental test of the theory that visual information is stored in the inferotemporal cortex. Cirillo RA, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):43–53

Lesions of the anterior temporal stem and the performance of delayed match-to-sample and visual discriminations in monkeys. Cirillo RA, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):55–69

Inferotemporal-frontal disconnection and fornix transection in visuomotor conditional learning by monkeys. Gaffan D, et al. **Behav Brain Res** 1988 Dec 1;31(2):149–63

Retention deficits produced in monkeys with reversible cold lesions in the prestriate cortex. Martin-Elkins CL, et al. **Behav Brain Res** 1989 Apr 1;32(3):219–30

The effects of unilateral destruction of fimbria-fornix and supracallosal pathways in the rat. Buzsáki G, et al. **Behav Neural Biol** 1989 Mar;51(2):278–88

P3-like brain waves in normal monkeys and in monkeys with medial temporal lesions. Paller KA, et al. **Behav Neurosci** 1988 Oct;102(5):714–25

Neuronal activity in human lateral temporal cortex related to short-term verbal memory, naming and reading.

Ojemann GA, et al. **Brain** 1988 Dec;111 (Pt 6):1383–403
Midline and temporal lobe MLRs in the guinea pig originate from different generator systems: a conceptual framework for new and existing data. Kraus N, et al. **Electroencephalogr Clin Neurophysiol** 1988 Dec; 70(6):541–58
The involvement of the temporal lobes in colour discrimination. Heywood CA, et al. **Exp Brain Res** 1988; 71(2):437–41
Single-unit analysis of pattern-motion selective properties in the middle temporal visual area (MT). Rodman HR, et al. **Exp Brain Res** 1989;75(1):53–64
The effect of learning on the face selective responses of neurons in the cortex in the superior temporal sulcus of the monkey. Rolls ET, et al. **Exp Brain Res** 1989; 76(1):153–64
Directionally selective response of cells in the middle temporal area (MT) of the macaque monkey to the movement of equiluminous opponent color stimuli. Saito H, et al. **Exp Brain Res** 1989;75(1):1–14
What facial features activate face neurons in the inferotemporal cortex of the monkey? Yamane S, et al. **Exp Brain Res** 1988;73(1):209–14
Pitch perception of complex tones and human temporal-lobe function. Zatorre RJ. **J Acoust Soc Am** 1988 Aug; 84(2):566–72
Polysensory properties of neurons in the anterior bank of the caudal superior temporal sulcus of the macaque monkey. Hikosaka K, et al. **J Neurophysiol** 1988 Nov; 60(5):1615–37
Relation of cortical areas MT and MST to pursuit eye movements. I. Localization and visual properties of neurons. Komatsu H, et al. **J Neurophysiol** 1988 Aug; 60(2):580–603
Relation of cortical areas MT and MST to pursuit eye movements. III. Interaction with full-field visual stimulation. Komatsu H, et al. **J Neurophysiol** 1988 Aug; 60(2):621–44
Relation of cortical areas MT and MST to pursuit eye movements. II. Differentiation of retinal from extraretinal inputs. Newsome WT, et al. **J Neurophysiol** 1988 Aug; 60(2):604–20
Effects of lesions of temporal-parietal junction on perceptual and attentional processing in humans. Robertson LC, et al. **J Neurosci** 1988 Oct;8(10):3757–69
Neuronal correlate of visual associative long-term memory in the primate temporal cortex. Miyashita Y. **Nature** 1988 Oct 27;335(6193):817–20
Identification of a negative bitemporal component (N300) of the event-related potentials demonstrated by noncephalic recordings. Neshige R, et al. **Neurology** 1988 Nov;38(11):1803–5
Geophysical variables and behavior: LV. Predicting the details of visitor experiences and the personality of experients: the temporal lobe factor. Persinger MA. **Percept Mot Skills** 1989 Feb;68(1):55–65 (70 ref.)
The temporal-hippocampal region and retention: the role of temporo-entorhinal connections in rats. Myhrer T, et al. **Scand J Psychol** 1989;30(1):72–80
[Caffeine and EEG mapping: effects of visuo-spatial task in healthy volunteers] Etevenon P, et al. **Neurophysiol Clin** 1988 Aug;18(4):355–67 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Neocortical propagation in temporal lobe spike foci on magnetoencephalography and electroencephalography. Sutherling WW, et al. **Ann Neurol** 1989 Apr;25(4):373–81
Correlations between abnormal auditory P300 topography and positive symptoms in schizophrenia: a preliminary report. Shenton ME, et al. **Biol Psychiatry** 1989 Mar 15; 25(6):710–6
Double dissociation of frontal dysfunction in organic amnesia. Leng NR, et al. **Br J Clin Psychol** 1988 Nov;27 (Pt 4):359–62
Body image and the temporal lobes. Trimble MR. **Br J Psychiatry** 1988 Jul;153 Suppl 2:12–4 (16 ref.)
Preserved topographical memory following right temporal lobectomy. Beatty WW, et al. **Brain Cogn** 1988 Aug; 8(1):67–76
Cortical deafness cannot account for the inability of Japanese macaques to discriminate species-specific vocalizations. Heffner HE, et al. **Brain Lang** 1989 Feb;36(2):275–85
Temporal lobe and petit mal antiepileptics differentially affect ventral lateral thalamic and motor cortex excitability patterns. Shouse MN, et al. **Brain Res** 1988 Nov 15; 473(2):372–9
Temporal lobe syncope: clinical variants. Jacome DE. **Clin Electroencephalogr** 1989 Jan;20(1):58–65
Positive temporal sharp waves in neonatal EEG. Nowack WJ, et al. **Clin Electroencephalogr** 1989 Jul;20(3):196–201 (34 ref.)
The anterior temporal electrode in the EEG of the adult. Nowack WJ, et al. **Clin Electroencephalogr** 1988 Oct; 19(4):199–204
Basal temporal subdural electrodes in the evaluation of patients with intractable epilepsy. Lüders H, et al. **Epilepsia** 1989 Mar-Apr;30(2):131–42
Significance of bisynchronous spike-waves in patients with temporal lobe spikes. Sadler RM, et al. **Epilepsia** 1989 Mar-Apr;30(2):143–6
Temporal lobe involvement in Capgras syndrome. Ardila A, et al. **Int J Neurosci** 1988 Dec;43(3–4):219–24
Unilateral temporal lobe lesions alter P300 scalp topography. Daruna JH, et al. **Int J Neurosci** 1989 Jun;46(3–4):243–7
Dissociation of recognition memory components following temporal lobe lesions. Smith ME, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan;15(1):50–60
Two syndromes of schizophrenic psychopathology associated with left vs. right temporal deficits in P300 amplitude. Four case reports. Shenton ME, et al. **J Nerv Ment Dis** 1989 Apr;177(4):219–25
Pursuit and optokinetic deficits following chemical lesions of cortical areas MT and MST. Dürsteler MR, et al. **J Neurophysiol** 1988 Sep;60(3):940–65
A case of temporal lobe astrocytoma associated with epileptic seizures and schizophrenia-like psychosis. Kan R, et al. **Jpn J Psychiatry Neurol** 1989 Mar;43(1):97–103
Dystonic posturing in complex partial seizures of temporal lobe onset: a new lateralizing sign. Kotagal P, et al. **Neurology** 1989 Feb;39(2 Pt 1):196–201
Unilateral attention deficits and hemispheric asymmetries in the control of visual attention. Làdavas E, et al. **Neuropsychologia** 1989;27(3):353–66
Attention and interference in the processing of global and local information: effects of unilateral temporal-parietal junction lesions. Lamb MR, et al. **Neuropsychologia** 1989; 27(4):471–83
[Frequency analytic EEG study on the topic of temporal function disorders in transsexuality] Grasser T, et al. **EEG EMG** 1989 Jun;20(2):117–20 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

Effects of radiation therapy on neuropsychological functioning in patients with nasopharyngeal carcinoma. Lee PW, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr; 52(4):488–92
Temporal lobe and hypothalamic-pituitary dysfunctions after radiotherapy for nasopharyngeal carcinoma: a distinct clinical syndrome. Woo E, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1302–7
Radiation-induced schwannomas. Rubinstein AB, et al. **Neurosurgery** 1989 Jun;24(6):929–32

RADIOGRAPHY

Temporal lobe atrophy in patients with Alzheimer disease: a CT study. Kido DK, et al. **AJNR** 1989 May-Jun; 10(3):551–5
A case study of the cognitive and behavioral deficits of temporal lobe damage in herpes simplex encephalitis. Greer MK, et al. **J Autism Dev Disord** 1989 Jun;19(2):317–26
[A case of extensive hemangioma of the brain] Ziąber J, et al. **Wiad Lek** 1988 Jun 15;41(12):809–12 (Eng. Abstr.) **(Pol)**

SURGERY

Experience with orbital electrodes in the patients operated on for epilepsy—results of temporofrontal resections. Ribarić I, et al. **Acta Neurochir Suppl (Wien)** 1989;46:21–4
Psychiatric assessment and temporal lobectomy. Fenwick PB. **Acta Neurol Scand Suppl** 1988;117:96–102 (27 ref.)
Sex differences in brain and personality correlates of the ability to identify popular word associations. Lansdell H. **Behav Neurosci** 1989 Aug;103(4):893–7
Scalp-recorded P300 activity in patients following unilateral temporal lobectomy. Johnson R Jr. **Brain** 1988 Dec;111 (Pt 6):1517–29
Memory deficits before and after temporal lobectomy: effect of laterality and age of onset. Saykin AJ, et al. **Brain Cogn** 1989 Mar;9(2):191–200
Surgery for intractable epilepsy. Clinicopathologic correlates in 60 cases. Estes ML, et al. **Cleve Clin J Med** 1988 Sep-Oct;55(5):441–7
Effects of frontal or temporal lobectomy on the use of advance information in a choice reaction time task. Alivisatos B, et al. **Neuropsychologia** 1989;27(4):495–503
Sequence ability in parkinsonians, patients with frontal lobe lesions and patients who have undergone unilateral temporal lobectomies. Canavan AG, et al. **Neuropsychologia** 1989;27(6):787–98
The effect of categorization on verbal memory after temporal lobectomy. Channon S, et al. **Neuropsychologia** 1989; 27(6):777–85
Cognitive mapping after unilateral temporal lobectomy. Goldstein LH, et al. **Neuropsychologia** 1989;27(2):167–77
Right hippocampal impairment in the recall of spatial location: encoding deficit or rapid forgetting? Smith ML, et al. **Neuropsychologia** 1989;27(1):71–81
Zygomaticotemporal approach to the basis cranii and basilar artery. Neil-Dwyer G, et al. **Neurosurgery** 1988 Jul; 23(1):20–2
Optic tract injury after anterior temporal lobectomy. Anderson DR, et al. **Ophthalmology** 1989 Jul;96(7):1065–70
Temporal lobectomy in epilepsy. A report of 2 cases. Ames FR, et al. **S Afr Med J** 1989 Feb 4;75(3):130–2
Supratentorial hemangioblastoma. Report of a case and review of the literature. Ferrante L, et al. **Zentralbl Neurochir** 1988;49(3):151–61 (69 ref.)
[Effects of extirpation of the piriform area on the ultrastructure of the adrenal cortex] López-Muñiz A, et al. **Bol Asoc Med P R** 1989 May;81(5):171–7 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Reproducible compartmentalization of individual chromosome domains in human CNS cells revealed by in situ hybridization and three-dimensional reconstruction. Manuelidis L, et al. **Chromosoma** 1988;96(6):397–410

TEMPORAL MUSCLE see under **MASTICATORY MUSCLES**

TEMPORARY THRESHOLD SHIFT, AUDITORY see **AUDITORY FATIGUE**

TEMPOROMANDIBULAR JOINT

Septic arthritis of the temporomandibular joint complicating otitis externa. Thomson HG. **J Laryngol Otol** 1989 Mar; 103(3):319–21
Persistent foramen of Huschke: possible risk factor for otologic complications after arthroscopy of the temporomandibular joint. Herzog S, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):267–70
Foreign body. Toranzo JM, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):227
Treating acute mandibular dislocation [letter] Scamahorn GF. **Postgrad Med** 1989 Sep 1;86(3):44
Temporomandibular joint imaging [published erratum appears in Radiology 1989 May;171(2):584] Katzberg RW. **Radiology** 1989 Feb;170(2):297–307 (64 ref.)
Upper airway obstruction in patients with rheumatoid arthritis and temporomandibular joint destruction. Redlund-Johnell I. **Scand J Rheumatol** 1988;17(4):273–9

ANATOMY & HISTOLOGY

Mathematical outline-analysis of eminence and fossa of the TMJ of Cercopithecus aethiops (Cercopithecidae, primates, Mammalia). Kubein-Meesenburg D, et al. **Anat Anz** 1989; 168(4):297–305
Gross anatomy of the craniomandibular joint and masticatory muscles of the dog. Ström D, et al. **Arch Oral Biol** 1988; 33(8):597–604
The anatomic relationship of the insertion of the superior lateral pterygoid muscle to the articular disc in the temporomandibular joint of human cadavers. Wilkinson T, et al. **Aust Dent J** 1989 Aug;34(4):315–22
Muscle attachments and TMJ [letter] **J Am Dent Assoc** 1988 Dec;117(7):808, 810, 812
Newly described muscle attachments to the anterior band of the articular disk of the temporomandibular joint. Myers LJ. **J Am Dent Assoc** 1988 Sep;117(3):437–9
Evaluating anatomical factors affecting endotracheal intubation. Rhee KJ, et al. **J Emerg Med** 1988 May-Jun; 6(3):209–11
An animal model for TMJ arthroscopy. Goss AN, et al. **J Oral Maxillofac Surg** 1989 May;47(5):537–8
Arthroscopy of the temporomandibular joint: an anatomic perspective. Greene MW, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):386–9 (14 ref.)
The relationship between the disk and the lateral pterygoid muscle in the human temporomandibular joint. Wilkinson TM. **J Prosthet Dent** 1988 Dec;60(6):715–24
Arthroscopy of the temporomandibular joint. Thomas M. **N Y State Dent J** 1988 Dec;54(10):25–7
Temporomandibular joint comparative imaging: diagnostic efficacy of arthroscopy compared to tomography and arthrography. Bibb CA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):352–9
A classification of temporomandibular joint disk morphology. Heffez L, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan; 67(1):11–9
Histologic features of the temporomandibular joint disk and posterior disk attachment: comparison of symptom-free persons with normally positioned disks and patients with internal derangement. Kurita K, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):635–43
Cryosectional observations of functional anatomy of the temporomandibular joint. Westesson PL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):247–51
The effect of partial rostral hemimandibulectomy on mandibular mobility and temporomandibular joint morphology in the dog. Umphlet RC, et al. **Vet Surg** 1988 Jul-Aug;17(4):186–93
[The condylar-meniscal complex] Pajoni D. **Orthod Fr** 1987; 58 Pt 2:501–5 (Eng. Abstr.) **(Fre)**
[Results of magnetic resonance tomography of the temporomandibular joint using optimized surface coils] Vogl T, et al. **ROFO** 1988 Nov;149(5):502–7 (Eng. Abstr.) **(Ger)**
[Tomographic study of space relations in the temporo-mandibular joint] Capurso U, et al. **Minerva Stomatol** 1988 Dec;37(12):965–73 (Eng. Abstr.) **(Ita)**

CYTOLOGY

Distribution of putative elastic fibers in rabbit temporomandibular joint tissues. O'Dell NL, et al. **Acta Anat (Basel)** 1989;135(3):239–44

DRUG EFFECTS

Reflex excitation of masticatory muscles induced by algesic chemicals applied to the temporomandibular joint of the cat. Broton JG, et al. **Arch Oral Biol** 1988;33(10):741–7

EMBRYOLOGY

Ontogeny of relationship of middle ear and temporomandibular (squamomandibular) joint in mammals. II. Morphology and ontogeny in insectivores. Smeele LE. **Acta Anat (Basel)** 1989;134(1):62–6

[Morphogenesis of the temporomandibular joint in the early stages of ontogeny] Panikarovskiĭ VV, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):16–9 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

The role of condylar cartilage in the development of the temporomandibular joint. Copray JC, et al. **Angle Orthod** 1988 Oct;58(4):369–80 (42 ref.)

A theoretical model of loading and eminence development of the postnatal human temporomandibular joint. Nickel JC, et al. **J Dent Res** 1988 Jun;67(6):903–10

Eminence development of the postnatal human temporomandibular joint. Nickel JC, et al. **J Dent Res** 1988 Jun;67(6):896–902

INJURIES

The diagnosis and treatment of the dislocated mandible. Luyk NH, et al. **Am J Emerg Med** 1989 May;7(3):329–35 (49 ref.)

Long–term results after childhood condylar fractures. A computer–tomographic study. Sahm G, et al. **Eur J Orthod** 1989 May;11(2):154–60

Modeling of jaw–head–neck dynamics during whiplash. Schneider K, et al. **J Dent Res** 1989 Sep;68(9):1360–5

Temporomandibular joint injuries. Schellhas KP. **Radiology** 1989 Oct;173(1):211–6

[Non–reducible meniscal luxation of the temporomandibular joint] Lerondeau JC, et al. **Rev Stomatol Chir Maxillofac** 1988;89(4):210–3 (Eng. Abstr.) (Fre)

[A retrospective clinical study of the fractures and luxations of the mandible in the cat] Battier B, et al. **Schweiz Arch Tierheilkd** 1989;131(2):77–80, 87–94 (Eng. Abstr.) (Fre)

[Success and failure in orthodontic treatment following temporomandibular condylar fractures] Sahm G. **Fortschr Kieferorthop** 1988 Dec;49(6):557–67 (Eng. Abstr.) (Ger)

[Traumatic pathology of the temporo–mandibular articulation. Clinical study of 55 cases] Mazzocchi A, et al. **Minerva Stomatol** 1989 Jan;38(1):89–96 (Eng. Abstr.) (Ita)

INNERVATION

Peptidergic innervation of the temporomandibular disk in the rat. Ichikawa H, et al. **Experientia** 1989 Mar 15; 45(3):303–4

METABOLISM

Histochemical and immunohistochemical studies on the articular disk of the temporomandibular joint in rats. Fujita S, et al. **Acta Anat (Basel)** 1989;134(1):26–30

Histological features and in–vitro proteoglycan synthesis in the rabbit craniomandibular joint disc. Mills DK, et al. **Arch Oral Biol** 1988;33(3):195–202

PATHOLOGY

Dual–surface–coil MR imaging of bilateral temporomandibular joints: improvements in the imaging protocol. Shellock FG, et al. **AJNR** 1989 May–Jun; 10(3):595–8

MR imaging of the temporomandibular joint: comparison of images of autopsy specimens made at 0.3 T and 1.5 T with anatomic cryosections. Hansson LG, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1241–4

Age–related changes in the temporomandibular joint of the senescence accelerated mouse. SAM–P/3 as a new murine model of degenerative joint disease. Chen WH, et al. **Am J Pathol** 1989 Aug;135(2):379–85

Morphologic alterations of the temporomandibular joint in a patient with Sotos' syndrome: report of a case. Harris AM, et al. **Ann Dent** 1988 Summer;47(1):20–2 (18 ref.)

Otologic complications following temporomandibular joint arthroscopy. Applebaum EL, et al. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):675–9

Internal derangements of the temporomandibular joint. Pathological variations. Wilkes CH. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):469–77

Dynamic magnetic resonance imaging of the temporomandibular joint using FLASH sequences. Conway WF, et al. **J Oral Maxillofac Surg** 1988 Nov; 46(11):930–8

The current status of TMJ arthroscopy [letter] Freedus M. **J Oral Maxillofac Surg** 1989 May;47(5):438

The relationship between condylar guidance and temporomandibular joint clicking. Alsawaf M, et al. **J Prosthet Dent** 1989 Mar;61(3):349–54

The temporomandibular joint: a comparison of clinical and arthroscopic findings. Holmlund A, et al. **J Prosthet Dent** 1989 Jul;62(1):61–5

The temporomandibular joint. Hasso AN, et al. **Radiol Clin North Am** 1989 Mar;27(2):301–14 (31 ref.)

Temporomandibular joint: morphology and signal intensity characteristics of the disk at MR imaging. Helms CA, et al. **Radiology** 1989 Sep;172(3):817–20

Temporomandibular joint: MR assessment of rotational and sideways disk displacements. Katzberg RW, et al. **Radiology** 1988 Dec;169(3):741–8

[Microscopic–anatomic changes of the temporomandibular joint structure in miniature swine due to unilateral occlusion disorders] Ulrici V, et al. **Anat Anz** 1988; 167(4):329–33 (Eng. Abstr.) (Ger)

[Effect of an experimentally–induced lateral occlusal disorder on cell proliferation in the condylar cartilage of the rat temporomandibular joint] Dannhauer KH, et al. **Zahn Mund Kieferheilkd** 1989;77(4):299–304 (Eng. Abstr.) (Ger)

[Gouty tophus of the temporomandibular joint] Suba Z, et al. **Fogorv Sz** 1989 Feb;82(2):33–6 (Eng. Abstr.) (Hun)

[Mode and site of bone remodelling in the glenoid cavity of the temporomandibular joint] Pastremoli A, et al. **Minerva Stomatol** 1988 Jun;37(6):435–9 (Eng. Abstr.) (Ita)

PHYSIOLOGY

Analysis of the open–closing movement of the human temporomandibular joint. Wu JB, et al. **Acta Anat (Basel)** 1988;133(3):213–6

The physiology of splint therapy: a literature review. Boero RP. **Angle Orthod** 1989 Fall;59(3):165–80 (84 ref.)

Organ culture providing an articulating function for the temporomandibular joint. Kantomaa T, et al. **J Anat** 1988 Dec;161:195–201

Sensitivity of temporomandibular joint force calculations to errors in muscle force measurements. Throckmorton GS. **J Biomech** 1989;22(5):455–68

The effects of cusp and jaw morphology on the forces on teeth and the temporomandibular joint. Katona TR. **J Oral Rehabil** 1989 Mar;16(2):211–9

Temporomandibular joint motion: efficacy of fast low–angle shot MR imaging. Conway WF, et al. **Radiology** 1989 Sep; 172(3):821–6

The relationship between condylar rotation and anterior translation in healthy and clicking temporomandibular joints. Merlini L, et al. **Schweiz Monatsschr Zahnmed** 1988; 98(11):1191–9

[The relationship of Christensen's phenomena to the structure of the temporomandibular joints] Parilov VV. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):49–50 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Long–term status of TMJ clicking in patients with myofascial pain and dysfunction [published erratum appears in J Am Dent Assoc 1988 Oct;117(5):558] Greene CS, et al. **J Am Dent Assoc** 1988 Sep;117(3):461–5

[Mandibular kinesiology and orthodontics] Li JX, et al. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):118–20 (16 ref.) (Chi)

[Remodeling of the temporomandibular joint and long–term results after conservative treatment of condylar fractures] Zou ZJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):193–6, 254 (Eng. Abstr.) (Chi)

[Functional study of the temporomandibular joint in new orthodontic cases using the hinge axis recorder] Jähnig A, et al. **Fortschr Kieferorthop** 1989 Apr;50(2):136–43 (Eng. Abstr.) (Ger)

[Joint and functional changes in the masticatory system in chronic rheumatoid arthritis in adults. Preliminary study] Capurso U. **Minerva Stomatol** 1989 Feb;38(2):173–80 (Eng. Abstr.) (Ita)

[Phonoarthrographic method of diagnosing diseases of the temporomandibular joint and a device for its performance] Persin LS, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct; 67(5):38–40 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Imaging the temporomandibular joint, 1989 [editorial] Thompson JR. **AJNR** 1989 Sep–Oct;10(5):1128

Radiographic changes of the temporomandibular joint after oblique sliding osteotomy of the mandibular rami. Petersson A, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):27–31

Judging the effects of the TMJ disc implants radiographically [letter] James RB. **J Oral Maxillofac Surg** 1988 Dec; 46(12):1032, 1119

Accuracy of the oblique lateral transcranial projection, lateral tomography, and x–ray stereometry in evaluation of mandibular condyle displacement. Rosenquist B, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):862–7

The effect of increasing occlusal vertical dimension on transcranial radiographic projections of the temporomandibular joints. Gross MD. **J Prosthet Dent** 1988 Oct;60(4):491–9

Direct coronal high resolution computed tomography of the temporomandibular joints in patients with rheumatoid arthritis. Avrahami E, et al. **J Rheumatol** 1989 Mar; 16(3):298–301

Panoramic radiography for temporomandibular joint arthrography: a description of arthropanoramograms. Abramovitch K, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):775–80

Temporomandibular joint arthrography: a comparison between a fluoroscopic and a nonfluoroscopic technique. Benson BW, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):600–5 (48 ref.)

Computed tomographic evaluation of the density of the temporomandibular joint meniscus. Paz ME, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):519–24

Arthrographic and clinical characteristics patients with disk displacement who progressed to closed lock during a 6–month period. Westesson PL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):654–7

[Investigations on internal derangement of the temporomandibular joint by direct sagittal CT scanning] Ying SX. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb; 23(1):8–10 (Eng. Abstr.) (Chi)

[Comprehensive studies on occlusion, electromyography and radiography in cases with temporomandibular sounds] Liu ZJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Sep; 23(5):276–8, 319 (Eng. Abstr.) (Chi)

[The CT scanner and the temporomandibular joint. Anatomo–radiologic comparisons. Apropos of 14 cases of algodysfunctional of the manducator system] Vanneroy F, et al. **J Radiol** 1989 Feb;70(2):127–32 (Eng. Abstr.) (Fre)

[The scanner and the temporomandibular joint; anatomic–radiologic comparisons. Apropos of 26 cases of masticatory apparatus pain–dysfunction syndrome] Vanneroy F, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(4):231–5 (Eng. Abstr.) (Fre)

[A radiologic technic for the temporomandibular joint] Inoue N, et al. **Rinsho Hoshasen** 1988 Jun;33(6):735–8 (Jpn)

[Diplotomography of the temporomandibular joint] Nespriad'ko VI, et al. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):74–7 (Eng. Abstr.) (Rus)

SURGERY

Silicone–induced foreign–body reaction after temporomandibular joint arthroplasty. Case report. Acton C, et al. **Aust Dent J** 1989 Jun;34(3):228–32

Transplantation of cryogenically preserved mandibular condyles in the adult and juvenile goat. Bifano CA, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A76–80

A 30–year follow–up study of temporomandibular joint meniscectomies: a report on five patients. Tolvanen M, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):311–6

Replacement of the interarticular disc of the craniomandibular joint with fresh autogenous sternal or auricular cartilage. An experimental study in guinea pigs. Ioannides C, et al. **J Craniomaxillofac Surg** 1988 Nov; 16(8):343–9

Lyophilized auricular cartilage as a replacement for the interarticular disc of the craniomandibular joint. An experimental study in guinea pigs. Ioannides C, et al. **J Craniomaxillofac Surg** 1988 Oct;16(7):295–300

Replacement of the damaged interarticular disc of the TMJ. Ioannides C, et al. **J Craniomaxillofac Surg** 1988 Aug; 16(6):273–8 (42 ref.)

Comparison between CO2 microsurgical laser and conventional meniscectomies in sheep: a preliminary report. Bavitz JB, et al. **J Oral Maxillofac Surg** 1989 Apr; 47(4):383–5

Brachial plexus injury occurring during oral and maxillofacial surgery: a case report. Berwick JE, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):643–5

Use of bone plates to manage chronic mandibular dislocation: report of cases. Buckley MJ, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):998–1003

Surgical repair of defects in the rabbit temporomandibular joint disc: a comparison of various techniques. Eppley BL, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):587–95

Use of cross–linked bovine pericardium as a disc replacement in the rabbit temporomandibular joint. Gibeault JD, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):828–33

Arthroscopic surgery of the temporomandibular joint: report of 64 patients with long–term follow–up. Indresano AT. **J Oral Maxillofac Surg** 1989 May;47(5):439–41

Technique for placement of a discal traction suture during temporomandibular joint arthroscopy. Israel HA. **J Oral Maxillofac Surg** 1989 Mar;47(3):311–3

Healing following condylar shave in the monkey temporomandibular joint. Marciani RD, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1071–6

A technique of fixation of costochondral grafts for reconstruction of the temporomandibular joint. Mosby EL, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):209–11

The effect of arthroscopic surgical lysis and lavage of the superior joint space on TMJ disc position and mobility. Moses JJ, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):674–8

Open reduction of the dislocated, fractured condylar process: indications and surgical procedures. Raveh J, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):120–7

Temporomandibular joint retractors. Thomson ER. **J Oral Maxillofac Surg** 1989 Jan;47(1):98

The effects of continuous passive motion on the temporomandibular joint after surgery. Part I. Appliance design and fabrication. Poremba EP, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):490–8 (41 ref.)

The effects of continuous passive motion on the temporomandibular joint after surgery. Part II. Appliance improvement, normal subject evaluation, pilot clinical trial. Sebastian MH, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):644–53 (9 ref.)

[The pterygo–maxillary junction: its surgical implications] Leyder P, et al. **Ann Chir Plast Esthet** 1988;33(2):147–57 (Eng. Abstr.) (Fre)

[Repositioning of the mandibular condyle after intervention for surgical remodeling] Cascone P, et al. **Minerva Stomatol** 1988 Oct;37(10):779–88 (Eng. Abstr.) **(Ita)**

ULTRASTRUCTURE

Light and electron microscopic evaluation of Proplast II TMJ disc implants. Valentine JD Jr, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):689–96

[Scanning electron microscopy of the temporomandibular joint disk] Pi X. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):150–1, 191 (Eng. Abstr.) **(Chi)**

[The surface topography and ultrastructure of the human TMJ, a SEM and TEM study] You ZH. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):46–8, 63 (Eng. Abstr.) **(Chi)**

TEMPOROMANDIBULAR JOINT DISEASES

Taking the mystique out of the diagnosis and treatment of craniomandibular (TMJ) disorders. Gelb H, et al. **Int Dent J** 1989 Jun;39(2):129–39 (31 ref.)

The tower of Babel [editorial] Laskin DM. **J Oral Maxillofac Surg** 1989 Aug;47(8):779

Temporomandibular joint disorders. Mosby EL. **Mo Med** 1986 Feb;83(2):89–92

[The Temporomandibular Joint Diseases Unit of the Villeneuve-Saint-Georges Hospital Center] Scheffer P, et al. **Rev Stomatol Chir Maxillofac** 1988;89(3):181–3 (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

A cortisone–wrecked and bony ankylosed temporomandibular joint [letter] Aggarwal S, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1084–5

CLASSIFICATION

An empirical taxometric alternative to traditional classification of temporomandibular disorders. Rudy TE, et al. **Pain** 1989 Mar;36(3):311–20

COMPLICATIONS

Facial pain, headache, and temporomandibular joint inflammation. Schellhas KP, et al. **Headache** 1989 Apr; 29(4):229–32

The prevalence of dental attrition and its association with factors of age, gender, occlusion, and TMJ symptomatology. Seligman DA, et al. **J Dent Res** 1988 Oct;67(10):1323–33 (71 ref.)

Synovial chondromatosis associated with experimental osteoarthritis in adult monkeys. Helmy ES, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):823–7

Malocclusion and its association with clinical signs of craniomandibular disorder in 5–, 10– and 15–year old children in Finland. Jämsä T, et al. **Proc Finn Dent Soc** 1988;84(4):235–40

[Temporomandibular joint dysfunction and neurofibromatosis. Apropos of a case] Pasturel A, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):17–9 (Eng. Abstr.) **(Fre)**

CONGENITAL

[A case of true congenital temporo–mandibular ankylosis] Losapio PL, et al. **Minerva Stomatol** 1989 May;38(5):505–8 (13 ref.) (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Dual–surface–coil MR imaging of bilateral temporomandibular joints: improvements in the imaging protocol. Shellock FG, et al. **AJNR** 1989 May–Jun; 10(3):595–8

Current status of temporomandibular joint imaging for the diagnosis of internal derangements. Kaplan PA, et al. **AJR** 1989 Apr;152(4):697–705 (58 ref.)

Temporomandibular joint inflammation: comparison of MR fast scanning with T1– and T2–weighted imaging techniques. Schellhas KP, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):93–8

Association of symptoms and signs of TM disorders in an adult population. Locker D, et al. **Community Dent Oral Epidemiol** 1989 Jun;17(3):150–3

TMJ testing [letter] Levitt SR. **J Am Dent Assoc** 1989 Jan; 118(1):10, 12

Clinical vs. arthrographic diagnosis of TMJ internal derangement. Anderson GC, et al. **J Dent Res** 1989 May; 68(5):826–9

Magnetic resonance imaging of partial temporomandibular joint disc displacement. Kerstens HC, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):25–9

Getting your diagnosis out of joint [editorial] Laskin DM. **J Oral Maxillofac Surg** 1989 Feb;47(2):111

Standardization of diagnostic criteria for temporomandibular joint disorders [letter] Schwartz HC. **J Oral Maxillofac Surg** 1989 Aug;47(8):891

Temporomandibular joint comparative imaging: diagnostic efficacy of arthroscopy compared to tomography and arthrography. Bibb CA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):352–9

Arthroscopic diagnosis of perforation and adhesions of the temporomandibular joint: correlation with postmortem morphology. Kurita K, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):130–4

Temporomandibular joint: morphology and signal intensity characteristics of the disk at MR imaging. Helms CA, et al. **Radiology** 1989 Sep;172(3):817–20

[Results of magnetic resonance tomography of the temporomandibular joint using optimized surface coils] Vogl T, et al. **ROFO** 1988 Nov;149(5):502–7 (Eng. Abstr.) **(Ger)**

[Phonoarthrographic method of diagnosing diseases of the temporomandibular joint and a device for its performance] Persin LS, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct; 67(5):38–40 (Eng. Abstr.) **(Rus)**

[Thermography in the complex examination of patients with temporomandibular joint diseases] Sukharev MF, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):48–50 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Prevalence of symptoms associated with temporomandibular disorders in a Canadian population. Locker D, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):310–3

ETIOLOGY

Orthodontics, condylar position, and TMJ status. Gianelly AA. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):521–3

In re: Orthodontics/TMJ [letter] Nemeth RB. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):25A

The prevalence of temporomandibular joint dysfunction among patients wearing complete dentures. Zissis AJ, et al. **Aust Dent J** 1988 Aug;33(4):299–302

TMJ disorders [letter] MacIntyre–Smith R. **Aust Fam Physician** 1988 Aug;17(8):623–4

Extractions and TMJ [letter] Lindquist JT. **J Am Dent Assoc** 1988 Oct;117(5):556

Osteoarthrosis of the temporomandibular joint following experimental disc perforation in Macaca fascicularis. Helmy E, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):979–90

Osteoarthrosis as the cause of craniomandibular pain and dysfunction: a unifying concept. Stegenga B, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):249–56 (54 ref.)

The recognition of craniomandibular disorders; condylar symmetry in relation to myogenous and arthrogenous origin of pain. Bezuur JN, et al. **J Oral Rehabil** 1989 May; 16(3):257–60

[Myo–arthropathies of the face and ear] Slavicek R. **Arch Otorhinolaryngol Suppl** 1988;2:10–7 (42 ref.) **(Ger)**

[Clinical and epidemiologic study on the correlation of chronic rheumatoid arthritis in adults and stomatognathic dysfunction] Capurso U, et al. **Medicina (Firenze)** 1989 Jan–Mar;9(1):65–8 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Age–related changes in the temporomandibular joint of the senescence accelerated mouse. SAM–P/3 as a new murine model of degenerative joint disease. Chen WH, et al. **Am J Pathol** 1989 Aug;135(2):379–85

Ganglion of the temporomandibular joint. Case report and literature survey. el–Massry MA, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):67–70 (9 ref.)

Synovial chondromatosis of the temporomandibular joint. Von Arx DP, et al. **Br J Oral Maxillofac Surg** 1988 Aug; 26(4):297–305 (38 ref.)

Synovial chondromatosis of the temporomandibular joint. Report of a case and review of the literature. Forssell K, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):237–41 (49 ref.)

Synovial chondromatosis of the temporomandibular joint. Jian XC, et al. **Int J Oral Maxillofac Surg** 1988 Oct; 17(5):307–9

Synovial chondromatosis of the temporomandibular joint. Review of the literature and case report. Lustmann J, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):90–4 (43 ref.)

Malignant paraganglioma. Report of a case and review of the Japanese literature. Tashiro M, et al. **J Craniomaxillofac Surg** 1988 Oct;16(7):324–9 (24 ref.)

Degenerative changes in the temporomandibular joint in two Australian aboriginal populations. Richards LC. **J Dent Res** 1988 Dec;67(12):1529–33

Synovial chondromatosis of the temporomandibular joint diagnosed by magnetic resonance imaging: report of a case. Dolan EA, et al. **J Oral Maxillofac Surg** 1989 Apr; 47(4):411–3

Correlation of clinical, radiographic, and arthroscopic findings in internal derangements of the TMJ. McCain JP, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):913–21

Chronic preauricular swelling [clinical conference] Orden A, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):390–7

Light and electron microscopic evaluation of Proplast II TMJ disc implants. Valentine JD Jr, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):689–96

Spontaneous temporomandibular joint arthropathy in MRL–lpr/lpr mice. Haraldson T, et al. **J Oral Pathol** 1988 Sep;17(8):386–9

A comparison of protrusive interocclusal records to pantographic tracings. Curtis DA. **J Prosthet Dent** 1989 Aug;62(2):154–6

The temporomandibular joint: a comparison of clinical and arthroscopic findings. Holmlund A, et al. **J Prosthet Dent** 1989 Jul;62(1):61–5

Relationship between clinical and radiologic findings of the temporomandibular joint in rheumatoid arthritis. Akerman S, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec; 66(6):639–43

Synovial chondromatosis of the temporomandibular joint: a light and electron microscopic study. de Bont LG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):593–8

Histologic features of the temporomandibular joint disk and posterior disk attachment: comparison of symptom–free persons with normally positioned disks and patients with internal derangement. Kurita K, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):635–43

Sideways position of the temporomandibular joint disk: coronal cryosectioning of fresh autopsy specimens. Liedberg J, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):644–9

Ganglions of the temporomandibular joint [letter] **Plast Reconstr Surg** 1989 Mar;83(3):574

[Microscopic–anatomic changes of the temporomandibular joint structure in miniature swine due to unilateral occlusion disorders] Ulrici V, et al. **Anat Anz** 1988; 167(4):329–33 (Eng. Abstr.) **(Ger)**

[Structural aspects of degenerative disease of the temporomandibular articulation] Cardesi E, et al. **Minerva Stomatol** 1989 Mar;38(3):299–306 (21 ref.) (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

The relationship between temporomandibular joint sounds and malocclusion. Runge ME, et al. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):36–42

The relationship between condylar guidance and temporomandibular joint clicking. Alsawaf M, et al. **J Prosthet Dent** 1989 Mar;61(3):349–54

A preliminary study of the effects of tooth guidance on working–side condylar movement. Coffey JP, et al. **J Prosthet Dent** 1989 Aug;62(2):157–62

Subjective symptoms in patients with temporomandibular joint disk displacement versus patients with myogenic craniomandibular disorders. Isacsson G, et al. **J Prosthet Dent** 1989 Jan;61(1):70–7

The relationship between condylar rotation and anterior translation in healthy and clicking temporomandibular joints. Merlini L, et al. **Schweiz Monatsschr Zahnmed** 1988; 98(11):1191–9

[Occlusal planning according to classical gnathology] Galasso L, et al. **Minerva Stomatol** 1989 Jun;38(6):593–604 (Eng. Abstr.) **(Ita)**

PREVENTION & CONTROL

Preventing adverse effects on the temporomandibular joint through orthodontic treatment. Wyatt WE. **Int J Orthod** 1988 Fall–Winter;26(3–4):10–2

PSYCHOLOGY

Dentists' ability to detect psychological problems in patients with temporomandibular disorders and chronic pain. Oakley ME, et al. **J Am Dent Assoc** 1989 Jun;118(6):727–30

A simplified psychologic questionnaire as a treatment planning aid for patients with temporomandibular joint disorders. Gale EN, et al. **J Prosthet Dent** 1989 Feb; 61(2):235–8

RADIOGRAPHY

Three–dimensional radiographic evaluation of condyle poles in "closed–lock" syndrome. Nadler GL. **Angle Orthod** 1988 Oct;58(4):357–68

The radiographic and surgical evaluation of meniscal dysfunction of the temporomandibular joint. Greenwood RE. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):156–62

Synovial chondromatosis of the temporomandibular joint with intracranial extension. Case report. Daspit CP, et al. **J Neurosurg** 1989 Jan;70(1):121–3

Arthrographic findings in the temporomandibular joint in patients with rheumatic disease. Larheim TA, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):780–4

Direct coronal high resolution computed tomography of the temporomandibular joints in patients with rheumatoid arthritis. Avrahami E, et al. **J Rheumatol** 1989 Mar; 16(3):298–301

Condylar position as a predictor of temporomandibular joint internal derangement. Brand JW, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):469–76

The effects of temporomandibular joint internal derangement and degenerative joint disease on tomographic and arthrotomographic images. Brand JW, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):220–3

Rheumatoid arthritis of the temporomandibular joint: radiologic evaluation based on standard reference films. Rohlin M, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):594–9

Arthrographic and clinical characteristics patients with disk displacement who progressed to closed lock during a 6–month period. Westesson PL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):654–7

RADIOTHERAPY

Infrared laser in the treatment of craniomandibular disorders,

arthrogenous pain. Hansson TL. **J Prosthet Dent** 1989 May; 61(5):614–7

REHABILITATION

Clinical evaluation of physical therapy in the management of internal derangement of the temporomandibular joint. Kirk WS Jr, et al. **J Oral Maxillofac Surg** 1989 Feb; 47(2):113–9

[Appliance possibilities in the rehabilitation of restricted habitual mandibular movements] Jeckel N, et al. **Fortschr Kieferorthop** 1988 Aug;49(4):331–41 (Eng. Abstr.) (Ger)

SURGERY

Vascular metatarsophalangeal to ankylosed temporomandibular joint replacement. Ting ZS, et al. **Ann Plast Surg** 1985 Dec;15(6):497–500

Temporomandibular joint arthroscopic surgery [news] Hunsaker D. **Arch Otolaryngol Head Neck Surg** 1989 Sep; 115(9):1025, 1027

A 30-year follow-up study of temporomandibular joint meniscectomies: a report on five patients. Tolvanen M, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):311–6

Chondrosarcoma of the temporomandibular joint: case report. Morris MR, et al. **Head Neck Surg** 1987 Nov–Dec; 10(2):113–7

Temporomandibular joint evaluation and reconstruction. Knapp J, et al. **IMJ** 1988 Dec;174(6):339–44

Articular eminectomy for long-standing luxation of the mandible. Report of 2 cases. Mizuno A, et al. **Int J Oral Maxillofac Surg** 1988 Oct;17(5):303–6

Facial growth after treatment of unilateral temporomandibular joint ankylosis in childhood without growth centre transplantation. A serial cephalomorphometric study. Farmand M, et al. **J Craniomaxillofac Surg** 1989 Aug;17(6):260–70

Modified rhytidectomy approach for total temporomandibular joint reconstruction: a case report. Block MS, et al. **J Oral Maxillofac Surg** 1989 Feb; 47(2):187–90

Free grafting of traumatically displaced or resected mandibular condyles. Boyne PJ. **J Oral Maxillofac Surg** 1989 Mar;47(3):228–32

The use of a pedicled temporalis muscle–pericranial flap for replacement of the TMJ disc: preliminary report. Feinberg SE, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):142–6

Local subcutaneous atrophy following arthroscopy of the TMJ. Goldberg JS, et al. **J Oral Maxillofac Surg** 1989 Sep; 47(9):986–7

Survey of TMJ arthroscopy in oral and maxillofacial surgery residency programs. Greene MW, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):574–6

Arthroscopic surgery of the temporomandibular joint: report of 64 patients with long-term follow-up. Indresano AT. **J Oral Maxillofac Surg** 1989 May;47(5):439–41

Patient response to temporomandibular joint arthroscopy: preliminary findings in 24 patients. Israel HA, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):570–3

Eminectomy and discoplasty for correction of the displaced temporomandibular joint disc. Kerstens HC, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):150–4

An assessment for auriculotemporal syndrome following temporomandibular joint surgery through the preauricular approach. Kryshtalskyj B, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):3–6

Reconstruction of the mandibular condyle using ramus osteotomies: a preliminary report. Markowitz NR, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):367–77 (82 ref.)

The autogenous dermal graft in temporomandibular joint disc surgery. Meyer RA. **J Oral Maxillofac Surg** 1988 Nov; 46(11):948–54 (51 ref.)

TMJ arthroscopic surgery: an analysis of 237 patients. Moses JJ, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):790–4

The effect of arthroscopic surgical lysis and lavage of the superior joint space on TMJ disc position and mobility. Moses JJ, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):674–8

Management of internal maxillary artery hemorrhage from temporomandibular joint surgery via selective embolization. Peoples JR 3d, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):1005–7

Temporomandibular joint ankylosis: surgical treatment and long-term results. Raveh J, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):900–6

Arthroscopic treatment of anterior disc displacement: a preliminary report. Tarro AW. **J Oral Maxillofac Surg** 1989 Apr;47(4):353–8

Temporomandibular joint disorders: discussion of a rational approach to surgery and a retrospective analysis of surgeries performed. Lessin ME, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):374–8 (21 ref.)

Trends in temporomandibular joint surgery: economic implications and complications. Sabol SR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):256–8

Carotid thrombosis following surgical release of temporomandibular ankylosis. Sullivan WG, et al. **Plast Reconstr Surg** 1989 Jan;83(1):153–4

[Review of the functional surgical pathology of the temporomandibular joint] Bourdon C, et al. **Acta Stomatol Belg** 1988 Sep;85(3):173–7 (Fre)

[Conservative attitude in surgery of the temporomandibular joint. Indications and technics] Lemaitre A, et al. **Acta Stomatol Belg** 1988 Sep;85(3):165–71 (Fre)

[The role of costochondral grafts in the treatment of ankylosis of the maxillary joint] Politis C, et al. **Rev Belge Med Dent** 1987;42(6):172–8 (67 ref.) (Fre)

[A method of correcting ankylosis of the temporomandibular joint using an isolated muscle flap] Sheinman VIu, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):74–5 (Rus)

THERAPY

Dislocated jaw [letter] Tuffley M. **Aust Fam Physician** 1989 Apr;18(4):421

The orthodontist in the team–treatment for children with rheumatoid arthritis. Grosfeld O. **Eur J Orthod** 1989 May; 11(2):120–4

Long–term treatment of disk–interference disorders of the temporomandibular joint with anterior repositioning occlusal splints. Okeson JP. **J Prosthet Dent** 1988 Nov; 60(5):611–6

The need for integrating TMJ therapy with implant prosthodontic cases. Fagan MI 3d. **N Y State Dent J** 1989 Apr;55(4):29–32

Long–term follow–up after occlusal treatment to correct abnormal temporomandibular joint disk position. Lundh H, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan; 67(1):2–10

Disk–repositioning onlays in the treatment of temporomandibular joint disk displacement: comparison with a flat occlusal splint and with no treatment. Lundh H, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug; 66(2):155–62

Temporomandibular joint disk displacement: arthrographic and tomographic follow–up after 6 months' treatment with disk–repositioning onlays. Westesson PL, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):271–8

[Current principles of mobilization of the temporomandibular joint. Practical applications] Hofmann B. **Rev Stomatol Chir Maxillofac** 1988;89(6):365–9 (Eng. Abstr.) (Fre)

[Use of distraction plates in the pathology of the temporo–mandibular articulation] Fraccari F, et al. **Minerva Stomatol** 1989 Mar;38(3):345–51 (Eng. Abstr.) (Ita)

VETERINARY

Mandibular condylectomy in a horse. Patterson LJ, et al. **J Am Vet Med Assoc** 1989 Jul 1;195(1):101–2

TEMPOROMANDIBULAR JOINT SYNDROME

The TMJ syndrome. Is it a reasonable diagnostic term? Kirk WS Jr. **N C Med J** 1988 Nov;49(11):574–8 (24 ref.)

On TMJ [letter] Himmelfarb R. **N Y State Dent J** 1988 Oct; 54(8):10

[Dysfunction of the temporomandibular joint] Kocsik I, et al. **Med Pregl** 1988;41(11–12):500–2 (Eng. Abstr.) (Ser)

COMPLICATIONS

Association of functional state of stomatognathic system with mobility of cervical spine and neck muscle tenderness. Kirveskari P, et al. **Acta Odontol Scand** 1988 Oct; 46(5):281–6

Vitamin status of inpatients with chronic cephalgia and dysfunction pain syndrome and effects of a vitamin supplementation. Mäder R, et al. **Int J Vitam Nutr Res** 1988;58(4):436–41

Facial expressions of pain and emotions in chronic TMD patients. LeResche L, et al. **Pain** 1988 Oct;35(1):71–8

[Clinical lessons: various toothaches] Willemsen WL. **Rev Belge Med Dent** 1988;43(1):72–8 (Fre)

DIAGNOSIS

Discriminant function analysis of clinical and psychological variables in temporomandibular joint pain dysfunction. Gerke DC, et al. **Aust Dent J** 1989 Feb;34(1):44–8

Magnetic resonance imaging in the investigation of temporo–mandibular joint disorders. Morse MH. **Bristol Med Chir J** 1988 May;103(2):21–2

TOS = TMJ: true or false? Nelson DA. **Del Med J** 1989 Jul;61(7):339–40 (14 ref.)

Metastatic carcinoma of the mandibular condyle presenting as temporomandibular joint syndrome. Rubin MM, et al. **J Oral Maxillofac Surg** 1989 May;47(5):507–10

Value of EMG analysis of mandibular elevators in open–close–clench cycle to diagnosing TMJ disturbance syndrome. Chong–Shan S, et al. **J Oral Rehabil** 1989 Jan; 16(1):101–7

Signs and symptoms of mandibular dysfunction in shortened dental arches. Witter DJ, et al. **J Oral Rehabil** 1988 Sep; 15(5):413–20 (28 ref.)

An evaluation of ther criteria used to diagnose mandibular dysfunction with the mandibular kinesiograph [letter] Cooper BC. **J Prosthet Dent** 1989 Mar;61(3):388–91

An evaluation of the criteria used to diagnose mandibular dysfunction with the mandibular kinesiograph. Feine JS, et al. **J Prosthet Dent** 1988 Sep;60(3):374–80

An evaluation of the criteria used to diagnose mandibular dysfunction with the mandibular kinesiograph [letter] Meyer NJ. **J Prosthet Dent** 1989 Mar;61(3):386

Bursitis: a factor in the differential diagnosis of orofacial neuralgias and myofascial pain dysfunction syndrome. Salins PC, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):154–7

Temporomandibular joint motion: efficacy of fast low–angle shot MR imaging. Conway WF, et al. **Radiology** 1989 Sep; 172(3):821–6

Temporomandibular joint: morphology and signal intensity characteristics of the disk at MR imaging. Helms CA, et al. **Radiology** 1989 Sep;172(3):817–20

Symptoms and signs of mandibular dysfunction in primary fibromyalgia syndrome (PSF) patients. Eriksson PO, et al. **Swed Dent J** 1988;12(4):141–9

[Temporomandibular joint dysfunction syndrome: a study of magnetic resonance imaging diagnoses and fluoroscopy] Ma XC. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):321–3, 384 (Eng. Abstr.) (Chi)

DRUG THERAPY

The effect of L–tryptophan supplementation and dietary instruction on chronic myofascial pain. Stockstill JW, et al. **J Am Dent Assoc** 1989 Apr;118(4):457–60

[Evaluation of the efficacy and tolerability of nimesulide in various odonto–stomatologic pathologies] Monaci D, et al. **Minerva Stomatol** 1988 Apr;37(4):291–4 (Eng. Abstr.) (Ita)

EPIDEMIOLOGY

The occurrence of craniomandibular symptoms in healthy young adults with and without prior orthodontic treatment. Loft GH, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep; 96(3):264–5

Prevalence of craniomandibular dysfunction in white children with different emotional states. Part II. Not–calm group. Vanderas AP. **ASDC J Dent Child** 1989 Sep–Oct; 56(5):348–52

Prevalence, interrelation, and severity of signs of dysfunction from masticatory system in 14–16–year–old Danish children. Nielsen L, et al. **Community Dent Oral Epidemiol** 1989 Apr;17(2):91–6

Prevalence of TMJ symptoms and X–ray findings. Dibbets JM, et al. **Eur J Orthod** 1989 Feb;11(1):31–6

Temporomandibular joint symptoms in orthognathic surgery. Kerstens HC, et al. **J Craniomaxillofac Surg** 1989 Jul; 17(5):215–8

Prevalence of signs and symptoms of mandibular dysfunction among adults aged 25, 35, 50 and 65 years in Ostrobothnia, Finland. Tervonen T, et al. **J Oral Rehabil** 1988 Sep; 15(5):455–63

ETIOLOGY

Systemic joint laxity (the hypermobile joint syndrome) is associated with temporomandibular joint dysfunction. Harinstein D, et al. **Arthritis Rheum** 1988 Oct; 31(10):1259–64

Calm group. Prevalence of craniomandibular dysfunction in white children with different emotional states. Vanderas AP. **ASDC J Dent Child** 1988 Nov–Dec;55(6):441–8

Post–orthodontic occlusal function. Smith A, et al. **Aust Dent J** 1989 Aug;34(4):301–9

'Audit—a cause for TMJ dysfunction' [letter] **Br Dent J** 1989 Jun 10;166(11):397

Myofascial pain dysfunction and viola playing. Bryant GW. **Br Dent J** 1989 May 6;166(9):335–6

Hemifacial atrophy and temporomandibular joint pain–dysfunction syndrome. Talacko AA, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):224–6

Do occlusal factors play a part in temporomandibular dysfunction? Wassell RW. **J Dent** 1989 Jun;17(3):101–10 (94 ref.)

Stress in patients with pain in the muscles of mastication and the temporomandibular joints. Lundeen TF, et al. **J Oral Rehabil** 1988 Nov;15(6):631–7

Association between craniomandibular disorders and occlusal interferences. Kirveskari P, et al. **J Prosthet Dent** 1989 Jul; 62(1):66–9

Temporomandibular joint syndrome. Solberg WK. **Semin Neurol** 1988 Dec;8(4):291–7 (34 ref.)

[Temporomandibular joint dysfunction and neurofibromatosis. Apropos of a case] Pasturel A, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):17–9 (Eng. Abstr.) (Fre)

[Pathogenesis of temporomandibular dysfunction. II. Statistical method] Vágó P. **Fogorv Sz** 1989 Aug; 82(8):237–41 (Eng. Abstr.) (Hun)

[Pathogenesis of temporomandibular joint dysfunction. I. Cross sectional study] Vágó P. **Fogorv Sz** 1989 Jul; 82(7):203–6 (Eng. Abstr.) (Hun)

PATHOLOGY

Internal derangements of the temporomandibular joint. Pathological variations. Wilkes CH. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):469–77

Dynamic magnetic resonance imaging of the temporomandibular joint using FLASH sequences. Conway WF, et al. **J Oral Maxillofac Surg** 1988 Nov; 46(11):930–8

The recognition of craniomandibular disorders—a comparison between clinical, tomographical, and dental panoramic radiographical findings in thirty–one subjects.

Bezuur JN, et al. **J Oral Rehabil** 1988 Nov;15(6):549–54

PHYSIOPATHOLOGY

Long–term status of TMJ clicking [letter] **J Am Dent Assoc** 1989 Jan;118(1):12, 14

Long–term status of TMJ clicking in patients with myofascial pain and dysfunction [published erratum appears in J Am Dent Assoc 1988 Oct;117(5):558] Greene CS, et al. **J Am Dent Assoc** 1988 Sep;117(3):461–5

Electromyographic studies of craniomandibular disorders: a review of the literature. Dahlström L. **J Oral Rehabil** 1989 Jan;16(1):1–20 (72 ref.)

The silent period in the masseter and the anterior temporalis muscles in adult patients with mild or moderate mandibular dysfunction symptoms. Zulqarnain BJ, et al. **J Oral Rehabil** 1989 Mar;16(2):127–37

Bite force duration: a diagnostic procedure for mandibular dysfunction. Choy E, et al. **J Prosthet Dent** 1988 Sep; 60(3):365–8

Subjective symptoms in patients with temporomandibular joint disk displacement versus patients with myogenic craniomandibular disorders. Isacsson G, et al. **J Prosthet Dent** 1989 Jan;61(1):70–7

A comparative electromyographic study of the lateral pterygoid muscle and arthrography in patients with temporomandibular joint disturbance syndrome sounds. Liu ZJ, et al. **J Prosthet Dent** 1989 Aug;62(2):229–33

Habitual mastication in dysfunction: a computer–based analysis. Mongini F, et al. **J Prosthet Dent** 1989 Apr; 61(4):484–94

Temporomandibular joint noises in infants review of the literature and report of cases. Razook SJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):658–64 (54 ref.)

Heterogeneity of patients with craniomandibular disorders. A longitudinal study. Wedel A. **Swed Dent J Suppl** 1988; 55:1–51

[Nature of masticatory muscle damage in patient with temporomandibular joint dysfunction syndrome] Fang DF. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):92–5 **(Chi)**

[Comprehensive studies on occlusion, electromyography and radiography in cases with temporomandibular sounds] Liu ZJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Sep; 23(5):276–8, 319 (Eng. Abstr.) **(Chi)**

[Electromyographic evaluation of silent periods in the elevator muscles of the mandible in dysfunctional pathology of the temporo–mandibular joint] Bonanini M, et al. **Minerva Stomatol** 1989 Feb;38(2):151–9 (65 ref.) (Eng. Abstr.) **(Ita)**

[Electromyographic evaluation of muscular tension in dysfunctional subjects in relation to normal subjects] Scotti R, et al. **Minerva Stomatol** 1989 Feb;38(2):205–10 (Eng. Abstr.) **(Ita)**

PREVENTION & CONTROL

Effect of elimination of occlusal interferences on signs and symptoms of craniomandibular disorder in young adults. Kirveskari P, et al. **J Oral Rehabil** 1989 Jan;16(1):21–6

PSYCHOLOGY

The effect of public or private management on patients with temporomandibular joint pain dysfunction. Gerke DC, et al. **Aust Dent J** 1989 Aug;34(4):310–4

Psychiatric referral for craniomandibular pain patients. Lapeer GL. **Can Dent Assoc J** 1989 Apr;55(4):315–7

Role of psychologic and social variables in TMJ pain dysfunction syndrome (PDS) symptoms. van der Laan GJ, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):274–7

Candidate risk factors for temporomandibular pain and dysfunction syndrome: psychosocial, health behavior, physical illness and injury. Marbach JJ, et al. **Pain** 1988 Aug;34(2):139–51

RADIOGRAPHY

The Orthopantomogram, an aid in diagnosis of temporomandibular joint problems. II. The vertical symmetry. Habets LL, et al. **J Oral Rehabil** 1988 Sep; 15(5):465–71

[The CT scanner and the temporomandibular joint. Anatomo–radiologic comparisons. Apropos of 14 cases of algodysfunctional of the manducator system] Vanneroy F, et al. **J Radiol** 1989 Feb;70(2):127–32 (Eng. Abstr.) **(Fre)**

[The scanner and the temporomandibular joint; anatomic–radiologic comparisons. Apropos of 26 cases of masticatory apparatus pain–dysfunction syndrome] Vanneroy F, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(4):231–5 (Eng. Abstr.) **(Fre)**

REHABILITATION

TMJ dysfunction [letter] Gerrard B. **Aust Fam Physician** 1988 Oct;17(10):838

Isometric exercises and a simple appliance for temporomandibular joint dysfunction: a case report. Santiesteban AJ. **Phys Ther** 1989 Jun;69(6):463–6

SURGERY

Taking the bite out of TMJ syndrome. Vallerand AH, et al. **Am J Nurs** 1989 May;89(5):688–90

A parotid fistula and sialocele complicating temporomandibular joint surgery. Hutchison IL, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):203–8

Condylar displacement and temporomandibular joint dysfunction following bilateral sagittal split osteotomy and rigid fixation. Hackney FL, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):223–7

THERAPY

Temporomandibular joint disease treated with hypnosis. Golan HP. **Am J Clin Hypn** 1989 Apr;31(4):269–74

The physiology of splint therapy: a literature review. Boero RP. **Angle Orthod** 1989 Fall;59(3):165–80 (84 ref.)

Buccal separators for relief of TMJ pain and symptoms. Mintz AH. **Angle Orthod** 1988 Oct;58(4):351–6

'Audit—a cause for TMJ dysfunction' [letter] **Br Dent J** 1989 Jul 8;167(1):9–10

A sojourn in Sweden. Pilley JR. **Br Dent J** 1989 Mar 11; 166(5):183–4

Audit—a cause for TMJ dysfunction. Winstanley JH. **Br Dent J** 1989 Apr 22;166(8):278

The placebo effect. The placebo effect in the management of chronic myofascial pain: a review. Stockstill JW. **J Am Coll Dent** 1989 Summer;56(2):14–8 (33 ref.)

Here today, gone tomorrow [letter] Douglas BL. **J Am Dent Assoc** 1989 Sep;119(3):348

Postural and maximum activity in elevators during mandible pre– and post–occlusal splint treatment of temporomandibular joint disturbance syndrome. Shi CS, et al. **J Oral Rehabil** 1989 Mar;16(2):155–61

Short–term effect of two therapeutic methods on myofascial pain and dysfunction of the masticatory system. Burgess JA, et al. **J Prosthet Dent** 1988 Nov;60(5):606–10

Prognostic features of value in the management of temporomandibular joint pain–dysfunction syndrome by occlusal splint therapy. Suvinen T, et al. **J Prosthet Dent** 1989 Mar;61(3):355–61

A short–term evaluation of the effectiveness of stabilization–type occlusal splint therapy for specific symptoms of temporomandibular joint dysfunction syndrome. Tsuga K, et al. **J Prosthet Dent** 1989 May; 61(5):610–3

[Mandibular repositioning. Design and fitting of an occlusal plate] Capurso U. **Minerva Stomatol** 1988 Sep;37(9):721–8 (Eng. Abstr.) **(Ita)**

[Evaluation of the use of polyethylene plates in the therapy of cranio–facial pain (the Drum plate)] Fraccari F, et al. **Minerva Stomatol** 1989 Mar;38(3):353–7 (Eng. Abstr.) **(Ita)**

[Evaluation of the clinical effectiveness of biofeedback EMG on muscular relaxation and painful symptomatology] Paradiso M, et al. **Minerva Stomatol** 1989 Jan;38(1):19–22 (Eng. Abstr.) **(Ita)**

TENDINITIS

Tendon problems of the foot and ankle. The spectrum from peritendinitis to rupture. Plattner PF. **Postgrad Med** 1989 Sep 1;86(3):155–62, 167–70 (18 ref.)

COMPLICATIONS

Semimembranosus tendinitis: an overlooked cause of medial knee pain. Ray JM, et al. **Am J Sports Med** 1988 Jul–Aug; 16(4):347–51

Calcific shoulder periarthritis (tendinitis) in adult onset diabetes mellitus: a controlled study. Mavrikakis ME, et al. **Ann Rheum Dis** 1989 Mar;48(3):211–4

DIAGNOSIS

Jumper's knee and ultrasonography. Fritschy D, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):637–40

Patellar tendinitis ("jumper's knee"). Young D. **Aust Fam Physician** 1989 Aug;18(8):1021

Fast scan magnetic resonance of Achilles tendonitis. Berthoty D, et al. **J Foot Surg** 1989 Mar–Apr;28(2):171–3

Acute calcific tendinitis of the hand and wrist: a report of 12 cases and a review of the literature. Moyer RA, et al. **J Rheumatol** 1989 Feb;16(2):198–202 (19 ref.)

Acute neck pain due to tendonitis of the longus colli: CT and MRI findings. Artenian DJ, et al. **Neuroradiology** 1989; 31(2):166–9 (10 ref.)

Tendonitis of the wrist and elbow. Thorson EP, et al. **Occup Med** 1989 Jul–Sep;4(3):419–31 (51 ref.)

Joint pain. It isn't always arthritis. Baum J. **Postgrad Med** 1989 Jan;85(1):311–3, 316, 321

[Sonography of Achilles tendon changes in athletes] Gondolph–Zink B, et al. **Sportverletz Sportschaden** 1987 Jun;1(2):96–9 (Eng. Abstr.) **(Ger)**

[Status of sonography in the diagnosis of the pathologic shoulder] Weinstabl R, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(3):157–64 **(Ger)**

DRUG THERAPY

Achilles paratendonitis: an evaluation of steroid injection. DaCruz DJ, et al. **Br J Sports Med** 1988 Jun;22(2):64–5

ETIOLOGY

Rotator cuff tendinitis: basic concepts of pathoetiology. Nirschl RP. **Instr Course Lect** 1989;38:439–45 (34 ref.)

Achilles tendinitis in running athletes. Nichols AW. **J Am Board Fam Pract** 1989 Jul–Sep;2(3):196–203 (48 ref.)

The use of sign language as an aggravating factor in shoulder tendinitis, a case history of a deaf–mute cleaner. Hagberg M, et al. **J Hum Ergol (Tokyo)** 1987 Dec;16(2):173–8

Etiologic factors associated with selected running injuries. Messier SP, et al. **Med Sci Sports Exerc** 1988 Oct; 20(5):501–5

[Retropharyngeal tendinitis after chiropractor therapy] Kogstad O, et al. **Tidsskr Nor Laegeforen** 1989 Jun 30; 109(19–21):2001–3 (Eng. Abstr.) **(Nor)**

METABOLISM

Chronic achilles paratenonitis. An immunohistologic study of fibronectin and fibrinogen. Kvist MH, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):616–23

PATHOLOGY

[Unusual healing of tendon sheath tuberculosis by intercurrent streptococcal phlegmon] Pfeiffer KM. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):218–9 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

A unified approach to symptomatic juxtasternal arthritis and enthesitis. Katz ME, et al. **AJR Am J Roentgenol** 1989 Aug; 153(2):327–33

Acute peritendinitis calcarea. Daniel WW. **Arthritis Rheum** 1989 Jun;32(6):767–9

REHABILITATION

Evaluation of eccentric exercise in treatment of patellar tendinitis. Jensen K, et al. **Phys Ther** 1989 Mar;69(3):211–6

SURGERY

Failed anterior acromioplasty. A review of 51 cases. Hawkins RJ, et al. **Clin Orthop** 1989 Jun;(243):106–11

Primary tendinitis of the long head of the biceps. Post M, et al. **Clin Orthop** 1989 Sep;(246):117–25

Rotator cuff surgery. Nirschl RP. **Instr Course Lect** 1989; 38:447–62 (17 ref.)

Tenodesis of the long head of the biceps brachii for chronic bicipital tendinitis. Long–term results. Becker DA, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):376–81

[Injuries and damage of the muscles and their insertions] Puhl W. **Chirurg** 1988 Nov;59(11):697–700 (16 ref.) **(Ger)**

THERAPY

The long–term outcome of rotator cuff tendinitis—a review study. Chard MD, et al. **Br J Rheumatol** 1988 Oct; 27(5):385–9

Management of a patient with a diagnosis of bilateral plantar fasciitis and Achilles tendinitis. A case report. Riddle DL, et al. **Phys Ther** 1988 Dec;68(12):1913–6

[Achilles tendinitis. Role of medical treatment] Arnaud–Ulliet V, et al. **Rev Rhum Mal Osteoartic** 1989 May;56(6):467–9 **(Fre)**

[Conservative treatment of paratenonitis achillea with suspension dressings] Schwarz B, et al. **Sportverletz Sportschaden** 1988 Dec;2(4):160–3 (Eng. Abstr.) **(Ger)**

[Does laser treatment help in tendinitis? (letter)] Hartvig P, et al. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2184 **(Nor)**

[The combined treatment of calcareous bursitis of the subdeltoid muscle and tendinitis of the supraspinous muscle] Mikhallovich D, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr; (2):31–3 **(Rus)**

TENDON INJURIES

Flexor digitorum profundus avulsion. A unique presentation. Schwartz GB. **Orthop Rev** 1989 Jul;18(7):793–5

Bilateral spontaneous quadriceps tendon ruptures. A case report and review of the literature. Walker LG, et al. **Orthop Rev** 1989 Aug;18(8):867–71 (42 ref.)

Tendon problems of the foot and ankle. The spectrum from peritendinitis to rupture. Plattner PF. **Postgrad Med** 1989 Sep 1;86(3):155–62, 167–70 (18 ref.)

[Simultaneous bilateral spontaneous rupture of the quadriceps tendons compared with unilateral traumatic rupture] Kleintz R, et al. **Unfallchirurg** 1989 Jan;92(1):29–31 (Eng. Abstr.) **(Ger)**

BLOOD

Distribution of blood groups in patients with tendon rupture. An analysis of 832 cases. Jozsa L, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):272–4

COMPLICATIONS

Peroneus brevis rupture in the absence of the peroneus longus muscle and tendon in a classical ballet dancer. A case report. Cross MJ, et al. **Am J Sports Med** 1988 Nov–Dec; 16(6):677–8

Rupture of the extensor pollicis longus tendon after fracture of the distal end of the radius. A report of the youngest case. Kurosawa H, et al. **Ital J Orthop Traumatol** 1987 Dec;13(4):517–9

Spontaneous rupture of the peroneus longus tendon with fracture of the os peroneum. Cachia VV, et al. **J Foot Surg** 1988 Jul–Aug;27(4):328–33

Interposition of extensor digitorum tendon in distal radius fracture mimicking a compartment syndrome. Hussain S, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):255–6

Tendon rupture in systemic lupus erythematosus. Furie RA, et al. **Semin Arthritis Rheum** 1988 Nov;18(2):127–33 (42 ref.)

DIAGNOSIS

Ultrasonography in lesions of the rotator cuff and biceps tendon. Ahovuo J, et al. **Acta Radiol** 1989 May–Jun; 30(3):253–5

Unrecognized laceration of tibialis anterior tendon: a case report. Crosby LA, et al. **Foot Ankle** 1988 Dec;9(3):143–5

Traumatic dislocation of the tibialis posterior tendon. Mittal RL, et al. **Int Orthop** 1988;12(3):259–60

Bilateral spontaneous rupture of the quadriceps tendons misdiagnosed as a "neurological condition". Sagiv P, et al. **J Am Geriatr Soc** 1989 Aug;37(8):750–2

Clinical presentation of complete tears of the rotator cuff. Norwood LA, et al. **J Bone Joint Surg [Am]** 1989 Apr; 71(4):499–505

Rupture of the peroneus longus tendon. Report of three cases. Thompson FM, et al. **J Bone Joint Surg [Am]** 1989 Feb; 71(2):293–5

MR imaging of the peroneal tunnel. Zeiss J, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):840–4

Achilles tendon rupture [editorial] **Lancet** 1989 Jun 24; 1(8652):1427–8

Ultrasonography of post–traumatic soft–tissue lesions. Kaplan PA, et al. **Radiol Clin North Am** 1989 Sep;27(5):973–82

Avulsion of the posteromedial tibial plateau by the semimembranosus tendon: diagnosis with MR imaging. Yao L, et al. **Radiology** 1989 Aug;172(2):513–4

Limited sensitivity of ultrasound for the detection of rotator cuff tears. Miller CL, et al. **Skeletal Radiol** 1989; 18(3):179–83

[Rupture of the tendon of the anterior tibial muscle (letter)] Rompa PJ. **Ned Tijdschr Geneeskd** 1988 Aug 13; 132(33):1548–9 **(Dut)**

[Magnetic resonance imaging and the diagnosis of musculo–tendinous disorders] Sayegh C, et al. **Schweiz Z Sportmed** 1988 Dec;36(4):169–74 (Eng. Abstr.) **(Fre)**

[Echography of the musculo–tendinous system] de Gautard R, et al. **Ther Umsch** 1989 Mar;46(3):152–7 (Eng. Abstr.) **(Fre)**

[Real time sonography in sports specific tendon injuries] Hanneschläger G, et al. **Sportverletz Sportschaden** 1988 Dec;2(4):133–46 (Eng. Abstr.) **(Ger)**

[Sonography of the shoulder] Hodler J, et al. **Ther Umsch** 1989 Mar;46(3):158–63 (Eng. Abstr.) **(Ger)**

[Ultrasonic diagnosis of tendon and ligament injuries in anterior dislocations of the shoulder joint] Falkowska–Bednarek E. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):49–54 (Eng. Abstr.) **(Pol)**

[Rupture of the supraspinal tendon] Cepuder J. **Acta Chir Iugosl** 1989;36(1):137–42 (Eng. Abstr.) **(Scr)**

EPIDEMIOLOGY

Spontaneous rupture of tendons in dialysis and renal transplant patients. Spencer JD. **Injury** 1988 Mar;19(2):86–8

ETIOLOGY

Spontaneous four–extremity extensor tendon rupture in a renal dialysis patient. Clark RF, et al. **Ann Emerg Med** 1989 Jul;18(7):783–4

Orbital injury complicated by entrapment of the superior oblique tendon: a case report. Al–Qurainy IA, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):336–40

Extensor tendon rupture related to calcium pyrophosphate crystal deposition disease. Binder AI, et al. **Br J Rheumatol** 1989 Jun;28(3):251–3

Patellar tendon rupture after total knee arthroplasty. Rand JA, et al. **Clin Orthop** 1989 Jul;(244):233–8

Posterior tibial tendon dysfunction: its association with seronegative inflammatory disease. Myerson M, et al. **Foot Ankle** 1989 Apr;9(5):219–25

Flexor tendon ruptures in patients with rheumatoid arthritis. Ertel AN, et al. **J Hand Surg [Am]** 1988 Nov;13(6):860–6

Late flexor pollicis longus tendon rupture due to retained glass fragments. Jablon M, et al. **J Hand Surg [Am]** 1988 Sep;13(5):713–6

Attritional flexor tendon ruptures by an old lunate dislocation. Johnston GH, et al. **J Hand Surg [Am]** 1988 Sep;13(5):701–3

Late rupture of the extensor pollicis longus tendon: the case against attrition. Jenkins NH, et al. **J Hand Surg [Br]** 1988 Nov;13(4):448–9

Rupture of flexor tendons to the little finger due to bony irregularities in the carpal tunnel. Stevenson TR, et al. **J Hand Surg [Br]** 1988 Aug;13(3):308–10

Laxity and rupture of the patellar tendon in systemic lupus erythematosus. Association with secondary hyperparathyroidism. Babini SM, et al. **J Rheumatol** 1988 Jul;15(7):1162–5

[Dislocation of the peroneal tendons] Behfar AS. **Sportverletz Sportschaden** 1987 Dec;1(4):223–8 (Eng. Abstr.) **(Ger)**

[The overstretched patellar tendon in patellar apex syndrome] Weh L. **Sportverletz Sportschaden** 1988 Mar;2(1):26–34 (Eng. Abstr.) **(Ger)**

[Spontaneous rupture of the tendon of the musculus extensor hallucis longus] Langenberg R. **Zentralbl Chir** 1989; 114(6):400–3 **(Ger)**

[Bilateral laceration of patellar tendon in a case of osteogenesis imperfecta] Nigrisoli M, et al. **Chir Organi Mov** 1988 Jul–Sep;73(3):259–63 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Structural specialization in tendons under compression. Vogel KG, et al. **Int Rev Cytol** 1989;115:267–93 (72 ref.)

Identification of the collagen–producing cells in healing flexor tendons. Garner WL, et al. **Plast Reconstr Surg** 1989 May;83(5):875–9

[Functional anatomy of the long head of biceps brachii—a comparative study between normal and torn rotator cuff shoulders in cadaver specimens] Nakagawa Y. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):75–90 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Does early movement speed the recovery of function of repaired flexor tendon? Farkas LG, et al. **Ann Plast Surg** 1980 Oct;5(4):305–8

Peritendinous healing after early movement of repaired flexor tendon: anatomical study. Farkas LG, et al. **Ann Plast Surg** 1980 Oct;5(4):298–304

New technique for producing uniform partial lacerations of tendons. Hitchcock TF, et al. **J Orthop Res** 1989;7(3):451–5

Effect of hyaluronic acid/chondroitin sulfate on healing of full–thickness tendon lacerations in rabbits. Meyers SA, et al. **J Orthop Res** 1989;7(5):683–9

AAOS/NIH/ORS workshop. Injury and repair of the musculoskeletal soft tissues. Savannah, Georgia, June 18–20, 1987. Woo SL, et al. **J Orthop Res** 1988;6(6):907–31

Inflammation, cellularity, and fibrillogenesis in regenerating tendon: implications for tendon rehabilitation. Enwemeka CS. **Phys Ther** 1989 Oct;69(10):816–25

Effects of unrestricted motion on healing: a study of posttraumatic adhesions in primate tendons. Seyfer AE, et al. **Plast Reconstr Surg** 1989 Jan;83(1):122–8

[A painful and acute disorder of the leg. Rupture of the tendon of the femoral biceps] Choffray DU. **Acta Belg Med Phys** 1988 Oct–Dec;11(4):175–7 **(Fre)**

[The quadriga phenomenon of the extensor tendon system and the superficial transverse metacarpal ligament] Wilhelm A. **Handchir Mikrochir Plast Chir** 1988 Jul; 20(4):173–9 (5 ref.) (Eng. Abstr.) **(Ger)**

[Electrophysiological and morphological changes in muscle–flexors of the fingers after injuries of the tendons in children] Danilov AA, et al. **Ortop Travmatol Protez** 1989 Jan;(1):24–8 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Fractures of the proximal humerus involving the intertubercular groove. Ahovuo J, et al. **Acta Radiol** 1989 Jul–Aug;30(4):373–4

Arthrography of the biceps tendon. Ahovuo J, et al. **Eur J Radiol** 1988 Aug;8(3):196–8

Shoulder arthrography with sodium meglumine metrizoate and iopamidol. Ahovuo J, et al. **Skeletal Radiol** 1989; 18(2):89–92

[Diagnostic importance of arthrography of the shoulder in rotator cuff rupture] Pěchouček J. **Acta Chir Orthop Traumatol Cech** 1989 Apr;56(2):96–101 (Eng. Abstr.) **(Cze)**

[Rupture of the rotator cuff. Quantification of indirect signs in standard radiology and the Leclercq maneuver] Cotty P, et al. **J Radiol** 1988 Nov;69(11):633–8 (11 ref.) (Eng. Abstr.) **(Fre)**

[Apophyseal rupture of the pelvis and lower extremity caused by sports] Ahmadi A, et al. **Sportverletz Sportschaden** 1987 Sep;1(3):113–7 (Eng. Abstr.) **(Ger)**

[A method of contrast achillography] Zhelev Zh, et al. **Ortop Travmatol Protez** 1988 Jun;(6):53 **(Rus)**

RADIONUCLIDE IMAGING

Bone scintigraphic findings in recruits after short periods of nonweight–bearing ambulation. A report of two cases. Milgrom C, et al. **Orthop Rev** 1988 Feb;17(2):187–90

REHABILITATION

The effect of early functional activities on experimentally tenotomized Achilles tendons in rats. Enwemeka CS, et al. **Am J Phys Med Rehabil** 1988 Dec;67(6):264–9 (65 ref.)

Functional deficit following loss of continuity of the long extensors of the fingers: a method of assessment. Quaba AA, et al. **J Hand Surg [Br]** 1988 Aug;13(3):282–3

Post–operative management of flexor tendon grafting. Tonkin M, et al. **J Hand Surg [Br]** 1988 Aug;13(3):277–81

Mobilisation after Achilles tendon rupture [letter] Roberts P, et al. **Lancet** 1989 Jul 22;2(8656):224

SURGERY

A single success may not predict other successes [letter] Colditz JC. **Am J Occup Ther** 1989 Jan;43(1):55

Early controlled motion following flexor tendon graft. Dovelle S, et al. **Am J Occup Ther** 1988 Jul;42(7):457–63

Sliding fibular graft repair for chronic dislocation of the peroneal tendons. Micheli LJ, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):68–71

Primary repair of extensor tendons with assisted post–operative mobilisation. A series of 48 cases. Marin–Braun F, et al. **Ann Chir Main** 1989;8(1):7–21 **(Eng, Fre)**

Recent simple flexor tendon injuries in zone I, II, III of Verdan. Results of tendon repairs concerning 115 fingers in 99 patients. Tropet Y, et al. **Ann Chir Main** 1988; 7(2):109–14 **(Eng, Fre)**

Posterior tibial tendon rupture—a brief report. Chen SC. **Ann R Coll Surg Engl** 1988 Sep;70(5):280–1

Posterior tibial tendon rupture—a brief report [letter] Welton EA, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):144

Chronic peroneus brevis tendon lesions. Sammarco GJ, et al. **Foot Ankle** 1989 Feb;9(4):163–70

Flexor tendon ruptures in rheumatoid arthritis. Ertel AN. **Hand Clin** 1989 May;5(2):177–90 (21 ref.)

Rheumatoid extensor tendon ruptures. Leslie BM. **Hand Clin** 1989 May;5(2):191–202 (22 ref.)

Primary care of flexor tendon injuries. Schneider LH, et al. **Hand Clin** 1989 Aug;5(3):383–94 (95 ref.)

"A pulled muscle". Partial avulsion of the extensor indicis proprius tendon following a hyperflexion injury. Clay NR. **Injury** 1988 Mar;19(2):127–8

Longitudinal rupture of the peroneus brevis tendon: a study of eight cases. LeMelle DP, et al. **J Foot Surg** 1989 Mar–Apr;28(2):132–6

Report of the committee on tendon injuries. Kleinert HE. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 2):3816

The "cage" splint: an added protection for flexor tendon repair. Ashall G, et al. **J Hand Surg [Br]** 1989 Feb;14(1):128

A comparison of results of extensor tendon repair followed by early controlled mobilisation versus static immobilisation. Chow JA, et al. **J Hand Surg [Br]** 1989 Feb;14(1):18–20

Deformation of the nail following elastic band traction—a case report. Hoddinott C, et al. **J Hand Surg [Br]** 1989 Feb;14(1):23–4

Flexor tendon grafting 48 years after injury. Jones MW, et al. **J Hand Surg [Br]** 1988 Aug;13(3):284–5

Dynamic traction after extensor tendon repair in zones 6, 7, and 8: a retrospective study. Kerr CD, et al. **J Hand Surg [Br]** 1989 Feb;14(1):21–2

Flexor tendon healing. Manske PR. **J Hand Surg [Br]** 1988 Aug;13(3):237–45 (93 ref.)

Flexor tendon injuries: the results of primary repair. Singer M, et al. **J Hand Surg [Br]** 1988 Aug;13(3):269–72

The modified Kleinert splint in zone II flexor tendon injuries. Slattery PG. **J Hand Surg [Br]** 1988 Aug;13(3):273–6

Repair of the isolated cut flexor digitorum profundus tendon under intravenous regional anaesthesia. Morgan WJ, et al. **J Trauma** 1989 Jan;29(1):102–3

Mallet thumb: an unusual association. Madhok R. **Orthop Rev** 1989 Apr;18(4):469–70

Traumatic dislocation of the long finger extensor tendon at the metacarpophalangeal joint. A case report and literature review. Ostrowski DM. **Orthopedics** 1989 Apr;12(4):581–3 (16 ref.)

Trapdoor pulley repair for chronic subluxation of the digital extensor tendon. Eisenbaum SL. **Plast Reconstr Surg** 1988 Dec;82(6):1081–2

Early mobilization after flexor tendon grafting for isolated profundus tendon lesions. Ipsen T, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(2):163–7 (15 ref.)

[Tears of the distal tendon of the biceps muscle] Vrzala J. **Acta Chir Orthop Traumatol Cech** 1989 Apr;56(2):102–10 (Eng. Abstr.) **(Cze)**

[Problems in the treatment of flexor tendon injuries in the hand in the region of "no man's land"] Pinter L. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(3):389–98 (Eng. Abstr.) **(Cze)**

[Ruptures of the musculus extensor pollicis longus tendon] Hylkema B, et al. **Ned Tijdschr Geneeskd** 1988 Nov 26; 132(48):2202–4 (Eng. Abstr.) **(Dut)**

[Injuries of the tendons of hand] Iselin F. **J Chir (Paris)** 1988 Jun–Jul;125(6–7):424–30 **(Fre)**

[Suture of flexor tendon injury of the hand] Iselin F. **J Chir (Paris)** 1988 Jun–Jul;125(6–7):440–2 **(Fre)**

[Repair of sub–spinal rupture (group II)] Patte D, et al. **Rev Chir Orthop** 1988;74(4):312–4 **(Fre)**

[Distal biceps tendon rupture. Clinical aspects—therapy—results] Lang E, et al. **Aktuel Traumatol** 1988 Oct;18(5):209–14 (Eng. Abstr.) **(Ger)**

[Management of biceps tendon ruptures with the "key hole–plasty"] Henning N, et al. **Beitr Orthop Traumatol** 1989 May;36(5):214–7 (Eng. Abstr.) **(Ger)**

[Surgical treatment of hammer finger] Rauhut F. **Beitr Orthop Traumatol** 1988 Jun;35(6):260–2 (Eng. Abstr.) **(Ger)**

[Injuries and damage of the muscles and their insertions] Puhl W. **Chirurg** 1988 Nov;59(11):697–700 (16 ref.) **(Ger)**

[Scanning electron microscopy studies following two–stage tendon and tendon sheath reconstruction in experimental flexor tendon injuries] Biró V, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):33–6 (Eng. Abstr.) **(Ger)**

[Spontaneous rupture of the extensor pollicis longus] Nigst H, et al. **Handchir Mikrochir Plast Chir** 1989 Jul; 21(4):172–7 (Eng. Abstr.) (Ger)

[Complete rotator cuff lesions in athletes] Melzer C, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):81–7 (Eng. Abstr.) (Ger)

[Results of follow-up studies of 340 flexor tendon reconstructions. A comparative study of various methods of treatment] Knopp W, et al. **Unfallchirurg** 1988 Dec; 91(12):565–70 (Eng. Abstr.) (Ger)

[Rupture of the distal biceps tendon] Bindl G, et al. **Unfallchirurgie** 1988 Oct;14(5):259–64 (Eng. Abstr.) (Ger)

[Possibilities and limits of ambulatory flexor tendon surgery] Belusa M. **Z Arztl Fortbild (Jena)** 1989;83(9):455–8 (14 ref.) (Ger)

[Injuries of the biceps brachii muscle with special reference to surgical therapy] Freiherr von Salis-Soglio G, et al. **Z Orthop** 1988 Dec;126(6):683–7 (Eng. Abstr.) (Ger)

[Habitual peroneal tendon dislocation] Huber H, et al. **Z Orthop** 1988 Dec;126(6):609–12 (Eng. Abstr.) (Ger)

[Subcutaneous rupture of the patellar tendon] Pagani PA, et al. **Chir Organi Mov** 1988 Jul–Sep;73(3):221–6 (Eng. Abstr.) (Ita)

[Microsurgical reconstruction of the forearm tendons] Borovikov AM, et al. **Ortop Travmatol Protez** 1989 Feb; (2):13–6 (Eng. Abstr.) (Rus)

[Modification of a method of distraction tendinoplasty of flexors of the fingers] Lapin VV. **Ortop Travmatol Protez** 1988 Aug;(8):62–4 (Rus)

[Anatomical and biomechanical substantiation of operations for restoration of the extensor function of the II–V fingers] Roslova EP, et al. **Ortop Travmatol Protez** 1988 Aug; (8):14–8 (Eng. Abstr.) (Rus)

[Alloplasty in injuries of the Achilles tendon] Demichev NP, et al. **Vestn Khir** 1989 Jan;142(1):86–90 (Eng. Abstr.) (Rus)

[Actual problems of surgical treatment of patellar fractures] Efimov VN. **Vestn Khir** 1988 Jun;140(6):62–5 (Eng. Abstr.) (Rus)

[Rupture of the biceps tendon] Cepuder J. **Acta Chir Iugosl** 1988;35(2):271–4 (Eng. Abstr.) (Slv)

[Experimental study on the process of repair-healing of the flexor system in the growing chick] Ayala Montoro J, et al. **An Esp Pediatr** 1988 Oct;29(4):274–8 (Eng. Abstr.) (Spa)

THERAPY

Rotator cuff injuries of the shoulder [published erratum appears in Aust Fam Physician 1989 Feb;18(2):88] Hannaford P. **Aust Fam Physician** 1988 Dec;17(12):1039–40

Non-suture repair of tendons. Powell ES, et al. **J Biomed Eng** 1989 May;11(3):215–8

Early dynamic splinting for extensor tendon injuries. Browne EZ Jr, et al. **J Hand Surg [Am]** 1989 Jan;14(1):72–6

A new dynamic splint for postoperative treatment of flexor tendon injury. Werntz JR, et al. **J Hand Surg [Am]** 1989 May;14(3):559–66

Clinical observations in 185 cases of ligament and tendon injuries treated by the method of dissipating blood stasis and promoting the meridian. Luo QD, et al. **J Tradit Chin Med** 1989 Mar;9(1):15–7

Experimental studies on the application of various surgical threads used for reconstruction of fresh injuries of the calcaneal tendon. Synder M, et al. **Mater Med Pol** 1988 Oct–Dec;20(4):278–80

[Treatment of closed injuries of finger tendons and aponeurosis at the level of the distal interphalangeal joint] Korshunov VF, et al. **Ortop Travmatol Protez** 1988 Aug; (8):12–4 (Eng. Abstr.) (Rus)

VETERINARY

Lateral luxation of the superficial digital flexor tendon from the calcaneal tuber in two horses. Meagher DM, et al. **J Am Vet Med Assoc** 1989 Aug 15;195(4):495–8

TENDON TRANSFER

Long-term followup of anterior cruciate ligament reconstruction using the quadriceps tendon substitution for chronic anterior cruciate ligament insufficiency. Kornblatt I, et al. **Am J Sports Med** 1988 Sep–Oct;16(5):444–8

Vascularized patella tendon anterior cruciate ligament reconstruction. Arendt EA, et al. **Clin Orthop** 1989 Jul; (244):222–32

Reconstructive surgery after extensive paralysis of the upper limb II. **Hand Clin** 1989 Feb;5(1):1–109

Biomechanical basis of transfers for shoulder paralysis. Comtet JJ, et al. **Hand Clin** 1989 Feb;5(1):1–14 (42 ref.)

Tendon transfers for shoulder paralysis in children. Gilbert A, et al. **Hand Clin** 1988 Nov;4(4):633–42

Tendon transfers for treatment of the paralyzed hand following brachial plexus injury. Merle M, et al. **Hand Clin** 1989 Feb;5(1):33–41 (20 ref.)

Plication of the anterolateral capsule of the ankle with extensor digitorum brevis transfer for chronic lateral ligament instability. Williams JG. **Injury** 1988 Mar; 19(2):65–9

Tendon transfer to augment the weakened tibialis posterior mechanism. Hansen ST Jr, et al. **J Am Podiatr Med Assoc** 1988 Aug;78(8):399–402

Triceps to biceps transfer for established brachial plexus palsy. Hoang PH, et al. **J Bone Joint Surg [Br]** 1989 Mar; 71(2):268–71 (20 ref.)

Tibialis posterior dysfunction: an overview with a surgical case report using a flexor tendon transfer. Mendicino SS, et al. **J Foot Surg** 1989 Mar–Apr;28(2):154–7 (9 ref.)

Surgical treatment of the clasped thumb. Lipskeir E, et al. **J Hand Surg [Br]** 1989 Feb;14(1):72–9

Early histologic, metabolic, and vascular assessment of anterior cruciate ligament autografts. Kleiner JB, et al. **J Orthop Res** 1989;7(2):235–42

[Valvular substitution of the popliteal vein by double tendon transposition] Zhu SQ. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):620–1, 639 (Eng. Abstr.) (Chi)

[Reconstruction of the anterior cruciate ligament with an autologous graft of the patellar tendon] Pagani PA, et al. **Chir Organi Mov** 1988 Apr–Jun;73(2):129–36 (Eng. Abstr.) (Ita)

METHODS

Free patellar tendon grafting as augmentation or as substitution for acute isolated anterior cruciate ligament tears. Preliminary results. Aerts P, et al. **Acta Orthop Belg** 1988;54(4):401–5

Coracoid tendon transposition a.m. Bristow-Latarjet. Jalovaara P, et al. **Ann Chir Gynaecol** 1988;77(3):103–7

Posterior tibial tendon transfer in spastic equinovarus. Lagast J, et al. **Arch Orthop Trauma Surg** 1989;108(2):100–3

Transposition of the posterior tibial tendon. Johnson WL, et al. **Clin Orthop** 1989 Aug;(245):223–7

Blood supply of the upper extremity muscles as related to functional tendon transfers. Parry SW, et al. **Clin Plast Surg** 1989 Jul;16(3):531–6 (14 ref.)

The role of lateral extra-articular procedures for anterolateral rotatory instability. Carson WG Jr. **Clin Sports Med** 1988 Oct;7(4):751–72 (64 ref.)

Arthroscopically assisted reconstruction of the anterior cruciate ligament using a patella tendon bone autograft. Jackson DW, et al. **Clin Sports Med** 1988 Oct;7(4):785–800

A modification of the surgical correction of the thumb—a long term follow up. Beine AO, et al. **Indian J Lepr** 1989 Jan;61(1):17–22

Reconstruction of the anterior cruciate ligament by semitendinosus transfer in chronic anterior instability of the knee. Puddu G, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):187–93

Calcaneal osteotomy and tendon sling for the management of calcaneus deformity. Pandey AK, et al. **J Bone Joint Surg [Am]** 1989 Sep;71(8):1192–8

Dynamic inversion of the forefoot and dorsiflexion of the big toe treated by transfer of extensor hallucis longus. Fulford GE, et al. **J Bone Joint Surg [Br]** 1989 Jan; 71(1):21–3

Operation for calcaneus deformity after surgery for club foot. Wijesinha SS, et al. **J Bone Joint Surg [Br]** 1989 Mar; 71(2):234–6

Team physician #6. Surgical treatment of Achilles tendon rupture. Roberts C, et al. **Orthop Rev** 1989 Apr;18(4):513–6 (11 ref.)

Team physician #2. Peroneus brevis transfer for Achilles tendon rupture in athletes. Turco V, et al. **Orthop Rev** 1988 Aug;17(8):822–4, 827–8

[Ruptures of the musculus extensor pollicis longus tendon] Hylkema B, et al. **Ned Tijdschr Geneeskd** 1988 Nov 26; 132(48):2202–4 (Eng. Abstr.) (Dut)

[Dissection technic for the superficial flexor tendon of the ring finger] Foucher G, et al. **Ann Chir Main** 1988; 7(2):176–8 (Eng. Abstr.) (Fre)

[The role of tendon transfer in paralysis of the shoulder in children] Gilbert A, et al. **Rev Chir Orthop** 1988;74 Suppl 2:45–6 (Fre)

[The early development of postoperative anterior instability] Moyen B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:190–4 (Fre)

[Tendon transfer for radial paralysis. Development of technics] Tubiana R. **Rev Chir Orthop** 1988;74 Suppl 2:52–3 (Fre)

[Fresh ruptures of the anterior cruciate ligament treated with sutures reinforced with the semi-tendinous tendon] Witvoët J, et al. **Rev Chir Orthop** 1988;74 Suppl 2:170–3 (Fre)

[The effectiveness of the Slocum and Larson pes anserinus transfer] Seidlein H, et al. **Beitr Orthop Traumatol** 1988 Oct;35(10):483–7 (Eng. Abstr.) (Ger)

[A rare cause of spontaneous rupture of the tendon of the extensor pollicis longus muscle] Ahmadi A. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):223–4 (Eng. Abstr.) (Ger)

[Spontaneous rupture of the extensor pollicis longus] Nigst H, et al. **Handchir Mikrochir Plast Chir** 1989 Jul; 21(4):172–7 (Eng. Abstr.) (Ger)

[Suture of the Achilles tendon with a reinforcing-plasty—experiences with 30 primary sutures of Achilles tendon ruptures] Rehli V, et al. **Helv Chir Acta** 1989 Jun;56(1–2):67–71 (Eng. Abstr.) (Ger)

[Modification of a method of distraction tendinoplasty of flexors of the fingers] Lapin VV. **Ortop Travmatol Protez** 1988 Aug;(8):62–4 (Rus)

TENDONS

Crystal-collagen relationships in calcified turkey leg tendons visualized by selected-area dark field electron microscopy. Arsenault AL. **Calcif Tissue Int** 1988 Oct;43(4):202–12

Ganglion cyst of the quadriceps tendon—an uncommon cause of knee pain revealed by ultrasounds [letter] Trabucchi L, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):335–6

Chronic peroneal tendon subluxation produced by an anomalous peroneus brevis: case report and literature review. Hammerschlag WA, et al. **Foot Ankle** 1989 Aug; 10(1):45–7 (17 ref.)

Simulated superior oblique tendon sheath syndrome. Folk ER, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):410–3

Development of a reconstituted collagen tendon prosthesis. A preliminary implantation study. Goldstein JD, et al. **J Bone Joint Surg [Am]** 1989 Sep;71(8):1183–91

Multiple ruptures of flexor tendons due to hypertrophic change at the distal radio-ulnar joint. A case report. Minami A, et al. **J Bone Joint Surg [Am]** 1989 Feb; 71(2):300–2

Spontaneous rupture of the peroneus longus tendon with fracture of the os peroneum. Cachia VV, et al. **J Foot Surg** 1988 Jul–Aug;27(4):328–33

Kienböck's disease: two unusual cases. Ribbans WJ. **J Hand Surg [Br]** 1988 Nov;13(4):463–5

Flexor tendon sheath haematoma: a case report. Thakore HK. **J Hand Surg [Br]** 1989 Feb;14(1):117

Studies on type II collagen induced arthritis in rats: an experimental model of peripheral and axial ossifying enthesopathy. Gillet P, et al. **J Rheumatol** 1989 Jun; 16(6):721–8

Carpal tunnel syndrome caused by flexor tendon sheath lipoma. Kremchek TE, et al. **Orthop Rev** 1988 Nov; 17(11):1083–5

Reduced C27-steroid 26-hydroxylase activity in heterozygotes for cerebrotendinous xanthomatosis. Skrede S, et al. **Scand J Clin Lab Invest** 1988 Sep;48(5):425–9

Flexor tendon contractures in an insulin-dependent diabetic young girl (Rosenbloom syndrome). Hascelik Z, et al. **Turk J Pediatr** 1987 Jul–Sep;29(3):177–80

Neural crest origin of clear cell sarcoma of tendons and aponeuroses. Ultrastructural and enzyme cytochemical study of human and nude mouse-transplanted tumours. Mii Y, et al. **Virchows Arch [A]** 1989;415(1):51–60

[Myoblastic myoma of the tendon of long flexor of the thumb] Urban K, et al. **Acta Chir Orthop Traumatol Cech** 1989 Apr;56(2):129–33 (Eng. Abstr.) (Cze)

[Polyenthesopathies] Amor B, et al. **Ann Med Interne (Paris)** 1989;140(4):279–84 (48 ref.) (Fre)

[Van Bogaert's cerebrotendinous xanthomatosis. A study of 3 cases] Laurent A, et al. **Ann Med Interne (Paris)** 1988; 139(6):395–402 (61 ref.) (Eng. Abstr.) (Fre)

[Unrecognized tendinopathy of the posterior tibial muscle in the 5th decade] Claustre J, et al. **Rev Rhum Mal Osteoartic** 1989 May;56(6):445–52 (Fre)

[Simultaneous bilateral spontaneous rupture of the quadriceps tendons compared with unilateral traumatic rupture] Kleintz R, et al. **Unfallchirurg** 1989 Jan;92(1):29–31 (Eng. Abstr.) (Ger)

[Fibroma of the tendon sheath. Diagnosis and differential diagnosis] Kosmehl H, et al. **Zentralbl Allg Pathol** 1988; 134(4–5):393–8 (Eng. Abstr.) (Ger)

[A syndrome of apophysotendopathy of the tuberosity of the tibia of dysplastic origin] Zelenetskiĭ IB, et al. **Ortop Travmatol Protez** 1988 Sep;(9):41–6 (Eng. Abstr.) (Rus)

ABNORMALITIES

Peroneus brevis rupture in the absence of the peroneus longus muscle and tendon in a classical ballet dancer. A case report. Cross MJ, et al. **Am J Sports Med** 1988 Nov–Dec; 16(6):677–8

Anomalous abductor pollicis longus insertion in the thenar muscles. Rayan GM, et al. **J Hand Surg [Am]** 1989 May; 14(3):550–2

An accessory superficialis tendon involved by Dupuytren's contracture. Srivastava S, et al. **J Hand Surg [Br]** 1989 Feb;14(1):35–6

[Retrotendinous ureter. An exceptional cause of obstruction in the upper urinary tract] Guarise P, et al. **Pediatr Med Chir** 1989 Jan–Feb;11(1):85–8 (Eng. Abstr.) (Ita)

ANALYSIS

Upper limb pyrophosphate tenosynovitis outside the carpal tunnel. Gerster JC, et al. **Ann Rheum Dis** 1989 Aug; 48(8):689–91

ANATOMY & HISTOLOGY

Tendon and myo-tendinous junction in an overloaded skeletal muscle of the rat. Zamora AJ, et al. **Anat Embryol (Berl)** 1988;179(1):89–96

Structural specialization in tendons under compression. Vogel KG, et al. **Int Rev Cytol** 1989;115:267–93 (72 ref.)

Anatomy of the flexor tendon sheath and pulley system: a current review. Doyle JR. **J Hand Surg [Am]** 1989 Mar; 14(2 Pt 2):349–51

Functional anatomy of the vagina fibrosa of the flexors of the fingers. Hoving EW, et al. **J Hand Surg [Br]** 1989 Feb; 14(1):99–101

Tendon excursions of the interossei and superficial hypothenar muscles: an anatomical study. Woodburn KR, et al. **J Hand Surg [Br]** 1988 Nov;13(4):415–20

[Echography of the flexor tendons of the fingers] Souissi M, et al. **Presse Med** 1989 Mar 4;18(9):463–6 (Eng. Abstr.) **(Fre)**

[Studies on the tendinous compartments of the extensor muscles on the back of the human hand and their tendon sheaths. II] Schmidt HM, et al. **Gegenbaurs Morphol Jahrb** 1988;134(3):309–27 **(Ger)**

[Functional anatomy of the long head of biceps brachii—a comparative study between normal and torn rotator cuff shoulders in cadaver specimens] Nakagawa Y. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):75–90 (Eng. Abstr.) **(Jpn)**

[Comparative evaluation of morphometric and intravital measurements of the intraorbital portion of the optic nerve and of the distance from the posterior pole of the eyeball to the common tendinous ring] Shengeliia DG, et al. **Oftalmol Zh** 1989;(2):112–3 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Fenestration of tenosynovial capillaries. Neal C, et al. **Br J Rheumatol** 1989 Feb;28(1):31–3

The functional characteristics of tendon blood circulation in the rabbit hindlimbs. Takemiya T, et al. **Jpn J Physiol** 1988;38(3):361–74

[The blood vessel system of the tendon of the long head of the biceps brachii muscle] Korn S, et al. **Unfallchirurg** 1989 Jan;92(1):43–7 (Eng. Abstr.) **(Ger)**

CYTOLOGY

Appearance and ultrastructure of intranuclear crystalloids in tendon fibroblasts induced by an anabolic steroid hormone in the mouse. Michna H. **Acta Anat (Basel)** 1988; 133(3):247–50

Tendon cell outgrowth rates and morphology associated with kevlar–49. Zimmerman M, et al. **J Biomed Mater Res** 1988 Dec;22(3 Suppl):339–50

EMBRYOLOGY

The extracellular matrix architecture relating to myotendinous pattern formation in the distal part of the developing chick limb: an ultrastructural, histochemical and immunocytochemical analysis. Hurle JM, et al. **Cell Differ Dev** 1989 Jul;27(2):103–20

Structural changes at the myogenic cell surface during the formation of myotendinous junctions. Tidball JG, et al. **Cell Tissue Res** 1989 Jul;257(1):77–84

ENZYMOLOGY

Inhibition of collagen hydroxylation by 2,7,8–trihydroxyanthraquinone in embryonic–chick tendon cells. Franklin TJ, et al. **Biochem J** 1989 Jul 1;261(1):127–30

Type I procollagen N–proteinase from chick embryo tendons. Purification of a new 500–kDa form of the enzyme and identification of the catalytically active polypeptides. Hojima Y, et al. **J Biol Chem** 1989 Jul 5;264(19):11336–45

Neutral metalloprotease from tendons. Piening C, et al. **J Orthop Res** 1989;7(2):228–34

Collagenases from periarticular ligaments and tendon: enzyme levels during the development of joint contracture. Harper J, et al. **Matrix** 1989 Jun;9(3):200–5

GROWTH & DEVELOPMENT

Growth allometry of craniomandibular muscles, tendons, and bones in the laboratory rat (Rattus norvegicus): relationships to oromotor maturation and biomechanics of feeding. Hurov J, et al. **Am J Anat** 1988 Aug;182(4):381–94

INNERVATION

Alteration of proprioceptive messages induced by tendon vibration in man: a microneurographic study. Roll JP, et al. **Exp Brain Res** 1989;76(1):213–22

Mechano–receptors in the flexor tendons of the hand. Zimny ML, et al. **J Hand Surg [Br]** 1989 May;14(2):229–31

Cybernetic model of psychophysiologic pathways: III. Clinical impairment of tension and kinesthesia. Leisman G. **J Manipulative Physiol Ther** 1989 Aug;12(4):275–80

Unloading of tendon organ discharges by in–series motor units in cat peroneal muscles. Horcholle–Bossavit G, et al. **J Physiol (Lond)** 1989;408:185–98

[Functional properties of the Golgi tendon organs] Jami L. **Arch Int Physiol Biochim** 1988 Sep;96(4):A363–78 (40 ref.) (Eng. Abstr.) **(Fre)**

METABOLISM

In vivo glycosylation of dermal and tendon type I collagen. Rathi NA, et al. **Biochem Med Metab Biol** 1989 Feb; 41(1):70–6

Relative content of isoaccepting tRNAs for glycine and proline in avian tendon cells with different rates of procollagen synthesis. Ouenzar B, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):429–34

The elastin associated glycoprotein gp115. Synthesis and secretion by chick cells in culture. Colombatti A, et al. **J Biol Chem** 1988 Nov 25;263(33):17534–40

Isolation and partial characterization of collagen chains dimerized by sugar–derived cross–links. Tanaka S, et al. **J Biol Chem** 1988 Nov 25;263(33):17650–7

Anisotropic and biomechanical properties of tendons modified by exercise and denervation: aggregation and macromolecular order in collagen bundles. Vilarta R, et al. **Matrix** 1989 Jan;9(1):55–61

PATHOLOGY

Fibroma of tendon sheath. A clinicopathologic study of 32 cases. Pulitzer DR, et al. **Am J Surg Pathol** 1989 Jun; 13(6):472–9

Rupture of tendon after cryotherapy for hand wart. Yates VM, et al. **BMJ** 1988 Oct 29;297(6656):1106

Ultrasonography of the tendons of the shoulder. Ahovuo J, et al. **Eur J Radiol** 1989 Feb;9(1):17–21

Ultrastructural and autoradiographic investigations of cell cultures derived from tendons or ligamentous material from patients with fibromatous disorders. Neumüller J, et al. **Exp Cell Biol** 1988;56(3):113–30

Hypertrophy, androgens, and tendon karyometry: functional and experimental investigations. Michna H, et al. **Gegenbaurs Morphol Jahrb** 1988;134(6):903–12

Redefined type of elbow dysplasia involving calcified flexor tendons attached to the medial humeral epicondyle in three dogs. Zontine WJ, et al. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1082–5

Palmar wrist pain caused by ulnar nerve entrapment in the flexor carpi ulnaris tendon. Zook EG, et al. **J Hand Surg [Am]** 1988 Sep;13(5):732–5

Foreign bodies in tendons. Jozsa L, et al. **J Hand Surg [Br]** 1989 Feb;14(1):84–5

Normolipidemic xanthomata of the hand extensor tendons. Mulholland RS, et al. **J Rheumatol** 1989 Feb;16(2):242–4

Alterations in dry mass content of collagen fibers in degenerative tendinopathy and tendon–rupture. Józsa L, et al. **Matrix** 1989 Mar;9(2):140–6

[Spontaneous rupture of the flexor tendon of the hand disclosing the presence of Recklinghausen's disease] Arkwright S, et al. **Ann Chir Main** 1989;8(1):64–6 (Eng. Abstr.) **(Fre)**

[Echography of the musculo–tendinous system] de Gautard R, et al. **Ther Umsch** 1989 Mar;46(3):152–7 (Eng. Abstr.) **(Fre)**

[Pathological study of the supraspinatus tendon] Yamanaka K. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec; 62(12):1121–38 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Length–force characteristics of aponeurosis in passive muscle and during isometric and slow dynamic contractions of rat gastrocnemius muscle. Huijing PA, et al. **Acta Morphol Neerl Scand** 1988–89;26(1):51–62

The effect of tenotomy and immobilization on muscle spindles and tendon organs of the rat calf muscles. A histochemical and morphometrical study. Józsa L, et al. **Acta Neuropathol (Berl)** 1988;76(5):465–70

Kinetics and kinematics of the equine hind limb: in vivo tendon loads and force plate measurements in ponies. Riemersma DJ, et al. **Am J Vet Res** 1988 Aug;49(8):1344–52

Kinetics and kinematics of the equine hind limb: in vivo tendon strain and joint kinematics. Riemersma DJ, et al. **Am J Vet Res** 1988 Aug;49(8):1353–9

Application of a Hall–effect transducer for measurement of tendon strains in horses. Stephens PR, et al. **Am J Vet Res** 1989 Jul;50(7):1089–95

Electromechanical analogs of human reflexes. Littman MG, et al. **Ann N Y Acad Sci** 1989;563:184–94

Controlled digital motion by electrical stimulation of the flexor muscle in chickens. Herbert MA, et al. **Ann Plast Surg** 1980 Oct;5(4):309–16

Mechanical properties of collagen fibres: a comparison of reconstituted and rat tail tendon fibres. Kato YP, et al. **Biomaterials** 1989 Jan;10(1):38–42

The role of the long head of biceps brachii in the stabilization of the head of the humerus. Kumar VP, et al. **Clin Orthop** 1989 Jul;(244):172–5

Effects of short–term immobilization versus continuous passive motion on the biomechanical and biochemical properties of the rabbit tendon. Loitz BJ, et al. **Clin Orthop** 1989 Jul;(244):265–71

The contribution of labile crosslinks to the tensile behavior of tendons. Davison PF. **Connect Tissue Res** 1989; 18(4):293–305

Immature tendon adaptation to strenuous exercise. Curwin SL, et al. **J Appl Physiol** 1988 Nov;65(5):2297–301

Calibration of the mercury–in–silastic strain gauge in tendon load experiments. Riemersma DJ, et al. **J Biomech** 1988; 21(6):469–76

A kinematic model of the flexor tendons of the hand. Thompson DE, et al. **J Biomech** 1989;22(4):327–34

Simultaneous measurements of strains on two surfaces of tendons and ligaments. To SY, et al. **J Biomech** 1988; 21(6):511–4

Indomethacin inhibition of tenotomy–induced bone resorption in rats. Thompson DD, et al. **J Bone Miner Res** 1988 Aug;3(4):409–14

Muscle forces during locomotion in kangaroo rats: force platform and tendon buckle measurements compared. Biewener AA, et al. **J Exp Biol** 1988 Jul;137:191–205

Autonomous healing of chicken flexor tendons in vitro. Garner WL, et al. **J Hand Surg [Am]** 1988 Sep; 13(5):697–700

Human flexor tendon participation in the in vitro repair process. Mass DP, et al. **J Hand Surg [Am]** 1989 Jan; 14(1):64–71

Synaptic effects of intercostal tendon organs on membrane potentials of medullary respiratory neurons. Bolser DC, et al. **J Neurophysiol** 1989 May;61(5):918–26

Electromyographic study of the anterior cruciate ligament–hamstrings synergy during isometric knee extension. Grabiner MD, et al. **J Orthop Res** 1989; 7(1):152–5

Microcomputer–based system for tensile testing of biological materials. Milthorpe BK, et al. **Med Biol Eng Comput** 1988 Mar;26(2):161–6

Time–resolved studies of the dynamic behavior of the tendon fibers (chordae tendineae) of the human mitral valve. Christmann D, et al. **Naturwissenschaften** 1989 Mar; 76(3):124

A comparison of steady state and transient thermography techniques using a healing tendon model. Stein LE, et al. **Vet Surg** 1988 Mar–Apr;17(2):90–6

[Thermoanalytic studies of bundles of collagen fibers with biomechanical methods] Arnold G, et al. **Anat Anz** 1989; 168(1):17–26 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

More on the posterior tibial tendon in rheumatoid arthritis [letter] Simkin PA, et al. **Arthritis Rheum** 1989 Aug; 32(8):1050

Tibialis posterior tendon dysfunction. Johnson KA, et al. **Clin Orthop** 1989 Feb;(239):196–206

Posterior tibial tendon dysfunction: its association with seronegative inflammatory disease. Myerson M, et al. **Foot Ankle** 1989 Apr;9(5):219–25

Tibialis posterior dysfunction: an overview with a surgical case report using a flexor tendon transfer. Mendicino SS, et al. **J Foot Surg** 1989 Mar–Apr;28(2):154–7 (9 ref.)

Tendinous laxity and Jaccoud's syndrome in patients with systemic lupus erythematosus. Possible role of secondary hyperparathyroidism. Babini SM, et al. **J Rheumatol** 1989 Apr;16(4):494–8

Case report 550: Snapping right iliopsoas tendon. Silver SF, et al. **Skeletal Radiol** 1989;18(4):327–8

RADIOGRAPHY

Anatomical and radiological observations of the sesamoid bone of the popliteus muscle in the adult dog and cat. McCarthy PH, et al. **Anat Histol Embryol** 1989 Mar; 18(1):58–65

Arthrography, tenography, and bursography of the ankle and foot. Haller J, et al. **Clin Podiatr Med Surg** 1988 Oct; 5(4):893–908 (34 ref.)

Peroneal tenography. Buttery BW. **Radiography** 1988 May–Jun;54(615):121–3

SURGERY

The hamstring syndrome. A new diagnosis of gluteal sciatic pain. Puranen J, et al. **Am J Sports Med** 1988 Sep–Oct; 16(5):517–21

Study of permanent artificial tendon. Dong DY, et al. **Biomater Artif Cells Artif Organs** 1988–89;16(5):927–44

Hamstring release for knee flexion contracture in spastic adults. Keenan MA, et al. **Clin Orthop** 1988 Nov; (236):221–6

Proximal closing wedge osteotomy and adductor tenotomy for treatment of hallux valgus. Resch S, et al. **Foot Ankle** 1989 Jun;9(6):272–80

Secondary flexor tendon reconstruction. Imbriglia JE, et al. **Hand Clin** 1989 Aug;5(3):395–413 (59 ref.)

Bilateral, simultaneous, spontaneous rupture of the quadriceps tendon. A report of 3 cases and a review of the literature. Dhar S. **Injury** 1988 Jan;19(1):7–8 (13 ref.)

The surgical treatment of valgus flat foot in the adolescent by osteotomy of calcaneum associated with tenodesis of tibialis anterior and posterior. Chiappara P, et al. **Ital J Orthop Traumatol** 1989 Jun;15(2):171–5

Experimental permanent artificial tendon for the hand. Dong DY, et al. **J Biomed Eng** 1988 Oct;10(5):406–10

The effect on gait of lengthening of the medial hamstrings in cerebral palsy. Thometz J, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):345–53

Clear cell sarcoma of tendons and aponeuroses: histogenesis and mode of treatment. Langen RJ, et al. **J Foot Surg** 1989 Mar–Apr;28(2):112–5

Extensor carpi ulnaris and flexor carpi ulnaris tenodesis of the unstable distal ulna. Breen TF, et al. **J Hand Surg [Am]** 1989 Jul;14(4):612–7

Comparative mechanical analysis of a looped–suture tendon repair. Haddad RJ Jr, et al. **J Hand Surg [Am]** 1988 Sep; 13(5):709–13

Active tendon implants in flexor tendon reconstruction. Hunter JM, et al. **J Hand Surg [Am]** 1988 Nov;13(6):849–59

Results of flexor tendon tenolysis after replantation in the hand. Jupiter JB, et al. **J Hand Surg [Am]** 1989 Jan; 14(1):35–44

The E–flat hand. McGregor IA, et al. **J Hand Surg [Am]** 1988 Sep;13(5):692–3

Flexor tendon surgery: technical note. Shaw JA. **J Hand Surg [Am]** 1989 Jan;14(1):150–2

Extensor tenotomy: a technique for correction of posttraumatic distal interphalangeal joint hyperextension deformity. Stern PJ. **J Hand Surg [Am]** 1989 May;

14(3):546–9
Flexor tendon repair: significant gain in strength from the Halsted peripheral suture technique. Wade PJ, et al. **J Hand Surg [Br]** 1989 May;14(2):232–5
Reconstruction of the digital pulley in the monkey using biologic and nonbiologic materials. Kain CC, et al. **J Orthop Res** 1988;6(6):871–7
Tibial sequestrectomy in the management of Osgood–Schlatter disease. Trail IA. **J Pediatr Orthop** 1988 Sep–Oct;8(5):554–7
Biological response to a musculo-tendinous prosthesis in the rabbit. Vesce G, et al. **Life Support Syst** 1983;1 Suppl 1:424–7
Tips of the trade #11. A technique for tendon and capsule separation in shoulder surgery. O'Neill DB, et al. **Orthop Rev** 1989 Apr;18(4):504–7
Intratendinous ganglion. A case report. Rayan GM. **Orthop Rev** 1989 Apr;18(4):449–51
Free-flap coverage of the exposed Achilles tendon. Hallock GG. **Plast Reconstr Surg** 1989 Apr;83(4):710–6
A tendon approximator. LaLonde DH. **Plast Reconstr Surg** 1989 May;83(5):912–3
A history of tendon operations. Chick LR, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):183–8
[Cervical peridural selective sensitive anesthesia in surgery and rehabilitation of the hand] Deschodt J, et al. **Ann Chir Main** 1988;7(3):217–21 (Eng. Abstr.) (Fre)
[Unusual course of malignant synovioma of the flexor tendon sheath of the hand] Pfeiffer KM, et al. **Handchir Mikrochir Plast Chir** 1989 Jul;21(4):210–2 (Eng. Abstr.) (Ger)
[Baker's operation in the treatment of equinus deformity caused by cerebral palsy] Libri R, et al. **Chir Organi Mov** 1988 Oct–Dec;73(4):335–8 (Eng. Abstr.) (Ita)
[Surgical tactics in injury of the bending surface of the forearm] Dubrov IaG, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):5–9 (Rus)

TRANSPLANTATION

Augmentation with the longitudinal patellar retinaculum in the repair of an anterior cruciate ligament rupture. Jonsson T, et al. **Am J Sports Med** 1989 May–Jun;17(3):401–8
Effects of fibrin sealant on incorporation of autograft and xenograft tendons within bone tunnels. A preliminary study. Shoemaker SC, et al. **Am J Sports Med** 1989 May–Jun;17(3):318–24
Denervated palmaris longus tendon as a skeletal muscle transplant in circumferential pharyngoplasty. Ramakrishnan KM, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):392–3
Pitfalls in the use of interference screws for anterior cruciate ligament reconstruction: brief report. Matthews LS, et al. **Arthroscopy** 1989;5(3):225–6
Arthroscopic follow-up of anterior cruciate ligament reconstruction using allogeneic tendon. Shino K, et al. **Arthroscopy** 1989;5(3):165–71
Arthroscopic reconstruction of the anterior cruciate ligament using allograft tendon. Wainer RA, et al. **Arthroscopy** 1988; 4(3):199–205
Bridge flexor tendon grafts. Stark HH, et al. **Clin Orthop** 1989 May;(242):51–9
Arthroscopic observations of autogeneic quadriceps and patellar tendon grafts after anterior cruciate ligament reconstruction of the knee. Yasuda K, et al. **Clin Orthop** 1989 Sep;(246):217–24
Free tendon grafting to repair the metacarpophalangeal joint of the thumb. Surgical techniques and a review of 70 patients. Breek JC, et al. **J Bone Joint Surg [Br]** 1989 May; 71(3):383–7
Comparative study of vascularized and nonvascularized tendon grafts for reconstruction of flexor tendons in zone 2: an experimental study in primates. Singer DI, et al. **J Hand Surg [Am]** 1989 Jan;14(1):55–63
The independent long extensor tendon of the fifth toe as a source of tendon grafts for the hand. Aulicino PL, et al. **J Hand Surg [Br]** 1989 May;14(2):236–8
Use of patellar tendon autograft for anterior cruciate ligament reconstruction in the rabbit: a long-term histologic and biomechanical study. Ballock RT, et al. **J Orthop Res** 1989; 7(4):474–85
Mechanical properties of primate vascularized vs. nonvascularized patellar tendon grafts; changes over time. Butler DL, et al. **J Orthop Res** 1989;7(1):68–79
Maturation of autogenous tendon grafts in anterior cruciate ligament reconstruction of the human knee—an arthroscopic study. Yasuda K, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):59–66
Early mobilization after flexor tendon grafting for isolated profundus tendon lesions. Ipsen T, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(2):163–7 (15 ref.)
[Management of fresh and older ruptures of the anterior cruciate ligament with the Kennedy modified polypropylene ligament augmented tendonplasty. Preliminary contribution] Paar O. **Chirurg** 1988 Nov; 59(11):788–92 (Ger)
[Lateral ligament replacement of the ankle joint—cialit graft or tendon graft? A comparative clinical study from the Balgrist Orthopedic University Hospital, Zürich] Waldis MF, et al. **Z Orthop** 1988 Jul–Aug;126(4):416–9 (Eng. Abstr.) (Ger)
[Surgical treatment of inveterate ruptures of the rotator cuff by creating a tendon graft bridging of the defect] Varga A. **Magy Traumatol Orthop Helyreallito Sebesz** 1988; 31(4):285–90 (Eng. Abstr.) (Hun)
[Microsurgical reconstruction of the forearm tendons] Borovikov AM, et al. **Ortop Travmatol Protez** 1989 Feb; (2):13–6 (Eng. Abstr.) (Rus)
[Characteristics of rehabilitation treatment after tendon and muscle plastic surgery in children with sequelae of injuries of the peripheral nerves] Kaptelin AF, et al. **Ortop Travmatol Protez** 1989 Feb;(2):29–34 (Eng. Abstr.) (Rus)
[Alloplasty in injuries of the Achilles tendon] Demichev NP, et al. **Vestn Khir** 1989 Jan;142(1):86–90 (Eng. Abstr.) (Rus)
[Surgical treatment of postoperative ventral hernia using a modification of the Napalkov method] Uglov FG, et al. **Vestn Khir** 1989 Jan;142(1):100–4 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Intra- and extracellular lysosomes in tendon tissue of the mouse after treatment with an anabolic steroid hormone. Ultrastructural and cytochemical study. Michna H. **Acta Anat (Basel)** 1989;134(1):57–61
Ultrastructure of the gastrocnemius tendon and sheath from broilers infected with reovirus. Hill JE, et al. **Avian Dis** 1989 Jan–Mar;33(1):79–85
A comparative electron microscopic study of apatite crystals in collagen fibrils of rat bone, dentin and calcified turkey leg tendons. Arsenault AL. **Bone Miner** 1989 May; 6(2):165–77
Intracellular collagen fibrils: evidence of an intracellular source from experiments with tendon fibroblasts and fibroblastic tumour cells. Michna H. **J Anat** 1988 Jun; 158:1–12
Procollagen intermediates during tendon fibrillogenesis. Fleischmajer R, et al. **J Histochem Cytochem** 1988 Nov; 36(11):1425–32
Collagen fibrillogenesis in situ: fibril segments are intermediates in matrix assembly. Birk DE, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4549–53
Intervertebral disc and tendon: quantitative ultrastructure and differentiation of their collagen fibrils. Michna H, et al. **Z Mikrosk Anat Forsch** 1988;102(6):1013–24

TENDONS, PARA-ARTICULAR

Bilateral spontaneous concurrent rupture of the patellar tendon in the absence of associated local or systemic disease. Sherlock DA, et al. **Clin Orthop** 1988 Dec; (237):179–83
A synovial ganglion of the popliteus tendon simulating a parameniscal cyst. Two case reports [letter] Fowler AW. **J Bone Joint Surg [Am]** 1989 Mar;71(3):474–5
[Talalgia and enthesopathy of the ankle] Onkelinx A. **Acta Belg Med Phys** 1988 Oct–Dec;11(4):179–83 (Fre)
[Diagnosis and treatment of the snapping hip] Floares G, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):693–7 (Eng. Abstr.) (Rum)
[Treatment of closed injuries of finger tendons and aponeurosis at the level of the distal interphalangeal joint] Korshunov VF, et al. **Ortop Travmatol Protez** 1988 Aug; (8):12–4 (Eng. Abstr.) (Rus)

ABNORMALITIES

Limitation of thumb flexion due to an unusual insertion of the flexor pollicis longus. Hagan HJ, et al. **J Hand Surg [Br]** 1988 Nov;13(4):474–6

ANATOMY & HISTOLOGY

Anatomic relations between the median nerve and flexor tendons in the carpal tunnel: MR evaluation in normal volunteers. Zeiss J, et al. **AJR Am J Roentgenol** 1989 Sep; 153(3):533–6
The anatomy of the extensor mechanism. Terry GC. **Clin Sports Med** 1989 Apr;8(2):163–77
The popliteus tendon. Tria AJ Jr, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):714–6
Latissimus dorsi and teres major tendons: separate or conjoint tendons? Beck PA, et al. **J Pediatr Orthop** 1989 May–Jun; 9(3):308–9
[Fibrous structures of the wrist. III. Microscopic study. Rheologic consequences] Kuhlmann JN, et al. **Bull Assoc Anat (Nancy)** 1988 Jun–Sep;72(217–218):37–43 (Eng. Abstr.) (Fre)
[Fibrous structures of the wrist. I. Methods of studying the fibrous structures and results obtained (history)] Kuhlmann JN, et al. **Bull Assoc Anat (Nancy)** 1988 Jun–Sep; 72(217–218):27–30 (37 ref.) (Eng. Abstr.) (Fre)

DRUG EFFECTS

Effects of chondroitinase-ABC on proteoglycans and swelling properties of fibrocartilage in bovine flexor tendon. Koob TJ. **J Orthop Res** 1989;7(2):219–27

ENZYMOLOGY

Collagenase production by rabbit ligaments and tendon. Harper J, et al. **Connect Tissue Res** 1988;17(4):253–9

INJURIES

Rehabilitation of extensor tendon injury of the hand by means of early controlled motion. Dovelle S, et al. **Am J Occup Ther** 1989 Feb;43(2):115–9
Jumper's knee and ultrasonography. Fritschy D, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):637–40
Recent simple flexor tendon injuries in zone I, II, III of Verdan. Results of tendon repairs concerning 115 fingers in 99 patients. Tropet Y, et al. **Ann Chir Main** 1988; 7(2):109–14 (Eng, Fre)
Traumatic dislocation of the tibialis posterior tendon. Mittal RL, et al. **Int Orthop** 1988;12(3):259–60
Neglected rupture of the tibialis anterior tendon. Benzakein R, et al. **J Am Podiatr Med Assoc** 1988 Oct;78(10):529–32
Concurrent rupture of the rotator cuff and anterior dislocation of the shoulder in the older patient. Neviaser RJ, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1308–11
Rupture of flexor tendons to the little finger due to bony irregularities in the carpal tunnel. Stevenson TR, et al. **J Hand Surg [Br]** 1988 Aug;13(3):308–10
Dual extensor tendon entrapment in Galeazzi fracture-dislocation: a case report. Biyani A, et al. **J Trauma** 1989 Sep;29(9):1295–7
"Pumpkin carvers" tendon injuries: repair of children's flexor tendon lacerations caused by a sharp knife. Winternitz WW Jr, et al. **Minn Med** 1988 Oct;71(10):622–4
Arthroscopy update #3. Chronic impingement syndrome. The role of ultrasonography and arthroscopic anterior acromioplasty. Seitz WH Jr, et al. **Orthop Rev** 1989 Mar; 18(3):364–75
Ultrasonography of the rotator cuff. Crass JR, et al. **Radiographics** 1985 Nov;5(6):941–53
Rotator cuff tears: correlation of sonographic and surgical findings. Hodler J, et al. **Radiology** 1988 Dec;169(3):791–4
Rotator cuff tears: diagnostic performance of MR imaging. Zlatkin MB, et al. **Radiology** 1989 Jul;172(1):223–9
Shoulder arthrography with sodium meglumine metrizoate and iopamidol. Ahovuo J, et al. **Skeletal Radiol** 1989; 18(2):89–92
Limited sensitivity of ultrasound for the detection of rotator cuff tears. Miller CL, et al. **Skeletal Radiol** 1989; 18(3):179–83
[Repair of severe ruptures of the rotator cuff of the shoulder] Augereau B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:59–62 (Fre)
[Recent rupture of the rotator cuff in young athletes: myth or reality?] De Roguin B, et al. **Rev Med Suisse Romande** 1989 May;109(5):375–8 (Fre)
[Bilateral intra-ligamentous traumatic rupture of both patellar tendons—a case report] Kohn D, et al. **Aktuel Traumatol** 1988 Dec;18(6):271–4 (Eng. Abstr.) (Ger)
[Rupture of the triceps tendon in the athlete] Felenda M, et al. **Sportverletz Sportschaden** 1988 Sep;2(3):120–1 (Eng. Abstr.) (Ger)
[Treatment of fresh subcutaneous flexor tendon rupture of the distal joint of long fingers with temporary bone wire arthrodesis] Ittner G, et al. **Unfallchirurgie** 1989 Feb; 15(1):9–13 (Eng. Abstr.) (Ger)
[Spontaneous ruptures of the extensor system of the knee following joint replacement in patients with rheumatoid arthritis] Trepte CT, et al. **Z Orthop** 1988 Sep–Oct; 126(5):519–25 (Eng. Abstr.) (Ger)
[Experiences with 160 operated rotator cuff ruptures] Reichelt A. **Z Unfallchir Versicherungsmed Berufskr** 1988; 81(3):165–8 (Ger)
[Status of sonography in the diagnosis of the pathologic shoulder] Weinstabl R, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(3):157–64 (Ger)
[Ultrasonic diagnosis of tendon and ligament injuries in anterior dislocations of the shoulder joint] Falkowska-Bednarek E. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):49–54 (Eng. Abstr.) (Pol)
[Anatomical and biomechanical substantiation of operations for restoration of the extensor function of the II–V fingers] Roslova EP, et al. **Ortop Travmatol Protez** 1988 Aug; (8):14–8 (Eng. Abstr.) (Rus)

PATHOLOGY

Ultrasonography of the tendons of the shoulder. Ahovuo J, et al. **Eur J Radiol** 1989 Feb;9(1):17–21
Carpal tunnel syndrome. Anatomical and clinical correlations and morphological and ultrastructural aspects of the tenosynovial sheath. Scelsi R, et al. **Ital J Orthop Traumatol** 1989 Mar;15(1):75–80
MR image of localized giant cell tumor of the tendon sheath involving the knee. Balsara ZN, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):159–62
Pigmented villonodular synovitis of the extensor tendon sheaths in a child. Hansen P, et al. **J Hand Surg [Br]** 1988 Aug;13(3):313–4 .
[Pathogenesis and treatment of tendon ruptures at the level of the wrist and the hand in rheumatoid polyarthritis. Illustrated review of the literature] Boute B, et al. **Acta Orthop Belg** 1988;54(2):158–64 (95 ref.) (Eng. Abstr.) (Fre)
[Scanning electron microscopy studies following two-stage tendon and tendon sheath reconstruction in experimental flexor tendon injuries] Biró V, et al.

Handchir Mikrochir Plast Chir 1989 Jan;21(1):33–6 (Eng. Abstr.) (Ger)
[Fibrous hyperplasia of the flexor tendon sheaths as a main cause of carpal tunnel syndrome] Paschmeyer HD. Handchir Mikrochir Plast Chir 1989 Mar;21(2):74–8 (Eng. Abstr.) (Ger)

PHYSIOLOGY

Flexor tendon healing. Manske PR. J Hand Surg [Br] 1988 Aug;13(3):237–45 (93 ref.)
The influence of wrist position on the minimum force required for active movement of the interphalangeal joints. Savage R. J Hand Surg [Br] 1988 Aug;13(3):262–8
[Fibrous structures of the wrist. II. Biomechanical study] Kuhlmann JN, et al. Bull Assoc Anat (Nancy) 1988 Jun–Sep; 72(217–218):31–5 (Eng. Abstr.) (Fre)

PHYSIOPATHOLOGY

Snapping syndrome caused by the semitendinosus tendon. A case report. Lyu SR, et al. J Bone Joint Surg [Am] 1989 Feb;71(2):303–5
Acromioplasty for impingement with an intact rotator cuff. Hawkins RJ, et al. J Bone Joint Surg [Br] 1988 Nov; 70(5):795–7
Rotator cuff function in the impingement syndrome. Watson M. J Bone Joint Surg [Br] 1989 May;71(3):361–6
Functional deficit following loss of continuity of the long extensors of the fingers: a method of assessment. Quaba AA, et al. J Hand Surg [Br] 1988 Aug;13(3):282–3
[The patellar tendon reflex in knee injuries. I. A measuring place for assessing parameters of the patellar tendon reflex] Schier G. Beitr Orthop Traumatol 1988 Sep;35(9):417–23 (Eng. Abstr.) (Ger)
[The patellar tendon reflex in knee injuries. II. Reproducible representation of the patellar tendon reflex and its modification by knee injury] Schier G. Beitr Orthop Traumatol 1988 Sep;35(9):423–33 (Eng. Abstr.) (Ger)
[A rare cause of spontaneous rupture of the tendon of the extensor pollicis longus muscle] Ahmadi A. Handchir Mikrochir Plast Chir 1988 Jul;20(4):223–4 (Eng. Abstr.) (Ger)
[The quadriga phenomenon of the extensor tendon system and the superficial transverse metacarpal ligament] Wilhelm A. Handchir Mikrochir Plast Chir 1988 Jul; 20(4):173–9 (5 ref.) (Eng. Abstr.) (Ger)

SURGERY

Biomechanical evaluation of rotator cuff fixation methods. France EP, et al. Am J Sports Med 1989 Mar–Apr; 17(2):176–81
Medial subluxation of the patella as a complication of lateral retinacular release. Hughston JC, et al. Am J Sports Med 1988 Jul–Aug;16(4):383–8
The durability of anterior cruciate ligament reconstruction with the patellar tendon. Sandberg R, et al. Am J Sports Med 1988 Jul–Aug;16(4):341–3
A biomechanical analysis of anterior cruciate ligament reconstruction with the patellar tendon. A two year followup. Tibone JE, et al. Am J Sports Med 1988 Jul–Aug; 16(4):332–5
Surgical repair of the rotator cuff and surrounding tissues. Factors influencing the results. Björkenheim JM, et al. Clin Orthop 1988 Nov;(236):148–53
Lateral facet syndrome of the patella. Lateral restraint analysis and use of lateral resection. Johnson RP. Clin Orthop 1989 Jan;(238):148–58
Posteromedial release for idiopathic talipes equinovarus. A long-term follow-up study. Levin MN, et al. Clin Orthop 1989 May;(242):265–8
Bridge flexor tendon grafts. Stark HH, et al. Clin Orthop 1989 May;(242):51–9
Pitfalls of the lateral retinacular release. Busch MT, et al. Clin Sports Med 1989 Apr;8(2):279–90 (44 ref.)
The results of extensor mechanism realignment following failed lateral retinacular releases. Holmes PF, et al. Clin Sports Med 1989 Apr;8(2):291–6
Formal extensor mechanism reconstruction. Turba JE. Clin Sports Med 1989 Apr;8(2):297–317 (60 ref.)
Chronic peroneus brevis tendon lesions. Sammarco GJ, et al. Foot Ankle 1989 Feb;9(4):163–70
Evans' procedure in the treatment of chronic instability of the ankle. Björkenheim JM, et al. Injury 1988 Mar; 19(2):70–2
Peroneal tendon balance procedure. Grumbine NA, et al. J Am Podiatr Med Assoc 1989 Jan;79(1):15–23 (81 ref.)
Tenodesis of the long head of the biceps brachii for chronic bicipital tendinitis. Long-term results. Becker DA, et al. J Bone Joint Surg [Am] 1989 Mar;71(3):376–81
Long-term results after tenosynovectomy to treat the rheumatoid hand. Brown FE, et al. J Hand Surg [Am] 1988 Sep;13(5):704–8
Flexor tendon injuries: the results of primary repair. Singer M, et al. J Hand Surg [Br] 1988 Aug;13(3):269–72
The modified Kleinert splint in zone II flexor tendon injuries. Slattery PG. J Hand Surg [Br] 1988 Aug;13(3):273–6
Tendon interposition arthroplasty of the first carpo-metacarpal joint. Weilby A. J Hand Surg [Br] 1988 Nov;13(4):421–5
Correction of idiopathic clubfoot: a comparison of results of early versus delayed posteromedial release. DePuy J, et al. J Pediatr Orthop 1989 Jan–Feb;9(1):44–8
Combined adductor transfer, iliopsoas release, and proximal hamstring release in cerebral palsy. Smith JT, et al. J Pediatr Orthop 1989 Jan–Feb;9(1):1–5
Bilateral simultaneous infrapatellar tendon rupture: support for Davidsson's theory. Splain SH, et al. Orthop Rev 1988 Aug;17(8):802–5 (15 ref.)
Trapdoor pulley repair for chronic subluxation of the digital extensor tendon. Eisenbaum SL. Plast Reconstr Surg 1988 Dec;82(6):1081–2
[Splitting of the lateral retinaculum of the knee in retropatellar chondropathy (letter)] Bakx JC. Ned Tijdschr Geneeskd 1989 Mar 25;133(12):631–2 (Dut)
[Treatment of hallux valgus by plasty of the adductor tendon of the great toe] Jarde O, et al. Ann Chir 1988;42(10):770–2 (Eng. Abstr.) (Fre)
[Post-traumatic button syndrome caused by lesions of the extensor apparatus of the dorsum of the proximal interphalangeal joint] Alnot JY, et al. Rev Chir Orthop 1988;74 Suppl 2:53–6 (Fre)
[The trans-acromioclavicular approach with preservation of a digastric trapezo-deltoid flap in surgery of the rotator cuff] Mestdagh H, et al. Rev Chir Orthop 1988;74 Suppl 2:62–5 (Fre)
[Extra-coracoid axillary approach to the gleno-humeral joint: an original approach to the shoulder] Saillant G, et al. Rev Chir Orthop 1988;74 Suppl 2:57–8 (Fre)
[Roentgenologic evaluation of postoperative carpal collapse and ulnar translocation in patients with chronic polyarthritis] Schmidt A, et al. Handchir Mikrochir Plast Chir 1989 May;21(3):134–7 (Eng. Abstr.) (Ger)
[Results of follow-up studies of 340 flexor tendon reconstructions. A comparative study of various methods of treatment] Knopp W, et al. Unfallchirurg 1988 Dec; 91(12):565–70 (Eng. Abstr.) (Ger)
[Habitual peroneal tendon dislocation] Huber H, et al. Z Orthop 1988 Dec;126(6):609–12 (Eng. Abstr.) (Ger)
[Subcutaneous rupture of the patellar tendon] Pagani PA, et al. Chir Organi Mov 1988 Jul–Sep;73(3):221–6 (Eng. Abstr.) (Ita)
[Correction of the muscles of the external rotators of the hip in the surgical treatment of congenital dislocation in children] Gafarov KhZ, et al. Ortop Travmatol Protez 1988 Oct;(10):45–6 (Rus)

TRANSPLANTATION

A distally based dorsal and triangular tendinous flap for direct access to the proximal interphalangeal joint. Chamay A. Ann Chir Main 1988;7(2):179–83 (Eng, Fre)
Five year retrospective analysis of the autogenous tendon graft procedure for primary ankle repair and ankle stabilization. Kuwada GT. J Foot Surg 1988 Jul–Aug; 27(4):353–8
Flexor tendon grafting 48 years after injury. Jones MW, et al. J Hand Surg [Br] 1988 Aug;13(3):284–5
Post-operative management of flexor tendon grafting. Tonkin M, et al. J Hand Surg [Br] 1988 Aug;13(3):277–81

ULTRASTRUCTURE

Microscopical investigation of canine anterior cruciate ligament and patellar tendon: collagen fascicle morphology and architecture. Yahia LH, et al. J Orthop Res 1989; 7(2):243–51

TENEBRIO

GENETICS

Distribution and sequence homogeneity of an abundant satellite DNA in the beetle, Tenebrio molitor. Davis CA, et al. Nucleic Acids Res 1989 Jul 25;17(14):5579–86

METABOLISM

Brain RNA synthesis and the retention of learning through metamorphosis in Tenebrio obscurus (Insecta: Coleoptera). Punzo F, et al. Comp Biochem Physiol [A] 1988;91(4):675–8
Leucomyosuppressin, a novel insect neuropeptide, inhibits evoked transmitter release at the mealworm neuromuscular junction. Yamamoto D, et al. Neurosci Lett 1988 Dec 19; 95(1–3):137–42

PHYSIOLOGY

20-Hydroxyecdysone acts in the male pupa to commit accessory glands toward trehalase production in the adult mealworm beetle (Tenebrio molitor). Yaginuma T, et al. Gen Comp Endocrinol 1989 Feb;73(2):173–85

TENIPOSIDE see under PODOPHYLLOTOXIN

TENNECETIN see PIMARICIN

TENNIS see under SPORTS

TENNIS ELBOW

Tennis elbow—a reappraisal. Chard MD, et al. Br J Rheumatol 1989 Jun;28(3):186–90 (52 ref.)
Tennis elbow: its clinical course, etiology and treatment. Wood M, et al. J Arkansas Med Soc 1989 Apr; 85(11):499–500
[Tennis elbow] Weigl K. Harefuah 1988 Dec 15; 115(12):399–402 (Heb)
[Humeral epicondylitis: notes on therapy] Adamo V, et al. Clin Ter 1987 Dec 15;123(5):395–403 (Ita)

DRUG THERAPY

Medial epicondylitis caused by injury to the medial antebrachial cutaneous nerve: a case report. Richards RR, et al. Can J Surg 1989 Sep;32(5):366–7, 369

PHYSIOPATHOLOGY

Generalizability of grip strength measurements in patients with tennis elbow. Stratford PW, et al. Phys Ther 1989 Apr;69(4):276–81
[Polymyography recording in epicondylopathia humeri radialis] Weh L, et al. Z Orthop 1989 Jan–Feb;127(1):72–6 (Eng. Abstr.) (Ger)

SURGERY

Decompression of the posterior interosseous nerve for tennis elbow. Jalovaara P, et al. Arch Orthop Trauma Surg 1989; 108(4):243–5

THERAPY

Effect of standard and Aircast tennis elbow bands on integrated electromyography of forearm extensor musculature proximal to the bands. Snyder-Mackler L, et al. Am J Sports Med 1989 Mar–Apr;17(2):278–81
Pulsed electromagnetic field treatment of chronic lateral humeral epicondylitis [letter] Chard MD, et al. Clin Exp Rheumatol 1988 Jul–Sep;6(3):330–2
52 cases of external humeral epicondylitis treated by acupuncture and moxibustion. Mei ZY. J Tradit Chin Med 1989 Mar;9(1):3–4
A comparative study of continuous ultrasound, placebo ultrasound and rest in epicondylalgia. Lundeberg T, et al. Scand J Rehabil Med 1988;20(3):99–101
[Evaluation of the results of conservative treatment in cases of chronic lateral epicondylitis of the humerus in workers in the metal industry] Bicz-Kubiatowicz M, et al. Med Pr 1988;39(3):217–21 (Eng. Abstr.) (Pol)

TENOSYNOVITIS

CHEMICALLY INDUCED

Ciprofloxacin and tenosynovitis [letter] McEwan SR, et al. Lancet 1988 Oct 15;2(8616):900

COMPLICATIONS

Nonoperative treatment of trigger fingers and thumbs. Freiberg A, et al. J Hand Surg [Am] 1989 May;14(3):553–8
Acute carpal tunnel syndrome: a case report. Jones WA, et al. J Hand Surg [Br] 1988 Nov;13(4):400–1
A Mycobacterium malmoense infection of the hand presenting as carpal tunnel syndrome. Prince H, et al. J Hand Surg [Br] 1988 Aug;13(3):328–30
Digital flexion contractures secondary to tophaceous gout. A report of three cases. Caudle RJ, et al. Orthopedics 1989 May;12(5):731–5 (13 ref.)
[Acquired Brown syndrome. An unusual complication of rheumatoid polyarthritis (letter)] Olivares JP, et al. Rev Rhum Mal Osteoartic 1988 Dec;55(12):1035 (Fre)

DIAGNOSIS

Use of sonography in the early detection of suppurative flexor tenosynovitis. Schecter WP, et al. J Hand Surg [Am] 1989 Mar;14(2 Pt 1):307–10
Overuse syndrome and its differential diagnosis. J Occup Med 1988 Dec;30(12):966–7

DRUG THERAPY

Efficacy of cortisone injection in treatment of trigger fingers and thumbs. Marks MR, et al. J Hand Surg [Am] 1989 Jul;14(4):722–7
A long-term follow-up of the effect of repeated corticosteroid injections for stenosing tenovaginitis. Faunø P, et al. J Hand Surg [Br] 1989 May;14(2):242–3
Tenosynovitis [letter] Watson NA. J R Soc Med 1988 Dec; 81(12):742

ETIOLOGY

Tuberculous tenosynovitis [letter] Garcia Cebrian F. Chest 1988 Nov;94(5):1119
Posterior tibial tendon dysfunction: its association with seronegative inflammatory disease. Myerson M, et al. Foot Ankle 1989 Apr;9(5):219–25
Acquired Brown's syndrome caused by frontal sinus osteoma. Biedner B, et al. J Pediatr Ophthalmol Strabismus 1988 Sep–Oct;25(5):226–9
Sporothrix tenosynovitis—differential diagnosis of granulomatous inflammatory disease of the joints. Schwartz DA. J Rheumatol 1989 Apr;16(4):550–3
[Rupture of the extensor tendons of the fingers in inflammatory rheumatic disorders. Study of a series of 23 surgical cases] Roombouts JJ, et al. Acta Orthop Belg 1988; 54(2):165–9 (Eng. Abstr.) (Fre)

METABOLISM

Upper limb pyrophosphate tenosynovitis outside the carpal tunnel. Gerster JC, et al. **Ann Rheum Dis** 1989 Aug; 48(8):689–91

MICROBIOLOGY

Tenosynovitis of the hand caused by Mycobacterium terrae. Petrini B, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug; 8(8):722–4

Tenosynovitis of the hand: a forgotten manifestation of tuberculosis. Jackson RH, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):616–8

PATHOLOGY

Synovial involvement by Mycobacterium marinum. A histopathological study of 25 culture-proven cases. Collins RJ, et al. **Pathology** 1988 Oct;20(4):340–5

[Synovitis and pigmented villonodular tenosynovitis: apropos of 3 cases] Ben Rejeb A, et al. **Tunis Med** 1988 May; 66(5):485–9 (24 ref.) (Eng. Abstr.) (Fre)

RADIOGRAPHY

Chronic tenosynovitis of the tibialis posterior tendon and the use of tenography. Hirsh S, et al. **J Foot Surg** 1988 Jul–Aug; 27(4):306–9

[Peritendinitis calcarea doesn't appear only in the shoulder joint] Michaëlsson K, et al. **Lakartidningen** 1988 Sep 28; 85(39):3191–2 (Swe)

SURGERY

Treatment of tenosynovitis in rheumatoid arthritis. Stirrat CR. **Hand Clin** 1989 May;5(2):169–75 (15 ref.)

Longitudinal incision for trigger finger release. Stefanich RJ, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):316–7

Surgical treatment of de Quervain's diseases: a clinical review of 42 cases. Visuthikosol V, et al. **J Med Assoc Thai** 1988 Nov;71(11):637–9

[Bilateral stenosing tenosynovitis of the long flexors of the great toe in a dancer. Apropos of a bilateral case] Lamata Iturria M, et al. **Rev Chir Orthop** 1988;74(2):190–2 (Eng. Abstr.) (Fre)

THERAPY

Hand problems in pregnancy. Nygaard IE, et al. **Am Fam Physician** 1989 Jun;39(6):123–6

Mycobacterium marinum flexor tenosynovitis. Lacy JN, et al. **Clin Orthop** 1989 Jan;(238):288–93

Stenosing tenovaginitis of extensor carpi ulnaris: brief report. Nachinolcar UG, et al. **J Bone Joint Surg [Br]** 1988 Nov; 70(5):842

The treatment of overuse syndrome in musicians. Results in 175 patients. Fry HJ. **J R Soc Med** 1988 Oct;81(10):572–5

[Treatment of tendovaginitis crepitans of the forearm by the method of local ethyl chloride hypothermia] Il'inskiĭ IS, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):116–7 (Rus)

VETERINARY

Ultrastructure of the gastrocnemius tendon and sheath from broilers infected with reovirus. Hill JE, et al. **Avian Dis** 1989 Jan–Mar;33(1):79–85

Comparative microscopic lesions in reoviral and staphylococcal tenosynovitis. Hill JE, et al. **Avian Dis** 1989 Jul–Sep;33(3):401–10

TENSILE STRENGTH

A new quantitative measurement for surgical needle ductility. Abidin MR, et al. **Ann Emerg Med** 1989 Jan;18(1):64–8

Surgical manipulation and the tensile strength of polypropylene sutures. Dobrin PB. **Arch Surg** 1989 Jun; 124(6):665–8

The relative effects of collagen fiber orientation, porosity, density, and mineralization on bone strength. Martin RB, et al. **J Biomech** 1989;22(5):419–26

The bovine pericardial xenograft: I. Effect of fixation in aldehydes without constraint on the tensile viscoelastic properties of bovine pericardium. Lee JM, et al. **J Biomed Mater Res** 1989 May;23(5):457–75

The bovine pericardial xenograft: II. Effect of tethering or pressurization during fixation on the tensile viscoelastic properties of bovine pericardium. Lee JM, et al. **J Biomed Mater Res** 1989 May;23(5):477–89

The bovine pericardial xenograft: III. Effect of uniaxial and sequential biaxial stress during fixation on the tensile viscoelastic properties of bovine pericardium. Lee JM, et al. **J Biomed Mater Res** 1989 May;23(5):491–506

Effect of aging on tensile mechanical properties of the rabbit distal femoral growth plate. Guse RJ, et al. **J Orthop Res** 1989;7(5):667–73

Which drain? A comparison of the tensile strengths of vacuum drainage tubes. Paton RW, et al. **J R Coll Surg Edinb** 1988 Jun;33(3):127–9

Microcomputer-based system for tensile testing of biological materials. Milthorpe BK, et al. **Med Biol Eng Comput** 1988 Mar;26(2):161–6

[A method of low-temperature strengthening of microtome knives and medical cutting instruments] Stepanov PF, et al. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):77 (Rus)

DRUG EFFECTS

Endoscopic sclerotherapy of oesophageal varices in rabbits. The long-term effect on oesophageal collagen content and mechanical strength. Jensen LS, et al. **Scand J Gastroenterol** 1989 Jun;24(5):613–6

TENSOR TYMPANI see under TYMPANIC MEMBRANE

TENUAZONIC ACID see under ANTIBIOTICS, ANTINEOPLASTIC

TEPA see under AZIRINES

TEPROTIDE see under OLIGOPEPTIDES

TERATOGENS

see related
ABNORMALITIES, DRUG-INDUCED

Pathogenesis of limb and facial malformations induced by pyrimethamine in the rat. Horvath C, et al. **Acta Morphol Hung** 1988;36(1–2):53–61

Significance of the differential growth, relative tissue shifts and the vascular bed in limb development. Seichert V. **Acta Univ Carol [Med Monogr] (Praha)** 1988;125:1–162

Human teratogens, prenatal mortality, and selection bias. Khoury MJ, et al. **Am J Epidemiol** 1989 Aug;130(2):361–70

Fetal alcohol syndrome and DiGeorge anomaly: critical ethanol exposure periods for craniofacial malformations as illustrated in an animal model. Sulik KK, et al. **Am J Med Genet Suppl** 1986;2:97–112

Perception of teratogenic risk by pregnant women exposed to drugs and chemicals during the first trimester. Koren G, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1190–4

Perspectives on the concern for and management of prenatal chemical exposure and postnatal effects. Kimmel CA. **Ann N Y Acad Sci** 1989;562:1–2

Concepts in teratology and developmental toxicology derived from animal research. Vorhees CV. **Ann N Y Acad Sci** 1989;562:31–41

Cytogenetic effects of methylmercury in embryos of the killifish, Fundulus heteroclitus. Perry DM, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):569–74

Tributyltin is a teratogen in producing deformities in limbs of the fiddler crab, Uca pugilator. Weis JS, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):583–7

Lack of teratogenic and mutagenic effects of nitrite on mouse fetuses. Shimada T. **Arch Environ Health** 1989 Jan–Feb; 44(1):59–63

Gross-structural defects in rats after acyclovir application on day 10 of gestation. Chahoud I, et al. **Arch Toxicol** 1988 Aug;62(1):8–14

Influence of 13-cis and all-trans retinoic acid on rat embryonic development in vitro: correlation with isomerisation and drug transfer to the embryo. Klug S, et al. **Arch Toxicol** 1989;63(3):185–92

Embryotoxicity induced by alkylating agents: 5. Dose-response relationships of teratogenic effects of methylnitrosourea in mice. Platzek T, et al. **Arch Toxicol** 1988;62(6):411–23

Prenatal toxicity of acyclovir in rats. Stahlmann R, et al. **Arch Toxicol** 1988;61(6):468–79

The teratogenicity of cadmium-metallothionein in the rat. Webb M, et al. **Arch Toxicol** 1988;61(6):457–67

Teratogenicity of dinoseb: role of the diet. Giavini E, et al. **Bull Environ Contam Toxicol** 1989 Aug;43(2):215–9

Embryotoxicity of lead on Bufo arenarum. Pérez-Coll CS, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):247–52

Teratogenesis of polychlorocycloalkane insecticides in chicken embryos resulting from their interactions at the convulsant recognition sites of the GABA (pro)receptor complex. Seifert J. **Bull Environ Contam Toxicol** 1989 May; 42(5):707–15

Current status of behavioral teratology: science and regulation. Kimmel CA. **CRC Crit Rev Toxicol** 1988; 19(1):1–10 (46 ref.)

Teratogens and craniofacial malformations: relationships to cell death. Sulik KK, et al. **Development** 1988;103 Suppl:213–31 (114 ref.)

Teratology study of Tween 60 in rats. Ema M, et al. **Drug Chem Toxicol** 1988;11(3):249–60

Teratogenic effects of a lipophilic cationic dye rhodamine 123, alone and in combination with 2-deoxyglucose. Hood RD, et al. **Drug Chem Toxicol** 1988;11(3):261–74

Teratological evaluation of the phenoxyacid herbicide MCPA in the regenerating forelimb of the adult newt. Arias E, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):30–7

Study of possible teratogenic effects of the fungicide maneb on chick embryos. Munk R, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):112–8

Teratology study in mice subjected to inhalation of diethylhydroxylamine, nitroethane, and diethylamine hydrogen sulfite. Beliles RP, et al. **Environ Res** 1978 Oct; 17(2):165–76

A variable embryotoxic response to lead in different strains of hamsters. Gale TF. **Environ Res** 1978 Dec;17(3):325–33

Teratologic evaluation of orally administered nitrapyrin in rats and rabbits. Berdasco NM, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):464–71

Evaluation of valproic acid (VPA) developmental toxicity and pharmacokinetics in Sprague-Dawley rats. Binkerd PE, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):485–93

Developmental toxicity of 2,3,4,7,8-pentachlorodibenzofuran in the Fischer 344 rat. Couture LA, et al. **Fundam Appl Toxicol** 1989 Feb;12(2):358–66

Functional teratogens of the rat kidney. II. Nitrofen and ethylenethiourea. Daston GP, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):401–15

Functional teratogens of the rat kidney. I. Colchicine, dinoseb, and methyl salicylate. Daston GP, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):381–400

Developmental toxicity of subcutaneously administered meso-2,3-dimercaptosuccinic acid in mice. Domingo JL, et al. **Fundam Appl Toxicol** 1988 Nov;11(4):715–22

The effects of inhalation exposure to sulfuryl fluoride on fetal development in rats and rabbits. Hanley TR Jr, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):79–86

Developmental toxicity of perfluorodecanoic acid in C57BL/6N mice. Harris MW, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):442–8

Screening for the developmental toxicity of retinoids: use of the sea urchin model. Kahn TA, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):511–8

Lack of selective developmental toxicity of three butanol isomers administered by inhalation to rats. Nelson BK, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):469–79

Teratology of 2,3,7,8-tetrachlorodibenzo-p-dioxin in a complex environmental mixture from the love canal. Silkworth JB, et al. **Fundam Appl Toxicol** 1989 Jul; 13(1):1–15

Evaluation of the developmental toxicity of ethylene glycol monohexyl ether vapor in Fischer 344 rats and New Zealand white rabbits. Tyl RW, et al. **Fundam Appl Toxicol** 1989 Feb;12(2):269–80

Drugs in pregnancy. Niebyl JR. **Iowa Med** 1989 Apr; 79(4):185–9

Corticosteroid-induced cleft palate in short-ear mice. Marazita ML, et al. **J Craniofac Genet Dev Biol** 1988; 8(1):47–51

Effects of sodium valproate and oxygen on the CD-1 mouse fetus. Paulson RB, et al. **J Craniofac Genet Dev Biol** 1988; 8(1):35–45

Alterations in craniofacial growth induced by isotretinoin (13-cis-retinoic acid) in mouse whole embryo and primary mesenchymal cell culture. Watanabe T, et al. **J Craniofac Genet Dev Biol** 1988;8(1):21–33

Toxic and developmental effects of organophosphorus insecticides in embryos of the South African clawed frog. Snawder JE, et al. **J Environ Sci Health [B]** 1989 Jun; 24(3):205–18

Effects of teratogenic antibodies on cultured visceral yolk-sac endodermal cells: cytotoxicity and morphological studies. Cheewatrakoolpong B, et al. **J Exp Zool** 1988 Dec; 248(3):315–20

The Florida Teratogen Information Service. LaFauce L, et al. **J Fla Med Assoc** 1988 Dec;75(12):814–6

Modulation of embryonic glutathione reductase and phenytoin teratogenicity by 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU). Wong M, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):336–42

Lack of teratogenicity of aluminum hydroxide in mice. Domingo JL, et al. **Life Sci** 1989;45(3):243–7

Teratogenic evaluation of terpenoid derivatives. Unsworth B, et al. **Life Sci** 1974 Nov 1;15(9):1649–55

The new teratogens: accutane and other vitamin-A analogs. Thomson EJ, et al. **MCN** 1989 Jul–Aug;14(4):244–8

Mechanisms of inhibitors of mutagenesis and carcinogenesis. Classification and overview. De Flora S, et al. **Mutat Res** 1988 Dec;202(2):285–306 (175 ref.)

Mutagenicity, carcinogenicity and teratogenicity of aluminium. Léonard A, et al. **Mutat Res** 1988 Nov; 196(3):247–57 (140 ref.)

Mutagenic and teratogenic effects of acrylamide in the mammalian spot test. Neuhäuser-Klaus A, et al. **Mutat Res** 1989 Jul;226(3):157–62

Azathioprine, a genotoxic agent to be considered non-genotoxic in man. Voogd CE. **Mutat Res** 1989 Sep; 221(2):133–52 (141 ref.)

Retinoic acid causes an anteroposterior transformation in the developing central nervous system. Durston AJ, et al. **Nature** 1989 Jul 13;340(6229):140–4

Neurobehavioral teratogenic effects of clomipramine and alpha-methyldopa. De Boer S, et al. **Neurotoxicol Teratol** 1989 Jan–Feb;11(1):77–84

Behavioral teratology investigation of 1-propanol administered by inhalation to rats. Nelson BK, et al. **Neurotoxicol Teratol** 1989 Mar–Apr;11(2):153–9

Teratogenic and behavioral anomalies induced by acute exposure of mice to ethanol and their possible relation to fetal brain DNA synthesis. Ciociola AA, et al. **Pharm Res** 1988 Jul;5(7):447–52

Behavioral teratology and toxicology: a brief review. Annau Z, et al. **Pharmacol Res Commun** 1988 Oct;20(10):841–52 (42 ref.)

Retinoids: toxicology and teratogenicity to date. Teelmann K. **Pharmacol Ther** 1989;40(1):29–43 (82 ref.)

No embryotoxic or teratogenic effect of dimethyl phthalate in rats after epicutaneous application. Hansen E, et al. **Pharmacol Toxicol** 1989 Feb;64(2):237–8

Teratological study of the hypolipidaemic drugs etofylline clofibrate (VULM) and fenofibrate in Swiss mice. Ujházy E, et al. **Pharmacol Toxicol** 1989 Mar;64(3):286–90

Teratological evaluation of Juniperus sabina essential oil in mice. Pages N, et al. **Planta Med** 1989 Apr;55(2):144–6

Teratological evaluation of Plectranthus fruticosus leaf essential oil. Pages N, et al. **Planta Med** 1988 Aug; 54(4):296–8

Influence of N–3–pyridoyltryptamine (tryptamide) on fetal development in rats and mice. Dłużniewski A, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):779–86

Human teratogens: delineating the phenotypic effects, the period of greatest sensitivity, the dose–response relationship and mechanisms of action. Holmes LB. **Prog Clin Biol Res** 1988;281:177–91

Ozone and ultraviolet light act as additive cocarcinogens to induce in vitro neoplastic transformation. Borek C, et al. **Teratogenesis Carcinog Mutagen** 1989;9(2):71–4

Limb defects in gray short–tailed opossums (Monodelphis domestica) following postnatal injection with ethanol or saline. Fadem BH, et al. **Teratogenesis Carcinog Mutagen** 1989;9(1):1–6

Developmental toxicity screen: results of rat studies with diethylhexyl phthalate and ethylene glycol monomethyl ether. Morrissey RE, et al. **Teratogenesis Carcinog Mutagen** 1989;9(2):119–29

Transplacental teratogenesis and mutagenesis in mouse fetuses treated with cyclophosphamide. Porter AJ, et al. **Teratogenesis Carcinog Mutagen** 1988;8(4):191–203

Limb bud cell culture for in vitro teratogen screening: validation of an improved assessment method using 51 compounds. Renault JY, et al. **Teratogenesis Carcinog Mutagen** 1989;9(2):83–96

Effects of the antioxidant butylated hydroxytoluene (BHT) on retinal degeneration induced transplacentally by a single low dosage of N–methyl–N–nitrosourea (MNU). Smith SB, et al. **Teratogenesis Carcinog Mutagen** 1988;8(4):175–89

Abstracts of papers presented at the twenty–eighth annual meeting of the Japanese Teratology Society and the second meeting of the International Federation of Teratology Societies. Kyoto, Japan, July 14–16, 1988. **Teratology** 1988 Nov;38(5):499–549

The Teratology Society, twenty–ninth annual meeting. June 3–8, 1989, Richmond, Virginia. Program, abstracts. **Teratology** 1989 May;39(5):409–513

Effect of 6–mercaptopurine on 65Zn distribution in the pregnant rat. Amemiya K, et al. **Teratology** 1989 Apr; 39(4):387–93

Effects of paternal subacute exposure to Tordon 202c on fetal growth and development in CD–1 mice. Blakley PM, et al. **Teratology** 1989 Mar;39(3):237–41

Effects of preconceptional and gestational exposure to Tordon 202c on fetal growth and development in CD–1 mice. Blakley PM, et al. **Teratology** 1989 Jun;39(6):547–53

Clinical and basic science lessons from the thalidomide tragedy: what have we learned about the causes of limb defects? Brent RL, et al. **Teratology** 1988 Sep;38(3):241–51 (216 ref.)

Exposure of Japanese quail embryos to o,p'–DDT has long–term effects on reproductive behaviors, hematology, and feather morphology. Bryan TE, et al. **Teratology** 1989 Jun;39(6):525–35

Embryotoxicity studies of norfloxacin in cynomolgus monkeys: I. Teratology studies and norfloxacin plasma concentration in pregnant and nonpregnant monkeys. Cukierski MA, et al. **Teratology** 1989 Jan;39(1):39–52

Studies of mechanisms of niridazole–elicited embryotoxicity: evidence against a major role for covalent binding. Fantel AG, et al. **Teratology** 1989 Jan;39(1):63–74

Common hierarchies of susceptibility to the induction of neural tube defects in mouse embryos by valproic acid and its 4–propyl–4–pentenoic acid metabolite. Finnell RH, et al. **Teratology** 1988 Oct;38(4):313–20

Retinoic acid induction of featherlike structures from reticulate scales. Fisher CJ, et al. **Teratology** 1988 Oct; 38(4):321–8

Thalidomide retrospective: what did we learn? Fraser FC. **Teratology** 1988 Sep;38(3):201–2

Teratogenic and postnatal developmental studies of morphine in Sprague–Dawley rats. Fujinaga M, et al. **Teratology** 1988 Nov;38(5):401–10

The threshold dose question in teratogenesis [letter] Gaylor DW, et al. **Teratology** 1988 Oct;38(4):389–91

Evaluation of the threshold concept in teratogenicity studies [letter] Giavini E. **Teratology** 1988 Oct;38(4):393–5

Direct effects of retinoic acid on the development of the tail bud in chick embryos. Griffith CM, et al. **Teratology** 1989 Mar;39(3):261–75

Comments on "Amyoplasia Congenita–Like Condition and Maternal Malathion Exposure": Is all Amyoplasia Amyoplasia? [letter] Hall JG. **Teratology** 1988 Nov; 38(5):493–5

Transplacental estrogen responses in the fetal rat: increased uterine weight and ornithine decarboxylase activity. Harmon JR, et al. **Teratology** 1989 Mar;39(3):253–60

Valproic acid developmental toxicity and pharmacokinetics in the rhesus monkey: an interspecies comparison. Hendrickx AG, et al. **Teratology** 1988 Oct;38(4):329–45

After the tragedy: living with the consequences. Heshka T. **Teratology** 1988 Sep;38(3):227–8

In vitro differential developmental toxicity of vitamin A congeners. Johnson EM, et al. **Teratology** 1989 Apr; 39(4):349–61

Teratogenic activity of lithium carbonate: an experimental update [published erratum appears in Teratology 1989 Jan;39(1):95–6] Jurand A. **Teratology** 1988 Aug; 38(2):101–11

Retinoic acid vs. excess vitamin A. Kalter H. **Teratology** 1989 Jun;39(6):611–6

Interaction between the splotch mutation and retinoic acid in mouse neural tube defects in vitro. Kapron–Brás CM, et al. **Teratology** 1988 Aug;38(2):165–73

Thalidomide update: regulatory aspects. Kelsey FO. **Teratology** 1988 Sep;38(3):221–6

A short history of thalidomide embryopathy. Lenz W. **Teratology** 1988 Sep;38(3):203–15 (0 ref.)

Test of six chemicals for embryotoxicity using fetal mouse salivary glands in culture. Lyng RD. **Teratology** 1989 Jun; 39(6):591–9

Halothane prevents nitrous oxide teratogenicity in Sprague–Dawley rats; folinic acid does not. Mazze RI, et al. **Teratology** 1988 Aug;38(2):121–7

Teratogenicity of the antiallergic Sm 857 SE in rats versus rabbits. Nishimura M, et al. **Teratology** 1988 Oct; 38(4):351–67

Embryotoxic and teratogenic effects of aluminum nitrate in rats upon oral administration. Paternain JL, et al. **Teratology** 1988 Sep;38(3):253–7

Ventricular blood pressure and cardiac output changes in epinephrine– and metoprolol–treated chick embryos. Rajala GM, et al. **Teratology** 1988 Sep;38(3):291–6

Effects of dinocap on otolith development: evaluation of mouse and hamster fetuses at term. Rogers JM, et al. **Teratology** 1989 Jun;39(6):515–23

Pharmacokinetic assessment of teratologically effective concentrations of an endogenous retinoic acid metabolite. Satre MA, et al. **Teratology** 1989 Apr;39(4):341–8

Teratologic potential of 2–methoxyethanol and transplacental distribution of its metabolite, 2–methoxyacetic acid, in non–human primates. Scott WJ, et al. **Teratology** 1989 Apr; 39(4):363–73

Morphometric analysis of Macaca nemestrina exposed to ethanol during gestation. Sheller B, et al. **Teratology** 1988 Nov;38(5):411–7

Strain difference in galactokinase level and susceptibility to the teratogenic effect of dietary galactose in mice: I. Teratogenic and embryopathic effect. Shih LY, et al. **Teratology** 1988 Aug;38(2):175–9

Teratogenic effects of trichloroacetonitrile in the Long–Evans rat. Smith MK, et al. **Teratology** 1988 Aug; 38(2):113–20

Proposed mechanisms of action in thalidomide embryopathy. Stephens TD. **Teratology** 1988 Sep;38(3):229–39 (61 ref.)

Teratogenicity of three substituted 4–biphenyls in the rat as a result of the chemical breakdown and possible metabolism of a thromboxane A2–receptor blocker. Sutherland MF, et al. **Teratology** 1989 Jun;39(6):537–45

Behavioral teratogenic effect of methylmercury and d–amphetamine: meta–analysis and power analysis of data from the Collaborative Behavioral Teratology Study of National Center for Toxicological Research. Tachibana T. **Teratology** 1989 Aug;40(2):93–100

Central nervous system malformations induced by triamcinolone acetonide in nonhuman primates: pathogenesis. Tarara RP, et al. **Teratology** 1988 Sep; 38(3):259–70

Why I doubted that thalidomide was the cause of the epidemic of limb defects of 1959 to 1961. Warkany J. **Teratology** 1988 Sep;38(3):217–9

Enhancement of murine phenytoin teratogenicity by the gamma–glutamylcysteine synthetase inhibitor L–buthionine–(S,R)–sulfoximine and by the glutathione depletor diethyl maleate. Wong M, et al. **Teratology** 1989 Aug;40(2):127–41

Effects of human diabetic serum on the in vitro development of mouse preimplantation embryos. Zusman I, et al. **Teratology** 1989 Jun;39(6):581–9

Teratogenicity and placental transfer of all–trans–, 13–cis–, 4–oxo–all–trans–, and 4–oxo–13–cis–retinoic acid after administration of a low oral dose during organogenesis in mice. Creech Kraft J, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):162–76

Inhibition of mitochondrial respiration by cationic rhodamines as a possible teratogenicity mechanism. Ranganathan S, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):81–9

Microinjection of cultured rat embryos: a new technique for studies in chemical dysmorphogenesis. Stark KL, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):411–6

Anti–kidney antibody teratogenesis: evidence for a direct action on the rat conceptus by a mechanism involving the yolk sac. Freeman SJ, et al. **Toxicol Lett** 1989 May; 47(2):197–203

Effects of inhalation exposure to carbon disulfide and its combination with hydrogen sulfide on embryonal and fetal development in rats. Saillenfait AM, et al. **Toxicol Lett** 1989 Jul;48(1):57–66

Inhibition of DNA synthesis in mouse whole embryo culture by 2–methoxyacetic acid and attenuation of the effects by simple physiological compounds. Stedman DB, et al. **Toxicol Lett** 1989 Jan;45(1):111–7

Structure–activity relationships for osteolathyrism: II. Effects of alkyl–substituted acid hydrazides. Schultz TW, et al. **Toxicology** 1988 Dec 16;53(1):147–59

The developmental toxicity of an isolate from the plant Solanum dimidiatum (potato–weed) in Syrian golden hamsters. Casteel SW, et al. **Toxicon** 1989;27(7):757–62

Behavioral teratology: an inappropriate term for some uninterpretable effects. Cattabeni F, et al. **Trends Pharmacol Sci** 1988 Jan;9(1):13–5 (37 ref.)

[Teratogen effect of Thiotepa (letter)] Elberg JJ, et al. **Ugeskr Laeger** 1988 Oct 24;150(43):2602 (Dan)

[Teratogenic effect of thiotepa (letter)] Krarup–Hansen A. **Ugeskr Laeger** 1989 Feb 6;151(6):397 (Dan)

[Teratogenic effect of thio–tepa despite use of safety rules (letter)] Krarup–Hansen A. **Ugeskr Laeger** 1988 Oct 3; 150(40):2416–7 (Dan)

[Pharmacotherapy during pregnancy and lactation] Merkus FW, et al. **Ned Tijdschr Geneeskd** 1989 Feb 25;133(8):381–7 (Dut)

[Lasting effects of chemical agents on the developing nervous system: functional teratology] Swaab DF. **Ned Tijdschr Geneeskd** 1989 Feb 4;133(5):246–9 (Dut)

[Lasting effects of chemical agents on the developing nervous system: functional teratology (letter)] 't Hoen EF. **Ned Tijdschr Geneeskd** 1989 May 6;133(18):953–4 (Dut)

[Teratogenic evaluation of alpha–asarone in the rat] Jimenez L, et al. **Ann Pharm Fr** 1988;46(3):179–83 (Eng. Abstr.) (Fre)

[Research on teratogenic risks using a register of congenital malformations] Goujard J. **Rev Epidemiol Sante Publique** 1988;36(4–5):283–91 (Eng. Abstr.) (Fre)

[Synthesis and teratogenic action of n–hydroxythalidomide] Blaschke G, et al. **Arzneimittelforschung** 1989 Mar; 39(3):293–4 (Eng. Abstr.) (Ger)

[Neurotoxic and teratogenic risks of vincristine in the rat] Barberi I, et al. **Boll Soc Ital Biol Sper** 1988 Jun; 64(6):577–81 (Eng. Abstr.) (Ita)

ADVERSE EFFECTS

[Ocular teratology provides valuable knowledge on the causes of congenital eye abnormalities] Strömland K. **Lakartidningen** 1989 Apr 12;86(15):1376–8 (Swe)

ANTAGONISTS & INHIBITORS

Reduction of the teratogenic effects of phenytoin by folic acid and a mixture of folic acid, vitamins, and amino acids: a preliminary trial. Zhu MX, et al. **Epilepsia** 1989 Mar–Apr; 30(2):246–51

IMMUNOLOGY

Teratogenic antibodies are directed against a coated–pit glycoprotein. Leung CC, et al. **Anat Rec** 1989 Apr; 223(4):363–7

METABOLISM

Bioactivation in chemical teratogenesis. Juchau MR. **Annu Rev Pharmacol Toxicol** 1989;29:165–87 (112 ref.)

Lectin teratogenesis. II: Demonstration of increased binding of concanavalin A to limb buds of rabbit embryos during the teratogenically sensitive period. DeSesso JM, et al. **Teratology** 1989 Apr;39(4):395–407

Effect of a high systemic background level of vitamin A on the teratogenicity of all–trans–retinoic acid given either acutely or subacutely. Nolen GA. **Teratology** 1989 Apr; 39(4):331–9

PHARMACOKINETICS

Development of a metabolic activation system for the frog embryo teratogenesis assay: Xenopus (FETAX). Fort DJ, et al. **Teratogenesis Carcinog Mutagen** 1988;8(5):251–63

Human embryonic cell growth assay for teratogens with or without metabolic activation system using microplate. Tsuchiya T, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(5):265–72

PHARMACOLOGY

Ethanol teratogenesis in mice selected for differences in alcohol sensitivity. Gilliam DM, et al. **Alcohol** 1988 Nov–Dec;5(6):513–9

Pharmacological concepts and developmental toxicology. Skalko RG. **Ann N Y Acad Sci** 1989;562:21–30

Experimental models of anterior segment dysgenesis. Cook CS. **Ophthalmic Paediatr Genet** 1989 Mar;10(1):33–46 (65 ref.)

Carcinogenesis and teratogenesis may have common mechanisms. Vainio H. **Scand J Work Environ Health** 1989 Feb;15(1):13–7

Effects of exposing rat embryos in utero to physical or chemical teratogens are expressed later as enhanced induction of heat–shock proteins when embryonic hearts are cultured in vitro. Higo H, et al. **Teratogenesis Carcinog Mutagen** 1988;8(6):315–28

Studies of embryotoxic mechanisms of niridazole: evidence that oxygen depletion plays a role in dysmorphogenicity. Fantel AG, et al. **Teratology** 1989 Mar;39(3):243–51

TOXICITY

The effects of 2,4,5–trichlorophenoxyacetic acid and 2,3,7,8–tetrachlorodibenzo–p–dioxin on developing chicken embryos. Allred PM, et al. **Arch Environ Contam Toxicol** 1977;6(4):483–9

Potential human developmental toxicants and the role of animal testing in their identification and characterization. Schardein JL, et al. **CRC Crit Rev Toxicol** 1989; 19(3):251–339 (717 ref.)

Developmental toxicity testing with FETAX: evaluation of

five compounds. Dawson DA, et al.
Drug Chem Toxicol 1989 Mar;12(1):67–75
Relationship of embryotoxicity to genotoxicity of lead nitrate in mice. Nayak BN, et al. **Exp Pathol** 1989;36(2):65–73
Evaluation of two in vitro assays to screen for potential developmental toxicants. Steele VE, et al.
Fundam Appl Toxicol 1988 Nov;11(4):673–84
Evaluation of the teratogenic potential of the rubber accelerator N-cyclohexyl-2-benzothiazylsulfenamide in rats. Ema M, et al. **J Appl Toxicol** 1989 Jun;9(3):187–90
Evaluation of the developmental toxicity of nicotine and cotinine with frog embryo teratogenesis assay: Xenopus. Dawson DA, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(6):329–38
Mechanism of dimethylsulfoxide protection against the teratogenicity of secalonic acid D in mice. ElDeib MM, et al. **Teratology** 1988 Nov;38(5):419–25
Embryonic catch-up growth after exposure to the ketone body D,L,-beta-hydroxybutyrate in vitro. Shum L, et al. **Teratology** 1988 Oct;38(4):369–79
An in vitro assay for teratogens with cultures of rat embryo midbrain and limb bud cells. Johnson EM, et al.
Toxicol Appl Pharmacol 1989 Jun 1;99(1):173–80
[Teratogen-modified palatogenesis in the Uje: WIST rat. 4. Scanning electron microscopic morphology of the epithelium during the formation of the secondary palate] Zenk W, et al. **Zahn Mund Kieferheilkd** 1989;77(2):161–6 (Eng. Abstr.) (Ger)
[A list of teratogenic human drugs (letter)] Czeizel E, et al. **Orv Hetil** 1989 May 7;130(19):1022–3 (Hun)

TERATOID TUMOR see **TERATOMA**

TERATOMA

F9 teratocarcinoma aggregates express villin upon differentiation into visceral endoderm-like cells.
Buc-Caron MH, et al. **Biol Cell** 1989;65(2):195–8
Sacrococcygeal teratomas. Mahour GH. **CA** 1988 Nov-Dec; 38(6):362–7 (12 ref.)
Sister chromatid exchange frequency, cellular replication and relative cloning efficiency in human teratocarcinoma-derived cells. Morris SM, et al.
Cell Biol Toxicol 1988 Sep;4(3):281–94
Intracardiac teratoma in a newborn. Farooki ZQ, et al.
Clin Cardiol 1988 Sep;11(9):642–4
Analysis of cell-differentiation lineage in human teratomas using new monoclonal antibodies to cytostructural antigens of embryonal carcinoma cells. Pera MF, et al.
Differentiation 1988 Dec;39(2):139–49
Differentially regulated production of platelet-derived growth factor and of transforming growth factor beta by a human teratocarcinoma cell line. Weima SM, et al.
Differentiation 1988 Sep;38(3):203–10
Teratomas of the head and neck. Ward RF, et al.
Otolaryngol Clin North Am 1989 Jun;22(3):621–9 (28 ref.)
Cellular factors in development and differentiation: embryos, teratocarcinomas, and differentiated tissues. Proceedings of the Third International Symposium on Cellular Endocrinology. Lake Placid, New York, August 30-September 2, 1987. **Prog Clin Biol Res** 1988;284:1–250
Cellular factors in development and differentiation. Embryos, teratocarcinomas, and differentiated tissues. Proceedings of the Third International Symposium on Cellular Endocrinology. Lake Placid, New York, August 30-September 2, 1987. **Prog Clin Biol Res** 1988;284:1–250
[Intrascrotal teratoma forming a free foreign body in the tunica vaginalis. Apropos of a case] Nini W, et al.
Chirurgie 1988;114(3):268–9 (Fre)
[Primary malignant dysembryoma of the mediastinum] Lemarie E, et al. **Rev Mal Respir** 1989;6(2):95–108 (102 ref.) (Eng. Abstr.) (Fre)
[A case of retrovesical tumor] Nagatani Y, et al.
Hinyokika Kiyo 1989 Apr;35(4):689–91 (Eng. Abstr.) (Jpn)
[Teratoma in the thyroid area in a neonate] Rafaeli Z, et al. **Acta Chir Iugosl** 1988;35(2):197–202 (Eng. Abstr.) (Scr)

ANALYSIS

Ki-1 (CD30) antigen is regularly expressed by tumor cells of embryonal carcinoma. Pallesen G, et al.
Am J Pathol 1988 Dec;133(3):446–50
A study of the sedimentation properties of the U-snRNPs of mouse embryoid bodies (OTT6050) by sucrose gradient centrifugation under physiological ionic conditions and electrophoretic analysis of the RNA in various fractions. Matsuda M. **Nippon Juigaku Zasshi** 1989 Apr;51(2):251–6

BLOOD

Prolonged survival in a patient with disseminated malignant teratoma in the presence of a persistently elevated serum alpha-fetoprotein level. Lawson CS, et al. **Cancer** 1989 Feb 15;63(4):804–6
The diagnostic value of alpha-fetoprotein in an infant with sacrococcygeal teratoma. Johnston PW. **J Pediatr Surg** 1988 Sep;23(9):862–3
The diagnosis of immature teratoma by maternal serum alpha-fetoprotein screening. Montz FJ, et al.
Obstet Gynecol 1989 Mar;73(3 Pt 2):522–5
[An autopsied case of pulmonary blastoma with high serum alpha-fetoprotein and carcinoembryonic antigen levels] Kiura K, et al. **Gan No Rinsho** 1989 May;35(6):729–34 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Promotion of malignant 'embryonal' liver tumors by phenobarbital: increased incidence and shortened latency of hepatoblastomas in (DBA/2 x C57BL/6)F1 mice initiated with N-nitrosodiethylamine. Diwan BA, et al.
Carcinogenesis 1989 Jul;10(7):1345–8
Diethylstilboestrol exposure and testicular cancer [letter] Williams F. **Int J Epidemiol** 1989 Jun;18(2):462–3

COMPLICATIONS

Hydrops fetalis caused by intrapericardial teratoma. Skyggebjerg KD. **Acta Obstet Gynecol Scand** 1988; 67(7):653–4
Cardiac-compressing intrapericardial teratoma at birth. Brabham KR, et al. **Am J Cardiol** 1989 Feb 1;63(5):386–7
Fetal hydrops and death from sacrococcygeal teratoma: rationale for fetal surgery. Langer JC, et al.
Am J Obstet Gynecol 1989 May;160(5 Pt 1):1145–50
Unexpected dystocia secondary to a fetal sacrococcygeal teratoma: a successful outcome. el-Shafie M, et al.
Int J Gynaecol Obstet 1988 Dec;27(3):431–8 (16 ref.)
Virilization due to a rare ovarian tumor in a postmenopausal woman. Varma TR, et al. **Int J Gynaecol Obstet** 1988 Dec; 27(3):443–9
High-output cardiac failure in fetuses with large sacrococcygeal teratoma: diagnosis by echocardiography and Doppler ultrasound. Schmidt KG, et al. **J Pediatr** 1989 Jun;114(6):1023–8
Thromboembolic events during combination chemotherapy for germ cell malignancy [letter] Hall MR, et al.
Lancet 1988 Nov 26;2(8622):1259
Testicular malignancy associated with massive inguinal adenopathy and life threatening hemorrhage. Lichtman SM, et al. **N Y State J Med** 1989 Aug;89(8):482–3
Intramedullary teratoma of the thoracic spinal cord associated with anomalies of the vertebrae and ribs—case report. Shimauchi M, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):1005–9
Dysembryoplastic neuroepithelial tumor: a surgically curable tumor of young patients with intractable partial seizures. Report of thirty-nine cases. Daumas-Duport C, et al.
Neurosurgery 1988 Nov;23(5):545–56
Aicardi syndrome associated with an embryonal carcinoma. Tagawa T, et al. **Pediatr Neurol** 1989 Jan-Feb;5(1):45–7 (14 ref.)
Intrauterine mediastinal teratoma associated with non-immune hydrops fetalis. Weinraub Z, et al.
Prenat Diagn 1989 May;9(5):369–72
[Advanced cancer of the ovary and pregnancy. Apropos of 2 cases] Charles G, et al.
J Gynecol Obstet Biol Reprod (Paris) 1989;18(1):61–8 (Eng. Abstr.) (Fre)
[Treatment of invasion of the vena cava by an embryonal carcinoma of the testis] Jacqmin D, et al.
J Urol (Paris) 1989;95(1):62–3 (Fre)
[Mediastinal teratoma disclosed by pericarditis] Long P, et al. **Rev Med Interne** 1989 Mar-Apr;10(2):150–1 (6 ref.) (Fre)
[Peripheral pulmonary stenosis: initial manifestation of a malignant teratoma] Busch U, et al. **Z Kardiol** 1988 Sep; 77(9):613–6 (Eng. Abstr.) (Ger)
[Non-trauma-induced hemothorax—a certain leading symptom of a malignant tumor?] Klöti J, et al.
Z Kinderchir 1989 Apr;44(2):115–8 (Eng. Abstr.) (Ger)
[Hepatoduodenal ligament teratoma followed by hypertensive syndrome of the portal vein] Akimov OV. **Arkh Patol** 1989;51(1):60–2 (Eng. Abstr.) (Rus)
[Teratoma of the membranes of a myelocele in a child] Kudriavtsev VA, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):136 (Rus)
[A combination of an accessory large intestine and teratoid cysts of the intrapelvic tissue] Magomedov AZ, et al.
Khirurgiia (Mosk) 1988 Nov;(11):118 (Rus)

CONGENITAL

Experience with 8 cases of prenatally diagnosed sacrococcygeal teratomas. Holzgreve W, et al.
Fetal Ther 1987;2(2):88–94
Fetal sacrococcygeal teratoma. Kuhlmann RS, et al.
Fetal Ther 1987;2(2):95–100 (11 ref.)
Sacrococcygeal teratoma. Pringle KC, et al. **Fetal Ther** 1987; 2(2):80–7
Epignathus. Banerjee KS, et al. **Indian Pediatr** 1988 Apr; 25(4):388–9
Epignathus: a report of two neonatal cases. Maeda K, et al.
J Pediatr Surg 1989 Apr;24(4):395–7
Congenital metastatic cervical teratoma: diagnostic and management considerations. Touran T, et al.
J Pediatr Surg 1989 Jan;24(1):21–3
A case of congenital orbital teratoma. Choi SH, et al.
Korean J Ophthalmol 1987 Dec;1(2):139–44
[Teratoma orbitae in the neonatal period] Schaal ST, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):295–300 (Eng. Abstr.) (Ger)
[Intrapericardial teratoma] Weber G, et al. **Pathologe** 1988 Sep;9(5):302–4 (Ger)
[Congenital laterocervical teratoma] Oliván Gonzalvo G, et al. **An Esp Pediatr** 1989 May;30(5):416–8 (Spa)

DIAGNOSIS

Paratesticular adenomatoid tumors. The cytologic presentation in fine needle aspiration biopsies. Pérez-Guillermo M, et al. **Acta Cytol** 1989 Jan-Feb; 33(1):6–10
Aggressive intracranial teratocarcinoma with ventriculoperitoneal shunt metastases. Kuzel TM, et al.
Am J Med 1989 Jun;86(6 Pt 1):736–8
Labyrinthine functional tests and a case of midline cerebellar teratoma. Clack TD, et al. **Am J Otol** 1988 Nov;9(6):481–8
Intrauterine diagnosis of epignathus using ultrasonic tomography. Shouno H, et al.
Asia Oceania J Obstet Gynaecol 1988 Jun;14(2):199–205
Influence of delay in diagnosis on prognosis in testicular teratoma. Chilvers CE, et al. **Br J Cancer** 1989 Jan; 59(1):126–8
The hairy polyp: a benign teratoma of the colon. Mauer K, et al. **Endoscopy** 1989 May;21(3):148–51
Embryonal carcinoma of testis in elderly men. Kaneti J, et al. **Int Urol Nephrol** 1988;20(6):641–5
Glial teratoma thought to be a lingual thyroid. Tumushime-Buturo CG, et al. **J Laryngol Otol** 1989 Jun; 103(6):620–1
Risk indicators in stage I testicular teratoma [letter] Klepp O. **Lancet** 1989 Mar 4;1(8636):506
Development of a benign intrapericardial tumor between 20 and 40 weeks of gestation. Weber HS, et al.
Pediatr Cardiol 1988;9(3):153–6
Fatty Wilms' tumor simulating teratoma; occurrence in a child with horseshoe kidney. Fernbach SK, et al.
Pediatr Radiol 1988;18(5):424–6
Mature teratoma of the retroperitoneum: radiologic, pathologic, and clinical correlation. Davidson AJ, et al.
Radiology 1989 Aug;172(2):421–5
Fetus amorphus or placental teratoma? Stephens TD, et al.
Teratology 1989 Jul;40(1):1–10 (65 ref.)
Bilateral testicular tumors [letter] Perlstein GB. **Urology** 1988 Oct;32(4):388
[Sacrococcygeal teratoma] Sørensen P, et al.
Ugeskr Laeger 1989 Jan 9;151(2):102 (Eng. Abstr.) (Dan)
[Echography and CT in mediastinal teratoma] Roelandt W, et al. **J Belge Radiol** 1988;71(5):611–4 (Eng. Abstr.) (Dut)
[A case of (benign) teratoma of the nasopharynx] Resimont S, et al. **Acta Otorhinolaryngol Belg** 1988;42(5):681–9 (Eng. Abstr.) (Fre)
[Pharyngeal epignathus teratoma. Echographic and prognostic study] Crimail P, et al.
J Gynecol Obstet Biol Reprod (Paris) 1988;17(8):1069–74 (Eng. Abstr.) (Fre)
[Prenatal diagnosis of intracranial teratoma. Apropos of a case] Ferreira O, et al.
J Gynecol Obstet Biol Reprod (Paris) 1988;17(8):1075–80 (Eng. Abstr.) (Fre)
[Proton spin tomography in testicular tumors] Knönagel H, et al. **Helv Chir Acta** 1988 Jul;55(3):325–8 (Eng. Abstr.) (Ger)
[Intrapericardial teratoma in an adult] Meissner A, et al.
Z Kardiol 1988 Sep;77(9):608–12 (Eng. Abstr.) (Ger)
[Nuclear magnetic resonance in a case of cystic teratoma of the sacrum] Di Renzi P, et al. **G Ital Oncol** 1987 Oct-Dec;7(4):196–9 (Eng. Abstr.) (Ita)
[Tumors of the testis. Correlations between echographic, macroscopic and histological features in 48 cases] Barozzi L, et al. **Radiol Med (Torino)** 1989 Jun;77(6):663–7 (Eng. Abstr.) (Ita)
[Hemorrhagic lymph node metastasis from testicular carcinoma. The echo-CT-MR correlations] Ferrozzi F, et al. **Radiol Med (Torino)** 1989 Mar;77(3):283–5 (Ita)
[Torsion of a teratoma of the right ovary simulating an appendicular infiltrate] Ploshchanskiĭ VV, et al.
Klin Khir 1988;(6):63–4 (Rus)
[Teratomas of the sacrococcygeal region in newborn infants and infants] Sitkovskiĭ NB, et al. **Klin Khir** 1989;(5):19–21 (Eng. Abstr.) (Rus)

DRUG THERAPY

Malignant germ cell sacrococcygeal tumors in children. Improved prognosis after introduction of cisplatin-containing multiple drug treatment. Diez B, et al. **Acta Oncol** 1989;28(2):249–51
Cisplatinum-based chemotherapy in malignant mediastinal teratoma. Mackintosh JF, et al. **Aust N Z J Surg** 1989 May; 59(5):399–404 (19 ref.)
Carboplatin and etoposide pharmacokinetics in patients with testicular teratoma. Newell DR, et al.
Cancer Chemother Pharmacol 1989;23(6):367–72
Phase II study of iproplatin (CHIP, JM-9) in advanced testicular cancers progressing after prior chemotherapy. Clavel M, et al. **Eur J Cancer Clin Oncol** 1988 Aug; 24(8):1345–8
Primary treatment with vincristine, dactinomycin, and cyclophosphamide in nondysgerminomatous germ cell tumor of the ovary. Wong LC, et al. **Gynecol Oncol** 1989 Aug;34(2):155–8
Long-term neurotoxicity in patients treated with cisplatin, vinblastine, and bleomycin for metastatic germ cell cancer. Hansen SW, et al. **J Clin Oncol** 1989 Oct;7(10):1457–61

Post-chemotherapy lymph node histology in radiologically normal patients with metastatic nonseminomatous testicular cancer. Fossa SD, et al. **J Urol** 1989 Mar;141(3):557–9

Thromboembolic events during combination chemotherapy for germ cell–malignancy [letter] Cantwell BM, et al. **Lancet** 1988 Nov 5;2(8619):1086–7

Vinblastine, cisplatin and bleomycin (VPB) adjuvant therapy does not induce dose–dependent damage in human chromosomes. Gundy S, et al. **Neoplasma** 1989;36(4):457–64

Treatment of testicular tumors: analysis of treatment results of chemotherapy. Kellokumpu–Lehtinen P. **Strahlenther Onkol** 1988 Nov;164(11):638–41

Risk/benefit of treating retroperitoneal teratoid bulky tumors. Jaeger N, et al. **Urology** 1989 Jul;34(1):14–7

[A case of ovarian germ cell tumor] Hayase R, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2655–8 (Eng. Abstr.) **(Jpn)**

[A case report of extragonadal germ cell tumor with special reference to VAB–6 therapy] Iwasaki M, et al. **Hinyokika Kiyo** 1988 May;34(5):883–8 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Anti–cancer drug sensitivity test against human testicular cancer xenograft—comparison with clinical results of chemotherapy] Miki T, et al. **Hinyokika Kiyo** 1988 Nov; 34(11):1903–9 (Eng. Abstr.) **(Jpn)**

[Effects of chemotherapy on regional metastases of non–seminomatous tumors of the testis] Sakalo VS, et al. **Vopr Onkol** 1988;34(10):1219–24 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

[The differentiation characteristics of neural derivatives in rat teratomas] Dyban PA. **Ontogenez** 1989 Mar–Apr; 20(2):204–8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Secretion of creatine kinase MB isoenzyme by an immature teratoma with predominant rhabdomyosarcomatous elements [see comments] Emancipator K, et al. **Clin Chem** 1988 Dec;34(12):2600–2. **Comment in:** Clin Chem 1989 May;35(5):896–7

Neuron–specific enolase as a serum marker for immature teratoma and dysgerminoma. Kawata M, et al. **Gynecol Oncol** 1989 Feb;32(2):191–7

Microsomal aromatase in testicular tumour tissue: increased activity in choriocarcinoma compared to embryonal carcinoma. Templ H, et al. **Horm Metab Res** 1988 Aug; 20(8):522–4

EPIDEMIOLOGY

The epidemiology of testicular cancer in upstate New York. Haughey BP, et al. **Am J Epidemiol** 1989 Jul;130(1):25–36

Benign ovarian teratomas: a population–based case–control study. Westhoff C, et al. **Br J Cancer** 1988 Jul;58(1):93–8

Non–seminomatous germ cell testis cancer in Ireland (1980–1985). Management, results and prognostic variables with relevance to national management protocols. Thornhill JA, et al. **Eur Urol** 1988;15(1–2):84–8

Testis cancer: post–natal hormonal factors, sexual behaviour and fertility. Swerdlow AJ, et al. **Int J Cancer** 1989 Apr 15;43(4):549–53

Immature teratoma of the fallopian tube. A case report. Frost RG, et al. **J Reprod Med** 1989 Jan;34(1):62–4

ETIOLOGY

[Experimental teratomas from xenogenic embryonic implants in the urodele amphibian, Pleurodeles waltlii Michah] Houillon C. **C R Acad Sci [III]** 1989;308(9):229–36 (Eng. Abstr.) **(Fre)**

GENETICS

Differential expression of two homologous and clustered oncogenes, Hst1 and Int–2, during differentiation of F9 cells. Yoshida T, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):618–25

Expression of the HST1 oncogene in human germ cell tumors [published erratum appears in Biochem Biophys Res Commun 1988 Dec 15;157(2):850] Yoshida T, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1324–9

Constitutive c–myc expression enhances proliferation of differentiating F9 teratocarcinoma cells. Schulz WA, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):125–32

Cytogenetic analysis of ependymoma and teratoma of the ovary. Yang–Feng TL, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):83–9

Chromosomal changes in mature residual teratomas following polychemotherapy. Castedo SM, et al. **Cancer Res** 1989 Feb 1;49(3):672–6

Regional loss of chromosome 6 in two urological malignancies. Rukstalis DB, et al. **Cancer Res** 1989 Sep 15;49(18):5087–90

Ovarian teratocarcinomas in LT/Sv mice carrying t–mutations. Artzt K, et al. **Dev Genet** 1987;8(1):1–9

Post–transcriptional regulation and DNA undermethylation of intracisternal A particle genes in embryonal carcinoma cell lines. Morgan RA, et al. **Dev Genet** 1987;8(3):123–33

Nonhistone nuclear proteins specific to certain mouse embryonal carcinoma clones having an inactive X chromosome. Abe K, et al. **Exp Cell Res** 1988 Dec; 179(2):590–4

Expression of c–src and c–abl in embryonal carcinoma cells and adult mouse tissues. Boulter CA, et al. **Exp Cell Res** 1988 Nov;179(1):214–21

Trisomy 12 and translocation (7;9) in an ovarian immature teratoma. López Ginés C, et al. **Int J Gynecol Pathol** 1989; 8(3):277–85

Expression of oncogenic ras in human teratocarcinoma cells induces partial differentiation and permissiveness for human cytomegalovirus infection. Shelbourn SL, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):367–74

Proto–oncogene expression during retinoic acid–induced neural differentiation of embryonal carcinoma cells. Nakamura KD, et al. **Mech Ageing Dev** 1989 Apr; 48(1):53–62

Functional cloning of mouse chromosomal loci specifically active in embryonal carcinoma stem cells. Bhat K, et al. **Mol Cell Biol** 1988 Aug;8(8):3251–9

Transient expression of the proto–oncogene int–1 during differentiation of P19 embryonal carcinoma cells. Schuuring E, et al. **Mol Cell Biol** 1989 Mar;9(3):1357–61

Regulation of the cellular retinoid–binding proteins and their messenger ribonucleic acids during P19 embryonal carcinoma cell differentiation induced by retinoic acid. Wei LN, et al. **Mol Endocrinol** 1989 Mar;3(3):454–63

The effect of a transfected c–myc proto–oncogene on cellular differentiation. Segal S, et al. **Mol Immunol** 1988 Nov; 25(11):1129–32

Monosomy 22 in rhabdoid or atypical teratoid tumors of the brain [letter] Biegel JA, et al. **N Engl J Med** 1989 Sep 28;321(13):906

Identification of new human repetitive sequences: characterization of the corresponding cDNAs and their expression in embryonal carcinoma cells. La Mantia G, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):5913–22

Sequence organization of the human int–2 gene and its expression in teratocarcinoma cells. Brookes S, et al. **Oncogene** 1989 Apr;4(4):429–36

Gene–centromere mapping and the study of non–disjunction in autosomal trisomies and ovarian teratomas. Chakravarti A, et al. **Prog Clin Biol Res** 1989;311:45–79

Testicular germ cell tumors in HLA–genotype non–twin brothers. Kandel LB, et al. **Urology** 1988 Oct;32(4):315–9

IMMUNOLOGY

MHC class I expression by developmental tumors: teratocarcinoma stem cells are TCA positive. Stern PL, et al. **Hum Immunol** 1988 Aug;22(4):247–61

Transfected H–2Kb gene as a cause of embryonal carcinoma cell rejection in vivo. Mosinger B Jr, et al. **Immunogenetics** 1989;29(4):269–72

Human cytomegalovirus induces stage–specific embryonic antigen 1 in differentiating human teratocarcinoma cells and fibroblasts. Andrews PW, et al. **J Exp Med** 1989 Apr 1;169(4):1347–59

A monoclonal antibody, MA21, recognizes a surface component that is present on F9 teratocarcinoma cells and that appears vectorially on the trophectoderm of peri–implantation–stage mouse blastocysts. Vernon RB, et al. **J Reprod Immunol** 1989 Mar;15(1):1–20

Two purified factors bind to the same sequence in the enhancer of mouse MHC class I genes: one of them is a positive regulator induced upon differentiation of teratocarcinoma cells. Israel A, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5245–57

Embryonal carcinoma cells express Qa and T1a class I genes of the major histocompatibility complex. Ostrand–Rosenberg S, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5084–8

[The surface glycolipid antigen specific for the internal cell mass of the mouse blastocyst and of the stem cells of murine teratocarcinoma F9] Anfimova ML, et al. **Ontogenez** 1989 Mar–Apr;20(2):158–63 (Eng. Abstr.) **(Rus)**

METABOLISM

Identification of the two types of specific receptor for activin/EDF expressed on Friend leukemia and embryonal carcinoma cells. Kondo S, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1267–72

A close relationship between microvilli and metabolic cooperation deficiency in embryonal carcinoma cells. Purcell IF, et al. **Exp Cell Res** 1989 May;182(1):84–9

Stimulation of autophagic protein degradation by nutrient deprivation in a differentiated murine teratocarcinoma (F9 12–1a) cell line. Lee HK, et al. **Exp Mol Pathol** 1989 Feb; 50(1):139–46

Characterization of transforming growth factors produced by the insulin–independent teratoma–derived cell line 1246–3A. Yamada Y, et al. **J Cell Physiol** 1989 Aug; 140(2):254–63

MICROBIOLOGY

Two blocks in Moloney murine leukemia virus expression in undifferentiated F9 embryonal carcinoma cells as determined by transient expression assays. Feuer G, et al. **J Virol** 1989 May;63(5):2317–24

PATHOLOGY

Microglial and neural differentiation in human teratomas. Sangruchi T, et al. **Acta Neuropathol (Berl)** 1989; 78(3):258–63

Epignathic teratoma associated with craniopharyngeal canal [letter] Cohen R, et al. **AJNR** 1989 May–Jun;10(3):652

Placental teratoma. Unger JL. **Am J Clin Pathol** 1989 Sep; 92(3):371–3

Immature neural elements in immature teratomas. An immunohistochemical and ultrastructural study. Vance RP, et al. **Am J Clin Pathol** 1988 Oct;90(4):397–411

Immature (malignant) teratoma of the fallopian tube. Baginski L, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):671–2

Squamous cell carcinoma arising in mature cystic teratoma of the ovary. Clinicopathologic and topographic analysis. Hirakawa T, et al. **Am J Surg Pathol** 1989 May; 13(5):397–405

Retroperitoneal embryonal carcinoma/yolk sac tumor. A case report and a review of the histogenesis. Janda J, et al. **Arch Geschwulstforsch** 1988;58(5):333–40 (35 ref.)

Pituitary–containing benign cystic teratoma arising from the uterosacral ligament. Heller DS, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):802–4

An unusual malignancy arising in a benign cystic teratoma of the ovary. Escoffery CT, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):85–7 (8 ref.)

A carboranyl porphyrin for boron neutron capture therapy of brain tumors. Kahl SB, et al. **Basic Life Sci** 1989; 50:193–203

Bone disease in testicular and extragonadal germ cell tumours. Hitchins RN, et al. **Br J Cancer** 1988 Dec; 58(6):793–6

Prognostic factors for relapse after complete response in patients with metastatic germ cell tumors. Geller NL, et al. **Cancer** 1989 Feb 1;63(3):440–5

Intratubular germ cell neoplasia in testicular teratomas and epidermoid cysts. Correlation with prognosis and possible biologic significance. Manivel JC, et al. **Cancer** 1989 Aug 1;64(3):715–20

Isolation of differentially expressed human cDNA clones: similarities between mouse and human embryonal carcinoma cell differentiation. Wiles MV. **Development** 1988 Nov;104(3):403–13

Teratoma of the nasopharynx [letter] Singh RK, et al. **Ear Nose Throat J** 1988 Sep;67(9):692, 694–5

Early increase in histone H1(0) mRNA during differentiation of F9 cells to parietal endoderm. Alonso A, et al. **EMBO J** 1988 Oct;7(10):3003–8

Teratoma of the placenta, a case report. Fernández Figueras MT, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug; 32(2):169–72

Factors influencing the differentiation of embryonal carcinoma and embryo–derived stem cells. Fisher JP, et al. **Exp Cell Res** 1989 Jun;182(2):403–14

Embryonal carcinoma cells adhere preferentially to fibronectin and laminin but their endodermal differentiation leads to a reduced adherence to laminin. Tienari J, et al. **Exp Cell Res** 1989 May;182(1):26–32

Solid teratomas and mixed müllerian tumors of the ovary: a clinical, histological, and immunocytochemical comparative study. Calame JJ, et al. **Gynecol Oncol** 1989 May;33(2):212–21

Multiple neuroectodermal tumors arising in a mature cystic teratoma of the ovary. Oláh KS, et al. **Gynecol Oncol** 1989 Aug;34(2):222–5

Pneumatosis cystoides–like appearances in a mature cystic teratoma of the ovary. Maudsley G, et al. **Histopathology** 1989 Apr;14(4):420–2

Milk plasma supports growth and differentiation of a mouse teratocarcinoma cell line [letter] Subramanian V, et al. **In Vitro Cell Dev Biol** 1989 May;25(5):391–2

Inducer mediated in vitro differentiation in a neurogenic transplantable murine teratocarcinoma. Thakare AV, et al. **Indian J Exp Biol** 1988 Jun;26(6):440–4

Gliomatosis peritonei: a rare complication of malignant ovarian teratoma. Vijayaraghavan M, et al. **Indian J Pathol Microbiol** 1987 Oct;30(4):383–6

Nasopharyngeal teratoma involving the temporal bone. de Vries EJ, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov; 16(2):167–73

Primary malignant mediastinal germ cell tumors: a study of eleven cases and a review of the literature. Kiffer JD, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):835–41 (63 ref.)

Toxic effect of a photo–induced tryptophan–riboflavin adduct on F9 teratocarcinoma cells and preimplantation mouse embryos. Silva E, et al. **Int J Vitam Nutr Res** 1988; 58(4):394–401

Expression of fibroblast growth factor by F9 teratocarcinoma cells as a function of differentiation. Braunhut SJ, et al. **J Cell Biol** 1989 Jun;108(6):2467–76

Induction of in vitro differentiation of mouse embryonal carcinoma (F9) and erythroleukemia (MEL) cells by herbimycin A, an inhibitor of protein phosphorylation. Kondo K, et al. **J Cell Biol** 1989 Jul;109(1):285–93

Insulin–like growth factors and the multiplication of Tera–2, a human teratoma–derived cell line. Biddle C, et al. **J Cell Sci** 1988 Jul;90 (Pt 3):475–84

Perinatal salivary gland tumours (embryomas). Batsakis JG, et al. **J Laryngol Otol** 1988 Nov;102(11):1007–11 (15 ref.)

Teratoma of the mastoid region in a newborn. Talmi YP, et al. **J Laryngol Otol** 1988 Nov;102(11):1033–5

Immature teratomas: identification of patients at risk for malignant recurrence. Malogolowkin MH, et al. **J Natl Cancer Inst** 1989 Jun 7;81(11):870–4

Primary and secondary orbital teratomas. Weiss AH, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jan–Feb;26(1):44–9

Teratoid Wilms' tumor: the St Jude experience. Fernandes ET, et al. **J Pediatr Surg** 1988 Dec;23(12):1131–4

Immunohistochemistry of a spontaneous murine ovarian teratoma with neuroepithelial differentiation. Neuron-associated beta-tubulin as a marker for primitive neuroepithelium. Caccamo D, et al. **Lab Invest** 1989 Mar; 60(3):390–8

Is seminoma a relative or a precursor of embryonal carcinoma? [editorial] Damjanov I. **Lab Invest** 1989 Jan; 60(1):1–3

Interphase cytogenetics in paraffin embedded sections from human testicular germ cell tumor xenografts and in corresponding cultured cells. Emmerich P, et al. **Lab Invest** 1989 Aug;61(2):235–42

The Ad5 12S growth factor induces F9 cell proliferation and differentiation. Quinlan MP. **Oncogene** 1989 Aug; 4(8):1051–5

Teratomas and allied germ cell tumors: common origin and diverging paths of differentiation. Pesce CM, et al. **Pathol Immunopathol Res** 1988;7(3):208–24 (96 ref.)

Retroconversion of malignancy of ovarian immature teratoma. Lian LJ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(2):79–83

Mechanism of programmed cell death in the blastocyst. Pierce GB, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3654–8

Value of retroperitoneal lymphadenectomy after chemotherapy for non-seminomatous testicular tumor with lymph node metastases. Le Guillou M, et al. **Prog Clin Biol Res** 1989;303:813

Synthesis of insulin-like growth factor-II by embryonal carcinoma cell-derived differentiated cells. Shi WK. **Shih Yen Sheng Wu Hsueh Pao** 1988 Sep;21(3):355–67

Retroperitoneal teratoma with fetuses. Nadimpalli VR, et al. **Teratology** 1989 Mar;39(3):233–6

Intra-abdominal metastatic malignant teratoma. Metastatic malignant teratoma (carcinosarcoma), primary in the retroperitoneum. Dardick I, et al. **Ultrastruct Pathol** 1989 Mar–Jun;13(2–3):291–300

Late recurrence of mature teratoma in nonseminomatous testicular tumors after PVB chemotherapy and surgery. Gelderman WA, et al. **Urology** 1989 Jan;33(1):10–4

Benign cystic ovarian teratoma with lung differentiation. Pruszczyński M, et al. **Zentralbl Allg Pathol** 1988; 134(7):687–9

Cartilaginous teratoma of the ovary. Hrabowska M, et al. **Zentralbl Gynakol** 1989;111(11):761–5

[Pathologic study and prognostic factors in 28 patients with ovarian immature teratoma] Zhang CH, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):209–12 (Eng. Abstr.) **(Chi)**

[Giant sacrococcygeal teratoma in adults] Harbon S, et al. **Ann Chir Plast Esthet** 1989;34(2):153–9 (36 ref.) (Eng. Abstr.) **(Fre)**

[Embryonal carcinoma of the ovary. Anatomo-clinical aspects and presentation of a case] Maffeo A, et al. **Minerva Ginecol** 1989 May;41(5):241–5 (Eng. Abstr.) **(Ita)**

[Report of a case of adenomatoid tumor in the epididymis] Honjo M, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1829–31 (Eng. Abstr.) **(Jpn)**

[A case of pulmonary blastoma associated with a cystic lesion in adult] Inaoka M, et al. **Kyobu Geka** 1988 Oct; 41(11):921–3 (Eng. Abstr.) **(Jpn)**

[Intra-articular teratoma of the knee] Baciu CC, et al. **Rev Chir [Chir]** 1989 Jan–Feb;38(1):65–8 (Eng. Abstr.) **(Rum)**

[Adenomatoid tumor of the epididymis. Apropos of a case] Sánchez Gómez E, et al. **Actas Urol Esp** 1988 Nov–Dec; 12(6):563–5 (Eng. Abstr.) **(Spa)**

[Mature retroperitoneal teratoma] Martín A, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):381–3 (14 ref.) (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Induction of murine 8-cell blastomere polarity by F9 embryonal carcinoma cells. Adler RR, et al. **Dev Biol** 1989 Oct;135(2):405–13

Embryonal carcinoma in two cases of androgen insensitivity syndrome: clinical, endocrinological and pathological features. Lecca U, et al. **Eur J Gynaecol Oncol** 1988; 9(6):489–96

RADIOGRAPHY

Non-seminomatous testicular tumors: effect of lesion side on CT detection of lymph node metastasis. Munechika H, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):343–8

Posterior mediastinal teratoma involving the esophagus. Vade A, et al. **Gastrointest Radiol** 1989 Spring;14(2):106–8

Teratoma of the spinal cord. A case report with CT scans. Hamabuchi M, et al. **J Bone Joint Surg [Br]** 1989 May; 71(3):390–2

Cerebral primitive neuroectodermal tumors in childhood. Tomita T, et al. **J Neurooncol** 1988 Nov;6(3):233–43 (34 ref.)

SECONDARY

Testicular cancer presenting as a red swollen lid. Ham JA, et al. **Br J Ophthalmol** 1988 Nov;72(11):868–70

Reversal of duodenal obstruction due to metastatic teratoma by combination chemotherapy. Mannix KA, et al. **Br J Urol** 1989 Apr;63(4):442

Massive hemorrhage secondary to metastatic testicular carcinoma. Cunningham LN, et al. **J Am Osteopath Assoc** 1989 Mar;89(3):341–4

Differentiated teratoma of testis metastasizing as differentiated teratoma in adult. Cameron-Strange A, et al. **Urology** 1989 Jun;33(6):481–2

Paratesticular metastases from congenital retroperitoneal tumor. Nistal M, et al. **Urology** 1989 Feb;33(2):131–4

SECRETION

[A case of antidiuretic hormone-producing malignant teratoma of the anterior mediastinum] Matsuda S, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):884–5 **(Jpn)**

SURGERY

Benign nasopharyngeal teratomas in the neonate. Clark DP, et al. **Int J Pediatr Otorhinolaryngol** 1988 Dec;16(3):219–24

Giant sacrococcygeal teratoma: a method of simple intraoperative control of hemorrhage. Lindahl H. **J Pediatr Surg** 1988 Nov;23(11):1068–9

Malignant retro-peritoneal teratoma (a case report). Sood S, et al. **J Postgrad Med** 1988 Jul;34(3):185–7 (10 ref.)

Lessons in the surgical treatment of epilepsy [editorial] **Lancet** 1989 Aug 12;2(8659):366–7

Nerve sparing retroperitoneal lymphadenectomy in clinical stage I, low stage II and after chemotherapy in stage III nonseminomatous testicular cancer. Javadpour N. **Prog Clin Biol Res** 1988;277:53–62

A case of malignant teratoma developing from the septum pellucidum 7 years after removal of a mature teratoma in the pineal region. Kamiya K, et al. **Surg Neurol** 1988 Dec; 30(6):462–7

[Primary malignant teratoma of the thyroid in adults. Report of 1 case and review of the literature] Gožau-Brissonnière O, et al. **J Chir (Paris)** 1989 Jan;126(1):1–4 (13 ref.) (Eng. Abstr.) **(Fre)**

[Organ-saving therapy of small ovarian cystomas and dermoids by surgical laparoscopy—a trial 1985–1987] Dressler F, et al. **Geburtshilfe Frauenheilkd** 1989 Apr; 49(4):390–3 (Eng. Abstr.) **(Ger)**

[Surgery of the female gonads] Schwöbel MG, et al. **Z Kinderchir** 1988 Aug;43(4):289–94 (Eng. Abstr.) **(Ger)**

[Presacral tumor with sacral meningocele] Vogl D, et al. **Z Kinderchir** 1988 Oct;43(5):361–4 (Eng. Abstr.) **(Ger)**

[Treatment of patients with stage I non-seminomatous testicular tumors with general orchiectomy] Horňák M, et al. **Z Urol Nephrol** 1988 Sep;81(9):541–5 (Eng. Abstr.) **(Ger)**

[A case of teratoma of the posterior mediastinum] Kashiwaya A, et al. **Kyobu Geka** 1989 Jan;42(1):59–61 (Eng. Abstr.) **(Jpn)**

[Reoperations in the treatment of caudal teratomas] Nikitin AM, et al. **Khirurgiia (Mosk)** 1989 May;(5):97–100 (Eng. Abstr.) **(Rus)**

[A rare location of a parasitic fetus] Kalita NIa, et al. **Klin Khir** 1988;(6):71–2 **(Rus)**

[Nasopharyngeal teratoma in a newborn infant] Gurin MA. **Vestn Otorinolaringol** 1988 May–Jun;(3):70–1 **(Rus)**

THERAPY

Primary anterior mediastinal malignant teratoma. A case report with long-term survival. Wirtanen GW, et al. **Cancer** 1989 May 1;63(9):1823–5

In vivo antitumor effect of methotrexate conjugated to a monoclonal IgM antibody specific for stage-specific embryonic antigen-1, on MH-15 mouse teratocarcinoma. Persiani S, et al. **Cancer Immunol Immunother** 1989; 29(3):167–70

Immature teratoma of the ovary. Koulos JP, et al. **Gynecol Oncol** 1989 Jul;34(1):46–9

Primary chemotherapy and the role of second-look laparotomy in non-dysgerminomatous germ cell malignancies of the ovary. Pippitt CH Jr, et al. **Gynecol Oncol** 1988 Oct;31(2):268–75

Intensive chemotherapy followed by autologous bone marrow transplantation for a patient having wide-spread embryonal carcinoma in the central nervous system. Tsukada T, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):67–71

Pregnancy following conservative surgery and adjunctive chemotherapy for stage III immature teratoma of the ovary. Lee RB, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):853–5

Role of novel adjuvants in specific active immunotherapy. Cantrell JL, et al. **Prog Clin Biol Res** 1989;288:297–307

[Testicular germinal tumors. Current therapeutic principles] Kerbrat P, et al. **J Chir (Paris)** 1989 May;126(5):327–33 (Eng. Abstr.) **(Fre)**

[Relief from hemodialysis after combined chemotherapy and left-nephrectomy. A case of stage IIB, non-seminomatous testicular tumor] Uchida T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1114–8 (Eng. Abstr.) **(Jpn)**

[Treatment of patients with retroperitoneal metastases of nonseminoma tumors of the testis] Matveev BP, et al. **Vopr Onkol** 1988;34(12):1493–7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

A comparative fine structure study on myofibroblasts from a cultured human and an in-situ rat tumor source. Reger JF, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):501–8

Dental elements in mature teratomas of the ovary: scanning electron microscope ultrastructure. Fedele L, et al. **Tumori** 1989 Feb 28;75(1):76–8

VETERINARY

Teratocarcinoma of the ovary in a mare. Frazer GS, et al. **J Am Vet Med Assoc** 1988 Oct 15;193(8):953–5

Primary ovarian adenocarcinoma associated with teratomatous elements in a mare. Van Camp SD, et al. **J Am Vet Med Assoc** 1989 Jun 15;194(12):1728–30

Teratoma of the pituitary gland in a young male rat. Maekawa A, et al. **J Comp Pathol** 1989 Apr;100(3):349–52

Testicular teratoma and seminoma in a woodchuck. Anderson WI, et al. **Vet Pathol** 1988 Sep;25(5):400

TERATOMA, CYSTIC see **DERMOID CYST**

TERATOMA, MATURE see **DERMOID CYST**

TERBIUM

Reinterpretation of fluorescence of terbium ion–DNA complexes. Balcarová Z, et al. **Biophys Chem** 1989 Mar; 33(1):55–61

On the coordination of La3+ by phosphatidylserine. Petersheim M, et al. **Biophys J** 1989 Apr;55(4):631–6

Terbium(III) induced Z to A transition in poly(dG–m5dC). Chatterji D. **Biopolymers** 1988 Jul;27(7):1183–6

ANALYSIS

Determination of terbium in organs of mice administered terbium chloride: comparative study of fluorometry and atomic absorption spectrometry. Shinohara A, et al. **J Anal Toxicol** 1989 May–Jun;13(3):135–40

DIAGNOSTIC USE

Re: L. F. Pearlman et al., interaction of three second-generation anthracyclines with polynucleotides, RNA, DNA, and nucleosomes. Cancer Res., 46:341–346, 1986. Stokke T. **Cancer Res** 1988 Dec 1;48(23):6962–5

METABOLISM

Interaction of terbium and calcium with chicken cystatin. Bell ET, et al. **Arch Biochem Biophys** 1989 Jun; 271(2):359–65

Evidence of a calcium-induced structural change in the ATP-binding site of the sarcoplasmic-reticulum Ca2+-ATPase using terbium formycin triphosphate as an analogue of Mg-ATP. Girardet JL, et al. **Eur J Biochem** 1989 Sep 1;184(1):131–40

PHARMACOLOGY

Activation of calpain I and calpain II: a comparative study using terbium as a fluorescent probe for calcium-binding sites. Zimmerman UJ, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):462–9

Consequences of terbium (III) binding on the conformation and enzymatic activity of guinea pig liver transglutaminase. Achyuthan KE, et al. **Mol Cell Biochem** 1989 Jan 23; 85(1):57–65

TERBUTALINE

Tuberculin substituted for terbutaline. No "tine" for error [letter] Barham B, et al. **Chest** 1988 Nov;94(5):1120–1

ADMINISTRATION & DOSAGE

Fetal cardiac function in response to long-term maternal terbutalin treatment. Sørensen KE, et al. **Acta Obstet Gynecol Scand** 1988;67(2):105–7

A multiple dose powder inhaler (Turbuhaler) compared with a conventional aerosol. An acceptance study in asthmatics. Osterman K, et al. **Allergy** 1989 May;44(4):294–7

Duration of action of inhaled terbutaline at two different doses and of albuterol in protecting against bronchoconstriction induced by hyperventilation of dry cold air in asthmatic subjects. Malo JL, et al. **Am Rev Respir Dis** 1989 Sep;140(3):817–21

A clinical comparison of terbutaline with albuterol administered by metered-dose inhaler. Munzenberger PJ, et al. **Ann Allergy** 1989 Feb;62(2):107–10

Aerosol bronchodilator delivery methods. Relative impact on pulmonary function and cost of respiratory care. Summer W, et al. **Arch Intern Med** 1989 Mar;149(3):618–23

Comparison of inhaled terbutaline and terbutaline injection in treatment of acute asthmatic attacks in children. Phanichyakarn P, et al. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):29–32

Nebuhaler or nebulizer for high dose bronchodilator therapy in chronic bronchitis: a comparison. Allen MB, et al. **Br J Dis Chest** 1988 Oct;82(4):368–73

Terbutaline sustained-release tablets in nocturnal asthma—a placebo-controlled comparison between a high and a low evening dose. Dahl R, et al. **Br J Dis Chest** 1988 Jul; 82(3):237–41

Nebuhaler technique. Gleeson JG, et al. **Br J Dis Chest** 1988 Apr;82(2):172–4

Nebulization versus injection in ambulatory treatment of

acute asthma: a comparative study. Janson C, et al. **Br J Dis Chest** 1988 Oct;82(4):347–53

Bronchodilatory therapy with nebuhaler: how important is the delay between firing the dose and inhaling? Newman SP, et al. **Br J Dis Chest** 1988 Jul;82(3):262–7

Long term treatment of severe asthma with subcutaneous terbutaline. O'Driscoll BR, et al. **Br J Dis Chest** 1988 Oct; 82(4):360–7

Continuous intravenous therapy with theophylline in patients with brittle bronchial asthma [letter] Ayres JG. **Eur Respir J** 1989 Feb;2(2):190

A new multiple dose powder inhaler, (Turbuhaler), compared with a presurized inhaler in a study of terbutaline in asthmatics. Persson G, et al. **Eur Respir J** 1988 Aug; 1(8):681–4

The bronchodilator response from inhaled terbutaline is influenced by the mass of small particles: a study on a dry powder inhaler (Turbuhaler). Persson G, et al. **Eur Respir J** 1989 Mar;2(3):253–6

Nocturnal asthma: effect of treatment with oral sustained-release terbutaline, inhaled budesonide, and the two in combination. Dahl R, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):811–5

Combined beta 1-adrenoceptor blockade and/or beta 2- or beta 1/2 adrenoceptor stimulation as treatment of essential hypertension. Schulte KL, et al. **J Hypertens Suppl** 1988 Dec;6(4):S658–61

Management of acute bronchial asthma—intravenous terbutaline or aminophylline? [letter] Tripathi SK. **J Indian Med Assoc** 1989 Mar;87(3):75–6

Dose-response relationships of intravenously administered terbutaline in children with asthma. Fugisang G, et al. **J Pediatr** 1989 Feb;114(2):315–20

Randomized comparison of oral terbutaline and ritodrine for preventing recurrent preterm labor. Kopelman JN, et al. **J Reprod Med** 1989 Mar;34(3):225–30

Use of the subcutaneous terbutaline pump for long-term tocolysis. Lam F, et al. **Obstet Gynecol** 1988 Nov; 72(5):810–3

ADVERSE EFFECTS

Does terbutaline cause uterine atony and increase intraoperative blood loss? [letter] Brown MS. **Am J Obstet Gynecol** 1989 Jul;161(1):259

Effects of somatostatin and oral potassium administration on terbutaline-induced hypokalemia. Schnack C, et al. **Am Rev Respir Dis** 1989 Jan;139(1):176–80

Hypersensitivity vasculitis induced by terbutaline sulfate. Enat R, et al. **Ann Allergy** 1988 Oct;61(4):275–6

Irritant contact facial dermatitis due to nebulizer therapy. Eedy DJ, et al. **Postgrad Med J** 1988 Apr;64(750):306–7

ANALOGS & DERIVATIVES

Bambuterol, a bronchodilator prodrug with sustained action, enhances delivery of active drug to the lung. Svensson LA. **Agents Actions Suppl** 1988;23:271–6

Bambuterol: clinical effects of three doses of bambuterol once daily in asthmatic patients. Clemmensen IH, et al. **Allergy** 1988 Nov;43(8):573–6

The influence of bambuterol (carbamylated terbutaline) on the duration of action of succinylcholine-induced paralysis in humans. Fisher DM, et al. **Anesthesiology** 1988 Nov; 69(5):757–9

Hydrolysis of 3H-bambuterol, a carbamate prodrug of terbutaline, in blood from humans and laboratory animals in vitro. Tunek A, et al. **Biochem Pharmacol** 1988 Oct 15; 37(20):3867–76

Metabolism of bambuterol in rat liver microsomes: identification of hydroxylated and demethylated products by liquid chromatography mass spectrometry. Lindberg C, et al. **Drug Metab Dispos** 1989 May-Jun;17(3):311–22

Bambuterol, a carbamate ester prodrug of terbutaline, as inhibitor of cholinesterases in human blood. Tunek A, et al. **Drug Metab Dispos** 1988 Sep-Oct;16(5):759–64

Protective effect of tulobuterol on methacholine-induced bronchospasm in asthmatic children. Riba A, et al. **Eur J Clin Pharmacol** 1988;35(1):77–9

Open cross-over comparison of tulobuterol and fenoterol in asthmatic adult patients. Sanchez J, et al. **Int J Clin Pharmacol Res** 1988;8(4):279–85

Effects of ibuterol, a beta-2 adrenergic prodrug, on intraocular pressure. Phipps TL, et al. **J Ocul Pharmacol** 1986 Summer;2(3):225–37

Bambuterol: uptake and metabolism in guinea pig isolated lungs. Ryrfeldt A, et al. **Pharm Res** 1988 Mar;5(3):151–5

Interaction between bambuterol and physostigmine: aspects on cholinesterase inhibition and neuromuscular transmission in the smooth and skeletal muscles of the guinea-pig. Jeppsson AB, et al. **Pharmacol Toxicol** 1988 Oct;63(4):211–4

[Comparative studies on the effectiveness of inhalant beta 2 mimetics therapy in patients with obstructive respiratory disorders] Würtemberger G, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:304–6 (Eng. Abstr.) (Ger)

[Pulmonary function tests in asthmatic children in treatment with tulobuterol] Pérez-Martini L, et al. **Bol Med Hosp Infant Mex** 1989 Apr;46(4):241–5 (Eng. Abstr.) (Spa)

BLOOD

Hydrolysis of 3H-bambuterol, a carbamate prodrug of terbutaline, in blood from humans and laboratory animals in vitro. Tunek A, et al. **Biochem Pharmacol** 1988 Oct 15; 37(20):3867–76

PHARMACOKINETICS

Pharmacokinetic evaluation in man of terbutaline given as separate enantiomers and as the racemate. Borgström L, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):49–56

Theophylline-terbutaline, a steady state study on possible pharmacokinetic interactions with special reference to chronopharmacokinetic aspects. Jonkman JH, et al. **Br J Clin Pharmacol** 1988 Sep;26(3):285–93

Pharmacokinetics of intravenous terbutaline in asthmatic children. Hultquist C, et al. **Dev Pharmacol Ther** 1989; 13(1):11–20

Comparative pharmacokinetics of unlabeled and deuterium-labeled terbutaline: demonstration of a small isotope effect. Borgström L, et al. **J Pharm Sci** 1988 Nov; 77(11):952–4

PHARMACOLOGY

The effect of beta 2-adrenoceptor activation on ion-shifts and fatigue in mouse soleus muscles stimulated in vitro. Juel C. **Acta Physiol Scand** 1988 Oct;134(2):209–16

Response of pulmonary mechanics to terbutaline in patients with bronchopulmonary dysplasia. Brudno DS, et al. **Am J Med Sci** 1989 Mar;297(3):166–8

Effects of terbutaline sulfate on fetal cardiac function. Petersen R, et al. **Am J Obstet Gynecol** 1989 Sep; 161(3):509–12

Intraoperative management of penile erection by using terbutaline. Shantha TR. **Anesthesiology** 1989 Apr; 70(4):707–9

Age-dependent effects of beta 2-adrenergic-stimulating drugs on fetal rabbit lung liquid and adrenal catecholamines. Lundell KH, et al. **Biol Neonate** 1988; 54(3):144–50

Effect of atropine and terbutaline on motor activity of the continent caecal reservoir for urine. Månsson W, et al. **Br J Urol** 1989 Apr;63(4):375–8

Influence of terbutaline on endotoxin-induced lung injury. Sigurdsson GH, et al. **Circ Shock** 1988 Jul;25(3):153–63

Increased theophylline clearance in asthmatic patients due to terbutaline. Garty M, et al. **Eur J Clin Pharmacol** 1989; 36(1):25–8

Terbutaline decreases the blood flow of the pancreatic islets but does not reduce the diabetogenic action of streptozotocin in the rat. Jansson L, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):79–83

Effects of terbutaline and atenolol on large and small airways in asthmatic patients. Lammers JW, et al. **Eur Respir J** 1988 May;1(5):453–7

Effects of D2343, a new beta-mimetic drug, and terbutaline on spontaneous term labor. Ingemarsson I, et al. **Gynecol Obstet Invest** 1988;26(2):130–5

Tachykinins mediate bronchoconstriction elicited by isocapnic hyperpnea in guinea pigs. Ray DW, et al. **J Appl Physiol** 1989 Mar;66(3):1108–12

Adrenergic and VIP-ergic relaxatory mechanisms of the feline extrahepatic biliary tree. Dahlstrand C, et al. **J Auton Nerv Syst** 1989 Mar;26(2):97–106

The induction of cardiac hypertrophy by catecholamines can be dissociated from their inotropic effect. Carlier PG, et al. **J Hypertens Suppl** 1988 Dec;6(4):S119–21

Phosphatidic acid phosphatase in neonatal rat lung: effects of prenatal dexamethasone or terbutaline treatment on basal activity and on responsiveness to beta adrenergic stimulation. Kudlacz EM, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):236–40

Ontogeny of renal hemodynamic response to terbutaline and forskolin in sheep. Nakamura KT, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):453–9

Effects of dobutamine and terbutaline on the secretion of glycoproteins from the acinar cells of the rat submandibular gland. Iwabuchi Y, et al. **Jpn J Pharmacol** 1988 Jul; 47(3):301–10

Bradykinin-mediated edema formation is blocked by levorotatory but not dextrorotatory terbutaline. Dobbins DE, et al. **Microcirc Endothelium Lymphatics** 1988 Oct; 4(5):377–97

Growth of S49 cells in low concentrations of beta-adrenergic agonists causes desensitization. Barber R, et al. **Mol Pharmacol** 1989 Sep;36(3):459–64

Mechanisms of terbutaline-induced inhibition of exocrine pancreatic secretion in humans. Meyer B, et al. **Pancreas** 1988;3(4):399–403

Effects of prenatal terbutaline exposure on cellular development in lung and liver of neonatal rat: ornithine decarboxylase activity and macromolecules. Kudlacz EM, et al. **Pediatr Res** 1989 Jun;25(6):617–22

The effect of terbutaline on exocrine function in the denervated canine pancreas. Garvin PJ, et al. **Transplantation** 1988 Nov;46(5):739–43

POISONING

Rhabdomyolysis and acute renal failure after terbutaline overdose. Blake PG, et al. **Nephron** 1989;53(1):76–7

THERAPEUTIC USE

Terbutaline (intravenous bolus) for the treatment of acute intrapartum fetal distress. Shekarloo A, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):615–8

Terbutaline and diaphragm function in chronic obstructive pulmonary disease: a double-blind randomized clinical trial. Stoller JK, et al. **Br J Dis Chest** 1988 Jul;82(3):242–50

Effects of oral terbutaline in chronic airflow limitation. Maltbaek N, et al. **Chest** 1989 Jun;95(6):1248–52

Breath-actuated inhalers: comparison of terbutaline Turbohaler with salbutamol Rotahaler. Anani A, et al. **Eur Respir J** 1989 Jul;2(7):640–2

Optimal inhalation technique with terbutaline Turbuhaler. Hansen OR, et al. **Eur Respir J** 1989 Jul;2(7):637–9

Comparison of terbutaline, isotonic saline, ambient air and non-treatment in patients with reversible chronic airway obstruction. May O, et al. **Eur Respir J** 1988 Jun; 1(6):527–30

Deposition and clinical efficacy of terbutaline sulphate from Turbuhaler, a new multi-dose powder inhaler. Newman SP, et al. **Eur Respir J** 1989 Mar;2(3):247–52

Treatment of junctional rhythm after heart transplantation with terbutaline. Cook LS, et al. **J Heart Transplant** 1989 Jul-Aug;8(4):342–4

Intravenous terbutaline and aminophylline in bronchial asthma. Sharma TN, et al. **J Indian Med Assoc** 1988 Apr; 86(4):92–3

Treatment of persistent penile erection and priapism using terbutaline. Shantha TR, et al. **J Urol** 1989 Jun; 141(6):1427–9

Terbutaline by pump to prevent recurrent preterm labor. Gill P, et al. **MCN** 1989 May-Jun;14(3):163–7

Slow-release terbutaline and theophylline for the long-term therapy of children with asthma: a Latin square and factorial study of drug effects and interactions. Chow OK, et al. **Pediatrics** 1989 Jul;84(1):119–25

[Bronchospasmolytic tests with and without a nebulizer] Kirsten D, et al. **Z Erkr Atmungsorgane** 1988;171(3):243–6 (Eng. Abstr.) (Ger)

[A new treatment of hyperkalemia in renal failure with selective beta 2-adrenergic stimulant, terbutaline sulfate] Tanaka Y, et al. **Nippon Jinzo Gakkai Shi** 1989 Apr; 31(4):353–8 (Eng. Abstr.) (Jpn)

[Placebo-controlled comparative study of clenbuterol and terbutaline in asthmatic children] Valente Mérida J, et al. **Rev Alerg Mex** 1989 Mar-Apr;36(2):61–4 (Eng. Abstr.) (Spa)

TERMINAL CARE

see related
HOSPICES
PALLIATIVE TREATMENT

The dying elderly patient. Streim JE, et al. **Am Fam Physician** 1988 Nov;38(5):175–83

Dialogues with excellence. The paper crane. Dyck B. **Am J Nurs** 1989 Jun;89(6):824–5

How can a hospital ethics committee help? Weeks LC, et al. **Am J Nurs** 1989 May;89(5):651–4

Obstacles in the treatment of dying patients. Levinson P. **Am J Psychiatry** 1975 Jan;132(1):28–32

Treatment of the terminal stages of breast cancer. Holli K, et al. **BMJ** 1989 Jan 7;298(6665):13–4

The last illness factor: a District experience. Russell JG. **Br J Radiol** 1988 Nov;61(731):1037–8

A place for living, a place for dying. Trent B. **Can Med Assoc J** 1988 Nov 1;139(9):889–93

Malignancy as it affects the patient. Kushner H. **Clin Neurosurg** 1989;35:336–48

Care of irreversibly ill patients: policy statement of the Connecticut Chapter of the American College of Physicians. Belsky JL. **Conn Med** 1989 May;53(5):279

Sedation and pain management for the critically ill. Veselis RA. **Crit Care Clin** 1988 Jan;4(1):167–81 (147 ref.)

The use of hospital beds for terminally ill cancer patients. Walsh S, et al. **Eur J Surg Oncol** 1988 Oct;14(5):367–70

The physician's role in managing terminal care. A Harvard Medical School symposium. **Geriatrics** 1989 Feb; 44(2):83–90, 93, 96–7

Care of the terminally ill person with AIDS. Schofferman J. **Int Ophthalmol Clin** 1989 Summer;29(2):127–30 (5 ref.)

Hospice: A special kind of caring. MacGregor A. **Iowa Med** 1988 Aug;78(8):362–4

Physicians' responsibility toward dying patients. Youngblade DM. **Iowa Med** 1988 Aug;78(8):355

Hospice care of the intravenous drug user AIDS patient in a skilled nurse facility. Bulkin W, et al. **J Acquir Immune Defic Syndr** 1988;1(4):375–80

Do not leave home [letter] **J Am Geriatr Soc** 1988 Dec; 36(12):1163

How should we treat third parties? [letter] Kalis CC. **J Am Geriatr Soc** 1989 Mar;37(3):286–7

Decisions to leave home. What will the neighbors say? Loewy EH. **J Am Geriatr Soc** 1988 Dec;36(12):1143–6

Abstracts: 7th International Congress on Care of the Terminally Ill. October 15–19, 1988, Montréal, Canada. **J Palliat Care** 1988 Sep;4(3):66–88

The use of transdermal scopolamine in the control of death rattle. Dawson HR. **J Palliat Care** 1989 Mar;5(1):31–3

La Maison Michel Sarrazin: from dream to reality.An experience from life. Dionne L. **J Palliat Care** 1988 Sep; 4(3):38–53 (Eng, Fre)

Spiritual care: the software of life. Eaton S. **J Palliat Care** 1988 May;4(1-2):91–3

Family dynamics in the achievement of symptom control. McWhinney IR. **J Palliat Care** 1989 Jun;5(2):37–9
Spirituality, pastoral care, and religion: the need for clear distinctions. Smyth P, et al. **J Palliat Care** 1988 May; 4(1–2):86–8
Spiritual or pastoral care: two models. Wald FS. **J Palliat Care** 1988 May;4(1–2):94–7
Ultimate questions and existential vulnerability. Weisman AD. **J Palliat Care** 1988 May;4(1–2):89–90
Planning a regional palliative care services network. Zalot GN. **J Palliat Care** 1989 Mar;5(1):42–6
Withholding nutrition from hopelessly ill infants [letter] L'Ecuyer JL. **J Pediatr** 1989 Feb;114(2):339–40
The Medical Directive. A new comprehensive advance care document. Emanuel LL, et al. **JAMA** 1989 Jun 9; 261(22):3288–93
Flunitrazepam in terminal care [letter] Smales EA, et al. **Lancet** 1989 Aug 26;2(8661):501
Terminal care: where does it fit in oncology? Alexander C. **Md Med J** 1989 Mar;38(3):211
Dying: rights and responsibilities [letter] **Med J Aust** 1988 Nov 21;149(10):565–6
The physician's responsibility toward hopelessly ill patients [letter] **N Engl J Med** 1989 Oct 5;321(14):975–8
The physician's responsibility toward hopelessly ill patients. A second look. Wanzer SH, et al. **N Engl J Med** 1989 Mar 30;320(13):844–9
Biomedical ethics. A quest for balance. Cassidy RC. **N J Med** 1989 Jan;86(1):35–7
Nursing homes and ethics committees. Somers AR. **N J Med** 1989 Jan;86(1):45–9
Hospice care: a model for caring for the person with AIDS. Clark C, et al. **Nurs Clin North Am** 1988 Dec;23(4):851–62 (35 ref.)
Caring for decisionally incapacitated elderly. High DM. **Theor Med** 1989 Mar;10(1):83–96
[Basic therapy in the final stages of malignant diseases of the female reproductive organs] Vágner Z, et al. **Cesk Gynekol** 1988 Dec;53(10):772–3 (Cze)
[Terminal care, information and cooperation (editorial)] Klee M, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):479–80 (Dan)
[Terminal care—the task is solved by primary health service] Ostergaard I. **Ugeskr Laeger** 1989 Mar 20;151(12):795–6 (Dan)
[Terminal care of cancer patients. 3. Problems and suggestions for improvement] Svendsen I, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):499–502 (Eng. Abstr.) (Dan)
[Terminal care of cancer patients. 1. Frequency and clinical problems] Svendsen I, et al. **Ugeskr Laeger** 1989 Feb 20; 151(8):492–5 (Eng. Abstr.) (Dan)
[Terminal care of cancer patients. 2. Communication and cooperation] Svendsen I, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):495–9 (Eng. Abstr.) (Dan)
[Home care of terminal patients with cancer (letter)] **Ned Tijdschr Geneeskd** 1989 May 13;133(19):999–1000 (Dut)
[The quality of life of the terminally ill cancer patient—from hospice experience] Kashiwagi T. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1038–43 (Eng. Abstr.) (Jpn)
[Pain control in terminal cancer] Tsuneto S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):759–66 (Eng. Abstr.) (Jpn)
[Technical aids. A better life for terminal cancer patients] Melsom H, et al. **Tidsskr Nor Laegeforen** 1989 Feb 28; 109(6):713–4 (Nor)
[Care of seriously ill and dying persons. A 3-year report from an advisory group] Ottesen S. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1645–8 (Eng. Abstr.) (Nor)
[The complex diagnosis of brain edema—swelling in patients in critical states] Novikova RI, et al. **Zh Nevropatol Psikhiatr** 1988;88(6):85–8 (Eng. Abstr.) (Rus)
[Principles and practice of palliative care (editorial)] Sanz Ortiz J. **Med Clin (Barc)** 1989 Feb 4;92(4):143–5 (Spa)
[The terminal disease syndrome: criteria and attitudes] Gil AC, et al. **Rev Med Univ Navarra** 1988 Apr–Jun;32(2):111–8 (Spa)
[Medical ethics. Key questions in medical ethics. To put limits on treatment and care—duty ethics against consequence ethics] Bischofberger E. **Lakartidningen** 1988 Dec 7; 85(49):4328–9 (Swe)
[Terminal care programs] Lindahl SO. **Lakartidningen** 1989 Mar 8;86(10):876–7 (Swe)
[Pain relief in terminal care] Wallgren A, et al. **Lakartidningen** 1989 May 24;86(21):1975 (Swe)

ECONOMICS

Insurance cash advances to AIDS patients extended to some other terminal illnesses. LeBourdais E. **Can Med Assoc J** 1989 Aug 1;141(3):245–7
Medical care in the last year of life: a review of economic and ethical issues. Lipton HL. **Compr Gerontol [B]** 1987 Dec;1(3):89–93 (58 ref.)
Justice and the economics of terminal illness. Veatch RM. **Hastings Cent Rep** 1988 Aug–Sep;18(4):34–40
Changes in the location of death after passage of Medicare's prospective payment system. A national study [see comments] Sager MA, et al. **N Engl J Med** 1989 Feb 16; 320(7):433–9, **Comment in:** N Engl J Med 1989 Jul 6;321(1):56–7
[Health care consumption in the last year of life. Part of total health care consumption] Nord E, et al. **Tidsskr Nor Laegeforen** 1988 Dec 10;108(34–36):3265–7 (Eng. Abstr.) (Nor)

EDUCATION

Palliative medicine [editorial] Hillier R. **BMJ** 1988 Oct 8; 297(6653):874–5

LEGISLATION & JURISPRUDENCE

Care of the brain dead and other troubling patients [editorial] Vates TS Jr. **Del Med J** 1988 Sep;60(9):529–30
Common fallacies made in dealing with the terminally ill patient. Victoroff MS. **Del Med J** 1989 Feb;61(2):81

METHODS

AIDS care team [editorial] George R. **Br J Hosp Med** 1989 Jan;41(1):11
Is withholding hydration a valid comfort measure in the terminally ill? Printz LA. **Geriatrics** 1988 Nov;43(11):84–8
Percutaneous epidural catheterization for intractable pain in terminal cancer patients. Ali NM, et al. **Gynecol Oncol** 1989 Jan;32(1):22–5
Measuring symptoms in terminal cancer: are pain and dyspnoea controlled? Higginson I, et al. **J R Soc Med** 1989 May;82(5):264–7
Patients' socioeconomic background: influence on selection of inpatient or domiciliary hospice terminal-care programmes. Komesaroff PA, et al. **Med J Aust** 1989 Aug 21;151(4):196, 199–201
Advances in the use of opioids for domiciliary terminal care. Dover S. **Practitioner** 1988 Aug;232(1453):884–6
Terminal care. Mabbott A, et al. **Practitioner** 1988 Apr 22; 232(1447):459–60
Symptom management in the home-based terminal cancer patient. Martin EW, et al. **R I Med J** 1989 Jul;72(7):243–52 (58 ref.)
Clinical cancer: 34. Supportive care of the incurable cancer patient. Kwong RW. **Wis Med J** 1988 Nov;87(11):21–4
[The clinical picture of terminally ill patients with lung cancer] Homma T, et al. **Gan No Rinsho** 1989 Jul; 35(8):891–4 (Eng. Abstr.) (Jpn)

ORGANIZATION & ADMINISTRATION

Terminal care at home for children with cancer. Chambers EJ, et al. **BMJ** 1989 Apr 8;298(6678):937–40
Cancer pain control in Canada: the Montebello strategy. Scott JF, et al. **J Palliat Care** 1989 Jun;5(2):34–7

PSYCHOLOGY

Teaching third-year medical students how to care for terminally ill patients. Martin RW 3d, et al. **Acad Med** 1989 Jul;64(7):413–4
Do you want everything done? Swensson VM. **Am J Nurs** 1989 Sep;89(9):1252
Life threatening illness and hospice care. Stein A, et al. **Arch Dis Child** 1989 May;64(5):697–702
Imparting the diagnosis of life threatening illness in children. Woolley H, et al. **BMJ** 1989 Jun 17;298(6688):1623–6
The doctor's dilemma (the nurse's Waterloo). Laszlo J, et al. **Cancer Invest** 1988;6(3):361–3
When the patient doesn't die. Hans P. **Gen Hosp Psychiatry** 1988 Sep;10(5):367–72
The Hospice Caregiver Assessment: a study of a case management tool for professional assistance. Etten MJ, et al. **Gerontologist** 1989 Feb;29(1):128–31
Psychological correlates of survival in nursing home cancer patients. Stein S, et al. **Gerontologist** 1989 Apr;29(2):224–8
In Greece, lament for the dead, denial for the dying. Dracopoulou S, et al. **Hastings Cent Rep** 1988 Aug–Sep; 18(4):suppl 15–6
Caring for the dying patient [clinical conference] **Iowa Med** 1988 Aug;78(8):356–60
Spiritual aid for dying patients. Hebard AC. **Iowa Med** 1988 Aug;78(8):365–6
Before death: freeing time... [editorial] Roy DJ. **J Palliat Care** 1989 Mar;5(1):5–6
To be a nurse. Carter MA. **J Prof Nurs** 1989 May–Jun; 5(3):122
Dying, God, & anger. Comforting through spiritual care. Henderson KJ. **J Psychosoc Nurs Ment Health Serv** 1989 May;27(5):17–21
Intimacy and terminal care. Gilley J. **J R Coll Gen Pract** 1988 Mar;38(308):121–2
A piece of my mind. Last rounds. Martorano JT. **JAMA** 1989 Sep 22–29;262(12):1688
Lady Macbeth as a terminal case [editorial] Crosby WH. **Mo Med** 1989 Apr;86(4):209, 242
The empty lifeboat. Crum G. **N Y State J Med** 1988 Oct; 88(10):520–1
Attitudes to a hospital based terminal care scheme. McKee CM, et al. **Postgrad Med J** 1988 Sep;64(755):678–80
Death anxiety and attitudes toward hospice care. Neubauer BJ, et al. **Psychol Rep** 1988 Aug;63(1):195–8
The suicidal, terminally ill patient with depression. Leibenluft E, et al. **Psychosomatics** 1988 Fall;29(4):379–86
Reflections and remembrances. Carpenter MK, et al. **R I Med J** 1989 Jul;72(7):255–6
Hospice care of Rhode Island: 1989. McDuff HC. **R I Med J** 1989 Jul;72(7):237–9
Immediate effectiveness of brief psychological training for health professionals dealing with terminally ill cancer patients: a controlled study. Razavi D, et al. **Soc Sci Med** 1988;27(4):369–75
[The helplessness of the physician in the treatment of chronic and terminally ill patients] Buddeberg C. **Fortschr Med** 1988 Aug 10;106(23):467–8 (Ger)
[The importance of patient education at the bedside and saying good-by for managing grief by those left behind] Böhme S. **Z Arztl Fortbild (Jena)** 1988;82(17):837–8 (Ger)

STANDARDS

In Uruguay, an ethic of care for the dying. França O. **Hastings Cent Rep** 1988 Aug–Sep;18(4):suppl 21–2
In France, terminal stage medicine is not hopelessly ill. Lefevre C. **Hastings Cent Rep** 1988 Aug–Sep;18(4):suppl 19–20
Mere presence [editorial] **J Palliat Care** 1988 Sep;4(3):7–8
Quality of terminal care: salient indicators identified by families. Kristjanson LJ. **J Palliat Care** 1989 Mar;5(1):21–30
Ethical issues in nutritional support nursing. Withholding and withdrawing nutritional support. Knox LS. **Nurs Clin North Am** 1989 Jun;24(2):427–36 (37 ref.)
[Cancer treatment in terminal stage] Murakami K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):740–5 (Eng. Abstr.) (Jpn)
[A comparative study of clinics: Terminal care personnel need communication, support and comfort to provide good care] Merk K, et al. **Lakartidningen** 1989 Feb 15; 86(7):549–52 (Swe)

TRENDS

Changes in prescribing for terminal care patients in general practice, hospital and hospice over a five-year period. Rees WD. **J R Coll Gen Pract** 1987 Nov;37(304):504–6
[What is the current status and future of p..rimortal medicine?] Blumenthal-Barby K. **Z Arztl Fortbild (Jena)** 1988;82(21):1047–8 (Ger)
[Perimortal management—humanistic assignment and responsibility. Attempt at status determination] Blumenthal-Barby K, et al. **ZFA** 1989 Mar–Apr; 44(2):121–3 (Eng. Abstr.) (Ger)

TERMINAL DEOXYRIBONUCLEOTIDYL TRANSFERASE see **DNA NUCLEOTIDYLEXOTRANSFERASE**

TERMINALS, COMPUTER see **COMPUTER SYSTEMS**

TERMINATION, EMPLOYMENT see **EMPLOYMENT**

TERMINATOR REGIONS (GENETICS) see under **GENES, REGULATOR**

TERPENE PHOSPHATES see **POLYISOPRENYL PHOSPHATES**

TERPENES

Hardness of restorative resins: effect of camphorquinone, amine, and inhibitor. Peutzfeldt A, et al. **Acta Odontol Scand** 1989 Aug;47(4):229–31
Luffolide, a novel anti-inflammatory terpene from the sponge Luffariella sp.. Kernan MR, et al. **Experientia** 1989 Apr 15;45(4):388–90
Carotenoids and polyterpenoids. Britton G. **Nat Prod Rep** 1989 Aug;6(4):359–92 (705 ref.)

ADMINISTRATION & DOSAGE

Rat monoclonal antibodies. VII. Enhancement of ascites production and yield of monoclonal antibodies in rats following pretreatment with pristane and Freund's adjuvant. Kints JP, et al. **J Immunol Methods** 1989 May 12;119(2):241–5

ADVERSE EFFECTS

Allergic contact dermatitis from "Varn Ecol – OJ wash" in a litho printer. Garioch JJ, et al. **Contact Dermatitis** 1988 Sep;19(3):229
The safety of diethyltoluamide insect repellents [letter] Moody RP. **JAMA** 1989 Jul 7;262(1):28–9
Making insect repellents safe [letter] Curtis CF. **Lancet** 1988 Oct 29;2(8618):1020
The mortician's mystery solved? [letter] Abramovici A, et al. **N Engl J Med** 1988 Oct 27;319(17):1157
Absinthe. Arnold WN. **Sci Am** 1989 Jun;260(6):112–7

ANALYSIS

Long-chain polyprenols in gymnosperm plants. Swieżewska E, et al. **Acta Biochim Pol** 1988;35(2):131–47
Carcinogen in rock fern (Cheilanthes sieberi) from New Zealand and Australia. Smith BL, et al. **Aust Vet J** 1989 May;66(5):154–5
Gas-liquid chromatographic resolution of some racemic synthons for lamtidine analogous histamine H2-receptor antagonists via diastereomeric amides of (1S)-(-)-camphanic acid. Büyüktimkin N, et al.

J Chromatogr 1989 Apr 28;467(2):402–5
Applications of gas chromatography to the study of terpenoid metabolism. Satterwhite DM, et al. **J Chromatogr** 1988 Oct 28;452:61–73

BIOSYNTHESIS

Monoterpene biosynthesis: mechanism and stereochemistry of the enzymatic cyclization of geranyl pyrophosphate to (+)-cis- and (+)-trans-sabinene hydrate. Hallahan TW, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):313–26
Isoprenoid biosynthesis in a marine sponge of the Amphimedon genus: incorporation studies with [1–14C] acetate, [4–14C] cholesterol and [2–14C] mevalonate. Garson MJ, et al. **Comp Biochem Physiol [B]** 1988; 91(2):293–300
Biosynthesis of monoterpenes. Stereochemistry of the enzymatic cyclization of geranyl pyrophosphate to (-)-endo-fenchol. Croteau R, et al. **J Biol Chem** 1988 Oct 25;263(30):15449–53

CHEMICAL SYNTHESIS

A total synthesis of grifolin. Ohta S, et al.
Chem Pharm Bull (Tokyo) 1988 Jun;36(6):2239–43

HISTORY

Vincent van Gogh and the thujone connection. Arnold WN. **JAMA** 1988 Nov 25;260(20):3042–4

IMMUNOLOGY

Contact dermatitis from methylionone fragrance. Bernaola G, et al. **Contact Dermatitis** 1989 Jan;20(1):71–2
Allergic contact dermatitis resulting from sensitivity to citrus peel, geraniol, and citral. Cardullo AC, et al.
J Am Acad Dermatol 1989 Aug;21(2 Pt 2):395–7

ISOLATION & PURIFICATION

Identification of isoprenoid-type components in human expired air: a possible shunt pathway in sterol metabolism. O'Neill HJ, et al. **Biomed Chromatogr** 1987;2(2):66–70
Irritant principles of the mezereon family (Thymelaeaceae). V. New skin irritants and tumor promoters of the daphnane and 1 alpha-alkyldaphnane type from Synaptolepis kirkii and Synaptolepis retusa. Adolf W, et al. **J Nat Prod** 1988 Jul–Aug;51(4):662–74
Sesterterpenes from a Pacific sponge, Carteriospongia flabelliifera [published erratum appears in J Nat Prod 1988 Nov–Dec;51(6):1112] Schmitz FJ, et al. **J Nat Prod** 1988 Jul–Aug;51(4):745–8
[Identification of the chemical components of two Alpinia species] Yu JG. **Chung Yao Tung Pao** 1988 Jun;13(6):34–6, 63 (Eng. Abstr.) **(Chi)**

METABOLISM

Geranyl pyrophosphate synthase: characterization of the enzyme and evidence that this chain-length specific prenyltransferase is associated with monoterpene biosynthesis in sage (Salvia officinalis). Croteau R, et al. **Arch Biochem Biophys** 1989 Jun;271(2):524–35
Prenylated proteins: demonstration of a thioether linkage to cysteine of proteins. Rilling HC, et al.
Biochem Biophys Res Commun 1989 Aug 30;163(1):143–8
Characterization of the interaction of ophiobolin A and calmodulin. Leung PC, et al. **Int J Biochem** 1988; 20(12):1351–9
Plasmid control of the Pseudomonas aeruginosa and Pseudomonas putida phenotypes and of linalool and p-cymene oxidation. de Smet MJ, et al. **J Bacteriol** 1989 Sep;171(9):5155–61
Biosynthesis of monoterpenes. Stereochemistry of the enzymatic cyclizations of geranyl pyrophosphate to (+)-alpha-pinene and (-)-beta-pinene. Croteau R, et al. **J Biol Chem** 1989 Feb 5;264(4):2075–80
Biosynthesis of monoterpenes. Stereochemical implications of acyclic and monocyclic olefin formation by (+)- and (-)-pinene cyclases from sage. Croteau R, et al.
J Biol Chem 1989 Sep 15;264(26):15309–15
Use of terpene-based solvents (Hemo-De, Histoclear, and Shandon and BDH xylene substitutes) in place of xylene in the Ehrlich indole test. Gubash SM, et al.
J Clin Microbiol 1989 Sep;27(9):2136–7
Effect of carbon monoxide on the cytochrome P-450-mediated activation of 4-ipomeanol by the isolated perfused rabbit lung. Trela BA, et al.
J Toxicol Environ Health 1989;27(3):341–50
Natural products from plant tissue culture. Ellis BE.
Nat Prod Rep 1988 Dec;5(6):581–612 (465 ref.)

PHARMACOKINETICS

Biotransformations of alpha-terpineol in the rat: its effects on the liver microsomal cytochrome P-450 system. Madyastha KM, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):17–25
Tracing tissues with 4-ipomeanol-metabolizing capacity in rats. Larsson P, et al. **Chem Biol Interact** 1988;67(1–2):1–24
Disposition of citral in male Fischer rats. Diliberto JJ, et al. **Drug Metab Dispos** 1988 Sep–Oct;16(5):721–7
Models of retinoid metabolism: microbial biotransformation of alpha-ionone and beta-ionone. Hartman DA, et al.
J Nat Prod 1988 Sep–Oct;51(5):947–53
Biotransformation of 1,4-cineole, a monoterpene ether. Asakawa Y, et al. **Xenobiotica** 1988 Oct;18(10):1129–34

PHARMACOLOGY

In vitro Sendai viral replication in pulmonary macrophages from mice treated with 4-ipomeanol. Durham SK, et al. **Am J Vet Res** 1988 Oct;49(10):1677–80
Pristane-induced arthritis. The immunologic and genetic features of an experimental murine model of autoimmune disease. Wooley PH, et al. **Arthritis Rheum** 1989 Aug; 32(8):1022–30
Inactivation of phospholipase A2 by manoalide. Localization of the manoalide binding site on bee venom phospholipase A2. Glaser KB, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3639–46
Inhibition of platelet aggregation by manoalide: preliminary results. Freitas JC, et al. **Braz J Med Biol Res** 1988; 21(2):337–40
Inhibition of N-nitrosodiethylamine carcinogenesis in mice by naturally occurring organosulfur compounds and monoterpenes. Wattenberg LW, et al. **Cancer Res** 1989 May 15;49(10):2689–92
Tumour-promoting and hyperplastic effects of phorbol and daphnane esters in CD-1 mouse skin and a synergistic effect of calcium ionophore with the non-promoting activator of protein kinase C, sapintoxin A. Brooks G, et al.
Carcinogenesis 1989 Feb;10(2):283–8
The prevention of nitrosomethylurea-induced mammary tumors by d-limonene and orange oil. Maltzman TH, et al. **Carcinogenesis** 1989 Apr;10(4):781–3
Effect of limonene and related compounds on the percutaneous absorption of indomethacin. Okabe H, et al.
Drug Des Deliv 1989 Jun;4(4):313–21
Mechanism of antifertility action of neem oil. Riar SS, et al. **Indian J Med Res** 1988 Oct;88:339–42
Inhibition studies on the membrane-associated phospholipase A2 in vitro and prostaglandin E2 production in vivo of the macrophage-like P388D1 cell. Effects of manoalide, 7,7-dimethyl-5,8-eicosadienoic acid, and p-bromophenacyl bromide. Lister MD, et al.
J Biol Chem 1989 May 25;264(15):8520–8
Effects of 6 months use of an antiseptic mouthrinse on supragingival dental plaque microflora. Minah GE, et al.
J Clin Periodontol 1989 Jul;16(6):347–52
Effects of protein kinase C activators on the in-vitro action of thyrotrophin in pigs. Ginsberg J, et al. **J Endocrinol** 1988 Aug;118(2):199–203
Pharmacologic effects of lactones isolated from Pulsatilla alpina subsp. apiifolia. Martin ML, et al.
J Ethnopharmacol 1988 Dec;24(2–3):185–91
Biochemical and histological studies of reproductive organs in cyclic and ovariectomized rats supporting a non-hormonal action for neem oil. Tewari RK, et al.
J Ethnopharmacol 1989 May;25(3):281–93
Isoprenoid (phosphinylmethyl)phosphonates as inhibitors of squalene synthetase. Biller SA, et al. **J Med Chem** 1988 Oct;31(10):1869–71
4-Ipomeanol: a novel investigational new drug for lung cancer. Christian MC, et al. **J Natl Cancer Inst** 1989 Aug 2;81(15):1133–43 (70 ref.)
Regulation of eicosanoid biosynthesis in vitro and in vivo by the marine natural product manoalide: a potent inactivator of venom phospholipases. Mayer AM, et al.
J Pharmacol Exp Ther 1988 Mar;244(3):871–8
beta-eudesmol (a main component of Atractylodes lancea)-induced potentiation of depolarizing neuromuscular blockade in diaphragm muscles of normal and diabetic mice. Muroi M, et al. **Jpn J Pharmacol** 1989 May;50(1):69–71
Geraniol interferes with membrane functions in strains of Candida and Saccharomyces. Bard M, et al. **Lipids** 1988 Jun;23(6):534–8
Onchidal: a naturally occurring irreversible inhibitor of acetylcholinesterase with a novel mechanism of action. Abramson SN, et al. **Mol Pharmacol** 1989 Sep;36(3):349–54
Effect of dihydroheptaprenol on nitroblue tetrazolium reduction by swine alveolar macrophages. Watari T, et al.
Nippon Juigaku Zasshi 1989 Jun;51(3):630–1
Effect of helenalin and bis(helenalinyl)malonate on nucleic acid and protein synthesis in human KB carcinoma cells. Hall IH, et al. **Pharm Res** 1987 Dec;4(6):509–14
Central nervous system activity of terpenoids from marine sponge. De Pasquale R, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:23–6
[Plasmatic clearance of antipyrine after treatment with epomediol] Del Vecchio S, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):446–8 (Eng. Abstr.) **(Ita)**
[Comparison of the action of pristan and Freund's incomplete adjuvant on the development of ascites in mice—the recipients of hybridoma cells] Novikov VV, et al.
Antibiot Khimioter 1988 Jul;33(7):530–2 (Eng. Abstr.) **(Rus)**

STANDARDS

Council on Dental Therapeutics accepts Listerine.
J Am Dent Assoc 1988 Sep;117(3):515–6

THERAPEUTIC USE

A double-blind, placebo-controlled study to determine the efficacy of Nicobrevin anti-smoking capsules. Dankwa E, et al. **Br J Clin Pract** 1988 Sep;42(9):359–63
Chemotherapeutic inhibition of supragingival dental plaque and gingivitis development. DePaola LG, et al.
J Clin Periodontol 1989 May;16(5):311–5
Sobrerol in the treatment of secretory otitis media in childhood. Bellussi L, et al. **J Int Med Res** 1989 May–Jun; 17(3):277–86
Monodisperse labeled aerosol to visualize airflow redistribution in the lung after a mucokinetic drug. Pulerà N, et al. **J Nucl Med Allied Sci** 1989 Jul–Sep;33(3):258–63
The effect of an antimicrobial mouthrinse on early healing of gingival flap surgery wounds. Zambon JJ, et al.
J Periodontol 1989 Jan;60(1):31–4
d-limonene, an anticarcinogenic terpene. **Nutr Rev** 1988 Oct; 46(10):363–5 (12 ref.)
[Efficacy and tolerance of intravenously administered epomediol in patients with hepatopathy] Fiocchi G, et al.
Clin Ter 1988 Oct 15;127(1):37–41 (Eng. Abstr.) **(Ita)**
[Antilipemic activity of epomediol in patients with primary hyperlipidemia] Saba P, et al. **Clin Ter** 1987 Jan 15; 120(1):37–43 (Eng. Abstr.) **(Ita)**

TOXICITY

Sebaceous gland hyperplasia following topical application of citral. An ultrastructural study. Sandbank M, et al.
Am J Dermatopathol 1988 Oct;10(5):415–8
Sublethal effects of phenanthrene, nicotine, and pinane on Daphnia pulex. Savino JF, et al.
Bull Environ Contam Toxicol 1989 May;42(5):778–84
Critical comparison of histological and morphometric changes in SENCAR mouse epidermis in response to n-dodecane, 12-O-tetradecanoylphorbol-13-acetate and mezerein. Miller ML, et al. **Carcinogenesis** 1988 Nov; 9(11):1959–65
Plant constituents of cotton dust and lung effects after inhalation. Rylander R. **Eur Respir J** 1988 Oct;1(9):812–7
Allergic contact sensitization potential of hydroxycitronellal in humans. Ford RA, et al. **Food Chem Toxicol** 1988 Nov–Dec;26(11–12):921–6
Effects of TPA dose variation and mezerein on skin tumorigenesis by initiation promotion protocol in S/RV Cri mice. Bhisey RA, et al. **Indian J Exp Biol** 1988 Oct; 26(10):764–7
The accelerating role of Abelson murine leukemia virus in murine plasmacytoma development: in vitro infection of spleen cells generates donor-type tumors after transfer to pristane-treated BALB/c mice. Sugiyama H, et al.
Int J Cancer 1989 Aug 15;44(2):348–52
Further characterization of skin tumor promotion and progression by mezerein in SENCAR mice. Ewing MW, et al. **J Natl Cancer Inst** 1989 May 3;81(9):676–82
Contribution of menthofuran to the hepatotoxicity of pulegone: assessment based on matched area under the curve and on matched time course. Thomassen D, et al.
J Pharmacol Exp Ther 1988 Mar;244(3):825–9
Teratogenic evaluation of terpenoid derivatives. Unsworth B, et al. **Life Sci** 1974 Nov 1;15(9):1649–55
Pulmonary toxicity of 4-ipomeanol. Gram TE.
Pharmacol Ther 1989;43(2):291–7 (20 ref.)
d-Limonene-induced male rat-specific nephrotoxicity: evaluation of the association between d-limonene and alpha 2u-globulin. Lehman-McKeeman LD, et al.
Toxicol Appl Pharmacol 1989 Jun 15;99(2):250–9
[Activities of the Public Health Department of the Acad. I.P. Pavlov Ryazan Medical Institute (on its 25th anniversary)] Tkachev PG, et al. **Gig Sanit** 1989 May; (5):34–7 **(Rus)**
[Toxicologic properties and the nature of the combined effect of a orthomenthane hydrocarbon mixture] Stel'makh VA. **Gig Tr Prof Zabol** 1988 Sep;(9):34–7 (Eng. Abstr.) **(Rus)**

TERPHENYL COMPOUNDS

ADMINISTRATION & DOSAGE

[Effectiveness of the combined use of antihypoxic agents and antioxidants in tuberculosis] Aleksandrova AE, et al.
Probl Tuberk 1988;(6):62–5 **(Rus)**

PHARMACOLOGY

Effect of triphenylacrylonitrile derivatives on estradiol-receptor binding and on human breast cancer cell growth. Bignon E, et al. **J Med Chem** 1989 Sep; 32(9):2092–103
Predicting the carcinogenicity of the aromatic amine derivatives tested in the second UKEMS Collaborative Study. Ennever FK, et al. **Mutagenesis** 1986 Mar; 1(2):119–23
[Effect of the nonhormonal bisanionic aromatic compound IEM 967 on the pituitary-ovarian system of rats] Bekhtereva EP. **Vopr Med Khim** 1988 Jul–Aug;34(4):78–81 (Eng. Abstr.) **(Rus)**

POISONING

[Analysis of PCB- and PCT-methylsulfones in the blood in Yusho patients] Haraguchi K, et al.
Fukuoka Igaku Zasshi 1989 May;80(5):291–5 (Eng. Abstr.) **(Jpn)**

TERRITORIALITY

Geographic variation in the territorial success of Drosophila melanogaster males. Hoffmann AA. **Behav Genet** 1989 Mar; 19(2):241–55

Olfactory demarcation of territorial but not home range boundaries by Lemur catta. Mertl–Millhollen AS. **Folia Primatol (Basel)** 1988;50(3–4):175–87

Hormonal correlates of migration and territorial behavior in juvenile willow tits during autumn. Silverin B, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):148–56

Life histories of male Cayo Santiago macaques. Berard JD. **P R Health Sci J** 1989 Apr;8(1):61–4

[The occupation of space and interindividual relations of a nocturnal Madagascan prosimian (Microcebus murinus)] Pagès–Feuillade E. **Folia Primatol (Basel)** 1988; 50(3–4):204–20 (Eng. Abstr.) (Fre)

TERRORISM see **VIOLENCE**

TEST ANXIETY SCALE see under **PERSONALITY INVENTORY**

TEST-TUBE FERTILIZATION see **FERTILIZATION IN VITRO**

TESTICULAR DISEASES

Epidermoid cyst of the testis. Case report with a review of the literature. Kaasinen E, et al. **Eur Urol** 1988; 15(1–2):141–3 (17 ref.)

[Multiple testicular cysts—an unusual case] Just A, et al. **ROFO** 1989 Mar;150(3):358–9 (Ger)

[Epidermoid cysts of the testis] Drei GN, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):31–5 (Eng. Abstr.) (Ita)

[Hemorrhagic cyst of the cavum tunica vaginalis testis: a case report] Hirano S, et al. **Hinyokika Kiyo** 1988 Dec; 34(12):2201–3 (Eng. Abstr.) (Jpn)

BLOOD

Hormone profiles in Klinefelter's syndrome with and without testicular epidermoid cyst. Sasagawa I, et al. **Arch Androl** 1988;21(3):205–9

Increased levels of serum follicle-stimulating hormone and luteinizing hormone associated with intrinsic testicular hyperthermia in oligospermic infertile men. Mieusset R, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):419–25

Serum inhibin levels in normal men and men with testicular disorders. de Kretser DM, et al. **J Endocrinol** 1989 Mar; 120(3):517–23

CHEMICALLY INDUCED

Effect of styrene administration on rat testis. Srivastava S, et al. **Arch Toxicol** 1989;63(1):43–6

Changes induced by hexachlorocyclohexane isomers in rat liver and testis. Srinivasan K, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):531–9

Quantitative high resolution 1H NMR urinalysis studies on the biochemical effects of cadmium in the rat. Nicholson JK, et al. **Mol Pharmacol** 1989 Sep;36(3):398–404

Mechanistic approaches in the study of testicular toxicity: toxicants that affect the endocrine regulation of the testis. Chapin RE, et al. **Toxicol Pathol** 1989;17(2):446–51 (49 ref.)

Mechanistic approaches in the study of testicular toxicity: agents that directly affect the testis. Working PK. **Toxicol Pathol** 1989;17(2):452–6 (33 ref.)

COMPLICATIONS

Thyro–gonadic failure, a risk factor in cardiovascular pathology. Pitiş M, et al. **Endocrinologie** 1989 Jan–Mar; 27(1):43–7 (23 ref.)

Male infertility: actual or potential. Oates RD. **Hosp Pract [Off]** 1989 Sep 30;24(9A):20, 22, 25 passim

The influence of various aetiopathogenetic factors on testicular function. Lábady F, et al. **Int Urol Nephrol** 1989; 21(1):63–72

CONGENITAL

The number of spermatogonia in various congenital testicular disorders. Saito S, et al. **J Urol** 1989 May;141(5):1166–8

DIAGNOSIS

Spermatic granuloma. Diagnosis by fine needle aspiration cytology. Pérez–Guillermo M, et al. **Acta Cytol** 1989 Jan–Feb;33(1):1–5

Testicular epidermoid cyst: sonographic and MR findings [letter] Brenner JS, et al. **AJR Am J Roentgenol** 1989 Jun; 152(6):1344

The hypoechoic band: a normal finding on testicular sonography. Fakhry J, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):321–3

Sonographic appearance of benign intratesticular lesions. Kratzik C, et al. **Eur Urol** 1988;15(3–4):196–9

Scrotal cup for testicular ultrasound. Cazenave CR, et al. **JCU** 1987 Jun;15(5):357–9

[Ultrasound examination of the scrotum] Olsen JB, et al. **Ugeskr Laeger** 1989 Mar 27;151(13):836–8 (Eng. Abstr.) (Dan)

[Ultrasonic confirmation of scrotal pathology] Mattila S, et al. **Duodecim** 1989;105(10):901–8 (Fin)

[Genitourinary malacoplakia. Apropos of 5 cases. A review of the literature] el Ouakdi M, et al. **Ann Urol (Paris)** 1989; 23(3):197–200 (11 ref.) (Eng. Abstr.) (Fre)

[The contribution of scrotal and abdominal computerized tomography in assessing malignant tumor of the testis] Jichlinski P, et al. **Ther Umsch** 1989 Mar;46(3):171–7 (Eng. Abstr.) (Fre)

[Torsion of the testis and its adnexae. Differential diagnosis of "acute scrotum" in childhood] Vincze J, et al. **Orv Hetil** 1988 Jul 3;129(27):1421–5 (50 ref.) (Eng. Abstr.) (Hun)

[The role of thermography in the diagnosis of testicular diseases] Tiktinskiĭ OL, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):23–6 (Eng. Abstr.) (Rus)

[Torsion of the hydatid of Morgagni] Alcalá–Santaella Casanova C, et al. **Actas Urol Esp** 1989 May–Jun; 13(3):201–3 (Eng. Abstr.) (Spa)

ECONOMICS

[Expert evaluation of work capacity and economic losses in acute diseases of the scrotal organs] Bogomol'nyĭ NG, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):21–3 (Eng. Abstr.) (Rus)

ETIOLOGY

Primary testicular manifestation of systemic lupus erythematosus. Kuehn MW, et al. **Eur Urol** 1989;16(1):72–3

Falciparum malaria presenting as testicular pain and swelling—a rejoinder [letter] Virmani SK. **J Assoc Physicians India** 1988 Apr;36(4):295

Symptomatic urogenital manifestations of polyarteritis nodosa and Churg–Strauss angiitis: analysis of 8 of 165 patients. Azar N, et al. **J Urol** 1989 Jul;142(1):136–8

Values of the topological index of sudanophilic bodies SLey in the conditions of damage to the male gonad. Sośnik H. **Mater Med Pol** 1988 Apr–Jun;20(2):99–102

Testicular adhesion: a potential complication from wedge testicular biopsy in childhood leukemia. Chan KW, et al. **Med Pediatr Oncol** 1988;16(5):366–7

[Epididymal diseases and repercussions on testicular function] van de Casseye M, et al. **Reprod Nutr Dev** 1988; 28(5):1347–56 (Eng. Abstr.) (Fre)

METABOLISM

Testicular dysfunction in experimental chronic renal insufficiency: a deficiency of nocturnal pineal N-acetyltransferase activity. Holmes EW, et al. **Br J Exp Pathol** 1989 Jun;70(3):349–56

PATHOLOGY

A case report: obstruction at the colliculus seminalis. Perez–Pelaez M, et al. **Andrologia** 1988 Sep–Oct; 20(5):447–9

Secondary amyloidosis of the testis: an electron microscopic and histochemical study. Nistal M, et al. **Appl Pathol** 1989; 7(1):2–7

Cysts of the testicular parenchyma and tunica albuginea. Nistal M, et al. **Arch Pathol Lab Med** 1989 Aug; 113(8):902–6 (19 ref.)

Epidermoid cyst of the testis. Aitchison M, et al. **Br J Urol** 1989 Mar;63(3):324

Morbidity in sickle cell trait and histology of surgical specimens [letter] Sarma PS. **J Assoc Physicians India** 1988 Jun;36(6):401

Epidermoid cyst of the testis—benign teratoma in an adult. Case report. Thomsen H. **Scand J Urol Nephrol** 1988; 22(4):339–41

Testicular microlithiasis in male infertility. Sasagawa I, et al. **Urol Int** 1988;43(6):368–9

Sonography of testicular microlithiasis. Jaramillo D, et al. **Urol Radiol** 1989;11(1):55–7

[Diseases of the testis and epididymis based on the biopsy materials of the Department of Pathological Anatomy of the Biomedical Research Institute] Mavrov Kh, et al. **Khirurgiia (Sofiia)** 1988;41(4):18–25 (Eng. Abstr.) (Bul)

[Epidermoid cyst of the testis. Apropos of 2 cases with one in a child] Dumotier J, et al. **J Urol (Paris)** 1989;95(1):49–51 (11 ref.) (Eng. Abstr.) (Fre)

[Scrotal changes in the 3.5 MHz ultrasound image] Wakat JP, et al. **Rontgenblatter** 1988 Jul;41(7):304–9 (Eng. Abstr.) (Ger)

[Epidermoid cyst of the testis: a report of 2 cases] Satoh S, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1265–8 (Eng. Abstr.) (Jpn)

[A case of malakoplakia of the testis and epididymis] Moriyama N, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):740–3 (24 ref.) (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Evaluation of the human testis and its age-related dysfunction. Johnson L. **Prog Clin Biol Res** 1989;302:35–60; discussion 61–7 (156 ref.)

[Pathophysiology of primary testicular dysfunction] Parsch EM, et al. **Hautarzt** 1988 Nov;39(11):708–11 (18 ref.) (Eng. Abstr.) (Ger)

[Disorders of neuroendocrine regulation and of the hormonal reserves of the testes in rats during total overheating] Reznikov AG, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):78–83 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Zinc protects testicular injury induced by concurrent exposure to cadmium and lead in rats. Saxena DK, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):317–29

RADIONUCLIDE IMAGING

[Differential diagnosis of acute scrotum by nuclear medicine study] Grünig F, et al. **Urologe [A]** 1989 Jan;28(1):45–7 (Eng. Abstr.) (Ger)

SURGERY

Benign testicular tumors: a case for testis preservation? Kressel K, et al. **Eur Urol** 1988;15(3–4):200–4

Simple cysts of the testis in children: preoperative diagnosis by ultrasound and excision with testicular preservation. Altadonna V, et al. **J Urol** 1988 Dec;140(6):1505–7

[Surgical protocol and intraoperative considerations in interventions on the testis] Benz G, et al. **Z Kinderchir** 1988 Aug;43(4):295–303 (Eng. Abstr.) (Ger)

[Treatment of acute testicular diseases in childhood] Solov'ev AE. **Klin Khir** 1988;(6):30–4 (Eng. Abstr.) (Rus)

[Acute testicular diseases in children] Sleptsov VP, et al. **Vestn Khir** 1988 Jun;140(6):78–81 (Eng. Abstr.) (Rus)

THERAPY

Treatment of hydrocele testis by injection of tetracycline. Miskowiak J, et al. **Eur Urol** 1988;14(6):440–1

[Treatment of hydrocele testis by injection of tetracycline solution] Masuda F, et al. **Hinyokika Kiyo** 1988 Jul; 34(7):1191–3 (Eng. Abstr.) (Jpn)

VETERINARY

Study on boar infertilities: epididymal dysfunction. Kunavongkrit A, et al. **Acta Vet Scand Suppl** 1988; 83:128–32

Ultrasonographic evaluation of induced testicular lesions in male goats. Eilts BE, et al. **Am J Vet Res** 1989 Aug; 50(8):1361–4

Sperm granuloma in a stallion. Held JP, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):267–8

Transient testicular degeneration in rams fed locoweed (Astragalus lentiginosus). Panter KE, et al. **Vet Hum Toxicol** 1989 Feb;31(1):42–6

Unusual bovine cases [letter] Shepherd PR. **Vet Rec** 1989 Aug 5;125(6):138

TESTICULAR FEMINIZATION

BLOOD

[Effect of sex steroids on the lipoprotein profile] Prömpeler HJ, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):785–7 (Eng. Abstr.) (Ger)

COMPLICATIONS

Seminoma in pubertal patient with androgen insensitivity syndrome. Hurt WG, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):530–1

DIAGNOSIS

Testicular feminization syndrome presenting in a 78-year-old patient. Khoury GM, et al. **Conn Med** 1988 Oct; 52(10):584–5

Sex hormone-binding globulin response to the anabolic steroid stanozolol: evidence for its suitability as a biological androgen sensitivity test. Sinnecker G, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1195–200

Testicular feminization syndrome: a case study of four generations. Shull BL, et al. **South Med J** 1989 Feb; 82(2):251–4

[Endocrine loading tests in familial testicular feminization] László A, et al. **Orv Hetil** 1989 Jul 16;130(29):1553–5 (Eng. Abstr.) (Hun)

[Testicular feminization syndrome. An echographic study of one family] Barozzi L, et al. **Radiol Med (Torino)** 1988 Oct; 76(4):360–2 (Ita)

GENETICS

Beta-glucuronidase activity is present in the microscopic epididymis of the Tfm/Y mouse. Scott JE, et al. **Dev Genet** 1987;8(1):11–5

Testicular feminization syndrome. Four case reports with a brief review of the literature. Afework S. **Ethiop Med J** 1989 Jul;27(3):151–4 (12 ref.)

The whole truth and nothing but the truth? Minogue BP, et al. **Hastings Cent Rep** 1988 Oct–Nov;18(5):34–6

METABOLISM

Growth hormone (GH) response to GH-releasing hormone by perifused pituitary cells from male, female, and testicular feminized rats. Batson JM, et al. **Endocrinology** 1989 Jan; 124(1):444–8

The androgen receptor of the testicular-feminized (Tfm) mutant mouse is smaller than the wild-type receptor. Young CY, et al. **Endocrinology** 1989 Feb;124(2):771–5

PHYSIOPATHOLOGY

Patterns of lateralization and performance levels for verbal and spatial tasks in congenital androgen deficiency. Cappa SF, et al. **Behav Brain Res** 1988 Dec 1;31(2):177–83

Growth hormone secretion by individual somatotropes of the testicular feminized rat. Martha PM Jr, et al. **Endocrinology** 1989 Mar;124(3):1124–30

Embryonal carcinoma in two cases of androgen insensitivity syndrome: clinical, endocrinological and pathological features. Lecca U, et al. **Eur J Gynaecol Oncol** 1988; 9(6):489–96

Effect of the Tfm mutation on handedness in mice. Nosten M, et al. **J Endocrinol** 1989 Apr;121(1):R5–7

SURGERY

Anaesthesia in the testicular feminisation syndrome [letter] Pollard BJ. **Anaesthesia** 1989 Feb;44(2):169–70

VETERINARY

Testicular feminization in a cat. Meyers-Wallen VN, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):631–4

TESTICULAR HORMONES

ANALYSIS

Cellular localization of müllerian inhibiting substance in the developing rat ovary. Ueno S, et al. **Endocrinology** 1989 Feb;124(2):1000–6

[Reduction of germ cell number induced in vitro by the testis in fetal rat ovary may be caused by factors other than anti-Müllerian hormone] Charpentier G, et al. **C R Acad Sci [III]** 1989;309(1):35–42 (Eng. Abstr.) (Fre)

BIOSYNTHESIS

Stainless steel mesh supports high density cell growth and production of recombinant müllerian inhibiting substances. Epstein J, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):213–6

BLOOD

The persistent Müllerian duct syndrome: a molecular approach. Guerrier D, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):46–52

GENETICS

Developmental expression of an androgen-regulated epididymal protein. Charest NJ, et al. **Endocrinology** 1989 Aug;125(2):942–7

A Drosophila melanogaster gene encodes a protein homologous to the mouse t complex polypeptide 1. Ursic D, et al. **Gene** 1988 Sep 7;68(2):267–74

Molecular cloning of complementary deoxyribonucleic acid for an androgen-regulated epididymal protein: sequence homology with metalloproteins. Charest NJ, et al. **Mol Endocrinol** 1988 Oct;2(10):999–1004

IMMUNOLOGY

A monoclonal antibody against human testicular anti-müllerian hormone. Legeai L, et al. **Am J Reprod Immunol Microbiol** 1988 Oct;18(2):39–43

Anti-idiotypic antibodies to a monoclonal antibody raised against anti-müllerian hormone exhibit anti-müllerian biological activity. Lefèvre G, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):125–33

ISOLATION & PURIFICATION

A ram epididymal secretory protein shares common antigenic determinants with rat epididymal proteins and human seminal plasma proteins. Fournier-Delpech S, et al. **Reprod Nutr Dev** 1988;28(5):1283–99

METABOLISM

Androgenic control of antagglutinin secretion in the boar epididymal epithelium. An immunocytochemical study. Dacheux F, et al. **Cell Tissue Res** 1989 Feb;255(2):371–8

Germ cell–Sertoli cell interactions: analysis of the biosynthesis and secretion of cyclic protein-2. Wright WW. **Dev Biol** 1988 Nov;130(1):45–56

Mullerian inhibiting substance in the adult rat ovary during various stages of the estrous cycle. Ueno S, et al. **Endocrinology** 1989 Aug;125(2):1060–6

Proteolytic processing of mullerian inhibiting substance produces a transforming growth factor-beta-like fragment. Pepinsky RB, et al. **J Biol Chem** 1988 Dec 15; 263(35):18961–4

PHARMACOLOGY

Cytotoxic effects of müllerian inhibiting substance (MIS)? Janssens JP, et al. **Anticancer Res** 1988 Jul-Aug;8(4):781–4

Minimal antiproliferative effect of recombinant müllerian inhibiting substance on gynecological tumor cell lines and tumor explants. Wallen JW, et al. **Cancer Res** 1989 Apr 15;49(8):2005–11

Regulation of Sertoli cell function and differentiation through the actions of a testicular paracrine factor P-Mod-S. Norton JN, et al. **Endocrinology** 1989 Jun;124(6):2711–9

Anti-Müllerian hormone produces endocrine sex reversal of fetal ovaries. Vigier B, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3684–8

Anti-müllerian hormone and freemartinism: inhibition of germ cell development and induction of seminiferous cord-like structures in rat fetal ovaries exposed in vitro to purified bovine AMH [published erratum appears in Reprod Nutr Dev 1988;28 Suppl 1:199] Vigier B, et al. **Reprod Nutr Dev** 1988;28(4B):1113–28

PHYSIOLOGY

Müllerian inhibiting substance depresses accumulation in vitro of disaturated phosphatidylcholine in fetal rat lung. Catlin EA, et al. **Am J Obstet Gynecol** 1988 Nov; 159(5):1299–303

Mullerian inhibiting substance in the ovary. Donahoe PK, et al. **Prog Clin Biol Res** 1988;267:153–75 (62 ref.)

SECRETION

The physiology of the endocrine testis. Maddocks S, et al. **Oxf Rev Reprod Biol** 1988;10:53–123 (376 ref.)

Anti-müllerian hormone in sheep follicles. Bézard J, et al. **Reprod Nutr Dev** 1988;28(4B):1105–12

[Differential regulation of antagglutinin secretion in pig epididymis: an immunocytochemistry study.] Dacheux F, et al. **Reprod Nutr Dev** 1988;28(5):1251–6 (Eng. Abstr.) (Fre)

THERAPEUTIC USE

Diagnosis and management of abnormalities of the testes. Helfer EL, et al. **Compr Ther** 1988 Sep;14(9):42–54 (8 ref.)

TESTICULAR INTERSTITIAL CELLS see **LEYDIG CELLS**

TESTICULAR NEOPLASMS

Testicular cancer. Peckham M. **Acta Oncol** 1988;27(4):439–53 (70 ref.)

Bilateral testicular and adrenal malignant lymphoma of pre B-cell type. Coventry BJ, et al. **Aust N Z J Surg** 1989 Jan;59(1):79–83

The role of surgery in metastatic testicular germ cell tumours (GCT). Newlands ES, et al. **Br J Cancer** 1989 Jun; 59(6):837–9 (11 ref.)

Testicular cancer presenting as a red swollen lid. Ham JA, et al. **Br J Ophthalmol** 1988 Nov;72(11):868–70

Seminoma of testis with unusual bone metastasis. Asthana AK, et al. **Br J Urol** 1988 Oct;62(4):380–1

Computed tomographic appearances of treated metastatic testicular tumours. Carey BM, et al. **Clin Radiol** 1989 Jul; 40(4):406–12

Computed tomography scanning and post-lymphangiogram radiography in the follow-up of patients with metastatic testicular cancer. Williams MP, et al. **Clin Radiol** 1989 Jan; 40(1):47–50

Analysis of cell-differentiation lineage in human teratomas using new monoclonal antibodies to cytostructural antigens of embryonal carcinoma cells. Pera MF, et al. **Differentiation** 1988 Dec;39(2):139–49

Adenomatoid tumours of the male genital tract. Review of 5 men presenting with an intrascrotal swelling subsequently diagnosed as an adenomatoid tumour. Davies JH, et al. **Eur Urol** 1989;16(5):393–4

Involvement of the caval vein lumen by a metastasis of a non-seminomatous testicular tumor. Jacqmin D, et al. **Eur Urol** 1989;16(3):233–4

Pure testicular rhabdomyosarcoma in a newborn. Ballin A, et al. **Isr J Med Sci** 1989 Jun;25(6):340–1

Simple nontoxic treatment of advanced metastatic seminoma with carboplatin. Horwich A, et al. **J Clin Oncol** 1989 Aug; 7(8):1150–6 (32 ref.)

Carcinoma in situ of the testis. Reinberg Y, et al. **J Urol** 1989 Aug;142(2):243–7 (54 ref.)

Prognostic factors in testicular tumors. McLeod DG. **Prog Clin Biol Res** 1988;277:69–77

Management of seminoma. Stutzman RE. **Prog Clin Biol Res** 1988;277:63–8 (12 ref.)

Controversies in urologic oncology. Kirschenbaum A, et al. **Surg Clin North Am** 1988 Oct;68(5):1105–23 (94 ref.)

Germ cell tumors of the testicle or 'orchidomata'. Haddad FS, et al. **Urol Int** 1989;44(1):20–4 (66 ref.)

Detection of AFP and HCG in metastatic testicular cancer after treatment with chemotherapy or radiation therapy. Fowler JE Jr, et al. **Urology** 1989 Jan;33(1):74–7

[Carcinoma in situ of the testis] Wolf H. **Ugeskr Laeger** 1988 Sep 12;150(37):2153 (Dan)

[A rare case of neoplasm of the epididymis] Marino C, et al. **Minerva Chir** 1989 Apr 15;44(7):1193–5 (Eng. Abstr.) (Ita)

[A case of chondrosarcoma developing within the metastasis of germ cell tumor of the testis] Turrin A, et al. **Radiol Med (Torino)** 1989 Jun;77(6):711–3 (Ita)

[Testicular tumors] Yoshida O. **Gan No Rinsho** 1989 Jan;Spec No:453–60 (Jpn)

[A clinical study of testicular tumors] Matsuki H, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1757–65 (Eng. Abstr.) (Jpn)

[A case of testicular tumor in an elderly man] Ohyama A, et al. **Hinyokika Kiyo** 1989 Apr;35(4):693–6 (Eng. Abstr.) (Jpn)

[Paraplegia caused by metastatic testicular tumor] Furuhata A, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov; 79(11):1774–81 (Eng. Abstr.) (Jpn)

[A germ cell tumor of an ectopic testis in polyorchidism] Gonchar MA, et al. **Klin Khir** 1989;(5):64–5 (Rus)

ANALYSIS

Ki-1 (CD30) antigen is regularly expressed by tumor cells of embryonal carcinoma. Pallesen G, et al. **Am J Pathol** 1988 Dec;133(3):446–50

Isolation of 16,000-dalton parathyroid hormone-like proteins from two animal tumors causing humoral hypercalcemia of malignancy. Weir EC, et al. **Endocrinology** 1988 Dec; 123(6):2744–51

Immunohistological determination of oestrogen receptor, progesterone receptor, and intermediate filaments in Leydig cell tumours, Leydig cell hyperplasia, and normal Leydig cells of the human testis. Düe W, et al. **J Pathol** 1989 Mar;157(3):225–34

False positivity with one-step and conventional ELISA for alpha-fetoprotein in seminoma [letter] Veress L, et al. **Lancet** 1989 May 27;1(8648):1210–1

BLOOD

Tumour markers in testicular and prostatic cancer. van Erps P, et al. **Ann Chir Gynaecol** 1989;78(1):71–6 (17 ref.)

Serum lactate dehydrogenase and human choriogonadotrophin in seminoma. Fossâ A, et al. **Br J Urol** 1989 Apr;63(4):408–15

Evidence for free beta-subunit secretion in so-called human chorionic gonadotropin-positive seminoma. Mann K, et al. **Cancer** 1988 Dec 1;62(11):2378–82

The measurement of cisplatin-DNA adduct levels in testicular cancer patients. Reed E, et al. **Carcinogenesis** 1988 Oct;9(10):1909–11

Carcinoembryonic antigen levels in germ cell tumours. Hitchins RN, et al. **Int J Biol Markers** 1989 Jan-Mar; 4(1):31–4

Seminoma testis with elevated serum beta-HCG—a category of germ-cell cancer between seminoma and nonseminoma. Dieckmann KP, et al. **Int Urol Nephrol** 1989;21(2):175–84 (48 ref.)

[Biological markers and germinal tumors of the testis. Value and limitations of the assay of chorionic gonadotrophin hormone and alpha-fetoprotein] Bassoulet J, et al. **J Urol (Paris)** 1988;94(8):393–6 (Eng. Abstr.) (Fre)

CHEMICALLY INDUCED

A case-control study of testicular cancer using Connecticut tumour registry data. Gershman ST, et al. **Int J Epidemiol** 1988 Dec;17(4):738–42

Diethylstilboestrol exposure and testicular cancer [letter] Williams F. **Int J Epidemiol** 1989 Jun;18(2):462–3

Dimethylformamide, metal dyes, and testicular cancer [letter] Ducatman AM. **Lancet** 1989 Apr 22;1(8643):911

COMPLICATIONS

Gynaecomastia and occult Leydig cell tumour of the testis. Mellor SG, et al. **Br J Urol** 1989 Apr;63(4):420–2 (11 ref.)

Cryptorchidism and testicular neoplasia. Giwercman A, et al. **Horm Res** 1988;30(4–5):157–63 (48 ref.)

Infertility in patients with testicular cancer: testis, tumor, or treatment? [editorial] Schlisky RL. **J Natl Cancer Inst** 1989 Aug 16;81(16):1204–5

Intraabdominal testis with yolk sac tumor in a 2-year-old child. Cox L, et al. **J Pediatr Surg** 1988 Aug;23(8):775–6

Paratesticular malignant mesothelioma associated with abdominoscrotal hydrocele. Velasco AL, et al. **J Pediatr Surg** 1988 Nov;23(11):1065–7 (10 ref.)

Occult Leydig cell testicular tumour presenting with gynaecomastia. O'Donovan JJ, et al. **J R Soc Med** 1989 Jan;82(1):49–50

Giant fibrous pseudotumor of the testicular tunics in association with Schistosoma haematobium infection. Elem B, et al. **J Urol** 1989 Feb;141(2):376–7

Back pain delaying diagnosis of metastatic testicular tumours [letter] Cantwell BM, et al. **Lancet** 1989 Sep 23; 2(8665):739–40

Thromboembolic events during combination chemotherapy for germ cell malignancy [letter] Hall MR, et al. **Lancet** 1988 Nov 26;2(8622):1259

Testicular malignancy associated with massive inguinal adenopathy and life threatening hemorrhage. Lichtman SM, et al. **N Y State J Med** 1989 Aug;89(8):482–3

[A seldom occurring cause of severe backache in young adult men] Keizer HJ, et al. **Ned Tijdschr Geneeskd** 1988 Oct 1;132(40):1825–6 (Dut)

[Carney's complex (myxomas, pigmented spots and endocrine hyperactivity). Apropos of a partial form in monozygotic twins] Gaillard F, et al. **Ann Pathol** 1988;8(3):239–43 (Eng. Abstr.) (Fre)

[Secondary paraneoplastic polycythemia of testicular cancer] Sachot JL, et al. **Ann Urol (Paris)** 1989;23(2):153–5 (Eng. Abstr.) (Fre)

[Treatment of invasion of the vena cava by an embryonal carcinoma of the testis] Jacqmin D, et al. **J Urol (Paris)** 1989;95(1):62–3 (Fre)

[Abdominal testicular retention with seminoma and epididymo-testicular separation] Friedrich M, et al. **ROFO** 1989 Jun;150(6):740–1 (Ger)

[Autologous frozen sperm—an alternative in infertility in the

patient with invasively treated testicular tumor?] Schubert J, et al. **Z Urol Nephrol** 1989 Apr;82(4):209–16 (Eng. Abstr.) **(Ger)**

[Papillary cystadenoma of the epididymis. Apropos of a rare case in a patient with grade III varicocele] Cavallaro G, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):27–9 (Eng. Abstr.) **(Ita)**

[Trousseau's syndrome: thrombosis of the inferior vena cava and of the left renal vein associated with a testicular neoplasm] Castiñeiras J, et al. **Actas Urol Esp** 1988 Sep–Oct; 12(5):402–10 (32 ref.) (Eng. Abstr.) **(Spa)**

[Plasmacytoma of the testis: report of a case] Abad Hernández MM, et al. **Arch Esp Urol** 1989 May; 42(4):369–71 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Fine needle aspiration cytology of spermatocytic seminoma. Report of a case. López JI, et al. **Acta Cytol** 1989 Sep–Oct; 33(5):627–30

Paratesticular adenomatoid tumors. The cytologic presentation in fine needle aspiration biopsies. Pérez–Guillermo M, et al. **Acta Cytol** 1989 Jan–Feb; 33(1):6–10

Value of fine needle aspiration cytology in the diagnosis of testicular neoplasms. Verma K, et al. **Acta Cytol** 1989 Sep–Oct;33(5):631–4

Malignant mixed germ cell tumor of the testis mimicking a hematocele [letter] Sanders LM, et al. **AJR** 1988 Dec; 151(6):1253

Testicular involvement in young patients with non–Hodgkin's lymphoma. Haddy TB, et al. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):224–9

Endodermal sinus (yolk sac) tumor in infants and children. A clinical and pathologic study: an 11 year review. Shebib S, et al. **Am J Pediatr Hematol Oncol** 1989 Spring; 11(1):36–9

Immunohistochemistry of germ cell tumors of the testis. Matolka J. **Arch Geschwulstforsch** 1988;58(6):441–4 (12 ref.)

Importance of scrotal ultrasonography in gynaecomastia. Conway GS, et al. **BMJ** 1988 Nov 5;297(6657):1176–7

Germ cell tumours in men. Mead GM. **BMJ** 1988 Nov 19; 297(6659):1283–4

Influence of delay in diagnosis on prognosis in testicular teratoma. Chilvers CE, et al. **Br J Cancer** 1989 Jan; 59(1):126–8

Leiomyoma of the testis: sonographic and pathologic findings. Nino–Murcia M, et al. **Can Assoc Radiol J** 1989 Jun;40(3):178–9

Paraneoplastic limbic encephalopathy with testicular carcinoma. A reversible neurologic syndrome. Burton GV, et al. **Cancer** 1988 Nov 15;62(10):2248–51

Carcinoma in-situ of the testis diagnosed on semen cytology. Howard GC, et al. **Clin Radiol** 1989 May;40(3):323–4

Monitoring of patients with nonseminomatous testicular cancer by nuclear magnetic resonance spectroscopy of plasma. Höfeler H, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1141–3

Impact of sonography on diagnosis of scrotal diseases: a multicenter study. Kratzik C, et al. **Eur Urol** 1988; 14(4):270–5

Serum markers in testicular germ–cell neoplasms. Rowland RG. **Hematol Oncol Clin North Am** 1988 Sep;2(3):485–9 (5 ref.)

Clinical evaluation of scrotal masses: an overview. Paola AS, et al. **Hosp Pract [Off]** 1989 Mar 15;24(3):255–8, 259–64

Embryonal carcinoma of testis in elderly men. Kaneti J, et al. **Int Urol Nephrol** 1988;20(6):641–5

Papillary serous cystadenoma of the testis. Kosmehl H, et al. **Int Urol Nephrol** 1989;21(2):169–74

Testicular cancer, early diagnosis and management [editorial] Cantwell B. **Ir Med J** 1989 Jun;82(2):46–7

Male college students' compliance with testicular self–examination. Dachs RJ, et al. **J Adolesc Health Care** 1989 Jul;10(4):295–9

Testicular choriocarcinoma. An unusual presentation as occult gastrointestinal blood loss. Stokes EW, et al. **J Adolesc Health Care** 1989 Mar;10(2):146–50

Modeling and guided practice as components within a comprehensive testicular self–examination cancer education program. Walker R, et al. **J Am Coll Health** 1989 Mar;37(5):211–5

Risk indicators in stage I testicular teratoma [letter] Klepp O. **Lancet** 1989 Mar 4;1(8636):506

Non–seminomatous testicular cancer clinical stage I: prediction of outcome by histopathological parameters. A multivariate analysis. Fosså SD, et al. **Oncology** 1989; 46(5):297–300

Testicular self–examination: is it still necessary [letter] Dieckmann KP. **Postgrad Med J** 1988 Mar;64(749):250

Leydig cell tumour: diagnosis and treatment. Case report and review. Glavind K, et al. **Scand J Urol Nephrol** 1988; 22(4):343–5

Testicular cancer: new concepts and innovations in diagnosis and treatment. **Semin Urol** 1988 Aug;6(3):159–245

Testicular cancer: innovations in diagnosis and treatment. Rowland RG, et al. **Semin Urol** 1988 Aug;6(3):223–32 (15 ref.)

CT and MR imaging of malignant germ cell tumor of the undescended testis. Lorigan JG, et al. **Urol Radiol** 1989; 11(2):113–7

Differentiated teratoma of testis metastasizing as differentiated teratoma in adult. Cameron–Strange A, et al. **Urology** 1989 Jun;33(6):481–2

Impalpable testicular tumors diagnosed by scrotal ultrasonography. Csapo Z, et al. **Urology** 1988 Dec; 32(6):549–52

Bilateral testicular tumors [letter] Perlstein GB. **Urology** 1988 Oct;32(4):388

Malignant mesothelioma of tunica vaginalis testis. Tyagi G, et al. **Urology** 1989 Aug;34(2):102–4

[Endodermal sinus tumor (yolk sac tumor)—report of 52 cases and review of the literature of 1224 cases] Dong HJ, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):213–6 (9 ref.) (Eng. Abstr.) **(Chi)**

[A testis tumor in the left adnexi] van Laarhoven K, et al. **Ned Tijdschr Geneeskd** 1989 Apr 8;133(14):736–7 (Eng. Abstr.) **(Dut)**

[Ultrasonic confirmation of scrotal pathology] Mattila S, et al. **Duodecim** 1989;105(10):901–8 **(Fin)**

[Scrotal echography in the diagnosis of cancer of the testis: misleading images and echographic patterns] Martin B, et al. **Ann Radiol (Paris)** 1989;32(2):91–6 (Eng. Abstr.) **(Fre)**

[Nonseminomatous testicular tumors. Diagnostic strategy. Apropos of 53 cases] Mazeman E, et al. **Ann Urol (Paris)** 1988;22(5):345–9 (Eng. Abstr.) **(Fre)**

[From scrotal ultrasonography to unnecessary castration (editorial)] Timbal Y. **Ann Urol (Paris)** 1989;23(1):7 **(Fre)**

[Plea for autopalpation of the testis (letter)] Dieckmann KP, et al. **Presse Med** 1989 Jan 7–14;18(1):32 **(Fre)**

[Proton spin tomography in testicular tumors] Knönagel H, et al. **Helv Chir Acta** 1988 Jul;55(3):325–8 (Eng. Abstr.) **(Ger)**

[Tumors of the testis. Correlations between echographic, macroscopic and histological features in 48 cases] Barozzi L, et al. **Radiol Med (Torino)** 1989 Jun;77(6):663–7 (Eng. Abstr.) **(Ita)**

[Hemorrhagic lymph node metastasis from testicular carcinoma. The echo–CT–MR correlations] Ferrozzi F, et al. **Radiol Med (Torino)** 1989 Mar;77(3):283–5 **(Ita)**

[Testicular cancer. A challenge to the health services taking care of young males] Fosså SD, et al. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):337–40 (Eng. Abstr.) **(Nor)**

[A case of testicular tumor of the Sertoli–Leydig cell type] Kuzaka B, et al. **Pol Tyg Lek** 1988 May 30;43(22):721–2 **(Pol)**

[Bilateral testicular neoplasms] Sosnowski M, et al. **Wiad Lek** 1989 Jan 1;42(1):53–5 (Eng. Abstr.) **(Pol)**

[Clinical comments on testicular tumors seen at a urology clinic] Proca E, et al. **Rev Chir [Chir]** 1988 Jul–Aug; 37(4):241–62 (Eng. Abstr.) **(Rum)**

[The diagnostic and prognostic value of tumor markers in nonseminomatous stage–III to –IV testicular tumors] Sakalo VS, et al. **Urol Nefrol (Mosk)** 1989 May–Jun; (3):42–6 (Eng. Abstr.) **(Rus)**

[Placental alkaline phosphatase as a marker of malignant neoplasms] Pashintseva LP, et al. **Vopr Med Khim** 1989 May–Jun;35(3):68–71 (Eng. Abstr.) **(Rus)**

[Use of radioimmunoanalysis for tumor markers in the diagnosis of carcinoma of the testes and prostate] Kaulitz J. **Bratisl Lek Listy** 1988 Oct;89(10):715–24 (Eng. Abstr.) **(Slo)**

[The value of ultrasonographic examination of scrotal contents in patients with suspected testicular tumors] Polák V, et al. **Rozhl Chir** 1988 Oct;67(10):682–7 (Eng. Abstr.) **(Slo)**

DRUG THERAPY

EDTA clearance in monitoring cisplatin dose escalation in patients with bulky metastatic germ cell tumors of the testis. Jelić S, et al. **Acta Oncol** 1988;27(5):541–3

Enlargement of the thymus following chemotherapy for non–seminomatous testicular cancer. Abildgaard A, et al. **Acta Radiol** 1989 May–Jun;30(3):259–62

Thymic atrophy and rebound enlargement following chemotherapy for testicular cancer. Hendrickx P, et al. **Acta Radiol** 1989 May–Jun;30(3):263–7

Therapy–related acute nonlymphocytic leukemia with monocytic features and rearrangement of chromosome 11q. DeVore R, et al. **Ann Intern Med** 1989 May 1;110(9):740–2 (9 ref.)

Nodular pneumonitis after cancer chemotherapy [letter] Talcott JA, et al. **Ann Intern Med** 1989 Jan 1;110(1):91

Detection of cardiac arrhythmias and ischaemic events in combination chemotherapy with cisplatin, etoposide and bleomycin for testicular cancer. Comazzi R, et al. **Anticancer Res** 1989 May–Jun;9(3):663–5

The bends [letter] Hamilton D, et al. **BMJ** 1988 Sep 24; 297(6651):793–4

Treatment of disseminated germ cell tumours of the testis. Athanassiou A, et al. **Br J Urol** 1989 May;63(5):525–30

Lack of gonadal protection by medroxyprogesterone acetate–induced transient medical castration during chemotherapy for testicular cancer. Fosså SD, et al. **Br J Urol** 1988 Nov;62(5):449–53

Cisplatin–based chemotherapy does not eliminate the risk of a second testicular cancer. Fosså SD, et al. **Br J Urol** 1989 May;63(5):531–4

Radical retroperitoneal node dissection after chemotherapy for testicular tumours. Williams SN, et al. **Br J Urol** 1989 Jun;63(6):641–3

Thymic hyperplasia following chemotherapy of a testicular germ cell tumor. Immunohistological evidence for a simple rebound phenomenon. Düe W, et al. **Cancer** 1989 Feb 1; 63(3):446–9

Comparison of the antitumor activity of cisplatin, carboplatin, and iproplatin against established human testicular cancer cell lines in vivo and in vitro. Harstrick A, et al. **Cancer** 1989 Mar 15;63(6):1079–83

Results of adjuvant chemotherapy for low–stage nonseminomatous germ cell tumors of the testis with vascular invasion. Sandeman TF, et al. **Cancer** 1988 Oct 15;62(8):1471–5

Early–onset thrombocytopenia during combination chemotherapy in testicular cancer is induced by vinblastine. Steurer G, et al. **Cancer** 1989 Jan 1;63(1):51–8

Phase II trial of carboplatin in patients with advanced germ–cell testicular tumors and transitional cell carcinomas of the urinary tract. Akaza H, et al. **Cancer Chemother Pharmacol** 1989;23(3):181–5

Carboplatin and etoposide pharmacokinetics in patients with testicular teratoma. Newell DR, et al. **Cancer Chemother Pharmacol** 1989;23(6):367–72

Phase II study of iproplatin (CHIP, JM–9) in advanced testicular cancers progressing after prior chemotherapy. Clavel M, et al. **Eur J Cancer Clin Oncol** 1988 Aug; 24(8):1345–8

Effects of antineoplastic treatment of HIV–positive patients with testicular cancer. Damstrup L, et al. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):983–6

Clinical and radiological correlation of retroperitoneal metastasis from nonseminomatous testicular cancer treated with chemotherapy. Dexeus FH, et al. **Eur J Cancer Clin Oncol** 1989 Jan;25(1):35–43

The late effects of cis–platinum on renal function. Hamilton CR, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):185–9

Intensive induction chemotherapy for poor risk non–seminomatous germ cell tumours. Horwich A, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):177–84

Single agent activity of methotrexate in advanced non–seminomatous testicular germ cell tumours. Smith DB, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1779–81

Early and long–term toxicity in the management of advanced germ cell testicular tumors. Strohmeyer T, et al. **Eur Urol** 1988;15(3–4):205–8

Long–term neurotoxicity in patients treated with cisplatin, vinblastine, and bleomycin for metastatic germ cell cancer. Hansen SW, et al. **J Clin Oncol** 1989 Oct;7(10):1457–61

Long–term effects on renal function and blood pressure of treatment with cisplatin, vinblastine, and bleomycin in patients with germ cell cancer. Hansen SW, et al. **J Clin Oncol** 1988 Nov;6(11):1728–31

Ten–year survival and late sequelae in testicular cancer patients treated with cisplatin, vinblastine, and bleomycin. Stoter G, et al. **J Clin Oncol** 1989 Aug;7(8):1099–104

The correlation of vinblastine pharmacokinetics to toxicity in testicular cancer patients. Chong CD, et al. **J Clin Pharmacol** 1988 Aug;28(8):714–8

Steroid sulfates in testis tissue of prostatic cancer patients treated for six months with the gonadotropin releasing hormone agonist buserelin. Huhtaniemi I, et al. **J Steroid Biochem** 1989 Jun;32(6):811–3

Post–chemotherapy lymph node histology in radiologically normal patients with metastatic nonseminomatous testicular cancer. Fosså SD, et al. **J Urol** 1989 Mar;141(3):557–9

Stage IE nonHodgkin's lymphoma of the testis: a need for a brief aggressive chemotherapy. Roche H, et al. **J Urol** 1989 Mar;141(3):554–6

Chemotherapy of a patient because of spuriously elevated alpha–fetoprotein levels. Identification of the responsible factor. Dahlmann N, et al. **Klin Wochenschr** 1989 Apr 3; 67(7):408–12

Vinblastine, cisplatin and bleomycin (VPB) adjuvant therapy does not induce dose–dependent damage in human chromosomes. Gundy S, et al. **Neoplasma** 1989;36(4):457–64

Third–line chemotherapy of resistant advanced testicular cancer. Bodrogi I. **Prog Clin Biol Res** 1989;303:749–58

Phase II trial with etoposide (VP16) plus ifosfamide plus high–dose cisplatin (VIhP regimen) in refractory germ cell tumors. Droz JP, et al. **Prog Clin Biol Res** 1989;303:739–47

Retroperitoneal lymph node dissection (RPLND) post chemotherapy for non–seminomatous testicular neoplasms: what is the significance of residual masses at scanner control after chemotherapy and should they be removed? Solé–Balcells F, et al. **Prog Clin Biol Res** 1989;303:759–62

Advances in testicular cancer—role of chemotherapy. Sternberg CN, et al. **Prog Clin Biol Res** 1988;277:79–84 (19 ref.)

Acute subjective morbidity after cisplatin–based combination chemotherapy in patients with testicular cancer: a prospective study. Aass N, et al. **Radiother Oncol** 1989 Jan; 14(1):27–33

Ifosfamide in testicular cancer: the Indiana University experience. Loehrer PJ Sr, et al. **Semin Oncol** 1989 Feb; 16(1 Suppl 3):96–101

The role of ifosfamide in testicular cancer. Schmoll HJ. **Semin Oncol** 1989 Feb;16(1 Suppl 3):82–95 (78 ref.)

Disseminated testicular cancer: current chemotherapy strategies. Williams SD, et al. **Semin Oncol** 1989 Aug;16(4 Suppl 6):105–9 (18 ref.)

Use of carboplatin in the treatment of testicular cancer. Williams SD, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 5):42–4 (7 ref.)

Chemotherapeutic approaches to the treatment of testicular

cancer. Seitz DE, et al. **Semin Urol** 1988 Aug;6(3):238–45

Treatment of testicular tumors: analysis of treatment results of chemotherapy. Kellokumpu-Lehtinen P. **Strahlenther Onkol** 1988 Nov;164(11):638–41

Growth and chemotherapy of a human germ-cell tumour line (GCT 27). Schlappack OK, et al. **Strahlenther Onkol** 1989 Jul;165(7):541

[Role of VP 16 in the treatment of non-seminomatous germ cell tumors of the testis] Bassoulet J, et al. **Therapie** 1988 Jun-Jul;43(4):279–84 (31 ref.) (Eng. Abstr.) **(Fre)**

[Malignant testicular tumors in children. Concept of the cooperative therapy study MAHO 88 based on MAHO 82] Haas RJ, et al. **Klin Padiatr** 1989 Jul-Aug;201(4):269–74 (Eng. Abstr.) **(Ger)**

[Results of the cooperative Malignant Testicular Tumors 82 Study of the German Society of Pediatric Oncology on the therapy of malignant germ cell tumors in childhood] Haas RJ, et al. **Klin Padiatr** 1988 May-Jun;200(3):230–5 (Eng. Abstr.) **(Ger)**

[Reversible germ cell toxicity following aggressive chemotherapy in patients with testicular tumors: results of a prospective study] Kreuser ED, et al. **Klin Wochenschr** 1989 Apr 3;67(7):367–78 (Eng. Abstr.) **(Ger)**

[Computed tomographic detection of chemotherapy-induced thymus changes in patients with metastatic testicular tumors] Hendrickx P, et al. **ROFO** 1989 Mar;150(3):268–73 (Eng. Abstr.) **(Ger)**

[Anti-cancer drug sensitivity test against human testicular cancer xenograft—comparison with clinical results of chemotherapy] Miki T, et al. **Hinyokika Kiyo** 1988 Nov; 34(11):1903–9 (Eng. Abstr.) **(Jpn)**

[A case of bilateral testicular tumors showing remarkable regression of huge metastatic tumors after VAB-6 combined chemotherapy] Nakashima T, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1823–8 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Chemotherapy of carcinoma of the prostate and testis: experimental study in vivo and in vitro] Okada K, et al. **Hinyokika Kiyo** 1988 Nov;34(11):1911–6 (Eng. Abstr.) **(Jpn)**

[Salvage chemotherapy of far advanced testicular cancer with VP-16 and CDDP] Gotoh S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):732–7 (Eng. Abstr.) **(Jpn)**

[The results of the use of bleomycin and its analogs in the VAB-6 protocol in treating testicular tumors] Garin AM, et al. **Antibiot Khimioter** 1988 Nov;33(11):855–9 (Eng. Abstr.) **(Rus)**

[Characteristics of the growth and regression of metastases of malignant testicular tumors to the lungs during chemotherapy] Lichinitser MR, et al. **Vopr Onkol** 1989; 35(4):482–4 **(Rus)**

[Effects of chemotherapy on regional metastases of non-seminomatous tumors of the testis] Sakalo VS, et al. **Vopr Onkol** 1988;34(10):1219–24 (Eng. Abstr.) **(Rus)**

[Mental disorders during chemotherapy of malignant testicular neoplasms] Mironova IN, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):87–90 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Embryology of the gonad with reference to special tumors of the ovary and testis. Barber HR. **J Pediatr Surg** 1988 Oct;23(10):967–72 (6 ref.)

[The differentiation characteristics of neural derivatives in rat teratomas] Dyban PA. **Ontogenez** 1989 Mar-Apr; 20(2):204–8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Oncodevelopmental expression and structure of alkaline phosphatase genes. Millán JL. **Anticancer Res** 1988 Sep-Oct;8(5A):995–1004 (90 ref.)

Elevated lactate dehydrogenase isoenzyme 1 as a tumour marker in patients with germ cell testicular tumours. Winkle DC, et al. **Aust N Z J Surg** 1988 Sep;58(9):737–41

Alkaline phosphatase isozymes in human testicular germ cell tumors, their precancerous stage, and three related cell lines. Hofmann MC, et al. **Cancer Res** 1989 Sep 1; 49(17):4696–700

Microsomal aromatase in testicular tumour tissue: increased activity in choriocarcinoma compared to embryonal carcinoma. Templ H, et al. **Horm Metab Res** 1988 Aug; 20(8):522–4

Serum lactate dehydrogenase isoenzyme 1 as a marker of testicular germ cell tumor. von Eyben FE, et al. **J Urol** 1988 Nov;140(5):986–90

Hydrophobicity and lectin affinity of alkaline phosphatase isozymes in seminoma and normal testis. Koshida K, et al. **Tumour Biol** 1989;10(4):173–80

Electrophoretic heterogeneity of alkaline phosphatase isozymes in seminoma and normal testis. Koshida K, et al. **Tumour Biol** 1989;10(4):181–9

[Histochemical study on glutathione S-transferase in patients with testicular tumor] Adachi Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):396–401 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

The epidemiology of testicular cancer in upstate New York. Haughey BP, et al. **Am J Epidemiol** 1989 Jul;130(1):25–36

Non-seminomatous germ cell testis cancer in Ireland (1980–1985). Management, results and prognostic variables with relevance to national management protocols. Thornhill JA, et al. **Eur Urol** 1988;15(1-2):84–8

An evaluation of predisposing factors for testis cancer in Ireland. Thornhill JA, et al. **Eur Urol** 1988;14(6):429–33

Testis cancer: post-natal hormonal factors, sexual behaviour and fertility. Swerdlow AJ, et al. **Int J Cancer** 1989 Apr 15;43(4):549–53

Prepubertal yolk sac testicular tumors—report of the testicular tumor registry. Kaplan GW, et al. **J Urol** 1988 Nov;140(5 Pt 2):1109–12

Testicular cancer in leather workers—Fulton County, New York. **MMWR** 1989 Feb 24;38(7):105–6, 111–4

[A clinico-statistical study of testicular tumors—a reevaluation of 90 cases at the Nagasaki University Hospital and affiliated hospitals] Nomata K, et al. **Gan No Rinsho** 1988 Aug;34(9):1115–20 (Eng. Abstr.) **(Jpn)**

[A case-control study of testicular cancer] Mori M, et al. **Hinyokika Kiyo** 1988 May;34(5):832–8 (Eng. Abstr.) **(Jpn)**

[Incidence of malignant testicular neoplasms with special reference to the Łódź province] Nagański T, et al. **Nowotwory** 1988 Oct-Dec;38(4):225–31 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Testicular seminoma in an immunosuppressed renal transplant recipient. Dieckmann KP, et al. **Br J Urol** 1989 May; 63(5):549–50

Hypothesis: a Y-chromosomal gene causes gonadoblastoma in dysgenetic gonads. Page DC. **Development** 1987;101 Suppl:151–5

Testicular seminoma associated with the acquired immunodeficiency syndrome and acquired immunodeficiency syndrome related complex: 2 case reports. Palmer MC, et al. **J Urol** 1989 Jul;142(1):128–30

Carcinoma in situ of the undescended testis. Giwercman A, et al. **Semin Urol** 1988 May;6(2):110–9 (52 ref.)

Molecular biological concepts in the etiology of testicular and other urologic malignancies. Rukstalis DB, et al. **Semin Urol** 1988 Aug;6(3):161–70 (24 ref.)

Neoplasia in cryptorchid men. Whitaker RH. **Semin Urol** 1988 May;6(2):107–9

[Cryptorchidism, orchidopexy and testicular cancer: report of a case showing this association] Castiñeiras J, et al. **Arch Esp Urol** 1988 Nov-Dec;41(9):886–9 (23 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

Testicular tumors in non-twin brothers from a consanguineous marriage. Yonemitsu N, et al. **Acta Pathol Jpn** 1988 Aug;38(8):1077–86 (54 ref.)

Increased breakage of chromosome 1 in lymphocytes of patients with testicular cancer after bleomycin treatment in vitro. Vorechovsky I, et al. **Br J Cancer** 1989 Apr; 59(4):499–502

Characterization of rearranged Y chromosomes in human testicular tumor cell lines. Arnemann J, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):141–51

Cytogenetic study of a combined germ cell tumor of the testis. Castedo SM, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):159–65

i(12p)-negative testicular germ cell tumors. A different group? Castedo SM, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):171–8

Chromosome 12q heterozygosity is retained in i(12p)-positive testicular germ cell tumor cells. Geurts van Kessel A, et al. **Cancer Genet Cytogenet** 1989 Jul 1;40(1):129–34

Karyotyping and DNA flow cytometry of an orchidoblastoma. Oosterhuis JW, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):7–11

A malignant mixed gonadal stromal tumor of the testis with heterologous components and i(12p) in one of its metastases. Oosterhuis JW, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):105–14

Cytogenetic analysis of ten human seminomas. Castedo SM, et al. **Cancer Res** 1989 Jan 15;49(2):439–43

Chromosomal changes in mature residual teratomas following polychemotherapy. Castedo SM, et al. **Cancer Res** 1989 Feb 1;49(3):672–6

Regional loss of chromosome 6 in two urological malignancies. Rukstalis DB, et al. **Cancer Res** 1989 Sep 15;49(18):5087–90

HLA typing in familial testicular cancer. Dieckmann KP, et al. **Eur Urol** 1989;16(5):361–5 (44 ref.)

Loss of 3p or 11p alleles is associated with testicular cancer tumors. Lothe RA, et al. **Genomics** 1989 Jul;5(1):134–8

Oncogene expression in small-cell lung cancer cell lines and a testicular germ-cell tumor: activation of the N-myc gene and decreased RB mRNA. Saksela K, et al. **Int J Cancer** 1989 Jul 15;44(1):182–5

Testicular tumors occurring in non-twin brothers: a case report. Natsume O, et al. **Jpn J Clin Oncol** 1989 Mar; 19(1):72–4

Ploidy of primary germ cell tumors of the testis. Pathogenetic and clinical relevance. Oosterhuis JW, et al. **Lab Invest** 1989 Jan;60(1):14–21

Malignant testicular germ cell tumor in father and son: a case report. Crispino S, et al. **Tumori** 1989 Apr 30; 75(2):177–80

Testicular germ cell tumors in HLA-genotype non-twin brothers. Kandel LB, et al. **Urology** 1988 Oct;32(4):315–9

[Testicular mixed germ-cell tumors in 2 non-twin brothers: report of a case and review of the literature] Sousa Escandón A, et al. **Actas Urol Esp** 1988 Nov-Dec; 12(6):575–9 (30 ref.) (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Verification of the histologic diagnosis of malignant mesothelioma in relation to the binding of an antimesothelial cell antibody. Donna A, et al. **Cancer** 1989 Apr 1;63(7):1331–6

Immunophenotyping to detect and characterize acute lymphocytic leukemia in testicular biopsies. Verdi CJ, et al. **Pediatr Pathol** 1989;9(2):117–30

METABOLISM

A transplantable rat Leydig cell tumour. Properties of the prostaglandin E receptor. Erichsen A, et al. **Acta Endocrinol (Copenh)** 1989 Apr;120(4):499–504

Regulated expression of the prodynorphin gene in the R2C Leydig tumor cell line. McMurray CT, et al. **Endocrinology** 1989 Jan;124(1):49–59

Correlation between lectin binding and clinical factors in seminoma patients. Malmi R, et al. **J Cancer Res Clin Oncol** 1989;115(1):96–100

MORTALITY

Significance of scrotal violation in the prognosis of patients with testicular tumours. Ozen H, et al. **Br J Urol** 1988 Sep;62(3):267–70

Prognosis of testicular tumour since the introduction of complex therapy. Frang D, et al. **Int Urol Nephrol** 1989; 21(1):81–9

Mortality in pediatric paratesticular rhabdomyosarcoma: a multivariate analysis. LaQuaglia MP, et al. **J Urol** 1989 Aug;142(2 Pt 2):473–8; discussion 489

Causes of deaths—testicular cancers in Delaware, 1972–1986. Frelick RW, et al. **Prog Clin Biol Res** 1989;293:361–72

[Transitory trends in the mortality of testicular cancer in Spain 1953–1977] Fernández Quintana G, et al. **Actas Urol Esp** 1988 Jul-Aug;12(4):340–6 (28 ref.) (Eng. Abstr.) **(Spa)**

PATHOLOGY

A transplantable rat Leydig cell tumour. 6. Effect of castration and hypophysectomy on tumour growth, morphology and plasma levels of pituitary hormones and testosterone. Erichsen A, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):291–300

Testicular tumor as the first manifestation of B-lymphoid blastic crisis in a case of Ph-positive chronic myelogenous leukemia. Ohyashiki JH, et al. **Am J Hematol** 1988 Nov; 29(3):164–7

Rete testis adenocarcinoma [letter] Schwartz IS. **Am J Surg Pathol** 1988 Dec;12(12):967

The importance of fixatives for detection a carcinoma-in-situ (CIS) in testicular tissue. Schütte B. **Andrologia** 1988 Sep-Oct;20(5):422–5

Macrophages lysing seminoma cells in patients with carcinoma-in-situ (CIS) of the testis. Schütte B, et al. **Andrologia** 1988 Jul-Aug;20(4):295–303

Leydig cell tumor of testis with adipose metaplasia. Santonja C, et al. **Appl Pathol** 1989;7(3):201–4

Juvenile granulosa cell tumor of the testis. Nistal M, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1129–32

Tubular seminoma. Report of a case. Young RH, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):414–6

Prognostic indicators for failure of surveillance management of stage I non-seminomatous germ cell tumours. Costello AJ, et al. **Aust N Z J Surg** 1989 Feb;59(2):119–22

An immunohistological examination of inflammatory cell infiltration in primary testicular seminomas. Strutton GM, et al. **Aust N Z J Surg** 1989 Feb;59(2):169–72

Bone disease in testicular and extragonadal germ cell tumours. Hitchins RN, et al. **Br J Cancer** 1988 Dec; 58(6):793–6

High intrinsic radiosensitivity of a newly established and characterised human embryonal rhabdomyosarcoma cell line. Kelland LR, et al. **Br J Cancer** 1989 Feb;59(2):160–4

Morphology of testicular germ cell tumours in treated and untreated cryptorchidism. Halme A, et al. **Br J Urol** 1989 Jul;64(1):78–83

Prognostic factors for relapse after complete response in patients with metastatic germ cell tumors. Geller NL, et al. **Cancer** 1989 Feb 1;63(3):440–5

Intratubular germ cell neoplasia in testicular teratomas and epidermoid cysts. Correlation with prognosis and possible biologic significance. Manivel JC, et al. **Cancer** 1989 Aug 1;64(3):715–20

Adenocarcinoma of the rete testis with a spindle cell component. A possible metaplastic carcinoma. Visscher DW, et al. **Cancer** 1989 Aug 1;64(3):770–5

Effect of androgen on proliferation of estrogen-responsive transformed mouse Leydig cells in serum-free culture. Nishizawa Y, et al. **Cancer Res** 1989 Mar 15;49(6):1377–82

Leydig cell mitoses in human testes bearing early germ cell tumors. Lauke H, et al. **Cell Tissue Res** 1989 Mar; 255(3):475–9

DNA flow cytometry in sperm cells from unilaterally orchiectomized patients with testicular cancer before further treatment. Fossâ SD, et al. **Cytometry** 1989 May; 10(3):345–50

Urine and semen cytomorphology in patients with testicular tumors. Rojewska J, et al. **Diagn Cytopathol** 1989;5(1):9–13

Carcinoma in situ of the testis in the presence of contralateral germ cell tumor. Kleinschmidt K, et al. **Eur Urol** 1989; 16(1):74–7

beta-HCG-positive seminoma of testis weighing 1 kg in a 59-year-old man. Steffens J, et al. **Eur Urol** 1989; 16(2):151–2

Inflammatory malignant fibrous histiocytoma of the spermatic cord with eosinophilia. Algaba F, et al. **Histopathology** 1989 Mar;14(3):319–21

Morphological and immunohistological study of testicular lymphomas. Wilkins BS, et al. **Histopathology** 1989 Aug; 15(2):147–56

Retroperitoneal seminoma and intratubular germ cell neoplasia. Chen KT, et al. **Hum Pathol** 1989 May; 20(5):493–5

Characteristics of "embryoid body" in human gonadal germ cell tumors. Nakashima N, et al. **Hum Pathol** 1988 Oct; 19(10):1144–54

Massive hemorrhage secondary to metastatic testicular carcinoma. Cunningham LN, et al. **J Am Osteopath Assoc** 1989 Mar;89(3):341–4

Childhood non-Hodgkin's lymphoma involving the testis: clinical features and treatment outcome. Kellie SJ, et al. **J Clin Oncol** 1989 Aug;7(8):1066–70 (35 ref.)

Large-cell calcifying Sertoli cell tumor. Buchino JJ, et al. **J Urol** 1989 Apr;141(4):953–4

Needle biopsy in the diagnosis of testicular leukemia in children. Gill B, et al. **J Urol** 1989 May;141(5):1169–71

Melanotic neuroectodermal tumor of the epididymis in infancy: a case report. Murayama T, et al. **J Urol** 1989 Jan;141(1):105–6

Testicular carcinoma in situ associated with rhabdomyosarcoma of the spermatic cord. Nistal M, et al. **J Urol** 1989 Aug;142(2):358–60

Malignant lymphoma of the testis: histological and immunohistological study of 28 cases. Nonomura N, et al. **J Urol** 1989 Jun;141(6):1368–71

Primary leiomyosarcoma of the testis. Yachia D, et al. **J Urol** 1989 Apr;141(4):955–6

Is seminoma a relative or a precursor of embryonal carcinoma? [editorial] Damjanov I. **Lab Invest** 1989 Jan; 60(1):1–3

Interphase cytogenetics in paraffin embedded sections from human testicular germ cell tumor xenografts and in corresponding cultured cells. Emmerich P, et al. **Lab Invest** 1989 Aug;61(2):235–42

Testicular relapse in adult acute lymphocytic leukemia: a case report and literature review. Vukelja SJ, et al. **Med Pediatr Oncol** 1989;17(2):170–3 (27 ref.)

Carcinoid tumor of the testicle. Rosenberg JW, et al. **N J Med** 1989 Apr;86(4):299–300

Unusual presentation: testicular seminoma. Szypula G, et al. **N J Med** 1989 Apr;86(4):295–7

Lectin histochemistry of human testicular germ cell tumors. Kosmehl H, et al. **Neoplasma** 1989;36(1):29–39

Primary non-Hodgkin's lymphoma of the testis. Krol-van Straaten MJ, et al. **Neth J Med** 1988 Aug;33(1–2):83–5

Extranodal non-Hodgkin's lymphoma [editorial] Otter R, et al. **Neth J Med** 1988 Aug;33(1–2):49–51

Fibrous pseudotumor of tunica vaginalis. Report of a case. Corcione N, et al. **Pathologica** 1988 Nov-Dec; 80(1070):723–7 (16 ref.)

Value of retroperitoneal lymphadenectomy after chemotherapy for non-seminomatous testicular tumor with lymph node metastases. Le Guillou M, et al. **Prog Clin Biol Res** 1989;303:813

Prevention of bilateral testicular cancer: significance of detection and treatment of carcinoma in situ. Skakkebaek NE, et al. **Prog Clin Biol Res** 1989;303:779–89 (29 ref.)

The role of ultrasound in diagnosis and staging of testicular cancer. Benson CB. **Semin Urol** 1988 Aug;6(3):189–202

Developments in histopathology of testicular germ cell tumors. Mostofi FK, et al. **Semin Urol** 1988 Aug; 6(3):171–88

Simultaneous bilateral testicular germ cell tumors with dissimilar histology. Case report and review of the literature. Dieckmann KP, et al. **Urol Int** 1988;43(5):305–9 (46 ref.)

Granulocytic sarcoma of testis preceding acute myelocytic leukemia. Kawashima H, et al. **Urol Int** 1988;43(5):310–2

Value of computed tomography in the staging of testicular tumors. Strohmeyer T, et al. **Urol Int** 1988;43(4):198–200

Benign mesothelioma of the epididymis: case report. Van Poppel H, et al. **Urol Int** 1988;43(6):370–1

Tumor volume, CT scan, lymphography, sonography, intravenous pyelography, and tumor markers in testis tumors. Wilbert DM, et al. **Urol Int** 1989;44(1):15–9

Evidence of interepithelial seminoma spread into the rete testis by immunostaining of paraffin sections with antibodies against cytokeratin and vimentin. Düe W, et al. **Urol Res** 1988;16(5):389–93

Testicular plasmacytoma. Avitable AM, et al. **Urology** 1989 Jul;34(1):51–4 (24 ref.)

Late recurrence of mature teratoma in nonseminomatous testicular tumors after PVB chemotherapy and surgery. Gelderman WA, et al. **Urology** 1989 Jan;33(1):10–4

Rare solitary metastasis to subcutaneous tissue from choriocarcinoma of testis. Winter CC, et al. **Urology** 1989 Apr;33(4):320–1

Mesotheliomas of the tunica vaginalis testis and hernial sacs. Grove A, et al. **Virchows Arch [A]** 1989;415(3):283–92 (56 ref.)

[The significance of carcinoma in situ in testicular biopsies] Mazanec K, et al. **Cas Lek Cesk** 1989 Apr 7;128(15):465–8 (Eng. Abstr.) **(Cze)**

[Testicular carcinoma in situ] Skakkebaek NE, et al. **Ugeskr Laeger** 1988 Sep 12;150(37):2154–7 (Eng. Abstr.) **(Dan)**

[2 cases of carcinoid tumor of the testis] Houlgatte A, et al. **Ann Urol (Paris)** 1988;22(4):296–7 (7 ref.) (Eng. Abstr.) **(Fre)**

[Malignant para-testicular tumors. Apropos of 3 unusual cases] Mhiri MN, et al. **Ann Urol (Paris)** 1989;23(1):23–6 (Eng. Abstr.) **(Fre)**

[Occurrence of germ cells in a cryptorchism testis in the adult] Blumer CF, et al. **Pathologe** 1989 Jan;10(1):3–11 **(Ger)**

[Malignant mesothelioma of the tunica vaginalis testis] Dressler W, et al. **Pathologe** 1988 Sep;9(5):318–21 **(Ger)**

[Pancytopenia resembling leukemia as the initial symptom of alveolar rhabdomyosarcoma of the testis] Mechtersheimer G, et al. **Pathologe** 1989 Jul;10(4):252–6 **(Ger)**

[Scrotal changes in the 3.5 MHz ultrasound image] Wakat JP, et al. **Rontgenblatter** 1988 Jul;41(7):304–9 (Eng. Abstr.) **(Ger)**

[Differentiation of human testicular tumors in the nude mouse] Wittekind C, et al. **Verh Dtsch Ges Pathol** 1988; 72:317–9 (Eng. Abstr.) **(Ger)**

[A new case of simultaneous bilateral seminoma of the testicle] Di Sandro L, et al. **Minerva Urol Nefrol** 1988 Jan-Mar;40(1):49–51 (Eng. Abstr.) **(Ita)**

[Non-Hodgkin's lymphoma of the testis] Fornasiero E, et al. **Minerva Urol Nefrol** 1988 Oct-Dec;40(4):277–9 (Eng. Abstr.) **(Ita)**

[Epidermoid cysts of the testis. Considerations on a clinical case] Gozo M, et al. **Minerva Urol Nefrol** 1988 Apr-Jun; 40(2):125–7 (17 ref.) (Eng. Abstr.) **(Ita)**

[A case of spermatocytic seminoma] Kamata S, et al. **Gan No Rinsho** 1989 Jan;35(1):120–2 (Eng. Abstr.) **(Jpn)**

[A case of primary carcinoid tumor of the testis] Ogawa A, et al. **Gan No Rinsho** 1988 Sep;34(11):1629–34 (Eng. Abstr.) **(Jpn)**

[A case of AFP-producing gastric cancer accompanied with testicular tumor] Watanabe M, et al. **Gan No Rinsho** 1988 Dec;34(15):2131–7 (Eng. Abstr.) **(Jpn)**

[Report of a case of adenomatoid tumor in the epididymis] Honjo M, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1829–31 (Eng. Abstr.) **(Jpn)**

[A case of papillary cystadenoma of epididymis] Miyake O, et al. **Hinyokika Kiyo** 1989 Jan;35(1):137–40 (13 ref.) (Eng. Abstr.) **(Jpn)**

[Primary carcinoid tumor of the testis: a case report] Shinoda I, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1257–63 (21 ref.) (Eng. Abstr.) **(Jpn)**

[A case of pure choriocarcinoma of the testis with cerebellar metastasis] Yamamoto N, et al. **Hinyokika Kiyo** 1988 Aug; 34(8):1475–8 (Eng. Abstr.) **(Jpn)**

[Human germinal testicular tumors heterotransplanted into nude mice] Miki T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):265–73 (Eng. Abstr.) **(Jpn)**

[Malignant lymphoma of the testis] Jarczok K, et al. **Pol Tyg Lek** 1988 May 30;43(22):723–4 (Eng. Abstr.) **(Pol)**

[Prognostic factors in the progress of non-seminomatous tumors of the testes in clinical stage I] Horňák M, et al. **Rozhl Chir** 1988 Oct;67(10):633–6 (Eng. Abstr.) **(Slo)**

[Pure testicular choriocarcinoma] Alvaro Naranjo T, et al. **Actas Urol Esp** 1989 Mar-Apr;13(2):126–8 (Eng. Abstr.) **(Spa)**

[Paratesticular rhabdomyosarcoma. Presentation of a case and discussion of the biology of these neoplasms] López A, et al. **Actas Urol Esp** 1988 Sep-Oct;12(5):469–75 (Eng. Abstr.) **(Spa)**

[Adenomatoid tumor of the epididymis. Apropos of a case] Sánchez Gómez E, et al. **Actas Urol Esp** 1988 Nov-Dec; 12(6):563–5 (Eng. Abstr.) **(Spa)**

[Leiomyosarcoma of the albuginea: presentation of a case and review of the literature] Ochoa Urdangarain O, et al. **Arch Esp Urol** 1989 Mar;42(2):155–6 (5 ref.) (Eng. Abstr.) **(Spa)**

[Mesothelioma of the tunica vaginalis testis] Rey López A, et al. **Arch Esp Urol** 1989 Mar;42(2):157–60 (Eng. Abstr.) **(Spa)**

[Unusual findings during orchidopexy] Sanz Jaka JP, et al. **Arch Esp Urol** 1988 Sep;41(7):553–4 (Eng. Abstr.) **(Spa)**

[Spermatocytoma of the testis] Nacov E. **Rev Clin Esp** 1988 May;182(9):459–63 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Elevated intrascrotal temperature and the incidence of testicular cancer in noncryptorchid men. Karagas MR, et al. **Am J Epidemiol** 1989 Jun;129(6):1104–9

Germ cell function and hormonal status in patients with testicular cancer. Hansen PV, et al. **Cancer** 1989 Aug 15; 64(4):956–61

Absence of relation between nutritional parameters and renal function in non-seminomatous testicular cancer patients. Gietema JA, et al. **J Cancer Res Clin Oncol** 1988; 114(6):618–22

PREVENTION & CONTROL

Re: Bilateral testicular germ cell tumours: an increasing incidence and prevention by chemotherapy [letter] Dieckmann KP. **Br J Urol** 1989 Apr;63(4):445–6

Bilateral testicular germ cell tumours: an increasing incidence and prevention by chemotherapy. Thompson J, et al. **Br J Urol** 1988 Oct;62(4):374–6

Cadmium carcinogenesis in male Wistar [Crl:(WI)BR] rats: dose-response analysis of effects of zinc on tumor induction in the prostate, in the testes, and at the injection site. Waalkes MP, et al. **Cancer Res** 1989 Aug 1;49(15):4282–8

Practice patterns of teaching testicular self-examination to adolescent patients. Sayger SA, et al. **J Adolesc Health Care** 1988 Sep;9(5):441–2

Testicular cancer. Adolescent knowledge and attitudes. Vaz RM, et al. **J Adolesc Health Care** 1988 Nov;9(6):474–9

Evaluation of a testicular cancer curriculum for adolescents. Vaz RM, et al. **J Pediatr** 1989 Jan;114(1):150–3

[Ballography screening—it should save lives] Schei B. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1088–9 **(Nor)**

PSYCHOLOGY

Long-term effects of testicular cancer on sexual functioning in married couples. Gritz ER, et al. **Cancer** 1989 Oct 1; 64(7):1560–7

RADIOGRAPHY

Computed tomography and conventional radiography in intrathoracic metastases from non-seminomatous testicular tumor. Lien HH, et al. **Acta Radiol** 1988 Sep-Oct; 29(5):547–9

Non-seminomatous testicular tumors: effect of lesion side on CT detection of lymph node metastasis. Munechika H, et al. **Comput Med Imaging Graph** 1988 Nov-Dec;12(6):343–8

Are lymphangiograms necessary before placing patients with nonseminomatous testicular tumors on surveillance? Wishnow KI, et al. **J Urol** 1989 May;141(5):1133–5

Radiologic evaluation of nonseminomatous germ cell tumor of the testis. Socinski MA, et al. **Semin Urol** 1988 Aug; 6(3):203–15

[Renal space-occupying lesion of uncertain tumor status in metastatic testicular tumor] Engelhard K, et al. **Rontgenblatter** 1988 Jul;41(7):301–3 (Eng. Abstr.) **(Ger)**

[Lymphography of the spermatic cord in the staging of testicular germinal tumors] Martinengo C, et al. **G Ital Oncol** 1988 Jan-Mar;8(1):41–4 (Eng. Abstr.) **(Ita)**

RADIOTHERAPY

Long-term morbidity after infradiaphragmatic radiotherapy in young men with testicular cancer. Fossâ SD, et al. **Cancer** 1989 Jul 15;64(2):404–8

Response of the seminiferous epithelium to scattered radiation in seminoma patients. Schlappack OK, et al. **Cancer** 1988 Oct 15;62(8):1487–91

Radiotherapy for testicular seminoma stage I: treatment results and long-term post-irradiation morbidity in 365 patients. Fossâ SD, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):383–8

Radiotherapy for stage 2 testicular seminoma: the prognostic influence of tumor bulk. Mason BR, et al. **J Clin Oncol** 1988 Dec;6(12):1856–62

Stage II seminoma: results of postorchiectomy irradiation. Sagerman RH, et al. **Radiology** 1989 Aug;172(2):565–8

Radiation therapy of seminoma: 17-year experience at the Joint Center for Radiation Therapy. Lederman GS, et al. **Radiother Oncol** 1989 Mar;14(3):203–8

Neurogenic fibrosarcoma following radiation therapy for seminoma. O'Brien WM, et al. **Urology** 1989 May; 33(5):420–3

[Pathogenesis, diagnosis and therapy of nerve lesions following combined (surgical-radiotherapy) cancer therapy] Trettin H. **Z Lymphol** 1989 Jul;13(1):42–7 (Eng. Abstr.) **(Ger)**

[The prognostic significance of anaplastic variants in patients with testicular seminoma subjected to exclusive radiotherapy] Gardani G, et al. **Radiol Med (Torino)** 1989 May;77(5):524–9 (Eng. Abstr.) **(Ita)**

[Radiotherapy of a pure seminoma of the testis] Nambu T, et al. **Gan No Rinsho** 1989 Jan;35(2):280–5 (Eng. Abstr.) **(Jpn)**

SECONDARY

Bilateral testicular metastases of pulmonary small cell carcinoma: a rare incidental finding following orchiectomy for prostatic carcinoma. Stein A, et al. **Br J Urol** 1989 May;63(5):552

Intrascrotal metastasis of renal cell carcinoma. Case reports and review of the literature. Dieckmann KP, et al. **Eur Urol** 1988;15(3–4):297–301 (52 ref.)

Secondary testicular tumors. Nistal M, et al. **Eur Urol** 1989; 16(3):185–8

'Krukenberg' tumour of the testis. Zuk RJ, et al. **Histopathology** 1989 Feb;14(2):214–6

Secondary tumours in testis and epididymis. Adiga KM. **J Indian Med Assoc** 1988 Apr;86(4):105–7

Carcinoma of pancreas metastasizing to the tunica vaginalis testis. Aquino NM, et al. **JCU** 1989 May;17(4):287–90
Paraepididymal relapse of follicular small cleaved cell lymphoma. Wishnow KI, et al. **Urol Int** 1989;44(1):50–2
Metastatic tumors involving testis. Almagro UA. **Urology** 1988 Oct;32(4):357–60
Metastases to both testicles from prostatic carcinoma six years after radiation therapy. Bulbul MA, et al. **Urology** 1989 Apr;33(4):322–3
Paratesticular metastases from congenital retroperitoneal tumor. Nistal M, et al. **Urology** 1989 Feb;33(2):131–4
Krukenberg tumor of testis [letter] Shetty MR. **Urology** 1989 Apr;33(4):351
[Metastasis of the epididymis disclosing cancer of the prostate. Apropos of a case] Markovic B.
Ann Urol (Paris) 1988;22(6):440–1 (Eng. Abstr.) **(Fre)**
[Testicular metastasis of prostatic carcinoma: presentation of a case and a review of the literature] Mannini D, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):165–8 (21 ref.) (Eng. Abstr.) **(Ita)**
[Diagnostic and prognostic value of testicular biopsy in boys with acute lymphoblastic leukemia after chemotherapy] Koehler M, et al. **Pol Tyg Lek** 1988 Dec 12;43(50):1619–22 (Eng. Abstr.) **(Pol)**
[Testicular recurrence of acute lymphoblastic leukemia in children treated by BFM 81 83 protocol. Report of the Polish Group for the Treatment of Leukemia and Other Lymphatic Diseases in Children] Koehler M, et al.
Pol Tyg Lek 1988 Dec 12;43(50):1615–8 **(Pol)**
[Testicular metastasis of prostatic carcinoma: apropos of 2 cases] García Riestra V, et al. **Actas Urol Esp** 1988 Jul–Aug; 12(4):368–70 (Eng. Abstr.) **(Spa)**
[Metastasis of carcinoma of the colon to cryptorchid testis. An infrequent finding] Alvarez Pérez JA, et al.
Rev Esp Enferm Apar Dig 1989 Feb;75(2):213–4 **(Spa)**

SECRETION

Prolactin secretion in testicular cancer patients. Lissoni P, et al. **Int J Biol Markers** 1989 Jan–Mar;4(1):27–30
Hormone-secreting metastatic interstitial cell tumor of the testis. Schwarzman MI, et al. **J Urol** 1989 Mar;141(3):620–2

SURGERY

Testicular cancer, clinical stage I [letter] Donohue JP.
Ann Intern Med 1989 Mar 1;110(5):409–10
Testicular germ-cell neoplasms: curative approaches. Rowland RG. **Hematol Oncol Clin North Am** 1988 Sep; 2(3):467–84 (13 ref.)
Disease relapse in patients with stage I nonseminomatous germ cell tumor of the testis on active surveillance. Thompson PI, et al. **J Clin Oncol** 1988 Oct;6(10):1597–603
Intraoperative ultrasound in the conservative resection of testicular neoplasms. Buckspan MB, et al. **J Urol** 1989 Feb; 141(2):326–7
A study of post-orchiectomy surveillance in stage I testicular seminoma. Thomas GM, et al. **J Urol** 1989 Aug;142(2):313–6
Nerve sparing retroperitoneal lymphadenectomy in clinical stage I, low stage II and after chemotherapy in stage III nonseminomatous testicular cancer. Javadpour N.
Prog Clin Biol Res 1988;277:53–62
Management of yolk sac carcinoma of the testis clinical stage I: lymphadenectomy vs. no lymphadenectomy. Pow-Sang JE, et al. **Prog Clin Biol Res** 1989;303:791–8
Significance of salvage lymphadenectomy in the therapeutical concept of advanced nonseminomatous germ cell tumors. Staehler G, et al. **Urol Int** 1989;44(2):84–6
Use of limited retroperitoneal lymphadenectomy in nonseminomatous germ cell tumors. Sherlag AP, et al.
Urology 1989 May;33(5):355–7
[Results of treatment of advanced stages of testicular tumors] Bašc J.
Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1988;31(3):363–9 (Eng. Abstr.) **(Cze)**
[Iterative surgery in germ cell tumor] Merlini M, et al.
Helv Chir Acta 1989 Jan;55(5):549–52 (Eng. Abstr.) **(Fre)**
[Temporary transsection of the inferior vena cava for complete removal of a retroperitoneal metastatic testicular tumor] Kumada K, et al. **Chirurg** 1988 Oct;59(10):676–8 **(Ger)**
[Retroperitoneal lymphadenectomy in testicular tumors] Mast GJ, et al. **Chirurg** 1989 Mar;60(3):148–52 (15 ref.) **(Ger)**
[Retroperitoneal lymphadenectomy in non-seminomatous stage I, IIa and IIb testicular tumors] Jaeger P, et al.
Urologe [A] 1988 Sep;27(5):251–5 (Eng. Abstr.) **(Ger)**
[Inguinal metastasis of stage I testicular tumors] van Ahlen H, et al. **Urologe [A]** 1988 Sep;27(5):275–8 (Eng. Abstr.) **(Ger)**
[Treatment of patients with stage I non-seminomatous testicular tumors with general orchiectomy] Horňák M, et al. **Z Urol Nephrol** 1988 Sep;81(9):541–5 (Eng. Abstr.) **(Ger)**
[A study of prevention of ejaculatory disturbance after retroperitoneal lymph node dissection in testicular tumor] Kihara K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec;79(12):1982–90 (Eng. Abstr.) **(Jpn)**
[Multiple primary cancer of the epididymis and cecum] Alekseenko AN. **Vestn Khir** 1988 Oct;141(10):53–5 **(Rus)**
[Intratesticular epidermoid cysts] Martínez-Sapiña Llanas I, et al. **Actas Urol Esp** 1988 Jul–Aug;12(4):374–6 (Eng. Abstr.) **(Spa)**

THERAPY

Treatment with the gonadotropin-releasinghormone agonist buserelin to protect spermatogenesis against cytotoxic treatment in young men. Krause W, et al. **Andrologia** 1989 May–Jun;21(3):265–70
Non-seminomatous testicular cancer, 1989: primum non nocere. Raghavan D. **Aust N Z J Surg** 1989 Feb;59(2):103–4
Malignant interstitial cell tumour of testis in a child. Kapoor HL, et al. **Indian J Cancer** 1988 Dec;25(4):241–5
Primary testicular tumors in children. Lin JN, et al.
Int Surg 1988 Jul–Sep;73(3):190–2 (14 ref.)
Testicular seminoma: the Hadassah University Hospital experience. Warner-Efrati E, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):584–7
Testicular function in patients with testicular cancer treated with orchiectomy alone or orchiectomy plus cisplatin-based chemotherapy. Hansen PV, et al.
J Natl Cancer Inst 1989 Aug 16;81(16):1246–50
Testicular cancer: the quest continues. Loehrer PJ Sr, et al.
J Natl Cancer Inst 1988 Nov 2;80(17):1373–82 (81 ref.)
Two decades of experience with testicular tumors in children at St Jude Children's Research Hospital. Fernandes ET, et al. **J Pediatr Surg** 1989 Jul;24(7):677–81; discussion 682
Stage II nonseminomatous germ cell tumors of the testis: an analysis of treatment options in patients with low volume retroperitoneal disease. Socinski MA, et al. **J Urol** 1988 Dec;140(6):1437–41
Can we cure testicular cancer and retain fertility? Fossâ SD, et al. **Prog Clin Biol Res** 1989;303:769–77
Salvage therapy in refractory and relapsing testicular cancer. Rodenburg CJ, et al. **Prog Clin Biol Res** 1989;303:763–8 (12 ref.)
Testicular cancer. Garnick MB. **Semin Surg Oncol** 1989; 5(4):221–6 (18 ref.)
Testicular cancer: new concepts and innovations in diagnosis and treatment. **Semin Urol** 1988 Aug;6(3):159–245
Nerve-sparing techniques in retroperitoneal lymphadenectomy in patients with low-stage testicular cancer. Jewett MA, et al. **Semin Urol** 1988 Aug;6(3):233–7
Modified retroperitoneal lymphadenectomy for patients with clinical stage I testicular cancer. Richie JP. **Semin Urol** 1988 Aug;6(3):216–22
Paratesticular rhabdomyosarcoma in childhood: experience of the Italian Cooperative Study. Cecchetto G, et al.
Tumori 1988 Dec 31;74(6):645–7
[Germinal neoplasm of the testis] Chen SJ, et al.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1988 Dec; 4(12):682–7 (Eng. Abstr.) **(Chi)**
[Testicular germinal tumors. Current therapeutic principles] Kerbrat P, et al. **J Chir (Paris)** 1989 May;126(5):327–33 (Eng. Abstr.) **(Fre)**
[Treatment of stage I–IIB nonseminomatous testicular tumors] Clemm C, et al. **Dtsch Med Wochenschr** 1989 Aug 25;114(34):1276–82 (Eng. Abstr.) **(Ger)**
[Combined therapy of malignant testicular tumors] Pintér J, et al. **Orv Hetil** 1989 Feb 12;130(6):271–5 (31 ref.) (Eng. Abstr.) **(Hun)**
[Treatment of subdiaphragmatic lymph node metastases of primary testicular seminoma (stage II)] Gardani G, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):104–14 (Eng. Abstr.) **(Ita)**
[Multidisciplinary treatment of advanced testicular tumors] Kotake T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1016–24 (Eng. Abstr.) **(Jpn)**
[Treatment of testicular tumors at Department of Urology, Hamamatsu University School of Medicine during the past 10 years] Aso Y, et al.
Nippon Hinyokika Gakkai Zasshi 1988 Jul;79(7):1248–53 (Eng. Abstr.) **(Jpn)**
[Chemotherapy before orchiectomy for an advanced testicular tumor—a case of anaplastic seminoma with skin invasion and inguinal lymph nodes metastases after a scrotal injury] Saito M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul;79(7):1254–7 (Eng. Abstr.) **(Jpn)**
[Clinical study of the treatment with chemotherapy and surgery in patients with advanced testicular cancer] Tsukamoto T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep;79(9):1516–23 (Eng. Abstr.) **(Jpn)**
[Relief from hemodialysis after combined chemotherapy and left-nephrectomy. A case of stage IIIB, non-seminomatous testicular tumor] Uchida T, et al.
Nippon Hinyokika Gakkai Zasshi 1988 Jun;79(6):1114–8 (Eng. Abstr.) **(Jpn)**
[Treatment of patients with retroperitoneal metastases of nonseminoma tumors of the testis] Matveev BP, et al.
Vopr Onkol 1988;34(12):1493–7 (Eng. Abstr.) **(Rus)**
[Stage II non-seminoma cancer of the testis: combined treatment with surgery and chemotherapy] Orlandi L, et al. **Actas Urol Esp** 1989 Jan–Feb;13(1):53–5 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Case of a 46XY infant with gonadoblastoma [letter] Lee ML, et al. **J Pediatr Surg** 1988 Dec;23(12):1227
A comparative fine structure study on myofibroblasts from a cultured human and an in-situ rat tumor source. Reger JF, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):501–8
Granulosa cell tumor of the adult testis: ultrastructural and ultrasonographic characteristics. Gaylis FD, et al.
J Urol 1989 Jan;141(1):126–7
Ultrastructure of human germ cells in sex-indifferent gonad, in early fetal testis or ovary and in testicular cancers. Francavilla S, et al. **Prog Clin Biol Res** 1989;296:31–40

VETERINARY

Canine testicular tumors in descended and cryptorchid testes. Nieto JM, et al. **DTW** 1989 Apr;96(4):186–9
Bilateral testicular seminoma in a snow leopard. Karesh WB, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1201
A testicular seminoma in a rabbit. Brown PJ, et al.
J Comp Pathol 1989 Apr;100(3):353–5
Seminoma and parathyroid adenoma in a snow leopard (Panthera unica). Doster AR, et al. **J Comp Pathol** 1989 May;100(4):475–80
Leiomyoma of the tunica albuginea in a horse. Johnson RC, et al. **J Comp Pathol** 1989 May;100(4):465–8
Mesothelioma in the tunica vaginalis of a bull. Sutton RH.
J Comp Pathol 1988 Jul;99(1):78–82
Radiotherapy of metastatic seminoma in the dog. Case reports. McDonald RK, et al. **J Vet Intern Med** 1988 Apr–Jun;2(2):103–7
Interstitial cell adenoma in a ferret. Meschter CL.
Lab Anim Sci 1989 Jul;39(4):353–4
Testicular teratoma and seminoma in a woodchuck. Anderson WI, et al. **Vet Pathol** 1988 Sep;25(5):400
Testicular leiomyoma in a ram. Foster RA, et al.
Vet Pathol 1989 Mar;26(2):184–5
Epididymal interstitial (Leydig) cell tumors in B6C3F1 mice. Mitsumori K, et al. **Vet Pathol** 1989 Jan;26(1):65–9
[What is your diagnosis? Sertoli cell tumor in a dog] Barras J, et al. **Schweiz Arch Tierheilkd** 1989;131(1):33–4 **(Fre)**

TESTICULAR TORSION see **SPERMATIC CORD TORSION**

TESTING, BIOCOMPATIBLE MATERIALS see **MATERIALS TESTING**

TESTIS

see related
ORCHIECTOMY

Rete testis adenocarcinoma [letter] Schwartz IS.
Am J Surg Pathol 1988 Dec;12(12):967
Pineal and pituitary involvement in the photoperiodic regulation of body weight, coat color and testicular size of the Djungarian hamster, Phodopus sungorus. Niklowitz P, et al. **Biol Reprod** 1988 Sep;39(2):489–98
Nodular proliferation of calcifying connective tissue in the rete testis: a study of three cases. Nistal M, et al.
Hum Pathol 1989 Jan;20(1):58–61
Practice patterns of teaching testicular self-examination to adolescent patients. Sayger SA, et al.
J Adolesc Health Care 1988 Sep;9(5):441–2
Testicular self-examination: reaching the college male. Pinch WJ, et al. **J Am Coll Health** 1988 Nov;37(3):131–2
Modeling and guided practice as components within a comprehensive testicular self-examination cancer education program. Walker R, et al. **J Am Coll Health** 1989 Mar;37(5):211–5
Suprainguinal ectopic scrota of TS inbred rats. Ikadai H, et al. **J Reprod Fertil** 1988 Nov;84(2):701–7
Tissue expansion of underdeveloped scrotum to accommodate large testicular prosthesis. A technique. Lattimer JK, et al. **Urology** 1989 Jan;33(1):6–9
[Gonadal differentiation] Pelliniemi LJ. **Duodecim** 1988; 104(17):1310–9 (50 ref.) **(Fin)**
[Perineal ectopic testis] Dieckmann KP, et al.
Urologe [A] 1988 Nov;27(6):358–62 (Eng. Abstr.) **(Ger)**
[Clinical studies of subcapsular orchiectomy with an intracapsular testicular prosthesis—improving the quality of life in patients with prostatic cancer] Sakamoto M, et al. **Gan No Rinsho** 1989 Sep;35(10):1143–8 (Eng. Abstr.) **(Jpn)**
[A new experimental model for direct in vivo observation of microcirculation in microsurgery] Siemionow M.
Chir Narzadow Ruchu Ortop Pol 1989;54(1):1–7 (Eng. Abstr.) **(Pol)**
[Morphogenesis of neural derivates after transplantation of the rat embryo telencephalon to the testis of sexually mature animals] Dyban PA. **Biull Eksp Biol Med** 1989 Jan; 107(1):87–9 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Aspartylglucosaminuria in a Puerto Rican family: additional features of a panethnic disorder. Chitayat D, et al.
Am J Med Genet 1988 Nov;31(3):527–32
A comparative study of the effects of non-union of testis and epididymis and cryptorchidism on testicular development and spermatogenesis in the rat. Johansen TE, et al. **Andrologia** 1988 May–Jun;20(3):189–201
Polyorchidism diagnosed by ultrasound. Cadigan P.
Br J Radiol 1989 Jan;62(733):82–3
Triorchidism with torsion. Crawford DS, et al.
Br J Urol 1989 May;63(5):553–4
Laparoscopy and the management of the impalpable testis. Guiney EJ, et al. **Br J Urol** 1989 Mar;63(3):313–6
Diagnosis and management of abnormalities of the testes.

Helfer EL, et al. **Compr Ther** 1988 Sep;14(9):42–54 (8 ref.)
Monorchidism in the horse. Parks AH, et al.
Equine Vet J 1989 May;21(3):215–7
Testicular feminization in a cat. Meyers-Wallen VN, et al.
J Am Vet Med Assoc 1989 Sep 1;195(5):631–4
Monorchidism in three colts. Santschi EM, et al.
J Am Vet Med Assoc 1989 Jan 15;194(2):265–6
Transverse testicular ectopia. Hammoudi S.
J Pediatr Surg 1989 Feb;24(2):223–4
Unilateral biorchism associated with contralateral rudimentary uterus. Madarikan BA, et al.
J Pediatr Surg 1989 Jun;24(6):607
Crossed testicular ectopia with bilateral duplication of the vasa deferentia: an unusual finding in cryptorchism. Tolete-Velcek F, et al. **J Pediatr Surg** 1988 Jul;23(7):641–3
Urological manifestations of the popliteal pterygium syndrome. Cunningham LN, et al. **J Urol** 1989 Apr; 141(4):910–2
Infant testicular prostheses. Elder JS, et al. **J Urol** 1989 Jun; 141(6):1413–5
The role of laparoscopy in management of nonpalpable testes. Bloom DA, et al. **J Urol (Paris)** 1988;94(9–10):465–70 (21 ref.)
Non-union of testis and epididymis. Description of an experimental model in the rat. Effect on testicular descent. Bjerklund Johansen TE. **Scand J Urol Nephrol** 1988; 22(3):165–70
Polyorchidism with normal spermatogenesis, diagnosed preoperatively by ultrasound. A case report. Tammela TL, et al. **Scand J Urol Nephrol** 1989;23(1):71–3
Polyorchidism associated with cryptorchidism. Gökalp A, et al. **Turk J Pediatr** 1988 Jul-Sep;30(3):185–6
Polyorchidism: preoperative diagnosis by ultrasonography. Yoshida T, et al. **Urol Int** 1989;44(1):47–9
Splenic gonadal fusion. Walther MM, et al. **Urology** 1988 Dec;32(6):521–4 (39 ref.)
[Abdominal testicular retention with seminoma and epididymo-testicular separation] Friedrich M, et al. **ROFO** 1989 Jun;150(6):740–1 **(Ger)**
[A germ cell tumor of an ectopic testis in polyorchidism] Gonchar MA, et al. **Klin Khir** 1989;(5):64–5 **(Rus)**
[Ectopy of the accessory third testicle in the posterior urethra] Dutov VV, et al. **Urol Nefrol (Mosk)** 1989 Mar-Apr;(2):56 **(Rus)**
[Supernumerary testis. Communication of a case and review of the literature] Mallafre Sala JM, et al.
Arch Esp Urol 1989 Mar;42(2):166–8 (21 ref.) (Eng. Abstr.) **(Spa)**
[Supernumerary testicles] Barrios-Torres E, et al.
Bol Med Hosp Infant Mex 1989 Jan;46(1):56–9 (Eng. Abstr.) **(Spa)**

ANALYSIS

A rat testis-specific hsp70 gene-related transcript is coded by a novel gene from the hsp70 multigene family. Krawczyk Z, et al. **Acta Biochim Pol** 1988;35(4):377–85
Variations in soluble and particulate ABP of rat testis during sexual development. Campo S, et al.
Acta Physiol Pharmacol Latinoam 1987;37(3):331–41
Regulation of vasopressin and oxytocin synthesis in anterior pituitary and peripheral tissues. Dave JR, et al.
Adv Alcohol Subst Abuse 1988;7(3–4):231–4
Immunogold distribution of actin during spermiogenesis in the rat, hamster, monkey, and human. Fouquet JP, et al. **Anat Rec** 1989 Jan;223(1):35–42
Immunohistochemical detection of prolactin and its receptors in human testis. Bouhdiba M, et al. **Andrologia** 1989 May-Jun;21(3):223–8
Androgen-binding protein and other Sertoli cell proteins in human testis. Forti G, et al. **Ann N Y Acad Sci** 1988; 538:167–72 (15 ref.)
The extracellular sex steroid-binding proteins of testis and liver. Structure-function studies. Musto NA.
Ann N Y Acad Sci 1988;538:37–44
Secondary amyloidosis of the testis: an electron microscopic and histochemical study. Nistal M, et al. **Appl Pathol** 1989; 7(1):2–7
Isolation and partial characterization of the low-molecular-mass zinc/cadmium-binding protein from the testes of the patas monkey (Erythrocebus patas). Distinction from metallothionein. Waalkes MP, et al.
Biochem J 1988 Nov 15;256(1):131–7
The isolation and physiology of inhibin and related proteins. de Kretser DM, et al. **Biol Reprod** 1989 Jan;40(1):33–47 (149 ref.)
Insulin-like growth factor I in the developing and mature rat testis: immunohistochemical aspects. Hansson HA, et al. **Biol Reprod** 1989 Jun;40(6):1321–8
Disruption of spermatogenesis is associated with decreased concentration of immunoreactive arginine vasopressin in testicular fluid. Pomerantz DK, et al. **Biol Reprod** 1988 Oct;39(3):610–6
Use of electrophoretic techniques and specific antibodies to analyse tubulin isotypes in rabbit testis and spermatozoa. Casale A. **Cell Biol Int Rep** 1989 Jun;13(6):537–46
Sex-specific proteins in normal chick embryo gonads and testis feminized by oestrogen treatment: a two-dimensional gel electrophoresis investigation. Samsel J, et al.
Cell Differ Dev 1988 Dec;25(3):223–8
Isolation and characterization of ATP-dependent proteolytically active ubiquitin in cock testis. Sun NE, et al. **Comp Biochem Physiol [B]** 1988;91(4):777–81
Sigma-receptors in endocrine organs: identification, characterization, and autoradiographic localization in rat pituitary, adrenal, testis, and ovary. Wolfe SA Jr, et al.
Endocrinology 1989 Mar;124(3):1160–72
Human testis cDNA for the regulatory subunit RII alpha of cAMP-dependent protein kinase encodes an alternate amino-terminal region. Oyen O, et al. **FEBS Lett** 1989 Mar 27;246(1–2):57–64
Chicken spermatogenesis is accompanied by a genomic-wide loss of DNA methylation. Rocamora N, et al.
FEBS Lett 1989 Apr 24;247(2):415–8
Evaluation of vasovasostomy candidates by deoxyribonucleic acid flow cytometry of testicular aspirates. Hellstrom WJ, et al. **Fertil Steril** 1989 Mar;51(3):546–8
Testosterone immunoreactivity in rainbow trout (Salmo gairdneri Richardson) testis. Schulz R, et al.
Gen Comp Endocrinol 1988 Oct;72(1):80–9
Localization in situ of c-myc mRNA and c-myc protein in adult mouse testis. Koji T, et al. **Histochem J** 1988 Oct; 20(10):551–7
Pregnancy-specific beta 1 glycoprotein in rat: tissue distribution of the mRNA and identification of testicular cDNA clones. Chan WY, et al. **Hum Reprod** 1988 Jul; 3(5):687–92
Localization of immunoreactive testibumin in the testis and epididymis of adult rats. Shaha C, et al. **Int J Androl** 1988 Dec;11(6):547–59
Identification of androgen binding-protein (ABP) from testis and epididymis of the seasonal rodent, Octodon degus (Molina, 1872). Balbontin JB, et al. **J Androl** 1989 Jul-Aug; 10(4):289–95
Effect of immobilization stress on testosterone and inhibin in male rats. Demura R, et al. **J Androl** 1989 May-Jun; 10(3):210–3
Polyamine profiles in rat testis, germ cells and Sertoli cells during testicular maturation. Shubhada S, et al.
J Androl 1989 Mar-Apr;10(2):145–51
The correlation between the gossypol contents in blood plasma, rete testis fluid, and cauda epididymal fluid following chronic treatment with gossypol in rats. Wang JM, et al. **J Androl** 1988 Nov-Dec;9(6):397–402
Molecular cloning sequence and distribution of rat calspermin, a high affinity calmodulin-binding protein. Ono T, et al. **J Biol Chem** 1989 Feb 5;264(4):2081–7
Identification of rat testis galactosyl receptor using antibodies to liver asialoglycoprotein receptor: purification and localization on surfaces of spermatogenic cells and sperm. Abdullah M, et al. **J Cell Biol** 1989 Feb;108(2):367–75
Sulfogalactolipid binding protein SLIP 1: a conserved function for a conserved protein. Law H, et al.
J Cell Physiol 1988 Dec;137(3):462–8
Isolation, purification and characterization of low molecular weight 110mAg-binding proteins from the rat and goat testis. Mehta U, et al. **J Environ Pathol Toxicol Oncol** 1989; 9(1):65–77
A specific androgen-binding protein (ABP) in Necturus testis and its zonal distribution. Singh S, et al. **J Exp Zool** 1989 Apr;250(1):73–81
Relationship of intratesticular testosterone content of stallions to age, spermatogenesis, Sertoli cell distribution and germ cell–Sertoli cell ratios. Berndtson WE, et al.
J Reprod Fertil 1989 Mar;85(2):511–8
Characterization and regulation of testicular inhibin beta-subunit mRNA. Feng ZM, et al. **Mol Endocrinol** 1989 Jun;3(6):939–48
Expression and regulation of testicular inhibin alpha-subunit gene in vivo and in vitro. Keinan D, et al.
Mol Endocrinol 1989 Jan;3(1):29–35
Specific mRNAs in Sertoli and germinal cells of testes from stage synchronized rats. Morales CR, et al.
Mol Endocrinol 1989 Apr;3(4):725–33
The testis-specific octamer-binding protein of the sea urchin has a molecular weight of 85 kDa. Barberis A, et al.
Nucleic Acids Res 1989 Sep 12;17(17):7114
P150c-abl is detected in mouse male germ cells by an in vitro kinase assay and is associated with stage-specific phosphoproteins in haploid cells. Ponzetto C, et al.
Oncogene 1989 Jun;4(6):685–90
Solubilization and purification of the lutropin (LH) receptor from porcine testes. Jallal B, et al. **Reprod Nutr Dev** 1988; 28(4B):1177–92
[Immunocytological distribution of HP1 group protamines in human testes and ejaculated spermatozoa] Roux C, et al. **Bull Assoc Anat (Nancy)** 1987 Dec;71(215):65–9 (Eng. Abstr.) **(Fre)**
[A method of measurement of human testicular follicle-stimulating hormone receptors] Namiki M, et al.
Hinyokika Kiyo 1988 Jun;34(6):945–9 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

The rete testis of the goat, a morphological study. Goyal HO, et al. **Acta Anat (Basel)** 1987;130(2):151–7
Structure of rete testis, vas efferens, epididymis and vas deferens of langur monkey (Presbytis entellus entellus Dufresne). Lohiya NK, et al. **Acta Eur Fertil** 1988 May-Jun;19(3):167–73
Immunological relationships between specific sperm proteins and secretory polypeptides from seminal vesicles. Seitz J, et al. **Acta Histochem Suppl (Jena)** 1989;37:231–3
Balano-preputial separation as an external sign of puberty in the rat: correlation with histologic testicular data. Gaytan F, et al. **Andrologia** 1988 Sep-Oct;20(5):450–3
Clinical and physical evaluation of the infertile male: testicular measurement or orchidometry. Steeno OP.
Andrologia 1989 Mar-Apr;21(2):103–12 (38 ref.)
Normal beard growth and testicular volume in depressed men [letter] Reynolds CF 3d, et al. **Arch Gen Psychiatry** 1989 Mar;46(3):288
The relationship of scrotal circumference to testicular weight in rams. Foster RA, et al. **Aust Vet J** 1989 Jan;66(1):20–2
Morphometric studies on hamster testes in gonadally active and inactive states: light microscope findings. Sinha Hikim AP, et al. **Biol Reprod** 1988 Dec;39(5):1225–37
Puberty and early sexual development in Libyan fat-tailed ram lambs. Madani MO, et al. **Br Vet J** 1989 May-Jun; 145(3):276–88
The mediastinum of the bovine testis. Hees H, et al.
Cell Tissue Res 1989 Jan;255(1):29–39
The volume of the testes in North-West Indian children. Jit I, et al. **Hum Biol** 1988 Dec;60(6):945–51
Histomorphological alterations in gonads of normal and pinealectomized domestic pigeon, Columba livia, during breeding and post-breeding phases. Ramachandran AV, et al. **Indian J Exp Biol** 1988 Nov;26(11):835–8
A prognostic score for subfertile men based on anamnestic data and semen variables. Abramsson L, et al.
Int J Androl 1989 Feb;12(1):1–9
Testicular volume variations from 0 to 28 years of age. Béres J, et al. **Int Urol Nephrol** 1989;21(2):159–67
Control of luteinizing hormone in postpubertal boars with large testes. Wolfe PL, et al. **J Anim Sci** 1989 May; 67(5):1334–40
Seasonal changes of testis volume and sperm quality in adult fallow deer (Dama dama) and their relationship to the antler cycle. Gosch B, et al. **J Reprod Fertil** 1989 Jan; 85(1):7–17
Seasonal variation in serum testosterone, testicular measurements and semen characteristics in the collared peccary (Tayassu tajacu). Hellgren EC, et al.
J Reprod Fertil 1989 Mar;85(2):677–86
Effect of aromatase inhibitors on the functional morphology of the pituitary gland of dogs and monkeys. Habenicht UF, et al. **Pathol Res Pract** 1988 Sep;183(5):651–3
Chromosome mapping and expression of a putative testis-determining gene in mouse. Nagamine CM, et al.
Science 1989 Jan 6;243(4887):80–3
[The lymphatic system and lymph drainage of the testis of the Peking drake (Anas platyrhynchos, L.)] Kremer A, et al. **Anat Histol Embryol** 1988 Sep;17(3):246–57 (Eng. Abstr.) **(Ger)**
[Testicular measurement by test size orchidometer] Tajima M. **Hinyokika Kiyo** 1988 Nov;34(11):2013–20 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Chronic administration of a gonadotropin-releasing hormone (GnRH) agonist affects testicular microvasculature. Mayerhofer A, et al. **Acta Endocrinol (Copenh)** 1989 Jan; 120(1):75–80
Color Doppler ultrasound of the normal testis. Middleton WD, et al. **AJR** 1989 Feb;152(2):293–7
Testicular ischemia: color Doppler sonographic findings in five patients. Middleton WD, et al.
AJR Am J Roentgenol 1989 Jun;152(6):1237–9
Anatomical observations of the testicular veins. Piffer CR, et al. **Anat Anz** 1988;166(1–5):249–55
Structural features of the human testicular veins walls. Piffer CR, et al. **Anat Anz** 1988;166(1–5):257–66
Changes in the testicular microvasculature during photoperiod-related seasonal transition from reproductive quiescence to reproductive activity in the adult golden hamster. Mayerhofer A, et al. **Anat Rec** 1989 Aug; 224(4):495–507
The microcirculation of the testis. Desjardins C.
Ann N Y Acad Sci 1989;564:243–9
The blood vascular architecture of the rat testis: a scanning electron microscopic study of corrosion casts followed by light microscopy of tissue sections. Murakami T, et al.
Arch Histol Cytol 1989 May;52(2):151–72
Contralateral testicular blood flow during unilateral testicular torsion. Tanyel FC, et al. **Br J Urol** 1989 May;63(5):522–4
Testicular infarction following ethanol embolization of a renal neoplasm. Siniluoto TM, et al.
Cardiovasc Intervent Radiol 1988 Jun;11(3):162–4
Testicular ischemia and infarction following herniorrhaphy or varicocelectomy: evaluation by radionuclide imaging. Nagle C, et al. **Clin Nucl Med** 1989 Apr;14(4):243–8
Concentrations of oestradiol and testosterone in peripheral and spermatic venous blood of dogs with unilateral cryptorchidism. Mattheeuws D, et al.
Domest Anim Endocrinol 1989 Jul;6(3):203–9
Treatment with human chorionic gonadotropin induces inflammation-like changes in the testicular microcirculation in adult unilaterally cryptorchid rats. Bergh A.
Horm Res 1988;30(4–5):207–9
Investigations of arterio-venous anastomoses in the spermatic cords and blood supply, oxygen consumption and testosterone production of scrotal and abdominal testes in the pig. Noordhuizen-Stassen EN, et al. **Int J Androl** 1988 Dec;11(6):493–505
CT appearance of right gonadal vein. Rebner M, et al.
J Comput Assist Tomogr 1989 May-Jun;13(3):460–2
Tolerance of rat testis to graded periods of total circulatory

isolation. Lui RC, et al. **J Surg Oncol** 1988 Dec;39(4):264–8
Segmental infarct of the testis due to hypersensitivity angiitis. Baer HM, et al. **J Urol** 1989 Jul;142(1):125–7
Re: The veno-occlusive mechanism of the canine corpus cavernosum: angiographic and pharmacologic studies [letter] Goldstein AM, et al. **J Urol** 1988 Dec;140(6):1555–6
Recovery of testicular blood flow following ligation of testicular vessels. Pascual JA, et al. **J Urol** 1989 Aug;142(2 Pt 2):549–52; discussion 572
Microvascular autotransplantation of intra-abdominal testes. Frey P, et al. **Prog Pediatr Surg** 1989;23:115–25
Vascularization of male gonads in Blennius pavo (Teleostei, Blenniidae) as revealed by scanning electron microscopy of vascular corrosion casts. Lahnsteiner F, et al. **Scanning Microsc** 1988 Dec;2(4):2077–86
The venous hilum of the testis and epididymis: anatomic aspect. Gaudin J, et al. **Surg Radiol Anat** 1988;10(3):233–42
[Biopsy diagnosis of infarct of the testis and epididymis] Takov R, et al. **Khirurgiia (Sofiia)** 1988;41(4):12–7 (Eng. Abstr.) **(Bul)**
[Microvascular re-anastomosis of the testis in management of recurrent inguinal hernia] Jung D, et al. **Chirurg** 1989 Jan;60(1):60–2 **(Ger)**
[Value of trans-scrotal phlebography. Considerations and results in 10 years of experience] Ialongo A, et al. **Ann Ital Chir** 1987;59(1–6):127–34 **(Ita)**
[Advantages of a light-equipped angiographic guide in percutaneous obliteration of the spermatic veins] Benea G, et al. **Radiol Med (Torino)** 1989 Apr;77(4):408–10 (Eng. Abstr.) **(Ita)**
[Postoperative hydrocele testis as a complication of high ligation of internal spermatic vein] Kageyama Y, et al. **Hinyokika Kiyo** 1988 May;34(5):851–4 (Eng. Abstr.) **(Jpn)**
[Importance of lateral inspection of the scrotum and value of intraoperative spermatic phlebography in varicocele] Tomoyoshi T, et al. **Hinyokika Kiyo** 1988 Nov; 34(11):1935–7 (Eng. Abstr.) **(Jpn)**
[Retrograde gonadal venography in patient with bilateral varicocele; a rare venous return via Santorini's plexus] Yasumoto R, et al. **Rinsho Hoshasen** 1989 Mar;34(3):387–9 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Description of eight phases of spermiogenesis in the marmoset testis. Haider SG, et al. **Acta Anat (Basel)** 1989; 135(2):180–4
Role of epithelial clear cells of the rat epididymis in the disposal of the contents of cytoplasmic droplets detached from spermatozoa. Hermo L, et al. **Am J Anat** 1988 Oct; 183(2):107–24
Postnatal development of the Sertoli cell barrier, tubular lumen, and cytoskeleton of Sertoli and myoid cells in the rat, and their relationship to tubular fluid secretion and flow. Russell LD, et al. **Am J Anat** 1989 Mar;184(3):179–89
Changes in surface area and number of Leydig cells in relation to the 6 stages of the cycle of the human seminiferous epithelium. Paniagua R, et al. **Anat Embryol (Berl)** 1988;178(5):423–7
Regulation of spermatogonial proliferation. De Rooij DG, et al. **Ann N Y Acad Sci** 1989;564:140–53 (57 ref.)
Application of the disector method to enumerate cells in the testis. Mendis-Handagama SM, et al. **Ann N Y Acad Sci** 1989;564:86–98
M-dinitrobenzene: studies on its toxicity to the testicular Sertoli cell. Foster PM. **Arch Toxicol Suppl** 1989;13:3–17
Anionic sites of the basement membrane of rat seminiferous tubules during ontogenesis. Leheup BP, et al. **Biol Cell** 1988;63(1):83–7
Cytochemical and biochemical characterization of testicular peritubular myoid cells. Anthony CT, et al. **Biol Reprod** 1989 Apr;40(4):811–23
Temporal appearance of seasonal changes in numbers of Sertoli cells, Leydig cells, and germ cells in stallions. Johnson L, et al. **Biol Reprod** 1989 May;40(5):994–9
Alkaline phosphatase is a marker for myoid cells in cultures of rat peritubular and tubular tissue. Palombi F, et al. **Biol Reprod** 1988 Dec;39(5):1101–9
DNA flow cytometric analysis of mouse seminiferous epithelium. Toppari J, et al. **Cytometry** 1988 Sep; 9(5):456–62
Sea urchin testicular cells evaluated by fluorescence microscopy of unfixed tissue. Simpson MV, et al. **Gamete Res** 1987 Jun;17(2):131–44
The annual testicular cycle in the turtle, Chrysemys picta: a histochemical and electron microscopic study. Dubois W, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):191–204
Microwave-aided technique to detect bromodeoxyuridine in S-phase cells using immunogold-silver staining and plastic-embedded sections. van de Kant HJ, et al. **Histochem J** 1988 Jun-Jul;20(6-7):335–40
Detection of cell proliferation in pig testis and intestine sections using monoclonal anti-bromodeoxyuridine antibody and immunogold silver staining. Dombrowicz D, et al. **Histochemistry** 1988;90(1):31–5
Secretion of plasminogen activator in response to follicle-stimulating hormone in culture medium of human testicular cells from biopsy specimens. Nishimune Y, et al. **J Androl** 1989 Jul-Aug;10(4):283–8
Possible role of elongated spermatids in control of stage-dependent changes in the diameter of the lumen of the rat seminiferous tubule. Sharpe RM. **J Androl** 1989 Jul-Aug;10(4):304–10
Differentiation of germ cells in seminiferous tubules transplanted to testes of germ cell-deficient mice of W/Wv and Sl/Sld genotypes. Kuroda H, et al. **J Cell Physiol** 1989 May;139(2):329–34
Method for showing human spermatogenesis using Arachis hypogaea (AHA) lectin. Jones CJ, et al. **J Clin Pathol** 1988 Sep;41(9):1017–8
Inhibitory effects of alkane sulphonates on the function of immature rat Leydig, Sertoli and peritubular cells cultured in vitro. Verhoeven G, et al. **J Mol Endocrinol** 1989 Mar; 2(2):145–55
Isolation of rat gonocytes by velocity sedimentation at unit gravity. van Dissel-Emiliani FM, et al. **J Reprod Fertil** 1989 Jul;86(2):759–66
Sertoli cell proteins in the human seminiferous tubule. Forti G, et al. **J Steroid Biochem** 1989 Jan;32(1B):135–44
Human Sertoli-spermatogenic cell cocultures prepared from biopsies of cryptorchid testes performed during orchidopexy. Tres LL, et al. **J Urol** 1989 Apr;141(4):1003–9
Fine structure of macrophages in the testicular interstitial tissue of the white-belly opossum Didelphis albiventris. Nogueira JC, et al. **Microsc Electron Biol Celular** 1988 Jun; 12(1):23–33
Human testis cytosol and ovarian follicular fluid contain high amounts of interleukin-1-like factor(s). Khan SA, et al. **Mol Cell Endocrinol** 1988 Aug;58(2-3):221–30
Paracrine control of immature Sertoli cells by adult germ cells, in the rat (an in vitro study). Cell-cell interactions within the testis. Le Magueresse B, et al. **Mol Cell Endocrinol** 1988 Jul;58(1):65–72
Transforming growth factor beta gene expression and action in the seminiferous tubule: peritubular cell-Sertoli cell interactions. Skinner MK, et al. **Mol Endocrinol** 1989 Apr; 3(4):625–34
The effect of microgravity on the reproductive function of male-rats. Serova LV, et al. **Physiologist** 1989 Feb;32(1 Suppl):S29–30
Topography of the rat blood-testis barrier after intratubular administration of intercellular tracers. Cavicchia JC, et al. **Tissue Cell** 1988;20(4):577–86
[The autophagic activity of Leydig cells in normal rat testes] Tang XM. **Shih Yen Sheng Wu Hsueh Pao** 1988 Mar; 21(1):119–29 (Eng. Abstr.) **(Chi)**
[Polynuclear genital cells in rat spermatogenesis in the normal state and after exposure to xenobiotics] Ivanov IuV. **Gig Tr Prof Zabol** 1989;(3):54–5 **(Rus)**
[Evaluation of methods for the isolation and purification Leydig and Sertoli cells] Bermúdez JA, et al. **Arch Invest Med (Mex)** 1988 Jul-Sep;19(3):291–301 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Prepubertal treatment of rats with clomiphene citrate affects postpubertal testicular development. Brown JL, et al. **Acta Endocrinol (Copenh)** 1989 Apr;120(4):423–8
The antimycotic drug terbinafine in contrast to ketoconazole lacks acute effects on the pituitary-testicular function of healthy men: a placebo-controlled double-blind trial. Nashan D, et al. **Acta Endocrinol (Copenh)** 1989 May; 120(5):677–81
Evidence for reversible and irreversible biochemical defects in accessory sex organs and kidney of neonatally androgenized male mice. Veyssiere G, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):121–8
Dibromochloropropane (DBCP) effects on the reproductive function of the adult male rat. Leone M, et al. **Acta Eur Fertil** 1988 Mar-Apr;19(2):99–103
Time-dependent effects of alcohol on the hypothalamic-hypophyseal-testicular function in the rat. Esquifino AI, et al. **Alcoholism (NY)** 1989 Apr;13(2):219–23
The effects of lead on the male rat reproductive system. Barratt CL, et al. **Andrologia** 1989 Mar-Apr;21(2):161–6
Reversible effects of long-term treatment with D-Trp6-LH-RH-microcapsules on pituitary-gonadal axis, spermatogenesis and prostate morphology in adolescent and adult dogs. Cavitte JC, et al. **Andrologia** 1988 May-Jun; 20(3):249–63
Effect of lithium chloride on spermatogenesis, testicular delta 5- 3 beta- and 17 beta-hydroxysteroid dehydrogenase activities in toad (Bufo melanostictus). Ghosh PK, et al. **Andrologia** 1989 May-Jun;21(3):199–203
Effects of prolactin and bromocriptine on physiological status of testis of the musk shrew (Suncus murinus L.). Mohanty N, et al. **Andrologia** 1988 Sep-Oct;20(5):426–32
Testicular damage development in rats injected with dibromochloropropane (DBCP). Shemi D, et al. **Andrologia** 1988 Jul-Aug;20(4):331–7
Ultrastructure of testicular cells in rats treated with dibromochloropropane (DBCP). Shemi D, et al. **Andrologia** 1989 May-Jun;21(3):229–36
Effects of gossypol on the antioxidant defense system of the rat testis. Bender HS, et al. **Arch Androl** 1988;21(1):59–70
Effectiveness of hMG-hCG treatment for DNA/RNA syntheses in subfertile human testis in vitro. Okuyama A, et al. **Arch Androl** 1989;22(2):167–72
Effect of sexual maturity on testicular injury subsequent to procarbazine administration in rats. Pogach LM, et al. **Arch Androl** 1988;21(1):37–43
Reproductive effects of the anticancer drug cyclophosphamide in male rats at different ages. Velez de la Calle JF, et al. **Arch Androl** 1989;22(3):251–63
Effects of co-administration of di(2-ethylhexyl)phthalate and testosterone on several parameters in the testis and pharmacokinetics of its mono-de-esterified metabolite. Oishi S. **Arch Toxicol** 1989;63(4):289–95
Effects of N,N'-methylene-bis-acrylamide (MBA) on mouse germ cells--sperm count and morphology, and testicular pathology. Sakamoto J, et al. **Arch Toxicol** 1988 Aug; 62(1):54–9
Effect of styrene administration on rat testis. Srivastava S, et al. **Arch Toxicol** 1989;63(1):43–6
Sterilisation of bulls with lactic acid. Coventry J, et al. **Aust Vet J** 1989 May;66(5):156–7
Rapid Leydig cell proliferation and luteinizing hormone receptor replenishment in the neonatal rat testis after a single injection of human chorionic gonadotropin. Ksiopio T, et al. **Biol Reprod** 1989 Jan;40(1):135–43
The effects of fetal exposure to 1,2-dibromo-3-chloropropane on adult male reproductive function. Warren DW, et al. **Biol Reprod** 1988 Oct; 39(3):707–16
Extrapolation of laboratory findings to risks from environmental exposures: male reproductive effects of ethylene oxide. Smith TJ. **Birth Defects** 1988;24(5):79–100 (30 ref.)
Plasma inhibin levels in men with chemotherapy-induced severe damage to the seminiferous epithelium. Tsatsoulis A, et al. **Clin Endocrinol (Oxf)** 1988 Dec;29(6):659–65
Effect of dihydrotestosterone on testicular and accessory gland function in male rhesus monkeys. Ramakrishnan PR, et al. **Contraception** 1989 Jul;40(1):111–27
Studies on mechanism(s) of antifertility action of gossypol in rat and hamster. Srivastava A, et al. **Contraception** 1989 Mar;39(3):337–55
Sustained azoospermia in squirrel monkey, Saimiri sciureus, resulting from a single intratesticular glycerol injection. Wiebe JP, et al. **Contraception** 1989 Apr;39(4):447–57
Effects of estradiol on secretion of LH, hypothalamic function and testicular development in bull calves. Deaver DR, et al. **Domest Anim Endocrinol** 1988 Oct;5(4):307–16
Effects of exogenous melatonin prior to the breeding season on testis weight and epididymal androgen receptors in rams. Tekpetey FR, et al. **Domest Anim Endocrinol** 1988 Jul;5(3):257–64
Testosterone restores testicular inhibin content in cryptorchid rats. Demura R, et al. **Endocrinol Jpn** 1988 Jun;35(3):385–90
The effects of long term methotrexate therapy on the gonadal function and morphology. Koehler M, et al. **Endokrynol Pol** 1988;39(1):33–40
Long-term effects of triethylenemelamine exposure on mouse testis cells and sperm chromatin structure assayed by flow cytometry. Evenson DP, et al. **Environ Mol Mutagen** 1989; 14(2):79–89
Comparative response of male rats to parathion and lindane: histopathological and biochemical studies. Dikshith TS, et al. **Environ Res** 1978 Aug;17(1):1–9
Effects of carbamazepine on the hypothalamic-pituitary-gonadal axis in male patients with epilepsy: a prospective study. Isojärvi JI, et al. **Epilepsia** 1989 Jul-Aug;30(4):446–52
Histometric investigations of the effect of cyclosporin A on the testicular tissue of rats. Chen C, et al. **Exp Mol Pathol** 1988 Oct;49(2):185–95
Histopathological effect of cadmium on the testes of mice from the KE inbred strain. Godowicz B, et al. **Folia Biol (Krakow)** 1988;36(3-4):159–65
Lead induced testicular changes in protein malnourished rats. Saxena DK, et al. **Folia Histochem Cytobiol** 1989; 27(1):57–61
Effect of thyroxine on testicular activity in the toad Bufo regularis. Sakr SA. **Folia Morphol (Praha)** 1988;36(3):256–9
Studies on the testicular effects of vitamin A palmitate in the Sprague-Dawley rat. Bosakowski T, et al. **Food Chem Toxicol** 1988 Sep;26(9):767–73
Effect of metronidazole on fertility and testicular function in male rats. McClain RM, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):386–96
Intratesticular injection as a method to assess the potential toxicity of various agents and to study mechanisms of normal spermatogenesis. Russell LD, et al. **Gamete Res** 1987 May;17(1):43–56
Regulation of gonadal steroidogenesis in Fundulus heteroclitus by recombinant salmon growth hormone and purified salmon prolactin. Singh H, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):144–53
Gossypol and testicular lipids of adult rats. Sheriff DS. **Horm Metab Res** 1988 Nov;20(11):691–2
Cumulative effects of 1,2-dibromo-3-chloropropane (DBCP) on kidney and testis. Saegusa J. **Ind Health** 1989;27(2):49–58
Effect of gossypol on testes & epididymis of albino rats. Kaur P, et al. **Indian J Med Res** 1988 Apr;87:368–76
Effects of prolactin on luteinizing hormone-stimulated testosterone secretion in isolated perfused rat testis. Fung MC, et al. **J Androl** 1989 Jan-Feb;10(1):37–42
Acute effects and long-term sequelae of 1,3-dinitrobenzene on male reproduction in the rat. II. Quantitative and qualitative histopathology of the testis. Hess RA, et al. **J Androl** 1988 Sep-Oct;9(5):327–42
Endocrine parameters, hormone receptors, and functions of the testicular interstitium and seminiferous epithelium in estradiol-immunized Ile-de-France rams. Monet-Kuntz C, et al. **J Androl** 1988 Jul-Aug;9(4):278–83
The pattern of LH release in the adult ram influences the

testicular steroidogenic response to individual LH pulses and is regulated by testosterone negative feedback. Sanford LM, et al. **J Androl** 1989 Jan–Feb;10(1):1–8

Effects of ethanol consumption on the morphology of the rat seminiferous epithelium. Weinberg J, et al. **J Androl** 1988 Jul–Aug;9(4):261–9

Influences of season and artificial photoperiod on stallions: pituitary and testicular responses to exogenous GnRH. Clay CM, et al. **J Anim Sci** 1989 Mar;67(3):763–70

Two-year comparison of testicular responses to pulsatile gonadotropin-releasing hormone and exogenous gonadotropins from the inception of therapy in men with isolated hypogonadotropic hypogonadism. Liu L, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1140–5

Mode of suppression of pituitary and gonadal function after acute or prolonged administration of a luteinizing hormone-releasing hormone antagonist in normal men. Pavlou SN, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):446–54

Male gonadal function after chemotherapy for solid tumors in childhood. Aubier F, et al. **J Clin Oncol** 1989 Mar; 7(3):304–9

Effect of aldrin on spermatogenesis, plasma gonadotrophins and testosterone, and testicular testosterone in the rat. Chatterjee S, et al. **J Endocrinol** 1988 Oct;119(1):75–81

Biopotency of highly purified porcine FSH and human LH on gonadal function. Closset J, et al. **J Endocrinol** 1989 Jan;120(1):89–96

Inhibition of testicular and somatic development after treatment of the postnatal rat with the Leydig cell cytotoxic ethylene dimethanesulphonate. Morris ID, et al. **J Endocrinol** 1988 Dec;119(3):467–74

Endocrine-mediated protection from cytotoxic-induced testicular damage. Morris ID, et al. **J Endocrinol** 1989 Jan; 120(1):7–9 (19 ref.)

The effect of 5-methoxytryptamine on golden hamster gonads is not a consequence of its acetylation into melatonin. Raynaud F, et al. **J Endocrinol** 1989 Jun; 121(3):507–12

Testicular dysfunction induced by cadmium and its improvement caused by selenium in the mouse. Sugawara N, et al. **J Environ Pathol Toxicol Oncol** 1989;9(1):53–64

Testicular cell population dynamics following palmitine hydroxide treatment in male dogs. Gupta RS, et al. **J Ethnopharmacol** 1989 Apr;25(2):151–7

Beta-adrenergic blockers prevent short photoperiod-induced gonadal regression, but not melatonin-induced regression in male Syrian hamsters. Champney TH. **J Exp Zool** 1989 Feb;249(2):221–8

Effects of melatonin and 6-methoxybenzoxazolinone on photoperiodic control of testis size in adult male golden hamsters. Anderson KD, et al. **J Pineal Res** 1988; 5(4):351–65

Effects of melatonin and thyroxine treatment on reproductive organs and thyroid hormone levels in male hamsters. Creighton JA, et al. **J Pineal Res** 1989;6(4):317–23

Antigonadal activity of the melatonin analogs 2-iodomelatonin and 2-chloromelatonin in the juvenile Djungarian hamster, Phodopus sungorus campbelli. Sugden D. **J Pineal Res** 1989;7(2):205–9

Seasonal changes in plasma testosterone concentrations in response to administration of hCG in a desert rodent, the sand rat (Psammomys obesus). Khammar F, et al. **J Reprod Fertil** 1989 Jan;85(1):171–5

Steroid sulfates in testis tissue of prostatic cancer patients treated for six months with the gonadotropin releasing hormone agonist buserelin. Huhtaniemi I, et al. **J Steroid Biochem** 1989 Jun;32(6):811–3

The rise in testicular androgens during the first days of treatment with an LHRH agonist in the dog can be blocked by aminoglutethimide or ketoconazole. Lacoste D, et al. **J Steroid Biochem** 1988 Dec;31(6):963–70

Cytotoxic effects of benzene on mouse germ cells determined by flow cytometry. Spanò M, et al. **J Toxicol Environ Health** 1989;26(3):361–72

Early sequence of biochemical events in the action of follicle stimulating hormone on the testis. Means AR. **Life Sci** 1974 Aug 1;15(3):371–89 (36 ref.)

Effects of vinyl acetate and acetaldehyde on sperm morphology and meiotic micronuclei in mice. Lähdetie J. **Mutat Res** 1988 Nov;202(1):171–8

Reducing the cost of the cure in childhood leukemia [editorial; comment] Civin CI. **N Engl J Med** 1989 Jul 20; 321(3):185–7. **Comment on:. Comment on:** N Engl J Med 1989 Jul 20;321(3):136–42 N Engl J Med 1989 Jul 20;321(3):143–51

Cobalt-protoporphyrin suppresses testosterone secretion by multiple interactions within the brain-pituitary-testicular axis. Galbraith RA, et al. **Neuroendocrinology** 1989 Jun; 49(6):641–8

Correlation of sperm and endocrine measures with reproductive success in rodents. Gray LE Jr, et al. **Prog Clin Biol Res** 1989;302:193–206; discussion 206–9 (29 ref.)

Reversibility of GnRH agonist-induced inhibition of testicular function: differences between rats and primates. Weinbauer GF, et al. **Prog Clin Biol Res** 1989;303:75–87 (46 ref.)

Inhibition of the pituitary-gonadal axis by a single intramuscular administration of D-Trp-6-LH-RH (decapeptyl) in a sustained-release formulation in patients with prostatic carcinoma. Gonzalez-Barcena D, et al. **Prostate** 1989;14(4):291–300

Early effects of gossypol on the testis and epididymis in the rat. Radigue C, et al. **Reprod Nutr Dev** 1988;28(5):1329–38

Evaluation of the hypothalamic-hypophysial, thyroid, and gonadal axes before and after disulfiram administration in patients with chronic alcoholism. Ramirez G, et al. **South Med J** 1988 Nov;81(11):1407–11

The effect of sex hormone binding globulin (SHBG) on the pituitary testicular axis in hyperthyroid men. Garden GA, et al. **Steroids** 1988 Oct;52(4):385–6

Mono-2-ethylhexyl phthalate, a metabolite of di-(2-ethylhexyl) phthalate, causally linked to testicular atrophy in rats. Albro PW, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):193–200

Biochemical and structural evidence for ethanol-induced impairment of testicular development: apparent lack of Leydig cell involvement. Anderson RA Jr, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):62–85

Attenuation of 2-methoxyethanol-induced testicular toxicity in the rat by simple physiological compounds. Mebus CA, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):110–21

The metabolism and testicular toxicity of cyclohexylamine in rats and mice during chronic dietary administration. Roberts A, et al. **Toxicol Appl Pharmacol** 1989 Apr; 98(2):216–29

Unilateral depletion of testicular glutathione levels in the rat following intratesticular injections of diethylmaleate and buthionine sulfoximine. Slott VL, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):369–73

Toxicological study of etoposide (VP-16) in rats with special emphasis on testicular alteration. Kadota T, et al. **Toxicol Lett** 1989 Feb;45(2-3):185–94

Enhancing effects of luteinizing hormone-releasing hormone on testicular damage induced by di-(2-ethylhexyl)phthalate in rats. Oishi S. **Toxicol Lett** 1989 Jun;47(3):271–7

Inhibition of intratesticular testosterone synthesis by inorganic lead. Rodamilans M, et al. **Toxicol Lett** 1988 Sep; 42(3):285–90

Mechanistic approaches in the study of testicular toxicity: agents that directly affect the testis. Working PK. **Toxicol Pathol** 1989;17(2):452–6 (33 ref.)

Dependence on chelating agent properties of nephrotoxicity and testicular damage in male mice during cadmium decorporation. Jones SG, et al. **Toxicology** 1988 Dec 16; 53(1):135–46

Effects of zinc on the distribution and toxicity of cadmium in isolated interstitial cells of the rat testis. Koizumi T, et al. **Toxicology** 1989 Jun 1;56(2):137–46

2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)-induced alterations in lipid peroxidation, enzymes, and divalent cations in rat testis. al-Bayati ZA, et al. **Xenobiotica** 1988 Nov;18(11):1281–9

[Intratesticular stimulation of spermatogenesis] Goriunov VG, et al. **Khirurgiia (Sofiia)** 1989;42(2):41–5 (Eng. Abstr.) **(Bul)**

[Effect of racemic, (+),(-) gossypol on rat testis, epididymis, liver and kidney] Zhou LF. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):442–3 (Eng. Abstr.) **(Chi)**

[Peripheral effects of prolactin in reproductive function. I. Male reproductive function] Leroy-Martin B, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):39–45 (49 ref.) (Eng. Abstr.) **(Fre)**

[Effects of o,p'-DDD on pituitary-gonadal function in patients with Cushing's disease] Ojima M, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jun 20;64(6):451–62 (Eng. Abstr.) **(Jpn)**

[Alcohol drinking and sexual functions] Shimazaki J, et al. **Nippon Rinsho** 1988 Aug;46(8):1816–20 **(Jpn)**

[Evaluation of testicular damage by flow cytometry: testicular atrophy caused by ethylene oxide] Mori K, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 1;11(1):37–42 (Eng. Abstr.) **(Jpn)**

[Effects of chronic inhalation of ethylene oxide on the rat testes] Mori K, et al. **Sangyo Ika Daigaku Zasshi** 1988 Dec 1;10(4):427–31 (Eng. Abstr.) **(Jpn)**

[Antidopaminergic effect of metoclopramide on the rat testis and epididymis] Kamińska B. **Ann Acad Med Stetin** 1988; 34:69–86 (Eng. Abstr.) **(Pol)**

[Early stimulation with testosterone of the sexual system of male rats after administration of a single dose of stilbestrol in the first day of life] Limanowski A, et al. **Endokrynol Pol** 1987;38(6):467–76 (Eng. Abstr.) **(Pol)**

[Effects of thymosin (fraction 5) on the endocrine function of the testis in mice] Chesnokova VM, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):493–5 (Eng. Abstr.) **(Rus)**

[Effect of antioxidants on the indices of free-radical lipid oxidation in the testes of rats of different ages and on the reproductive capacity in chronic multiple antioxidant deficiency] Gaishenets VF, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):229–31 (Eng. Abstr.) **(Rus)**

[Psychotropic substances and endocrine mechanisms: the effect on gonadal function] Arushanian EB, et al. **Farmakol Toksikol** 1988 Nov-Dec;51(6):104–12 (115 ref.) (Eng. Abstr.) **(Rus)**

[Effect of destruction of the lateral septal nucleus on the sensitivity of the testes to chorionic gonadotropin] Kiriliuk ML, et al. **Fiziol Zh** 1988 Jul-Aug;34(4):92–6 (Eng. Abstr.) **(Rus)**

[Hygienic evaluation of the gonadotoxic effect of mercury after its combined administration] Ermachenko AB. **Gig Sanit** 1988 Jun;(6):81–3 **(Rus)**

[Effect of thymosin (fraction 5) on the development of functional activity of the adrenals and gonads in genetically athymic mice] Ignat'eva EV, et al. **Probl Endokrinol (Mosk)** 1988 Nov-Dec;34(6):83–6 (Eng. Abstr.) **(Rus)**

[Characteristics of the metabolism and gonadal action in mice of tritium-labelled deoxycytidine] Balonov MI, et al. **Radiobiologiia** 1989 May-Jun;29(3):343–8 (Eng. Abstr.) **(Rus)**

[Absence of an effect of cadmium on the distribution of ribosomal particles in the mouse testis] Narancsik P, et al. **Arh Hig Rada Toksikol** 1988 Jun;39(2):223–6 (Eng. Abstr.) **(Scr)**

[The effect of zeranol on muscle structure and the development of the testes in bulls] Uhrin V, et al. **Vet Med (Praha)** 1989 Apr;34(4):203–12 (Eng. Abstr.) **(Slo)**

EMBRYOLOGY

Influence of pituitary hormones (hCG, TSH, Pr, GH) on testosterone level and on the functional activity of the Leydig cell in rat fetuses. Dobozy O, et al. **Acta Physiol Hung** 1988;72(2):159–63

Absence of development of late steroidogenic lesions in rat testis during the end of fetal life. Habert R, et al. **Arch Androl** 1989;22(1):41–8

Mouse gonadal differentiation in vitro in the presence of fetal calf serum. Mackay S, et al. **Cell Differ Dev** 1989 Jun; 27(1):19–28

Testes of XX in equilibrium with XY chimeric mice develop from fetal ovotestes. Bradbury MW. **Dev Genet** 1987; 8(4):207–18

The Y-chromosomal and autosomal testis-determining genes. de la Chapelle A. **Development** 1987;101 Suppl:33–8

The fate of fetal Leydig cells during the development of the fetal and postnatal rat testis. Kerr JB, et al. **Development** 1988 Jul;103(3):535–44

Mapping of testis-determining locus on Yp by the molecular genetic analysis of XX males and XY females. Müller U. **Development** 1987;101 Suppl:51–8

Hormone ontogeny in the ovine fetus. XXIII. Pulsatile administration of follicle-stimulating hormone stimulates inhibin production and decreases testosterone synthesis in the ovine fetal gonad. Albers N, et al. **Endocrinology** 1989 Jun;124(6):3089–94

In vitro model of the first phase of testicular descent: identification of a low molecular weight factor from fetal testis involved in proliferation of gubernaculum testis cells and distinct from specified polypeptide growth factors and fetal gonadal hormones. Fentener van Vlissingen JM, et al. **Endocrinology** 1988 Dec;123(6):2868–77

Control of gonadotropin secretion in the ovine fetus. II. A sex difference in pulsatile luteinizing hormone secretion after castration. Matwijiw I, et al. **Endocrinology** 1989 Mar; 124(3):1352–8

The embryology of testicular descent. Wensing CJ. **Horm Res** 1988;30(4–5):144–52 (36 ref.)

Inhibition of growth and differentiation of fetal hamster gonads grafted into the adult testis. Arrau J, et al. **Int J Androl** 1988 Aug;11(4):327–38

Testosterone synthesis and adenylate cyclase activity in the early human fetal testis appear to be independent of human chorionic gonadotropin control. Word RA, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):204–8

Embryology of the gonad with reference to special tumors of the ovary and testis. Barber HR. **J Pediatr Surg** 1988 Oct;23(10):967–72 (6 ref.)

Genotypic effects on gonadal size in fetal mice. Argyropoulos G, et al. **J Reprod Fertil** 1989 Jul;86(2):473–8

Low aromatase activity and gene expression in human fetal testes. Tapanainen J, et al. **J Steroid Biochem** 1989 Jul; 33(1):7–11

Relationship between the development of the gubernaculum and the testicular descent in the rat fetus: macroscopic and light and electron microscopic observation. Fujikake N, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):416–24

Formation of male and female sex cords in gonadal development of C57BL/6 mouse. Kanai Y, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):7–16

Role of mammalian Y chromosome in sex determination. Burgoyne PS. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1;322(1208):63–72 (48 ref.)

Control mechanisms of testicular differentiation. Jost A, et al. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1; 322(1208):55–61

Experimental control of the differentiation of Leydig cells in the rat fetal testis. Jost A, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8094–7

Ultrastructure of human germ cells in sex-indifferent gonad, in early fetal testis or ovary and in testicular cancers. Francavilla S, et al. **Prog Clin Biol Res** 1989;296:31–40

Electron microscopic study of the gonadal development in early human embryos. Fukuda O, et al. **Prog Clin Biol Res** 1989;296:23–9

Morphogenesis of the testis in sex reversed genetically female fowls. Maraud R, et al. **Prog Clin Biol Res** 1989;296:65–70

Embryological controversies in testicular descent. Hutson JM, et al. **Semin Urol** 1988 May;6(2):68–73 (71 ref.)

[The prenatal development of deferent sperm ducts in swine] Branscheid W, et al. **Arch Exp Veterinarmed** 1988 Sep; 42(5):750–63 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

Stimulation of aromatase activity in the fetal rat gonads by cAMP and FSH. Weniger JP, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):381–5

Testosterone propionate induced changes in testicular phosphatases of musk shrew (Suncus murinus L.). Mohanty N, et al. **Andrologia** 1989 Jul–Aug;21(4):334–9

Hormonal regulation of rat testicular gamma–glutamyl–transpeptidase "in vivo" and "in vitro". Schteingart HF, et al. **Andrologia** 1988 Jul–Aug;20(4):351–9

Decrease of topoisomerase I activity in the testes of infertile men with varicocele. Fujisawa M, et al. **Arch Androl** 1988; 21(1):45–50

Developmental changes in lactate dehydrogenase–X activity in young jaundiced male rats. Gu Y, et al. **Arch Androl** 1989;22(2):131–6

Alpha–L–fucosidase in rat testis during sexual maturity. Leray G, et al. **Arch Androl** 1988;21(1):23–8

Changes in dehydrodolichyl diphosphate synthase during spermatogenesis in the rat. Chen Z, et al. **Arch Biochem Biophys** 1988 Oct;266(1):98–110

Selective induction of heme oxygenase–1 isozyme in rat testis by human chorionic gonadotropin. Kutty RK, et al. **Arch Biochem Biophys** 1989 Jan;268(1):100–7

A genuine organ specific alcohol dehydrogenase from hamster testes: isolation, characterization and developmental changes. Keung WM. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):38–45

Human testicular lactate dehydrogenase–C gene is interrupted by six introns at positions homologous to those of LDH–A (muscle) and LDH–B (heart) genes. Takano T, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):579–83

Modulation of testicular galactolipid sulphotransferase activity by phosphorylation. Stimulation of enzyme activity in vitro by an endogenous kinase. Sakac D, et al. **Biochem J** 1989 Jul 15;261(2):423–9

Lactate dehydrogenase isoenzymes A (muscle), B (heart) and C (testis) of mammals and the genes coding for these enzymes. Li SS. **Biochem Soc Trans** 1989 Apr;17(2):304–7

Inhibition of deoxyhypusine hydroxylase by polyamines and by a deoxyhypusine peptide. Abbruzzese A, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):248–55

Characterization of aldose reductase and aldehyde reductase from rat testis. Kawasaki N, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1–2):30–6

Guinea pig testicular proacrosin–acrosin system: further characterization of the active enzyme. Adekunle AO, et al. **Biol Reprod** 1989 Jan;40(1):127–34

Synthesis of 2–acetamido–2–deoxy–3–O–beta–D–galactopyranosyl–D–galacto se by the sequential use of beta–D–galactosidases from bovine testes and Escherichia coli. Hedbys L, et al. **Carbohydr Res** 1989 Mar 15;186(2):217–23

20 Beta–hydroxysteroid dehydrogenase of neonatal pig testis: cofactor requirement and stereospecificity of hydrogen transfer from nicotinamide adenine dinucleotide phosphate, reduced form. Nakajin S, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan;37(1):148–50

Glutathione–related enzyme activities in testis of patients with malignant diseases. Aceto A, et al. **Clin Chim Acta** 1989 Jul 31;183(1):83–6

Developmental pattern of 5 alpha–reductase activity in the rat gubernaculum. George FW. **Endocrinology** 1989 Feb; 124(2):727–32

Corticosteroid 11 beta–dehydrogenase in rat testis. Phillips DM, et al. **Endocrinology** 1989 Jul;125(1):209–16

The subunit structure of a major glutathione S–transferase form, MT, in rat testis. Evidence for a heterodimer consisting of subunits with different isoelectric points. Ishikawa T, et al. **Eur J Biochem** 1988 Oct 1;176(3):551–7

The testicular transcript of the angiotensin I–converting enzyme encodes for the ancestral, non–duplicated form of the enzyme. Lattion AL, et al. **FEBS Lett** 1989 Jul 31; 252(1–2):99–104

Deoxyribonucleic acid polymerase activity in the testes of infertile men with varicocele. Fujisawa M, et al. **Fertil Steril** 1988 Nov;50(5):795–800

Effects of hepatic inducers on testicular epoxide–metabolizing enzymes in the rat and mouse. DiBiasio KW, et al. **Fundam Appl Toxicol** 1989 Apr; 12(3):449–59

Protein carboxyl methyltransferase activity specific for age–modified aspartyl residues in mouse testes and ovaries: evidence for translation during spermiogenesis. O'Connor CM, et al. **Gamete Res** 1989 Mar;22(3):307–19

Developmental changes of steroidogenic enzyme activities in the embryonic gonads of the chicken: the sexual difference. Imataka H, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):413–8

Inhibition of testicular 3 beta–hydroxy–delta 5–steroid dehydrogenase (3 beta–HSD) activity in catfish Clarias batrachus (L.) by mercurials. Kirubagaran R, et al. **Indian J Exp Biol** 1988 Nov;26(11):907–8

Angiotensin converting enzyme in human seminal plasma is synthesized by the testis, epididymis and prostate. Krassnigg F, et al. **Int J Androl** 1989 Feb;12(1):22–8

Chronic ethanol ingestion during puberty alters the transient increase in testicular 5 alpha–reductase in the Swiss–Webster mouse. Anderson RA Jr, et al. **J Androl** 1989 Jan–Feb;10(1):28–36

20 beta–hydroxysteroid dehydrogenase of neonatal pig testis: purification and some properties. Nakajin S, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):565–9

Isolation and properties of a testicular ribonucleic acid polymerase. Ballard PL, et al. **J Biol Chem** 1966 Apr 10; 241(7):1602–15

Dehydrodolichyl diphosphate synthase in Sertoli and spermatogenic cells of prepuberal rats. Chen Z, et al. **J Biol Chem** 1989 Mar 5;264(7):3849–53

A newly synthesized selective casein kinase I inhibitor, N–(2–aminoethyl)–5–chloroisoquinoline–8–sulfonamide, and affinity purification of casein kinase I from bovine testis. Chijiwa T, et al. **J Biol Chem** 1989 Mar 25; 264(9):4924–7

Structure of testicular angiotensin–converting enzyme. A segmental mosaic isozyme. Kumar RS, et al. **J Biol Chem** 1989 Oct 5;264(28):16754–8

Testis–specific calmodulin–dependent phosphodiesterase. A distinct high affinity cAMP isoenzyme immunologically related to brain calmodulin–dependent cGMP phosphodiesterase. Rossi P, et al. **J Biol Chem** 1988 Oct 25;263(30):15521–7

Stimulation of aromatase activity in the fetal rat testis by cyclic AMP and FSH. Weniger JP, et al. **J Endocrinol** 1988 Sep;118(3):485–9

Changes of testicular cholesteryl ester hydrolase activity in experimentally cryptorchid rats. Hoffmann AM, et al. **J Reprod Fertil** 1989 May;86(1):11–8

Aromatase–inhibitors of the androstenedione–type activate the 17 beta–hydroxysteroid–dehydrogenase in the rat testis tissue suspension model. Schröder H, et al. **J Steroid Biochem** 1988 Oct;31(4B):685–90

Altered testicular enzyme patterns in rats after long–term exposure to thallium sulphate. Gregotti C, et al. **J Toxicol Clin Exp** 1985 Jul–Aug;5(4):265–71

Intratubular malignant germ cells in testicular biopsies: clinical course and identification by staining for placental alkaline phosphatase. Burke AP, et al. **Mod Pathol** 1988 Nov;1(6):475–9

Immunohistochemical analysis of cytochrome P–450 17 alpha–hydroxylase in pig adrenal cortex, testis and ovary. Sasano H, et al. **Mol Cell Endocrinol** 1989 Apr; 62(2):197–202

Rat P450(17 alpha) from testis: characterization of a full–length cDNA encoding a unique steroid hydroxylase capable of catalyzing both delta 4– and delta 5–steroid–17,20–lyase reactions. Fevold HR, et al. **Mol Endocrinol** 1989 Jun;3(6):968–75

Messenger ribonucleic acid encoding an apparent isoform of phosphorylase kinase catalytic subunit is abundant in the adult testis. Hanks SK. **Mol Endocrinol** 1989 Jan; 3(1):110–6

Molecular cloning, complementary deoxyribonucleic acid structure and predicted full–length amino acid sequence of the hormone–inducible regulatory subunit of 3'–5'–cyclic adenosine monophosphate–dependent protein kinase from human testis. Levy FO, et al. **Mol Endocrinol** 1988 Dec; 2(12):1364–73

Inhibition by gossypol of cyclic nucleotide–independent phosvitin kinase from pig testis. Katoh N, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):105–9

Nucleotide sequence of cytochrome P–450 cholesterol side–chain cleavage cDNA isolated from porcine testis. Mulheron GW, et al. **Nucleic Acids Res** 1989 Feb 25; 17(4):1773

Kinetic properties of sex steroids action on rat testicular aldehyde dehydrogenase. Messiha FS. **Proc West Pharmacol Soc** 1988;31:73–4

Hepatic, testicular aldehyde dehydrogenase and sex steroids. Messiha FS. **Proc West Pharmacol Soc** 1988;31:75–6

Intratesticular site of aromatase activity and possible function of testicular estradiol. Payne AH, et al. **Steroids** 1987 Oct–Dec;50(4–6):435–48 (24 ref.)

Electrophoretic heterogeneity of alkaline phosphatase isozymes in seminoma and normal testis. Koshida K, et al. **Tumour Biol** 1989;10(4):181–9

Hydrophobicity and lectin affinity of alkaline phosphatase isozymes in seminoma and normal testis. Koshida K, et al. **Tumour Biol** 1989;10(4):173–80

Lactate dehydrogenase isoenzymes in prostate and testis of wild animals and some histological remarks. Van Camp K, et al. **Urol Res** 1988;16(5):373–5

[N–acetyl–beta–D–glucosaminidase in the tissue of various urogenital organs] Yamamoto M, et al. **Rinsho Byori** 1989 Jan;37(1):43–6 **(Jpn)**

[Inhibitory effects and spectral changes in pig testicular cytochrome P–450(17 alpha–hydroxylase/lyase) by 20 beta–hydroxy–C21–steroids] Nakajin S, et al. **Yakugaku Zasshi** 1988 Dec;108(12):1188–95 (Eng. Abstr.) **(Jpn)**

[Inhibitory effect on pig testicular 20 beta–hydroxysteroid dehydrogenase by various inhibitors of steroid metabolizing enzymes] Nakajin S, et al. **Yakugaku Zasshi** 1988 Dec; 108(12):1219–22 (Eng. Abstr.) **(Jpn)**

[Beta–galactosidase activity in the seminal fluid and gonadal tissue as a biochemical criterion of the gonadotoxic effect of chemical substances] Votiakov AV, et al. **Gig Sanit** 1989 Mar;(3):62–3 **(Rus)**

GROWTH & DEVELOPMENT

Growth and maturation in the male genitalia from birth to adolescence. I. Change of testicular volume. Fujieda K, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Apr;29(2):214–9

Familial male pseudohermaphroditism and testicular descent in the racoon dog (Nyctereutes). Fentener van Vlissingen JM, et al. **Anat Rec** 1988 Dec;222(4):350–6

Increase in testicular androgen receptor during sexual maturation in the rat. Buzek SW, et al. **Biol Reprod** 1988 Aug;39(1):39–49

Timing of photorefractoriness in the European starling: significance of photoperiod early and late in the reproductive cycle. Falk H, et al. **Biol Reprod** 1988 Dec; 39(5):1004–8

Development of the inhibitory guanine nucleotide–binding regulatory protein in the rat testis. Warren DW. **Biol Reprod** 1989 Jun;40(6):1208–14

The fate of fetal Leydig cells during the development of the fetal and postnatal rat testis. Kerr JB, et al. **Development** 1988 Jul;103(3):535–44

The use of Y–chromosome–specific repeated DNA sequences in the analysis of testis development in an XX/XY mouse. Singh L, et al. **Development** 1987;101 Suppl:143–9

Pubertal changes in the secretion of gonadotropic hormones, testicular gonadotropic receptors and testicular function in the ram. Yarney TA, et al. **Domest Anim Endocrinol** 1989 Jul;6(3):219–29

Kinetic studies on the development of the adult population of Leydig cells in testes of the pubertal rat. Hardy MP, et al. **Endocrinology** 1989 Feb;124(2):762–70

Testosterone induction of cellular proteins in cultured Sertoli cells from hypophysectomized rats and rats of different ages. Roberts K, et al. **Endocrinology** 1989 Sep; 125(3):1174–9

Assays of testis development in the mouse distinguish three classes of domesticus–type Y chromosome. Biddle FG, et al. **Genome** 1988 Dec;30(6):870–8

Ontogeny and cellular origin of an interleukin–1–like factor in the reproductive tract of the male rat. Syed V, et al. **Int J Androl** 1988 Oct;11(5):437–47

Determination of Sertoli cell numbers in the developing rat testis by stereological methods. Wang ZX, et al. **Int J Androl** 1989 Feb;12(1):58–64

The changing profiles of L–ornithine decarboxylase and S–adenosyl–L–methionine decarboxylase activities in testicular cell types during sexual maturation of male rats. Shubhada S, et al. **J Androl** 1989 Mar–Apr;10(2):152–8

Blockade of neonatal activation of the pituitary–testicular axis: effect on peripubertal luteinizing hormone and testosterone secretion and on testicular development in male monkeys. Mann DR, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):600–7

Changes in the feedback control of gonadotrophin secretion in ewes from lines selected for testis size in the ram lamb. McNeilly JR, et al. **J Reprod Fertil** 1988 Sep;84(1):213–21

Fibroblast growth factor and the control of pituitary and gonad development and function. Gospodarowicz D, et al. **J Steroid Biochem** 1989 Jan;32(1B):183–91 (103 ref.)

Testicular descent: androgen receptors in cultured porcine gubernaculum cells. Oprins AC, et al. **J Steroid Biochem** 1988 Oct;31(4A):387–91

A new look to the andropause: altered function of the gonadotrophs. Vermeulen A, et al. **J Steroid Biochem** 1989 Jan;32(1B):163–5

Growth and differentiation of the gubernaculum testis during testicular descent in the pig: changes in the extracellular matrix, DNA content, and hyaluronidase, beta–glucuronidase, and beta–N–acetylglucosaminidase activities. Fentener van Vlissingen JM, et al. **J Urol** 1989 Sep;142(3):837–45

The ontogeny of immunoreactive beta–endorphin and beta–lipotropin in the rat testis. Adams ML, et al. **Life Sci** 1989;44(2):159–66

Effects of light environment and population density on growth performance of male turkeys: 2. Physiological changes. Gill DJ, et al. **Poult Sci** 1988 Nov;67(11):1518–24

Early postnatal development of the testes in mice with trisomy 19. Lorke DE, et al. **Prog Clin Biol Res** 1989; 296:71–6

Biochemistry, genetics and development of mouse testis aldehyde dehydrogenases. Rout UK, et al. **Prog Clin Biol Res** 1989;290:105–17

Sexual maturation of Turkish boys in Ankara. Güvenç H, et al. **Turk J Pediatr** 1988 Jan–Mar;30(1):39–43

[Steroid hormone transformation in the gonads and liver of aged rats] Schriefers H, et al. **Biol Chem Hoppe Seyler** 1988 May;369(5):371–80 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Immunological phenomena observed in the testis and their possible role in infertility. Lehmann D, et al. **Am J Reprod Immunol** 1989 Feb;19(2):43–52 (80 ref.)

Distribution of human leukocyte antigen–ABC and –D/DR antigens in the unfixed human testis. Haas GG Jr, et al. **Am J Reprod Immunol Microbiol** 1988 Oct;18(2):47–51

Evaluation of HLA expression on gametogenic cells isolated from human testis. Kowalik I, et al. **Andrologia** 1989 May–Jun;21(3):237–43

Characterization of two monoclonal antibodies raised against human testicular cells. Kurpisz M, et al. **Andrologia** 1988 Jul–Aug;20(4):304–10

Lectin–binding sites in normal human testis. Wollina U, et al. **Andrologia** 1989 Mar–Apr;21(2):127–30

Immunologic mechanisms and target antigens in testicular autoimmunity. Tung KS, et al. **Ann N Y Acad Sci** 1989; 564:267–80

Evidence for the presence of testicular tissue and Sxs antigen in the absence of Y-derived sequences. Wiberg UH, et al. **Development** 1987;101 Suppl:163–6
Microvascular permeability to IgG in the rat testis at puberty. Pöllänen PP, et al. **Int J Androl** 1989 Jun;12(3):206–18
A testis-specific antigen of the C57BL/6 mouse. Mikami O, et al. **J Reprod Immunol** 1989 May;15(2):123–39
Immunophenotyping to detect and characterize acute lymphocytic leukemia in testicular biopsies. Verdi CJ, et al. **Pediatr Pathol** 1989;9(2):117–30
Molecular structure and functional characterization of a human complement cytolysis inhibitor found in blood and seminal plasma: identity to sulfated glycoprotein 2, a constituent of rat testis fluid. Jenne DE, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7123–7
The testis: an 'immunologically suppressed' tissue? Hedger MP. **Reprod Fertil Dev** 1989;1(1):75–9 (31 ref.)
Contralateral testicular disease after unilateral testicular injury: current concepts. Tarter TH, et al. **Semin Urol** 1988 May;6(2):120–39 (181 ref.)
Testicular immunosuppressive peptide. Pöllänen P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1144–6

INJURIES

Bilateral testicular atrophy following blunt trauma. MacDermott JP, et al. **Br J Urol** 1989 Feb;63(2):215–6
Bilateral testicular injury from external trauma. Cass AS, et al. **J Urol** 1988 Dec;140(6):1435–6
Nonpenetrating gunshot injury as a cause of testicular rupture. Willis DL, et al. **J Urol** 1988 Dec;140(6):1543–4
Impregnated via a bullet? [letter] Gordon AC, et al. **Lancet** 1989 Apr 1;1(8640):737
Effects of radiation therapy and chemotherapy on testicular function. Kinsella TJ. **Prog Clin Biol Res** 1989;302:157–71; discussion 172–7 (37 ref.)
Pyocele of scrotum: consequence of spontaneous rupture of testicular abscess. Slavis SA, et al. **Urology** 1989 Apr; 33(4):313–6
[The effect of unilateral testicular damage on the contralateral testis: an experimental study] Lin AT, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Nov;40(5):437–42 (Eng. Abstr.) **(Chi)**
[Injuries of the testis in children] Sauvage P, et al. **Chir Pediatr** 1988;29(2–3):136–41 (Eng. Abstr.) **(Fre)**
[A case of traumatic rupture of the testicle] Matsuda H, et al. **Hinyokika Kiyo** 1989 Mar;35(3):513–6 (17 ref.) (Eng. Abstr.) **(Jpn)**
[Treatment of acute testicular diseases in childhood] Solov'ev AE. **Klin Khir** 1988;(6):30–4 (Eng. Abstr.) **(Rus)**

INNERVATION

Neuropeptide Y-containing nerves in rat gonads: sex difference and development. Allen LG, et al. **Biol Reprod** 1989 Feb;40(2):371–8
Target regulation of the serotonin and substance P innervation of the sexually dimorphic cremaster nucleus. Newton BW, et al. **Brain Res** 1989 Apr 17;485(1):149–56
Modulation of testicular polymodal receptor activities. Kumazawa T, et al. **Prog Brain Res** 1988;74:325–30

METABOLISM

Binding overlap and internalization of gonadotropin and thyrotropin in neonatal rat testicle and ovary cell cultures and the Chinese hamster ovary (CHO) cell line. Gruszczynska M, et al. **Acta Biol Hung** 1988;39(1):39–47
Inhibitory actions of interleukin-1 beta on steroidogenesis in primary cultures of neonatal rat testicular cells. Fauser BC, et al. **Acta Endocrinol (Copenh)** 1989 Apr;120(4):401–8
Increases in testosterone secretion in adult rams with immunoneutralization of endogenous estradiol occur in the absence of increases in pulsatile LH release or testicular LH receptors. Sanford LM. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):180–6
Characterization of specific insulin binding sites in rat testis following induced diabetes and experimental starvation. Kanwar KC, et al. **Acta Eur Fertil** 1989 Jan–Feb; 20(1):39–42
Detection of cholecystokinin in spermatogenic cells. Persson H, et al. **Acta Physiol Scand** 1988 Dec;134(4):565–6
Hachimijiogan produces testosterone in adult rat testes. Usuki S. **Am J Chin Med** 1988;16(3–4):93–105
Experimental syphilitic orchitis. Relationship between Treponema pallidum infection and testis synthesis of proteoglycans. Strugnell RA, et al. **Am J Pathol** 1988 Oct; 133(1):110–7
Modulation of rat testes lipid composition by hormones: effect of PRL and hCG. Sebokova E, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E442–8
Localization of inhibin in human testes by immunoperoxidase technique. Garde SV, et al. **Anat Rec** 1988 Dec; 222(4):357–61
The effect of dibromochloropropane (DBCP) on in vitro cyclic AMP levels and testosterone production in rat testes. Chayoth R, et al. **Andrologia** 1988 May–Jun;20(3):232–7
Lectin-binding sites in testis of men with acrosomeless round-headed spermatozoa. Wollina U, et al. **Andrologia** 1989 May–Jun;21(3):271–4
Biochemical changes in testicular varicocele. Fujisawa M, et al. **Arch Androl** 1989;22(2):149–59 (65 ref.)
DNA and RNA synthesis by postpubertal undescended testis in vitro. Nakamura M, et al. **Arch Androl** 1989;22(1):91–4
Impaired DNA synthesis by early pubertal cryptorchid testis in vitro. Nakamura M, et al. **Arch Androl** 1989;22(2):137–41
Effect of estrogen treatment on testicular gonadotropin receptors in prostatic cancer patients. Namiki M, et al. **Arch Androl** 1987;19(3):249–52
Induction of testicular DNA synthesis in vitro by hCG and hMG treatments in men with hypogonadotropic hypogonadism. Okuyama A, et al. **Arch Androl** 1989; 23(1):39–43
In vitro responsiveness of human testicular DNA synthesis to gonadotropins. Okuyama A, et al. **Arch Androl** 1989; 22(2):161–5
Retinoic acid synthesis by cytosol from the alcohol dehydrogenase negative deermouse. Posch KC, et al. **Arch Biochem Biophys** 1989 Oct;274(1):171–8
Isolation of 11 beta-hydroxylated androgens from testicular vein blood of the mature boar. Raeside JI, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1194–9
Intracellular distribution of pregnenolone metabolites in testis of macaque (Macaca fascicularis). Kwan TK, et al. **Biochem Int** 1988 Nov;17(5):885–94
Testosterone response in arginine vasopressin desensitized immature rat testis. Reddy BV, et al. **Biochem Int** 1989 Feb;18(2):325–33
Interaction of rat testis protein, TP, with nucleosome core particle. Singh J, et al. **Biochem Int** 1988 Oct;17(4):701–10
Specific accumulation of 17 alpha-hydroxyprogesterone in microsomal membranes during the process of cytochrome P-450(C-17)-catalysed androgen biosynthesis. A dynamic study of intermediate formation and turnover. Kühn-Velten N, et al. **Biochem J** 1988 Nov 15;256(1):53–9
Extraction of AZT and dideoxynucleosides by rat prostate but not testis. Sakiyama R, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):1009–11
Effects of cholesteryl esters on the accessibility of LH/hCG receptors and membrane lipid fluidity in rat testes. Kolena J, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):279–86
Steroid profiling in the study of rat testicular steroidogenesis. Kwan TK, et al. **Biochim Biophys Acta** 1988 Sep 23; 962(2):214–9
Poly(ADP-ribosylation) of nuclear proteins in rat testis correlates with active spermatogenesis. Quesada P, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):167–75
Mature rat testis contains a high molecular weight species of phosphatidylinositol transfer protein. Thomas PJ, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):24–30
Short-term pituitary-testicular responses of prepubertal ram lambs to hemicastration. Brown JL, et al. **Biol Reprod** 1988 Nov;39(4):854–61
Phospholipases modulate the rat testicular androgen biosynthetic pathway in vitro. Cooke GM, et al. **Biol Reprod** 1988 Sep;39(2):329–39
The steroidogenic characteristics of primary testicular cell cultures from adult hypophysectomized rats: enhanced formation of C21 steroids. Payne DW, et al. **Biol Reprod** 1988 Oct;39(3):581–91
The follicle-stimulating hormone (FSH) receptor in testis: interaction with FSH, mechanism of signal transduction, and properties of the purified receptor. Reichert LE Jr, et al. **Biol Reprod** 1989 Jan;40(1):13–26 (80 ref.)
Expression of RNAs for calmodulin, actins, and tubulins in rat testis cells. Slaughter GR, et al. **Biol Reprod** 1989 Feb; 40(2):395–405
Transepithelial movement of 3H-androgen in seminiferous and epididymal tubules: a study using in vivo micropuncture and in vivo microperifusion. Turner TT. **Biol Reprod** 1988 Sep;39(2):399–408
Down-regulation of testicular aromatization in the horse. Zwain I, et al. **Biol Reprod** 1989 Mar;40(3):503–10
Metallothionein-like cadmium binding protein in rat testes administered with cadmium and selenium. Ohta H, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):195–200
Sheep testicular gonadotropin binding sites: characterization and changes with surgical shortening of the scrotum. Yarney TA, et al. **Can J Physiol Pharmacol** 1988 Oct; 66(10):1319–27
Steroidogenesis in fetal bovine gonads. Dominguez MM, et al. **Can J Vet Res** 1988 Oct;52(4):401–6
Isolation and characterization of the 36-kDa D-mannose 6-phosphate receptor from porcine testis. Baba T, et al. **Carbohydr Res** 1988 Jun 15;177:153–61
The entry of gossypol across the blood-testis barrier in rats. Wang JM, et al. **Contraception** 1989 May;39(5):569–75
Spironolactone metabolism in target tissues. Characteristics of deacetylation in kidney, liver, adrenal cortex, and testes. Flowers NL, et al. **Drug Metab Dispos** 1989 Mar–Apr; 17(2):186–9
A 14 bp promoter element directs the testis specificity of the Drosophila beta 2 tubulin gene. Michiels F, et al. **EMBO J** 1989 May;8(5):1559–65
Inhibitory effect of glycyrrhetinic acid on testosterone production in rat gonads. Sakamoto K, et al. **Endocrinol Jpn** 1988 Apr;35(2):333–42
Stage dependent expression of inhibin alpha and beta-B subunits during the cycle of the rat seminiferous epithelium. Bhasin S, et al. **Endocrinology** 1989 Feb;124(2):987–91
In vivo evidence for a direct effect of naloxone on testicular steroidogenesis in the male rat. Cicero TJ, et al. **Endocrinology** 1989 Aug;125(2):957–63
Fibroblast growth factor inhibits luteinizing hormone-stimulated androgen production by cultured rat testicular cells. Fauser BC, et al. **Endocrinology** 1988 Dec; 123(6):2935–41
In vivo and in vitro production of inhibin by cryptorchid testes from adult rats. Gonzales GF, et al. **Endocrinology** 1989 Apr;124(4):1661–8
Hormonal regulation of rat testicular arginine vasopressin receptors. Kasson BG, et al. **Endocrinology** 1989 Jun; 124(6):2777–84
Effect of long term deprivation of luteinizing hormone on Leydig cell volume, Leydig cell number, and steroidogenic capacity of the rat testis. Keeney DS, et al. **Endocrinology** 1988 Dec;123(6):2906–15
Regulation of testicular inhibin subunit messenger ribonucleic acid levels in vivo: effects of hypophysectomy and selective follicle-stimulating hormone replacement. Krummen LA, et al. **Endocrinology** 1989 Sep;125(3):1630–7
Histamine affects testicular steroid production in the golden hamster. Mayerhofer A, et al. **Endocrinology** 1989 Jul; 125(1):560–2
Regulation of Sertoli cell differentiated function: testicular transferrin and androgen-binding protein expression. Skinner MK, et al. **Endocrinology** 1989 Jun;124(6):3015–24
Identification of the cytochrome P-450 isozymes responsible for testosterone oxidation in rat lung, kidney, and testis: evidence that cytochrome P-450a (P450IIA1) is the physiologically important testosterone 7 alpha-hydroxylase in rat testis. Sonderfan AJ, et al. **Endocrinology** 1989 Aug; 125(2):857–66
Characterization of adenosine binding sites in bovine testicular tissue using 8-cyclopentyl-1,3-[3H]dipropylxanthine. Cushing DJ, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):353–6
Steroid metabolism in the testes of the breeding and nonbreeding three-spined stickleback, Gasterosteus aculeatus. Borg B, et al. **Gen Comp Endocrinol** 1989 Jan; 73(1):40–5
Seasonal fluctuations of estrogen-binding activity in the testis of the frog, Rana esculenta. Fasano S, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):157–61
The localization of oxytocin and mesotocin in the reproductive tract of the male marsupial bandicoot Isoodon macrourus. Gemmell RT, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):103–9
Biosynthetic pathways of testosterone and estradiol-17 beta in slices of the embryonic ovary and testis of the chicken (Gallus domesticus). Imataka H, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):69–79
Gonadotropin stimulation of K+ secretion and Na+ absorption by brook trout (Salvelinus fontinalis) sperm duct epithelium. Marshall WS, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):118–28
Seasonal variations in testicular germ cell stages and in plasma concentrations of sex steroids in male rainbow trout (Salmo gairdneri) maturing at 2 years old. Scott AP, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):46–58
Plasma LH and gonadal LH-binding cells in normal and surgically decapitated chick embryos. Woods JE, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):1–13
Influence of age at exposure on concentrations of 239Pu in beagle gonads. Miller SC, et al. **Health Phys** 1989 Apr; 56(4):485–91
Changes in lectin binding pattern of gonads of developing mice. Kanai Y, et al. **Histochemistry** 1989;92(1):37–42
Comparison of LR white resin, Lowicryl K4M and Epon postembedding procedures for immunogold staining of actin in the testis. Kann ML, et al. **Histochemistry** 1989; 91(3):221–6
Prolonged intratesticular islet allograft survival is not dependent on local steroidogenesis. Selawry HP, et al. **Horm Metab Res** 1988 Sep;20(9):562–5
Reduction of testicular human chorionic gonadotropin receptors by human chorionic gonadotropin in vivo and in vitro. Namiki M, et al. **Horm Res** 1988;29(4):156–61
Glutathione peroxidase and catalase in liver, kidney, testis and brain regions of rats following cadmium exposure and subsequent withdrawal. Shukla GS, et al. **Ind Health** 1989; 27(2):59–69
Suppression of LH levels in male rats by a 10 K dalton peptide isolated from human testes. Hurkadli KS, et al. **Indian J Exp Biol** 1988 Jul;26(7):513–5
Treatment with an LHRH agonist or hCG increases interstitial fluid volume and permeability to Evans blue in the mouse testis. Bergh A, et al. **Int J Androl** 1988 Oct; 11(5):449–56
Synthesis of extracellular matrix components by somatic testicular cells from immature and pubertal rats. Rodríguez JP, et al. **Int J Androl** 1989 Jun;12(3):231–9
Arachidonic acid metabolism by perfused ram testis. Schön I, et al. **Int J Biochem** 1989;21(1):7–13
Facilitory role of thyroid hormone in vitamin A uptake in the rat testes. Rajguru S, et al. **Int J Vitam Nutr Res** 1989; 59(2):107–12
Radioautographic localization of atrial natriuretic factor receptors in the rat testis. Pelletier G. **J Androl** 1988 Sep-Oct;9(5):352–5
The testicular response to hemicastration in the male rat cannot be maintained in vitro. Frankel AI, et al. **J Endocrinol** 1989 Apr;121(1):43–8
Testosterone concentrations in testicular interstitial fluid collected with a push-pull cannula or by drip-collection from adult rats given testosterone or aminoglutethimide. Maddocks S, et al. **J Endocrinol** 1989 May;121(2):303–9
Testicular steroid metabolism during development in the

normal and hypogonadal mouse. Sheffield JW, et al. **J Endocrinol** 1988 Nov;119(2):257–64

Comparative binding of FSH to chicken and rat testis. Gordon WL, et al. **J Endocrinol Invest** 1989 Jun; 12(6):383–92

Comparative effects of ketoconazole on rat, dog and human testicular steroidogenesis. De Coster R, et al. **J Enzym Inhib** 1989;2(4):261–8

Changes in the testicular binding of luteinizing hormone and plasma testosterone concentrations in the Djungarian hamster subjected to different photoperiods and temperatures and effects of long-term testosterone treatment on the binding. Tsutsui K, et al. **J Exp Zool** 1989 Jul;251(1):91–100

Age-related deposition of amyloid P component in normal human testis. Herriot R, et al. **J Pathol** 1989 Jan;157(1):11–4

The composition of extracellular interstitial fluid collected with a push-pull cannula from the testes of adult rats. Maddocks S, et al. **J Physiol (Lond)** 1988 Dec;407:363–72

Changes of enzymes involved in DNA synthesis in the testes of cryptorchid rats. Fujisawa M, et al. **J Reprod Fertil** 1988 Sep;84(1):123–30

Evaluation of the possible direct effects of gonadotrophin-releasing hormone analogues on the monkey (Macaca mulatta) testis. Mann DR, et al. **J Reprod Fertil** 1989 Jan;85(1):89–95

Absence of direct effects of GnRH on testicular steroid secretion in the ram. Meijer JC, et al. **J Reprod Fertil** 1989 Jul;86(2):517–24

Effect of injection of gonadotrophin-releasing hormone on testicular steroidogenesis in the hypogonadal (hpg) mouse. Sheffield JW, et al. **J Reprod Fertil** 1989 Jul;86(2):609–17

Synthesis and aromatization of 19-norandrogens in the stallion testis. Dintinger T, et al. **J Steroid Biochem** 1989 Apr;32(4):537–44

Evidence for an androgen binding protein in the testis of a teleost fish (Salmo gairdneri R.): a potential marker of Sertoli cell function. Foucher JL, et al. **J Steroid Biochem** 1989 Apr;32(4):545–52

Specificity of steroid binding to testicular microsomal cytochrome P-450. Relation of steroid structure to type-I spectral responses after correction for hydrophobic association with the membrane. Kühn-Velten N, et al. **J Steroid Biochem** 1989 Jul;33(1):33–9

Effect of 3-week treatment with [D-Trp6, des-Gly-NH10(2)]LHRH ethylamide, aminoglutethimide, ketoconazole or flutamide alone or in combination on testicular, serum, adrenal and prostatic steroid levels in the dog. Lacoste D, et al. **J Steroid Biochem** 1989 Aug; 33(2):233–42

The mechanism of the synthesis of 16-androstenes in human testicular homogenates. Weusten JJ, et al. **J Steroid Biochem** 1989 May;32(5):689–94

Characterization and localization of in vivo phospholipid methylation in the hamster testis. Schlegel PN, et al. **J Urol** 1989 Jun;141(6):1483–7

Effect of transforming growth factor-beta on human chorionic gonadotropin induced testosterone production by cultured rat testicular cells. Fauser BC, et al. **Life Sci** 1988;43(17):1363–70

Location of double bonds in fatty acids of fish oil and rat testis lipids. Gas chromatography–mass spectrometry of the oxazoline derivatives. Yu QT, et al. **Lipids** 1989 Jan; 24(1):79–83

Identification and developmental expression of a smooth-muscle gamma-actin in postmeiotic male germ cells of mice. Kim E, et al. **Mol Cell Biol** 1989 May; 9(5):1875–81

In vitro synthesis and release of inhibin in response to FSH stimulation by isolated segments of seminiferous tubules from normal adult male rats. Gonzales GF, et al. **Mol Cell Endocrinol** 1988 Oct;59(3):179–85

The effect of insulin on inhibin production in isolated seminiferous tubule segments from adult rats cultured in vitro. Gonzales GF, et al. **Mol Cell Endocrinol** 1989 Feb; 61(2):209–16

Pertussis toxin enhances follicle-stimulating hormone-stimulated cAMP production in rat seminiferous tubules in a stage-dependent manner. Huhtaniemi I, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):89–94

Effect of ethane dimethane sulphonate on proopiomelanocortin (POMC) mRNA and POMC-derived peptides in the rat testis. Li H, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):203–7

The albumin fraction of rat testicular fluid stimulates steroid production by isolated Leydig cells. Meisert R, et al. **Mol Cell Endocrinol** 1988 Oct;59(3):221–31

The androgen-binding protein gene is expressed in CD1 mouse testis. Wang YM, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):85–92

Regulation of urokinase- and tissue-type plasminogen activator gene expression in the rat seminiferous epithelium. Vihko KK, et al. **Mol Endocrinol** 1989 Jan;3(1):52–9

An abundant testis RNA species shows sequence similarity to Y chromosomal and other genomic sites in Drosophila hydei. Brand RC, et al. **Mol Gen Genet** 1989 Feb; 215(3):469–77

Isolation and characterization of small phosphorylated peptides controlling transcription "in vitro" from trout testis chromatin DNA. Coderoni S, et al. **Physiol Chem Phys Med NMR** 1988;20(2):91–108

Growth factors in human testis. Ultrastructural demonstration of receptor-mediated endocytosis. Balboni GC, et al. **Prog Clin Biol Res** 1989;296:197–206

Effects of pinealectomy and melatonin or 5-methoxytryptamine on testicular LH and PRL receptors in Syrian hamsters (Mesocricetus auratus). Amador AG, et al. **Rev Esp Fisiol** 1988 Mar;44(1):81–6

Characteristics and stage-dependent distribution of a novel steroid binding protein in the testis of Squalus acanthias. Callard GV, et al. **Steroids** 1988 Oct;52(4):359–60

Influence of endogenous prolactin on the luteinizing hormone stimulation of testicular steroidogenesis and the role of prolactin in adult male rats. Chandrashekar V, et al. **Steroids** 1988 May-Jun;51(5–6):559–76

Formation of 5,16-androstadien-3 beta-ol from pregnenolone in human testicular microsomes. Kohara H. **Steroids** 1988 Sep;52(3):295–309

Testosterone blood content is regulated by testicular aromatization-conjugation in the stallion. Silberzahn P, et al. **Steroids** 1988 Oct;52(4):353–4

[Reduction of germ cell number induced in vitro by the testis in fetal rat ovary may be caused by factors other than anti-Müllerian hormone] Charpentier G, et al. **C R Acad Sci [III]** 1989;309(1):35–42 (Eng. Abstr.) **(Fre)**

[Down-regulation of rat and human testicular hCG receptors by hCG] Namiki M, et al. **Hinyokika Kiyo** 1988 Oct; 34(10):1771–5 (Eng. Abstr.) **(Jpn)**

[Temperature influence on testicular function--effect of temperature on DNA synthesis by human testis in-vitro] Nakamura M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1653–6 (Eng. Abstr.) **(Jpn)**

[Seasonal fluctuations of the testicular androgenic function in rats] Tarasenko LV, et al. **Fiziol Zh** 1989 Mar-Apr; 35(2):107–9 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Transmission of Salmonella enteritidis in poultry [letter] Bygrave AC, et al. **Vet Rec** 1989 May 27;124(21):571

PATHOLOGY

The management of retained testis based on our investigations. Gervain M, et al. **Acta Chir Hung** 1988; 29(2):117–29

The hypoechoic band: a normal finding on testicular sonography. Fakhry J, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):321–3

Society of Uroradiology Award paper. The pars infravaginalis gubernaculi: importance in the identification of the undescended testis. Rosenfield AT, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):775–8

Ultrasonographic evaluation of induced testicular lesions in male goats. Eilts BE, et al. **Am J Vet Res** 1989 Aug; 50(8):1361–4

The testes in cadmium intoxication: morphological and vascular aspects. Gouveia MA. **Andrologia** 1988 May-Jun; 20(3):225–31

Thecal metaplasia in the adrenal gland of a man with acquired bilateral testicular atrophy. Romberger CF, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):1071–5

Testicular atrophy and loss of nerve growth factor-immunoreactive germ cell line in rats exposed to n-hexane and a protective effect of simultaneous exposure to toluene or xylene. Nylén P, et al. **Arch Toxicol** 1989; 63(4):296–307

Morphology of testicular germ cell tumours in treated and untreated cryptorchidism. Halme A, et al. **Br J Urol** 1989 Jul;64(1):78–83

Testicular and epididymal histology in a fetus with Klinefelter's syndrome at 22 weeks' gestation. Jequier AM, et al. **Br J Urol** 1989 Feb;63(2):214–5

Histopathological changes in adult cryptorchid testes. Ozen H, et al. **Br J Urol** 1989 May;63(5):520–1

The fate of testes following unilateral incarcerated inguinal hernia in adult rats. Tanyel FC, et al. **Br J Urol** 1989 Aug; 64(2):176–9

Pattern of compartmentation in human seminiferous tubules showing dislocation of spermatogonia. Bergmann M, et al. **Cell Tissue Res** 1989 Apr;256(1):183–90

Focal disruption of spermatogenesis in the testis of adult rats after a single administration of human chorionic gonadotrophin. Kerr JB, et al. **Cell Tissue Res** 1989 Jul; 257(1):163–9

Low testosterone levels in diabetic men and animals: a possible role in testicular impotence. Fushimi H, et al. **Diabetes Res Clin Pract** 1989 May 15;6(4):297–301

Restoration of advanced spermatogenic cells in the experimentally regressed rat testis: quantitative relationship to testosterone concentration within the testis. Awoniyi CA, et al. **Endocrinology** 1989 Mar;124(3):1217–23

Hormonal pattern and testicular histology in patients with prostatic cancer after long-term treatment with a gonadotropin-releasing hormone agonist analogue. Giberti C, et al. **Eur Urol** 1988;15(1–2):125–7

A classification for intravaginal torsion of the testis. Ishizuka E, et al. **Eur Urol** 1988;15(1–2):108–12

Sonographic appearance of benign intratesticular lesions. Kratzik C, et al. **Eur Urol** 1988;15(3–4):196–9

Studies on the size of human male gonad in biomorphosis, alcohol intoxication, and cirrhosis--a review and own findings. Sośnik H. **Gegenbaurs Morphol Jahrb** 1988; 134(5):733–61

The testicular lesion and sexual differentiation in congenital lipoid adrenal hyperplasia. Ogata T, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):531–8

Development of the seminiferous epithelium during and after treatment for acute lymphoblastic leukemia in childhood. Müller J, et al. **Horm Res** 1988;30(2-3):115–20

Testicular atrophy in AIDS: a study of 57 autopsy cases. De Paepe ME, et al. **Hum Pathol** 1989 Mar;20(3):210–4

Testicular atrophy in homosexual AIDS patients: an immune-mediated phenomenon? De Paepe ME, et al. **Hum Pathol** 1989 Jun;20(6):572–8

Male gonads in leprosy--a clinico-pathological study. Nigam P, et al. **Indian J Lepr** 1988 Jan;60(1):77–83

A critical evaluation of testicular biopsy. Ranadive NU, et al. **Indian J Pathol Microbiol** 1988 Jul;31(3):210–5

A modification of testicular biopsy reporting. Fidas-Kamini A, et al. **Int J Androl** 1988 Dec;11(6):473–7

Restricted lesions after testicular biopsies in young and adult rats. Sjögren I, et al. **Int J Androl** 1988 Dec;11(6):525–31

Semen biochemistry studies in men with macro-orchidism. Padrón RS. **Int J Fertil** 1986 Mar-Apr;31(1):56–8

Testicular volume and seminal fluid profile in fertile and infertile males in Ilorin, Nigeria. Sobowale OB, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):155–61

Thermosensitization by step-down heating in mouse testis. Marigold JC, et al. **Int J Hyperthermia** 1989 May-Jun; 5(3):371–6

The influence of various aetiopathogenetic factors on testicular function. Lábady F, et al. **Int Urol Nephrol** 1989; 21(1):63–72

A histological study of the gonads of T16H/XSxr hermaphrodite mice. Ward HB, et al. **J Anat** 1988 Jun; 158:65–75

Steroid metabolism and morphologic features of the human testis. Fredricsson B, et al. **J Androl** 1989 Jan-Feb; 10(1):43–9

Mechanism of testicular atrophy induced by di-n-butyl phthalate in rats. Part 1. Fukuoka M, et al. **J Appl Toxicol** 1989 Aug;9(4):277–83

Mesothelioma in the tunica vaginalis of a bull. Sutton RH. **J Comp Pathol** 1988 Jul;99(1):78–82

Low temperature in the golden hamster accelerates the gonadal atrophy induced by short photoperiod but does not affect the daily pattern of melatonin secretion. Pévet P, et al. **J Neural Transm** 1989;76(2):119–28

Familial bulbo-spinal muscular atrophy associated with testicular atrophy and sensory neuropathy (Kennedy-Alter-Sung syndrome). Autopsy case report of two brothers. Nagashima T, et al. **J Neurol Sci** 1988 Nov; 87(2-3):141–52

Glandular changes in the rete testis: metastatic tumour or adenomatous hyperplasia? [letter] Channer JL, et al. **J Pathol** 1989 Jan;157(1):81–2

The influence of experimentally induced copper deficiency on the fertility of rams. II. Macro- and microscopic changes in the testes. Van Niekerk FE, et al. **J S Afr Vet Assoc** 1989 Mar;60(1):32–5

Effects of parenteral di-(2-ethylhexyl)phthalate (DEHP) on gonadal biochemistry, pathology, and reproductive performance of mice. Agarwal DK, et al. **J Toxicol Environ Health** 1989;26(1):39–59

Large-cell calcifying Sertoli cell tumor. Buchino JJ, et al. **J Urol** 1989 Apr;141(4):953–4

Needle biopsy in the diagnosis of testicular leukemia in children. Gill B, et al. **J Urol** 1989 May;141(5):1169–71

Testicular and vascular changes in children and adults with varicocele. Hadziselimovic F, et al. **J Urol** 1989 Aug;142(2 Pt 2):583–5; discussion 603–5

Postnatal testicular maldevelopment in unilateral cryptorchidism. Huff DS, et al. **J Urol** 1989 Aug;142(2 Pt 2):546–8; discussion 572

Testicular carcinoma in situ associated with rhabdomyosarcoma of the spermatic cord. Nistal M, et al. **J Urol** 1989 Aug;142(2):358–60

Malignant lymphoma of the testis: histological and immunohistological study of 28 cases. Nonomura N, et al. **J Urol** 1989 Jun;141(6):1368–71

Histologic analysis of orchiopexy in a cryptorchid rabbit model. Pryor JL, et al. **J Urol** 1989 Aug;142(2):413–7

The number of spermatogonia in various congenital testicular disorders. Saito S, et al. **J Urol** 1989 May;141(5):1166–8

Primary leiomyosarcoma of the testis. Yachia D, et al. **J Urol** 1989 Apr;141(4):955–6

Trauma-induced testicular torsion: ultrasonographic features and pathologic correlation. Sanders LM, et al. **JCU** 1989 Sep;17(7):538–41

Idiopathic macroorchidism. Truwit CL, et al. **JCU** 1989 Mar-Apr;17(3):200–5

Testicular adhesion: a potential complication from wedge testicular biopsy in childhood leukemia. Chan KW, et al. **Med Pediatr Oncol** 1988;16(5):366–7

Intratubular malignant germ cells in testicular biopsies: clinical course and identification by staining for placental alkaline phosphatase. Burke AP, et al. **Mod Pathol** 1988 Nov;1(6):475–9

The spectrum of histopathology of the testis in acquired immunodeficiency syndrome. Yoshikawa Y, et al. **Mod Pathol** 1989 May;2(3):233–8

Surgical pathology of the tunica vaginalis testis and embryologically related mesothelium. Walker AN, et al. **Pathol Annu** 1988;23 Pt 2:125–52 (58 ref.)

Stereometry of male gonad and the value of the topological

index of sudanophilic bodies (SLey). Correlative investigations. Sośnik H. **Patol Pol** 1988 Oct–Dec; 39(4):284–94

Mechanism of unusual cell enlargement in the testis of irradiated mouse following treatment with a radioprotective thiophosphate. Jaimala, et al. **Radiobiol Radiother (Berl)** 1988;29(4):429–33

Nonpalpable testes in young boys: evaluation with MR imaging. Kier R, et al. **Radiology** 1988 Nov;169(2):429–33

P–31 MR spectroscopy in assessing testicular torsion: rat model. Tzika AA, et al. **Radiology** 1989 Sep;172(3):753–7

The anatomy of gubernaculum testis and processus vaginalis in cryptorchidism. Johansen TE. **Scand J Urol Nephrol** 1988;22(2):101–5

Histological studies of gubernaculum testis taken during orchiopexies. Johansen TE, et al. **Scand J Urol Nephrol** 1988;22(2):107–8

Histopathology of the undescended testis. Mininberg DT. **Semin Urol** 1988 May;6(2):74–8 (16 ref.)

Effects of the benomyl metabolite, carbendazim, on the hypothalamic–pituitary reproductive axis in the male rat. Goldman JM, et al. **Toxicology** 1989 Jul 17;57(2):173–82

Cyclosporine: its harmful effects on testicular function and male fertility. Seethalakshmi L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):928–30

Germ cell tumors of the testicle or 'orchidomata'. Haddad FS, et al. **Urol Int** 1989;44(1):20–4 (66 ref.)

Increased mast cells in the limiting membrane of seminiferous tubules in testes of patients with idiopathic infertility. Hashimoto J, et al. **Urol Int** 1988;43(3):129–32

Tumor volume, CT scan, lymphography, sonography, intravenous pyelography, and tumor markers in testis tumors. Wilbert DM, et al. **Urol Int** 1989;44(1):15–9

Effects of the ablation of the submaxillary gland on the rat testis. Pellegrini A, et al. **Z Mikrosk Anat Forsch** 1988; 102(5):760–8

Experimentally induced testicular alterations in boars: histological and ultrastructural findings. Malmgren L, et al. **Zentralbl Veterinarmed [A]** 1989 Jan;36(1):3–14

[Diseases of the testis and epididymis based on the biopsy materials of the Department of Pathological Anatomy of the Biomedical Research Institute] Mavrov Kh, et al. **Khirurgiia (Sofiia)** 1988;41(4):18–25 (Eng. Abstr.) **(Bul)**

[The relation of lesions of the testis and acute injury and chronic disease of the kidney] Kuang DY. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan;9(1):10–3, 3–4 (Eng. Abstr.) **(Chi)**

[The significance of carcinoma in situ in testicular biopsies] Mazanec K, et al. **Cas Lek Cesk** 1989 Apr 7;128(15):465–8 (Eng. Abstr.) **(Cze)**

[Histopathology of gonads in syndromes of abnormal sexual differentiation] Mazanec K, et al. **Cesk Patol** 1989 Mar; 25(1):54–60 (Eng. Abstr.) **(Cze)**

[Reduced numbers of germinal cells in prepubertal patients with ectopic testes] Moll M, et al. **Ugeskr Laeger** 1988 Oct 10;150(41):2467–9 (Eng. Abstr.) **(Dan)**

[Normal and pathologic aspects of the tunica vaginalis in ultrasonography] Martin B, et al. **Ann Radiol (Paris)** 1988; 31(7–8):410–7 (Eng. Abstr.) **(Fre)**

[Azoospermia with normal plasma FSH and unlowered seminal carnitine. Utilization for diagnosis and treatment] Soufir JC, et al. **Reprod Nutr Dev** 1988;28(5):1363–74 (Eng. Abstr.) **(Fre)**

[Ultrasound attenuation as a function of frequency in formalin fixed testicular tissue] Heynemann H, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(3):184–9 (Eng. Abstr.) **(Ger)**

[Findings on changes in the gonads in autopsy cases of AIDS] Badini A, et al. **Pathologica** 1988 Sep–Oct;80(1069):633–7 (Eng. Abstr.) **(Ita)**

[Histological and immunohistochemical aspects of the sterile testis] Martinazzi M, et al. **Pathologica** 1987 Nov–Dec; 79(1064):667–80 (Eng. Abstr.) **(Ita)**

[The prognostic significance of anaplastic variants in patients with testicular seminoma subjected to exclusive radiotherapy] Gardani G, et al. **Radiol Med (Torino)** 1989 May;77(5):524–9 (Eng. Abstr.) **(Ita)**

[Histological findings of the testis in male infertility] Miyake K. **Hinyokika Kiyo** 1988 Nov;34(11):1949–51 (Eng. Abstr.) **(Jpn)**

[Bilateral testicular biopsies and histological comparison of both testes] Tomoyoshi T, et al. **Hinyokika Kiyo** 1988 Nov; 34(11):1939–41 (Eng. Abstr.) **(Jpn)**

[Analysis of histological findings of testicular biopsies in male infertility] Yamaguchi Y, et al. **Hinyokika Kiyo** 1988 Nov; 34(11):1953–7 (Eng. Abstr.) **(Jpn)**

[Study on testicular tissue in animals with congenital hormone deficiency] Kuroda K. **Nippon Hinyokika Gakkai Zasshi** 1989 Jan;80(1):3–10 (Eng. Abstr.) **(Jpn)**

[A case of malakoplakia of the testis and epididymis] Moriyama N, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):740–3 (24 ref.) (Eng. Abstr.) **(Jpn)**

[Three cases of Klinefelter syndrome in childhood—endocrinological and gonadal changes in puberty] Shinohara M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):574–81 (Eng. Abstr.) **(Jpn)**

[Malignant lymphoma of the testis] Jarczok K, et al. **Pol Tyg Lek** 1988 May 30;43(22):723–4 (Eng. Abstr.) **(Pol)**

[Diagnostic and prognostic value of testicular biopsy in boys with acute lymphoblastic leukemia after chemotherapy] Koehler M, et al. **Pol Tyg Lek** 1988 Dec 12;43(50):1619–22 (Eng. Abstr.) **(Pol)**

[A case of testicular tumor of the Sertoli–Leydig cell type] Kuzaka B, et al. **Pol Tyg Lek** 1988 May 30;43(22):721–2 **(Pol)**

[Cytologic study of spermatogenesis in rats exposed to hypergravitation] Balkova. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):81–2 **(Rus)**

[Cyto–physiologic indicators of the status of the reproductive organs of male rats after 7–day immobilization stress and 7–day hypokinesia] Balkova OV. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):56–9 (Eng. Abstr.) **(Rus)**

[Effect of long–term hypokinesia on the androgenic system in rats] Kirillov OI, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):74–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effect of gonadal activity on the cranial dimorphism of the rat. Dahinten SL, et al. **Acta Anat (Basel)** 1988;132(4):324–6

Effect of pinealectomy on the undernutrition–induced suppression of the reproductive axis in rats. Chik CL, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):569–73

Endocrine effects of early non–union of testis and epididymis and of cryptorchidism in the rat. Johnansen TE, et al. **Andrologia** 1989 May–Jun;21(3):256–64

Regulation of testicular function. Signaling molecules and cell–cell communication. **Ann N Y Acad Sci** 1989;564:1–308

Inhibin structure and function in the testis. Bardin CW, et al. **Ann N Y Acad Sci** 1989;564:10–23 (44 ref.)

Different pleiotypic actions of seminiferous growth factor (SGF), acidic fibroblast growth factor (aFGF), and basic fibroblast growth factor (bFGF). Bellvé AR, et al. **Ann N Y Acad Sci** 1989;564:116–31 (46 ref.)

Inhibin and the regulation of testicular function. Historical and clinical aspects. Burger HG, et al. **Ann N Y Acad Sci** 1989;564:1–9 (63 ref.)

Characterization and function of adenosine receptors in the testis. Conti M, et al. **Ann N Y Acad Sci** 1989;564:39–47

Function of vitamin A in normal and synchronized seminiferous tubules. Griswold MD, et al. **Ann N Y Acad Sci** 1989;564:154–72 (47 ref.)

Expression of mouse protamine 1 genes in transgenic mice. Peschon JJ, et al. **Ann N Y Acad Sci** 1989;564:186–97

Oxytocin in the testis: what, where, and why? Pickering BT, et al. **Ann N Y Acad Sci** 1989;564:198–209

Testicular signaling: incoming and outgoing messages. Robaire B, et al. **Ann N Y Acad Sci** 1989;564:250–60 (49 ref.)

Germ cell–Sertoli cell interactions. Studies of cyclic protein–2 in the seminiferous tubule. Wright WW, et al. **Ann N Y Acad Sci** 1989;564:173–85

Peripubertal castration of male rats, adult open field ambulation and partner preference behavior. Brand T, et al. **Behav Brain Res** 1988 Sep 15;30(2):111–7

Influence of adult castration on the olfactory sensitivity of the male rat: a signal detection analysis. Doty RL, et al. **Behav Neurosci** 1989 Jun;103(3):691–4

Rat testis P–450(17)alpha cDNA: the deduced amino acid sequence, expression and secondary structural configuration. Namiki M, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):705–12

Phorbol ester regulates the abundance of enkephalin precursor mRNA but not of amyloid beta–protein precursor mRNA in rat testicular peritubular cells. Yoshikawa K, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):568–75

Structural characterization and localization of corticotropin–releasing factor in testis. Audhya T, et al. **Biochim Biophys Acta** 1989 Mar 16;995(1):10–6

Tissue–differential expression of two distinct genes for phosphoribosyl pyrophosphate synthetase and existence of the testis–specific transcript. Taira M, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):203–8

Long day photoperiods and temperature of 20 degrees C induce spermatogenesis in blinded and non–blinded marbled newts during the period of testicular quiescence. Fraile B, et al. **Biol Reprod** 1988 Oct;39(3):649–55

Partial characterization of the androgen receptor of the newborn rat gubernaculum. George FW, et al. **Biol Reprod** 1988 Oct;39(3):536–9

Catecholamine effects on testicular testosterone production in the gonadally active and the gonadally regressed adult golden hamster. Mayerhofer A, et al. **Biol Reprod** 1989 Apr;40(4):752–61

Bilateral transection of the lateral olfactory tract but not removal of the vomeronasal organs inhibits short–photoperiod–induced testicular regression in golden hamsters. Pieper DR, et al. **Brain Res** 1989 Apr 24; 485(2):382–90

Paraventricular nucleus projections mediating pineal melatonin and gonadal responses to photoperiod in the hamster. Smale L, et al. **Brain Res Bull** 1989 Feb; 22(2):263–9

Changes of basal and steroidal precursor–stimulated testosterone secretion in isolated Mongolian gerbil and guinea pig testes after a single episode of heating. Fenske M. **Comp Biochem Physiol [A]** 1989;93(4):857–60

Seasonal variation in steroid biosynthesis by the testis of the lizard Tiliqua Rugosa. Bourne AR, et al. **Comp Biochem Physiol [B]** 1978;59(4):363–7

Photoperiodically induced variation in testicular RNA, DNA and protein content in hamsters and ground squirrels. Greendyke SD, et al. **Comp Biochem Physiol [B]** 1979; 63(3):363–7

The influence of duration of photoperiod and hemicastration on growth and testicular and endocrine functions of boars. Minton JE, et al. **Domest Anim Endocrinol** 1988 Jan; 5(1):71–80

Gonadal regulation of LH secretion in prepubertal bull calves. Wise ME, et al. **Domest Anim Endocrinol** 1987 Jul; 4(3):175–81

Response to luteinizing hormone releasing hormone in postpubertal boars with large testes. Wolfe PL, et al. **Domest Anim Endocrinol** 1989 Jul;6(3):211–8

The maturational process of gonadotropin–releasing hormone neurons in the male rat: a role for the adrenal gland in the increase in secretory function. Barnea A, et al. **Endocrinology** 1988 Dec;123(6):2730–5

Further studies on the role of the gonads in determining the ontogeny of gonadotropin secretion in the guinea pig (Cavia porcelus). Fraser MO, et al. **Endocrinology** 1989 Aug;125(2):906–11

The effects of aprotinin on follicle–stimulating hormone binding and signal transduction in bovine calf testis. Grasso P, et al. **Endocrinology** 1989 Jul;125(1):117–25

Regulation of Sertoli cell function and differentiation through the actions of a testicular paracrine factor P–Mod–S. Norton JN, et al. **Endocrinology** 1989 Jun;124(6):2711–9

Transforming growth factor–alpha gene expression and action in the seminiferous tubule: peritubular cell–Sertoli cell interactions. Skinner MK, et al. **Endocrinology** 1989 Feb;124(2):845–54

Maintenance of advanced spermatogenic cells in the adult rat testis: quantitative relationship to testosterone concentration within the testis. Zirkin BR, et al. **Endocrinology** 1989 Jun;124(6):3043–9

Use of seminiferous tubule segments to study stage specificity of unscheduled DNA synthesis in rat spermatogenic cells. Bentley KS, et al. **Environ Mol Mutagen** 1988;12(3):285–97

Testis–specific histone H1t is truly a testis–specific variant and not a meiotic–specific variant. Markose ER, et al. **Exp Cell Res** 1989 May;182(1):279–83

Seasonal variation in testicular activity of roe deer (Capreolus capreolus). Marchlewska–Koj A, et al. **Folia Biol (Krakow)** 1988;36(1–2):119–25

Optimal replication for histometric analyses of testicular function in rats or rabbits. Berndtson WE, et al. **Fundam Appl Toxicol** 1989 Feb;12(2):291–302

Seasonal cycles in testicular activity in the frog, Rana perezi. Delgado MJ, et al. **Gen Comp Endocrinol** 1989 Jan; 73(1):1–11

Effects of photoperiod and temperature on gonadal maturation, and plasma steroid and gonadotropin levels in a cyprinid fish, the honmoroko Gnathopogon caerulescens. Okuzawa K, et al. **Gen Comp Endocrinol** 1989 Jul; 75(1):139–47

Properties of follicle–stimulating hormone receptors and changes during annual breeding cycle in the testis of short–tailed bandicoot rat, Nesokia indica. Tsutsui K, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):442–51

Hypothalamic regulation of the adenohypophyseal–testicular axis in the male chick embryo. Woods JE, et al. **Gen Comp Endocrinol** 1989 May;74(2):167–72

Development of the seminiferous epithelium during and after treatment for acute lymphoblastic leukemia in childhood. Müller J, et al. **Horm Res** 1988;30(2–3):115–20

Effect of pinealectomy and photoperiod on testis and thyroid gland of the Indian tropical palm–squirrel Funambulus pennanti. Haldar C, et al. **Indian J Exp Biol** 1988 Jul; 26(7):516–9

Pituitary and testicular function in the restricted (Hre) rat. Heindel JJ, et al. **Int J Androl** 1988 Aug;11(4):313–26

Effect of age and busulphan treatment on the hsp70 gene–related transcript level in rat testes. Krawczyk Z, et al. **Int J Androl** 1989 Feb;12(1):72–9

Sampling intensities and replication requirements for detection of treatment effects on testicular function in bulls and stallions: a statistical assessment. Berndtson WE. **J Anim Sci** 1989 Jan;67(1):213–25

Expression of a testis–specific hsp70 gene–related RNA in defined stages of rat seminiferous epithelium. Krawczyk Z, et al. **J Cell Biol** 1988 Oct;107(4):1317–23

Evidence that olfactory bulbectomy does not influence testicular regression in golden hamsters on short photoperiod by altering pineal melatonin production. Pieper DR, et al. **J Comp Physiol [B]** 1988;158(3):301–5

Steroids in equine testes: the identification of endogenous 19–hydroxy and 19–nor neutral steroids by gas chromatography—mass spectrometry. Dumasia MC, et al. **J Endocrinol** 1989 Feb;120(2):223–9

Testes are asymmetric in the testicular hemicastration response of the male rat. Frankel AI, et al. **J Endocrinol** 1989 Aug;122(2):485–8

Inhibin concentrations in the peripheral blood of rams during a cycle in testicular activity induced by changes in photoperiod or treatment with melatonin. Lincoln GA, et al. **J Endocrinol** 1989 Jan;120(1):R9–13

Interstitial fluid volume in the rat testis: androgen–dependent regulation by the seminiferous tubules? Maddocks S, et al. **J Endocrinol** 1989 Feb;120(2):215–22

Factors affecting the secretion of immunoactive inhibin into testicular interstitial fluid in rats. Sharpe RM, et al.

J Endocrinol 1988 Nov;119(2):315–26

A videomicrographic low–frequency movement analyser (VLMA) and perifusion chamber for recording and analysis of the physical behaviour of seminiferous tubules and other contractile tissues in vitro. Worley RT, et al. J Microsc 1988 Jul;151 (Pt 1):61–9

Gonadal regulation of pituitary hormone mRNA levels in male rats. Abbot SD, et al. J Mol Endocrinol 1988 Jul; 1(1):61–8

Effects of ionic calcium on the responses of canine testicular polymodal receptors to algesic substances. Sato J, et al. J Neurophysiol 1989 Jul;62(1):119–25

In vivo effect of melatonin and gonadotropin–releasing hormone on testicular function in Rana temporaria. Alonso–Bedate M, et al. J Pineal Res 1988;5(4):323–32

Long–term effects of pinealectomy on testicular function, luteinizing hormone–releasing hormone hypothalamic system, and plasma prolactin levels in the mink, a short–day breeder. Boissin–Agasse L, et al. J Pineal Res 1988; 5(4):385–96

Pineal gland and humidity effects on testicular function of the Indian palm squirrel, Funambulus pennanti. Haldar C, et al. J Pineal Res 1988;5(5):411–8

Growth factors as autocrine and paracrine modulators of male gonadal functions. Bellvé AR, et al. J Reprod Fertil 1989 Mar;85(2):771–93 (106 ref.)

Adrenal–pituitary–gonadal relationships and ejaculate characteristics in captive leopards (Panthera pardus kotiya) isolated on the island of Sri Lanka. Brown JL, et al. J Reprod Fertil 1989 Mar;85(2):605–13

Relationship of scrotal surface temperature measured by infrared thermography to subcutaneous and deep testicular temperature in the ram. Coulter GH, et al. J Reprod Fertil 1988 Nov;84(2):417–23

Testicular migration, spermatogenesis, temperature regulation and environment of the sheath–tail bat, Taphozous georgianus. Jolly SE, et al. J Reprod Fertil 1988 Nov;84(2):447–55

Evidence for a major role of inhibin in the feedback control of FSH in the male rat. Weinbauer GF, et al. J Reprod Fertil 1989 Mar;85(2):355–62

Neuroendocrine control of male reproductive function. The opioid system as a model of control at multiple sites. Fabbri A, et al. J Steroid Biochem 1989 Jan;32(1B):145–50 (58 ref.)

The role of the gubernaculum in testicular descent. Beasley SW, et al. J Urol 1988 Nov;140(5 Pt 2):1191–3

Testicular descent revisited. Lancet 1989 Feb 18; 1(8634):360–1 (24 ref.)

Hypertrophy of the thymus and restoration of immune functions in mice and rats by gonadectomy. Utsuyama M, et al. Mech Ageing Dev 1989 Mar;47(3):175–85

Summary of the 10th NIH–sponsored Testis Workshop held in Baltimore, MD, U.S.A., December 8–11, 1988. Ritzén M. Mol Cell Endocrinol 1989 Jun;64(1):1–3

A rat seminiferous epithelial factor that inhibits Leydig cell cAMP and testosterone production: mechanism of action, stage–specific secretion, and partial characterization. Vihko KK, et al. Mol Cell Endocrinol 1989 Aug;65(1–2):119–27

Molecular probes for general testicular and specific spermatogenic function. Krawetz SA, et al. Mol Cell Probes 1989 Jun;3(2):109–15

Effect of destruction of the lateral nucleus of the septum of the morpho–functional state of the reproductive system of albino male rats. Kirilyuk ML. Neurosci Behav Physiol 1988 Jul–Aug;18(4):286–9

Testicular hormones reduce individual differences in the aggressive behavior of male mice: a theory of hormone action. Johnson F, et al. Neurosci Biobehav Rev 1988 Summer;12(2):93–9 (55 ref.)

The physiology of the endocrine testis. Maddocks S, et al. Oxf Rev Reprod Biol 1988;10:53–123 (376 ref.)

Suppression of male rhesus testicular function and sexual behavior by a gonadotropin–releasing–hormone agonist. Davis–daSilva M, et al. Physiol Behav 1989 May; 45(5):963–8

Relationship between throat feather–color pattern and photodependency of testicular function in the athens randombred control line of Japanese quail. Burke WH, et al. Poult Sci 1988 Jul;67(7):1098–101

Value of testicular and sperm profiles in optimizing reproductive success: lessons learned from selective breeding programs of domestic and laboratory animals. Foote RH. Prog Clin Biol Res 1989;302:107–26 (114 ref.)

Evaluation of the human testis and its age–related dysfunction. Johnson L. Prog Clin Biol Res 1989;302:35–60; discussion 61–7 (156 ref.)

Sem observations of the male reproductive tract with special reference to epithelial phagocytosis. Murakami M, et al. Prog Clin Biol Res 1989;296:207–14

Aspects of the dynamics and ultrastructure of mammalian spermatogenesis. Plöen L. Prog Clin Biol Res 1989; 296:141–8 (9 ref.)

Secretion of activin by interstitial cells in the testis. Lee W, et al. Science 1989 Jan 20;243(4889):396–8

Hormonal treatment of cryptorchidism: role of pituitary gonadal axis. De Muinck Keizer–Schrama SM, et al. Semin Urol 1988 May;6(2):84–95 (101 ref.)

Mechanistic approaches in the study of testicular toxicity: toxicants that affect the endocrine regulation of the testis. Chapin RE, et al. Toxicol Pathol 1989;17(2):446–51 (49 ref.)

In–vitro contractility of human seminiferous tubules in response to testosterone, dihydrotestosterone and estradiol. Yamamoto M, et al. Urol Res 1989;17(4):265–8

[Paracrine regulation of testicular function] Demoulin A, et al. Acta Urol Belg 1989;57(1):47–58 (62 ref.) (Eng. Abstr.) (Fre)

[Gonadal opioids and testicular function] Engelhardt RP. Ann Endocrinol (Paris) 1989;50(1):64–72 (64 ref.) (Eng. Abstr.) (Fre)

[Andrological findings in adolescents with retractile testis] Raboch J, et al. Andrologia 1988 Sep–Oct;20(5):417–21 (Eng. Abstr.) (Ger)

[Influence of temperature on the function of the human testes] Namiki M, et al. Hinyokika Kiyo 1988 Oct;34(10):1767–70 (Eng. Abstr.) (Jpn)

[The role of melatonin in the regulation of functions of the genital system] Kniażewski B. Pol Tyg Lek 1988 Apr 25; 43(17):561–4 (40 ref.) (Eng. Abstr.) (Pol)

[Role of catecholaminergic systems of the bird brain in regulating gonadal function] Nikonenko AG, et al. Fiziol Zh 1988 Nov–Dec;34(6):45–9 (Eng. Abstr.) (Rus)

[Hemodynamics in waking rats undergoing testicular exposure to elevated temperature] Murashev AN, et al. Fiziol Zh SSSR 1988 Oct;74(10):1433–7 (Eng. Abstr.) (Rus)

[Effect of destruction of the lateral septal nucleus on the hormonal reserves of the hypothalamo–hypophyseo–testicular system] Reznikov AG, et al. Fiziol Zh SSSR 1988 Jun;74(6):798–801 (Eng. Abstr.) (Rus)

[Polymorphism of the response of the hypophyseo–gonadal system to the long–term administration of an agonist of luliberin] Goncharova ND, et al. Probl Endokrinol (Mosk) 1989 Mar–Apr;35(2):62–7 (Eng. Abstr.) (Rus)

[Effect of neonatal castration on the capacity of the cerebral neurons in the septal complex of male rats to bind sex steroids] Myslitskiĭ VF. Probl Endokrinol (Mosk) 1988 Nov–Dec;34(6):56–9 (Eng. Abstr.) (Rus)

[Role of adrenoreceptors in the activation of the mouse hypothalamo–pituitary testicular complex induced by the presence of a female] Naumenko EV, et al. Probl Endokrinol (Mosk) 1989 May–Jun;35(3):64–7 (Eng. Abstr.) (Rus)

[Seasonal characteristics of the functioning of the hypophysis–gonad system in the suslik Citellus parryi] Shvareva NV, et al. Zh Evol Biokhim Fiziol 1989 Jan–Feb; 25(1):52–9 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Allogenic bone marrow transplantation in adults: endocrine sequelae after 1–6 years. Benker G, et al. Acta Endocrinol (Copenh) 1989 Jan;120(1):37–42

Primordial birdheaded nanism associated with progressive ataxia, early onset insulin resistant diabetes, goiter and primary gonadal insufficiency. A new syndrome. Bangstad HJ, et al. Acta Paediatr Scand 1989 May;78(3):488–93

Stress and reproduction: physiologic and pathophysiologic interactions between the stress and reproductive axes. Rabin D, et al. Adv Exp Med Biol 1988;245:377–87 (98 ref.)

Effect of testicular torsion on contralateral testis and fertility in mature rats. Madgar I, et al. Arch Androl 1987; 19(3):237–41

Experimental model of varicocele. Shafik A, et al. Eur Urol 1989;16(4):298–303

The application of intrascrotal deep body temperature measurement for the noninvasive diagnosis of varicoceles. Yamaguchi M, et al. Fertil Steril 1989 Aug;52(2):295–301

Hypothalamic–pituitary–testicular axis in patients with hyperthyroidism. Rõjdmark S, et al. Horm Res 1988; 29(5–6):185–90

Alterations in testicular functions in patients of scrotal hydrocele. Singh MP, et al. Indian J Med Res 1989 Apr; 90:124–6

Long–term follow–up of testicular function following radiation therapy for early–stage Hodgkin's disease. Kinsella TJ, et al. J Clin Oncol 1989 Jun;7(6):718–24

Effect of short–term starvation on reproductive hormone gene expression, secretion and receptor levels in male rats. Bergendahl M, et al. J Endocrinol 1989 Jun;121(3):409–17

Testicular function in patients with testicular cancer treated with orchiectomy alone or orchiectomy plus cisplatin–based chemotherapy. Hansen PV, et al. J Natl Cancer Inst 1989 Aug 16;81(16):1246–50

Infertility in patients with testicular cancer: testis, tumor, or treatment? [editorial] Schilsky RL. J Natl Cancer Inst 1989 Aug 16;81(16):1204–5

Comparison of age–related changes in in vivo and in vitro measures of testicular steroidogenesis after acute cadmium exposure in the Sprague–Dawley rat. Phelps PV, et al. J Toxicol Environ Health 1989;27(1):95–105

Detection of testicular endocrine abnormalities and their correlation with serum antisperm antibodies in men following vasectomy. Fisch H, et al. J Urol 1989 May; 141(5):1129–32

Elevation of intratesticular and scrotal skin surface temperature in men with varicocele. Goldstein M, et al. J Urol 1989 Sep;142(3):743–5

Normal or early development of puberty despite gonadal damage in children treated for acute lymphoblastic leukemia [see comments] Quigley C, et al. N Engl J Med 1989 Jul 20;321(3):143–51. Comment in: N Engl J Med 1989 Jul 20;321(3):185–7

Testicular function of scrotal testes after the cryptorchidectomy in dogs with unilateral cryptorchidism. Kawakami E, et al. Nippon Juigaku Zasshi 1988 Dec; 50(6):1239–44

[Epididymal diseases and repercussions on testicular function] van de Casseye M, et al. Reprod Nutr Dev 1988; 28(5):1347–56 (Eng. Abstr.) (Fre)

[Disorders of the hypothalamo–hypophyseal–gonadal axis and erectile impotence (letter)] Krause W. Dtsch Med Wochenschr 1988 Nov 4;113(44):1739 (Ger)

[Pathophysiology of secondary testicular dysfunction] Parsch EM, et al. Hautarzt 1988 Dec;39(12):767–72 (38 ref.) (Eng. Abstr.) (Ger)

[Possible involvement of the renin–angiotensin system in reproduction. I. Occurrence and role in the male reproductive tract] Jentzsch KD, et al. Zentralbl Gynakol 1989;111(5):265–75 (52 ref.) (Eng. Abstr.) (Ger)

[Disorders of neuroendocrine regulation and of the hormonal reserves of the testes in rats during total overheating] Reznikov AG, et al. Fiziol Zh 1988 Jul–Aug;34(4):78–83 (Eng. Abstr.) (Rus)

[The role of disorders of mineralocorticoid function of the adrenal glands in the development of infertility in patients with left–side varicocele] Mazo EB, et al. Urol Nefrol (Mosk) 1989 Mar–Apr;(2):38–45 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Response of the seminiferous epithelium to scattered radiation in seminoma patients. Schlappack OK, et al. Cancer 1988 Oct 15;62(8):1487–91

Assessment of testicular function after acute and chronic irradiation: further evidence for an influence of late spermatids on Sertoli cell function in the adult rat. Pineau C, et al. Endocrinology 1989 Jun;124(6):2720–8

Leydig cell insufficiency after testicular irradiation for acute lymphoblastic leukemia. Brauner R, et al. Horm Res 1988; 30(2–3):111–4

The effect of 90Sr given to pregnant mice on spermatogenesis in the male offspring: a comparison with the effect on the ovaries in the female offspring. De Rooij DG, et al. Int J Radiat Biol 1989 Aug;56(2):151–9

Radiosensitization by nicotinamide in tumors and normal tissues: the importance of tissue oxygenation status. Horsman MR, et al. Int J Radiat Oncol Biol Phys 1989 May;16(5):1273–6

In–vivo radiotoxicity of DNA–incorporated 125I compared with that of densely ionising alpha–particles. Rao DV, et al. Lancet 1989 Sep 16;2(8664):650–3

Steroid hormone production in testis, ovary, and adrenal gland of immature rats irradiated in utero with 60Co. Inano H, et al. Radiat Res 1989 Feb;117(2):293–303

Inhibition of radiation induced changes in testicular RNA content by a thiophosphate. Jaimala. Radiobiol Radiother (Berl) 1989;30(2):163–6

Protective effect of hypoxia in the ram testis during single and split–dose X–irradiation. van Vliet J, et al. Radiother Oncol 1988 Sep;13(1):9–16

Effects of prenatal X–irradiation on postnatal testicular development and function in the Wistar rat: development/teratology/behavior/radiation. Jensh RP, et al. Teratology 1988 Nov;38(5):443–9

[Radiation dosage to the gonads in cranial computerized tomography in young children] Berndt L, et al. Kinderarztl Prax 1988 Dec;56(12):599–602 (Eng. Abstr.) (Ger)

[Scintigraphic studies of gonadal burden in radiosynoviortheses of the knee joint with yttrium 90] Wagener P, et al. Z Rheumatol 1988 Jul–Aug;47(4):201–4 (Eng. Abstr.) (Ger)

RADIOGRAPHY

[Ballography screening—it should save lives] Schei B. Tidsskr Nor Laegeforen 1989 Apr 10;109(10):1088–9 (Nor)

RADIONUCLIDE IMAGING

[Gamma–camera scintigraphy and radioimmunological study of the hormones of the hypophyseal–gonadal axis to evaluate testicular function in patients with hypogonadism and infertility] Sultanov S, et al. Akush Ginekol (Sofiia) 1989;28(2):64–6 (Eng. Abstr.) (Bul)

[Gamma–camera scintigraphy of the testes and the concentration of hormones of the hypophyseo–gonadal axis in patients with cryptorchism and infertility] Sultanova S, et al. Akush Ginekol (Sofiia) 1989;28(1):77–80 (Bul)

[The significance of testicular scintigraphy for the differential diagnosis of the acute scrotum] Bockisch A, et al. Nuklearmedizin 1989 Jun;28(3):84–7 (Eng. Abstr.) (Ger)

SECRETION

Mechanism of action of the factor(s) secreted by rat seminiferous tubules and inhibiting interstitial cell testosterone production in vitro. Syed V, et al. Acta Endocrinol (Copenh) 1988 Nov;119(3):427–34

Induction of renin–angiotensin system in human testis in vivo. Okuyama A, et al. Arch Androl 1988;21(1):29–35

Plasminogen activator secretion in the rat seminiferous epithelium after hypophysectomy and gonadotropin

treatment. Toppari J, et al. **Arch Androl** 1988;20(3):219–27
Changes in the pituitary–testicular axis function with age in normal adult males. Díaz Sánchez V, et al. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):309–17
Effects of photoperiod, beta-endorphin, and naloxone on in vitro secretion of testosterone in white-footed mouse (Peromyscus leucopus) testes. Knotts LK, et al. **Biol Reprod** 1988 Aug;39(1):205–12
In vitro-perifused rat testes secrete beta-endorphin and dynorphin: their effect on testosterone secretion. Margioris AN, et al. **Biol Reprod** 1989 Apr;40(4):776–84
The involvement of Leydig cells in the regulation of inhibin secretion by the testis. Drummond AE, et al. **Endocrinology** 1989 Jul;125(1):510–5
A study of the source of estradiol-17 beta in the bull. Henricks DM, et al. **Horm Metab Res** 1988 Aug;20(8):494–7
Culture patterns and sorting of rat Sertoli cell secretory proteins. Ueda H, et al. **J Cell Sci** 1988 Feb;89 (Pt 2):175–88
Dynamics of testosterone secretion by the rat testis: implications for measurement of the intratesticular levels of testosterone. Maddocks S, et al. **J Endocrinol** 1989 Jul; 122(1):323–9
The route of secretion of inhibin from the rat testis. Maddocks S, et al. **J Endocrinol** 1989 Jan;120(1):R5–8
Melatonin does not affect in vitro secretion of testosterone in white-footed mouse testis. Knotts LK, et al. **J Pineal Res** 1988;5(6):521–6
Growth factor activity in luminal fluids from the male reproductive tract of the ram, rat, tammar wallaby (Macropus eugenii) and Japanese quail (Coturnix coturnix japonica). Jones RC, et al. **J Reprod Fertil** 1989 Jul; 86(2):513–6
Evidence for a role of the Leydig cells in control of the intratesticular secretion of inhibin. Sharpe RM, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):243–7
[The hypothalamo–hypophyseal–gonadal system in men with myocardial infarction] Słowińska-Srzednicka J, et al. **Endokrynol Pol** 1987;38(6):429–37 (Eng. Abstr.) **(Pol)**

SURGERY

Undescended testis: how history and examination may influence treatment. MacKellar A. **Aust N Z J Surg** 1988 Aug;58(8):643–5
Intermittent torsion of the testis. Creagh TA, et al. **BMJ** 1988 Aug 20–27;297(6647):525–6
Testicular salvage and age-related delay in the presentation of testicular torsion. Barada JH, et al. **J Urol** 1989 Sep; 142(3):746–8
Orchiopexy: an experimental study of the effect of surgical technique on testicular histology. Bellinger MF, et al. **J Urol** 1989 Aug;142(2 Pt 2):553–5; discussion 572
Urethral replacement with tunica vaginalis: a pilot study. Khoury AE, et al. **J Urol** 1989 Aug;142(2 Pt 2):628–30; discussion 631
Orchiopexy of the high undescended testis by division of the spermatic vessels: a critical review of 38 selected transections. Kogan SJ, et al. **J Urol** 1989 Jun;141(6):1416–9
Semen analysis of patients who had orchidopexy at or after seven years of age. Puri P, et al. **Lancet** 1988 Nov 5; 2(8619):1051–2
The epithelial mounds of the distal epididymal tubule (zone 9) after new microsurgical models of tubulo–vasostomy. Study in the rat. Tritto G. **Reprod Nutr Dev** 1988; 28(5):1357–62
Surgical treatment of cryptorchidism. Rabinowitz R. **Semin Urol** 1988 May;6(2):96–102 (14 ref.)
Fowler–Stephens orchiopexy. Stephens FD. **Semin Urol** 1988 May;6(2):103–6
Testicular prostheses. Beer M, et al. **Urol Clin North Am** 1989 Feb;16(1):133–8
[Surgical protocol and intraoperative considerations in interventions on the testis] Benz G, et al. **Z Kinderchir** 1988 Aug;43(4):295–303 (Eng. Abstr.) **(Ger)**
[Testis endothesis surgery. Results of an ambulatory clinical evaluation study] Böhm WD, et al. **Z Urol Nephrol** 1989 May;82(5):253–8 (Eng. Abstr.) **(Ger)**
[Morphometric studies of the epididymal duct in the F-zone after apical mesotestis cutting] Blázquez C, et al. **Rev Esp Fisiol** 1988 Dec;44(4):423–7 (Eng. Abstr.) **(Spa)**

TRANSPLANTATION

Correlation of fetal kidney and testis congenic graft survival with reduced major histocompatibility complex burden. Statter MB, et al. **Transplantation** 1989 Apr;47(4):651–60
[Testicular autotransplantation in children. Apropos of 2 cases] Van Kote G, et al. **Chir Pediatr** 1988;29(5):281–6 (Eng. Abstr.) **(Fre)**
[Effect of allotransplantation of the testis on several metabolism parameters in primary hypogonadism] Schioschwili TI, et al. **Z Urol Nephrol** 1989 Jun; 82(6):325–30 (Eng. Abstr.) **(Ger)**
[Importance of venous anastomosis in autotransplantation of the testis] Schioschwili TJ, et al. **Z Urol Nephrol** 1988 Dec; 81(12):711–3 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Co-existence of gametic and agametic seminiferous tubules in a chimeric mouse. A light- and electron-microscopic study. Hrudka F, et al. **Acta Anat (Basel)** 1989; 135(3):269–74
Ultrastructure of sustentacular (Sertoli) cells in the bovine testis. Sinowatz F, et al. **Acta Anat (Basel)** 1988; 133(4):274–81
Schistosoma japonicum and S. mansoni: ultrastructural damage in the tegument and reproductive organs after treatment with levo- and dextro-praziquantel. Irie Y, et al. **Am J Trop Med Hyg** 1989 Aug;41(2):204–11
Fine structure of boundary tissue of the seminiferous tubules in the scrotal and abdominal testes of naturally unilateral cryptorchid West African dwarf goats. Ezeasor DN. **Anat Anz** 1988;167(2):151–60
Morphological studies on prespermatogonia and pre-Sertoli cells in the testes of 6- to 11-day-old golden hamsters. Miething A. **Anat Embryol (Berl)** 1989;179(5):503–10
Insulin binding sites in solubilized membranes from rat testis. Effect of age. Loubassou S, et al. **Andrologia** 1989 Jul–Aug; 21(4):377–83
Effect of hypophysectomy and hormone replacement on fatty elongation in isolated microsomes of rat testes. Coniglio JG, et al. **Arch Androl** 1988;20(3):193–201
Testicular ultrastructure in infertile men. Martinova Y, et al. **Arch Androl** 1989;22(2):103–22 (57 ref.)
Ultrastructure of Sertoli cells in cryptorchid goats. Singh A, et al. **Arch Androl** 1989;23(1):61–70
The protamine gene chromatin in developing trout testis exists in an altered state. Nickel BE, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):23–9
Basement membrane and epithelial features of fetal-type Leydig cells in rat and human testis. Kuopio T, et al. **Differentiation** 1989 Jun;40(3):198–206
Ultrastructural studies on the boundary tissue of the seminiferous tubules of different mammals. Cieciura L, et al. **Folia Histochem Cytobiol** 1988;26(3):171–6
Impaired spermatogenesis in the finch hybrid L. castaneothorax by L. punctulata: transmission electron microscopy and genetic analysis. Swan MA, et al. **Gamete Res** 1987 Jun;17(2):157–71
Human homologs of two testes-expressed loci on mouse chromosome 17 map to opposite arms of chromosome 6. Bibbins KB, et al. **Genomics** 1989 Jul;5(1):139–43
A testis-specific gene Tpx-1 maps between Pgk-2 and Mep-1 on mouse chromosome 17. Kasahara M, et al. **Immunogenetics** 1989;29(1):61–3
Scanning electron microscopic study on the shape of infertile seminiferous tubules: a hypothesis of pathogenesis of idiopathic male infertility. Yamamoto M, et al. **Int J Fertil** 1988 Jul–Aug;33(4):265–72
Electron microscopic study of the secretion process in bovine reproductive organs. Agrawal Y, et al. **J Androl** 1988 Sep–Oct;9(5):307–16
An improved embedding method employing epoxy resin Quetol 651 for stereoscopic observation of thick sections under a 300 kV transmission electron microscope. Kushida T, et al. **J Electron Microsc (Tokyo)** 1988;37(4):212–4
Ultrastructural changes in the seminiferous epithelium of two seasonally reproducing bats (Mammalia: Chiroptera). Bernard RT, et al. **J Morphol** 1989 Mar;199(3):249–58
Centriolar length variability in testicular cells from side-necked turtles. Hale DW, et al. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):211–4
Ultrastructural observation on influence of gossypol on the hormone-secreting cells of pituitary-testis axis of rats. Yu MQ, et al. **J Tongji Med Univ** 1988;8(4):229–31
Reproductive toxicity of 2,4-toluenediamine in the rat. 3. Effects on androgen-binding protein levels, selected seminiferous tubule characteristics, and spermatogenesis. Varma SK, et al. **J Toxicol Environ Health** 1988; 25(4):435–51
Granulosa cell tumor of the adult testis: ultrastructural and ultrasonographic characteristics. Gaylis FD, et al. **J Urol** 1989 Jan;141(1):126–7
Values of the topological index of sudanophilic bodies SLey in the conditions of damage to the male gonad. Sośnik H. **Mater Med Pol** 1988 Apr–Jun;20(2):99–102
Ultrastructure of Sertoli cells in scrotal testis of unilaterally cryptorchid goat. Singh A, et al. **Prog Clin Biol Res** 1989; 296:159–64
Junctional specializations in the seminiferous epithelium of an insect (Triatoma infestans): a freeze fracture and lanthanum tracer study. Miranda JC, et al. **Tissue Cell** 1988; 20(4):611–9
[Scanning electron and light microscopic studies of the surface epithelium of the rete testis and epididymis of the boar. I. Rete testis and efferent ducts] Wystub T, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):384–9 (Eng. Abstr.) **(Ger)**
[Ultrastructural study of testicular toxicity. Effects of CDDP on the rat seminiferous tubules] Ohara M. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):788–98 (Eng. Abstr.) **(Jpn)**
[Spermatogonia types in tepezcuintle (Cuniculus paca). Ultrastructural study] Ureña F, et al. **Rev Biol Trop** 1988 Nov;36(2A):325–8 (Eng. Abstr.) **(Spa)**

TESTOLACTONE

PHARMACOLOGY

Anti-estrogens and aromatase inhibitors: tamoxifen and testolactone. Sciarra F. **J Endocrinol Invest** 1988 Nov; 11(10):755–62 (33 ref.)

THERAPEUTIC USE

Tamoxifen and testolactone in therapy of oligozoospermia: results of a randomized study. Maier U, et al. **Eur Urol** 1988;14(6):447–9
Treatment of men with idiopathic oligozoospermic infertility using the aromatase inhibitor, testolactone. Results of a double-blinded, randomized, placebo-controlled trial with crossover. Clark RV, et al. **J Androl** 1989 May–Jun; 10(3):240–7
Treatment of familial male precocious puberty with spironolactone and testolactone. Laue L, et al. **N Engl J Med** 1989 Feb 23;320(8):496–502
Effects of the aromatase inhibitor testolactone on human benign prostatic hyperplasia. Schweikert HU, et al. **Steroids** 1987 Jul–Sep;50(1–3):191–200

TESTOSTERONE

ADMINISTRATION & DOSAGE

Decrease of serum sex hormone-binding globulin as a marker of androgen sensitivity. Correlation with clinical response. Ciaccio M, et al. **Acta Endocrinol (Copenh)** 1989 Apr; 120(4):540–4
Evidence for reversible and irreversible biochemical defects in accessory sex organs and kidney of neonatally androgenized male mice. Veyssiere G, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):121–8
Contraception in men: efficacy and immediate toxicity. A study of 18 cases. Lobel B, et al. **Acta Urol Belg** 1989; 57(1):117–24
The use of a testosterone intravaginal device to detect oestrus in goats. Del Campo CH, et al. **Acta Vet Scand Suppl** 1988; 83:101–9
Hormone implants. Murtagh J, et al. **Aust Fam Physician** 1989 Apr;18(4):431
Reconciliation of the paradox that testosterone replacement prevents the postcastration hypersecretion of follicle-stimulating hormone in male rhesus monkeys (Macaca mulatta) with an intact central nervous system but not in hypothalamic-lesioned, gonadotropin-releasing hormone-replaced animals. Abeyawardene SA, et al. **Biol Reprod** 1989 Mar;40(3):578–84
Down-regulation of testicular aromatization in the horse. Zwain I, et al. **Biol Reprod** 1989 Mar;40(3):503–10
The topical administration of steroids in the treatment of typical vulvar dystrophies. Gadducci A, et al. **Clin Exp Obstet Gynecol** 1989;16(1):12–5 (28 ref.)
Vulvar hormonal receptor modifications during topical steroid treatment. Nardelli GB. **Clin Exp Obstet Gynecol** 1988;15(4):170–3
The results of short-term (6 months) high-dose testosterone treatment on bone age and adult height in boys of excessively tall stature. Brämswig JH, et al. **Eur J Pediatr** 1988 Nov;148(2):104–6
Treatment of primary hypogonadism in men by the transdermal administration of testosterone. Findlay JC, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):369–73
The administration of pharmacological doses of testosterone or 19-nortestosterone to normal men is not associated with increased insulin secretion or impaired glucose tolerance. Friedl KE, et al. **J Clin Endocrinol Metab** 1989 May; 68(5):971–5
The effects of long term testosterone administration on pulsatile luteinizing hormone secretion and on ovarian histology in eugonadal female to male transsexual subjects. Spinder T, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):151–7
Testosterone replacement with transdermal therapeutic systems. Physiological serum testosterone and elevated dihydrotestosterone levels. Cunningham GR, et al. **JAMA** 1989 May 5;261(17):2525–30
Transdermal testosterone [editorial] **Lancet** 1989 Mar 25; 1(8639):652
Transdermal testosterone [letter] Nieschlag E, et al. **Lancet** 1989 May 20;1(8647):1146–7
Corticosteroid-induced osteoporosis and hormone implants [letter] Reid DM. **Lancet** 1989 Mar 11;1(8637):563
Correction of corticosteroid-induced osteoporosis by percutaneous hormone implants [letter] Studd JW, et al. **Lancet** 1989 Feb 11;1(8633):339
Testosterone therapy in young and old rhesus males that display low levels of sexual activity. Phoenix CH, et al. **Physiol Behav** 1988;43(4):479–84
[Clinical study of termination of early pregnancy by administration of yuanhuacine in combination with testosterone propionate] Wang SX. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Sep;23(5):296–8, 318 (Eng. Abstr.) **(Chi)**
[Diagnosis and therapy of dystrophic vulvar diseases] Lotze W. **Zentralbl Gynakol** 1988;110(16):1034–8 (Eng. Abstr.) **(Ger)**
[Early stimulation with testosterone of the sexual system of male rats after administration of a single dose of stilbestrol in the first day of life] Limanowski A, et al. **Endokrynol Pol** 1987;38(6):467–76 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Priapism following testosterone therapy for delayed puberty [letter] Key LL, et al. **Am J Dis Child** 1989 Sep; 143(9):1001–2

Priapism following testosterone administration for delayed male puberty [letter] Ruch W, et al. **Am J Med** 1989 Feb; 86(2):256

Testosterone and anabolic steroids and acne fulminans [letter] Heydenreich G. **Arch Dermatol** 1989 Apr;125(4):571–2

Female pseudohermaphroditism in three sibling greyhounds. Olson PN, et al. **J Am Vet Med Assoc** 1989 Jun 15; 194(12):1747–9

Testosterone treatment for delayed growth [letter] Waller K. **N Engl J Med** 1989 May 4;320(18):1217–8

ANALOGS & DERIVATIVES

Changes in the bioactivity to immunoreactivity ratio of circulating luteinizing hormone in impotent men treated with testosterone undecanoate. Carani C, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):284–8

Diagnostic value of testosterone therapy in boys with delayed puberty. Kaplowitz PB. **Am J Dis Child** 1989 Jan; 143(1):116–20

Oral treatment of oligozoospermia with testosterone–undecanoate: results of a double–blind–placebo–controlled trial. Pusch HH. **Andrologia** 1989 Jan–Feb;21(1):76–82

Resistance to muscle relaxants in a patient receiving prolonged testosterone therapy. Reddy P, et al. **Anesthesiology** 1989 May;70(5):871–3

Attempted protection of spermatogenesis from single doses of gamma–irradiation in the androgen pretreated rat. Schlappack OK, et al. **Arch Androl** 1987;19(3):269–74

Biotransformation of 1–dehydrotestosterone in the equine male castrate: identification of the neutral unconjugated and glucuronic acid conjugated metabolites in horse urine. Dumasia MC, et al. **Biomed Environ Mass Spectrom** 1988 Nov;17(5):383–92

Time–dependent inactivation of human placental aromatase by bromoacetoxy 4–androsten–3–ones in the presence of reduced nicotinamide adenine dinucleotide phosphate (NADPH). Numazawa M, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):735–7

Brain–enhanced delivery of testosterone using a chemical delivery system complexed with 2–hydroxypropyl–beta–cyclodextrin. Anderson WR, et al. **Drug Des Deliv** 1988 May;2(4):287–98

Suppression of sperm function by depot medroxyprogesterone acetate and testosterone enanthate in steroid male contraception. Wu FC, et al. **Fertil Steril** 1989 Apr;51(4):691–8

Seasonal variations in testicular germ cell stages and in plasma concentrations of sex steroids in male rainbow trout (Salmo gairdneri) maturing at 2 years old. Scott AP, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):46–58

Sex differences in the inhibition by ATD of testosterone–activated mounting behavior in guinea pigs. Roy MM, et al. **Horm Behav** 1988 Sep;22(3):315–23

Endocrine, seminal and peripheral effects of depot medroxyprogesterone acetate and testosterone enanthate in men. Hedman M, et al. **Int J Androl** 1988 Aug; 11(4):265–76

Testosterone dose–dependency of sexual and nonsexual behaviors in the gonadotropin–releasing hormone antagonist–treated male rat. Fielder TJ, et al. **J Androl** 1989 May–Jun;10(3):167–73

Screening, confirmation and quantification of boldenone sulfate in equine urine after administration of boldenone undecylenate (Equipoise). Weidolf LO, et al. **J Chromatogr** 1988 Dec 9;433:9–21

A comparison of the suppressive effects of testosterone and a potent new gonadotropin–releasing hormone antagonist on gonadotropin and inhibin levels in normal men. Bagatell CJ, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):43–8

Increases in bone density during treatment of men with idiopathic hypogonadotropic hypogonadism. Finkelstein JS, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):776–83

The hamster flank organ model: is it relevant to man? Franz TJ, et al. **J Invest Dermatol** 1989 Oct;93(4):475–9

Effects of long–term immunization against LHRH and androgen treatment on gonadal function. Ladd A, et al. **J Reprod Immunol** 1989 May;15(2):85–101

Contrasting effects of testosterone and stanozolol on serum lipoprotein levels. Thompson PD, et al. **JAMA** 1989 Feb 24;261(8):1165–8

Histopathology of the breasts of 12 women receiving long–term exogenous androgen therapy. Futterweit W, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):309–12

Testosterone treatment in adolescent boys with constitutional delay in growth and development. Richman RA, et al. **N Engl J Med** 1988 Dec 15;319(24):1563–7

Randomized controlled trial of testosterone in myotonic dystrophy. Griggs RC, et al. **Neurology** 1989 Feb;39(2 Pt 1):219–22

Studies on long–acting aryl carboxylic acid esters of testosterone. Leung SL, et al. **Pharm Acta Helv** 1989; 64(4):121–4

The effects of sex hormones on the synthesis of prostacyclin (PGI2) by vascular tissues. Wakasugi M, et al. **Prostaglandins** 1989 Apr;37(4):401–10

Estrogen and/or androgen replacement therapy and cognitive functioning in surgically menopausal women. Sherwin BB. **Psychoneuroendocrinology** 1988;13(4):345–57

Synergistic effect of testosterone and of a luteinizing hormone–releasing hormone agonist on androgen receptor content in the ventral prostate of castrated rats. Fiorelli G, et al. **Steroids** 1989 Jan–Feb;53(1–2):195–217

The chemistry of 9 alpha–hydroxysteroids. 1. Preparation of 9 alpha,17 beta–dihydroxy–17 alpha–ethynylandrost–4–en–3–one. Kapur JC, et al. **Steroids** 1988 Sep;52(3):181–6

Hormonal regulation of somatostatin messenger RNA. Baldino F Jr, et al. **Synapse** 1988;2(3):317–25

[Comparison of the excretion of 3 androgens registered in Czechoslovakia] Hampl R, et al. **Sb Lek** 1989 Jan; 91(1):16–20 (Eng. Abstr.) **(Cze)**

[Identification of a photolabelled site of the plasma binding protein for testosterone and estradiol (SBP) using tritiated 17 beta–hydroxy– 4,6–androstadien–3–one] Grenot C, et al. **C R Acad Sci [III]** 1988;307(7):391–6 (Eng. Abstr.) **(Fre)**

[Acne fulminans following high–dose testosterone treatment in tall boys] von Mühlendahl KE, et al. **Dtsch Med Wochenschr** 1989 May 5;114(18):712–4 (Eng. Abstr.) **(Ger)**

[Drug prevention of thromboembolism in elective hip surgery with reference to thrombophilic conditions] Liedloff H, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):320–3 (Eng. Abstr.) **(Ger)**

[Development of acne in systemic androgen therapy in boys during puberty] Fyrand O, et al. **Tidsskr Nor Laegeforen** 1989 Aug 10,109(22):2139–41 (Eng. Abstr.) **(Nor)**

ANALYSIS

The correlation between clinical and hormonal parameters in androgenisation. Pfeifer M, et al. **Acta Eur Fertil** 1989 Jan–Feb;20(1):31–3

The study of steroid hormones in epithelial ovarian tumours. Péter I, et al. **Acta Morphol Hung** 1988;36(1–2):133–40

Is the level of steroid hormones in the low density lipoprotein (LDL) particles responsible for the prostaglandin I2 inhibitory potency of LDL? Beitz J, et al. **Biomed Biochim Acta** 1988;47(2):181–7

Salivary testosterone in prostatic carcinoma. Navarro MA, et al. **Br J Urol** 1989 Mar;63(3):306–8

Immunohistochemical study of sex steroid hormones in primary liver cancer. Liossi AK, et al. **Cancer Detect Prev** 1988;13(3–4):195–201

Sensitivity of steroid enzyme immunoassays. Use of 3,3',5,5'–tetramethylbenzidine as a chromogen in the assay system with glucose oxidase label. Hosoda H, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1808–13

Low testosterone levels in diabetic men and animals: a possible role in testicular impotence. Fushimi H, et al. **Diabetes Res Clin Pract** 1989 May 15;6(4):297–301

Experimental model of varicocele. Shafik A, et al. **Eur Urol** 1989;16(4):298–303

Salivary testosterone in cryptorchid pubertal boys: a parameter to assess the gonadal function. Navarro MA, et al. **Fertil Steril** 1989 Jul;52(1):128–31

Testosterone immunoreactivity in rainbow trout (Salmo gairdneri Richardson) testis. Schulz R, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):80–9

Is follicular fluid steroid content representative of follicular steroid secretion? Zimmermann RC, et al. **Hum Reprod** 1989 Jan;4(1):29–32

Effect of immobilization stress on testosterone and inhibin in male rats. Demura R, et al. **J Androl** 1989 May–Jun; 10(3):210–3

Relationship of intratesticular testosterone content of stallions to age, spermatogenesis, Sertoli cell distribution and germ cell–Sertoli cell ratios. Berndtson WE, et al. **J Reprod Fertil** 1989 Mar;85(2):511–8

Structural determination of testosterone esters in oil injectables by thermospray mass spectrometry. Cairns T, et al. **Pharm Res** 1988 Jan;5(1):31–5

Testosterone concentrations in blood and seminal plasma of turkeys classified as high or low semen producers. Cecil HC, et al. **Poult Sci** 1988 Oct;67(10):1461–4

[Salivary estradiol testosterone and progesterone levels in women with normal cycles and in pregnancy] Lu YR. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Nov;23(6):334–7, 386 (Eng. Abstr.) **(Chi)**

[Determination of salivary testosterone in women in menopause with epulides. Pathogenetic hypothesis] Amato R, et al. **Minerva Stomatol** 1988 Oct;37(10):729–32 (Eng. Abstr.) **(Ita)**

[An immunohistochemical study of endogenous estradiol and testosterone in human colo–rectal cancer tissues] Takeda H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb; 86(2):200–7 (Eng. Abstr.) **(Jpn)**

[Steroid hormone receptors in osteogenic sarcomas] Bassalyk LS, et al. **Vopr Onkol** 1989;35(6):658–63 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Diagnosis and resection of an oral contraceptive–suppressible Sertoli–Leydig cell tumor with preservation of fertility and a 7–year follow–up. Haning RV Jr, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):901–5 (27 ref.)

BIOSYNTHESIS

Inhibitory actions of interleukin–1 beta on steroidogenesis in primary cultures of neonatal rat testicular cells. Fauser BC, et al. **Acta Endocrinol (Copenh)** 1989 Apr;120(4):401–8

Mechanism of action of the factor(s) secreted by rat seminiferous tubules and inhibiting interstitial cell testosterone production in vitro. Syed V, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):427–34

Inhibition of testosterone synthesis by ethanol: role of luteinizing hormone. Widenius TV, et al. **Alcohol** 1989 May–Jun;6(3):241–4

Hachimijiogan produces testosterone in adult rat testes. Usuki S. **Am J Chin Med** 1988;16(3–4):93–105

The effect of dibromochloropropane (DBCP) on in vitro cyclic AMP levels and testosterone production in rat testes. Chayoth R, et al. **Andrologia** 1988 May–Jun;20(3):232–7

Absence of development of late steroidogenic lesions in rat testis during the end of fetal life. Habert R, et al. **Arch Androl** 1989;22(1):41–8

Effect of retinol and retinoic acid on testosterone production by rat Leydig cells in primary culture. Chaudhary LR, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):400–6

Testosterone response in arginine vasopressin desensitized immature rat testis. Reddy BV, et al. **Biochem Int** 1989 Feb;18(2):325–33

Catecholamine effects on testicular testosterone production in the gonadally active and the gonadally regressed adult golden hamster. Mayerhofer A, et al. **Biol Reprod** 1989 Apr;40(4):752–61

Characterization of adrenergic control of the Leydig cell steroidogenesis: identification of both stimulatory and inhibitory components. Favaretto AL, et al. **Braz J Med Biol Res** 1988;21(3):539–43

Effects of polychlorinated biphenyls (PCBs) on in vitro biosynthesis of testosterone and cell viability in mouse Leydig cells. Johansson B. **Bull Environ Contam Toxicol** 1989 Jan;42(1):9–14

Steroidogenesis in fetal bovine gonads. Dominguez MM, et al. **Can J Vet Res** 1988 Oct;52(4):401–6

Inhibitory effect of glycyrrhetinic acid on testosterone production in rat gonads. Sakamoto K, et al. **Endocrinol Jpn** 1988 Apr;35(2):333–42

Hormone ontogeny in the ovine fetus. XXIII. Pulsatile administration of follicle–stimulating hormone stimulates inhibin production and decreases testosterone synthesis in the ovine fetal gonad. Albers N, et al. **Endocrinology** 1989 Jun;124(6):3089–94

Fibroblast growth factor inhibits luteinizing hormone–stimulated androgen production by cultured rat testicular cells. Fauser BC, et al. **Endocrinology** 1988 Dec; 123(6):2935–41

Effect of long term deprivation of luteinizing hormone on Leydig cell volume, Leydig cell number, and steroidogenic capacity of the rat testis. Keeney DS, et al. **Endocrinology** 1988 Dec;123(6):2906–15

Differential steroid production between theca interna and theca externa cells: a three–cell model for follicular steroidogenesis in avian species. Porter TE, et al. **Endocrinology** 1989 Jul;125(1):109–16

Biosynthetic pathways of testosterone and estradiol–17 beta in slices of the embryonic ovary and testis of the chicken (Gallus domesticus). Imataka H, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):69–79

Regulation of gonadal steroidogenesis in Fundulus heteroclitus by recombinant salmon growth hormone and purified salmon prolactin. Singh H, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):144–53

Prolonged intratesticular islet allograft survival is not dependent on local steroidogenesis. Selawry HP, et al. **Horm Metab Res** 1988 Sep;20(9):562–5

Maintenance of testosterone production by purified adult rat Leydig cells for 3 days in vitro. Klinefelter GR, et al. **In Vitro Cell Dev Biol** 1989 Mar;25(3 Pt 1):283–8

Testosterone synthesis and adenylate cyclase activity in the early human fetal testis appear to be independent of human chorionic gonadotropin control. Word RA, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):204–8

The testicular response to hemicastration in the male rat cannot be maintained in vitro. Frankel AI, et al. **J Endocrinol** 1989 Apr;121(1):43–8

Comparison of the inhibitory effects of interferons–alpha and –gamma on testosterone production in porcine Leydig cell culture. Orava M. **J Interferon Res** 1989 Feb;9(1):135–41

Evaluation of the possible direct effects of gonadotrophin–releasing hormone analogues on the monkey (Macaca mulatta) testis. Mann DR, et al. **J Reprod Fertil** 1989 Jan;85(1):89–95

Absence of direct effects of GnRH on testicular steroid secretion in the ram. Meijer JC, et al. **J Reprod Fertil** 1989 Jul;86(2):517–24

Effect of transforming growth factor–beta on human chorionic gonadotropin induced testosterone production by cultured rat testicular cells. Fauser BC, et al. **Life Sci** 1988;43(17):1363–70

Calcitonin, zinc, and testicular function. Chausmer AB, et al. **Metabolism** 1989 Aug;38(8):714–7

Measurement of steroidogenesis in rodent Leydig cells: a comparison between pregnenolone and testosterone production. van Haren L, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):157–64

A rat seminiferous epithelial factor that inhibits Leydig cell cAMP and testosterone production: mechanism of action, stage–specific secretion, and partial characterization. Vihko KK, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):119–27

Interferon–gamma inhibits steroidogenesis and accumulation of mRNA of the steroidogenic enzymes P450scc and

P450c17 in cultured porcine Leydig cells. Orava M, et al. **Mol Endocrinol** 1989 Jun;3(6):887–94
Testicular interstitial cells as targets for peripheral benzodiazepines. Ritta MN, et al. **Neuroendocrinology** 1989 Mar;49(3):262–6
Leydig cell insufficiency—diagnosis and treatment. Hammar M. **Scand J Urol Nephrol Suppl** 1988;110:41–5
A factor(s) produced by Sertoli cells stimulates androgen biosynthesis by Leydig cells in neonatal rats. Liu YX, et al. **Sei Sin [B]** 1988 Jul;31(7):818–27
Influence of endogenous prolactin on the luteinizing hormone stimulation of testicular steroidogenesis and the role of prolactin in adult male rats. Chandrashekar V, et al. **Steroids** 1988 May–Jun;51(5–6):559–76
Inhibition of intratesticular testosterone synthesis by inorganic lead. Rodamilans M, et al. **Toxicol Lett** 1988 Sep; 42(3):285–90
Effect of cyclosporine on steroidogenesis in rat Leydig cells. Sikka SC, et al. **Transplantation** 1988 Dec;46(6):886–90
Thyroid–gonad relationship in chronic schizophrenia. Parshad O, et al. **West Indian Med J** 1989 Jun;38(2):83–7
[The use of Leydig interstitial cells preserved by deep freezing in the testosterone production assay] Tiemann U, et al. **Arch Exp Veterinarmed** 1988 May;42(3):430–4 (Eng. Abstr.) **(Ger)**
[Seasonal fluctuations of the testicular androgenic function in rats] Tarasenko LV, et al. **Fiziol Zh** 1989 Mar–Apr; 35(2):107–9 (Eng. Abstr.) **(Rus)**
[Mechanism of suppression of testosterone biosynthesis by ethanol] Khokha AM, et al. **Probl Endokrinol (Mosk)** 1989 May–Jun;35(3):68–72 (Eng. Abstr.) **(Rus)**

BLOOD

The effects of pulsatile GnRH infusion upon the diurnal variations in serum LH and testosterone in pre–pubertal and pubertal boys. Gordon D, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):241–5
Pharmacological doses of calcitonin reduce sex hormone levels in rat plasma. Mahrous TS, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):525–8
Inhibition of binding of gonadal steroids to serum binding proteins by non–esterified fatty acids: the influence of chain length and degree of unsaturation. Street C, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):175–9
Serum testosterone response to low dose dexamethasone and combined contraceptive pill in subgroups of patients with polycystic ovary syndrome. Prelević G, et al. **Acta Med Iugosl** 1989;43(2):113–20
Gonadal function in male patients on maintenance hemodialysis, chronic hepatitis B virus carriers. Stefanović V, et al. **Acta Med Iugosl** 1988;42(5):383–9
Thyroid hormones and thyroxine–binding globulin in relation to liver function and serum testosterone in men with alcoholic cirrhosis. Becker U, et al. **Acta Med Scand** 1988; 224(4):367–73
Influence of pituitary hormones (hCG, TSH, Pr, GH) on testosterone level and on the functional activity of the Leydig cell in rat fetuses. Dobozy O, et al. **Acta Physiol Hung** 1988;72(2):159–63
Serum levels of thyroid and adrenal hormones, testosterone, TSH, LH, GH and prolactin in men after a 2–h stay in a cold room. Leppäluoto J, et al. **Acta Physiol Scand** 1988 Apr;132(4):543–8
Hypothalamic–pituitary–gonadal axis in major depressive disorders. Undén F, et al. **Acta Psychiatr Scand** 1988 Aug; 78(2):138–46
Evaluation of pituitary gonadal axis in erectile impotence. Rosen LS. **Ala Med** 1988 Sep;58(3):27, 29–30
The antiandrogen anandron potentiates the castrating effect of the LH–RH agonist buserelin in the rat. Moguilewsky M, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S148–51
Estrogen and androgen levels in women treated with radiation for cervical cancer—possible influence on breast cancer risk. Eby NL, et al. **Am J Epidemiol** 1989 Mar; 129(3):527–32
Sex hormones and lipoproteins in men. Kiel DP, et al. **Am J Med** 1989 Jul;87(1):35–9
Sex hormones and coronary artery disease [letter] Swartz CM. **Am J Med** 1988 Nov;85(5):757–8
17–a–OH–progesterone to testosterone plasma ratios and their modification after HCG in normal men and in patients with idiopathic infertility. Abbaticchio G, et al. **Andrologia** 1988 Sep–Oct;20(5):441–6
Effect of aldrin on accessory sex glands and plasma testosterone levels in rats. Chatterjee S, et al. **Andrologia** 1988 Nov–Dec;20(6):472–6
Relative diagnostic value of serum non–SHBG–bound testosterone, free androgen index and free testosterone in the assessment of mild to moderate hirsutism. Blight LF, et al. **Ann Clin Biochem** 1989 Jul;26 (Pt 4):311–6
Diagnostic value of serum testosterone measurement in infancy: two case reports. Ismail AA, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):259–61
Salivary and plasma free testosterone and androstenedione levels in women using oral contraceptives containing desogestrel or levonorgestrel. Swinkels LM, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):354–9
Decreased serum testosterone response to gonadotropin–releasing hormone in male offspring of diabetic female rats. Bender HS, et al. **Arch Androl** 1988; 21(1):11–6
Hormone profiles in Klinefelter's syndrome with and without testicular epidermoid cyst. Sasagawa I, et al. **Arch Androl** 1988;21(3):205–9
Suppression of male–specific cytochrome P450 2c and its mRNA by 3,4,5,3',4',5'–hexachlorobiphenyl in rat liver is not causally related to changes in serum testosterone. Yeowell HN, et al. **Arch Biochem Biophys** 1989 Jun; 271(2):508–14
Plasma testosterone in preterm infants with cryptorchidism. Baker BA, et al. **Arch Dis Child** 1988 Oct;63(10):1198–200
Possible subtypes of affective disorder suggested by differences in cerebral laterality and testosterone. A preliminary report. Wexler BE, et al. **Arch Gen Psychiatry** 1989 May;46(5):429–33
Sex hormone status of male patients with rheumatoid arthritis: evidence of low serum concentrations of testosterone at baseline and after human chorionic gonadotropin stimulation. Cutolo M, et al. **Arthritis Rheum** 1988 Oct;31(10):1314–7
Relationships between serum testosterone, fasting insulin and lipoprotein levels among elderly men. Deutscher S, et al. **Atherosclerosis** 1989 Jan;75(1):13–22
The effect of artificial photoperiod at the end of the breeding season on plasma testosterone concentrations in stallions. Cox JE, et al. **Aust Vet J** 1988 Aug;65(8):239–41
The effects of different anesthetics on blood steroid concentrations in domestic tom–cats. Johnstone IP, et al. **Aust Vet J** 1988 Dec;65(12):382–5
Effects of serum testosterone level with buserelin on the activities of drug and testosterone hydroxylase and on the content of a male–specific form of cytochrome P–450 in male rats. Ohi H, et al. **Biochem Pharmacol** 1989 Feb 1; 38(3):535–8
An endocrine marker for pancreatic cancer. Tulassay Z, et al. **BMJ** 1988 Dec 3;297(6661):1447–8
Forearm mineral content in normal men: relationship to weight, height and plasma testosterone concentrations. McElduff A, et al. **Bone** 1988;9(5):281–3
Testosterone in chronic alcoholic men. Irwin M, et al. **Br J Addict** 1988 Aug;83(8):949–53
Prolonged hypogonadism in male patients with rheumatoid arthritis during flares in disease activity. Gordon D, et al. **Br J Rheumatol** 1988 Dec;27(6):440–4
Oestrogen pre–treatment abolishes luteinising hormone–releasing hormone testosterone stimulation. Kreis W, et al. **Br J Urol** 1988 Oct;62(4):352–4
Perinatal administration of nicotine alters subsequent sexual behavior and testosterone levels of male rats. Segarra AC, et al. **Brain Res** 1989 Feb 20;480(1–2):151–9
Genetic variation in liver tumor susceptibility, plasma testosterone levels, and androgen receptor binding in six inbred strains of mice. Kemp CJ, et al. **Cancer Res** 1989 Sep 15;49(18):5044–7
Testosterone and estradiol serum levels in acne. Yang XQ, et al. **Chin Med J [Engl]** 1989 Mar;102(3):236–8
Radioimmunoassay of testosterone not bound to sex–steroid–binding protein in plasma. Déchaud H, et al. **Clin Chem** 1989 Aug;35(8):1609–14
Investigation of sex–hormone binding globulin interference in direct radioimmunoassays for testosterone and estradiol. Masters AM, et al. **Clin Chem** 1989 Jun;35(6):979–84
Three methods compared for estimating the fraction of testosterone and estradiol not bound to sex–hormone–binding globulin. Pearce S, et al. **Clin Chem** 1989 Apr;35(4):632–5
Correlation between testosterone not bound to sex–hormone–binding globulin (SHBG) and the testosterone/SHBG ratio. See YP, et al. **Clin Chem** 1988 Oct;34(10):2163
Acute pituitary–ovarian response during chronic luteinizing hormone–releasing hormone agonist administration in polycystic ovarian syndrome. Faure N, et al. **Clin Endocrinol (Oxf)** 1988 Oct;29(4):403–10
Effects of changing gonadotrophin–releasing hormone pulse frequency on gonadotrophin secretion in men. Sauder SE, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):647–56
Free and serum testosterone levels in 276 males: a comparative study of rheumatoid arthritis, ankylosing spondylitis and healthy controls. Spector TD, et al. **Clin Rheumatol** 1989 Mar;8(1):37–41
Effects of photoperiod, melatonin implants and castration on molting and on plasma thyroxine, testosterone and prolactin levels in the European badger (Meles meles). Maurel D, et al. **Comp Biochem Physiol [A]** 1989;93(4):791–7
Elevation of sex steroids and inhibition of UDP–glucuronyltransferase are out of phase during gonadal maturation in the common carp. Sikoki FD, et al. **Comp Biochem Physiol [C]** 1989;92(2):267–72
Testosterone and alcoholic cirrhosis. Epidemiologic, pathophysiologic and therapeutic studies in men. Gluud C. **Dan Med Bull** 1988 Dec;35(6):564–75 (172 ref.)
In vivo effects of terbinafine and ketoconazole on testosterone plasma levels in healthy males. Effendy I, et al. **Dermatologica** 1989;178(2):103–6
Influence of moderate exercise on glucose homeostasis and serum testosterone in young men with low HDL–cholesterol level. Raz I, et al. **Diabetes Res** 1988 Sep;9(1):31–5
Estradiol and testosterone levels in patients undergoing partial hepatectomy. A possible signal for hepatic regeneration? Francavilla A, et al. **Dig Dis Sci** 1989 Jun; 34(6):818–22
Are certain HLA haplotypes responsible for low testosterone levels in males? Ollier W, et al. **Dis Markers** 1989 Jul–Sep; 7(3):139–43
Concentrations of oestradiol and testosterone in peripheral and spermatic venous blood of dogs with unilateral cryptorchidism. Mattheeuws D, et al. **Domest Anim Endocrinol** 1989 Jul;6(3):203–9
In vivo evidence for a direct effect of naloxone on testicular steroidogenesis in the male rat. Cicero TJ, et al. **Endocrinology** 1989 Aug;125(2):957–63
Stimulation of testosterone production in the cynomolgus monkey in vivo by deglycosylated and desialylated human choriogonadotropin. Liu L, et al. **Endocrinology** 1989 Jan; 124(1):175–80
Conservation of free but not total or non–sex–hormone–binding–globulin–bound testosterone in serum from Nagase analbuminemic rats. Mendel CM, et al. **Endocrinology** 1989 Jun;124(6):3128–30
Treatment of metastatic lipid cell tumor of the ovary with BV–CAP and VAC chemotherapy, using serum testosterone and dihydrotestosterone as tumor markers. Patsner B, et al. **Eur J Gynaecol Oncol** 1988;9(6):441–4
Serum testosterone levels in experimental acute renal failure. Ivić MA, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):349–56
The impact of spermatic vein ligation on the male factor in in vitro fertilization–embryo transfer and its relation to testosterone levels before and after operation. Ashkenazi J, et al. **Fertil Steril** 1989 Mar;51(3):471–4
Dynamics of estradiol and testosterone and seminal fluid indexes in smokers and nonsmokers. Klaiber EL, et al. **Fertil Steril** 1988 Oct;50(4):630–4
Prolactin suppression by bromocriptine stimulates aromatization of testosterone to estradiol in women. Martikainen H, et al. **Fertil Steril** 1989 Jul;52(1):51–4
Free testosterone levels during the menstrual cycle in obese versus normal women. Wajchenberg BL, et al. **Fertil Steril** 1989 Mar;51(3):535–7
Effect of liver regeneration on hepatic cytochrome P450 isozymes and serum sex steroids in the male rat. Liddle C, et al. **Gastroenterology** 1989 Mar;96(3):864–72
Luteinizing hormone–releasing hormone induces thyroxine release together with testosterone in the neotenic axolotl Ambystoma mexicanum. Jacobs GF, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):502–5
Hormonal changes associated with natural and manipulated incubation in the sex–role reversed Wilson's phalarope. Oring LW, et al. **Gen Comp Endocrinol** 1988 Nov; 72(2):247–56
Seasonal variations in testicular germ cell stages and in plasma concentrations of sex steroids in male rainbow trout (Salmo gairdneri) maturing at 2 years old. Scott AP, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):46–58
Hormonal correlates of migration and territorial behavior in juvenile willow tits during autumn. Silverin B, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):148–56
Direct radioimmunoassay of free testosterone in the evaluation of androgenetic manifestations in women. Jung–Hoffmann C, et al. **Gynecol Endocrinol** 1987 Mar; 1(1):83–92
The testicular lesion and sexual differentiation in congenital lipoid adrenal hyperplasia. Ogata T, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):531–8
Plasma steroid concentrations change in response to sexual behavior in Bufo marinus. Orchinik M, et al. **Horm Behav** 1988 Sep;22(3):338–50
Endocrine and immunological findings in cryptorchid infants. Job JC, et al. **Horm Res** 1988;30(4–5):167–72
Sustained impairment of pituitary and testicular function in prostatic cancer patients treated with a depot form of a GnRH agonist. Rolandi E, et al. **Horm Res** 1988;30(1):22–5
Pulsatile gonadotrophin releasing hormone therapy in patients with hyperandrogenaemia or hypothalamic amenorrhoea. Gerhard I, et al. **Hum Reprod** 1988 Oct; 3(7):835–43
Ultrasonic assessment of the endometrium as a predictor of oestrogen status in amenorrhoeic patients. Shulman A, et al. **Hum Reprod** 1989 Aug;4(6):616–9
Plasma estrogens, androgens, and von Willebrand factor in men on chronic hemodialysis. Baumann G, et al. **Int J Artif Organs** 1988 Nov;11(6):449–53
Normalization of serum prolactin levels in hemodialysis patients on recombinant human erythropoietin. Schaefer RM, et al. **Int J Artif Organs** 1989 Jul;12(7):445–9
Adrenal response to adrenocorticotropin stimulation in unexplained infertile women. Cohen I, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):219–24
Serous cystadenoma in a normally cyclic mare with high plasma testosterone values. Hinrichs K, et al. **J Am Vet Med Assoc** 1989 Feb 1;194(3):381–2
Serum testosterone and estradiol 17–beta concentrations in 15 dogs with perineal hernia. Mann FA, et al. **J Am Vet Med Assoc** 1989 Jun 1;194(11):1578–80
Changes in blood content and histology during growth of antlers in red deer (Cervus elaphus) and their relationship to plasma testosterone levels. Muir PD, et al. **J Anat** 1988 Jun;158:31–42
Steroid metabolism and morphologic features of the human testis. Fredricsson B, et al. **J Androl** 1989 Jan–Feb; 10(1):43–9
Indomethacin and oxaprozin lower seminal prostaglandin levels but do not influence sperm motion characteristics and serum hormones of young healthy men in a placebo–controlled double–blind trial. Knuth UA, et al.

J Androl 1989 Mar-Apr;10(2):108-19

Effects of chronic sulpiride-induced hyperprolactinemia on plasma testosterone and its responses to hCG in normal men. Oseko F, et al. **J Androl** 1988 Jul-Aug;9(4):231-3

Simultaneous determination of testosterone, dihydrotestosterone and 5 alpha-androstan-3 alpha,-17 beta-diol by isotopic dilution mass spectrometry in plasma and prostatic tissue of patients affected by benign prostatic hyperplasia. Effects of 3-month treatment with a GnRH analog. Salerno R, et al. **J Androl** 1988 Jul-Aug;9(4):234-40

The relationship between composition of gain and circulating hormones in growing beef bulls fed three dietary crude protein levels. Anderson PT, et al. **J Anim Sci** 1988 Dec; 66(12):3059-67

Relationships among intramuscular collagen, serum hydroxyproline and serum testosterone in growing rams and wethers. Miller LF, et al. **J Anim Sci** 1989 Mar; 67(3):698-703

Changes in the hypothalamic-pituitary-gonadal axis in human immunodeficiency virus-infected homosexual men. Croxson TS, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):317-21

Suppression of serum insulin by diazoxide reduces serum testosterone levels in obese women with polycystic ovary syndrome. Nestler JE, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1027-32

Sex steroids and bone density in premenopausal and perimenopausal women. Steinberg KK, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):533-9

Serum sex hormone levels and myocardial infarction in the Honolulu Heart Program. Pitfalls in prospective studies on sex hormones. Phillips GB, et al. **J Clin Epidemiol** 1988; 41(12):1151-6

Fluorimetric method for simultaneous estimation of cortisol, corticosterone, and testosterone in plasma. Mattingly D, et al. **J Clin Pathol** 1989 Jun;42(6):661-6

Further demonstration of the ambient temperature dependence of the annual biological cycles in the edible dormouse, Glis glis. Jallageas M, et al. **J Comp Physiol [B]** 1989;159(3):333-8

Testes are asymmetric in the testicular hemicastration response of the male rat. Frankel AI, et al. **J Endocrinol** 1989 Aug;122(2):485-8

Increases in plasma concentrations of steroids in the rat after the administration of caffeine: comparison with plasma disposition of caffeine [published erratum appears in J Endocrinol 1989 Aug;122(2):606] Pollard I. **J Endocrinol** 1988 Nov;119(2):275-80

Effect of exposure to the altitude of 300 meters below sea-level on testosterone, luteinizing hormone, follicle-stimulating hormone and prolactin in man. Ajlouni KM, et al. **J Endocrinol Invest** 1988 Sep;11(8):621-3

Concentration of serum testosterone in XY sex reversed horses. Kent MG, et al. **J Endocrinol Invest** 1988 Sep; 11(8):609-13

Seasonality of serum testosterone levels and sperm density in Tursiops truncatus. Schroeder JP, et al. **J Exp Zool** 1989 Mar;249(3):316-21

Changes in the testicular binding of luteinizing hormone and plasma testosterone concentrations in the Djungarian hamster subjected to different photoperiods and temperatures and effects of long-term testosterone treatment on the binding. Tsutsui K, et al. **J Exp Zool** 1989 Jul;251(1):91-100

Aging, stress, and chronic disease interact to suppress plasma testosterone in Syrian hamsters. Ottenweller JE, et al. **J Gerontol** 1988 Nov;43(6):M175-80

Age-related differences in the sensitivity to opiate-induced perturbations in reproductive endocrinology in the developing and adult male rat. Cicero TJ, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):256-61

Effect of pinealectomy on testosterone, estradiol-17 beta, esterone, and 17 alpha-hydroxyprogesterone levels during the annual reproductive cycle in the freshwater catfish, Clarias batrachus. Nayak PK, et al. **J Pineal Res** 1988; 5(5):419-26

Seasonal variation in serum testosterone, testicular measurements and semen characteristics in the collared peccary (Tayassu tajacu). Hellgren EC, et al. **J Reprod Fertil** 1989 Mar;85(2):677-86

Seasonal changes in plasma testosterone concentrations in response to administration of hCG in a desert rodent, the sand rat (Psammomys obesus). Khammar F, et al. **J Reprod Fertil** 1989 Jan;85(1):171-5

Daily and seasonal variations in plasma LH and testosterone concentrations in the adult male hedgehog (Erinaceus europaeus). el Omari B, et al. **J Reprod Fertil** 1989 May; 86(1):145-55

Plasma concentrations of progesterone and testosterone in captive woolly opossums (Caluromys philander). Perret M, et al. **J Reprod Fertil** 1989 Jan;85(1):31-41

LH and testosterone responses to GnRH in red deer (Cervus elaphus) stags kept in a manipulated photoperiod. Suttie JM, et al. **J Reprod Fertil** 1989 Jan;85(1):213-9

Semen characteristics and testosterone profiles in ferrets kept in a long-day photoperiod, and the influence of hCG timing and sperm dilution medium on pregnancy rate after laparoscopic insemination. Wildt DE, et al. **J Reprod Fertil** 1989 May;86(1):349-58

The influence of experimentally induced copper deficiency on the fertility of rams. I. Semen parameters and peripheral plasma androgen concentration. Van Niekerk FE, et al. **J S Afr Vet Assoc** 1989 Mar;60(1):28-31

Acute effects of drinking beer or wine on the steroid hormones of healthy men. Couwenbergs CJ. **J Steroid Biochem** 1988 Oct;31(4A):467-73

Adrenalectomy does not influence basal secretion of testosterone in rat in vivo. Feek CM, et al. **J Steroid Biochem** 1989 May;32(5):725-8

The adrenal gland and progesterone stimulates testicular steroidogenesis in the rat in vivo. Feek CM, et al. **J Steroid Biochem** 1989 Apr;32(4):573-9

Castration levels of plasma testosterone have potent stimulatory effects on androgen-sensitive parameters in the rat prostate. Marchetti B, et al. **J Steroid Biochem** 1988 Oct;31(4A):411-9

Androgen levels during sequential insulin euglycemic clamp studies in patients with polycystic ovary disease. Micic D, et al. **J Steroid Biochem** 1988 Dec;31(6):995-9

A new look to the andropause: altered function of the gonadotrophs. Vermeulen A, et al. **J Steroid Biochem** 1989 Jan;32(1B):163-5

Foetal testosterone levels, homosexuality and handedness: a research proposal for jointly testing Geschwind's and Dörner's hypotheses. James WH. **J Theor Biol** 1989 Jan 23;136(2):177-80

Testosterone levels, handedness and sex ratio at birth. James WH. **J Theor Biol** 1988 Aug 8;133(3):261-6

Comparison of age-related changes in in vivo and in vitro measures of testicular steroidogenesis after acute cadmium exposure in the Sprague-Dawley rat. Phelps PV, et al. **J Toxicol Environ Health** 1989;27(1):95-105

Detection of testicular endocrine abnormalities and their correlation with serum antisperm antibodies in men following vasectomy. Fisch H, et al. **J Urol** 1989 May; 141(5):1129-32

Prognostic factors in survival free of progression after androgen deprivation therapy for treatment of prostate cancer. Ishikawa S, et al. **J Urol** 1989 May;141(5):1139-42

Fluctuations in peripheral serum testosterone levels within a day, with age and by sexual stimulation in male beagle dogs bred indoors. Fukuda S, et al. **Jikken Dobutsu** 1988 Oct;37(4):381-6

Serum testosterone level in the peripheral vein and the perigastric draining vein of patients with gastric carcinoma. Inutsuka S, et al. **Jpn J Clin Oncol** 1988 Dec;18(4):357-62

Testicular dysfunction in leprosy: relationships of FSH, LH and testosterone to disease classification, activity and duration. Levis WR, et al. **Lepr Rev** 1989 Jun;60(2):94-101

Effects of cocaine hydrochloride on the male reproductive system. Berul CI, et al. **Life Sci** 1989;45(1):91-5

Lithium: evidence for reduction in circulating testosterone levels in mice following chronic administration. Collins TJ, et al. **Life Sci** 1988;43(19):1501-5

Vasopressin and oxytocin excretion in the Brown-Norway rat in relation to aging, water metabolism and testosterone. Goudsmit E, et al. **Mech Ageing Dev** 1988 Sep;44(3):241-52

Changes of plasma testosterone, estradiol and prolactin levels in severe adult-onset obesity. Bellastella A, et al. **Minerva Endocrinol** 1988 Apr-Jun;13(2):107-10

Impact of circulating testosterone on iodomelatonin binding sites in the male rat brain. Zisapel N, et al. **Mol Cell Endocrinol** 1988 Dec;60(2-3):119-26

Cobalt-protoporphyrin suppresses testosterone secretion by multiple interactions within the brain-pituitary-testicular axis. Galbraith RA, et al. **Neuroendocrinology** 1989 Jun; 49(6):641-8

Effect of the antiandrogen flutamide on pituitary LH content and release. Sardañons ML, et al. **Neuroendocrinology** 1989 Aug;50(2):211-6

Virilizing serous cystadenoma. Beauchamp PJ, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):513-7

Rapid rise of serum testosterone following discontinuation of long term treatment of prostate carcinoma with an LHRH-agonist. Kreis W, et al. **Onkologie** 1988 Dec; 11(6):292-3

Future research on Cayo Santiago-derived group M rhesus monkeys at Sabana Seca: the socioendocrinology of male reproductive development. Bercovitch FB. **P R Health Sci J** 1989 Apr;8(1):177-9

Naltrexone effects on pituitary and gonadal hormones in male and female rhesus monkeys. Mello NK, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):683-91

Cohabitation with a female activates testosterone-dependent social aggression in male rats independently of changes in serum testosterone concentration. Albert DJ, et al. **Physiol Behav** 1988;44(6):735-40

Changes in forebrain Na,K-ATPase activity and serum hormone levels during sexual behavior in male rats. Oaknin S, et al. **Physiol Behav** 1989 Feb;45(2):407-10

The low plasma testosterone levels of young Indian infarct survivors are not due to a primary testicular defect. Sewdarsen M, et al. **Postgrad Med J** 1988 Apr; 64(750):264-6

Neuroendocrine aspects of primary endogenous depression VIII. Pituitary-gonadal axis activity in male patients and matched control subjects. Rubin RT, et al. **Psychoneuroendocrinology** 1989;14(3):217-29

Effects of chronic alprazolam treatment on plasma concentrations of glucocorticoids, thyroid hormones, and testosterone in cardiomyopathic hamsters. Ottenweller JE, et al. **Psychopharmacology (Berlin)** 1989;98(3):369-71

Seasonal and diurnal changes of prostatic androgen receptor and circulating testosterone in young mature rats. Moeller H, et al. **Res Exp Med (Berl)** 1988;188(6):451-62

Serum androgen levels after streptozotocin administration in the male rat. Centol I, et al. **Rev Esp Fisiol** 1988 Mar; 44(1):31-4

Gonadotrophin stimulation in children with abnormal sexual development. Garg SK, et al. **S Afr Med J** 1989 Sep 2; 76(5):199-201

Pretreatment hormone levels in prostatic cancer. Haapiainen R, et al. **Scand J Urol Nephrol Suppl** 1988;110:137-43

Endocrinologic evaluation of impotence. Baskin HJ. **South Med J** 1989 Apr;82(4):446-9

Endurance training and testosterone levels. Hackney AC. **Sports Med** 1989 Aug;8(2):117-27 (51 ref.)

Sex hormone binding globulin levels and free progesterone, testosterone and estradiol 17 beta during the annual cycle of the female turtle, Chrysemys picta. Albert C, et al. **Steroids** 1988 Oct;52(4):355-6

Effect of tracer binding to serum proteins on the reliability of a direct free testosterone assay. Giraudi G, et al. **Steroids** 1988 Oct;52(4):423-4

Usefulness of calculated free testosterone for discriminating secretory and idiopathic hirsute women. Lecomte P, et al. **Steroids** 1988 Oct;52(4):377-8

Testosterone blood content is regulated by testicular aromatization-conjugation in the stallion. Silberzahn P, et al. **Steroids** 1988 Oct;52(4):353-4

Twenty-four-hour pattern of plasma SHBG, total proteins and testosterone in young and elderly men. Simoni M, et al. **Steroids** 1988 Oct;52(4):381-2

Thyroid function and endocrine abnormalities in elderly patients with severe chronic obstructive lung disease [letter] Semple PD, et al. **Thorax** 1988 Nov;43(11):945-6

Plasma testosterone levels in human onchocerciasis. Ogunrinade AF, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):725

Circulating plasma levels of follicle-stimulating hormone, luteinizing hormone and testosterone in malnourished male children. Nduka EU, et al. **Turk J Pediatr** 1987 Jul-Sep; 29(3):151-4

Circulating testosterone, prostatic nuclear androgen receptor and time to progression in patients with metastatic disease of the prostate treated by orchiectomy. van Aubel OG, et al. **Urol Res** 1989;17(2):99-102

Dehydroepiandrosterone and epitestosterone in the blood of cows at term. Möstl E, et al. **Zentralbl Veterinarmed [A]** 1989 Feb;36(2):104-9

[The serum testosterone level of patients with bronchial asthma treated with corticosteroids and untreated] Mileva Zh, et al. **Vutr Boles** 1988;27(4):29-32 (Eng. Abstr.) **(Bul)**

[Effect of gossypol acetate on the testicular HCG reactivity and its receptor in the rats] Fang L, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Sep;21(3):331-5 (Eng. Abstr.) **(Chi)**

[Clinical manifestations of hyperandrogenism in infertile women] Gasparov AS, et al. **Cesk Gynekol** 1989 Feb; 54(1):11-7 (Eng. Abstr.) **(Cze)**

[Sex hormones in men under occupational stress] Hampl R, et al. **Vnitr Lek** 1988 Aug;34(8):802-6 (Eng. Abstr.) **(Cze)**

[Assay of plasma progesterone and testosterone. Comparison of enzyme immunoassays and radio-immunoassays] Nahoul K, et al. **Ann Biol Clin (Paris)** 1989;47(3):127-34 (Eng. Abstr.) **(Fre)**

[Elevated levels of plasma 4-ene steroids in a case of congenital deficiency of 3 beta-hydroxysteroid dehydrogenase] Nahoul K, et al. **Ann Endocrinol (Paris)** 1989;50(1):58-63 (Eng. Abstr.) **(Fre)**

[Testosterone-dihydrotestosterone ratio in the differential diagnosis of pancreatic disease] Sándor Z, et al. **Orv Hetil** 1989 Jun 25;130(26):1387-8 (Eng. Abstr.) **(Hun)**

[Plasma levels of testosterone and 17 beta-estradiol after castration and testosterone load in the rat] Di Stefano A, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):269-72 (Eng. Abstr.) **(Ita)**

[Possible effects of lead on various hormonal metabolic pathways] Apostoli P, et al. **G Ital Med Lav** 1988 Jan; 10(1):19-22 (Eng. Abstr.) **(Ita)**

[Effects of pyridoxine on the hypothalamo-hypophyseal-gonadal axis during chronic treatment with methadone] Tridenti G, et al. **Medicina (Firenze)** 1988 Jan-Mar;8(1):55-6 (Eng. Abstr.) **(Ita)**

[Low levels of testosterone in patients with pancreatic carcinoma] Militello C, et al. **Minerva Chir** 1988 Apr 15; 43(7):581-6 (Eng. Abstr.) **(Ita)**

[Blood testosterone in cryptorchid newborn infants: does it have a prognostic significance?] Di Comite A, et al. **Minerva Pediatr** 1989 Jan;41(1):47-9 (Eng. Abstr.) **(Ita)**

[Urination disorders, endocrine features and sexual activity in patients with benign prostatic hypertrophy under treatment with mepartricin] Scarpa RM, et al. **Minerva Urol Nefrol** 1988 Apr-Jun;40(2 Suppl):18-20 **(Ita)**

[Endocrinological profile of human spermatogenic impairment--evaluation of function of Leydig and Sertoli cells in vivo or in vitro studies] Okuyama A, et al. **Hinyokika Kiyo** 1988 Nov;34(11):1943-8 (Eng. Abstr.) **(Jpn)**

[The measurement of plasma-free testosterone in normal menstrual females, pregnant females, post menopausal

females and vulvar dystrophy] Yamaguchi A, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jun 20;64(6):482–8 (Eng. Abstr.) **(Jpn)**

[Total and free testosterone and androgen binding globulin (SHBG) in women with the features of androgenization] Baron J, et al. **Endokrynol Pol** 1988;39(4):189–96 (Eng. Abstr.) **(Pol)**

[Effects of thymosin (fraction 5) on the endocrine function of the testis in mice] Chesnokova VM, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):493–5 (Eng. Abstr.) **(Rus)**

[Effect of physical exertion on the factors of nonspecific resistance and steroid hormone levels in human blood] Priiatkin SA, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):606–12 **(Rus)**

[Sex hormones in dyslipoproteinemias and disorders of arterial blood pressure in boys 11–12 years of age] Shakhov IuA, et al. **Kardiologiia** 1989 Mar;29(3):81–6 (Eng. Abstr.) **(Rus)**

[Content of sex steroid hormones of the blood in patients with gastric and duodenal peptic ulcer] Loginov AS, et al. **Vrach Delo** 1988 Oct;(10):49–52 (Eng. Abstr.) **(Rus)**

[The role of hormonal factors in the pathogenesis of juvenile arterial hypertension] Tsygankov AT, et al. **Vrach Delo** 1988 Aug;(8):53–4 (Eng. Abstr.) **(Rus)**

[Effect of ketoconazole on the serum level of total testosterone, free testosterone and estradiol in normal subjects] Mangas–Rojas A, et al. **Rev Clin Esp** 1988 Nov; 183(7):358–64 (Eng. Abstr.) **(Spa)**

DEFICIENCY

Importance of gonadal steroids to bone mass in men with hyperprolactinemic hypogonadism. Greenspan SL, et al. **Ann Intern Med** 1989 Apr 1;110(7):526–31

Gonadotropin deficiency in Tourette's syndrome: a preliminary communication. Sandyk R, et al. **Int J Neurosci** 1988 Sep;42(1–2):121–5

DIAGNOSTIC USE

Neuroanatomical localization of sex steroid–concentrating cells in the Japanese quail (Coturnix japonica): autoradiography with [3H]–testosterone, [3H]–estradiol, and [3H]–dihydrotestosterone. Watson JT, et al. **Neuroendocrinology** 1989 Jan;49(1):51–64

IMMUNOLOGY

Sex hormones and autoimmune rheumatic disorders. Ansar Ahmed S, et al. **Scand J Rheumatol** 1989;18(2):69–76

METABOLISM

Effects of ethanol on testicular steroidogenesis in the rat. Akane A, et al. **Alcohol Alcohol** 1988;23(3):203–9

Target neurons of endogenous androgens immunocytochemically localized in male rat hypothalamus. Faccioli G, et al. **Arch Ital Biol** 1989 Jun;127(3):173–86

The use of human gingival fibroblasts in culture for studying the effects of phenytoin on testosterone metabolism. Sooriyamoorthy M, et al. **Arch Oral Biol** 1988;33(5):353–9

Age–related changes in the iron spin state of testosterone–binding rat liver microsomal cytochromes P–450. Friedman FK, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):480–4

Androgen hydroxylation catalysed by a cell line (SD1) that stably expresses rat hepatic cytochrome P–450 PB–4 (IIB1). Waxman DJ, et al. **Biochem J** 1989 May 15;260(1):81–5

A comparative study of 1–substituted imidazole and 1,2,4–triazole antifungal compounds as inhibitors of testosterone hydroxylations catalysed by mouse hepatic microsomal cytochromes P–450. Ballard SA, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4643–51

Differential effects of cimetidine, ranitidine and famotidine on the hepatic metabolism of estrogen and testosterone in male rats. Galbraith RA, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):2046–9

Metabolism of testosterone in vivo in the pregnant rat. Bassett SG, et al. **Biol Reprod** 1988 Oct;39(3):526–31

The influence of short photoperiod on testicular and circulating levels of testosterone precursors in the adult golden hamster. Chandrashekar V, et al. **Biol Reprod** 1989 Feb;40(2):300–6

Changes in serum and ovarian steroids during reproductive development in the female guinea pig. Westfahl PK, et al. **Biol Reprod** 1988 Dec;39(5):1086–92

Is the androgen–dependent increase in preoptic estradiol–17 beta formation due to aromatase induction? Steimer T, et al. **Brain Res** 1989 Feb 20;480(1–2):335–9

Changes in the activity of testosterone–metabolizing enzymes in the brain of male and female zebra finches during the post–hatching period. Vockel A, et al. **Brain Res** 1988 Nov 1;463(2):330–40

Aromatization of testosterone by epithelial tumor cells cultured from patients with ovarian carcinoma. Thompson MA, et al. **Cancer Res** 1988 Nov 15;48(22):6491–7

Localization and identification of nuclear radioactivity in the pituitary gland and genital tract after administering 3H–testosterone, 3H–dihydrotestosterone, or 3H–estradiol to male rhesus monkeys. Rees HD, et al. **Cell Tissue Res** 1988 Oct;254(1):139–46

Effect of salivary proteins on binding curves of three radioimmunoassay kits: Amerlex–M progesterone, Amerlex cortisol, and Biodata testosterone. Fulton A, et al. **Clin Chem** 1989 Apr;35(4):641–4

Brain–enhanced delivery of testosterone using a chemical delivery system complexed with 2–hydroxypropyl–beta–cyclodextrin. Anderson WR, et al. **Drug Des Deliv** 1988 May;2(4):287–98

Mechanism for inhibitory effect of cannabidiol on microsomal testosterone oxidation in male rat liver. Narimatsu S, et al. **Drug Metab Dispos** 1988 Nov–Dec;16(6):880–9

The uptake of [3H]testosterone and its metabolites by the brain and pituitary gland of the fetal macaque. Michael RP, et al. **Endocrinology** 1989 Mar;124(3):1319–26

Identification of the cytochrome P–450 isozymes responsible for testosterone oxidation in rat lung, kidney, and testis: evidence that cytochrome P–450a (P450IIA1) is the physiologically important testosterone 7 alpha–hydroxylase in rat testis. Sonderfan AJ, et al. **Endocrinology** 1989 Aug; 125(2):857–66

Developmental changes in arginine vasopressin receptors and testosterone stimulation in Leydig cells. Tahri–Joutei A, et al. **Endocrinology** 1989 Aug;125(2):605–11

Hormonal consequences of orchidectomy for carcinoma of the prostate. With special reference to the measurement of free testosterone in saliva and prostatic dihydrotestosterone levels. Boccon–Gibod L, et al. **Eur Urol** 1988;15(1–2):99–102

Hormonal pattern and testicular histology in patients with prostatic cancer after long–term treatment with a gonadotropin–releasing hormone agonist analogue. Giberti C, et al. **Eur Urol** 1988;15(1–2):125–7

The in vitro conversion of 3H androstenedione to testosterone and dihydrotestosterone in the adrenal gland of castrated male rat: influence of gonadal steroid administration. Andò S, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):83–9

Steroidogenesis in Fundulus heteroclitus. I. Production of 17 alpha–hydroxy,20 beta–dihydroprogesterone, testosterone, and 17 beta–estradiol by prematurational follicles in vitro. Petrino TR, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):147–56

Influence of follicular development on steroid production in the medaka (Oryzias latipes) ovarian follicle in response to exogenous substrates. Sakai N, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):516–23

Binding of levonorgestrel, norethisterone and desogestrel to human sex hormone binding globulin and influence on free testosterone levels. Nilsson B, et al. **Gynecol Obstet Invest** 1989;27(3):151–4

Testosterone metabolism by microsomal cytochrome P–450 in liver of rats treated with some inducers. Lee DW, et al. **Int J Biochem** 1989;21(1):49–57

Salivary testosterone levels in men and women: changes with age and correlation with plasma testosterone. Ben–Aryeh H, et al. **Isr J Med Sci** 1989 Jun;25(6):344–6

Reduction of testosterone, androstendione and their derivatives by Aphanocladium album. Dmochowska–Gładysz J, et al. **J Basic Microbiol** 1989; 29(1):3–12

Neonatal phenobarbital imprinting of rat hepatic microsomal testosterone hydroxylations. Haake JM, et al. **J Biochem Toxicol** 1988 Winter;3:309–19

Mechanism of androstenedione formation from testosterone and epitestosterone catalyzed by purified cytochrome P–450b. Wood AW, et al. **J Biol Chem** 1988 Nov 25; 263(33):17322–32

Effect of protein binding on testosterone extraction by human cirrhotic liver: evidence for a dissociation–limited uptake. Guéchot J, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):200–3

Effect of aldrin on spermatogenesis, plasma gonadotrophins and testosterone, and testicular testosterone in the rat. Chatterjee S, et al. **J Endocrinol** 1988 Oct;119(1):75–81

Testosterone concentrations in testicular interstitial fluid collected with a push–pull cannula or by drip–collection from adult rats given testosterone or aminoglutethimide. Maddocks S, et al. **J Endocrinol** 1989 May;121(2):303–9

Effect of a single injection of human chorionic gonadotrophin on testosterone levels in testicular interstitial fluid, and in testicular and peripheral venous blood in adult rats. Maddocks S, et al. **J Endocrinol** 1989 May;121(2):311–6

Effects of antimycotics on hepatic steroid metabolism. Morita K, et al. **J Pharmacobiodyn** 1988 Dec;11(12):808–15

Effect of pregnancy, injection of oestradiol benzoate or hCG on steroid concentration and release by pig luteal cells. Wiesak T. **J Reprod Fertil** 1989 May;86(1):247–54

Testosterone metabolism in neuroendocrine organs in male rats under atrazine and deethylatrazine influence. Babić–Gojmerac T, et al. **J Steroid Biochem** 1989 Jul; 33(1):141–6

Pretreatments with 5 alpha–dihydrotestosterone and the uptake of testosterone by cell nuclei in the brains of male rhesus monkeys. Bonsall RW, et al. **J Steroid Biochem** 1989 Sep;33(3):405–11

Identification of radioactivity in cell nuclei from brain, pituitary gland and genital tract of male rhesus monkeys after the administration of [3H]testosterone. Bonsall RW, et al. **J Steroid Biochem** 1989 Apr;32(4):599–608

Plasma testosterone levels and ovarian testosterone content in adult mice treated with diethylstilbestrol neonatally. Halling A, et al. **J Steroid Biochem** 1989 Mar;32(3):439–43

Estradiol and testosterone metabolism and production in men with prostatic cancer. Meikle AW, et al. **J Steroid Biochem** 1989 Jul;33(1):19–24

Effect of neonatal estrogenization on testosterone metabolism in the prostate and in the epididymis of the rat. Pinilla L, et al. **J Steroid Biochem** 1989 Mar;32(3):459–65

No evidence for aromatization of [3H]testosterone in oestrogen receptor containing cells of the epididymis. Schleicher G, et al. **J Steroid Biochem** 1989 Feb; 32(2):299–302

Microbial transformations of steroids—IV. 6,7–Dehydrogenation; a new class of fungal steroid transformation product. Smith KE, et al. **J Steroid Biochem** 1989 Aug;33(2):271–6

Microbial transformation of steroids—II. Transformations of progesterone, testosterone and androstenedione by Phycomyces blakesleeanus. Smith KE, et al. **J Steroid Biochem** 1989 Mar;32(3):445–51

Isolation and characterization of a 50 kDa testosterone–binding protein from Pseudomonas testosteroni. Thomas JE, et al. **J Steroid Biochem** 1989 Jan; 32(1A):27–34

Antihormonal activities of 5 alpha–reductase and aromatase inhibitors. Zoppi S, et al. **J Steroid Biochem** 1988 Oct; 31(4B):677–83

Effects of castration and androgen on glycosuria appearance in the diabetic KK mice induced by monosodium glutamate administration. Nonaka T, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1121–3

Effect of repeated administration of antidepressant drugs on the serum and brain concentration of testosterone and its metabolites. Przegaliński E, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):683–9

Interpretation of the discrepancy observed between plasma free and salivary testosterone levels in man. Rey F, et al. **Steroids** 1988 Oct;52(4):371–2

[Steroid hormone transformation in the gonads and liver of aged rats] Schriefers H, et al. **Biol Chem Hoppe Seyler** 1988 May;369(5):371–80 (Eng. Abstr.) **(Ger)**

[Evaluation of the capacity of the thymus to accumulate testosterone and of the nature of its interaction with the thymocytes] Chermnykh NS, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):611–3 (Eng. Abstr.) **(Rus)**

[Changes in the number of estradiol and testosterone–binding sites of the hypophysis in cyclic female rats in the period of elevated follicle–stimulating hormone levels] Babichev VN, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr; 35(2):59–62 (Eng. Abstr.) **(Rus)**

[Effect of neonatal castration on the capacity of the cerebral neurons in the septal complex of male rats to bind sex steroids] Myslitskiĭ VF. **Probl Endokrinol (Mosk)** 1988 Nov–Dec;34(6):56–9 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Pharmacokinetic studies of testosterone propionate using gas chromatography/mass spectrometry/selected ion monitoring. Shinohara Y, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):241–4

The utilization of prodrugs to enhance transdermal absorption of testosterone, deoxycorticosterone & indomethacin. Milosovich SM, et al. **Prog Clin Biol Res** 1989;292:273–7

[Transport of steroid hormones by bovine serum albumin as carrier] Watanabe S, et al. **Yakugaku Zasshi** 1989 Jan; 109(1):12–7 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Influence of testosterone on the development of the ischiocavernosus muscle of the rat. Vercelli A, et al. **Acta Anat (Basel)** 1989;134(3):177–83

Effect of testosterone administration on rates of ethanol elimination in hypogonadal patients. Mezey E, et al. **Alcohol** 1989 Jul–Aug;6(4):331–3

Effect of sex steroids on peak bone density of growing rabbits. Gilsanz V, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E416–21

Androgenic influences on body size and composition of adult rhesus monkeys. Kemnitz JW, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E857–64

Effects of testosterone on the prevention of T–2 toxin–induced adrenocortical necrosis in mice. Thurman JD, et al. **Am J Vet Res** 1989 Jun;50(6):942–4

Effect of trenbolone and testosterone on the plasma elimination rates of sulfamethazine, trimethoprim, and antipyrine in female dwarf goats. van Miert AS, et al. **Am J Vet Res** 1988 Dec;49(12):2060–4

Effects of long–term testosterone exposure on ovarian function and morphology in the rhesus monkey. Faiman C, et al. **Anat Rec** 1988 Nov;222(3):245–51

Testosterone propionate induced changes in testicular phosphatases of musk shrew (Suncus murinus L.). Mohanty N, et al. **Andrologia** 1989 Jul–Aug;21(4):334–9

Effects of co–administration of di(2–ethylhexyl)phthalate and testosterone on several parameters in the testis and pharmacokinetics of its mono–de–esterified metabolite. Oishi S. **Arch Toxicol** 1989;63(4):289–95

Synaptic plasticity in the hypoglossal nucleus of female canaries: structural correlates of season, hemisphere, and testosterone treatment. Clower RP, et al. **Behav Neural Biol** 1989 Jul;52(1):63–77

The glycosphingolipid composition and glycosyltransferase activities of the small intestinal mucosa of

testosterone-treated rats. Dahiya R, et al. **Biochem Cell Biol** 1989 Jan;67(1):42–7

The N haplotype of the murine beta-glucuronidase gene is altered in both its systemic regulation and its response to androgen induction. Bracey LT, et al. **Biochem Genet** 1989 Feb;27(1–2):1–15

Testosterone increases N-acetyltransferase activity in both male and female Syrian hamster harderian glands. Menendez-Pelaez A, et al. **Biochem Int** 1989 Jul; 19(1):115–21

Hormonal regulation of the developmental pattern of epoxide hydrolases. Studies in rat liver. Denlinger CL, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):603–10

Stimulatory effect of testosterone on renal 25-hydroxyvitamin D-3 1 alpha-hydroxylase in guinea pig. Hagenfeldt Y, et al. **Biochim Biophys Acta** 1989 Mar 14; 1002(1):84–8

Changes of norepinephrine levels, tyrosine hydroxylase and dopamine-beta-hydroxylase activities after castration and testosterone treatment in vas deferens of adult rats. Bustamante D, et al. **Biol Reprod** 1989 Mar;40(3):541–8

The effects of an aromatase inhibitor and a 5 alpha-reductase inhibitor upon the occurrence of polyovular follicles, persistent anovulation, and permanent vaginal stratification in mice treated neonatally with testosterone. Iguchi T, et al. **Biol Reprod** 1988 Oct;39(3):689–97

Testosterone regulates aromatase activity in discrete brain areas of male rhesus macaques. Roselli CE, et al. **Biol Reprod** 1989 May;40(5):929–34

Skeletal effects of oestrogen and testosterone in postmenopausal women [letter] **BMJ** 1988 Sep 10; 297(6649):687–8

Testosterone alters the behavioral response of the medial preoptic-anterior hypothalamus to microinjection of arginine vasopressin in the hamster. Albers HE, et al. **Brain Res** 1988 Jul 26;456(2):382–6

The distribution of glial fibrillary acidic protein in the adult rat brain is influenced by the neonatal levels of sex steroids. Garcia-Segura LM, et al. **Brain Res** 1988 Jul 26; 456(2):357–63

Testosterone supplementation restores vasopressin innervation in the senescent rat brain. Goudsmit E, et al. **Brain Res** 1988 Nov 15;473(2):306–13

Androgen increases the number of cells in fetal mouse spinal cord cultures: implications for motoneuron survival. Hauser KF, et al. **Brain Res** 1989 Apr 17;485(1):157–64

Effects of castration, steroid replacement, and sexual experience on mesolimbic dopamine and sexual behaviors in the male rat. Mitchell JB, et al. **Brain Res** 1989 Jul 3; 491(1):116–27

Testosterone stimulates LH-RH-like mRNA level in the rat hypothalamus. Park Y, et al. **Brain Res** 1988 Jun 7; 451(1–2):255–60

The distribution and plasticity of [3H]vasopressin-labelled specific binding sites in the canary brain. Voorhuis TA, et al. **Brain Res** 1988 Aug 2;457(1):148–53

The effects of immobilization stress on beta-endorphin levels are modulated by testosterone. Forman LJ, et al. **Brain Res Bull** 1988 Jul;21(1):7–12

Prepubescent hormonal control of the development of accessory olfactory bulbs in the male rat. Roos J, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):309–12

Early and late influences of testosterone on acetylcholinesterase activity of skeletal muscles from developing rats. Souccar C, et al. **Braz J Med Biol Res** 1988;21(2):263–71

Influence of testosterone and dihydrotestosterone on bone-matrix induced endochondral bone formation. Kapur SP, et al. **Calcif Tissue Int** 1989 Feb;44(2):108–13

The promotional effect of testosterone on induction of prostate-cancer in MNU-sensitized L-W rats. Pollard M, et al. **Cancer Lett** 1989 Jun;45(3):209–12

Regulation of renal N-nitrosodimethylamine demethylase activity by androgens, progestin, glucocorticoid, and estrogen in BALB/c mice. Ahir S, et al. **Cancer Res** 1989 Jul 15;49(14):3737–41

Inhibitory effect of antibody against basic fibroblast growth factor on androgen- or glucocorticoid-induced growth of Shionogi carcinoma 115 cells in serum-free culture. Lu J, et al. **Cancer Res** 1989 Sep 15;49(18):4963–7

1,2-Dimethylhydrazine carcinogenesis in neonatally androgenized CBA mice. Smirnova IO, et al. **Carcinogenesis** 1988 Nov;9(11):1927–9

Polyamines mediate androgenic stimulation of calcium fluxes and membrane transport in rat heart myocytes. Koenig H, et al. **Circ Res** 1989 Mar;64(3):415–26

The effect of testosterone, cyproterone acetate, and minoxidil on hair loss in the androchronogenetic alopecia mouse. Matias JR, et al. **Clin Dermatol** 1988 Oct-Dec;6(4):169–76

Regulatory effects of testosterone and 17 beta-oestradiol on the metabolism of dimethylnitrosamine by renal and hepatic microsomal enzymes from BALB/c mice. Ampy FR, et al. **Cytobios** 1988;55(221):87–94

Satellite cell proliferation and increase in the number of myonuclei induced by testosterone in the levator ani muscle of the adult female rat. Joubert Y, et al. **Dev Biol** 1989 Feb;131(2):550–7

Castration and testosterone effects on endogenous and somatocrinin-induced growth hormone release in intact and castrated male pigs. Dubreuil P, et al. **Domest Anim Endocrinol** 1989 Jan;6(1):15–24

Effects of dihydrotestosterone administration with and without estradiol pretreatment on gonadotropin secretion in ovariectomized pony mares. Wiest JJ, et al. **Domest Anim Endocrinol** 1987 Jul;4(3):167–74

Effect of short-term androgen administration to rabbit females on their lipoprotein metabolism. Háčik T, et al. **Endocrinol Exp (Bratisl)** 1988 Sep;22(3):181–6

Testosterone restores testicular inhibin content in cryptorchid rats. Demura R, et al. **Endocrinol Jpn** 1988 Jun;35(3):385–90

Bilateral orchidectomy and concomitant testosterone replacement in the juvenile male rhesus monkey (Macaca mulatta) receiving an invariant intravenous gonadotropin-releasing hormone (GnRH) infusion results, as in the hypothalamus lesioned GnRH-driven adult male, in a selective hypersecretion of follicle-stimulating hormone. Abeyawardene SA, et al. **Endocrinology** 1989 Jul; 125(1):257–9

Institution of combined treatment with testosterone and charcoal-extracted porcine follicular fluid immediately after orchidectomy prevents the postcastration hypersecretion of follicle-stimulating hormone in the hypothalamus-lesioned rhesus monkey (Macaca mulatta) receiving an invariant intravenous gonadotropin-releasing hormone infusion. Abeyawardene SA, et al. **Endocrinology** 1989 Mar;124(3):1310–8

Quantitative restoration of advanced spermatogenic cells in adult male rats made azoospermic by active immunization against luteinizing hormone or gonadotropin-releasing hormone. Awoniyi CA, et al. **Endocrinology** 1989 Sep; 125(3):1303–9

Restoration of advanced spermatogenic cells in the experimentally regressed rat testis: quantitative relationship to testosterone concentration within the testis. Awoniyi CA, et al. **Endocrinology** 1989 Mar;124(3):1217–23

Endogenous human growth hormone (GH) modulates the effect of gonadotropin-releasing hormone on pituitary function and the gonadotropin response to the negative feedback effect of testosterone in adult male transgenic mice bearing human GH gene. Chandrashekar V, et al. **Endocrinology** 1988 Dec;123(6):2717–22

Testosterone regulation of proopiomelanocortin messenger ribonucleic acid in the arcuate nucleus of the male rat. Chowen-Breed J, et al. **Endocrinology** 1989 Apr; 124(4):1697–702

Regional specificity of testosterone regulation of proopiomelanocortin gene expression in the arcuate nucleus of the male rat brain. Chowen-Breed JA, et al. **Endocrinology** 1989 Jun;124(6):2875–81

Sexual dimorphism and testosterone-dependent regulation of somatostatin gene expression in the periventricular nucleus of the rat brain. Chowen-Breed JA, et al. **Endocrinology** 1989 Jul;125(1):357–62

A tyrosine aminotransferase glucocorticoid response element also mediates androgen enhancement of gene expression. Denison SH, et al. **Endocrinology** 1989 Feb;124(2):1091–3

Effects of gonadectomy and treatment with gonadal steroids and luteinizing hormone secretion in hypogonadal male and female mice with preoptic area implants. Gibson MJ, et al. **Endocrinology** 1989 Sep;125(3):1525–32

Effects of sex steroids on the response of cultured rat pituitary cells to growth hormone-releasing hormone and somatostatin. Hertz P, et al. **Endocrinology** 1989 Aug; 125(2):581–5

Gonadal steroid modulation of signal transduction and luteinizing hormone release in cultured chicken pituitary cells. King JA, et al. **Endocrinology** 1989 Apr; 124(4):1830–40

Effects of gonadal steroids on gonadotropin secretion in males: studies with perifused rat pituitary cells. Kotsuji F, et al. **Endocrinology** 1988 Dec;123(6):2683–9

Neonatal organization of the brain opioid systems controlling prolactin and luteinizing hormone secretion. Limonta P, et al. **Endocrinology** 1989 Feb;124(2):681–6

Evidence for a role of testosterone-androgen receptor interactions in mediating masculine sexual behavior in male rats. McGinnis MY, et al. **Endocrinology** 1989 Feb; 124(2):618–26

Testosterone induction of cellular proteins in cultured Sertoli cells from hypophysectomized rats and rats of different ages. Roberts K, et al. **Endocrinology** 1989 Sep; 125(3):1174–9

Testosterone raises neuropeptide-Y concentration in selected hypothalamic sites and in vitro release from the medial basal hypothalamus of castrated male rats. Sahu A, et al. **Endocrinology** 1989 Jan;124(1):410–4

The effects of exogenously administered testosterone on spermatogenesis in intact and hypophysectomized rats. Sun YT, et al. **Endocrinology** 1989 Aug;125(2):1000–10

Testosterone selectively influences protein kinase-C-coupled secretion of proluteinizing hormone-releasing hormone-derived peptides. Wetsel WC, et al. **Endocrinology** 1989 Jul;125(1):538–47

Maintenance of advanced spermatogenic cells in the adult rat testis: quantitative relationship to testosterone concentration within the testis. Zirkin BR, et al. **Endocrinology** 1989 Jun;124(6):3043–9

Urinary output modulation of alanine aminopeptidase, gamma-glutamyl transpeptidase and N-acetyl-beta-D-glucosaminidase by castration and testosterone in male normal rat. Girolami JP, et al. **Enzyme** 1989;41(4):181–6

Increase in bone density during testosterone therapy in adolescent hypogonadism [letter] Arisaka O, et al. **Eur J Pediatr** 1989 Apr;148(6):579

The in vitro conversion of 3H androstenedione to testosterone and dihydrotestosterone in the adrenal gland of castrated male rat: influence of gonadal steroid administration. Andò S, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):83–9

Sex-specific postnatal development of negative oestrogen feedback in rats. Döcke F, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):301–10

Testosterone-induced acceleration of recovery from facial paralysis following crush axotomy of the facial nerve in male hamsters. Kujawa KA, et al. **Exp Neurol** 1989 Jul; 105(1):80–5

Effects of photoperiod, temperature and testosterone-treatment on plasma T3 and T4 levels in the Djungarian hamster, Phodopus sungorus. Masuda A, et al. **Experientia** 1989 Jan 15;45(1):102–3

Epididymal sperm profiles in young adult, middle-aged, and testosterone-supplemented old rats. Taylor GT, et al. **Gamete Res** 1988 Apr;19(4):401–9

Induction of gonadotropin surge by steroid hormone implantation in ovariectomized and sexually regressed female goldfish. Kobayashi M, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):469–76

Induction of cloacal and dermal skin glands of tiger salamander larvae, (Ambystoma tigrinum): effects of testosterone and prolactin. Norris DO, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):194–204

Infravesical outflow obstruction in rats: a comparison of two models. Maggi CA, et al. **Gen Pharmacol** 1989;20(3):345–9

Modulation of prolactin responses to gonadotropin releasing hormone by acute testosterone infusions in normal women. Serafini P, et al. **Gynecol Endocrinol** 1987 Sep;1(3):247–53

The role of anabolic steroids on baseline and stress heart rate in cynomolgus monkeys. Rejeski WJ, et al. **Health Psychol** 1988;7(4):299–307

The effect of several sex steroid hormones on the growth rate of three Morris hepatoma tumor lines. Erdstein J, et al. **Hepatology** 1989 Apr;9(4):621–4

Behavioral masculinization is independent of genital masculinization in prenatally androgenized female rhesus macaques. Goy RW, et al. **Horm Behav** 1988 Dec; 22(4):552–71

Perseverative responding in male and female Wistar rats: effects of gonadal hormones. van Hest A, et al. **Horm Behav** 1989 Mar;23(1):57–67

Sexual orientation, proceptivity, and receptivity in the male rat as a function of neonatal hormonal manipulation. Vega Matuszczyk J, et al. **Horm Behav** 1988 Sep;22(3):362–78

Activation of sexual behavior by implantation of testosterone propionate and estradiol benzoate into the preoptic area of the male Japanese quail (Coturnix japonica). Watson JT, et al. **Horm Behav** 1989 Jun;23(2):251–68

Quantitative analysis of spermatogonial germ cells in adult rats treated with oestradiol benzoate alone & in combination with testosterone propionate. Raychoudhury K, et al. **Indian J Med Res** 1988 Jun;87:609–14

Hormonal modulation of sex differences in resistance to Leishmania major systemic infections. Mock BA, et al. **Infect Immun** 1988 Dec;56(12):3316–9

Effects of differentiation state and post-castration time lapse on the epididymal response of the lizard to testosterone in vitro: changes in specific protein and mRNA levels. Morel F, et al. **Int J Androl** 1988 Aug;11(4):349–60

Effects of gonadal steroids on nerve growth factor receptors in sympathetic and sensory ganglia of neonatal rats. Wright LL, et al. **Int J Dev Neurosci** 1988;6(3):217–22

Gonadal steroid influence upon sexual and aggressive behavior of female rats. Van de Poll NE, et al. **Int J Neurosci** 1988 Aug;41(3–4):271–86

Androgenic-anabolic steroid effects on serum and skin surface lipids, on red cells, and on liver enzymes. Király CL. **Int J Sports Med** 1988 Aug;9(4):249–52

Effects of anabolic steroids, testosterone, and HGH on blood lipids and echocardiographic parameters in body builders. Zuliani U, et al. **Int J Sports Med** 1989 Feb;10(1):62–6

Pituitary gonadotropin content in gonadectomized rats. Immunoassay measurements influenced by extraction solvent and testosterone replacement. Spitzbarth TL, et al. **J Androl** 1988 Jul-Aug;9(4):294–304

Effect of prenatal androgenization on growth performance and carcass characteristics of steers and heifers. DeHaan KC, et al. **J Anim Sci** 1988 Aug;66(8):1864–70

Effect of active immunization against estrogen on gonadotropin response to testosterone propionate treatment in ovariectomized pony mares. Garza F Jr, et al. **J Anim Sci** 1989 Jan;67(1):226–31

Effect of testosterone on muscle mass and muscle protein synthesis. Griggs RC, et al. **J Appl Physiol** 1989 Jan; 66(1):498–503

Mechanism of induction of mouse kidney alcohol dehydrogenase by androgen. Androgen-induced stimulation of transcription of the Adh-1 gene. Felder MR, et al. **J Biol Chem** 1988 Oct 5;263(28):14531–7

The effect of beta-estradiol, progesterone and testosterone on the production of human leukocyte derived interferons. Le N, et al. **J Biol Regul Homeost Agents** 1988 Oct-Dec; 2(4):199–204

Testosterone administration inhibits gonadotropin secretion by an effect directly on the human pituitary. Sheckter CB, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):397–401

Effects of long-term testosterone administration on

gonadotropin secretion in agonadal female to male transsexuals compared with hypogonadal and normal women. Spinder T, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):200–7

Hormonal modification of the number of total and late-arising neurons in the central part of the medial preoptic nucleus of the rat. Dodson RE, et al. **J Comp Neurol** 1988 Sep 22;275(4):623–9

Hormonal control of neuron number in sexually dimorphic spinal nuclei of the rat: I. Testosterone-regulated death in the dorsolateral nucleus. Sengelaub DR, et al. **J Comp Neurol** 1989 Feb 22;280(4):622–9

Sex reversal in female Betta splendens as a function of testosterone manipulation and social influence. Badura LL, et al. **J Comp Psychol** 1988 Sep;102(3):262–8

Prenatal androgenization selectively modifies some responses to oestrogen in the prepubertal rat uterus. Arriaza CA, et al. **J Endocrinol** 1989 Mar;120(3):379–84

Differential effects of FSH and testosterone on the maintenance of spermatogenesis in the adult hypophysectomized rat. Bartlett JM, et al. **J Endocrinol** 1989 Apr;121(1):49–58

The in-vitro transformation of [3H]dehydroepiandrosterone into its principal metabolites in the adrenal cortex of adult castrated male rats and following steroid treatment. Canonaco M, et al. **J Endocrinol** 1989 Jun;121(3):419–24

Effects of an aromatase inhibitor on testosterone-induced inhibition of thymus growth in immature female rats. Greenstein BD, et al. **J Endocrinol** 1988 Oct;119(1):65–7

The regulation by thyroid hormones and androgen of epidermal growth factor synthesis in the submandibular gland and its plasma concentrations in mice. Kasayama S, et al. **J Endocrinol** 1989 May;121(2):269–75

Interstitial fluid volume in the rat testis: androgen-dependent regulation by the seminiferous tubules? Maddocks S, et al. **J Endocrinol** 1989 Feb;120(2):215–22

Androgen regulation of major mRNAs for proteins of the immature and adult mouse vas deferens. Martinez A, et al. **J Endocrinol** 1989 Jan;120(1):67–74

Effects of neonatal androgenization on growth and carcass composition in female mice. Ventanas J, et al. **J Endocrinol** 1989 Feb;120(2):281–5

Growth hormone and testosterone can independently stimulate the growth of hypophysectomized prepubertal lambs without any alteration in circulating concentrations of insulin-like growth factors. Young IR, et al. **J Endocrinol** 1989 Jun;121(3):563–70

Serum androgen levels in senescent Cr1:CD-1 (ICR)BR mice: effects of castration and testosterone treatment. Shapiro BH, et al. **J Gerontol** 1989 Jan;44(1):B15–9

Lipogenesis by isolated human apocrine sweat glands: testosterone has no effect during long-term organ maintenance. Barth JH, et al. **J Invest Dermatol** 1989 Mar; 92(3):333–6

Effect of systemic and topical application of testosterone propionate on the density of epidermal Langerhans cells in the mouse. Koyama Y, et al. **J Invest Dermatol** 1989 Jan;92(1):86–90

Joint hormonal and sensory stimulation modulate neuronal number in adult canary brains. Bottjer SW, et al. **J Neurobiol** 1988 Oct;19(7):624–35

Effect of testosterone on input received by an identified neuron type of the canary song system: a Golgi/electron microscopy/degeneration study. Canady RA, et al. **J Neurosci** 1988 Oct;8(10):3770–84

Androgenic regulation of gap junctions between motoneurons in the rat spinal cord. Matsumoto A, et al. **J Neurosci** 1988 Nov;8(11):4177–83

Inhibition of the catalytic activity of bovine pineal gland hydroxyindole-O-methyltransferase (EC 2.1.1.4) by estrone, estradiol, progesterone, and testosterone but not pteridines. Morton DJ, et al. **J Pineal Res** 1989;6(3):259–65

Depressed translational activity in the androgen sensitive levator ani muscle of the rat. Boissonneault G, et al. **J Steroid Biochem** 1989 Apr;32(4):507–13

Effect of androgen pretreatments at adulthood on androgen-induced proliferative response of seminal vesicles in neonatally castrated mice. Li W, et al. **J Steroid Biochem** 1989 Jul;33(1):59–63

Growth-stimulatory effects of androgen, high concentration of glucocorticoid or fibroblast growth factors on a cloned cell line from Shionogi carcinoma 115 cells in a serum-free medium. Nakamura N, et al. **J Steroid Biochem** 1989 Jul; 33(1):13–8

Differentiation between androgen and estrogen receptor mediated effects of testosterone on FSH using androgen receptor deficient (Tfm) and normal mice. Schleicher G, et al. **J Steroid Biochem** 1989 Jul;33(1):49–51

John Lattimer lecture. Lipokinins: novel phospholipase A2 activators mediate testosterone effects on embryonic genitalia. Goldman AS, et al. **J Urol** 1988 Nov;140(5 Pt 2):1184–8

The effect of testosterone and rutting on the metabolism and pharmacokinetics of sulphadimidine in goats. Nouws JF, et al. **J Vet Pharmacol Ther** 1988 Jun;11(2):145–54

The response to analgesia testing is affected by gonadal steroids in the rat. Forman LJ, et al. **Life Sci** 1989; 45(5):447–54

Effects of testosterone and estradiol on ventral prostate and body weights of castrated rats. Karr JP, et al. **Life Sci** 1974 Aug 1;15(3):501–13

Effects of testosterone and erythropoietin on erythroid colony formation in rabbit bone marrow cultures. Moriyama Y, et al. **Life Sci** 1974 Sep 15;15(6):1181–8

Effects of parenteral testosterone administration on insulin action in perfused hindlimb muscle of female rats. Hager SR, et al. **Metabolism** 1989 May;38(5):431–4

Molecular genetics of androgen-inducible RP2 gene transcription in the mouse kidney. Rheaume C, et al. **Mol Cell Biol** 1989 Feb;9(2):477–83

Androgen induction of beta-glucuronidase translational yield in submaxillary gland of B6.N mice. Bracey LT, et al. **Mol Endocrinol** 1988 Aug;2(8):701–5

Testosterone and dihydrotestosterone, but not estradiol, selectively maintain pituitary and serum follicle-stimulating hormone in gonadotropin-releasing hormone antagonist treated male rats. Arslan M, et al. **Neuroendocrinology** 1989 Apr;49(4):395–401

Chronic morphine and testosterone treatment. Effects on sexual behavior and dopamine metabolism in male rats. Clark JT, et al. **Neuroendocrinology** 1988 Jul;48(1):97–104

Testosterone modulates oxytocin binding in the hypothalamus of castrated male rats. Johnson AE, et al. **Neuroendocrinology** 1989 Aug;50(2):199–203

Rapid effect of testosterone on striated muscle activity in rats. Sachs BD, et al. **Neuroendocrinology** 1988 Nov; 48(5):453–8

Reproductive hormones control striatal tyrosine hydroxylase activity in the male rat. Abreu P, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):213–7

Critical period for androgenic regulation of soma size of sexually dimorphic motoneurons in rat lumbar spinal cord. Lee JH, et al. **Neurosci Lett** 1989 Mar 13;98(1):79–84

Hormonal influence on carcinogenicity of methylmercury in mice. Hirano M, et al. **Nippon Juigaku Zasshi** 1988 Aug; 50(4):886–93

Processing of one-chain to two-chain renin in the mouse submandibular gland is influenced by androgen. Ingelfinger JR, et al. **Pediatr Res** 1989 Apr;25(4):332–5

Competitive experience activates testosterone-dependent social aggression toward unfamiliar males. Albert DJ, et al. **Physiol Behav** 1989 Apr;45(4):723–7

Gonadal steroids and attentional mechanisms in young domestic chicks. Clifton PG, et al. **Physiol Behav** 1988; 43(4):441–6

The influence of steroid hormones on competing sexual and ingestive behavior in the male rat. Hawkins CA, et al. **Physiol Behav** 1988;44(3):291–300

High dosage testosterone propionate induces copulatory behavior in the obese male Zucker rat. Hemmes RB, et al. **Physiol Behav** 1988;43(3):321–4

Injected testosterone fails to influence schedule-induced attack. Robinson JK, et al. **Physiol Behav** 1988;43(4):539–40

Gender-specific and gonadectomy-specific effects upon swim analgesia: role of steroid replacement therapy. Romero MT, et al. **Physiol Behav** 1988;44(2):257–65

Perinatal modification of a sexually dimorphic motor nucleus in the spinal cord of the B6D2F1 house mouse. Wagner CK, et al. **Physiol Behav** 1989 Apr;45(4):831–5

Hormonal regulation of postnatal development of renal tubular transport processes. Bräunlich H. **Physiol Bohemoslov** 1988;37(4):347–50

Sex- and hormone-dependent antigen immunoreactivity in developing rat hypothalamus. Tobet SA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):382–6

Localization of beta-endorphin in the rat heart and modulation by testosterone. Forman LJ, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):240–5

Protection from radiation-induced damage to spermatogenesis in the androgen pretreated rat. Schlappack OK, et al. **Radiother Oncol** 1988 Jul;12(3):219–24

In-vitro contractility of human seminiferous tubules in response to testosterone, dihydrotestosterone and estradiol. Yamamoto M, et al. **Urol Res** 1989;17(4):265–8

Episodic growth hormone secretory pattern in male rats: relationship to gonadal steroid hormones. Ahmed HH, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):292–8

[Does epitestosterone function as an endogenous antiandrogen?] Bičíková M, et al. **Cas Lek Cesk** 1989 Jun 9;128(24):754–5 (Eng. Abstr.) (Cze)

[Experimental research on the effect of testosterone on skull morphogenesis in the rat] Duncker M, et al. **Fortschr Kieferorthop** 1988 Aug;49(4):342–57 (Eng. Abstr.) (Ger)

[Effect of testosterone on in vitro proliferation of bone marrow granulocyte-macrophage progenitor cells (CFU-GM). I. Observations in normal subjects] De Caro L, et al. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):195–202 (Eng. Abstr.) (Ita)

[Effect of testosterone on the in vitro proliferation of bone marrow granulocyte-macrophage cells (CFU-GM). II. Observations in hypogonadal subjects] De Caro L, et al. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):203–10 (Eng. Abstr.) (Ita)

[Behavior of nucleotides in the liver of the rat after castration and treatment with testosterone] Pizzichini M, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):265–8 (Eng. Abstr.) (Ita)

[Morphometric analysis of the liver of rats, castrated and treated with testosterone] Tanganelli P, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):257–63 (Eng. Abstr.) (Ita)

[Testosterone stimulation of the growth of a human osteogenic sarcoma strain transplanted into athymic rats] Bassalyk LS, et al. **Eksp Onkol** 1988;10(6):29–31 (Eng. Abstr.) (Rus)

[Reception of progesterone and its biological action in the uterus of neonatally androgenized rats] Sekretareva EV, et al. **Probl Endokrinol (Mosk)** 1988 Sep-Oct;34(5):61–5 (Eng. Abstr.) (Rus)

[The effect of noradrenaline, adrenaline and acetylcholine on contractility of the uterus of the guinea pig after testosterone administration] Sochorová R, et al. **Bratisl Lek Listy** 1989 Jun;90(6):436–40 (Eng. Abstr.) (Slo)

PHYSIOLOGY

Androgen-dependent human prostate cancer in nude mice. The PC-82 tumor model. van Steenbrugge GJ, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S8–12

Hormonal regulation of rat testicular gamma-glutamyl-transpeptidase "in vivo" and "in vitro". Schteingart HF, et al. **Andrologia** 1988 Jul-Aug;20(4):351–9

Patterns of lateralization and performance levels for verbal and spatial tasks in congenital androgen deficiency. Cappa SF, et al. **Behav Brain Res** 1988 Dec 1;31(2):177–83

Facilitation of the effect testosterone on male sexual behavior in rats deprived of REM sleep. Velazquez-Moctezuma J, et al. **Behav Neural Biol** 1989 Jan;51(1):46–53

Hypogastric ganglion perinatal development: evidence for androgen specificity via androgen receptors. Melvin JE, et al. **Brain Res** 1989 Apr 17;485(1):11–9

Organizational role of testosterone on the biochemical and morphological development of the hypogastric ganglion. Melvin JE, et al. **Brain Res** 1989 Apr 17;485(1):1–10

Developmental and hormonal factors in the sexually dimorphic, asymmetrical response to focal cortical lesions. Starkstein SE, et al. **Brain Res** 1989 Jan 23;478(1):16–23

Androgen regulation of an antigen expressed in regions of developing brainstem monoaminergic cell groups. Tobet SA, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):253–61

Testosterone as a factor modifying the toxicity of ekatin for the Pharaoh quail (Coturnix coturnix Pharaoh). I. Mature birds. Gromysz-Kałkowska K, et al. **Comp Biochem Physiol [C]** 1989;92(1):89–93

Transcriptional regulation of the gene encoding the 78-kD glucose-regulated protein GRP78 in mouse sertoli cells: binding of specific factor(s) to the GRP78 promoter. Day AR, et al. **DNA** 1989 Jun;8(5):301–10

Identification of the cytochrome P-450 isozymes responsible for testosterone oxidation in rat lung, kidney, and testis: evidence that cytochrome P-450a (P450IIA1) is the physiologically important testosterone 7 alpha-hydroxylase in rat testis. Sonderfan AJ, et al. **Endocrinology** 1989 Aug; 125(2):857–66

Testosterone and its effect on spermatogenesis in the Egyptian toad. Sabry I, et al. **Folia Morphol (Praha)** 1988; 36(3):290–5

Control of aggression and dominance in white-throated sparrows by testosterone and its metabolites. Archawaranon M, et al. **Horm Behav** 1988 Dec; 22(4):497–517

Testosterone and survival: a cost of aggressiveness? Dufty AM Jr. **Horm Behav** 1989 Jun;23(2):185–93

Alarm signals in birds: the role of testosterone. Gyger M, et al. **Horm Behav** 1988 Sep;22(3):305–14

Androgen influence on exocrine pancreatic cancer. Andrén-Sandberg A. **Int J Pancreatol** 1989 May;4(4):363–9 (31 ref.)

The pattern of LH release in the adult ram influences the testicular steroidogenic response to individual LH pulses and is regulated by testosterone negative feedback. Sanford LM, et al. **J Androl** 1989 Jan-Feb;10(1):1–8

The role of testosterone in spontaneous autoimmune thyroiditis of Obese strain (OS) chickens. Fässler R, et al. **J Autoimmun** 1988 Feb;1(1):97–108

Androgen regulation of rat renal angiotensinogen messenger RNA expression. Ellison KE, et al. **J Clin Invest** 1989 Jun; 83(6):1941–5

Effect of short-term starvation on reproductive hormone gene expression, secretion and receptor levels in male rats. Bergendahl M, et al. **J Endocrinol** 1989 Jun;121(3):409–17

Effect of the Tfm mutation on handedness in mice. Nosten M, et al. **J Endocrinol** 1989 Apr;121(1):R5–7

A window for the study of prenatal sex hormone influences on postnatal development. Finegan JA, et al. **J Genet Psychol** 1989 Mar;150(1):101–12

Effect of testosterone on the susceptibility of C57BL/6 mice to infection with Brugia pahangi with reference to inflammatory cell response. Nakanishi H, et al. **J Parasitol** 1989 Jun;75(3):455–60

Castration blocks chronic sulpiride-induced desensitization of striatal D1 receptor-stimulated adenylate cyclase activity in male rats. Ryan-Jastrow T, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):626–31

Androgen-dependent messenger RNA(s) related to secretory proteins in the mouse epididymis. Ghyselinck NB, et al. **J Reprod Fertil** 1989 Mar;85(2):631–9

The role of sex steroids in the acquisition and production of birdsong. Marler P, et al. **Nature** 1988 Dec 22-29; 336(6201):770–2

Left and right-handed dyslexic boys: an empirical test of some assumptions of the Geschwind-Behan hypothesis. Hugdahl K, et al. **Neuropsychologia** 1989;27(2):223–31

Testicular hormones reduce individual differences in the aggressive behavior of male mice: a theory of hormone

action. Johnson F, et al. **Neurosci Biobehav Rev** 1988 Summer;12(2):93–9 (55 ref.)
Synaptology of luteinizing hormone-releasing hormone neurons in the preoptic area of the male rat: effects of gonadectomy. Witkin JW. **Neuroscience** 1989;29(2):385–90
Effects of testosterone on blood leukocytes in plasmodium berghei–infected mice. Kamis AB, et al. **Parasitol Res** 1989; 75(8):611–3
Activation of aggression in female rats by normal males and by castrated males with testosterone implants. Albert DJ, et al. **Physiol Behav** 1988;44(1):9–13
Gonadotropin releasing hormone (GnRH) affects precopulatory behavior in testosterone–treated geldings. McDonnell SM, et al. **Physiol Behav** 1989 Jan;45(1):145–9
Activity of castrated male voles: rhythms of responses to testosterone replacement. Rowsemitt CN. **Physiol Behav** 1989 Jan;45(1):7–13
The emission and elicitation of mouse ultrasonic vocalizations: the effects of age, sex and gonadal status. Warburton VL, et al. **Physiol Behav** 1989 Jan;45(1):41–7
Embryological controversies in testicular descent. Hutson JM, et al. **Semin Urol** 1988 May;6(2):68–73 (71 ref.)
[Interhormonal relations in the dynamics of immune response during thyroidectomy] Fomicheva EE. **Fiziol Zh SSSR** 1989 Jan;75(1):131–7 (Eng. Abstr.) **(Rus)**

SECRETION

Increases in testosterone secretion in adult rams with immunoneutralization of endogenous estradiol occur in the absence of increases in pulsatile LH release or testicular LH receptors. Sanford LM. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):180–6
Effects of photoperiod, beta–endorphin, and naloxone on in vitro secretion of testosterone in white–footed mouse (Peromyacus leucopus) testes. Knotts LK, et al. **Biol Reprod** 1988 Aug;39(1):205–12
In vitro–perifused rat testes secrete beta–endorphin and dynorphin: their effect on testosterone secretion. Margioris AN, et al. **Biol Reprod** 1989 Apr;40(4):776–84
Changes of basal and steroidal precursor–stimulated testosterone secretion in isolated Mongolian gerbil and guinea pig testes after a single episode of heating. Fenske M. **Comp Biochem Physiol [A]** 1989;93(4):857–60
Neonatal hemiorchidectomy of bulls alters plasma growth hormone levels and advances onset of pubertal testosterone secretion. al–Haboby AH, et al. **Domest Anim Endocrinol** 1988 Jan;5(1):61–9
Changes in the endocrine system controlling reproduction in mature female rats neonatally exposed to a low dose of gamma irradiation. Freud A, et al. **Endocr Res** 1989; 15(3):323–38
Steroid secretion by ovarian cells of the Japanese quail (Coturnix coturnix japonica). Onagbesan OM, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):272–81
Enhanced progesterone and testosterone secretion and depressed estradiol secretion in vitro from small white follicle cells of incubating turkey hens. Porter TE, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):400–5
Testosterone–secreting adrenocortical tumor in a pubertal girl. Case report and review of the literature. Sorgo W, et al. **Horm Res** 1988;30(6):217–23 (38 ref.)
Effects of prolactin on luteinizing hormone–stimulated testosterone secretion in isolated perfused rat testis. Fung MC, et al. **J Androl** 1989 Jan–Feb;10(1):37–42
Blockade of neonatal activation of the pituitary–testicular axis: effect on peripubertal luteinizing hormone and testosterone secretion and on testicular development in male monkeys. Mann DR, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):600–7
Dynamics of testosterone secretion by the rat testis: implications for measurement of the intratesticular levels of testosterone. Maddocks S, et al. **J Endocrinol** 1989 Jul; 122(1):323–9
Melatonin does not affect in vitro secretion of testosterone in white–footed mouse testis. Knotts LK, et al. **J Pineal Res** 1988;5(6):521–6
Seasonal pattern of LH and testosterone secretion in adult male fallow deer, Dama dama. Asher GW, et al. **J Reprod Fertil** 1989 Mar;85(2):657–65
Fibroblast growth factor is a regulator of testosterone secretion in cultured immature Leydig cells. Sordoillet C, et al. **Mol Cell Endocrinol** 1988 Aug;58(2–3):283–6
Steroid secretion by a virilizing lipoid cell ovarian tumor: origins of dehydroepiandrosterone sulfate. Shenker Y, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):502–6
Hormone ontogeny in the ovine fetus: XIX: The effect of a potent luteinizing hormone–releasing factor agonist on gonadotropin and testosterone release in the fetus and neonate. Clark SJ, et al. **Pediatr Res** 1989 Apr;25(4):347–52
Morphological and functional features of ovine follicles in perifusion with pulsatile hormone delivery. Terqui M, et al. **Reprod Nutr Dev** 1988;28(4B):1093–104
A possible role for testosterone during luteolysis in the ewe. Cooke RG, et al. **Res Vet Sci** 1988 Sep;45(2):222–4
[Three cases of Klinefelter syndrome in childhood—endocrinological and gonadal changes in puberty] Shinohara M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):574–81 (Eng. Abstr.) **(Jpn)**
[Fertilization in vitro—embryo transfer (IVF–ET). II. Secretion of progesterone, estradiol and testosterone by the "oocyte–corona radiata–cumulus" complex in the in vitro culture during in vitro fertilization] Kulikowski M, et al. **Ginekol Pol** 1988 May;59(5):245–9 (Eng. Abstr.) **(Pol)**
[Clinico–dermatoglyphic correlations in patients with hyperandrogenia] Gasparov AS, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):46–9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

The effect of testosterone therapy on spontaneous growth hormone secretion in boys with constitutional delay. Chalew SA, et al. **Am J Dis Child** 1988 Dec;142(12):1345–8
Testosterone replacement therapy and prostate/seminal vesicle volume in Klinefelter's syndrome. Sasagawa I, et al. **Arch Androl** 1989;22(3):245–9
Steroid hormone effects on picrotoxin–induced seizures in female and male rats. Schwartz–Giblin S, et al. **Brain Res** 1989 Jan 9;476(2):240–7
Testosterone treatment of an XXYY male presenting with aggression: a case report. Sourial N, et al. **Can J Psychiatry** 1988 Dec;33(9):846–50
Hormonal therapy and pubertal development in boys with selective hypogonadotropic hypogonadism. Bistritzer T, et al. **Fertil Steril** 1989 Aug;52(2):302–6
Metoclopramide–mediated prolactin secretion in patients with idiopathic hypogonadotropic hypogonadism: effect of testosterone therapy. Modebe O. **Fertil Steril** 1989 May; 51(5):855–8
No effect of oral testosterone treatment on sexual dysfunction in alcoholic cirrhotic men. Gluud C, et al. **Gastroenterology** 1988 Dec;95(6):1582–7
Influence of testosterone and progesterone on fatty liver of rats treated with few halogen alkanes. Kumar S, et al. **Indian J Exp Biol** 1988 Oct;26(10):811–3
Randomized clinical trial of testosterone replacement therapy in hypogonadal men. Conway AJ, et al. **Int J Androl** 1988 Aug;11(4):247–64
Androgen resistance associated with a qualitative abnormality of the androgen receptor and responsive to high dose androgen therapy. Grino PB, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):578–84
Corticosteroid induced osteoporosis and hormone implants [letter] Studd J, et al. **Lancet** 1989 Apr 15;1(8642):850–1
Is androgen substitution necessary in hypogonadal patients when they are treated with chemotherapy for malignant diseases? Pavlidis N, et al. **Med Pediatr Oncol** 1989; 17(3):222–6
Androgen–dependent somatotroph function in a hypogonadal adolescent male: evidence for control of exogenous androgens on growth hormone release. Mauras N, et al. **Metabolism** 1989 Mar;38(3):286–9
Gonadotropin–induced fertility in a man with congenital hypogonadism after prolonged prior testosterone therapy. Johnson VP, et al. **S D J Med** 1988 Dec;41(12):5–7
The effects of castration, testosterone and oestrogen on epithelial and stromal growth and morphology of the Dunning (R3327H) prostatic adenocarcinoma. Damber JE, et al. **Scand J Urol Nephrol Suppl** 1988;110:145–8
[Treatment of micropenis with testosterone cyclopentylate] Dorantes–Alvarez LM, et al. **Bol Med Hosp Infant Mex** 1988 Jul;45(7):449–53 (Eng. Abstr.) **(Spa)**

TOXICITY

[Effect of sex hormones on the induction of renal capsule angiosarcomas in mice] Chemeris GIu. **Eksp Onkol** 1989; 11(2):71–2 (Eng. Abstr.) **(Rus)**

URINE

Urinary excretion of free glucocorticosteroids and testosterone in the Mongolian gerbil (Meriones unguiculatus): effects of long–acting corticotrophin and human gonadotrophin. Fenske M. **Comp Biochem Physiol [A]** 1988;91(4):789–95
Gas chromatographic method for simultaneous analysis of urinary testosterone, androsterone and etiocholanolone. Determinations after a single dose of testosterone. Babar A, et al. **Pharm Acta Helv** 1988;63(9–10):278–81
The relationship between total urinary testosterone and renal calculi. van Aswegen CH, et al. **Urol Res** 1989;17(3):181–3
[Extraction–free determination of total and free forms of testosterone together with 5–alpha–dihydrotestosterone and estradiol in urine using a radioimmunologic analytic method] Buniatian AF, et al. **Lab Delo** 1988;(5):44–7 (Eng. Abstr.) **(Rus)**

TESTOSTERONE 5-ALPHA-REDUCTASE

ANALYSIS

Photoaffinity labelling of nuclear steroid 5 alpha–reductase of rat ventral prostate. Enderle–Schmitt U, et al. **J Steroid Biochem** 1989 Sep;33(3):379–87

ANTAGONISTS & INHIBITORS

The effects of an aromatase inhibitor and a 5 alpha–reductase inhibitor upon the occurrence of polyovular follicles, persistent anovulation, and permanent vaginal stratification in mice treated neonatally with testosterone. Iguchi T, et al. **Biol Reprod** 1988 Oct;39(3):689–97
Effect of MK–906, a specific 5 alpha–reductase inhibitor, on serum androgens and androgen conjugates in normal men. Rittmaster RS, et al. **J Androl** 1989 Jul–Aug;10(4):259–62
WS–9659 A and B, novel testosterone 5 alpha–reductase inhibitors isolated from a Streptomyces. I. Taxonomy, fermentation, isolation, physico–chemical characteristics. Nakayama O, et al. **J Antibiot (Tokyo)** 1989 Aug; 42(8):1221–9
WS–9659 A and B, novel testosterone 5 alpha–reductase inhibitors isolated from a Streptomyces. II. Structural elucidation of WS–9659 A and B. Nakayama O, et al. **J Antibiot (Tokyo)** 1989 Aug;42(8):1230–4
WS–9659 A and B, novel testosterone 5 alpha–reductase inhibitors isolated from a Streptomyces. III. Biological characteristics and pharmacological characteristics. Nakayama O, et al. **J Antibiot (Tokyo)** 1989 Aug; 42(8):1235–40
Prostate. III—A structural feature characteristic of the rat prostate 5 alpha–reductase active site. Petrow V, et al. **J Steroid Biochem** 1989 Mar;32(3):399–407
Role of steroid 5 alpha–reductase activity in sexual differentiation of the guinea pig. Connolly PB, et al. **Neuroendocrinology** 1989 Mar;49(3):324–30
Effect of a 4–methyl–4–aza steroid on androgen metabolism by rat ventral prostate epithelial and stromal cell cultures: selective inhibition of 5 alpha–reductase activity. Orlowski J, et al. **Prostate** 1988;13(4):289–97
Hormonal effects of an orally active 4–azasteroid inhibitor of 5 alpha–reductase in humans. Vermeulen A, et al. **Prostate** 1989;14(1):45–53
A kinetic analysis of the inhibition of human prostatic 5 alpha–reductase by 4–hydroxyandrostenedione and related steroids. Houston B, et al. **Steroids** 1988 Sep;52(3):237–47

DEFICIENCY

Decreased 3 alpha–androstanediol glucuronide levels in plasma and random urines in male pseudohermaphroditism caused by 5 alpha–reductase deficiency. Ertel NH, et al. **Metabolism** 1989 Sep;38(9):817–21

GENETICS

Expression cloning and regulation of steroid 5 alpha–reductase, an enzyme essential for male sexual differentiation. Andersson S, et al. **J Biol Chem** 1989 Sep 25;264(27):16249–55

METABOLISM

The effect of in vitro androgen stimulation upon androgen metabolism and trophic parameters in cultured human epididymis. Vazquez MH, et al. **Andrologia** 1989 Jan–Feb; 21(1):9–17
Effect of diethylstilbestrol diphosphate on activity of 5 alpha–reductase in human prostate. Usui T, et al. **Arch Androl** 1987;19(3):229–35
Side gland of Suncus murinus as a new model of sebaceous gland: 5 alpha–reductase, androgen receptor, and nuclear androgen content in male and female animals. Komada S, et al. **Arch Dermatol Res** 1989;280(8):487–93
Relationship of changing delta 4–steroid 5 alpha–reductase activity to [125I]iododeoxyuridine uptake during regeneration of involuted rat prostates. Kitahara S, et al. **Biol Reprod** 1989 Apr;40(4):793–9
Inhibition of 5 alpha–reductase activity in human skin by zinc and azelaic acid. Stamatiadis D, et al. **Br J Dermatol** 1988 Nov;119(5):627–32
Changes in the activity of testosterone–metabolizing enzymes in the brain of male and female zebra finches during the post–hatching period. Vockel A, et al. **Brain Res** 1988 Nov 1;463(2):330–40
Ontogenetic development of the 5 alpha–reductase in the rat brain: cerebral cortex, hypothalamus, purified myelin and isolated oligodendrocytes. Melcangi RC, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):181–8
Developmental pattern of 5 alpha–reductase activity in the rat gubernaculum. George FW. **Endocrinology** 1989 Feb; 124(2):727–32
5 alpha–reductase, aromatase, and androgen receptor levels in the monkey brain during fetal development. Sholl SA, et al. **Endocrinology** 1989 Feb;124(2):627–34
Chronic ethanol ingestion during puberty alters the transient increase in testicular 5 alpha–reductase in the Swiss–Webster mouse. Anderson RA Jr, et al. **J Androl** 1989 Jan–Feb;10(1):28–36
Three–month treatment with a long–acting gonadotropin–releasing hormone agonist of patients with benign prostatic hyperplasia: effects on tissue androgen concentration, 5 alpha–reductase activity and androgen receptor content. Forti G, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):461–8
Aromatase, 5 alpha– and 5 beta–reductase in brain, pituitary and skin of the sex–role reversed Wilson's phalarope. Schlinger BA, et al. **J Endocrinol** 1989 Aug;122(2):573–81
Non–michaelian behavior of 5 alpha–reductase in human prostate. Le Goff JM, et al. **J Steroid Biochem** 1989 Aug; 33(2):155–63
Androgen receptor levels and 5 alpha–reductase activities in preputial skin and chordee tissue of boys with isolated hypospadias. Gearhart JP, et al. **J Urol** 1988 Nov;140(5 Pt 2):1243–6
Flow cytometric analysis of cellular DNA in human prostate

cancer: relationship to 5 alpha-reductase activity of the tissue. Habib FK, et al. **Urol Res** 1989;17(4):239-43
[Biochemical characteristics of nuclear 5 alpha-reductase and cytosol 3 alpha-hydroxysteroid dehydrogenase in rat submandibular gland] Furuyama M.
Nippon Naibunpi Gakkai Zasshi 1989 Jan 20;65(1):1-17 (Eng. Abstr.) (Jpn)
[5-alpha-reductase activity in the hypothalamus and pituitary gland of rats in various stages of pregnancy] Rembiesa R, et al. **Endokrynol Pol** 1988;39(1):27-32 (Eng. Abstr.) (Pol)

TESTOSTERONE BINDING GLOBULIN see **SEX HORMONE-BINDING GLOBULIN**

TESTOSTERONE DEHYDROGENASES see under **17-HYDROXYSTEROID DEHYDROGENASES**

TESTOSTERONE DELTA-4-5-ALPHA-REDUCTASE see **TESTOSTERONE 5-ALPHA-REDUCTASE**

TESTOSTERONE ESTRADIOL BINDING GLOBULIN see **SEX HORMONE-BINDING GLOBULIN**

TESTOSTERONE PROPIONATE see **TESTOSTERONE**

TETANUS

see related
TRISMUS
[Tetanus] Nieminen S. **Duodecim** 1989;105(3):246-54 (44 ref.) (Fin)

COMPLICATIONS

Major thoracic surgery during active tetanus. Farling PA, et al. **Anaesthesia** 1989 Feb;44(2):125-7
Rectus abdominis sheath hematoma as a complication of tetanus. Diagnosis by computed tomography scanning. Suhr GM, et al. **Clin Imaging** 1989 Mar;13(1):82-6
Autonomic nervous system dysfunction in severe tetanus: current perspectives. Wright DK, et al. **Crit Care Med** 1989 Apr;17(4):371-5 (70 ref.)
Tetanus in patient with lepromatous leprosy (I). Anilkumar G, et al. **Indian J Lepr** 1988 Jul;60(3):448-9
Tetanus in leprosy patient (II). Anilkumar G, et al. **Indian J Lepr** 1988 Jul;60(3):450-2
Tetanus presenting as dysphagia. Kasanzew M, et al. **J Laryngol Otol** 1989 Feb;103(2):229-30
Intraoral mass associated with trismus [clinical conference] Bottenbley A, et al. **J Oral Maxillofac Surg** 1989 Sep; 47(9):970-5
Tetanus: an uncommon cause of dysphagia. Scholz DG, et al. **Mayo Clin Proc** 1989 Mar;64(3):335-8
Hyperadrenergic syndrome with hypertension, hypotension and myocardial necrosis in tetanus. van Lieshout JJ, et al. **Neth J Med** 1988 Aug;33(1-2):33-6

DIAGNOSIS

Pseudotetanus from illicit drug use [letter] Melvin JA, et al. **Am J Emerg Med** 1989 Jul;7(4):455-6
Tetanus or drug reaction? Mackler S, et al.
Hosp Pract [Off] 1989 Aug 15;24(8):75-8, 81-2, 85-9

DRUG THERAPY

Intravenous infusion of midazolam, propofol and vecuronium in a patient with severe tetanus. Orko R, et al.
Acta Anaesthesiol Scand 1988 Oct;32(7):590-2

EPIDEMIOLOGY

Tetanus in Southeast Asia. Kim-Farley R, et al.
Asia Pac J Public Health 1988;2(3):175-8
Neonatal tetanus in the Department of Child Health Dr. Pirngadi Hospital, Medan in 1983-1984. Marbun MD, et al. **Paediatr Indones** 1988 Mar-Apr;28(3-4):49-59
A house-to-house survey of neonatal tetanus in urban and rural areas in the Gondar region, Ethiopia. Maru M, et al. **Trop Geogr Med** 1988 Jul;40(3):233-6
Under-reporting of tetanus and diphtheria cases in Jamaica (1980-1986). Figueroa JP, et al. **West Indian Med J** 1988 Sep;37(3):143-7
[Tetanus: antibody levels and vaccination history in a target group of the Latium population] Mastroeni I, et al.
Nuovi Ann Ig Microbiol 1988 Mar-Apr;39(2):149-60 (Eng. Abstr.) (Ita)
[Seroepidemiology of tetanus and diphtheria: survey of the Latium Region] Mastroeni I, et al.
Nuovi Ann Ig Microbiol 1988 Jul-Oct;39(4-5):449-54 (Ita)
[Seroepidemiology of rubella, hepatitis B and tetanus in students of graduate courses in dentistry and dental prosthesis] Simonetti D'Arca A, et al.
Nuovi Ann Ig Microbiol 1986 Jan-Dec;37(1-6):127-36 (Eng. Abstr.) (Ita)
[Tetanus 1986] Anusz Z. **Przegl Epidemiol** 1988;42(1):81-6 (Pol)
[Tetanus—1987] Anusz Z. **Przegl Epidemiol** 1989;43(1):80-4 (Pol)
[Epidemiologic surveillance of tetanus in Rio Grande do Sul, Brazil] Meneghel SN. **Bol Of Sanit Panam** 1988 Aug; 105(2):139-50 (Eng. Abstr.) (Por)

ETIOLOGY

Tetanus following a burn injury. Karyoute SM, et al.
Burns Incl Therm Inj 1988 Jun;14(3):241-3
Tetanus with leprosy. Tibrewala KD, et al.
J Assoc Physicians India 1988 Jun;36(6):395-6
Tetanus from chigger flea sores [letter] Tonge BL.
J Trop Pediatr 1989 Apr;35(2):94
Umbilical cord care and neonatal tetanus [letter] Oudesluys-Murphy AM. **Lancet** 1989 Apr 15;1(8642):843
Ghee applications to the umbilical cord: a risk factor for neonatal tetanus [see comments] Traverso HP, et al.
Lancet 1989 Mar 4;1(8636):486-8. **Comment in:** Lancet 1989 Jul 8;2(8654):109-10
[A case of postoperative tetanus in a 58-year-old woman] Postawa B. **Przegl Epidemiol** 1988;42(3):299-300 (Eng. Abstr.) (Pol)

HISTORY

Neonatal tetanus (St Kilda, 19th century) [letter] Woody RC, et al. **Lancet** 1989 Jun 10;1(8650):1339

IMMUNOLOGY

Immunity to diphtheria and tetanus in inner-city women of childbearing age. Koblin BA, et al.
Am J Public Health 1989 Sep;79(9):1297-8
Antitetanus immunity in a sample of adult population from the Siena area (Italy). Cellesi C, et al.
Boll Ist Sieroter Milan 1988;67(2):149-55
Rapid assessment of the antitetanus immune status of a subject using Dot-ELISA. Mastroeni P, et al. **Eur J Epidemiol** 1989 Mar;5(1):97-100
Tetanus immunity in kibbutz women. Leshem Y, et al.
Isr J Med Sci 1989 Mar;25(3):127-30
Role of intrathecal tetanus antitoxin (equine) in tetanus neonatorum. Singh G, et al. **J Indian Med Assoc** 1989 Jan; 87(1):8-10
The 1985 national immunisation survey: diphtheria, tetanus, and pertussis (whooping cough) [see comments] Lau RC, et al. **N Z Med J** 1988 Nov 23;101(858):797-800. **Comment in:** N Z Med J 1989 Jan 25;102(860):22
Half-dose immunization for diphtheria, tetanus, pertussis: response of preterm infants. Bernbaum J, et al.
Pediatrics 1989 Apr;83(4):471-6
Double-blind trial of intramuscular and intramuscular plus intrathecal human tetanus immunoglobulin and intramuscular equine tetanus antitoxin in the treatment of tetanus neonatorum. Gültekin A, et al. **Turk J Pediatr** 1988 Jan-Mar;30(1):9-15
[Evaluation of a rapid test of measuring antitetanus immunity in the practice of an emergency department (letter)] Beytout J, et al. **Presse Med** 1988 Nov 5;17(39):2091 (Fre)
[Gaps in tetanus immunity (letter)] Pietsch M, et al.
Dtsch Med Wochenschr 1988 Nov 25;113(47):1861 (Ger)
[Anti-tetanus immunity in an elderly population in some regions of southern Italy] Grasso GM, et al.
Nuovi Ann Ig Microbiol 1987 May-Aug;38(3-4):225-34 (Eng. Abstr.) (Ita)
[Seroepidemiology of tetanus and diphtheria in the Japanese population] Takayama N, et al. **Kansenshogaku Zasshi** 1988 Jul;62(7):657-63 (Eng. Abstr.) (Jpn)
[Effect of blood transfusion on specific anti-tetanus immunity] Korableva NN, et al. **Gematol Transfuziol** 1989 Mar;34(3):26-9 (Eng. Abstr.) (Rus)
[The significance of the level of immunity in organized collectives in performing epidemiologic surveillance for diphtheria, tetanus and measles] Kolkov VF, et al.
Voen Med Zh 1988 Jul;(7):46-9 (Rus)
[Immunity against tetanus in patients with chronic diseases] Gil' IV. **Vrach Delo** 1989 May;(5):121-3 (Eng. Abstr.) (Rus)

MORTALITY

Tetanus neonatorum: clinico-epidemiological profile. Kumar H, et al. **Indian Pediatr** 1988 Nov;25(11):1054-7
Neonatal tetanus mortality in a rural community of Haryana [published erratum appears in Indian Pediatr 1988 May;25(50:488] Kumar V, et al. **Indian Pediatr** 1988 Feb; 25(2):167-9
Mortality from neonatal tetanus in Ilorin: results of a community-based survey [letter] Babaniyi OA, et al.
J Trop Pediatr 1989 Jun;35(3):137-8
[Mortality from tetanus in children less than 1 year of age, Mexico, 1970-1982] Tirado-Gómez LL, et al.
Salud Publica Mex 1989 May-Jun;31(3):334-45 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Long-term prognosis after neonatal tetanus. Anlar B, et al.
Dev Med Child Neurol 1989 Feb;31(1):76-80
Tetanus—pathophysiology as a guide to treatment. Dastur FD. **J Assoc Physicians India** 1988 Jul;36(7):441-4 (30 ref.)
Presynaptic inhibition of the monosynaptic reflex during local tetanus in the cat. Takano K, et al. **Toxicon** 1989; 27(4):431-8

PREVENTION & CONTROL

Anyone for tetanus? [letter] **BMJ** 1988 Oct 15;297(6654):980
Anyone for tetanus? [letter] Burch KW, et al. **BMJ** 1988 Nov 26;297(6660):1405-6
Tetanus immunisation state in a general practice population. Dixon AM, et al. **BMJ** 1988 Sep 3;297(6648):598
Anyone for tetanus? Howie JG. **BMJ** 1988 Sep 3; 297(6648):570-1
Anyone for tetanus? [letter] Kennie DC. **BMJ** 1988 Oct 22; 297(6655):1044
Cost-effectiveness of primary tetanus vaccination among elderly Canadians. Hutchison BG, et al.
Can Med Assoc J 1988 Dec 15;139(12):1143-51 (55 ref.)
Cost-effectiveness of primary tetanus vaccination among elderly Canadians [letter] Muckle TJ. **Can Med Assoc J** 1989 Mar 15;140(6):586-7
Preventing tetanus now. **Drug Ther Bull** 1988 Nov 14; 26(23):91-2
Cost-benefit analysis of tetanus prophylaxis by a mathematical model. Carducci A, et al.
Epidemiol Infect 1989 Jun;102(3):473-83
Health maintenance issues of the elderly. Immunization. Levitt A. **Md Med J** 1989 Feb;38(2):141-3
Asymptomatic malaria parasitaemia and the antibody response to tetanus toxoid vaccination. Corrigall RJ.
Trans R Soc Trop Med Hyg 1988;82(4):540-1
[The problem of using anatoxin and antitoxin in the prevention of tetanus] Koszarski J, et al. **Wiad Lek** 1988 Sep 15;41(18):1247-9 (Eng. Abstr.) (Pol)
[Effectiveness of allogenic and xenogenic antitoxins in the active-passive prophylaxis of tetanus in an experiment] Nazarchuk LV. **Fiziol Zh** 1988 Jul-Aug;34(4):98-101 (Eng. Abstr.) (Rus)

THERAPY

The prolonged use of atracurium in a patient with tetanus. Peat SJ, et al. **Anaesthesia** 1988 Nov;43(11):962-3
Tetanus in a 92 year-old man. Nandi SR, et al.
Br J Clin Pract 1988 Feb;42(2):78-9
Pancuronium and tetanus in the elderly [letter] Bouffet E, et al. **Chest** 1988 Nov;94(5):1114-5
Intrathecal human tetanus hyperimmunoglobulin in neonatal tetanus. Chopra K, et al. **Indian Pediatr** 1988 Jun; 25(6):530-3
"Relapsing" tetanus [letter] Bates I. **Trop Doct** 1988 Oct; 18(4):192
Tetanus in pregnancy in a Nigerian woman—a case report. Dare FO, et al. **Trop Doct** 1989 Apr;19(2):81
[Obtaining anti-tetanus immunoglobulin from blood plasma of immunized dogs] Nazarchuk LV. **Fiziol Zh** 1989 Mar-Apr;35(2):95-7 (Eng. Abstr.) (Rus)

VETERINARY

Tetanus-like condition in heifers [letter] Calder HA.
Vet Rec 1989 Mar 25;124(12):313
An outbreak of a tetanus-like condition in heifers. Crossman PJ. **Vet Rec** 1989 Feb 25;124(8):196-7
Tetanus in the dog [letter] Edwards GT, et al. **Vet Rec** 1989 Jul 29;125(5):117
Tetanus in a dog [letter] Ratcliffe J. **Vet Rec** 1989 Jun 24; 124(25):666

TETANUS ANTITOXIN

ADMINISTRATION & DOSAGE

Intrathecal human tetanus hyperimmunoglobulin in neonatal tetanus. Chopra K, et al. **Indian Pediatr** 1988 Jun; 25(6):530-3
[The problem of using anatoxin and antitoxin in the prevention of tetanus] Koszarski J, et al. **Wiad Lek** 1988 Sep 15;41(18):1247-9 (Eng. Abstr.) (Pol)

ANALYSIS

Immune response of the llama (Lama glama) to tetanus toxoid vaccination. Paul-Murphy J, et al. **Am J Vet Res** 1989 Aug; 50(8):1279-81
The toxin binding inhibition test as a reliable in vitro alternative to the toxin neutralization test in mice for the estimation of tetanus antitoxin in human sera. Hendriksen CF, et al. **J Biol Stand** 1988 Oct;16(4):287-97
Combined estimation of tetanus and diphtheria antitoxin in human sera by the in vitro Toxin-Binding Inhibition (ToBI) test. Hendriksen CF, et al. **J Biol Stand** 1989 Apr; 17(2):191-200
Assaying tetanus antitoxin antibody levels on samples of dried blood on filter paper discs in tropical countries [letter] Arya SC. **J Clin Lab Anal** 1989;3(1):71
[Evaluation of a rapid test of measuring antitetanus immunity in the practice of an emergency department (letter)] Beytout J, et al. **Presse Med** 1988 Nov 5;17(39):2091 (Fre)

BLOOD

DTP immunization status and tetanus antitoxin titers of Mexican American children ages six months through eleven years. Gergen PJ, et al. **Am J Public Health** 1988 Nov; 78(11):1446-50

IMMUNOLOGY

Tetanus toxoid complexed with heterologous antibody can induce germinal centre formation and B cell memory in mice without evoking a detectable anti-toxin response. Kraft R, et al. **Clin Exp Immunol** 1989 Apr;76(1):138-43

Role of intrathecal tetanus antitoxin (equine) in tetanus neonatorum. Singh G, et al. **J Indian Med Assoc** 1989 Jan; 87(1):8–10

Double-blind trial of intramuscular and intramuscular plus intrathecal human tetanus immunoglobulin and intramuscular equine tetanus antitoxin in the treatment of tetanus neonatorum. Gültekin A, et al. **Turk J Pediatr** 1988 Jan–Mar;30(1):9–15

[Detection of anti-horse serum antibody produced by injecting an antivenin or antitoxin (Report 2)] Ameno S, et al. **Nippon Hoigaku Zasshi** 1988 Apr;42(2):161–8 (Eng. Abstr.) **(Jpn)**

[Effect of blood transfusion on specific anti-tetanus immunity] Korableva NN, et al. **Gematol Transfuziol** 1989 Mar;34(3):26–9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Tetanus in the dog [letter] Edwards GT, et al. **Vet Rec** 1989 Jul 29;125(5):117

[Effectiveness of allogenic and xenogenic antitoxins in the active-passive prophylaxis of tetanus in an experiment] Nazarchuk LV. **Fiziol Zh** 1988 Jul–Aug;34(4):98–101 (Eng. Abstr.) **(Rus)**

TETANUS TOXIN

Interaction of tetanus toxin with lipid vesicles. Effects of pH, surface charge, and transmembrane potential on the kinetics of channel formation. Menestrina G, et al. **Biophys J** 1989 Mar;55(3):393–405

Two-dimensional crystals of tetanus toxin. Reidler J, et al. **Methods Enzymol** 1988;165:389–96

ANALYSIS

Botulinum neurotoxin type B (strain 657): partial sequence and similarity with tetanus toxin. Dasgupta BR, et al. **Biochimie** 1988 Jun;70(6):811–7

Chains and fragments of tetanus toxin. Separation, reassociation and pharmacological properties. Weller U, et al. **Eur J Biochem** 1989 Jul 1;182(3):649–56

IMMUNOLOGY

Comparison of Corynebacterium parvum and Bordetella pertussis with Freund's complete adjuvant as immunopotentiators for beta-human chorionic gonadotropin linked to an atoxic fragment of tetanus toxin. Covey DC, et al. **Am J Reprod Immunol** 1989 Jan; 19(1):17–20

Human monoclonal antibodies with a protective activity against tetanus toxin. Trabaud MA, et al. **APMIS** 1989 Aug; 97(8):671–6

Protective murine monoclonal antibodies to tetanus toxin. Shang HF, et al.
Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih 1988 Nov;21(4):199–209

Delineation of several DR-restricted tetanus toxin T cell epitopes. Demotz S, et al. **J Immunol** 1989 Jan 15; 142(2):394–402

A novel and simple procedure for determining T cell epitopes in protein antigens. Demotz S, et al.
J Immunol Methods 1989 Aug 15;122(1):67–72

Direct immunization with synthetic peptidyl-polyamide resin. Comparison with antibody production from free peptide and conjugates with carrier proteins. Fischer PM, et al. **J Immunol Methods** 1989 Mar 10;118(1):119–23

ISOLATION & PURIFICATION

Sequence homology between tetanus and botulinum toxins detected by an antipeptide antibody. Halpern JL, et al. **Infect Immun** 1989 Jan;57(1):18–22

Purification of tetanus toxin and its major peptides. Robinson JP. **Methods Enzymol** 1988;165:85–90

Tetanus toxin: biochemical and pharmacological comparison between its protoxin and some isotoxins obtained by limited proteolysis. Weller U, et al.
Naunyn Schmiedebergs Arch Pharmacol 1988 Aug; 338(2):99–106

METABOLISM

Tetanus toxin binding to mouse spinal cord cells: an evaluation of the role of gangliosides in toxin internalization. Parton RG, et al. **Brain Res** 1988 Dec 13; 475(1):118–27

Affinity purified tetanus toxin binds to isolated chromaffin granules and inhibits catecholamine release in digitonin-permeabilized chromaffin cells. Lazarovici P, et al. **FEBS Lett** 1989 Aug 14;253(1–2):121–8

Tetanus toxin binding to isolated and cultured rat retinal glial cells. Huba R, et al. **GLIA** 1988;1(2):156–64

Inactivation of botulinum and tetanus toxins by chelators. Bhattacharyya SD, et al. **Infect Immun** 1989 Oct; 57(10):3053–7

Proteolytic cleavage of tetanus toxin increases activity. Bergey GK, et al. **J Neurochem** 1989 Jul;53(1):155–61

Periodate-modified gangliosides enhance surface binding of tetanus toxin to PC12 pheochromocytoma cells. Nathan A, et al. **J Neurochem** 1989 Jul;53(1):88–94

Comparison of the binding characteristics of two different preparations of tetanus toxin to rat brain membranes. Parton RG, et al. **Toxicon** 1989;27(1):127–35

PHARMACOLOGY

The tetanus toxin light chain inhibits exocytosis. Ahnert-Hilger G, et al. **FEBS Lett** 1989 Jan 2;242(2):245–8

Light chain of tetanus toxin intracellularly inhibits acetylcholine release at neuro-neuronal synapses, and its internalization is mediated by heavy chain. Mochida S, et al. **FEBS Lett** 1989 Aug 14;253(1–2):47–51

Selective inhibition of cytokine-induced lysozyme activity by tetanus toxin in the GG2EE macrophage cell line. Pitzurra L, et al. **Infect Immun** 1989 Aug;57(8):2452–6

Studies on the intoxication pathway of tetanus toxin in the rat pheochromocytoma (PC12) cell line. Binding, internalization, and inhibition of acetylcholine release. Sandberg K, et al. **J Biol Chem** 1989 Apr 5;264(10):5679–86

Isolated light chain of tetanus toxin inhibits exocytosis: studies in digitonin-permeabilized cells. Bittner MA, et al. **J Neurochem** 1989 Sep;53(3):966–8

Endogenous amino acid release from cultured cerebellar neuronal cells: effect of tetanus toxin on glutamate release. Van Vliet BJ, et al. **J Neurochem** 1989 Apr;52(4):1229–39

Selective depression of synaptic transmission by tetanus toxin: a comparative study on hippocampal and neostriatal slices. Calabresi P, et al. **Neuroscience** 1989;30(3):663–70

Gangliosides mediate inhibitory effects of tetanus and botulinum A neurotoxins on exocytosis in chromaffin cells. Marxen P, et al. **Toxicon** 1989;27(8):849–59

Blocking effects of tetanus toxin and its fragment [A-B] on the excitatory and inhibitory synapses of the spinal motoneurone of the cat. Takano K, et al. **Toxicon** 1989; 27(3):385–92

TOXICITY

Chronic epileptic foci in vitro in hippocampal slices from rats with the tetanus toxin epileptic syndrome. Jefferys JG. **J Neurophysiol** 1989 Aug;62(2):458–68

Presynaptic inhibition of the monosynaptic reflex during local tetanus in the cat. Takano K, et al. **Toxicon** 1989; 27(4):431–8

[Effect of tetanus toxin on the activity of the 5-hydroxytryptaminergic system in the mouse brain] Lyczak A. **Med Dosw Mikrobiol** 1988;40(3):155–60 (Eng. Abstr.) **(Pol)**

TETANUS TOXOID

Pediatricians' recommendations for antipyretic agents with DTP immunizations: a survey of current practice [letter] Flanagan PJ, et al. **Am J Dis Child** 1989 May;143(5):517–8

DTP immunization status and tetanus antitoxin titers of Mexican American children ages six months through eleven years. Gergen PJ, et al. **Am J Public Health** 1988 Nov; 78(11):1446–50

An evaluation of diphtheria—tetanus (adult) vaccine in unselected human volunteers. Harcus AW, et al.
J Int Med Res 1989 May–Jun;17(3):262–7

Stability of an antifertility vaccine consisting of gonadotropin subunits linked to tetanus toxoid. Alam A, et al.
Vaccine 1989 Apr;7(2):129–31

[Tetanus: antibody levels and vaccination history in a target group of the Latium population] Mastroeni I, et al.
Nuovi Ann Ig Microbiol 1988 Mar–Apr;39(2):149–60 (Eng. Abstr.) **(Ita)**

[The effect of histamine on the rosette-forming ability of T-lymphocytes upon immunization with DPT vaccine and its components] Kamalova MN, et al.
Zh Mikrobiol Epidemiol Immunobiol 1989 Feb;(2):83–5 (Eng. Abstr.) **(Rus)**

[Vaccination coverage in a school population of Guipúzcoa: DTP, polio and measles] Basterretxea Irurzun M, et al. **Gac Sanit** 1988 Jan–Feb;2(4):26–9 (Eng. Abstr.) **(Spa)**

ADMINISTRATION & DOSAGE

Poliovirus vaccine policy. Another perspective [editorial] Katz SL. **Am J Dis Child** 1989 Sep;143(9):1007–9

Why wait for DTP-E-IPV? [editorial] Marcuse EK.
Am J Dis Child 1989 Sep;143(9):1006–7

Behaviour of the typhoid vaccine intradermally administered in association with tetanus unadsorbed vaccine and soluble antigens of vaccinia virus. Croitoru M, et al.
Arch Roum Pathol Exp Microbiol 1988 Apr–Jun; 47(2):139–43

Preventing tetanus now. **Drug Ther Bull** 1988 Nov 14; 26(23):91–2

Mortality from neonatal tetanus in Ilorin: results of a community-based survey [letter] Babaniyi OA, et al.
J Trop Pediatr 1989 Jun;35(3):137–8

Comparison of immunogenicity of combined DPT—inactivated injectable polio vaccine (DPT – IPV) and association of DPT and attenuated oral polio vaccine (DPT + OPV) in Pakistani children. Qureshi AW, et al. **JPMA** 1989 Feb;39(2):31–5

Immunization of children who have received fractional doses of diphtheria-tetanus toxoids-pertussis vaccine.
Pediatr Infect Dis J 1989 Feb;8(2):129–30

Half-dose immunization for diphtheria, tetanus, pertussis: response of preterm infants. Bernbaum J, et al.
Pediatrics 1989 Apr;83(4):471–6

Optimum needle length for diphtheria-tetanus-pertussis inoculation of infants. Hick JF, et al. **Pediatrics** 1989 Jul; 84(1):136–7

[Whooping cough—not eradicated, but forgotten] Swidsinski S, et al. **Z Arztl Fortbild (Jena)** 1989;83(6):309–12 (29 ref.) **(Ger)**

[The problem of using anatoxin and antitoxin in the prevention of tetanus] Koszarski J, et al. **Wiad Lek** 1988 Sep 15;41(18):1247–9 (Eng. Abstr.) **(Pol)**

[Evaluation of a school vaccination program in Cádiz] Cruz Rojo C, et al. **Gac Sanit** 1989 Mar–Apr;3(11):366–70 (Eng. Abstr.) **(Spa)**

[Risk of overvaccination against tetanus—who is deciding: the National Board of Health and Welfare or the manufacturer?] Rabo E. **Lakartidningen** 1989 Feb 22; 86(8):615–6 **(Swe)**

ADVERSE EFFECTS

Etiology and treatment of infantile spasms: current concepts, including the role of DPT immunization. Millichap JG. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):54–60

Effect of prophylactic acetaminophen administration on reaction to DTP vaccination. Uhari M, et al.
Acta Paediatr Scand 1988 Sep;77(5):747–51

Immunisation triggering rheumatoid arthritis? [letter] Jawad AS, et al. **Ann Rheum Dis** 1989 Feb;48(2):174

Acellular DTP vaccine produces fewer reactions [news]
Bol Asoc Med P R 1988 Nov;80(11):440–1

Adverse local reactions to fourth and fifth doses of DPT vaccine—Alberta. Hanrahan A, et al.
Can Dis Wkly Rep 1988 Mar 19;14(11):45–7 **(Eng, Fre)**

Local adverse reactions to adsorbed DPT vaccine—Surrey, British Columbia. Meekison W, et al.
Can Dis Wkly Rep 1989 Apr 1;15(13):73–5 **(Eng, Fre)**

Local adverse reactions to diphtheria and tetanus toxoids and pertussis vaccine, adsorbed, in Surrey, BC.
Can Med Assoc J 1989 Aug 15;141(4):312–3

Infectious episodes following diphtheria-pertussis-tetanus vaccination. A preliminary observation in infants. Jaber L, et al. **Clin Pediatr (Phila)** 1988 Oct;27(10):491–4

Sudden infant death and immunization: an extensive epidemiological approach to the problem in France—winter 1986. Bouvier-Colle MH, et al.
Int J Epidemiol 1989 Mar;18(1):121–6

Acute midbrain syndrome as an adverse reaction to tetanus immunization. Schwarz G, et al. **Intensive Care Med** 1988; 15(1):53–4

Erythema multiforme following diphtheria and tetanus toxoid vaccination [letter] Griffith RD, et al.
J Am Acad Dermatol 1988 Oct;19(4):758–9

Adverse reactions of medical organizations to DTP vaccine: the vaccine-related compensation bill. Sepkowitz S.
J Okla State Med Assoc 1989 Jan;82(1):21–4

Bulging fontanelle after immunization with diphtheria-tetanus-pertussis vaccine and diphtheria-tetanus vaccine. Gross TP, et al. **J Pediatr** 1989 Mar;114(3):423–5

Neurological complications after simultaneous immunisation against tick-borne encephalitis and tetanus [letter] Schabet M, et al. **Lancet** 1989 Apr 29;1(8644):959–60

Adverse events following DTP immunization in Maryland, 1987. Siddiqui MA, et al. **Md Med J** 1989 Jul;38(7):556–9

Analyses of adverse reactions to diphtheria and tetanus toxoids and pertussis vaccine by vaccine lot, endotoxin content, pertussis vaccine potency and percentage of mouse weight gain. Baraff LJ, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):502–7

Adverse reactions to diphtheria, tetanus, pertussis-polio vaccination at 18 months of age: effect of injection site and needle length. Ipp MM, et al. **Pediatrics** 1989 May; 83(5):679–82

Local reactions of Zwittergent-containing meningococcal vaccine after intramuscular injection in rats: comparison with the effect of diphtheria-pertussis-tetanus-polio vaccine. Speijers GJ, et al. **Vaccine** 1988 Oct;6(5):419–22

[Follow-up of a group of children with severe reactions to mixed vaccine against diphtheria, tetanus and whooping cough from the aspect of their immunological profile] Bergmannová V, et al. **Cesk Pediatr** 1988 Oct; 43(10):599–601 (Eng. Abstr.) **(Cze)**

[Vaccination of children with reactions to mixed vaccine against diphtheria, tetanus and whooping cough] Bergmannová V, et al. **Cesk Pediatr** 1988 Sep;43(9):522–6 (Eng. Abstr.) **(Cze)**

[A pediatric vaccination counseling service] Wiersbitzky S, et al. **Kinderarztl Prax** 1988 Nov;56(11):557–8 **(Ger)**

[The pediatric vaccination counseling facility] Wiersbitzky S, et al. **Kinderarztl Prax** 1989 Jun;57(6):295–6 **(Ger)**

IMMUNOLOGY

Immune response of the llama (Lama glama) to tetanus toxoid vaccination. Paul-Murphy J, et al. **Am J Vet Res** 1989 Aug; 50(8):1279–81

Antitetanus immunity in a sample of adult population from the Siena area (Italy). Cellesi C, et al.
Boll Ist Sieroter Milan 1988;67(2):149–55

Appearance of IgG and IgA antibodies in human bile after tetanus toxoid immunization. Hansen PG, et al.
Clin Exp Immunol 1989 Aug;77(2):215–20

Tetanus toxoid complexed with heterologous antibody can induce germinal centre formation and B cell memory in mice without evoking a detectable anti-toxin response. Kraft R, et al. **Clin Exp Immunol** 1989 Apr;76(1):138–43

Polyspecific human and murine antibodies to diphtheria and tetanus toxoids and phospholipids. Sutjita M, et al.

Clin Exp Immunol 1988 Aug;73(2):191–7
Immunoregulatory effects of alpha–endorphin, beta–endorphin, methionine–enkephalin, and adrenocorticotropic hormone on anti–tetanus toxoid antibody synthesis by human lymphocytes. Munn NA, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):376–85
Antibody level of New Zealand children immunized with the triple vaccine DTP (diphtheria–tetanus–pertussis). Lau RC. **Epidemiol Infect** 1988 Oct;101(2):405–10
Immunity and immunization of children against diphtheria in Sweden. Mark A, et al. **Eur J Clin Microbiol Infect Dis** 1989 Mar;8(3):214–9
Rapid assessment of the antitetanus immune status of a subject using Dot–ELISA. Mastroeni P, et al. **Eur J Epidemiol** 1989 Mar;5(1):97–100
The role of CD4+ lymphocytes in the activation of non–specific suppressor cells by antigen. Stefanovic H, et al. **Immunology** 1989 Jul;67(3):339–43
Enhancement of immunoglobulin G responses in mice against hepatitis B virus surface antigen, influenza virus hemagglutinin vaccine, and tetanus toxoid by 6–O–acylated muramyl dipeptides. Furuya T, et al. **Infect Immun** 1989 Jun;57(6):1839–44
Human TCR–gamma+/delta+, CD8+ T lymphocytes recognize tetanus toxoid in an MHC–restricted fashion. Kozbor D, et al. **J Exp Med** 1989 May 1;169(5):1847–51
Protective levels of serum antibodies stimulated in infants by two injections of Haemophilus influenzae type b capsular polysaccharide–tetanus toxoid conjugate. Claesson BA, et al. **J Pediatr** 1989 Jan;114(1):97–100
Synthesis of antibody specific for nonoral antigen in the gingiva of periodontitis patients. Mallison SM 3d, et al. **J Periodont Res** 1989 May;24(3):214–6
Delayed cutaneous hypersensitivity response in tetanus toxoid sensitized rhesus monkeys: predictor of anergy and value in tuberculin skin testing. Davis JA, et al. **Lab Anim Sci** 1988 Aug;38(4):413–6
Vaccines for Haemophilus influenzae type b as models for an otitis vaccine. Mäkelä PH, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S73–5 (18 ref.)
Depressed PPD and tetanus toxoid presentation by monocytes to T lymphocytes in patients with rheumatoid arthritis: restoration by interferon gamma. Seitz M, et al. **Rheumatol Int** 1988;8(5):189–96
Antibody production in rats after long–term exposure to formaldehyde. Holmström M, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):328–33
Asymptomatic malaria parasitaemia and the antibody response to tetanus toxoid vaccination. Corrigall RJ. **Trans R Soc Trop Med Hyg** 1988;82(4):540–1
Double–blind trial of intramuscular and intramuscular plus intrathecal human tetanus immunoglobulin and intramuscular equine tetanus antitoxin in the treatment of tetanus neonatorum. Gültekin A, et al. **Turk J Pediatr** 1988 Jan–Mar;30(1):9–15
Immunoenhancement with combined rabies and aluminium–adjuvanted tetanus vaccines. Phanuphak P, et al. **Vaccine** 1989 Jun;7(3):249–52
[Cellular immune response and glomerulonephritis—their detection with the Tetamun intracutaneous test] Kettritz R, et al. **Z Urol Nephrol** 1988 Oct;81(10):647–55 (Eng. Abstr.) (Ger)
[Obtaining anti–tetanus immunoglobulin from blood plasma of immunized dogs] Nazarchuk LV. **Fiziol Zh** 1989 Mar–Apr;35(2):95–7 (Eng. Abstr.) (Rus)
[Effectiveness of donor immunization with adsorbed tetanus anatoxin depending on several factors] Prilutskiĭ AS, et al. **Gematol Transfuziol** 1989 Jan;34(1):53–5 (Rus)
[Evaluation of postvaccinal pertussis immunity by using immunoenzyme analysis] Khardina AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):50–4 (Eng. Abstr.) (Rus)
[A vaccine against tetanus with a higher level of tetanus toxoid] Kamenická L, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Mar;38(2):82–8 (Eng. Abstr.) (Slo)

PHARMACOLOGY

Modulation of CD7 is associated with inhibition of T cell proliferation in response to tetanus toxoid and phytohemagglutinin. Lazarovits AI, et al. **Transplant Proc** 1989 Apr;21(2):3325–7
[Effects of diphtheria–tetanus vaccination on natural killer cells] Tolone C, et al. **Minerva Pediatr** 1988 Jul;40(7):401–2 (Eng. Abstr.) (Ita)

STANDARDS

Development of a mouse model to estimate the potency of the diphtheria toxoid component of diphtheria–tetanus and diphtheria–tetanus–pertussis vaccines. Maheshwari SC, et al. **J Biol Stand** 1988 Jul;16(3):139–46

SUPPLY & DISTRIBUTION

DTP vaccine litigation update [letter] Hinman AR. **Am J Dis Child** 1988 Dec;142(12):1275–6

THERAPEUTIC USE

Vaccination against tetanus and diphtheria. Evaluations of immunity in the Danish population, guidelines for revaccination, and methods for control of vaccination programs. Simonsen O. **Dan Med Bull** 1989 Feb;36(1):24–47 (246 ref.)
Response of preterm infants to diphtheria–tetanus–pertussis vaccine. Koblin BA, et al. **Pediatr Infect Dis J** 1988 Oct; 7(10):704–11
[Experimental preventive properties of a complex of Pseudomonas aeruginosa and Clostridium tetani anatoxins] Podgornaia LG, et al. **Mikrobiol Zh** 1987 Sep–Oct; 49(5):55–8 (Eng. Abstr.) (Rus)

TOXICITY

Determination of the epinephrine–refractory hypoglycaemic activity of whole–cell pertussis vaccine in mice. Horiuchi Y, et al. **J Biol Stand** 1988 Oct;16(4):239–48
[Comparative study of the rat paw edema test for evaluating the reactivity of combined vaccines containing a pertussis component] Pruchová J, et al. **Cesk Farm** 1988 Sep; 37(7):322–6 (Eng. Abstr.) (Cze)

TETANUS VACCINE see **TETANUS TOXOID**

TETANY

[An Italian multicenter study on spasmophilia. Clinical, laboratory and therapeutic evaluation] Agnoli A, et al. **Clin Ter** 1988 Feb 29;124(4):257–67 (Eng. Abstr.) (Ita)

COMPLICATIONS

[Laryngostenosis caused by neurogenic tetany] Karpova OIu. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):76–7 (Rus)

DIAGNOSIS

Computerized electroencephalographic mapping in hypomagnesian spasmophilic syndromes. Popoviciu L, et al. **Neurol Psychiatr (Bucur)** 1989 Apr–Jun;27(2):91–7

ETIOLOGY

Hypoglycaemic tetany—a case report. Anantharaman V. **Singapore Med J** 1988 Oct;29(5):524–5
Tetany in association with gentamicin therapy. Beatty OL, et al. **Ulster Med J** 1989 Apr;58(1):108–10
[Clinical remarks on a case of hypocalcemic tetany secondary to celiac disease initially diagnosed as chronic hypoparathyroidism] Cataldo F, et al. **Minerva Pediatr** 1989 Feb;41(2):113–6 (Eng. Abstr.) (Ita)
[Chronic normocalcemic constitutional tetany: clinic and etiopathogenic aspects. Description of a case] Gregory S, et al. **Pediatr Med Chir** 1988 Nov–Dec;10(6):653–5 (Eng. Abstr.) (Ita)

PHYSIOPATHOLOGY

[Hyperventilation syndrome (letter)] Fustinoni O Jr. **Medicina (B Aires)** 1988;48(1):109–10 (Spa)

THERAPY

[Therapy of endocrine diseases in childhood and adolescence. 6: Endocrinologic emergencies in pediatrics] Butenandt O. **Fortschr Med** 1989 Apr 20;107(12):274–5 (0 ref.) (Eng. Abstr.) (Ger)

VETERINARY

Hypomagnesemic tetany of ruminants. Smith RA, et al. **Vet Clin North Am [Food Anim Pract]** 1988 Jul;4(2):365–77 (41 ref.)

TETRABENAZINE

ANALOGS & DERIVATIVES

Interaction of dihydrotetrabenazine binding activity with immobilized lectins. Vincent MS, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):317–9

METABOLISM

Photoaffinity labeling of the monoamine transporter of bovine chromaffin granules and other monoamine storage vesicles using 7–azido–8–[125I]iodoketanserin. Isambert MF, et al. **Biochemistry** 1989 Mar 7;28(5):2265–70

PHARMACOLOGY

Imipramine and tetrabenazine: effects on monoamine receptor binding sites and phosphoinositide hydrolysis. Butler PD, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):93–100
[Comparison of tetrahydropalmatine, tetrabenazine and reserpine in monoamine depleting action] Liu GQ, et al. **Yao Hsueh Hsueh Pao** 1988;23(10):721–6 (Eng. Abstr.) (Chi)

TETRABROMOFLUORESCEIN see **EOSIN**

TETRACAINE

Time–courses of zones of differential sensory blockade during spinal anesthesia with hyperbaric tetracaine or bupivacaine. Brull SJ, et al. **Anesth Analg** 1989 Sep;69(3):342–7
Tourniquet pain during bupivacaine and tetracaine spinal anesthesia [letter] Gibbons JJ. **Anesth Analg** 1989 Sep; 69(3):410–1
Anesthetic management of a patient with bullous pemphigoid. Prasad KK, et al. **Anesth Analg** 1989 Oct;69(4):537–40
Interactions of the local anesthetic tetracaine with membranes containing phosphatidylcholine and cholesterol: a 2H NMR study. Auger M, et al. **Biochemistry** 1988 Jun 28; 27(13):4660–7
Interactions of the local anesthetic tetracaine with glyceroglycolipid bilayers: a 2H–NMR study. Auger M, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):351–7
Membrane–buffer partition coefficients of tetracaine for liquid–crystal and solid–gel membranes estimated by direct ultraviolet spectrophotometry. Kaminoh Y, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):337–44
Effects of different glucose concentrations on spinal anaesthesia with bupivacaine and tetracaine. Janik R, et al. **Eur J Anaesthesiol** 1989 May;6(3):215–21
Spinal anesthesia for the high–risk infant. Schwartz N, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):399–403

ADMINISTRATION & DOSAGE

Effect of injection rate on level and duration of hypobaric spinal anesthesia. Atchison SR, et al. **Anesth Analg** 1989 Oct;69(4):496–500
Topical anesthesia of the skin by liposome–encapsulated tetracaine. Gesztes A, et al. **Anesth Analg** 1988 Nov; 67(11):1079–81
In vivo assessment of percutaneous local anaesthetic preparations. McCafferty DF, et al. **Br J Anaesth** 1989 Jan; 62(1):17–21
Pain–free cutting of split skin grafts by application of a percutaneous local anaesthetic cream. Small J, et al. **Br J Plast Surg** 1988 Sep;41(5):539–43
Half–strength TAC topical anesthetic. For selected dermal lacerations. Bonadio WA, et al. **Clin Pediatr (Phila)** 1988 Oct;27(10):495–8
Topical anesthesia for strabismus surgery. Diamond GR. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr; 26(2):86–90
Spinal anesthesia and electroerection in dogs and monkeys. Mueller SC, et al. **J Urol** 1989 Jul;142(1):171–5
[The effect of the injection speed on the blockade characteristics of hyperbaric bupivacaine and tetracaine in spinal anesthesia] Janik R, et al. **Reg Anasesth** 1989 Jul; 12(4):63–8 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Tack up a warning on TAC [letter] Mofenson HC, et al. **Am J Dis Child** 1989 May;143(5):519–20
Cetacaine–induced acute methemoglobinemia. Ferraro L, et al. **Anesthesiology** 1988 Oct;69(4):614–5
Occupational allergic contact dermatitis from amethocaine. Condé–Salazar L, et al. **Contact Dermatitis** 1988 Jul; 19(1):69–70
Serious systemic toxicity resulting from use of tetracaine for pharyngeal anesthesia in upper endoscopic procedures. Patel D, et al. **Dig Dis Sci** 1989 Jun;34(6):882–4
[A rare complication of regional anesthesia] Vagner EA, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):64–6 (Eng. Abstr.) (Rus)
[Acute poisoning by tetracaine following topical oropharyngeal administration (letter)] Luis M, et al. **Rev Esp Anestesiol Reanim** 1988 Sep–Oct;35(5):275 (Spa)

ANALYSIS

[Commonly used local anaesthetic–sensitive field effect transistor: its development and applications] Liu WZ, et al. **Yao Hsueh Hsueh Pao** 1988;23(9):688–92 (Eng. Abstr.) (Chi)

PHARMACOKINETICS

Concentration–response analysis of percutaneous local anaesthetic formulations. Woolfson AD, et al. **Br J Anaesth** 1988 Nov;61(5):589–92

PHARMACOLOGY

Dose–related prolongation of hyperbaric tetracaine spinal anesthesia by clonidine in humans. Bonnet F, et al. **Anesth Analg** 1989 May;68(5):619–22
Smooth muscle contraction and local anesthetics: calmodulin–dependent myosin light–chain kinase. Nosaka S, et al. **Anesth Analg** 1989 Oct;69(4):504–10
Surgical repair of hip fractures using continuous spinal anesthesia: comparison of hypobaric solutions of tetracaine and bupivacaine. Van Gessel EF, et al. **Anesth Analg** 1989 Mar;68(3):276–81
Epinephrine increases the effectiveness of tetracaine spinal anesthesia. Carpenter RL, et al. **Anesthesiology** 1989 Jul; 71(1):33–6
Effects of the local anesthetic tetracaine on the structural and dynamic properties of lipids in model membranes: a high–pressure Fourier transform infrared study. Auger M, et al. **Biochemistry** 1988 Aug 9;27(16):6086–93
Interaction of the local anesthetics dibucaine and tetracaine with sarcoplasmic reticulum membranes. Differential scanning calorimetry and fluorescence studies. Gutiérrez–Merino C, et al. **Biochemistry** 1989 Apr 18; 28(8):3398–406
Calcium–dependent regulation of phospholipase A2 and its inhibitors, including tetracaine, for acetylcholine receptor cluster formation in mouse myotubes co–cultured with

spinal cord explant. Kimura M, et al.
Int J Dev Neurosci 1987;5(2):127–33
Differential effects of tetracaine on charge movements and Ca2+ signals in frog skeletal muscle. Csernoch L, et al.
J Gen Physiol 1988 Nov;92(5):601–12

POISONING

Packaging and storage of TAC to avoid medication dispensing errors [letter] Bonadio WA, et al.
Pediatr Emerg Care 1988 Sep;4(3):229–30

THERAPEUTIC USE

Topically applied tetracaine, adrenalin, and cocaine in the repair of traumatic wounds of the head and neck. Cannon CR, et al. **Otolaryngol Head Neck Surg** 1989 Jan; 100(1):78–9
TAC: a review. Bonadio WA. **Pediatr Emerg Care** 1989 Jun; 5(2):128–30 (15 ref.)

TOXICITY

A single exposure to cocaine or immobilization stress provides extremely long-lasting, selective protection against sudden cardiac death from tetracaine. Antelman SM, et al. **Life Sci** 1989;44(3):201–7

TETRACEMATE see **EDTA**

TETRACHLORODIBENZODIOXIN see under **DIOXINS**

TETRACHLOROETHYLENE

ADVERSE EFFECTS

Reproductive hazards related to perchloroethylene. A review. van der Gulden JW, et al.
Int Arch Occup Environ Health 1989;61(4):235–42 (67 ref.)
Menstrual disorders among dry-cleaning workers [letter] Zielhuis GA, et al. **Scand J Work Environ Health** 1989 Jun;15(3):238
[Evaluation of the health status of dry cleaning plant workers exposed to tetrachloroethylene] Głuszczowa M. **Med Pr** 1988;39(3):200–5 (Eng. Abstr.) **(Pol)**
[Status of the nervous system and bioelectric activity of the brain in dry cleaning plant workers exposed to tetrachloroethylene] Sińczuk-Walczak H. **Med Pr** 1988; 39(2):91–9 (Eng. Abstr.) **(Pol)**
[Proliferation and polyploidy of hepatocytes as indicators of liver regeneration after exposure to environmental chemical factors] Beliaeva NN. **Gig Sanit** 1989 Mar;(3):48–52 (Eng. Abstr.) **(Rus)**

ANALYSIS

Volatile halocarbons in butter: elevated tetrachloroethylene levels in samples obtained in close proximity to dry-cleaning establishments. Miller LJ, et al.
Bull Environ Contam Toxicol 1988 Sep;41(3):469–74
Residual tetrachloroethylene in dry-cleaned clothes. Kawauchi T, et al. **Environ Res** 1989 Apr;48(2):296–301
Statistical approach towards point sources of groundwater pollution with tetrachloroethylene: a field study. Kido K, et al. **Tohoku J Exp Med** 1989 Mar;157(3):229–39
Determination of residual tetrachloroethylene in olive oil by headspace-gas chromatography. Van Rillaer W, et al.
Z Lebensm Unters Forsch 1989 Mar;188(3):221–2
[The tetrachloroethylene burden of residents adjacent to chemical dry cleaning establishments] Schaefer I, et al.
Off Gesundheitswes 1989 Jun;51(6):291–5 (Eng. Abstr.) **(Ger)**

METABOLISM

Dependence of tetrachloroethylene dechlorination on methanogenic substrate consumption by Methanosarcina sp. strain DCM. Fathepure BZ, et al.
Appl Environ Microbiol 1988 Dec;54(12):2976–80
Skin absorption of organic solvent vapors in nude mice in vivo. Tsuruta H. **Ind Health** 1989;27(2):37–47

PHARMACOKINETICS

Potential of physiologically based pharmacokinetics to amalgamate kinetic data of trichloroethylene and tetrachloroethylene obtained in rats and man. Koizumi A.
Br J Ind Med 1989 Apr;46(4):239–49
Respiratory input in inhalation experiments. Opdam JJ.
Br J Ind Med 1989 Mar;46(3):145–56
A method for the retrospective estimation of the individual respiratory intake of a highly and a poorly metabolising solvent during rest and physical exercise. Opdam JJ, et al. **Br J Ind Med** 1989 Apr;46(4):250–60
Linking indoor air and pharmacokinetic models to assess tetrachloroethylene risk. Bogen KT, et al. **Risk Anal** 1988 Dec;8(4):509–20

PHARMACOLOGY

Genetic effects of chlorinated ethylenes in the yeast Saccharomyces cerevisiae. Koch R, et al. **Mutat Res** 1988 Oct;206(2):209–16

POISONING

[Sensitive painful polyneuropathy probably caused by poisoning by perchloroethylene. Apropos of 1 case] Herruzo Pérez A, et al. **Rev Esp Anestesiol Reanim** 1989 May-Jun;36(3):180–1 **(Spa)**

TOXICITY

Mutagenicity of tetrachloroethene in the Ames test—metabolic activation by conjugation with glutathione. Vamvakas S, et al. **J Biochem Toxicol** 1989 Spring;4(1):21–7
Tetrachloroethylene. **Rev Environ Contam Toxicol** 1988; 106:175–88 (62 ref.)
Potential role of alpha-2 mu-globulin, protein droplet accumulation, and cell replication in the renal carcinogenicity of rats exposed to trichloroethylene, perchloroethylene, and pentachloroethane. Goldsworthy TL, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):367–79
Toxicity of mixtures of trichloroethylene, tetrachloroethylene and 1,1,1-trichloroethane: similarity of in vitro to in vivo responses. Stacey NH.
Toxicol Ind Health 1989 May;5(3):441–50

TETRACHLORVINPHOS

THERAPEUTIC USE

Effect of insecticidal ear tags on populations of lice (Damalinia ovis) infesting sheep. James PJ, et al.
Aust Vet J 1989 May;66(5):134–7

TETRACOSACTIDE see **COSYNTROPIN**

TETRACOSACTRIN see **COSYNTROPIN**

TETRACYCLINE

Tetracycline promoter mutations decrease non-B DNA structural transitions, negative linking differences and deletions in recombinant plasmids in Escherichia coli. Jaworski A, et al. **J Mol Biol** 1989 Jun 5;207(3):513–26

ADMINISTRATION & DOSAGE

Chemical pleurodesis in the presence of persistent air leak. Almassi GH, et al. **Ann Thorac Surg** 1989 May;47(5):786–7
Lung infection caused by Rhodococcus. Hart DH, et al.
Aust N Z J Med 1988 Oct;18(6):790–1
Clinical effects of local application of collagen film-immobilized tetracycline. Minabe M, et al.
J Clin Periodontol 1989 May;16(5):291–4
Clinical trial of high-dose berberine and tetracycline in cholera. Khin-Maung-U, et al. **J Diarrhoeal Dis Res** 1987 Sep;5(3):184–7
Use of antimicrobial containing acrylic strips in the treatment of chronic periodontal disease. A three month follow-up study. Addy M, et al. **J Periodontol** 1988 Sep;59(9):557–64
Tissue interactions with dentin specimens after demineralization using tetracycline. Frantz B, et al.
J Periodontol 1988 Nov;59(11):714–21
Application of a local drug delivery system to periodontal therapy: I. Development of collagen preparations with immobilized tetracycline. Minabe M, et al.
J Periodontol 1989 Feb;60(2):113–7
Tetracycline treatment for malignant pericardial effusion. Salamon P, et al. **Med Interne** 1989 Jan-Mar;27(1):73–4
Efficacy of neonatal ocular prophylaxis for the prevention of chlamydial and gonococcal conjunctivitis.
Hammerschlag MR, et al. **N Engl J Med** 1989 Mar 23; 320(12):769–72
Topical and oral tetracycline in the treatment of acne vulgaris. Budden MG. **Practitioner** 1988 Jun 8; 232(1450):669–74
Malignant pleural effusions: pleurodesis using a small-bore percutaneous catheter. Walsh FW, et al. **South Med J** 1989 Aug;82(8):963–5, 972
[Pleurodesis with tetracycline hydrochloride] Frank W, et al. **Pneumologie** 1989 Feb;43(2):80–4 (Eng. Abstr.) **(Ger)**
[Pleurodesis with tetracycline hydrochloride in spontaneous pneumothorax] Grosser H, et al. **Pneumologie** 1989 Feb; 43(2):98–100 (Eng. Abstr.) **(Ger)**
[The effectiveness of neonatal ocular prophylactic treatment for preventing chlamydial or gonococcal conjunctivitis] Steigleder GK. **Z Hautkr** 1989 May 15;64(5):347 **(Ger)**
[Management of malignant pleural effusion by tetracycline pleurodesis] Horváth T, et al. **Orv Hetil** 1989 May 14; 130(20):1051–2 (Eng. Abstr.) **(Hun)**
[Treatment of hydrocele testis by injection of tetracycline solution] Masuda F, et al. **Hinyokika Kiyo** 1988 Jul; 34(7):1191–3 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Fixed drug eruptions—a Singapore study. Chan HL, et al.
Ann Acad Med Singapore 1988 Oct;17(4):514–7
Continuous thoracic epidural analgesia for the control of pain associated with pleural sclerosis. Culling RD, et al.
Gynecol Oncol 1989 Jan;32(1):76–8
Pseudotumor cerebri, a rare adverse reaction to tetracycline therapy. A case report. Minutello JS, et al.
J Periodontol 1988 Dec;59(12):848–51

ANALYSIS

Flow injection amperometric detection based on ion transfer across a water-solidified nitrobenzene interface for the determination of tetracycline and terramycin. Ji HM, et al. **Analyst** 1988 Oct;113(10):1541–3
High-performance liquid chromatography as an alternative to microbiological measurements in the assay of tetracyclines. Ray A, et al. **J Chromatogr** 1989 Apr 28; 467(2):430–5
A rapid fluorimetric screening method for chlortetracycline, oxytetracycline and tetracycline in pig meat and kidney tissues. Haagsma N, et al. **Z Lebensm Unters Forsch** 1989 Mar;188(3):227–31

BIOSYNTHESIS

Glucose-6-phosphate dehydrogenase from a tetracycline producing strain of Streptomyces aureofaciens: some properties and regulatory aspects of the enzyme. Neužil J, et al. **Biochem Int** 1988 Jul;17(1):187–96

DIAGNOSTIC USE

Single-dose tetracycline labeling for bone histomorphometry. Sherrard DJ, et al. **Am J Clin Pathol** 1989 Jun;91(6):682–7
Static and tetracycline-based bone histomorphometric data from 34 normal postmenopausal females. Recker RR, et al. **J Bone Miner Res** 1988 Apr;3(2):133–44

METABOLISM

Thermal denaturation of engineered tet repressor proteins and their complexes with tet operator and tetracycline studied by temperature gradient gel electrophoresis. Wagenhöfer M, et al. **Anal Biochem** 1988 Dec; 175(2):422–32
Novel aerobic tetracycline resistance gene that chemically modifies tetracycline. Speer BS, et al. **J Bacteriol** 1989 Jan; 171(1):148–53
Mutations in the Tn10 tet repressor that interfere with induction. Location of the tetracycline-binding domain. Smith LD, et al. **J Mol Biol** 1988 Oct 20;203(4):949–59

PHARMACOKINETICS

Bioavailability, pharmacokinetics, and plasma concentration of tetracycline hydrochloride fed to swine. Kniffen TS, et al. **Am J Vet Res** 1989 Apr;50(4):518–21
The cryptic tetracycline resistance determinant on Tn4400 mediates tetracycline degradation as well as tetracycline efflux. Park BH, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1797–800
Systemic absorption of tetracycline and lidocaine following intrapleural instillation. Wooten SA, et al. **Chest** 1988 Nov; 94(5):960–3
Excretion of tetracycline and chlortetracycline in eggs after oral medication of laying hens. Roudaut B, et al.
Food Addit Contam 1989 Jan-Mar;6(1):71–8
Comparison of long bones and vertebrae in growing male rats: rate of growth, mineralization, and uptake of 3H-tetracycline at the organ level. Coffey SA, et al.
Growth Dev Aging 1988 Autumn;52(3):151–6
Concentrations of tetracycline in human gingival tissue in patients with chronic periodontal disease [letter] Shifer A, et al. **J Antimicrob Chemother** 1989 Mar;23(3):464–5
Impaired absorption of tetracycline by colestipol is not reversed by orange juice. Friedman H, et al.
J Clin Pharmacol 1989 Aug;29(8):748–51
Studies on the bioavailability of tetracycline chloride after oral administration to calves and pigs. Luthman J, et al.
Zentralbl Veterinarmed [A] 1989 Apr;36(4):261–8

PHARMACOLOGY

The effect of tetracyclines on the mobilization of fluoride. Nedeljković M, et al. **Arh Hig Rada Toksikol** 1988 Sep; 39(3):313–7
Effect of antibiotic treatment of young calves on glucose absorption and some plasma components. Aslan V, et al.
Br Vet J 1989 Mar-Apr;145(2):170–3
Inhibitory effect of tetracycline and doxycycline on resistance of mice to infection with a tetracycline-resistant strain of Listeria monocytogenes. Metz P, et al.
Int J Immunopharmacol 1988;10(5):519–24
Structure of cCF10, a peptide sex pheromone which induces conjugative transfer of the Streptococcus faecalis tetracycline resistance plasmid, pCF10. Mori M, et al.
J Biol Chem 1988 Oct 5;263(28):14574–8
Mitochondria as the site of action of tetracycline on Plasmodium falciparum. Kiatfuengfoo R, et al.
Mol Biochem Parasitol 1989 May 1;34(2):109–15

THERAPEUTIC USE

Azelaic acid for the treatment of acne. A clinical comparison with oral tetracycline. Hjorth N, et al.
Acta Derm Venereol Suppl (Stockh) 1989;143:45–8
Use of tetracycline for sclerosis of a biliary-cutaneous fistula. Shaw DW, et al. **AJR Am J Roentgenol** 1989 Jul; 153(1):65–6
Steroid resistant pleural effusion in systemic lupus erythematosus treated with tetracycline pleurodesis. Gilleece MH, et al. **Ann Rheum Dis** 1988 Dec;47(12):1031–2
Treatment of recurrent thyroid cysts by injection of tetracycline or minocycline. Lee JK, et al.
Arch Intern Med 1989 Mar;149(3):599–601
Refractory chronic periodontitis: effect of oral tetracycline hydrochloride and root planning. Papli R, et al.
Aust Dent J 1989 Feb;34(1):60–8
Clinicians' guide to antibiotics. Tetracycline. Pallett AP, et

al. Br J Hosp Med 1988 Nov;40(5):385–90 (30 ref.)
Treatment of hydrocele testis by injection of tetracycline. Miskowiak J, et al. Eur Urol 1988;14(6):440–1
Tetracycline in uranyl nitrate intoxication: its action on renal damage and U retention in bone. Guglielmotti MB, et al. Health Phys 1989 Sep;57(3):403–5
Response to tetracycline of telangiectasias in a male hemophiliac with human immunodeficiency virus infection [letter] Jiménez-Acosta F, et al. J Am Acad Dermatol 1988 Aug;19(2 Pt 1):369–70
Comparison of spiramycin and tetracycline used adjunctively in the treatment of advanced chronic periodontitis. Chin Quee T, et al. J Antimicrob Chemother 1988 Jul;22 Suppl B:171–7
A double-blind study on the effectiveness of tetracycline in reducing the incidence of fibrinolytic alveolitis. Swanson AE. J Oral Maxillofac Surg 1989 Feb;47(2):165–7
Urethral syndrome. A comparison of different treatment modalities. Bergman A, et al. J Reprod Med 1989 Feb; 34(2):157–60
Indigenised pharmaceuticals and aplastic anaemia [letter] Verwilghen RL. Lancet 1988 Oct 29;2(8618):1019
Rocky Mountain spotted fever vs. viral syndrome. A management approach in a primary care setting. Rizzolo PJ, et al. N C Med J 1989 Apr;50(4):181–3
Rocky Mountain spotted fever [letter] Wilfert C. N C Med J 1989 Jul;50(7):402–3
Genital Chlamydia trachomatis infections in patients with abnormal cervical smears: effect of tetracycline treatment on cell changes. Mecsei R, et al. Obstet Gynecol 1989 Mar; 73(3 Pt 1):317–21
Non-surgical treatment of a congenital splenic cyst [letter] Jequier S, et al. Pediatr Radiol 1989;19(5):346–7
Antibiotic sclerotherapy for renal cysts. van der Ent CK, et al. ROFO 1989 Mar;150(3):339–41
Chemical pleurodesis in primary spontaneous pneumothorax. van den Brande P, et al. Thorac Cardiovasc Surg 1989 Jun; 37(3):180–2
[Tetracycline and oxytetracycline in the treatment of non-gonococcal urethritis in men] Dajek Z, et al. Przegl Dermatol 1988 May-Jun;75(3):210–4 (Eng. Abstr.) (Pol)
[Albamycin T in the treatment of gonorrhea] Owsińska H, et al. Przegl Dermatol 1988 May-Jun;75(3):204–9 (Eng. Abstr.) (Pol)
[Pleurodesis with tetracycline in neoplastic effusions. Is an acid pH necessary?] Varela G, et al. Rev Med Univ Navarra 1988 Jul-Sep;32(3):143–6 (32 ref.) (Eng. Abstr.) (Spa)

URINE

Automated high-performance liquid chromatographic analysis of tetracycline in urine [letter] LeDuc BW, et al. J Chromatogr 1989 May 30;490(2):474–7

TETRACYCLINE RESISTANCE

Enhanced gentamicin killing of Escherichia coli by tet gene expression. Merlin TL, et al. Antimicrob Agents Chemother 1989 Feb;33(2):230–2
Antimicrobial sensitivity and plasmid-mediated tetracycline resistance in Campylobacter jejuni isolated in Bangladesh. Akhtar SQ. Chemotherapy 1988;34(4):326–31
A threonine to alanine exchange at position 40 of Tet repressor alters the recognition of the sixth base pair of tet operator from GC to AT. Altschmied L, et al. EMBO J 1988 Dec 1;7(12):4011–7
Overproduction of transposon Tn10-encoded tetracycline resistance protein results in cell death and loss of membrane potential. Eckert B, et al. J Bacteriol 1989 Jun; 171(6):3557–9
Cloned Bacillus subtilis chromosomal DNA mediates tetracycline resistance when present in multiple copies. Ives CL, et al. J Bacteriol 1989 Apr;171(4):1801–10
Cloning, expression in Escherichia coli and nucleotide sequence of a tetracycline-resistance gene from Streptomyces rimosus. Reynes JP, et al. J Gen Microbiol 1988 Mar;134 (Pt 3):585–98
Isolation of multiple antibiotic resistant Enterobacteriaceae from river water. Rinker AG Jr, et al. Microbios 1988; 56(228–229):169–75
Tetracycline-resistant Neisseria gonorrhoeae. N Y State J Med 1988 Dec;88(12):665–6
Transfer frequency of various 25.2 Mdal tetracycline resistance plasmids in Neisseria gonorrhoeae. Roberts MC, et al. Sex Transm Dis 1989 Apr-Jun;16(2):91–4
[Tetracycline resistance and beta-lactamase production in pharyngeal commensal Neisseria] Prère MF, et al. Pathol Biol (Paris) 1988 Jun;36(5 Pt 2):643–6 (Eng. Abstr.) (Fre)

GENETICS

Composite IS1-tetracycline resistance elements in aerobactin-encoding FIme plasmids from epidemic Salmonella wien. Casalino M, et al. Antimicrob Agents Chemother 1988 Aug;32(8):1262–6
The cryptic tetracycline resistance determinant on Tn4400 mediates tetracycline degradation as well as tetracycline efflux. Park BH, et al. Antimicrob Agents Chemother 1988 Dec;32(12):1797–800
Tetracycline resistance and TetM in oral anaerobic bacteria and Neisseria perflava-N. sicca. Roberts MC, et al. Antimicrob Agents Chemother 1988 Aug;32(8):1271–3
Occurrence of the Campylobacter resistance gene tetO in Enterococcus and Streptococcus spp. Zilhao R, et al. Antimicrob Agents Chemother 1988 Dec;32(12):1793–6
Detection of tetracycline-resistant strains of Ureaplasma urealyticum by hybridization assays. Brunet B, et al. Eur J Clin Microbiol Infect Dis 1989 Jul;8(7):636–8
Similarities between the regulatory sequences of the unrelated tetracycline genes of pBR322 and Tn10. Hung A, et al. FEBS Lett 1989 Mar 13;245(1-2):57–60
Stability of the pBR322 plasmid as affected by the promoter region of the tetracycline-resistance gene. Kolot MN, et al. Gene 1989 Feb 20;75(2):335–9
Point mutations that affect translation initiation of the transposon Tn10 tetA gene. Schneider K, et al. Gene 1988 Dec 30;74(2):559–63
Tetracycline-resistant Neisseria gonorrhoeae. Heritage J, et al. J Antimicrob Chemother 1988 Nov;22(5):575–9 (40 ref.)
Evolution and spread of tetracycline resistance determinants. Levy SB. J Antimicrob Chemother 1989 Jul;24(1):1–3 (32 ref.)
Characterization of the tetracycline resistance gene of plasmid pT181 of Staphylococcus aureus. Mojumdar M, et al. J Bacteriol 1988 Dec;170(12):5522–8
Cloning and characterization of a Bacteroides conjugal tetracycline-erythromycin resistance element by using a shuttle cosmid vector. Shoemaker NB, et al. J Bacteriol 1989 Mar;171(3):1294–302
Novel aerobic tetracycline resistance gene that chemically modifies tetracycline. Speer BS, et al. J Bacteriol 1989 Jan; 171(1):148–53
Topology of the transposon Tn10-encoded tetracycline resistance protein within the inner membrane of Escherichia coli. Eckert B, et al. J Biol Chem 1989 Jul 15;264(20):11663–70
Non-radioactive gene probes for the detection of tetracycline and/or minocycline resistance in staphylococci. Sakamoto H, et al. Mol Cell Probes 1988 Dec;2(4):321–30
Identification and nucleotide sequence of the class E tet regulatory elements and operator and inducer binding of the encoded purified Tet repressor. Tovar K, et al. Mol Gen Genet 1988 Dec;215(1):76–80
Construction of shuttle cloning vectors for Bacteroides fragilis and use in assaying foreign tetracycline resistance gene expression. Guiney DG, et al. Plasmid 1988 Jul; 20(1):17–22
[Effect of a fragment of pBR322 plasmid in the region of tetracycline resistance gene on the stability of this plasmid] Kolot MN, et al. Mol Biol (Mosk) 1988 Sep-Oct; 22(5):1301–6 (Eng. Abstr.) (Rus)
[SOS-induction of the RP4 plasmid tet-determinant] Skavronskaia AG, et al. Mol Gen Mikrobiol Virusol 1988 Aug;(8):17–23 (Eng. Abstr.) (Rus)

TETRACYCLINES

The influence of experimental conditions on the preparation of 99mTc-pyrrolidino-methyl tetracycline [99mTc-PMT] in the form of an instant kit. Shafiq YF, et al. Nuklearmedizin 1988 Aug;27(4):154–6

ADMINISTRATION & DOSAGE

[A method of saturation of tissues of the limbs with morphocycline] Lezvinskiĭ IaS, et al. Ortop Travmatol Protez 1988 Nov;(11):60–1 (Rus)

ADVERSE EFFECTS

Fine needle aspiration cytologic findings in the black thyroid syndrome. Wajda KJ, et al. Acta Cytol 1988 Nov-Dec; 32(6):862–5
Acute hepatitis and exfoliative dermatitis associated with minocycline. Davies MG, et al. BMJ 1989 Jun 3; 298(6686):1523–4
Skin pigmentation associated with minocycline therapy. Okada N, et al. Br J Dermatol 1989 Aug;121(2):247–54
Tetracyclines—how safe are they? Wright AL, et al. Clin Exp Dermatol 1988 Mar;13(2):57–61 (66 ref.)
Treatment of tetracycline toxicity with tetracycline [letter] Fisher M. J Adolesc Health Care 1989 Jan;10(1):57
Minocycline-induced discoloration of the permanent teeth. Rosen T, et al. J Am Acad Dermatol 1989 Sep;21(3 Pt 1):569 (9 ref.)
The black thyroid: an unusual finding during neck exploration. Noble JG, et al. Postgrad Med J 1989 Jan; 65(759):34–5
Protracted systemic illness and interstitial nephritis due to minocycline. Wilkinson SP, et al. Postgrad Med J 1989 Jan;65(759):53–6
[Bleaching of tetracycline-stained teeth] Guan YC. Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Nov; 23(6):354–5 (Chi)
[Papilledema caused by minocycline: apropos of a case] Le Bris P, et al. J Fr Ophtalmol 1988;11(10):681–4 (14 ref.) (Eng. Abstr.) (Fre)
[Esophageal ulcer after ingestion of minocycline (letter)] Algayres JP, et al. Presse Med 1989 Mar 11;18(10):541 (Fre)
[A case of minocycline induced pneumonitis] Shigematsu T, et al. Nippon Naika Gakkai Zasshi 1988 Oct;77(10):1584–5 (Jpn)

ANALYSIS

Minocycline levels in tears of patients with active trachoma. Tabbara KF, et al. Arch Ophthalmol 1989 Jan;107(1):93–5
Colorimetric determination of tetracycline derivatives in pharmaceutical preparations. Saha U. J Assoc Off Anal Chem 1989 Mar-Apr;72(2):242–4
Simultaneous determination of oxytetracycline, tetracycline, and chlortetracycline in milk by liquid chromatography. Thomas MH. J Assoc Off Anal Chem 1989 Jul-Aug; 72(4):564–7
Liquid chromatographic and flow injection analysis of tetracycline using sensitized europium (III) luminescence detection. Wenzel TJ, et al. J Chromatogr 1988 Dec 9; 433:149–58

PHARMACOKINETICS

Clinical pharmacokinetics of doxycycline and minocycline. Saivin S, et al. Clin Pharmacokinet 1988 Dec;15(6):355–66 (78 ref.)
[Minocycline diffusion into prostatic tissue] Kawashima H, et al. Hinyokika Kiyo 1988 Sep;34(9):1683–5 (Eng. Abstr.) (Jpn)
[Levels of tetracyclines in the blood and soft tissues] Neuschl J. Vet Med (Praha) 1988 Sep;33(9):561–8 (Eng. Abstr.) (Slo)

PHARMACOLOGY

Minocycline-related black thyroid. Hanzlick R, et al. Am J Forensic Med Pathol 1988 Sep;9(3):200–2
Effect of amoxicillin, cephalexin, and tetracycline-HCl on intestinal L-leucine transport in the rat in vivo. Barcina Y, et al. Drug Nutr Interact 1988;5(4):283–8
Hydroxyl radical generation by the tetracycline antibiotics with free radical damage to DNA, lipids and carbohydrate in the presence of iron and copper salts. Quinlan GJ, et al. Free Radic Biol Med 1988;5(5–6):341–8
The ocular hypotensive effects of demeclocycline, tetracycline and other tetracycline derivatives. Wallace I, et al. Invest Ophthalmol Vis Sci 1989 Jul;30(7):1594–8
Psoriasis and drugs: influence of tetracyclines on the course of psoriasis. Tsankov N, et al. J Am Acad Dermatol 1988 Oct;19(4):629–32
Factors influencing the in-vitro sensitivity of Ureaplasma urealyticum to tetracyclines. Jalil N, et al. J Antimicrob Chemother 1989 Mar;23(3):341–5
Susceptibility of Branhamella catarrhalis to tetracyclines. Riley TV, et al. J Antimicrob Chemother 1989 May; 23(5):802–4
Mitochondrial biogenesis during the activation of lymphocytes by mitogens: the immunosuppressive action of tetracyclines. Van den Bogert C, et al. J Leukoc Biol 1989 Aug;46(2):128–33
Effect of minocycline on prostaglandin formation in gingival fibroblasts. ElAttar TM, et al. J Periodont Res 1988 Sep; 23(5):285–6
Non-radioactive gene probes for the detection of tetracycline and/or minocycline resistance in staphylococci. Sakamoto H, et al. Mol Cell Probes 1988 Dec;2(4):321–30
Tetracycline-resistant Neisseria gonorrhoeae. N Y State J Med 1988 Dec;88(12):665–6
The influence of tetracyclines on the aggregation of free and membrane-bound polysomes and on the RNA content of the liver of mice. Hopf G, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Oct; 338(4):455–8

THERAPEUTIC USE

Reactualisation of the in vitro activity of tetracycline antibiotics. Vuye A. Acta Clin Belg 1988;43(6):437–48 (81 ref.)
Treatment of recurrent thyroid cysts by injection of tetracycline or minocycline. Lee JK, et al. Arch Intern Med 1989 Mar;149(3):599–601
Prurigo pigmentosa successfully treated with minocycline. Aso M, et al. Br J Dermatol 1989 May;120(5):705–8
A comparison of doxycycline and minocycline in the treatment of acne vulgaris. Harrison PV. Clin Exp Dermatol 1988 Jul;13(4):242–4
Minocycline in the treatment of patients with Reiter's syndrome [letter] Panayi GS, et al. Clin Exp Rheumatol 1989 Jan-Feb;7(1):100–1
Preventive lymecycline therapy in women with a history of pelvic inflammatory disease undergoing first-trimester abortion: a clinical, controlled trial. Heisterberg L, et al. Eur J Obstet Gynecol Reprod Biol 1988 Jul;28(3):241–7
Minocycline effects in patients with active trachoma. Tabbara KF, et al. Int Ophthalmol 1988;12(1):59–63
Doxycycline and minocycline in the treatment of respiratory infections: a double-blind comparative clinical, microbiological and pharmacokinetic study. Maesen FP, et al. J Antimicrob Chemother 1989 Jan;23(1):123–9
Ticks, tetracycline, and backyard terrorism. Bryan CS. J S C Med Assoc 1989 Jul;85(7):341–3
Tetracyclines for dystrophic epidermolysis bullosa [letter] Humbert P, et al. Lancet 1989 Jul 29;2(8657):277
Minocycline for dystrophic epidermolysis bullosa [letter] White JE. Lancet 1989 Apr 29;1(8644):966
A prospective single-blind trial of minocycline and doxycycline in the treatment of genital Chlamydia trachomatis infection in women. Kovacs GT, et al.

Med J Aust 1989 May 1;150(9):483–5
[Which antibiotics for pneumonia treatment?] Ruutu P.
Duodecim 1989;105(3):227–9 (Fin)
[Confluent and reticulated papillomatosis of Gougerot and Carteaud. Treatment by minocycline] Petit A, et al.
Ann Dermatol Venereol 1989;116(1):29–30 (Fre)
[Antibiotic prophylaxis in cardiac surgery in France] Levy M, et al. Pathol Biol (Paris) 1989 May;37(5):472–6 (Eng. Abstr.) (Fre)
[Chloramphenicol, tetracyclines and macrolide antibiotics] Knothe H. Internist (Berlin) 1989 Jan;30(1):32–7 (4 ref.) (Ger)
[Systemic antibiotic therapy in chronic periodontitis in adults. II. Rational use of minocycline] Matarasso S, et al.
Minerva Stomatol 1988 Aug;37(8):621–7 (30 ref.) (Eng. Abstr.) (Ita)
[In vitro activity of minocycline against Chlamydia trachomatis clinical isolates and clinical efficacy of minocycline to C. trachomatis associated nongonococcal urethritis] Kato N, et al. Jpn J Antibiot 1988 Oct; 41(10):1550–6 (Eng. Abstr.) (Jpn)
[Treatment of idiopathic hydrocele and cord cysts with sclerosing puncture of tetracycline] Miguélez García E, et al. Arch Esp Urol 1988 Sep;41(7):493–4 (Eng. Abstr.) (Spa)

TETRADECANOIC ACIDS see MYRISTIC ACIDS

TETRADECANOYLPHORBOL ACETATE

Oxygen distribution and utilization after phorbol myristate acetate–induced lung injury. Dorinsky PM, et al.
Am Rev Respir Dis 1988 Dec;138(6):1454–63
Effects of oleic acid–, alpha–naphthylthiourea–, and phorbol myristate acetate–induced microvascular damage on indexes of pulmonary endothelial function in anesthetized dogs. Gardaz JP, et al. Am Rev Respir Dis 1988 Jun; 137(6):1350–5
Role of cutaneous GSH in 12–O–tetradecanoyl–phorbol 13–acetate–induced mouse skin tumor promotion. Kumar S, et al. Arch Dermatol Res 1988;280(6):371–4
Effects of angiotensin II and of phorbol ester on protein kinase C activity and on prostacyclin production in cultured rat aortic smooth–muscle cells. Lang U, et al.
Biochem J 1989 Apr 15;259(2):477–83
Screening for skin–tumor promoters. Ohkawa Y, et al.
Biomed Pharmacother 1988;42(7):447–50 (22 ref.)
Expression of tartrate–resistant acid phosphatase in B–CLL treated with phorbol ester or phorbol ester plus calcium ionophore. Drexler HG, et al. Eur J Haematol 1988 Sep; 41(3):250–7
Retinoic acid protects Langerhans' cells from the effects of the tumour promotor 12–O–tetradecanoylphorbol 13–acetate. Halliday GM, et al. Immunology 1989 Jul; 67(3):298–302
Differential responsiveness of human B lymphocytes to phorbol ester and calcium ionophore based on their state of activation. Inglés J, et al. Immunology 1989 Jul; 67(3):359–64
Phorbol myristate acetate induces IL–2 secretion by HUT 78 cells by a mechanism independent of protein kinase C translocation. Kelleher D, et al. Immunology 1988 Nov; 65(3):351–5
Functional properties of intra–epithelial lymphocytes from mouse small intestine. IV. Investigation of the proliferative capacity of IEL using phorbol ester and calcium ionophore. Mowat AM, et al. Immunology 1989 Mar;66(3):398–403
Effects of acyclovir on herpes simplex virus type 1 infection in mice treated with 12–O–tetradecanoylphorbol 13–acetate. Larsson PA, et al. J Gen Virol 1989 Jul;70 (Pt 7):1773–8
Activation– and phorbol ester–stimulated phosphorylation of a plasma membrane glycoprotein antigen expressed on mouse IL–3–dependent mast cells and serosal mast cells. Katz HR, et al. J Immunol 1989 Feb 1;142(3):919–26
Phorbol ester–stimulated superoxide production by murine bone marrow–derived macrophages requires preexposure to cytokines. Phillips WA, et al. J Immunol 1989 Apr 1; 142(7):2445–9
[Inhibitory effect of glycyrrhizin and caffeine on two–stage carcinogenesis in mice] Yasukawa K, et al.
Yakugaku Zasshi 1988 Aug;108(8):794–6 (Eng. Abstr.) (Jpn)

ANALOGS & DERIVATIVES

Effects of fluorescent derivatives of TPA on HL60 cells: dissociation between the differentiation–induced and protein kinase C activity. Tran PL, et al.
J Cell Physiol 1989 May;139(2):313–9
[The role of protein kinase C in left ventricular relaxation impaired by global ischemia] Sonoki H, et al.
Kokyu To Junkan 1989 Jun;37(6):669–74 (Eng. Abstr.) (Jpn)

ANTAGONISTS & INHIBITORS

Cyclosporine A suppresses an early process in phorbol ester action. Gschwendt M, et al. Cancer Lett 1989 Jul 15; 46(2):113–5
The immunosuppressant FK–506, like cyclosporins and didemnin B, inhibits calmodulin–dependent phosphorylation of the elongation factor 2 in vitro and biological effects of the phorbol ester TPA on mouse skin in vivo. Gschwendt M, et al. Immunobiology 1989 Mar; 179(1):1–7
Anti–Ig antibody inhibits the phorbol ester–induced stimulation of peritoneal B cells. Rothstein TL, et al.
J Immunol 1988 Dec 15;141(12):4089–93
Sphingosine inhibits phorbol ester–induced inflammation, ornithine decarboxylase activity, and activation of protein kinase C in mouse skin. Gupta AK, et al.
J Invest Dermatol 1988 Nov;91(5):486–91
Insulin reverses the growth retardation effect of phorbol ester in chicken embryos during organogenesis. Girbau M, et al. Life Sci 1989;44(25):1971–8

METABOLISM

The mechanism of skin tumor promotion caused by phorbol esters: possible involvement of arachidonic acid cascade/lipoxygenase, protein kinase C and calcium/calmodulin systems. Nakadate T.
Jpn J Pharmacol 1989 Jan;49(1):1–9 (52 ref.)

PHARMACOKINETICS

Transmembrane signaling: tumor promoter distribution. Fisher KA, et al. Biochim Biophys Acta 1989 Jul 10; 982(2):237–44

PHARMACOLOGY

Phorbol–myristate–acetate–induced platelet aggregation in the presence of inhibitors. Jerushalmy Z, et al.
Acta Haematol (Basel) 1988;80(4):210–5
Phorbol ester desensitization of clonal insulin–releasing cell response to carbachol involves depletion of an intracellular calcium pool. Gylfe E. Acta Physiol Scand 1989 Feb; 135(2):107–11
Regulation of phosphoinositide hydrolysis by GTP–binding proteins, phorbol esters and botulinum toxin type D. Brown JH, et al. Adv Exp Med Biol 1988;236:229–37
The activation of pyruvate dehydrogenase by glucagon in hepatocytes is diminished by phorbol myristate acetate: a role for cytoplasmic calcium in dehydrogenase regulation. Staddon JM, et al. Adv Exp Med Biol 1988;232:245–7
Mechanisms involved in ornithine decarboxylase induction by 12–O–tetradecanoylphorbol–13–acetate, a potent mouse skin tumor promoter and an activator of protein kinase C. Verma AK, et al. Adv Exp Med Biol 1988;250:273–90 (31 ref.)
Pharmacological modification of 12–0–tetradecanoylphorbol–13–acetate induced inflammation and epidermal cell proliferation in mouse skin. Griffiths RJ, et al. Agents Actions 1988 Dec;25(3–4):344–51
Characterization of the morphological, growth, and steroidogenic effect of TPA on mouse Y–1 adrenal cortical tumor cells in culture. Murray SA, et al. Am J Anat 1988 Oct;183(2):166–77
Response of neoplasms of B cell lineage to the proliferative effects of B cell growth factor and the phorbol ester TPA. Kinney MC, et al. Am J Pathol 1989 Apr;134(4):913–23
Differential effects of phorbol esters on PGE2 and bradykinin–induced elevation of [Cai2+] in MDCK cells. Aboolian A, et al. Am J Physiol 1989 Jun;256(6 Pt 2):F1135–43
Interactions of TPA and insulin on Na+ transport across frog skin. Civan MM, et al. Am J Physiol 1989 Mar;256(3 Pt 1):C569–78
Acute effects of phorbol esters on receptor–mediated IP3, cAMP, and progesterone levels in rat granulosa cells. Davis JS, et al. Am J Physiol 1989 Mar;256(3 Pt 1):E368–74
In vitro correction of impaired Na+–K+–ATPase in diabetic nerve by protein kinase C agonists. Lattimer SA, et al. Am J Physiol 1989 Feb;256(2 Pt 1):E264–9
The effects of 12–O–tetradecanoylphorbol–13–acetate (TPA) on axonal elongation and fasciculation. Hsu L.
Anat Embryol (Berl) 1989;179(5):511–8
Interleukin–1 alpha mRNA induced by cycloheximide PMA, and retinoic acid is reduced by dexamethasone in PAM–212 keratinocytes. McGuire J, et al. Ann N Y Acad Sci 1988; 548:283–90
Terminal differentiation of human leukemic blasts in response to 12–0–tetradecanoyl–13–phorbol acetate (TPA). Joshi KS, et al. Anticancer Res 1988 Nov–Dec;8(6):1367–71
Early ionic events associated with phorbol ester induced differentiation and inhibition of cell growth in hematopoietic tumor cell lines. Larsson R, et al.
Anticancer Res 1989 Jan–Feb;9(1):1–7
Nitroblue tetrazolium reduction in monocytes and monocyte–derived macrophages. Effect of oxidative burst stimulants and interferons. Müller F, et al. APMIS 1989 Jun;97(6):490–6
Selective detachment of a tetraploid subline of primary keratinocytes after treatment with the tumor promoter 12–0–tetradecanoylphorbol–13–acetate. Clausen OP, et al. APMIS Suppl 1988;2:100–10
Insulin and phorbol myristic acetate induce ornithine decarboxylase in Reuber H35 rat hepatoma cells by different mechanisms. Goodman SA, et al.
Arch Biochem Biophys 1988 Nov 1;266(2):343–50
Possible involvement of a 95–kDa protein phosphorylation in phorbol 12–myristate 13–acetate–induced suppression of zymosan phagocytosis in guinea pig macrophages. Hazeki K, et al. Arch Biochem Biophys 1989 May 1;270(2):551–9
Proteolytic degradation of protein kinase C in the phorbol ester–induced interleukin–2 secreting thymoma cells. Huang FL, et al. Arch Biochem Biophys 1988 Dec; 267(2):503–14
Glycoprotein biosynthesis in B lymphocytes: induction of protein N–glycosylation, RNA synthesis, and DNA synthesis by phorbol ester plus ionomycin is blocked by protein kinase inhibitors. Rush JS, et al.
Arch Biochem Biophys 1988 Nov 15;267(1):305–16
A role for intracellular histamine in ultrastructural changes induced in platelets by phorbol esters. McNicol A, et al.
Arterioscler Dis 1989 Sep–Oct;9(5):684–9
Studies on intimal smooth muscle cells in rabbits: decreased growth response to the tumor promoter. Nishida K, et al.
Artery 1989;16(5):272–85
Involvement of reactive oxygen intermediates in the mutagenicity of tumor promoters. Biggart NW, et al.
Basic Life Sci 1988;49:457–60
Indomethacin shifts the peak of c–fos, egr–1, and c–myc gene expression in confluent fibroblasts induced by phorbol myristate acetate. Birnboim HC, et al.
Biochem Biophys Res Commun 1989 Jun 15;161(2):508–13
Transient elevation of ribonucleotide reductase activity, M2 mRNA and M2 protein in BALB/c 3T3 fibroblasts in the presence of 12–O–tetradecanoylphorbol–13–acetate. Choy BK, et al. Biochem Biophys Res Commun 1989 Aug 15; 162(3):1417–24
Differential effects of norepinephrine and phorbol ester on alpha–1 adrenergic receptor number and surface–accessibility in DDT1 MF–2 cells. Colucci WS, et al. Biochem Biophys Res Commun 1988 Oct 31; 156(2):924–30
Retention of specific protein kinase C isozymes following chronic phorbol ester treatment in BC3H–1 myocytes. Cooper DR, et al. Biochem Biophys Res Commun 1989 May 30;161(1):327–34
Effect of phorbolmyristate acetate on fatty acid uptake and distribution in human promyelocytic leukemia (HL–60) cells in vitro. Das UN. Biochem Biophys Res Commun 1988 Dec 15;157(2):639–47
A phospholipase D–like mechanism in pancreatic islet cells: stimulation by calcium ionophore, phorbol ester and sodium fluoride. Dunlop M, et al.
Biochem Biophys Res Commun 1989 Sep 15;163(2):922–8
Inhibition of neuroglandular antigen (NGA) glycosylation by phorbol ester in human melanoma cells. Feyles V, et al. Biochem Biophys Res Commun 1989 Feb 15; 158(3):837–43
Phorbol ester induces differential membrane–association of protein kinase C subspecies in human platelets. Fournier A, et al. Biochem Biophys Res Commun 1989 Jun 15; 161(2):556–61
Metabolic responsiveness to phorbol ester and activity of protein kinase C in isolated hepatocytes from partially hepatectomized rats. Houweling M, et al.
Biochem Biophys Res Commun 1989 Jan 16;158(1):294–301
Inhibition of alpha 2–adrenergic receptor–mediated cyclic GMP formation by a phorbol ester, a protein kinase C activator. Jaiswal RK, et al.
Biochem Biophys Res Commun 1988 Oct 31;156(2):905–9
Time–course of Ca2+–induced insulin secretion from perifused, electrically permeabilised islets of Langerhans: effects of cAMP and a phorbol ester. Jones PM, et al.
Biochem Biophys Res Commun 1989 Aug 15; 162(3):998–1003
Phorbol ester activation of phospholipase D in human monocytes but not peripheral blood lymphocytes. Kinsky SC, et al. Biochem Biophys Res Commun 1989 Jul 31; 162(2):788–93
Phorbol ester treatment inhibits thrombin but not stable GTP analogue–induced platelet granule secretion despite inhibition of phosphatidate formation with both agonists. Krishnamurthi S, et al. Biochem Biophys Res Commun 1988 Nov 15;156(3):1257–64
Modulation of estrogen receptor and epidermal growth factor receptor mRNAs by phorbol ester in MCF 7 breast cancer cells. Lee CS, et al. Biochem Biophys Res Commun 1989 Jul 14;162(1):415–21
Subcellular distribution and immunocytochemical localization of protein kinase C in myocardium, and phosphorylation of troponin in isolated myocytes stimulated by isoproterenol or phorbol ester. Liu JD, et al. Biochem Biophys Res Commun 1989 Aug 15; 162(3):1105–10
Induction of plasminogen activator activity by phorbol ester in transformed fetal bovine aortic endothelial cells. Possible independence from protein kinase C. Maier JA, et al.
Biochem Biophys Res Commun 1989 Apr 28;160(2):682–91
TPA– and agonist–induced force development in myometrium from pregnant and non–pregnant rats. Missiaen L, et al. Biochem Biophys Res Commun 1989 Jan 16;158(1):302–6
Increased degradation of protein kinase C without diminution of mRNA level after treatment of WEHI–231 B lymphoma cells with phorbol esters. Mizuguchi J, et al.
Biochem Biophys Res Commun 1988 Sep 30;155(3):1311–7
Interruption of TPA–induced signals by an antiviral and antitumoral xanthate compound: inhibition of a phospholipase C–type reaction. Müller–Decker K.
Biochem Biophys Res Commun 1989 Jul 14;162(1):198–205
Expression of thromboxane A2 receptor in cultured human erythroleukemia cells and its induction by

12-O-tetradecanoylphorbol-13-acetate. Nakajima M, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):958-65

The transcription of the interleukin 1 beta gene is induced with PMA and inhibited with dexamethasone in U937 cells. Nishida T, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):269-74

Activation of neutrophil calpain following its translocation to the plasma membrane induced by phorbol ester or fMet-Leu-Phe. Pontremoli S, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):737-43

Phorbol ester dissociates endothelin-stimulated phosphoinositide hydrolysis and arachidonic acid release in vascular smooth muscle cells. Reynolds EE, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):868-73

Role of calcium in the potentiating effect of phorbol ester on KCl-induced vasocontraction. Wakabayashi I, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1195-202

Lack of phosphorylation of lipocortin I in A431 epidermoid carcinoma cells treated with phorbol esters. William F, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):474-9

Phorbol 12-myristate 13-acetate inhibition of leukotriene D4-induced signal transduction was rapidly reversed by staurosporine. Winkler JD, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):521-9

Inhibition of phorbol ester-caused induction of ornithine decarboxylase and tumor promotion in mouse skin by staurosporine, a potent inhibitor of protein kinase C. Yamada S, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):9-15

Phorbol ester regulates the abundance of enkephalin precursor mRNA but not of amyloid beta-protein precursor mRNA in rat testicular peritubular cells. Yoshikawa K, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):568-75

Effect of H-7 on the modulation of glucagon actions by activators of protein kinase-C. García-Sáinz JA, et al. **Biochem Int** 1989 Jan;18(1):243-9

Differences in phorbol-ester-induced down-regulation of protein kinase C between cell lines. Adams JC, et al. **Biochem J** 1989 Feb 1;257(3):905-11

Mechanism of cellular effect of phorbol esters on action of arginine vasopressin and angiotensin II on rat vascular smooth muscle cells in culture. Caramelo C, et al. **Biochem J** 1988 Sep 15;254(3):625-9

Arachidonate release in neutrophils: does a lack of effect of protein kinase C inhibitors imply no involvement of protein kinase C? [letter] Krishnamurthi S, et al. **Biochem J** 1989 Jul 15;261(2):687-8

Phosphorylation of class I histocompatibility antigens in human B lymphocytes. Regulation by phorbol esters and insulin. Peyron JF, et al. **Biochem J** 1988 Dec 15; 256(3):763-8

The inhibitory GTP-binding protein (Gi) occurs in rat Leydig cells and is differentially modified by lutropin and 12-O-tetradecanoylphorbol 13-acetate. Platts EA, et al. **Biochem J** 1988 Aug 1;253(3):895-9

Inhibition of prostaglandin E2-induced phosphoinositide metabolism by phorbol ester in bovine adrenal chromaffin cells. Yokohama H, et al. **Biochem J** 1988 Nov 1; 255(3):957-62

Phorbol ester-induced attenuation of tissue DNA synthesis: antagonism by prolactin in liver and thymus. Buckley AR, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1192-4

Effect of pertussis toxin on the inhibition of secretory activity by prostaglandin E2, somatostatin, epidermal growth factor and 12-O-tetradecanoylphorbol 13-acetate in parietal cells from rat stomach. Atwell MM, et al. **Biochim Biophys Acta** 1988 Oct 7;971(3):282-8

Synergistic enhancement of histamine release from rat peritoneal mast cells by the phorbol ester 12-O-tetradecanoylphorbol 13-acetate is not reflected by corresponding changes in phospholipid turnover. Boam DS, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):215-22

Phorbol myristate acetate activates protein kinase C, stimulates the phosphorylation of endogenous proteins and inhibits phosphate transport in mouse renal tubules. Boneh A, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):308-16

Interaction of protein kinase C with chromaffin granule membranes: effects of Ca2+, phorbol esters and temperature reveal differences in the properties of the association and dissociation events. Brocklehurst KW, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):157-65

Modulation by phorbol 12-myristate 13-acetate of arachidonic acid release from rat basophilic leukemia cells stimulated with A23187. Froissart P, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):376-81

Stimulation of a calcium-dependent actin nucleation activity by phorbol 12-myristate 13-acetate in rabbit macrophage cytoskeletons. Hartwig JH, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):64-71

Regulation of glucose transport activity and expression of glucose transporter mRNA by serum, growth factors and phorbol ester in quiescent mouse fibroblasts. Kitagawa T, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):100-8

Stimulation of progesterone production by phorbol-12-myristate-13-acetate in MA-10 Leydig tumor cells. Chaudhary LR, et al. **Biochimie** 1988 Oct; 70(10):1353-60

Output and effects of thromboxane produced by the liver perfused with phorbol myristate acetate. Tran-Thi TA, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1179-84

Effects of TPA, A23187, and prostaglandin F2 alpha on progesterone synthesis by dispersed ovine luteal cells. Conley AJ, et al. **Biol Reprod** 1989 Jun;40(6):1224-30

Stimulatory effect of phorbol diester on relaxin release by porcine luteal cells in culture. Taylor MJ, et al. **Biol Reprod** 1988 Oct;39(3):743-50

Attenuation of hen granulosa cell steroidogenesis by a phorbol ester and 1-oleoyl-2-acetylglycerol. Tilly JL, et al. **Biol Reprod** 1988 Aug;39(1):1-8

Synergistic stimulation of prostaglandin E2 production by calcium ionophore and protein kinase C activator in rat granulosa cells. Wang J, et al. **Biol Reprod** 1989 May; 40(5):1000-6

Age-dependent effects of phorbol ester on adenylate cyclase stimulation by glucagon in liver of female rats. Hermsdorf T, et al. **Biomed Biochim Acta** 1989;48(4):255-60

Regulation of insulin gene expression by dexamethasone, Ca2+ and a phorbol ester. Welsh M, et al. **Biomed Biochim Acta** 1988;47(4-5):299-303

Downregulation of c-fms gene expression in human monocytes treated with phorbol esters and colony-stimulating factor 1. Sariban E, et al. **Blood** 1989 Jul;74(1):123-9

Interleukin-3, GM-CSF, and TPA induce distinct phosphorylation events in an interleukin 3-dependent multipotential cell line. Sorensen PH, et al. **Blood** 1989 Feb; 73(2):406-18

Procoagulant induction by human lymphokine and interferon gamma/PMA on a myelomonocytic cell line, RC2a. Geczy CL, et al. **Br J Haematol** 1988 Oct;70(2):211-8

The influence of activation or inhibition of protein kinase C on the release of radioactivity from rat isolated atria labelled with [3H]-noradrenaline. Ishac EJ, et al. **Br J Pharmacol** 1988 Jul;94(3):713-20

Effect of phorbol esters on noradrenaline release from cerebral arteries. Balfagon G, et al. **Brain Res** 1989 Jan 16;477(1-2):196-201

Dose-dependent phorbol ester facilitation or blockade of hippocampal long-term potentiation: relation to membrane/cytosol distribution of protein kinase C activity. Colley PA, et al. **Brain Res** 1989 Aug 28;495(2):205-16

Phorbol ester stimulates hexose uptake by brain microvessel endothelial cells. Drewes LR, et al. **Brain Res Bull** 1988 Nov;21(5):771-6

Nerve growth factor and phorbol esters increase the number of choline acetyltransferase-positive cells in two morphologically distinct classes of basal forebrain neurons in primary cultures. Alderson RF, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):229-41

TPA-induced neurite formation in a neuroblastoma cell line (SH-SY5Y) is associated with increased IGF-I receptor mRNA and binding. Ota A, et al. **Brain Res Mol Brain Res** 1989 Jul;6(1):69-76

Changes in expression of tyrosine hydroxylase immunoreactivity in human SMS-KCNR neuroblastoma following retinoic acid or phorbol ester-induced differentiation. Pennypacker KR, et al. **Brain Res Mol Brain Res** 1989 Jun;5(4):251-8

Could the increase in natural killer activity induced by the tumor-promoting agent TPA depend on the TPA-adherent, nonphagocytic mononuclear cells? De-La-Rocque L, et al. **Braz J Med Biol Res** 1988; 21(2):289-93

Ultrastructure of four human germ cell tumor-derived cell lines: effect of 12-O-tetradecanoyl phorbol-13-acetate. Hiraoka A, et al. **Cancer Invest** 1988;6(4):393-402

A model to account for the effects of oncogenes, TPA, and retinoic acid on the regulation of genes involved in metastasis. Pohl J, et al. **Cancer Metastasis Rev** 1988 Dec; 7(4):347-56 (102 ref.)

Elevation of intracellular calcium ion by prostaglandin E1 and its inhibition by protein kinase C in a human megakaryocyte leukemia cell line. Adachi M, et al. **Cancer Res** 1989 Jul 15;49(14):3805-8

Novobiocin- and phorbol-12-myristate-13-acetate-induced differentiation of human leukemia cells associated with a reduction in topoisomerase II activity. Constantinou A, et al. **Cancer Res** 1989 Mar 1;49(5):1110-7

Comparison of effects of bryostatins 1 and 2 and 12-O-tetradecanoylphorbol-13-acetate on protein kinase C activity in A549 human lung carcinoma cells. Dale IL, et al. **Cancer Res** 1989 Jun 15;49(12):3242-5

Four-day duration of tumor promoter exposure required to transform JB6 promotion-sensitive cells to anchorage independence. Dion LD, et al. **Cancer Res** 1988 Dec 15; 48(24 Pt 1):7126-31

Lack of a role of DNA methylation in tumor promoter 12-O-tetradecanoylphorbol-13-acetate-induced synthesis of ornithine decarboxylase messenger RNA in T24 cells. Hsieh JT, et al. **Cancer Res** 1989 Aug 1;49(15):4251-7

Inhibition of MCF-7 cell growth by 12-O-tetradecanoylphorbol-13-acetate and 1,2-dioctanoyl-sn-glycerol: distinct effects on protein kinase C activity. Issandou M, et al. **Cancer Res** 1988 Dec 1;48(23):6943-50

Effects of bryostatins and retinoic acid on phorbol ester- and diacylglycerol-induced squamous differentiation in human tracheobronchial epithelial cells. Jetten AM, et al. **Cancer Res** 1989 Jul 15;49(14):3990-5

SV40-transfected human melanocyte sensitivity to growth inhibition by the phorbol ester 12-O-tetradecanoylphorbol-13-acetate. Melber K, et al. **Cancer Res** 1989 Jul 1;49(13):3650-5

Effects of serum, transforming growth factor type beta, or 12-O-tetradecanoyl-phorbol-13-acetate on ionized cytosolic calcium concentration in normal and transformed human bronchial epithelial cells. Miyashita M, et al. **Cancer Res** 1989 Jan 1;49(1):63-7

Regulation of transforming growth factor alpha messenger RNA expression in a chemically transformed rat hepatic epithelial cell line by phorbol ester and hormones. Raymond VW, et al. **Cancer Res** 1989 Jul 1;49(13):3608-12

Modulation of HT-29 human colonic cancer cell differentiation with calmidazolium and 12-O-tetradecanoylphorbol-13-acetate. Rochette-Egly C, et al. **Cancer Res** 1988 Nov 1;48(21):6173-82

Modulation by adriamycin, daunomycin, verapamil, and trifluoperazine of the biochemical processes linked to mouse skin tumor promotion by 12-O-tetradecanoylphorbol-13-acetate. Satyamoorthy K, et al. **Cancer Res** 1989 Oct 1;49(19):5364-70

Effects of thioether phospholipid BM 41.440 on protein kinase C and phorbol ester-induced differentiation of human leukemia HL60 and KG-1 cells. Shoji M, et al. **Cancer Res** 1988 Dec 1;48(23):6669-73

Differential effects of long-chain (sphingoid) bases on the monocytic differentiation of human leukemia (HL-60) cells induced by phorbol esters, 1 alpha, 25-dihydroxyvitamin D3, or ganglioside GM3. Stevens VL, et al. **Cancer Res** 1989 Jun 15;49(12):3229-34

Induction of tumorigenicity and lack of in vitro growth requirement for 12-O-tetradecanoylphorbol-13-acetate by transfection of murine melanocytes with v-Ha-ras. Wilson RE, et al. **Cancer Res** 1989 Feb 1;49(3):711-6

Effect of phorbol ester treatment on drug-induced, topoisomerase II-mediated DNA cleavage in human leukemia cells. Zwelling LA, et al. **Cancer Res** 1988 Dec 1;48(23):6625-33

Inhibition of the induction of ornithine decarboxylase activity by 12-O-tetradecanoylphorbol-13-acetate in mouse skin by sphingosine sulfate. Enkvetchakul B, et al. **Carcinogenesis** 1989 Feb;10(2):379-81

Regulation of ornithine decarboxylase gene expression in normal and transformed hamster embryo fibroblasts following stimulation by 12-O-tetradecanoylphorbol-13-acetate. Gilmour SK, et al. **Carcinogenesis** 1989 Jan;10(1):157-62

The tumor promoters 12-O-tetradecanoylphorbol-13-acetate and okadaic acid differ in toxicity, mitogenic activity and induction of gene expression. Herschman HR, et al. **Carcinogenesis** 1989 Aug; 10(8):1495-8

Chromosomal and c-K-ras oncogene alterations induced by a chemical carcinogen and phorbol ester in skin fibroblasts of individuals with familial polyposis coli. Marczynska B, et al. **Carcinogenesis** 1988 Oct;9(10):1897-900

Comparison of epidermal protein kinase C activity, ornithine decarboxylase induction and DNA synthesis stimulated by TPA or dioctanoylglycerol in mouse strains with differing susceptibility to TPA-induced tumor promotion. Mills KJ, et al. **Carcinogenesis** 1989 May;10(5):833-8

Suppression of keratinocyte differentiation in SSC-9 human squamous carcinoma cells by benzo[a]pyrene, 12-O-tetradecanoylphorbol-13-acetate and hydroxyurea. Rice RH, et al. **Carcinogenesis** 1988 Oct;9(10):1885-90

Tumor progression in vitro: tumor-promoter-induced reversible decrease in natural immune susceptibility. Sandstrom PA, et al. **Carcinogenesis** 1988 Nov; 9(11):1967-73

Induction of interleukin-1 and tumor necrosis factor by 12-O-tetradecanoylphorbol-13-acetate in phorbol ester-sensitive (SENCAR) and resistant (B6C3F1) mice. Updyke LW, et al. **Carcinogenesis** 1989 Jun;10(6):1107-11

Modulation of natural killer activity by 12-O-tetradecanoylphorbol-13-acetate and benzoyl peroxide in phorbol ester-sensitive (SENCAR) and resistant (B6C3F1) mice. Updyke LW, et al. **Carcinogenesis** 1988 Nov;9(11):1943-51

Differential effects of diacylglycerols and 12-O-tetradecanoylphorbol-13-acetate on protein phosphorylation and cell proliferation of tumor promoter-dependent leukemia cell line A65T. Yamamoto S, et al. **Carcinogenesis** 1988 Oct;9(10):1857-62

A quantitative analysis of alterations in the shape of cultured fibroblasts induced by tumour-promoting phorbol ester. Brown AF, et al. **Cell Biol Int Rep** 1989 Apr;13(4):357-66

Characteristics of intracellular calcium changes required for augmentation of phorbol ester-stimulated pancreatic enzyme secretion. Pandol SJ, et al. **Cell Calcium** 1989 May-Jun;10(4):255-62

Anti-CD4 monoclonal antibodies enhance phorbol 12-myristate, 13-acetate-induced activation of human T cells. Favero J, et al. **Cell Immunol** 1989 Sep;122(2):307-18

Stimulation of AIDS lymphocytes with calcium ionophore (A23187) and phorbol ester (PMA): studies of cytoplasmic free Ca, IL-2 receptor expression, IL-2 production, and proliferation. Hofmann B, et al. **Cell Immunol** 1989 Mar; 119(1):14-21

Dissociation of TPA-induced down-regulation of T cell antigens from protein kinase C activation. Jung LK, et al. **Cell Immunol** 1988 Dec;117(2):352-9

Constitutive and PMA-induced interleukin-1 production by the human astrocytoma cell line T24. Lee JC, et al. **Cell Immunol** 1989 Feb;118(2):298-311

The effect of phorbol esters on tumor cell sensitivity to macrophage-mediated cytostasis. Nycum LM, et al. **Cell Immunol** 1989 Jan;118(1):147–56

Interleukin-4 enhances peritoneal B cell stimulation induced by phorbol ester. Rothstein TL. **Cell Immunol** 1989 May; 120(2):450–9

L-fucose blocks MIF/MAF priming of rabbit alveolar macrophages for a PMA-induced oxidative response. Umehara K, et al. **Cell Immunol** 1989 Mar;119(1):67–72

Effect of chemical constituents from plants on 12-O-tetradecanoylphorbol-13-acetate-induced inflammation in mice. Yasukawa K, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):1071–3

Actions of a phorbol ester on factors regulating contraction in rabbit mesenteric artery. Fujiwara T, et al. **Circ Res** 1988 Nov;63(5):893–902

Phorbol-ester-induced activation of the NF-kappa B transcription factor involves dissociation of an apparently cytoplasmic NF-kappa B/inhibitor complex. Baeuerle PA, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:789–98

raf family serine/threonine protein kinases in mitogen signal transduction. Rapp UR, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:173–84

Changes in the migratory properties of neural crest and early crest-derived cells in vivo following treatment with a phorbol ester drug. Sears R, et al. **Dev Biol** 1988 Nov; 130(1):133–43

Increased beta-cell secretory responsiveness to ceruletide and TPA in streptozocin-induced mildly diabetic rats. Okabayashi Y, et al. **Diabetes** 1989 Aug;38(8):1042–7

The role of calcium in mediating phorbol ester- and insulin-stimulated adipocyte lipogenesis. Avasthy N, et al. **Diabetes Res** 1988 Oct;9(2):91–5

Mechanisms by which a phorbol ester and a diacylglycerol analog inhibit hen granulosa cell steroidogenesis. Tilly JL, et al. **Domest Anim Endocrinol** 1989 Apr;6(2):155–66

Rapid phosphorylation of the L-myc protein induced by phorbol ester tumor promoters and serum. Saksela K, et al. **EMBO J** 1989 Jan;8(1):149–57

Activators of protein kinase C depolarize insulin-secreting cells by closing K+ channels. Wollheim CB, et al. **EMBO J** 1988 Aug;7(8):2443–9

Characterization of 12-O-tetradecanoyl-phorbol-13 acetate mediated ACTH release. Sobel DO. **Endocr Res** 1988; 14(2-3):149–63

The insulin-like effects of phorbol myristate acetate (PMA) in the isolated fat cell. Solomon SS, et al. **Endocr Res** 1989; 15(3):375–91

Growth hormone-releasing factor secretion from fetal hypothalamic cell cultures is modulated by forskolin, phorbol esters, and muscimol. Baes M, et al. **Endocrinology** 1989 Jan;124(1):104–10

Gonadotropin-releasing hormone-stimulated luteinizing hormone (LH) release from ovine gonadotrophs in culture is separate from phorbol ester-stimulated LH release. Beggs MJ, et al. **Endocrinology** 1989 Feb;124(2):667–74

Synthesis of gonadotropin-releasing hormone receptors by gonadotrope cell cultures: both preexisting receptors and those unmasked by protein kinase-C activators show a similar synthetic rate. Braden TD, et al. **Endocrinology** 1989 Sep;125(3):1623–9

Induction of type II 5'-deiodinase activity in cultured rat astroglial cells by 12-O-tetradecanoylphorbol-13-acetate: dependence on glucocorticoids. Courtin F, et al. **Endocrinology** 1989 Sep;125(3):1277–81

Steroidogenesis of porcine granulosa cells from small and medium-sized follicles: effects of follicle-stimulating hormone, forskolin, and adenosine 3,5'-cyclic monophosphate versus phorbol ester. Hylka VW, et al. **Endocrinology** 1989 Mar;124(3):1204–9

Evidence that phorbol diester-sensitive protein kinase-C(s) may not be directly involved in secretagogue-stimulated prolactin release and arachidonate liberation. Judd AM, et al. **Endocrinology** 1989 Sep;125(3):1134–41

The effects of protein kinase-C agonists on parathyroid hormone release and intracellular free Ca2+ in bovine parathyroid cells. Membreño L, et al. **Endocrinology** 1989 Feb;124(2):789–97

Regulation of androstenedione production by adenosine 3',5'-monophosphate and phorbol myristate acetate in ovarian thecal cells of the domestic hen. Tilly JL, et al. **Endocrinology** 1989 Sep;125(3):1691–9

Intracellular Ca2+ potentiates Na+/H+ exchange and cell differentiation induced by phorbol ester in U937 cells. Alvarez J, et al. **Eur J Biochem** 1989 Aug 15;183(3):709–14

Inhibition of NADPH oxidase by aminoacyl chloromethane protease inhibitors in phorbol-ester-stimulated human neutrophils: a reinvestigation. Are proteases really involved in the activation process? Conseiller EC, et al. **Eur J Biochem** 1989 Jul 15;183(1):107–14

Neomycin inhibits platelet functions and inositol phospholipid metabolism upon stimulation with thrombin, but not with ionomycin or 12-O-tetradecanoyl-phorbol 13-acetate. Tysnes OB, et al. **Eur J Biochem** 1988 Oct 15; 177(1):219–23

Induction of vimentin synthesis in a murine myeloma cell line by TPA is strongly dependent on the composition of the cell culture medium. Giese G, et al. **Eur J Cell Biol** 1988 Dec;47(2):291–9

TPA-induced differentiation and adhesion of U937 cells: changes in ultrastructure, cytoskeletal organization and expression of cell surface antigens. Hass R, et al. **Eur J Cell Biol** 1989 Apr;48(2):282–93

Leukotriene B4 metabolism in neutrophils of patients with chronic granulomatous disease: phorbol myristate acetate decreases endogenous leukotriene B4 via NADPH oxidase-dependent mechanism. Hamasaki T, et al. **Eur J Clin Invest** 1989 Aug;19(4):404–11

Comparison of interleukin 2 and 12-O-tetradecanoylphorbol 13-acetate as signals for protein kinase C activation in purified human T lymphocytes. Mahé Y, et al. **Eur J Immunol** 1988 Dec;18(12):2029–36

Phorbol ester regulates stimulatory and inhibitory pathways of the hormone-sensitive adenylate cyclase system in rat reticulocytes. Yamashita A, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):167–75

Long-term culturing of TPA-induced differentiated HL-60 cells results in increased levels of lytic enzymes. Ackerman JJ, et al. **Exp Cell Res** 1989 Aug;183(2):353–60

Mitogenic activity of phorbol esters and insulin-like growth factor 1 in chemically transformed mouse fibroblasts BP-A31: independent effects and differential sensitivity to inhibition by 3-isobutyl-1-methyl xanthine. Buchou T, et al. **Exp Cell Res** 1989 May;182(1):129–43

Phorbol ester-induced activation of protein kinase C leads to increased formation of diacylglycerol in human neutrophils. Fällman M, et al. **Exp Cell Res** 1989 Mar; 181(1):217–25

Laminin synthesis by NK cells and modulation of its expression by TPA (12-O-tetradecanoylphorbol-13-acetate). Morrone S, et al. **Exp Cell Res** 1989 Jun;182(2):543–9

Growth cone advance mediated by fibronectin-associated filopodia is inhibited by a phorbol ester tumor promoter. Muir D, et al. **Exp Cell Res** 1989 Jan;180(1):134–49

Phorbol 12-myristate 13-acetate prevents isoproterenol-induced morphological change in cultured vascular smooth muscle cells. Nabika T, et al. **Exp Cell Res** 1988 Oct;178(2):358–68

Increased endocytosis and formation of multivesicular bodies in phorbol ester-stimulated human monoblastic U-937 cells. Nilsson M, et al. **Exp Cell Res** 1989 Apr;181(2):551–65

Actin stress fiber disruption and tropomyosin isoform switching in normal thyroid epithelial cells stimulated by thyrotropin and phorbol esters. Roger PP, et al. **Exp Cell Res** 1989 May;182(1):1–13

12-O-tetradecanoylphorbol-13-acetate disrupts actin filaments and focal contacts and enhances binding of fibronectin-coated latex beads to 3T3-L1 cells. Shiba Y, et al. **Exp Cell Res** 1988 Oct;178(2):233–41

Induction of macrophage-like differentiation of HL60 human myeloid leukemia cells by phorbol myristate acetate triggers an early decline in inositol lipid breakdown. Porfiri E, et al. **Exp Hematol** 1989 May;17(4):344–50

Two isozymes of PKC found in HL-60 cells show a difference in activation by the phorbol ester TPA. Beh I, et al. **FEBS Lett** 1989 Jun 5;249(2):264–6

The phorbol ester-induced extracellular Ca2+-independent release of LH is dependent on estradiol and de novo protein synthesis. Bourne GA, et al. **FEBS Lett** 1989 Apr 10; 247(1):159–62

Effects of pretreatment with tetradecanoyl phorbol acetate on regulation of growth hormone and prolactin secretion from ovine anterior pituitary cells. Boyd RS, et al. **FEBS Lett** 1989 Jul 17;251(1-2):99–103

Control of fructose 2,6-bisphosphate levels in rat macrophages by glucose and phorbol ester. Bustos R, et al. **FEBS Lett** 1989 Jul 17;251(1-2):143–6

12-O-tetradecanoyl phorbol-13-acetate interferes with germination of Phycomyces blakesleeanus sporangiospores. Carrillo-Rayas T, et al. **FEBS Lett** 1988 Oct 10; 238(2):441–4

Interleukin 3 and phorbol ester stimulate tyrosine phosphorylation of overlapping substrate proteins. Ferris DK, et al. **FEBS Lett** 1989 Mar 27;246(1-2):153–8

Differential activation by fMet-Leu-Phe and phorbol ester of a plasma membrane phosphatidylcholine-specific phospholipase D in human neutrophil. Gelas P, et al. **FEBS Lett** 1989 Jul 17;251(1-2):213–8

Adenosine 3',5'-cyclic monophosphate (cAMP) inhibits phorbol ester-induced growth of an IL-2-dependent T cell line. Goto Y, et al. **FEBS Lett** 1988 Nov 7;239(2):165–8

Protein kinase C activators inhibit the antigen receptor-coupled polyphosphoinositide phosphodiesterase in murine B lymphocytes. Harnett MM, et al. **FEBS Lett** 1988 Nov 7;239(2):281–4

Direct evidence that the kinase activity of protein kinase C is involved in transcriptional activation through a TPA-responsive element. Hata A, et al. **FEBS Lett** 1989 Jul 31;252(1-2):144–6

Tumor promoter 12-O-tetradecanoylphorbol 13-acetate inhibits mas/angiotensin receptor-stimulated inositol phosphate production and intracellular Ca2+ elevation in the 401L-C3 neuronal cell line. Jackson TR, et al. **FEBS Lett** 1989 Jul 17;251(1-2):27–30

Defect in phorbol acetate-induced translocation of diacylglycerol kinase in erbB-transformed fibroblast cells. Kato M, et al. **FEBS Lett** 1989 Apr 24;247(2):247–50

Phorbol ester stimulates the synthesis of sphingomyelin in NIH 3T3 cells. A diminished response in cells transformed with human A-raf carrying retrovirus. Kiss Z, et al. **FEBS Lett** 1988 Nov 21;240(1-2):221–6

Direct activation of a protein kinase activity from rat lacrimal gland by PMA in a phospholipid-free system. Mauduit P, et al. **FEBS Lett** 1989 Jul 31;252(1-2):5–11

Translocation of protein kinase C in rat islets of Langerhans. Effects of a phorbol ester, carbachol and glucose. Persaud SJ, et al. **FEBS Lett** 1989 Mar 13;245(1-2):80–4

Treatment of intact hepatocytes with either the phorbol ester TPA or glucagon elicits the phosphorylation and functional inactivation of the inhibitory guanine nucleotide regulatory protein Gi. Pyne NJ, et al. **FEBS Lett** 1989 Jan 16; 243(1):77–82

A phorbol ester and a daphnane ester stimulate a calcium-independent kinase activity from human mononuclear cells. Ryves WJ, et al. **FEBS Lett** 1989 Mar 13;245(1-2):159–63

Phorbol ester-responsive H-ras1 gene promoter contains multiple TPA-inducible/AP-1-binding consensus sequence elements. Spandidos DA, et al. **FEBS Lett** 1988 Nov 21;240(1-2):191–5

Phosphorylation of NADPH-cytochrome c reductase in guinea pig peritoneal macrophages stimulated with phorbol myristate acetate. Tamoto K, et al. **FEBS Lett** 1989 Feb 13;244(1):159–62

Phorbol 12-myristate 13-acetate modulates the cAMP-induced light-scattering response of a Dictyostelium discoideum cell population. Thiery R, et al. **FEBS Lett** 1988 Dec 5;241(1-2):149–53

Co-localization of elements required for phorbol ester stimulation and glucocorticoid repression of proliferin gene expression. Mordacq JC, et al. **Genes Dev** 1989 Jun; 3(6):760–9

Induction of plasmacytoid and hairy cell features by phorbol esters (TPA) in B-lymphoma cells: attempted correlation with disease activity. Gazitt Y, et al. **Hematol Oncol** 1988 Oct-Dec;6(4):307–18

A monoclonal antibody to CD11c antigen inhibits the production of superoxide anion induced by concanavalin A in PMA-differentiated U-937 cells. Cabañas C, et al. **Immunol Lett** 1989 Feb;20(3):193–7

Inhibition of the CD3-mediated calcium signal by protein kinase C activators in human T (Jurkat) lymphoblastoid cells. Tordai A, et al. **Immunol Lett** 1989 Jan 15;20(1):47–52

Induction of EL4 cell resistance to syngeneic macrophage-mediated lysis by protein kinase C ligands; effects of cultured TPA-treated target cell and protein phosphorylation. Essani N, et al. **Immunology** 1988 Oct; 65(2):165–70

Phorbol ester and calcium ionophore are sufficient to promote cell replication in cultures of quiescent human B lymphocytes. Flores-Romo L, et al. **Immunology** 1989 Feb;66(2):228–32

Effects of 12-O-tetradecanoylphorbol-13-acetate on macromolecular synthesis in epidermis, dermis and subcutis from mouse skin initiated with 7,12-dimethylbenz(a) anthracene. Jeyapaul J, et al. **Indian J Exp Biol** 1988 Sep; 26(9):671–8

Phorbol myristate acetate modulates calcium ion-dependent superoxide anion generation induced by a monoclonal antibody raised against polymorphonuclear leukocytes. Ichinose Y, et al. **Infect Immun** 1989 Aug;57(8):2529–33

Ontogeny of inflammatory cell responsiveness: superoxide anion generation by phorbol ester-stimulated fetal, neonatal, and adult bovine neutrophils. Clifford CB, et al. **Inflammation** 1989 Apr;13(2):221–31

Stimulation of release of prostaglandins and thromboxanes from isolated guinea pig lung cells by bradykinin, f-Met-Leu-Phe, phorbol myristate, ionophore A23187, and leukotrienes. Robidoux C, et al. **Inflammation** 1988 Aug; 12(4):285–95

Function and stimulus-specific effects of phorbol 12-myristate 13-acetate on human polymorphonuclear neutrophils: autoregulatory role for protein kinase C in signal transduction. Smith RJ, et al. **Inflammation** 1988 Dec; 12(6):597–611

Effects of calcium ionophore and phorbol ester on class-II-restricted virus-specific human cytotoxic T cell clones. Richert JR, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):178–83

Epstein-Barr virus and a tumour-promoting phorbol ester use similar mechanisms in the stimulation of human B-cell proliferation. Guy GR, et al. **Int J Cancer** 1989 Apr 15; 43(4):703–8

Biochemical events associated with inhibition of B-cell proliferation by phorbol diesters. Germolec DR, et al. **Int J Immunopharmacol** 1988;10(8):953–65

Pulmonary effects of zymosan activated plasma and phorbol myristate acetate in anaesthetized and awake rabbits. Opdahl H, et al. **Int J Microcirc Clin Exp** 1988 Aug; 7(3):237–51

Effect of neutrophil activating substances on intracellular generation of phagocyte chemiluminescence by means of luminol-bound microspheres. Takeuchi A, et al. **Int J Tissue React** 1988;10(3):169–75

Induction of polyomavirus DNA replication by cyclic AMP and a tumor promoter. Baru M, et al. **Intervirology** 1988; 29(6):328–33

Effects of retinoic acid and phorbol ester on lymphocytes and monocytes in B-lymphocytic leukemia. Polliack A, et al. **Isr J Med Sci** 1988 Sep-Oct;24(9-10):522–32

Tumor-promoting phorbol esters inhibit monocyte adherence to endothelial cells. Kamp DW, et al. **J Appl Physiol** 1989 Jan;66(1):437–42

Role of interleukin-4 in T-cell ontogeny: changes in cell

surface phenotype and lymphokine production of immature thymocytes after culture with interleukin-4 and phorbol ester. Guidos C, et al. J Autoimmun 1989 Jun;2 Suppl:141-53

12-O-tetradecanoylphorbol 13-acetate induces DNA cleavage at linker regions in mouse thymocytes. Kizaki H, et al. J Biochem (Tokyo) 1989 May;105(5):673-5

Appearance of a proliferation-associated antigen, gp125, on rat and human lymphocytes by co-stimulation with phorbol ester and calcium ionophore. Tanaka T, et al. J Biochem (Tokyo) 1988 Apr;103(4):644-9

Phorbol ester-mediated down-regulation of an interferon-inducible gene. Akai H, et al. J Biol Chem 1989 Feb 25;264(6):3252-5

Phorbol ester modulates interleukin 6- and interleukin 1-regulated expression of acute phase plasma proteins in hepatoma cells. Baumann H, et al. J Biol Chem 1988 Nov 25;263(33):17390-6

Regulation of phospholipase D in HL-60 granulocytes. Activation by phorbol esters, diglyceride, and calcium ionophore via protein kinase- independent mechanisms. Billah MM, et al. J Biol Chem 1989 May 25;264(15):9069-76

Phorbol ester or epidermal growth factor (EGF) stimulates the concurrent accumulation of mRNA for the EGF receptor and its ligand transforming growth factor-alpha in a breast cancer cell line. Bjorge JD, et al. J Biol Chem 1989 Mar 5;264(7):4021-7

Insulin receptor recycling in vascular endothelial cells. Regulation by insulin and phorbol ester. Bottaro DP, et al. J Biol Chem 1989 Apr 5;264(10):5916-23

Thrombin and phorbol esters cause the selective phosphorylation of a G protein other than Gi in human platelets. Carlson KE, et al. J Biol Chem 1989 Aug 5; 264(22):13298-305

Activators of protein kinase C up-regulate the cell surface expression of CD2 and CD5 T cell glycoproteins. Carrera AC, et al. J Biol Chem 1989 Sep 15;264(26):15650-5

Alterations of phospholipid metabolism by phorbol esters and fatty acids occur by different intracellular mechanisms in cultured glioma, neuroblastoma, and hybrid cells. Cook HW, et al. J Biol Chem 1989 Feb 15;264(5):2746-52

Osteopontin, a transformation-associated cell adhesion phosphoprotein, is induced by 12-O-tetradecanoylphorbol 13-acetate in mouse epidermis. Craig AM, et al. J Biol Chem 1989 Jun 5;264(16):9682-9

The structure and function of mouse thrombomodulin. Phorbol myristate acetate stimulates degradation and synthesis of thrombomodulin without affecting mRNA levels in hemangioma cells. Dittman WA, et al. J Biol Chem 1988 Oct 25;263(30):15815-22

Phorbol ester, 1,2-diacylglycerol, and collagen induce inhibition of arachidonic acid incorporation into phospholipids in human platelets. Fuse I, et al. J Biol Chem 1989 Mar 5;264(7):3890-5

Phorbol ester transiently increases topoisomerase I mRNA levels in human skin fibroblasts. Hwong CL, et al. J Biol Chem 1989 Sep 5;264(25):14923-6

Phorbol ester and interferon-gamma modulation of epidermal growth factor receptors on human amniotic (WISH) cells. Karasaki Y, et al. J Biol Chem 1989 Apr 15;264(11):6158-63

Inhibition of DNA fragmentation in thymocytes and isolated thymocyte nuclei by agents that stimulate protein kinase C. McConkey DJ, et al. J Biol Chem 1989 Aug 15; 264(23):13399-402

Identification of an adipocyte protein that binds to calmodulin in the absence of Ca2+ and is phosphorylated in response to insulin and tumor-promoting phorbol esters. McDonald JR, et al. J Biol Chem 1989 Jun 5;264(16):9611-8

Phorbol ester-induced translocation of diacylglycerol kinase from the cytosol to the membrane in Swiss 3T3 fibroblasts. Maroney AC, et al. J Biol Chem 1989 Feb 15; 264(5):2537-44

Phorbol esters stimulate phosphorylation of eukaryotic initiation factors 3, 4B, and 4F. Morley SJ, et al. J Biol Chem 1989 Feb 15;264(5):2401-4

Enhancement of adenosine A2 and prostaglandin E1 receptor-mediated cAMP generation by prior exposure of Swiss 3T3 fibroblasts to Ca2+-mobilizing receptor agonists or phorbol ester. Activation of protein kinase C triggers increases in the receptor density in cell membranes. Murayama T, et al. J Biol Chem 1989 Sep 15; 264(26):15186-91

Studies of signal transduction in the respiratory burst-associated stimulation of fMet-Leu-Phe-induced tubulin tyrosinolation and phorbol 12-myristate 13-acetate-induced posttranslational incorporation of tyrosine into multiple proteins in activated neutrophils and HL-60 cells. Nath J, et al. J Biol Chem 1989 Jan 15; 264(2):848-55

Structural and functional analysis of an enhancer GPEI having a phorbol 12-O-tetradecanoate 13-acetate responsive element-like sequence found in the rat glutathione transferase P genc. Okuda A, et al. J Biol Chem 1989 Oct 5;264(28):16919-26

Phorbol ester and neomycin dissociate bradykinin receptor-mediated arachidonic acid release and polyphosphoinositide hydrolysis in Madin-Darby canine kidney cells. Evidence that bradykinin mediates noninterdependent activation of phospholipases A2 and C. Slivka SR, et al. J Biol Chem 1988 Oct 15;263(29):14640-7

Differences in transferrin receptor function between normal developing and transformed myogenic cells as revealed by differential effects of phorbol ester on receptor distribution and rates of iron uptake. Sorokin LM, et al. J Biol Chem 1988 Oct 5;263(28):14128-33

Evidence for a role of protein kinase C in luteinizing hormone synthesis and secretion. Impaired responses to gonadotropin-releasing hormone in protein kinase C-depleted pituitary cells. Stojilković SS, et al. J Biol Chem 1988 Nov 25;263(33):17307-11

Phorbol ester induces increased expression, altered glycosylation, and reduced adhesion of K562 erythroleukemia cell fibronectin receptors. Symington BE, et al. J Biol Chem 1989 Aug 5;264(22):13258-66

Regulation of the product of a possible human cell cycle control gene CDC2Hs in B-cells by alpha-interferon and phorbol ester. Thomas NS. J Biol Chem 1989 Aug 15; 264(23):13697-700

Phorbol diesters regulate expression of the membrane neutral metalloendopeptidase (EC 3.4.24.11) in rabbit synovial fibroblasts and mammary epithelial cells. Werb Z, et al. J Biol Chem 1989 Jun 5;264(16):9111-3

Inhibition of inositol 1,4,5-trisphosphate-induced Ca2+ release in permeabilized pancreatic acinar cells by hormonal and phorbol ester pretreatment. Willems PH, et al. J Biol Chem 1989 Jun 15;264(17):9762-7

Stimulation of de novo synthesis of prostaglandin G/H synthase in human endothelial cells by phorbol ester. Wu KK, et al. J Biol Chem 1988 Dec 15;263(35):19043-7

Regulation of apolipoprotein E biosynthesis by cAMP and phorbol ester in rat ovarian granulosa cells. Wyne KL, et al. J Biol Chem 1989 Jan 15;264(2):981-9

Phorbol ester-stimulated insulin secretion by RINm5F insulinoma cells is linked with membrane depolarization and an increase in cytosolic free Ca2+ concentration. Yada T, et al. J Biol Chem 1989 Feb 15;264(5):2455-62

Regulation of osteosarcoma EGF receptor affinity by phorbol ester and cyclic AMP. Borst SE, et al. J Bone Miner Res 1989 Apr;4(2):185-91

Inhibition of bone collagen synthesis by the tumor promoter phorbol 12-myristate 13-acetate. Feyen JH, et al. J Bone Miner Res 1988 Apr;3(2):173-9

Phorbol esters stimulate bone resorption in fetal rat long-bone cultures by mechanisms independent of prostaglandin synthesis. Lorenzo JA, et al. J Bone Miner Res 1988 Feb;3(1):63-7

Relationship of cellular oncogene expression to inhibition of growth and induction of differentiation of Daudi cells by interferons or TPA. Clemens MJ, et al. J Cell Biochem 1988 Dec;38(4):251-9

Phorbol diester enhances calcium ionophore A23187-induced [3H]acetate incorporation into platelet-activating factor in murine macrophages: predominant incorporation into 1-O-acyl-2-acetyl-sn-glycero-3-phosphocholine. Wey HE. J Cell Biochem 1989 Mar;39(3):305-13

Endocytosis of the class I major histocompatibility antigen via a phorbol myristate acetate-inducible pathway is a cell-specific phenomenon and requires the cytoplasmic domain [published erratum appears in J Cell Biol 1989 Sep;109(3):1381] Capps GG, et al. J Cell Biol 1989 Apr; 108(4):1317-29

Phorbol ester modulation of integrin-mediated cell adhesion: a postreceptor event. Danilov YN, et al. J Cell Biol 1989 May;108(5):1925-33

Differential response of myofibrillar and cytoskeletal proteins in cells treated with phorbol myristate acetate. Lin ZX, et al. J Cell Biol 1989 Mar;108(3):1079-91

Macrophage interactions with laminin: PMA selectively induces the adherence and spreading of mouse macrophages on a laminin substratum. Mercurio AM, et al. J Cell Biol 1988 Nov;107(5):1873-80

Regulation of urokinase receptors in monocytelike U937 cells by phorbol ester phorbol myristate acetate. Picone R, et al. J Cell Biol 1989 Feb;108(2):693-702

Effects of 5-azacytidine, sodium butyrate, and phorbol esters on amino acid transport system A in a kidney epithelial cell line, MDCK: evidence for multiple mechanisms of regulation. Boerner P, et al. J Cell Physiol 1988 Oct; 137(1):117-24

Tumor promoter 12-0-tetradecanoyl-phorbol-13-acetate (TPA) can reduce the Ca-transporting ability of Ca-ionophores in T lymphocytes: the involvement of intracellular heavy metal ions. Csermely P, et al. J Cell Physiol 1989 Mar;138(3):593-602

Enhancement of phorbol ester-induced protein kinase activity in human neutrophils by platelet-activating factor. Gay JC, et al. J Cell Physiol 1988 Dec;137(3):439-47

Sphingosine inhibits phorbol 12-myristate 13-acetate-, but not serum-induced, activation of Na+/H+ exchange in mammalian cells. Gillies RJ, et al. J Cell Physiol 1989 Apr; 139(1):125-30

Protein kinase C activation and down-regulation in relation to phorbol ester-induced differentiation of SH-SY5Y human neuroblastoma cells. Heikkilä JE, et al. J Cell Physiol 1989 Sep;140(3):593-600

Dimethylsulfoxide modifies the sensitivity of BALB/c-3T3 cells to the activation of Na+/H+ exchange by phorbol esters. Martinez R, et al. J Cell Physiol 1989 Apr; 139(1):131-5

Protein kinase C modulates effects of prostanoids on cyclic adenosine monophosphate in guinea pig chief cells. Raufman JP, et al. J Cell Physiol 1989 Jul;140(1):91-7

Comparison of phorbol-12-myristate-13-acetate and dioctanoyl-sn-glycerol in the activation of EL4/6.1 thymoma cells. Stoeck M, et al. J Cell Physiol 1989 Mar; 138(3):541-7

Natural, lectin- and phorbol ester-induced cellular cytotoxicity in Crohn's disease and ulcerative colitis. Aparicio-Pagés MN, et al. J Clin Lab Immunol 1988 Nov; 27(3):109-13

Effects of epidermal growth factor and phorbol 12-myristate 13-acetate on protein phosphorylation in mouse embryo palate mesenchyme cells in vitro. Chepenik KP, et al. J Craniofac Genet Dev Biol 1988;8(2):147-53

Phorbol ester pretreatment attenuates the growth hormone (GH) response to GH-releasing factor in cultured rat pituitary cells. Ohmura E, et al. J Endocrinol 1988 Sep; 118(3):423-8

Production of parathyroid hormone-like peptide in a human osteosarcoma cell line: stimulation by phorbol esters and epidermal growth factor. Rodan SB, et al. J Endocrinol 1989 Jul;122(1):219-27

The effects of 5-azacytidine, 12-O-tetradecanoylphorbol 13-acetate and sodium n-butyrate on reactivation of alphaherpesvirus saimiri from explant cultures of latently infected rabbit dorsal root ganglia. Mossman SP, et al. J Gen Virol 1989 Sep;70 (Pt 9):2507-12

Transcriptional regulation of transferrin receptor expression by cultured lymphoblastoid T cells treated with phorbol diesters. Alcantara O, et al. J Immunol 1989 Mar 1; 142(5):1719-26

The effect of anti-intercellular adhesion molecule-1 on phorbol-ester-induced rabbit lung inflammation. Barton RW, et al. J Immunol 1989 Aug 15;143(4):1278-82

Human T cell activation by phorbol esters and diacylglycerol analogues. Berry N, et al. J Immunol 1989 Sep 1; 143(5):1407-13

Human peripheral lymphocyte growth regulation and response to phorbol esters is linked to synthesis and phosphorylation of the cytosolic protein, prosolin. Cooper HL, et al. J Immunol 1989 Aug 1;143(3):956-63

Modulation of urokinase-type plasminogen activator and plasminogen activator inhibitor-2 expression by U-937 mononuclear phagocytes. Effects of 1 alpha, 25-dihydroxyvitamin D3 and phorbol ester. Gyetko MR, et al. J Immunol 1988 Oct 15;141(8):2693-8

Induction of multinucleated giant cell formation from human blood-derived monocytes by phorbol myristate acetate in in vitro culture. Hassan NF, et al. J Immunol 1989 Oct 1;143(7):2179-84

Activation of a suicide process of thymocytes through DNA fragmentation by calcium ionophores and phorbol esters. Kizaki H, et al. J Immunol 1989 Sep 15;143(6):1790-4

Biosynthesis of paf-acether. X. Phorbol myristate acetate-induced paf-acether biosynthesis and acetyltransferase activation in human neutrophils. Leyravaud S, et al. J Immunol 1989 Jul 1;143(1):245-9

Pretreatment with phorbol esters abrogates mast cell adenosine responsiveness. Marquardt DL, et al. J Immunol 1989 Feb 15;142(4):1268-73

Thymic stroma-derived T cell growth factor (TSTGF). IV. Capacity of TSTGF to promote the growth of L3T4-Lyt-2- thymocytes by synergy with phorbol myristate acetate or various IL. Mizushima Y, et al. J Immunol 1989 Feb 15;142(4):1195-202

Agents that mimic antigen receptor signaling inhibit proliferation of cloned murine T lymphocytes induced by IL-2. Nau GJ, et al. J Immunol 1988 Nov 15; 141(10):3557-63

Inhibition of lymphokine-activated killer cell-mediated cytotoxicity by phorbol ester. Nishimura T, et al. J Immunol 1989 Mar 15;142(6):2155-61

IL-4 induces LFA-1 and LFA-3 expression on Burkitt's lymphoma cell lines. Requirement of additional activation by phorbol myristate acetate for induction of homotypic cell adhesions. Rousset F, et al. J Immunol 1989 Sep 1; 143(5):1490-8

Requirements for modulation of the CD4 molecule in response to phorbol myristate acetate. Role of the cytoplasmic domain. Sleckman BP, et al. J Immunol 1989 Mar 1;142(5):1457-62

Characterization of interleukin 2 and phorbol myristate acetate augmentation of expression of transfected human interferon-gamma genomic DNA. Young HA, et al. J Interferon Res 1988 Aug;8(4):527-38

Effects of retinoids on phorbol ester-stimulated epidermal DNA synthesis and hyperplasia in hairless mice. Gendimenico GJ, et al. J Invest Dermatol 1989 Sep; 93(3):363-7

Topical cyclosporine A inhibits the phorbol ester induced hyperplastic inflammatory response but not protein kinase C activation in mouse epidermis. Gupta AK, et al. J Invest Dermatol 1989 Sep;93(3):379-86

Effects of the tumor promoter, phorbol 12-myristate, 13-acetate, on the epidermal adenylate cyclase system: evidence for adenylate cyclase-regulation by protein kinase C. Iizuka H, et al. J Invest Dermatol 1989 Sep;93(3):387-91

Action of phorbol esters, bryostatins, and retinoic acid on cholesterol sulfate synthesis: relation to the multistep process of differentiation in human epidermal keratinocytes. Jetten AM, et al. J Invest Dermatol 1989 Jul;93(1):108-15

Conversion of xanthine dehydrogenase to xanthine oxidase occurs during keratinocyte differentiation: modulation by 12-O-tetradecanoylphorbol-13-acetate. Reiners JJ Jr, et al. J Invest Dermatol 1989 Jul;93(1):132-5

Phorbol myristate acetate-treated endothelium stimulates

polymorphonuclear leukocyte adhesion and superoxide secretion. Gudewicz PW, et al. **J Lab Clin Med** 1989 Jun; 113(6):708–16

Two distinct cytolytic mechanisms of macrophages and monocytes activated by phorbol myristate acetate. Chung T, et al. **J Leukoc Biol** 1988 Nov;44(5):329–36

Phorbol ester–induced loss of membrane sialic acid: implications for tumor cytolysis by natural killer cells. Nabi ZF, et al. **J Leukoc Biol** 1989 Mar;45(3):183–8

Membrane oxidative metabolism of human eosinophilic cell line EoL–1 in response to phorbol diester and formyl peptide: synergistic augmentation by interferon–gamma and tumor necrosis factor. Yoshie O, et al. **J Leukoc Biol** 1989 Jan;45(1):10–20

Effects of inducers of differentiation on protein kinase C and CMP–N–acetylneuraminic acid:lactosylceramide sialyltransferase activities of HL–60 leukemia cells [published erratum appears in J Lipid Res 1989 Apr;30(4):631] Xia XJ, et al. **J Lipid Res** 1989 Feb; 30(2):181–8

Differential acute and chronic response of protein kinase C in cultured neonatal rat heart myocytes to alpha 1–adrenergic and phorbol ester stimulation. Henrich CJ, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1081–5

Effects of forskolin and phorbol–myristate–acetate on cytoskeleton, extracellular matrix and protein phosphorylation in human endothelial cells. Smirnov VN, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:3–11

Neurofilament phosphorylation in cultured bovine adrenal chromaffin cells is stimulated by phorbol ester. Georges E, et al. **J Neurochem** 1989 Apr;52(4):1156–61

Protein phosphorylation in astrocytes mediated by protein kinase C: comparison with phosphorylation by cyclic AMP–dependent protein kinase. Harrison BC, et al. **J Neurochem** 1989 Oct;53(4):1245–51

Protein phosphorylation induced by phorbol esters and cyclic AMP in anterior pituitary cells: possible role in adrenocorticotropin release and synthesis. Rougon G, et al. **J Neurochem** 1989 Apr;52(4):1270–8

Inhibition by cyclic AMP of phorbol ester–potentiated norepinephrine release from guinea pig brain cortical synaptosomes. Shuntoh H, et al. **J Neurochem** 1988 Nov; 51(5):1565–72

Properties of the 12–O–tetradecanoylphorbol–13–acetate–stimulated S6 kinase from rat astroglial cells. Toru–Delbauffe D, et al. **J Neurochem** 1988 Nov;51(5):1448–54

Effects of phorbol esters and forskolin on basal and histamine–induced accumulation of inositol phosphates in cultured bovine adrenal chromaffin cells. Wan DC, et al. **J Neurochem** 1989 Oct;53(4):1219–27

Induction of protooncogene fos by extracellular signals in primary glial cell cultures. Condorelli DF, et al. **J Neurosci Res** 1989 Jun;23(2):234–9

Changes in protein kinase C activities are correlated with the metaplastic transformation of Schwann cell precursors of avian embryos into melanocytes. Hess L, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):101–6

Induction of morphological differentiation of human neuroblastoma cells is accompanied by induction of tissue–type plasminogen activator. Neuman T, et al. **J Neurosci Res** 1989 Jul;23(3):274–81

Activators of protein kinase C enhance cyclic AMP accumulation in cerebral cortical and diencephalic neurons in primary culture. Tapia–Arancibia L, et al. **J Neurosci Res** 1988;20(2):195–201

In vivo effects of Sn–1,2–dioctanoylglycerol, TPA and A23187 on hamster cheek pouch epithelium. Singh BB, et al. **J Oral Pathol** 1988 Nov;17(9–10):517–21

Antagonism of acetylcholine–mediated relaxation of rabbit pulmonary arteries by phorbol myristate acetate. Cherry PD, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):542–6

Phorbol esters and corticotropin releasing factor stimulate calcium influx in the anterior pituitary tumor cell line, AtT–20, through different intracellular sites of action. Reisine T. **J Pharmacol Exp Ther** 1989 Mar;248(3):984–90

Effect of metal containing compounds on superoxide release from phorbol myristate acetate stimulated murine peritoneal macrophages: inhibition by auranofin and spirogermanium. Mirabelli CK, et al. **J Rheumatol** 1988 Jul;15(7):1064–9

A unique enhancer element for the trans activator (p40tax) of human T–cell leukemia virus type I that is distinct from cyclic AMP– and 12–O–tetradecanoylphorbol–13–acetate–responsive elements. Fujisawa J, et al. **J Virol** 1989 Aug;63(8):3234–9

Activation of the human T–cell leukemia virus type I long terminal repeat by 12–O–tetradecanoylphorbol–13–acetate and by tax (p40x) occurs through similar but functionally distinct target sequences. Radonovich M, et al. **J Virol** 1989 Jul;63(7):2987–94

Loss of responsiveness of an AP1–related factor, PEBP1, to 12–O–tetradecanoylphorbol–13–acetate after transformation of NIH 3T3 cells by the Ha–ras oncogene. Satake M, et al. **J Virol** 1989 Sep;63(9):3669–77

Phorbol ester–inducible T–cell–specific expression of variant mouse mammary tumor virus long terminal repeats. Theunissen HJ, et al. **J Virol** 1989 Aug;63(8):3466–71

Induction of anti–EBNA–1 protein by 12–O–tetradecanoylphorbol–13–acetate treatment of human lymphoblastoid cells. Wen LT, et al. **J Virol** 1989 Aug;63(8):3315–22

Two overlapping sequence motifs within the polyomavirus enhancer are independently the targets of stimulation by both the tumor promoter 12–O–tetradecanoylphorbol–13–acetate and the Ha–ras oncogene. Yamaguchi Y, et al. **J Virol** 1989 Mar; 63(3):1040–8

Toxicity of phorbol myristate acetate–stimulated polymorphonuclear neutrophils against rat hepatocytes. Demonstration and mechanism. Guigui B, et al. **Lab Invest** 1988 Dec;59(6):831–7

Alteration of intracellular actin levels induced by phorboldiester in human HL–60 leukemia cells susceptible or resistant to differentiation, and the effects of protein kinase inhibitors. Uemura Y, et al. **Leuk Res** 1989; 13(7):545–52

Effects of simultaneous and sequential exposure to granulocytic and monocytic inducers on the choice of differentiation pathway in HL–60 promyelocytic leukemia cells. Zinzar S, et al. **Leuk Res** 1989;13(1):23–30

Phorbol ester and B cell–stimulatory factor synergize to induce B–chronic lymphocytic leukemia cells to simultaneous immunoglobulin secretion and DNA synthesis. Carlsson M, et al. **Leukemia** 1988 Nov; 2(11):734–44

The effect of 12–O–tetradecanoylphorbol–13–acetate (TPA) on leukemic cells from chronic B cell leukemia. Tokumine Y, et al. **Leukemia** 1989 Jul;3(7):516–21

Beta 1–adrenoceptors in rat hepatoma. Desensitization by isoproterenol and phorbol–myristate–acetate. García–Sáinz JA, et al. **Life Sci** 1989;44(23):1767–75

Reactive oxygen in the tumor promotion stage of skin carcinogenesis. Fischer SM, et al. **Lipids** 1988 Jun; 23(6):592–7

PMA–responsive 5' flanking sequences of the human TNF gene. Hensel G, et al. **Lymphokine Res** 1989 Fall; 8(3):347–51

Effects of low–concentration polymyxin B on insulin secretion induced by 12–O–tetradecanoyl–phorbol–13–acetate (TPA), glucose, or tolbutamide from the isolated perfused rat pancreas. Maki Y, et al. **Metabolism** 1989 Apr;38(4):334–7

Use of protein kinase C–depleted cells for investigation of the role of protein kinase C in stimulus–response coupling in the pituitary. McArdle CA, et al. **Methods Enzymol** 1989; 168:287–301

Immunomodulation of HLA class I and II expression on a human tumor derived cell line by 5–azacytidine, bacterial lipopolysaccharide, gamma interferon and a phorbol ester. Santamaría M, et al. **Methods Find Exp Clin Pharmacol** 1989 Apr;11(4):269–72

An AP1–binding site in the c–fos gene can mediate induction by epidermal growth factor and 12–O–tetradecanoyl phorbol–13–acetate. Fisch TM, et al. **Mol Cell Biol** 1989 Mar;9(3):1327–31

Role of arachidonic acid metabolism in transcriptional induction of tumor necrosis factor gene expression by phorbol ester. Horiguchi J, et al. **Mol Cell Biol** 1989 Jan; 9(1):252–8

Transcriptional and posttranscriptional modulation of myeloid colony–stimulating factor expression by tumor necrosis factor and other agents. Koeffler HP, et al. **Mol Cell Biol** 1988 Aug;8(8):3432–8

Induction of tumor promotor–inducible genes in murine 3T3 cell lines and tetradecanoyl phorbol acetate–nonproliferative 3T3 variants can occur through protein kinase C–dependent and –independent pathways. Lim RW, et al. **Mol Cell Biol** 1989 Apr;9(4):1790–3

The NF–kappa B–binding site mediates phorbol ester–inducible transcription in nonlymphoid cells. Nelsen B, et al. **Mol Cell Biol** 1988 Aug;8(8):3526–31

Tumor promoter–inducible genes are differentially expressed in the developing mouse. Tippetts MT, et al. **Mol Cell Biol** 1988 Oct;8(10):4570–2

A further comparison of insulin– and phorbol ester–stimulated glucose transport in adipocytes. Cherqui G, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):13–25

Distribution of Thyroliberin (TRH)– and 12–O–tetradecanoylphorbol 13–acetate (TPA)–activated adenylyl cyclase in normal and neoplastic tissue with special reference to the prostate. Gordeladze JO, et al. **Mol Cell Endocrinol** 1988 Aug;58(2–3):287–90

Distinct adenosine 3',5'–monophosphate and phorbol ester–responsive signal transduction pathways converge at the level of transcriptional activation by the interactions of DNA–binding proteins. Hoeffler JP, et al. **Mol Endocrinol** 1989 May;3(5):868–80

Transforming growth factor–alpha expression in the anterior pituitary gland: regulation by epidermal growth factor and phorbol ester in dispersed cells. Mueller SG, et al. **Mol Endocrinol** 1989 Jun;3(6):976–83

Cyclic adenosine monophosphate and phorbol ester, like gonadotropin–releasing hormone, stimulate the biosynthesis of luteinizing hormone polypeptide chains in a nonadditive manner. Starzec A, et al. **Mol Endocrinol** 1989 Apr; 3(4):618–24

Use of the orthogonal design method to study the synergistic effects of asbestos fibres and 12–O–tetradecanoylphorbol–13–acetate (TPA) in the BALB/3T3 cell transformation system. Lu YP, et al. **Mutagenesis** 1988 Jul;3(4):355–62

Spontaneous channel activity induced by tumor promoter TPA in chick myotubes. Ciccarelli C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):121–4

Stimulation of spontaneous transmitter release at the frog neuromuscular junction by 12–O–tetradecanoylphorbol–13–acetate occurs in the absence of extracellular Ca2+ and is enhanced by depolarization. Light PE, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):339–44

Induction of neurite outgrowth from chick embryonic ganglia explants by activators of protein kinase C. Hsu L, et al. **Neurosci Lett** 1989 May 8;99(3):257–62

Morphological changes and neural cell adherion molecule expression in mouse cerebrum primary cultures following long–term exposure to phorbol ester. Itoh K, et al. **Neurosci Res** 1989 Apr;6(4):350–7

Activation of the c–fos gene by UV and phorbol ester: different signal transduction pathways converge to the same enhancer element. Büscher M, et al. **Oncogene** 1988 Sep;3(3):301–11

Similar and synergistic inhibition of gap–junctional communication by ras transformation and tumor promoter treatment of mouse primary keratinocytes. Dotto GP, et al. **Oncogene** 1989 May;4(5):637–41

Insulin and phorbol ester induce distinct phosphorylations of pp60c–src in the BC3H–1 murine myocyte cell line. Luttrell LM, et al. **Oncogene** 1989 Mar;4(3):317–24

Nucleotide sequence of a cDNA encoding TIS11, a message induced in Swiss 3T3 cells by the tumor promoter tetradecanoyl phorbol acetate. Varnum BC, et al. **Oncogene** 1989 Jan;4(1):119–20

Phorbol ester potentiates VIP–stimulated amylase release in rat pancreatic acini. Suwandito L, et al. **Pancreas** 1989; 4(4):459–63

Activators of protein kinase C stimulate insulin secretion from the human fetal pancreas. Tuch BE, et al. **Pancreas** 1988;3(6):675–80

Heterogeneity of the response to inducers of differentiation and to cytostatics of tumor cell populations. Pályi I. **Pathol Res Pract** 1988 Dec;184(1):11–7

TPA stimulates both release of choline and ethanolamine and synthesis of PGI2 in C–9 cells. Xiao DM, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(4):213–7

Tumor necrosis factor alpha induces proteins that bind specifically to kappa B–like enhancer elements and regulate interleukin 2 receptor alpha–chain gene expression in primary human T lymphocytes. Lowenthal JW, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2331–5

Microtubule–dependent effect of phorbol ester on the contractility of cytoskeleton of cultured fibroblasts. Lyass LA, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9538–41

Multiple regulatory elements and phorbol 12–O–tetradecanoate 13–acetate responsiveness of the rat placental glutathione transferase gene. Sakai M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9456–60

Identification of a phorbol ester–repressible v–src–inducible gene. Simmons DL, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1178–82

Phorbol 12–myristate 13–acetate inhibits binding of leukotriene B4 and platelet–activating factor and the responses they induce in neutrophils: site of action. Yamazaki M, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5791–4

Neutrophil stimulation by PMA increases alveolar permeability in rabbits. Burchardi H, et al. **Prog Clin Biol Res** 1989;308:323–9

Induction of neoplastic transformation in C3H/10T1/2 cells by 2.45–GHz microwaves and phorbol ester. Balcer–Kubiczek EK, et al. **Radiat Res** 1989 Mar; 117(3):531–7

Correlation between neutrophil superoxide formation, luminol–augmented chemiluminescence and intracellular Ca2+ levels upon stimulation with leukotriene B4, formylpeptide and phorbolester. Gyllenhammar H. **Scand J Clin Lab Invest** 1989 Jun;49(4):317–22

Effects of 12–O–tetradecanoyl phorbol–13–acetate (TPA) on rat thymocytes. Sasaki R, et al. **Scand J Immunol** 1989 Apr; 29(4):485–8

AP1/jun function is differentially induced in promotion–sensitive and resistant JB6 cells. Bernstein LR, et al. **Science** 1989 May 5;244(4904):566–9

Cloning of TPA–inducible early (TIE) genes by differential hybridization using TPA–nonresponsive variant of mouse 3T3–L1 cells. Amagai M, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):153–8

Differential effects of phorbol 12–myristate 13–acetate on GTP gamma S–induced diacylglycerol formation and arachidonic acid liberation in saponin–permeabilized rabbit platelets. Akiba S, et al. **Thromb Res** 1989 Mar 1; 53(5):503–12

The effect of low dose of 12–O–tetradecanoyl–phorbol–13–acetate on collagen platelet interactions. Chiang TM. **Thromb Res** 1989 Jun 15;54(6):633–41

Phorbol ester stimulates platelet spreading and thrombi–like aggregate formation on the surface of immobilized type V collagen. Leytin VL, et al. **Thromb Res** 1989 Aug 1; 55(3):309–18

Differential modulation of protein kinase C by bryostatin 1 and phorbol ester. Sako T, et al. **Tohoku J Exp Med** 1988

Nov;156(3):229–36
Receptor–mediated endocytosis of IL–2 by PHA stimulated lymphocytes. Lee TP, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):100–2
[Changes in the expression and structure of some proto–oncogenes in TPA–induced HL–60 and Raji cells] Tang JQ, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Jun; 21(2):201–8 (Eng. Abstr.) **(Chi)**
[Epigenetic mechanism of tumor promotion. Interrelationship between inflammation and ornithine decarboxylase activity induced in vitro by the carcinogenic 12–O–tetradecanoyl–phorbol–13–acetate] Giao NB, et al. **C R Acad Sci [III]** 1988;307(5):229–34 (Eng. Abstr.) **(Fre)**
[Phorbol myristate acetate promotes entry of calcium in hypophysial cells GH3 B6 via potential dependent calcium channels] Taupignon AI, et al. **C R Soc Biol (Paris)** 1988; 182(1):74–8 (Eng. Abstr.) **(Fre)**
[Action of PMA (phorbol myristate acetate), scopolamine, propranolol, and oxotremorine on memorization of an active or passive avoidance test] Laborit H, et al. **Encephale** 1989 Jan–Feb;15(1):29–35 (Eng. Abstr.) **(Fre)**
[Effect of tumor–promoting phorbol esters on retrovirus–infected human cells: scanning electron microscopy studies] Rudolph M, et al. **Biomed Biochim Acta** 1989;48(1):129–36 (Eng. Abstr.) **(Ger)**
[Cell adhesion in rat fibroblasts: effect of tumor promoters] Pippia P, et al. **Boll Soc Ital Biol Sper** 1989 May; 65(5):453–60 (Eng. Abstr.) **(Ita)**
[Effect of phorbol myristate acetate (PMA) on diphosphoinositide (DPI) synthesis in rat mast cell granules] Okayama Y, et al. **Arerugi** 1989 Feb;38(2):80–5 (Eng. Abstr.) **(Jpn)**
[Phenotypes of leukemic cells from chronic B cell leukemia and their proliferative responses to several kinds of mitogens or lymphokines: PHA or phorbol ester (TPA) induces a high responsibility to B cell growth factor (BCGF) in the leukemic cells] Takeuchi H. **Rinsho Ketsueki** 1988 Dec;29(12):2241–9 (Eng. Abstr.) **(Jpn)**
[Regulation by the protein kinase C activator phorbol ester of calcium channels in polymorphonuclear leukocytes] Grigorian MR, et al. **Biokhimiia** 1988 Sep;53(9):1462–6 (Eng. Abstr.) **(Rus)**
[The effect of phorbol ester on the polar properties of eggs] Bozhkova VP, et al. **Dokl Akad Nauk SSSR** 1989 Mar–Apr; 305(1):212–4 **(Rus)**
[Peptide Arg–Gly–Asp–Ser amplifies the functional activity of phagocytes, caused by adhesion and phorbol myristate acetate] Zemskov VM, et al. **Dokl Akad Nauk SSSR** 1989; 306(3):748–51 **(Rus)**
[Changes in the morphology of fibroblasts of different degrees of transformation under the action of 12–tetradecanoylphorbol–13–acetate] Dugina VB. **Tsitologiia** 1989 Mar;31(3):344–7 (Eng. Abstr.) **(Rus)**
[Effect of the tumor promoter TPA on the distribution of PHA–stimulated human lymphocytes by cell cycle phases] Vinogradov AE, et al. **Tsitologiia** 1988 Aug;30(8):983–90 (Eng. Abstr.) **(Rus)**

TOXICITY

Resolution of impaired pulmonary function and pulmonary hypertension after phorbol ester administration in rabbits. Havill AM, et al. **Am Rev Respir Dis** 1989 Sep;140(3):782–8
Neutrophil accumulation and structural changes in nonpulmonary organs after acute lung injury induced by phorbol myristate acetate. Mizer LA, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1017–26
Modulation by glycyrrhetinic acid derivatives of TPA–induced mouse ear oedema. Inoue H, et al. **Br J Pharmacol** 1989 Jan;96(1):204–10
Critical comparison of histological and morphometric changes in SENCAR mouse epidermis in response to n–dodecane, 12–O–tetradecanoylphorbol–13–acetate and mezerein. Miller ML, et al. **Carcinogenesis** 1988 Nov; 9(11):1959–65
Comparison of the effect of sn–1,2–didecanoylglycerol and 12–O–tetradecanoylphorbol–13–acetate on cutaneous morphology, inflammation and tumor promotion in CD–1 mice. Smart RC, et al. **Carcinogenesis** 1988 Dec; 9(12):2221–6
Differential inhibition by staurosporine, a potent protein kinase C inhibitor, of 12–O–tetradecanoylphorbol–13–acetate–caused skin tumor promotion, epidermal ornithine decarboxylase induction, hyperplasia and inflammation. Yamamoto S, et al. **Carcinogenesis** 1989 Jul;10(7):1315–22
Synergistic inhibition of metabolic cooperation by oleic acid or 12–O–tetradecanoylphorbol–13–acetate and dichlorodiphenyltrichlorethane (DDT) in Chinese hamster V79 cells: implication of a role for protein kinase C in the regulation of gap junctional intercellular communication. Aylsworth CF, et al. **Cell Biol Toxicol** 1989 Jan;5(1):27–37
Effects of tetradecanoyl phorbol acetate, pyrethroids and DDT in the V79. Wärngård L, et al. **Cell Biol Toxicol** 1989 Jan;5(1):67–75
Differentiation of cultured epithelial cells: response to toxic agents. Rice RH, et al. **Environ Health Perspect** 1989 Mar; 80:239–46
Chemiluminescence in human whole blood: modulation by the cocarcinogens phorbol diester and polychlorobiphenyls. Gyorkos JW, et al. **Immunopharmacol Immunotoxicol** 1988;10(3):417–35
Effects of TPA dose variation and mezerein on skin tumorigenesis by initiation promotion protocol in S/RV Cri mice. Bhisey RA, et al. **Indian J Exp Biol** 1988 Oct; 26(10):764–7
PMA–induced pulmonary edema: mechanisms of the vasoactive response. Johnson A. **J Appl Physiol** 1988 Nov; 65(5):2302–12
Phorbol myristate acetate–induced injury of isolated perfused rat lungs: neutrophil dependence. Perry M, et al. **J Appl Physiol** 1988 Nov;65(5):2164–9
Isolation and characterization of ras–transfected BALB/3T3 clone showing morphological transformation by 12–O–tetradecanoyl–phorbol–13–acetate. Sasaki K, et al. **Jpn J Cancer Res** 1988 Aug;79(8):921–30
Mutagenic effects of TPA–induced clastogenic factor in Chinese hamster cells. Emerit I, et al. **Mutat Res** 1989 Sep; 214(1):97–104
Acceleration of papilloma growth in mice fed high–fat diets during promotion of two–stage skin carcinogenesis. Birt DF, et al. **Nutr Cancer** 1989;12(2):161–8
Model systems for defining initiation, promotion, and progression of skin neoplasms. Boutwell RK. **Prog Clin Biol Res** 1989;298:3–15
Promoter–enhanced neoplastic transformation after gamma–ray exposure at 10 cGy/day. Hill CK, et al. **Radiat Res** 1989 Aug;119(2):348–55

TETRAETHYL LEAD see under **ORGANOMETALLIC COMPOUNDS**

TETRAETHYLAMMONIUM COMPOUNDS

DIAGNOSTIC USE

Single–injection method for evaluation of renal function with 3H–inulin and 14C–tetraethylammonium bromide in conscious unrestrained Sprague–Dawley rats. Radin MJ, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1044–6

METABOLISM

Brush–border TEA transport in intact proximal tubules and isolated membrane vesicles. Dantzler WH, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):F290–7
Carrier–mediated transport of tetraethylammonium across rabbit renal basolateral membrane. Montrose–Rafizadeh C, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):F243–51
Mechanism of cis– and trans–substrate interactions at the tetraethylammonium/H+ exchanger of rabbit renal brush–border membrane vesicles. Wright SH, et al. **J Biol Chem** 1988 Dec 25;263(36):19494–7
Organic cation uptake by a cultured renal epithelium. McKinney TD, et al. **J Cell Physiol** 1988 Dec;137(3):513–20

PHARMACOKINETICS

Characteristics of tetraethylammonium transport in rabbit renal plasma–membrane vesicles. Jung JS, et al. **Biochem J** 1989 Apr 15;259(2):377–83
[Transport mechanisms of drugs in intestinal and renal epithelial cell membranes] Inui K. **Yakugaku Zasshi** 1988 Oct;108(10):921–37 (70 ref.) (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Two distinct mechanisms are responsible for single K channel block by internal tetraethylammonium ions. Yamamoto D, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C683–7
Effects of lidocaine alone and in combination with tetraethylammonium on the maximum upstroke velocity in guinea–pig papillary muscles. Ban T, et al. **Arzneimittelforschung** 1989 Jul;39(7):770–4
TEA prevents inactivation while blocking open K+ channels in human T lymphocytes. Grissmer S, et al. **Biophys J** 1989 Jan;55(1):203–6
Ethanol–induced bronchodilatation in TEA–treated canine tracheal smooth muscle is mediated by a beta–adrenoceptor–dependent mechanism. Richards IS, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):155–60
Tetraethylammonium–induced contraction of rabbit coronary artery. Iwaki M, et al. **Heart Vessels** 1988; 4(3):141–8
Effect of K+ channel blockers on anti–immunoglobulin–induced murine B cell proliferation. Gollapudi SV, et al. **J Clin Lab Immunol** 1988 Nov; 27(3):121–5
Development of 4–AP and TEA sensitivities in mammalian myelinated nerve fibers. Eng DL, et al. **J Neurophysiol** 1988 Dec;60(6):2168–79
Protein kinase C activators reduce the inositol trisphosphate–induced outward current and the Ca^{2+}–activated outward current in identified neurons of Aplysia. Sawada M, et al. **J Neurosci Res** 1989 Feb; 22(2):158–66
Effects of tetraethylammonium on the depolarizing after–potential and passive properties of lizard myelinated axons. Barrett EF, et al. **J Physiol (Lond)** 1988 Aug; 402:65–78
Differential effects of potassium channel blockers on neurohypophysial release of oxytocin and vasopressin. Evidence for frequency–dependent interaction with the endogenous opioid inhibition of oxytocin release. Racké K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):560–6
The effects of tetraethylammonium during twitch and tetanic stimulation of the phrenic nerve diaphragm preparation in the rat. Røed A. **Neuropharmacology** 1989 Jun;28(6):585–92
Heterogeneity in spontaneous and tetraethylammonium induced intracellular electrical activity in colonic circular muscle. Barajas–López C, et al. **Pflugers Arch** 1988 Jul; 412(1–2):203–10
Effects of potassium channel blockers on differentiation of Dictyostelium discoideum. Van Duijn B, et al. **Pflugers Arch** 1989;414 Suppl 1:S148–9

TETRAETHYLTHIURAM DISULFIDE see **DISULFIRAM**

TETRAGASTRIN see under **GASTRINS**

TETRAGASTRIN RECEPTORS see **RECEPTORS, CHOLECYSTOKININ**

TETRAHYDRO–1,4–OXAZINES see **MORPHOLINES**

TETRAHYDROCANNABINOL

The conformational analysis of delta 9– and delta 9,11–tetrahydrocannabinols in solution using high resolution nuclear magnetic resonance spectroscopy. Kriwacki RW, et al. **Mol Pharmacol** 1989 Apr; 35(4):495–503
Cannabis–resin foreign body in the ear [letter] Thompson AC, et al. **N Engl J Med** 1989 Jun 29;320(26):1758

ANALOGS & DERIVATIVES

Preparation and certification of standard reference material 1507: 11–nor–delta 9–tetrahydrocannabinol–9–carboxylic acid in freeze–dried urine. Craft NE, et al. **Anal Chem** 1989 Mar 15;61(6):540–4
Selective sample preparation for determination of 11–nor–9–carboxy–delta 9–tetrahydrocannabinol from human urine by gas chromatography with electron capture detection. Rosenfeld JM, et al. **Anal Chem** 1989 Apr 15; 61(8):925–8
Optimization of the quantitative analysis of the major cannabis metabolite (11–nor–9–COOH–delta 9–tetrahydrocannabinol) in urine by gas chromatography/mass spectrometry. Congost M, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):367–72
A rapid sample–preparation technique for thin–layer chromatographic analysis for 11–nor–delta 9–tetrahydrocannabinol–9–carboxylic acid in human urine. King DL, et al. **Clin Chem** 1989 Jan;35(1):163–6
Metabolism of n–hexyl–homologues of delta–8–tetrahydrocannabinol and delta–9–tetrahydrocannabinol in the mouse. Brown NK, et al. **Eur J Drug Metab Pharmacokinet** 1988 Jul–Sep; 13(3):165–76
Separation of the discriminative stimulus effects of stereoisomers of delta 2– and delta 3–tetrahydrocannabinols in pigeons. Jrbe TU, et al. **Eur J Pharmacol** 1988 Nov 8; 156(3):361–6
Cannabinoids and pain responses: a possible role for prostaglandins. Burstein SH, et al. **FASEB J** 1988 Nov; 2(14):3022–6
Prevention and reversal of delta–9–tetrahydrocannabinol induced depression of natural killer cell activity by interleukin–2. Specter S, et al. **Int J Immunopharmacol** 1989;11(1):63–9
False negative GC/MS assay for carboxy THC due to ibuprofen interference. Brunk SD. **J Anal Toxicol** 1988 Sep–Oct;12(5):290–1
Lack of interference by nabilone in the EMIT d.a.u. cannabinoid assay, Abbott TDx cannabinoid assay, and a sensitive TLC assay for delta 9–THC–carboxylic acid. Fraser AD, et al. **J Anal Toxicol** 1989 Jul–Aug;13(4):240
Urinary excretion half–life of delta 1–tetrahydrocannabinol–7–oic acid in heavy marijuana users after smoking. Johansson E, et al. **J Anal Toxicol** 1989 Jul–Aug;13(4):218–23
Confirmation of cannabis use. II. Determination of tetrahydrocannabinol metabolites in urine and plasma by HPLC with ECD. Nakahara Y, et al. **J Anal Toxicol** 1989 Jan–Feb;13(1):22–4
THCA calibrators and controls [letter] Peat MA. **J Anal Toxicol** 1988 Jul–Aug;12(4):239
Studies on the stability and detection of cocaine, benzoylecgonine, and 11–nor–delta–9–tetrahydrocannabinol–9–carboxylic acid in whole blood using Abuscreen radioimmunoassay. McCurdy HH, et al. **J Forensic Sci** 1989 Jul;34(4):858–70
Intrsocular pressure, ocular toxicity and neurotoxicity in response to 11–hydroxy–delta 9–tetrahydrocannabinol and 1–nantradol. Colasanti BK. **J Ocul Pharmacol** 1985 Summer;1(2):123–35
Stereospecificity of the discriminative stimulus functions of the dimethylheptyl homologs of 11–hydroxy–delta 8–tetrahydrocannabinol in rats and pigeons. Järbe TU, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1000–5
Interpretation of urine quantitative 11–nor–delta–9 tetrahydrocannabinol–9–carboxylic acid to determine abstinence from marijuana smoking. Bell R, et al. **J Toxicol Clin Toxicol** 1989;27(1–2):109–15

Delta-9-tetrahydrocannabinol inhibits macrophage protein expression in response to bacterial immunomodulators. Cabral GA, et al. **J Toxicol Environ Health** 1989; 26(2):175-82

Stereochemical effects of 11-OH-delta 8-THC-dimethylheptyl in mice and dogs. Little PJ, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):661-6

ANALYSIS

Histochemical detection of hemp trichomes and their correlation with the THC content. Petri G, et al. **Acta Biol Hung** 1988;39(1):59-73

Determination of delta 1-tetrahydrocannabinol in human fat biopsies from marihuana users by gas chromatography-mass spectrometry. Johansson E, et al. **Biomed Chromatogr** 1989 Jan;3(1):35-8

Confirmation of cannabis use. II. Determination of tetrahydrocannabinol metabolites in urine and plasma by HPLC with ECD. Nakahara Y, et al. **J Anal Toxicol** 1989 Jan-Feb;13(1):22-4

Delta-9-tetrahydrocannabinol content and human marijuana self-administration. Chait LD. **Psychopharmacology (Berlin)** 1989;98(1):51-5

Cannabis plants illicitly grown in Jutland (Denmark). Kaa E. **Z Rechtsmed** 1989;102(6):367-75

BLOOD

Cannabis—1988. Hollister LE. **Acta Psychiatr Scand Suppl** 1988;345:108-18 (73 ref.)

Determination of delta 9-tetrahydrocannabinol in plasma using solid-phase extraction and high-performance liquid chromatography with electrochemical detection. Zweipfenning PG, et al. **J Chromatogr** 1988 Dec 2; 456(1):83-91

Plasma concentrations of delta-9-tetrahydrocannabinol in dams and fetuses following acute or multiple prenatal dosing in rats. Hutchings DE, et al. **Life Sci** 1989; 44(11):697-701

METABOLISM

Brain microsomal oxidation of delta 8- and delta 9-tetrahydrocannabinol. Watanabe K, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):75-80

Urinary excretion half-life of delta 1-tetrahydrocannabinol-7-oic acid in heavy marijuana users after smoking. Johansson E, et al. **J Anal Toxicol** 1989 Jul-Aug;13(4):218-23

Confirmation of cannabis use. III. Simultaneous quantitation of six metabolites of delta 9-tetrahydrocannabinol in plasma by high-performance liquid chromatography with electrochemical detection. Nakahara Y, et al. **J Chromatogr** 1988 Dec 29;434(1):247-52

PHARMACOLOGY

Altered hepatic microsomal function and elevated protooncogene expression as residual effects in rats exposed to delta-9-tetrahydrocannabinol. Prasanna HR, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):217-21

Effects of diazepam on regional brain homovanillic acid following phencyclidine or delta 9-tetrahydrocannabinol. Bowers MB Jr, et al. **Biochem Pharmacol** 1989 Jul 15; 38(14):2385-7

The effect of chronic prepubertal administration of marihuana (delta-9-tetrahydrocannabinol) on the onset of puberty and the postpubertal reproductive functions in female rats. Wenger T, et al. **Biol Reprod** 1988 Oct; 39(3):540-5

The effects of delta 9-tetrahydrocannabinol on potassium-evoked release of dopamine in the rat caudate nucleus: an in vivo electrochemical and in vivo microdialysis study. Ng Cheong Ton JM, et al. **Brain Res** 1988 Jun 7;451(1-2):59-68

Effects of marijuana on the task-elicited physiological response. Capriotti RM, et al. **Drug Alcohol Depend** 1988 Jul;21(3):183-7

Cannabinoids and pain responses: a possible role for prostaglandins. Burstein SH, et al. **FASEB J** 1988 Nov; 2(14):3022-6

Suppression by delta-9-tetrahydrocannabinol of interleukin 2-induced lymphocyte proliferation and lymphokine-activated killer cell activity. Kawakami Y, et al. **Int J Immunopharmacol** 1988;10(4):485-8

Effect of delta 9-tetrahydrocannabinol on intraocular pressure after removal of autonomic input. Colasanti BK, et al. **J Ocul Pharmacol** 1985 Spring;1(1):47-57

Time course and dose-response effects of orally administered delta-9-THC on interval schedule performance of the rat. Elsmore TF, et al. **Life Sci** 1974 Aug 1;15(3):481-9

Anticonvulsant properties of delta 9-tetrahydrocannabinol and other cannabinoids. Karler R, et al. **Life Sci** 1974 Sep 1;15(5):931-47

Effects of delta 9-THC on growth hormone and ACTH secretion in rats. Kokka N, et al. **Life Sci** 1974 Jul 15; 15(2):329-38

Acquisition of tolerance to delta-9-THC as measured by the response of a cellular function. Nazar BL, et al. **Life Sci** 1974 Jun 16;14(12):2513-20

Comparative anti-phlogistic activity of delta 9-tetrahydrocannabinol, hydrocortisone and aspirin in various rat paw edema models. Sofia RD, et al. **Life Sci** 1974 Jul 15;15(2):251-60

The effect of hypothermic doses of 1-delta 9-tetrahydrocannabinol on biogenic amine metabolism in selected parts of the rat brain. Yagiela JA, et al. **Life Sci** 1974 Jun 16;14(12):2367-78

Relationship between delta-9-tetrahydrocannabinol-induced arachidonic acid release and secretagogue-evoked phosphoinositide breakdown and Ca2+ mobilization of exocrine pancreas. Chaudhry A, et al. **Mol Pharmacol** 1988 Oct;34(4):543-8

Delta 9-tetrahydrocannabinol increases arachidonic acid levels in guinea pig cerebral cortex slices. Reichman M, et al. **Mol Pharmacol** 1988 Dec;34(6):823-8

Behaviour in rats maintained by low differential reinforcement rate: effects of delta 1-tetrahydrocannabinol, cannabinol and cannabidiol, alone and in combination. Hiltunen AJ, et al. **Neuropharmacology** 1989 Feb; 28(2):183-9

Drugs which stimulate or facilitate central GABAergic transmission interact synergistically with delta-9-tetrahydrocannabinol to produce marked catalepsy in mice. Pertwee RG, et al. **Neuropharmacology** 1988 Dec; 27(12):1265-70

Alcohol and marijuana: comparative dose effect profiles in humans. Heishman SJ, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):649-55

PCP, THC, ethanol, and morphine and consumption of palatable solutions. Milano WC, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):893-7

Delta-9-tetrahydrocannabinol during pregnancy in the rat: effects on development of RNA, DNA, and protein in offspring brain. Morgan B, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):365-9

Delta-9-tetrahydrocannabinol impairs visual recognition memory but not discrimination learning in rhesus monkeys. Aigner TG. **Psychopharmacology (Berlin)** 1988;95(4):507-11

Facilitation of brain stimulation reward by delta 9-tetrahydrocannabinol. Gardner EL, et al. **Psychopharmacology (Berlin)** 1988;96(1):142-4

[Spatial-temporal structure of the organization of goal-directed behavior under the action of delta 9-tetrahydrocannabinol] Machula AI, et al. **Farmakol Toksikol** 1988 Sep-Oct;51(5):12-7 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Efficacy of tetrahydrocannabinol in patients refractory to standard antiemetic therapy. McCabe M, et al. **Invest New Drugs** 1988 Sep;6(3):243-6

Delta 9-tetrahydrocannabinol: a novel treatment for experimental autoimmune encephalomyelitis. Lyman WD, et al. **J Neuroimmunol** 1989 Jun;23(1):73-81

TOXICITY

Animal studies of prenatal delta-9-tetrahydrocannabinol: female embryolethality and effects on somatic and brain growth. Hutchings DE, et al. **Ann N Y Acad Sci** 1989; 562:133-44

Immunization against prostaglandins reduces delta 1-tetrahydrocannabinol-induced catalepsy in mice. Burstein SH, et al. **Mol Pharmacol** 1989 Jan;35(1):6-9

URINE

Marijuana pharmacology and urine testing. DiGregorio GJ, et al. **Am Fam Physician** 1987 Jun;35(6):209-12

Optimization of the quantitative analysis of the major cannabis metabolite (11-nor-9-COOH-delta 9-tetrahydrocannabinol) in urine by gas chromatography/mass spectrometry. Congost M, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1-12):367-72

TETRAHYDROCORTISOL see under **HYDROCORTISONE**

TETRAHYDROCORTISONE see under **CORTISONE**

TETRAHYDROFOLATE DEHYDROGENASE

Computational studies on pterins and speculations on the mechanism of action of dihydrofolate reductase. Uchimaru T, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):64-8

Effects of multiple replacements at a single position on the folding and stability of dihydrofolate reductase from Escherichia coli. Garvey EP, et al. **Biochemistry** 1989 Mar 7;28(5):2083-93

Direct 19F NMR observation of the conformational selection of optically active rotamers of the antifolate compound fluoronitropyrimethamine bound to the enzyme dihydrofolate reductase. Tendler SJ, et al. **FEBS Lett** 1988 Nov 21;240(1-2):201-4

Orientation and structure-building role of the water molecules bound at the contact surface of the dihydrofolate reductase-methotrexate complex. Nagy P. **J Comput Aided Mol Des** 1988 Apr;2(1):65-76

The border residues of the dihydrofolate reductase domain in Escherichia coli beta-galactosidase correspond to the positions of introns 1 and 5 of dihydrofolate reductase of chicken. Kuchinke W. **J Mol Evol** 1989 Jul;29(1):95-7

Protein fragments as probes in the study of protein folding mechanisms: differential effects of dihydrofolate reductase fragments on the refolding of the intact protein. Hall JG, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3060-4

ANTAGONISTS & INHIBITORS

Development and evaluation of an enzyme inhibition assay for methotrexate. Kelly MG. **Ann Clin Biochem** 1988 Sep; 25 (Pt 5):516-21

A molecular shape analysis and quantitative structure-activity relationship investigation of some triazine-antifolate inhibitors of Leishmania dihydrofolate reductase. Koehler MG, et al. **Arch Biochem Biophys** 1988 Oct;266(1):152-61

Interactions between inhibitors of dihydrofolate reductase. Bowden K, et al. **Biochem J** 1989 Mar 1;258(2):335-42

Inhibition of human dihydrofolate reductase by antifolyl polyglutamates. Kumar P, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):541-3

Tricyclic 2,4-diaminopyrimidines with broad antifolate activity and the ability to inhibit Pneumocystis carinii growth in cultured human lung fibroblasts in the presence of leucovorin. Rosowsky A, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2677-84

Structural studies on bio-active compounds. Part XV. Structure-activity relationships for pyrimethamine and a series of diaminopyrimidine analogues versus bacterial dihydrofolate reductase. Sansom CE, et al. **Biochim Biophys Acta** 1989 Mar 16;995(1):21-7

A phase I study of meta-azidopyrimethamine ethanesulphonate (MZPES)—a new dihydrofolate reductase inhibitor. Stuart NS, et al. **Cancer Chemother Pharmacol** 1989;23(5):308-10

Nobel lecture in physiology or medicine—1988. Selective inhibitors of dihydrofolate reductase. Hitchings GH Jr. **In Vitro Cell Dev Biol** 1989 Apr;25(4):303-10

The role of cellular folates in the enhancement of activity of the thymidylate synthase inhibitor 10-propargyl-5,8-dideazafolate against hepatoma cells in vitro by inhibitors of dihydrofolate reductase. Galivan J, et al. **J Biol Chem** 1989 Jun 25;264(18):10685-92

2,4-Diamino-5-benzylpyrimidines and analogues as antibacterial agents. 12. 1,2-Dihydroquinolylmethyl analogues with high activity and specificity for bacterial dihydrofolate reductase. Johnson JV, et al. **J Med Chem** 1989 Aug;32(8):1942-9

Inhibition of mammalian folylpolyglutamate synthetase and human dihydrofolate reductase by 5,8-dideaza analogues of folic acid and aminopterin bearing a terminal L-ornithine. Patil SA, et al. **J Med Chem** 1989 Jul; 32(7):1559-65

The 2-desamino and 2-desamino-2-methyl analogues of aminopterin do not inhibit dihydrofolate reductase but are potently toxic to tumor cells in culture. Rosowsky A, et al. **J Med Chem** 1989 Mar;32(3):517-20

On the structure selectivity problem in drug design. A comparative study of benzylpyrimidine inhibition of vertebrate and bacterial dihydrofolate reductase via molecular graphics and quantitative structure-activity relationships. Selassie CD, et al. **J Med Chem** 1989 Aug; 32(8):1895-905

Selective inhibition of Leishmania dihydrofolate reductase and Leishmania growth by 5-benzyl-2,4-diaminopyrimidines. Sirawaraporn W, et al. **Mol Biochem Parasitol** 1988 Oct;31(1):79-85

The structure selectivity problem in drug design with respect to antifolates. Dias Selassie C, et al. **Prog Clin Biol Res** 1989;291:341-4

[The synthesis of the dihydrofolate reductase inhibitors 2,4-diamino-5-substituted-benzylpyrimidines and their inhibition on L. casei DHFR and chicken liver DHFR] Fang ZX, et al. **Yao Hsueh Hsueh Pao** 1988 Feb; 23(2):108-14 (Eng. Abstr.) (Chi)

BIOSYNTHESIS

Study of dihydrofolate reductase-thymidylate synthase in Plasmodium falciparum. Inselburg J, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):328-36

DHFR coamplification of t-PA in DHFR+ bovine endothelial cells: in vitro characterization of the purified serine protease. Connors RW, et al. **DNA** 1988 Nov; 7(9):651-61

GENETICS

High-level resistance to trimethoprim in Shigella sonnei associated with plasmid-encoded dihydrofolate reductase type I. Delgado R, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1598-9

Repair of 8-methoxypsoralen + UVA-induced damage in specific sequences in chromosomal and episomal DNA in human cells. Dean SW. **Carcinogenesis** 1989 Jul; 10(7):1253-6

Mapping replication units in animal cells. Handeli S, et al. **Cell** 1989 Jun 16;57(6):909-20

Plasmodium falciparum: three amino acid changes in the dihydrofolate reductase of a pyrimethamine-resistant mutant. Inselburg J, et al. **Exp Parasitol** 1988 Dec; 67(2):361-3

Characterisation of the dihydrofolate reductase-thymidylate synthetase gene from human malaria parasites highly resistant to pyrimethamine. Snewin VA, et al. **Gene** 1989 Mar 15;76(1):41-52

Biotinylated DNA probes for trimethoprim-resistant dihydrofolate reductases types IV and V. Towner KJ, et al. **J Antimicrob Chemother** 1988 Sep;22(3):285–91

Deletion analysis of the Chinese hamster dihydrofolate reductase gene promoter. Ciudad CJ, et al. **J Biol Chem** 1988 Nov 5;263(31):16274–82

Isolation and characterization of cDNA clones derived from the divergently transcribed gene in the region upstream from the human dihydrofolate reductase gene. Fujii H, et al. **J Biol Chem** 1989 Jun 15;264(17):10057–64

Amplification of a polymorphic dihydrofolate reductase gene expressing an enzyme with decreased binding to methotrexate in a human colon carcinoma cell line, HCT-8R4, resistant to this drug. Srimatkandada S, et al. **J Biol Chem** 1989 Feb 25;264(6):3524–8

Structure, genomic organization and transcription of the bifunctional dihydrofolate reductase-thymidylate synthase gene from Crithidia fasciculata. Hughes DE, et al. **Mol Biochem Parasitol** 1989 May 1;34(2):155–66

Chimeric 3-hydroxy-3-methylglutaryl coenzyme A reductase-dihydrofolate reductase genes display bidirectional expression and unidirectional regulation in stably transfected cells. Abrams JM, et al. **Mol Cell Biol** 1989 Feb;9(2):620–8

Replication in the amplified dihydrofolate reductase domain in CHO cells may initiate at two distinct sites, one of which is a repetitive sequence element. Anachkova B, et al. **Mol Cell Biol** 1989 Feb;9(2):532–40

Matrix attachment regions are positioned near replication initiation sites, genes, and an interamplicon junction in the amplified dihydrofolate reductase domain of Chinese hamster ovary cells. Dijkwel PA, et al. **Mol Cell Biol** 1988 Dec;8(12):5398–409

Identification and characterization of a gene that is coamplified with dihydrofolate reductase in a methotrexate-resistant CHO cell line. Foreman PK, et al. **Mol Cell Biol** 1989 Mar;9(3):1137–47

Chromosome instability associated with human alphoid DNA transfected into the Chinese hamster genome. Heartlein MW, et al. **Mol Cell Biol** 1988 Sep;8(9):3611–8

Transcriptional mapping of the amplified region encoding the dihydrofolate reductase-thymidylate synthase of Leishmania major reveals a high density of transcripts, including overlapping and antisense RNAs. Kapler GM, et al. **Mol Cell Biol** 1989 Sep;9(9):3959–72

High-resolution mapping of replication fork movement through the amplified dihydrofolate reductase domain in CHO cells by in-gel renaturation analysis. Leu TH, et al. **Mol Cell Biol** 1989 Feb;9(2):523–31

Dual bidirectional promoters at the mouse dhfr locus: cloning and characterization of two mRNA classes of the divergently transcribed Rep-1 gene. Linton JP, et al. **Mol Cell Biol** 1989 Jul;9(7):3058–72

The dihydrofolate reductase amplicons in different methotrexate-resistant Chinese hamster cell lines share at least a 273-kilobase core sequence, but the amplicons in some cell lines are much larger and are remarkably uniform in structure. Looney JE, et al. **Mol Cell Biol** 1988 Dec; 8(12):5268–79

Nonsense mutations in the dihydrofolate reductase gene affect RNA processing. Urlaub G, et al. **Mol Cell Biol** 1989 Jul;9(7):2868–80

Trimethoprim resistance transposon Tn4003 from Staphylococcus aureus encodes genes for a dihydrofolate reductase and thymidylate synthetase flanked by three copies of IS257. Rouch DA, et al. **Mol Microbiol** 1989 Feb;3(2):161–75

A frequent DHFR polymorphism detected by an intron fragment. Detera-Wadleigh SD, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6432

Amplified inverted duplications within and adjacent to heterologous selectable DNA. Heartlein MW, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1697–716

Amino acid changes linked to pyrimethamine resistance in the dihydrofolate reductase-thymidylate synthase gene of Plasmodium falciparum. Cowman AF, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9109–13

Evidence that a point mutation in dihydrofolate reductase-thymidylate synthase confers resistance to pyrimethamine in falciparum malaria. Peterson DS, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9114–8

Repair of N-methylpurines in specific DNA sequences in Chinese hamster ovary cells: absence of strand specificity in the dihydrofolate reductase gene. Scicchitano DA, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3050–4

Studies of Plasmodium falciparum dihydrofolate-reductase thymidylate synthase: potential advantages. Inselburg J, et al. **Prog Clin Biol Res** 1989;313:29–43 (26 ref.)

Involvement of unstable chromosomal regions containing C-heterochromatin and fragile sites in the integration of amplified dhfr domains. Riva P, et al. **Somat Cell Mol Genet** 1989 Sep;15(5):377–85

[Methotrexate resistance of rat clonogenic hemopoietic cells with an inserted bacterial dihydrofolate reductase gene] Khrushchov NG, et al. **Dokl Akad Nauk SSSR** 1989; 305(4):981–3 (Rus)

ISOLATION & PURIFICATION

N-terminal amino acid sequence of the chromosomal dihydrofolate reductase purified from trimethoprim-resistant Staphylococcus aureus. Hartman PG, et al. **FEBS Lett** 1988 Dec 19;242(1):157–60

Characterization of Candida albicans dihydrofolate reductase. Baccanari DP, et al. **J Biol Chem** 1989 Jan 15;264(2):1100–7

METABOLISM

Rescue effect of exogenous reduced folates on methotrexate polyglutamylation and dihydrofolate reductase activity in L1210 cells. Balińska M. **Acta Biochim Pol** 1988; 35(3):199–205

Dihydrofolate reductase activity in the Purkinje neuron populations of some non-mammalian vertebrates. Nano R, et al. **Acta Histochem (Jena)** 1988;84(2):179–86

A qualitative and quantitative cytochemical assay of dihydrofolate reductase in erythroid cells. Nano R, et al. **Acta Histochem (Jena)** 1989;85(1):51–8

In vivo measurement of dihydrofolate reductase and its inhibition by antifolates. Bowers SW, et al. **Anal Biochem** 1988 Jul;172(1):169–75

A comparison of dihydrofolate reductase activity in intact leukemia cells and squamous cell carcinoma. FitzGerald GB, et al. **Anticancer Drug Des** 1989 Jun;4(1):79–87

A qualitative and quantitative assay of dihydrofolate reductase in carrot cells resistant to methotrexate. Nano R, et al. **Basic Appl Histochem** 1989;33(2):81–92

N.m.r. studies of coenzyme binding to Lactobacillus casei dihydrofolate reductase. Roberts GC. **Biochem Soc Trans** 1989 Apr;17(2):297–9

A kinetic study of wild-type and mutant dihydrofolate reductases from Lactobacillus casei. Andrews J, et al. **Biochemistry** 1989 Jul 11;28(14):5743–50

NMR studies of differences in the conformations and dynamics of ligand complexes formed with mutant dihydrofolate reductases. Birdsall B, et al. **Biochemistry** 1989 Feb 7;28(3):1353–62

Dihydrofolate reductase: multiple conformations and alternative modes of substrate binding. Birdsall B, et al. **Biochemistry** 1989 Mar 7;28(5):2297–305

Probing the functional role of threonine-113 of Escherichia coli dihydrofolate reductase for its effect on turnover efficiency, catalysis, and binding. Fierke CA, et al. **Biochemistry** 1989 Jan 24;28(2):478–86

Effects of conversion of an invariant tryptophan residue to phenylalanine on the function of human dihydrofolate reductase. Huang SM, et al. **Biochemistry** 1989 Jan 24; 28(2):471–8

Mechanism of the reaction catalyzed by dihydrofolate reductase from Escherichia coli: pH and deuterium isotope effects with NADPH as the variable substrate. Morrison JF, et al. **Biochemistry** 1988 Jul 26;27(15):5499–506

Hydrophobic interactions via mutants of Escherichia coli dihydrofolate reductase: separation of binding and catalysis. Murphy DJ, et al. **Biochemistry** 1989 Apr 4;28(7):3025–31

Effects of conversion of phenylalanine-31 to leucine on the function of human dihydrofolate reductase. Prendergast NJ, et al. **Biochemistry** 1989 May 30;28(11):4645–50

Ligand-induced structural constraints in human dihydrofolate reductase revealed by peptide-specific antibodies. Ratnam M, et al. **Biochemistry** 1988 Jun 28; 27(13):4800–4

Dihydrofolate reductase from Escherichia coli: the kinetic mechanism with NADPH and reduced acetylpyridine adenine dinucleotide phosphate as substrates. Stone SR, et al. **Biochemistry** 1988 Jul 26;27(15):5493–9

Maintenance of dihydrofolate reductase enzyme after disappearance of DHFR mRNA during muscle cell differentiation. Schmidt EE, et al. **In Vitro Cell Dev Biol** 1989 Aug;25(8):697–704

A fluorescence study of substrate and inhibitor binding to bovine liver dihydrofolate reductase. Degan P, et al. **Int J Biochem** 1989;21(3):291–5

Atypical transient state kinetics of recombinant human dihydrofolate reductase produced by hysteretic behavior. Comparison with dihydrofolate reductases from other sources. Appleman JR, et al. **J Biol Chem** 1989 Feb 15; 264(5):2625–33

Hydride transfer by dihydrofolate reductase. Causes and consequences of the wide range of rates exhibited by bacterial and vertebrate enzymes. Beard WA, et al. **J Biol Chem** 1989 Jun 5;264(16):9391–9

Adriamycin, a drug interacting with acidic phospholipids, blocks import of precursor proteins by isolated yeast mitochondria. Eilers M, et al. **J Biol Chem** 1989 Feb 15; 264(5):2945–50

Binding of a tightly folded artificial mitochondrial precursor protein to the mitochondrial outer membrane involves a lipid-mediated conformational change. Endo T, et al. **J Biol Chem** 1989 Feb 15;264(5):2951–6

Dihydrofolate reductase (mouse) and beta-galactosidase (Escherichia coli) can be translocated across the plasma membrane of E. coli. Freudl R, et al. **J Biol Chem** 1988 Nov 15;263(32):17084–91

In vitro patterns of enzymic tetrahydrofolate dehydrogenase (EC 1.5.1.3) expression in bone marrow stromal cells. Miszta H, et al. **Leukemia** 1988 Nov;2(11):754–9

Protein folding in mitochondria requires complex formation with hsp60 and ATP hydrolysis. Ostermann J, et al. **Nature** 1989 Sep 14;341(6238):125–30

A free-energy perturbation study of the binding of methotrexate to mutants of dihydrofolate reductase. Singh UC, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9519–23

Automated site-directed drug design: the prediction and observation of ligand point positions at hydrogen-bonding regions on protein surfaces. Danziger DJ, et al. **Proc R Soc Lond [Biol]** 1989 Mar 22;236(1283):115–24

Conformational analysis of antifolates: molecular structure and enzyme binding of the 4'-COOH trimethoprim derivative. Cody V, et al. **Prog Clin Biol Res** 1989; 291:247–50

Structure and energetics of ligand binding to proteins: Escherichia coli dihydrofolate reductase-trimethoprim, a drug-receptor system. Dauber-Osguthorpe P, et al. **Proteins** 1988;4(1):31–47

PHYSIOLOGY

Identification of a novel plasmid-encoded dihydrofolate reductase mediating high-level resistance to trimethoprim. Wylie BA, et al. **J Antimicrob Chemother** 1988 Oct; 22(4):429–35

TETRAHYDROFOLATES

ANALYSIS

Methods for thymidylate synthase pharmacodynamics: serial biopsy, free and total TS, FdUMP and dUMP, and H4PteGlu and CH2-H4PteGlu assays. Spears CP, et al. **Adv Exp Med Biol** 1988;244:97–106

BIOSYNTHESIS

Regulation of 5-methyltetrahydrofolate synthesis. Lumb M, et al. **Biochem J** 1989 Mar 1;258(2):611–2

BLOOD

A rapid and specific HPLC-electrochemical method for the determination of endogenous 5-methyltetrahydrofolic acid in plasma using solid phase sample preparation with internal standardization. Lucock MD, et al. **Biomed Chromatogr** 1989 Mar;3(2):58–63

Accumulation of tetrahydrofolates in human plasma after leucovorin administration. Bunni MA, et al. **Cancer Chemother Pharmacol** 1989;23(6):353–7

Bioequivalence of two leucovorin calcium tablet formulations. De Vito JM, et al. **DICP** 1989 Feb; 23(2):153–4

CEREBROSPINAL FLUID

Evidence for CSF accumulation of 5-methyltetrahydrofolate during repeated courses of methotrexate plus folinic acid rescue. Thyss A, et al. **Br J Cancer** 1989 Apr;59(4):627–30

CHEMICAL SYNTHESIS

Synthesis and antifolate activity of 5-methyl-5,10-dideaza analogues of aminopterin and folic acid and an alternative synthesis of 5,10-dideazatetrahydrofolic acid, a potent inhibitor of glycinamide ribonucleotide formyltransferase. Piper JR, et al. **J Med Chem** 1988 Nov;31(11):2164–9

(6R,6S)-5,8,10-trideaza-5,6,7,8-tetrahydrofolate and 6(R,6S)-5,8,10-trideaza-5,6,7,8-tetrahydropteroyl-L-ornithine as potential antifolates and antitumor agents. Rosowsky A, et al. **J Med Chem** 1989 Mar;32(3):709–15

Synthesis and antitumor activity of 5-deaza-5,6,7,8-tetrahydrofolic acid and its N10-substituted analogues. Taylor EC, et al. **J Med Chem** 1989 Jul;32(7):1517–22

METABOLISM

Effect of nitrous oxide inactivation of vitamin B12-dependent methionine synthetase on the subcellular distribution of folate coenzymes in rat liver. Horne DW, et al. **Arch Biochem Biophys** 1989 May 1;270(2):729–33

Quantitation of carbon flow through the hepatic folate-dependent one-carbon pool in rats. Schalinske KL, et al. **Arch Biochem Biophys** 1989 May 15;271(1):49–55

Oxidation of 5-methyltetrahydrofolate in cobalamin-inactivated rats. Lumb M, et al. **Biochem J** 1989 Mar 15;258(3):907–10

Effect of polyglutamylation of 5,10-methylenetetrahydrofolate on the binding of 5-fluoro-2'-deoxyuridylate to thymidylate synthase purified from a human colon adenocarcinoma xenograft. Radparvar S, et al. **Biochem Pharmacol** 1989 Jan 15; 38(2):335–42

Analogs of tetrahydrofolate directed at folate-dependent purine biosynthetic enzymes. Characteristics of mediated entry and transport-related resistance in L1210 cells for 5,10-dideazatetrahydrofolate and two 10-alkyl derivatives. Sirotnak FM, et al. **Biochem Pharmacol** 1988 Dec 15; 37(24):4775–7

Molecular recognition by dihydrofolate reductase: n.m.r. studies of protein-ligand interactions. Roberts GC. **Biochem Soc Trans** 1988 Dec;16(6):925–7

Substrate flux through methylenetetrahydrofolate dehydrogenase: predicted effects of the concentration of methylenetetrahydrofolate on its partitioning into pathways leading to nucleotide biosynthesis or methionine regeneration. Green JM, et al. **Biochemistry** 1988 Oct 18; 27(21):8014–22

Selective expansion of 5,10-methylenetetrahydrofolate pools and modulation of 5-fluorouracil antitumor activity by leucovorin in vivo. Wright JE, et al. **Cancer Res** 1989 May 15;49(10):2592–6

Stable and sensitive method for the simultaneous

determination of N5-methyltetrahydrofolate, leucovorin, methotrexate and 7-hydroxymethotrexate in biological fluids. van Tellingen O, et al. **J Chromatogr** 1989 Mar 24; 488(2):379–88

In vivo oxidation of the methyl group of hepatic 5-methyltetrahydrofolate. Lumb M, et al. **J Clin Pathol** 1988 Nov;41(11):1158–62

Source of methyl groups in brain and nerve tissue in the rat. Long M, et al. **J Neurochem** 1989 Feb;52(2):377–80

PHARMACOKINETICS

Pharmacokinetic analysis of (6S)-5-formyltetrahydrofolate (1-CF), (6R)-5-formyltetrahydrofolate (d-CF) and 5-methyltetrahydrofolate (5-CH3-THF) in patients receiving constant i.v. infusion of high-dose (6R,S)-5-formyltetrahydrofolate (leucovorin). Straw JA, et al. **Adv Exp Med Biol** 1988;244:53–8

PHARMACOLOGY

Rescue effect of exogenous reduced folates on methotrexate polyglutamylation and dihydrofolate reductase activity in L1210 cells. Balińska M. **Acta Biochim Pol** 1988; 35(3):199–205

Analogs of tetrahydrofolate directed at folate-dependent purine biosynthetic enzymes. Characteristics of mediated entry and transport-related resistance in L1210 cells for 5,10-dideazatetrahydrofolate and two 10-alkyl derivatives. Sirotnak FM, et al. **Biochem Pharmacol** 1988 Dec 15; 37(24):4775–7

Induction of HL-60 leukemia cell differentiation by the novel antifolate 5,10-dideazatetrahydrofolic acid. Sokoloski JA, et al. **Cancer Res** 1989 Sep 1;49(17):4824–8

The effect of folic acid and 5-formyltetrahydrofolic acid on folate-deficient HEp 2 cells in culture. Leeming RJ, et al. **Clin Chim Acta** 1989 Apr 14;180(3):241–4

A new folate antimetabolite, 5,10-dideaza-5,6,7,8-tetrahydrofolate is a potent inhibitor of de novo purine synthesis. Beardsley GP, et al. **J Biol Chem** 1989 Jan 5;264(1):328–33

Differential sensitivity to (dl)-5-methyltetrahydrofolate of normal CFU-GM and HL-60 cells. Gattei V, et al. **Leuk Res** 1989;13(7):595–8

[Inhibition of muscle glycogen phosphorylase b by 5-methyltetrahydrofolic acid, 3'-chloro- and 3',6'-dichloromethotrexates] Klinov SV, et al. **Bioorg Khim** 1988 Sep;14(9):1162–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Role of enzyme-bound 5,10-methenyltetrahydropteroylpolyglutamate in catalysis by Escherichia coli DNA photolyase. Hamm-Alvarez S, et al. **J Biol Chem** 1989 Jun 5;264(16):9649–56

TETRAHYDROLINOLEIC ACIDS see **STEARIC ACIDS**

TETRAHYDRONAPHTHALENES see under **NAPHTHALENES**

TETRAHYDROPAPAVEROLINE see under **PAPAVERINE**

TETRAHYDROPTEROYLGLUTAMATE METHYLTRANSFERASE see under **METHYLTRANSFERASES**

TETRAHYDROURIDINE see under **URIDINE**

TETRAHYMENA

Dynein as a microtubule translocator in ciliary motility: current studies of arm structure and activity pattern. Satir P. **Cell Motil Cytoskeleton** 1988;10(1-2):263–70

ANALYSIS

Protein acylation in Tetrahymena. Ryals PE, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):408–15

Sequence-specific endoribonuclease activity of the Tetrahymena ribozyme: enhanced cleavage of certain oligonucleotide substrates that form mismatched ribozyme-substrate complexes. Zaug AJ, et al. **Biochemistry** 1988 Dec 13;27(25):8924–31

Methylated amino acids in the proteins of the cytoplasmic ribosome of Tetrahymena thermophila. Guérin MF, et al. **Biochimie** 1989 Jul;71(7):805–11

Ribosomal proteins of Tetrahymena thermophila. Correlation of one- and two-dimensional electrophoretic migration patterns and characterization of additional small and large subunit proteins. Petridou B, et al. **Biochimie** 1989 May; 71(5):655–65

Tetrahymena HMG nonhistone chromosomal protein. Isolation and amino acid sequence lacking the N- and C-terminal domains of vertebrate HMG 1. Hayashi T, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):577–81

Separation of phospholipids and phosphonolipids of Tetrahymena by high-performance liquid chromatography. Smith JD, et al. **J Chromatogr** 1988 Oct 14;431(2):395–9

Glutathione in Tetrahymena thermophila. Wagner B. **J Protozool** 1989 Jan-Feb;36(1):92–5

CLASSIFICATION

Comparison of ribosomal and isozymic phylogenies of tetrahymenine ciliates. Nanney DL, et al. **J Protozool** 1989 Jan-Feb;36(1):1–8

CYTOLOGY

Induction of cybrid strains of Tetrahymena thermophila by electrofusion. Gaertig J, et al. **J Cell Sci** 1988 Feb;89 (Pt 2):253–61

Cell volume and dry weight of cultured Tetrahymena. Heilung-Larsen P, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):319–24

DRUG EFFECTS

Polyamine effects on DNA-directed RNA polymerases in the ciliate Tetrahymena thermophila. In vivo- and in vitro-experiments suggesting highly specific regulative interactions. Eichler W, et al. **Biol Chem Hoppe Seyler** 1989 May;370(5):451–66

Phagocytosis in Tetrahymena thermophila: naloxone-reversible inhibition by opiates. De Jesus S, et al. **Comp Biochem Physiol [C]** 1989;92(1):139–42

Cytotoxic effects of cisplatin, cis-dichlorodiammineplatinum(II), on Tetrahymena. Nilsson JR. **J Cell Sci** 1988 Aug;90 (Pt 4):707–16

Ingestion, cytotoxicity, and early morphological effects of asbestos on Tetrahymena. Hjelm KK. **J Environ Pathol Toxicol Oncol** 1988;8(7 Spec No):15–26

Naloxone-reversible inhibition by opiates of phagocytosis in Tetrahymena thermophila and mouse macrophages. Casellas AM, et al. **P R Health Sci J** 1988 Aug;7(2):103–5

ENZYMOLOGY

Effect of catalytic hydrogenation of Tetrahymena ciliary phospholipid fatty acids on ciliary phospholipase A activity. Horváth I, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):409–12

Fractionation of Tetrahymena ciliary membranes with triton X-114 and the identification of a ciliary membrane ATPase. Dentler WL. **J Cell Biol** 1988 Dec;107(6 Pt 2):2679–88

Lysosomal enzymes in extracellular digestion in the unicellular eukaryote Tetrahymena. Tiedtke A, et al. **J Cell Physiol** 1988 Sep;136(3):554–6

Constitutive secretion of acid hydrolases in Tetrahymena thermophila. Tiedtke A, et al. **J Protozool** 1989 Jul-Aug; 36(4):378–82 (51 ref.)

Telomerase: the beginning of the ends [news] [see comments] Szostak JW. **Nature** 1989 Jan 26;337(6205):303–4. **Comment in:** Nature 1989 Apr 6;338(6215):468

Tetrahymena telomerase contains an internal RNA template. Lamond AI. **Trends Biochem Sci** 1989 Jun;14(6):202–4 (11 ref.)

GENETICS

Kinetics for reaction of a circularized intervening sequence with CU, UCU, CUCU, and CUCUCU: mechanistic implications from the dependence on temperature and on oligomer and Mg2+ concentrations. Sugimoto N, et al. **Biochemistry** 1988 Aug 23;27(17):6384–92

Specificity of arginine binding by the Tetrahymena intron. Yarus M. **Biochemistry** 1989 Feb 7;28(3):980–8

A novel DNA deletion-ligation reaction catalyzed in vitro by a developmentally controlled activity from Tetrahymena cells. Robinson EK, et al. **Cell** 1989 Sep 8; 58(5):887–900

Comparison of Tetrahymena ARS sequence function in the yeasts Saccharomyces cerevisiae and Schizosaccharomyces pombe. Luehrsen KR, et al. **Curr Genet** 1988 Sep; 14(3):225–33

DNA rearrangements associated with the H3 surface antigen gene of Tetrahymena thermophila that occur during macronuclear development. Tondravi MM. **Curr Genet** 1988 Dec;14(6):617–26

Cloning of Tetrahymena genomic sequences whose message abundance is increased during conjugation. Rogers MB, et al. **Dev Biol** 1989 Jan;131(1):261–8

Two guanosine binding sites exist in group I self-splicing IVS RNAs. Kay PS, et al. **EMBO J** 1988 Nov;7(11):3531–7

Identifying functional regions of rRNA by insertion mutagenesis and complete gene replacement in Tetrahymena thermophila. Sweeney R, et al. **EMBO J** 1989 Mar;8(3):933–8

In vitro synthesis and processing of pre-rRNA in isolated macronuclei from Tetrahymena. Kister KP, et al. **Eur J Cell Biol** 1988 Jun;46(2):233–43

Characterization of pre-rRNA components in ribosomal precursor particles from macronuclei of Tetrahymena thermophila. Müller B, et al. **Eur J Cell Biol** 1989 Aug; 49(2):225–35

Transformation of Tetrahymena with hypermethylated ribosomal RNA genes. Karrer KM, et al. **Gene** 1988 Dec 25;74(1):105–7

Replacement of the macronuclear ribosomal RNA genes of a mutant Tetrahymena using electroporation. Orias E, et al. **Gene** 1988 Oct 30;70(2):295–301

Determinants of the 3' splice site for self-splicing of the Tetrahymena pre-rRNA. Price JV, et al. **Genes Dev** 1988 Nov;2(11):1439–47

Arrest of micronuclear DNA replication during genomic exclusion in Tetrahymena produces haploid strains. Kaczanowski A, et al. **Genetics** 1989 Jan;121(1):37–45

Phenotypic assortment in Tetrahymena thermophila: assortment kinetics of antibiotic-resistance markers, mtA, death, and the highly amplified rDNA locus. Merriam EV, et al. **Genetics** 1988 Oct;120(2):389–95

A conditional mutant having paralyzed cilia and a block in cytokinesis is rescued by cytoplasmic exchange in Tetrahymena thermophila. Pennock DG, et al. **Genetics** 1988 Nov;120(3):697–705

Ciliate evolution: the ribosomal phylogenies of the tetrahymenine ciliates. Preparata RM, et al. **J Mol Evol** 1989 May;28(5):427–41

Identification of a cDNA coding for the SerH3 surface protein of Tetrahymena thermophila. Doerder FP, et al. **J Protozool** 1989 May-Jun;36(3):304–7

Codon usage in Tetrahymena and other ciliates. Martindale DW. **J Protozool** 1989 Jan-Feb;36(1):29–34

Sequence structures of two developmentally regulated, alternative DNA deletion junctions in Tetrahymena thermophila. Austerberry CF, et al. **Mol Cell Biol** 1988 Sep;8(9):3947–50

The conserved U.G pair in the 5' splice site duplex of a group I intron is required in the first but not the second step of self-splicing. Barfod ET, et al. **Mol Cell Biol** 1989 Sep; 9(9):3657–66

Molecular analysis of N6-methyladenine patterns in Tetrahymena thermophila nuclear DNA. Capowski EE, et al. **Mol Cell Biol** 1989 Jun;9(6):2598–605

Reproducible and variable rearrangements of a Tetrahymena thermophila surface protein gene family occur during macronuclear development. Kile JP, et al. **Mol Cell Biol** 1988 Nov;8(11):5043–6

Telomeric repeats of Tetrahymena malaccensis mitochondrial DNA: a multimodal distribution that fluctuates erratically during growth. Morin GB, et al. **Mol Cell Biol** 1988 Oct; 8(10):4450–8

Localization and expression of mRNA for a macronuclear-specific histone H2A variant (hv1) during the cell cycle and conjugation of Tetrahymena thermophila. White EM, et al. **Mol Cell Biol** 1988 Nov; 8(11):4780–6

The replication advantage of a free linear rRNA gene is restored by somatic recombination in Tetrahymena thermophila. Yaeger PC, et al. **Mol Cell Biol** 1989 Feb; 9(2):452–60

Accurate processing and amplification of cloned germ line copies of ribosomal DNA injected into developing nuclei of Tetrahymena thermophila. Yao MC, et al. **Mol Cell Biol** 1989 Mar;9(3):1092–9

RNA-catalysed synthesis of complementary-strand RNA. Doudna JA, et al. **Nature** 1989 Jun 15;339(6225):519–22

A telomeric sequence in the RNA of Tetrahymena telomerase required for telomere repeat synthesis. Greider CW, et al. **Nature** 1989 Jan 26;337(6205):331–7

Tetrahymena micronuclear sequences that function as telomeres in yeast. Shampay J, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3247–60

Effects of substrate structure on the kinetics of circle opening reactions of the self-splicing intervening sequence from Tetrahymena thermophila: evidence for substrate and Mg2+ binding interactions. Sugimoto N, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):355–71

The tRNAglu (anticodon TTU) gene and its upstream sequence coding for a homolog of the E. coli large ribosome-subunit protein L14 in the Tetrahymena mitochondrial genome. Suyama Y, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):803

Compensatory mutations demonstrate that P8 and P6 are RNA secondary structure elements important for processing of a group I intron. Williamson CL, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):675–89

A Tetrahymena intron nucleotide connected to the GTP/arginine site. Yarus M, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):6969–81

Defining the inside and outside of a catalytic RNA molecule. Latham JA, et al. **Science** 1989 Jul 21;245(4915):276–82

Stereochemistry of RNA cleavage by the Tetrahymena ribozyme and evidence that the chemical step is not rate-limiting. McSwiggen JA, et al. **Science** 1989 May 12; 244(4905):679–83

Stereochemical course of catalysis by the Tetrahymena ribozyme. Rajagopal J, et al. **Science** 1989 May 12; 244(4905):692–4

GROWTH & DEVELOPMENT

Direct measurement of tubulin and bulk message distributions on polysomes of growing, starved and deciliated Tetrahymena using RNA gel blots of sucrose gradients containing acrylamide. Calzone FJ, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9597–609

METABOLISM

Use of 3-aminopropanol as an ethanolamine analogue in the study of phospholipid metabolism in Tetrahymena. Smith JD, et al. **Biochem J** 1988 Aug 15;254(1):301–2

Lipid modification during cytodifferentiation of Tetrahymena vorax. Whole cell phospholipids and triacylglycerols of microstomal and macrostomal phenotypes. Ryals PE, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):438–44

Protein-RNA crosslinking in the subunits of the cytoplasmic ribosome of Tetrahymena thermophila. Petridou B, et al.

Biochimie 1989 May;71(5):667–79
Purification and partial characterization of a transcription-inhibitory peptide from Tetrahymena. Andersen HA, et al. **Biol Chem Hoppe Seyler** 1989 Jan; 370(1):41–6
The opiate receptor: a single 110 kDa recognition molecule appears to be conserved in Tetrahymena, leech, and rat. Zipser B, et al. **Brain Res** 1988 Nov 1;463(2):296–304
Studies into hormonal imprinting in a Tetrahymena thermophila mutant incapable of lysosomal enzyme secretion. Kovacs P, et al. **Cell Mol Biol** 1989;35(3):293–6
Presence of benzodiazepine binding sites (receptors) and amplification thereof by imprinting in Tetrahymena. Csaba G, et al. **Experientia** 1989 Jan 15;45(1):96–8
The mechanism of receptor development as implied by hormonal imprinting studies on unicellular organisms. Kovács P. **Experientia** 1986 Jul 15;42(7):770–5
Maintenance of methylation patterns in Tetrahymena thermophila. Capowski EE, et al. **Gene** 1988 Dec 25; 74(1):103–4
Cation channels from ciliary membrane of Tetrahymena reconstituted into planar lipid bilayer. Comparison between the channels from the wild T. thermophila and from its mutant which does not show ciliary reversal. Fujiwara C, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):344–8
Ca2+/calmodulin-dependent phosphorylation of ciliary beta-tubulin in Tetrahymena. Hirano-Ohnishi J, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):858–60
Antibodies specific to acetylated histones document the existence of deposition- and transcription-related histone acetylation in Tetrahymena. Lin R, et al. **J Cell Biol** 1989 May;108(5):1577–88
Characterization of phosphorylation sites in histone H1 in the amitotic macronucleus of Tetrahymena during different physiological states. Roth SY, et al. **J Cell Biol** 1988 Dec; 107(6 Pt 2):2473–82
Signal transduction events associated with exocytosis in ciliates. Satir BH. **J Protozool** 1989 Jul-Aug;36(4):382–9 (60 ref.)
Methylation of replicating and nonreplicating DNA in the ciliate Tetrahymena thermophila. Harrison GS, et al. **Mol Cell Biol** 1989 Feb;9(2):828–30

PHYSIOLOGY

Gibbs-Donnan ratio and channel conductance of Tetrahymena cilia in mixed solution of K+ and Ca2+. Oosawa Y, et al. **Biophys J** 1988 Sep;54(3):407–10
Pressure sensitivity of tubulin expression in Tetrahymena. Tahir SK, et al. **Cell Biol Int Rep** 1988 Dec;12(12):1005–9
Concanavalin A inhibits mating type recognition in Tetrahymena. Pagliaro L, et al. **Exp Cell Res** 1989 Apr; 181(2):374–8
Histone acetylation in conjugating Tetrahymena thermophila. Pfeffer U, et al. **J Cell Biol** 1989 Sep;109(3):1007–14
Calcium regulates the regeneration of cilia in Tetrahymena thermophila. Joglar-Ramirez JA, et al. **J Protozool** 1988 Aug;35(3):413–7

ULTRASTRUCTURE

Characteristics of basal body cartwheel reassembly. Gavin RH, et al. **J Protozool** 1989 Jul-Aug;36(4):391–7

TETRAHYMENA PYRIFORMIS

ANALYSIS

The presence of acyl-CoA: cholesterol acyltransferase in Tetrahymena pyriformis W. Billheimer JT, et al. **Comp Biochem Physiol [B]** 1989;92(4):675–80

DRUG EFFECTS

Effect of puromycin on synthesis, processing, and nucleocytoplasmic translocation of rRNA in Tetrahymena pyriformis. Eckert WA. **Comp Biochem Physiol [B]** 1977; 57(4):275–80

ENZYMOLOGY

Purification and properties of an acid phosphoprotein phosphatase from Tetrahymena pyriformis. Lougovoi CP, et al. **Biochem Int** 1988 Nov;17(5):847–54
A model for the regulation of the activity of L-asparaginase/kinase enzyme of Tetrahymena pyriformis. Tsirka SA, et al. **Biochem Int** 1989 Jul;19(1):9–17
Interconversion of Tetrahymena pyriformis ornithine decarboxylase from inactive to active form by phosphorylation. Lougovoi CP, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1-2):70–5
Preliminary characterization of the delta-9 desaturase of Tetrahymena pyriformis W. Shipiro H, et al. **Comp Biochem Physiol [B]** 1978;61(4):513–20
Levels of true thymidine kinase and nucleoside phosphotransferase in two strains of Tetrahymena pyriformis under different growth conditions. Yuyama S, et al. **Comp Biochem Physiol [B]** 1979;62(4):325–8
Purification and properties of a membrane-bound L-asparaginase of Tetrahymena pyriformis. Triantafillou DJ, et al. **Mol Cell Biochem** 1988 May;81(1):43–51
In vitro alterations of L-asparaginase activity of Tetrahymena pyriformis by lipids. Tsirka SA, et al. **Mol Cell Biochem** 1988 Oct;83(2):147–55

GENETICS

Ubiquitin genes in Tetrahymena pyriformis and their expression during heat shock. Neves AM, et al. **Gene** 1988 Dec 15;73(1):87–96
Sequence of one alpha- and two beta-tubulin genes of Tetrahymena pyriformis. Structural and functional relationships with other eukaryotic tubulin genes. Barahona I, et al. **J Mol Biol** 1988 Aug 5;202(3):365–82

GROWTH & DEVELOPMENT

Effect of diphenyl, o-phenylphenol and 2-(4-thiazoyl) benzimidazole on growth of Tetrahymena pyriformis. Otsuka K, et al. **Bull Environ Contam Toxicol** 1988 Aug; 41(2):282–5
Ultradian photosynchronization in Tetrahymena pyriformis GLC is related to modal cell generation time: further evidence for a common timer model. Readey MA. **Chronobiol Int** 1987;4(2):195–208
Variation in the growth medium during the culture cycle of Tetrahymena: with special reference to ammonia (NH3), ammonium (NH4+), and pH1. Larsen J, et al. **J Protozool** 1988 Nov;35(4):541–6

METABOLISM

The effect of hormonal imprinting on 3H-steroid incorporation of Tetrahymena pyriformis. Fülöp AK, et al. **Acta Morphol Hung** 1988;36(1-2):27–33
Effect of glycosylation inhibitors on the binding of insulin and lectins and on hormonal imprinting in Tetrahymena. Kovács P, et al. **Acta Physiol Hung** 1988;72(2):135–41
Induction of hormone receptor formation in the unicellular Tetrahymena. Kovács P, et al. **Biosci Rep** 1989 Feb; 9(1):87–92
Synchronizing temperatures and rRNA metabolism in Tetrahymena pyriformis. Kaffenberger W, et al. **Comp Biochem Physiol [B]** 1979;64(2):167–73
The effects of concanavalin A, cerulenin, hydroxyurea and tunicamycin on the incorporation of amino acids and glucosamine in Tetrahymena pyriformis. Richmond JE. **Comp Biochem Physiol [B]** 1979;64(2):161–5
Cell cycle dependent variation of calmodulin in Tetrahymena. Singh J, et al. **Cytobios** 1988;55(221):95–103
Specificity of the dexamethasone-induced steroid receptor in Tetrahymena. Csaba G, et al. **Experientia** 1989 Feb 15; 45(2):174–5
Purification of Tetrahymena actin reveals some unusual properties. Hirono M, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):75–9

MICROBIOLOGY

[Population dynamics of Yersinia pseudotuberculosis in association with the infusorian Tetrahymena pyriformis] Pushkareva VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):17–21 (Eng. Abstr.) **(Rus)**

TETRAISOPROPYLPYROPHOSPHAMIDE see under **ORGANOPHOSPHORUS COMPOUNDS**

TETRAKAIN see **TETRACAINE**

TETRALOGY OF FALLOT

Tetralogy of Fallot: characteristics, dental implications and case study. Rockman RA. **ASDC J Dent Child** 1989 Mar-Apr;56(2):147–50
[A congress on Fallot's tetralogy] Abon P, et al. **Lakartidningen** 1988 Dec 21;85(51):4516–7 **(Swe)**

COMPLICATIONS

Growth of the pulmonary artery after neonatal balloon dilatation of the right ventricular outflow tract in an infant with the tetralogy of Fallot and atrioventricular septal defect. Parsons JM, et al. **Br Heart J** 1989 Jul;62(1):63–8
A case of Dandy-Walker malformation: consideration on the teratogenic period and sleep structures. Kohyama J, et al. **Brain Dev** 1988;10(6):392–6
Brain abscess in cyanotic congenital heart disease. Chakraborty RN, et al. **Indian Heart J** 1989 May-Jun; 41(3):190–3
Facial and immunological anomalies associated with tetralogy of Fallot. Radford DJ, et al. **Int J Cardiol** 1989 Feb;22(2):229–39
Tetralogy of Fallot with discrete subaortic shelf; cross-sectional echocardiographic and Doppler diagnosis of a rare association. Radhakrishnan S, et al. **Int J Cardiol** 1989 Jun;23(3):413–4
Tetralogy of Fallot associated with anomalous origin of the left coronary artery from the pulmonary artery, pulmonary artery hypoplasia and atrial septal defect. A case report. Kromann Hansen O, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):291–4
[Hypertrophic osteoarthropathy and congenital cyanotic heart defects] Berdah C, et al. **Arch Fr Pediatr** 1989 Jan; 46(1):31–3 (12 ref.) (Eng. Abstr.) **(Fre)**
[Extracardiac malformations in tetralogy of Fallot] Voisin M, et al. **Arch Mal Coeur** 1989 May;82(5):689–92 (14 ref.) (Eng. Abstr.) **(Fre)**
[Pulmonary vascular disease in shunted and nonshunted patients with tetralogy of Fallot] Yamaki S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):62–7 (Eng. Abstr.) **(Jpn)**
[A case of atypical Fallot's tetralogy with rare cerebral vascular anomaly and cerebral hemorrhage] Fukahori A, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):420–1 **(Jpn)**

DIAGNOSIS

Prenatal diagnosis and circulatory characteristics in tetralogy of Fallot with absent pulmonary valve. Fouron JC, et al. **Am J Cardiol** 1989 Sep 1;64(8):547–9
Entrapment of venous catheter following inferior vena caval spasm. Dalvi BV, et al. **Cathet Cardiovasc Diagn** 1989 Jul; 17(3):161–3
Tetralogy of Fallot: MR findings. Mirowitz SA, et al. **Radiology** 1989 Apr;171(1):207–12
[The "asymmetric crying facies": an indication of other malformations?] Fiocchi A, et al. **Minerva Pediatr** 1988 Mar;40(3):195–8 (16 ref.) (Eng. Abstr.) **(Ita)**

DRUG THERAPY

Propranolol induced bradycardia in tetralogy of Fallot. Clark DJ, et al. **Br Heart J** 1989 Apr;61(4):378–9
Continuous intravenous phenylephrine infusion for treatment of hypoxemic spells in tetralogy of Fallot. Shaddy RE, et al. **J Pediatr** 1989 Mar;114(3):468–70

ENZYMOLOGY

Effect of oxygen tension on the anti-oxidant enzyme activities of tetralogy of Fallot ventricular myocytes. Li RK, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):567–75

ETIOLOGY

Arrested rotation of the outflow tract may explain tetralogy of Fallot and transposition of the great arteries. Lomonico MP, et al. **Pediatr Pathol** 1988;8(3):267–81

HISTORY

[Tetralogy of Fallot. Apropos of a centenary] Dupuis C, et al. **Arch Fr Pediatr** 1988 Nov;45(9):609–11 (Eng. Abstr.) **(Fre)**
[A centennial: tetralogy of Fallot (1888–1988)] Gérard R. **Arch Mal Coeur** 1988 Nov;81(11):1313–5 **(Fre)**

IMMUNOLOGY

[Cellular and humoral immunity of patients operated on for tetralogy of Fallot] Lukoianova TN, et al. **Grudn Khir** 1988 Sep-Oct;(5):44–6 (Eng. Abstr.) **(Rus)**

NURSING

[Experience in coordinating the radical correction of tetralogy of Fallot] Yao BY. **Chung Hua Hu Li Tsa Chih** 1988 Oct;23(10):534–5 **(Chi)**

PATHOLOGY

The size of the orifices of the pulmonary trunk and aorta in atrial septal defect, ventricular septal defect, patent ductus arteriosus and tetralogy of Fallot. Robida A. **Acta Med Iugosl** 1989;43(2):103–12
Fistulous communications between a solitary coronary artery and the pulmonary arteries as the primary source of pulmonary blood supply in tetralogy of Fallot with pulmonary valve atresia. Pahl E, et al. **Am J Cardiol** 1989 Jan 1;63(1):140–3
A 51-year-old man with palpitation, short breath, cyanosis and suffocation [clinical conference] **Chin Med J [Engl]** 1989 Feb;102(2):152–8
IVC interruption in a case of TOF. Shah LS, et al. **Indian Heart J** 1988 Jul-Aug;40(4):277–80
Tetralogy of Fallot—a centennial review. Anderson RH, et al. **Int J Cardiol** 1988 Dec;21(3):219–32 (26 ref.)
A rare case of tetralogy of Fallot with unusual blood supply to the left lung. Anjos RT, et al. **Int J Cardiol** 1989 Sep; 24(3):363–6
Parasitic conjoined twins with omphalocele and tetralogy of Fallot. Husain AN, et al. **Pediatr Pathol** 1989;9(3):321–8
[Ultrastructural study of the myocardium of the right infundibulum in the tetralogy of Fallot] Song LF. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):252–3, 18 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

Exercise-induced ventricular arrhythmia after repair of tetralogy of Fallot. Fukushige J, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Feb;31(1):30–4
The usefulness of Doppler echocardiography for the evaluation of hemodynamics in tetralogy of Fallot: comparison of the patients with pre- and post-corrective surgery and control healthy children. Watari T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Oct;30(5):569–87
Comparison of cardiovascular adjustments to exercise in adolescents 8 to 15 years of age after correction of tetralogy of fallot, ventricular septal defect or atrial septal defect. Perrault H, et al. **Am J Cardiol** 1989 Jul 15;64(3):213–7
Incidence of residual defects determining the clinical outcome after correction of tetralogy of Fallot: postoperative late follow-up. Calza G, et al.

Ann Thorac Surg 1989 Mar;47(3):428–35

Aortic regurgitation in Tetralogy of Fallot. Kothari SS, et al. **Indian Heart J** 1987 Nov–Dec;39(6):17–20

Congenital pulmonary steal associated with Tetralogy of Fallot, right aortic arch and an isolated left carotid artery. Tozzi R, et al. **Pediatr Radiol** 1989;19(6–7):449–51

[Evaluation of right ventricular function using a two-dimensional echocardiographic apical four-chamber view] Cui W, et al.
Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1988 Dec; 16(6):356–7, 383–4 (Eng. Abstr.) **(Chi)**

[Risk scores for ventricular premature contraction and exercise—performance after repair of tetralogy of Fallot] Kori Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug; 89(8):1273–8 (Eng. Abstr.) **(Jpn)**

[A comparative evaluation of methods of radiologic diagnosis in determining the functional status of the right ventricular myocardium in tetralogy of Fallot] Dynnik IB, et al.
Vestn Rentgenol Radiol 1989 Jan–Feb;(1):28–32 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

[Angiography of right ventricular volume after surgical repair of tetralogy of Fallot] Chantepie A, et al.
Arch Mal Coeur 1989 May;82(5):693–8 (28 ref.) (Eng. Abstr.) **(Fre)**

REHABILITATION

[Physical work capacity and social adaptation of patients with tetralogy of Fallot who have undergone the Blalock–Taussig operation at an early age] Il'in RN, et al.
Pediatriia 1988;(6):53–7 **(Rus)**

SURGERY

Response of upper limb blood flow to handgrip exercise after Blalock–Taussig operation (for tetralogy of Fallot) or subclavian flap operation (for aortic isthmic coarctation). Joyner MJ, et al. **Am J Cardiol** 1989 Jun 1;63(18):1379–84

Intraoperative hypoxemic spells in tetralogy of Fallot. An echocardiographic analysis of diagnosis and treatment. Greeley WJ, et al. **Anesth Analg** 1989 Jun;68(6):815–9

Anesthetic management of tetralogy of Fallot with absent pulmonary valve. Hosking MP, et al. **Anesthesiology** 1989 May;70(5):863–5

Right atrial approach for surgical correction of tetralogy of Fallot. Dietl CA, et al. **Ann Thorac Surg** 1989 Apr; 47(4):546–51; discussion 551–2

Early primary repair of tetralogy of Fallot [letter] Jacobs ML, et al. **Ann Thorac Surg** 1988 Dec;46(6):711

Tetralogy of Fallot. Using pulmonary allograft conduits to reconstruct the right ventricular outflow tract. Maloney SM. **AORN J** 1989 Sep;50(3):554–5, 557–9, 561–2

Long-term valvular function after total repair of tetralogy of Fallot. Relation to ventricular arrhythmias. Zahka KG, et al. **Circulation** 1988 Nov;78(5 Pt 2):III14–9

Handgrip strength after the Blalock–Taussig shunt: 14 to 34 year follow-up. Zahka KG, et al. **Clin Cardiol** 1988 Sep; 11(9):627–9

Postoperative cardiopulmonary failure in tetralogy of Fallot with absent pulmonary valve syndrome treated by extracorporeal membrane oxygenation. Pahl E, et al.
Int J Cardiol 1988 Aug;20(2):276–8

Profile of creatine phosphokinase (CK) and its isoenzyme MB (CK-MB) during corrective procedures of congenital cyanotic heart disease. Ngalikpima VF, et al.
J Cardiovasc Surg (Torino) 1989 May–Jun;30(3):342–7

Chronotropic and inotropic supports are both required to increase cardiac output early after corrective operations for tetralogy of Fallot. Berner M, et al.
J Thorac Cardiovasc Surg 1989 Feb;97(2):297–302

Determination of the need for a ventriculotomy in the repair of tetralogy of Fallot. McGrath LB, et al.
J Thorac Cardiovasc Surg 1988 Dec;96(6):947–51

Ventricular premature contraction after repair of tetralogy of Fallot—the influence of postoperative factors, particularly the right ventricular regional wall motion. Kori Y, et al. **Jpn Circ J** 1989 Mar;53(3):213–8

Incidence and severity of ventricular arrhythmia in patients after repair of tetralogy of Fallot. Fukushige J, et al.
Jpn Heart J 1988 Nov;29(6):795–800

Entrainment of ventricular tachycardia in postoperative tetralogy of Fallot. Kremers MS, et al. **PACE** 1988 Sep; 11(9):1310–4

Radionuclide evaluation of right ventricular wall motion after surgery in tetralogy of Fallot. Ratib O, et al.
Pediatr Cardiol 1989 Winter;10(1):25–31

Echocardiographic left ventricular size in the selection of surgical treatment in patients with tetralogy of Fallot. Ozkutlu S, et al. **Turk J Pediatr** 1987 Oct–Dec;29(4):187–97

Pulse oximetry during shunt surgery in pediatric patients with tetralogy of fallot. Oh HK, et al. **Yonsei Med J** 1989; 30(1):12–5

[Plasma fibronectin level in pediatric open heart surgery] Ye YC, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr;16(2):89–91, 127 (Eng. Abstr.) **(Chi)**

[Tetralogy of Fallot. 20 years' experience in 144 cases] Hallali P, et al. **Arch Mal Coeur** 1989 May;82(5):683–8 (13 ref.) (Eng. Abstr.) **(Fre)**

[Percutaneous transluminal angioplasty of stenosis of the pulmonary arteries after surgical repair of tetralogy of Fallot] Worms AM, et al. **Arch Mal Coeur** 1989 May; 82(5):701–6 (Eng. Abstr.) **(Fre)**

[Immediate postoperative measurement of systolic pressure of the right ventricle after repair of tetralogy of Fallot. Comparison with measurements obtained after the operation (letter)] Vaksmann G, et al. **Presse Med** 1989 Apr 29;18(17):898 **(Fre)**

[Cardiac arrhythmia following total correction of tetralogy of Fallot] Janoušek J, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):323–6 (Eng. Abstr.) **(Ger)**

[Incidence and significance of ventricular arrhythmia after surgical correction of Fallot's tetralogy] Conte MR, et al. **Cardiologia** 1989 Mar;34(3):265–9 (Eng. Abstr.) **(Ita)**

[Seroma: a complication of systemic–pulmonary shunt with a tubular prosthesis] Marianeschi SM, et al. **Cardiologia** 1989 Mar;34(3):271–4 (Eng. Abstr.) **(Ita)**

[Balloon dilatation angioplasty of stenotic pulmonary artery simultaneously with a Blalock–Taussig shunt in extremely tetralogy of Fallot] Ishii K, et al. **Kyobu Geka** 1988 Nov; 41(12):971–5 (Eng. Abstr.) **(Jpn)**

[A case of tetralogy of Fallot with pulmonary aneurysm] Murayama H, et al. **Kyobu Geka** 1989 Mar;42(3):229–31 (Eng. Abstr.) **(Jpn)**

[A clinical investigation of pulmonary valve replacement in tetralogy of Fallot] Okita Y, et al. **Kyobu Geka** 1988 Nov; 41(12):947–50 (Eng. Abstr.) **(Jpn)**

[Right ventricular regional wall motion and function after tetralogy repair] Onitsuka T, et al. **Kyobu Geka** 1989 Jan; 42(1):2–10 (Eng. Abstr.) **(Jpn)**

[Reconstruction of right ventricular outflow tract with mechanical valve replacement in situ for tetralogy of Fallot] Matsuda K. **Nippon Geka Hokan** 1988 Jul 1; 57(4):280–6 (Eng. Abstr.) **(Jpn)**

[A case report of compression of right pulmonary artery and bronchus by aneurysmal dilated ascending aorta in tetralogy of Fallot—suspension of ascending aorta] Fujiwara K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):374–8 (Eng. Abstr.) **(Jpn)**

[Aortocoronary bypass grafting in an infant with tetralogy of Fallot combined with subpulmonary ventricular septal defect and left single coronary artery nine years follow-up] Kainuma Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1362–8 (Eng. Abstr.) **(Jpn)**

[Systemic–pulmonary shunt for tetralogy of Fallot—analysis for optimal shunt flow] Kawata H, et al.
Nippon Kyobu Geka Gakkai Zasshi 1988 Sep; 36(9):2097–105 (Eng. Abstr.) **(Jpn)**

[Noninvasive and quantitative evaluation of pulmonary regurgitation by pulsed Doppler echocardiography—a study in patients with tetralogy of Fallot after corrective surgery] Matsuda Y, et al.
Nippon Kyobu Geka Gakkai Zasshi 1989 Feb;37(2):255–64 (Eng. Abstr.) **(Jpn)**

[Regional and global right ventricular function and its relations to operative procedures late after repair of tetralogy of Fallot] Miura T.
Nippon Kyobu Geka Gakkai Zasshi 1988 Oct; 36(10):2238–47 (Eng. Abstr.) **(Jpn)**

[Tetralogy of Fallot associated with total anomalous pulmonary venous drainage] Onoe M, et al.
Nippon Kyobu Geka Gakkai Zasshi 1988 Nov; 36(11):2499–503 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Successful simultaneous repair of tetralogy of Fallot and congenital tracheal stenosis in a 5-year old child] Oshima Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):535–9 (Eng. Abstr.) **(Jpn)**

[A successful case of primary repair of total anomalous pulmonary venous drainage combined with tetralogy of Fallot] Shibanaka K, et al.
Nippon Kyobu Geka Gakkai Zasshi 1988 Dec;36(12):2630–5 (13 ref.) (Eng. Abstr.) **(Jpn)**

[Evaluation of the cardiovascular system in children after total surgical correction of tetralogy of Fallot based on roentgenograms of the chest] Tarnowska A.
Pol Przegl Radiol (Warszawa) 1987 Sep–Oct;51(5):234–40 (Eng. Abstr.) **(Pol)**

[Radical correction of Fallot's tetralogy following 2 earlier operations, transventricular pulmonary valvulotomy and cavopulmonary anastomosis] Podzolkov VP, et al.
Grudn Khir 1989 Mar–Apr;(2):92–3 **(Rus)**

[Removal of the intervascular anastomoses in the radical correction of tetralogy of Fallot] Selivanenko VT, et al.
Sov Med 1988;(6):28–33 (Eng. Abstr.) **(Rus)**

[Surgical anatomy of tetralogy of Fallot] Muñoz Castellanos L, et al. **Arch Inst Cardiol Mex** 1988 Jul–Aug;58(4):313–23 (38 ref.) (Eng. Abstr.) **(Spa)**

THERAPY

Balloon dilatation of the pulmonary valve in the first year of life in patients with tetralogy of Fallot: a preliminary study. Qureshi SA, et al. **Br Heart J** 1988 Sep;60(3):232–5

[Palliative percutaneous pulmonary valvuloplasty in neonatal forms of tetralogy of Fallot] de Geeter B, et al.
Arch Fr Pediatr 1989 Feb;46(2):117–9 (Eng. Abstr.) **(Fre)**

TETRAMERES see **SPIRUROIDEA**

TETRAMETHYL ACRIDINE DIAMINE see **ACRIDINE ORANGE**

TETRAMETHYLPHENYLENEDIAMINE see under **PHENYLENEDIAMINES**

TETRAMISOLE

ANALOGS & DERIVATIVES

Comparative inhibition of human alkaline phosphatase and diamine oxidase by bromo-levamisole, cimetidine and various derivatives. Metaye T, et al.
Biochem Pharmacol 1988 Nov 15;37(22):4263–8

PHARMACOLOGY

Antagonization of tetramisole toxicity by hexamethonium. Fayez M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):317–9

L-TETRAMISOLE see **LEVAMISOLE**

TETRAMON see **TETRAETHYLAMMONIUM COMPOUNDS**

TETRANITROMETHANE see under **METHANE**

TETRAPETALONEMA see **MANSONELLA**

TETRAPHENYLBORATE see under **BORON COMPOUNDS**

TETRAPLEGIA see **QUADRIPLEGIA**

TETRATHIONIC ACID see under **THIOSULFATES**

TETRAZOLES see under **AZOLES**

TETRAZOLIUM SALTS

The involvement of superoxide anions in the nitro blue tetrazolium chloride reduction mediated by NADH and phenazine methosulfate. Van Noorden CJ, et al.
Anal Biochem 1989 Jan;176(1):170–4

Appraisal of the MTT assay as a rapid test of chemosensitivity in acute myeloid leukaemia. Sargent JM, et al. **Br J Cancer** 1989 Aug;60(2):206–10

Effect of nitroblue tetrazolium concentration on the fructosamine assay for quantifying glycated protein. Chung HF, et al. **Clin Chem** 1988 Oct;34(10):2106–11

Serum glycated beta-lipoprotein determined by agarose-gel electrophoresis with nitroblue tetrazolium coloration. Kobayashi K, et al. **Clin Chem** 1989 Jan;35(1):177–8

Biological effects of cigarette smoking assessed with the NBT test. Moszczyński P, et al. **Folia Haematol (Leipz)** 1989; 116(1):157–60

Immunohistochemical detection of antibody in tissue sections of non-perfused and ex vivo-perfused organs using a tetrazolium alkaline phosphatase substrate. Doria M, et al.
Histochemistry 1988;89(5):443–6

Indoxyl-tetranitro blue tetrazolium method for detection of alkaline phosphatase in immunohistochemistry. Brenan M, et al. **J Histochem Cytochem** 1989 Aug;37(8):1299–301

Superoxide-dependent nitroblue tetrazolium reduction and expression of cytochrome b-245 components by human tonsillar B lymphocytes and B cell lines. Maly FE, et al.
J Immunol 1989 Feb 15;142(4):1260–7

Re-examination and further development of a precise and rapid dye method for measuring cell growth/cell kill. Hansen MB, et al. **J Immunol Methods** 1989 May 12; 119(2):203–10

Sodium succinate enhances the colorimetric reaction of the in vitro chemosensitivity test: MTT assay. Machara Y, et al. **Oncology** 1988;45(6):434–6

[Model studies in the histochemical investigation of hydrolases using tetrazolium salts] Seidler E.
Acta Histochem (Jena) 1988;84(2):227–34 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

Spectrophotometric determination of browning products of glycation of protein amino groups based on their reactivity with nitro blue tetrazolium salts. Ghiggeri GM, et al.
Analyst 1988 Jul;113(7):1101–4

Ability of peripheral blood neutrophils from patients with infectious bronchial asthma to engulf latex particles and reduce nitroblue tetrazolium. Matusiewicz R, et al.
Arch Immunol Ther Exp (Warsz) 1988;36(1):55–9

The tetrazolium dye assay for rapid in vitro assessment of cytotoxicity. Iselt M, et al. **Arzneimittelforschung** 1989 Jul; 39(7):747–9

Comparison of tetrazolium colorimetric and [3H]-uridine assays for in vitro chemosensitivity testing. Ford CH, et al. **Cancer Chemother Pharmacol** 1989;24(5):295–301

Chemosensitivity and radiosensitivity of small cell lung cancer cell lines studied by a newly developed 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (MTT) hybrid assay. Hida T, et al.
Cancer Res 1989 Sep 1;49(17):4785–90

Comparison between the chromate inhibition test and a cytochemical method for the determination of glucose-6-phosphate dehydrogenase deficiency in erythrocytes. Jonges GN, et al. **Clin Chim Acta** 1989 May 15;181(2):135–41

On the role of oxygen in dehydrogenase reactions using tetrazolium salts. Van Noorden CJ. **Histochem J** 1988 Oct; 20(10):587–93

Detection of activated lymphocyte subsets by fluorescence and MTT staining. Schauer U, et al.

J Immunol Methods 1989 Jan 17;116(2):221–7
New soluble-formazan assay for HIV-1 cytopathic effects: application to high-flux screening of synthetic and natural products for AIDS-antiviral activity [published erratum appears in J Natl Cancer Inst 1989 Jun 21;81(12):963] Weislow OS, et al. J Natl Cancer Inst 1989 Apr 19; 81(8):577–86
Predictability of in vivo chemosensitivity by in vitro MTT assay with reference to the clonogenic assay. Shimoyama Y, et al. J Surg Oncol 1989 May;41(1):12–8
Use of the MTT assay for rapid determination of chemosensitivity of human leukemic blast cells. Campling BG, et al. Leuk Res 1988;12(10):823–31
The alterations of magnetic resonance relaxation parameters in excised myocardial tissue during NMR spectroscopy: the effects of time, environmental exposure and TTC staining. Liu P, et al. Magn Reson Imaging 1989 Jan-Feb; 7(1):109–13
The use of cephalothin and triphenyltetrazolium chloride impregnated filter paper strips in the identification of Campylobacter species. Pefanis SM, et al. Onderstepoort J Vet Res 1989 Jun;56(2):143–4
[Use of the tetrazolium salt reduction test in the detection of phagocytic activity in pigs] Granátová M. Vet Med (Praha) 1989 Apr;34(4):231–8 (Eng. Abstr.) (Cze)
[The practicality of an NBT test] Krause B, et al. Z Med Lab Diagn 1989;30(4):246–8 (Ger)
[Use of the NBT test for evaluating the sensitivity of neutrophils to stimulants] Shcherbakov VI. Lab Delo 1989; (1):30–3 (Eng. Abstr.) (Rus)

METABOLISM

Screening for skin-tumor promoters. Ohkawa Y, et al. Biomed Pharmacother 1988;42(7):447–50 (22 ref.)
Cerebral superoxide anion generation during seizures in newborn pigs. Armstead WM, et al. J Cereb Blood Flow Metab 1989 Apr;9(2):175–9
Effect of dihydroheptaprenol on nitroblue tetrazolium reduction by swine alveolar macrophages. Watari T, et al. Nippon Juigaku Zasshi 1989 Jun;51(3):630–1
[Fluorescent formazans in flow cytometry. Studies of their oxygen sensitivity] Kuhlmann U, et al. Acta Histochem Suppl (Jena) 1989;37:221–30 (Eng. Abstr.) (Ger)

PHARMACOKINETICS

Effects of the pH dependence of 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl-tetrazolium bromide-formazan absorption on chemosensitivity determined by a novel tetrazolium-based assay. Plumb JA, et al. Cancer Res 1989 Aug 15;49(16):4435–40

PHARMACOLOGY

Evaluation of the effect of evan's blue and triphenyltetrazolium chloride dyes on myeloperoxidase activity in canine cardiac tissue. Griswold DE, et al. J Pharmacol Methods 1989 Mar;21(1):13–9

TETRODOTOXIN

Resistance of nerves from certain toxic crabs to paralytic shellfish poison and tetrodotoxin. Daigo K, et al. Toxicon 1988;26(5):485–90
Tetrodotoxin. Prince RC. Trends Biochem Sci 1988 Mar; 13(3):76–7

ADMINISTRATION & DOSAGE

[Effects of tetrodotoxin and verapamil on abnormal ventricular activity at the late stage of experimental myocardial infarction in dogs] Aniukhovskiĭ EP, et al. Kardiologiia 1989 May;29(5):66–71 (Eng. Abstr.) (Rus)

ANALYSIS

Detection of tetrodotoxin by thin-layer chromatography/fast atom bombardment mass spectrometry. Nagashima Y, et al. Anal Biochem 1988 Nov 15;175(1):258–62
Thin-layer chromatography with flame ionization detection for the determination of tetrodotoxin in biological fluids. Ikebuchi J, et al. J Chromatogr 1988 Nov 18;432:401–6
Evidence for the presence of tetrodotoxin in a powder used in Haiti for zombification. Benedek C, et al. Toxicon 1989; 27(4):473–80
Occurrence of tetrodotoxin in the frog Atelopus oxyrhynchus. Mebs D, et al. Toxicon 1989;27(7):819–22
Tetrodotoxin in two species of ribbon worm (Nemertini), Lineus fuscoviridis and Tubulanus punctatus. Miyazawa K, et al. Toxicon 1988;26(9):867–74

IMMUNOLOGY

Protection against nerve toxicity by monoclonal antibodies to the sodium channel blocker tetrodotoxin. Huot RI, et al. J Clin Invest 1989 Jun;83(6):1821–6
Monoclonal antibody raised against tetrodonic acid, a derivative of tetrodotoxin. Watabe S, et al. Toxicon 1989; 27(2):265–8

PHARMACOLOGY

Frequency-dependent and independent effects of tetrodotoxin on Vmax in cardiac fibers. Varró A, et al. Acta Physiol Hung 1989;73(1):47–52
Tetrodotoxin-resistant contractions induced by electrical stimulation of bladder muscle from man, rabbit and rat. Fovaeus M, et al. Acta Physiol Scand 1988 Feb;132(2):233–9
Mechanisms contributing to gastric motility changes induced by PAF-acether and endotoxin in rats. Esplugues JV, et al. Am J Physiol 1989 Feb;256(2 Pt 1):G275–82
Basal metabolic energy requirements of polarized and depolarized arrest in rat heart. Sternbergh WC, et al. Am J Physiol 1989 Mar;256(3 Pt 2):H846–51
Effects of tetrodotoxin on relaxation of pig duodenal circular muscle induced by C-terminal fragments of cholecystokinin. Kimura I, et al. Br J Pharmacol 1989 Mar; 96(3):739–45
Blockade of the voltage-dependent sodium current in isolated rat hippocampal neurons by tetrodotoxin and lidocaine. Kaneda M, et al. Brain Res 1989 Apr 10;484(1-2):348–51
Intraocular injections of tetrodotoxin reduce transiently expressed acetylcholinesterase activity in developing rat visual cortex. Robertson RT, et al. Brain Res Dev Brain Res 1989 Mar 1;46(1):69–84
Tetrodotoxin: sodium channel specific anti-arrhythmic activity. Duff HJ, et al. Cardiovasc Res 1988 Nov; 22(11):800–7
Presumptive neurons derived by differentiation of a human embryonal carcinoma cell line exhibit tetrodotoxin-sensitive sodium currents and the capacity for regenerative responses. Rendt J, et al. Exp Cell Res 1989 Feb;180(2):580–4
Regulation of acetylcholinesterase synthesis and assembly by muscle activity. Effects of tetrodotoxin. Fernandez-Valle C, et al. J Biol Chem 1989 Aug 25;264(24):14043–9
Pathfinding and target selection of goldfish retinal axons regenerating under TTX-induced impulse blockade. Hartlieb E, et al. J Comp Neurol 1989 Jun 1;284(1):148–68
Effects of intraocular tetrodotoxin on the development of the retinocollicular pathway in the Syrian hamster. Thompson I, et al. J Comp Neurol 1989 Apr 15; 282(3):371–88
Evidence for voltage-dependent block of cardiac sodium channels by tetrodotoxin. Clarkson CW, et al. J Mol Cell Cardiol 1988 Dec;20(12):1119–31
Calcium-dependent, tetrodotoxin-sensitive stimulation of cortical serotonin release after a tryptophan load. Carboni E, et al. J Neurochem 1989 Sep;53(3):976–8
Terminal nerve sprouting at the frog neuromuscular junction induced by prolonged tetrodotoxin blockade of nerve conduction. Diaz J, et al. J Neurocytol 1989 Feb; 18(1):39–46
Changes in tetrodotoxin-resistant action potentials after passive transfer of myasthenia gravis patient sera. Losavio A, et al. J Neurol Sci 1989 Jul;91(3):345–51
A persistent, TTX-sensitive sodium current in an invertebrate neuron with neurosecretory ultrastructure. Davis RE, et al. J Neurosci 1988 Nov;8(11):3978–91
Impulse blockade by intraocular tetrodotoxin during optic regeneration in goldfish: HRP-EM evidence that the formation of normal numbers of optic synapses and the elimination of exuberant optic fibers is activity independent. Hayes WP, et al. J Neurosci 1989 Apr;9(4):1414–23
Effect of tetrodotoxin on the transmembrane potential of the pacemaker cell in the sinus venosus of toad. Qin WN, et al. J Tongji Med Univ 1988;8(2):101–5
Tetrodotoxin sensitivity of high K+-induced 86Rb efflux in the duodenal circular muscle of pigs. Kondoh T, et al. Jpn J Pharmacol 1988 Oct;48(2):294–8
Tetrodotoxin-unaffected depolarization of frog muscles induced by the venom of jellyfish (Genus aurelia). Kihara H, et al. Jpn J Physiol 1988;38(6):839–49
Basal acetylcholine release in freely moving rats detected by on-line trans-striatal dialysis: pharmacological aspects. Damsma G, et al. Life Sci 1988;43(14):1161–8
Differential effects of tetrodotoxin on the sialogenous and vasodilator actions of prostaglandin E2 in the dog salivary gland. Taira N, et al. Life Sci 1974 Sep 1;15(5):987–93
Modification of retinal ganglion cell axon morphology by prenatal infusion of tetrodotoxin. Sretavan DW, et al. Nature 1988 Dec 1;336(6198):468–71
The effects of blocking nerve conduction on retrograde HRP labeling of rat motoneuron. Kanda K, et al. Neurosci Lett 1989 Apr 24;99(1-2):153–6
Tetrodotoxin differentially blocks peak and steady-state sodium channel currents in early embryonic chick ventricular myocytes. Josephson IR, et al. Pflugers Arch 1989 Jul;414(3):354–9
Effects of inhibition of ventricular sodium channel conductance by tetrodotoxin on the occurrence of occlusion induced arrhythmia in the rat. Abraham S, et al. Proc West Pharmacol Soc 1988;31:305–7
Electric field stimulation alters the outputs of prostaglandins from isolated rat urinary bladder preparations. Influences of papaverine and tetradotoxin. Dveksler G, et al. Prostaglandins Leukot Essent Fatty Acids 1989 May; 36(2):65–8
Prenatal tetrodotoxin infusion blocks segregation of retinogeniculate afferents. Shatz CJ, et al. Science 1988 Oct 7;242(4875):87–9
Tetrodotoxin. Prince RC. Trends Biochem Sci 1988 Mar; 13(3):76–7
Retinal ganglion cell death is not prevented by application of tetrodotoxin during optic nerve regeneration in the frog Hyla moorei. Sheard PW, et al. Vision Res 1988; 28(4):461–70
[The local anesthetic effect of tetrodotoxin on the natural spike activity of the depressor nerve in rabbits] Lipfert P, et al. Reg Anaesth 1989 Jul;12(4):69–75 (Eng. Abstr.) (Ger)
[Kinetics of the inactivation of tetrodotoxin-sensitive sodium channels in the spinal ganglion neurons of rats] Akoev GN, et al. Fiziol Zh SSSR 1988 Jun;74(6):802–8 (Eng. Abstr.) (Rus)
[Monoclonal antibodies to cytoplasmic tetrodotoxin-sensitive brain protein. The effect of veratrine on antibody binding to neuroblastoma cells] Pinchuk GV, et al. Neirofiziologiia 1988;20(6):794–800 (Eng. Abstr.) (Rus)

POISONING

Tetrodotoxin and the zombi phenomenon. Davis W. J Ethnopharmacol 1989 Feb;25(1):119–22
Nine fatal cases of puffer fish poisoning in Sabah, Malaysia. Kan SK, et al. Med J Malaysia 1987 Sep;42(3):199–200
Nerve conduction study of human tetrodotoxication. Oda K, et al. Neurology 1989 May;39(5):743–5
[A case report of tetrodotoxin poisoning following ingestion of a trumpet shell "Boshubora"] Kondo K, et al. Nippon Naika Gakkai Zasshi 1988 Jul;77(7):1093–4 (Jpn)

TOXICITY

[Puffer fish poisoning] Naito H. Kokyu To Junkan 1988 Dec; 36(12):1309–13 (Jpn)

TETRYLAMMONIUM see **TETRAETHYLAMMONIUM COMPOUNDS**

TEXTBOOKS see under **BOOKS**

TEXTBOOKS, PROGRAMMED see **PROGRAMMED INSTRUCTION**

TEXTILE INDUSTRY

Motor neuron disease in textile factory workers. Abarbanel JM, et al. Acta Neurol Scand 1989 Apr;79(4):347–9
Bladder cancer among workers in the textile industry: results of a Spanish case-control study. Gonzales CA, et al. Am J Ind Med 1988;14(6):673–80
Recent trends in the prevalence of byssinotic symptoms in the Lancashire textile industry. Cinkotai FF, et al. Br J Ind Med 1988 Nov;45(11):782–9
Respiratory and allergic symptoms in wool textile workers. Love RG, et al. Br J Ind Med 1988 Nov;45(11):727–41
Respiratory cancer in chrysotile textile and mining industries: exposure inferences from lung analysis. Sebastien P, et al. Br J Ind Med 1989 Mar;46(3):180–7
Byssinosis in a textile factory in Cameroon: a preliminary study. Takam J, et al. Br J Ind Med 1988 Dec;45(12):803–9
Smoking and cotton dust effects in cotton textile workers. Schachter EN, et al. Chest 1989 May;95(5):997–1003
High-frequency audiometry in the evaluation of critical noise intensity. Bartsch R, et al. Int Arch Occup Environ Health 1989;61(5):347–51
Multistage modelling of lung cancer mortality in asbestos textile workers. Pearce N. Int J Epidemiol 1988 Dec; 17(4):747–52
Impaired color discrimination among viscose rayon workers exposed to carbon disulfide. Raitta C, et al. J Occup Med 1981 Mar;23(3):189–92
Complex evaluation of health status, occupational and non-occupational working conditions of women employed in the textile industry. Indulski J, et al. Sante Publique (Bucur) 1989 Apr-Jun;32(2):121–7
[The effect of noise on arterial hypertension in textile workers] Gîdiuţă C, et al. Sante Publique (Bucur) 1988 Oct-Dec;31(4):299–302 (Eng. Abstr.) (Fre)
[Causes and rates of absenteeism in selected branches of industry during the years 1970–1987] Szubert Z, et al. Med Pr 1988;39(6):446–54 (Eng. Abstr.) (Pol)
[Incidence of anemia in pregnancy and the condition of newborn infants born to women working in industrial plants in Białystok] Bielecki M, et al. Rocz Akad Med Bialymstoku 1984–85;29–30:245–9 (Eng. Abstr.) (Pol)
[The role of occupational and various social factors in the development of diseases among workers in the chemical fiber industry] DobzhanskiiеIS. Gig Tr Prof Zabol 1988 Dec;(12):59–60 (Rus)
[Microbial contamination of the work area air at the tricot knitting mills] Ikonomova ZL, et al. Gig Tr Prof Zabol 1989;(1):16–9 (Eng. Abstr.) (Rus)
[Changes in biochemical indicators after exposure to carbon disulfide] Pavlova SD, et al. Gig Tr Prof Zabol 1988 Sep; (9):12–5 (Eng. Abstr.) (Rus)
[Characteristics of the structure and development of diseases of the upper respiratory tract in workers exposed to dust] Pleshkov IV. Gig Tr Prof Zabol 1989;(4):43–4 (Rus)
[Relation of intensive occupational noise and the incidence of cardiovascular pathology in organized women's collectives of Moscow and Havana (data of simultaneous epidemiologic studies] Vermel' AE, et al. Gig Tr Prof Zabol 1988 Dec;(12):18–22 (Eng. Abstr.) (Rus)
[Byssinosis caused by mixed vegetable dust (jute, ambary and

flax)] Zaritskaia LP. **Gig Tr Prof Zabol** 1989;(6):51–2 **(Rus)**

[Clinical picture and early diagnosis of lesions of the upper respiratory tract in workers exposed to industrial aerosols] Akhmedli TA, et al. **Vestn Otorinolaringol** 1988 Sep–Oct; (5):31–4 (Eng. Abstr.) **(Rus)**

[Arterial pressure in female combers depending on age and the length of work service] Sakhno GP, et al. **Vrach Delo** 1989 Jan;(1):105–7 (Eng. Abstr.) **(Rus)**

[Absenteeism from work among asbestos–textile workers] Krstev S, et al. **Arh Hig Rada Toksikol** 1988 Mar; 39(1):39–46 (Eng. Abstr.) **(Scr)**

INSTRUMENTATION

[Ventilation of the PNSh–I4 continuous spinning machine] Zhigalov VP, et al. **Gig Tr Prof Zabol** 1989;(2):48–50 **(Rus)**

[Changes in arterial pressure in female twiner machine operators] Kachnaia MA, et al. **Vrach Delo** 1988 Oct; (10):104–6 (Eng. Abstr.) **(Rus)**

STANDARDS

[Hygienic evaluation of students' training at a light industry vocational school] Shpirt MB, et al. **Gig Sanit** 1989 Apr; (4):65–7 **(Rus)**

[Current studies of energy expenditure and the quantitative and qualitative adequacy of nutrition of female textile workers] Smoliar VI, et al. **Gig Sanit** 1989 Feb;(2):25–8 (Eng. Abstr.) **(Rus)**

[Cotton dust and its effect on the respiratory organs of workers in the cotton–spinning industry in Vietnam] Chyong VZ, et al. **Gig Tr Prof Zabol** 1989;(4):44–6 **(Rus)**

[Sanitary–hygienic characteristics of air environment and microflora at a cotton–processing plant] Garas'ko EV, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):31–4 (Eng. Abstr.) **(Rus)**

[Determining physical and psychological occupational stress in women performing physical work on the basis of subjective evaluation] Makovska Z, et al. **Gig Tr Prof Zabol** 1989;(5):8–11 **(Rus)**

[Hygienic characteristics and ways of improving working conditions at a rug–making factory] Rumiantsev GI, et al. **Gig Tr Prof Zabol** 1989;(4):27–30 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

[Coexistence of cervico–brachial neuralgia and backache among textile industry workers] Szymańska R. **Med Pr** 1988;39(2):125–9 (Eng. Abstr.) **(Pol)**

TEXTILES

Vibration in textile mills. Sorainen E. **Am Ind Hyg Assoc J** 1988 Dec;49(12):A775–8

Contact urticaria from a chemical textile finish. de Groot AC, et al. **Contact Dermatitis** 1989 Jan;20(1):63–4

Sensitization experiments with textile dyes in guinea pigs. Hausen BM, et al. **Contact Dermatitis** 1989 Jan;20(1):27–31

Effects of weathering on fabrics treated with permethrin for protection against mosquitoes. Gupta RK, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):176–9

Mortality in the US rayon industry. MacMahon B, et al. **J Occup Med** 1988 Sep;30(9):698–705

[Morphologic peculiarities of absolute gunshots at close range on clothed or covered body regions] Pollak S, et al. **Beitr Gerichtl Med** 1988;46:401–7 (Eng. Abstr.) **(Ger)**

[Experimental and clinical studies of knitted double–velour prostheses of Polish production] Filipiak K, et al. **Pol Tyg Lek** 1988 Jun 13;43(24):768–70 (Eng. Abstr.) **(Pol)**

[Preparation of lysozyme immobilized on textile carriers and its use in treating suppurative wounds] Vlasov LG, et al. **Antibiot Khimioter** 1988 Nov;33(11):848–50 (Eng. Abstr.) **(Rus)**

[The antifungal activity of fibrous materials containing chemically bound antimicrobial substances] Stepanova ZhV, et al. **Vestn Dermatol Venerol** 1989;(5):48–9 (Eng. Abstr.) **(Rus)**

[Rational variant of the method of freeing the finger from the hard–to–remove ring] Mamedov AG. **Vestn Khir** 1988 Oct;141(10):112–4 **(Rus)**

[Use of a woven carbon material in the treatment of acute suppurative diseases and trophic ulcers] Riabtsev VG, et al. **Vestn Khir** 1989 Mar;142(3):62–3 **(Rus)**

[Development of disinfection regimens for the special clothing of miners on a test object model made from different fabrics] Mikhno IL, et al. **Vrach Delo** 1988 Jul; (7):116–8 (Eng. Abstr.) **(Rus)**

STANDARDS

[Studies on perfecting Polish–made linen threads for surgical use] Jarosz–Cichulska H. **Polim Med** 1988;18(1–2):3–49 (Eng. Abstr.) **(Pol)**

TFE see POLYTETRAFLUOROETHYLENE

TGF–ALPHA see TRANSFORMING GROWTH FACTORS

TGF–BETA see TRANSFORMING GROWTH FACTORS

THALAMIC DISEASES

CEREBROSPINAL FLUID

Hemiballismus: changes in cerebrospinal fluid. Kostic V, et al. **Acta Neurol Scand** 1988 Aug;78(2):115–7

CHEMICALLY INDUCED

Caudal thalamic infarction following intranasal methamphetamine use. Sachdeva K, et al. **Neurology** 1989 Feb;39(2 Pt 1):305–6

CLASSIFICATION

Thalamic pain syndrome of Dejérine–Roussy. Differentiation of four subtypes assisted by somatosensory evoked potentials data. Mauguière F, et al. **Arch Neurol** 1988 Dec; 45(12):1312–20

COMPLICATIONS

Preserved memory abilities in thalamic amnesia. Nichelli P, et al. **Brain** 1988 Dec;111 (Pt 6):1337–53

Aphonia as the only speech disturbance from bilateral paramedian thalamic infarction. Lazzarino LG, et al. **Clin Neurol Neurosurg** 1988;90(3):265–7

Thalamic aphasia. A conceptional critique. Bruyn RP. **J Neurol** 1989 Jan;236(1):21–5 (33 ref.)

Hemiballism in multiple sclerosis. Riley D, et al. **Mov Disord** 1988;3(1):88–94 (25 ref.)

Thalamic aphasia [letter] Cappa SF, et al. **Neurology** 1989 Jun;39(6):874

Thalamic dementia and motor neuron disease. Deymeer F, et al. **Neurology** 1989 Jan;39(1):58–61

Atypical spasmus nutans as an initial sign of thalamic neoplasm. Baram TZ, et al. **Pediatr Neurol** 1986 Nov–Dec; 2(6):375–6

[Connected pathways of the thalamus and clinical manifestations of lesions of its various parts] Hu RL. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Dec; 21(6):362–5 (39 ref.) **(Chi)**

[Amnesia due to a left–sided thalamic hematoma] Wang S. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Aug; 21(4):216–7, 255 (Eng. Abstr.) **(Chi)**

[Cerebral infarct and pure sensory deficit] Decroix JP, et al. **Rev Neurol (Paris)** 1989;145(2):111–6 (Eng. Abstr.) **(Fre)**

[Deep cerebral lesions: neuro–rehabilitative aspects] Guarnaschelli C, et al. **Riv Neurol** 1989 Jan–Feb;59(1):15–8 (Eng. Abstr.) **(Ita)**

[Coma caused by paramedian thalamic infarct (letter)] Arias M, et al. **Arch Neurobiol (Madr)** 1988 Jul–Aug;51(4):229–30 **(Spa)**

CONGENITAL

Symmetrical thalamic degeneration with calcifications of infancy. DiMario FJ Jr, et al. **Am J Dis Child** 1989 Sep; 143(9):1056–60 (14 ref.)

DIAGNOSIS

Bilateral germ cell tumors involving the basal ganglia and thalamus. Kobayashi T, et al. **Neurosurgery** 1989 Apr; 24(4):579–83

Primary thalamic hemorrhage in a preterm infant. Weissman BM, et al. **Pediatr Neurol** 1987 Mar–Apr;3(2):121–2

[Understanding thalamic aphasias and amnesias] Lang C, et al. **Nervenarzt** 1989 Jul;60(7):425–32 **(Ger)**

ETIOLOGY

Thalamic hemorrhage clinical and CT findings. Simonetti C, et al. **Acta Neurol (Napoli)** 1988 Aug–Oct;10(4–5):246–61 (75 ref.)

Solitary thalamic abscess. Naidu MR. **Clin Neurol Neurosurg** 1988;90(3):245–7

Unilateral "akathisia" in a patient with AIDS and a toxoplasmosis subthalamic abscess. Carrazana E, et al. **Neurology** 1989 Mar;39(3):449–50

Reversible profound neurologic deficits associated with transient cranial CT abnormalities and systemic lupus erythematosus. Golloub CA, et al. **South Med J** 1989 May; 82(5):650–2

[Bilateral thalamic hemorrhage following severe asphyxia in a 9–month–old infant] Bordarier C, et al. **Arch Fr Pediatr** 1989 Jan;46(1):39–40 (12 ref.) (Eng. Abstr.) **(Fre)**

[Thalamic hematoma. Analysis of a series of 40 cases] Martínez Fernández R, et al. **Rev Clin Esp** 1988 Oct; 183(5):246–52 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Unusual thalamic inclusions in an infant with progressive neurologic dysfunction and blindness. Anwer UE, et al. **Clin Neuropathol** 1988 Sep–Oct;7(5):259–65

Primary thalamic malignant fibrous histiocytoma of the dominant hemisphere causing severe neuropsychological symptoms. Roosen N, et al. **Clin Neuropathol** 1989 Jan–Feb; 8(1):16–21

PHYSIOPATHOLOGY

Abnormalities of visually induced eye movements in thalamic lesions. Nakamura T, et al. **Adv Otorhinolaryngol** 1988; 41:104–8

"Ease of falling" syndrome [letter] Awerbuch G, et al. **Ann Neurol** 1989 Feb;25(2):210–1

The thalamus participates in the regulation of the sleep–waking cycle. A clinico–pathological study in fatal familial thalamic degeneration. Tinuper P, et al. **Electroencephalogr Clin Neurophysiol** 1989 Aug; 73(2):117–23

Pizotifen in deafferentation pain. Ghose K. **Postgrad Med J** 1989 Feb;65(760):79–82

[Cerebral blood flow deficit and thalamic infarcts. Topographic and neuropsychological confrontations] Rousseaux M, et al. **Rev Neurol (Paris)** 1989;145(2):140–7 (Eng. Abstr.) **(Fre)**

[Cerebral blood flow in patients with thalamic hemorrhage (Part 2): Etiological analysis of decreased cerebral blood flow in acute stage] Ueda M, et al. **No Shinkei Geka** 1989 Apr;17(4):343–50 (Eng. Abstr.) **(Jpn)**

[An autopsied case of thalamic haemorrhage with abnormalities in respiratory and ocular movements] Nomura N, et al. **Rinsho Shinkeigaku** 1975 Mar;15(3):150–5 (Eng. Abstr.) **(Jpn)**

[Structuro–functional organization of thalamic insufficiency] Mukhin EI. **Zh Nevropatol Psikhiatr** 1988;88(7):3–7 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

The neuropsychology of paramedian thalamic infarction. Stuss DT, et al. **Brain Cogn** 1988 Dec;8(3):348–78

Memory functioning following a left medial thalamic hematoma. Brown GG, et al. **J Clin Exp Neuropsychol** 1989 Mar;11(2):206–18

RADIOGRAPHY

The cranial computed tomographic findings in patients with cheiro–oral syndrome. Iwasaki Y, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):237–9

Thalamic bleeding: clinico–computed tomographic correlations. Iwasaki Y, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):245–8

Thalamic hemorrhage: a computed tomographic–clinical study in prognostic prediction. Chui C, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Apr; 5(4):231–40

Primary thalamic and caudate hemorrhage in term neonates presenting with seizures. Adams C, et al. **Pediatr Neurol** 1988 May–Jun;4(3):175–7

SURGERY

Spontaneously ruptured pineal epidermoid cyst associated with a thalamic germinoma. Wang J, et al. **Neurosurgery** 1989 Jun;24(6):933–6

THALAMIC NUCLEI

Facial spasm from lacunar infarction of the thalamic ventrolateral nucleus [letter] Toda T, et al. **Stroke** 1989 Sep;20(9):1289–90

[Treatment of Parkinson tremor by chronic stimulation of the ventral intermediate nucleus of the thalamus] Benabid AL, et al. **Rev Neurol (Paris)** 1989;145(4):320–3 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

Topographic organization of the auditory thalamocortical system in the albino rat. Scheel M. **Anat Embryol (Berl)** 1988;179(2):181–90

The maturational status of thalamocortical and callosal connections of visual areas V1 and V2 in the newborn monkey. Dehay C, et al. **Behav Brain Res** 1988 Aug; 29(3):237–44

Auditory pathways in the budgerigar. II. Intratelencephalic pathways. Brauth SE, et al. **Brain Behav Evol** 1988; 32(4):193–207

A cyto–architectonic description of the thalamus of the tammar wallaby, Macropus eugenii. Mayner L. **Brain Behav Evol** 1989;33(6):342–55

Reciprocal connections between medial prefrontal cortex and lateral posterior nucleus in rats. Sukekawa K. **Brain Behav Evol** 1988;32(4):246–51

Sex difference in the visual projections of young chicks: a quantitative study of the thalamofugal pathway. Adret P, et al. **Brain Res** 1989 Jan 23;478(1):59–73

Single neurones of the basal forebrain and laterodorsal tegmental nucleus project by collateral axons to the olfactory bulb and the mediodorsal nucleus in the rat. Cornwall J, et al. **Brain Res** 1989 Jul 3;491(1):194–8

Axonal connections of a forebrain nucleus involved with vocal learning in zebra finches. Bottjer SW, et al. **J Comp Neurol** 1989 Jan 8;279(2):312–26

Basal forebrain efferents to the medial dorsal thalamic nucleus in the rhesus monkey. Hreib KK, et al. **J Comp Neurol** 1988 Nov 15;277(3):365–90

The ventral lateral geniculate nucleus in the cat: thalamic and commissural connections revealed by the use of WGA–HRP transport. Nakamura H, et al. **J Comp Neurol** 1988 Nov 22;277(4):509–28

Topographical organization of the projections from the reticular thalamic nucleus to the intralaminar and medial thalamic nuclei in the cat. Velayos JL, et al. **J Comp Neurol** 1989 Jan 15;279(3):457–69

Nociceptive body representation in nucleus ventralis posterolateralis of cat thalamus. Yokota T, et al. **J Neurophysiol** 1988 Nov;60(5):1714–27

Convergence of afferent fibers from the entopeduncular nucleus and the substantia nigra pars reticulata onto single neurons in the ventromedial thalamic nucleus: an electron microscope study in the cat. Moriizumi T, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):125–9

Distinct afferents to internal and external pallidal segments in the squirrel monkey. Parent A, et al. **Neurosci Lett** 1989 Jan 16;96(2):140–4

Topographic organization and collateralization of the projections of the anterior and laterodorsal thalamic nuclei to cingulate areas 24 and 29 in the rat. Horikawa K, et al. **Neurosci Res** 1988 Oct;6(1):31–44

Connections to the lateral posterior–pulvinar thalamic complex from the reticular and ventral lateral geniculate thalamic nuclei: a topographical study in the cat. Rodrigo-Angulo ML, et al. **Neuroscience** 1988 Aug; 26(2):449–59

Axonal arborizations of a magnocellular basal nucleus input and their relation to the neurons in the thalamic reticular nucleus of rats. Asanuma C. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4746–50

The arbors of axons terminating in middle cortical layers of somatosensory area 3b in owl monkeys. Garraghty PE, et al. **Somatosens Mot Res** 1989;6(4):401–11

Medial, intralaminar, and lateral terminations of lumbar spinothalamic tract neurons: a fluorescent double-label study. Stevens RT, et al. **Somatosens Mot Res** 1989; 6(3):285–308

Light and electron microscopical studies of the substance P innervation of the dorsal column nuclei and the lateral cervical nucleus in the primate. Westman J. **Ups J Med Sci** 1989;94(2):123–8

[Ventrolateral nucleus of the cat thalamus and its connection with field 4 of the cerebral cortex] Melik-Musian AB. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):22–7 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Differential projection from the motor and limbic cortical regions to the mediodorsal thalamic nucleus in the dog. Stepniewska I, et al. **Acta Neurobiol Exp (Warsz)** 1989; 49(1):23–37

Motor cortex projections to the thalamus. An autoradiographic study in the cat. Gómez-Pinilla F, et al. **Arch Ital Biol** 1989 Mar;127(2):109–14

Fetal brain grafts induce recovery of learning deficits and connectivity in rats with gustatory neocortex lesion. Escobar M, et al. **Brain Res** 1989 Jan 30;478(2):368–74

A topographic study of the course of nigral axons and of the distribution of pallidal axonal endings in the centre médian–parafascicular complex of macaques. François C, et al. **Brain Res** 1988 Nov 8;473(1):181–6

The sensitive period for the morphological effects of monocular deprivation in two nuclei of the tectofugal pathway of zebra finches. Herrmann K, et al. **Brain Res** 1988 Jun 7;451(1–2):43–53

A new parcellation of the human thalamus on the basis of histochemical staining. Hirai T, et al. **Brain Res Brain Res Rev** 1989 Jan–Mar;14(1):1–34

Projection from the thalamic intralaminar nuclei on the isocortex of the rat: a surface potential study. Olausson B, et al. **Exp Brain Res** 1989;75(3):543–54

Quantitative Golgi study of anatomically identified subdivisions of motor thalamus in the rat. Sawyer SF, et al. **J Comp Neurol** 1989 Aug 1;286(1):1–27

A quantitative histological study of the anterodorsal thalamic nucleus and the lateral mammillary nucleus of ageing mice. Sturrock RR. **J Hirnforsch** 1989;30(2):191–5

Cytometric analysis of the thalamic ventralis intermedius nucleus in humans. Hirai T, et al. **J Neurophysiol** 1989 Mar; 61(3):478–87

Morphology of physiologically characterized medial lemniscal axons terminating in cat ventral posterior thalamic nucleus. Hirai T, et al. **J Neurophysiol** 1988 Oct; 60(4):1439–59

Response properties and topography of vibrissa-sensitive VPM neurons in the rat. Ito M. **J Neurophysiol** 1988 Oct; 60(4):1181–97

Direct retinal projections to the lateroposterior thalamic nucleus (LP) in the mole. Kudo M, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):176–80

Distribution of terminals of thalamocortical fibers originating from the ventrolateral nucleus of the cat thalamus. Shinoda Y, et al. **Neurosci Lett** 1989 Jan 16;96(2):163–7

Sex differences in vasopressin neurons in the bed nucleus of the stria terminalis by in situ hybridization. Miller MA, et al. **Peptides** 1989 May–Jun;10(3):615–9

DRUG EFFECTS

[Effects of intracerebroventricularly injected cholecystokinin octapeptide on the electric activities of pain-reacted neurons in nucleus parafascicularis of thalamus in rats] Xu MY, et al. **Chen Tzu Yen Chiu** 1988;13(4):305–9 (Eng. Abstr.) **(Chi)**

[Specific lesion in habenular nucleus induced by the intraventricular injection of monosodium glutamate in mice] Wang GJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):519–21 (Eng. Abstr.) **(Chi)**

[Excitatory effect of subthalamo-nigral and subthalamo-pallidal efferent pathways in the rat] Robledo P, et al. **C R Acad Sci [III]** 1988;307(3):133–8 (Eng. Abstr.) **(Fre)**

EMBRYOLOGY

Development of the rat thalamus: VI. The posterior lobule of the thalamic neuroepithelium and the time and site of origin and settling pattern of neurons of the lateral geniculate and lateral posterior nuclei. Altman J, et al. **J Comp Neurol** 1989 Jun 22;284(4):581–601

Development of the rat thalamus: V. The posterior lobule of the thalamic neuroepithelium and the time and site of origin and settling pattern of neurons of the medial geniculate body. Altman J, et al. **J Comp Neurol** 1989 Jun 22;284(4):567–80

Development of the rat thalamus: IV. The intermediate lobule of the thalamic neuroepithelium, and the time and site of origin and settling pattern of neurons of the ventral nuclear complex. Altman J, et al. **J Comp Neurol** 1989 Jun 22;284(4):534–66

[Tecto–thalamo–telencephalic visual system of the brain in 13-day-old chick embryos] Ozirskaia EV, et al. **Zh Evol Biokhim Fiziol** 1988 May–Jun;24(3):404–13 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

A new group of tyrosine hydroxylase–immunoreactive neurons in the cat thalamus. Kitahama K, et al. **Brain Res** 1989 Jan 23;478(1):156–60

Adenosine deaminase containing fiber pathway from the superior colliculus to the lateral posterior nucleus of the rat. Miguel-Hidalgo JJ, et al. **Brain Res** 1989 Jan 2; 476(1):189–93

METABOLISM

Thalamic, brainstem, and cerebellar glucose metabolism in the hemiplegic monkey. Shimoyama I, et al. **Ann Neurol** 1988 Dec;24(6):718–26

Distribution and binding parameters of GABA and benzodiazepine receptors in the cat motor thalamus and adjacent nuclear groups. Kultas-Ilinsky K, et al. **Brain Res** 1988 Aug 30;459(1):1–16

Co-existence of vasoactive intestinal polypeptide (VIP)- and cholecystokinin (CCK)-like immunoreactivities in thalamocortical neuron in the ventrolateral nucleus of the rat. Ogawa R, et al. **Brain Res** 1989 Jun 19;490(1):152–6

Thalamic nuclei that project to reptilian telencephalon lack GABA and GAD immunoreactive neurons and puncta. Pritz MB, et al. **Brain Res** 1988 Aug 2;457(1):154–9

Distribution of tachykinin- and enkephalin-immunoreactive fibers in the human thalamus. Hirai T, et al. **Brain Res Brain Res Rev** 1989 Jan–Mar;14(1):35–52

Light and electron microscopic study of galanin-immunoreactive nerve fibers in the rat posterior thalamus. Blasco I, et al. **J Comp Neurol** 1989 May 1; 283(1):1–12

Ultrastructural analysis of GABA-immunoreactive elements in the monkey thalamic ventrobasal complex. Ohara PT, et al. **J Comp Neurol** 1989 May 22;283(4):541–58

Immunocytochemical study of serotoninergic and noradrenergic innervation of the ventrobasal complex of the rat thalamus. Nothias F, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):59–63

Neurotensin-containing projections from the retrosplenial cortex to the anterior ventral thalamic nucleus in the rat. Fukami K, et al. **Neuroscience** 1988 Sep;26(3):819–26

PATHOLOGY

New stereological method for obtaining unbiased and efficient estimates of total nerve cell number in human brain areas. Exemplified by the mediodorsal thalamic nucleus in schizophrenics. Pakkenberg B, et al. **APMIS** 1989 Aug; 97(8):677–81

Thalamic nuclei in Alzheimer disease: evidence against the cholinergic hypothesis of plaque formation. Masliah E, et al. **Brain Res** 1989 Jul 31;493(2):240–6

Reduced glutamate decarboxylase activity in the subthalamic nucleus in patients with tardive dyskinesia. Andersson U, et al. **Mov Disord** 1989;4(1):37–46

Ramsay Hunt syndrome in dentatorubral–pallidoluysian atrophy. Suzuki S, et al. **Pediatr Neurol** 1985 Sep–Oct; 1(5):298–301

[Lateral coordinate of the thalamic Vim neurons in the cases with dilated third ventricle] Maeda T, et al. **No Shinkei Geka** 1988 Aug;16(9):1045–52 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Stimulation of internal capsule, thalamic sensory nucleus (VPM) and cerebral cortex inhibited deafferentation hyperactivity provoked after gasserian ganglionectomy in cat. Namba S, et al. **Acta Neurochir Suppl (Wien)** 1988; 42:243–7

Effects of anterodorsalis thalami nucleus lesion on adrenal function in rats. Suárez MM, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(3):403–7

Abnormalities of visually induced eye movements in thalamic lesions. Nakamura T, et al. **Adv Otorhinolaryngol** 1988; 41:104–8

Parasagittal thalamic knife-cuts and cardiac changes. Buchanan SL, et al. **Behav Brain Res** 1989 Apr 1; 32(3):241–53

Intensity difference thresholds after lesions of ectostriatum in pigeons. Hodos W, et al. **Behav Brain Res** 1988 Sep 1;30(1):43–53

Role of lateral habenula in the regulation of exploratory behavior and its relationship to stress in rats. Lee EH, et al. **Behav Brain Res** 1988 Oct;30(3):265–71

Effects of unilateral thalamic lesion upon interocular transfer of visual discrimination in pigeons. I. Lesion in the trained hemisphere (memory access deficits). Watanabe S. **Behav Brain Res** 1988 Aug;29(3):259–65

Effects of anterior or dorsomedial thalamic ibotenic lesions on learning and memory in rats. Beracochea DJ, et al. **Behav Neural Biol** 1989 May;51(3):364–76

Lesions of anterior thalamic nuclei impair acquisition of new and changing of preoperatively learnt active avoidance stereotypes. Klingberg F, et al. **Biomed Biochim Acta** 1988; 47(6):497–505

Somatosensory inputs to the subthalamic nucleus: a combined retrograde and anterograde horseradish peroxidase study in the rat. Canteras NS, et al. **Brain Res** 1988 Aug 16; 458(1):53–64

Does the pulvinar–LP complex contribute to motor programming? Cudeiro J, et al. **Brain Res** 1989 Apr 10; 484(1–2):367–70

Thalamic control of subcortical dopamine function in the rat and the effects of lesions applied to the medial prefrontal cortex. Jones MW, et al. **Brain Res** 1988 Dec 13;475(1):8–20

The pretectum as a site for relaying dorsal column input to thalamic VL neurons. Mackel R, et al. **Brain Res** 1989 Jan 2;476(1):135–9

Subpallidal–pedunculopontine projections but not subpallidal–mediodorsal thalamus projections contribute to spontaneous exploratory locomotor activity. Mogenson GJ, et al. **Brain Res** 1989 Apr 24;485(2):396–8

Burst discharges of thalamic reticular neurons: an intracellular analysis in anesthetized rats. Sumitomo I, et al. **Brain Res** 1989 Mar 13;482(1):34–41

Dual somatosensory representation of the periodontium in nucleus ventralis posteromedialis of the cat thalamus. Yokota T, et al. **Brain Res** 1988 Dec 13;475(1):187–91

Parasagittal thalamic knife cuts retard Pavlovian eyeblink conditioning and abolish the tachycardiac component of the heart rate conditioned response. Buchanan SL, et al. **Brain Res Bull** 1988 Nov;21(5):723–9

Dorsal raphe and external electrical stimulation modulate noxious input to single neurons in nucleus parafascicularis thalami. Qiao JT, et al. **Brain Res Bull** 1988 Oct;21(4):671–5

Responses of pain-sensitive neurons of thalamic parafascicular nucleus to stimulation of anterior cingulate gyrus in rabbits. Yin HZ, et al. **Chen Tzu Yen Chiu** 1988; 13(4):299–304

Far field correlates of thalamic activity in cortical and cervical somatosensory evoked potentials. Shaw NA. **Clin Electroencephalogr** 1988 Oct;19(4):219–24

Human thalamic and pallidal neuronal responses to visual stimuli in a threshold recognition task. Bechtereva NP, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar; 72(3):240–9

Mediodorsal thalamic lesions impair differential Pavlovian heart rate conditioning. Buchanan SL. **Exp Brain Res** 1988; 73(2):320–8

Anterior and medial thalamic lesions, discriminative avoidance learning, and cingulate cortical neuronal activity in rabbits. Gabriel M, et al. **Exp Brain Res** 1989; 76(2):441–57

Segregation of lemniscal inputs and motor cortex outputs in cat ventral thalamic nuclei: application of a novel technique. Hirai T, et al. **Exp Brain Res** 1988;71(2):329–44

Electrical stimulation of the lateral habenula increases hippocampal noradrenaline release as monitored by in vivo microdialysis. Kalén P, et al. **Exp Brain Res** 1989; 76(1):239–45

Receptive field properties of thalamo-cortical taste relay neurons in the parvicellular part of the posteromedial ventral nucleus in rats. Ogawa H, et al. **Exp Brain Res** 1988;73(2):364–70

The modulation of the retinal relay to the cortex in the dorsal lateral geniculate nucleus. Sillito AM, et al. **Eye** 1988;2 Suppl:S221–32 (38 ref.)

Relations between slow extracellular potential changes, glial potassium buffering, and electrolyte and cellular volume changes during neuronal hyperactivity in cat brain. Dietzel I, et al. **GLIA** 1989;2(1):25–44

Influence of envelope rise time on neural responses in the auditory system of anurans. Hall JC, et al. **Hear Res** 1988 Nov;36(2–3):261–76

Efferent projections from limbic cortex of the temporal pole to the magnocellular medial dorsal nucleus in the rhesus monkey. Gower EC. **J Comp Neurol** 1989 Feb 15; 280(3):343–58

Further physiological observations on the ventralis intermedius neurons in the human thalamus. Ohye C, et al. **J Neurophysiol** 1989 Mar;61(3):488–500

Dissociated mesencephalic responses to medial and ventral thalamic nuclei stimulation in rats. Relationship to analgesic mechanisms. Sakata S, et al. **J Neurosurg** 1989 Mar; 70(3):446–53

Noradrenaline and serotonin selectively modulate thalamic burst firing by enhancing a hyperpolarization-activated

cation current. Pape HC, et al. **Nature** 1989 Aug 31; 340(6236):715–8

Responses of VPL thalamic neurones to peripheral stimulation in wakefulness and sleep. Mariotti M, et al. **Neurosci Lett** 1989 Jul 17;102(1):70–5

Characteristics of tooth pulp–driven neurons in the posterior group of the cat thalamus. Matsumoto N, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):253–8

An N-methyl-D-aspartate receptor mediated excitatory postsynaptic potential evoked in subthalamic neurons in an in vitro slice preparation of the rat. Nakanishi H, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):130–6

Activation of the bilateral corticostriatal glutamatergic projection by infusion of GABA into thalamic motor nuclei in the cat: an in vivo release study. Barbeito L, et al. **Neuroscience** 1989;28(2):365–74

The effects of brainstem peribrachial stimulation on perigeniculate neurons: the blockage of spindle waves. Hu B, et al. **Neuroscience** 1989;31(1):1–12

The cellular mechanism of thalamic ponto–geniculo–occipital waves. Hu B, et al. **Neuroscience** 1989;31(1):25–35

Differential effects of ascending neurons containing dopamine and noradrenaline in the control of spontaneous activity and of evoked responses in the rat prefrontal cortex. Mantz J, et al. **Neuroscience** 1988 Nov;27(2):517–26

Electrophysiological characteristics of morphologically identified reticular thalamic neurons from rat slices. Spreafico R, et al. **Neuroscience** 1988 Nov;27(2):629–38

Analysis of recurrent inhibitory circuit in rat thalamus: neurophysiology of the thalamic reticular nucleus. Shosaku A, et al. **Prog Neurobiol** 1989;32(2):77–102 (112 ref.)

Experimentally induced visual projections into auditory thalamus and cortex. Sur M, et al. **Science** 1988 Dec 9; 242(4884):1437–41

[Effect of stimulation of nucleus raphe magnus and adjacent reticular formation on unit discharges of nucleus centralis lateralis in rabbits] Li ZH, et al. **Chen Tzu Yen Chiu** 1988; 13(4):292–8 (Eng. Abstr.) **(Chi)**

[Antagonism of CaCl2 injected into periaqueductal gray on the inhibitory action of morphine on pain–evoked discharges of parafascicular nucleus in rats] Chen ZX, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):504–7 (Eng. Abstr.) **(Chi)**

[Effects of exciting the habenula by sodium glutamate on blood pressure and heart rate in rats] Gao YL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):126–8 (Eng. Abstr.) **(Chi)**

[Effects of nucleus raphe magnus and locus coeruleus in descending modulation of the habenula on pain threshold and acupuncture analgesia] Liu GJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):18–22 (Eng. Abstr.) **(Chi)**

[The influence of blocking habenulae or medial forebrain bundles on the analgesic effect elicited by administration L-glutamic acid into the septa] Liu GJ, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):547–52 (Eng. Abstr.) **(Chi)**

[Effects of stimulation of caudate nucleus on the unit discharges of somato–visceral converging neurons of parafascicular nucleus of thalamus in rats] Tong ZQ, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):586–91 (Eng. Abstr.) **(Chi)**

[The effects of acetylcholine on the electric activities of pain reaction neurons in nucleus parafascicularis of thalamus and midbrain reticular formation in rats] Zhao DC, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):326–34 (Eng. Abstr.) **(Chi)**

[Participation of the thalamic reticular nucleus in the shaping of the interrelations of the mesencephalic reticular formation and the lateral geniculate body] Kul'gavin LE, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):643–5 (Eng. Abstr.) **(Rus)**

[Effect of stimulation of the thalamic reticular nucleus on the neuronal activity of the associative and nonspecific structures of the thalamus] Airapetian AA, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):924–32 (Eng. Abstr.) **(Rus)**

[Effect of stimulation of the central gray matter of the midbrain on responses of neurons of the ventroposteromedial nucleus of the thalamus in cats] Gura EV, et al. **Neirofiziologiia** 1988;20(5):688–94 (Eng. Abstr.) **(Rus)**

[Role of neurons of the thalamus and striopallidar complex of the human brain in ensuring the constancy of visual perception] Medvedev SV, et al. **Neirofiziologiia** 1989; 21(1):93–101 (Eng. Abstr.) **(Rus)**

[Convergence of projections from various thalamic nuclei on the rat somatosensory cortex columns] Sukhov AG, et al. **Neirofiziologiia** 1989;21(2):168–74 (Eng. Abstr.) **(Rus)**

[Modulation of the thalamocortical responses of the sensorimotor cortex during stimulation of the lateral hypothalamus in rabbits in ontogeny] Shimko IA. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb;25(1):74–80 (Eng. Abstr.) **(Rus)**

[The effect of stimulating the "reward zones" on the evoked potentials in the parafascicular complex of the thalamus in rabbits] Butkevich IP, et al. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):142–4 **(Rus)**

[Functional contribution of the parafascicular complex of the thalamus to complex forms of behavior in cats] Mukhin EI. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):660–6 (Eng. Abstr.) **(Rus)**

[The significance of the thalamic parafascicular complex in tracking processes in cats] Mukhin EI. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):252–8 (Eng. Abstr.) **(Rus)**

[Electrophysiological analysis of septum–amygdala interaction at the level of the dorsomedial thalamic nucleus in the rat] Sidorov BM, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1085–92 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Hemiballismus: changes in cerebrospinal fluid. Kostic V, et al. **Acta Neurol Scand** 1988 Aug;78(2):115–7

The effect of thalamic stimulation in processing of verbal stimuli in dichotic listening tasks: a case study. Bhatnager SC, et al. **Brain Lang** 1989 Feb;36(2):236–51

Anticonvulsant effect of muscimol injected into the thalamus of spontaneously epileptic Mongolian gerbils. Lee RJ, et al. **Brain Res** 1989 May 22;487(2):363–7

Epileptiform EEG activities of the centromedian thalamic nuclei in patients with intractable partial motor, complex partial, and generalized seizures. Velasco M, et al. **Epilepsia** 1989 May–Jun;30(3):295–306

Behavioural and electrophysiological evidence for an analgesic effect of a non–steroidal anti–inflammatory agent, sodium diclofenac. Attal N, et al. **Pain** 1988 Dec; 35(3):341–8

Suppression of noxious thermal evoked responses in thalamic central lateral nucleus by cortical spreading depression. Condés–Lara M, et al. **Pain** 1988 Nov;35(2):199–204

Connectivity patterns of thalamic nuclei implicated in dyskinesia. Carpenter MB. **Stereotact Funct Neurosurg** 1989;52(2–4):79–119 (167 ref.)

[Interhemispheric artificial stable functional connections] Smirnov VM, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):531–44 **(Rus)**

[Structuro–functional organization of thalamic insufficiency] Mukhin EI. **Zh Nevropatol Psikhiatr** 1988;88(7):3–7 (Eng. Abstr.) **(Rus)**

[Somatosensory evoked potentials before and after stereotaxic operations in patients with childhood cerebral palsy] Tomas D, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug;(4):27–32 (Eng. Abstr.) **(Rus)**

SURGERY

Adrenal medullary autograft in human brain for Parkinson's disease [letter] Frank F, et al. **Acta Neurochir (Wien)** 1988; 94(3–4):162–3

Lateral coordinates of nucleus ventralis intermedius target for tremor alleviation. Maeda T. **Stereotact Funct Neurosurg** 1989;52(2–4):191–9

[Late results of ventrolateral thalamotomy in parkinsonism and their mathematical prognosis] Asser TK, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):37–9 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Ultrastructural differences between pallidohabenular terminals and pallidothalamic terminals. Tokuno H, et al. **Brain Res** 1988 Dec 6;474(2):390–3

Fornix afferents to the anteroventral thalamic nucleus: an EM study in the rat. Lenn NJ. **Brain Res Bull** 1978 Nov–Dec;3(6):589–93

Ultrastructure of ChAT–immunoreactive synaptic terminals in the thalamic reticular nucleus of the rat. Hallanger AE, et al. **J Comp Neurol** 1988 Dec 22;278(4):486–97

Synaptic organization of the thalamic reticular nucleus. Ohara PT. **J Electron Microsc Tech** 1988 Nov;10(3):283–92

[Electron microscopic observation on descending fiber terminal degenerations of somatosensory area I in thalamic central lateral nucleus] Luo MF, et al. **Chen Tzu Yen Chiu** 1988;13(2):106–9 (Eng. Abstr.) **(Chi)**

THALAMOSTRIATE VEIN see **CEREBRAL VEINS**

THALAMUS

Prognostic factors and results of therapy for adult thalamic and brainstem tumors. Grigsby PW, et al. **Cancer** 1989 Jun 1;63(11):2124–9

Multivariate analysis of prognostic factors in pediatric and adult thalamic and brainstem tumors. Grigsby PW, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):649–55

Stereotactic biopsy and resection of thalamic astrocytomas. Kelly PJ. **Neurosurgery** 1989 Aug;25(2):185–94; discussion 194–5

Hypesthetic ataxic hemiparesis in a thalamic lacune. Lee N, et al. **Stroke** 1989 Jun;20(6):819–21

ANALYSIS

Age–related changes of catecholamines and their metabolites content in the visual system of the rat. Santiago M, et al. **Mech Ageing Dev** 1989 Jan;47(1):77–84

Neurokinin B and substance P genes are co–expressed in a subset of neurons in the rat habenula. Burgunder JM, et al. **Neuropeptides** 1989 Apr;13(3):165–9

[Biochemical and immunocytochemical study of the axonal domain of mature and immature microtubules] Binet S, et al. **Rev Neurol (Paris)** 1988;144(11):688–96 (Eng. Abstr.) **(Fre)**

[Distribution of the enkephalin neuron system in the rat thalamus; an immunohistochemical analysis] Fujii S. **Masui** 1989 Jan;38(1):76–87 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Evidence for two complementary patterns of thalamic input to the rat somatosensory cortex. Koralek KA, et al. **Brain Res** 1988 Nov 1;463(2):346–51

The posterior part of the thalamus and anterior pretectum have two systems of connections with insula and claustrum in the rat. Moryś J, et al. **Folia Morphol (Warsz)** 1987; 46(1–2):67–76

Origin and terminals of the pretectothalamoclaustral connections in the cat. Moryś J, et al. **Folia Morphol (Warsz)** 1987;46(3–4):129–40

Ascending connections of the supralemniscal field to the insular cortex in the cat. Moryś J, et al. **Folia Morphol (Warsz)** 1987;46(1–2):77–82

Lamina medullaris pretectothalamica and adjacent nuclei in the rat. Moryś J, et al. **Folia Morphol (Warsz)** 1987; 46(1–2):83–90

Cholinergic innervation of canine thalamostriatal projection neurons: an ultrastructural study combining choline acetyltransferase immunocytochemistry and WGA–HRP retrograde labeling. Isaacson LG, et al. **J Comp Neurol** 1988 Nov 22;277(4):529–40

Basal forebrain cholinergic and noncholinergic projections to the thalamus and brainstem in cats and monkeys. Parent A, et al. **J Comp Neurol** 1988 Nov 8;277(2):281–301

Ultrastructural and neurochemical analysis of synaptic input to trigemino–thalamic projection neurones in lamina I of the rat: a combined immunocytochemical and retrograde labelling study. Priestley JV, et al. **J Comp Neurol** 1989 Jul 22;285(4):467–86

Anatomy of the auditory thalamocortical system of the guinea pig. Redies H, et al. **J Comp Neurol** 1989 Apr 22; 282(4):489–511

A cytoarchitectonic atlas of the medial geniculate body of the opossum, Didelphys virginiana, with a comment on the posterior intralaminar nuclei of the thalamus. Winer JA, et al. **J Comp Neurol** 1988 Aug 15;274(3):422–48

Thalamic connections of the cortex of the superior temporal sulcus in the rhesus monkey. Yeterian EH, et al. **J Comp Neurol** 1989 Apr 1;282(1):80–97

Mapping of semimicroelectrode stimulation response in and around the thalamus. Yoshida M. **Stereotact Funct Neurosurg** 1989;52(2–4):171–5

[Connected pathways of the thalamus and clinical manifestations of lesions of its various parts] Hu RL. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Dec; 21(6):362–5 (39 ref.) **(Chi)**

[Intrathalamic afferent connections of the median center of the thalamus] Kostanian EG, et al. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):17–22 (Eng. Abstr.) **(Rus)**

[Efferent connections of various parts of the orbitofrontal cortex with thalamic structures in cats] Malakhova OE, et al. **Arkh Anat Gistol Embriol** 1988 Jun;94(6):29–38 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Effects of beta–adrenergic agents on the regional cerebral blood flow in cortex and thalamus of the cat. Vlahov V, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec; 296:87–100

The neuropsychology of paramedian thalamic infarction. Stuss DT, et al. **Brain Cogn** 1988 Dec;8(3):348–78

Hyperperfusion of cerebral cortex, thalamus and basal ganglia during spontaneously occurring migraine headaches. Kobari M, et al. **Headache** 1989 May;29(5):282–9

[The effect of the calcium antagonists nimodipin, verapamil and diltiazem on local cerebral blood flow of the cortex and thalamus in cats] Ganchev E. **Eksp Med Morfol** 1989; 28(2):44–7 (Eng. Abstr.) **(Bul)**

[Diagnostic imaging of thalamic infarcts] Götz GF, et al. **Rontgenpraxis** 1989 Aug;42(8):285–8 **(Ger)**

[Amnestic syndrome with severe character change caused by bilateral small infarctions involving white matter just below the thalamus] Hirono N, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1209–16 (Eng. Abstr.) **(Jpn)**

[Paramedian thalamic and midbrain infarcts associated with palilalia] Yasuda Y, et al. **Rinsho Shinkeigaku** 1989 Feb; 29(2):186–90 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Characterization of ethosuximide reduction of low–threshold calcium current in thalamic neurons. Coulter DA, et al. **Ann Neurol** 1989 Jun;25(6):582–93

Thalamocortical synapses with identified neurons in monkey primary auditory cortex: a combined Golgi/EM and GABA/peptide immunocytochemistry study. Cipolloni PB, et al. **Brain Res** 1989 Jul 17;492(1–2):347–55

The cerebral and cerebellar connections of pretecto–thalamic and pretecto–olivary neurons in the anterior pretectal nucleus of the cat. Kitao Y, et al. **Brain Res** 1989 Apr 10;484(1–2):304–13

A new parcellation of the human thalamus on the basis of histochemical staining. Hirai T, et al. **Brain Res Brain Res Rev** 1989 Jan–Mar;14(1):1–34

Afferent projections to the dorsal thalamus of the rat as shown by retrograde lectin transport. II. The midline

nuclei. Cornwall J, et al. **Brain Res Bull** 1988 Aug; 21(2):147–61
Collateral projections of predorsal bundle cells of the superior colliculus in the rat. Bickford ME, et al. **J Comp Neurol** 1989 May 1;283(1):86–106
Retrograde double-labeling study of the mammillothalamic and the mammillotegmental projections in the rat. Hayakawa T, et al. **J Comp Neurol** 1989 Jun 1;284(1):1–11
Development of the thalamocortical system: transient-crossed projections to the frontal cortex in neonatal rats. Minciacchi D, et al. **J Comp Neurol** 1989 Mar 1;281(1):1–12
Cells of origin of spinothalamic, spinotectal, spinoreticular and spinocerebellar pathways in the pigeon as studied by the retrograde transport of horseradish peroxidase. Necker R. **J Hirnforsch** 1989;30(1):33–43
Effects of oxotremorine on neuronal RNA and chromatin in thalamic cholinoceptive sites. Martin LJ, et al. **J Neurol Sci** 1988 Sep;86(2–3):159–69
Monocular and binocular response properties of cells in the striate-recipient zone of the cat's lateral posterior-pulvinar complex. Casanova C, et al. **J Neurophysiol** 1989 Aug; 62(2):544–57
Coexistence of corticotropin releasing factor and neurotensin within oval nucleus neurons in the bed nuclei of the stria terminalis in the rat. Ju G, et al. **Neurosci Lett** 1989 May 8;99(3):246–50
Collateral branches of cerebellopontine axons reach the thalamus, superior colliculus, or inferior olive: a double-fluorescence and combined fluorescence-horseradish peroxidase study in the rat. Lee HS, et al. **Neuroscience** 1989;28(3):725–34
[System principles in the organization of neurons carrying out cortical inhibition] Batuev AS, et al. **Fiziol Zh** 1989 May–Jun;35(3):84–91 (22 ref.) (Eng. Abstr.) (Rus)

DRUG EFFECTS

A mechanistic approach to the effect of anaesthetic agents on the centripetal transfer of sensory information. Angel A. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):395–404
Excitatory effect of histamine on EEGs of the cortex and thalamus in rats. Tasaka K, et al. **Agents Actions** 1989 Apr; 27(1–2):127–30
Flupirtine depresses nociceptive activity evoked in rat thalamus. Bleyer H, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):259–65
Local perfusion of the thalamus with GABA increases sleep and induces long-lasting inhibition of somatosensory event-related potentials in cats. Juhász G, et al. **Neurosci Lett** 1989 Aug 28;103(2):229–33
[Ultrastructural changes in the thalamus in chronic morphine intoxication and abstinence] Kolusheva GV. **Zh Nevropatol Psikhiatr** 1988;88(7):67–71 (Eng. Abstr.) (Rus)

EMBRYOLOGY

Depletion of cholinergic habenulo-interpeduncular neurons by selectively timed methylazoxymethanol acetate (MAM) treatment during pregnancy. Virgili M, et al. **Brain Res** 1988 Sep 20;460(2):361–5
Development of the rat thalamus: IV. The intermediate lobule of the thalamic neuroepithelium, and the time and site of origin and settling pattern of neurons of the ventral nuclear complex. Altman J, et al. **J Comp Neurol** 1989 Jun 22;284(4):534–66
Development of the rat thalamus: II. Time and site of origin and settling pattern of neurons derived from the anterior lobule of the thalamic neuroepithelium. Altman J, et al. **J Comp Neurol** 1988 Sep 15;275(3):378–405
Development of the rat thalamus: III. Time and site of origin and settling pattern of neurons of the reticular nucleus. Altman J, et al. **J Comp Neurol** 1988 Sep 15;275(3):406–28
Development of the rat thalamus: I. Mosaic organization of the thalamic neuroepithelium. Altman J, et al. **J Comp Neurol** 1988 Sep 15;275(3):346–77
[The development of connections in the tecto-thalamo-telencephalic visual system of the brain in 13-day-old chick embryos] Tumanova NL, et al. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb;25(1):119–22 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Transient patterns of acetylcholinesterase activity in developing thalamus: a comparative study in rodents. Robertson RT, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):309–15
Acetylcholinesterase in immature thalamic neurons: relation to afferentation, development, regulation and cellular distribution. Kristt DA. **Neuroscience** 1989;29(1):27–43

GROWTH & DEVELOPMENT

Modification of left-right pairing during the development of individual crest synapses in the rat interpeduncular nucleus. Lenn NJ, et al. **J Comp Neurol** 1989 Mar 1; 281(1):136–42

INJURIES

Somatosensory evoked potentials following lesions of the claustrum. Moryś J, et al. **Acta Physiol Pol** 1988 Sep–Dec; 39(5–6):475–83

METABOLISM

Topography of basal glucose utilization in rat thalamus and hypothalamus determined with (1-14C)-glucose. Bristle O, et al. **Anat Embryol (Berl)** 1988;179(1):1–17
Thalamic dopamine and norepinephrine ratios in schizophrenia [letter] Katz RJ. **Biol Psychiatry** 1989 Feb 1;25(3):363
Feline subthalamic nucleus neurons contain glutamate-like but not GABA-like or glycine-like immunoreactivity. Albin RL, et al. **Brain Res** 1989 Jul 3;491(1):185–8
Induction of c-fos-like protein within the lumbar spinal cord and thalamus of the rat following peripheral stimulation. Bullitt E. **Brain Res** 1989 Jul 31;493(2):391–7
The distribution of thalamic projection neurons containing cholecystokinin messenger RNA, using in situ hybridization histochemistry and retrograde labeling. Burgunder JM, et al. **Brain Res** 1988 Nov;464(3):179–89
Immunocytochemical study of angiotensin II cell bodies in the rat thalamus. Coveñas R, et al. **Brain Res** 1989 Feb 27;481(1):185–9
Distribution and binding parameters of GABA and benzodiazepine receptors in the cat motor thalamus and adjacent nuclear groups. Kultas-Ilinsky K, et al. **Brain Res** 1988 Aug 30;459(1):1–16
Preprocholecystokinin mRNA in rat brain: regional expression includes thalamus. Voigt MM, et al. **Brain Res** 1988 Nov;464(3):247–53
Distribution of tachykinin- and enkephalin-immunoreactive fibers in the human thalamus. Hirai T, et al. **Brain Res Brain Res Rev** 1989 Jan–Mar;14(1):35–52
Ontogeny of cholecystokinin gene expression in the rat thalamus—a hybridization histochemical study. Burgunder JM, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):221–32
Localization of serotonin receptors in the rat thalamus by electrophysiology and the action of 5-HTP-DP-hex. Emmers R, et al. **Exp Neurol** 1989 Jun;104(3):279–83
Specific petit mal anticonvulsants reduce calcium currents in thalamic neurons. Coulter DA, et al. **Neurosci Lett** 1989 Mar 13;98(1):74–8

PATHOLOGY

Intracytoplasmic inclusion bodies of the thalamus and the substantia nigra, and Marinesco bodies in myotonic dystrophy: a quantitative morphological study. Ono S, et al. **Acta Neuropathol (Berl)** 1989;77(4):350–6
A premature infant with a bilateral thalamostriatal hemorrhage: brain imaging and pathology. Hokazono Y, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Dec;29(6):867–71
Analysis of autopsy findings in patients treated with irradiation for thalamic and brain stem tumors. Grigsby PW, et al. **Am J Clin Oncol** 1989 Jun;12(3):255–8
Symmetrical thalamic degeneration with calcifications of infancy. DiMario FJ Jr, et al. **Am J Dis Child** 1989 Sep; 143(9):1056–60 (14 ref.)
Ipsilateral blepharospasm and contralateral hemidystonia and parkinsonism in a patient with a unilateral rostral brainstem-thalamic lesion: structural and functional abnormalities studied with CT, MRI, and PET scanning. Leenders KL, et al. **Mov Disord** 1986;1(1):51–8
Long-term follow-up after stereotaxic basal ganglia surgery in parkinsonism. A neuroanatomical study of a case showing unusual postural disorders. Viallet F, et al. **Mov Disord** 1988;3(2):140–51
Acute thalamic esotropia. Gomez CR, et al. **Neurology** 1988 Nov;38(11):1759–62
Fetal cortical transplants reduce the thalamic atrophy induced by frontal cortical lesions in newborn rats. Sørensen JC, et al. **Neurosci Lett** 1989 Mar 13;98(1):33–8
Pathological echogenecity of the tahalamus in newborn and young infants. Shen EY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Sep;87(9):891–7

PHYSIOLOGY

Human thalamus and striopallidal neuronal responses related to visual perception constancy. Medvedev SV, et al. **Act Nerv Super (Praha)** 1988 Dec;30(4):317–9
Responses of thalamic neurons in rats to skin cooling and hypothalamic temperature. Sakata Y, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1293–8
New vistas on the morphology, chemical transmitters and physiological actions of the ascending brainstem reticular system. Steriade M. **Arch Ital Biol** 1988 Oct;126(4):225–38 (24 ref.)
Medial thalamus and memory [letter] Mori E, et al. **Arch Neurol** 1989 May;46(5):482–4
Responses of neurons in nucleus ventralis posterolateralis of the cat thalamus' to hypogastric inputs. Asato F, et al. **Brain Res** 1989 May 29;488(1–2):135–42
Enlargement of uncrossed retinal projections in the albino rat: additive effects of neonatal eye removal and thalamectomy. Chan SO, et al. **Brain Res** 1988 Sep 27; 461(1):163–8
Intracellular analysis of excitatory subthalamic inputs to the pedunculopontine neurons. Granata AR, et al. **Brain Res** 1989 May 29;488(1–2):57–72
Regulation of striatal serotonin release by the lateral habenula-dorsal raphe pathway in the rat as demonstrated by in vivo microdialysis: role of excitatory amino acids and GABA. Kalén P, et al. **Brain Res** 1989 Jul 17; 492(1–2):187–202
Slow fluctuations of single unit activities of hippocampal and thalamic neurons in cats. II. Role of serotonin on the stability of neuronal activities. Kodama T, et al. **Brain Res** 1989 May 15;487(1):35–44
Slow fluctuations of single unit activities of hippocampal and thalamic neurons in cats. I. Relation to natural sleep and alert states. Kodama T, et al. **Brain Res** 1989 May 15; 487(1):26–34
Fetal cortical transplants into neonatal rats respond to thalamic and peripheral stimulation in the adult. An electrophysiological study of single-unit activity. Neafsey EJ, et al. **Brain Res** 1989 Jul 24;493(1):33–40
Ipsilateral somatosensory tongue representation within the lateral subdivision of the nucleus ventralis posteromedialis parvocellularis of the cat thalamus. Nishikawa Y, et al. **Brain Res** 1988 Aug 23;458(2):394–6
Modulation of NMDA receptor-mediated responses by glycine and D-serine in the rat thalamus in vivo. Salt TE. **Brain Res** 1989 Mar 6;481(2):403–6
Tongue-muscle-controlling motoneurons in the Japanese toad: neural inputs from the thalamus. Satou M, et al. **Brain Res** 1989 Feb 27;481(1):39–46
Short latency activation of local circuit neurons in the cat somatosensory cortex. Yamamoto T, et al. **Brain Res** 1988 Sep 27;461(1):199–203
Modulation of the spontaneous and evoked discharges of ventral posterior thalamic neurons during shifts in arousal. Morrow TJ, et al. **Brain Res Bull** 1988 Sep;21(3):433–8
Excitatory effect of histamine on the arousal system and its inhibition by H1 blockers. Tasaka K, et al. **Brain Res Bull** 1989 Feb;22(2):271–5
Origin and distribution of thalamic somatosensory evoked potentials in humans. Morioka T, et al. **Electroencephalogr Clin Neurophysiol** 1989 May–Jun; 74(3):186–93
The thalamus participates in the regulation of the sleep-waking cycle. A clinico-pathological study in fatal familial thalamic degeneration. Tinuper P, et al. **Electroencephalogr Clin Neurophysiol** 1989 Aug; 73(2):117–23
Identification of a median thalamic system regulating seizures and arousal. Miller JW, et al. **Epilepsia** 1989 Jul–Aug; 30(4):493–500
Multiple inputs to a population of thalamocortical neurons projecting to cat somatosensory cortex. Waldron JN, et al. **Exp Brain Res** 1989;74(1):105–15
Spatial organization of thalamocortical and corticothalamic projection systems in the rat SmI barrel cortex. Chmielowska J, et al. **J Comp Neurol** 1989 Jul 15; 285(3):325–38
Thalamic input to inferior area 6 and area 4 in the macaque monkey. Matelli M, et al. **J Comp Neurol** 1989 Feb 15; 280(3):468–88
Computer-controlled stimulation in the assessment of electrical characteristics for cortical phosphene generation for a visual prosthesis. Record P, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):52–6
Effects of thalamic lesion on the bilateral regulation of serotoninergic transmission in rat basal ganglia. Becquet D, et al. **J Neural Transm** 1988;74(2):117–28
gamma-Aminobutyric acid function in the rat striatum is under the double influence of nigrostriatal dopaminergic and thalamostriatal inputs: two modes of regulation? Samuel D, et al. **J Neurochem** 1988 Dec;51(6):1704–10
Identification of two calcium currents in acutely dissociated neurons from the rat lateral geniculate nucleus. Hernández-Cruz A, et al. **J Neurophysiol** 1989 Jun; 61(6):1270–83
Responses of monkey medullary dorsal horn neurons during the detection of noxious heat stimuli. Maixner W, et al. **J Neurophysiol** 1989 Aug;62(2):437–49
Neural coding of gustatory information in the thalamus of Macaca mulatta. Pritchard TC, et al. **J Neurophysiol** 1989 Jan;61(1):1–14
Thalamocortical response transformation in the rat vibrissa/barrel system. Simons DJ, et al. **J Neurophysiol** 1989 Feb;61(2):311–30
Nucleus basalis and thalamic control of neocortical activity in the freely moving rat. Buzsaki G, et al. **J Neurosci** 1988 Nov;8(11):4007–26
Visual receptive fields in the striate-recipient zone of the lateral posterior-pulvinar complex. Chalupa LM, et al. **J Neurosci** 1989 Jan;9(1):347–57
Effect of stimulation in three subcortical sites on the thalamocortical augmenting response in the cat. Nowack WJ, et al. **Neurol Res** 1988 Sep;10(3):156–60
Local blood flow in the thalamus and frontal cortex in alert and narcotized dogs. Kaasik AE, et al. **Neurosci Behav Physiol** 1988 Sep–Oct;18(5):384–7
Interaction of cortico-subcortical systems in the organization of acts of higher nervous activity. Suvorov NF. **Neurosci Behav Physiol** 1988 Jul–Aug;18(4):330–41 (28 ref.)
Spinal lamina I projection neurons in the rat: collateral innervation of parabrachial area and thalamus. Hylden JL, et al. **Neuroscience** 1989;28(1):27–37
Gamma-aminobutyric acid and afferent inhibition in the cat and rat ventrobasal thalamus. Salt TE. **Neuroscience** 1989; 28(1):17–26
Connectivity of striatal grafts implanted into the ibotenic acid-lesioned striatum—I. Subcortical afferents. Wictorin K, et al. **Neuroscience** 1988 Nov;27(2):547–62
Visual responses of neurons in somatosensory cortex of hamsters with experimentally induced retinal projections

to somatosensory thalamus. Métin C, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):357–61

The assembly of ionic currents in a thalamic neuron. III. The seven-dimensional model. Rose RM, et al. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):313–34

The assembly of ionic currents in a thalamic neuron. II. The stability and state diagrams. Rose RM, et al. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):289–312

The assembly of ionic currents in a thalamic neuron. I. The three-dimensional model. Rose RM, et al. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):267–88

Electrophysiological and behavioral experiments on the primate pulvinar. Bender DB. **Prog Brain Res** 1988; 75:55–65 (38 ref.)

Receptive-field properties in the tecto- and striate-recipient zones of the cat's lateral posterior nucleus. Chalupa LM, et al. **Prog Brain Res** 1988;75:85–94 (40 ref.)

The lateral posterior complex of the cat: studies of the functional organization. Hutchins B, et al. **Prog Brain Res** 1988;75:75–83 (40 ref.)

The consequences of the superior colliculus output on lateral geniculate and pulvinar responses. Molotchnikoff S, et al. **Prog Brain Res** 1988;75:67–74

Synaptic organization of the lateralis medialis–suprageniculate nuclear (LM–Sg) complex in the cat. Norita M, et al. **Prog Brain Res** 1988;75:109–19 (30 ref.)

Visual function of the cat's LP/LS subsystem in global motion processing. Rauschecker JP. **Prog Brain Res** 1988; 75:95–108 (30 ref.)

Some extra-striate corticothalamic connections in macaque monkeys. Squatrito S, et al. **Prog Brain Res** 1988;75:279–92

Visual projections induced into auditory thalamus and cortex: implications for thalamic and cortical information processing. Sur M. **Prog Brain Res** 1988;75:129–36 (129 ref.)

Cholinergic and noradrenergic modulation of thalamocortical processing. McCormick DA. **Trends Neurosci** 1989 Jun; 12(6):215–21 (48 ref.)

[Convergence of somatic and visceral afferent impulses in the parafascicular nucleus of the rat] He SF, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):111–6 (Eng. Abstr.) **(Chi)**

[Subthalamic lesions eliminate sexual behavior in the male rat] Maillard CA, et al. **J Physiol (Paris)** 1988;83(1):50–5 (Eng. Abstr.) **(Fre)**

[The effects of electrical stimulation of nucleus raphe magnus and nucleus reticularis gigantocellularis on medial thalamic neurons—special reference to noxious neurons] Miyamoto T. **No To Shinkei** 1988 Oct;40(10):971–8 (Eng. Abstr.) **(Jpn)**

[Results of studies of the processes of excitation and inhibition in neurons of the cerebral cortex and the thalamus] Serkov FN. **Fiziol Zh** 1988 Sep–Oct;34(5):3–21 (32 ref.) (Eng. Abstr.) **(Rus)**

[Effect of stimulation of the thalamic reticular nucleus on the neuronal activity of the associative and nonspecific structures of the thalamus] Airapetian AA, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):924–32 (Eng. Abstr.) **(Rus)**

[Morphometric and electrophysiologic research on the parafascicular complex of the thalamus in early ontogeny in the rabbit] Butkevich IP, et al. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb;25(1):67–73 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Noxious stimuli excite neurons in nucleus submedius of the normal and arthritic rat. Dostrovsky JO, et al. **Brain Res** 1988 Sep 20;460(2):269–80

Evidence for central phenomena participating in the changes of responses of ventrobasal thalamic neurons in arthritic rats. Guilbaud G, et al. **Brain Res** 1989 Apr 10; 484(1–2):383–8

Diencephalic amnesia: a reorientation towards tracts? Markowitsch HJ. **Brain Res** 1988 Dec;472(4):351–70 (218 ref.)

Effects of thalamic parafascicular stimulation on the periaqueductal gray and adjacent reticular formation neurons. A possible contribution to pain control mechanisms. Sakata S, et al. **Brain Res** 1988 Jun 7; 451(1–2):85–96

Temporal lobe and petit mal antiepileptics differentially affect ventral lateral thalamic and motor cortex excitability patterns. Shouse MN, et al. **Brain Res** 1988 Nov 15; 473(2):372–9

Behavioural and electrophysiological studies on the paradoxical antinociceptive effects of an extremely low dose of naloxone in an animal model of acute and localized inflammation. Kayser V, et al. **Exp Brain Res** 1988; 73(2):402–10

Ketamine and MK-801 prevent degeneration of thalamic neurons induced by focal cortical seizures. Clifford DB, et al. **Exp Neurol** 1989 Sep;105(3):272–9

Somatosensory evoked potentials following severe head injury: loss of the thalamic potential with brain death. Chancellor AM, et al. **J Neurol Sci** 1988 Nov; 87(2–3):255–63

Crossed cerebellar and uncrossed basal ganglia and thalamic diaschisis in Alzheimer's disease. Akiyama H, et al. **Neurology** 1989 Apr;39(4):541–8

Cytochrome oxidase activity in the rat retina following unilateral thalamic lesion. Jen LS, et al. **Neurosci Lett** 1989 Aug 28;103(2):133–8

Behavioral and thalamic nociceptive responses in rats following noxious ischaemia of the tail. Gelgor L, et al. **Pain** 1988 Aug;34(2):205–11

Dose-dependent inhibition by naloxone of nociceptive activity evoked in the rat thalamus. Jurna I. **Pain** 1988 Dec; 35(3):349–54

Pediatric diencephalic gliomas—a review of 18 cases. Scott EW, et al. **Pediatr Neurosci** 1987;13(5):225–32 (44 ref.)

Subthalamic and mesencephalic locomotor regions: brain damage augments the importance of female movement for the display of sexual behavior in male rats. Edwards DA, et al. **Physiol Behav** 1988;44(6):803–9

Excitability cycles of epileptic after-discharges in rats. Marel P, et al. **Physiol Bohemoslov** 1989;38(1):55–61

Current issues regarding subcortical electrical stimulation for pain control in humans. Hosobuchi Y. **Prog Brain Res** 1988; 77:189–92 (26 ref.)

Problems and controversies in PVG and sensory thalamic stimulation as treatment for pain. Meyerson BA. **Prog Brain Res** 1988;77:175–88 (61 ref.)

Mesothalamic discharge sites. Andy OJ. **Stereotact Funct Neurosurg** 1989;52(2–4):176–82

Thalamic stimulation and recording in patients with deafferentation and central pain. Gorecki J, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):219–26

Recordings of abnormal activity in patients with deafferentation and central pain. Hirayama T, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):120–6

Microrecording for the study of thalamic organization, for tumor biopsy and removal. Ohye C, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):136–44

Stereoencephalotomy and control of skeletal muscle tone. Struppler A. **Stereotact Funct Neurosurg** 1989; 52(2–4):205–18

Evoked potentials from the human thalamus: correlation with microstimulation and single unit recording. Yamashiro K, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):127–35

RADIOGRAPHY

Thalamic hyperdensity: a previously unreported sign of Sandhoff disease. Stalker HP, et al. **AJNR** 1989 Sep–Oct; 10(5 Suppl):S82

SURGERY

Sex differences in brain and personality correlates of the ability to identify popular word associations. Lansdell H. **Behav Neurosci** 1989 Aug;103(4):893–7

Stereotaxic Vim thalamotomy for treatment of tremor. Narabayashi H. **Eur Neurol** 1989;29 Suppl 1:29–32 (16 ref.)

Magnetic resonance imaging stereotactic thalamotomy: report of a case with comparison to computed tomography. Lunsford LD. **Neurosurgery** 1988 Sep;23(3):363–7

New trends in computer graphics and computer vision to assist functional neurosurgery. Lipinski HG, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):234–41

Microphysiological recordings at CT gantry site during stereotactic thalamotomy. Uematsu S, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):183–90

CT profile of experimental radiofrequency lesion in the thalamus. Ebisutani D. **Tokushima J Exp Med** 1988 Jun; 35(1–2):21–35

[Ballism syndromes treated by cryothalamotomy] Mempel E. **Neurol Neurochir Pol** 1988 Sep–Oct;22(5):468–72 (Eng. Abstr.) **(Pol)**

TRANSPLANTATION

Somatic activation of thalamic neurons transplanted into lesioned somatosensory thalamus. Juliano SL, et al. **Brain Res** 1989 Jan 30;478(2):356–60

Rapid growth of host afferents into fetal thalamic transplants. Nothias F, et al. **Brain Res** 1988 Nov 1;463(2):341–5

Vascularization of fetal cell suspension grafts in the excitotoxically lesioned adult rat thalamus. Dusart I, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):215–28

Fetal homotypic transplant in the excitotoxically neuron-depleted thalamus: light microscopy. Peschanski M, et al. **J Comp Neurol** 1988 Aug 15;274(3):449–63

Magnetic resonance imaging of intracerebral neural grafts. Peschanski M, et al. **Prog Brain Res** 1988;78:619–24

ULTRASTRUCTURE

Morphological alteration of thalamic afferents in the excitotoxically lesioned striatum. Nothias F, et al. **Brain Res** 1988 Oct 4;461(2):349–54

Topographical and ultrastructural investigation of the habenulo-interpeduncular pathway in the rat: a wheat germ agglutinin-horseradish peroxidase anterograde study. Kawaja MD, et al. **J Comp Neurol** 1988 Sep 1;275(1):117–27

The effect of thiamine deficiency on the structure and physiology of the rat forebrain. Armstrong-James M, et al. **Metab Brain Dis** 1988 Jun;3(2):91–124

THALASSEMIA

Thalassemia: molecular pathology and management. Steinberg MH. **Am J Med Sci** 1988 Nov;296(5):308–21 (217 ref.)

Proceedings of the First International Symposium on Thalassemias in China. Shanghai, People's Republic of China, October 12–15, 1987. **Hemoglobin** 1988; 12(5–6):441–825

Successful full-term pregnancy in homozygous beta-thalassemia major: case report and review of the literature. Mordel N, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):837–40 (13 ref.)

[Thalassemia registry of Sicily] Giambelluca SE, et al. **Epidemiol Prev** 1987 Mar;9(30):23–7 (Eng. Abstr.) **(Ita)**

BLOOD

Platelet survival in patients with beta-thalassemia. Eldor A, et al. **Am J Hematol** 1989 Oct;32(2):94–9

Hemoglobin Athens-Georgia [alpha 2 beta 2 40(C6)Arg——Lys] in association with beta 0-thalassemia in Tunisia. Mrad A, et al. **Am J Hematol** 1989 Oct; 32(2):117–22

Evidence for posttranslational control of fetal hemoglobin synthesis. Qiu CC, et al. **Am J Hematol** 1988 Sep;29(1):58–9

Red cell ferritin and iron overload in heterozygous beta-thalassemia. Van der Weyden MB, et al. **Am J Hematol** 1989 Apr;30(4):201–5

Plasma lipids in beta-thalassemia minor. Maioli M, et al. **Atherosclerosis** 1989 Feb;75(2–3):245–8

Calcium transport and ultrastructure of red cells in beta-thalassemia intermedia. Bookchin RM, et al. **Blood** 1988 Nov;72(5):1602–7

Hemoglobin Köln occurring in association with a beta zero thalassemia: hematologic and functional consequences. Galacteros F, et al. **Blood** 1989 Jul;74(1):496–500

Enhancement of in vitro beta-thalassemic and normal hematopoiesis by a noncytotoxic monoclonal antibody, 9.1C3: evidence for negative regulation of hematopoiesis by monocytes and natural killer cells. Kannourakis G, et al. **Blood** 1988 Oct;72(4):1124–33

Erythropoiesis following bone marrow transplantation from donors heterozygous for beta-thalassaemia. Galanello R, et al. **Br J Haematol** 1989 Aug;72(4):561–6

The interaction of alpha thalassaemia and sickle cell-beta zero thalassaemia. Vyas P, et al. **Br J Haematol** 1988 Dec; 70(4):449–54

Sero-negative rheumatoid arthritis in haemoglobin E thalassaemia. de Silva HJ, et al. **Ceylon Med J** 1988 Dec; 33(4):131–3

Serum lipids and their modifications after blood transfusion in polytransfused beta-thalassemic patients. Leonardi S, et al. **Haematologica (Pavia)** 1988 Jul–Aug;73(4):269–71

Red cell distribution width in microcytosis [letter] Perutelli P. **Haematologica (Pavia)** 1989 Mar–Apr;74(2):221–2

Evaluation of red cell volume distribution width (RDW). Marsh WL Jr, et al. **Hematol Pathol** 1987;1(2):117–23

An isoelectricfocusing method to detect hemoglobin variants in newborn blood samples including the beta-thalassemias. Black J. **Hemoglobin** 1988;12(5–6):681–9

The levels of zeta, gamma, and delta chains in patients with Hb H disease. Kutlar F, et al. **Hum Genet** 1989 May; 82(2):179–86

Oxidative injury to the red cell in thalassaemia & the protective role of antioxidants. Pavri RS, et al. **Indian J Med Res** 1988 Oct;88:356–9

Globin synthesis in thalassemia syndromes among Indians—a preliminary report. Pavri RS, et al. **Indian J Med Res** 1988 Aug;88:156–64

Reversed-phase high-performance liquid chromatographic separation and quantitation of reticulocyte alpha- and beta-globin polypeptide chains from normal and beta-thalassemic mice. Schafer MP. **J Chromatogr** 1988 Sep 23;431(1):177–83

Normal growth hormone (GH) response to GH-releasing hormone in children with thalassemia major before puberty: a possible age-related effect. Leger J, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):453–6

Differing erythrocyte membrane skeletal protein defects in alpha and beta thalassemia. Shinar E, et al. **J Clin Invest** 1989 Feb;83(2):404–10

Decreased erythrocyte phosphoribosylpyrophosphate synthetase activity and impaired formation in thalassemia minor: a mechanism for decreased adenine nucleotide content. Zerez CR, et al. **J Lab Clin Med** 1989 Jul; 114(1):43–50

Hepatitis B infection in multitransfused thalassaemics. George E, et al. **Med J Malaysia** 1988 Dec;43(4):284–7

Effects of thalassaemic serum on the in vitro development of the malarial parasite Plasmodium falciparum. Thanomsub BW, et al. **Parasitol Res** 1989;75(3):212–7

Effects of centrifugation on transmembrane water loss from normal and pathologic erythrocytes. Kaperonis AA, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):174–8

High platelet counts in heterozygous beta-thalassaemia. Castaldi G, et al. **Riv Eur Sci Med Farmacol** 1987 Mar; 9(1):73–5

Inhibitory effect of beta zero-thalassaemia/haemoglobin E erythrocytes on Plasmodium falciparum growth in vitro. Yuthavong Y, et al. **Trans R Soc Trop Med Hyg** 1987; 81(6):903–6

The incidence of microcytosis in the newborn (possible alpha-thalassemia) in the Tabuk region of Saudi Arabia. Ozsoylu S, et al. **Turk J Pediatr** 1987 Jul–Sep;29(3):167–9

[Findings in relation to serum and urinary iron in heterozygotic beta-thalassemia] Lodi G, et al. **G Clin Med** 1989 Apr;70(4):263–6 (Eng. Abstr.) **(Ita)**

[Hyperbilirubinemia in heterozygous beta-thalassemia] Bariani L, et al. **Riv Eur Sci Med Farmacol** 1987 Mar;

9(1):77–81 (Eng. Abstr.) (Ita)
[Hemoglobin O Arab in interaction with beta 0-thalassemia] Nikolov N, et al. **Lijec Vjesn** 1989 Jan–Feb;111(1–2):27–30 (Eng. Abstr.) (Ser)
[Folate concentrations and blood ferritin in thalassemia minor in the Barcelona area (letter)] Juncà Piera J, et al. **Med Clin (Barc)** 1989 Apr 29;92(16):638–9 (Spa)
[Free erythrocytic protoporphyrin and thalassemic trait (letter)] López Rubio M, et al. **Sangre (Barc)** 1989 Jun; 34(3):246–7 (Spa)
[Determination of free erythrocyte protoporphyrin in thalassemic trait] Vayá A, et al. **Sangre (Barc)** 1989 Feb; 34(1):47–9 (Eng. Abstr.) (Spa)
[Free erythrocytic protoporphyrin and thalassemia minor] Vayá A, et al. **Sangre (Barc)** 1989 Jun;34(3):247–8 (Spa)
[Evaluation of erythrocyte deformability in carriers of thalassemic trait with the Hanss' hemorheometer] Vayá A, et al. **Sangre (Barc)** 1989 Feb;34(1):50–2 (Eng. Abstr.) (Spa)

CLASSIFICATION

The different types of alpha-thalassemia-2: genetic aspects. Embury SH. **Hemoglobin** 1988;12(5–6):445–53 (28 ref.)

COMPLICATIONS

Coexisting hereditary methaemoglobinaemia and heterozygous beta-thalassaemia. Kumar R, et al. **Acta Paediatr Scand** 1989 Jan;78(1):149–51
Concomitant primary hemochromatosis and beta-thalassemia trait: iron depletion by erythrocytapheresis and desferrioxamine. Cesana M, et al. **Am J Gastroenterol** 1989 Feb;84(2):150–2
Acute myeloid leukemia in a child affected by beta-thalassemia major [letter] Felici W, et al. **Am J Hematol** 1988 Oct;29(2):124
Peripheral retinal neovascularization associated with hemoglobin C beta zero thalassemia. Duker JS, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):328–9
Haemoglobin H disease and cardiac surgery. Rowbottom SJ, et al. **Anaesthesia** 1988 Dec;43(12):1033–4
Antithrombin III concentrate for treatment of chronic leg ulcers in sickle cell–beta thalassemia: a pilot study. Cacciola E, et al. **Ann Intern Med** 1989 Sep 15;111(6):534–6
Results of long-term subcutaneous desferrioxamine therapy. Hoffbrand AV, et al. **Baillieres Clin Haematol** 1989 Apr; 2(2):345–62 (65 ref.)
Bone marrow transplantation for secondary (therapy-related) acute non-lymphoblastic leukaemia: report of a case associated with adoptive beta-thalassaemia. Marmont AM, et al. **Bone Marrow Transplant** 1987 Jun;2(1):91–7
Thalassemic cardiomyopathy: echocardiographic difference between major and intermediate thalassemia at rest and during isometric effort: yearly follow-up. Canale C, et al. **Clin Cardiol** 1988 Aug;11(8):563–71
Libyan family with beta-thalassemia trait associated with hypercholesterolemia with widespread xanthomas. Sheriff DS, et al. **Clin Chem** 1988 Nov;34(11):2385–6
Double heterozygosity for hemoglobin Malmö [beta 97 (FG 4) His——Gln] and beta-thalassemia traits. Girino M, et al. **Haematologica (Pavia)** 1989 Mar–Apr;74(2):187–90
A benign sickle-cell disease in a Saudi subject with beta zero-thalassemia and glucose-6-phosphate dehydrogenase deficiency. Alayash AI, et al. **Hum Hered** 1989;39(2):118–20
Yersinia enterocolitica septicaemia. Masters AP, et al. **Intensive Care Med** 1988;14(5):585–7
Hemoglobin C-beta degrees thalassemia. Ozsoylu S, et al. **Isr J Med Sci** 1989 Jul;25(7):410–2
Hypogonadotropic hypogonadism in severe beta-thalassemia: effect of chelation and pulsatile gonadotropin-releasing hormone therapy. Wang C, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):511–6
Human pythiosis associated with thalassemia hemoglobinopathy syndrome. Sathapatayavongs B, et al. **J Infect Dis** 1989 Feb;159(2):274–80 (19 ref.)
Incidence and treatment of fractures in thalassemia. Michelson J, et al. **J Orthop Trauma** 1988;2(1):29–32
Cerebrovascular accidents in children with sickle-cell disease and alpha-thalassemia. Miller ST, et al. **J Pediatr** 1988 Nov; 113(5):847–9
Reversal of anergic state in human immunodeficiency virus infected thalassemic children treated with fusidic acid [letter] Novelli V, et al. **Pediatr Infect Dis J** 1988 Nov; 7(11):821
Vibrio vulnificus meningitis in a boy with thalassemia after eating raw oysters. Katz BZ. **Pediatrics** 1988 Nov; 82(5):784–6
Infections in thalassemic patients (hepatitis and bone marrow transplantation related infections excluded). de Montalembert M, et al. **Prog Clin Biol Res** 1989;309:231–8 (15 ref.)
Endocrine complications in thalassaemia major. De Sanctis V, et al. **Prog Clin Biol Res** 1989;309:77–83
Cardiac complications in homozygous beta-thalassemia. Wonke B, et al. **Prog Clin Biol Res** 1989;309:51–6
HTLV-I infection in multitransfused patients with thalassemia [letter] Politis C, et al. **Transfusion** 1989 Jul–Aug;29(6):561
[Yersinia enterocolitica infections and thalassemia major in children] Chirio R, et al. **Ann Pediatr (Paris)** 1989 May; 36(5):308; 311–4 (37 ref.) (Eng. Abstr.) (Fre)
[Tolerance of zidovudine in patients with beta-thalassemia (letter)] Boudes P, et al. **Presse Med** 1989 Apr 15;18(15):777 (Fre)
[Thalassemia intermedia: apropos of 14 cases] Hafsia R, et al. **Tunis Med** 1989 Mar;67(3):173–6 (Eng. Abstr.) (Fre)
[Skeletal changes in thalassemia] Alsiyan H, et al. **Z Orthop** 1988 Jul–Aug;126(4):437–47 (Eng. Abstr.) (Ger)
[Cardiological problems in thalassemia major] Mancuso L. **G Ital Cardiol** 1988 Aug;18(8):665–70 (Ita)
[Cardiovascular diseases in heterozygote beta-thalassemia subjects] Gallerani M, et al. **Minerva Med** 1989 Apr; 80(4):367–9 (Eng. Abstr.) (Ita)
[Yersinia enterocolitica septicemia in a girl with thalassemia major] Fontani C, et al. **Pediatr Med Chir** 1988 Nov–Dec; 10(6):657–8 (Eng. Abstr.) (Ita)
[Articular complications in sickle cell–thalassemia after childhood. Diagnostic problems] Potente G. **Radiol Med (Torino)** 1988 Nov;76(5):409–13 (Eng. Abstr.) (Ita)
[Incidence of thalassemic trait in patients with diabetes mellitus] Morreale S. **Riv Eur Sci Med Farmacol** 1987 Jun; 9(2):153–5 (Eng. Abstr.) (Ita)
[Association of alpha thalassemia and Hb G Philadelphia in a Spanish family] González Redondo JM, et al. **Sangre (Barc)** 1988 Jun;33(3):224–8 (Eng. Abstr.) (Spa)
[Thalassemia can cause microcytic, therapy-resistant anemia] Björklund O. **Lakartidningen** 1989 Mar 22;86(12):1080 (Swe)

DIAGNOSIS

Prenatal diagnosis of homozygous alpha 0-thalassaemia by direct DNA analysis of chorionic villi in Singapore. Tan JA, et al. **Aust Paediatr J** 1989 Jun;25(3):161–3
A novel monoclonal antibody based diagnostic test for alpha-thalassemia-1 carriers due to the (-SEA/) deletion. Luo HY, et al. **Blood** 1988 Nov;72(5):1589–94
Results of programmes for antenatal detection of thalassemia in reducing the incidence of the disorder. Cao A. **Blood Rev** 1987 Sep;1(3):169–76 (40 ref.)
A rapid DNA method for first-trimester prenatal diagnosis [letter] [published erratum appears in Br J Haematol 1989 Mar;71(3):446] Di Marzo R, et al. **Br J Haematol** 1988 Dec; 70(4):504–5
Rapid and non-radioactive prenatal diagnosis of beta thalassaemia and sickle cell disease: application of the polymerase chain reaction (PCR). Kulozik AE, et al. **Br J Haematol** 1988 Dec;70(4):455–8
Assay of discriminant functions and new proposals in thalassemic evaluation. Lin CK, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;42(5):333–8
Red blood count: a valuable clue in the diagnosis of thalassemia. Jim RT. **Hawaii Med J** 1988 Sep;47(9):416, 433–8
Prenatal diagnosis: general introduction, methodology, and review. Alter BP. **Hemoglobin** 1988;12(5–6):763–72 (23 ref.)
Prenatal diagnosis of alpha- and beta-thalassemias: experience in Hong Kong. Chan TK, et al. **Hemoglobin** 1988;12(5–6):787–94
The use of restriction fragment length polymorphisms for prenatal diagnosis: the estimation of diagnosable rate of multiple genetic markers and its use in detecting beta-thalassemia in a Chinese population. Jin L, et al. **Hemoglobin** 1988;12(5–6):773–86
Newer developments in the identification of beta-thalassemia. Stoming TA, et al. **Hemoglobin** 1988;12(5–6):565–76
Prenatal diagnosis of thalassemia: experiences at the Shanghai Children's Hospital. Zeng YT, et al. **Hemoglobin** 1988; 12(5–6):795–800
Prenatal diagnosis of beta thalassaemia based on restriction endonuclease analysis of amplified fetal DNA. Pirastu M, et al. **J Med Genet** 1989 Jun;26(6):363–7
Prenatal diagnosis of beta thalassaemia by oligonucleotide analysis in Mediterranean populations. Rosatelli MC, et al. **J Med Genet** 1988 Nov;25(11):762–5
Alpha-thalassaemia and its diagnosis. Han P. **J Singapore Paediatr Soc** 1988;30(3–4):109–12
Prenatal diagnosis of beta-thalassaemia using globin chain biosynthesis. Wong HB, et al. **J Singapore Paediatr Soc** 1988;30(3–4):113–7
Diagnosis of beta-thalassaemia by DNA amplification in single blastomeres from mouse preimplantation embryos. Holding C, et al. **Lancet** 1989 Sep 2;2(8662):532–5
Haemoglobin Bart's hydrops fetalis syndrome in an infant of Greek origin and prenatal diagnosis of alpha-thalassaemia. Sharma RS, et al. **Med J Aust** 1979 Oct 20;2(8):404, 433–4
A pitfall in the prenatal diagnosis of beta-thalassaemia by RFLP [letter] Aulehla-Scholz C, et al. **Prenat Diagn** 1989 Feb;9(2):140–1
Prenatal diagnosis of beta-thalassaemia by second-trimester chorionic villus sampling. Monni G, et al. **Prenat Diagn** 1988 Jul;8(6):447–51
Prenatal diagnosis of haemoglobinopathies by ion exchange HPLC of haemoglobins. Rouyer-Fessard P, et al. **Prenat Diagn** 1989 Jan;9(1):19–26
Sickled cells in synovial fluid: clue to unsuspected hemoglobinopathy. Glickstein SL, et al. **South Med J** 1989 Jun;82(6):769–71 (12 ref.)
[A simple approach to prenatal diagnosis of beta thalassemia] Cai SP. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):506–8, 36 (Eng. Abstr.) (Chi)
[Detection of alpha-thalassemias in patients with microcytic hypochromic anemia or microcytosis by restriction endonuclease mapping] Peng HW, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jan;41(1):25–30 (Eng. Abstr.) (Chi)
[Determination of the microcyte count in the differential diagnosis of iron-deficiency anemia and thalassemias] Shamov IA. **Gematol Transfuziol** 1988 Jul;33(7):40–2 (Eng. Abstr.) (Rus)
[Cases of heterozygous beta-thalassemia in children living in Moscow] Kuberger MB, et al. **Pediatriia** 1988;(8):88–90 (Rus)

DRUG THERAPY

Acute changes in renal function associated with deferoxamine therapy. Koren G, et al. **Am J Dis Child** 1989 Sep; 143(9):1077–80
Hearing loss and desferrioxamine in homozygous beta-thalassemia. Albera R, et al. **Audiology** 1988; 27(4):207–14
5-Azacytidine treatment in a beta degrees-thalassaemic patient unable to be transfused due to multiple alloantibodies. Dunbar C, et al. **Br J Haematol** 1989 Jul; 72(3):467–8
Desferrioxamine and ascorbic acid supplement in E-B thalassaemia [letter] Dutta AK, et al. **J Assoc Physicians India** 1988 Jul;36(7):463–4
Rapid removal of excessive iron with daily, high-dose intravenous chelation therapy. Cohen AR, et al. **J Pediatr** 1989 Jul;115(1):151–5
Deferoxamine-induced growth retardation in patients with thalassemia major. De Virgiliis S, et al. **J Pediatr** 1988 Oct; 113(4):661–9
Computed tomography scanning of the liver to determine efficacy of iron chelation therapy in thalassemia major. Olivieri NF, et al. **J Pediatr** 1989 Mar;114(3):427–30
Safety of oral iron chelator L1 [letter] Kontoghiorghes GJ, et al. **Lancet** 1989 Aug 19;2(8660):457–8
Maintenance treatment with desferrioxamine via subcutaneous injections in a patient with HbE thalassaemia. van Deursen CT, et al. **Neth J Med** 1988 Oct; 33(3–4):178–81
[Evaluation of the secretion of GH and GH-releasing hormone (GHRH) in adolescents with thalassemia treated with chorionic gonadotropins] Valtorta A, et al. **Medicina (Firenze)** 1988 Jan–Mar;8(1):76–7 (Eng. Abstr.) (Ita)
[Iron therapy in patients with beta-thalassemia minor and minima in pregnancy] Muscianisi G. **Minerva Ginecol** 1989 Jan;41(1):39–40 (Eng. Abstr.) (Ita)
[Audiologic evaluation of patients with thalassemic syndromes treated with desferrioxamine B] Gaini RM, et al. **Pediatr Med Chir** 1988 Sep–Oct;10(5):503–4 (Eng. Abstr.) (Ita)

ENZYMOLOGY

Impaired erythrocyte NAD synthesis: a metabolic abnormality in thalassemia. Zerez CR, et al. **Am J Hematol** 1989 Sep;32(1):1–7
Genetic and other influences on red-cell flavin enzymes, pyridoxine phosphate oxidase and glutathione reductase in families with beta-thalassaemia. Anderson BB, et al. **Eur J Haematol** 1989 Apr;42(4):354–60

EPIDEMIOLOGY

Alpha thalassaemia in Zambian newborn. Muklwala EC, et al. **Clin Lab Haematol** 1989;11(1):1–6
Beta-thalassemia associated with alpha-thalassemia in Thailand. Fucharoen S, et al. **Hemoglobin** 1988; 12(5–6):581–92
gamma-thalassemia and its related abnormalities in China. Liang CC. **Hemoglobin** 1988;12(5–6):717–21
The thalassemia syndromes in association with hemoglobinopathies in southern China. Liang S, et al. **Hemoglobin** 1988;12(5–6):579
Thalassemia in the Silk Road region of China. Qin F, et al. **Hemoglobin** 1988;12(5–6):629–35
Alpha-thalassemia in Thailand. Winichagoon P, et al. **Hemoglobin** 1988;12(5–6):485–98
The incidence of alpha-thalassemia in south China. Wu GY, et al. **Hemoglobin** 1988;12(5–6):529–32
The types and distribution of alpha-thalassemia-2 in China. Zeng YT, et al. **Hemoglobin** 1988;12(5–6):455–8
Alpha-thalassemia in northern Thailand. Frequency of deletional types characterized at the DNA level. Hundrieser J, et al. **Hum Hered** 1988;38(4):211–5
Increase with age in the prevalence of beta-thalassemia trait among Sicilians [letter] Schiliro G, et al. **N Engl J Med** 1989 Sep 14;321(11):762
Screening for thalassaemia using the width of the Technicon H6000/H601 erythrocyte size histograms. Helleman PW, et al. **Scand J Clin Lab Invest** 1988 Nov;48(7):697–704
[Detection of alpha-thalassemia in Tunisia (across 1500 cases)] Fattoum S, et al. **Tunis Med** 1987 Dec;65(12):763–6 (Eng. Abstr.) (Fre)
[Study of beta-thalassemia minor in a community of a metropolitan area of Barcelona (letter) (published erratum appears in Rev Clin Esp 1989 Mar;184(4):221)] Buil P, et al. **Rev Clin Esp** 1988 Oct;183(5):283 (Spa)
[Beta and beta-delta thalassemia heterozygotes in the province of Alicante. Epidemiologic features] Marco Vera P, et al. **Sangre (Barc)** 1988 Dec;33(6):479–82 (Eng. Abstr.)

(Spa)

ETHNOLOGY

The molecular basis of thalassaemia major and thalassaemia intermedia in Asian Indians: application to prenatal diagnosis. Thein SL, et al. **Br J Haematol** 1988 Oct; 70(2):225–31

Hemoglobin H disease in Hawaii: update 30 years later. Jim RT. **Hawaii Med J** 1988 Aug;47(8):374, 386 (16 ref.)

GENETICS

Molecular heterogeneity of beta-thalassemia intermedia in Turkey. Gurgey A, et al. **Acta Haematol (Basel)** 1989; 81(1):22–7

Hydrops fetalis due to homozygosity for alpha-thalassemia-1, -(alpha)-20.5 kb: the first observation in a Turkish family. Gurgey A, et al. **Acta Haematol (Basel)** 1989;81(3):169–71

Interaction of heterozygous beta zero-thalassemia with single functional alpha-globin gene. Galanello R, et al. **Am J Hematol** 1988 Oct;29(2):63–6

Atypical haplotypes linked to the beta S gene in Africa are likely to be the product of recombination. Srinivas R, et al. **Am J Hematol** 1988 Sep;29(1):60–2

Positional effect of cis/trans alpha globin gene deletions on the formation of "H" bodies. Thompson CC, et al. **Am J Hematol** 1989 Aug;31(4):242–7

A new TATA box mutation detected at prenatal diagnosis for beta-thalassemia. Cai SP, et al. **Am J Hum Genet** 1989 Jul;45(1):112–4

Hemoglobin D-beta degrees thalassemia. A case report and family study. Dawod ST, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):316–8

Inadequate utilization of routine electronic RBC counts to identify beta thalassemia carriers. Shalev O, et al. **Am J Public Health** 1988 Nov;78(11):1476–7

Types of alpha+ thalassemia in Southeast Asia refugees. Dodé C, et al. **Ann Genet (Paris)** 1988;31(4):201–4

Frequency of deletional types of alpha-thalassemia in Kampuchea. Hundrieser J, et al. **Ann Genet (Paris)** 1988; 31(4):205–10

Alpha thalassemia. A modifier of sickle cell disease. Embury SH. **Ann N Y Acad Sci** 1989;565:213–21 (55 ref.)

Abnormal processing of beta-Malay globin RNA. Gonzalez-Redondo JM, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):8–13

Molecular basis of beta degrees-thalassemia/HbE disease in Thailand. Petmitr S, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):846–51

Rapid prenatal diagnosis of beta thalassemia using DNA amplification and nonradioactive probes. Cai SP, et al. **Blood** 1989 Feb;73(2):372–4

A novel beta-thalassemia frameshift mutation (codon 14/15), detectable by direct visualization of abnormal restriction fragment in amplified genomic DNA. Chan V, et al. **Blood** 1988 Oct;72(4):1420–3

Characterization of a spontaneous mutation in beta-thalassemia associated with advanced paternal age. Chenhab FF, et al. **Blood** 1989 Aug 1;74(2):852–4

One form of inclusion body beta-thalassemia is due to a GAA——TAA mutation at codon 121 of the beta chain [letter] Fei YJ, et al. **Blood** 1989 Mar;73(4):1075–7

Molecular analysis of beta zero-thalassemia intermedia in Sardinia. Galanello R, et al. **Blood** 1989 Aug 1;74(2):823–7

A C——T substitution at nt—101 in a conserved DNA sequence of the promotor region of the beta-globin gene is associated with "silent" beta-thalassemia. Gonzalez-Redondo JM, et al. **Blood** 1989 May 1; 73(6):1705–11

A review of the molecular genetics of the human alpha-globin gene cluster. Higgs DR, et al. **Blood** 1989 Apr;73(5):1081–104 (271 ref.)

Molecular basis and prenatal diagnosis of beta-thalassemia. Kazazian HH Jr, et al. **Blood** 1988 Oct;72(4):1107–16 (97 ref.)

Sodium butyrate enhances fetal globin gene expression in erythroid progenitors of patients with Hb SS and beta thalassemia. Perrine SP, et al. **Blood** 1989 Jul;74(1):454–9

Thalassemia intermedia resulting from a mild beta-thalassemia mutation. Rosatelli MC, et al. **Blood** 1989 Feb;73(2):601–5

Homozygous beta-thalassemia without anemia. Safaya S, et al. **Blood** 1989 Jan;73(1):324–8

Beta-thalassemia gene analysis in a Turkish family reveals a 7 BP deletion in the coding region [letter] Schnee J, et al. **Blood** 1989 Jun;73(8):2224–5

Molecular analysis of Japanese delta beta-thalassemia. Shiokawa S, et al. **Blood** 1988 Nov;72(5):1771–6

A beta-thalassemia gene caused by a 290-base pair deletion: analysis by direct sequencing of enzymatically amplified DNA. Spiegelberg R, et al. **Blood** 1989 May 1;73(6):1695–8

Molecular characterization of a high A2 beta thalassemia by direct sequencing of single strand enriched amplified genomic DNA. Thein SL, et al. **Blood** 1989 Mar; 73(4):924–30

Beta-thalassemia due to two novel nucleotide substitutions in consensus acceptor splice sequences of the beta-globin gene. Wong C, et al. **Blood** 1989 Mar;73(4):914–8

Thalassaemia intermedia. Wainscoat JS, et al. **Blood Rev** 1987 Dec;1(4):273–9 (54 ref.)

Genotypic analysis of engraftment in thalassemia following bone marrow transplantation using synthetic oligonucleotides. Ugozzoli L, et al. **Bone Marrow Transplant** 1989 Mar;4(2):173–80

Molecular characterization of beta-globin gene mutations in patients with beta-thalassaemia intermedia in south China. Antonarakis SE, et al. **Br J Haematol** 1988 Nov; 70(3):357–61

Beta thalassaemia mutations in Mediterranean populations. Cao A, et al. **Br J Haematol** 1989 Mar;71(3):309–12 (31 ref.)

Characterization of two deletions that remove the entire human zeta-alpha globin gene complex (- -THAI and - -FIL). Fischel-Ghodsian N, et al. **Br J Haematol** 1988 Oct; 70(2):233–8

Severe Hb S-beta zero-thalassaemia with a T——C substitution in the donor splice site of the first intron of the beta-globin gene. Gonzalez-Redondo JM, et al. **Br J Haematol** 1989 Jan;71(1):113–7

Hb S(C)-beta+-thalassaemia: different mutations are associated with different levels of normal Hb A. Gonzalez-Redondo JM, et al. **Br J Haematol** 1988 Sep; 70(1):85–9

Characterization of a newly discovered alpha-thalassaemia-1 in two Spanish patients with Hb H disease. Gonzalez-Redondo JM, et al. **Br J Haematol** 1988 Dec; 70(4):459–63

Occurrence of hereditary spherocytosis and beta thalassaemia in the same family: globin chain synthesis and visco diffractometric studies. Pautard B, et al. **Br J Haematol** 1988 Oct;70(2):239–45

A novel deletion of the entire alpha-globin gene cluster in a British individual. Vickers MA, et al. **Br J Haematol** 1989 Jul;72(3):471–3

Molecular characterization of beta-globin gene mutations in Malay patients with Hb E-beta-thalassaemia and thalassaemia major. Yang KG, et al. **Br J Haematol** 1989 May;72(1):73–80

Bipolar affective disorder and thalassemia minor—a genetic linkage? [letter] Singh AN, et al. **Br J Psychiatry** 1988 Apr; 152:581

The alpha thalassaemic syndrome of Hb H disease in a Sri Lankan family. de Tissera A, et al. **Ceylon Med J** 1988 Dec;33(4):135–9

A comparison of stem cell populations and hemoglobin switching in normal versus beta-thalassemic mice. Bolch SL, et al. **Exp Hematol** 1989 May;17(4):340–3

Delta zero-thalassemia in cis of beta Knossos-globin gene. Normal structure transient expression of the delta-globin gene. Ouazana R, et al. **FEBS Lett** 1989 Jul 31; 252(1-2):53–7

Prenatal diagnosis of beta-thalassemia in Italian population. Cao A, et al. **Haematologica (Pavia)** 1988 Sep-Oct; 73(5):331–41 (48 ref.)

"Forward" and "reverse" genetics of inherited human disorders: the thalassemia syndromes and chronic granulomatous disease. Orkin SH. **Harvey Lect** 1987–88; 83:57–76 (58 ref.)

Different forms of Hb H disease in the Chinese. Chan VV, et al. **Hemoglobin** 1988;12(5–6):499–507

Potential application of a new screening test for alpha-thalassemia-1 carriers. Chui DH, et al. **Hemoglobin** 1988;12(5–6):459–63

No interaction between Hb J-Paris-I and beta-thalassemia in an Indian family. Dash S. **Hemoglobin** 1989;13(2):213–4

The interaction of alpha-thalassemia with sickle cell anemia. Embury SH. **Hemoglobin** 1988;12(5–6):509–17

Hb Monroe or alpha 2 beta 230(B12)Arg——Thr, a variant associated with beta-thalassemia due to A G——C substitution adjacent to the donor splice site of the first intron. Gonzalez-Redondo JM, et al. **Hemoglobin** 1989; 13(1):67–74

Characterization of a new alpha-thalassemia-1 deletion in a Spanish family. Gonzalez-Redondo JM, et al. **Hemoglobin** 1989;13(2):103–16

Characterization of three types of beta zero-thalassemia resulting from a partial deletion of the beta-globin gene. Gonzalez-Redondo JM, et al. **Hemoglobin** 1989; 13(4):377–92

A beta+-thalassemia (codon 24, GGT——GGA) found in a Japanese. Hattori Y, et al. **Hemoglobin** 1988; 12(5–6):655–60

The different types of alpha-thalassemia: practical and genetic aspects. Hsia YE, et al. **Hemoglobin** 1988; 12(5–6):465–84

Beta-thalassemia in China: a systematic molecular characterization of beta-thalassemia mutations. Huang S, et al. **Hemoglobin** 1988;12(5–6):621–8

Type of beta-thalassemia mutations found in the Chinese identified by synthetic oligonucleotides. Huang SZ, et al. **Hemoglobin** 1988;12(5–6):577

Deletional beta-thalassemia with high Hb A2. Kendall AG, et al. **Hemoglobin** 1988;12(5–6):653–4

Beta-thalassemia intermedia in two Turkish families is caused by the interaction of Hb Knossos [beta 27(B9)Ala——Ser] and of Hb City of Hope [beta 69(E13)Gly——ser] with beta degree-thalassemia. Kutlar A, et al. **Hemoglobin** 1989; 13(1):7–16

Biochemical and molecular aspects of beta-thalassemia types in northern Sardinia. Masala B, et al. **Hemoglobin** 1988; 12(5–6):661–71

Homozygous beta zero-39 mutation with thalassemia intermedia in northern Sardinia: clinical, hematological and molecular analysis. Oggiano L, et al. **Hemoglobin** 1988; 12(5–6):673–80

Beta-cluster haplotypes, alpha-gene status, and hematological data from SS, SC, and S-beta-thalassemia patients in southern California. Schroeder WA, et al. **Hemoglobin** 1989;13(4):325–53

Overview of the beta thalassemias: genetic and clinical aspects. Schwartz E, et al. **Hemoglobin** 1988;12(5–6):551–64 (32 ref.)

The interaction of anti 3.7 type quadruplicated alpha-globin genes and heterozygous beta-thalassemia. Thompson CC, et al. **Hemoglobin** 1989;13(2):125–35

The molecular basis of AE-Bart's disease. Thonglairuam V, et al. **Hemoglobin** 1989;13(2):117–24

Alpha-thalassemia screening reveals quadruple zeta-globin genes in a Laotian family. Titus EA, et al. **Hemoglobin** 1988;12(5–6):539–50

Cloning and sequencing of a beta-thalassemia gene from south China. Wang T, et al. **Hemoglobin** 1988;12(5–6):615–9

High frequencies of a rearrangement (+ATA; -T) at -530 to the beta-globin gene in different populations indicate the absence of a correlation with a silent beta-thalassemia determinant. Wong SC, et al. **Hemoglobin** 1989;13(1):1–5

Thalassemia heterozygotes in Hawaii: ethnic attitudes toward screening and prenatal diagnosis. Yuen J, et al. **Hemoglobin** 1988;12(5–6):801–16

A beta-thalassemia mutant caused by a 300-bp deletion in the human beta-globin gene. Aulehla-Scholz C, et al. **Hum Genet** 1989 Feb;81(3):298–9

Mutation analysis of beta-thalassemia genes in a German family reveals a rare transversion in the first intron. Eigel A, et al. **Hum Genet** 1989 Mar;81(4):371–2

Prevalence and molecular heterogeneity of alfa+ thalassemia in two tribal populations from Andhra Pradesh, India. Fodde R, et al. **Hum Genet** 1988 Oct;80(2):157–60

A novel delta zero-thalassemia arising from a frameshift insertion, detected by direct sequencing of enzymatically amplified DNA. Losekoot M, et al. **Hum Genet** 1989 Aug; 83(1):75–8

Frequency and molecular types of deletional alpha-thalassemia in Egypt. Novelletto A, et al. **Hum Genet** 1989 Feb;81(3):211–3

Autosomal dominant polycystic kidney disease and alpha -4.2 thalassemia in a Caucasian family. Vinet MC, et al. **Hum Genet** 1989 Aug;83(1):55–7

Detection of beta-thalassemia and hemoglobin E genes in Thai by a DNA amplification technique. Winichagoon P, et al. **Hum Genet** 1989 Jul;82(4):389–90

A novel ochre mutation in the beta-thalassemia gene of a Thai. Identification by direct cloning of the entire beta-globin gene amplified using polymerase chain reactions. Fucharoen S, et al. **J Biol Chem** 1989 May 15; 264(14):7780–3

Counselling for prenatal diagnosis of sickle cell disease and beta thalassaemia major: a four year experience. Anionwu EN, et al. **J Med Genet** 1988 Nov;25(11):769–72

Beta thalassaemia mutations in Turkish Cypriots. Sozuoz A, et al. **J Med Genet** 1988 Nov;25(11):766–8

Alpha thalassaemia: a potential source of error in DNA linkage studies for adult polycystic kidney disease. Trent RJ, et al. **J Med Genet** 1989 Jan;26(1):6–9

Prediction of consanguinity using human DNA fingerprints. Wells RA, et al. **J Med Genet** 1988 Oct;25(10):660–2

Hemoglobin E beta-thalassemia in a Pakistani family. Ahmed A, et al. **JPMA** 1988 Nov;38(11):301–3

Direct sequencing of amplified DNA in prenatal diagnosis of beta-thalassaemia [letter] Aulehla-Scholz C, et al. **Lancet** 1989 Feb 11;1(8633):326–7

Alpha thalassaemia in the Maori: a family study. Parker LS, et al. **N Z Med J** 1989 May 24;102(868):245–6

British type alpha 0-thalassaemia in New Zealand. Trent RJ, et al. **N Z Med J** 1989 Feb 8;102(861):39–41

Molecular analysis of beta-thalassemia. Fukumaki Y. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1347–54

A large deletion encompassing the entire alpha-like globin gene cluster in a family of northern European extraction. Fortina P, et al. **Nucleic Acids Res** 1988 Dec 9; 16(23):11223–35

A novel frameshift mutation causing beta-thalassaemia in Azerbaijan. Schwartz EI, et al. **Nucleic Acids Res** 1989 May 25;17(10):3997

Globin gene expression in hereditary persistence of fetal haemoglobin and (delta beta) naught-thalassaemia. Poncz M, et al. **Oxf Surv Eukaryot Genes** 1988;5:163–203 (189 ref.)

A molecular marker associated with mild hemoglobin H disease. George E, et al. **Pathology** 1989 Jan;21(1):27–30

A 5' splice-region G——C mutation in exon 1 of the human beta-globin gene inhibits pre-mRNA splicing: a mechanism for beta+-thalassemia. Vidaud M, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1041–5

Molecular pathology and detection of beta-thalassemias. Cao A, et al. **Prog Clin Biol Res** 1989;309:3–11 (8 ref.)

Characterization of hemoglobin variants. Prenatal diagnosis on a fetus at risk of having the hemoglobin variants S and/or C in combination with beta-thalassemia. Blanke S. **Scand J Clin Lab Invest Suppl** 1989;194:51–5

Hemoglobinopathies in Danish families. Wimberley PD, et al. **Scand J Clin Lab Invest Suppl** 1989;194:45–9

DNA polymorphism haplotype analysis of beta-thalassemia genes in Taiwan. Ko TM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):103–7

[Construction of plasmids containing different human globin gene fragments] Liu JZ.
Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1988 Dec; 10(6):411–5 (Eng. Abstr.) (Chi)
[Beta thalassemia in Czech families] Brabec V, et al.
Vnitr Lek 1988 Oct;34(10):979–88 (Eng. Abstr.) (Cze)
[Combined alpha and beta thalassemia in a Chinese family in The Netherlands] Losekoot M, et al.
Ned Tijdschr Geneeskd 1989 Jun 17;133(24):1218–23 (Eng. Abstr.) (Dut)
[Intermediate homozygous beta-thalassemia with high fetal hemoglobin synthesis. Molecular analysis]
Cohen-Haguenauer O, et al. **Presse Med** 1989 Feb 4; 18(4):173–6 (Eng. Abstr.) (Fre)
[Heterozygote beta-thalassemia without microcytosis (letter)]
Gallien N, et al. **Presse Med** 1988 Sep 10;17(30):1538 (Fre)
[Screening for alpha-thalassemia using DNA analysis] Beris P, et al. **Schweiz Med Wochenschr** 1988 Oct 22; 118(42):1538–41 (Eng. Abstr.) (Fre)
[Double heterozygous Hb O ARAB/beta+ thalassemia (in a Tunisian family)] Ben Abdeladhim A, et al.
Tunis Med 1988 Aug–Sep;66(8–9):631–5 (Eng. Abstr.) (Fre)
[The beta-thalassemia gene in French Canada: reappearance in Portneuf County] Prévost C, et al. **Union Med Can** 1988 Aug;118(3):241, 243–4 (Eng. Abstr.) (Fre)
[Anemia requiring transfusion and amenorrhea in a 23-year-old patient desiring children] Gerhartz HH, et al. **Internist (Berlin)** 1989 Apr;30(4):258–62 (Ger)
[The molecular basis of hereditary persistence of fetal hemoglobin (HPFH). Clinical importance of the hemoglobin switching mechanism with special reference to Corfu delta beta zero thalassemia] Kulozik AE, et al. **Monatsschr Kinderheilkd** 1988 Nov;136(11):751–7 (Eng. Abstr.) (Ger)
[Total ridge count in patients with Cooley's anemia and thalassemic trait] Benigno V, et al. **Minerva Pediatr** 1988 Dec;40(12):687–90 (Eng. Abstr.) (Ita)
[Evaluation of allele gene frequency in beta-thalassemia in a population sample from Conca Ternana] Brancali PL, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):13–9 (Eng. Abstr.) (Ita)
[Thalassemia syndromes: molecular and clinical aspects] Imamura T. **Tanpakushitsu Kakusan Koso** 1987 May; 32(6):650–8 (32 ref.) (Jpn)
[Molecular nature of deletion in beta 0-thalassemia, established using a method of amplification of genomic DNA in vitro] Shvarts EI, et al. **Bioorg Khim** 1989 Apr; 15(4):556–9 (Eng. Abstr.) (Rus)
[A case of combined carriage of HbE and beta-thalassemia in the Georgian SSR] Mestiashvili IG, et al.
Gematol Transfuziol 1988 Sep;33(9):50–2 (Rus)
[Heterogeneity of globin protein synthesis in bone marrow cells of patients with homozygous beta-thalassemia from Tadzhikistan] Nasyrova FIu, et al.
Mol Gen Mikrobiol Virusol 1988 Oct;(10):34–40 (Eng. Abstr.) (Rus)

HISTORY

Cooley's anemia management: 25 years of progress. Piomelli S. **Prog Clin Biol Res** 1989;309:23–6

IMMUNOLOGY

Immune cell functions in iron overload. de Sousa M.
Clin Exp Immunol 1989 Jan;75(1):1–6 (61 ref.)
Prevalence of hepatitis-B virus markers in multi-transfused thalassemic patients. Mital MK, et al. **Indian Pediatr** 1988 Feb;25(2):161–5
Resistance to infection in murine beta-thalassemia. Ampel NM, et al. **Infect Immun** 1989 Apr;57(4):1011–7
Prevalence of anti-HIV antibodies in Greek thalassaemic patients [letter] Politis C, et al. **Vox Sang** 1989;56(3):202–3
[Vaccination against hepatitis B of children with of homozygous beta-thalassemia (letter)]
Sclavounou-Tsouroutsoglou S, et al. **Presse Med** 1988 Dec 10;17(44):2356 (Fre)
[Histocompatibility antigens (HLA) on the erythrocytes of patients with beta-thalassemia major] Ragimov AA.
Gematol Transfuziol 1988 Jul;33(7):42–6 (Eng. Abstr.) (Rus)

METABOLISM

Direct demonstration of iron in a term placenta in a case of beta-thalassemia major. Birkenfeld A, et al.
Am J Obstet Gynecol 1989 Mar;160(3):562–3
Studies of variations of subcutaneously infused desferrioxamine and iron movements in thalassaemia children. Llados i Vallory EA, et al. **Eur J Pediatr** 1989 Apr;148(6):503–6
Effect of increased haemoglobin levels on growth hormone (GH) secretion in beta-thalassaemia major: differences between prepubertal subjects and patients with delayed puberty. Celani MF, et al. **Exp Clin Endocrinol** 1988 Dec; 92(2):225–30
Tissue iron deposition in untransfused beta-thalassemic mice. Garrick LM, et al. **Exp Hematol** 1989 Jun;17(5):423–8
No evidence for a defect in growth hormone binding to liver membranes in thalassemia major. Postel-Vinay MC, et al.
J Clin Endocrinol Metab 1989 Jan;68(1):94–8
Cytochemical evaluation of neutrophil components in beta thalassemia hemoglobin E. Trewatcharegon S, et al.
J Med Assoc Thai 1989 Feb;72(2):67–70
Hepatic iron stores in thalassemia: non-invasive magnetic measurements. Brittenham GM, et al.
Prog Clin Biol Res 1989;309:101–6
Iron balance in thalassemia. Cazzola M, et al.
Prog Clin Biol Res 1989;309:93–100 (13 ref.)
Measurement of iron status. Pippard MJ.
Prog Clin Biol Res 1989;309:85–92 (20 ref.)
Investigations on the relative synthesis of globin chains in thalassaemia: a preliminary study in Malaysian subjects. Hassan K, et al. **Singapore Med J** 1988 Oct;29(5):462–8

MORTALITY

Survival and causes of death in thalassaemia major. Zurlo MG, et al. **Lancet** 1989 Jul 1;2(8653):27–30
Survival in thalassemia with conventional treatment. Borgna-Pignatti C, et al. **Prog Clin Biol Res** 1989;309:27–33
Quality of life and life expectancy in thalassemic patients with complications. Gabutti V, et al.
Prog Clin Biol Res 1989;309:35–41

PATHOLOGY

Calcium transport and ultrastructure of red cells in beta-thalassemia intermedia. Bookchin RM, et al. **Blood** 1988 Nov;72(5):1602–7
Endometrial glandular haemosiderosis in homozygous beta-thalassaemia. Birkenfeld A, et al.
Eur J Obstet Gynecol Reprod Biol 1989 May;31(2):173–8
Syringomyelia associated with developmental anomalies and clinically pure motor presentation. Siriaungkul S, et al.
J Med Assoc Thai 1988 Jun;71(6):345–9
[A combination of ectopic parathyroid adenoma and thalassemia with manifestations of extreme hyperparathyroidism] Lozanov B, et al. **Vutr Boles** 1989; 28(1):97–100 (Eng. Abstr.) (Bul)
[Congenital dyserythropoietic anemia, type I. Clinico-hematological and ultrastructural study of a case diagnosed late] Sansone G, et al. **Pathologica** 1987 Nov–Dec;79(1064):705–14 (Eng. Abstr.) (Ita)
[Transient erythroblastopenia with many ringed sideroblasts] Kobayashi T, et al. **Rinsho Ketsueki** 1988 Dec; 29(12):2375–8 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Myocardial dysfunction in two hypothyroid twins with thalassaemia major. Fiorillo A, et al.
Acta Paediatr Scand 1989 May;78(3):455–7
Unusual manifestation of extramedullary haematopoiesis in thalassaemia major (report of 2 cases). Rao M, et al.
Australas Radiol 1989 May;33(2):187–8
Function of reticuloendothelial system in splenectomised thalassemics. Germenis A, et al. **Blut** 1988 Nov; 57(5):307–10
Induction of spermatogenesis in thalassaemia. De Sanctis V, et al. **Fertil Steril** 1988 Dec;50(6):969–75
Sexual performance and fertility potential in patients with beta thalassaemia major. Katz M, et al.
Prog Clin Biol Res 1989;309:57–66
Atypical location of extramedullary hematopoietic masses in thalassemia. Gemenis T, et al. **Radiologe** 1989 Jun; 29(6):295–6
[Echocardiographic study at rest and during effort in adult asymptomatic thalassemic patients] Sau F, et al.
Cardiologia 1989 Mar;34(3):221–7 (Eng. Abstr.) (Ita)

RADIOGRAPHY

Dual energy CT estimation of liver iron content in thalassaemic children. Leighton DM, et al.
Australas Radiol 1988 May;32(2):214–9
Unusual long bone changes in thalassaemia: findings on plain radiography and computed tomography. Singcharoen T.
Br J Radiol 1989 Feb;62(734):168–71
The "lamellated" skull in beta-thalassaemia. Orzincolo C, et al. **Skeletal Radiol** 1989;18(5):373–6
Circumscribed lytic lesions of the thalassaemic skull. Orzincolo C, et al. **Skeletal Radiol** 1988;17(5):344–7
The radiographic appearances following adequate transfusion in beta-thalassaemia. Scutellari PN, et al.
Skeletal Radiol 1989;17(8):545–50
[The rib changes in thalassemia (report of 7 cases)] Li CB.
Chung Hua Fang She Hsueh Tsa Chih 1988 Dec;22(6):334–6 (Eng. Abstr.) (Chi)
[Rheumatologic findings in patients with major and intermediate beta-thalassemia] Arman MI, et al.
Z Rheumatol 1989 Mar–Apr;48(2):68–72 (Eng. Abstr.) (Ger)
[The "lamellar cranium": a particular radiologic feature of Cooley's disease] Orzincolo C, et al.
Radiol Med (Torino) 1989 Apr;77(4):317–21 (Eng. Abstr.) (Ita)
[Thalassemia today. The radiologic evolution of lesions of the skull and hand with reference to transfusion therapy] Scutellari PN, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):399–404 (Eng. Abstr.) (Ita)

SURGERY

Long-term effect of splenectomy on transfusion requirements in thalassemia major. Cohen A, et al. **Am J Hematol** 1989 Apr;30(4):254–6
Marrow transplantation for thalassemia. Lin KH, et al.
Bone Marrow Transplant 1986 Dec;1(2):115–20
Treatment of the thalassemia syndrome with splenectomy. Yang XY, et al. **Hemoglobin** 1988;12(5–6):601–8
Results of the splenectomy in children with thalassemia. Hathirat P, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:133–8
Overwhelming postsplenectomy infection in patients with thalassemia major. Golematis B, et al. **Mt Sinai J Med** 1989 Mar;56(2):97–8
Bone marrow transplantation in thalassemia. Lucarelli G, et al. **Nouv Rev Fr Hematol** 1989;31(2):115–7
[Therapeutic advances in bone marrow transplantation] Brenner MK, et al. **Clin Ter** 1987 Sep 15;122(5):321–32 (49 ref.) (Eng. Abstr.) (Ita)
[Splenectomy in the combined treatment of patients with thalassemia] Abdullaev GM, et al. **Gematol Transfuziol** 1988 Sep;33(9):13–6 (Eng. Abstr.) (Rus)

THERAPY

Zinc status and zinc therapy in beta thalassemia [letter] Arcasoy A. **Am J Pediatr Hematol Oncol** 1989 Summer; 11(2):245–6
Intradermal hepatitis B vaccine in thalassaemia and sickle cell disease. Mok Q, et al. **Arch Dis Child** 1989 Apr; 64(4):535–40
Bone marrow transplantation in thalassaemia. Slavin S, et al. **Bone Marrow Transplant** 1986 May;1(1):11–5 (25 ref.)
Effect of human chorionic gonadotropin on growth velocity and biological growth parameters in adolescents with thalassaemia major. Bozzola M, et al. **Eur J Pediatr** 1989 Jan;148(4):300–3
Bone marrow transplantation in beta-thalassemia major. The Israeli experience. Or R, et al. **Hemoglobin** 1988; 12(5–6):609–14
Frequencies of hepatitis B, delta and human immune deficiency virus markers in multitransfused Saudi patients with thalassaemia and sickle-cell disease. el-Hazmi MA, et al. **J Trop Med Hyg** 1989 Feb;92(1):1–5
Risk of HIV infection in polytransfused thalassaemia patients [letter] Lefrere JJ, et al. **Lancet** 1989 Sep 30;2(8666):813
Advances and controversies in thalassemia therapy. Bone marrow transplantation and other approaches. Proceedings of an International Symposium on Bone Marrow Transplantation and Related Problems. Urbino, Italy, September 22–25, 1988. **Prog Clin Biol Res** 1989;309:1–395
Liver iron kinetic in thalassemic patients after bone marrow transplantation. Angelucci E, et al. **Prog Clin Biol Res** 1989; 309:291–8
CMV infections in thalassemia patients after BMT. Baronciani D, et al. **Prog Clin Biol Res** 1989;309:249–63
Bone marrow transplantation for thalassaemia—a preliminary report from the International Bone Marrow Transplant Registry. Barrett AJ, et al. **Prog Clin Biol Res** 1989; 309:173–85
High-dose intravenous chelation therapy with deferoxamine. Cohen A, et al. **Prog Clin Biol Res** 1989;309:125–31
Bone marrow transplantation for thalassemia in Pescara. Di Bartolomeo P, et al. **Prog Clin Biol Res** 1989;309:193–9
Bone marrow transplantation (BMT) for thalassemia major (TM). The French experience. Frappaz D, et al.
Prog Clin Biol Res 1989;309:207–16
Prospects for correction of thalassemia by genetic engineering. Gale RP. **Prog Clin Biol Res** 1989;309:141–59 (67 ref.)
Patterns of graft rejection after bone marrow transplant in thalassemia. Galimberti M, et al. **Prog Clin Biol Res** 1989; 309:223–9
Blood component therapy in bone marrow transplantation for thalassemia. Giardini C, et al. **Prog Clin Biol Res** 1989; 309:265–71
Iron chelation. Hershko C, et al. **Prog Clin Biol Res** 1989; 309:133–40 (17 ref.)
Bone marrow transplantation for thalassaemia: Westminster Children's Hospital and United Kingdom experience. Hugh-Jones K, et al. **Prog Clin Biol Res** 1989;309:201–5
Prospects for effective oral iron chelation therapy in man with 1,2-dimethyl-3-hydroxypyrid-4-one and other alpha-ketohydroxypyridines. Kontoghiorghes GJ, et al.
Prog Clin Biol Res 1989;309:107–14
Medical management of beta-thalassemia. Lerner N.
Prog Clin Biol Res 1989;309:13–22
Bone marrow transplantation in thalassemia. The experience of Pesaro. Lucarelli G, et al. **Prog Clin Biol Res** 1989; 309:163–71
Growth and endocrine function after bone marrow transplantation for thalassemia major. Manenti F, et al.
Prog Clin Biol Res 1989;309:273–80
Reversal features of hepatic haemosiderosis and haemochromatosis in thalassemia after bone marrow transplantation. Muretto P, et al. **Prog Clin Biol Res** 1989; 309:299–314
Bone marrow transplantation with T-cell depleted allografts for the treatment of severe beta thalassemia major. Or R, et al. **Prog Clin Biol Res** 1989;309:217–22
Cyclosporine in children. Polchi P, et al.
Prog Clin Biol Res 1989;309:333–48
Liver iron stores before and after bone marrow transplantation for thalassemia. Politi P, et al.
Prog Clin Biol Res 1989;309:281–9
Complications of blood transfusion in thalassemia. Politis C.
Prog Clin Biol Res 1989;309:67–76 (12 ref.)

Long-term complications of bone marrow transplantation. Sullivan KM, et al. **Prog Clin Biol Res** 1989;309:367–74 (22 ref.)
Therapy of thalassemia major—the case for marrow transplantation. Thomas ED. **Prog Clin Biol Res** 1989; 309:187–91
Compliance with therapy in Cooley's anaemia. Vullo C, et al. **Prog Clin Biol Res** 1989;309:43–9
Beta-thalassaemia—the Johannesburg experience. Poole JE, et al. **S Afr Med J** 1989 Apr 15;75(8):367–70 (24 ref.)
Can deferoxamine be considered an ototoxic drug? Masala W, et al. **Scand Audiol Suppl** 1988;30:237–8
[Erythropheresis in 4 cases of congenital hemolytic anemia] Schooneman F, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:18–9 (Eng. Abstr.) (Fre)
[Treatment of homozygote beta thalassemia in Algiers. A 5-year follow-up of 66 patients] Adjrad L, et al. **Presse Med** 1989 May 20;18(20):1010–13 (Eng. Abstr.) (Fre)
[Percutaneous subtotal splenic embolization in thalassemia major. A 4-year follow up] Benea G, et al. **Radiol Med (Torino)** 1989 Jun;77(6):672–8 (Eng. Abstr.) (Ita)

URINE

Iron excretion in thalassemia children treated with deferoxamin methansulfonat: intravenous drip compared to the subcutaneous routes. Hathirat P, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:121–4
[Findings in relation to serum and urinary iron in heterozygotic beta-thalassemia] Lodi G, et al. **G Clin Med** 1989 Apr;70(4):263–6 (Eng. Abstr.) (Ita)

THALASSEMIA MAJOR see **THALASSEMIA**

THALASSOTHERAPY

Histologic studies in psoriatic patients treated at the Dead Sea: comparison with photochemotherapy. Schewach-Millet M, et al. **J Am Acad Dermatol** 1989 Mar; 20(3):502–3
[Effect of climate therapy on the functional state of the respiratory system of children with nasal obstruction] Brzezińska H, et al. **Pediatr Pol** 1988 Jun;63(6):364–70 (Eng. Abstr.) (Pol)

THALICARPINE see under **APORPHINES**

THALIDOMIDE

ADVERSE EFFECTS

The obstetric problems of the thalidomide children [editorial] Chamberlain G. **BMJ** 1989 Jan 7;298(6665):6
Thalidomide and exfoliative dermatitis [letter] Salafia A, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):625
Clinical and basic science lessons from the thalidomide tragedy: what have we learned about the causes of limb defects? Brent RL, et al. **Teratology** 1988 Sep;38(3):241–51 (216 ref.)
Thalidomide retrospective: what did we learn? Fraser FC. **Teratology** 1988 Sep;38(3):201–2
After the tragedy: living with the consequences. Heshka T. **Teratology** 1988 Sep;38(3):227–8
Thalidomide update: regulatory aspects. Kelsey FO. **Teratology** 1988 Sep;38(3):221–6
A short history of thalidomide embryopathy. Lenz W. **Teratology** 1988 Sep;38(3):203–15 (0 ref.)
Proposed mechanisms of action in thalidomide embryopathy. Stephens TD. **Teratology** 1988 Sep;38(3):229–39 (61 ref.)
Why I doubted that thalidomide was the cause of the epidemic of limb defects of 1959 to 1961. Warkany J. **Teratology** 1988 Sep;38(3):217–9
[Producing technical drawings using the feet—a special work site for a thalidomide-damaged technical draftswoman] Fischbach F. **Rehabilitation (Stuttg)** 1989 May;28(2):83–8 (Eng. Abstr.) (Ger)
[The education and occupational status of young adults damaged by thalidomide] von Moltke HJ, et al. **Rehabilitation (Stuttg)** 1989 May;28(2):78–82 (Eng. Abstr.) (Ger)

ANALOGS & DERIVATIVES

Embryotoxic effects of thalidomide derivatives on the non-human primate Callithrix jacchus; 3. Teratogenic potency of the EM 12 enantiomers. Heger W, et al. **Arch Toxicol** 1988;62(2–3):205–8
The enantiomers of the teratogenic thalidomide analogue EM 12: 1. Chiral inversion and plasma pharmacokinetics in the marmoset monkey. Schmahl HJ, et al. **Arch Toxicol** 1988; 62(2–3):200–4
Determination of the thalidomide analogues 2-(2,6-dioxopiperidine-3-yl)phthalimidine (EM 12), 2-(2,6-dioxopiperidine-4-yl)phthalimidine (EM 16) and their metabolites in biological samples. Winckler K, et al. **J Chromatogr** 1989 Mar 24;488(2):417–25
The enantiomers of the teratogenic thalidomide analogue EM 12. 2. Chemical stability, stereoselectivity of metabolism and renal excretion in the marmoset monkey. Schmahl HJ, et al. **Toxicol Lett** 1989 Jan;45(1):23–33
[Synthesis and teratogenic action of n-hydroxythalidomide] Blaschke G, et al. **Arzneimittelforschung** 1989 Mar; 39(3):293–4 (Eng. Abstr.) (Ger)

ANALYSIS

Determination of the thalidomide analogues 2-(2,6-dioxopiperidine-3-yl)phthalimidine (EM 12), 2-(2,6-dioxopiperidine-4-yl)phthalimidine (EM 16) and their metabolites in biological samples. Winckler K, et al. **J Chromatogr** 1989 Mar 24;488(2):417–25
[Improvement in solubility and stability of thalidomide by synthesis of inclusion complexes with cyclodextrins] Koch HP, et al. **Arch Pharm (Weinheim)** 1988 Jun;321(6):371–3 (Eng. Abstr.) (Ger)

PHARMACOLOGY

Enhancement of antibody response and delayed-type hypersensitivity by thalidomide in mice. Descotes J, et al. **Fundam Clin Pharmacol** 1988;2(6):493–7

THERAPEUTIC USE

Treatment of resistant aphthous ulceration with thalidomide in patients positive for HIV antibody. Youle M, et al. **BMJ** 1989 Feb 18;298(6671):432
Thalidomide for treatment of graft-versus-host disease. Vogelsang GB, et al. **Bone Marrow Transplant** 1988 Sep; 3(5):393–8 (18 ref.)
Pyoderma gangrenosum associated with Behçet's syndrome—response to thalidomide. Munro CS, et al. **Clin Exp Dermatol** 1988 Nov;13(6):408–10
Treatment of aphthae with thalidomide. Grinspan D, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1060–3
The effect of thalidomide on experimental autoimmune myasthenia gravis. Crain E, et al. **J Autoimmun** 1989 Apr; 2(2):197–202
Treatment of refractory rheumatoid arthritis—the thalidomide experience. Gutiérrez-Rodríguez O, et al. **J Rheumatol** 1989 Feb;16(2):158–63
Thalidomide for chronic graft-versus-host disease in children [letter] Heney D, et al. **Lancet** 1988 Dec 3;2(8623):1317
Thalidomide for graft-versus-host disease [letter] McCarthy DM, et al. **Lancet** 1988 Nov 12;2(8620):1135
Thalidomide in erythema nodosum leprosum (ENL) [letter] Bourdillon C. **Lepr Rev** 1988 Jun;59(2):184–5
Inefficacy of thalidomide on rat adjuvant-induced arthritis and lack of arthrogenicity of Hansen bacilli. Tsutsumi S, et al. **Nippon Rai Gakkai Zasshi** 1988 Jul–Sep;57(3):122–8
[Thalidomide and ulcerative colitis in Behçet's disease (letter)] Patey O, et al. **Gastroenterol Clin Biol** 1989 Jan; 13(1):104 (Fre)
[Thalidomide 1989 (editorial)] Codina C. **Med Clin (Barc)** 1989 Apr 22;92(15):571–2 (Spa)
[Thalidomide. New uses in dermatology] Soto de Delás J, et al. **Rev Med Univ Navarra** 1988 Jul–Sep;32(3):159–61 (39 ref.) (Spa)

THALLIUM

Thallium (I) interactions in biological fluids: a potentiometric investigation of thallium(I) complex equilibria with some sulphur-containing amino acids. García Bugarín M, et al. **J Inorg Biochem** 1989 Feb;35(2):95–105

DIAGNOSTIC USE

Comparison of technetium-99m MIBI and thallium-201 chloride myocardial scintigraphy in infants. Flynn B, et al. **J Nucl Med** 1989 Jul;30(7):1176–81
[Myocardioscintigraphy with radioactive thallium (201Tl-chloride)] Palermo F, et al. **Ric Clin Lab** 1976 Jan–Mar;6 Suppl 1:38–51 (Ita)
[Study of 201Tl uptake by bone and bone marrow on 201Tl scintigraphy—with special reference to bone marrow abnormalities] Fujii T, et al. **Kaku Igaku** 1989 Apr; 26(4):551–8 (Jpn)
[New application of myocardial infarct map using a dual isotope single photon emission computed tomography (SPECT) of [99mTc]pyrophosphate and [201Tl]chloride in patients with acute myocardial infarction] Hiroe M, et al. **Kaku Igaku** 1988 Oct;25(10):1125–9 (Eng. Abstr.) (Jpn)
[A case of myocardial infarction with ventricular tachycardia, which had discrepancy of defect size between 123I-MIBG and 201TlCl myocardial imaging] Nishimura T, et al. **Kaku Igaku** 1989 Mar;26(3):419–23 (Eng. Abstr.) (Jpn)
[Clinical evaluation of Tl-201 single photon emission computed tomography in patients with suspected bronchogenic carcinoma] Tonami N, et al. **Kaku Igaku** 1988 Dec;25(12):1381–94 (Eng. Abstr.) (Jpn)
[199Tl chloride in the experimental assessment of myocardial perfusion. 2] Chernov VI, et al. **Med Radiol (Mosk)** 1989 Feb;34(2):8–10 (Eng. Abstr.) (Rus)

METABOLISM

Comparison of the myocardial uptake of a technetium-labeled isonitrile analogue and thallium. Leppo JA, et al. **Circ Res** 1989 Sep;65(3):632–9
Uptake of perfusion imaging agents by transplanted hearts: an experimental study in rats. Bergsland J, et al. **J Surg Res** 1989 Feb;46(2):184–6

PHARMACOKINETICS

Brain regional thallium distribution in rats acutely intoxicated with Tl2SO4. Ríos C, et al. **Arch Toxicol** 1989;63(1):34–7
Distribution and excretion of thallium after oral and intraperitoneal administration of thallous malonate and thallous sulfate in hamsters. Aoyama H. **Bull Environ Contam Toxicol** 1989 Mar;42(3):456–63

POISONING

Effects of thallium poisoning on intellectual function. Thompson C, et al. **Br J Psychiatry** 1988 Sep;153:396–9
Connective tissue disease features after thallium poisoning. Alarcón-Segovia D, et al. **J Rheumatol** 1989 Feb; 16(2):171–4
Poisoning from thallium. Schwartz JG, et al. **Tex Med** 1988 Aug;84(8):46–8
[Clinical picture and treatment of acute thallium poisoning] Treshchinskiĭ AI, et al. **Vrach Delo** 1989 Mar;(3):100–3 (Eng. Abstr.) (Rus)
[Familial thallium poisoning. Clinical and therapeutic considerations] Ruiz Extremera A, et al. **An Esp Pediatr** 1989 Feb;30(2):147–9 (Spa)

TOXICITY

Brain regional thallium distribution in rats acutely intoxicated with Tl2SO4. Ríos C, et al. **Arch Toxicol** 1989;63(1):34–7
Protection against thallium hepatotoxicity by silymarin. Mourelle M, et al. **J Appl Toxicol** 1988 Oct;8(5):351–4
Altered testicular enzyme patterns in rats after long-term exposure to thallium sulphate. Gregotti C, et al. **J Toxicol Clin Exp** 1985 Jul–Aug;5(4):265–71
Induction of lipid peroxidation in tissues of thallous malonate-treated hamster. Aoyama H, et al. **Toxicology** 1988 Dec 16;53(1):11–8

THALLIUM RADIOISOTOPES

ADMINISTRATION & DOSAGE

Gated intracoronary thallium201 scintigraphy: feasibility and potential clinical advantages. Siegel ME, et al. **Angiology** 1989 Jun;40(6):513–20
Thallium per rectum scintigraphy, portal pressure and portal perfusion [letter; comment] Urbain D, et al. **Hepatology** 1989 Aug;10(2):262. **Comment on:** Hepatology 1988 Jul–Aug;8(4):785–7
Per-rectal portal scintigraphy: comparison between technetium-99m, thallium-201, and iodine-123-HIPDM [letter] Urbain D, et al. **J Nucl Med** 1988 Dec;29(12):2020–1

BLOOD

Effect of thallium-201 blood levels on reversible myocardial defects. Nelson CW, et al. **J Nucl Med** 1989 Jul; 30(7):1172–5

DIAGNOSTIC USE

AIDS-related Kaposi sarcoma: findings on thallium-201 scintigraphy. Lee VW, et al. **AJR** 1988 Dec;151(6):1233–5
Three-dimensional techniques and artificial intelligence in thallium-201 cardiac imaging. DePuey EG, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1161–8 (24 ref.)
Role of resting thallium201 perfusion in predicting coronary anatomy, left ventricular wall motion, and hospital outcome in unstable angina pectoris. Freeman MR, et al. **Am Heart J** 1989 Feb;117(2):306–14
Dipyridamole-induced negative U waves: scintigraphic evidence of severe anterior myocardial ischemia. Galli M, et al. **Am Heart J** 1989 Sep;118(3):616–9
A look at 15 years of planar thallium-201 imaging. Kaul S. **Am Heart J** 1989 Sep;118(3):581–601 (144 ref.)
Pulmonary embolism masquerading as coronary insufficiency: clues to the diagnosis by exercise-thallium stress test. Kaye KM, et al. **Am Heart J** 1989 May; 117(5):1169–71
Comparison of technetium 99m methoxy isobutyl isonitrile and thallium 201 for evaluation of coronary artery disease by planar and tomographic methods. Kiat H, et al. **Am Heart J** 1989 Jan;117(1):1–11
The effect of beta blockade on single photon emission computed tomographic (SPECT) thallium-201 images in patients with coronary disease. Narahara KA, et al. **Am Heart J** 1989 May;117(5):1030–5
Dipyridamole-thallium-201 tomography documenting improved myocardial perfusion with therapy in Kawasaki disease. Nienaber CA, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1575–9
Functional significance of predischarge exercise thallium-201 findings following intravenous streptokinase therapy during acute myocardial infarction. Touchstone DA, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1500–7
Planar positron imaging of rubidium-82 for myocardial infarction: a comparison with thallium-201 and regional wall motion. Williams KA, et al. **Am Heart J** 1989 Sep; 118(3):601–10
Exercise thallium-201 scintigraphy and prognosis in typical angina pectoris and negative exercise electrocardiography. Bairey CN, et al. **Am J Cardiol** 1989 Aug 1;64(5):282–7
Radionuclide imaging of myocardial perfusion and viability in assessment of acute myocardial infarction. Berman DS, et al. **Am J Cardiol** 1989 Jul 18;64(4):9B–16B

Effect of the degree of effort on the sensitivity of the exercise thallium-201 stress test in symptomatic coronary artery disease. Esquivel L, et al. **Am J Cardiol** 1989 Jan 15; 63(3):160–5

Comparison of dipyridamole–Doppler echocardiography to thallium-201 imaging and quantitative coronary arteriography in the assessment of coronary artery disease. Grayburn PA, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1315–20

Detection of coronary artery disease by dipyridamole thallium tomography in mitral valve stenosis. Huikuri HV, et al. **Am J Cardiol** 1989 Jan 1;63(1):124–6

Combined dipyridamole–exercise thallium imaging [letter] James MA, et al. **Am J Cardiol** 1989 Apr 15;63(13):1023

Usefulness of the severity and extent of reversible perfusion defects during thallium–dipyridamole imaging for cardiac risk assessment before noncardiac surgery. Lette J, et al. **Am J Cardiol** 1989 Aug 1;64(5):276–81

Quantitative exercise thallium-201 scintigraphy for predicting angina recurrence after percutaneous transluminal coronary angioplasty. Stuckey TD, et al. **Am J Cardiol** 1989 Mar 1;63(9):517–21

Usefulness of thallium-201 scintigraphy in predicting the development of angina pectoris in hypertensive patients with left ventricular hypertrophy. Tubau JF, et al. **Am J Cardiol** 1989 Jul 1;64(1):45–9

Significance of positive or negative thallium-201 scintigraphy in hypertrophic cardiomyopathy. von Dohlen TW, et al. **Am J Cardiol** 1989 Sep 1;64(8):498–503

Prognostic value of intravenous dipyridamole thallium scintigraphy after an acute myocardial ischemic event. Younis LT, et al. **Am J Cardiol** 1989 Jul 15;64(3):161–6

Intrarenal blood flow distribution in dog kidney determined by 99mTc microaggregates and 201Tl. Abildgaard U, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1535–41

Noninvasive external cardiac pacing for thallium-201 scintigraphy. Feldman MD, et al. **Am J Physiol Imaging** 1988;3(4):172–7

Comparison of rest and exercise thallium-201 kinetics in man and implications for quantitation. Freeman MR, et al. **Am J Physiol Imaging** 1989;4(1):4–10

Validation of diagnostic procedures on stratified populations: application on the quantification of thallium myocardial perfusion scintigraphy. Goris ML, et al. **Am J Physiol Imaging** 1989;4(1):11–5

Changes of portal systemic shunting after sclerotherapy and/or partial splenic embolization observed by thallium-201 per rectal administration. Tonami N, et al. **Am J Physiol Imaging** 1988;3(3):128–32

Dipyridamole–thallium cardiac imaging [letter; comment] Class RN, et al. **Ann Intern Med** 1989 Jul 1;111(1):90–1. **Comment on:** Ann Intern Med 1988 Dec 15;109(12):990–1

Combining clinical and thallium data optimizes preoperative assessment of cardiac risk before major vascular surgery. Eagle KA, et al. **Ann Intern Med** 1989 Jun 1;110(11):859–66

Death with dipyridamole–thallium imaging [letter] [see comments] Friedman HZ, et al. **Ann Intern Med** 1988 Dec 15;109(12):990–1. **Comment in:** Ann Intern Med 1989 Jul 1;111(1):90–1

Comparison of techniques for thallium-201–technetium-99m parathyroid imaging. Brownless SM, et al. **Br J Radiol** 1989 Jun;62(738):532–5

Effect of antianginal medications on the prognostic value of exercise thallium scintigraphy. Burns RJ, et al. **Can J Cardiol** 1989 Jan–Feb;5(1):29–32

Increased exercise thallium-201 lung uptake: a noninvasive prognostic index in two-vessel coronary artery disease. Miller DD, et al. **Can J Cardiol** 1988 Sep;4(6):270–6

Specific localization of thallium 201 in human high-grade astrocytoma by microautoradiography. Mountz JM, et al. **Cancer Res** 1989 Jul 15;49(14):4053–6

Comparative analysis of the diagnostic and prognostic value of exercise ECG and thallium-201 scintigraphic markers of myocardial ischemia in asymptomatic and symptomatic patients. Gibson RS. **Cardiol Clin** 1989 Aug;7(3):565–75 (52 ref.)

Non-invasive diagnosis of ischemic heart disease using stress thallium scintigraphy and digital exercise 2-dimensional echocardiography. Gentile R, et al. **Cardiologia** 1989 Jan; 34(1):47–52

Underestimation of residual ischemia by 201-thallium scintigraphy after myocardial infarction. Galli M, et al. **Chest** 1988 Oct;94(4):876–8

Severe bronchospasm followed by respiratory arrest during thallium–dipyridamole imaging. Lette J, et al. **Chest** 1989 Jun;95(6):1345–7

New exercise parameter for the identification of severe coronary artery disease. Nelson JR, et al. **Chest** 1989 Apr; 95(4):895–8

Comparison of the myocardial uptake of a technetium-labeled isonitrile analogue and thallium. Leppo JA, et al. **Circ Res** 1989 Sep;65(3):632–9

Thallium 201 uptake in kidneys and heart as an indicator of prognosis in septic shock in the rat. Senda M, et al. **Circ Shock** 1989 Mar;27(3):211–7

Quantitative rotational tomography with 201Tl and 99mTc 2-methoxy-isobutyl-isonitrile. A direct comparison in normal individuals and patients with coronary artery disease. Kahn JK, et al. **Circulation** 1989 Jun;79(6):1282–93

Detection of coronary artery stenosis in children with Kawasaki disease. Usefulness of pharmacologic stress 201Tl myocardial tomography. Kondo C, et al. **Circulation** 1989 Sep;80(3):615–24

Efficacy of coronary artery bypass surgery with gastroepiploic artery. Assessment with thallium 201 myocardial scintigraphy. Kusukawa J, et al. **Circulation** 1989 Sep;80(3 Pt 1):1135–40

Quantification of infarct size by 201Tl single-photon emission computed tomography during acute myocardial infarction in humans. Comparison with enzymatic estimates. Mahmarian JJ, et al. **Circulation** 1988 Oct;78(4):831–9

Atrial pacing and thallium-201 scintigraphy in patients with chest pain: correlation with coronary anatomy. Stratmann HG, et al. **Clin Cardiol** 1989 Apr;12(4):185–92

Diagnostic value of atrial pacing and thallium-201 scintigraphy for the assessment of patients with chest pain. Stratmann HG, et al. **Clin Cardiol** 1989 Apr;12(4):193–201

Dipyridamole thallium-201 myocardial imaging. Complications associated with oral and intravenous routes of administration. Aksut SV, et al. **Clin Nucl Med** 1988 Nov;13(11):786–8

Thallium-201 accumulation in an unsuspected bronchogenic carcinoma. Fakier DR, et al. **Clin Nucl Med** 1989 Jun; 14(6):460–1

Thallium-201 imaging in anomalous left coronary artery originating from pulmonary trunk. Kim SM, et al. **Clin Nucl Med** 1989 Jul;14(7):492–3

Visualization of jugular vein on a thallium-201 scan for thyroid cancer. Nakano S, et al. **Clin Nucl Med** 1989 Jun; 14(6):449–50

The use and diagnostic significance of thallium-201 SPECT imaging in a case of anomalous left coronary artery. Petrozzo PJ, et al. **Clin Nucl Med** 1988 Sep;13(9):629–31

Improved specificity of prone versus supine thallium SPECT imaging. Segall GM, et al. **Clin Nucl Med** 1988 Dec; 13(12):915–6

Myocardial perfusion imaging with a new radiotracer, technetium-99m–hexamibi (methoxy isobutyl isonitrile): comparison with thallium-201 imaging. Taillefer R, et al. **Clin Nucl Med** 1989 Feb;14(2):89–96

Two cases of adenocarcinoma of the lung in which thallium-201 gave a better delineation of metastatic lesions than gallium-67. Togawa T, et al. **Clin Nucl Med** 1989 Mar;14(3):197–201

Parathyroid adenoma associated with neurofibromatosis: correlative scintigraphic and magnetic resonance imaging. Vogelzang PJ, et al. **Clin Nucl Med** 1989 Mar;14(3):168–70

A comparison of myocardial thallium-201 image quality after either dipyridamole or exercise stress. Bourke JP, et al. **Clin Phys Physiol Meas** 1989 Feb;10(1):49–56

Thallium-201 myocardial scintigraphy during dipyridamole-induced coronary hyperaemia. First experiences with a new regional washout programme. Madsen PV, et al. **Dan Med Bull** 1988 Dec;35(6):588–92

Improvement in transient and 'persistent' perfusion defects on early and late post-exercise thallium-201 tomograms after coronary artery bypass grafting. Fioretti P, et al. **Eur Heart J** 1988 Dec;9(12):1332–8

Efficacy of intravenous dipyridamole with exercise in thallium-201 myocardial perfusion scintigraphy. Laarman GJ, et al. **Eur Heart J** 1988 Nov;9(11):1206–14

The evaluation of ventricular function using gated myocardial imaging with Tc-99m MIBI. Najm YC, et al. **Eur Heart J** 1989 Feb;10(2):142–8

Dipyridamole-thallium 201 scintigraphy in the early post-infarction period. (Safety and accuracy in predicting the extent of coronary disease and future recurrence of angina in patients suffering from their first myocardial infarction). Pirelli S, et al. **Eur Heart J** 1988 Dec; 9(12):1324–31

Recovery of left ventricular function after myocardial infarction can be predicted immediately after thrombolysis by semiquantitative intracoronary thallium and technetium pyrophosphate scintigraphy. Schofer J, et al. **Eur Heart J** 1988 Oct;9(10):1088–97

Value of radionuclide assessment with thallium 201 scintigraphy in carnitine deficiency cardiomyopathy. Taillard F, et al. **Eur Heart J** 1988 Jul;9(7):811–8 (39 ref.)

Improvement of myocardial perfusion after thrombolysis assessed by thallium-201 exercise scintigraphy.Report of the Working Group on Thrombolytic Therapy in Acute Myocardial Infarction of the Netherlands Interuniversity Institute of Cardiology. van der Wall EE, et al. **Eur Heart J** 1988 Aug;9(8):828–35

Automatic assignment of elliptical ROIs: first results in planar scintigrams of the left ventricle. Blokland JA, et al. **Eur J Nucl Med** 1989;15(2):87–92

Myocardial 201Tl washout after combined dipyridamole submaximal exercise stress: reference values from different patient groups. Fridrich L. **Eur J Nucl Med** 1989;15(2):81–6

Two dimensional polar display of cardiac blood pool SPECT. Honda N, et al. **Eur J Nucl Med** 1989;15(3):133–6

Quantitative thallium-201 scintigraphy after dipyridamole infusion combined with low level exercise in healthy volunteers. Laarman GJ, et al. **Eur J Nucl Med** 1989; 15(5):239–43

Improvement of parathyroid Tl-Tc scintigraphy by using a new image subtraction method. Liehn JC, et al. **Eur J Nucl Med** 1988;14(4):184–9

Mechanism of 201Tl uptake in tumours. Sehweil AM, et al. **Eur J Nucl Med** 1989;15(7):376–9

Clinical comparison between thallium-201 and Tc-99m–methoxy isobutyl isonitrile (hexamibi) myocardial perfusion imaging for detection of coronary artery disease. Taillefer R, et al. **Eur J Nucl Med** 1989;15(6):280–6

The unfolded map using 201Tl myocardial SPECT. Takishima T, et al. **Eur J Nucl Med** 1988;14(11):572–4

Improved detection of coronary artery disease by estimated myocardial thallium uptake. Tweddel AC, et al. **Eur J Nucl Med** 1989;15(7):336–40

Automatic drawing of the left epicardial region of interest on thallium 201 scintigraphic images. Valette H, et al. **Eur J Nucl Med** 1988;14(9–10):485–8

Thallium-201 in human milk: observations and radiological consequences. Murphy PH, et al. **Health Phys** 1989 Apr; 56(4):539–41

Lack of correlation after reperfusion between ventricular function and infarct size estimated by thallium single-photon emission computed tomography. Schofer J, et al. **Int J Card Imaging** 1988–89;3(4):203–8

Correlations between quantitative cineangiography, coronary flow reserve measured with digital subtraction cineangiography and exercise thallium perfusion scintigraphy. Zijlstra F, et al. **Int J Card Imaging** 1988; 3(2–3):133–9

Stress thallium-201 imaging after coronary angioplasty predicts restenosis and recurrent symptoms. Breisblatt WM, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1199–204

Myocardial stunning in hypertrophic cardiomyopathy: recovery predicted by single photon emission computed tomographic thallium-201 scintigraphy. Fine DG, et al. **J Am Coll Cardiol** 1989 May;13(6):1415–8

Improved diagnostic performance of exercise thallium-201 single photon emission computed tomography over planar imaging in the diagnosis of coronary artery disease: a receiver operating characteristic analysis. Fintel DJ, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):600–12

Relation between myocardial thallium-201 kinetics during exercise and quantitative coronary angiography in patients with one vessel coronary artery disease. Hadjimiltiades S, et al. **J Am Coll Cardiol** 1989 May;13(6):1301–8

Late reversibility of tomographic myocardial thallium-201 defects: an accurate marker of myocardial viability. Kiat H, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1456–63

Comparison of planar and tomographic exercise thallium-201 imaging methods for the evaluation of coronary artery disease. Kiat H, et al. **J Am Coll Cardiol** 1989 Mar 1; 13(3):613–6

Dipyridamole–thallium scan for screening of coronary artery disease prior to vascular surgery. Fletcher JP, et al. **J Cardiovasc Surg (Torino)** 1988 Nov–Dec;29(6):666–9

Comparison of a supplemented Rose Questionnaire to exercise thallium testing in men and women. Bass EB, et al. **J Clin Epidemiol** 1989;42(5):385–94

Use of thallium-201 SPECT to quantitate malignancy grade of gliomas. Black KL, et al. **J Neurosurg** 1989 Sep; 71(3):342–6

Effect of ribose on thallium-201 myocardial redistribution. Angello DA, et al. **J Nucl Med** 1988 Dec;29(12):1943–50

Normal SPECT thallium-201 bull's-eye display: gender differences. Eisner RL, et al. **J Nucl Med** 1988 Dec; 29(12):1901–9

Prone decubitus: a solution to inferior wall attenuation in thallium-201 myocardial tomography. Esquerré JP, et al. **J Nucl Med** 1989 Mar;30(3):398–401

Comparison of technetium-99m MIBI and thallium-201 chloride myocardial scintigraphy in infants. Flynn B, et al. **J Nucl Med** 1989 Jul;30(7):1176–81

Intracardiac malignant lymphoma detected by gallium-67 citrate and thallium-201 chloride. Hamada S, et al. **J Nucl Med** 1988 Nov;29(11):1868–70

Quantitation of postexercise lung thallium-201 uptake during single photon emission computed tomography. Kahn JK, et al. **J Nucl Med** 1989 Mar;30(3):288–94

Dual tracer autoradiographic study with thallium-201 and radioiodinated fatty acid in cardiomyopathic hamsters. Kurata C, et al. **J Nucl Med** 1989 Jan;30(1):80–7

Dipyridamole–thallium imaging: the lazy man's stress test. Leppo JA. **J Nucl Med** 1989 Mar;30(3):281–7 (53 ref.)

Transient mitral regurgitation: an adjunctive sign of myocardial ischemia during dipyridamole–thallium imaging. Lette J, et al. **J Nucl Med** 1989 Jul;30(7):1271–2

Comparison of hypoxia and ouabain effects on the myocardial uptake kinetics of technetium-99m hexakis 2-methoxyisobutyl isonitrile and thallium-201. Meerdink DJ, et al. **J Nucl Med** 1989 Sep;30(9):1500–6

Peritoneal fluid causing inferior attenuation on SPECT thallium-201 myocardial imaging in women. Rab ST, et al. **J Nucl Med** 1988 Nov;29(11):1860–4

Variability of serum drug level following a single oral dose of dipyridamole. Segall GM, et al. **J Nucl Med** 1988 Oct; 29(10):1662–7

Prone versus supine thallium myocardial SPECT: a method to decrease artifactual inferior wall defects. Segall GM, et al. **J Nucl Med** 1989 Apr;30(4):548–55

Myocardial perfusion imaging with technetium-99m SQ30217: comparison with thallium-201 and coronary anatomy. Seldin DW, et al. **J Nucl Med** 1989 Mar; 30(3):312–9

Quantitative planar imaging with technetium-99m methoxyisobutyl isonitrile: comparison of uptake patterns with thallium-201. Sinusas AJ, et al. **J Nucl Med** 1989 Sep; 30(9):1456–63

Thallium-201 single photon emission computed tomography in the evaluation of suspected lung cancer. Tonami N, et al. **J Nucl Med** 1989 Jun;30(6):997–1004

Technetium-99m hexakis 2-methoxyisobutyl isonitrile: human biodistribution, dosimetry, safety, and preliminary comparison to thallium-201 for myocardial perfusion imaging. Wackers FJ, et al. **J Nucl Med** 1989 Mar; 30(3):301-11

Thallium-201 imaging in a patient with mid-ventricular hypertrophic obstructive cardiomyopathy. Wakasugi S, et al. **J Nucl Med** 1988 Oct;29(10):1738-41

Thallium-201 SPECT in coronary artery disease patients with left bundle branch block [letter; comment] Winzelberg GG. **J Nucl Med** 1989 Mar;30(3):419-20. **Comment on:** J Nucl Med 1988 Sep;29(9):1479-85

Uptake of myocardial imaging agents by rejecting and nonrejecting cardiac transplants. A comparative clinical study of thallium-201, technetium-99m, and gallium-67. Yamamoto S, et al. **J Nucl Med** 1989 Sep;30(9):1464-9

Brown tumor of bone: a potential source of false-positive thallium-201 localization. Yang CJ, et al. **J Nucl Med** 1989 Jul;30(7):1264-7

Stress thallium-201 myocardial scintigraphy: planar imaging versus SPECT. Ferlin G, et al. **J Nucl Med Allied Sci** 1988 Apr-Jun;32(2):82-6

A comparison of dipyridamole-thallium imaging and exercise testing in the prediction of postoperative cardiac complications in patients requiring arterial reconstruction. McPhail NV, et al. **J Vasc Surg** 1989 Jul;10(1):51-5; discussion 55-6

Morphological assessment of left ventricular wall and ventricular aneurysm by thallium-201 myocardial emission computed tomography. Nakata T, et al. **Jpn Circ J** 1988 Jul;52(7):589-96

Parathyroid imaging with thallium-201 [letter] Smidt KP. **N Z Med J** 1989 Jul 12;102(871):360

201Tl-99mTc subtraction scintigraphy in secondary hyperparathyroidism of chronic renal failure. Moolenaar W, et al. **Nephrol Dial Transplant** 1988;3(2):166-8

Regional myocardial perfusion abnormality demonstrated by intra-arterial digital subtraction angiogram at capillary phase. A comparison of DSA with left ventriculography and thallium-201 myocardial scintigraphy. Takeda T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25; 48(9):1069-77

Methods of background subtraction in myocardial perfusion imaging with thallium-201: a comparative study in the presence of an artefact. Ros D, et al.
Nucl Med Commun 1989 Jun;10(6):415-24

The multislice cylinder: a new approach to quantification of cardiac single photon emission tomography. Stone DL, et al. **Nucl Med Commun** 1989 Jun;10(6):409-13

Diagnosis of coronary artery disease using thallium imaging: tomographic versus planar imaging. Taylor DN, et al.
Nucl Med Commun 1989 Jun;10(6):401-7

Scintigraphy of the parathyroid glands with 201TI: experience with 250 operated patients. Borsato N, et al. **Nuklearmedizin** 1989 Feb;28(1):26-8

Diagnostic efficacy of dynamic radiothallium uptake in thyroid nodules determined by computer-assisted scintigraphy. Reevaluation of a radioisotopic procedure. Palermo F. **Nuklearmedizin** 1989 Aug;28(4):114-9

Thallium-201 myocardial planar scintigrams. Alignment of stress and rest images by correlation. Ros D, et al.
Phys Med Biol 1989 Jul;34(7):875-84

201 thallium-chloride use in the radioisotopic pre-operative study of the lymphnodes of the neck. Modica V, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):193-6

The study of a case of single coronary artery using stress 201thalium single photon emission computed tomogram. Iio K, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 1; 11(1):55-62

The clinical significance of unusual sites of thallium-201 uptake. Krasnow AZ, et al. **Semin Nucl Med** 1988 Oct; 18(4):350-8 (98 ref.)

The use of preoperative localization of adenomas of the parathyroid glands by thallium-technetium subtraction scintigraphy, high-resolution ultrasonography and computed tomography. Roses DF, et al.
Surg Gynecol Obstet 1989 Feb;168(2):99-106

[Reappraisal of Tl-Tc scanning in the preoperative localization of hyperfunctioning parathyroid glands] Kung SP, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan; 88(1):78-82 (Eng. Abstr.) **(Chi)**

[Stress perfusion tomography of the myocardium using the 201 thallium isotope in cardiac surgery--evaluation of initial results] Krska Z, et al. **Rozhl Chir** 1989 Feb; 68(2):82-6 (Eng. Abstr.) **(Cze)**

[Preoperative localization of parathyroid adenoma with technetium and thallium double-labeling scintigraphy. Difficulties related to associated thyroid lesions] Valensi P, et al. **Ann Med Interne (Paris)** 1989;140(4):263-8 (Eng. Abstr.) **(Fre)**

[Short-axis thallium 201 tomography. Changes in the isotope fixation on the circumference of the left ventricle] Levy M, et al. **Arch Mal Coeur** 1988 Sep;81(9):1093-8 (Eng. Abstr.) **(Fre)**

[Tolerance and prognostic value of Thallium 201 myocardial tomoscintigraphy with dipyridamole in the aged subject] Morelon P, et al. **Arch Mal Coeur** 1988 Sep;81(9):1061-7 (Eng. Abstr.) **(Fre)**

[Diagnostic value of exercise tomoscintigraphy with thallium 201 in patients with complete left branch block] Tessonnier G, et al. **Arch Mal Coeur** 1989 Feb;82(2):209-13 (Eng. Abstr.) **(Fre)**

[Thallium-technetium scintigraphy for presurgical localization of parathyroid adenomas and hyperplasia] Amico S, et al. **Nephrologie** 1988;9(5):211-5 (Eng. Abstr.) **(Fre)**

[Value of thallium-technetium scintigraphy in the preoperative localization of parathyroid adenoma. Apropos of 30 cases] Gautier D, et al.
Rev Rhum Mal Osteoartic 1988 May;55(7):501-4 (44 ref.) **(Fre)**

[The modification of 201Tl-SPECT of the myocardium by breast absorption] Bockisch A, et al. **Nuklearmedizin** 1989 Aug;28(4):145-7 (Eng. Abstr.) **(Ger)**

[Comparison of 123I-fatty acid and 201Tl myocardial scintigraphy in patients with ischemic heart disease. Assessment of the clinical value by evaluating perfusion and metabolism] Götsche A, et al. **Radiol Diagn (Berl)** 1988; 29(3):477-86 **(Ger)**

[Myocardial scintigraphy using 201-thallium and 2-dimensional echocardiogram after dipyridamole infusion in the early evaluation of post-infarct residual ischemia] Casanova R, et al. **G Ital Cardiol** 1989 Apr;19(4):287-94 (Eng. Abstr.) **(Ita)**

[Scintigraphy using thallium-201 in the functional evaluation of coronary disease] Galli M. **G Ital Cardiol** 1988 May; 18(5):423-32 (62 ref.) **(Ita)**

[Study of myocardial perfusion at rest using technetium Tc 99m methoxy-isobutylisonitrile: comparison with labeled microspheres and thallium 201] Santoro GM, et al.
G Ital Cardiol 1988 Nov;18(11):907-13 (Eng. Abstr.) **(Ita)**

[Myocardial perfusion in coronary disease: thallium-201 planar scintigraphy] Astorri E, et al.
Minerva Cardioangiol 1989 Mar;37(3):81-6 (Eng. Abstr.) **(Ita)**

[Myocardioscintigraphy with radioactive thallium (201Tl-chloride)] Palermo F, et al. **Ric Clin Lab** 1976 Jan-Mar;6 Suppl 1:38-51 **(Ita)**

[Dual energy emission computed tomography with 99mTc pyrophosphate and 201T1 in evaluating coronary reperfusion therapy in patients with acute myocardial infarction] Hashimoto T, et al. **J Cardiol** 1988 Jun; 18(2):291-7 (Eng. Abstr.) **(Jpn)**

[Comparison of two-dimensional echocardiography with 201T1-single photon emission computed tomography for evaluating the myocardial infarct zone] Konishiike A, et al. **J Cardiol** 1987 Dec;17(4):699-710 (Eng. Abstr.) **(Jpn)**

[Graft patency and myocardial viability after aorto-coronary bypass surgery evaluated by exercise 201T1 myocardial SPECT] Yada T, et al. **J Cardiol** 1988 Jun;18(2):299-306 (Eng. Abstr.) **(Jpn)**

[Usefulness of rest-redistribution thallium scan for the indication of PTCA in an interesting case with acute myocardial infarction] Chiba H, et al. **Kaku Igaku** 1988 Apr;25(4):331-7 (Eng. Abstr.) **(Jpn)**

[Study of 201Tl uptake by bone and bone marrow on 201Tl scintigraphy--with special reference to bone marrow abnormalities] Fujii T, et al. **Kaku Igaku** 1989 Apr; 26(4):551-8 **(Jpn)**

[New application of myocardial infarct map using a dual isotope single photon emission computed tomography (SPECT) of [99mTc]pyrophosphate and [201Tl]chloride in patients with acute myocardial infarction] Hiroe M, et al. **Kaku Igaku** 1988 Oct;25(10):1125-9 (Eng. Abstr.) **(Jpn)**

[Technetium-99m-pyrophosphate single photon emission computed tomography of the heart in familial amyloid polyneuropathy: comparison with thallium-201 myocardial scintigraphy--a case report] Imamoto T, et al.
Kaku Igaku 1988 Oct;25(10):1117-23 (Eng. Abstr.) **(Jpn)**

[Assessment of the significance of coronary collateral vessels using thallium-201 myocardial imaging] Kanoh Y, et al. **Kaku Igaku** 1988 Nov;25(11):1271-8 (Eng. Abstr.) **(Jpn)**

[Reverse redistribution in the stress thallium scan--correlation of coronary blood flow and myocardial damage] Matsuda H, et al. **Kaku Igaku** 1989 Jan;26(1):55-60 (Eng. Abstr.) **(Jpn)**

[Clinical significance of normal exercise thallium-201 myocardial scintigraphy in subjects with abnormal exercise electrocardiographic findings] Matsuo T, et al.
Kaku Igaku 1988 Jul;25(7):595-603 (Eng. Abstr.) **(Jpn)**

[Assessment of thallium-201 late redistribution in exercise myocardial SPECT] Muto T. **Kaku Igaku** 1988 Jul; 25(7):639-46 (Eng. Abstr.) **(Jpn)**

[Long-term follow-up of thallium-201 myocardial scintigraphy in acute myocardial infarction--clinical significance of reverse redistribution during acute period] Naka K, et al. **Kaku Igaku** 1989 Apr;26(4):539-43 (Eng. Abstr.) **(Jpn)**

[Quantification of severity and redistribution of ischemic and infarcted myocardium by Thallium-201 polar map: evaluation in patients with single vessel disease] Nakanishi F, et al. **Kaku Igaku** 1989 Mar;26(3):339-47 (Eng. Abstr.) **(Jpn)**

[A case of myocardial infarction with ventricular tachycardia, which had discrepancy of defect size between 123I-MIBG and 201TlCl myocardial imaging] Nishimura T, et al. **Kaku Igaku** 1989 Mar;26(3):419-23 (Eng. Abstr.) **(Jpn)**

[Assessment of relative washout rate (rW-R) in stress T1-201 myocardial SPECT] Okuzumi I. **Kaku Igaku** 1989 Mar; 26(3):329-38 (Eng. Abstr.) **(Jpn)**

[Myocardial imaging by direct injection of thallium-201 into coronary artery] Sugihara H, et al. **Kaku Igaku** 1988 Oct; 25(10):1095-102 (Eng. Abstr.) **(Jpn)**

[Semidecubitus position scanning method for thallium-201 cardiac single photon emission computed tomography] Suzuki A, et al. **Kaku Igaku** 1988 Nov;25(11):1255-62 (Eng. Abstr.) **(Jpn)**

[Sex differences in the tracer distribution on stress thallium-201 imaging: (1) Analysis of normal subjects] Tamaki N, et al. **Kaku Igaku** 1988 Dec;25(12):1345-51 (Eng. Abstr.) **(Jpn)**

[Overestimation of myocardial viability due to an increase in thallium uptake by the lung] Tanaka T, et al.
Kaku Igaku 1989 Jan;26(1):15-21 (Eng. Abstr.) **(Jpn)**

[The evaluation of left ventricular eccentric hypertrophy by 201Tl-myocardial scintigraphy] Yamazaki J, et al.
Kaku Igaku 1989 Mar;26(3):409-18 (Eng. Abstr.) **(Jpn)**

[The usefulness of preoperative exercise stress myocardial single photon emission CT with thallium-201 to predict the responses to coronary revascularization] Narita M, et al. **Kokyu To Junkan** 1989 Apr;37(4):421-8 (Eng. Abstr.) **(Jpn)**

[Evaluation of SPECT with 67Ga and 201Tl in patients with primary lung cancer] Tanabe M, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1988 Nov 25; 48(11):1445-50 (Eng. Abstr.) **(Jpn)**

[Right atrial myxoma demonstrated by 201thallium scan with a wide splitting of the first heart sound] Kataoka N, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):544-8 **(Jpn)**

[Relation between Tc-99m-PYP and Tl-201 scintigraphic findings and left ventricular function in acute myocardial infarction with early reperfusion] Mori T, et al.
Nippon Naika Gakkai Zasshi 1988 Jul;77(7):993-8 **(Jpn)**

[The safety and diagnostic accuracy of dipyridamole-loading myocardial tomography with thallium-201 in the elderly with coronary artery disease] Narita M, et al.
Nippon Ronen Igakkai Zasshi 1989 Jan;26(1):53-60 (Eng. Abstr.) **(Jpn)**

[Sequential changes of the cardiomyopathy in Duchenne muscular dystrophy by 201Tl myocardial SPECT] Ono S, et al. **Radioisotopes** 1989 Mar;38(3):130-5 (Eng. Abstr.) **(Jpn)**

[Scintigraphy presentation: Dual SPECT imaging of the myocardium with 201Tl and 99mTc] Kojima Y, et al.
Rinsho Hoshasen 1988 Aug;33(8):897-8 **(Jpn)**

[Computed tomography with thallium-201 and oral dipyridamole in the diagnosis of coronary artery disease] Borges Neto S, et al. **Arq Bras Cardiol** 1988 Jan;50(1):19-22 (Eng. Abstr.) **(Por)**

[Value of myocardial scintigraphy using T1-201 in the diagnosis of ischemic heart disease] Samollenko LE, et al. **Kardiologiia** 1988 Nov;28(11):71-4 (Eng. Abstr.) **(Rus)**

[199Tl chloride in the experimental assessment of myocardial perfusion. 2] Chernov VI, et al. **Med Radiol (Mosk)** 1989 Feb;34(2):8-10 (Eng. Abstr.) **(Rus)**

[Diagnostic imaging using 201Tl and 99mTc-pertechnetate in hyperparathyroidism] Gimlette TM, et al.
Med Radiol (Mosk) 1989 May;34(5):32-44 **(Rus)**

[Scintigraphy of the myocardium with 201Tl and equilibrium ventriculography in thromboembolism of the pulmonary artery] Karalkin AV, et al. **Med Radiol (Mosk)** 1989 Apr; 34(4):31-5 (Eng. Abstr.) **(Rus)**

[Spectrometric characteristics and phantom studies of 199Tl] Krivonogov NG, et al. **Med Radiol (Mosk)** 1988 Oct; 33(10):3-4 (Eng. Abstr.) **(Rus)**

[Methodologic characteristics of scintigraphy of the myocardium using 201Tl chloride] Laskin SA.
Med Radiol (Mosk) 1989 Mar;34(3):79-89 (65 ref.) **(Rus)**

[Diagnostic possibilities of scintigraphy of the myocardium using 201Tl chloride] Laskin SA. **Med Radiol (Mosk)** 1989 Jun;34(6):68-76 (15 ref.) **(Rus)**

[Diagnostic efficiency of exertion gammagraphy with thallium and the "silent majority"] Castell J, et al.
Rev Esp Cardiol 1988;41 Suppl 2:12-9 (Eng. Abstr.) **(Spa)**

[Transaxial tomography in the study of myocardial perfusion with thallium-201] Redondo J, et al. **Rev Esp Cardiol** 1989 Mar;42(3):162-8 (Eng. Abstr.) **(Spa)**

METABOLISM

Biodistributions of radioactive alkaline metals in tumor bearing animals: comparison with 201Tl. Ando A, et al. **Eur J Nucl Med** 1988;14(7-8):352-7

[Rapid elimination of thallium-201 induced by aminophylline] Magriñá J, et al. **Rev Esp Cardiol** 1988 Nov; 41(9):571-3 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

Relationship between the relative regional thallium-201 uptake and the regional systolic or diastolic filling function. Yamagishi T, et al. **Jpn Circ J** 1988 Jun;52(6):525-34

THERAPEUTIC USE

[A comparison of the sensitivity of electrocardiographic diagnostic tests and myocardial thallium scintigraphy in the diagnosis of coronary disease] Dosiak J, et al.
Pol Arch Med Wewn 1985 Apr;73(4):214-21 (Eng. Abstr.) **(Pol)**

THANATOLOGY see under **DEATH**

THANATOPHORIC DYSPLASIA see under OSTEOCHONDRODYSPLASIAS

THC see TETRAHYDROCANNABINOL

THEA see TEA

THEBAINE

ANALOGS & DERIVATIVES

Pharmacological study on irreversible ligands of opiate receptors. I. alpha-CAO as agonist of irreversible ligand of opiate receptors. Li LY, et al. **Proc Chin Acad Med Sci Peking Union Med Coll 1988;** 3(1):20-5

ANALYSIS

Identification of the convulsant opiate thebaine in mammalian brain. Kodaira H, et al. **Proc Natl Acad Sci U S A 1989** Jan;86(2):716-9

THECA CELL TUMOR

COMPLICATIONS

Virilizing pregnancy luteoma: a case report. Yasuda J, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun;14(2):155-60

Adnexal torsion in postmenopausal women. Koonings PP, et al. **Obstet Gynecol** 1989 Jan;73(1):11-2

[A case of Meigs' syndrome due to ovarian thecoma with increased CA125] Kawamura T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1302-6 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Calcified thecomas in young women. A report of four cases. Young RH, et al. **Int J Gynecol Pathol** 1988;7(4):343-50 (36 ref.)

ULTRASTRUCTURE

Sclerosing stromal tumour of the ovary. Ultrastructural study. Tenti P, et al. **Eur J Gynaecol Oncol** 1988;9(6):464-9

VETERINARY

Malignant luteoma in a sow. Hashimoto N, et al. **Zentralbl Veterinarmed [A]** 1989 May;36(5):386-92

THECA CELLS

Virilization due to ovarian hyperthecosis in a postmenopausal woman. van Heyningen C, et al. **Gynecol Endocrinol** 1988 Dec;2(4):331-8

CYTOLOGY

Evidence that luteinizing hormone-stimulated differentiation of purified ovarian thecal-interstitial cells is mediated by both type I and type II adenosine 3',5'-monophosphate-dependent protein kinases. Magoffin DA. **Endocrinology** 1989 Sep;125(3):1464-73

Formation of the rupture site in preovulatory hamster follicles: morphological and morphometric analysis of thinning of the granulosa and thecal layers. Martin GG, et al. **Gamete Res** 1987 Aug;17(4):303-20

[Factors regulating the differentiation of somatic cells of mammalian ovarian follicles] Nikitin AI, et al. **Tsitologiia** 1988 Oct;30(10):1155-71 (115 ref.) (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Ovarian transforming growth factor-beta (TGF beta): cellular site(s), and mechanism(s) of action. Adashi EY, et al. **Mol Cell Endocrinol** 1989 Feb;61(2):247-56

ENZYMOLOGY

Modulation of 17 alpha-hydroxylase/C17,20-lyase activity in porcine theca cells. Tonetta SA, et al. **J Steroid Biochem** 1989 Aug;33(2):263-70

Effect of hypophysectomy on 17 alpha-hydroxylase activity in theca cells of the ovarian follicle in the Japanese quail. Mori M, et al. **Poult Sci** 1988 Nov;67(11):1636-41

METABOLISM

Evidence for protein kinase C regulation of ovarian theca-interstitial cell androgen biosynthesis. Hofeditz C, et al. **Biol Reprod** 1988 Nov;39(4):873-81

Insulin enhances luteinizing hormone-stimulated steroidogenesis by porcine theca cells. Morley P, et al. **Biol Reprod** 1989 Apr;40(4):735-43

Regulation of steroidogenesis in cultured porcine theca cells by growth factors. Caubo B, et al. **Endocrinology** 1989 Jul; 125(1):321-6

Mevinolin (lovastatin) inhibits androstenedione production by porcine ovarian theca cells at the level of the 17 alpha-hydroxylase:C-17,20-lyase complex. Engelhardt H, et al. **Endocrinology** 1989 May;124(5):2297-304

Differential steroid production between theca interna and theca externa cells: a three-cell model for follicular steroidogenesis in avian species. Porter TE, et al. **Endocrinology** 1989 Jul;125(1):109-16

Regulation of ovarian cell growth through the local production of transforming growth factor-alpha by theca cells. Skinner MK, et al. **Endocrinology** 1988 Dec; 123(6):2632-8

Regulation of androstenedione production by adenosine 3',5'-monophosphate and phorbol myristate acetate in ovarian thecal cells of the domestic hen. Tilly JL, et al. **Endocrinology** 1989 Sep;125(3):1691-9

Theca function in polycystic ovaries of a patient with virilizing congenital adrenal hyperplasia. Erickson GF, et al. **Fertil Steril** 1989 Jan;51(1):173-6

PHYSIOLOGY

Hamster thecal cells express muscle characteristics. Self DA, et al. **Biol Reprod** 1988 Aug;39(1):119-30

SECRETION

Indomethacin inhibits hCG and GnRH agonist-induced secretion of plasminogen activator by granulosa and theca interstitial cells of hypophysectomized rats. Liu YX, et al. **Sci Sin [B]** 1988 Jul;31(7):807-17

[Morphofunctional characteristics of the ovaries in generalized lipodystrophy syndrome] Bronshtein ME, et al. **Sov Med** 1988;(5):102-6 **(Rus)**

ULTRASTRUCTURE

Ovarian interstitial tissue of the wood mouse, Apodemus sylvaticus. Brook FA, et al. **J Reprod Fertil** 1989 Jan; 85(1):251-60

THECOMA see THECA CELL TUMOR

THEFT

Sex differences in property crime in a Danish adoption cohort. Baker LA, et al. **Behav Genet** 1989 May; 19(3):355-70

Shop-lifting as a symptom of stress in families of mentally handicapped persons. A case report. Roy M. **Br J Psychiatry** 1988 Jun;152:845-6

No offshore coverage [letter] Rustebakke DA. **Can Dent Assoc J** 1989 Jul;55(7):525

Stolen prescription blanks [letter] **Postgrad Med** 1989 Sep 1;86(3):40, 44

LEGISLATION & JURISPRUDENCE

Investigating the theft of patient property. Harnden L. **Dimens Health Serv** 1989 May;66(4):10

["Kleptomania" as a family game—on the legal responsibility in complex motivated stealing] Kröber HL. **Nervenarzt** 1988 Oct;59(10):610-5 **(Ger)**

PREVENTION & CONTROL

Theft in the health care industry [editorial] Cleverley WO. **Top Health Care Financ** 1988 Winter;15(2):v

Foreword [editorial] Jaspan N, et al. **Top Health Care Financ** 1988 Winter;15(2):vi-vii

Total approach to loss prevention. Jaspan N. **Top Health Care Financ** 1988 Winter;15(2):62-7 (0 ref.)

Cash and billing problems. Nagel W. **Top Health Care Financ** 1988 Winter;15(2):51-4

A recent survey on procurement. Nagel W. **Top Health Care Financ** 1988 Winter;15(2):68-74

A summary of recommendations. Nagel W. **Top Health Care Financ** 1988 Winter;15(2):75-80

THEILERIASIS

Corridor disease in South Africa: a review of the current status. Potgieter FT, et al. **J S Afr Vet Assoc** 1988 Sep; 59(3):155-60 (34 ref.)

BLOOD

Intraerythrocytic Ca2+ and Mg2+ concentrations of Theileria sergenti infected calves. Yagi Y, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):460-2

Abnormality of osmotic fragility and morphological disorder of bovine erythrocytes infected with Theileria sergenti. Yagi Y, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):389-95

Isolation of Theileria sergenti piroplasms from infected erythrocytes and development of an enzyme-linked immunosorbent assay for serodiagnosis of T sergenti infections. Shimizu S, et al. **Res Vet Sci** 1988 Sep; 45(2):206-12

DRUG THERAPY

Efficacy of parvaquone in the treatment of naturally occurring theileriosis in cattle in Iraq. Hawa N, et al. **Trop Anim Health Prod** 1988 Aug;20(3):130-6

Effectiveness of parvaquone in cattle infected with Theileria annulata. Unsuren H, et al. **Trop Anim Health Prod** 1988 Nov;20(4):256-8

EPIDEMIOLOGY

The use of geographical information systems in estimating East Coast fever risk to African livestock. Lessard P, et al. **Acta Vet Scand Suppl** 1988;84:234-6

IMMUNOLOGY

Expression and characterization of the interleukin 2 receptor in Theileria parva-infected bovine lymphocytes. Coquerelle TM, et al. **Eur J Immunol** 1989 Apr;19(4):655-9

The intermediate-affinity interleukin (IL)2 receptor expressed on Theileria annulata-infected cells comprises a single IL 2-binding protein. Partial characterization of bovine IL2 receptors. Herrmann T, et al. **Eur J Immunol** 1989 Jul;19(7):1339-42

Theileria annulata and T. parva infect and transform different bovine mononuclear cells. Spooner RL, et al. **Immunology** 1989 Feb;66(2):284-8

Immunological and preventive effects of combined inoculation of theilerial lymphokine and immunostimulant against Theileria sergenti infection. Kawamura S, et al. **Kitasato Arch Exp Med** 1988 Apr;61(1):29-50

The immunoglobulin response in cattle to experimental infection with Theileria sergenti. Kawazu S, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1107-8

Evaluation of cytotoxic lymphocytes and their parasite strain specificity from African buffalo infected with Theileria parva. Baldwin CL, et al. **Parasite Immunol** 1988 Jul; 10(4):393-403

Theileria parva (Muguga) infects bovine T-lymphocytes in vivo and induces coexpression of BoT4 and BoT8. Emery DL, et al. **Parasite Immunol** 1988 Jul;10(4):379-91

The development and specificity of cytotoxic cells in cattle immunized with autologous or allogeneic Theileria annulata-infected lymphoblastoid cell lines. Innes EA, et al. **Parasite Immunol** 1989 Jan;11(1):57-68

Bovine mononuclear cell lines transformed by Theileria parva or Theileria annulata express different subpopulation markers. Spooner RL, et al. **Parasite Immunol** 1988 Nov; 10(6):619-29

Theileria parva: the immune status of calves born of dams immunised against East Coast fever. Cunningham MP, et al. **Res Vet Sci** 1989 Jan;46(1):90-4

Theileria parva in cattle: characterization of infected lymphocytes and the immune responses they provoke. Morrison WI, et al. **Vet Immunol Immunopathol** 1989 Feb; 20(3):213-37 (86 ref.)

PARASITOLOGY

A progress report on the status of a new disease of American cats: cytauxzoonosis. Ferris DH. **Comp Immunol Microbiol Infect Dis** 1979;1(4):269-76

Theileria sergenti: a simple method for isolation of piroplasms from erythrocytes. Fujisaki K, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):457-9

Characterization of buffalo-derived theilerial parasites with monoclonal antibodies and DNA probes. Conrad PA, et al. **Parasitology** 1989 Apr;98 Pt 2:179-88

PATHOLOGY

Observations on demyelinating lesions induced by Theiler's virus in CBA mice. Blakemore WF, et al. **Acta Neuropathol (Berl)** 1988;76(6):581-9

PREVENTION & CONTROL

The effect of MHC compatibility between parasite-infected cell line and recipient in immunization against tropical theileriosis. Innes EA, et al. **Parasite Immunol** 1989 Jan; 11(1):47-56

Macrophage-mediated cytostasis and lymphocyte cytotoxicity in cattle immunized with Theileria annulata sporozoites or macroschizont-infected cell lines. Preston PM, et al. **Parasite Immunol** 1988 Nov;10(6):631-47

Immunization of cattle with a Theileria parva bovis stock from Zimbabwe protects against challenge with virulent T.p. parva and T.p. lawrencei stocks from Kenya. Irvin AD, et al. **Vet Parasitol** 1989 Aug 1;32(4):271-8

The effect of dose and line on immunisation of cattle with lymphoblastoid cells infected with Theileria annulata. Ouhelli H, et al. **Vet Parasitol** 1989 Jun;31(3-4):217-28

Long-acting oxytetracycline prophylaxis to protect susceptible cattle introduced into an area of Kenya with endemic East Coast fever. Chumo RS, et al. **Vet Rec** 1989 Mar 4;124(9):219-22

The effect of East Coast fever immunisation and different acaricidal treatments on the productivity of beef cattle. Morzaria SP, et al. **Vet Rec** 1988 Sep 17;123(12):313-20

TRANSMISSION

The effect of temperature on the rate of transmission of Theileria parva parva infection to cattle by its tick vector, Rhipicephalus appendiculatus. Ochanda H, et al. **Parasitology** 1988 Oct;97 (Pt 2):239-45

Transmission of Theileria parva bovis (Boleni strain) to cattle resistant to the brown ear tick Rhipicephalus appendiculatus (Neumann). Fivaz BH, et al. **Trop Anim Health Prod** 1989 May;21(2):129-34

Relative role of male and female Hyalomma anatolicum anatolicum ticks in Theileria transmission. Sangwan AK, et al. **Vet Parasitol** 1989 Apr;31(1):83-7

THELAZIA see THELAZIOIDEA

THELAZIOIDEA

GROWTH & DEVELOPMENT

Circumoval and larval microprecipitation reactions in experimental and human gnathostomiasis. Rojekittikhun W, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):81–6

[Experimental infection of an adult domestic cat with third stage larvae of Gnathostoma spinigerum isolated from a fresh water fish] Wenceslao Ollague L, et al. **Med Cutan Ibero Lat Am** 1988;16(4):295–7 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Scanning electron microscopy of the early third–stage larvae of Gnathostoma spinigerum. Maleewong W, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):643–7

THEMATIC APPERCEPTION TEST

Induced anxiety, defensive style, and performance on the TAT. Sherwood JV, et al. **J Clin Psychol** 1988 Sep; 44(5):817–20

Two methods of assessing narcissism: comparison of the Narcissism–Projective (N–P) and the Narcissistic Personality Inventory (NPI). Shulman DG, et al. **J Clin Psychol** 1988 Nov;44(6):857–66

Discriminant analysis of clinical outpatients and public school children 'ry TEMAS: a thematic apperception test for Hispanics and blacks. Costantino G, et al. **J Pers Assess** 1988 Winter;52(4):670–8

Deprivation/enhancement fantasy patterns in children. Stearns ME, et al. **Psychol Rep** 1989 Aug;65(1):127–30

[The elderly and their existence model. A study with projective technics] Fagiani MB, et al. **Minerva Psichiatr** 1989 Apr–Jun;30(2):69–75 (Eng. Abstr.) **(Ita)**

THENOYLTRIFLUOROACETONE see under **THIOPHENES**

THEOBROMINE

[Proceedings of the satellite symposium 'Pentoxifylline 1988', Firenze, 4 February 1988] **Ric Clin Lab** 1988;18 Suppl 2:1–74 **(Ita)**

[Clinical pharmacology and pharmacokinetics of pentoxifylline] Mueller R. **Ric Clin Lab** 1988;18 Suppl 2:3–33 (141 ref.) **(Ita)**

ADMINISTRATION & DOSAGE

[Preparation and biopharmaceutics of theobromine suppositories] Regdon G, et al. **Pharmazie** 1988 Oct; 43(10):729 **(Ger)**

ANALOGS & DERIVATIVES

Effects of pentoxifylline and papaverine on tissue perfusion during arterial surgery. Niinikoski J, et al. **Acta Chir Scand** 1988 Nov–Dec;154(11–12):641–5

Pentoxifyllin treatment of oligoasthenospermic men. Mičič S, et al. **Acta Eur Fertil** 1988 May–Jun;19(3):135–7

Effects of pentoxifylline on pulmonary hemodynamics during acute hypoxia in anesthetized dogs. Chick TW, et al. **Am Rev Respir Dis** 1988 May;137(5):1099–103

Attenuation of acute lung injury in septic guinea pigs by pentoxifylline. Ishizaka A, et al. **Am Rev Respir Dis** 1988 Aug;138(2):376–82

Pentoxifylline prevents tumor necrosis factor–induced lung injury. Lilly CM, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1361–8

ARDS, neutrophils, and pentoxifylline. Mandell GL. **Am Rev Respir Dis** 1988 Nov;138(5):1103–5 (22 ref.)

Pentoxifylline decreases endotoxin–induced pulmonary neutrophil sequestration and extravascular protein accumulation in the dog. Welsh CH, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1106–14

Effect of oral pentoxifylline therapy on venous lower extremity ulcers due to deep venous incompetence. Angelides NS, et al. **Angiology** 1989 Aug;40(8):752–63

Comparative efficacy of ketanserin and pentoxiphylline in treatment of Raynaud's phenomenon. Arosio E, et al. **Angiology** 1989 Jul;40(7):633–8

Efficacy and safety of pentoxifylline in geriatric patients with intermittent claudication. Crowder JE, et al. **Angiology** 1989 Sep;40(9):795–802

Acenocoumarol and pentoxifylline in intermittent claudication. A controlled clinical study. The APIC Study Group. Dettori AG, et al. **Angiology** 1989 Apr;40(4 Pt 1):237–48

Photoplethysmographic documentation of improved microcirculation after pentoxifylline therapy. Roeren T, et al. **Angiology** 1988 Nov;39(11):929–33

Intravenous treatment of chronic peripheral occlusive arterial disease: a double–blind, placebo–controlled, randomized, multicenter trial of pentoxifylline. Rudofsky G, et al. **Angiology** 1989 Jul;40(7):639–49

Failure of pentoxifylline to enhance skin flap survival in the rat. Freedman AM, et al. **Ann Plast Surg** 1989 Jul; 23(1):31–4

Intravenous pentoxifylline in the treatment of rest pain: a preliminary report. McCollum PT, et al. **Ann Vasc Surg** 1989 Jul;3(3):220–3

The effects of pentoxifylline on random skin flap survival. Yessenow RS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):179–81

Pentoxifylline increases extremity blood flow in diabetic atherosclerotic patients. Schwartz RW, et al. **Arch Surg** 1989 Apr;124(4):434–7

Metabolism and pharmacokinetics of 14C–pentoxifylline in healthy volunteers. Bryce TA, et al. **Arzneimittelforschung** 1989 Apr;39(4):512–7

Cellular and molecular regulation of tumor necrosis factor–alpha production by pentoxifylline. Strieter RM, et al. **Biochem Biophys Res Commun** 1988 Sep 30; 155(3):1230–6

Effect of pentoxifylline on the ischemic rat kidney monitored by 31P NMR spectroscopy in vivo. Ellermann J, et al. **Biomed Biochim Acta** 1988;47(6):515–21

Influence of pentoxifylline administered in vivo on the synthesis of PGI2 in human varicose veins. Fahr A, et al. **Biomed Biochim Acta** 1988;47(10–11):S238–40

Effect of pentoxifylline on neutrophil behaviour: stimulation of movement without adhesion changes. Crocket KV, et al. **Biomed Pharmacother** 1988;42(2):117–20

Drug treatment of intermittent claudication: a critical analysis of the methods and findings of published clinical trials, 1965–1985. Cameron HA, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):569–76

Augmentation of skin flap survival by parenteral pentoxifylline. Roth AG, et al. **Br J Plast Surg** 1988 Sep; 41(5):515–20

Attenuation of pulmonary and systemic vasoconstriction with pentoxifylline and aminophylline. Hakim TS, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):396–401

Urinary excretion of pentoxifylline and its metabolites by standardbred mares. Kwong EC, et al. **Can J Vet Res** 1989 Apr;53(2):147–53

Pentoxifylline reduces pulmonary leucostasis and improves capillary patency in a rabbit peritonitis model. Tighe D, et al. **Circ Shock** 1989 Jun;28(2):159–64

Simultaneous determination of pentoxifylline and three metabolites in biological fluids by liquid chromatography. Lambert WE, et al. **Clin Chem** 1989 Feb;35(2):298–301

Calcium content of the erythrocytes: a sensitive and easy handling method for measuring free calcium ions, and modulation of the Ca2+ ion concentration by the calcium antagonists nifedipine and pentoxifylline. Friederichs E, et al. **Clin Exp Pharmacol Physiol** 1989 May;16(5):387–94

Current and potential therapeutic effects of pentoxifylline. Stellin GP, et al. **Compr Ther** 1989 May;15(5):11–3 (15 ref.)

Pentoxifylline improves survival following hemorrhagic shock. Coccia MT, et al. **Crit Care Med** 1989 Jan;17(1):36–8

The effects of pentoxifylline on bacterial peritonitis. Price CI, et al. **Curr Surg** 1989 Jul–Aug;46(4):308–11

Therapy of livedo vasculitis with pentoxifylline. Ely H, et al. **Cutis** 1988 Nov;42(5):448–53

Pentoxifylline therapy in dermatology. A review of localized hyperviscosity and its effects on the skin. Ely H. **Dermatol Clin** 1988 Oct;6(4):585–608 (150 ref.)

Adenine nucleotides in erythrocytes from patients with peripheral vascular disease and the effects of oxpentifylline. Gleeson M, et al. **Eur J Vasc Surg** 1987 Jun;1(3):173–9

The effects of pentoxifylline on cochlear blood flow in normotensive and spontaneously hypertensive rats. Quirk WS, et al. **Hear Res** 1988 Nov;36(2–3):175–80

Protective effect of vasodilators on liver function after long hypothermic preservation: a study in the isolated perfused rat liver. Chazouillères O, et al. **Hepatology** 1989 Jun; 9(6):824–9

Pentoxifylline—a new drug for the treatment of intermittent claudication. Chopra HK, et al. **Indian Heart J** 1989 Mar–Apr;41(2):127–33

Treatment of wound sepsis in irradiated mice. Brook I, et al. **Int J Radiat Biol** 1989 Jul;56(1):75–82

The effect of pentoxifylline on early and late radiation injury following fractionated irradiation in C3H mice. Dion MW, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):101–7

White blood cells as mediators of hyperviscosity–induced tissue damage in neutrophilic vascular reactions: therapy with pentoxifylline. Ely H. **J Am Acad Dermatol** 1989 Apr; 20(4):677–80

Effect of pentoxiphylline on oxygen transport during hypothermia. Hershenson MB, et al. **J Appl Physiol** 1989 Jan;66(1):96–101

Rapid deformation of "passive" polymorphonuclear leukocytes: the effects of pentoxifylline. Needham D, et al. **J Cell Physiol** 1989 Sep;140(3):549–57

Effect of pentoxifylline on developmental changes in neutrophil cell surface mobility and membrane fluidity. Newton JA, et al. **J Cell Physiol** 1989 Sep;140(3):427–31

Actin depolymerization and inhibition of capping induced by pentoxifylline in human lymphocytes and neutrophils. Rao KM, et al. **J Cell Physiol** 1988 Dec;137(3):577–82

Alteration of pentoxifylline pharmacokinetics by cimetidine. Mauro VF, et al. **J Clin Pharmacol** 1988 Jul;28(7):649–54

Ticlopidine–pentoxifylline combination in the treatment of atherosclerosis and the prevention of cerebrovascular accidents. Apollonio A, et al. **J Int Med Res** 1989 Jan–Feb; 17(1):28–35

Pentoxifylline inhibits normal human dermal fibroblast in vitro proliferation, collagen, glycosaminoglycan, and fibronectin production, and increases collagenase activity. Berman B, et al. **J Invest Dermatol** 1989 Apr;92(4):605–10

Mechanism of the potentiation of thrombolysis by pentoxifylline (Trental). Ambrus JL, et al. **J Med** 1987; 18(5–6):265–76

Studies on the vasoocclusive crisis of sickle cell disease IV. Mechanism of action of pentoxifylline (Trental). Ambrus JL, et al. **J Med** 1988;19(2):67–88

Pentoxifylline (Trental)—a new drug for the treatment of peripheral chronic occlusive arterial disease. Chopra HK, et al. **J Med** 1988;19(2):89–107 (38 ref.)

Placebo controlled double–blind study of pentoxifylline in sickle cell disease patients. Manrique RV. **J Med** 1987; 18(5–6):277–91

The effect of pentoxifylline in septic shock—new pharmacologic aspects of an established drug. Schönharting MM, et al. **J Med** 1989;20(1):97–105 (29 ref.)

Pentoxifylline and claudication [editorial] Johnson G Jr. **J Vasc Surg** 1988 Nov;8(5):649

The use of pentoxifylline in a pig random skin flap model. Knox RD, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):582–5

3,7–Dimethyl–1–propargylxanthine: a potent and selective in vivo antagonist of adenosine analogs. Seale TW, et al. **Life Sci** 1988;43(21):1671–84

Pharmacokinetics of pentoxifylline during concomitant theophylline administration to rats. Rocci ML Jr, et al. **Pharm Res** 1987 Oct;4(5):433–5

Treatment of chronic occlusive arterial disease with pentoxifylline: changes in clinical and haemodynamic parameters. Schweiger H, et al. **Pharmatherapeutica** 1989; 5(5):298–304

The lack of effect of pentoxifylline on random skin flap survival. Chu BC, et al. **Plast Reconstr Surg** 1989 Feb; 83(2):315–8

Pentoxifylline, diltiazem, and A23187: effects on deformability and volume of human red blood cells. Dodson RA, et al. **Proc West Pharmacol Soc** 1988;31:205–7

Update on the pharmacology of pentoxifylline and its combination with low–dose acetylsalicylic acid (HWA 5112). Seiffge D, et al. **Semin Thromb Hemost** 1989 Apr; 15(2):150–8

Possible complications of pentoxifylline in stroke [letter] Dragunow M. **Stroke** 1989 Aug;20(8):1115–6

Lack of theophylline assay interference from pentoxifylline and its metabolites. Morton MR, et al. **Ther Drug Monit** 1989;11(3):347–8

Fibrinogen and pentoxifylline. Bachet P, et al. **Thromb Res** 1989 Jul 1;55(1):161–3

Modulation of surface expression of human platelet prostacyclin receptors by cholesterol, dibucaine and pentoxifylline. Funck M, et al. **Thromb Res** 1988 Nov 15; 52(4):343–7

[Sudden deafness: apropos of 19 cases. Results of treatment with pentoxifylline. Value of erythrocyte filtration time] Denis F, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(1):21–6 (Eng. Abstr.) **(Fre)**

[New aspects of the pharmacology of pentoxifylline] Lenoble Giovannangeli M. **J Mal Vasc** 1989;14 Suppl A:35–41 (55 ref.) (Eng. Abstr.) **(Fre)**

[The biology of fibrinogen. The role of pentoxifylline] Soria J, et al. **J Mal Vasc** 1989;14 Suppl A:25–8 (18 ref.) (Eng. Abstr.) **(Fre)**

[Fibrinogen and pentoxifylline. Results of a French cooperative exploratory study of stage II arteritis] Soria J, et al. **J Mal Vasc** 1989;14 Suppl A:29–34 (Eng. Abstr.) **(Fre)**

[Permeability of the erythrocyte membrane to pentoxifylline and propentofylline. Research on their effects on some structural and functional properties of the membrane] Chetrite G, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1066–72 (Eng. Abstr.) **(Fre)**

[Interaction between various alkylxanthines and the proteins of the erythrocyte skeleton] Delaunay J, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1076–80 (Eng. Abstr.) **(Fre)**

[Comparative effects of pentoxifylline and of HWA 285 on mitochondrial maturation and biosynthesis of proteins in rats in the perinatal period] Gautheron DC, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1056–9 (Eng. Abstr.) **(Fre)**

[In vitro effect of pentoxifylline on the metabolism of glycogen and the secretory process in the parotid and lacrimal extraorbital glands in rats] Mauduit P, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1060–5 (Eng. Abstr.) **(Fre)**

[Effects of pentoxifylline and propentofylline on the turnover of polyphosphoinositides of the erythrocyte membrane and on the metabolism of arachidonic acid in platelets] Rossignol L, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1073–5 (Eng. Abstr.) **(Fre)**

[The effect of pentoxifylline and propentofylline on the membrane fluidity of red blood cells in uncontrolled insulin–dependent (type 1) diabetic patients] Roul C, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1081–3 (Eng. Abstr.) **(Fre)**

[In vitro demonstration of hydroxylation of pentoxifylline (letter)] Poirier JM, et al. **Therapie** 1989 Jan–Feb; 44(1):69–70 **(Fre)**

[Different forms of drug therapy for progressive sensorineural hearing loss in childhood] Nickisch A, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct;67(10):498–500 (Eng. Abstr.) **(Ger)**

[Lipid metabolism and peripheral hemodynamics in arteriosclerosis obliterans treated with nifedipine—a comparison with pentoxifylline] Beykirch H, et al. **Z Gesamte Inn Med** 1989 Feb 1;44(3):77–9 (Eng. Abstr.) (Ger)

[Alopecia areata. Hemorheological study and treatment with pentoxifylline] Trevisan G, et al. **G Ital Dermatol Venereol** 1988 May;123(5):211–4 (Eng. Abstr.) (Ita)

[Effect of pentoxifylline on pulmonary hemodynamics] Coccheri S, et al. **Ric Clin Lab** 1988;18 Suppl 2:67–71 (Ita)

[Treatment of vascular diseases of the extremities using pentoxifylline] Di Perri T. **Ric Clin Lab** 1988;18 Suppl 2:49–56 (59 ref.) (Ita)

[Pentoxifylline and prostaglandins] Poggesi L, et al. **Ric Clin Lab** 1988;18 Suppl 2:37–46 (Ita)

[Trental Hoechst (pentoxylylline) and withdrawal (letter)] Hoechst N. **Tidsskr Nor Laegeforen** 1989 Aug 20; 109(23):2348 (Nor)

[Effect of long-term pentoxifylline treatment on selected parameters of the fibrinolytic system in patients with arteriosclerosis obliterans of the legs] Berent H, et al. **Pol Tyg Lek** 1988 Jun 13;43(24):776–8 (Eng. Abstr.) (Pol)

[Serum lipid levels in patients with arteriosclerosis obliterans of the legs during treatment with pentoxifylline] Kuczyńska K, et al. **Pol Tyg Lek** 1988 Aug 22;43(34):1092–4 (Eng. Abstr.) (Pol)

[Use of a combination of rheopolyglucin, complamin and trental in the complex treatment of acute postoperative pancreatitis] Lupal tsev VI. **Klin Khir** 1988;(11):27–9 (Eng. Abstr.) (Rus)

[Effect of the long-term prophylactic use of trental on cerebral blood flow in diabetics] Nazarova KhI. **Klin Med (Mosk)** 1988 Sep;66(9):85–7 (Rus)

[Pharmacologic correction of the adverse effects of beta-adrenoblockaders on the kidneys in patients with hypertension] Tikhonov VP, et al. **Klin Med (Mosk)** 1989 Mar;67(3):40–6 (Eng. Abstr.) (Rus)

[Evaluation of thermal conductivity and skin temperature in the treatment of leg ulcers] Jarčušková D, et al. **Bratisl Lek Listy** 1988 Jul;89(7):519–23 (Eng. Abstr.) (Slo)

PHARMACOKINETICS

Radiometric high-performance liquid chromatographic procedure for the determination of theobromine metabolites in microsomal incubations. Lelo A, et al. **J Chromatogr** 1988 Aug 19;430(1):203–6

PHARMACOLOGY

Xanthine derivatives: could a further study of the mechanisms of action yield new therapeutic agents? [letter] Stefanovich V. **Drugs Exp Clin Res** 1988;14(4):299–301

TOXICITY

Methylxanthines: toxicity to humans. 3. Theobromine, paraxanthine and the combined effects of methylxanthines. Stavric B. **Food Chem Toxicol** 1988 Aug;26(8):725–33 (75 ref.)

Toxic effects of theobromine on mature and immature male rabbits. Soffietti MG, et al. **J Comp Pathol** 1989 Jan; 100(1):47–58

THEOLOGY see **RELIGION**

THEOPHYLLINE

Proconvulsant effect of papaverine on theophylline-induced seizures in rats. Ramzan I. **Clin Exp Pharmacol Physiol** 1989 May;16(5):425–7

The preparation and characterization of ethylcellulose-walled theophylline microcapsules. Nixon JR, et al. **J Microencapsul** 1984 Jan–Mar;1(1):53–64

[Theophylline] Plebani M, et al. **G Clin Med** 1988 Jun–Jul; 69(6–7):471–4 (Ita)

ADMINISTRATION & DOSAGE

The role of adenosine and prostacyclin in coronary flow regulation in healthy man. Edlund A, et al. **Acta Physiol Scand** 1989 Jan;135(1):39–46

Effects of withdrawal of sustained-release theophylline in patients with chronic obstructive lung disease. Aamodt T, et al. **Allergy** 1988 Aug;43(6):411–4

Nocturnal asthma therapy. Inhaled bitolterol versus sustained-release theophylline. Zwillich CW, et al. **Am Rev Respir Dis** 1989 Feb;139(2):470–4

Theophylline levels after single daily and divided dosing of a once-a-day theophylline preparation in asthmatic children. Boner AL, et al. **Ann Allergy** 1989 Feb; 62(2):149–53

The use of theophylline in 'irreversible' chronic obstructive pulmonary disease. An update. Hill NS. **Arch Intern Med** 1988 Dec;148(12):2579–84 (91 ref.)

Euphylong. A new sustained-release theophylline pellet formulation for once-daily evening administration. **Arzneimittelforschung** 1988 Aug;38(8A):1199–256

Galenical development of a new sustained-release theophylline pellet formulation for once-daily administration. Benedikt G, et al. **Arzneimittelforschung** 1988 Aug;38(8A):1203–9

Dose response relation to oral theophylline in severe chronic obstructive airways disease. Chrystyn H, et al. **BMJ** 1988 Dec 10;297(6662):1506–10

Once nightly sustained release theophylline in elderly subjects [letter] Rodgers A, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):279

A study comparing Pro-Vent and phyllocontin in stable asthmatics. Sivananthan N, et al. **Br J Clin Pract** 1988 Dec; 42(12):498–500

A double-blind, placebo-controlled comparison of the efficacy of standard and individually titrated doses of theophylline in patients with chronic asthma. Barlow TJ, et al. **Br J Dis Chest** 1988 Jul;82(3):251–61

Comparison of the oral and intravenous routes for treating asthma with methylprednisolone and theophylline. Jónsson S, et al. **Chest** 1988 Oct;94(4):723–6

Sustained-release theophylline-uniphyllin in nocturnal asthmatics. Yiin KT, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;43(1):43–8

Per-oral controlled release dosage form of theophylline using soybean protein. Machida Y, et al. **Drug Des Deliv** 1987 Feb;1(3):187–92

Algorithms for dosage and therapeutic monitoring of theophylline. Mangues MA, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):893–4

Sustained release theophylline preparations. Practical recommendations for prescribing and therapeutic drug monitoring. Glynn-Barnhart A, et al. **Drugs** 1988 Jun; 35(6):711–26 (91 ref.)

Continuous intravenous therapy with theophylline in patients with brittle bronchial asthma [letter] Ayres JG. **Eur Respir J** 1989 Feb;2(2):190

Continuous intravenous therapy with theophylline in a patient with brittle bronchial asthma. Speelberg B, et al. **Eur Respir J** 1988 May;1(5):471–2

Comparative dose study of a theophylline sustained-release tablet formulation after repeated administrations. Cova D, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jun; 27(6):273–5

In vivo effects of theophylline on diaphragm, bicep, and quadricep strength and fatigability. DeGarmo C, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1041–6

Regarding an article by Milavetz et al. [letter] Goldenheim PD. **J Allergy Clin Immunol** 1989 Apr;83(4):853–4

Pharmacist substitution of slow-release theophylline products [letter] Sly RM, et al. **J Allergy Clin Immunol** 1989 Jul; 84(1):131–2

Evaluation of a sustained-release theophylline product in children with asthma. Canny GJ, et al. **J Asthma** 1987; 24(1):37–44

Steady-state evaluation of two controlled-release theophylline preparations in children. Tinkelman DG, et al. **J Asthma** 1988;25(1):27–31

Comparison of a new sustained-release theophylline preparation, TheoBeads, with Theo-Dur tablets in children with asthma. Welch MJ, et al. **J Asthma** 1988;25(5):269–74

TDM of theophylline—compliance evaluation. Otero MJ, et al. **J Clin Pharm Ther** 1988 Aug;13(4):273–80

In vitro release behaviour of theophylline from PIB-induced ethylcellulose microcapsules interpreted by simple mathematical functions. Lin SY. **J Microencapsul** 1987 Jul–Sep;4(3):213–6

Effect of ethylene-vinyl acetate concentration on ethylcellulose-walled microcapsules: preparation and release kinetics of theophylline microcapsules. Lin SY, et al. **J Microencapsul** 1985 Oct–Dec;2(4):315–25

The in vivo performance of theophylline microcapsules. Nixon JR, et al. **J Microencapsul** 1984 Jan–Mar;1(1):65–72

Formation and in-vitro evaluation of theophylline-loaded poly(methyl methacrylate) microspheres. Pongpaibul Y, et al. **J Pharm Pharmacol** 1988 Aug;40(8):530–3

Effect of pH on the in vitro dissolution and in vivo absorption of controlled-release theophylline in dogs. Vashi VI, et al. **J Pharm Sci** 1988 Sep;77(9):760–4

Pharmacokinetics of pentoxifylline during concomitant theophylline administration to rats. Rocci ML Jr, et al. **Pharm Res** 1987 Oct;4(5):433–5

The consistency of theophylline absorption from a sustained-release formulation in asthmatic children. Hill M, et al. **Pharmacotherapy** 1988;8(5):277–83

[Theophylline plus salbutamol in chronic bronchial obstruction. The additive effects of combination therapy in comparison with salbutamol monotherapy] Bossert J, et al. **Fortschr Med** 1989 Apr 10;107(11):255–8 (Eng. Abstr.) (Ger)

[Theophylline therapy: patient compliance and dosage. A clinical study] Kerschl J, et al. **Fortschr Med** 1988 Sep 20; 106(27):554–7 (Eng. Abstr.) (Ger)

[Effect of the diagnosis and prevention of exercise-induced bronchial obstruction on sports participation by asthmatic school children] Hussein A, et al. **Monatsschr Kinderheilkd** 1988 Dec;136(12):819–23 (Eng. Abstr.) (Ger)

[The left ventricular functional parameter in M-mode echocardiography in various administration rates of a loading dose of theophylline in premature infants] Möller JC, et al. **Monatsschr Kinderheilkd** 1989 Jan;137(1):33–6 (Eng. Abstr.) (Ger)

[Respiratory insufficiency in mucoviscidosis. Pathophysiologic aspects of conservative drug therapy] Storm W. **Monatsschr Kinderheilkd** 1989 Jan;137(1):52–3 (Eng. Abstr.) (Ger)

[Theophylline-retard preparations: relation between drug liberation in vitro and their behavior in the human body] Beerbaum H, et al. **Pharmazie** 1988 May;43(5):325–9 (Eng. Abstr.) (Ger)

[Compliance improving measures in the treatment of obstructive lung diseases] Holzer R. **Prax Klin Pneumol** 1988 Jul;42(7):335–6 (Eng. Abstr.) (Ger)

[Application of a factorial experimental project for optimization of manufacturing technology for theophylline suppositories] Dévay A, et al. **Acta Pharm Hung** 1988 Sep; 58(5):201–7 (Eng. Abstr.) (Hun)

[Use of a new delayed-release anhydrous theophylline by single daily administration in the treatment of reversible bronchial obstruction. Comparison with a delayed-release preparation administered twice daily] Baronti A, et al. **Clin Ter** 1987 Sep 30;122(6):437–40 (Eng. Abstr.) (Ita)

[The grade of dyspnea in patients treated with a theophylline derivative (bamifylline) vs controlled-absorption theophylline] Giosuè S, et al. **Clin Ter** 1987 Dec 31; 123(6):457–63 (Eng. Abstr.) (Ita)

[Asthma patients requiring unusually high doses of theophylline] Matsumura Y, et al. **Arerugi** 1989 Mar; 38(3):272–6 (Eng. Abstr.) (Jpn)

[Clinical evaluation of intravenous theophylline therapy in status asthmaticus] Noguchi M, et al. **Arerugi** 1988 Nov; 37(11):1084–93 (Eng. Abstr.) (Jpn)

[How to determine theophylline dosage?] Droszcz W. **Pneumonol Pol** 1988 Oct;56(10):463–6 (Pol)

ADVERSE EFFECTS

Proarrhythmia related to a kinetic and dynamic interaction of mexiletine and theophylline. Kessler KM, et al. **Am Heart J** 1989 Apr;117(4):964–6

Effects of theophylline on behavior and learning in children with asthma. Rappaport L, et al. **Am J Dis Child** 1989 Mar;143(3):368–72

Induction of theophylline toxicity and inhibition of clearance rates by ranitidine. Roy AK, et al. **Am J Med** 1988 Oct; 85(4):525–7

Mexiletine-theophylline interaction. Stanley R, et al. **Am J Med** 1989 Jun;86(6 Pt 1):733–4

Probable fatal interaction between ciprofloxacin and theophylline. Holden R. **BMJ** 1988 Nov 19;297(6659):1339

Myofascial pain from theophylline [letter] Townend J. **Br Dent J** 1989 Jun 24;166(12):438

Theophylline-thiabendazole drug interaction. Lew G, et al. **Clin Pharm** 1989 Mar;8(3):225–7

Theophylline toxicity, acute illness, and cefaclor administration [letter] Hammond D, et al. **DICP** 1989 Apr; 23(4):339–40

Theophylline—pyrantel pamoate interaction [letter] Hecht L, et al. **DICP** 1989 Mar;23(3):258

Influence of theophylline on gastro-oesophageal reflux and asthma. Ekström T, et al. **Eur J Clin Pharmacol** 1988; 35(4):353–6

Methylxanthines: toxicity to humans. 1. Theophylline. Stavric B. **Food Chem Toxicol** 1988 Jun;26(6):541–65 (236 ref.)

Regarding the article by Furukawa et al. [letter] **J Allergy Clin Immunol** 1989 Jun;83(6):1139–42

The effects of theophylline on cognitive and behavioral performance [editorial] Creer TL, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):1027–9

Field trial of theophylline in cattle with respiratory tract disease. McKenna DJ, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):603–5

A case of acute psychosis in temporal association with theophylline toxicity [letter] Mansheim P. **J Clin Psychopharmacol** 1989 Feb;9(1):65–6

Evidence of a theophylline-induced vitamin B6 deficiency caused by noncompetitive inhibition of pyridoxal kinase. Ubbink JB, et al. **J Lab Clin Med** 1989 Jan;113(1):15–22

A manifestation of theophylline toxicity. Williams J, et al. **J Tenn Med Assoc** 1989 Mar;82(3):127–8

Development of severe Stevens-Johnson syndrome after administration of slow-release theophylline. Brook U, et al. **Pediatr Dermatol** 1989 Jun;6(2):126–9

Severe erythema multiforme (Stevens-Johnson syndrome) after taking sustained release theophylline [letter] Hidalgo HA. **Pediatr Pulmonol** 1989;6(3):209–10

Theophylline, school performance, and the Food and Drug Administration [letter] Nicklas RA. **Pediatrics** 1989 Jan; 83(1):146–7

Theophylline toxicity following coadministration of viloxazine. Thomson AH, et al. **Ther Drug Monit** 1988; 10(3):359–60

[Hypokalemia in a patient treated with theophylline. A case (letter)] Elmay M, et al. **Presse Med** 1988 Sep 24; 17(32):1652 (Fre)

[Theophylline-induced hepatitis. Apropos of 2 cases] Piperno D, et al. **Therapie** 1988 Oct–Dec;43(6):481–3 (Eng. Abstr.) (Fre)

[Sympatho-adrenergic reactions following theophylline administration with the use of various anesthesia technics] Adams HA, et al. **Anaesthesist** 1989 Jun;38(6):309–16 (Eng. Abstr.) (Ger)

[Grand mal series and status using high-dose theophylline medication] Hager H, et al. **Fortschr Med** 1989 Mar 10; 107(7):166–7 (Eng. Abstr.) (Ger)

[Dermatitis caused by bulbar analeptics: mepixanox and theophylline] Bedello PG, et al. **G Ital Dermatol Venereol** 1988 Oct;123(10):517–8 (Eng.

Abstr.) (Ita)
[Anxiety crisis (panic attack) secondary to the administration of theophylline in an oral sustained-release preparation (letter)] Gea J, et al. **Rev Clin Esp** 1988 Oct;183(5):280 (Spa)

ANALOGS & DERIVATIVES

Acetate causes endothelium-independent increases in cyclic AMP in rat caudal artery. Daugirdas JT, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1378-83
Doxofylline, an antiasthmatic drug lacking affinity for adenosine receptors. Cirillo R, et al. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct;295:221-37
Evidence of pulmonary tropism of bamifylline and its main active metabolite. Schiantarelli P, et al. **Arzneimittelforschung** 1989 Feb;39(2):215-9
Effect of isoproterenol and 3-isobutyl-1-methylxanthine on junctional conductance in heart cell pairs. De Mello WC. **Biochim Biophys Acta** 1989 Aug 15;1012(3):291-8
Multiple-dose pharmacokinetics of the new H1-receptor antagonist tazifylline in healthy volunteers. Bruno R, et al. **Biopharm Drug Dispos** 1989 Jan-Feb;10(1):115-9
Adenosine antagonists delay hypoxia-induced depression of neuronal activity in hippocampal brain slice. Fowler JC. **Brain Res** 1989 Jun 26;490(2):378-84
Increased cyclic AMP content accelerates protein synthesis in rat heart. Xenophontos XP, et al. **Circ Res** 1989 Sep; 65(3):647-56
Effect of teomorfolin [N-(7'-theophylline acetyl)morpholine], a new drug, on dislipidaemic conditions induced in the rat. Franzone JS, et al. **Drugs Exp Clin Res** 1988;14(5):347-54
Doxofylline and theophylline are xanthines with partly different mechanisms of action in animals. Franzone JS, et al. **Drugs Exp Clin Res** 1988;14(7):479-89
Doxofylline exerts a prophylactic effect against bronchoconstriction and pleurisy induced by PAF. Franzone JS, et al. **Eur J Pharmacol** 1989 Jun 20; 165(2-3):269-77
Mitogenic activity of phorbol esters and insulin-like growth factor 1 in chemically transformed mouse fibroblasts BP-A31: independent effects and differential sensitivity to inhibition by 3-isobutyl-1-methyl xanthine. Buchou T, et al. **Exp Cell Res** 1989 May;182(1):129-43
Attenuation of endotoxin-induced cytotoxicity and prostacyclin production in cultured bovine pulmonary artery endothelial cells by phosphodiesterase inhibition. Hussein A, et al. **Exp Lung Res** 1988;14(5):637-54
Binding of theophylline, ethophylline and diprophylline to human serum albumin. Alvarez MV, et al. **Farmaco [Prat]** 1988 Jul-Aug;43(7-8):259-65
A steady state comparison of three theophylline formulations in adult stable asthmatics. Subramaniam S, et al. **Indian J Med Res** 1988 May;87:509-15
Massive perfusion with vasodilators for ischaemic retinopathy and optic nerve diseases—a new approach. Rao KR, et al. **Indian J Ophthalmol** 1987;35(5-6):91-3
Effect of cAMP on ciliary function in rabbit tracheal epithelial cells. Tamaoki J, et al. **J Appl Physiol** 1989 Mar; 66(3):1035-9
8-phenyltheophylline as an inhibitor of cyclic AMP hydrolysis by cyclic nucleotide phosphodiesterase. Nicholson CD, et al. **J Auton Pharmacol** 1989 Jun; 9(3):159-65
Two distinct pathways for cAMP-mediated down-regulation of the beta 2-adrenergic receptor. Phosphorylation of the receptor and regulation of its mRNA level. Bouvier M, et al. **J Biol Chem** 1989 Oct 5;264(28):16786-92
Elevation of angiotensin converting enzyme by 3-isobutyl-1-methylxanthine in cultured endothelial cells: a possible role for calmodulin. Dasarathy Y, et al. **J Cell Physiol** 1988 Oct;137(1):179-84
Determination of 1,3-dimethyl-7-isobutylxanthine in guinea pig plasma by high-performance liquid chromatography. Agostini O, et al. **J Chromatogr** 1988 Dec 9;433:288-91
Rapid gas-chromatographic microdetermination of soluphylline in serum. Arranz Peña MI, et al. **J Clin Chem Clin Biochem** 1988 Nov;26(11):791-3
Comparison of intravenously administered doxofylline and placebo for the treatment of severe acute airways obstruction. Dolcetti A, et al. **J Int Med Res** 1988 Jul-Aug; 16(4):264-9
A single-blind crossover study of two different slow release theophylline preparations. Tatsis G, et al. **J Int Med Res** 1988 Nov-Dec;16(6):452-8
Amelioration of glycerol-induced acute renal failure in the rat with 8-phenyltheophylline: timing of intervention. Bowmer CJ, et al. **J Pharm Pharmacol** 1988 Oct; 40(10):733-5
Pharmacokinetics of 8-phenyltheophylline in the rat. Wormald A, et al. **J Pharm Pharmacol** 1989 Jun; 41(6):418-20
Morphine blocks and naloxone enhances suppression of operant behavior by low doses of 3-isobutyl-1-methylxanthine. Kleven MS, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):273-7
The modulation of the ionic selectivity of the light-sensitive current in isolated rods of the tiger salamander. Cervetto L, et al. **J Physiol (Lond)** 1988 Dec;406:181-98
The reducing effects of tazifylline on histamine-induced bronchoconstriction in atopic asthmatics. Kiviranta K, et al. **Methods Find Exp Clin Pharmacol** 1989 Feb; 11(2):119-21
Identification of an adenosine 3',5'-monophosphate (cAMP)-responsive region in the rat growth hormone gene: evidence for independent and synergistic effects of cAMP and thyroid hormone on gene expression. Copp RP, et al. **Mol Endocrinol** 1989 May;3(5):790-6
Endogenous adenosine improves work rate to oxygen consumption ratio in catecholamine stimulated isovolumic rat heart. Headrick J, et al. **Pflugers Arch** 1989 Feb; 413(4):354-8
New methylxanthine thio-derivatives inducing marked tracheal relaxation without increasing cardiac inotropism or motor activity. Ragazzi E, et al. **Pharmacol Res Commun** 1988 Jul;20(7):621-2
The effect of some 8-aminoalkanol derivatives of theophylline on cardiovascular system. Drabczyńska A, et al. **Pol J Pharmacol Pharm** 1988 May-Jun;40(3):321-9
(RS), (R)(-) and (S)(+) derivatives of 2-N-arylalkylamino-1-butanol having antiarrhythmic properties. Eckstein M, et al. **Pol J Pharmacol Pharm** 1988 Jul-Aug;40(4):401-11
cAMP stimulates transcription of the beta 2-adrenergic receptor gene in response to short-term agonist exposure. Collins S, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):4853-7
Doxofylline, an adenosine-nonblocking xanthine, does not induce cardiostimulant effects. Cirillo R, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul;65(1):21-34
Metabolic fate of fenetylline in rat and man. Yoshimura H, et al. **Xenobiotica** 1988 Aug;18(8):929-40
[Determination of dimenhydrinate by computer-aided convolution curve method] Wang GF, et al. **Yao Hsueh Hsueh Pao** 1988;23(10):773-8 (Chi)
[Clinical evaluation of a new preparation of Ersilan drops in patients with vascular headaches] Serclová L. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(5):649-55 (Eng. Abstr.) (Cze)
[The grade of dyspnea in patients treated with a theophylline derivative (bamifylline) vs controlled-absorption theophylline] Giosuè S, et al. **Clin Ter** 1987 Dec 31; 123(6):457-63 (Eng. Abstr.) (Ita)
[Medical treatment of obliterating arteriopathies of the lower limbs with vasoactive drugs] Raspanti D, et al. **Clin Ter** 1987 Jun 30;121(6):479-83 (Eng. Abstr.) (Ita)
[Hypolipemic and antiatherogenic effects of 2',4'-dichlorobenzoate of 7-gamma(beta-hydroxypropyl)-theophylline (HME2)] Wójcicki J, et al. **Acta Pol Pharm** 1988;45(4):362-8 (Eng. Abstr.) (Pol)
[Chronic stimulation of the fibrinolytic system as supplementary treatment of intrauterine fetal hypotrophy] Uszyński M, et al. **Ginekol Pol** 1988 Jul;59(7):429-34 (Eng. Abstr.) (Pol)
[Interactions of theophylline with erythromycin, rifampicin and lincomycin] Halawa B. **Pol Tyg Lek** 1988 Jun 27; 43(26):854-7 (Eng. Abstr.) (Pol)
[Use of a combination of rheopolyglucin, complamin and trental in the complex treatment of acute postoperative pancreatitis] Lupal'tsev VI. **Klin Khir** 1988;(11):27-9 (Eng. Abstr.) (Rus)
[Hypolipidemic effect of the new diprophylline derivative, [2-hydroxy-3-(theophylline-7-ol] propyl ester of 4-benzylhydroxybenzoic acid] Ryzhenkov VE, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):109-12 (Eng. Abstr.) (Rus)

ANALYSIS

Stability of alcohol-free theophylline liquid repackaged in plastic oral syringes. Johnson CE, et al. **Am J Hosp Pharm** 1989 May;46(5):980-1
Interaction of theophylline with L-tryptophan. Study by proton nuclear magnetic resonance spectroscopy. Nishijo J, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):2735-41
The dehydration kinetics of theophylline monohydrate powder and tablet. Otsuka M, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4914-20
Dissolution of theophylline from film-coated slow release mini-tablets in various dissolution media. Fassihi AR, et al. **J Pharm Pharmacol** 1989 Jun;41(6):369-72
In-vitro dissolution behavior of some sustained-release theophylline dosage forms. Lin SY, et al. **Pharm Acta Helv** 1989;64(8):236-40
Effect of drug (core) particle size on the dissolution of theophylline from microspheres made from low molecular weight cellulose acetate propionate. Shukla AJ, et al. **Pharm Res** 1989 May;6(5):418-21
Utility of rapid theophylline assay in clinical research. Chandler MH, et al. **Ther Drug Monit** 1989;11(3):365-7
[Salivary theophylline concentration as an indirect parameter to monitor plasma theophylline levels] Wu J. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):196-8, 253 (Eng. Abstr.) (Chi)
[Studies on gas chromatographic quantitative determination and identification of compound tablets of theophylline] Xu BM. **Yao Hsueh Hsueh Pao** 1988 Nov;23(11):835-8 (Eng. Abstr.) (Chi)
[A new excipient in pharmaceutical formulation of theophylline tablets of the hydrophilic matrix type: the pulp of the baobab fruit (Adansonia digitata L.)] Arama E, et al. **Farmaco [Prat]** 1988 Oct;43(10):303-15 (Eng. Abstr.) (Fre)

ANTAGONISTS & INHIBITORS

Relative efficacy of phenytoin and phenobarbital for the prevention of theophylline-induced seizures in mice. Blake KV, et al. **Ann Emerg Med** 1988 Oct;17(10):1024-8

BLOOD

Circadian variations in theophylline concentrations and the treatment of nocturnal asthma [published erratum appears in Am Rev Respir Dis 1989 Apr;139(4):1065] Martin RJ, et al. **Am Rev Respir Dis** 1989 Feb;139(2):475-8
Liquid chromatographic determination of theophylline concentration with syringe-type minicolumns for direct plasma injection. Homma M, et al. **Anal Chem** 1989 Apr 1;61(7):784-7
Two rapid methods for determination of serum theophylline concentrations: a comparison. Fling JA, et al. **Ann Allergy** 1989 Jan;62(1):35-7
Comparative efficiency of a laboratory and examining room assay for therapeutic drug monitoring of theophylline in ambulatory patients. Milavetz G, et al. **Ann Allergy** 1989 May;62(5):453-6
Theophylline assay on Kodak Ektachem DTSC—performance and interference by structurally-related compounds and salicylate. Ayers GJ, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):268-73
Comparison of microcale ultracentrifugation and equilibrium dialysis for the determination of the unbound fraction of theophylline in human serum. McKenzie K, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):185-8
Measurement of theophylline in dried blood spots by spectrophotometric enzyme immunoassay. Rattenbury JM, et al. **Ann Clin Biochem** 1988 Nov;25 (Pt 6):650-3
Evaluation of a rapid theophylline test strip assay in the emergency department setting. Hurley WT, et al. **Ann Emerg Med** 1988 Oct;17(10):1029-33
Theophylline blood levels in circulatory shock [letter] Randhawa PS. **Ann Intern Med** 1989 Jun 15;110(12):1035
Is posture clinically important when monitoring theophylline therapy? Horn CR, et al. **Br J Clin Pharmacol** 1988 Jun; 25(6):778-9
Automated fluoroimmunoassay of theophylline and valproic acid by flow-injection analysis with use of HPLC instruments. Allain P, et al. **Clin Chem** 1989 Mar; 35(3):469-70
Patient-side immunoassay system with a single-use cartridge for measuring analytes in blood. Gibbons I, et al. **Clin Chem** 1989 Sep;35(9):1869-73
Multilayer fluorescent immunoassay technique. Grenner G, et al. **Clin Chem** 1989 Sep;35(9):1865-8
Variations in protein binding of drugs in plasma and serum. Ohshima T, et al. **Clin Chem** 1989 Aug;35(8):1722-5
EMIT measurement of carbamazepine, phenobarbital, and theophylline in the "Monarch" centrifugal analyzer [letter] Wenham PR, et al. **Clin Chem** 1989 May;35(5):895
Creation of four consecutive instantaneous steady-state plasma concentration plateaus of theophylline and enprofylline by repeated infusions with exponentially decreasing delivery rates. Kraan J, et al. **Eur J Clin Pharmacol** 1988;35(6):657-61
Binding of theophylline, ethophylline and diprophylline to human serum albumin. Alvarez MV, et al. **Farmaco [Prat]** 1988 Jul-Aug;43(7-8):259-65
Prediction of steady-state plasma theophylline concentration by Bayesian algorithm. Imaeda N, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Dec;26(12):588-93
Influence of food on steady state serum concentrations of theophylline from two controlled-release preparations. Lefebvre RA, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Aug;26(8):375-9
Are theophylline "levels" a reliable indicator of compliance? Kossoy AF, et al. **J Allergy Clin Immunol** 1989 Jul; 84(1):60-5
The effects of theophylline on the physical performance and work capacity of well-trained athletes. Morton AR, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):55-61
Comparison of two office tests for determining blood theophylline levels. Garrison M, et al. **J Am Osteopath Assoc** 1989 Jun;89(6):773-4, 779
Caffeine and its dimethylxanthine metabolites in two cases of caffeine overdose: a cause of falsely elevated theophylline concentrations in serum. Fligner CL, et al. **J Anal Toxicol** 1988 Nov-Dec;12(6):339-43
Effectiveness of theophylline monitoring by the use of serum assays. Horsley MG, et al. **J Clin Pharm Ther** 1988 Oct; 13(5):359-64
Comparison of fluorescence polarization immunoassay and HPLC for the determination of theophylline in serum. el-Sayed YM, et al. **J Clin Pharm Ther** 1989 Apr; 14(2):127-34
High-performance liquid chromatographic analysis of theophylline in serum and its use in therapeutic drug monitoring. el-Sayed YM, et al. **J Clin Pharm Ther** 1989 Feb;14(1):35-43
Serum theophylline concentrations in general practice patients [letter] Miller AJ. **J R Coll Gen Pract** 1987 Oct; 37(303):464
Serum theophylline testing in a pediatric emergency setting: potential benefit of rapid assays [published erratum appears in Pediatr Emerg Care 1989 Mar;5(1):21] Shaw KN, et al. **Pediatr Emerg Care** 1988 Dec;4(4):237-40
Prediction of intravenous theophylline dosage based on a

single, nonsteady-state concentration: a clinical study of childhood status asthmaticus. Kurland G, et al. **Pediatrics** 1988 Dec;82(6):880–3

The accuracy and stability of Bayesian theophylline predictions. Chrystyn H, et al. **Ther Drug Monit** 1988; 10(3):299–305

Lack of theophylline assay interference from pentoxifylline and its metabolites. Morton MR, et al. **Ther Drug Monit** 1989;11(3):347–8

An evaluation of the Kodak Ektachem clinical chemistry slide for theophylline. St. Louis PJ, et al. **Ther Drug Monit** 1989;11(1):93–6

The effect of vitamin B2 and its derivatives on a dry-reagent strip theophylline assay. Wei JS, et al. **Ther Drug Monit** 1989;11(1):84–7

Evaluation of chromatographic and kit immunoassay techniques for the measurement of theophylline in serum: a study based on external quality assurance measurements. Wilson JF, et al. **Ther Drug Monit** 1988;10(4):438–45

[Serum theophylline levels in chronic obstructive pulmonary disease patients receiving uniphyllin] Chang SC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jan;41(1):37–42 (Eng. Abstr.) (Chi)

[Theophylline determination in capillary blood of babies] Nagel S, et al. **Pharmazie** 1989 Mar;44(3):228–9 (Ger)

[Analysis and importance of levels of caffeine and theophylline in cord blood of premature newborn infants] Scarcella A, et al. **Boll Soc Ital Biol Sper** 1988 Feb; 64(2):181–8 (Eng. Abstr.) (Ita)

[Comparison of circadian variation of serum theophylline concentration and bioavailability between Theo-dur tablet and a new sustained-release theophylline formulation (E-0686 granule)] Kishida M, et al. **Arerugi** 1988 Apr; 37(4):218–25 (Eng. Abstr.) (Jpn)

[Efficacy of whole blood theophylline assay kit AccuLevel] Morikawa T, et al. **Arerugi** 1988 Jun;37(6):381–6 (Eng. Abstr.) (Jpn)

[The serum theophylline level in patients with chronic bronchitis treated with Theodur] Frank-Piskorska A, et al. **Pneumonol Pol** 1988 Oct;56(10):472–6 (Eng. Abstr.) (Pol)

[Monitoring theophylline in premature newborn infants] Closa RM, et al. **An Esp Pediatr** 1989 Apr;30(4):269–71 (Eng. Abstr.) (Spa)

[Levels of blood theophylline in patients with acute bronchospasm] Martínez MJ, et al. **Rev Clin Esp** 1989 May; 184(9):470–2 (Eng. Abstr.) (Spa)

[Optimization of a method of high performance liquid chromatography for the determination of serum theophylline] Meier N, et al. **Rev Med Chil** 1988 Apr; 116(4):350–8 (Eng. Abstr.) (Spa)

DIAGNOSTIC USE

A rapid sample clean-up for determining 5-hydroxymethylfurfural in dextrose: theophylline injection. Hryncewicz CL, et al. **J Pharm Sci** 1988 Dec; 77(12):1066

[Study of T lymphocyte subpopulations in patients with leprosy, using incubation with theophylline] Bottasso O, et al. **Med Cutan Ibero Lat Am** 1988;16(5):397–401 (Eng. Abstr.) (Spa)

METABOLISM

Effect of norfloxacin on theophylline metabolism. Davis RL, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):212–4

Caffeine and theophylline metabolism in newborn and adult human hepatocytes; comparison with adult rat hepatocytes. Berthou F, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3691–700

Study of isotope effects on protein binding by gas chromatography/mass spectrometry of theophylline–phenobarbitone and 2H, 13C, 15N isotopomers. Cherrah Y, et al. **Biomed Environ Mass Spectrom** 1988 Oct;17(4):245–50

Relationship between the metabolism of antipyrine, hexobarbitone and theophylline in man as assessed by a 'cocktail' approach. Schellens JH, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):373–84

The pharmacokinetics of caffeine and its dimethylxanthine metabolites in patients with chronic liver disease. Scott NR, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):205–13

Application of theophylline metabolite assays to the exploration of liver microsome oxidative function in man. Naline E, et al. **Fundam Clin Pharmacol** 1988;2(4):341–51

Saliva and serum theophylline concentration in management of asthma in children on sustained-release therapy. Iwasaki E, et al. **J Asthma** 1987;24(3):173–8

The effect of route of administration on the cimetidine–theophylline drug interaction. Cremer KF, et al. **J Clin Pharmacol** 1989 May;29(5):451–6

Monitoring theophylline levels in serum and saliva using fluorescence polarization immunoassay and Seralyzer. Schulte T, et al. **Pediatr Pulmonol** 1989;6(4):246–52

A ready-to-use activated charcoal mixture. Adsorption studies in vitro and in dogs: its influence on the intestinal secretion of theophylline in a rat model. Rademaker CM, et al. **Pharm Weekbl [Sci]** 1989 Apr 28;11(2):56–60

The influence of ofloxacin and enoxacin on the metabolic pathways of theophylline in healthy volunteers. A pilot study. Wijnands WJ, et al. **Pharm Weekbl [Sci]** 1988 Dec 9;10(6):272–6

PHARMACOKINETICS

Theophylline in serum and in bronchoalveolar lavage (BAL) in atopic bronchial asthma and chronic bronchitis. Plusa T, et al. **Allergol Immunopathol (Madr)** 1989 Jan–Feb; 17(1):29–32

Lack of evidence for reduction of theophylline clearance by ranitidine [letter] Kelly HW. **Am J Med** 1989 May; 86(5):629–32

Pharmacokinetic properties of theophylline given intravenously and orally to ruminating calves. Langston VC, et al. **Am J Vet Res** 1989 Apr;50(4):493–7

Single-dose study of the effect of terfenadine on theophylline absorption and disposition. Fitzsimmons WE, et al. **Ann Allergy** 1989 Mar;62(3):213–4

Acute dosing with methylprednisolone in normal subjects does not affect theophylline clearance. Kuthiala C, et al. **Ann Allergy** 1988 Nov;61(5):337–8

Pharmacokinetic properties of sustained-release theophylline (Theolair-SR) in relation to timing of doses after low-fat meals. Welsh PW, et al. **Ann Allergy** 1989 May; 62(5):396–400

Effect of lomefloxacin on theophylline pharmacokinetics. Nix DE, et al. **Antimicrob Agents Chemother** 1989 Jul; 33(7):1006–8

Validation of the pellet coating process used for a new sustained-release theophylline formulation. Dietrich R, et al. **Arzneimittelforschung** 1988 Aug;38(8A):1210–9

Validation of the in-vitro dissolution method used for a new sustained-release theophylline pellet formulation. Dietrich R, et al. **Arzneimittelforschung** 1988 Aug;38(8A):1220–8

Feasibility of in-vitro/in-vivo correlation in the case of a new sustained-release theophylline pellet formulation. Dietrich R, et al. **Arzneimittelforschung** 1988 Aug; 38(8A):1229–37

Interaction of enoxacin with theophylline in rats. Mizuki Y, et al. **Arzneimittelforschung** 1989 May;39(5):593–7

A novel approach to the specification of in-vitro dissolution boundaries based on regulatory requirements for bioequivalence. Steinijans VW, et al. **Arzneimittelforschung** 1988 Aug;38(8A):1238–40

Pharmacokinetic profile of a new sustained-release theophylline pellet formulation for once-daily evening administration. Steinijans VW, et al. **Arzneimittelforschung** 1988 Aug;38(8A):1241–50

Theophylline therapeutic drug monitoring in the case of a new sustained-release pellet formulation for once-daily evening administration. Steinijans VW, et al. **Arzneimittelforschung** 1988 Aug;38(8A):1251–3

Nicotine gum and theophylline metabolism. Benowitz NL, et al. **Biomed Pharmacother** 1989;43(1):1–3

Effects of equimolar doses of cimetidine and ranitidine on theophylline elimination. Adebayo GI. **Biopharm Drug Dispos** 1989 Jan–Feb;10(1):77–85

Pharmacokinetics of theophylline before and after nephrectomy in dogs. Brashear RE, et al. **Biopharm Drug Dispos** 1989 Jan–Feb;10(1):87–99

Theophylline disposition in foundry workers exposed to coke oven effluent. Haughey DB, et al. **Biopharm Drug Dispos** 1988 Jul–Aug;9(4):405–9

Sustained release properties of the once daily theophylline capsule BY912 as compared with Theo-24 capsules. Jonkman JH, et al. **Biopharm Drug Dispos** 1989 Mar–Apr; 10(2):213–24

Pharmacokinetics of theophilline in different age-groups: statistical analysis. Bompadre S, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):453–9

Predicting the ciprofloxacin–theophylline interaction from single plasma theophylline measurements. Bachmann KA, et al. **Br J Clin Pharmacol** 1988 Aug;26(2):191–4

Lack of effect of terfenadine on theophylline pharmacokinetics and metabolism in normal subjects. Brion N, et al. **Br J Clin Pharmacol** 1989 Mar;27(3):391–5

Lack of effect of atenolol on the pharmacokinetics of theophylline. Cerasa LA, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):800–2

Bayesian derived predictions for twice daily theophylline under outpatient conditions and an assessment of optimal sampling times. Chrystyn H, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):215–21

Once nightly sustained release theophylline in elderly subjects [letter] Coates P, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):613

Circadian variation in theophylline absorption during chronic dosing with a slow release theophylline preparation and the effect of clock time of dosing. Jackson SH, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):73–7

Effects of alpha-interferon on theophylline pharmacokinetics and metabolism. Jonkman JH, et al. **Br J Clin Pharmacol** 1989 Jun;27(6):795–802

Theophylline–terbutaline, a steady state study on possible pharmacokinetic interactions with special reference to chronopharmacokinetic aspects. Jonkman JH, et al. **Br J Clin Pharmacol** 1988 Sep;26(3):285–93

Roxithromycin and controlled release theophylline, an interaction study. Bandera M, et al. **Chemioterapia** 1988 Oct;7(5):313–6

Effect of miocamycin on theophylline kinetics in asthmatic children. Principi N, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):339–40

Clinical relevance of the interaction of theophylline with diltiazem or nifedipine. Christopher MA, et al. **Chest** 1989 Feb;95(2):309–13

Theophylline disposition in patients with COLD with and without hypoxemia. du Souich P, et al. **Chest** 1989 May; 95(5):1028–32

The newest quinolone antibacterial agents and theophylline [letter] Niki Y, et al. **Chest** 1989 Feb;95(2):486

Clinical pharmacokinetics of theophylline and levels of alpha 1-acid glycoprotein in smokeless tobacco users. Parish RC, et al. **Chest** 1989 Jun;95(6):1253–6

Famotidine effects on theophylline pharmacokinetics in subjects affected by COPD. Comparison with cimetidine and placebo. Verdiani P, et al. **Chest** 1988 Oct;94(4):807–10

Day-night differences in steady-state theophylline pharmacokinetics in asthmatic children. Scott PH, et al. **Chronobiol Int** 1989;6(2):163–71

Interaction between phenytoin and theophylline in healthy volunteers. Adebayo GI. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):883–7

Steady-state pharmacokinetics of two sustained-release theophylline products during once-daily and twice-daily dosing. Armstrong EP, et al. **Clin Pharm** 1987 Oct; 6(10):800–4

Absorption of theophylline administered via colostomy. Hooker KD, et al. **Clin Pharm** 1989 May;8(5):354–8

Effect of continuous cimetidine infusion on steady-state theophylline concentration. Krstenansky PM, et al. **Clin Pharm** 1989 Mar;8(3):206–9

Theophylline pharmacokinetics in a cachectic child [letter] Murphy JE. **Clin Pharm** 1989 Jun;8(6):391

Food interactions with sustained-release theophylline preparations. A review. Jonkman JH. **Clin Pharmacokinet** 1989 Mar;16(3):162–79 (74 ref.)

Pharmacokinetics of theophylline and its metabolites in a patient undergoing continuous ambulatory peritoneal dialysis. Vree TB, et al. **Clin Pharmacokinet** 1988 Dec; 15(6):390–5

Effects of time of dose in relation to food on the bioavailability of Theo-Dur Sprinkle at steady state in asthmatic children. Birkett DJ, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):305–11

Disposition of a flow-limited drug (lidocaine) and a metabolic capacity-limited drug (theophylline) in liver cirrhosis. Colli A, et al. **Clin Pharmacol Ther** 1988 Dec;44(6):642–9

Maturational changes of theophylline pharmacokinetics in preterm infants. Dothey CI, et al. **Clin Pharmacol Ther** 1989 May;45(5):461–8

Dose-dependent inhibition of theophylline metabolism by disulfiram in recovering alcoholics. Loi CM, et al. **Clin Pharmacol Ther** 1989 May;45(5):476–86

The theophylline–enoxacin interaction: I. Effect of enoxacin dose size on theophylline disposition. Rogge MC, et al. **Clin Pharmacol Ther** 1988 Nov;44(5):579–87

Theophylline pharmacokinetics in normal elderly subjects. Shin SG, et al. **Clin Pharmacol Ther** 1988 Nov;44(5):522–30

Factors contributing to the accelerated clearance of theophylline and antipyrine in adults with exocrine pancreatic disease. Acheson DW, et al. **Clin Sci** 1989 Apr; 76(4):377–85

Theophylline–isoniazid interaction. Torrent J, et al. **DICP** 1989 Feb;23(2):143–5

Evaluation of passively absorbed saliva for determination of oral slow-release theophylline bioavailability in children. Vaughan LM, et al. **Drug Intell Clin Pharm** 1988 Sep; 22(9):684–7

Effects of capsicum fruit on theophylline absorption and bioavailability in rabbits. Bouraoui A, et al. **Drug Nutr Interact** 1988;5(4):345–50

Felodipine reduces the absorption of theophylline in man. Bratel T, et al. **Eur J Clin Pharmacol** 1989;36(5):481–5

The effect of pneumococcal vaccine on the disposition of theophylline. Cupit GC, et al. **Eur J Clin Pharmacol** 1988; 34(5):505–7

Increased theophylline clearance in asthmatic patients due to terbutaline. Garty M, et al. **Eur J Clin Pharmacol** 1989; 36(1):25–8

4-quinolones inhibit biotransformation of caffeine [published erratum appears in Eur J Clin Pharmacol 1989;36(1):100] Harder S, et al. **Eur J Clin Pharmacol** 1988;35(6):651–6

The relationship between theophylline clearance and age in adult life. Jackson SH, et al. **Eur J Clin Pharmacol** 1989; 36(1):29–34

The pharmacokinetics of theophylline and enprofylline in patients with liver cirrhosis and in patients with chronic renal disease. Kraan J, et al. **Eur J Clin Pharmacol** 1988; 35(4):357–62

Effects of enoxacin, ofloxacin and norfloxacin on theophylline disposition in humans. Sano M, et al. **Eur J Clin Pharmacol** 1988;35(2):161–5

The effects of once-daily dosing with ranitidine and cimetidine on theophylline pharmacokinetics. McEwen J, et al. **Eur J Drug Metab Pharmacokinet** 1988 Jul–Sep; 13(3):201–5

Theophylline pharmacokinetics following single and repeated administration of slow-release capsules. Torrent J, et al. **Eur J Drug Metab Pharmacokinet** 1988 Oct–Dec; 13(4):225–30

Theophylline pharmacokinetics in children, comparing sustained release spheres (Theo-Dur sprinkle) with elixir. Kjellman NI, et al. **Eur J Pediatr** 1988 Dec;148(3):278–80

Rat but not human interferons suppress hepatic oxidative drug metabolism in rats. Craig PI, et al. **Gastroenterology** 1989 Oct;97(4):999–1004

A steady state comparison of three theophylline formulations

in adult stable asthmatics. Subramaniam S, et al. **Indian J Med Res** 1988 May;87:509–15

The effects of cefonicid on the pharmacokinetics of a once-a-day theophylline formulation. Cazzola M, et al. **Int J Clin Pharmacol Res** 1989;9(3):169–73

Rifampicin–isoniazid and delayed elimination of theophylline: a case report. Dal Negro R, et al. **Int J Clin Pharmacol Res** 1988;8(4):275–7

Effect of type II diabetes mellitus on theophylline elimination. Adithan C, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 May;27(5):258–60

Interaction of quinolones with the theophylline metabolism in man: investigations with lomefloxacin and pipemidic acid. Staib AH, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jun;27(6):289–3

Pharmacokinetic comparison of a slow-release theophylline–hydroxyzine combination and a plain slow-release theophylline preparation. Tukiainen H, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Jul;26(7):346–50

Effects of roxatidine acetate hydrochloride and cimetidine on the pharmacokinetics of theophylline in healthy subjects. Yoshimura N, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jun;27(6):308–12

Pharmacokinetic evaluation of the terfenadine–theophylline interaction [published erratum appears in J Allergy Clin Immunol 1989 Jun;83(6):1082] Luskin SS, et al. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 1):406–11

Unraveling the mysteries of serum theophylline levels: a patient care report in the light of pharmacokinetics. Bussey H, et al. **J Am Board Fam Pract** 1988 Oct–Dec;1(4):282–7

Interaction between the fluoroquinolones and the bronchodilator theophylline. Wijnands WJ, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:109–14 (20 ref.)

Comparative studies on interaction between theophylline and quinolones. Takagi K, et al. **J Asthma** 1988;25(2):63–71

Theophylline pharmacokinetics in patients with bronchopulmonary dysplasia. Nahata MC, et al. **J Clin Pharm Ther** 1989 Jun;14(3):225–9

Influence of food on bioavailability from two controlled-release granules of theophylline. Tada H, et al. **J Clin Pharm Ther** 1989 Apr;14(2):145–51

Effect of altering small bowel transit time on sustained release theophylline absorption. Bryson JC, et al. **J Clin Pharmacol** 1989 Aug;29(8):733–8

The effect of verapamil on the pharmacokinetic disposition of theophylline in cigarette smokers. Gin AS, et al. **J Clin Pharmacol** 1989 Aug;29(8):728–32

The influence of intravenous cimetidine dosage regimens on the disposition of theophylline. Gutfeld MB, et al. **J Clin Pharmacol** 1989 Jul;29(7):665–9

Effect of quinolone antimicrobials on theophylline pharmacokinetics. Prince RA, et al. **J Clin Pharmacol** 1989 Jul;29(7):650–4

The effect of smoking on theophylline kinetics in healthy and asthmatic elderly males. Samaan S, et al. **J Clin Pharmacol** 1989 May;29(5):448–50

New results on an in vitro model for the study of the influence of fatty meals on the bioavailability of theophylline controlled-release formulations. Aiache JM, et al. **J Pharm Sci** 1989 Mar;78(3):261–3

Penetration of theophylline and adenosine into excised human skin from binary and ternary vehicles: effect of a nonionic surfactant. Kadir R, et al. **J Pharm Sci** 1989 Feb; 78(2):149–53

Circadian rhythm in theophylline disposition during a constant-rate intravenous infusion of aminophylline in the dog. Rackley RJ, et al. **J Pharm Sci** 1988 Aug;77(8):658–61

The population pharmacokinetics of theophylline in neonates and young infants. Moore ES, et al. **J Pharmacokinet Biopharm** 1989 Feb;17(1):47–66

Substrate-selective inhibition by verapamil and diltiazem: differential disposition of antipyrine and theophylline in humans. Abernethy DR, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):994–9

Blood oxygen tension-related change of theophylline clearance in experimental hypoxemia. Kishimoto I, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1237–42

Paraxanthine metabolism in humans: determination of metabolic partial clearances and effects of allopurinol and cimetidine. Lelo A, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):315–9

Sustained-release theophylline pharmacokinetics in the cat. Dye JA, et al. **J Vet Pharmacol Ther** 1989 Jun;12(2):133–40

Pharmacokinetics and cardio-respiratory effects of oral theophylline in exercised horses. Ingvast-Larsson C, et al. **J Vet Pharmacol Ther** 1989 Jun;12(2):189–99

Effect of body weight on the volume of distribution of theophylline. Rizzo A, et al. **Lung** 1988;166(5):269–76

Office measurement of serum theophylline. Oliver W, et al. **Pediatr Rev** 1987 Feb;8(8):227

Computer-aided dosage form design. II. Methods for defining a zero-order sustained-release delivery system of maximum formulating flexibility. Lee TY, et al. **Pharm Res** 1987 Oct;4(5):385–91

Analysis of in vitro dissolution of whole vs. half controlled-release theophylline tablets. Shah VP, et al. **Pharm Res** 1987 Oct;4(5):416–9

The effect of food on the absorption of controlled-release theophylline in mini-swine. Shiu GK, et al. **Pharm Res** 1988 Jan;5(1):48–52

Inhibition of theophylline elimination in rabbits by verapamil. Nielsen-Kudsk JE. **Pharmacol Toxicol** 1989 Apr; 64(4):349–51

Influence of endotoxin-induced fever on the pharmacokinetics of theophylline in the rabbit model. Prince RA, et al. **Pharmacotherapy** 1989;9(4):240–4

Gamma radiation affects active electrolyte transport by rabbit ileum. II. Correlation of alanine and theophylline response with morphology. Gunter-Smith PJ. **Radiat Res** 1989 Mar; 117(3):419–32

Induction of theophylline metabolism by pentobarbital. Dahlqvist R, et al. **Ther Drug Monit** 1989;11(4):408–10

No effect of influenza vaccination on theophylline pharmacokinetics as studied by ultraviolet spectrophotometry, HPLC, and EMIT assay methods. Jonkman JH, et al. **Ther Drug Monit** 1988;10(3):345–8

The effect of total parenteral nutrition–induced cholestasis on theophylline clearance in neonates. Kandrotas RJ, et al. **Ther Drug Monit** 1988;10(4):390–4

Distribution of enprofylline and theophylline between plasma and cerebrospinal fluid. Laursen LC, et al. **Ther Drug Monit** 1989;11(2):162–4

Oral bioavailability of slow-release theophylline from unencapsulated beads in preschool children with chronic asthma. Vaughan LM, et al. **Ther Drug Monit** 1988; 10(4):395–400

[Pharmacokinetics and chronotherapy of delayed action theophylline (Euphyllin CR)] Vondra V, et al. **Cas Lek Cesk** 1989 May 5;128(19):595–8 (Eng. Abstr.) (Cze)

[Chronopharmacokinetics of theophylline] Trnavská Z, et al. **Cesk Farm** 1988 Sep;37(7):300–4 (Eng. Abstr.) (Cze)

[Bioavailability of prolonged-liberation tablets of theophylline and paracetamol formulated in pulp from the fruit of baobab (Adansonia digitata L.)] Arama E, et al. **Pharm Acta Helv** 1989;64(4):116–20 (Fre)

[Abrupt change in the clearance of theophylline in children (letter)] Bidat E, et al. **Presse Med** 1989 Mar 18;18(11):587 (Fre)

[Pharmacokinetic interactions of macrolides and theophylline] Vlastos F, et al. **Rev Med Interne** 1989 Jan–Feb;10(1):73–7 (35 ref.) (Eng. Abstr.) (Fre)

[Determinations of blood theophylline level in a severe asthma attack in childhood treated with respirator therapy] Heydolph F, et al. **Z Erkr Atmungsorgane** 1988; 171(2):184–7 (Eng. Abstr.) (Ger)

[Residues of active substances after consumption of contaminated food: status report on the evaluation of residues with examples of two drugs] Richter O, et al. **Z Lebensm Unters Forsch** 1988 Aug;187(2):130–6 (Eng. Abstr.) (Ger)

[Effect of azelastine on theophylline clearance in asthma patients] Asamoto H, et al. **Arerugi** 1988 Oct;37(10):1033–7 (Eng. Abstr.) (Jpn)

[Pharmacokinetics and pharmacodynamics of sustained-release theophylline formulation, Slo-bid, in both single and multiple dosing studies of asthmatic children] Iwasaki E, et al. **Arerugi** 1989 Mar;38(3):263–71 (Eng. Abstr.) (Jpn)

[Comparison of absorption characteristics of sustained-release theophylline formulations in healthy volunteers] Kawakatsu K, et al. **Arerugi** 1988 May; 37(5):256–64 (Eng. Abstr.) (Jpn)

[Pharmacokinetics of caffeine and dimethylxanthines in plasma and saliva] Nakazawa K, et al. **Yakugaku Zasshi** 1988 Jul;108(7):653–8 (Eng. Abstr.) (Jpn)

[Changes in theophylline levels in the blood serum and saliva of children with bronchial asthma] Kurzawa R, et al. **Pediatr Pol** 1988 Sep;63(9):557–62 (Eng. Abstr.) (Pol)

[Theophylline in the serum and bronchoalveolar lavage fluid (BALF) in patients with bronchospastic conditions] Plusa T, et al. **Pneumonol Pol** 1988 Nov;56(11):523–7 (Eng. Abstr.) (Pol)

[Pharmacokinetics of theophylline in children with acute asthmatic crisis] Casasín Edo T, et al. **An Esp Pediatr** 1988 Sep;29(3):220–2 (15 ref.) (Eng. Abstr.) (Spa)

PHARMACOLOGY

Diltiazem, verapamil, and nifedipine inhibit theophylline–enhanced diaphragmatic contractility. Kolbeck RC, et al. **Am Rev Respir Dis** 1989 Jan; 139(1):139–45

Effect of inspiratory resistance and theophylline on respiratory muscle strength in patients with amyotrophic lateral sclerosis. Schiffman PL, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1418–23

Effect of theophylline and adenosine on eosinophil function. Yukawa T, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):327–33

Effect of theophylline on improvement of the pulmonary function in the treatment of acute episodes of asthma: the influence of the severity of acute asthma. Sakamoto Y, et al. **Ann Allergy** 1989 Jul;63(1):21–7

The relationship between theophylline, caffeine and heart rate in neonates. Nadkarni S, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):408–10

Quinolones, theophylline, and diclofenac interactions with the gamma-aminobutyric acid receptor. Segev S, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1624–6

Effects of progressively increased doses of theophylline and of S 9795 on hemodynamics, blood gases and lung mechanics in dogs. Lejeune P, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:215–27

Interaction of caffeine and of theophylline with liver glutamate dehydrogenase. Prabhakaram M, et al. **Biochem Int** 1989 Jan;18(1):217–25

The effect of heat-stable Escherichia coli enterotoxin, theophylline and forskolin on cyclic nucleotide levels and mucosal surface (acid microclimate) pH in rat proximal jejunum in vivo. McKie AT, et al. **Biochim Biophys Acta** 1988 Oct 7;971(3):325–31

Theophylline reverses haloperidol-induced catalepsy in the rat. Possible relevance to the pharmacological treatment of psychosis. Casas M, et al. **Biol Psychiatry** 1988 Oct; 24(6):642–8

Adenosine antagonists delay hypoxia-induced depression of neuronal activity in hippocampal brain slice. Fowler JC. **Brain Res** 1989 Jun 26;490(2):378–84

Voltage-dependent Vmax blockade in Na+-dependent action potentials after beta 1- and H2-receptor stimulation in mammalian ventricular myocardium. Gillis AM, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1291–6

Cellular sialic acid level and phenotypic expression in B16 melanoma cells: comparison of spontaneous variations and bromodeoxyuridine- and theophylline-induced changes. Kinoshita Y, et al. **Cell Struct Funct** 1989 Feb;14(1):35–43

Renal effects of theophylline in very low birthweight neonates. Wilkins BH. **Contrib Nephrol** 1988;67:155–9

Doxofylline and theophylline are xanthines with partly different mechanisms of action in animals. Franzone JS, et al. **Drugs Exp Clin Res** 1988;14(7):479–89

Xanthine derivatives: could a further study of the mechanisms of action yield new therapeutic agents? [letter] Stefanovich V. **Drugs Exp Clin Res** 1988;14(4):299–301

Bronchodilator effect and serum theophylline level after combined treatment with fenoterol and theophylline in reversible chronic airflow obstruction. Lucena MI, et al. **Eur J Clin Pharmacol** 1988;35(6):669–71

Theophylline antagonizes the effect of diazepam on ventricular automaticity. Ruiz F, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):205–9

Theophylline affects the inotropic status of guinea-pig left atria by actions on the sarcolemma and sarcoplasmic reticulum. Zavecz JH. **Eur J Pharmacol** 1989 Jan 24; 160(1):187–91

Effects of theophylline and S 9795 on hyperoxic and hypoxic pulmonary vascular tone in intact dogs. Lejeune P, et al. **Eur Respir J** 1989 Apr;2(4):370–6

Effect of theophylline and salbutamol on hepatic drug metabolism. Døssing M, et al. **Hum Toxicol** 1989 May; 8(3):225–8

Effects of theophylline on human natural killer cells. Marshall ME, et al. **Immunopharmacol Immunotoxicol** 1989; 11(1):1–16

Modulation of type-I skin hypersensitivity reactions by bronchodilators. Pant K, et al. **Indian J Chest Dis Allied Sci** 1988 Oct–Dec;30(4):253–6

Anti-allergic effects of milrinone and sulmazole in isolated rat lungs in comparison with theophylline. Post MJ, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):1–5

Comparison of the anti-anaphylactic effects of milrinone, sulmazole and theophylline in the rat. Post MJ, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):6–10

Inhibiton of the colony-forming capacity of human T-lymphocytes exerted by theophylline. Ghio R, et al. **Int J Immunopharmacol** 1988;10(3):299–302

Theophylline does not inhibit allergen-induced increase in airway responsiveness to methacholine. Cockcroft DW, et al. **J Allergy Clin Immunol** 1989 May;83(5):913–20

Effects of theophylline in gastroesophageal reflux [letter] Mansfield LE. **J Allergy Clin Immunol** 1989 Sep; 84(3):407–8

The effect of theophylline and enprofylline on the late cutaneous response to antigen and compound 48/80. Zunich KM, et al. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 1):428–34

Slowing of relaxation in the fatiguing hamster diaphragm is enhanced by theophylline. Esau SA. **J Appl Physiol** 1988 Sep;65(3):1307–13

Effect of theophylline on the velocity of diaphragmatic muscle shortening. Supinski GS, et al. **J Appl Physiol** 1988 Sep;65(3):1410–5

Effect of prior medication on intradermal test response in patients with respiratory allergies. Agarwal MK, et al. **J Asthma** 1988;25(5):275–9

Hormonal regulation of chimeric genes containing the phosphoenolpyruvate carboxykinase promoter regulatory region in hepatoma cells infected by murine retroviruses. Hatzoglou M, et al. **J Biol Chem** 1988 Nov 25; 263(33):17798–808

The effects of dipyridamole and theophylline on rat pial vessels during hypocarbia. Ibayashi S, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):829–33

Use of theophylline in the investigation of pseudothrombocytopenia induced by edetic acid (EDTA-2K). Ohnuma O, et al. **J Clin Pathol** 1988 Aug; 41(8):915–7

Effects of theophylline infusion on the growth hormone (GH) and prolactin response to GH-releasing hormone administration in acromegaly. Losa M, et al. **J Endocrinol Invest** 1988 Oct;11(9):663–7

The effect of theophylline and cyclic adenosine 3',5'-monophosphate on renin release by afferent arterioles. Cannon ME, et al. **J Hypertens** 1989 Jul;7(7):569–76

Dual effects of theophylline on spontaneous transmitter

release from frog motor nerve terminals. Barry SR. J Neurosci 1988 Dec;8(12):4427–33
Kinetics of drug action in disease states. XXVI: Effect of fever on the pharmacodynamics of theophylline–induced seizures in rats. Yasuhara M, et al. J Pharm Sci 1988 Jul; 77(7):569–70
Theophylline: a new concept of nephroprotection in acute cyclosporin A nephrotoxicity? Rob PM, et al. Klin Wochenschr 1989 Jun 15;67(12):648
Effects of theophylline and salbutamol on phosphate and calcium metabolism in normal subjects. Prince RL, et al. Miner Electrolyte Metab 1988;14(5):262–5
Temporal relationship between A1 adenosine receptor upregulation and alterations in bicuculline seizure susceptibility in rats. Sanders RC, et al. Neurosci Lett 1989 Jul 3;101(3):325–30
Pharmacodynamics and pharmacokinetics of enprofylline and theophylline in the isolated rabbit heart. Nielsen–Kudsk JE, et al. Pharmacol Toxicol 1988 Sep;63(3):183–8
Theophylline effects on normal uveal melanocytes in culture: an ultrastructural study. Hu F, et al. Pigment Cell Res 1987; 1(2):104–10
Role of theophylline, verapamil, and diltiazem on rat fatigued diaphragmatic muscle in vitro. Mitra P, et al. Proc West Pharmacol Soc 1989;32:209–10
The influence of xanthines on the contractile responses of PGF2 alpha and PGD2 in human parenchymal strips. Napier FE, et al. Prostaglandins 1989 Aug;38(2):227–35
The effects of intravenous theophylline infusion versus intravenous sodium bicarbonate infusion on lithium clearance in normal subjects. Holstad SG, et al. Psychiatry Res 1988 Aug;25(2):203–11
Fenspiride and relaxation of tracheobronchial musculature. Mechanism of action. Advenier C. Rhinology 1988;Suppl 4:67–74
Effects of theophylline, beta–adrenergic stimulants and prednisolone on platelet and urine cyclic guanosine monophosphate (cGMP). Williams WR, et al. Tohoku J Exp Med 1988 Dec;156(4):331–40
[Identification of alpha–2 adrenergic receptors in rabbit adipocytes] Naaraoui A, et al. Arch Inst Pasteur Tunis 1988 Jul–Oct;65(3–4):255–60 (Eng. Abstr.) (Fre)
[Additive action of theophylline and ambroxol on bronchial clearance?] Würtemberger G, et al. Prax Klin Pneumol 1988 Jun;42 Suppl 1:300–3 (Eng. Abstr.) (Ger)
[Receptors for polysaccharides of group A streptococci on human thymic lymphocytes. Stimulation of their expression by action of adenosine, theophylline and supernatant of thymocytes] Gnezditskaia EV, et al. Biull Eksp Biol Med 1988 Oct;106(10):467–9 (Eng. Abstr.) (Rus)
[Early and late changes in potassium transport during the start of proliferation in CHO cell cultures. The action of serum, isoproterenol, propranolol and theophylline] Marakhova II, et al. Tsitologiia 1988 Oct;30(10):1208–17 (Eng. Abstr.) (Rus)
[Resistance to pancuronium caused by theophylline and forskolin] García E, et al. Rev Esp Anestesiol Reanim 1988 Jul–Aug;35(4):191–3 (Eng. Abstr.) (Spa)

POISONING

Magnesium toxicity secondary to catharsis during management of theophylline poisoning. Garrelts JC, et al. Am J Emerg Med 1989 Jan;7(1):34–7
Lactic acidosis in theophylline overdose. Leventhal LJ, et al. Am J Emerg Med 1989 Jul;7(4):417–8
The seed queen. Stephens BG. Am J Forensic Med Pathol 1989 Jun;10(2):156–8
Theophylline therapy [letter] Brown JF, et al. Ann Emerg Med 1989 Apr;18(4):425–6
Digisorb—instrument, not a drug [letter] Haragan PW. Ann Emerg Med 1989 Feb;18(2):228
Theophylline blood levels in circulatory shock [letter] Randhawa PS. Ann Intern Med 1989 Jun 15;110(12):1035
T wave inversion associated with severe theophylline toxicity. Kolander SA, et al. Chest 1989 Aug;96(2):429–31
Hypermagnesemia. A potential complication during treatment of theophylline intoxication with oral activated charcoal and magnesium–containing cathartics. Weber CA, et al. Chest 1989 Jan;95(1):56–9
Theophylline toxicity after iodine 131 treatment for hyperthyroidism. Johnson CE, et al. Clin Pharm 1988 Aug; 7(8):620–2
Multi–drug theophylline overdose. Schwartz MP, et al. J Fam Pract 1989 May;28(5):575–7
Fatal theophylline toxicity precipitated by in situ pulmonary artery thrombosis. Davies RJ, et al. Postgrad Med J 1989 Jan;65(759):49–50
Treatment of severe theophylline toxicity with oral activated charcoal and haemodialysis—a case report. Lim TK, et al. Singapore Med J 1988 Dec;29(6):601–3
[Severe theophylline poisoning in children. Value of hemodialysis with high permeability membrane] Kretz M, et al. Arch Fr Pediatr 1988 Dec;45(10):821–2 (Eng. Abstr.) (Fre)
[Acute theophylline poisoning (letter)] Do P, et al. Presse Med 1989 Mar 11;18(10):539–40 (Fre)
[Theophylline poisoning: use of hemoperfusion with activated charcoal (letter)] Rocs A, et al. Rev Clin Esp 1988 Apr;182(7):392–3 (Spa)

THERAPEUTIC USE

Comparative evaluation of caffeine and theophylline for weaning premature infants from the ventilator. Sims ME, et al. Am J Perinatol 1989 Jan;6(1):72–5
Slow–release theophylline: do not substitute. Hendeles L. Am Pharm 1989 Mar;NS29(3):22
Slow–release theophylline: substitute only AB–rated products. Kramer P. Am Pharm 1989 Mar;NS29(3):23–4
Theophylline and diaphragmatic contractility. Investigation of a dose–response relationship. Foxworth JW, et al. Am Rev Respir Dis 1988 Dec;138(6):1532–4
Theophylline minimally inhibits bronchoconstriction induced by dry cold air inhalation in asthmatic subjects. Merland N, et al. Am Rev Respir Dis 1988 Jun;137(6):1304–8
Effect of theophylline on adenosine–induced bronchoconstriction. Crimi N, et al. Ann Allergy 1989 Feb; 62(2):123–7
Theophylline: Primary or Tertiary Drug? A Brief Review [letter] Milgrom H. Ann Allergy 1989 Apr;62(4):369–70
The value of theophylline for asthma. Weinberger M. Ann Allergy 1989 Jul;63(1):1–3 (33 ref.)
Methylxanthines in 1989. Rossing TH. Ann Intern Med 1989 Apr 1;110(7):502–4 (12 ref.)
Acceptance of domiciliary theophylline monitoring using dried blood spots. Rattenbury JM, et al. Arch Dis Child 1988 Dec;63(12):1449–52
Biochemical and cellular basis for circadian rhythms in obstructive lung disease and implications for theophylline therapy. Kunkel G, et al. Arzneimittelforschung 1988 Aug; 38(8A):1200–2 (27 ref.)
Response to oral theophylline in severe chronic obstructive airways disease [letter] Davidson AC, et al. BMJ 1989 Feb 25;298(6672):523–4
The effect of theophylline on thyrotoxic tremor. Buss DC, et al. Br J Clin Pharmacol 1989 Jul;28(1):103–7
Combined administration of controlled release theophylline and ranitidine: a 53–day controlled survey in patients with chronic obstructive lung disease (COLD) and peptic disease. Dal Negro R, et al. Br J Clin Pract 1987 Nov; 41(11):1004–8
Chronopharmacology and its application to the development of theophylline treatment schedules for asthma. Godfrey KR. Eur J Clin Pharmacol 1989;36(2):103–9 (30 ref.)
Theophylline and the respiratory muscles: where are we? Decramer M, et al. Eur Respir J 1989 May;2(5):399–401 (44 ref.)
Chronopharmacodynamics and kinetics after symmetric and asymmetric multiple theophylline doses in patients with chronic obstructive pulmonary disease. Gimeno F, et al. Int J Clin Pharmacol Ther Toxicol 1989 Jan;27(1):7–12
Cellular immunity and suppressor T cell function in asthmatic children on prolonged theophylline therapy. Bibi H, et al. Int J Tissue React 1988;10(5):305–10
New aspects of the therapeutic potential of theophylline in asthma. Pauwels RA. J Allergy Clin Immunol 1989 Feb; 83(2 Pt 2):548–53 (29 ref.)
Global perspectives in the management of asthma. Falliers CJ. J Asthma 1988;25(5):285–91 (28 ref.)
The theophylline–erythromycin interaction. Rieder MJ, et al. J Asthma 1988;25(4):195–204 (52 ref.)
Should study subjects see their previous responses: data from a randomized control trial. Guyatt GH, et al. J Clin Epidemiol 1989;42(9):913–20
A single–blind crossover study of two different slow release theophylline preparations. Tatsis G, et al. J Int Med Res 1988 Nov–Dec;16(6):452–8
Controlled release salbutamol tablets versus sustained release theophylline tablets in the control of reversible obstructive airways disease. Vyse T, et al. J Int Med Res 1989 Jan–Feb; 17(1):93–8
Angina pectoris, adenosine, and theophylline [letter] Lancet 1989 Jun 10;1(8650):1328–9
Disordered smell [letter] Henkin RI. Lancet 1988 Oct 15; 2(8616):901–2
Reversing the irreversible [editorial] Drazen JM, et al. N Engl J Med 1989 Jun 8;320(23):1555–6
A randomized, controlled trial of theophylline in patients with severe chronic obstructive pulmonary disease. Murciano D, et al. N Engl J Med 1989 Jun 8;320(23):1521–5
Bronchodilation from intravenous theophylline in patients with cystic fibrosis: results of a blinded placebo–controlled crossover clinical trial. Pan SH, et al. Pediatr Pulmonol 1989;6(3):172–9
Slow–release terbutaline and theophylline for the long–term therapy of children with asthma: a Latin square and factorial study of drug effects and interactions. Chow OK, et al. Pediatrics 1989 Jul;84(1):119–25
Is theophylline use justified in acute exacerbations of asthma? Self TH, et al. Pharmacotherapy 1989;9(4):260–6 (60 ref.)
A controlled trial of an oral bronchodilator preparation ('Franol') in asthma. Owen S, et al. Pharmatherapeutica 1988;5(4):240–5
Comparison of the effect of oxitropium bromide and of slow–release theophylline on nocturnal asthma. Bellia V, et al. Postgrad Med J 1988 Aug;64(754):583–6
Has theophylline a role in the cure and prevention of ACE–inhibitor–related cough? Pomari C, et al. Respiration 1989;55(2):119–21
Theophylline prolongs survival and decreases renal damage in female NZB/W F–1 mice. Gelber M, et al. Thymus 1988; 11(4):231–41
[Serum theophylline levels in chronic obstructive pulmonary disease patients receiving uniphyllin] Chang SC, et al. Chung Hua I Hsueh Tsa Chih 1988 Jan;41(1):37–42 (Eng. Abstr.) (Chi)
[Effect of alpha and beta–blockaders on the anti–inflammatory effects of adrenaline and an adrenaline and theophylline combination] Fehri B, et al. Ann Pharm Fr 1988;46(4):267–72 (Eng. Abstr.) (Fre)
[Inefficacy of theophylline in preventing hypoxemia in abdominal surgery] Crenesse D, et al. Cah Anesthesiol 1988 Dec;36(8):619–25 (Eng. Abstr.) (Fre)
[Use of the methylxanthines, caffeine and theophylline, in the treatment of extrapyramidal disorders caused by treatment with neuroleptics. Development of a therapeutic hypothesis] Casas M, et al. Encephale 1989 Jan–Feb;15 Spec No:177–80 (Fre)
[Delayed–action theophylline versus placebo on the ventilatory function of stable asthmatic patients. Study in relation to circadian rhythm] Vergeret J, et al. Therapie 1989 Jan–Feb;44(1):33–7 (Eng. Abstr.) (Fre)
[Modification of mucociliary clearance by a combination of theophylline with ambroxol and of ambroxol in monotherapy] Dorow P, et al. Arzneimittelforschung 1988 Jun;38(6):828–30 (Eng. Abstr.) (Ger)
[Staged therapy of chronic obstructive respiratory tract diseases. Treatment of chronic obstructive respiratory tract diseases by the established physician] Hausen T. Fortschr Med 1989 Mar 20;107(9):210–3 (Eng. Abstr.) (Ger)
[Bronchodilator effectiveness of theophylline] Kleinemeier HJ, et al. Fortschr Med 1988 Aug 20;106(24):499–502 (Eng. Abstr.) (Ger)
[The value of theophylline therapy in the treatment of obstructive respiratory tract diseases] Kublik A, et al. Internist (Berlin) 1988 Nov;29(11):727–33 (42 ref.) (Ger)
[Cerebrovascular circulation in premature infants in relation to theophylline therapy] Jorch G, et al. Klin Padiatr 1988 Jul–Aug;200(4):294–8 (Eng. Abstr.) (Ger)
[Increase of arterial oxygen pressure in therapy with theophylline in patients with obstructive ventilation disorder and partial respiratory insufficiency] Schmidt EW, et al. Prax Klin Pneumol 1988 Jul;42(7):600–2 (Eng. Abstr.) (Ger)
[Controlled treatment with a retard theophylline preparation] Wilke A, et al. Prax Klin Pneumol 1988 Jul;42(7):603–5 (Eng. Abstr.) (Ger)
[Inflammatory mediators in the pathogenesis of obstructive bronchial diseases: consequences for therapy] Hahn HL. Verh Dtsch Ges Inn Med 1988;94:364–75 (57 ref.) (Ger)
[The first retard theophylline made in Czechoslovakia for the treatment of asthma in children—Spophyllin Spofa] Hrušković J, et al. Cesk Pediatr 1988 Dec;43(12):715–7 (Eng. Abstr.) (Slo)
[Slow–release theophyllines: serum and saliva levels in asthmatic children] Souto Martínez I, et al. An Esp Pediatr 1988 Jun;28(6):513–6 (Eng. Abstr.) (Spa)

TOXICITY

Induction of theophylline toxicity and inhibition of clearance rates by ranitidine [letter] Roy AK. Am J Med 1989 Apr; 86(4):513–4
Theophylline toxicity subsequent to ranitidine administration: a possible drug–drug interaction. Skinner MH, et al. Am J Med 1989 Jan;86(1):129–32
Methylxanthines: toxicity to humans. 3. Theobromine, paraxanthine and the combined effects of methylxanthines. Stavric B. Food Chem Toxicol 1988 Aug;26(8):725–33 (75 ref.)
Subchronic toxicity of orally administered (gavage and dosed–feed) theophylline in Fischer 344 rats and B6C3F1 mice. Collins JJ, et al. Fundam Appl Toxicol 1988 Oct; 11(3):472–84
Theophylline toxicity due to drug interaction. Tenenbein M. J Emerg Med 1989 May–Jun;7(3):249–51
Effect of age on neurotoxicity of theophylline. Yasuhara M, et al. J Pharm Sci 1988 Jul;77(7):645–6
Kinetics of drug action in disease states XXVIII: Effect of acute hypovolemia on theophylline–induced neurotoxicity in rats. Yasuhara M, et al. J Pharm Sci 1988 Aug; 77(8):729–30
Caffeine as a potential risk factor for theophylline neurotoxicity. Yasuhara M, et al. J Pharm Sci 1988 Sep; 77(9):745–7
Determination of the acute oral toxicity of theophylline in conscious dogs. Munsiff IJ, et al. J Vet Pharmacol Ther 1988 Dec;11(4):381–9
Effect of enoxacin on theophylline neurotoxicity. Hoffman A, et al. Life Sci 1989;44(23):1803–6
The effect of serum potassium on theophylline–induced seizures. Borok Z, et al. Vet Hum Toxicol 1988 Oct; 30(5):417–9

URINE

Renal clearance of theophylline and its major metabolites: age and urine flow dependency in paediatric patients. Bonnacker I, et al. Eur J Clin Pharmacol 1989;36(2):145–50
Inhibitory effect of enoxacin, ofloxacin and norfloxacin on renal excretion of theophylline in humans. Sano M, et al. Eur J Clin Pharmacol 1989;36(3):323–4

THEOPHYLLINE RECEPTORS see **RECEPTORS, PURINERGIC**

THERAPEUTIC COMMUNITY

Drug-free therapeutic community: a ten-year follow-up. Charuvastra VC, et al. **Addict Behav** 1989;14(3):343–5
The therapeutic community perspective and approach for adolescent substance abusers. De Leon G. **Adolesc Psychiatry** 1988;15:535–56
The clinical research ward as a therapeutic community: incompatibilities. Reich LH, et al. **Am J Psychiatry** 1975 Jan;132(1):48–51
Use of open report as a staff–patient model of communication on a schizophrenia research unit: a case report. Puskar KR, et al. **Arch Psychiatr Nurs** 1988 Oct;2(5):274–80
Residents' evaluation of a therapeutic community. Gara A, et al. **Aust Clin Rev** 1989 Mar;8(32):211–6
Alcoholism: advice versus extended treatment [letter] Chick JD, et al. **Br J Addict** 1989 Jul;84(7):817–8
Pathological gambling among youthful multiple substance abusers in a therapeutic community. Lesieur HR, et al. **Br J Addict** 1988 Jul;83(7):765–71
The therapeutic community: exploring the boundaries. Rosenthal MS. **Br J Addict** 1989 Feb;84(2):141–50
Involvement of families in group therapy of heroin addicts. Clerici M, et al. **Drug Alcohol Depend** 1988 Jul;21(3):213–6
The effects of two therapeutic communities on illicit drug users between 6 months and 1 year after treatment. Page RC, et al. **Int J Addict** 1988 Jun;23(6):591–601
Psychopathology and substance abuse: what is being learned from research in therapeutic communities. De Leon G. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):177–88 (36 ref.)
Legal pressure in therapeutic communities. De Leon G. **NIDA Res Monogr** 1988;86:160–77 (27 ref.)
The therapeutic community and behavioral science. De Leon G. **NIDA Res Monogr** 1988;84:74–99 (17 ref.)
Patient suicide: its impact on the therapeutic milieu of a psychiatric unit. Landeen JJ. **Perspect Psychiatr Care** 1987–88;24(2):74–8
Effects of moral reconation therapy upon moral reasoning, life purpose, and recidivism among drug and alcohol offenders. Little GL, et al. **Psychol Rep** 1989 Feb; 64(1):83–90
Study of ideal–self discrepancy and observed social behaviors in a therapeutic community. Rogers MK, et al. **Psychol Rep** 1989 Apr;64(2):495–502
[The experience of aging at a long-stay therapeutic community for psychiatric patients] Chinni C. **Minerva Psichiatr** 1988 Jan–Mar;29(1):13–5 (Eng. Abstr.) **(Ita)**
[The appropriate social network: an operative instrument for the evaluation of indications for psychiatric hospitalization] Graña DO, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Mar; 34(1):69–74 (Eng. Abstr.) **(Spa)**

METHODS

Adapting milieu approaches to acute inpatient care for schizophrenic patients. Kahn EM, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):609–14

THERAPEUTIC CULTS

see related
QUACKERY

Health, healing, and the medical model [letter; comment] Hall SM. **J Fam Pract** 1989 May;28(5):624–5. **Comment on:** J Fam Pract 1988 Nov;27(5):505–8
[Instinct therapy—raw food with meat with exclusion of milk products. Report No. 16] Jallut O. **Schweiz Rundsch Med Prax** 1989 Jun 13;78(24):697–701 (Eng. Abstr.) **(Ger)**
[Compilation and brief summary of the documentation of unproven methods in cancer therapy of the American Cancer Society (ACS) from 1962 to 1985. Document No. 11 (the original of this document is in French)] Jallut O. **Schweiz Rundsch Med Prax** 1989 May 2;78(18):524–31 (Eng. Abstr.) **(Ger)**
[A case of obstructive pneumonitis caused by anthracotic lymphadenopathy] Fukushima K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1096–101 (Eng. Abstr.) **(Jpn)**

HISTORY

Moral medicine: symbolic content in 19th century Shaker therapeutics. Idler EL. **Cult Med Psychiatry** 1989 Mar; 13(1):1–24
Brunonianism in Britain and Europe. **Med Hist Suppl** 1988; 8:1–104
Brunonianism under the bed: an alternative to University Medicine in Edinburgh in the 1780s. Barfoot M. **Med Hist Suppl** 1988;8:22–45
The Brunonian influence on the medical thought and practice of Joseph Frank. Kondratas R. **Med Hist Suppl** 1988; 8:75–88
Cullen, Brown and the poverty of essentialism. Lawrence C. **Med Hist Suppl** 1988;8:1–21
Brunonian psychiatry. Porter R. **Med Hist Suppl** 1988;8:89–99
Brunonian therapeutics: new wine in old bottles? Risse GB. **Med Hist Suppl** 1988;8:46–62
The influence of John Brown's ideas in Germany. Tsouyopoulos N. **Med Hist Suppl** 1988;8:63–74

THERAPEUTIC EQUIVALENCY

Generic substitution: a dilemma for the allergist [editorial] Triplett RF. **Ann Allergy** 1988 Nov;61(5):323a–323b
Generic drugs: therapeutic effectiveness and interchangeability. Netz HE. **Colo Med** 1988 Sep 1; 85(16):347–8
Therapeutic drug interchange: the battle heats up [editorial] McLeod DC. **Drug Intell Clin Pharm** 1988 Sep;22(9):716–8
Generic drugs: boon or bust for quality? Sedor P. **Hospitals** 1989 Jan 20;63(2):68
Bioequivalence studies: single vs multiple dose. Steinijans VW, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 May; 27(5):261–6
Therapeutic drug substitution [letter] Artherholt WG. **Iowa Med** 1988 Oct;78(10):485–6
Bioequivalence (bioavailability) of generic topical corticosteroids. Jackson DB, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):791–6
Bioavailability/bioequivalence: study design and statistical issues. Meltzler CM. **J Clin Pharmacol** 1989 Apr; 29(4):289–92 (6 ref.)
Nontherapeutic problems of generic drugs lead to call for FDA, legislative diagnosis and cure [news] Marwick C. **JAMA** 1989 Sep 22–29;262(12):1566–7
From the Food and Drug Administration. Nightingale SL. **JAMA** 1989 Oct 13;262(14):1916
Therapeutic substitution by pharmacists? [letter] Gottfried NS. **Milit Med** 1989 Feb;154(2):102
Concern about generic drugs [letter] Mack RB. **N C Med J** 1988 Dec;49(12):665
Generic tug of war. **N J Med** 1989 Jun;86(6):427
Generic substitution. Raymond RA. **Nebr Med J** 1989 Jul; 74(7):180–1
The generic drug debate [published erratum appears in Ohio Med 1988 Nov;84(11):858] Athy D. **Ohio Med** 1988 Sep; 84(9):727–31
Let the prescriber beware! Edwards KS. **Ohio Med** 1988 Sep; 84(9):733–41
Drug substitution and rational therapeutics. Old problems and new challenges. Nelson EB. **Postgrad Med** 1989 Jul; 86(1):247–50
Analgesics: the physician's partner in effective pain management. Rogers AG. **Va Med** 1989 Apr;116(4):164–70
[Bioequivalence of generic drugs: sense and nonsense] Brune K, et al. **Fortschr Med** 1988 Nov 20;106(33):16–7 **(Ger)**
[Are therapeutic drugs freely interchangeable? Studies of bioavailability and bioequivalence] Blume H. **Verh Dtsch Ges Inn Med** 1988;94:411–9 (0 ref.) **(Ger)**
[The cheapest synonymous preparation—a suggestion with unwanted consequences. Is it the cheapest drugs? (letter)] Rytter E. **Tidsskr Nor Laegeforen** 1989 Aug 10; 109(22):2178–9 **(Nor)**

THERAPEUTICS

DICE: nonclinical causes of overtreatment [letter] Cunningham AS. **Am J Dis Child** 1989 Feb;143(2):142
Interview as part of medical treatment [letter] Ferrante J. **Am J Psychiatry** 1989 May;146(5):684
In support of hypnotherapy [letter] Karle H. **Br J Hosp Med** 1989 Mar;41(3):297
Withholding and withdrawing treatments: ethics at the bedside. Pellegrino ED. **Clin Neurosurg** 1989;35:164–84
The integration of Western and Oriental medicine. Ishikawa Y. **Fam Med** 1988 Jul–Aug;20(4):239, 303
A suggestion for cost containment [letter] Petermann C. **N Engl J Med** 1989 Jun 15;320(24):1630
Fumes from the spleen. **Paediatr Perinat Epidemiol** 1988 Apr; 2(2):116–8
Risks and benefits of tests and treatment. Robin ED. **Proc Annu Meet Med Sect Am Counc Life Insur** 1988; :107–22
The Appleton Consensus: suggested international guidelines for decisions to forgo medical treatment. **Ugeskr Laeger** 1989 Mar 13;151(11):700–6
[Application of the law of synthetical judgment of fuzzy mathematics in clinical curative effect analysis] Zheng RX. **Chung Hsi I Chieh Ho Tsa Chih** 1989 May;9(5):302–3 **(Chi)**
[Computerized records of visits. Support in therapy] Werthenschlag J, et al. **Rev Fr Gynecol Obstet** 1989 Apr; 84(4):303–4 **(Fre)**
[Therapy as science (letter)] Obrecht JP, et al. **Dtsch Med Wochenschr** 1989 Apr 14;114(15):607–9 **(Ger)**
[Medical and scientific experience as complementary guidelines of therapy] Buchborn E. **Internist (Berlin)** 1988 Jul;29(7):459–62 **(Ger)**
[Empirical methods in clinical medicine] Hartmann F. **Med Klin** 1989 Apr 15;84(4):219–23 **(Ger)**
[Achievements and progress in medicine—1987] Teplizki H, et al. **Harefuah** 1988 Dec 15;115(12):394–6 **(Heb)**
[A method of conducting practical work in pediatrics with students of the Chair of Therapeutics at a pediatric polyclinic] Zernov NG, et al. **Pediatriia** 1989;(7):79–80 **(Rus)**
[Diagnostic and therapeutic value of routine methods of additional examination in the clinical management of internal diseases] Pomerantsev VP. **Ter Arkh** 1988; 60(7):128–33 **(Rus)**
[Analysis of response to treatment. Considerations on changing prognostic variables (time-dependent)] Rozman C, et al. **Med Clin (Barc)** 1989 Jan 21;92(2):52–5 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

[Adverse effects of alternative treatment] **Nord Med** 1989; 104(4):123 **(Swe)**

EDUCATION

Training and validating the use of geriatric simulated patients. Nieman LZ, et al. **Proc Annu Conf Res Med Educ** 1988; 27:154–9
How standardized are standardized patients? Tamblyn R, et al. **Proc Annu Conf Res Med Educ** 1988;27:148–53

HISTORY

[The physician in the Greek city] Koelbing HM. **Gesnerus** 1989;46(1–2):29–43 (Eng. Abstr.) **(Fre)**
[Knidos as the center of early scientific medicine in ancient Greece] Kollesch J. **Gesnerus** 1989;46(1–2):11–28 (Eng. Abstr.) **(Ger)**
[Main currents of medical scientific theory in Germany after 1945] Neumann JN. **Sudhoffs Arch** 1988;72(2):133–53 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Coping by children undergoing stressful medical procedures: some conceptual, methodological, and therapeutic issues. Peterson L. **J Consult Clin Psychol** 1989 Jun;57(3):380–7 (57 ref.)

STANDARDS

Best documented practice [editorial] Whitehouse JM. **BMJ** 1989 Jun 10;298(6687):1536–7
Which of two individuals do you treat when only their ages are different and you can't treat both? Lewis PA, et al. **J Med Ethics** 1989 Mar;15(1):28–34
[At the center of attention: an increase in the quality of diagnosis and treatment] Glukhov IuD. **Voen Med Zh** 1988 May;(5):8–13 **(Rus)**

STATISTICS & NUMERICAL DATA

Detailed diagnoses and procedures, National Hospital Discharge Survey, 1987. **Vital Health Stat [13]** 1989 Mar; (100):1–304

TRENDS

Defining the true therapeutics and clinical pharmacology curriculum in a Canadian medical school: implications for change. Sellers EM, et al. **Clin Pharmacol Ther** 1988 Dec; 44(6):629–33
Innovative medical therapies: between practice and research. Lind SE. **Clin Res** 1988 Oct;36(6):546–51
[Current problems of early diagnosis and treatment in medical practice] Struchkov VI. **Klin Med (Mosk)** 1989 Mar; 67(3):21–4 (0 ref.) **(Rus)**

THERAPEUTICS COMMITTEE see **PHARMACY AND THERAPEUTICS COMMITTEE**

THERAPY, COMBINED MODALITY see **COMBINED MODALITY THERAPY**

THERAPY, COMPUTER-ASSISTED

Computer driven i.v. injection systems. State of the art, future developments. Cantraine F. **Acta Anaesthesiol Belg** 1988; 39(4):257–66
Microcomputer technology in the rehabilitation of brain disorders. Lynch WJ. **Adv Clin Rehabil** 1988;2:41–58 (37 ref.)
Computers in medicine. Augmenting medical care in pediatric patients with chronic illnesses. Handler EG. **Am J Dis Child** 1989 Sep;143(9):1021–3
Computer-assisted optimization of aminophylline therapy in the emergency department. Gonzalez ER, et al. **Am J Emerg Med** 1989 Jul;7(4):395–401
Emergency management assistance using computerized guidelines [letter] Honigman B. **Am J Emerg Med** 1989 Sep;7(5):561
Pediatric and adult emergency management assistance using computerized guidelines. Yamamoto LG, et al. **Am J Emerg Med** 1989 Jan;7(1):91–6
Technical and clinical evaluation of a new system for ultrafiltration control during hemodialysis. Ronco C, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):613–6
The development of a computer-aided perinatal information system. Hara K, et al. **Asia Oceania J Obstet Gynaecol** 1989 Mar;15(1):21–4
Closed-loop management of circulatory shock. Mason DG, et al. **Australas Phys Eng Sci Med** 1988 Oct–Dec; 11(4):133–42
A closed-loop system for pressure-controlled intermittent coronary sinus occlusion. Sun Y. **Biomed Instrum Technol** 1989 Mar–Apr;23(2):136–43
Computer-assisted aminoglycoside dosage. Sørensen JP, et al. **Br J Clin Pract Symp Suppl** 1988 Feb;57:58–61
Computer-generated phonemic cues: an effective aid for naming in aphasia. Bruce C, et al. **Br J Disord Commun** 1987 Dec;22(3):191–201

PharmCalc: program for the calculation of clinical pharmacokinetic parameters of methotrexate. Borsi JD, et al. **Cancer Chemother Pharmacol** 1988;22(4):339–43
Artificial intelligence techniques for the control of cancer cells. Nicolini C, et al. **Cell Biophys** 1989 Apr;14(2):117–27
A comprehensive anticoagulant management support system (AMSS) [letter; comment] Rose PE, et al. **Clin Lab Haematol** 1989;11(1):75–6. **Comment on:** Clin Lab Haematol 1988;10(2):235–6
The principles and prototyping of a knowledge-based diabetes management system. Deutsch T, et al. **Comput Methods Programs Biomed** 1989 Jun;29(2):75–88
A self-tuning Smith predictor applied to the control of blood pressure: simulation studies. Mansour NE, et al. **Comput Methods Programs Biomed** 1989 May;29(1):21–9
A program for oriented treatment of essential hypertension. Moreno V, et al. **Comput Methods Programs Biomed** 1989 Jun;29(2):89–94
A BASIC program for randomizing and balancing the order of interventions in crossover studies. Salnitro F, et al. **Comput Methods Programs Biomed** 1989 Feb;28(2):129
PEPTY: a knowledge-based program for assisting medical reasoning in peptic diseases. Torchio M, et al. **Comput Methods Programs Biomed** 1989 Apr;28(4):249–56
A knowledge-based information system for monitoring drug levels. Wiener F, et al. **Comput Methods Programs Biomed** 1989 Jun;29(2):115–28
Computer-generated drug-dosing nomograms. Lamiell JM, et al. **Crit Care Med** 1988 Dec;16(12):1246–7
Intelligent instrumentation in diabetic management. Albisser AM. **Crit Rev Biomed Eng** 1989;17(1):1–24 (62 ref.)
Finding and inventing alternative therapies: how I do it. Tkach JR. **Dermatol Clin** 1989 Jan;7(1):1–18 (45 ref.)
Scientific rationale for management of diabetes in pregnancy. Recent approaches with innovative computer-based technology. Langer O. **Diabetes Care** 1988 Nov–Dec;11 Suppl 1:67–72 (26 ref.)
Potential role of computers in clinical investigation and management of diabetes mellitus. Rodbard D. **Diabetes Care** 1988 Nov–Dec;11 Suppl 1:54–61 (44 ref.)
Computer-based patient monitoring systems. Use in research and clinical practice. Zimmet P, et al. **Diabetes Care** 1988 Nov–Dec;11 Suppl 1:62–6 (21 ref.)
A partially computerized treatment plan. Ormiston S, et al. **Hosp Community Psychiatry** 1989 May;40(5):531–3
Functional neuromuscular stimulation system using an implantable hydroxyapatite connector and a microprocessor-based portable stimulator. Akazawa K, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):746–53
Development and operation of portable and laboratory electrical stimulation systems for walking in paraplegic subjects. Borges G, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):798–801
OVERSEER: a prototype expert system for monitoring drug treatment in the psychiatric clinic. Bronzino JD, et al. **IEEE Trans Biomed Eng** 1989 May;36(5):533–40
Optimization of symptomatic therapy in Parkinson's disease. Hacisalihzade SS, et al. **IEEE Trans Biomed Eng** 1989 Mar;36(3):363–72
A multichannel FES system for the restoration of motor functions in high spinal cord injury patients: a respiration-controlled system for multijoint upper extremity. Hoshimiya N, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):754–60
A microcomputer controlled, local hyperthermia system for uniform tumour heating in unanaesthetized mice. Walton MI, et al. **Int J Hyperthermia** 1989 Jan–Feb;5(1):53–8
A program for parenteral and combined parenteral and enteral nutrition of neonates and children in an intensive care unit. Picart D, et al. **Intensive Care Med** 1989;15(4):279–82
Computer-assisted infusion and nutrition planning in an intensive care burn unit. Piert M, et al. **Intensive Care Med** 1989;15(2):121–5
An automated system of strabismus management. A direct approach using a "reverse" model. Kault D, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):276–87
Computer-controlled stimulation in the assessment of electrical characteristics for cortical phosphene generation for a visual prosthesis. Record P, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):52–6
Some pros and cons of computer-assisted psychotherapy. Colby KM, et al. **J Nerv Ment Dis** 1989 Feb;177(2):105–8
Tabletop versus microcomputer-assisted speech management: stabilization phase. Shriberg LD, et al. **J Speech Hear Disord** 1989 May;54(2):233–48
Computer modeling of blood acid–base disorders for diagnostics, therapy and education. Kmiotek W, et al. **Life Support Syst** 1983;1 Suppl 1:411–3
Volumetric stereotactic surgical resection of intra-axial brain mass lesions. Kelly PJ. **Mayo Clin Proc** 1988 Dec;63(12):1186–98
Artificial intelligence techniques for cancer treatment planning. Ardizzone E, et al. **Med Inf (Lond)** 1988 Jul–Sep;13(3):199–210
Expert-system-based fuzzy control of arterial pressure by drug infusion. Ying H, et al. **Med Prog Technol** 1988;13(4):203–15
Knowledge-based decision support for diagnosis and therapy: on the multiple usability of patient data. Haux R. **Methods Inf Med** 1989 Apr;28(2):69–77
Validating the knowledge base of a therapy planning system. Shwe MA, et al. **Methods Inf Med** 1989 Jan;28(1):36–50
Computerized suction lipectomy aspirator monitor for improved results in suction lipectomy. Apfelberg DB, et al. **Plast Reconstr Surg** 1988 Nov;82(5):896–903
Computerized calculation of essential drug requirements. Soeters R, et al. **Soc Sci Med** 1988;27(9):955–70
Application of computer-assisted gait training (CAGT) program for hemiparetic stroke patients: a preliminary report. Nakamura R, et al. **Tohoku J Exp Med** 1988 Oct;156(2):101–7
[Strabismus—a computer program] Brožek B, et al. **Cesk Oftalmol** 1988 Nov;44(6):409–10 (Eng. Abstr.) (Cze)
[Monitoring anticoagulation therapy with dicoumarin preparations using a computer] Pecka M, et al. **Vnitr Lek** 1988 Oct;34(10):1003–9 (Eng. Abstr.) (Cze)
[A microcomputer and the operative plan in strabismus: update on the Macintosh] Aflalo G. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):903–5 (Fre)
[Computer-assisted diet therapy in pediatric kidney diseases] Dartois AM, et al. **Pediatrie** 1989;44(3):197–202 (Eng. Abstr.) (Fre)
[Computerized program for rapid evaluation of the critical surgical patient with multiple trauma] Benedetto G, et al. **Minerva Chir** 1988 Jun 30;43(12):1041–4 (Eng. Abstr.) (Ita)
[Project of a teledialysis system. Technical aspects] Appiano S. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):63–6 (Ita)
[Computerization of "dialytic efficiency"] Biasioli S, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):81–2 (Ita)
[Optimization of dialysis time using a personal computer] Mandolfo S, et al. **Minerva Urol Nefrol** 1989 Jan–Mar; 41(1):79 (Ita)
[Tele-monitoring of dialysis. General and clinical aspects] Quarello F, et al. **Minerva Urol Nefrol** 1989 Jan–Mar; 41(1):59–62 (Ita)
[Use of microcomputer technic in the hemodialysis department] Filutowicz J, et al. **Pol Tyg Lek** 1988 Aug 1–8;43(31–32):1034–7 (Eng. Abstr.) (Pol)
[Choice of antibacterial therapy with the use of a computerized consultation system] Vrublevskiĭ OP, et al. **Anesteziol Reanimatol** 1989 Jan–Feb;(1):17–9 (Eng. Abstr.) (Rus)
[An expert system for therapeutic and diagnostic processes] Rakhmanova ZB, et al. **Med Tekh** 1988 Nov–Dec;(6):23–41 (Eng. Abstr.) (Rus)
[Experience with the use of computers in neurological practice] Akimov GA, et al. **Vestn Akad Med Nauk SSSR** 1988;(8):69–74 (Eng. Abstr.) (Rus)
[Methods of evaluating the effectiveness of drugs based on experimental morphologic data] Vachnadze RG, et al. **Vestn Akad Med Nauk SSSR** 1988;(7):80–3 (Eng. Abstr.) (Rus)
[Mathematical processing of medical information in the combined treatment of psoriatic arthropathy] Mavrov II, et al. **Vestn Dermatol Venerol** 1988;(9):21–4 (Eng. Abstr.) (Rus)
[Use of computers for setting individual physical loads in the rehabilitation of patients with ischemic heart disease at a sanatorium] Churiukin GD, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):11–3 (Eng. Abstr.) (Rus)
[Rehabilitation of schizophrenics by computerized technics using the LOGO language] Ivanovic-Zuvic F, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Jul–Aug;16(4):273–8 (Eng. Abstr.) (Spa)

LEGISLATION & JURISPRUDENCE

Legal issues associated with pharmacokinetic software. Schwartz JI, et al. **Am J Hosp Pharm** 1989 Jan;46(1):120–4

THERMAL CONDUCTIVITY

A spherical source model for the thermal pulse decay method of measuring blood perfusion: a sensitivity analysis. Diederich CJ, et al. **J Biomech Eng** 1989 Feb;111(1):55–61
[Thermal and electric conductivity in the Zakharin–Head areas of the skin in the normal state] Malenkov AG, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):586–91 (Rus)

THERMAL WATER POLLUTION see **WATER POLLUTION, THERMAL**

THERMOCOAGULATION see **ELECTROCOAGULATION**

THERMODILUTION

Underestimation of cardiac output by thermodilution in patients with tricuspid regurgitation. Cigarroa RG, et al. **Am J Med** 1989 Apr;86(4):417–20
Characteristics of the pulmonary transport functions for heat and dye in pulmonary edema and orthostasis. Böck JC, et al. **Biomed Tech (Berlin)** 1989 Apr;34(4):85–90
Noninvasive assessment of cardiac output by impedance cardiography in the newborn canine. Gotshall RW, et al. **Crit Care Med** 1989 Jan;17(1):63–5
Comparison of cardiac output estimation by thoracic electrical bioimpedance, thermodilution, and Fick methods. Salandin V, et al. **Crit Care Med** 1988 Nov;16(11):1157–8
Reliability of cardiac output estimation by thermodilution [letter] Versprille A. **Intensive Care Med** 1989;15(2):144
Application of thermal dilution measurements for thermal treatment planning. Higgins PD, et al. **Phys Med Biol** 1989 Jun;34(6):651–8
[Assessment of fluid content of the lung by thoracic radiography. Comparison of extravascular lung water measurement and results of radiological estimation methods] Heinrichs W, et al. **Dtsch Med Wochenschr** 1988 Oct 14;113(41):1583–7 (Eng. Abstr.) (Ger)
[Measurement of coronary sinus flow with a continuous thermodilution method] Kodama K, et al. **Kokyu To Junkan** 1988 Jul;36(7):731–8 (11 ref.) (Jpn)
[Comparison between the methods of thoracic bioimpedance and thermodilution for determining cardiac output in heart disease patients (letter)] Máttar JA. **Arq Bras Cardiol** 1988 Mar;50(3):213–6 (Por)

INSTRUMENTATION

A continuous cardiac output computer based on thermodilution principles. Normann RA, et al. **Ann Biomed Eng** 1989;17(1):61–73
Reversal of the pulmonary artery distal and right atrium proximal lumens on a thermodilution catheter [letter] Palmisano JM, et al. **Crit Care Med** 1989 May;17(5):486
Evaluation of antithrombogenic thermodilution catheter. Nagaoka S, et al. **J Biomater Appl** 1989 Jul;4(1):22–32
[Intracardiac recording of potentials in placing a thermodilution catheter] Wunderlich E, et al. **Z Gesamte Inn Med** 1989 Feb 15;44(4):126–8 (Eng. Abstr.) (Ger)

METHODS

Measurement of stroke volume with three-dimensional transesophageal ultrasonic scanning: comparison with thermodilution measurement. Martin RW, et al. **Anesthesiology** 1989 Mar;70(3):470–6
Comparison of iced and room temperature injectate for thermodilution cardiac output. Bourdillon PD, et al. **Cathet Cardiovasc Diagn** 1989 Jun;17(2):116–20
Measurement of coronary sinus flow by thermodilution: observations on the effect of respiration and a review of the potential sources of error. Stewart JT, et al. **Cathet Cardiovasc Diagn** 1989 Aug;17(4):207–11 (12 ref.)
Thermal dilution measurements of cardiac output [letter] Zack R, et al. **Heart Lung** 1989 Jan;18(1):102
Measurement of human portal blood flow by continuous thermodilution. Kinoshita H, et al. **J Surg Res** 1989 Mar; 46(3):235–40
Simultaneous measurement of skin blood flow by the transient thermal-clearance method and laser Doppler flowmetry. Nitzan M, et al. **Med Biol Eng Comput** 1988 Jul; 26(4):407–10
Effect of respiratory cycle on measurements of cardiac output by thermodilution. McMillan RW, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):420–2
[Determination of the right ventricular ejection fraction from the exponential decrease in the thermodilution curve—a comparison with biplanar cineventriculography] Unterberg R, et al. **Z Kardiol** 1989 May;78(5):313–9 (Eng. Abstr.) (Ger)

THERMODYNAMICS

Network thermodynamic model of rat lingual epithelium: effects of hyperosmotic NaCl. Fidelman ML, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G475–87
Molecular mechanisms of osmosis. Kiil F. **Am J Physiol** 1989 Apr;256(4 Pt 2):R801–8
Thermodynamic problems of protein structure. Privalov PL. **Annu Rev Biophys Biophys Chem** 1989;18:47–69 (38 ref.)
Thermodynamic parameters of the binding of an oligo-alpha-thymidylate to its complementary oligo-beta-adenylate sequences. Durand M, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):505–10
Glass transition of deoxymyoglobin probed by optical absorption spectroscopy. Kushida T, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):948–53
Unfolding free energy changes determined by the linear extrapolation method. 2. Incorporation of delta G degrees N-U values in a thermodynamic cycle. Bolen DW, et al. **Biochemistry** 1988 Oct 18;27(21):8069–74
Binding of plasma membrane glycoproteins to the cytoskeleton during patching and capping is consistent with an entropy-enhancement model. Shiozawa JA, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):361–6
Thermodynamic network modelling of transfer across the perfused guinea-pig placenta, using SPICE. van Kreel BK, et al. **Comput Methods Programs Biomed** 1989 Feb; 28(2):137–49
Quantifying the effects of clothing for models of human response to the thermal environment. Haslam RA, et al. **Ergonomics** 1988 Dec;31(12):1787–806
Thermal stability of nucleosomes studied in situ by flow cytometry: effect of ionic strength and n-butyrate. Darzynkiewicz Z, et al. **Exp Cell Res** 1989 Feb;180(2):551–6
Nixon and thermodynamics. Morowitz HJ. **Hosp Pract [Off]** 1988 Oct 15;23(10):151–2
On a thermodynamic model of biological growth. Chakrabarti CG. **Indian J Biochem Biophys** 1989 Feb; 26(1):61–2
Thermodynamic analysis of the activation of glycogen

phosphorylase b over a range of temperatures. Barón C, et al. **J Biol Chem** 1989 Aug 5;264(22):12872–8

Thermodynamic consequences of the dispersion relation in nonlinear biomechanical materials and systems. Paynter HM, et al. **J Biomech Eng** 1989 May;111(2):173–5

The interpretation of experimentally obtained values of the cytoplasmic phosphorylation potential. Fiolet JW. **J Mol Cell Cardiol** 1988 Dec;20(12):1203–9 (40 ref.)

Thermodynamics of agonist and antagonist interaction with the strychnine–sensitive glycine receptor. Ruiz–Gómez A, et al. **J Neurochem** 1989 Jun;52(6):1775–80

31P NMR studies of the thermodynamics and kinetics of the creatine kinase reaction. Eldar H, et al. **Magn Reson Med** 1989 Jul;11(1):121–6

Kinetics and thermodynamic transitions of N–acetyl–beta–D–glucosaminidase A and B in free and bound forms: role of cellulose ion–exchangers. Gupta GS, et al. **Mol Cell Biochem** 1989 Mar 16;86(1):65–70

Alpha–DNA VIII: thermodynamic parameters of complexes formed between the oligo–alpha–deoxynucleotides: alpha–d(GGAAGG) and alpha–d(CCTTCC) and their complementary oligo–beta–deoxynucleotides: beta–d(CCTTCC) and beta–d(GGAAGG) are different. Paoletti J, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2693–704

Conformational and thermodynamic consequences of the introduction of a nick in duplexed DNA fragments: an NMR study augmented by biochemical experiments. Pieters JM, et al. **Nucleic Acids Res** 1989 Jun 26; 17(12):4551–65

Determination of thermodynamic parameters of complexation using a nonlinear regression method. Menard FA, et al. **Pharm Acta Helv** 1989;64(3):76–81

Dynamical simulation of rate constants in protein–ligand interactions. Case DA. **Prog Biophys Mol Biol** 1988; 52(1):39–70 (137 ref.)

Artifacts in the application of linear free energy analysis. Estell DA. **Protein Eng** 1987 Dec;1(6):441–2

Linear free energy relationships are valid; using plots of log k versus log (k/k') to prove their existence is not. Estell DA. **Protein Eng** 1987 Dec;1(6):445–6

Linear free energy relationships are valid! Fersht AR. **Protein Eng** 1987 Dec;1(6):442–5

Relationship of protein flexibility to thermostability. Vihinen M. **Protein Eng** 1987 Dec;1(6):477–80

Roots, Steam Engines, Thermodynamics, and the Cornish Giant. Johns RJ. **Trans Am Clin Climatol Assoc** 1987;99:1–9

METHODS

Thermodynamic cycle integration by computer simulation as a tool for obtaining free energy differences in molecular chemistry. van Gunsteren WF, et al. **J Comput Aided Mol Des** 1987 Jul;1(2):171–6

THERMOELECTRIC POWER PLANTS see **POWER PLANTS**

THERMOGRAPHY

Chromatic temperature characteristics of thermographic sheets applied in actual Czechoslovak medical practice. Pospíšil E, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 120:401–6

Thermographic evidence for demarcation of the sympatholytic effect following intravenous regional guanethidine block (IVRGB) [letter] Weyland A, et al. **Anesthesiology** 1989 Jul;71(1):171–2

Headache in patients with systemic lupus erythematosus: clinical and telethermographic findings [letter] Anzola GP, et al. **Arch Neurol** 1988 Oct;45(10):1061–2

Use of thermography in the diagnosis of deep vein thrombosis. Free TW, et al. **J Am Osteopath Assoc** 1989 Jun;89(6):768–72

Thermographic evaluation of the autonomic effects of nerve blocks in the foot. Jacobs AM, et al. **J Am Podiatr Med Assoc** 1989 Mar;79(3):107–15

Thermographic imaging of myofascial trigger points [letter; comment] Wolf TD. **J Manipulative Physiol Ther** 1989 Feb; 12(1):63–4. **Comment on:** J Manipulative Physiol Ther 1988 Apr;11(2):114–7

Staging and follow–up of rheumatoid arthritis of the knee. Comparison of sonography, thermography, and clinical assessment. van Holsbeeck M, et al. **J Ultrasound Med** 1988 Oct;7(10):561–6

Thermography of the curved living skin surface. Ash CJ, et al. **Mo Med** 1987 Nov;84(11):702–8

The role of thermography in the evaluation of lumbosacral radiculopathy. So YT, et al. **Neurology** 1989 Sep; 39(9):115–8

Evaluation of thermography in the diagnosis of selected entrapment neuropathies [see comments] So YT, et al. **Neurology** 1989 Jan;39(1):1–5. **Comment in:** Neurology 1989 Jul;39(7):1003–5

Infrared thermography in oral and maxillofacial surgery. Pogrel MA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):126–31

Neuromuscular thermography [letter] **Orthop Rev** 1989 Aug; 18(8):923–4

Neuromuscular thermography of the lumbar spine with CT correlation. Chafetz N, et al. **Spine** 1988 Aug;13(8):922–5

Telethermography and breast cancer risk prediction. Clatto S, et al. **Tumori** 1989 Apr 30;75(2):110–2

[Application of infrared thermal imaging technics in clinical diagnosis] Sun G. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):568–9 **(Chi)**

[Clinical analysis of thermography in breast diseases] Chen J. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):400–1, 445 (Eng. Abstr.) **(Chi)**

[The role of thermography in the diagnosis of thyroid diseases] Xue JZ. **Chung Hua Wai Ko Tsa Chih** 1988 Sep; 26(9):539–40, 573 (Eng. Abstr.) **(Chi)**

[Study of the state of blood circulation of the extremity using infrared thermography] Yang KF. **Chung Hua Wai Ko Tsa Chih** 1988 May;26(5):276–8, 318 (Eng. Abstr.) **(Chi)**

[Possibilities and perspectives in the use of thermovision technics in neurosurgery] Kozler P, et al. **Cas Lek Cesk** 1988 Jul 8;127(28):873–80 (Eng. Abstr.) **(Cze)**

[Changes in the thermographic picture of hands of healthy persons after vibrations of 125 Hz] Chudáček Z. **Cesk Radiol** 1989 Mar;43(2):98–101 (Eng. Abstr.) **(Cze)**

[The value of thermography in the diagnosis of breast cancer and in the selection of risk groups] Ulmer HU. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):757–62 (Eng. Abstr.) **(Ger)**

[Thermo–echo–clinical examination of the breast: a new diagnostic method for first level examination. Experience acquired at the L. Mangiagalli Gynecology and Obstetrics Institute in Milan during the period January 1985–August 1988] Dambrosio F. **Ann Ostet Ginecol Med Perinat** 1989; Spec No:65–89 (12 ref.) **(Ita)**

[Thermographic physiopathology of the breast] Rocchi L, et al. **Ann Ostet Ginecol Med Perinat** 1989;Spec No:90–1 (2 ref.) **(Ita)**

[Telethermographic evaluation of the intra–articular administration of thymopentin in rheumatoid arthritis of the knee] Pappalardo A, et al. **Clin Ter** 1989 Mar 15; 128(5):321–7 (Eng. Abstr.) **(Ita)**

[Telethermographic evaluation of pirprofen in rheumatic pathology] Pappalardo A, et al. **Clin Ter** 1987 Oct 15; 123(1):7–13 (Eng. Abstr.) **(Ita)**

[Thermographic study of the percutaneous absorption of corticosteroids] Ippolito F, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):9–12 (Eng. Abstr.) **(Ita)**

[Usefulness of thermography in ulcero–mutilating acropathy of the lower limbs. Description of a case] Federici S, et al. **Minerva Cardioangiol** 1988 Jul–Aug;36(7–8):377–80 (Eng. Abstr.) **(Ita)**

[Imaging in senology] Tetti C. **Minerva Chir** 1988 Sep 30; 43(18 Suppl):9–11 **(Ita)**

[Contact thermography as a prognostic indicator of breast cancer] Ikeda T, et al. **Gan To Kagaku Ryoho** 1989 May; 16(5):2103–8 (Eng. Abstr.) **(Jpn)**

[Evaluation of the thermographic diagnosis of breast disease—relation of thermographic findings and pathologic findings of cancer growth] Usuki H. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2687–95 (Eng. Abstr.) **(Jpn)**

[Assessment of regional myocardial ischemia by thermocardiography in the dog] Adachi H. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2408–16 (Eng. Abstr.) **(Jpn)**

[Usefulness of thermographic examination in the diagnosis of early peripheral ischemia of the extremities in patients with diabetes mellitus] Sroczyński J, et al. **Wiad Lek** 1989 Jan 1;42(1):25–9 (Eng. Abstr.) **(Pol)**

[Thermovisualization of the hemisphere asymmetry in the animal brain] Kuznetsova GD, et al. **Dokl Akad Nauk SSSR** 1988;302(2):484–7 **(Rus)**

[Telethermographic study of arthrosis deformans of the hip joint] Gnatov VI, et al. **Klin Khir** 1988;(12):51–2 **(Rus)**

[Thermographic semeiotics of food poisoning and its differential diagnosis] Andreichin MA, et al. **Klin Med (Mosk)** 1989 Apr;67(4):64–7 (Eng. Abstr.) **(Rus)**

[The possibilities of infrared thermography in the diagnosis of thyroid pathology] Shatsova EN, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):34–7 (Eng. Abstr.) **(Rus)**

[Thermography in the early diagnosis and assessment of treatment results in microcirculatory disorders in alcoholism] Latukhina SA, et al. **Sov Med** 1988;(6):26–8 **(Rus)**

[Thermography in bronchial asthma] Mart'lanov SG, et al. **Sov Med** 1988;(7):35–8 (Eng. Abstr.) **(Rus)**

[Thermographic diagnosis of diseases of the maxillofacial area] Rozenfel'd LG, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):54–8 (Eng. Abstr.) **(Rus)**

[Thermography in the complex examination of patients with temporomandibular joint diseases] Sukharev MF, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):48–50 (Eng. Abstr.) **(Rus)**

[A thermographic method of examining peripheral blood circulation] Kishko AM, et al. **Ter Arkh** 1988;60(7):50 **(Rus)**

[Thermographic diagnosis of acute and chronic non–specific pulmonary diseases] Lobenko AA, et al. **Ter Arkh** 1989; 61(4):107–10 (Eng. Abstr.) **(Rus)**

[The role of thermography in the diagnosis of testicular diseases] Tiktinskiĭ OL, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):23–6 (Eng. Abstr.) **(Rus)**

[Use of thermography for the diagnosis and control of the effectiveness of the treatment of circumscribed scleroderma] Smirnov AV, et al. **Vestn Dermatol Venerol** 1988;(7):43–6 (Eng. Abstr.) **(Rus)**

[Detection of arteriovenous anastomoses using thermography] Nagovitsyn ES, et al. **Vestn Khir** 1988 May; 140(5):46–8 **(Rus)**

[Thermography in clinical practice] Rozenfel'd LG. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):62–8 **(Rus)**

[The use of thermography in clinical practice] Iakhontova OI, et al. **Vrach Delo** 1989 Jun;(6):24–7 (Eng. Abstr.) **(Rus)**

[Thermographic examination of patients with neurologic manifestations of lumbar osteochondrosis] Belova AN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):31–5 (Eng. Abstr.) **(Rus)**

[Thermographic diagnosis of implantation cholesteatomas of the cauda equina] Nikiforov BM. **Zh Vopr Neirokhir** 1988 Nov–Dec;(6):52–4 **(Rus)**

[Use of thermography in the detection of deep venous thrombosis] Monreal M, et al. **Angiologia** 1988 Jul–Aug; 40(4):139–44 (Eng. Abstr.) **(Spa)**

HISTORY

Cool heads and hot spots: surface thermometry and neurothermography. Goldblatt D. **Semin Neurol** 1987 Dec; 7(4):377–9

INSTRUMENTATION

Changes in colour temperature characteristic of cholesteric temperature indicators provoked by UV radiation. Pospíšil E, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:23–30

Neurothermography. Green J. **Semin Neurol** 1987 Dec; 7(4):313–6 (47 ref.)

[Liquid–crystal–contact–thermography (LCCT)—a new diagnostic method for determination of skin circulation. Results of 300 studies] Hoffmann R, et al. **Helv Chir Acta** 1989 Jun;56(1–2):263–6 (Eng. Abstr.) **(Ger)**

[Infrared thermovision findings in a patient with infiltrating orbitopathy] Kohlmann H, et al. **Klin Monatsbl Augenheilkd** 1989 Mar;194(3):190–5 (Eng. Abstr.) **(Ger)**

[Digital thermo–coronary angiography—development and validation of the method in comparison with conventional cine–coronary angiography] Mohr FW, et al. **Z Kardiol** 1989 Jul;78(7):441–52 (Eng. Abstr.) **(Ger)**

[An impulse device for measuring electric conductivity with thermostatic skin electrodes for determining ovulation time] Stupnitskiĭ IF. **Med Tekh** 1989 Jan–Feb;(1):50–2 (Eng. Abstr.) **(Rus)**

METHODS

Contact thermography as a screening test for deep venous thrombosis following major hip surgery. Kjaer L, et al. **Acta Radiol** 1988 Nov–Dec;29(6):649–52

Thermal coronary angiography: a method for assessing graft patency and coronary anatomy in coronary bypass surgery. Mohr FW, et al. **Ann Thorac Surg** 1989 Mar;47(3):441–9

Infra–red surface thermography. Evaluation of a new radiometry instrument for measuring skin temperature over joints. Arnold MH, et al. **Clin Rheumatol** 1989 Jun; 8(2):225–30

Role of temperature in regulation of spermatogenesis [letter] Zorgniotti AW. **Fertil Steril** 1988 Oct;50(4):677–8

Are there objective criteria to follow up migrainous patients? A prospective study with thermography and evoked potentials. Dalla Volta G, et al. **Headache** 1988 Jul; 28(6):423–5

Preliminary report on the use of liquid crystal thermography in podiatry. Baer MS, et al. **J Foot Surg** 1988 Sep–Oct; 27(5):398–403 (31 ref.)

Thermography [letter; comment] **Neurology** 1989 Jul; 39(7):1003–5. **Comment on:** Neurology 1989 Jan;39(1):1–5

Electronic thermography of normal facial structures: a pilot study. Gratt BM, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):346–51

Studies in tooth crown temperature gradients with the use of infrared thermography. Pogrel MA, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):583–7

Reflex sympathetic dystrophy and thermography [letter] Adler L. **Orthop Rev** 1988 Oct;17(10):1047

Cervical radiculopathy revisited [letter] Newman DL, et al. **Orthop Rev** 1988 Feb;17(2):199

The use of difference of Gaussian image filtering to assess objectively the correlation between breast vascularity and breast cancer. Stevens RG, et al. **Phys Med Biol** 1988 Dec; 33(12):1417–31

[Autonomic disorders and thermography using liquid crystals in obesity] Staikusheva T, et al. **Vutr Boles** 1988; 27(3):97–101 (Eng. Abstr.) **(Bul)**

[Digital noninvasive microwave thermography in the diagnosis of breast disease] Fan KH, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):200–4 (Eng. Abstr.) **(Chi)**

[Liquid crystal contact thermography—a new screening procedure in the diagnosis of deep venous thrombosis] Hoffmann R, et al. **Helv Chir Acta** 1989 Jun;56(1–2):45–8 (Eng. Abstr.) **(Ger)**

[Telethermovision studies in Perthes disease] Bajtay A. **Z Orthop** 1988 Sep–Oct;126(5):484–6 (Eng. Abstr.) **(Ger)**

[Electrothermographic measurements of the alveolar process during tooth eruption] Petersohn K, et al. **Zahn Mund Kieferheilkd** 1988;76(8):821–4 (Eng. Abstr.) (Ger)

[Value of tele-thermographic studies in the diagnosis of head and neck diseases] Czigány J. **Orv Hetil** 1989 Jan 22; 130(4):177–81 (Eng. Abstr.) (Hun)

[Telethermography, a new method in the evaluation of topical corticosteroid activity] Ippolito F, et al. **G Ital Dermatol Venereol** 1988 Jun;123(6):291–5 (Eng. Abstr.) (Ita)

[Possibility of objective evaluation of the pain syndrome in ischemic heart disease using skin electrothermometry] Tarasov AN, et al. **Kardiologiia** 1989 Jun;29(6):114–5 (Rus)

[Value of rheovasography and thermography in the diagnosis of varicose veins of the legs in the practice of expert evaluation of work capacity] Kosichkin MM, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):27–31 (Eng. Abstr.) (Rus)

[Possibilities and perspectives of infrared thermography in the complex diagnosis of osteomyelitis of the extremities] Samokhin AV, et al. **Klin Khir** 1988;(12):36–7 (Eng. Abstr.) (Rus)

[A method of contact thermography in the diagnosis of myocarditis] Voronov KIu, et al. **Klin Med (Mosk)** 1988 Jun;66(6):51–3 (Eng. Abstr.) (Rus)

[A method of using infrared thermography in the diagnosis of osteochondrosis of the cervical spine] Sidorenko LV. **Ortop Travmatol Protez** 1988 Jun;(6):48–50 (Rus)

[SHF-thermography in allergic diseases] Borodin IuP, et al. **Sov Med** 1989;(2):19–21 (Eng. Abstr.) (Rus)

[Infrared irradiation of the anterior abdominal wall in pathology of the gastroduodenal area (mechanisms of formation of the radiation foci and clinical evaluation)] Krylov AA, et al. **Ter Arkh** 1989;61(2):39–42 (Eng. Abstr.) (Rus)

[Contact thermometry and color liquid-crystalline thermography in the complex examination of patients with tonsillitis and acute sinusitis] Bolko IN, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):66–7 (Rus)

STANDARDS

Cold spot question heats up [letter] Swerdlow B, et al. **Headache** 1989 Feb;29(2):122–3

VETERINARY

A comparison of steady state and transient thermography techniques using a healing tendon model. Stein LE, et al. **Vet Surg** 1988 Mar–Apr;17(2):90–6

THERMOGRAVIMETRY see under **CHEMISTRY, ANALYTICAL**

THERMOLUMINESCENT DOSIMETRY

Preparation and performance of a CaSO4:Dy, Tm thermoluminescent phosphor for long-term gamma measurements. Azorin J, et al. **Health Phys** 1989 Apr; 56(4):551–9

Measuring the skin dose from radioactively contaminated gold rings using LiF thermoluminescent powder. Eheman CR, et al. **Health Phys** 1989 Apr;56(4):547–50

The use of a spreadsheet computer program to expedite TLD reporting. Wolf D, et al. **Med Dosim** 1989;14(2):125–7

Detection of irradiated food [letter] **Nature** 1989 Jul 6; 340(6228):23–4

Wide use of personnel dosimetry is necessary to monitor exposures. Schaaf SW. **Occup Health Saf** 1989 May; 58(5):49, 52–3, 86

Measurement and analysis of supralinearity in LiF TLD-100 irradiated by 1.5 keV x-rays. Folkard M, et al. **Phys Med Biol** 1989 Jun;34(6):707–15

Infrared and visible thermoluminescence signals of Tm-doped CaF2 measured by a semiconductor photodiode. Meissner P, et al. **Phys Med Biol** 1988 Dec; 33(12):1407–15

[Thermoluminescent dosimetry of panoramic zonography] Duda SH, et al. **Rontgenpraxis** 1989 Jan;42(1):17–21 (Ger)

INSTRUMENTATION

A small, multi-element fingertip dosimeter for beta radiation. Couch NW, et al. **Health Phys** 1988 Nov;55(5):719–28

Direct dose confirmation of quantitative autoradiography with micro-TLD measurements for radioimmunotherapy. Griffith MH, et al. **J Nucl Med** 1988 Nov;29(11):1795–809

Sensitivity of LiF thermoluminescent dosemeters to 6–18 keV photons. Ahmed AB, et al. **Phys Med Biol** 1989 Mar; 34(3):343–52

Influence of the variation of energy spectra with depth in the dosimetry of 192Ir using LiF TLD. Meigooni AS, et al. **Phys Med Biol** 1988 Oct;33(10):1159–70

[Metrological and operating characteristics of thermoluminescent and photographic film dosimeters for the centralized individual dosimetric monitoring of medical personnel] Kalmykov LZ, et al. **Med Radiol (Mosk)** 1989 Jul;34(7):72–6 (Eng. Abstr.) (Rus)

STATISTICS & NUMERICAL DATA

[Results of TL-personal dosimetry in Austria] Hefner A, et al. **Strahlenschutz Forsch Prax** 1988;30:41–53 (Ger)

THERMOLYSIN

Folding of thermolysin fragments. Hydrodynamic properties of isolated domains and subdomains. Vita C, et al. **Eur J Biochem** 1989 Aug 15;183(3):513–8

A theoretical study of Zn++ interacting with models of ligands present at the thermolysin active site. Giessner-Prettre C, et al. **J Comput Aided Mol Des** 1989 Mar;3(1):23–37

ANTAGONISTS & INHIBITORS

Binding energetics of phosphorus-containing inhibitors of thermolysin. Grobelny D, et al. **Biochemistry** 1989 Jun 13; 28(12):4948–51

Studies on the inhibition of neutral proteases by 1,10-phenanthroline. Feder J, et al. **Biochim Biophys Acta** 1971 May 12;235(2):370–7

Computer automated structure evaluation (CASE): a study of inhibitors of the thermolysin enzyme. Klopman G, et al. **J Theor Biol** 1989 Jan 9;136(1):67–77

METABOLISM

Thiorphan and retro-thiorphan display equivalent interactions when bound to crystalline thermolysin. Roderick SL, et al. **Biochemistry** 1989 Feb 21;28(4):1493–7

Receptor binding affinity and thermolysin degradation of truncated and retro-inverso-isomeric ANF analogs. Berman JM, et al. **Life Sci** 1989;44(18):1267–70

PHARMACOLOGY

Differences in the solubility and susceptibility to proteolytic degradation of basement-membrane components in adult and embryonic mouse tissues. Dziadek M, et al. **Am J Anat** 1989 Apr;184(4):298–310

Thermolysin treatment: a new method for dermo-epidermal separation. Walzer C, et al. **J Invest Dermatol** 1989 Jan; 92(1):78–81

[Assessment of plasma inactive renin by trypsin and thermolysin treatment during open heart surgery] Amano Y, et al. **Kokyu To Junkan** 1989 Mar;37(3):301–5 (Eng. Abstr.) (Jpn)

THERMOMETERS

The Cyclops 33 radiation thermometer. An appraisal for use in anaesthesia. Ramachandra V, et al. **Anaesthesia** 1989 Apr;44(4):328–31

Evaluation of a tympanic membrane thermometer in an outpatient clinical setting. Ros SP. **Ann Emerg Med** 1989 Sep;18(9):1004–6

Validation of electronic rectal thermometry. Goetting MG, et al. **Henry Ford Hosp Med J** 1988;36(4):207–8

Biomedical thermometry—a simple fiber optic approach. Grattan KT, et al. **IEEE Trans Biomed Eng** 1988 Aug; 35(8):618–22

Infrared fibers for radiometer thermometry in hypothermia and hyperthermia treatment. Katzir A, et al. **IEEE Trans Biomed Eng** 1989 Jun;36(6):634–7

The accuracy of temperature measurement from within an interstitial microwave antenna. Astrahan MA, et al. **Int J Hyperthermia** 1988 Nov-Dec;4(6):593–607

Perturbations due to the use of catheters with non-perturbing thermometry probes. Chan KW, et al. **Int J Hyperthermia** 1988 Nov-Dec;4(6):699–702

Total implants for hyperthermia application and thermometry. Doss JD, et al. **Int J Hyperthermia** 1988 Nov-Dec;4(6):617–25

A multicouple probe for temperature gradient measurements in biological materials. Ducharme MB, et al. **J Appl Physiol** 1988 Nov;65(5):2337–42

Thermosensitive determination of patency in lumboperitoneal shunts. Technical note. Ishiwata Y, et al. **J Neurosurg** 1989 Jan;70(1):143–5

An experimental investigation into the use of implanted thermocouples and differential thermometry as monitors for microvascular anastomoses. Roberts JO, et al. **J Reconstr Microsurg** 1985 Oct;2(1):51–7

A liquid crystal thermometer as an aid to the prevention of damage from excessive heat in anaesthetic extremities [letter] Gregory EL. **Lepr Rev** 1988 Sep;59(3):269–70

Microprocessor automatic multiple temperature measurement device. Mahler Y, et al. **Med Biol Eng Comput** 1988 Sep; 26(5):554–6

Improved probe for a deep body thermometer. Nemoto T, et al. **Med Biol Eng Comput** 1988 Jul;26(4):456–9

Temperature measurements during ultrasound hyperthermia. Hynynen K, et al. **Med Phys** 1989 Jul-Aug;16(4):618–26

Liquid-crystal thermometer use in pediatric office counseling about tap water burn prevention. Katcher ML, et al. **Pediatrics** 1989 May;83(5):766–71

[Can measurement of oral or axillary temperature replace rectal temperature measurements?] Göte H, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2085–7 (Eng. Abstr.) (Dan)

[Rectal injury caused by a broken thermometer. Risks related to mercury] Maurage C, et al. **Arch Fr Pediatr** 1989 Apr; 46(4):277–9 (Eng. Abstr.) (Fre)

[Computed tomography guided positioning of catheters for temperature measurement in hyperthermia of malignant tumors] Müller RD, et al. **Strahlenther Onkol** 1988 Oct; 164(10):593–601 (Eng. Abstr.) (Ger)

[Experimental studies of the heat effect of directed temperature radiation with microcomputer-assisted control of the study course, data recording and evaluation] Neuschulz H, et al. **Z Gesamte Hyg** 1988 May;34(5):320–5 (Eng. Abstr.) (Ger)

[Measurement of body temperature using expiratory air temperature method] Yonezawa Y, et al. **Iyodenshi To Seitai Kogaku** 1988 Sep;26(3):139–45 (Eng. Abstr.) (Jpn)

[A device for the continuous recording of the temperature of the coronary venous blood] Sher LA, et al. **Fiziol Zh** 1988 Jul-Aug;34(4):114–6 (Rus)

[An impulse device for measuring electric conductivity with thermostatic skin electrodes for determining ovulation time] Stupnitskiĭ IF. **Med Tekh** 1989 Jan-Feb;(1):50–2 (Eng. Abstr.) (Rus)

[A method for measuring the temperature of the deeply situated tissues of a biological subject] Rutsal SV, et al. **Patol Fiziol Eksp Ter** 1988 May-Jun;(3):68–9 (Rus)

[Contact thermometry and color liquid-crystalline thermography in the complex examination of patients with tonsillitis and acute sinusitis] Bolko IN, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):66–7 (Rus)

[Possibilities of the use of hysterothermometry in modern gynecologic studies] Berić BM, et al. **Med Pregl** 1988; 41(3–4):139–41 (Scr)

THERMOPLASMA

GENETICS

The structure and organization of the 16S ribosomal RNA gene from the archaebacterium Thermoplasma acidophilum. Ree HK, et al. **Can J Microbiol** 1989 Jan; 35(1):124–33

METABOLISM

[Biology of chemoautotrophs] Takakuwa S, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(15):2569–78 (58 ref.) (Jpn)

THERMORECEPTORS

ANALYSIS

Nasal 'flow' receptors of the rat. Tsubone H. **Respir Physiol** 1989 Jan;75(1):51–64

ANATOMY & HISTOLOGY

The distribution of thermoreceptors within the nasal cavity. Jones AS, et al. **Clin Otolaryngol** 1989 Jun;14(3):235–9

PHYSIOLOGY

Arousal state vs. temperature effects on neuronal activity in subcoeruleus area. Grahn DA, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R840–9

Limits of thermal sensation. Dusenbery DB. **J Theor Biol** 1988 Apr 7;131(3):263–71

Analysis of cold and warm receptor activity in vampire bats and mice. Schäfer K, et al. **Pflugers Arch** 1988 Jul; 412(1–2):188–94

Classification of a calcium conductance in cold receptors. Schäfer K, et al. **Prog Brain Res** 1988;74:29–36 (23 ref.)

[A study of the infrared sensory system] Terashima S. **Nippon Seirigaku Zasshi** 1989;51(2):65–73 (82 ref.) (Jpn)

ULTRASTRUCTURE

Ruffini corpuscle—a stretch receptor in the connective tissue of the skin and locomotion apparatus. Halata Z. **Prog Brain Res** 1988;74:221–9

THERMOREGULATION see **BODY TEMPERATURE REGULATION**

THERMOTHERAPY see **HYPERTHERMIA, INDUCED**

THERMUS

Characterization of crystals of small ribosomal subunits. Yonath A, et al. **J Mol Biol** 1988 Oct 5;203(3):831–4

ANALYSIS

Physical properties of membrane lipids isolated from a thermophilic eubacterium (Thermus sp.). Prado A, et al. **Adv Exp Med Biol** 1988;238:47–58

DRUG EFFECTS

Effects of oxygen and methyl viologen on Thermus aquaticus. MacMichael GJ. **J Bacteriol** 1988 Oct; 170(10):4995–8

ENZYMOLOGY

Low cost apparatus for primer-directed DNA amplification using Thermus aquaticus-DNA polymerase. Torgersen H, et al. **Anal Biochem** 1989 Jan;176(1):33–5

On the origin and functional unit of cytochrome c oxidase.

Buse G, et al. **Ann N Y Acad Sci** 1988;550:8–12

Nucleotide sequence of the phosphoglycerate kinase gene from the extreme thermophile Thermus thermophilus. Comparison of the deduced amino acid sequence with that of the mesophilic yeast phosphoglycerate kinase. Bowen D, et al. **Biochem J** 1988 Sep 1;254(2):509–17

Fidelity of DNA synthesis by the Thermus aquaticus DNA polymerase. Tindall KR, et al. **Biochemistry** 1988 Aug 9; 27(16):6008–13

A highly stable NADP-dependent isocitrate dehydrogenase from Thermus thermophilus HB8: purification and general properties. Eguchi H, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):133–7

Kinetic characterization of a thermostable inorganic pyrophosphatase from Thermus thermophilus. Höhne WE, et al. **Biomed Biochim Acta** 1988;47(12):941–7

Evidence for cytochrome oxidase subunit I and a cytochrome c—subunit II fused protein in the cytochrome 'c1aa3' of Thermus thermophilus. How old is cytochrome oxidase? Buse G, et al. **Eur J Biochem** 1989 Apr 15;181(1):261–8

Crystallization and preliminary X-ray diffraction studies of intact EF-Tu from Thermus aquaticus YT-1. Lippmann C, et al. **FEBS Lett** 1988 Nov 21;240(1–2):139–42

How TaqI endonuclease recognizes its cognate sequence. Barany F. **Gene** 1988 Dec 25;74(1):63–5

Determination of the positions of the disulfide bonds in aqualysin I (a thermophilic alkaline serine protease) of Thermus aquaticus YT-1. Kwon ST, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):557–9

An infrared study of the binding and photodissociation of carbon monoxide in cytochrome ba3 from Thermus thermophilus. Einarsdóttir O, et al. **J Biol Chem** 1989 Feb 15;264(5):2405–8

Isolation, characterization, and expression in Escherichia coli of the DNA polymerase gene from Thermus aquaticus. Lawyer FC, et al. **J Biol Chem** 1989 Apr 15; 264(11):6427–37

Nucleotide sequence of the succinyl-CoA synthetase alpha-subunit from Thermus aquaticus B. Nicholls DJ, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9858

[Temperature-dependent structural changes in complexes of tRNA(adenine-1)-methyltransferase from Thermus thermophilus HB8 and tRNA studied by optical and electron microscope methods] Borisova OF, et al. **Mol Biol (Mosk)** 1988 May-Jun;22(3):659–69 (Eng. Abstr.) **(Rus)**

GENETICS

Isolation and partial sequence of the A-protein gene of Thermus thermophilus cytochrome c1aa3. Fee JA, et al. **Ann N Y Acad Sci** 1988;550:33–8

Molecular cloning and nucleotide sequence of Thermus thermophilus HB8 trpE and trpG. Sato S, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):303–12

Thermus thermophilus 16S rRNA is transcribed from an isolated transcription unit. Hartmann RK, et al. **J Bacteriol** 1989 Jun;171(6):2933–41

Complete nucleotide sequence of a 23S ribosomal RNA gene from Thermus thermophilus HB8. Höpfl P, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9043

Nucleotide sequence of the 4.5S RNA gene from Thermus thermophilus HB8. Struck JC, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9042

Inquiries into the cloning and expression of the tuf gene of Thermus thermophilus HB8. Kushiro A, et al. **Nucleic Acids Symp Ser** 1988;(19):161–4

METABOLISM

Biochemical properties of unusual polyamines found in an extreme thermophile, Thermus thermophilus. Oshima T, et al. **Adv Exp Med Biol** 1988;250:633–42 (25 ref.)

Affinity labeling of the GDP/GTP binding site in Thermus thermophilus elongation factor Tu. Peter ME, et al. **Biochemistry** 1988 Dec 27;27(26):9132–9

THEROPITHECUS GELADA see under **CERCOPITHECIDAE**

THESES see **DISSERTATIONS, ACADEMIC**

THETA RHYTHM see under **ELECTROENCEPHALOGRAPHY**

THIABENDAZOLE

ADMINISTRATION & DOSAGE

[Alternative treatment of larva migrans] Dietrich M. **Hautarzt** 1989 Jul;40(7):461 **(Ger)**

ADVERSE EFFECTS

Theophylline-thiabendazole drug interaction. Lew G, et al. **Clin Pharm** 1989 Mar;8(3):225–7

Micronodular cirrhosis after thiabendazole. Roy MA, et al. **Dig Dis Sci** 1989 Jun;34(6):938–41

Intrahepatic cholestasis after thiabendazole. Davidson RN, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):620

PHARMACOLOGY

Improved antifungal effect of thiabendazole against Penicillium digitatum by its application to post-harvest citrus fruit in combination with carbohydrate esters of fatty acids. Nishikawa Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3216–9

The inheritance of thiabendazole resistance in Trichostrongylus colubriformis. Martin PJ, et al. **Int J Parasitol** 1988 Sep;18(6):703–9

Selection for thiabendazole resistance in Ostertagia spp. by low efficiency anthelmintic treatment. Martin PJ. **Int J Parasitol** 1989 May;19(3):317–25

THERAPEUTIC USE

Randomized trial of albendazole versus tiabendazole plus flubendazole during an outbreak of human trichinellosis. Fourestié V, et al. **Parasitol Res** 1988;75(1):36–41

Effect of strategic anthelmintic treatment and pasture management on productivity and control of nematode parasites in weaner-yearling beef cattle. Williams JC, et al. **Res Vet Sci** 1988 Jul;45(1):31–40

The effects of thiabendazole, mebendazole and cambendazole in normal and immunosuppressed dogs infected with a human strain of Strongyloides stercoralis. Grove DI, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):146–9

Haemonchus contortus: infectivity and resistance to benzimidazoles. Kerboeuf D, et al. **Vet Rec** 1989 Apr 15; 124(15):399–400

[Comparative study of thiabendazole and mebendazole in strongyloidiasis] Beus A. **Lijec Vjesn** 1989 Mar; 111(3):98–101 (Eng. Abstr.) **(Scr)**

TOXICITY

Effect of diphenyl, o-phenylphenol and 2-(4-thiazoyl) benzimidazole on growth of Tetrahymena pyriformis. Otsuka K, et al. **Bull Environ Contam Toxicol** 1988 Aug; 41(2):282–5

Glutathione and cysteine enhance and diethylmaleate reduces thiabendazole teratogenicity in mice. Ogata A, et al. **Food Chem Toxicol** 1989 Feb;27(2):117–23

Effects of thiabendazole on the kidneys of ICR mice. Tada Y, et al. **Food Chem Toxicol** 1989 May;27(5):307–15

THIACETAZONE

ADVERSE EFFECTS

Full-thickness oesophageal burns with perforation. Aghaji MA, et al. **Cent Afr J Med** 1987 Nov;33(11):269–71

THERAPEUTIC USE

Is thiacetazone necessary or useful in the intensive phase of anti-tuberculous chemotherapy? McLeod DT, et al. **Cent Afr J Med** 1989 Jan;35(1):313–6

THIADIAZINES see under **THIAZINES**

THIADIAZOLES

ADMINISTRATION & DOSAGE

Intraocular pressure effects of carbonic anhydrase inhibitors in primary open-angle glaucoma. Lichter PR, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):11–7

ADVERSE EFFECTS

Methazolamide-associated temporary leukopenia and thrombocytopenia. Cohen AM, et al. **DICP** 1989 Jan; 23(1):58–9

CHEMICAL SYNTHESIS

Compounds with potential antitumor activity—note VIII: 1-alkyl-N,N'-di (1,3,4-thiadiazol-2-yl)methylenediamines. Grasso S, et al. **Boll Chim Farm** 1988 Jul-Aug; 127(7–8):198–201

Synthesis and antihypertensive activity of some 1,3,4-thiadiazole derivatives. Vio L, et al. **Farmaco** 1989 Feb;44(2):165–72

Compounds with potential antitumor activity. VI—2-Alkyl-3-[2-(1,3,4-thiadiazolyl)]-4-thiazolidinones. Grasso S, et al. **Farmaco [Sci]** 1988 Oct;43(10):851–6

PHARMACOLOGY

Lack of effect of carbonic anhydrase inhibition on direct measurements of endolymph bicarbonate. Isaacs JH Jr, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):209–12

Studies on heterocyclic compounds: 1,3-thiazolidin-4-one derivatives. II. Biological activity of chlorinated 2,3-diaryl-1,3-thiazolidin-4-ones. Piscopo E, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):131–6

Anticonvulsant and analgesic activity of 1, 2, 4-thiadiazoles. II. Pandeya SN, et al. **Indian J Physiol Pharmacol** 1988 Apr-Jun;32(2):164–7

The effects of topical and general anesthesia on ocular drug levels and intraocular pressure lowering activity of topically applied carbonic anhydrase inhibitors. Bar-Ilan A, et al. **J Ocul Pharmacol** 1988 Spring;4(1):1–12

The oral hypoglycemic activity of 2,5-dioxamide derivatives of 1,3,4-thiadiazole. Oke JM, et al. **Jpn J Pharmacol** 1989 Jan;49(1):135–8

Effect of drugs on Trypanosoma cruzi and on its interaction with heart muscle cell "in vitro". de Castro SL, et al. **Mem Inst Oswaldo Cruz** 1987 Apr-Jun;82(2):209–18

The effect of an orally active leukotriene (LT) antagonist YM-16638 on antigen-induced early and late airway responses in allergic sheep. Tomioka K, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):43–7

[Synthesis of 1,3,4-thiadiazole derivatives with potential tuberculostatic action] Santus M. **Acta Pol Pharm** 1988; 45(3):219–24 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Phase II trials of 5-day vinblastine infusion (NSC 49842), L-alanosine (NSC 153353), acivicin (NSC 163501), and aminothiadiazole (NSC 4728) in patients with recurrent or metastatic renal cell carcinoma. Elson PJ, et al. **Invest New Drugs** 1988 Jun;6(2):97–103

THIAMINE

Inactivation of the thiamine transport system in Saccharomyces cerevisiae with O-bromoacetylthiamine. Nishimura H, et al. **Arch Biochem Biophys** 1988 Oct; 266(1):248–53

ADMINISTRATION & DOSAGE

Thiamin: to add or not to add? [letter] **Med J Aust** 1988 Oct 3;149(7):390–2

Prevention of the Wernicke-Korsakoff syndrome in Australia: a cost-benefit analysis. Fischer AJ, et al. **Med J Aust** 1989 Mar 20;150(6):311–3, 317

Thiamin: to add or not to add? [letter] Price J, et al. **Med J Aust** 1989 Feb 20;150(4):223–4

Acetazolamide and thiamine: an ancillary therapy for chronic mental illness. Sacks W, et al. **Psychiatry Res** 1989 Jun; 28(3):279–88

Thiamin intakes and erythrocyte thiamin levels in eleven-year-old children in the Western Cape. van der Westhuyzen J, et al. **Trop Geogr Med** 1988 Jul;40(3):218–22

[Stereometric evaluation of the myocardial cardiomyocyte-capillary ratio in emotional and pain-induced stress after administration of thiamine and nicotinamide] Shneider AB. **Kardiologiia** 1989 Apr; 29(4):97–9 (Eng. Abstr.) **(Rus)**

[Experimental evaluation of the effectiveness of vitamin-enriched chopped meat products] Alekseeva IA, et al. **Vopr Pitan** 1988 Jul-Aug;(4):55–9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Allergic contact dermatitis from thiamine. Ingemann Larsen A, et al. **Contact Dermatitis** 1989 May;20(5):387–8

ANALOGS & DERIVATIVES

Intestinal transport of thiamin and thiamin monophosphate in rat everted jejunal sacs: a comparative study using some potential inhibitors. Gastaldi G, et al. **Arch Int Physiol Biochim** 1988 Dec;96(5):223–30

Properties of the thiamin triphosphate-synthesizing activity catalyzed by adenylate kinase (isoenzyme 1). Shikata H, et al. **Biochem Int** 1989 May;18(5):943–9

Inhibition of rat brain pyruvate dehydrogenase by thiamine analogs. Kandiko CT, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4375–80

Phosphorylated thiamine derivatives and cortical activity in the baboon Papio papio: effect of intermittent light stimulation. Bettendorff L, et al. **J Neurochem** 1989 Jul; 53(1):80–7

[A study on the mechanism of phleboid olfactory function] Okabe E. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Jan; 92(1):111–20 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Spectrofluorometric assay of thiamine hydrochloride in injections and multivitamin preparations. Mohamed AM, et al. **J Assoc Off Anal Chem** 1988 Nov-Dec;71(6):1131–3

Determination of rubidium, sodium, calcium and thiamine in a pharmaceutical preparation by capillary isotachophoresis. Fanali S, et al. **J Chromatogr** 1989 Jun 23;472(2):441–4

Improved high-performance liquid chromatographic determination of thiamine and its phosphate esters in animal tissues. Iwata H, et al. **J Chromatogr** 1988 Oct 26; 450(3):317–23

Conditions for thiamin assay by cyanogen bromide oxidation. Nishimune T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Dec; 34(6):543–52

Thiaminase activities and thiamine content of Pteridium aquilinum, Equisetum ramosissimum, Malva parviflora, Pennisetum clandestinum and Medicago sativa. Meyer P. **Onderstepoort J Vet Res** 1989 Jun;56(2):145–6

[Determination of the caffeine content in syrup vitamin B1 and glycerophosphate using the first derivative ratio method] Dong SS, et al. **Yao Hsueh Hsueh Pao** 1988 Jun; 23(6):441–4 (Eng. Abstr.) **(Chi)**

[A method of determining the concentration of thiamine] Puzach SS, et al. **Lab Delo** 1989;(6):30–2 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Incorporation of histidine into the pyrimidine moiety of thiamin in Saccharomyces cerevisiae. Tazuya K, et al.

Biochim Biophys Acta 1989 Jan 27;990(1):73–9

BLOOD

Placental transfer of thiamine in the human subject: in vitro perfusion studies and maternal–cord plasma concentrations. Dancis J, et al. Am J Obstet Gynecol 1988 Dec; 159(6):1435–9

The vitamin B1 status among Egyptians occupationally exposed to pesticides. Arafah A, et al. Int J Vitam Nutr Res 1988;58(3):351

Comparison of methods for thiamin and riboflavin nutriture in man. Fidanza F, et al. Int J Vitam Nutr Res 1989; 59(1):40–7

METABOLISM

Intestinal absorption of thiamine, glucose and sodium in rats after lead and joint lead–zinc treatment. Doležych S. Acta Physiol Pol 1988 May–Jun;39(3):195–201

Thiamin and the brain. Haas RH. Annu Rev Nutr 1988; 8:483–515 (226 ref.)

Intestinal transport of thiamin and thiamin monophosphate in rat everted jejunal sacs: a comparative study using some potential inhibitors. Gastaldi G, et al. Arch Int Physiol Biochim 1988 Dec;96(5):223–30

Acrylamide and thiamine. Igisu H, et al. Arch Toxicol 1989; 63(3):248–9

Thiazolium C(2)–proton exchange: structure–reactivity correlations and the pKa of thiamin C(2)–H revisited. Washabaugh MW, et al. Biochemistry 1988 Jul 12; 27(14):5044–53

The irreversibility of thiamin transport in Saccharomyces cerevisiae. Ruml T, et al. Folia Microbiol (Praha) 1988; 33(5):372–6

Postnatal development of thiamine metabolism in rat brain. Matsuda T, et al. J Neurochem 1989 Mar;52(3):842–6

Thiamine-like molecules in the cerebellar cortex of the rat: light and electron microscopic immunocytochemical investigation. Martínez-Rodriguez R, et al. J Neurosci Res 1989 Aug;23(4):447–53

Cerebral thiamine-dependent enzyme changes in experimental Wernicke's encephalopathy. Butterworth RF. Metab Brain Dis 1986 Sep;1(3):165–75 (44 ref.)

Identity of soluble thiamine-binding protein with thiamine repressible acid phosphatase in Saccharomyces cerevisiae. Nosaka K, et al. Yeast 1989 Apr;5 Spec No:S447–51

[Animal experimental studies of the supply of vitamins B1, B2 and B6 from a determination of erythrocytic transketolase, glutathione reductase and aspartate aminotransferase activities following irradiation] Grimm U, et al. Radiobiol Radiother (Berl) 1988;29(6):711–6 (Eng. Abstr.) (Ger)

[Differences in the binding of thiamine and oxythiamine in the pancreas] Ostrovskiĭ IuM. Dokl Akad Nauk SSSR 1988; 302(4):995–8 (Rus)

[Ontogenetic features of the accumulation and restoration of thiamine of the digestive system organs in white rats] Rozanov AIa, et al. Fiziol Zh 1989 Jan–Feb;35(1):68–71 (Eng. Abstr.) (Rus)

[Characteristics of the products of thiamine degradation by molluskan thiaminase I] Puzach SS, et al. Vopr Med Khim 1989 Mar–Apr;35(2):82–4 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

New aspects in the study of the mechanism of intestinal absorption of thiamine in rats. Szymański A. Acta Physiol Pol 1988 Sep–Dec;39(5–6):450–9

Effect of chronic ethanol administration on thiamine transport in microvillous vesicles of rat small intestine. Gastaldi G, et al. Alcohol Alcohol 1989;24(2):83–9

Effect of acute and chronic ethanol administration on the transport of thiamine from plasma to different brain regions of the rat. Patrini C, et al. Alcohol Alcohol 1988; 23(6):455–63

Photoinactivation of the thiamin transport system in Saccharomyces cerevisiae with azidobenzoyl derivatives of thiamin. Sempuku K. Biochim Biophys Acta 1988 Oct 6;944(2):177–84

Thiamin absorption is not compromised in folate-deficient rats. Walzem RL, et al. J Nutr 1988 Nov;118(11):1343–8

[Vitamin B1 absorption in healthy subjects] Salmi M, et al. Duodecim 1988;104(10):778–81 (Fin)

[The role of Na K ATPase in thiamine and lipoic acid interrelations during their absorption in the gastrointestinal tract of mice] Karpov LM. Fiziol Zh 1989 Mar–Apr; 35(2):51–7 (Eng. Abstr.) (Rus)

[Effect of ethanol narcosis on 35S-thiamine metabolism in mouse tissues] Pogba S, et al. Fiziol Zh 1988 Jul–Aug; 34(4):36–41 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Influence of thiamine and ascorbic acid supplementation on the antidotal efficacy of thiol chelators in experimental lead intoxication. Dhawan M, et al. Arch Toxicol 1988; 62(4):301–4

Effect of pyrithiamine treatment and subsequent thiamine rehabilitation on regional cerebral amino acids and thiamine-dependent enzymes. Butterworth RF, et al. J Neurochem 1989 Apr;52(4):1079–84

PHYSIOLOGY

The evaluation of erythrocyte thiamin diphosphate as an indicator of thiamin status in man, and its comparison with erythrocyte transketolase activity measurements. Baines M, et al. Ann Clin Biochem 1988 Nov;25 (Pt 6):698–705

[The neurotrophic role of thiamine] Romanenko AV. Usp Fiziol Nauk 1988 Jul–Sep;19(3):99–110 (82 ref.) (Rus)

THERAPEUTIC USE

Thiamine for prevention of Wernicke's encephalopathy: a reminder [letter] Mayes GA. Anesth Analg 1989 Sep; 69(3):407–8

Studies on thiamine metabolism in thiamine-responsive megaloblastic anaemia. Poggi V, et al. Eur J Pediatr 1989 Jan;148(4):307–11

Thiamine and zinc in prevention or therapy of lead intoxication. Flora SJ, et al. J Int Med Res 1989 Jan–Feb; 17(1):68–75

Thiamine-responsive anemia in DIDMOAD syndrome. Borgna-Pignatti C, et al. J Pediatr 1989 Mar;114(3):405–10

[Discussion of the article by M. Vichnar: Experience with the administration of group B vitamins to children with hyperkinetic syndrome] Tikal K. Cesk Psychiatr 1989 Jun; 85(3):204–6 (Cze)

[Effect of ascorbic acid and thiamine on the development and course of mycogenic sensitization] Maniashin IuA, et al. Gig Tr Prof Zabol 1988 Nov;(11):50–1 (Rus)

TOXICITY

A toxicity study of parenteral thiamine hydrochloride. Wrenn KD, et al. Ann Emerg Med 1989 Aug;18(8):867–70

THIAMINE DEFICIENCY

Thiamin deficiency in clinical practice: a controversy [letter] Lipman TO. J Am Coll Nutr 1989 Feb;8(1):87–90

BLOOD

Branched-chain alpha-ketoacids and related acids in thiamin-deprived rats. Shigematsu Y, et al. J Nutr Sci Vitaminol (Tokyo) 1989 Jun;35(3):163–70

COMPLICATIONS

Pelizaeus-Merzbacher disease with thiamine deficiency or Leigh disease with extensive involvement of white matter? Case report. Cruz-Sanchez FF, et al. Clin Neurol Neurosurg 1989;91(3):261–3

Thiamine deficiency neuropathy. It's still common today. Skelton WP 3d, et al. Postgrad Med 1989 Jun;85(8):301–6

[Lactic acidosis caused by vitamin B1 deficiency in exclusive parenteral feeding. A case of 1 child (letter)] Chevallier B, et al. Presse Med 1988 Dec 10;17(44):2355–6 (Fre)

DRUG THERAPY

A toxicity study of parenteral thiamine hydrochloride. Wrenn KD, et al. Ann Emerg Med 1989 Aug;18(8):867–70

Deficiencies of vitamins in CAPD patients: the effect of supplementation. Boeschoten EW, et al. Nephrol Dial Transplant 1988;3(2):187–93

ENZYMOLOGY

Acceleration of ethanol metabolism by past thiamine deficiency. Martin PR, et al. Alcoholism (N Y) 1989 Jun; 13(3):457–60

Effect of a deficiency of thiamine on brain pyruvate dehydrogenase: enzyme assay by three different methods. Elnageh KM, et al. J Neurochem 1988 Nov;51(5):1482–9

EPIDEMIOLOGY

The vitamin B1 status among young Egyptian males in relation to infection with parasites. Hussein L, et al. Int J Vitam Nutr Res 1989;59(1):48–51

The vitamin B1 status among young Egyptians from the oasis in relation to glucose-6 phosphate dehydrogenase deficiency. Hussein L, et al. Int J Vitam Nutr Res 1989; 59(1):52–4

ETIOLOGY

Thiamine status after major trauma. McConachie I, et al. Intensive Care Med 1988;14(6):628–31

Deaths associated with thiamine-deficient total parenteral nutrition [published erratum appears in MMWR 1989 Feb 10;38(5):79] MMWR 1989 Jan 27;38(3):43–6

METABOLISM

Experimental studies on kernicterus in thiamine-deficient Gunn rats. Ueno Y, et al. Bull Osaka Med Sch 1987 Oct; 33(2):128–36

The influence of thiamine deficiency and ethanol on rat brain catecholamines. Sjöquist B, et al. Drug Alcohol Depend 1988 Dec;22(3):187–93

Regional changes in brain histamine levels following dietary-induced thiamine deficiency in rats. Onodera K, et al. Jpn J Pharmacol 1988 Jul;47(3):323–6

Regionally selective alterations in enzymatic activities and metabolic fluxes during thiamin deficiency. Gibson G, et al. Neurochem Res 1989 Jan;14(1):17–24

Long-lasting changes in regional brain amino acids and monoamines in recovered pyrithiamine treated rats. Langlais PJ, et al. Neurochem Res 1988 Dec; 13(12):1199–206

[Change in nucleic acid synthesis in the spleen of rats with acute deficit of vitamin B1 during immunogenesis] Dvorianinovich LN. Vopr Med Khim 1989 May–Jun; 35(3):92–6 (Eng. Abstr.) (Rus)

[Effect of acute vitamin B1 deficiency caused by oxythiamine on protein biosynthesis in the spleen during immunogenesis] Dvorianinovich LN. Vopr Med Khim 1988 Jul–Aug; 34(4):71–4 (Eng. Abstr.) (Rus)

PATHOLOGY

Acute and subacute effects of thiamine deficiency on the morphometry and cell kinetics of jejunal and ileal epithelial cells. Cipriano TC, et al. Cell Tissue Kinet 1988 Jul; 21(4):221–6

The effect of thiamine deficiency on the structure and physiology of the rat forebrain. Armstrong-James M, et al. Metab Brain Dis 1988 Jun;3(2):91–124

Differentiation between brain lesions in experimental thiamine deficiency. Vortmeyer AO, et al. Virchows Arch [A] 1988;414(1):61–7

PHYSIOPATHOLOGY

Thiamin, riboflavin, and vitamins B-6 and C: impact of combined restricted intake on functional performance in man. van der Beek EJ, et al. Am J Clin Nutr 1988 Dec; 48(6):1451–62

Effects of insulin secretagogues on the secretion of insulin during thiamine deficiency. Rathanaswami P, et al. Biochem Int 1988 Sep;17(3):523–8

Thiamine deficiency in utero alters response to ethanol in adulthood. Martin PR, et al. Psychopharmacology (Berlin) 1989;97(2):253–6

THERAPY

Thiamin: to add or not to add? [letter] Price J, et al. Med J Aust 1989 Feb 20;150(4):223–4

THIAMINE DIPHOSPHATE see **THIAMINE PYROPHOSPHATE**

THIAMINE MONOPHOSPHATE see under **THIAMINE**

THIAMINE PYROPHOSPHATASE see under **PYROPHOSPHATASES**

THIAMINE PYROPHOSPHATE

BLOOD

The evaluation of erythrocyte thiamin diphosphate as an indicator of thiamin status in man, and its comparison with erythrocyte transketolase activity measurements. Baines M, et al. Ann Clin Biochem 1988 Nov;25 (Pt 6):698–705

Studies on the nature of thiamine pyrophosphate binding and dependency on divalent cations of transketolase from human erythrocytes. Jung EH, et al. Int J Biochem 1988; 20(11):1255–9

METABOLISM

Cytosolic adenylate kinase catalyzes the synthesis of thiamin triphosphate from thiamin diphosphate. Shikata H, et al. Biochem Int 1989 May;18(5):933–41

Benzaldehyde lyase, a novel thiamine PPi-requiring enzyme, from Pseudomonas fluorescens biovar I. González B, et al. J Bacteriol 1989 May;171(5):2401–5

Phosphorylated thiamine derivatives and cortical activity in the baboon Papio papio: effect of intermittent light stimulation. Bettendorff L, et al. J Neurochem 1989 Jul; 53(1):80–7

[Interaction of pyruvate dehydrogenase complex from the heart muscle with thiamine diphosphate and its derivatives] Strumilo SA, et al. Vopr Med Khim 1989 Mar–Apr; 35(2):102–5 (Eng. Abstr.) (Rus)

THIAMINE PYROPHOSPHOKINASE see under **PHOSPHOTRANSFERASES, ATP**

THIAMINE TRIPHOSPHATASE see under **PHOSPHATASES**

THIAMINE TRIPHOSPHATE see under **THIAMINE**

THIAMPHENICOL

ANALOGS & DERIVATIVES

In vitro activity of florphenicol. Graham R, et al. Eur J Clin Microbiol Infect Dis 1988 Oct;7(5):691–4

ANALYSIS

Reversed-phase liquid chromatographic separation of enantiomeric and diastereomeric bases related to chloramphenicol and thiamphenicol. Gal J, et al. J Pharm Sci 1988 Dec;77(12):1062–5

BLOOD

Determination of thiamphenicol in bovine plasma by liquid chromatography. Felice L, et al. **J Assoc Off Anal Chem** 1988 Nov-Dec;71(6):1156-7

PHARMACOLOGY

Hemopoiesis during thiamphenicol treatment. I. Stimulation of stem cells during eradication of intermediate cell stages. Goris H, et al. **Exp Hematol** 1989 Oct;17(9):957-61

Hemopoiesis during thiamphenicol treatment. II. A theoretical analysis shows consistency of new data with a previously hypothesized model of stem cell regulation. Loeffler M, et al. **Exp Hematol** 1989 Oct;17(9):962-7

In vitro susceptibility of thiamphenicol against Salmonella typhi. Kapil A, et al. **Indian J Med Res** 1988 Nov;88:395-7

[Antimycoplasmal activities of ofloxacin and commonly used antimicrobial agents on Mycoplasma gallisepticum] Takahashi I, et al. **Jpn J Antibiot** 1989 May;42(5):1166-72 (Eng. Abstr.) **(Jpn)**

THIAMYLAL

Comparison of propofol and thiamylal for induction and maintenance of anaesthesia for outpatient surgery. Sampson IH, et al. **Br J Anaesth** 1988 Dec;61(6):707-11

BLOOD

Measurement of thiamylal in human plasma using reversed-phase high-performance liquid chromatography. Hosotsubo H, et al. **J Chromatogr** 1989 Jan 27;487(1):204-9

PHARMACOLOGY

Interactions between chloramphenicol, acepromazine, phenylbutazone, rifampin and thiamylal in the horse [published erratum appears in Equine Vet J 1989 May;21(3):210] Burrows GE, et al. **Equine Vet J** 1989 Jan; 21(1):34-8

[A possible circadian rhythm of susceptibility to thiamylal] Michita A, et al. **Masui** 1989 Apr;38(4):469-74 (Eng. Abstr.) **(Jpn)**

[Effect of thiamylal on superoxide generation in the cells and on lipid peroxidation of biological membranes] Nishiyama K, et al. **Masui** 1989 Feb;38(2):202-10 (Eng. Abstr.) **(Jpn)**

THIAZEPINES

ADVERSE EFFECTS

Analysis of the side effects of tianeptine. Delalleau B, et al. **Clin Neuropharmacol** 1988;11 Suppl 2:S83-9

CHEMICAL SYNTHESIS

Synthesis and pharmacological evaluation of triazolo derivatives of 8-amino-10,11-dihydro-dibenzo[b,e]1,4-thiazepine-11-one. Joshi J, et al. **Pharmazie** 1989 Apr;44(4):265-7

PHARMACOKINETICS

Pharmacokinetic and metabolic parameters of tianeptine in healthy volunteers and in populations with risk factors. Royer RJ, et al. **Clin Neuropharmacol** 1988;11 Suppl 2:S90-6

Tianeptine and its main metabolite pharmacokinetics in chronic alcoholism and cirrhosis. Royer RJ, et al. **Clin Pharmacokinet** 1989 Mar;16(3):186-91

Influence of food on tianeptine and its main metabolite kinetics. Dresse A, et al. **J Clin Pharmacol** 1988 Dec; 28(12):1115-9

PHARMACOLOGY

Hemodynamic comparison of diltiazem and TA-3090 in spontaneously hypertensive and normal Wistar-Kyoto rats. Isshiki T, et al. **Am J Cardiol** 1988 Oct 5;62(11):79G-84G

Antidepressant and anxiolytic activities of tianeptine: an overview of clinical trials. Defrance R, et al. **Clin Neuropharmacol** 1988;11 Suppl 2:S74-82 (10 ref.)

Electrophysiological effects of tianeptine on rat locus coeruleus, raphe dorsalis, and hippocampus activity. Dresse A, et al. **Clin Neuropharmacol** 1988;11 Suppl 2:S51-8

Neurochemical profile of tianeptine, a new antidepressant drug. Kato G, et al. **Clin Neuropharmacol** 1988;11 Suppl 2:S43-50 (21 ref.)

Structure-activity relationships of tricyclic antidepressants, with special reference to tianeptine. Labrid C, et al. **Clin Neuropharmacol** 1988;11 Suppl 2:S21-31

Pharmacological antidepressive effects and tianeptine-induced 5-HT uptake increase. Mocaër E, et al. **Clin Neuropharmacol** 1988;11 Suppl 2:S32-42

Chronic inhibition of angiotensin converting enzyme decreases Ca2+-dependent tone of aorta in hypertensive rats. Sada T, et al. **Hypertension** 1989 Jun;13(6 Pt 1):582-8

Effect of KT-362, a putative intracellular calcium antagonist, on norepinephrine-induced contractions and inositol monophosphate accumulation in canine femoral artery. Eskinder H, et al. **J Cardiovasc Pharmacol** 1989 Mar; 13(3):502-7

Collateral blood flow following acute coronary artery occlusion: comparison of a new intracellular calcium antagonist (KT-362) and diltiazem. Farber NE, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):66-72

Cardioprotective effects of a new vascular intracellular calcium antagonist, KT-362, in the stunned myocardium. Farber NE, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):39-43

Inhibitory actions of a novel benzothiazepine derivative, TA3090, on the electrical and mechanical responses of the rabbit mesenteric artery. Nishiye E, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1079-86

(R)-3-[(S)-1-carboxy-5-(4-piperidyl)pentyl]amino-4-oxo-2,3,4,5-tetrahydro-1,5-benzothiazepine-5-acetic acid (CV-5975): a new potent and long-lasting inhibitor of angiotensin converting enzyme. Inada Y, et al. **Jpn J Pharmacol** 1988 Jun;47(2):135-41

Antihypertensive action of a new angiotensin converting enzyme inhibitor, (R)-3-[(S)-1-carboxy-5-(4-piperidyl)pentyl]amino-4-oxo-2,3,4,5-tetr ahy dro-1,5-benzothiazepine-5-acetic acid (CV-5975), in various hypertensive models. Inada Y, et al. **Jpn J Pharmacol** 1988 Jul;47(3):311-22

Inhibition of angiotensin converting enzyme by (R)-3-[(S)-1-carboxy-5-(4-piperidyl)pentyl]amino-4-oxo-2,3,4,5-tetra- hydro-1,5-benzothiazepine-6-acetic acid (CV-5975), a non-sulfhydryl compound. Inada Y, et al. **Jpn J Pharmacol** 1988 Nov;48(3):323-30

Pharmacological profiles of CS-622, a novel angiotensin converting enzyme inhibitor. Oizumi K, et al. **Jpn J Pharmacol** 1988 Nov;48(3):349-56

CGS 10746B is able to attenuate the effects of amphetamine: further evidence for dopaminergic mediation. Schechter MD, et al. **Pharmacol Biochem Behav** 1988 Aug; 30(4):1089-92

Hemodynamic and electrocardiographic actions of the new intracellular calcium antagonist, KT-362, in the conscious dog. Hartman JC, et al. **Pharmacology** 1988;37(6):376-84

[Electrophysiological study of tianeptine, a new enhancer of serotonin uptake with antidepressant activity] Lejeune F, et al. **Neurophysiol Clin** 1988 Aug;18(4):369-81 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Position of tianeptine among antidepressive chemotherapies. Lôo H, et al. **Clin Neuropharmacol** 1988;11 Suppl 2:S97-102 (20 ref.)

Reduction of myocardial ischemia-reperfusion injury by KT-362, a new intracellular calcium antagonist in anesthetized dogs. Pelc LR, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):586-93

Tianeptine and amitriptyline. Controlled double-blind trial in depressed alcoholic patients. Lôo H, et al. **Neuropsychobiology** 1988;19(2):79-85

[Long-term treatment using antidepressants. Tianeptine: methodology of a long-term study and preliminary results] Olié JP, et al. **Encephale** 1988 Sep-Oct;14(5):379-84 (Eng. Abstr.) **(Fre)**

THIAZIDE DIURETICS see **DIURETICS, THIAZIDE**

THIAZINAMIUM see under **PROMETHAZINE**

THIAZINES

The influence of cationic thiazine dyes on eosin Y-uptake of red blood cells in Romanowsky-Giemsa type stains. Schulte E, et al. **Acta Histochem Suppl (Jena)** 1989; 37:139-47

Electrocardiographic values from clinically normal, anesthetized ferrets (Mustela putorius furo). Bone L, et al. **Am J Vet Res** 1988 Nov;49(11):1884-7

Effect of tolazoline on xylazine-ketamine-induced anesthesia in turkey vultures. Allen JL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1011-2

Reversal of xylazine-induced sedation in llamas, using doxapram or 4-aminopyridine and yohimbine. Riebold TW, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1059-61

Acesulfame—a new artificial sweetener. **Med Lett Drugs Ther** 1988 Dec 16;30(781):116

Gas exchange during xylazine-ketamine anesthesia in neonatal calves. Blaze CA, et al. **Vet Surg** 1988 May-Jun; 17(3):155-9

[The effect of thiazon on helminth eggs in soil] Babaeva RI. **Med Parazitol (Mosk)** 1989 Mar-Apr;(2):25-7 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Evaluation of a combination of xylazine, ketamine, and halothane for anesthesia in llamas. Gavier D, et al. **Am J Vet Res** 1988 Dec;49(12):2047-55

Epidural injection of xylazine for perineal analgesia in horses. LeBlanc PH, et al. **J Am Vet Med Assoc** 1988 Dec 1; 193(11):1405-8

Sloth bear immobilization with a ketamine-xylazine combination: reversal with yohimbine. Page CD. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1050-1

Ketamine-xylazine anaesthesia in the Djungarian hamster (Phodopus sungorus). Curl JL. **Lab Anim** 1988 Oct; 22(4):309-12

Thiazine, antibiotic, bilirubin adducts. Eckert GM, et al. **Xenobiotica** 1989 May;19(5):567-79

ADVERSE EFFECTS

[The fetal hydantoin syndrome] Egense BM, et al. **Ugeskr Laeger** 1989 Feb 27;151(9):575-6 (Eng. Abstr.) **(Dan)**

ANALYSIS

Analysis of saccharin, acesulfame-K and sodium cyclamate by high-performance ion chromatography. Biemer TA. **J Chromatogr** 1989 Feb 3;463(2):463-8

ANTAGONISTS & INHIBITORS

Antagonistic effect of idazoxan on xylazine-induced central nervous system depression and bradycardia in calves. Thompson JR, et al. **Am J Vet Res** 1989 May;50(5):734-6

Effect of cocaine on xylazine analgesic activity. Leonhardt JH, et al. **Braz J Med Biol Res** 1988;21(1):103-5

Use of alpha 2-adrenergic receptor antagonists. Gross ME, et al. **J Am Vet Med Assoc** 1989 Aug 1;195(3):378-81 (19 ref.)

Xylazine-ketamine-induced anesthesia in rats and its antagonism by yohimbine. Hsu WH, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1040-3

Yohimbine reversal of ketamine-xylazine immobilization of raccoons (Procyon lotor). Deresienski DT, et al. **J Wildl Dis** 1989 Apr;25(2):169-74

Antagonism of xylazine hydrochloride sedation in raptors by yohimbine hydrochloride. Freed D, et al. **J Wildl Dis** 1989 Jan;25(1):136-8

Immobilization of coyotes with xylazine hydrochloride-ketamine hydrochloride and antagonism by yohimbine hydrochloride. Kreeger TJ, et al. **J Wildl Dis** 1986 Oct;22(4):604-6

Blockade of 5-hydroxytryptamine3 receptors prevents cisplatin-induced but not motion- or xylazine-induced emesis in the cat. Lucot JB. **Pharmacol Biochem Behav** 1989 Jan;32(1):207-10

Neuroinhibition of xylazine induced emesis. Zabara J. **Pharmacol Toxicol** 1988 Aug;63(2):70-4

[Xylazine antagonism by tolazoline in the dog. 1. Modification by tolazoline of the duration of anesthesia and secondary action of xylazine on the respiratory and metabolic functions] Amelang D, et al. **Berl Munch Tierarztl Wochenschr** 1988 Aug 1; 101(8):266-70 (Eng. Abstr.) **(Ger)**

[Xylazine antagonism by tolazoline in the dog. 2. Cardiac and circulatory effects of xylazine anesthesia and its modification by tolazoline] Grässer F, et al. **Berl Munch Tierarztl Wochenschr** 1988 Aug 1;101(8):271-7 (Eng. Abstr.) **(Ger)**

[The antagonism of ketamine/xylazine anesthesia ("Hellabrunn mixture") in wild zoo ruminants] Hafner S, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jun 1; 102(6):181-4 (Eng. Abstr.) **(Ger)**

CHEMICAL SYNTHESIS

Heteroarylalkanoic acid with possible antiinflammatory activities. Note VII. Gamberini G, et al. **Boll Chim Farm** 1989 Mar;128(3):101-5

Thiazinoquinolones in benzothiazine research. Fravolini A. **Farmaco [Sci]** 1988 Dec;43(12 Suppl):1063-74 (16 ref.)

Synthesis and structure-activity relationship of substituted tetrahydro- and hexahydro-1,2-benzisothiazol-3-one 1,1-dioxides and thiadiazinones: potential anxiolytic agents. Abou-Gharbia M, et al. **J Med Chem** 1989 May; 32(5):1024-33

[One-step synthesis of 2-aminothieno [2,3-d]thiazen-4-ones in some cases 5,6-anellated from ethyl 2-benzoylthioureidothiophen-3-carboxylates and evaluation of their anti-allergy activity] Leistner S, et al. **Pharmazie** 1988 Jul;43(7):466-70 (Eng. Abstr.) **(Ger)**

METABOLISM

Uptake of saccharin and related intense sweeteners by Streptococcus mutans NCTC 10449. Ziesenitz SC, et al. **Z Ernahrungswiss** 1988 Sep;27(3):155-69

PHARMACOLOGY

Effect of xylazine in heifers under thermoneutral or heat stress conditions. Fayed AH, et al. **Am J Vet Res** 1989 Jan;50(1):151-3

Evidence for the involvement of alpha 2-adrenoceptors in the emetic action of xylazine in cats. Hikasa Y, et al. **Am J Vet Res** 1989 Aug;50(8):1348-51

Xylazine and tiletamine-zolazepam anesthesia in horses. Hubbell JA, et al. **Am J Vet Res** 1989 May;50(5):737-42

Effects of ketamine, xylazine, and a combination of ketamine and xylazine in Pekin ducks. Ludders JW, et al. **Am J Vet Res** 1989 Feb;50(2):245-9

Effect of xylazine treatment on equine proximal gastrointestinal tract myoelectrical activity. Merritt AM, et al. **Am J Vet Res** 1989 Jun;50(6):945-9

Effects of xylazine and/or butorphanol or neostigmine on myoelectric activity of the cecum and right ventral colon in female ponies. Rutkowski JA, et al. **Am J Vet Res** 1989 Jul;50(7):1096-101

The cardiovascular pharmacology of ICI 170777 ((6RS)-6-methyl-3-(pyrid-4-yl)-3H,6H-1,3,4-thiadiazin-2-one) a novel compound with positive inotropic and vasodilator effects. Collis MG, et al. **Br J Pharmacol** 1989 Jun;97(2):409-18

Effects of xylazine on cerebrospinal fluid catecholamines in the rhesus monkey. Mefford IN, et al. **Brain Res** 1989 Jul 17;492(1–2):377–80

Antagonistic effects of alpha-adrenoceptor blocking agents on reticuloruminal hypomotility induced by xylazine in cattle. Hikasa Y, et al. **Can J Vet Res** 1988 Oct;52(4):411–5

The effect of yohimbine on plasma levels of T3, T4 and cortisol in xylazine-immobilized white-tailed deer. Bubenik GA, et al. **Comp Biochem Physiol [C]** 1989;92(2):315–8

Cardiorespiratory and sedative effects of a combination of acepromazine, xylazine and methadone in the horse. Nilsfors L, et al. **Equine Vet J** 1988 Sep;20(5):364–7

Xylazine-evoked depression of rat cerebral cortical neurons: a pharmacological study. O'Regan MH. **Gen Pharmacol** 1989;20(4):469–74

Anesthetic effects on liver and muscle glycogen concentrations: rest and postexercise. Musch TI, et al. **J Appl Physiol** 1989 Jun;66(6):2895–900

Interaction of angiotensin I-converting enzyme with two potent tricyclic inhibitors. Giroux E, et al. **J Enzym Inhib** 1989;2(4):269–77

The ocular effects of xylazine in rabbits, cats, and monkeys. Burke JA, et al. **J Ocul Pharmacol** 1986 Winter;2(1):9–21

Sustained anti-adherence activity of taurolidine (Taurolin) and noxythiolin (Noxyflex S) solutions. Blenkharn JI. **J Pharm Pharmacol** 1988 Jul;40(7):509–11

Cardiotonic activity of 5-methyl-6-(4-pyridyl)-2H-1,4-thiazin-3(4H)-one hydrochloride (ZSY-27). Yoshioka K, et al. **J Pharmacobiodyn** 1988 Nov;11(11):715–21

Time-dependent enhancement of xylazine-induced, alpha-2 adrenoceptor-mediated vasoconstriction in isolated and perfused canine pulmonary veins. Haniuda M, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):340–7

Effect of administration of an alpha 2-adrenergic agonist, xylazine, on pulsatile gonadotrophin secretion in anoestrous horse mares. Fitzgerald BP, et al. **J Reprod Fertil** 1988 Nov;84(2):693–700

Xylazine—a review of its pharmacology and use in veterinary medicine. Greene SA, et al. **J Vet Pharmacol Ther** 1988 Dec;11(4):295–313 (145 ref.)

Reversal by tolazoline hydrochloride of xylazine hydrochloride-ketamine hydrochloride immobilizations in free-ranging desert mule deer. DelGiudice GD, et al. **J Wildl Dis** 1989 Jul;25(3):347–52

Evaluation of xylazine hydrochloride as the sole immobilizing agent in moose and caribou—and its subsequent reversal with idazoxan. Doherty TJ, et al. **J Wildl Dis** 1989 Jan; 25(1):95–8

Use of xylazine sedation with yohimbine antagonism in captive gray wolves. Kreeger TJ, et al. **J Wildl Dis** 1988 Oct;24(4):688–90

Physiological response of gray wolves to butorphanol-xylazine immobilization and antagonism by naloxone and yohimbine. Kreeger TJ, et al. **J Wildl Dis** 1989 Jan;25(1):89–94

Antisecretory activity of the alpha 2-adrenoceptor agonist, xylazine in rat jejunal epithelium. Cox HM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):669–74

Effect of physical restraint and xylazine sedation on haematological values in red deer (Cervus elaphus). Cross JP, et al. **Res Vet Sci** 1988 Nov;45(3):281–6

Physiological effects of etorphine, acepromazine and xylazine in the scimitar horned oryx (Oryx dammah). Pearce PC, et al. **Res Vet Sci** 1989 Jul;47(1):78–83

Physiological effects of etorphine, acepromazine and xylazine on the black fallow deer (Dama dama). Pearce PC, et al. **Res Vet Sci** 1989 May;46(3):380–6

Enhancement of tetrathiomolybdate-induced copper excretion in bile of sheep by the alpha 2-agonistic action of xylazine. Symonds HW, et al. **Res Vet Sci** 1989 May; 46(3):349–53

Effect of yohimbine on xylazine-induced diuresis in rats. Mohammad FK, et al. **Vet Hum Toxicol** 1989 Feb; 31(1):13–5

POISONING

Unusual reaction following overdose of xylazine in a mare. Groenendyk J, et al. **Vet Rec** 1989 May 13;124(19):511

THERAPEUTIC USE

Selective pulmonary vasodilatory effect of ZSY-27 in dogs with pulmonary hypertension due to pulmonary embolism. Tajimi K, et al. **Crit Care Med** 1989 Feb;17(2):163–5

Benign partial epilepsy—treatment with sulthiame [letter] Doose H, et al. **Dev Med Child Neurol** 1988 Oct;30(5):683–4

A preliminary comparison of lidocaine and xylazine as epidural analgesics in ponies. Fikes LW, et al. **Vet Surg** 1989 Jan–Feb;18(1):85–6

TOXICITY

The effect of xylazine on basal serum prolactin concentrations in male rats. Fayez M, et al. **Arch Exp Veterinarmed** 1989 May;43(3):405–8

Effects of xylazine and ketamine on epinephrine-induced arrhythmia in the dog. Wright M, et al. **Vet Surg** 1987 Sep–Oct;16(5):398–403

THIAZOLES

The reaction of sulfhydryl groups with carbonyl compounds. Wlodek L. **Acta Biochim Pol** 1988;35(4):307–17

Appraisal of the MTT assay as a rapid test of chemosensitivity in acute myeloid leukaemia. Sargent JM, et al. **Br J Cancer** 1989 Aug;60(2):206–10

Effect of aspirin on urinary bladder carcinogenesis initiated with N-[4-(5-nitro-2-furyl)-2-thiazolyl]formamide in rats. Cohen SM, et al. **Cancer Res** 1989 Jan 15;49(2):372–7

Electrochemistry of cyclic alpha-imino carboxylates and their metal complexes: correlation with physiological activity. Kovacic P, et al. **Chem Biol Interact** 1989; 69(2–3):235–44

Studies of the reactivity of morpholine, 2-mercaptobenzothiazole and 2 of their derivatives with selected amino acids. Wang XS, et al. **Contact Dermatitis** 1988 Jul;19(1):16–21

Nizatidine. A preliminary review of its pharmacodynamic and pharmacokinetic properties, and its therapeutic use in peptic ulcer disease. Price AH, et al. **Drugs** 1988 Nov; 36(5):521–39 (70 ref.)

Methylchloroisothiazolinone-methylisothiazolinone (Kathon CG) [letter] Larsen WG. **J Am Acad Dermatol** 1989 Apr; 20(4):703

Chemical stabilities of famotidine and ranitidine hydrochloride in intravenous admixtures. Das Gupta V, et al. **J Clin Pharm Ther** 1988 Oct;13(5):329–34

Re-examination and further development of a precise and rapid dye method for measuring cell growth/cell kill. Hansen MB, et al. **J Immunol Methods** 1989 May 12; 119(2):203–10

Sodium succinate enhances the colorimetric reaction of the in vitro chemosensitivity test: MTT assay. Maehara Y, et al. **Oncology** 1988;45(6):434–6

A new technique for staining catecholic residues in biological samples. Kalyani R, et al. **Stain Technol** 1989 Jan;64(1):15–8

[German language reprints of original papers from the supplement "Nizatidine in peptic ulcer disease" of the Scandinavian Journal of Gastroenterology, Volume 22, Supplement 136, 1987] **Fortschr Med** 1989 Jan 11;Spec No:1–48 (Ger)

[A QSAR study of synthetic stimulators of growth of domestic animals on the basis of 6-amino-2-mercaptobenzothiazole] Zahradník P, et al. **Cesk Farm** 1988 Dec;37(10):440–2 (Eng. Abstr.) (Slo)

ADMINISTRATION & DOSAGE

Comparison of nizatidine and cimetidine as once-nightly treatment of acute duodenal ulcer. Nizatidine Multicenter Duodenal Ulcer Study Group. Cherner JA, et al. **Am J Gastroenterol** 1989 Jul;84(7):769–74

Do anticholinergics interact with histamine H2 receptor antagonists on night intragastric acidity in active duodenal ulcer patients? Fiorucci S, et al. **Am J Gastroenterol** 1988 Dec;83(12):1371–5

Topical carbonic anhydrase inhibitors. Kass MA. **Am J Ophthalmol** 1989 Mar 15;107(3):280–2

Healing and recurrence of active duodenal ulcer with nizatidine. Cloud ML, et al. **Clin Pharmacol Ther** 1989 Sep; 46(3):310–6

Optimal therapeutic regimen of famotidine based on plasma concentrations in patients with chronic renal failure. Hachisu T, et al. **Clin Ther** 1988;10(6):656–63

A comparison of the effects on intragastric acidity of bedtime or dinnertime administration of a once daily dose of famotidine. Savarino V, et al. **Eur J Clin Pharmacol** 1988; 35(2):203–7

A multicenter, randomized, double-blind study comparing once-daily bedtime administration of famotidine and ranitidine in the short-term treatment of active duodenal ulcer. Alcalá Santaella R, et al. **Hepatogastroenterology** 1989 Jun;36(3):168–71

Stability of famotidine in commonly used nutritional infusion fluids. Underberg WJ, et al. **J Parenter Sci Technol** 1988 May–Jun;42(3):94–7

A single nocte dose of famotidine in the treatment of duodenal ulcer. Qureshi H, et al. **JPMA** 1989 Apr; 39(4):104–6

[Nizatidine versus ranitidine in the treatment of acute duodenal ulcer. Comparison of 300 mg nizatidine and 300 mg ranitidine in a single evening dose] Arnold R, et al. **Fortschr Med** 1989 Jul 20;107(21):467–70 (Eng. Abstr.) (Ger)

[Treatment of acute stomach ulcer with H2 receptor antagonists. A direct therapy comparison with 300 mg nizatidine nightly and 2 times 150 mg nizatidine with twice daily 150 mg ranitidine] Arnold R, et al. **Fortschr Med** 1989 Jun 10;107(17):390–4 (Eng. Abstr.) (Ger)

[Famotidine treatment of patients with gastric and duodenal ulcers. A comparative study with once or twice-a-day administration] Bonardelli P, et al. **Clin Ter** 1987 Aug 15; 122(3):183–7 (Eng. Abstr.) (Ita)

ADVERSE EFFECTS

Formaldehyde-induced depression of skin reactivity to 5-chloro-2-methyl-4-isothiazolin-3-one in the guinea pig. Bruze M, et al. **Contact Dermatitis** 1988 Sep;19(3):231–2

Contact allergy to dichlorinated methylisothiazolinone. Bruze M, et al. **Contact Dermatitis** 1989 Mar;20(3):219–20

Allergic contact dermatitis from a suction socket prosthesis. Condé-Salazar L, et al. **Contact Dermatitis** 1988 Oct; 19(4):305–6

Risk of sensitization to Kathon CG [letter] de Groot AC, et al. **Contact Dermatitis** 1988 Sep;19(3):210–4

Sensitivity to Kathon CG: findings in 365 consecutive patients. Fransway AF. **Contact Dermatitis** 1988 Nov; 19(5):342–7

Kathon CG as a sensitizer [letter] Massarotti S, et al. **Contact Dermatitis** 1988 Sep;19(3):215–6

Kathon CG reactivity in 1396 consecutively patch tested patients in the Copenhagen area. Menné T, et al. **Contact Dermatitis** 1988 Oct;19(4):260–2

Occupational allergic contact dermatitis from Kathon WT. O'Driscoll JB, et al. **Contact Dermatitis** 1988 Jul;19(1):63

Sensitization to Kathon CG in Geneva and Switzerland. Pasche F, et al. **Contact Dermatitis** 1989 Feb;20(2):115–9

Possible famotidine-induced thrombocytopenia [letter] Comer JB, et al. **DICP** 1989 Jun;23(6):507–8

Famotidine-associated mental confusion in elderly patients. Henann NE, et al. **Drug Intell Clin Pharm** 1988 Dec; 22(12):976–8

Safety profile of H2-receptor antagonists: current status of famotidine. Levine JB. **J Int Med Res** 1989;17 Suppl 1:48A–53A

Isothiazolinone preservative: cause of a continuing epidemic of cosmetic dermatitis. de Groot AC, et al. **Lancet** 1989 Feb 11;1(8633):314–6

Isothiazolinone sensitivity [letter] Fransway AF. **Lancet** 1989 Apr 22;1(8643):910

Impotence and nizatidine [letter] Kassianos GC. **Lancet** 1989 Apr 29;1(8644):963

Isothiazolinone [letter] Wooder MF. **Lancet** 1989 Mar 11; 1(8637):560

ANALYSIS

Visual compatibility of intravenous famotidine with selected drugs. Fong PA, et al. **Am J Hosp Pharm** 1989 Jan; 46(1):125–6

Immunotropic compounds. Structure and biological activity of L-cysteine and 1,3-thiazolidine-4-carboxylic acid derivatives. Kwapiszewski W, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):239–43

Kathon CG content in cosmetic products. Rastogi SC. **Contact Dermatitis** 1988 Oct;19(4):263

Stability of famotidine in minibags refrigerated and/or frozen. Bullock LS, et al. **DICP** 1989 Feb;23(2):132–5

Stability of intravenous famotidine stored in polyvinyl chloride syringes. Bullock LS, et al. **DICP** 1989 Jul–Aug; 23(7–8):588–90

Synthesis of N-(5-vinyl-1,3-thiazolidin-2-ylidene)phenylamine and analysis of oils implicated in the Spanish toxic oil syndrome for its presence. Bernert JT Jr, et al. **Food Chem Toxicol** 1989 Mar;27(3):159–64

Spanish toxic oil syndrome: an isothiocyanate-derived compound cannot be substantiated as a causative agent [letter] Verhaar HJ, et al. **Food Chem Toxicol** 1989 Mar; 27(3):205–6

Study of plasma, urine and gastric juice concentrations of famotidine using high performance liquid chromatography. Bologna M, et al. **Int J Clin Pharmacol Res** 1988; 8(5):335–40

Quantitation of N-[4-(5-nitro-2-furyl)-2-thiazolyl]formamide and 2-amino-4-(5-nitro-2-furyl)thiazole in rodent diet. Smith RA, et al. **J Chromatogr** 1989 Mar 31;465(2):442–7

Mammalian pheromone studies, VII. Identification of thiazole derivatives in the preorbital gland secretions of the grey duiker, Sylvicapra grimmia, and the red duiker, Cephalophus natalensis. Burger BV, et al. **Z Naturforsch [C]** 1988 Sep–Oct;43(9–10):731–6

ANTAGONISTS & INHIBITORS

Interference of flunoxaprofen, a non-steroidal anti-inflammatory agent, on the antihypertensive activity of etozoline. Lisa M, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1125–6

BIOSYNTHESIS

Formation of thiazolidine-4-carboxylic acid represents a main metabolic pathway of 5-hydroxytryptamine in rat brain. Susilo R, et al. **J Neurochem** 1989 Jun;52(6):1793–800

BLOOD

Plasma famotidine concentration versus intragastric pH in patients with upper gastrointestinal bleeding and in healthy subjects. Echizen H, et al. **Clin Pharmacol Ther** 1988 Dec; 44(6):690–8

Determination of pioglitazone in dog serum using solid-phase extraction and high-performance liquid chromatography with ultraviolet (229 nm) detection. Zhong WZ, et al. **J Chromatogr** 1989 May 30;490(2):377–85

CHEMICAL SYNTHESIS

Immunomodulation by the new synthetic thiazole derivative tiprotimod. 1st communication: synthesis and structure-activity relationships. Fleischmann K, et al. **Arzneimittelforschung** 1989 Jul;39(7):743–6

Synthesis of some thiazoline and thiazolidinone derivatives of 1,4-benzoquinone as potential antimicrobial agents.

el-Khawass SM, et al. **Farmaco** 1989 Apr;44(4):415–21

Bycyclic compounds with potential antiulcer and/or antisecretory activity. III—2-substituted tetrahydrothiazolo-[5,4-c]pyridines. Scarponi U, et al. **Farmaco [Sci]** 1988 Jul–Aug;43(7–8):575–96

3,3'-Di[1,3-thiazolidine-4-one]system. IV. Synthesis and pharmacological properties of 3,3'(1,2-ethanediyl)bis [2-aryl-1,3-thiazolidine-4-one 1,1-dioxide] derivatives. Vigorita MG, et al. **Farmaco [Sci]** 1988 Apr;43(4):373–9

Synthesis of N-(5-vinyl-1,3-thiazolidin-2-ylidene)phenylamine and analysis of oils implicated in the Spanish toxic oil syndrome for its presence. Bernert JT Jr, et al. **Food Chem Toxicol** 1989 Mar;27(3):159–64

The nature of the inhibition of 4,7-dioxobenzothiazole derivatives on mitochondrial ubiquinol-cytochrome c reductase. Yang FD, et al. **J Biol Chem** 1989 Jan 15; 264(2):891–8

Synthesis and structure-activity relationship of substituted tetrahydro- and hexahydro-1,2-benzisothiazol-3-one 1,1-dioxides and thiadiazinones: potential anxiolytic agents. Abou-Gharbia M, et al. **J Med Chem** 1989 May; 32(5):1024–33

In vitro antiproliferative activity of 4-substituted 2-(2-hydroxyphenyl)thiazolines on murine leukemia cells. Elliott GT, et al. **J Med Chem** 1989 May;32(5):1039–43

Synthesis and biological activity of isodithiobiurets, dithiobiurets, and dithiazoles. Pandeya SN, et al. **Pharm Res** 1987 Aug;4(4):321–6

Synthesis and characterization of new 2-(arylidenehydrazino)-4-methyl-5-(arylazo)thiazoles. Ergenç N, et al. **Pharmazie** 1988 Dec;43(12):832–4

Synthesis and antimicrobial activity of some N-monosubstituted 2-(2-aminothiazol-4-yl)-(Z)-2-methoxyiminoacetamides. Garuti L, et al. **Pharmazie** 1988 Aug;43(8):535–6

Synthesis of some thiazole derivatives with prospective local anaesthetic activity. Geronikaki A, et al. **Pharmazie** 1989 May;44(5):349

Synthesis of pyridylthiazoles as antisecretory agents. Kosáry J, et al. **Pharmazie** 1989 Mar;44(3):191–3

[Synthesis of the marine cyclopeptide thiazole amino acid component (D-Val)Thz] Long KH, et al. **Yao Hsueh Hsueh Pao** 1988 Apr;23(4):304–7 (Eng. Abstr.) **(Chi)**

[Synthesis and analgesic activity of new spiro-derivatives of benzothiazoline] Coudert P, et al. **J Pharm Belg** 1988 Jul–Aug;43(4):258–62 (Eng. Abstr.) **(Fre)**

[Synthesis and antifungal activity of new derivatives of 5-(4-halobenzoyl)-4-amino-3-(2-dialkylaminoethylthio)thieno [2,3-c] and [3,2-d] isothiazole] Romeo G, et al. **Farmaco [Sci]** 1988 May; 43(5):457–67 (Eng. Abstr.) **(Ita)**

[Synthesis of derivatives of 2-(2-amino-1,3-thiazol-4-yl)-2-hydroxyiminoacetic acid] Shiliaeva SV, et al. **Antibiot Khimioter** 1988 Sep;33(9):714–8 (43 ref.) **(Rus)**

DIAGNOSTIC USE

Spectrophotometric determination of some phenothiazine drugs using 3-methylbenzothiazolin-2-one hydrazone. el-Kommos ME, et al. **Analyst** 1988 Aug;113(8):1267–71

Flow cytometric reticulocyte quantification using thiazole orange provides clinically useful reticulocyte maturity index. Davis BH, et al. **Arch Pathol Lab Med** 1989 Jun; 113(6):684–9

The effect of K+ and glutamate receptor agonists on the membrane potential of suspensions of primary cultures of rat astrocytes as measured with a cyanine dye, DiS-C2-(5). Enkvist MO, et al. **Brain Res** 1988 Oct 11;462(1):67–75

Comparison of tetrazolium colorimetric and [3H]-uridine assays for in vitro chemosensitivity testing. Ford CH, et al. **Cancer Chemother Pharmacol** 1989;24(5):295–301

Chemosensitivity and radiosensitivity of small cell lung cancer cell lines studied by a newly developed 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (MTT) hybrid assay. Hida T, et al. **Cancer Res** 1989 Sep 1;49(17):4785–90

Detection of activated lymphocyte subsets by fluorescence and MTT staining. Schauer U, et al. **J Immunol Methods** 1989 Jan 17;116(2):221–7

Predictability of in vivo chemosensitivity by in vitro MTT assay with reference to the clonogenic assay. Shimoyama Y, et al. **J Surg Oncol** 1989 May;41(1):12–8

Use of the MTT assay for rapid determination of chemosensitivity of human leukemic blast cells. Campling BG, et al. **Leuk Res** 1988;12(10):823–31

Spectrophotometric determination of some anthelmintics and antiamoebic agents with 3-methyl-2-benzothiazolinone hydrazone hydrochloride. Sastry CS, et al. **Pharmazie** 1988 May;43(5):361

IMMUNOLOGY

Risk of sensitization to Kathon CG [letter] Bruze M, et al. **Contact Dermatitis** 1989 Jan;20(1):76–9

The irritancy and allergenicity of 2-n-octyl-4-isothiazolin-3-one (Skane M-8), with recommendations for patch test concentration. Emmett EA, et al. **Contact Dermatitis** 1989 Jan;20(1):21–6

Comparative studies of the sensitization potential of morpholine, 2-mercaptobenzothiazole and 2 of their derivatives in guinea pigs. Wang XS, et al. **Contact Dermatitis** 1988 Jul;19(1):11–5

ISOLATION & PURIFICATION

Isolation, via activity-directed fractionation, of mercaptobenzothiazole and dibenzothiazyl disulfide as 2 allergens responsible for tennis shoe dermatitis. Jung JH, et al. **Contact Dermatitis** 1988 Oct;19(4):254–9

Structural identification of a heterocyclic compound implicated in the Spanish toxic oil syndrome. Nomura GS, et al. **Food Chem Toxicol** 1989 Mar;27(3):165–71

METABOLISM

The aminothiazol-oxyimino cephalosporin antibiotics with quaternary ammonium substituents at the 3-position (a review). Uri JV, et al. **Acta Microbiol Hung** 1988; 35(4):327–59 (148 ref.)

Macrophage-mediated N-nitrosation of thioproline and proline. Miwa M, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):373–8

Kinetics and mechanism of the glutathione-dependent reduction of dehydromethionine. Young PR, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):318–21

Metabolism of N-nitroso-1,3-thiazolidine in the rat. Cragin DW, et al. **Food Chem Toxicol** 1989 Feb;27(2):105–10

High-performance liquid chromatography of antifilarials. II. Determination of S-(2-carboxyethyl)-N-(2-tert.-butyl-5-methoxy-benzthiazol- 6-yl)dithiocarbamate and its active isothiocyanate metabolite in biological fluids. Bhatia SC, et al. **J Chromatogr** 1988 Dec 29;434(1):296–302

High-performance liquid chromatography of antifilarials. III. Determination of 2-tert.-butyl-6-isothiocyanato-5-(piperidin-1-yl)-benzthiazole in biological fluids. Bhatia SC, et al. **J Chromatogr** 1988 Dec 29;434(1):303–7

Kinetics of some benzothiazoles, benzoxazoles, and quinolines as substrates and inhibitors of rabbit liver aldehyde oxidase. Gristwood W, et al. **Xenobiotica** 1988 Aug;18(8):949–54

[Spectral features of amines of 2-phenylbenzazoles upon interaction with DNA] Ivanov SD, et al. **Bioorg Khim** 1989 May;15(5):648–55 (Eng. Abstr.) **(Rus)**

[Differences in the binding of thiamine and oxythiamine in the pancreas] Ostrovskii IuM. **Dokl Akad Nauk SSSR** 1988; 302(4):995–8 **(Rus)**

PHARMACOKINETICS

Pharmacokinetics and dynamics of famotidine in patients with renal failure. Gladziwa U, et al. **Br J Clin Pharmacol** 1988 Sep;26(3):315–21

Effects of the pH dependence of 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl-tetrazolium bromide-formazan absorption on chemosensitivity determined by a novel tetrazolium-based assay. Plumb JA, et al. **Cancer Res** 1989 Aug 15;49(16):4435–40

Disposition and metabolism of letosteine in rats. Gachon F, et al. **Drug Metab Dispos** 1988 Nov-Dec;16(6):853–7

Pharmacokinetics and metabolism of SK&F 86002 in male and female Sprague-Dawley rats. Newton JF, et al. **Drug Metab Dispos** 1989 Mar-Apr;17(2):174–9

Pharmacokinetics of famotidine in elderly patients with and without renal insufficiency and in healthy young volunteers. Inotsume N, et al. **Eur J Clin Pharmacol** 1989; 36(5):517–20

High-performance liquid chromatographic assay of nesosteine in human plasma and urine. Girometta MA, et al. **J Chromatogr** 1989 Jan 27;487(1):117–24

Impaired bioavailability of famotidine given concurrently with a potent antacid. Barzaghi N, et al. **J Clin Pharmacol** 1989 Jul;29(7):670–2

Oral bioavailability of nizatidine and ranitidine concurrently administered with antacid. Desager JP, et al. **J Int Med Res** 1989 Jan-Feb;17(1):62–7

Ocular distribution studies of the topical carbonic anhydrase inhibitors L-643,799 and L-650,719 and related alkyl prodrugs. Grove J, et al. **J Ocul Pharmacol** 1988 Winter; 4(4):279–90

Disposition of 2-mercaptobenzothiazole and 2-mercaptobenzothiazole disulfide in rats dosed intravenously, orally, and topically and in guinea pigs dosed topically. el Dareer SM, et al. **J Toxicol Environ Health** 1989;27(1):65–84

[Metabolism of L-thiazolidine-4-carboxylic acid] Böhler S, et al. **Infusionstherapie** 1989 Apr;16(2):82–6 (Eng. Abstr.) **(Ger)**

[Absorption, distribution, metabolism and excretion of N-cyclohexyl-2-benzothiazyl sulfenamide (CBS), a vulcanizing accelerator, in rats] Adachi T, et al. **Radioisotopes** 1989 May;38(5):255–8 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Do ranitidine and nizatidine influence pepsin secretion? Vianello F, et al. **Acta Gastroenterol Belg** 1988 Mar-Apr; 51(2):154–8

Tumor necrosis factor-induced bowel necrosis: the role of platelet-activating factor. Hsueh W, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:363–6

H2-receptor antagonist activity of N-methylthiourea, N-cyano-N'-methylguanidine, N-cyanoamidine, N-carbamoylamidine and N-sulfamoylamidine 5-substituted thiazole derivatives on guinea-pig atria. Barocelli E, et al. **Agents Actions** 1989 Apr;27(1-2):195–7

Influence of urea-equivalent groups in position 5 of 2-amino, 2-(1-aminoethylidenamino) and 2-guanidino thiazole derivatives on H2-receptor antagonist activity in gastric fistula cat. Chiavarini M, et al. **Agents Actions** 1989 Apr; 27(1-2):192–4

Diacylglycerol kinase inhibitor R59022 and stimulated neutrophil responses. Mege JL, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C589–94

Iron chelators: in vitro inhibitory effect on the liver stage of rodent and human malaria. Stahel E, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):236–40

Effect of oral and intramuscular famotidine on pH and volume of gastric contents. Abe K, et al. **Anesth Analg** 1989 Apr;68(4):541–4

Synthesis, biological activity and DNA interaction of anilinoacridine and bithiazole peptide derivatives related to the anti-tumor drugs m-AMSA and bleomycin. Morier-Teissier E, et al. **Anticancer Drug Des** 1989 Jun; 4(1):37–52

Effect of H2 antagonists cimetidine and famotidine on the hemotoxicity of cyclophosphamide. Lerza RA, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1241–5

Interaction between R 56865 and alpha-adrenoceptors in the pithed rat. Koch P, et al. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:134–43

Effect of inhibitors of eicosanoid metabolism in murine collagen-induced arthritis. Griswold DE, et al. **Arthritis Rheum** 1988 Nov;31(11):1406–12

General pharmacology of nizatidine in animals. Bemis K, et al. **Arzneimittelforschung** 1989 Feb;39(2):240–50

Diacylglycerol kinase inhibitors R59022 and dioctanoylethylene glycol potentiate the respiratory burst of neutrophils by raising cytosolic Ca2+. Nasmith P, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):95–100

Inhibition of superoxide anion radical production by ebselen (PZ51) and its sulfur analogue (PZ25) in guinea pig alveolar macrophages. Leura R, et al. **Biochem Int** 1989 Feb; 18(2):295–9

Differential effects of cimetidine, ranitidine and famotidine on the hepatic metabolism of estrogen and testosterone in male rats. Galbraith RA, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):2046–9

Actions of the brain-penetrating H2-antagonist zolantidine on histamine dynamics and metabolism in rat brain. Hough LB, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4707–11

Studies on heterocyclic compounds: 1,3-thiazolidin-4-oses from Schiff bases. Piscopo E, et al. **Boll Soc Ital Biol Sper** 1988 Feb;64(2):153–8

A comparison of the influence of famotidine and cimetidine on phenytoin elimination and hepatic blood flow. Sambol NC, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):83–7

Pharmacological modulation of Paf-induced rat pleurisy and its role in inflammation by zymosan. Martins MA, et al. **Br J Pharmacol** 1989 Feb;96(2):363–71

Selective inhibition of adrenaline-induced human platelet aggregation by the structurally related Paf antagonist Ro 19-3704. Schattner M, et al. **Br J Pharmacol** 1989 Apr; 96(4):759–66

Administration of L-2-oxothiazolidine-4-carboxylate increases glutathione levels in rat brain. Mesina JE, et al. **Brain Res** 1989 Jan 23;478(1):181–3

Influence of a cysteine prodrug, L-2-oxothiazolidine-4-carboxylic acid, on the urinary elimination of mercapturic acids of ethylene oxide, dibromoethane, and acrylonitrile: a dose-effect study. Goyal R, et al. **Can J Physiol Pharmacol** 1989 Mar; 67(3):207–12

Latrunculins—novel marine macrolides that disrupt microfilament organization and affect cell growth: I. Comparison with cytochalasin D. Spector I, et al. **Cell Motil Cytoskeleton** 1989;13(3):127–44

Famotidine effects on theophylline pharmacokinetics in subjects affected by COPD. Comparison with cimetidine and placebo. Verdiani P, et al. **Chest** 1988 Oct;94(4):807–10

Protective effect of SK&F 86002, a novel dual inhibitor of arachidonic acid metabolism, in murine models of endotoxin shock: inhibition of tumor necrosis factor as a possible mechanism of action. Badger AM, et al. **Circ Shock** 1989 Jan;27(1):51–61

2-(4'-chlorophenyl)benzothiazole is a potent inducer of cytochrome P450IA1 in a human and a mouse cell line. Anomalous correlation between protein and mRNA induction. Kärenlampi SO, et al. **Eur J Biochem** 1989 Apr 15;181(1):143–8

Pharmacological control of the human gastric histamine H2 receptor by famotidine: comparison with H1, H2 and H3 receptor agonists and antagonists. Gespach C, et al. **Eur J Clin Invest** 1989 Feb;19(1):1–10

Do nizatidine and cimetidine interact with ibuprofen? Forsyth DR, et al. **Eur J Clin Pharmacol** 1988;35(1):85–8

The protective action of R56865 against ouabain-induced intoxication in rat heart isolated atria and ventricles. Finet M, et al. **Eur J Pharmacol** 1989 May 30;164(3):555–63

Different effects of R 56865 and calcium entry blockers on K+- and noradrenaline-induced contractions and 45Ca uptake in rat aorta. Koch P, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):183–90

The diacylglycerol kinase inhibitor, R 59022, suppresses

contractility of intestinal smooth muscle. Lippe IT, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):1–8

Litomosoides carinii: mode of action in vitro of benzothiazole and amocanate derivatives with antifilarial activity. Davies KP, et al. **Exp Parasitol** 1989 May;68(4):382–91

Marked increase of cysteine levels in many regions of the brain after administration of 2-oxothiazolidine-4-carboxylate. Anderson ME, et al. **FASEB J** 1989 Mar;3(5):1632–6

Increased protein synthesis response to insulin in fibroblasts treated with the diacylglycerol kinase inhibitor R59022. Hesketh JE, et al. **FEBS Lett** 1988 Dec 5;241(1–2):115–8

The inhibitory effect of thioproline on carcinogenesis induced by N-benzylmethylamine and nitrite. Tahira T, et al. **Food Chem Toxicol** 1988 Jun;26(6):511–6

Negative effects of famotidine on cardiac performance assessed by noninvasive hemodynamic measurements. Kirch W, et al. **Gastroenterology** 1989 Jun;96(6):1388–92

Rebound nocturnal hypersecretion after four weeks treatment with an H2 receptor antagonist. Fullarton GM, et al. **Gut** 1989 Apr;30(4):449–54

Twenty four hour intragastric acidity and plasma gastrin concentration in healthy volunteers taking nizatidine 150 mg, nizatidine 300 mg, ranitidine 300 mg, or placebo at 21:00 h [published erratum appears in Gut 1989 Jan;30(1):144] Lanzon-Miller S, et al. **Gut** 1988 Oct; 29(10):1364–9

Inhibition of monocyte IL-1 production by the anti-inflammatory compound, SK&F 86002. Lee JC, et al. **Int J Immunopharmacol** 1988;10(7):835–43

Thiazolidine derivatives as potent inhibitors specific for prolyl endopeptidase. Tsuru D, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):580–6

Electrophysiologic effects of a novel Ca antagonist, SA2572, in isolated rabbit and guinea pig hearts. Miyawaki N, et al. **J Cardiovasc Pharmacol** 1988 Jul;12(1):65–71

Lack of interaction between nizatidine and warfarin during chronic administration. Cournot A, et al. **J Clin Pharmacol** 1988 Dec;28(12):1120–2

Organic phosphorus compounds. 2. Synthesis and coronary vasodilator activity of (benzothiazolylbenzyl) phosphonate derivatives. Yoshino K, et al. **J Med Chem** 1989 Jul; 32(7):1528–32

Effect of an aldose reductase inhibitor, CT-112, on healing of the corneal epithelium in galactose-fed rats. Awata T, et al. **J Ocul Pharmacol** 1988 Fall;4(3):195–201

Ocular penetration and hypotensive activity of the topically applied carbonic anhydrase inhibitor L-645,151. Bar-Ilan A, et al. **J Ocul Pharmacol** 1986 Spring;2(2):109–20

Inhibition of acetylcholinesterase by the H2-receptor antagonist nizatidine. Kounenis G, et al. **J Pharmacobiodyn** 1988 Nov;11(11):767–71

Acute effects of ranitidine, famotidine and omeprazole on plasma gastrin in the rat. Decktor DL, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):1–5

Inhibition of naloxone-reaistant antinociception by centrally administered H2-antagonists. Gogas KR, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):262–7

Protection by L-2-oxothiazolidine-4-carboxylate, a cysteine prodrug, against 1,1-dichloroethylene hepatotoxicity in rats is associated with decreases in toxin metabolism and cytochrome P-450. Moslen MT, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):157–63

B cell suppressing and CD8+ T cell enhancing effects of photosensitive dye platonin in humans. Kondo N, et al. **J Rheumatol** 1989 Jul;16(7):936–9

Latrunculin A is a potent inhibitor of phagocytosis by macrophages. de Oliveira CA, et al. **Life Sci** 1988; 43(22):1825–30

Glyburide but not ciglitazone enhances insulin action in the liver independent of insulin receptor kinase activation. Caro JF, et al. **Metabolism** 1989 Jul;38(7):606–11

Bacterial genotoxicity of nitrosated famotidine. De Flora S, et al. **Mutagenesis** 1986 Mar;1(2):125–30

Histaminergic regulation of prolactin secretion: involvement of tuberoinfundibular dopaminergic neurons. Knigge U, et al. **Neuroendocrinology** 1988 Aug;48(2):167–73

6-amino-2-benzothiazole-sulfonamide. The effect of a topical carbonic anhydrase inhibitor on aqueous humor formation in the normal human eye. Kalina PH, et al. **Ophthalmology** 1988 Jun;95(6):772–7

H2-receptor-mediated stress-induced analgesia is dependent on neither pituitary nor adrenal activation. Gogas KR, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):791–4

Sabeluzole (R58 735) increases consistent retrieval during serial learning and relearning of nonsense syllables. Clincke GH, et al. **Psychopharmacology (Berlin)** 1988;96(3):309–10

Effects of a cysteine precursor, L-2-oxothiazolidine-carboxylate, nutritional status, and sex on tissue glutathione and hepatic GSH-utilizing enzymes of CD-1 mice [published erratum appears in Res Commun Chem Pathol Pharmacol 1988 Sep;61(3):432] Moslen MT, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jul;61(1):49–63

[Relation between the chemical structure of substances and their antimicrobial action against atypical strains. II. 6-acycloamido-2-alkylthiobenzothiazoles, quantitative relation to their effectiveness spectrum] Macháček M, et al. **Cesk Farm** 1989 Feb;38(1):9–15 (Eng. Abstr.) **(Cze)**

[Invasive and non-invasive studies of the protective action of a silicon-containing cream and its excipient in skin irritation induced by sodium laurylsulfate] Nouaigui H, et al. **Ann Dermatol Venereol** 1989;116(5):389–98 (Eng. Abstr.) **(Fre)**

[Inhibition of 24-hour acidity by nizatidine] Dammann HG, et al. **Fortschr Med** 1989 May 10;107(14):321–4 (Eng. Abstr.) **(Ger)**

[Negative inotropic action of famotidine] Kirch W, et al. **Schweiz Med Wochenschr** 1988 Dec 17;118(50):1912–4 (Eng. Abstr.) **(Ger)**

[Effects of famotidine on plasma pentazocine concentration in surgical patients] Takahashi S, et al. **Masui** 1988 Jun; 37(6):701–6 (Eng. Abstr.) **(Jpn)**

[The effects of famotidine and omeprazole on 24-hour intragastric pH of normal subjects] Ohara S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1353–9 (Eng. Abstr.) **(Jpn)**

[Effect of nizatidine on the 14C-aminopyrine accumulation by isolated guinea pig parietal cells] Saito E, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2475 **(Jpn)**

[Effect of an H+, K+-ATPase inhibitor, omeprazole (OPZ), on gastric acid secretion and gastric or duodenal lesion. Comparison with an H2-receptor antagonist, famotidine (FMD)] Haga K, et al. **Nippon Yakurigaku Zasshi** 1988 Jul;92(1):39–47 (Eng. Abstr.) **(Jpn)**

[Effects of nizatidine, a new histamine H2-receptor antagonist, on gastric acid secretion and various gastric and duodenal lesions in rats: comparison with cimetidine] Okabe S, et al. **Nippon Yakurigaku Zasshi** 1989 Mar; 93(3):133–44 (Eng. Abstr.) **(Jpn)**

[Effects of omeprazole and famotidine on (H+-K+) ATPase and acid secretion in rabbit gastric glands] Tomoi M, et al. **Nippon Yakurigaku Zasshi** 1988 Aug;92(2):105–11 (Eng. Abstr.) **(Jpn)**

[Antivitamin activity of O-acyloxythiamine disulfides] Zimatkina TI, et al. **Ukr Biokhim Zh** 1988 Nov-Dec; 60(6):43–8 (Eng. Abstr.) **(Rus)**

[Effect of acute vitamin B1 deficiency caused by oxythiamine on protein biosynthesis in the spleen during immunogenesis] Dvorianinovich LN. **Vopr Med Khim** 1988 Jul-Aug; 34(4):71–4 (Eng. Abstr.) **(Rus)**

[Inhibition of Candida albicans transformation from the yeast form to the mycelial form by 2-alkylthio-6-amino- and 2-alkylthio-6-formamido- benzothiazoles] Kuchta T, et al. **Cesk Farm** 1989 Apr;38(3):139–40 (Eng. Abstr.) **(Slo)**

[The effects of the plant growth regulator 3-benzylbenzothiazolium bromide on growth processes in Japanese quail] Paulov S. **Vet Med (Praha)** 1988 Sep; 33(9):557–60 (Eng. Abstr.) **(Slo)**

THERAPEUTIC USE

Drugs recently released in Belgium. Recombinant DNA tissue plasminogen activator (rt-PA) famotidine-sultamicillin. Harvengt C. **Acta Clin Belg** 1988; 43(5):396–400

Famotidine in the short and long-term treatment of duodenal ulcer. Zaterka S, et al. **Acta Gastroenterol Latinoam** 1988; 18(2):115–21

Beneficial effects of glucose polymer and an H2-receptor blocker in a patient with a proximal ileostomy. Saunders DR, et al. **Am J Gastroenterol** 1989 Feb;84(2):192–4

Comparison of the effects of famotidine and ranitidine on gastric secretion in patients undergoing elective surgery. Escolano F, et al. **Anaesthesia** 1989 Mar;44(3):212–5

Famotidine therapy for active duodenal ulcers. A multivariate analysis of factors affecting early healing. Reynolds JC. **Ann Intern Med** 1989 Jul 1;111(1):7–14

Inhibition of experimental allergic encephalomyelitis by a new anti-inflammatory compound—SK&F 86002. DiMartino MJ, et al. **Ann N Y Acad Sci** 1988;540:578–80

A non-human primate model for the study of oral iron chelators. Wolfe LC, et al. **Br J Haematol** 1989 Jul; 72(3):456–61

Fourth histamine antagonist, nizatidine, reaches U.S. market [news] **Clin Pharm** 1988 Aug;7(8):560

Characterization of new oral antidiabetic agent CS-045. Studies in KK and ob/ob mice and Zucker fatty rats. Fujiwara T, et al. **Diabetes** 1988 Nov;37(11):1549–58

Effect of prostaglandin E1 analogue TFC 612 on diabetic neuropathy in streptozocin-induced diabetic rats. Comparison with aldose reductase inhibitor ONO 2235. Yasuda H, et al. **Diabetes** 1989 Jul;38(7):832–8

Randomized, double-blind comparison of famotidine with ranitidine in treatment of acute, benign gastric ulcer disease. Community-based study coupled with a patient registry. Brazer SR, et al. **Dig Dis Sci** 1989 Jul;34(7):1047–52

A multicenter, randomized, double-blind study comparing a daily bedtime administration of famotidine and ranitidine in short-term treatment of active duodenal ulcer. Alcalá-Santaella R, et al. **Digestion** 1989;42(2):79–85

Famotidine versus cimetidine in the treatment of acute duodenal ulcer. Double-blind, randomized clinical trial comparing nocturnal administration of 40 mg famotidine to 800 mg cimetidine. Hartmann H, et al. **Digestion** 1988; 39(3):156–61

A multicenter, randomized, double-blind study comparing famotidine with cimetidine in the treatment of active duodenal ulcer disease. Rodrigo L, et al. **Digestion** 1989; 42(2):86–92

Use of microbleeding and an ultrathin endoscope to assess gastric mucosal protection by famotidine. Daneshmend TK, et al. **Gastroenterology** 1989 Oct;97(4):944–9

Suppression of nocturnal acid secretion with famotidine accelerates gastric ulcer healing. McCullough AJ, et al. **Gastroenterology** 1989 Oct;97(4):860–6

Rheological profile of nesosteine: a new mucoactive agent. Braga PC, et al. **Int J Clin Pharmacol Res** 1989;9(1):77–83

A review of developments in H2-receptor antagonist therapy: focus on famotidine. Proceedings of an official satellite symposium to the 8th Asian-Pacific Congress on Gastroenterology and the 5th Asian-Pacific Congress of Digestive Endoscopy. Seoul, Korea, 10 October 1988. **J Int Med Res** 1989;17 Suppl 1:1A–53A

Treatment of upper gastro-intestinal bleeding with the H2-receptor antagonist famotidine. Aoki T. **J Int Med Res** 1989;17 Suppl 1:32A–40A

Famotidine in the treatment of duodenal ulcers resistant to other histamine H2-receptor antagonists. Chen PH, et al. **J Int Med Res** 1989;17 Suppl 1:25A–31A

Famotidine in the USA: a review of efficacy studies. Gitnick G. **J Int Med Res** 1989;17 Suppl 1:17A–24A (8 ref.)

Clinical evaluation of 20 mg/day famotidine in the treatment of acute gastric mucosal lesions. Miwa T. **J Int Med Res** 1989;17 Suppl 1:41A–47A

Aminozolamide suspension: the role of the vehicle in a topical carbonic anhydrase inhibitor. Lewis RA, et al. **J Ocul Pharmacol** 1988 Fall;4(3):215–9

Healing and relapse rates of duodenal ulcer with various H2 receptor antagonists. Ahmed W, et al. **JPMA** 1988 Dec; 38(12):319–22

Double pylorus accompanied by gastric ulcer resistant to H2-receptor antagonist—a case report and review of the literature. Yoshimura Y, et al. **Kobe J Med Sci** 1988 Aug; 34(4):151–9 (13 ref.)

Comparative study of famotidine and metoclopramide alone or combined for prophylaxis of aspiration pneumonitis. Chan-Liao DM, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun; 26(2):139–46

A comparison of nizatidine with the three other histamine receptor antagonists for duodenal ulcer therapy. Lima M, et al. **Nurse Pract** 1989 Feb;14(2):41–2

[Effectiveness and tolerance of a new molecule with secreto-dynamic activity: nesosteine] Gatto PG, et al. **Clin Ter** 1989 Jan 31;128(2):87–97 (Eng. Abstr.) **(Ita)**

[Famotidine in the therapy and prevention of duodenal ulcer] Reggio D, et al. **Clin Ter** 1988 Oct 31;127(2):105–11 (Eng. Abstr.) **(Ita)**

[Famotidine in the short and long term treatment of duodenal ulcer: clinical and physiopathologic study] Vio A, et al. **G Clin Med** 1989 Mar;70(3):195–201 (Eng. Abstr.) **(Ita)**

[Nizatidine] Romero M, et al. **Medicina (Firenze)** 1989 Jan-Mar;9(1):93–6 (19 ref.) (Eng. Abstr.) **(Ita)**

[Chemotherapeutic effectiveness of preparation B-40 in experimental staphylococcal infection] Pavlii SI, et al. **Mikrobiol Zh** 1989 Jan-Feb;51(1):95–7 (Eng. Abstr.) **(Rus)**

[Treatment of duodenal ulcer with famotidine. (Multicenter study)] Bernal Sahagún F, et al. **Rev Gastroenterol Mex** 1989 Jan-Mar;54(1):13–7 (Eng. Abstr.) **(Spa)**

[Treatment of gastric ulcer with famotidine. (Multicenter study)] Bernal Sahagún F, et al. **Rev Gastroenterol Mex** 1989 Jan-Mar;54(1):7–11 (Eng. Abstr.) **(Spa)**

TOXICITY

Spanish toxic oil syndrome: an isothiocyanate-derived compound cannot be substantiated as a causative agent [letter] Verhaar HJ, et al. **Food Chem Toxicol** 1989 Mar; 27(3):205–6

Evaluation of the teratogenic potential of the rubber accelerator N-cyclohexyl-2-benzothiazylsulfenamide in rats. Ema M, et al. **J Appl Toxicol** 1989 Jun;9(3):187–90

Decreased de novo synthesis of proteoglycans in drug-induced renal cystic disease. Lelongt B, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9047–51

[Biological side-effects of potential anti-tubercular agents. XIV. Relation between the chemical structure, antitubercular activity and hepatotoxicity of 2-alkylthio-6-(2-chlorobenzamido) benzothiazoles] Waisser K, et al. **Cesk Farm** 1988 Dec;37(10):437–9 (Eng. Abstr.) **(Cze)**

[Cytogenetic activity of the butylcaptax defoliant transformation product] Vesmanova OIa, et al. **Tsitol Genet** 1989 May-Jun;23(3):70–2 (Eng. Abstr.) **(Rus)**

URINE

HPLC reveals famotidine in the urine up to five days after a single 20 mg oral dose. Bologna M, et al. **Drugs Exp Clin Res** 1988;14(6):419–21

Determination of urinary 2-thiothiazolidine-4-carboxylic acid by automated high performance liquid chromatography, as an index of carbon disulfide exposure. Ogata M, et al. **Ind Health** 1989;27(1):31–5

High-performance liquid chromatographic determination of famotidine in urine. Rahman A, et al. **J Chromatogr** 1988 Jul 15;428(2):395–401

THIENAMYCINS

CHEMICAL SYNTHESIS

Synthetic studies of 1-beta-methylcarbapenem antibiotics. Shibata T, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):374–81

Synthesis and in vitro activity of 1 beta-methyl C-2

quaternary heterocyclic alkylthio carbapenems. Kim CU, et al. **J Med Chem** 1989 Mar;32(3):601–4

PHARMACOLOGY

In vitro antibacterial activity of SM–7338, a carbapenem antibiotic with stability to dehydropeptidase I. Edwards JR, et al. **Antimicrob Agents Chemother** 1989 Feb; 33(2):215–22

Multicenter in vitro evaluation of SM–7338, a new carbapenem. Jones RN, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):562–5

In vitro activity and beta-lactamase stability of a new carbapenem, SM–7338. Neu HC, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1009–18

Synthesis and antibacterial activity of 5-methylcarbapenems. Onoue H, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1100–13

THERAPEUTIC USE

The effect of antimicrobial prophylaxis for thoracic noncardiac surgery: thienamycin versus cefazolin. Perliková I, et al. **Int J Clin Pharmacol Res** 1988;8(4):267–9

THIEPINS

PHARMACOLOGY

Characterization of DNA damage and cytotoxicity induced in two human colon carcinoma cell lines by cyclodisone. Gibson NW. **Cancer Res** 1989 Jan 1;49(1):154–7

TOXICITY

Comparison of the in vitro cytotoxicity of cyclodisone with a series of structurally related analogues. Gibson NW. **Anticancer Drug Des** 1988 Dec;3(3):199–204

THIETHYLPERAZINE

ADVERSE EFFECTS

[Extrapyramidal side effects after long-term treatment with thiethylperazine] Brennum J. **Ugeskr Laeger** 1988 Nov 14; 150(46):2827 (Eng. Abstr.) **(Dan)**

PHARMACOLOGY

The effect of Torecane on the female rat spleen during pregnancy. Zarębska A. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:241–6

THIGH

Intramuscular myxoma: a rare but important association with fibrous dysplasia of bone. Sundaram M, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):107–8

Radiological case of the month. Hemangioma of the thigh. Weisberg AL, et al. **Am J Dis Child** 1989 Mar;143(3):379–80

Thigh musculature in relation to chronic anterior cruciate ligament tear: muscle size, morphology, and mechanical output before reconstruction. Lorentzon R, et al. **Am J Sports Med** 1989 May–Jun;17(3):423–9

Isokinetic peak torque and work relationship in the laterally unstable knee. Kannus VP. **Can J Sport Sci** 1989 Mar; 14(1):17–20

Torque acceleration energy, power and peak torque in thigh muscles after a previous knee sprain. Kannus VP, et al. **Can J Sport Sci** 1989 Jun;14(2):103–6

Aggressive infantile fibromatosis. Pulmonary metastases documented by plain film and computed tomography. Shankwiler RA, et al. **Clin Imaging** 1989 Jun;13(2):127–9

Malignant neuroepithelioma (peripheral neuroblastoma). A case report. Buckley SL, et al. **Clin Orthop** 1989 Jun; (243):220–4

Pyomyositis mimicking soft-tissue sarcoma. Pittam MR. **Eur J Surg Oncol** 1988 Oct;14(5):459–61

The effect of aminophylline on respiratory and limb muscle contractility in man. Brophy C, et al. **Eur Respir J** 1989 Jul;2(7):652–5

Stiff knee following intramuscular injection into the thigh [letter] Kulkarni BK. **Indian Pediatr** 1989 Feb;26(2):194–6

Femoral pain of solitary neurofibromatous origin. Sharma SC, et al. **Indian Pediatr** 1988 Dec;25(12):1221–3

Coactivation of the hamstrings and quadriceps during extension of the knee. Draganich LF, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1075–81

Neurilemoma in the distal part of the thigh. A case report. Roberts CS, et al. **J Bone Joint Surg [Am]** 1989 Aug; 71(7):1082–3

Abductor function after total hip replacement. An electromyographic and clinical review. Baker AS, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):47–50

Resection of a tumor of the psoas muscle. Shamberger RC, et al. **J Pediatr Surg** 1989 Sep;24(9):933–5

Compartment syndrome of the thigh [editorial] **Lancet** 1989 Aug 26;2(8661):485–6

A case report of malignant mesenchymoma with discussion of musculoskeletal tumor staging: the Enneking system. DePaolo CJ, et al. **Orthopedics** 1988 Sep;11(9):1263–76

Techniques to deliver high dose localized irradiation for tissue-sparing management of sarcomas. Kumar PP, et al. **Radiat Med** 1988 Jul–Aug;6(4):171–8

Imaging of atypical lipomas of the extremities: report of three cases. Bush CH, et al. **Skeletal Radiol** 1988;17(7):472–5

Case report 499: Benign mesenchymoma of right thigh. Hertzanu Y, et al. **Skeletal Radiol** 1988;17(6):447–9

Case report 489: Hibernoma of left thigh. Nigrisoli M, et al. **Skeletal Radiol** 1988;17(6):432–5

Melanotic neuroectodermal tumor of infancy occurring in the left thigh of a 6-month-old female infant. Scheck O, et al. **Ultrastruct Pathol** 1989 Jan–Feb;13(1):23–33

[CT diagnosis of soft-tissue tumors of the extremities, buttock and chest wall] Zeng YL. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Oct;22(5):290–3 (Eng. Abstr.) **(Chi)**

[A study of quadriceps contracture-causing factor by the analysis of muscle injection according to medical records] Nakagawa T, et al. **Nippon Eiseigaku Zasshi** 1988 Aug; 43(3):724–35 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Thigh circumference in the detection of intrauterine growth retardation. Hill LM, et al. **Am J Perinatol** 1989 Jul; 6(3):349–52

Fiber type, fiber size, and capillary geometric features of the semitendinosus muscle in three types of dogs. Rosenblatt JD, et al. **Am J Vet Res** 1988 Sep;49(9):1573–6

Thigh circumference in assessing malnutrition in preschool children. Mohan M, et al. **Indian Pediatr** 1988 Mar; 25(3):255–7

Thigh circumference at birth as the best predictor of low birth weight babies. Sharma JN, et al. **Indian Pediatr** 1989 Jan;26(1):18–21

Measurement of quadriceps muscle thickness and subcutaneous tissue thickness in normal children by real-time ultrasound imaging. Heckmatt JZ, et al. **JCU** 1988 Mar–Apr;16(3):171–6

Longitudinal structure and innervation of two mammalian hindlimb muscles. Manzano G, et al. **Muscle Nerve** 1988 Nov;11(11):1115–22

US location of the adductor canal hiatus: morphologic study. Scholten FG, et al. **Radiology** 1989 Jul;172(1):75–8

BLOOD SUPPLY

Number and anatomical distribution of incompetent thigh perforating veins. Papadakis K, et al. **Br J Surg** 1989 Jun; 76(6):581–4

Altering local soft-tissue circulation fails to halt venous drainage from the femur. Culbertson MC 3d, et al. **Clin Orthop** 1989 Apr;(241):251–6

Ischaemic mouse thigh model for evaluation of pathogenicity of non-clostridial anaerobes. Chatterjee BD, et al. **Indian J Med Res** 1989 Jan;89:36–9

Differentiation and treatment of hemangiomas and arteriovenous malformations. Smith MB, et al. **J La State Med Soc** 1989 Jun;141(6):41–3

Use of contralateral rectus femoris flap: an alternative for covering exposed femoral vessels of the thigh. Madariaga J, et al. **J Surg Oncol** 1989 Jul;41(3):206–9

[Decrease of postoperative edema following arterial reconstruction of the thigh by aprotinin] Greve H, et al. **Vasa Suppl** 1988;23:276–9 **(Ger)**

INJURIES

Venous insufficiency in a young man secondary to a traumatic arteriovenous fistula. Psaila JV, et al. **Ann Vasc Surg** 1989 Jan;3(1):63–7

Gunshot wound of the thigh presenting as a massive hemorrhage to the scrotum. Moskovitz B, et al. **Isr J Med Sci** 1988 Nov;24(11):684–5

Report of a case: foreign body embolism. Miller WA. **J Okla State Med Assoc** 1988 Nov;81(11):689–90

Acute anterior compartment syndrome in the thigh: a case report and review of the literature. An HS, et al. **J Orthop Trauma** 1987;1(2):180–2

Acute anterior compartmental syndrome of the thigh following contusion. A case report and review of the literature. Gorman PW, et al. **J Orthop Trauma** 1987; 1(1):68–70 (14 ref.)

Compartment syndrome of the thigh complicating surgical treatment of ipsilateral femur and ankle fractures. Moore MR, et al. **J Orthop Trauma** 1987;1(1):71–3

Successful limb reperfusion by temporary arterial shunt during a 950-mile air transfer: case report. Johansen K, et al. **J Trauma** 1989 Sep;29(9):1289–91

[2-stage reconstruction in large loss of substance of the thigh using a fasciocutaneous flap and later on massive bone allograft] Le Huec JC, et al. **Rev Chir Orthop** 1989; 75(2):125–9 (Eng. Abstr.) **(Fre)**

INNERVATION

Aberrant cutaneous nerve of the thigh arising from the sciatic nerve in the human. Horiguchi M, et al. **Acta Anat (Basel)** 1988;133(2):118–21

Saphenous nerve entrapment at the adductor canal. Romanoff ME, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):478–81

Meralgia paraesthetica of spinal origin: brief report. Jiang GX, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):843–4

Posterior femoral cutaneous neuralgia. Chutkow JG. **Muscle Nerve** 1988 Nov;11(11):1146–8

PATHOLOGY

Stiff knee following intramuscular injection into the thigh. Mukherjee PK, et al. **Indian Pediatr** 1988 Apr;25(4):343–9

Assessment of quadriceps femoris muscle atrophy and hypertrophy in neuromuscular disease in children. Heckmatt JZ, et al. **JCU** 1988 Mar–Apr;16(3):177–81

MRI of thorotrastoma. Keidan RD, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):717–20

PHYSIOLOGY

The Gerace reflex [letter] Gerace JR. **Am J Obstet Gynecol** 1988 Nov;159(5):1309

Coordination of the thigh muscles in static leg extension. Eloranta V. **Electromyogr Clin Neurophysiol** 1989 May–Jun;29(4):227–33

Projections of group Ia afferents to motoneurons of thigh muscles in man. Bayoumi A, et al. **Exp Brain Res** 1989; 76(1):223–8

Electrical stimulation of quadriceps femoris in an elite weight lifter: a single subject experiment. Delitto A, et al. **Int J Sports Med** 1989 Jun;10(3):187–91 (22 ref.)

Eccentric and concentric torque-velocity characteristics, torque output comparisons, and gravity effect torque corrections for the quadriceps and hamstring muscles in females. Westing SH, et al. **Int J Sports Med** 1989 Jun; 10(3):175–80

In vivo effects of theophylline on diaphragm, bicep, and quadricep strength and fatigability. DeGarmo C, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1041–6

Prediction of torque acceleration energy and power of thigh muscles from peak torque. Kannus P, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):304–7

PHYSIOPATHOLOGY

A comparative study of the extensor force of the quadriceps between subjects with a normal patella and those with patella alta of neurological pathogenesis. Villani C, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):401–6

Reflex inhibition of thigh muscles in knee injury. Causes and treatment. Morrissey MC. **Sports Med** 1989 Apr; 7(4):263–76 (80 ref.)

RADIATION EFFECTS

[Effect of OK-432 on spontaneous lung metastases from murine fibrosarcoma in the preirradiated tissue] Ito H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25; 48(10):1261–8 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Case report 489. Nigrisoli M, et al. **Skeletal Radiol** 1988; 17(4):315–6

SURGERY

Medial thighplasty, prevention of scar migration, and labial flattening. Hodgkinson DJ. **Aesthetic Plast Surg** 1989 Spring;13(2):111–4

The free or pedicled anteromedial thigh flap. Koshima I, et al. **Ann Plast Surg** 1988 Nov;21(5):480–5

Lipoplasty of the knees and anterior thighs. Fodor PB. **Clin Plast Surg** 1989 Apr;16(2):361–4

Liposuction surgery of the lateral thigh. Narins RS. **J Dermatol Surg Oncol** 1988 Oct;14(10):1155–61

Postoperative examination of the biceps femoris muscle sling used in excision of the femoral head and neck in dogs. Lewis DD, et al. **Vet Surg** 1988 Sep–Oct;17(5):269–77

[The thigh of the obese] Nicoletis C. **Phlebologie** 1988 Jul–Oct;41(3):585–8 **(Fre)**

[Surgery of lipodystrophy] van der Stricht J. **Phlebologie** 1988 Jul–Oct;41(3):589–91 (Eng. Abstr.) **(Fre)**

THIMAZOL see **METHIMAZOLE**

THIMEROSAL see under **ETHYLMERCURY COMPOUNDS**

THIMETHAPHAN see **TRIMETHAPHAN**

THINKING

Aggressive thoughts and behavior: another symptom of panic disorder? George DT, et al. **Acta Psychiatr Scand** 1989 May;79(5):500–2

Behaviour therapy and obsessional ruminations: can failure be turned into success? Salkovskis PM, et al. **Behav Res Ther** 1989;27(2):149–60

A content analysis of thoughts and emotions elicited from depressed patients during cognitive therapy. Blackburn IM, et al. **Br J Med Psychol** 1989 Mar;62 (Pt 1):23–33

Anxiety, supervision and a space for thinking: some narcissistic perils for clinical psychologists in learning psychotherapy. Mollon P. **Br J Med Psychol** 1989 Jun;62 (Pt 2):113–22

Schizophrenic thought disorder [letter] **Br J Psychiatry** 1988 Sep;153:410–2

Schizophrenic thought disorder. A psychological and organic interpretation. Cutting J, et al. **Br J Psychiatry** 1988 Mar; 152:310–9

"Magical thinking," suicide, and malpractice litigation. Bursztajn H, et al. **Bull Am Acad Psychiatry Law** 1988; 16(4):369–77 (22 ref.)

Correlation of manual dexterity and comprehension with oral hygiene and periodontal status in mentally handicapped adults. Shaw L, et al. **Community Dent Oral Epidemiol** 1989

Aug;17(4):187–9
Hemispheric specialization for mental rotation. Corballis MC, et al. **Cortex** 1989 Mar;25(1):15–25
Beliefs about fact retrieval and inferential reasoning across the adult lifespan. Camp CJ, et al. **Exp Aging Res** 1988 Summer–Autumn;14(2–3):89–97
Medical teaching and 'dichotomous thinking' [letter] Jessee RA. **Hosp Pract [Off]** 1988 Nov 15;23(11):16
From inquiry to judgment: age and sex differences in patterns of adult moral thinking and information–seeking. Pratt MW, et al. **Int J Aging Hum Dev** 1988;27(2):109–24
Reference performance and positive and negative thought disorder: a follow–up study of manics and schizophrenics. Docherty N, et al. **J Abnorm Psychol** 1988 Nov; 97(4):437–42
The Kiddie Formal Thought Disorder Rating Scale: clinical assessment, reliability, and validity. Caplan R, et al. **J Am Acad Child Adolesc Psychiatry** 1989 May; 28(3):408–16
Irrational thinking and negative emotionality in college students and applicants for mental health services. Muran JC, et al. **J Clin Psychol** 1989 Mar;45(2):188–93
Perceptual distraction in schizophrenia. Watson CG, et al. **J Clin Psychol** 1988 Sep;44(5):674–81
Reasoning with contrary–to–fact propositions. Markovits H, et al. **J Exp Child Psychol** 1989 Jun;47(3):398–412
Mapping musical thought to musical performance. Palmer C. **J Exp Psychol [Hum Percept]** 1989 May;15(2):331–46
Depression, suicidal preoccupation, and rational thinking. Lester D. **J Gen Psychol** 1989 Apr;116(2):221–3
Development of thinking about things and people: social and nonsocial cognition during adolescence. O'Mahony JF. **J Genet Psychol** 1989 Jun;150(2):217–24
Primary process content in paranoid schizophrenic speech. West AN, et al. **J Genet Psychol** 1988 Dec;149(4):547–53
Writing to learn: a reconceptualization of thinking and writing in the nursing curriculum. Allen DG, et al. **J Nurs Educ** 1989 Jan;28(1):6–11
Polemics in perinatology: arguing with geniuses. Schifrin BS. **J Perinatol** 1989 Mar;9(1):90–2
Psychometric properties of the Survey of Personal Beliefs: a rational–emotive measure of irrational thinking. Demaria TP, et al. **J Pers Assess** 1989 Summer;53(2):329–41
Boyhood separation anxiety disorder: thought disorder and object relations psychopathology as manifested in Rorschach imagery. Goddard R, et al. **J Pers Assess** 1989 Summer;53(2):239–52
Primary process thinking, divergent thinking, and coping in children. Russ SW. **J Pers Assess** 1988 Fall;52(3):539–48
Constructive thinking: a broad coping variable with specific components. Epstein S, et al. **J Pers Soc Psychol** 1989 Aug; 57(2):332–50
Depression and mental control: the resurgence of unwanted negative thoughts. Wenzlaff RM, et al. **J Pers Soc Psychol** 1988 Dec;55(6):882–92
Stop the negative, accentuate the positive. Chandler CK, et al. **J Sch Health** 1988 Sep;58(7):295–7
Thoughts and ethics. The place for thought in medical ethical decision–making. Graner JL. **Lancet** 1989 Jul 15; 2(8655):150
Medical clinical thought. Purice S. **Med Interne** 1982 Apr–Jun;20(2):91–4
Reflex dementia: disinhibited primitive thinking [see comments] Landau WM. **Neurology** 1989 Jan;39(1):133–7 (28 ref.). **Comment in:** Neurology 1989 Jul;39(7):1001–2
Fumes from the spleen. **Paediatr Perinat Epidemiol** 1989 Apr; 3(2):109–11
The development of thinking skills in school age children. Feldman H. **Pediatr Ann** 1989 Jun;18(6):356–8, 360–3 (15 ref.)
Verbal and spatial processing efficiency in 32 children with sex chromosome abnormalities. Bender BG, et al. **Pediatr Res** 1989 Jun;25(6):577–9
Developmental study of the effect of dimensionality and presentation mode on original thinking of children. Tegano DW, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1275–81
Right–brain techniques: a catalyst for creative thinking and internal focusing. A study of five writers and six psychotherapists. Zdenek M. **Psychiatr Clin North Am** 1988 Sep;11(3):427–41
Factor analytic study of irrational beliefs. Jacobsen RH, et al. **Psychol Rep** 1988 Dec;63(3):803–9
Effects of the Scamper technique on anxiety and creative thinking of intellectually gifted students. Mijares–Colmenares BE, et al. **Psychol Rep** 1988 Oct; 63(2):495–500
Further evidence of construct and discriminant validities for the Malouff and Schutte Belief Scale. Zgourides GD, et al. **Psychol Rep** 1988 Dec;63(3):801–2
Innovations in the assessment of thought disorder [letter] McCarty T, et al. **Schizophr Bull** 1989;15(1):1–3
Sleep loss and "divergent" thinking ability. Horne JA. **Sleep** 1988 Dec;11(6):528–36
[Thought processes in the blind] Cálek O. **Cas Lek Cesk** 1988 Jul 15;127(29):897–900 (Eng. Abstr.) (Cze)
[Effects of systemic thinking on the human concept of the therapist and his therapeutic work] Rotthaus W. **Prax Kinderpsychol Kinderpsychiatr** 1989 Jan;38(1):10–6 (17 ref.) (Eng. Abstr.) (Ger)
[Causality of action and circular thinking—systems therapy versus psychoanalysis] Fischer G, et al. **Psyche (Stuttg)** 1989 Apr;43(4):339–58 (Eng. Abstr.) (Ger)
[A Rorschach test study of primary thought processes in schizophrenic subjects using the Holt method] Camurati P. **Minerva Psichiatr** 1989 Jan–Mar;30(1):39–45 (Eng. Abstr.) (Ita)
[Experimental analysis of some determinants of inductive reasoning] Ono K. **Shinrigaku Kenkyu** 1989 Feb; 59(6):334–41 (Eng. Abstr.) (Jpn)
[Means of activating cognitive activity and the development of clinical thinking in students at departments of surgical diseases] Gusak VK, et al. **Klin Khir** 1989;(5):50 (Rus)
[Methods of increasing the efficacy of developing clinical thinking in students] Daniliak IG, et al. **Klin Med (Mosk)** 1988 Nov;66(11):144–7 (Rus)
[Clinical thinking] Gordon IB. **Klin Med (Mosk)** 1988 Nov; 66(11):141–2 (Rus)
[The development of clinical thinking in students during practical work] Grigorian RA, et al. **Klin Med (Mosk)** 1988 Nov;66(11):142–4 (Rus)

PHYSIOLOGY

Scalp–recorded P300 activity in patients following unilateral temporal lobectomy. Johnson R Jr. **Brain** 1988 Dec;111 (Pt 6):1517–29
The accommodative response, refractive error and mental effort: I. The sympathetic nervous system. Bullimore MA, et al. **Doc Ophthalmol** 1988 Aug;69(4):385–97
Talking off the top of your head: toward a mental prosthesis utilizing event–related brain potentials. Farwell LA, et al. **Electroencephalogr Clin Neurophysiol** 1988 Dec; 70(6):510–23
Event–related covariances during a bimanual visuomotor task. I. Methods and analysis of stimulus– and response–locked data. Gevins AS, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan–Feb; 74(1):58–75
Thinking in circles. Appenzeller T. **Sci Am** 1989 Mar; 260(3):26–7
[Characteristics of the conceptual and logical thinking of younger schoolchildren from the aspect of diagnosing intellectual impairment] Peresleni LI, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):35–9 (Eng. Abstr.) (Rus)
[Changes in EEG rhythms during verbal and visual–image thinking] Shcheblanova EI. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):627–32 (Eng. Abstr.) (Rus)

THINNESS

see related
EMACIATION

BLOOD

[Evaluation of thyroid function in children with body weight deficit] Jabłońska–Ulbrych A, et al. **Pediatr Pol** 1988 Sep; 63(9):545–9 (Eng. Abstr.) (Pol)

DRUG THERAPY

[Significance of the contribution of pizotifen in correcting appetite disorders and weight insufficiencies] Blouza Chachoub S, et al. **Tunis Med** 1989 Mar;67(3):207–12 (Eng. Abstr.) (Fre)

EPIDEMIOLOGY

[Prevalence of thinness and excessive fatness in a group of school children of the city of Cordoba, Argentina] Agrelo F, et al. **Arch Latinoam Nutr** 1988 Mar;38(1):69–80 (Eng. Abstr.) (Spa)

ETIOLOGY

The prevalence of polycystic ovaries in thin oligomenorrhoeic, anovulatory women. Eden JA, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):70–1

GENETICS

Thinness—not obesity—has a genetic component. Costanzo PR, et al. **Neurosci Biobehav Rev** 1989 Spring;13(1):55–8 (26 ref.)

METABOLISM

Energy expenditure in underweight free–living adults: impact of energy supplementation as determined by doubly labeled water and indirect calorimetry. Riumallo JA, et al. **Am J Clin Nutr** 1989 Feb;49(2):239–46
Leanness, peptide hormones and premenopausal breast cancer. Hill P. **Med Hypotheses** 1989 Jan;28(1):45–50 (76 ref.)

MORTALITY

Prognosis of lean and fat hypertensives. Menotti A, et al. **Cardiology** 1988;75(6):448–57

PHYSIOPATHOLOGY

Responses of lean and obese subjects to preloads, deprivation, and palatability. Spiegel TA, et al. **Appetite** 1989 Aug; 13(1):45–69
[Effect of eating and mazindol on the pain threshold in obese and lean persons] Zahorska–Markiewicz B, et al. **Pol Arch Med Wewn** 1985 Sep;74(3):203–6 (Eng. Abstr.) (Pol)

PSYCHOLOGY

The struggle to be thin: a survey of anorexic and bulimic symptoms in a non–referred adolescent population. Whitaker A, et al. **Psychol Med** 1989 Feb;19(1):143–63

THIO–TEPA

ADMINISTRATION & DOSAGE

A phase I study of thiotepa administered by short–term and protracted continuous intravenous infusion. Lokich JJ, et al. **Cancer** 1989 Jan 1;63(1):46–50
Phase I clinical and pharmacokinetic study of thiotepa administered intraperitoneally in patients with advanced malignancies. Wadler S, et al. **J Clin Oncol** 1989 Jan; 7(1):132–9
High–dose thiotepa with autologous bone marrow transplantation for metastatic malignant melanoma: results of phase I and II studies of the North American Bone Marrow Transplantation Group. Wolff SN, et al. **J Clin Oncol** 1989 Feb;7(2):245–9
The effect of liposome encapsulated antineoplastic agents on transitional cell carcinoma in tissue culture. Egerdie RB, et al. **J Urol** 1989 Aug;142(2):390–8
Intravesical thiotepa versus mitomycin C in patients with Ta, T1 and TIS transitional cell carcinoma of the bladder: a phase III prospective randomized study. Heney NM, et al. **J Urol** 1988 Dec;140(6):1390–3
The induction of reciprocal translocations in mouse germ cells by chemicals and ionizing radiations. I. Dose–response relationships and combined effects of bleomycin with thio–tepa and gamma–rays. De Luca JC, et al. **Mutat Res** 1988 Nov;202(1):65–70

ADVERSE EFFECTS

Observations and proposed mechanism of N,N',N''–triethylenethiophosphoramide (thiotepa)–induced hyperpigmentation. Horn TD, et al. **Arch Dermatol** 1989 Apr;125(4):524–7
[Teratogen effect of Thiotepa (letter)] Elberg JJ, et al. **Ugeskr Laeger** 1988 Oct 24;150(43):2602 (Dan)
[Teratogenic effect of thiotepa (letter)] Krarup–Hansen A. **Ugeskr Laeger** 1989 Feb 6;151(6):397 (Dan)
[Teratogenic effect of thio–tepa despite use of safety rules (letter)] Krarup–Hansen A. **Ugeskr Laeger** 1988 Oct 3; 150(40):2416–7 (Dan)

ANALYSIS

Liquid chromatography–thermospray mass spectrometry of DNA adducts formed with mitomycin C, porfiromycin and thiotepa. Musser SM, et al. **J Chromatogr** 1989 Jul 14; 474(1):197–207

BLOOD

High–performance liquid chromatography of the anti–tumour agent triethylenethiophosphoramide and its metabolite triethylenephosphoramide with sodium sulphide, taurine and o–phthalaldehyde as pre–column fluorescent derivatization reagents. Sano A, et al. **J Chromatogr** 1988 Dec 23;458:295–301

METABOLISM

Evidence for enzymatic activation and oxygen involvement in cytotoxicity and antitumor activity of N,N',N''–triethylenethiophosphoramide. Teicher BA, et al. **Cancer Res** 1989 Sep 15;49(18):4996–5001
[Use of the method of fast atom bombardment mass spectrometry for identification of products of the interaction of thiophosphamide with DNA] Sukhodub LF, et al. **Bioorg Khim** 1988 Dec;14(12):1698–9 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Pharmacokinetics of thio–TEPA at two different doses. Hagen B, et al. **Cancer Chemother Pharmacol** 1988; 22(4):356–8
Phase I and pharmacokinetic evaluation of thiotepa in the cerebrospinal fluid and plasma of pediatric patients: evidence for dose–dependent plasma clearance of thiotepa. Heideman RL, et al. **Cancer Res** 1989 Feb 1;49(3):736–41

PHARMACOLOGY

[Dynamics of sister chromatid exchange after in vivo exposure to thiophosphamide] Stukalov SV. **Biull Eksp Biol Med** 1989 Jan;107(1):85–7 (Eng. Abstr.) (Rus)
[Thymidine transport and its incorporation into the cellular DNA of Ehrlich ascites cancer and Zajdela's ascitic hepatoma in the presence of thiophosphamide and thiophosphamide–modified DNA] Patskovskiĭ IuV, et al. **Eksp Onkol** 1989;11(4):37–41 (Eng. Abstr.) (Rus)
[Effect of interferon on the number of cytogenetic disorders occurring in human cultured lymphocytes treated with thio–TEPA and fotrin] Sarkisian TF, et al. **Tsitologiia** 1988 Dec;30(12):1491–4 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

High dose chemotherapy with autologous hematopoietic stem cell support in the treatment of refractory stage IV breast carcinoma. Kaminer LS, et al. **Bone Marrow Transplant** 1989 Jul;4(4):359–62

Effects of local chemotherapy and immunotherapy on the recurrence and progression of superficial bladder cancer. Novak R, et al. **Eur Urol** 1988;14(5):367–70

BCG versus thiotepa in non–CIS, stage Ta, T1 bladder cancer: rationale and design of ECOG trial. Fisher HA. **Prog Clin Biol Res** 1989;310:275–83 (22 ref.)

Intravesical therapy comparing BCG, adriamycin, and thiotepa in 200 patients with superficial bladder cancer: a randomized prospective study. Martinez–Pineiro JA, et al. **Prog Clin Biol Res** 1989;310:237–52

[Chemoprophylaxis of superficial tumors of the bladder with thiotepa: long–term results] Durán R, et al. **Actas Urol Esp** 1989 Jan–Feb;13(1):19–23 (Eng. Abstr.) **(Spa)**

[Comparative study of adriamycin and thiotepa in the chemoprophylaxis of superficial bladder tumors] Salinas Sánchez AS, et al. **Actas Urol Esp** 1989 Mar–Apr; 13(2):99–102 (Eng. Abstr.) **(Spa)**

THIOACETAMIDE see under **ACETAMIDES**

THIOACETAZON see **THIACETAZONE**

THIOAMIDES see under **AMIDES**

THIOBACILLUS

ENZYMOLOGY

Cytochrome oxidase of an acidophilic iron–oxidizing bacterium, Thiobacillus ferrooxidans, functions at pH 3.5. Kai M, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):839–43

GENETICS

Characterization of the two rRNA gene operons present in Thiobacillus ferrooxidans. Salazar O, et al. **FEBS Lett** 1989 Jan 2;242(2):439–43

Cloning and expression of Thiobacillus versutus aspartate–semialdehyde dehydrogenase gene in Escherichia coli. Jagusztyn–Krynicka EK, et al. **FEMS Microbiol Lett** 1989 May;50(1–2):21–5

Nucleotide sequence and expression of a cloned Thiobacillus ferrooxidans recA gene in Escherichia coli. Ramesar RS, et al. **Gene** 1989 May 15;78(1):1–8

Sequence and structural analysis of the alpha– and beta–dinitrogenase subunits of Thiobacillus ferrooxidans. Rawlings DE. **Gene** 1988 Sep 30;69(2):337–43

Identification and sequence of the basic replication region of a broad–host–range plasmid isolated from Thiobacillus ferrooxidans. Dorrington RA, et al. **J Bacteriol** 1989 May; 171(5):2735–9

Cloning and expression of Thiobacillus ferrooxidans mercury ion resistance genes in Escherichia coli. Shiratori T, et al. **J Bacteriol** 1989 Jun;171(6):3458–64

Cloning and expression in Escherichia coli of a recA–like gene from the acidophilic autotroph Thiobacillus ferrooxidans. Ramesar RS, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1141–6

IST2: an insertion sequence from Thiobacillus ferrooxidans. Yates JR, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7284–7

METABOLISM

Removal of methanethiol, dimethyl sulfide, dimethyl disulfide, and hydrogen sulfide from contaminated air by Thiobacillus thioparus TK–m. Kanagawa T, et al. **Appl Environ Microbiol** 1989 Mar;55(3):555–8

Reduction of Mo6+ with elemental sulfur by Thiobacillus ferrooxidans. Sugio T, et al. **J Bacteriol** 1988 Dec; 170(12):5956–9

THIOBACILLUS THIOOXIDANS see under **THIOBACILLUS**

THIOBACTERIACEAE see under **GRAM–NEGATIVE CHEMOLITHOTROPHIC BACTERIA**

THIOBARBITURATES

Plasma malondialdehyde, lipid peroxides, and the thiobarbituric acid reaction [letter] Wade CR, et al. **Clin Chem** 1989 Feb;35(2):336

Thiobarbituric acid–reactive malondialdehyde formation during superoxide–dependent, iron–catalyzed lipid peroxidation: influence of peroxidation conditions. Janero DR, et al. **Lipids** 1989 Feb;24(2):125–31

[Modification of the method of determining lipid peroxidation in a test using thiobarbituric acid] Andreeva LI, et al. **Lab Delo** 1988;(11):41–3 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Induction of profound hypouricemia by a non–sedating thiobarbiturate. Warrell RP Jr, et al. **Metabolism** 1989 Jun; 38(6):550–4

ANALYSIS

Spectrophotometric and volumetric assay of 5–(p–dimethylamino benzylidene)–2–thiobarbituric acid. Guillén Sans R, et al. **Boll Chim Farm** 1988 Jan;127(1):23–5

CHEMICAL SYNTHESIS

Antimicrobial activity of 5–(2–thiophenylidene)–2–thiobarbituric acid. Bautista Paloma FJ, et al. **Pharmazie** 1988 Dec;43(12):877–8

DIAGNOSTIC USE

A modification of the thiobarbituric acid reaction. Bidder TG, et al. **Lipids** 1989 Jul;24(7):656–8

METABOLISM

Effects of allopurinol on the glutathione status and thiobarbituric acid reactive substances (TBA–RS) in ischaemic rat intestine. Siems W, et al. **Pharmazie** 1988 Jun; 43(6):438–9

PHARMACOLOGY

Suppression of neutrophil migration and chemiluminescence is due to the sulphur atom in the thiobarbiturate molecule. Kress HG, et al. **Acta Anaesthesiol Scand** 1989 Feb; 33(2):122–8

In vitro and intracellular inhibition of topoisomerase II by the antitumor agent merbarone. Drake FH, et al. **Cancer Res** 1989 May 15;49(10):2578–83

Participation of lipid peroxidation in rat pertussis vaccine pleurisy. I. Thiobarbituric acid (TBA) reactant and ceruloplasmin. Yuda Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2691–4

Glutathione peroxidase, glutathione reductase, and thiobarbituric acid–reactive products in muscles of chickens and mice with genetic muscular dystrophy. Omaye ST, et al. **Life Sci** 1974 Jul 1;15(1):137–45

Synthesis and CVS activity of 1–(2,3, 2,5, 2,6 dichlorophenyl)–3–morpholinophenyl–5–substituted beazylidene–thiobarbituric acids (3–17). Singh A, et al. **Pharmacol Res** 1989 Jan–Feb;21(1):59–64

THERAPEUTIC USE

[Isothiobarbamine prevention of disorders of carbohydrate and oxygen metabolism and of the development of brain edema in the early period after an intracerebral hemorrhage] Plotnikov MB, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):688–90 (Eng. Abstr.) **(Rus)**

[Use of isothiobarbamin in the correction of disorders of the vital activities of the brain in intracerebral hemorrhage] Plotnikov MB, et al. **Farmakol Toksikol** 1988 Jul–Aug; 51(4):38–41 (Eng. Abstr.) **(Rus)**

THIOCARBAMATES

ADVERSE EFFECTS

Contact dermatitis due to Ziram and Maneb. Manuzzi P, et al. **Contact Dermatitis** 1988 Aug;19(2):148

[Study of the embryotropic effect of tiuram EF] Sal'nikova LS. **Gig Sanit** 1989 Mar;(3):88 **(Rus)**

ANALYSIS

Survey of ethylenethiourea (ETU) in ethylenebis(dithiocarbamate) (EBDC) fungicides. Camoni I, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):176–9

[Gas–chromatographic method of determining the levels of tri–allate in the water, soil and plants] Pilenkova II, et al. **Gig Sanit** 1989 May;(5):51–2 **(Rus)**

BIOSYNTHESIS

Diethylthiocarbamic acid methyl ester. A potent inhibitor of aldehyde dehydrogenase found in rats treated with disulfiram or diethyldithiocarbamic acid methyl ester. Johansson B, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1053–9

CHEMICAL SYNTHESIS

Synthesis of some substituted carbamodithioic acid esters and their anticholinergic properties. Safak C, et al. **Arch Pharm (Weinheim)** 1988 Dec;321(12):859–61

N–alkyl–N–dithiocarboxy–D–glucamine analogs as cadmium antagonists: synthesis and evaluation of the n–propyl, n–butyl, and n–amyl derivatives. Gale GR, et al. **Arch Toxicol** 1988;62(6):428–34

PHARMACOLOGY

Kinetics of Mg2+–ATPase inhibition by benthiocarb and its recovery by oximes and L–cysteine in brain of albino rat (Wistar strain). Veera Babu GR, et al. **Arch Int Physiol Biochim** 1989 Apr;97(2):205–9

Meso–2,3–dimercaptosuccinic acid and sodium N–benzyl–N–dithiocarboxy–D–glucamine as antagonists for cadmium intoxication. Jones MM, et al. **Arch Toxicol** 1988 Aug;62(1):29–36

In vitro studies with dimethyldithiocarbamate, possible new antimicrobial for use in poultry. Delap SK, et al. **Avian Dis** 1989 Jan–Mar;33(1):8–11

Perturbations in nitrogen metabolism of brain and liver of rat following repeated benthiocarb administration. Babu GR, et al. **Biochem Int** 1989 Jun;18(6):1253–68

Benthiocarb toxicity on rat brain AChE. Babu GR, et al. **Biochem Int** 1989 Jul;19(1):77–82

Effects in vivo and in vitro of benthiocarb on developing rat (Wistar strain) brain Mg2+ and Ca2+–ATPases. Srinivas PN, et al. **Biochem Int** 1989 Jul;19(1):145–53

Modulation of benthiocarb in vitro inhibited neonate rat (Wistar strain) brain Na+K+–ATPase by norepinephrine. Srinivas PN, et al. **Biochem Int** 1989 Jul;19(1):209–14

Inhibition of human erythrocyte and leukocyte aldehyde dehydrogenase activities by diethylthiocarbamic acid methyl ester. An in vivo metabolite of disulfiram. Helander A, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2195–8

Inhibition of oxidative phosphorylation by organotin thiocarbamates. Chandra S, et al. **Chem Biol Interact** 1989; 71(1):21–36

Optimal dithiocarbamate structure for immunomodulator action. Topping RJ, et al. **Med Hypotheses** 1988 Sep; 27(1):55–7

Effects of dithiocarbamates on intestinal absorption and organ distribution of cadmium chloride in mice. Andersen O, et al. **Pharmacol Toxicol** 1989 Mar;64(3):239–43

Mobilization of cadmium in mice by combined treatment with N–benzyl–N–dithiocarboxy–D–glucamine and diesters of meso–2, 3–dimercaptosuccinic acid. Gale GR, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):327–37

Antipseudomonal effects of selected dithiocarbamates alone and in combination with gentamicin or aztreonam. Walker EM Jr, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jan;63(1):101–17

Effect of N–benzyl–D–glucamine dithiocarbamate on the renal toxicity produced by subacute exposure to cadmium in rats. Kojima S, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):39–48

N,N–disubstituted dithiocarbamates as cadmium antagonists: N–(4–methoxybenzyl)–N–dithiocarboxy–D–glucamine. Gale GR, et al. **Toxicol Lett** 1989 Jul;48(1):105–15

THERAPEUTIC USE

Combination and individual antitumor effects of hyperthermia, cisplatin, and selected dithiocarbamates. Walker EM Jr, et al. **Ann Clin Lab Sci** 1989 Jul–Aug; 19(4):242–54

In vivo studies with dimethyldithiocarbamate, a possible new antimicrobial for use against Aspergillus fumigatus in poultry. Delap SK, et al. **Avian Dis** 1989 Jul–Sep; 33(3):497–501

Dithiocarbamate treatment of chronic cadmium intoxication in mice. Gale GR, et al. **Toxicol Lett** 1988 Nov; 44(1–2):77–84

TOXICITY

Ethylenethiourea as an indicator of exposure to ethylenebisdithiocarbamate fungicides. Savolainen K, et al. **Arch Toxicol Suppl** 1989;13:120–3

In vitro inactivation of hepatic alcohol dehydrogenase and aldehyde dehydrogenases from rats by dithiocarbamates with or without metals. Freundt KJ, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):540–7

Recovery of benthiocarb–inhibited AChE in fish brain: an in vitro study. Babu PR, et al. **Ecotoxicol Environ Safety** 1989 Jun;17(3):317–22

Study of possible teratogenic effects of the fungicide maneb on chick embryos. Munk R, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):112–8

Dose effect relationship for some specific effects of dithiocarbamates. Kaloyanova F, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):11–7

Sister–chromatid exchanges and chromosomal aberrations in chick embryos after treatment with the fungicide maneb. Arias E. **Mutat Res** 1988 Oct;206(2):271–3

Prenataltoxicological study of rapeseed meal and of the fungicide maneb in dependence of maternal ages. Bleyl DW, et al. **Nahrung** 1988;32(10):1007–10

The behavioral effects of pesticides in male mice. Mitchell JA, et al. **Neurotoxicol Teratol** 1989 Jan–Feb;11(1):45–50

Diethylthiocarbamic acid methyl ester: a suicide inhibitor of liver aldehyde dehydrogenases? Johansson B. **Pharmacol Toxicol** 1989 May;64(5):471–4

Toxicology of fungicides: effects of 270 days administration of zinc ethylene–bis–dithiocarbamate in Friesian cattle. Gennaro Soffietti M, et al. **Schweiz Arch Tierheilkd** 1988 Dec;130(12):657–72

Toxic and DNA–damaging activities of the fungicides mancozeb and thiram (TMTD) on human lymphocytes in vitro. Perocco P, et al. **Teratogenesis Carcinog Mutagen** 1989;9(2):75–81

Epiphyseal lesions of the femur and tibia in rats following oral chronic administration of zinc dimethyldithiocarbamate (ziram). Enomoto A, et al. **Toxicology** 1989 Jan;54(1):45–58

Carcinogenicity study of tetramethylthiuram disulfide (thiram) in F344 rats. Hasegawa R, et al. **Toxicology** 1988 Oct;51(2–3):155–65

Examination of the interaction of decis and dithane in rats. Szépvölgyi J, et al. **Toxicology** 1988 Dec 16;53(1):107–11

Toxicology of thiram (tetramethylthiuram disulfide): a review. Dalvi RR. **Vet Hum Toxicol** 1988 Oct;30(5):480–2 (35 ref.)

[Hygienic substantistion of the maximum permissible level of tetramethylthiuram disulfide in atmospheric air] Kasymova ShA. **Gig Sanit** 1988 Jun;(6):74–5 **(Rus)**

[Effect of thiuram D on the activity of oxidative liver enzymes in experimental studies] Makarova LF, et al. **Gig Sanit** 1988 Oct;(10):81–2 **(Rus)**

[Comparative characteristics of methods of mathematical evaluation of the combined effects of 2 or more harmful chemical factors in their single and successive administration in acute experiments] Manenko AK, et al. **Gig Sanit** 1988 Nov;(11):53–8 **(Rus)**

[Evaluation of soil fumigants from the standpoint of nutrition hygiene] Nesterova MF. **Gig Sanit** 1988 Jun;(6):83–4 **(Rus)**

[Effect of silimarine on activity of lysosomal proteinases in the liver and kidneys during tetramethylthiuram disulfide administration] Tabagari SI, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):110–3 (Eng. Abstr.) **(Rus)**

[Morphologic changes in sperm in experimental mice after the administration of phosmet and mancozeb] Jablonická A, et al. **Bratisl Lek Listy** 1988 Aug;89(8):611–4 (Eng. Abstr.) **(Slo)**

THIOCHOLINE see under **CHOLINE**

THIOCTIC ACID see **LIPOIC ACID**

THIOCYANATES

Effect of papain digestion on the specificity of fluorescein-labeled immunoglobulins. Mengeling WL, et al. **Am J Vet Res** 1988 Aug;49(8):1235–9

Amino acid analysis utilizing phenylisothiocyanate derivatives. Cohen SA, et al. **Anal Biochem** 1988 Oct; 174(1):1–16 (93 ref.)

Fluorescein labeling of Fab' while preserving single thiol. Der-Balian GP, et al. **Anal Biochem** 1988 Aug 15; 173(1):59–63

Interaction between D-glyceraldehyde-3-phosphate dehydrogenase and 3-phosphoglycerate kinase labeled by fluorescein-5'-isothiocyanate: evidence that the dye participates in the interaction. Sukhodolets MV, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):187–96

Modification of porcine zona pellucida with fluorescein isothiocyanate: evidence for the presence of a structural unit consisting of glycoproteins in the mammalian egg coat. Hatanaka Y, et al. **Biochem Int** 1988 Nov;17(5):935–44

Micro-scale sequence analysis from the N-terminus of peptides using the fluorogenic Edman reagent 4-N,N-dimethylamino-1-naphthyl isothiocyanate. Miyano H, et al. **Biomed Chromatogr** 1987;2(4):139–44

Fluorescein isothiocyanate staining intensity as a probe of hyperthermia-induced changes in chromatin conformation. Dyson JE, et al. **Cytometry** 1989 Mar;10(2):174–84

Reaction of fluorescein isothiocyanate with an ATP-binding site on the phosphorylase kinase alpha subunit. Zaman N, et al. **Eur J Biochem** 1989 Jul 1;182(3):577–84

T cell activation by preformed, long-lived Ia-peptide complexes. Quantitative aspects. Watts TH. **J Immunol** 1988 Dec 1;141(11):3708–14

Thiocyanate elution estimation of relative antibody affinity [letter] Hall TJ, et al. **J Immunol Methods** 1988 Nov 25; 115(1):153–5

Multiple immunoenzyme staining techniques. Use of fluoresceinated, biotinylated and unlabelled monoclonal antibodies. Van der Loos CM, et al. **J Immunol Methods** 1989 Feb 8;117(1):45–52

Piretanide-dextran and piretanide-polyethylene glycol interact with high affinity with the Na+ 2 Cl- K+ cotransporter in the thick ascending limb of the loop of Henle. Nitschke R, et al. **Pflugers Arch** 1989 Mar; 413(5):559–61

[The application of Pirkle-type chiral column to the resolution of enantiomeric drugs: resolution of some amines and alcohols using alpha-naphthyl isocyanate] Yang Q, et al. **Yao Hsueh Hsueh Pao** 1988;23(12):921–6 (Eng. Abstr.) **(Chi)**

ANALYSIS

A micromethod for the determination of carboxyl-terminal amino acids of peptides and proteins: phenylisothiocyanate reaction with hydrazinolysates. Strydom DJ. **Anal Biochem** 1988 Nov 1;174(2):679–686

Binding of thiocyanate to lactoperoxidase: 1H and 15N nuclear magnetic resonance studies. Modi S, et al. **Biochemistry** 1989 May 30;28(11):4689–94

Effect of storage conditions on saliva thiocyanate concentration. Galanti LM, et al. **Clin Chem** 1989 Mar; 35(3):496–7

Metabolism of linamarin in rats. Maduagwu EN. **Food Chem Toxicol** 1989 Jul;27(7):451–4

Determination of SCN—in vegetables by gas chromatography in relation to endemic goiter. Olea Serrano MR, et al. **J Anal Toxicol** 1988 Nov–Dec; 12(6):307–9

Blood haemoglobin determination as haemiglobin isothiocyanate. Franzini C. **J Clin Chem Clin Biochem** 1988 Jul;26(7):463–5

BLOOD

A simple method for determination of plasma thiocyanate [letter] Bourdoux P. **Ann Clin Biochem** 1989 May;26 (Pt 3):303–4

A simple method for determination of plasma thiocyanate. Falkensson M, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):422–3

Cyanide and thiocyanate blood levels in patients with renal failure or respiratory disease. Cailleux A, et al. **J Med** 1988; 19(5–6):345–51

Cyanide and fire victims [letter] Stevenson RN, et al. **Lancet** 1988 Nov 12;2(8620):1145

[Serum thiocyanate and HDL levels and their subgroup levels] Hu ZX. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Feb; 16(1):16 **(Chi)**

[Plasma thiocyanate determination: a simple method for quantifying the smoking habits of pregnant patients—a preliminary study] Pollak A, et al. **Wien Klin Wochenschr** 1988 Oct 7;100(19):652–5 (Eng. Abstr.) **(Ger)**

CHEMICAL SYNTHESIS

Superoxide anion measurement by sulfonated phenyl isothiocyanate cytochrome c. Morel F, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1175–81

[Studies on new antiparasitic agents: synthesis of nithiocyamine analogs] Yao RH, et al. **Yao Hsueh Hsueh Pao** 1988 Jul;23(7):498–503 (Eng. Abstr.) **(Chi)**

DIAGNOSTIC USE

Quantitation of aspartate and glutamate in HPLC analysis of phenylthiocarbamyl amino acids. Mora R, et al. **Anal Biochem** 1988 Aug 1;172(2):368–76

Fluorescence quenching studies of fluorescein attached to Lys-61 or Cys-374 in actin: effects of polymerization, myosin subfragment-1 binding, and tropomyosin-troponin binding. Miki M, et al. **J Biochem (Tokyo)** 1988 Aug; 104(2):232–5

Staphylococcus aureus phagocytosis. A new cytofluorometric method using FITC and paraformaldehyde. Cantinieaux B, et al. **J Immunol Methods** 1989 Jul 26;121(2):203–8

The FITC-anti-FITC system is a sensitive alternative to biotin-streptavidin in ELISA. Harmer IJ, et al. **J Immunol Methods** 1989 Aug 15;122(1):115–21

Increased intratumor concentration of fluorescein-isothiocyanate-labeled neocarzinostatin in rats under angiotensin-induced hypertension. Abe I, et al. **Jpn J Cancer Res** 1988 Jul;79(7):874–9

[Detection of retinal vascular endothelial damage by fluorescein isothiocyanate-labelled platelet] Shiraki K, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar;93(3):339–45 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Localization of TI2 antigen (Ficoll-FITC) and corresponding specific anti-FITC antibody forming cells in the rat spleen. Matsuno K, et al. **Adv Exp Med Biol** 1988;237:895–9

METABOLISM

The influence of salivary stimulation on the validity of thiocyanate as an index of smoking status. O'Connell KA, et al. **Addict Behav** 1988;13(4):383–6

Cyanine dye labeling reagents containing isothiocyanate groups. Mujumdar RB, et al. **Cytometry** 1989 Jan;10(1):11–9

High-performance liquid chromatography of antifilarials. III. Determination of 2-tert.-butyl-6-isothiocyanato-5-(piperidin-1-yl)-benzthiazole in biological fluids. Bhatia SC, et al. **J Chromatogr** 1988 Dec 29;434(1):303–7

PHARMACOKINETICS

Sensitivity, specificity and predictive value of saliva thiocyanate among pregnant women. Windsor R, et al. **Addict Behav** 1989;14(4):447–52

Saliva cotinine and thiocyanate: chemical indicators of smokeless tobacco and cigarette use in adolescents. Noland MP, et al. **J Behav Med** 1988 Oct;11(5):423–33

Validation of the use of the lipophilic thiocyanate anion for the determination of membrane potential in Ehrlich ascites tumor cells. Smith TC, et al. **J Membr Biol** 1989 Feb; 107(2):169–78

PHARMACOLOGY

Chemical modification of the glycine receptor with fluorescein isothiocyanate specifically affects the interaction of glycine with its binding site. Ruiz Gómez A, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):374–81

Identification of the cysteine residue of beta-tubulin alkylated by the antimitotic agent 2,4-dichlorobenzyl thiocyanate, facilitated by separation of the protein subunits of tubulin by hydrophobic column chromatography. Bai RL, et al. **Biochemistry** 1989 Jun 27;28(13):5606–12

Ordered disruption of subunit interfaces during the stepwise reversible dissociation of Escherichia coli phosphofructokinase with KSCN. Deville-Bonne D, et al. **Biochemistry** 1989 Feb 21;28(4):1917–22

Any of several lysines can react with 5'-isothiocyanatofluorescein to inactivate sodium and potassium ion activated adenosinetriphosphatase. Xu KY. **Biochemistry** 1989 Jul 11;28(14):5764–72

Mechanism of action of the antimitotic drug 2,4-dichlorobenzyl thiocyanate: alkylation of sulfhydryl group(s) of beta-tubulin. Bai R, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):12–20

Interaction of phenylisothiocyanates with the mitochondrial phosphate carrier. I. Covalent modification and inhibition of phosphate transport. Genchi G, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):413–20

Inhibition of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone-induced DNA adduct formation and tumorigenicity in the lung of F344 rats by dietary phenethyl isothiocyanate. Morse MA, et al. **Cancer Res** 1989 Feb 1;49(3):549–53

Effects of aromatic isothiocyanates on tumorigenicity, O6-methylguanine formation, and metabolism of the tobacco-specific nitrosamine 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone in A/J mouse lung. Morse MA, et al. **Cancer Res** 1989 Jun 1; 49(11):2894–7

Thiocyanate stabilizes AMPA binding to the quisqualate receptor. Nielsen EO, et al. **Eur J Pharmacol** 1988 Nov 22;157(2-3):197–203

Litomosoides carinii: mode of action in vitro of benzothiazole and amoscanate derivatives with antifilarial activity. Davies KP, et al. **Exp Parasitol** 1989 May;68(4):382–91

Effect of internally loaded iodide, thiocyanate, and perchlorate on sodium-dependent iodide uptake by phospholipid vesicles reconstituted with thyroid plasma membranes: iodide counterflow mediated by the iodide transport carrier. Saito K, et al. **J Biochem (Tokyo)** 1989 May;105(5):790–3

Fluorescein isothiocyanate specifically modifies lysine 338 of cytochrome P-450scc and inhibits adrenodoxin binding. Tuls J, et al. **J Biol Chem** 1989 Oct 5;264(28):16421–5

Effects of capsaicin and isothiocyanate on thermogenesis of interscapular brown adipose tissue in rats. Yoshida T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Dec;34(6):587–94

Effect of allyl isothiocyanate on hepatic monooxygenases and serum transferases in rats. Lewerenz HJ, et al. **Toxicol Lett** 1988 Nov;44(1-2):65–70

[The effect of thiocyanate on bacterial plasmids using the plasmid screening test] Kramer A, et al. **Z Gesamte Hyg** 1989 May;35(5):253–5 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Effects of alkyl chain length on the inhibition of NNK-induced lung neoplasia in A/J mice by arylalkyl isothiocyanates. Morse MA, et al. **Carcinogenesis** 1989 Sep; 10(9):1757–9

TOXICITY

Effect of alpha-naphthyl isothiocyanate and CCl4 interaction on hepatocellular calcium transport. Agarwal AK, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):464–70

Effect of alpha-naphthylisothiocyanate on blood clearance of 99mTc-phytate in rats. Shibata H, et al. **J Toxicol Sci** 1989 Feb;14(1):33–42

Effect of alpha-naphthylisothiocyanate on blood clearance of 99mTc-phytate in dogs. Shibata H, et al. **J Toxicol Sci** 1989 May;14(2):67–75

Short-term toxicity study of allyl isothiocyanate in rats. Lewerenz HJ, et al. **Nahrung** 1988;32(8):723–8

Chronic toxicity tests of sodium thiocyanate with sodium nitrite in F344 rats. Lijinsky W, et al. **Toxicol Ind Health** 1989 Jan;5(1):25–9

[Characteristics of toxicokinetics of ammonium thiocyanate] Ivanova LA, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):52–3 **(Rus)**

THIOETHERS see **SULFIDES**

THIOGALACTOSIDES see under **THIOGLYCOSIDES**

THIOGLUCOSIDES see under **THIOGLYCOSIDES**

THIOGLYCOLATES

Improved separation of alpha chains of collagen type I, type III, and type V by noninterrupted electrophoresis using thioglycolic acid as a negatively charged reducer. Nakamura K, et al. **Electrophoresis** 1989 Jan;10(1):29–33

Mechanism of activation of the antitumor antibiotic neocarzinostatin by mercaptan and sodium borohydride. Hensens OD, et al. **J Antibiot (Tokyo)** 1989 May; 42(5):761–8

The role of mast cells in thioglycollate-induced inflammation. Qureshi R, et al. **J Immunol** 1988 Sep 15; 141(6):2090–6

ANALYSIS

Mercaptoethanol poisoning: report of a fatal case and analytical determinations. Eriksson A, et al. **J Anal Toxicol** 1989 Jan–Feb;13(1):60–2

PHARMACOLOGY

Effect of erdosteine and its metabolites on tracheobronchial mucus production and transport. Scuri R, et al.

Drugs Exp Clin Res 1988;14(11):693–8
Erdosteine protection against cigarette smoking–induced functional antiprotease deficiency in human bronchiolo–alveolar structures. Vagliasindi M, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 May;27(5):238–41
The use of thioglycolate to distinguish between 3' AP (apurinic/apyrimidinic) endonucleases and AP lyases. Bricteux–Grégoire S, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6269–82
In vitro protection by erdosteine against oxidative inactivation of alpha–1–antitrypsin by cigarette smoke. Gazzani G, et al. **Respiration** 1989;55(2):113–8

THERAPEUTIC USE

Influence of erdosteine, a mucolytic agent, on amoxycillin penetration into sputum in patients with an infective exacerbation of chronic bronchitis. Ricevuti G, et al. **Thorax** 1988 Aug;43(8):585–90

THIOGLYCOSIDES

ANALYSIS

Improved method for the determination of the total glucosinolate content of rapeseed by determination of enzymically released glucose. Heaney RK, et al. **Analyst** 1988 Oct;113(10):1515–8
Formation of mutagenic N–nitroso compounds in vegetable extracts upon nitrite treatment: a comparison with the glucosinolate content. Tiedink HG, et al. **Food Chem Toxicol** 1988 Nov–Dec;26(11–12):947–54
The effect of processing conditions on glucosinolates in cruciferous vegetables. de Vos RH, et al. **Z Lebensm Unters Forsch** 1988 Dec;187(6):525–9 (28 ref.)

ANTAGONISTS & INHIBITORS

Analogs of 5–methylthioribose, a novel class of antiprotozoal agents. Riscoe MK, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1904–6

BIOSYNTHESIS

A radioassay of enzymes catalyzing the glucosylation and sulfation steps of glucosinolate biosynthesis in Brassica species. Jain JC, et al. **Anal Biochem** 1989 Apr; 178(1):137–40

CHEMICAL SYNTHESIS

A new reagent for the preparation of glycoconjugates. Moroder L. **Biol Chem Hoppe Seyler** 1988 May; 369(5):381–5
Synthesis and antiinflammatory activity of copper 1–thioglycoses. Garuti L, et al. **Pharm Acta Helv** 1988; 63(7):202–5

METABOLISM

Exploitation of methylthioribose kinase in the development of antiprotozoal drugs. Fitchen JH, et al. **Adv Exp Med Biol** 1988;250:199–210
Fast measurement of galactoside transport by lactose permease. Dornmair K, et al. **J Biol Chem** 1989 Jan 5; 264(1):342–6
Conversion of 5–S–ethyl–5–thio–D–ribose to ethionine in Klebsiella pneumoniae. Basis for the selective toxicity of 5–S–ethyl–5–thio–D–ribose. Myers RW, et al. **J Biol Chem** 1989 Jun 25;264(18):10547–51

PHARMACOLOGY

Analogs of 5–methylthioribose, a novel class of antiprotozoal agents. Riscoe MK, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1904–6
Effects of dietary sinigrin or indole–3–carbinol on O6–methylguanine–DNA–transmethylase activity and 4–(methylnitrosamino)–1–(3–pyridyl)–1–butanone–induced DNA methylation and tumorigenicity in F344 rats. Morse MA, et al. **Carcinogenesis** 1988 Oct;9(10):1891–5
The effect of feeding brassica vegetables and intact glucosinolates on mixed–function–oxidase activity in the livers and intestines of rats. McDanell R, et al. **Food Chem Toxicol** 1989 May;27(5):289–93
Isolation and characterization of thiodigalactoside–resistant mutants of the lactose permease which possess an enhanced recognition for maltose. Franco PJ, et al. **J Biol Chem** 1989 Sep 25;264(27):15988–92
Antimutagens against spontaneous and induced reversion of a lacZ frameshift mutation in E. coli K–12 strain ND–160. Clarke CH, et al. **Mutat Res** 1988 Nov;202(1):19–23

THIOGUANINE

ADMINISTRATION & DOSAGE

Comparative trial of cytarabine and thioguanine in combination with amsacrine or daunorubicin in patients with untreated acute nonlymphocytic leukemia: results of the L–16M protocol. Berman E, et al. **Leukemia** 1989 Feb; 3(2):115–21

ADVERSE EFFECTS

Peliosis hepatis induced by 6–thioguanine administration. Larrey D, et al. **Gut** 1988 Sep;29(9):1265–9

ANALOGS & DERIVATIVES

Kinetic study of the interaction of glutathione with four antitumor disulfides: possible mechanism for cellular glutathione depletion. Kirkpatrick DL. **Chem Biol Interact** 1989;69(2–3):225–34

PHARMACOLOGY

Flow cytometric enumeration of drug–resistant tumor cells. deFazio A, et al. **Cancer Res** 1988 Nov 1;48(21):6037–43
Molecular analysis of spontaneous hypoxanthine phosphoribosyltransferase mutations in thioguanine–resistant HL–60 human leukemia cells. Monnat RJ Jr. **Cancer Res** 1989 Jan 1;49(1):81–7
Synergistic enhancement of 6–thioguanine cytotoxicity by ADP–ribosyltransferase inhibitors. Moses K, et al. **Cancer Res** 1988 Oct 15;48(20):5650–4
Tolerance to methylnitrosourea–induced DNA damage is associated with 6–thioguanine resistance in CHO cells. Aquilina G, et al. **Carcinogenesis** 1989 Jul;10(7):1219–23
A novel class of unstable 6–thioguanine–resistant cells from dog and human kidneys. Turker MS, et al. **Cell Biol Toxicol** 1988 Jun;4(2):211–23
Mitogenic stimulation may induce an anti–mutagenic repair system in human lymphocytes. Sanderson BJ, et al. **Mutagenesis** 1986 Mar;1(2):131–3
Protection against isoproterenol–induced myocardial necrosis in rats by 6–mercaptopurine and 6–thioguanine or by irradiation. Joseph X, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):385–94
[Mutations of resistance to 6–thioguanine following roentgen irradiation and subsequent treatment with cytosine arabinoside combined with hydroxyurea in Chinese hamster cells in the G1 phase] Elisova TV, et al. **Radiobiologia** 1988 Sep–Oct;28(5):617–22 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Prediction of thioguanine–induced cytotoxicity by dual–parameter flow cytometric analysis. Maybaum J, et al. **Cancer Chemother Pharmacol** 1989;24(5):291–4

TOXICITY

Enumeration of 6–thioguanine–resistant tumour cells using flow cytometry and comparison with a microtitration cloning assay. deFazio A, et al. **Mutat Res** 1989 Feb; 216(1):57–64
Cloning of in vivo–derived thioguanine–resistant human B cells. Hakoda M, et al. **Mutat Res** 1989 Jan;210(1):29–34

6–THIOGUANINE see **THIOGUANINE**

THIOHYDANTOINS see under **HYDANTOINS**

THIOINOSINE see under **INOSINE**

THIOL PROTEINASES see **CYSTEINE PROTEINASES**

THIOLESTER HYDROLASES

Complete amino acid sequence of the thioesterase domain of chicken liver fatty acid synthase. Yang CY, et al. **Biochemistry** 1988 Oct 4;27(20):7773–7

ANALYSIS

Sulfhydryl groups of an extramitochondrial acetyl–CoA hydrolase from rat liver. Nakanishi Y, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):209–13

ANTAGONISTS & INHIBITORS

Effects of some S–blocked glutathione derivatives on the prevalent glyoxalase II (a form) of rat liver. Principato GB, et al. **Enzyme** 1989;41(3):175–80

BIOSYNTHESIS

Sex–related difference in the inductions by perfluoro–octanoic acid of peroxisomal beta–oxidation, microsomal 1–acylglycerophosphocholine acyltransferase and cytosolic long–chain acyl–CoA hydrolase in rat liver. Kawashima Y, et al. **Biochem J** 1989 Jul 15;261(2):595–600

BLOOD

Optimization of efficiency in the glyoxalase pathway. Creighton DJ, et al. **Biochemistry** 1988 Sep 20; 27(19):7376–84
Diffusion–dependent rates for the hydrolysis reaction catalyzed by glyoxalase II from rat erythrocytes. Guha MK, et al. **Biochemistry** 1988 Nov 29;27(24):8818–22
The human red blood cell glyoxalase system in diabetes mellitus. Thornalley PJ, et al. **Diabetes Res Clin Pract** 1989 Aug 1;7(2):115–20

GENETICS

Characterization of a genomic and cDNA clone coding for the thioesterase domain and 3' noncoding region of the chicken liver fatty acid synthase gene. Kasturi R, et al. **Biochemistry** 1988 Oct 4;27(20):7778–85
Nucleotide sequence of the S–acyl fatty acid synthase thioesterase gene and its tissue–specific expression. Sasaki GC, et al. **DNA** 1988 Sep;7(7):449–57

ISOLATION & PURIFICATION

Purification and characterization of an acetyl–CoA hydrolase from Saccharomyces cerevisiae. Lee FJ, et al. **Eur J Biochem** 1989 Sep 1;184(1):21–8
D–methylmalonyl–CoA hydrolase. Kovachy RJ, et al. **Methods Enzymol** 1988;166:393–400

METABOLISM

Acetyl–CoA hydrolase: relation between activity and cholesterol metabolism in rat. Ebisuno S, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R724–30
Analysis of thiolester bond cleavage–dependent conformational changes in binary alpha 2–macroglobulin–proteinase complexes. Roche PA, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):285–93
Detection, resolution, and nomenclature of multiple ubiquitin carboxyl–terminal esterases from bovine calf thymus. Mayer AN, et al. **Biochemistry** 1989 Jan 10;28(1):166–72
Binding of nucleotides to an extramitochondrial acetyl–CoA hydrolase from rat liver. Nakanishi Y, et al. **Biochemistry** 1988 Jun 28;27(13):4822–6
NADH–sensitive propionyl–CoA hydrolase in brown–adipose–tissue mitochondria of the rat. Alexson SE, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):13–9
Expression of glyoxalase, glutathione peroxidase and glutathione S–transferase isoenzymes in different bovine tissues. Hayes JD, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):21–9
Glyoxalase activity and cell proliferation in Burkitt's lymphoma and transformed lymphoblast cells in vitro. Hooper NI, et al. **Cell Mol Biol** 1988;34(4):399–405
Effects of experimental hypo– and hyperthyroidism on hepatic long–chain fatty acyl–CoA synthetase and hydrolase. Dang AQ, et al. **Horm Metab Res** 1989 Jul; 21(7):359–61
The biphasic change of cytosolic acetyl–CoA hydrolase in rat liver during 3'–methyl–4–dimethylaminoazobenzene hepatocarcinogenesis. Ebisuno S, et al. **Jpn J Cancer Res** 1989 Feb;80(2):132–5

THIOLS see **SULFHYDRYL COMPOUNDS**

THIOMALATES

URINE

Determination and metabolism of dithiol chelating agents. IV. Urinary excretion of meso–2,3–dimercaptosuccinic acid and mercaptosuccinic acid in rabbits given meso–2,3–dimercaptosuccinic acid. Maiorino RM, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1147–54

THIOMEBUMAL see **THIOPENTAL**

THIONEINE see **ERGOTHIONEINE**

THIONES

Application of the reaction of dithioesters with epsilon–amino groups in lysine to the chemical modification of proteins. Souppe J, et al. **Biochim Biophys Acta** 1988 Nov 23; 957(2):254–7
Charge calculations in molecular mechanics 7: application to polar pi systems incorporating nitro, cyano, amino, C=S and thio substituents. Abraham RJ, et al. **J Comput Aided Mol Des** 1989 Jun;3(2):175–87

ANALYSIS

Fate and effects of xanthates in laboratory freshwater systems. Xu Y, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):683–9

CHEMICAL SYNTHESIS

[Synthesis of 3–cyano–6–methyl–4–pyridyl–2(1H)–pyridinethiones as well as 2–substituted 6–methyl–4–pyridyl–pyridine–3–carbonitriles and 3–carbonic acid amides, respectively, and testing their cardiovascular activity] Hanfeld V, et al. **Pharmazie** 1989 Jan;44(1):12–5 (Eng. Abstr.) **(Ger)**
[Synthesis and anti–ulcer activity of 3–arylprop–2–enthionoethyl esters] Guerrera F, et al. **Farmaco [Sci]** 1988 Jun;43(6):551–8 (Eng. Abstr.) **(Ita)**

PHARMACOLOGY

Interruption of TPA–induced signals by an antiviral and antitumoral xanthate compound: inhibition of a phospholipase C–type reaction. Müller–Decker K. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):198–205
Mechanistic aspects of the synergistic antiviral effect of xanthates and monocarbonic acids. Music L, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1941–5
Antiasthmatic effects of onions. Prevention of platelet–activating factor induced bronchial hyperreactivity to histamine in guinea pigs by diphenylthiosulfinate. Dorsch W, et al. **Int Arch Allergy Appl Immunol** 1989;

88(1-2):228-30
Tumor prevention by a xanthate compound in experimental mouse-skin tumorigenesis. Fürstenberger G, et al. **Int J Cancer** 1989 Mar 15;43(3):508-12

THERAPEUTIC USE

Effects of potassium ethylxanthogenate on nitrosodiethylamine-induced DNA damage and on liver carcinogenesis. Hadjiolov D, et al. **Arch Geschwulstforsch** 1988;58(5):313-8

THIONUCLEOSIDES

ANALYSIS

Characterization and biogenesis of 5'-methylthioxylofuranosyl adenine, a new natural analog of 5'-methylthioadenosine. Porcelli M, et al. **Adv Exp Med Biol** 1988;250:219-28

METABOLISM

Muscarinic receptor subtype specificity of 5'-(isobutylthio)-adenosine (SIBA) and its analogs. Smejkal RM, et al. **Gen Pharmacol** 1989;20(3):385-92

PHARMACOLOGY

Methylthioadenosine toxicity and metabolism to methionine in mammalian cells. Christa L, et al. **Biochem J** 1988 Oct 1;255(1):145-52
Effects of S-adenosyl-1,8-diamino-3-thio-octane and S-methyl-5'-methylthioadenosine on polyamine synthesis in Ehrlich ascites-tumour cells. Holm I, et al. **Biochem J** 1989 Jul 1;261(1):205-10
Potentiation of methotrexate lymphocytotoxicity in vitro by inhibitors of nucleoside transport. Hughes JM, et al. **Br J Cancer** 1989 Mar;59(3):381-4
Altered cell shapes in fibroblasts treated with 5'-deoxy-5'-methylthioadenosine: relation to morphogenesis of neural cells. Smalheiser NR. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):59-67
Induction of interleukin 1 activity from macrophages by direct interaction with C8-substituted guanine ribonucleosides. Goodman MG. **Int J Immunopharmacol** 1988;10(5):579-86
8-Mercaptoguanosine overcomes unresponsiveness of human neonatal B cells to polysaccharide antigens. Rijkers GT, et al. **J Immunol** 1988 Oct 1;141(7):2313-6
Synthesis and antiproliferative effects of novel 5'-fluorinated analogues of 5'-deoxy-5'-(methylthio)adenosine. Sufrin JR, et al. **J Med Chem** 1989 May;32(5):997-1001

THIONUCLEOTIDES

Synthetic repeating sequence DNAs containing phosphorothioates: nuclease sensitivity and triplex formation. Latimer LJ, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1549-61

BLOOD

Receptor-regulated formation of GTP[gamma S] with subsequent persistent Gs-protein activation in membranes of human platelets. Wieland T, et al. **FEBS Lett** 1989 Mar 13;245(1-2):189-93
Characterization of GTP-gamma-S binding to isolated human platelet plasma membranes and its relationship with the stimulation of a phospholipase C activity. Apitz-Castro R, et al. **Thromb Res** 1989 Sep 15;55(6):747-56

CHEMICAL SYNTHESIS

Synthesis of phosphorothioate analogues of oligodeoxyribonucleotides and their antiviral activity against human immunodeficiency virus (HIV). Matsukura M, et al. **Gene** 1988 Dec 10;72(1-2):343-7
Synthesis of (Rp,Rp)-P1,P4-Bis(5'-adenosyl)-1[17O,18O2],4[17O,18O2] tetraphosphate from (Sp,Sp)-P1,P4-Bis(5'-adenosyl)-1[thio-18O2], 4[thio-18O2]tetraphosphate with retention at phosphorus and the stereochemical course of hydrolysis by the unsymmetrical Ap4A phosphodiesterase from lupin seeds. Dixon RM, et al. **J Biol Chem** 1989 Feb 5;264(4):2069-74

METABOLISM

RNA mediated formation of a phosphorothioate diester bond. Buzayan JM, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):340-7
ras p21 and other Gn proteins are detected in mammalian cell lines by [gamma-35S]GTP gamma S binding. Comerford JG, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1269-74
Conformation change of effector-region residues in antiparallel beta-sheet of human c-Ha-ras protein on GDP——GTP gamma S exchange: a two-dimensional NMR study. Yamasaki K, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1054-62
Guanine nucleotides induce tyrosine phosphorylation and activation of the respiratory burst in neutrophils. Nasmith PE, et al. **Biochem J** 1989 Feb 1;257(3):893-7
Rapid binding of guanosine 5'-O-(3-thiotriphosphate) to an apparent complex of beta-adrenergic receptor and the GTP-binding regulatory protein Gs. May DC, et al. **Biochemistry** 1988 Jun 28;27(13):4888-93
Stereochemical control over Mn(II)-thio versus Mn(II)-oxy coordination in adenosine 5'-O-(1-thiodiphosphate) complexes at the active site of creatine kinase. Smithers GW, et al. **Biochemistry** 1989 Feb 21;28(4):1597-604
Phosphorothioate and normal oligodeoxyribonucleotides with 5'-linked acridine: characterization and preliminary kinetics of cellular uptake. Stein CA, et al. **Gene** 1988 Dec 10;72(1-2):333-41
Guanine nucleotide-sensitive interaction of a radiolabeled agonist with a phospholipase C-linked P2y-purinergic receptor. Cooper CL, et al. **J Biol Chem** 1989 Apr 15; 264(11):6202-6
Stereochemical course of the reaction catalyzed by the cyclic GMP phosphodiesterase from retinal rod outer segments. Eckstein F, et al. **J Biol Chem** 1988 Oct 5;263(28):14080-5
Aspartyl peptide labeled by 2-(4-bromo-2,3-dioxobutylthio)adenosine 5'-diphosphate in the allosteric ADP site of pig heart NAD+-dependent isocitrate dehydrogenase. Huang YC, et al. **J Biol Chem** 1989 Jul 25;264(21):12208-14
Different phosphorylation patterns of cardiac myosin light chains using ATP and ATP gamma S as substrates. Bialojan C, et al. **J Mol Cell Cardiol** 1988 Jul;20(7):575-8
Effect of guanosine 5'-O-(3-thiotriphosphate) and calcium on gamma-aminobutyric acidB binding as a function of postnatal development. al-Dahan MI, et al. **J Neurochem** 1989 Jan;52(1):313-6
Detection of a novel serotonin receptor subtype (5-HT1E) in human brain: interaction with a GTP-binding protein. Leonhardt S, et al. **J Neurochem** 1989 Aug;53(2):465-71
Incorporation of analogues of GTP and GDP into rod photoreceptors isolated from the tiger salamander. Lamb TD, et al. **J Physiol (Lond)** 1988 Dec;407:463-87
GTP gamma S binding activities were reduced in heavy membrane fraction during desensitization by Ca-mobilizing agonists in human astrocytoma cells. Nakahata N, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):179-92
Phosphorothioates in molecular biology. Eckstein F, et al. **Trends Biochem Sci** 1989 Mar;14(3):97-100 (33 ref.)

PHARMACOLOGY

GTP gamma S loading of endothelial cells stimulates phospholipase C and uncouples ATP receptors. Brock TA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C667-73
Prevention of tubercidin host toxicity by nitrobenzylthioinosine 5'-monophosphate for the treatment of schistosomiasis. el Kouni MH, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):824-7
Activation of 5-lipoxygenase by guanosine 5'-O-(3-thiotriphosphate) and other nucleoside phosphorothioates: redox properties of thionucleotide analogs. Denis D, et al. **Arch Biochem Biophys** 1989 Sep; 273(2):592-6
Effects of heparin on inositol 1,4,5-trisphosphate and guanosine 5'-O-(3-thio triphosphate) induced calcium release in cultured smooth muscle cells from rabbit trachea. Chopra LC, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):262-8
Phorbol ester treatment inhibits thrombin but not stable GTP analogue-induced platelet granule secretion despite inhibition of phosphatidate formation with both agonists. Krishnamurthi S, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1257-64
Norepinephrine and GTP-gamma-S increase myofilament Ca2+ sensitivity in alpha-toxin permeabilized arterial smooth muscle. Nishimura J, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):677-83
Synergistic inhibition of hepatic ketogenesis in the presence of insulin and a cAMP antagonist. Olivieri MC, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):741-7
Action of guanosine 5'-[beta-thio]diphosphate on thrombin-induced activation and Ca2+ mobilization in saponin-permeabilized and intact human platelets. Authi KS, et al. **Biochem J** 1988 Nov 1;255(3):885-93
Kinetics of cell-free activation of neutrophil NADPH oxidase. Effects of neomycin and guanine nucleotides. Aviram I, et al. **Biochem J** 1989 Jul 15;261(2):477-82
G-protein involvement in central-nervous-system muscarinic-receptor-coupled polyphosphoinositide hydrolysis. Chiu AS, et al. **Biochem J** 1988 Dec 15; 256(3):995-9
Carbachol and histamine stimulation of guanine-nucleotide-dependent phosphoinositide hydrolysis in rat brain cortical membranes. Claro E, et al. **Biochem J** 1989 Jul 1;261(1):29-35
Evidence that guanosine 5'-[gamma-thio]triphosphate stimulates plasma membrane Ca2+ inflow when introduced into hepatocytes. Hughes BP, et al. **Biochem J** 1989 Jan 15;257(2):591-8
Chemoattractant and guanosine 5'-[gamma-thio]triphosphate induce the accumulation of inositol 1,4,5-trisphosphate in Dictyostelium cells that are labelled with [3H]inositol by electroporation. Van Haastert PJ, et al. **Biochem J** 1989 Mar 1;258(2):577-86
Stepwise mechanism of HIV reverse transcriptase: primer function of phosphorothioate oligodeoxynucleotide. Majumdar C, et al. **Biochemistry** 1989 Feb 7;28(3):1340-6
Determination of RNA-protein contacts using thiophosphate substitutions. Milligan JF, et al. **Biochemistry** 1989 Apr 4; 28(7):2849-55
Phospholipase C in rabbit thymocytes: subcellular distribution and influences of calcium and GTP gamma S on the substrate dependence of cytosolic and plasma membrane-associated phospholipase C. Behl B, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):179-88
Influence of follicular maturation on luteinizing hormone and guanosine 5'-O-thiotriphosphate-promoted breakdown of phosphoinositides and calcium mobilization in chicken granulosa cells. Hertelendy F, et al. **Biol Reprod** 1989 Jun; 40(6):1144-51
Circadian rhythm of the rat suprachiasmatic brain slice is rapidly reset by daytime application of cAMP analogs. Gillette MU, et al. **Brain Res** 1988 Dec 6;474(2):348-52
Guanosine-5'-O-thiodiphosphate functions as a partial agonist for the receptor-independent stimulation of neural adenylate cyclase. Rasenick MM, et al. **Brain Res** 1989 May 29;488(1-2):105-13
Characterization of a cysteine-containing peptide after affinity labelling of Ca2+-ATPase of sarcoplasmic reticulum with the disulfide of 3'(2')-O-biotinyl-thioinosine triphosphate. Kison R, et al. **Eur J Biochem** 1989 May 1;181(2):503-11
Effects of 2-methylthio ATP on insulin secretion in the dog in vivo. Ribes G, et al. **Eur J Pharmacol** 1988 Oct 11; 155(1-2):171-4
Rp-diastereomer of adenosine cyclic 3',5'-phosphorothioate as an antagonist of the stimulatory action of cyclic AMP on the ouabain-insensitive Na efflux in single barnacle muscle fibers. Nwoga J, et al. **Experientia** 1989 Feb 15; 45(2):142-3
Inhibition by cyclic AMP of guanine nucleotide-induced activation of phosphoinositide-specific phospholipase C in human platelets. Yada Y, et al. **FEBS Lett** 1989 Jan 2; 242(2):368-72
Modification of AlF-4- and receptor-stimulated phospholipase C activity by G-protein beta gamma subunits. Boyer JL, et al. **J Biol Chem** 1989 Aug 15; 264(23):13917-22
Guanosine 5'-O-(3-thiotrisphosphate) potentiates both thrombin- and platelet-derived growth factor-induced inositol phosphate release in permeabilized vascular smooth muscle cells. Signaling mechanisms distinguished by sensitivity to pertussis toxin and phorbol esters. Huang CL, et al. **J Biol Chem** 1989 Mar 15;264(8):4391-7
Subunit dissociation is the mechanism for hormonal activation of the Gs protein in native membranes. Ransnäs LA, et al. **J Biol Chem** 1988 Nov 25;263(33):17239-42
The dynamics of exocytosis in human neutrophils. Nüsse O, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2117-23
Evidence that guanosine triphosphate (GTP)-binding proteins control a synaptic response in brain: effect of pertussis toxin and GTP gamma S on the late inhibitory postsynaptic potential of hippocampal CA3 neurons. Thalmann RH. **J Neurosci** 1988 Dec;8(12):4589-602
Guanine nucleotide binding proteins may modulate gating of calcium channels in vascular smooth muscle. II. Studies with guanosine 5'-(gamma)triphosphate. Zeng YY, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):352-7
Guanosine 5'-triphosphate analogue activates potassium current modulated by neurotransmitters in Aplysia neurones. Březina V. **J Physiol (Lond)** 1988 Dec;407:15-40
Identification of an adenosine 3',5'-monophosphate (cAMP)-responsive region in the rat growth hormone gene: evidence for independent and synergistic effects of cAMP and thyroid hormone on gene expression. Copp RP, et al. **Mol Endocrinol** 1989 May;3(5):790-6
Glucocorticoid and cyclic nucleotide regulation of plasminogen activator and plasminogen activator-inhibitor gene expression in primary cultures of rat hepatocytes. Heaton JH, et al. **Mol Endocrinol** 1989 Jan;3(1):185-92
Bradykinin enhances excitability in cultured rat sensory neurones by a GTP-dependent mechanism. McGuirk SM, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):85-9
GTP-binding proteins mediate the M2-muscarinic effect on the action potential in isolated sympathetic neurons of rabbits. Mochida S, et al. **Neurosci Lett** 1988 Nov 11; 93(2-3):247-52
Muscarinic excitation and inhibition of neurons in the submucous plexus of the guinea-pig caecum. Mihara S, et al. **Neuroscience** 1989;31(1):247-57
Oligodeoxynucleoside phosphoramidates and phosphorothioates as inhibitors of human immunodeficiency virus [published erratum appears in Proc Natl Acad Sci U S A 1989 Mar;86(5):1504] Agrawal S, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7079-83
Glucocorticoid and cAMP induction mechanisms are differentially affected by the p85gag-mos oncoprotein. Hamilton BJ, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(2):597-601
Phosphorothioate and cordycepin analogues of 2',5'-oligoadenylate: inhibition of human immunodeficiency virus type 1 reverse transcriptase and infection in vitro. Montefiori DC, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7191-4
Regulation of a heart potassium channel by protein kinase A and C. Walsh KB, et al. **Science** 1988 Oct 7; 242(4875):67-9

THIOPENTAL

Comparison of propofol induction with thiopentone or methohexitone in short outpatient general anaesthesia.

Raeder JC, et al. **Acta Anaesthesiol Scand** 1988 Nov; 32(8):607–13

Anaesthesia for computerised tomography of the brain in children: a comparison of propofol and thiopentone. Valtonen M. **Acta Anaesthesiol Scand** 1989 Feb;33(2):170–3

Fetal heart rate changes associated with general anesthesia. Fedorkow DM, et al. **Am J Perinatol** 1989 Jul;6(3):287–8

Bilateral abnormal branch of radial artery [letter] Yau G, et al. **Anaesth Intensive Care** 1989 Feb;17(1):116–7

Propofol–induced anaesthesia. Double–blind comparison of recovery after anaesthesia induced by propofol or thiopentone. Sanders LD, et al. **Anaesthesia** 1989 Mar; 44(3):200–4

A randomized comparison between midazolam and thiopental for elective cesarean section anesthesia. I. Mothers. Crawford ME, et al. **Anesth Analg** 1989 Mar; 68(3):229–33

Fentanyl–induced muscle rigidity in unanesthetized and ketamine– or thiopental–anesthetized rats. Lui PW, et al. **Anesthesiology** 1989 Jun;70(6):984–90

Thiopental requirements for induction of anesthesia in neonates and in infants one to six months of age. Westrin P, et al. **Anesthesiology** 1989 Sep;71(3):344–6

Dose–response curves for suxamethonium in neonates, infants and children. Meakin G, et al. **Br J Anaesth** 1989 Jun; 62(6):655–8

Anaesthesia for cardioversion: a comparison of propofol and thiopentone. Valtonen M, et al. **Can J Anaesth** 1988 Sep; 35(5):479–83

Awareness of intubation with thiopental as induction agent. Huang ST, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun; 26(2):169–72

Changes in plasma cortisol concentration by ages in dogs under ketamine and thiopental anesthesia. Tagawa M, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):278–83

Diazepam and thiopentone sodium anaesthesia in calves: evaluation of cardio–respiratory dynamics, blood gases and acid–base status. Mirakhur KK, et al. **Zentralbl Veterinarmed [A]** 1988 Dec;35(10):775–84

[Changes in systemic and pulmonary circulation during thiopental induction of anesthesia] Terzinacheva P. **Khirurgiia (Sofiia)** 1988;41(5):47–51 (Eng. Abstr.) **(Bul)**

[Propofol versus thiopentone as the main anesthetic for brief surgical interventions] Jenstrup M, et al. **Ugeskr Laeger** 1988 Oct 10;150(41):2454–7 (Eng. Abstr.) **(Dan)**

[Total intravenous anesthesia in direct laryngoscopy. A comparison of methohexital (Brietal) and thiopental] Schou H, et al. **Ugeskr Laeger** 1989 Jun 26;151(26):1679–81 (Eng. Abstr.) **(Dan)**

[Methohexital/alfentanil–thiopental/alfentanil for total intravenous anesthesia for direct laryngoscopy with 100% O2 jet ventilation] Tolksdorf W, et al. **Anasth Intensivther Notfallmed** 1988 Aug;23(4):191–4 (Eng. Abstr.) **(Ger)**

[Ambulatory anesthesia using thiopental: when to discharge the patient? (letter)] Hernández C, et al. **Rev Esp Anestesiol Reanim** 1988 Nov–Dec;35(6):347 **(Spa)**

ADMINISTRATION & DOSAGE

Apparent resistance to thiopentone [letter] Andrew LJ, et al. **Anaesthesia** 1989 Jul;44(7):619

Flushing between thiopentone and atracurium [letter] Radford P. **Anaesthesia** 1988 Sep;43(9):798–9

Induction of anesthesia with small doses of sufentanil or fentanyl: dose versus EEG response, speed of onset, and thiopental requirement. Bowdle TA, et al. **Anesthesiology** 1989 Jan;70(1):26–30

[Comparison of propofol and thiopentone in young and elderly patients] Nielsen PA, et al. **Ugeskr Laeger** 1989 Aug 28;151(35):2204–6 (Eng. Abstr.) **(Dan)**

ADVERSE EFFECTS

Anaphylaxis to thiopentone: an unusual outbreak in a single hospital. Fisher MM, et al. **Anaesth Intensive Care** 1989 Aug;17(3):361–5

Factors that influence cutaneous reactions following administration of thiopentone and atracurium. Lynas AG, et al. **Anaesthesia** 1988 Oct;43(10):825–8

A randomized comparison between midazolam and thiopental for elective cesarean section anesthesia: II. Neonates. Ravlo O, et al. **Anesth Analg** 1989 Mar; 68(3):234–7

A new therapeutic approach to accidental intra–arterial injection of thiopentone. Vangerven M, et al. **Br J Anaesth** 1989 Jan;62(1):98–100

Fatal haemopathological consequences of general anaesthesia. Wright PJ, et al. **Br J Anaesth** 1989 Jan; 62(1):104–7

ANALOGS & DERIVATIVES

Effects of vasoactive intestinal peptide on vascular conductance are unaffected by anesthesia. Bouder TG, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R968–73

Tubulo–glomerular feedback response: enhancement in adult spontaneously hypertensive rats and effects of anaesthetics. Leyssac PP, et al. **Pflugers Arch** 1989 Jan;413(3):267–72

Comparison of anaesthetic and kinetic properties of thiobutabarbital, butabarbital and hexobarbital after intravenous threshold doses in the male rat. Koskela T, et al. **Pharmacol Toxicol** 1989 Mar;64(3):308–13

ANALYSIS

High–performance liquid chromatographic method for determining thiopental concentrations in twelve rat tissues: application to physiologic modeling of disposition of barbiturate. Ebling WF, et al. **J Chromatogr** 1989 May 30; 490(2):339–53

DIAGNOSTIC USE

The use of EEG spectral analysis after thiopental bolus in the prognostic evaluation of comatose patients with brain injuries. Klein HJ, et al. **Acta Neurochir Suppl (Wien)** 1988; 42:31–4

Quantitative comparison of cell loss and thiopental–induced EEG changes in human epileptic hippocampus. Lieb JP, et al. **Epilepsia** 1989 Mar–Apr;30(2):147–56

PHARMACOKINETICS

A randomized comparison between midazolam and thiopental for elective cesarean section anesthesia: III. Placental transfer and elimination in neonates. Bach V, et al. **Anesth Analg** 1989 Mar;68(3):238–42

First–pass uptake of verapamil, diazepam, and thiopental in the human lung. Roerig DL, et al. **Anesth Analg** 1989 Oct; 69(4):461–6

Intravascular mixing and drug distribution: the concurrent disposition of thiopental and indocyanine green. Henthorn TK, et al. **Clin Pharmacol Ther** 1989 Jan;45(1):56–65

Individual variation in response to thiopentone. Christensen JH. **Dan Med Bull** 1989 Jun;36(3):281–98 (134 ref.)

Pharmacokinetics of thiopental in the asphyxiated neonate. Garg DC, et al. **Dev Pharmacol Ther** 1988;11(4):213–8

Interaction between benzylpenicillin and thiopental in the central nervous system of the male rat. Schliamser SE, et al. **Pharmacol Toxicol** 1989 Feb;64(2):222–7

[Delay in the elimination of thiopental and phenoperidine related to cimetidine] Favre JP, et al. **Cah Anesthesiol** 1988 Jun–Jul;36(4):313–5 **(Fre)**

PHARMACOLOGY

Pharmacokinetics of midazolam and alfentanil in outpatient general anesthesia. A study with concomitant thiopentone, flumazenil or placebo administration. Raeder JC, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):467–72

Effects of thiopental on granulocyte oxidative microbicidal capacity. Salo M, et al. **Acta Anaesthesiol Scand** 1989 May; 33(4):339–42

The influence of different anesthetics on the oxygen delivery to and consumption of the heart. van Daal GJ, et al. **Adv Exp Med Biol** 1989;248:527–32

Effects of intravenously given barbiturate and diazepam on eye motor performance in man. Schalen L, et al. **Adv Otorhinolaryngol** 1988;42:260–4

Cardiovascular responses to induction of anaesthesia with thiopentone and suxamethonium in infants and children. Tibballs J, et al. **Anaesth Intensive Care** 1988 Aug; 16(3):278–84

Intra–ocular pressure changes during rapid sequence induction of anaesthesia. A comparison between thiopentone and suxamethonium and thiopentone and atracurium. Edmondson L, et al. **Anaesthesia** 1988 Dec; 43(12):1005–10

Dose–related changes in the rate of cerebrospinal fluid formation and resistance to reabsorption of cerebrospinal fluid following administration of thiopental, midazolam, and etomidate in dogs. Artru AA. **Anesthesiology** 1988 Oct; 69(4):541–6

Comparison of the effects of isoflurane and thiopental on neurologic outcome and neuropathology after temporary focal cerebral ischemia in primates. Milde LN, et al. **Anesthesiology** 1988 Dec;69(6):905–13

Effect of general anesthesia on syncytiotrophoblast plasma membranes from human placenta. Mazzanti L, et al. **Biochem Int** 1988 Jun;16(6):1095–101

Influence of thiopentone on upper airway muscles. Drummond GB. **Br J Anaesth** 1989 Jul;63(1):12–21

Anticonvulsive properties of pregnanolone emulsion compared with althesin and thiopentone in mice. Høgskilde S, et al. **Br J Anaesth** 1988 Oct;61(4):462–7

Effects of thiopentone on median nerve somatosensory evoked potentials. Sloan TB, et al. **Br J Anaesth** 1989 Jul; 63(1):51–5

Potassium permeability in pancreatic beta–cell. The effect of thiopental. Gonçalves AA, et al. **Braz J Med Biol Res** 1988;21(2):365–8

Haemodynamic responses to laryngoscopy and tracheal intubation in geriatric patients: effects of fentanyl, lidocaine and thiopentone. Splinter WM, et al. **Can J Anaesth** 1989 Jul;36(4):370–6

Evaluation of acepromazine/meperidine/atropine premedication followed by thiopental anesthesia in the cat. Dyson DH, et al. **Can J Vet Res** 1988 Oct;52(4):419–22

Influence of thiopental anaesthesia on fetal motor behaviour in early pregnancy. Jørgensen NP, et al. **Early Hum Dev** 1988 May;17(1):71–8

Neonatal serum cortisol suppression by etomidate compared with thiopentone, for elective caesarean section. Reddy BK, et al. **Eur J Anaesthesiol** 1988 May;5(3):171–6

Methods for studying the effect of anesthetics on anoxic damage in the rat hippocampal slice. Kass IS, et al. **J Neurosci Methods** 1989 May;28(1–2):77–82

The effect of sodium thiopentone and succinylcholine on blood pressure and intraocular pressure. Ukra H, et al. **Middle East J Anesthesiol** 1988 Oct;9(6):505–15

Effect of sodium thiopentone and midazolam on intraocular pressure, pulse rate and blood pressure—a comparative study. Ukra HS, et al. **Middle East J Anesthesiol** 1988 Oct; 9(6):491–504

Effects of thiopentone and etomidate on median nerve somatosensory evoked responses. Russ W, et al. **Neurol Res** 1989 Mar;11(1):51–6

Anaesthetic properties of pregnanolone in mice in an emulsion preparation for intravenous administration: a comparison with thiopentone. Larsson–Backström C, et al. **Pharmacol Toxicol** 1988 Sep;63(3):143–9

[The amount of histamine released in vivo by hypnotics (thiopental, methohexital, propofol) studied by assays of plasma histamine] Widmer S, et al. **Allerg Immunol (Paris)** 1988 Nov;20(9):346–7 (Eng. Abstr.) **(Fre)**

POISONING

The case against lethal injection. Gorman JD, et al. **Va Med** 1988 Dec;115(12):576–7

THERAPEUTIC USE

On hot mice, cold facts, and would–be replication [letter] Hartung J, et al. **Anesth Analg** 1989 Sep;69(3):408–10

Thiopental for phantom limb pain during spinal anesthesia. Koyama K, et al. **Anesthesiology** 1988 Oct;69(4):598–600

Can barbiturate anaesthesia cure infantile spasms? Riikonen R, et al. **Brain Dev** 1988;10(5):300–4

Thiopental infusion in the treatment of intracranial hypertension complicating fulminant hepatic failure. Forbes A, et al. **Hepatology** 1989 Sep;10(3):306–10

The use of thiopentone in the treatment of non–organic locomotor disorders. White A, et al. **J Psychosom Res** 1988; 32(3):249–53

Spinal cord ischemia: an evaluation of pharmacologic agents in minimizing paraplegia after aortic occlusion. Kirshner DL, et al. **J Vasc Surg** 1989 Feb;9(2):305–8

EEG monitoring of prolonged thiopentone administration for intractable seizures and status epilepticus in infants and young children. Tasker RC, et al. **Neuropediatrics** 1989 Aug;20(3):147–53

Temporary vessel occlusion and barbiturate protection in cerebral aneurysm surgery. McDermott MW, et al. **Neurosurgery** 1989 Jul;25(1):54–61; discussion 61–2

THIOPENTOBARBITAL see **THIOPENTAL**

THIOPHANATE see under **CARBAMATES**

THIOPHENES

Properties and biological interactions of polyurethane anionomers: effect of sulfonate incorporation. Grassl TG, et al. **J Biomed Mater Res** 1989 Mar;23(3):311–38

Synthesis and thromboxane synthetase inhibitory activity of di– or tetrahydrobenzo[b]thiophenecarboxylic acid derivatives. Amemiya Y, et al. **J Med Chem** 1989 Jun; 32(6):1265–72

The thieno[3,2–c]pyridine and furo[3,2–c]pyridine rings: new pharmacophores with potential antipsychotic activity. New JS, et al. **J Med Chem** 1989 Jun;32(6):1147–56

Photosensitization with alpha–terthienyl: the formation of superoxide ion in aqueous media. Kagan J, et al. **J Photochem Photobiol [B]** 1989 Apr;3(2):165–74

ADMINISTRATION & DOSAGE

Topical carbonic anhydrase inhibitors. Kass MA. **Am J Ophthalmol** 1989 Mar 15;107(3):280–2

ADVERSE EFFECTS

[A new case of hepatitis caused by thiopheol (letter)] Pouderoux P, et al. **Gastroenterol Clin Biol** 1988 Aug–Sep; 12(8–9):673–4 **(Fre)**

[Unilateral pupillotonia after ipsilateral dental anesthesia] Amer Ferrer G, et al. **Arch Neurobiol (Madr)** 1988 Nov–Dec;51(6):349–51 (Eng. Abstr.) **(Spa)**

[Intrahepatic cholestasis and agranulocytosis in a young man: toxic reaction or citiolone?] Fernández Sanfiel ML, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):465–6 (Eng. Abstr.) **(Spa)**

ANALYSIS

Determination of enantiomeric purity of the new D–2 dopamine agonist 2–(N–propyl–N–2–thienylethylamino)–5–hydroxytetralin (N–0437) by reversed–phase high–performance liquid chromatography after pre–column derivatization with D(+)–glucuronic acid. Gerding TK, et al. **J Chromatogr** 1989 Jan 27;487(1):125–34

Stereoselective disposition of the geometric isomers of a novel lipoxygenase cyclo–oxygenase inhibitor in dog and photochemical interconversion of its isomers. Matuszewski BK, et al. **J Pharm Sci** 1988 Oct;77(10):880–4

Development of a radioreceptor assay for the D2–selective dopamine agonist N–0437. Ensing K, et al. **Pharm Res** 1988 May;5(5):283–7

Accumulation and distribution of thiophenes in Tagetes

pstula. Tosi B, et al. **Pharmacol Res Commun** 1988 Dec; 20 Suppl 5:117–21

BLOOD

Analysis of the dopamine agonist N–0437 in rat serum using reversed–phase high–performance liquid chromatography with electrochemical detection. den Dass I, et al. **J Chromatogr** 1989 Jan 27;487(1):210–4

CHEMICAL SYNTHESIS

Synthesis and antifungal properties of dihydrobenzothiophene azoles. Rane DF, et al. **Ann N Y Acad Sci** 1988;544:105–8

Synthesis and mucolytic–expectorant activity of 3–mercapto–2 oxo 1–pyrrolidinyl acetic acid derivatives. Coppi G, et al. **Boll Chim Farm** 1988 Jun;127(6):148–52

Synthesis and D2 dopaminergic activity of pyrrolidinium, tetrahydrothiophenium, and tetrahydrothiophene analogues of sulpiride. Harrold MW, et al. **J Med Chem** 1989 Apr;32(4):874–80

2–(2–arylvinyl)thieno[2,3–d]pyrimidines. Part 1: Synthesis and structure of 2–(2–arylvinyl)thieno[2,3–d]pyrimidin–6–yl–ketones with potential biological activity. el–Bahaie S, et al. **Pharmazie** 1989 May;44(5):348–9

Antimicrobial activity of 5–(2–thiophenylidene)–2–thiobarbituric acid. Bautista Paloma FJ, et al. **Pharmazie** 1988 Dec;43(12):877–8

Synthesis and reactions of some biologically active 2–(2'–thienyl)benzoxazinone and quinazolinone derivatives. el–Khamry AM, et al. **Pharmazie** 1989 May;44(5):312–5

[Thiophene as a structural element in physiologically active substances. 17. Thienoisoxazoles through nucleophile substitution] Binder D, et al. **Arch Pharm (Weinheim)** 1988 Jul;321(7):391–5 (Eng. Abstr.) (Ger)

[One–step synthesis of 2–aminothieno [2,3–d]thiazen–4–ones in some cases 5,6–anellated from ethyl 2–benzoylthioureidothiophen–3–carboxylates and evaluation of their anti–allergy activity] Leistner S, et al. **Pharmazie** 1988 Jul;43(7):466–70 (Eng. Abstr.) (Ger)

[Synthesis and antifungal activity of new derivatives of 5–(4–halobenzoyl)–4–amino–3–(2–dialkylaminoethylthio)thieno [2,3–c] and [3,2–d] isothiazole] Romeo G, et al. **Farmaco [Sci]** 1988 May; 43(5):457–67 (Eng. Abstr.) (Ita)

METABOLISM

Successive mutation of E. coli for improved thiophene degradation. Scientific note. Clark DP, et al. **Appl Biochem Biotechnol** 1988 Aug;18:393–401

Mineralization of the dibenzothiophene biodegradation products 3–hydroxy–2–formyl benzothiophene and dibenzothiophene sulfone. Mormile MR, et al. **Appl Environ Microbiol** 1988 Dec;54(12):3183–4

Pharmacokinetics, metabolism, and renal excretion of articaine and its metabolite articainic acid in patients after epidural administration. van Oss GE, et al. **Eur J Anaesthesiol** 1989 Jan;6(1):49–56

Toxicity, localization and elimination of the phototoxin, alpha–terthienyl, in mosquito larvae. Hasspieler BM, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):479–84

PHARMACOKINETICS

Ocular distribution studies of the topical carbonic anhydrase inhibitors L–643,799 and L–650,719 and related alkyl prodrugs. Grove J, et al. **J Ocul Pharmacol** 1988 Winter; 4(4):279–90

Clinical effects and pharmacokinetics of articainic acid in one volunteer after intravenous administration. Van Oss GE, et al. **Pharm Weekbl [Sci]** 1988 Dec 9;10(6):284–6

PHARMACOLOGY

RS–5186, a novel, long–acting thromboxane synthetase inhibitor. Matsuda K, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:674–7

Local tolerance and activity of MK–927, a novel topical carbonic anhydrase inhibitor. Lippa EA, et al. **Arch Ophthalmol** 1988 Dec;106(12):1694–6

Microstructural analysis of the anorectic effect of N–0437, a highly selective dopamine D2 agonist. Rusk IN, et al. **Brain Res** 1989 Aug 14;494(2):350–8

Duration dependent effect of methylmercury chloride and antagonists on the enzymes of the central nervous system of rat: II. Acid phosphatase study on the brain. Sood PP, et al. **Cell Mol Biol** 1988;34(3):271–7

Circadian changes in stimulus threshold and in the effect of a local anaesthetic drug in human teeth: studies with an electronic pulptester. Lemmer B, et al. **Chronobiol Int** 1989; 6(2):157–62

Effect of erdosteine and its metabolites on tracheobronchial mucus production and transport. Scuri R, et al. **Drugs Exp Clin Res** 1988;14(11):693–8

Microdialysis and striatal dopamine release: stereoselective actions of the enantiomers of N–0437. Timmerman W, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):143–50

Serotonin regulation of aldosterone secretion. Maestri E, et al. **Horm Metab Res** 1988 Jul;20(7):457–9

Intraspecies differentiation of strains of Mycobacterium tuberculosis obtained from Czechoslovakian, Mongolian and south Indian patients. Venkataraman P, et al. **Indian J Med Res** 1988 Sep;88:211–6

Erdosteine protection against cigarette smoking–induced functional antiprotease deficiency in human bronchiolo–alveolar structures. Vagliasindi M, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 May;27(5):238–41

Ocular hypotensive activity and disposition of the topical carbonic anhydrase inhibitor 6–hydroxy–benzo[b]thiophene–2–sulfonamide, L–650,719, in the rabbit. Bar–Ilan A, et al. **J Ocul Pharmacol** 1989 Summer;5(2):99–110

Prejunctional inhibitory effect of a dopamine D–2 agonist, N–0437, on vascular adrenergic responses. Friedman DJ, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):853–9

Pharmacological manipulation of inflammation in rabbit hydronephrosis: effects of a combined cyclooxygenase/lipoxygenase inhibitor ethoxyquin, a thromboxane synthase inhibitor RS–5186 and a PAF antagonist L–659,989. Spaethe SM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1308–16

Role of estrogen receptors and antiestrogen binding sites in an early effect of antiestrogens, the inhibition of cholesterol biosynthesis. Cypriani B, et al. **J Steroid Biochem** 1988 Nov; 31(5):763–71

Effects of oestrogen and the antioestrogens, tamoxifen and LY117018, on four oestrogen–regulated RNAs in the EFM–19 breast cancer cell line. Westley BR, et al. **J Steroid Biochem** 1989 Mar;32(3):365–72

Stimulation of rat liver growth by a 1,3–dithiole derivative, KZ–1026. Hirayama Y, et al. **Jpn J Pharmacol** 1989 Jun; 50(2):101–10

LY227942, an inhibitor of serotonin and norepinephrine uptake: biochemical pharmacology of a potential antidepressant drug. Wong DT, et al. **Life Sci** 1988; 43(24):2049–57

Psychophysiological research in psychiatry and neuropsychopharmacology. II. The investigation of antihypoxidotic/nootropic drugs (tenilsetam and co–dergocrine–mesylate) in elderlies with the Viennese Psychophysiological Test–System (VPTS). Saletu B, et al. **Methods Find Exp Clin Pharmacol** 1989 Jan;11(1):43–55

Alterations produced by sertaconazole on the morphology and ultrastructure of Candida albicans. Guarro J, et al. **Mycoses** 1989 Jun;32(6):283–95

Thermoregulatory responses of the rabbit to central neural injections of sulfolane. Mohler FS, et al. **Neurotoxicology** 1989 Spring;10(1):53–62

Effect of isoprothiolane on hepatic lesions of heifer caused by carbon tetrachloride. Nagasawa S, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):284–93

Stimulation and inhibition of food intake by the selective dopamine D2 agonist, N–0437: a meal pattern analysis. Clifton PG, et al. **Pharmacol Biochem Behav** 1989 May; 33(1):21–6

Sucrose sham–feeding in the rat after administration of the selective dopamine D2 receptor agonist N–0437, d–amphetamine or cocaine. Cooper SJ, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):447–52

The effects of the kappa agonist PD–117302 on feeding behaviour in obese and lean Zucker rats. Leighton GE, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):425–9

Effects of 5–HT and alpha 1 adrenoceptor antagonists on kappa opioid–induced sedation. Leighton GE, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):899–904

Antiviral properties of photosensitizers. Hudson JB, et al. **Photochem Photobiol** 1988 Sep;48(3):289–96

Profile of the selective dopamine D–2 receptor agonist N–0437: its effects on palatability– and deprivation–induced feeding, and operant responding for food. Rusk IN, et al. **Physiol Behav** 1988;44(4–5):545–53

Comparison of PD 117302, a kappa agonist, and morphine on colonic transit and formalin–induced pain in rats. Porreca F, et al. **Proc West Pharmacol Soc** 1989;32:185–7

In vitro protection by erdosteine against oxidative inactivation of alpha–1–antitrypsin by cigarette smoke. Gazzani G, et al. **Respiration** 1989;55(2):113–8

RS–5186, a novel thromboxane synthetase inhibitor with a potent and extended duration of action. Ushiyama S, et al. **Thromb Res** 1988 Sep 1;51(5):507–20

[Observation on the inhibitory effect of ketotifen, cyproheptadine and pizotifenum on Plasmodium falciparum in vitro] Zhou MX, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):130–3 (Eng. Abstr.) (Chi)

[Relation of conformation and antalgic activity of 2–aryl–dihydrothienocoumarins] Robert JF, et al. **Ann Pharm Fr** 1988;46(4):273–81 (Eng. Abstr.) (Fre)

THERAPEUTIC USE

MK–927: a topically effective carbonic anhydrase inhibitor in patients. Bron AM, et al. **Arch Ophthalmol** 1989 Aug; 107(8):1143–6

Efficacy of isoprothiolane for the treatment of fat necrosis in cattle. Oka A, et al. **Br Vet J** 1988 Sep–Oct;144(5):507–14

The effects of thionapthene–2–carboxylic acid–lysine on the hypercalcemia of malignancy in the rat. Decker JE, et al. **Calcif Tissue Int** 1989 Jan;44(1):61–4

Onset of action of various migraine prophylactics. Amery WK. **Cephalalgia** 1988;8 Suppl 8:11–3

Flunarizine vs. pizotifen in migraine prophylaxis: a review of comparative studies. Spierings EL, et al. **Cephalalgia** 1988;8 Suppl 8:27–30

Therapeutic effect of isoprothiolane on bovine fat necrosis. Shimada Y, et al. **Nippon Juigaku Zasshi** 1988 Oct; 50(5):1017–24

Pizotifen in deafferentation pain. Ghose K. **Postgrad Med J** 1989 Feb;65(760):79–82

Influence of erdosteine, a mucolytic agent, on amoxycillin penetration into sputum in patients with an infective exacerbation of chronic bronchitis. Ricevuti G, et al. **Thorax** 1988 Aug;43(8):585–90

[Significance of the contribution of pizotifen in correcting appetite disorders and weight insufficiencies] Blouza Chachoub S, et al. **Tunis Med** 1989 Mar;67(3):207–12 (Eng. Abstr.) (Fre)

[Initial clinical experiences in the treatment of chronic polyarthritis with a new monokine release inhibitor] Seibel MJ, et al. **Z Rheumatol** 1989 May–Jun;48(3):147–51 (Eng. Abstr.) (Ger)

[Preventive effect of KZ–1026 on acute liver injury induced by CCl4 in rats: histochemical, enzyme–histochemical and ultrastructural studies] Kobayashi M, et al. **Nippon Yakurigaku Zasshi** 1989 Jan;93(1):17–27 (Eng. Abstr.) (Jpn)

TOXICITY

Thermoregulatory responses of the rabbit to subcutaneous injection of sulfolane. Mohler FS, et al. **Arch Toxicol** 1988; 62(2–3):216–9

Acute oral toxicity of dibenzothiophene for male CD–1 mice: LD50, lesions, and the effect of preinduction of mixed–function oxidases. Leighton FA. **Fundam Appl Toxicol** 1989 May;12(4):787–92

THIOPHENICOL see **THIAMPHENICOL**

THIOPHOSPHAMIDE see **THIO–TEPA**

THIOPHOSPHORIC ACID ESTERS see under **ORGANOTHIOPHOSPHORUS COMPOUNDS**

THIOQUINALBARBITONE see **THIAMYLAL**

THIOREDOXIN see under **BACTERIAL PROTEINS**

THIOREDOXIN REDUCTASE (NADPH) see under **NADH, NADPH OXIDOREDUCTASES**

THIORHODACEAE see **CHROMATIACEAE**

THIORIDAZINE

ADMINISTRATION & DOSAGE

Thioridazine dose effects with reference to stereotypic behavior in mentally retarded residents. Aman MG, et al. **J Autism Dev Disord** 1988 Sep;18(3):355–66

ADVERSE EFFECTS

Attempted strangulation during phenothiazine–induced sleep–walking and night terrors. Scott AI. **Br J Psychiatry** 1988 Nov;153:692–4

Drug–induced tremor of the tongue. Gabellini AS, et al. **Ital J Neurol Sci** 1989 Feb;10(1):89–91

Drug–induced dystonia in neuronal ceroid–lipofuscinosis. Gospe SM Jr, et al. **Pediatr Neurol** 1986 Jul–Aug;2(4):236–7

Choreoathetosis associated with thioridazine: three case reports and literature review. Carlson RJ. **Psychiatr Med** 1988;6(3):52–8 (15 ref.)

[Striatal hypersensitivity to neuroleptics. Therapeutic difficulties and medico–legal aspects] Antoine C, et al. **Therapie** 1988 Aug–Sep;43(5):437 (Fre)

ANALYSIS

Selective membrane electrode potentiometry and spectrophotometry of a photochemical reaction of thioredazine hydrochloride. Shoukry AF, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):1042–5

Synthesis and properties of haptens for the development of radioimmunoassays for thioridazine, mesoridazine, and sulforidazine. Chakraborty BS, et al. **Pharm Res** 1987 Jun; 4(3):207–13

BLOOD

Metabolism of thioridazine in the elderly. Cohen BM, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):336–9

A fixed dose study of the plasma concentration and clinical effects of thioridazine and its major metabolites. Cohen BM, et al. **Psychopharmacology (Berlin)** 1989;97(4):481–8

PHARMACOLOGY

Dopamine and preparatory behavior: III. Effects of metoclopramide and thioridazine. Blackburn JR, et al. **Behav Neurosci** 1989 Aug;103(4):903–6

Inhibition of peroxisomal beta–oxidation and brain development in rats. Van den Branden C, et al. **GLIA** 1989; 2(4):260–5

Comparative anticholinergic properties of thioridazine, mesoridazine and sulforidazine. Niedzwiecki DM, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):126–33

Comparative antidopaminergic properties of thioridazine, mesoridazine and sulforidazine on the corpus striatum.

Niedzwiecki DM, et al. **J Pharmacol Exp Ther** 1989 Jul; 250(1):117–25

Receptor affinity, neurochemistry and behavioral characteristics of the enantiomers of thioridazine: evidence for different stereoselectivities at D1 and D2 receptors in rat brain. Svendsen CN, et al. **Neuropharmacology** 1988 Nov;27(11):1117–24

Blockade of acquisition of one–way conditioned avoidance responding by haloperidol and metoclopramide but not by thioridazine or clozapine: implications for screening new antipsychotic drugs. Blackburn JR, et al. **Psychopharmacology (Berlin)** 1989;98(4):453–9

Glutathione (GSH) content in livers from control and carbon tetrachloride poisoned rats treated with the calmodulin inhibitors thioridazine, imipramine or chlorpromazine. Villarruel MC, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):397–400

THERAPEUTIC USE

A double blind comparative study of remoxipride and thioridazine in the acute phase of schizophrenia. McCreadie RG, et al. **Acta Psychiatr Scand** 1988 Jul;78(1):49–56

[A double–blind controlled study of the efficacy and side effects of thioridazine and chlorpromazine in schizophrenia] Guo GY. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Oct; 21(5):300–2, 319–20 **(Chi)**

[Effect of thioridazine and chlorpromazine on the ECG and serum potassium level—ECG of the glucose load in 40 cases] Kuang RY. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Oct; 21(5):297–9, 319 (Eng. Abstr.) **(Chi)**

THIORPHAN

ANALOGS & DERIVATIVES

Naloxone–reversible inhibition of gall–bladder mucosal fluid secretion in experimental cholecystitis in the cat by acetorphan, an enkephalinase inhibitor. Jivegård L, et al. **Clin Sci** 1989 Jul;77(1):49–54

Assessment of the abuse potential of acetorphan, an enkephalinase inhibitor. Knisely JS, et al. **Drug Alcohol Depend** 1989 Apr;23(2):143–51

Thiorphan and acetorphan inhibit gastric secretion by a central, non–opioid mechanism in the rat. Chicau–Chovet M, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):247–54

Effects of an enkephalinase inhibitor on esophageal motility in man. Chaussade S, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):793–6

Evaluation of enkephalinase inhibition in the living mouse, using [3H]acetorphan as a probe. De la Baume S, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):653–60

Augmented analgesic effects of enkephalinase inhibitors combined with transcranial electrostimulation. Malin DH, et al. **Life Sci** 1989;44(19):1371–6

Role of endogenous enkephalins in locomotion and nociception studied with peptidase inhibitors in two inbred strains of mice (C57BL/6J and DBA/2J). Michael–Titus A, et al. **Neuropharmacology** 1989 Feb;28(2):117–22

METABOLISM

Thiorphan and retro–thiorphan display equivalent interactions when bound to crystalline thermolysin. Roderick SL, et al. **Biochemistry** 1989 Feb 21;28(4):1493–7

PHARMACOLOGY

Comparison of the effects of epithelium removal and of an enkephalinase inhibitor on the neurokinin–induced contractions of guinea–pig isolated trachea. Devillier P, et al. **Br J Pharmacol** 1988 Jul;94(3):675–84

Enkephalinase inhibition increases plasma atrial natriuretic peptide levels, glomerular filtration rate, and urinary sodium excretion in rats with reduced renal mass. Lafferty HM, et al. **Circ Res** 1989 Sep;65(3):640–6

Thiorphan and acetorphan inhibit gastric secretion by a central, non–opioid mechanism in the rat. Chicau–Chovet M, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):247–54

Effect of thiorphan on response of the guinea–pig gallbladder to tachykinins. Maggi CA, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):51–61

Substance P–induced effects in guinea pig lungs: effects of thiorphan and captopril. Drazen JM, et al. **J Appl Physiol** 1989 Mar;66(3):1364–72

Thiorphan, an inhibitor of endopeptidase 24.11, potentiates the natriuretic activity of atrial natriuretic peptide. Trapani AJ, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):419–24

Interaction of non–guanylate cyclase–linked atriopeptin receptor ligand and endopeptidase inhibitor in conscious rats. Koepke JP, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):172–6

Effect of thiorphan on tachykinin–induced potentiation of nerve–mediated contractions of the rat isolated vas deferens. Patacchini R, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):678–81

Augmented analgesic effects of enkephalinase inhibitors combined with transcranial electrostimulation. Malin DH, et al. **Life Sci** 1989;44(19):1371–6

Effect of inhibitors of enkephalin degradation in the isolated guinea–pig ileum. van Amsterdam JG, et al. **Life Sci** 1988; 43(19):1529–36

Specific inhibitors of endopeptidase 24.11 inhibit the metabolism of atrial natriuretic peptides in vitro and in vivo. Olins GM, et al. **Mol Cell Endocrinol** 1989 Feb; 61(2):201–8

Role of endogenous enkephalins in locomotion and nociception studied with peptidase inhibitors in two inbred strains of mice (C57BL/6J and DBA/2J). Michael–Titus A, et al. **Neuropharmacology** 1989 Feb;28(2):117–22

Thiorphan increases capsaicin–evoked release of substance P from slices of dorsal spinal cord of guinea pig. Geppetti P, et al. **Neurosci Lett** 1989 Aug 14;103(1):69–73

THIOSEMICARBAZONES

Synthesis, characterization, and antitumor properties of some metal complexes of 2,6–diacetylpyridine bis(N4–azacyclic thiosemicarbazones). Mohan M, et al. **J Inorg Biochem** 1988 Sep;34(1):41–54

CHEMICAL SYNTHESIS

Syntheses and spectroscopic studies of potential antitumor copper(II) complexes with 5–phenylazo–3–methoxy salicylidene thiosemicarbazone and N4 substituted thiosemicarbazones. Patil BG, et al. **J Inorg Biochem** 1989 Jun;36(2):107–13

PHARMACOLOGY

Induction of process outgrowth in vertebrate and invertebrate cell lines by a 2–pyridinyl thiosemicarbazone. Carrow GM, et al. **Differentiation** 1988 Nov;39(1):22–7

Search for a new thiosemicarbazones as possible fungitoxic agents. Mishra P, et al. **Hindustan Antibiot Bull** 1988 Feb–May;30(1–2):37–9

Hybrid molecules: growth inhibition of Leishmania donovani promastigotes by thiosemicarbazones of 3–carboxy–beta–carbolines. Dodd RH, et al. **J Med Chem** 1989 Jun;32(6):1272–6

THIOSTREPTON see under **ANTIBIOTICS**

THIOSULFATE SULFURTRANSFERASE see under **SULFURTRANSFERASES**

THIOSULFATES

Electron microscopy of nuclear matrices prepared in situ under oxidizing conditions. Chaly N. **Cell Biol Int Rep** 1988 Aug;12(8):587–95

[Bile–thiosulfate broth—a medium for nourishing shigellae] Sultanov GV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):112–3 **(Rus)**

ADMINISTRATION & DOSAGE

'Two–route chemotherapy' using intra–arterial cisplatin and intravenous sodium thiosulfate, its neutralizing agent, for hepatic malignancies [see comments] Abe R, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1671–4. **Comment in:** Eur J Cancer Clin Oncol 1989 May;25(5):775–6

Efficacy of two–route chemotherapy using cis–diamminedichloroplatinum(II) and its antidote, sodium thiosulfate, in combination with angiotensin II for rat liver tumor. Hasuda K, et al. **Int J Cancer** 1989 Aug 15; 44(2):373–7

Bromate poisoning. Lichtenberg R, et al. **J Pediatr** 1989 May; 114(5):891–4

Thiosulphate and hydroxocobalamin prophylaxis in progressive cyanide poisoning in guinea–pigs. Mengel K, et al. **Toxicology** 1989 Mar;54(3):335–42

[Two–route chemotherapy under AT–II induced hypertension using totally implanted injection port system in liver metastases derived from digestive cancers] Hokita S, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2901–4 (Eng. Abstr.) **(Jpn)**

[Studies on an appropriate intra thoracic administration of cisplatin and sodium thiosulfate in malignant pleural effusion] Kitajima K, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3253–9 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy of two–route chemotherapy with CDDP and STS in patients with peritonitis carcinomatosa] Kuwahara A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2752–5 (Eng. Abstr.) **(Jpn)**

[Two–route chemotherapy with cisplatinum (ip) and its antidote, sodium thiosulfate (iv) against carcinomatous peritonitis following alimentary tract cancers] Takao s, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20; 23(8):1696–709 (Eng. Abstr.) **(Jpn)**

[Use of sodium thiosulfate with fibrinolysin and endolympphatic antibacterial therapy in the complex treatment of suppurative wounds] Margulis FB, et al. **Klin Khir** 1989;(1):56 **(Rus)**

PHARMACOLOGY

Mitomycin C toxicity and pharmacokinetics in mice given sulfur nucleophiles. Dorr RT, et al. **Anticancer Res** 1988 Jul–Aug;8(4):733–7

Sodium thiosulfate inhibits cisplatin–induced mutagenesis in somatic tissue of Drosophila. Katz AJ. **Environ Mol Mutagen** 1989;13(2):97–9

Effects of cisplatin and thiosulfate upon auditory brainstem responses of guinea pigs. Otto WC, et al. **Hear Res** 1988 Sep 1;35(1):79–85

Chemical modification of chalcone isomerase by mercurials and tetrathionate. Evidence for a single cysteine residue in the active site. Bednar RA, et al. **J Biol Chem** 1989 Aug 25;264(24):14272–6

Effects of fosfomycin, mesna, and sodium thiosulfate on the toxicity and antitumor activity of cisplatin. Wagner T, et al. **J Cancer Res Clin Oncol** 1988;114(5):497–501

[The influence of sodium thiosulfate on the antitumor effect of cisplatin in human gastric cancer cell lines] Fujii T, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3227–32 (Eng. Abstr.) **(Jpn)**

[Low molecular weight and protein dinitrosyl complexes of non–heme iron as inhibitors of platelet aggregation] Kuznetsov VA, et al. **Vopr Med Khim** 1988 Sep–Oct; 34(5):43–6 (Eng. Abstr.) **(Rus)**

POISONING

[Resuscitation and combined therapy of exotoxic shock caused by methemoglobin–forming poisons] Kosonogov LF, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):61–3 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Efficacy of sodium thiosulfate as a local antidote to mechlorethamine skin toxicity in the mouse. Dorr RT, et al. **Cancer Chemother Pharmacol** 1988;22(4):299–302

Effects of sodium thiosulfate in combination therapy of cis–dichlorodiammineplatinum and vindesine. Hirosawa A, et al. **Cancer Chemother Pharmacol** 1989;23(4):255–8

"Two–route chemotherapy" using cis–diamminedichloroplatinum(II) and its antidote, sodium thiosulfate, combined with angiotensin II is effective against peritoneally disseminated cancer in rats. Kobayashi H, et al. **Cancer Chemother Pharmacol** 1989;24(3):141–7

Sodium thiosulfate unproven as bromate antidote [letter] McElwee NE, et al. **Clin Pharm** 1988 Aug;7(8):570, 572

Sodium thiosulfate prevents cisplatin–induced hypomagnesemia. Wong NL, et al. **Nephron** 1988; 50(4):308–14

[Effect of sodium thiosulfate on the antitumor effect and nephrotoxicity of CDDP in human gastric cancer transplanted in nude mice] Saito D, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):379–85 (Eng. Abstr.) **(Jpn)**

[The pharmacokinetics and clinical toxicities following intraperitoneal infusion of cis–diamminedichloroplatinum (II) with simultaneous sodium thiosulfate rescue in patients with ovarian cancer] Takizawa K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1483–90 (Eng. Abstr.) **(Jpn)**

URINE

Response of allergic and normal persons to sulfiting agents in wine: determination of thiosulfate excretion in urine. Torun M, et al. **Clin Chem** 1989 Aug;35(8):1792–3

THIOSULFONIC ACIDS see under **SULFONIC ACIDS**

THIOSULFURIC ACID ESTERS see under **SULFURIC ACIDS**

THIOTEPA see **THIO–TEPA**

THIOTHIXENE

BLOOD

Improved high–performance liquid chromatographic method for the determination of tiotixene in human serum. Dilger C, et al. **Arzneimittelforschung** 1988 Oct;38(10):1522–5

THERAPEUTIC USE

Some clinical and physiologic effects of a thioxanthene derivative, thiothixene (P–4657B), in 20 newly hospitalized male schizophrenics. Hekimian LJ, et al. **J Clin Pharmacol J New Drugs** 1967 Jan–Feb;7(1):52–7

THIOURACIL

ANALOGS & DERIVATIVES

Antimycotic and spectral properties of some thiouracilderivatives. Pecorari P, et al. **Boll Chim Farm** 1988 Apr;127(4):71–5

Synthesis, tissue distribution and cytostatic properties of two new daunorubicin derivatives of 2–thiouracil containing a guanidine bridge. Wätjen F, et al. **Drug Des Deliv** 1986 Nov;1(2):131–42

A patient study with radioiodine labelled 5–iodo–2–thiouracil. van Langevelde A, et al. **Eur J Nucl Med** 1988;14(12):640–1

Corticosteroid receptors in liver cytosol of the clawed toad, Xenopus laevis: influence of thyroid and ovarian hormones. Lange CB, et al. **Gen Comp Endocrinol** 1989 Mar; 73(3):485–97

Rapid effectiveness of prednisone and thionamides combined therapy in severe amiodarone iodine–induced thyrotoxicosis. Comparison of two groups of patients with

apparently normal thyroid glands. Broussolle C, et al. **J Endocrinol Invest** 1989 Jan;12(1):37–42

PHARMACOKINETICS

Synthesis, tissue distribution and cytostatic properties of two new daunorubicin derivatives of 2-thiouracil containing a guanidine bridge. Wätjen F, et al. **Drug Des Deliv** 1986 Nov;1(2):131–42

Therapeutic effects of S-35-thiouracil in BALB/c mice carrying Harding-Passey melanoma. Fairchild RG, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):337–43

PHARMACOLOGY

Effect of thiouracil in modifying folate function in severe vitamin B12 deficiency. Keating JN, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):119–24

Antimycotic and spectral properties of some thiouracilderivatives. Pecorari P, et al. **Boll Chim Farm** 1988 Apr;127(4):71–5

Thiouracil and antibody titers of chickens from lines divergently selected for antibody response to sheep erythrocytes. Martin A, et al. **Dev Comp Immunol** 1988 Summer;12(3):611–9

Influence of thyroid hormones on hepatic mitochondrial enzymes of thiouracil treated teleost Anabas testudineus (Bloch). Peter MC, et al. **Indian J Exp Biol** 1988 Sep; 26(9):651–3

Photosensitized inactivation of DNA by monochromatic 334-nm radiation in the presence of 2-thiouracil: genetic activity and backbone breaks. Peak MJ, et al. **Photochem Photobiol** 1988 Jun;47(6):809–13

URINE

Screening and confirmation of thyreostatics in urine by gas chromatography with nitrogen-phosphorus detection and gas chromatography-mass spectrometry after sample clean-up with a mercurated affinity column. Schilt R, et al. **J Chromatogr** 1989 Apr 7;489(1):127–37

THIOUREA

Acquisition of acoustic startle response in relation to growth and thyroid function in rats. Schneider BF, et al. **Int J Dev Neurosci** 1987;5(2):99–106

ADVERSE EFFECTS

Silver polish: another source of contact dermatitis reactions to thiourea. Dooms-Goossens A, et al. **Contact Dermatitis** 1988 Aug;19(2):133–5

ANALOGS & DERIVATIVES

Dithiobiuret neurotoxicity: an ultrastructural investigation of the lesion in preterminal axons and motor endplates in the rat lumbrical muscle. Jones HB. **Acta Neuropathol (Berl)** 1989;78(1):72–85

Pulmonary vascular permeability and resistance measurements in control and ANTU-injured dog lungs. Allison RC, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1711–8

Effects of oleic acid-, alpha-naphthylthiourea-, and phorbol myristate acetate-induced microvascular damage on indexes of pulmonary endothelial function in anesthetized dogs. Gardaz JP, et al. **Am Rev Respir Dis** 1988 Jun; 137(6):1350–5

The use of noxythiolin (Noxyflex 'S') as an antiseptic irrigant in upper urinary tract drainage following percutaneous nephrolithotomy. Buck AC. **Br J Urol** 1988 Oct; 62(4):306–10

Controlled trial of intravesical noxythiolin in the prevention of infection following outflow tract surgery. Jones MA, et al. **Br J Urol** 1988 Oct;62(4):311–4

Dimethylthiourea flush improves transplant lung function following 24-hour cold preservation. Paull DE, et al. **Curr Surg** 1989 Jul-Aug;46(4):293–5

Effect of dimethylthiourea on syngeneic rodent islet transplantation. Shin SJ, et al. **Diabetes Res Clin Pract** 1989 Apr 1;6(3):167–71

Dimethylthiourea inhibits the inflammatory response to intravitreally-injected endotoxin. Fleisher LN, et al. **Exp Eye Res** 1989 Apr;48(4):561–7

S-Aryl(tetramethyl)isothiouronium salts as possible antimicrobial agents—III. Tait A, et al. **Farmaco [Sci]** 1988 Dec;43(12):979–88

Dimethylthiourea, but not dimethylsulfoxide, reduces canine myocardial infarct size. Portz SJ, et al. **Free Radic Biol Med** 1989;7(1):53–8

Dimethylthiourea prevents hydrogen peroxide and neutrophil mediated damage to lung endothelial cells in vitro and disappears in the process. Toth KM, et al. **Free Radic Biol Med** 1989;6(5):457–66

Thiourea and dimethylthiourea decrease human neutrophil bactericidal function in vitro. Jackson JH, et al. **Inflammation** 1988 Oct;12(5):515–24

Thioureas and isothiouronium salts of the aglycone of teicoplanin. I. Synthesis and biological activity. Trani A, et al. **J Antibiot (Tokyo)** 1989 Aug;42(8):1268–75

An unexpected intramolecular cyclization of isothiouronium teicoplanins. II. Reaction mechanism and biological activity. Trani A, et al. **J Antibiot (Tokyo)** 1989 Aug; 42(8):1276–82

Dimethylthiourea does not ameliorate reperfusion lung injury in dogs or rabbits. Bishop MJ, et al. **J Appl Physiol** 1988 Nov;65(5):2051–6

Sustained anti-adherence activity of taurolidine (Taurolin) and noxythiolin (Noxyflex S) solutions. Blenkharn JI. **J Pharm Pharmacol** 1988 Jul;40(7):509–11

Alterations of spontaneous and evoked release of acetylcholine during dithiobiuret-induced neuromuscular weakness. Atchison WD. **J Pharmacol Exp Ther** 1989 Jun; 249(3):735–43

Improved lung preservation using a dimethylthiourea flush. Paull DE, et al. **J Surg Res** 1989 Apr;46(4):333–8

Evidence for hydroxyl radical involvement in group B streptococcus-induced pulmonary hypertension and arterial hypoxemia in young piglets. Pauly TH, et al. **Pediatr Res** 1988 Dec;24(6):735–9

Effects of hyperoxia and dimethylthiourea on neonatal pulmonary hemodynamics in piglets. Hoffmeister AC, et al. **Respir Physiol** 1989 May;76(2):139–48

The incorporation of boronated substances into melanin in vitro—an experimental model for melanotic melanoma. Roberto A, et al. **Strahlenther Onkol** 1989 Feb-Mar; 165(2-3):165–7

Allopurinol and dimethylthiourea reduce brain infarction following middle cerebral artery occlusion in rats. Martz D, et al. **Stroke** 1989 Apr;20(4):488–94

Polyamine synthesis in rat lungs injured with alpha-naphthylthiourea. Olson JW, et al. **Toxicology** 1989 May 15;55(3):317–26

Hydroperoxide-dependent metabolism of goitrogenic thiocarbamides by lactoperoxidase. Doerge DR. **Xenobiotica** 1988 Nov;18(11):1291–6

[The fertility performance (litter characteristics) of laboratory mice over 6 generations after the administration of zinc metallibure as suisynchronous premix and cloprostenol as estrophane] Lusky K, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):147–54 (Eng. Abstr.) (Ger)

[One-step synthesis of 2-aminothieno [2,3-d]thiazen-4-ones in some cases 5,6-anellated from ethyl 2-benzoylthioureidothiophen-3-carboxylates and evaluation of their anti-allergy activity] Leistner S, et al. **Pharmazie** 1988 Jul;43(7):466–70 (Eng. Abstr.) (Ger)

METABOLISM

The reaction of Octopus vulgaris hemocyanin with exogenous ligands: proposal of an allosteric model for the binding of cyanide and thiourea to the 11 S subunit. Giscometti GM, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):539–47

PHARMACOLOGY

Effect of thyroxine (T4) and thiourea on the hepatic oxygen consumption of male garden lizards of three different age groups. Sahu N, et al. **Arch Gerontol Geriatr** 1989 Jan; 8(1):55–62

Mechanism of the reversal reaction of platinated DNA with thiourea studied by platinated 5'-GMP. Urata H, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):819–24

Metabolic responses to gradual cooling in chicken eggs treated with thiourea and oxygen. Tazawa H, et al. **Comp Biochem Physiol [A]** 1989;92(4):619–22

Comparative studies of the effect of thiourea and BHC on behaviour and mortality in adult snails of the species Lymnaea stagnalis and on their egg masses. Bhide M. **Folia Morphol (Praha)** 1989;37(1):13–8

Effect of free radical scavengers and metal ion chelators on hydrogen peroxide and phenylhydrazine induced red blood cell lipid peroxidation. Einsele H, et al. **Free Radic Res Commun** 1987;3(1-5):257–63

Age-related changes in the response of hepatic succinic dehydrogenase activity to thyroxine and thiourea in lizards. Sahu N, et al. **Gerontology** 1988;34(4):179–83

Thiourea and dimethylthiourea decrease human neutrophil bactericidal function in vitro. Jackson JH, et al. **Inflammation** 1988 Oct;12(5):515–24

[The effect of dimethylsulfoxide and thiourea on the water diffusion permeability of the E. coli membrane] Sakharov BV, et al. **Biofizika** 1989 May-Jun;34(3):464–7 (Eng. Abstr.) (Rus)

TOXICITY

Thymo-bursal and adrenal reactions in chickens subjected to thiourea treatment. Giurgea R, et al. **Arch Exp Veterinarmed** 1988 Sep;42(5):655–9

THIOURIDINE

Time-resolved absorption, circular dichroism, and emission of tRNA. Evidence that the photo-cross-linking of 4-thiouridine in tRNA occurs from the triplet state. Milder SJ, et al. **Biochemistry** 1989 Mar 7;28(5):2258–64

RADIATION EFFECTS

Photochemistry of 4-thiouridine and thymine. Peak MJ, et al. **Photochem Photobiol** 1988 Aug;48(2):229–32

THIOXANTHENES

Early years of the Salmonella mutagen tester strains: lessons from hycanthone. Hartman PE. **Environ Mol Mutagen** 1989;14 Suppl 16:39–45

ADMINISTRATION & DOSAGE

Synergy between a non-neuroleptic thioxanthene stereo-isomer and penicillin in vivo. Kristiansen JE, et al. **APMIS** 1988 Dec;96(12):1079–84

[Use of Clopixol Acutard 50 and 100 mg (zuclopenthixol acetate) as a therapeutic drug in crisis at the Cery psychiatric hospital] Bttig D. **Schweiz Arch Neurol Psychiatr** 1988;139(5):35–47 (Eng. Abstr.) (Fre)

ANALYSIS

Titrimetric determination of some thioxanthene derivatives. Walash MI, et al. **Analyst** 1988 Aug;113(8):1309–12

Milk concentrations of flupenthixol, nortriptyline and zuclopenthixol and between-breast differences in two patients. Matheson I, et al. **Eur J Clin Pharmacol** 1988; 35(2):217–20

METABOLISM

Binding of tritiated hycanthone and hycanthone N-methylcarbamate to macromolecules of drug-sensitive and drug-resistant schistosomes. Pica-Mattoccia L, et al. **Mol Biochem Parasitol** 1988 Oct;31(1):87–96

PHARMACOKINETICS

Pharmacokinetics of three different injectable zuclopenthixol preparations. Aaes-Jørgensen T. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1-2):77–85

PHARMACOLOGY

Chronic flupentixol treatment potentiates the reinforcing properties of systemic heroin administration. Stinus L, et al. **Biol Psychiatry** 1989 Aug;26(4):363–71

Regional neuroleptic microinjections indicate a role for nucleus accumbens in lateral hypothalamic self-stimulation reward. Stellar JR, et al. **Brain Res** 1989 Jan 16; 477(1-2):126–43

Dopaminergic inhibition of alpha-melanocyte-stimulating hormone release from superfused slices of the rat hypothalamus. Tiligada E, et al. **Brain Res** 1988 Aug 9; 457(2):379–82

Behavioral recovery after irreversible inactivation of D-1 and D-2 dopamine receptors. Meller E, et al. **Life Sci** 1989; 44(15):1019–26

Anti-schistosomal drugs: observations on the mechanism of drug resistance to hycanthone, and on the involvement of host antibodies in the mode of action of praziquantel. Brindley PJ, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:157–61

[D-TRP11]-neurotensin, unlike alpha-flupenthixol, may not block amphetamine-induced hyperactivity in rats. Sahgal A, et al. **Neuropharmacology** 1989 Mar;28(3):283–9

Training-dependent decay in performance produced by the neuroleptic cis(Z)-flupentixol on spatial navigation by rats in a swimming pool. Whishaw IQ, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):211–20

The dopamine innervation of the visceral cortex mediates the aversive effects of opiates. Zito KA, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):693–9

THERAPEUTIC USE

Outpatient treatment of 'crack' cocaine smoking with flupenthixol decanoate. A preliminary report. Gawin FH, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):322–5

The Scottish First Episode Schizophrenia Study V. One-year follow-up. The Scottish Schizophrenia Research Group. **Br J Psychiatry** 1988 Apr;152:470–6

Schistosoma mansoni-induced mesangiocapillary glomerulonephritis: influence of therapy. Martinelli R, et al. **Kidney Int** 1989 May;35(5):1227–33

Experimental chemotherapy of Schistosoma curassoni in mice. Vercruysse J, et al. **Parasitol Res** 1989;75(7):559–62

Zuclopenthixol and haloperidol/levomepromazine in the treatment of elderly patients with symptoms of aggressiveness and agitation: a double-blind, multi-centre study. Fuglum E, et al. **Pharmatherapeutica** 1989; 5(5):285–91

Flupenthixol and fluvoxamine in mild to moderate depression: a comparison in general practice. Hamilton BA, et al. **Pharmatherapeutica** 1989;5(5):292–7

Zuclopenthixol decanoate in the management of behavioural disorders in mentally handicapped patients. Izmeth MG, et al. **Pharmatherapeutica** 1988;5(4):217–27

THIRAM see under **THIOCARBAMATES**

THIRD PARTY PAYMENTS see **INSURANCE, HEALTH, REIMBURSEMENT**

THIRST

see related
DEHYDRATION
WATER DEPRIVATION

Osmoregulation of thirst and vasopressin release in pregnancy. Lindheimer MD, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 2):F159–69 (17 ref.)

The effect of preoperative apple juice on gastric contents, thirst, and hunger in children. Splinter WM, et al. **Can J Anaesth** 1989 Jan;36(1):55–8

Thirst and compulsive water drinking in medial basal limbic epilepsy: an electroclinical and neuropathological correlation [letter] Cascino GD, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):680–1

Adaptive decreases in amino acids (taurine in particular), creatine, and electrolytes prevent cerebral edema in chronically hyponatremic mice: rapid correction (experimental model of central pontine myelinolysis) causes dehydration and shrinkage of brain. Thurston JH, et al. **Metab Brain Dis** 1987 Dec;2(4):223–41

Appetite, thirst and related disorders. A satellite symposium to the 17th annual meeting of the Society for Neuroscience. San Antonio, TX, 12–15 November 1987. Proceedings. **Physiol Behav** 1988;44(4–5):435–689

Adjustment to intermittent access in rats drinking saccharin: I. Pauses in drinking. Mook DG, et al. **Physiol Behav** 1988; 44(1):21–6

Mammillary polydipsia and diabetes insipidus: a study of the rhythmicity of water intake. Morales A, et al. **Physiol Behav** 1989 May;45(5):911–5

Regulation of intakes of water and NaCl solutions in Fischer 344 rats: contrasts and comparisons between strains. Rowland NE, et al. **Physiol Behav** 1988;44(4–5):461–7

Interactions between conditioned stimuli for food and water in the rat. Ganesan R, et al. **Q J Exp Psychol [B]** 1988 Aug;40(3):229–41

Diagnostic approach to polydipsia and polyuria. Feldman EC, et al. **Vet Clin North Am [Small Anim Pract]** 1989 Mar;19(2):327–41 (20 ref.)

[Polyuria and polydipsia in acute fatty liver of pregnancy. Discussion based on a case] Bourlière M, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):79–81 (Eng. Abstr.) **(Fre)**

[Description of the water intoxication syndrome in psychiatric patients] de Dios Francos A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 May–Jun;16(3):173–82 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Neurotensin-induced polydipsia: a structure–activity study. Hawkins MF, et al. **Brain Res** 1989 May 15;487(1):188–91

Intracerebroventricular saccharide infusions inhibit thirst induced by systemic hypertonicity. Park R, et al. **Brain Res** 1989 Jul 24;493(1):123–8

The development in infant rats of kassinin's potent and selective control of cell–dehydration thirst. Perfumi M, et al. **Peptides** 1989 Jan–Feb;10(1):125–30

Neurokinin A and osmotic thirst: a behavioural and renal study. Polidori C, et al. **Pharmacol Res Commun** 1988 Jul; 20(7):605–6

Third ventricular chloride infusions enhance drinking in water deprived rats. Badgaiyan RD. **Physiol Behav** 1989 May;45(5):951–4

Augmentation of isoproterenol-induced drinking by acute treatment with certain dopaminergic agonists. Fregly MJ, et al. **Physiol Behav** 1988;44(4–5):473–81

PHYSIOLOGY

Effects of intraruminal loads of saline or water followed by voluntary drinking in the dehydrated lactating goat. Dahlborn K, et al. **Acta Physiol Scand** 1988 Jan; 132(1):67–73

Hypodipsia and hypernatremia in congenital hydrocephalus. Franco–Saenz R, et al. **Am J Med Sci** 1989 Jun;297(6):385–6

Osmoregulation of vasopressin secretion and thirst during the estrous cycle of pigs. Rollin C, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R270–5

Stimulated esophageal groove closure in adult goats. Mikhail M, et al. **Am J Vet Res** 1988 Oct;49(10):1713–5

Fluid deprivation before operation. The effect of a small drink. Agarwal A, et al. **Anaesthesia** 1989 Aug;44(8):632–4

Neural systems for early independent ingestion: regional metabolic changes during ingestive responding and dehydration. Hall WG. **Behav Neurosci** 1989 Apr; 103(2):386–411

Characteristics of thirst and sodium appetite in mice (Mus musculus). Rowland NE, et al. **Behav Neurosci** 1988 Dec; 102(6):969–74

A device for continuous monitoring of water consumption by rats. Schultz TJ, et al. **Biomed Sci Instrum** 1989;25:39–46

Osmoregulation of vasopressin secretion and thirst in health and disease. Baylis PH, et al. **Clin Endocrinol (Oxf)** 1988 Nov;29(5):549–76 (152 ref.)

Osmoregulation of vasopressin secretion and thirst in cyclical oedema. Thompson CJ, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):629–35

Thirst-induced anorexias and the ontogeny of thirst in the rat. Leshem M, et al. **Dev Psychobiol** 1988 Nov; 21(7):651–62

Pathogenesis of extracellular fluid abnormalities of hypothalamic hypodipsia–hypernatremia syndrome. Yamamoto T, et al. **Endocrinol Jpn** 1988 Dec;35(6):915–24

Primary polydipsia and autoimmune chronic active hepatitis [letter] Quigley EM, et al. **Gut** 1988 Dec;29(12):1755

Angiotensin and thirst: studies with a converting enzyme inhibitor and a receptor antagonist. Summy-Long J, et al. **Life Sci** 1974 Aug 1;15(3):569–82

Renin-dependent water intake in hypovolemia. Mann JF, et al. **Pflugers Arch** 1988 Oct;412(6):574–8

[Effect of electric stimulation of the supraoptic nucleus on mammillary polydipsia] Morales A, et al. **Arch Neurobiol (Madr)** 1988 May–Jun;51(3):154–8 (Eng. Abstr.) **(Spa)**

THOMSEN'S DISEASE see **MYOTONIA CONGENITA**

THORACIC ARTERIES

Percutaneous transluminal angioplasty of left internal mammary artery grafts: two years' experience with a femoral approach. Bell MR, et al. **Br Heart J** 1989 May; 61(5):417–20

Arteriovenous fistula of internal mammary artery after median sternotomy. Bentivegna PE, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):375–7

[Treatment of hemoptysis by embolization of the thoracic arteries with Ethibloc] Jaschke VW, et al. **ROFO** 1989 May;150(5):536–42 (Eng. Abstr.) **(Ger)**

ABNORMALITIES

Balloon embolization of a congenital arterio–venous fistula between the internal mammary artery and a portal vein radicle. Cobby MJ, et al. **Br J Radiol** 1989 Apr; 62(736):371–3

A patient with an arteriovenous fistula between the internal mammary artery and the pulmonary artery. Sotozono K, et al. **Jpn Circ J** 1989 Apr;53(4):341–4

ANATOMY & HISTOLOGY

Internal mammary artery grafts: the shortest route to the coronary arteries. Vander Salm TJ, et al. **Ann Thorac Surg** 1989 Mar;47(3):421–7

The vascular anatomy of rectus abdominis musculocutaneous flaps based on the deep superior epigastric system. Moon HK, et al. **Plast Reconstr Surg** 1988 Nov;82(5):815–32

[Topographic anatomical characteristics of the surgical approach to the second section of the posterior intercostal arteries] Larichev VB, et al. **Klin Khir** 1988;(10):68–9 **(Rus)**

DRUG EFFECTS

Reactivity of human isolated internal mammary artery to constrictor and dilator agents. Implications for treatment of internal mammary artery spasm. He GW, et al. **Circulation** 1989 Sep;80(3 Pt 1):1141–50

Reactivity of the canine isolated internal mammary artery, saphenous vein, and coronary artery to constrictor and dilator substances: relevance to coronary bypass graft surgery. He GW, et al. **J Cardiovasc Pharmacol** 1988 Jul; 12(1):12–22

Histamine receptors in the smooth muscle of human internal mammary artery and saphenous vein. Schoeffter P, et al. **Pharmacol Toxicol** 1989 Jan;64(1):64–71

[Pharmacologic characterization of the internal mammary artery used in myocardial revascularization] Raddino R, et al. **Cardiologia** 1989 May;34(5):431–7 (Eng. Abstr.) **(Ita)**

INJURIES

Probing of the canine mammary artery damages endothelium and impairs vasodilation resulting from prostacyclin and endothelium-derived relaxing factor. Johns RA, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):252–8

Fracture of the upper ribs and injury to the great vessels. Poole GV. **Surg Gynecol Obstet** 1989 Sep;169(3):275–82 (60 ref.)

Traumatic internal mammary arteriovenous fistula. A case report and review of the literature. al-Qudah AH. **Thorac Cardiovasc Surg** 1988 Jun;36(3):164–6 (20 ref.)

[Thoracic vascular injuries] Kortmann H, et al. **Chirurg** 1988 Jun;59(6):389–97 **(Ger)**

INNERVATION

Differences in alpha-adrenergic responsiveness between human internal mammary arteries and saphenous veins. Weinstein JS, et al. **Circulation** 1989 Jun;79(6):1264–70

METABOLISM

Neuropeptides in the human internal mammary artery. Sisto T, et al. **Acta Physiol Scand** 1989 Aug;136(4):615–6

PATHOLOGY

Incidence of atherosclerosis in the internal mammary artery. Sisto T, et al. **Ann Thorac Surg** 1989 Jun;47(6):884–6

Magnetic resonance imaging of thoracic vascular disease. White RD, et al. **J Thorac Imaging** 1989 Apr;4(2):34–50 (75 ref.)

[The pulsed Doppler echo of the internal mammary artery] Giuseppetti GM, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):414–9 (Eng. Abstr.) **(Ita)**

PHYSIOLOGY

Invited letter concerning: preparation of the internal mammary artery graft: which is the best method? [letter] Green GE. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):152–3

Weak beta-adrenoceptor-mediated relaxation in the human internal mammary artery. He GW, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):259–66

Role of the endothelium and arginine peptides on the vaso-motor response of porcine internal mammary artery. Thomas G, et al. **Life Sci** 1989;44(24):1823–30

PHYSIOPATHOLOGY

Comparison of blood-flow velocity waveforms in different coronary artery bypass grafts. Sequential saphenous vein grafts and internal mammary artery grafts. Fujiwara T, et al. **Circulation** 1988 Nov;78(5 Pt 1):1210–7

RADIOGRAPHY

Diagnosis of anemia on computed tomography scans of the thorax. Corcoran HL, et al. **J Comput Tomogr** 1988 Apr; 12(2):116–21

SURGERY

Carbodissection of the internal thoracic artery pedicle. Lee ME. **Ann Thorac Surg** 1988 Oct;46(4):470–1

Systemic-to-pulmonary artery shunt using the internal mammary artery. Longaker MT, et al. **Ann Thorac Surg** 1989 Mar;47(3):464–5

Coronary artery bypass. Internal thoracic artery bypass procedure. Marker L. **AORN J** 1989 Jun;49(6):1533–48

The effects of median sternotomy and internal mammary artery takedown on sternal blood flow. Shriver CD, et al. **Curr Surg** 1988 Sep–Oct;45(5):376–9

A versatile retractor for use in harvesting the internal mammary artery and performing standard cardiac operations. Phillips SJ, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):633–5

The internal mammary artery free and flap aortoplasty in coarctation of the aorta. Henze A, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(1):39–42

The internal mammary artery origin flap aortoplasty in coarctation of the aorta. Henze A, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(1):43–5

Sternal blood flow after median sternotomy and mobilization of the internal mammary arteries. Seyfer AE, et al. **Surgery** 1988 Nov;104(5):899–904

Retrograde internal mammary to coronary artery anastomoses. von Segesser L, et al. **Thorac Cardiovasc Surg** 1989 Jun;37(3):143–6

Left vocal cord paralysis after mobilisation of the internal mammary artery. Jeffry RR, et al. **Thorax** 1988 Nov; 43(11):941–2

[A new type of sternal retractor for dissecting the 2 internal mammary arteries] Barra JA, et al. **Ann Chir** 1988; 42(8):535–9 (Eng. Abstr.) **(Fre)**

TRANSPLANTATION

Coronary–coronary bypass using internal mammary artery. Nishida H, et al. **Ann Thorac Surg** 1988 Nov;46(5):577–8

Application of percutaneous transluminal coronary angioplasty to the internal mammary artery graft. Shimshak TM, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1205–14

Thrombogenicity of canine free internal mammary artery autografts. Mashburn JP, et al. **J Surg Res** 1989 Jan; 46(1):16–22

Polydioxanone and polypropylene suture material in free internal mammary artery graft anastomoses. Aarnio P, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):741–5

Sequential mammary grafting. Clinical, functional, and angiographic assessment 6 months postoperatively in 231 consecutive patients. Dion R, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):80–8; discussion 88–9

Preparation of the internal mammary artery graft. Which is the best method? Mills NL, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):73–7; discussion 78–9

Bilateral internal mammary artery for coronary revascularization. Early experience of 100 cases. Henze A, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(1):9–12

Reversed left internal mammary artery graft for coronary bypass. Evaluation of function with digital subtraction angiography and radionuclide imaging. Huttunen H, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(1):13–8

Internal-mammary coronary artery grafts: is their superiority also due to a basically intact endothelium? Lehmann KH, et al. **Thorac Cardiovasc Surg** 1989 Jun;37(3):187–9

ULTRASTRUCTURE

Structural features of saphenous vein and internal thoracic artery endothelium: correlates with susceptibility and resistance to graft atherosclerosis. Merrilees MJ, et al. **J Cardiovasc Surg (Torino)** 1988 Nov–Dec;29(6):639–46

Is electrocautery safe for internal mammary artery (IMA) mobilization? A study using scanning electron microscopy (SEM). Lehtola A, et al. **Thorac Cardiovasc Surg** 1989 Feb; 37(1):55–7

THORACIC CYST see **MEDIASTINAL CYST**

THORACIC DISEASES

Proceeding of the Irish Thoracic Society—annual scientific meeting. 13/14 November 1987. Abstracts. **Ir J Med Sci** 1988 Dec;157(12):392–7

[Recurrent thoracic abscess due to Salmonella typhi]

Takenaka A, et al. **Kanzombogaku Zasshi** 1989 Feb; 63(2):166–9 (Eng. Abstr.) **(Jpn)**
[29th meeting of the Japan Society of Chest Diseases. 5–7 April 1989, Kyoto. Abstracts]
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Mar;27 Suppl:1–545 **(Jpn)**
[28th meeting of the Japan Society of Chest Diseases. Sendai, 26–28 April 1988. Abstracts]
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Mar;26 Suppl:1–494 **(Jpn)**

COMPLICATIONS

Spontaneous increase and decrease of thoracic lymphadenopathy and SACE in sarcoidosis. Lhote F, et al. **Eur Respir J** 1988 Oct;1(9):874–5
[Mycetoma of the thorax associated with diabetes mellitus. Report of a clinical case] Bolio Cicero A, et al. **Rev Invest Clin** 1967 Jan–Mar;19(1):95–9 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Comparison of STIR and spin–echo MR imaging at 1.5 T in 90 lesions of the chest, liver, and pelvis. Shuman WP, et al. **AJR** 1989 Apr;152(4):853–9
Magnetic resonance imaging of the thorax. Gamsu G, et al. **Am Rev Respir Dis** 1989 Jan;139(1):254–74 (169 ref.)
Ultrasound of the chest. Verschakelen J, et al. **J Belge Radiol** 1988;71(5):615–21 (17 ref.)
Pediatric thoracic applications of magnetic resonance imaging. Bisset GS 3d. **J Thorac Imaging** 1989 Apr; 4(2):51–7
Magnetic resonance imaging of the thorax: techniques, current applications, and future directions. Spritzer C, et al. **J Thorac Imaging** 1989 Apr;4(2):1–18 (177 ref.)
Magnetic resonance imaging of the thorax. Swensen SJ, et al. **J Thorac Imaging** 1989 Apr;4(2):19–33 (86 ref.)
Cross–sectional imaging of the chest wall. Wechsler RJ, et al. **J Thorac Imaging** 1989 Jan;4(1):29–40 (61 ref.)
Extrapelvic endometriosis. Markham SM, et al. **Obstet Gynecol Clin North Am** 1989 Mar;16(1):193–219 (79 ref.)
Thoracoscopy: diagnostic and therapeutic indications. Newhouse MT. **Pneumologie** 1989 Feb;43(2):48–52 (59 ref.)
Contraindications and complications to thoracoscopy. Viskum K. **Pneumologie** 1989 Feb;43(2):55–7
[Thoracic fluid index in normal adult and patient with different type of chest disease] Lin HI, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):191–6 (Eng. Abstr.) **(Chi)**
[Current imaging technics and interventional radiology in thoracic pathology. Viewpoint of the pneumologist] Yernault JC. **J Belge Radiol** 1988;71(3):377–80 (Eng. Abstr.) **(Fre)**
[Imaging technics in extra–cardiac thoracic amyloidosis] Hélénon O, et al. **J Radiol** 1989 Mar;70(3):159–66 (33 ref.) (Eng. Abstr.) **(Fre)**
[An unusual course of thoracic actinomycosis] Bross–Bach U, et al. **Dtsch Med Wochenschr** 1989 Aug 18; 114(33):1242–4 (Eng. Abstr.) **(Ger)**
[Thoracoscopy in thoracic wall processes] Greschuchna D. **Pneumologie** 1989 Feb;43(2):119–21 (Eng. Abstr.) **(Ger)**
[Indications for proton spin tomography and computerized tomography in chest diagnoses] Dinkel E, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:327–34 (47 ref.) (Eng. Abstr.) **(Ger)**
[MRT of intrathoracic space–occupying lesions—conventional and new rapid study technics] Claussen C, et al. **Rontgenblatter** 1989 Jan;42(1):6–12 (Eng. Abstr.) **(Ger)**
[Requirements in radiologic diagnosis from the internist–cardiology viewpoint] Langes K, et al. **Rontgenblatter** 1989 Jul;42(7):282–5 (Eng. Abstr.) **(Ger)**
[Thoracic diagnostic requirements of an intensive care unit from the anesthesiology viewpoint] Schulte am Esch J. **Rontgenblatter** 1989 Jul;42(7):286–91 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Pseudomonas thoracic empyema secondary to nosocomial rhinosinusitis. Meyer P, et al. **Eur Respir J** 1988 Oct; 1(9):868–9
The risk of abscess from sternoclavicular septic arthritis [see comments] Wohlgethan JR, et al. **J Rheumatol** 1988 Aug; 15(8):1302–6 (46 ref.). **Comment in:** J Rheumatol 1989 Mar;16(3):413–4
Thoracic complications of pancreatitis. Iacono C, et al. **Pancreas** 1989;4(2):228–36

PATHOLOGY

CT–guided cutting–needle biopsies of selected chest lesions. Goralnik CH, et al. **AJR** 1988 Nov;151(5):903–7
MRI of the thorax. State of the art. **J Thorac Imaging** 1989 Apr;4(2):1–92
[Mondor's disease] Savchak VI. **Vestn Dermatol Venerol** 1989;(5):73–4 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Unusual electrocardiographic manifestations in conditions with increased intrathoracic pressure. Kounis NG, et al. **Acta Cardiol (Brux)** 1988;43(6):653–61

RADIOGRAPHY

Thal patch gastroesophagoplasty: chest radiographic findings simulating leak or abscess. Goodman P, et al. **AJR** 1988 Dec;151(6):1121–2
The radiologic evaluation of chest pain in the athlete. Groskin S. **Clin Sports Med** 1987 Oct;6(4):845–71 (115 ref.)
The diaphragm, chest wall, and pleura. **J Thorac Imaging** 1989 Jan;4(1):1–94
Update on pediatric chest imaging. Eggleston DE, et al. **Pediatr Pulmonol** 1988;5(3):158–75 (12 ref.)
Computed tomography of chest wall masses. Jafri SZ, et al. **Radiographics** 1989 Jan;9(1):51–68
Radiographic evaluation of chest–wall lesions. Schaefer PS, et al. **Surg Clin North Am** 1989 Oct;69(5):911–45 (46 ref.)
[The contribution of computer tomography in improving the diagnosis of disorders of the thoracic wall and pleura] Salamoun V, et al. **Cesk Radiol** 1988 Nov;42(6):412–9 (Eng. Abstr.) **(Cze)**
[Radiation dosage of premature infants caused by roentgen imaging of the thorax] Weingärtner R, et al. **Kinderarztl Prax** 1989 Jan;57(1):33–5 (Eng. Abstr.) **(Ger)**
[Thoracic diagnosis at the intensive care unit: digital radiography] Witte G, et al. **Rontgenblatter** 1989 Jul; 42(7):292–5 (Eng. Abstr.) **(Ger)**
[Quality control in radiologic diagnosis of thoracic diseases—criteria and management] Smajkiewicz L. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun;52(3):178–83 (Eng. Abstr.) **(Pol)**
[Diagnostic and therapeutic manipulations under computed tomographic control] Uchikov P, et al. **Khirurgiia (Sofiia)** 1988;41(3):36–8 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

[Computed tomography in pre–irradiation topometry applied to diseases of the thoracic organs] Kostylev VA, et al. **Med Radiol (Mosk)** 1988 Dec;33(12):49–52 (Eng. Abstr.) **(Rus)**

SURGERY

Closure of a sternal defect with the rectus abdominis muscle after sacrifice of both internal mammary arteries. Fernando B, et al. **Ann Plast Surg** 1988 Nov;21(5):468–71
Intrathoracic muscle flaps: a 10–year experience in the management of life–threatening infections. Arnold PG, et al. **Plast Reconstr Surg** 1989 Jul;84(1):92–8; discussion 99
Chest–wall reconstruction by contralateral latissimus dorsi musculocutaneous flap. Matsuo K, et al. **Plast Reconstr Surg** 1988 Dec;82(6):994–9
[Surgical treatment of chest wall tuberculosis] Wang SX, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):172–3, 192 (Eng. Abstr.) **(Chi)**
[Treatment of decompensated metabolic alkalosis by intravenous administration of sorbamine after thoracic and abdominal operations] Novikov GA, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):63–6 (Eng. Abstr.) **(Rus)**

THERAPY

Decision analysis for chest clinicians. Haponik EF, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1058–60

VETERINARY

Ultrasonography of noncardiac thoracic diseases in small animals. Stowater JL, et al. **J Am Vet Med Assoc** 1989 Aug 15;195(4):514–20 (30 ref.)

THORACIC DUCT

Effects of sustained lymph drainage on cardiovascular function and thoracic duct lymph in sheep. Valenzuela GJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R867–74
Combined monitoring of thoracic duct and lung lymph during E. coli sepsis in awake sheep. Smith L, et al. **Lymphology** 1988 Sep;21(3):169–77
Transcatheter thoracic duct embolization in the dog. An experimental study. Pardo AD, et al. **Vet Surg** 1989 Jul–Aug;18(4):279–85
[Biochemical justification of drainage of the thoracic duct in acute necrotic–hemorrhagic pancreatitis] Deby–Dupont G, et al. **Acta Gastroenterol Belg** 1988 Jan–Feb;51(1):31–40 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

Who's for the thoracic duct? [letter] **Lancet** 1988 Oct 8; 2(8615):857–8
[Surgical anatomy of the abdominal part of the thoracic duct] Semenov GM. **Arkh Anat Gistol Embriol** 1988 Oct; 95(10):55–9 (Eng. Abstr.) **(Rus)**
[Roentgenologic investigation of collateral lymphatic pathways after ligation of the thoracic duct] Umbetov TZh, et al. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):59–64 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

The lymphogogue action of calcium dobesilate on the flow of lymph from the thoracic duct of anesthetized and mobile guinea pigs. Piller NB. **Lymphology** 1988 Jun;21(2):124–7

EMBRYOLOGY

Thoracic duct lymph flow and its measurement in chronically catheterized sheep fetus. Brace RA. **Am J Physiol** 1989 Jan;256(1 Pt 2):H16–20

INJURIES

Chylothorax following high translumbar aortography: a case report and review of the literature. Negroni CC, et al. **Bol Asoc Med P R** 1988 Jun;80(6):201–4 (17 ref.)
Intraoperative determination of thoracic duct injury with 131I–fat. An experimental study on dogs. Wang YJ, et al. **Chin Med J [Engl]** 1989 Feb;102(2):86–90
[Fistula of the thoracic duct: an infrequent complication in radical neck surgery (letter)] Cabrera Ruiz–Lopera JC, et al. **Rev Esp Anestesiol Reanim** 1988 May–Jun;35(3):168 **(Spa)**

INNERVATION

[Adrenergic innervation of lymph nodes and the thoracic duct] Chzhao LKh, et al. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):33–7 (Eng. Abstr.) **(Rus)**

METABOLISM

An immunoelectron microscopic study of von Willebrand factor in the thoracic duct endothelium of rats. Magari S, et al. **Lymphology** 1989 Jun;22(2):76–80

PATHOLOGY

[Determining the type of drowning based on the levels of blood in the thoracic duct lymph] Isaev IuS. **Sud Med Ekspert** 1989 Jan–Mar;32(1):23–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Evaluation of the effects of lymph drainage by a thoracic duct fistula in experimental peritonitis. Olofsson P. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):453–9
Lymph flow dynamics into the thoracic duct of the rat. Yamada S, et al. **Jpn J Physiol** 1988;38(5):729–33
Contribution of the liver to thoracic duct lymph flow in a motionless subject. Mobley WP, et al. **Lymphology** 1989 Jun;22(2):81–4

RADIOGRAPHY

The role of lymphography in chylothorax following thoracic surgery. Ngan H, et al. **Br J Radiol** 1988 Nov; 61(731):1032–6

RADIONUCLIDE IMAGING

Scintigraphic demonstration of the thoracic duct following oral ingestion of 123I–heptadecanoic acid. Hvid–Jacobsen K, et al. **Gastrointest Radiol** 1989 Summer;14(3):212–4
[Radionuclide diagnosis of disorders of the central lymph dynamics in thoracic duct pathology] Bykov SA, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):27–9 (Eng. Abstr.) **(Rus)**

SECRETION

Paradoxical effects of acute rejection in long–term kidney allografts after pretreatment with thoracic duct drainage. Kinukawa T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2192–3
The long–term results of thoracic duct drainage in living related kidney transplantation. Ohshima S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1972–3

SURGERY

Early operative management of chylothorax by thoracic duct ligation. Mohlala ML, et al. **S Afr J Surg** 1989 Mar; 27(1):11–2 (7 ref.)
Transdiaphragmatic approach to thoracic duct ligation in the cat. Martin RA, et al. **Vet Surg** 1988 Jan–Feb;17(1):22–6
[Surgical management of chylothorax: a report of 65 cases] Gao CX. **Chung Hua Wai Ko Tsa Chih** 1989 Mar; 27(3):164–5, 189 (Eng. Abstr.) **(Chi)**
[Fixation of the catheter in the lumen of the thoracic duct in its external drainage] Archvadze VG, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):131–2 **(Rus)**
[An intermittent method for drainage of the thoracic lymphatic duct in chronic lympholeukemia] Archvadze VG, et al. **Ter Arkh** 1988;60(5):89–92 (Eng. Abstr.) **(Rus)**
[Use of lymphosorption detoxication in the treatment of lung abscesses and their complications] Samsonov VP. **Vestn Khir** 1988 May;140(5):92–5 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Ultrastructural morphology of the canine thoracic duct and cisterna chyli. Marais J, et al. **Acta Anat (Basel)** 1988; 133(4):309–12
[Microrelief of the internal surface of the thoracic duct in dogs (based on scanning electron microscopy data)] Vyrenko IuE, et al. **Arkh Anat Gistol Embriol** 1988 Sep; 95(9):31–5 (Eng. Abstr.) **(Rus)**

THORACIC INJURIES

An unusual high–pressure penetrating thoracic injury: a case

report. Burnett R. **Injury** 1987 May;18(3):216–7
Cardiac damage in nonpenetrating chest injuries. Report of 5 cases. Glock Y, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):27–33
Thoracic trauma. **Surg Clin North Am** 1989 Feb;69(1):1–178
[A combined rupture of the interventricular septum and the tricuspid valve in closed chest injury] Babliak DE, et al. **Grudn Khir** 1989 Jan–Feb;(1):88–9 (Rus)
[Classification and pathogenesis of cranio–thoracic injuries] Kalashnik AF, et al. **Sov Med** 1988;(11):35–9 (60 ref.) (Rus)
[Comparative characteristics of chest cavity injuries in children and adults as a result of a blow from a solid blunt object] Khokhlov VV. **Sud Med Ekspert** 1989 Apr–Jun; 32(2):8–11 (Eng. Abstr.) (Rus)

COMPLICATIONS

Thoracic paravertebral block: a method of pain control. Gilbert J, et al. **Acta Anaesthesiol Scand** 1989 Feb; 33(2):142–5
Pulmonary contusion. Hill JW, et al. **Am Fam Physician** 1988 Nov;38(5):219–20
The sensitivity of vital signs in identifying major thoracoabdominal hemorrhage. Luna GK, et al. **Am J Surg** 1989 May;157(5):512–5
Myocardial infarction caused by blunt chest injury: possible mechanisms involved—case reports. Foussas SG, et al. **Angiology** 1989 Apr;40(4 Pt 1):313–8
Traumatic aorto–right atrial fistula after blunt chest injury. Chang H, et al. **Ann Thorac Surg** 1989 May;47(5):778–9
Ventricular aneurysm due to blunt chest injury. Grieco JG, et al. **Ann Thorac Surg** 1989 Feb;47(2):322–9 (31 ref.)
Traumatic laceration of a saphenous vein graft: successful surgical repair. Harada A, et al. **Ann Thorac Surg** 1989 Jun;47(6):924–5
Diagnosis of traumatic thoracic aortic rupture: a 10–year retrospective analysis. Kram HB, et al. **Ann Thorac Surg** 1989 Feb;47(2):282–6
Combined ascending aorta rupture and left main bronchus disruption from blunt chest trauma. Marzelle J, et al. **Ann Thorac Surg** 1989 May;47(5):769–71
Why is the lower torso protected in traumatic asphyxia? A new hypothesis. Thompson A Jr, et al. **Ann Thorac Surg** 1989 Feb;47(2):247–9
Myocardial contusion. When can the diagnosis be eliminated? Miller FB, et al. **Arch Surg** 1989 Jul;124(7):805–7; discussion 807–8
Traumatic lung cyst. Ayuso JR, et al. **Can Assoc Radiol J** 1989 Jun;40(3):174–5
Coronary artery dissection secondary to blunt chest trauma. Kohli S, et al. **Cathet Cardiovasc Diagn** 1988;15(3):179–83
Blunt chest trauma. Extrapericardial cardiac tamponade by a mediastinal hematoma. Coleman GM, et al. **Chest** 1989 Apr;95(4):922–4
Chest trauma and subvalvular left ventricular aneurysms. Matthews RV, et al. **Chest** 1989 Feb;95(2):474–6
Inverse ratio ventilation in a 6–year–old with severe post–traumatic adult respiratory distress syndrome. Greaves TH, et al. **Crit Care Med** 1989 Jun;17(6):588–9
Immediate post–traumatic hypokalemia. Grace GT, et al. **Curr Surg** 1988 Nov–Dec;45(6):463–4
Aneurysm of the left anterior descending coronary artery after chest trauma. Bjørn–Hansen LS, et al. **Eur Heart J** 1989 Feb;10(2):177–9
Subocclusion of the left anterior descending artery following blunt chest trauma. van Schil P, et al. **Eur Heart J** 1988 Dec;9(12):1361–2
Blunt traumatic rupture of cervical trachea. Beg MH, et al. **Indian J Chest Dis Allied Sci** 1988 Oct–Dec;30(4):291–4
Traumatic diaphragmatic hernia: an unusual presentation. Scott RF, et al. **Injury** 1988 Jul;19(4):292
Quantitation and pattern of parenchymal lung injury in blunt chest trauma. Diagnostic and therapeutic implications. Wagner RB, et al. **J Comput Tomogr** 1988 Oct;12(4):270–81
Temporary blindness associated with traumatic asphyxia. Purdy RH, et al. **J Emerg Med** 1988 Sep–Oct;6(5):373–6
Tension gastrothorax complicating traumatic diaphragmatic hernia. Sidhu BS, et al. **J Indian Med Assoc** 1988 Jul; 86(7):182–4
Traumatic pulmonary pseudocyst. Report of twelve cases. Kato R, et al. **J Thorac Cardiovasc Surg** 1989 Feb; 97(2):309–12
A prospective evaluation of 68 patients suffering blunt chest trauma for evidence of cardiac injury. Helling TS, et al. **J Trauma** 1989 Jul;29(7):961–5; discussion 965–6
Occult diaphragmatic injury from stab wounds to the lower chest and abdomen. Madden MR, et al. **J Trauma** 1989 Mar;29(3):292–8 (43 ref.)
Transection of the inferior vena cava from blunt thoracic trauma: case reports. Peitzman AB, et al. **J Trauma** 1989 Apr;29(4):534–6
Ventricular septal defect following blunt thoracic and abdominal trauma: case report. Sparrow JG, et al. **J Trauma** 1989 May;29(5):690–3
High altitude penetrating chest trauma: a case report. Baird RE, et al. **Milit Med** 1989 Jul;154(7):337–40
Approaches to trauma involving the major vessels of the thorax. Mattox KL. **Surg Clin North Am** 1989 Feb; 69(1):77–91 (55 ref.)
Acute post–traumatic respiratory physiology and insufficiency. Pepe PE. **Surg Clin North Am** 1989 Feb; 69(1):157–73 (39 ref.)
Delayed sequelae of thoracic trauma. Symbas PN, et al. **Surg Clin North Am** 1989 Feb;69(1):135–42 (25 ref.)
Pulmonary contusion. Evaluation and classification by computed tomography. Wagner RB, et al. **Surg Clin North Am** 1989 Feb;69(1):31–40
Prospective trial of the six hour rule in stab wounds of the chest. Kerr TM, et al. **Surg Gynecol Obstet** 1989 Sep; 169(3):223–5
Acute mitral regurgitation secondary to blunt chest trauma: report of a case. Chang JP, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):173–5
Traumatic tension pneumomediastinum mimicking cardiac tamponade. Beg MH, et al. **Thorax** 1988 Jul;43(7):576–7
Acute myocardial infarction following blunt chest trauma due to the kick of a cow. Barton EN, et al. **West Indian Med J** 1988 Dec;37(4):236–9
[Diagnosis of post–traumatic pleural effusion] Capellier G, et al. **Ann Fr Anesth Reanim** 1989;8(2):131–2 (Eng. Abstr.) (Fre)
[Late diagnosis of a bronchial fracture after thoracic injury] Parat S, et al. **Ann Pediatr (Paris)** 1989 Mar;36(3):205–7 (Eng. Abstr.) (Fre)
[Post–traumatic dissecting aortic aneurysm in adolescents] Hendaoui L, et al. **Ann Radiol (Paris)** 1989;32(3):217–20 (Eng. Abstr.) (Fre)
[Traumatic mitral insufficiency] Devanne C, et al. **Cah Anesthesiol** 1988 Nov;36(7):575–7 (Fre)
[Traumatic rupture of 3 lobes of the right lung without any parietal lesion. A peculiar entity] Houdelette P, et al. **J Chir (Paris)** 1989 May;126(5):313–4 (8 ref.) (Eng. Abstr.) (Fre)
[Post–traumatic pulmonary hematomas. Apropos of 2 cases] Melloni B, et al. **Rev Mal Respir** 1989;6(3):267–70 (Eng. Abstr.) (Fre)
[A strange calcification on/in the thorax. A dorsal pleural calcification following long–term drainage of a splinter injury and pleural empyema on the right] Frahm R. **Radiologe** 1989 Jan;29(1):51–2 (Ger)
[Neglected closed chest injury and chylothorax. Importance of computerized axial tomography. Description of a clinical case] Tulli G, et al. **Minerva Anestesiol** 1987 Nov; 53(11):647–50 (Eng. Abstr.) (Ita)
[Post–traumatic inflammatory pseudotumor of the lung. Description of a case] Freschi P, et al. **Pediatr Med Chir** 1989 Jan–Feb;11(1):93–6 (Eng. Abstr.) (Ita)
[A case of mitral regurgitation from non–penetrating chest trauma] Okazaki K, et al. **Kokyu To Junkan** 1989 Feb; 37(2):221–4 (Eng. Abstr.) (Jpn)
[A case of traumatic aneurysm of the brachiocephalic artery] Kokubo M, et al. **Kyobu Geka** 1988 Aug;41(9):756–9 (Eng. Abstr.) (Jpn)
[A case of traumatic heart and lung hernia] Yokokawa H, et al. **Kyobu Geka** 1988 Nov;41(12):1003–5 (Eng. Abstr.) (Jpn)
[Traumatic subclavian steal syndrome. Report of a case] Kinoshita Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun; 89(6):967–70 (13 ref.) (Eng. Abstr.) (Jpn)
[Chronic traumatic thoracic aortic aneurysm: experience of 2 cases] Shin H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2525–8 (Eng. Abstr.) (Jpn)
[Treatment of pneumo– and hemothorax in multiple rib fractures and combined trauma] Sokolov VA, et al. **Grudn Khir** 1988 May–Jun;(3):55–8 (Rus)
[A rare source of hemorrhage in closed chest trauma] Deriugina MS, et al. **Klin Khir** 1988;(10):57 (Rus)
[Stress–induced ulcers in thoraco–abdominal injuries] Kharitonov VA, et al. **Klin Khir** 1989;(4):68–9 (Rus)
[Injuries of the venae cavae] Grinev MV, et al. **Vestn Khir** 1988 Sep;141(9):72–7 (Eng. Abstr.) (Rus)
[Chylothorax in closed trauma of the chest] Gurbanaliev IG, et al. **Vestn Khir** 1989 Feb;142(2):68–70 (Rus)
[Pathogenetic substantiation of photomodification of autologous blood in the prevention and treatment of complications of closed chest trauma] Kutushev FKh, et al. **Vestn Khir** 1988 Dec;141(12):63–71 (Eng. Abstr.) (Rus)
[Traumatic pericardial effusion in childhood. Follow–up study using bidimensional echocardiography] Cabrera A, et al. **Rev Esp Cardiol** 1988 May;41(5):315–7 (Eng. Abstr.) (Spa)
[Traumatic tricuspid insufficiency] Villarroel MT, et al. **Rev Esp Cardiol** 1989 Feb;42(2):145–7 (Eng. Abstr.) (Spa)

DIAGNOSIS

Clinical assessment and radiograph following blunt chest trauma. Dunlop MG, et al. **Arch Emerg Med** 1989 Jun; 6(2):125–7
Fiberoptic bronchoscopy in the evaluation of acute chest and upper airway trauma. Hara KS, et al. **Chest** 1989 Sep; 96(3):627–30
[Diagnosis and treatment of penetrating wounds of the chest cavity in childhood] Mikhallova V. **Khirurgiia (Sofiia)** 1988; 41(4):61–4 (Eng. Abstr.) (Bul)
[The value of ultrasound diagnosis in blunt abdominal and thoracic injuries] Strittmatter B, et al. **Langenbecks Arch Chir** 1988;373(4):202–5 (Eng. Abstr.) (Ger)
[Diagnosis and treatment of peacetime chest trauma] Nedvetskaia LM, et al. **Grudn Khir** 1988 May–Jun;(3):63–7 (Eng. Abstr.) (Rus)
[Gunshot wounds of the chest in peacetime] Marchuk IK. **Klin Khir** 1988;(10):36–8 (Eng. Abstr.) (Rus)

DRUG THERAPY

Early use of corticosteroids in severe closed chest injuries: a 10–year experience. Svennevig JL, et al. **Injury** 1987 Sep; 18(5):309–12

EPIDEMIOLOGY

Clinical profile of thoracic trauma in children—a study from Aligarh, N. India. Beg MH, et al. **Ann Trop Paediatr** 1988 Dec;8(4):238–40
Chest injuries sustained in severe traffic accidents by seatbelt wearers. Arajärvi E, et al. **J Trauma** 1989 Jan;29(1):37–41
Blunt chest trauma in the elderly. Shorr RM, et al. **J Trauma** 1989 Feb;29(2):234–7
Incidence of penetrating chest and/or abdomen injury. Simons–Morton DG, et al. **Md Med J** 1988 Sep;37(9):725–8
Epidemiology of chest trauma. LoCicero J 3d, et al. **Surg Clin North Am** 1989 Feb;69(1):15–9
[Thoracic, abdominal and thoraco–abdominal traumas. A statistical–epidemiological study of 1009 cases and diagnostic–therapeutic considerations] Valente F, et al. **Minerva Chir** 1989 Apr 30;44(8):1267–74 (Eng. Abstr.) (Ita)

ETIOLOGY

Fatal motorcyclist injury from a hinged and rounded rearview mirror. Fife D. **Am J Emerg Med** 1989 May; 7(3):300–1
Effect of temporary external stabilization on ventilator weaning after sternal resection. Ali J, et al. **Chest** 1989 Feb;95(2):472–3
Distribution and function of alveolar cells in multiply injured patients with trauma–induced ARDS. Pison U, et al. **Intensive Care Med** 1988;14(6):602–9
Two cases of near fatal airgun injury [letter] Paraskevaides EC, et al. **J R Coll Gen Pract** 1988 Jun;38(311):274
[Polytrauma as a result of a fall from a height] Beresnev SA, et al. **Klin Khir** 1989;(4):67 (Rus)

HISTORY

Highlights of the history of nonpenetrating chest trauma. Wagner RB, et al. **Surg Clin North Am** 1989 Feb;69(1):1–14

MORTALITY

Unusually low mortality of penetrating wounds of the chest. Twelve years' experience. Mandal AK, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):119–25

PATHOLOGY

[Determining direction in cases of bodies run over by automobile wheels] Vinokurova SE. **Sud Med Ekspert** 1989 Jan–Mar;32(1):20–3 (Eng. Abstr.) (Rus)
[Fatal head and chest wounds from splinters of a board] Vorob'ev IuV. **Sud Med Ekspert** 1988 Jul–Sep;31(3):55–6 (Rus)

PHYSIOPATHOLOGY

Chest wall distortion in patients with flail chest. Tzelepis GE, et al. **Am Rev Respir Dis** 1989 Jul;140(1):31–7
Ventilation–perfusion imaging in evaluating regional lung function in nonpenetrating injury to the chest. Van Eeden SF, et al. **Chest** 1989 Mar;95(3):632–8
Analytical studies of injury criteria for the thorax. Wang JT. **J Biomech Eng** 1989 May;111(2):128–35
Biophysics of impact injury to the chest and abdomen. Cooper GJ, et al. **J R Army Med Corps** 1989 Jun; 135(2):58–67
Longitudinal assessment of breast development in adolescent female patients with burns involving the nipple–areolar complex. McCauley RL, et al. **Plast Reconstr Surg** 1989 Apr;83(4):676–80
[The role of microcirculatory disorders in the development of postoperative complications in thoracic and abdominal injuries] Riabova SS, et al. **Vestn Khir** 1988 Oct; 141(10):60–4 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Of seat belts and sternal fractures [letter] Graber MA, et al. **Ann Emerg Med** 1989 Apr;18(4):427

RADIOGRAPHY

Value of plain chest film in predicting traumatic aortic rupture. Savastano S, et al. **Ann Radiol (Paris)** 1989; 32(3):196–200
False–positive aortography following blunt chest trauma: case report. Orron DE, et al. **Cardiovasc Intervent Radiol** 1988 Jun;11(3):132–5
Computed tomography of the chest in the trauma patient. Brooks AP, et al. **Clin Radiol** 1989 Mar;40(2):127–32
The radiologic evaluation of chest pain in the athlete. Groskin S. **Clin Sports Med** 1987 Oct;6(4):845–71 (115 ref.)
The potential effects of radiographic criteria to exclude aortography in patients with blunt chest trauma. Results of a study of 32 patients with proved aortic or brachiocephalic arterial injury. Woodring JH, et al.

J Thorac Cardiovasc Surg 1989 Mar;97(3):456–60
The frequency and significance of thoracic injuries detected on abdominal CT scans of multiple trauma patients. Rhea JT, et al. J Trauma 1989 Apr;29(4):502–5
Determination of normal transverse mediastinal width and mediastinal–width to chest–width (M/C) ratio in control subjects: implications for subjects with aortic or brachiocephalic arterial injury. Woodring JH, et al. J Trauma 1989 Sep;29(9):1268–72
Diagnostic imaging of pelvic and chest wall trauma. Heare MM, et al. Radiol Clin North Am 1989 Sep;27(5):873–89
Chest injury in children with blunt abdominal trauma: evaluation with CT. Sivit CJ, et al. Radiology 1989 Jun; 171(3):815–8
[Radiology of multiple thoracic trauma] Partanen K, et al. Duodecim 1988;104(16):1264–74 (32 ref.) (Fin)
[Roentgen pathology of blunt bronchial injuries] Stark P, et al. Radiologe 1989 May;29(5):224–7 (Eng. Abstr.) (Ger)
[Radiologic diagnosis of thoracic injuries] Freyschmidt J. Rontgenblatter 1989 Jul;42(7):311–6 (6 ref.) (Eng. Abstr.) (Ger)
[Clinical x-ray characteristics of lung contusion in closed chest trauma] Florikian AK, et al. Klin Khir 1988;(10):7–9 (Eng. Abstr.) (Rus)
[Asymptomatic course of giant lipoma of the mediastinum] Bruns VA, et al. Vestn Khir 1989 Feb;142(2):49–50 (Rus)

RADIONUCLIDE IMAGING

[Dynamic perfusion scintigraphy of the lungs in closed chest injury] Proskurina GB, et al. Sov Med 1988;(8):64–7 (Rus)

SURGERY

Empyema thoracis in patients undergoing emergent closed tube thoracostomy for thoracic trauma. Eddy AC, et al. Am J Surg 1989 May;157(5):494–7
The post–pericardiotomy syndrome and penetrating injury of the chest. Loughlin V, et al. Injury 1987 Nov;18(6):412–4
Indications for thoracotomy: deciding to operate. Mattox KL. Surg Clin North Am 1989 Feb;69(1):47–58 (52 ref.)
Emergency department thoracotomy following injury: critical determinants for patient salvage. Baxter BT, et al. World J Surg 1988 Oct;12(5):671–5
[Definitive treatment of thoracic penetrating injuries due to missiles: report of 155 cases] Huang XM. Chung Hua Wai Ko Tsa Chih 1988 Oct;26(10):622–3, 639 (Eng. Abstr.) (Chi)
[A successful procedure in mitral valve rupture accompanied by rupture of the papillary muscle and the chordae tendinae following multiple injuries and blunt thoracic trauma] Sold M, et al. Anaesthesist 1989 May;38(5):262–5 (Eng. Abstr.) (Ger)
[Surgical treatment of the unstable thorax in respiratory insufficiency] Tscharner C, et al. Helv Chir Acta 1989 Jan; 55(5):711–7 (Eng. Abstr.) (Ger)
[The significance of thoracic trauma as single or concomitant injuries in polytrauma] Roscheck H, et al. Unfallchirurg 1988 Sep;91(9):422–7 (Eng. Abstr.) (Ger)
[Treatment of thoracic trauma at an emergency hospital] Gastinger I, et al. Zentralbl Chir 1989;114(5):301–5 (Eng. Abstr.) (Ger)
[Thoraco–abdominal wound] Poliankо NI, et al. Khirurgiia (Mosk) 1988 Aug;(8):131–2 (Rus)
[Diagnosis and treatment of thoraco–abdominal wounds] Demchenko PS, et al. Klin Khir 1988;(10):40–1 (Eng. Abstr.) (Rus)
[Intrauterine penetrating knife wound of the chest] Shapkin VV, et al. Klin Khir 1988;(6):74 (Rus)
[Surgical tactics in thoraco–abdominal injuries] Kutushev FKh, et al. Vestn Khir 1989 Jan;142(1):57–9 (Rus)

THERAPY

Pitfalls in the management of penetrating chest trauma. Hirshberg A, et al. Am J Surg 1989 Apr;157(4):372–5; discussion 376
Major thoracic incisional injury: ventilatory management [letter] Naicker S, et al. Anesth Analg 1989 May;68(5):702
Chest injuries. A review of 195 patients. Brotzu G, et al. Ann Chir Gynaecol 1988;77(4):155–9
An audit of the management of 250 patients with chest trauma in a regional thoracic surgical centre. Jones NS. Arch Emerg Med 1989 Jun;6(2):97–106
Management of severe chest injuries. Dhasmana JP. Br J Hosp Med 1989 Jun;41(6):554–62 (24 ref.)
Successful management of flail chest without the use of volume ventilator. Odelowo EO. East Afr Med J 1987 Dec; 64(12):836–44
Chest trauma. Carrero R, et al. Emerg Med Clin North Am 1989 May;7(2):389–418 (86 ref.)
Differential ventilation with low–flow CPAP and CPPV in the treatment of unilateral chest trauma. Wendt M, et al. Intensive Care Med 1989;15(3):209–11 (9 ref.)
Management of sucking chest wounds [letter] Lawrence BA. J R Army Med Corps 1989 Jun;135(2):94
Stab wounds of the trunk: a review of clinical experience. McCombe AW. J R Coll Surg Edinb 1988 Oct;33(5):261–2
Current concepts in the management of flail chest. Lee RB, et al. J Tenn Med Assoc 1988 Oct;81(10):631–3
Prevention of pneumothorax during mechanical ventilation using chest tubes in patients with blunt thoracic trauma. van Niekerk JL, et al. Neth J Surg 1988 Jun;40(4):114
A triage system for stab wounds to the chest. Wormald PJ, et al. S Afr Med J 1989 Sep 2;76(5):211–2 (5 ref.)
Prehospital care of the patient with an injured chest. Mattox KL. Surg Clin North Am 1989 Feb;69(1):21–9 (36 ref.)
Chest wall injuries. Pate JW. Surg Clin North Am 1989 Feb; 69(1):59–70 (12 ref.)
Chest drainage tubes. Symbas PN. Surg Clin North Am 1989 Feb;69(1):41–6 (11 ref.)
Advanced techniques in thoracic trauma. Van Way CW 3d. Surg Clin North Am 1989 Feb;69(1):143–55 (43 ref.)
[First–aid of serious trauma at the emergency room (an analysis of 144 cases)] Zhu XG. Chung Hua I Hsueh Tsa Chih 1989 Jan;69(1):17–9, 4 (Eng. Abstr.) (Chi)
[Thoracic trauma in the pre–hospital phase] Vock B. Aktuel Traumatol 1989 Feb;19(1):17–21 (14 ref.) (Eng. Abstr.) (Ger)
[Thoracic and abdominal injuries in childhood] Gdanietz K. Z Arztl Fortbild (Jena) 1988;82(16):765–70 (6 ref.) (Ger)
[Blood reinfusion in chest trauma] Lebedev NV, et al. Khirurgiia (Mosk) 1988 Aug;(8):67–71 (Eng. Abstr.) (Rus)

VETERINARY

An unusual cause of increasing airway pressure during anesthesia. Klein LV, et al. Vet Surg 1989 May–Jun; 18(3):239–41

THORACIC NEOPLASMS

Thoracic complications of multiple myeloma. Srinivasulu T, et al. Indian J Chest Dis Allied Sci 1988 Jan–Mar; 30(1):56–60
[Thoracic splenosis. Review of the literature apropos of a case] Jebara VA, et al. Ann Chir 1989;43(2):178–80 (17 ref.) (Eng. Abstr.) (Fre)
[Swiss Society for Thoracic and Cardiovascular Surgery. 3d annual meeting. 17–18 March 1988, Zurich. Proceedings] Helv Chir Acta 1988 Nov;55(4):383–534 (Ger)
[Tumors of the thoracic wall] Beltrami V, et al. Minerva Chir 1989 Feb 15;44(3):377–9 (7 ref.) (Ita)

ANALYSIS

Gangliosides in neuroblastomas. Schengrund CL, et al. Neurochem Pathol 1988 Jun;8(3):189–202 (42 ref.)

BLOOD

A longitudinal study of the hyaluronan level in the serum of patients with malignant mesothelioma under treatment. Hyaluronan as an indicator of progressive disease. Dahl IM, et al. Cancer 1989 Jul 1;64(1):68–73
Serum levels of C–reactive protein in patients with pulmonary tuberculosis and malignant tumors of the chest. Maasilta P, et al. Infection 1989 Jan–Feb;17(1):13–4
Significance of abnormal serum binding of insulin–like growth factor II in the development of hypoglycemia in patients with non–islet–cell tumors. Daughaday WH, et al. Proc Natl Acad Sci U S A 1989 Sep;86(17):6778–82

CHEMICALLY INDUCED

[Carcinomas of internal organs and their relationship to arsenical drinking water in the Republic of Argentina] Tello EE. Med Cutan Ibero Lat Am 1988;16(6):497–501 (Eng. Abstr.) (Spa)

COMPLICATIONS

Electrocardiographic pseudo–myocardial infarct pattern in malignant cardiac disease. O'Dea D, et al. Cancer 1989 Mar 1;63(5):958–62
Acquired ichthyosis in a child with rhabdomyosarcoma. Grattan CE, et al. Pediatr Dermatol 1988 Aug;5(3):167–9
Comparison of soluble dexamethasone sodium phosphate with free dexamethasone and indomethacin in treatment of experimental neoplastic spinal cord compression. Siegal T, et al. Spine 1988 Oct;13(10):1171–6

DIAGNOSIS

Delayed radiologic appearance of bilateral thoracic ectopic kidneys. Liddell RM, et al. AJR 1989 Jan;152(1):120–2
Thoracic neuroblastoma presenting as a cystic hygroma. Ganick DJ, et al. Arch Dis Child 1988 Oct;63(10):1270–1
MRI in thoracic malignancy. Goddard P. Bristol Med Chir J 1988 May;103(2):27–8
Ultrasonographic approach to diagnosing chest wall tumors. Saito T, et al. Chest 1988 Dec;94(6):1271–5
High signal intensity lesions of the chest in MR imaging. Barakos JA, et al. J Comput Assist Tomogr 1989 Sep–Oct; 13(5):797–802
MR appearance of bilateral periscapular elastofibromas. Gould ES, et al. J Comput Assist Tomogr 1989 Jul–Aug; 13(4):701–3
Accuracy of diagnostic imaging as determined by delayed operative intervention for advanced neuroblastoma. Foglia RP, et al. J Pediatr Surg 1989 Jul;24(7):708–11
Cross–sectional imaging of the chest wall. Wechsler RJ, et al. J Thorac Imaging 1989 Jan;4(1):29–40 (61 ref.)
Eigenimage filtering in MR imaging: an application in the abnormal chest wall. Haggar AM, et al. Magn Reson Med 1989 Jul;11(1):85–97
Chest wall mesenchymoma (hamartoma) in infancy. CT and MR findings. Schlesinger AE, et al. Pediatr Radiol 1989; 19(3):212–3
Thoracoscopy: diagnostic and therapeutic indications. Newhouse MT. Pneumologie 1989 Feb;43(2):48–52 (59 ref.)
Case report 519: Histiocytoid hemangioendothelioma of right 10th rib. Jaffe JW, et al. Skeletal Radiol 1989;18(1):50–4
Large fluid–filled thoracic mass in a young man. Hebert C, et al. South Med J 1988 Oct;81(10):1322–3
[Interventional computed tomography in thoracic oncology. Apropos of 170 cases] Berry M, et al. J Radiol 1989 Jan; 70(1):7–16 (Eng. Abstr.) (Fre)
[NMR tomography with gadolinium–DTPA of the trunk in pediatric oncology] Kahn T, et al. ROFO 1989 May; 150(5):592–7 (Eng. Abstr.) (Ger)
[Percutaneous biopsy (PB) of solid thoraco–abdominal formations with instrumental guidance. The authors' experience] Tetti C, et al. Radiol Med (Torino) 1988 Nov; 76(5):443–7 (Eng. Abstr.) (Ita)
[CT–guided needle aspiration biopsy for the diagnosis of intrathoracic lesions] Shinohara Y. Nippon Kyobu Shikkan Gakkai Zasshi 1988 Oct; 26(10):1052–61 (Eng. Abstr.) (Jpn)
[A difficult pneumologic case] Albu A, et al. Rev Ig [Pneumoftiziol] 1988 Jan–Mar;37(1):85–90 (Rum)
[Thoracoscopic diagnosis of various types of intrathoracic tumors and cysts] Get'man VG, et al. Grudn Khir 1988 Nov–Dec;(6):52–7 (Eng. Abstr.) (Rus)

DRUG THERAPY

Giant cavernous haemangioma: treatment with intralesional injection of OK–432. Ogita S, et al. Z Kinderchir 1988 Dec; 43(6):408–9
[Myeloablative chemo– and radiotherapy with autologous and allogenic bone marrow reconstitution in children with metastatic neuroblastoma] Berthold F, et al. Klin Padiatr 1988 May–Jun;200(3):221–5 (Eng. Abstr.) (Ger)

ETIOLOGY

[Chondrosarcoma of the soft parts of the thoracic wall. Apropos of a case after surgery and irradiation of breast adenocarcinoma] Steiner E, et al. J Gynecol Obstet Biol Reprod (Paris) 1989;18(4):496–9 (Eng. Abstr.) (Fre)
[Postirradiation malignant fibrous histiocytoma following mastectomy in breast cancer] Inui K, et al. Nippon Geka Gakkai Zasshi 1988 Oct;89(10):1722–5 (24 ref.) (Eng. Abstr.) (Jpn)
[Sarcoma of soft tissues induced by radiation. Presentation of a case and review of the literature] Caballero JL, et al. Rev Med Panama 1989 May;14(2):116–9 (6 ref.) (Eng. Abstr.) (Spa)

METABOLISM

Synthesis and secretion of insulin–like growth factor II by a leiomyosarcoma with associated hypoglycemia. Daughaday WH, et al. N Engl J Med 1988 Dec 1; 319(22):1434–40

PATHOLOGY

Peripheral neuroepithelioma in childhood. Immunohistochemical demonstration of epithelial differentiation. Shinoda M, et al. Arch Pathol Lab Med 1988 Nov;112(11):1155–8
Cell culture of small round cell tumor originating in the thoracopulmonary region. Evidence for derivation from a primitive pluripotent cell. Fujii Y, et al. Cancer 1989 Jul 1;64(1):43–51
Extraskeletal Ewing's sarcoma—a case report. Shiang CP, et al. Chung Hua I Hsueh Tsa Chih 1987 Sep;40(3):335–40
Hemangioendothelioma following chronic granulocytic leukemia—a case report. Gupta R, et al. Indian J Cancer 1987 Dec;24(4):196–201
Hidroacanthoma simplex showing variation in the appearance of tumor cells in different nests. Nakagawa T, et al. J Cutan Pathol 1988 Aug;15(4):238–44
Malignant fibrous histiocytoma in the thoracic region—a clinico–pathologic investigation. Shirakusa T, et al. Jpn J Surg 1989 May;19(3):283–9
Transbronchial needle aspiration in the practice of bronchoscopy. Gay PC, et al. Mayo Clin Proc 1989 Feb; 64(2):158–62
Transbronchial needle aspiration—current status. Shure D. Mayo Clin Proc 1989 Feb;64(2):251–4 (16 ref.)
Malignant rhabdoid tumor. A morphological and flow cytometric study. Schmidt D, et al. Pathol Res Pract 1989 Feb;184(2):202–10
Benign solitary schwannoma. Diagnostic value of fine–needle aspiration biopsy. Cristallini EG. Pathologica 1988 Jul–Aug;80(1068):501–4
[In vivo study of human tumor cell proliferation, by histo–immunodetection of 5–iododeoxyuridine incorporated into DNA] Duprez A, et al. C R Acad Sci [III] 1989;308(12):313–9 (Eng. Abstr.) (Fre)
[Intrathoracic tumors of the sympathetic nervous system—characteristics of their biological behavior] Anders M, et al. Padiatr Grenzgeb 1988;27(6):503–9 (Eng.

Abstr.) (Ger)
[An autopsied case of malignant paraganglioma of the posterior thoracic cavity] Kitazawa S, et al. **Gan No Rinsho** 1989 Mar;35(4):486–92 (Eng. Abstr.) (Jpn)
[Multiple neurilemmomas of the chest wall] Matsubara M, et al. **Kyobu Geka** 1988 Aug;41(9):764–7 (Eng. Abstr.) (Jpn)
[Vascular and cartilaginous hamartoma of the thoracic wall] Ulloa-Patiño P, et al. **Bol Med Hosp Infant Mex** 1988 Jul; 45(7):467–71 (Eng. Abstr.) (Spa)
[Anatomoclinical case. A 40-year-old man with thoraco-abdominal giant hemangioma, history of infracondylar amputation of legs, loss of weight, abdominal pain and ascites] Manffrini Madrid F, et al. **Rev Invest Clin** 1988 Oct–Dec;40(4):433–8 (Spa)

RADIOGRAPHY

Ewing's tumour of rib presenting as chest mass. Khastigir T, et al. **Australas Radiol** 1989 Feb;33(1):116–8
Roentgenogram of the month. Chest mass in a paraplegic. Hart CM, et al. **Chest** 1989 May;95(5):1121–2
Chondrosarcoma of the sternum: CT features. Aoki J, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):806–10
Beckwith–wiedemann syndrome and neural crest tumors. A report of two cases. Sirinelli D, et al. **Pediatr Radiol** 1989; 19(4):242–5
Computed tomography of chest wall masses. Jafri SZ, et al. **Radiographics** 1989 Jan;9(1):51–68
Hickman nodule: a mimic of metastatic disease. Fernandez GG, et al. **Radiology** 1989 May;171(2):401–2
Varied appearance of AIDS-related lymphoma in the chest. Sider L, et al. **Radiology** 1989 Jun;171(3):629–32
Chest wall hamartoma of infancy. Buss EA, et al. **Tex Med** 1989 Aug;85(8):52–3
[An indistinct breast tumor. Lipoma underneath the greater pectoral muscle] Uhlig U. **Radiologe** 1989 May;29(5):257–8 (Ger)
[CT morphology and clinical diagnosis of thoracic space-occupying lesions in patients under 40 years of age] Beyer-Enke SA, et al. **ROFO** 1989 Jun;150(6):674–9 (Eng. Abstr.) (Ger)
[X-ray findings in Askin tumors] Crone-Münzebrock W, et al. **Rontgenblatter** 1989 Jun;42(6):271–3 (Eng. Abstr.) (Ger)
[Roentgenology of intrathoracic Hodgkin's disease] Barthel E. **Z Arztl Fortbild (Jena)** 1988;82(9):391–5 (26 ref.) (Ger)

RADIONUCLIDE IMAGING

Diaphragmatic eventration versus chest mass. Reyes de la Rocha S, et al. **Clin Nucl Med** 1988 Aug;13(8):619–20
[Quantitative and morphologic information value of the SPECT perfusion study of thoracic space-occupying lesions] Beyer-Enke SA, et al. **ROFO** 1989 May; 150(5):569–72 (Eng. Abstr.) (Ger)

RADIOTHERAPY

Pleural irradiation in thoracic malignancies [letter] Habrand JL, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1050
Monitor unit calculations for breast or chest wall treatments. Cheng PC, et al. **Med Dosim** 1989;14(1):35–6
Treatment of the chest wall. Cormack DV, et al. **Med Dosim** 1988 Dec;13(4):191–3
Measured inhomogeneity correction factors for lung in electron beam treatments of the chest wall. Moldon C, et al. **Med Dosim** 1989;14(2):89–98
Estimate of the excessive spinal cord dose in AP-PA thorax treatment. Kubo H. **Radiother Oncol** 1988 Nov; 13(3):187–92
[Computed tomography in pre-irradiation topometry applied to diseases of the thoracic organs] Kostylev VA, et al. **Med Radiol (Mosk)** 1988 Dec;33(12):49–52 (Eng. Abstr.) (Rus)

SECONDARY

Frequency and types of chest wall recurrences among node negative breast cancer patients. Ottesen G, et al. **Acta Oncol** 1988;27(6A):601–4
Hazards of transthoracic needle biopsy of the lung. Lillington GA. **Ann Thorac Surg** 1989 Aug;48(2):163–4
Chest wall implantation of lung cancer after thin-needle aspiration biopsy. Seyfer AE, et al. **Ann Thorac Surg** 1989 Aug;48(2):284–6
Metastatic pattern in recurrent breast cancer. Special reference to intrathoracic recurrences. Kamby C, et al. **Cancer** 1988 Nov 15;62(10):2226–33
Factors affecting the response of recurrent squamous cell carcinoma of the cervix to cisplatin. Potter ME, et al. **Cancer** 1989 Apr 1;63(7):1283–6
Case 3. Follicular thyroid carcinoma with metastases to bone. **Radiographics** 1989 Jan;9(1):92–4
Case report 535: Hepatoma metastatic to the sternum. Reed JD Jr, et al. **Skeletal Radiol** 1989;18(2):161–3
[A case of chest wall tumor developed 13 years after surgery of small cell lung cancer] Inoue K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2484–8 (Eng. Abstr.) (Jpn)

SURGERY

Chest wall stabilization using plate fixation. Sherman JE, et al. **Ann Thorac Surg** 1988 Oct;46(4):467–9
Chest wall resection and reconstruction for malignant conditions in childhood. Grosfeld JL, et al. **J Pediatr Surg** 1988 Jul;23(7):667–73
Intrathoracic tumors arising from the vagus nerve. Review of resected tumors in Japan. Shirakusa T, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):173–5 (14 ref.)
Resection and debridement of chest-wall tumors and general aspects of reconstruction. el-Tamer M, et al. **Surg Clin North Am** 1989 Oct;69(5):947–64 (70 ref.)
Reconstruction of a functional hemidiaphragm with use of omentum and latissimus dorsi flaps. Edington HD, et al. **Surgery** 1989 Mar;105(3):442–5
Chest wall resection—alloplastic replacement. Lampl LH, et al. **Thorac Cardiovasc Surg** 1988 Jun;36(3):157–8
[Will in vivo investigation of human cell kinetics determine the surgical indication of malignant thoracic tumors?] Duprez A, et al. **Chirurgie** 1988;114(9):689–702 (Eng. Abstr.) (Fre)
[Aggressive fibromatosis—a surgical problem disease] Sommer HJ, et al. **Chirurg** 1989 Jun;60(6):426–30 (Eng. Abstr.) (Ger)
[Reconstruction of the thoracic wall in neoplasms of the manubrium of sternum] Baisi A, et al. **Minerva Chir** 1989 Apr 30;44(8):1289–92 (Eng. Abstr.) (Ita)
[A case of re-expansion pulmonary edema during thoracotomy due to gigantic tumor of the chest wall] Sakuma T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2504–7 (Eng. Abstr.) (Jpn)

THERAPY

Chest wall tumors in infancy and childhood. Shamberger RC, et al. **Cancer** 1989 Feb 15;63(4):774–85
Treatment of sarcomas of the chest wall using intensive combined modality therapy. Young MM, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):49–57
Numerical analysis of electromagnetic hyperthermia of the human thorax. Zheng L, et al. **Med Biol Eng Comput** 1988 Jan;26(1):50–6
Recurrent tumors of the head and neck, pelvis, and chest wall: treatment with hyperthermia and brachytherapy. Rafla S, et al. **Radiology** 1989 Sep;172(3):845–50
Current management of chest-wall tumors. Ryan MB, et al. **Surg Clin North Am** 1989 Oct;69(5):1061–80 (66 ref.)
[A case of vascular tumor of the thoracic wall surgically treated. Role of embolization in this type of tumor] Gamondes JP, et al. **Ann Chir** 1989;43(2):174–7 (Eng. Abstr.) (Fre)
[Plasmacytoma in childhood] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):886–7 (Jpn)

VETERINARY

Thoracic neoplasia in equids: 35 cases (1967–1987). Sweeney CR, et al. **J Am Vet Med Assoc** 1989 Aug 1;195(3):374–7
Pathology of spontaneous malignant fibrous histiocytoma in a Japanese white rabbit. Yamamoto H, et al. **Jikken Dobutsu** 1989 Apr;38(2):165–9
[The distribution, epizootiology and x-ray diagnosis of intrathoracic tumors in the dog] Prange H, et al. **Arch Exp Veterinarmed** 1988 Sep;42(5):637–49 (Eng. Abstr.) (Ger)

THORACIC NERVES

Multiple schwannomas presenting as a mass of the lateral chest wall [letter] Murray RJ, et al. **AJR** 1988 Dec; 151(6):1250–1
Interpleural administration of bupivacaine after cholecystectomy: a comparison with intercostal nerve block. Blake DW, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):269–74
The control of post-thoracotomy pain. A comparative evaluation of thoracic epidural fentanyl infusions and cryo-analgesia [see comments] Gough JD, et al. **Anaesthesia** 1988 Sep;43(9):780–3. **Comment in:** Anaesthesia 1989 May;44(5):445–6
Rectus sheath block for diagnostic laparoscopy. Smith BE, et al. **Anaesthesia** 1988 Nov;43(11):947–8
Pharmacokinetics of bupivacaine following intraoperative intercostal nerve block in neonates and in infants aged less than 6 months. Bricker SR, et al. **Anesthesiology** 1989 Jun; 70(6):942–7
Cervical sympathetic blockade after thoracic intercostal injection of local anesthetic. Brown RH, et al. **Anesthesiology** 1989 Jun;70(6):1011–2
Effect of intercostal nerve blockade on respiratory mechanics and CO2 chemosensitivity at rest and exercise. Hecker BR, et al. **Anesthesiology** 1989 Jan;70(1):13–8
Bleeding after intercostal nerve block in a patient anticoagulated with heparin. Nielsen CH. **Anesthesiology** 1989 Jul;71(1):162–4
Continuous intercostal nerve block for pain relief after thoracotomy. Sabanathan S, et al. **Ann Thorac Surg** 1988 Oct;46(4):425–6
Postoperative intercostal block [letter] Murphy DF. **Br J Anaesth** 1988 Sep;61(3):370–1
Two epithelioid malignant schwannomas in a patient with neurofibromatosis. Cytology, histology and DNA-flow-cytometry. Molenaar WM, et al. **Pathol Res Pract** 1989 May;184(5):529–34
Intercostal blockade and pulmonary function after cholecystectomy. Ross WB, et al. **Surgery** 1989 Feb;105(2 Pt 1):166–9

ANATOMY & HISTOLOGY

Neuromuscular organization of the pectoralis (pars thoracicus) of the pigeon (Columba livia): implications for motor control. Kaplan SR, et al. **Anat Rec** 1989 Jul; 224(3):426–30
Anatomical variation in the position of the proximal intercostal nerve. Hardy PA. **Br J Anaesth** 1988 Sep; 61(3):338–9
External respiratory nerve of Bell (long thoracic nerve). Furukawa T. **Neurology** 1989 Jan;39(1):147–8
[Anatomical study of the ramification and intramuscular distribution of the intercostal nerves in man] Sakamoto H. **Kaibogaku Zasshi** 1989 Apr;64(2):126–63 (Eng. Abstr.) (Jpn)
[Terminal ramifications of the ventral branch of Th1 in postnatal development of man] Urbanowicz Z. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:41–8 (Eng. Abstr.) (Pol)

CYTOLOGY

Morphometrical study of the cat thoracic dorsal root ganglion cells in relation to muscular and cutaneous afferent innervation. Larnicol N, et al. **Neurosci Res** 1988 Dec; 6(2):149–61

IMMUNOLOGY

The development of GABA-like immunoreactivity in the thoracic ganglia of the locust Schistocerca gregaria. O'Dell DA, et al. **Cell Tissue Res** 1988;254(3):633–46

PHYSIOLOGY

Mechanical arrangement of the parasternal intercostals in the different interspaces. De Troyer A, et al. **J Appl Physiol** 1989 Mar;66(3):1421–9
Internal intercostal nerve discharges in the cat: influence of chemical stimuli. Pregosi RF, et al. **J Appl Physiol** 1989 Feb;66(2):687–94
Patterns of neural and muscular electrical activity in costal and crural portions of the diaphragm. Oyer LM, et al. **J Appl Physiol** 1989 May;66(5):2092–100
Electronmicroscopic and electrophysiological studies of the teat branch of the XIII thoracic nerve: relationship with lactation in the rat. Voloschin LM, et al. **J Endocrinol** 1988 Sep;118(3):471–83
Intercostal nerve conduction study in man. Pradhan S, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):763–6
Synaptic effects of intercostal tendon organs on membrane potentials of medullary respiratory neurons. Bolser DC, et al. **J Neurophysiol** 1989 May;61(5):918–26
Effects of intercostal nerve resection on the longitudinal rib growth in the growing rabbit. Agadir M, et al. **J Orthop Res** 1989;7(5):690–5

SURGERY

Neurotization of the remaining latissimus dorsi muscle following muscle flap transplant. Serra JM, et al. **J Reconstr Microsurg** 1988 Oct;4(5):415–20
Post-axillary dissection pain in breast cancer due to a lesion of the intercostobrachial nerve. Vecht CJ, et al. **Pain** 1989 Aug;38(2):171–6
The post-mastectomy pain syndrome and the effect of topical capsaicin. Watson CP, et al. **Pain** 1989 Aug;38(2):177–86
[Experiences with the "epigastric pain syndrome"] Meier W. **Helv Chir Acta** 1989 Jan;55(5):731–6 (Eng. Abstr.) (Ger)
[Importance of pectoral nerves in conservative surgery in cancer of the breast] De Toma G, et al. **Minerva Chir** 1988 Sep 15;43(17):1349–53 (Eng. Abstr.) (Ita)
[Anastomosis of intercostal nerves with the roots of the cauda equina in the late stage of complicated trauma of the lower thoracic and lumbar spine] Iumashev GS, et al. **Ortop Travmatol Protez** 1988 Nov;(11):39–43 (Eng. Abstr.) (Rus)

THORACIC OUTLET SYNDROME

Thoracic outlet syndrome [letter] Hunter OK Jr. **Arch Phys Med Rehabil** 1989 Feb;70(2):165
The thoracic outlet syndrome: controversies, overdiagnosis, overtreatment, and recommendations for management. Cuetter AC, et al. **Muscle Nerve** 1989 May;12(5):410–9 (45 ref.)
[Complete cervical rib. Possible neurovascular implications of the upper limb] Morbidelli A, et al. **Minerva Chir** 1989 Apr 15;44(7):1167–72 (Eng. Abstr.) (Ita)
[Thoracic outlet syndrome. Positional angiography and surgical management] Shimizu H, et al. **Neurol Med Chir (Tokyo)** 1988 Sep;28(9):875–9 (Eng. Abstr.) (Jpn)
[The upper thoracic outlet syndrome] Djordjević M. **Srp Arh Celok Lek** 1988 Nov–Dec;116(11–12):1065–81 (17 ref.) (Eng. Abstr.) (Sec)

COMPLICATIONS

Venous complications of the thoracic outlet syndrome. Jamieson CW. **Eur J Vasc Surg** 1987 Feb;1(1):1–3 (19 ref.)

[Venous involvement in the thoracic outlet syndrome (apropos of 30 cases)] Hassen-Khodja R, et al. **Phlebologie** 1988 Nov-Dec;41(4):818-24 (Eng. Abstr.) (Fre)

[Angiographic diagnosis and rheologic properties of blood in vertebrobasilar insufficiency caused by scalenus anticus syndrome] Apsatarov EA, et al. **Kardiologiia** 1988 Sep; 28(9):74-7 (Eng. Abstr.) (Rus)

DIAGNOSIS

Thoracic outlet syndromes—application of microcirculation techniques and clinical review. Winsor T, et al. **Angiology** 1989 Sep;40(9):773-82

TOS = TMJ: true or false? Nelson DA. **Del Med J** 1989 Jul;61(7):339-40 (14 ref.)

Diagnosis of thoracic outlet syndrome [letter] White BE. **Del Med J** 1988 Oct;60(10):606-7

Neuropathy due to entrapment of the long thoracic nerve. A case report. Distefano S. **Ital J Orthop Traumatol** 1989 Jun;15(2):259-62

Upper extremity arterial injury in athletes. McCarthy WJ, et al. **J Vasc Surg** 1989 Feb;9(2):317-27

Left arm pain isn't always angina [published erratum appears in N C Med J 1988 Dec;49(12):636] Campbell PT, et al. **N C Med J** 1988 Nov;49(11):564-7

Thoracic outlet syndrome [letter] Sullivan JM, et al. **Neurosurgery** 1988 Aug;23(2):271-2

[Thoracic outlet syndromes and their treatment] Nachbur BH. **Ther Umsch** 1988 Nov;45(11):763-73 (35 ref.) (Eng. Abstr.) (Ger)

[Usefulness of Doppler echography in the diagnosis of upper thoracic outlet syndrome] Guzzetti A, et al. **Chir Ital** 1988 Apr;40(2):152-5 (Eng. Abstr.) (Ita)

ETIOLOGY

The rudimentary first rib. A cause of thoracic outlet syndrome with arterial compromise. Baumgartner F, et al. **Arch Surg** 1989 Sep;124(9):1090-2

Bilateral thoracic outlet syndrome following non-union of clavicles, associated with radio-osteodystrophy. Hughes AW, et al. **Injury** 1988 Jan;19(1):40-1

Nonunion of the clavicle and thoracic outlet syndrome. Connolly JF, et al. **J Trauma** 1989 Aug;29(8):1127-32; discussion 1132-3

[Costoclavicular syndrome—a rare complication of clavicular fracture] Dannöhl C, et al. **Aktuel Traumatol** 1988 Aug;18(4):149-51 (Eng. Abstr.) (Ger)

[A rare cause of extravasal compression of the axillary artery] Shor NA. **Khirurgiia (Mosk)** 1989 Feb;(2):130-1 (Rus)

[Cervical rib syndrome] Greida BP. **Vestn Khir** 1988 Jun; 140(6):45-6 (Rus)

PATHOLOGY

[Role of anterior scalene muscle hypertrophy in thoracic outlet syndrome] Bortolani E, et al. **Minerva Chir** 1989 Apr 30;44(8):1305-9 (Eng. Abstr.) (Ita)

PHYSIOPATHOLOGY

A subclavian bruit in the thoracic outlet syndrome [letter] Goadsby PJ. **Ann Intern Med** 1989 Feb 15;110(4):323

RADIOGRAPHY

Cineradiography of the hypomobile first rib. Lindgren KA, et al. **Arch Phys Med Rehabil** 1989 May;70(5):408-9

Vascular compression in thoracic outlet syndrome [letter] Douglas HM, et al. **J R Soc Med** 1989 Jan;82(1):61

Thoracic outlet syndrome: evaluation with CT. Bilbey JH, et al. **Radiology** 1989 May;171(2):381-4

[The thoracic outlet compression syndrome—angiographic diagnosis of vascular complications] Klanfar Z, et al. **Lijec Vjesn** 1988 Nov;110(11):361-8 (Eng. Abstr.) (Scr)

SURGERY

Transaxillary or supraclavicular decompression for the thoracic outlet syndrome. A comparison of the risks and benefits. Cikrit DF, et al. **Am Surg** 1989 Jun;55(6):347-52

Supraclavicular approach for the simultaneous treatment of dysphagia lusoria and thoracic outlet syndrome. Valentine RJ, et al. **Ann Vasc Surg** 1988 Oct;2(4):378-80

Thoracic outlet syndrome. Gu YD, et al. **Chin Med J [Engl]** 1988 Sep;101(9):689-94

Reoperation for thoracic outlet syndrome. Sessions RT. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):434-44

Resection of the first rib, following deep arm vein thrombolysis in patients with thoracic outlet syndrome. Strange-Vognsen HH, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):430-3

Surgical decompression for thoracic outlet syndrome. Loh CS, et al. **J R Coll Surg Edinb** 1989 Apr;34(2):66-8

Arterial complications of the thoracic outlet syndrome: fifty-five operative cases. Cormier JM, et al. **J Vasc Surg** 1989 Jun;9(6):778-87

Brachial plexopathy complicating thoracic outlet syndrome surgery [letter] **Muscle Nerve** 1988 Oct;11(10):1090-2

Critical reappraisal of diagnostic and therapeutic modalities for thoracic outlet syndromes. Lord JW Jr. **Surg Gynecol Obstet** 1989 Apr;168(4):337-40

[Cervico-costo-clavicular syndrome] Llaneza Coto JM, et al. **Angiologia** 1989 May-Jun;41(3):96-100 (Eng. Abstr.) (Spa)

THERAPY

An osteopathic approach to conservative management of thoracic outlet syndromes. Dobrusin R. **J Am Osteopath Assoc** 1989 Aug;89(8):1046-50, 1053-7 (20 ref.)

Thoracic outlet syndrome: diagnosis and conservative management. Liebenson CS. **J Manipulative Physiol Ther** 1988 Dec;11(6):493-9 (56 ref.)

[Choice of the method of treatment of the compressive thoracic outlet syndrome] Oleinik LI, et al. **Klin Khir** 1988; (7):31-4 (Eng. Abstr.) (Rus)

THORACIC RADIOGRAPHY

Routine pre-operative chest radiographs in non-cardiopulmonary surgery. Ogunseyinde AO. **Afr J Med Med Sci** 1988 Sep;17(3):157-61

Thal patch gastroesophagoplasty: chest radiographic findings simulating leak or abscess. Goodman P, et al. **AJR** 1988 Dec;151(6):1121-2

Efficacy of chest radiography in pediatric intensive care. Sivit CJ, et al. **AJR** 1989 Mar;152(3):575-7

Pneumatosis intestinalis in bone-marrow transplantation patients: diagnosis on routine chest radiographs. Bates FT, et al. **AJR Am J Roentgenol** 1989 May;152(5):991-4

Is routine chest radiography required with biliary lithotripsy? Malone DE, et al. **AJR Am J Roentgenol** 1989 May; 152(5):987-9

Asbestos-related chest X-ray changes among Greek merchant marine seamen. Velonakis EG, et al. **Am J Ind Med** 1989;15(5):511-6

Evaluation of intrathoracic extent of lung cancer by plain chest radiography, computed tomography, and magnetic resonance imaging. Batra P, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1456-62

Effect of tobacco smoking on the presence of asbestosis at postmortem and on the reading of irregular opacities on roentgenograms in asbestos-exposed workers. Hnizdo E, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1207-12

Radiographic abnormalities in relation to total dust exposure at a bauxite refinery and alumina-based chemical products plant. Townsend MC, et al. **Am Rev Respir Dis** 1988 Jul; 138(1):90-5

The use of follow-up chest roentgenograms among hospitalized patients. Berlowitz DR, et al. **Arch Intern Med** 1989 Apr;149(4):821-5

Measurement of cardiothoracic ratio and cardiac volume. A simple screening method for detection of acute rejection after orthotopic heart transplantation. Grabenwoeger F, et al. **Bibl Cardiol** 1988;(43):116-8

Preliminary investigations in dual-potential digital fluorography of the thorax. Cowen AR, et al. **Br J Radiol** 1988 Oct;61(730):969-72

Image processing of digital chest ionograms. Yarwood JR, et al. **Br J Radiol** 1988 Oct;61(730):943-50

Radiologic findings in heart-lung transplantation: a preliminary experience. Holland SA, et al. **Can Assoc Radiol J** 1989 Apr;40(2):94-7

Immediate chest roentgenography following fiberoptic bronchoscopy. Milam MG, et al. **Chest** 1989 Sep; 96(3):477-9

Comparison of CT and chest radiographs in the evaluation of post-therapy lymphoma patients. Khan A, et al. **Eur J Radiol** 1989 May;9(2):96-100

Influence of organs in the ICRP's remainder on effective dose equivalent computed for diagnostic radiation exposures. Gibbs SJ. **Health Phys** 1989 Apr;56(4):515-20

The role of yearly chest radiography in the early detection of lung cancer following oral cancer. Stalpers LJ, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):99-103

A comparison of dual-energy digital radiography and screen-film imaging in the detection of subtle interstitial pulmonary disease. Barnes GT, et al. **Invest Radiol** 1989 Aug;24(8):585-91

Routine preoperative chest X-rays. McCleane GJ. **Ir J Med Sci** 1989 Mar;158(3):67-8

Chest x-ray before vascular surgery [letter] Humphrey LL, et al. **J Gen Intern Med** 1989 May-Jun;4(3):268

Breast cancer in women with scoliosis exposed to multiple diagnostic x rays. Hoffman DA, et al. **J Natl Cancer Inst** 1989 Sep 6;81(17):1307-12

The importance of the "sloping rib" in interventional radiology procedures of the chest. Collins JD, et al. **J Natl Med Assoc** 1988 Dec;80(12):1293-6

The role of chest radiography in patients presenting with anterior chest pain to the Accident & Emergency Department. Russell NJ, et al. **J R Soc Med** 1988 Nov; 81(11):626-8

The post-cardiac surgery chest radiograph: a clinically integrated approach. Henry DA, et al. **J Thorac Imaging** 1989 Jul;4(3):20-41 (51 ref.)

The radiology of right heart dysfunction: chest roentgenogram and computed tomography. Stanford W, et al. **J Thorac Imaging** 1989 Jul;4(3):7-19 (15 ref.)

Limited value of chest radiography in uncomplicated hypertension [letter] Dimmitt SB, et al. **Lancet** 1989 Jul 8;2(8654):104

Atypical intrathoracic manifestations of Burkitt's lymphoma. Nzeh DA. **Pediatr Radiol** 1988;18(5):411-2

A common artifact revisited. **Radiol Technol** 1989 Mar-Apr; 60(4):325-6

Dynamic probabilistic model for determination of optimal timing of surveillance chest radiography in pediatric Hodgkin disease. Chang PJ, et al. **Radiology** 1989 Oct; 173(1):71-5

Chest pain and dyspnea related to "crack" cocaine smoking: value of chest radiography. Eurman DW, et al. **Radiology** 1989 Aug;172(2):459-62

Digital imaging of the chest. Fraser RG, et al. **Radiology** 1989 May;171(2):297-307 (77 ref.)

Complications of automatic implantable cardioverter defibrillators: radiographic, CT, and echocardiographic evaluation. Goodman LR, et al. **Radiology** 1989 Feb; 170(2):447-52

The left paratracheal reflection. Proto AV, et al. **Radiology** 1989 Jun;171(3):625-8

An analysis of the effect of the Zielke operation on S-shaped curves in idiopathic scoliosis. The use of EVAs showing that correction of the thoracic curve occurs in its lower part: significance of the thoracolumbar spinal segment. Wojcik AS, et al. **Spine** 1989 Jun;14(6):625-31

[Chest roentgenographic manifestations of Hodgkin's disease] Hur T, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug; 42(2):121-8 (Eng. Abstr.) (Chi)

[The value of routine thoracic radiography at the time of admission at a psychogeriatric department] Duvoisin B, et al. **Rev Med Suisse Romande** 1988 Nov;108(11):957-9 (Fre)

[The value of preoperative studies. Prospective study of preoperative thoracic radiographs and ECGs of 201 patients] Michel C. **Rev Med Suisse Romande** 1989 Mar; 109(3):225-33 (Fre)

[Assessment of fluid content of the lung by thoracic radiography. Comparison of extravascular lung water measurement and results of radiological estimation methods] Heinrichs W, et al. **Dtsch Med Wochenschr** 1988 Oct 14;113(41):1583-7 (Eng. Abstr.) (Ger)

[Digital radiography in thoracic diagnosis] Oestmann JW, et al. **ROFO** 1989 Apr;150(4):465-71 (56 ref.) (Eng. Abstr.) (Ger)

[Inter-observer variations in thoracic radiogram readings in pneumoconiosis] Maranelli G, et al. **Med Lav** 1988 May-Jun;79(3):187-93 (Eng. Abstr.) (Ita)

[Radiological examination of the thorax in intensive therapy centers] Pirronti T, et al. **Radiol Med (Torino)** 1989 Jul-Aug;78(1-2):30-7 (Eng. Abstr.) (Ita)

[Re-evaluation of determinants of the cardiothoracic ratio using two-dimensional echocardiography] Mikami T, et al. **J Cardiol** 1988 Jun;18(2):395-402 (Eng. Abstr.) (Jpn)

[Tracheobronchial tuberculosis observed from the chest X-ray findings and its pathogenesis] Hirata S. **Kekkaku** 1989 Apr;64(4):319-27 (Eng. Abstr.) (Jpn)

[A case report of thoracic foreign body resembling fungus ball on chest X-P] Sasai T, et al. **Kyobu Geka** 1989 Feb; 42(2):138-40 (Eng. Abstr.) (Jpn)

[The limitations of plain chest radiography and the role of computed tomography in diagnosis of traumatic mediastinal hematoma] Nakajima Y. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):961-71 (Eng. Abstr.) (Jpn)

[Comparative studies on physical characteristics and clinical efficacy of conventional and digitized chest radiographs] Yamasaki K. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25;49(3):327-34 (Eng. Abstr.) (Jpn)

[Clinical evaluation of cases with pleural plaque on chest X-ray] Kishimoto T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1263-6 (Eng. Abstr.) (Jpn)

[Development and usefulness of dynamic respiratory scanning by fast CT] Anno H, et al. **Rinsho Hoshasen** 1989 Jan;34(1):27-35 (Eng. Abstr.) (Jpn)

[Radiological findings on the chest roentgenogram after reconstructive surgery in head and neck cancer with the pectoralis major musculocutaneous flap] Itabashi K, et al. **Rinsho Hoshasen** 1988 Jun;33(6):657-62 (Eng. Abstr.) (Jpn)

[Distinguishing benign from malignant pulmonary nodules by gradient analysis of digitized chest radiographs] Kuriyama K, et al. **Rinsho Hoshasen** 1989 Jan;34(1):75-8 (Eng. Abstr.) (Jpn)

[Densitometric analysis of chest x-rays and their division into the classes "normal" and "pathology"] Antonov OS, et al. **Vestn Rentgenol Radiol** 1988 May-Jun;(3):55-60 (Eng. Abstr.) (Rus)

[The advantages, possibilities and limitations of computerized tomography of the lungs, pleura and thoracic wall] Asiku V, et al. **Med Pregl** 1988;41(9-10):399-405 (Eng. Abstr.) (Scr)

ADVERSE EFFECTS

Vascular changes in irradiated lungs: a morphometric study. Wilkinson MJ, et al. **J Pathol** 1989 Jul;158(3):229-32

EDUCATION

Training of general practitioners in interpreting chest radiographs. Paakkala T. **Med Educ** 1988 Sep;22(5):449-53

INSTRUMENTATION

Evaluation of a low-dose neonatal chest radiographic system. Burton EM, et al. **AJR** 1988 Nov;151(5):999-1002

Optical image processing with liquid-crystal display for image intensifier/television systems. Lam KL, et al. **Med Phys** 1988 Nov-Dec;15(6):838-45

An old problem seen again. Barker EJ. **Radiol Technol** 1989 May–Jun;60(5):427–8

[Digital luminescence radiography. A new method of study in thoracic diagnosis at the intensive care unit] Witte G, et al. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):60–4 (16 ref.) (Eng. Abstr.) **(Ger)**

[Image intensifying split radiography] Reuter M, et al. **Rontgenblatter** 1988 Dec;41(12):477–83 (Eng. Abstr.) **(Ger)**

METHODS

The diagnosis of phrenic nerve block on chest X-ray by a double-exposure technique. Hickey R, et al. **Anesthesiology** 1989 Apr;70(4):704–7

Digital imaging of the newborn chest. Cohen MD, et al. **Clin Radiol** 1989 Jul;40(4):365–8

The influence of the lordotic projection on the interpretation of the chest radiograph. Hollman AS, et al. **Clin Radiol** 1989 Jul;40(4):360–4

Scatter compensation in digital chest radiography using Fourier deconvolution. Floyd CE, et al. **Invest Radiol** 1989 Jan;24(1):30–3

Three-dimensional imaging of the thoracic cavity. Stern RL, et al. **Invest Radiol** 1989 Apr;24(4):282–8

Use of oblique chest roentgenograms in detecting pleural disease in asbestos-exposed workers. Sherman CB, et al. **J Occup Med** 1988 Sep;30(9):681–3

Comparison of dual and single exposure techniques in dual-energy chest radiography. Ho JT, et al. **Med Phys** 1989 Mar–Apr;16(2):202–8

Update on pediatric chest imaging. Eggleston DE, et al. **Pediatr Pulmonol** 1988;5(3):158–75 (12 ref.)

Comparison of scanning equalization and conventional chest radiography. Wandtke JC, et al. **Radiology** 1989 Sep; 172(3):641–5

[Pulmonary artery hypertension in chronic obstructive lung disease. The place of morphometric studies in thoracic radiography] Dinkel E, et al. **Radiologe** 1989 Jun; 29(6):272–8 (Eng. Abstr.) **(Ger)**

[Imaging properties of digital image-intensifier radiography compared to the conventional x-ray technic for chest pictures] Dölken W, et al. **ROFO** 1989 Jan;150(1):86–92 (Eng. Abstr.) **(Ger)**

[The chest picture in the intensive care station as visualized by digital luminescence radiography] Witte G, et al. **ROFO** 1988 Nov;149(5):453–7 (Eng. Abstr.) **(Ger)**

[Radiologic diagnosis of thoracic injuries] Freyschmidt J. **Rontgenblatter** 1989 Jul;42(7):311–6 (6 ref.) (Eng. Abstr.) **(Ger)**

[Bedside pictures and thorax-CT of intensive care patients] Jend HH, et al. **Rontgenblatter** 1989 Jul;42(7):296–301 (Eng. Abstr.) **(Ger)**

[Conventional radiography and digital radiography of the thorax: evaluation of anatomo-radiological parameters] Del Maschio A, et al. **Radiol Med (Torino)** 1989 Jun;77(6):621–5 (Eng. Abstr.) **(Ita)**

[Constructions of compensating screen of chest radiography and its clinical applications—evaluation of normal anatomical structures] Higashida Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):293–9 (Eng. Abstr.) **(Jpn)**

[Diagnostic capability of digital radiography of the chest using scanning laser stimulated luminescence] Onitsuka H. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Feb 25; 49(2):177–90 (Eng. Abstr.) **(Jpn)**

[Prototype digital unit dedicated to radiography of the thorax] Sabbagh EA, et al. **Rev Med Chil** 1988 Aug; 116(8):802–10 (Eng. Abstr.) **(Spa)**

STANDARDS

Chest X-rays in hypersensitivity pneumonitis: a metaanalysis of secular trend. Hodgson MJ, et al. **Am J Ind Med** 1989; 16(1):45–53

[Quality control in thoracic diagnosis] Feuerbach S. **Rontgenpraxis** 1988 Aug;41(8):276–8 **(Ger)**

[Diagnostic accuracy of thoracic radiography in infectious pathology] Monti C, et al. **Radiol Med (Torino)** 1988 Oct; 76(4):259–61 (Eng. Abstr.) **(Ita)**

[Quality control in radiologic diagnosis of thoracic diseases—criteria and management] Smajkiewicz L. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun;52(3):178–83 (Eng. Abstr.) **(Pol)**

TRENDS

[Radiologic examination of the chest today] Juliani G. **Radiol Med (Torino)** 1988 Nov;76(5):385–9 (28 ref.) **(Ita)**

UTILIZATION

Five thousand acute care/emergency department chest radiographs: comparison of requisitions with radiographic findings. Buenger RE. **J Emerg Med** 1988 May–Jun; 6(3):197–202

Routine chest radiographs in pediatric intensive care: a prospective study [published erratum appears in Pediatrics 1989 Jul;84(1):17] Hauser GJ, et al. **Pediatrics** 1989 Apr; 83(4):465–70

VETERINARY

Thoracic radiographic appearance during lung inflation in neonatal calves. Slocombe RF, et al. **Vet Res Commun** 1988; 12(2–3):259–72

THORACIC SURGERY

Respiratory, circulatory and metabolic effects of respirator treatment. A clinical study in postoperative thoracic surgical patients. Grenvik A. **Acta Anaesthesiol** 1966;(19 Suppl):1–122

Use of laser knife in thoracic surgery. Tóth T, et al. **Acta Chir Hung** 1989;30(1):63–9

Post-operative wound infection in thoracic patients: a preliminary report. Adebo OA, et al. **Afr J Med Med Sci** 1988 Sep;17(3):145–8

Poland's anomaly. Natural history and long-term results of chest wall reconstruction in 33 patients. Seyfer AE, et al. **Ann Surg** 1988 Dec;208(6):776–82

Thoracic incisions [letter] Heitmiller RF. **Ann Thorac Surg** 1988 Nov;46(5):601

The Society of Thoracic Surgeons ad hoc Committee on AIDS. Report to the membership. Stiles QR, et al. **Ann Thorac Surg** 1989 Jun;47(6):946–8

Postoperative paravertebral blocks for thoracic surgery [letter] Purcell-Jones G, et al. **Br J Anaesth** 1988 Sep; 61(3):369–70

Reconstruction of a large full thickness chest wall defect by a double-folded vertical rectus abdominis musculocutaneous flap. Kiyoizumi T, et al. **Br J Plast Surg** 1989 Jul;42(4):460–2

The role of lymphography in chylothorax following thoracic surgery. Ngan H, et al. **Br J Radiol** 1988 Nov; 61(731):1032–6

Reconstruction of chest wall defects with homologous dura mater grafts. van Geel AN, et al. **Br J Surg** 1989 Aug; 76(8):870

Critical evaluation of common clinical parameters of postoperative pneumonia after thoracic surgery with perioperative prophylaxis. Bardua R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):580–2

Perioperative prophylaxis and postoperative treatment of pneumonia with oxacillin and acylureidopenicillin in thoracic surgery. Koch A, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):583

The results of perioperative prophylaxis in thoracic surgery. Lenz J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):578

The continuing dilemma of general thoracic surgery. Where to now? Orringer MB, et al. **J Thorac Cardiovasc Surg** 1989 May;97(5):649–53

Pathophysiology and prevention of acute renal failure associated with thoracoabdominal or abdominal aortic surgery. Miller DC, et al. **J Vasc Surg** 1987 Mar;5(3):518–23 (27 ref.)

Cardiothoracic surgery. Pierce WS. **JAMA** 1989 May 19; 261(19):2827–9

Changes in serum zinc and copper concentrations after thoracic operation. Li GG, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(3):179–81

Chest-wall reconstruction. **Surg Clin North Am** 1989 Oct; 69(5):899–1122

Preoperative evaluation and general preparation for chest-wall operations. Azarow KS, et al. **Surg Clin North Am** 1989 Oct;69(5):899–910 (23 ref.)

Surgical treatment of childhood pleural empyema. Alp M, et al. **Thorac Cardiovasc Surg** 1988 Dec;36(6):361–4

[Selective high-frequency jet ventilation of the operative lung improves oxygenation during thoracic surgery] Chen CY, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):185–6 (Eng. Abstr.) **(Chi)**

[Combined transposition of the latissimus dorsi and serratus anterior muscles in cervical and thoracic reconstructive surgery. Results of 40 anatomical dissections and clinical applications in 21 cases] Guédon C, et al. **Ann Chir Plast Esthet** 1988;33(4):321–8 (Eng. Abstr.) **(Fre)**

[Pulse oximetry and thoracopulmonary surgery] Colson P, et al. **Ann Fr Anesth Reanim** 1988;7(4):349–51 (Eng. Abstr.) **(Fre)**

[Epidural analgesia after thoracic surgery: morphine versus buprenorphine] Petit J, et al. **Ann Fr Anesth Reanim** 1988; 7(6):464–70 (Eng. Abstr.) **(Fre)**

[Meeting of the Thoracic Surgery Section of the East German Society of Surgery. 21–22 April 1988, Halle. Abstracts] **Zentralbl Chir** 1989;114(5):326–38 **(Ger)**

[Evaluation of the respiratory function and prognostication of risk in thoracic-pulmonary surgery] Leonelli V, et al. **Minerva Anestesiol** 1988 Oct;54(10):431–7 (Eng. Abstr.) **(Ita)**

[Postoperative analgesia with peridural morphine. Comparative study in thoracic and abdominal surgery] Pelliccia E, et al. **Minerva Anestesiol** 1988 Dec;54(12):521–4 (Eng. Abstr.) **(Ita)**

[Reconstruction of the thoracic wall in neoplasms of the manubrium of sternum] Baisi A, et al. **Minerva Chir** 1989 Apr 30;44(8):1289–92 (Eng. Abstr.) **(Ita)**

[Clinical experience with a new method of separate lung ventilation in thoracic surgery] Prati U, et al. **Minerva Chir** 1988 Sep 15;43(17):1323–5 (Eng. Abstr.) **(Ita)**

[Physiopathology and treatment of multiple major organ failure developing after thoracic surgery] **Nippon Kyobu Geka Gakkai Zasshi** 1987 May;35(5):663–75 **(Jpn)**

[The use of computers for diagnosis and control of the treatment of acid-base imbalance during controlled lung ventilation in patients following thoracic surgery] Novikov GA, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):40–2 (Eng. Abstr.) **(Rus)**

[Single-layer closure of a subcostal incision using a monofilament absorbable suture material—comparison of polydioxanone (PDS) and polyglyconate (Maxon)] Vračko J, et al. **Acta Chir Iugosl** 1989;36(1):15–25 (Eng. Abstr.) **(Ser)**

ADVERSE EFFECTS

Prevention of arrhythmias by flecainide after noncardiac thoracic surgery. Borgeat A, et al. **Ann Thorac Surg** 1989 Aug;48(2):232–4

[Complication of thoracic surgery in the aged and their prevention] Niahimura Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2182–7 (Eng. Abstr.) **(Jpn)**

[The current status of patients with extrapleural pneumolysis and plombage] Dangubić V, et al. **Pneum Beleszt** 1988 Jan–Jun;40(1–2):49–52 (Eng. Abstr.) **(Ser)**

ECONOMICS

Hospital costs and resource characteristics for cardiothoracic surgical hospital deaths. Muñoz E, et al. **Ann Thorac Surg** 1989 May;47(5):735–40

EDUCATION

Choosing cardiothoracic surgical residents [editorial] Grillo HC, et al. **Ann Thorac Surg** 1989 Mar;47(3):333

HISTORY

The early years. Ellison RG. **Ann Thorac Surg** 1989 Jan; 47(1):4–5

Toward fifty. Ferguson TB. **Ann Thorac Surg** 1989 Jan; 47(1):3

Unterdruck and Uberdruck, 1904. Meyer JA. **Ann Thorac Surg** 1989 Jun;47(6):933–8

More change. Sloan H. **Ann Thorac Surg** 1989 Jan;47(1):6–7

[20th anniversary of the Thoracic Surgery Section of the East German Society of Surgery—retrospect and future responsibilities] Neef H. **Zentralbl Chir** 1989;114(5):319–25 **(Ger)**

[Surgeons who contributed to development of thoracic surgery] Hirose T. **Kyobu Geka** 1988 Jul;41(8):656–9 (Eng. Abstr.) **(Jpn)**

INSTRUMENTATION

Maintaining chest tube patency. Halejian BA, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):521

[A new type of sternal retractor for dissecting the 2 internal mammary arteries] Barra JA, et al. **Ann Chir** 1988; 42(8):535–9 (Eng. Abstr.) **(Fre)**

[Improvement of oxygenation in thoracic surgery with one-lung ventilation using a new intraoperative CPAP device] Hirlinger WK, et al. **Anaesthesist** 1989 Aug; 38(8):437–9 (Eng. Abstr.) **(Ger)**

METHODS

A two-institution study of transfusion practice in 78 consecutive adult elective open-heart procedures. Goodnough LT, et al. **Am J Clin Pathol** 1989 Apr; 91(4):468–72

Current techniques for chest wall reconstruction: expanded possibilities for treatment. McKenna RJ Jr, et al. **Ann Thorac Surg** 1988 Nov;46(5):508–12

Reconstruction of infant thoracic wounds. Stahl RS, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1000–11

Reconstruction of the radiation-damaged chest wall. Arnold PG, et al. **Surg Clin North Am** 1989 Oct;69(5):1081–9 (27 ref.)

Rectus abdominis muscle-musculocutaneous flap in chest-wall reconstruction. Coleman JJ 3d, et al. **Surg Clin North Am** 1989 Oct;69(5):1007–27 (30 ref.)

Use of the omentum in chest-wall reconstruction. Fix RJ, et al. **Surg Clin North Am** 1989 Oct;69(5):1029–46

Reconstruction of congenital chest-wall deformities. Garcia VF, et al. **Surg Clin North Am** 1989 Oct;69(5):1103–18 (36 ref.)

Use of prosthetic materials in chest-wall reconstruction. Assets and liabilities. McCormack PM. **Surg Clin North Am** 1989 Oct;69(5):965–76 (29 ref.)

Latissimus dorsi muscle-musculocutaneous flap in chest-wall reconstruction. Moelleken BR, et al. **Surg Clin North Am** 1989 Oct;69(5):977–90 (68 ref.)

Intrathoracic transfer of flaps for fistulas, exposed prosthetic devices, and reinforcement of suture lines. Pairolero PC, et al. **Surg Clin North Am** 1989 Oct;69(5):1047–59 (20 ref.)

Pectoralis major muscle-musculocutaneous flap for chest-wall reconstruction. Tobin GR. **Surg Clin North Am** 1989 Oct;69(5):991–1006 (30 ref.)

[Clinical studies on the reconstructed cases after the total layer resection of chest wall] Kobayashi S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2319–24 (Eng. Abstr.) **(Jpn)**

[Transthoracic approaches to the lesions of thoracic cord and thoracic vertebrae] Hanakita J, et al. **No Shinkei Geka** 1988 Jun;16(7):837–43 (Eng. Abstr.) **(Jpn)**

[Prevention of blood coagulation disorders during operations on the organs of the chest cavity] Morozov AF, et al. **Klin Khir** 1988;(10):30-2 (Eng. Abstr.) (Rus)

STANDARDS

[The past, present and future system of specialist licensing of the Japanese Thoracic Surgical Society] **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):987-91 (Jpn)

TRENDS

Looking ahead. Lindesmith GC. **Ann Thorac Surg** 1989 Jan; 47(1):8

A profile of thoracic surgery from the sidelines. Ebert PA. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):677-81

[Progress in thoracic surgery since 1980] Naef AP. **Helv Chir Acta** 1989 Apr;55(6):791-7 (Eng. Abstr.) (Fre)

[Pneumology and thoracopulmonary surgery] Ionescu C, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr-Jun; 92(2):403-5 (Rum)

THORACIC VERTEBRAE

Symptomatic spinal metastases. Perrin RG. **Am Fam Physician** 1989 May;39(5):165-72

Inadvertent paravertebral block [letter] Gilbert J, et al. **Anaesthesia** 1989 Jun;44(6):527-8

Anterior rib strut grafting for the treatment of malignant lesions in the thoracic spine. Shirakusa T, et al. **Arch Orthop Trauma Surg** 1989;108(5):268-72

Resin injection of thoracic paravertebral spaces. Conacher ID. **Br J Anaesth** 1988 Dec;61(6):657-61

Hemangioma, a rare cause of photopenic lesion on skeletal imaging. Makhija M, et al. **Clin Nucl Med** 1988 Sep; 13(9):661-2

Hemangioma of bone. Moreno AJ, et al. **Clin Nucl Med** 1988 Oct;13(10):768-9

Carcinoma oesophagus—an unusual presentation. Kapoor A, et al. **J Assoc Physicians India** 1989 Mar;37(3):235-7

Pott's disease in Kentucky: diagnosis and treatment. Roy TM, et al. **J Ky Med Assoc** 1988 Sep;86(9):499-502

Thoracic dorsal ramus entrapment. Case report. González-Darder JM. **J Neurosurg** 1989 Jan;70(1):124-5

Diagnosis and treatment of giant cell tumor in the thoracic spine. Yan SC, et al. **J Surg Oncol** 1989 Feb;40(2):128-31

Radiology/case of the month. Posterior mediastinal mass in a black patient with back pain. Bosch X, et al. **JAMA** 1989 Sep 8;262(10):1373-4

Intramedullary teratoma of the thoracic spinal cord associated with anomalies of the vertebrae and ribs—case report. Shimauchi M, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):1005-9

Aneurysmal bone cyst of the thoracic spine: treatment by excision and segmental stabilization with Luque rods. Cybulski GR, et al. **Neurosurgery** 1989 Feb;24(2):273-6

Paraparesis during myelography associated with a ruptured thoracic intervertebral disc. Lehman LB. **Neurosurgery** 1989 Jun;24(6):912-4

Case 10. Vertebral (thoracic) chordoma. **Radiographics** 1989 Jan;9(1):112-4

Avascular necrosis of the vertebral body: MR imaging. Naul LG, et al. **Radiology** 1989 Jul;172(1):219-22

Brucellar and tuberculous spondylitis: comparative imaging features. Sharif HS, et al. **Radiology** 1989 May; 171(2):419-25

A case report of bone metastases in Wilms' tumor: diagnostic aspects and a review of the literature. Lupi L, et al. **Rays** 1987 Sep-Dec;12(3):61-5 (16 ref.)

Thoracic disc herniation versus spinal metastases: optimizing diagnosis with magnetic resonance imaging. Goldberg AL, et al. **Skeletal Radiol** 1988;17(6):423-6

Vertebral hemangioma associated with spinal cord compression. Marymont JV, et al. **South Med J** 1988 Dec; 81(12):1586-7

Malignant schwannoma (neurofibrosarcoma) metastatic to spine. Surgical decompression and stabilization. Cybulski GR, et al. **Spine** 1989 May;14(5):549-51

TLSO treatment of idiopathic scoliosis. An analysis of the Wilmington jacket. Hanks GA, et al. **Spine** 1988 Jun; 13(6):626-9

Rotatory olisthesis in idiopathic scoliosis. Trammell TR, et al. **Spine** 1988 Dec;13(12):1378-82

Upper thoracic disk herniation secondary to vertebral metastases. Rosenblum B, et al. **Surg Neurol** 1989 Jun; 31(6):473-5

[Ossification of the ligamentum flavum] Dai LY. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):99-101 (24 ref.) (Chi)

[Bone metastases in a case of trimorphic Wilm's tumor] Lupi L, et al. **Ann Radiol (Paris)** 1988;31(3):189-92 (Eng. Abstr.) (Fre)

[Percutaneous injection of cement into metastatic vertebrae (letter)] Kaemmerlen P, et al. **Presse Med** 1989 May 13; 18(19):983-4 (Fre)

[Vertebral hydatid cyst. Apropos of 2 cases] Argenson C, et al. **Rev Chir Orthop** 1989;75(4):267-70 (Eng. Abstr.) (Fre)

[Fracture dislocation of the thoracic spine in ankylosing spondylitis. A case of spontaneous occurrence and an uncommon course] Papavasiliou V, et al. **Rev Chir Orthop** 1988;74(7):679-81 (Eng. Abstr.) (Fre)

[Vertebral compression disclosing bifocal staphylococcal spondylodiscitis] Juvin R, et al. **Rev Rhum Mal Osteoartic** 1989 May;56(6):495-7 (Fre)

[The radicular and pseudoradicular syndrome of infectious spondylitis and its differential diagnostic significance] Weber M, et al. **Z Orthop** 1988 Sep-Oct;126(5):563-9 (Eng. Abstr.) (Ger)

[Transverse syndrome in aneurysmal bone cyst] Pittasch D, et al. **Zentralbl Neurochir** 1988;49(3):247-51 (Eng. Abstr.) (Ger)

[Presentation of a case of spinal osteoid osteoma causing dorsal scoliosis. Role of high resolution CT] Piazza P, et al. **Acta Biomed Ateneo Parmense** 1988;59(1-2):13-7 (Eng. Abstr.) (Ita)

[Distribution of motor nuclei of the thoracic dorsal paravertebral muscles] Sugiuchi Y. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1910-9 (Eng. Abstr.) (Jpn)

[Thoracic and lumbo-sacral spinal lipoma in an infant] Honda E, et al. **No Shinkei Geka** 1989 Feb;17(2):171-5 (Eng. Abstr.) (Jpn)

[Clinico-radiographic evaluation of the state of the spine in stomach and duodenal diseases] Dmitriev AE, et al. **Klin Med (Mosk)** 1989 Jan;67(1):108-12 (Eng. Abstr.) (Rus)

[Prerequisites of manual therapy in spinal diseases] Khvisiuk NI, et al. **Ortop Travmatol Protez** 1988 Jun;(6):68-71 (Rus)

[Treatment of spinal cord compression in multiple myeloma] Golenkov AK, et al. **Sov Med** 1988;(10):107-9 (Rus)

[Use of a low-frequency magnetic field in the combined treatment of middle-aged and elderly patients with ischemic heart disease and osteochondrosis of the cervico-thoracic spine] Sorokina EI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar-Apr; (2):18-22 (Eng. Abstr.) (Rus)

[Bone metastasis as the first manifestation of follicular carcinoma of the thyroid gland. Apropos of 1 case] Faubel Serra M, et al. **An Otorrinolaringol Ibero Am** 1989; 16(4):447-54 (Eng. Abstr.) (Spa)

ABNORMALITIES

Spondylothoracic dysplasia. Report of four cases. Marti D, et al. **Acta Orthop Belg** 1988;54(4):413-7

Syndrome of imperforate oropharynx with costovertebral and auricular anomalies. Flannery DB. **Am J Med Genet** 1989 Feb;32(2):189-91

Radial ray defect with vascular and vertebral anomalies. Kutsal A, et al. **Arch Orthop Trauma Surg** 1989; 108(5):333-5

Hypoplasia of thoracic pedicle: CT diagnosis. A case report with emphasis on CT diagnosis. De Morsier B, et al. **Clin Rheumatol** 1988 Sep;7(3):389-93

Omovertebral bone, cervicothoracic deformity and patent ductus arteriosus. Lahiri TK, et al. **Indian J Chest Dis Allied Sci** 1988 Oct-Dec;30(4):277-80

Thoracic disc herniation and paraplegia in Stickler's syndrome. Harkey HL, et al. **Neurosurgery** 1989 Jun; 24(6):909-12

[Surgical treatment of spinal kyphosis following congenital hemivertebra] Rui KQ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):92-6 (Eng. Abstr.) (Chi)

[Straight thoracic spine syndrome] Panaszek B, et al. **Pol Tyg Lek** 1988 Nov 14;43(46):1476-8 (Eng. Abstr.) (Pol)

[Characteristics of spinal stress in modeling scoliotic deformity and the methods of its correction] Gladkov AV, et al. **Ortop Travmatol Protez** 1989 Jan;(1):43-7 (Eng. Abstr.) (Rus)

ANALYSIS

Correlation of mechanical properties of vertebral trabecular bone with equivalent mineral density as measured by computed tomography. Lang SM, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1531-8

ANATOMY & HISTOLOGY

Coil selection for magnetic resonance imaging of the cervical and thoracic spine using a vertical magnetic field. Larsson EM, et al. **Acta Radiol** 1989 Mar-Apr;30(2):141-6

Overriding vertebral spinous processes in the extinct horse, Equus occidentalis [published erratum appears in Am J Vet Res 1989 Jun;50(6):989] Klide AM. **Am J Vet Res** 1989 Apr;50(4):592-3

Vertebral morphometry: normative data. Gallagher JC, et al. **Bone Miner** 1988 Jun;4(2):189-96

Peak trabecular vertebral density: a comparison of adolescent and adult females. Gilsanz V, et al. **Calcif Tissue Int** 1988 Oct;43(4):260-2

Normal vertebral dimensions and normal variation in serial measurements of vertebrae. Davies KM, et al. **J Bone Miner Res** 1989 Jun;4(3):341-9

Anatomic analysis of pedicle cortical and cancellous diameter as related to screw size. Misenhimer GR, et al. **Spine** 1989 Apr;14(4):367-72

Vertebral body and posterior element morphology: the normal spine in middle life. Scoles PV, et al. **Spine** 1988 Oct;13(10):1082-6

Morphometric analysis of the thoracolumbar and lumbar pedicles, anatomo-radiologic study. Marchesi D, et al. **Surg Radiol Anat** 1988;10(4):317-22

[Laminectomy in the dog for experimental purposes—a technical comment] Santa M, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(6):340-3 (Eng. Abstr.) (Ger)

[Anatomo-functional features of the blood supply to the thoracic part of the canine spinal column] Larichev VB, et al. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):55-9 (Eng. Abstr.) (Rus)

BLOOD SUPPLY

Myelopathy due to epidural varicose veins of the cervicothoracic junction. Case report. Dickman CA, et al. **J Neurosurg** 1988 Dec;69(6):940-1

Magnetic resonance imaging in cases of spinal dural arteriovenous malformation. Isu T, et al. **Neurosurgery** 1989 Jun;24(6):919-23

GROWTH & DEVELOPMENT

The relationship between age, size and shape in the upper thoracic vertebrae of the mouse. Johnson DR, et al. **J Anat** 1988 Dec;161:73-82

INJURIES

Recurrence of deformity after removal of Harrington's fixation of spine fracture. Seventy-six cases followed for 2 years. Myllynen P, et al. **Acta Orthop Scand** 1988 Oct; 59(5):497-502

Superior mediastinal widening from spine fractures mimicking aortic rupture on chest radiographs [letter] Heiberg E. **AJR Am J Roentgenol** 1989 Jun;152(6):1340

Epidemiology of vertebral fractures in women. Melton LJ 3d, et al. **Am J Epidemiol** 1989 May;129(5):1000-11

Radiological diagnosis of cervical trauma at the level C7/T1. Spielmann RP, et al. **Arch Orthop Trauma Surg** 1989; 108(2):122-4

A newly developed spine deformity index (SDI) to quantitate vertebral crush fractures in patients with osteoporosis. Minne HW, et al. **Bone Miner** 1988 Mar;3(4):335-49

Reduced occurrence of vertebral crush fractures in senile osteoporosis treated with 1 alpha (OH)-vitamin D3. Orimo H, et al. **Bone Miner** 1987 Oct;3(1):47-52

Thoracic back pain in rowers and butterfly swimmers—costo vertebral subluxation [letter] Thomas PL. **Br J Sports Med** 1988 Jun;22(2):81

Surgical treatment of post-traumatic kyphosis: a report of 16 cases. Jodoin A, et al. **Can J Surg** 1989 Jan;32(1):36-42

Anterolateral compression fracture of the thoracolumbar spine. A seat belt injury. Miniaci A, et al. **Clin Orthop** 1989 Mar;(240):153-6

Operative fixation of fractures of the thoracic and lumbar vertebrae by Williams plates with reference to late kyphosis. Aho AJ, et al. **Injury** 1988 May;19(3):153-8

Unstable fractures of the thoracic and lumbar spine: the audit of an 8-year series with early reduction using Harrington instrumentation. Böstman OM, et al. **Injury** 1987 May; 18(3):190-5

Chylothorax following fracture of the thoracolumbar spine. Gartside R, et al. **Injury** 1988 Sep;19(5):363-4 (21 ref.)

Computerized tomography of injury to the thoracolumbar spine. Wilson BP, et al. **Injury** 1987 May;18(3):185-9

Spring alloplasty in the treatment of fractures of the thoracic and lumbar spines. A correlation of the results of treatment with the mechanism of injury. Kiwerski J. **Int Orthop** 1989; 13(1):33-7

Dural laceration occurring with burst fractures and associated laminar fractures. Cammisa FP Jr, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1044-52

Vertebral fractures without neurological deficit. A long-term follow-up study. Hazel WA Jr, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1319-21

Thoracic vertebral fracture as a complication of cardiopulmonary resuscitation. Goldberg RM, et al. **J Emerg Med** 1988 May-Jun;6(3):177-8

Vertebral body impactor for posterior lateral decompression of thoracic and lumbar fractures. Technical note. Oro J, et al. **J Neurosurg** 1989 Feb;70(2):285-6

Therapeutic concept and results of operative treatment in acute trauma of the thoracic and lumbar spine: the Hannover experience. Blauth M, et al. **J Orthop Trauma** 1987;1(3):240-52

Undetected posttraumatic instability of "stable" thoracolumbar fractures. Keene JS, et al. **J Orthop Trauma** 1988;2(3):202-11

Traction bow for acute reduction of fracture and/or dislocation of the thoracic or thoracolumbar spine. Wang GJ, et al. **J Orthop Trauma** 1988;2(2):124-9

Long-term follow-up of nonoperatively treated thoracolumbar spine fractures. Weinstein JN, et al. **J Orthop Trauma** 1987;1(2):152-9

Traumatic spinal fracture in ankylosing spondylitis (a case report). Sharma RR, et al. **J Postgrad Med** 1988 Jul; 34(3):193-5 (8 ref.)

Thoracic spine injuries in victims of motorcycle accidents. Kupferschmid JP, et al. **J Trauma** 1989 May;29(5):593-6

Renal infarction in adulthood due to a childhood trauma to the vertebral column. Schenck I, et al. **Klin Wochenschr** 1989 Jul 17;67(14):734-6

Transthoracic repair of a traumatic subarachnoid-pleural fistula. Dosios T, et al. **Neurochirurgia (Stuttg)** 1989 May; 32(3):82-3

Multiple fractures of the cervical and upper thoracic spine without neurological deficit: case report. Cybulski GR, et al. **Neurosurgery** 1989 May;24(5):768–71
Thoracic spine fractures. Hanley EN Jr, et al. **Orthopedics** 1989 May;12(5):689–96 (21 ref.)
Spinal vacuum phenomena: radiological study of a case, etiology and pathologic mechanisms of phenomena. Lupi L, et al. **Rays** 1988 May–Aug;13(2):15–8
Burst fractures of the thoracolumbar spine. Albuquerque RG, et al. **Singapore Med J** 1988 Dec;29(6):624–30
Spontaneous unstable burst fracture of the thoracolumbar spine in osteoporosis. A report of two cases. Arciero RA, et al. **Spine** 1989 Jan;14(1):114–7
Atypical multivertebral fracture due to hyperextension in an adolescent girl. A case report. Ferrandez L, et al. **Spine** 1989 Jun;14(6):645–6
Decompression and circumferential stabilization of unstable spinal fractures. Gertzbein SD, et al. **Spine** 1988 Aug; 13(8):892–5
Fractures of the spine in ankylosing spondylitis. Diagnosis, treatment, and complications. Graham B, et al. **Spine** 1989 Aug;14(8):803–7
Relationship between traumatic spinal canal stenosis and neurologic deficits in thoracolumbar burst fractures. Hashimoto T, et al. **Spine** 1988 Nov;13(11):1268–72
Migrating spinal pseudarthrosis in the spine affected by ankylosing spondylitis. Ho E, et al. **Spine** 1989 May; 14(5):546–8
Significance of acute posttraumatic bony encroachment of the neural canal. Keene JS, et al. **Spine** 1989 Aug; 14(8):799–802
Anterior stabilization, instrumentation, and decompression for post-traumatic kyphosis. Kostuik JP, et al. **Spine** 1989 Apr;14(4):379–86
Bilateral facet dislocations in the thoracolumbar spine. Levine AM, et al. **Spine** 1988 Jun;13(6):630–40
Multiple spinal fractures after scoliosis fusion with Harrington rods. Thomas R, et al. **Spine** 1989 May; 14(5):539–41
Intraoperative ultrasonography for reduction of thoracolumbar burst fractures. Vincent KA, et al. **Spine** 1989 Apr;14(4):387–90
Complications with the variable spinal plating system. Whitecloud TS 3d, et al. **Spine** 1989 Apr;14(4):472–6
[Care of patients with dorsal and lumbar vertebra compression fracture treated by padding pill] Tao JR. **Chung Hua Hu Li Tsa Chih** 1988 Sep;23(9):532 (Chi)
[Treatment of unstable fracture–dislocation of the thoracolumbar spine with Luque's U-shaped rod] Jiang HZ, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar; 26(3):139–40, 189 (Eng. Abstr.) (Chi)
[Vertebrectomy in treating fracture–dislocation of the spine with paraplegia] Xu ST. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):85–7, 125 (Eng. Abstr.) (Chi)
[Comprehensive classification and surgical treatment of injury of the thoracolumbar spine] Zhang GB, et al. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):71–4, 124 (Eng. Abstr.) (Chi)
[Concepts in the treatment of injuries of the thoracic and lumbar spine] Wendsche P, et al. **Rozhl Chir** 1989 Jan; 68(1):15–22 (Eng. Abstr.) (Cze)
[Orthopedic treatment of fractures of the dorsolumbar and lumbar spine with recoil of the posterior corpus wall (burst fracture) without or with minor neurologic lesions] Goutallier D, et al. **Rev Chir Orthop** 1988;74 Suppl 2:77–83 (Fre)
[Management and results of conservative treatment of patients with injuries of the thoracic and lumbar vertebrae] Bilow H, et al. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:7–17 (Eng. Abstr.) (Ger)
[Stability of the spine following osteosynthesis with internal fixation. Case report] Schwarz N, et al. **Aktuel Traumatol** 1989 Apr;19(2):61–2 (Eng. Abstr.) (Ger)
[Fixateur externe as a definitive treatment method of unstable thoracolumbar spinal fractures in emergency conditions—technical modification and clinical experiences] Knopf W, et al. **Beitr Orthop Traumatol** 1989 Mar;36(3):96–103 (Eng. Abstr.) (Ger)
[Acute management of spinal injuries. The thoracic and lumbar spine, surgical therapy] Dick W. **Langenbecks Arch Chir** 1988;Suppl 2:261–5 (10 ref.) (Eng. Abstr.) (Ger)
[Acute management of spinal injuries. The thoracic and lumbar spine, conservative and functional therapy] Dürr W. **Langenbecks Arch Chir** 1988;Suppl 2:255–60 (15 ref.) (Eng. Abstr.) (Ger)
[The "chapeau-claque" mechanism. Biomechanical aspects of roentgen diagnosis of vertebral fractures] Richter-Turtur M, et al. **Unfallchirurg** 1989 Jul;92(7):328–30 (Eng. Abstr.) (Ger)
[Flexion–distraction injuries of the thoracolumbar spine with complete pancreatic rupture. Description of a case] Rommens P, et al. **Unfallchirurg** 1989 Jan;92(1):26–8 (Eng. Abstr.) (Ger)
[Fractures of the thoracolumbar spine] Lokiec F, et al. **Harefuah** 1989 Mar 1;116(5):277–80 (18 ref.) (Heb)
[Use of contractors in unstable fractures of the thoraco-lumbar spine] Szlachta Z, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):20–5 (Eng. Abstr.) (Pol)
[Computerized tomography in the diagnosis of traumatic changes in the spine] Kossovoi AL. **Ortop Travmatol Protez** 1988 Dec;(12):54–7 (51 ref.) (Rus)
[A device for applying corsets and for reclination of compressed vertebrae] Shchekin OV. **Ortop Travmatol Protez** 1988 Jun;(6):56–8 (Rus)
[Use of damper hammocks in the treatment of spinal fractures] Shchëtkin VA. **Ortop Travmatol Protez** 1989 Jan; (1):60–1 (Rus)
[Spondyloptosis of the 4th thoracic vertebra with complete regression of neurologic disorders] Voronovich IR, et al. **Ortop Travmatol Protez** 1988 Nov;(11):53–4 (Rus)
[Rehabilitation treatment of patients with uncomplicated fractures of the spine at a hospital rehabilitation center] Bagaturiia GO, et al. **Vestn Khir** 1989 Feb;142(2):63–6 (Eng. Abstr.) (Rus)

INNERVATION

[Terminal ramifications of the ventral branch of Th1 in postnatal development of man] Urbanowicz Z. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:41–8 (Eng. Abstr.) (Pol)
[Substantiation of the use of terrilytin in the treatment of spinal cord disorders in tuberculous spondylitis] Bellendir EN, et al. **Probl Tuberk** 1989;(4):46–50 (Eng. Abstr.) (Rus)

PATHOLOGY

Surface stereophotogrammetry of thoracic kyphosis. Carr AJ, et al. **Acta Orthop Scand** 1989 Apr;60(2):177–80
Change in vertebral shape in spinal osteoporosis. Hedlund LR, et al. **Calcif Tissue Int** 1989 Mar;44(3):168–72
Increase of vertebral density by combination therapy with pulsatile 1–38hPTH and sequential addition of calcitonin nasal spray in osteoporotic patients. Hesch RD, et al. **Calcif Tissue Int** 1989 Mar;44(3):176–80
Spinal osteomyelitis: unusual findings on magnetic resonance imaging. Michael AS, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):329–31
Ossification of the ligamentum flavum. A case report and its MRI finding. Enomoto H, et al. **Neuroradiology** 1988; 30(6):571–3
Thoracolumbar needle biopsy. Alexander AH. **Orthopedics** 1988 Oct;11(10):1473–7
Anterior extension of the thoracic vertebral bodies in Scheuermann's kyphosis. An anatomic study. Digiovanni BF, et al. **Spine** 1989 Jul;14(7):712–6
Vertebral arch hemangioma producing spinal cord compression in pregnancy. Diagnosis by magnetic resonance imaging. Schwartz DA, et al. **Spine** 1989 Aug; 14(8):888–90
[Extra-medullary intradural melanotic tumor: apropos of a case of dorsal pigmented neurinoma. Review of the literature] Graziani N, et al. **Neurochirurgie** 1988; 34(3):210–7 (49 ref.) (Eng. Abstr.) (Fre)
[Modeling of scoliosis in animal experiments and the concepts of its etiology and pathogenesis] Shevtsova OA. **Ortop Travmatol Protez** 1988 Jun;(6):72–5 (Rus)

PHYSIOPATHOLOGY

Vertebral rotation during the initial stages of scoliosis: the costovertebral interaction mechanism. Fabris D, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):59–66
Are pulmonary factors responsible for the direction of the spinal curvature in idiopathic scoliosis? Del Bigio MR. **Med Hypotheses** 1989 Apr;28(4):217–8

RADIATION EFFECTS

Thoracic vertebral photopenia may predict fatty changes of the corresponding bone marrow following irradiation. Shih WJ, et al. **Radiat Med** 1989 Jan–Feb;7(1):32–5

RADIOGRAPHY

Lumbar and thoracic spine pain in the athlete: radiographic evaluation. Cacayorin ED, et al. **Clin Sports Med** 1987 Oct; 6(4):767–83 (30 ref.)
What is your diagnosis? Unremoved penrose drain and osteomyelitis of spinous processes of T3 to T6. Jann HW, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):651–2
Effect of intervertebral changes of the spinal trabecular and cortical mineral content on the precision requirements in longitudinal single and dual energy computed tomography examinations. Sandor T, et al. **Med Phys** 1989 Mar–Apr; 16(2):218–24
Measurement of effective pedicle diameter in the human spine. Banta CJ 2d, et al. **Orthopedics** 1989 Jul;12(7):939–42
Diffuse idiopathic skeletal hyperostosis: diagnostic significance of radiographic abnormalities of the pelvis. Haller J, et al. **Radiology** 1989 Sep;172(3):835–9
Variations in zygapophyseal joint orientation and level of transition at the thoracolumbar junction. Preliminary survey using computed tomography. Singer KP, et al. **Surg Radiol Anat** 1988;10(4):291–5
[Abdominal pain precipitated by thoracic segment syndrome] Mikkelsen S, et al. **Ugeskr Laeger** 1989 Apr 24; 151(17):1036–8 (Eng. Abstr.) (Dan)
[Mediastinal widening in thoracic lordosis] Fischer U, et al. **ROFO** 1989 May;150(5):617–8 (Ger)
[Aneurysmal cyst of the cervico-thoracic junction of the spine] Radek A, et al. **Neurol Neurochir Pol** 1988 Sep–Oct; 22(5):463–7 (Eng. Abstr.) (Pol)
[Comparative clinico-roentgenological characteristics of degenerative-dystrophic changes in various segments of the spine] Kamalov II. **Zh Nevropatol Psikhiatr** 1989; 89(4):28–31 (Eng. Abstr.) (Rus)

SURGERY

Fixateur interne—new method for segmental stabilization of the thoracolumbar spine. Pentelényi T, et al. **Acta Chir Hung** 1988;29(4):373–83
Cyclic loading of segmental spinal instrumentation. Kummer FJ, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall;48(2):204–6
Operative neurological complications resulting from thoracic and lumbar spine internal fixation. Meyer PR Jr, et al. **Clin Orthop** 1988 Dec;(237):125–31
Laminopediculoplasty: a new method of reconstructing the posterior elements of the thoracic spine. Tsuzuki N, et al. **Int Orthop** 1989;13(1):39–45
Factors influencing the penetration of wires into the neural canal during segmental wiring. Zindrick MR, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):742–50
Anterior approach to the upper thoracic vertebrae. Charles R, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):81–4
Spondylectomy for malignant tumors of the spine. Sundaresan N, et al. **J Clin Oncol** 1989 Oct;7(10):1485–91
One-stage posterolateral decompression and stabilization for primary and metastatic vertebral tumors in the thoracic and lumbar spine. Shaw B, et al. **J Neurosurg** 1989 Mar; 70(3):405–10
Convex growth arrest for progressive congenital scoliosis due to hemivertebrae. Winter RB, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):633–8
Management of tumor adherent to the vertebral column. DeMeester TR, et al. **J Thorac Cardiovasc Surg** 1989 Mar; 97(3):373–8
Anterior spinal artery ischemia syndrome—a possible complication following surgery for the correction of scoliosis. Li HP, et al. **J Tongji Med Univ** 1988;8(3):182–5
Is Cotrel–Dubousset Instrumentation the treatment of choice for idiopathic scoliosis in the adolescent who has an operative thoracic curve? Shufflebarger HL, et al. **Orthopedics** 1988 Nov;11(11):1579–88
Lateral thoracic meningocele associated with neurofibromatosis: total excision by posterolateral extradural approach. A case report. Chee CP. **Spine** 1989 Jan;14(1):129–31
The AO spinal internal fixator. Esses SI. **Spine** 1989 Apr; 14(4):373–8
The failure of ethylene oxide gas–sterilized freeze–dried bone graft for thoracic and lumbar spinal fusion. Herron LD, et al. **Spine** 1989 May;14(5):496–500
The comparative results of treatment in idiopathic thoracolumbar and lumbar scoliosis using the Harrington, Dwyer, and Zielke instrumentations. Luk KD, et al. **Spine** 1989 Mar;14(3):275–80
Evaluation of the role of concave rib osteotomies in the correction of thoracic scoliosis. Mann DC, et al. **Spine** 1989 May;14(5):491–5
Axillary compression syndrome with neurapraxia due to operative positioning. Nambisan RN, et al. **Surgery** 1989 Mar;105(3):449–54
[Vertebral implant as a treatment principle in tumors and metastases of the thoracic and lumbar spine] Wuisman P, et al. **Z Orthop** 1989 Jan–Feb;127(1):25–31 (Eng. Abstr.) (Ger)
[Anterior rib strut grafting in the treatment of a malignant lesion of the thoracic spine under thoracotomy] Shirakusa T, et al. **Kyobu Geka** 1988 Dec;41(13):1040–5 (Eng. Abstr.) (Jpn)
[Transthoracic approaches to the lesions of thoracic cord and thoracic vertebrae] Hanakita J, et al. **No Shinkei Geka** 1988 Jun;16(7):837–43 (Eng. Abstr.) (Jpn)
[Results of the surgical treatment of patients with hematogenic osteomyelitis of the spine] Tikhodeev SA. **Vestn Khir** 1988 May;140(5):42–6 (Eng. Abstr.) (Rus)

THORACOPLASTY

Separation of conjoined twins using chest wall prosthesis. Hisano K, et al. **J Pediatr Surg** 1989 Sep;24(9):928–9
[A case of the successful surgical treatment of mediastinal giant neurogenic tumor, and the chest wall reconstruction by the autologous ribs] Ishikawa S, et al. **Kyobu Geka** 1989 Mar;42(3):244–8 (Eng. Abstr.) (Jpn)
[Surgical interventions in diffuse pulmonary tuberculosis in undisciplined patients] Cherkasov VA, et al. **Probl Tuberk** 1989;(2):34–6 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Pulmonary function in long-term survivors of thoracoplasty. Bredin CP. **Chest** 1989 Jan;95(1):18–20

METHODS

Coverage of chest wall and pelvic defects with the external oblique musculofasciocutaneous flap. Meland NB, et al. **Ann Plast Surg** 1988 Oct;21(4):297–302
[Omental pedicle plombage in the treatment of chronic empyema and bronchial fistula] Ge BS. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):356–8, 386–7 (Eng. Abstr.) (Chi)

[Long-term results of the use of osteoplastic thoracoplasty in the treatment of destructive tuberculosis of the lungs in patients with antisocial behavior] Krasnov VA, et al. **Probl Tuberk** 1989;(1):41–4 (Eng. Abstr.) (Rus)

THORACOSCOPY

Thoracoscopic closure of distal bronchopleural fistulas, using tissue glue. Aasebø U. **Eur Respir J** 1989 Apr;2(4):383–4
Thoracoscopy in the diagnosis of pleural effusions. Wu MH, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):116–9
Thoracoscopy in malignant mesothelioma. Boutin C. **Pneumologie** 1989 Feb;43(2):61–5
Diagnostic results in secondary malignant pleural effusions. Cantó Armengod A. **Pneumologie** 1989 Feb;43(2):58–60
Thoracoscopy in rheumatoid pleural effusion. Faurschou P. **Pneumologie** 1989 Feb;43(2):69–71
Prediction of the diagnostic utility of thoracoscopy in pleural effusion. Martensson G. **Pneumologie** 1989 Feb;43(2):72–5
Thoracoscopy: diagnostic and therapeutic indications. Newhouse MT. **Pneumologie** 1989 Feb;43(2):48–52 (59 ref.)
Long term sequelae after talc pleurodesis for spontaneous pneumothorax. Viskum K, et al. **Pneumologie** 1989 Feb; 43(2):105–6
[Value of talc administration using thoracoscopy in the symptomatic treatment of recurrent pleurisy. Apropos of 302 cases] Boniface E, et al. **Rev Mal Respir** 1989; 6(2):133–40 (Eng. Abstr.) (Fre)
[Talc pleural symphysis using thoracoscopy (editorial)] Boutin C. **Rev Mal Respir** 1989;6(2):91–3 (Fre)
[Results of talc administration using thoracoscopy in neoplastic pleurisies. Apropos of 218 cases] Ladjimi S, et al. **Rev Mal Respir** 1989;6(2):147–50 (Eng. Abstr.) (Fre)
[Thoracoscopy in pulmonary histiocytosis X] Bayle JY, et al. **Rev Pneumol Clin** 1988;44(6):292–6 (25 ref.) (Eng. Abstr.) (Fre)
[Thoracoscopic diagnosis and therapy of spontaneous pneumothorax] Schulz V. **Langenbecks Arch Chir** 1988; Suppl 2:493–7 (19 ref.) (Eng. Abstr.) (Ger)
[Thoracoscopy Symposium 1987] **Pneumologie** 1989 Feb; 43(2):45–125 (Ger)
[Palliative therapy of tumor-induced pleural effusions with radioisotopes] Austgen M. **Pneumologie** 1989 Feb; 43(2):88–91 (Eng. Abstr.) (Ger)
[Thoracoscopy in the immunosuppressed patient] Dijkman JH. **Pneumologie** 1989 Feb;43(2):116–8 (Eng. Abstr.) (Ger)
[Pleurodesis with tetracycline hydrochloride] Frank W, et al. **Pneumologie** 1989 Feb;43(2):80–4 (Eng. Abstr.) (Ger)
[Thoracoscopy in thoracic wall processes] Greschuchna D. **Pneumologie** 1989 Feb;43(2):119–21 (Eng. Abstr.) (Ger)
[Fibrin glue pleurodesis in recurrent malignant pleural effusions] Gust R, et al. **Pneumologie** 1989 Feb;43(2):85–7 (Eng. Abstr.) (Ger)
[Indications for thoracoscopy in pleural empyema] Kaiser D. **Pneumologie** 1989 Feb;43(2):76–9 (Eng. Abstr.) (Ger)
[Diagnostic thoracoscopy in mediastinal space-occupying lesions] Mai J, et al. **Pneumologie** 1989 Feb;43(2):122–5 (Eng. Abstr.) (Ger)
[Diagnosis of tuberculous pleural effusion] Szüle P. **Pneumologie** 1989 Feb;43(2):66–8 (Eng. Abstr.) (Ger)
[Indications for thoracoscopy in secondary spontaneous pneumothorax] Wieser O, et al. **Pneumologie** 1989 Feb; 43(2):92–5 (Eng. Abstr.) (Ger)
[Pneumothorax: indications for thoracoscopic talc insufflation] Grossenbacher M, et al. **Schweiz Rundsch Med Prax** 1989 Mar 28;78(13):359–61 (40 ref.) (Eng. Abstr.) (Ger)
[Surgical diagnostic methods in the thoracic area] Engelmann C. **Z Erkr Atmungsorgane** 1988;171(1):19–28 (19 ref.) (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Contraindications and complications to thoracoscopy. Viskum K. **Pneumologie** 1989 Feb;43(2):55–7

HISTORY

[The history and development of thoracoscopy] Brandt HJ. **Pneumologie** 1989 Feb;43(2):46–7 (Eng. Abstr.) (Ger)

INSTRUMENTATION

The laser in thoracoscopy. Boutin C. **Pneumologie** 1989 Feb; 43(2):96–7
[Fibrin gluing in spontaneous pneumothorax] Kaiser D. **Pneumologie** 1989 Feb;43(2):101–4 (Eng. Abstr.) (Ger)
[Indications and limits of thorscoscopy in surgical diagnosis and therapy of lung diseases] Elfeldt R, et al. **Zentralbl Chir** 1989;114(5):281–5 (Eng. Abstr.) (Ger)

METHODS

Thoracoscopy: a review of 121 consecutive surgical procedures. Page RD, et al. **Ann Thorac Surg** 1989 Jul; 48(1):66–8
[Pleurodesis with tetracycline hydrochloride in spontaneous pneumothorax] Grosser H, et al. **Pneumologie** 1989 Feb; 43(2):98–100 (Eng. Abstr.) (Ger)
[Thoracoscopy: surgical technic] Maassen W. **Pneumologie** 1989 Feb;43(2):53–4 (Eng. Abstr.) (Ger)
[Thoracoscopy in the treatment of bronchial asthma] Satter P, et al. **Pneumologie** 1989 Feb;43(2):109–11 (Eng. Abstr.) (Ger)
[Thoracoscopy in diffuse lung diseases] Schaberg T, et al. **Pneumologie** 1989 Feb;43(2):112–5 (Eng. Abstr.) (Ger)
[Thoracoscopic sympathectomy in hyperhidrosis] Toomes H, et al. **Pneumologie** 1989 Feb;43(2):107–8 (Eng. Abstr.) (Ger)
[The German Society of Pneumology and Tuberculosis. Recommendations for personnel and time requirements in pneumologic studies. Bronchoscopy, thoracoscopy, lung and pleura puncture] **Prax Klin Pneumol** 1988 Dec; 42(12):853–8 (13 ref.) (Ger)

NURSING

Thoracoscopy. An endoscopic look into the thorax. Golanowski M. **AORN J** 1989 Jul;50(1):80–5

THORACOSTOMY

External accumulation of radionuclide in hepatic hydrothorax. Albin RJ, et al. **Clin Nucl Med** 1989 May; 14(5):341–3
Chest drainage tubes. Symbas PN. **Surg Clin North Am** 1989 Feb;69(1):41–6 (11 ref.)

ADVERSE EFFECTS

Empyema thoracis in patients undergoing emergent closed tube thoracostomy for thoracic trauma. Eddy AC, et al. **Am J Surg** 1989 May;157(5):494–7
Aspergilloma in an open chest cavity. Thomas DA, et al. **Chest** 1989 May;95(5):1156–8

INSTRUMENTATION

The use of colostomy bags for chest tube drainage. Velanovich V, et al. **Ann Thorac Surg** 1988 Dec;46(6):697–8
A guided chest tube for safe thoracostomy. Thal AP, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):517
Horner's syndrome caused by an intercostal chest drain. Campbell P, et al. **Thorax** 1989 Apr;44(4):305–6

METHODS

Tube thoracostomy drainage. An alternative in the management of giant bullae? [editorial] Ginsberg RJ. **Chest** 1988 Dec;94(6):1125–6
Intercostal tube thoracostomy in pneumothorax—factors influencing re-expansion of lung. Sharma TN, et al. **Indian J Chest Dis Allied Sci** 1988 Jan–Mar;30(1):32–5
Treatment of postpneumonectomy empyema and associated bronchopleural fistula. Experience of 100 consecutive postpneumonectomy patients. Eerola S, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):235–9

THORACOTOMY

Epidural clonidine for treatment of postoperative pain after thoracotomy. A double-blind placebo-controlled study. Gordh T Jr. **Acta Anaesthesiol Scand** 1988 Nov;32(8):702–9
Major thoracic surgery during active tetanus. Farling PA, et al. **Anaesthesia** 1989 Feb;44(2):125–7
The control of post-thoracotomy pain. A comparative evaluation of thoracic epidural fentanyl infusions and cryo-analgesia [see comments] Gough JD, et al. **Anaesthesia** 1988 Sep;43(9):780–3. **Comment in:** Anaesthesia 1989 May;44(5):445–6
Management of one-lung anesthesia in an anticoagulated patient. Herenstein R, et al. **Anesth Analg** 1988 Nov; 67(11):1120–2
Respiratory effects of pain in a child after thoracotomy. Tyler DC. **Anesthesiology** 1989 May;70(5):873–4
Transthoracic resection of esophageal cancer in patients with pulmonary dysfunction. Usefulness of high frequency ventilation during thoracotomy. Imamura M, et al. **Ann Surg** 1988 Nov;208(5):601–5
Right thoracotomy, femorofemoral bypass, and deep hypothermia for re-replacement of the mitral valve. Cohn LH, et al. **Ann Thorac Surg** 1989 Jul;48(1):69–71
Cryoanalgesia for postthoracotomy pain [editorial] Katz J. **Ann Thorac Surg** 1989 Jul;48(1):5
Intraoperative cryoanalgesia for postthoracotomy pain relief. Müller LC, et al. **Ann Thorac Surg** 1989 Jul;48(1):15–8
Unilateral high-frequency jet ventilation during one-lung ventilation for thoracotomy. Nakatsuka M, et al. **Ann Thorac Surg** 1988 Dec;46(6):654–60
Comparison of continuous paravertebral and extradural infusions of bupivacaine for pain relief after thoracotomy. Matthews PJ, et al. **Br J Anaesth** 1989 Feb;62(2):204–5
Severe hypotension from epidural meperidine in a high-risk patient after thoracotomy. Balaban M, et al. **Can J Anaesth** 1989 Jul;36(4):450–3
Intrapleural analgesia for post-thoracotomy pain and blood levels of bupivacaine following intrapleural injection. Kambam JR, et al. **Can J Anaesth** 1989 Mar;36(2):106–9
Does the surgical trauma of "exploratory thoracotomy" affect survival of patients with bronchogenic carcinoma? Paul A, et al. **Can J Surg** 1989 Sep;32(5):322–7
Penetration of imipenem-cilastatin into the lung tissue and pericardial fluid of thoracotomized patients. Benoni G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):259–60
Short-term prophylaxis in thoracic surgery: what regimen? Serrano S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):579–80
Survival after incomplete resection or exploratory thoracotomy in patients with advanced non small cell lung cancer. Ratto GB, et al. **Ital J Surg Sci** 1988;18(4):377–83
Fast cortisol-induced inhibition of the adrenocorticotropin response to surgery in humans. Raff H, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1146–8
Microbiology of postthoractomy sternal wound infection. Brook I. **J Clin Microbiol** 1989 May;27(5):806–7
Wound infection caused by Branhamella catarrhalis. Gray LD, et al. **J Clin Microbiol** 1989 May;27(5):818–20
Chest wall deformity in patients with repaired esophageal atresia. Chetcuti P, et al. **J Pediatr Surg** 1989 Mar; 24(3):244–7
Resuscitative thoracotomy: the effect of the field time on outcome [letter] Pons PT, et al. **J Trauma** 1988 Dec; 28(12):1685–6
Extravascular lung water with special reference to thoracotomy, manual lung manipulation and rapid fluid transfusion. Chiyotanda S. **Jpn J Surg** 1988 Jul;18(4):376–83
Midazolam as an induction agent for thoracotomy in comparison with diazepam with or without nifedipine. Hseu SS, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun; 26(2):147–52
Solitary hamartoma of the lung: is thoracotomy still mandatory? de Rooij PD, et al. **Neth J Surg** 1988 Dec; 40(6):145–8
The influence of opening the thorax on defibrillation threshold in canines. Kallok MJ. **PACE** 1989 Jan;12(1 Pt 1):70–9
Late results after pericardectomy for constrictive pericarditis via left thoracotomy. Astudillo R, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):115–9 (18 ref.)
Indications for thoracotomy: deciding to operate. Mattox KL. **Surg Clin North Am** 1989 Feb;69(1):47–58 (52 ref.)
Aggressive treatment of chylothorax complicating transhiatal esophagectomy without thoracotomy. Orringer MB, et al. **Surgery** 1988 Oct;104(4):720–6
Solitary coin lesion in patients with malignant melanoma: an indication for thoracotomy? Jüttner FM, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):232–3
[Trends in surgery of bronchial cancer 1972–1984] Stulz P, et al. **Helv Chir Acta** 1988 Nov;55(4):445–8 (Eng. Abstr.) (Ger)
[Hemodynamics in the early postoperative period after thoracotomy and lung resection] Radenbach D, et al. **Thorac Cardiovasc Surg** 1988 Dec;36(6):365–9 (Eng. Abstr.) (Ger)
[Neglected traumatic diaphragmatic rupture in a thoracic surgery patient sample] Plate H, et al. **Zentralbl Chir** 1989; 114(6):393–6 (Eng. Abstr.) (Ger)
[Giant mediastinal pancreatic pseudocyst removed by thoracotomy] Kecskés L, et al. **Orv Hetil** 1988 Sep 18; 129(38):2033–5 (Eng. Abstr.) (Hun)
[Treatment of hiatal hernia by the thoracotomy route using the modified Merendino-Björk method] Mascitelli E, et al. **Ann Ital Chir** 1987;59(1–6):233–8 (Eng. Abstr.) (Ita)
[Invasive diagnosis and therapeutic program for solitary nodules of the lung] Giampaglia F, et al. **Arch Monaldi Mal Torace** 1987 Sep–Oct;42(5):445–57 (Eng. Abstr.) (Ita)
[A case of a 10-year survivor with squamous cell carcinoma of the lung, treated with radiation after an exploratory thoracotomy] Iwasaki M, et al. **Gan No Rinsho** 1989 Jul; 35(8):939–42 (Eng. Abstr.) (Jpn)
[A clinical trial of astromicin, a new aminoglycoside antibiotic, in thoracotomized patients and astromicin concentrations in the lung tissue] Imaizumi M, et al. **Jpn J Antibiot** 1988 Nov;41(11):1635–49 (Eng. Abstr.) (Jpn)
[A case of the management of developed collateral vessels through left thoracotomy of recurrence of right bronchiectasia with hemoptysis] Kagaya H, et al. **Kyobu Geka** 1989 May;42(5):367–70 (Eng. Abstr.) (Jpn)
[A case of bilateral multiple lung cancer resected by synchronous bilateral thoracotomy] Minami H, et al. **Kyobu Geka** 1989 Mar;42(3):195–8 (Eng. Abstr.) (Jpn)
[Anterior rib strut grafting in the treatment of a malignant lesion of the thoracic spine under thoracotomy] Shirakusa T, et al. **Kyobu Geka** 1988 Dec;41(13):1040–5 (Eng. Abstr.) (Jpn)
[Influence of thoracotomy and pulmonary surgery on coagulation and fibrinolysis in the intra and postoperative period—experimental and clinical study] Sembo J. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):199–209 (Eng. Abstr.) (Jpn)
[A case of re-expansion pulmonary edema during thoracotomy due to gigantic tumor of the chest wall] Sakuma T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2504–7 (Eng. Abstr.) (Jpn)
[Extirpation of the esophagus without thoracotomy] Sigal EI. **Grudn Khir** 1988 Jul–Aug;(4):75–9 (25 ref.) (Rus)

ADVERSE EFFECTS

Treatment of post-thoracotomy pain with intermittent instillations of intrapleural bupivacaine. Scheinin B, et al. **Acta Anaesthesiol Scand** 1989 Feb;33(2):156–9
The control of post-thoracotomy pain [letter; comment] Bromage PR. **Anaesthesia** 1989 May;44(5):445–6. **Comment on:** Anaesthesia 1988 Sep;43(9):780–3
High thoracic epidural sufentanil for post-thoracotomy pain: influence of epinephrine as an adjuvant—a double blind study. Hasenbos MA, et al. **Anesthesiology** 1988 Dec; 69(6):1017–22
Continuous intercostal nerve block for pain relief after thoracotomy. Sabanathan S, et al. **Ann Thorac Surg** 1988

Oct;46(4):425–6
Auricular electroacupuncture for postthoracotomy pain. Wang FH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May; 41(5):349–56
Accessory nerve palsy following thoracotomy. Morrell S, et al. **Clin Orthop** 1989 Jan;(238):237–40
Recurrent esophageal carcinoma at thoracotomy incisions: diagnostic contributions of CT. Recht MP, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):58–60
The effective use of intrapleural bupivacaine for analgesia after thoracic and subcostal incisions in children. McIlvaine WB, et al. **J Pediatr Surg** 1988 Dec;23(12):1184–7
Apparent association between thymic cysts and prior thoracotomy. Jaramillo D, et al. **Radiology** 1989 Jul; 172(1):207–9
[Respiration in thoracic surgery] Baldi S, et al. **Minerva Chir** 1988 Nov 30;43(22):1919–21 (Eng. Abstr.) (Ita)

ECONOMICS

Emergency department thoracotomy following injury: critical determinants for patient salvage. Baxter BT, et al. **World J Surg** 1988 Oct;12(5):671–5

METHODS

Thoracotomy through the auscultatory triangle. Horowitz MD, et al. **Ann Thorac Surg** 1989 May;47(5):782–3
Right mini-thoracotomy: an adjunct to left subcostal automatic implantable cardioverter defibrillator implantation. Lawrie GM, et al. **Ann Thorac Surg** 1989 May;47(5):780–1
Coronary artery bypass grafting in patients with a tracheostoma: use of a bilateral thoracotomy incision. Marshall WG Jr, et al. **Ann Thorac Surg** 1988 Oct; 46(4):465–6
Muscle-sparing thoracotomy [letter] Noirclerc M. **Ann Thorac Surg** 1989 Feb;47(2):330
Emergency department thoracotomy. Wasserberger J, et al. **Emerg Med Clin North Am** 1989 Feb;7(1):103–15
Left thoracotomy approach for resection of carcinoma of the esophagus. Pradhan GN, et al. **Surg Gynecol Obstet** 1989 Jan;168(1):49–53
Chest wall resection—alloplastic replacement. Lampl LH, et al. **Thorac Cardiovasc Surg** 1988 Jun;36(3):157–8
[Left thoracotomy: an alternative to median sternotomy in coronary bypass in cases of pericardial adhesions] Gandjbakhch I, et al. **Arch Mal Coeur** 1989 Jun;82(6):913–5 (Eng. Abstr.) (Fre)
[Exploratory thoracotomies for unresectable lung cancer] Witzig JA, et al. **Helv Chir Acta** 1989 Jan;55(5):723–5 (Eng. Abstr.) (Fre)
[Surgery of apical lung cancer invading the chest wall—a new approach to apical thorax by dislocation of sterno-clavicular joint] Kusajima K. **Kyobu Geka** 1988 May;41(6):475–9 (Eng. Abstr.) (Jpn)
[Axillary vertical incision thoracotomy sparing pectoralis major muscle and latissimus dorsi muscle: an approach for patent ductus arteriosus] Kyoku I, et al. **Kyobu Geka** 1989 May;42(5):371–3 (Eng. Abstr.) (Jpn)
[The reconstruction surgery of the thoracic skeleton with the homologous rib transplantation] Kondoh D, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2073–8 (Eng. Abstr.) (Jpn)
[The influence of thoracotomy on the chest wall movement—difference between intercostal thoracotomy and median sternotomy] Sumitomo S. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep; 36(9):1995–2004 (Eng. Abstr.) (Jpn)

THORAX

Influence of the "squeeze jacket" on lung function in young infants. Steinbrugger B, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1258–60
Retrieval of metallic objects from the pericardial cavity [letter] Kalmbach T, et al. **Ann Thorac Surg** 1988 Oct; 46(4):484
Use of colostomy bags for chest tube drainage [letter] Kaul A, et al. **Ann Thorac Surg** 1989 Sep;48(3):456
A serious complication of the Angelchik prosthesis. Boeree NR, et al. **Br J Surg** 1988 Aug;75(8):626–7
Circulatory assistance by intrathoracic pressure variations: optimization and mechanisms studied by a mathematical model in relation to experimental data. Beyar R, et al. **Circ Res** 1989 Apr;64(4):703–20
Chest surface recording of diaphragm potentials in man. Lansing R, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan;72(1):59–68
Evaluation of lung dose correction methods for photon irradiations of thorax phantoms. el-Khatib EE, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):871–8
Chest wall restriction limits high airway pressure-induced lung injury in young rabbits. Hernandez LA, et al. **J Appl Physiol** 1989 May;66(5):2364–8
Extracardiac chest ultrasonography in infants and children: radiographic and clinical implications. Glasier CM, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):540–4
Chest pain without radiographic sacroiliitis in relatives of patients with ankylosing spondylitis. van der Linden SM, et al. **J Rheumatol** 1988;15(5):836–9
Thoracic ureter. Garat JM, et al. **J Urol** 1988 Dec; 140(6):1519–20
The foam sponge as a teaching aid in the examination of the chest [letter] Benbassat J, et al. **Med Educ** 1988 Nov; 22(6):554–5
Intrathoracic and intravascular migratory foreign bodies. Van Way CW 3d. **Surg Clin North Am** 1989 Feb;69(1):125–33 (19 ref.)
[Definitive treatment of thoracic penetrating injuries due to missiles: report of 155 cases] Huang XM. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):622–3, 639 (Eng. Abstr.) (Chi)
[A case report of thoracic foreign body resembling fungus ball on chest X-P] Sasai T, et al. **Kyobu Geka** 1989 Feb; 42(2):138–40 (Eng. Abstr.) (Jpn)
[Concurrent pancreatic pseudocysts in the thoracic and abdominal cavities] Shavlokhov VS, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):110–1 (Rus)

ABNORMALITIES

Fabrication of a customized cuirass for patients with severe thoracic asymmetry [letter] Shneerson JM, et al. **Am Rev Respir Dis** 1988 Aug;138(2):488–9
Spondylothoracic dysplasia. Clinical and sonographic diagnosis. Marks F, et al. **J Ultrasound Med** 1989 Jan; 8(1):1–5
Pulmonary hypoplasia in infants with giant abdominal wall defects. Argyle JC. **Pediatr Pathol** 1989;9(1):43–55
Jeune syndrome associated with pancreatic fibrosis. Georgiou-Theodoropoulos M, et al. **Pediatr Pathol** 1988; 8(5):541–4
Stenosis of the foramen magnum and rostral spinal canal, with spinal cord deformity, in Jeune's asphyxiating thoracic dystrophy. Knisely AS, et al. **Pediatr Pathol** 1989; 9(3):299–305
Reconstruction of congenital chest-wall deformities. Garcia VF, et al. **Surg Clin North Am** 1989 Oct;69(5):1103–18 (36 ref.)
[Neural tube defect associated with thoracoabdominal evisceration] Hori A, et al. **Ann Pathol** 1988;8(4–5):321–4 (Eng. Abstr.) (Fre)
[Spondylo-costal dysostosis. Description of a case and review of the literature] Porcelli F, et al. **Pediatr Med Chir** 1988 May–Jun;10(3):339–42 (Eng. Abstr.) (Ita)

ANALYSIS

[Thoracic fluid index in normal adult and patient with different type of chest disease] Lin HI, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):191–6 (Eng. Abstr.) (Chi)

ANATOMY & HISTOLOGY

Light- and electron-microscopic immunocytochemistry of peptidergic neurons innervating thoracico-abdominal neurohaemal areas in the blowfly. Duve H, et al. **Cell Tissue Res** 1988 Sep;253(3):583–95
Chest wall and lung surface viewing with ultrasound. Birnholz J. **Chest** 1988 Dec;94(6):1275–6
Magnetic resonance for evaluation of the thorax. Fisher MR. **Chest** 1989 Jan;95(1):166–73 (28 ref.)
Ultrasound of the chest. Verschakelen J, et al. **J Belge Radiol** 1988;71(5):615–21 (17 ref.)
The effect of torso inhomogeneities on body surface potentials quantified using "tailored" geometry. van Oosterom A, et al. **J Electrocardiol** 1989 Jan;22(1):53–72
MRI of the thorax. State of the art. **J Thorac Imaging** 1989 Apr;4(2):1–92
[New percentile values for birth weight, body length, head and breast circumference of newborn infants in East Germany] Voigt M, et al. **Arztl Jugendkd** 1989;80(1):1–11 (Eng. Abstr.) (Ger)
[The topography of the organs of the thoracic cavity of the hippopotamus (Hippopotamus amphibius Linné 1758)] Heinrichs J, et al. **Gegenbaurs Morphol Jahrb** 1988; 134(5):615–23 (Eng. Abstr.) (Ger)
[Cardiothoracic ratio and roentgenologic heart size as the indices of body fluid retention in uremics under hemodialysis] Harasawa H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Feb 25; 49(2):191–8 (Eng. Abstr.) (Jpn)

BLOOD SUPPLY

A twelve-year survey of cervicothoracic vascular injuries. Bladergroen M, et al. **Am J Surg** 1989 May;157(5):483–6
[Metastases of lung cancer to the lymph nodes simulating arteriosclerosis obliterans] Zwoliński J, et al. **Pneumonol Pol** 1988 Jun;56(6):288–9 (Pol)
[Vascular reactions of the internal organs to lower body negative pressure] Andriiako LIa, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):90–1 (Rus)
[Iatrogenic injuries of the major blood vessels] Svitich IuM. **Sov Med** 1989;(2):54–7 (Rus)

DRUG EFFECTS

Chest wall rigidity during fentanyl- and midazolam-fentanyl induction: ventilatory and haemodynamic effects. Neidhart P, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):1–5

ENZYMOLOGY

A calmodulin-sensitive adenylate cyclase in the prothoracic glands of the tobacco hornworm, Manduca sexta. Meller VH, et al. **Mol Cell Endocrinol** 1988 Sep;59(1–2):67–76

INNERVATION

Intrathoracic ganglionic beta-adrenergic receptors involved in efferent sympathetic regulation of the canine heart. Armour JA, et al. **Can J Cardiol** 1989 Jun–Aug;5(5):275–83

METABOLISM

Altered clearance of inhaled 99mTc-pentetate aerosols following exposure to cadmium chloride aerosols in ferrets. Platner JW, et al. **Exp Lung Res** 1989;15(1):77–91
A bumetanide-sensitive, potassium carrier-mediated transport system in excitable tissues. Babila T, et al. **Life Sci** 1989;44(22):1665–75

PATHOLOGY

Magnetic resonance imaging of the thorax. Gamsu G, et al. **Am Rev Respir Dis** 1989 Jan;139(1):254–74 (169 ref.)
Chest wall necrosis secondary to hydrochloric acid use in the treatment of metabolic alkalosis. Jankauskas SJ, et al. **Crit Care Med** 1989 Sep;17(9):963–4
Pediatric thoracic applications of magnetic resonance imaging. Bisset GS 3d. **J Thorac Imaging** 1989 Apr; 4(2):51–7
Chest-wall collapse as a complication of atelectasis. Gurney JW, et al. **J Thorac Imaging** 1989 Apr;4(2):87–9
Magnetic resonance imaging of the thorax: techniques, current applications, and future directions. Spritzer C, et al. **J Thorac Imaging** 1989 Apr;4(2):1–18 (177 ref.)
Magnetic resonance imaging of the thorax. Swensen SJ, et al. **J Thorac Imaging** 1989 Apr;4(2):19–33 (86 ref.)
[Bronchogenic carcinoma invading the thoracic wall. The results of surgical treatment] Forni E, et al. **Minerva Med** 1989 Jul;80(7):679–83 (Ita)
[Surgical treatment of lung cancer with chest wall invasion] Higashi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar;37(3):404–10 (Eng. Abstr.) (Jpn)
[Magnetic resonance imaging of the thorax] Noma S, et al. **Rinsho Hoshasen** 1989 Jan;34(1):1–9 (Eng. Abstr.) (Jpn)

PHYSIOLOGY

Biodynamic behavior of the trunk and the abdomen during whole-body vibration. Dupuis H. **Acta Anaesthesiol Scand Suppl** 1989;90:34–8 (13 ref.)
Negative intrathoracic pressure decreases independently left ventricular filling and emptying. Peters J, et al. **Am J Physiol** 1989 Jul;25 7(1 Pt 2):H120–31
Amplitude dependency of regional chest wall resistance and elastance at normal breathing frequencies. Barnas GM, et al. **Am Rev Respir Dis** 1989 Jul;140(1):25–30
Simultaneous quantification of chest wall distortion by multiple methods in preterm infants. Heldt GP. **Am Rev Respir Dis** 1988 Jul;138(1):20–5
Normal chest expansion with oesophageal placement of a tracheal tube [letter] Charters P. **Anaesthesia** 1989 Apr; 44(4):365
Respiratory system, lung, and chest wall mechanics in guinea pigs. Martins MA, et al. **Braz J Med Biol Res** 1988; 21(2):353–63 (25 ref.)
Effect of chestwall removal on expiratory flow in dogs. Minh VD, et al. **Chin J Physiol** 1988;31(2):63–77
Chest wall movements in anaesthesia. Drummond GB. **Eur J Anaesthesiol** 1989 May;6(3):161–96 (122 ref.)
A volume conductor model of the thorax for the study of defibrillation fields. Claydon FJ 3d, et al. **IEEE Trans Biomed Eng** 1988 Nov;35(11):981–92
Chest wall impedance partitioned into rib cage and diaphragm-abdominal pathways. Barnas GM, et al. **J Appl Physiol** 1989 Jan;66(1):350–9
Impedance of the chest wall during sustained respiratory muscle contraction. Barnas GM, et al. **J Appl Physiol** 1989 Jan;66(1):360–9
Transmission of sound generated by sternal percussion. Bohadana AB, et al. **J Appl Physiol** 1989 Jan;66(1):273–7
Direct measurement of static chest wall compliance in animal and human neonates. Davis GM, et al. **J Appl Physiol** 1988 Sep;65(3):1093–8
Coupling between rib cage and abdominal compartments of the relaxed chest wall. Deschamps C, et al. **J Appl Physiol** 1988 Nov;65(5):2265–9
Transmission to the chest of sound introduced at the mouth. Kraman SS, et al. **J Appl Physiol** 1989 Jan;66(1):278–81
Volume quantification of chest wall motion in dogs. Krayer S, et al. **J Appl Physiol** 1988 Nov;65(5):2213–20
Thoracic influence on upper airway patency. Van de Graaff WB. **J Appl Physiol** 1988 Nov;65(5):2124–31
Chest wall motion during spontaneous breathing and mechanical ventilation in dogs. Warner DO, et al. **J Appl Physiol** 1989 Mar;66(3):1179–89
Mechanics of compartmental models of the chest wall. Wilson TA. **J Appl Physiol** 1988 Nov;65(5):2261–4
Clapping or percussion causes atelectasis in dogs and influences gas exchange. Zidulka A, et al. **J Appl Physiol** 1989 Jun;66(6):2833–8
Rotational and translational movement features of the pelvis and thorax during adult human locomotion. Stokes VP, et al. **J Biomech** 1989;22(1):43–50
Comment on Cavallo and Baken (1985) [letter] Hixon TJ. **J Speech Hear Res** 1988 Dec;31(4):726–9

A critical flow device for accurate PM10 sampling and correct indication of PM10 dosage to the thoracic region of the respiratory tract. Wedding JB, et al. **JAPCA** 1987 Mar;37(3):254–8

Potential distribution in the thorax in relation to electrical field plethysmography. Bhattacharya B, et al. **Med Biol Eng Comput** 1988 May;26(3):303–9

A three-dimensional analysis of angular momentum in the hammer throw. Dapena J, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):206–20

Developmental changes in phosphodiesterase activity and hormonal response in the prothoracic glands of Manduca sexta. Smith WA, et al. **Mol Cell Endocrinol** 1989 May; 63(1–2):239–46

The topographical distribution of the inhalation-to-perfusion ratio in double-muscled and Friesian calves. Gustin P, et al. **Vet Res Commun** 1988;12(4–5):401–5

[Clinical usefulness of the monitoring of thorax movement for postoperative neonates with congenital heart disease—a preliminary study for developing a new volume-limited ventilator for neonates] Komeda M, et al. **Kokyu To Junkan** 1988 Jul;36(7):767–71 **(Jpn)**

PHYSIOPATHOLOGY

Respiratory mechanics in acute quadriplegia. Lung and chest wall compliance and dimensional changes during respiratory maneuvers. Scanlon PD, et al. **Am Rev Respir Dis** 1989 Mar;139(3):615–20

Chest wall distortion in patients with flail chest. Tzelepis GE, et al. **Am Rev Respir Dis** 1989 Jul;140(1):31–7

Are pulmonary factors responsible for the direction of the spinal curvature in idiopathic scoliosis? Del Bigio MR. **Med Hypotheses** 1989 Apr;28(4):217–8

A new differential diagnosis for musculoskeletal posterior thoracic wall pain. A case report. Quast MS, et al. **Orthop Rev** 1989 Apr;18(4):461–5

Chest expansion as a screening test for respiratory disorders [letter] Swinburn C. **Practitioner** 1988 Apr 22;232(1447):433

Cross leg pain and trunk list. Khuffash B, et al. **Spine** 1989 Jun;14(6):602–3

RADIATION EFFECTS

Corticosteroids prevent acute lung dysfunction caused by thoracic irradiation in unanesthetized sheep. Loyd JE, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1227–33

Alveolar macrophage proliferation in situ after thoracic irradiation of rats. Wesselius LJ, et al. **Am Rev Respir Dis** 1989 Jan;139(1):221–5

The association of adult respiratory distress syndrome (ARDS) with thoracic irradiation (RT). Byhardt RW, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1441–6

RADIONUCLIDE IMAGING

Composite SPECT-CT images: technique and potential applications in chest and abdominal imaging. Kaplan IL, et al. **AJR** 1989 Apr;152(4):865–6

Gallium-67 imaging: chloroquine overdose. Havens PL, et al. **Clin Nucl Med** 1989 Feb;14(2):135

Three-dimensional attenuation coefficients distribution for SPECT of the chest [letter] Guzzardi R, et al. **J Nucl Med** 1989 Jan;30(1):128–9

The role of nuclear medicine in three permanent total artificial heart recipients. Zenger GH, et al. **Semin Nucl Med** 1988 Jul;18(3):241–5

THORIUM

ANALYSIS

A sensitive method for the determination of Th in body fluids. Dang HS, et al. **Health Phys** 1989 Sep;57(3):393–6

Radionuclide contents in building materials used in Hong Kong. Man CK, et al. **Health Phys** 1989 Sep;57(3):397–401

Assimilation of thorium isotopes into terrestrial vegetation. Rayno DR. **Sci Total Environ** 1989 May 15;80(2–3):243–66

[A method of determining the levels of uranium, thorium and radium in biological specimens] Shalaeva MP, et al. **Gig Tr Prof Zabol** 1989;(3):49–51 **(Rus)**

PHARMACOKINETICS

A review of parameter values used to assess the transport of plutonium, uranium, and thorium in terrestrial food chains. Garten CT Jr. **Environ Res** 1978 Dec;17(3):437–52 (44 ref.)

A review of the dietary uptake of Th. Johnson JR, et al. **Health Phys** 1989 Feb;56(2):165–8 (19 ref.)

[Levels of internal irradiation of the population of the RSFSR by natural alpha emitters] Ponikarova TM, et al. **Gig Sanit** 1989 Apr;(4):22–5 (Eng. Abstr.) **(Rus)**

THORIUM DIOXIDE

ADVERSE EFFECTS

Comparison of anamnestic history, alcohol intake and smoking, nutritional status, and liver dysfunction between thorotrast patients who developed primary liver cancer and those who did not. Kiyosawa K, et al. **Environ Res** 1989 Aug;49(2):166–72

A case of cholangiocarcinoma detected after follow-up for seven years for thorotrast deposition. Imai H, et al. **Gastroenterol Jpn** 1988 Oct;23(5):570–5

Thorotrast-induced oro- and hypopharyngeal fibrosis with recurrent bleeding. Wustrow TP, et al. **J Craniomaxillofac Surg** 1988 Oct;16(7):315–9

Pathomorphological characteristics of thorotrast-related cholangiocarcinoma. Ito Y. **Kurume Med J** 1988;35(2):63–9

MRI of thorotrastoma. Keidan RD, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):717–20

Renal thorium deposition associated with transitional cell carcinoma: radiologic demonstration in two patients. Oyen RH, et al. **Radiology** 1988 Dec;169(3):705–7

[Thorotrast (letter)] Wilson K. **Ugeskr Laeger** 1989 Jul 24; 151(30):1945–6 **(Dan)**

[Urothelial carcinoma of the kidney pelvis 51 years after retrograde ureteropyelography with Thorotrast. An autoradiography study] Bachor R, et al. **Med Klin** 1988 Oct 4;83(19):652–4 **(Ger)**

[A case of thorotrastoma of the mesentery] Ponzio F, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1195–6 (Eng. Abstr.) **(Ita)**

[Diagnostic imaging of thorotrast associated cholangiocarcinoma and mixed hepatocellular and cholangiocellular carcinoma] Sasaki F, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):948–54 (Eng. Abstr.) **(Jpn)**

[Hepatic angiosarcoma with thorotrast] Vadell Nadal C, et al. **Rev Clin Esp** 1988 Dec;183(9):475–7 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

[Roentgenologic evaluation of intrahepatic redistribution after thorotrast administration] Sasaki F, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1333–41 (Eng. Abstr.) **(Jpn)**

THORIUM OXIDE see **THORIUM DIOXIDE**

THORNAPPLE see **STRAMONIUM**

THORNY-HEADED WORMS see **ACANTHOCEPHALA**

THREADWORMS see **ENTEROBIUS**

THREE-DAY SICKNESS see **EPHEMERAL FEVER**

THREONINE

Point mutations at threonine-301 modify substrate specificity of rabbit liver microsomal cytochromes P-450 (laurate (omega-1)-hydroxylase and testosterone 16 alpha-hydroxylase). Imai Y, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):717–22

Probing the functional role of threonine-113 of Escherichia coli dihydrofolate reductase for its effect on turnover efficiency, catalysis, and binding. Fierke CA, et al. **Biochemistry** 1989 Jan 24;28(2):478–86

Mechanism of phosphorylation of the epidermal growth factor receptor at threonine 669. Countaway JL, et al. **J Biol Chem** 1989 Jun 25;264(18):10828–35

Studies of the regulatory mechanism of Ca2+/calmodulin-dependent protein kinase II. Mutation of threonine 286 to alanine and aspartate. Fong YL, et al. **J Biol Chem** 1989 Oct 5;264(28):16759–63

Decrease of anion selectivity caused by mutation of Thr301 and Gly302 to Glu in the hydrophobic domain of the colicin E1 channel. Shirabe K, et al. **J Biol Chem** 1989 Feb 5;264(4):1951–7

Glycosylation of human apolipoprotein E. The carbohydrate attachment site is threonine 194. Wernette-Hammond ME, et al. **J Biol Chem** 1989 May 25;264(15):9094–101

A gamma methionine-310 to threonine substitution and consequent N-glycosylation at gamma asparagine-308 identified in a congenital dysfibrinogenemia associated with posttraumatic bleeding, fibrinogen Asahi. Yamazumi K, et al. **J Clin Invest** 1989 May;83(5):1590–7

Characterization of aminoalkylimidazol-4-one mutagens from liquid-reflux models. Jones RC, et al. **Mutat Res** 1989 Jan;222(1):43–51

Stimulation of phosphorylation of lipocortin at threonine residues by epidermal growth factor (EGF) and the EGF receptor: addition of protein kinase P with polylysine inhibits this effect. Abdel-Ghany M, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6072–6

Phosphorylation at threonine-654 is not required for negative regulation of the epidermal growth factor receptor by non-phorbol tumor promoters. Friedman BA, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):812–6

ANALOGS & DERIVATIVES

Thin-layer chromatography can resolve phosphotyrosine, phosphoserine, and phosphothreonine in a protein hydrolyzate. Neufeld E, et al. **Anal Biochem** 1989 Feb 15; 177(1):138–43

Effects of puromycin and hydroxynorvaline on net production and intracellular degradation of collagen in human fetal lung fibroblasts. Barile FA, et al. **Arch Biochem Biophys** 1989 Apr;270(1):294–301

Antibodies directed against phosphothreonine residues as potent tools for studying protein phosphorylation. Heffetz D, et al. **Eur J Biochem** 1989 Jun 15;182(2):343–8

Synthesis of phosphopeptides containing O-phosphoserine or O-phosphothreonine. Arendt A, et al. **Int J Pept Protein Res** 1989 Jun;33(6):468–76

Enzymatic formation of glidobactamine: a peptide nucleus of glidobactins A, B and C, new lipopeptide antitumor antibiotics. Numata K, et al. **J Antibiot (Tokyo)** 1988 Oct; 41(10):1351–7

Phospholamban phosphorylation in intact ventricles. Phosphorylation of serine 16 and threonine 17 in response to beta-adrenergic stimulation [published erratum appears in J Biol Chem 1989 Sep 15;264(26):15738] Wegener AD, et al. **J Biol Chem** 1989 Jul 5;264(19):11468–74

Elucidation of methanogenesis seems well on its way. Hauska G. **Trends Biochem Sci** 1988 Jan;13(1):2–4 (26 ref.)

BIOSYNTHESIS

Siderophore containing 2,3-dihydroxybenzoic acid and threonine formed by Rhizobium trifolii. Skorupska A, et al. **Acta Biochim Pol** 1988;35(2):119–30

Threonine production by microorganisms: a review. Bhattacharyya R, et al. **Hindustan Antibiot Bull** 1988 Aug-Nov;30(3–4):54–65 (74 ref.)

Transcription termination directed by heteroduplex thr attenuator templates. Evidence that the transcript stem and loop structure is the termination signal. Yang MT, et al. **J Biol Chem** 1989 Feb 15;264(5):2634–9

[Selection of bacterial strains for the production of threonine] Nudel BC, et al. **Rev Argent Microbiol** 1984;16(4):209–17 (Eng. Abstr.) **(Spa)**

DEFICIENCY

Transplantation of skin grafts in rats fed plant protein wheat gluten. Lotan RM. **Isr J Med Sci** 1989 Aug;25(8):433–7

Humoral and cellular immune response in growing rats fed a 10% gluten diet. Lotan RM. **Isr J Med Sci** 1989 Aug; 25(8):437–41

GENETICS

On the effect on specificity of Thr246——Gly mutation in L-lactate dehydrogenase of Bacillus sterothermophilus. Bur D, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):59–63

Translational coupling in the threonine operon of Escherichia coli K-12. Little S, et al. **J Bacteriol** 1989 Jun; 171(6):3518–22

Functional consequences of alterations to amino acids located in the catalytic center (isoleucine 348 to threonine 357) and nucleotide-binding domain of the Ca2+-ATPase of sarcoplasmic reticulum. Maruyama K, et al. **J Biol Chem** 1989 Aug 5;264(22):13038–42

METABOLISM

The structure and regulation of protein phosphatases. Cohen P. **Annu Rev Biochem** 1989;58:453–508 (340 ref.)

Phosphorylation of calmodulin on threonine residue(s) by cytosol prepared from the adrenal cortex. Kubo M, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1333–9

N-terminal sequence extension in the glycosylated forms of human pancreatic stone protein. The 5-oxoproline N-terminal chain is O-glycosylated on the 5th amino acid residue. De Caro AM, et al. **Biochim Biophys Acta** 1989 Feb 23;994(3):281–4

Threonine phosphorylation is associated with mitosis in HeLa cells. Zhao JY, et al. **FEBS Lett** 1989 Jun 5;249(2):389–95

PHARMACOLOGY

Effect of threonine and glycine concentrations on threonine aldolase activity of yogurt microorganisms during growth in a modified milk prepared by ultrafiltration. Marranzini RM, et al. **J Dairy Sci** 1989 May;72(5):1142–8

THREONINE DEAMINASE see **THREONINE DEHYDRATASE**

THREONINE DEHYDRASE see **THREONINE DEHYDRATASE**

THREONINE DEHYDRATASE

ANALYSIS

The peptide sequences near the bound pyridoxal phosphate are conserved in serine dehydratase from rat liver, and threonine dehydratases from yeast and Escherichia coli. Ogawa H, et al. **Biochim Biophys Acta** 1989 Jun 13; 996(1–2):139–41

ANTAGONISTS & INHIBITORS

Double inhibition of L-threonine dehydratase by aminothiols. Leoncini R, et al. **Biochim Biophys Acta** 1989 Jan 19; 994(1):52–8

Amino acid sequence of the regulatory-site glyoxylate peptide of biodegradative threonine dehydratase of Escherichia coli. Patil RV, et al. **J Bacteriol** 1989 Jun; 171(6):3379–84

GENETICS

Physical identification of an internal promoter, ilvAp, in the distal portion of the ilvGMEDA operon. Lopes JM, et al. **Gene** 1989;76(2):255–69

Molecular characterization of the tdc operon of Escherichia coli K-12. Goss TJ, et al. **J Bacteriol** 1988 Nov; 170(11):5352-9

Genetic analysis of the tdcABC operon of Escherichia coli K-12. Schweizer HP, et al. **J Bacteriol** 1988 Nov; 170(11):5360-3

Human liver serine dehydratase. cDNA cloning and sequence homology with hydroxyamino acid dehydratases from other sources. Ogawa H, et al. **J Biol Chem** 1989 Sep 25; 264(27):15818-23

METABOLISM

Photoaffinity labeling of the allosteric AMP site of biodegradative threonine dehydratase of Escherichia coli with 8-azido-AMP. Patil RV, et al. **Eur J Biochem** 1988 Nov 15;177(3):569-74

THREONYL T RNA SYNTHETASE see under **AMINO ACYL T RNA SYNTHETASES**

THROAT see **PHARYNX**

THROMBASE see **THROMBIN**

THROMBASTHENIA see under **BLOOD PLATELET DISORDERS**

THROMBELASTOGRAPHY

Analysis of thromboelastogram on coagulation and fibrinolysis. Wang M, et al. **Biorheology** 1988;25(3):539-44

Characterization and anticoagulant properties of rodent sublingual gland extracts. Menghi G, et al. **Cell Mol Biol** 1988;34(3):279-86

The thromboelastogram and circulating lupus anticoagulant. Confino E, et al. **J Reprod Med** 1989 Apr;34(4):289-91

Species-related differences of blood coagulation on polymer surfaces, evaluated by means of thrombelastography. Schulze T, et al. **Life Support Syst** 1983;1 Suppl 1:231-4

Material thrombelastography: an assessment of phosphorylcholine compounds as models for biomaterials. Bird RR, et al. **Thromb Res** 1988 Sep 1;51(5):471-83

[Preliminary experiences with the use of thrombelastography during surgical considerations] Leitner R, et al. **Klin Med Osterr Z Wiss Prakt Med** 1967;22(12):559-63 (Ger)

INSTRUMENTATION

A new in-vitro thrombogenicity test: resonance-thrombography in comparison with material-thrombelastography. Sprengel H, et al. **Life Support Syst** 1983;1 Suppl 1:235-8

Comparison of Thromboelastograph and Sonoclot coagulation analyzer for assessing coagulation status during orthotopic liver transplantation. Chapin JW, et al. **Transplant Proc** 1989 Jun;21(3):3539

THROMBIN

Transantral repair of cerebrospinal fluid fistulas using bone chips, Tisseel, fascia and plaster of Paris. Olofsson J, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:89-92

Use of fibrin glue in sucrose gap method. Tuganowski W, et al. **Acta Physiol Pol** 1988 Jul-Aug;39(4):307-10

Small-angle X-ray scattering studies of fibrin film: comparisons of fine and coarse films prepared with thrombin and ancrod. Müller MF, et al. **Biopolymers** 1989 May;28(5):1011-8

Expression in Escherichia coli of the human fibrinogen B beta chain and its cleavage by thrombin. Bolyard MG, et al. **Blood** 1989 Apr;73(5):1202-6

Expression of a fibrinogen fusion peptide in Escherichia coli: a model thrombin substrate for structure/function analysis. Lord ST, et al. **Blood** 1989 Jan;73(1):166-71

Thrombin-induced increase in surface expression of epitopes on platelet membrane glycoprotein IIb/IIIa complex and GMP-140 is a function of platelet age. Savage B, et al. **Blood** 1989 Aug 15;74(3):1007-14

Association of fibrinogen with human platelets pretreated with chymotrypsin or aggregated with ADP or thrombin: an immunocytochemical study. Suzuki H, et al. **Br J Exp Pathol** 1989 Aug;70(4):479-88

Microvascular anastomosis using polyethylene glycol 4000 and fibrin glue. Kamiji T, et al. **Br J Plast Surg** 1989 Jan; 42(1):54-8

Rectal anastomosis with application of luminal fibrin adhesive in the rectum of dogs. An experimental study. Hjortrup A, et al. **Dis Colon Rectum** 1989 May;32(5):422-5

Influence of hirudin on the thrombin-induced release of tissue plasminogen activator from isolated perfused pig ear. Klöcking HP, et al. **Folia Haematol (Leipz)** 1988; 115(1-2):110-2

Reactivity of mouse antibodies against bromelain-treated mouse erythrocytes with thrombin-treated mouse platelets. Kawaguchi S. **Immunology** 1989 Mar;66(3):335-8

The use of fibrin adhesive in the repair of chondral and osteochondral injuries. Kaplonyi G, et al. **Injury** 1988 Jul; 19(4):267-72

Application of single-donor fibrin glue to burns. Stuart JD, et al. **J Burn Care Rehabil** 1988 Nov-Dec;9(6):619-22

Fibrin glue as cement for HA-granules. Wittkampf AR. **J Craniomaxillofac Surg** 1989 May;17(4):179-81

IL-1 and related cytokines enhance thrombin-stimulated PGI2 production in cultured endothelial cells without affecting thrombin-stimulated von Willebrand factor secretion or platelet-activating factor biosynthesis. Zavoico GB, et al. **J Immunol** 1989 Jun 1;142(11):3993-9

Human D-Phe-Pro-Arg-CH2-alpha-thrombin crystallization and diffraction data. Skrzypczak-Jankun E, et al. **J Mol Biol** 1989 Apr 20;206(4):755-7

Origin of HA-fibrin glue mixture for ridge augmentation [letter] Bochlogyros PN. **J Oral Maxillofac Surg** 1989 Aug; 47(8):891

Esophageal atresia—a rabbit model to study anastomotic healing and the use of tissue adhesive fibrin sealant. Blair GK, et al. **J Pediatr Surg** 1988 Aug;23(8):740-3

Randomized clinical trial of fibrin sealant in patients undergoing resternotomy or reoperation after cardiac operations. A multicenter study. Rousou J, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):194-203

Fibrin glue sealing of polytetrafluoroethylene vascular graft anastomoses: comparison with oxidized cellulose. Kram HB, et al. **J Vasc Surg** 1988 Nov;8(5):563-8

Autologous and homologous fibrinogen sealants: adhesive strength. Laitakari K, et al. **Laryngoscope** 1989 Sep; 99(9):974-6

Adhesives in larynx repair. Lyons MB, et al. **Laryngoscope** 1989 Apr;99(4):376-81

Control of intraoperative hemorrhage in gynecology with the use of fibrin glue. Malviya VK, et al. **Obstet Gynecol** 1989 Feb;73(2):284-6

Evaluation of dural closure techniques. Suture methods, fibrin adhesive sealant, and cyanoacrylate polymer. Cain JE Jr, et al. **Spine** 1988 Jul;13(7):720-5

Use of fibrin glue as a substrate for in vitro endothelialization of PTFE vascular grafts. Zilla P, et al. **Surgery** 1989 Apr; 105(4):515-22

Effect of lupus anticoagulant on antithrombogenic properties of endothelial cells--inhibition of thrombomodulin-dependent protein C activation. Cariou R, et al. **Thromb Haemost** 1988 Aug 30;60(1):54-8

Inhibition of thrombin-induced platelet aggregation by myristic acid. Fukamachi N, et al. **Thromb Res** 1988 Nov 1;52(3):227-35

[Tissucol in septorhinoplasties] Pech A, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(8):629-34 (Eng. Abstr.) (Fre)

[Initial results of a possible biological bone substitute. An experimental study] de Palacios y Carvajal J, et al. **Bull Acad Natl Med (Paris)** 1988 Nov;172(8):1205-11 (Fre)

[Fibrin sealant: personal experience in general surgical practice] Eppinger S, et al. **Chir Ital** 1988 Aug-Oct; 40(4-5):340-4 (Eng. Abstr.) (Ita)

[Experimental study on the use of fibrin glue in vascular microsurgery] Cerillo A, et al. **Minerva Chir** 1988 Aug 31; 43(15-16):1261-5 (Eng. Abstr.) (Ita)

[Human fibrin glue in colorectal surgery] Rodolico G, et al. **Minerva Chir** 1988 Oct 31;43(20):1687-93 (Eng. Abstr.) (Ita)

[Fibrin glue in surgery (a review of the literature)] Fedorov VD, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):122-4 (25 ref.) (Rus)

[Use of fibrin glue in surgery of parenchymatous organs] Gigauri VS, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):89-93 (Eng. Abstr.) (Rus)

[Fibrin glue in surgery is a simple and time-saving technic] Zederfeldt B, et al. **Lakartidningen** 1989 May 17;86(20):1887 (Swe)

ADMINISTRATION & DOSAGE

Randomized trial of fibrin adhesive for reduction of drained secretion after elective cholecystectomy. Dimo B, et al. **Acta Chir Scand** 1989 Mar;155(3):177-8

A technique for spot application of fibrin glue during open heart operations. Garcia-Rinaldi R, et al. **Ann Thorac Surg** 1989 Jan;47(1):59-61

A method of applying fibrin sealant using an atomizing needle. Joyce DH, et al. **Ann Thorac Surg** 1989 Feb; 47(2):320

Hemostasis of solid viscus trauma by intraparenchymal injection of fibrin glue. Hauser CJ. **Arch Surg** 1989 Mar; 124(3):291-3

Treatment of hemoptysis patients by thrombin and fibrinogen-thrombin infusion therapy using a fiberoptic bronchoscope. Tsukamoto T, et al. **Chest** 1989 Sep; 96(3):473-6

Bronchial infusion therapy (BIT). A bit of caution [editorial] Walsh TE. **Chest** 1989 Sep;96(3):456-7

Anterior cervical arthrodesis with heterologous bone graft and human fibrin glue in the surgical treatment of myelopathy due to spondylosis. Preliminary note. Fortuna A, et al. **Clin Neurol Neurosurg** 1988;90(2):125-9

Endaural extracranial repair for cerebrospinal otorrhoea with human fibrin glue: technical note. Ferrante L, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1438-40

Benefit of fibrin sealing in great vessel surgery. Jakob H, et al. **Life Support Syst** 1983;1 Suppl 1:368-72

Pancreatic duct occlusion in the management of acute necrotizing pancreatitis in a canine model. Torino F, et al. **Mt Sinai J Med** 1989 Mar;56(2):79-82

Intermittent intraocular thrombin as an adjunct to vitrectomy. Maxwell DP Jr, et al. **Ophthalmic Surg** 1989 Feb;20(2):108-11

Wound hematoma: prophylaxis with topical thrombin. Roberts WS, et al. **South Med J** 1989 May;82(5):607-9

Sclerotherapy of esophageal varices by consecutive injection of anhydrous ethanol: 1% polydocanol and thrombin. Kumagai Y, et al. **Surg Endosc** 1987;1(1):29-32

Fibrin glue in renal and ureteral trauma. Kram HB, et al. **Urology** 1989 Mar;33(3):215-8

A new technical of liver biopsy with plugging of the needle track using a double channel biopsy device. An experimental study. Zatloukal K, et al. **Z Gastroenterol** 1988 Nov;26(11):699-703

[Protection of the pancreatico-digestive anastomosis following resection of the head of the pancreas by pancreatic duct occluion with fibrin (-glue). Animal experiment and clinical experiences] Waclawiczek HW, et al. **Chirurg** 1989 Jun;60(6):403-9 (Eng. Abstr.) (Ger)

[Fibrin glue injection—a hemostatic technic after laparoscopic liver biopsy] Thiele H, et al. **Dtsch Med Wochenschr** 1989 Aug 4;114(31-32):1196-8 (Eng. Abstr.) (Ger)

[Management of conjunctival wounds with suture or fibrin glue following intraocular lens implantation—a comparative study] Mellin KB, et al. **Fortschr Ophthalmol** 1989;86(2):129-31 (Eng. Abstr.) (Ger)

[Canaliculo-cystostomy using the fibrin glue technic] Steinkogler FJ, et al. **Fortschr Ophthalmol** 1989;86(1):76-7 (Eng. Abstr.) (Ger)

[Marshall-Marchetti-Krantz operation with fibrin gluing. Results after 2 years] Stolz W, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):564-7 (Eng. Abstr.) (Ger)

[Is there a preference among fibrin glues for nerve anastomosis?] Herter T. **HNO** 1989 Jun;37(6):255-8 (Eng. Abstr.) (Ger)

[The effect of fibrin glue on the healing of hydroxyapatite ceramics. An animal experiment study] Reck R, et al. **HNO** 1989 Mar;37(3):112-6 (Eng. Abstr.) (Ger)

[Experimental transvitreal fibrin gluing of the retina] Emmerich KH, et al. **Klin Monatsbl Augenheilkd** 1989 Jan; 194(1):42-7 (Eng. Abstr.) (Ger)

[Human fibrin glue as a new therapeutic concept in cyclophosphamide-induced cystitis and macrohematuria] Müller-Mattheis V, et al. **Klin Padiatr** 1988 May-Jun; 200(3):274-8 (Eng. Abstr.) (Ger)

[Spontaneous splenic rupture in infectious mononucleosis—organ-sparing operation using fibrin glue] Ormann W, et al. **Langenbecks Arch Chir** 1988;373(4):240-2 (Eng. Abstr.) (Ger)

[Occlusion therapy in chronic recurrent parotitis? A report of clinical experiences with the use of a fibrin glue-gentamycin mixture] Laskawi R, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):367-8 (Eng. Abstr.) (Ger)

[Fibrin glue and tricalcium phosphate implants in middle ear surgery. An animal experiment study] Reck R, et al. **Laryngorhinootologie** 1989 Mar;68(3):152-6 (Eng. Abstr.) (Ger)

[Do fibrin glue sleeves produce fibrosis in transplanted nerves?] Herter T, et al. **Neurochirurgia (Stuttg)** 1989 Jan; 32(1):16-20 (Eng. Abstr.) (Ger)

[Fibrin glue pleurodesis in recurrent malignant pleural effusions] Gust R, et al. **Pneumologie** 1989 Feb;43(2):85-7 (Eng. Abstr.) (Ger)

[Fibrin gluing in spontaneous pneumothorax] Kaiser D. **Pneumologie** 1989 Feb;43(2):101-4 (Eng. Abstr.) (Ger)

[Proposal of a new method in the medical treatment of thyroid cysts] Grandi M, et al. **Clin Ter** 1988 Sep 15; 126(5):329-34 (Eng. Abstr.) (Ita)

ANALYSIS

Strong activity of acid-stable trypsin inhibitor in bovine thrombin for clinical use. Sumi H, et al. **Clin Chim Acta** 1988 Sep 30;177(1):21-9

Determination of human thrombin-antithrombin III complex by enzyme immunoassay. Heimburger N, et al. **Folia Haematol (Leipz)** 1988;115(3):269-73

Evidence for a relationship between high fibrinogen levels and decreased thrombin activity in vivo in elderly subjects. Marongiu F, et al. **Haemostasis** 1989;19(2):91-3

Determination of thrombin activity in pharmaceutical forms by RP-HPLC. Scalia S, et al. **Pharm Acta Helv** 1988; 63(8):224-6

[Hemostatic tests for the diagnosis of thrombosis. Activated coagulation and fibrinolytic factors. Detection of the protease/inhibitor complex] Iijima K. **Rinsho Byori** 1988 Jun;36(6):623-6 (Jpn)

[Affinity chromatography of human gamma-thrombin on fibrin-agarose] Shvachko LP, et al. **Ukr Biokhim Zh** 1988 Jul-Aug;60(4):24-9 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

Kinetics of heparin action. Shore JD, et al. **Ann N Y Acad Sci** 1989;556:75-80

Unfractionated heparin inhibits thrombin-catalysed amplification reactions of coagulation more efficiently than those catalysed by factor Xa. Ofosu FA, et al. **Biochem J** 1989 Jan 1;257(1):143-50

Effect of heparin on the glia-derived-nexin-thrombin interaction. Wallace A, et al. **Biochem J** 1989 Jan 1; 257(1):191-6

Use of site-directed mutagenesis to investigate the basis for the specificity of hirudin. Braun PJ, et al. **Biochemistry** 1988 Aug 23;27(17):6517–22

The molecular-mass dependence of dextran sulfate enhancement of inactivation of thrombin and fibrinogen and on factor Xa neutralization by antithrombin III. Oshima G. **Biol Chem Hoppe Seyler** 1989 Jul;370(7):715–21

A form of protease nexin I is expressed on the platelet surface during platelet activation. Gronke RS, et al. **Blood** 1989 Feb;73(2):472–8

Relationship between ex vivo anti-proteinase (factor Xa and thrombin) assays and in vivo anticoagulant effect of very low molecular weight heparin, CY222. Tew CJ, et al. **Br J Haematol** 1988 Nov;70(3):335–40

Thrombin-induced endothelium-dependent relaxation and its inhibition by LDL in porcine coronary arteries. Inoue Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4626–9

Effects of thrombin inhibition on the development of acute platelet-thrombus deposition during angioplasty in pigs. Heparin versus recombinant hirudin, a specific thrombin inhibitor. Heras M, et al. **Circulation** 1989 Mar;79(3):657–65

Inhibition of fibrinolytic enzymes by thrombin inhibitors. Gilboa N, et al. **Enzyme** 1988;40(2–3):144–8

Experimental oral anticoagulation by a directly acting thrombin inhibitor (RGH-2958). Bagdy D, et al. **Folia Haematol (Leipz)** 1988;115(1–2):136–40

The contractile response of vascular smooth muscle to thrombin and its inhibition by thrombin inhibitors. Glusa E, et al. **Folia Haematol (Leipz)** 1988;115(1–2):94–100

Antithrombotic and haemorrhagic effects of the naturally occurring thrombin inhibitor hirudin. Kaiser B, et al. **Folia Haematol (Leipz)** 1988;115(1–2):41–6

Effects of site specific amino acid exchanges in hirudin on the thrombin-hirudin interaction. Köhler S, et al. **Folia Haematol (Leipz)** 1988;115(1–2):24–9

Are factor Xa inhibitors superior to thrombin inhibitors in anticoagulation? Stürzebecher J, et al. **Folia Haematol (Leipz)** 1988;115(1–2):152–6

Hirudin as a diagnostic agent. Walsmann P. **Folia Haematol (Leipz)** 1988;115(1–2):36–40 (28 ref.)

Comparative assays of the chemotoxicity of iodinated radiographic contrast media based on impairment of fibrin antithrombin activity. Schulze B, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:21–3

X-ray analysis of a thrombin inhibitor-trypsin complex. Matsuzaki T, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):949–52

Antithrombin activity of fucoidan. The interaction of fucoidan with heparin cofactor II, antithrombin III, and thrombin. Church FC, et al. **J Biol Chem** 1989 Feb 25; 264(6):3618–23

The use of thrombin inhibitors and aprotinin in the preservation of platelets stored for transfusion. Bode AP, et al. **J Lab Clin Med** 1989 Jun;113(6):753–8

Anticoagulant effects of heparin in neonatal plasma. Schmidt B, et al. **Pediatr Res** 1989 Apr;25(4):405–8

Pharmacological characterization of a new structural variant of 4-amidinophenylalanine amide-type synthetic thrombin inhibitor. Hauptmann J, et al. **Pharmazie** 1989 Apr; 44(4):282–4

Fibrin monomer protects thrombin from inactivation by heparin-antithrombin III: implications for heparin efficacy. Hogg PJ, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3619–23

Point mutations modifying the thrombin inhibition kinetics and antithrombotic activity in vivo of recombinant hirudin. Degryse E, et al. **Protein Eng** 1989 Mar;2(6):459–65

An approach to assigning in vitro potency to unfractionated and low molecular weight heparins based on the inhibition of prothrombin activation and catalysis of thrombin inhibition. Ofosu FA, et al. **Thromb Haemost** 1988 Oct 31; 60(2):193–8

Effect of rabbit thrombomodulin on thrombin inhibition by antithrombin in the presence of heparin. Bourin MC. **Thromb Res** 1989 Apr 1;54(1):27–39

Neutralization of thrombin by antithrombin III in the presence of cultured human fibroblasts. Brandt JT, et al. **Thromb Res** 1988 Jul 15;51(2):187–96

Effect of synthetic thrombin inhibitor (MD805) as an alternative drug on heparin induced thrombocytopenia during hemodialysis. Matsuo T, et al. **Thromb Res** 1988 Oct 15;52(2):165–71

Dissociation of the thrombin/antithrombin III reaction from amidolytic activity of the enzyme at high salt concentration. Oshima G. **Thromb Res** 1989 May 1; 54(3):225–35

Synthetic inhibitors of bovine factor Xa and thrombin comparison of their anticoagulant efficiency. Stürzebecher J, et al. **Thromb Res** 1989 May 1;54(3):245–52

[The use of the specific thrombin inhibitor hirudin in diagnostic and biochemical studies] Walsmann P. **Pharmazie** 1988 Nov;43(11):737–44 (218 ref.) **(Ger)**

[Effects of ulinastatin on alpha-thrombin and the activation of protein C and factor XIII induced by thrombin] Fukutake K, et al. **Rinsho Byori** 1989 Apr;37(4):416–20 **(Jpn)**

[The immunoregulator alpha-1-thymosin as an inhibitor of alpha thrombin enzymatic activity] Strukova SM, et al. **Dokl Akad Nauk SSSR** 1989 May-Jun;306(1):229–32 **(Rus)**

BIOSYNTHESIS

Increased thrombin generation in normal pregnancy. Pinto S, et al. **Acta Eur Fertil** 1988 Sep-Oct;19(5):263–7

Thrombin and plasmin generation in patients with liver disease. Takahashi H, et al. **Am J Hematol** 1989 Sep; 32(1):30–5

Enhanced thrombin generation in normal and hypertensive pregnancy. de Boer K, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):95–100

Deendothelialization in vivo initiates a thrombogenic reaction at the rabbit aorta surface. Correlation of uptake of fibrinogen and antithrombin III with thrombin generation by the exposed subendothelium. Hatton MW, et al. **Am J Pathol** 1989 Sep;135(3):499–508

Increased intraglomerular thrombin formation in diabetic microangiopathy. Tada H, et al. **Diabetes Res Clin Pract** 1989 Aug 1;7(2):121–5

Enhanced thrombin generation and platelet binding on herpes simplex virus-infected endothelium. Visser MR, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8227–30

Regulation of thrombin generation at cell surfaces. Tracy PB. **Semin Thromb Hemost** 1988 Jul;14(3):227–33 (58 ref.)

The effect of trace amounts of tissue factor on thrombin generation in platelet rich plasma, its inhibition by heparin. Béguin S, et al. **Thromb Haemost** 1989 Feb 28;61(1):25–9

The mode of action of low molecular weight heparin preparation (PK10169) and two of its major components on thrombin generation in plasma. Béguin S, et al. **Thromb Haemost** 1989 Feb 28;61(1):30–4

Meizothrombin, a major product of factor Xa-catalyzed prothrombin activation. Rosing J, et al. **Thromb Haemost** 1988 Dec 22;60(3):355–60 (34 ref.)

Systemic effects of tissue plasminogen activator-associated fibrinolysis and its relation to thrombin generation in orthotopic liver transplantation. Porte RJ, et al. **Transplantation** 1989 Jun;47(6):978–84

[Increased thrombin synthesis in patients with fulminant hepatic failure and its treatment with antithrombin III evaluated by plasma levels of thrombin-antithrombin III complex] Tomiya T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2473 **(Jpn)**

BLOOD

Laboratory and clinical evaluation of an assay of thrombin-antithrombin III complexes in plasma. Hoek JA, et al. **Clin Chem** 1988 Oct;34(10):2058–62

DIAGNOSTIC USE

[Platelet activation during exacerbation of bronchial asthma—thrombin induced ATP release from washed platelets and plasma beta-TG, PF4, beta-TG/PF4 ratio] Yasuba H, et al. **Arerugi** 1988 Dec;37(12):1152–60 (Eng. Abstr.) **(Jpn)**

GENETICS

Identification of the primary structural defect in the dysthrombin thrombin Quick I: substitution of cysteine for arginine-382. Henriksen RA, et al. **Biochemistry** 1988 Dec 27;27(26):9160–5

IMMUNOLOGY

Antibodies to thrombin in postsurgical patients [letter] Flaherty MJ, et al. **Blood** 1989 Apr;73(5):1386

Acquired protein C deficiency in a patient with primary antiphospholipid syndrome. Relationship to reactivity of anticardiolipin antibody with thrombomodulin. Ruiz-Arguelles GJ, et al. **J Rheumatol** 1989 Mar; 16(3):381–3

ISOLATION & PURIFICATION

A study on the properties of commercial thrombin preparations. Suzuki S, et al. **Thromb Res** 1989 Feb 1; 53(3):271–7

Gyroxin, a toxin from the venom of Crotalus durissus terrificus, is a thrombin-like enzyme. Alexander G, et al. **Toxicon** 1988;26(10):953–60

METABOLISM

Neutrophil elastase, thrombin and plasmin in septic shock. Seitz R, et al. **Adv Exp Med Biol** 1988;240:481–4

Measurement of the affinities of heparins, naturally occurring glycosaminoglycans, and other sulfated polymers for antithrombin III and thrombin. Dawes J. **Anal Biochem** 1988 Oct;174(1):177–86

Thrombin anion-binding exosite interactions with heparin and various polyanions. Fenton JW 2d, et al. **Ann N Y Acad Sci** 1989;556:158–65 (44 ref.)

Analysis of the secondary structure of hirudin and the mechanism of its interaction with thrombin. Konno S, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):158–66

Thrombin binding to platelets from hypercholesterolaemic rats. Winocour PD, et al. **Atherosclerosis** 1988 Oct; 73(2–3):215–21

Stability of the thrombin-thrombomodulin complex on the surface of endothelial cells from human saphenous vein or from the cell line EA.hy 926. Beretz A, et al. **Biochem J** 1989 Apr 1;259(1):35–40

Active site selective labeling of serine proteases with spectroscopic probes using thioester peptide chloromethyl ketones: demonstration of thrombin labeling using N alpha-[(acetylthio)acetyl]-D-Phe-Pro-Arg-CH2Cl. Bock PE. **Biochemistry** 1988 Aug 23;27(17):6633–9

Anion-binding exosite of human alpha-thrombin and fibrin(ogen) recognition. Fenton JW 2d, et al. **Biochemistry** 1988 Sep 6;27(18):7106–12

Substitution of valine for glycine-558 in the congenital dysthrombin thrombin Quick II alters primary substrate specificity. Henriksen RA, et al. **Biochemistry** 1989 Mar 7;28(5):2078–82

Subunit structure of thrombin-activated porcine factor VIII. Lollar P, et al. **Biochemistry** 1989 Jan 24;28(2):666–74

Interaction of hirudin with thrombin: identification of a minimal binding domain of hirudin that inhibits clotting activity. Mao SJ, et al. **Biochemistry** 1988 Oct 18; 27(21):8170–3

High-resolution NMR studies of fibrinogen-like peptides in solution: interaction of thrombin with residues 1–23 of the A alpha chain of human fibrinogen. Ni F, et al. **Biochemistry** 1989 Apr 4;28(7):3082–94

High-resolution NMR studies of fibrinogen-like peptides in solution: structure of a thrombin-bound peptide corresponding to residues 7–16 of the A alpha chain of human fibrinogen. Ni F, et al. **Biochemistry** 1989 Apr 4; 28(7):3094–105

Binding of the bovine basic pancreatic trypsin inhibitor (Kunitz) to human alpha-, beta- and gamma-thrombin; a kinetic and thermodynamic study. Ascenzi P, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):156–61

Free factor Xa is on the main pathway of thrombin generation in clotting plasma. Hemker HC, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):409–11

Expression of human erythrocyte NADH-cytochrome b5 reductase as an alpha-thrombin-cleavable fused protein in Escherichia coli. Shirabe K, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):189–92

Association of thrombin, plasmin, thrombin-antithrombin III complex and plasmin-antithrombin III complex with isolated hepatocytes. Spolarics Z, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):231–6

Adsorption of plasma proteins onto anticoagulant polystyrene derivatives: a fluorescence study. Dulos E, et al. **Biomaterials** 1988 Sep;9(5):405–12

Heparin-like tubings. III. Kinetics and mechanism of thrombin, antithrombin III and thrombin-antithrombin complex adsorption under controlled-flow conditions. Migonney V, et al. **Biomaterials** 1988 Sep;9(5):413–8

Activity toward thrombin-antithrombin of heparin immobilized on two hydrogels. Tay SW, et al. **Biomaterials** 1989 Jan;10(1):11–5

A comparison of phospholipid and platelets in the activation of human factor VIII by thrombin and factor Xa, and in the activation of factor X. Neuenschwander P, et al. **Blood** 1988 Nov;72(5):1761–70

In situ-generated thrombin is the only enzyme that effectively activates factor VIII and factor V in thromboplastin-activated plasma. Pieters J, et al. **Blood** 1989 Aug 15;74(3):1021–4

Thrombin and plasmin activity in coronary artery disease. Small M, et al. **Br Heart J** 1988 Sep;60(3):201–3

Involvement of platelet membrane glycoprotein Ib and glycoprotein IIb/IIIa complex in thrombin-dependent and -independent platelet aggregations induced by tumor cells. Kitagawa H, et al. **Cancer Res** 1989 Feb 1;49(3):537–41

An automated approach to characterize, in simple kinetic terms, the generation and inactivation of thrombin and the interaction of fibrinogen with thrombin. Hoak DR, et al. **Clin Chem** 1988 Oct;34(10):1971–5

Lack of effect of acitretin on the hypothrombinemic action of phenprocoumon in healthy volunteers. Hartmann D, et al. **Dermatologica** 1989;178(1):33–6

Acute changes in blood glucose concentration do not promote thrombin generation or fibrin breakdown in type 1 diabetes. Grant PJ, et al. **Diabetic Med** 1988 Dec; 5(9):867–70

Anti-thrombin activity in cultured aortic and capillary endothelial cells: binding, internalization and degradation of thrombin. Savion N, et al. **Eur J Cell Biol** 1989 Aug; 49(2):350–7

The disturbance of hemostasis in septic shock: role of neutrophil elastase and thrombin, effects of antithrombin III and plasma substitution. Seitz R, et al. **Eur J Haematol** 1989 Jul;43(1):22–8

Covalent binding of human thrombin to a human endothelial cell-associated protein. Leroy-Viard K, et al. **Exp Cell Res** 1989 Mar;181(1):1–10

Intensity of thrombin activity and surgical trauma. Lučić A, et al. **Folia Haematol (Leipz)** 1988;115(3):329–32

Thrombin activity and oral anticoagulant therapy: a preliminary study. Marongiu F, et al. **Haemostasis** 1989; 19(3):142–6

Functionally active thrombomodulin is present in human platelets. Suzuki K, et al. **J Biochem (Tokyo)** 1988 Oct; 104(4):628–32

Biochemical characterization of the human complement protein C6. Association with alpha-thrombin-like enzyme and absence of serine protease activity in cytolytically active C6. Chakravarti DN, et al. **J Biol Chem** 1988 Dec 5;263(34):18306–12

The hirudin-binding site of human alpha-thrombin. Identification of lysyl residues which participate in the

combining site of hirudin–thrombin complex. Chang JY. **J Biol Chem** 1989 May 5;264(13):7141–6

Macromolecular specificity determinants on thrombin for fibrinogen and thrombomodulin. Jakubowski HV, et al. **J Biol Chem** 1989 Jul 5;264(19):11117–21

The active site of the thrombin–thrombomodulin complex. A fluorescence energy transfer measurement of its distance above the membrane surface. Lu RL, et al. **J Biol Chem** 1989 Aug 5;264(22):12956–62

A domain composed of epidermal growth factor–like structures of human thrombomodulin is essential for thrombin binding and for protein C activation. Suzuki K, et al. **J Biol Chem** 1989 Mar 25;264(9):4872–6

Permeability of a heparin–polyvinyl alcohol hydrogel to thrombin and antithrombin III. Smith BA, et al. **J Biomed Mater Res** 1988 Aug;22(8):673–85

Biological action of colorless and yellow solutions of gold sodium thiomalate on thrombin activity and the mixed lymphocyte reaction. Kean WF, et al. **J Pharm Sci** 1988 Dec;77(12):1033–6

Gene structure of human thrombomodulin, a thrombin receptor on endothelium acting as a cofactor for thrombin–catalyzed activation of protein C. Suzuki K. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1655–64 (39 ref.)

Sequence of a cDNA for mouse thrombomodulin and comparison of the predicted mouse and human amino acid sequences. Dittman WA, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):802

A thrombin binding assay for 125I–hirudin. Richter M, et al. **Pharmazie** 1988 May;43(5):369–70

Differential proteolytic activation of factor VIII–von Willebrand factor complex by thrombin. Hill–Eubanks DC, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6508–12

The role of thrombomodulin in the regulation of hemostatic interactions. Thompson EA, et al. **Prog Hematol** 1987; 15:51–70 (60 ref.)

Thrombomodulin. Esmon NL. **Prog Hemost Thromb** 1989; 9:29–55 (1204 ref.)

Efficient cleavage by alpha–thrombin of a recombinant fused protein which contains insulin–like growth factor I. Nishikawa S, et al. **Protein Eng** 1987 Dec;1(6):487–92

The specific binding of thrombin to human polymorphonuclear leucocytes. Sonne O. **Scand J Clin Lab Invest** 1988 Dec;48(8):831–8

Interaction of thrombin and factor Xa with bovine vascular endothelial cells, smooth muscle cells and rat hepatoma cells. Dryjski M, et al. **Thromb Haemost** 1988 Oct 31; 60(2):148–52

Thrombin–independent activation of platelet factor XIII by endogenous platelet acid protease. Lynch GW, et al. **Thromb Haemost** 1988 Jun 16;59(3):372–7

Modulation of heparin cofactor II function by S protein (vitronectin) and formation of a ternary S protein–thrombin–heparin cofactor II complex. Preissner KT, et al. **Thromb Haemost** 1988 Dec 22;60(3):399–406

Increased thrombin activity during thrombolysis [letter] Seitz R, et al. **Thromb Haemost** 1988 Jun 16;59(3):541–2

Modification of human thrombin: effect on thrombomodulin binding. Thompson EA, et al. **Thromb Haemost** 1988 Jun 16;59(3):415–20

Characterization of the binding of bovine thrombin to isolated rat hepatocytes. Weyer B, et al. **Thromb Haemost** 1988 Dec 22;60(3):419–27

Prevention of thrombin/antithrombin III reaction in the presence of protamine or polybrene. Oshima G. **Thromb Res** 1988 Sep 15;51(6):565–74

[Antibioprophylaxis in surgery: value of the diffusion of antibiotics into the fibrin clot] Chanu B, et al. **Agressologie** 1988 Mar;29(3):151–5 (Eng. Abstr.) **(Fre)**

[Enzymatic properties of the isolated B–chain of human thrombin] Serefskaia AA, et al. **Biokhimiia** 1989 Apr; 54(4):542–8 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Occlusion of experimental artery aneurysms by intrasaccular injection of fibrin sealant. Moringlane JR, et al. **Acta Neurochir Suppl (Wien)** 1988;43:193–7

Intracameral thrombin and the corneal endothelium. McDermott ML, et al. **Am J Ophthalmol** 1988 Oct 15; 106(4):414–22

Increased transvascular protein transport in lungs induced by nonthrombogenic gamma–thrombin. Garcia–Szabo RR, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1690–6

Phallacidin prevents thrombin–induced increases in endothelial permeability to albumin. Phillips PG, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C562–7

Effects of fibrin sealant on incorporation of autograft and xenograft tendons within bone tunnels. A preliminary study. Shoemaker SC, et al. **Am J Sports Med** 1989 May–Jun;17(3):318–24

Effects of glycosaminoglycans and protamine chloridrate on platelet aggregation induced by collagen and thrombin. Luzzatto G, et al. **Angiology** 1989 Mar;40(3):170–4

Thrombin–induced platelet aggregation involves an indirect proteolytic cleavage of aggregin by calpain. Puri RN, et al. **Arch Biochem Biophys** 1989 Jun;271(2):346–58

Passage of low density lipoproteins through monolayers of human arterial endothelial cells. Effects of vasoactive substances in an in vitro model. Langeler EG, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):550–9

Vitronectin is phosphorylated by a cAMP–dependent protein kinase released by activation of human platelets with thrombin. Korc–Grodzicki B, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1131–8

Phorbol ester treatment inhibits thrombin but not stable GTP analogue–induced platelet granule secretion despite inhibition of phosphatidate formation with both agonists. Krishnamurthi S, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1257–64

Cleavage of a 100 kDa membrane protein (aggregin) during thrombin–induced platelet aggregation is mediated by the high affinity thrombin receptors. Puri RN, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1017–24

Phosphatidylethanol formation in human platelets: evidence for thrombin–induced activation of phospholipase D. Rubin R. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1090–6

Thrombin induced platelet adhesion to endothelium is modified by endothelial derived relaxing factor (EDRF). Venturini CM, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):349–54

Altered properties of platelet membrane in childhood obesity. Tangorra A, et al. **Biochem Int** 1988 Nov;17(5):837–46

Involvement of inositol 1,4,5–trisphosphate in Ca2+ influx in thrombin stimulated human platelets. Uemura Y, et al. **Biochem Int** 1989 Feb;18(2):335–41

Tb(III)–ion–binding–induced conformational changes in platelet factor XIII. Achyuthan KE, et al. **Biochem J** 1989 Jan 15;257(2):331–8

Action of guanosine 5'–[beta–thio]diphosphate on thrombin–induced activation and Ca2+ mobilization in saponin–permeabilized and intact human platelets. Authi KS, et al. **Biochem J** 1988 Nov 1;255(3):885–93

Arachidonate cannot be released directly from diacyl–sn–glycero–3–phosphocholine in thrombin–stimulated platelets. Colard O, et al. **Biochem J** 1989 Apr 15;259(2):333–9

Evidence that agonists stimulate bivalent–cation influx into human endothelial cells. Hallam TJ, et al. **Biochem J** 1988 Oct 1;255(1):179–84

Thrombin exerts a dual effect on stimulated adenylate cyclase in hamster fibroblasts, an inhibition via a GTP–binding protein and a potentiation via activation of protein kinase C. Magnaldo I, et al. **Biochem J** 1988 Aug 1;253(3):711–9

Receptor–mediated calcium entry in fura–2–loaded human platelets stimulated with ADP and thrombin. Dual–wavelengths studies with Mn2+. Sage SO, et al. **Biochem J** 1989 Mar 15;258(3):923–6

Activation of Na+/H+ exchange and Ca2+ mobilization start simultaneously in thrombin–stimulated platelets. Evidence that platelet shape change disturbs early rises of BCECF fluorescence which causes an underestimation of actual cytosolic alkalinization. Siffert W, et al. **Biochem J** 1989 Mar 1;258(2):521–7

Synergism between thrombin and adrenaline (epinephrine) in human platelets. Marked potentiation of inositol phospholipid metabolism. Steen VM, et al. **Biochem J** 1988 Jul 15;253(2):581–6

Does protein kinase C activation mediate thrombin–induced arachidonate release in human platelets? Fuse I, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):54–9

Identification of the molecular species of lysophosphatidic acid produced when platelets are stimulated by thrombin. Gerrard JM, et al. **Biochim Biophys Acta** 1989 Feb 20; 1001(3):282–5

Thrombin–induced activation of calcium transport pathways and their role in platelet functions. Magócsi M, et al. **Biochim Biophys Acta** 1989 Aug 21;984(1):88–96

Rapid modulation of rat adipocyte lipoprotein lipase: effect of calcium, A23187 ionophore, and thrombin. Soma MR, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):307–14

pH sensitivity of the thrombin–induced rise in fructose 2,6–bisphosphate content of human platelets. Vasta V, et al. **Biochim Biophys Acta** 1989 May 10;1011(2–3):165–7

Ca–channel currents in isolated frog ventricular cells are increased by thrombin. Albitz R, et al. **Biomed Biochim Acta** 1989;48(5–6):S350–3

Thrombin regulation of mRNA levels of tissue plasminogen activator and plasminogen activator inhibitor–1 in cultured human umbilical vein endothelial cells. Dichek D, et al. **Blood** 1989 Jul;74(1):222–8

Human platelet–derived mitogens. II. Subcellular localization of insulinlike growth factor I to the alpha–granule and release in response to thrombin. Karey KP, et al. **Blood** 1989 Aug 15;74(3):1093–100

von Willebrand factor biosynthesis and partitioning between constitutive and regulated pathways of secretion after thrombin stimulation. Mayadas T, et al. **Blood** 1989 Feb 15;73(3):706–11

Increased concentrations of heparin cofactor II in diabetic patients, and possible effects on thrombin inhibition assay of antithrombin III. Gram J, et al. **Clin Chem** 1989 Jan; 35(1):52–5

Thrombin–stimulated calcium uptake is altered in platelets from spontaneously hypertensive rats. Effect of external magnesium. Dard B, et al. **Clin Exp Hypertens [A]** 1989; 11(2):295–315

The influence of fibrin sealant on demineralized bone matrix–dependent osteoinduction. A quantitative and qualitative study in rats. Schwarz N, et al. **Clin Orthop** 1989 Jan;(238):282–7

Neomycin inhibits platelet functions and inositol phospholipid metabolism upon stimulation with thrombin, but not with ionomycin or 12–O–tetradecanoyl–phorbol 13–acetate. Tysnes OB, et al. **Eur J Biochem** 1988 Oct 15; 177(1):219–23

Thrombin enhances the release of endothelin from cultured porcine aortic endothelial cells. Schini VB, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):333–4

Growth factors and hormones which affect survival, growth, and differentiation of the MCF–7 stem cells and their descendants. Resnicoff M, et al. **Exp Cell Res** 1989 Mar; 181(1):116–25

Thrombin–induced platelet aggregation is affected by external Na+ independently of the Na+/H+ exchange. Agam G, et al. **FEBS Lett** 1989 Feb 13;244(1):231–6

Potentiation by adrenaline of thrombin–induced elevation of pHi is not essential for synergistic activation of human platelets. Steen VM, et al. **FEBS Lett** 1989 Jul 3; 250(2):211–.

Thrombin induces endothelium–dependent relaxation of pig coronary arteries. Glusa E. **Folia Haematol (Leipz)** 1988; 115(1–2):101–5

The contractile response of vascular smooth muscle to thrombin and its inhibition by thrombin inhibitors. Glusa E, et al. **Folia Haematol (Leipz)** 1988;115(1–2):94–100

The interaction between fibrinogen and 3H–L–arginine cationic peptides derived from fibrosarcoma in the presence of thrombin. Farbiszewski R, et al. **Haematologia (Budap)** 1988;21(3):169–73

Effect of heparin and related glycosaminoglycans (GAGs) on thrombin–induced platelet aggregation and release. Cofrancesco E, et al. **Haematologica (Pavia)** 1988 Nov–Dec;73(6):471–5

Alterations of wheat–germ agglutinin binding pattern on cell surface of blood platelets after thrombin stimulation. Daimon T, et al. **Histochemistry** 1989;91(6):461–7

Effect of scavengers of active oxygen species and pretreatment with acetyl–salicylic acid on the injury to cultured endothelial cells by thrombin–stimulated platelets. Larsen T, et al. **In Vitro Cell Dev Biol** 1989 Mar;25(3 Pt 1):276–82

Thrombin is a potent mitogen for rat astroblasts but not for oligodendroblasts and neuroblasts in primary culture. Perraud F, et al. **Int J Dev Neurosci** 1987;5(3):181–8

Thrombin enhances release of tissue plasminogen activator from bovine corneal endothelial cells. Fukushima M, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1576–83

Synthesis of recombinant human single–chain urokinase–type plasminogen activator variants resistant to plasmin and thrombin. Miyake T, et al. **J Biochem (Tokyo)** 1988 Oct; 104(4):643–7

Thrombin–induced membrane depolarization of platelets and its inhibition by cetiedil. Yamaguchi A, et al. **J Biochem (Tokyo)** 1988 May;103(5):787–91

Image processing of proteinase– and methylamine–transformed human alpha 2–macroglobulin. Localization of the proteinases. Boisset N, et al. **J Biol Chem** 1989 Jul 15;264(20):12046–52

Thrombin and phorbol esters cause the selective phosphorylation of a G protein other than Gi in human platelets. Carlson KE, et al. **J Biol Chem** 1989 Aug 5; 264(22):13298–305

Guanosine 5'–O–(3–thiotrisphosphate) potentiates both thrombin– and platelet–derived growth factor–induced inositol phosphate release in permeabilized vascular smooth muscle cells. Signa¹ing mechanisms distinguished by sensitivity to pertussis toxin and phorbol esters. Huang CL, et al. **J Biol Chem** 1989 Mar 15;264(8):4391–7

Differential phenotypic expression induced in cultured rat astroblasts by acidic fibroblast growth factor, epidermal growth factor, and thrombin. Loret C, et al. **J Biol Chem** 1989 May 15;264(14):8319–27

Thrombin and histamine stimulate the phosphorylation of elongation factor 2 in human umbilical vein endothelial cells. Mackie KP, et al. **J Biol Chem** 1989 Jan 25; 264(3):1748–53

Thrombin and collagen induce rapid phosphorylation of a common set of cellular proteins on tyrosine in human platelets. Nakamura S, et al. **J Biol Chem** 1989 May 5; 264(13):7089–91

Molecular species analysis of 1,2–diglycerides stimulated by alpha–thrombin in cultured fibroblasts. Pessin MS, et al. **J Biol Chem** 1989 May 25;264(15):8729–38

Hamster fibroblasts defective in thrombin–induced mitogenesis. A selection for mutants in phosphatidylinositol metabolism and other functions. Rath HM, et al. **J Biol Chem** 1989 Aug 15;264(23):13387–90

Proteolytic regulation of neurite outgrowth from neuroblastoma cells by thrombin and protease nexin–1. Cunningham DD, et al. **J Cell Biochem** 1989 Jan; 39(1):55–64 (28 ref.)

Wheat germ agglutinin inhibits thrombin–induced rises in cytosolic free calcium and prostacyclin synthesis by human umbilical vein endothelial cells. Grulich–Henn J, et al. **J Cell Physiol** 1988 Dec;137(3):553–8

Differential response of normal human fibroblasts to bombesin versus thrombin. Hendey B, et al. **J Cell Physiol** 1988 Sep;136(3):486–92

Effects of fibrin sealant on the fixation of porous titanium and pyrolytic carbon implants. Hetherington VJ, et al. **J Foot Surg** 1989 Mar–Apr;28(2):145–50

Stimulation of mononuclear cell binding to human endothelial cell monolayers by thrombin. Saegusa Y, et al. **J Immunol** 1988 Dec 15;141(12):4140–5

Thrombin-treated endothelium primes neutrophil functions: inhibition by platelet-activating factor receptor antagonists. Vercellotti GM, et al. **J Leukoc Biol** 1989 Jun;45(6):483–90

Thrombin and bradykinin enhance prostaglandin production in human peripheral blood monocytes. Lerner UH, et al. **J Oral Pathol Med** 1989 Apr;18(4):246–50

Effect of thrombin on cyclic AMP content in glomeruli isolated from rat kidney. Shah SV. **Kidney Int** 1989 Mar; 35(3):824–9

Thrombin and trypsin act at the same site to stimulate phosphoinositide hydrolysis and calcium mobilization. Jones LG, et al. **Mol Pharmacol** 1989 Jul;36(1):142–9

Thrombin inhibits the synthesis of prostanoids by isolated glomeruli and peritoneal macrophages in rats. Podjarny E, et al. **Nephron** 1989;53(1):50–3

Thrombin stimulates Ca-channel currents in isolated frog ventricular cells. Markwardt F, et al. **Pflugers Arch** 1988 Oct;412(6):668–70

Atriopeptin inhibition of thrombin-mediated changes in the morphology and permeability of endothelial monolayers. Baron DA, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3394–8

Thrombin-induced neutrophil adhesion. Del Vecchio PJ, et al. **Prog Clin Biol Res** 1989;308:101–12

The activation of platelets by thrombin: a model for activation by high and moderate affinity receptor pathways. Jamieson GA. **Prog Clin Biol Res** 1988;283:137–58 (75 ref.)

Thrombin-induced changes in platelet membrane glycoproteins. Michelson AD, et al. **Prog Clin Biol Res** 1988;283:159–62

Thrombin receptors on human platelets. Wyler B, et al. **Prog Clin Biol Res** 1988;283:163–9

Functional assays of protein C: comparison of two snake-venom assays with two thrombin assays. Franchi F, et al. **Thromb Haemost** 1988 Oct 31;60(2):145–7

Antithrombotic properties of heparin in a neonatal piglet model of thrombin-induced thrombosis. Schmidt B, et al. **Thromb Haemost** 1988 Oct 31;60(2):289–92

Interaction of thrombin-stimulated platelets with vitronectin (S-protein of complement) substrate: inhibition by a monoclonal antibody to glycoprotein IIb-IIIa complex. Thiagarajan P, et al. **Thromb Haemost** 1988 Dec 22; 60(3):514–7

Megakaryocyte response to thrombin [letter] Trowbridge A. **Thromb Haemost** 1988 Aug 30;60(1):125–6

Influence of alpha-NAPAP on thrombin-induced release of plasminogen activator. Klöcking HP, et al. **Thromb Res** 1988 Oct 1;52(1):71–3

Platelet membrane glycoprotein V: characterization of the thrombin-sensitive glycoprotein from human platelets. Zafar RS, et al. **Thromb Res** 1989 Jan 1;53(1):31–44

[Dura mater healing after repair with aponeurotic plasty. Comparison of results between classical sutures and fibrin adhesive glue. Fibrin adhesive in frontobasal injuries. An experimental study] Dehesdin D, et al. **Neurochirurgie** 1988; 34(5):311–4 (Eng. Abstr.) **(Fre)**

[Preliminary data on the preparation of a fibrin glue from the patient's own plasma and its use in ENT surgery] Cucuianu AM, et al. **Rev Chir [Otorinolaringol]** 1988 Apr-Jun;33(2):81–7 (Eng. Abstr.) **(Rum)**

[Thrombolytic action of urokinase preparation covalently bound to modified thrombin] Maksimenko AV, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):322–4 (Eng. Abstr.) **(Rus)**

[Alpha-thrombin stimulation of heparin secretion by the peritoneal mast cells in rats] Umarova BA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):131–3 (Eng. Abstr.) **(Rus)**

[Comparison and analysis of the characteristics of the coagulation of blood and plasma exposed to thrombin] Arkhipov BF, et al. **Lab Delo** 1988;(10):45–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Platelets adhere to thrombin-treated endothelial cells in vitro. Kaplan JE, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H423–33

Mitogenic signals for thrombin in mesangial cells: regulation of phospholipase C and PDGF genes. Shultz PJ, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F366–74

Pertussis toxin-sensitive GTP-binding proteins may regulate phospholipase A2 in response to thrombin in rabbit platelets. Kajiyama Y, et al. **Arch Biochem Biophys** 1989 Oct;274(1):200–8

Spacial isolation of protein kinase C activation in thrombin stimulated human platelets. Crouch MF, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):149–56

Effects of five anion channel blockers on thrombin- and ionomycin-activated platelet functions. Ozaki Y, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2147–52

Lysosomal hydrolases of human vascular cells: response to agonists of endothelial function. Morgan DM, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):184–90

The occupancy of glycoprotein IIb-IIIa complex modulates thrombin activation of human platelets. Sinigaglia F, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):225–30

Influence of the antianginal drug trapidil and its derivative AR 12463 on arachidonic acid liberation and thromboxane formation in thrombin-stimulated platelets. Block HU, et al. **Biomed Biochim Acta** 1988;47(10–11):S141–4

Studies on thrombin-induced endothelium-dependent vascular effects. Glusa E, et al. **Biomed Biochim Acta** 1988; 47(7):623–30

Endothelium-dependent relaxant effect of thrombin on isolated pig coronary arteries. Glusa E. **Biomed Biochim Acta** 1988;47(10–11):S67–70

Lupus anticoagulant induces a selective defect in thrombin-mediated endothelial prostacyclin release and platelet aggregation. Schorer AE, et al. **Br J Haematol** 1989 Mar;71(3):399–407

Modification of tissue-factor mRNA and protein response to thrombin and interleukin 1 by high glucose in cultured human endothelial cells. Boeri D, et al. **Diabetes** 1989 Feb; 38(2):212–8

Calcium dependence of the thrombin-induced increase in endothelial albumin permeability. Lum H, et al. **J Appl Physiol** 1989 Mar;66(3):1471–6

The roles of protein C and thrombomodulin in the regulation of blood coagulation. Esmon CT. **J Biol Chem** 1989 Mar 25;264(9):4743–6 (82 ref.)

Role of Na+/H+ exchange in thrombin-induced platelet-activating factor production by human endothelial cells. Ghigo D, et al. **J Biol Chem** 1988 Dec 25; 263(36):19437–46

Nature of thrombin-induced sustained increase in cytosolic calcium concentration in cultured endothelial cells. Goligorsky MS, et al. **J Biol Chem** 1989 Oct 5; 264(28):16771–5

Thrombin is an important mediator of platelet aggregation in stenosed canine coronary arteries with endothelial injury. Eidt JF, et al. **J Clin Invest** 1989 Jul;84(1):18–27

Adhesion of platelets to purified solid-phase von Willebrand factor: effects of wall shear rate, ADP, thrombin, and ristocetin. Olson JD, et al. **J Lab Clin Med** 1989 Jul; 114(1):6–18

Selectivity of the endothelial monolayer: effects of increased permeability. Siflinger-Birnboim A, et al. **Microvasc Res** 1988 Nov;36(3):216–27

Platelet tyrosine-specific protein phosphorylation is regulated by thrombin. Ferrell JE Jr, et al. **Mol Cell Biol** 1988 Sep;8(9):3603–10

Transcription of thrombomodulin mRNA in mouse hemangioma cells is increased by cycloheximide and thrombin. Dittman WA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7179–82

Thrombin treatment induces rapid changes in tyrosine phosphorylation in platelets. Golden A, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):901–5

Regulation of thrombin generation and functions. Fenton JW 2d. **Semin Thromb Hemost** 1988 Jul;14(3):234–40 (92 ref.)

Thrombin stimulates inositol phosphate accumulation and prostacyclin synthesis in human endothelial cells from umbilical vein but not from omentum. Carter AJ, et al. **Thromb Haemost** 1989 Feb 28;61(1):122–6

Differences among beta-adrenoceptor blocking drugs in modifying platelet aggregation and arachidonic acid liberation under thrombin stimulation. Jancinová V, et al. **Thromb Res** 1989 Jun 15;54(6):687–98

Human alpha-thrombin induces phosphoinositide turnover and Ca2+ movements in cultured human umbilical vein endothelial cells. Lampugnani MG, et al. **Thromb Res** 1989 Apr 1;54(1):75–87

On the location in the thrombin B chain of substrate recognition sites for fibrinopeptide release and factor XIII activation. Pirkle H, et al. **Thromb Res** 1989 Sep 15; 55(6):737–46

[Effect of thrombomodulin on specific thrombin functions: fibrinogen coagulation and thrombocyte aggregation] Luk'ianenko EF, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):517–9 (Eng. Abstr.) **(Rus)**

[The thrombomodulin-protein C anticoagulant system (current status of the problem and clinical outlook)] Smirnov MD, et al. **Ter Arkh** 1988;60(5):131–6 (85 ref.) **(Rus)**

THERAPEUTIC USE

Balancing the benefits and risks of intracameral thrombin [editorial] Aaberg TM. **Am J Ophthalmol** 1988 Oct 15; 106(4):483–6

Seroma prevention using fibrin glue during modified radical neck dissection in a rat model. Lindsey WH, et al. **Am J Surg** 1988 Oct;156(4):310–3

Successful use of fibrin glue during 2 years of surgery at a university medical center. Spotnitz WD, et al. **Am Surg** 1989 Mar;55(3):166–8

The use of autogenous rabbit fibrin sealant to plug retinal holes in experimental detachments. Nasaduke I, et al. **Ann Ophthalmol** 1986 Nov;18(11):324–7

Treatment of postoperative chylothorax with intrapleural fibrin glue. Akaogi E, et al. **Ann Thorac Surg** 1989 Jul; 48(1):116–8

Mediastinal fibrin glue: hemostatic effect and tissue response in calves. Baker JW, et al. **Ann Thorac Surg** 1989 Mar; 47(3):450–2

Fibrin glue achieves hemostasis in patients with coagulation disorders. Kram HB, et al. **Arch Surg** 1989 Mar; 124(3):385–7

Human thrombin plus 5 per cent ethanolamine oleate injected to sclerose oesophageal varices: a prospective randomized trial. Kitano S, et al. **Br J Surg** 1989 Jul;76(7):715–8

Fibrin glue: a review of its preparation, efficacy, and adverse effects as a topical hemostat. Thompson DF, et al. **Drug Intell Clin Pharm** 1988 Dec;22(12):946–52 (48 ref.)

Human fibrin sealant in upper G.I. tract bleeding [letter] Ederle A, et al. **Endoscopy** 1989 Mar;21(2):112

Endoscopic treatment of refluxing ureteric stump following nephrectomy with Tissucol and teflon injection. Carini M, et al. **Eur Urol** 1989;16(4):312–4

Experimental studies in animals on the use of a fibrin glue from the human plasma fraction Cohn I in nerve reconstruction. Hamm KD, et al. **Folia Haematol (Leipz)** 1988;115(1–2):208–12

Fibrin glue on the Cohn I fraction basis in repairing cerebral and dura defects—an experimental study on rats. Steube D, et al. **Folia Haematol (Leipz)** 1988;115(1–2):213–7

Fibrin glue for the treatment of persistent lymphatic drainage. Giberson WG, et al. **J Pediatr Surg** 1988 Dec;23(12):1188–9

Laparoscopically applied fibrin glue in experimental liver trauma. Ishitani MB, et al. **J Pediatr Surg** 1989 Sep; 24(9):867–71

Fibrin and fibronectin sealing system in a guided tissue regeneration procedure. A case report. Pini Prato GP, et al. **J Periodontol** 1988 Oct;59(10):679–83

Management of oral bleeding in haemophilic patients [letter] Baudo F, et al. **Lancet** 1988 Nov 5;2(8619):1082

Problems of fibrin adhesion of the nerves. Herter T. **Neurosurg Rev** 1988;11(3–4):249–58 (110 ref.)

Intraocular human thrombin infusion in diabetic vitrectomies. Verdoorn C, et al. **Ophthalmic Surg** 1989 Apr;20(4):278–9

Effects of fibrin glue on rat facial nerve regeneration. Medders G, et al. **Otolaryngol Head Neck Surg** 1989 Feb; 100(2):106–9

A biologic tissue adhesive for vitreoretinal surgery. Coleman DJ, et al. **Retina** 1988;8(4):250–6

Initial experience with the endoscopic application of fibrin tissue adhesive in the upper gastrointestinal tract. Groitl H, et al. **Surg Endosc** 1987;1(2):93–7

Endoscopic sealing of infected bronchus stump fistulae with fibrin following lung resections. Experimental and clinical experience. Waclawiczek HW, et al. **Surg Endosc** 1987; 1(2):99–102

Use of microcrystalline collagen powder and fibrinogen tissue adhesive for hemostasis and prevention of rebleeding in patients with hepatocellular carcinoma associated with cirrhosis of the liver. Sakon M, et al. **Surg Gynecol Obstet** 1989 May;168(5):453–4

Closure of a post-pneumonectomy bronchopleural fistula with fibrin sealant (Tisseel). Onotera RT, et al. **Thorax** 1988 Dec;43(12):1015–6

Value of fibrin sealant in heart transplantation. Chartrand C, et al. **Transplant Proc** 1989 Apr;21(2):3347–8

[Intraoperative use of fibrin sealant in pulmonary surgery. A prospective study on a series of 124 procedures] Grunenwald D. **Ann Chir** 1989;43(2):147–50 (Eng. Abstr.) **(Fre)**

[Repair of the facial nerve exclusively by fibrin glue. 56 cases] Sterkers O, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(3):176–81 (17 ref.) (Eng. Abstr.) **(Fre)**

[Use of a fibrin glue (Tissucol) to plug perforated ulcers in dry eye syndromes] Lagoutte F, et al. **Ophtalmologie** 1988 Apr-Jun;2(2):153–5 (Eng. Abstr.) **(Fre)**

[Surgery of the thoracic aorta. Value of tissucol] Ninet J, et al. **Presse Med** 1988 Nov 19;17(41):2197–9 (Eng. Abstr.) **(Fre)**

[The status of coagulum choledocholithotomy in choledochus revision] Glass W, et al. **Chirurg** 1988 Sep; 59(9):602–4 (Eng. Abstr.) **(Ger)**

[Fibrin gluing of the extraocular eye muscles. Experimental use in the rabbit] Aichmair MW, et al. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):499–503 (Eng. Abstr.) **(Ger)**

[Autologous fibrin glue—a local hemostyptic agent following dental surgical interventions in patients undergoing anticoagulant therapy] Leuthold B, et al. **Zahn Mund Kieferheilkd** 1989;77(3):268–72 (Eng. Abstr.) **(Ger)**

[Fibrin glue in gastroenteric surgery] Giordano L, et al. **Minerva Chir** 1989 May 15;44(9):1371–4 (Eng. Abstr.) **(Ita)**

[Experimental study of motor nerve repair: comparison of nylon suture and two component fibrin adhesive techniques] Nishihira S. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug;91(8):1208–12 (Eng. Abstr.) **(Jpn)**

[Endoscopic closure of the postoperative bronchopleural fistula] Ikushima Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2521–4 (Eng. Abstr.) **(Jpn)**

[Use of fibrin glue at the anterior mediastinum to reduce postoperative drainage in cardiac surgery] Tanemoto K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun; 36(6):942–6 **(Jpn)**

TOXICITY

Autologous fibrin tissue adhesive for cerebrospinal fluid leaks: a controlled study of neurotoxicity. Feldman MD, et al. **Am J Otol** 1988 Jul;9(4):302–5

THROMBIN TIME see under **BLOOD COAGULATION TESTS**

THROMBOANGIITIS OBLITERANS

[Obliterating thromboangiitis] Shelygina NM, et al. **Revmatologiia (Moskva)** 1988 Jul–Sep;(3):75–6 **(Rus)**

BLOOD

Studies on hypercoagulation state in thromboangiitis obliterans. Zheng P, et al. **Chin Med J [Engl]** 1989 Jan; 102(1):67–71

[Disorders of the system of regulation of the aggregative status of the blood in patients with thromboangiitis obliterans of the lower extremities] Bykov VM, et al. **Kardiologiia** 1989 Mar;29(3):59–62 (Eng. Abstr.) (Rus)

[Characteristics of metabolism in patients with arteriosclerosis obliterans and arteritis] Savel'ev VS, et al. **Kardiologiia** 1988 Sep;28(9):35–8 (Eng. Abstr.) (Rus)

COMPLICATIONS

Anterior ischemic optic neuropathy in Buerger's disease. Coppeto JR, et al. **Ann Ophthalmol** 1988 Sep;20(9):332–4

[Management of critical ischemia of the leg by omentum transplantation in Buerger's disease] László G. **Orv Hetil** 1989 Sep 10;130(37):1993–4 (Eng. Abstr.) (Hun)

[Electroretinographic changes in thromboangiitis obliterans (Buerger's disease)] Romero Valdés A, et al. **Angiologia** 1988 Sep–Oct;40(5):166–9 (Eng. Abstr.) (Spa)

DIAGNOSIS

Aortitis presenting as Buerger's disease. White RA, et al. **Ann Vasc Surg** 1987 Dec;1(5):591–4

[Application of infrared thermal imaging technics in clinical diagnosis] Sun G. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):568–9 (Chi)

[Buerger's disease and obliterative atherosclerosis. 2 different diseases] Puchmayer V, et al. **Cas Lek Cesk** 1986 Oct 24; 125(43):1313–6 (Eng. Abstr.) (Cze)

[A case of thromboangiitis obliterans in a young woman. A rarity and diagnostic difficulties] Dahan J. **Phlebologie** 1989 Jan–Mar;42(1):163–7 (Eng. Abstr.) (Fre)

[Thromboangiitis obliterans] Kriessmann A. **Dtsch Med Wochenschr** 1989 Jun 16;114(24):969 (Ger)

[A case from practice (131). Patient: Mr. H.J. S., born 1962, clerk] Suter F. **Schweiz Rundsch Med Prax** 1989 Feb 21; 78(8):200–1 (Ger)

DRUG THERAPY

Clinical effectiveness of defibrotide in vaso-occlusive disorders and its mode of actions. Ulutin ON. **Semin Thromb Hemost** 1988;14 Suppl:58–63

[107 patients with thromboangiitis obliterans treated by traditional Chinese medicine combined with Western medicine therapy] Pan JY. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):665–7, 646 (Eng. Abstr.) (Chi)

[Effect of prostaglandin E1 in chronic obliterative diseases of peripheral arteries] Zhang GS. **Chung Hua Wai Ko Tsa Chih** 1988 Sep;26(9):541–2, 573 (Eng. Abstr.) (Chi)

EPIDEMIOLOGY

The rise and fall and resurgence of thromboangiitis obliterans (Buerger's disease). Lie JT. **Acta Pathol Jpn** 1989 Mar; 39(3):153–8 (48 ref.)

ETIOLOGY

[Etiopathogenesis of Burger's disease] Andreozzi GM. **J Mal Vasc** 1989;14(1):44 (Fre)

[The significance of inflammatory vascular diseases] Voigt H, et al. **Z Gesamte Inn Med** 1988 Sep 15;43(18):509–10 (29 ref.) (Eng. Abstr.) (Ger)

IMMUNOLOGY

Immunological studies on thromboangiitis obliterans. Zheng P, et al. **Chin Med J [Engl]** 1989 Feb;102(2):129–36

PATHOLOGY

A case of thromboangiitis obliterans affecting coronary, pulmonary, and splenic vessels. Is thromboangiitis obliterans a generalized vascular disease? Korsgaard N, et al. **Am J Cardiovasc Pathol** 1988;2(3):263–7

Distal digital necrosis. **J Tenn Med Assoc** 1989 May; 82(5):253–4

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 16–1989. A 36-year-old man with peripheral vascular disease. **N Engl J Med** 1989 Apr 20;320(16):1068–76

Thromboangiitis obliterans (Buerger's disease) revisited. Lie JT. **Pathol Annu** 1988;23 Pt 2:257–91 (106 ref.)

[Clinical, immunologic and therapeutic aspects of endangiitis obliterans] Lambrecht R, et al. **Z Gesamte Inn Med** 1988 Sep 15;43(18):511–4 (Eng. Abstr.) (Ger)

[An aged case of peripheral arterial obstructive disease with progressive limb necrosis] Akimoto N, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):622–5 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Study on reaction of subpapillary venous plexus in patients with arterial occlusive diseases of lower extremity by reflective spectrophotometry. Kimura T, et al. **Angiology** 1988 Oct;39(10):858–64

RADIOGRAPHY

[Clinical and radiologic detection of lung involvement in thromboangiitis obliterans (Winiwarter-Buerger's disease)] Domej W, et al. **Prax Klin Pneumol** 1988 Nov;42(11):793–7 (Eng. Abstr.) (Ger)

REHABILITATION

[Peculiarities of physical therapy in endangiitis obliterans] Sohr C. **Z Gesamte Inn Med** 1988 Sep 15;43(18):517–9 (14 ref.) (Eng. Abstr.) (Ger)

SURGERY

[Surgical aspects in the therapy of Buerger's disease] Aschieri F, et al. **J Mal Vasc** 1989;14(1):47–9 (Eng. Abstr.) (Fre)

THERAPY

Accelerated thrombolysis and angioplasty for hand ischemia in Buerger's disease. Lang EV, et al. **Cardiovasc Intervent Radiol** 1989 Mar–Apr;12(2):95–7

[Therapy of Buerger's disease] Allegra C. **J Mal Vasc** 1989; 14(1):45–6 (Fre)

[Hemosorption in the treatment of occlusive arterial diseases of the legs] Korneev AA, et al. **Vestn Khir** 1988 Jul; 141(7):60–2 (Eng. Abstr.) (Rus)

THROMBOCYTES see BLOOD PLATELETS

THROMBOCYTHEMIA, ESSENTIAL see THROMBOCYTHEMIA, HEMORRHAGIC

THROMBOCYTHEMIA, HEMORRHAGIC

Essential thrombocythaemia. Tobelem G. **Baillieres Clin Haematol** 1989 Jul;2(3):719–28 (45 ref.)

Three successful pregnancies in a woman with essential thrombocythemia [letter] Sanada M. **Eur J Haematol** 1989 Feb;42(2):215–6

Essential thrombocythaemia. Ravi TS, et al. **J Assoc Physicians India** 1988 Aug;36(8):515–7

BLOOD

Low protein S in essential thrombocythemia with thrombosis. Conlan MG, et al. **Am J Hematol** 1989 Oct;32(2):88–93

Chronic myeloproliferative diseases with an elevated platelet count (in excess of 1,000,000/microliter): a clinicopathological study on 46 patients with special emphasis on primary (essential) thrombocythemia. Thiele J, et al. **Hematol Pathol** 1987;1(4):227–37

Low intracellular calcium concentration in the platelets after stimulation in patients with myeloproliferative disorders. Fujimoto T, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):118–25

COMPLICATIONS

8;21 translocation in myelodysplasia secondary to essential thrombocythemia. Knottenbelt E, et al. **Am J Hematol** 1989 Apr;30(4):233–5

Cure of Curvularia pneumonia by amphotericin B in a patient with megakaryocytic leukemia [letter] Brubaker LH, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1178–9

Pregnancy in a young woman affected by essential thrombocythemia: a case report [letter] Ferrari A, et al. **Haematologica (Pavia)** 1989 Jan–Feb;74(1):115–6

Benign intracranial hypertension and essential thrombocythaemia [letter] Esack A, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):914

Slowly progressive ischemic stroke as first manifestation of essential thrombocythemia. Benassi G, et al. **Stroke** 1989 Sep;20(9):1271–2

[Erythromelalgia and thrombotic thrombocythemia] Michiels JJ. **Ned Tijdschr Geneeskd** 1989 May 13;133(19):971–3 (20 ref.) (Dut)

[Essential thrombocythemia associated with subdural hematoma and postoperative intracerebral hemorrhage—a case report] Ogasawara K, et al. **No To Shinkei** 1989 Jan; 41(1):91–5 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Primary (essential) thrombocythemia versus initial (hyperplastic) stages of agnogenic myeloid metaplasia with thrombocytosis—a critical evaluation of clinical and histomorphological data. Thiele J, et al. **Acta Haematol (Basel)** 1989;81(4):192–202

[Clinical characterization of essential thrombocythemia in comparison to other myeloproliferative diseases and reactive thrombocytoses] Zankovich R, et al. **Klin Wochenschr** 1988 Aug 1;66(15):699–702 (Ger)

DRUG THERAPY

Myelodysplastic syndrome and secondary acute leukemia after treatment of essential thrombocythemia with melphalan [letter] Gris JC, et al. **Am J Hematol** 1989 Jan; 30(1):47–8

Management of polycythaemia vera, essential thrombocythaemia and myelofibrosis with hydroxyurea. Löfvenberg E, et al. **Eur J Haematol** 1988 Oct;41(4):375–81

[Therapeutic effect of ranimustine (MCNU) on essential thrombocythemia and polycythemia vera] Nagai M, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3267–70 (Eng. Abstr.) (Jpn)

ENZYMOLOGY

Detection of retrovirus in patients with myeloproliferative disease. Boyd MT, et al. **Lancet** 1989 Apr 15;1(8642):814–7

GENETICS

Philadelphia chromosome in essential thrombocythemia? [letter] Sarode R, et al. **Am J Hematol** 1989 Jan;30(1):45–6

Amegakaryocytic thrombocytopenia with duplication of part of the long arm of chromosome 3. Hallett JM, et al. **Br J Haematol** 1989 Feb;71(2):291–2

Essential thrombocythaemia and the Philadelphia chromosome. Morris CM, et al. **Br J Haematol** 1988 Sep; 70(1):13–9

Philadelphia-positive thrombocythemia with a complex translocation involving chromosomes 9, 15, and 22. Palumbo AP, et al. **Cancer Genet Cytogenet** 1989 May; 39(1):77–80

Low incidence of familial occurrence of thrombocythaemia and/or thrombocytosis. Randi ML, et al. **Folia Haematol (Leipz)** 1988;115(5):695–9

Induction of megakaryocytic characteristics in human leukemic cell line K562: polyploidy, inducers, and secretion of mitogenic activity. Leary JF, et al. **J Biol Regul Homeost Agents** 1987 Apr–Jun;1(2):73–80

Molecular analysis of Philadelphia positive essential thrombocythemia. Martist P, et al. **Leukemia** 1989 Aug; 3(8):563–5

[Essential thrombocythemia with Philadelphia chromosome] Yoshimura Y, et al. **Rinsho Ketsueki** 1989 Mar;30(3):332–7 (Eng. Abstr.) (Jpn)

METABOLISM

Iron stores in essential thrombocythaemia. A study of 26 patients. Cervantes F, et al. **Blut** 1989 Jun;58(6):291–4

PATHOLOGY

Primary (essential) thrombocythemia versus polycythemia vera rubra. A histomorphometric analysis of bone marrow features in trephine biopsies. Thiele J, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):375–82

In vivo and in vitro inhibitory effect of alpha-interferon on megakaryocyte colony growth in essential thrombocythaemia. Gugliotta L, et al. **Br J Haematol** 1989 Feb;71(2):177–81

Characteristics of megakaryocyte colony formation in normal individuals and in primary thrombocythemia: studies using an optimal cloning system. Han ZC, et al. **Exp Hematol** 1989 Jan;17(1):46–52

The bone marrow in myeloproliferative and dysmyelopoietic syndromes. Wolf BC, et al. **Hematol Oncol Clin North Am** 1988 Dec;2(4):669–94 (126 ref.)

Ultrastructure of megakaryocytes in the human bone marrow of patients with primary (essential) thrombocythemia. Thiele J, et al. **J Submicrosc Cytol Pathol** 1988 Oct; 20(4):671–81

[Megakaryocytopoiesis in vitro of the patients with essential thrombocythemia] Komatsu N. **Rinsho Ketsueki** 1988 Jul; 29(7):977–82 (Eng. Abstr.) (Jpn)

RADIOTHERAPY

The treatment of essential thrombocythaemia with radioactive phosphorus. Wagner S, et al. **Clin Radiol** 1989 Mar;40(2):190–2

THERAPY

Intravenous immunoglobulin therapy in thrombocytopenic infectious mononucleosis. Duncombe AS, et al. **Clin Lab Haematol** 1989;11(1):11–5

Treatment of essential thrombocythaemia by alpha 2a interferon [letter] Bellucci S, et al. **Lancet** 1988 Oct 22; 2(8617):960–1

Treatment of essential thrombocythaemia with interferon alpha-2b [letter] May D, et al. **Lancet** 1989 Jan 14; 1(8629):96

Biological molecules in the treatment of hematological disorders. Kurzrock R, et al. **Sangre (Barc)** 1989 Feb; 34(1):53–8 (22 ref.)

VETERINARY

Radiophosphorus (32P) treatment of bone marrow disorders in dogs: 11 cases (1970–1987). Smith M, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):98–102

Probable essential thrombocythemia in a dog. Hopper PE, et al. **J Vet Intern Med** 1989 Apr–Jun;3(2):79–85

Ultrastructural analysis of platelets and megakaryocytes from a dog with probable essential thrombocythemia. Tablin F, et al. **Vet Pathol** 1989 Jul;26(4):289–93

THROMBOCYTHEMIA, IDIOPATHIC see THROMBOCYTHEMIA, HEMORRHAGIC

THROMBOCYTHEMIA, PRIMARY see THROMBOCYTHEMIA, HEMORRHAGIC

THROMBOCYTOPATHY see BLOOD PLATELET DISORDERS

THROMBOCYTOPENIA

Congenital defects of the marrow stem cell. Evans DI. **Baillieres Clin Haematol** 1989 Jan;2(1):162–90 (79 ref.)
Successful delivery in a case of essential athrombia. Ueda Y, et al. **Jpn J Med** 1989 May–Jun;28(3):379–81
Thrombocytopenia during pregnancy [letter] **N Engl J Med** 1988 Dec 1;319(22):1482–3
Unrecognized thrombocytopenia and regional anesthesia in parturients: a retrospective review. Rasmus KT, et al. **Obstet Gynecol** 1989 Jun;73(6):943–6
[Evans' syndrome] Mydlik M, et al. **Vnitr Lek** 1988 Oct; 34(10):1013–7 (Eng. Abstr.) (Slo)

BLOOD

Is thrombopenia in cord blood indicative of intra-uterine sensitization? Magnusson CG, et al. **Allergy** 1989 Feb; 44(2):143–51
Transfusion-associated fall in platelet count in very low birthweight infants. Austin N, et al. **Aust Paediatr J** 1988 Dec;24(6):354–6
Heterogeneity of drug-dependent platelet antigens and their antibodies in quinine- and quinidine-induced thrombocytopenia: involvement of glycoproteins Ib, IIb, IIIa, and IX. Pfueller SL, et al. **Blood** 1988 Oct; 72(4):1155–62
Identification of the target platelet glycoprotein in autoimmune thrombocytopenia occurring after allogeneic bone marrow transplantation. Benda H, et al. **Blut** 1989 Mar;58(3):151–3
Serum from patients with various thrombopoietic disorders alters terminal cytoplasmic maturation of human megakaryocytes in vitro. Straneva JE, et al. **Eur J Haematol** 1989 Mar;42(3):293–7
Use of theophylline in the investigation of pseudothrombocytopenia induced by edetic acid (EDTA-2K). Ohnuma O, et al. **J Clin Pathol** 1988 Aug; 41(8):915–7
Reduced CD4+ count, infections, and immune thrombocytopenia without HIV infection [letter] Daus H, et al. **Lancet** 1989 Sep 2;2(8662):559
Endotoxaemia, pulmonary complications, and thrombocytopenia in liver transplantation. Miyata T, et al. **Lancet** 1989 Jul 22;2(8656):189–91
Effect of synthetic thrombin inhibitor (MD805) as an alternative drug on heparin induced thrombocytopenia during hemodialysis. Matsuo T, et al. **Thromb Res** 1988 Oct 15;52(2):165–71
Quantitation of serum prostacyclin-binding in thrombotic thrombocytopenic purpura. Tsai AL, et al. **Thromb Res** 1988 Sep 15;51(6):583–92
Gray platelet syndrome. Wills EJ. **Ultrastruct Pathol** 1989 Jul–Aug;13(4):451–5
[Studies on the levels of plasma and platelet beta-thromboglobulin in thrombocytopenia] Chen YZ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):307–9, 22 (Eng. Abstr.) (Chi)
[Chronic thrombocytopenia] Nieuwenhuis HK. **Ned Tijdschr Geneeskd** 1988 Oct 22;132(43):1961–3 (Dut)
[Changes in the blood picture in hyperthyroidism] Hambsch K, et al. **Z Gesamte Inn Med** 1989 May 15;44(10):300–6 (Eng. Abstr.) (Ger)
[An anticoagulant for complete blood cell counts and hemograms in pseudothrombocytopenia. Effect of aminoglycoside antibiotics mixed with EDTA-2K] Sakurai S, et al. **Rinsho Byori** 1989 May;37(5):555–60 (Jpn)
[Prolonged thrombocytopenia after autologous bone marrow transplantation] Kojima S, et al. **Rinsho Ketsueki** 1989 Feb; 30(2):175–80 (Eng. Abstr.) (Jpn)
[A case of EDTA-dependent panagglutination and on its relationship to EDTA-dependent pseudothrombocytopenia] Okubo S, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1031–5 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Heparin-induced thrombocytopenia with disseminated intravascular coagulation and white clot syndrome: a case report. Desmet G, et al. **Acta Clin Belg** 1988;43(6):419–22
Acute thrombocytopenia after i.v. administration of a radiographic contrast medium. Chang JC, et al. **AJR Am J Roentgenol** 1989 May;152(5):947–9
Thrombocytopenia associated with hypersensitivity to ranitidine: possible cross-reactivity with cimetidine. Gafter U, et al. **Am J Gastroenterol** 1989 May;84(5):560–2
Thrombocytopenia associated with auranofin therapy: evidence for a gold-dependent immunologic mechanism. Kosty MP, et al. **Am J Hematol** 1989 Apr;30(4):236–9
Naproxen thrombocytopenia [letter] Poldre PA. **Am J Hematol** 1989 May;31(1):74
Thrombocytopenia and vitreous hemorrhage complicating ganciclovir treatment. Robinson MR, et al. **Am J Ophthalmol** 1989 May 15;107(5):560–1
Coumarin skin necrosis in a patient with heparin-induced thrombocytopenia—a case report. Celoria GM, et al. **Angiology** 1988 Oct;39(10):915–20
Diltiazem and thrombocytopenia [letter] Lahav M, et al. **Ann Intern Med** 1989 Feb 15;110(4):327
Heparin-induced thrombocytopenia. Warkentin TE, et al. **Annu Rev Med** 1989;40:31–44 (81 ref.)
Low incidence of thrombocytopenia with porcine mucosal heparin. A prospective multicenter study. Rao AK, et al. **Arch Intern Med** 1989 Jun;149(6):1285–8
Heparin-associated thrombocytopenia and thrombosis syndrome in a rehabilitation patient. Young MA, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):468–70
A 61-year-old man with extensive thrombosis [clinical conference] Bendrups A, et al. **Aust N Z J Med** 1988 Jun; 18(4):639–44
Heparin-induced thrombocytopenia: studies with a new low molecular weight heparinoid, Org 10172. Chong BH, et al. **Blood** 1989 May 1;73(6):1592–6
Drug-mediated thrombocytopenia. Berndt MC, et al. **Blood Rev** 1987 Jun;1(2):111–8 (47 ref.)
Heparin-induced thrombocytopenia. Chong BH, et al. **Blut** 1989 Feb;58(2):53–7 (44 ref.)
Thrombocytopenia induced by angiotensin converting enzyme inhibitors. Grosbois B, et al. **BMJ** 1989 Jan 21; 298(6667):189–90
Cefotetan-induced immunologic thrombocytopenia. Christie DJ, et al. **Br J Haematol** 1988 Dec;70(4):423–6
Early-onset thrombocytopenia during combination chemotherapy in testicular cancer is induced by vinblastine. Steurer G, et al. **Cancer** 1989 Jan 1;63(1):51–8
Thrombocytopenia—a rare but potentially serious side effect of initial daily and interrupted use of rifampicin. Lee CH, et al. **Chest** 1989 Jul;96(1):202–3
Heparin-induced thrombocytopenia. Miller ML. **Cleve Clin J Med** 1989 Jul–Aug;56(5):483–90 (79 ref.)
Experimental drug-induced immune thrombocytopenia in monkeys. Petersen BH, et al. **Diagn Clin Immunol** 1988; 5(6):349–54
Reversible hematologic suppression during ranitidine treatment [letter] Bader A, et al. **DICP** 1989 Jun;23(6):508–9
Rifampin-associated thrombocytopenia secondary to poor compliance. Burnette PK, et al. **DICP** 1989 May; 23(5):382–4
Methazolamide-associated temporary leukopenia and thrombocytopenia. Cohen AM, et al. **DICP** 1989 Jan; 23(1):58–9
Possible famotidine-induced thrombocytopenia [letter] Comer JB, et al. **DICP** 1989 Jun;23(6):507–8
Cimetidine-induced thrombocytopenia in a cirrhotic patient [letter] Harats N, et al. **DICP** 1989 Feb;23(2):177–8
Acute thrombocytopenia after De-Nol. Beckingham IJ, et al. **Gut** 1989 Jul;30(7):1016–7
Quinidine-induced immune thrombocytopenia. Saleh MN, et al. **Henry Ford Hosp Med J** 1989;37(1):28–32
Embolic arterial occlusion in heparinized man. Shapiro JS. **Hosp Pract [Off]** 1989 Feb 15;24(2):136, 138
Cardiovascular surgery and heparin induced thrombocytopenia. Glock Y, et al. **Int Angiol** 1988 Jul–Sep; 7(3):238–45
A case of immune complex hemolytic anemia, thrombocytopenia, and acute renal failure associated with doxepin use. Wolf B, et al. **J Clin Psychiatry** 1989 Mar; 50(3):99–100
Transient leucopenia and thrombocytopenia associated with sodium nitroprusside infusion. Moore DP, et al. **J Hum Hypertens** 1987 Jun;1(1):17–8
Heparin-associated thrombocytopenia: observations on the mechanism of platelet aggregation. Adelman B, et al. **J Lab Clin Med** 1989 Feb;113(2):204–10
Heparin-associated thrombocytopenia and thrombosis [letter] Mikhailidis DP, et al. **J Lab Clin Med** 1989 May; 113(5):655–6
Late onset gold induced thrombocytopenia [letter] Cook DJ, et al. **J Rheumatol** 1988 Sep;15(9):1450–1
Heparin-induced platelet activation: the role of thromboxane A2 synthesis and the extent of platelet granule release in two patients. Kappa JR, et al. **J Vasc Surg** 1989 Apr; 9(4):574–9
Surgical management of heparin-associated thrombocytopenia. Strategies in the treatment of venous and arterial thromboembolism. Sobel M, et al. **J Vasc Surg** 1988 Oct;8(4):395–401
Effect of a novel thromboxane A2 receptor antagonist, S-145, on collagen-induced ECG changes and thrombocytopenia in rodents. Hori Y, et al. **Jpn J Pharmacol** 1989 Jun; 50(2):195–205
Agranulocytosis and thrombocytopenia in patient with Blackfan-Diamond anaemia during oral chelator trial [letter] Hoffbrand AV, et al. **Lancet** 1989 Aug 19; 2(8660):457
Heparin-associated thrombocytopenia: a complication of low-dose heparin prophylaxis. Cottingham JK, et al. **Milit Med** 1989 May;154(5):242–4
Diltiazem-associated thrombocytopenia: an opposing viewpoint [letter] Flicker MR, et al. **Mt Sinai J Med (NY)** 1989 Jan;56(1):77
Phenytoin-induced thrombocytopenia. Brown JJ, et al. **Pediatr Neurol** 1986 Mar–Apr;2(2):99–101
Morbidity and mortality among low birth weight infants exposed to an intravenous vitamin E product, E-Ferol. Arrowsmith JB, et al. **Pediatrics** 1989 Feb;83(2):244–9
Acute renal failure, eosinophilia thrombocytopenia and exfoliative dermatitis associated with captopril therapy. Lai KN, et al. **Singapore Med J** 1988 Oct;29(5):526–7
Heparin-induced thrombocytopenia: effects of rabbit IgG, and its Fab and FC fragments on antibody-heparin-platelet interaction. Chong BH, et al. **Thromb Res** 1989 Jul 15; 55(2):291–5
Pyrazinamide induced thrombocytopenia. Jain VK, et al. **Tubercle** 1988 Sep;69(3):217–8
[Heparin-associated thrombocytopenia] Janssens M, et al. **Acta Chir Belg** 1989 Mar–Apr;89(2):73–6 (21 ref.) (Eng. Abstr.) (Dut)
[Venous thrombosis in the brain and upper limbs associated with thrombopenia induced by pentosan polysulfate] Jacquin V, et al. **Ann Med Interne (Paris)** 1988;139(3):194–7 (Eng. Abstr.) (Fre)
[Disseminated coronary thrombosis and thrombopenia induced by pentosan polysulfate] Meyer P, et al. **Arch Mal Coeur** 1988 Jul;81(7):913–9 (16 ref.) (Eng. Abstr.) (Fre)
[Intracerebral hemorrhage linked to thrombopenia induced by pentosan polysulfate] Merlin G, et al. **Cah Anesthesiol** 1988 Oct;36(6):469–70 (Fre)
[Complications of postoperative systematic preventive anticoagulant treatment] Rettori R. **J Mal Vasc** 1989;14 Suppl B:46–8 (Eng. Abstr.) (Fre)
[Thrombopenia caused by fraxiparin. A case (letter)] Ball A, et al. **Presse Med** 1989 Jun 24;18(25):1254 (Fre)
[Multiple thrombosis and thrombocytopenia due to heparin occurring after plasma exchange (letter)] Fourrier F, et al. **Presse Med** 1989 Feb 18;18(7):359 (Fre)
[Drug-induced thrombopenias and neutropenias. An in vitro study by the indirect immunofluorescence test] Vicariot M, et al. **Presse Med** 1988 Oct 15;17(35):1789–92 (Eng. Abstr.) (Fre)
[Thrombopenia induced by heparin in orthopedic surgery. Apropos of 12 cases] Coudane H, et al. **Rev Chir Orthop** 1988;74(6):488–92 (Eng. Abstr.) (Fre)
[Immuno-allergic thrombopenias and leukopenias induced by drugs] Marcelli-Barge A. **Rev Fr Transfus Hemobiol** 1989 Apr;32(2):115–34 (95 ref.) (Eng. Abstr.) (Fre)
[Thrombopenia under low molecular weight heparin after treatment with pentosan polyphosphate (letter)] Paille F, et al. **Therapie** 1988 Jun–Jul;43(4):322–3 (Fre)
[Drug-induced immunocytopenia] Salama A, et al. **Immun Infekt** 1989 Apr;17(2):44–9 (32 ref.) (Eng. Abstr.) (Ger)
[Heparin-induced thrombocytopenia and thrombosis] Langecker P, et al. **Internist (Berlin)** 1988 Jul;29(7):515–8 (Ger)
[Drug-induced hemopathies: thrombocytopenia] Fossati C. **Clin Ter** 1987 Aug 31;122(4):281–7 (272 ref.) (Eng. Abstr.) (Ita)
[Heparin and platelet; reference to heparin induced thrombocytopenia] Matsuo T, et al. **Rinsho Byori** 1989 Apr; Spec No 81:34–40 (Jpn)
[Leuko- and thrombocytopenic reactions of the body to the intravenous administration of emulsions of perfluoro-organic compounds] Sedova LA, et al. **Gematol Transfuziol** 1988 Nov;33(11):45–8 (Eng. Abstr.) (Rus)
[Plasmapheresis and heparin-induced thrombocytopenia-thrombosis (letter)] Manzano L, et al. **Med Clin (Barc)** 1989 Apr 29;92(16):639 (Spa)
[Low molecular weight heparin in a patient with pulmonary embolism and heparin-induced thrombocytopenia (letter)] Monreal M, et al. **Med Clin (Barc)** 1988 Nov 12; 91(16):638–9 (Spa)

CLASSIFICATION

[Pure chronic thrombocytopenia caused by a defect of production: genetic anomalies and acquired diseases] Najean Y, et al. **Ann Med Interne (Paris)** 1989;140(3):163–5 (Fre)

COMPLICATIONS

Neurological abnormalities and thrombocytopenia in a young white male [clinical conference] Whitaker JN, et al. **Ala J Med Sci** 1988 Oct;25(4):394–9
Reduced platelet count as a risk factor for intraventricular hemorrhage. Lupton BA, et al. **Am J Dis Child** 1988 Nov; 142(11):1222–4
Antifibrinolytic therapy in the management of the Kasabach Merritt syndrome [see comments] Ortel TL, et al. **Am J Hematol** 1988 Sep;29(1):44–8. **Comment in:** Am J Hematol 1989 Jul;31(3):219–20
Adult-onset cyclic bicytopenia: a case report and review of treatment of cyclic hematopoiesis. Tefferi A, et al. **Am J Hematol** 1989 Mar;30(3):181–5 (45 ref.)
Asymptomatic thrombocytopenia associated with chorioangioma of placenta. Limaye NS, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):76–7
Clinical significance, prevalence, and natural history of thrombocytopenia in pregnancy-induced hypertension. Romero R, et al. **Am J Perinatol** 1989 Jan;6(1):32–8
Phlegmasia cerulea dolens and its association with hypercoagulable states: case reports. Cohen DJ, et al. **Angiology** 1989 May;40(5):498–508
Control of bleeding in patients with immune and nonimmune thrombocytopenia with aminocaproic acid. Bartholomew JR, et al. **Arch Intern Med** 1989 Sep;149(9):1959–61
Micro-angiopathic haemolysis, thrombocytopenia and nephrotic syndrome associated with membranous nephropathy in a Vietnamese boy. McDonald DT, et al. **Aust Paediatr J** 1988 Oct;24(5):311–3

Autoimmune thrombocytopenia in renal carcinoma. Enright H, et al. **Br J Urol** 1989 Feb;63(2):212–3

Thrombocytopenia in a case of Wegener's granulomatosis [letter] Gabrielli GB, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):331–2

Childhood transient erythroblastopenia complicated by thrombocytopenia and neutropenia. Hanada T, et al. **Eur J Haematol** 1989 Jan;42(1):77–80

Autoimmune neutropenia and thrombocytopenia associated with development of antibodies to human immunodeficiency virus. Ribera E, et al. **J Infect** 1989 Mar; 18(2):167–70

The significance of thrombocytopenia in the development of postoperative intracranial hematoma. Chan KH, et al. **J Neurosurg** 1989 Jul;71(1):38–41

Neutropenia and thrombocytopenia in infants with Rh hemolytic disease. Koenig JM, et al. **J Pediatr** 1989 Apr; 114(4 Pt 1):625–31

Visual diagnosis casebook. Thrombocytopenia with absent radius. Furman GI, et al. **J Perinatol** 1988 Spring;8(2):166–8 (7 ref.)

Intrauterine chronic subdural hematoma with postoperative tension pneumocephalus. Atluru VL, et al. **Pediatr Neurol** 1987 Sep–Oct;3(5):306–9

Legionella infection with acute renal failure and thrombocytopenia mimicking allograft rejection. A pitfall in post-transplantation diagnosis. Barendregt JN, et al. **Transpl Int** 1988 Dec;1(4):222–5

[Vascular headache, thrombopenia and serotonin metabolism] Laloux P, et al. **Acta Neurol Belg** 1988 Nov–Dec; 88(5):290–6 (Eng. Abstr.) (Fre)

[Thrombopenia with heparin and disseminated intravascular coagulation (letter)] Vitoux JF, et al. **Rev Neurol (Paris)** 1989;145(3):251–2 (Fre)

[Thrombocytopenia and HIV: the role of splenectomy] Guetty-Torello M, et al. **Schweiz Med Wochenschr** 1988 Oct 22;118(42):1546–50 (Eng. Abstr.) (Fre)

[Severe thrombocytopenia, hemolysis and liver function disorder in late pregnancy. HELLP syndrome] Mathis G, et al. **Dtsch Med Wochenschr** 1988 Oct 14;113(41):1598–600 (Eng. Abstr.) (Ger)

[B-mode and color-coded Doppler sonography in irradiation planning in klippel–Trenaunay syndrome with Kasabach–Merritt symptoms] Handl-Zeller L, et al. **Ultraschall Med** 1989 Feb;10(1):41–3 (Eng. Abstr.) (Ger)

[Percutaneous removal of kidney calculi and extracorporeal shockwave lithotripsy in patients with hemorrhagic diatheses] Kirschner P, et al. **Z Urol Nephrol** 1988 Jul; 81(7):425–30 (Eng. Abstr.) (Ger)

[A case of cerebral infarction with lupus anticoagulant positive, presenting thrombocytopenia, recurrent fetal loss and biological false-positive in syphilis] Kitabayashi T, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):702–3 (Jpn)

[A case of giant hemangioma of the liver accompanied by Kasabach–Merritt syndrome] Taniwaki S, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1601–4 (Eng. Abstr.) (Jpn)

[Incomplete-form of Behçet disease in a case of monopathic myelodysplastic syndrome presenting as a thrombocytopenia] Nehashi Y, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1097–102 (16 ref.) (Eng. Abstr.) (Jpn)

[Blue-rubber-bleb-nevus syndrome presented vascular dementia and chronic DIC—a case report] Hashimoto Y, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):202–8 (Eng. Abstr.) (Jpn)

CONGENITAL

Thrombocytopenia with absent radii. A review of 100 cases. Hedberg VA, et al. **Am J Pediatr Hematol Oncol** 1988 Spring;10(1):51–64 (72 ref.)

Passive neonatal thrombocytopenia. A case study of factors predicting the response to i.v. IgG therapy. Katikaneni LD, et al. **Ann Clin Lab Sci** 1989 Jul–Aug;19(4):255–9

Defective megakaryocytopoiesis in the syndrome of thrombocytopenia with absent radii. Homans AC, et al. **Br J Haematol** 1988 Oct;70(2):205–10

[Failure of intravenous immunoglobulins in treating allo-immune neonatal thrombopenia (letter)] Dagorne M, et al. **Arch Fr Pediatr** 1989 May;46(5):387–8 (Fre)

DIAGNOSIS

Occult pulmonary embolism presenting with thrombocytopenia and elevated fibrin split products. Mustafa MH, et al. **Am J Med** 1989 Apr;86(4):490–1

Elevated liver enzymes and thrombocytopenia in the third trimester of pregnancy: an unusual case report and a review of the literature. Hannah ME, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):322–3 (2 ref.)

Idiopathic cyclic thrombocytopenia of childhood. Al-Rashid RA. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):40–3

Pseudothrombocytopenia in an elderly preoperative patient. Lavender RC, et al. **Anesth Analg** 1989 Sep;69(3):396–7

Pseudothrombocytopenia. Jim RT. **Hawaii Med J** 1989 May; 48(5):170, 191

[The HELLP syndrome as an unfavorable course in pre-eclampsia] Musfeld DA, et al. **Gynakol Rundsch** 1988; 28(4):210–9 (Eng. Abstr.) (Ger)

[A clinical case of autoimmune neonatal thrombocytopenia] Tripodi V, et al. **Minerva Pediatr** 1989 Mar;41(3):159–62 (Eng. Abstr.) (Ita)

DRUG THERAPY

High-dose intravenous methylprednisolone for Kasabach–Merritt syndrome [letter; comment] Ozsoylu S. **Am J Hematol** 1989 Jul;31(3):219–20. **Comment on:** Am J Hematol 1988 Sep;29(1):44–8

Zidovudine therapy for severe human immunodeficiency virus-related thrombocytopenia. Neil BJ, et al. **Am J Med** 1988 Nov;85(5):744–5

Epsilon-aminocaproic acid in the reversal of consumptive coagulopathy with platelet sequestration in a vascular malformation of Klippel–Trenaunay syndrome. Poon MC, et al. **Am J Med** 1989 Aug;87(2):211–3

Tranexamic acid in the treatment of Kasabach–Merritt syndrome in infants. Hanna BD, et al. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):191–5

Heparin-associated thrombocytopenia: management of patients for open heart surgery. Case reports describing the use of iloprost. Kraenzler EJ, et al. **Anesthesiology** 1988 Dec;69(6):964–7

Zidovudine for the treatment of thrombocytopenia associated with human immunodeficiency virus (HIV). A prospective study. The Swiss Group for Clinical Studies on the Acquired Immunodeficiency Syndrome (AIDS). **Ann Intern Med** 1988 Nov 1;109(9):718–21

High dose intravenous methylprednisolone for Kasabach–Merritt syndrome. Ozsoylu S, et al. **Eur J Pediatr** 1989 Feb;148(5):403–5

Giant hemangioma with thrombocytopenia and osteolysis successfully treated with prednisone. Sadan N, et al. **J Pediatr Orthop** 1989 Jul–Aug;9(4):472–5

Treatment of human immunodeficiency virus-related thrombocytopenia with zidovudine. Pottage JC Jr, et al. **JAMA** 1988 Nov 25;260(20):3045–8

Idiopathic thrombocytopenia treated with Paf-acether antagonist WEB 2086 [letter] Lohmann HF, et al. **Lancet** 1988 Nov 12;2(8620):1147

More on zidovudine and HIV-related thrombocytopenia [letter] Wallis RS. **N Engl J Med** 1989 Aug 31;321(9):614–5

A safe technique for the placement of implantable vascular access devices in patients with thrombocytopenia. Coit DG, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):429–31

[Major thrombocytopenia related to HIV1 virus treated with zidovudine (letter)] Routy JP, et al. **Presse Med** 1988 Oct 1;17(33):1703 (Fre)

[A case of refractory thrombocytopenia with a remarkable response to colchicine therapy] Kawai H, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1450–1 (Jpn)

[Normalization of platelet count following prednisolone and splenectomy in a patient with splenic hamartoma and thrombocytopenia] Ubara Y, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1083–7 (Eng. Abstr.) (Jpn)

[Use of high doses of intravenous immunoglobulin in the treatment of neonatal thrombocytopenia secondary to maternal idiopathic thrombopenic purpura] García-Monge Santidrian S, et al. **An Esp Pediatr** 1988 Oct;29(4):333–4 (Spa)

EPIDEMIOLOGY

EDTA-dependent pseudothrombocytopaenia: a 12-month epidemiological study. Vicari A, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):537–42

ETIOLOGY

Auto-immune haemolytic anaemia and thrombocytopenia in scleroderma. Pettersson T, et al. **Acta Haematol (Basel)** 1988;80(3):179–80

Pseudothrombocytopenia induced by a monoclonal IgM kappa platelet agglutinin. Hoyt RH, et al. **Am J Hematol** 1989 May;31(1):50–2

Thrombotic thrombocytopenic purpura as a cause of thrombocytopenia in pregnancy: literature review. Pinette MG, et al. **Am J Perinatol** 1989 Jan;6(1):55–7 (15 ref.)

Immunologic thrombocytopenic purpura and human immunodeficiency virus (HIV) in a married heterosexual couple [letter] Larach JC, et al. **Ann Intern Med** 1989 Feb 15;110(4):322–3

Immune thrombocytopenia in hemophiliacs infected with human immunodeficiency virus and their response to splenectomy. Kim HC, et al. **Arch Intern Med** 1989 Jul; 149(7):1685–8

Thrombocytopenia in patients with Sjögren's syndrome [letter] Sugai S, et al. **Arthritis Rheum** 1989 Feb;32(2):234–5

Graft-v-host disease is associated with autoimmune-like thrombocytopenia. Anasetti C, et al. **Blood** 1989 Mar; 73(4):1054–8

Immune thrombocytopenia and interferon alfa. Kanfer EJ, et al. **BMJ** 1988 Dec 17;297(6663):1613

Late onset transfusion-dependent anaemia with thrombocytopenia secondary to marrow fibrosis and hypoplasia associated with chronic graft-versus-host disease. Atkinson K, et al. **Bone Marrow Transplant** 1987 Dec;2(4):445–9

Immune thrombocytopenia more than a year after allogeneic marrow transplantation due to antibodies against donor platelets with anti-PIA1 specificity: evidence for a host-derived immune reaction. Panzer S, et al. **Br J Haematol** 1989 Feb;71(2):259–64

Is there a role for phospholipases in the anti-cardiolipin syndrome? Gonzalez-Buritica H, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):341–2

Toxicity from treatment of neuroblastoma with 131I-meta-iodobenzylguanidine. Sisson JC, et al. **Eur J Nucl Med** 1988;14(7–8):337–40

Immunopathology of thrombocytopenia in experimental malaria. Grau GE, et al. **Immunology** 1988 Dec;65(4):501–6

Infectious mononucleosis with acute thrombocytopenia. Flanagan NG, et al. **J Infect** 1989 Jul;19(1):61–3

Hematologic dysfunction in Lassa fever. Fisher-Hoch S, et al. **J Med Virol** 1988 Oct;26(2):127–35

Hypothermia-induced thrombocytopenia [letter] Burman JF. **J R Soc Med** 1988 Oct;81(10):619

Hypothermia-induced thrombocytopenia [letter] McFadden JP. **J R Soc Med** 1988 Nov;81(11):677

Thrombocytopenia and hemolytic anemia in a patient with mixed connective tissue disease due to thrombotic thrombocytopenic purpura. ter Borg EJ, et al. **J Rheumatol** 1988 Jul;15(7):1174–7

From the National Institutes of Health. Raub W. **JAMA** 1989 Oct 6;262(13):1748

Role of complement-derived peptides in thrombocytopenia elicited by soluble aggregates of immunoglobulin G in the rat. Fernandez-Gallardo S, et al. **Lab Invest** 1989 May; 60(5):705–13

Acquired cyclic amegakaryocytic thrombocytopenia associated with an immunoglobulin blocking the action of granulocyte-macrophage colony-stimulating factor. Hoffman R, et al. **N Engl J Med** 1989 Jul 13;321(2):97–102

Thrombocytopenia and human immunodeficiency virus in children. Ellaurie M, et al. **Pediatrics** 1988 Dec;82(6):905–8

Thrombocytopenia and pediatric patients with AIDS [letter] Weinblatt M. **Pediatrics** 1989 Aug;84(2):401–2

Thrombocytopenia following routine blood transfusion: micro-aggregate blood filters prevent worsening thrombocytopenia in patients with low platelet counts. Lim S, et al. **Vox Sang** 1989;56(1):40–1

Severe thrombocytopenia in Epstein-Barr virus-induced mononucleosis. Steeper TA, et al. **West J Med** 1989 Feb; 150(2):170–3

[Severe thrombocytopenia in acute brucellosis] Shaked Y, et al. **Harefuah** 1988 Apr 15;114(8):386 (Eng. Abstr.) (Heb)

[Four patients with thrombocytopenia associated with Sjögren's syndrome] Tachibana J, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1697–703 (Jpn)

[Status of the blood coagulation system in traumatic disease] Nemchenko NS, et al. **Vestn Khir** 1988 Oct;141(10):56–60 (Eng. Abstr.) (Rus)

[Hemangioma of the urinary bladder with thrombocytopenia] Vesely R, et al. **Cesk Pediatr** 1989 Mar;44(3):174–5 (Slo)

[Thrombocytopenias induced by infections] Valverde F, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:83–5 (5 ref.) (Spa)

GENETICS

Parent to child transmission of the thrombocytopenia absent radius (TAR) syndrome. Ward RE, et al. **Am J Med Genet Suppl** 1986;2:207–14 (16 ref.)

Hereditary X-linked thrombocytopenia maps to the same chromosomal region as the Wiskott–Aldrich syndrome. Donnér M, et al. **Blood** 1988 Dec;72(6):1849–53

Genetic counselling in a case of TAR syndrome where the father presented malformations of the feet. Le Marec B, et al. **Clin Genet** 1988 Aug;34(2):104–8

Don't let my baby be like me. **Hastings Cent Rep** 1988 Aug–Sep;18(4):suppl 25–8

Familial myopathy associated with thrombocytopenia: a clinical and histomorphometric study. Mahon M, et al. **J Neurol Sci** 1988 Dec;88(1–3):55–67

Thrombocytopenia with absent radius (TAR). Hall JG, et al. **Medicine (Baltimore)** 1969 Nov;48(6):411–39 (75 ref.)

[Familial isolated thrombocytopenia. A family with autosomal dominant heredity] May O. **Ugeskr Laeger** 1989 Jan 16;151(3):172–3 (Eng. Abstr.) (Dan)

[Study on mean platelet volume, platelet distribution width, platelet associated IgG in a family with hereditary thrombocytopenia] Yamada S, et al. **Rinsho Byori** 1988 Jun; 36(6):667–73 (Jpn)

[The May-Hegglin anomaly in a family] Javier G, et al. **Sangre (Barc)** 1989 Feb;34(1):71–3 (Spa)

IMMUNOLOGY

Thrombocytopenia in HIV-infected hemophiliacs [letter] Fabris F, et al. **Acta Haematol (Basel)** 1989;81(4):219–20

Platelet antibody [letter; comment] Ozsoylu S. **Am J Hematol** 1989 Jul;31(3):223–4. **Comment on:** Am J Hematol 1988 Oct;29(2):106–14

Antinuclear antibodies in patients with chronic idiopathic autoimmune thrombocytopenia followed 2–30 years. Panzer S, et al. **Am J Hematol** 1989 Oct;32(2):100–3

Autoimmune thrombocytopenias. Bellucci S. **Baillieres Clin Haematol** 1989 Jul;2(3):695–718 (133 ref.)

Immunology of platelet disorders. von dem Borne AE, et al. **Baillieres Clin Haematol** 1989 Jul;2(3):749–81 (212 ref.)

Cyclic thrombocytopenia of apparent autoimmune etiology. Menitove JE, et al. **Blood** 1989 May 1;73(6):1561–9

The serology and immunochemistry of HIV-induced platelet-bound immunoglobulin. Klaassen RJ, et al. **Blut** 1989 Jul;59(1):75–81

Sex difference in the CD4 + CD45R+ T lymphocytes in

normal individuals and its selective decrease in women with idiopathic thrombocytopenic purpura. Mylvaganam R, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):473–85

Steroid–resistant immune thrombocytopenia of pregnancy: successful treatment using prolonged high–dose intravenous immunoglobulin [letter] Rugman FP, et al. **Eur J Haematol** 1989 Jul;43(1):90–1

Immune thrombocytopenia in dogs after fetal liver hematopoietic cell transplantation. Cain GR, et al. **Exp Hematol** 1989 Mar;17(3):287–91

A second case of neonatal alloimmune thrombocytopenia associated with anti–PIA2 (Zwb) antibodies. Maslanka K, et al. **Haematologia (Budap)** 1989;22(2):109–13

Is thrombocytopenia seen in patients with leptospirosis immunologically mediated? Davenport A, et al. **J Clin Pathol** 1989 Apr;42(4):439–40

348 cases of suspected neonatal alloimmune thrombocytopenia. Mueller–Eckhardt C, et al. **Lancet** 1989 Feb 18;1(8634):363–6

Detection and quantitation of platelet–associated IgG in thrombocytopenia: a comparison of immunofluorescence and immunoenzyme techniques. Smith GA, et al. **Med Lab Sci** 1989 Jan;46(1):45–9

The alloimmune thrombocytopenias: neonatal alloimmune thrombocytopenic purpura and post–transfusion purpura. Kunicki TJ, et al. **Prog Hemost Thromb** 1989;9:203–32 (177 ref.)

Disorders associated with antibodies to endothelial cells. Cines DB. **Rev Infect Dis** 1989 May–Jun;11 Suppl 4:S705–11 (45 ref.)

Testing of maternal sera in pregnancies at risk for neonatal alloimmune thrombocytopenia. McFarland JG, et al. **Transfusion** 1989 Feb;29(2):128–33

[Diagnosis and treatment of alloimmunothrombocytopenia in the fetus] Kekomäki R, et al. **Duodecim** 1988; 104(17):1398–400 **(Fin)**

[Thrombocytopenia of malaria. Role of immune phenomena (letter)] Touze JE, et al. **Presse Med** 1989 Jul 1;18(26):1297 **(Fre)**

[Anti–phospholipid antibody with recurrent venous thromboembolism and severe autoimmune thrombocytopenia] Kienast J, et al. **Klin Wochenschr** 1989 Jul 3;67(13):691–5 (Eng. Abstr.) **(Ger)**

[Analysis of antigens and disorders in 20 patients with EDTA–dependent pseudothrombocytopenia] Endo Y, et al. **Rinsho Byori** 1989 Apr;37(4):421–5 **(Jpn)**

METABOLISM

Is thrombocytopenia in liver failure dependent on an inadequate synthesis of thrombopoietic stimulating factor by the liver? Aseni P, et al. **Med Hypotheses** 1988 Aug; 26(4):217–9

MORTALITY

[Prognostic criteria in alcohol–induced damage of the blood–forming system] Gehrmann G. **Versicherungsmedizin** 1988 Jul 1;40(4):99–100 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Monocyte–platelet interaction in immune and nonimmune thrombocytopenia. Saleh MN, et al. **Blood** 1989 Sep; 74(4):1328–31

Ultrastructural analysis of acute immune thrombocytopenia in mice: dissociation between alterations in megakaryocytes and platelets. Stenberg PE, et al. **J Cell Physiol** 1989 Oct; 141(1):160–9

Kawasaki's syndrome accompanied by bone marrow suppression. Cohen I, et al. **J La State Med Soc** 1988 Jul; 140(7):31–4

Hamartoma of the spleen with haematological symptoms. Beham A, et al. **Virchows Arch [A]** 1989;414(6):535–9

PHYSIOPATHOLOGY

Pulmonary hypertension due to monocrotaline pyrrole is reduced by moderate thrombocytopenia. Ganey PE, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1165–72

Pathophysiology of thrombocytopenia associated with HIV infection in homoexual men. A preliminary report. Ballem PJ, et al. **Blut** 1989 Jul;59(1):111–4

Menstrual cyclic thrombocytopenia. Tomer A, et al. **Br J Haematol** 1989 Apr;71(4):519–24

The safety of dental extractions in patients with hematologic malignancies. Williford SK, et al. **J Clin Oncol** 1989 Jun; 7(6):798–802

Abrupt reversal of gestational autoimmune thrombocytopenia after delivery. A case report. Bartholomew JR, et al. **J Reprod Med** 1989 Mar; 34(3):234–6

PREVENTION & CONTROL

Prevention by a stable prostacyclin analogue, 7–oxoprostaglandin I2 of the platelet loss during experimental cardiopulmonary bypass. Juhász–Nagy S, et al. **Acta Chir Hung** 1988;29(3):251–61

Reduction of difluoromethylornithine–induced thrombocytopenia in rats with ornithine while maintaining antitumor activity. Grossie VB Jr, et al. **Cancer Res** 1989 Aug 1;49(15):4159–62

Platelet transfusion therapy in thrombocytopaenia of haematologic malignancies. Charak BS, et al. **J Assoc Physicians India** 1989 Mar;37(3):201–3

Amelioration of chemotherapy–induced thrombocytopenia by GM–CSF: apparent dose and schedule dependency [letter] Edmonson JH, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1510–2

Antenatal treatment of neonatal alloimmune thrombocytopenia. Bussel JB, et al. **N Engl J Med** 1988 Nov 24;319(21):1374–8

[Prevention of immunoallergic thrombopenia induced by heparin] Grouille D, et al. **Cah Anesthesiol** 1988 Jun–Jul; 36(4):261–3 **(Fre)**

RADIONUCLIDE IMAGING

Unusual uptake of In–111 labeled platelets in a patient with polycythemia. Shulkin BL. **Clin Nucl Med** 1988 Dec; 13(12):917–8

SURGERY

Succesaful splenectomy in May–Hegglin anomaly: report of a case with platelet kinetic studies. Raveh D, et al. **Acta Haematol (Basel)** 1989;82(1):43–5

Splenectomy. The treatment of choice for human immunodeficiency virus–related immune thrombocytopenia? Ravikumar TS, et al. **Arch Surg** 1989 May;124(5):625–8

[Effect of splenectomy on the cytotoxic activity (ADCC) of K lymphocytes] Pawelski S, et al. **Pol Arch Med Wewn** 1985 Apr;73(4):230–5 (Eng. Abstr.) **(Pol)**

THERAPY

Intravenous gamma globulin for prolonged passive immune thrombocytopenia. Hara T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Oct;30(5):627–31

Intravenous immunoglobulin therapy in human immunodeficiency virus–associated thrombocytopenia [letter; comment] Fisher AE. **Arch Intern Med** 1989 Feb; 149(2):467. **Comment on:** Arch Intern Med 1988 Mar;148(3):695–7

Management of refractory idiopathic thrombocytopenia. Firkin BG, et al. **Blood Rev** 1988 Sep;2(3):149–56 (44 ref.)

High–dose IgG treatment for neonatal alloimmune thrombocytopenia. Mueller–Eckhardt C, et al. **Blut** 1989 Jul;59(1):145–6

The treatment of chronic idiopathic thrombocytopenia with anti–D (Rho) immunoglobulin: its effectiveness, safety and mechanism of action. Boughton BJ, et al. **Clin Lab Haematol** 1988;10(3):275–84

Use of i.v. immune globulin for presumed quinidine–induced thrombocytopenia [letter] Redell MA, et al. **Clin Pharm** 1989 Feb;8(2):89

Human immunodeficiency virus–associated thrombocytopenia. Hoffman DM, et al. **DICP** 1989 Feb; 23(2):157–60 (35 ref.)

Mechanism of action of intravenous immunoglobulin in immune–mediated cytopenias. Atrah HI, et al. **J Clin Pathol** 1988 Dec;41(12):1249–55 (50 ref.)

Management of alloimmune neonatal thrombocytopenia. **Lancet** 1989 Jan 21;1(8630):137–8 (23 ref.)

Prenatal treatment of fetal alloimmune thrombocytopenia [letter] **Lancet** 1988 Oct 15;2(8616):910

Intravenous gammaglobulin, antiphospholipid antibodies, and thrombocytopenia [letter] Barbui T, et al. **Lancet** 1988 Oct 22;2(8617):969

In–utero platelet transfusion for alloimmune thrombocytopenia [letter] Bussel J, et al. **Lancet** 1988 Dec 3;2(8623):1307–8

Interleukin–1 potentiates granulopoiesis and thrombopoiesis by producing hematopoietic factors in vivo. Nakai S, et al. **Life Sci** 1989;45(7):585–91

Epstein–Barr virus induced thrombocytopenia treated with intravenous acyclovir and immunoglobulin. Hugo H, et al. **Scand J Infect Dis** 1989;21(1):103–5

Treatment of serious heparin–induced thrombocytopenia by plasma exchange: report on 4 cases [letter] Bouvier JL, et al. **Thromb Res** 1988 Aug 1;51(3):335–6

A cost–effectiveness evaluation of platelet crossmatching and HLA matching in the management of alloimmunized thrombocytopenic patients. Freedman J, et al. **Transfusion** 1989 Mar–Apr;29(3):201–7

Postoperative thrombocytopenia in liver transplant recipients: prognostic implications and treatment with high dose of gamma–globulin. Munoz SJ, et al. **Transplant Proc** 1989 Jun;21(3):3545–6

Anti–D immunoglobulin and immune thrombocytopenia—a problem of ethics in blood transfusion practice [letter; comment] Bowman JM, et al. **Vox Sang** 1989;56(2):136–7 . **Comment on:** Vox Sang 1988;54(4):246

AIDS–related thrombocytopenia. Experience of a medium–term treatment with intravenous IgG in haemophilia B patients. Leipnitz G, et al. **Vox Sang** 1989; 56(1):57–8

Failure of antenatal high–dose immunoglobulin to improve fetal platelet count in neonatal allo–immune thrombocytopenia [letter] Mir N, et al. **Vox Sang** 1988; 55(3):188–9

Management of alloimmune neonatal and antenatal thrombocytopenia. Reznikoff–Etievant MF. **Vox Sang** 1988;55(4):193–201 (65 ref.)

[Stability of blood cell preparations for malignant blood diseases] Kekomäki R. **Duodecim** 1989;105(11):1138–47 (35 ref.) **(Fin)**

[Treatment of idiopathic thrombocytopenic purpura and thrombocytopenia associated with the HIV virus using anti–Rhesus immunoglobulins] Durand JM, et al. **Presse Med** 1989 Feb 4;18(4):161–4 (Eng. Abstr.) **(Fre)**

[Selection of compatible thrombocyte donors using a solid–phase immunoassay in polytransfused patients] Bade L, et al. **Beitr Infusionther** 1988;21:299–303 **(Ger)**

[Disorders of liver function, thrombopenia and hemolysis in a special clinical form of hypertension in pregnancy (the so–called HELLP syndrome) (published erratum appears in Geburtshilfe Frauenheilkd 1989 Jan;49(1):79)] Niesert S, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):637–40 (Eng. Abstr.) **(Ger)**

[Successful therapeutic use of intraglobin–F in idiopathic immuno–thrombopenia, refractory to corticosteroid and immunosuppressive therapy as well as to splenectomy] Bábiczky A, et al. **Orv Hetil** 1989 Mar 5;130(10):511–3 (27 ref.) (Eng. Abstr.) **(Hun)**

[Platelet transfusions] Mandelli F. **Ric Clin Lab** 1976 Jan–Mar;6 Suppl 1:73–6 (0 ref.) **(Ita)**

[A case of pre–eclampsia with liver dysfunction and thrombocytopenia—is the administration of corticosteroid and gamma–globulin effective against thrombocytopenia?] Fujimoto H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1299–303 **(Jpn)**

[Successful treatment of severe aplastic anemia in an infant with cyclic thrombocytopenia by high–dose intravenous gammaglobulin] Ando O, et al. **Rinsho Ketsueki** 1988 May; 29(5):769–75 (Eng. Abstr.) **(Jpn)**

[Effect of transfusion of various doses of thrombocyte mass in experimental drug–induced thrombocytopenia] Abesadze AI, et al. **Gematol Transfuziol** 1988 Nov; 33(11):27–30 (Eng. Abstr.) **(Rus)**

VETERINARY

Use of danazol for treatment of corticosteroid–resistant immune–mediated thrombocytopenia in a dog. Bloom JC, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):76–8

Thrombocytopenia associated with acute bovine virus diarrhea infection in cattle. Rebhun WC, et al. **J Vet Intern Med** 1989 Jan–Mar;3(1):42–6

Severe thrombocytopenia in young calves experimentally infected with noncytopathic bovine viral diarrhea virus. Corapi WV, et al. **J Virol** 1989 Sep;63(9):3934–43

Laboratory evaluation of hemorrhagic coagulopathies in small animal practice. Parry BW. **Vet Clin North Am Small Anim Pract** 1989 Jul;19(4):729–42 (29 ref.)

THROMBOCYTOSIS

BLOOD

Platelet parameters and aggregation in essential and reactive thrombocytosis. Schayek E, et al. **Am J Clin Pathol** 1988 Oct;90(4):431–6

Thrombocytosis and hyperkalemia revisited. Fort JA. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):334–6

Thrombocytosis in active rheumatoid arthritis. Relation to other parameters of inflammatory activity and confounding effect of automated cell counting. Dahlqvist SR, et al. **Clin Rheumatol** 1988 Sep;7(3):335–41

Blood platelet calcium content and aggregation behaviour in myeloproliferative disorders and secondary thrombocytosis. Mindner K, et al. **Folia Haematol (Leipz)** 1988;115(4):461–4

CHEMICALLY INDUCED

Maternal narcotic abuse and neonatal thrombocytosis [letter] Chambers HM, et al. **Arch Dis Child** 1989 Mar;64(3):426

Danazol and internal carotid artery thrombosis. Corne M, et al. **Eur Neurol** 1989;29(4):235–7

5–fluorouracil–induced thrombocytosis in mice is independent of the spleen and can be partially reproduced by repeated doses of cytosine arabinoside. Ebbe S, et al. **Exp Hematol** 1989 Aug;17(7):822–6

Marked thrombocytosis after CMF chemotherapy [letter] Bolzern U, et al. **Haematologica (Pavia)** 1989 Mar–Apr; 74(2):229

Thrombocytosis after cyclosporin therapy in child with nephrotic syndrome [letter] Itami N, et al. **Lancet** 1988 Oct 29;2(8618):1018

COMPLICATIONS

Kawasaki disease with thrombocytosis followed by thrombocytopenia purpura in the same patient [letter] Lipnick RN, et al. **Am J Dis Child** 1989 Feb;143(2):139–40

Myocardial infarction before the age of 20 is rare [letter] Høst NB, et al. **Eur J Haematol** 1988 Nov;41(5):511

Red cell hypoplasia, thrombocytosis, and leucocytosis: myelodysplastic and proliferative syndrome. Craig A, et al. **J Clin Pathol** 1988 Nov;41(11):1168–70

Transient ischaemic attacks associated with thrombocytosis in active rheumatoid arthritis [letter] Casado Naranjo I, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1599

Fatal cerebrovascular thrombosis in a young woman: an unusual complication associated with hypochromic anemia and thrombocytosis following surgery. Heller DS, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):318–20

[Acute myocardial infarction as the primary symptom in essential thrombocytosis in a 17-year-old male] Høst NB, et al. **Ugeskr Laeger** 1989 May 15;151(20):1250 (Eng. Abstr.) **(Dan)**

[Plasma cell granuloma of the lung and thrombocytosis: apropos of a case] Morell Bernabé JJ, et al. **An Esp Pediatr** 1989 Mar;30(3):215-6 **(Spa)**

[Chronic eosinophilic pneumonia and thrombocytosis: a rare association (letter)] Togores Solivellas B, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):595-6 **(Spa)**

DIAGNOSIS

Primary (essential) thrombocythemia versus initial (hyperplastic) stages of agnogenic myeloid metaplasia with thrombocytosis--a critical evaluation of clinical and histomorphological data. Thiele J, et al. **Acta Haematol (Basel)** 1989;81(4):192-202

Thrombocytosis as a presenting feature of acute lymphoblastic leukemia in childhood. Blatt J, et al. **Am J Hematol** 1989 May;31(1):46-9

Primary thrombocythaemia: diagnostic criteria and a simple scoring system for positive diagnosis. Dudley JM, et al. **Br J Haematol** 1989 Mar;71(3):331-5

Thrombocytosis in pediatric outpatients. Heath HW, et al. **J Pediatr** 1989 May;114(5):805-7

[Essential thrombocytosis] Van Camp G. **Acta Clin Belg** 1989; 44(1):31-6 (Eng. Abstr.) **(Dut)**

[Clinical characterization of essential thrombocythemia in comparison to other myeloproliferative diseases and reactive thrombocytoses] Zankovich R, et al. **Klin Wochenschr** 1988 Aug 1;66(15):699-702 **(Ger)**

ETIOLOGY

Profound thrombocytosis in a patient with iron-lack anemia. Baldwin JG Jr, et al. **South Med J** 1989 May;82(5):662-3

[Fatal acute myocardial infarction associated with postsplenectomy thrombocytosis] Nielsen H. **Ugeskr Laeger** 1988 Sep 5;150(36):2125-6 (Eng. Abstr.) **(Dan)**

[Postinfectious thrombocytosis as an acute phase reaction: the example of Haemophilus influenzae meningitis] Heyne K, et al. **Monatsschr Kinderheilkd** 1988 Sep;136(9):622-5 (Eng. Abstr.) **(Ger)**

[Thrombocytosis following pancreas transplantation--a retrospective clinical study] Hunziker D. **Schweiz Rundsch Med Prax** 1989 Feb 21;78(8):191-6 (Eng. Abstr.) **(Ger)**

[Thrombocytosis and solid tumors] Malacarne P, et al. **Recenti Prog Med** 1988 Sep;79(9):351-5 (Eng. Abstr.) **(Ita)**

[Clinical evaluation of the control of antiplatelet therapy through platelet aggregation rate on polycythemia vera associated with thrombocytosis and erythromelalgia] Kurihara A, et al. **Rinsho Ketsueki** 1989 Jan;30(1):99-104 (Eng. Abstr.) **(Jpn)**

GENETICS

Low incidence of familial occurrence of thrombocythaemia and/or thrombocytosis. Randi ML, et al. **Folia Haematol (Leipz)** 1988;115(5):695-9

PATHOLOGY

Histomorphometry of bone marrow biopsies in chronic myeloproliferative disorders with associated thrombocytosis--features of significance for the diagnosis of primary (essential) thrombocythaemia. Thiele J, et al. **Virchows Arch [A]** 1988;413(5):407-17

THERAPY

Treatment of thrombocytosis in myeloproliferative disorders with interferon alpha-2a. Tichelli A, et al. **Blut** 1989 Jan; 58(1):15-9

Interferon alpha-2b as treatment for Philadelphia-negative chronic myeloproliferative disorders with excessive thrombocytosis. Lazzarino M, et al. **Br J Haematol** 1989 Jun;72(2):173-7

Long-term interferon therapy for thrombocytosis in myeloproliferative diseases. Gisslinger H, et al. **Lancet** 1989 Mar 25;1(8639):634-7

[Thrombocytosis in chronic myelogenous leukemia (CML) controlled by interferon alpha (IFN-alpha)] Koike G, et al. **Rinsho Ketsueki** 1989 Mar;30(3):400-3 (Eng. Abstr.) **(Jpn)**

VETERINARY

Thrombocytosis associated with a myeloproliferative disorder in a dog. Degen MA, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1457-9

Factitious hyperkalemia in dogs with thrombocytosis. The effect of platelets on serum potassium concentration. Reimann KA, et al. **J Vet Intern Med** 1989 Jan-Mar; 3(1):47-52

THROMBOELASTOGRAPHY see **THROMBELASTOGRAPHY**

THROMBOEMBOLISM

Venous thromboembolism. Cooke JP, et al. **Acute Care** 1986; 12(3-4):118-64 (269 ref.)

Clinical studies with low molecular weight heparins in the prevention and treatment of venous thromboembolism. Samama M, et al. **Ann N Y Acad Sci** 1989;556:386-405 (59 ref.)

Reporting the results of heart valve operations [letter] Nashef SA, et al. **Ann Thorac Surg** 1989 Jun;47(6):949-50

Antithrombin III deficiency. Beresford CH. **Blood Rev** 1988 Dec;2(4):239-50 (102 ref.)

Recent advances in the clinical management of thromboembolic diseases. October 20-22, 1988, Düsseldorf, F.R.G. Abstracts of the international symposium. **Thromb Res Suppl** 1988;9:1-61

[What can be expected from a thorough study of coagulation in thromboembolic disease?] Drouet L. **Presse Med** 1989 Apr 1;18(13):656-9 **(Fre)**

[Pulmonary thromboembolism] Dalla Volta S. **G Clin Med** 1988 Dec;69(12):723-40 (15 ref.) **(Ita)**

BLOOD

Thromboembolic disorders [letter] Allen BD. **J Am Board Fam Pract** 1989 Jul-Sep;2(3):220-1

[Hemostasis parameters in 55 patients with venous and/or arterial thromboembolisms] Thommen D, et al. **Schweiz Med Wochenschr** 1989 Apr 22;119(16):493-9 (Eng. Abstr.) **(Ger)**

[Thromboembolism risk factors in kidney transplant patients with secondary erythrocytosis in relation to hemorheologic aspects] Koall W, et al. **Z Gesamte Inn Med** 1988 Sep 1; 43(17):474-7 (Eng. Abstr.) **(Ger)**

CHEMICALLY INDUCED

Heparin-induced thrombocytopenia with disseminated intravascular coagulation and white clot syndrome: a case report. Desmet G, et al. **Acta Clin Belg** 1988;43(6):419-22

Haemorrhagic and thromboembolic complications versus intensity of treatment of venous thromboembolism with oral anticoagulants. Schulman S, et al. **Acta Med Scand** 1988;224(5):425-30

Acute effects with reference to thrombogenicity and liver toxicity after injection of different coagulation factor concentrates. Schulman S, et al. **Haemostasis** 1989; 19(3):152-9

Thromboembolic risk of tamoxifen in patients with stage II breast cancer [letter] Levine M. **J Clin Oncol** 1989 Oct; 7(10):1579-80

Thromboembolic events during combination chemotherapy for germ cell-malignancy [letter] Cantwell BM, et al. **Lancet** 1988 Nov 5;2(8619):1086-7

The safety and effectiveness of long-term warfarin therapy in an anticoagulation clinic. Bussey HI, et al. **Pharmacotherapy** 1989;9(4):214-9

[Complications of postoperative systematic preventive anticoagulant treatment] Rettori R. **J Mal Vasc** 1989;14 Suppl B:46-8 (Eng. Abstr.) **(Fre)**

[Effects of oral estrogen-progestin contraceptives on blood coagulation and assessment of the risk of thromboembolism] Surico N, et al. **Minerva Ginecol** 1988 Sep;40(9):559-62 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Aortic degenerative changes and thrombus formation: an unusual cause of massive myocardial infarction with normal coronary arteries. Nader RG, et al. **Am J Med** 1989 Jun; 86(6 Pt 1):718-22

Frequency of thromboembolic complications in patients with acute pneumonia and pyelonephritis. Wallmark E, et al. **Scand J Infect Dis** 1988;20(4):453-4

In vivo effects of thymic epithelial culture supernate and thymosin fraction 5 on ADP-induced thromboembolic respiratory depression in mice. Hashimoto S, et al. **Thromb Res** 1989 Jan 15;53(2):209-14

[Acute gangrene of the face in a diabetic] Nini G, et al. **G Ital Dermatol Venereol** 1988 Jul-Aug;123(7-8):359-61 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Intracardiac thrombus-systemic arterial embolism. Contribution of echocardiography. Egeblad H. **Acta Med Scand Suppl** 1988;730:1-112

Incidence and diagnostic significance of paraneoplastic thromboembolism disorders. A survey from a community hospital. Naschitz JE, et al. **Int Angiol** 1989 Jan-Mar; 8(1):28-31

Echocardiographic diagnosis of a left atrial thrombus in a patient with normal prosthetic mitral valve. Sundar AS, et al. **Int J Cardiol** 1989 May;23(2):273-4

Diagnosis and evaluation of thromboembolic disorders. Brunader RE. **J Am Board Fam Pract** 1989 Apr-Jun; 2(2):106-18 (75 ref.)

Clinical evaluation of hemostatic molecular markers. Kazama M. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1387-94

[Echocardiography for the diagnosis of right heart thromboembolism (editorial)] Vecchio C. **G Ital Cardiol** 1989 Jan;19(1):17-8 **(Ita)**

DRUG THERAPY

Heparin therapy in venous thromboembolism. Hirsh J. **Ann N Y Acad Sci** 1989;556:378-85 (39 ref.)

Anticoagulants in venous thromboembolism [see comments] Fennerty A, et al. **BMJ** 1988 Nov 19;297(6659):1285-8 (40 ref.). **Comment in:** BMJ 1989 Jan 21;298(6667):185

Local thrombolytic therapy of acute peripheral arterial ischaemia with tissue plasminogen activator: a dose-ranging study. Earnshaw JJ, et al. **Br J Surg** 1988 Dec;75(12):1196-200

Low-dose fibrinolytic therapy for recent lower extremity thromboembolism. Sniderman KW, et al. **Can Assoc Radiol J** 1989 Apr;40(2):98-103

Hemorrhagic complications of thrombolytic therapy in the treatment of myocardial infarction and venous thromboembolism. Fennerty AG, et al. **Chest** 1989 Feb;95(2 Suppl):88S-97S (73 ref.)

Use of anticoagulants during pregnancy. Ginsberg JS, et al. **Chest** 1989 Feb;95(2 Suppl):156S-160S (27 ref.)

Antithrombotic therapy for venous thromboembolic disease. Hyers TM, et al. **Chest** 1989 Feb;95(2 Suppl):37S-51S (179 ref.)

Proceedings of a symposium on Fluxum (low molecular weight heparin): a new prophylactic and therapeutic approach to thromboembolic diseases. Held during the 1st Mediterranean Congress of Angiology. Corfu, Greece, June 2, 1988. **Int Angiol** 1988 Jul-Sep;7(3 Suppl):1-47

Fibrinolytic treatment of residual thrombus after catheter embolectomy for severe lower limb ischemia. Parent FN 3d, et al. **J Vasc Surg** 1989 Jan;9(1):153-60

Can old people on oral anticoagulants be safely managed as out-patients? Joglekar M, et al. **Postgrad Med J** 1988 Oct;64(756):775-7

The Canadian American Ticlopidine Study (CATS) in thromboembolic stroke. Design, organization, and baseline results. Gent M, et al. **Stroke** 1988 Oct;19(10):1203-10

Risks to the fetus of anticoagulant therapy during pregnancy. Ginsberg JS, et al. **Thromb Haemost** 1989 Apr 25; 61(2):197-203 (189 ref.)

[Indications and possibilities of thrombosis prevention and antithrombotic therapy in cardiology] Dolchinov A, et al. **Vutr Boles** 1988;27(3):22-9 (0 ref.) **(Bul)**

[Acetylsalicylic acid in the treatment of arterial thromboembolic diseases. 1. Pharmacologic aspects] Husted SE, et al. **Ugeskr Laeger** 1989 Jun 19;151(25):1597-9 (23 ref.) (Eng. Abstr.) **(Dan)**

[Acetylsalicylic acid in the treatment of arterial thromboembolytic diseases. 2. Clinical documentation] Nielsen HK, et al. **Ugeskr Laeger** 1989 Jun 19; 151(25):1599-606 (30 ref.) (Eng. Abstr.) **(Dan)**

[The administration of thrombolytic agents in peripheral vascular occlusion] Buth J. **Ned Tijdschr Geneeskd** 1988 Sep 24;132(39):1785-9 (29 ref.) **(Dut)**

[A new method of heparin therapy: subcutaneous administration in thromboembolism] Rák K. **Orv Hetil** 1989 Feb 12;130(6):295-7 **(Hun)**

[Cardiovascular therapy in pregnancy] Piccione E. **Clin Ter** 1987 Jun 30;121(6):517-24 (48 ref.) (Eng. Abstr.) **(Ita)**

[Pharmacologic treatment of venous thromboembolism] Arnesen H. **Tidsskr Nor Laegeforen** 1989 Jun 20; 109(17-18):1893-4 **(Nor)**

[Drug therapy in arterial thromboembolic disease] Dale J. **Tidsskr Nor Laegeforen** 1988 Sep 10;108(25):2038-9 **(Nor)**

ENZYMOLOGY

Serum angiotensin-converting enzyme: an endothelial cell marker. Application to thromboembolic pathology. Drouet L, et al. **J Lab Clin Med** 1988 Oct;112(4):450-7

EPIDEMIOLOGY

Incidence of thromboembolism in association with surgical and medical diseases. Bergentz SE. **Acta Chir Scand Suppl** 1988;543:10-4 (33 ref.)

Oral contraceptives and venous thromboembolic disease: the effect of the oestrogen dose. Melis GB, et al. **Maturitas** 1988;Suppl 1:131-9

ETIOLOGY

The oral contraceptive user. Lidegaard O, et al. **Acta Obstet Gynecol Scand** 1988;67(1):27-31

Risk factors for thromboembolic stroke in elderly patients with chronic atrial fibrillation. Aronow WS, et al. **Am J Cardiol** 1989 Feb 1;63(5):366-7

Thromboembolization complicating left ventricular pseudoaneurysm: serial two-dimensional and color-flow Doppler echocardiographic observations. D'Cruz IA, et al. **Am J Med Sci** 1989 Aug;298(2):123-5

Infections and thromboembolism with implantable cardiovascular devices. Didisheim P, et al. **ASAIO Trans** 1989 Jan-Mar;35(1):54-70 (65 ref.)

Incidence of septic and thromboembolic-related deaths after splenectomy in adults. Pimpl W, et al. **Br J Surg** 1989 May; 76(5):517-21

Haemorrhagic and thrombo-embolic complications associated with surgery. Grant PJ, et al. **Br Med Bull** 1988 Apr;44(2):453-74 (51 ref.)

Platelet activation in patients with mitral valve prolapse. Lin SL, et al. **Can J Cardiol** 1989 Mar;5(2):84-6

Thromboembolic complications in coronary angiography associated with the use of nonionic contrast medium [letter] Robertson HJ. **Cathet Cardiovasc Diagn** 1989 Feb; 16(2):145-6

Serious complications of congenital antithrombin III (AT III) deficiency in a 7-year-old girl. Kardos M, et al.

Folia Haematol (Leipz) 1988;115(3):297–300
Hemorrhagic and thrombotic complications in polycythemia vera. A clinical study. Orlandi E, et al. Haematologica (Pavia) 1989 Jan–Feb;74(1):45–9
The role of catheters and guidewires in the production of angiographic thromboembolic complications. Kido DK, et al. Invest Radiol 1988 Nov;23 Suppl 2:S359–65 (37 ref.)
Nonionic contrast media in radiology. Procedural considerations. Robertson HJ. Invest Radiol 1988 Nov;23 Suppl 2:S374–7 (9 ref.)
Connective tissue disease associated with sclerodermoid features, early abortion, and circulating anticoagulant. Freeman WE, et al. J Am Acad Dermatol 1988 Nov;19(5 Pt 2):932–7 (32 ref.)
Blood compatibility of surfaces modified by plasma polymerization. Yeh YS, et al. J Biomed Mater Res 1988 Sep;22(9):795–818
Haemorrhagic and thromboembolic complications in patients with atrial fibrillation on anticoagulant prophylaxis. Lundström T, et al. J Intern Med 1989 Feb;225(2):137–42
Superficial femoral pseudoaneurysm and arterial thromboembolism caused by an osteochondroma. Woolson ST, et al. J Pediatr Orthop 1989 May–Jun;9(3):335–7
Thrombosis and thromboembolism in an infant of a diabetic mother. Katzman GH. J Perinatol 1989 Jun;9(2):137–40
Thromboembolic potential of synthetic vascular grafts in baboons. Schneider PA, et al. J Vasc Surg 1989 Jul; 10(1):75–82
Long-term evaluation of mechanical heart valves [letter] Lancet 1989 May 6;1(8645):1020–1
Thromboembolism and air travel [letter] Coller BS. Lancet 1988 Nov 26;2(8622):1255
Thromboembolism and air travel [letter] Finch PJ, et al. Lancet 1988 Oct 29;2(8618):1025
Thromboembolic events during combination chemotherapy for germ cell malignancy [letter] Hall MR, et al. Lancet 1988 Nov 26;2(8622):1259
Rates of thromboembolism with three different mechanical heart valve prostheses: randomised study. Kuntze CE, et al. Lancet 1989 Mar 11;1(8637):514–7
Fatal cerebrovascular thrombosis in a young woman: an unusual complication associated with hypochromic anemia and thrombocytosis following surgery. Heller DS, et al. Mt Sinai J Med (NY) 1988 Sep;55(4):318–20
Inherited deficiency of functional and free form protein S. Iijima K, et al. Nippon Ketsueki Gakkai Zasshi 1989 Feb; 52(1):126–33
Thromboembolic risk factors in patients undergoing maxillofacial surgery for malignancies. Watzke I, et al. Oral Surg Oral Med Oral Pathol 1989 Feb;67(2):137–40
Atrial fibrillation and embolic complications in paced patients. Langenfeld H, et al. PACE 1988 Nov;11(11 Pt 2):1667–72
No association between post-transplant erythrocytosis, thromboembolic events, and cyclosporine therapy. Glicklich D, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2141–2
Portal vein thromboembolism of liver allografts from splenectomized donors. Yanaga K, et al. Transplantation 1989 Feb;47(2):399–400
[Arterial and venous thromboembolic complications in patients with renal transplants. Apropos of 2 cases] Poitrineau O, et al. Ann Cardiol Angeiol (Paris) 1989 Jun; 38(6):309–12 (10 ref.) (Eng. Abstr.) (Fre)
[Risk of thromboembolism in chronic inflammatory intestinal disease] Hüppe D, et al. Med Klin 1988 Sep 16; 83(18):577–84 (36 ref.) (Eng. Abstr.) (Ger)
[Thromboembolism as a complication of Pudenz-Heyer drainage with cardiac shunt] Galal O, et al. Monatsschr Kinderheilkd 1989 Feb;137(2):98–100 (Eng. Abstr.) (Ger)
[Laboratory methods for the testing of fibrinolytic capacity] Siegert G. Z Med Lab Diagn 1988;29(6):321–6 (15 ref.) (Eng. Abstr.) (Ger)
[Thromboembolus migrating into the right heart in pulmonary embolism. Echocardiographic and clinico-therapeutic aspects in 7 cases and review of the literature] Franzoni P, et al. G Ital Cardiol 1989 Jan; 19(1):7–16 (59 ref.) (Eng. Abstr.) (Ita)
[Thromboembolic risk] Campisi M, et al. Minerva Anestesiol 1988 Oct;54(10):405–12 (Eng. Abstr.) (Ita)
[A case of successful operation of chronic dissecting aneurysm (DeBakey IIIb) complicated with frequent acute thrombo-embolism in the leg] Masuda M, et al. Kyobu Geka 1988 Jul;41(8):664–6 (Eng. Abstr.) (Jpn)
[Disorders of blood coagulation and fibrinolysis in neoplasms] Ponahajba A. Pneumonol Pol 1988 Sep;56(9):393–7 (Pol)
[Thrombotic diseases: their classification and laboratory diagnosis] Baluda VP, et al. Gematol Transfuziol 1989 Feb; 34(2):3–8 (Rus)
[Activation of factor VII as a global marker of thrombophilic conditions] Barkagan ZS, et al. Kardiologiia 1989 Jun; 29(6):121–5 (70 ref.) (Rus)
[Late thrombo-embolic complications after heart valve prosthesis] Chernov VA, et al. Kardiologiia 1988 Sep; 28(9):21–7 (Eng. Abstr.) (Rus)
[Injury of the axillary artery caused by crutches] Neugodov IuV, et al. Khirurgiia (Mosk) 1989 Mar;(3):105–8 (Rus)
[Malignant pheochromocytoma with multiple thromboembolic manifestations] Bondar' IuS, et al. Probl Endokrinol (Mosk) 1988 Sep–Oct;34(5):43–5 (Rus)
[Anticoagulant treatment during pregnancy in patients with prosthetic valves (editorial)] Salazar E. Arch Inst Cardiol Mex 1988 Sep–Oct;58(5):387–8 (Spa)
[Venous thromboembolism] Arribas Castrillo JM. Rev Clin Esp 1989 May;184(8):395–8 (Spa)

GENETICS

The clinical spectrum of heterozygous protein C deficiency in a large New England kindred. Bovill EG, et al. Blood 1989 Feb 15;73(3):712–7
Heterozygous protein C deficiency type I. Kemkes-Matthes B. Blut 1989 Apr;58(4):201–6

HISTORY

[The evolution of ideas in preventive treatment of thrombo-embolic disease. Hemodilution] Duruble M. J Mal Vasc 1989;14 Suppl B:49–50 (Fre)

METABOLISM

Effect of blood gases and pH on thromboembolic reactions in rabbit mesenteric microvessels. oude Egbrink MG, et al. Pflugers Arch 1989 Jul;414(3):324–30
Plasma protein S deficiency and thromboembolic disease. Griffin JH, et al. Prog Hematol 1987;15:39–49 (80 ref.)

MORTALITY

Ten years' experience with the St. Jude Medical valve prosthesis. Arom KV, et al. Ann Thorac Surg 1989 Jun; 47(6):831–7

PATHOLOGY

Intravascular lymphomatosis (malignant angioendotheliomatosis). A B-cell neoplasm expressing surface homing receptors. Ferry JA, et al. Mod Pathol 1988 Nov;1(6):444–52
[Megakaryocytic myelosis—clinical aspects, morphology and platelet function] Hochhaus A, et al. Klin Wochenschr 1989 Jan 20;67(2):51–9 (Eng. Abstr.) (Ger)
[Thromboembolic complications in children] Liamtsev VT, et al. Arkh Patol 1989;51(4):41–5 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Pathophysiological mechanisms of thromboembolism. Risberg B. Acta Chir Scand Suppl 1989;550:104–14 (124 ref.)
Thromboembolism and air travel [letter] Cruickshank JM, et al. Lancet 1988 Dec 24–31;2(8626–8627):1501
[Coronary thromboembolism in hepatic sarcoma following myocardial infarct] Tenna M, et al. Riv Eur Sci Med Farmacol 1987 Mar;9(1):61–5 (Eng. Abstr.) (Ita)
[The importance of a biological study of venous thromboembolism] Romo M, et al. Med Clin (Barc) 1989 Apr 8;92(13):507–10 (49 ref.) (Spa)

PREVENTION & CONTROL

New approaches to thromboprophylaxis. Denmark, October 28–29, October 28–29, 1987. Proceedings. Acta Chir Scand Suppl 1988;543:1–104
Concluding remarks and remaining problems on thromboprophylaxis. Bergqvist D. Acta Chir Scand Suppl 1988;543:48–51 (27 ref.)
Oral anticoagulants for prophylaxis against postoperative thromboembolism. Bergqvist D. Acta Chir Scand Suppl 1988;543:43–7 (44 ref.)
Prophylaxis of postoperative thromboembolism with low dose heparin alone or in combination with dihydroergotamine. A review. Lindblad B. Acta Chir Scand Suppl 1988;543:31–42 (132 ref.)
The antithrombotic efficacy of dextran. Ljungström KG. Acta Chir Scand Suppl 1988;543:26–30 (38 ref.)
Comparison of low molecular weight heparin vs. unfractionated heparin in gynecological surgery. Borstad E, et al. Acta Obstet Gynecol Scand 1988;67(2):99–103
Long-term oral anticoagulant therapy in elderly patients. Wickramasinghe LS, et al. Age Ageing 1988 Nov; 17(6):388–96
Antithrombotic therapy in acute myocardial infarction: prevention of venous, left ventricular and coronary artery thromboembolism. Stein B, et al. Am J Cardiol 1989 Jul 18;64(4):33B–40B (51 ref.)
Hydroxychloroquine and postoperative thromboembolism after total hip replacement. Loudon JR. Am J Med 1988 Oct 14;85(4A):57–61 (34 ref.)
Thrombosis prophylaxis in pregnancy with use of subcutaneous heparin adjusted by monitoring heparin concentration in plasma. Dahlman TC, et al. Am J Obstet Gynecol 1989 Aug;161(2):420–5
Recurrent thromboembolism in pregnancy and puerperium. Is there a need for thromboprophylaxis? Tengborn L, et al. Am J Obstet Gynecol 1989 Jan;160(1):90–4
Thromboembolism and problems of anti-coagulation after prosthetic valve replacement. Sivathasan C, et al. Ann Acad Med Singapore 1988 Jul;17(3):434–7
Elimination of the cloth sewing ring-metal interface in an effort to decrease thromboembolism. Beall AC Jr. Ann Thorac Surg 1989 Sep;48(3 Suppl):S57–8
Anticoagulant therapy in children with prosthetic valves. Rao PS, et al. Ann Thorac Surg 1989 Apr;47(4):589–92
Prevention of thromboembolism in hip-fracture patients. Comparison of low-dose heparin and low-molecular-weight heparin combined with dihydroergotamine. Lassen MR, et al. Arch Orthop Trauma Surg 1989;108(1):10–3
Anticoagulant drugs in the elderly: valuable in selected patients. Lowe GD. BMJ 1988 Nov 12;297(6658):1260, 1262–3 (22 ref.)
2nd ACCP Conference on Antithrombotic Therapy. American College of Chest Physicians. June 21, 1988. Proceedings. Chest 1989 Feb;95(2 Suppl):1S–169S
Antithrombotic therapy in peripheral vascular disease. Clagett GP, et al. Chest 1989 Feb;95(2 Suppl):128S–139S (109 ref.)
Antithrombotic therapy in atrial fibrillation. Dunn M, et al. Chest 1989 Feb;95(2 Suppl):118S–127S (109 ref.)
Optimal therapeutic range for oral anticoagulants. Hirsh J, et al. Chest 1989 Feb;95(2 Suppl):5S–11S (31 ref.)
Antithrombotic therapy in valvular heart disease. Levine HJ, et al. Chest 1989 Feb;95(2 Suppl):98S–106S (94 ref.)
A decision analytic view of anticoagulant prophylaxis for thromboembolism in heart disease. Pauker SG, et al. Chest 1989 Feb;95(2 Suppl):161S–169S
Antithrombotic therapy in mechanical and biological prosthetic heart valves and saphenous vein bypass grafts. Stein PD, et al. Chest 1989 Feb;95(2 Suppl):107S–117S (57 ref.)
Venous thromboembolic disease after hip surgery. Risk factors, prophylaxis, and diagnosis. Haake DA, et al. Clin Orthop 1989 May;(242):212–31 (135 ref.)
Low-dose heparin in the prevention of thrombotic complications following acute myocardial infarction. Zawilska K, et al. Cor Vasa 1989;31(3):179–85
Low dose heparin versus low molecular weight heparin (Kabi 2165, Fragmin) in the prophylaxis of thromboembolic complications of abdominal oncological surgery. Fricker JP, et al. Eur J Clin Invest 1988 Dec;18(6):561–7
Venous thromboembolism: how to prevent a tragedy. Goldhaber SZ. Hosp Pract [Off] 1988 Oct 15;23(10):164, 169–70, 173–4 (6 ref.)
Reevaluation of indications for percutaneous placement of the Greenfield filter. Tobin KD, et al. Invest Radiol 1989 Feb;24(2):115–8
The role of regional anesthesia in decreasing thromboembolism [letter] Larsen KD. JAMA 1989 Jun 23–30;261(24):3552
Warfarin to prevent thromboembolism in chronic atrial fibrillation [letter] Lancet 1989 Mar 25;1(8639):670
The Canadian American Ticlopidine Study (CATS) in thromboembolic stroke. Gent M, et al. Lancet 1989 Jun 3;1(8649):1215–20
Warfarin to prevent thromboembolism in chronic atrial fibrillation [letter] Monreal M, et al. Lancet 1989 Apr 1; 1(8640):720–1
Placebo-controlled, randomised trial of warfarin and aspirin for prevention of thromboembolic complications in chronic atrial fibrillation. The Copenhagen AFASAK study. Petersen P, et al. Lancet 1989 Jan 28;1(8631):175–9
Full dose subcutaneous heparin therapy. Hollander G, et al. N Y State J Med 1989 Jul;89(7):387–9
Modes of administration of heparin in clinical medicine. Mendelsohn ME. N Y State J Med 1989 Jul;89(7):382–4
Strategies for preventing thromboembolism in patients with acute myocardial infarction. Rooke TW. N Y State J Med 1989 Jul;89(7):381–2
Protein C deficiency and pregnancy: a case report. Vogel JJ, et al. Obstet Gynecol 1989 Mar;73(3 Pt 2):455–6
Ergotism as a consequence of thromboembolic prophylaxis. Ashenburg RJ, et al. Radiology 1989 Feb;170(2):375–6
[Complications following preventive treatment of thromboembolism with Dihydergot-heparin] Andersen KH, et al. Ugeskr Laeger 1989 Aug 14;151(33):2072–5 (26 ref.) (Eng. Abstr.) (Dan)
[What is new about determining thrombo-embolic risk?] Dormandy J. J Mal Vasc 1989;14 Suppl B:44–5 (0 ref.) (Fre)
[Prevention of thromboembolic complications during total hip arthroplasty by pre- and postoperative heparinotherapy with adapted doses. Apropos of 356 cases] Pidhorz L, et al. Rev Chir Orthop 1988;74(7):593–603 (Eng. Abstr.) (Fre)
[The advantages and disadvantages of surgical prevention of thrombosis] Straub H. Aktuel Traumatol 1989 Feb; 19(1):1–5 (11 ref.) (Eng. Abstr.) (Ger)
[Symposium: Thrombosis and embolism. The value of fraxiparin in the prevention of postoperative thromboembolism. 28–29 October 1988, Cologne. Abstracts] Chirurg 1989 Feb;60(2 Suppl):1–19 (Ger)
[Thromboembolism prophylaxis with low molecular weight heparin in abdominal surgery] Adolf J, et al. Dtsch Med Wochenschr 1989 Jan 13;114(2):48–53 (Eng. Abstr.) (Ger)
[Thromboses: prevention is the A and Z. Fractionated heparins and a new quick test] Kallmeyer V. Fortschr Med 1988 Sep 10;106(26):76–7 (Ger)
[Use of gonadotropin releasing hormone analogs in Marcumar-treated patients for contraception and prevention of life-threatening ovulation hemorrhages] Prömpeler H, et al. Geburtshilfe Frauenheilkd 1988 Aug; 48(8):588–9 (Eng. Abstr.) (Ger)
[Prevention of thromboembolism with heparin and dihydroergotamine (DHE) in internal

medicine—comparison of various administration forms of dihydroergotamine] Schott G, et al. **Z Arztl Fortbild (Jena)** 1988;82(11):509–11 (Ger)

[Drug prevention of thromboembolism in elective hip surgery with reference to thrombophilic conditions] Liedloff H, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):320–3 (Eng. Abstr.) (Ger)

[Is it really necessary to discontinue hormonal contraceptives before carrying out a planned operation?] **Zentralbl Gynakol** 1989;111(11):771–80 (Ger)

[Use of anticoagulants in pregnant women carrying heart valve prosthesis] Dattino R, et al. **Clin Ter** 1989 Mar 31; 128(6):401–4 (Eng. Abstr.) (Ita)

[Prevention of deep venous thrombosis in obstetrico-gynecologic surgery. Our experience with defibrotide] Bracciani M, et al. **Minerva Ginecol** 1989 May; 41(5):225–9 (Eng. Abstr.) (Ita)

[Current topics of anticoagulant therapy and antiplatelet therapy after cardiac valve replacement] Kudo T, et al. **Kyobu Geka** 1988 Jul;41(8):644–8 (Eng. Abstr.) (Jpn)

[Effect of long-term anticoagulant and antithrombocytic therapy on the size of intracavitary thrombus and the incidence of thromboembolic complications in patients with acute myocardial infarction] Rado Iu, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):94 (Rus)

[Aggregation capability of thrombocytes in rabbits with acute hypoxia and pathogenetic prophylaxis of thromboembolic complications] Bakanskaia VV. **Fiziol Zh** 1988 Nov–Dec; 34(6):13–8 (Eng. Abstr.) (Rus)

[Determination of the necessary time for prevention of thromboembolism using heparin/dihydroergotamine during implantation of partial hip joint endoprostheses] Maldini B, et al. **Acta Chir Iugosl** 1989;36(1):169–78 (Eng. Abstr.) (Scr)

[Prevention of perioperative thromboembolism and antithrombin III levels in patients who are to undergo major gynecologic operations] Viceić M, et al. **Lijec Vjesn** 1988 Nov;110(11):359–60 (Eng. Abstr.) (Scr)

[Prevention of thromboembolic disease in the pregnant woman] Bordigoni AJ, et al. **Angiologia** 1988 Jul–Aug; 40(4):133–5 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Risks to the fetus of radiologic procedures used in the diagnosis of maternal venous thromboembolic disease. Ginsberg JS, et al. **Thromb Haemost** 1989 Apr 25; 61(2):189–96

RADIONUCLIDE IMAGING

Current status of immunoscintigraphy in the detection of thrombosis and thromboembolism. Koblik PD, et al. **Semin Nucl Med** 1989 Jul;19(3):221–37 (113 ref.)

[Diagnosis of thrombosis of the deep veins of the lower extremity and the pelvis and pulmonary thromboembolism using 99m Tc HSA, MAA] Marković S, et al. **Vojnosanit Pregl** 1988 Nov–Dec;45(6):421–4 (Eng. Abstr.) (Scr)

SURGERY

Acute [letter] Diethrich EB. **Eur J Vasc Surg** 1989 Apr; 3(2):186

Treatment of acute ischaemia: every general surgeon's business? Nachbur B. **Eur J Vasc Surg** 1988 Oct;2(5):281–2 (19 ref.)

Surgical management of heparin–associated thrombocytopenia. Strategies in the treatment of venous and arterial thromboembolism. Sobel M, et al. **J Vasc Surg** 1988 Oct;8(4):395–401

[A new prognostic test in the surgical treatment of acute arterial occlusion] Mikaelian AL, et al. **Kardiologiia** 1988 Jun;28(6):103–4 (Rus)

[Extensive resection of an infarcted intestine] Sergienko VS. **Khirurgiia (Mosk)** 1988 Oct;(10):116–9 (Rus)

THERAPY

Percutaneous aspiration of a thromboembolus. Dorros G, et al. **Cathet Cardiovasc Diagn** 1989 Aug;17(4):202–6

Current treatment of embolic disease. Moylan JA. **Clin Plast Surg** 1989 Apr;16(2):381–4 (19 ref.)

[Fibrinolytic therapy of thromboembolic vascular occlusions: experiences based on 87 patients] Grabenwöger F, et al. **Vasa Suppl** 1988;26:96–8 (Ger)

VETERINARY

Arterial thromboembolic disease in a dog with blastomycosis localized in a hilar lymph node. Ware WA, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):847–9

THROMBOLYSIN see **FIBRINOLYSIN**

THROMBOLYTIC AGENTS see **FIBRINOLYTIC AGENTS**

THROMBOPENIA see **THROMBOCYTOPENIA**

THROMBOPHLEBITIS

Thrombus formation in deep venous thrombosis. A clinical approach to diagnosis and control of lysis efficacy. Scheffler P, et al. **Int Angiol** 1988 Jul–Sep;7(3):207–13

Deep venous thrombosis: an overview. Bounameaux H. **Vasa Suppl** 1988;25:1–28 (218 ref.)

[Round table: Recent advances in the risk determination, diagnosis and treatment of deep venous thromboses of the legs. Meeting of the French Society of Phlebology and the 22d meeting of the French College of Vascular Pathology. Paris, 18 March 1989] **J Mal Vasc** 1989;14 Suppl B:43–90 (Fre)

[Results of a multicenter survey on the diagnosis and treatment of recent deep vein thromboses of the legs. March 1988] Ouvry PA, et al. **J Mal Vasc** 1989;14 Suppl B:85–8 (Fre)

[A clinical case of thrombophlebitis migrans] Vandendriessche M. **Phlebologie** 1988 Jul–Oct;41(3):685–6 (Fre)

[Thrombosis in a probable double heterozygote young man from an asymptomatic family with protein C deficiency and protein C dysfunction] Tsakiris DA, et al. **Schweiz Med Wochenschr** 1988 Oct 29;118(43):1583–5 (Eng. Abstr.) (Ger)

[Updating deep venous thrombosis. I. Physiopathology and clinical aspects] Antignani PL, et al. **Clin Ter** 1987 Oct 15;123(1):57–62 (0 ref.) (Ita)

BLOOD

Thrombosis after hip replacement. Relationship to the fibrinolytic system. Eriksson BI, et al. **Acta Orthop Scand** 1989 Apr;60(2):159–63

Measurement of plasma D–dimer for diagnosis of deep venous thrombosis. Bounameaux H, et al. **Am J Clin Pathol** 1989 Jan;91(1):82–5

Time course of thrombolysis induced by intravenous bolus or infusion of tissue plasminogen activator in a rabbit jugular vein thrombosis model. Clozel JP, et al. **Circulation** 1989 Jan;79(1):125–33

Impact of acute phase on concentrations of tissue plasminogen activator and plasminogen activator inhibitor in plasma after deep–vein thrombosis or open–heart surgery. Jansson JH, et al. **Clin Chem** 1989 Jul;35(7):1544–5

Incidence of humoral risk factors in silent postoperative thrombosis of deep calf veins. Rödiger H, et al. **Folia Haematol (Leipz)** 1988;115(3):398–400

Fibrinogen Nijmegen: congenital dysfibrinogenemia associated with impaired t–PA mediated plasminogen activation and decreased binding of t–PA. Engesser L, et al. **Thromb Haemost** 1988 Aug 30;60(1):113–20

Altered fibrinolysis in DVT: influence of site of sampling. Han P, et al. **Thromb Haemost** 1988 Aug 30;60(1):50–3

Plasma cross–linked fibrin degradation products fraction D in patients undergoing elective abdominal surgery. Hauch O, et al. **Thromb Res** 1988 Aug 15;51(4):385–9

Changes in plasma fibrin degradation products as a marker of thrombus evolution in patients with deep vein thrombosis. Mirshahi M, et al. **Thromb Res** 1988 Aug 1; 51(3):295–302

[Deep venous thrombosis in a young athlete] Lehtinen M, et al. **Duodecim** 1988;104(14):1073–6 (Fin)

[The significance of the levels of D–dimer in thrombotic conditions] Roul C, et al. **Ann Biol Clin (Paris)** 1988; 46(9):730–3 (Eng. Abstr.) (Fre)

[Potentiation by heparins of the action of leukocytes in experimental venous thrombosis] Doutremepuich C, et al. **Ann Pharm Fr** 1988;46(3):197–203 (Eng. Abstr.) (Fre)

[Effect of prostaglandin E1 on the formation of experimental arterial and venous thrombosis] Zimmermann R, et al. **Wien Klin Wochenschr** 1988 Jul 15;100(14):481–4 (Eng. Abstr.) (Ger)

CHEMICALLY INDUCED

Thrombophlebitis and disturbed hemostasis following administration of intravenous hematin in normal volunteers. Simionatto CS, et al. **Am J Med** 1988 Oct;85(4):538–40

Heparin–associated thrombocytopenia and thrombosis syndrome in a rehabilitation patient. Young MA, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):468–70

A 61–year–old man with extensive thrombosis [clinical conference] Bendrups A, et al. **Aust N Z J Med** 1988 Jun; 18(4):639–44

Thrombophlebitis with diazepam and ampicillin [letter] Subrahmanyam M. **Indian J Physiol Pharmacol** 1988 Oct–Dec;32(4):310–1

Development of an in vivo model for assessment of drug–induced vascular injury. Johnson JV, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):819–22

Venous thrombosis and rifampicin. White NW. **Lancet** 1989 Aug 19;2(8660):434–5

Thrombophlebitis migrans following co–trimoxazole therapy. Verne–Pignatelli J, et al. **Postgrad Med J** 1989 Jan; 65(759):51–2

[Local reactions following intravenous injection of Valium mixed micelles and Diazemuls] Clemensen SE, et al. **Ugeskr Laeger** 1989 Jul 31;151(31):1983–4 (Eng. Abstr.) (Dan)

[The risk of deep thrombosis due to intra–varicose injections. Why is it virtually non–existent?] Van der Molen HR. **Phlebologie** 1989 Jan–Mar;42(1):137–9 (Fre)

[A new formulation of etomidate in lipid emulsion—bioavailability and venous provocation] Suttmann H, et al. **Anaesthesist** 1989 Aug;38(8):421–3 (Eng. Abstr.) (Ger)

[Heparin–induced thrombocytopenia and thrombosis] Langecker P, et al. **Internist (Berlin)** 1988 Jul;29(7):515–8 (Ger)

COMPLICATIONS

Deep venous thrombosis, inflammatory bowel disease, and protein S deficiency. Wyshock E, et al. **Am J Clin Pathol** 1988 Nov;90(5):633–5

Severe thrombotic tendency associated with a type I plasminogen deficiency. Leebeek FW, et al. **Am J Hematol** 1989 Jan;30(1):32–5

Idiopathic entero–colic lymphocytic phlebitis. A cause of ischemic intestinal necrosis. Saraga EP, et al. **Am J Surg Pathol** 1989 Apr;13(4):303–8

A retrospective analysis of inferior vena caval filtration for prevention of pulmonary embolization. Thomas WO 3d, et al. **Am Surg** 1988 Dec;54(12):726–30

Deep venous thrombosis and the risk of cancer [letter] McKenna MT. **Arch Intern Med** 1989 Apr;149(4):966, 969

Calf deep venous thrombosis. A wolf in sheep's clothing? Philbrick JT, et al. **Arch Intern Med** 1988 Oct; 148(10):2131–8 (27 ref.)

Unexpected high prevalence of silent pulmonary embolism in patients with deep venous thrombosis. Huisman MV, et al. **Chest** 1989 Mar;95(3):498–502

A 55–year–old woman with abdominal pain, mucous stools, shock and polycythemia vera [clinical conference] **Clin Med J (Engl)** 1989 Jan;102(1):72–8

CT demonstration of brain infarcts due to deep venous thrombosis in systemic lupus erythematosus. Shah ZR, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):241–3

Interruption of the inferior vena cava for prevention of pulmonary embolism: transvenous filter devices. Grassi CJ, et al. **Herz** 1989 Jun;14(3):182–91 (37 ref.)

Asymptomatic pulmonary embolism in patients with deep vein thrombosis. Is it useful to take a lung scan to rule out this condition? Monreal M, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):104–7

Autopsy proven pulmonary embolism in hospital patients: are we detecting enough deep vein thrombosis? Sandler DA, et al. **J R Soc Med** 1989 Apr;82(4):203–5

Image interpretation session. Ferris EJ, et al. **Radiographics** 1989 Jan;9(1):85–114

Frequency of thromboembolic complications in patients with acute pneumonia and pyelonephritis. Wallmark E, et al. **Scand J Infect Dis** 1988;20(4):453–4

[A 46–year–old patient with diarrhea, subfebrile temperatures and thrombophlebitis] Hoffmann RM, et al. **Internist (Berlin)** 1989 Jun;30(6):392–5 (Ger)

[The percutaneous vena cava umbrella filter in the prevention of pulmonary embolism] Günther RW, et al. **Rontgenblatter** 1988 Jul;41(7):297–300 (21 ref.) (Eng. Abstr.) (Ger)

[A case from practice (107). Patient: L.E., 74–year–old female, retired] Meyer JL. **Schweiz Rundsch Med Prax** 1988 May 3;77(18):499–500 (Ger)

[Venous diseases of the lower limbs and pulmonary embolism] Tomai F, et al. **Clin Ter** 1988 Jul 31;126(2):91–6 (Eng. Abstr.) (Ita)

[Thrombophlebitis as the source of embolism] Droździ W. **Pneumonol Pol** 1988 May;56(5):211–20 (Pol)

[Pulmonary embolism as a complication of circulatory diseases: differential–diagnostic and therapeutic difficulties] Filipecki S. **Pneumonol Pol** 1988 May;56(5):206–10 (Pol)

[New methods of surgical correction of regional blood flow in combined disorders of the iliac and femoral veins in patients with the post–thrombophlebitis syndrome] Sukharev II, et al. **Klin Khir** 1989;(3):16–8 (Eng. Abstr.) (Rus)

DIAGNOSIS

Assessment of D–dimer in plasma: diagnostic value in suspected deep venous thrombosis of the leg. Ott P, et al. **Acta Med Scand** 1988;224(3):263–7

Monitoring of therapy for deep vein thrombosis using magnetic resonance imaging. Francis CW, et al. **Acta Radiol** 1989 Jul–Aug;30(4):445–6

Contact thermography as a screening test for deep venous thrombosis following major hip surgery. Kjaer L, et al. **Acta Radiol** 1988 Nov–Dec;29(6):649–52

Emergency department use of hand–held Doppler ultrasonography. Turnbull TJ, et al. **Am J Emerg Med** 1989 Mar;7(2):209–15 (72 ref.)

Noninvasive imaging for deep venous thrombosis. Borozan PG, et al. **Am J Surg** 1988 Dec;156(6):474–6

Massive venous thrombosis of the extremities. Hill SL, et al. **Am J Surg** 1989 Aug;158(2):131–5

Recent advances in diagnosis of pulmonary embolism and deep venous thrombosis. Moser KM, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1046–7

Immunoscintigraphic detection of venous thrombosis of the lower extremities by means of human antifibrin monoclonal antibodies labeled with 111In. Lusiani L, et al. **Angiology** 1989 Jul;40(7):671–7

Real–time ultrasound for diagnosis of symptomatic venous thrombosis and for screening of patients at risk: correlation with ascending conventional venography. Monreal M, et al. **Angiology** 1989 Jun;40(6):527–33

Diagnosis of deep–vein thrombosis using duplex ultrasound. White RH, et al. **Ann Intern Med** 1989 Aug 15; 111(4):297–304

The diagnosis of acute deep venous thrombosis: noninvasive and radioisotopic techniques. Comerota AJ, et al. **Ann Vasc Surg** 1988 Oct;2(4):406–24 (108 ref.)

Real-time ultrasonography for the diagnosis of lower extremity deep venous thrombosis. The wave of the future? Becker DM, et al. **Arch Intern Med** 1989 Aug;149(8):1731–4

Management of clinically suspected acute venous thrombosis in outpatients with serial impedance plethysmography in a community hospital setting. Huisman MV, et al. **Arch Intern Med** 1989 Mar;149(3):511–3

Ambulatory management of suspected deep vein thrombosis [editorial] Wheeler HB. **Arch Intern Med** 1989 Mar; 149(3):501–2

Duplex venous scanning for the prospective surveillance of perioperative venous thrombosis. Flinn WR, et al. **Arch Surg** 1989 Aug;124(8):901–5

Use of the triplex scanner in diagnosis of deep venous thrombosis. Persson AV, et al. **Arch Surg** 1989 May; 124(5):593–6

Pseudothrombophlebitis caused by nontraumatic compartmental syndrome of the calf [letter] Wargovich R, et al. **Arthritis Rheum** 1988 Dec;31(12):1591–2

Fetal renal vein thrombosis. Furness ME, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):193–6

A heparin test as a predictor of postoperative deep vein thrombosis. Randle PM, et al. **Aust N Z J Surg** 1989 Jul; 59(7):579–81

Diagnosis of deep venous thrombosis. A prospective study comparing duplex scanning to contrast venography. Killewich LA, et al. **Circulation** 1989 Apr;79(4):810–4

Clues to diagnosis of a life-threatening thrombotic syndrome. Bartholomew J. **Cleve Clin J Med** 1989 May;56(3):233–4

Combined non-invasive diagnostics of deep vein thrombosis of the lower extremities. Ovcharenko KI, et al. **Cor Vasa** 1989;31(1):42–50

Non-invasive diagnosis of D.V.T. false positive due to hydatid disease [letter] Lozano F, et al. **Eur J Vasc Surg** 1987 Oct;1(5):364

Suppurative pylethrombosis: a changing clinical picture. Knockaert DC, et al. **Gastroenterology** 1989 Oct; 97(4):1028–30

Evaluation of Doppler examination for diagnosis of catheter-related deep vein thrombosis. Bonnet F, et al. **Intensive Care Med** 1989;15(4):238–40

Use of thermography in the diagnosis of deep vein thrombosis. Free TW, et al. **J Am Osteopath Assoc** 1989 Jun;89(6):768–72

Compression ultrasonography for the detection of deep venous thrombosis in patients who have a fracture of the hip. A prospective study. Froehlich JA, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):249–56

John Homans: the dorsiflexion sign [classical article] Sternbach G. **J Emerg Med** 1989 May-Jun;7(3):287–90

Diagnosis of deep vein thrombosis with an ultrasonic Doppler technique: a study of 64 cases. Phornphibulaya P. **J Med Assoc Thai** 1989 Jan;72(1):7–10

Perioperative asymptomatic venous thrombosis: role of duplex scanning versus venography. Barnes RW, et al. **J Vasc Surg** 1989 Feb;9(2):251–60

The limitations of impedance plethysmography in the diagnosis of acute deep venous thrombosis. Patterson RB, et al. **J Vasc Surg** 1989 May;9(5):725–9; discussion 729–30

A prospective study of the efficacy of B-scan sonography in the detection of deep venous thrombosis in the lower extremities. O'Leary DH, et al. **JCU** 1988 Jan;16(1):1–8

Diagnosis of deep-vein thrombosis. **Lancet** 1989 Jul 1; 2(8653):23–4 (19 ref.)

Oedema protein concentrations for differentiation of cellulitis and deep vein thrombosis. Berlyne GM, et al. **Lancet** 1989 Sep 23;2(8665):728–9

Fibrin monoclonal antibodies in diagnosis of deep venous thrombosis [letter] Broodhurst P, et al. **Lancet** 1989 Jul 29;2(8657):272–3

Doppler ultrasound evaluation for lower extremity deep venous thrombosis in a community hospital. Archie JP Jr, et al. **N C Med J** 1989 Aug;50(8):457–60

Detection of deep-vein thrombosis by B-mode ultrasonography [letter] **N Engl J Med** 1989 Aug 31; 321(9):613–4

Detection of deep-vein thrombosis by real-time B-mode ultrasonography. Lensing AW, et al. **N Engl J Med** 1989 Feb 9;320(6):342–5

Recurrent deep venous thrombosis: limitations of US. Cronan JJ, et al. **Radiology** 1989 Mar;170(3 Pt 1):739–42

Deep veins of the calf: assessment with color Doppler flow imaging. Polak JF, et al. **Radiology** 1989 May;171(2):481–5

The value of the enzygnost TAT test in the diagnosis of postoperative deep vein thrombosis after hip surgery. The Venous Thrombosis Group. Borris LC, et al. **Thromb Res** 1989 Jun 1;54(5):505–9

Venous sonography for pregnancy-related thrombosis: case report. Abbitt PL, et al. **Va Med** 1989 Jun;116(6):277–8

[Light reflex rheography—a new examination method in phlebology] Bizoň J. **Vnitr Lek** 1989 Feb;35(2):158–63 (Eng. Abstr.) **(Cze)**

[Ultrasonic diagnosis of deep venous thrombosis (letter)] Borris LC, et al. **Ugeskr Laeger** 1989 Jul 31;151(31):1993 **(Dan)**

[Diagnosis of femoropopliteal venous thrombosis. Comparison of dynamic ultrasonic scanning and phlebography] Mantoni M. **Ugeskr Laeger** 1989 Apr 24; 151(17):1051–3 (Eng. Abstr.) **(Dan)**

[Ultrasonic scanning, is it an alternative to phlebography in deep thrombophlebitis of the leg?] Olsen AD, et al. **Ugeskr Laeger** 1989 Apr 24;151(17):1053–5 (Eng. Abstr.) **(Dan)**

[Echography in the diagnosis of deep venous thrombosis] Appelman PT, et al. **Ned Tijdschr Geneeskd** 1988 Nov 19; 132(47):2154–7 (Eng. Abstr.) **(Dut)**

[Echography in the diagnosis of deep venous thrombosis (letter)] Veldhuyzen van Zanten GO, et al. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):313–4 **(Dut)**

[Cerebral venous thrombosis in adults. Diagnostic and therapeutic aspects in 20 cases] Milandre L, et al. **Ann Med Interne (Paris)** 1989;139(8):544–54 (94 ref.) (Eng. Abstr.) **(Fre)**

[Non-invasive methods for vascular studies in the diagnosis of deep venous thrombosis] Dauzat M, et al. **J Mal Vasc** 1988;13(3):280–5 (Eng. Abstr.) **(Fre)**

[Detection of acute venous thromboses using plethysmography. Possibilities and limitations] Langeron P, et al. **J Mal Vasc** 1989;14 Suppl B:52–5 (14 ref.) (Eng. Abstr.) **(Fre)**

[Evaluation of the diagnostic reliability of combination plethysmography-Doppler. Evaluated on the basis of a prospective study of 176 patients with suspected thrombophlebitis of the limbs including 60 phlebographic correlations (letter)] Planchon B, et al. **J Mal Vasc** 1988; 13(3):290 **(Fre)**

[Pitfalls of echo-Doppler in recent venous thromboses] Sentou Y. **J Mal Vasc** 1989;14 Suppl B:56–9 **(Fre)**

[Venous plethysmography in a sitting position] Zicot M. **J Mal Vasc** 1988;13(4):317–20 (Eng. Abstr.) **(Fre)**

[Difficulties of functional exploration of the veins in the obese. Problems that may be posed in its interpretation] Boccalon H, et al. **Phlebologie** 1988 Jul-Oct;41(3):509–25 (Eng. Abstr.) **(Fre)**

[Algodystrophy and venous thrombosis of the lower limbs: diagnostic problems. Apropos of 5 cases] Eulry F, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):403–7 **(Fre)**

[The value of Duplex sonography in the diagnosis of deep leg and pelvic vein thrombosis] Stapff M, et al. **Bildgebung** 1987–89;56(2):52–6 (Eng. Abstr.) **(Ger)**

[Diagnosis of deep venous thrombosis of the leg] Habscheid W, et al. **Dtsch Med Wochenschr** 1989 May 26; 114(21):837–44 (66 ref.) **(Ger)**

[Diagnosis of deep venous thrombosis of the legs using real-time ultrasonography (letter)] Rudofsky G. **Dtsch Med Wochenschr** 1988 Nov 4;113(44):1738–9 **(Ger)**

[Phlebologic indications for duplex sonography] Marshall M. **Fortschr Med** 1989 May 20;107(15):325–9 (Eng. Abstr.) **(Ger)**

[Sonography versus phlebography. New variants of the color-coded duplex ultrasound technic—controversy: diagnostic accuracy] Schwing C. **Fortschr Med** 1989 Jun 30;107(19):63–4 **(Ger)**

[Liquid crystal contact thermography—a new screening procedure in the diagnosis of deep venous thrombosis] Hoffmann R, et al. **Helv Chir Acta** 1989 Jun;56(1–2):45–8 (Eng. Abstr.) **(Ger)**

[Diagnosis of deep leg and pelvic vein thromboses] Weber W, et al. **Med Klin** 1989 Apr 15;84(4):196–202 (28 ref.) **(Ger)**

[Imitation of acute, deep venous thrombosis of the lower leg by a ruptured Baker's cyst] Hoffmann R, et al. **Vasa** 1989;18(1):74–7 (Eng. Abstr.) **(Ger)**

[Assessing the age of the thrombus in venous thrombosis using sonographic and phlebographic criteria] De la Hammette D, et al. **Vasa Suppl** 1988;26:123–6 **(Ger)**

[Diagnosis of deep venous thrombosis of the lower limbs] Zambon G, et al. **G Clin Med** 1988 Mar;69(3):207–16 (87 ref.) **(Ita)**

[Clinical evaluation of phlebopathies of the lower limbs using Doppler ultrasonography] Scagno C, et al. **Minerva Med** 1988 Dec;79(12):1079–83 (Eng. Abstr.) **(Ita)**

[Use of thermography in the detection of deep venous thrombosis] Monreal M, et al. **Angiologia** 1988 Jul-Aug; 40(4):139–44 (Eng. Abstr.) **(Spa)**

[Evaluation of cutaneous thermometry in the diagnosis of deep venous thrombosis] Vega Gómez ME, et al. **Angiologia** 1988 Jul-Aug;40(4):136–8 (Eng. Abstr.) **(Spa)**

[Validation of ultrasonic flowmetry and occlusion plethysmography in venous thromboses] Vega Gómez ME, et al. **Angiologia** 1988 Jul-Aug;40(4):129–32 (Eng. Abstr.) **(Spa)**

[Aneurysm of the femoral artery as the cause of pseudothrombophlebitis (letter)] Vela C, et al. **Med Clin (Barc)** 1988 May 14;90(19):797 **(Spa)**

DRUG THERAPY

Clinical experiences in the administration of a low molecular weight heparin (Fragmin, Kabi-Vitrum) to healthy volunteers and in the treatment of established deep venous thrombosis. Bratt GA, et al. **Acta Chir Scand Suppl** 1988; 543:96–100

Successful urokinase therapy for superior vena cava syndrome in a premature infant [letter] Griffin MP, et al. **Am J Dis Child** 1988 Dec;142(12):1267–8

Relative efficacy of heparin and related glycosaminoglycans as antithrombotic drugs. Thomas DP, et al. **Ann N Y Acad Sci** 1989;556:313–22

Effects of dermatan sulfate and heparin on inhibition of thrombus growth in vivo. Van Ryn-McKenna J, et al. **Ann N Y Acad Sci** 1989;556:304–12

Thrombolytic therapy for venous thrombosis [editorial] Fiessinger JN. **Ann Vasc Surg** 1987 Dec;1(5):521, 523

Comparison of cost effectiveness of streptokinase and urokinase in the treatment of deep vein thrombosis. Graor RA, et al. **Ann Vasc Surg** 1987 Dec;1(5):524–8

Basic data related to thrombolytic therapy for venous thrombosis. Pilla T, et al. **Ann Vasc Surg** 1989 Jan;3(1):81–5 (50 ref.)

Streptokinase vs heparin for deep venous thrombosis. Can lytic therapy be justified? Sidorov J. **Arch Intern Med** 1989 Aug;149(8):1841–5 (63 ref.)

Heparin therapy for venous thrombosis and pulmonary embolism. Raskob GE, et al. **Blood Rev** 1988 Dec; 2(4):251–8 (57 ref.)

Anticoagulants in venous thromboembolism [letter; comment] Stringer MD, et al. **BMJ** 1989 Jan 21; 298(6667):185. **Comment on:** BMJ 1988 Nov 19;297(6659):1285–8

Comparative study of the action of topical heparinoids on the evolution of experimental thrombophlebitis. Mattar L, et al. **Braz J Med Biol Res** 1988;21(5):1047–8

How to select patients with deep vein thrombosis for tPA therapy. Brown WD, et al. **Chest** 1989 May;95(5 Suppl):276S–278S

A comparative study of urokinase and heparin in the treatment of deep vein thrombosis. Lai ST, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;42(2):99–104

Calculation of heparin dosage in a morbidly obese woman. Ellison MJ, et al. **Clin Pharm** 1989 Jan;8(1):65–8

Comparative dosage and toxicity of heparin sodium in the treatment of patients with pulmonary embolism versus deep-vein thrombosis. Tenero DM, et al. **Clin Pharm** 1989 Jan;8(1):40–3

The treatment of venous thrombosis of the upper and lower limbs with "APSAC" (p-anisoylated streptokinase-plasminogen complex). Ruckley CV, et al. **Eur J Vasc Surg** 1987 Apr;1(2):107–12

Venous thrombolysis [letter] Scott DJ, et al. **Eur J Vasc Surg** 1988 Aug;2(4):274

Symptomless postoperative thrombosis of the deep calf veins—treatment and prognosis. Kneist W, et al. **Folia Haematol (Leipz)** 1988;115(3):401–4

Fibrinolytic therapy with streptokinase and urokinase in deep vein thrombosis. Trübestein G, et al. **Folia Haematol (Leipz)** 1988;115(4):599–602

Antithrombotic treatment during acute inflammatory complications of patients affected by postphlebitic syndrome: LMW-heparin versus standard heparin. Verardi S, et al. **Int Angiol** 1988 Jul-Sep;7(3 Suppl):33–40

Deep vein thrombosis of the legs: new therapy by means of low molecular weight heparins. Zanghi' M, et al. **J Int Med Res** 1988 Nov-Dec;16(6):474–84

Effect of thromboxane receptor antagonists on venous thrombosis in rats. Schumacher WA, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1109–15

Low-molecular-weight heparin for deep venous thrombosis [letter] Faivre R, et al. **JAMA** 1988 Nov 4;260(17):2507–8

Home treatment for deep venous thrombosis with low-molecular-weight heparin [letter] Bakker M, et al. **Lancet** 1988 Nov 12;2(8620):1142

Medical management of fungal suppurative thrombosis of great central veins in a child. Berg RA, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):469–70

Thrombolytic activity of defibrotide: a morphometric evaluation in experimental venous thrombosis. Fumagalli G, et al. **Pharmacol Res** 1989 May-Jun;21(3):293–8

Anticoagulant therapy for venous thromboembolism. Raskob GE, et al. **Prog Hemost Thromb** 1989;9:1–27 (151 ref.)

Subcutaneous calcium heparin for anticoagulation of HIV/hepatitis B infected intravenous drug abusers [letter] Green ST, et al. **Scand J Infect Dis** 1988;20(4):457

Low molecular weight heparin treatment in a pregnant woman with allergy to standard heparins and heparinoid [letter] de Boer K, et al. **Thromb Haemost** 1989 Feb 28; 61(1):148

Adjusted-dose intravenous heparin treatment evaluation of an automated and a non automated schedule. Felding P, et al. **Thromb Res** 1988 Aug 15;51(4):447–52

Subcutaneous treatment of deep venous thrombosis with low molecular weight heparin. A dose finding study with LMWH-Novo. Siegbahn A, et al. **Thromb Res** 1989 Sep 15;55(6):767–78

Multicenter pilot study of the efficacy and safety of systemic rt-PA administration in the treatment of deep vein thrombosis of the lower extremities and/or pelvis. Verhaeghe R, et al. **Thromb Res** 1989 Jul 1;55(1):5–11

Thrombolysis with a snake venom protease in a rat model of venous thrombosis. Willis TW, et al. **Thromb Res** 1989 Jan 1;53(1):19–29

[Intrapulmonary heparin] Huang SW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):370–2 (17 ref.) **(Chi)**

[The extension of deep venous thrombosis treated by intravenous heparin: apropos of 12 cases] Serradimigni A. **Bull Acad Natl Med (Paris)** 1988 Mar;172(3):355–61 (Eng. Abstr.) **(Fre)**

[Problems posed by the treatment of deep venous thrombosis in patients with a coagulopathy (letter)] Conard J, et al. **J Mal Vasc** 1988;13(3):291 **(Fre)**

[Role of thrombolytics in the treatment of deep venous

thromboses of the legs] Janvier G, et al. **J Mal Vasc** 1989; 14 Suppl B:78–82 (36 ref.) **(Fre)**

[Long-term heparinotherapy in the treatment of acute venous thromboses] Langeron P. **J Mal Vasc** 1989;14 Suppl B:69–73 (Eng. Abstr.) **(Fre)**

[Duration of treatment with heparin in deep venous thromboses of the legs] Vitoux JF. **J Mal Vasc** 1989;14 Suppl B:74–5 (7 ref.) **(Fre)**

[Ultra-high dose thrombolytic therapy with streptokinase in peripheral venous thrombosis] Fahn H, et al. **Med Klin** 1989 Apr 15;84(4):183–7, 226 (Eng. Abstr.) **(Ger)**

[Long-term results following fibrinolytic treatment of deep venous thromboses in the area of the pelvis and leg] Thiele C, et al. **Vasa** 1989;18(1):48–55 (Eng. Abstr.) **(Ger)**

[Validation of the treatment of fresh pelvic-leg venous thromboses with ultra-high dose streptokinase based on a new phlebographic score] Heinrich F, et al. **Vasa Suppl** 1988;23:87–90 **(Ger)**

[Heparin in deep venous thrombosis of the leg—effectiveness and safety] Gatterer E, et al. **Wien Klin Wochenschr** 1988 Sep 23;100(18):601–5 (Eng. Abstr.) **(Ger)**

[Experience with fibrinolytic therapy in cases of deep vein thrombosis persisting over one week] Kaiona A, et al. **Orv Hetil** 1988 Jul 31;129(31):1641–2, 1645–7 (42 ref.) (Eng. Abstr.) **(Hun)**

[Experience with anticoagulant and fibrinolytic therapy in deep vein thrombosis of the lower extremities] Pap S, et al. **Orv Hetil** 1988 Aug 28;129(35):1867–70 (Eng. Abstr.) **(Hun)**

[Updating deep venous thrombosis. II. Prevention and therapy] Antignani PL, et al. **Clin Ter** 1987 Oct 31; 123(2):139–44 (50 ref.) **(Ita)**

[Evaluation of the efficacy of profibrinolytic treatment with defibrotide in the therapy of thrombophlebitis] Murgiano GA. **Clin Ter** 1988 Dec 15;127(5):355–61 (Eng. Abstr.) **(Ita)**

[Use of defibrotide in the treatment of acute superficial thrombophlebitis of the legs] Seccia M, et al. **Minerva Chir** 1989 May 15;44(9):1379–84 (Eng. Abstr.) **(Ita)**

[Pharmacologic treatment of venous thromboembolism] Arnesen H. **Tidsskr Nor Laegeforen** 1989 Jun 20; 109(17–18):1893–4 **(Nor)**

[Local-regional fibrinolysis as elective treatment in deep venous thromboses: experimental clinical study] Magallón Ortin P, et al. **Angiologia** 1989 Jan–Feb;41(1):20–37 **(Spa)**

ECONOMICS

[Social medicine significance, costs, course, therapy and prognosis of venous diseases] Marshall M. **Versicherungsmedizin** 1989 May 1;41(3):89–97 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

The incidence and clinical pattern of deep vein thrombosis in the Chinese in Hong Kong. Woo KS, et al. **Singapore Med J** 1988 Aug;29(4):357–9

Allograft renal vascular thrombosis—lack of increase with cyclosporine immunosuppression. Gruber SA, et al. **Transplantation** 1989 Mar;47(3):475–8

ETIOLOGY

Cannula thrombophlebitis: a study in volunteers comparing polytetrafluoroethylene, polyurethane, and polyamide–ether–elastomer cannulae. Larsson N, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):223–31

Incidence of thromboembolism in association with congenital disorders in coagulation and fibrinolysis. Conard J, et al. **Acta Chir Scand Suppl** 1988;543:15–25 (107 ref.)

Infusion thrombophlebitis: a prospective comparison of 645 Vialon and Teflon cannulae in anaesthetic and postoperative use. Gaukroger PB, et al. **Anaesth Intensive Care** 1988 Aug;16(3):265–71

Phlegmasia cerulea dolens and its association with hypercoagulable states: case reports. Cohen DJ, et al. **Angiology** 1989 May;40(5):498–508

Cocaine abuse and deep venous thrombosis [letter] Lisse JR, et al. **Ann Intern Med** 1989 Apr 1;110(7):571–2

Basic data related to venous thromboembolism. Clagett GP. **Ann Vasc Surg** 1988 Oct;2(4):402–5

Thrombophlebitis following intravenous glucose in the cold. Vallerand AL, et al. **Aviat Space Environ Med** 1989 Apr; 60(4):349–51

Are anaerobic bacteria involved in peripheral vein catheter associated thrombophlebitis? Collignon P, et al. **Biomed Pharmacother** 1988;42(3):213–5

Immunoaffinity purification of factor IX from commercial concentrates and infusion studies in animals. Smith KJ. **Blood** 1988 Oct;72(4):1269–77

Mondor's disease and breast cancer. Hershman MJ, et al. **Br J Clin Pract** 1987 Oct;41(10):979–80

Antithrombin Sheffield: amino acid substitution at the reactive site (Arg393 to His) causing thrombosis. Lane DA, et al. **Br J Haematol** 1989 Jan;71(1):91–6

Protein C deficiency presenting as deep venous thrombosis in pregnancy. Case report. Morrison AE, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):1077–80 (22 ref.)

Incidence of deep vein thrombosis after major abdominal surgery in Brisbane [letter] Chleboun JO, et al. **Br J Surg** 1988 Oct;75(10):1046

Deep vein thrombosis of the arm associated with malignancy. Hung SS. **Cancer** 1989 Jul 15;64(2):531–5

Are patients with multiple sclerosis protected from thrombophlebitis and pulmonary embolism? Kaufman J, et al. **Chest** 1988 Nov;94(5):998–1001

Fatal septic thrombophlebitis due to Salmonella enteritidis. Navarro M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):82–3

Three theses on thrombosis of the veins. Fuchs U, et al. **Folia Haematol (Leipz)** 1988;115(4):553–6

Intravenous placement device and infusion thrombophlebitis. Subrahmanyam M. **Indian J Med Sci** 1989 Feb;43(2):27–31

Phlegmasia cerulea dolens as a complication of percutaneous insertion of a vena caval filter. Feinman LJ, et al. **J Am Osteopath Assoc** 1989 Jan;89(1):63–8

Deep vein thrombosis after total hip replacement. A comparison between spinal and general anaesthesia. Davis FM, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):181–5

The use of intravenous cannulae and the occurrence of thrombophlebitis. van den Broek PJ, et al. **J Hosp Infect** 1989 Jan;13(1):43–53

Pulmonary embolism and cancer: predisposition to venous thrombosis and embolism as a paraneoplastic syndrome. Sons HU. **J Surg Oncol** 1989 Feb;40(2):100–6 (82 ref.)

Paget-Schroetter syndrome in a patient on the contraceptive pill [letter] Earle KA, et al. **N Y State J Med** 1989 May; 89(5):293

Short-term thrombosis after transvenous permanent pacemaker insertion. Antonelli D, et al. **PACE** 1989 Feb; 12(2):280–2

Pediatric transvenous pacing: a concern for venous thrombosis? Gillette PC, et al. **PACE** 1988 Nov;11(11 Pt 2):1935–9

Phlegmasia coerulia dolens revisited. Chalmers N, et al. **Practitioner** 1987 Nov 23;231(1439):1519, 1521

Thromboembolic problems in colorectal cancer surgery. Bergqvist D, et al. **Scand J Gastroenterol Suppl** 1988; 149:74–81 (56 ref.)

Operative venodilation: a previously unsuspected factor in the cause of postoperative deep vein thrombosis. Comerota AJ, et al. **Surgery** 1989 Aug;106(2):301–8: discussion 308–9

Massive systemic venous thrombosis after Fontan operation: report of a case. Okita Y, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):234–6

Familial type I protein S deficiency associated with severe venous thrombosis—a study of five cases [letter] Boyer-Neumann C, et al. **Thromb Haemost** 1988 Aug 30; 60(1):128

Thrombotic manifestations in plasminogen deficiency and in plasminogen abnormalities [letter] Girolami A, et al. **Thromb Haemost** 1988 Dec 22;60(3):528

The role of platelets and ADP in experimental thrombosis induced by venous stasis in the rat. Bernat A, et al. **Thromb Res** 1988 Oct 1;52(1):65–70

Acute phase reaction, fibrinogen level and thrombus size. Chooi CC, et al. **Thromb Res** 1989 Mar 1;53(5):493–501

A quantitative venous thrombosis model with stasis based on vascular lesion. Pescador R, et al. **Thromb Res** 1989 Jan 15;53(2):197–201

Mechanical obstruction of the portal vein as a cause of vascular thrombosis after pancreatic transplantation in humans. Soon-Shiong P, et al. **Transplant Proc** 1988 Oct; 20(5):1059–61

[Venous thrombosis in spinal and spinal cord injuries] Myllynen P, et al. **Duodecim** 1988;104(14):1059–62 (15 ref.) **(Fin)**

[Short-acting fibrinolysis in the etiology of venous thrombosis] Petäjä J, et al. **Duodecim** 1988;104(5):317–24 (33 ref.) **(Fin)**

[Venous thrombosis in Behçet's disease] Wechsler B, et al. **J Mal Vasc** 1988;13(3):240–4 (47 ref.) (Eng. Abstr.) **(Fre)**

[Pelvic and femoral vein thrombosis in childhood] von Mühlendahl KE. **Monatsschr Kinderheilkd** 1988 Jul; 136(7):397–9 (Eng. Abstr.) **(Ger)**

[Recurrent thrombophlebitis, weakness (clinical conference)] Predel HG, et al. **Schweiz Rundsch Med Prax** 1989 May 2;78(18):532–4 (Eng. Abstr.) **(Ger)**

[A clinical study of thrombus formation associated with central venous catheterization] Yagi K, et al. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):1943–9 (Eng. Abstr.) **(Jpn)**

[Embolic complications in atrial fibrillation] Banasiak W, et al. **Wiad Lek** 1989 Dec 1;41(23):1553–8 (Eng. Abstr.) **(Pol)**

[Pathogenesis of thrombus formation in varicose veins] Vedenskiĭ AN, et al. **Vestn Khir** 1988 Sep;141(9):41–3 (Eng. Abstr.) **(Rus)**

[Pseudothrombophlebitic syndrome as an onset form of juvenile psoriatic arthritis] González Hernández MT, et al. **An Esp Pediatr** 1989 Mar;30(3):225–6 **(Spa)**

[Mechanical and infectious complications associated with central venous catheterization as a vascular access for hemodialysis] Rello J, et al. **Rev Clin Esp** 1988 Dec; 183(9):455–8 (Eng. Abstr.) **(Spa)**

[Moderate deficiency of Factor XII associated with postoperative deep venous thrombosis] Cornudella R, et al. **Sangre (Barc)** 1989 Apr;34(2):144–6 (Eng. Abstr.) **(Spa)**

[Lupus anticoagulant and venous thromboses (letter)] Gil González I, et al. **Sangre (Barc)** 1988 Aug;33(4):320–1 **(Spa)**

GENETICS

Familial protein S deficiency with a variant protein S molecule in plasma and platelets. Schwarz HP, et al. **Blood** 1989 Jul;74(1):213–21

A Dutch family with hereditary protein S deficiency. Petersen EJ, et al. **Neth J Med** 1989 Jun;34(5–6):243–50

The relative frequency of hereditary thrombotic disorders among 107 patients with thrombophilia in Israel. Ben-Tal O, et al. **Thromb Haemost** 1989 Feb 28;61(1):50–4

IMMUNOLOGY

Venous thrombosis associated with lupus anticoagulant and anticardiolipin antibodies. Pelkonen P, et al. **Acta Paediatr Scand** 1988 Sep;77(5):767–72

Recurrent deep vein thrombosis and Addison's disease in "primary" antiphospholipid syndrome. Asherson RA, et al. **J Rheumatol** 1989 Mar;16(3):378–80

Fall in antiphospholipid antibody at time of thromboocclusive episodes in systemic lupus erythematosus. Drenkard C, et al. **J Rheumatol** 1989 May;16(5):614–7

[Anti-phospholipid antibody with recurrent venous thromboembolism and severe autoimmune thrombocytopenia] Kienast J, et al. **Klin Wochenschr** 1989 Jul 3;67(13):691–5 (Eng. Abstr.) **(Ger)**

METABOLISM

Evaluation of postoperative blood coagulation changes in elderly patients undergoing major surgery. Caporale A, et al. **Ital J Surg Sci** 1989;19(1):51–6

Binding properties of monoclonal antibodies against human fragment D-dimer of cross-linked fibrin to human plasma clots in an in vivo model in rabbits. Holvoet P, et al. **Thromb Haemost** 1989 Apr 25;61(2):307–13

MICROBIOLOGY

Suppurative thrombophlebitis due to Aeromonas. Haake DA, et al. **Diagn Microbiol Infect Dis** 1988 May;10(1):57–60

Mycoplasma hominis septic thrombophlebitis in a patient with multiple trauma: a case report and literature review. Martinez OV, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):193–6 (18 ref.)

PHYSIOPATHOLOGY

One-year sequential follow-up of venous emptying rate and leg temperature profiles after acute deep vein thrombosis. Holmgren K, et al. **Acta Med Scand** 1988;224(6):577–82

Familial hypofibrinolysis and venous thrombosis. Petäjä J, et al. **Br J Haematol** 1989 Mar;71(3):393–8

Clinical differences in spinal opioid efficacy. Organowski S, et al. **Can J Anaesth** 1989 Jul;36(4):448–9

Arterial blood flow in deep venous thrombosis of the lower limbs. Seem E, et al. **Eur J Vasc Surg** 1987 Feb;1(1):45–9

Pathophysiology of thrombophilic states. Mammen EF. **Folia Haematol (Leipz)** 1988;115(3):243–52 (35 ref.)

The measurement of afterload, vascular input impedance, and power distribution in aorto-femoral bypass. Ashe JW, et al. **J Biomech** 1989;22(5):447–53

Spontaneous lysis of deep venous thrombi: rate and outcome. Killewich LA, et al. **J Vasc Surg** 1989 Jan;9(1):89–97

Thrombolysis with systemically administered t-PA in a new venous thrombosis model. Hayden RE, et al. **Laryngoscope** 1989 Jan;99(1):100–4

Neonatal dural sinus thrombosis. Shevell MI, et al. **Pediatr Neurol** 1989 May-Jun;5(3):161–5

This and that: clots, creamers and canals. Max B. **Trends Pharmacol Sci** 1988 Apr;9(4):122–4

[Surgical intervention in genital tumors and concomitant thrombophlebitis of the lower extremities] Mishev D, et al. **Akush Ginekol (Sofiia)** 1988;27(4):61–3 (Eng. Abstr.) **(Bul)**

[Constitutional dysfunction of heparin cofactor II with a tendency for venous thrombosis] Marbet GA, et al. **Schweiz Med Wochenschr** 1988 Oct 29;118(43):1586–8 (Eng. Abstr.) **(Ger)**

[Phlebothrombosis] Gromnica-Ihle E. **Z Arztl Fortbild (Jena)** 1988;82(14):671–7 (13 ref.) **(Ger)**

[Peripheral hemodynamics at various stages of deep vein thrombosis of the legs] Ovcharenko KI, et al. **Kardiologiia** 1988 Jun;28(6):80–4 (Eng. Abstr.) **(Rus)**

[Disorders of central and regional hemodynamics in patients with acute venous thrombosis and their correction] Iablokov EG, et al. **Klin Khir** 1988;(7):1–4 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Prophylaxis of postoperative deep vein thrombosis in general surgery: experiences with Fragmin. Bergqvist D. **Acta Chir Scand Suppl** 1988;543:87–9 (17 ref.)

Low molecular weight heparin (Logiparin) as thromboprophylaxis in elective abdominal surgery. A dose finding study. Hauch O, et al. **Acta Chir Scand Suppl** 1988; 543:90–5

Safety and efficacy of a low molecular weight heparin (Logiparin) versus dextran as prophylaxis against thrombosis after total hip replacement. Mätzsch T, et al. **Acta Chir Scand Suppl** 1988;543:80–4

Influence of regional anesthesia, local anesthetics, and sympathicomimetics on the pathophysiology of deep vein thrombosis. Modig J. **Acta Chir Scand Suppl** 1989; 550:119–24; discussion 124–7 (35 ref.)

Prophylactic methods against thromboembolism. Reilly DT. **Acta Chir Scand Suppl** 1989;550:115–8 (10 ref.)
Low molecular weight heparins: deep vein thrombosis prophylaxis in elective hip surgery and thrombotic stroke. Turpie AG. **Acta Chir Scand Suppl** 1988;543:85–6
Haemorrhagic and thromboembolic complications versus intensity of treatment of venous thromboembolism with oral anticoagulants. Schulman S, et al. **Acta Med Scand** 1988;224(5):425–30
Prevention of venous thrombosis and pulmonary embolism. Greenfield LJ, et al. **Adv Surg** 1989;22:301–23 (80 ref.)
Fixed combinations of low-molecular weight or unfractionated heparin plus dihydroergotamine in the prevention of postoperative deep vein thrombosis. Kakkar VV, et al. **Am J Surg** 1989 Apr;157(4):413–8
Real-time ultrasound for diagnosis of symptomatic venous thrombosis and for screening of patients at risk: correlation with ascending conventional venography. Monreal M, et al. **Angiology** 1989 Jun;40(6):527–33
Heparin for prophylaxis of venous thromboembolism. Salzman EW. **Ann N Y Acad Sci** 1989;556:371–7 (30 ref.)
A prospective randomized trial of low molecular weight heparin-DHE and conventional heparin-DHE (with acenocoumarol) in patients undergoing gynaecological surgery. Steiner RA, et al. **Arch Gynecol Obstet** 1989; 244(3):141–50
A randomized trial of less intense postoperative warfarin or aspirin therapy in the prevention of venous thromboembolism after surgery for fractured hip. Powers PJ, et al. **Arch Intern Med** 1989 Apr;149(4):771–4
Prevention of deep vein thrombosis in potential neurosurgical patients. A randomized trial comparing graduated compression stockings alone or graduated compression stockings plus intermittent pneumatic compression with control. Turpie AG, et al. **Arch Intern Med** 1989 Mar; 149(3):679–81
Moderate anticoagulation by salicylate prevents thrombosis without bleeding complications. An experimental study in rats. Roncaglioni MC, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4743–5
Current recommendations in prevention of thrombosis in surgery. Kakkar VV. **Blood Rev** 1987 Dec;1(4):237–44 (38 ref.)
Thrombosis prevention. **Br J Hosp Med** 1988 Aug;40(2):146
Comparison of a low molecular weight heparin and unfractionated heparin for the prevention of deep vein thrombosis in patients undergoing abdominal surgery. The European Fraxiparin Study (EFS) Group. **Br J Surg** 1988 Nov;75(11):1058–63
Low molecular weight heparins and prevention of postoperative thrombosis [letter] Bounameaux H. **Br J Surg** 1989 May;76(5):524
Prevention of postoperative deep vein thrombosis. Browse NL. **Br J Surg** 1988 Sep;75(9):835–6 (8 ref.)
Thrombosis prophylaxis with low molecular weight heparin in total hip replacement. Eriksson BI, et al. **Br J Surg** 1988 Nov;75(11):1053–7
Thigh length versus knee length stockings in the prevention of deep vein thrombosis. Porteous MJ, et al. **Br J Surg** 1989 Mar;76(3):296–7
Prophylaxis of deep-vein thrombosis in total hip surgery. Hu R. **Can J Surg** 1989 May;32(3):207–9
Deep vein thrombosis and its prevention in patients with acute myocardial infarction. Přerovský I, et al. **Cor Vasa** 1988;30(5):345–51
Effectiveness of thrombosis prevention with a low molecular weight heparin preparation in gynaecological patients undergoing surgery: an open study. Tartaglia P, et al. **Curr Med Res Opin** 1989;11(6):360–5
Randomized trial of a low-molecular-weight heparin (Kabi 2165) versus adjusted-dose subcutaneous standard heparin in the prophylaxis of deep-vein thrombosis after elective hip surgery. Dechavanne M, et al. **Haemostasis** 1989; 19(1):5–12
Prophylaxis of deep venous thrombosis with a low-molecular-weight heparin (Kabi 2165/Fragmin) in stroke patients. Prins MH, et al. **Haemostasis** 1989; 19(5):245–50
Prevention of venous thromboembolism. Stringer MD, et al. **Herz** 1989 Jun;14(3):135–47 (111 ref.)
Role of intravenous heparin and hydrocortisone in prevention of infusion thrombophlebitis. Subrahmanyam M. **Indian J Physiol Pharmacol** 1988 Jan–Mar;32(1):37–40
Topical effect of heparin and a corticosteroid in prevention of infusion thrombophlebitis [letter] Subrahmanyam M. **Indian J Physiol Pharmacol** 1988 Jul–Sep;32(3):223–5
Prevention of deep venous thrombosis in vascular surgical procedures by LMW-heparin. Gossetti B, et al. **Int Angiol** 1988 Jul–Sep;7(3 Suppl):25–7
A multicentre study on LMW-heparin effectiveness in preventing postsurgical thrombosis. Verardi S, et al. **Int Angiol** 1988 Jul–Sep;7(3 Suppl):19–24
Doppler C.W. study of the lower limb venous hemodynamics during pregnancy and prevention of thrombotic complications. Irace L, et al. **Ital J Surg Sci** 1988; 18(2):167–9
Dihydroergotamine/heparin in the prevention of deep-vein thrombosis after total hip replacement [letter] **J Bone Joint Surg [Am]** 1989 Feb;71(2):311–2
Prevention of venous thrombosis after total hip arthroplasty. Antithrombin III and low-dose heparin compared with dextran 40. Francis CW, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):327–35
The use of low molecular weight heparins for postsurgical deep vein thrombosis prevention in orthopaedic patients. Chiapuzzo E, et al. **J Int Med Res** 1988 Sep–Oct; 16(5):359–66
Venous thrombosis after abdominal surgery. A comparison between subcutaneous heparin and antithrombotic stockings, or both. Rasmussen A, et al. **J Med** 1988; 19(3–4):193–201
A prospective double-blind trial of a low molecular weight heparin once daily compared with conventional low-dose heparin three times daily to prevent pulmonary embolism and venous thrombosis in patients with hip fracture. Monreal M, et al. **J Trauma** 1989 Jun;29(6):873–5
Complications of caval interruption by Greenfield filter in quadriplegics. Balshi JD, et al. **J Vasc Surg** 1989 Apr; 9(4):558–62
Influence of sequential pneumatic compression on postoperative venous function. Blackshear WM Jr, et al. **J Vasc Surg** 1987 Mar;5(3):432–6
Bilateral upper extremity ischemia after administration of dihydroergotamine–heparin for prophylaxis of deep venous thrombosis. Seifert KB, et al. **J Vasc Surg** 1988 Oct; 8(4):410–4
Physical approaches to the prevention of venous thrombosis [letter] Lyne E. **JAMA** 1988 Nov 11;260(18):2664
Peroneal nerve palsy following sequential pneumatic compression [letter] Pittman GR. **JAMA** 1989 Apr 21; 261(15):2201–2
Heparin therapy, deep-vein thrombosis and pulmonary embolism after intracerebral hemorrhage. Dickmann U, et al. **Klin Wochenschr** 1988 Dec 1;66(23):1182–3
Low molecular weight heparin prevention of post-operative deep vein thrombosis in vascular surgery. Speziale F, et al. **Pharmatherapeutica** 1988;5(4):261–8
Prevention of recurrence of deep vein thrombosis in pregnant and post-partum women. Henry M. **Phlebologie** 1988 Nov-Dec;41(4):830–2
Cost effectiveness and efficacy of below knee against above knee graduated compression stockings in the prevention of deep vein thrombosis. Williams JT, et al. **Phlebologie** 1988 Nov-Dec;41(4):809–11
Salvage of a failing microvascular free muscle flap by direct continuous intravascular infusion of heparin: a case report. May JW Jr, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1045–8
Role of compression modalities in a prophylactic program for deep vein thrombosis. Caprini JA, et al. **Semin Thromb Hemost** 1988;14 Suppl:77–87 (65 ref.)
Antithrombotic drugs in pelvic surgery. Fareed J, et al. **Semin Thromb Hemost** 1989 Apr;15(2):230–2 (17 ref.)
Mechanical prophylaxis of venous thrombosis in patients undergoing craniotomy: a randomized trial. Bucci MN, et al. **Surg Neurol** 1989 Oct;32(4):285–8
Prevention of postoperative venous thrombosis: a randomized trial comparing unfractionated heparin with low molecular weight heparin in patients undergoing total hip replacement. Planes A, et al. **Thromb Haemost** 1988 Dec 22;60(3):407–10
Effects of sulfated polysaccharides on inhibition of thrombus formation initiated by different stimuli. Van Ryn-McKenna J, et al. **Thromb Haemost** 1989 Feb 28;61(1):7–9
Prevention of postoperative deep vein thrombosis by one daily injection of low molecular weight heparin and dihydroergotamine. Baumgartner A, et al. **Vasa** 1989; 18(2):152–6
[Tolerability in ophthalmologic surgery of CY 216 in preventing venous thrombosis of the leg] Morin Y, et al. **J Fr Ophtalmol** 1988;11(11):747–52 (Eng. Abstr.) (Fre)
[The role of support in the prevention of venous thromboses of the lower limbs] Coget JM, et al. **Phlebologie** 1988 Nov-Dec;41(4):805–8 (Eng. Abstr.) (Fre)
[The role of hemodilution in the prevention of thromboembolic disease] Duruble M. **Phlebologie** 1988 Nov-Dec;41(4):825–9 (Fre)
[The prevention of thromboembolic disease by physical means. Use of an external electric stimulator. Initial results obtained during hip surgery] Prevot JP, et al. **Phlebologie** 1988 Nov-Dec;41(4):815–7 (Eng. Abstr.) (Fre)
[Prevention of venous thromboses and cutaneous necroses using physical methods and pressure therapy in the surgery of chronic venous insufficiency of the lower limbs] Valentin J, et al. **Phlebologie** 1988 Jul–Oct;41(3):690–6 (Eng. Abstr.) (Fre)
[The use of enoxaparine in preventing deep venous thrombosis following total hip prosthesis. Randomized multicenter prospective trial] Planes A, et al. **Rev Chir Orthop** 1988;74 Suppl 2:215–8 (Fre)
[Initial clinical experiences with low molecular weight heparin in the prevention of thrombosis in orthopedic surgery] Schwarz B, et al. **Aktuel Traumatol** 1988 Oct; 18(5):226–32 (Eng. Abstr.) (Ger)
[Preoperative hemodilution for the prevention of postoperative deep venous thrombosis and early infectious complications in colorectal resections] Vara-Thorbeck R, et al. **Zentralbl Chir** 1988;113(18):1204–9 (Eng. Abstr.) (Ger)
[Updating deep venous thrombosis. II. Prevention and therapy] Antignani PL, et al. **Clin Ter** 1987 Oct 31; 123(2):139–44 (50 ref.) (Ita)
[Low-dose heparin in the prevention of venous thromboses] Cospite M, et al. **Clin Ter** 1987 Aug 15;122(3):177–81 (Eng. Abstr.) (Ita)
[Heparin prophylaxis of deep venous thrombosis and pulmonary embolism in medical patients] Pirone F, et al. **Clin Ter** 1988 Aug 31;126(4):267–71 (Eng. Abstr.) (Ita)
[A multicenter study of defibrotide in the prevention of deep venous thrombosis. Final results] Gerosa C, et al. **Minerva Chir** 1989 May 31;44(10):1507–16 (Eng. Abstr.) (Ita)
[Prevention of deep venous thrombosis. A prospective study of defibrotide] Mensa G, et al. **Minerva Chir** 1988 Aug 31;43(15–16):1275–8 (Eng. Abstr.) (Ita)
[Comparative study of defibrotide and calcium heparin in the prevention of postoperative deep venous thrombosis. A randomized multicenter study] Battistel V, et al. **Minerva Med** 1988 Sep;79(9):783–90 (Eng. Abstr.) (Ita)
[Pharmacologic prevention of deep postoperative venous thrombosis in general surgery] Lippi G, et al. **Minerva Med** 1989 Mar;80(3):275–80 (28 ref.) (Eng. Abstr.) (Ita)
[Defibrotide versus heparin in antithrombotic prophylaxis in gynecological surgery] Lippi G, et al. **Minerva Med** 1989 May;80(5):455–9 (Eng. Abstr.) (Ita)
[Experience with the prevention of venous thrombosis] Rzaev NM, et al. **Kardiologiia** 1989 Mar;29(3):56–9 (Eng. Abstr.) (Rus)
[Prevention of postoperative phlebothrombosis of the legs using low-dose heparin in urologic patients] Savchenko NE, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):62–6 (Eng. Abstr.) (Rus)
[Prevention of the recurrences of deep venous thromboses of the legs using calcium heparin in slowly decreasing dosages] Bilancini S, et al. **Angiologia** 1988 Jul–Aug; 40(4):125–8 (Eng. Abstr.) (Spa)
[Dextran versus subcutaneous heparin in the prevention of deep venous thrombosis (D.V.T.) after biliary surgery] Rosell Pradas J, et al. **Rev Esp Enferm Apar Dig** 1988 Nov; 74(5):521–4 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Deep cerebral venous thrombosis. Clinical, neuroradiological, and neuropsychological correlates. Haley EC Jr, et al. **Arch Neurol** 1989 Mar;46(3):337–40
Digital subtraction venography for assessment of deep venous thrombosis in the arms following pacemaker implantation. Sharma S, et al. **Int J Cardiol** 1989 Apr;23(1):135–6
Deep vein thrombosis in an adolescent. Berman DA, et al. **Pediatr Emerg Care** 1989 Jun;5(2):102–4
How do we know who has had deep vein thrombosis? Sandler DA, et al. **Postgrad Med J** 1989 Jan;65(759):16–9
Impedence phlebography. Ahmed ZM. **Radiography** 1988 Jul–Aug;54(616):143–6
A comparative trial of the tolerance and diagnostic quality of iopromide and iopamidol when used for leg phlebography. Thomas ML, et al. **Vasa** 1988;17(4):273–4
[Venous occlusions distant to the shunt as malfunction factors during hemodialysis] Schumacher KA, et al. **ROFO** 1989 Feb;150(2):198–201 (Eng. Abstr.) (Ger)
[Venous diseases of the extremities—surgery and demands on radiology] Imig H. **Rontgenblatter** 1988 Jul;41(7):267–9 (Eng. Abstr.) (Ger)
[Venous diseases of the lower extremities—methods and results of phlebography of the lower extremity—the superficial and deep systems] Roth FJ, et al. **Rontgenblatter** 1988 Jul;41(7):270–2 (Eng. Abstr.) (Ger)
[Clinical aspects of venous diseases and diagnostic demands on radiology] Wienert V. **Rontgenblatter** 1988 Jul; 41(7):265–6 (Eng. Abstr.) (Ger)
[Arthrocele of the knee joint—a differential diagnosis to deep venous thrombosis] Krause P, et al. **Z Gesamte Inn Med** 1989 Mar 15;44(6):188–91 (29 ref.) (Eng. Abstr.) (Ger)
[The paradoxical embolism] Schmidt R, et al. **Zentralbl Chir** 1988;113(16):1056–60 (Ger)
[The side effects of phlebography of the lower extremities using iohexol. A prospective study] Vigo M, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):53–6 (Eng. Abstr.) (Ita)

RADIONUCLIDE IMAGING

Diagnosis of deep vein thrombosis with a new radionuclide method—99Tcm-albumin test. Bornhov S, et al. **Acta Med Scand** 1988;224(6):571–6
Low specificity of the 125I-fibrinogen uptake test for the diagnosis of deep vein thrombosis in patients with erysipelas of the leg. Lindblad B, et al. **Acta Med Scand** 1988; 224(4):399–400
Diagnosis of deep venous thrombosis of the leg using immunoscintigraphy with 111In-labelled monoclonal antifibrin antibody fragments. Aronen H. **Acta Radiol** 1989 Mar–Apr;30(2):159–62
Early image acquisition after administration of indium-111 platelets in clinically suspected deep venous thrombosis. Farlow DC, et al. **Am J Cardiol** 1989 Aug 1;64(5):363–8
Radiolabelling of human platelets with 99mTc-HMPAO. Vorne M, et al. **Eur J Haematol** 1989 May;42(5):487–91
The validity of radiolabeled anti fibrin antibody for deep vein thrombosis imaging. Bosnjakovic V, et al. **Eur J Nucl Med** 1988;14(9–10):489–94
Radionuclide venography: two stage—flow and equilibrium technique using 99mTc pertechnetate, and 99mTc RBC labelled "in vivo". Snarski AM. **Eur J Nucl Med** 1989;

15(3):137–42

A new monoclonal antibody antifibrin: preliminary evaluation in the detection of venous thrombosis. Ferlin G, et al. **Int J Rad Appl Instrum [B]** 1989;16(2):163–5

False-positive indium-111 platelet scintigraphy [letter; comment] Goodgold HM, et al. **J Nucl Med** 1989 Feb; 30(2):267–8. **Comment on:** J Nucl Med 1988 Jul;29(7):1169–80

Imaging thrombi with radiolabelled fragment E1. Knight LC. **Nucl Med Commun** 1988 Oct;9(10):849–57 (16 ref.)

Diagnosis of thrombosis of the deep veins of the lower extremities and pelvis and pulmonary thromboembolism using 99Tcm human serum albumin macroaggregates. Stevan M, et al. **Nucl Med Commun** 1989 Mar;10(3):141–7

Tc-99m antifibrin Fab' fragments for imaging venous thrombi: evaluation in a canine model. Knight LC, et al. **Radiology** 1989 Oct;173(1):163–9

[Nuclear medicine diagnosis in venous diseases of the extremities] Schwarzrock R, et al. **Rontgenblatter** 1988 Jul; 41(7):288–92 (Eng. Abstr.) (Ger)

SURGERY

The use of arm veins for infrainguinal bypass in end-stage peripheral vascular disease. Balshi JD, et al. **Arch Surg** 1989 Sep;124(9):1078–81

Saphenofemoral vein crossover bypass grafting in iliofemoral vein obstruction. Haas GE. **J Am Osteopath Assoc** 1989 Apr;89(4):511–2, 515–8

The measurement of afterload, vascular input impedance, and power distribution in aorto-femoral bypass. Ashe JW, et al. **J Biomech** 1989;22(5):447–53

Surgical management of fungal peripheral thrombophlebitis. Hauser CJ, et al. **Surgery** 1989 Apr;105(4):510–4

[Indications for venous thrombectomy] van der Stricht J. **J Mal Vasc** 1989;14 Suppl B:83–4 (8 ref.) (Eng. Abstr.) (Fre)

[Surgical treatment of acute deep venous thrombosis of the lower limbs. Description of an original thrombectomy technic] Marongiu GM, et al. **Phlebologie** 1989 Apr-Jun; 42(2):345–52 (Fre)

[Popliteo-femoral venous reconstruction: indications and results] Stockmann U, et al. **Langenbecks Arch Chir** 1988; Suppl 2:177–80 (Eng. Abstr.) (Ger)

[Venous thrombectomy: indications, technic and results] Weber H, et al. **Langenbecks Arch Chir** 1988;Suppl 2:169–75 (25 ref.) (Eng. Abstr.) (Ger)

[Deep venous thrombosis: comparison in the literature of various long-term studies from the vascular surgery viewpoint] Brunner U. **Vasa** 1988;17(4):247–58 (22 ref.) (Eng. Abstr.) (Ger)

[Acute leg-pelvic vein thrombosis: surgical therapy and long-term results] Huk I, et al. **Vasa Suppl** 1988;26:128–32 (Ger)

[Acute thrombosis of deep pelvic and leg veins—a report of surgical experiences] Eggert WD, et al. **Z Arztl Fortbild (Jena)** 1988;82(11):485–7 (Ger)

[Leg-/pelvic vein thrombosis from the viewpoint of the surgeon] Schellong H, et al. **Z Hautkr** 1989 Mar 15; 64(3):181–6 (Eng. Abstr.) (Ger)

[Surgical treatment of acute superficial thrombophlebitis of the lower extremities] Kovalenko NV. **Klin Khir** 1988; (7):39–41 (Eng. Abstr.) (Rus)

[Surgical treatment of complicated and combined hemorrhoids] Askerkhanov RP, et al. **Vestn Khir** 1989 Jan; 142(1):24–6 (Eng. Abstr.) (Rus)

THERAPY

Percutaneous transvenous caval interruption with the "LGM" filter: early results of a multicenter trial. Ricco JB, et al. **Ann Vasc Surg** 1988 Jul;2(3):242–7

Greenfield filter insertions: predictability of technical difficulties. Smyk R, et al. **Ann Vasc Surg** 1988 Oct; 2(4):316–8

The management of the limb in acute venous thrombosis. Lewis JD. **Blood Rev** 1987 Dec;1(4):230–6 (45 ref.)

Current management of venous thromboembolic disease. McCann RL, et al. **Br J Surg** 1989 Feb;76(2):113–4 (14 ref.)

Absence of potentiation with murine antiplatelet GPIIb/IIIa antibody of thrombolysis with recombinant tissue-type plasminogen activator (rt-PA) in a canine venous thrombosis model. Spriggs D, et al. **Thromb Haemost** 1989 Feb 28;61(1):93–6

[A non-traditional approach to deep venous thrombosis complicated by pulmonary embolism and shock] Mika J, et al. **Cesk Gynekol** 1988 Nov;53(9):672–4 (Cze)

[Management of patients with varicose veins presenting with a history of deep venous thrombosis] Battino A, et al. **J Mal Vasc** 1989;14(3):254–7; discussion 257–8 (Eng. Abstr.) (Fre)

[Elastic support in 1988] Furderer C. **J Mal Vasc** 1989; 14(3):259–62 (Eng. Abstr.) (Fre)

[Role of compression and ambulation in the treatment of recent deep venous thromboses] Wallois P. **J Mal Vasc** 1989;14 Suppl B:76–7 (0 ref.) (Fre)

[Evaluation of venous therapy. Venous tonics, vascular protectants and thermal cures. What are the advantages for the patient?] Garreau C, et al. **Phlebologie** 1988 Nov-Dec;41(4):857–76 (26 ref.) (Eng. Abstr.) (Fre)

[Treatment of deep venous thrombosis of the lower leg] Kriessmann A. **Dtsch Med Wochenschr** 1988 Nov 11; 113(45):1779 (Ger)

[Fibrinolytic therapy--plasminogen activator inhibitors] Hönigl K, et al. **Vasa Suppl** 1988;26:103–6 (Eng. Abstr.) (Ger)

[Phlebology—current therapeutic aspects from the dermatologic viewpoint] Kaufmann R. **Z Hautkr** 1988 Jul 15;63(7):577–84 (46 ref.) (Eng. Abstr.) (Ger)

[Hemodilution in the complex treatment of acute iliofemoral venous thromboses] Iablokov EG, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):85–90 (Eng. Abstr.) (Rus)

THROMBOPLASTIN

Flow as a regulator of the activation of factor X by tissue factor. Gemmell CH, et al. **Blood** 1988 Oct;72(4):1404–6

In situ-generated thrombin is the only enzyme that effectively activates factor VIII and factor V in thromboplastin-activated plasma. Pieters J, et al. **Blood** 1989 Aug 15;74(3):1021–4

Stability of gels formed following coagulation of Limulus amebocyte lysate: lack of covalent crosslinking of coagulin. Roth RI, et al. **Thromb Res** 1989 Jul 1;55(1):25–36

ANALYSIS

Control of oral anticoagulant therapy. Biemer JJ. **Ann Clin Lab Sci** 1988 Nov-Dec;18(6):421–8

Human tissue factor contains thioester-linked palmitate and stearate on the cytoplasmic half-cystine. Bach R, et al. **Biochemistry** 1988 Jun 14;27(12):4227–31

Factor VII and extrinsic pathway inhibitor in acute coronary disease. Sandset PM, et al. **Br J Haematol** 1989 Jul; 72(3):391–6

Identification of tissue factor in two human pancreatic cancer cell lines. Silberberg JM, et al. **Cancer Res** 1989 Oct 1; 49(19):5443–7

Measuring tissue factor (factor III) activity in plasma. Fukuda C, et al. **Clin Chem** 1989 Sep;35(9):1897–900

Thromboplastin—sensitivity, precision and other characteristics. Denson KW. **Clin Lab Haematol** 1988; 10(3):315–28

Effect of international sensitivity index (ISI) of thromboplastins on precision of international normalised ratios (INR). Taberner DA, et al. **J Clin Pathol** 1989 Jan; 42(1):92–6

Recalcification time in breast disease. Sofia CA, et al. **J Natl Med Assoc** 1988 Nov;80(11):1214–6

A Multi-centre study to evaluate method dependency of the international sensitivity index of bovine thromboplastin. Peters RH, et al. **Thromb Haemost** 1989 Apr 25;61(2):166–9

Correlation between antigenic and functional expression of tissue factor on the surface of cultured human endothelial cells following stimulation by lipopolysaccharide endotoxin. Noguchi M, et al. **Thromb Res** 1989 Jul 1; 55(1):87–97

Studies on leukemic cell tissue factor. Tanaka H, et al. **Thromb Res** 1989 Mar 15;53(6):535–49

[The level of factor VIII/von Willebrand and inhibitors in diabetic retinopathy] Petrunova N, et al. **Vutr Boles** 1988; 27(5):46–50 (Eng. Abstr.) (Bul)

[Studies on tissue factor activity assay in plasma with chromogenic substrates] Fukuda C, et al. **Rinsho Byori** 1989 Feb;37(2):219–20 (Jpn)

[Coagulative activity of the amniotic fluid] Tersenov OA, et al. **Akush Ginekol (Mosk)** 1989 Jan;(1):43–6 (Eng. Abstr.) (Rus)

[A model of tissue thromboplastin] Balkeev RF, et al. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):3–9 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

Human fibroblast tissue factor is inhibited by lipoprotein-associated coagulation inhibitor and placental anticoagulant protein but not by apolipoprotein A-II. Gramzinski RA, et al. **Blood** 1989 Mar;73(4):983–9

Inhibition of factor VIIa/tissue factor-induced blood coagulation: with particular emphasis upon a factor Xa-dependent inhibitory mechanism. Rapaport SI. **Blood** 1989 Feb;73(2):359–65 (60 ref.)

Human plasma extrinsic pathway inhibitor activity: II. Plasma levels in disseminated intravascular coagulation and hepatocellular disease. Warr TA, et al. **Blood** 1989 Aug 15;74(3):994–8

Human plasma extrinsic pathway inhibitor activity: I. Standardization of assay and evaluation of physiologic variables. Warr TA, et al. **Blood** 1989 Jul;74(1):201–6

Synergistic effect of antithrombin III, activated protein C and heparin on the inhibition of the tissue thromboplastin-mediated coagulation. Hirahara K, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):692–6

Identification of an endothelial cell product as an inhibitor of tissue factor activity. Colburn P, et al. **In Vitro Cell Dev Biol** 1988 Nov;24(11):1133–6

Modifications of extrinsic pathway inhibitor (EPI) and factor Xa that affect their ability to interact and to inhibit factor VIIa/tissue factor: evidence for a two-step model of inhibition. Warn-Cramer BJ, et al. **Thromb Haemost** 1988 Dec 22;60(3):453–6

Studies of the factor Xa-dependent inhibitor of factor VIIa/tissue factor (extrinsic pathway inhibitor) from cell supernates of cultured human umbilical vein endothelial cells. Warn-Cramer BJ, et al. **Thromb Haemost** 1989 Feb 28;61(1):101–5

Identification of the 1.4 kb and 4.0 kb messages for the lipoprotein associated coagulation inhibitor and expression of the encoded protein. Girard TJ, et al. **Thromb Res** 1989 Jul 1;55(1):37–50

BIOSYNTHESIS

Identification and partial purification of a novel tumor-derived protein that induces tissue factor on cultured human endothelial cells. Noguchi M, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):222–7

Allogenic induction of thromboplastin synthesis in monocytes and endothelial cells. Biphasic effect of cyclosporin A. Carlsen E, et al. **Clin Exp Immunol** 1989 Jun;76(3):428–33

Synthesis of thromboplastin (tissue factor) by endothelial cells. Prydz H, et al. **Haemostasis** 1988;18(4–6):215–23 (56 ref.)

Effects of dietary supplementation with cod liver oil on monocyte thromboplastin synthesis, coagulation and fibrinolysis. Hansen JB, et al. **J Intern Med Suppl** 1989; 225(731):133–9

Effect of insulin immune complexes on human blood monocyte and endothelial cell procoagulant activity. Uchman B, et al. **J Lab Clin Med** 1988 Nov;112(5):652–9

Tumor necrosis factor enhances expression of tissue factor mRNA in endothelial cells. Conway EM, et al. **Thromb Res** 1989 Feb 1;53(3):231–41

[The role of ADP-cyclic AMP system in horseshoe crab amebocytes aggregation and gel formation] Chen IJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Apr; 5(4):194–200 (Eng. Abstr.) (Chi)

[Studies on tissue factor generation of cultured human vascular endothelial cells] Uchiyama T, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Nov;51(7):1209–14 (Jpn)

[Thromboplastic activity of various stable cell lines] Tersenov OA, et al. **Gematol Transfuziol** 1989 Feb;34(2):27–30 (Eng. Abstr.) (Rus)

DIAGNOSTIC USE

Special report: a simple system for the derivation of International Normalized Ratios for the reporting of prothrombin time results with North American thromboplastin reagents. Poller L, et al. **Am J Clin Pathol** 1989 Jul;92(1):124–6

Detection of antiphospholipid antibodies by ELISA-method with bovine thromboplastin as antigen. López-Soto A, et al. **Thromb Res** 1989 Mar 15;53(6):623–8

[Comparison of a sensitive rabbit brain thromboplastin and a human placenta thromboplastin for thromboplastin time determination] Lämmle B, et al. **Schweiz Med Wochenschr** 1989 Feb 11;119(6):178–83 (Eng. Abstr.) (Ger)

GENETICS

Complete sequence of the human tissue factor gene, a highly regulated cellular receptor that initiates the coagulation protease cascade. Mackman N, et al. **Biochemistry** 1989 Feb 21;28(4):1755–62

Modification of tissue-factor mRNA and protein response to thrombin and interleukin 1 by high glucose in cultured human endothelial cells. Boeri D, et al. **Diabetes** 1989 Feb; 38(2):212–8

Serum stimulation of quiescent human fibroblasts induces the synthesis of tissue factor mRNA followed by the appearance of tissue factor antigen and procoagulant activity. Bloem LJ, et al. **J Cell Physiol** 1989 May; 139(2):418–23

Regulation of tissue factor gene expression in the monocyte procoagulant response to endotoxin. Gregory SA, et al. **Mol Cell Biol** 1989 Jun;9(6):2752–5

A growth factor-responsive gene of murine BALB/c 3T3 cells encodes a protein homologous to human tissue factor. Hartzell S, et al. **Mol Cell Biol** 1989 Jun;9(6):2567–73

Identification of the 1.4 kb and 4.0 kb messages for the lipoprotein associated coagulation inhibitor and expression of the encoded protein. Girard TJ, et al. **Thromb Res** 1989 Jul 1;55(1):37–50

IMMUNOLOGY

Monoclonal antibody analysis of purified and cell-associated tissue factor. Morrissey JH, et al. **Thromb Res** 1988 Nov 1;52(3):247–61

Characterization of anti-tissue factor antibody and its use in immunoaffinity purification of human tissue factor. Rao LV. **Thromb Res** 1988 Aug 15;51(4):373–84

Coagulation disorders during orthotopic liver transplantation: inhibition of tissue thromboplastin activity by its antibody. Suzumura N, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2367–8

ISOLATION & PURIFICATION

Purification of human brain tissue factor. Kang S, et al. **Thromb Haemost** 1988 Jun 16;59(3):400–3

[Improvement in anti-hemophilic preparations and its problems. 2. Inadequacy of the heat treatment of factor concentrates on the inactivation of non-A, non-B hepatitis virus] Inagaki M, et al. **Rinsho Ketsueki** 1988 May; 29(5):635–9 (Jpn)

METABOLISM

Selective cellular expression of tissue factor in human tissues. Implications for disorders of hemostasis and thrombosis. Drake TA, et al. **Am J Pathol** 1989 May;134(5):1087–97

An inhibitory monoclonal antibody to factor X that blocks prothrombin activation but not prothrombinase enzyme assembly. Church WR, et al. **Blood** 1988 Dec;72(6):1911–21

Inhibition of phospholipid and platelet-dependent prothrombinase activity in the plasma of patients with lupus anticoagulants. Galli M, et al. **Br J Haematol** 1989 Aug; 72(4):549–55

A streptokinase dependent plasma factor (SKDF) induces leucocyte tissue factor activity. Niemetz J, et al. **Br J Haematol** 1988 Dec;70(4):427–33

Antithrombin III–dependent anti–prothrombinase activity of heparin and heparin fragments. Schoen P, et al. **J Biol Chem** 1989 Jun 15;264(17):10002–7

Complement proteins C5b–9 cause release of membrane vesicles from the platelet surface that are enriched in the membrane receptor for coagulation factor Va and express prothrombinase activity. Sims PJ, et al. **J Biol Chem** 1988 Dec 5;263(34):18205–12

Functional tissue factor is entirely cell surface expressed on lipopolysaccharide–stimulated human blood monocytes and a constitutively tissue factor–producing neoplastic cell line. Drake TA, et al. **J Cell Biol** 1989 Jul;109(1):389–95

Effect of strenuous exercise on blood monocytes and their relation to coagulation. Osterud B, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):374–8 (25 ref.)

Differentiation–dependent expression of phosphatidylserine in mammalian plasma membranes: quantitative assessment of outer–leaflet lipid by prothrombinase complex formation. Connor J, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3184–8

Localization of tissue factor in the normal vessel wall and in the atherosclerotic plaque. Wilcox JN, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2839–43

Increased thromboplastin activity in circulating monocytes and reduced in vitro sensitivity to stimuli of blood monocytes from selenium–deficient rats. Ringstad J, et al. **Thromb Res** 1988 Sep 1;51(5):557–62

[The expression and degradation of tissue thromboplastin] Zubairov DM, et al. **Fiziol Zh SSSR** 1988 Oct; 74(10):1404–8 (Eng. Abstr.) (Rus)

PHARMACOLOGY

The limited importance of factor Xa inhibition to the anticoagulant property of heparin in thromboplastin–activated plasma. Pieters J, et al. **Blood** 1988 Dec;72(6):2048–52

Cachectin in tissue injury, shock, and related states. Beutler B. **Crit Care Clin** 1989 Apr;5(2):353–67 (97 ref.)

[Effect of a complex mixture of plasma proteins with heparin on the anticoagulation and fibrinolytic activity of the blood plasma in animals following intravenous administration of tissue thromboplastin] Pastorova VE. **Fiziol Zh SSSR** 1988 Jun;74(6):814–9 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Evidence for the presence of tissue factor activity on subendothelium. Weiss HJ, et al. **Blood** 1989 Mar; 73(4):968–75

Initiation of coagulation by tissue factor. Bach RR. **CRC Crit Rev Biochem** 1988;23(4):339–68 (190 ref.)

Effects of interleukin–1, lipopolysaccharide, and streptococci on procoagulant activity of cultured human cardiac valve endothelial and stromal cells. Drake TA, et al. **Infect Immun** 1989 Feb;57(2):507–12

The effect of trace amounts of tissue factor on thrombin generation in platelet rich plasma, its inhibition by heparin. Béguin S, et al. **Thromb Haemost** 1989 Feb 28;61(1):25–9

[Molecular structure and function of tissue thromboplastin and thromboplastin inhibitor, calphobindin in blood coagulation and fibrinolysis] Shidara Y, et al. **Nippon Rinsho** 1989 Apr;47(4):844–50 (Jpn)

STANDARDS

Regional thromboplastin standardisation using a human brain extract. Bird AR, et al. **S Afr Med J** 1989 Jun 3; 75(11):538–40

THROMBOPLASTINOGEN see FACTOR VIII

THROMBOPOIETIN see under GLYCOPROTEINS

THROMBOSIS

Atrial fibrillation and left atrial thrombus: an insufferable odd couple. Lie JT. **Am Heart J** 1988 Nov;116(5 Pt 1):1374–7 (62 ref.)

The issue of animal models of thrombosis. Wessler S. **Ann N Y Acad Sci** 1989;556:366–70

Romancing the clot—the past, the present, the future. Firkin BG. **Aust N Z J Med** 1988 May;18(3):255–61

Acute and chronic canine ex vivo blood interactions with NHLBI–DTB primary reference materials. McCoy TJ, et al. **Biomaterials** 1989 May;10(4):243–50

The place of first rib resection in the management of axillary–subclavian thrombosis [letter] Scott DJ, et al. **Eur J Vasc Surg** 1987 Oct;1(5):363

Present problems in haemostaseology. Part II: Platelets and vessels, haemorrhagic disorders. The Vth International Meeting of the Danubian League against Thrombosis and Haemorrhagic Disorders in conjunction with the 16th Erfurt Conference on Haemostasis and Thrombosis. Proceedings. **Folia Haematol (Leipz)** 1988;115(4):415–608

The role of vascular endothelial cells in hemostasis and thrombosis. **Haemostasis** 1988;18(4–6):201–389

Recurrent left ventricular mural thrombi in a patient with acute myocarditis. Kojima J, et al. **Heart Vessels** 1988; 4(2):120–2

Axillary–subclavian venous thrombosis. Brochner G, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):108–11

Cortical vein thrombosis—a case report. Chuah EC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec;26(4):435–8

Microvascular surgical experimental thrombosis model: rationale and design. Kersh RA, et al. **Plast Reconstr Surg** 1989 May;83(5):866–72; discussion 873–4

Renal venous thrombosis in infancy. Wiggelinkhuizen J, et al. **S Afr Med J** 1989 May 6;75(9):413–6

Hypertriglyceridemia, arteriosclerosis, and thrombosis: II. September 21–23, 1987, Washington, D.C. Proceedings. **Semin Thromb Hemost** 1988 Jul;14(3):227–92

Clot lysis mediated by cultured human microvascular endothelial cells. Speiser W, et al. **Thromb Haemost** 1988 Dec 22;60(3):463–7

Strain enhancement of elastic modulus in fine fibrin clots. Bale MD, et al. **Thromb Res** 1988 Dec 15;52(6):565–72

[Neonatal venous thrombosis and familial protein C deficiency. A difficult diagnosis] Mettey R, et al. **Ann Pediatr (Paris)** 1989 May;36(5):343–4 (Fre)

[Thrombosis of the right ventricle in 2 infants with myocardiopathy] Regaieg R, et al. **Ann Pediatr (Paris)** 1989 May;36(5):339–42 (Eng. Abstr.) (Fre)

[Calcified thrombosis of the inferior vena cava in children] Levard G, et al. **Chir Pediatr** 1988;29(4):201–4 (12 ref.) (Eng. Abstr.) (Fre)

[Acute mesenteric infarction. Recent advances in relation to physiopathology, clinical features and therapy] Coraggio F, et al. **Clin Ter** 1988 Mar 15;124(5):343–56 (19 ref.) (Eng. Abstr.) (Ita)

[Thrombosis of the renal vein in nephrotic syndrome: clinico–diagnostic and therapeutic aspects] Zambon G, et al. **G Clin Med** 1989 Jun–Jul;70(6–7):457–64 (62 ref.) (Ita)

[New trend of research on thrombosis and hemostasis; molecular biology] Aoki N. **Nippon Rinsho** 1989 Apr; 47(4):729–31 (Jpn)

[Features of thrombophilia in nephrotic syndrome in children] Serebrianyĭ VL, et al. **Pediatriia** 1989;(1):49–53 (Eng. Abstr.) (Rus)

BLOOD

Venostasis–induced thrombosis in rats is not influenced by circulating platelet or leukocyte number. Reyers I, et al. **Agents Actions** 1989 Aug;28(1–2):137–41

Heparin cofactor II in adults and infants with thrombosis and DIC. Chuansumrit A, et al. **Am J Hematol** 1989 Jun; 31(2):109–13

Low protein S in essential thrombocythemia with thrombosis. Conlan MG, et al. **Am J Hematol** 1989 Oct;32(2):88–93

Severe hemolysis and red cell fragmentation caused by the combination of a spectrin mutation with a thrombotic microangiopathy. Jarolim P, et al. **Am J Hematol** 1989 Sep; 32(1):50–6

Mechanisms of thrombus formation and lysis. Stump DC, et al. **Ann Emerg Med** 1988 Nov;17(11):1138–47

Abstracts: 8th National Conference on Thrombosis and Hemostasis. Washington, D. C., November 1988. **Arteriosclerosis** 1988 Sep–Oct;8(5):648a–736a

Modified cellulosic dialyzer membranes: an investigative tool in thrombogenicity studies. Mahiout A, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):878–81

Platelet aggregating activity in the plasma of patients with established thrombosis. Jackson SP, et al. **Aust N Z J Med** 1989 Apr;19(2):126–31

Thrombolytic properties of human tissue–type plasminogen activator, single–chain urokinase–type plasminogen activator, and synergistic combinations in venous thrombosis models in dogs and rabbits. Spriggs DJ, et al. **Blood** 1989 Apr;73(5):1207–12

Cellular and molecular markers of thrombosis. Wu KK, et al. **Hematol Pathol** 1987;1(4):249–60 (74 ref.)

The dermatologist and protein C. Miller SJ. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):904–7 (48 ref.)

A thrombotic state due to an abnormal protein C. Matsuda M, et al. **N Engl J Med** 1988 Nov 10;319(19):1265–8

Coagulation disorders associated with neoplastic disease. Steingart RH. **Recent Results Cancer Res** 1988;108:37–43 (14 ref.)

Effect of platelet–activating factor on platelets and vascular endothelium. Braquet P, et al. **Semin Thromb Hemost** 1989 Apr;15(2):184–96 (159 ref.)

Pharmacology of ticlopidine: a review. Defreyn G, et al. **Semin Thromb Hemost** 1989 Apr;15(2):159–66 (38 ref.)

Protein C and the endothelium. Esmon NL, et al. **Semin Thromb Hemost** 1988 Apr;14(2):210–5 (42 ref.)

Platelets and atherosclerosis. Hoak JC. **Semin Thromb Hemost** 1988 Apr;14(2):202–5 (13 ref.)

Thrombosis and the development of atherosclerosis: Rokitansky revisited. Schwartz CJ, et al. **Semin Thromb Hemost** 1988 Apr;14(2):189–95 (46 ref.)

Interactions of protein S with membranes. Walker FJ. **Semin Thromb Hemost** 1988 Apr;14(2):216–21 (48 ref.)

Formation of thrombi on injured endothelium in mesenteric arterioles in guinea pigs. Johnson SA. **Thromb Diath Haemorrh Suppl** 1968;28:65–74; discussion 75–95

Endothelial–dependent fibrinolysis in subjects with the lupus anticoagulant and thrombosis. Francis RB Jr, et al. **Thromb Haemost** 1988 Jun 16;59(3):412–4

Homozygous variant of antithrombin III that lacks affinity for heparin, AT III Kumamoto. Okajima K, et al. **Thromb Haemost** 1989 Feb 28;61(1):20–4

Growth and stability of thrombi in flowing citrated blood: assessment of platelet–surface interactions with computer–assisted morphometry. Sakariassen KS, et al. **Thromb Haemost** 1988 Dec 22;60(3):392–8

The measurement of haemostatic factors in 16 European laboratories: quality assessment for the Multicentre ECAT Angina Pectoris Study. Report from the European Concerted Action on Thrombosis and Disabilities (ECAT). Thompson SG, et al. **Thromb Haemost** 1989 Apr 25; 61(2):301–6

Impaired fibrinolysis as an essential contribution to thrombosis in patients with lupus anticoagulant. Tsakiris DA, et al. **Thromb Haemost** 1989 Apr 25;61(2):175–7

Mechanisms of vascular graft thrombosis: role of altered canine platelet sensitivity to thromboxane. McGoff MA, et al. **Thromb Res** 1989 Sep 15;55(6):695–707

Dietary lipids, platelet function and arterial thrombosis. Hornstra G. **Wien Klin Wochenschr** 1989 Apr 14; 101(8):272–7 (45 ref.)

[Fibrinogen and factor VII: 2 risk factors for arterial thrombosis] Carvalho Sousa J, et al. **Presse Med** 1989 Apr 22;18(16):799–800 (Fre)

[Lupus anticoagulants, thrombosis and accidental interruption of pregnancy] David JL. **Rev Med Liege** 1988 Nov 15;43(22):737–40 (Fre)

[Effect of prostaglandin E1 on the formation of experimental arterial and venous thrombosis] Zimmermann R, et al. **Wien Klin Wochenschr** 1988 Jul 15;100(14):481–4 (Eng. Abstr.) (Ger)

[Structure of the surface of erythrocytes in a clot in hemolytic disease of the newborn] Mashanskiĭ VF, et al. **Lab Delo** 1989;(2):20–2 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Renal vascular and thrombotic effects of cyclosporine. Remuzzi G, et al. **Am J Kidney Dis** 1989 Apr;13(4):261–72 (100 ref.)

Sequelae of thrombotic or hemorrhagic complications following L–asparaginase therapy for childhood lymphoblastic leukemia. Ott N, et al. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):191–5

Venous sequelae following i.v. administration of diclofenac. Campbell WI, et al. **Br J Anaesth** 1989 May;62(5):545–7

Carboplatin–associated thrombotic microangiopathic hemolytic anemia. Walker RW, et al. **Cancer** 1989 Sep 1; 64(5):1017–20

Two–year follow–up of changes in clinical chemistry in Singaporean Norplant acceptors: haemostatic changes. Singh K, et al. **Contraception** 1989 Feb;39(2):137–46

Two–year follow–up of changes in clinical chemistry in Singaporean Norplant–2 rod acceptors: haemostatic changes. Singh K, et al. **Contraception** 1989 Feb; 39(2):155–64

Thrombotic microangiopathy associated with chemotherapy: case report and review of the literature. Fields SM, et al. **DICP** 1989 Jul–Aug;23(7–8):582–8 (63 ref.)

Heparin–associated thrombocytopenia and thrombosis [letter] Mikhailidis DP, et al. **J Lab Clin Med** 1989 May; 113(5):655–6

Axillary vein thrombosis after nitrogen mustard therapy for SLE [letter] Quismorio FP Jr, et al. **J Rheumatol** 1988 Nov; 15(11):1732–3

Endoscopic sclerotherapy: a risk factor for splanchnic venous thrombosis. Leach SD, et al. **J Vasc Surg** 1989 Jul; 10(1):9–12; discussion 12–3

Desmopressin and thrombosis [letter] Mannucci PM, et al. **Lancet** 1989 Sep 16;2(8664):675–6

A new in–vitro thrombogenicity test: resonance–thrombography in comparison with material–thrombelastography. Sprengel H, et al. **Life Support Syst** 1983;1 Suppl 1:235–8

Azaribine–homocystinemia–thrombosis in historical perspective. Drell W, et al. **Pharmacol Ther** 1989; 41(1–2):195–206 (121 ref.)

Acute glomerular thrombosis with CsA treatment. Muirhead N, et al. **Ren Fail** 1987–88;10(3–4):135–9

Cyclosporine–associated glomerular and arteriolar thrombosis following renal transplantation. First MR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1567–70

[Venous thrombosis in the brain and upper limbs associated with thrombopenia induced by pentosan polysulfate] Jacquin V, et al. **Ann Med Interne (Paris)** 1988;139(3):194–7 (Eng. Abstr.) (Fre)

[Complications following parenteral administration of oral methadone solution] Naschitz JE, et al. **Harefuah** 1988 Nov 15;115(10):271–4 (Eng. Abstr.) (Heb)

[Systemic thrombotic microangiopathy secondary to diclofenac (letter)] Claros González I, et al. **Med Clin (Barc)** 1989 Mar 18;92(10):396 (Spa)

[Plasmapheresis and heparin–induced

thrombocytopenia–thrombosis (letter)] Manzano L, et al. **Med Clin (Barc)** 1989 Apr 29;92(16):639 **(Spa)**

COMPLICATIONS

Giant right atrial thrombus causing right ventricular inflow and outflow obstruction. Gultekin N, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1367–9

Inferior myocardial infarction complicated by mural thrombus and systemic embolization despite anticoagulation in progressive systemic sclerosis with normal coronary arteriograms. Nair CK, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1357–9

Left ventricular thrombus with normal left ventricular wall motion in a patient with myelofibrosis. Stoddard MF, et al. **Am Heart J** 1989 Apr;117(4):966–8

Idiopathic membranous glomerulopathy complicated by crescentic glomerulonephritis and renal vein thrombosis. Nguyen BP, et al. **Am J Kidney Dis** 1988 Oct;12(4):326–8

Pulmonary embolism as a result of Hickman catheter–related thrombosis. Leiby JM, et al. **Am J Med** 1989 Feb; 86(2):228–31 (32 ref.)

Nonbacterial thrombotic endocarditis complicating mitral valve prolapse presenting as Parinaud's syndrome—a case report. Cook DJ, et al. **Angiology** 1989 May;40(5):494–7

Abdominal aortic aneurysm with inferior vena cava obstruction: case report. Demircioglu FF, et al. **Angiology** 1989 Mar;40(3):227–32

Ultrasound examination in the patient with ascites. Black M, et al. **Ann Intern Med** 1989 Feb 15;110(4):253–5

Mural thrombus of the aorta. Gagliardi JM, et al. **Ann Vasc Surg** 1988 Jul;2(3):201–4

Predicting pulmonary embolism in postoperative patients with deep venous thrombosis of lower limbs. Monreal M, et al. **Ann Vasc Surg** 1987 May;1(4):421–5

Contrast enhanced CT scan as a diagnostic procedure in mesenteric ischaemia due to mesenteric venous thrombosis. Clavien PA, et al. **Br J Surg** 1989 Jan;76(1):93–4

Mesenteric arteriovenous shunt associated with thrombosis of the portal venous system: case report. Matsunaga N, et al. **Cardiovasc Intervent Radiol** 1988 Oct;11(5):281–4

In vivo right heart thrombus. Precursor of life–threatening pulmonary embolism. Crowell RH, et al. **Chest** 1988 Dec; 94(6):1236–9 (16 ref.)

Roentgenogram of the month. Pulmonary cavity in a patient with nephrotic syndrome and renal vein thrombosis. Schonfeld AD, et al. **Chest** 1988 Dec;94(6):1285–6

Giant right atrial thrombus in Noonan syndrome combined with Eisenmenger's complex. Tatsukawa H, et al. **Chest** 1989 Apr;95(4):930–2

A 55–year–old woman with abdominal pain, mucous stools, shock and polycythemia vera [clinical conference] **Chin Med J [Engl]** 1989 Jan;102(1):72–8

Photothrombosis–induced ischemic neuronal degeneration in the rat retina. Mosinger JL, et al. **Exp Neurol** 1989 Jul; 105(1):110–3

Primary adrenal insufficiency, circulating lupus anticoagulant and anticardiolipin antibodies in a patient with multiple abortions and recurrent thrombotic episodes. Grottolo A, et al. **Haematologica (Pavia)** 1988 Nov–Dec;73(6):517–9

Myeloproliferative disorders in portal vein thrombosis in adults. Knox TA, et al. **Hepatology** 1989 Sep;10(3):392–3

Acute aortic thrombosis presenting as painless paraplegia. Bolduc ME, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):506–8

Patent foramen ovale or left atrial thrombi in unexplained arterial embolism [letter] Mügge A, et al. **Lancet** 1989 Feb 4;1(8632):282–3

Lipoprotein(a). Thrombogenesis linked to atherogenesis at last? [news] Scott J. **Nature** 1989 Sep 7;341(6237):22–3

Salvage of upper arm access graft in the presence of symptomatic subclavian vein thrombosis. Campistol JM, et al. **Nephron** 1989;51(4):551–2

Behcet's syndrome associated with minimal change glomerulonephritis and renal vein thrombosis. Malik GH, et al. **Nephron** 1989;52(1):87–9

Embolic stroke from a carotid arterial source in the rat: pathology and clinical implications. Futrell N, et al. **Neurology** 1989 Aug;39(8):1050–6

Intestinal obstruction in a neonate with adrenal hemorrhage and renal vein thrombosis. Levine C. **Pediatr Radiol** 1989; 19(6–7):477–8

Severe disseminated intravascular coagulation associated with massive ventricular mural thrombus following acute myocardial infarction. Solomon SA, et al. **Postgrad Med J** 1988 Oct;64(756):791–5

Median artery thrombosis as a cause of carpal tunnel syndrome [letter] de Graad M, et al. **S Afr Med J** 1989 Jul 15;76(2):78–9

Hypertriglyceridemia, arteriosclerosis, and thrombosis: I. September 21–23, 1987, Washington, D.C. Proceedings of a workshop. **Semin Thromb Hemost** 1988 Apr;14(2):137–221

Soft tissue involvement, mediastinal pseudotumor, and venous thrombosis in pustulotic arthro–osteitis. A study of eight new cases. van Holsbeeck M, et al. **Skeletal Radiol** 1989;18(1):1–8

Hepatic artery thrombosis after orthotopic liver transplantation—a fatal complication or an asymptomatic event. Hesselink EJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2462

Common causes of cardiac emboli—left ventricular thrombi and atrial fibrillation [clinical conference] Stratton JR. **West J Med** 1989 Aug;151(2):172–9 (74 ref.)

[The locked–in syndrome] Delacour JL, et al. **Ann Fr Anesth Reanim** 1988;7(5):433–6 (21 ref.) (Eng. Abstr.) **(Fre)**

[Post–traumatic carotido–cavernous fistula associated with thrombosis of the superior ipsilateral ophthalmic vein. Clinical and therapeutic characteristics: apropos of a case] Simha N, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul; 88(6–7):833–4, 837–40 (9 ref.) **(Fre)**

[Acute intestinal ischemia from arterial thrombosis. Value of emergency arteriography and revascularization] Bokobza B, et al. **J Mal Vasc** 1988;13(4):356–8 (Eng. Abstr.) **(Fre)**

[Superficial femoral artery thrombosis associated with protein S deficiency and rheumatoid pelvispondylitis] Millaire A, et al. **J Mal Vasc** 1989;14(3):263–4 **(Fre)**

[Chylothorax due to thrombosis of the superior vena cava during Behçet's disease] Bouslama A, et al. **Tunis Med** 1987 Aug–Sep;65(8–9):539–42 (Eng. Abstr.) **(Fre)**

[Portal hypertension due to thromboses of the portal, splenic and mesenteric veins in congenital protein c deficiency] Höring E, et al. **Dtsch Med Wochenschr** 1988 Nov 25; 113(47):1847–9 (Eng. Abstr.) **(Ger)**

[Recurrent gastrointestinal hemorrhage in portal vein thrombosis and antibiotic–resistant pneumonia in a 38–year–old patient] Klaubert W, et al. **Internist (Berlin)** 1988 Oct;29(10):705–9 **(Ger)**

[Studies on the portasystemic shunt in pelvic vein thrombosis and the vena cava inferior syndrome] Zückmantel WR, et al. **Radiol Diagn (Berl)** 1988;29(4):635–40 (Eng. Abstr.) **(Ger)**

[Spinal claudication following ileocaval venous thrombosis] Blättler W, et al. **Schweiz Med Wochenschr** 1988 Aug 27; 118(34):1209–12 (Eng. Abstr.) **(Ger)**

[Clinical case (nephrotic syndrome associated with thrombosis of the inferior vena cava)] Fornaciari M, et al. **G Clin Med** 1989 Apr;70(4):305–6, 308 **(Ita)**

[Fibrinolytic treatment in acute ischemia caused by thrombosed popliteal aneurysm. Apropos of 2 cases] Bonelli U, et al. **Minerva Chir** 1989 May 31;44(10):1517–20 (Eng. Abstr.) **(Ita)**

[Neonatal renal insufficiency and thrombosis of the renal vein. Systemic thrombolytic treatment] Artesani L, et al. **Minerva Urol Nefrol** 1988 Oct–Dec;40(4):313–6 (Eng. Abstr.) **(Ita)**

[A case of successful operation of acute pulmonary embolism due to right ventricular thrombus detected by two–dimensional echocardiography] Kawai A, et al. **Kyobu Geka** 1989 Mar;42(3):232–5 (Eng. Abstr.) **(Jpn)**

[Consumption coagulopathy found in mitral stenosis associated with atrial thrombus] Takamatsu J, et al. **Rinsho Ketsueki** 1989 Apr;30(4):525–9 (Eng. Abstr.) **(Jpn)**

[Consumption coagulopathy associated with thrombosis of inferior vena cava: trial of intracaval filter] Tatewaki W, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1115–9 (Eng. Abstr.) **(Jpn)**

[Behçet disease with superior sagittal sinus and inferior vena caval thrombosis] Hata T, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1217–24 (26 ref.) (Eng. Abstr.) **(Jpn)**

[A typical syndrome of the sulco–commissural arteries] Szyrocka–Szwed K, et al. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):343–7 (Eng. Abstr.) **(Pol)**

[Total gangrene of the small intestine caused by thrombosis of mesenteric veins] Serochkin GG, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):127–8 **(Rus)**

[Venous infarction of the small intestine after novocaine block of the mesenteric root] Mizaushev BA, et al. **Vestn Khir** 1988 Sep;141(9):133–5 **(Rus)**

[Trousseau's syndrome: thrombosis of the inferior vena cava and of the left renal vein associated with a testicular neoplasm] Castiñeiras J, et al. **Actas Urol Esp** 1988 Sep–Oct; 12(5):402–10 (32 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Color Doppler ultrasound imaging of lower–extremity venous disease. Foley WD, et al. **AJR** 1989 Feb; 152(2):371–6

Detection of thrombus by using phase–image MR scans: ROC curve analysis. Tavares NJ, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):173–8

Thrombotic obstruction of prosthetic aortic valve presenting as acute myocardial infarction. Quintanilla MA, et al. **Am Heart J** 1989 Jun;117(6):1378–9

Left atrial ball thrombus: apparent detachment following initiation of anticoagulant therapy. Wrisley D, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1351–2

Detection of left atrial thrombi by two–dimensional echocardiography and surgical correlation in 148 patients with mitral valve disease. Bansal RC, et al. **Am J Cardiol** 1989 Jul 15;64(3):243–6

Antiphospholipid antibody syndrome with right atrial thrombosis mimicking an atrial myxoma. Leventhal LJ, et al. **Am J Med** 1989 Jul;87(1):111–3

New ultrasonic femoropopliteal and tibiofemoral tests in the study of patency of the deep venous system. Barták JV. **Angiology** 1989 Aug;40(8):701–4

Thrombotic obstruction of disc valves: clinical recognition and surgical management. Kontos GJ Jr, et al. **Ann Thorac Surg** 1989 Jul;48(1):60–5

Monoclonal antibody immunoassay in the study of thrombogenicity of preclotted and gelatin–impregnated aortic prostheses. Zahrani HA, et al. **Ann Vasc Surg** 1989 Jul;3(3):248–50

Real time sound spectral analysis for diagnosis of thrombosed prosthetic valves. Sato N, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):831–4

Cavernous transformation of the portal vein. Philips RL. **Australas Radiol** 1988 May;32(2):239–41

Use of synthetic oligonucleotides in the characterization of antithrombin III Northwick Park (393 CGT——TGT) and antithrombin III Glasgow (393 CGT——CAT). Thein SL, et al. **Blood** 1988 Nov;72(5):1817–21

Diagnosis and management of subclavian vein thrombosis occurring in association with subclavian cannulation for hemodialysis. Brady HR, et al. **Blood Purif** 1989;7(4):210–7

Lack of correlation between intracavitary thrombosis detected by cross sectional echocardiography and systemic emboli in patients with dilated cardiomyopathy. Ciaccheri M, et al. **Br Heart J** 1989 Jul;62(1):26–9

Transcardiac passage of thrombus—ultrasonographic visualization. Cross P, et al. **Can Assoc Radiol J** 1989 Apr; 40(2):108–9

Acquired coronary artery fistula: a sign of mural thrombus. Lucca MJ, et al. **Cathet Cardiovasc Diagn** 1988;15(4):273–6

Intra–atrial smoke–like echoes and thrombi formation. Chia BL, et al. **Chest** 1989 Apr;95(4):912–4

Echocardiographic detection of an infected superior vena caval thrombus presenting as a right atrial mass. Dick AE, et al. **Chest** 1989 Jul;96(1):212–4

Pericardial effusion mimicking left atrial thrombus after coronary bypass surgery. Steffenino G, et al. **Chest** 1989 Feb;95(2):468–70

Left ventricular thrombus in the absence of detectable heart disease. Vaganos SA, et al. **Chest** 1989 Aug;96(2):426–7

111In–labeled platelet scintigraphy and two–dimensional echocardiography for detection of left atrial appendage thrombi. Studies in a new canine model. Vandenberg BF, et al. **Circulation** 1988 Oct;78(4):1040–6

Diagnosis of allograft renal vein thrombosis. Delbeke D, et al. **Clin Nucl Med** 1989 Jun;14(6):415–20

Venous thrombosis in the neck. The role of real time ultrasound. Williams CE, et al. **Eur J Radiol** 1989 Feb; 9(1):32–6

Free floating ball thrombus in left atrium. Grover A, et al. **Indian Pediatr** 1988 Sep;25(9):878–81

Characterization of the acute left ventricular thrombus: hermit or nomad? Gutterman DD. **J Am Coll Cardiol** 1989 Mar 1;13(3):565–6

Prospective two–dimensional echocardiographic evaluation of left ventricular thrombus and embolism after acute myocardial infarction. Jugdutt BI, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):554–64

Flow characteristics in the dilated left ventricle with thrombus: qualitative and quantitative Doppler analysis. Maze SS, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):873–81

Thrombus calcification of renal vein in neonate: ultrasound and CT diagnosis. Starinsky R, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):545–6

Magnetic resonance imaging of renal vein and inferior vena cava thrombosis in a patient with glomerulonephritis: a case report. Honda H, et al. **J Comput Tomogr** 1988 Apr; 12(2):147–9

Doppler mapping in hypothenar syndrome: an alternative to angiography. DiBenedetto MR, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):244–6

Duplex venous scanning: a case report. Harkrider WW Jr, et al. **J La State Med Soc** 1989 Apr;141(4):41–5

Floating thrombus in the internal carotid artery disclosed by B–mode ultrasonography. Arning C, et al. **J Neurol** 1988 Sep;235(7):425–7

A painful, swollen lower extremity. **J Tenn Med Assoc** 1989 Apr;82(4):198

Magnetic resonance imaging in heterotopic heart transplantation [letter] de Roos A, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):457–9

High–resolution real–time ultrasonography. Diagnosis and follow–up of jugular and subclavian vein thrombosis. Gaitini D, et al. **J Ultrasound Med** 1988 Nov;7(11):621–7

Identification of aortic thrombus by magnetic resonance imaging. Pan X, et al. **J Vasc Surg** 1989 Jun;9(6):801–5

Acute aortic thrombosis causing sudden paraplegia in a patient with known thoraco–lumbar spinal metastasis: the diagnostic usefulness of magnetic resonance imaging. Moore MR, et al. **Neurosurgery** 1989 Jul;25(1):105–9

New approaches to radiolabelled blood cells imaging thrombus and inflammation. Papers from a meeting. London, February 26–27 1988. **Nucl Med Commun** 1988 Oct;9(10):679–866

Ovarian vein thrombosis with atypical presentation: role of sonography and duplex Doppler. Baka JJ, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):887–9

Ultrasound demonstration of prenatal renal vein thrombosis. Sanders LD, et al. **Pediatr Radiol** 1989;19(2):133–5

Duplex Doppler ultrasound evaluation of calcified inferior vena cava thrombosis. Uglietta JP, et al. **Pediatr Radiol** 1989;19(4):250–2

Ultrasound case of the day. Portal vein thrombosis. Sandler MA, et al. **Radiographics** 1988 Nov;8(6):1216–20

Adrenal hemorrhage and renal vein thrombosis in the newborn: MR imaging. Brill PW, et al. **Radiology** 1989 Jan;170(1 Pt 1):95–8

Acute renal vein thrombosis in renal allografts: detection with duplex Doppler US. Reuther G, et al. **Radiology** 1989 Feb;170(2):557–8

Duplex ultrasonography in portal vein thrombosis. Harkányi Z, et al. **Surg Endosc** 1989;3(2):79–82

Delayed arterial thrombosis following an apparently trivial low-voltage electric injury. Bongard O, et al. **Vasa** 1989; 18(2):162–6

The role of echocardiography in managing cardiac emboli [editorial] Burke JF. **West J Med** 1989 Aug;151(2):197–8

[Right ventricular thrombus mimicking a tumor mass in a newborn with pulmonary atresia—an autopsy report] Chen YH, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Mar;5(3):185–8 (Eng. Abstr.) (Chi)

[Biventricular thrombosis in dilated cardiomyopathy. Echocardiographic and pathophysiologic study of intra-cardiac thrombosis] Hula J, et al. **Cas Lek Cesk** 1989 May 19;128(21):664–6 (Eng. Abstr.) (Cze)

[Evaluation of the consensus deep venous thrombosis] van Everdingen JJ, et al. **Ned Tijdschr Geneeskd** 1988 Nov 26; 132(48):2206–11 (3 ref.) (Eng. Abstr.) (Dut)

[MRI and post-partum thrombosis of the utero-ovarian vein. Apropos of a case] Martin B, et al. **Ann Radiol (Paris)** 1988; 31(4):251–4 (Eng. Abstr.) (Fre)

[Development of left intraventricular thrombi. Monitoring by two-dimensional echocardiography and scintigraphy with indium 111-labelled platelets] Benichou M, et al. **Arch Mal Coeur** 1988 Nov;81(11):1317–24 (Eng. Abstr.) (Fre)

[Acute thrombosis of mitral Starr prosthesis. Value of color coded two-dimensional doppler echocardiography] Wahl P, et al. **Arch Mal Coeur** 1989 Feb;82(2):251–6 (Eng. Abstr.) (Fre)

[Puerperal ovarian vein thrombophlebitis following pregnancy with quadruplets] Spitzer D, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):502–3 (Eng. Abstr.) (Ger)

[Ultrasound diagnosis of thrombosis of the inferior vena cava in the puerperium] Troester U, et al. **Geburtshilfe Frauenheilkd** 1988 Dec;48(12):902–3 (Eng. Abstr.) (Ger)

[Detection of superior mesenteric vein thrombosis following splenectomy using real-time and Doppler sonography] Mildenberger P, et al. **Radiologe** 1988 Aug;28(8):395–8 (Eng. Abstr.) (Ger)

[Deep venous thrombosis of the upper extremities] Huber P, et al. **Schweiz Med Wochenschr** 1988 Sep 3; 118(35):1230–6 (Eng. Abstr.) (Ger)

[The diagnosis of acute (deep venous thrombosis) amd of chronic venous circulatory disorders °chronic venous insufficiency) using light reflection rheography (LRR) in clinical and hospital practice] Hördegen KM. **Schweiz Rundsch Med Prax** 1988 Nov 8;77(45):1224–30 (Eng. Abstr.) (Ger)

[Thrombophilic and hemorrhagic diatheses in cancer] Marx R. **Thromb Diath Haemorrh Suppl** 1968;28:101–17; discussion 143–68 (43 ref.) (Ger)

[Duplex sonography of the internal jugular vein] Steinke W, et al. **Ultraschall Med** 1989 Apr;10(2):72–6 (Eng. Abstr.) (Ger)

[Venous hemodynamics in axillary venous stasis] Joel A, et al. **Z Gesamte Inn Med** 1988 Oct 15;43(20):592–3 (Eng. Abstr.) (Ger)

[False echocardiographic images of an atrial thrombus in pericarditis] Beccaria E, et al. **Cardiologia** 1988 Dec; 33(12):1177–9 (Eng. Abstr.) (Ita)

[Pulmonary and systemic embolism in a case of biatrial thrombosis. Role of two-dimensional echocardiography] Cazzani E, et al. **G Ital Cardiol** 1987 Dec;17(12):1169–72 (Eng. Abstr.) (Ita)

[Detection of mural thrombi and analysis of blood flow velocities in the left atrial appendage using transesophageal two-dimensional echocardiography and pulsed Doppler flowmetry] Suetsugu M, et al. **J Cardiol** 1988 Jun; 18(2):385–94 (Eng. Abstr.) (Jpn)

[Molecular marker for hemostasis and thrombosis] Fukutake K, et al. **Nippon Rinsho** 1989 Apr;47(4):883–90 (Jpn)

[Partially thrombosed radiculomeningeal arterio-venous fistula in spinomedullary junction] Oda Y, et al. **No Shinkei Geka** 1989 Jan;17(1):63–8 (Eng. Abstr.) (Jpn)

[Hemostatic tests for the diagnosis of thrombosis. Activated platelet] Fujimura K, et al. **Rinsho Byori** 1988 Jun; 36(6):640–5 (Jpn)

[Hemostatic tests for the diagnosis of thrombosis. Activated coagulation and fibrinolytic factors. Detection of the protease/inhibitor complex] Iijima K. **Rinsho Byori** 1988 Jun;36(6):623–6 (Jpn)

[Hemostatic tests for the diagnosis of thrombosis. The diagnosis of protein C deficiency] Ikeda K. **Rinsho Byori** 1988 Jun;36(6):627–31 (Jpn)

[Hemostatic tests for the diagnosis of thrombosis. Examination of thrombotic disease by impedance aggregometry using whole blood] Mizuno A, et al. **Rinsho Byori** 1988 Jun;36(6):632–9 (Jpn)

[Thrombin/antithrombin III complex (TAT)—a new parameter for detection of thrombotic states] Pelzer H. **Rinsho Byori** 1989 Apr;Spec No 81:198–201 (Jpn)

[Imaging diagnosis of portal vein thrombosis following splenectomy in 23 patients with hepatocellular carcinoma] Yamashita K, et al. **Rinsho Hoshasen** 1988 Nov; 33(12):1561–4 (Eng. Abstr.) (Jpn)

[Changes in left-ventricular mural thrombus examined by two-dimensional echocardiography during hospitalization for acute myocardial infarction. Clinico-echocardiographic correlations and the effect of intravenous streptokinase and/or heparin] Piszczek I, et al. **Kardiol Pol** 1988; 31(8):481–7 (Eng. Abstr.) (Pol)

[Right-atrial thrombi: their etiology, diagnosis and management] Torbicki A, et al. **Kardiol Pol** 1988; 31(8):329–34 (28 ref.) (Pol)

[Paget-Schroetter-Kristelli syndrome and pregnancy] Makatsariia AD, et al. **Akush Ginekol (Mosk)** 1988 Oct; (10):58–9 (Rus)

[Diagnosis and treatment of thrombosis and thrombophlebitis of deep veins of the lower extremities] Kovalenko PP, et al. **Kardiologiia** 1989 Mar;29(3):99–100 (Rus)

[Intravital diagnosis of thrombosis of the splenic vein] Kuznetsov NE, et al. **Klin Med (Mosk)** 1989 May; 67(5):132–4 (Rus)

[Characteristics of the thrombohemorrhagic syndrome in patients with systemic lupus erythematosus] Angelutsa PA, et al. **Vrach Delo** 1989 Jan;(1):50–2 (Eng. Abstr.) (Rus)

[Paget-Schroetter syndrome] Oborin AN, et al. **Vrach Delo** 1989 Apr;(4):97–8 (Rus)

[Ultrasonic demonstration of gallbladder varices in a patient with hepatocarcinoma and portal thrombosis] Celorio Peinado C, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):467–9 (Eng. Abstr.) (Spa)

[Immunoreactive urinary thromboxane B2 in experimental mesenteric thrombosis in dogs] Herrera Hernández MF, et al. **Rev Invest Clin** 1989 Apr-Jun;41(2):123–7 (Eng. Abstr.) (Spa)

DIET THERAPY

Assessment of the therapeutic use of dietary fish oil in atherosclerotic vascular disease and thrombosis. Goodnight SH, et al. **Chest** 1989 Feb;95(2 Suppl):19S–25S (62 ref.)

The effects of omega-3 fatty acids on thrombosis and atherogenesis. Goodnight SH. **Hematol Pathol** 1989; 3(1):1–9 (80 ref.)

DRUG THERAPY

Pulsed-spray pharmacomechanical thrombolysis: preliminary clinical results. Bookstein JJ, et al. **AJR Am J Roentgenol** 1989 May;152(5):1097–100

Enhancement of arterial thrombolysis with native tissue type plasminogen activator by pretreatment with heparin or batroxobin: an angioscopic study. Tomaru T, et al. **Am Heart J** 1989 Feb;117(2):275–81

Successful percutaneous transvenous catheter balloon mitral commissurotomy after warfarin therapy and resolution of left atrial thrombus. Hung JS, et al. **Am J Cardiol** 1989 Jul 1;64(1):126–8

Therapeutic control of oral anticoagulant treatment in The Netherlands. van den Besselaar AM, et al. **Am J Clin Pathol** 1988 Dec;90(6):685–90

Urokinase therapy for a central venous catheter thrombus. Suarez CR, et al. **Am J Hematol** 1989 Aug;31(4):269–72

Neonatal thrombosis and the thrombolytic system: pathophysiology and therapy. Corrigan JJ Jr. **Am J Pediatr Hematol Oncol** 1988 Spring;10(1):83–91 (52 ref.)

Thrombolytic therapy in acute arterial thrombosis. Price C, et al. **Am J Surg** 1988 Dec;156(6):488–91

The ex vivo correlate of the antithrombotic action of heparin. Hemker HC, et al. **Ann N Y Acad Sci** 1989;556:146–57 (39 ref.)

Antithrombotic effects of heparin oligosaccharides. Mattsson C, et al. **Ann N Y Acad Sci** 1989;556:323–32

Streptokinase for aortic thrombosis. Kirk CR, et al. **Arch Dis Child** 1988 Sep;63(9):1086–7

Urokinase dissolution of a right atrial thrombus [letter] Tenney RD, et al. **Arch Intern Med** 1989 Feb;149(2):475

Cost-effectiveness of intra-arterial thrombolytic therapy. Dacey LJ, et al. **Arch Surg** 1988 Oct;123(10):1218–23

Potential therapeutic mechanisms of stable prostacyclin (PGI2)-mimetics in severe peripheral vascular disease. Müller B, et al. **Biomed Biochim Acta** 1988;47(10–11):S40–4

Thrombolytic therapy. Cade JF. **Blood Rev** 1989 Mar; 3(1):5–10 (42 ref.)

Microvascular surgery to preserve a preterm infant's ischaemic arm [letter] Kirk CR, et al. **BMJ** 1988 Nov 5; 297(6657):1198

Neonatal aortic thrombosis treated with intra-arterial urokinase therapy. Goldberg RE, et al. **Can Assoc Radiol J** 1989 Feb;40(1):55–6

Use of streptokinase for lysis of a mobile left ventricular thrombus—report of a case and review of the literature. Keren A, et al. **Cardiology** 1988;75(6):444–7 (23 ref.)

Changes in ventricular function and coronary stenosis after successful intravenous thrombolysis in acute myocardial infarction. Lotan C, et al. **Cardiology** 1988;75(6):419–30

Accelerated thrombolysis and angioplasty for hand ischemia in Buerger's disease. Lang EV, et al. **Cardiovasc Intervent Radiol** 1989 Mar-Apr;12(2):95–7

Prolonged selective urokinase infusion in totally occluded coronary arteries and bypass grafts: two case reports. McKeever L, et al. **Cathet Cardiovasc Diagn** 1988; 15(4):247–51

Acute inferior vena cava thrombosis. Early results of heparin therapy. Girard P, et al. **Chest** 1989 Feb;95(2):284–91

Anticoagulation and thrombolytic therapy. Practical considerations. Kessler CM. **Chest** 1989 May;95(5 Suppl):245S–256S (84 ref.)

Differential sensitivity of erythrocyte-rich and platelet-rich arterial thrombi to lysis with recombinant tissue-type plasminogen activator. A possible explanation for resistance to coronary thrombolysis. Jang IK, et al. **Circulation** 1989 Apr;79(4):920–8

Local urokinase infusion for total occlusion of the lower abdominal aorta. Report of two cases and a review of the literature. Goffette P, et al. **Eur J Radiol** 1989 May; 9(2):121–4 (11 ref.)

Effects of various doses of SP 54 on fibrinolytic activity in patients with thrombotic diseases. Losonczy H, et al. **Folia Haematol (Leipz)** 1988;115(3):388–93

Thrombolytic therapy for a thromoboses Bjork-Shiley mitral valve prosthesis. Tyagi S, et al. **Indian Heart J** 1988 Nov-Dec;40(6):507–9

Reduced incidence of left ventricular thrombi with intravenous streptokinase in acute anterior myocardial infarction: prospective evaluation by cross-sectional echocardiography. Natarajan D, et al. **Int J Cardiol** 1988 Aug;20(2):201–7

Resection of the first rib, following deep arm vein thrombolysis in patients with thoracic outlet syndrome. Strange-Vognsen HH, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):430–3

Thrombolytic therapy of aortic thrombosis in the premature infant [letter] Adelman RD. **J Pediatr Surg** 1989 Jul; 24(7):728

Successful treatment of Candida-infected caval thrombosis in critically ill infants by low-dose streptokinase infusion. Lacey SR, et al. **J Pediatr Surg** 1988 Dec;23(12):1204–9

Effective thrombolytic therapy of aortic thrombosis in the small premature infant. Richardson R, et al. **J Pediatr Surg** 1988 Dec;23(12):1198–200

Early detection and simplified management of obstructed Hickman and Broviac catheters. Stokes DC, et al. **J Pediatr Surg** 1989 Mar;24(3):257–62

Clot lysis for thrombosed central venous catheters in pediatric patients. Kellam B, et al. **J Perinatol** 1987 Summer;7(3):242–4

Repeated successful thrombolysis of an acute peripheral arterial thrombosis with tissue plasminogen activator. Berridge DC, et al. **J R Coll Surg Edinb** 1989 Feb; 34(1):49–51

Microvascular thrombolysis to salvage a free flap using human recombinant tissue plasminogen activator. Fudem GM, et al. **J Reconstr Microsurg** 1989 Jul;5(3):231–4

Aortic arch thrombosis in the neonate [letter] Davidson A, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):152–3

Recovery of function in a solitary kidney after intra-arterial thrombolytic therapy. Skinner RE, et al. **J Urol** 1989 Jan; 141(1):108–10

Salvage of occluded arterial bypass grafts by means of thrombolysis. Gardiner GA Jr, et al. **J Vasc Surg** 1989 Mar;9(3):426–31

Copolymer, undergoing trials, could improve fibrinolytics' effectiveness [news] Raymond C. **JAMA** 1989 May 5; 261(17):2475, 2479–80

Thrombolysis of tricuspid Björk-Shiley prosthesis with tissue-type plasminogen activator. Matsuda M, et al. **Jpn Circ J** 1988 Jun;52(6):583–7

Assessment of warfarin therapy under full dose using indium-111 platelet scintigraphy in patients with intracardiac thrombi. Yamada M, et al. **Jpn Circ J** 1988 Dec;52(12):1357–64

Tissue plasminogen activator therapy of glomerular thrombi in the Shwartzman reaction. Bergstein JM. **Kidney Int** 1989 Jan;35(1):14–8

Optimal strategy for diagnosis and treatment of pulmonary embolism due to right atrial thrombus. Goldhaber SZ. **Mayo Clin Proc** 1988 Dec;63(12):1261–4

Successful treatment of pulmonary embolism and associated mobile right atrial thrombus with use of a central thrombolytic infusion. Proano M, et al. **Mayo Clin Proc** 1988 Dec;63(12):1181–5

Coronary thrombolysis [letter] Stock E. **Med J Aust** 1989 Jan 16;150(2):109

Heparin for mural thrombosis in anterior myocardial infarction [letter] **N Engl J Med** 1989 Jul 27;321(4):259–60

Heparin treatment: confusion still prevails. Krulder JW, et al. **Neth J Med** 1989 Aug;35(1–2):1–3

The thrombolytic effect of human tissue-type plasminogen activator on the experimental thrombosis in rabbit. Masunaga H, et al. **Nippon Juigaku Zasshi** 1988 Dec; 50(6):1232–8

Continuous infusion of low-dose urokinase in the treatment of central venous catheter thrombosis in infants and children. Bagnall HA, et al. **Pediatrics** 1989 Jun;83(6):963–6

Successful fibrinolytic treatment of arterial thrombosis and hypertension in a cocaine-exposed neonate. Reznik VM, et al. **Pediatrics** 1989 Oct;84(4):735–8

Acute renal vein thrombosis: successful treatment with intraarterial urokinase. Vogelzang RL, et al. **Radiology** 1988 Dec;169(3):681–2

Modulation of endothelium and control of vascular and thrombotic disorders. **Semin Thromb Hemost** 1988;14 Suppl:1–114

Newer strategies in the management of thrombotic disorders: I. **Semin Thromb Hemost** 1989 Apr;15(2):99–236

Current perspectives in the treatment of thrombotic disorders. Drouet L, et al. **Semin Thromb Hemost** 1989 Apr; 15(2):111–22 (70 ref.)

Overview of the management of thrombotic disorders. Gallus AS. **Semin Thromb Hemost** 1989 Apr;15(2):99–110 (96 ref.)

Importance of fibrin specificity in therapeutic thrombolysis and the rationale of using sequential and synergistic combinations of tissue plasminogen activator and pro-urokinase. Gurewich V. **Semin Thromb Hemost** 1989 Apr;15(2):123–8 (40 ref.)

Perspective on antiplatelet drugs. O'Brien JR. **Semin Thromb Hemost** 1989 Apr;15(2):171–2

Intra-arterial thrombolytic therapy improves outcome in patients with acute vertebrobasilar occlusive disease. Hacke W, et al. **Stroke** 1988 Oct;19(10):1216–22

Antithrombotic properties of heparin in a neonatal piglet model of thrombin-induced thrombosis. Schmidt B, et al. **Thromb Haemost** 1988 Oct 31;60(2):289–92

The relative antithrombotic effectiveness of heparin, a low molecular weight heparin, and a pentasaccharide fragment in an animal model. Thomas DP, et al. **Thromb Haemost** 1989 Apr 25;61(2):204–7

Bolus dose response characteristics of single chain urokinase plasminogen activator and tissue plasminogen activator in a dog model of arterial thrombosis. Badylak SF, et al. **Thromb Res** 1988 Nov 15;52(4):295–312

Antithrombotic activity of recombinant hirudin in the rat: a comparative study with heparin. Doutremepuich C, et al. **Thromb Res** 1989 Jun 1;54(5):435–45

Normalization by dietary cod-liver oil of reduced thrombogenesis in essential fatty acid deficient rats. Hornstra G, et al. **Thromb Res** 1989 Jan 1;53(1):45–53

Studies on antithrombotic effects of recombinant hirudin. Markwardt F, et al. **Thromb Res** 1989 Jun 1;54(5):377–88

Effect of thromboxane synthase inhibition on the thrombolytic action of tissue-type plasminogen activator in a rabbit model of peripheral arterial thrombosis. Shebuski RJ, et al. **Thromb Res** 1988 Dec 1;52(5):381–92

Comparison of two experimental thrombosis models in rats effects of four glycosaminoglycans. Vogel GM, et al. **Thromb Res** 1989 Jun 1;54(5):399–410

Disseminated intravascular coagulation with multiple arterial thromboses responding to antithrombin-III concentrate infusion. Wisecarver JL, et al. **Thromb Res** 1989 Jun 15; 54(6):709–17

[Early postoperative thrombosis of an aortic Saint-Jude prosthesis. Success of fibrinolytic treatment] Sadoun D, et al. **Ann Cardiol Angeiol (Paris)** 1988 Jul-Sep;37(7):365–9 (32 ref.) (Eng. Abstr.) (Fre)

[Treatment with urokinase of systemic arterial thrombosis in the newborn infant] Brevière GM, et al. **Arch Mal Coeur** 1989 May;82(5):771–7 (20 ref.) (Eng. Abstr.) (Fre)

[Local thrombolysis using a combination of RTPA and Lys-plasminogen in ischemia due to a previous thrombosis] Marcon JL, et al. **J Mal Vasc** 1989;14(3):265–6 (Fre)

[Arterial thrombolysis. Review and future prospects] Marzelle J, et al. **J Mal Vasc** 1988;13(4):307–16 (64 ref.) (Eng. Abstr.) (Fre)

[Lysis treatment of left ventricular thrombi (letter)] Herrmann KS, et al. **Dtsch Med Wochenschr** 1988 Nov 11;113(45):1781 (Ger)

[Local thrombolysis of acute and subacute forearm, hand and finger artery occlusions. Early and late results] Pfyffer M, et al. **Vasa** 1989;18(2):128–35 (Eng. Abstr.) (Ger)

[Blood coagulation in the aged and peculiarities of anti-thrombotic therapy] Gromnica-Ihle E. **Z Arztl Fortbild (Jena)** 1989;83(11):589–93 (18 ref.) (Ger)

[Laboratory diagnostic monitoring of individually dosed antithrombotic therapy with acetylsalicylic acid in patients with atherosclerosis] Misselwitz F, et al. **Z Med Lab Diagn** 1989;30(1):43–4 (Ger)

[Effects of dilazep on platelet thrombus formation and intimal thickening after mechanical injury of aorta in rabbit] Hayashi T. **Fukuoka Igaku Zasshi** 1988 Oct;79(10):723–37 (Eng. Abstr.) (Jpn)

[Thromboxane synthetase inhibitor and prostacyclin analogue] Nakagawa M, et al. **Nippon Rinsho** 1989 Apr; 47(4):929–34 (Jpn)

[Treatment of iliofemoral venous thrombosis] Rusten LS, et al. **Tidsskr Nor Laegeforen** 1989 May 20;109(14):1502–5 (Eng. Abstr.) (Nor)

[Right-atrial thrombi: report of 2 cases treated with a fibrinolytic drug] Pasierski T, et al. **Kardiol Pol** 1988; 31(8):523–8 (Eng. Abstr.) (Pol)

[Role of low molecular weight heparin in antithrombotic treatment] Dmoszyńska-Giannopoulou A, et al. **Przegl Lek** 1989;46(5):466–9 (37 ref.) (Pol)

[Anticoagulant and antithrombotic effects of low molecular weight heparin] Bashkov GV, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):399–402 (Eng. Abstr.) (Rus)

[Thrombolytic action of urokinase preparation covalently bound to modified thrombin] Maksimenko AV, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):322–4 (Eng. Abstr.) (Rus)

[Effect of long-term anticoagulant and antithrombocytic therapy on the size of intracavitary thrombus and the incidence of thromboembolic complications in patients with acute myocardial infarction] Rado Iu, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):94 (Rus)

[Thrombolytic treatment of patients with thromboses of artificial heart valves (successful avelizin treatment of a female patient with thrombosis of a mitral prosthesis)] Martsinkiavichus A, et al. **Gruda Khir** 1988 May-Jun; (3):27–9 (Rus)

[Treatment with indirect anticoagulants] Kirichenko LL. **Kardiologiia** 1988 Oct;28(10):109–13 (Rus)

[Prevention and treatment of hemostatic disorders in patients with liver cirrhosis] Podymova SD, et al. **Klin Med (Mosk)** 1989 May;67(5):111–3 (Eng. Abstr.) (Rus)

[Successful fibrinolytic treatment in a patient with acute mitral prosthetic thrombosis] Cladellas M, et al. **Rev Esp Cardiol** 1989 Jun-Jul;42(6):422–4 (Eng. Abstr.) (Spa)

EPIDEMIOLOGY

Aqueous heparin therapy: intermittent v continuous administration. Freed N, et al. **J Am Osteopath Assoc** 1988 Sep;88(9):1085–90

Deep vein thrombosis after elective knee surgery. An incidence study in 312 patients. Stringer MD, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):492–7

A survey of inherited thrombotic syndromes in Italy. ad hoc Study Group. Tripodi A, et al. **Ric Clin Lab** 1989 Jan-Mar; 19(1):67–74

ETIOLOGY

Protein C deficiency and splanchnic venous thrombosis. Case report. Udén P, et al. **Acta Chir Scand** 1989 Mar; 155(3):221–3

Right atrial thrombus complicating Port-a-Cath system. Grégoire JM, et al. **Acta Clin Belg** 1988;43(4):306–8

Thrombosis associated with procainamide-induced lupus anticoagulant. List AF, et al. **Acta Haematol (Basel)** 1989; 82(1):50–2

Thrombotic microangiopathy in lupus nephritis. Porri MT, et al. **Adv Exp Med Biol** 1989;252:35–9

Cigarette smoking and thrombus formation [letter] Folts JD. **Am Heart J** 1988 Dec;116(6 Pt 1):1657–8

Detection of thrombus in an aneurysm of the ventricular septum. Bush HS, et al. **Am J Cardiol** 1989 Jun 15; 63(20):1533–5

Cardiopulmonary thrombosis complicating peritoneovenous shunting: a case report and review of the literature. Goldfarb AN. **Am J Cardiovasc Pathol** 1988;2(3):259–62 (14 ref.)

Portal and mesenteric venous thrombosis as a complication of endoscopic sclerotherapy. Ashida H, et al. **Am J Gastroenterol** 1989 Mar;84(3):306–10

Arachidonic acid metabolites produced by platelet-depleted human blood monocytes: a possible role in thrombogenesis. Jones CM, et al. **Am J Hematol** 1989 Jul;31(3):145–52

Lipoprotein glomerulopathy: glomerular lipoprotein thrombi in a patient with hyperlipoproteinemia. Saito T, et al. **Am J Kidney Dis** 1989 Feb;13(2):148–53

Systemic lupus erythematosus presenting with portal venous thrombosis. Pertuiset E, et al. **Am J Med** 1989 Apr; 86(4):501–2

Brachiocephalic vein occlusion in a hemodialysis patient [letter] Cheung AK, et al. **Am J Nephrol** 1989;9(3):261–2

Idiopathic nephrotic syndrome of the adult with asymptomatic thrombosis of the renal vein. Velasquez Forero F, et al. **Am J Nephrol** 1988;8(6):457–62

Vasoocclusion with homozygous hemoglobin-C disease. Fort JA, et al. **Am J Pediatr Hematol Oncol** 1988 Winter; 10(4):323–5

An unusual presentation of gluteal hematoma during anticoagulation therapy for deep venous thrombosis in spinal cord injury. Balmaseda MT Jr, et al. **Am J Phys Med Rehabil** 1988 Dec;67(6):261–3

Presence of thrombosis-inducing activity in plasma from patients with lung cancer. Maruyama M, et al. **Am Rev Respir Dis** 1989 Sep;140(3):778–81

Thrombosis and lung cancer [editorial] Rickles FR. **Am Rev Respir Dis** 1989 Sep;140(3):573–5

Right atrial thrombus formation following central venous dialysis catheter placement. Fincher ME, et al. **Am Surg** 1988 Nov;54(11):652–4

Effect of dietary lipids on platelet function and thrombosis. Hornstra G. **Ann Med** 1989 Feb;21(1):53–7

Inflow failure of grafts originating in the axillary artery. Quiñones-Baldrich WJ, et al. **Ann Vasc Surg** 1988 Jul; 2(3):303–8

Thrombotic endocarditis and lupus anticoagulant. A pathogenetic possibility for idiopathic 'rheumatic type' valvular heart disease. Ford SE, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):350–3

Lipoprotein(a). A potential bridge between the fields of atherosclerosis and thrombosis. Scanu AM. **Arch Pathol Lab Med** 1988 Oct;112(10):1045–7 (34 ref.)

Experience with the Hemasite vascular prosthesis. Viron B, et al. **Artif Organs** 1989 Apr;13(2):159–62

Deposition of blood elements on vacuum-formed ventricles in calves. A gross and electron microscopic study. DeFeo PA, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):550–5

Antithrombogenicity of ventricular assist devices for postoperative myocardial dysfunction. Sato N, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):290–3

Effects of a novel antiplatelet agent in mural thrombogenesis on collagen-coated glass. Folie BJ, et al. **Blood** 1988 Oct; 72(4):1393–400

Inhibition of platelet-dependent thrombus formation by human activated protein C in a primate model. Gruber A, et al. **Blood** 1989 Feb 15;73(3):639–42

Complications of central venous cannulation. Kaye CG, et al. **BMJ** 1988 Sep 3;297(6648):572–3 (27 ref.)

Intracardiac thrombosis, phospholipid antibodies, and two-chambered right ventricle. Coppock MA, et al. **Br Heart J** 1988 Nov;60(5):455–8

Thrombophilia. Weston-Smith S, et al. **Br J Hosp Med** 1989 Apr;41(4):368–71 (39 ref.)

How does sepsis promote thrombosis in microvascular anastomoses? McLean NR, et al. **Br J Plast Surg** 1989 May; 42(3):314–7

Superior mesenteric vein thrombosis caused by Yersinia pseudotuberculosis. Stuart RC, et al. **Br J Surg** 1989 Mar; 76(3):272

Axillary vein thrombosis in a female backpacker: Paget-Schroetter syndrome. Kolodinsky SD, et al. **Can Assoc Radiol J** 1989 Aug;40(4):230–1

Concomitant chronic lymphocytic leukemia, acute myeloid leukemia, and thrombosis with protein C deficiency. Case report and review of the literature. Conlan MG, et al. **Cancer** 1989 Apr 1;63(7):1398–401 (41 ref.)

Thrombosis: the major Hickman catheter complication in patients with solid tumor. Anderson AJ, et al. **Chest** 1989 Jan;95(1):71–5

Short- and long-term complications of coronary angioplasty [clinical conference] Lange RA, et al. **Chest** 1989 Jul; 96(1):151–7 (30 ref.)

Platelet thrombus formation on collagen type I. A model of deep vessel injury. Influence of blood rheology, von Willebrand factor, and blood coagulation. Badimon L, et al. **Circulation** 1988 Dec;78(6):1431–42

Is there a role for phospholipases in the anti-cardiolipin syndrome? Gonzalez-Buritica H, et al. **Clin Exp Rheumatol** 1988 Oct-Dec;6(4):341–2

Hemorrhagic and thrombotic abnormalities of cancer. Schwartzberg LS, et al. **Crit Care Clin** 1988 Jan;4(1):107–28 (120 ref.)

Mural thrombi in children: potentially lethal complication of central venous hyperalimentation. Bagwell CE, et al. **Crit Care Med** 1989 Mar;17(3):295–6

Prothrombotic abnormalities in inflammatory bowel disease. Conlan MG, et al. **Dig Dis Sci** 1989 Jul;34(7):1089–93

Inaugural intra-atrial neoplastic thrombosis in stage II Hodgkin's disease. Domergue J, et al. **Eur J Surg Oncol** 1989 Jun;15(3):279–81

Persistent bilateral sciatic arteries—an unusual presentation. Beard JD, et al. **Eur J Vasc Surg** 1989 Jun;3(3):279–81

Popliteal artery occlusion by a popliteal (Baker's) cyst. Clarke JM, et al. **Eur J Vasc Surg** 1988 Feb;2(1):61–3

"Sticky platelet syndrome": a congenital platelet abnormality predisposing to thrombosis? Mammen EF, et al. **Folia Haematol (Leipz)** 1988;115(3):361–5

Thrombosis promoting changes in chronic liver diseases. Rák K. **Folia Haematol (Leipz)** 1988;115(3):333–9

Extrahepatic portal venous obstruction of different pathogenesis in pancreatic diseases: reports of 4 autopsy cases with chronic pancreatitis and pancreatic carcinoma. Terada T, et al. **Gastroenterol Jpn** 1989 Aug;24(4):414–20

Portal and mesenteric thrombosis revealing constitutional protein C deficiency [letter] Prat F, et al. **Gut** 1989 Mar; 30(3):416

Bleeding and thrombosis in chronic myeloproliferative disorders: relation of platelet disorders to clinical aspects of the disease. Wehmeier A, et al. **Haemostasis** 1989; 19(5):251–9

Postanginal sepsis. Shapiro J, et al. **Head Neck** 1989 Mar-Apr;11(2):164–9

Thrombosis of the superior mesenteric and portal veins after splenectomy and/or distal splenorenal shunts. Ito K, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):71–6

Embolic arterial occlusion in heparinized man. Shapiro JS. **Hosp Pract [Off]** 1989 Feb 15;24(2):136, 138

Axillary artery thrombosis following a fracture of the neck of the humerus. Sathyarup D, et al. **Injury** 1988 Jan; 19(1):45–7

Peripancreatic vascular occlusions as a complication of pancreatitis. Nordback I, et al. **Int Surg** 1989 Jan-Mar; 74(1):36–9

Segmental portal hypertension and polycythemia vera. Baniel J, et al. **Isr J Med Sci** 1989 Apr;25(4):202–4

"Effort" thrombosis of the axillary and subclavian vein associated with cervical rib and oral contraceptives in a young woman athlete. Aquino BC, et al. **J Am Board Fam Pract** 1989 Jul-Sep;2(3):208–11

Left ventricular thrombus incidence and behavior studied by serial two-dimensional echocardiography in acute anterior myocardial infarction: left ventricular wall motion, systemic embolism and oral anticoagulation. Küpper AJ, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1514–20

Increased plasma fibrinopeptide A levels during attacks induced by hyperventilation in patients with coronary vasospastic angina. Oshima S, et al. **J Am Coll Cardiol** 1989 Jul;14(1):150–4

Blood compatibility of surfaces modified by plasma polymerization. Yeh YS, et al. **J Biomed Mater Res** 1988 Sep;22(9):795–818

Low incidence of deep-vein thrombosis after cementless total hip replacement [letter] Hoagland FT. **J Bone Joint Surg [Am]** 1989 Jan;71(1):151

Giant synovial cyst causing deep venous thrombosis: brief report. Van Mourik JB, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):841

Renal vein thrombosis in burned children. Waymack JP, et

al. **J Burn Care Rehabil** 1988 Sep–Oct;9(5):472–3
Mesenteric thrombosis following sclerotherapy during vasopressin infusion: mechanism and therapeutic implications. Goldberg H, et al. **J Clin Gastroenterol** 1989 Feb;11(1):56–7
Portal thrombosis complicating appendicitis: ultrasound detection and hepatic computed tomography lobar attenuation alteration. Chan SC, et al. **J Comput Tomogr** 1988 Jul;12(3):208–10
Platelet and fibrin metabolism in recipients of the Jarvik 7 total artificial heart. Ring ME, et al. **J Heart Transplant** 1989 May–Jun;8(3):225–32
Influence of dietary fish oil on arterial thrombosis and atherosclerosis in animal models and in man. Hornstra G. **J Intern Med Suppl** 1989;225(731):53–9 (59 ref.)
Management and follow-up of arterial thrombosis in the neonatal period. Payne RM, et al. **J Pediatr** 1989 May; 114(5):853–8
Thrombus associated with central venous catheters in infants and children. Ross P Jr, et al. **J Pediatr Surg** 1989 Mar; 24(3):253–6
Hepatic artery thrombosis in pediatric liver transplantation. Tan KC, et al. **J Pediatr Surg** 1988 Oct;23(10):927–30
Thrombosis and thromboembolism in an infant of a diabetic mother. Katzman GH. **J Perinatol** 1989 Jun;9(2):137–40
Inferior vena cava thrombosis following a cycle ride. Simpson AH, et al. **J R Soc Med** 1988 Dec;81(12):738–9
Late arterial thrombosis in a replanted thumb: a case report. Griffin PA, et al. **J Reconstr Microsurg** 1989 Jan;5(1):75–7
Thrombogenicity of canine free internal mammary artery autografts. Mashburn JP, et al. **J Surg Res** 1989 Jan; 46(1):16–22
Thrombotic complications with the Omniscience valve: a current review [letter] DeWall RA. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):298–300
An experimental study of normothermic abdominal aorta clamping in dogs: I. The safe time limit and syndromes after abdominal aorta clamping. Qu D, et al. **J Tongji Med Univ** 1988;8(4):243–8
Internal jugular and subclavian vein thrombosis caused by central venous catheters. Evaluation using Doppler blood flow imaging. Hübsch PJ, et al. **J Ultrasound Med** 1988 Nov;7(11):629–36
Use of a caval–atrial shunt for resection of a caval tumor thrombus in renal cell carcinoma. Foster RS, et al. **J Urol** 1988 Dec;140(6):1370–1
Intracaval and atrial involvement with nephroblastoma: review of National Wilms Tumor Study–3. Ritchey ML, et al. **J Urol** 1988 Nov;140(5 Pt 2):1113–8
Vein compression by arterial aneurysms. Walsh JJ, et al. **J Vasc Surg** 1988 Oct;8(4):465–9
Central venous thrombosis related to the silastic Hickman–Broviac catheter in an oncologic population. Moss JF, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):397–400
Total venous obstruction—a possible complication of transvenous dual-chamber pacing. Koike R, et al. **Jpn Circ J** 1988 Nov;52(11):1293–6 (15 ref.)
Treatment of a case of asynchronous bilateral renal cell carcinomas with inferior vena caval thrombus and hepatic metastases. Takai K, et al. **Jpn J Clin Oncol** 1988 Dec; 18(4):379–85
Economy class syndrome [letter] **Lancet** 1988 Nov 5; 2(8619):1077
Protein C deficiency and portal thrombosis in liver transplantation in children. Harper PL, et al. **Lancet** 1988 Oct 22;2(8617):924–7
Early thrombosis in kidney grafted into patient treated with erythropoietin [letter] Zaoui P, et al. **Lancet** 1988 Oct 22; 2(8617):956
Arterial thrombosis in Crohn's disease. Halliday CE, et al. **Med J Aust** 1988 Nov 21;149(10):559–60
The Lemierre syndrome: suppurative thrombophlebitis of the internal jugular vein secondary to oropharyngeal infection. Sinave CP, et al. **Medicine (Baltimore)** 1989 Mar; 68(2):85–94 (75 ref.)
Axillary vein thrombosis as the initial symptom in metastatic papillary carcinoma of the thyroid. Sirota DK. **Mt Sinai J Med** 1989 Mar;56(2):111–3
Acute thrombosed external hemorrhoids. Oh C. **Mt Sinai J Med (NY)** 1989 Jan;56(1):30–2
Iliac-vein thrombosis after extracorporeal shock-wave lithotripsy [letter] Desmet W, et al. **N Engl J Med** 1989 Sep 28;321(13):907
A potential basis for the thrombotic risks associated with lipoprotein(a). Miles LA, et al. **Nature** 1989 May 25; 339(6222):301–3
Stenosis and vascular damage as a cause of thrombosis in the dog femoral artery. Prosdocimi M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):430–7
Allograft membranous glomerulonephritis and renal-vein thrombosis in a patient with a lupus anticoagulant factor. Liaño F, et al. **Nephrol Dial Transplant** 1988;3(5):684–9
Venous thrombosis and acute renal failure in paroxysmal nocturnal haemoglobinuria [letter] Sechi LA, et al. **Nephrol Dial Transplant** 1988;3(5):708–9
Aortic thrombosis complicating the nephrotic syndrome. Cullen P, et al. **Nephron** 1989;52(3):287–8 (5 ref.)
Posttransplantation complications of lower limb polytetrafluoroethylene grafts in children. O'Regan S, et al. **Nephron** 1989;52(1):90–2
Generation of oxygen radicals and formation of fibrin thrombi in glomerular capillaries of rats with nephrotoxic nephritis. Ito S, et al. **Nippon Jinzo Gakkai Shi** 1989 Feb; 31(2):171–7
Fetal death as a complication of intrauterine intravascular transfusion. Seeds JW, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):461–3
Thrombosis-inducing activity found in plasma from two patients with advanced lung cancer. Maruyama M, et al. **Oncology** 1989;46(4):251–4
Subclavian vein thrombosis following fracture of the clavicle: a case report [letter] Kanbar MS. **Orthopedics** 1988 Oct; 11(10):1372, 1374
Pulmonary venous obstruction from left atrial thrombus in hypoplastic left heart syndrome. Romano A, et al. **Pediatr Cardiol** 1989 Spring;10(2):105–7
Pancreatic carcinoma. An unusual presentation—inferior vena cava thrombosis. Beyth RJ, et al. **Postgrad Med** 1989 Jul;86(1):229–32
What is it? What could injections have to do with this arterial occlusion? Nawabi IU, et al. **Postgrad Med** 1989 Jun; 85(8):95–6
Jugular vein thrombosis associated with distant malignancy. Carrington BM, et al. **Postgrad Med J** 1988 Jun; 64(752):455–8
Coagulopathy and bleeding in the parturient patient. Recent information has helped in the identification of individuals at special risk. Crowley JP. **R I Med J** 1989 Apr; 72(4):135–43 (97 ref.)
Iatrogenic changes at the venotomy site after percutaneous placement of the Greenfield filter. Dorfman GS, et al. **Radiology** 1989 Oct;173(1):159–62
Infected bilomas and hepatic artery thrombosis in infant recipients of liver transplants. Interventional radiology and medical therapy as an alternative to retransplantation. Hoffer FA, et al. **Radiology** 1988 Nov;169(2):435–8
Thrombosis at venous insertion sites after inferior vena caval filter placement. Mewissen MW, et al. **Radiology** 1989 Oct; 173(1):155–7
Suppurative thrombophlebitis of the superior vena cava. de Marie S, et al. **Scand J Infect Dis** 1989;21(1):107–11
Update on the relationship of heparin to atherosclerosis and its thrombotic complications. Engelberg H. **Semin Thromb Hemost** 1988;14 Suppl:88–105 (257 ref.)
Thrombophilia: new ideas about old problems. Patton D. **South Med J** 1988 Oct;81(10):1277–81 (22 ref.)
Disseminated intravascular coagulation: thrombosis versus fibrination, in clinical disease states. Schneider CL. **Thromb Diath Haemorrh Suppl** 1969;36:1–43 (74 ref.)
Pathogenesis of early thrombus formation in experimental vein graft. Itoh T, et al. **Thromb Res** 1989 Feb 15; 53(4):357–65
Frequency of allograft renal vascular thrombosis under three immunosuppressive regimens at a single institution. Gruber SA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2139–40
Hepatic artery thrombosis (HAT) after orthotopic transplantation (OLT)—the influence of technical factors and rejection episodes. Hesselink EJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2468
Factors responsible for hepatic artery thrombosis after pediatric liver transplantation. Mazzaferro V, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2466–7
Is hepatic artery thrombosis after liver transplantation really a surgical complication? Yanaga K, et al. **Transplant Proc** 1989 Jun;21(3):3511–3
Hepatic artery thrombosis due to acute pancreatitis following liver transplantation. Badger I, et al. **Transplantation** 1989 Sep;48(3):526–7
Hepatic artery thrombosis after pediatric liver transplantation—a medical or surgical event? Mazzaferro V, et al. **Transplantation** 1989 Jun;47(6):971–7
Position-induced internal jugular vein thrombosis. Weber RR, et al. **W V Med J** 1988 Nov;84(11):509–11 (19 ref.)
[Arterial thrombus formation and serum lipids in rats with renal hypertension] Lakova E, et al. **Eksp Med Morfol** 1988; 27(4):13–7 (Eng. Abstr.) **(Bul)**
[Protein C and liver dysfunction] Doncheva N. **Vutr Boles** 1988;27(3):18–22 (20 ref.) **(Bul)**
[A case of large mixed thrombus in the left heart atrium] Marinov Kh, et al. **Vutr Boles** 1988;27(3):112–6 (Eng. Abstr.) **(Bul)**
[Nonbacterial thrombotic endocarditis: a clinico–pathologic study] Li LY, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Aug;27(8):469–71, 518 (Eng. Abstr.) **(Chi)**
[Incidence of intraventricular thrombosis after acute myocardial infarct] Sipula J, et al. **Vnitr Lek** 1988 Dec; 34(12):1155–60 (Eng. Abstr.) **(Cze)**
[Thrombosis–precipitating factors and diagnosis in a patient with qualitative antithrombin III defect] Munkvad S, et al. **Ugeskr Laeger** 1988 Sep 26;150(39):2347–8 (Eng. Abstr.) **(Dan)**
[An etiologic inquiry in recurrent venous thrombosis in 1988] Grob JJ, et al. **Ann Dermatol Venereol** 1988;115(6–7):753–7 (24 ref.) **(Fre)**
[Arterial thrombosis and infection in prolonged catheterization of the dorsal artery of the foot (letter)] Martin C, et al. **Ann Fr Anesth Reanim** 1989;8(3):298 **(Fre)**
[Portal cavernoma and inferior caval thrombosis disclosing Behçet's disease (letter)] Tlili–Graies K, et al. **Ann Med Interne (Paris)** 1988;139(6):444–6 **(Fre)**
[Portal system obstruction of delayed onset following neonatal Staphylococcus aureus infection] Garel D, et al. **Arch Fr Pediatr** 1989 Jan;46(1):41–3 (Eng. Abstr.) **(Fre)**
[Retrospective echographic surveillance of a population of patients splenectomized for hematologic reasons. Thrombosis of the portal vein is rare] Goudet P, et al. **Chirurgie** 1988;114(5):383–6 (Eng. Abstr.) **(Fre)**
[Arterial involvement in Behçet's disease] Hamza M, et al. **J Mal Vasc** 1988;13(3):245–9 (39 ref.) (Eng. Abstr.) **(Fre)**
[Familial venous and arterial thromboembolic disease due to protein C deficiency (letter)] Millaire A, et al. **J Mal Vasc** 1988;13(3):292–3 **(Fre)**
[Cancer of the kidney with neoplastic caval emboli: surgical excision and prognostic factors] Bittard M, et al. **J Urol (Paris)** 1989;95(1):62 **(Fre)**
[Treatment of invasion of the vena cava by an embryonal carcinoma of the testis] Jacqmin D, et al. **J Urol (Paris)** 1989;95(1):62–3 **(Fre)**
[Cancer of the kidney and caval thrombus. Adenocarcinoma of the kidney and neoplastic thrombus of the inferior cava vena. Therapeutic and developing aspects] Tremeaux JC, et al. **J Urol (Paris)** 1989;95(1):61–2 **(Fre)**
[Early graft venous thrombosis after renal transplantation (2 cases)] Guerin C, et al. **Nephrologie** 1988;9(5):237–8 (Eng. Abstr.) **(Fre)**
[Vascular trauma—sequelae] Jantet G. **Phlebologie** 1989 Apr–Jun;42(2):307–11 **(Fre)**
[Renal arterial thrombosis complicating nephrotic syndrome (letter)] Pochet JM, et al. **Presse Med** 1988 Nov 12; 17(40):2139 **(Fre)**
[Regressive left intraventricular thrombosis during hypereosinophilia (letter)] Thebault B, et al. **Presse Med** 1989 Apr 29;18(17):894 **(Fre)**
[Vertebro–basilar vascular accident after manipulation of the cervical spine] Ponge T, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):545–8 **(Fre)**
[Lung embolism during and following long–distance flights ("economy class syndrome")] Bürki U. **Schweiz Med Wochenschr** 1989 Mar 4;119(9):287–9 (Eng. Abstr.) **(Ger)**
[Etiology and long–term course of subclavian vein thrombosis with reference to acute therapy] Häuptli W, et al. **Schweiz Med Wochenschr** 1989 May 20;119(20):647–52 (Eng. Abstr.) **(Ger)**
[Thrombosis due to a Carpentier–Edwards bioprosthesis of the mitral valve without significant alteration of the leaflet in the Mono–2D echocardiography] Caruso A, et al. **Arch Monaldi Mal Torace** 1987 May–Jun;42(3):251–3 (Eng. Abstr.) **(Ita)**
[Usefulness of the Doppler color technic in the diagnosis of thrombosis in a mitral valve mechanical prosthesis and in the monitoring of the results of thrombolytic therapy] Budano S, et al. **G Ital Cardiol** 1989 Jan;19(1):63–6 (Eng. Abstr.) **(Ita)**
[Paroxysmal nocturnal hemoglobinuria with multiple venous thrombosis and acute renal insufficiency. Description of a case] Tedde R, et al. **Minerva Med** 1989 Jun;80(6):615–8 (Eng. Abstr.) **(Ita)**
[A case of HCC with a tumor thrombus in the main portal vein surviving (Vp4) for over three years and six months] Suyama Y, et al. **Gan No Rinsho** 1988 Oct;34(12):1723–30 (Eng. Abstr.) **(Jpn)**
[Renal artery thrombosis following surgical treatment of chyluria] Takigawa H, et al. **Hinyokika Kiyo** 1988 Sep; 34(9):1631–4 (Eng. Abstr.) **(Jpn)**
[A case of left atrial ball thrombus observed in a patient with combined valvular heart disease, accompanying anomalous coronary venous run] Komatsu T, et al. **Kokyu To Junkan** 1989 Apr;37(4):455–60 (15 ref.) (Eng. Abstr.) **(Jpn)**
[Complications and practical problems in the measurements with the use of Swan–Ganz catheter] Nishikawa T, et al. **Kokyu To Junkan** 1989 Jun;37(6):603–15 (100 ref.) **(Jpn)**
[A case of mitral stenosis with left atrial thrombus arose and reduced in a short–term] Ueda M, et al. **Kokyu To Junkan** 1989 May;37(5):563–7 (Eng. Abstr.) **(Jpn)**
[Thrombosed SJM—a case report] Kurisu K, et al. **Kyobu Geka** 1988 Oct;41(11):928–31 (Eng. Abstr.) **(Jpn)**
[Splenic vein occlusion due to pancreatic disease: regional portal hypertension from hemodynamic points of view] Ku Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):409–14 (Eng. Abstr.) **(Jpn)**
[Thrombosed St. Jude Medical valve prosthesis—report of two cases] Yokote Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):1027–31 (Eng. Abstr.) **(Jpn)**
[A case of systemic lupus erythematosus with multiple organ thromboses] Anzai K, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):650–4 **(Jpn)**
[Molecular mechanism of thrombogenesis] Sueishi K. **Nippon Rinsho** 1989 Apr;47(4):870–5 **(Jpn)**
[Thrombosis of the superior vena cava caused by catheterization. Successfully treated with streptokinase] Kjernsmo A, et al. **Lakartidningen** 1989 Mar 15; 86(11):954–6 **(Nor)**
[Case of intraoperative thrombosis of an aortocoronary shunt: its cause, diagnosis and elimination] Kovalev SG, et al. **Grudn Khir** 1988 May–Jun;(3):88–9 **(Rus)**
[Disorders of the system of regulation of the aggregative status of the blood in patients with thromboangiitis

obliterans of the lower extremities] Bykov VM, et al. **Kardiologiia** 1989 Mar;29(3):59–62 (Eng. Abstr.) **(Rus)**

[Tactics in using the subclavian vein for infusion therapy] Alakozov VA. **Khirurgiia (Mosk)** 1989 Jun;(6):32–6 (Eng. Abstr.) **(Rus)**

[Rare complication of cholecystectomy] Marzhan NN, et al. **Klin Khir** 1988;(9):43–4 **(Rus)**

[A rare complication of gastric resection] Nartsissov TV. **Klin Khir** 1988;(8):56 **(Rus)**

[The role of anti-phospholipid antibodies in the development of thrombotic complications and in obstetrical pathology] Prudnikova LZ, et al. **Klin Med (Mosk)** 1989 Jun; 67(6):59–64 (Eng. Abstr.) **(Rus)**

[Thromboses following surgery of "complex" forms of abdominal hernias in geriatric patients] Komilov SO, et al. **Sov Med** 1988;(8):80–3 **(Rus)**

[Thrombosis of the femoral artery caused by paravasal ossification] Dzhafarov ZM. **Vestn Khir** 1988 May;140(5):54 **(Rus)**

[Rhinogenic thrombophlebitis of the cavernous sinus in a 77-year-old patient with diabetes mellitus with favorable outcome] Dvoretskov AI. **Vestn Otorinolaringol** 1988 Jul-Aug;(4):83–4 **(Rus)**

[Disorders of the major blood flow due to polycythemia vera] Gribenko VV, et al. **Vrach Delo** 1988 Oct;(10):28–31 (Eng. Abstr.) **(Rus)**

[Results and prospects of studying thrombosis formation in ischemic heart disease] Gritsiuk AI. **Vrach Delo** 1989 May; (5):5–9 (Eng. Abstr.) **(Rus)**

[Thrombosis of the iliac arteries as a rare complication of diphtheria] Kovalenko AP, et al. **Vrach Delo** 1989 Mar; (3):113–5 **(Rus)**

[Basilar artery thrombosis as a complication of angiographic study in spontaneous subarachnoid hemorrhage] Mosilchuk NM, et al. **Vrach Delo** 1989 Apr;(4):92 **(Rus)**

[The isolation syndrome] Nikonov AV. **Zh Nevropatol Psikhiatr** 1988;88(10):62–3 (Eng. Abstr.) **(Rus)**

[Occlusion of the subclavian vein—a late complication of the subclavian catheter] Grinfeld B, et al. **Lijec Vjesn** 1988 Sep-Oct;110(9–10):322–4 (Eng. Abstr.) **(Scr)**

[Thrombosis and thromboembolism in patients with a Björk–Shiley prosthesis] Hricák V, et al. **Vnitr Lek** 1989 Apr;35(4):340–3 (Eng. Abstr.) **(Slo)**

[Acute thrombosis of an aneurysm of the abdominal aorta] Romero Valdés A, et al. **Angiologia** 1988 Sep-Oct; 40(5):170–3 (Eng. Abstr.) **(Spa)**

[Puerperal thrombosis of the ovarian vein associated with an intracaval "floating" thrombus] Vaquero F, et al. **Angiologia** 1988 Nov-Dec;40(6):219–24 (Eng. Abstr.) **(Spa)**

[Cancer of the kidney with tumor thrombosis of the inferior vena cava and right atrium] González Martín M, et al. **Arch Esp Urol** 1988 May;41(4):291–6 (35 ref.) (Eng. Abstr.) **(Spa)**

[Usefulness of 2-dimensional echocardiography in detecting intraventricular thrombi in patients with acute myocardial infarction] Vargas-Barrón J, et al. **Arch Inst Cardiol Mex** 1989 Mar-Apr;59(2):121–4 (Eng. Abstr.) **(Spa)**

[Role of platelet phospholipases in the antiphospholipid antibody syndrome (letter)] González-Buriticá H, et al. **Med Clin (Barc)** 1988 Nov 5;91(15):596–7 **(Spa)**

[Dysfunction in a Hancock mitral valve bioprosthesis caused by thrombosis and resolved with heparin] Moujir F, et al. **Rev Esp Cardiol** 1989 Mar;42(3):219–21 (Eng. Abstr.) **(Spa)**

[Left atrial thrombosis: a coronariographic finding in mitral stenosis] Roca J, et al. **Rev Esp Cardiol** 1988 Jun-Jul; 41(6):352–4 (Eng. Abstr.) **(Spa)**

[Palatine mucormycosis and thrombosis of the cavernous sinus] Ermocilla R, et al. **Rev Med Panama** 1988 May; 13(2):107–10 (Eng. Abstr.) **(Spa)**

GENETICS

Partial protein S gene deletion in a family with hereditary thrombophilia. Ploos van Amstel HK, et al. **Blood** 1989 Feb;73(2):479–83

Thrombovascular disease and familial plasminogen deficiency: a report of three kindreds. Dolan G, et al. **Br J Haematol** 1988 Dec;70(4):417–21

[Recent advances in molecular genetics and DNA analysis of congenital thrombotic disorders] Saito M, et al. **Nippon Rinsho** 1989 Apr;47(4):857–63 **(Jpn)**

[Familial antithrombin deficiency] Eide D, et al. **Tidsskr Nor Laegeforen** 1989 Mar 10;109(7–8):836–7 (Eng. Abstr.) **(Nor)**

[Familial deficiency of protein S associated with thrombophilia] Velasco F, et al. **Med Clin (Barc)** 1989 Apr 8;92(13):484–7 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Antiphospholipid antibodies: a risk factor for occlusive ocular vascular disease in systemic lupus erythematosus and the 'primary' antiphospholipid syndrome. Asherson RA, et al. **Ann Rheum Dis** 1989 May;48(5):358–61

Immune mediated mechanism for thrombosis: antiphospholipid antibody binding to platelet membranes. Khamashta MA, et al. **Ann Rheum Dis** 1988 Oct; 47(10):849–54

Antibody to phosphatidylethanolamine in a patient with lupus anticoagulant and thrombosis. Staub HL, et al. **Ann Rheum Dis** 1989 Feb;48(2):166–9

Autoimmune cardiolipin-binding antibodies in oral anticoagulant patients. Exner T, et al. **Aust N Z J Med** 1988 Aug;18(5):669–73

Detection of lupus anticoagulant in patients attending an anticoagulation clinic. Chu P, et al. **BMJ** 1988 Dec 3; 297(6661):1449

Vascular disease, thrombosis, and recurrent abortion. Hughes GR. **BMJ** 1988 Sep 17;297(6650):700–1 (25 ref.)

Thromboses during cytotoxic chemotherapy [letter] Milne A, et al. **BMJ** 1988 Sep 3;297(6648):624

The titre of anti-centromere antibodies: its relationship to Raynaud's phenomenon and vascular occlusion. Buchanan RR, et al. **Br J Rheumatol** 1989 Jun;28(3):221–6

Anticardiolipin syndrome in plastic surgery of the breast. Alušík S, et al. **Cor Vasa** 1989;31(2):139–44

Prosthetic graft thrombosis associated with lupus anticoagulant. Ashley S, et al. **Eur J Vasc Surg** 1988 Feb; 2(1):57–60

The immunohistological detection of platelets, megakaryocytes and thrombi in routinely processed specimens. Gatter KC, et al. **Histopathology** 1988 Sep; 13(3):257–67

Thrombotic skin disease as a marker of the anticardiolipin syndrome. Livedo vasculitis and distal gangrene associated with abnormal serum antiphospholipid activity. Grob JJ, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1063–9

Antibodies to phospholipids in thrombotic disease. Hamsten A, et al. **J Intern Med** 1989 Jun;225(6):363–5

Postoperative thrombotic complications in patients with the lupus anticoagulant: increased risk after vascular procedures [letter] Baumgartner FJ, et al. **J Vasc Surg** 1989 Mar;9(3):506–7

Disorders associated with antibodies to endothelial cells. Cines DB. **Rev Infect Dis** 1989 May-Jun;11 Suppl 4:S705–11 (45 ref.)

Binding specificity of lupus anticoagulants and anticardiolipin antibodies. McNeil HP, et al. **Thromb Res** 1988 Dec 15; 52(6):609–19

METABOLISM

Antithrombin Cambridge, 384 Ala to Pro: a new variant identified using the polymerase chain reaction. Perry DJ, et al. **FEBS Lett** 1989 Aug 28;254(1–2):174–6

D dimer, an ambiguous marker of thrombolysis [editorial] Mosesson MW. **J Lab Clin Med** 1989 Jun;113(6):662

Defective thrombolysis due to collagen incorporation in fibrin clots. Mirshahi M, et al. **Thromb Res Suppl** 1988; 8:73–80

MORTALITY

Factors influencing the presence or absence of acute coronary artery thrombi in sudden ischaemic death. Davies MJ, et al. **Eur Heart J** 1989 Mar;10(3):203–8

The prognosis of renal vein thrombosis: a re-evaluation of 27 cases. Laville M, et al. **Nephrol Dial Transplant** 1988; 3(3):247–56

PATHOLOGY

Cerebral venous sinuses: anatomical variants or thrombosis? Zouaoui A, et al. **Acta Anat (Basel)** 1988;133(4):318–24

Morphological aspects of the aortofemoral graft thrombosis. Majewski W, et al. **Acta Chir Belg** 1988 Sep-Oct; 88(5):354–8

Quantitative scanning electron microscopy for the evaluation of thrombosis in extracorporeal circuits. Kundu SK, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):568–72

Differentiation of mononuclear blood cells into macrophages, fibroblasts and endothelial cells in thrombus organization. Leu HJ, et al. **Exp Cell Biol** 1988;56(4):201–10 (17 ref.)

Left atrial clot mimicking thickened inter atrial septum. Gupta SR, et al. **J Assoc Physicians India** 1988 Mar; 36(3):230–1

Fibrinogen-independent platelet adhesion and thrombus formation on subendothelium mediated by glycoprotein IIb-IIIa complex at high shear rate. Weiss HJ, et al. **J Clin Invest** 1989 Jan;83(1):288–97

Ultrasonic demonstration of portal vein occlusion. Khan O, et al. **West Indian Med J** 1988 Jun;37(2):123–6

[Idiopathic white atrophy causing cutaneous thrombotic microangiopathy. Apropos of a case] Boisnic S, et al. **Ann Pathol** 1989;9(2):118–20 (Eng. Abstr.) **(Fre)**

[Special problems in the histologic age determination of thrombi and emboli] Leu AJ, et al. **Pathologe** 1989 Mar; 10(2):87–92 **(Ger)**

[Ultrastructural bases of intravascular thrombosis in the liver in mechanical jaundice] Zufarov KA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):376–9 (Eng. Abstr.) **(Rus)**

[An experimental model of DIC syndrome] Shchepotin BM, et al. **Fiziol Zh** 1989 May-Jun;35(3):109–13 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Endothelial cell function in hemostasis and thrombosis. Wu KK, et al. **Adv Exp Med Biol** 1988;242:127–33 (50 ref.)

Vaso-occlusion in sickle cell disease: pathophysiology of the microvascular circulation. Kurantsin-Mills J, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):357–72 (68 ref.)

Suppression mechanisms for thrombus formation on heparin-immobilized segmented polyurethane-ureas. Nojiri C, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):386–98

Role of eicosanoids in the kappa-carrageenin rat tail thrombosis. Bekemeier H, et al. **Biomed Biochim Acta** 1988; 47(10–11):S260–3

The lupus anticoagulant and its role in thrombosis. Tobelem G, et al. **Blood Rev** 1987 Mar;1(1):21–4 (29 ref.)

Clinical disorders of fibrinolysis: a critical review. Francis RB Jr. **Blut** 1989 Jul;59(1):1–14 (198 ref.)

Pathophysiology of thrombophilic states. Mammen EF. **Folia Haematol (Leipz)** 1988;115(3):243–52 (35 ref.)

Favorable outcome of neonatal aortic thrombosis and renovascular hypertension. Caplan MS, et al. **J Pediatr** 1989 Aug;115(2):291–5

Endothelium in health and disease. Engelberg H. **Semin Thromb Hemost** 1989 Apr;15(2):178–83 (61 ref.)

Hemodynamic effects on atherosclerosis and thrombosis. Eskin SG, et al. **Semin Thromb Hemost** 1988 Apr; 14(2):170–4

Induced clot lysis by mini-dose injection of streptokinase in non-perfused arterial segments of rabbits. Kolts RL, et al. **Thromb Res** 1989 Feb 15;53(4):401–8

Platelet adherence and thrombus formation with flowing human blood on atherosclerotic plaque: reduced thrombogenicity of Watanabe-heritable hyperlipidemic rabbit aortic subendothelium. Lawrence JB, et al. **Thromb Res** 1989 Apr 15;54(2):99–114

[Thrombosis and hemorrhage: blood between Scylla and Charybdis] Verstraete M. **Verh K Acad Geneeskd Belg** 1988; 50(4):327–47 (51 ref.) (Eng. Abstr.) **(Dut)**

[Thrombosis and hemorrhage: the blood of Charybdis and Scylla] Verstraete M. **Bull Mem Acad R Med Belg** 1987; 142(11–12):460–3 **(Fre)**

PREVENTION & CONTROL

Thrombosis prophylaxis in hip arthroplasty [letter] Borris LC, et al. **Acta Orthop Scand** 1988 Dec;59(6):731

Chemical mediators and the anti-thrombotic properties of endothelial cells. Botting R, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:11–20 (48 ref.)

Usefulness of aspirin plus dipyridamole in reducing left ventricular thrombus formation in anterior wall acute myocardial infarction. Johannessen KA, et al. **Am J Cardiol** 1989 Jan 1;63(1):101–2

Effect of low dose acetylsalicylic acid on the frequency and hematologic activity of left ventricular thrombus in anterior wall acute myocardial infarction. Küpper AJ, et al. **Am J Cardiol** 1989 Apr 15;63(13):917–20

Influence of thrombolytic treatment followed by full dose anticoagulation on the frequency of left ventricular thrombi in acute myocardial infarction. Lupi G, et al. **Am J Cardiol** 1989 Sep 15;64(10):588–90

Maternal and fetal sequelae of anticoagulation during pregnancy in patients with mechanical heart valve prostheses. Sareli P, et al. **Am J Cardiol** 1989 Jun 15; 63(20):1462–5

Antithrombotic therapy in acute myocardial infarction: prevention of venous, left ventricular and coronary artery thromboembolism. Stein B, et al. **Am J Cardiol** 1989 Jul 18;64(4):33B–40B (51 ref.)

Prevention of left ventricular mural thrombus. Turpie AG. **Am J Cardiol** 1989 Jul 18;64(4):41B–43B

Use of a new stapling instrument for permanent occlusion of the aorta in the surgical procedure for thromboexclusion. Odagiri S, et al. **Ann Thorac Surg** 1989 Mar;47(3):466–9

Deep vein thrombosis after ischemic stroke: rationale for a therapeutic trial. Bornstein NM, et al. **Arch Phys Med Rehabil** 1988 Nov;69(11):955–8

Surface modification for improved blood compatibility. Jacobs H, et al. **Artif Organs** 1988 Dec;12(6):506–7 (29 ref.)

Development of an antithrombogenic cardiac wall substitute which can be reconstructed by infiltration of host cells. Okoshi T, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):532–7

Development of a small-caliber vascular graft with antithrombogenicity induced by extreme hydrophilicity. Tomizawa Y, et al. **ASAIO Trans** 1988 Jul-Sep; 34(3):644–50

Antithrombotic and bleeding effects of glycosaminoglycans with different degrees of sulphation. Van Ryn-McKenna J, et al. **Br J Haematol** 1989 Feb;71(2):265–9

Dihydroergotamine andthe thromboprophylactic effect of dextran 70 in emergency hip surgery [letter] Bergqvist D, et al. **Br J Surg** 1988 Aug;75(8):830

Low molecular weight heparin given the evening before surgery compared with conventional low-dose heparin in prevention of thrombosis [published erratum appears in Br J Surg 1988 Nov;75(11):1077] Bergqvist D, et al. **Br J Surg** 1988 Sep;75(9):888–91

Metabolism of ethyl eicosapentaenoate (EPA-E) in rats and effect of its metabolites on ellagic acid-induced thrombus formation in the stenosed femoral artery of rabbits. Ishiguro J, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2158–67

Effects of thrombin inhibition on the development of acute platelet-thrombus deposition during angioplasty in pigs. Heparin versus recombinant hirudin, a specific thrombin inhibitor. Heras M, et al. **Circulation** 1989 Mar;79(3):657–65

Controlled clinical study of the efficacy of a new low molecular weight heparin administered subcutaneously to prevent post-operative deep venous thrombosis. Valle I,

et al. **Curr Med Res Opin** 1988;11(2):80–6
Time–course of anti–Xa effects of calcium heparin and low–molecular–weight heparin given s.c.: insights for thrombosis prevention. Rosneo G, et al. **Drugs Exp Clin Res** 1988;14(6):423–7
Inhibitory effect of hirudin on thrombosis induced by prothrombin complex concentrates. Klöcking HP, et al. **Folia Haematol (Leipz)** 1988;115(1–2):106–9
Effect of physical training on thrombotic tendency in rats: decrease in thrombotic tendency measured by the He–Ne laser–induced thrombus formation method. Yamamoto J, et al. **Haemostasis** 1989;19(5):260–5
Mediators produced by the endothelial cell. Gryglewski RJ, et al. **Hypertension** 1988 Dec;12(6):530–48 (301 ref.)
The effect of low molecular weight dextran on early platelet deposition onto vascular grafts. Al–Huneidi W, et al. **Int Angiol** 1988 Jul–Sep;7(3):266–9
Prevention of platelet aggregation by dietary polyunsaturated fatty acids in the biodegradable polyurethane vascular prosthesis: an experimental model in pigs. Galletti G, et al. **Ital J Surg Sci** 1989;19(2):121–30
Heterotopic ossification with total hip endoprostheses in various models of thrombosis prophylaxis [letter] Kjaersgaard–Andersen P. **J Arthroplasty** 1989;4(1):97–8
Influence of blood flow and the effect of protamine on the thromboresistant properties of a covalently bonded heparin surface. Arnander C, et al. **J Biomed Mater Res** 1988 Oct; 22(10):859–68
RGDV peptide selectively inhibits platelet–dependent thrombus formation in vivo. Studies using a baboon model. Cadroy Y, et al. **J Clin Invest** 1989 Sep;84(3):939–44
Eicosapentaenoic acid and adult diseases in Japan: epidemiological and clinical aspects. Hirai A, et al. **J Intern Med Suppl** 1989;225(731):69–75
Synthesis, platelet aggregation inhibitory activity, and in vivo antithrombotic activity of new 1,4–dihydropyridines. Sunkel CE, et al. **J Med Chem** 1988 Oct;31(10):1886–90
Anticoagulation with sodium warfarin in children: effect of a loading regimen. Doyle JJ, et al. **J Pediatr** 1988 Dec; 113(6):1095–7
Nutrient bed protection during lower extremity arterial reconstruction. Rutherford RB. **J Vasc Surg** 1987 Mar; 5(3):529–34 (34 ref.)
Femoral artery recanalisation with percutaneous angioplasty and segmentally enclosed plasminogen activator. Jørgensen B, et al. **Lancet** 1989 May 20;1(8647):1106–8
Protein C deficiency and thrombotic complications after liver transplantation in children [letter] Stringer MD, et al. **Lancet** 1989 Jan 14;1(8629):102–3
Atrial fibrillation and antithrombotic prophylaxis: a prospective meta–analysis [letter] Walker MD. **Lancet** 1989 Feb 11;1(8633):325–6
Effects of dietary palm oil on arterial thrombosis, platelet responses and platelet membrane fluidity in rats. Rand ML, et al. **Lipids** 1988 Nov;23(11):1019–23
Hematologic and surgical management of the dental patient with plasminogen activator deficiency. Scheitler LE, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):680–2
Low dose dextran 40 in reconstructive hip surgery patients. Roberts TS, et al. **Orthopedics** 1989 Jun;12(6):797–801
Danish very–low–dose aspirin after carotid endarterectomy trial. Boysen G, et al. **Stroke** 1988 Oct;19(10):1211–5
Sex difference in antithrombotic effect of aspirin. Spranger M, et al. **Stroke** 1989 Jan;20(1):34–7
The influence of early surface thromboreactivity on long–term arterial graft patency. Rumisek JD, et al. **Surgery** 1989 May;105(5):654–61
Role of bone marrow in the development of thrombosis. A study of the curative and prophylactic action of heparin and heparin fragment (CY 222). Doutremepuich C, et al. **Thromb Res** 1989 May 15;54(4):369–75
Prevention of the formation of arterial thrombi using different antiplatelet drugs: experimental study in dogs. Escudero–Vela MC, et al. **Thromb Res** 1989 May 1; 54(3):187–95
Thrombus formation on the aorta injured by angioplasty and its prevention with dilazep in atherosclerotic rabbits. Nobuyoshi M, et al. **Thromb Res** 1989 Jun 15;54(6):561–72
Low haematocrit reduces hepatic artery thrombosis after liver transplantation. Buckels JA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2460–1
Coumarin associated skin necrosis. Konrad P, et al. **Vasa** 1988;17(3):208–15
[Inhibitory effects of new–breviscapine on thrombosis in vivo] Wang ZY. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan;9(1):26–8, 6 (Eng. Abstr.) (Chi)
[Anticoagulant management of patients with cardiac valve prostheses] Chen RK. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):13–5, 60–1 (Eng. Abstr.) (Chi)
[Effect of beta–phenyl lactic acid on platelet aggregation, thrombosis, and plasma cAMP content] Zhu L, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):249–51 (Eng. Abstr.) (Chi)
[Low–molecular weight heparin. A new agent to prevent thrombosis] Christiansen HM, et al. **Ugeskr Laeger** 1989 May 22;151(21):1302–5 (Eng. Abstr.) (Dan)
[Value of a fraction of low molecular weight heparin, enoxaparine, in patients at high risk of hemorrhage and thrombosis] Huet Y, et al. **Ann Med Interne (Paris)** 1988; 139(5):349–53 (Eng. Abstr.) (Fre)
[Segmental transplantation of the pancreas. Technical changes in preventing vascular thrombosis] Visset J, et al. **Chirurgie** 1988;114(10):769–74 (Eng. Abstr.) (Fre)
[Dermatan sulfate and the prevention of experimental venous thrombosis] Desnoyers P, et al. **Pathol Biol (Paris)** 1989 Jun;37(6):739–67 (54 ref.) (Eng. Abstr.) (Fre)
[Contribution of pentosan sulfuric polyester in the prevention of complications of percutaneous arterial dilatation (letter)] Pinot JJ. **Presse Med** 1989 Jan 7–14;18(1):32 (Fre)
[Anticoagulation with phenprocoumon in early childhood: dosage, complications, effectiveness] Engelhardt W, et al. **Klin Padiatr** 1989 Jan–Feb;201(1):21–7 (Eng. Abstr.) (Ger)
[Ergotism of the lower extremities resulting from thrombosis prevention using DHE–heparin. An angiographic follow–up study] Warmuth–Metz M. **Radiologe** 1988 Oct; 28(10):491–3 (Eng. Abstr.) (Ger)
[Effect of various glycosaminoglycans on laser–induced thrombus formation in the rat mesentery in correlation to inhibition of blood coagulation] Krupinski K, et al. **Vasa Suppl** 1988;23:257–9 (Ger)
[Use of calcium heparin in the prevention of thrombosis after arterial revascularization surgery] Zucchelli A. **Clin Ter** 1988 Feb 29;124(4):287–9 (Eng. Abstr.) (Ita)
[Prevention of thromboses in vascular microanastomoses. Experimental study on the role of anti–aggregant drugs. Preliminary remarks] Cerillo A, et al. **Minerva Chir** 1988 Oct 15;43(19):1593–5 (Eng. Abstr.) (Ita)
[Usefulness of several laboratory tests on prethrombotic status in arterial vascular pathology] Arosio E, et al. **Recenti Prog Med** 1989 Jan;80(1):18–24 (80 ref.) (Eng. Abstr.) (Ita)
[Antithrombogenic therapy by use of antiplatelet agents with warfarin—its efficiency for the outpatients with prosthetic valve] Saitoh H. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2396–407 (Eng. Abstr.) (Jpn)
[The role of antithrombin III in disorders of blood coagulation] Król–Grela H, et al. **Przegl Lek** 1988; 45(6):516–20 (14 ref.) (Pol)
[Possibilities of using implanted elastic magnetic elements in reconstructive operations on the abdominal aorta and its branches] Volkolakov IaV, et al. **Kardiologiia** 1988 Jun; 28(6):85–9 (Eng. Abstr.) (Rus)
[Endothelization of vascular prostheses using human cultured endothelial cells] Abzianidze GA, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):124–8 (Rus)
[Hemodilution in the prevention of complications after surgery of the major arteries] Kuznetsov NA, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):100–4 (Rus)
[Use of activated coagulation time for evaluation of the degree of heparinization and calculation of heparin pharmacokinetic parameters during hemodialysis] Khodas MIa, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):42–8 (Eng. Abstr.) (Rus)
[Value of early anticoagulation in the prevention of intraventricular thrombosis after a 1st myocardial infarction: prospective and randomized study] Díaz R, et al. **Rev Med Chil** 1988 Jan;116(1):13–7 (Eng. Abstr.) (Spa)
[Orstanorm with heparin—vasospasm] **Lakartidningen** 1988 Sep 7;85(36):2875 (Swe)

RADIOGRAPHY

Fluoroscopic differentiation between leaflet escape (LE) and valve thrombosis (VT) of the Edwards–Duromedics mitral valve. Deuvaert FE, et al. **Acta Cardiol** 1989;44(3):221–8
Left atrial thrombus [letter] Zatuchni J. **Am Heart J** 1989 Jun;117(6):1405
Computed tomographic features of puerperal ovarian vein thrombosis. Khurana BK, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):905–8
Significance of an enlarged splenic artery in patients with splenic vein thrombosis. Dumont AE, et al. **Am Surg** 1988 Oct;54(10):613–6
Computed tomography of internal jugular vein thrombosis. Wen BC, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):318–9
C.T. demonstration of thrombosis of the portal venous system. Lee WB, et al. **Australas Radiol** 1988 Aug; 32(3):360–4
Acute aorto–iliac thrombosis in a young man shown on unenhanced computed tomography. Adler J, et al. **Br J Radiol** 1989 Jul;62(739):627–8
Free–floating thrombi. Effects of venography on choice of therapy for recurrent pulmonary embolism [letter] Foresti V, et al. **Chest** 1989 Aug;96(2):444
Transient perihilar attenuation difference in the liver on dynamic CT secondary to portal vein thrombosis: report of two cases. Takayasu K, et al. **Gastroenterol Jpn** 1989 Apr;24(2):205–8
Regional anatomical differences in the venographic occurrence of deep venous thrombosis and long–term follow–up. Cohen JR, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct;29(5):547–51
Tumor thrombus in the branches of the distal portal vein: CT demonstration. Imaeda T, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):262–8
Septic thrombosis of the portal vein: CT and clinical observations. Lim GM, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):656–8
Computed tomography of portal vein thrombosis: unusual appearances and pitfalls in diagnosis. Martin K, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):811–6
Mesenteric venous thrombosis. Harward TR, et al. **J Vasc Surg** 1989 Feb;9(2):328–33
Intraluminal clot in the vertebrobasilar circulation: clinical and radiologic features. Levine SR, et al. **Neurology** 1989 Apr;39(4):515–22
Lower–extremity in situ saphenous vein grafts: angiographic interventions. Sniderman KW, et al. **Radiology** 1989 Mar; 170(3 Pt 2):1023–7
Bilateral Paget–von Schroetter syndrome including superior caval vein. Maurer HJ. **ROFO** 1989 Aug;151(2):245–7
Spontaneous subclavian vein thrombosis. Featherstone T. **Scott Med J** 1988 Jun;33(3):270–1
Portal and arterial thrombosis in liver transplantation: a frequent event in severe rejection. Samuel D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2225–7
Renal vein thrombosis presenting as renal mass. Gomella LG, et al. **Urology** 1989 Sep;34(3):164–7
[Calcified thrombus of the inferior vena cava. Apropos of a case] Paillé P, et al. **Ann Radiol (Paris)** 1989;32(2):151–4 (Eng. Abstr.) (Fre)
[CT cavography: diagnosis of iliocaval thrombosis by administration of contrast medium into the foot] Bostel F, et al. **ROFO** 1988 Oct;149(4):423–6 (Eng. Abstr.) (Ger)
[Small parietal thrombi in artificial bypass grafts] Dock W, et al. **ROFO** 1989 Feb;150(2):202–4 (16 ref.) (Eng. Abstr.) (Ger)
[The vertebral venous plexus: its physiopathological aspects. A CT study in 2 patients with obstruction of the inferior vena cava] Bellelli A, et al. **Radiol Med (Torino)** 1989 May; 77(5):564–7 (Ita)
[Preoperative evaluation of left atrial thrombi with computed tomography in mitral stenosis] Takahara Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2157–62 (Eng. Abstr.) (Jpn)
[Thrombosed aneurysm of the accessory hemiazygos vein simulating neurinoma of the posterior mediastinum] Vishnevskii AA, et al. **Vestn Khir** 1989 Mar;142(3):49–50 (Rus)

RADIONUCLIDE IMAGING

New perspectives in thrombus–specific imaging: radiolabeled monoclonal antibodies. Oster ZH, et al. **AJR** 1989 Feb; 152(2):253–60 (94 ref.)
Radiological case of the month. Pylephlebitis secondary to unsuspected appendiceal rupture. Giuliano CT, et al. **Am J Dis Child** 1989 Sep;143(9):1099–100
Upper extremity radionuclide venography in the diagnosis and management of venous disease associated with intravenous catheters. Dhekne RD, et al. **Angiology** 1988 Oct;39(10):907–14
An antifibrin monoclonal antibody useful in immunoscintigraphic detection of thrombi. Wasser MN, et al. **Blood** 1989 Aug 1;74(2):708–14
Hepatic localization of Tc–99m MAA during lower extremity venography. Kolla I, et al. **Clin Nucl Med** 1989 Jun; 14(6):433–5
The detection of inferior vena cava obstruction using Tc–99m RBC venography. Skarzynski JJ, et al. **Clin Nucl Med** 1988 Oct;13(10):763–4
Tc–99m–HMPAO labelled human platelets: in vitro and in vivo results. Becker W, et al. **Eur J Nucl Med** 1989; 15(6):296–301
Gallium–67 citrate scintigraphy in Salmonella infected thrombus of a left ventricular aneurysm [letter] de la Fuente C, et al. **J Nucl Med** 1989 Jul;30(7):1277–8
Value of blood–pool subtraction in cardiac indium–111–labeled platelet imaging. Machac J, et al. **J Nucl Med** 1989 Sep;30(9):1445–55
99Tcm hexamethylpropyleneamineoxime (HMPAO) as a platelet label: evaluation of labelling parameters and first in vivo results. Becker W, et al. **Nucl Med Commun** 1988 Oct;9(10):831–42
Clinical studies with 111In–labelled platelets. Goldman MD. **Nucl Med Commun** 1988 Oct;9(10):809–12 (18 ref.)
Imaging thrombi with radiolabelled anti–fibrin monoclonal antibodies. Knight LC. **Nucl Med Commun** 1988 Oct; 9(10):823–9 (23 ref.)
In vivo studies with an anti–platelet monoclonal antibody; P256. Lavender JP, et al. **Nucl Med Commun** 1988 Oct; 9(10):817–22
Use of an anti–platelet monoclonal antibody F(ab')2 fragment for imaging thrombus. Stuttle AW, et al. **Nucl Med Commun** 1988 Sep;9(9):647–55
Thrombus imaging in a primate model with antibodies specific for an external membrane protein of activated platelets. Palabrica TM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1036–40
Hepatic visualization with a "hot" spot adjacent to the porta hepatis in Tc–99m MAA venography of the lower extremity: a sign of IVC obstruction. DeLand FH, et al. **Radiat Med** 1988 May–Jun;6(3):107–10
Radionuclide thrombus imaging: an idea whose time has come? [editorial] Grossman ZD. **Radiology** 1989 Oct; 173(1):22
Thrombus imaging with an I–123–labeled F(ab')2 fragment of an anti–human fibrin monoclonal antibody in a rabbit model. Hashimoto Y, et al. **Radiology** 1989 Apr; 171(1):223–6
Current status of immunoscintigraphy in the detection of thrombosis and thromboembolism. Koblik PD, et al. **Semin Nucl Med** 1989 Jul;19(3):221–37 (113 ref.)
Imaging of human thrombi in the rabbit jugular vein: I: Comparison of two fibrin–specific monoclonal antibodies.

Tymkewycz PM, et al. **Thromb Res** 1989 Jun 1;54(5):411–21

Anti-fibrin monoclonal antibodies for radioimmunodetection: preliminary assessment in a rat model system. Walker KZ, et al. **Thromb Res** 1988 Nov 15;52(4):269–78

Platelet disposition at angioplasty sites and platelet survival time after PTA in iliac and femoral arteries [letter] Ahmadi R, et al. **Vasa** 1989;18(1):79 (Eng, Ger)

[Thrombus scintigraphy using radiolabeled monoclonal antibodies to platelets: (II). Visualization of arterial thrombus of rabbits using radioiodinated antibodies] Nakashima T, et al. **Kaku Igaku** 1988 Oct;25(10):1073–9 (Eng. Abstr.) (Jpn)

[Thrombus scintigraphy using radiolabeled monoclonal antibodies to platelets: (I). Development of monoclonal antibodies reactive with rabbit and human platelets] Nakashima T, et al. **Kaku Igaku** 1988 Aug;25(8):743–8 (Eng. Abstr.) (Jpn)

[Diagnosis of left atrial thrombus by technetium-99m radionuclide angiography] Uehara T, et al. **Kaku Igaku** 1988 Jun;25(6):513–23 (Eng. Abstr.) (Jpn)

[Diagnosis of thrombosis of the deep veins of the lower extremity and the pelvis and pulmonary thromboembolism using 99m Tc HSA, MAA] Marković S, et al. **Vojnosanit Pregl** 1988 Nov–Dec;45(6):421–4 (Eng. Abstr.) (Ser)

SURGERY

Distal splenorenal shunt for portal vein thrombosis after liver transplantation. Marino IR, et al. **Am J Gastroenterol** 1989 Jan;84(1):67–70

Varix of the facial vein. Manstein ME, et al. **Ann Plast Surg** 1988 Aug;21(2):155–7

Aortic thrombosis in neonates and infants. Lofland GK, et al. **Ann Surg** 1988 Dec;208(6):743–5

Thrombotic obstruction of disc valves: clinical recognition and surgical management. Kontos GJ Jr, et al. **Ann Thorac Surg** 1989 Jul;48(1):60–5

Surgical removal of a mobile, pedunculated left ventricular thrombus: report of 4 cases. Nili M, et al. **Ann Thorac Surg** 1988 Oct;46(4):396–400

Patency after iliofemoral and iliocaval venous thrombectomy. Juhan C, et al. **Ann Vasc Surg** 1987 Dec;1(5):529–33

Liver abscess following superior mesenteric artery revascularization for acute mesenteric ischemia. Shah PM, et al. **Ann Vasc Surg** 1989 Jul;3(3):261–3

Massive upper-extremity edema following forearm fistula: cause and treatment with salvage of the fistula [letter] Rajagoplan A, et al. **Arch Surg** 1989 May;124(5):636

Venous complications of the thoracic outlet syndrome. Jamieson CW. **Eur J Vasc Surg** 1987 Feb;1(1):1–3 (19 ref.)

The place of first rib resection in the management of axillary-subclavian vein thrombosis. Pittam MR, et al. **Eur J Vasc Surg** 1987 Feb;1(1):5–10

Left ventricular aneurysm with mural thrombus occurring in a patient with patent coronary arteries. Sueda T, et al. **Hiroshima J Med Sci** 1988 Dec;37(4):171–3

Treatment of major venous obstruction with an expandable endoluminal spiral prosthesis. Jakob H, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):112–7

Thrombectomy for acute deep vein thrombosis: prevention of postthrombotic syndrome. Shionoya S, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):484–9

Thrombosed iliac venous aneurysm: a rare cause of left lower extremity venous obstruction. Hurwitz RL, et al. **J Vasc Surg** 1989 Jun;9(6):822–4

Thrombotic lesions of the tricuspid valve in a newborn: surgical management. Hartyánszky IL, et al. **Pediatr Cardiol** 1989 Spring;10(2):109–12

Vascular grafting in the management of thrombotic disorders. Greisler HP, et al. **Semin Thromb Hemost** 1989 Apr; 15(2):206–14 (30 ref.)

Endothelial cell seeding in the management of vascular thrombosis. Herring MB, et al. **Semin Thromb Hemost** 1989 Apr;15(2):200–5

Thrombectomy of acute iliofemoral venous thrombosis during pregnancy. Mogensen K, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):50–4

Neonatal aortic thrombosis complicating umbilical artery catheterization: successful treatment with retroperitoneal aortic thrombectomy. Martin JE Jr, et al. **Surgery** 1989 Jun;105(6):793–6 (14 ref.)

[Thromboses of the splenic vein. Our experience with 34 surgically treated cases] Morel P, et al. **Ann Chir** 1988; 42(7):442–7 (Eng. Abstr.) (Fre)

[Placement of a hollow clip under peridural anesthesia] Le Camus J, et al. **Cah Anesthesiol** 1988 Jun–Jul;36(4):307–12 (Fre)

[Mesenteric venous thrombosis. An 18-year retrospective study] Clavien PA, et al. **Helv Chir Acta** 1988 Jun; 55(1–2):29–34 (Eng. Abstr.) (Fre)

[Insertion of a temporary percutaneous filter before suprarenal caval thrombectomy (letter)] Du Cailar C, et al. **Presse Med** 1989 Jun 17;18(24):1208–9 (Fre)

[The compartment syndrome from the vascular surgery viewpoint] Allenberg JR, et al. **Chirurg** 1988 Nov; 59(11):722–7 (Ger)

[Non-occlusive ischemia enteropathy. Diagnosis, therapy and prognosis] Bruch HP, et al. **Chirurg** 1989 Jun;60(6):419–25 (Eng. Abstr.) (Ger)

[First successful clinical small intestine transplantation. Tactics and surgical technic] Deltz E, et al. **Chirurg** 1989 Apr;60(4):235–9 (Eng. Abstr.) (Ger)

[Puerperal ovarian vein thrombophlebitis—a rare puerperal complication] Loos W, et al. **Geburtshilfe Frauenheilkd** 1988 Jul;48(7):483–8 (Eng. Abstr.) (Ger)

[Acute mesenterial infarcts—results of surgical therapy] Käch K, et al. **Helv Chir Acta** 1989 Jun;56(1–2):23–7 (Eng. Abstr.) (Ger)

[Clinical aspects and therapy of isolated mesenteric venous thrombosis] Marty A, et al. **Helv Chir Acta** 1988 Jun; 55(1–2):25–8 (Eng. Abstr.) (Ger)

[Acute arterial occlusion of the extremities. Rate of success following simple embolectomy and following combined procedures] Oehy K, et al. **Helv Chir Acta** 1989 Jun; 56(1–2):35–8 (Eng. Abstr.) (Ger)

[Reconstruction of unilateral iliac vein occlusion] Gruss JD, et al. **Langenbecks Arch Chir** 1988;Suppl 2:181–6 (Eng. Abstr.) (Ger)

[Reconstructive interventions of the inferior vena cava] Hutschenreiter S, et al. **Langenbecks Arch Chir** 1988;Suppl 2:191–5 (Eng. Abstr.) (Ger)

[Liver transplantation in low portal vein flow: separation of portal vein areas with divided portal-venous and arterialized caval-venous liver perfusion. I. Clinical case report] Pichlmayr R, et al. **Langenbecks Arch Chir** 1989; 374(4):232–9 (Eng. Abstr.) (Ger)

[Acute infrarenal aortic and bilateral pelvic artery occlusion] Menges HW, et al. **Zentralbl Chir** 1988;113(16):1035–43 (Eng. Abstr.) (Ger)

[Long-term results following femoro-popliteal vascular reconstruction] Wagner W, et al. **Zentralbl Chir** 1989; 114(3):157–68 (Eng. Abstr.) (Ger)

[Surgical treatment of thrombosis of the inferior vena cava] Bajardi G, et al. **Minerva Chir** 1989 Apr 15;44(7):1103–6 (Eng. Abstr.) (Ita)

[Indications for isolated thromboendarterectomy of the deep femoral artery] Ghilardi G, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2075–80 (Eng. Abstr.) (Ita)

[Treatment of ischemia in late thrombosis after aorto-iliaco-femoral reconstructions] Giuffrida GF, et al. **Minerva Chir** 1989 Mar 31;44(6):1009–14 (Eng. Abstr.) (Ita)

[Adult neuroblastoma of the adrenal with intraatrial tumor thrombus: report of a case] Onishi S, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1195–9 (Eng. Abstr.) (Jpn)

[Four successfully operated cases of ball thrombus in the left atrium] Aoyagi S, et al. **Kyobu Geka** 1989 Feb; 42(2):97–102 (Eng. Abstr.) (Jpn)

[Surgical treatment of renal carcinoma with inferior vena cava thrombus] Kitajima K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1459–66 (Eng. Abstr.) (Jpn)

[Treatment of renal vein thrombosis associated with nephrotic syndrome] Funami M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):952–6 (Eng. Abstr.) (Jpn)

[Open-heart surgery in a patient with chronic leukemia] Sekino Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar; 90(3):450–3 (Eng. Abstr.) (Jpn)

[Successful removal of ball thrombus in the left atrium] Mizumoto T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):723–8 (Eng. Abstr.) (Jpn)

[Surgical management of intra-atrial free-floating thrombus in four patients] Tomizawa Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1210–3 (Eng. Abstr.) (Jpn)

[Reoperations on the aorta and its branches] Kulik IaP, et al. **Kardiologiia** 1988 Dec;28(12):113–5 (Rus)

[Combined treatment of acute arterial occlusion] Natsvlishvili GA, et al. **Kardiologiia** 1988 Jun;28(6):110–1 (Rus)

[Thrombectomy from the superior mesenteric vein] Belokurov IuN, et al. **Khirurgiia (Mosk)** 1988 Oct; (10):130–1 (Rus)

[Reoperation in vascular complications after transplantation of thoracodorsal flaps] Milanov NO, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):104–7 (Rus)

[Successful surgical treatment of acute disorders of mesenteric circulation] Orlov AV, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):135–6 (Rus)

[Occlusion of the infrarenal segment of the aorta in a patient with total situs inversus of the internal organs] Rapovka VG. **Khirurgiia (Mosk)** 1989 Mar;(3):137–8 (Rus)

[Extensive resection of an infarcted intestine] Sergienko VS. **Khirurgiia (Mosk)** 1988 Oct;(10):116–9 (Rus)

[A method of trapezoid skin plasty of the anal region in thrombosis of the external hemorrhoidal nodes] Enfendzhian AK, et al. **Klin Khir** 1989;(2):70 (Rus)

[Tactics of the surgeon in acute thrombophlebitis of a great saphenous varix of the leg] Genyk SN, et al. **Klin Khir** 1988;(7):4–6 (Eng. Abstr.) (Rus)

[Treatment of patients with late thrombosis after reconstructive surgery of the terminal segment of the aorta and its branches] Belichenko IA, et al. **Vestn Khir** 1989 Jan;142(1):35–8 (Eng. Abstr.) (Rus)

[The human umbilical cord vein in the surgical treatment of acute arterial thrombosis] Isaev AF, et al. **Vestn Khir** 1988 Jun;140(6):105–10 (Eng. Abstr.) (Rus)

[Surgical treatment of recurrent thrombosis after aorto-femoral reconstruction] Klioner LI, et al. **Vestn Khir** 1988 Jul;141(7):54–7 (Eng. Abstr.) (Rus)

[Artificial arteriovenous anastomoses in reconstructive surgery of arteries with a poor distal vascular bed] Volodos' NL, et al. **Vestn Khir** 1988 Dec;141(12):53–8 (Eng. Abstr.) (Rus)

[Free thrombus in the left atrium associated with mitral stenosis. Diagnostic and therapeutic aspects. Apropos of a case] Mesa JM, et al. **Rev Esp Cardiol** 1989 Apr; 42(4):280–2 (Eng. Abstr.) (Spa)

THERAPY

Efficacy of treatment of patients with echocardiographically detected right-sided heart thrombi: a meta-analysis. Kinney EL, et al. **Am Heart J** 1989 Sep;118(3):569–73

Percutaneous transluminal balloon angioplasty for obstruction of the suprahepatic inferior vena cava and cavo-atrial graft stenosis. Dev V, et al. **Am J Cardiol** 1989 Aug 1;64(5):397–9

Digital manipulation of the thrombosed arterio-venous conduit. Bloom RJ, et al. **Am Surg** 1989 Aug;55(8):482–4

Thrombolytic therapy. A review (2). Stewart JH, et al. **Cleve Clin J Med** 1989 May;56(3):290–6 (38 ref.)

Intra-arterial thrombolysis using recombinant tissue plasminogen activator (r-TPA): the optimal agent, at the optimal dose? Berridge DC, et al. **Eur J Vasc Surg** 1989 Aug;3(4):327–32

Clinical application of percutaneous transluminal angioscopy. Comparison of findings in percutaneous transluminal angioplasty, thrombolysis, thrombus-extraction and stent-application. Beck A, et al. **Herz** 1988 Dec;13(6):392–9 (44 ref.)

Percutaneous recanalization and dilatation of a thrombotically occluded superior vena cava in a patient with a peritoneovenous shunt. Meinertz T, et al. **J Hepatol** 1989 Jul;9(1):91–4

Chest drain thrombectomy [letter] Diament RH. **Lancet** 1989 May 13;1(8646):1074

Mechanical clot dissolution: new concept. Bildsoe MC, et al. **Radiology** 1989 Apr;171(1):231–3

Insufficient hemodialysis access fistulas: late results of treatment with percutaneous balloon angioplasty. Gmelin E, et al. **Radiology** 1989 Jun;171(3):657–60

Thrombosed polytetrafluoroethylene hemodialysis fistulas: salvage with combined thrombectomy and angioplasty. Smith TP, et al. **Radiology** 1989 May;171(2):507–8

Thrombus-trapping efficiency of the Greenfield filter in vivo. Thompson BH, et al. **Radiology** 1989 Sep;172(3 Pt 2):979–81

Thrombosis of portal vein in absence of hepatic disease. Belli L, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):46–9

A simplified technique for thrombectomy of vein grafts. Konigsberg SF, et al. **Surg Gynecol Obstet** 1989 Apr; 168(4):355–6

Orthotopic liver transplantation: nonoperative management of early, acute portal vein thrombosis. Burke GW 3d, et al. **Surgery** 1988 Nov;104(5):924–8

Spontaneous subclavain vein thrombosis: a successful combined approach of local thrombolytic therapy followed by first rib resection [letter] Kunkel JM, et al. **Surgery** 1989 Jul;106(1):114

[Prognosis of renal vein thrombosis in the adult: influence of treatment] Aguilera D, et al. **Nephrologie** 1988;9(5):201–6 (Eng. Abstr.) (Fre)

[Acute ischemia of the limbs. Etiology, treatment, prognosis] Genton A. **Rev Med Suisse Romande** 1988 Sep;108(9):771–7 (Fre)

[The treatment of deep venous thrombosis of the lower limbs] Bounameaux H, et al. **Schweiz Med Wochenschr** 1988 Sep 3;118(35):1225–9 (37 ref.) (Eng. Abstr.) (Fre)

[Treatment of acute iliac artery occlusion by catheter lysis, catheter dilatation and implantation of a new kind of metallic vascular endoprosthesis] Richter GM, et al. **Chirurg** 1989 May;60(5):346–51 (Eng. Abstr.) (Ger)

[Percutaneous transluminal angioplasty, local thrombolysis and percutaneous thrombus extraction in the treatment of arterial occlusions of the extremities] Schneider E. **Internist (Berlin)** 1989 Jul;30(7):440–6 (22 ref.) (Ger)

[Venous thrombolysis and venous angioplasty] Günther RW, et al. **Rontgenblatter** 1988 Jul;41(7):293–6 (Eng. Abstr.) (Ger)

[Fibrinolytic therapy—plasminogen activator inhibitors] Hönigl K, et al. **Vasa Suppl** 1988;26:103–6 (Eng. Abstr.) (Ger)

[Systemic fibrinolysis with recombinant tissue-type plasminogen activator in subrenal aortic occlusions] Hönigl K, et al. **Vasa Suppl** 1988;26:99–102 (Eng. Abstr.) (Ger)

[Treatment of iliofemoral venous thrombosis—diagnosis of pulmonary embolism] Arnesen H. **Tidsskr Nor Laegeforen** 1989 May 20;109(14):1496 (Nor)

[Treatment of the Paget-Schroetter syndrome] Frantsev VI, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):90–3 (Eng. Abstr.) (Rus)

[Local hypothermia in the treatment of acute arterial occlusion of the extremities] Urakov AL, et al. **Vestn Khir** 1988 Jul;141(7):62–5 (Eng. Abstr.) (Rus)

[Local fibrinolysis and percutaneous transluminal angioplasty in embolism of the renal artery] Rossique Delmás P, et al. **Med Clin (Barc)** 1988 Sep 10;91(7):267–9 (Eng. Abstr.) (Spa)

[Mesenteric venous thrombosis: a new case of favorable course using conservative treatment] Ledo Barro L, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):720–2 (Eng. Abstr.) (Spa)

VETERINARY

Aorto-iliac thrombosis in two horses: clinical course of the

disease and use of real-time ultrasonography to confirm diagnosis. Edwards GB, et al. **Equine Vet J** 1988 Sep; 20(5):384–7

Obstructed portal venous flow and portal vein thrombus in a dog. Willard MD, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1449–51

Drugs used for disorders of coagulation. Meric SM. **Vet Clin North Am [Small Anim Pract]** 1988 Nov; 18(6):1217–41 (109 ref.)

THROMBOSIS, RETINAL VEIN see **RETINAL VEIN OCCLUSION**

THROMBOSIS, VENOUS see **THROMBOPHLEBITIS**

THROMBOXANE A SYNTHASE see **THROMBOXANE SYNTHETASE**

THROMBOXANE A2

Physico-chemical properties of prostaglandins and related pharmacological compounds. A theoretical study on conformational related activity. Deleers M, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2441–7

Effects of respiratory alkalosis on thromboxane-induced pulmonary hypertension in piglets. Redding GJ, et al. **Pediatr Res** 1988 Nov;24(5):558–62

ANALOGS & DERIVATIVES

Developments of TXA2 antagonists. Hamanaka N. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:663–5

Photoaffinity labelling and isoelectric focusing of the human platelet thromboxane A2/prostaglandin H2 (TXA2/PGH2) receptor. Mais DE, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:168–71

Magnitude of thromboxane receptor antagonism necessary for antithrombotic activity in monkeys. Schumacher WA, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H726–34

Photoaffinity labelling of the human platelet thromboxane A2/prostaglandin H2 receptor. Mais DE, et al. **Biochim Biophys Acta** 1989 Jul 11;1012(2):184–90

EP 171: a high affinity thromboxane A2-mimetic, the actions of which are slowly reversed by receptor blockade. Jones RL, et al. **Br J Pharmacol** 1989 Apr;96(4):875–87

Protective effects of ONO 3708, a new thromboxane A2 receptor antagonist, during experimental endotoxin shock. Taneyama C, et al. **Circ Shock** 1989 May;28(1):69–77

Increased Ca2+ influx into platelets induced by thromboxane A2 analog in patients with ischemic heart disease. Kobayashi N, et al. **Clin Cardiol** 1989 Aug;12(8):456–60

Effects of ONO-3708, an antagonist of the thromboxane A2/prostaglandin endoperoxide receptor, on platelet aggregation and thrombosis. Kondo K, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):253–61

Effects of a new thromboxane A2-antagonist (ONO-3708) and a new leukotriene-antagonist (ONO-1078) on thromboxane A2 analogue-, leukotriene C4-, and D4-induced regional myocardial blood flow reduction. Torii T, et al. **Heart Vessels** 1988;4(2):104–11

Role of venoconstriction in thromboxane-induced pulmonary hypertension and edema in lambs. Yoshimura K, et al. **J Appl Physiol** 1989 Feb;66(2):929–35

The effect of the thromboxane A2/prostaglandin endoperoxide receptor antagonist SQ 30,741 on myocardial infarct size and blood flow during myocardial ischemia and reperfusion. Grover GJ, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):701–9

Effect of the thromboxane A2 receptor antagonist SQ 30,741 on ultimate myocardial infarct size, reperfusion injury and coronary flow reserve. Grover GJ, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):484–91

Effect of thromboxane receptor antagonists on venous thrombosis in rats. Schumacher WA, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1109–15

Difluorothromboxane A2 and stereoisomers: stable derivatives of thromboxane A2 with differential effects on platelets and blood vessels. Morinelli TA, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5600–4

[Potentiating effect of inhaled thromboxane A2 analogue (STA2) on bronchial responsiveness in guinea pigs] Fujimura M, et al. **Arerugi** 1988 Oct;37(10):1038–41 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Developments of TXA2 antagonists. Hamanaka N. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:663–5

Inhibition of thromboxane responses in the airway of the cat by SQ29,548 and OKY 1581. Kadowitz PJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:535–8

Magnitude of thromboxane receptor antagonism necessary for antithrombotic activity in monkeys. Schumacher WA, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H726–34

Reduced myocardial neutrophil accumulation and infarct size following thromboxane synthetase inhibitor or receptor antagonist. Nichols WW, et al. **Angiology** 1989 Mar; 40(3):209–21

The effect of the thromboxane A2 receptor antagonist SQ 29,548 on the severity of pacing-induced ischemia. Grover GJ, et al. **Basic Res Cardiol** 1989 Jan–Feb;84(1):103–10

Characterization of thromboxane A2/prostaglandin H2 (TXA2/PGH2) receptors of rat platelets and their interaction with TXA2/PGH2 receptor antagonists. Hanasaki K, et al. **Biochem Pharmacol** 1988 Oct 15; 37(20):3923–9

Further studies on the anti-thromboxane A2 activity of monohydroxylated fatty acids. Lagarde M, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1863–4

EP 171: a high affinity thromboxane A2-mimetic, the actions of which are slowly reversed by receptor blockade. Jones RL, et al. **Br J Pharmacol** 1989 Apr;96(4):875–87

Characterization of contractile prostanoid receptors on human airway smooth muscle. Armour CL, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):215–22

Effects of ONO-3708, an antagonist of the thromboxane A2/prostaglandin endoperoxide receptor, on platelet aggregation and thrombosis. Kondo K, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):253–61

Effects of a new thromboxane A2-antagonist (ONO-3708) and a new leukotriene-antagonist (ONO-1078) on thromboxane A2 analogue-, leukotriene C4-, and D4-induced regional myocardial blood flow reduction. Torii T, et al. **Heart Vessels** 1988;4(2):104–11

Effect of a thromboxane receptor antagonist on PGD2- and allergen-induced bronchoconstriction. Beasley RC, et al. **J Appl Physiol** 1989 Apr;66(4):1685–93

The effect of the thromboxane A2/prostaglandin endoperoxide receptor antagonist SQ 30,741 on myocardial infarct size and blood flow during myocardial ischemia and reperfusion. Grover GJ, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):701–9

9,11-Epoxy-9-homo-14-thiaprost-5-enoic acid derivatives: potent thromboxane A2 antagonists. Hall SE, et al. **J Med Chem** 1989 May;32(5):974–84

Effect of the thromboxane A2 receptor antagonist SQ 30,741 on ultimate myocardial infarct size, reperfusion injury and coronary flow reserve. Grover GJ, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):484–91

Thromboxane A2 antagonist and diltiazem-induced enhancement of contractile function: the effect of timing of treatment. Grover GJ, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):445–52

Combination of the thromboxane receptor antagonist, sulotroban (BM 13.177; SK&F 95587), with streptokinase: demonstration of thrombolytic synergy. Kopia GA, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):887–95

Inhibiting noradrenergic overactivity by inhibition of thromboxane and concomitant activation of opiate receptors via dietary means. Backon J. **Med Hypotheses** 1989 May;29(1):65–74 (182 ref.)

Improvement of renal function with selective thromboxane antagonism in lupus nephritis [see comments] Pierucci A, et al. **N Engl J Med** 1989 Feb 16;320(7):421–5. **Comment in:** N Engl J Med 1989 Aug 3;321(5):330–1

[Effect of a new thromboxane A2 antagonist, S-145, on platelet aggregation] Kakushi H, et al. **Nippon Yakurigaku Zasshi** 1989 Mar;93(3):171–8 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Effects of Gramoxone-induced reactive oxygen radicals on eicosanoid synthesis of mouse lung. Matkovics B, et al. **Acta Biol Hung** 1988;39(4):351–9

Lipoxin A4 causes generation of thromboxane A2 in the guinea-pig lung. Wikström E, et al. **Agents Actions** 1989 Jan;26(1–2):90–2

Thromboxane biosynthesis and pharmacologic modulation in progressive glomerulosclerosis. Patrono C, et al. **Am J Nephrol** 1989;9 Suppl 1:13–6 (22 ref.)

Failure of aspirin to impair bovine platelet function. Gentry PA, et al. **Am J Vet Res** 1989 Jun;50(6):919–22

Prostanoid production in varicose veins: evidence for decreased prostacyclin with increased thromboxane A2 and prostaglandin E2 formation. Biagi G, et al. **Angiology** 1988 Dec;39(12):1036–42

Endogenous formation of prostanoids in neonates with persistent pulmonary hypertension. Kühl PG, et al. **Arch Dis Child** 1989 Jul;64(7):949–52

The effects of colchicine on prostaglandin I2 and thromboxane A2 biosynthesis in the rat dental pulp. Hirafuji M, et al. **Arch Oral Biol** 1988;33(5):311–5

Biochemical adaptation of venous patches placed in the carotid circulation. Govostis DM, et al. **Arch Surg** 1989 Apr;124(4):490–3

Effects of isosorbide dinitrate on thromboxane A2 synthesis in carbon dioxide exposed platelets. Ishikawa N, et al. **Arzneimittelforschung** 1988 Sep;38(9):1334–5

Synthesis of prostacyclin and thromboxane A2 by rat gastric mucosa. Comparison of 1,6-dimethyl-4-oxo-1,6,7,8,9,9a-hexahydro-4H-pyrido (1,1-a)-pyrimidine-3-carboxamide and cimetidine. Rózsa I, et al. **Arzneimittelforschung** 1989 Jun;39(6):686–9

Interrelation of platelet aggregation, release reaction and thromboxane A2 production. Balduini CL, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):823–9

Increased in vivo biosynthesis of prostacyclin and thromboxane A2 in chronic idiopathic thrombocytopenic purpura. Rousson D, et al. **Br J Haematol** 1989 Jul; 72(3):402–6

Culture of pericytes isolated from rat adipose microvasculature and characterization of their prostanoid production. Eskenasy M, et al. **Cell Biol Int Rep** 1988 Dec; 12(12):1055–66

Increased thromboxane biosynthesis during coronary thrombolysis. Evidence that platelet activation and thromboxane A2 modulate the response to tissue-type plasminogen activator in vivo. Fitzgerald DJ, et al. **Circ Res** 1989 Jul;65(1):83–94

Equine peritoneal macrophage production of thromboxane and prostacyclin in response to platelet activating factor and its receptor antagonist SRI 63-441. Morris DD, et al. **Circ Shock** 1989 Jun;28(2):149–58

Cardiopulmonary function as related to thromboxane A2 synthesis in experimental septic shock. Schütz er KM, et al. **Circ Shock** 1988 Sep;26(1):27–40

The effect of immunity to core lipopolysaccharides (LPS) on the production of thromboxane and prostacyclin by equine peritoneal macrophages. Morris DD, et al. **Cornell Vet** 1989 Jul;79(3):231–47

Relationship between vascular adrenergic receptors and prostaglandin biosyntheses in canine diabetic coronary arteries. Koltai MZ, et al. **Diabetologia** 1988 Sep; 31(9):681–6

Pharmacokinetics of low-dose oral modified release, soluble and intravenous aspirin in man, and effects on platelet function. Bochner F, et al. **Eur J Clin Pharmacol** 1988; 35(3):287–94

Effect of acetyl salicylic acid on increased production of thromboxane after aortic graft surgery. Lewin J, et al. **Eur J Vasc Surg** 1989 Jun;3(3):213–8

Effect of hyperlipidemic serum on lipid peroxidation, synthesis of prostacyclin and thromboxane by cultured endothelial cells: protective effect of antioxidants. Wang JA, et al. **Free Radic Biol Med** 1989;7(3):243–9

PMA-induced pulmonary edema: mechanisms of the vasoactive response. Johnson A. **J Appl Physiol** 1988 Nov; 65(5):2302–12

Thromboxane A2 production in allergen-induced immediate and late asthmatic responses. Its possible role in inducing the late response. Iwamoto I, et al. **J Asthma** 1988; 25(3):117–24

Inhibition of thromboxane A synthesis in U937 cells by glucocorticoids. Lack of evidence for lipocortin 1 as the second messenger. Bienkowski MJ, et al. **J Biol Chem** 1989 Apr 15;264(11):6536–44

Cholesterol levels and eicosanoid production in rats fed phosphatidylinositol or soybean lecithin. Ishida T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr;34(2):237–44

Effect of preexcisional heparin anticoagulation on excised canine vein and artery prostanoid production. Kresowik TF, et al. **J Surg Res** 1989 Jun;46(6):605–10

Prostacyclin and thromboxane A2 formation by atherosclerotic carotid artery: comparison with normal aorta, saphenous vein, and platelets. Akers DL, et al. **J Vasc Surg** 1988 Oct;8(4):520–6

Heparin-induced platelet activation: the role of thromboxane A2 synthesis and the extent of platelet granule release in two patients. Kappa JR, et al. **J Vasc Surg** 1989 Apr; 9(4):574–9

Effects of thromboxane A2 synthesis inhibition on renal renin release and protein excretion in diabetic rats. Omoto A, et al. **Nippon Jinzo Gakkai Shi** 1988 Mar;30(3):305–11

Relationship between PAF-acether and thromboxane A2 biosynthesis in endotoxin-induced intestinal damage in the rat. Boughton-Smith NK, et al. **Prostaglandins** 1989 Sep; 38(3):319–33

Increase in uterine prostaglandin E2, F2 alpha, prostacyclin and stability in thromboxane A2 production during late pregnancy in streptozotocin-induced diabetic rats. Chartrel N, et al. **Prostaglandins** 1989 Jun;37(6):695–706

cAMP dependent inhibition of thromboxane A2, prostacyclin and PGF2 alpha synthesis in mouse hepatocytes. Mandl J, et al. **Prostaglandins** 1988 Dec;36(6):761–72

Influence of a plasma fraction of human blood, rich in high density lipoprotein, on in vitro formation of prostaglandin I2 (PGI2) and thromboxane A2 (TXA2). Beitz J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jan; 35(1):37–9

Prostaglandin and thromboxane biosynthesis in isolated platelet-free human monocytes. III. The induction of cycloxygenase by colony stimulating factor-1. Orlandi M, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 May; 36(2):101–6

Comparative effects on TXA2 biosynthesis of products extracted from Lippia multiflora Moldenke leaves. Pham HC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Nov;34(2):83–8

Changes of prostacyclin and thromboxane synthesis in the course of mouse liver perfusion. Stimulated thromboxane A2 synthesis of freshly prepared isolated mouse hepatocytes. Spolarics Z, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 May; 36(2):107–12

Relative effects of flurbiprofen on platelet 12-hydroxy-eicosatetraenoic acid and thromboxane A2 production: influence on collagen-induced platelet aggregation and adhesion. Van Ryan-McKenna J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(3):171–4

Measurements of the in vivo synthesis of thromboxane and prostacyclin in humans. Vesterqvist O. **Scand J Clin Lab Invest** 1988 Sep;48(5):401–7 (23 ref.)

Prostacyclin and thromboxane production by autogenous femoral veins grafted into the arterial circulation of the dog. de Castellarnau C, et al. **Thromb Haemost** 1989 Apr 25;61(2):279–85

[Effect of cigarette smoking on platelet–thromboxane A2 and arterial–prostacyclin synthesis in rats] Fukuda S, et al. **Kokyu To Junkan** 1988 Oct;36(10):1105–8 (Eng. Abstr.) **(Jpn)**

BLOOD

Pathogenesis of cardiovascular disorders in streptozotocin–induced diabetes in rat. II. Correlation between lipid peroxides, thromboxane A2/prostacyclin, and platelet aggregation in different stages of diabetes. Somova L, et al. **Acta Physiol Pharmacol Bulg** 1988; 14(3):57–62

Vasospasm and injuries of cerebral arteries induced by activation of platelets in vivo: it may be due to thromboxane A2. Yamazaki H, et al.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:289–92

Noncardiogenic pulmonary edema after abdominal aortic aneurysm surgery. Paterson IS, et al. **Ann Surg** 1989 Feb; 209(2):231–6

The temporal relationship in arterial and venous prostacyclin and thromboxane activity during 24 hours of intraaortic balloon counterpulsation in dogs. Hoover EL, et al.
Ann Thorac Surg 1988 Dec;46(6):661–5

Photoaffinity labelling of the human platelet thromboxane A2/prostaglandin H2 receptor. Mais DE, et al.
Biochim Biophys Acta 1989 Jul 11;1012(2):184–90

Platelet desensitization by arachidonic acid is associated with the suppression of endoperoxide/thromboxane A2 binding to the membrane receptor. Sato T, et al.
Biochim Biophys Acta 1989 Aug 18;992(2):168–73

Beta blockers inhibit fetal thromboxane A2 production in vitro. Viinikka L, et al. **Biol Neonate** 1988;54(3):169–72

Influence of drugs on the TXA2/PGI2 balance and on the atherogenic index in myocardial ischemia in dogs. Beitz A, et al. **Biomed Biochim Acta** 1988;47(10–11):S149–52

Desensitisation of human platelets against stimulation by thromboxane mimics—reduction in receptor capacity and loss of functional response. Thierauch KH, et al.
Biomed Biochim Acta 1988;47(10–11):S75–8

Effect of smoke inhalation injury on thromboxane levels and platelet counts. Huang YS, et al. **Burns Incl Therm Inj** 1988 Dec;14(6):440–6

Platelet thromboxane A2 synthesizing capacity is enhanced by fasting but diminished by diabetes mellitus in the rat. Jeremy JY, et al. **Diabetes Res** 1988 Aug;8(4):177–81

Iron chelators inhibit human platelet aggregation, thromboxane A2 synthesis and lipoxygenase activity. Barradas MA, et al. **FEBS Lett** 1989 Mar 13;245(1–2):105–9

Prothrombotic cytotoxicity of cyanoacrylate tissue adhesive. Papatheofanis FJ. **J Surg Res** 1989 Oct;47(4):309–12

The role of neural and vasoactive mediators in the regulation of the pulmonary circulation during cardiopulmonary preservation. Mashburn JP, et al.
J Thorac Cardiovasc Surg 1989 Sep;98(3):434–42; discussion 442–3

The use of aspirin to prevent pregnancy–induced hypertension and lower the ratio of thromboxane A2 to prostacyclin in relatively high risk pregnancies. Schiff E, et al. **N Engl J Med** 1989 Aug 10;321(6):351–6

Regulation of thromboxane receptor activation in human platelets. Murray R, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):124–8

Altered membrane fatty acid composition and increased thromboxane A2 generation in platelets from patients with diabetes. Prisco D, et al.
Prostaglandins Leukot Essent Fatty Acids 1989 Jan; 35(1):15–23

Platelet thromboxane A2 receptors in habitual smokers. Modesti PA, et al. **Thromb Res** 1989 Jul 15;55(2):195–201

[Effects of sodium ferulate on platelet aggregation and platelet thromboxane A2 in patients with coronary heart disease] Gao SW, et al.
Chung Hsi I Chieh Ho Tsa Chih 1988 May;8(5):263–5, 259 (Eng. Abstr.) **(Chi)**

[The study of thromboxane A2 and prostacyclin in oleic acid–induced lung injury in dogs] Cui SH.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1989 Feb; 12(1):24–6, 61 (Eng. Abstr.) **(Chi)**

[Experimental study of atherosclerosis. II. The effect of 8501 on the balance between thromboxane A2 and prostacyclin in preventing experimental atherosclerosis of rabbits] Wang Z. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec;10(6):421–5 (Eng. Abstr.) **(Chi)**

[Increase of the prostacyclin/thromboxane A2 ratio in the plasma of rabbits treated with cicletanine, a new antihypertensive agent] Deby C, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:97–9 (Eng. Abstr.) **(Fre)**

[Connection between plasma thromboxane and prostacyclin levels in the metabolic control of diabetic children] Orosz L, et al. **Orv Hetil** 1989 Jan 15;130(3):125–8 (30 ref.) (Eng. Abstr.) **(Hun)**

CHEMICAL SYNTHESIS

Developments of TXA2 antagonists. Hamanaka N.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:663–5

METABOLISM

Low density lipoprotein–mediated endothelial cell perturbation: effects on endothelial cell eicosanoid metabolism. Miano JM, et al.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:248–54 (65 ref.)

Glomerular responses to platelet–activating factor in the rat: role of thromboxane A2. Badr KF, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F35–43

Evidence for functional thromboxane A2–prostaglandin H2 receptors in human placenta. Hedberg A, et al.
Am J Physiol 1989 Feb;256(2 Pt 1):E256–63

Prostaglandin synthesis and release by subpopulations of rat interstitial macrophages. Chandler DB, et al.
Am Rev Respir Dis 1988 Oct;138(4):901–7

The role of cyclooxygenase products in the acute airway obstruction and airway hyperreactivity of ponies with heaves. Gray PR, et al. **Am Rev Respir Dis** 1989 Jul; 140(1):154–60

The affinities of prostaglandin H2 and thromboxane A2 for their receptor are similar in washed human platelets. Mayeux PR, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):733–9

Fish oil affects phosphoinositide turnover and thromboxane A metabolism in cultured vascular muscle cells. Locher R, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):279–83

Fractional conversion of thromboxane A2 and B2 to urinary 2,3–dinor–thromboxane B2 and 11–dehydrothromboxane B2 in the cynomolgus monkey. Patrignani P, et al.
Biochim Biophys Acta 1989 Jul 21;992(1):71–7

Thromboxane A2 receptor antagonists. II. Synthesis and pharmacological activity of 6,6–dimethylbicyclo[3.1.1]heptane derivatives with the benzenesulfonylamino group. Seno K, et al.
Chem Pharm Bull (Tokyo) 1989 Apr;37(4):948–54

Eicosanoid biosynthesis and action: novel opportunities for pharmacological intervention. Nicosia S, et al.
FASEB J 1989 Jun;3(8):1941–8 (44 ref.)

Prompt elevations of PGE2 and thromboxane A2 metabolites in peripheral node efferent lymph of sheep following drainage area immunization. Moore TC, et al.
Immunopharmacology 1989 Mar–Apr;17(2):73–80

Prostaglandin I2 and thromboxane A2 production in relation to alpha 1 and alpha 2–adrenoreceptor activation in the normotensive and hypertensive rat. Pipili E, et al.
J Auton Pharmacol 1988 Dec;8(4):333–42

Thromboxane–mediated hypertension and vascular leakage evoked by low doses of Escherichia coli hemolysin in rabbit lungs. Seeger W, et al. **J Clin Invest** 1989 Jul;84(1):220–7

Alterations of the cardiovascular and renal prostaglandins and thromboxanes system in prehypertensive spontaneously hypertensive rats. Ishimitsu T, et al. **Jpn Circ J** 1989 Apr; 53(4):307–12

Effect of a novel thromboxane A2 receptor antagonist, S–145, on collagen–induced ECG changes and thrombocytopenia in rodents. Hori Y, et al. **Jpn J Pharmacol** 1989 Jun; 50(2):195–205

An increase in the ratio of thromboxane A2 to prostacyclin in association with increased blood pressure in patients on cyclosporine A. Förstermann U, et al. **Prostaglandins** 1989 May;37(5):567–75

Re: Cyclosporine A nephrotoxicity the role of thromboxane A2 [letter] **Prostaglandins Leukot Essent Fatty Acids** 1988; 33(3):253–5

Re: Cyclosporine A nephrotoxicity. The role of thromboxane A2 [letter] Grace AA.
Prostaglandins Leukot Essent Fatty Acids 1988;34(3):239

[Prostacyclin and thromboxane in obstetrics] Liu LL.
Chung Hua Fu Chan Ko Tsa Chih 1988 Mar;23(2):110–2 (17 ref.) **(Chi)**

[The participation of the sympathetic nervous system in thromboxane A2 release induced by limb ischemia] Sakio H, et al. **Masui** 1989 Feb;38(2):211–5 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Phospholipase C activation by prostaglandins and thromboxane A2 in cultured mesangial cells. Mené P, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1059–69

Thromboxane mediation of pulmonary hemodynamic responses after neutralization of heparin by protamine in pigs. Conzen PF, et al. **Anesth Analg** 1989 Jan;68(1):25–31

Direct activation by prostaglandin F2 alpha but not thromboxane A2 of glycogenolysis via an increase in inositol 1,4,5–trisphosphate in rat hepatocytes. Athari A, et al. **Biochem Biophys Res Commun** 1989 Sep 29; 163(3):1235–42

The effect of naftidrofuryl on PGF2 alpha, U 46.619, 5–HT and thromboxane A2 (TXA2) induced vasoconstriction. Verheggen R, et al. **Biomed Biochim Acta** 1988; 47(10–11):S264–7

Effect of early and advanced atherosclerosis on vascular responses to serotonin, thromboxane A2, and ADP. Lopez JA, et al. **Circulation** 1989 Mar;79(3):698–705

Involvement of thromboxane and leukotriene in arachidonate induced coronary constriction in diabetic rats. Takiguchi Y, et al. **Diabetologia** 1989 Jun;32(6):337–41

Thromboxane A2 activates phospholipase C in astrocytoma cells via pertussis toxin–insensitive G–protein. Nakahata N, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):407–17

Mechanisms of hypotension produced by platelet–activating factor. Laurindo FR, et al. **J Appl Physiol** 1989 Jun; 66(6):2681–90

Thromboxane mimetics enhance adrenergic neurotransmission in the rabbit–isolated portal vein. Stein EA, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):469–74

Leukotriene antagonists attenuate thromboxane–inducible pulmonary hypertension. Soifer SJ, et al. **Pediatr Res** 1989 Aug;26(2):83–7

Regulatory effects of eicosanoids on thymidine uptake by vascular smooth muscle cells of rats. Uehara Y, et al.
Prostaglandins 1988 Dec;36(6):847–57

A possible mechanism of airway hyperresponsiveness induced by prostaglandin F2 alpha and thromboxane A2. Aizawa H, et al.
Prostaglandins Leukot Essent Fatty Acids 1988 Sep; 33(3):185–9

Influence of the thromboxane–mimetic U–46619 and the prostacyclin metabolite 6–keto prostaglandin E1 on vasoconstriction induced by noradrenaline and 5–HT in rat mesenteric vasculature. Stanton BJ, et al.
Prostaglandins Leukot Essent Fatty Acids 1988 Jul; 33(1):7–12

Thromboxane A2 Mediates Hemodynamic and Respiratory Dysfunction in Graded Bacteremia [letter] Slotman GJ. **Surgery** 1989 Jun;105(6):810–1

PHYSIOLOGY

Role of eicosanoids in the cardiovascular system. Wennmalm A. **Acta Physiol Pol** 1988 Jul–Aug;39(4):217–24 (30 ref.)

Intracellular mechanisms of the effect of thromboxane A2 on water transport. Escalante B, et al.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:229–32

Role of thromboxane A2 in myocardial ischemia and circulatory shock. Lefer AM.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:321–6

Role of TXA2 in the pathogenesis of severe angiotensin II–salt hypertension. Mistry M, et al.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:207–10

The role of thromboxane A2 in experimental and human models of chronic glomerular damage. Patrono C, et al.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:199–202 (10 ref.)

Interactions of thromboxane A2 and prostaglandin E2 in the control of glomerular mesangial responses. Dunn MJ, et al. **Am J Nephrol** 1989;9 Suppl 1:7–12

Thromboxane A2 and serotonin mediate coronary blood flow reductions in unsedated dogs. Eidt JF, et al.
Am J Physiol 1989 Sep;257(3 Pt 2):H873–82

Endothelin–induced mobilization of Ca2+ and the possible involvement of platelet activating factor and thromboxane A2. Takayasu M, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):751–7

Role of thromboxane in interleukin 2–induced lung injury in sheep. Klausner JM, et al. **Cancer Res** 1989 Jul 1; 49(13):3542–9

Role of thromboxane A2 in the control of myocardial O2 supply/consumption balance and severity of ischemia during pacing–induced ischemia. Grover GJ, et al.
Circ Res 1989 Mar;64(3):575–82

Thromboxane A2 mediates increased pulmonary microvascular permeability following limb ischemia. Klausner JM, et al. **Circ Res** 1989 Jun;64(6):1178–89

Systemic and regional hemodynamic effects of cyclo–oxygenase and thromboxane synthetase inhibition in normal and hyperdynamic endotoxemic rabbits. Fink MP, et al. **Circ Shock** 1988 Sep;26(1):41–57

Simultaneous administration of thromboxane A2– and serotonin S2–receptor antagonists markedly enhances thrombolysis and prevents or delays reocclusion after tissue–type plasminogen activator in a canine model of coronary thrombosis. Golino P, et al. **Circulation** 1989 Apr; 79(4):911–9

Local platelet activation causes vasoconstriction of large epicardial canine coronary arteries in vivo. Thromboxane A2 and serotonin are possible mediators. Golino P, et al.
Circulation 1989 Jan;79(1):154–66

Role of thromboxane A2 as a mediator of platelet–activating–factor–induced aggregation of human platelets. McCulloch RK, et al. **Clin Sci** 1989 Jul; 77(1):99–103

Role of thromboxane receptors in Forssman shock in guinea pigs. Schumacher WA, et al. **J Appl Physiol** 1989 Jul; 67(1):44–51

Elevation of cytosolic free Ca2+ is directly evoked by thromboxane A2 in human platelets during activation with collagen. Moriyama T, et al. **J Biochem (Tokyo)** 1988 Jun; 103(6):901–2

Role of serotonin, histamine, and thromboxane A2 in platelet–induced contractions of coronary arteries and aortae from rabbits. Awano K, et al.
J Cardiovasc Pharmacol 1989 May;13(5):781–92

Enhanced glomerular thromboxane A2 mediates some pathophysiologic effect of platelet–activating factor in rabbit nephrotoxic nephritis: evidence from biochemical measurements and inhibitor trials. Macconi D, et al.
J Lab Clin Med 1989 May;113(5):549–60

Platelet–generated thromboxane A2 enhances norepinephrine release from adrenergic nerves. Trachte GJ, et al.
J Pharmacol Exp Ther 1988 Dec;247(3):1139–45

Effect of thromboxane synthesis inhibition in a model of membranous nephropathy. Thaiss F, et al. **Kidney Int** 1989 Jan;35(1):76–83

The role of thromboxane A2 (TxA2) in allergic cutaneous reactions and the effect of (E)-3-[p-(1H-imidazol-1-ylmethyl) phenyl]-2-propenoic acid hydrochloride (OKY-046), a TxA2 synthetase inhibitor. Nagai H, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Mar; 35(3):125–30

SECRETION

Release of thromboxane A2 by low-dose almitrine in the hypoxic dog. Chuma R, et al. **Eur Respir J** 1988 Aug; 1(8):706–10

ATP-evoked Ca2+ mobilisation and prostanoid release from astrocytes: P2-purinergic receptors linked to phosphoinositide hydrolysis. Pearce B, et al. **J Neurochem** 1989 Mar;52(3):971–7

[Increased thromboxane A2 release after tourniquet ischemia in patients with lower limb surgery] Sakio H, et al. **Masui** 1988 Oct;37(10):1224–7 (Eng. Abstr.) (Jpn)

URINE

[Effect of a specific antagonist of platelet-activating factor, FR-900452, on proteinuria and urinary thromboxane excretion in aminonucleoside nephrotic rats] Suzuki S, et al. **Nippon Jinzo Gakkai Shi** 1988 Aug;30(8):985–90 (Eng. Abstr.) (Jpn)

THROMBOXANE B2

ANALOGS & DERIVATIVES

Radioimmunoassay of 11-dehydro-thromboxane B2 using monoclonal antibody. Hayashi Y, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:688–91

A simple purification method for quantitation of eicosanoids, in biological specimens by gas chromatography/selected ion monitoring. Miyazaki H, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:684–7

Fractional conversion of thromboxane B2 to urinary 11-dehydrothromboxane B2 in man. Ciabattoni G, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):66–70

Fractional conversion of thromboxane A2 and B2 to urinary 2,3-dinor-thromboxane B2 and 11-dehydrothromboxane B2 in the cynomolgus monkey. Patrignani P, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):71–7

Dimethylisopropylsilyl ether derivative in gas chromatography/mass spectrometry of 11-dehydrothromboxane B2. Ishibashi M, et al. **Biomed Environ Mass Spectrom** 1988 Aug;17(2):133–5

Microdetermination of 11-dehydrothromboxane B2 in human urine by gas chromatography-selected-ion monitoring. Watanabe K, et al. **J Chromatogr** 1989 May 12;468:383–94

Increased urinary excretion of thromboxane B2 and 2,3-dinor-TxB2 in cyclosporin A nephrotoxicity. Benigni A, et al. **Kidney Int** 1988 Aug;34(2):164–74

A new method using simple solid phase extraction for the rapid gas-chromatographic mass-spectrometric determination of 11-dehydro-thromboxane B2 in urine. Lorenz R, et al. **Prostaglandins** 1989 Aug;38(2):157–70

[Changes in urinary immunoreactive-TXB2 and 2,3-dinor TXB2 in man following cardiopulmonary bypass] Arima T, et al. **Masui** 1989 Apr;38(4):512–6 (Eng. Abstr.) (Jpn)

ANALYSIS

A simple purification method for quantitation of eicosanoids, in biological specimens by gas chromatography/selected ion monitoring. Miyazaki H, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:684–7

An enzyme-linked immunoassay for thromboxane B2 and 6-oxo-PGF1 alpha using peroxidase as label. Giessler C, et al. **Biomed Biochim Acta** 1988;47(10–11):S137–9

Specific radioactivity determination of labeled eicosanoids. Do UH, et al. **J Chromatogr** 1989 Apr 14;489(2):359–63

The prostaglandin outflow from perfused mesenteric vasculature of rats fed different fats. Huang YS, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Feb; 35(2):73–9

Determination of leukotriene B4, 6-keto-prostaglandin F1 alpha and thromboxane B2 in peritoneal lavage fluid of sham-operated and adrenalectomized rats. Vincent JE, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Sep; 33(3):203–4

LTC4, thromboxane B2 and 6-keto PGF1 in syngeneic and allogenic heterotopic cardiac transplant in rats. Pepino P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):442

Thromboxane B2 and lung transplantation: correlation of rejection with levels detected in bronchoalveolar lavage. Santillan-Doherty P, et al. **Transplant Proc** 1989 Aug; 21(4):3650–2

[Thromboxane B2 (125I) radioimmunoassay and its clinical uses] Yang MF. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct; 8(10):627 (Chi)

[Enzyme immunoassay for thromboxane B2] Giesaler C, et al. **Z Med Lab Diagn** 1989;30(3):175–9 (Eng. Abstr.) (Ger)

ANTAGONISTS & INHIBITORS

Low-dose aspirin inhibits thromboxane, but not prostacyclin, production by human placental arteries. Thorp JA, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1381–4

Vasodilating prostaglandins attenuate ischemic renal injury only if thromboxane is inhibited. Klausner JM, et al. **Ann Surg** 1989 Feb;209(2):219–24

BIOSYNTHESIS

Effects of Gramoxone-induced reactive oxygen radicals on eicosanoid synthesis of mouse lung. Matkovics B, et al. **Acta Biol Hung** 1988;39(4):351–9

Effects of antirheumatic drugs on leukotriene B4 and prostanoid synthesis in human polymorphonuclear leukocytes in vitro. Moilanen E, et al. **Agents Actions** 1988 Jul;24(3–4):387–94

Functional characteristics of macrophages in glomerulonephritis in the rat. O2- generation, MHC class II expression, and eicosanoid synthesis. Cook HT, et al. **Am J Pathol** 1989 Feb;134(2):431–7

Dietary protein intake modulates glomerular eicosanoid production in the rat. Don BR, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F711–8

Prostaglandin formation in the hypothalamus in vivo: effect of pyrogens. Sirko S, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R616–24

Eicosanoid production in isolated perfused lungs stimulated by calcium ionophore A23187. Westcott JY, et al. **Am Rev Respir Dis** 1988 Oct;138(4):895–900

Influence of phentolamine on platelet aggregation, thromboxane B2 production and release reaction. Anfossi G, et al. **Arch Int Pharmacodyn Ther** 1988 Nov-Dec; 296:144–54

Kallikrein stimulates arachidonic acid release and production of prostaglandins from TEA3A1 endocrine thymic epithelial cells. Sun L, et al. **Biochem J** 1989 Mar 1; 258(2):351–5

Synergism between chemotactic peptide and platelet-activating factor in stimulating thromboxane B2 and leukotriene B4 biosynthesis in human neutrophils. Tanizawa H, et al. **Biochem Pharmacol** 1989 Aug 1; 38(15):2559–63

The relation between thromboxane and prostaglandin synthesis in human decidua tissue: a comparison of eicosanoid synthesis in minced tissue with that in a cell-free preparation. Asbóth G, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):101–8

Output and effects of thromboxane produced by the liver perfused with phorbol myristate acetate. Tran-Thi TA, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1179–84

Cyclooxygenase products formed by primary cultures of cells from human chorion laeve: influence of steroids. Gibb W, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):788–93

Evidence for prostanoid biosynthesis as a biochemical feature of certain subclasses of non-small cell carcinomas of the lung as determined in established cell lines derived from human lung tumors. Hubbard WC, et al. **Cancer Res** 1989 Feb 15;49(4):826–32

Inhibitory effects of anisodamine on endotoxin-induced prostaglandin production by cells in culture. Xiao DM, et al. **Chin Med J [Engl]** 1988 Dec;101(12):871–5

Increased thromboxane biosynthesis during coronary thrombolysis. Evidence that platelet activation and thromboxane A2 modulate the response to tissue-type plasminogen activator in vivo. Fitzgerald DJ, et al. **Circ Res** 1989 Jul;65(1):83–94

Platelet thromboxane formation capacity after ethanol withdrawal in chronic alcoholics. Hillbom M, et al. **Haemostasis** 1988;18(3):170–8

Effect of contrast media on prostaglandin synthesis in vivo. Parvez Z, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S178–81

Evidence for coordinate, selective regulation of eicosanoid synthesis in platelet-derived growth factor-stimulated 3T3 fibroblasts and in HL-60 cells induced to differentiate into macrophages or neutrophils. Goerig M, et al. **J Biol Chem** 1988 Dec 25;263(36):19384–91

On the mechanism of prostacyclin and thromboxane A2 biosynthesis. Hecker M, et al. **J Biol Chem** 1989 Jan 5; 264(1):141–50

Interleukin 1 stimulates production of LTC4 and other eicosanoids by macrophages. Censini S, et al. **Lymphokine Res** 1989 Summer;8(2):107–14

Thrombin inhibits the synthesis of prostanoids by isolated glomeruli and peritoneal macrophages in rats. Podjarny E, et al. **Nephron** 1989;53(1):50–3

Ischemia alters cerebral vascular responses to hypercapnia and acetylcholine in piglets. Leffler CW, et al. **Pediatr Res** 1989 Feb;25(2):180–3

Effects of gangliosides on the formation of eicosanoids in rat brain cerebral ischemia and reperfusion. Bertazzo A, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:95–8

Lipid mediator production by post-implantation rat embryos in vitro. Geissler FT, et al. **Prostaglandins** 1989 Aug; 38(2):145–55

The production of C3, PGE2 and TxB2 by splenic, alveolar, and peritoneal guinea pig macrophages. Ogle CK, et al. **Prostaglandins** 1988 Sep;36(3):279–89

The oral gold compound auranofin triggers arachidonate release and cyclooxygenase metabolism in the alveolar macrophage. Peters-Golden M, et al. **Prostaglandins** 1988 Dec;36(6):773–86

Influence of propranolol on platelet aggregation and thromboxane B2 production from platelet-rich plasma and whole blood. Anfossi G, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):1–7

Eicosanoid synthesis by alveolar macrophages in rats with malignant mammary tumors: differences in rats treated with and without carrageenan implants. Kort WJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Aug; 37(2):113–20

OKY-046 inhibits thromboxane synthesis with no effect on brain edema and neurological status in head traumatized rats. Shapira Y, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):49–55

Glucocorticoid-treatment does not influence the synthesis of thromboxane B2 and bicyclo-PGE2 in humans. Sinzinger H, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Mar; 35(3):135–9

Effect of onion and ginger consumption on platelet thromboxane production in humans. Srivastava KC. **Prostaglandins Leukot Essent Fatty Acids** 1989 Mar; 35(3):183–5

Prostacyclin and thromboxane production by autogenous femoral veins grafted into the arterial circulation of the dog. de Castellarnau C, et al. **Thromb Haemost** 1989 Apr 25;61(2):279–85

PAF-induced platelet aggregation and TXB2 formation [letter] Küster LJ, et al. **Thromb Res** 1989 Jan 1;53(1):89–90

Thromboxane synthesis inhibition and renal allograft function. Anderson C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1161–4

In vitro tests on macrophage prostaglandin E2 and thromboxane B2 production after blood transfusion. Ogle CK, et al. **Transplant Proc** 1988 Dec;20(6):1179–83

Effect of verapamil on glomerular filtration rate and glomerular prostaglandin production during cyclosporine administration. Bunke M, et al. **Transplantation** 1988 Dec; 46(6):919–21

Equine postanaesthetic myositis: thromboxanes, prostacyclin and prostaglandin E2 production. Serteyn D, et al. **Vet Res Commun** 1988;12(2–3):219–26

[Correlation of platelet aggregation, platelet cAMP content and TXB2 synthesis in patients with diabetes mellitus] Chen SY. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;68(10):561–4, 38 (Eng. Abstr.) (Chi)

[Effects of oxyfedrine on platelet thromboxane A2 and aorta prostacyclins formations] Fu JM, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):433–7 (Eng. Abstr.) (Chi)

[The effect of anisodamine on endotoxin-stimulated prostaglandin synthesis by macrophages and endothelial cells] Xiao DM, et al. **Yao Hsueh Hsueh Pao** 1988 May; 23(5):327–31 (Eng. Abstr.) (Chi)

[Synthesis of prostanoids in the gastric and duodenal mucosa of healthy subjects] Baraldini M, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):985–92 (Eng. Abstr.) (Ita)

BLOOD

Enzyme immunoassay of thromboxane B2 using immobilized hapten and enzyme amplification. Houtz P, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:678–83

Prostaglandin and thromboxane concentrations in plasma and lung lavage fluids during sequential infection of vaccinated and nonvaccinated calves with bovine respiratory syncytial virus. Gershwin LJ, et al. **Am J Vet Res** 1989 Aug; 50(8):1254–62

Vitamin E intake affects serum thromboxane and tissue essential fatty acid composition in the rat. Cunnane SC. **Ann Nutr Metab** 1988;32(2):90–6

The effect of prior elevation of skin flaps and ischemia on blood thromboxane levels. Angel MF, et al. **Ann Plast Surg** 1989 Jun;22(6):501–4

Reduced platelet aggregability and increased vascular prostacyclin formation in a variant rat strain (IVA-SIV) with endogenous hypertriglyceridemia. Lovati MR, et al. **Atherosclerosis** 1988 Nov;74(1–2):169–77

Appearance of prostaglandins, thromboxane B2, and hepoxilin A3 in the circulation of the normal and diabetic (BB) rat after arachidonic acid administration—correlation with plasma insulin. Pace-Asciak CR, et al. **Biochem Cell Biol** 1988 Aug;66(8):901–9

Plasma catecholamines and production of thromboxane B2 by platelets after psychological and physical tests in normotensive and mild hypertensive subjects. Vapaatalo H, et al. **Biomed Biochim Acta** 1988;47(10–11):S294–8

Association of transient ischaemic attack in alcohol withdrawal with changes in haemostasis. Neiman J. **Br J Addict** 1988 Dec;83(12):1457–9

Plasma eicosanoids, platelet function and cold sensitivity. Wilkinson D, et al. **Br J Surg** 1989 Apr;76(4):401–5

Effect of smoke inhalation injury on thromboxane levels and platelet counts. Huang YS, et al. **Burns Incl Therm Inj** 1988 Dec;14(6):440–6

Prostacyclin and thromboxane in pregnancy-induced hypertension. Yang CS, et al. **Chin Med J [Engl]** 1988 Dec; 101(12):906–10

In vivo measurement of thromboxane B2 and 6-keto-prostaglandin F1 alpha in humans in response to

a standardized vascular injury and the influence of aspirin. Gerrard JM, et al. **Circulation** 1989 Jan;79(1):29–38

A reassessment of the bleeding time: association of age, hematocrit, platelet function, von Willebrand factor, and bleeding time thromboxane B2 with the length of the bleeding time. Gerrard JM, et al. **Clin Invest Med** 1989 Jun;12(3):165–71

Effect of gliclazide on thromboxane B2, parameters of haemostasis, fluorescent IgG and lipid peroxides in non–insulin dependent diabetes mellitus. Florkowski CM, et al. **Diabetes Res** 1988 Oct;9(2):87–90

The relationship of insulin antibodies, platelet–fixing immune complexes and platelet–associated IgG to in vitro platelet aggregation and thromboxane B2 synthesis in childhood type 1 (insulin–dependent) diabetes mellitus. Triolo G, et al. **Diabetes Res** 1989 Jan;10(1):1–5

Relevance of prostaglandins in true menstrual migraine. Nattero G, et al. **Headache** 1989 Apr;29(4):233–8

Healing of necrobiotic ulcers with antiplatelet therapy. Correlation with plasma thromboxane levels. Heng MC, et al. **Int J Dermatol** 1989 Apr;28(3):195–7

Differential inhibition by aspirin of platelet thromboxane and renal prostaglandins in the rat. Livio M, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):334–41

The role of neural and vasoactive mediators in the regulation of the pulmonary circulation during cardiopulmonary preservation. Mashburn JP, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):434–42; discussion 442–3

Influence of pressure, flow rate, and pulsatility on release of 6–keto–prostaglandin F1 alpha and thromboxane B2 in ex vivo perfused canine veins [letter] Dalessandri KM. **J Vasc Surg** 1989 May;9(5):747

Synthesis of thromboxane B2 and prostaglandin F2 alpha by human platelets after contact with biomaterials used in vascular surgery. Pizzoferrato A, et al. **Life Support Syst** 1983;1 Suppl 1:251–4

Piracetam as a potent inhibitor of plasma thromboxane B2 during hemodialysis [letter] Grekas D, et al. **Nephron** 1989; 52(4):372–3

Effect of cortisone treatment on blood prostanoid levels. Giorgis GE, et al. **Panminerva Med** 1988 Apr–Jun; 30(2):93–5

Effects of anisodamine on plasma levels of thromboxane B2 (TXB2) and 6–keto–prostaglandin F1 alpha (6–keto–PGF1 alpha) in rat with septic shock. Tao YP, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(2):116–7

Radioimmunoassay of thromboxane B2 and its preliminary applications. Wang Z, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(1):50–4

Development of an enzyme–linked immunosorbent assay of thromboxane B2 using a monoclonal antibody. Reinke M, et al. **Prostaglandins** 1989 May;37(5):577–86

Plasma thromboxane B2 levels and thromboxane B2 production by platelets are increased in patients during spinal and epidural anesthesia. Kaukinen S, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Aug; 37(2):83–8

Role of prostanoids in respiratory failure during circulatory shock of intestinal origin in dogs. Mózes T, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(3):189–94

Measurement of 6–keto–PGF1 alpha and thromboxane B2 levels in critically ill surgical patients. Vassar MJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Aug; 33(2):129–35

Effect of thromboxane synthase inhibition on eicosanoid levels and blood flow in ischemic rat brain. Pettigrew LC, et al. **Stroke** 1989 May;20(5):627–32

Radioimmunoassay of thromboxane B2 in plasma: methodological modifications. Rogasi PG, et al. **Thromb Res** 1988 Sep 1;51(5):533–41

Response of thromboxane B2, malondialdehyde and platelet sensitivity to 3 weeks low–dose aspirin (ASA) in healthy volunteers. Sinzinger H, et al. **Thromb Res** 1989 Feb 1; 53(3):261–9

Thromboxane flux and urinary eicosanoids as an index of reperfusion injury in pancreas transplantation after different periods of cold storage. Colomer J, et al. **Transplant Proc** 1988 Oct;20(5):1013–5

Experimental study on the relationship between prostaglandin production and acute pancreatic rejection. Hashimoto T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):505–6

The effects of cyclosporine on human platelet aggregation and thromboxane release. Jorkasky DK, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):948–9

Flunixin pharmacokinetics and serum thromboxane inhibition in the dog. McKellar QA, et al. **Vet Rec** 1989 Jun 24; 124(25):651–4

[Inhibitory effects of new–breviscapine on thrombosis in vivo] Wang ZY. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan;9(1):26–8, 6 (Eng. Abstr.) (Chi)

[Effects of anisodamine (654–2) on plasma levels of thromboxane B2, 6–keto–PGF1 alpha and platelet cAMP following cardiopulmonary bypass] Huang Y, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):669–71, 46 (Eng. Abstr.) (Chi)

[Effect of the leech on 6–keto–PGF1 alpha, TXB2, total cholesterol and triglycerides in experimental hyperlipemic rabbits] Wang DP, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Aug;27(8):472–5, 518 (Eng. Abstr.) (Chi)

[Changes in plasma 6–keto–PGF1 alpha, TXB2 lipid peroxides in acute cerebral infarction patients and the effects of Salvia miltiorrhiza on these three indices] Yu NC, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Oct; 27(10):596–9, 651 (Eng. Abstr.) (Chi)

[The changes in serum TXB2 and 6–keto–PGF1 alpha in 62 cases with renal disease] Zhang ZF, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jan;28(1):25–7, 62 (Eng. Abstr.) (Chi)

[Preliminary observation on plasma level of 5–HT, TXB2 and 6–keto–PGF1 alpha in TEPH] Xu SH. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Oct; 10(5):343–6 (Eng. Abstr.) (Chi)

[Effect of cardiac sympathetic nerves on changes of TXB2 and 6–keto–PGF1 alpha in venous blood of ischemic myocardium] Zhao ZQ, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):30–9 (Eng. Abstr.) (Chi)

[Changes in the level of prostanoids in blood during whole–body irradiation of rats] Navrátil L, et al. **Sb Lek** 1988 Oct;90(10):302–9 (Eng. Abstr.) (Cze)

[Collection, preparation and storage of human plasma for radioimmunologic determination of thromboxane B2] Nell A, et al. **Wien Klin Wochenschr** 1988 Nov 4;100(21):700–6 (Eng. Abstr.) (Ger)

[Defects in the prostaglandin system. VIII. A pathologic thrombocyte population in myeloproliferative syndrome, which forms no thromboxane from exogenous arachidonic acid] Sinzinger H, et al. **Wien Klin Wochenschr** 1988 Nov 4;100(21):715–8 (Eng. Abstr.) (Ger)

[Enzyme immunoassay for thromboxane B2] Hellthaler G, et al. **Z Med Lab Diagn** 1989;30(1):39–40 (Ger)

[Plasma PGE2, TXB2 and 6–keto PGF1 alpha levels in patients with Kawasaki disease] Sasai K. **Arerugi** 1988 Sep; 37(9):952–8 (Eng. Abstr.) (Jpn)

[Local changes in prostanoids in arteriosclerosis obliterans] Tsuchida H. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):605–14 (Eng. Abstr.) (Jpn)

[The changes in lipid peroxides in platelet, thromboxane B2 and 6–keto prostaglandin F1 alpha in patients with primary lung cancer] Ikeda S. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):579–86 (Eng. Abstr.) (Jpn)

[Usefulness of the tourniquet test in the evaluation of hemostasis. II. Activities of thromboxanes and prostacyclins in the early normal puerperium] Malofiejew M. **Ginekol Pol** 1988 Oct;59(10):613–7 (Eng. Abstr.) (Pol)

[The content of thromboxane B2 and 6–ketoprostaglandin F1 alpha of the blood plasma in patients with psoriasis and children with allergic dermatoses] Polkanov VS, et al. **Vestn Dermatol Venerol** 1989;(1):11–3 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

[Significance of trabeculae in subarachnoid hemorrhage. Measurement of bradykinin, fibrinopeptide A, and thromboxane B2 in cerebrospinal fluid] Kasuya H, et al. **Neurol Med Chir (Tokyo)** 1988 Sep;28(9):880–5 (Eng. Abstr.) (Jpn)

METABOLISM

Role of TXA2 in the pathogenesis of severe angiotensin II–salt hypertension. Mistry M, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:207–10

Selective inhibition of platelet thromboxane generation with low–dose aspirin does not protect rats with reduced renal mass from the development of progressive disease. Zoja C, et al. **Am J Pathol** 1989 May;134(5):1027–38

Renal metabolism and urinary excretion of thromboxane B2 in the rat. Benigni A, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):F77–85

Characterization of glomerular thromboxane receptor sites in the rat. Wilkes BM, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F1111–6

Substance P stimulates release of arachidonic acid cyclooxygenation products from primary culture rat astrocytes. Hartung HP, et al. **Ann N Y Acad Sci** 1988; 540:427–9

Effects of recombinant human interleukin–1 beta on rabbit articular chondrocytes. Stimulation of prostanoid release and inhibition of cell growth. Chin JE, et al. **Arthritis Rheum** 1988 Oct;31(10):1290–6

Prostaglandin E2, thromboxane B2, and leukotriene B4 release from peritoneal macrophages by different osmotic agents in nonuremic guinea pigs. Hain H, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):429–32

Fractional conversion of thromboxane B2 to urinary 11–dehydrothromboxane B2 in man. Ciabattoni G, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):66–70

Fractional conversion of thromboxane A2 and B2 to urinary 2,3–dinor–thromboxane B2 and 11–dehydrothromboxane B2 in the cynomolgus monkey. Patrignani P, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):71–7

Influence of the PG–analogues iloprost, nalador and nileprost on rejection time and TXB2 content of murine tail skin allografts. Becker K, et al. **Biomed Biochim Acta** 1988; 47(10–11):S117–20

Recombinant interleukin–1 beta stimulates eicosanoid production in rat primary culture astrocytes. Hartung HP, et al. **Brain Res** 1989 Jun 5;489(1):113–9

Effects of albumin on fatty acid, protein, and eicosanoid levels in rat mesenteric arterial bed perfusions. Jenkins DK, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):679–82

Output of prostanoids from rat lung following endotoxin and its modification by methylprednisolone. Izumi T, et al. **Circ Shock** 1989 May;28(1):9–21

Stimulation of thromboxane release by extracellular UTP and ATP from perfused rat liver. Role of icosanoids in mediating the nucleotide responses. Häussinger D, et al. **Eur J Biochem** 1988 Dec 1;178(1):249–56

Release of PAF–acether and eicosanoids from guinea–pig alveolar macrophages by FMLP: effect of cyclo–oxygenase and lipoxygenase inhibition. Fitzgerald MF, et al. **Eur J Pharmacol** 1989 May 30;164(3):539–46

Arterial 6–keto–PGF1 alpha and TxB2 release in ex vivo perfused canine vessels: effects of pulserate, pulsatility, altered pressure and flow rate. Brunkwall JS, et al. **Eur J Vasc Surg** 1989 Jun;3(3):219–25

Acute cigarette smoke exposure alters lung eicosanoid and inflammatory cell concentrations in rabbits. Witten ML, et al. **Exp Lung Res** 1988;14(6):727–42

Stimulation of release of prostaglandins and thromboxanes from isolated guinea pig lung cells by bradykinin, f–Met–Leu–Phe, phorbol myristate, ionophore A23187, and leukotrienes. Robidoux C, et al. **Inflammation** 1988 Aug; 12(4):285–95

Endotoxin–induced lung injury in rats: role of eicosanoids. Chang SW, et al. **J Appl Physiol** 1989 May;66(5):2407–18

Arachidonic acid metabolism in guinea pig eosinophils: synthesis of thromboxane B2 and leukotriene B4 in response to soluble or particulate activators. Sun FF, et al. **J Leukoc Biol** 1989 Aug;46(2):152–60

Experimental traumatic brain injury elevates brain prostaglandin E2 and thromboxane B2 levels in rats. Dewitt DS, et al. **J Neurotrauma** 1988;5(4):303–13

Effects of nicotine on eicosanoid synthesis of differentiating human promyelocytic leukemia cells. Goerig M, et al. **Klin Wochenschr** 1988;66 Suppl 11:117–9 (25 ref.)

Thromboxane B2 and 6–keto–prostaglandin F1 alpha [125I] radioimmunoassays and applications. Wang Z, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(4):209–12

Dynamics of prostacyclin and thromboxane during myocardial ischemia. Röth E, et al. **Prog Clin Biol Res** 1989;308:907–11

The effects of platelet–activating factor on flow rate and eicosanoid release in the isolated perfused rat gastric vascular bed. Dembinska–Kiec A, et al. **Prostaglandins** 1989 Jan;37(1):69–91

Elevation of thromboxane in pressure wounds. Vaughn DM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jul; 37(1):45–50

Prostaglandin profiles in relation to local circulatory changes following focal cerebral ischemia in cats. Hanamura T, et al. **Stroke** 1989 Jun;20(6):803–8

[Evaluation of various components of arachidonic acid metabolism of the subretinal fluid in aphakic eyes] Stankiewicz A, et al. **Klin Oczna** 1988 Jun;90(6):209–10 (Eng. Abstr.) (Pol)

PHARMACOLOGY

Prostaglandin and thromboxane in liposomes: suppression of the primary immune response to liposomal antigens. Wessef NM, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):565–72

Hormone studies in Myxine glutinosa: effects of the eicosanoids arachidonic acid, prostaglandin E1, E2, A2, F2 alpha, thromboxane B2 and of indomethacin on plasma cortisol, blood pressure, urine flow and electrolyte balance. Wales NA. **J Comp Physiol [B]** 1988;158(5):621–6

Vasoactive amines and eicosanoids interactively regulate both polymorphonuclear leukocyte diapedesis and albumin permeability in vitro. Doukas J, et al. **Microvasc Res** 1989 Mar;37(2):125–37

TXB2: cardiostimulant effect that involves beta–adrenoceptor and Na+ + K+–ATPase activity. Pascual J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul; 33(1):53–9

Leukotrienes and thromboxane B2 stimulate normal human melanocytes in vitro: possible inducers of postinflammatory pigmentation. Tomita Y, et al. **Tohoku J Exp Med** 1988 Nov;156(3):303–4

PHYSIOLOGY

Influence of the specific antagonist of PAF–acether, BN 52021, and of Ginkgo extract on the rejection of murine tail skin allografts and the PAF–acether mortality in mice in particular consideration of the role of TXB2. Becker K, et al. **Biomed Biochim Acta** 1988;47(10–11):S165–8

Effect of thromboxane synthesis inhibition in a model of membranous nephropathy. Thaiss F, et al. **Kidney Int** 1989 Jan;35(1):76–83

SECRETION

Release of eicosanoids in rat peritoneal cavity during the Arthus reaction. Effect of the PAF–antagonist BN–52021 and indomethacin. Jancar S, et al. **Int J Immunopharmacol** 1989;11(2):129–32

Prostaglandin E2 and thromboxane B2 release from human monocytes treated with bacterial lipopolysaccharide. Nichols FC, et al. **J Leukoc Biol** 1988 Nov;44(5):376–84

Effect of muscarinic receptor stimulation on release of cysteinyl-leukotrienes and thromboxane B2 from anaphylactic guinea-pig hearts. Wittmann G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):577–81

Chronological relationships between mediator release and changes in airway dynamics during an ascaris response in sensitive cynomolgus monkeys. Malo PE. **Prostaglandins Leukot Essent Fatty Acids** 1989 Feb; 35(2):105–11

URINE

Prostanoid response in the kidney of hypertensive subjects as part of renal counteraction to gallopamil-induced blood pressure decrease. Székács B, et al. **Acta Med Hung** 1988; 45(3–4):349–63

The role of eicosanoids in cyclosporine nephrotoxicity in the rat. Erman A, et al. **Biochem Pharmacol** 1989 Jul 1; 38(13):2153–7

Involvement of prostaglandins in the action of captopril in type II diabetic patients. Koev D, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):11–8

Renal excretion of prostanoids and cyclic AMP in chronic partial ureteral obstruction of the rabbit. Kekomäki M, et al. **J Urol** 1989 Feb;141(2):395–7

Increased urinary excretion of thromboxane B2 and 2,3-dinor-TxB2 in cyclosporin A nephrotoxicity. Benigni A, et al. **Kidney Int** 1988 Aug;34(2):164–74

The importance of urinary thromboxane B2 excretion in the diagnosis of acute renal rejection. Ortuño J, et al. **Nephrol Dial Transplant** 1988;3(3):305–11

Urinary amylase and immunoreactive metabolites of thromboxane B2 and 6keto-prostaglandin F1 alpha in rat pancreatic allograft rejection. Johnson BF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2788–90

Fine needle aspiration biopsy, serum beta 2-microglobulin, and urine thromboxane in renal allografts. Lim LK, et al. **Transplant Proc** 1989 Aug;21(4):3583–4

Urinary thromboxane B2 as indicator of pancreatic allograft rejection in nonimmunosuppressed dogs. Odor-Morales A, et al. **Transplant Proc** 1989 Aug;21(4):3646–9

[Obstructive nephropathy; kidney function and renal excretion of prostaglandin (E)2 and Thromboxane B(2) following percutaneous decompression nephropyelostomy] Weber T, et al. **Urologe [A]** 1988 Sep;27(5):269–74 (Eng. Abstr.) **(Ger)**

[Role of prostanoids in the control of renal function in normal potassium balance and in acute experimental potassium depletion. 4. Relation of extrarenal parameters, renal function parameters and urinary excretion of prostanoids] Agnoli GC, et al. **Boll Soc Ital Biol Sper** 1989 Apr; 65(4):329–35 (Eng. Abstr.) **(Ita)**

[Changes in urinary immunoreactive-TXB2 and 2,3-dinor TXB2 in man following cardiopulmonary bypass] Arima T, et al. **Masui** 1989 Apr;38(4):512–6 (Eng. Abstr.) **(Jpn)**

[Immunoreactive urinary thromboxane B2 in experimental mesenteric thrombosis in dogs] Herrera Hernández MF, et al. **Rev Invest Clin** 1989 Apr–Jun;41(2):123–7 (Eng. Abstr.) **(Spa)**

THROMBOXANE SYNTHETASE

ANTAGONISTS & INHIBITORS

Comparison of the effects on inhibition of cyclooxygenase and thromboxane synthetase on renal excretion and haemodynamics in rats of different ages. Bartha J, et al. **Acta Physiol Hung** 1989;73(1):29–37

Inhibition of kidney function after blockade of thromboxane synthetase by imidazole in anaesthetized rats. Pfeiffer L, et al. **Acta Physiol Hung** 1988;72(2):201–11

Inhibition of thromboxane responses in the airway of the cat by SQ29,548 and OKY 1581. Kadowitz PJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:535–8

Determination of the effects of inhibition of pulmonary thromboxane A2 synthase activity, in vivo and in vitro. McNamara DB, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:531–4

RS-5186, a novel, long-acting thromboxane synthetase inhibitor. Matsuda K, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:674–7

Effect of an oral thromboxane synthetase inhibitor (OKY-046) on antigen-induced bronchoconstriction in guinea pigs. Nambu F, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:528–30

The effect of thromboxane inhibition on vulnerability to ventricular fibrillation in the acute and chronic feline infarction models. O'Connor KM, et al. **Am Heart J** 1989 Apr;117(4):848–53

The protective effect of thromboxane synthetase inhibition on renal function in systemic sepsis. Cumming AD, et al. **Am J Kidney Dis** 1989 Feb;13(2):114–9

Erythrocyte morphologic features and serum chemistry studies in ovine pregnancy-induced hypertension treated with thromboxane synthetase inhibitors. Miller KW, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1241–6

Thromboxane synthetase inhibition in pregnancy-induced hypertension [letter] Van Assche FA, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):1015–6

Reduced myocardial neutrophil accumulation and infarct size following thromboxane synthetase inhibitor or receptor antagonist. Nichols WW, et al. **Angiology** 1989 Mar; 40(3):209–21

Dual effects of cyclosporine A on arachidonate metabolism by peritoneal macrophages. Phospholipase activation and partial thromboxane-synthase blockage. Sraer J, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1947–54

Influence of the thromboxane synthetase inhibitor HOE 944, prostacyclin and indomethacin on reperfusion arrhythmias, cardiodynamics and metabolism in isolated ischemic rat hearts. Linz W, et al. **Biomed Biochim Acta** 1988; 47(10–11):S23–6

Differential effects of tranylcypromine and imidazole on mammary carcinogenesis in rats fed low and high fat diets. McCormick DL, et al. **Cancer Res** 1989 Jun 15; 49(12):3168–72

Thromboxane A2 synthetase inhibitors. I. Syntheses and activities of various N-heteroaromatic derivatives. Kanao M, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):2968–76

Clinical effects of selective thromboxane A2 synthetase inhibitor in patients with nephrotic syndrome. Niwa T, et al. **Clin Nephrol** 1988 Nov;30(5):276–81

Selective inhibition of thromboxane synthetase reduces group-B-beta-hemolytic-streptococci-induced pulmonary hypertension in piglets. Hammerman C, et al. **Dev Pharmacol Ther** 1988;11(5):306–12

Thromboxane synthase inhibition enhances action of converting enzyme inhibitors. Levens NR, et al. **Hypertension** 1989 Jan;13(1):51–62

Inhibition of the cutaneous response to antigen by a thromboxane-synthetase inhibitor (OKY-046) in allergic dogs. Becker AB, et al. **J Allergy Clin Immunol** 1989 Aug; 84(2):206–13

Pharmacologic effects of Wy 27569: a combined calcium channel blocker and thromboxane synthetase inhibitor. Ennis C, et al. **J Cardiovasc Pharmacol** 1989 Apr; 13(4):511–9

High-performance liquid chromatography with fluorescence detection of dazmegrel, a specific thromboxane A2 synthetase inhibitor. Rebec MV, et al. **J Chromatogr** 1988 Nov 18;432:375–80

Prostaglandin endoperoxides modulate the response to thromboxane synthase inhibition during coronary thrombosis. Fitzgerald DJ, et al. **J Clin Invest** 1988 Nov; 82(5):1708–13

Phase I study of Y-20811, a new long-acting thromboxane synthetase inhibitor by intravenous administration. Kanamaru M, et al. **J Clin Pharmacol** 1989 Jun;29(6):563–7

Thromboxane synthase activity and platelet function after furegrelate administration in man. Mohrland JS, et al. **J Clin Pharmacol** 1989 Jan;29(1):53–8

Phase I study of Y-20811, a new long-acting thromboxane synthetase inhibitor by oral administration. Nakashima M, et al. **J Clin Pharmacol** 1989 Jun;29(6):568–76

Synthesis and thromboxane synthetase inhibitory activity of di- or tetrahydrobenzo[b]thiophenecarboxylic acid derivatives. Amemiya Y, et al. **J Med Chem** 1989 Jun; 32(6):1265–72

Thromboxane A2 synthetase inhibitors. 2. Syntheses and activities of tetrahydronaphthalene and indan derivatives. Kanao M, et al. **J Med Chem** 1989 Jun;32(6):1326–34

[(1H-imidazol-1-yl)methyl]- and [(3-pyridinyl)methyl]pyrroles as thromboxane synthetase inhibitors. Martinez GR, et al. **J Med Chem** 1989 Apr; 32(4):890–7

Effects of ozagrel (OKY-046), a thromboxane synthase inhibitor, on oxidative drug-metabolizing enzymes in mouse hepatic microsomes. Morita K, et al. **J Pharmacobiodyn** 1988 Jul;11(7):519–25

Endothelial injury provokes collateral arterial vasoconstriction: response to a serotonin 2 antagonist, thromboxane antagonist or synthetase inhibition. Hollenberg NK, et al. **J Pharmacol Exp Ther** 1988 Mar; 244(3):1164–8

Effects of the thromboxane synthesis inhibitor CGS-12970 on experimental acute renal allograft rejection. Mangino MJ, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):23–8

Pharmacological manipulation of inflammation in rabbit hydronephrosis: effects of a combined cyclooxygenase/lipoxygenase inhibitor ethoxyquin, a thromboxane synthase inhibitor RS-5186 and a PAF antagonist L-659,989. Spaethe SM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1308–16

Effects of thromboxane synthetase inhibition on patency and anastomotic hyperplasia of vascular grafts. Graham LM, et al. **J Surg Res** 1989 Jun;46(6):611–5

Antinephritic effect of OKY-046, a thromboxane A synthetase inhibitor (1). Effects on crescentic-type anti-GBM nephritis in rats. Nagamatsu T, et al. **Jpn J Pharmacol** 1989 Apr;49(4):501–9

Chronic thromboxane inhibition preserves function of rejecting rat renal allografts. Coffman TM, et al. **Kidney Int** 1989 Jan;35(1):24–30

Prior inhibition of vasoconstrictors normalizes GFR in postobstructed kidneys. Purkerson ML, et al. **Kidney Int** 1989 Jun;35(6):1305–14

Effect of thromboxane synthesis inhibition in a model of membranous nephropathy. Thaiss F, et al. **Kidney Int** 1989 Jan;35(1):76–83

Inhibition of pulmonary thromboxane A2 synthase activity and airway responses by CGS 13080. McNamara DB, et al. **Mol Cell Biochem** 1989 Jan 23;85(1):29–41

Clinical study of OKY-046, a thromboxane synthetase inhibitor, in prevention of cerebral vasospasms and delayed cerebral ischaemic symptoms after subarachnoid haemorrhage due to aneurysmal rupture: a randomized double-blind study. Suzuki S, et al. **Neurol Res** 1989 Jun; 11(2):79–88

Failure of thromboxane synthetase inhibition to protect the postinfarcted heart against the induction of ventricular tachycardia and ventricular fibrillation in a conscious canine model of sudden coronary death. Kitzen JM, et al. **Pharmacology** 1988;37(3):171–86

Inhibition of converting enzyme and thromboxane synthetase in a model of progressive renal disease; effects of enalapril and RS-86328 in the rat. Rosenkranz RP, et al. **Proc West Pharmacol Soc** 1988;31:81–5

The role of thromboxane A2 (TxA2) in allergic cutaneous reactions and the effect of (E)-3-[p-(1H-imidazol-1-ylmethyl) phenyl]-2-propenoic acid hydrochloride (OKY-046), a TxA2 synthetase inhibitor. Nagai H, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Mar; 35(3):125–30

A selective inhibitor of thromboxane synthetase activity of rabbit heart tissue: a pyridazinic derivative. Pham Huu Chanh, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Aug;33(2):143–7

Metabolic protection of the reperfused canine endocardium by the thromboxane synthetase inhibitor, dazoxiben. Pieper GM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul;33(1):13–22

OKY-046 inhibits thromboxane synthesis with no effect on brain edema and neurological status in head traumatized rats. Shapira Y, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):49–55

Effect of thromboxane synthase inhibition on eicosanoid levels and blood flow in ischemic rat brain. Pettigrew LC, et al. **Stroke** 1989 May;20(5):627–32

Inhibition of thromboxane synthetase accentuates hemodynamic instability and burn edema in the anesthetized sheep model. LaLonde C, et al. **Surgery** 1989 May;105(5):638–44

Interference with the prostaglandin system as a therapeutical concept to protect the myocardium during ischemic stress: experimental studies with inhibition of thromboxane synthesis. Korb H, et al. **Thorac Cardiovasc Surg** 1988 Aug; 36(4):187–93

R 68 070: thromboxane A2 synthetase inhibition and thromboxane A2/prostaglandin endoperoxide receptor blockade combined in one molecule—I. Biochemical profile in vitro. De Clerck F, et al. **Thromb Haemost** 1989 Feb 28;61(1):35–42

R 68 070: thromboxane A2 synthetase inhibition and thromboxane A2/prostaglandin endoperoxide receptor blockade combined in one molecule—II. Pharmacological effects in vivo and ex vivo. De Clerck F, et al. **Thromb Haemost** 1989 Feb 28;61(1):43–9

Effect of thromboxane synthetase inhibition on platelet function and morphology during ovine pregnancy-induced hypertension. Miller KW, et al. **Thromb Haemost** 1988 Dec 22;60(3):365–71

Effect of thromboxane synthase inhibition on the thrombolytic action of tissue-type plasminogen activator in a rabbit model of peripheral arterial thrombosis. Shebuski RJ, et al. **Thromb Res** 1988 Dec 1;52(5):381–92

RS-5186, a novel thromboxane synthetase inhibitor with a potent and extended duration of action. Ushiyama S, et al. **Thromb Res** 1988 Sep 1;51(5):507–20

Experimental model of chronic renal allograft rejection in rats and therapeutic efficacy of a new selective thromboxane A2 (TXA2) synthetase inhibitor (CV-4151). Tanabe K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):293–5

[Sodium ferulate is an inhibitor of thromboxane A2 synthetase] Wang Z, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):430–3 (Eng. Abstr.) **(Chi)**

[Effects of a selective thromboxane A2 synthetase inhibitor, OKY-046, on proteinuria of aminonucleoside nephrotic rats] Suzuki S, et al. **Nippon Jinzo Gakkai Shi** 1988 Apr; 30(4):341–6 (Eng. Abstr.) **(Jpn)**

[Thromboxane synthetase inhibitors. II. Optical resolution of 4-[alpha-hydroxy-5-(1-imidazolyl)-2-methylbenzyl]-3,5-dimethylbenzo ic acid] Tsuruda M, et al. **Yakugaku Zasshi** 1989 Jan;109(1):26–32 (Eng. Abstr.) **(Jpn)**

BLOOD

On the mechanism of prostacyclin and thromboxane A2 biosynthesis. Hecker M, et al. **J Biol Chem** 1989 Jan 5; 264(1):141–50

METABOLISM

Manipulation of cytochrome P-450 dependent renal thromboxane synthase activity in spontaneously

hypertensive rats. Sessa WC, et al. **J Hypertens** 1989 Jan; 7(1):37–42

PHARMACOLOGY

Thromboxane synthesis inhibitor in a beagle pup model of perinatal asphyxia. Ment LR, et al. **Stroke** 1989 Jun; 20(6):809–14

THERAPEUTIC USE

[Thromboxane synthetase inhibitor and prostacyclin analogue] Nakagawa M, et al. **Nippon Rinsho** 1989 Apr; 47(4):929–34 **(Jpn)**

THROMBOXANES

ANALYSIS

High performance liquid chromatography in the analysis of prostaglandins, thromboxanes and leukotrienes. Tavares IA. **Monogr Endocrinol** 1988;30:140–57 (102 ref.)

ANTAGONISTS & INHIBITORS

Protective effect of the specific thromboxane receptor antagonist, BM–13505, in reperfusion injury following acute myocardial ischemia in cats. Bhat AM, et al. **Am Heart J** 1989 Apr;117(4):799–803

Cyclical carotid artery flow reduction in conscious dogs: effect of a new thromboxane receptor antagonist. al–Wathiqui MH, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1482–7

Renal effects of nonsteroidal anti–inflammatory drugs and thromboxane receptor antagonists in chronic glomerular disease. Cinotti GA, et al. **Am J Nephrol** 1989;9 Suppl 1:47–50

Barbiturate anesthetics inhibit thromboxane–, potassium–, but not angiotensin–induced pulmonary vasoconstriction. McShane AJ, et al. **Anesthesiology** 1989 May;70(5):775–9

Role of eicosanoids in the kappa–carrageenin rat tail thrombosis. Bekemeier H, et al. **Biomed Biochim Acta** 1988; 47(10–11):S260–3

Beneficial effects of a thromboxane receptor antagonist (BM 13.505) on platelet hyperreactivity and thromboxane formation in cholesterol–fed rabbits. Löbel P, et al. **Biomed Biochim Acta** 1988;47(10–11):S86–9

Evidence for homogeneity of thromboxane A2 receptor using structurally different antagonists. Swayne GT, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):311–9

The thromboxane receptor antagonist, daltroban, protects the myocardium from ischaemic injury resulting in suppression of leukocytosis. Thiemermann C, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):57–67

Reduction of myocardial damage and polymorphonuclear leukocyte accumulation following coronary artery occlusion and reperfusion by the thromboxane receptor antagonist BM 13.505. Smith EF 3d, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):715–22

The effects of L655,240, a selective thromboxane and prostaglandin endoperoxide antagonist, on ischemia– and reperfusion–induced cardiac arrhythmias. Wainwright CL, et al. **J Cardiovasc Pharmacol** 1988 Sep;12(3):264–71

A leukotriene and thromboxane inhibitor (Sch 37224) blocks antigen–induced immediate and late responses and airway hyperresponsiveness in allergic sheep. Abraham WM, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1004–11

Endothelial injury provokes collateral arterial vasoconstriction: response to a serotonin 2 antagonist, thromboxane antagonist or synthetase inhibition. Hollenberg NK, et al. **J Pharmacol Exp Ther** 1988 Mar; 244(3):1164–8

Effect of thromboxane receptor antagonists on venous thrombosis in rats. Schumacher WA, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1109–15

Thromboxane antagonism in lupus nephritis [letter; comment] Kallenberg CG, et al. **N Engl J Med** 1989 Aug 3; 321(5):330–1. **Comment on:** N Engl J Med 1989 Feb 16;320(7):421–5

Efficacy of a combination thromboxane receptor antagonist and lipoxygenase inhibitor in traumatic shock. Levitt MA, et al. **Resuscitation** 1988 Jul;16(3):211–20

Teratogenicity of three substituted 4–biphenyls in the rat as a result of the chemical breakdown and possible metabolism of a thromboxane A2–receptor blocker. Sutherland MF, et al. **Teratology** 1989 Jun;39(6):537–45

[The role of inhibitors of thromboxane and prostaglandin on healing of deep partial thickness burns] Wang SL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):148–51 (30 ref.) **(Chi)**

BIOSYNTHESIS

Involvement of peptidoleukotrienes in antigen–dependent thromboxane (TX) synthesis in IgG1–sensitized guinea pig lungs. Cheng JB, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:187–90

Thromboxane production in placentas of women with preeclampsia [letter] Walsh SW. **Am J Obstet Gynecol** 1989 Jun;160(6):1535–6

Modulation of prostacyclin/thromboxane formation by molsidomine during platelet–endothelial cell interactions. Bordet JC, et al. **Biochem Pharmacol** 1988 Oct 15; 37(20):3911–4

Independent regulation of thromboxane and prostaglandin synthesis in liver macrophages. Dieter P, et al. **Biochem Pharmacol** 1989 May 15;38(10):1577–81

Anti–asthmatic effects of onions. Alk(en)ylsulfinothioic acid alk(en)yl–esters inhibit histamine release, leukotriene and thromboxane biosynthesis in vitro and counteract PAF and allergen–induced bronchial obstruction in vivo. Dorsch W, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4479–86

Prostaglandin and thromboxane synthesis by human intracranial tumors. Castelli MG, et al. **Cancer Res** 1989 Mar 15;49(6):1505–8

Effects of recombinant human tumor necrosis factor alpha, lymphotoxin, and Escherichia coli lipopolysaccharide on hemodynamics, lung microvascular permeability, and eicosanoid synthesis in anesthetized sheep. Kreil EA, et al. **Circ Res** 1989 Aug;65(2):502–14

Decreased systemic formation of prostaglandin E and prostacyclin, and unchanged thromboxane formation, in alcoholics during withdrawal as estimated from metabolites in urine [letter] Mikhailidis DP, et al. **Clin Sci** 1988 Nov; 75(5):559–60

Effects of eicosanoids inhibitors and thromboxane receptor antagonists in human glomerular disease. Cinotti GA. **Contrib Nephrol** 1989;70:121–7 (33 ref.)

Comparison of the effect of aspirin and choline magnesium trisalicylate on thromboxane biosynthesis in human platelets: role of the acetyl moiety. Danesh BJ, et al. **Haemostasis** 1989;19(3):169–73

Effect of pH on pulmonary vascular tone, reactivity, and arachidonate metabolism. Farrukh IS, et al. **J Appl Physiol** 1989 Jul;67(1):445–52

Thromboxane and prostacyclin production by different compartments of the human placental villus. Nelson DM, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):676–83

Thromboxane synthesis and actions in isolated adrenergic nerve (pheochromocytoma–12) cells. Trachte GJ, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):43–6

Complement and leukocyte independent proteinuria and eicosanoid synthesis in rat membranous nephropathy. Rahman MA, et al. **Lab Invest** 1988 Oct;59(4):477–83

Aspirin and myocardial infarction [letter] Green K, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1489

Effect of low–dose aspirin on fetal and maternal generation of thromboxane by platelets in women at risk for pregnancy–induced hypertension. Benigni A, et al. **N Engl J Med** 1989 Aug 10;321(6):357–62

Relative participation of the gas phase and total particulate matter in the imbalance in prostacyclin and thromboxane formation seen following chronic cigarette smoke exposure. Sherratt AJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):15–8

In vivo biosynthesis of thromboxane and prostacyclin during exposure to physiological levels of epinephrine. Vesterqvist O, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Mar;35(3):165–7

Does non–acetylated salicylate inhibit thromboxane biosynthesis in human platelets? Danesh BJ, et al. **Scott Med J** 1988 Aug;33(4):315–6

Measurement of aspirin concentrations in portal and systemic blood in pigs: effect on platelet aggregation, thromboxane and prostacyclin production. Bochner F, et al. **Thromb Haemost** 1989 Apr 25;61(2):211–6

[The effects of ketanserin on vascular eicosanoid system in spontaneously hypertensive rats and their implications] Uehara Y, et al. **Nippon Jinzo Gakkai Shi** 1989 Jan; 31(1):31–7 (Eng. Abstr.) **(Jpn)**

BLOOD

Photoaffinity labelling and isoelectric focusing of the human platelet thromboxane A2/prostaglandin H2 (TXA2/PGH2) receptor. Mais DE, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:168–71

Comparative effects of mezlocillin and carbenicillin on platelet function and thromboxane generation in patients with cancer. Mehta P, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):286–91

Influence of the antianginal drug trapidil and its derivative AR 12463 on arachidonic acid liberation and thromboxane formation in thrombin–stimulated platelets. Block HU, et al. **Biomed Biochim Acta** 1988;47(10–11):S141–4

Purification of the thromboxane A2/prostaglandin H2 receptor from human blood platelets. Ushikubi F, et al. **J Biol Chem** 1989 Oct 5;264(28):16496–501

Effect of R and S enantiomers of naproxen on aggregation and thromboxane production in human platelets. Kean WF, et al. **J Pharm Sci** 1989 Apr;78(4):324–7

[Relationship of eicosanoids to cellular and humoral immunity factors in meningococcal infection] Pokrovskiĭ VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan; (1):63–8 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Role of eicosanoids as mediators of glomerular injury in immune–mediated nephropathies. Zoja C, et al. **Contrib Nephrol** 1989;69:18–26; discussion 37–8 (53 ref.)

METABOLISM

Low–dose aspirin: treatment for the imbalance of increased thromboxane and decreased prostacyclin in preeclampsia. Walsh SW. **Am J Perinatol** 1989 Apr;6(2):124–32 (54 ref.)

Allergen–stimulated release of mediators into sheep bronchoalveolar lavage fluid. Effect of cyclooxygenase inhibition. Dworski R, et al. **Am Rev Respir Dis** 1989 Jan; 139(1):46–51

Local complement activation, thromboxane–mediated vasoconstriction, and vascular leakage in isolated lungs. Role of the terminal complement sequence. Seeger W, et al. **Am Rev Respir Dis** 1989 Jan;139(1):88–99

Endothelial thromboxane receptors: biochemical characterization and functional implications. Sung CP, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):326–33

Influence of eicosanoids on renal function of DOCA–salt hypertensive rats. Roman RJ, et al. **Hypertension** 1988 Sep; 12(3):287–94

Exaggerated renal thromboxane and prostaglandin release by angiotensin II in suprarenal aortic coarctation hypertension. Miller MJ, et al. **Pharmacol Res** 1989 Mar–Apr;21(2):201–10

The PAF–acether receptor antagonist BN–52021 inhibits mediator release during guinea–pig active lung anaphylaxis. Berti F, et al. **Pharmacol Res Commun** 1988 Dec; 20(12):1047–59

Enhancement of eicosanoid synthesis in mouse peritoneal macrophages by the organic mercury compound thimerosal. Kaever V, et al. **Prostaglandins** 1988 Jun; 35(6):885–902

Influence of thromboxane metabolism interference on glycemia regulation in rats. Nechifor M, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):555–7

Recombinant interleukin 1 and tumor necrosis factor acting in synergy to release thromboxane, 6–KETO–PGF1 alpha and PGE2 by human neutrophils. Conti P, et al. **Scand J Rheumatol Suppl** 1988;75:318–24

PHARMACOLOGY

Atherosclerosis potentiates constrictor responses of cerebral and ocular blood vessels to thromboxane in monkeys. Faraci FM, et al. **Stroke** 1989 Feb;20(2):242–7

PHYSIOLOGY

Role of eicosanoids in regulation of vascular resistance. Frölich JC, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:211–5 (41 ref.)

The role of thromboxane in two–kidney, one–clip Goldblatt hypertension in rats. Himmelstein SI, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):F190–6

Vth International Symposium on Eicosanoids in the Cardiovascular System. May 16–19, 1988, Halle (Saale), GDR. Proceedings. **Biomed Biochim Acta** 1988; 47(10–11):S1–332

Intravenous lipids in newborn lungs: thromboxane–mediated effects. Hammerman C, et al. **Crit Care Med** 1989 May; 17(5):430–6

Eicosanoids in primary dysmenorrhea, endometriosis and menstrual migraine. Benedetto C. **Gynecol Endocrinol** 1989; 3(1):71–94 (105 ref.)

Role for local prostaglandin and thromboxane production in the regulation of glomerular filtration rate in the rat with streptozocin–induced diabetes. Craven PA, et al. **J Lab Clin Med** 1989 Jun;113(6):674–81

Glomerular eicosanoids and diabetes mellitus [editorial] Dunn MJ. **J Lab Clin Med** 1989 Jun;113(6):659–61

Role of prostaglandins and thromboxane in the control of renal hemodynamics in experimental liver cirrhosis. Leehey DJ, et al. **J Lab Clin Med** 1989 Mar;113(3):309–15

Arachidonic acid metabolites: basic concepts relevant to plastic surgery. Proctor KG, et al. **J Reconstr Microsurg** 1988 Oct;4(5):421–6 (55 ref.)

Escherichia coli hemolysin causes thromboxane–mediated hypertension and vascular leakage in rabbit lungs. Seeger W, et al. **Prog Clin Biol Res** 1989;308:67–72 (19 ref.)

Thromboxane mediates the ischemia–induced neutrophil oxidative burst. Paterson IS, et al. **Surgery** 1989 Aug; 106(2):224–9

Eicosanoids and platelet activating factor mechanisms in organ rejection. Foegh ML. **Transplant Proc** 1988 Dec; 20(6):1260–3 (21 ref.)

THRUSH see **CANDIDIASIS, ORAL**

THULIUM

Infrared and visible thermoluminescence signals of Tm–doped CaF2 measured by a semiconductor photodiode. Meissner P, et al. **Phys Med Biol** 1988 Dec; 33(12):1407–15

THUMB

Human abductor pollicis brevis muscle "divisions" and the nerve hila. Simard T, et al. **Anat Rec** 1988 Dec; 222(4):426–36

Giant cell reaction in a phalangeal bone. Dwyer RT, et al. **Aust N Z J Surg** 1989 Jul;59(7):586–9

Surgical treatment of the boutonniere rheumatoid thumb deformity. Terroso A, et al. **Hand Clin** 1989 May; 5(2):239–48 (25 ref.)

Arthritis of the basal joint of the thumb. A critical analysis of treatment options. Wolock BS, et al. **J Arthroplasty** 1989;

4(1):65–78 (59 ref.)
An unusual case of dermatofibrosarcoma protuberans. Coles M, et al. **J Hand Surg [Am]** 1989 Jan;14(1):135–8
Subperiosteal osteoid osteoma of the distal phalanx of the thumb. Crosby LA, et al. **J Hand Surg [Am]** 1988 Nov; 13(6):923–5
Trapeziometacarpal abnormalities in Ehlers–Danlos syndrome. Gamble JG, et al. **J Hand Surg [Am]** 1989 Jan; 14(1):89–94
Arthrodesis of digital joints in children. Kowalski MF, et al. **J Hand Surg [Am]** 1988 Nov;13(6):874–9
Flexion contracture of the thumb: a malignant etiology. McGraw JM, et al. **J Hand Surg [Am]** 1989 Jul;14(4):736–8
Efficacy of cortisone injection in treatment of trigger fingers and thumbs. Marks MR, et al. **J Hand Surg [Am]** 1989 Jul;14(4):722–7
Subungual keratoacanthoma in the hand. Patel MR, et al. **J Hand Surg [Am]** 1989 Jan;14(1):139–42
Locked metacarpo–phalangeal joint of the thumb. Inoue G, et al. **J Hand Surg [Br]** 1988 Nov;13(4):469–73
Case report 525: Benign fibrous histiocytoma (BFH) of thumb. Statz EM, et al. **Skeletal Radiol** 1989;18(4):299–302
Neurothekeoma of the thumb. A case report. Donofrio V, et al. **Tumori** 1988 Dec 31;74(6):751–4
[Myoblastic myoma of the tendon of long flexor of the thumb] Urban K, et al.
Acta Chir Orthop Traumatol Cech 1989 Apr;56(2):129–33 (Eng. Abstr.) (Cze)
[The rheumatoid thumb. Clinical aspects and surgical treatment] Alnot JY. **Acta Orthop Belg** 1988;54(2):210–6 (Eng. Abstr.) (Fre)
[Actinobacillus actinomycetemcomitans whitlow (letter)] Pinon G, et al. **Presse Med** 1988 Nov 12;17(40):2138 (Fre)

ABNORMALITIES

Aplasia of the thumbs and great toes as the outstanding feature of Yunis and Varon syndrome. A new entity. A new observation. Pfeiffer RA, et al. **Ann Genet (Paris)** 1988; 31(4):241–3
Aase–Smith syndrome: report of a new case. D'Avanzo M, et al. **Br J Haematol** 1988 Sep;70(1):125–6
Degenerative arthritis of the carpus associated with congenital hypoplastic thumb. Bonatz E, et al.
J Hand Surg [Am] 1989 Jul;14(4):734–6
Treatment of duplicated thumb using a ligamentous/periosteal flap. Manske PR.
J Hand Surg [Am] 1989 Jul;14(4):728–33
Anomalous abductor pollicis longus insertion in the thenar muscles. Rayan GM, et al. **J Hand Surg [Am]** 1989 May; 14(3):550–2
Congenital absence of the thumb and digits. Gilbert A.
J Hand Surg [Br] 1989 Feb;14(1):6–17 (33 ref.)
Surgical treatment of the clasped thumb. Lipskeir E, et al. **J Hand Surg [Br]** 1989 Feb;14(1):72–9
Radially deviated type of thumb polydactyly. Ogino T, et al. **J Hand Surg [Br]** 1988 Aug;13(3):315–9
Triphalangeal thumb. Qazi Q, et al. **J Med Genet** 1988 Aug; 25(8):505–20 (65 ref.)
Ulnar thumb in cleft–hand–type congenital deformity. Case report. Ipsen T, et al.
Scand J Plast Reconstr Surg Hand Surg 1988;22(3):257–9
[Pollicization of fingers for aplasia of the thumb] Wang W. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):249–51 (Chi)
[Variants of radial hemimelia with and without vitium cordis (Holt–Oram syndrome) in 2 families] Pfeiffer RA, et al. **Monatsschr Kinderheilkd** 1989 May;137(5):275–9 (Eng. Abstr.) (Ger)

ANATOMY & HISTOLOGY

Thumbs up: anthropometry of the first digit. Gilbert BG, et al. **Hum Factors** 1988 Dec;30(6):747–50

BLOOD SUPPLY

Dorsal vascular network of the first web space. Anatomical bases of the kite flap. Dautel G, et al.
Surg Radiol Anat 1989;11(2):109–13
[Anatomic variations of the vascular network of the first dorsal commissure. Uses of the kite flap] Dautel G, et al. **Ann Chir Main** 1989;8(1):53–8; discussion 59 (Eng. Abstr.) (Fre)

DRUG EFFECTS

Effects of succinylcholine at the masseter and adductor pollicis muscles in adults. Smith CE, et al.
Anesth Analg 1989 Aug;69(2):158–62
Differential effects of pancuronium on masseter and adductor pollicis muscles in humans. Smith CE, et al.
Anesthesiology 1989 Jul;71(1):57–61

EMBRYOLOGY

Embryological development and prevalence of thumb flexion creases. Kimura S, et al. **Anat Rec** 1988 Sep;222(1):83–9

INJURIES

Gamekeeper's thumb. Hankin FM, et al.
Am Fam Physician 1988 Dec;38(6):127–30
High pressure injection injuries of the hand: a report of three cases. Maxwell RJ, et al. **Aust N Z J Surg** 1988 Apr; 58(4):344–6
Intra–articular fractures of the basilar joint of the thumb. Breen TF, et al. **Hand Clin** 1988 Aug;4(3):491–501 (37 ref.)
Missed carpometacarpal dislocation of the thumb in motorcyclists. Johnson SR, et al. **Injury** 1987 Nov; 18(6):415–6
Wrinkle corner. A splint for the metacarpophalangeal joint of the thumb. Wakeley CJ, et al. **Injury** 1987 Jul;18(4):291
Rupture of the extensor pollicis longus tendon after fracture of the distal end of the radius. A report of the youngest case. Kurosawa H, et al. **Ital J Orthop Traumatol** 1987 Dec;13(4):517–9
Free tendon grafting to repair the metacarpophalangeal joint of the thumb. Surgical techniques and a review of 70 patients. Breek JC, et al. **J Bone Joint Surg [Br]** 1989 May; 71(3):383–7
Aeromonas hydrophila infection complicating digital replantation and revascularization. Lowen RM, et al.
J Hand Surg [Am] 1989 Jul;14(4):714–8 (60 ref.)
Gamekeepers thumb: a prospective study of functional bracing. Pichora DR, et al. **J Hand Surg [Am]** 1989 May; 14(3):567–73
Comminuted fractures of the base of the first metacarpal treated by distraction–external fixation. Schuind F, et al. **J Orthop Trauma** 1988;2(4):314–21
Late arterial thrombosis in a replanted thumb: a case report. Griffin PA, et al. **J Reconstr Microsurg** 1989 Jan;5(1):75–7
Circulatory crisis in free toe–to–hand transfer and its management: I. Clinical experience. Gu YD, et al.
J Reconstr Microsurg 1989 Apr;5(2):111–4
Mallet thumb: an unusual association. Madhok R.
Orthop Rev 1989 Apr;18(4):469–70
An increasing seasonal sports injury. Smith E, et al.
Practitioner 1988 Dec;232(1460):1385–6
Combination of rupture of the ulnar collateral ligament and spiroid fracture of the thumb. Case report. Gottlieb JO, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989; 23(1):75–6
Isolated carpometacarpal dislocation of the thumb. Case report. Jakobsen CW, et al.
Scand J Plast Reconstr Surg Hand Surg 1988;22(2):185–6
[The socio–economic costs of finger replantation. Apropos of 40 replantations of the thumb] Dap F, et al.
Ann Chir Main 1989;8(1):78–83 (Eng. Abstr.) (Fre)
[Chronic internal metacarpophalangeal sprains of the thumb. Anatomo–clinical classification and therapeutic consequences] Kuhlmann JN, et al. **Rev Chir Orthop** 1988; 74(5):446–53 (Eng. Abstr.) (Fre)
[Economic aspects of reconstruction of the thumb using a microsurgical toe transplant procedure] Egloff DV, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(1):50–6 (Fre)
[Injury of the collateral ligaments of the metacarpophalangeal joint of the thumb and therapy] Reill P, et al.
Aktuel Traumatol 1988 Jul;18 Suppl 1:35–9 (Eng. Abstr.) (Ger)
[A rare hand injury] Rieger H. **Aktuel Traumatol** 1989 Jun; 19(3):100–3 (Eng. Abstr.) (Ger)
[Isolated fracture of the os trapezium with concomitant dislocation of the carpometacarpal joint of the thumb. A case report] Walz M. **Aktuel Traumatol** 1989 Jun; 19(3):104–6 (Eng. Abstr.) (Ger)
[Spontaneous rupture of the extensor pollicis longus] Nigst H, et al. **Handchir Mikrochir Plast Chir** 1989 Jul; 21(4):172–7 (Eng. Abstr.) (Ger)
[Dislocations of the carpometacarpal joint of the thumb—results of follow–up] Sim E.
Handchir Mikrochir Plast Chir 1989 May;21(3):138–46 (Eng. Abstr.) (Ger)
[Osseous avulsion of the opponens pollicis muscle. Case report of a rare injury in skiing] Pechlaner S, et al.
Sportverletz Sportschaden 1989 Mar;3(1):41–2 (Eng. Abstr.) (Ger)
[Follow–up studies of transosseous capsule–ligament sutures of the basal joint of the thumb using a standardized holder] Lütten C, et al. **Z Orthop** 1989 Jan–Feb;127(1):82–8 (Eng. Abstr.) (Ger)
[Ligament injuries of the metacarpophalangeal joint of the thumb] Mitzscherling CP, et al. **Zentralbl Chir** 1988; 113(19):1263–7 (Eng. Abstr.) (Ger)

INNERVATION

Where is the ideal reference site for recording the thenar compound muscle action potential. Wee AS, et al.
Electromyogr Clin Neurophysiol 1988 Jun–Jul;28(5):249–52
Isolated paralysis of the descending branch of the posterior interosseous nerve. Report of a case. Hirayama T, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1402–3
Cherry pitter's thumb. Case report and review of the literature. Viegas SF, et al. **Orthop Rev** 1989 Mar; 18(3):336–8 (12 ref.)

PATHOLOGY

Magnetic resonance imaging of the collateral ligaments of the thumb. Louis DS, et al. **J Hand Surg [Am]** 1989 Jul; 14(4):739–41
The sesamoids of the metacarpo–phalangeal joint of the thumb: an anatomical and clinical study. Gibeault JD, et al. **J Hand Surg [Br]** 1989 May;14(2):244–7
[Rhizarthrosis and thenar muscles. A clinico–anatomic study] Schöneberger M, et al. **Handchir Mikrochir Plast Chir** 1989 Jul;21(4):182–8 (Eng. Abstr.) (Ger)

PHYSIOLOGY

Ulnar train–of–four stimulation in predicting face movement during intracranial facial nerve stimulation. Ho LC, et al.
Anesth Analg 1989 Aug;69(2):242–4
Infusion of vecuronium assessed by tactile evaluation of evoked thumb twitch. Haraldsted VY, et al.
Br J Anaesth 1988 Oct;61(4):479–81
The use of the latissimus dorsi muscle as an active motor unit for digital flexion. Govila A. **J Hand Surg [Br]** 1989 Feb;14(1):70–1

PHYSIOPATHOLOGY

Nonoperative treatment of trigger fingers and thumbs. Freiberg A, et al. **J Hand Surg [Am]** 1989 May;14(3):553–8
Limitation of thumb flexion due to an unusual insertion of the flexor pollicis longus. Hagan HJ, et al.
J Hand Surg [Br] 1988 Nov;13(4):474–6
[A rare cause of spontaneous rupture of the tendon of the extensor pollicis longus muscle] Ahmadi A.
Handchir Mikrochir Plast Chir 1988 Jul;20(4):223–4 (Eng. Abstr.) (Ger)

SURGERY

Arthrodesis of the first carpometacarpal joint. 33 cases of arthrosis. Alberts KA, et al. **Acta Orthop Scand** 1989 Jun; 60(3):258–60
Replantation service in Helsinki University Central Hospital 1980–1985. Asko–Seljavaara S, et al. **Ann Chir Gynaecol** 1988;77(3):97–102
Replantation of avulsively amputated thumb: a report of 15 cases. Cheng GL, et al. **Ann Plast Surg** 1985 Dec; 15(6):474–80
Free musculocutaneous flap transfer of extensor digitorum brevis muscle by microvascular anastomosis for restoration of function of thenar and adductor pollicis muscles. Zhu SX, et al. **Ann Plast Surg** 1985 Dec;15(6):481–8
Thumb reconstruction with free rib segment and big toe nail flap. Report of 6 cases. Zhang GL, et al.
Chin Med J [Engl] 1989 Feb;102(2):114–5
Thumb reconstruction—great toe transfer. Valauri FA, et al. **Clin Plast Surg** 1989 Jul;16(3):475–89 (76 ref.)
A modification of the surgical correction of the thumb—a long term follow up. Beine AO, et al. **Indian J Lepr** 1989 Jan;61(1):17–22
Complications and salvage of trapeziometacarpal arthroplasties. Thompson JS. **Instr Course Lect** 1989; 38:3–13 (24 ref.)
Replacement of the trapeziometacarpal joint with a cemented (Caffinière) prosthesis. Boeckstyns ME, et al.
J Hand Surg [Am] 1989 Jan;14(1):83–9
Surgical management of spastic thumb–in–palm deformity in adults with brain injury. Botte MJ, et al.
J Hand Surg [Am] 1989 Mar;14(2 Pt 1):174–82
Transection of radial digital nerve of the thumb during trigger release. Carrozzella J, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):198–200
Fusion of the thumb metacarpophalangeal joint to treat posttraumatic arthritis. Hagan HJ, et al.
J Hand Surg [Am] 1988 Sep;13(5):750–3
Tendon interposition arthroplasty of the first carpo–metacarpal joint. Weilby A. **J Hand Surg [Br]** 1988 Nov;13(4):421–5
Continuous local intra–arterial infusion of anticoagulants for digit replantation and treatment of damaged arteries. Fukui A, et al. **J Reconstr Microsurg** 1989 Apr;5(2):127–36
Microvascular replantation in a seven–month–old girl: a case report. Gaul JS 3d, et al. **Microsurgery** 1988;9(3):204–7
Digital replantation. Gaul JS, et al. **Surg Annu** 1989;21:343–62 (39 ref.)
[A plastic technique of using the forearm island–like flap to transplant the thumb] Xu GB, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Mar;1(1):36–7 (Chi)
[Application of a free nail skin flap of a big toe in emergency reconstruction of the thumb] Yang ZX.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Dec;2(4):241–3 (Eng. Abstr.) (Chi)
[A surgical correction method for spastic "thumb in the palm"] Kartchinov K, et al. **Ann Chir Main** 1989;8(1):88–92 (Eng. Abstr.) (Fre)
[Intermediate term results of treatment with the Francobal endoprosthesis in osteoarthritis] Helbig B, et al.
Handchir Mikrochir Plast Chir 1988 Nov;20(6):301–5 (Eng. Abstr.) (Ger)
[Arthrodesis of the metacarpophalangeal joint of the thumb. Indications, technic, arthrodesis angle and functional effect] Steiger R, et al. **Handchir Mikrochir Plast Chir** 1989 Jan; 21(1):18–22 (Eng. Abstr.) (Ger)
[Restoration of the thumb by transposition of the fingers of the injured hand] Nguyen VN. **Khirurgiia (Mosk)** 1988 Aug;(8):42–5 (Eng. Abstr.) (Rus)

THUMBSUCKING see **FINGERSUCKING**

THYME see **HERBS**

THYMECTOMY

Immune competence in 90Sr–exposed, adult thymectomized

and antilymphocyteglobulin-treated CBA mice. I. Allogenic skin graft reaction. Bierke P. **Acta Oncol** 1989; 28(2):271–5

Radiostrontium-induced oncogenesis and the role of immunosuppression. I. Influence of 90Sr dose, adult thymectomy and antilymphocyteglobulin treatment on the development of neoplastic and preneoplastic lesions in the skeleton of CBA mice. Bierke P, et al. **Acta Oncol** 1989; 28(1):87–102

Thoracic epidural anesthesia for transsternal thymectomy in myasthenia gravis. Burgess FW, et al. **Anesth Analg** 1989 Oct;69(4):529–31

Cumulative dose-response curves for atracurium in patients with myasthenia gravis. Smith CE, et al. **Can J Anaesth** 1989 Jul;36(4):402–6

Mineralocorticoids are not involved in the antihypertensive effect of neonatal thymectomy in the genetically hypertensive LH rat. Bataillard A, et al. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):875–82

Origin and fate of IgE-bearing lymphocytes. II. Modulation of IgE isotype expression on Peyer's patch cells by feeding with certain bacteria and bacterial cell wall components or by thymectomy. Durkin HG, et al. **J Immunol** 1989 Sep 15;143(6):1777–83

The use of atracurium in Chinese myasthenic patients undergoing thymectomy. Yang MW, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):161–8

Response of agranulocytosis to thymectomy in a patient with thymoma and chronic lymphocytic leukemia. Weir AB 3d, et al. **Med Pediatr Oncol** 1989;17(1):58–61

Thymectomy in refractory dermatomyositis [letter] Cumming WJ. **Muscle Nerve** 1989 May;12(5):424

Antibody responses to hapten in thymectomized mice: extraordinarily pronounced deficiency in IgG1 production. Seppälä IJ, et al. **Scand J Immunol** 1989 Apr;29(4):469–75

[The effect of neonatal thymectomy on thrombocytopoesis in rats] Ganchev T, et al. **Eksp Med Morfol** 1989;28(2):20–5 (Eng. Abstr.) **(Bul)**

[The value of thymectomy in myasthenia gravis] Buchmann P, et al. **Helv Chir Acta** 1989 Jan;55(5):553–8 (Eng. Abstr.) **(Ger)**

[Thymus surgery in myasthenia gravis] Dapper F, et al. **Helv Chir Acta** 1988 Nov;55(4):455–8 (Eng. Abstr.) **(Ger)**

[Surgical intervention on the thymus in children and adolescents] Schück R, et al. **Z Kinderchir** 1988 Aug; 43(4):239–42 (Eng. Abstr.) **(Ger)**

[Thymectomy and myasthenia gravis. Critical remarks on our experience] Tesauro B, et al. **Minerva Chir** 1988 Sep 15;43(17):1319–22 (Eng. Abstr.) **(Ita)**

[Anesthetic management of a patient with pemphigus vulgaris] Hosshi S, et al. **Masui** 1988 Aug;37(8):989–92 (Eng. Abstr.) **(Jpn)**

[The result of extended thymectomy in patients with myasthenia gravis of pure ocular type] Yang DS, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):313–7 (Eng. Abstr.) **(Jpn)**

[A case of systemic lupus erythematosus following thymectomy in myasthenia gravis] Kinoshita I, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1894–5 (6 ref.) **(Jpn)**

[Pulmonary dirofilariasis found unexpectedly during thymectomy] Makiya K, et al. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1;10(3):325–30 (Eng. Abstr.) **(Jpn)**

[Myasthenia gravis: treatment with thymectomy, corticoids and plasmapheresis] Dias-Tosta E, et al. **Arq Neuropsiquiatr** 1989 Mar;47(1):39–50 (Eng. Abstr.) **(Por)**

[Effect of the thymus gland on various metabolic processes in pregnancy (experimental study)] Chukhlovina ML, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):20–3 (Eng. Abstr.) **(Rus)**

[Changes in the immunoreactivity of patients with generalized myasthenia following thymectomy] Zaltsev VT, et al. **Klin Khir** 1988;(12):25–7 (Eng. Abstr.) **(Rus)**

[Efferent methods in the complex treatment of myasthenia gravis] Sazonov AM, et al. **Sov Med** 1989;(1):17–20 (Eng. Abstr.) **(Rus)**

[Myasthenic thymoma in the residual thymus gland after thymectomy] Vasil'ev VN, et al. **Vestn Khir** 1989 Feb; 142(2):50–1 **(Rus)**

[Type 1 diabetes after thymectomy for myasthenia gravis (letter)] Alfaro A, et al. **Med Clin (Barc)** 1989 Mar 25; 92(11):437–8 **(Spa)**

[Inhalation anesthesia in myasthenic patients undergoing elective thymectomy] Rubio Pascual P, et al. **Rev Esp Anestesiol Reanim** 1988 Nov-Dec;35(6):308–10 (Eng. Abstr.) **(Spa)**

[Peroperative management of myasthenia gravis patients undergoing thymectomy] Portela JM, et al. **Rev Invest Clin** 1988 Jul-Sep;40(3):217–21 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

[Acute respiratory insufficiency following thymectomy: an unusual cause] Zueras R, et al. **Rev Esp Anestesiol Reanim** 1989 Jan-Feb;36(1):51–3 (Eng. Abstr.) **(Spa)**

METHODS

Transsternal radical thymectomy for myasthenia gravis: a 15-year review. Hatton PD, et al. **Ann Thorac Surg** 1989 Jun;47(6):838–40

Cervical thymectomy in the treatment of myasthenia gravis. Whyte RI, et al. **J R Coll Surg Edinb** 1989 Apr;34(2):74–8

"Maximal" thymectomy for myasthenia gravis. Surgical anatomy and operative technique. Jaretzki A 3d, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):711–6

[Extended thymectomy with marginal resection of the left brachiocephalic vein in invasive thymoma in myasthenia] Vasil'ev VN, et al. **Vestn Khir** 1988 Dec;141(12):33–4 **(Rus)**

THYMIC CYST see **MEDIASTINAL CYST**

THYMIC FACTOR, CIRCULATING see under **THYMUS HORMONES**

THYMIC GROUP VIRUSES see **MOUSE LEUKEMIA VIRUSES**

THYMIC HORMONES see **THYMUS HORMONES**

THYMIDINE

Production of hybrid hybridomas based on HAT(s)-neomycin(r) double mutants. De Lau WB, et al. **J Immunol Methods** 1989 Feb 8;117(1):1–8

3-Carbethoxypsoralen-DNA photolesions: identification and quantitative detection in yeast and mammalian cells of the two cis-syn diastereoisomers formed with thymidine. Moysan A, et al. **Photochem Photobiol** 1988 Jun;47(6):803–8

Universal rule for coding sequence construction: TA/CG deficiency-TG/CT excess. Ohno S. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9630–4

ANALOGS & DERIVATIVES

Enhanced in vitro inhibition of HIV-1 replication by 3'-fluoro-3'-deoxythymidine compared to several other nucleoside analogs. Hartmann H, et al. **AIDS Res Hum Retroviruses** 1988 Dec;4(6):457–66

Effects of 5-hydroxymethyluracil and 3-aminobenzamide on the repair and toxicity of 5-hydroxymethyl-2'-deoxyuridine in mammalian cells. Boorstein RJ, et al. **Cancer Res** 1989 Mar 15;49(6):1509–14

Basis for the differential modulation of the uptake of 5-iododeoxyuridine by 5'-aminothymidine among various cell types. Vazquez-Padua MA, et al. **Cancer Res** 1989 May 1;49(9):2413–21

Detection by 32P-postlabeling of thymidine glycol in gamma-irradiated DNA. Hegi ME, et al. **Carcinogenesis** 1989 Jan;10(1):43–7

Improved delivery through biological membranes XXV. Enhanced and sustained delivery of trifluorothymidine to the brain using a dihydropyridine in equilibrium pyridinium salt type redox delivery system. el-Kousi A, et al. **Drug Des Deliv** 1987 May;1(4):275–83

Inhibition of reverse transcription in rat liver intracisternal A-particles by thymidine derivatives. Pyrinova GB, et al. **FEBS Lett** 1989 Apr 10;247(1):57–60

Quantitative measurement of the diastereoisomers of cis thymidine glycol in gamma-irradiated DNA. Teebor G, et al. **Free Radic Res Commun** 1987;2(4–6):303–9

Trifluridine decreases ocular HSV-1 recovery, but not herpetic lesions after timolol iontophoresis. Rootman DS, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):678–83

1-(3-cyano-2,3-dideoxy-beta-D-erythro-pentofuranosyl)thymine (cyanothymidine): synthesis and antiviral evaluation against human immunodeficiency virus. Greengrass CW, et al. **J Med Chem** 1989 Mar;32(3):618–22

Synthesis and antiviral activity of several 2,5'-anhydro analogues of 3'-azido-3'-deoxythymidine, 3'-azido-2',3'-dideoxyuridine, 3'-azido-2',3'-dideoxy-5-halouridines, and 3'-deoxythymidine against human immunodeficiency virus and Rauscher-murine leukemia virus. Lin TS, et al. **J Med Chem** 1989 Aug;32(8):1891–5

Replacement of the 3'-CH group by nitrogen in the carbocyclic analogue of thymidine. Ng KM, et al. **J Med Chem** 1989 Aug;32(8):1754–7

Synthesis and properties of oligonucleotides containing 4-thiothymidine, 5-methyl-2-pyrimidinone-1-beta-D(2'-deoxyriboside) and 2-thiothymidine. Connolly BA, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):4957–74

Stereoselective synthesis of P-homochiral oligo(thymidine methanephosphonates). Lesnikowski ZJ, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11675–89

A model reaction for the repair of nucleic acids. The repair of thymidine bromohydrins. Harayama T, et al. **Nucleic Acids Symp Ser** 1988;(19):107–10

Thiol reduction of 3'-azidothymidine to 3'-aminothymidine: kinetics and biomedical implications. Handlon AL, et al. **Pharm Res** 1988 May;5(5):297–9

[Progress in treatment of herpetic keratitis] Uchida Y, et al. **Nippon Rinsho** 1989 Feb;47(2):419–23 **(Jpn)**

BLOOD

A human-mouse T-cell hybridoma-derived lymphokine inhibits thymidine uptake of T-lymphocytes. Laus R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):96–7

CHEMICAL SYNTHESIS

Synthesis and evaluation of a series of 1-(3-alkyl-2,3-dideoxy-alpha,beta-D-erythro-pentofuranosyl)thymines. Agyei-Aye K, et al. **Carbohydr Res** 1988 Dec 1;183(2):261–75

Synthesis of 11C-labelled thymidine for tumor visualization using positron emission tomography. Poupeye E, et al. **Int J Rad Appl Instrum [A]** 1989;40(1):57–61

DIAGNOSTIC USE

A preparative suspension culture system permitting quantitation of anchorage-independent growth by direct radiolabeling of cellular DNA. Assoian RK, et al. **Anal Biochem** 1989 Feb 15;177(1):95–9

Proliferative index of breast carcinoma by thymidine labeling: prognostic power independent of stage, estrogen and progesterone receptors [published erratum appears in Breast Cancer Res Treat 1989 Jul;13(3):279] Meyer JS, et al. **Breast Cancer Res Treat** 1988 Oct;12(2):191–204

Double labelling with bromodeoxyuridine and [3H]-thymidine of proliferative cells in small intestinal epithelium in steady state and after irradiation. Chwalinski S, et al. **Cell Tissue Kinet** 1988 Sep;21(5):317–29

Comparative double-tracer whole-body autoradiography: uptake of 11C-, 18F- and 3H-labeled compounds in rat tumors. d'Argy R, et al. **Int J Rad Appl Instrum [B]** 1988; 15(5):577–85

In vivo measurement of carbon-11 thymidine uptake in non-Hodgkin's lymphoma using positron emission tomography. Martiat P, et al. **J Nucl Med** 1988 Oct; 29(10):1633–7

The labelling index: a prognostic factor in head and neck carcinoma. Chauvel P, et al. **Radiother Oncol** 1989 Mar; 14(3):231–7

IMMUNOLOGY

[Evaluation of the proliferative activity of malignant human tumors by an indirect immunofluorescent method using antithymidine antibodies] Chissov VI, et al. **Eksp Onkol** 1989;11(4):44–7 (Eng. Abstr.) **(Rus)**

METABOLISM

In vitro DNA synthesis by megaloblastic bone marrow: effect of folates and cobalamins on thymidine incorporation and de novo thymidylate synthesis. Das KC, et al. **Am J Hematol** 1989 May;31(1):11–20

Incorporation of tritiated thymidine by epithelial and interstitial cells in bronchiolar-alveolar regions of asbestos-exposed rats. Brody AR, et al. **Am J Pathol** 1989 Jan;134(1):133–40

Thymidine labeling index and Ki-67 growth fraction in lesions of the breast. Kamel OW, et al. **Am J Pathol** 1989 Jan;134(1):107–13

Local and systemic implications of thymidine catabolism by human keratinocytes. Schwartz PM, et al. **Ann N Y Acad Sci** 1988;548:115–24

The significance of 3H-thymidine degradation in cell culture experiments with special reference to rheumatoid arthritis. Nykänen PJ, et al. **APMIS** 1988 Sep;96(9):768–72

Platelet activating factor antagonist L-652,731 inhibits thymidine transport. Bazill GW, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):373–4

Deoxyribonucleoside triphosphate pools in regenerating rat liver: effect of hydroxyurea and exogenous deoxypyrimidines. Röttgen V, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):349–54

In vitro study of the modification by bleomycin of thymidine phosphorylation activity in lectin-stimulated normal human lymphocytes. Sharif A, et al. **Cancer Biochem Biophys** 1988 Jul;10(1):17–24

Behavior of activities of thymidine metabolizing enzymes in human leukemia-lymphoma cells. Shiotani T, et al. **Cancer Res** 1989 Mar 1;49(5):1090–4

Comparison of 5-bromo-2-deoxyuridine and [3H]thymidine for studies of hepatocellular proliferation in rodents. Lanier TL, et al. **Carcinogenesis** 1989 Jul;10(7):1341–3

Local re-utilization of thymidine in normal mouse tissues as measured with iododeoxyuridine. Quackenbush RC, et al. **Cell Tissue Kinet** 1988 Nov;21(6):381–7

The effect of in vivo and in vitro methotrexate on lymphocyte proliferation as measured by the uptake of tritiated thymidine and tritiated guanosine. A reply [letter] Afane M, et al. **Clin Exp Rheumatol** 1989 May-Jun; 7(3):336–7

The effect of in vivo and in vitro methotrexate on lymphocyte proliferation as measured by the uptake of tritiated thymidine and tritiated guanosine. Johnston C, et al. **Clin Exp Rheumatol** 1988 Oct-Dec;6(4):391–3

Degradation of extracellular thymidine by cultured hepatocytes from rainbow trout (Salmo gairdneri). Kocal TE, et al. **Comp Biochem Physiol [B]** 1988;91(3):557–61

A simplified tritiated thymidine incorporation assay for chemosensitivity testing of human tumors. Wada T, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1421–4

3H-thymidine incorporation into islets obtained from prediabetic BB rats. Danger A, et al. **Exp Clin Endocrinol** 1989 May;93(2–3):267–71

Quantitation of erythropoietin stimulatory activity using

[3H]thymidine uptake by K562 cells. Lewis JP, et al. **Exp Hematol** 1989 Feb;17(2):102–5

Genetic analysis of two mutations affecting thymidine metabolism in Dictyostelium discoideum. Bronner CE, et al. **Genetics** 1988 Dec;120(4):959–64

In vitro testing of chemotherapeutic combinations in a rapid thymidine incorporation assay. Sondak VK, et al. **Int J Cell Cloning** 1988 Nov;6(6):378–91

Human lactoferrin supplementation of infant formulas increases thymidine incorporation into the DNA of rat crypt cells. Nichols BL, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):102–9

Repair of the two cis-syn diastereoisomers formed between 3-carbethoxy-psoralen and thymidine in yeast cells, followed by a chemical method. Dardalhon M, et al. **J Photochem Photobiol –B–** 1988 Nov;2(3):389–94

Incorporation of thymidine by fibroblasts: evidence for complex regulation by postsurgical macrophages. Fukasawa M, et al. **J Surg Res** 1988 Nov;45(5):460–6

Micromolar aluminum levels reduce 3H-thymidine incorporation by cell line UMR 106-01. Blair HC, et al. **Kidney Int** 1989 May;35(5):1119–25

Age-related changes in the proliferative kinetics of phytohemagglutinin-stimulated lymphocytes. Analysis by uptake of tritiated precursors of DNA, RNA and proteins, and by flow cytometry. Lucivero G, et al. **Mech Ageing Dev** 1988 Jun;43(3):259–67

Evidence that fluoride-stimulated 3[H]-thymidine incorporation in embryonic chick calvarial cell cultures is dependent on the presence of a bone cell mitogen, sensitive to changes in the phosphate concentration, and modulated by systemic skeletal effectors. Farley JR, et al. **Metabolism** 1988 Oct;37(10):988–95

Inhibin and activin regulate [3H]thymidine uptake by rat thymocytes and 3T3 cells in vitro. Hedger MP, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):133–8

Enzyme regulatory site-directed drugs: study of the interactions of 5'-amino-2', 5'-dideoxythymidine (5'-AdThd) and thymidine triphosphate with thymidine kinase and the relationship to the stimulation of thymidine uptake by 5'-AdThd in 647V cells. Vazquez-Padua MA, et al. **Mol Pharmacol** 1989 Jan;35(1):98–104

Significant correlations between atmospherics and the in vivo incorporation of 3H-thymidine into the nuclear DNA of liver cells. Hoffmann G, et al. **Naturwissenschaften** 1988 Sep;75(9):459–60

Bilirubin toxicity in a neuroblastoma cell line N-115: I. Effects on Na+K+ ATPase, [3H]-thymidine uptake, L-[35S]-methionine incorporation, and mitochondrial function. Amit Y, et al. **Pediatr Res** 1989 Apr;25(4):364–8

Thymidine uptake, incorporation and DNA polymerase activity in murine bladder tumor cell, MBT-2, exposed to UV activated dihematoporphyrin ether. Tseng MT, et al. **Photochem Photobiol** 1988 Nov;48(5):647–51

Effect of ofloxacin on the uptake of [3H]thymidine by articular cartilage cells in the rat. Kato M, et al. **Toxicol Lett** 1988 Nov;44(1-2):131–42

Inhibition of 3H-thymidine incorporation by angiopeptin in the aorta of rabbits after balloon angioplasty. Asotra S, et al. **Transplant Proc** 1989 Aug;21(4):3695–6

Angiopeptin inhibits thymidine incorporation in rat carotid artery in vitro. Vargas R, et al. **Transplant Proc** 1989 Aug; 21(4):3702–3

[The study of direct effect of methimazole on thymidine incorporation in FRTL-5 cells] Urabe M. **Nippon Naibunpi Gakkai Zasshi** 1989 Jan 20;65(1):32–41 (Eng. Abstr.) (Jpn)

[Effect of macrophage decay products on the incorporation of H3-thymidine into pulmonary cells in rats] Privalova LI, et al. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):66–9 (Eng. Abstr.) (Rus)

[Thymidine transport and its incorporation into the cellular DNA of Ehrlich ascites cancer and Zajdela's ascitic hepatoma in the presence of thiophosphamide and thiophosphamide-modified DNA] Patskovskiĭ IuV, et al. **Eksp Onkol** 1989;11(4):37–41 (Eng. Abstr.) (Rus)

[The first cycle of DNA replication in mouse embryogenesis studied by microinjections of 3H-thymidine into the cytoplasm of fertilized ova] Samoshkina NA, et al. **Ontogenez** 1988 Nov-Dec;19(6):582–90 (Eng. Abstr.) (Rus)

[Proliferation and differentiation of erythroid bone marrow cells in patients with hypoplastic anemia under alpine conditions (based on 3H-thymidine incorporation data)] Mirrakhimov MM, et al. **Ter Arkh** 1988;60(5):66–9 (Rus)

[3H-thymidine and 3H-uridine incorporation into the heart cells of the freshwater crayfish Astacus astacus and the swimming crab Portunus holsatus] Martynova MG. **Tsitologiia** 1988 Oct;30(10):1251–4 (Eng. Abstr.) (Rus)

[Thymine- and thymidine-dependence of Yersinia pestis mutants with altered thymidylate synthetase] Mishan'kan BN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb; (2):24–9 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

N-ethylmaleimide differentially affects adenosine and thymidine uptake by rat thymocytes. Krzystyniak K, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):287–94

Inhibition of rat ovarian [3H]thymidine uptake by luteinizing hormone-releasing hormone agonists: a possible mechanism for preventing damage by cytotoxic agents. Ataya KM, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7252–6

Acute effect of prostaglandins and somatostatin on thymidine uptake of gastric mucosa cells. Aliño SF, et al. **Exp Cell Res** 1988 Dec;179(2):396–9

Enhanced thymidine uptake causes the lowered thymidine requirement of D. discoideum auxotroph HPS 401. Hurley DL, et al. **Exp Cell Res** 1988 Nov;179(1):273–81

Comparison of an antimetabolic assay and an antiproliferative assay, both using 3H-thymidine incorporation, to test drug sensitivity of human tumors. Zaffaroni N, et al. **Int J Cell Cloning** 1988 Nov;6(6):392–403

Effects of adriamycin and hyperthermia on cellular uptake of [3H]thymidine and its significance for the incorporation into DNA. Naito K, et al. **Int J Hyperthermia** 1989 May-Jun;5(3):329–40

The pancreas of Syrian golden hamsters. Age-related autoradiographic observations. Rosenberg L, et al. **Int J Pancreatol** 1989 Apr;4(3):273–80

Induction of cyclic AMP synthesis by forskolin is followed by a reduction in the expression of c-myc messenger RNA and inhibition of 3H-thymidine incorporation in human fibroblasts. Heldin NE, et al. **J Cell Physiol** 1989 Jan; 138(1):17–23

Evaluation of [3H]thymidine uptake method for studying growth of spiroplasmas under various conditions. Bastian FO, et al. **J Clin Microbiol** 1988 Oct;26(10):2124–6

On the uptake and incorporation of thymidine by cultured chick pineal glands. Wainwright SD, et al. **J Pineal Res** 1989;6(2):169–78

On thymidine incorporation by the cultured chick pineal gland. Wainwright SD, et al. **J Pineal Res** 1989;6(2):179–97

PHARMACOLOGY

Effect of varying the exposure and 3H-thymidine labeling period upon the outcome of the primary hepatocyte DNA repair assay. Barfknecht TR, et al. **Cell Biol Toxicol** 1988 Jun;4(2):199–209

The labelling index is not always reliable. Discrepancies between the labelling index and the mitotic rate in the rat corneal epithelium after intraperitoneal and topical administration of tritiated thymidine and colcemid. Haaskjold E, et al. **Cell Tissue Kinet** 1988 Nov;21(6):389–94

Thymidine suicide and hydroxyurea kill ratios accurately reflect the proliferative status of stem cells (CFU-S). Nečas E, et al. **Exp Hematol** 1989 Jan;17(1):53–5

Synergistic effect of hydroxyurea and excessive thymidine on the expression of the common fragile sites at 3p14 and 16q23. Yan ZA, et al. **Hum Genet** 1988 Dec;80(4):382–4

Reversal of activity of trimethoprim against gram-positive cocci by thymidine, thymine and 'folates'. Hamilton-Miller JM. **J Antimicrob Chemother** 1988 Jul;22(1):35–9

Comments on "The molecular basis for the differential sensitivity of B and T lymphocytes to growth inhibition by thymidine and 5-fluorouracil" [letter] Srivastava BI. **Leuk Res** 1988;12(8):699

RADIATION EFFECTS

Ability of melanins to protect against the radiolysis of thymine and thymidine. Hill HZ, et al. **Pigment Cell Res** 1987;1(2):81–6

TOXICITY

The effects of thymidine on deoxyribonucleotide pool levels, cytotoxicity and mutation induction in Friend mouse erythroleukaemia cells. Wilkinson YA, et al. **Leuk Res** 1989;13(7):615–20

THYMIDINE KINASE

Purification and crystallization of thymidine kinase from herpes simplex virus type 1. Sanderson MR, et al. **J Mol Biol** 1988 Aug 20;202(4):917–9

ANALYSIS

Detection of thymidine kinase activity using an assay based on the precipitation of nucleoside monophosphates with lanthanum chloride. Wolcott RM, et al. **Anal Biochem** 1989 Apr;178(1):38–40

Stability of enterocytes and certain enzymatic activities in suspensions of cells from the villous tip to the crypt of Lieberkühn of the mouse small intestine. Whitt DD, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2398–404

Hepatic regenerative enzyme activity after diffuse injury with galactosamine: relationship to histologic alterations. Zieve L, et al. **J Lab Clin Med** 1988 Nov;112(5):575–82

ANTAGONISTS & INHIBITORS

Effect of hepatic failure toxins on regenerative enzymes in the liver after injury with galactosamine in the rat. Zieve L, et al. **J Lab Clin Med** 1989 Apr;113(4):463–8

Enzyme regulatory site-directed drugs: study of the interactions of 5'-amino-2', 5'-dideoxythymidine (5'-AdThd) and thymidine triphosphate with thymidine kinase and the relationship to the stimulation of thymidine uptake by 5'-AdThd in 647V cells. Vazquez-Padua MA, et al. **Mol Pharmacol** 1989 Jan;35(1):98–104

[The development of pharmacophore models for thymidine kinase-dependent virostatic nucleoside analogs] Folkers G, et al. **Arch Pharm (Weinheim)** 1989 Jul;322(7):395–8 (Eng. Abstr.) (Ger)

[Localization of the essential structure for binding of antiviral agents to thymidine kinase by studying sequence homologies] Folkers G, et al. **Arch Pharm (Weinheim)** 1989 Jul;322(7):409–13 (Eng. Abstr.) (Ger)

BIOSYNTHESIS

Estrogen-like effect of 5-androstene-3 beta,17 beta-diol on the induction of fetal thymidine kinase in the rat uterus. Leroy B, et al. **J Steroid Biochem** 1988 Oct;31(4A):453–8

Thymidine kinase synthesis is repressed in nonreplicating muscle cells by a translational mechanism that does not affect the polysomal distribution of thymidine kinase mRNA. Gross MK, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4987–91

Expression of herpes simplex virus thymidine kinase, mediated by vaccinia virus early promoters. Sharif A, et al. **Res Virol** 1989 Mar-Apr;140(2):103–13

BLOOD

Serum thymidine kinase as a marker of disease activity in patients with multiple myeloma. Brown RD, et al. **Aust N Z J Med** 1989 Jun;19(3):226–32

Neuron-specific enolase and thymidine kinase as an aid to the diagnosis and treatment monitoring of small cell lung cancer. Fischbach W, et al. **Cancer** 1989 Mar 15; 63(6):1143–9

Correlation between tumor proliferation and serum levels of beta 2-microglobulin and thymidine kinase in malignant lymphomas. Lehtinen T. **Cancer Detect Prev** 1988; 12(1-6):125–31

Serum thymidine kinase in polycythaemia vera [letter] Pedersen C. **Eur J Haematol** 1989 Apr;42(4):409

Serum thymidine kinase in hairy cell leukemia before and during treatment with alpha interferon. Hagberg H, et al. **Haematologica (Pavia)** 1988 Sep-Oct;73(5):365–9

Thymidine kinase in neoplastic haematological diseases: confirmations, doubts and new findings [letter] Musto P, et al. **Haematologica (Pavia)** 1988 Nov-Dec;73(6):545–6

Serum thymidine kinase (TK) evaluation in HIV infection. Sabbatani S, et al. **Int J Biol Markers** 1989 Jan-Mar; 4(1):40–4

Activity of serum thymidine kinase in non-Hodgkin lymphoma: relationship to other prognostic factors. Hallek M, et al. **Klin Wochenschr** 1988 Aug 15;66(16):718–23

Serum thymidine kinase peaks early during AML induction therapy [letter; comment] Catalano L, et al. **Leukemia** 1989 May;3(5):396. **Comment on:** Leukemia 1988 Apr;2(4):245–6

Varicella zoster virus deoxythymidine kinase is present in serum before the onset of varicella. Källander CF, et al. **Scand J Infect Dis** 1989;21(3):255–7

[Serum deoxythymidine kinase in hematological malignancy] Naito K, et al. **Gan To Kagaku Ryoho** 1988 Dec; 15(12):3221–6 (Eng. Abstr.) (Jpn)

[A study on the measurement of serum thymidine kinase and its clinical significance in hematological neoplastic disorders] Torizumi K, et al. **Kaku Igaku** 1988 Jun; 25(6):561–7 (Jpn)

[Changes in the activities of enzymes of metabolism of DNA precursors in peptic ulcer and cancer of the stomach] Borzenko BG. **Klin Med (Mosk)** 1989 May;67(5):87–91 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

Cerebro-spinal fluid thymidine kinase in acute leukemia. Musto P, et al. **Leukemia** 1989 Sep;3(9):679–80

[Determination of thymidine kinase in the cerebrospinal fluid as a marker of leukemic meningosis] Musto P, et al. **Medicina (Firenze)** 1989 Jan-Mar;9(1):49–51 (Eng. Abstr.) (Ita)

GENETICS

Regulation of the expression of cell cycle genes. Baserga R, et al. **Ann N Y Acad Sci** 1988;551:283–9

(E)-5-(2-bromovinyl)uridine requires phosphorylation by the herpes simplex virus (type 1)-induced thymidine kinase to express its antiviral activity. Bernaerts R, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1955–61

Cytosine methylation in the EcoRI site of active and inactive herpesvirus thymidine kinase promoters. Tasseron-de Jong J, et al. **Biochim Biophys Acta** 1989 Jun 1;1008(1):62–70

De novo methylation as major event in the inactivation of transfected herpesvirus thymidine kinase genes in human cells. Tasseron-de Jong JG, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):215–23

Genetic analysis of metabolic cooperation in mammalian cell lines. MacDonald C. **Exp Cell Res** 1989 Jun;182(2):534–42

The effect of cell synchronization on the efficiency of stable gene transfer by electroporation. Yorifuji T, et al. **FEBS Lett** 1989 Mar 13;245(1-2):201–3

DNA methylation, chromatin structure and regulation of Herpes simplex virus tk gene expression. Graessmann A, et al. **Gene** 1988 Dec 25;74(1):135–7 (7 ref.)

A new expression system for mammalian cells based on putative replicator sequences of the mouse and a truncated thymidine kinase gene. Weidle UH, et al. **Gene** 1988 Dec 20;73(2):427–37

Expression vector pT7/TKII for the synthesis of authentic biologically active RNA encoding vaccinia virus thymidine kinase. Wilson EM, et al. **Gene** 1989 Apr 15;77(1):69–78

Locus specificity for mutation induction in human cells

exposed to accelerated heavy ions. Kronenberg A, et al. **Int J Radiat Biol** 1989 Jun;55(6):913–24

Molecular analysis of the thymidine kinase gene of thymidine kinase–deficient mutants of varicella–zoster virus. Mori H, et al. **Intervirology** 1988;29(6):301–10

The human thymidine kinase gene promoter. Deletion analysis and specific protein binding. Arcot SS, et al. **J Biol Chem** 1989 Feb 5;264(4):2343–9

The nucleotide sequence around the capripoxvirus thymidine kinase gene reveals a gene shared specifically with leporipoxvirus. Gershon PD, et al. **J Gen Virol** 1989 Mar; 70 (Pt 3):525–33

Analysis of the bovine herpesvirus type 1 thymidine kinase (TK) gene from wild–type virus and TK–deficient mutants. Mittal SK, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):901–18

Examination of the roles of transcription factor Sp1–binding sites and an octamer motif in trans induction of the herpes simplex virus thymidine kinase gene. Böni J, et al. **J Virol** 1989 Sep;63(9):4088–92

A conserved open reading frame that overlaps the herpes simplex virus thymidine kinase gene is important for viral growth in cell culture. Jacobson JG, et al. **J Virol** 1989 Apr;63(4):1839–43

Genetic and biochemical characterization of the thymidine kinase gene from herpesvirus of turkeys. Martin SL, et al. **J Virol** 1989 Jun;63(6):2847–52

Identification of the thymidine kinase gene of feline herpesvirus: use of degenerate oligonucleotides in the polymerase chain reaction to isolate herpesvirus gene homologs. Nunberg JH, et al. **J Virol** 1989 Aug; 63(8):3240–9

Latency–associated transcript but not reactivatable virus is present in sensory ganglion neurons after inoculation of thymidine kinase–negative mutants of herpes simplex virus type 1. Tenser RB, et al. **J Virol** 1989 Jun;63(6):2861–5

A rapid method for identifying the thymidine kinase genes of avipoxviruses. Schnitzlein WM, et al. **J Virol Methods** 1988 Aug;20(4):341–52

Coordinate control of S phase onset and thymidine kinase expression. Knight GB, et al. **Jpn J Cancer Res** 1989 Jun; 80(6):493–8 (75 ref.)

Inhibitory effects of (E)–5–(2–bromovinyl)–2'–deoxyuridine (BVDU) and related compounds on herpes simplex virus (HSV)–infected cells and HSV thymidine kinase gene–transformed cells. Balzarini J, et al. **Methods Find Exp Clin Pharmacol** 1989 Jun;11(6):379–89 (53 ref.)

Regulation of thymidine kinase activity in mouse L cells biochemically transformed by varicella–zoster virus. Shiraki K, et al. **Microbiol Immunol** 1989;33(8):693–8

Insertional activation of a promoterless thymidine kinase gene. Hiller S, et al. **Mol Cell Biol** 1988 Aug;8(8):3298–302

Transcriptional and posttranscriptional mechanisms regulate murine thymidine kinase gene expression in serum–stimulated cells. Lieberman HB, et al. **Mol Cell Biol** 1988 Dec;8(12):5280–91

A Mup promoter–thymidine kinase reporter gene shows relaxed tissue–specific expression and confers male sterility upon transgenic mice. Al–Shawi R, et al. **Mol Cell Biol** 1988 Nov;8(11):4821–8

Dependence of intrachromosomal recombination in mammalian cells on uninterrupted homology. Waldman AS, et al. **Mol Cell Biol** 1988 Dec;8(12):5350–7

Micronucleus, chromosome aberration, and small–colony TK mutant analysis to quantitate chromosomal damage in L5178Y mouse lymphoma cells. Doerr CL, et al. **Mutat Res** 1989 Mar;222(3):191–203

Molecular characterization of thymidine kinase mutants of human cells induced by densely ionizing radiation. Kronenberg A, et al. **Mutat Res** 1989 Apr;211(2):215–24

A comparison of mutation induction at the tk and hprt loci in human lymphoblastoid cells; quantitative differences are due to an additional class of mutations at the autosomal tk locus. Liber HL, et al. **Mutat Res** 1989 Feb;216(1):9–17

Evolution of the herpes thymidine kinase: identification and comparison of the equine herpesvirus 1 thymidine kinase gene reveals similarity to a cell–encoded thymidylate kinase. Robertson GR, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11303–17

Mouse thymidine kinase: the promoter sequence and the gene and pseudogene structures in normal cells and in thymidine kinase deficient mutants. Seiser C, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):185–95

Mouse thymidine kinase: sequence of a processed pseudogene. Seiser C, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2128

Targeting of an inducible toxic phenotype in animal cells. Borrelli E, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(20):7572–6

Thymidine kinase–negative herpes simplex virus mutants establish latency in mouse trigeminal ganglia but do not reactivate. Coen DM, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4736–40

Thymidine kinase obliteration: creation of transgenic mice with controlled immune deficiency. Heyman RA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2698–702

S–phase–specific regulation by deletion mutants of the human thymidine kinase promoter. Lipson KE, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6848–52

Deletion and hypermethylation of thymidine kinase gene in V79 Chinese hamster cells resistant to bromodeoxyuridine. Wise TL, et al. **Somat Cell Mol Genet** 1988 Nov; 14(6):567–81

Effect of an amber mutation in the herpes simplex virus thymidine kinase gene on polypeptide synthesis and stability. Irmiere AF, et al. **Virology** 1989 Feb;168(2):210–20

Nucleotide sequence of the thymidine kinase gene of a new strain of herpes simplex virus type 1. Palu' G, et al. **Virus Genes** 1989 Mar;2(2):183–6

Characterization of a binding factor that interacts with the sequences upstream of the vaccinia virus thymidine kinase gene. Wilson EM, et al. **Virus Genes** 1988 Oct;2(1):31–48

The effect of E1 mutations on biochemical transformation by an adenovirus carrying the herpes simplex virus thymidine kinase gene in region E3. Wilson GM, et al. **Virus Res** 1989 May;13(1):29–44

[Studies on the structural alterations of the human thymidine kinase gene occurring in the process of cotransfection] Weng ZP, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Jun; 21(2):231–8 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

Relationship between nasopharyngeal carcinoma and high antibody titers to Epstein–Barr virus–specific thymidine kinase. de Turenne–Tessier M, et al. **Int J Cancer** 1989 Jan 15;43(1):45–8

Antibodies against varicella–zoster virus and herpes simplex virus deoxythymidine kinase in heterologous infections. Källander CF, et al. **J Med Virol** 1989 May;28(1):30–7

ISOLATION & PURIFICATION

Co–purification of thymidylate kinase and cytosolic thymidine kinase from human term placenta by affinity chromatography. Tamiya N, et al. **Biochim Biophys Acta** 1989 Mar 16;995(1):28–35

[Feasibility of isolating and purifying thymidine kinases with the use of affinity chromatography] Eger K, et al. **Pharm Unserer Zeit** 1989 Mar;18(2):43–52 **(Ger)**

METABOLISM

Effect of ba–wei–di–huang–wan (hachimi–jio–gan) on thymidine kinase and its isozyme activities in the prostate glands in rats. Sakamoto S, et al. **Am J Chin Med** 1988; 16(1–2):29–36

Influence of indigenous microbiota on activities of alkaline phosphatase, phosphodiesterase I, and thymidine kinase in mouse enterocytes. Whitt DD, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2405–10

Cytosolic thymidine kinase activity in cultured human fibroblasts from individuals with galactokinase deficiency. Baptista J, et al. **Biochem Genet** 1989 Apr;27(3–4):219–28

Comparison of plasma and tissue thymidine kinase activities [letter] Calvert RJ, et al. **Br J Cancer** 1989 Apr;59(4):660

An assessment of proliferative and enzyme activity in transitional mucosa adjacent to colonic cancer. Lawson MJ, et al. **Cancer** 1989 Sep 1;64(5):1061–6

Thymidylate synthetase and thymidine kinase activities and methotrexate cytotoxicity during growth of L1210 and Ehrlich ascites tumor. Hullán L, et al. **Cancer Biochem Biophys** 1988 Nov;10(2):131–9

In vitro study of the modification by bleomycin of thymidine phosphorylation activity in lectin–stimulated normal human lymphocytes. Sharif A, et al. **Cancer Biochem Biophys** 1988 Jul;10(1):17–24

Levels of true thymidine kinase and nucleoside phosphotransferase in two strains of Tetrahymena pyriformis under different growth conditions. Yuyama S, et al. **Comp Biochem Physiol [B]** 1979;62(4):325–8

Effect of static magnetic field on cellular metabolism in the living mouse. Feinendegen LE, et al. **Endeavour** 1988; 12(3):119–23

Mitogen activation of human lymphocytes from normal and acute lymphocytic leukemia (ALL) subjects. Russo SA, et al. **Enzyme** 1989;41(4):217–26

Regulation of mitosis onset and thymidine kinase activity during the cell cycle of Physarum polycephalum plasmodia: effect of hydroxyurea. Wright M, et al. **Exp Cell Res** 1988 Nov;179(1):263–72

Thymidine kinase and disaccharidase activities in intestinal mucosa in health and disease. Mittal SK, et al. **Indian Pediatr** 1988 Jan;25(1):51–5

Correlations of dihydropyrimidine dehydrogenase, thymidine phosphorylase and thymidine kinase activities in strongly and weakly malignant cultured murine neuroblastoma cells. Williams CS, et al. **Int J Cancer** 1989 May 15;43(5):901–4

Regulation of mitosis onset and thymidine kinase activity during the cell cycle of Physarum polycephalum plasmodia: effect of fluorodeoxyuridine. Wright M, et al. **J Cell Physiol** 1989 May;139(2):346–53

The role of herpes simplex virus type 1 thymidine kinase in pathogenesis. Efstathiou S, et al. **J Gen Virol** 1989 Apr; 70 (Pt 4):869–79

Influence of meal distribution of wheat bran on fecal bulk, gastrointestinal transit time and colonic thymidine kinase activity in the rat. Otsuka M, et al. **J Nutr** 1989 Apr; 119(4):566–72

Regulation of thymidine kinase protein levels during myogenic withdrawal from the cell cycle is independent of mRNA regulation. Gross MK, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11625–43

Alterations in colonic thymidine kinase enzyme activity induced by consumption of various dietary fibers. Calvert RJ, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):45–51

Low levels of herpes simplex virus thymidine– thymidylate kinase are not limiting for sensitivity to certain antiviral drugs or for latency in a mouse model. Coen DM, et al. **Virology** 1989 Feb;168(2):221–31

[Clinical value of thymidine kinase activities in sera and tumor tissues of patients with colorectal cancer] Sakamoto S, et al. **Kaku Igaku** 1988 Oct;25(10):1089–94 (Eng. Abstr.) **(Jpn)**

[Effects of neo–adjuvant chemotherapy with UFT (a combination of tegafur and uracil) on DNA–synthesizing enzyme activities in human colorectal carcinomas] Sakamoto S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):94–8 (Eng. Abstr.) **(Jpn)**

[Thymidine kinase and its isozyme activities in human thyroid diseases] Murakami S. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):921–30 (Eng. Abstr.) **(Jpn)**

THYMIDINE MONOPHOSPHATE see under **THYMINE NUCLEOTIDES**

THYMIDINE PHOSPHATES see **THYMINE NUCLEOTIDES**

THYMIDINE PHOSPHORYLASE see under **PENTOSYLTRANSFERASES**

THYMIDYLATE SYNTHETASE

Stacked beta–bulges in thymidylate synthase account for a novel right–handed rotation between opposing beta–sheets. Matthews DA, et al. **J Mol Biol** 1989 Jan 20;205(2):449–54

ANALYSIS

High–performance liquid chromatographic assay for thymidylate synthase from the human malaria parasite, Plasmodium falciparum. Krungkrai J, et al. **J Chromatogr** 1989 Jan 27;487(1):51–9

ANTAGONISTS & INHIBITORS

Selectivity of CF and 5–fluorouracil: critical role of polyglutamylation. Houghton JA, et al. **Adv Exp Med Biol** 1988;244:85–95

Thymidylate synthase and fluorouracil. Ivanetich KM, et al. **Adv Exp Med Biol** 1988;244:113–24

Tumor cell responses to inhibition of thymidylate synthase. Moran RG, et al. **Adv Exp Med Biol** 1988;244:71–83

The quantitation by radioimmunoassay of 2'–deoxyuridine 5'–triphosphate in extracts of thymidylate synthase–inhibited cells. Piall EM, et al. **Anal Biochem** 1989 Mar;177(2):347–52

Quinazoline antifolates inhibiting thymidylate synthase: computer modelling of the N10 substituent. Jones TR, et al. **Anticancer Drug Des** 1989 Mar;3(4):243–8

The efficacy of 5–fluorouracil in human colorectal cancer is not enhanced by thymidylate synthetase inhibition with CB3717 (N10–propargyl–5,8 dideazafolic acid). Cantwell BM, et al. **Br J Cancer** 1988 Aug;58(2):189–90

Leucovorin enhancement of the effects of the fluoropyrimidines on thymidylate synthase. Morgan RG. **Cancer** 1989 Mar 15;63(6 Suppl):1008–12 (41 ref.)

Inhibition of thymidylate synthase after administration of doxifluridine in a transplantable colon carcinoma in the rat. Berne M, et al. **Cancer Invest** 1988;6(4):377–83

Mechanisms of innate resistance to thymidylate synthase inhibition after 5–fluorouracil. Spears CP, et al. **Cancer Res** 1988 Oct 15;48(20):5894–900

Biochemical mechanisms in colon xenografts: thymidylate synthase as a target for therapy. Houghton PJ, et al. **Invest New Drugs** 1989 Apr;7(1):59–69 (30 ref.)

Synthesis and biological activity of analogues of diazaquinomycin A, a new thymidylate synthase inhibitor. Tsuzuki K, et al. **J Antibiot (Tokyo)** 1989 May;42(5):727–37

The role of cellular folates in the enhancement of activity of the thymidylate synthase inhibitor 10–propargyl–5,8–dideazafolate against hepatoma cells in vitro by inhibitors of dihydrofolate reductase. Galivan J, et al. **J Biol Chem** 1989 Jun 25;264(18):10685–92

Quinazoline antifolates inhibiting thymidylate synthase: 2–desamino derivatives with enhanced solubility and potency. Jones TR, et al. **J Med Chem** 1989 Apr; 32(4):847–52

Quinazoline antifolate thymidylate synthase inhibitors: nitrogen, oxygen, sulfur, and chlorine substituents in the C2 position. Marsham PR, et al. **J Med Chem** 1989 Mar; 32(3):569–75

Folate analogues. 32. Synthesis and biological evaluation of 2–desamino–2–methyl–N10–propargyl–5,8–dideazafolic acid and related compounds. Patil SD, et al. **J Med Chem** 1989 Jun;32(6):1284–9

Quinazoline antifolates inhibiting thymidylate synthase: synthesis of four oligo(L–gamma–glutamyl) conjugates of N10–propargyl–5,8–dideazafolic acid and their enzyme inhibition. Pawelczak K, et al. **J Med Chem** 1989 Jan; 32(1):160–5

A pyrimidine–based "flexible" bisubstrate analogue inhibitor of human thymidylate synthase. Yang IY, et al. **J Med Chem** 1988 Nov;31(11):2126–32

Activity of thymidylate synthetase and its inhibition by 5–fluorouracil in highly enzyme–overproducing cells resistant to 10–propargyl–5,8–dideazafolate. Danenberg KD, et al. **Mol Pharmacol** 1989 Aug;36(2):219–23

[Inhibition of thymidylate synthetase and antiproliferative effect by 1-hexylcarbamoyl-5-fluorouracil] Nishiyama M, et al. **Gan To Kagaku Ryoho** 1988 Nov;15(11):3109–13 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Study of dihydrofolate reductase–thymidylate synthase in Plasmodium falciparum. Inselburg J, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):328–36

DEFICIENCY

Mutants of human colon adenocarcinoma, selected for thymidylate synthase deficiency. Houghton PJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1377–81

GENETICS

Detection of drug resistance in human tumors by in vitro enzymatic amplification [published erratum appears in Cancer Res 1989 Sep 1;49(17):4946] Kashani-Sabet M, et al. **Cancer Res** 1988 Oct 15;48(20):5775–8

Regulation of thymidylate synthase gene expression in mouse fibroblasts synchronized by mitotic selection. Nagarajan M, et al. **Exp Cell Res** 1989 Mar;181(1):289–97

Characterisation of the dihydrofolate reductase–thymidylate synthetase gene from human malaria parasites highly resistant to pyrimethamine. Snewin VA, et al. **Gene** 1989 Mar 15;76(1):41–52

Genetic analysis of two mutations affecting thymidine metabolism in Dictyostelium discoideum. Bronner CE, et al. **Genetics** 1988 Dec;120(4):959–64

Cloning, purification, and properties of Candida albicans thymidylate synthase. Singer SC, et al. **J Bacteriol** 1989 Mar;171(3):1372–8

Identification and characterization of an L1 family sequence with a very long open reading frame in the third intron of the human thymidylate synthase gene. Horie N, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):1–4

Expression of human thymidylate synthase in Escherichia coli. Davisson VJ, et al. **J Biol Chem** 1989 Jun 5; 264(16):9145–8

Evidence that the intron open reading frame of the phage T4 td gene encodes a specific endonuclease. West DK, et al. **J Biol Chem** 1989 Jun 25;264(18):10343–6

Analysis of the multiple 5' and 3' termini of poly(A)+ and poly(A)-deficient thymidylate synthase mRNA in growth-stimulated mouse fibroblasts. DeWille JW, et al. **J Cell Physiol** 1989 Feb;138(2):358–66

Structure, genomic organization and transcription of the bifunctional dihydrofolate reductase–thymidylate synthase gene from Crithidia fasciculata. Hughes DE, et al. **Mol Biochem Parasitol** 1989 May 1;34(2):155–66

The mouse thymidylate synthase promoter: essential elements are in close proximity to the transcriptional initiation sites. Deng T, et al. **Mol Cell Biol** 1989 Sep;9(9):4079–82

Transcriptional mapping of the amplified region encoding the dihydrofolate reductase–thymidylate synthase of Leishmania major reveals a high density of transcripts, including overlapping and antisense RNAs. Kapler GM, et al. **Mol Cell Biol** 1989 Sep;9(9):3959–72

Transcriptional regulation of the cell cycle-dependent thymidylate synthase gene of Saccharomyces cerevisiae. McIntosh EM, et al. **Mol Cell Biol** 1988 Nov;8(11):4616–24

Trimethoprim resistance transposon Tn4003 from Staphylococcus aureus encodes genes for a dihydrofolate reductase and thymidylate synthetase flanked by three copies of IS257. Rouch DA, et al. **Mol Microbiol** 1989 Feb;3(2):161–75

A naturally occurring variation in thymidylate synthase structure is associated with a reduced response to 5-fluoro-2'-deoxyuridine in a human colon tumor cell line. Berger SH, et al. **Mol Pharmacol** 1988 Oct;34(4):480–4

Complementation of a Dictyostelium discoideum thymidylate synthase mutation with the mouse gene provides a new selectable marker for transformation. Chang AC, et al. **Nucleic Acids Res** 1989 May 25;17(10):3655–61

Thymidylate synthase gene expression is stimulated by some (but not all) introns. Deng TL, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):645–58

Amino acid changes linked to pyrimethamine resistance in the dihydrofolate reductase–thymidylate synthase gene of Plasmodium falciparum. Cowman AF, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9109–13

Isolation and expression of the Pneumocystis carinii thymidylate synthase gene. Edman U, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6503–7

Evidence that a point mutation in dihydrofolate reductase–thymidylate synthase confers resistance to pyrimethamine in falciparum malaria. Peterson DS, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9114–8

Studies of Plasmodium falciparum dihydrofolate–reductase thymidylate synthase: potential advantages. Inselburg J, et al. **Prog Clin Biol Res** 1989;313:29–43 (26 ref.)

ISOLATION & PURIFICATION

Purification and characterization of thymidylate synthetase in the liver of the mouse bearing Ehrlich ascites tumor. Asanagi M, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):749–57

METABOLISM

Effects of treatment of donor mice with phenylhydrazine and 5-fluorouracil on thymidylate synthase activity and growth of bone marrow grafts in spleens of irradiated recipients. Panfil B, et al. **Acta Pol Pharm** 1988;45(3):266–70

The role of thymidylate synthase in the response to fluoropyrimidine–folinic acid combinations. Berger SH, et al. **Adv Exp Med Biol** 1988;244:59–69

Pharmacodynamics of 5-fluorouracil and leucovorin. Gustavsson BG, et al. **Adv Exp Med Biol** 1988;244:219–24

Methods for thymidylate synthase pharmacodynamics: serial biopsy, free and total TS, FdUMP and dUMP, and H4PteGlu and CH2-H4PteGlu assays. Spears CP, et al. **Adv Exp Med Biol** 1988;244:97–106

Isolation and characterization of thymidylate synthetase mutants of Xanthomonas maltophilia. West TP. **Arch Microbiol** 1989;151(3):220–2

Interaction of the 5'-phosphates of the anti-HIV agents, 3'-azido-3'-deoxythymidine and 3'-azido-2',3'-dideoxyuridine, with thymidylate synthase. Dzik JM, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1418–23

Effect of polyglutamylation of 5,10-methylenetetrahydrofolate on the binding of 5-fluoro-2'-deoxyuridylate to thymidylate synthase purified from a human colon adenocarcinoma xenograft. Radparvar S, et al. **Biochem Pharmacol** 1989 Jan 15; 38(2):335–42

Deoxyuridylate effects on thymidylate synthase–5-fluorodeoxyuridylate-folate ternary complex formation. Spears CP, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):2985–93

5-Fluorouracil and UFT-sensitive gastric carcinoma has a high level of thymidylate synthase. Machara Y, et al. **Cancer** 1989 May 1;63(9):1693–6

Increased thymidylate synthase (EC 2.1.1.45) activity in normal and neoplastic proliferation. Hashimoto Y, et al. **Cancer Biochem Biophys** 1988 Jul;10(1):1–10

Thymidylate synthetase and thymidine kinase activities and methotrexate cytotoxicity during growth of L1210 and Ehrlich ascites tumor. Hullán L, et al. **Cancer Biochem Biophys** 1988 Nov;10(2):131–9

Thymidylate synthesis and utilization via the de novo pathway in normal and megaloblastic human bone marrow cells. Matthews JH, et al. **Eur J Haematol** 1989 Apr; 42(4):396–404

Thymidylate synthase as a determinant of 5-fluoro-2'-deoxyuridine response in human colonic tumor cell lines. Berger SH, et al. **Mol Pharmacol** 1988 Oct; 34(4):474–9

Modulation of 5-fluoro-2'-deoxyuridine response by folinic acid in human colonic tumor cell lines: the role of thymidylate synthase. Davis ST, et al. **Mol Pharmacol** 1989 Apr;35(4):422–7

[Effects of neo-adjuvant chemotherapy with UFT (a combination of tegafur and uracil) on DNA-synthesizing enzyme activities in human colorectal carcinomas] Sakamoto S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):94–8 (Eng. Abstr.) **(Jpn)**

[Thymine- and thymidine-dependence of Yersinia pestis mutants with altered thymidylate synthetase] Mishan'kan BN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb; (2):24–9 (Eng. Abstr.) **(Rus)**

THYMINE

Identification of a single nucleotide C-to-T transition and five different deletions in patients with severe hemophilia B. Ludwig M, et al. **Am J Hum Genet** 1989 Jul;45(1):115–22

Cooperativity in A-tract structure and bending properties of composite TnAn blocks. Haran TE, et al. **Biochemistry** 1989 Apr 4;28(7):2763–7

Structure of a hydroxyl radical induced cross-link of thymine and tyrosine. Margolis SA, et al. **Biochemistry** 1988 Aug 23;27(17):6353–9

Methylation of thymine and uracil with free methyl cations formed due to beta-decay of tritiated methane: possible implication in mutagenesis and carcinogenesis. Kornakov MV, et al. **Biokhimiia** 1989 May;71(5):633–7

Structure and mechanism of hydroxyl radical-induced formation of a DNA–protein cross-link involving thymine and lysine in nucleohistone. Dizdaroglu M, et al. **Cancer Res** 1989 Jul 1;49(13):3463–7

Chemical reactivity of matched cytosine and thymine bases near mismatched and unmatched bases in a heteroduplex between DNA strands with multiple differences. Cotton RG, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4223–33

Refined crystal structure of an octanucleotide duplex with I.T. mismatched base pairs. Cruse WB, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):55–72

Effect of the sequence-dependent structure of the 17 bp AT spacer on the strength of consensuslike E.coli promoters in vivo. Lozinski T, et al. **Nucleic Acids Res** 1989 May 25;17(10):3855–63

3,4 and 4',5'-photocycloadducts between 4'-methylangelicin and thymine from DNA. Caffieri S, et al. **Photochem Photobiol** 1988 Nov;48(5):573–7

Interactions and photoreactivity of 5-alkoxypsoralens with thymine. A model approach. Décout JL, et al. **Photochem Photobiol** 1988 Nov;48(5):583–96

Interactions and photoreactivity of 8-alkoxypsoralens with thymine. A model approach. Décout JL, et al. **Photochem Photobiol** 1988 Nov;48(5):597–605

The direct observation of a psoralen–thymine UVA induced solid-state cycloaddition reaction product by single-crystal x-ray diffractometry. Pfluger CE, et al. **Photochem Photobiol** 1989 Apr;49(4):375–9

A human 200-kDa protein binds selectively to DNA fragments containing G.T mismatches. Jiricny J, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8860–4

Sequence recognition protein for the 17-base-pair A + T-rich tract in the replication origin of simian virus 40 DNA. Malkas LH, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):70–4

ESR characteristics of one-electron reduced thymine in monomer, oligomer, and polymer derivatives. Bernhard WA, et al. **Radiat Res** 1989 Mar;117(3):379–94

Recognition of thymine adenine.base pairs by guanine in a pyrimidine triple helix motif. Griffin LC, et al. **Science** 1989 Sep 1;245(4921):967–71

ANALOGS & DERIVATIVES

Mutagenic specificity of alkylated and oxidized DNA bases as determined by site-specific mutagenesis. Essigmann JM, et al. **Ann Ist Super Sanita** 1989;25(1):155–61

Processing of ring saturation and fragmentation products of DNA thymine in Escherichia coli. Wallace SS. **Ann Ist Super Sanita** 1989;25(1):191–201

Solid-phase synthesis and side reactions of oligonucleotides containing O-alkylthymine residues. Borowy-Borowski H, et al. **Biochemistry** 1989 Feb 21;28(4):1471–7

Template length, sequence context, and 3'-5' exonuclease activity modulate replicative bypass of thymine glycol lesions in vitro. Clark JM, et al. **Biochemistry** 1989 Jan 24;28(2):775–9

Characterization of antibodies to dihydrothymine, a radiolysis product of DNA. Hubbard K, et al. **Biochemistry** 1989 May 16;28(10):4382–7

C–H ... O hydrogen bonding in solutions of methylated nucleic acid base analogs as revealed by NMR. Bruskov VI, et al. **Biopolymers** 1989 Feb;28(2):589–604

Immunoanalytical detection of O4-ethylthymine in liver DNA of individuals with or without malignant tumors. Huh NH, et al. **Cancer Res** 1989 Jan 1;49(1):93–7

Synthesis and evaluation of a series of 1-(3-alkyl-2,3-dideoxy-alpha,beta-D-erythro-pentofuranosyl)thymines. Agyei-Aye K, et al. **Carbohydr Res** 1988 Dec 1;183(2):261–75

The SO4- -induced oxidation of 1,3,6-trimethyluracil and 1,3-dimethylthymine by potassium peroxodisulphate and oxygen in aqueous solution: an interesting contrast. von Sonntag C, et al. **Free Radic Res Commun** 1989; 6(2-3):111-2

Detection of O4-ethylthymine in human liver DNA. Huh N, et al. **IARC Sci Publ** 1988;(89):292–5

Interaction energy studies on 6-azapyrimidine antimetabolites during transcription process. Ojha RP, et al. **Indian J Biochem Biophys** 1988 Jun;25(3):237–43

Cyclobuta-dithymidine induction by solar-simulating UV radiation in human skin: II. Individual responses. Bruze M, et al. **J Invest Dermatol** 1989 Sep;93(3):341–4

3,4 and 4',5'-photocycloadducts between 4'-methylangelicin and thymine from DNA. Caffieri S, et al. **Photochem Photobiol** 1988 Nov;48(5):573–7

Cyclobuta-dithymidine induction by solar-simulating UV radiation in human skin. I. Protection by constitutive pigmentation. Strickland PT, et al. **Photodermatol** 1988 Aug;5(4):166–9

Absence of pyrimidine salvage and prevention of thymineless radiosensitization in Escherichia coli thyA cells fed dihydrothymine or thymine glycol. Claycamp HG, et al. **Radiat Res** 1988 Sep;115(3):617–23

Immunochemical quantitation of thymine glycol in oxidized and X-irradiated DNA. Hubbard K, et al. **Radiat Res** 1989 May;118(2):257–68

Effects of N1,N3-diallyluracil and N1,N3-diallylthymine on hepatic drug-metabolizing enzymes of mice. Tateoka Y, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr; 64(1):135–43

ANALYSIS

Determination of the A-T content of DNA by second-derivative ultraviolet spectroscopy. Marquet R, et al. **Anal Biochem** 1989 Feb 1;176(2):265–8

A simple method for the characterization of photoproducts from DNA applied to the cis-syn thymine dimer. Salter LF, et al. **Biomed Chromatogr** 1989 Jan;3(1):32–4

CHEMICAL SYNTHESIS

Solid-phase synthesis and side reactions of oligonucleotides containing O-alkylthymine residues. Borowy-Borowski H, et al. **Biochemistry** 1989 Feb 21;28(4):1471–7

METABOLISM

Thymineless death in Escherichia coli mutants deficient in the RecF recombination pathway. Nakayama K, et al. **Can J Microbiol** 1988 Jul;34(7):905–7

[Thymine- and thymidine-dependence of Yersinia pestis mutants with altered thymidylate synthetase] Mishan'kan BN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb; (2):24–9 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Reversal of activity of trimethoprim against gram-positive cocci by thymidine, thymine and 'folates'. Hamilton-Miller JM. **J Antimicrob Chemother** 1988 Jul;22(1):35-9

PHYSIOLOGY

TMP-reactive autoantibodies in human SLE sera demonstrate thymine-dependent oligonucleotide specificity. Munns TW, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):204-10

Absence of pyrimidine salvage and prevention of thymineless radiosensitization in Escherichia coli thyA cells fed dihydrothymine or thymine glycol. Claycamp HG, et al. **Radiat Res** 1988 Sep;115(3):617-23

RADIATION EFFECTS

A specific and efficient photoreaction between E. coli RNA polymerase and T+1 in the lacUV5 or deoP1 promoter. Jeppesen C, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9545-55

Photochemistry of 4-thiouridine and thymine. Peak MJ, et al. **Photochem Photobiol** 1988 Aug;48(2):229-32

Ability of melanins to protect against the radiolysis of thymine and thymidine. Hill HZ, et al. **Pigment Cell Res** 1987;1(2):81-6

Intramolecular H atom abstraction from the sugar moiety by thymine radicals in oligo- and polydeoxynucleotides. Karam LR, et al. **Radiat Res** 1988 Nov;116(2):210-6

THYMINE DIMERS see PYRIMIDINE DIMERS

THYMINE NUCLEOTIDES

Thermodynamic parameters of the binding of an oligo-alpha-thymidylate to its complementary oligo-beta-adenylate sequences. Durand M, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):505-10

Nuclear magnetic resonance studies of cis-syn, trans-syn, and 6-4 photodimers of thymidylyl(3'-5')thymidine monophosphate and cis-syn photodimers of thymidylyl(3'-5')thymidine cyanoethyl phosphotriester. Kan L, et al. **Biochemistry** 1988 Jul 26;27(15):5796-803

Sequence-targeted cleavage of nucleic acids by oligo-alpha-thymidylate-phenanthroline conjugates: parallel and antiparallel double helices are formed with DNA and RNA, respectively. Sun JS, et al. **Biochemistry** 1988 Aug 9;27(16):6039-45

ESR characteristics of one-electron reduced thymine in monomer, oligomer, and polymer derivatives. Bernhard WA, et al. **Radiat Res** 1989 Mar;117(3):379-94

[Reactivity of oligonucleotide derivatives, containing a methylphosphate group. Affinity modification of target DNA by 4-N-(methyl-N-2-chlorethylamino)benzyl 3'- and 5'-phosphamide derivatives of octathymidylate containing methylphosphonate residues] Amirkhanov NV, et al. **Bioorg Khim** 1989 Mar;15(3):379-86 (Eng. Abstr.) (Rus)

ANALYSIS

The crystal structure of the ternary complex of staphylococcal nuclease, Ca2+, and the inhibitor pdTp, refined at 1.65 A. Loll PJ, et al. **Proteins** 1989;5(3):183-201

BIOSYNTHESIS

Effects of the combination of acivicin and cis-diamminedichloroplatinum(II) on thymidylate synthesis of A549 lung cancer cells. Futami H, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):31-7

Thymidylate synthesis and utilization via the de novo pathway in normal and megaloblastic human bone marrow cells. Matthews JH, et al. **Eur J Haematol** 1989 Apr; 42(4):396-404

DNA strand break accumulation, thymidylate synthesis and NAD levels in lymphocytes from methyl donor-deficient rats. James SJ, et al. **J Nutr** 1989 Apr;119(4):661-4

CHEMICAL SYNTHESIS

Comparison of polymerase insertion and extension kinetics of a series of O2-alkyldeoxythymidine triphosphates and O4-methyldeoxythymidine triphosphate. Singer B, et al. **Biochemistry** 1989 Feb 21;28(4):1478-83

IMMUNOLOGY

TMP-reactive autoantibodies in human SLE sera demonstrate thymine-dependent oligonucleotide specificity. Munns TW, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):204-10

METABOLISM

Voltage-dependent introduction of a d[alpha]octothymidylate into electropermeabilized cells. Bazile D, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):633-9

Direct photoaffinity labeling of ribonucleotide reductase from Escherichia coli using dTTP: characterization of the photoproducts. Kierdaszuk B, et al. **Biochemistry** 1988 Jun 28;27(13):4952-6

Enhanced canavanine uptake is associated with nucleotide permeability in a thymidylate auxotroph of Saccharomyces cerevisiae. Kohalmi SE, et al. **Curr Genet** 1989 Feb; 15(2):129-34

Dihydrothymidine and thymidine glycol triphosphates as substrates for DNA polymerases: differential recognition of thymine C5-C6 bond saturation and sequence specificity of incorporation. Ide H, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11339-54

[Observation of AT-nucleotide specificity during the interaction of dexamethoxin with native DNA] Kukhar' VP, et al. **Dokl Akad Nauk SSSR** 1989;305(4):997-9 (Rus)

PHARMACOLOGY

Cellular pharmacology of 2',3'-dideoxy-2',3'-didehydrothymidine, a nucleoside analog active against human immunodeficiency virus. Ho HT, et al. **Antimicrob Agents Chemother** 1989 Jun; 33(6):844-9

Reverse transcriptases from human immunodeficiency virus type 1 (HIV-1), HIV-2, and simian immunodeficiency virus (SIVMAC) are susceptible to inhibition by foscarnet and 3'-azido-3'-deoxythymidine triphosphate. Vrang L, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1733-4

Comparison of the effect of Carbovir, AZT, and dideoxynucleoside triphosphates on the activity of human immunodeficiency virus reverse transcriptase and selected human polymerases. White EL, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):393-8

Inhibition of human hepatitis B virus DNA polymerase and duck hepatitis B virus DNA polymerase by triphosphates of thymidine analogs and pharmacokinetic properties of the corresponding nucleosides. Tao PZ, et al. **J Med Virol** 1988 Dec;26(4):353-62

Enzyme regulatory site-directed drugs: study of the interactions of 5'-amino-2', 5'-dideoxythymidine (5'-AdThd) and thymidine triphosphate with thymidine kinase and the relationship to the stimulation of thymidine uptake by 5'-AdThd in 647V cells. Vazquez-Padua MA, et al. **Mol Pharmacol** 1989 Jan;35(1):98-104

[Selective inhibition by 3'-azido-2',3'-dideoxythymidine-5'-triphosphate of reverse transcription in retrovirus A particles from the rat liver] Pyrinova GB, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1405-10 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Spin trapping of sugar radicals in solid and aqueous phases. Kuwabara M, et al. **Free Radic Res Commun** 1989; 6(2-3):97-8

Enzymatic analysis of isomeric trithymidylates containing ultraviolet light-induced cyclobutane pyrimidine dimers. I. Nuclease P1-mediated hydrolysis of the intradimer phosphodiester linkage. Liuzzi M, et al. **J Biol Chem** 1989 Apr 15;264(11):6355-63

Enzymatic analysis of isomeric trithymidylates containing ultraviolet light-induced cyclobutane pyrimidine dimers. II. Phosphorylation by phage T4 polynucleotide kinase. Weinfeld M, et al. **J Biol Chem** 1989 Apr 15; 264(11):6364-70

Intramolecular H atom abstraction from the sugar moiety by thymine radicals in oligo- and polydeoxynucleotides. Karam LR, et al. **Radiat Res** 1988 Nov;116(2):210-6

THYMOANALEPTICS see ANTIDEPRESSIVE AGENTS

THYMOL

Dependence of the output of a halothane vaporizer on thymol concentration. Gray WM. **Anaesthesia** 1988 Dec; 43(12):1047-9

ADMINISTRATION & DOSAGE

Endodontic treatment of infected primary teeth, using Maisto's paste. Mass E, et al. **ASDC J Dent Child** 1989 Mar-Apr;56(2):117-20 (25 ref.)

ADVERSE EFFECTS

Allergic contact dermatitis due to thymol in Listerine for treatment of paronychia. Fisher AA. **Cutis** 1989 Jun; 43(6):531-2

ANALOGS & DERIVATIVES

Inhibition of Escherichia coli serotype O157:H7 by bromthymol blue. Gubash SM, et al. **J Clin Microbiol** 1988 Nov;26(11):2248-9

Endomethasone root canal filling material in the mandibular canal. A case report. Erişen R, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):343-5

[Study of bromthymol blue binding with plasma membranes] Dreval' VI, et al. **Ukr Biokhim Zh** 1989 Mar-Apr; 61(2):94-8 (Eng. Abstr.) (Rus)

ANALYSIS

Simultaneous determination of methyl salicylate and thymol in various pharmaceutical formulations by differential-pulse voltammetry using a glassy carbon electrode. Lau OW, et al. **Analyst** 1988 Jun;113(6):865-8

[Azo dye from 4-aminobenzoic acid and thymol—proof of 4-aminobenzoic acid as a degradation product of procaine] Blüsing G, et al. **Arch Pharm (Weinheim)** 1988 Jul;321(7):433 (Ger)

PHARMACOLOGY

Stimulation of guinea pig neutrophil superoxide anion-producing system with thymol. Suzuki Y, et al. **Inflammation** 1988 Dec;12(6):575-84

THYMOLEPTICS see ANTIDEPRESSIVE AGENTS

THYMOLPHTHALEIN see under PHENOLPHTHALEINS

THYMOMA

A new intraperitoneal metastasis from thymoma. Lundblad R, et al. **Eur J Surg Oncol** 1988 Dec;14(6):697-702

[Thymus tumors] Pešula E, et al. **Cas Lek Cesk** 1988 Aug 19;127(34):1066-9 (Eng. Abstr.) (Cze)

[Malignant thymoma. Apropos of 10 cases] Charrot P. **Ann Otolaryngol Chir Cervicofac** 1988;105(7):535-7 (19 ref.) (Eng. Abstr.) (Fre)

[Mediastinal thymoma (presentation of 2 cases)] Tirone G, et al. **Chir Ital** 1988 Apr;40(2):159-69 (22 ref.) (Eng. Abstr.) (Ita)

[Clinical features and prognosis of thymoma and thymic carcinoma] Miyazawa N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2194-9 (Eng. Abstr.) (Jpn)

[A case of Good's syndrome with thymoma that regressed spontaneously—a review of clinical feature in 14 cases of Good's syndrome reported in Japan] Doutsu Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):770-7 (14 ref.) (Eng. Abstr.) (Jpn)

ANALYSIS

A novel form of GD1c ganglioside IV3 (NeuAc alpha 2-8 NeuGc)Gg4Cer from murine X-ray induced thymoma. Pacuszka T, et al. **Acta Biochim Pol** 1988;35(4):387-93

Immunohistochemical studies in human thymomas. Localization of thymosin and various cell marker. Hirokawa K, et al. **Virchows Arch [B]** 1988;55(6):371-80

CLASSIFICATION

[Thymomas non associated with myasthenia gravis. Nosologic aspects and therapeutic correlations] Ghilardi G, et al. **Minerva Chir** 1989 Mar 31;44(6):999-1004 (Eng. Abstr.) (Ita)

COMPLICATIONS

Massive benign thymoma presenting as ocular myasthenia. Goadsby PJ, et al. **Aust N Z J Med** 1989 Jun;19(3):257-8

Thymoma in a case of linear scleroderma [letter] Duró JC, et al. **Br J Rheumatol** 1989 Apr;28(2):178-9

Peliosis thymomis: association with tuberculosis [letter] Williams DJ, et al. **J Clin Pathol** 1989 Mar;42(3):331

Response of agranulocytosis to thymectomy in a patient with thymoma and chronic lymphocytic leukemia. Weir AB 3d, et al. **Med Pediatr Oncol** 1989;17(1):58-61

[Cachexia, pain and muscle weakness in a 69-year-old woman (clinical conference)] Pécoud A, et al. **Schweiz Med Wochenschr** 1989 Mar 25;119(12):407-15 (Eng. Abstr.) (Fre)

[Diagnostic and therapeutic tactics in cancerous lesions of the thymus in patients with myasthenia] Kuzin MI, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):72-7 (Eng. Abstr.) (Rus)

DIAGNOSIS

DNA flow cytometry of thymomas. Davies SE, et al. **Histopathology** 1989 Jul;15(1):77-83

Cytologic diagnosis of thymoma by fine needle aspiration. Mondal A, et al. **Indian J Pathol Microbiol** 1989 Jul; 32(3):237-9

Metastatic cervical thymoma. Juarbe C, et al. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):232-6

[Diagnosis, pathogenesis and treatment of myasthenia in thymic tumors] Lobzin VS, et al. **Sov Med** 1988;(12):79-82 (Rus)

DRUG THERAPY

Disseminated thymoma and myasthenia gravis: dramatic response to prednisone [letter] Taylor R, et al. **Ann Neurol** 1989 Feb;25(2):208-9

Initial chemotherapy followed by surgery in malignant thymoma. Mackintosh JF, et al. **Aust N Z J Med** 1989 Aug;19(4):362-4

Chemotherapy of invasive thymoma. A retrospective study of 22 cases. Göldel N, et al. **Cancer** 1989 Apr 15; 63(8):1493-500

ENZYMOLOGY

Proteolytic degradation of protein kinase C in the phorbol ester-induced interleukin-2 secreting thymoma cells. Huang FL, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):503-14

Mouse thymoma cell line expresses a gluconeogenic enzyme, fructose 1,6-bisphosphatase. Mizunuma H, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):929-35

ETIOLOGY

[A case of a lymphoreticular thymoma arising in the wall of a true cyst] Kharitonov VA, et al. **Klin Khir** 1988;(12):55 (Rus)

[Myasthenic thymoma in the residual thymus gland after thymectomy] Vasil'ev VN, et al. **Vestn Khir** 1989 Feb; 142(2):50–1 (Rus)

GENETICS

Multiple clonal chromosome aberrations in two thymomas. Kristofferson U, et al. **Cancer Genet Cytogenet** 1989 Aug; 41(1):93–8

The Mlvi-1 locus involved in the induction of rat T-cell lymphomas and the pvt-1/Mis-1 locus are identical. Koehne CF, et al. **J Virol** 1989 May;63(5):2366–9

Expression of cellular oncogenes: unrearranged c-myc gene but altered promoter usage in radiation-induced thymoma. Bandyopadhyay SK, et al. **Oncogene Res** 1989;4(4):311–8

Isolation of a cDNA clone from the rat thymoma cell line C58 with homology to the murine T cell receptor alpha chain gene. Ono SJ, et al. **Transplant Proc** 1989 Apr; 21(2):3242–3

IMMUNOLOGY

Quantitative analysis of cultured thymic reticulo-epithelial cells labelled by different antibodies: a flow cytometric study. Fabien N, et al. **Clin Exp Immunol** 1989 Feb; 75(2):292–6

Macrophages and interdigitating reticulum cells in normal thymus and in thymoma: an immunohistochemical study. Ruco LP, et al. **Histopathology** 1989 Jan;14(1):37–45

Allosensitization in IL-2-containing limiting dilution cultures generates cytotoxic T lymphocytes (CTL) rather than LAK cells reactive with a syngeneic nonimmunogenic murine tumor. Leshem B, et al. **Immunol Lett** 1989 Jan 15;20(1):53–8

Immunoprecipitation of interleukin-1 receptors from a mouse thymoma cell line, EL-4. Rangnekar VM, et al. **J Biol Chem** 1988 Nov 5;263(31):16408–13

Immortalization of EBV-infected B cells is not influenced by exogenous signals acting on B cell proliferation. Effects of mutant EL-4 thymoma cells and transforming growth factor-beta. Straub C, et al. **J Immunol** 1989 Jan 1; 142(1):87–93

Increased sensitivity of tumor cells to immune defense cells following treatment with antineoplastic agents in vitro. Ujiie T. **Jpn J Exp Med** 1989 Feb;59(1):17–26

[Immunologic defect and other parathymic syndromes in thymoma] Morell A, et al. **Ergeb Inn Med Kinderheilkd** 1988;57:185–216 (103 ref.) (Ger)

METABOLISM

Expression of cortical and medullary thymic epithelial antigens in thymomas. An immunohistological study of 14 cases including a characterization of the lymphocytic compartment. Hofmann WJ, et al. **Histopathology** 1989 May;14(5):447–63

Immunohistochemical study of 22 cases of thymoma. Lee D, et al. **J Clin Pathol** 1988 Dec;41(12):1297–304

MICROBIOLOGY

Measurement of binding specificity between T cell lymphomas and murine leukemia viruses. O'Neill HC, et al. **J Immunol Methods** 1989 Aug 15;122(1):79–90

Distinct helper virus requirements for Abelson murine leukemia virus-induced pre-B- and T-cell lymphomas. Poirier Y, et al. **J Virol** 1989 May;63(5):2088–98

PATHOLOGY

Analysis of lymphocyte phenotype in human thymomas. Berrih-Aknin S, et al. **Adv Exp Med Biol** 1988;237:369–74

Degree of malignancy of thymic epithelial tumors in terms of nuclear DNA content and nuclear area. An analysis of 39 cases. Asamura H, et al. **Am J Pathol** 1988 Dec; 133(3):615–22

Diagnosing thymic neoplasia [letter] Miller RR. **Chest** 1989 Sep;96(3):702–3

Primary thyroid thymoma: a distinct clinicopathologic entity. Asa SL, et al. **Hum Pathol** 1988 Dec;19(12):1463–7

Cortical versus medullary thymomas: a useful morphologic distinction? Kornstein MJ, et al. **Hum Pathol** 1988 Nov; 19(11):1335–9

Cortical versus medullary thymomas [letter] Le Marc'Hadour F. **Hum Pathol** 1989 Jul;20(7):715–6

A spectrum of thymomas over a three year period. Bolster M, et al. **Ir J Med Sci** 1988 Nov;157(11):348–50

Comparison of phorbol-12-myristate-13-acetate and dioctanoyl-sn-glycerol in the activation of EL4/6.1 thymoma cells. Stoeck M, et al. **J Cell Physiol** 1989 Mar; 138(3):541–7

Interleukin-1 induces a pertussis toxin-sensitive increase in diacylglycerol accumulation in mouse thymoma cells. Dobson PR, et al. **J Mol Endocrinol** 1989 May;2(3):R5–7

Nodular development of spontaneous epithelial thymoma in (ACI/NMs x BUF/Mna)F1 rats. Matsuyama M, et al. **Jpn J Cancer Res** 1988 Sep;79(9):1031–8

Limbic encephalitis associated with malignant thymoma. McArdle JP, et al. **Pathology** 1988 Jul;20(3):292–5

Correlations between histological type, clinical behaviour, and prognosis in thymoma. Ricci C, et al. **Thorax** 1989 Jun;44(6):455–60

Polypoid endobronchial extension from invasive thymoma. Honma K, et al. **Virchows Arch [A]** 1988;413(5):469–74

[Thymoma. Anatomo-clinical results apropos of 16 cases] Ben Romdhane K, et al. **Arch Anat Cytol Pathol** 1989; 37(3):80–7 (28 ref.) (Fre)

[Thymoma: evaluation of clinical staging in the development of a therapeutic strategy. Apropos of 3 cases] Dellagi K, et al. **Tunis Med** 1988 Nov;66(11):765–70 (Eng. Abstr.) (Fre)

[Histogenic and functional markers of epithelial differentiation in thymomas and thymus carcinomas] Kirchner T, et al. **Verh Dtsch Ges Pathol** 1988;72:349–53 (Eng. Abstr.) (Ger)

[A case of invasive thymoma in the left hilus of the lung] Tomichi N, et al. **Gan No Rinsho** 1989 Aug;35(9):1067–72 (Eng. Abstr.) (Jpn)

[A case of thymoma associated with prostatic cancer] Isurugi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jan; 80(1):100–3 (Eng. Abstr.) (Jpn)

[Postoperative recurrence of noninvasive thymomas (stage 1)] Yoshitake T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1326–32 (Eng. Abstr.) (Jpn)

[Thymoma of fusiform cells. Report of a case] Pachar JV, et al. **Rev Med Panama** 1989 May;14(2):104–7 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Radiologic detection of thymoma in patients with myasthenia gravis. Ellis K, et al. **AJR** 1988 Nov;151(5):873–81

Pleural metastasis of malignant thymoma. A pitfall in the CT-diagnosis of pleural mesothelioma. Görich J, et al. **Comput Med Imaging Graph** 1989 Mar-Apr;13(2):169–70

CT demonstration of "ectopic" thymoma. Kaplan IL, et al. **J Comput Assist Tomogr** 1988 Nov-Dec;12(6):1037–8

Intracaval and intracardiac extension of malignant thymoma: CT diagnosis. Korobkin M, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):348–50

Radiographic and computed tomographic detection of thymoma in patients with myasthenia gravis. Lupi L, et al. **Rays** 1988 Jan-Apr;13(1):17–21

[Computed tomographic findings in 36 patients with space-occupying lesions of the thymus] Görich J, et al. **ROFO** 1988 Nov;149(5):466–9 (Eng. Abstr.) (Ger)

[Diagnosis and treatment of thymus tumors] Ganul VL, et al. **Sov Med** 1988;(6):13–7 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

Mediastinal uptake of Tc-99m pertechnetate in a thymona. Jimenez-Heffernan A, et al. **Clin Nucl Med** 1989 May; 14(5):375

RADIOTHERAPY

Invasive thymoma: the role of mediastinal irradiation following complete or incomplete surgical resection. Curran WJ Jr, et al. **J Clin Oncol** 1988 Nov;6(11):1722–7

Malignant thymoma—a study of 30 cases. Chua ET, et al. **Singapore Med J** 1988 Dec;29(6):565–9

SECONDARY

Extrathoracic metastatic thymoma. A case report. Jose CC, et al. **Australas Radiol** 1988 Nov;32(4):500–2

Metastatic thymoma: case report. Stevens MJ, et al. **Australas Radiol** 1989 May;33(2):168–70

[Cerebral metastasis from malignant thymoma] Mizushima H, et al. **No To Shinkei** 1988 Dec;40(12):1157–62 (Eng. Abstr.) (Jpn)

SECRETION

Internalization of interleukin 1 (IL 1) correlates with IL 1-induced IL 2 receptor expression and IL 2 secretion of EL4 thymoma cells. Von Hoegen I, et al. **Eur J Immunol** 1989 Feb;19(2):329–34

SURGERY

"Maximal" thymectomy for myasthenia gravis. Surgical anatomy and operative technique. Jaretzki A 3d, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):711–6

[Invasive thymoma with pulmonary metastasis. Complete remission 5 years after surgery and chemotherapy using the CHOP-BLEO protocol] Wurtz A, et al. **Rev Mal Respir** 1988;5(6):651–4 (Eng. Abstr.) (Fre)

[Thymus surgery in myasthenia gravis] Dapper F, et al. **Helv Chir Acta** 1988 Nov;55(4):455–8 (Eng. Abstr.) (Ger)

[Venous reconstruction of superior vena cava syndrome with thymoma] Tago M, et al. **Kyobu Geka** 1988 Sep; 41(10):814–6 (Eng. Abstr.) (Jpn)

[Management of patients with thymoma] Isobe M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):955–60 (Eng. Abstr.) (Jpn)

[Surgical treatment of stage III and IV thymoma] Yamashita C, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):391–5 (Eng. Abstr.) (Jpn)

[Successful case report concerning removal of right atrial tumor of malignant thymoma—review of right atrial tumor thrombus via the superior or inferior vena cava] Ikeda T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1025–30 (19 ref.) (Jpn)

[Extended thymectomy with marginal resection of the left brachiocephalic vein in invasive thymoma in myasthenia] Vasil'ev VN, et al. **Vestn Khir** 1988 Dec;141(12):33–4 (Rus)

THERAPY

Augmented induction of antitumor cells in vivo by cyclophosphamide fails to benefit antitumor resistance of the host. Ryoyama K, et al. **Cancer Immunol Immunother** 1989;29(4):255–60

ULTRASTRUCTURE

Proteins with epitopes of the acetylcholine receptor in epithelial cell cultures of thymomas in myasthenia gravis. Marx A, et al. **Am J Pathol** 1989 Apr;134(4):865–77

[Comparative ultrastructural characteristics of epithelial cells of the parenchyma of the thymus gland and thymoma] Galil-Ogly GA, et al. **Arkh Patol** 1988;50(9):51–60 (Eng. Abstr.) (Rus)

VETERINARY

[Myasthenia gravis and a thymoma in a cat] van Oosterhout IC, et al. **Tijdschr Diergeneeskd** 1989 May 1;114(9):499–504 (Eng. Abstr.) (Dut)

THYMOPOIETINS see under THYMUS HORMONES

THYMOSIN

Evidence for the monomeric nature of thymosins. Haritos AA, et al. **FEBS Lett** 1989 Feb 27;244(2):287–90

ANALOGS & DERIVATIVES

Possibility of HIV gp41 and thymosin beta-4 sharing the same antigenic epitope [letter] Wu AF, et al. **Aids** 1989 May;3(5):319–20

Amniotic fluid thymosin alpha 1 levels increase during gestation. Welch RA, et al. **Am J Reprod Immunol Microbiol** 1988 Jul;17(3):96–7

Structure and function of a thymic peptide is mimicked by Plasmodium falciparum peptides. Dubois P, et al. **Ann Inst Pasteur Immunol** 1988 Sep-Oct;139(5):557–67

Prothymosin alpha and parathymosin: mRNA and polypeptide levels in rodent tissues. Clinton M, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):256–63

Isolation and characterization of thymosin beta 9 Met from pork spleen. Hannappel E, et al. **Arch Biochem Biophys** 1989 Sep;273(2):396–402

The sequence of human parathymosin deduced from a cloned human kidney cDNA. Clinton M, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):855–62

Synthesis of deacetylthymosin beta 11 and its effect on the impaired T-lymphocytes of a uremic patient with common variable immunodeficiency. Abiko T, et al. **Biotechnol Appl Biochem** 1988 Dec;10(6):576–88

Protection by thymosin fraction 5 from streptozotocin-induced diabetes in mice. Tabata T, et al. **Cell Mol Biol** 1989;35(2):121–7

Localization of the gene coding for parathymosin to chromosome 17 in humans. Szabo P, et al. **Cytogenet Cell Genet** 1989;50(2-3):91–2

Characterization of secretion of thymosin alpha 1 and thymosin beta 4 during prepuberty, estrus and pregnancy in the bovine female. Wolfe MW, et al. **Domest Anim Endocrinol** 1989 Jan;6(1):71–8

Prothymosin alpha is not a nuclear polypeptide. Tsitsiloni OE, et al. **Experientia** 1989 Apr 15;45(4):332–4

The primary sequence of the PFK-1 inactivating zinc-binding protein as deduced from cDNA sequencing. Identity of the zinc-binding protein with rat parathymosin. Trompeter HI, et al. **FEBS Lett** 1989 Aug 14;253(1-2):63–6

Prothymosin alpha is a nuclear protein. Watts JD, et al. **FEBS Lett** 1989 Mar 13;245(1-2):17–20

Interaction of thymic peptide thymosin alpha 1 with VIP receptors in rat intestinal epithelial cells: comparison with PHI and secretin. Calvo JR, et al. **Gen Pharmacol** 1989; 20(4):503–5

Synthesis and apparent secretion of prothymosin alpha by different subpopulations of calf and rat thymocytes. Franco FJ, et al. **Immunology** 1989 Jun;67(2):263–8

Interaction between luteotrophic hormone (LH) and thymosin on natural killer cell activity in BALB/c mice. Rouabhia M, et al. **Immunology** 1988 Sep;65(1):125–8

Mechanism of action of prothymosin alpha in the human autologous mixed lymphocyte response. Baxevanis CN, et al. **Immunopharmacol Immunotoxicol** 1988;10(4):443–61

In vitro effect of methionine-enkephalin and thymosin on murine expression of Thy1-2 antigen. Chakir J, et al. **Immunopharmacology** 1989 Jan-Feb;17(1):31–5

Isolation of parathymosin. Panneerselvam C, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):569–73

Improved ELISA to measure thymosin alpha 1: comparison of whole and absorbed antisera. Wada S, et al. **Int J Immunopharmacol** 1988;10(7):795–801

Augmentation of influenza antibody response in elderly men by thymosin alpha one. A double-blind placebo-controlled clinical study. Gravenstein S, et al. **J Am Geriatr Soc** 1989 Jan;37(1):1–8

Isolation and partial sequencing of the human prothymosin alpha gene family. Evidence against export of the gene products. Eschenfeldt WH, et al. **J Biol Chem** 1989 May

5;264(13):7546–55
The expression of prothymosin alpha gene in T lymphocytes and leukemic lymphoid cells is tied to lymphocyte proliferation. Gómez-Márquez J, et al. **J Biol Chem** 1989 May 25;264(15):8451–4
Rapid isolation of thymosin beta 4 from thymosin fraction 5 by preparative high-performance liquid chromatography. Badamchian M, et al. **J Chromatogr** 1988 Dec 28; 459:291–300
A radioimmunoassay for parathymosin alpha using antibodies to synthetic N-terminal peptide 1–30. Tsitsiloni OE, et al. **J Immunol Methods** 1988 Oct 26;113(2):175–84
Effect of thymosin (fraction 5) on the plasma levels of glucose and glucoregulatory hormones in humans. Gossain VV, et al. **J Med** 1988;19(5–6):335–43
Micro ELISA for measurement of parathymosin alpha utilizing a monoclonal antibody. Wada S, et al. **Thymus** 1988–89;12(4):215–24
In vivo effects of a thymosin alpha 1-containing colostral whey product on neutrophils and lymphocytes from lactating cows without and with experimentally induced Staphylococcus aureus mastitis. Kehrli ME Jr, et al. **Vet Immunol Immunopathol** 1989 Jan;20(2):149–63
[Electron microscopic study of internalization stages of cellular receptors for insulin and alpha-1-thymosin] Marinova Ts, et al. **Eksp Med Morfol** 1989;28(1):50–4 (Eng. Abstr.) **(Bul)**
[Effects of thymosin alpha 1 on peanut agglutinin receptors in murine thymocytes] Baldassarre AM, et al. **Boll Soc Ital Biol Sper** 1988 Feb;64(2):109–13 (Eng. Abstr.) **(Ita)**
[Effects of thymosin (fraction 5) on the endocrine function of the testis in mice] Chesnokova VM, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):493–5 (Eng. Abstr.) **(Rus)**
[Effect of thymosin (fraction 5) on the development of functional activity of the adrenals and gonads in genetically athymic mice] Ignat'eva EV, et al. **Probl Endokrinol (Mosk)** 1988 Nov–Dec;34(6):83–6 (Eng. Abstr.) **(Rus)**
[Characteristics of secondary immunologic deficiency in children with chronic hepatitis B and the methods of its correction] Gol'zand IV, et al. **Ter Arkh** 1989;61(2):72–6 (Eng. Abstr.) **(Rus)**

ANALYSIS

Thymosin alpha 1 in milk specimens from Guatemalan women. Cruz JR, et al. **Acta Paediatr Scand** 1989 Jul; 78(4):522–4
MicroELISA method for the determination of thymosin beta 9 discriminating between thymosin beta 9 and the structurally closely related thymosin beta 4. Mihelić M, et al. **J Immunol Methods** 1989 Aug 15;122(1):7–13
Immunohistochemical studies in human thymomas. Localization of thymosin and various cell marker. Hirokawa K, et al. **Virchows Arch [B]** 1988;55(6):371–80

BIOSYNTHESIS

Production in Escherichia coli of human thymosin beta 4 as chimeric protein with human tumor necrosis factor. Tsuji Y, et al. **Biochem Int** 1989 Mar;18(3):501–8

IMMUNOLOGY

[Thymosin] Dammacco F. **Ric Clin Lab** 1976 Jan–Mar;6 Suppl 1:70–1 (0 ref.) **(Ita)**

METABOLISM

Localization of immunoreactive thymosin alpha 1 in astrocytes of normal human brain. Su YL, et al. **Ann Neurol** 1989 Aug;26(2):277–80

PHARMACOLOGY

Effects of thymosin on soybean lectin responsiveness of thymic small lymphocyte subsets from streptozotocin-induced diabetic rats. Okimoto T, et al. **Cell Mol Biol** 1988;34(5):465–72
Aspirin and thymosin increase interleukin-2 and interferon-gamma production by human peripheral blood lymphocytes. Hsia J, et al. **Immunopharmacology** 1989 May–Jun;17(3):167–73
Thymosin, interleukins, isoprinosine and imuthiol do not reconstitute T-cells in athymic nude mice. Hadden JW, et al. **Int J Immunopharmacol** 1989;11(1):13–9
Thymosin enhances the production of IL-1 alpha by human peripheral blood monocytes. Hu SK, et al. **Lymphokine Res** 1989 Fall;8(3):203–14
[The immunoregulator alpha-1-thymosin as an inhibitor of alpha thrombin enzymatic activity] Strukova SM, et al. **Dokl Akad Nauk SSSR** 1989 May–Jun;306(1):229–32 **(Rus)**
[Hypoglycemic effect of thymosine in an animal experiment] Mizina TIu. **Vopr Med Khim** 1989 May–Jun;35(3):80–2 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

In vivo effects of thymic epithelial culture supernate and thymosin fraction 5 on ADP-induced thromboembolic respiratory depression in mice. Hashimoto S, et al. **Thromb Res** 1989 Jan 15;53(2):209–14

THYMOXAMINE

METABOLISM

Metabolism of 14C-thymoxamine in rat and man. Duchene P, et al. **Xenobiotica** 1988 Aug;18(8):919–28

PHARMACOLOGY

Effect of moxisylyte hydrochloride on isolated human penile corpus cavernosum tissue. Imagawa A, et al. **Life Sci** 1989; 44(9):619–23

THERAPEUTIC USE

The efficacy of thymoxamine in primary Raynaud's phenomenon. Grigg MJ, et al. **Eur J Vasc Surg** 1989 Aug; 3(4):309–13
Safety of intracavernous injections using an alpha-blocking agent. Buvat J, et al. **J Urol** 1989 Jun;141(6):1364–7
[Medical treatment of obliterating arteriopathies of the lower limbs with vasoactive drugs] Raspanti D, et al. **Clin Ter** 1987 Jun 30;121(6):479–83 (Eng. Abstr.) **(Ita)**
[The effect of moxisylyte hydrochloride in the symptomatic treatment of benign prostatic hyperplasia] Izumi H, et al. **Hinyokika Kiyo** 1989 Mar;35(3):541–9 (Eng. Abstr.) **(Jpn)**

THYMOXYALCYLAMINE see **THYMOXAMINE**

THYMUS-DEPENDENT LYMPHOCYTES see **T LYMPHOCYTES**

THYMUS EXTRACTS

ADMINISTRATION & DOSAGE

Attempt to treat acute type B hepatitis with an orally administered thymic extract (thymomodulin): preliminary results. Galli M, et al. **Drugs Exp Clin Res** 1985;11(9):665–9
[Our observations regarding the treatment of multiple sclerosis with TFX "Polfa" (letter)] Fryze W, et al. **Neurol Neurochir Pol** 1988 Sep–Oct;22(5):475 **(Pol)**
[Effect of the thymus factor (TFX Polfa) on the clinical status of patients on long-term treatment with corticosteroids] Matusiewicz R, et al. **Wiad Lek** 1988 Dec 15;41(24):1630–2 (Eng. Abstr.) **(Pol)**
[Use of T-activin and prodigiozan in combined treatment of patients with diabetic retinopathy] Sakalo EA, et al. **Oftalmol Zh** 1988;(4):204–7 (Eng. Abstr.) **(Rus)**
[The immediate and late results of treating neurodermatitis by the indirect endolymphatic administration of drug preparations] Shakhtmeister IIa, et al. **Vestn Dermatol Venerol** 1988;(11):12–3 (Eng. Abstr.) **(Rus)**
[Study of various immunologic indicators in patients with laryngopharyngeal cancer before and after administration of T-activin] Nummsev GM, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):67 **(Rus)**
[The intraperitoneal administration of chemical preparations and taktivin in the combined treatment of stomach cancer] Shchepotin IB, et al. **Vrach Delo** 1988 Sep;(9):3–6 (Eng. Abstr.) **(Rus)**
[Use of thymostimulin in immunodeficiency associated to HIV (letter)] Cahn P, et al. **Medicina (B Aires)** 1988; 48(5):555–6 **(Spa)**

METABOLISM

Localization of thymostimulin in mammalian thymuses: comparative evaluation. Aita M, et al. **Cell Mol Biol** 1989; 35(2):137–45

PHARMACOKINETICS

The pharmacodynamics of thymomodulin in elderly humans. Calsini P, et al. **Drugs Exp Clin Res** 1985;11(9):671–4

PHARMACOLOGY

Migration of putative progenitor T cells in response to thymus-derived chemotactic factors. Imaizumi A, et al. **Cell Immunol** 1989 May;120(2):301–13
The effect of a calf thymus acid lysate on bone marrow cell growth in vitro. Vasilopoulos G, et al. **Immunopharmacol Immunotoxicol** 1988;10(4):523–36
A comparative study on the immunological effects of bovine and porcine thymic extracts: induction of lymphoproliferative response and enhancement of interleukin-2, gamma-interferon and tumor necrotic factor production in vitro on cord blood lymphocytes. Lin CY, et al. **Immunopharmacology** 1989 Jul–Aug;18(1):1–10
The combined administration of thymomodulin and interleukin 2 reverses T-cell unresponsiveness in mice infected with Mycobacterium bovis-BCG. Colizzi V, et al. **Int J Immunopharmacol** 1988;10(3):271–5
In vitro effect of TP-1 (a calf thymic extract) on suppressor T-cell function of patients with autoimmune chronic active hepatitis. O'Brien CJ, et al. **Int J Immunopharmacol** 1988; 10(6):651–6
Thymomodulin: biological properties and clinical applications. Kouttab NM, et al. **Med Oncol Tumor Pharmacother** 1989;6(1):5–9 (58 ref.)
Modulation of NK activity by thymic hormones: in vitro effects of thymostimulin. Liberati AM, et al. **Med Oncol Tumor Pharmacother** 1989;6(1):45–52
The release of luteinizing hormone from pituitaries perifused with thymic extracts. Zaidi SA, et al. **Thymus** 1988–89; 12(4):253–64
[Dynamics of healing of purulent wounds under the influence of immunoregulatory drugs] Guselnov AZ. **Arkh Patol** 1988;50(9):28–34 (Eng. Abstr.) **(Rus)**
[Effect of taktivin on diuresis and tubular cardiotrast secretion in the kidney] Arion VIa, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):264–6 (Eng. Abstr.) **(Rus)**
[Comparative study of the effect of the thymus preparations thymoptin and thymalin on fibrin-monomer polymerization] Pastorova VE, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):47–50 (Eng. Abstr.) **(Rus)**
[Thymostimulin induction of the synthesis of a factor intensifying the bactericidal activity of macrophages] Nikol'skii IS, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):23–6 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Long-term treatment with thymomodulin reduces airway hyperresponsiveness to methacholine. Bagnato A, et al. **Ann Allergy** 1989 May;62(5):425–8
Effects of thymostimulin on chemotherapy-induced toxicity and long-term survival in small cell lung cancer patients. Macchiarini P, et al. **Anticancer Res** 1989 Jan–Feb; 9(1):193–6
Influence of thymus factor (TFX "Polfa") on migration of granulocytes in vivo and in vitro in patients treated for a long time with corticosteroids. Matusiewicz R, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):361–5
Effect of T-activin on the course of experimental infection with Taenia crassiceps (Zeder, 1800) in mice. Heřmánek J, et al. **Folia Parasitol (Praha)** 1989;36(2):117–26
Peripheral blood lymphocyte changes after benign gastrointestinal surgery. Role of thymostimulin in reversing the postoperative immunodepression seen in humans. García-Valdecasas JC, et al. **Hepatogastroenterology** 1988 Oct;35(5):219–22
"Food allergy in children: an attempt to improve the effects of the elimination diet with an immunomodulating agent (thymomodulin). A double-blind clinical trial". Cavagni G, et al. **Immunopharmacol Immunotoxicol** 1989; 11(1):131–42
Influence of thymus factor (TFX "Polfa") on the ability of granulocytes to absorb neutral latex particles and Staphylococcus aureus in patients treated for long-time periods with corticosteroids. Matusiewicz R, et al. **Mater Med Pol** 1988 Apr–Jun;20(2):132–4
Trials of thymus extract TFX administration in dermatological patients resistant to conventional treatment methods. Turowski G, et al. **Mater Med Pol** 1988 Apr–Jun; 20(2):128–31
Therapeutic application of calf thymus extract (TFX). Skotnicki AB. **Med Oncol Tumor Pharmacother** 1989; 6(1):31–43 (81 ref.)
First experience with immunomodulation in septic shock. Josten C, et al. **Prog Clin Biol Res** 1989;308:989–94
Effect of thymic extract 'thymostimulin' on the incidence of infections and myelotoxicity during adjuvant chemotherapy for breast cancer. Iaffaioli RV, et al. **Thymus** 1988–89;12(2):69–75
[Can thymostimulin influence the course of malignant subacute hepatitis?] Tripi S, et al. **Clin Ter** 1987 Oct 31; 123(2):133–7 (Eng. Abstr.) **(Ita)**
[Immunotherapy with high-dose thymostimulin in patients with advanced neoplasms] Marcellino LR, et al. **G Ital Oncol** 1988 Jan–Mar;8(1):45–7 (Eng. Abstr.) **(Ita)**
[Evaluation of the effectiveness of thymomodulin in children with recurrent respiratory infections] Longo F, et al. **Pediatr Med Chir** 1988 Nov–Dec;10(6):603–7 (Eng. Abstr.) **(Ita)**
[Results of a controlled clinical protocol in the treatment of patients with operable breast carcinoma with positive axillary lymph nodes. Comparison of a chemotherapeutic regimen with a chemo-immunotherapeutic regimen] Mantovani G, et al. **Recenti Prog Med** 1988 Dec; 79(12):513–8 (Eng. Abstr.) **(Ita)**
[Clinical trial of immunoregulation using the TFX Polfa preparation in non-Hodgkin's lymphoma] Górski J, et al. **Przegl Lek** 1988;45(7):555–8 (Eng. Abstr.) **(Pol)**
[Treatment of recurrent skin abscesses with TFX] Dąbrowska M, et al. **Wiad Lek** 1988 Dec 15;41(24):1665–7 (Eng. Abstr.) **(Pol)**
[Leucotrofina in the treatment of protracted suppurative otitis media in infants (preliminary note)] Rădulescu M. **Rev Chir [Otorinolaringol]** 1988 Oct–Dec;33(4):307–14 (Eng. Abstr.) **(Rum)**
[Clinical and immunologic study on the efficacy of the leucotrophine treatment of patients with recurrent bronchopulmonary infections] Basacopol A, et al. **Rev Ig [Pneumoftiziol]** 1988 Jan–Mar;37(1):63–8 **(Rum)**
[Taktivin in the combined treatment of patients with ovarian cancer] Griaznova IM, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):57–61 (Eng. Abstr.) **(Rus)**
[Stage-by-stage complex immunologic correction in patients with bronchial asthma living in a large industrial and power plant region] Grigor'ev MA, et al. **Gig Tr Prof Zabol** 1989; (4):25–7 (Eng. Abstr.) **(Rus)**
[Immunomodulators in the complex therapy of newborn infants with suppurative surgical infections] Samsygin SA,

et al. **Khirurgiia (Mosk)** 1988 Jul;(7):101–6 (Eng. Abstr.) (Rus)

[Efficacy of treating patients with disseminated forms of destructive pulmonary tuberculosis using chemical preparations and T-activin] Chukanov VI, et al. **Probl Tuberk** 1989;(6):30–3 (Eng. Abstr.) (Rus)

[Use of taktivin in postoperative intensive therapy in oncology] Gadalov VP, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):68–73 (Eng. Abstr.) (Rus)

[Possibility of using T-activin in the treatment of primary glaucoma] Dobritsa TA, et al. **Vestn Oftalmol** 1988 Jul–Aug;104(4):22–4 (Eng. Abstr.) (Rus)

[Experience in treating atopic dermatitis in children with vilozen] Kaliuzhnaia LD, et al. **Vrach Delo** 1989 Jan;(1):90–2 (Eng. Abstr.) (Rus)

[Thymostimulin as an adjuvant to antineoplastic chemotherapy. Experience with patients with myeloma and lymphoma] Cánovas Fernández A, et al. **Rev Clin Esp** 1988 Nov;183(7):340–3 (Eng. Abstr.) (Spa)

THYMUS GLAND

see related
BURSA OF FABRICIUS

Aberrant solid cervical thymus. Nowak PA, et al. **Ear Nose Throat J** 1988 Sep;67(9):670, 673, 676–7

Thymic hemorrhage: a cause of acute symptomatic mediastinal widening in an infant with late haemorrhagic disease. Sonographic findings. Lemaitre L, et al. **Pediatr Radiol** 1989;19(2):128–9

Bilateral thymus found in association with unilateral cleft lip and palate. Civi I, et al. **Plast Reconstr Surg** 1989 Jan; 83(1):143–7

Bilateral ectopic thymus gland tissue associated with the cleft lip and palate [letter] Dado DV, et al. **Plast Reconstr Surg** 1989 Aug;84(2):376

[Hydatid cysts of the thymus gland. Apropos of 3 new cases] Zargouni MN, et al. **Ann Chir** 1988;42(8):610–6 (7 ref.) (Eng. Abstr.) (Fre)

[Thymic hormones] Monier JC, et al. **Arch Int Physiol Biochim** 1988 Aug;96(3):A2–26 (151 ref.) (Fre)

[Cervical pathology caused by thymic ectopia] Marsella P. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 19:87–97 (Eng. Abstr.) (Ita)

[Characteristics of memory in MRL/1 mice and the effect of thymic peptides] Melekhin VD, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):199–201 (Eng. Abstr.) (Rus)

[Clinico-immunologic evaluation of thymotropin efficacy in dermatosis patients] Khamidov ShA, et al. **Vestn Dermatol Venerol** 1988;(10):7–10 (Eng. Abstr.) (Rus)

ABNORMALITIES

Ectrodactyly, ectodermal dysplasia, and clefting associated with thymic aplasia [letter] Jhaveri M, et al. **Am J Dis Child** 1989 Jan;143(1):12

Hormonal characterization of female SL/Ni mice: a small thymus gland strain exhibiting ovarian dysgenesis. Michael SD, et al. **J Reprod Immunol** 1988 Mar;12(4):277–86

Extrathoracic thymus tissue in lambs in Zimbabwe ('goitre'). Kock ND, et al. **Vet Rec** 1989 Jun 17;124(24):635–6

ANALYSIS

Microgel immunoblotting of thymus and nuclear extracts by unidirectional diffusion. De Keyser F, et al. **Anal Biochem** 1989 Feb 1;176(2):350–2

Receptor for epidermal growth factor in neoplastic and non-neoplastic human thymus. Battaglia F, et al. **Ann N Y Acad Sci** 1988;551:366–8

Immunohistochemical studies on a human thymic epithelial cell subset defined by the anti-cytokeratin 18 monoclonal antibody. Savino W, et al. **Cell Tissue Res** 1988 Oct; 254(1):225–31

Antibody 12–15 cross-reacts with mouse Fc gamma receptors and CD2: study of thymus expression, genetic polymorphism and biosynthesis of the CD2 protein. Altevogt P, et al. **Eur J Immunol** 1989 Feb;19(2):341–6

S-100 protein detection in "follicular macrophages" of mouse lymphoid organs by ABC immunoperoxidase method. Carbone A, et al. **Int J Biol Markers** 1988 Jan–Mar; 3(1):36–40

Optimization of the ion-pair high-performance liquid chromatographic separation of purine derivatives in erythrocytes, thymocytes and liver mitochondria. Toguzov RT, et al. **J Chromatogr** 1988 Dec 30;434(2):447–53

Insulin B chain functions as an effective competitor of antigen presentation via peptide homologies present in the thymus. Miller GG, et al. **J Exp Med** 1989 Jun 1;169(6):2251–6

Expression of ets genes in mouse thymocyte subsets and T cells. Bhat NK, et al. **J Immunol** 1989 Jan 15;142(2):672–8

Expression and function of the UM4D4 antigen in human thymus. Fox DA, et al. **J Immunol** 1989 Oct 1; 143(7):2166–75

Characterization of a specific binding protein for 2,3,7,8-tetrachlorodibenzo-p-dioxin in human thymic epithelial cells. Cook JC, et al. **Mol Pharmacol** 1989 May; 35(5):713–9

Recognition of idiotypic structures in the thymus. Zöller M. **Scand J Immunol** 1989 May;29(5):579–88

Heterogeneity of rat thymic epithelium defined by monoclonal anti-keratin antibodies. Colić M, et al. **Thymus** 1988–89;12(2):123–30

Tin in the thymus gland of dogs. Sherman LR, et al. **Thymus** 1988–89;12(2):131–4

[Increase in the longevity and decrease in the tumor incidence in mice given polypeptide thymus and epiphysis factors at different age] Anisimov VN, et al. **Dokl Akad Nauk SSSR** 1988;302(2):473–6 (Rus)

[Identification of pro-opiomelanocortin in rat thymus and spleen using immunoblotting and the effect of adrenalectomy and haloperidol injection on the content of immunoreactive beta-endorphin in these organs] Dmitriev AD, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb; 304(1):235–7 (Rus)

ANATOMY & HISTOLOGY

Complex heterogeneity of the thymic stroma. Boyd RL, et al. **Adv Exp Med Biol** 1988;237:263–8

Thymic stromal elements defined by M.Abs: ontogeny, and modulation in vivo by immunosuppression. Godfrey DI, et al. **Adv Exp Med Biol** 1988;237:269–75

The effect of laboratory environment on the morphology of the spleen and the thymus in the yellow-bellied toad, Bombina variegata (L.). Dulak J, et al. **Dev Comp Immunol** 1989 Winter;13(1):49–55

Normal thymus in infancy: sonographic characteristics. Han BK, et al. **Radiology** 1989 Feb;170(2):471–4

Normal and abnormal thymus in childhood: MR imaging. Siegel MJ, et al. **Radiology** 1989 Aug;172(2):367–71

BLOOD SUPPLY

Microvasculature of normal and involuted mouse thymus. Light- and electron-microscopic study. Kato S, et al. **Acta Anat (Basel)** 1989;135(1):1–11

Microvasculature of the sheep thymus. Yamaguchi K, et al. **Adv Exp Med Biol** 1988;237:571–5

On the A. thymica suprema, a provisionally named branch of the superior thyroid artery in the human. Yamasaki M. **Anat Anz** 1989;168(4):329–35

The transcapsular route: a new way for (self-) antigens to by-pass the blood-thymus barrier? Nieuwenhuis P, et al. **Immunol Today** 1988 Dec;9(12):372–5 (23 ref.)

Increased vascular permeability in the thymus of the autoimmune New Zealand mouse. Kotani M, et al. **J Anat** 1988 Dec;161:83–93

[Two supplementary cases of the A. thymica suprema (Yamasaki) in human adults] Yamasaki M, et al. **Kaibogaku Zasshi** 1988 Oct;63(5):468–72 (Eng. Abstr.) (Jpn)

[Extended thymectomy with marginal resection of the left brachiocephalic vein in invasive thymoma in myasthenia] Vasil'ev VN, et al. **Vestn Khir** 1988 Dec;141(12):33–4 (Rus)

CYTOLOGY

Cloning of human thymic subcapsular cortex epithelial cells with SV40 origene. Mizutani S, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):539–41

Interdigitating cells and dendritic cells of the mouse identified by monoclonal antibodies: interaction with lymphocyte subsets. Breel M, et al. **Adv Exp Med Biol** 1988;237:757–63

Enrichment of germinal centre cells. Brown AN, et al. **Adv Exp Med Biol** 1988;237:227–32

A study of early events during T cell differentiation in thymic grafted nude mice. Chapman CC, et al. **Adv Exp Med Biol** 1988;237:323–31

Structural and cellular changes in the mouse thymus during pregnancy. Clarke AG. **Adv Exp Med Biol** 1988;237:363–8

Kinetics of rat thymic dendritic cells in bone marrow-reconstituted radiation chimeras. Duijvestijn AM, et al. **Adv Exp Med Biol** 1988;237:277–83

A low density fraction of bone marrow cells enriched in prothymocyte activity. Ezine S, et al. **Adv Exp Med Biol** 1988;237:307–13

Interactions between lymphoid cells and a thymic stromal cell line in vitro. Hugo P, et al. **Adv Exp Med Biol** 1988; 237:357–62

T lymphocyte precursors migrate towards chemotactic peptides secreted by embryonic or juvenile thymus. Imhof BA, et al. **Adv Exp Med Biol** 1988;237:565–70

M receptor and differentiation of T lymphocytes in the developing human thymus. Isaković K, et al. **Adv Exp Med Biol** 1988;237:339–44

Vascular thymus transplantation in rats: a new method to study thymocyte kinetics. Kampinga J, et al. **Adv Exp Med Biol** 1988;237:333–8

Kinetics of thymocyte regeneration in adult adriamycin treated rats: evidence for a bone marrow derived prothymocyte precursor. Murawska MB, et al. **Adv Exp Med Biol** 1988;237:315–21

Homing receptor expression in grafts of purified thymic epithelium. Perry GA, et al. **Adv Exp Med Biol** 1988; 237:345–9

In vitro binding of L3T4-Lyt-2- Pgp-1+ thymocytes to thymic accessory cells. el Rouby S, et al. **Adv Exp Med Biol** 1988;237:351–6

Allogeneic cultured thymic fragments in congenitally athymic (nude) rats. Schuurman HJ, et al. **Adv Exp Med Biol** 1988;237:285–92

Studies on thymic involution: growth potential and DNA repair of the stromal cells. Small M, et al. **Adv Exp Med Biol** 1988;237:293–8

In vivo homing of thymus-enriched bone marrow cells. Klussmann KG, et al. **Anat Rec** 1988 Jul;221(3):714–9

Kinetic analysis of thymocyte attachment to thymus stromal cells in culture by using phase-contrast and scanning electron microscopy. LaRochelle GG, et al. **Anat Rec** 1989 May;224(1):55–65

Effect of sound stress on the migration of prethymic stem cells. Bomberger CE, et al. **Ann N Y Acad Sci** 1988; 540:700–1

The distribution and structure of FTS immunoreactive cells in the thymus of the mouse. Fujiwara S, et al. **Arch Histol Jpn** 1988 Dec;51(5):467–72

A comparison of the conventional and the rosette method of determination of interleukin 1 (IL-1) activity. The advantages of the rosette method. Zimecki M, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):655–60

Myoid cell differentiation in true thymic hyperplasia and lymphoid hyperplasia. Judd RL, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1140–4

Human thymic epithelium in culture: an experimental model for the study of thymic microenvironment. Osculati F, et al. **Biomed Pharmacother** 1988;42(6):395–407 (163 ref.)

Granulocyte macrophage colony-stimulating activity production by cultured human thymic nonlymphoid cells is regulated by endogenous interleukin-1. Ridgway D, et al. **Blood** 1988 Oct;72(4):1230–6

The cell surface of mouse dendritic cells: FACS analyses of dendritic cells from different tissues including thymus. Crowley M, et al. **Cell Immunol** 1989 Jan;118(1):108–25

Immunohistological analysis of immigration of thymocyte-precursors into the thymus: evidence for immigration of peripheral T cells into the thymic medulla. Hirokawa K, et al. **Cell Immunol** 1989 Mar;119(1):160–70

Kinetics of thymus repopulation by intrathymic progenitors after intravenous injection: evidence for successive repopulation by an IL-2R+, Pgp-1- and by an IL-2R-, Pgp-1+ progenitor. Lesley J, et al. **Cell Immunol** 1988 Dec;117(2):378–88

Characterization of murine thymocyte subpopulations reacting with Dolichos bifloris agglutinin. Scofield K, et al. **Cell Immunol** 1989 Apr 15;120(1):114–25

The induction of antigen-specific thymic regulatory cells in the mouse [published erratum appears in Cell Immunol 1989 Feb;118(2):532] Talor E, et al. **Cell Immunol** 1988 Oct 1; 116(1):24–34

Selective stimulation of human thymocyte subpopulations by recombinant IL-4 and IL-3. Ueno Y, et al. **Cell Immunol** 1989 Feb;118(2):382–93

Inhibition of thymocyte mitogenic responses by coculture with thymic epithelial cells. Munoz-Blay T, et al. **Clin Immunol Immunopathol** 1989 May;51(2):275–93

Model system evaluating fluorescein-labeled microbeads as internal standards to calibrate fluorescence intensity on flow cytometers. Vogt RF Jr, et al. **Cytometry** 1989 May; 10(3):294–302

Cloning of glucocorticoid-responsive mRNA in the rat thymus. Hoshikawa Y, et al. **Endocrinol Jpn** 1988 Jun; 35(3):429–37

Evidence that an increase in cytoplasmic calcium is the initiating event in certain plasma membrane-mediated responses to 3,5,3'-triiodothyronine in rat thymocytes. Segal J, et al. **Endocrinology** 1989 Apr;124(4):1949–55

The majority of mouse spontaneous rosette-forming cells of thymic origin belong to the Ly-2+ subset. Lepault F, et al. **Eur J Immunol** 1989 Apr;19(4):605–9

Gamma/delta T cells express a unique surface molecule appearing late during thymic development. Mackay CR, et al. **Eur J Immunol** 1989 Aug;19(8):1477–83

A novel CD3-J11d+ subset of CD4+CD8- cells repopulating thymus in radiation bone marrow chimeras. Matsumoto K, et al. **Eur J Immunol** 1989 Jul;19(7):1203–7

Clonal analysis of CD4-CD8- human thymocytes expressing a T cell receptor gamma/delta chain. Direct evidence for the de novo expression of CD8 surface antigen and of cytolytic activity against tumor targets. Mingari MC, et al. **Eur J Immunol** 1988 Nov;18(11):1831–4

Characterization of the subset of immature thymocytes which can undergo rapid in vitro differentiation. Nikolić-Zugić J, et al. **Eur J Immunol** 1989 Apr;19(4):649–53

In vivo dynamics of CD4-8- thymocytes. Proliferation, renewal and differentiation of different cell subsets studied by DNA biosynthetic labeling and surface antigen detection. Penit C, et al. **Eur J Immunol** 1988 Sep; 18(9):1343–50

Definition of the thymic generative lineage by selective expression of high molecular weight isoforms of CD45 (T200). Pilarski LM, et al. **Eur J Immunol** 1989 Apr; 19(4):589–97

Inhibition by chlorpromazine of lymphokine-specific mRNA expression in human thymocytes. Schleuning MJ, et al. **Eur J Immunol** 1989 Aug;19(8):1491–5

Studies on thymocyte subpopulations in guinea pigs. VIII. Characterization of a thymocyte population resistant to the cytotoxic effect of normal rabbit serum. Sandberg G, et al. **Exp Cell Biol** 1988;56(3):159–68

Characterization of colony-forming cells in the human thymus: evidence for a suppressor mechanism. Dalloul AH, et al. **Exp Hematol** 1989 Aug;17(7):774–8

Prethymic and intrathymic mouse T-cell progenitors.

Growth requirements and analysis of the expression of genes encoding TCR/T3 components and other T-cell-specific molecules. Palacios R, et al. **Immunol Rev** 1988 Aug;104:5-27 (80 ref.)

Developmental status and reconstitution potential of subpopulations of murine thymocytes. Scollay R, et al. **Immunol Rev** 1988 Aug;104:81-120 (71 ref.)

Molecular and functional properties of novel T cell subsets in C3H-gld/gld and nude mice. Implications for thymic and extrathymic maturation. Yui K, et al. **Immunol Rev** 1988 Aug;104:121-55 (92 ref.)

Immunohistochemical characterization of rat thymic non-lymphoid cells. I. Epithelial and mesenchymal components defined by monoclonal antibodies. Colić M, et al. **Immunology** 1988 Oct;65(2):277-84

Restricted expression of CD2 among subsets of sheep thymocytes and T lymphocytes. Giegerich GW, et al. **Immunology** 1989 Mar;66(3):354-61

Concanavalin A receptor(s) possibly interacts with at least two kinds of GTP-binding proteins in murine thymocytes. Wang P, et al. **J Biochem (Tokyo)** 1989 Jan;105(1):4-9

Macrophages phagocytose thymic lymphocytes with productively rearranged T cell receptor alpha and beta genes. Inaba K, et al. **J Exp Med** 1988 Dec 1;168(6):2279-94

Rare peripheral T cells migrate to and persist in normal mouse thymus. Michie SA, et al. **J Exp Med** 1988 Nov 1;168(5):1929-34

Essential role of the interleukin 2-interleukin 2 receptor pathway in thymocyte maturation in vivo. Tentori L, et al. **J Exp Med** 1988 Nov 1;168(5):1741-7

Isolation of murine fetal thymus cell lines after infection with recombinant retroviruses containing the v-myc and v-Ha-ras oncogenes. Cattermole JA, et al. **J Immunol** 1989 Jun 1;142(11):3746-53

Thy-1+ epidermal cells in nude mice are distinct from their counterparts in thymus-bearing mice. A study of morphology, function, and T cell receptor expression. Nixon-Fulton JL, et al. **J Immunol** 1988 Sep 15; 141(6):1897-903

The stem cell antigens Sca-1 and Sca-2 subdivide thymic and peripheral T lymphocytes into unique subsets. Spangrude GJ, et al. **J Immunol** 1988 Dec 1; 141(11):3697-707

Mature T cells generated from single thymic clones are phenotypically and functionally heterogeneous. Spangrude GJ, et al. **J Immunol** 1988 Sep 15;141(6):1877-90

Characterization of cells comprising murine thymocyte multicellular complexes. Wood GW, et al. **J Immunol** 1988 Oct 1;141(7):2221-9

Cell surface topography of thymic microenvironments. van Ewijk W. **Lab Invest** 1988 Nov;59(5):579-90

Discordant expression of terminal transferase and T cell receptor beta chain in fetal and pediatric thymocytes. Bonati A, et al. **Leukemia** 1989 Feb;3(2):130-2

Strain differences in the early development of the thymus-dependent cells: precocity of T lineage cells in AKR mice as compared to those in C3H mice. Katsume C, et al. **Microbiol Immunol** 1989;33(4):313-28

Thymic myoid cells--stimulants and/or targets of autoimmune myasthenia gravis. Müller-Hermelink HK, et al. **Monogr Allergy** 1988;25:68-74

Cyclosporin A inhibits activation-induced cell death in T-cell hybridomas and thymocytes. Shi YF, et al. **Nature** 1989 Jun 22;339(6226):625-6

Model for clonal elimination in the thymus. Kosaka H, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3773-7

Physiological significance of thymic B lymphocytes: an appraisal. Marcos MA, et al. **Res Immunol** 1989 Mar-Apr; 140(3):275-9 (33 ref.)

A comparison of the elemental concentrations in tissue thymocytes from diabetic and non-diabetic rats. Warley A. **Scanning Microsc** 1988 Dec;2(4):2219-26

In vivo effects of thymic epithelial culture supernate and thymosin fraction 5 on ADP-induced thromboembolic respiratory depression in mice. Hashimoto S, et al. **Thromb Res** 1989 Jan 15;53(2):209-14

Enzyme analysis of thymic nurse cells. Defresne MP, et al. **Thymus** 1988;11(4):221-30

Characterization of the in vitro interaction between thymocytes and a medullary thymic epithelial cell line. Hugo P, et al. **Thymus** 1988;12(1):27-37

What actually are the thymic stromal cells? [letter] Milićević NM, et al. **Thymus** 1988;11(4):270

On the nature of the content in the PAS-positive macrophages of the rodent thymus. Milićević NM, et al. **Thymus** 1988;11(4):257-9

Differential effect of cyclosporine in vivo on the distribution of T cell subsets in the thymus, spleen, and lymph nodes. Hiramine C, et al. **Transplantation** 1989 Mar;47(3):499-503

Thy-1, CD4 and CD8 in T cell development. Wadsworth S, et al. **Year Immunol** 1989;4:59-73 (55 ref.)

Morphometric variations of the thymus cells 30 days after pinealectomy. Cimas Garcia C, et al. **Z Mikrosk Anat Forsch** 1988;102(4):619-26

[In vitro organ cultures of human embryonic and fetal thymus] Nenova I, et al. **Eksp Med Morfol** 1988;27(2):1-9 (Eng. Abstr.) (Bul)

[Culture of human thymic epithelial cells and their secretory products] Zhang HY, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Sep;21(3):345-53 (Eng. Abstr.) (Chi)

[Target cells and tissue microenvironment in the development of thymic lymphomas in mice: a model for the study of the role of host factors in carcinogenesis] Boniver J, et al. **Bull Mem Acad R Med Belg** 1988;143(1-2):114-22 (Eng. Abstr.) (Fre)

[Interactions of DNA topoisomerase inhibitors novobiocin and nalidixic acid with some cytotoxic agents. In vitro investigations in rat thymic and splenic cells] Tempel K. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):673-9 (Eng. Abstr.) (Ger)

[Secondary follicles in the thymus. Immunohistologic characterization of B lymphocytes using monoclonal antibodies] Kupper H, et al. **Zentralbl Allg Pathol** 1989; 135(3):269-75 (Eng. Abstr.) (Ger)

[Cell composition and ultrastructure of the thymus in offspring during changes in the hormonal background in the mother-fetus functional system] Torbek VE. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):80-4 (Eng. Abstr.) (Rus)

[Proliferation and migration of lymphoid cells of the thymus in acute hypoxia and partial hepatectomy] Nalivalko AM, et al. **Patol Fiziol Eksp Ter** 1988 Jul-Aug;(4):32-5 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Thymo-bursal and adrenal reactions in chickens subjected to thiourea treatment. Giurgea R, et al. **Arch Exp Veterinarmed** 1988 Sep;42(5):655-9

An immunohistochemical study of dibutyltin-induced thymus atrophy. Pieters RH, et al. **Arch Toxicol Suppl** 1989; 13:175-8

Thymus atrophy and immunosuppression induced by organotin compounds. Snoeij NJ, et al. **Arch Toxicol Suppl** 1989;13:171-4

Medullary epithelial cell lines from murine thymus constitutively secrete IL-1 and hematopoietic growth factors and express class II antigens in response to recombinant interferon-gamma. Farr AG, et al. **Cell Immunol** 1989 Apr 1;119(2):427-44

Luteinizing hormone-releasing hormone (LHRH) agonist restoration of age-associated decline of thymus weight, thymic LHRH receptors, and thymocyte proliferative capacity. Marchetti B, et al. **Endocrinology** 1989 Aug; 125(2):1037-45

Effect of chronic or cyclic exposure to estradiol on the humoral immune response and the thymus. Erbach GT, et al. **Immunopharmacology** 1988 Jul-Aug;16(1):45-51

Dibutyltin and tributyltin compounds induce thymus atrophy in rats due to a selective action on thymic lymphoblasts. Snoeij NJ, et al. **Int J Immunopharmacol** 1988;10(7):891-9

Concanavalin A-induced translocation of part of the GTP-binding activity from the membrane to the cytosol in murine thymocytes. Wang P, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):169-72

Effects of an aromatase inhibitor on testosterone-induced inhibition of thymus growth in immature female rats. Greenstein BD, et al. **J Endocrinol** 1988 Oct;119(1):65-7

Effect of cyclosporin A on lymphopoiesis. I. Absence of mature T cells in thymus and periphery of bone marrow transplanted mice treated with cyclosporin A. Kosugi A, et al. **J Immunol** 1989 May 1;142(9):3026-32

Effects of immunosuppressive chemicals on lymphoid development in foetal thymus organ cultures. d'Argy R, et al. **Pharmacol Toxicol** 1989 Jan;64(1):33-8

Effects of TCDD and its congeners 3,3',4,4'-tetrachloroazoxybenzene and 3,3',4,4'-tetrachlorobiphenyl on lymphoid development in the thymus of avian embryos. Nikolaidis E, et al. **Pharmacol Toxicol** 1988 Nov;63(5):333-6

2,3,7,8-Tetrachlorodibenzo-p-dioxin kills immature thymocytes by Ca2+-mediated endonuclease activation. McConkey DJ, et al. **Science** 1988 Oct 14;242(4876):256-9

Abnormal distribution of T cell subsets in the thymus of cyclosporin A (CsA)-treated mice. Hiramine C, et al. **Thymus** 1988;11(4):243-52

Effects of benzodiazepines on thymus cell proliferation. Stepien H, et al. **Thymus** 1988-89;12(2):117-21

Elevated plasma corticosterone levels and histopathology of the adrenals and thymuses in 2,3,7,8-tetrachlorodibenzo-p-dioxin-treated rats. Gorski JR, et al. **Toxicology** 1988 Dec 16;53(1):19-32

Prolongation of pancreatic islet xenograft survival and thymus alteration by 15-deoxyspergualin. Nakajima Y, et al. **Transplantation** 1989 Aug;48(2):351-2

Macrophages of the rat thymus after cyclosporin treatment. Histochemical, enzymehistochemical and immunohistochemical study. Milićević NM, et al. **Virchows Arch [B]** 1989;57(4):237-44

[The study of immunotoxicity of butyl glycidyl ether] Xue B, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jan; 22(1):11-3 (Eng. Abstr.) (Chi)

[Pathomorphologic and hematologic studies of the immunotoxicity of the phenoxyalkane acid mecoprop in rats] Moeller T, et al. **Z Gesamte Hyg** 1989 May; 35(5):258-60 (Eng. Abstr.) (Ger)

[Effect of cyclosporin on the thymus and spleen in rats] Nagai Y. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):906-20 (Eng. Abstr.) (Jpn)

[Influence of Bacillus intermedius RNAase on thymus cell composition and T-lymphocyte differentiation in an experiment] Kurinenko BM, et al. **Antibiot Khimioter** 1989 Feb;34(2):129-33 (Eng. Abstr.) (Rus)

[Effect of bacterial toxins on the mitogen-induced increase of the Ca2+ concentration in the cytoplasm of rat thymocytes. The role of N proteins] Gukovskaia AS, et al. **Biull Eksp Biol Med** 1989 May;107(5):598-600 (Eng. Abstr.) (Rus)

[The activity of growth-regulating substances isolated from the spleen and thymus of healthy cows and of those with hemoblastoses] Ronichevskaia GM, et al. **Eksp Onkol** 1989; 11(4):63-6 (Eng. Abstr.) (Rus)

[Effect of glucocorticoids on the Ca2+ concentration in the cytoplasm of thymocytes] Dukhanin AS. **Farmakol Toksikol** 1988 Jul-Aug;51(4):71-2 (Eng. Abstr.) (Rus)

[The action of cortifen and corticosterone on the thymocyte nucleoid of mice in vivo and in vitro] Struchkov VA, et al. **Farmakol Toksikol** 1988 Nov-Dec;51(6):76-80 (Eng. Abstr.) (Rus)

[Effect of aroclor 1254 on morphochemical parameters of various organs in experimental studies] Seffner V, et al. **Gig Sanit** 1989 Mar;(3):71-4 (Rus)

[Effect of myelopeptides on the postradiation recovery of the thymus] Kuznetsova SF. **Radiobiologiia** 1989 May-Jun; 29(3):326-30 (Eng. Abstr.) (Rus)

[The role of adenine nucleotide catabolism in the interphase death of thymocytes, caused by papaverine and dipyridamole] Dmitrenko NP, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):59-64 (Eng. Abstr.) (Rus)

EMBRYOLOGY

In situ localization of T cell receptor beta chain in the murine thymus: changes in the intrathymic distribution of thymocytes expressing beta chain during fetal development. Farr AG, et al. **Cell Immunol** 1988 Oct 1;116(1):135-48

B cell precursors are present in the thymus during early development. Kimoto H, et al. **Eur J Immunol** 1989 Jan; 19(1):97-104

Thymocyte clones from 14-day mouse embryos. II. Transcription of T3 gamma gene may precede rearrangement of TcR delta and expression of T3 delta, T3 epsilon and T11 genes. Pelkonen J, et al. **Eur J Immunol** 1988 Sep;18(9):1337-41

A histological study of prenatal growth of the thymus in humans. Nenova I. **Folia Med (Plovdiv)** 1987;29(3):64-73

Ontogeny of T lymphocytes in the pig. Trebichavský I, et al. **Folia Microbiol (Praha)** 1988;33(4):329-31

Acute thymus involution in infancy and childhood: a reliable marker for duration of acute illness. van Baarlen J, et al. **Hum Pathol** 1988 Oct;19(10):1155-60

Cyclosporin A and anti-Ia antibody cause a maturation defect of CD4+8- cells in organ-cultured fetal thymus. Takeuchi Y, et al. **Immunology** 1989 Mar;66(3):362-7

Analysis of the first two waves of thymus homing stem cells and their T cell progeny in chick-quail chimeras. Coltey M, et al. **J Exp Med** 1989 Aug 1;170(2):543-57

Early events in human T cell ontogeny. Phenotypic characterization and immunohistologic localization of T cell precursors in early human fetal tissues [published erratum appears in J Exp Med 1989 Feb 1;169(2):603] Haynes BF, et al. **J Exp Med** 1988 Sep 1;168(3):1061-80

Effect of IL-7 on the growth of fetal thymocytes in culture. Watson JD, et al. **J Immunol** 1989 Aug 15;143(4):1215-22

Developmental control of lymphokine gene expression in fetal thymocytes during T-cell ontogeny. Carding SR, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3342-5

Thymus histogenesis in C3H mice. Moraux-Moyson A, et al. **Thymus** 1988-89;12(2):89-109

Immuno-architecture of human fetal lymphoid tissues. Timens W, et al. **Virchows Arch [A]** 1988;413(6):563-71

A morphometrical study of human fetal thymus. Liberti EA, et al. **Z Mikrosk Anat Forsch** 1989;103(2):309-15

ENZYMOLOGY

Lesions and repair of cells of maternal mice after valproic acid (VPA) treatment on day 8 of pregnancy: an enzyme histochemical analysis. Gossrau R, et al. **Acta Histochem (Jena)** 1989;86(1):23-32

Changes in antizyme-ornithine decarboxylase complexes in tissues of hormone-treated rats. Peng T, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):99-105

Phospholipase A2 inhibitory activity in thymocytes of dexamethasone-treated mice--possible implication of lipocortins. Errasfa M, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):53-60

Lipocortin-independent effect of dexamethasone on phospholipase activity in a thymic epithelial cell line. Pilch A, et al. **Biochem J** 1989 Jul 15;261(2):395-400

Detection, resolution, and nomenclature of multiple ubiquitin carboxyl-terminal esterases from bovine calf thymus. Mayer AN, et al. **Biochemistry** 1989 Jan 10;28(1):166-72

Filament assembly and regulation of the actin-activated ATPase activity of thymus myosin. Wagner PD, et al. **Biochemistry** 1988 Aug 23;27(17):6236-42

Phospholipase C in rabbit thymocytes: subcellular distribution and influences of calcium and GTP gamma S on the substrate dependence of cytosolic and plasma membrane-associated phospholipase C. Behl B, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):179-88

Structural study of immunoaffinity-purified DNA polymerase alpha-DNA primase complex from calf thymus. Tamai K, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):263-73

Evidence for the presence of carbonic anhydrase III in the

myoid cells of the bovine thymus. Immunocytochemical and ultrastructural study. Nishita T, et al. **Histochemistry** 1989;92(1):87–8
Immunocytochemical localization of carbonic anhydrase isozyme III in equine thymus. Nishita T, et al. **Histochemistry** 1989;91(1):39–42
Carbonic anhydrase activity in peripheral T-lymphocytes and appearance of the activity during their maturation in the thymus. A histochemical demonstration. Parkkila S, et al. **Histochemistry** 1989;91(6):479–82
Biochemical and histochemical localization of succinate dehydrogenase on nuclear membrane of rat thymocytes and splenocytes. Arifuddin M, et al. **Indian J Exp Biol** 1988 May;26(5):397–9
Purification and partial amino acid sequences of a phospholipase C-associated GTP-binding protein from calf thymocytes. Wang P, et al. **J Biochem (Tokyo)** 1989 Mar; 105(3):461–6
Purification and characterization of 5-hydroxymethyluracil-DNA glycosylase from calf thymus. Its possible role in the maintenance of methylated cytosine residues. Cannon-Carlson SV, et al. **J Biol Chem** 1989 Aug 5;264(22):13306–12
Recognition of (dG)n.(dC)n sequences by endonuclease G. Characterization of the calf thymus nuclease. Côté J, et al. **J Biol Chem** 1989 Feb 25;264(6):3301–10
Purification of RNA polymerase IIO from calf thymus. Kim WY, et al. **J Biol Chem** 1988 Dec 15;263(35):18880–5
Differential extension of 3' mispairs is a major contribution to the high fidelity of calf thymus DNA polymerase-alpha. Perrino FW, et al. **J Biol Chem** 1989 Feb 15; 264(5):2898–905
Calf thymus DNA polymerase delta independent of proliferating cell nuclear antigen (PCNA). Focher F, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1805–21
Calf thymus histone H1 is a recombinase that catalyzes ATP-independent DNA strand transfer. Kawasaki I, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5281–5
Proofreading by the epsilon subunit of Escherichia coli DNA polymerase III increases the fidelity of calf thymus DNA polymerase alpha. Perrino FW, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3085–8
Purification and characterization of calcium-activated neutral proteinase from calf thymus. Schwenk M, et al. **Z Naturforsch [C]** 1988 Sep-Oct;43(9-10):679–85

GROWTH & DEVELOPMENT

Influence of adrenalectomy on the development of the neonatal thymus in the rat. Inomata T, et al. **Biol Neonate** 1989;55(4-5):238–43
Activation of the interleukin 2 pathway precedes CD3-T cell receptor expression in thymic development. Differential growth requirements of early and mature intrathymic subpopulations. Toribio ML, et al. **Eur J Immunol** 1989 Jan;19(1):9–15
Phenotypic analysis of mouse thymus development. Ceredig R, et al. **Immunol Res** 1988;7(4):265–78 (48 ref.)
The growth of nonlymphoid thymic components in vitro: age-related differences during development. Milisen WB, et al. **In Vitro Cell Dev Biol** 1988 Oct;24(10):972–80
The expression of T cell receptor-associated proteins during T cell ontogeny in man. Campana D, et al. **J Immunol** 1989 Jan 1;142(1):57–66
Immature, double negative (CD4-,CD8-) rat thymocytes do not express IL-2 receptors. Takács L, et al. **J Immunol** 1988 Dec 1;141(11):3810–8
Precursor immigration and thymocyte succession during larval development and metamorphosis in Xenopus. Turpen JB, et al. **J Immunol** 1989 Jan 1;142(1):41–7
Monoclonal antibodies specific to native murine T-cell receptor gamma delta: analysis of gamma delta T cells during thymic ontogeny and in peripheral lymphoid organs. Itohara S, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):5094–8
Developmental biology of T cell receptors. Strominger JL. **Science** 1989 May 26;244(4907):943–50 (63 ref.)
Image analysis of cell proliferation in rat thymus throughout development. Aboussaouira T, et al. **Thymus** 1988–89; 12(3):167–86

IMMUNOLOGY

Electrophoretic immunoblotting analysis of anti-thymus microsome antibodies in patients with myasthenia gravis. Hazama T, et al. **Acta Neurol Scand** 1989 Feb;79(2):88–96
p145-MR6: a novel T cell surface molecule with a role in tolerance to self. Larche M, et al. **Adv Exp Med Biol** 1988; 237:413–7
Age-dependence of lymphocyte production in Peyer's patch follicles in contrast to the other Peyer's patch compartments and the thymus. Rothkötter HJ, et al. **Adv Exp Med Biol** 1988;237:81–5
Divergent patterns of pulmonary blastomycosis induced by conidia and yeasts in athymic and euthymic mice. Frey CL, et al. **Am Rev Respir Dis** 1989 Jul;140(1):118–24
B-cell compartment in the thymus of patients with myasthenia gravis and control subjects. Christensson B, et al. **Ann N Y Acad Sci** 1988;540:293–7
Monoclonal antibodies as probes for acetylcholine receptor epitopes in thymuses and thymic epithelial tumors of patients with myasthenia gravis and nonmyasthenic controls. Kirchner T, et al. **Ann N Y Acad Sci** 1988; 540:508–10
Activation of thymocytes and T cells by interleukin-6. Le JM, et al. **Ann N Y Acad Sci** 1989;557:444–52; discussion 452–3
Development of cytolytic T lymphocytes in thymus culture requires a cytokine sharing homology with IL-6 alpha. Ming JE, et al. **Ann N Y Acad Sci** 1989;557:396–403; discussion 403–4
Autoantibody reactive integral membrane antigens of thymocytes and brain. Narendran A, et al. **Ann N Y Acad Sci** 1988;540:466
Disorders of the lymphatic homing and MIF production by the lymphocytes of thymus, spleen and lymph nodes after liver injury caused by portocaval shunt in rats. Andrzejewski W, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):753–8
Estrogen-induced suppression of collagen arthritis. III. Adult thymectomy does not affect the course of arthritis or the estrogen-mediated suppression of T-cell immunity. Holmdahl R, et al. **Brain Behav Immun** 1988 Jun; 2(2):123–32
Thymic response to thermal injury in mice: I. Alterations of thymocyte subsets studied by flow cytometry and immunohistochemistry. Colić M, et al. **Burns** 1989 Jun; 15(3):155–61
Antigen/MHC-specific T cells are preferentially exported from the thymus in the presence of their MHC ligand. Berg LJ, et al. **Cell** 1989 Sep 22;58(6):1035–46
The thymus has two functionally distinct populations of immature alpha beta + T cells: one population is deleted by ligation of alpha beta TCR. Finkel TH, et al. **Cell** 1989 Sep 22;58(6):1047–54
MHC restriction, alloreactivity, and thymic education: a common link? Kourilsky P, et al. **Cell** 1989 Feb 10; 56(3):327–9 (23 ref.)
Peripheral but not thymic T cells participate in an autoreactive T cell network. Kennedy DW, et al. **Cell Immunol** 1988 Nov;117(1):177–87
Expression of non-MHC-restricted T cell antigen-binding molecules by thymic lymphocytes. Rellahan BL, et al. **Cell Immunol** 1989 Oct 1;123(1):166–76
Proliferation in vitro of Lyt2-,L3T4- thymocytes shows responsiveness to interleukin 1. Chaudhri G, et al. **Clin Exp Immunol** 1988 Jul;73(1):51–6
Quantitative analysis of cultured thymic reticulo-epithelial cells labelled by different antibodies: a flow cytometric study. Fabien N, et al. **Clin Exp Immunol** 1989 Feb; 75(2):292–6
Exercise stress alters murine lymphocyte subset distribution in spleen, lymph nodes and thymus. Hoffman-Goetz L, et al. **Clin Exp Immunol** 1989 May;76(2):307–10
Infection of human thymic epithelial cells by human cytomegalovirus and other viruses: effect on secretion of interleukin 1-like activity. Wainberg MA, et al. **Clin Exp Immunol** 1988 Jun;72(3):415–21
Effects of retinoids on human thymus-dependent and thymus-independent mitogenesis. Dillehay DL, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):100–8
Thymus and immunity—I. Early thymus research. Gregoire C. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1249–55
Thymus and immunity—II. The last three decades. Miller JF. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1257–62 (52 ref.)
Structural and serological heterogeneity of gamma/delta T cell antigen receptor expression in thymus and peripheral blood. Lanier LL, et al. **Eur J Immunol** 1988 Dec; 18(12):1985–92
Mouse strain variation in Ly-24 (Pgp-1) expression by peripheral T cells and thymocytes: implications for T cell differentiation. Lynch F, et al. **Eur J Immunol** 1989 Feb; 19(2):223–9
B (MHC) antigen dependent modulation of GvH reactivity by neonatal thymectomy and alloimmunization. Plachý J, et al. **Folia Biol (Praha)** 1989;35(3):121–36
The thymus—what's new? Henry K. **Histopathology** 1989 May;14(5):537–48 (117 ref.)
Macrophages and interdigitating reticulum cells in normal thymus and in thymoma: an immunohistochemical study. Ruco LP, et al. **Histopathology** 1989 Jan;14(1):37–45
Thymic medullary cells expressing B lymphocyte antigens. Hofmann WJ, et al. **Hum Pathol** 1988 Nov;19(11):1280–7
CD45 and the thymus. Beverley PC. **Immunol Lett** 1989 Jun 1;21(3):199–200
Selective expression of CD45 isoforms and of maturation antigens during human thymocyte differentiation: observations and hypothesis. Pilarski LM, et al. **Immunol Lett** 1989 Jun 1;21(3):187–98 (59 ref.)
Effect of graft-versus-host reaction on thymic function. Fukuzawa M, et al. **Immunol Res** 1988;7(3):239–46 (26 ref.)
Thymic selection of the T-cell repertoire. Kruisbeek AM, et al. **Immunol Res** 1988;7(4):318–28 (43 ref.)
Stop and go in the thymus. Fink PJ. **Immunol Today** 1988 Dec;9(12):377–80 (22 ref.)
The true function of the thymus [letter] Kisielow P. **Immunol Today** 1988 Dec;9(12):367
Human thymic dendritic cells. Characterization, isolation and functional assays. Landry D, et al. **Immunology** 1988 Sep; 65(1):135–42
The role of the thymus in multiple sclerosis. D'Andrea V, et al. **Ital J Neurol Sci** 1989 Feb;10(1):43–8
Lymphokine-induced cytotoxic cell generation in thymus and spleen cell cultures. Biasi G, et al. **J Biol Regul Homeost Agents** 1987 Jul-Sep;1(3):119–25
Novel primary thymic defect with T lymphocytes expressing gamma delta T cell receptor. Geisler C, et al. **J Clin Pathol** 1989 Jul;42(7):705–11
Role of the thymus in natural tolerance to an autologous protein antigen. Boguniewicz M, et al. **J Exp Med** 1989 Jan 1;169(1):285–90
Influence of the thymus on the capacity of female mice to reject male skin grafts. De Pirro ES, et al. **J Exp Med** 1989 May 1;169(5):1829–33
L3T4 effector cells in multiple organ-localized autoimmune disease in nude mice grafted with embryonic rat thymus. Ikeda H, et al. **J Exp Med** 1988 Dec 1;168(6):2397–402
Relative V beta transcript levels in thymus and peripheral lymphoid tissues from various mouse strains. Inverse correlation of I-E and Mls expression with relative abundance of several V beta transcripts in peripheral lymphoid tissues. Okada CY, et al. **J Exp Med** 1989 May 1;169(5):1703–19
Thymic selection of H-2-incompatible bone marrow cells in SCID mice. Differences in T help for induction of B cell IgG responses versus cytotoxic T cells. Zinkernagel RM, et al. **J Exp Med** 1988 Sep 1;168(3):1187–92
Monoclonal antibodies reactive with subsets of mouse and human thymic epithelial cells. Rouse RV, et al. **J Histochem Cytochem** 1988 Dec;36(12):1511–7
Expression of ABH, Lewis and related tissue antigens in the human thymus. Le Pendu J, et al. **J Immunogenet** 1989 Feb;16(1):19–32
Requirements for stimulation of autoreactive T cells by thymic stroma. Burstyn D, et al. **J Immunol** 1989 Sep 1; 143(5):1422–5
Mouse fetal thymus lobes cultured in IL-2 generate CD3+, TCR-gamma delta-expressing CD4-/CD8+ and CD4-/CD8- cells. Ceredig R, et al. **J Immunol** 1989 May 15;142(10):3353–60
Human postnatal CD4- CD8- CD3- thymic T cell precursors differentiate in vitro into T cell receptor delta-bearing cells. Denning SM, et al. **J Immunol** 1989 May 1;142(9):2988–97
Analysis of expression of CD2, CD3, and T cell antigen receptor molecules during early human fetal thymic development [published erratum appears in J Immunol 1989 Feb 15;142(4):1410] Haynes BF, et al. **J Immunol** 1988 Dec 1;141(11):3776–84
Involvement of major histocompatibility complex products in tolerance induction in the thymus. McDuffie M, et al. **J Immunol** 1988 Sep 15;141(6):1840–7
Specific neonatal induction of functional tolerance to allogeneic Mls determinants occurs intrathymically and the tolerant state is Mls haplotype-specific. Macphail S, et al. **J Immunol** 1989 Sep 15;143(6):1795–800
Two monoclonal antibodies identify thymic-repopulating cells in mouse bone marrow. Spangrude GJ, et al. **J Immunol** 1989 Jan 15;142(2):425–30
Phenotypic characterization of the post-thymic differentiation of human alloantigen-specific CD8+ cytotoxic T lymphocytes. Yamashita N, et al. **J Immunol** 1989 Sep 1;143(5):1518–23
Anti-thymocyte serum delays clearance of poliovirus from the mouse central nervous system. Jubelt B, et al. **J Neuroimmunol** 1989 May;22(3):223–32
Thymic cortical epithelial cells lack full capacity for antigen presentation. Lorenz RG, et al. **Nature** 1989 Aug 17; 340(6234):557–9
Thymic cortical epithelial cells can present self-antigens in vivo. Lorenz RG, et al. **Nature** 1989 Feb 9;337(6207):560–2
Presentation of antigen, foreign major histocompatibility complex proteins and self by thymus cortical epithelium. Marrack P, et al. **Nature** 1989 Apr 6;338(6215):503–5
A novel MHC class II epitope expressed in thymic medulla but not cortex. Murphy DB, et al. **Nature** 1989 Apr 27; 338(6218):765–8
Thymic selection process induced by hybrid antibodies. Zepp F, et al. **Nature** 1988 Dec 1;336(6198):473–5
Thymotaxin: a thymic epithelial peptide chemotactic for T-cell precursors [published erratum appears in Proc Natl Acad Sci U S A 1989 Mar;86(6):1992] Imhof BA, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7699–703
Positive selection of a T-cell subpopulation in the thymus in which it develops. Iwabuchi K, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5089–93
Significance of thymus differential ratio in immunologic status of graft tolerance. Otani Y, et al. **Res Exp Med (Berl)** 1988;188(4):305–17
Thymic accessory cells required for the increased responsiveness of thymocyte subpopulations to interleukin 1-like monokine in guinea pigs. Aida Y, et al. **Scand J Immunol** 1988 Sep;28(3):285–92
Comparison between thymus- and spleen-derived B-cell hybridomas. Zöller M. **Scand J Immunol** 1989 Aug; 30(2):271–5
Influence of the major histocompatibility complex on positive thymic selection of V beta 17a+ T cells. Blackman MA, et al. **Science** 1989 Apr 14;244(4901):214–7
Neonatal thymectomy results in a repertoire enriched in T cells deleted in adult thymus. Smith H, et al. **Science** 1989 Aug 18;245(4919):749–52
Immunologic studies on myasthenia gravis. II: A new chemotactic factor for lymphocytes found in patients with myasthenia gravis. Annoh T, et al. **Surgery** 1989 May; 105(5):615–24

The effects of leukemosuppressive immunotherapy on thymic infectious cell centers in AKR mice. Buckheit RW Jr, et al. **Thymus** 1988–89;12(3):143–56

Detection of Thy-1+ cells in the developing thymus of the lizard, Chalcides ocellatus. el Deeb S, et al. **Thymus** 1988; 12(1):3–9

Immunoglobulin-producing cells in the human thymus. Henry L, et al. **Thymus** 1988–89;12(2):77–87

Cyclosporin-induced autoimmunity: a role for marrow-derived cells presenting self antigens in the thymus. Babcock SK, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):220–1

How is the thymus affected by alterations in immunologic environment? Hayashi S, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):322–3

Tolerance and the thymus. Miller JF. **Transplant Proc** 1989 Feb;21(1 Pt 1):59–60

Persistent immunogenicity of rat thymic epithelium. Georgiou HM, et al. **Transplantation** 1989 Aug;48(2):302–6

Natural suppressor cells derived from adult spleen and thymus. Schwadron RB, et al. **Transplantation** 1989 Jul; 48(1):107–10

[Expression of the CD1a, CD1b, CD1c antigens in human thymus at various ages of development] Bonati A, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):999–1005 (Eng. Abstr.) **(Ita)**

[Clinicopathological studies on myasthenia gravis and thymus] Kawaguchi T, et al. **Kokyu To Junkan** 1988 Oct; 36(10):1101–4 (Eng. Abstr.) **(Jpn)**

[Monoclonal autoantibodies to different epithelial structures of the thymus gland obtained by the immunization with streptococcal group A antigens] Drobyshevskaia EI, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):77–80 (Eng. Abstr.) **(Rus)**

[Effect of the thymus on the activity of immunoreactive peptides] Kalashnikov SG, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):234–6 (Eng. Abstr.) **(Rus)**

[Thymus-dependent nature of the antigens of enteropathogenic viruses] Kvachev VG, et al. **Mikrobiol Zh** 1989 Jan–Feb;51(1):64–7 (Eng. Abstr.) **(Rus)**

[Antibodies to the plasma membranes of thyrocytes in patients with diffuse toxic goiter during treatment with mercazole] Saarma VA, et al. **Probl Endokrinol (Mosk)** 1988 Sep–Oct;34(5):17–9 (Eng. Abstr.) **(Rus)**

[Changes in the electrophoretic mobility of thymus, spleen and lymph node cells in tumor-bearing mice during dynamic tumor growth] Grinevich IuA, et al. **Tsitologiia** 1989 Feb;31(2):209–14 (Eng. Abstr.) **(Rus)**

[Thymus insufficiency and its correction in patients with recurrent ophthalmic herpes] Petrov RV, et al. **Vestn Oftalmol** 1988 Nov–Dec;104(6):39–41 (Eng. Abstr.) **(Rus)**

[Monoclonal autoantibodies to the epithelial basement membrane cells of human skin and thymus obtained through immunization with Rickettsia prowazekii antigens] Drobyshevskaia EI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):73–7 (Eng. Abstr.) **(Rus)**

INNERVATION

The cholinergic and adrenergic innervation of the rat thymus. Kendall MD, et al. **Adv Exp Med Biol** 1988;237:255–61

Maintenance of noradrenergic sympathetic innervation in the involuted thymus of the aged Fischer 344 rat. Bellinger DL, et al. **Brain Behav Immun** 1988 Jun;2(2):133–50

Tachykinins, calcitonin gene-related peptide and neuropeptide Y in nerves of the mammalian thymus: interactions with mast cells in autonomic and sensory neuroimmunomodulation? Weihe E, et al. **Neurosci Lett** 1989 May 22;100(1–3):77–82

METABOLISM

Identification of filaggrin in Hassall's corpuscle by histochemical and immunohistochemical methods. Favre A. **Acta Anat (Basel)** 1989;135(1):71–6

Production of interleukin 1 (IL1) by human thymic epithelial cells (TEC). Cohen-Kaminsky S, et al. **Adv Exp Med Biol** 1988;237:299–305

The effect of adrenalectomy on eicosanoid formation in blood platelets after aggregation and in the thymus of the rat. Vincent JE, et al. **Agents Actions** 1989 Jan;26(1–2):249–51

Patterns of keratin expression in the murine thymus. Farr AG, et al. **Anat Rec** 1989 Jul;224(3):374–8

Studies on the effect of superoxide dismutase (peroxinorm) on interleukin-1 activity. Gieldanowski J, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):245–8

The effect of sodium-2-mercaptoethane-sulphonate, N-acetylcysteine and cysteine on the uptake of cytosine arabinoside by normal and neoplastic thymus cells of mice. Jastrzębski Z, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(3):335–43

N-ethylmaleimide differentially affects adenosine and thymidine uptake by rat thymocytes. Krzystyniak K, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):287–94

A revised sequence of calf thymus glutaredoxin. Papayannopoulos IA, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1448–54

Characterization of phosphopeptides released during dialysis of EDTA-reacted highly purified DNA prepared from calf thymus nuclei. Welsh RS. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1135–42

Stimulation of respiration by mitogens in rat thymocytes is independent of mitochondrial calcium. Lakin-Thomas PL, et al. **Biochem J** 1988 Nov 15;256(1):167–73

Evidence that activation of 2-deoxy-D-glucose transport in rat thymocyte suspensions results from enhanced coupling between transport and hexokinase activity. Naftalin RJ, et al. **Biochem J** 1989 May 15;260(1):143–52

Kallikrein stimulates arachidonic acid release and production of prostaglandins from TEA3A1 endocrine thymic epithelial cells. Sun L, et al. **Biochem J** 1989 Mar 1; 258(2):351–5

Phorbol ester-induced attenuation of tissue DNA synthesis: antagonism by prolactin in liver and thymus. Buckley AR, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1192–4

Immunoregulation and production of tumor necrosis factor alpha by human thymocytes. Reem GH, et al. **Cancer Res** 1989 Jul 1;49(13):3568–73

Localization of thymostimulin in mammalian thymuses: comparative evaluation. Aita M, et al. **Cell Mol Biol** 1989; 35(2):137–45

Local re-utilization of thymidine in normal mouse tissues as measured with iododeoxyuridine. Quackenbush RC, et al. **Cell Tissue Kinet** 1988 Nov;21(6):381–7

Carrier-mediated [125I]-T3 uptake by mouse thymocytes. Centanni M, et al. **Endocrinology** 1989 May;124(5):2443–8

Neuroendocrine control of thymic hormonal production. I. Prolactin stimulates in vivo and in vitro the production of thymulin by human and murine thymic epithelial cells. Dardenne M, et al. **Endocrinology** 1989 Jul;125(1):3–12

Luteinizing hormone-releasing hormone-binding sites in the rat thymus: characteristics and biological function. Marchetti B, et al. **Endocrinology** 1989 Aug;125(2):1025–36

Distinct target cells and effects of 1 alpha,25-dihydroxyvitamin D3 and glucocorticoids in the rat thymus gland. Provvedini DM, et al. **Endocrinology** 1989 Mar;124(3):1532–8

Hydrocortisone increases the numbers of KL1+ cells, a discrete thymic epithelial cell subset characterized by high molecular weight cytokeratin expression. Savino W, et al. **Endocrinology** 1988 Nov;123(5):2557–64

3,5,3'-Triiodothyronine increases cellular adenosine 3',5'-monophosphate concentration and sugar uptake in rat thymocytes by stimulating adenylate cyclase activity: studies with the adenylate cyclase inhibitor MDL 12330A. Segal J, et al. **Endocrinology** 1989 May;124(5):2166–71

Oxytocin receptors in the rat thymic gland. Elands J, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):345–6

The role of ubiquinones in the regulation of lipid metabolism in rat thymocytes. Novoselova EG. **FEBS Lett** 1989 Jun 5;249(2):371–4

Interaction of cytosol fractions containing activated glucocorticoid-receptor complexes from rat liver and thymus with heterologous nuclei: effects on transcription. Tzavaras TJ, et al. **FEBS Lett** 1989 Jun 19;250(1):30–4

Thymic lymphoma cells as a model for complex-formation between thymocytes and thymic medullary epithelial cells. Hugo P, et al. **Immunol Lett** 1989 Jul;22(1):73–7

Synthesis and apparent secretion of prothymosin alpha by different subpopulations of calf and rat thymocytes. Franco FJ, et al. **Immunology** 1989 Jun;67(2):263–8

Inhibition of DNA fragmentation in thymocytes and isolated thymocyte nuclei by agents that stimulate protein kinase C. McConkey DJ, et al. **J Biol Chem** 1989 Aug 15; 264(23):13399–402

Ca++-ionophore-induced dissipation of intracellular proton gradients in rat thymocytes. Dell'Antone P. **J Cell Physiol** 1989 Apr;139(1):76–82

Somatostatin gene expression in the thymus gland. Fuller PJ, et al. **J Immunol** 1989 Aug 1;143(3):1015–7

Tumor necrosis factor synergistically acts with IFN-gamma to regulate Ly-6A/E expression in T lymphocytes, thymocytes and bone marrow cells. Malek TR, et al. **J Immunol** 1989 Mar 15;142(6):1929–36

A novel gamma delta T cell receptor for antigen adds limited diversity to the gamma delta repertoire in adult thymus. Marulić-Galelić S, et al. **J Immunol** 1989 Jan 1; 142(1):28–34

T cell receptor-gamma and -delta genes preferentially utilized by adult thymocytes for the surface expression. Takagaki Y, et al. **J Immunol** 1989 Mar 15;142(6):2112–21

The expression and sequences of T cell antigen receptor beta-chain genes in the thymus at an early stage after sublethal irradiation. Yuuki H, et al. **J Immunol** 1989 May 15;142(10):3683–91

Interaction of the B subunit of cholera toxin with endogenous ganglioside GM1 causes changes in membrane potential of rat thymocytes. Mulhern SA, et al. **J Membr Biol** 1989 Jul;109(1):21–8

Isolation and characterization of nicotinic acetylcholine receptor-like protein from fetal calf thymus. Kawanami S, et al. **J Neurol Sci** 1988 Nov;87(2–3):195–209

Age-related changes in excision repair of cultured epithelial cells from mouse thymus. Small M, et al. **Mech Ageing Dev** 1988 Nov 14;45(2):127–36

Inhibin and activin regulate [3H]thymidine uptake by rat thymocytes and 3T3 cells in vitro. Hedger MP, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):133–8

Production of interleukin-6 in vitro parallels development of cytotoxic T lymphocytes from murine thymocytes. Stringfellow MM, et al. **Surgery** 1989 Aug;106(2):332–8

[Luminescence-histochemical analysis of the histamine-containing cells in the lobule of the thymus] Liubovtseva LA, et al. **Arkh Anat Gistol Embriol** 1988 Nov; 95(11):61–4 (Eng. Abstr.) **(Rus)**

[Poly(ADP-ribosylation) of nuclear proteins in rat thymocytes] Beletskil IP, et al. **Biokhimiia** 1988 Jul; 53(7):1144–52 (Eng. Abstr.) **(Rus)**

[Biosynthesis and processing of heterogeneous nuclear RNA in rat thymocytes] Evtushenko VI, et al. **Biokhimiia** 1988 May;53(5):862–71 (Eng. Abstr.) **(Rus)**

[The role of ubiquinones in regulating lipid metabolism in rat thymocytes] Novoselova EG. **Biokhimiia** 1989 Jan; 54(1):27–32 (Eng. Abstr.) **(Rus)**

[Immunohistochemical and electron microscopic identification of the cells producing serotonin and prostaglandin F2 in the rat thymus] Aleksandrova Se, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):237–9 (Eng. Abstr.) **(Rus)**

[Evaluation of the capacity of the thymus to accumulate testosterone and of the nature of its interaction with the thymocytes] Chermnykh NS, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):611–3 (Eng. Abstr.) **(Rus)**

[The effect of inhibitors of arachidonic acid oxidation on the mitogen-induced changes in calcium level and pH in the cytoplasm of rat thymocytes] Gukovskaia AS, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1507–11 **(Rus)**

[Purine compound transport and metabolism in the thymus and spleen lymphocytes of C3HA mice during the growth of hepatoma 22] Pimenov AM, et al. **Eksp Onkol** 1989; 11(4):33–7 (Eng. Abstr.) **(Rus)**

[Transport of x-ray contrast media in isolated target and nontarget cells] Shimanovskil NL, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):80–4 (Eng. Abstr.) **(Rus)**

[Early changes in the biosynthesis of proteins in the thymocytes of mice following exposure to lympholytic agents] Nazarova LF, et al. **Radiobiologiia** 1988 Nov–Dec; 28(6):756–61 (Eng. Abstr.) **(Rus)**

[Binding of alcian blue by the outer perimembrane layers of cells in the liver, thymus and transplantable tumors] Slivinskil GG. **Tsitologiia** 1988 Jun;30(6):672–7 (Eng. Abstr.) **(Rus)**

[Adenylic acid catabolism in thymocytes of the regenerating thymus in mice] Bezvershenko IA, et al. **Ukr Biokhim Zh** 1989 Jan–Feb;61(1):52–7 (Eng. Abstr.) **(Rus)**

[Study of bromthymol blue binding with plasma membranes] Dreval' VI, et al. **Ukr Biokhim Zh** 1989 Mar–Apr; 61(2):94–8 (Eng. Abstr.) **(Rus)**

[Metabolism of nuclear proteins of the thymus and bone marrow cells in mice with hepatoma 22] Savina MI, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):111–4 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Infection of cultured human thymic epithelial cells by human immunodeficiency virus. Numazaki K, et al. **Clin Immunol Immunopathol** 1989 May;51(2):185–95

Mouse thymic virus (MTLV). A mammalian herpesvirus cytolytic for CD4+ (L3T4+) T lymphocytes. Morse SS, et al. **J Exp Med** 1989 Feb 1;169(2):591–6

Replication of measles virus in cultured human thymic epithelial cells. Numazaki K, et al. **J Med Virol** 1989 Jan; 27(1):52–8

Thymic atrophy characteristic in transgenic mice that harbor pX genes of human T-cell leukemia virus type I. Furuta Y, et al. **J Virol** 1989 Jul;63(7):3185–9

Influence of enhancer sequences on thymotropism and leukemogenicity of mink cell focus-forming viruses. Holland CA, et al. **J Virol** 1989 Mar;63(3):1284–92

Replication of cytomegalovirus in human thymic epithelial cells. Numazaki K, et al. **Med Microbiol Immunol (Berl)** 1989;178(2):89–98

Failure to thrive, wasting syndrome, and immunodeficiency in rabies: a hypophyseal/hypothalamic/thymic axis effect of rabies virus. Torres-Anjel MJ, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S710–25

The role of bone marrow and thymic elements in the initiation and spread of virus production in the AKR thymus. Buckheit RW Jr, et al. **Virology** 1988 Oct; 166(2):533–41

PATHOLOGY

Enlargement of the thymus following chemotherapy for non-seminomatous testicular cancer. Abildgaard A, et al. **Acta Radiol** 1989 May-Jun;30(3):259–62

Thymic atrophy and rebound enlargement following chemotherapy for testicular cancer. Hendrickx P, et al. **Acta Radiol** 1989 May-Jun;30(3):263–7

Thymic hyperplasia in myasthenia gravis: immunohistological abnormalities and responsiveness to recombinant IL2. Cohen-Kaminsky S, et al. **Adv Exp Med Biol** 1988;237:375–81

Thymus homing and reconstitution in split dose irradiated preleukemic mice. Defresne MP, et al. **Adv Exp Med Biol** 1988;237:383–6

The thymus in acquired immune deficiency syndrome. Comparison with other types of immunodeficiency diseases, and presence of components of human immunodeficiency virus type 1. Schuurman HJ, et al. **Am J Pathol** 1989 Jun;134(6):1329–38

Mycotoxicosis caused by aerosolized T-2 toxin administered to female mice. Thurman JD, et al. **Am J Vet Res** 1988 Nov;49(11):1928–31

True thymic hyperplasia: a clinicopathological study. Ricci C, et al. **Ann Thorac Surg** 1989 May;47(5):741–5

Effect of dietary lipid peroxides on lymphoid tissues. Oarada M, et al. **Basic Life Sci** 1988;49:327–30

2,3,7,8–Tetrachlorodibenzo–p–dioxin (TCDD) kills glucocorticoid–sensitive thymocytes in vivo. McConkey DJ, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1003–8

Prethymic phenotype and genotype of pre–T (CD7+/ER–)–cell leukemia and its clinical significance within adult acute lymphoblastic leukemia. Thiel E, et al. **Blood** 1989 Apr;73(5):1247–58

Thymus and B cell reconstitution in severe combined immunodeficiency after transplantation of monoclonal antibody depleted parental mismatched bone marrow. Hong R, et al. **Bone Marrow Transplant** 1987 Apr; 1(4):405–9

Thymic hyperplasia following chemotherapy of a testicular germ cell tumor. Immunohistological evidence for a simple rebound phenomenon. Diie W, et al. **Cancer** 1989 Feb 1; 63(3):446–9

Prevention of doxorubicin–induced hematotoxicity in mice by interleukin 1. Eppstein DA, et al. **Cancer Res** 1989 Jul 15;49(14):3955–60

Persistence of the irradiated host component in thymocyte populations from bone marrow radiation chimeras infected with lymphocytic choriomeningitis virus. Lynch F, et al. **Cell Immunol** 1989 Feb;118(2):482–90

Male BXSB mice develop a thymic hormonal dysfunction with presence of intraepithelial crystalline inclusions. Dardenne M, et al. **Clin Immunol Immunopathol** 1989 Sep; 52(3):392–405

Rearrangement of TCR gamma chain gene involving JP1 suggests early thymocyte origin of peripheral T–cell lymphoma. Leber BF, et al. **Eur J Haematol** 1989 Apr; 42(4):368–74

Histiocytosis X and lymphoid follicular hyperplasia of the thymus in myasthenia gravis. Pescarmona E, et al. **Histopathology** 1989 May;14(5):465–70

Acute thymus involution in infancy and childhood: a reliable marker for duration of acute illness. van Baarlen J, et al. **Hum Pathol** 1988 Oct;19(10):1155–60

Myasthenia gravis thymus: clinical, histological and culture correlations. Schluep M, et al. **J Autoimmun** 1988 Oct; 1(5):445–67

Flow cytometric and histological analysis of mouse thymus in fetal alcohol syndrome. Ewald SJ, et al. **J Leukoc Biol** 1988 Nov;44(5):434–40

B–cell lymphoma of probable thymic origin: case report. Kataoka T, et al. **Jpn J Clin Oncol** 1988 Dec;18(4):371–8

Hypertrophy of the thymus and restoration of immune functions in mice and rats by gonadectomy. Utsuyama M, et al. **Mech Ageing Dev** 1989 Mar;47(3):175–85

Pathomorphological aspects of extremely small thymuses occurring spontaneously in Thoroughbred foals. Oikawa M, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):437–40

Acute thymus involution during infancy and childhood: immunohistology of the thymus and peripheral lymphoid tissues after acute illness. van Baarlen J, et al. **Pediatr Pathol** 1989;9(3):261–75

Increased thymic size and thymocyte interleukin 2 production in androgen–resistant mice. Olsen NJ, et al. **Scand J Immunol** 1989 Jun;29(6):733–8

Concentrations of elements in dying thymocytes from the thymus gland of diabetic rats. Warley A, et al. **Scanning Microsc** 1988 Dec;2(4):2227–32

Phenotypic changes of the subseptal thymic epithelium in myasthenia gravis. Savino W, et al. **Thymus** 1988–89; 12(2):111–6

Structural and histochemical features of cortical thymic epithelial cells in mice with chemically–induced lymphoid leukemia. Valkov I, et al. **Thymus** 1988;12(1):39–50

Histopathological studies on experimental marine toxin poisoning—III. Morphological changes in the liver and thymus of male ICR mice induced by goniodomin A, isolated from the dinoflagellate Goniodoma pseudogoniaulax. Terao K, et al. **Toxicon** 1989;27(2):269–71

[Histologic distribution pattern of thymus hemorrhages in sudden infant death] Risse M, et al. **Beitr Gerichtl Med** 1988;46:351–5 (Eng. Abstr.) (Ger)

[Comparative histologic studies of the origin of petechial thymus hemorrhage] Risse M, et al. **Z Rechtsmed** 1989; 102(1):33–40 (Eng. Abstr.) (Ger)

[A case of thymic Hodgkin's disease (nodular sclerotic type) diagnosed by ultrasound–guided needle biopsy] Kumazaki S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):549–53 (Eng. Abstr.) (Jpn)

[Changes in the argyrophil carcass of the lobules of the thymus gland during its age–related involution] Kolomiitsev AK, et al. **Arkh Anat Gistol Embriol** 1989 Mar; 96(3):43–8 (Eng. Abstr.) (Rus)

[Changes in primordial lymphoid organs in chronic glomerulonephritis] Rakitianskaia IA, et al. **Klin Med (Mosk)** 1989 Feb;67(2):58–60 (Eng. Abstr.) (Rus)

[Morphological characteristics of the thymus and adrenal glands of infants with thymus hyperplasia who died of acute pneumonia] Gevorkian DK, et al. **Pediatriia** 1988;(9):110–1 (Rus)

[Myasthenic thymoma in the residual thymus gland after thymectomy] Vasil'ev VN, et al. **Vestn Khir** 1989 Feb; 142(2):50–1 (Rus)

[Structural characteristics of the thymus in a large fetus] Iakovtsova AF, et al. **Vrach Delo** 1989 Jan;(1):94–6 (Rus)

[Morphologic and functional characteristics of thymus cells of the mouse during combined radiation injury] Colić M. **God Vojnomed Akad** 1987;29:13–7 (Eng. Abstr.) (Scr)

PHYSIOLOGY

Lymphocyte emigration from the ovine thymus: characterization of lymphatic emigrants and venous emigrants. Miyasaka M, et al. **Adv Exp Med Biol** 1988; 237:559–63

The effects of interleukin–3, bryostatin and thymocytes on erythropoiesis. Sharkis SJ, et al. **Ann N Y Acad Sci** 1989; 554:59–65

Unravelling the complexity of intrathymic cell–cell interactions. Kyewski B. **APMIS** 1988 Dec;96(12):1049–60 (101 ref.)

Ageing and thymus–induced differential regulation of beta 1 and beta 2 adrenoceptors of mouse brain cortex. Viticchi C, et al. **Arch Gerontol Geriatr** 1989 Jan;8(1):13–20

Ultrastructural changes in the thymus of the turtle Mauremys caspica in relation to the seasonal cycle. Leceta J, et al. **Cell Tissue Res** 1989 Apr;256(1):213–9

Changes in the connective tissue components of the aorta in thymectomized rats. Prodanov K, et al. **Cor Vasa** 1988; 30(4):309–16

Phylogeny of lymphocyte heterogeneity: the thymus of the channel catfish. Ellsaesser CF, et al. **Dev Comp Immunol** 1988 Fall;12(4):787–99

The thymus: old gland, new perspectives. Wise TH. **Domest Anim Endocrinol** 1988 Apr;5(2):109–28 (227 ref.)

Mouse CD1 is distinct from and co–exists with TL in the same thymus. Bradbury A, et al. **EMBO J** 1988 Oct; 7(10):3081–6

Effect of cyclosporin A on T cell immunity. II. Defective thymic education of CD4 T helper cell function in cyclosporin A–treated mice. Fukuzawa M, et al. **Eur J Immunol** 1989 Jun;19(6):1147–52

Thymocyte development: an analysis of T cell receptor gene expression in 519 newborn thymocyte hybridomas. Happ MP, et al. **Eur J Immunol** 1989 Jul;19(7):1317–25

Defective in vitro migratory capacity of bone marrow cells from viable motheaten mice in response to normal thymus culture supernatants. Haar JL, et al. **Exp Hematol** 1989 Jan;17(1):21–4

Calcium–activated DNA fragmentation kills immature thymocytes. McConkey DJ, et al. **FASEB J** 1989 May; 3(7):1843–9

Thyroid–thymus interactions during development and aging. Fabris N, et al. **Horm Res** 1989;31(1–2):85–9

Neuroendocrinology of the thymus. Geenen V, et al. **Horm Res** 1989;31(1–2):81–4 (39 ref.)

The true function of the thymus? Ritter MA, et al. **Immunol Today** 1988 Jul–Aug;9(7–8):189–93

The thymus selects the useful, neglects the useless and destroys the harmful. von Boehmer H, et al. **Immunol Today** 1989 Feb;10(2):57–61 (34 ref.)

Contact–mediated maturational effects of thymic stromal cells on murine thymocytes in culture. Savion S, et al. **Immunology** 1989 Aug;67(4):496–501

Predominant variable region gene usage by gamma/delta T cell receptor–bearing cells in the adult thymus. Korman AJ, et al. **J Exp Med** 1988 Sep 1;168(3):1021–40

Rare peripheral T cells migrate to and persist in normal mouse thymus. Michie SA, et al. **J Exp Med** 1988 Nov 1;168(5):1929–34

A role for the thymic epithelium in the selection of pre–T cells from murine bone marrow. Bauvois B, et al. **J Immunol** 1989 Aug 15;143(4):1077–86

Thymic stroma–derived T cell growth factor (TSTGF). IV. Capacity of TSTGF to promote the growth of L3T4–Lyt–2– thymocytes by synergy with phorbol myristate acetate or various IL. Mizushima Y, et al. **J Immunol** 1989 Feb 15;142(4):1195–202

Cell proliferation and differentiation in the fetal and early postnatal mouse thymus. Penit C, et al. **J Immunol** 1989 May 15;142(10):3369–77

Steroid sensitivity of thymocyte subpopulations during intrathymic differentiation. Effects of 17 beta–estradiol and dexamethasone on subsets expressing T cell antigen receptor or IL–2 receptor. Screpanti I, et al. **J Immunol** 1989 May 15;142(10):3378–83

Melatonin and cortisol "switches" during mania, depression, and euthymia in a drug–free bipolar patient. Kennedy SH, et al. **J Nerv Ment Dis** 1989 May;177(5):300–3

Calmodulin modulates thymocyte adenylate cyclase activity through the guanine nucleotide regulatory unit. Segal J. **Mol Cell Endocrinol** 1989 Jun;64(1):95–103

Deletion of self–reactive T cells before entry into the thymus medulla. Hengartner H, et al. **Nature** 1988 Nov 24; 336(6197):388–90

Regeneration of the spleen, thymus and femoral bone marrow following irradiation of diethyldithiocarbamate–protected mice. Kautská J, et al. **Radiobiol Radiother (Berl)** 1988; 29(4):409–16

Dynamics of complex formation between thymocytes and thymic medullary epithelial cells. Hugo P, et al. **Scand J Immunol** 1989 Apr;29(4):399–408

Do epidermal cells produce thymic hormones in vivo? An immunohistochemical study using anti–thymic hormone antibodies. Nicolas JF, et al. **Thymus** 1988–89;12(3):187–201

The role of the thymus in the pathogenesis of hind–limb paralysis induced by ts1, a mutant of Moloney murine leukemia virus–TB. Prasad G, et al. **Virology** 1989 Apr; 169(2):332–40

[T–lymphocyte precursors—the target cells of thymocyte growth factor] Protsak EA, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):462–4 (Eng. Abstr.) (Rus)

[Participation of the thymus in controlling cytomedine activity] Kalashnikov SG, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):57–60 (Eng. Abstr.) (Rus)

[The role of thymus gland in the regulation of cytomedin synthesis] Kalashnikov SG, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):33–6 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Complete sequential regeneration of graft–vs.–host–induced severely dysplastic thymuses. Implications for the pathogenesis of chronic graft–vs.–host disease. Ghayur T, et al. **Am J Pathol** 1988 Oct;133(1):39–46

Thymopoietin: a marker of the human nicotinic acetylcholine receptor. Morel E, et al. **Ann N Y Acad Sci** 1988; 540:298–300

Analysis of immunoglobulin and T cell receptor gene rearrangements in the thymus of myasthenia gravis patients. Tesch H, et al. **J Neuroimmunol** 1989 Feb;21(2–3):169–76

[Study of thymus gland function for the prognosis of the course of myasthenia gravis] Lobzin VS, et al. **Klin Med (Mosk)** 1988 Dec;66(12):78–80 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

On the role of Ca, Mg–dependent nuclease in the postirradiation degradation of chromatin in lymphoid tissues. Beletsky IP, et al. **Gen Physiol Biophys** 1989 Aug; 8(4):381–98

Mixed chimerism and permanent specific transplantation tolerance induced by a nonlethal preparative regimen. Sharabi Y, et al. **J Exp Med** 1989 Feb 1;169(2):493–502

Cell proliferation and thymocyte subset reconstitution in sublethally irradiated mice: compared kinetics of endogenous and intrathymically transferred progenitors. Penit C, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5547–51

[Mechanism of interphase death of lymphoid cells during radiation exposure] Korystov IuN, et al. **Dokl Akad Nauk SSSR** 1988;303(3):742–5 (Rus)

[The effect of gamma–irradiation on the poly(ADP–ribosylation) of nuclear proteins in rat thymocytes] Beletskiĭ IP, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):611–6 (Eng. Abstr.) (Rus)

[Patterns in the degradation of individual genes of thymocytes in irradiated rats] Beletskiĭ IP, et al. **Radiobiologiia** 1989 Jul–Aug;29(4):435–40 (Eng. Abstr.) (Rus)

[Quantitative evaluation of the combined effect of external gamma radiation and internal alpha radiation from 239Pu based on biochemical indices of the organs of the rat immune system] Elkina NI, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):695–9 (Eng. Abstr.) (Rus)

[The effect of a low dose of ionizing radiation and of gangliosides on the adenylate cyclase activity of the chicken thymus and thyroid in ontogeny] Khozhiakhmedov G, et al. **Radiobiologiia** 1989 May–Jun;29(3):417–9 (Eng. Abstr.) (Rus)

[Effect of irradiation on the intracellular reception of glucocorticoids in tissues with various radiosensitivities] Konoplia EF, et al. **Radiobiologiia** 1988 Nov–Dec; 28(6):772–4 (Eng. Abstr.) (Rus)

[Comparative action of X–rays and fast neutrons on thymus endocrine function] Martynenko SV, et al. **Radiobiologiia** 1989 Mar–Apr;29(2):268–71 (Eng. Abstr.) (Rus)

[Radiation stimulation of the production of thymocyte growth factor and its possible role in thymus recovery] Protsak EA, et al. **Radiobiologiia** 1989 May–Jun;29(3):321–5 (Eng. Abstr.) (Rus)

[Electrophoretic analysis of the internucleosome fragmentation of DNA in irradiated thymocytes of rats] Riabchenko NI, et al. **Radiobiologiia** 1989 Jan–Feb; 29(1):48–53 (Eng. Abstr.) (Rus)

[Relative biological effectiveness of tritium oxide based on DNA destruction and thymus depletion in rats] Rusinova GG, et al. **Radiobiologiia** 1988 Nov–Dec;28(6):836–40 (Eng. Abstr.) (Rus)

[Evaluation of the expression of damage of the DNA–structural complex of rat thymocytes based on kinetics of alkaline lysis following irradiation] Rusinova GG, et al. **Radiobiologiia** 1989 Jan–Feb;29(1):44–7 (Eng. Abstr.) (Rus)

[Modification of the interphase death of thymocytes: the effect of agents inhibiting the killing process] Shaposhnikova VV, et al. **Radiobiologiia** 1989 Jan–Feb; 29(1):83–8 (Eng. Abstr.) (Rus)

[Changes in the composition of DNA–bound nonhistone protein in the thymus and liver of gamma–irradiated rats] Strazhevskaia NB, et al. **Radiobiologiia** 1989 Jul–Aug; 29(4):441–4 (Eng. Abstr.) (Rus)

[The spectra of de novo synthesized proteins in the early

stages of radiation death of lymphocytes in the rat thymus] Zhivotovskil BD, et al. **Radiobiologila** 1988 Nov–Dec; 28(6):737–44 (Eng. Abstr.) (Rus)

[Effect of microwaves on the expression by thymocytes of various surface membrane markers] Evstropov VM, et al. **Tsitologila** 1988 Nov;30(11):1345–9 (Eng. Abstr.) (Rus)

[Combined effects of electromagnetic waves (27, 12 and 460 MGz) on the endocrine glands of men with secondary infertility] Karpukhin IV. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):54–8 (Rus)

RADIOGRAPHY

Problems in radiology: CT assessment of the thymus. Williams MP. **Clin Radiol** 1989 Mar;40(2):113–4 (6 ref.)

[Computed tomographic findings in 36 patients with space-occupying lesions of the thymus] Görich J, et al. **ROFO** 1988 Nov;149(5):466–9 (Eng. Abstr.) (Ger)

[CT in the study of the thymus] Juliani G, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):11–7 (Ita)

SECRETION

[Effect of the stimulation of T-lymphocytes by thymus mitogenic factor on the somatotropic function of the hypophysis] Jighi KN, et al. **Fiziol Zh** 1988 Jul–Aug; 34(4):96–8 (Eng. Abstr.) (Rus)

TRANSPLANTATION

Encapsulated thymic epithelial cells as a potential treatment for immunodeficiencies. Christenson L, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):681–6

Use of thymic grafts or thymic factors to augment immunologic recovery after bone marrow transplantation: brief report with 2 to 12 years' follow-up. Witherspoon RP, et al. **Bone Marrow Transplant** 1988 Sep;3(5):425–35

Restoration of T-cell function in nude mice by grafting the epitheliomesenchymal thymic rudiment from 10-day-old euthymic embryos. Khazaal I, et al. **Cell Differ Dev** 1989 May;26(3):211–20

Implantation of cultured thymic fragments in congenitally athymic (nude) rats. Ultrastructural characteristics of the developing microenvironment. Kendall MD, et al. **Cell Tissue Res** 1988 Nov;254(2):283–94

Peripheral tolerance mechanisms prevent the development of autoreactive T cells in chimeras grafted with two minor incompatible thymuses. Zamoyska R, et al. **Eur J Immunol** 1989 Jan;19(1):111–7

DiGeorge syndrome with hypogammaglobulinaemia: a patient with excess suppressor T cell activity treated with fetal thymus transplantation. Mayumi M, et al. **Eur J Pediatr** 1989 Apr;148(6):518–22

Effect of neonatal spleen and thymus implants on H-Y incompatible skin grafts. Skowron-Cendrzak A, et al. **Folia Biol (Krakow)** 1989;37(1–2):101–4

Phenotypical and functional heterogeneity of the large granular lymphocytes increased after various treatments in a patient with combined immunodeficiency. Takagi S, et al. **J Clin Immunol** 1989 Jan;9(1):39–47

Thymus transplantation and disease prevention in the diabetes-prone Bio-Breeding rat. Georgiou HM, et al. **J Immunol** 1989 May 15;142(10):3400–5

Split tolerance in nude mice transplanted with 2'-deoxyguanosine-treated allogeneic thymus lobes. Suzuki G, et al. **J Immunol** 1989 Mar 1;142(5):1463–9

Enhanced in vitro bone marrow cell migration and T-lymphocyte responses in aged mice given subcutaneous thymic epithelial cell grafts. Haar JL, et al. **Mech Ageing Dev** 1989 Mar;47(3):207–19

Combined grafting of bone marrow and thymus, and sequential multiple thymus graftings in various strains of mice. The effect on immune functions and life span. Hirokawa K, et al. **Mech Ageing Dev** 1989 Jul;49(1):49–60

Immunological status of nude mice engrafted with allogeneic or syngeneic thymuses. Furukawa F, et al. **Thymus** 1988; 12(1):11–26

Immunological reconstitution of immunodeficient rats: mechanisms versus effects. Hougen HP, et al. **Thymus** 1988; 11(4):267–9

Thymus implantation in nude rats: biological effects of the microenvironment or of lymphocytes? Schuurman HJ, et al. **Thymus** 1988;11(4):261–5

Thymus allografts fail to improve lymphopenia or prevent autoimmune diabetes in the BB rat. Brayman KL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):218–9

Modulation of insulitis following thymus transplantation. Georgiou HM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):215–7

Induction of immunologic tolerance after allogeneic thymus transplantation and total lymphoid irradiation. Palathumpat V, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1108–9

ULTRASTRUCTURE

Electron microscopic studies on the thymus of the Arabian camel (Camelus dromedarius). Aly AE, et al. **Anat Anz** 1988;167(2):119–27

Ultrastructure of the APUD-like cells of the frog thymus gland. Bigaj J, et al. **Folia Histochem Cytobiol** 1988; 26(2):105–7

Lymphoid microenvironments in the thymus and lymph node. van Ewijk W, et al. **Scanning Microsc** 1988 Dec; 2(4):2129–40

Macrophages and epithelial cells of the thymus gland. An ultrastructural study in the natterjack, Bufo calamita. Barrutia MG, et al. **Tissue Cell** 1989;21(1):69–81

[Comparative ultrastructural characteristics of epithelial cells of the parenchyma of the thymus gland and thymoma] Galil-Ogly GA, et al. **Arkh Patol** 1988;50(9):51–60 (Eng. Abstr.) (Rus)

THYMUS HORMONES

Avian thymic hormone (ATH) is a parvalbumin. Brewer JM, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1155–61

Thymopoietins and long postsynaptic neurotoxins share common information in their primary structures. Skerl V, et al. **FEBS Lett** 1988 Oct 24;239(1):141–6

ADMINISTRATION & DOSAGE

[Telethermographic evaluation of the intra-articular administration of thymopentin in rheumatoid arthritis of the knee] Pappalardo A, et al. **Clin Ter** 1989 Mar 15; 128(5):321–7 (Eng. Abstr.) (Ita)

ANALYSIS

The distribution and structure of FTS immunoreactive cells in the thymus of the mouse. Fujiwara S, et al. **Arch Histol Jpn** 1988 Dec;51(5):467–72

Male BXSB mice develop a thymic hormonal dysfunction with presence of intraepithelial crystalline inclusions. Dardenne M, et al. **Clin Immunol Immunopathol** 1989 Sep; 52(3):392–405

Establishment of the specific radioimmunoassay for serum thymic factor (STF). Ishizuka J, et al. **Tohoku J Exp Med** 1989 Jun;158(2):107–17

BIOSYNTHESIS

Neuroendocrine control of thymic hormonal production. I. Prolactin stimulates in vivo and in vitro the production of thymulin by human and murine thymic epithelial cells. Dardenne M, et al. **Endocrinology** 1989 Jul;125(1):3–12

Do epidermal cells produce thymic hormones in vivo? An immunohistochemical study using anti-thymic hormone antibodies. Nicolas JF, et al. **Thymus** 1988–89;12(3):187–201

BLOOD

Effect of oral zinc administration on prolactin and thymulin circulating levels in patients with chronic renal failure. Travaglini P, et al. **J Clin Endocrinol Metab** 1989 Jan; 68(1):186–90

CHEMICAL SYNTHESIS

Synthesis of [Glu34]human splenin (hSP) and examination of its immunological effect on the reduced B-lymphocytes of uremic patients. Abiko T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):391–6

Synthesis of human thymopoietin (hTP) and examination of its immunological effect on the impaired blastogenic response of T-lymphocytes of uremic patients. Abiko T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2506–16

DEFICIENCY

[Effect of the thymus gland on various metabolic processes in pregnancy (experimental study)] Chukhlovina ML, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):20–3 (Eng. Abstr.) (Rus)

GENETICS

Amino acid sequence of thymopoietin isolated from skin. Audhya TK, et al. **Ann N Y Acad Sci** 1988;548:233–40

IMMUNOLOGY

[Use of thymalin in stimulating an immune response in subjects inoculated with influenza vaccine] Degtiarev AA, et al. **Voen Med Zh** 1988 Sep;(9):37–8 (Rus)

METABOLISM

Thymopoietin: a marker of the human nicotinic acetylcholine receptor. Morel E, et al. **Ann N Y Acad Sci** 1988; 540:298–300

Zinc-dependent low thymic hormone level in type I diabetes. Mocchegiani E, et al. **Diabetes** 1989 Jul;38(7):932–7

Serum thymic hormone thymulin activity is normal in children with asthma. Lurie A, et al. **J Allergy Clin Immunol** 1989 Sep;84(3):386–90

[A study of enzymatic hydrolysis of splenopentin and its analogs in human serum] Isakova OL, et al. **Bioorg Khim** 1989 Apr;15(4):453–9 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

The immune-enhancing effect of perioperative thymopentin administration in elderly patients undergoing major surgery. Faist E, et al. **Arch Surg** 1988 Dec;123(12):1449–53

PHARMACOLOGY

Splenopentin--influence on antibody formation in immunosuppressed animals and on phagocytic capability of human granulocytes. Diezel W, et al. **Arch Geschwulstforsch** 1989;59(3):161–4

Central administration of immunomodulatory factors alters neural activity and adrenocortical secretion. Kidron D, et al. **Brain Behav Immun** 1989 Mar;3(1):15–27

Arg-Lys-Asp-Val-Tyr (thymopentin) accelerates the cholinergic-induced inactivation (desensitization) of reconstituted nicotinic receptor. Ochoa EL, et al. **Cell Mol Neurobiol** 1988 Sep;8(3):325–31

Selected human T cell lines respond to thymopoietin with intracellular cyclic GMP elevations. Baker B, et al. **Immunopharmacology** 1988 Sep–Oct;16(2):115–22

Production of human B and T cell growth factors is enhanced by thymic hormones. Kouttab NM, et al. **Immunopharmacology** 1988 Sep–Oct;16(2):97–105

The effect of thymic substances on T circulating cells of patients treated for Hodgkin's disease. Chisesi T, et al. **J Biol Regul Homeost Agents** 1988 Oct–Dec;2(4):193–8

The effect of TP-5 on the production of C3, PGE2, and TXB2 by macrophages obtained from burned guinea pigs. Ogle CK, et al. **J Burn Care Rehabil** 1989 Mar–Apr; 10(2):146–50

Thymopoietin, a thymic polypeptide, specifically interacts at neuronal nicotinic alpha-bungarotoxin receptors. Quik M, et al. **J Neurochem** 1989 Oct;53(4):1320–3

Thymulin, a zinc-dependent hormone. Bach JF, et al. **Med Oncol Tumor Pharmacother** 1989;6(1):25–9 (8 ref.)

Immunomodulation with thymopentin: in vitro studies. Duchateau J, et al. **Med Oncol Tumor Pharmacother** 1989; 6(1):19–23 (27 ref.)

Modulation of NK activity by thymic hormones: in vitro effects of thymostimulin. Liberati AM, et al. **Med Oncol Tumor Pharmacother** 1989;6(1):45–52

Thymic hormones and prostaglandins. I. Lack of stimulation of prostaglandin production by thymic hormones. Homo-Delarche F, et al. **Prostaglandins** 1989 Aug; 38(2):183–96

Neurophysiological and endocrine consequences of immune activity. Saphier D. **Psychoneuroendocrinology** 1989; 14(1–2):63–87

Inhibition of wound repair by thymic hormones. Barbul A, et al. **Surgery** 1989 Aug;106(2):373–6; discussion 376–7

Influence of thymic hormone on cell-mediated and humoral immune responses in Marek's disease. Quere P, et al. **Vet Microbiol** 1989 Jan;19(1):53–64

[Shedding of mouse thymocyte receptors for autologous erythrocytes under the influence of oligopeptide thymic factor] Bezvershenko IA, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):470–1 (Eng. Abstr.) (Rus)

[Comparative study of the effect of the thymus preparations thymoptin and thymalin on fibrin-monomer polymerization] Pastorova VE, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):47–50 (Eng. Abstr.) (Rus)

[Stimulating effect of biologically active substances from the spleen on the functional activity of hepatocytes] Korpachev VV, et al. **Fiziol Zh** 1989 May–Jun;35(3):80–3 (Eng. Abstr.) (Rus)

[Thymus hormones--precursors of new psychoneuromodulatory peptides] Klusha VE, et al. **Fiziol Zh SSSR** 1989 May;75(5):691–6 (Eng. Abstr.) (Rus)

[Differentiation and a change in the sensitivity to antibrain serum of circulating colony-forming units under the action of thymic factors] Popov BV, et al. **Tsitologila** 1988 Aug; 30(8):1018–21 (Eng. Abstr.) (Rus)

[Effect of splenin and splenic protein-free extracts on the adenosine deaminase activity in various organs of the rat] Korpachev VV, et al. **Ukr Biokhim Zh** 1989 May–Jun; 61(3):114–7 (Eng. Abstr.) (Rus)

PHYSIOLOGY

T lymphocyte precursors migrate towards chemotactic peptides secreted by embryonic or juvenile thymus. Imhof BA, et al. **Adv Exp Med Biol** 1988;237:565–70

The thymus: old gland, new perspectives. Wise TH. **Domest Anim Endocrinol** 1988 Apr;5(2):109–28 (227 ref.)

Serum thymulin in human zinc deficiency. Prasad AS, et al. **J Clin Invest** 1988 Oct;82(4):1202–10

[Thymic hormones] Monier JC, et al. **Arch Int Physiol Biochim** 1988 Aug;96(3):A2–26 (151 ref.) (Fre)

THERAPEUTIC USE

Treatment of marrow graft recipients with thymopentin. Witherspoon RP, et al. **Bone Marrow Transplant** 1987 Apr; 1(4):365–71

Use of thymic grafts or thymic factors to augment immunologic recovery after bone marrow transplantation: brief report with 2 to 12 years' follow-up. Witherspoon RP, et al. **Bone Marrow Transplant** 1988 Sep;3(5):425–35

Immunomodulation and Sézary syndrome: experience with thymopentin (TP-5). Bernengo MG, et al. **Br J Dermatol** 1988 Aug;119(2):207–21

Thymopentin (TP-5) in the treatment of rheumatoid arthritis. Kantharia BK, et al. **Br J Rheumatol** 1989 Apr;28(2):118–23

Thymopentin treatment in genital warts of long duration. Fransen L, et al. **Cancer Detect Prev** 1988;12(1–6):503–9

An immunomodulating drug, thymopentin, in the treatment of progressive systemic sclerosis [letter] Giordano N, et al. **Clin Rheumatol** 1989 Jun;8(2):293–4

Thymopentin in dermatology. Haneke E. **Curr Probl Dermatol** 1989;18:283–9 (38 ref.)

Thymopentin in the treatment of alopecia areata [letter] Orecchia G. **Dermatologica** 1989;178(4):231
Thymopentin in the treatment of severe alopecia areata. Tosti A, et al. **Dermatologica** 1988;177(3):170–4
Therapeutic prospects of THF—a thymic hormone—in autoimmune processes. Trainin N. **Isr J Med Sci** 1988 Dec; 24(12):739–40
Phenotypical and functional heterogeneity of the large granular lymphocytes increased after various treatments in a patient with combined immunodeficiency. **Takagi S, et al. J Clin Immunol** 1989 Jan;9(1):39–47
Immunomodulation in infection caused by human immunodeficiency virus [editorial] Phair JP. **J Lab Clin Med** 1989 Feb;113(2):135–6
Immunologic effects of long-term thymopentin treatment in patients with HIV-induced lymphadenopathy syndrome. Silvestris F, et al. **J Lab Clin Med** 1989 Feb;113(2):139–44
Preliminary results on clinical and immunological effects of thymus hormone preparations in AIDS. Hermans P, et al. **Med Oncol Tumor Pharmacother** 1989;6(1):55–8 (18 ref.)
Controlled trial of thymopentin in hemodialysis patients who fail to respond to hepatitis B vaccination. Donati D, et al. **Nephron** 1988;50(2):133–6
Thymic hormone in the treatment of cancer. Dardeene M, et al. **Prog Clin Biol Res** 1989;288:363–82 (77 ref.)
Thymopentin (TP-5) in the treatment of the postburn and postoperative immunodeficiency syndrome. Hamilton G, et al. **Prog Clin Biol Res** 1989;308:995–9
Effect of thymopentin on the anaemia of myelodysplastic syndromes. A preliminary study [letter] Catarini M, et al. **Recenti Prog Med** 1989 Jan;80(1):46
Thymic hormones and interferons in the treatment of rheumatoid arthritis. Veys EM, et al. **Scand J Rheumatol Suppl** 1988;76:297–304 (37 ref.)
In vivo effects of thymic epithelial culture supernate and thymosin fraction 5 on ADP-induced thromboembolic respiratory depression in mice. Hashimoto S, et al. **Thromb Res** 1989 Jan 15;53(2):209–14
Efficacy of a new treatment for chronic rejection: thymic hormones with immunosuppression. Orlowski T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2161–2
[Thymopentin in a case of autoimmune thrombocytopenia secondary to chronic lymphatic leukemia] Cantore M, et al. **G Clin Med** 1989 Jun–Jul;70(6–7):421, 423, 425 (Eng. Abstr.) **(Ita)**
[Thymopentin treatment of ovarian carcinoma: preliminary clinical results] Garozzo G, et al. **G Ital Oncol** 1988 Jan–Mar;8(1):11–3 (Eng. Abstr.) **(Ita)**
[Thymopentin in the treatment of recurrent condylomata acuminata] Ghetti P, et al. **Minerva Ginecol** 1989 Feb; 41(2):113–6 (Eng. Abstr.) **(Ita)**
[A case of juvenile rheumatoid arthritis treated with thymopentin] Tucciarone L, et al. **Minerva Pediatr** 1989 Feb;41(2):109–11 (Eng. Abstr.) **(Ita)**
[Use of thymopentin in the therapy of recurrent oral ulcers] Robotti MP, et al. **Minerva Stomatol** 1988 Jun; 37(6):497–503 (Eng. Abstr.) **(Ita)**
[Use of thymopentin in the treatment of post-radiation cystitis] Martinoli F, et al. **Minerva Urol Nefrol** 1988 Oct–Dec;40(4):275–6 (Eng. Abstr.) **(Ita)**
[Effect of thymalin on the immunological indices and morphofunctional structure of the uterus in guinea pigs with endometrial hyperplasia] Zaporozhan VN, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):251–3 (Eng. Abstr.) **(Rus)**
[Inhibiting effect of thymogen on the development of tumors of the esophagus and forestomach induced by N-nitrososarcosine ethyl ester in rats] Bespalov VG, et al. **Eksp Onkol** 1989;11(4):23–6 (Eng. Abstr.) **(Rus)**
[Effect of splenin on liver function in alloxan diabetes in rats] Shevchenko AV, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):104–8 (Eng. Abstr.) **(Rus)**
[Treatment of peritonitis in children using thymalin and metronidazole] Lomachenko IN, et al. **Klin Khir** 1988; (6):41–3 (Eng. Abstr.) **(Rus)**
[Effect of thymalin on immunologic reactivity of patients with non-specific lung diseases] Dovnar TE, et al. **Ter Arkh** 1989;61(3):69–71 (Eng. Abstr.) **(Rus)**
[The efficacy of combined immunomodulatory therapy with timoptin and sodium nucleinate in patients with chronic obstructive bronchitis] Zemskov AM, et al. **Ter Arkh** 1989; 61(3):65–8 (Eng. Abstr.) **(Rus)**
[Use of splenin for the purpose of immunocorrection in patients with seroresistance following syphilis treatment] Bakhmet'eva TM, et al. **Vestn Dermatol Venerol** 1988; (10):38–42 (Eng. Abstr.) **(Rus)**
[Clinico-immunologic evaluation of thymotropin efficacy in dermatosis patients] Khamidov ShA, et al. **Vestn Dermatol Venerol** 1988;(10):7–10 (Eng. Abstr.) **(Rus)**
[Reparative processes and the possibilities of their stimulation in the over-cooled body] Popov SD, et al. **Vestn Khir** 1987 Dec;139(12):98–101 (37 ref.) **(Rus)**
[Thymalin in the combined treatment of patients with chronic lympholeukemia] Babenko TF, et al. **Vrach Delo** 1989 Mar; (3):47–9 (Eng. Abstr.) **(Rus)**
[Thymus hormones in the immunotherapy of malignant neoplasms (a review of the literature)] Nikol'skii IS. **Vrach Delo** 1988 Aug;(8):77–82 (20 ref.) **(Rus)**
[Eosinophilic granuloma of the lung. Complete response after treatment with thymic hormone (letter)] Martin Algarra S, et al. **Med Clin (Barc)** 1989 Mar 18;92(10):394 **(Spa)**
[Immunoregulation in juvenile diabetes] Moncada E, et al. **Rev Clin Esp** 1988 Jun;183(2):61–6 (Eng. Abstr.) **(Spa)**

THYMUS HYPERPLASIA

CHEMICALLY INDUCED

[Computed tomographic detection of chemotherapy-induced thymus changes in patients with metastatic testicular tumors] Hendrickx P, et al. **ROFO** 1989 Mar;150(3):268–73 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

True thymic hyperplasia: an unrecognised cause of cardiac murmur? Williams DJ. **Thymus** 1988–89;12(2):135–7
[Neurologic disorders in young children with thymomegaly] Mekhtieva AA. **Pediatriia** 1989;(5):85–7 **(Rus)**

DIAGNOSIS

Aberrant solid cervical thymus. Nowak PA, et al. **Ear Nose Throat J** 1988 Sep;67(9):670, 673, 676–7

ETIOLOGY

Histiocytosis X and lymphoid follicular hyperplasia of the thymus in myasthenia gravis. Pescarmona E, et al. **Histopathology** 1989 May;14(5):465–70

IMMUNOLOGY

[The clinical picture and immunologic parameters in children with benign thymus hyperplasia] Milićević J, et al. **Srp Arh Celok Lek** 1988 May;116(5):393–401 (Eng. Abstr.) **(Scc)**

PATHOLOGY

Myoid cell differentiation in true thymic hyperplasia and lymphoid hyperplasia. Judd RL, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1140–4
Epithelial proliferation in thymic hyperplasia. An immunohistochemical study and correlation with the developing fetal thymus. Zbieranowski I, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):385–9
[Morphological characteristics of the thymus and adrenal glands of infants with thymus hyperplasia who died of acute pneumonia] Gevorkian DK, et al. **Pediatriia** 1988;(9):110–1 **(Rus)**

PHYSIOPATHOLOGY

[Characteristics of the endocrine and immune systems and lipid metabolism in children with lymphatico-hyperplastic diathesis] Bondarenko GP, et al. **Pediatriia** 1989;(2):8–12 (Eng. Abstr.) **(Rus)**
[Characteristics of the immune and neuroendocrine systems in children with thymomegaly] Dadambaev ET, et al. **Pediatriia** 1989;(5):100–3 (71 ref.) **(Rus)**

RADIOGRAPHY

[Computed tomographic findings in 36 patients with space-occupying lesions of the thymus] Görich J, et al. **ROFO** 1988 Nov;149(5):466–9 (Eng. Abstr.) **(Ger)**

THYMUS-INDEPENDENT ANTIGENS see ANTIGENS, T-INDEPENDENT

THYMUS NEOPLASMS

Extrathoracic metastatic thymoma. A case report. Jose CC, et al. **Australas Radiol** 1988 Nov;32(4):500–2
Pleural metastasis of malignant thymoma. A pitfall in the CT-diagnosis of pleural mesothelioma. Görich J, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):169–70
[Thymus tumors] Peňula E, et al. **Cas Lek Cesk** 1988 Aug 19;127(34):1066–9 (Eng. Abstr.) **(Cze)**
[Malignant thymoma. Apropos of 10 cases] Charrot P. **Ann Otolaryngol Chir Cervicofac** 1988;105(7):535–7 (19 ref.) (Eng. Abstr.) **(Fre)**
[Thymic carcinoid. Description of 2 cases and review of the international literature] Percopo V, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1209–14 (31 ref.) (Eng. Abstr.) **(Ita)**
[Clinical features and prognosis of thymoma and thymic carcinoma] Miyazawa N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2194–9 (Eng. Abstr.) **(Jpn)**
[A case of Good's syndrome with thymoma that regressed spontaneously—a review of clinical feature in 14 cases of Good's syndrome reported in Japan] Doutsu Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):770–7 (14 ref.) (Eng. Abstr.) **(Jpn)**
[Successful case report concerning removal of right atrial tumor of malignant thymoma—review of right atrial tumor thrombus via the superior or inferior vena cava] Ikeda T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1025–30 (19 ref.) **(Jpn)**

ANALYSIS

A novel form of GD1c ganglioside IV3 (NeuAc alpha 2–8 NeuGc)Gg4Cer from murine X-ray induced thymoma. Pacuszka T, et al. **Acta Biochim Pol** 1988;35(4):387–93
Proteins with epitopes of the acetylcholine receptor in epithelial cell cultures of thymomas in myasthenia gravis. Marx A, et al. **Am J Pathol** 1989 Apr;134(4):865–77
Receptor for epidermal growth factor in neoplastic and non-neoplastic human thymus. Battaglia F, et al. **Ann N Y Acad Sci** 1988;551:366–8
Characterization of human corticotrophin-releasing hormone and pro-opiomelanocortin-related peptides in a thymic carcinoid tumour responsible for Cushing's syndrome. Raux Demay MC, et al. **Clin Endocrinol (Oxf)** 1988 Dec; 29(6):649–57
Immunohistochemical studies in human thymomas. Localization of thymosin and various cell marker. Hirokawa K, et al. **Virchows Arch [B]** 1988;55(6):371–80

CHEMICALLY INDUCED

Inducibility of thymic lymphomas in female Hsd: (ICR)BR mice following subcutaneous injection of ethyl- and isopropyl methanesulfonate. Segal A, et al. **Cancer Lett** 1989 Mar;44(3):199–204
Thymic T-cell lymphoma with the CD8+ (OX-8), CD4+ (W3/25) phenotype, induced in F344/NCr rats by nitroso-2-hydroxypropylurea. Konishi N, et al. **Thymus** 1988–89;12(4):225–37

CLASSIFICATION

Characterization of cell markers in type B retroviral-induced thymic lymphomas—I. Surface antigen phenotype and karyotype in developing and primary lymphomas. Mueller RE, et al. **Leuk Res** 1989;13(7):553–9
Characterization of cell markers in type B retroviral-induced thymic lymphomas—II. Surface antigen phenotype, karyotype and proviral integration pattern in cultured lymphoma cells and cloned lines. Mueller RE, et al. **Leuk Res** 1989;13(7):561–71
[Thymomas non associated with myasthenia gravis. Nosologic aspects and therapeutic correlations] Ghilardi G, et al. **Minerva Chir** 1989 Mar 31;44(6):999–1004 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Thymolipoma in patients with myasthenia gravis: report of two cases and review. Pan CH, et al. **Acta Neurol Scand** 1988 Jul;78(1):16–21 (34 ref.)
Massive benign thymoma presenting as ocular myasthenia. Goadsby PJ, et al. **Aust N Z J Med** 1989 Jun;19(3):257–8
Peliosis thymomis: association with tuberculosis [letter] Williams DJ, et al. **J Clin Pathol** 1989 Mar;42(3):331
Response of agranulocytosis to thymectomy in a patient with thymoma and chronic lymphocytic leukemia. Weir AB 3d, et al. **Med Pediatr Oncol** 1989;17(1):58–61
[Cachexia, pain and muscle weakness in a 69-year-old woman (clinical conference)] Pécoud A, et al. **Schweiz Med Wochenschr** 1989 Mar 25;119(12):407–15 (Eng. Abstr.) **(Fre)**
[Opsoclonus syndrome] Szwarc M, et al. **Harefuah** 1988 Apr 15;114(8):382–4 (Eng. Abstr.) **(Heb)**
[Two cases of cardiac tamponade, complicated by malignant, effusive pericarditis and treated by creating a pericardial peritoneal window] Yasuma F, et al. **Gan No Rinsho** 1989 Feb;35(3):393–6 (Eng. Abstr.) **(Jpn)**
[Diagnostic and therapeutic tactics in cancerous lesions of the thymus in patients with myasthenia] Kuzin MI, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):72–7 (Eng. Abstr.) **(Rus)**
[Rare combination of granulomatous thymoma and multiple dysontogenetic cysts of the thymus gland] Kharitonov VA, et al. **Klin Med (Mosk)** 1989 Apr;67(4):122–3 **(Rus)**

DIAGNOSIS

CT and sonographic diagnosis of thymolipoma. A case report. Nuruddin R, et al. **Australas Radiol** 1988 Nov; 32(4):497–9
DNA flow cytometry of thymomas. Davies SE, et al. **Histopathology** 1989 Jul;15(1):77–83
Cytologic diagnosis of thymoma by fine needle aspiration. Mondal A, et al. **Indian J Pathol Microbiol** 1989 Jul; 32(3):237–9
Metastatic cervical thymoma. Juarbe C, et al. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):232–6
[A case of thymic Hodgkin's disease (nodular sclerotic type) diagnosed by ultrasound-guided needle biopsy] Kumazaki S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):549–53 (Eng. Abstr.) **(Jpn)**
[Diagnosis, pathogenesis and treatment of myasthenia in thymic tumors] Lobzin VS, et al. **Sov Med** 1988;(12):79–82 **(Rus)**

DRUG THERAPY

Disseminated thymoma and myasthenia gravis: dramatic response to prednisone [letter] Taylor R, et al. **Ann Neurol** 1989 Feb;25(2):208–9
Initial chemotherapy followed by surgery in malignant thymoma. Mackintosh JF, et al. **Aust N Z J Med** 1989 Aug;19(4):362–4
Chemotherapy of invasive thymoma. A retrospective study of 22 cases. Göldel N, et al. **Cancer** 1989 Apr 15; 63(8):1493–500

ENZYMOLOGY

Mouse thymoma cell line expresses a gluconeogenic enzyme, fructose 1,6-bisphosphatase. Mizunuma H, et al.

Biochem Biophys Res Commun 1989 Feb 15;158(3):929–35

ETIOLOGY

Development of lymphoma in the thymus of AKR mice treated with the lymphomagenic virus SL 3–3. Hays EF, et al. **Cancer Res** 1989 Aug 1;49(15):4225–30

Development of donor-derived thymic lymphomas after allogeneic bone marrow transplantation in AKR/J mice. Yasumizu R, et al. **J Immunol** 1988 Sep 15;141(6):2181–6

Evidence of recombinant ecotropic provirus integration in thymic lymphomas induced by direct or indirect radiation effects. Baylac-Kalabokias H, et al. **Leuk Res** 1989; 13(2):131–43

Radiation-induced lymphomas developing during cyclosporine treatment. Hooghe R, et al. **Transplantation** 1989 Aug;48(2):342–4

[Target cells and tissue microenvironment in the development of thymic lymphomas in mice: a model for the study of the role of host factors in carcinogenesis] Boniver J, et al. **Bull Mem Acad R Med Belg** 1988;143(1–2):114–22 (Eng. Abstr.) **(Fre)**

[A case of a lymphoreticular thymoma arising in the wall of a true cyst] Kharitonov VA, et al. **Klin Khir** 1988;(12):55 **(Rus)**

[Myasthenic thymoma in the residual thymus gland after thymectomy] Vasil'ev VN, et al. **Vestn Khir** 1989 Feb; 142(2):50–1 **(Rus)**

GENETICS

Multiple clonal chromosome aberrations in two thymomas. Kristoffersson U, et al. **Cancer Genet Cytogenet** 1989 Aug; 41(1):93–8

Characterization of lymphoid tumors induced by a recombinant murine retrovirus carrying the avian v-myc oncogene. Identification of novel (B-lymphoid) tumors in the thymus. Brightman BK, et al. **J Immunol** 1988 Oct 15;141(8):2844–54

Cytogenetic studies on rat thymic lymphomas induced by N-propyl-N-nitrosourea. Ogiu T, et al. **Leuk Res** 1988; 12(7):607–10

Expression of cellular oncogenes: unrearranged c-myc gene but altered promoter usage in radiation-induced thymoma. Bandyopadhyay SK, et al. **Oncogene Res** 1989;4(4):311–8

cDNA clones from autocrine thymic lymphoma cells encode two mitogenic proteins, a serine protease and a truncated T-cell receptor beta-chain. Bogenberger J, et al. **Oncogene Res** 1988;3(4):301–12

Isolation of a cDNA clone from the rat thymoma cell line C58 with homology to the murine T cell receptor alpha chain gene. Ono SJ, et al. **Transplant Proc** 1989 Apr; 21(2):3242–3

IMMUNOLOGY

Monoclonal antibodies as probes for acetylcholine receptor epitopes in thymuses and thymic epithelial tumors of patients with myasthenia gravis and nonmyasthenic controls. Kirchner T, et al. **Ann N Y Acad Sci** 1988; 540:508–10

Quantitative analysis of cultured thymic reticulo-epithelial cells labelled by different antibodies: a flow cytometric study. Fabien N, et al. **Clin Exp Immunol** 1989 Feb; 75(2):292–6

Macrophages and interdigitating reticulum cells in normal thymus and in thymoma: an immunohistochemical study. Ruco LP, et al. **Histopathology** 1989 Jan;14(1):37–45

Immunoprecipitation of interleukin-1 receptors from a mouse thymoma cell line, EL-4. Rangnekar VM, et al. **J Biol Chem** 1988 Nov 5;263(31):16408–13

[Immunologic defect and other parathymic syndromes in thymoma] Morell A, et al. **Ergeb Inn Med Kinderheilkd** 1988;57:185–216 (103 ref.) **(Ger)**

METABOLISM

The effect of sodium-2-mercaptoethane-sulphonate, N-acetylcysteine and cysteine on the uptake of cytosine arabinoside by normal and neoplastic thymus cells of mice. Jastrzębski Z, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(3):335–43

Expression of cortical and medullary thymic epithelial antigens in thymomas. An immunohistological study of 14 cases including a characterization of the lymphocytic compartment. Hofmann WJ, et al. **Histopathology** 1989 May;14(5):447–63

Immunohistochemical study of 22 cases of thymoma. Lee D, et al. **J Clin Pathol** 1988 Dec;41(12):1297–304

MICROBIOLOGY

Thymic atrophy characteristic in transgenic mice that harbor pX genes of human T-cell leukemia virus type I. Furuta Y, et al. **J Virol** 1989 Jul;63(7):3185–9

PATHOLOGY

Analysis of lymphocyte phenotype in human thymomas. Berrih-Aknin S, et al. **Adv Exp Med Biol** 1988;237:369–74

Degree of malignancy of thymic epithelial tumors in terms of nuclear DNA content and nuclear area. An analysis of 39 cases. Asamura H, et al. **Am J Pathol** 1988 Dec; 133(3):615–22

Metastatic thymoma: case report. Stevens MJ, et al. **Australas Radiol** 1989 May;33(2):168–70

In vitro malignant progression of cells derived from Abelson murine leukaemia virus-induced thymic lymphomas. Saggioro D, et al. **Br J Cancer** 1988 Aug;58(2):152–7

Diagnosing thymic neoplasia [letter] Miller RR. **Chest** 1989 Sep;96(3):702–3

Cortical versus medullary thymomas: a useful morphologic distinction? Kornstein MJ, et al. **Hum Pathol** 1988 Nov; 19(11):1335–9

Cortical versus medullary thymomas [letter] Le Marc'Hadour F. **Hum Pathol** 1989 Jul;20(7):715–6

A spectrum of thymomas over a three year period. Bolster M, et al. **Ir J Med Sci** 1988 Nov;157(11):348–50

Interleukin-1 induces a pertussis toxin-sensitive increase in diacylglycerol accumulation in mouse thymoma cells. Dobson PR, et al. **J Mol Endocrinol** 1989 May;2(3):R5–7

Nodular development of spontaneous epithelial thymoma in (ACI/NMs x BUF/Mna)F1 rats. Matsuyama M, et al. **Jpn J Cancer Res** 1988 Sep;79(9):1031–8

Limbic encephalitis associated with malignant thymoma. McArdle JP, et al. **Pathology** 1988 Jul;20(3):292–5

Correlations between histological type, clinical behaviour, and prognosis in thymoma. Ricci C, et al. **Thorax** 1989 Jun;44(6):455–60

Primary cultures of human thymic epithelial tumors. Morphological and immunocytochemical characterization. Papadopoulos T, et al. **Virchows Arch [B]** 1989;56(6):363–70

[Thymoma. Anatomo-clinical results apropos of 16 cases] Ben Romdhane K, et al. **Arch Anat Cytol Pathol** 1989; 37(3):80–7 (28 ref.) (Eng. Abstr.) **(Fre)**

[Thymoma: evaluation of clinical staging in the development of a therapeutic strategy. Apropos of 3 cases] Dellagi K, et al. **Tunis Med** 1988 Nov;66(11):765–70 (Eng. Abstr.) **(Fre)**

[Primary mediastinal, clear cell B-cell lymphoma is an epithelium-associated thymus lymphoma] Möller P, et al. **Pathologe** 1989 Jul;10(4):234–9 **(Ger)**

[Histogenic and functional markers of epithelial differentiation in thymomas and thymus carcinomas] Kirchner T, et al. **Verh Dtsch Ges Pathol** 1988;72:349–53 (Eng. Abstr.) **(Ger)**

[Clinicopathologic assessment of primary thymic carcinoma based on seven cases] Fujimura S, et al. **Kyobu Geka** 1989 Feb;42(2):86–96 (Eng. Abstr.) **(Jpn)**

[A case of thymoma associated with prostatic cancer] Isurugi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jan; 80(1):100–3 (Eng. Abstr.) **(Jpn)**

[A case of adenocarcinoma of the thymus] Moriyama S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr; 37(4):717–22 (Eng. Abstr.) **(Jpn)**

[Postoperative recurrence of noninvasive thymomas (stage I)] Yoshitake T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1326–32 (Eng. Abstr.) **(Jpn)**

[A case of thymic carcinoma (undifferentiated carcinoma)] Takekawa H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):541–4 (Eng. Abstr.) **(Jpn)**

[Cerebral metastasis from malignant thymoma] Mizushima H, et al. **No To Shinkei** 1988 Dec;40(12):1157–62 (Eng. Abstr.) **(Jpn)**

[Clinico-morphologic analysis of thymus tumors in patients with myasthenia] Shevniuk MM, et al. **Vrach Delo** 1988 Aug;(8):75–7 (Eng. Abstr.) **(Rus)**

[Thymoma of fusiform cells. Report of a case] Pachar JV, et al. **Rev Med Panama** 1989 May;14(2):104–7 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Tumor necrosis factor and interferon gamma inhibit the development of radiation-induced thymic lymphomas in C57BL/Ka mice. Boniver J, et al. **Leukemia** 1989 Aug; 3(8):611–3

RADIOGRAPHY

Radiologic detection of thymoma in patients with myasthenia gravis. Ellis K, et al. **AJR** 1988 Nov;151(5):873–81

Thymic carcinoid in a case of Zollinger Ellison syndrome. A case report. Jose CC, et al. **Australas Radiol** 1988 Aug; 32(3):408–9

CT demonstration of "ectopic" thymoma. Kaplan IL, et al. **J Comput Assist Tomogr** 1988 Nov-Dec;12(6):1037–8

Intracaval and intracardiac extension of malignant thymoma: CT diagnosis. Korobkin M, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):348–50

Radiographic and computed tomographic detection of thymoma in patients with myasthenia gravis. Lupi L, et al. **Rays** 1988 Jan-Apr;13(1):17–21

[Computed tomographic findings in 36 patients with space-occupying lesions of the thymus] Görich J, et al. **ROFO** 1988 Nov;149(5):466–9 (Eng. Abstr.) **(Ger)**

[Diagnosis and treatment of thymus tumors] Ganul VL, et al. **Sov Med** 1988;(6):13–7 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Mediastinal uptake of Tc-99m pertechnetate in a thymona. Jimenez-Heffernan A, et al. **Clin Nucl Med** 1989 May; 14(5):375

[Thymic carcinoid tumor visualized with I 131-metaiodobenzylguanidine] Mey P, et al. **Ann Radiol (Paris)** 1988;31(3):181–2 (Eng. Abstr.) **(Fre)**

RADIOTHERAPY

Invasive thymoma: the role of mediastinal irradiation following complete or incomplete surgical resection. Curran WJ Jr, et al. **J Clin Oncol** 1988 Nov;6(11):1722–7

Malignant thymoma—a study of 30 cases. Chua ET, et al. **Singapore Med J** 1988 Dec;29(6):565–9

SECRETION

Internalization of interleukin 1 (IL 1) correlates with IL 1-induced IL 2 receptor expression and IL 2 secretion of EL4 thymoma cells. Von Hoegen I, et al. **Eur J Immunol** 1989 Feb;19(2):329–34

SURGERY

"Maximal" thymectomy for myasthenia gravis. Surgical anatomy and operative technique. Jaretzki A 3d, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):711–6

[Invasive thymoma with pulmonary metastasis. Complete remission 5 years after surgery and chemotherapy using the CHOP-BLEO protocol] Wurtz A, et al. **Rev Mal Respir** 1988;5(6):651–4 (Eng. Abstr.) **(Fre)**

[Thymus surgery in myasthenia gravis] Dapper F, et al. **Helv Chir Acta** 1988 Nov;55(4):455–8 (Eng. Abstr.) **(Ger)**

[Surgical intervention on the thymus in children and adolescents] Schück R, et al. **Z Kinderchir** 1988 Aug; 43(4):239–42 (Eng. Abstr.) **(Ger)**

[An operated case of resection of thymic atypical carcinoid] Fujino M, et al. **Kyobu Geka** 1988 Oct;41(11):916–20 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Two cases of thymic carcinoid] Kaguraoka H, et al. **Kyobu Geka** 1989 May;42(5):404–8 (6 ref.) (Eng. Abstr.) **(Jpn)**

[Venous reconstruction of superior vena cava syndrome with thymoma] Tago M, et al. **Kyobu Geka** 1988 Sep; 41(10):814–6 (Eng. Abstr.) **(Jpn)**

[Management of patients with thymoma] Isobe M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):955–60 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of stage III and IV thymoma] Yamashita C, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):391–5 (Eng. Abstr.) **(Jpn)**

[Extended thymectomy with marginal resection of the left brachiocephalic vein in invasive thymoma in myasthenia] Vasil'ev VN, et al. **Vestn Khir** 1988 Dec;141(12):33–4 **(Rus)**

THERAPY

Augmented induction of antitumor cells in vivo by cyclophosphamide fails to benefit antitumor resistance of the host. Ryoyama K, et al. **Cancer Immunol Immunother** 1989;29(4):255–60

ULTRASTRUCTURE

[Comparative ultrastructural characteristics of epithelial cells of the parenchyma of the thymus gland and thymoma] Galil-Ogly GA, et al. **Arkh Patol** 1988;50(9):51–60 (Eng. Abstr.) **(Rus)**

VETERINARY

Primary tumours of the thymus in the rat. Naylor DC, et al. **J Comp Pathol** 1988 Aug;99(2):187–203

Tumorigenic potential of a myc-containing strain of feline leukemia virus in vivo in domestic cats. Levy LS, et al. **J Virol** 1988 Dec;62(12):4770–3

[Myasthenia gravis and a thymoma in a cat] van Oosterhout IC, et al. **Tijdschr Diergeneeskd** 1989 May 1;114(9):499–504 (Eng. Abstr.) **(Dut)**

THYROCALCITONIN see **CALCITONIN**

THYROGLOBULIN

The hormonogenic sites of turtle thyroglobulin and their homology with those of mammals. Roe MT, et al. **Endocrinology** 1989 Mar;124(3):1327–32

Sulfated N-linked carbohydrate chains in porcine thyroglobulin. Kamerling JP, et al. **FEBS Lett** 1988 Dec 5;241(1–2):246–50

Occurrence of sulfate in the asparagine-linked complex carbohydrate units of thyroglobulin. Identification and localization of galactose 3-sulfate and N-acetylglucosamine 6-sulfate residues in the human and calf proteins. Spiro RG, et al. **J Biol Chem** 1988 Oct 5;263(28):14351–8

[Thyroglobulin] Guermazi F, et al. **Tunis Med** 1989 Apr; 67(4):221–3 (12 ref.) **(Fre)**

ADMINISTRATION & DOSAGE

Effect of immunization with prostaglandin metabolites on gastrointestinal ulceration. Redfern JS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G723–30

ANALYSIS

Hormone-containing peptides from normal and goiter human thyroglobulins. Dziadik-Turner C, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):377–85

Novel immunoradiometric assay of thyroglobulin in serum with use of monoclonal antibodies selected for lack of cross-reactivity with autoantibodies. Piechaczyk M, et al.

Clin Chem 1989 Mar;35(3):422–4

Abnormal properties of thyroglobulin in mice with inherited congenital goiter (cog/cog). Basche M, et al. **Endocrinology** 1989 Apr;124(4):1822–9

Thyroglobulin immunostaining in follicular thyroid carcinoma: relationship to the degree of differentiation and cell type. Harach HR, et al. **Histopathology** 1988 Jul; 13(1):43–54

Subunit heterogeneity of buffalo thyroglobulin. Deshpande V. **Indian J Biochem Biophys** 1988 Oct;25(5):455–7

Investigations into lactoperoxidase–catalysed bromination of tyrosine and thyroglobulin. Buchberger W. **J Chromatogr** 1988 Nov 18;432:57–63

[Immunohistochemical detection of thyroglobulin] Sturm U, et al. **Zentralbl Allg Pathol** 1989;135(3):281–5 (Eng. Abstr.) (Ger)

[Oncogens and tumor makers in thyroid cancer] Hashimoto T, et al. **Rinsho Byori** 1989 Feb;37(2):122–30 (Jpn)

BIOSYNTHESIS

Induction of peroxidase and thyroglobulin by TSH in cultured thyroid cells from patients with Basedow's disease and its inhibition by actinomycin D. Yamashita H, et al. **Acta Pathol Jpn** 1989 Feb;39(2):121–6

Thyroglobulin biosynthesis in a larval (ammocoete) and adult freshwater lamprey (Lampetra planeri Bl.). Monaco F, et al. **Comp Biochem Physiol [B]** 1978;60(1):87–91

Effects of epidermal growth factor on thyroglobulin and adenosine 3',5'-monophosphate production by cultured human thyrocytes. Tseng YC, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):771–5

Mild familial goitrous hypothyroidism associated with prolonged 131–iodine retention: possible defect in thyroglobulin synthesis. McKenna TJ, et al. **J Endocrinol Invest** 1989 Apr;12(4):229–34

Preferential formation of triiodothyronine residues in newly synthesized [14C]tyrosine–labeled thyroglobulin molecules in follicles reconstructed in a suspension culture of hog thyroid cells. Sho K, et al. **Mol Cell Endocrinol** 1988 Sep; 59(1–2):117–24

BLOOD

Serum thyroglobulin during the menstrual cycle, during pregnancy, and post partum. Rasmussen NG, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):168–73

Urinary iodine excretion is low and serum thyroglobulin high in pregnant women in parts of Denmark. Pedersen KM, et al. **Acta Obstet Gynecol Scand** 1988;67(5):413–6

Thyroid scanning, ultrasound, and serum thyroglobulin in determining the origin of congenital hypothyroidism [letter] Farriaux JP, et al. **Am J Dis Child** 1988 Oct; 142(10):1023–4

Measurement of anti–thyroglobulin IgG in serum by novel and sensitive immune complex transfer enzyme immunoassay. Kohno T, et al. **Clin Biochem** 1989 Aug; 22(4):277–84

TSH dependent elevation of serum thyroglobulin in reversible primary hypothyroidism. Sato K, et al. **Clin Endocrinol (Oxf)** 1988 Sep;29(3):231–7

Metastatic papillary thyroid carcinoma with normal serum thyroglobulin level. Miller JH, et al. **Clin Nucl Med** 1988 Sep;13(9):652–3

Interference of antithyroglobulin autoantibodies in serum thyroglobulin estimation by RIA. Rajashekharrao B, et al. **Indian J Med Res** 1988 Aug;88:146–9

Development of immunoradiometric assays for human thyroglobulin using monoclonal antibodies and the biotin/avidin system. Pfahl H, et al. **J Clin Chem Clin Biochem** 1988 Jul;26(7):435–9

Thyroid volume and serum thyroglobulin levels in patients with acromegaly: correlation with plasma insulin–like growth factor I levels. Miyakawa M, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):973–8

Changes in serum thyroid hormone, thyrotropin and thyroglobulin concentrations during thyroxine therapy in patients with solitary thyroid nodules. Morita T, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):227–30

Fasting induces a decrease in serum thyroglobulin in normal subjects. Unger J. **J Clin Endocrinol Metab** 1988 Dec; 67(6):1309–11

Serum thyroglobulin concentration may be a clue to the mechanism of amiodarone–induced thyrotoxicosis [letter] Unger J. **J Endocrinol Invest** 1988 Oct;11(9):689

Postoperative thyroglobulin level determination to follow up patients with highly differentiated thyroid cancer. Szántó J, et al. **Oncology** 1989;46(2):99–104

[The significance of thyroglobulin determination in the follow–up of patients with papillary or follicular thyroid carcinoma] Hennemann G, et al. **Ned Tijdschr Geneeskd** 1989 Mar 11;133(10):491–3 (Dut)

[Thyroglobulin and thyroid pathology in children] Dubourg H, et al. **Ann Pediatr (Paris)** 1989 Feb;36(2):88–91 (25 ref.) (Eng. Abstr.) (Fre)

[Follow up of thyroglobulin levels in patients with surgically treated, highly differentiated thyroid cancer] Szántó J, et al. **Orv Hetil** 1989 Aug 6;130(32):1695–9 (Eng. Abstr.) (Hun)

[Characteristics of the clinical picture, hormonal status and humoral immunity in older patients with diffuse toxic goiter] Natarov VV, et al. **Ter Arkh** 1988;60(12):96–8 (Eng. Abstr.) (Rus)

[Diagnostic accuracy of the serum thyroglobulin determinations and isotopic scanning in differentiated carcinomas of the thyroid with more than 5 years of follow–up] Pulgar Encinas R, et al. **Med Clin (Barc)** 1988 May 28;91(1):7–10 (Eng. Abstr.) (Spa)

GENETICS

cAMP–dependent binding of a trans–acting factor to the thyroglobulin promoter. Hansen C, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):722–31

Protein binding domains of the rat thyroglobulin promoter. Ursini MV, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):481–8

Alternative splicing may be responsible for heterogeneity of thyroglobulin structure. Mercken L, et al. **Biochimie** 1989 Feb;71(2):223–6

Studies on the structures of the normal and abnormal goat thyroglobulin genes. Van Ommen GJ, et al. **Biochimie** 1989 Feb;71(2):211–21

Reactivation of thyroglobulin gene expression in transformed thyroid cells by 5–azacytidine. Avvedimento EV, et al. **Cell** 1989 Sep 22;58(6):1135–42

Normal–sized thyroglobulin messenger ribonucleic acid in Dutch goats with a thyroglobulin synthesis defect is translated into a 35,000 molecular weight N–terminal fragment. Sterk A, et al. **Endocrinology** 1989 Jan; 124(1):477–83

Thyroid–specific and cAMP–dependent hypersensitive regions in thyroglobulin gene chromatin. Hansen C, et al. **Eur J Biochem** 1988 Dec 15;178(2):387–93

The block of thyroglobulin synthesis, which occurs upon transformation of rat thyroid epithelial cells, is at the transcriptional level and it is associated with methylation of the 5' flanking region of the gene. Berlingieri MT, et al. **Exp Cell Res** 1989 Aug;183(2):277–83

Induction of nuclear protein factors specific for hormone–responsive region during activation of thyroglobulin gene by thyrotropin in rat thyroid FRTL–5 cells. Lee NT, et al. **J Biol Chem** 1989 May 5; 264(13):7523–30

Regulation of thyroid peroxidase and thyroglobulin gene expression by thyrotropin in cultured human thyroid cells. Nagayama Y, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1155–9

Interleukin–1 inhibits thyrotrophin–induced human thyroglobulin gene expression. Yamashita S, et al. **J Endocrinol** 1989 Jul;122(1):177–83

Identification of a cAMP–responsive region in thyroglobulin gene promoter. Christophe D, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):5–18

In vitro effects of estrogen on tgb and c–myc gene expression in normal and neoplastic human thyroids. del Senno L, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):67–74

Thyroglobulin gene expression as a differentiation marker in primary cultures of calf thyroid cells. Gérard CM, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):23–35

Differential cytokine regulation of MHC class II and thyroglobin mRNAs in rat thyroid cells. Graves P, et al. **Mol Endocrinol** 1989 May;3(5):758–62

Sequence of a rat MHC class II–associated invariant chain cDNA clone containing a 64 amino acid thyroglobulin–like domain. McKnight AJ, et al. **Nucleic Acids Res** 1989 May 25;17(10):3983–4

[Structural heterogeneity of human thyroglobulin in relation to its messenger RNA maturation] Malthièry Y, et al. **C R Soc Biol (Paris)** 1989;183(1):33–9 (Eng. Abstr.) (Fre)

[Mapping of the thyroglobulin gene in high molecular weight DNA from the human thyroid in normal conditions and in thyroid pathology] Atakhanova BA, et al. **Biokhimiia** 1989 Jan;54(1):81–7 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Anti–thyroglobulin antibodies in patients with chronic thyroiditis and in healthy subjects. Kohno Y, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:128–32

Human monoclonal antibodies produced against bovine thyroglobuline by in vitro immunization. Kockhans MC, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1988; 125(2):17–23

Depletion of L3T4+ and Lyt–2+ cells by rat monoclonal antibodies alters the development of adoptively transferred experimental autoimmune thyroiditis. Flynn JC, et al. **Cell Immunol** 1989 Sep;122(2):377–90

Experimental autoimmune thyroiditis in mice chronically treated from birth with anti–IgM antibodies. Vladutiu AO. **Cell Immunol** 1989 Jun;121(1):49–59

Highly sensitive assays of autoantibodies to thyroglobulin and to thyroid peroxidase. Beever K, et al. **Clin Chem** 1989 Sep;35(9):1949–54

Selective autoimmune response to the chicken–specific structures of thyroglobulin in Obese strain chickens. Chan CT, et al. **Clin Exp Immunol** 1989 Jul;77(1):117–23

Epitope specificity of spontaneous and induced thyroglobulin autoantibodies in the rat. De Assis–Paiva HJ, et al. **Clin Exp Immunol** 1988 Oct;74(1):63–7

Thyroglobulin antibodies in Graves' disease are associated with T–cell receptor beta chain and major histocompatibility complex loci. Demaine AG, et al. **Clin Exp Immunol** 1989 Jul;77(1):21–4

Serial studies on the affinity and heterogeneity of human autoantibodies to thyroglobulin. Devey ME, et al. **Clin Exp Immunol** 1989 Aug;77(2):191–5

Heterogeneity of the immune status concerning anti–thyroglobulin antibody production among patients with Hashimoto's thyroiditis; an in vitro study. Sekino T, et al. **Clin Exp Immunol** 1988 Jun;72(3):486–92

Analysis of the spectrotypes of autoantibodies against thyroglobulin in two rat models of autoimmune thyroiditis. Stott DI, et al. **Clin Exp Immunol** 1988 Aug;73(2):269–75

Resistance to experimental autoimmune thyroiditis: L3T4+ cells as mediators of both thyroglobulin–activated and TSH–induced suppression. Kong YM, et al. **Clin Immunol Immunopathol** 1989 Apr;51(1):38–54

Circulating immune complexes and kidney lesions following 131I administration in mice with thyroglobulin antibodies. Vladutiu AO, et al. **Clin Immunol Immunopathol** 1989 Jul; 52(1):117–25

Thyroid antigen–mediated glomerulonephritis in Graves' disease. Sato Y, et al. **Clin Nephrol** 1989 Jan;31(1):49–52

Cutaneous metastasis from papillary carcinoma of the thyroid. A case confirmed by monoclonal antithyroglobulin antibody. Doutre MS, et al. **Dermatologica** 1988; 177(4):241–3

Human thyroglobulin autoantibodies of subclasses IgG2 and IgG4 bind to different epitopes on thyroglobulin. Fukuma N, et al. **Immunology** 1989 May;67(1):129–31

Thyroglobulin and thyroid peroxidase share common epitopes recognized by autoantibodies in patients with chronic autoimmune thyroiditis. Kohno Y, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):899–907

The significance of antithyroglobulin and antithyroidal microsomal antibodies in patients with hyperthyroidism due to Graves' disease treated with antithyroidal drugs. Takaichi Y, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1097–100

More sensitive and simpler immune complex transfer enzyme immunoassay for antithyroglobulin IgG in serum. Kohno T, et al. **J Clin Lab Anal** 1989;3(3):163–8

Towards an antigenic map of human thyroglobulin: identification of ten epitope–bearing sequences within the primary structure of thyroglobulin. Dong Q, et al. **J Endocrinol** 1989 Jul;122(1):169–76

Significance of the recognition of certain antigenic regions on the human thyroglobulin molecule by natural autoantibodies from healthy subjects. Bouanani M, et al. **J Immunol** 1989 Aug 15;143(4):1129–32

Characteristics of cytotoxic thyroglobulin–specific T cell hybridomas. Remy JJ, et al. **J Immunol** 1989 Feb 15; 142(4):1129–33

Production of monoclonal antibody to thyroglobulin from malignant thyroid carcinoma. Kusakabe K, et al. **Jpn J Exp Med** 1989 Feb;59(1):37–42

Experimental autoimmune thyroiditis. I. Participation of IgA, IgM and IgG in the development of the disease. Leyán VR, et al. **Zentralbl Veterinarmed [B]** 1989 Jun;36(4):250–6

[Antibodies against thyroxine, triiodothyronine and thyroglobulin as a possible cause of error in the diagnosis of disorders of thyroid gland function] Kraft O, et al. **Vnitr Lek** 1989 Mar;35(3):303–6 (Eng. Abstr.) (Cze)

[Anti–thyroglobulin and anti–microsomal antibodies in patients with hyperthyroidism treated with radioactive iodine] Barańska H, et al. **Pol Tyg Lek** 1988 Apr 25; 43(17):534–8 (Eng. Abstr.) (Pol)

[Comparison of the results of radioimmunologic and hemagglutination methods in the determination of antibodies against thyroglobulin and the effect of these antibodies on thyroglobulin serum levels] Reietková E, et al. **Bratisl Lek Listy** 1989 Apr;90(4):263–7 (Eng. Abstr.) (Slo)

METABOLISM

Interleukin–1 affects the function of cultured human thyroid cells. Krogh Rasmussen A, et al. **Allergy** 1988 Aug; 43(6):435–41

Identification of two subpopulations of thyroid lysosomes: relation to the thyroglobulin proteolytic pathway. Selmi S, et al. **Biochem J** 1988 Jul 15;253(2):523–32

Enzymatic deglycosylation of human thyroglobulin: fluorescence studies. Grimaldi S, et al. **Biochim Biophys Acta** 1988 Nov 2;957(1):105–10

Regulation of thyroperoxidase, thyroglobulin and iodide levels in sheep thyroid cells by TSH, tumor promoters and epidermal growth factor. Pratt MA, et al. **Biochimie** 1989 Feb;71(2):227–35

In vitro studies of the thyroglobulin degradation pathway: endocytosis and delivery of thyroglobulin to lysosomes, release of thyroglobulin cleavage products—iodotyrosines and iodothyronines. Rousset B, et al. **Biochimie** 1989 Feb; 71(2):247–62

Cytoskeleton and thyroglobulin expression change during transformation of thyroid epithelium to mesenchyme–like cells. Greenburg G, et al. **Development** 1988 Mar; 102(3):605–22

Differential incorporation of sulfate into the chondroitin chain and complex carbohydrate chains of human thyroglobulin: studies in normal and neoplastic thyroid tissue. Schneider AB, et al. **Endocrinology** 1989 Jan; 124(1):356–62

Mannose 6–phosphate receptor in porcine thyroid follicle cells. Localization and possible implications for the intracellular transport of thyroglobulin. Scheel G, et al. **Eur J Cell Biol** 1989 Jun;49(1):140–8

Hormone synthesis in human thyroglobulin: possible cleavage of the polypeptide chain at the tyrosine donor site. Marriq C, et al. **FEBS Lett** 1989 Jan 2;242(2):414–8

Functional morphology of the thyroid. Fujita H. **Int Rev Cytol** 1988;113:145–85 (170 ref.)

Thyrotropin alters the utilization of thyroglobulin's hormonogenic sites. Fassler CA, et al. **J Biol Chem** 1988 Nov 25;263(33):17366–71

Consensus sequences for early iodination and hormonogenesis in human thyroglobulin. Lamas L, et al. **J Biol Chem** 1989 Aug 15;264(23):13541–5

Thyroid hormone residues are released from thyroglobulin with only limited alteration of the thyroglobulin structure. Rousset B, et al. **J Biol Chem** 1989 Jul 25;264(21):12620–6

Immunoreactive thyroglobulin in sera and saliva of patients with various thyroid disorders: role of autoantibodies. Van Herle AJ, et al. **J Endocrinol Invest** 1989 Mar;12(3):177–82

Evidence for a preferential iodination site within the thyroglobulin molecule. Haraguchi K, et al. **Mol Cell Endocrinol** 1988 Sep;59(1–2):111–5

Acute in vitro thyrotropin regulation of lysosomal enzyme activity in the thyroid follicular cell. Perrild H, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):75–80

[Relations of iodination, hormonosynthesis and proteolytic cleavage in human thyroglobulin] Lejeune PJ, et al. **C R Acad Sci [III]** 1988;307(3):123–7 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Enhanced induction of thyroid cell MHC class II antigen expression in rats highly responsive to thyroglobulin. Lahat N, et al. **Endocrinology** 1989 Apr;124(4):1754–9

PHYSIOLOGY

Thyroglobulin structure and function: recent advances. Malthièry Y, et al. **Biochimie** 1989 Feb;71(2):195–209 (137 ref.)

Thyroglobulin–mediated one– and two–electron oxidations of glutathione and ascorbate in thyroid peroxidase systems. Nakamura M, et al. **J Biol Chem** 1989 Aug 5; 264(22):12909–13

SECRETION

Thyroglobulin secretion by cultured human thyroid cells from cold nodules. Izembart M, et al. **Biomed Pharmacother** 1988;42(6):421–6

Receptors for atrial natriuretic peptide (ANP) and regulation of thyroglobulin secretion by ANP in human thyroid cells. Sellitti DF, et al. **Life Sci** 1989;45(9):793–801

THYROGLOSSAL CYST

Thyroglossal duct cyst presenting as an anterior tongue fistula. Ngo HH, et al. **J Otolaryngol** 1988 Aug;17(5):227–8

Squamous cell carcinoma in a thyroglossal cyst remnant: a case report and review of the literature. Colloby PS, et al. **World J Surg** 1989 Jan–Feb;13(1):137–9 (11 ref.)

[Lateral cysts and fistulas in the neck] Lauritzen A, et al. **Ugeskr Laeger** 1988 Dec 19;150(51):3189–90 (Eng. Abstr.) **(Dan)**

[Median cysts and fistulas in the neck] Lauritzen A, et al. **Ugeskr Laeger** 1988 Dec 19;150(51):3187–9 (Eng. Abstr.) **(Dan)**

[Thyroglossal duct cyst] Shapira A, et al. **Harefuah** 1989 Feb 1;116(3):138–9 (Eng. Abstr.) **(Heb)**

COMPLICATIONS

Hurthle cell adenoma of the thyroglossal duct. Tovi F, et al. **Head Neck Surg** 1988 May–Jun;10(5):346–9

CONGENITAL

Congenital neck masses. Drumm AJ, et al. **Am Fam Physician** 1989 Jan;39(1):159–63 (10 ref.)

DIAGNOSIS

Giant ruptured thyroglossal cyst. Kabadi U, et al. **Iowa Med** 1988 Oct;78(10):473–6

Atypical thyroglossal duct cyst. Cumberworth VL, et al. **J Laryngol Otol** 1989 Jul;103(7):700–3

[Cervicofacial actinomycosis. Apropos of 2 atypical locations] Klotz G, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(2):105–7 (Eng. Abstr.) **(Fre)**

EPIDEMIOLOGY

Papillary carcinoma arising in a thyroglossal cyst. Thornton CM. **Ulster Med J** 1989 Apr;58(1):111–3 (6 ref.)

PATHOLOGY

Pathologic quiz case 2. Epidermoid cyst and thyroglossal duct (TGD) cyst. Bhansali SA, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):752–5

Invasive thyroglossal duct carcinoma in childhood. Kaplan HJ, et al. **Ear Nose Throat J** 1989 Jun;68(6):460–2, 464

Intrahyoid thyroglossal cyst. Podoshin L, et al. **J Laryngol Otol** 1989 May;103(5):539–42

Squamous cell carcinoma arising in a thyroglossal duct cyst in the tongue. Lustmann J, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):81–5 (19 ref.)

Adenocarcinoma arising in a thyroglossal duct cyst: report of a case and literature review. Vincent SD, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):633–5 (11 ref.)

Papillary carcinoma arising in a thyroglossal duct cyst. McNicoll MP, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):50–4

[Papillary carcinoma in a cyst of the thyroglossal duct. Review] Martín C, et al. **An Otorrinolaringol Ibero Am** 1989;16(3):247–56 (23 ref.) (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Thyroglossal duct cyst in hyoid bone: CT confirmation. Bourjat P, et al. **J Comput Assist Tomogr** 1988 Sep–Oct; 12(5):871–3

Unusual CT appearance of a thyroglossal duct cyst carcinoma. Gardner DJ. **J Otolaryngol** 1989 Aug; 18(5):258–9

RADIONUCLIDE IMAGING

The pyramidal lobe—a helpful criterion in the differential diagnosis of thyroid diseases. Wahl R, et al. **Klin Wochenschr** 1989 Jun 15;67(12):647

SURGERY

Bilateral pneumothoraces after removal of a thyroglossal cyst [letter] McLuckie A, et al. **Anaesthesia** 1989 Jan;44(1):72–3

Thyroglossal duct remnants in infants and children: reevaluation of histopathology and methods for resection. Hoffman MA, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):483–6

Management of thyroglossal cysts in children. Athow AC, et al. **Br J Surg** 1989 Aug;76(8):811–4

Operative treatment of median cervical cysts [letter] Nicholson ML, et al. **Br J Surg** 1988 Dec;75(12):1278

Thyroglossal duct cyst recurrence [letter] Rogers SN, et al. **Br J Surg** 1988 Sep;75(9):932

[A modification of the surgical technic in cysts and fistulas of the thyroglossal duct] Pinelli V, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 19:63–9 (Eng. Abstr.) **(Ita)**

[Our experience in the surgical treatment of cysts and fistulas of the thyroglossal duct] Rosati R, et al. **Minerva Chir** 1989 May 15;44(9):1357–60 (Eng. Abstr.) **(Ita)**

THYROID ANTAGONISTS

Goitrogens. Gaitan E. **Baillieres Clin Endocrinol Metab** 1988 Aug;2(3):683–702 (78 ref.)

The thyroid effects of C–glycosylflavonoids in millet. Gaitan E, et al. **Prog Clin Biol Res** 1988;280:349–63

[The use of image analysis in nutritional toxicology—determination of goitrogenic effects] Bleyl DW, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):173–5 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Bitter taste responses to phenylthiocarbamide are not related to dietary goitrogen intake in human beings. Mattes R, et al. **J Am Diet Assoc** 1989 May;89(5):692–4

[Treatment of diffuse nontoxic goiter with low doses of thyroidin] Sazonova SN. **Probl Endokrinol (Mosk)** 1988 Jul–Aug;34(4):41–2 **(Rus)**

ADVERSE EFFECTS

Cross sensitivity to antithyroid drugs. Smith A, et al. **BMJ** 1989 May 6;298(6682):1253

Development of spontaneous hypothyroidism in patients with Graves' disease treated with antithyroidal drugs: clinical, immunological, and histological findings in 26 patients. Tamai H, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):49–53

[Side–effects of synthetic antithyroid drugs] Ducornet B, et al. **Ann Med Interne (Paris)** 1988;139(6):410–31 (179 ref.) **(Fre)**

[Side effects of antithyroid therapy of hyperthyroidism. A study of 1256 continuously treated patients] Meyer–Gessner M, et al. **Dtsch Med Wochenschr** 1989 Feb 3;114(5):166–71 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

The effects of cytokines, antithyroidal drugs and glucocorticoids on phagocytosis by thyroid cells. Matsunaga M, et al. **Acta Endocrinol (Copenh)** 1988 Nov; 119(3):413–9

Modification of radioiodine incorporation into the fetuses and newborn rats by thyroid blocking agents. Sztanyik LB, et al. **Acta Physiol Hung** 1988;72(3–4):343–54

The effect of antithyroid drugs on B and T cell activity in vitro. Wilson R, et al. **Clin Endocrinol (Oxf)** 1988 Apr; 28(4):389–97

Evaluation of thyroid gland activity by hormone assays and flow cytometry in rats. Zbinden G. **Exp Cell Biol** 1988; 56(4):196–200

Inhibition of dopamine beta–hydroxylase by goitrin, a natural antithyroid compound. Zenker N, et al. **J Nat Prod** 1988 Sep–Oct;51(5):862–5

POISONING

Clinical features and management of overdosage with thyroid drugs. Lin TH, et al. **Med Toxicol Adverse Drug Exp** 1988 Jul–Aug;3(4):264–72 (57 ref.)

THERAPEUTIC USE

A rational approach to the treatment of hyperthyroidism. Peele ME, et al. **Compr Ther** 1988 Sep;14(9):34–41 (7 ref.)

Potassium iodide as a thyroid blocker—Three Mile Island to today. Halperin JA. **DICP** 1989 May;23(5):422–7

A patient with Graves' disease who developed hypothyroidism associated with thyroid stimulation blocking immunoglobulin during anti–thyroid drug therapy. Inomata H, et al. **Endocrinol Jpn** 1988 Jun; 35(3):379–84

The significance of antithyroglobulin and antithyroidal microsomal antibodies in patients with hyperthyroidism due to Graves' disease treated with antithyroidal drugs. Takaichi Y, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1097–100

Fibrinogen and fibrinolytic activity in hyperthyroidism before and after antithyroid treatment. Marongiu F, et al. **J Endocrinol Invest** 1988 Nov;11(10):723–5

[Dynamic thyroid hormone levels during the thyrostatic treatment of Basedow's disease] Vŭrbanov V, et al. **Vutr Boles** 1988;27(4):15–8 (Eng. Abstr.) **(Bul)**

[Early changes in thyroid hormones following radioiodine therapy of hyperthyroidism with reference to etiology and accompanying medication] Kreisig T, et al. **Klin Wochenschr** 1989 Apr 3;67(7):386–92 (Eng. Abstr.) **(Ger)**

[Therapy resistance of amiodarone–induced hyperthyroidism] Althaus B, et al. **Schweiz Med Wochenschr** 1988 Aug 20;118(33):1176–81 (Eng. Abstr.) **(Ger)**

[Changes of the blood kallikrein–kinin system in patients with diffuse toxic goiter under the influence of thyrostatic therapy and prodectin] Matiashina GI. **Vrach Delo** 1989 Apr;(4):31–3 (Eng. Abstr.) **(Rus)**

THYROID CARTILAGE see under **LARYNGEAL CARTILAGES**

THYROID CRISIS

DRUG THERAPY

[Effectiveness of intravenous administration of methimazole in patients with thyroid crisis] Sowiński J, et al. **Endokrynol Pol** 1988;39(2):67–73 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Acute thyroid crisis on induction of anaesthesia. Bennett MH, et al. **Anaesthesia** 1989 Jan;44(1):28–30

SURGERY

[Hyperthyroidism in operations for non–thyroid diseases] Böhmig HJ, et al. **Wien Med Wochenschr** 1988 Sep 30; 138(18):447–9 (Eng. Abstr.) **(Ger)**

[Surgical preparation in hyperthyroidism and therapy of thyrotoxic crisis] Röher HD. **Wien Med Wochenschr** 1988 Sep 30;138(18):441–4 (Eng. Abstr.) **(Ger)**

THERAPY

Treatment of thyrotoxic storm by charcoal plasmaperfusion [letter] Candrina R, et al. **J Endocrinol Invest** 1989 Feb; 12(2):133–4

THYROID DISEASES

Management of thyroid nodules. Griffin JE. **Am J Med Sci** 1988 Nov;296(5):336–47 (80 ref.)

18th annual meeting of the European Thyroid Association. Abstracts. Copenhagen, Denmark, June 26–30, 1989. **Ann Endocrinol (Paris)** 1989;50(2):78–171

17th annual meeting of the European Thyroid Association. Abstracts. Montpellier, 11–16 September 1988. **Ann Endocrinol (Paris)** 1988;49(3):165–253

Thyroid disorders and the elderly. Kabadi UM. **Compr Ther** 1989 Jun;15(6):53–65 (17 ref.)

Plasma cell granuloma of the thyroid gland. Talmi YP, et al. **Head Neck** 1989 Mar–Apr;11(2):184–7

Profile of thyroid disorders in a referral centre in north India. Virmani A, et al. **Indian Pediatr** 1989 Mar;26(3):265–9

[11th annual meeting of the Section on Pediatric Endocrinology of the Spanish Association of Pediatrics. Granada, 19–20 May 1989. Abstracts] **An Esp Pediatr** 1989 May;30 Suppl 37:1–62 **(Spa)**

BLOOD

Transient infantile hyperthyrotrophinaemia. Miki K, et al. **Arch Dis Child** 1989 Aug;64(8):1177–82

Limitations to the use of a sensitive assay for serum thyrotropin in the assessment of thyroid status. Ehrmann DA, et al. **Arch Intern Med** 1989 Feb;149(2):369–72

Comparison of seven sensitive thyrotropin (TSH) assays to predict a suppressed thyroliberin (TRH) test. Body JJ, et al. **Clin Chem** 1989 Mar;35(3):497–8

Errors in a report: thyroid dysfunction detection strategy [letter] Hammer MR. **Clin Chem** 1989 Jan;35(1):193

Four sensitive thyrotropin assays critically evaluated and compared. Sgoutas DS, et al. **Clin Chem** 1989 Aug;

35(8):1785–9
Serum androstanediol glucuronide concentrations in normal and hirsute women and patients with thyroid dysfunction. Scanlon MJ, et al. **Clin Endocrinol (Oxf)** 1988 Nov; 29(5):529–38
Reversible alteration of red cell lithium–sodium countertransport in patients with thyroid disease. Brent GA, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):322–8
Binding of plasma fibronectin to human polymorphonuclear leukocytes in normal subjects and patients with aplastic anemia and thyroid dysfunction. Ohara T, et al. **J Lab Clin Med** 1989 Feb;113(2):229–34
Clinical utility and cost–effectiveness of sensitive thyrotropin assays in ambulatory and hospitalized patients. Spencer CA. **Mayo Clin Proc** 1988 Dec;63(12):1214–22 (43 ref.)
[Reverse T3 values] Grebe SF, et al. **Acta Med Austriaca** 1988;15 Suppl 1:35–6 (Ger)
[The negative TRH test: new differential assessment using a sensitive TSH assay] Lind P, et al. **Schweiz Med Wochenschr** 1988 Aug 9;118(31–32):1130–4 (Eng. Abstr.) (Ger)

CHEMICALLY INDUCED

Effect of amiodarone on circulating antithyroid antibodies. Safran M, et al. **BMJ** 1988 Aug 13;297(6646):456–7
Amiodarone and the thyroid. Kennedy RL, et al. **Clin Chem** 1989 Sep;35(9):1882–7 (85 ref.)
Induction of experimental thyroid dysfunction in rats with implantable pellets of thyroxine or propylthiouracil. Walker JS, et al. **J Pharmacol Methods** 1989 May;21(3):223–9
[Amiodarone–induced thyroid pathology] De Rosa G, et al. **Clin Ter** 1987 Dec 31;123(6):487–92 (26 ref.) (Eng. Abstr.) (Ita)

COMPLICATIONS

Luxation of the globe [letter] Nelson ME. **BMJ** 1989 Mar 18;298(6675):754
Autoimmune thyroid disease and thyroid autoantibodies in rheumatoid arthritis patients and their families. Silman AJ, et al. **Br J Rheumatol** 1989 Feb;28(1):18–21
The thyroid. Diven DG, et al. **Dermatol Clin** 1989 Jul; 7(3):547–58 (93 ref.)
Diabetes mellitus and thyroid disease. Mouradian M, et al. **Diabetes Care** 1983 Sep–Oct;6(5):512–20 (139 ref.)
A case of Graves' disease associated with an autonomously functioning thyroid nodule (AFTN) (Marine–Lenhalt syndrome) which spontaneously became a cold nodule. Konno N, et al. **Endocrinol Jpn** 1988 Oct;35(5):753–8
Hirsutism due to the treatment with L–thyroxine in patients with thyroid pathology. Koloğlu S, et al. **Endocrinologie** 1988 Jul–Sep;26(3):179–85
Thyro–gonadic failure, a risk factor in cardiovascular pathology. Pitiş M, et al. **Endocrinologie** 1989 Jan–Mar; 27(1):43–7 (23 ref.)
Thyroid evaluation in alopecia areata in children [letter] **J Am Acad Dermatol** 1988 Dec;19(6):1118–20
Thyroid function in patients with pustulosis palmoplantaris. Rosén K, et al. **J Am Acad Dermatol** 1988 Dec; 19(6):1009–16
Angioimmunoblastic lymphadenopathy associated with thyroid disease [letter] Ambepitiya GB. **J Clin Pathol** 1989 Jun;42(6):668–9
Clinical significance of psychoneuroendocrinology in psychiatry: focus on the thyroid and adrenal. Nemeroff CB. **J Clin Psychiatry** 1989 May;50 Suppl:13–20; discussion 21–2 (76 ref.)
Orbital decompression for dysthyroid orbitopathy [letter] Kennerdell JS, et al. **J Neurosurg** 1989 May;70(5):816–7
Neurologic complications of endocrine diseases. Kaminski HJ, et al. **Neurol Clin** 1989 Aug;7(3):489–508 (136 ref.)
Dysthyroid optic neuropathy. The crowded orbital apex syndrome. Neigel JM, et al. **Ophthalmology** 1988 Nov; 95(11):1515–21
Compressive optic neuropathy in dysthyroid eye disease. Wong D, et al. **Yen Ko Hsueh Pao** 1986 Dec;2(4):237–9
[The effect of thyropathies on diabetes mellitus] Limanová Z, et al. **Cas Lek Cesk** 1988 Jul 8;127(28):885–8 (Eng. Abstr.) (Cze)
[Psychological disorders and thyropathies] Stárková L. **Cesk Psychiatr** 1988 Oct;84(5):317–22 (Eng. Abstr.) (Cze)
[Frequency of carcinoma in thyroid cysts] Brožková V, et al. **Vnitr Lek** 1989 Feb;35(2):151–7 (Eng. Abstr.) (Cze)
[The thyroid gland and bone and joint diseases. Pathologic associations in adults] Martin A, et al. **Rev Med Interne** 1989 Jan–Feb;10(1):49–55 (70 ref.) (Fre)
[Symptoms, which indicate thyroid disease] Hehrmann R. **Internist (Berlin)** 1988 Aug;29(8):523–8 (11 ref.) (Ger)
[Isolated thyroid gland sarcoidosis and hyperthyroidism] Langsteger W, et al. **Schweiz Med Wochenschr** 1989 Apr 29;119(17):544–8 (Eng. Abstr.) (Ger)
[Diagnosis of thyroid function in uterine myomatosis] Lange R, et al. **Zentralbl Gynakol** 1989;111(1):47–52 (Eng. Abstr.) (Ger)
[New quantitative parameters for CT evaluation of orbitopathy in dysthyroid ophthalmopathy] Baba H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar;93(3):346–50 (Eng. Abstr.) (Jpn)
[Classification of endocrine (dysthyroid) ophthalmopathies] Miroshnikova LM, et al. **Oftalmol Zh** 1988;(4):213–5 (Eng. Abstr.) (Rus)
[Thyroid pathology and the female reproductive system] Potin VV, et al. **Probl Endokrinol (Mosk)** 1989 Jan–Feb; 35(1):44–8 (Rus)

CONGENITAL

Congenital thyroid disease. Beck–Peccoz P, et al. **Baillieres Clin Endocrinol Metab** 1988 Aug;2(3):737–59 (93 ref.)

DIAGNOSIS

Fine needle aspiration of the thyroid. Distinction between colloid nodules and follicular neoplasms using cell blocks and 21–gauge needles. Kung IT, et al. **Acta Cytol** 1989 Jan–Feb;33(1):53–60
MR imaging of thyroid and parathyroid glands: a review of current status. Higgins CB, et al. **AJR** 1988 Dec; 151(6):1095–106 (78 ref.)
Tuberculous adenitis of the thyroid mimicking subacute thyroiditis. Sachs MK, et al. **Am J Med** 1988 Oct; 85(4):573–5
Serum thyrotropin and the assessment of thyroid status. Ehrmann DA, et al. **Ann Intern Med** 1989 Feb 1; 110(3):179–81 (20 ref.)
Sensitivity, specificity, and cost–effectiveness of the sensitive thyrotropin assay in the diagnosis of thyroid disease in ambulatory patients. de los Santos ET, et al. **Arch Intern Med** 1989 Mar;149(3):526–32
Thyroid nodules and thyroid cancer—diagnostic aspects. Franklyn JA, et al. **Baillieres Clin Endocrinol Metab** 1988 Aug;2(3):761–75 (48 ref.)
Screening for thyroid disease [letter] **BMJ** 1989 Feb 11; 298(6670):385–6
Screening for thyroid disease in a primary care unit with a thyroid stimulating hormone assay with a low detection limit. Eggertsen R, et al. **BMJ** 1988 Dec 17; 297(6663):1586–92
Assessment of antithyroglobulin and antimicrosomal autoantibodies in patients with autoimmune thyroid disease: comparison of haemagglutination assay, enzyme–linked immunoassay and radioligand assay. Engler H, et al. **Clin Chim Acta** 1989 Feb 22;179(3):251–63
Interpretation of thyroid function tests. Bethune JE. **Dis Mon** 1989 Aug;35(8):541–95 (49 ref.)
Evaluation of nodular thyroid disease. Gharib H, et al. **Endocrinol Metab Clin North Am** 1988 Sep;17(3):511–26 (40 ref.)
Thyroid dysfunction. Hay ID, et al. **Endocrinol Metab Clin North Am** 1988 Sep;17(3):473–509 (212 ref.)
Appearance of thyroid diseases using colour–coded duplex sonography. Fobbe F, et al. **Eur J Radiol** 1989 Feb; 9(1):29–31
Evaluation of thyroid function in the critically ill. Buran MJ, et al. **Indiana Med** 1989 Mar;82(3):182–4
A sensitive thyroid stimulating hormone assay for screening of thyroid functional disorder in elderly Japanese. Okamura K, et al. **J Am Geriatr Soc** 1989 Apr;37(4):317–22
Cancer risk in population examined with diagnostic doses of 131I. Holm LE, et al. **J Natl Cancer Inst** 1989 Feb 15; 81(4):302–6
Stay away from the recurrent laryngeals! [editorial] Bhandarkar SD. **J Postgrad Med** 1988 Jul;34(3):125–6
Sudden change in the sonographic appearance of a thyroid cyst after percutaneous aspiration. Bolondi L, et al. **JCU** 1989 Mar–Apr;17(3):213–5
Sensitive thyrotropin measurements: utility and futility [editorial] [see comments] **Lancet** 1989 May 27;1(8648):1176 . **Comment in:** Lancet 1989 Jun 17;1(8651):1396
Solitary thyroid nodule—experience in a district hospital. Thambi Dorai CR. **Med J Malaysia** 1988 Mar;43(1):55–8
High sensitivity thyrotrophin assays in patients with severe non–thyroidal illnesses: a first–line screening test. Schutte DP, et al. **Med Lab Sci** 1987 Oct;44(4):312–9
Diagnostic problems caused by spurious elevation of thyrotrophin measured by sensitive assay. Harvey RD, et al. **Neth J Med** 1989 Jun;34(5–6):302–5
Thyroid function tests. Guidelines for interpretation in common clinical disorders. de los Santos ET, et al. **Postgrad Med** 1989 Apr;85(5):333–40, 345–52 (23 ref.)
Needle aspiration for thyroid nodules. Skip ultrasound—do initial assessment in the office. Hamburger JI. **Postgrad Med** 1988 Dec;84(8):61–6
Thyroid disease in the elderly. How is it different than in other age–groups? Stoffer SS, et al. **Postgrad Med** 1988 Nov 1;84(6):133–6, 138
Thyroid function tests. Broomhead CR, et al. **Practitioner** 1987 Oct 8;231(1436):1326, 1328, 1331
A case of refetoff syndrome: selective venous sampling for TSH is useful in differentiating thyroid hormone resistance from TSH secreting tumor. Itagaki Y, et al. **Tohoku J Exp Med** 1989 Jan;157(1):69–78
[Fine–needle aspiration biopsy in the diagnosis of thyroid diseases] Krŭstev I, et al. **Vutr Boles** 1988;27(4):10–4 (Eng. Abstr.) (Bul)
[The role of thermography in the diagnosis of thyroid diseases] Xue JZ. **Chung Hua Wai Ko Tsa Chih** 1988 Sep; 26(9):539–40, 573 (Eng. Abstr.) (Chi)
[Diagnostic value of ultrasonography and aspiration cytology for thyroid nodules] Huang BY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):978–83 (Eng. Abstr.) (Chi)
[The significance of diagnostic puncture of the thyroid gland in children and adolescents] Maršálková D, et al. **Cesk Pediatr** 1988 Nov;43(11):658–60 (Eng. Abstr.) (Cze)
[Ultrasonic examination of the thyroid gland] Girl J, et al. **Cesk Radiol** 1988 Nov;42(6):402–11 (Eng. Abstr.) (Cze)
[Antibodies against thyroxine, triiodothyronine and thyroglobulin as a possible cause of error in the diagnosis of disorders of thyroid gland function] Kraft O, et al. **Vnitr Lek** 1989 Mar;35(3):303–6 (Eng. Abstr.) (Cze)
[Diagnosis and treatment of differentiated thyroid carcinoma] Schelfhout LJ, et al. **Ned Tijdschr Geneeskd** 1989 Mar 11; 133(10):494–8 (32 ref.) (Dut)
[Hot feelings about cold thyroid nodules] Wiersinga WM. **Ned Tijdschr Geneeskd** 1989 Mar 11;133(10):489–91 (Dut)
[Value of echography and fine needle biopsy for diagnosis of thyroid nodules] Jortay A, et al. **Acta Chir Belg** 1988 Sep–Oct;88(5):336–45 (Eng. Abstr.) (Fre)
[Ultra–sensitive TSH and the TRH test in the follow–up of thyroid and pituitary diseases] Mathe C, et al. **Ann Endocrinol (Paris)** 1989;50(1):73–6 (Eng. Abstr.) (Fre)
[The thyroid nodule. A retrospective study of 200 cases] Hugues FC, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(2):77–81 (Eng. Abstr.) (Fre)
[Thyroglobulin and thyroid pathology in children] Dubourg H, et al. **Ann Pediatr (Paris)** 1989 Feb;36(2):88–91 (25 ref.) (Eng. Abstr.) (Fre)
[Thyroid diagnosis in general practice] Pickardt CR. **Fortschr Med** 1989 Mar 30;107(10):29–30, 33–4 (23 ref.) (Eng. Abstr.) (Ger)
[Diagnostic strategies: determination of thyroid gland hormones in serum] Reiners C. **Internist (Berlin)** 1988 Aug; 29(8):529–32 (11 ref.) (Ger)
[The TSH, TRH test] Von zur Mühlen A, et al. **Internist (Berlin)** 1988 Aug;29(8):533–7 (14 ref.) (Ger)
[Sonography of the thyroid gland] Sciuk J, et al. **Radiologe** 1989 Mar;29(3):95–102 (38 ref.) (Eng. Abstr.) (Ger)
[The importance of quantitative grey–scale analysis of the sonogram in "diffuse" thyroid diseases] Becker W, et al. **ROFO** 1989 Jan;150(1):66–71 (Eng. Abstr.) (Ger)
[Angiodynography of circumscribed thyroid changes] Thomas C, et al. **ROFO** 1989 Jan;150(1):72–5 (Eng. Abstr.) (Ger)
[Sonography of the thyroid gland] Utech C. **Verh Dtsch Ges Inn Med** 1988;94:581–6 (5 ref.) (Ger)
[Value of determining the basal TSH level with the TSH radioimmunoassay of AdW of East Germany in the staged diagnosis of disorders of thyroid function] Stegner S, et al. **Z Arztl Fortbild (Jena)** 1989;83(10):519–22 (Ger)
[In which sonographic thyroid gland findings is scintigraphy unnecessary?] Köthe A, et al. **Z Gesamte Inn Med** 1989 Mar 1;44(5):157–8 (Eng. Abstr.) (Ger)
[Sonography of the thyroid gland in children] Klingmüller V, et al. **Z Kinderchir** 1989 Jun;44(3):135–8 (Eng. Abstr.) (Ger)
[The effectiveness of sonography in preoperative thyroid diagnosis] Strittmatter B, et al. **Zentralbl Chir** 1989; 114(9):597–602 (Eng. Abstr.) (Ger)
[Immunoradiometry of serum thyrotropin as the primary laboratory test in thyroid diseases] Földes I, et al. **Orv Hetil** 1988 Oct 9;129(41):2185–8 (Eng. Abstr.) (Hun)
[Diagnostic imaging of neck masses] Gualdi GF, et al. **Clin Ter** 1988 Jan 31;124(2):149–53 (Ita)
[Thyroid nodule: current approaches] Lombardi M, et al. **Minerva Chir** 1989 Jan 31;44(1–2):89–93 (Ita)
[Cytodiagnosis by fine–needle aspiration (FNAB) in thyroid dysplasias and neoplasms observed in 1983–1987] Gabrielli M, et al. **Minerva Med** 1989 May;80(5):435–8 (Eng. Abstr.) (Ita)
[Evaluation of fine needle aspiration cytology in the diagnosis of thyroid diseases] Konno N, et al. **Hokkaido Igaku Zasshi** 1989 Mar;64(2):186–94 (Eng. Abstr.) (Jpn)
[Triiodothyronine(T3) autoantibodies in a woman with nonthyroidal disorder: a study on preparation of serum IgG fraction employing protein A column chromatography] Mizuno E, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Aug 20;64(8):677–86 (Eng. Abstr.) (Jpn)
[Value of ultrasonic examination in the evaluation of morphological changes in the thyroid gland] Woźniak–Stolarska B, et al. **Endokrynol Pol** 1988; 39(4):197–206 (Eng. Abstr.) (Pol)
[A comparative evaluation of radionuclide and ultrasonic studies of the thyroid] Epshtein EV, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):9–13 (Eng. Abstr.) (Rus)
[Ultrasonic diagnosis of nodular lesions of the thyroid] Kasatkin IuN, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):14–9 (Eng. Abstr.) (Rus)
[Ultrasonic diagnosis of thyroid diseases] Prikhod'ko AG, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):72–4 (Rus)
[The use of function tests in the radiologic diagnosis of diseases of the thyroid gland] Slavnov VN. **Med Radiol (Mosk)** 1989 Apr;34(4):77–83 (32 ref.) (Rus)
[Standardization of diagnostic studies in thyroid diseases] Voronetskiĭ IB, et al. **Med Radiol (Mosk)** 1989 May; 34(5):16–20 (Eng. Abstr.) (Rus)
[A new method of assessing disorders of thyroid status

experimentally] Trapkova AA, et al. **Patol Fiziol Eksp Ter** 1989 Jan-Feb;(1):68-70 **(Rus)**

[The possibilities of infrared thermography in the diagnosis of thyroid pathology] Shatsova EN, et al. **Probl Endokrinol (Mosk)** 1989 Mar-Apr;35(2):34-7 (Eng. Abstr.) **(Rus)**

[The prospects for using x-ray fluorescent analysis in vivo in the diagnosis of thyroid diseases] Tomashevskiĭ IO, et al. **Probl Endokrinol (Mosk)** 1988 Nov-Dec;34(6):86-93 (79 ref.) **(Rus)**

[Thyroid function in children treated for malignant diseases] Janić D, et al. **Srp Arh Celok Lek** 1988 Apr;116(4):297-304 (Eng. Abstr.) **(Scr)**

[Cytologic diagnosis of thyroid gland disease at the Endocrinology Clinic in Novi Sad] Todorović-Dilas L, et al. **Med Pregl** 1988;41(5-6):189-92 (Eng. Abstr.) **(Scr)**

DRUG THERAPY

Evidence of hyperthyroidism in apparently euthyroid patients treated with levothyroxine. Banovac K, et al. **Arch Intern Med** 1989 Apr;149(4):809-12

The aging thyroid. The use of thyroid hormone in older persons. Sawin CT, et al. **JAMA** 1989 May 12; 261(18):2653-5

ECONOMICS

[Enhanced economies of study in thyroid diseases] Afanas'eva NI, et al. **Med Radiol (Mosk)** 1989 May; 34(5):28-32 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

[Thymidine kinase and its isozyme activities in human thyroid diseases] Murakami S. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):921-30 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Prevalence of thyroid diseases in two samples of Czech population. A preliminary study. Zamrazil V, et al. **Endocrinol Exp** 1989 Jun;23(2):97-104

High prevalence of thyroid nodule in area of radioactive fallout [letter] Nagataki S, et al. **Lancet** 1989 Aug 12; 2(8659):385-6

Familial thyrotoxic periodic paralysis [letter] Leung AK. **West J Med** 1989 Aug;151(2):209

[Thyroid gland volumes and the incidence of focal changes in euthyroid men and women in various age groups] Struve C, et al. **Dtsch Med Wochenschr** 1989 Feb 24;114(8):283-7 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Thyroid function in survivors of cancer. Abusrewil SS, et al. **Arch Dis Child** 1989 May;64(5):709-12

Thyroid dysfunction after radiotherapy and chemotherapy of brain tumours. Livesey EA, et al. **Arch Dis Child** 1989 Apr;64(4):593-5

Radiation and thyroid disease. DeGroot LJ. **Baillieres Clin Endocrinol Metab** 1988 Aug;2(3):777-91 (43 ref.)

The development of a solitary toxic thyroid nodule following Graves' disease. Ikekubo K, et al. **Clin Nucl Med** 1988 Oct; 13(10):748-50

Development of thyroid disease in patients with primary and secondary Sjögren's syndrome. Loviselli A, et al. **J Endocrinol Invest** 1988 Oct;11(9):653-6

Epstein-Barr virus infection and thyroid dysfunction [letter] Coyle PV, et al. **Lancet** 1989 Apr 22;1(8643):899

Effects of elevated gonadotropin levels on thyroid function in the male rat. Steger RW, et al. **Life Sci** 1989;45(1):85-90

Possible role of IL-1, TNF-alpha, and IL-6 in insulin-dependent diabetes mellitus and autoimmune thyroid disease. Thyroid Cell Group. Bendtzen K, et al. **Lymphokine Res** 1989 Fall;8(3):335-40 (27 ref.)

[The thyrotropin receptor and thyrotropin receptor diseases] Wang X, et al. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct; 19(4):360-3 (6 ref.) **(Chi)**

[Cervicofacial hydatidosis. Apropos of 7 cases] Ennouri A, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):169-71 (Eng. Abstr.) **(Fre)**

GENETICS

Thyroid hormone resistance in a large kindred: physiologic, biochemical, pharmacologic, and neuropsychologic studies [published erratum appears in Am J Med 1989 May;86(5):637] Smallridge RC, et al. **Am J Med** 1989 Mar; 86(3):289-96

Tight linkage between the syndrome of generalized thyroid hormone resistance and the human c-erbA beta gene. Usala SJ, et al. **Mol Endocrinol** 1988 Dec;2(12):1217-20

[Mapping of the thyroglobulin gene in high molecular weight DNA from the human thyroid in normal conditions and in thyroid pathology] Atakhanova BA, et al. **Biokhimiia** 1989 Jan;54(1):81-7 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

The expanding clinical spectrum of autoimmune thyroid disease. Fisher DA. **Acta Paediatr Jpn Overseas Ed** 1988; 30 Suppl:117-27 (50 ref.)

Analysis of TSH receptors and microsomal antigen in different human thyroid tissue specimens. Furmaniak J, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):589-600

Incidence of thyroid hormone autoantibodies in patients with thyroid diseases with respect to diagnosis, other types of autoantibodies, duration of disease and treatment. Reletková E, et al. **Endocrinol Exp** 1989 Jun;23(2):105-16

Activity of thyroid stimulating antibody and thyroid stimulation blocking antibody determined by radioiodine uptake into FRTL-5 cells. Yoshikawa N, et al. **Endocrinol Jpn** 1989 Feb;36(1):55-63

Comparison of autoantibodies level in thyroid autoimmune diseases estimated by different methods. Gardas A, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):77-84

Clinical experience with a radioreceptor assay for TSH-binding inhibiting immunoglobulins (TBII). Heberling HJ, et al. **Exp Clin Endocrinol** 1988 Aug; 91(3):355-61

Intrathyroidal cytokine production in thyroid disease. Grubeck-Loebenstein B, et al. **J Autoimmun** 1989 Jun;2 Suppl:171-6

Decreased lymphocyte function-associated antigen-1 molecule expression on peripheral blood lymphocytes from patients with Graves' disease. Guerin V, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):648-53

CA 50 and CA 19-9 antigen expression in normal, hyperplastic, and neoplastic thyroid tissue. Vierbuchen M, et al. **Lab Invest** 1989 May;60(5):726-32

Enzyme-linked immunosorbent assay of TSH receptor antibodies in thyroid diseases] Chang TC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1164-9

[Cellular immunologic parameters in thyroid diseases] Beyer PA, et al. **Acta Med Austriaca** 1989;16(1):6-7 (Eng. Abstr.) **(Ger)**

[Occurrence of thyroid anti-microsomal antibodies in thyroid diseases and in healthy persons] Lacka K, et al. **Pol Arch Med Wewn** 1985 Oct;74(4):242-9 (Eng. Abstr.) **(Pol)**

[Usefulness of the radioimmunological and immunoenzyme methods in determining the levels of thyroid anti-microsomal antibodies] Lacka K, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1308-10 (Eng. Abstr.) **(Pol)**

[Cellular immunity indices and their information value in autoimmune diseases of the thyroid (a lecture)] Lazareva SP, et al. **Probl Endokrinol (Mosk)** 1988 Jul-Aug; 34(4):49-53 **(Rus)**

[Dynamics of clinico-immunologic indices in patients with endocrine ophthalmopathy undergoing treatment with the preparation parlodel] Zinkevich IV, et al. **Probl Endokrinol (Mosk)** 1988 Nov-Dec;34(6):6-9 (Eng. Abstr.) **(Rus)**

[Characteristics of viral hepatitis A and B in adolescents with thyroid pathology] Matelko GB, et al. **Ter Arkh** 1988; 60(11):47-9 (Eng. Abstr.) **(Rus)**

[Autoimmunity in thyroid disease secondary to amiodarone: heredofamilial aspects] Olguín R, et al. **Arch Inst Cardiol Mex** 1988 May-Jun;58(3):197-202 (Eng. Abstr.) **(Spa)**

METABOLISM

An immunohistochemical study of cytokeratin and vimentin in benign and malignant thyroid lesions. Uchida H, et al. **Acta Pathol Jpn** 1989 Mar;39(3):169-75

Lectin histochemistry of the thyroid gland. González-Cámpora R, et al. **Cancer** 1988 Dec 1; 62(11):2354-62

Influence of thyroid status on the membranes of rat liver mitochondria. Unique localization of L-glycerol-3-phosphate dehydrogenase. Beleznai Z, et al. **FEBS Lett** 1989 Jan 30;243(2):247-50

"In vitro" study on release of cyclic AMP and thyroid hormone in autonomously functioning thyroid nodules. Romaldini JH, et al. **Horm Metab Res** 1988 Aug; 20(8):510-2

Epidermal growth factor receptors in plasma membranes of normal and diseased human thyroid glands. Kanamori A, et al. **J Clin Endocrinol Metab** 1989 May;68(5):899-903

Immunoreactive thyroglobulin in sera and saliva of patients with various thyroid disorders: role of autoantibodies. Van Herle AJ, et al. **J Endocrinol Invest** 1989 Mar;12(3):177-82

Kinetics of drug action in disease states. XXXIV. Effect of experimental thyroid disorders on the pharmacodynamics of phenobarbital, ethanol and pentylenetetrazol. Walker JS, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):6-10

Non-invasive evaluation of bone formation: measurements of serum alkaline phosphatase, whole body retention of diphosphonate and serum osteocalcin in metabolic bone disorders and thyroid disease. Hyldstrup L, et al. **Scand J Clin Lab Invest** 1988 Nov;48(7):611-9

Autonomously functioning thyroid nodules in childhood and adolescence [letter] Leung AK. **Surgery** 1989 Feb;105(2 Pt 1):238

[Isoforms of thyroxine-binding globulin in thyroid gland function disorders] Leopold B, et al. **Acta Med Austriaca** 1988;15 Suppl 1:18-9 **(Ger)**

MICROBIOLOGY

Abscess thyroid due to Salmonella cholerae-suis--a rare presentation of salmonellosis. Lalitha MK, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):324-6

PARASITOLOGY

[Hydatid cyst of the thyroid. Apropos of a case in the Republic of Niger] Audoin J, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):360-4 (20 ref.) (Eng. Abstr.) **(Fre)**

PATHOLOGY

Fine needle aspiration of the hot thyroid nodule. Liel Y, et al. **Acta Cytol** 1988 Nov-Dec;32(6):866-7

The clonal origin of thyroid nodules and adenomas. Thomas GA, et al. **Am J Pathol** 1989 Jan;134(1):141-7

Fat-containing lesions of the thyroid gland. Gnepp DR, et al. **Am J Surg Pathol** 1989 Jul;13(7):605-12 (28 ref.)

Intraoperative imprint cytology of the thyroid gland with computer-assisted morphometric analysis of cell clusters. Masuda T, et al. **Anal Quant Cytol Histol** 1988 Aug; 10(4):294-8

Fine-needle aspiration biopsy in the preoperative diagnosis of solitary thyroid nodules. Cristallini EG, et al. **Appl Pathol** 1989;7(3):149-53

Fine-needle aspiration biopsy of the thyroid. Diagnostic accuracy when performing a moderate number of such procedures. Dwarakanathan AA, et al. **Arch Intern Med** 1989 Sep;149(9):2007-9

Fine-needle aspiration biopsy of the thyroid nodule. Results of a start-up project in a general teaching hospital setting. Pepper GM, et al. **Arch Intern Med** 1989 Mar;149(3):594-6

Increasing the accuracy of fine-needle biopsy for thyroid nodules. Hamburger JI, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):1035-41

Thyroglobulin secretion by cultured human thyroid cells from cold nodules. Izembart M, et al. **Biomed Pharmacother** 1988;42(6):421-6

Sources of diagnostic error in fine needle aspiration of the thyroid. Hall TL, et al. **Cancer** 1989 Feb 15;63(4):718-25

Fine needle aspiration biopsy of thyroid nodules. Tsung JS. **Indiana Med** 1988 Aug;81(8):701-5

Fine needle aspiration of thyroid nodules: three years' experience. Kendall CH. **J Clin Pathol** 1989 Jan;42(1):23-7

Plasma cell granuloma of the adrenal gland and the thyroid: report of two cases. De Mascarel A, et al. **J Surg Oncol** 1989 Jun;41(2):139-42

A histopathologic study on 1,095 surgically resected thyroid specimens. Park SH, et al. **Jpn J Clin Oncol** 1988 Dec; 18(4):297-302

Tuberculosis of the thyroid gland: a case report. Cheah DS. **Med J Malaysia** 1987 Jun;42(2):127-8

Primary tissue cultures of benign and malignant human thyroid tumors: effect of TSH. Komlos L, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):10-5

Fine-needle aspiration and needle biopsy of the thyroid gland. Nunez C, et al. **Pathol Annu** 1989;24 Pt 1:161-98 (88 ref.)

[Quantitative cytology. An aid in the cytologic diagnosis of cold nodes?] Lisautaud-Roger F, et al. **Acta Otorhinolaryngol Belg** 1988;42(5):604-5 **(Fre)**

[Sonography of the neck--indications and value] Tiedjen KU, et al. HNO 1988 Jul;36(7):267-76 (Eng. Abstr.) **(Ger)**

[Sonography and controlled fine needle puncture of the thyroid gland] Pfannenstiel P. **Internist (Berlin)** 1988 Aug; 29(8):545-9 (30 ref.) **(Ger)**

[The value of computer-assisted sonographic tissue characterization in focal lesions of the thyroid] Müller MJ, et al. **Radiologe** 1989 Mar;29(3):132-6 (Eng. Abstr.) **(Ger)**

[Ultrasound-guided fine-needle puncture of the thyroid] Wiedemann W, et al. **Radiologe** 1989 Mar;29(3):109-18 (12 ref.) (Eng. Abstr.) **(Ger)**

[Study of nodular lesions of the thyroid using high-resolution echography and echo-guided biopsy] Gidaro GS. **Ann Ital Chir** 1987;59(1-6):123-6 (Eng. Abstr.) **(Ita)**

[Tuberculosis of the thyroid] Bochkovskiĭ FI, et al. **Probl Tuberk** 1988;(8):61-2 **(Rus)**

[Tumors and pseudotumors of the thyroid] Murphy E. **Rev Invest Clin** 1967 Jan-Mar;19(1):27-33 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Thyrotropin-releasing hormone (TRH), the thyroid axis, and affective disorder. Nemeroff CB, et al. **Ann N Y Acad Sci** 1989;553:304-10 (33 ref.)

Thyroid dysfunction in individuals with Down syndrome. Friedman DL, et al. **Arch Intern Med** 1989 Sep; 149(9):1990-3

Thyroid disease in pregnancy. Rodin A, et al. **Br J Hosp Med** 1989 Mar;41(3):234, 238-42 (40 ref.)

Connective tissue, glycosaminoglycans, and diseases of the thyroid. Smith TJ, et al. **Endocr Rev** 1989 Aug;10(3):366-91 (316 ref.)

Concurrent aortic and mitral valve echocardiography permits measurement of systolic time intervals as an index of peripheral tissue thyroid functional status. Tseng KH, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):633-8

Recurrence of thyroid nodules after surgical removal in patients irradiated in childhood for benign conditions. Fogelfeld L, et al. **N Engl J Med** 1989 Mar 30; 320(13):835-40

Effect of induced thyroid dysfunction upon uterine responsiveness in strips from pregnant and nonpregnant rats. Medeiros YS, et al. **Pharmacology** 1989;38(4):235-42

Autonomously functioning thyroid nodule. Sarda AK, et al. **South Med J** 1989 Feb;82(2):206–9

Human sex hormone binding globulin and sensitive thyrotropin measurements in thyroid physiopathology. Chikhaoui Y, et al. **Steroids** 1988 Oct;52(4):387–8

[The fetal thyroid gland] Pekonen F. **Duodecim** 1988; 104(17):1340–6 (25 ref.) (Fin)

[Thyroid function and cancer] Lemaire M, et al. **Ann Endocrinol (Paris)** 1989;50(1):16–25 (116 ref.) (Eng. Abstr.) (Fre)

[Various problems of thyroidology] Balabolkin MI. **Ter Arkh** 1988;60(9):136–41 (Rus)

[Changes in thyroid function expressed by the calculation of the area under TRH–TSH curve] Herrera JD, et al. **Medicina (B Aires)** 1987;47(5):464–70 (Eng. Abstr.) (Spa)

PREVENTION & CONTROL

[Monitoring of thyroid function in patients treated for cancer of the upper respiratory and digestive tract] Baril P, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(5):292–6 (Eng. Abstr.) (Fre)

[Ultrasonic examination of the thyroid gland in mass screening of the population] Tsyb AF, et al. **Sov Med** 1988; (5):77–9 (Rus)

PSYCHOLOGY

Behavioral aspects of thyroid disease in women. Reus VI. **Psychiatr Clin North Am** 1989 Mar;12(1):153–65 (121 ref.)

RADIOGRAPHY

Evaluation of thyroid calcification using computed radiography with image plate. Fukatsu H, et al. **Eur J Radiol** 1989 Feb;9(1):22–8

RADIONUCLIDE IMAGING

Management of the solitary thyroid nodule [letter; comment] Watkinson JC, et al. **J R Soc Med** 1989 Jan;82(1):59–61. **Comment on:** J R Soc Med 1988 Aug;81(8):437–8

Radionuclide thyroid studies: analysis of use and correlation with physical findings. Kiefe C, et al. **South Med J** 1989 Feb;82(2):201–5

[Scintigraphy of the thyroid gland] Emrich D. **Internist (Berlin)** 1988 Aug;29(8):541–4 (7 ref.) (Ger)

[Nuclear medicine diagnosis of the thyroid] Moser E. **Radiologe** 1989 Mar;29(3):103–8 (10 ref.) (Eng. Abstr.) (Ger)

[Changes in 99mTc uptake by the thyroid gland and serum triiodothyronine and thyrotropin concentrations following completion of alimentary iodine administration] Schröder F, et al. **Z Gesamte Inn Med** 1988 Oct 1;43(19):544–7 (Eng. Abstr.) (Ger)

[Gammagraphy of the thyroid and its clinicopathologic correlation] Gómez Vargas E, et al. **Rev Invest Clin** 1967 Apr–Jun;19(2):131–6 (Eng. Abstr.) (Spa)

RADIOTHERAPY

Recurrence of thyroid nodules after surgical removal in patients irradiated in childhood [letter] Khandekar JD, et al. **N Engl J Med** 1989 Sep 14;321(11):758

[Therapeutic strategies—nuclear medicine aspects] Schicha H. **Internist (Berlin)** 1988 Aug;29(8):577–9 (15 ref.) (Ger)

SURGERY

Modified thyroidectomy in benign thyroid diseases. Bapat RD, et al. **J Postgrad Med** 1988 Jul;34(3):127–31

Surgical therapy for thyroid carcinoma: a review of 1249 solitary thyroid nodules. Brooks JR, et al. **Surgery** 1988 Dec;104(6):940–6

[Thyroid gland operations at the smaller hospital center] Van Waesenhove P. **Acta Otorhinolaryngol Belg** 1988; 42(5):612–22 (Eng. Abstr.) (Dut)

[Identification of the recurrent laryngeal nerve in thyroid gland surgery—a status determination] Zornig C, et al. **Chirurg** 1989 Jan;60(1):44–8 (Eng. Abstr.) (Ger)

[Surgical indications and choice of surgical procedure in thyroid gland diseases] Dralle H. **Internist (Berlin)** 1988 Aug;29(8):570–6 (26 ref.) (Ger)

[Indications for and basic principles of the surgical treatment of thyroid diseases] Röher HD, et al. **Radiologe** 1989 Mar; 29(3):119–24 (31 ref.) (Eng. Abstr.) (Ger)

[Experience with the surgical therapy of thyroid diseases in childhood] Waag KL, et al. **Z Kinderchir** 1988 Aug; 43(4):232–3 (Eng. Abstr.) (Ger)

[The incidence of recurrent laryngeal nerve paralysis following thyroid surgery] Horch R, et al. **Zentralbl Chir** 1989;114(9):577–82 (Eng. Abstr.) (Ger)

[Occult cancer of the thyroid gland] Negro G, et al. **Minerva Chir** 1989 Feb 28;44(4):647–51 (Ita)

[Thyroid nodule: surgical strategy] Porzio R, et al. **Minerva Chir** 1989 Jan 31;44(1–2):87–8 (Ita)

[Diagnosis and surgical treatment of diseases of the thyroid] Zenovko GI, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):76–9 (Eng. Abstr.) (Rus)

[Surgery of the thyroid] Breido NS. **Vestn Khir** 1989 Mar; 142(3):140–4 (20 ref.) (Rus)

THERAPY

Suppressive therapy of thyroid nodules in patients with previous radiotherapy to the head and neck. Razack MS, et al. **Am J Surg** 1988 Oct;156(4):290–3

Treatment of recurrent thyroid cysts by injection of tetracycline or minocycline. Lee JK, et al. **Arch Intern Med** 1989 Mar;149(3):599–601

[Thyroid gland diseases: long-term treatment and follow-up] Ziegler R. **Internist (Berlin)** 1988 Aug;29(8):580–5 (7 ref.) (Ger)

[Proposal of a new method in the medical treatment of thyroid cysts] Grandi M, et al. **Clin Ter** 1988 Sep 15; 126(5):329–34 (Eng. Abstr.) (Ita)

[Influences from the treatment of thyroid disease and diabetes mellitus on breast cancer prognosis] Fukutomi T, et al. **Gan No Rinsho** 1989 Apr;35(5):575–9 (Eng. Abstr.) (Jpn)

URINE

Urinary iodide excretion measured with an iodide-selective ion electrode: studies on normal subjects of varying ages and patients with thyroid diseases. Yabu Y, et al. **Endocrinol Jpn** 1988 Jun;35(3):391–8

THYROID FUNCTION TESTS

Thyroid function in psychosis following childbirth. Stewart DE, et al. **Am J Psychiatry** 1988 Dec;145(12):1579–81

Analytical goals for quantities used to assess thyrometabolic status. Browning MC. **Ann Clin Biochem** 1989 Jan;26 (Pt 1):1–12 (49 ref.)

Sensitivity, specificity, and cost-effectiveness of the sensitive thyrotropin assay in the diagnosis of thyroid disease in ambulatory patients. de los Santos ET, et al. **Arch Intern Med** 1989 Mar;149(3):526–32

Assessment of thyroid function during high-dosage furosemide therapy [letter] Stockigt JR, et al. **Arch Intern Med** 1989 Apr;149(4):973

The thyroid axis and desipramine treatment in depression. Brady KT, et al. **Biol Psychiatry** 1989 Mar 15;25(6):703–9

A simplified strategy for testing thyroid function. Beaman JM, et al. **Clin Chem** 1989 May;35(5):828–30

Methadone and thyroid-function tests [letter] Novick DM, et al. **Clin Chem** 1989 Aug;35(8):1807–8

The influence of elevated environmental temperature and nutrient intake on thyroid status and hepatic enzyme activities in immature male chicks. Moss B, et al. **Comp Biochem Physiol [B]** 1978;60(2):157–61

Interpretation of thyroid function tests. Bethune JE. **Dis Mon** 1989 Aug;35(8):541–95 (49 ref.)

Thyroid function testing in clinical psychiatry. Miyawaki E, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):830–1

Thyroid function testing. McKenna TJ, et al. **Ir J Med Sci** 1988 Dec;157(12):375–6

Thyroid function tests in ageing and their relation to associated nonthyroidal disease. Blum CJ, et al. **J Endocrinol Invest** 1989 May;12(5):307–12

Hashitoxicosis and autoantibody interference with thyroid function tests. Fonseca V, et al. **J R Soc Med** 1988 Sep; 81(9):546–7

Thyroid function and therapeutic efficacy of thyroxine in depression. Okuno Y, et al. **Jpn J Psychiatry Neurol** 1988 Dec;42(4):763–70

Significance of latent hyperthyroidism. Vardarli I, et al. **Klin Wochenschr** 1989 May 15;67(10):543–50

Effect of cigarette smoking on thyroid function in depressed patients. Joffe RT, et al. **Neuropsychobiology** 1988; 20(1):12–4

Effects of illness on thyroid function tests. Felicetta JV. **Postgrad Med** 1989 Jun;85(8):213–5, 219–20

Thyroid function tests. Broomhead CR, et al. **Practitioner** 1987 Oct 8;231(1436):1326, 1328, 1331

Thyroid function in obsessive–compulsive disorder. Joffe RT, et al. **Psychiatr J Univ Ottawa** 1988 Nov;13(4):215–6

Thyroid function in patients maintained on lithium. Hatterer JA, et al. **Psychiatry Res** 1988 Dec;26(3):249–57

Thyroid function and bipolar affective disorder. Joffe RT, et al. **Psychiatry Res** 1988 Aug;25(2):117–21

[Thyroid diagnosis in general practice] Pickardt CR. **Fortschr Med** 1989 Mar 30;107(10):29–30, 33–4 (23 ref.) (Eng. Abstr.) (Ger)

[Thyroid gland diseases: long-term treatment and follow-up] Ziegler R. **Internist (Berlin)** 1988 Aug;29(8):580–5 (7 ref.) (Ger)

[Changes in thyroid function in primary degenerative dementia processes] Bilikiewicz A, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jan;41(1):25–30 (Eng. Abstr.) (Ger)

[Negative TRH test: differentiated reevaluation using sensitive TSH determination (letter)] Marko P. **Schweiz Med Wochenschr** 1988 Oct 29;118(43):1589 (Ger)

[Changed thyroid function parameters in severe extrathyroidal diseases] Herrmann F. **Z Gesamte Inn Med** 1989 Jun 15;44(12):350–4 (50 ref.) (Eng. Abstr.) (Ger)

[Diagnosis of thyroid function in uterine myomatosis] Lange R, et al. **Zentralbl Gynakol** 1989;111(1):47–52 (Eng. Abstr.) (Ger)

[Basal metabolic rate as a thyroid function test] Shishiba Y, et al. **Rinsho Byori** 1988 May;36(5):521–6 (Jpn)

[Thyroid function in children treated for malignant diseases] Janić D, et al. **Srp Arh Celok Lek** 1988 Apr;116(4):297–304 (Eng. Abstr.) (Scc)

METHODS

High sensitivity thyrotrophin assays in patients with severe non-thyroidal illnesses: a first-line screening test. Schutte DP, et al. **Med Lab Sci** 1967 Oct;44(4):312–9

Thyroid function tests. Guidelines for interpretation in common clinical disorders. de los Santos ET, et al. **Postgrad Med** 1989 Apr;85(5):333–40, 345–52 (23 ref.)

[Diagnostic strategies: determination of thyroid gland hormones in serum] Reiners C. **Internist (Berlin)** 1988 Aug; 29(8):529–32 (11 ref.) (Ger)

[Value of determining the basal TSH level with the TSH radioimmunoassay of AdW of East Germany in the staged diagnosis of disorders of thyroid function] Stegner S, et al. **Z Arztl Fortbild (Jena)** 1989;83(10):519–22 (Ger)

[The use of function tests in the radiologic diagnosis of diseases of the thyroid gland] Slavnov VN. **Med Radiol (Mosk)** 1989 Apr;34(4):77–83 (32 ref.) (Rus)

[The prospects for using x-ray fluorescent analysis in vivo in the diagnosis of thyroid diseases] Tomashevskil IO, et al. **Probl Endokrinol (Mosk)** 1988 Nov–Dec;34(6):86–93 (79 ref.) (Rus)

STANDARDS

Clinical utility and cost-effectiveness of sensitive thyrotropin assays in ambulatory and hospitalized patients. Spencer CA. **Mayo Clin Proc** 1988 Dec;63(12):1214–22 (43 ref.)

VETERINARY

Effect of thyrotropin storage on thyroid-stimulating hormone response testing in normal dogs [published erratum appears in J Vet Intern Med 1987 Jul–Sep;1(3):101] Bruyette DS, et al. **J Vet Intern Med** 1987 Apr–Jun; 1(2):91–4

THYROID GLAND

see related
STRUMA OVARII
ULTIMOBRANCHIAL BODY

Intracardiac thyroid [letter] Carson W. **Am Heart J** 1988 Dec;116(6 Pt 1):1650–1

Heterotopic thyroid tissue in the heart. Rose AG, et al. **Am J Cardiovasc Pathol** 1988;1(3):401–4

Substernal goiter versus intrathoracic aberrant thyroid: a critical difference. Hall TS, et al. **Ann Thorac Surg** 1988 Dec;46(6):684–5

Accessory thyroid tissue in the right ventricle. Doria E, et al. **Chest** 1989 Aug;96(2):424–5

Effects of rat gamma- and non-gamma-interferons on the expression of Ia antigen, growth, and differentiated functions of FRTL5 cells. Misaki T, et al. **Endocrinology** 1988 Dec;123(6):2849–57

Technique-dependent decrease in thyroid absorbed dose for dental radiography. Wood RE, et al. **Health Phys** 1989 Jun;56(6):893–901

Lingual thyroid in a young infant presenting as airway obstruction: report of a case. Maddern BR, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct;16(1):77–82

Magnetic resonance imaging for the assessment of lingual thyroid. Spinas GA, et al. **J Endocrinol Invest** 1989 Jun; 12(6):429–31

Glial teratoma thought to be a lingual thyroid. Tumushime-Buturo CG, et al. **J Laryngol Otol** 1989 Jun; 103(6):620–1

Ectopic thyroid in the retroesophageal superior mediastinum. Arriaga MA, et al. **Otolaryngol Head Neck Surg** 1988 Sep; 99(3):338–40

Thyroid inclusion in the lung. Metastasis of an occult papillary carcinoma or ectopia? Simon M, et al. **Pathol Res Pract** 1989 Feb;184(2):263–67; discussion 268–70

Magnetic resonance imaging of a lingual thyroid gland. Johnson JC, et al. **Pediatr Radiol** 1989;19(6–7):461–2

Lingual thyroid and associated epiglottitis. Baldwin RL, et al. **South Med J** 1988 Dec;81(12):1538–41 (45 ref.)

[The lingual thyroid, an unexpected and rare intubation difficulty] Lammer H, et al. **Anaesthesist** 1989 Apr; 38(4):206–7 (Eng. Abstr.) (Ger)

[Embolization of a bleeding lingual thyroid] Scherer K, et al. **ROFO** 1988 Dec;149(6):671–2 (Ger)

[Echocardiography in the diagnosis of the intracardiac mass] Alcini E, et al. **Ann Ital Chir** 1987;59(1–6):21–30 (Eng. Abstr.) (Ita)

[A case of aberrant thyroid goiter in the nasal cavity and paranasal sinuses] Boenko SK, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):72–3 (Rus)

[Rare site of a supernumerary thyroid] Tsarev NI. **Voen Med Zh** 1988 Nov;(11):60 (Rus)

ABNORMALITIES

Thyroid hemiagenesis associated with the right aortic arch. Konno N, et al. **J Endocrinol Invest** 1988 Oct;11(9):685–7

Unknown syndrome: abnormal facies, hypothyroidism, and severe retardation: a second patient. Fryns JP, et al. **J Med Genet** 1988 Jul;25(7):498–9

Maternal-fetal transfer of thyroxine in congenital hypothyroidism due to a total organification defect or

thyroid agenesis [see comments] Vulsma T, et al. **N Engl J Med** 1989 Jul 6;321(1):13–6. **Comment in: N Engl J Med 1989 Jul 6;321(1):44–6**

[Lingual goiter in a 14-year-old girl] Bętkowski A, et al. **Otolaryngol Pol** 1988;42(3):205–8 (Eng. Abstr.) **(Pol)**

[Congenital absence of the thyroid gland as a cause of Debré–Semelaigne syndrome] Kansy J, et al. **Pediatr Pol** 1974 Feb;49(2):213–6 **(Pol)**

ANALYSIS

Ultrastructural immunocytochemical studies of the localization and distribution of somatostatin, calcitonin, calcitonin gene-related peptide, and substance P in the bat thyroid follicle. Nunez EA, et al. **Anat Rec** 1988 Jul; 221(3):707–13

Distribution of calcitonin- and somatostatin-containing cells in thyroid lymphoma and in Hashimoto's thyroiditis. Baschieri L, et al. **Appl Pathol** 1989;7(2):99–104

Radioiodine in human thyroid glands and incidence of thyroid cancer in Cumbria. Bowlt C, et al. **BMJ** 1989 Jul 29;299(6694):301–2

Lectin histochemistry of the thyroid gland. González–Cámpora R, et al. **Cancer** 1988 Dec 1; 62(11):2354–62

Isolation and characterization of hagfish thyroid iodoprotein by its non-thyroglobulin nature, very high iodine and carbohydrate contents and low hormone/iodine ratio. Ohmiya Y, et al. **Eur J Biochem** 1989 Jun 1;182(1):11–8

Results of a thyroid monitoring survey carried out on workers exposed to 125I in São Paulo, Brazil. Bartolini P, et al. **Health Phys** 1988 Sep;55(3):511–5

Cesium-137 and 131I in thyroids of cattle and sheep after nuclear accidents and weapons tests. Van Middlesworth L, et al. **Health Phys** 1988 Nov;55(5):809–11

Epidermal growth factor receptors in plasma membranes of normal and diseased human thyroid glands. Kanamori A, et al. **J Clin Endocrinol Metab** 1989 May;68(5):899–903

Immunoreactive insulin-like growth factor I (IGF-I) and IGF-I-binding protein content in human thyroid tissue. Minuto F, et al. **J Clin Endocrinol Metab** 1989 Mar; 68(3):621–6

Purification of a 107 kilodalton (kDa) casein kinase G substrate from thyroid cytosol. Levasseur S, et al. **Mol Cell Biochem** 1988 Oct;83(2):157–66

A neuroendocrine peptide derived from the amino-terminal half of rat procalcitonin. Burns DM, et al. **Mol Endocrinol** 1989 Jan;3(1):140–7

Immunohistochemical demonstration of somatostatin-containing cells in the equine thyroid and parathyroid glands. Tanimura N, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):228–30

Relative concentration of astatine-211 and iodine-125 by human fetal thyroid and carcinoma of the thyroid in nude mice. Cobb LM, et al. **Radiother Oncol** 1988 Nov; 13(3):203–9

[Thyroidal 125I monitoring system using a survey meter for 125I] Nishizawa K, et al. **Radioisotopes** 1989 Apr; 38(4):203–8 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Detection of calcitonin and CGRP mRNAs in thyroid parafollicular cells using biotinylated probes. Zabel M, et al. **Acta Histochem Suppl (Jena)** 1989;37:117–21

Thyroid gland volume as measured by ultrasonography in healthy children and adolescents in a non-iodine deficient area. Ivarsson SA, et al. **Acta Paediatr Scand** 1989 Jul; 78(4):633–4

Normal thyroid size versus goiter—postmortem thyroid weight and ultrasonographic volumetry versus physical examination. Langer P. **Endocrinol Exp** 1989 Jun; 23(2):67–76

Goiter prevalence and thyroid volume by ultrasonographic volumetry in two groups of schoolchildren and adolescents from east Slovakia. Tajtáková M, et al. **Endocrinol Exp** 1989 Jun;23(2):85–96

Studies on quantitative morphology. XII. Distribution of thyroid gland compartments in an activated rabbit thyroid gland. Löw O. **Gegenbaurs Morphol Jahrb** 1988; 134(5):685–92

Functional morphology of the thyroid. Fujita H. **Int Rev Cytol** 1988;113:145–85 (170 ref.)

Ultrasonography of the thyroid during pregnancy. Brander A, et al. **JCU** 1989 Jul–Aug;17(6):403–6

[Normal values of thyroid gland volume. Ultrasound measurements in schoolchildren 7 to 20 years of age] Müller-Leisse C, et al. **Dtsch Med Wochenschr** 1988 Dec 2;113(48):1872–5 (Eng. Abstr.) **(Ger)**

[Thyroid gland volumes and the incidence of focal changes in euthyroid men and women in various age groups] Struve C, et al. **Dtsch Med Wochenschr** 1989 Feb 24;114(8):283–7 (Eng. Abstr.) **(Ger)**

[The surgical anatomy of the adjacent lamellae of the thyroid gland and the laryngeal nerves] Stelzner F. **Langenbecks Arch Chir** 1988;373(6):355–66 (28 ref.) (Eng. Abstr.) **(Ger)**

[Sonographic volume determination of the thyroid in newborn infants] Einenkel D. **Padiatr Grenzgeb** 1989; 28(2):79–83 (Eng. Abstr.) **(Ger)**

[Sonography of the thyroid gland] Sciuk J, et al. **Radiologe** 1989 Mar;29(3):95–102 (38 ref.) (Eng. Abstr.) **(Ger)**

[Surgical anatomy of the thyroid gland. Morphofunctional peculiarities and surgical pictures] Licata A, et al. **Minerva Chir** 1989 Jan 31;44(1–2):83–6 (23 ref.) **(Ita)**

[Magnetic resonance imaging of the anterior neck (normal study)—using a surface coil] Noma S, et al. **Rinsho Hoshasen** 1988 Jul;33(7):751–5 (Eng. Abstr.) **(Jpn)**

[Effect of combined oral contraceptives on the hypophyseo-thyroid and hypophyseo-adrenal systems in women with various anatomy of the thyroid gland] Zigizmund VA, et al. **Akush Ginekol (Mosk)** 1988 Nov; (11):50–3 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

On the A. thymica suprema, a provisionally named branch of the superior thyroid artery in the human. Yamasaki M. **Anat Anz** 1989;168(4):329–35

The blood vascular architecture of the rat thyroid gland: a scanning electron microscope study of corrosion casts. Murakami T, et al. **Arch Histol Cytol** 1989 Mar;52(1):15–30

Measurement of parathyrin in blood from thyroid veins: two radioimmunoassays compared in patients with primary hyperparathyroidism [published erratum appears in Clin Chem 1988 Nov;34(11):2370] Muñoz-Torres M, et al. **Clin Chem** 1988 Oct;34(10):2148–50

Increases in thyroid gland blood flow after hemithyroidectomy in the rat. Michalkiewicz M, et al. **Endocrinology** 1989 Mar;124(3):1118–23

Alterations in thyroid blood flow induced by varying levels of iodine intake in the rat. Michalkiewicz M, et al. **Endocrinology** 1989 Jul;125(1):54–60

Demonstration of interleukin-1 beta on perifollicular endothelial cells in the thyroid glands of patients with Graves' disease. Miyazaki A, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):738–44

[Angiodynography of circumscribed thyroid changes] Thomas C, et al. **ROFO** 1989 Jan;150(1):72–5 (Eng. Abstr.) **(Ger)**

[Two supplementary cases of the A. thymica suprema (Yamasaki) in human adults] Yamasaki M, et al. **Kaibogaku Zasshi** 1988 Oct;63(5):468–72 (Eng. Abstr.) **(Jpn)**

[Thyroid arteriography and phlebography] Morita Y. **Rinsho Hoshasen** 1988 Oct;33(11):1247–53 **(Jpn)**

[The microcirculatory bed of the normal rat thyroid and during hypokinesia based on scanning electron microscopy data on corrosion preparations] Polianskaia LI, et al. **Arkh Anat Gistol Embriol** 1988 Nov;95(11):51–6 (Eng. Abstr.) **(Rus)**

CYTOLOGY

The ultrastructure of the thyroid parafollicular cells of the marmot (Marmota marmota). Immunocytochemical localization of calcitonin and somatostatin. Gatti R, et al. **Acta Biomed Ateneo Parmense** 1988;59(5–6):205–22

The interdependence of the follicular, parafollicular, and mast cells in the mammalian thyroid gland: a review and a synthesis [published erratum appears in Am J Anat 1989 May;185(1):101] Kališnik M, et al. **Am J Anat** 1988 Oct; 183(2):148–57 (53 ref.)

Demonstration of sugar residues in the ultimobranchial tubule and thyroid C-cells of the rat using peroxidase labelled lectins. Moreno AM, et al. **Anat Histol Embryol** 1989 Jun; 18(2):114–21

Inter- and intracellular luminal formation in porcine thyroid tissues cultured in a collagen substrate. Yamashita K, et al. **Arch Histol Cytol** 1989 May;52(2):109–14

Mammalian calcitonin cells: retrospect and prospect. Srivastav AK, et al. **Biol Struct Morphog** 1988;1(3):117–23 (156 ref.)

Hypomethylation enhances Ia antigen expression by the FRTL5 rat thyroid cell line. Weetman AP. **Cell Biol Int Rep** 1988 Oct;12(10):919–24

The regulation and integration of thyroid follicular differentiation and function. Bidey SP, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):423–44 (88 ref.)

Enhanced induction of thyroid cell MHC class II antigen expression in rats highly responsive to thyroglobulin. Lahat N, et al. **Endocrinology** 1989 Apr;124(4):1754–9

Extracellular adenosine triphosphate completely reverses the thyrotropin-induced morphological change in FRTL-5 cells. Nazarea M, et al. **Endocrinology** 1989 Jul;125(1):100–8

Iodine inhibits the proliferation of rat thyroid cells in culture. Tramontano D, et al. **Endocrinology** 1989 Aug; 125(2):984–92

Influence of cytokines on growth and differentiated function of FRTL5 cells. Zakarija M, et al. **Endocrinology** 1989 Sep; 125(3):1260–5

Pairs of cyclic AMP analogs, that are specifically synergistic for type I and type II cAMP-dependent protein kinases, mimic thyrotropin effects on the function, differentiation expression and mitogenesis of dog thyroid cells. Van Sande J, et al. **Eur J Biochem** 1989 Aug 15;183(3):699–708

Effects of tunicamycin and N-linked oligosaccharide-processing inhibitors on the morphology of cultured porcine thyroid cells. Giraud A, et al. **Eur J Cell Biol** 1989 Feb;48(1):128–34

Epithelial cell polarization in culture: orientation of cell polarity and expression of specific functions, studied with cultured thyroid cells. Mauchamp J, et al. **J Cell Sci Suppl** 1987;8:345–58 (44 ref.)

Forskolin-induced elevation of cyclic AMP does not cause exocytosis and endocytosis in rat thyroid follicle cells in vivo. Johanson V, et al. **Mol Cell Endocrinol** 1988 Sep; 59(1–2):27–34

Calf serum modifies the mitogenic activity of epidermal growth factor in WRT thyroid cells. Rotella CM, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):63–74

Preferential formation of triiodothyronine residues in newly synthesized [14C]tyrosine-labeled thyroglobulin molecules in follicles reconstructed in a suspension culture of hog thyroid cells. Sho K, et al. **Mol Cell Endocrinol** 1988 Sep; 59(1–2):117–24

The thyroid cell monolayer in culture. A tight sodium absorbing epithelium. Penel C, et al. **Pflugers Arch** 1989 Sep;414(5):509–15

Activation of the beta 2-adrenergic receptor promotes growth and differentiation in thyroid cells. Hen R, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4785–8

Proton pumps and chloride channels in secretory vesicles. al-Awqati Q, et al. **Soc Gen Physiol Ser** 1989;44:283–94

[Floating cultures obtained from the thyroid of human fetuses] Blomkin VN, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):600–2 (Eng. Abstr.) **(Rus)**

[Characteristics of thyrocyte multiplication in proliferating thyroid epithelium] Aleshin BV, et al. **Probl Endokrinol (Mosk)** 1988 Jul–Aug;34(4):60–4 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Inhibition of thyrotropin-stimulated adenylate cyclase activation and growth of rat thyroid cells, FRTL-5, by immunoglobulin G from patients with primary myxedema: comparison with activities of thyrotropin-binding inhibitor immunoglobulins. Cho BY, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):99–106

Chronic alcohol ingestion decreases pituitary-thyroid axis measures in Fischer-344 rats. Mason GA, et al. **Alcoholism (NY)** 1988 Dec;12(6):731–4

Interleukin-1 affects the function of cultured human thyroid cells. Krogh Rasmussen A, et al. **Allergy** 1988 Aug; 43(6):435–41

Minocycline-related black thyroid. Hanzlick R, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):200–2

Effects of phenobarbital on hypothalamic-pituitary-thyroid axis in the rat. Theodoropoulos TJ, et al. **Am J Med Sci** 1989 Apr;297(4):224–7

Inhibitory action of transforming growth factor beta on thyroid cells. Colletta G, et al. **Ann N Y Acad Sci** 1988; 551:372–3

Some effects of various dietary carbohydrates on thyroid activity in the rat. Macdonald I. **Ann Nutr Metab** 1989; 33(1):15–21

Treatment of amiodarone induced hyperthyroidism with potassium perchlorate and methimazole during amiodarone treatment. Reichert LJ, et al. **BMJ** 1989 Jun 10; 298(6687):1547–8

Short-term effects of butylated hydroxytoluene on the Wistar rat liver, urinary bladder and thyroid gland. Briggs D, et al. **Cancer Lett** 1989 Jul 1;46(1):31–6

Dual effect of transforming growth factor beta on rat thyroid cells: inhibition of thyrotropin-induced proliferation and reduction of thyroid-specific differentiation markers. Colletta G, et al. **Cancer Res** 1989 Jul 1;49(13):3457–62

Abnormalities in thyroid function associated with chronic therapy with methadone. English TN, et al. **Clin Chem** 1988 Nov;34(11):2202–4

Effects of low dose oral iodide supplementation on thyroid function in normal men. Gardner DF, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):283–8

Use of povidone-iodine in umbilical cord care [letter] Newman NM. **Clin Pediatr (Phila)** 1989 Jan;28(1):37

The influence of methimazole on the thyrotrophic and peripheral activity of thyrotrophin and thyrotrophin-releasing hormone in the chick embryo and growing chicken. Iqbal A, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):291–8

Toxic effects of mercurials on thyroid function of the catfish, Clarias batrachus (L.). Kirubagaran R, et al. **Ecotoxicol Environ Safety** 1989 Jun;17(3):265–71

Cythion-induced histophysiological changes in thyroid and thyrotrophs of the teleost fish, Channa punctatus (Bloch). Ram RN, et al. **Ecotoxicol Environ Safety** 1989 Jun; 17(3):272–8

The effect of melatonin and N-acetylserotonin on mitotic activity of thyroid gland and adrenal cortex in the rat. Sewerynek E, et al. **Endokrynol Pol** 1988;39(5):269–75

Evaluation of thyroid gland activity by hormone assays and flow cytometry in rats. Zbinden G. **Exp Cell Biol** 1988; 56(4):196–200

Effect of simultaneously administered iopanoic acid and thyrotropin releasing hormone (TRH) on thyroid hormone metabolism in euthyroid subjects. Szabolcs I, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):365–8

No effect of ketoconazole on thyroid function of normal subjects and hypothyroid patients. De Pedrini P, et al. **Int J Clin Pharmacol Res** 1988;8(6):485–8

No effect of ketoconazole on thyroid function of normals and thyrotoxic patients. De Pedrini P, et al. **Int J Tissue React** 1988;10(3):189–92

Effects of iodinated glycerol on thyroid function studies in elderly nursing home residents. Drinka PJ, et al. **J Am Geriatr Soc** 1988 Oct;36(10):911–3

Influence of tumor necrosis factor-alpha on the modulation by interferon-gamma of HLA class II molecules in human thyroid cells and its effect on interferon-gamma binding. Buscema M, et al. **J Clin Endocrinol Metab** 1989 Aug; 69(2):433–9

Antithyroid and goitrogenic effects of millet: role of C-glycosylflavones. Gaitan E, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):707–14

The acute effects of human growth hormone administration on thyroid function in normal men. Grunfeld C, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):1111–4

Rapid proliferative response of rat thyroid gland to a single injection of TSH in vivo. Bybee A, et al. **J Endocrinol** 1989 Apr;121(1):27–30

Effects of protein kinase C activators on the in-vitro action of thyrotrophin in pigs. Ginsberg J, et al. **J Endocrinol** 1988 Aug;118(2):199–203

Sensitization and desensitization of human thyroid cells in culture: effects of thyrotrophin and thyroid-stimulating immunoglobulin. Krsiem Z, et al. **J Endocrinol** 1988 Nov; 119(2):341–9

Dose effect relationship for some specific effects of dithiocarbamates. Kaloyanova F, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):11–7

Effect of aminophylline injection on the pituitary-thyroid axis in asthmatics. Hikita T, et al. **Jpn J Med** 1989 May–Jun; 28(3):303–8

Paradoxically subnormal serum T4 and T3 in dogs after prolonged excessive TSH stimulation of the thyroid caused by post-cAMP refractoriness of thyroid hormone secretion. Laurberg P. **Metabolism** 1989 Mar;38(3):265–70

TSH stimulates the activity of the c-fos promoter in FRTL5 rat thyroid cells. Damante G, et al. **Mol Cell Endocrinol** 1988 Aug;58(2–3):279–82

Effects of gamma-interferon and tumor necrosis factor alpha on thyroid cells: induction of class II antigen and inhibition of growth stimulation. Zakarija M, et al. **Mol Cell Endocrinol** 1988 Aug;58(2–3):129–36

1,25-Dihydroxyvitamin D3 silences 3',5'-cyclic adenosine monophosphate enhancement of somatostatin gene transcription in human thyroid C cells. Rogers DG, et al. **Mol Endocrinol** 1989 Mar;3(3):547–51

Suppressing effect of cysteamine on the TSH-stimulated mitotic activity of the rat thyroid follicular cells in vivo. Zerek-Melen G, et al. **Neuropeptides** 1989 Apr;13(3):171–4

Thyroid stimulatory action of (Z)-guggulsterone: mechanism of action. Tripathi YB, et al. **Planta Med** 1988 Aug; 54(4):271–7

Amiodarone and thyroid function. Nademanee K, et al. **Prog Cardiovasc Dis** 1989 May–Jun;31(6):427–37 (75 ref.)

Toxicology of fungicides: effects of 270 days administration of zinc ethylene-bis-dithiocarbamate in Friesian cattle. Gennaro Soffietti M, et al. **Schweiz Arch Tierheilkd** 1988 Dec;130(12):657–72

Evaluation of the hypothalamic-hypophysial, thyroid, and gonadal axes before and after disulfiram administration in patients with chronic alcoholism. Ramirez G, et al. **South Med J** 1988 Nov;81(11):1407–11

Stimulatory effect of vasoactive intestinal polypeptide on human normal and neoplastic thyroid tissue. Siperstein AE, et al. **Surgery** 1988 Dec;104(6):985–91

The effect of phenobarbital on the metabolism and excretion of thyroxine in rats. McClain RM, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):216–28

Thyroid and liver trophic changes in rats secondary to liver microsomal enzyme induction caused by an experimental leukotriene antagonist (L-649,923). Sanders JE, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):378–87

The effects of xenobiotics on the structure and function of thyroid follicular and C-cells. Capen CC, et al. **Toxicol Pathol** 1989;17(2):266–93 (68 ref.)

Some endocrine and morphological aspects of the acute toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Gorski JR, et al. **Toxicol Pathol** 1988;16(3):313–20

[Effect of the combined prenatal use of benzodiazepine preparations and alcohol on the functions of the hypophyseal-thyroid system in newborn rat pups] Boiadzhieva N, et al. **Eksp Med Morfol** 1988;27(2):28–31 (Eng. Abstr.) **(Bul)**

[Effect of the combined use of alcohol and dopaminergic agents during pregnancy on the function of the hypophyseo-thyroid system in the progeny of rats] Boiadzhieva N. **Eksp Med Morfol** 1988;27(4):31–4 (Eng. Abstr.) **(Bul)**

[Study of the long-term effects of amiodarone on thyroid function using ultrasensitive TSH measurements. Preliminary report] Vogt T, et al. **Schweiz Med Wochenschr** 1988 Dec 17;118(50):1909–11 (Eng. Abstr.) **(Ger)**

[Drugs and the thyroid gland] Cramarossa L, et al. **Clin Ter** 1987 Nov 30;123(4):287–96 (66 ref.) (Eng. Abstr.) **(Ita)**

[Amiodarone and thyroid function] De Rosa G, et al. **Clin Ter** 1987 Nov 15;123(3):205–13 (38 ref.) (Eng. Abstr.) **(Ita)**

[Transitory efficacy of potassium perchlorate in hypothyroidism caused by amiodarone] Foresti V, et al. **Recenti Prog Med** 1989 Apr;80(4):201–3 (Eng. Abstr.) **(Ita)**

[Effect of combined oral contraceptives on the hypophyseo-thyroid and hypophyseo-adrenal systems in women with various anatomy of the thyroid gland] Zigizmund VA, et al. **Akush Ginekol (Mosk)** 1988 Nov; (11):50–3 (Eng. Abstr.) **(Rus)**

[Effect of aroclor 1254 on morphochemical parameters of various organs in experimental studies] Seffner V, et al. **Gig Sanit** 1989 Mar;(3):71–4 **(Rus)**

[Study of the combined effect of carbon monoxide, nitrogen dioxide and hydrocarbons on the body of the rat] Vyskochil A, et al. **Gig Sanit** 1989 Mar;(3):69–71 **(Rus)**

[Features of the response of the rat thyroid gland to melatonin in pinealectomized rats] Shchervakova VS, et al. **Probl Endokrinol (Mosk)** 1988 Sep–Oct;34(5):75–8 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Cytoskeleton and thyroglobulin expression change during transformation of thyroid epithelium to mesenchyme-like cells. Greenburg G, et al. **Development** 1988 Mar; 102(3):605–22

Effect of maternal alcohol consumption on the fetal thyroid in the rat. Yamamoto M, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):382–6

[The fetal thyroid gland] Pekonen F. **Duodecim** 1988; 104(17):1340–6 (25 ref.) **(Fin)**

ENZYMOLOGY

Evidence for the presence of a very high concentration of arylsulfatase A in the pig thyroid: identification of arylsulfatase A subunits as the two major glycoproteins in purified thyroid lysosomes. Selmi S, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):170–9

Protein kinase C activities are increased in rat thyroid epithelial cells expressing v-ras genes. Spina A, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1093–103

Thyroid peroxidase activity in human nodular goiters. Moura EG, et al. **Braz J Med Biol Res** 1989;22(1):31–9

Insulin-like growth factor-I potentiates thyrotropin stimulation of adenylyl cyclase in FRTL-5 cells. Brenner-Gati L, et al. **Endocrinology** 1989 Sep; 125(3):1315–20

Thyrotropin regulation of thyroid peroxidase messenger ribonucleic acid levels in cultured rat thyroid cells: evidence for the involvement of a nontranscriptional mechanism. Damante G, et al. **Endocrinology** 1989 Jun; 124(6):2889–94

Aging alters the activity of 5'-deiodinase in the adenohypophysis, thyroid gland, and liver of the male rat. Donda A, et al. **Endocrinology** 1989 Mar;124(3):1305–9

Acute stimulation of thyroidal NAD+ kinase, NADPH reoxidation, and peroxidase activities by physiological concentrations of thyroid stimulating hormone acting in vitro: a quantitative cytochemical study. Perrild H, et al. **Endocrinology** 1988 Nov;123(5):2499–505

A reexamination of the proposed inactivation of thyroid peroxidase in the rat thyroid by propylthiouracil. Taurog A, et al. **Endocrinology** 1989 Jun;124(6):3038–42

Production of urokinase-type plasminogen activator by normal and transformed rat thyroid cells in culture. Cassano S, et al. **Exp Cell Res** 1989 May;182(1):197–205

Reduced acid protease activity in vitro of lysosomes from thyroid gland of rats chronically treated with propylthiouracil and perchlorate. Sinadinović J, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):97–105

cDNA-directed expression of human thyroid peroxidase. Kimura S, et al. **FEBS Lett** 1989 Jul 3;250(2):377–80

Effect of phospholipids on thyroid oligosaccharyltransferase activity and orientation. Evaluation of structural determinants for stimulation of N-glycosylation. Chalifour RJ, et al. **J Biol Chem** 1988 Oct 25;263(30):15673–80

Characterization of a thyroid sulfotransferase responsible for the 3-O-sulfation of terminal beta-D-galactosyl residues in N-linked carbohydrate units. Kato Y, et al. **J Biol Chem** 1989 Feb 25;264(6):3364–71

Interferon-gamma inhibits thyrotropin-induced thyroidal peroxidase gene expression in cultured human thyrocytes. Ashizawa K, et al. **J Clin Endocrinol Metab** 1989 Aug; 69(2):475–7

Regulation of thyroid peroxidase and thyroglobulin gene expression by thyrotropin in cultured human thyroid cells. Nagayama Y, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1155–9

Thyroid peroxidase activity-inhibiting immunoglobulins in patients with autoimmune thyroid disease. Okamoto Y, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):730–4

Generation of recombinant, enzymatically active human thyroid peroxidase and its recognition by antibodies in the sera of patients with Hashimoto's thyroiditis. Kaufman KD, et al. **J Clin Invest** 1989 Aug;84(2):394–403

Hormonal regulation of DNA polymerase-beta activity in the rat thyroid gland. Nagasaka A, et al. **J Endocrinol** 1988 Nov;119(2):303–8

Differential effects of methylmercuric chloride and mercuric chloride on the histochemistry of rat thyroid peroxidase and the thyroid peroxidase activity of isolated pig thyroid cells. Nishida M, et al. **J Histochem Cytochem** 1989 May; 37(5):723–7

Activation of the thyroid peroxidase gene in human thyroid cells: effect of thyrotrophin, forskolin and phorbol ester. Collison KS, et al. **J Mol Endocrinol** 1989 Jul;3(1):1–5

Thyrotrophin, forskolin and ionomycin increase cathepsin B mRNA concentrations in rat thyroid cells in culture. Phillips ID, et al. **J Mol Endocrinol** 1989 May;2(3):207–12

Flavonoid modulation of protein kinase C activation. Picq M, et al. **Life Sci** 1989;44(21):1563–71

DNA polymerase beta in human thyroid of Graves' disease and thyroid tumors. Nagasaka A, et al. **Metabolism** 1988 Nov;37(11):1051–4

Thyrotropin but not epidermal growth factor down-regulates the isozyme I (PKa I) of cyclic AMP-dependent protein kinases in dog thyroid cells in primary cultures. Breton MF, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):49–55

Acute in vitro thyrotropin regulation of lysosomal enzyme activity in the thyroid follicular cell. Perrild H, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):75–80

Thyrotropin increases malic enzyme messenger ribonucleic acid levels in rat FRTL-5 thyroid cells. Kohn AD, et al. **Mol Endocrinol** 1989 Mar;3(3):532–8

Biosynthesis of peptide neurotransmitters: studies on the formation of peptide amides. Bradbury AF, et al. **Physiol Bohemoslov** 1988;37(3):267–74

[Characterization of human thyroid adenyl cyclase] Jap TS, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Aug;40(2):201–10 (Eng. Abstr.) **(Chi)**

[Effects of thyroid-stimulating hormone on adenylate cyclase of well differentiated human carcinoma and adjacent normal tissues] Jap TS, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;42(4):241–8 (Eng. Abstr.) **(Chi)**

[Use of affinity chromatography for purification of adenosine deaminase from the thyroid gland of swine] Jaroszewicz L, et al. **Rocz Akad Med Bialymstoku** 1984–85;29–30:9–20 (Eng. Abstr.) **(Pol)**

GROWTH & DEVELOPMENT

Tissue-specific expression of the mammalian bombesin gene. Sunday ME. **Ann N Y Acad Sci** 1988;547:95–113

Effects of aging on the pituitary-thyroid axis in the dog. Gonzalez E, et al. **Exp Gerontol** 1988;23(3):151–60

[Dynamics of postnatal histogenesis of the thyroid in normal rats and after sympathectomy] Riashchikov SN, et al. **Ontogenez** 1988 May–Jun;19(3):258–63 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Antithyroid antibodies during amiodarone treatment. Foresti V, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):203–6

The effects of cytokines, antithyroidal drugs and glucocorticoids on phagocytosis by thyroid cells. Matsunaga M, et al. **Acta Endocrinol (Copenh)** 1988 Nov; 119(3):413–9

Thyroid autoantibodies in thyroid cancer: incidence and relationship with tumour outcome. Pacini F, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):373–80

Clinical applications of measuring thyroid receptor antibodies, thyroid-stimulating and thyroid stimulation-blocking antibodies. Sasaki N, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:133–8

Effective method for prediction of transient hypothyroidism in neonates born to mothers with chronic thyroiditis. Tamaki H, et al. **Am J Perinatol** 1989 Jul;6(3):296–303

Thyroid autoantigens and their relevance in the pathogenesis of thyroid autoimmunity. Pinchera A, et al. **Biochimie** 1989 Feb;71(2):237–45

Amiodarone and thyroid immunity [letter] Kennedy RL, et al. **BMJ** 1988 Sep 3;297(6648):621–2

Autoimmune thyroid disease and thyroid autoantibodies in rheumatoid arthritis patients and their families. Silman AJ, et al. **Br J Rheumatol** 1989 Feb;28(1):18–21

Thyroid autoantibodies in healthy Venezuelans. Sánchez-Borges M, et al. **Bull Pan Am Health Organ** 1988; 22(2):167–74

TSH binding-inhibiting antibodies in hyperthyroidism: relationship to clinical signs and hormone levels. Benker G, et al. **Clin Endocrinol (Oxf)** 1989 Jan;30(1):19–28

Analysis of TSH receptors and microsomal antigen in different human thyroid tissue specimens. Furmaniak J, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):589–600

Development of hyperthyroidism following primary hypothyroidism: a case report with changes in thyroid-related antibodies. Takeda K, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):341–4

The expression of the microsomal/peroxidase autoantigen in human thyroid cells is thyrotrophin-dependent. Chiovato L, et al. **Clin Exp Immunol** 1989 Apr;76(1):47–53

Immunological events leading to destructive thyroiditis in the AUG rat. Hassman R, et al. **Clin Exp Immunol** 1988 Sep;73(3):410–6

Cytotoxic activity of interleukin-2 (IL-2) activated killer cells toward thyroid epithelial cells. Migita K, et al. **Clin Exp Immunol** 1989 Aug;77(2):196–201

The goitre of the BB/O rat: an animal-model for studying the role of immunoglobulins stimulating growth of thyroid cells. Voorby HA, et al. **Clin Exp Immunol** 1989 May; 76(2):290–5

Absence of gradient of thyrotropin receptor antibody and T cell subset distribution between thyroid and peripheral venous blood in patients with Graves' disease prepared for surgery with carbimazole and potassium iodide. Wilson R, et al. **Clin Exp Immunol** 1988 Aug;73(2):265–8

Intrathyroidal HLA-DR-positive lymphocytes in Hashimoto's disease: increases in CD8 and Leu7 cells. Aozasa M, et al. **Clin Immunol Immunopathol** 1989 Sep;

52(3):516–22
Autologous CD8-positive cells suppress T cell proliferation in response to thyroid antigens in Hashimoto's thyroiditis. Weetman AP. **Clin Immunol Immunopathol** 1989 May; 51(2):303–10
Effect of HLA-DR positive thyrocytes on in vitro thyroid autoantibody production. Iwatani Y, et al. **Clin Invest Med** 1988 Aug;11(4):279–85
Thyroid antigen-mediated glomerulonephritis in Graves' disease. Sato Y, et al. **Clin Nephrol** 1989 Jan;31(1):49–52
Reovirus induction of MHC class II antigen in rat thyroid cells. Neufeld DS, et al. **Endocrinology** 1989 Jan; 124(1):543–5
Interception of the development of self tolerance in fetal lambs. McCullagh P. **Eur J Immunol** 1989 Aug; 19(8):1387–92
Clinical experience with a radioreceptor assay for TSH-binding inhibiting immunoglobulins (TBII). Heberling HJ, et al. **Exp Clin Endocrinol** 1988 Aug; 91(3):355–61
Autoantibodies to adrenal medullary and thyroid calcitonin cells in type I diabetes mellitus—a prospective study. Scherbaum WA, et al. **J Autoimmun** 1988 Jun;1(3):219–30
Cloning and characterization of a cDNA that encodes a 70-kDa novel human thyroid autoantigen. Chan JY, et al. **J Biol Chem** 1989 Mar 5;264(7):3651–4
Ectopic expression of HLA class II antigens on thyroid follicular cells: induction and transfer in vitro by autologous mononuclear leukocytes. Khoury EL, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):992–1004
Phenotypic analyses and concanavalin-A-induced suppressor cell dysfunction of intrathyroidal lymphocytes from patients with Graves' disease. Ueki Y, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):1018–24
Expression of an intercellular adhesion molecule, ICAM-1, by human thyroid cells. Weetman AP, et al. **J Endocrinol** 1989 Jul;122(1):185–91
Cross-reaction of eye muscle antibodies with thyroid tissue in thyroid-associated ophthalmopathy. Weightman D, et al. **J Endocrinol** 1989 Jul;122(1):201–6
The effect of sulphydryl reagents on the human thyroid microsomal antigen. Gardas A, et al. **J Endocrinol Invest** 1988 May;11(5):385–8
Blotting method using nitrocellulose sheets for immunohistochemical detection of soluble thyroid antigens. Endo T, et al. **J Histochem Cytochem** 1989 Apr;37(4):547–9
Increment in the Ta1+ cells in the peripheral blood and thyroid tissue of patients with Graves' disease. Eguchi K, et al. **J Immunol** 1989 Jun 15;142(12):4233–40
Immune induction of major histocompatibility complex antigens on a human thyroid cell line (SGHTL-34). King SL, et al. **J Mol Endocrinol** 1989 May;2(3):183–7
CA 50 and CA 19-9 antigen expression in normal, hyperplastic, and neoplastic thyroid tissue. Vierbuchen M, et al. **Lab Invest** 1989 May;60(5):726–32
Thyroid-stimulating antibodies of Graves' disease in thyroid cancer [letter] Röher HD, et al. **N Engl J Med** 1988 Dec 22;319(25):1669–70
Maternal serum thyroid antibodies in early pregnancy and fetal Down's syndrome. Cuckle H, et al. **Prenat Diagn** 1988 Jul;8(6):439–45
Autoantibodies in feline hyperthyroidism. Kennedy RL, et al. **Res Vet Sci** 1988 Nov;45(3):300–6
Affinity purification of IgG subclasses and the distribution of thyroid auto-antibody reactivity in Hashimoto's thyroiditis. Weetman AP, et al. **Scand J Immunol** 1989 Jul; 30(1):73–82
Clinical significance of mildly elevated thyrotropin levels with normal thyroxine levels. Brown CA, et al. **South Med J** 1989 Jun;82(6):681–5
Expression of Ia antigens on freshly dissociated mouse thyroid follicles demonstrated by immunofluorescence. Boudier JA, et al. **Tissue Antigens** 1988 Jul;32(1):24–31
The distribution and differential expression of MHC class II antigens (HLA-DR, DP, and DQ) in human fetal adrenal, pancreas, thyroid, and gut. Oliver AM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):651–2
[Correlation between thyroid hypofunction and the presence of circulating antithyroid microsomal antibodies. A phenomenon in the aged, prevalent in women] Custro N, et al. **G Clin Med** 1989 Jan;70(1):27–31 (Eng. Abstr.) **(Ita)**
[Thyroid hormone anomalies in patients with insulin-dependent diabetes mellitus and circulating antithyroid microsomal antibodies] Custro N, et al. **Minerva Med** 1989 May;80(5):427–30 (Eng. Abstr.) **(Ita)**
[Measurement of thyroid growth stimulating and inhibiting autoantibodies: examination using FRTL-5 cells] Tetsumoto T, et al. **Rinsho Byori** 1988 Nov;36(11):1317–22 **(Jpn)**
[Occurrence of thyroid anti-microsomal antibodies in thyroid diseases and in healthy persons] Lacka K, et al. **Pol Arch Med Wewn** 1985 Oct;74(4):242–9 (Eng. Abstr.) **(Pol)**
[Usefulness of the radioimmunological and immunoenzyme methods in determining the levels of thyroid anti-microsomal antibodies] Lacka K, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1308–10 (Eng. Abstr.) **(Pol)**
[The thyroid gland and the immune system] Chudner VZ, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan; (1):86–90 (44 ref.) **(Rus)**

INNERVATION

Innervation of the thyroid. A study of the rat using retrograde tracing and immunocytochemistry. Sundler F, et al. **Acta Histochem Suppl (Jena)** 1989;37:191–8
Neuropeptide Y and vasoactive intestinal peptide coexist in rat thyroid nerve fibers emanating from the thyroid ganglion. Grunditz T, et al. **Regul Pept** 1988 Nov; 23(2):193–208

METABOLISM

Electron-immunocytochemical localization of calcitonin and calcitonin-gene-related peptide in human c cells of the thyroid. Kakudo K, et al. **Acta Anat (Basel)** 1989; 135(1):17–21
Radioactive iodine thyroid uptake in patients with amiodarone-iodine-induced thyroid dysfunction. Martino E, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):167–73
Pituitary-thyroid interaction: effects of thyroid hormone, non thyroidal illness and various agents on TSH secretion. Vagenakis AG. **Acta Med Austriaca** 1988;15 Suppl 1:52–6 (28 ref.)
Induction of peroxidase and thyroglobulin by TSH in cultured thyroid cells from patients with Basedow's disease and its inhibition by actinomycin D. Yamashita H, et al. **Acta Pathol Jpn** 1989 Feb;39(2):121–6
Thyrotropin modulates receptors for atrial natriuretic peptide on intact human thyroid cells. Tseng YC, et al. **Am J Med Sci** 1989 Jul;298(1):15–9
Intrathyroidal dendritic cells, epitheloid cells, and giant cells in iodine deficient goiter. Wilders-Truschnig MM, et al. **Am J Pathol** 1989 Jul;135(1):219–25
The A1 adenosine receptor antagonist 1,3, dipropyl-8-cyclopentylxanthine (DPCPX) displays adenosine agonist properties in the FRTL5 thyroid cell line. Frauman AG, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):355–62
Identification of two subpopulations of thyroid lysosomes: relation to the thyroglobulin proteolytic pathway. Selmi S, et al. **Biochem J** 1988 Jul 15;253(2):523–32
Cytoplasmic pH in cultured porcine thyroid cells: alkalinization by epidermal growth factor. Takasu N, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):117–20
Regulation of thyroperoxidase, thyroglobulin and iodide levels in sheep thyroid cells by TSH, tumor promoters and epidermal growth factor. Pratt MA, et al. **Biochimie** 1989 Feb;71(2):227–35
Subcellular localization of iodinated thyroid tubulin. Hargreaves AJ, et al. **Biosci Rep** 1989 Jun;9(3):375–82
Estrogen increases c-myc RNA in human thyroids. Hanau S, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):791–4
Monoamine oxidase activity and triiodothyronine biosynthesis in human cultured thyroid cells. Kraiem Z, et al. **Br J Pharmacol** 1989 Feb;96(2):465–9
Lack of correlation between peroxidase activity and iodothyronine levels in human and murine thyroid tissues. Rosenthal D, et al. **Braz J Med Biol Res** 1988;21(1):123–7
Variations in immunocytochemical localization of cathepsin B and thyroxine in follicular cells of the rat thyroid gland and plasma TSH concentrations over 24 hours. Uchiyama Y, et al. **Cell Tissue Res** 1989;256(2):355–60
Cloning and sequencing of a calcium-binding protein regulated by cyclic AMP in the thyroid. Leiort A, et al. **EMBO J** 1989 Jan;8(1):111–6
Effects of low dose L-triiodothyronine administration on mental, behavioural and thyroid states in elderly subjects. Mori T, et al. **Endocrinol Jpn** 1988 Aug;35(4):585–92
The binding characteristics and biological effects in FRTL5 cells of placental protein-12, an insulin-like growth factor-binding protein purified from human amniotic fluid. Frauman AG, et al. **Endocrinology** 1989 May; 124(5):2289–96
Islet cell-activating protein reverses anti-fucosyl GM1 ganglioside antibody-induced inhibition of adenosine 3',5'-monophosphate production in FRTL-5 rat thyroid cells. Kosugi S, et al. **Endocrinology** 1989 Mar; 124(3):1230–4
Alpha 2- and beta-adrenergic receptors and adenosine A1 receptor of FRTL-5 rat thyroid cells in relation to fucosyl GM1 ganglioside. Kosugi S, et al. **Endocrinology** 1989 Jun; 124(6):2707–10
Metabolism of 35S- and 14C-labeled 1-methyl-2-mercaptoimidazole in vitro and in vivo. Taurog A, et al. **Endocrinology** 1989 Jan;124(1):30–9
Effect of iodide on glucose oxidation and 32P incorporation into phospholipids stimulated by different agents in dog thyroid slices. Tseng FY, et al. **Endocrinology** 1989 Mar; 124(3):1450–5
Variations in the culture medium for FRTL5 cells: effects on growth and iodide uptake. Zakarija M, et al. **Endocrinology** 1989 Sep;125(3):1253–9
Thyroid-specific and cAMP-dependent hypersensitive regions in thyroglobulin gene chromatin. Hansen C, et al. **Eur J Biochem** 1988 Dec 15;178(2):387–93
Identification and properties of a novel type of Na+-permeable amiloride-sensitive channel in thyroid cells. Verrier B, et al. **Eur J Biochem** 1989 Aug 15; 183(3):499–505
Mannose 6-phosphate receptor in porcine thyroid follicle cells. Localization and possible implications for the intracellular transport of thyroglobulin. Scheel G, et al. **Eur J Cell Biol** 1989 Jun;49(1):140–8
The block of thyroglobulin synthesis, which occurs upon transformation of rat thyroid epithelial cells, is at the transcriptional level and it is associated with methylation of the 5' flanking region of the gene. Berlingieri MT, et al. **Exp Cell Res** 1989 Aug;183(2):277–83
Stimulation of adenosine receptor enhances alpha 1-adrenergic receptor-mediated activation of phospholipase C and Ca2+ mobilization in a pertussis toxin-sensitive manner in FRTL-5 thyroid cells. Okajima F, et al. **FEBS Lett** 1989 May 8;248(1-2):145–9
Effectiveness of skin absorption of tincture of I in blocking radioiodine from the human thyroid gland. Miller KL, et al. **Health Phys** 1989 Jun;56(6):911–4
Dietary intake of stable I and some aspects of radioiodine dosimetry. Zvonova IA. **Health Phys** 1989 Sep;57(3):471–5
Immunocytochemical localization of ras p21 product in thyroid follicular cells of normal rats using monoclonal antibody RAP-5. Mizukami Y, et al. **Histochem J** 1988 Nov;20(11):629–34
Light- and electron-microscopical localization of calcitonin, calcitonin gene-related peptide, somatostatin and C-terminal gastrin/cholecystokinin immunoreactivities in rat thyroid. Arias J, et al. **Histochemistry** 1989;91(4):265–72
Inhibition of free triiodothyronine release from mouse thyroid lobes by N-(3',4'-dimethoxycinnamoyl)anthranilic acid (tranilast). Iwasa Y, et al. **Horm Metab Res** 1988 Nov; 20(11):722–3
Thyroidal radioactive iodine uptake in Iran. Kimiagar M, et al. **Int J Vitam Nutr Res** 1988;58(4):466–9
Molecular mechanism of iodide transport by thyroid plasmalemmal vesicles: cooperative sodium activation and asymmetrical affinities for the ions on the outside and inside of the vesicles. Nakamura Y, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):544–9
Effect of internally loaded iodide, thiocyanate, and perchlorate on sodium-dependent iodide uptake by phospholipid vesicles reconstituted with thyroid plasma membranes: iodide counterflow mediated by the iodide transport carrier. Saito K, et al. **J Biochem (Tokyo)** 1989 May;105(5):790–3
Thyrotropin alters the utilization of thyroglobulin's hormonogenic sites. Fassler CA, et al. **J Biol Chem** 1988 Nov 25;263(33):17366–71
Superoxide anion is the initial product in the hydrogen peroxide formation catalyzed by NADPH oxidase in porcine thyroid plasma membrane. Nakamura Y, et al. **J Biol Chem** 1989 Mar 25;264(9):4759–61
A permissive role of pertussis toxin substrate G-protein in P2-purinergic stimulation of phosphoinositide turnover and arachidonate release in FRTL-5 thyroid cells. Cooperative mechanism of signal transduction systems. Okajima F, et al. **J Biol Chem** 1989 Aug 5;264(22):13029–37
Thyroid hormone residues are released from thyroglobulin with only limited alteration of the thyroglobulin structure. Rousset B, et al. **J Biol Chem** 1989 Jul 25;264(21):12620–6
Carrier-mediated transport of monoiodotyrosine out of thyroid cell lysosomes. Tietze F, et al. **J Biol Chem** 1989 Mar 25;264(9):4762–5
Expression of the thyroid sodium/iodide symporter in Xenopus laevis oocytes. Vilijn F, et al. **J Biol Chem** 1989 Jul 15;264(20):11901–3
Thyroid function in neonates from goitrous and nongoitrous iodine-sufficient areas. Gaitan E, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):359–63
Interleukin-1 production and action in thyroid tissue. Kawabe Y, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1174–83
Human thyrotropin receptor subunits characterized by thyrotropin affinity purification and western blotting. Leedman PJ, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):134–41
Effects of epidermal growth factor on thyroglobulin and adenosine 3',5'-monophosphate production by cultured human thyrocytes. Tseng YC, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):771–5
Demonstration of the production and physiological role of insulin-like growth factor II in rat thyroid follicular cells in culture. Maciel RM, et al. **J Clin Invest** 1988 Nov; 82(5):1546–53
Iodine metabolism and the thyroid. Phillips DI, et al. **J Endocrinol** 1988 Dec;119(3):361–3 (19 ref.)
Generation of hydrogen peroxide in cultured porcine thyroid cells: synergistic regulation by cytoplasmic free calcium and protein kinase C. Takasu N, et al. **J Endocrinol** 1989 Mar;120(3):503–8
Amyloid goiter. Diagnosis by fine-needle aspiration biopsy of the thyroid. Lucas A, et al. **J Endocrinol Invest** 1989 Jan;12(1):43–6 (17 ref.)
Analysis of epidermal growth factor (EGF) receptor and effect of EGF on the growth of cultured Graves' and non-neoplastic human thyroid cells. Miyamoto M, et al. **J Endocrinol Invest** 1989 Feb;12(2):111–7
A differential nuclear uptake and retention of 3H-androgens in the thyroids of baboons. Sheridan PJ, et al. **J Endocrinol Invest** 1988 Sep;11(8):571–5
Calbindin-D immunolocalization in developing chick thyroid: a light and electron microscopic study. Inpanbutr N, et al. **J Histochem Cytochem** 1989 Apr;37(4):487–92
Immunocytochemical localization of cathepsins B, H, L, and T4 in follicular cells of rat thyroid gland. Uchiyama Y, et al. **J Histochem Cytochem** 1989 May;37(5):691–6
Direct induction of Ia antigen on murine thyroid-derived

epithelial cells by reovirus. Gaulton GN, et al. **J Immunol** 1989 Jun 1;142(11):3821–5

Processing of secondary ion microscope images: an example of application to the thyroid. Cavellier JP, et al. **J Microsc** 1989 Apr;154 (Pt 1):31–8

Cytoplasmic pH in cultured porcine thyroid cells: alkalinization by Ca2+. Takasu N, et al. **J Mol Endocrinol** 1989 Sep;3(2):163–6

Quantitative analysis of amyloid fibril protein in systemic organs of patients with familial amyloidotic polyneuropathy. Nakazato M, et al. **J Neurol Sci** 1989 Feb; 89(2–3):235–42

Thyroid uptake of iodine–131 and iodine–133 from Chernobyl in the population of southern Sweden. Strand SE, et al. **J Nucl Med** 1988 Oct;29(10):1719–23

Influence of melatonin and N–acetylserotonin on the cyclic AMP concentration in the rat thyroid lobes incubated in vitro. Lewiński A, et al. **J Pineal Res** 1989;7(1):55–61

Receptors for atrial natriuretic peptide (ANP) and regulation of thyroglobulin secretion by ANP in human thyroid cells. Sellitti DF, et al. **Life Sci** 1989;45(9):793–801

In vitro effects of estrogen on tgb and c–myc gene expression in normal and neoplastic human thyroids. del Senno L, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):67–74

Thyroglobulin gene expression as a differentiation marker in primary cultures of calf thyroid cells. Gérard CM, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):23–35

Transcriptional regulation of the thyroperoxydase gene by thyrotropin and forskolin. Gerard CM, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):239–42

The effect of thyroid state on respiratory activities of three rat liver mitochondrial fractions. Goglia F, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):41–6

Establishment of 8–azaguanine–resistant mutants from rat thyroid cell line FRTL–5. Sugawa H, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):319–26

Evidence for autocrine production of IGF–1 in human thyroid adenomas. Williams DW, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):139–43

Differential cytokine regulation of MHC class II and thyroglobin mRNAs in rat thyroid cells. Graves P, et al. **Mol Endocrinol** 1989 May;3(5):758–62

Evaluation and characterization of the hyt/hyt hypothyroid mouse. II. Abnormalities of TSH and the thyroid gland. Stein SA, et al. **Neuroendocrinology** 1989 May;49(5):509–19

Thyroid hormone modulation of TRH precursor levels in rat hypothalamus, pituitary, thyroid and blood. Simard M, et al. **Peptides** 1989 Jan–Feb;10(1):145–55

A simplified recycling model for the dosimetry of radioiodide. Smith T. **Phys Med Biol** 1988 Oct; 33(10):1141–57

Decrease of the prostaglandin I2 binding capacity in thyroids from patients with Graves' disease. Virgolini I, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Aug; 37(2):121–8

The association of plasma magnesium concentration and thyroid gland activity in young calves. Mulei CM, et al. **Zentralbl Veterinarmed [A]** 1988 Aug;35(7):516–21

[Loss of high–affinity prostacyclin binding sites in patients with Basedow's disease] Virgolini I, et al. **Nuklearmedizin** 1989 Feb;28(1):17–20 (Eng. Abstr.) **(Ger)**

[Hormono–metabolic relations in radiotherapy of uterine neoplasms] Lozinskaja IN, et al. **Radiobiol Radiother (Berl)** 1988;29(5):617–22 (Eng. Abstr.) **(Ger)**

[Endocrinology. Hypothyroidism caused by iodine excess] De Rosa G, et al. **G Clin Med** 1989 Mar;70(3):218–24 (50 ref.) **(Ita)**

[The study of direct effect of methimazole on thymidine incorporation in FRTL–5 cells] Urabe M. **Nippon Naibunpi Gakkai Zasshi** 1989 Jan 20;65(1):32–41 (Eng. Abstr.) **(Jpn)**

[Mapping of the thyroglobulin gene in high molecular weight DNA from the human thyroid in normal conditions and in thyroid pathology] Atakhanova BA, et al. **Biokhimiia** 1989 Jan;54(1):81–7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Retrovirus–like sequences in Graves' disease: implications for human autoimmunity. Ciampolillo A, et al. **Lancet** 1989 May 20;1(8647):1096–100

A heteroploid permanent cell line originating from embryonic calf thyroid supporting the replication of all known bovine adenovirus serotypes. Benkö M, et al. **Vet Microbiol** 1989 Apr;19(4):317–24

PATHOLOGY

Fine needle aspiration of the hot thyroid nodule. Liel Y, et al. **Acta Cytol** 1988 Nov–Dec;32(6):866–7

Riedel's thyroiditis. Schwaegerle SM, et al. **Am J Clin Pathol** 1988 Dec;90(6):715–22 (79 ref.)

Ultrasonographically determined thyroid size in pregnancy and post partum: the goitrogenic effect of pregnancy. Rasmussen NG, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1216–20

Fat–containing lesions of the thyroid gland. Gnepp DR, et al. **Am J Surg Pathol** 1989 Jul;13(7):605–12 (28 ref.)

C–cell hyperplasia of the thyroid in a patient with goitrous hypothyroidism and Hashimoto's thyroiditis. Libbey NP, et al. **Am J Surg Pathol** 1989 Jan;13(1):71–7

Intraoperative imprint cytology of the thyroid gland with computer–assisted morphometric analysis of cell clusters. Masuda T, et al. **Anal Quant Cytol Histol** 1988 Aug; 10(4):294–8

Solitary thyroid nodules for surgery—the role of fine–needle aspiration biopsy cytology. Ng EH, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):15–8

Fine–needle aspiration biopsy of the thyroid nodule. Results of a start–up project in a general teaching hospital setting. Pepper GM, et al. **Arch Intern Med** 1989 Mar;149(3):594–6

Reduction of size of thyroid with radioactive iodine in multinodular non–toxic goitre. Hegedüs L, et al. **BMJ** 1988 Sep 10;297(6649):661–2

Early calcitonin hypersecretion and C cell hyperplasia in rats with high incidence of C cell tumors (Wag/Rij). Khattab M, et al. **Bone Miner** 1989 Jul;6(3):249–60

Thyroid epithelial cell transformation by a retroviral vector expressing SV40 large T. Burns JS, et al. **Br J Cancer** 1989 May;59(5):755–60

Reactivity of monoclonal islet cell antibodies on normal hyperplastic and neoplastic thyroid C–cells. Neuhold N, et al. **Cell Tissue Res** 1989 Aug;257(2):437–43

Synergistic action of iodine–deficiency and fluorine–intoxication on rat thyroid. Guan ZZ, et al. **Chin Med J [Engl]** 1988 Sep;101(9):679–84

The value of thyroid volume measured by ultrasonography in the diagnosis of goitre. Berghout A, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):409–14

Renal–cell carcinoma with intranuclear inclusions metastatic to thyroid: a diagnostic problem in aspiration cytology. Gritsman AY, et al. **Diagn Cytopathol** 1988;4(2):125–9

Nuclear grooves: a useful criterion in the cytopathologic diagnosis of papillary thyroid carcinoma. Shurbaji MS, et al. **Diagn Cytopathol** 1988;4(2):91–4

Carbofuran–induced histophysiological changes in thyroid of the teleost fish, Channa punctatus (Bloch). Ram RN. **Ecotoxicol Environ Safety** 1988 Oct;16(2):106–13

Natural heterogeneity of thyroid cells: the basis for understanding thyroid function and nodular goiter growth. Studer H, et al. **Endocr Rev** 1989 May;10(2):125–35 (109 ref.)

Enhancement of cytosolic tyrosine kinase activity by propylthiouracil–induced hyperplasia in the rat thyroid. Polychronakos C, et al. **Endocrinology** 1989 Jan; 124(1):505–10

Solid cell nest–associated C–cells: another possible explanation for "C–cell hyperplasia" adjacent to follicular cell tumors [letter] Chan JK, et al. **Hum Pathol** 1989 May; 20(5):498–9

Fine needle aspiration biopsy of thyroid nodules. Tsung JS. **Indiana Med** 1988 Aug;81(8):701–5

High endothelial venules present in lymphoid cell accumulations in thyroids affected by autoimmune disease: a study in men and BB rats of functional activity and development. Kabel PJ, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):744–51

Thyroid volume and serum thyroglobulin levels in patients with acromegaly: correlation with plasma insulin–like growth factor I levels. Miyakawa M, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):973–8

Transforming growth factor beta regulates thyroid growth. Role in the pathogenesis of nontoxic goiter. Grubeck–Loebenstein B, et al. **J Clin Invest** 1989 Mar; 83(3):764–70

Age related correlation between serum TSH and thyroid C cell hyperplasia in Long–Evans rats. Nayyar RP, et al. **J Exp Pathol** 1989;4(2):87–95

Plasma cell granuloma of the adrenal gland and the thyroid: report of two cases. De Mascarel A, et al. **J Surg Oncol** 1989 Jun;41(2):139–42

Squamous metaplasia with Hashimoto's thyroiditis presenting as a thyroid nodule. Kobayashi T, et al. **J Surg Oncol** 1989 Feb;40(2):139–42

Sudden change in the sonographic appearance of a thyroid cyst after percutaneous aspiration. Bolondi L, et al. **JCU** 1989 Mar–Apr;17(3):213–5

Thyroid volume of East Slovakian adolescents determined by ultrasound 40 years after the introduction of iodized salt. Tajtáková M, et al. **Klin Wochenschr** 1988 Sep 1; 66(17):749–51

Endemic cretinism: possible role for thyroid autoimmunity. Boyages SC, et al. **Lancet** 1989 Sep 2;2(8662):529–32

Prevalence of thyroid abnormalities is not increased in Alzheimer's disease. Lopez O, et al. **Neurobiol Aging** 1989 May–Jun;10(3):247–51

Fine–needle aspiration and needle biopsy of the thyroid gland. Nunez C, et al. **Pathol Annu** 1989;24 Pt 1:161–98 (88 ref.)

The black thyroid: an unusual finding during neck exploration. Noble JG, et al. **Postgrad Med J** 1989 Jan; 65(759):34–5

Thyroid gland: US in patients with Hodgkin disease treated with radiation therapy in childhood. Stewart RR, et al. **Radiology** 1989 Jul;172(1):159–63

Fine needle aspiration cytology of metastatic sarcoma involving the thyroid. Gattuso P, et al. **South Med J** 1989 Sep;82(9):1158–60

[Fine–needle aspiration biopsy in the diagnosis of thyroid diseases] Krüstev I, et al. **Vutr Boles** 1988;27(4):10–4 (Eng. Abstr.) **(Bul)**

[Diagnostic value of ultrasonography and aspiration cytology for thyroid nodules] Huang BY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):978–83 (Eng. Abstr.) **(Chi)**

[The significance of diagnostic puncture of the thyroid gland in children and adolescents] Maršálková D, et al. **Cesk Pediatr** 1988 Nov;43(11):658–60 (Eng. Abstr.) **(Cze)**

[Quantitative cytology. An aid in the cytologic diagnosis of cold nodes?] Liautaud–Roger F, et al. **Acta Otorhinolaryngol Belg** 1988;42(5):604–5 **(Fre)**

[Thyroid gland volumes of healthy adults in an area with endemic goiter] Oberhofer R, et al. **Acta Med Austriaca** 1989;16(2):38–41 (Eng. Abstr.) **(Ger)**

[The use of image analysis in nutritional toxicology—determination of goitrogenic effects] Bleyl DW, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):173–5 (Eng. Abstr.) **(Ger)**

[Morphometry of the heterogenic distribution of tissue components] Löw O. **Gegenbaurs Morphol Jahrb** 1989; 135(1):133–6 (11 ref.) (Eng. Abstr.) **(Ger)**

[Ultrasound–guided fine–needle puncture of the thyroid] Wiedemann W, et al. **Radiologe** 1989 Mar;29(3):109–18 (12 ref.) (Eng. Abstr.) **(Ger)**

[Sonography and cytology of cold thyroid nodules] Pristautz H, et al. **ROFO** 1989 Mar;150(3):250–4 (Eng. Abstr.) **(Ger)**

[Sonography of the thyroid gland in children] Klingmüller V, et al. **Z Kinderchir** 1989 Jun;44(3):135–8 (Eng. Abstr.) **(Ger)**

[The importance of atypical adenoma of the thyroid gland] Adolf W, et al. **Zentralbl Allg Pathol** 1988;134(8):719–26 (Eng. Abstr.) **(Ger)**

[Cytodiagnosis by fine–needle aspiration (FNAB) in thyroid dysplasias and neoplasms observed in 1983–1987] Gabrielli M, et al. **Minerva Med** 1989 May;80(5):435–8 (Eng. Abstr.) **(Ita)**

[Echographic assessment of residual thyroid in incomplete excisional interventions. Comments on 38 patients] Tambussi U, et al. **Minerva Med** 1989 Jul;80(7):759–61 **(Ita)**

[Sclero–atrophic thyroiditis caused by amiodarone] Agosti R. **Pathologica** 1988 Jul–Aug;80(1068):477–82 (Eng. Abstr.) **(Ita)**

[The current importance of thyroid echography in the clinical definition of "hot" scintigraphic nodules. Apropos of a case of thyroid ectopia simulating Plummer's adenoma] Santaniello B, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):504–6 **(Ita)**

[Evaluation of fine needle aspiration cytology in the diagnosis of thyroid diseases] Konno N, et al. **Hokkaido Igaku Zasshi** 1989 Mar;64(2):186–94 (Eng. Abstr.) **(Jpn)**

[High–resolution ultrasound of the thyroid in patients with Graves' disease] Iwasawa T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):249–52 (Eng. Abstr.) **(Jpn)**

[Tissue quantification of the thyroid follicular adenoma and adenomatous goiter] Yamane Y, et al. **Rinsho Byori** 1988 Aug;36(8):970–3 **(Jpn)**

[Fine needle aspiration cytology of the thyroid. Based on a 5–year case load] Lilleng R, et al. **Tidsskr Nor Laegeforen** 1989 Jun 20;109(17–18):1875–7 (Eng. Abstr.) **(Nor)**

[Value of ultrasonic examination in the evaluation of morphological changes in the thyroid gland] Woźniak–Stolarska B, et al. **Endokrynol Pol** 1988; 39(4):197–206 (Eng. Abstr.) **(Pol)**

[Comparison of scintigraphic, ultrasonic, intraoperative and histopathological examinations in the evaluation of nodular changes in the thyroid gland] Rusiniak L, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1303–5 **(Pol)**

[Development of malignant neoplasms in various thyroid diseases] Nawrocka A, et al. **Wiad Lek** 1988 Mar 1; 41(5):300–4 (22 ref.) **(Pol)**

[Preparation of histotopographic goiter sections and endometrium scrapes for relevant instant diagnosis] Gol'dburt NN, et al. **Arkh Patol** 1989;51(5):74–5 (Eng. Abstr.) **(Rus)**

[Assessment of the effectiveness of conservative therapy of autoimmune thyroiditis using echographic study of the thyroid] Fedoseeva GI, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):40–2 (Eng. Abstr.) **(Rus)**

[Hyperplasia of the thyroid] Kholodova EA, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):52–3 **(Rus)**

[Ultrasonic examination of the thyroid gland in mass screening of the population] Tsyb AF, et al. **Sov Med** 1988; (5):77–9 **(Rus)**

[The effect of long–term smoking on the thyroid gland in women] Tajtáková M, et al. **Bratisl Lek Listy** 1988 Jul; 89(7):515–8 (Eng. Abstr.) **(Slo)**

PHYSIOLOGY

Thyroid inhibition and developmental increases in fetal rat lung antioxidant enzymes. Sosenko IR, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L94–9

A simplified scheme for the investigation of thyroid function in chronic liver disease. Bannister P, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):373–5

18th annual meeting of the European Thyroid Association. Abstracts. Copenhagen, Denmark, June 26–30, 1989. **Ann Endocrinol (Paris)** 1989;50(2):78–171

17th annual meeting of the European Thyroid Association. Abstracts. Montpellier, 11–16 September 1988. **Ann Endocrinol (Paris)** 1988;49(3):165–253

Phosphorylase a formation in protein-glycogen particles isolated from fast-twitch muscle of euthyroid and hypothyroid rats. Leijendekker WJ, et al. **Arch Biochem Biophys** 1989 Oct;274(1):120–9

Thyroid function in relation to reproductive efficiency in postpartum buffaloes (Bubalus bubalis) during summer and winter. Bahga CS, et al. **Arch Exp Veterinarmed** 1989 Jan; 43(1):17–22

Cytoplasmic pH in the action of epidermal growth factor (EGF) in cultured porcine thyroid cells. Takasu N, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):346–9

Effects of altered thyroid states and undernutrition on the calbindin-D28K (calcium-binding protein) content of the hippocampal formation in the developing rat. Rami A, et al. **Brain Res** 1989 Apr 17;485(1):20–8

Thyroid function in hemidecorticate rats. Munhoz CO, et al. **Braz J Med Biol Res** 1988;21(5):949–55

Modulation by the thyroid state of intracellular calcium and contractility in ferret ventricular muscle. MacKinnon R, et al. **Circ Res** 1988 Dec;63(6):1080–9

Lipid and carbohydrate metabolism in euthyroid and hypothyroid chick embryo (Gallus domesticus). Raheja KL, et al. **Comp Biochem Physiol [B]** 1979;64(3):289–91

Significance of serum thyrotropin and plasma dopamine concentration in the regulation of thyroid function in elderly subjects. Mori T, et al. **Endocrinol Jpn** 1988 Jun; 35(3):469–76

Impairment of hypothalamic-pituitary-thyroid function in rats treated with human recombinant tumor necrosis factor-alpha (cachectin). Pang XP, et al. **Endocrinology** 1989 Jul;125(1):76–84

Direct effect of methimazole on rat thyroidal cell growth induced by thyrotropin and insulin-like growth factor I. Taniguchi S, et al. **Endocrinology** 1989 May;124(5):2046–51

P2-purinergic agonists activate phospholipase C in a guanine nucleotide- and Ca2+-dependent manner in FRTL-5 thyroid cell membranes. Okajima F, et al. **FEBS Lett** 1989 Aug 14;253(1-2):132–6

Thyroid–thymus interactions during development and aging. Fabris N, et al. **Horm Res** 1989;31(1-2):85–9

Effect of pinealectomy and photoperiod on testis and thyroid gland of the Indian tropical palm-squirrel Funambulus pennanti. Haldar C, et al. **Indian J Exp Biol** 1988 Jul; 26(7):516–9

Acquisition of acoustic startle response in relation to growth and thyroid function in rats. Schneider BF, et al. **Int J Dev Neurosci** 1987;5(2):99–106

Thyroidal regulation of rat renal and hepatic Na,K-ATPase gene expression. Gick GG, et al. **J Biol Chem** 1988 Nov 15;263(32):16610–8

Thyroid hormones regulate G-protein beta-subunit mRNA expression in vivo. Rapiejko PJ, et al. **J Biol Chem** 1989 Sep 25;264(27):16183–9

Secretion and metabolism of monomeric human calcitonin: effects of age, sex, and thyroid damage. Tiegs RD, et al. **J Bone Miner Res** 1986 Aug;1(4):339–49

Thyrotropin induces the acidification of the secretory granules of parafollicular cells by increasing the chloride conductance of the granular membrane. Barasch J, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2137–47

Protein synthesis during induction of DNA replication in thyroid epithelial cells: evidence for late markers of distinct mitogenic pathways. Lamy F, et al. **J Cell Physiol** 1989 Mar;138(3):568–78

Adenosine triphosphate, bradykinin, and thyrotropin-releasing hormone regulate the intracellular Ca2+ concentration and the 45Ca2+ efflux of human thyrocytes in primary culture. Raspé E, et al. **J Cell Physiol** 1989 Sep;140(3):608–14

Thyroid cell growth, differentiation and function in the FRTL-5 cell line: a survey. Bidey SP, et al. **J Endocrinol** 1988 Dec;119(3):365–76 (96 ref.)

Electrophysiological correlates of fluid transport in cultured porcine thyroid cells. Pearson J, et al. **J Endocrinol** 1988 Nov;119(2):309–14

Influence of tri-iodothyronine or lipid administration on the response of the pituitary-thyroid axis to exposure to cold in the newborn lamb. Wrutniak C, et al. **J Endocrinol** 1989 May;121(2):361–5

Long term thyroid function after subtotal thyroidectomy for Graves' disease. Busnardo B, et al. **J Endocrinol Invest** 1988 May;11(5):371–4

Thyroid autoregulation. Inhibition of goiter growth and of cyclic AMP formation in rat thyroid by iodinated derivatives of arachidonic acid. Pisarev MA, et al. **J Endocrinol Invest** 1988 Oct;11(9):669–74

Regional changes in myocyte size during the reversal of thyroid-induced cardiac hypertrophy. Campbell SE, et al. **J Mol Cell Cardiol** 1988 May;20(5):379–87

Inter-species variations in myocardial responsiveness to cardiac glycosides: possible relations to the thyroid status. Felzen B, et al. **J Mol Cell Cardiol** 1989 Feb;21(2):165–74

Circannual serum creatine kinase patterns after ganglionectomy and pinealectomy of the Wistar rat. Peschke D, et al. **J Pineal Res** 1989;6(4):375–83

Peroxisomal oxidative capacity of brown adipose tissue depends on the thyroid status. Giacobino JP, et al. **Mol Cell Endocrinol** 1989 Feb;61(2):217–25

Effect of amiodarone and propranolol on the functional properties of human thyroid follicles cultured in collagen gel. Massart C, et al. **Mol Cell Endocrinol** 1989 Mar; 62(1):113–7

Full expression of uncoupling protein gene requires the concurrence of norepinephrine and triiodothyronine. Silva JE. **Mol Endocrinol** 1988 Aug;2(8):706–13

Tissue-specific regulation of pyroglutamate aminopeptidase II activity by thyroid hormones. Ponce G, et al. **Neuroendocrinology** 1988 Aug;48(2):211–3

Serum ferritin levels and thyroid function. Preliminary study. Re M, et al. **Panminerva Med** 1988 Oct-Dec;30(4):213–4

Activity of the hypothalamic-pituitary-thyroid axis during exposure to cold. Fregly MJ. **Pharmacol Ther** 1989; 41(1-2):85–142 (462 ref.)

Effect of the excess of thyroid hormone administration on water and sodium chloride intake in the rat. Belló AA, et al. **Physiol Behav** 1988;43(2):155–7

Effects of thyroidectomy on egg production, molt, and plasma thyroid hormone concentrations of turkey hens. Lien RJ, et al. **Poult Sci** 1989 Aug;68(8):1126–32

Thyroid function in embryonic and early posthatch chickens and quail. McNabb FM. **Poult Sci** 1989 Jul;68(7):990–8 (54 ref.)

Helodermin-like peptides in thyroid C cells: stimulation of thyroid hormone secretion and suppression of calcium incorporation into bone. Grunditz T, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1357–61

Thyroid status influences calcium ion accumulation and retention by rat liver mitochondria. Greif RL. **Proc Soc Exp Biol Med** 1988 Oct;189(1):39–44

Thyroid autoregulation. Inhibitory effects of iodinated derivatives of arachidonic acid on iodine metabolism. Chazenbalk GD, et al. **Prostaglandins** 1988 Aug; 36(2):163–72

Pituitary-adrenal and thyroid effects on melatonin content of the rat pineal gland. Bauer MS, et al. **Psychoneuroendocrinology** 1989;14(3):165–75

The effects of prolonged exposure to lowered ambient temperature on thyroid activity in mature female rats. Ibidapo II, et al. **Q J Exp Physiol** 1989 Mar;74(2):207–9

The significance of hepatic microsomal enzyme induction and altered thyroid function in rats: implications for thyroid gland neoplasia. McClain RM. **Toxicol Pathol** 1989; 17(2):294–306 (65 ref.)

[Thyroid function and cancer] Lemaire M, et al. **Ann Endocrinol (Paris)** 1989;50(1):16–25 (116 ref.) (Eng. Abstr.) (Fre)

[Physiological effects of iodine on the thyroid function: thyroid autoregulation] Testa A, et al. **G Clin Med** 1988 Aug-Sep;69(8-9):515–24 (50 ref.) (Ita)

[Compensatory-restorative processes of the thyroid gland in 1- and 3-month-old rats in health and in desympathization] Riashchikov SN, et al. **Arkh Anat Gistol Embriol** 1989 May; 96(5):62–8 (Eng. Abstr.) (Rus)

[Nuclear matrix proteins of the rat liver at various levels of body thyroid status] Adylova AT. **Biol Nauki** 1989; (1):33–7 (Rus)

[Thyroid homeostasis in animals with iodine deficiency] Fabri ZI. **Biol Nauki** 1988;(11):64–8 (Eng. Abstr.) (Rus)

[Characteristics of the recovery processes in the resected thyroid of adult rats after sympathectomy] Riashchikov SN, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):353–6 (Eng. Abstr.) (Rus)

[Prostaglandins and the thyroid] Gal'chinskaia VIu. **Fiziol Zh** 1989 Jan-Feb;35(1):103–12 (69 ref.) (Eng. Abstr.) (Rus)

[The role of the adrenal and thyroid glands in changes in the blood amino acid composition during adaptation to muscle loads] Rusin VIa, et al. **Fiziol Zh SSSR** 1988 Oct; 74(10):1479–83 (Rus)

[Role of vasopressin- and oxytocinergic cells of macrocellular rat hypothalamic nuclei in regulating the thyroid during the administration of thyroliberin] Krasnovskaia IA, et al. **Probl Endokrinol (Mosk)** 1989 Mar-Apr;35(2):67–70 (Eng. Abstr.) (Rus)

[Effect of adrenergic innervation on the degree of reparation of the thyroid after its resection] Riashchikov SN, et al. **Probl Endokrinol (Mosk)** 1989 Jan-Feb;35(1):83–7 (Eng. Abstr.) (Rus)

[Seasonal rhythms in the functioning of the hypophyseo-thyroid system of the suslik Citellus parryi] Nevretdinova ZG. **Zh Evol Biokhim Fiziol** 1989 May-Jun; 25(3):310–7 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Allogenic bone marrow transplantation in adults: endocrine sequelae after 1–6 years. Benker G, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):37–42

Thyroid function in "nonthyroidal-illness". Longitudinal study in patients with hematological diseases. Földes J, et al. **Acta Med Austriaca** 1988;15 Suppl 1:45–7

Thyroid gland function in prepubertal and pubertal non-ketotic diabetic children. Tumini S, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):94–5

Hypothalamic-pituitary-adrenal and -thyroid axis dysfunctions and decrements in the availability of L-tryptophan as biological markers of suicidal ideation in major depressed females. Maes M, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):13–7

Thyroid function in men with fragile X-linked MR [letter] Wilson DP, et al. **Am J Med Genet** 1988 Dec;31(4):733–4

Recovery of thyroid function in primary hypothyroidism. Nikolai TF. **Am J Med Sci** 1989 Jan;297(1):18–21

Thyroid and immunologic status of dogs with perianal fistula. Killingsworth CR, et al. **Am J Vet Res** 1988 Oct; 49(10):1742–6

Thyrotropin-releasing hormone (TRH), the thyroid axis, and affective disorder. Nemeroff CB, et al. **Ann N Y Acad Sci** 1989;553:304–10 (33 ref.)

Thyroid function in survivors of cancer. Abusrewil SS, et al. **Arch Dis Child** 1989 May;64(5):709–12

Transient infantile hyperthyrotrophinaemia. Miki K, et al. **Arch Dis Child** 1989 Aug;64(8):1177–82

Rapid decrease of the peripheral deiodination of thyroxine in malabsorption syndrome in artificially inoculated broilers. Rudas P, et al. **Avian Dis** 1989 Apr-Jun; 33(2):279–84

Thyroid function in pre-eclampsia. Lao TT, et al. **Br J Obstet Gynaecol** 1988 Sep;95(9):880–3

Spectrum of thyroid function abnormalities in gestational trophoblastic neoplasia. Desai RK, et al. **Clin Endocrinol (Oxf)** 1988 Dec;29(6):583–92

Expression and regulation of c-erb-A mRNA from lymphocytes in patients with thyroid dysfunction. Nagayama Y, et al. **Endocrinol Jpn** 1988 Jun;35(3):463–7

Thyroid functions before and after maintenance hemodialysis in patients with chronic renal failure. Sakurai S, et al. **Endocrinol Jpn** 1988 Dec;35(6):865–76

Thyroid functions in patients with various chronic liver diseases. Shimada T, et al. **Endocrinol Jpn** 1988 Jun; 35(3):357–69

Plasma atrial natriuretic peptide in states of altered thyroid function. Yamaji T, et al. **Endocrinol Jpn** 1988 Apr; 35(2):343–8

Pharmacoendocrinology of major depression. Rubin RT. **Eur Arch Psychiatry Neurol Sci** 1989;238(5-6):259–67 (121 ref.)

The pituitary-thyroid axis in acromegaly. Eskildsen PC, et al. **Horm Metab Res** 1988 Dec;20(12):755–7

Thyroid hormone alterations in patients with shock and injury. Vitek V, et al. **Injury** 1987 Sep;18(5):336–41

Pediatric Hodgkin's disease: pulmonary, cardiac, and thyroid function following combined modality therapy. Mefferd JM, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar; 16(3):679–85

Concurrent aortic and mitral valve echocardiography permits measurement of systolic time intervals as an index of peripheral tissue thyroid functional status. Tseng KH, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):633–8

Assessment of thyroid and adrenal function in patients with familial amyloidotic polyneuropathy. Olofsson BO, et al. **J Intern Med** 1989 May;225(5):337–41

Thyroid function in the early stage and during the course of subacute thyroiditis. Madeddu G, et al. **J Nucl Med Allied Sci** 1988 Apr-Jun;32(2):91–100

Normal thyroid function in 32 patients with amyotrophic lateral sclerosis. Iwasaki Y, et al. **Jpn J Med** 1989 May-Jun; 28(3):309–11

Effects of elevated gonadotropin levels on thyroid function in the male rat. Steger RW, et al. **Life Sci** 1989;45(1):85–90

Thyroid gland function and autoimmunity in children with alopecia universalis. Bruno OD, et al. **Medicina (B Aires)** 1985;45(1):25–8

Thyroid function in anxious and depressed patients. Rao ML, et al. **Pharmacopsychiatry** 1989 Mar;22(2):66–70

Thyroid function, metabolic regulation, and depression. Zach J, et al. **Psychosom Med** 1988 Sep-Oct;50(5):454–68 (69 ref.)

Thyroid function in male Zucker rats exposed to cold. Whitaker EM, et al. **Q J Exp Physiol** 1988 Nov; 73(6):1029–31

Alterations in thyroid function tests in major depression. Wang SY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb; 88(2):143–7

A study of thyroid function in cancer cachexia. Tancini G, et al. **Tumori** 1989 Apr 30;75(2):185–8

Thyroid–gonad relationship in chronic schizophrenia. Parshad O, et al. **West Indian Med J** 1989 Jun;38(2):83–7

[The thyroid gland and the breast] Pavić Z, et al. **Z Lymphol** 1988 Jul;12(1):24–9 (66 ref.) (Eng. Abstr.) (Ger)

[Effects of asphyxia on thyroid function] Sawaguchi A, et al. **Nippon Hoigaku Zasshi** 1988 Jun;42(3):331–9 (Eng. Abstr.) (Jpn)

[Study of the thyroid function in patients with chronic renal insufficiency in hemodialysis] de Sousa FT, et al. **Acta Med Port** 1988 Jul-Dec;1(4-6):247–50 (Eng. Abstr.) (Por)

[The reproductive system of patients with disordered thyroid function] Sosnova EA. **Akush Ginekol (Mosk)** 1988 May; (5):46–50 (Eng. Abstr.) (Rus)

[Thyroid function in patients with ventricular arrhythmia] Vanin LN, et al. **Kardiologiia** 1989 Feb;29(2):64–7 (Eng. Abstr.) (Rus)

[Study of thyroid function in patients with paroxysmal supraventricular tachycardia] Vanin LN, et al. **Kardiologiia** 1989 Jan;29(1):71–4 (Eng. Abstr.) (Rus)

[The hypophyseo-thyroid system in psoriatic arthritis combined with chronic opisthorchiasis] Milevskaia SG, et al. **Med Parazitol (Mosk)** 1989 Mar-Apr;(2):38–42 (Eng. Abstr.) (Rus)

[The functional state of the thyroid gland in cancer of the larynx] Andreev VG, et al. **Med Radiol (Mosk)** 1989 Apr; 34(4):42–6 (Eng. Abstr.) (Rus)

[Functional activity of the thyroid during radiation therapy of cervical cancer] Lozinskaia IN. **Med Radiol (Mosk)** 1989 Jan;34(1):70–2 (Rus)

[Thyroid function in children with bronchial asthma] Karakhanian E, et al. **Pediatriia** 1988;(4):110 **(Rus)**

[Dynamic thyroid function after the surgical treatment of patients with diffuse toxic goiter] Galkin RA, et al. **Probl Endokrinol (Mosk)** 1988 Nov-Dec;34(6):13–8 (Eng. Abstr.) **(Rus)**

[Euthyroid hyperplasia of the thyroid—a pressing problem of modern endocrinology] Zel'ker ME. **Probl Endokrinol (Mosk)** 1988 Jul-Aug;34(4):43–5 (27 ref.) **(Rus)**

[The functional state of the pituitary–thyroid gland system in patients with eczema] Kachuk MV, et al. **Vestn Dermatol Venerol** 1989;(3):12–5 (Eng. Abstr.) **(Rus)**

[Seasonal fluctuations in the functioning of the hypophyseo–thyroid system in patients with atopic dermatitis] Kachuk MV, et al. **Vestn Dermatol Venerol** 1989;(5):32–4 (Eng. Abstr.) **(Rus)**

[Function of the hypophyseo–thyroid system in patients with post–thyrotoxic encephalo–ophthalmopathy] Oleĭnik VA, et al. **Vrach Delo** 1988 Sep;(9):72–5 (Eng. Abstr.) **(Rus)**

[Study of thyroid function parameters and thyrotropin in general non–thyroid diseases] Gómez JM, et al. **Med Clin (Barc)** 1989 Jan 14;92(1):5–9 (Eng. Abstr.) **(Spa)**

[Bronchial asthma and thyroid dysfunction (letter)] Gómez Huelgas R, et al. **Med Clin (Barc)** 1989 May 13;92(18):718 **(Spa)**

[Changes in thyroid function expressed by the calculation of the area under TRH–TSH curve] Herrera JD, et al. **Medicina (B Aires)** 1987;47(5):464–70 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Effects of radiation on the thyroid gland. Van Middlesworth L. **Adv Intern Med** 1989;34:265–84 (71 ref.)

Thyroid function in children after treatment for acute lymphoblastic leukaemia [letter] Carter EP, et al. **Arch Dis Child** 1989 Apr;64(4):631

X-ray exposure [letter] Anderson DM. **Aust Dent J** 1988 Aug;33(4):335

Radiation and thyroid disease. DeGroot LJ. **Baillieres Clin Endocrinol Metab** 1988 Aug;2(3):777–91 (43 ref.)

Morphologic changes in the thyroid after irradiation for Hodgkin's and non–Hodgkin's lymphoma. Carr RF, et al. **Cancer** 1989 Aug 15;64(4):825–9

Photoreactivating enzyme in the blind cave fish, Anoptichthys jordani. Woodhead AD, et al. **Comp Biochem Physiol [B]** 1979;63(1):73–6

Effects of external irradiation on the thyroid gland in childhood. Barnes ND. **Horm Res** 1988;30(2–3):84–9 (39 ref.)

Lack of a differential radiation response for proliferative and non–proliferative rat thyroid cells (FRTL–5) in vitro. Brosing JW, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1311–7

Radiation inactivation of membrane components and molecular mass determination by target analysis. Kempner ES, et al. **Methods Enzymol** 1989;172:410–39

X-ray–induced mutations in cultured human thyroid cells. Nakamura N, et al. **Radiat Res** 1989 Jul;119(1):123–33

[The effect of radiation on thyroid gland function] Goláň T, et al. **Cas Lek Cesk** 1989 Jan 13;128(3):65–7 (Eng. Abstr.) **(Cze)**

[Clinical evaluation of irradiation of normal thyroid tissue during the treatment of "hot" hyperactive thyroid nodules with I–131] Górowski T. **Endokrynol Pol** 1988;39(3):129–35 (Eng. Abstr.) **(Pol)**

[Energy and plastic metabolism of the heart muscle in rabbits undergoing thyroid irradiation with decimeter waves] Bogoliubov VM, et al. **Biull Eksp Biol Med** 1989 May; 107(5):570–2 (Eng. Abstr.) **(Rus)**

[Cytogenetic and endocrinologic changes in experimental animals exposed to high–frequency electromagnetic fields] Nikitina VN, et al. **Gig Sanit** 1989 May;(5):85–6 **(Rus)**

[The effect of a low dose of ionizing radiation and of gangliosides on the adenylate cyclase activity of the chicken thymus and thyroid in ontogeny] Khozhiakhmedov G, et al. **Radiobiologiia** 1989 May–Jun;29(3):417–9 (Eng. Abstr.) **(Rus)**

[The effect of pinealectomy on the histologic picture of the thyroid gland in rats irradiated with a high dose of gamma rays] Kundurović Z, et al. **Med Pregl** 1988;41(9–10):369–72 (Eng. Abstr.) **(Scr)**

[Thyroid disorders after radiation of lymphoma] Angel M. **Med Clin (Barc)** 1989 Apr 1;92(12):457–9 (26 ref.) **(Spa)**

RADIOGRAPHY

Lingual thyroid: unusual appearance on computed tomography. Shah HR, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):263–6

RADIONUCLIDE IMAGING

Thyroid scanning, ultrasound, and serum thyroglobulin in determining the origin of congenital hypothyroidism [letter] Farriaux JP, et al. **Am J Dis Child** 1988 Oct; 142(10):1023–4

The role of imaging in neonatal hypothyroidism [letter] Horlick M, et al. **Am J Dis Child** 1988 Nov;142(11):1139

Gallium–67 uptake by the thyroid associated with progressive systemic sclerosis. Sjoberg RJ, et al. **Am J Med Sci** 1989 Jan;297(1):42–5

Three–dimensional shaded–surface images from positron tomography using MUP–PET. Webb S, et al. **Br J Radiol** 1988 Dec;61(732):1172–5

Thyroid uptake of gallium in Graves' disease. Allard JC, et al. **Clin Nucl Med** 1988 Sep;13(9):663–6

Subacute thyroiditis: a review of 105 cases. Kitchener MI, et al. **Clin Nucl Med** 1989 Jun;14(6):439–42

Management of the solitary thyroid nodule [letter; comment] Watkinson JC, et al. **J R Soc Med** 1989 Jan;82(1):59–61. **Comment on: J R Soc Med** 1988 Aug;81(8):437–8

The thyroid scan in Hashimoto's thyroiditis: the great mimic. Ramtoola S, et al. **Nucl Med Commun** 1988 Sep;9(9):639–45

Scintigraphy in hypothyroid neonates [letter] Clemens PC. **Postgrad Med J** 1988 May;64(751):413

Thyroidal radioiodine uptake in hyperthyroid cats. Sjollema BE, et al. **Vet Q** 1989 Jul;11(3):165–70

[The use of modern scintigraphic methods for the control of thyroid gland function in small laboratory animals] Hanauer G, et al. **Z Versuchstierkd** 1989;32(1):17–24 (Eng. Abstr.) **(Ger)**

[Clinico–morphologic comparisons in the combined study of the thyroid gland] Filatov AA, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):7–10 (Eng. Abstr.) **(Rus)**

[A method of processing scintigrams of the thyroid gland] Naumenko AZ, et al. **Med Radiol (Mosk)** 1989 Apr; 34(4):38–41 (Eng. Abstr.) **(Rus)**

[Thyroid function in chronic liver diseases in an endemic region] Riabchikov AV. **Med Radiol (Mosk)** 1989 Jul; 34(7):36–41 (Eng. Abstr.) **(Rus)**

[2–isotope study in the diagnosis of thyroid cancer] Vasil'ev LIa, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):10–4 (Eng. Abstr.) **(Rus)**

SECRETION

Triiodothyronine and 3',5'–cyclic AMP secretion by cultured human thyroid cells in response to thyrotropin and thyroid–stimulating immunoglobulin. Kraiem Z, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):493–500

Calcium stimulates the release of calcitonin gene–related peptide from the canine thyroid. Ahrén B, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E597–9

Secretion of calcitonin from the thyroid gland increases in aged rats. Kurosawa M, et al. **Arch Gerontol Geriatr** 1988 Sep;7(3):229–38

Thyroglobulin secretion by cultured human thyroid cells from cold nodules. Izembart M, et al. **Biomed Pharmacother** 1988;42(6):421–6

Thyroid and parathyroid response to subtotal thyroidectomy. Eforakopoulou–Gialakidou E, et al. **Endocrinol Exp (Bratisl)** 1988 Sep;22(3):165–9

Inhibitory effect of lithium on the release of thyroid hormones from thyrotropin–stimulated mouse thyroids in a perifusion system. Mori M, et al. **Endocrinology** 1989 Mar; 124(3):1365–9

Inhibition by phenytoin of in vitro secretion of calcitonin from rat thyroid glands and cultured rat C cells. Cooper CW, et al. **J Bone Miner Res** 1988 Apr;3(2):219–23

Insulin–like growth factor–I: autocrine secretion by human thyroid follicular cells in primary culture. Tode B, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):639–47

Release of an endothelial cell growth factor from cultured porcine thyroid follicles. Greil W, et al. **Mol Endocrinol** 1989 May;3(5):858–67

[Thyroid function and trisomy 21. TSH increase and rT3 deficiency] Lejeune J, et al. **Ann Genet (Paris)** 1988; 31(3):137–43 (Eng. Abstr.) **(Fre)**

[Effect of physiologic and instrumental labor on the hormonal activity of the hypothalamo–hypophyseo–thyroid system. I. Physiologic labor] Bielawski J, et al. **Ginekol Pol** 1988 Aug;59(8):470–5 (Eng. Abstr.) **(Pol)**

[Diurnal rhythm of thyroxine (T4), triiodothyronine (T3) and reverse triiodothyronine (rT3) secretion in women in the third trimester of uncomplicated pregnancy] Dzieciuchowicz L, et al. **Ginekol Pol** 1988 Feb;59(2):89–92 (Eng. Abstr.) **(Pol)**

SURGERY

The cricothyroid muscle after cricothyroidotomy. A porcine experimental study. Holst M, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):136–40

Regional anesthesia for certain patients undergoing thyroid and parathyroid surgery [letter] Crile G Jr. **Surgery** 1989 Mar;105(3):455

Complications of thyroid surgery performed by residents. Shaha A, et al. **Surgery** 1988 Dec;104(6):1109–14

[Preservation of the external branch of the superior laryngeal nerve in thyroid surgery. Anatomical study of 30 dissections] Espinoza J, et al. **Acta Otorhinolaryngol Belg** 1988;42(5):623–39 **(Fre)**

[Pitfalls of extracapsular thyroid surgery] Sauvage JP, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):209–11 (Eng. Abstr.) **(Fre)**

[Surgery of the thyroid] Breido NS. **Vestn Khir** 1989 Mar; 142(3):140–4 (20 ref.) **(Rus)**

TRANSPLANTATION

Pretransplant hyperthermia promotes permanent survival of murine thyroid allografts. Bartlett ST, et al. **J Surg Res** 1989 Apr;46(4):370–3

Regulation of class I antigens responsible for prolonged graft survival after organ culture. Hullett DA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):240–1

Effect of 15–deoxyspergualin on the survival of thyroid allografts in mice. Kamata K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1099–103

Enhancement of thyroid allograft survival following organ culture. Alteration of tissue immunogenicity. Hullett DA, et al. **Transplantation** 1989 Jan;47(1):24–7

Acceptance of murine thyroid allografts by pretreatment of anti–Ia antibody or anti–dendritic cell antibody in vitro. Iwai H, et al. **Transplantation** 1989 Jan;47(1):45–9

[Evaluation of the function of a free transplant of the thyroid gland] Ismailov SI, et al. **Vestn Khir** 1989 Jan;142(1):81–3 **(Rus)**

ULTRASTRUCTURE

Ultrastructural alterations of the thyroid follicular cells in domestic fowls following neonatal olfactory bulbectomy. Yamauchi K, et al. **Br Poult Sci** 1989 Jun;30(2):393–401

Purification of TSH receptor from porcine thyroid membrane and effect of various protease inhibitors on receptor stability. Akamizu T, et al. **Endocrinol Jpn** 1988 Apr; 35(2):275–83

Actin stress fiber disruption and tropomyosin isoform switching in normal thyroid epithelial cells stimulated by thyrotropin and phorbol esters. Roger PP, et al. **Exp Cell Res** 1989 May;182(1):1–13

Effect of gossypol on the thyroid in young rats. Rikihisa Y, et al. **J Comp Pathol** 1989 May;100(4):411–7

Ultrastructural evidence that the negative feedback mechanism of the pituitary–thyroid axis can operate without the hypothalamus in fetal rats: observation of thyroid follicular cells. Shirai M, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):244–50

Three dimensional aspect on the functional morphology of the thyroid gland. Fujita H, et al. **Prog Clin Biol Res** 1989; 295:227–33

Plasma membrane shedding and colloid vacuoles in hyperactive human thyroid tissue. Nilsson M, et al. **Virchows Arch [B]** 1988;56(2):85–94

[Morphometry of the mitochondria and endoplasmic reticulum of the thyroid epithelium in iodine deficient fetal mice] Liu JH. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):298–300 **(Chi)**

[Anti–thyroglobulin and anti–microsomal antibodies in patients with hyperthyroidism treated with radioactive iodine] Barańska H, et al. **Pol Tyg Lek** 1988 Apr 25; 43(17):534–8 (Eng. Abstr.) **(Pol)**

THYROID GLAND, DESICCATED see under **THYROID HORMONES**

THYROID HORMONE RECEPTORS see **RECEPTORS, THYROID HORMONE**

THYROID HORMONES

see related
THYROGLOBULIN

ADMINISTRATION & DOSAGE

Testing for recovery of thyroid function after withdrawal of long–term suppression therapy. Rubinoff H, et al. **J Clin Epidemiol** 1989;42(5):417–20

[Trends in the hormonal therapy of thyroid cancer] Szántó J, et al. **Orv Hetil** 1989 Jun 4;130(23):1215–8 (32 ref.) (Eng. Abstr.) **(Hun)**

[Treatment of diffuse nontoxic goiter with low doses of thyroidin] Sazonova SN. **Probl Endokrinol (Mosk)** 1988 Jul–Aug;34(4):41–2 **(Rus)**

ADVERSE EFFECTS

'Natural' desiccated thyroid. A 'health–food' thyroid preparation. Sawin CT, et al. **Arch Intern Med** 1989 Sep; 149(9):2117–8

[Factitious thyrotoxicosis due to the ingestion of bovine thyroid glands (letter)] Contreras P, et al. **Rev Med Chil** 1988 Apr;116(4):381–2 **(Spa)**

ANALYSIS

Rhodamine B–labeled thyroid hormone forms high molecular weight aggregates in solution: a possible source of artifacts in binding experiments. Cheng SY, et al. **Anal Biochem** 1989 Feb 1;176(2):440–3

Stopped–flow—photometric and kinetic—fluorimetric methods for the determination of thyroid hormones in tablets. Toledano M, et al. **Analyst** 1989 Feb;114(2):211–5

Hormone–containing peptides from normal and goiter human thyroglobulins. Dziadik–Turner C, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):377–85

Isolation and characterization of hagfish thyroid iodoprotein by its non–thyroglobulin nature, very high iodine and carbohydrate contents and low hormone/iodine ratio. Ohmiya Y, et al. **Eur J Biochem** 1989 Jun 1;182(1):11–8

Thyroid hormone residues are released from thyroglobulin with only limited alteration of the thyroglobulin structure. Rousset B, et al. **J Biol Chem** 1989 Jul 25;264(21):12620–6

Developmental changes in rat brain 5'–deiodinase and thyroid

hormones during the fetal period: the effects of fetal hypothyroidism and maternal thyroid hormones. Ruiz de Oña C, et al. **Pediatr Res** 1988 Nov;24(5):588–94

ANTAGONISTS & INHIBITORS

Antagonism of thyroid hormone action by amiodarone in rat pituitary tumor cells. Norman MF, et al. **J Clin Invest** 1989 Jan;83(1):306–13

Mechanism for the inhibitory action of 2-deoxy-glucose on thyroid hormone secretion in the mouse. Ahrén B, et al. **Neuroendocrinology** 1989 May;49(5):471–5

BIOSYNTHESIS

Hormone synthesis in human thyroglobulin: possible cleavage of the polypeptide chain at the tyrosine donor site. Marriq C, et al. **FEBS Lett** 1989 Jan 2;242(2):414–8

[Iodine-accumulating, hormone-producing liver metastasis of a follicular thyroid carcinoma] Krebs B, et al. **ROFO** 1989 Apr;150(4):489 (Ger)

BLOOD

Effect of fentanyl-oxygen anesthesia during cardiac surgery on serum thyroid hormones. Imberti R, et al. **Acta Anaesthesiol Belg** 1988;39(4):217–22

Thyroid function in hyperemesis gravidarum. Swaminathan R, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):155–60

Influence of dopamine on the thyroid hormones and thyrotropin in acute respiratory distress syndrome. Varl B, et al. **Acta Med Austriaca** 1988;15 Suppl 1:59–61

Thyroid hormones and thyroxine-binding globulin in relation to liver function and serum testosterone in men with alcoholic cirrhosis. Becker U, et al. **Acta Med Scand** 1988; 224(4):367–73

Serum levels of thyroid and adrenal hormones, testosterone, TSH, LH, GH and prolactin in men after a 2-h stay in a cold room. Leppäluoto J, et al. **Acta Physiol Scand** 1988 Apr;132(4):543–8

Chronic alcohol ingestion decreases pituitary-thyroid axis measures in Fischer-344 rats. Mason GA, et al. **Alcoholism (NY)** 1988 Dec;12(6):731–4

Unique alterations of thyroid hormone indices in the acquired immunodeficiency syndrome (AIDS). LoPresti JS, et al. **Ann Intern Med** 1989 Jun 15;110(12):970–5

Methimazole and serum thyroid hormone concentrations in hyperthyroid patients: effects of single and multiple daily doses. Roti E, et al. **Ann Intern Med** 1989 Jul 15; 111(2):181–2

Inhibition of thyroid hormone transport in plasma of rats by polychlorinated biphenyls. Brouwer A. **Arch Toxicol Suppl** 1989;13:440–5

Observations on thyroid hormones in hyperemesis gravidarum. Lao TT, et al. **Asia Oceania J Obstet Gynaecol** 1988 Dec;14(4):449–52

The effect of prior exercise and caffeine ingestion on metabolic rate and hormones in young adult males. Poehlman ET, et al. **Can J Physiol Pharmacol** 1989 Jan; 67(1):10–6

Relationship between the levels of serum thyroid hormones or estrogen status and the risk of breast cancer genesis in Japanese women. Takatani O, et al. **Cancer Res** 1989 Jun 1;49(11):3109–12

Profile of thyroid function and urinary iodine excretion of pregnant women attending Harare Central Hospital antenatal clinic. Chinyanga EA, et al. **Cent Afr J Med** 1989 May;35(5):396–400

Concentrations of thyroid hormones in maternal and cord blood from a normal Kenyan population. Orinda DA, et al. **Clin Chem** 1988 Nov;34(11):2371

A longitudinal study of thyroid function in pregnancy. Price A, et al. **Clin Chem** 1989 Feb;35(2):275–8

Fine adjustment of thyroxine replacement dosage: comparison of the thyrotrophin releasing hormone test using a sensitive thyrotrophin assay with measurement of free thyroid hormones and clinical assessment. Carr D, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):325–33

Effect of propranolol in combination with TSH and ovine prolactin on plasma thyroid hormone levels and in vitro hepatic monodeiodination of thyroxine in brook charr, Salvelinus fontinalis (Mitchill). Leatherland JF, et al. **Comp Biochem Physiol [A]** 1988;91(2):371–6

Thyroid functions before and after maintenance hemodialysis in patients with chronic renal failure. Sakurai S, et al. **Endocrinol Jpn** 1988 Dec;35(6):865–76

Recurrence of subacute thyroiditis over 10 years after the first attack in three cases. Yamamoto M, et al. **Endocrinol Jpn** 1988 Dec;35(6):833–9

Rapid effects of the flavonoid EMD 21388 on serum thyroid hormone binding and thyrotropin regulation in the rat. Köhrle J, et al. **Endocrinology** 1989 Jul;125(1):532–7

The TSH, T4, T3 and prolactin responses to consecutive infusions of a potent and stabilized thyrotrophin releasing hormone analogue, RX77368, in man. Eckland DJ, et al. **Eur J Clin Invest** 1988 Aug;18(4):405–9

Effect of nifedipine on thyrotropin, prolactin, and thyroid hormone release in man: a placebo-controlled study. Valensi P, et al. **Fundam Clin Pharmacol** 1989;3(1):59–66

The effects of TRH on plasma thyroid hormone levels of rainbow trout (Salmo gairdneri) and arctic charr (Salvelinus alpinus). Eales JG, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):333–9

Thyroid hormone response to thyrotropin releasing hormone after cold treatment during pre- and postnatal development in the domestic fowl. Decuypere E, et al. **Horm Metab Res** 1988 Aug;20(8):484–9

Effects of cold exposure or TRH on the serum TSH levels in the iron-deficient rat. Tang F, et al. **Horm Metab Res** 1988 Oct;20(10):616–9

Thyroid hormone alterations in patients with shock and injury. Vitek V, et al. **Injury** 1987 Sep;18(5):336–41

Endocrine status and growth after malignancy treated in childhood or adolescence. Vilska S, et al. **Int J Fertil** 1988 Jul-Aug;33(4):283–90

Endocrine, hematological and immunological changes in surgical patients undergoing general anesthesia. Costa A, et al. **Ital J Surg Sci** 1989;19(1):41–9

Thyroid hormones: blood levels do not define status of metabolism [letter] Barzel US. **J Am Geriatr Soc** 1989 Jan; 37(1):91

Serum thyroid hormone levels in patients with liver damage: evidence of multiple abnormalities in presence of euthyroidism. Mehta MN, et al. **J Assoc Physicians India** 1988 Nov;36(11):637–9

3,5,3'-triiodothyroacetic acid therapy for thyroid hormone resistance. Kunitake JM, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):461–6

Circadian variation of thyrotropin in childhood. Rose SR, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1086–90

Thyroid hormone economy in response to extreme cold exposure in healthy factory workers. Solter M, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):168–72

Effect of gossypol on the thyroid in young rats. Rikihisa Y, et al. **J Comp Pathol** 1989 May;100(4):411–7

Interaction of harderian glands, illumination, and temperature on thyroid hormones in golden hamsters. Hoffman RA, et al. **J Comp Physiol [B]** 1989;158(6):697–702

The anterior pituitary content of neuromedin U-like immunoreactivity is altered by thyrotrophin-releasing hormone and thyroid hormone status in the rat. Domin J, et al. **J Endocrinol** 1989 Aug;122(2):471–6

Effect of thyroid hormone level on temperament in infants with congenital hypothyroidism detected by screening of neonates. Rovet JF, et al. **J Pediatr** 1989 Jan;114(1):63–8

Effects of daily afternoon melatonin administration on body weight and thyroid hormones in female hamsters. Petterborg LJ, et al. **J Pineal Res** 1989;6(4):367–73

Effects of rose bengal on serum levels of thyroid hormones and thyroid peroxidase activity in male mice. Kurebayashi H, et al. **J Toxicol Sci** 1988 May;13(2):61–70

Serum thyroid hormone levels in liver cirrhosis. Agha F, et al. **JPMA** 1989 Jul;39(7):179–83

Significance of latent hyperthyroidism. Vardarli I, et al. **Klin Wochenschr** 1989 May 15;67(10):543–50

Effects of elevated gonadotropin levels on thyroid function in the male rat. Steger RW, et al. **Life Sci** 1989;45(1):85–90

Effect of acute renal failure on free thyroid hormone levels in a thyrotoxic patient. Hardy MJ, et al. **Nephron** 1989; 52(4):360–2

Effects of thyroidectomy on egg production, molt, and plasma thyroid hormone concentrations of turkey hens. Lien RJ, et al. **Poult Sci** 1989 Aug;68(8):1126–32

Hypomyelination in border disease: the roles of thyroid hormones, growth hormone, and virus infection of the CNS. Anderson CA, et al. **Prog Clin Biol Res** 1988; 281:59–70

Effects of chronic alprazolam treatment on plasma concentrations of glucocorticoids, thyroid hormones, and testosterone in cardiomyopathic hamsters. Ottenweller JE, et al. **Psychopharmacology (Berlin)** 1989;98(3):369–71

Relationship between liver microsomal function and serum thyroid hormones in rats treated with carbon tetrachloride. Itoh S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul;65(1):111–4

Effects of transient, corrected ovine maternal hypocalcaemia on neonatal endocrine and metabolic function. Cabello G, et al. **Res Vet Sci** 1989 Jul;47(1):54–9

Thyroid hormone resistance in blood monocyte cells and elevated serum T3 in patients with autosomal dominant osteopetrosis. Bollerslev J, et al. **Scand J Clin Lab Invest** 1988 Dec;48(8):795–9

The effects of chronic ingestion of spironolactone on serum thyrotropin and thyroid hormones in the male rat. Semler DE, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):263–8

Pituitary thyrotroph hypofunction in aged euthyroid subjects as assayed by the administration of iopanoic acid. Szabolcs I, et al. **ZFA** 1988 Sep-Oct;43(5):289–93

[Immunoenzyme methods for determining thyroid hormones] Tsoncheva A, et al. **Vutr Boles** 1988;27(4):73–7 (Eng. Abstr.) (Bul)

[Dynamic thyroid hormone levels during the thyrostatic treatment of Basedow's disease] Vürbanov V, et al. **Vutr Boles** 1988;27(4):15–8 (Eng. Abstr.) (Bul)

[The neuroendocrine response during surgery and in the first 5 postoperative days in a patient under continuous peridural analgesia] Lanza V, et al. **Cah Anesthesiol** 1989 Mar-Apr; 37(2):107–12 (Fre)

[Diagnostic strategies: determination of thyroid gland hormones in serum] Reiners C. **Internist (Berlin)** 1988 Aug; 29(8):529–32 (11 ref.) (Ger)

[Early changes in thyroid hormones following radioiodine therapy of hyperthyroidism with reference to etiology and accompanying medication] Kreisig T, et al. **Klin Wochenschr** 1989 Apr 3;67(7):386–92 (Eng. Abstr.) (Ger)

[Feeding of broilers with rape extract meal treated with copper ions with consideration of the iodine supply—effect on growth and thyroid hormone status] Schöne F, et al. **Nahrung** 1989;33(2):221–3 (Ger)

[Behavior of the cardiologist when faced with amiodarone-induced hormonal changes] Gheri RG. **G Ital Cardiol** 1988 Nov;18(11):945–7 (Ita)

[Pituitary thyrotropin function in type 2 diabetes mellitus: correlations with metabolic control parameters] Scaglione R, et al. **Medicina (Firenze)** 1988 Jul-Sep;8(3):315–8 (Eng. Abstr.) (Ita)

[Influence of phototherapy on the secretion of TSH, PRL and thyroid hormones in premature neonates] Bona G, et al. **Minerva Pediatr** 1988 Sep;40(9):539–44 (Eng. Abstr.) (Ita)

[Echocardiographic changes in primary autoimmune hypothyroidism] Castelli V, et al. **Recenti Prog Med** 1989 Apr;80(4):183–5 (Eng. Abstr.) (Ita)

[Serum levels of triiodothyronine, thyroxine, thyrotropic hormone, free thyroxine and reverse triiodothyronine in patients with chronic renal insufficiency subjected to hemodialysis] Knobel M, et al. **Rev Paul Med** 1987 Nov-Dec;105(6):317–22 (Eng. Abstr.) (Por)

[Changes of creatine phosphokinase and creatine phosphokinase isoenzyme in primary hypothyroidism before and after the treatment with thyroid hormone] Valente O, et al. **Rev Paul Med** 1988 May-Jun; 106(3):126–30 (Eng. Abstr.) (Por)

[Level of pituitary, adrenal and thyroid hormones in parturients with allergy and in their progeny] Krivonogova TS, et al. **Pediatriia** 1989;(6):11–3 (Rus)

[Thyroid hormones, thyrotropin, cortisol and corticotropin in postoperative recurrence of diffuse toxic goiter] Karachentsev IuI, et al. **Sov Med** 1988;(8):5–7 (Eng. Abstr.) (Rus)

[Characteristics of the clinical picture, hormonal status and humoral immunity in older patients with diffuse toxic goiter] Natarov VV, et al. **Ter Arkh** 1988;60(12):96–8 (Eng. Abstr.) (Rus)

[Thyroid hormones in leprosy patients] Balybin ES. **Vestn Dermatol Venerol** 1988;(8):48–51 (Eng. Abstr.) (Rus)

[Thyroid hormones in patients with focal scleroderma] Smirnov AV, et al. **Vestn Dermatol Venerol** 1988;(8):44–6 (Eng. Abstr.) (Rus)

[Study of intersystemic hormonal interrelations in patients with depression] Markova MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):105–10 (Eng. Abstr.) (Rus)

[The effect of long-term smoking on the thyroid gland in women] Tajtáková M, et al. **Bratisl Lek Listy** 1988 Jul; 89(7):515–8 (Eng. Abstr.) (Slo)

[Hormonal contraception and its effect on thyroid hormones and lipid metabolism] Sabaková D, et al. **Cesk Gynekol** 1988 May;53(4):275–9 (Eng. Abstr.) (Slo)

[Endocrine behavior of battered children in the acute stage of the aggression] Loredo-Abdalá A, et al. **Bol Med Hosp Infant Mex** 1989 Apr;46(4):272–6 (Eng. Abstr.) (Spa)

DEFICIENCY

Evidence for thyroid hormone deficiency in iron-deficient anemic rats. Beard J, et al. **J Nutr** 1989 May;119(5):772–8

Thyroid hormone deficiency and muscle metabolism during light and heavy exercise in dogs. Kaciuba-Uścilko H, et al. **Pflugers Arch** 1988 Aug;412(3):336–7

GENETICS

c-erbA protooncogenes mediate thyroid hormone-dependent and independent regulation of the rat growth hormone and prolactin genes. Forman BM, et al. **Mol Endocrinol** 1988 Oct;2(10):902–11

[Molecular basis for the action of thyroid hormones] Knopp J, et al. **Bratisl Lek Listy** 1989 Mar;90(3):222–7 (Eng. Abstr.) (Slo)

IMMUNOLOGY

Recurrent lupus pneumonitis with pulmonary hemorrhage in systemic lupus erythematosus associated with chronic thyroiditis and antithyroid hormone autoantibodies. Ichikawa Y, et al. **Clin Exp Rheumatol** 1989 May-Jun; 7(3):309–13

Incidence of thyroid hormone autoantibodies in patients with thyroid diseases with respect to diagnosis, other types of autoantibodies, duration of disease and treatment. Rešetková E, et al. **Endocrinol Exp** 1989 Jun;23(2):105–16

Thyroid hormone antibodies and Hashimoto's thyroiditis in mongrel dogs. Rajatanavin R, et al. **Endocrinology** 1989 May;124(5):2535–40

Thyroid hormone autoantibodies (THAA) in three sisters: a four-year follow up. Nakamura S, et al. **J Endocrinol Invest** 1989 Jun;12(6):421–7

[Antibodies against thyroxine, triiodothyronine and thyroglobulin as a possible cause of error in the diagnosis of disorders of thyroid gland function] Kraft O, et al. **Vnitr Lek** 1989 Mar;35(3):303–6 (Eng. Abstr.) (Cze)

[Two cases of untreated Graves' disease associated with anti-thyroid hormone antibodies] Komaki T, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):694–5 (Jpn)

METABOLISM

2nd Thyroid Symposium. Peripheral thyroid hormone metabolism. April 28–30, 1988, Graz, Austria. Proceedings. **Acta Med Austriaca** 1988;15 Suppl 1:1–70

Syndromes of thyroid hormone resistance. Seif FJ, et al. **Acta Med Austriaca** 1988;15 Suppl 1:47–52 (51 ref.)

Pituitary–thyroid interaction: effects of thyroid hormone, non thyroidal illness and various agents on TSH secretion. Vagenakis AG. **Acta Med Austriaca** 1988;15 Suppl 1:52–6 (28 ref.)

Effects of chronic peritoneal dialysis on thyroid function tests. Robey C, et al. **Am J Kidney Dis** 1989 Feb; 13(2):99–103

Thyroid hormone nuclear receptors and their role in the metabolic action of the hormone. DeGroot LJ. **Biochimie** 1989 Feb;71(2):269–77 (56 ref.)

Thyroid hormone action and the erbA oncogene family. Goldberg Y, et al. **Biochimie** 1989 Feb;71(2):279–91 (90 ref.)

Amiodarone and the thyroid. Kennedy RL, et al. **Clin Chem** 1989 Sep;35(9):1882–7 (85 ref.)

More on albumin and thyroid hormones [letter] Price A, et al. **Clin Chem** 1989 Sep;35(9):2017

Influence of anticonvulsants and flunarizine on the metabolism of thyroid hormones: speculation about the possible role of calmodulin. Rao ML, et al. **Clin Neuropharmacol** 1987 Aug;10(4):356–64

Hormonal regulation of thyrotropin and gonadotropin gene expression. Chin WW. **Clin Res** 1988 Sep;36(5):484–93 (66 ref.)

Endocrine changes with critical illness. Felicetta JV, et al. **Crit Care Clin** 1987 Oct;3(4):855–69 (92 ref.)

Effect of interleukin-1 (IL-1) on thyroid hormone metabolism in mice: stimulation by IL-1 of iodothyronine 5'-deiodinating activity (type I) in the liver. Fujii T, et al. **Endocrinology** 1989 Jan;124(1):167–74

Evidence for neuropeptide Y synthesis in the rat anterior pituitary and the influence of thyroid hormone status: comparison with vasoactive intestinal peptide, substance P, and neurotensin. Jones PM, et al. **Endocrinology** 1989 Jul;125(1):334–41

Localization of thyroid hormone in subpopulations of rat alveolar macrophages. Liu WK, et al. **Histochem J** 1989 Feb;21(2):115–21

Thyroid hormone metabolism in hypermetabolic patients with haematological disorders. Kirkegaard C, et al. **Horm Metab Res** 1989 Mar;21(3):145–7

Functional morphology of the thyroid. Fujita H. **Int Rev Cytol** 1988;113:145–85 (170 ref.)

Thyroid hormone metabolism and level of illness severity in pediatric cardiac surgery patients. Allen DB, et al. **J Pediatr** 1989 Jan;114(1):59–62

Effects of melatonin and thyroxine treatment on reproductive organs and thyroid hormone levels in male hamsters. Creighton JA, et al. **J Pineal Res** 1989;6(4):317–23

Effects of thyroid hormone on lipogenesis and glucose flux. **Nutr Rev** 1988 Oct;46(10):356–8 (13 ref.)

Flavonoid effects on transport, metabolism and action of thyroid hormones. Köhrle J, et al. **Prog Clin Biol Res** 1988; 280:323–40

Lipids and thyroid hormones. Hoch FL. **Prog Lipid Res** 1988; 27(3):199–270 (653 ref.)

A case of refetoff syndrome: selective venous sampling for TSH is useful in differentiating thyroid hormone resistance from TSH secreting tumor. Itagaki Y, et al. **Tohoku J Exp Med** 1989 Jan;157(1):69–78

[The metabolic effect of cold] Koivisto V. **Duodecim** 1989; 105(5):438–44 (30 ref.) (Fin)

[Effect of R- versus S-propranolol on the peripheral thyroid hormone metabolism of hyperthyroid patients] Buchinger W, et al. **Acta Med Austriaca** 1988;15 Suppl 1:62–3 (Ger)

PHARMACOKINETICS

Plasma protein-mediated transport of steroid and thyroid hormones. A critique. Ekins RP, et al. **Ann N Y Acad Sci** 1988;538:193–203 (13 ref.)

Thyroid hormone kinetics during late pregnancy in the ovine fetus. Fraser M, et al. **J Dev Physiol** 1988 Oct;10(5):461–71

PHARMACOLOGY

A structural study of the rat proximal and distal nephron: effect of peptide and thyroid hormones. Koechlin N, et al. **Am J Physiol** 1989 May;256(5 Pt 2):814–22

Identification of cytochrome P450a (P450IIA1) as the principal testosterone 7 alpha-hydroxylase in rat liver microsomes and its regulation by thyroid hormones. Arlotto MP, et al. **Arch Biochem Biophys** 1989 May 1; 270(2):458–71

Cartilage response to thyroid hormones in the sex-linked dwarf chicken. Hoshino S, et al. **Comp Biochem Physiol [A]** 1989;93(3):583–5

Characterization of thyroid hormone effects on Na channel synthesis in cultured skeletal myotubes: role of Ca2+. Brodie C, et al. **Endocrinology** 1989 Aug;125(2):842–9

Serum thyrotropin concentrations are more highly correlated with serum triiodothyronine concentrations than with serum thyroxine concentrations in thyroid hormone-infused thyroidectomized rats. Emerson CH, et al. **Endocrinology** 1989 May;124(5):2415–8

Control of mitochondrial transcription by thyroid hormone. Mutvei A, et al. **Eur J Biochem** 1989 Mar 1;180(1):235–40

Rat pituitary tumor cells in serum-free culture. I. Selection of thyroid hormone-responsive and autonomous cells. Riss TL, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):127–35

Rat pituitary tumor cells in serum-free culture. II. Serum factor and thyroid hormone requirements for estrogen-responsive growth. Riss TL, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):136–42

Influence of thyroid hormones on hepatic mitochondrial enzymes of thiouracil treated teleost Anabas testudineus (Bloch). Peter MC, et al. **Indian J Exp Biol** 1988 Sep; 26(9):651–3

The fall in the incorporation of labelled iron into the bone marrow during enhanced erythropoiesis: this paradox explained by changes in ferrokinetics and cytokinetics using the model of mice affected by thyroid hormones. Vácha J, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):373–80

Thyroid hormone inhibition of human thyrotropin beta-subunit gene expression is mediated by a cis-acting element located in the first exon. Wondisford FE, et al. **J Biol Chem** 1989 Sep 5;264(25):14601–4

Stimulation by thyroid hormone of phosphate transport in primary cultured renal cells. Noronha-Blob L, et al. **J Cell Physiol** 1988 Oct;137(1):95–101

Thyroid hormone analog inhibition of hepatic 5'-iodothyronine deiodinase activity. Shulkin BL, et al. **J Endocrinol Invest** 1988 Oct;11(9):657–61

Apolipoprotein gene expression in the rat is regulated in a tissue-specific manner by thyroid hormone. Davidson NO, et al. **J Lipid Res** 1988 Nov;29(11):1511–22

Selective thyromimetics. Cardiac-sparing thyroid hormone analogues containing 3'-arylmethyl substituents. Leeson PD, et al. **J Med Chem** 1989 Feb;32(2):320–36

Acute effect of thyroid hormone on the heart: an extranuclear increase in sugar uptake. Segal J. **J Mol Cell Cardiol** 1989 Mar;21(3):323–34

Cardiac hypertrophy induced by thyroid hormone is independent of loading conditions and beta adrenoceptor blockade. Bedotto JB, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):632–6

Repression of transcription mediated at a thyroid hormone response element by the v-erb-A oncogene product. Sap J, et al. **Nature** 1989 Jul 20;340(6230):242–4

Retinoic acid and thyroid hormone induce gene expression through a common responsive element. Umesono K, et al. **Nature** 1988 Nov 17;336(6196):262–5

Hormonal regulation of postnatal development of renal tubular transport processes. Bräunlich H. **Physiol Bohemoslov** 1988;37(4):347–50

Identification of the cis-acting elements and trans-acting factors that mediate cell-specific and thyroid hormone stimulation of growth hormone gene expression. Samuels HH, et al. **Recent Prog Horm Res** 1988;44:53–114 (80 ref.)

The role of thyroid hormones in the control of beta-adrenergic receptors in rat mammary gland. Depix M, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr; 64(1):79–86

The influence of thyroid hormones on colony growth of peripheral CFU-GM from normal and leukemic subjects. Notario A, et al. **Tumori** 1988 Oct 31;74(5):507–12

PHYSIOLOGY

Thyroid hormone resistance in a large kindred: physiologic, biochemical, pharmacologic, and neuropsychologic studies [published erratum appears in Am J Med 1989 May;86(5):637] Smallridge RC, et al. **Am J Med** 1989 Mar; 86(3):289–96

Glucoregulatory function of thyroid hormones: role of pancreatic hormones. Müller MJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E101–10

Nuclear thyroid hormone receptors: ontogeny and thyroid hormone effects in sheep. Polk D, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E543–9

Diabetes and thyroid-hormone-induced changes in cardiac function and their molecular basis. Dillmann WH. **Annu Rev Med** 1989;40:373–94 (111 ref.)

The impact of nutrition on thyroid hormone physiology and action. Danforth E Jr, et al. **Annu Rev Nutr** 1989;9:201–27 (116 ref.)

Regulation of gene expression by thyroid hormone. Samuels HH, et al. **Annu Rev Physiol** 1989;51:623–39 (96 ref.)

The effects of cerebral hemidecortication on the eruption rate and uptake of [3H]-glycine by the periodontal ligament of the rat incisor. Tse M do C, et al. **Arch Oral Biol** 1988; 33(8):605–11

Pituitary–thyroid relationships in hypothyroidism. Silva JE. **Baillieres Clin Endocrinol Metab** 1988 Aug;2(3):541–65 (129 ref.)

On the mechanism of the reduction by thyroid hormone of beta-adrenergic relaxation rate stimulation in rat heart. Beekman RE, et al. **Biochem J** 1989 Apr 1;259(1):229–36

Thyroid hormone response elements in pituitary genes. Ahlquist JA, et al. **Biochim Biophys Acta** 1989 Jul 7; 1008(2):251–4

Thyroid hormones and nervous system development. Timiras PS, et al. **Biol Neonate** 1989;55(6):376–85 (33 ref.)

The effect of thyroid hormones on the lipid composition of rat plasma and erythrocyte membranes. Digiorgio VM, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):979–84

Bone and thyroid hormones. Tremollieres F, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:116–8 (11 ref.)

Human ketone body production and utilization studied using tracer techniques: regulation by free fatty acids, insulin, catecholamines, and thyroid hormones. Keller U, et al. **Diabetes Metab Rev** 1989 May;5(3):285–98 (58 ref.)

Thyroid activity in relation to feed intake, growth rate and feed conversion in growing heifers. Standal N, et al. **Domest Anim Endocrinol** 1987 Jul;4(3):201–6

Thyroid hormone and the gut. Hays MT. **Endocr Res** 1988; 14(2–3):203–24 (76 ref.)

Thyroid hormones and the acquisition and retention of behavioural responses. Jefferys D, et al. **Endocrinology** 1989 Aug;125(2):1103–5

Effect of thyroid hormones on urea biosynthesis and related processes in rat liver. Marti J, et al. **Endocrinology** 1988 Nov;123(5):2167–74

The effect of altered thyroid status on pituitary hormone messenger ribonucleic acid concentrations in the rat. Samuels MH, et al. **Endocrinology** 1989 May;124(5):2277–82

Thyroid hormones modulate thyrotropin-releasing hormone biosynthesis in tissues outside the hypothalamic-pituitary axis of male rats. Simard M, et al. **Endocrinology** 1989 Jul; 125(1):524–31

The postnatal development of sarcoplasmic reticulum Ca2+ transport activity in skeletal muscle of the rat is critically dependent on thyroid hormone. Simonides WS, et al. **Endocrinology** 1989 Mar;124(3):1145–52

Glucoregulatory function of thyroid hormones: evidence for an insulin-independent effect. Müller MJ, et al. **Exp Clin Endocrinol** 1989 May;93(2–3):313–20

Influence of thyroid status on the membranes of rat liver mitochondria. Unique localization of L-glycerol-3-phosphate dehydrogenase. Beleznai Z, et al. **FEBS Lett** 1989 Jan 30;243(2):247–50

Thyroidectomy and the termination of juvenile refractoriness in the red-legged partridge (Alectoris graeca chukar). Creighton JA. **Gen Comp Endocrinol** 1988 Nov;72(2):204–8

Two thyroid hormone regulated genes, the beta-subunits of nerve growth factor (NGFB) and thyroid stimulating hormone (TSHB), are located less than 310 kb apart in both human and mouse genomes. Dracopoli NC, et al. **Genomics** 1988 Aug;3(2):161–7

Thyroid hormones and the hepatic handling of bilirubin. I. Effects of hypothyroidism and hyperthyroidism on the hepatic transport of bilirubin mono- and diconjugates in the Wistar rat. Van Steenbergen W, et al. **Hepatology** 1989 Feb;9(2):314–21

Thyroid hormone stimulation of the perch (Anabas testudineus Bloch) ovarian mitochondrial steroidogenesis. Kaul K, et al. **Indian J Exp Biol** 1988 Jun;26(6):413–7

Morphometric analysis of the cerebellar Purkinje cell in the developing normal and hypothyroid chick. Bouvet J, et al. **Int J Dev Neurosci** 1987;5(4):345–55

Selective effects of thyroid hormonal deprivation on growth and development of olfactory receptor sheet during the early postnatal period: a morphometric and cell count study in the rat. Paternostro M, et al. **Int J Dev Neurosci** 1989; 7(3):243–55

Acquisition of acoustic startle response in relation to growth and thyroid function in rats. Schneider BF, et al. **Int J Dev Neurosci** 1987;5(2):99–106

Malic enzyme activity in the developing rat brain in relation to thyroid status. Thakare UR, et al. **Int J Dev Neurosci** 1989;7(2):203–8

Thyroid hormone and circadian regulation of the binding activity of a liver-specific protein associated with the 5'-flanking region of the S14 gene. Wong NC, et al. **J Biol Chem** 1989 Mar 15;264(8):4466–70

Hypercholesterolaemia and thyroid hormone status. O'Reilly DS. **J Endocrinol** 1988 Sep;118(3):349–51 (23 ref.)

Xenopus laevis serum albumin: sequence of the complementary deoxyribonucleic acids encoding the 68- and 74-kilodalton peptides and the regulation of albumin gene expression by thyroid hormone during development. Moskaitis JE, et al. **Mol Endocrinol** 1989 Mar;3(3):464–73

The role of growth factors on the expression of differentiated functions of the ovary and placenta. Maruo T. **Nippon Naibunpi Gakkai Zasshi** 1988 Dec 20; 64(12):1214–22

Nongenomic interactions of retinoic acid and thyroid hormone at the plasma membrane. **Nutr Rev** 1989 Jul; 47(7):213–5 (10 ref.)

Thyroid function, metabolic regulation, and depression. Zach J, et al. **Psychosom Med** 1988 Sep-Oct;50(5):454–68 (69 ref.)

Permissive hormone regulation of hormone-sensitive effector systems. Malbon CC, et al. **Trends Pharmacol Sci** 1988 Jan; 9(1):33–6 (35 ref.)

[Hormonal effects of cold and light] Leppäluoto J. **Duodecim** 1989;105(5):430–6 (49 ref.) (Fin)

[Variations in the metabolism of lipoproteins as a function of thyroid hormones] Renard E, et al. **Presse Med** 1989 Feb 18;18(7):350–4 (Eng. Abstr.) (Fre)

[Hormonal determination of the differentiation of striated skeletal muscle in urodele amphibians] Chanoine C, et al. **Reprod Nutr Dev** 1988;28(3B):721–31 (Eng. Abstr.) (Fre)

[Lipogenesis, aging and hormonal regulation] Rassoul F, et al. **Z Gerontol** 1989 Jan–Feb;22(1):34–7 (Eng. Abstr.) (Ger)

[The thyroid gland and the breast] Pavić Z, et al. **Z Lymphol** 1988 Jul;12(1):24–9 (66 ref.) (Eng. Abstr.) (Ger)

[Effect of emotional-algesic stress on the hormonal function of thyroid and parathyroid glands] Kuripka VI, et al.

Fiziol Zh 1989 Jan-Feb;35(1):72-5 (Eng. Abstr.) (Rus)
[Interhormonal relations in the dynamics of immune response during thyroidectomy] Fomicheva EE. Fiziol Zh SSSR 1989 Jan;75(1):131-7 (Eng. Abstr.) (Rus)
[The role of thyroid hormones and prolactin in the development of disorders of arterial blood pressure in girls 11-12 years of age] Kolpakova GV, et al. Kardiologiia 1989 May;29(5):98-100 (Rus)
[Effect of estrogens and thyroid hormones on the development of isoprenaline-induced myocardiodystrophy] Stroev EA, et al. Kardiologiia 1988 Aug;28(8):90-3 (Eng. Abstr.) (Rus)
[Mineralocorticoid function of the rat adrenal gland and thyroid hormones] Komarova IV, et al. Patol Fiziol Eksp Ter 1989 Jan-Feb;(1):63-6 (Eng. Abstr.) (Rus)
[Effect of thyroid hormones on calcitonin secretion] Rom-Bugoslavskaia ES, et al. Probl Endokrinol (Mosk) 1988 Nov-Dec;34(6):9-13 (Eng. Abstr.) (Rus)
[Various problems of thyroidology] Balabolkin MI. Ter Arkh 1988;60(9):136-41 (Rus)

POISONING

Thyrotoxicosis due to ingestion of excess thyroid hormone. Cohen JH 3d, et al. Endocr Rev 1989 May;10(2):113-24 (94 ref.)
Toxic emergencies of endocrine and metabolic therapeutic agents. Seger D. J Emerg Med 1988 Nov-Dec;6(6):527-37 (50 ref.)
Clinical features and management of overdosage with thyroid drugs. Lin TH, et al. Med Toxicol Adverse Drug Exp 1988 Jul-Aug;3(4):264-72 (57 ref.)

SECRETION

Effects of gastrin-releasing peptide on basal and stimulated thyroid hormone secretion in the mouse. Ahrén B. Acta Endocrinol (Copenh) 1989 Feb;120(2):245-9
Effects of calcitonin, katacalcin, and calcitonin gene-related peptide on basal and TSH-stimulated thyroid hormone secretion in the mouse. Ahrén B. Acta Physiol Scand 1989 Feb;135(2):133-7
Protein content and thyroid hormone release in vitro by differentiated thyroid cancer cells in the presence of estradiol, dehydroepiandrosterone, polypeptidic hormones and pesticides. Ghinea E, et al. Endocrinologie 1988 Jul-Sep;26(3):165-71
Selective autonomic nervous control of thyroid hormone and calcitonin secretion during metabolic and cardiorespiratory activation by intracisternal thyrotropin-releasing hormone (TRH). Riedel W, et al. J Auton Nerv Syst 1988 Sep; 24(1-2):157-73
Helodermin-like peptides in thyroid C cells: stimulation of thyroid hormone secretion and suppression of calcium incorporation into bone. Grunditz T, et al. Proc Natl Acad Sci U S A 1989 Feb;86(4):1357-61
Autonomously functioning thyroid nodules in childhood and adolescence [letter] Leung AK. Surgery 1989 Feb;105(2 Pt 1):238
[A case of multiple endocrine neoplasia, type 1, with parathyroid adenoma, multinodular adrenal cortical hyperplasia, islet cell tumor and hyperplasia of thyroid with concomitant hypersecretion of gastrin and total glucagon-like immunoreactivity] Shigematsu S, et al. Nippon Naika Gakkai Zasshi 1989 Mar;78(3):357-62 (Jpn)
[Endocrine disorders in obesity—with special reference to the pituitary, thyroid and adrenal functions] Inoue S, et al. Nippon Rinsho 1988 Nov;46(11):2395-9 (Jpn)
[Basal secretion of hormones of the anterior lobe of the pituitary gland, thyroid gland and adrenal cortex in children and adolescents with epilepsy] Kirichenko VD. Zh Nevropatol Psikhiatr 1989;89(6):26-30 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Effects of thyroid hormones (T4,T3), bromocriptine and Triac on inappropriate TSH hypersecretion. Salmela PI, et al. Clin Endocrinol (Oxf) 1988 May;28(5):497-507
Thyroid hormone-induced reduction of urinary 5-hydroxyindole acetic acid (5 HIAA) in obese children. Comparison with hypothyroid patients of similar age having either pituitary dwarfism or congenital myxedema. Popa M, et al. Endocrinologie 1989 Jan-Mar;27(1):35-41
Postoperative recurrence of simple goiter and replacement therapy. Study of 210 patients. Ronga G, et al. Ital J Surg Sci 1989;19(1):57-61
Thyroid hormone treatment: new insights into an old therapy [editorial] Cooper DS. JAMA 1989 May 12;261(18):2694-5
Treatment with thyroid hormone [letter] Gaby AR. JAMA 1989 Oct 6;262(13):1774-5
The aging thyroid. The use of thyroid hormone in older persons. Sawin CT, et al. JAMA 1989 May 12; 261(18):2653-5
Prevention of respiratory distress syndrome. Moya FR, et al. Semin Perinatol 1988 Oct;12(4):348-58 (126 ref.)
[Pituitary changes under CT scan before and after replacement therapy in patients with primary hypothyroidism] Lu JM. Chung Hua I Hsueh Tsa Chih 1989 Mar;69(3):140-2, 12 (Eng. Abstr.) (Chi)
[Discrepancy between the basal level of TSH and the thyrotropic response to TRH during thyroid hormone treatment of differentiated thyroid cancers] Charrie A, et al. Ann Endocrinol (Paris) 1989;50(1):31-5 (Eng. Abstr.) (Fre)
[Therapy of hypothyroidism] Wenzel KW. Internist (Berlin) 1988 Aug;29(8):559-63 (35 ref.) (Ger)
[Therapeutic effect of thyroidin in euthyroid women with anovulatory infertility] Alipov VI, et al. Akush Ginekol (Mosk) 1988 Nov;(11):53-6 (Eng. Abstr.) (Rus)

TOXICITY

Effects of prenatally administered thyroid hormones or glucocorticoids on maturation of kidney function in newborn rats. Scholle S, et al. Dev Pharmacol Ther 1989; 12(3):162-8

THYROID NEOPLASMS

The management of differentiated thyroid cancer in Europe in 1988. Results of an international survey. Baldet L, et al. Acta Endocrinol (Copenh) 1989 May;120(5):547-58
Management of thyroid nodules. Griffin JE. Am J Med Sci 1988 Nov;296(5):336-47 (80 ref.)
Follicular thyroid cancer metastatic to the iris. Case report. Weisenthal R, et al. Arch Ophthalmol 1989 Apr; 107(4):494-5
Metastatic thyroid carcinoma: an unusual presentation. Revington PJ, et al. Br J Oral Maxillofac Surg 1989 Aug; 27(4):341-5
Suppression of T4 secretion in a metastatic follicular carcinoma. Boucher A, et al. Clin Invest Med 1989 Jun; 12(3):162-4
Medullary thyroid carcinoma: localization of a mediastinal metastasis with I-131 MIBG. Laflamme L, et al. Clin Nucl Med 1988 Aug;13(8):577-9
Cutaneous metastasis from papillary carcinoma of the thyroid. A case confirmed by monoclonal antithyroglobulin antibody. Doutre MS, et al. Dermatologica 1988; 177(4):241-3
Management of occult metastatic cervical disease from well-differentiated thyroid carcinoma. McGuirt WF. Ear Nose Throat J 1989 Mar;68(3):170-6, 179 (25 ref.)
A new intraperitoneal metastasis from thymoma. Lundblad R, et al. Eur J Surg Oncol 1988 Dec;14(6):697-702
Intraglomerular metastases from papillary carcinoma of the thyroid. Sarma DP, et al. J La State Med Soc 1989 Jun; 141(6):26-8
Metastatic thyroid adenocarcinoma presenting as exophthalmos. Umbreit JN, et al. Mo Med 1988 Dec; 85(12):792-4
Indication for surgery of spinal metastases within the cervical region. Kashab M, et al. Neurosurg Rev 1988;11(1):95-7
Occult medullary carcinoma of the thyroid presenting as neck and parapharyngeal metastases. Pearlman SJ, et al. Otolaryngol Head Neck Surg 1988 Nov;99(5):509-12
Case 3. Follicular thyroid carcinoma with metastases to bone. Radiographics 1989 Jan;9(1):92-4
[Primary lymphoma of the thyroid gland. Diagnostic and therapeutic discussion. Apropos of 4 cases] Ifrah N, et al. Ann Med Interne (Paris) 1988;139(5):344-8 (23 ref.) (Eng. Abstr.) (Fre)
[Pseudo-aneurysmal bone metastasis. Apropos of 6 new cases] Collet P, et al. Rev Rhum Mal Osteoartic 1988 Nov; 55(11):941-4 (Fre)
[Thyroid microcarcinoma. Apropos of 3 cases] Marrakchi R, et al. Tunis Med 1989 Feb;67(2):113-7 (Eng. Abstr.) (Fre)
[Diagnosis and therapy of differentiated thyroid cancer] Georgi P. Rontgenblatter 1989 Jan;42(1):51-3 (Eng. Abstr.) (Ger)
[Well-differentiated thyroid carcinoma] Feigl D, et al. Harefuah 1989 Apr 16;116(8):401-4 (Eng. Abstr.) (Heb)
[Diagnosis and treatment of thyroid nodules. Critical review of the literature and presentation of a case series] Badellino F, et al. Minerva Chir 1988 Jul 31;43(13-14):1139-49 (60 ref.) (Eng. Abstr.) (Ita)
[Assessment of the discriminant analysis concerning the prognostic factors in patients with differentiated thyroid cancer] Mori Y, et al. Nippon Geka Gakkai Zasshi 1988 Aug;89(8):1259-66 (Eng. Abstr.) (Jpn)
[Thyroid carcinoma] Hsie J. Tidsskr Nor Laegeforen 1989 Jun 10;109(16):1755-6 (Nor)
[Sarcomas of the thyroid gland] Murav'ev GN. Klin Med (Mosk) 1988 Jul;66(7):28-33 (25 ref.) (Rus)
[Teratoma in the thyroid area in a neonate] Rafaeli Z, et al. Acta Chir Iugosl 1988;35(2):197-202 (Eng. Abstr.) (Scr)
[Carcinoma of the thyroid in childhood] de Mingo Misena L, et al. An Esp Pediatr 1988 Nov;29(5):393-6 (Eng. Abstr.) (Spa)
[Cancer of the thyroid gland] San Román Terán JM, et al. Rev Clin Esp 1988 Oct;183(6):285-8 (Spa)

ANALYSIS

Nuclear DNA content and prognosis in Hürthle cell tumours of the thyroid gland. Wallin G, et al. Acta Chir Scand 1988 Sep;154(9):501-4
Medullary thyroid carcinomas express chromogranin A and a novel neuroendocrine protein recognized by monoclonal antibody HISL-19. Deftos LJ, et al. Am J Med 1988 Dec; 85(6):780-4
Distribution of calcitonin- and somatostatin-containing cells in thyroid lymphoma and in Hashimoto's thyroiditis. Baschieri L, et al. Appl Pathol 1989;7(2):99-104
Immunocytochemistry of anaplastic carcinoma of thyroid gland. Beltrami CA, et al. Appl Pathol 1989;7(2):122-33
Reproducibility of DNA measurements in imprints of thyroid adenoma. Variation sources. Montironi R, et al. Appl Pathol 1989;7(3):171-8
Lactoferrin demonstration in thyroid follicular and papillary carcinomas [letter] Barresi G, et al. Arch Pathol Lab Med 1988 Dec;112(12):1176-7
Structural characterization of a high-molecular-mass form of calcitonin [procalcitonin-(60-116)-peptide] and its corresponding N-terminal flanking peptide [procalcitonin-(1-57)-peptide] in a human medullary thyroid carcinoma. Conlon JM, et al. Biochem J 1988 Nov 15;256(1):245-50
Decrease of prostaglandin I2 binding sites in thyroid cancer. Virgolini I, et al. Br J Cancer 1988 Nov;58(5):584-8
Lectin histochemistry of the thyroid gland. González-Cámpora R, et al. Cancer 1988 Dec 1; 62(11):2354-62
Serum and tissue total sialic acid as a marker for human thyroid cancer. Kökoğlu E, et al. Cancer Lett 1989 Jul 1;46(1):1-5
Co-existent anaplastic and well differentiated thyroid carcinomas: a nuclear DNA study. Wallin G, et al. Eur J Surg Oncol 1989 Feb;15(1):43-8
Thyroglobulin immunostaining in follicular thyroid carcinoma: relationship to the degree of differentiation and cell type. Harach HR, et al. Histopathology 1988 Jul; 13(1):43-54
Mucosubstances in medullary carcinoma of the thyroid [letter; comment] Rigaud C, et al. Histopathology 1989 Feb; 14(2):228-9. Comment on: Histopathology 1988 Jul;13(1):55-66
Imaging and relative quantification of 127I in human thyroid follicles by analytical ion microscope: characterization of benign thyroid epithelial tumors. Fragu P, et al. J Clin Endocrinol Metab 1989 Aug;69(2):304-9
Human endothelial cell growth factors derived from thyroid anaplastic cell carcinoma. Itoh K, et al. Laryngoscope 1989 May;99(5):533-7
Relative concentration of astatine-211 and iodine-125 by human fetal thyroid and carcinoma of the thyroid in nude mice. Cobb LM, et al. Radiother Oncol 1988 Nov; 13(3):203-9
DNA content in radiation-associated thyroid cancer. Komorowski RA, et al. Surgery 1988 Dec;104(6):992-6
[Immunohistochemical detection of triiodothyronine in thyroid tumors using T3-01 monoclonal antibody] Michal M, et al. Cas Lek Cesk 1989 Apr 21;128(17):517-9 (Eng. Abstr.) (Cze)
[Immunohistochemical detection of thyroglobulin] Sturm U, et al. Zentralbl Allg Pathol 1989;135(3):281-5 (Eng. Abstr.) (Ger)
[Flow cytometric DNA measurements of thyroid carcinomas] Tsuchiya A, et al. Gan No Rinsho 1989 Jul; 35(8):886-90 (Eng. Abstr.) (Jpn)
[Measurement of cellular DNA content in thyroid tumors by the flow cytometer] Motomura Y. Nippon Geka Gakkai Zasshi 1988 Jul;89(7):1066-74 (Eng. Abstr.) (Jpn)
[A study on endothelial cell growth factors from the thyroid anaplastic cell carcinoma using human umbilical vein-endothelial cells] Itoh K. Nippon Jibiinkoka Gakkai Kaiho 1988 Jul;91(7):1085-95 (Eng. Abstr.) (Jpn)

BLOOD

Assay of "intact" parathyrin in the immediate and long-term postoperative follow-up of patients treated for hyperparathyroidism or thyroid tumor [letter] Lundberg PA, et al. Clin Chem 1989 Feb;35(2):340-1
Effect of a somatostatin analog (SMS 201-995) in perfusion on basal and pentagastrin-stimulated calcitonin levels in medullary thyroid carcinoma. Modigliani E, et al. Horm Metab Res 1988 Dec;20(12):773-5
Prediagnostic serum selenium in a case-control study of thyroid cancer. Glattre E, et al. Int J Epidemiol 1989 Mar; 18(1):45-9
Postoperative thyroglobulin level determination to follow up patients with highly differentiated thyroid cancer. Szántó J, et al. Oncology 1989;46(2):99-104
[The significance of thyroglobulin determination in the follow-up of patients with papillary or follicular thyroid carcinoma] Hennemann G, et al. Ned Tijdschr Geneeskd 1989 Mar 11;133(10):491-3 (Dut)
[Follow up of thyroglobulin levels in patients with surgically treated, highly differentiated thyroid cancer] Szántó J, et al. Orv Hetil 1989 Aug 6;130(32):1695-9 (Eng. Abstr.) (Hun)

CHEMICALLY INDUCED

Promoting effect of 2,4-diaminoanisole sulfate on rat thyroid carcinogenesis. Kitahori Y, et al. Cancer Lett 1989 May; 45(2):115-21
Strong promoting activity by uracil on urinary bladder carcinogenesis and a possible inhibitory effect on thyroid tumorigenesis in rats initiated with N-methyl-N-nitrosourea. Masui T, et al. Carcinogenesis

1989 Aug;10(8):1471–4
Chronic toxicity/carcinogenicity studies of sulphamethazine in B6C3F1 mice. Littlefield NA, et al. **Food Chem Toxicol** 1989 Jul;27(7):455–63
Thyroid follicular cell carcinogenesis. Hill RN, et al. **Fundam Appl Toxicol** 1989 May;12(4):629–97 (338 ref.)

CLASSIFICATION

Clinical characteristics in sporadic and familial medullary thyroid carcinoma. A nationwide study of 249 patients in Sweden from 1959 through 1981. Bergholm U, et al. **Cancer** 1989 Mar 15;63(6):1196–204
The WHO histological classification of thyroid tumors: a commentary on the second edition. Hedinger C, et al. **Cancer** 1989 Mar 1;63(5):908–11

COMPLICATIONS

Gardner's syndrome and thyroid cancer—a case report and review of the literature [letter] Piffer S. **Acta Oncol** 1988; 27(4):413–5 (17 ref.)
Multiple branchial cleft–like cysts in Hashimoto's thyroiditis. Louis DN, et al. **Am J Surg Pathol** 1989 Jan;13(1):45–9
Hemoptysis as the presenting manifestation of thyroid carcinoma. A case report. Weiland JE, et al. **Arch Intern Med** 1989 Jul;149(7):1693–4
Thyroid cancer with coexistent Hashimoto's thyroiditis. Clinical assessment and management. Eisenberg BL, et al. **Arch Surg** 1989 Sep;124(9):1045–7
Hyperthyroidism and thyroid cancer. Edmonds CJ, et al. **Clin Endocrinol (Oxf)** 1988 Feb;28(2):253–9
Werner's syndrome associated with malignancies: five case reports with a survey of case histories in Japan. Sato K, et al. **Gerontology** 1988;34(4):212–8 (19 ref.)
Diarrhea associated with metastasis from medullary carcinoma of thyroid. Pipalia DH, et al. **Indian J Gastroenterol** 1989 Jul;8(3):195–6
Laryngeal oedema complicating thyroid lymphoma. Watson C. **J Laryngol Otol** 1988 Oct;102(10):947–50
Thyroid plasmacytoma with dermatomyositis and palmar fasciitis. Caron P, et al. **J Rheumatol** 1989 Jul;16(7):997–9
Axillary vein thrombosis as the initial symptom in metastatic papillary carcinoma of the thyroid. Sirota DK. **Mt Sinai J Med** 1989 Mar;56(2):111–3
The deviated trachea. Hustad GJ, et al. **Nebr Med J** 1989 Jul;74(7):182–4
Hyperthyroidism without elevated levels of thyroxine and triiodothyronine in a patient with pulmonary tuberculosis. Archambeaud–Mouveroux F, et al. **South Med J** 1989 Jul; 82(7):907–10
Medullary thyroid cancer and Graves' disease. Schwartz RW, et al. **Surgery** 1989 Jun;105(6):804–7
Malignant thyroid neoplasms and coexistent lymphocytic thyroiditis—an analysis from surgical materials. Shinomiya S, et al. **Tokushima J Exp Med** 1988 Dec;35(3–4):91–100 (27 ref.)
[Frequency of carcinoma in thyroid cysts] Brožková V, et al. **Vnitr Lek** 1989 Feb;35(2):151–7 (Eng. Abstr.) (Cze)
[Synchronous occurrence of neoplasias of the thyroid gland and hyperthyroid nodular struma in an endemic area] Haid A, et al. **Chirurg** 1989 Jan;60(1):39–43 (Eng. Abstr.) (Ger)
[Hyperthyroidism caused by a hormone–producing follicular thyroid cancer] Scherübl H, et al. **Klin Wochenschr** 1989 Mar 1;67(5):304–7 (Eng. Abstr.) (Ger)
[Coexistence of hyperthyroidism and thyroid carcinoma. Description of a clinical case] De Marinis L, et al. **Minerva Endocrinol** 1989 Apr–Jun;14(2):129–35 (Eng. Abstr.) (Ita)
[Double neoplasms of non–Hodgkin's lymphoma and thyroid cancer associated with sicca syndrome: a case report] Saito M, et al. **Rinsho Ketsueki** 1988 Sep;29(9):1460–4 (Eng. Abstr.) (Jpn)
[The combination of diffuse toxic goiter and thyroid cancer] Tsarikovskaia NG, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):53–4 (Rus)

DIAGNOSIS

Fine needle aspiration cytologic diagnosis of the solitary cold thyroid nodule. Comparison with ultrasonography, radionuclide perfusion study and xeroradiography. Aggarwal SK, et al. **Acta Cytol** 1989 Jan–Feb;33(1):41–7
Nuclear grooves in cytologic preparations. A study of the utility of this feature in the diagnosis of papillary carcinoma. Gould E, et al. **Acta Cytol** 1989 Jan–Feb; 33(1):16–20
Usefulness of fine needle aspiration of the thyroid in an endemic goiter region. Harach HR. **Acta Cytol** 1989 Jan–Feb;33(1):31–5
Cytology of clear cell carcinoma of the thyroid [letter] Jayaram G. **Acta Cytol** 1989 Jan–Feb;33(1):135–6
Fine needle aspiration of the thyroid. Distinction between colloid nodules and follicular neoplasms using cell blocks and 21–gauge needles. Kung IT, et al. **Acta Cytol** 1989 Jan–Feb;33(1):53–60
Nuclear grooves in the aspiration cytology of papillary carcinoma of the thyroid. Rupp M, et al. **Acta Cytol** 1989 Jan–Feb;33(1):21–6
Clinicopathologic management of tumors of the thyroid gland in an endemic goiter area. Combined use of preoperative fine needle aspiration biopsy and intraoperative frozen section. Schmid KW, et al. **Acta Cytol** 1989 Jan–Feb;33(1):27–30
Fine needle aspiration cytology and immunocytochemistry in the diagnosis of lymphoid lesions of the thyroid gland. Tani E, et al. **Acta Cytol** 1989 Jan–Feb;33(1):48–52
Recurrent occult medullary thyroid carcinoma detected by MR imaging. Crow JP, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1255–6
Squamous cell carcinoma of the thyroid: a diagnostic dilemma. Korovin GS, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):59–65
Contribution of quantitative cytology to the cytological diagnosis of thyroid neoplasms. Liautaud–Roger F, et al. **Anticancer Res** 1989 Jan–Feb;9(1):231–4
Clear cell thyroid cancer—undifferentiated type—an immunohistochemical and electron microscopical study. Péter I, et al. **Arch Geschwulstforsch** 1989;59(2):121–8
Obstructive manifestations of thyroid lymphoma. Van Ruiswyk J, et al. **Arch Intern Med** 1989 Jul;149(7):1575–7
Medullary carcinoma in children. Results of early detection and surgery. Telander RL, et al. **Arch Surg** 1989 Jul; 124(7):841–3
Thyroid nodules and thyroid cancer—diagnostic aspects. Franklyn JA, et al. **Baillieres Clin Endocrinol Metab** 1988 Aug;2(3):761–75 (48 ref.)
Value of venous catheterization and calcitonin studies in the treatment and management of clinically inapparent medullary thyroid carcinoma. Ben Mrad MD, et al. **Cancer** 1989 Jan 1;63(1):133–8
Variable presentations of medullary carcinoma of the thyroid gland. Khan A, et al. **Ear Nose Throat J** 1989 Jan; 68(1):31–2, 34, 39–40 (10 ref.)
Simultaneous occurrence of medullary and follicular carcinoma in the same thyroid lobe. Tanaka T, et al. **Hum Pathol** 1989 Jan;20(1):83–6
MR imaging of primary thyroid lymphoma. Takashima S, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):517–8
Stay away from the recurrent laryngeals! [editorial] Bhandarkar SD. **J Postgrad Med** 1988 Jul;34(3):125–6
Sudden change in the sonographic appearance of a thyroid cyst after percutaneous aspiration. Bolondi L, et al. **JCU** 1989 Mar–Apr;17(3):213–5
Primary thyroid lymphoma: comparison of CT and US assessment. Takashima S, et al. **Radiology** 1989 May; 171(2):439–43
DNA cytophotometry in malignant thyroid tumors—use of different evaluation schemes for prognostic statements. Arps H, et al. **Virchows Arch [A]** 1988;413(4):319–23
[Application of infrared thermal imaging technics in clinical diagnosis] Sun G. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):568–9 (Chi)
[Diagnosis and treatment of differentiated thyroid carcinoma] Schelfhout LJ, et al. **Ned Tijdschr Geneeskd** 1989 Mar 11; 133(10):494–8 (32 ref.) (Dut)
[Hot feelings about cold thyroid nodules] Wiersinga WM. **Ned Tijdschr Geneeskd** 1989 Mar 11;133(10):489–91 (Dut)
[The thyroid nodule. A retrospective study of 200 cases] Hugues FC, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(2):77–81 (Eng. Abstr.) (Fre)
[Cancer of the thyroid in children] Triglia JM, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(3):182–6 (Eng. Abstr.) (Fre)
[Papillary carcinoma of the thyroid: development of the histological criteria for diagnosis. Study of 29 cases and review of the literature] Rigaud C. **Ann Pathol** 1988; 8(3):211–9 (46 ref.) (Eng. Abstr.) (Fre)
[Thyroglobulin and thyroid pathology in children] Dubourg H, et al. **Ann Pediatr (Paris)** 1989 Feb;36(2):88–91 (25 ref.) (Eng. Abstr.) (Fre)
[Detection and prognosis of medullary cancer of the thyroid gland. Influence of national multidisciplinary cooperation] Guliana JM, et al. **Presse Med** 1989 Mar 11;18(10):521–4 (Eng. Abstr.) (Fre)
[Immunohistology and prognosis in thyroid cancer. Determination of the malignancy potential of papillary and medullary neoplasms by the detection of S–100 protein and Leu–M1 antigen] Schröder S, et al. **Acta Med Austriaca** 1989;16(1):2–5 (Eng. Abstr.) (Ger)
[Initial symptoms of malignant thyroid tumors: the effect of age and sex in an iodine–deficient region. Experiences with 1116 patients] Reinwein D, et al. **Dtsch Med Wochenschr** 1989 May 19;114(20):775–82 (Eng. Abstr.) (Ger)
[The combination of scintigraphy and sonography in the diagnosis of an autonomous adenoma of the thyroid gland. Determination of the impulse–thickness–quotient] Klaua M, et al. **Radiobiol Radiother (Berl)** 1988;29(4):469–74 (Eng. Abstr.) (Ger)
[Sonography of the thyroid gland] Sciuk J, et al. **Radiologe** 1989 Mar;29(3):95–102 (38 ref.) (Eng. Abstr.) (Ger)
[Sonography and cytology of cold thyroid nodules] Pristautz H, et al. **ROFO** 1989 Mar;150(3):250–4 (Eng. Abstr.) (Ger)
[Type 2b multiple endocrine adenomatosis] Lehnert H, et al. **Schweiz Rundsch Med Prax** 1989 Jun 27;78(26):741–4 (Eng. Abstr.) (Ger)
[The single thyroid nodule. Diagnostic and therapeutic implications] Fato L, et al. **Minerva Med** 1989 Jul; 80(7):749–52 (Ita)
[Cytodiagnosis by fine–needle aspiration (FNAB) in thyroid dysplasias and neoplasms observed in 1983–1987] Gabrielli M, et al. **Minerva Med** 1989 May;80(5):435–8 (Eng. Abstr.) (Ita)
[Tumor markers in the early diagnosis of thyroid neoplasms] Re M, et al. **Minerva Med** 1989 Apr;80(4):341–3 (Eng. Abstr.) (Ita)
[Preoperative cytologic diagnosis of medullary carcinoma of the thyroid] Rabitti C, et al. **Pathologica** 1989 Mar–Apr; 81(1072):171–7 (Eng. Abstr.) (Ita)
[The current importance of thyroid echography in the clinical definition of "hot" scintigraphic nodules. Apropos of a case of thyroid ectopia simulating Plummer's adenoma] Santaniello B, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):504–6 (Ita)
[Diagnosis of thyroid cancer] Ito K. **Gan No Rinsho** 1989 Jan;Spec No:173–80 (Jpn)
[Analysis of ultrasound B–mode histogram in thyroid tumors] Morifuji H. **Nippon Geka Gakkai Zasshi** 1989 Feb; 90(2):210–21 (Eng. Abstr.) (Jpn)
[Oncogens and tumor makers in thyroid cancer] Hashimoto T, et al. **Rinsho Byori** 1989 Feb;37(2):122–30 (Jpn)
[Comparison of scintigraphic, ultrasonic, intraoperative and histopathological examinations in the evaluation of nodular changes in the thyroid gland] Rusiniak L, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1303–5 (Pol)
[Ultrasonic diagnosis of nodular lesions of the thyroid] Kasatkin IuN, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):14–9 (Eng. Abstr.) (Rus)
[The use of function tests in the radiologic diagnosis of diseases of the thyroid gland] Slavnov VN. **Med Radiol (Mosk)** 1989 Apr;34(4):77–83 (32 ref.) (Rus)
[The multiple endocrine neoplasm type–IIb syndrome] Kazeev KN, et al. **Probl Endokrinol (Mosk)** 1988 Nov–Dec; 34(6):45–7 (Rus)
[Clinico–cytologic aspects of the diagnosis of medullary cancer of the thyroid] Kondrat'eva TG, et al. **Vopr Onkol** 1989;35(5):573–9 (Eng. Abstr.) (Rus)
[Neuron specific enolase (ESA) as a marker of medullary carcinoma of the thyroid gland] Dasović–Knežević M, et al. **Med Pregl** 1988;41(5–6):212–4 (Eng. Abstr.) (Ser)
[Diagnostic accuracy of the serum thyroglobulin determinations and isotopic scanning in differentiated carcinomas of the thyroid with more than 5 years of follow–up] Pulgar Encinas R, et al. **Med Clin (Barc)** 1988 May 28;91(1):7–10 (Eng. Abstr.) (Spa)

DRUG THERAPY

Phase II evaluation of mitoxantrone in advanced non anaplastic thyroid cancer. Schlumberger M, et al. **Bull Cancer (Paris)** 1989;76(4):403–6
Metastatic medullary thyroid carcinoma. Complete response to combination chemotherapy with dacarbazine and 5–fluorouracil. Petursson SR. **Cancer** 1988 Nov 1; 62(9):1899–903
Serial serum calcitonin concentrations to evaluate response to therapy of patients with medullary thyroid carcinoma. Athanassiades P, et al. **Chemioterapia** 1988 Jun;7(3):195–7
Aclarubicin in advanced thyroid cancer: a phase II study. Samonigg H, et al. **Eur J Cancer Clin Oncol** 1988 Aug; 24(8):1271–5
Morphological changes of human thyroid medullary carcinoma cell line treated with calcium channel antagonist nifedipine. Nakamura A, et al. **Kitasato Arch Exp Med** 1988 Dec;61(4):195–200
4'epidoxorubicin plus verapamil in anthracycline—refractory cancer patients. Demicheli R, et al. **Tumori** 1989 Jun 30; 75(3):245–7
[Discrepancy between the basal level of TSH and the thyrotropic response to TRH during thyroid hormone treatment of differentiated thyroid cancers] Charrie A, et al. **Ann Endocrinol (Paris)** 1989;50(1):31–5 (Eng. Abstr.) (Fre)
[Metastatic thyroid cancer: sudden death following aclarubicin therapy] Langsteger W, et al. **Klin Wochenschr** 1989 Apr 3;67(7):393–7 (Eng. Abstr.) (Ger)

ENZYMOLOGY

Structure–activity relationships for glycine–extended peptides and the alpha–amidating enzyme derived from medullary thyroid CA–77 cells. Tamburini PP, et al. **Arch Biochem Biophys** 1988 Dec;267(2):623–31
Enhanced acid protease activity of lysosomes from papillary thyroid carcinoma. Sinadinović J, et al. **Cancer** 1989 Mar 15;63(6):1179–82
Neuron–specific enolase in medullary thyroid carcinoma. Touitou Y, et al. **Clin Chem** 1988 Nov;34(11):2375–6
Multiple forms of peptidyl alpha–amidating enzyme: purification from rat medullary thyroid carcinoma CA–77 cell–conditioned medium. Gilligan JP, et al. **Endocrinology** 1989 Jun;124(6):2729–36
DNA polymerase beta in human thyroid of Graves' disease and thyroid tumors. Nagasaka A, et al. **Metabolism** 1988 Nov;37(11):1051–4
[Effects of thyroid–stimulating hormone on adenylate cyclase of well differentiated human carcinoma and adjacent normal tissues] Jap TS, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;42(4):241–8 (Eng. Abstr.) (Chi)

EPIDEMIOLOGY

High frequency of cancer in cold thyroid nodules occurring

at young age. Belfiore A, et al.
Acta Endocrinol (Copenh) 1989 Aug;121(2):197–202
Tumours in Iceland. 11. Malignant tumours of the thyroid gland. A histological classification and epidemiological considerations. Jónasson JG, et al. **APMIS** 1989 Jul; 97(7):625–30
Radioiodine in human thyroid glands and incidence of thyroid cancer in Cumbria. Bowlt C, et al. **BMJ** 1989 Jul 29;299(6694):301–2
Occult papillary thyroid carcinoma at autopsy in La Plata, Argentina. Ottino A, et al. **Cancer** 1989 Jul 15;64(2):547–51
Thyroid cancer in children and adolescents in Denmark. Merrick Y, et al. **Eur J Surg Oncol** 1989 Feb;15(1):49–53
Pattern of malignant thyroid neoplasms in Ajmer. Tandon R, et al. **J Indian Med Assoc** 1988 Aug;86(8):212–3
Cancer risk in population examined with diagnostic doses of 131I. Holm LE, et al. **J Natl Cancer Inst** 1989 Feb 15; 81(4):302–6
A histopathologic study on 1,095 surgically resected thyroid specimens. Park SH, et al. **Jpn J Clin Oncol** 1988 Dec; 18(4):297–302
Frequency of medullary thyroid carcinoma in an endemic goiter area. Schmid KW, et al. **Mod Pathol** 1989 Mar; 2(2):90–3
[Thyroid cancer in Denmark during the period 1943–85. Cancer statistics number 23] Sprøgel P, et al.
Ugeskr Laeger 1989 Feb 20;151(8):507–11 **(Dan)**
[A registry of medullary thyroid carcinoma (letter)] Raue F. **Dtsch Med Wochenschr** 1989 Aug 18;114(33):1266 **(Ger)**
[Thyroid carcinoma in diving goiter. Its incidence and diagnostico-therapeutic problems] Tambussi U, et al.
Minerva Med 1989 Jul;80(7):763–4 **(Ita)**
[Once more on the effects of the Chernobyl accident] Liniecki J, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec;51(6):285–9 (Eng. Abstr.) **(Pol)**
[Cancer of the thyroid gland in a goiter-endemic region] Privalov Va, et al. **Sov Med** 1988;(11):113–5 **(Rus)**

ETHNOLOGY

Ethnic patterns of thyroid cancer incidence in the United States, 1973–1981. Spitz MR, et al. **Int J Cancer** 1988 Oct 15;42(4):549–53

ETIOLOGY

Radiation-induced sarcoma of the thyroid. Griem KL, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug; 115(8):991–3
Simultaneous presentation of parathyroid, thyroid and parotid tumours 44 years after neck irradiation. Delbridge L, et al. **Aust N Z J Surg** 1989 Feb;59(2):187–90
Elevated levels of calcitonin mRNA: a marker for the spontaneous development of medullary thyroid carcinoma in rats. Delehaye MC, et al.
Biochem Biophys Res Commun 1989 Mar 15;159(2):528–35
Effects of external irradiation on the thyroid gland in childhood. Barnes ND. **Horm Res** 1988;30(2–3):84–9 (39 ref.)
Radiation induced thyroid neoplasms 1920 to 1987: a vanishing problem? Mehta MP, et al.
Int J Radiat Oncol Biol Phys 1989 Jun;16(6):1471–5 (30 ref.)
Thyroid carcinoma in two sisters with familial polyposis of the colon. Case reports and review of the literature. Delamarre J, et al. **J Clin Gastroenterol** 1988 Dec; 10(6):659–62 (31 ref.)
Risk of thyroid cancer after diagnostic doses of radioiodine [letter; comment] Archer VE. **J Natl Cancer Inst** 1989 May 3;81(9):713–5. **Comment on:** J Natl Cancer Inst 1988 Sep 21;80(14):1132–8
Swedish thyroid cancer risk from Chernobyl? [letter] Holm LE, et al. **J Nucl Med** 1989 May;30(5):721–2
A report of four cases of thyroid cancer occurring in thyrotoxicosis and review of the literature. Sarda AK, et al. **Jpn J Surg** 1989 May;19(3):363–6 (16 ref.)
A highly suspected radiation-associated thyroid cancer: report of 1 case. Lian SL, et al.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1989 Jun; 5(6):357–9
Orbital tumor as a presenting symptom of occult carcinoma of the thyroid. Moisseiev J, et al.
Metab Pediatr Syst Ophthalmol 1988;11(1–2):33–4
Thyroid-stimulating antibodies of Graves' disease in thyroid cancer [letter] Röher HD, et al. **N Engl J Med** 1988 Dec 22;319(25):1669–70
The Kirsten murine sarcoma virus induces rat thyroid carcinomas in vivo. Portella G, et al. **Oncogene** 1989 Feb; 4(2):181–8
Follicular carcinoma of the thyroid following radioactive iodine treatment for Graves' disease. Staffurth JS, et al. **Postgrad Med J** 1988 Nov;64(757):878–80
Anaplastic carcinoma of the thyroid in a patient receiving radio-iodine therapy for amiodarone-induced thyrotoxicosis. Bridges AB, et al. **Scott Med J** 1989 Jun; 34(3):471–2
[The effect of radiation on thyroid gland function] Goláň T, et al. **Cas Lek Cesk** 1989 Jan 13;128(3):65–7 (Eng. Abstr.) **(Cze)**
[Radiation-induced thyroid cancer] Lemaire M, et al.
Acta Otorhinolaryngol Belg 1988;42(5):606–11 (Eng. Abstr.) **(Fre)**
[Development of malignant neoplasms in various thyroid diseases] Nawrocka A, et al. **Wiad Lek** 1988 Mar 1; 41(5):300–4 (22 ref.) **(Pol)**
[Thyrotoxicosis and cancer of the thyroid] Lukomskiĭ GI, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):55–8 (Eng. Abstr.) **(Rus)**
[Malignization of goiter] Pavlovskiĭ MP, et al.
Khirurgiia (Mosk) 1989 May;(5):22–5 (Eng. Abstr.) **(Rus)**
[3 cases of cancer of the thyroid gland in children with congenital hypothyroidism] Amirova NM, et al.
Pediatriia 1989;(7):104–5 **(Rus)**
[Medullary carcinoma of the thyroid gland associated with previous cervical radiotherapy (letter)] Couget JI, et al.
Med Clin (Barc) 1989 Mar 11;92(9):357 **(Spa)**

GENETICS

Cellular DNA pattern, S-phase frequency and survival in papillary thyroid cancer. Hrafnkelsson J, et al.
Acta Oncol 1988;27(4):329–33
Molecular cloning of PTC, a new oncogene found activated in human thyroid papillary carcinomas and their lymph node metastases. Grieco M, et al. **Ann N Y Acad Sci** 1988; 551:380–1
Immunohistochemical analysis of the ras oncogene protein product in human thyroid neoplasms. Papadimitriou K, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1223–7
Thyroid epithelial cell transformation by a retroviral vector expressing SV40 large T. Burns JS, et al. **Br J Cancer** 1989 May;59(5):755–60
Chromosome studies in thyroid neoplasia. Bondeson L, et al. **Cancer** 1989 Aug 1;64(3):680–5
Correlation of chromosome abnormalities with clinical characteristics in thyroid lymphoma. Taniwaki M, et al. **Cancer** 1989 Mar 1;63(5):873–6
A translocation (7;10)(q35;q21) in a differentiated papillary carcinoma of the thyroid. Antonini P, et al.
Cancer Genet Cytogenet 1989 Aug;41(1):139–44
Cytogenetic findings on eight follicular thyroid adenomas including one with a t(10;19). Bartnitzke S, et al.
Cancer Genet Cytogenet 1989 May;39(1):65–8
Abnormal expression of the MOS proto-oncogene in human thyroid medullary carcinoma. Parkar MH, et al.
Cancer Lett 1988 Dec 15;43(3):185–9
Loss of calcitonin receptors: a genetically transmitted defect in rats with high incidence of C-cell tumors. Bouizar Z, et al. **Cancer Res** 1989 Sep 15;49(18):5199–202
Low incidence of loss of chromosome 10 in sporadic and hereditary human medullary thyroid carcinoma. Nelkin BD, et al. **Cancer Res** 1989 Aug 1;49(15):4114–9
Nuclear DNA measurements in follicular thyroid adenomas. Bäckdahl M, et al. **Eur J Surg Oncol** 1989 Apr;15(2):125–9
Detection of the H-RAS oncogene in human thyroid anaplastic carcinomas. Stringer BM, et al. **Experientia** 1989 Apr 15;45(4):372–6
Flow cytometric analysis of DNA ploidy in lymphomas of the thyroid. Zirker TA, et al. **Head Neck Surg** 1988 May–Jun;10(5):324–9
Limited value of AgNOR enumeration in assessment of thyroid neoplasms [letter] Nairn ER, et al.
J Clin Pathol 1988 Oct;41(10):1136
Reproducibility of flow cytometric assessment of follicular tumours of the thyroid. van Thiel TP, et al.
J Clin Pathol 1989 Mar;42(3):260–3
The molecular biology of medullary thyroid carcinoma. A model for cancer development and progression. Nelkin BD, et al. **JAMA** 1989 Jun 2;261(21):3130–5 (104 ref.)
The molecular biology of Laron dwarfism and medullary thyroid cancer [editorial: comment] Jackson CE, et al.
N Engl J Med 1989 Oct 12;321(15):1039–40. **Comment on:** N Engl J Med 1989 Oct 12;321(15):989–95 N Engl J Med 1989 Oct 12;321(15):996–1001
The oncogene associated with human papillary thyroid carcinoma (PTC) is assigned to chromosome 10 q11–q12 in the same region as multiple endocrine neoplasia type 2A (MEN2A). Donghi R, et al. **Oncogene** 1989 Apr; 4(4):521–3
High frequency of ras oncogene activation in all stages of human thyroid tumorigenesis. Lemoine NR, et al.
Oncogene 1989 Feb;4(2):159–64
Aberrant expression of receptors for platelet-derived growth factor in an anaplastic thyroid carcinoma cell line. Heldin NE, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9302–6
Family screening in medullary thyroid carcinoma presenting without a family history. Ponder BA, et al. **Q J Med** 1988 Apr;67(252):299–308
[A family with type 2a multiple endocrine neoplasms] Haak HR, et al. **Ned Tijdschr Geneeskd** 1988 Sep 3;132(36):1660–4 (Eng. Abstr.) **(Dut)**
[Familial thyroid cancer and rectocolic adenomatous polyposis (letter)] Delamarre J, et al.
Gastroenterol Clin Biol 1989;13(2):229 **(Fre)**
[Diagnosis and treatment of the precancer state in hereditary medullary thyroid carcinoma] Takami H, et al.
Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2–3):1657–61 (Eng. Abstr.) **(Jpn)**
[Clinico-genetic aspects of medullary thyroid cancer] Gar kavtseva RF, et al. **Vopr Onkol** 1989;35(6):663–8 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Thyroid autoantibodies in thyroid cancer: incidence and relationship with tumour outcome. Pacini F, et al.
Acta Endocrinol (Copenh) 1988 Nov;119(3):373–80
Immunogenetic and immunologic studies of differentiated thyroid cancer. Juhasz F, et al. **Cancer** 1989 Apr 1; 63(7):1318–26
HLA-DR and differentiated thyroid cancer. Lack of association with the nonmedullary types and possible association with the medullary type. Weisel M, et al.
Cancer 1988 Dec 15;62(12):2486–8
Reactivity of monoclonal islet cell antibodies on normal hyperplastic and neoplastic thyroid C-cells. Neuhold N, et al. **Cell Tissue Res** 1989 Aug;257(2):437–43
Nontoxic nodular goiter and papillary thyroid carcinoma are not associated with peripheral blood lymphocyte sensitization to thyroid cells. Aguayo J, et al.
J Clin Endocrinol Metab 1989 Jan;68(1):145–9
Phenotypic and functional analysis at the clonal level of infiltrating T lymphocytes in papillary carcinoma of the thyroid: prevalence of cytolytic T cells with natural killer-like or lymphokine-activated killer activity. Bagnasco M, et al. **J Clin Endocrinol Metab** 1989 Oct; 69(4):832–6
Production of monoclonal antibody to thyroglobulin from malignant thyroid carcinoma. Kusakabe K, et al.
Jpn J Exp Med 1989 Feb;59(1):37–42
CA 50 and CA 19-9 antigen expression in normal, hyperplastic, and neoplastic thyroid tissue. Vierbuchen M, et al. **Lab Invest** 1989 May;60(5):726–32
Thyroid papillary carcinoma in HLA identical sibs [letter] Dzwonkowski P, et al. **Lancet** 1988 Oct 22;2(8617):971
[Cellular immunologic parameters in thyroid diseases] Beyer PA, et al. **Acta Med Austriaca** 1989;16(1):6–7 (Eng. Abstr.) **(Ger)**

METABOLISM

Melanin-producing medullary thyroid carcinoma with glandular differentiation. Kimura N, et al. **Acta Cytol** 1989 Jan–Feb;33(1):61–6
Expression of insulin-like growth factor receptors in primary human thyroid neoplasms. Yashiro T, et al.
Acta Endocrinol (Copenh) 1989 Jul;121(1):112–20
Mixed medullary-follicular carcinoma of the thyroid. Immunohistochemical and electron microscopic studies. Ogawa H, et al. **Acta Pathol Jpn** 1989 Jan;39(1):67–72
An immunohistochemical study of cytokeratin and vimentin in benign and malignant thyroid lesions. Uchida H, et al.
Acta Pathol Jpn 1989 Mar;39(3):169–75
Analysis of lectin binding in benign and malignant thyroid nodules. Sasano H, et al. **Arch Pathol Lab Med** 1989 Feb; 113(2):186–9
Somatostatin in medullary thyroid cancer. In vitro and in vivo studies. Pacini F, et al. **Cancer** 1989 Mar 15; 63(6):1189–95
Cell kinetics, DNA content and TSH receptor-adenylate cyclase system in differentiated thyroid cancer. Chang TC, et al. **Clin Endocrinol (Oxf)** 1988 Nov;29(5):477–84
Plummer's disease [letter] Wiener JD.
Clin Endocrinol (Oxf) 1988 May;28(5):581–2
Protein content and thyroid hormone release in vitro by differentiated thyroid cancer cells in the presence of estradiol, dehydroepiandrosterone, polypeptidic hormones and pesticides. Ghinea E, et al. **Endocrinologie** 1988 Jul–Sep;26(3):165–71
Establishment of a cholecystokinin-producing rat medullary thyroid carcinoma cell line. Haun RS, et al.
Endocrinology 1989 Aug;125(2):850–6
Differential incorporation of sulfate into the chondroitin chain and complex carbohydrate chains of human thyroglobulin: studies in normal and neoplastic thyroid tissue. Schneider AB, et al. **Endocrinology** 1989 Jan; 124(1):356–62
Mucosubstances in medullary carcinoma of the thyroid [see comments] Martin-Lacave I, et al. **Histopathology** 1988 Jul; 13(1):55–66. **Comment in:** Histopathology 1989 Feb;14(2):228–9
Increased deoxyribonucleic acid synthesis of autonomously functioning thyroid adenomas: independent of but further stimulable by thyrotropin. Müller-Gärtner HW, et al.
J Clin Endocrinol Metab 1989 Jan;68(1):39–45
Calcitonin gene-related peptide and calcitonin secretion from a human medullary thyroid carcinoma cell line: effects of ionomycin, phorbol ester and forskolin. Haller-Brem S, et al. **J Endocrinol** 1988 Oct;119(1):147–52
Uptake of 131I-metaiodobenzylguanidine by 6-23 rat medullary thyroid carcinoma. Poston GJ, et al. **Life Sci** 1989;44(21):1611–6
In vitro effects of estrogen on tgb and c-myc gene expression in normal and neoplastic human thyroids. del Senno L, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):67–74
Evidence for autocrine production of IGF-1 in human thyroid adenomas. Williams DW, et al.
Mol Cell Endocrinol 1989 Jan;61(1):139–43
Malignant haemangioendothelioma of the thyroid, immunohistochemical evidence of heterogeneity.
Vollenweider I, et al. **Pathol Res Pract** 1989 Apr; 184(4):376–81
Stimulatory effect of vasoactive intestinal polypeptide on human normal and neoplastic thyroid tissue. Siperstein AE, et al. **Surgery** 1988 Dec;104(6):985–91

Epidermal growth factor receptor on human thyroid neoplasms. Masuda H, et al. **World J Surg** 1988 Oct; 12(5):616–22

[Iodine-accumulating, hormone-producing liver metastasis of a follicular thyroid carcinoma] Krebs B, et al. **ROFO** 1989 Apr;150(4):489 (Ger)

[Abnormality of hormonal response in human thyroid carcinoma—molecular aspect] Abe Y, et al. **Rinsho Byori** 1988 Dec;36(12):1358–63 (Jpn)

MORTALITY

Prognostic factors in patients dying of well-differentiated thyroid cancer. Beenken S, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):326–30

Survival and prognostic factors in differentiated thyroid cancer—a multivariate analysis of 1,055 cases. Thoresen SO, et al. **Br J Cancer** 1989 Feb;59(2):231–5

Multifactorial study of prognostic factors in differentiated thyroid carcinoma. Palestini N, et al. **Ital J Surg Sci** 1989; 19(2):137–44

Deaths due to differentiated thyroid cancer: a 46-year perspective. Harness JK, et al. **World J Surg** 1988 Oct; 12(5):623–9

[Advanced age and clinical staging in the prognostic evaluation of differentiated carcinoma of the thyroid gland] Ardito G, et al. **Minerva Chir** 1989 Mar 31;44(6):595–8 (Eng. Abstr.) (Ita)

[Mortality of patients with differentiated thyroid carcinoma in Norway. The influence of sex, age, tumor stage, histologic type and residence at the time of diagnosis] Akalen LA, et al. **Tidsskr Nor Laegeforen** 1989 Jun 10; 109(16):1765–9 (Eng. Abstr.) (Nor)

PATHOLOGY

Differentiation of Hashimoto's thyroiditis from thyroid neoplasms in fine needle aspirates. Ravinsky E, et al. **Acta Cytol** 1988 Nov–Dec;32(6):854–61

Fine needle aspiration cytologic findings in the black thyroid syndrome. Wajda KJ, et al. **Acta Cytol** 1988 Nov–Dec; 32(6):862–5

Pseudolymphoma of the thyroid. Mizukami Y, et al. **Acta Pathol Jpn** 1988 Oct;38(10):1329–36

Minute (less than 1 mm) occult papillary thyroid carcinoma with metastasis [letter] Chen KT. **Am J Clin Pathol** 1989 Jun;91(6):746

Cytologic features of fine-needle aspirates of hyalinizing trabecular adenoma of the thyroid. Goellner JR, et al. **Am J Clin Pathol** 1989 Feb;91(2):115–9

Langerhans' cells and prognosis of thyroid carcinoma [letter] Gómez-Morales M, et al. **Am J Clin Pathol** 1989 May; 91(5):628–9

An enlarging neck mass in a 71-year-old woman [clinical conference] **Am J Med** 1989 Apr;86(4):459–64

The clonal origin of thyroid nodules and adenomas. Thomas GA, et al. **Am J Pathol** 1989 Jan;134(1):141–7

Hyalinizing trabecular adenoma [letter] **Am J Surg Pathol** 1989 Sep;13(9):808–10

Tall cell papillary carcinoma [letter] Sobrinho-Simões M, et al. **Am J Surg Pathol** 1989 Jan;13(1):79–80

Intraoperative imprint cytology of the thyroid gland with computer-assisted morphometric analysis of cell clusters. Masuda T, et al. **Anal Quant Cytol Histol** 1988 Aug; 10(4):294–8

Solitary thyroid nodules for surgery—the role of fine-needle aspiration biopsy cytology. Ng EH, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):15–8

Fine-needle aspiration biopsy of the thyroid. Diagnostic accuracy when performing a moderate number of such procedures. Dwarakanathan AA, et al. **Arch Intern Med** 1989 Sep;149(9):2007–9

Fine-needle aspiration biopsy of the thyroid nodule. Results of a start-up project in a general teaching hospital setting. Pepper GM, et al. **Arch Intern Med** 1989 Mar;149(3):594–6

Human medullary thyroid carcinoma. Initial characterization and in vitro differentiation of two new cell lines. Abemayor E, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr; 115(4):478–83

Elliptical lymph nodes [letter] Miller JM. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):994–5

Primary lymphangioma of the thyroid gland. Gardner DF, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):1084–5

Early calcitonin hypersecretion and C cell hyperplasia in rats with high incidence of C cell tumors (Wag/Rij). Khattab M, et al. **Bone Miner** 1989 Jul;6(3):249–60

Cystic change and neoplasia in isolated thyroid swellings. Cusick EL, et al. **Br J Surg** 1988 Oct;75(10):982–3

Histopathologic characteristics and nuclear DNA content as prognostic factors in medullary thyroid carcinoma. A nationwide study in Sweden. The Swedish MTC Study Group. Bergholm U, et al. **Cancer** 1989 Jul 1;64(1):135–42

Oxyphil and squamous variants of medullary thyroid carcinoma. Dominguez-Malagon H, et al. **Cancer** 1989 Mar 15;63(6):1183–8

Sources of diagnostic error in fine needle aspiration of the thyroid. Hall TL, et al. **Cancer** 1989 Feb 15;63(4):718–25

Lymphocytic infiltration in juvenile thyroid carcinoma. Kamma H, et al. **Cancer** 1988 Nov 1;62(9):1988–93

Leiomyosarcoma of the thyroid gland. A case report with a comparative study of five cases of anaplastic carcinoma. Kawahara E, et al. **Cancer** 1988 Dec 15;62(12):2558–63 (25 ref.)

Medullary and papillary carcinomas occurring as a collision tumor: report of a case. Gero MJ, et al. **Clin Nucl Med** 1989 Mar;14(3):171–4

The fine-needle aspiration appearance of the follicular variant of thyroid papillary carcinoma: a report of three cases. Hugh JC, et al. **Diagn Cytopathol** 1988;4(3):196–201

Medullary thyroid carcinoma metastatic to breast diagnosed by fine-needle aspiration biopsy. Ordóñez NG, et al. **Diagn Cytopathol** 1988;4(3):254–7

Marginal vacuoles in metastatic thyroid carcinoma: a case report. Pitts WC, et al. **Diagn Cytopathol** 1989;5(2):200–2

Nuclear grooves: a useful criterion in the cytopathologic diagnosis of papillary thyroid carcinoma. Shurbaji MS, et al. **Diagn Cytopathol** 1988;4(2):91–4

Multivariate analysis in solitary cold thyroid nodules for the diagnosis of malignancy. Hannequin P, et al. **Eur J Cancer Clin Oncol** 1988 May;24(5):881–8

Medullary (C cell) carcinoma of the thyroid with features of follicular oxyphilic cell tumours. Harach HR, et al. **Histopathology** 1988 Dec;13(6):645–56

Prognostic value of morphometry in papillary thyroid carcinoma. Ambros RA, et al. **Hum Pathol** 1989 Mar; 20(3):215–8

Primary thyroid thymoma: a distinct clinicopathologic entity. Asa SL, et al. **Hum Pathol** 1988 Dec;19(12):1463–7

Solid cell nest-associated C-cells: another possible explanation for "C-cell hyperplasia" adjacent to follicular cell tumors [letter] Chan JK, et al. **Hum Pathol** 1989 May; 20(5):498–9

Primary B cell lymphoma of the thyroid and its relationship to Hashimoto's thyroiditis. Hyjek E, et al. **Hum Pathol** 1988 Nov;19(11):1315–26

Hypopharyngeal involvement by thyroid cancer. Timon CI, et al. **J Laryngol Otol** 1989 Jun;103(6):629–31

Squamous metaplasia with Hashimoto's thyroiditis presenting as a thyroid nodule. Kobayashi T, et al. **J Surg Oncol** 1989 Feb;40(2):139–42

Squamous cell carcinoma of the thyroid. Sarda AK, et al. **J Surg Oncol** 1988 Nov;39(3):175–8

Study of cell kinetics in anaplastic thyroid carcinoma transplanted to nude mice. Yoshida A, et al. **J Surg Oncol** 1989 May;41(1):1–4

Clear cell carcinoma of the thyroid. A case report. Koike A, et al. **Jpn J Surg** 1989 Mar;19(2):237–40

Pure squamous cell carcinoma of the thyroid gland—report of an autopsy case and review of the literature. Misonou J, et al. **Jpn J Surg** 1988 Jul;18(4):469–74

Thyroid carcinoma in an endemic area presenting as solitary thyroid nodules. Sarda AK, et al. **Jpn J Surg** 1988 Jul; 18(4):409–14

Occult papillary carcinoma of the thyroid with pulmonary lymphangitic spread diagnosed by lung biopsy. Fend F, et al. **Klin Wochenschr** 1989 Jul 3;67(13):687–90

Centroblastic lymphoma of the thyroid supervening long-lasting chronic lymphocytic leukemia (B-CLL) demonstration of biclonality by immunohistochemical and gene rearrangement analysis. Trümper L, et al. **Klin Wochenschr** 1988 Aug 15;66(16):736–42

Long-term survival in anaplastic thyroid cancer. Schaefer CJ. **Md Med J** 1988 Nov;37(11):873–4

Lectin agglutinins: a comparative study of Lotus tetragonolobus and Ulex europaeus I as markers of vascular endothelium in follicular thyroid carcinoma. Griffiths DW, et al. **Med Lab Sci** 1988 Jan;45(1):45–51

Primary tissue cultures of benign and malignant human thyroid tumors: effect of TSH. Komlos L, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):10–5

Papillary carcinoma arising in a thyroglossal duct cyst. McNicoll MP, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):50–4

Fine-needle aspiration and needle biopsy of the thyroid gland. Nunez C, et al. **Pathol Annu** 1989;24 Pt 1:161–98 (88 ref.)

Follicular and papillary variants of medullary carcinoma of the thyroid. Sambade C, et al. **Pathol Res Pract** 1988 Dec; 184(1):98–107 (52 ref.)

Ectopic bone in multinodular goiter. Tzanakakis GN, et al. **R I Med J** 1989 May;72(5):171–2

Fine needle aspiration cytology of metastatic sarcoma involving the thyroid. Gattuso P, et al. **South Med J** 1989 Sep;82(9):1158–60

Peroperative diagnosis and treatment of metastases to the regional lymph nodes in papillary carcinoma of the thyroid gland. Hamming JF, et al. **Surg Gynecol Obstet** 1989 Aug; 169(2):107–14 (52 ref.)

Not all "occult" papillary carcinomas are "minimal". Allo MD, et al. **Surgery** 1988 Dec;104(6):971–6

An expanded view of risk-group definition in differentiated thyroid carcinoma. Cady B, et al. **Surgery** 1988 Dec; 104(6):947–53

Poorly differentiated ("insular") carcinoma of the thyroid gland: an aggressive subset of differentiated thyroid neoplasms. Flynn SD, et al. **Surgery** 1988 Dec; 104(6):963–70

C cell adenoma of the thyroid: a rare but distinct clinical entity. Kodama T, et al. **Surgery** 1988 Dec;104(6):997–1003

Comparison of the therapeutic dose and diagnostic dose of 131I in the detection of metastatic foci of differentiated thyroid cancer. Tung CC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1081–5

Multicentric giant lymph node hyperplasia with ascites and double cancers, an autopsy case. Mizutani N, et al. **Tohoku J Exp Med** 1989 May;158(1):1–7

Hyalinizing trabecular adenoma of the thyroid (case of the Ullensvang course). Hyalinizing spindle cell tumor of the thyroid with dual differentiation (variant of the so-called hyalinizing trabecular adenoma). Sambade C, et al. **Ultrastruct Pathol** 1989 Mar–Jun;13(2–3):275–80

Leiomyoma and neurilemoma: report of two unusual non-epithelial tumours of the thyroid gland. Andrion A, et al. **Virchows Arch [A]** 1988;413(4):367–72

Thyroid papillary adenocarcinoma; lipomatous-type. Bruno J, et al. **Virchows Arch [A]** 1989;414(4):371–3

Characterization of a human follicular thyroid carcinoma cell line (UCLA RO 82 W-1). Estour B, et al. **Virchows Arch [B]** 1989;57(3):167–74

[Hemangioendothelial sarcoma of the thyroid] Holtveg HM, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2088–9 (Eng. Abstr.) (Dan)

[Quantitative cytology. An aid in the cytologic diagnosis of cold nodes?] Liautaud-Roger F, et al. **Acta Otorhinolaryngol Belg** 1988;42(5):604–5 (Fre)

[Hemangiopericytoma of the thyroid gland] Justrabo E, et al. **Ann Endocrinol (Paris)** 1989;50(1):26–30 (Eng. Abstr.) (Fre)

["Mixed' (follicular and parafollicular) carcinomas of the thyroid. Histological and immunocytological study of 5 cases] Le Bodic MF, et al. **Ann Pathol** 1989;9(1):38–43 (Eng. Abstr.) (Fre)

[Differentiated thyroid carcinoma of follicular origin: new data in 1988] De Micco C. **Arch Anat Cytol Pathol** 1989; 37(1–2):21–8 (59 ref.) (Eng. Abstr.) (Fre)

[Medullary cancer of the thyroid: recent data] Franc B. **Arch Anat Cytol Pathol** 1989;37(1–2):29–35 (52 ref.) (Eng. Abstr.) (Fre)

[Imprint cytology in the diagnosis of tumors of the thyroid] Pluot M, et al. **Arch Anat Cytol Pathol** 1989;37(1–2):36–9 (Eng. Abstr.) (Fre)

[Implications of electron microscopy and immunohistochemistry data in the concept of mixed tumors of the thyroid] Sambade C, et al. **Arch Anat Cytol Pathol** 1989;37(1–2):15–8 (42 ref.) (Eng. Abstr.) (Fre)

[Basal-cell nevomatosis associated with multifocal fetal rhabdomyoma. A case] Klijanienko J, et al. **Presse Med** 1988 Nov 26;17(42):2247–50 (10 ref.) (Eng. Abstr.) (Fre)

[Sonography of the neck—indications and value] Tiedjen KU, et al. **HNO** 1988 Jul;36(7):267–76 (Eng. Abstr.) (Ger)

[The value of computer-assisted sonographic tissue characterization in focal lesions of the thyroid] Müller MJ, et al. **Radiologe** 1989 Mar;29(3):132–6 (Eng. Abstr.) (Ger)

[Pathological and clinical features of malignant thyroid tumors: classification, immunohistology, prognostic criteria] Schröder S. **Veroff Pathol** 1988;130:1–159 (Eng. Abstr.) (Ger)

[Lymphangitis carcinomatosa] Tóth A, et al. **Z Hautkr** 1988 Dec 15;63(12):1037–41 (Eng. Abstr.) (Ger)

[The importance of atypical adenoma of the thyroid gland] Adolf W, et al. **Zentralbl Allg Pathol** 1988;134(8):719–26 (Eng. Abstr.) (Ger)

[Fine needle aspiration in otorhinolaryngologic pathology. Cases and results] Chiesa F, et al. **Acta Otorhinolaryngol Ital** 1986;6 Suppl 12:39–46 (Ita)

[Cytodiagnosis of the thyroid and parathyroid glands] Ravetto C. **Acta Otorhinolaryngol Ital** 1986;6 Suppl 12:13–8 (9 ref.) (Ita)

[Primary lymphoma of the thyroid gland] Nicolosi A, et al. **Minerva Chir** 1989 Mar 31;44(6):1051–5 (7 ref.) (Eng. Abstr.) (Ita)

[Unusual case of thyroid tumor: follicular carcinoma with associated areas of squamous carcinoma] Torchio B, et al. **Pathologica** 1988 Nov–Dec;80(1070):717–22 (Eng. Abstr.) (Ita)

[A clinicopathological study of multiple thyroid carcinomas] Ishikita T, et al. **Gan No Rinsho** 1988 Nov;34(14):1917–21 (Eng. Abstr.) (Jpn)

[Histopathological study of juvenile thyroid carcinoma] Kamma H, et al. **Gan No Rinsho** 1989 Jan;35(2):270–4 (Eng. Abstr.) (Jpn)

[Multicentric papillary and follicular carcinomas of the thyroid] Kodate C, et al. **Gan No Rinsho** 1988 Aug; 34(9):1147–51 (Eng. Abstr.) (Jpn)

[A case of quartet cancer—a carcinoma of the breast followed by three synchronous cancers (kidney, thyroid and colon)] Kurihara T, et al. **Gan No Rinsho** 1989 Jul;35(8):955–62 (22 ref.) (Eng. Abstr.) (Jpn)

[Malignant lymphoma of the thyroid gland] Maniwa N, et al. **Gan No Rinsho** 1988 Oct;34(12):1654–8 (Eng. Abstr.) (Jpn)

[Three cases of thyroid cancer, including a component of squamous cell carcinoma] Matsuura M, et al. **Gan No Rinsho** 1989 Aug;35(9):1043–9 (Eng. Abstr.) (Jpn)

[A clinicopathologic study of primary malignant lymphoma of the thyroid with a report of six cases] Mitsunaga M, et al. **Gan No Rinsho** 1988 Oct;34(12):1699–704 (Eng. Abstr.) (Jpn)

[A case report of a giant cell carcinoma of the thyroid] Murakami N, et al. **Gan No Rinsho** 1989 Jul;35(8):927–32 (Eng. Abstr.) (Jpn)

[A clinico-pathological study regarding the incidence of intranuclear cytoplasmic inclusions (ICI) in cases of

papillary thyroid carcinoma] Oyama T, et al. **Gan No Rinsho** 1988 Dec;34(15):2067–74 (Eng. Abstr.) (Jpn)

[A case of lung metastasis of thyroid cancer with endobronchial polypoid growth] Takata T, et al. **Gan No Rinsho** 1989 Jun;35(7):840–4 (12 ref.) (Eng. Abstr.) (Jpn)

[Studies on blood vessel invasion in follicular carcinoma of the thyroid gland—observation of immunoperoxidase stain using factor VIII related antigen and Ulex europaeus agglutinin I] Iwasaki H, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1314 (Jpn)

[Transformation of follicular carcinoma of the thyroid to an anaplastic carcinoma after 30 years] Takasawa T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1005–10 (Jpn)

[Definition, diagnosis and treatment of thyroid carcinoma at an early stage] Ito K. **Nippon Rinsho** 1989 May; 47(5):1147–51 (Jpn)

[Tissue quantification of the thyroid follicular adenoma and adenomatous goiter] Yamane Y, et al. **Rinsho Byori** 1988 Aug;36(8):970–3 (Jpn)

[Fine needle aspiration cytology of the thyroid. Based on a 5-year case load] Lilleng R, et al. **Tidsskr Nor Laegeforen** 1989 Jun 20;109(17–18):1875–7 (Eng. Abstr.) (Nor)

[Poorly differentiated and undifferentiated neoplasms of the thyroid gland. Clinico-pathologic, immunocytochemical and ultrastructural study] Sambade C, et al. **Acta Med Port** 1988 Jul–Dec;1(4–6):251–9 (Eng. Abstr.) (Por)

[Thyroid cancer associated with a multinodular goiter in a child] Sido PG, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1988 Jul–Sep; 37(3):245–51 (Eng. Abstr.) (Rum)

[Invasive properties of follicular adenoma and follicular carcinoma of the thyroid gland] Rudkovskiĭ MS, et al. **Vestn Khir** 1988 Jul;141(7):67–8 (Rus)

[Bone metastasis as the first manifestation of follicular carcinoma of the thyroid gland. Apropos of 1 case] Faubel Serra M, et al. **An Otorrinolaringol Ibero Am** 1989; 16(4):447–54 (Eng. Abstr.) (Spa)

[Tumors and pseudotumors of the thyroid] Murphy E. **Rev Invest Clin** 1967 Jan–Mar;19(1):27–33 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Insulin-like growth factor I (IGF-I) production and the presence of IGF-I receptors in rat medullary thyroid carcinoma cell line 6–23 (clone 6). Okimura Y, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):589–95

Human medullary thyroid carcinoma: characterization of the serotonergic and neuronal properties of a neurectodermally derived cell line. Tamir H, et al. **J Neurosci** 1989 Apr; 9(4):1199–212

The significance of hepatic microsomal enzyme induction and altered thyroid function in rats: implications for thyroid gland neoplasia. McClain RM. **Toxicol Pathol** 1989; 17(2):294–306 (65 ref.)

PREVENTION & CONTROL

Evaluation of mass screening for thyroid cancer. Ishida T, et al. **Jpn J Clin Oncol** 1988 Dec;18(4):289–95

RADIOGRAPHY

Two cases of thyroid malignancy [letter] Yaffe D, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):85

Unusual CT appearance of a thyroglossal duct cyst carcinoma. Gardner DJ. **J Otolaryngol** 1989 Aug; 18(5):258–9

[X-ray and scintigraphic diagnosis of thyroid cancer metastatic to bone] Babushkin VV, et al. **Med Radiol (Mosk)** 1989 May;34(5):20–5 (Eng. Abstr.) (Rus)

[Infantile thyroid nodule: thyroid carcinoma. Apropos of a case] Garagorri JM, et al. **An Esp Pediatr** 1988 May; 28(5):471–3 (Spa)

RADIONUCLIDE IMAGING

Investigational study of iodine-124 with a positron camera. Lambrecht RM, et al. **Am J Physiol Imaging** 1988; 3(4):197–200

Positive anticalcitonin immunoscintigraphy in patients with medullary thyroid carcinoma. Manil L, et al. **Cancer Res** 1989 Oct 1;49(19):5480–5

Technetium-99m pentavalent DMSA imaging detects metastases of poorly differentiated carcinoma of the thyroid. Costa DC, et al. **Clin Nucl Med** 1989 Mar; 14(3):218–21

The scope of false-positive iodine-131 images for thyroid carcinoma. Greenler DP, et al. **Clin Nucl Med** 1989 Feb; 14(2):111–7

Gallium-67 imaging in the evaluation of thyroid malignancy. Higashi T, et al. **Clin Nucl Med** 1988 Nov;13(11):792–9

A simplified low iodine diet in I-131 scanning and therapy of thyroid cancer. Lakshmanan M, et al. **Clin Nucl Med** 1988 Dec;13(12):866–8

Metastatic papillary thyroid carcinoma with normal serum thyroglobulin level. Miller JH, et al. **Clin Nucl Med** 1988 Sep;13(9):652–3

Visualization of jugular vein on a thallium-201 scan for thyroid cancer. Nakano S, et al. **Clin Nucl Med** 1989 Jun; 14(6):449–50

Frequency of hepatic visualization during I-131 imaging for metastatic thyroid carcinoma. Rosenbaum RC, et al. **Clin Nucl Med** 1988 Sep;13(9):657–60

Intrathyroidal parathyroid adenoma: preoperative identification and localization by parathyroid imaging. Al-Suhaili AR, et al. **Clin Nucl Med** 1988 Jul;13(7):512–4

Imaging with pentavalent [99mTc]DMSA in patients with medullary cancer of the thyroid [letter] Hilditch TE, et al. **J Nucl Med** 1988 Oct;29(10):1746–7

More on [99mTc](V)DMSA scintigraphy in patients with medullary carcinoma of the thyroid [letter] Mojiminiyi OA, et al. **J Nucl Med** 1989 Aug;30(8):1420

The use of 99mTc(V)DMSA as imaging for the medullary thyroid carcinoma (MTC). Guerra U, et al. **J Nucl Med Allied Sci** 1988 Oct–Dec;32(4):242–7

The pyramidal lobe—a helpful criterion in the differential diagnosis of thyroid diseases. Wahl R, et al. **Klin Wochenschr** 1989 Jun 15;67(12):647

New tracers for the imaging of the medullary thyroid carcinoma. Guerra UP, et al. **Nucl Med Commun** 1989 Apr; 10(4):285–95

Diagnostic efficacy of dynamic radiothallium uptake in thyroid nodules determined by computer-assisted scintigraphy. Reevaluation of a radioisotopic procedure. Palermo F. **Nuklearmedizin** 1989 Aug;28(4):114–9

Radioimmunoimaging of metastatic medullary carcinoma of the thyroid gland using an indium-111-labeled monoclonal antibody to CEA. Edington HD, et al. **Surgery** 1988 Dec; 104(6):1004–10

The value of intraoperative scintigraphy as a routine procedure in thyroid carcinoma. Lennquist S, et al. **World J Surg** 1988 Oct;12(5):586–92

[Nuclear medicine diagnosis of the thyroid] Moser E. **Radiologe** 1989 Mar;29(3):103–8 (10 ref.) (Eng. Abstr.) (Ger)

[Scintigram after TSH in blocked thyroid gland] Schröder F, et al. **Z Gesamte Inn Med** 1988 Jul 1;43(13):364–6 (Eng. Abstr.) (Ger)

[X-ray and scintigraphic diagnosis of thyroid cancer metastatic to bone] Babushkin VV, et al. **Med Radiol (Mosk)** 1989 May;34(5):20–5 (Eng. Abstr.) (Rus)

[2-isotope study in the diagnosis of thyroid cancer] Vasil'ev LIa, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):10–4 (Eng. Abstr.) (Rus)

[Dynamic esophageal scintigraphy in assessing the degree of thyroid cancer spread] Vikman IaE, et al. **Med Radiol (Mosk)** 1989 May;34(5):25–7 (Eng. Abstr.) (Rus)

RADIOTHERAPY

Radioiodine therapy for differentiated thyroid carcinoma. Connor CS, et al. **Am J Surg** 1988 Dec;156(6):519–21

Value of postoperative radiotherapy for thyroid cancer. Wu XL, et al. **Head Neck Surg** 1987 Nov–Dec;10(2):107–12

Radiation dose assessments in radioiodine (131I) therapy. 1. The necessity for in vivo quantitation and dosimetry in the treatment of carcinoma of the thyroid. Schlesinger T, et al. **Radiother Oncol** 1989 Jan;14(1):35–41

[Bone marrow depression due to 131I treatment of thyroid cancer] Keldsen N, et al. **Ugeskr Laeger** 1988 Nov 14; 150(46):2817–9 (Eng. Abstr.) (Dan)

[Therapeutic strategies—nuclear medicine aspects] Schicha H. **Internist (Berlin)** 1988 Aug;29(8):577–9 (15 ref.) (Ger)

[Clinical picture and possible causes of functional disorders of the parotid gland in radioiodine therapy of differentiated thyroid cancer] Deeg M, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):362–6 (Eng. Abstr.) (Ger)

[Experience with a high-dose therapy concept in metastatic differentiated thyroid cancer] Grünwald F, et al. **Nuklearmedizin** 1988 Dec;27(6):266–71 (Eng. Abstr.) (Ger)

[Interstitial radiotherapy of thyroid cancer using 198Au-comizol] Rozdilsky SI, et al. **Radiobiol Radiother (Berl)** 1988;29(6):729–33 (Eng. Abstr.) (Ger)

[Radioiodine therapy and percutaneous radiotherapy of struma maligna] Kimmig B. **Radiologe** 1989 Mar; 29(3):125–31 (46 ref.) (Eng. Abstr.) (Ger)

[Role of radiotherapy in the treatment of carcinoma of the thyroid gland] Mancini M, et al. **Minerva Med** 1988 Oct; 79(10):873–81 (Eng. Abstr.) (Ita)

[A case report of thyroid papillary cancer that manifested leukocytosis and hypercalcemia after radiotherapy in bone metastasis] Kobayashi H, et al. **Gan No Rinsho** 1989 Jan; 35(1):55–62 (Eng. Abstr.) (Jpn)

[Estimation of absorbed dose in 131I therapy of metastasis of thyroid cancer] Takai M, et al. **Radioisotopes** 1988 Dec; 37(12):677–80 (Eng. Abstr.) (Jpn)

[Dynamics of the x-ray picture of bone metastases of thyroid cancer as affected by radiotherapy] Kineleva ES, et al. **Med Radiol (Mosk)** 1989 Mar;34(3):6–10 (Eng. Abstr.) (Rus)

SECONDARY

Renal cell carcinoma metastatic to the thyroid. Green LK, et al. **Cancer** 1989 May 1;63(9):1810–5

Renal-cell carcinoma with intranuclear inclusions metastatic to thyroid: a diagnostic problem in aspiration cytology. Gritsman AY, et al. **Diagn Cytopathol** 1988;4(2):125–9

Leiomyosarcoma metastatic to the thyroid gland. Cruickshank JC. **Ear Nose Throat J** 1988 Dec; 67(12):899–900, 902, 904 passim (23 ref.)

Thyroid metastases from renal carcinoma. Prati GF, et al. **Urol Int** 1988;43(6):347–8

[Endocrine localization of Hodgkin's disease] Nedelcheva E, et al. **Vutr Boles** 1989;28(3):14–7 (Eng. Abstr.) (Bul)

[Metastatic cancer of the thyroid gland—cases report and literature review] Shyr YM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;41(5):375–8 (18 ref.) (Eng. Abstr.) (Chi)

[Solitary late thyroid metastasis of a surgically removed kidney cancer] Zahradka W, et al. **Z Gesamte Inn Med** 1988 Jul 15;43(14):398–9 (Eng. Abstr.) (Ger)

SECRETION

Melanin-producing medullary carcinoma of the thyroid gland. Eng HL, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):377–80

Inhibition by phenytoin of in vitro secretion of calcitonin from rat thyroid glands and cultured rat C cells. Cooper CW, et al. **J Bone Miner Res** 1988 Apr;3(2):219–23

Cosecretion of calcitonin and calcitonin gene-related peptide from cultured rat medullary thyroid C cells. Seitz PK, et al. **J Bone Miner Res** 1989 Feb;4(1):129–34

Role of voltage-dependent calcium channels in secretion of calcitonin from human medullary thyroid carcinoma cells. Raue F, et al. **Klin Wochenschr** 1989 Jun 15;67(12):635–9

SURGERY

Papillary thyroid cancer with unusually aggressive behaviour. Case report. Di Saverio G, et al. **Acta Chir Scand** 1989;155(1):57–8

Thyroid carcinoma. Kramer JB, et al. **Adv Surg** 1989; 22:195–224 (112 ref.)

Thyroid carcinoma—problems in management. Ng EH, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):9–14

Electrophysiological measures during acupuncture-induced surgical analgesia. Starr A, et al. **Arch Neurol** 1989 Sep; 46(9):1010–2

Near-total thyroidectomy for carcinoma of the thyroid. Sarda AK, et al. **Br J Surg** 1989 Jan;76(1):90–2

Morphologic changes in the thyroid after irradiation for Hodgkin's and non-Hodgkin's lymphoma. Carr RF, et al. **Cancer** 1989 Aug 15;64(4):825–9

Early liver metastases in patients with medullary carcinoma of the thyroid gland. Gautvik KM, et al. **Cancer** 1989 Jan 1;63(1):175–80

3,5,3'-Triiodothyroacetic acid minimizes the pituitary thyrotrophin secretion in patients on levo-thyroxine therapy after ablative therapy for differentiated thyroid carcinoma. Mueller-Gaertner HW, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):345–51

Cardiomyopathy in phaeochromocytoma: a case report. Villani A, et al. **Eur J Anaesthesiol** 1989 May;6(3):233–6

Papillary and follicular thyroid carcinoma. Individualization of the treatment according to the prognosis of the disease. Andry G, et al. **Eur J Cancer Clin Oncol** 1988 Oct; 24(10):1641–6

Metastatic papillary carcinoma of the thyroid: the significance of extranodal extension. Spires JR, et al. **Head Neck** 1989 May–Jun;11(3):242–6

Morbidity of completion thyroidectomy for initially misdiagnosed thyroid carcinoma. Calabro S, et al. **Head Neck Surg** 1988 Mar–Apr;10(4):235–8

Hürthle cell neoplasm. Marzano LA, et al. **Int Surg** 1989 Apr–Jun;74(2):97–8

A twenty-year experience with thyroid carcinoma in children. Desjardins JG, et al. **J Pediatr Surg** 1988 Aug; 23(8):709–13

Reconstruction of the carotid artery using a temporary shunt during an operation for advanced thyroid carcinoma—a case report. Kobayashi S, et al. **Jpn J Surg** 1988 Sep; 18(5):592–4

Total thyroparathyroidectomy in patients with thyroid cancers and changes in erythrocytic Mg levels following parathyroautotransplantation. Sugiura H, et al. **Jpn J Surg** 1988 Nov;18(6):653–9

Influence of L-thyroxine on cardiac function in athyreotic thyroid cancer patients—an echophonocardiographic study. Punzengruber C, et al. **Klin Wochenschr** 1988 Aug 15;66(16):729–35

Intraoperative electrophysiologic monitoring of laryngeal muscle during thyroid surgery. Lipton RJ, et al. **Laryngoscope** 1988 Dec;98(12):1292–6

Medullary thyroid carcinoma in children. Telander RL, et al. **Minn Med** 1988 Oct;71(10):619–20

Emergency surgery for primary lymphoma of the thyroid. Albu E, et al. **Otolaryngol Head Neck Surg** 1989 Apr; 100(4):324–6 (14 ref.)

Surgical therapy for thyroid carcinoma: a review of 1249 solitary thyroid nodules. Brooks JR, et al. **Surgery** 1988 Dec;104(6):940–6

Thyroid cancer in children and adolescents. Ceccarelli C, et al. **Surgery** 1988 Dec;104(6):1143–8

Local recurrence in papillary thyroid carcinoma: is extent of surgical resection important? Grant CS, et al.

Surgery 1988 Dec;104(6):954–62
Recurrence and morbidity in differentiated thyroid carcinoma in children. La Quaglia MP, et al. Surgery 1988 Dec;104(6):1149–56
Hyperthyroidism and concurrent thyroid malignancies. Rieger R, et al. Surgery 1989 Jul;106(1):6–10
The role of surgery in the management of thyroid lymphoma. Rosen IB, et al. Surgery 1988 Dec;104(6):1095–9
Papillary thyroid carcinoma in children and adults: long-term follow-up of 1039 patients conservatively treated at one institution during three decades. Zimmerman D, et al. Surgery 1988 Dec;104(6):1157–66
Evaluation of surgical results and prediction of prognosis in patients with medullary thyroid carcinoma by analysis of serum calcitonin levels. Miyauchi A, et al. World J Surg 1988 Oct;12(5):610–5
Modified neck dissection for patients with nonadvanced, differentiated carcinoma of the thyroid. Ozaki O, et al. World J Surg 1988 Dec;12(6):825–9
[Thyroidectomy or extensive resection in differentiated carcinomas of the thyroid. A comparative study of the late results] Petkov R, et al. Khirurgiia (Sofiia) 1988;41(4):47–50 (Eng. Abstr.) (Bul)
[Surgical aspects in thyroid carcinoma. Retrospective studies of 216 patients operated on between 1971 and 1986] De Wit A, et al. Acta Otorhinolaryngol Belg 1988;42(4):538–47 (Eng. Abstr.) (Dut)
[Primary malignant teratoma of the thyroid in adults. Report of 1 case and review of the literature] Goëau-Brissonnière O, et al. J Chir (Paris) 1989 Jan;126(1):1–4 (13 ref.) (Eng. Abstr.) (Fre)
[Tongue necrosis following subtotal struma resection caused by Horton giant cell arteritis] Fabian W. Chirurg 1989 Apr; 60(4):305–6 (Ger)
[Various strategies in the diagnosis and therapy of thyroid gland cancer. Results of a survey] Goretzki PE, et al. Chirurg 1989 Jun;60(6):398–402 (Eng. Abstr.) (Ger)
[Long-term results following surgery or radioiodine treatment of solitary autonomous adenoma of the thyroid gland] Müller-Gärtner HW, et al. Chirurg 1989 Jan; 60(1):33–7 (Eng. Abstr.) (Ger)
[Aggressive fibromatosis—a surgical problem disease] Sommer HJ, et al. Chirurg 1989 Jun;60(6):426–30 (Eng. Abstr.) (Ger)
[Identification of the recurrent laryngeal nerve in thyroid gland surgery—a status determination] Zornig C, et al. Chirurg 1989 Jan;60(1):44–8 (Eng. Abstr.) (Ger)
[Paralyses of the recurrent laryngeal nerve following strumectomy in late follow-up] Kull C, et al. Helv Chir Acta 1989 Jan;55(5):545–8 (Eng. Abstr.) (Ger)
[Thyroid cancers—current diagnostic and therapeutic strategies] Benker G, et al. Internist (Berlin) 1988 Aug; 29(8):564–9 (35 ref.) (Ger)
[Surgical indications and choice of surgical procedure in thyroid gland diseases] Dralle H. Internist (Berlin) 1988 Aug;29(8):570–6 (26 ref.) (Ger)
[Problems of tracheotomy in locally invasive anaplastic thyroid cancer] Hölting T, et al. Langenbecks Arch Chir 1989;374(2):72–6 (Eng. Abstr.) (Ger)
[Indications for and basic principles of the surgical treatment of thyroid diseases] Röher HD, et al. Radiologe 1989 Mar; 29(3):119–24 (31 ref.) (Eng. Abstr.) (Ger)
[The incidence of recurrent laryngeal nerve paralysis following thyroid surgery] Horch R, et al. Zentralbl Chir 1989;114(9):577–82 (Eng. Abstr.) (Ger)
[Temporary and permanent recurrent laryngeal nerve paralysis following thyroid surgery. Modifying factors: the educational status of the surgeon] Weitensfelder W, et al. Zentralbl Chir 1989;114(9):583–9 (Eng. Abstr.) (Ger)
[Emergency subtotal thyroidectomy for acute respiratory distress] Weinberg J, et al. Harefuah 1988 Sep;115(5–6):121 (Eng. Abstr.) (Heb)
[Occult cancer of the thyroid gland] Negro G, et al. Minerva Chir 1989 Feb 28;44(4):647–51 (Ita)
[Recent advances in surgical treatment of thyroid carcinoma] Iida F. Nippon Geka Gakkai Zasshi 1988 Sep;89(9):1343–6 (5 ref.) (Eng. Abstr.) (Jpn)
[Autotransplantation of parathyroid glands in thyroid carcinoma surgery and their postoperative function] Takeuchi M, et al. Nippon Geka Gakkai Zasshi 1989 Feb; 90(2):273–9 (Eng. Abstr.) (Jpn)
[Surgical treatment of thyroid carcinoma in childhood] Sechanov T, et al. Khirurgiia (Sofiia) 1988;41(3):30–5 (Eng. Abstr.) (Rus)
[Performing thyroidectomy on patients having under gone non-radical surgery for thyroid carcinoma] Sechanov T, et al. Khirurgiia (Sofiia) 1988;41(3):39–43 (Eng. Abstr.) (Rus)
[Combined and extended operations in neglected cancer of the thyroid gland] Romanchishen AF. Vestn Khir 1988 May;140(5):39–42 (Eng. Abstr.) (Rus)
[Emergency and urgent operations in the treatment of patients with thyroid cancer] Romanchishen AF. Vopr Onkol 1988;34(9):1088–92 (Eng. Abstr.) (Rus)

THERAPY

Differentiated follicle-derived thyroid carcinoma in children. Lamberg BA, et al. Acta Paediatr Scand 1989 May; 78(3):419–25
Suppressive therapy of thyroid nodules in patients with previous radiotherapy to the head and neck. Razack MS, et al. Am J Surg 1988 Oct;156(4):290–3
Does fine-needle aspiration biopsy really spare patients thyroidectomy? Julian JS, et al. Am Surg 1989 Apr; 55(4):238–42
Medical treatment of benign and malignant thyroid tumors. Sisson JC. Endocrinol Metab Clin North Am 1989 Jun; 18(2):359–87 (157 ref.)
Temporary ovarian failure in thyroid cancer patients after thyroid remnant ablation with radioactive iodine. Raymond JP, et al. J Clin Endocrinol Metab 1989 Jul;69(1):186–90
Well-differentiated thyroid neoplasia: a curable cancer. Ferguson CM. J Med Assoc Ga 1988 Nov;77(11):846–9 (33 ref.)
Detection and treatment of lung metastases of differentiated thyroid carcinoma in patients with normal chest X-rays. Schlumberger M, et al. J Nucl Med 1988 Nov; 29(11):1790–4
The usefulness of a sensitive thyrotrophin assay in the fine adjustment of thyroxine therapy following ablation for carcinoma. de Lange WE, et al. Neth J Med 1989 Aug; 35(1–2):11–7
Favorable long term results in patients with small differentiated thyroid cancer not treated with radioiodine. Busnardo B, et al. Tumori 1989 Feb 28;75(1):57–9
[Thyroid gland diseases: long-term treatment and follow-up] Ziegler R. Internist (Berlin) 1988 Aug;29(8):580–5 (7 ref.) (Ger)
[Trends in the hormonal therapy of thyroid cancer] Szántó J, et al. Orv Hetil 1989 Jun 4;130(23):1215–8 (32 ref.) (Eng. Abstr.) (Hun)
[Therapeutic strategy in thyroid carcinoma] Baschieri L, et al. Clin Ter 1987 Jun 30;121(6):457–65 (Eng. Abstr.) (Ita)
[Treatment of thyroid cancer] Kasai N. Gan No Rinsho 1989 Jan;Spec No:181–6 (Jpn)
[Diagnosis and treatment of patients with cancer of the thyroid gland] Ekimov VI. Vestn Khir 1988 Jun;140(6):43–5 (Rus)
[Papillary cancer of the thyroid gland: treatment and follow-up of 39 patients during 10 years] Illán Gómez F, et al. Med Clin (Barc) 1988 Sep 24;91(9):321–4 (Eng. Abstr.) (Spa)

ULTRASTRUCTURE

Ultrastructural morphometric analysis of papillary neoplasms: biological and diagnostic relevance. Payne CM, et al. Hum Pathol 1989 Sep;20(9):864–70
Ultrastructural and electron immunohistochemical features of medullary thyroid carcinoma. Holm R, et al. Virchows Arch [A] 1989;414(5):375–84
A histopathological, immunohistochemical and ultrastructural study of intranuclear cytoplasmic inclusions in thyroid papillary carcinoma. Oyama T. Virchows Arch [A] 1989;414(2):91–104

VETERINARY

Thyroid carcinoma causing hyperthyroidism in cats: 14 cases (1981–1986). Turrel JM, et al. J Am Vet Med Assoc 1988 Aug 1;193(3):359–64
Radioactive iodine treatment of a functional thyroid carcinoma producing hyperthyroidism in a dog. Peterson ME, et al. J Vet Intern Med 1989 Jan–Mar;3(1):20–5
The ultimobranchial remnant and its hyperplasia or adenoma in equine thyroid gland. Tateyama S, et al. Nippon Juigaku Zasshi 1988 Jun;50(3):714–22

THYROID PEROXIDASE see **IODIDE PEROXIDASE**

THYROID STIMULATING HORMONE see **THYROTROPIN**

THYROID STIMULATING HORMONE, ALPHA SUBUNIT see **GLYCOPROTEIN HORMONES, ALPHA SUBUNIT**

THYROID STIMULATING HORMONE RECEPTORS see **RECEPTORS, THYROTROPIN**

THYROID STORM see **THYROID CRISIS**

THYROIDECTOMY

The protective mechanism of thyroidectomy in a rat model of chronic renal failure. Conger JD, et al. Am J Kidney Dis 1989 Mar;13(3):217–25
Gastric acid secretion and parietal cell mass: effects of thyroidectomy and thyroxine. Adeniyi KO, et al. Am J Physiol 1989 Jun;256(6 Pt 1):G975–8
Effect of thyroidectomy on rat T-kininogen. Bouhnik J, et al. Am J Physiol 1988 Oct;255(4 Pt 1):E411–5
Does fine-needle aspiration biopsy really spare patients thyroidectomy? Julian JS, et al. Am Surg 1989 Apr; 55(4):238–42
Thyroidectomy for Graves' disease: is hypothyroidism inevitable? Davenport M, et al. Ann R Coll Surg Engl 1989 Mar;71(2):87–91
Thyroidectomy under local analgesia: the anatomical basis of cervical blocks. Yerzingatsian KL. Ann R Coll Surg Engl 1989 Jul;71(4):207–10
Trainee surgery in teaching hospitals: is there a cost? Martin L, et al. Aust N Z J Surg 1989 Mar;59(3):257–60
Surgical significance of non-toxic iodine-avid goitre. Kalra M, et al. Br J Surg 1989 Apr;76(4):392–4
Effect of thyroidectomy on the release of prolactin in vitro response to calcitonin. Yang MY, et al. Chin J Physiol 1988;31(2):105–12
Graves' disease: changes in TSH receptor and anti-microsomal antibodies after thyroidectomy. De Bruin TW, et al. Clin Exp Immunol 1988 Jun;72(3):481–5
Thyroid and parathyroid response to subtotal thyroidectomy. Eforakopoulou-Gialakidou E, et al. Endocrinol Exp (Bratisl) 1988 Sep;22(3):165–9
Increases in thyroid gland blood flow after hemithyroidectomy in the rat. Michalkiewicz M, et al. Endocrinology 1989 Mar;124(3):1118–23
Thyroidectomy and the termination of juvenile refractoriness in the red-legged partridge (Alectoris graeca chukar). Creighton JA. Gen Comp Endocrinol 1988 Nov;72(2):204–8
Prevalence of parathyroid insufficiency after thyroidectomy: study of 1037 cases. Ronga G, et al. Ital J Surg Sci 1988; 18(2):151–4
Effects of oxidation of human parathyroid hormone on its biological activity in continuously infused, thyroparathyroidectomized rats. Horiuchi N. J Bone Miner Res 1988 Jun;3(3):353–8
Postnatal development of the renin-angiotensin system in thyroidectomized rats. Jiménez E, et al. J Endocrinol Invest 1988 Sep;11(8):567–70
The effect of thyroidectomy in the fetal sheep on lung liquid reabsorption induced by adrenaline or cyclic AMP. Barker PM, et al. J Physiol (Lond) 1988 Dec;407:373–83
Inhibition of pineal type-II 5'-deiodinase does not affect the nocturnal increase of N-acetyltransferase activity and melatonin content in either euthyroid or thyroidectomized rats. Guerrero JM, et al. J Pineal Res 1988;5(6):513–20
Substernal extension of thyroid swelling. Sharma A, et al. J Postgrad Med 1988 Jul;34(3):142–5
Total thyroparathyroidectomy in patients with thyroid cancers and changes in erythrocytic Mg levels following parathyroautotransplantation. Sugiura H, et al. Jpn J Surg 1988 Nov;18(6):653–9
A comparison of the effects of morphine withdrawal, thyroxine or thyroidectomy on the sensitivity of the anococcygeus muscle to agonists and on serum thyroxine levels in the rat. Gardiner DC, et al. Life Sci 1974 Jul 15;15(2):339–49
Interaction of calcitonin with vitamin D and prostaglandin E2 on renal tubular reabsorption of calcium in thyroparathyroidectomized rats. Su KW, et al. Miner Electrolyte Metab 1988;14(4):229–34
Cycloheximide blocks nicotinamide action on phosphate excretion in thyroparathyroidectomized rats. Wu KI, et al. Miner Electrolyte Metab 1988;14(5):271–6
Medullary thyroid carcinoma in children. Telander RL, et al. Minn Med 1988 Oct;71(10):619–20
Full expression of uncoupling protein gene requires the concurrence of norepinephrine and triiodothyronine. Silva JE. Mol Endocrinol 1988 Aug;2(8):706–13
Influence of thyroidectomy on serum and pituitary FSH in control and orchidectomized rats. Ruiz M, et al. Res Exp Med (Berl) 1989;189(2):85–90
Tracheomalacia from compressing goiter: management after thyroidectomy. Geelhoed GW. Surgery 1988 Dec; 104(6):1100–8
Complications of thyroid surgery performed by residents. Shaha A, et al. Surgery 1988 Dec;104(6):1109–14
The value of intraoperative scintigraphy as a routine procedure in thyroid carcinoma. Lennquist S, et al. World J Surg 1988 Oct;12(5):586–92
The effect of subtotal thyroidectomy on Graves' ophthalmopathy. Levitt MD, et al. World J Surg 1988 Oct; 12(5):593–7
[Thyroidectomy and cosmetic problems with scars] Løntoft E, et al. Ugeskr Laeger 1988 Nov 14;150(46):2813–4 (Eng. Abstr.) (Dan)
[Tongue necrosis following subtotal struma resection caused by Horton giant cell arteritis] Fabian W. Chirurg 1989 Apr; 60(4):305–6 (Ger)
[Various strategies in the diagnosis and therapy of thyroid gland cancer. Results of a survey] Goretzki PE, et al. Chirurg 1989 Jun;60(6):398–402 (Eng. Abstr.) (Ger)
[Long-term results following surgery or radioiodine treatment of solitary autonomous adenoma of the thyroid gland] Müller-Gärtner HW, et al. Chirurg 1989 Jan; 60(1):33–7 (Eng. Abstr.) (Ger)
[Paralyses of the recurrent laryngeal nerve following strumectomy in late follow-up] Kull C, et al. Helv Chir Acta 1989 Jan;55(5):545–8 (Eng. Abstr.) (Ger)
[Thyroid cancers—current diagnostic and therapeutic strategies] Benker G, et al. Internist (Berlin) 1988 Aug; 29(8):564–9 (35 ref.) (Ger)
[The surgical anatomy of the adjacent lamellae of the thyroid gland and the laryngeal nerves] Stelzner F. Langenbecks Arch Chir 1988;373(6):355–66 (28 ref.) (Eng. Abstr.) (Ger)
[Clinical picture and possible causes of functional disorders of the parotid gland in radioiodine therapy of differentiated thyroid cancer] Deeg M, et al. Laryngol Rhinol Otol (Stuttg) 1988 Jul;67(7):362–6 (Eng. Abstr.) (Ger)
[Results of the definitive treatment of autonomy in iodine deficiency goiter (published erratum appears in Nuklearmedizin 1989 Apr;28(2):124)] Emrich D, et al.

Nuklearmedizin 1989 Feb;28(1):11–6 (Eng. Abstr.) (Ger)
[Indications for subtotal thyroidectomy in patients with amiodarone– (iodine–) induced hyperthyroidism] Blossey HC, et al. Wien Med Wochenschr 1988 Sep 30;138(18):444–7 (Eng. Abstr.) (Ger)
[Hyperthyroidism in operations for non-thyroid diseases] Böhmig HJ, et al. Wien Med Wochenschr 1988 Sep 30; 138(18):447–9 (Eng. Abstr.) (Ger)
[Persistent postoperative hyperthyroidism—a surgical problem] Frilling A, et al. Wien Med Wochenschr 1988 Sep 30;138(18):450–1 (Eng. Abstr.) (Ger)
[Current aspects of prevention of struma recurrence] Pimpl W, et al. Zentralbl Chir 1989;114(9):593–6 (Eng. Abstr.) (Ger)
[Emergency subtotal thyroidectomy for acute respiratory distress] Weinberg J, et al. Harefuah 1988 Sep;115(5–6):121 (Eng. Abstr.) (Heb)
[Variations in serum calcium and magnesium levels in hyperthyroid and euthyroid patients undergoing total thyroidectomy: preliminary observations] Mancini A, et al. Medicina (Firenze) 1988 Apr–Jun;8(2):183–5 (Eng. Abstr.) (Ita)
[Occult cancer of the thyroid gland] Negro G, et al. Minerva Chir 1989 Feb 28;44(4):647–51 (Ita)
[Characteristics of the recovery processes in the resected thyroid of adult rats after sympathectomy] Riashchikov SN, et al. Biull Eksp Biol Med 1989 Mar;107(3):353–6 (Eng. Abstr.) (Rus)
[Interhormonal relations in the dynamics of immune response during thyroidectomy] Fomicheva EE. Fiziol Zh SSSR 1989 Jan;75(1):131–7 (Eng. Abstr.) (Rus)
[Performing thyroidectomy on patients having under gone non-radical surgery for thyroid carcinoma] Sechanov T, et al. Khirurgiia (Sofiia) 1988;41(3):39–43 (Eng. Abstr.) (Rus)
[Use of immunoregulators in the complex preoperative preparation of patients with diffuse toxic goiter] Kuleshov EV, et al. Vestn Khir 1989 Feb;142(2):98–100 (Rus)
[Changes in various indicators of the immune system in patients with diffuse toxic goiter after surgical treatment] Nugmanova LB, et al. Vestn Khir 1988 May;140(5):55 (Rus)
[Characteristics of the effect of hydrocortisone on biosynthesis of mitochondrial proteins in the liver of thyroidectomized rats] Minchenko AG. Vopr Med Khim 1988 Sep–Oct;34(5):17–22 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Hypocalcemia following pharyngoesophageal ablation and gastric pull-up reconstruction: pathophysiology and management. Price JC, et al. Ann Otol Rhinol Laryngol 1988 Sep–Oct;97(5 Pt 1):521–6
Serum parathyroid hormone concentration measured by highly sensitive assay in post-thyroidectomy hypocalcemia of patients with Graves' disease. Hamada N, et al. Endocrinol Jpn 1989 Apr;36(2):281–8
Morbidity of completion thyroidectomy for initially misdiagnosed thyroid carcinoma. Calabro S, et al. Head Neck Surg 1988 Mar–Apr;10(4):235–8
Late-onset hypocalcemia appearing years after thyroid surgery. Halperin I, et al. J Endocrinol Invest 1989 Jun; 12(6):419–20
Pituitary resistance to L-thyroxine after thyroidectomy. A case report. Mulaisho C, et al. S Afr Med J 1989 Mar 4; 75(5):236–7
[Preservation of the external branch of the superior laryngeal nerve in thyroid surgery. An anatomic study of 30 dissections] Espinoza J, et al. Ann Otolaryngol Chir Cervicofac 1989;106(2):127–34 (Eng. Abstr.) (Fre)
[Complications and sequelae of thyroid surgery] Peix JL, et al. Presse Med 1988 Oct 8;17(34):1749–53 (Eng. Abstr.) (Fre)
[Remote results of the surgical treatment of non-toxic goiter] Jaroszewicz S. Ann Acad Med Stetin 1988;34:137–60 (Eng. Abstr.) (Pol)
[Causes, prevention and treatment of postoperative hypothyroidism] Volokh IuA, et al. Vestn Khir 1988 Aug; 141(8):134–6 (Eng. Abstr.) (Rus)

EDUCATION

[Temporary and permanent recurrent laryngeal nerve paralysis following thyroid surgery. Modifying factors: the educational status of the surgeon] Weitensfelder W, et al. Zentralbl Chir 1989;114(9):583–9 (Eng. Abstr.) (Ger)

HISTORY

Our legacy of thyroid surgery. Harwick RD. Am J Surg 1988 Oct;156(4):230–4

METHODS

Transverse submammary skin incision for thyroidectomy. Aghaji MA. Br J Surg 1988 Oct;75(10):1034
Near-total thyroidectomy for carcinoma of the thyroid. Sarda AK, et al. Br J Surg 1989 Jan;76(1):90–2
Long term thyroid function after subtotal thyroidectomy for Graves' disease. Busnardo B, et al. J Endocrinol Invest 1988 May;11(5):371–4
Modified thyroidectomy in benign thyroid diseases. Bapat RD, et al. J Postgrad Med 1988 Jul;34(3):127–31
A technique for subtotal thyroidectomy. Lumsden AB, et al. Surg Gynecol Obstet 1989 Feb;168(2):177–9
[Thyroidectomy or extensive resection in differentiated carcinomas of the thyroid. A comparative study of the late results] Petkov R, et al. Khirurgiia (Sofiia) 1988;41(4):47–50 (Eng. Abstr.) (Bul)
[Subtotal thyroidectomy of multinodular goiter. Apropos of 223 cases] Demard F, et al. Ann Chir 1988;42(10):735–41 (31 ref.) (Eng. Abstr.) (Fre)
[Intrathoracic struma] Röher HD, et al. Chirurg 1989 Jun; 60(6):384–90 (20 ref.) (Ger)
[Surgical indications and choice of surgical procedure in thyroid gland diseases] Dralle H. Internist (Berlin) 1988 Aug;29(8):570–6 (26 ref.) (Ger)
[Radioiodine administration for the production of an athyreotic animal model] Hanauer G. Z Versuchstierkd 1989;32(1):7–15 (Eng. Abstr.) (Ger)
[The incidence of recurrent laryngeal nerve paralysis following thyroid surgery] Horch R, et al. Zentralbl Chir 1989;114(9):577–82 (Eng. Abstr.) (Ger)
[Can the rate of recurrent laryngeal nerve paralysis be reduced by a modified surgical technic in struma surgery?] Rieger R, et al. Zentralbl Chir 1989;114(9):590–2 (Eng. Abstr.) (Ger)
[Complications in bland struma surgery. A retrospective study based on 2,035 personal cases] Vara-Thorbeck R, et al. Zentralbl Chir 1989;114(9):571–6 (Eng. Abstr.) (Ger)
[Echographic assessment of residual thyroid in incomplete excisional interventions. Comments on 38 patients] Tambussi U, et al. Minerva Med 1989 Jul;80(7):759–61 (Ita)
[Extensiveness of resection of the thyroid gland in the treatment of euthyroid nodular goiter] Barcikowski S, et al. Endokrynol Pol 1987;38(6):421–7 (Eng. Abstr.) (Pol)
[Surgical treatment of recurrent goiter] Dzhaubaev MO, et al. Khirurgiia (Mosk) 1989 Jun;(6):123–4 (Rus)
[Diagnosis and surgical treatment of diseases of the thyroid] Zenovko GI, et al. Khirurgiia (Mosk) 1989 Mar;(3):76–9 (Eng. Abstr.) (Rus)
[Various problems of surgical treatment of different forms of goiter in children and adolescents] Bochkovskii FI, et al. Pediatriia 1989;(2):62–4 (Rus)
[Surgical treatment of endemic nodular goiter] Abduzhalilov AA. Vestn Khir 1988 Dec;141(12):92–3 (Rus)
[Surgery of the thyroid] Breido NS. Vestn Khir 1989 Mar; 142(3):140–4 (20 ref.) (Rus)
[Combined and extended operations in neglected cancer of the thyroid gland] Romanchishen AF. Vestn Khir 1988 May;140(5):39–42 (Eng. Abstr.) (Rus)

REHABILITATION

[Evaluation of the function of a free transplant of the thyroid gland] Ismailov SI, et al. Vestn Khir 1989 Jan;142(1):81–3 (Rus)

STATISTICS & NUMERICAL DATA

[A diminishing number of thyroid operations in The Netherlands in 1972–1986] Berghout A, et al. Ned Tijdschr Geneeskd 1989 Jul 1;133(26):1313–7 (Eng. Abstr.) (Dut)

TRENDS

Stay away from the recurrent laryngeals! [editorial] Bhandarkar SD. J Postgrad Med 1988 Jul;34(3):125–6

UTILIZATION

[Fewer thyroid operations in The Netherlands] Hennemann G, et al. Ned Tijdschr Geneeskd 1989 Jul 1;133(26):1299–300 (Dut)

VETERINARY

Feline thyroidectomy. A comparison of postoperative hypocalcemia associated with three different surgical techniques. Flanders JA, et al. Vet Surg 1987 Sep–Oct; 16(5):362–6

THYROIDITIS

The swollen neck. Cervical lymphadenitis, parotitis, thyroiditis, and infected cysts. Brook I. Infect Dis Clin North Am 1988 Mar;2(1):221–36 (56 ref.)
Acute suppurative thyroiditis in children. Panamonta O, et al. J Med Assoc Thai 1988 Dec;71(12):689–93
Postpartum thyroiditis. Heath GC. J Natl Med Assoc 1988 Nov;80(11):1231–2, 1235 (7 ref.)

BLOOD

Thyroid function in psychosis following childbirth. Stewart DE, et al. Am J Psychiatry 1988 Dec;145(12):1579–81

CHEMICALLY INDUCED

[Amiodarone-induced thyroiditis: description of a case] Piazza I, et al. Medicina (Firenze) 1988 Jul–Sep;8(3):297–8 (Eng. Abstr.) (Ita)

CLASSIFICATION

[Sclero-atrophic thyroiditis caused by amiodarone] Agosti R. Pathologica 1988 Jul–Aug;80(1068):477–82 (Eng. Abstr.) (Ita)

COMPLICATIONS

Recurrent laryngeal nerve palsy associated with thyroiditis. Lucarotti ME, et al. Br J Surg 1988 Oct;75(10):1041–2
Recurrent lupus pneumonitis with pulmonary hemorrhage in systemic lupus erythematosus associated with chronic thyroiditis and antithyroid hormone autoantibodies. Ichikawa Y, et al. Clin Exp Rheumatol 1989 May–Jun; 7(3):309–13

DIAGNOSIS

Thyroiditis. Differentiation of acute suppurative and subacute. Case report and review of the literature. Szabo SM, et al. Clin Pediatr (Phila) 1989 Apr;28(4):171–4 (24 ref.)
Isolation of Salmonella paratyphi A from thyroid abscess—a case report. Fule RP, et al. Indian J Med Sci 1989 Apr; 43(4):95–6
Acute suppurative thyroiditis in a child. Dewilde D, et al. J Belge Radiol 1988;71(3):353–5
[Postpartum thyroiditis, an overview] de Rooy HA, et al. Ned Tijdschr Geneeskd 1989 Apr 22;133(16):810–4 (24 ref.) (Dut)
[A case of acute suppurative thyroiditis] Gragnani SG, et al. Pediatr Med Chir 1988 Jul–Aug;10(4):451–3 (Eng. Abstr.) (Ita)
[Riedel's thyroiditis] Diaconescu MR, et al. Rev Chir [Chir] 1988 Nov–Dec;37(6):467–72 (Eng. Abstr.) (Rum)

ETIOLOGY

Postpartum thyroiditis. Jansson R, et al. Bailliere's Clin Endocrinol Metab 1988 Aug;2(3):619–35 (45 ref.)
Thyroid dysfunction in Hodgkin's disease. Pasqualini T, et al. Cancer 1989 Jan 15;63(2):335–9
[An unusual form of acute thyroiditis (letter)] Gómez-Balaguer M, et al. Med Clin (Barc) 1988 Jun 18; 91(4):158 (Spa)

IMMUNOLOGY

Anti-thyroglobulin antibodies in patients with chronic thyroiditis and in healthy subjects. Kohno Y, et al. Acta Paediatr Jpn Overseas Ed 1988;30 Suppl:128–32

PATHOLOGY

Riedel's thyroiditis. Schwaegerle SM, et al. Am J Clin Pathol 1988 Dec;90(6):715–22 (79 ref.)
Thyroiditis in Ibadan, Nigeria: a changing prevalence? Ogunniyi JO, et al. East Afr Med J 1988 Mar;65(3):183–8
The effect of thyroxine on spontaneous thyroiditis in BB/W rats. Banovac K, et al. Int Arch Allergy Appl Immunol 1988; 87(3):301–5
[Riedel's thyroiditis. 3 cases] Baudin E, et al. Presse Med 1989 Apr 22;18(16):825–7 (Eng. Abstr.) (Fre)
[Riedel's thyroiditis: report of a case in childhood] Rodriguez Sánchez MD, et al. An Esp Pediatr 1988 Jun;28(6):577–9 (Spa)

RADIOGRAPHY

The CT findings of acute thyroiditis and acute suppurative thyroiditis. Bernard PJ, et al. Otolaryngol Head Neck Surg 1988 Nov;99(5):489–93

SURGERY

[The base of the piriform sinus in the surgical treatment of fistula of the 4th endobranchial pouch. Apropos of 8 cases] Manach Y, et al. Ann Otolaryngol Chir Cervicofac 1988; 105(5):391–6 (Eng. Abstr.) (Fre)

TRANSMISSION

Five patients with painless thyroiditis simultaneously developed in a nursery school. Ogura T, et al. Endocrinol Jpn 1988 Apr;35(2):225–30

THYROIDITIS, AUTOIMMUNE

Polyglandular autoimmune syndrome, type 2. Leor J, et al. South Med J 1989 Mar;82(3):374–6

CHEMICALLY INDUCED

Effect of dietary iodine on autoimmune thyroiditis in the BB Wistar rats. Fischer PW, et al. J Nutr 1989 Mar; 119(3):502–7

CLASSIFICATION

What is meant today by Hashimoto's thyroiditis? Costa A, et al. J Endocrinol Invest 1989 May;12(5):355–6

COMPLICATIONS

Turner's syndrome with agenesis of the corpus callosum, Hashimoto's thyroiditis and horseshoe kidney. Araki K, et al. Acta Paediatr Jpn Overseas Ed 1987 Aug;29(4):622–6
Pretibial myxedema: an overlapping clinical manifestation of autoimmune thyroid disease [letter] Humbert P, et al. Am J Med 1987 Dec;83(6):1170–1
Ocular myasthenia gravis associated with autoimmune

hemolytic anemia and Hashimoto's thyroiditis. Iwasaki Y, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):90–1

Effective method for prediction of transient hypothyroidism in neonates born to mothers with chronic thyroiditis. Tamaki H, et al. **Am J Perinatol** 1989 Jul;6(3):296–303

Autoimmune thyroiditis and panic disorder. Stein MB, et al. **Am J Psychiatry** 1989 Feb;146(2):259–60

C-cell hyperplasia of the thyroid in a patient with goitrous hypothyroidism and Hashimoto's thyroiditis. Libbey NP, et al. **Am J Surg Pathol** 1989 Jan;13(1):71–7

Multiple branchial cleft–like cysts in Hashimoto's thyroiditis. Louis DN, et al. **Am J Surg Pathol** 1989 Jan;13(1):45–9

Thyroid cancer with coexistent Hashimoto's thyroiditis. Clinical assessment and management. Eisenberg BL, et al. **Arch Surg** 1989 Sep;124(9):1045–7

Multiple autoimmune diseases in a predisposed patient [letter] Laukaitis JP, et al. **Arthritis Rheum** 1989 Jan;32(1):119–20

Prasad's syndrome [letter] Weiner MJ, et al. **Br J Psychiatry** 1988 Mar;152:438–9

Prevalence of mitral valve prolapse in chronic lymphocytic thyroiditis and nongoitrous hypothyroidism. Brauman A, et al. **Cardiology** 1988;75(4):269–73

Psychotic states associated with disorders of thyroid function. Davis AT. **Int J Psychiatry Med** 1989;19(1):47–56

Results of radiotherapy for thyroid ophthalmopathy. Sandler HM, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct; 17(4):823–7

Syndrome of idiopathic chronic urticaria and angioedema with thyroid autoimmunity: a study of 90 patients. Leznoff A, et al. **J Allergy Clin Immunol** 1989 Jul;84(1):66–71

A case of dermatomyositis and Hashimoto's thyroiditis. Kato H, et al. **J Dermatol (Tokyo)** 1988 Jun;15(3):273–5

Pernicious anemia, Hashimoto's thyroiditis and Sjögren's in a woman with SLE and autoimmune hemolytic anemia [letter] Feld S, et al. **J Rheumatol** 1989 Feb;16(2):258–9

A case of Rathke's cleft cyst associated with diabetes insipidus and Hashimoto's thyroiditis. Koshiyama H, et al. **Jpn J Med** 1989 May–Jun;28(3):406–9

A case of insulin dependent diabetes mellitus associated with relapsing polychondritis, Hashimoto's thyroiditis and pituitary adrenocortical insufficiency in succession. Takamatsu K, et al. **Jpn J Med** 1989 Mar–Apr;28(2):232–6

Autoimmune thyroiditis manifested as a systemic febrile illness: diagnosis by gallium scan and fine needle aspiration biopsy. Castellucci RP, et al. **South Med J** 1989 May; 82(5):647–9

Malignant thyroid neoplasms and coexistent lymphocytic thyroiditis—an analysis from surgical materials. Shinomiya S, et al. **Tokushima J Exp Med** 1988 Dec;35(3–4):91–100 (27 ref.)

[A study on the prognosis of chronic lymphocytic thyroiditis] Bai Y, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Sep; 27(9):531–4, 586 (Eng. Abstr.) (Chi)

[Hypertrophy of the salivary glands and Hashimoto thyroiditis. Regression under substitutive opotherapy] Labussière AS, et al. **Ann Dermatol Venereol** 1989; 116(1):39–41 (Fre)

[Thyroiditis and Turner's syndrome] Lecornu M, et al. **Arch Fr Pediatr** 1988 Jun–Jul;45(6):411–2 (Eng. Abstr.) (Fre)

[Urticaria and auto–immune thyroiditis] Belkahia M, et al. **Tunis Med** 1988 Aug–Sep;66(8–9):619–22 (10 ref.) (Eng. Abstr.) (Fre)

[Churg–Strauss syndrome following autoimmune thyroiditis associated with Basedow's disease] Barzó P, et al. **Orv Hetil** 1988 Sep 4;129(36):1927–30 (41 ref.) (Eng. Abstr.) (Hun)

[Alopecia areata and thyroid diseases] De Padova MP, et al. **Medicina (Firenze)** 1988 Apr–Jun;8(2):185–7 (Eng. Abstr.) (Ita)

[A case of rheumatoid arthritis with chronic thyroiditis, primary biliary cirrhosis, and anti–centromere antibody] Hashimoto M, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar; 78(3):393–7 (Jpn)

[Asymptomatic primary biliary cirrhosis (A–PBC) associated with so–called "Hashitoxicosis"] Sasaki H, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):746–7 (Jpn)

[Acquired von Willebrand syndrome associated with Hashitoxicosis and pernicious anemia combined] Takai Y, et al. **Rinsho Ketsueki** 1989 Mar;30(3):354–60 (30 ref.) (Eng. Abstr.) (Jpn)

[A case of chronic thyroiditis associated with vasculitic neuropathy] Awaki E, et al. **Rinsho Shinkeigaku** 1988 May; 28(5):501–6 (Eng. Abstr.) (Jpn)

[A case of dysthyroid ophthalmopathy with chronic thyroiditis and anti–extraocular muscle antibody] Miyagi K, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):396–400 (Eng. Abstr.) (Jpn)

[Partial pituitary deficit and autoimmune lymphocytic thyroiditis in the postpartum period (letter)] Escudero Alvarez E, et al. **Rev Clin Esp** 1989 Mar;184(4):218–9 (Spa)

[Papulonodular mucinosis and late–onset systemic lupus erythematosus associated with Hashimoto's thyroiditis and Sjogren's syndrome (letter)] Galofré J, et al. **Rev Clin Esp** 1989 May;184(8):446–7 (Spa)

[Evolution of hypothyroidism to hyperthyroidism in a case of autoimmune thyroid disease] García Pascual L, et al. **Rev Clin Esp** 1989 Jun;185(1):21–3 (40 ref.) (Eng. Abstr.) (Spa)

[Hashimoto's thyroiditis associated with systemic lupus erythematosus (letter)] Martín Escobar E, et al. **Rev Clin Esp** 1989 Apr;184(6):334–5 (Spa)

[Chronic thyroiditis in a young population with goiter] Michaud P, et al. **Rev Med Chil** 1988 Jan;116(1):24–7 (Eng. Abstr.) (Spa)

DIAGNOSIS

Fine needle aspiration cytology and immunocytochemistry in the diagnosis of lymphoid lesions of the thyroid gland. Tani E, et al. **Acta Cytol** 1989 Jan–Feb;33(1):48–52

Ultrasonography related to clinical and laboratory findings in lymphocytic thyroiditis. Gutekunst R, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):129–35

Assessment of antithyroglobulin and antimicrosomal autoantibodies in patients with autoimmune thyroid disease: comparison of haemagglutination assay, enzyme–linked immunoassay and radioligand assay. Engler H, et al. **Clin Chim Acta** 1989 Feb 22;179(3):251–63

Thyroid disturbances in cytogenetic diseases. Kelnar CJ. **Dev Med Child Neurol** 1989 Jun;31(3):400–4 (21 ref.)

A case of silent thyroiditis associated with idiopathic thrombocytopenic purpura. Nagai K, et al. **Endocrinol Jpn** 1988 Dec;35(6):791–4

Hashimoto's thyroiditis simulating De Quervain's thyroiditis. Leung AK, et al. **J Adolesc Health Care** 1988 Sep; 9(5):434–5

[Postpartum thyroiditis. 31 cases] Wemeau JL, et al. **Rev Med Interne** 1989 Mar–Apr;10(2):107–11 (Eng. Abstr.) (Fre)

[The significance of microsomal antibodies, thyroglobulin antibodies, thyrotropin receptor antibodies in the diagnosis of thyroid diseases] Horster FA. **Internist (Berlin)** 1988 Aug;29(8):538–40 (23 ref.) (Ger)

[TSH receptor antibody determination using the TSH radioreceptor antibody assay in clinical practice] Hampel R, et al. **Z Gesamte Inn Med** 1989 Feb 15;44(4):113–6 (Eng. Abstr.) (Ger)

[Various aspects of the diagnosis and treatment of autoimmune thyroiditis] Bazarova EN, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):37–40 (Eng. Abstr.) (Rus)

[Autoimmune thyroiditis in children] Kalinits AP, et al. **Sov Med** 1988;(9):50–4 (79 ref.) (Rus)

[Clinico–electrocardiographic evaluation of the cardiovascular system in autoimmune thyroiditis] Khvorostinka VN, et al. **Vrach Delo** 1988 Nov;(11):32–5 (Eng. Abstr.) (Rus)

DRUG THERAPY

[Current treatment aspects in autoimmune thyroiditis] Kalinin AP, et al. **Klin Med (Mosk)** 1988 Aug;66(8):32–6 (49 ref.) (Rus)

ENZYMOLOGY

Antibodies to human thyroid peroxidase in autoimmune thyroid disease: studies with a cloned recombinant complementary deoxyribonucleic acid epitope. Ludgate M, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1091–6

Thyroid peroxidase activity–inhibiting immunoglobulins in patients with autoimmune thyroid disease. Okamoto Y, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):730–4

Thyroid peroxidase and thyroid microsomal autoantibodies. Yokoyama N, et al. **J Clin Endocrinol Metab** 1989 Apr; 68(4):766–73

EPIDEMIOLOGY

Autoimmune thyroiditis in patients with non–toxic goiter. Rajatanavin R, et al. **J Med Assoc Thai** 1988 Dec; 71(12):659–65

[Clinical and epidemiological study of asymptomatic autoimmune thyroiditis] Notsu K, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):689–96 (Jpn)

ETIOLOGY

Importance of cytolytic activity and dietary iodine in the pathogenesis of postpartum thyroiditis. Bech K. **Allergy** 1989 Apr;44(3):161–6 (37 ref.)

Immunogenetic analysis of spontaneous autoimmune thyroiditis of obese strain chickens. Kroemer G, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):202–13

Hashimoto's disease in Turner's syndrome. Fleming S, et al. **Clin Invest Med** 1988 Aug;11(4):243–6

Target organ defects in thyroid autoimmune disease. Sundick RS. **Immunol Res** 1989;8(1):39–60 (74 ref.)

The role of testosterone in spontaneous autoimmune thyroiditis of Obese strain (OS) chickens. Fässler R, et al. **J Autoimmun** 1988 Feb;1(1):97–108

Biological activity of autoantibodies associated with Graves' dermopathy. Tao TW, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):90–9

[A diagnostic and etiologic studies of Sjögren's syndrome—II. On the relationship between Sjögren's syndrome and chronic thyroiditis] Tanaka O. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Mar;92(3):374–82 (Eng. Abstr.) (Jpn)

[Growth–stimulating activity: A new factor in the pathogenesis of autoimmune lesions of the thyroid gland. (Apropos of an article by V. I. Kandor "Euthyroid goiter: autoimmune component of pathogenesis")] Levit ID. **Probl Endokrinol (Mosk)** 1988 Sep–Oct;34(5):39–41 (Rus)

GENETICS

Genetic analysis of extrathyroidal features of Obese strain (OS) chickens with spontaneous autoimmune thyroiditis. Kroemer G, et al. **Eur J Immunol** 1988 Oct;18(10):1499–505

Autoimmune thyroid disease in type I diabetic families. Payami H, et al. **Genet Epidemiol** 1989;6(1):137–41

Hashimoto's thyroiditis lacks detectable clonal immunoglobulin and T cell receptor gene rearrangements. Ben–Ezra J, et al. **Hum Pathol** 1988 Dec;19(12):1444–8

IMMUNOLOGY

Activated interstitial and intraepithelial thyroid lymphocytes in autoimmune thyroid disease. Cohen SB, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):161–6

Immune mechanisms in autoimmune thyroiditis. Charreire J. **Adv Immunol** 1989;46:263–334 (460 ref.)

Role of MHC class II antigen expression in thyroid autoimmunity. Davies TF, et al. **Ann N Y Acad Sci** 1988; 546:151–63 (31 ref.)

Antigenic alterations in autoimmune thyroid diseases. Observations and hypotheses. Wick MR, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):77–81

Depletion of L3T4+ and Lyt–2+ cells by rat monoclonal antibodies alters the development of adoptively transferred experimental autoimmune thyroiditis. Flynn JC, et al. **Cell Immunol** 1989 Sep;122(2):377–90

Experimental autoimmune thyroiditis in mice chronically treated from birth with anti–IgM antibodies. Vladutiu AO. **Cell Immunol** 1989 Jun;121(1):49–59

A 3,3',5–triiodothyronine autoantibody (IgG, lambda) in a case of Hashimoto's thyroiditis. Muratsugu M, et al. **Clin Chim Acta** 1988 Dec 15;178(2):171–80

Cellular infiltration in induced rat thyroiditis: phenotypic analysis and relationship to genetic restriction. De Assis–Paiva HJ, et al. **Clin Exp Immunol** 1989 Jan; 75(1):106–12

Immunological events leading to destructive thyroiditis in the AUG rat. Hassman R, et al. **Clin Exp Immunol** 1988 Sep;73(3):410–6

Heterogeneity of the immune status concerning anti–thyroglobulin antibody production among patients with Hashimoto's thyroiditis; an in vitro study. Sekino T, et al. **Clin Exp Immunol** 1988 Jun;72(3):486–92

Analysis of the spectrotypes of autoantibodies against thyroglobulin in two rat models of autoimmune thyroiditis. Stott DI, et al. **Clin Exp Immunol** 1988 Aug;73(2):269–75

Terminal complement complexes and C1/C1 inhibitor complexes in autoimmune thyroid disease. Weetman AP, et al. **Clin Exp Immunol** 1989 Jul;77(1):25–30

Intrathyroidal HLA–DR–positive lymphocytes in Hashimoto's disease: increases in CD8 and Leu7 cells. Aozasa M, et al. **Clin Immunol Immunopathol** 1989 Sep; 52(3):516–22

Investigation of the clonality of lymphocytes in Hashimoto's thyroiditis using immunoglobulin and T–cell receptor gene probes. Katzin WE, et al. **Clin Immunol Immunopathol** 1989 May;51(2):264–74

Resistance to experimental autoimmune thyroiditis: L3T4+ cells as mediators of both thyroglobulin–activated and TSH–induced suppression. Kong YM, et al. **Clin Immunol Immunopathol** 1989 Apr;51(1):38–54

Recent advances in the understanding of humoral and cellular mechanisms implicated in thyroid autoimmune disorders. Mariotti S, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 2):S73–84 (63 ref.)

Autologous CD8–positive cells suppress T cell proliferation in response to thyroid antigens in Hashimoto's thyroiditis. Weetman AP. **Clin Immunol Immunopathol** 1989 May; 51(2):303–10

Histocompatibility lymphocytic antigen (HLA) typing in patients with acute exacerbation of Hashimoto's thyroiditis. Ishihara T, et al. **Endocrinol Jpn** 1988 Apr;35(2):231–6

Anterior pituitary cell antibodies detected in Hashimoto's thyroiditis and Graves' disease. Kobayashi I, et al. **Endocrinol Jpn** 1988 Oct;35(5):705–8

Thyroid hormone antibodies and Hashimoto's thyroiditis in mongrel dogs. Rajatanavin R, et al. **Endocrinology** 1989 May;124(5):2535–40

Phenotypic characteristics of cells involved in induced suppression to murine experimental autoimmune thyroiditis. Parish NM, et al. **Eur J Immunol** 1988 Sep;18(9):1463–7

Comparison of autoantibodies level in thyroid autoimmune diseases estimated by different methods. Gardas A, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):77–84

Induction of experimental autoimmune thyroiditis in B cell–depleted mice. Rayfield LS, et al. **Immunol Lett** 1989 Jan 15;20(1):21–7

B lymphocyte subsets in Hashimoto's thyroiditis. Suranyi P, et al. **Immunol Lett** 1989 Aug;22(2):147–50

Thyroid microsomal/thyroid peroxidase autoantibodies show discrete patterns of cross–reactivity to myeloperoxidase, lactoperoxidase and horseradish peroxidase. Banga JP, et al. **Immunology** 1989 Jun;67(2):197–204

Analysis of T–cell receptor usage in activated T–cell clones from Hashimoto's thyroiditis and Graves' disease. Lipoldova M, et al. **J Autoimmun** 1989 Feb;2(1):1–13

Association of HLA antigen and restriction fragment length polymorphism of T cell receptor beta–chain gene with

Graves' disease and Hashimoto's thyroiditis. Ito M, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):100–4

Thyroglobulin and thyroid peroxidase share common epitopes recognized by autoantibodies in patients with chronic autoimmune thyroiditis. Kohno Y, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):899–907

Increase in antideoxyribonucleic acid antibody titer in postpartum aggravation of autoimmune thyroid disease. Tachi J, et al. **J Clin Endocrinol Metab** 1988 Nov; 67(5):1049–53

Generation of recombinant, enzymatically active human thyroid peroxidase and its recognition by antibodies in the sera of patients with Hashimoto's thyroiditis. Kaufman KD, et al. **J Clin Invest** 1989 Aug;84(2):394–403

TSH receptor antibodies in autoimmune thyroiditis. Nordmeyer JP, et al. **J Clin Lab Immunol** 1988 May; 26(1):21–4

Difference in species specificity of TSH receptor antibodies in Graves' disease and Hashimoto's thyroiditis. de Bruin TW. **J Endocrinol Invest** 1988 Jun;11(6):403–8

Probing the normal and autoimmune B cell repertoire with Epstein–Barr virus. Frequency of B cells producing monoreactive high affinity autoantibodies in patients with Hashimoto's disease and systemic lupus erythematosus. Nakamura M, et al. **J Immunol** 1988 Dec 15; 141(12):4165–72

Hashitoxicosis and autoantibody interference with thyroid function tests. Fonseca V, et al. **J R Soc Med** 1988 Sep; 81(9):546–7

Congenital hypothyroidism due to a transfer of antithyroid antibodies from a mother with Hashimoto's disease. Bona G, et al. **Panminerva Med** 1988 Apr–Jun;30(2):102–6

Affinity purification of IgG subclasses and the distribution of thyroid auto–antibody reactivity in Hashimoto's thyroiditis. Weetman AP, et al. **Scand J Immunol** 1989 Jul; 30(1):73–82

HLA and hypertrophic Hashimoto's thyroiditis in Shanghai Chinese. Wang FW, et al. **Tissue Antigens** 1988 Oct; 32(4):235–6

Autoimmune endocrine diseases. De Baets MH. **Year Immunol** 1989;4:264–75 (43 ref.)

Experimental autoimmune thyroiditis. I. Participation of IgA, IgM and IgG in the development of the disease. Leyán VR, et al. **Zentralbl Veterinarmed [B]** 1989 Jun;36(4):250–6

[Association of HLA with Hashimoto's thyroiditis] Pei J, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Feb;27(2):106–8, 136 (Eng. Abstr.) **(Chi)**

[Long–term follow–up on change of antithyroid antibody in chronic lymphocytic thyroiditis] Dai WX. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Oct; 10(5):357–60 (Eng. Abstr.) **(Chi)**

[Latent and postpartum thyroiditis. Prospective study] Houdent C, et al. **Ann Endocrinol (Paris)** 1989;50(1):36–9 (Eng. Abstr.) **(Fre)**

[Autoimmune thyroid diseases and Gougerot–Sjögren syndrome] Sanmarco M, et al. **Pathol Biol (Paris)** 1988 Sep; 36(7):867–70 (Eng. Abstr.) **(Fre)**

[IgA class anti–triiodothyronine antibodies in a patient with chronic thyroiditis] Tomita M, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1087–8 **(Jpn)**

[High incidence of Yersinia enterocolitica antibody in autoimmune thyroid disease] Asari S, et al. **Rinsho Byori** 1988 Jul;36(7):847–50 **(Jpn)**

[Association of antigens of the HLA system and Hashimoto's thyroiditis] Bazarova EN, et al. **Probl Endokrinol (Mosk)** 1988 Sep–Oct;34(5):14–6 (Eng. Abstr.) **(Rus)**

[Reticulocytosis and pure aplasia of red cells (letter)] **Rev Clin Esp** 1988 Nov;183(7):385 **(Spa)**

PATHOLOGY

Differentiation of Hashimoto's thyroiditis from thyroid neoplasms in fine needle aspirates. Ravinsky E, et al. **Acta Cytol** 1988 Nov–Dec;32(6):854–61

Distribution of calcitonin– and somatostatin–containing cells in thyroid lymphoma and in Hashimoto's thyroiditis. Baschieri L, et al. **Appl Pathol** 1989;7(2):99–104

Thyroid autoantigens and their relevance in the pathogenesis of thyroid autoimmunity. Pinchera A, et al. **Biochimie** 1989 Feb;71(2):237–45

Autoimmune thyroiditis and myopathy. Reversibility of myopathic alterations under thyroxine therapy. Frank B, et al. **Clin Neurol Neurosurg** 1989;91(3):251–5

Thyroiditis in Ibadan, Nigeria: a changing prevalence? Ogunniyi JO, et al. **East Afr Med J** 1988 Mar;65(3):183–8

Increase in peripheral large granular lymphocytes in postpartum autoimmune thyroiditis. Iwatani Y, et al. **Endocrinol Jpn** 1988 Jun;35(3):447–53

Primary B cell lymphoma of the thyroid and its relationship to Hashimoto's thyroiditis. Hyjek E, et al. **Hum Pathol** 1988 Nov;19(11):1315–26

High endothelial venules present in lymphoid cell accumulations in thyroids affected by autoimmune disease: a study in men and BB rats of functional activity and development. Kabel PJ, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):744–51

Squamous metaplasia with Hashimoto's thyroiditis presenting as a thyroid nodule. Kobayashi T, et al. **J Surg Oncol** 1989 Feb;40(2):139–42

[Development of malignant neoplasms in various thyroid diseases] Nawrocka A, et al. **Wiad Lek** 1988 Mar 1; 41(5):300–4 (22 ref.) **(Pol)**

PHYSIOPATHOLOGY

Two cases of Hashimoto's thyroiditis with pupillary disturbances. Okada F, et al. **Eur Neurol** 1989;29(3):174–6

Autoimmune orchitis and thyroiditis. Bigazzi PE. **Methods Enzymol** 1988;162:461–78

PREVENTION & CONTROL

Prevention and reversal of experimental autoimmune thyroiditis (EAT) in mice by administration of anti–L3T4 monoclonal antibody at different stages of disease development. Stull SJ, et al. **Cell Immunol** 1988 Nov; 117(1):188–98

Prevention of lymphocytic thyroiditis and insulitis in diabetes–prone BB rats by the depletion of macrophages [letter] Wilkin TJ. **Diabetologia** 1988 Oct;31(10):779–80

RADIONUCLIDE IMAGING

The thyroid scan in Hashimoto's thyroiditis: the great mimic. Ramtoola S, et al. **Nucl Med Commun** 1988 Sep;9(9):639–45

THERAPY

[Therapeutic strategies in immunogenic hyperthyroidism and endocrine ophthalmopathy] Pickardt CR. **Internist (Berlin)** 1988 Aug;29(8):555–8 (31 ref.) **(Ger)**

[Assessment of the effectiveness of conservative therapy of autoimmune thyroiditis using echographic study of the thyroid] Fedoseeva GI, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):40–2 (Eng. Abstr.) **(Rus)**

[Treatment of autoimmune thyroiditis] Kustova NI, et al. **Sov Med** 1988;(8):25–8 (66 ref.) **(Rus)**

VETERINARY

Anti–triiodothyronine antibodies associated with hypothyroidism and lymphocytic thyroiditis in a dog. Chastain CB, et al. **J Am Vet Med Assoc** 1989 Feb 15; 194(4):531–4

THYROIDITIS, CHRONIC see **THYROIDITIS, AUTOIMMUNE**

THYROIDITIS, LYMPHOCYTIC see **THYROIDITIS, AUTOIMMUNE**

THYROIDITIS, LYMPHOMATOUS see **THYROIDITIS, AUTOIMMUNE**

THYROIDITIS, SUBACUTE

Subacute thyroiditis—61 cases review. Hwang SC, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Feb;43(2):113–8

DIAGNOSIS

Tuberculous adenitis of the thyroid mimicking subacute thyroiditis. Sachs MK, et al. **Am J Med** 1988 Oct; 85(4):573–5

Thyroiditis. Differentiation of acute suppurative and subacute. Case report and review of the literature. Szabo SM, et al. **Clin Pediatr (Phila)** 1989 Apr;28(4):171–4 (24 ref.)

Graves disease presenting as painful thyroiditis. Alves C, et al. **Eur J Pediatr** 1989 Jun;148(7):603–4

Hashimoto's thyroiditis simulating De Quervain's thyroiditis. Leung AK, et al. **J Adolesc Health Care** 1988 Sep; 9(5):434–5

DRUG THERAPY

[Effect of glucocorticoids on immunological indices in patients with subacute thyroiditis] Epishin AV, et al. **Vrach Delo** 1989 Apr;(4):29–31 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Subacute thyroiditis after bone marrow transplant for chronic granulocytic leukaemia. Jones L, et al. **Bone Marrow Transplant** 1987 Apr;1(4):411–2

METABOLISM

Recurrence of subacute thyroiditis over 10 years after the first attack in three cases. Yamamoto M, et al. **Endocrinol Jpn** 1988 Dec;35(6):833–9

PHYSIOPATHOLOGY

Thyroid function in the early stage and during the course of subacute thyroiditis. Madeddu G, et al. **J Nucl Med Allied Sci** 1988 Apr–Jun;32(2):91–100

RADIONUCLIDE IMAGING

Subacute thyroiditis: a review of 105 cases. Kitchener MI, et al. **Clin Nucl Med** 1989 Jun;14(6):439–42

[Subacute nodular thyroiditis, de Quervain's type (letter)] Segura García A, et al. **Med Clin (Barc)** 1989 Apr 15; 92(14):558–9 **(Spa)**

THYROIDITIS, SUPPURATIVE see under **THYROIDITIS**

THYROLIBERIN see **THYROTROPIN RELEASING HORMONE**

THYRONINES

ADMINISTRATION & DOSAGE

The effect of thyroxine, 3, 5–dimethyl–3'isopropyl–L–thyronine and iodized oil on fetal brain development in the iodine–deficient sheep. Mano MT, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):7–15

ANALYSIS

Automated high–performance liquid chromatographic method for the determination of iodotyrosines and iodothyronines. Koostra PR, et al. **J Chromatogr** 1988 Dec 23;458:175–83

BLOOD

T4, T3 and rT3 levels in serum and cerebrospinal fluid of patients with amyotrophic lateral sclerosis. Malin JP, et al. **J Neurol** 1989 Jan;236(1):57–9

Concentrations of thyroxine, 3,5,3'–triiodothyronine, 3,3',5'–triiodothyronine, 3,3'–diiodothyronine, and 3',5'–diiodothyronine in human red blood cells. Bregengaard C, et al. **Scand J Clin Lab Invest** 1989 Jun; 49(4):329–36

[Concentration of thyroid hormones and thyrotropin in the blood of patients with chronic pancreatitis] Gidaiatov AA, et al. **Ter Arkh** 1988;60(9):50–2 (Eng. Abstr.) **(Rus)**

METABOLISM

Biochemistry of iodothyronine deiodination. Köhrle J. **Acta Med Austriaca** 1988;15 Suppl 1:22–4 (10 ref.)

Hepatic metabolism, biliary clearance and enterohepatic circulation of thyroid hormone. Visser TJ, et al. **Acta Med Austriaca** 1988;15 Suppl 1:37–9 (9 ref.)

Experimental values of the ionization constants for L–3,5–di–iodotyrosine and a model for ionic interactions of thyroid hormone (T3) and its nuclear receptor. Gent WL, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):343–6

Isoniazid–mediated irreversible inhibition of the myeloperoxidase antimicrobial system of the human neutrophil and the effect of thyronines. van Zyl JM, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2363–73

Lack of correlation between peroxidase activity and iodothyronine levels in human and murine thyroid tissues. Rosenthal D, et al. **Braz J Med Biol Res** 1988;21(1):123–7

The thyroid hormone analogue SKF L–94901: nuclear occupancy and serum binding studies. Barlow JW, et al. **Clin Sci** 1989 May;76(5):495–501

Comparative aspects of the distribution, metabolism, and excretion of six iodothyronines in the rat. DiStefano JJ 3d, et al. **Endocrinology** 1988 Nov;123(5):2514–25

Di–iodothyronine as part of the oestradiol and catechol oestrogen receptor—the role of iodine, thyroid hormones and melatonin in the aetiology of breast cancer. Clur A. **Med Hypotheses** 1988 Dec;27(4):303–11 (53 ref.)

THYROTOXIC CRISIS see **THYROID CRISIS**

THYROTOXIC STORM see **THYROID CRISIS**

THYROTOXICOSIS

BLOOD

Erythrocyte phosphofructokinase and glucose–6–phosphate dehydrogenase in thyroid disorders. Kwiatkowska D, et al. **Endokrynol Pol** 1987;38(6):449–55

Prediction of later development of thyrotoxicosis or central hypothyroidism from the cord serum thyroid–stimulating hormone level in neonates born to mothers with Graves disease. Tamaki H, et al. **J Pediatr** 1989 Aug;115(2):318–21

Effect of acute renal failure on free thyroid hormone levels in a thyrotoxic patient. Hardy MJ, et al. **Nephron** 1989; 52(4):360–2

CHEMICALLY INDUCED

Dexamethasone treatment of amiodarone–induced thyrotoxicosis (AIT) with or without persistent administration of the drug. Bonnyns M, et al. **Acta Cardiol** 1989;44(3):235–43

Lithium, psoriasis, abnormal glucose tolerance, and thyroid dysfunction [letter] Humphreys MS, et al. **Br J Psychiatry** 1988 Mar;152:437–8

Thyrotoxicosis due to ingestion of excess thyroid hormone. Cohen JH 3d, et al. **Endocr Rev** 1989 May;10(2):113–24 (94 ref.)

Amiodarone induced thyrotoxicosis. Parikh JA, et al. **Indian Heart J** 1988 Jul–Aug;40(4):281–2

Rapid effectiveness of prednisone and thionamides combined therapy in severe amiodaro.e iodine–induced thyrotoxicosis. Comparison of two groups of patients with apparently normal thyroid glands. Broussolle C, et al. **J Endocrinol Invest** 1989 Jan;12(1):37–42

More on KClO(4) and amiodarone associated thyrotoxicosis [letter] Dal Fabbro S, et al. **J Endocrinol Invest** 1988 Oct; 11(9):691–2

Natural course of iodine–induced thyrotoxicosis (Jodbasedow) in endemic goiter area: a 5 year follow–up. Martins MC, et al. **J Endocrinol Invest** 1989 Apr; 12(4):239–44

Serum thyroglobulin concentration may be a clue to the

mechanism of amiodarone-induced thyrotoxicosis [letter] Unger J. **J Endocrinol Invest** 1988 Oct;11(9):689
Anaplastic carcinoma of the thyroid in a patient receiving radio-iodine therapy for amiodarone-induced thyrotoxicosis. Bridges AB, et al. **Scott Med J** 1989 Jun; 34(3):471-2
[False innocuousness of eye drops. Apropos of 1 case of thyrotoxicosis induced by iodine] André F, et al. **Therapie** 1988 Aug-Sep;43(3):431-2 (Eng. Abstr.) **(Fre)**
[Worsening of asthma in amiodarone-induced thyrotoxicosis (letter)] López Navidad A, et al. **Med Clin (Barc)** 1988 Sep 24;91(9):358-9 **(Spa)**

COMPLICATIONS

Thyrotoxicosis, atrial fibrillation, and embolism, revisited. Presti CF, et al. **Am Heart J** 1989 Apr;117(4):976-7
Thyrotoxicosis, cryofibrinogenemia, Sinutab Maximum Strength, and purple ears [letter] Kellett J. **Ann Intern Med** 1989 Apr 15;110(8):668-9
Echocardiographic studies on the relationship between atrial fibrillation and atrial enlargement in patients with hyperthyroidism of Graves' disease. Iwasaki T, et al. **Cardiology** 1989;76(1):10-7
T3-thyrotoxicosis in a schizophrenic patient--comment on triiodothyronine to mental function. Nakanishi T. **Igaku Kenkyu** 1988 Oct;58(5):289-90
Psychotic states associated with disorders of thyroid function. Davis AT. **Int J Psychiatry Med** 1989;19(1):47-56
Haldol decanoate and thyroid disease [letter] Jefferson JW. **J Clin Psychiatry** 1988 Nov;49(11):457-8
Familial 'hashitoxic' periodic paralysis [letter] Leung AK. **J R Soc Med** 1989 Apr;82(4):245
Sudden deafness in a man with thyrotoxic hypokalemic periodic paralysis. Moriyama K, et al. **Jpn J Med** 1988 Aug;27(3):329-32
A report of four cases of thyroid cancer occurring in thyrotoxicosis and review of the literature. Sarda AK, et al. **Jpn J Surg** 1989 May;19(3):363-6 (16 ref.)
Persistent chorea as a manifestation of thyrotoxicosis. Javaid A, et al. **Postgrad Med J** 1988 Oct;64(756):789-90
Treatment of hypercalcaemia in thyrotoxicosis with aminohydroxypropylidene diphosphonate. Tan TT, et al. **Postgrad Med J** 1988 Mar;64(749):224-7
Hyperemesis gravidarum and thyrotoxicosis--a diagnostic and therapeutic problem. Thomson JA, et al. **Scott Med J** 1989 Jun;34(3):472-3
Thyrotoxicosis manifested as mania. Regan WM. **South Med J** 1988 Nov;81(11):1460-1
[Primary hypothyroidism after the onset of thyrotoxicosis] Tynkkynen P, et al. **Duodecim** 1988;104(20):1635-8 **(Fin)**
[Factitious thyrotoxicosis with periodic paralysis (letter)] Garcin JM, et al. **Presse Med** 1988 Oct 22;17(36):1862 **(Fre)**
[Myokymia: a rare manifestation of thyrotoxicosis] Shahar E, et al. **Harefuah** 1988 Aug;115(3-4):69-70 (Eng. Abstr.) **(Heb)**
[Asymptomatic primary biliary cirrhosis (A-PBC) associated with so-called "Hashitoxicosis"] Sasaki H, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):746-7 **(Jpn)**
[Myocardial infarction with normal coronary vessels, associated with thyrotoxicosis. A case report] de Andrade PJ, et al. **Arq Bras Cardiol** 1988 Feb;50(2):121-4 (Eng. Abstr.) **(Por)**
[Thyrotoxicosis and cancer of the thyroid] Lukomskiĭ GI, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):55-8 (Eng. Abstr.) **(Rus)**
[Post-thyrotoxic arterial hypertension] Zhilkova NN, et al. **Probl Endokrinol (Mosk)** 1988 Nov-Dec;34(6):21-4 (Eng. Abstr.) **(Rus)**
[Pathogenesis and treatment of disorders of the heart rhythm in thyrotoxicosis (a review of the literature)] Litvinenko AF, et al. **Vrach Delo** 1989 Jan;(1):22-7 (43 ref.) **(Rus)**
[Function of the hypophyseo-thyroid system in patients with post-thyrotoxic encephalo-ophthalmopathy] Oleĭnik VA, et al. **Vrach Delo** 1988 Sep;(9):72-5 (Eng. Abstr.) **(Rus)**
[Bronchial asthma and hyperthyroidism. Considerations apropos of 2 cases] Gómez Huelgas R, et al. **Rev Clin Esp** 1988 Jun;183(1):32-4 (31 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Occult thyrotoxicosis in patients with atrial fibrillation and an acute arterial embolism. Monreal M, et al. **Angiology** 1988 Nov;39(11):981-5
Sensitive thyroid-stimulating hormone assays: clinical applications and limitations. De Los Santos ET, et al. **Compr Ther** 1988 Sep;14(9):26-33 (19 ref.)
Thyrotoxicosis simulating lymphoma. A case report. Ramanathan M. **Med J Malaysia** 1988 Mar;43(1):59-61
Why are the sensitive TSH assay and TRH stimulation test frequently low in very old euthyroid subjects? Caradoc-Davies TH, et al. **N Z Med J** 1988 Oct 26;101(856 Pt 1):662-3

DRUG THERAPY

Thionamides and iodide in iodine-induced thyrotoxicosis [letter] Unger J. **Acta Clin Belg** 1989;44(1):61
Thyrotoxicosis complicating pregnancy. Davis LE, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):63-70
Peri-operative management of severe thyrotoxicosis with esmolol. Vijayakumar HR, et al. **Anaesthesia** 1989 May; 44(5):406-8
Preoperative treatment of thyrotoxicosis in developing countries: a comparative study of carbimazole and propranolol. Haddad JF, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):357-60
Higher than conventional doses of carbimazole in the treatment of thyrotoxicosis. O'Malley BP, et al. **Clin Endocrinol (Oxf)** 1988 Sep;29(3):281-8

ENZYMOLOGY

Modifications of serum hepatic enzymes in thyrotoxic patients with and without treatment. Gauna A, et al. **Medicina (B Aires)** 1988;48(1):17-21
Leukocyte alkaline phosphatase in hypothyroidism and hyperthyroidism. Response to initiation of thyroxine replacement therapy. Barsano CP, et al. **Metabolism** 1989 Apr;38(4):311-4
Comparison of ATPase activities and heavy chains of rabbit atrial and thyrotoxic ventricular myosin subfragment-1. Banerjee SK, et al. **Mol Cell Biochem** 1988 Sep;83(1):55-63

EPIDEMIOLOGY

Iodine in milk and the incidence of thyrotoxicosis in England. Phillips DI, et al. **Clin Endocrinol (Oxf)** 1988 Jan;28(1):61-6
[Incidence of the most frequently occurring diseases causing hyperthyroidism syndrome] Konrády A. **Orv Hetil** 1989 Sep 10;130(37):1967-71 (42 ref.) (Eng. Abstr.) **(Hun)**

ETIOLOGY

Thyrotoxicosis secondary to TSH secreting pituitary tumour. Menon PS, et al. **J Assoc Physicians India** 1988 Apr; 36(4):283-5
[Transient thyrotoxicosis induced by Japanese kombu] Ishizuki Y, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Feb 20;65(2):91-8 (Eng. Abstr.) **(Jpn)**
[Factitious thyrotoxicosis due to the ingestion of bovine thyroid glands (letter)] Contreras P, et al. **Rev Med Chil** 1988 Apr;116(4):381-2 **(Spa)**

GENETICS

Human leucocyte antigen in a Chinese family with thyrotoxic periodic paralysis in Singapore. Sum CF, et al. **BMJ** 1988 Sep 3;297(6648):594-5
Familial thyrotoxic periodic paralysis. Kufs WM, et al. **West J Med** 1989 Apr;150(4):461-3

METABOLISM

Erythrocyte sodium-potassium pump in thyrotoxic periodic paralysis. Lam KS, et al. **Aust N Z J Med** 1989 Feb; 19(1):6-10
The effect of thyrotoxicosis on isoniazid acetylation. Littley MD, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):103-6
Increased fat and skeletal muscle beta-adrenergic receptors but unaltered metabolic and hemodynamic sensitivity to epinephrine in vivo in experimental human thyrotoxicosis. Liggett SB, et al. **J Clin Invest** 1989 Mar;83(3):803-9
Glucose tolerance and gastric emptying in thyrotoxic rats. Ikeda T, et al. **Metabolism** 1989 Sep;38(9):874-7
[Digoxin receptors in myocardial membranes in pressure loading of the left ventricle and in experimental thyrotoxicosis] Köbel F, et al. **Cesk Fysiol** 1989;38(2):183-6 **(Cze)**
[Changes in blood levels and urinary excretion of magnesium in diseases of the thyroid gland] Zamrazil V, et al. **Vnitr Lek** 1988 Oct;34(10):989-93 (Eng. Abstr.) **(Cze)**

PATHOLOGY

[Ultrastructural study of thyrotoxic myopathy] Tang GY. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):116-7, 128 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

Glucose intolerance in thyrotoxic rats: role of insulin, glucagon, and epinephrine. Ikeda T, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E843-9
Diabetes and thyroid-hormone-induced changes in cardiac function and their molecular basis. Dillmann WH. **Annu Rev Med** 1989;40:373-94 (111 ref.)
Hypothalamic-pituitary-testicular axis in patients with hyperthyroidism. Röjdmark S, et al. **Horm Res** 1988; 29(5-6):185-90
No effect of ketoconazole on thyroid function of normals and thyrotoxic patients. De Pedrini P, et al. **Int J Tissue React** 1988;10(3):189-92
Effect of hyperthyroidism on bronchial reactivity in non-asthmatic patients. Roberts JA, et al. **Thorax** 1989 Jul; 44(7):603-4
[Changes in weight and caloric intake in patients with thyrotoxicosis] Frølich A, et al. **Ugeskr Laeger** 1988 Oct 17;150(42):2516-8 (Eng. Abstr.) **(Dan)**
[Hemodynamic mechanisms of the decrease in physical work capacity in hypothyroidism and thyrotoxicosis] Sokolov EI, et al. **Kardiologiia** 1988 Aug;28(8):63-7 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

A report on the followup of treatment of hyperthyroidism with radioiodine. Yasmeen S, et al. **Bangladesh Med Res Counc Bull** 1988 Jun;14(1):42-7
A new method for estimating the radioactive iodine dose in the treatment of hyperthyroidism. Riestra JL, et al. **Bol Asoc Med P R** 1988 Oct;80(10):363-5
Mediastinal hemorrhage after treatment of thyrotoxicosis using radioiodine. Piers DA, et al. **Clin Nucl Med** 1988 Aug;13(8):574-6

SURGERY

Surgical treatment for thyrotoxicosis. Reeve TS. **Br J Surg** 1988 Sep;75(9):833-4 (5 ref.)

THERAPY

Treatment of severe iodine-induced hyperthyroidism with plasmapheresis. Segers O, et al. **Acta Clin Belg** 1988; 43(5):335-43
Problems with asthma following treatment of thyrotoxicosis. Lipworth BJ, et al. **Br J Dis Chest** 1988 Jul;82(3):310-4
A rational approach to the treatment of hyperthyroidism. Peele ME, et al. **Compr Ther** 1988 Sep;14(9):34-41 (7 ref.)

THYROTROPIN

Characterization and charge distribution of the asparagine-linked oligosaccharides on secreted mouse thyrotropin and free alpha-subunits. Gesundheit N, et al. **Endocrinology** 1989 Jun;124(6):2967-77

ANALYSIS

Neonatal hypothyroid screening using enzymeimmunoassay of thyrotropin--comparison with radioimmunoassay. Kusuda S, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Dec; 30(6):686-91
Immunoscintigraphy with monoclonal antibodies [letter] McHardy KC, et al. **BMJ** 1989 Jul 1;299(6690):55
Minimum detection limits for thyrotropin assays [letter] Linnet K. **Clin Chem** 1989 Aug;35(8):1805-6
Ultrasensitive bioassay of thyrotropin. Tamaki H, et al. **Clin Chem** 1989 Jun;35(6):1252-3
Assessment of the biological stability of human thyroid stimulating hormone prepared by immunoaffinity chromatography. Blazek RW, et al. **J Biol Stand** 1989 Apr; 17(2):173-9
Evaluation of five high-sensitivity American thyrotropin assays. Hershman JM, et al. **Mayo Clin Proc** 1988 Nov; 63(11):1133-9
Sensitive thyrotropin assays: analytic and clinical performance criteria. Klee GG, et al. **Mayo Clin Proc** 1988 Nov;63(11):1123-32 (20 ref.)
An obsolete procedure [letter] Rosenfeld L. **Mayo Clin Proc** 1989 Apr;64(4):477-8
An evaluation and survey of enzyme immunoassay and fluorometric enzyme immunoassay tests for TSH and HCG. Armbruster DA, et al. **Milit Med** 1989 Aug;154(8):387-91
[Mathematical analysis of equilibrium on 2-site immunoradiometric assay using anti-human TSH monoclonal antibody] Obata K, et al. **Kaku Igaku** 1989 Mar; 26(3):349-59 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Design of a long-lived thyrotropin antagonist from derivatives of human chorionic gonadotropin. Hoermann R, et al. **Endocrinology** 1989 Jan;124(1):223-32
Interferon-gamma inhibits thyrotropin-induced thyroidal peroxidase gene expression in cultured human thyrocytes. Ashizawa K, et al. **J Clin Endocrinol Metab** 1989 Aug; 69(2):475-7
Effects of protein kinase C activators on the in-vitro action of thyrotrophin in pigs. Ginsberg J, et al. **J Endocrinol** 1988 Aug;118(2):199-203
Interleukin-1 inhibits thyrotrophin-induced human thyroglobulin gene expression. Yamashita S, et al. **J Endocrinol** 1989 Jul;122(1):177-83
Suppressing effect of cysteamine on the TSH-stimulated mitotic activity of the rat thyroid follicular cells in vivo. Zerek-Melen G, et al. **Neuropeptides** 1989 Apr;13(3):171-4

BLOOD

Changes in basal and stimulated TSH and other parameters of thyroid function in acromegaly after transsphenoidal surgery. Geelhoed-Duijvestijn PH, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):207-15
A sensitive and practical bioassay for thyrotropin using cultured FRTL-5 cells: assessment of bioactivity for serum TSH in patients with chronic renal failure. Horimoto M, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):191-6
Influence of dopamine on the thyroid hormones and thyrotropin in acute respiratory distress syndrome. Varl B, et al. **Acta Med Austriaca** 1988;15 Suppl 1:59-61
An evaluation of IRMA-TSH kits and a very sensitive RIA-TSH method. Lukinac L, et al. **Acta Med Iugosl** 1988; 42(3):201-6
Endocrine responses to growth hormone-releasing hormone, thyrotropin-releasing hormone and corticotropin-releasing hormone in depression. Lesch KP, et al. **Acta Psychiatr Scand** 1989 Jun;79(6):597-602
Relationship of age to TSH response to TRH in depressed men. Wahby VS, et al. **Acta Psychiatr Scand** 1988 Sep; 78(3):283-8
Growth studies in infants and children with Down's

syndrome and elevated levels of thyrotropin. Sharav T, et al. **Am J Dis Child** 1988 Dec;142(12):1302–6
TSH response to TRH in depression with and without panic attacks. Gillette GM, et al. **Am J Psychiatry** 1989 Jun; 146(6):743–8
Analytical evaluation of twenty assays for determination of thyrotropin (TSH). Libeer JC, et al. **Ann Biol Clin (Paris)** 1989;47(1):1–11
Multicentre study of a new test for TSH–screening in blood spots. Brombacher PJ, et al. **Ann Clin Biochem** 1988 Sep; 25 (Pt 5):530–5
Antibody interference in a two–site immunometric assay for thyrotrophin. John R, et al. **Ann Clin Biochem** 1989 Jul; 26 (Pt 4):346–52
Comparative evaluation of serum thyroxine, free thyroxine and thyrotropin determinations in screening of thyroid function. Nuutila P, et al. **Ann Clin Res** 1988;20(3):158–63
Serum thyrotropin and the assessment of thyroid status. Ehrmann DA, et al. **Ann Intern Med** 1989 Feb 1; 110(3):179–81 (20 ref.)
Serum thyroxine and thyroid stimulating hormone concentrations after treatment of congenital hypothyroidism. Abusrewil SS, et al. **Arch Dis Child** 1988 Nov;63(11):1368–71
Increased recall rate at screening for congenital hypothyroidism in breast fed infants born to iodine overloaded mothers. Chanoine JP, et al. **Arch Dis Child** 1988 Oct;63(10):1207–10
Transient infantile hyperthyrotrophinaemia. Miki K, et al. **Arch Dis Child** 1989 Aug;64(8):1177–82
Sensitivity, specificity, and cost–effectiveness of the sensitive thyrotropin assay in the diagnosis of thyroid disease in ambulatory patients. de los Santos ET, et al. **Arch Intern Med** 1989 Mar;149(3):526–32
Limitations to the use of a sensitive assay for serum thyrotropin in the assessment of thyroid status. Ehrmann DA, et al. **Arch Intern Med** 1989 Feb;149(2):369–72
Yield of hypothyroidism in symptomatic primary care patients. Schectman JM, et al. **Arch Intern Med** 1989 Apr; 149(4):861–4
Use of a sensitive thyrotropin assay for monitoring treatment with levothyroxine. Watts NB. **Arch Intern Med** 1989 Feb; 149(2):309–12
Nocturnal TSH and prolactin secretion during sleep deprivation and prediction of antidepressant response in patients with major depression. Kasper S, et al. **Biol Psychiatry** 1988 Oct;24(6):631–41
Comparison of GH responses after human GHRH–44 amide administration and TRH–induced TSH release in depressed patients. Lesch KP, et al. **Biol Psychiatry** 1989 Jan 15; 25(2):235–8
TRH test in schizophrenic patients and controls. Roy A, et al. **Biol Psychiatry** 1989 Feb 15;25(4):523–6
Triiodothyronine, thyroxine, and TSH response to dexamethasone in depressed patients and normal controls. Rupprecht R, et al. **Biol Psychiatry** 1989 Jan;25(1):22–32
Growth hormone responses to growth hormone releasing factor in primary degenerative dementia. Thomas R, et al. **Biol Psychiatry** 1989 Aug;26(4):389–96
Screening for thyroid disease [letter] **BMJ** 1989 Feb 11; 298(6670):385–6
Screening for thyroid disease in a primary care unit with a thyroid stimulating hormone assay with a low detection limit. Eggertsen R, et al. **BMJ** 1988 Dec 17; 297(6663):1586–92
Serum thyrotrophin concentration measured by sensitive assays in normal pregnancy. Chan BY, et al. **Br J Obstet Gynaecol** 1988 Dec;95(12):1332–4
Characteristic plasma hormone changes in Alzheimer's disease [letter] Thomas R, et al. **Br J Psychiatry** 1988 Mar; 152:434–6
Stage–dependent depression of melatonin in patients with primary breast cancer. Correlation with prolactin, thyroid stimulating hormone, and steroid receptors. Bartsch C, et al. **Cancer** 1989 Jul 15;64(2):426–33
Variations in immunocytochemical localization of cathepsin B and thyroxine in follicular cells of the rat thyroid gland and plasma TSH concentrations over 24 hours. Uchiyama Y, et al. **Cell Tissue Res** 1989;256(2):355–60
Sensitive time–resolved immunofluorometric assay of thyrotropin in serum. Reichstein E, et al. **Clin Biochem** 1989 Feb;22(1):23–9
Effect of interassay precision on diagnostic accuracy [letter] Bayer MF. **Clin Chem** 1988 Dec;34(12):2605–6
A simplified strategy for testing thyroid function. Beaman JM, et al. **Clin Chem** 1989 May;35(5):828–30
A laboratory and clinical evaluation of an immunochemiluminometric assay of thyrotropin in serum. Berry DJ, et al. **Clin Chem** 1988 Oct;34(10):2087–90
Comparison of seven sensitive thyrotropin (TSH) assays to predict a suppressed thyroliberin (TRH) test. Body JJ, et al. **Clin Chem** 1989 Mar;35(3):497–8
Chemiluminescent assay of alkaline phosphatase applied in an ultrasensitive enzyme immunoassay of thyrotropin. Bronstein I, et al. **Clin Chem** 1989 Jul;35(7):1441–6
Moderate iodine deficiency, a possible explanation for the inverse relationship between cord serum thyrotropin and birth weight in a normal Kenyan population [letter] Delange F, et al. **Clin Chem** 1989 Apr;35(4):710–2
Intra–assay precision of four assays of thyrotropin. Edwards W. **Clin Chem** 1988 Oct;34(10):2166–7
Inaccuracies in plasma thyrotropin concentrations with the Amersham "Amerlite" (monoclonal) assay. Edwards W, et al. **Clin Chem** 1988 Oct;34(10):2161–2
Errors in a report: thyroid dysfunction detection strategy [letter] Hammer MR. **Clin Chem** 1989 Jan;35(1):193
Is a "super–sensitive" thyrotropin assay ("Magic Lite") of more diagnostic value? Hildebrandt L, et al. **Clin Chem** 1988 Dec;34(12):2584
Sources of imprecision in laboratories screening for congenital hypothyroidism: analysis of nine years of performance data. Jewell SE, et al. **Clin Chem** 1989 Aug; 35(8):1701–5
How sensitive are immunometric assays for thyrotropin? [see comments] McConway MG, et al. **Clin Chem** 1989 Feb; 35(2):289–91. **Comment in:** Clin Chem 1989 May;35(5):901
Immunometric assays may underestimate thyrotropin concentrations in sera from infants with congenital hypothyroidism [letter] Potter BC, et al. **Clin Chem** 1988 Oct;34(10):2182
Four sensitive thyrotropin assays critically evaluated and compared. Sgoutas DS, et al. **Clin Chem** 1989 Aug; 35(8):1785–9
Sensitive, practical bioassay of thyrotropin, with use of FRTL–5 thyroid cells and magnetizable solid–phase–bound antibodies. Tokuda Y, et al. **Clin Chem** 1988 Nov; 34(11):2360–4
Performance of the SimulTRAC free T4/TSH assay during pregnancy and treatment with amiodarone [letter] Vanderborght J, et al. **Clin Chem** 1988 Nov;34(11):2387–8
Escape from blockade of interfering heterophile antibodies in a two–site immunoradiometric assay for thyrotropin. Zweig MH, et al. **Clin Chem** 1988 Dec;34(12):2589–91
The role of a highly sensitive amplified enzyme immunoassay for thyrotrophin in the evaluation of thyrotroph function in hypopituitary patients. Blunt S, et al. **Clin Endocrinol (Oxf)** 1988 Oct;29(4):387–93
3,5,3'–Triiodothyroacetic acid minimizes the pituitary thyrotrophin secretion in patients on levo–thyroxine therapy after ablative therapy for differentiated thyroid carcinoma. Mueller–Gaertner HW, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):345–51
TSH dependent elevation of serum thyroglobulin in reversible primary hypothyroidism. Sato K, et al. **Clin Endocrinol (Oxf)** 1988 Sep;29(3):231–7
Screening for thyroid disease in the elderly. Serum concentrations of thyrotropin and 3,5,3'–triiodothyronine in a representative population of 79–year–old women and men. Edén S, et al. **Compr Gerontol [A]** 1988 Feb;2(1):40–5
Sensitive thyroid–stimulating hormone assays: clinical applications and limitations. De Los Santos ET, et al. **Compr Ther** 1988 Sep;14(9):26–33 (19 ref.)
Dopaminergic–like activity in toxic fescue alters prolactin but not growth hormone or thyroid stimulating hormone in ewes. Elsasser TH, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):259–69
Effect of acute cold exposure and insulin hypoglycemia on plasma thyrotropin levels by IRMA in healthy young males. Vigaš M, et al. **Endocrinol Exp** 1988 Dec; 22(4):229–34
Relationship among thyrotropin (TSH), thyroid stimulating immunoglobulins, and results of triiodothyronine (T3) suppression test in patients with Graves' disease. Horimoto M, et al. **Endocrinol Jpn** 1988 Dec;35(6):841–8
Significance of serum thyrotropin and plasma dopamine concentration in the regulation of thyroid function in elderly subjects. Mori T, et al. **Endocrinol Jpn** 1988 Jun; 35(3):469–76
Optimum replacement dose of thyroid hormone assessed by highly sensitive TSH determination in patients with congenital hypothyroidism. Sato H, et al. **Endocrinol Jpn** 1988 Aug;35(4):531–6
Fasting–associated changes in serum thyrotropin in the rat are influenced by gender. Cohen JH 3d, et al. **Endocrinology** 1989 Jun;124(6):3025–9
Human recombinant interleukin–1 beta decreases plasma thyroid hormone and thyroid stimulating hormone levels in rats. Dubuis JM, et al. **Endocrinology** 1988 Nov; 123(5):2175–81
Serum thyrotropin concentrations are more highly correlated with serum triiodothyronine concentrations than with serum thyroxine concentrations in thyroid hormone–infused thyroidectomized rats. Emerson CH, et al. **Endocrinology** 1989 May;124(5):2415–8
Effects of aging on the in vivo release of thyrotropin (TSH), triiodothyronine, and thyroxine induced by TSH–releasing hormone in the cynomolgus monkey (Macaca fascicularis). Yoshida T, et al. **Endocrinology** 1989 Mar;124(3):1287–93
Thyroid hormone concentrations in epileptic patients. Larkin JG, et al. **Eur J Clin Pharmacol** 1989;36(3):213–6
Use of a pharmacological indicator to monitor compliance with thyroxine. Penn ND, et al. **Eur J Clin Pharmacol** 1988; 35(3):327–9
Interference in thyrotropin (TSH) determination: falsely elevated TSH values in a transplanted patient. Seghers J, et al. **Eur J Nucl Med** 1989;15(4):194–6
Evaluation of thyroid gland activity by hormone assays and flow cytometry in rats. Zbinden G. **Exp Cell Biol** 1988; 56(4):196–200
Effect of nifedipine on thyrotropin, prolactin, and thyroid hormone release in man: a placebo–controlled study. Valensi P, et al. **Fundam Clin Pharmacol** 1989;3(1):59–66
Diurnal variations in thyrotropin, prolactin and cortisol during human pregnancy. Eriksson L, et al. **Gynecol Obstet Invest** 1989;27(2):78–83
Triac reduces serum TSH without decreasing alpha and beta TSH messenger RNAs. Mirell CJ, et al. **Horm Metab Res** 1989 Mar;21(3):123–6
Thyrotropin measured by the immunoradiometric assay in low birth weight infants. Nagashima K, et al. **Horm Metab Res** 1988 Dec;20(12):758–60
Possible thyrotrophs insensitivity to dopamine in hyperprolactinaemic amenorrhoeic patients. Nyboe Andersen A, et al. **Horm Metab Res** 1989 Jun;21(6):328–30
Effects of cold exposure or TRH on the serum TSH levels in the iron–deficient rat. Tang F, et al. **Horm Metab Res** 1988 Oct;20(10):616–9
Effect of diclofenac on plasma levels of immunoreactive prolactin, follicle stimulating hormone, luteinizing hormone, thyrotropin, and beta–endorphin in humans. Joris J, et al. **Horm Res** 1988;29(4):143–6
Neonatal hypothyroxinemia. Malik GK, et al. **Indian J Pediatr** 1988 Nov–Dec;55(6):967–71
The role of dopaminergic and noradrenergic receptors in human TSH and LH release. Jacobs D, et al. **Int Clin Psychopharmacol** 1989 Apr;4(2):149–60
A revised interpretation of the TRH test results in female depressed patients. Part I: TSH responses. Effects of severity of illness, thyroid hormones, monoamines, age, sex hormonal, corticosteroid and nutritional state. Maes M, et al. **J Affective Disord** 1989 Mar–Jun;16(2–3):203–13
A revised interpretation of the TRH test results in female depressed patients. Part II: Prolactin responses. Relationships with sex hormones, corticosteroid state, age, monoamines and amino acid levels. Maes M, et al. **J Affective Disord** 1989 Mar–Jun;16(2–3):215–21
Prolactin and thyroid status in prepubertal children with mild to moderate obesity. Lala VR, et al. **J Am Coll Nutr** 1988 Oct;7(5):361–6
A sensitive thyroid stimulating hormone assay for screening of thyroid functional disorder in elderly Japanese. Okamura K, et al. **J Am Geriatr Soc** 1989 Apr;37(4):317–22
Thyroid hormones in non–insulin dependent diabetes mellitus. Bhu N, et al. **J Assoc Physicians India** 1988 Dec; 36(12):713–4
Decrease of hypothalamic TRH levels but not plasmatic TSH levels after ablation of submandibular salivary glands in the rat. Boyer R, et al. **J Biol Buccale** 1988 Jun;16(2):69–74
Changes in serum thyroid hormone, thyrotropin and thyroglobulin concentrations during thyroxine therapy in patients with solitary thyroid nodules. Morita T, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):227–30
Circadian variation of thyrotropin in childhood. Rose SR, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1086–90
Measurement of thyrotropin in clinical and subclinical hyperthyroidism using a new chemiluminescent assay. Ross DS, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):684–8
Decreased basal and stimulated thyrotropin secretion in healthy elderly men. van Coevorden A, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):177–85
Thyroid–stimulating activity in sera of normal pregnant women. Yoshikawa N, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):891–5
Effect of lysine vasopressin on basal and TRH stimulated TSH and PRL release in normal men. Chiodera P, et al. **J Endocrinol Invest** 1988 Jul–Aug;11(7):497–500
Role of smoking in goiter morphology and thyrotropin response to TRH in untreated goitrous women. Lio S, et al. **J Endocrinol Invest** 1989 Feb;12(2):93–7
The relation of serum T4 and TSH with the urinary iodine excretion. Moulopoulos DS, et al. **J Endocrinol Invest** 1988 Jun;11(6):437–9
Age related correlation between serum TSH and thyroid C cell hyperplasia in Long–Evans rats. Nayyar RP, et al. **J Exp Pathol** 1989;4(2):87–95
An avidin–biotin amplified ELISA for thyrotropin in human serum. Its implication for routine determination of thyrotropin in developing countries. Ohwovoriole AE, et al. **J Immunol Methods** 1988 Nov 25;115(1):99–104
Prediction of later development of thyrotoxicosis or central hypothyroidism from the cord serum thyroid–stimulating hormone level in neonates born to mothers with Graves disease. Tamaki H, et al. **J Pediatr** 1989 Aug;115(2):318–21
Neuroendocrine aspects of primary endogenous depression. VII. Logistic regression analysis of matched patient–control hormone data for discrimination between groups. Rubin RT, et al. **J Psychiatr Res** 1988;22(4):297–307
Circadian and pulsatile levels of human thyroid–stimulating hormone (TSH) in various stages of hyperthyroidism. Vardarli I, et al. **Klin Wochenschr** 1988 Oct 17;66(20):1039
Sensitive thyrotropin measurements: utility and futility [editorial] [see comments] **Lancet** 1989 May 27;1(8648):1176 . **Comment in:** Lancet 1989 Jun 17;1(8651):1396
Sensitive thyrotropin measurements: utility and futility [letter; comment] Rai GS. **Lancet** 1989 Jun 17;1(8651):1396. **Comment on:** Lancet 1989 May 27;1(8648):1176
Influence of intensity and duration of exposure to various stressors on serum TSH and GH levels in adult male rats. Armario A, et al. **Life Sci** 1989;44(3):215–21
Immunometric thyrotropin assays: current roles and future directions. Hay ID. **Mayo Clin Proc** 1988 Dec; 63(12):1230–3 (22 ref.)
Thyrotropin radioimmunoassays: birth, life, and demise. Ridgway EC. **Mayo Clin Proc** 1988 Oct;63(10):1028–34
Clinical utility and cost–effectiveness of sensitive thyrotropin assays in ambulatory and hospitalized patients. Spencer CA.

Mayo Clin Proc 1988 Dec;63(12):1214–22 (43 ref.)
Use of sensitive immunoradiometric assay for thyrotropin in clinical practice. Toft AD. Mayo Clin Proc 1988 Oct; 63(10):1035–42
Thyrotropin measurements: past, present, and future [editorial] Utiger RD. Mayo Clin Proc 1988 Oct; 63(10):1053–6
High sensitivity thyrotrophin assays in patients with severe non-thyroidal illnesses: a first-line screening test. Schutte DP, et al. Med Lab Sci 1987 Oct;44(4):312–9
The influence of caloric deprivation and food composition on TSH, thyroid hormones and nuclear binding of T3 in mononuclear blood cells in obese women. Matzen LE, et al. Metabolism 1989 Jun;38(6):555–61
The influence of dexamethasone on serum thyrotrophin and thyrotrophin synthesis in the rat. Ahlquist JA, et al. Mol Cell Endocrinol 1989 Jun;64(1):55–61
Paracoccidioidomycosis in the region of Botucatu (state of São Paulo, Brazil). Evaluation of serum thyroxine (T4) and triiodothyronine (T3) levels and of the response to thyrotropin releasing hormone (TRH). Kiy Y, et al. Mycopathologia 1988 Jul;103(1):3–9
Why are the sensitive TSH assay and TRH stimulation test frequently low in very old euthyroid subjects? Caradoc-Davies TH, et al. N Z Med J 1988 Oct 26;101(856 Pt 1):662–3
The usefulness of a sensitive thyrotrophin assay in the fine adjustment of thyroxine therapy following ablation for carcinoma. de Lange WE, et al. Neth J Med 1989 Aug; 35(1–2):11–7
Diagnostic problems caused by spurious elevation of thyrotrophin measured by sensitive assay. Harvey RD, et al. Neth J Med 1989 Jun;34(5–6):302–5
Lack of acute d-amphetamine effects on thyrotropin release. Little KY, et al. Neuroendocrinology 1988 Sep;48(3):304–7
Central actions of adenosine on pituitary secretion of prolactin, luteinizing hormone and thyrotropin. Ondo JG, et al. Neuroendocrinology 1989 Jun;49(6):654–8
Lack of an acute modulatory effect of melatonin on human nocturnal thyrotropin and cortisol secretion. Strassman RJ, et al. Neuroendocrinology 1988 Oct;48(4):387–93
Age-related differences in the spontaneous and thyrotropin-releasing hormone-stimulated release of prolactin and thyrotropin in ovariectomized rats. Wang PS, et al. Neuroendocrinology 1989 Jun;49(6):592–6
Thyrotropin and prolactin responses to different doses of thyrotropin-releasing hormone in depression. Masturzo P, et al. Neuropsychobiology 1989;20(3):120–5
Diurnal variation in fentanyl-induced hormone responses and side effects. Frecska E, et al. Neuropsychopharmacology 1988 Sep;1(3):235–8
A new TSH assay. Just another technique or a useful test? Bansal S. Postgrad Med 1989 Sep 1;86(3):97–9, 102
Hypopituitarism in the elderly in the presence of elevated thyroid stimulating hormone levels. Beringer T, et al. Postgrad Med J 1988 Dec;64(758):943–4
Calcium metabolism, serum thyroid-stimulating hormone, prolactin, and growth hormone in spontaneously hypercholesterolemic rats. Shiota K, et al. Proc Soc Exp Biol Med 1989 Mar;190(3):229–33
Sensitivity and specificity of TRH stimulation test in depressed and nondepressed adolescents. Khan AU. Psychiatry Res 1988 Jul;25(1):11–7
Abnormal thyroid stimulating hormone, prolactin, and growth hormone responses to thyrotropin releasing hormone in abstinent alcoholic men with cerebral atrophy. Marchesi C, et al. Psychiatry Res 1989 Apr;28(1):89–96
Dopaminergic control of TSH secretion in endogenous depression. Marchesi C, et al. Psychiatry Res 1988 Sep; 25(3):277–82
Circadian rhythms in depression and recovery: evidence for blunted amplitude as the main chronobiological abnormality. Souêtre E, et al. Psychiatry Res 1989 Jun; 28(3):263–78
Luteinizing hormone responses to luteinizing hormone releasing hormone (LHRH) in acute mania and the effects of lithium on LHRH and thyrotrophin releasing hormone tests in volunteers. Hunter R, et al. Psychol Med 1989 Feb; 19(1):69–77
Effect of oral administration of haloperidol on plasma thyrotropin concentrations in men. Magliozzi JR, et al. Psychoneuroendocrinology 1989;14(1–2):125–30
Anorexia nervosa with elevated serum TSH. Matsubayashi S, et al. Psychosom Med 1988 Nov–Dec;50(6):600–6
Effect of complement binding on a solid-phase immunometric TSH assay. Käpyaho K, et al. Scand J Clin Lab Invest 1989 May;49(3):211–5
TSH, thyroid hormones and nuclear-binding of T3 in mononuclear blood cells from obese and non-obese women. Matzen LE, et al. Scand J Clin Lab Invest 1989 May;49(3):249–53
Clinical significance of mildly elevated thyrotropin levels with normal thyroxine levels. Brown CA, et al. South Med J 1989 Jun;82(6):681–5
Human sex hormone binding globulin and sensitive thyrotropin measurements in thyroid physiopathology. Chikhaoui Y, et al. Steroids 1988 Oct;52(4):387–8
A case of refetoff syndrome: selective venous sampling for TSH is useful in differentiating thyroid hormone resistance from TSH secreting tumor. Itagaki Y, et al. Tohoku J Exp Med 1989 Jan;157(1):69–78
The effects of chronic ingestion of spironolactone on serum thyrotropin and thyroid hormones in the male rat. Semler DE, et al. Toxicol Appl Pharmacol 1989 Apr;98(2):263–8
Endocrine changes and haemodynamic stability after brain death. Robertson KM, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1197–8
Serum thyrotropin, thyroxin and triiodothyronine concentrations in maternal and cord blood of goitrous and non-goitrous pregnant women living in the Black Sea Region of Turkey. Teziç T, et al. Turk J Pediatr 1988 Jul–Sep;30(3):153–8
[Discrepancy between the basal level of TSH and the thyrotropic response to TRH during thyroid hormone treatment of differentiated thyroid cancers] Charrie A, et al. Ann Endocrinol (Paris) 1989;50(1):31–5 (Eng. Abstr.) (Fre)
[Ultra-sensitive TSH and the TRH test in the follow-up of thyroid and pituitary diseases] Mathe C, et al. Ann Endocrinol (Paris) 1989;50(1):73–6 (Eng. Abstr.) (Fre)
[Thyroid function and trisomy 21. TSH increase and rT3 deficiency] Lejeune J, et al. Ann Genet (Paris) 1988; 31(3):137–43 (Eng. Abstr.) (Fre)
[Transient neonatal hyperthyrotropinemia] Leger J, et al. Arch Fr Pediatr 1988 Dec;45(10):783–6 (30 ref.) (Eng. Abstr.) (Fre)
[Value of the ultrasensitive assay of plasma TSH for the surveillance of replacement treatment in children with congenital hypothyroidism] Raux Demay MC, et al. Arch Fr Pediatr 1988 Oct;45(8):549–52 (Eng. Abstr.) (Fre)
[Diminution of thyroid stimulating hormone level but normal levels of thyroid hormones. Demonstration of occult hyperthyroidism] Schlienger JL, et al. Presse Med 1989 Apr 8;18(14):707–10 (Eng. Abstr.) (Fre)
[Hyperthyroidism with normal thyrotropin assay disclosing thyrotropic pituitary adenoma (letter)] Thieblot P, et al. Presse Med 1988 Oct 29;17(38):2035–6 (Fre)
[Quality control of the radioimmunoassay of T3, T4 and TSH] Kraiem A, et al. Tunis Med 1987 Nov;65(11):701–4 (Eng. Abstr.) (Fre)
[The TSH, TRH test] Von zur Mühlen A, et al. Internist (Berlin) 1988 Aug;29(8):533–7 (14 ref.) (Ger)
[Reference values for the concentrations of triiodothyronine, thyroxine and thyrotropin in the blood serum of euthyroid children. Method: luminescence-enhanced enzyme immunoassay] Liappis N, et al. Klin Padiatr 1988 Sep–Oct; 200(5):410–3 (Eng. Abstr.) (Ger)
[The negative TRH test: new differential assessment using a sensitive TSH assay] Lind P, et al. Schweiz Med Wochenschr 1988 Aug 9;118(31–32):1130–4 (Eng. Abstr.) (Ger)
[Negative TRH test: differentiated reevaluation using sensitive TSH determination (letter)] Marko P. Schweiz Med Wochenschr 1988 Oct 29;118(43):1589 (Ger)
[Study of the long-term effects of amiodarone on thyroid function using ultrasensitive TSH measurements. Preliminary report] Vogt T, et al. Schweiz Med Wochenschr 1988 Dec 17;118(50):1909–11 (Eng. Abstr.) (Ger)
[Value of determining the basal TSH level with the TSH radioimmunoassay of AdW of East Germany in the staged diagnosis of disorders of thyroid function] Stegner S, et al. Z Arztl Fortbild (Jena) 1989;83(10):519–22 (Ger)
[Behavior of the basal and stimulated serum level of thyroid stimulating hormone and determination of thyroxine, thyroxine- binding capacity and free thyroxine index in females with chronic uremia] Rudolf K, et al. Z Gesamte Inn Med 1988 Oct 15;43(20):590–2 (Eng. Abstr.) (Ger)
[Changes in 99mTc uptake by the thyroid gland and serum triiodothyronine and thyrotropin concentrations following completion of alimentary iodine administration] Schröder F, et al. Z Gesamte Inn Med 1988 Oct 1;43(19):544–7 (Eng. Abstr.) (Ger)
[Immunoradiometry of serum thyrotropin as the primary laboratory test in thyroid diseases] Földes I, et al. Orv Hetil 1988 Oct 9;129(41):2185–8 (Eng. Abstr.) (Hun)
[Hormones of the pituitary-thyroid axis in obese subjects on free and low-calorie diet] Custro N, et al. Clin Ter 1987 Feb 15;120(3):199–203 (Eng. Abstr.) (Ita)
[Effects of chronic administration of several calcium antagonists on pituitary release of TSH] Custro N, et al. Clin Ter 1987 Aug 31;122(4):251–5 (Eng. Abstr.) (Ita)
[Pituitary thyrotropin function in type 2 diabetes mellitus: correlations with metabolic control parameters] Scaglione R, et al. Medicina (Firenze) 1988 Jul–Sep;8(3):315–8 (Eng. Abstr.) (Ita)
[24-hour integrated concentration of LH, FSH, TSH and PRL in subjects with hypogonadotropic hypogonadism treated with pulsatile LHRH] Torre R, et al. Minerva Endocrinol 1988 Oct–Dec;13(4):223–9 (Eng. Abstr.) (Ita)
[Influence of phototherapy on the secretion of TSH, PRL and thyroid hormones in premature neonates] Bona G, et al. Minerva Pediatr 1988 Sep;40(9):539–44 (Eng. Abstr.) (Ita)
[Neonatal screening for congenital hypothyroidism. Reflections on the methodology based on a statistical analysis of TSH and T4] Principi R, et al. Minerva Pediatr 1988 Nov;40(11):633–8 (Eng. Abstr.) (Ita)
[Serum levels of triiodothyronine, thyroxine and thyrotropin in children with epilepsy treated with amizepine, luminal and mizodine in a monotherapy system. Preliminary report] Kaciński M, et al. Endokrynol Pol 1988;39(3):137–42 (Eng. Abstr.) (Pol)
[Thyroid hormones, thyrotropin, cortisol and corticotropin in postoperative recurrence of diffuse toxic goiter] Karachentsev IuI, et al. Sov Med 1988;(8):5–7 (Eng. Abstr.) (Rus)
[Concentration of thyroid hormones and thyrotropin in the blood of patients with chronic pancreatitis] Gidaiatov AA, et al. Ter Arkh 1988;60(9):50–2 (Eng. Abstr.) (Rus)
[Characteristics of the clinical picture, hormonal status and humoral immunity in older patients with diffuse toxic goiter] Natarov VV, et al. Ter Arkh 1988;60(12):96–8 (Eng. Abstr.) (Rus)
[Neuroendocrine changes induced by craniospinal radiation in children with acute lymphoblastic leukemia and medulloblastoma] Couce Pico ML, et al. An Esp Pediatr 1989 Feb;30(2):85–90 (Eng. Abstr.) (Spa)
[Study of thyroid function parameters and thyrotropin in general non-thyroid diseases] Gómez JM, et al. Med Clin (Barc) 1989 Jan 14;92(1):5–9 (Eng. Abstr.) (Spa)
[Changes in thyroid function expressed by the calculation of the area under TRH-TSH curve] Herrera JD, et al. Medicina (B Aires) 1987;47(5):464–70 (Eng. Abstr.) (Spa)
[Importance of changes in plasmatic volume in the evaluation of TSH, L-T3 and L-T4, during muscular activity] Fernández-Pastor VJ, et al. Rev Esp Fisiol 1988 Sep; 44(3):331–6 (Eng. Abstr.) (Spa)

DEFICIENCY

Transient isolated thyrotropin deficiency in the postpartum period. Merenich JA, et al. Am J Med 1989 Mar; 86(3):361–2
Serum free thyrotropin subunit in congenital isolated thyrotropin deficiency. Miyai K, et al. Endocrinol Jpn 1988 Jun;35(3):517–21
Hypothalamic-pituitary dysfunction and Hirschsprung's disease in the Bardet-Biedl syndrome. Radetti G, et al. Helv Paediatr Acta 1988 Nov;43(3):249–52
Hydrocortisone resolves persistent neonatal jaundice in multiple hormone deficiencies. Steinherz R, et al. Helv Paediatr Acta 1988 Nov;43(3):219–23
[The dysfunction of human thyroid stimulating hormone (hTSH) due to TSH beta subunit gene abnormality] Hayashizaki Y, et al. Rinsho Byori 1988 May;36(5):538–40 (Jpn)

DIAGNOSTIC USE

Prolactin and its response to the luteinizing hormone-releasing hormone thyrotropin-releasing hormone test in patients with endometriosis before, during, and after treatment with danazol. Acién P, et al. Fertil Steril 1989 May;51(5):774–80
Effect of thyrotropin storage on thyroid-stimulating hormone response testing in normal dogs [published erratum appears in J Vet Intern Med 1987 Jul–Sep;1(3):101] Bruyette DS, et al. J Vet Intern Med 1987 Apr–Jun; 1(2):91–4
[Scintigram after TSH in blocked thyroid gland] Schröder F, et al. Z Gesamte Inn Med 1988 Jul 1;43(13):364–6 (Eng. Abstr.) (Ger)

GENETICS

Hormonal regulation of thyrotropin and gonadotropin gene expression. Chin WW. Clin Res 1988 Sep;36(5):484–93 (66 ref.)
The human thyrotropin beta-subunit gene differs in 5' structure from murine TSH-beta genes. Guidon PT Jr, et al. DNA 1988 Dec;7(10):691–9
The structure of the human thyrotropin beta-subunit gene. Tatsumi K, et al. Gene 1988 Dec 20;73(2):489–97
Two thyroid hormone regulated genes, the beta-subunits of nerve growth factor (NGFB) and thyroid stimulating hormone (TSHB), are located less than 310 kb apart in both human and mouse genomes. Dracopoli NC, et al. Genomics 1988 Aug;3(2):161–7
Thyroid hormone inhibition of human thyrotropin beta-subunit gene expression is mediated by a cis-acting element located in the first exon. Wondisford FE, et al. J Biol Chem 1989 Sep 5;264(25):14601–4
Thyroid hormone regulates the mouse thyrotropin beta-subunit gene promoter in transfected primary thyrotropes. Wood WM, et al. J Biol Chem 1989 Sep 5; 264(25):14840–7
Effect of triiodothyronine treatment on thyrotrophin beta- and alpha-messenger RNAs in the pituitary of the euthyroid rat. Franklyn JA, et al. Mol Cell Endocrinol 1988 Nov;60(1):1–5
Molecular cloning of cDNAs for precursors of porcine pituitary glycoprotein hormone common alpha-subunit and of thyroid stimulating hormone beta-subunit. Hirai T, et al. Mol Cell Endocrinol 1989 May;63(1–2):209–17
Differential thyroid hormone-regulated rat thyrotropin beta gene expression detected by blot hybridization. Carr FE, et al. Mol Endocrinol 1988 Aug;2(8):667–73
Thyroid hormones regulate rat thyrotropin beta gene

promoter activity expressed in GH3 cells. Carr FE, et al. **Mol Endocrinol** 1989 Apr;3(4):709–16

Thyrotropin–releasing hormone stimulates the activity of the rat thyrotropin beta–subunit gene promoter transfected into pituitary cells. Carr FE, et al. **Mol Endocrinol** 1989 Apr; 3(4):717–24

[The dysfunction of human thyroid stimulating hormone (hTSH) due to TSH beta subunit gene abnormality] Hayashizaki Y, et al. **Rinsho Byori** 1988 May;36(5):538–40 **(Jpn)**

IMMUNOLOGY

Epitope mapping of human thyrotropin. Endo Y, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):201–9

Clinical applications of measuring thyroid receptor antibodies, thyroid–stimulating and thyroid stimulation–blocking antibodies. Sasaki N, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:133–8

Clinical experience with a radioreceptor assay for TSH–binding inhibiting immunoglobulins (TBII). Heberling HJ, et al. **Exp Clin Endocrinol** 1988 Aug; 91(3):355–61

Evidence against the importance in the disease process of antibodies to bovine thyroid–stimulating hormone found in some patients with Graves' disease. Noh J, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):107–13

[A case of systemic lupus erythematosus (SLE) associated with anti–thyrotropin (TSH) autoantibodies] Sakata S, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):571–2 **(Jpn)**

METABOLISM

Binding overlap and internalization of gonadotropin and thyrotropin in neonatal rat testicle and ovary cell cultures and the Chinese hamster ovary (CHO) cell line. Gruszczynska M, et al. **Acta Biol Hung** 1988;39(1):39–47

Alterations in the sialylation and sulfation of secreted mouse thyrotropin in primary hypothyroidism. DeCherney GS, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):755–62

Regulation of thyroperoxidase, thyroglobulin and iodide levels in sheep thyroid cells by TSH, tumor promoters and epidermal growth factor. Pratt MA, et al. **Biochimie** 1989 Feb;71(2):227–35

Studies into hormonal imprinting in a Tetrahymena thermophila mutant incapable of lysosomal enzyme secretion. Kovacs P, et al. **Cell Mol Biol** 1989;35(3):293–6

Ultrastructural localization of thyrotropin (TSH)–like immunoreactivity in specific secretory cells of the hypophyseal pars tuberalis in the Djungarian hamster, Phodopus sungorus. Bergmann M, et al. **Cell Tissue Res** 1989 Jun;256(3):649–52

Morphometric evaluation of subcellular changes induced by in vivo TRH treatment in the pituitary gland of Rana perezi: effects on prolactin and thyrotropic cells. Malagón MM, et al. **Cell Tissue Res** 1989;256(2):391–8

Effect of thyrotropin releasing hormone injection on blood growth hormone (GH), TSH and growth hormone releasing hormone (GHRH) concentrations in cancer patients. Kamijo K, et al. **Endocrinol Jpn** 1988 Dec; 35(6):827–31

Characterization of anterior pituitary target cells for arginine vasopressin: including cells that store adrenocorticotropin, thyrotropin–beta, and both hormones. Childs GV, et al. **Endocrinology** 1989 Jul;125(1):554–9

Thyroid hormone regulation of hypothalamic immunoreactive thyrotropin. DeVito WJ. **Endocrinology** 1989 Sep;125(3):1219–23

Thyrotropin (TSH)–releasing hormone–stimulated TSH release and TSH concentration in the guinea pig pituitary, as determined by a heterologous radioimmunoassay. DeVito WJ, et al. **Endocrinology** 1989 Mar;124(3):1190–7

Rapid effects of the flavonoid EMD 21388 on serum thyroid hormone binding and thyrotropin regulation in the rat. Köhrle J, et al. **Endocrinology** 1989 Jul;125(1):532–7

Differential susceptibility to N–glycanase at the individual glycosylation sites of mouse thyrotropin and free alpha–subunits. Miura Y, et al. **Endocrinology** 1988 Nov; 123(5):2207–13

Immunocytochemical and morphometrical study of thyrotropic cells of Rana ridibunda. Malagón MM, et al. **Histochemistry** 1988;89(5):461–6

The effect of beta–endorphin on basal and TRH–stimulated TSH release in conscious male rats. Buydens P, et al. **Horm Metab Res** 1988 Nov;20(11):687–90

Alterations in the glycosylation of secreted thyrotropin during ontogenesis. Analysis of sialylated and sulfated oligosaccharides. Gyves PW, et al. **J Biol Chem** 1989 Apr 15;264(11):6104–10

Thyrotrophin (TSH)–binding proteins in bacteria and their cross–reaction with autoantibodies against the human TSH receptor. Byfield PG, et al. **J Endocrinol** 1989 Jun; 121(3):571–7

Vitamin D–enhanced thyrotrophin release from rat pituitary cells: effects of Ca2+, dihydropyridines and ionomycin. d'Emden MC, et al. **J Endocrinol** 1989 Jun;121(3):441–50

Effects of tri–iodothyronine, cortisol and transcriptional inhibitors on vitamin D3–enhanced thyrotrophin secretion by rat pituitary cells in vitro. d'Emden MC, et al. **J Endocrinol** 1989 Jun;121(3):451–8

Binding of thyrotropin to selected Mycoplasma species: detection of serum antibodies against a specific Mycoplasma membrane antigen in patients with autoimmune thyroid disease. Sack J, et al. **J Endocrinol Invest** 1989 Feb;12(2):77–86

Nuclear proteins from the rat pituitary gland bind to regulatory sequences of the thyrotrophin–beta gene. Ahlquist JA, et al. **J Mol Endocrinol** 1989 Mar;2(2):85–91

Studies on the conditions determining the inhibitory effect of somatostatin on adrenocorticotropin, prolactin and thyrotropin release by cultured rat pituitary cells. Lamberts SW, et al. **Neuroendocrinology** 1989 Jul;50(1):44–50

Evaluation and characterization of the hyt/hyt hypothyroid mouse. II. Abnormalities of TSH and the thyroid gland. Stein SA, et al. **Neuroendocrinology** 1989 May;49(5):509–19

Brefeldin A inhibits oligosaccharide processing of glycoproteins in mouse hypothyroid pituitary tissue at several subcellular sites. Perkel VS, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):286–93

Partial characterization of a thyroid–stimulating hormone–like peptide in neuroendocrine cells of the human prostate gland. Abrahamsson PA, et al. **Prostate** 1989; 14(1):71–81

Oral dosages of erythrosine and effects on TSH. Farrar DB, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):362–7

[Abnormality of hormonal response in human thyroid carcinoma—molecular aspect] Abe Y, et al. **Rinsho Byori** 1988 Dec;36(12):1358–63 **(Jpn)**

PHARMACOLOGY

Inhibition of thyrotropin–stimulated adenylate cyclase activation and growth of rat thyroid cells, FRTL–5, by immunoglobulin G from patients with primary myxedema: comparison with activities of thyrotropin–binding inhibitor immunoglobulins. Cho BY, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):99–106

Triiodothyronine and 3',5'–cyclic AMP secretion by cultured human thyroid cells in response to thyrotropin and thyroid–stimulating immunoglobulin. Kraiem Z, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):493–500

Induction of peroxidase and thyroglobulin by TSH in cultured thyroid cells from patients with Basedow's disease and its inhibition by actinomycin D. Yamashita H, et al. **Acta Pathol Jpn** 1989 Feb;39(2):121–6

Influence of pituitary hormones (hCG, TSH, Pr, GH) on testosterone level and on the functional activity of the Leydig cell in rat fetuses. Dobozy O, et al. **Acta Physiol Hung** 1988;72(2):159–63

Effects of calcitonin, katacalcin, and calcitonin gene–related peptide on basal and TSH–stimulated thyroid hormone secretion in the mouse. Ahrén B. **Acta Physiol Scand** 1989 Feb;135(2):133–7

Thyrotropin modulates receptors for atrial natriuretic peptide on intact human thyroid cells. Tseng YC, et al. **Am J Med Sci** 1989 Jul;298(1):15–9

The influence of methimazole on the thyrotrophic and peripheral activity of thyrotrophin and thyrotrophin–releasing hormone in the chick embryo and growing chicken. Iqbal A, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):291–8

Insulin–like growth factor–I potentiates thyrotropin stimulation of adenylyl cyclase in FRTL–5 cells. Brenner–Gati L, et al. **Endocrinology** 1989 Sep; 125(3):1315–20

Thyrotropin regulation of thyroid peroxidase messenger ribonucleic acid levels in cultured rat thyroid cells: evidence for the involvement of a nontranscriptional mechanism. Damante G, et al. **Endocrinology** 1989 Jun; 124(6):2889–94

Inhibitory effect of lithium on the release of thyroid hormones from thyrotropin–stimulated mouse thyroids in a perifusion system. Mori M, et al. **Endocrinology** 1989 Mar; 124(3):1365–9

Extracellular adenosine triphosphate completely reverses the thyrotropin–induced morphological change in FRTL–5 cells. Nazarea M, et al. **Endocrinology** 1989 Jul;125(1):100–8

Acute stimulation of thyroidal NAD+ kinase, NADPH reoxidation, and peroxidase activities by physiological concentrations of thyroid stimulating hormone acting in vitro: a quantitative cytochemical study. Perrild H, et al. **Endocrinology** 1988 Nov;123(5):2499–505

Requirement of insulin growth factor I plus hydrocortisone for the regeneration of thyrotropin (TSH)–dependent mechanism of I–efflux and Ca2+ mobilization in FRTL–5 cells during TSH depletion. Sho K, et al. **Endocrinology** 1989 Feb;124(2):598–604

Variations in the culture medium for FRTL5 cells: effects on growth and iodide uptake. Zakarija M, et al. **Endocrinology** 1989 Sep;125(3):1253–9

Pairs of cyclic AMP analogs, that are specifically synergistic for type I and type II cAMP–dependent protein kinases, mimic thyrotropin effects on the function, differentiation expression and mitogenesis of dog thyroid cells. Van Sande J, et al. **Eur J Biochem** 1989 Aug 15;183(3):699–708

Actin stress fiber disruption and tropomyosin isoform switching in normal thyroid epithelial cells stimulated by thyrotropin and phorbol esters. Roger PP, et al. **Exp Cell Res** 1989 May;182(1):1–13

Effects of bovine TSH on the tissue thyroxine level and metamorphosis in prometamorphic flounder larvae. Inui Y, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):406–10

Influence of L–thyroxine, L–triiodothyronine, thyroid stimulating hormone, or estradiol on the cell kinetics of cultured mammary cancer cells. de Launoit Y, et al. **In Vitro Cell Dev Biol** 1989 Jul;25(7):585–91

Thyrotropin alters the utilization of thyroglobulin's hormonogenic sites. Fassler CA, et al. **J Biol Chem** 1988 Nov 25;263(33):17366–71

Induction of nuclear protein factors specific for hormone–responsive region during activation of thyroglobulin gene by thyrotropin in rat thyroid FRTL–5 cells. Lee NT, et al. **J Biol Chem** 1989 May 5; 264(13):7523–30

Thyrotropin–releasing hormone–induced rise in cytosolic calcium and activation of outward K+ current monitored simultaneously in individual GH3B6 pituitary cells. Mollard P, et al. **J Biol Chem** 1988 Dec 25;263(36):19570–6

Thyrotropin induces the acidification of the secretory granules of parafollicular cells by increasing the chloride conductance of the granular membrane. Barasch J, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2137–47

Increased deoxyribonucleic acid synthesis of autonomously functioning thyroid adenomas: independent of but further stimulable by thyrotropin. Müller–Gärtner HW, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):39–45

Regulation of thyroid peroxidase and thyroglobulin gene expression by thyrotropin in cultured human thyroid cells. Nagayama Y, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1155–9

Rapid proliferative response of rat thyroid gland to a single injection of TSH in vivo. Bybee A, et al. **J Endocrinol** 1989 Apr;121(1):27–30

Sensitization and desensitization of human thyroid cells in culture: effects of thyrotrophin and thyroid–stimulating immunoglobulin. Kraiem Z, et al. **J Endocrinol** 1988 Nov; 119(2):341–9

Hormonal regulation of DNA polymerase–beta activity in the rat thyroid gland. Nagasaka A, et al. **J Endocrinol** 1988 Nov;119(2):303–8

Activation of the thyroid peroxidase gene in human thyroid cells: effect of thyrotrophin, forskolin and phorbol ester. Collison KS, et al. **J Mol Endocrinol** 1989 Jul;3(1):1–5

Thyrotrophin, forskolin and ionomycin increase cathepsin B mRNA concentrations in rat thyroid cells in culture. Phillips ID, et al. **J Mol Endocrinol** 1989 May;2(3):207–12

Paradoxically subnormal serum T4 and T3 in dogs after prolonged excessive TSH stimulation of the thyroid caused by post–cAMP refractoriness of thyroid hormone secretion. Laurberg P. **Metabolism** 1989 Mar;38(3):265–70

Effect of naloxone on TRH–induced PRL and TSH response in normal man. Rampinini A, et al. **Minerva Endocrinol** 1989 Apr–Jun;14(2):125–8

Thyrotropin but not epidermal growth factor down–regulates the isozyme I (PKa I) of cyclic AMP–dependent protein kinases in dog thyroid cells in primary cultures. Breton MF, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):49–55

TSH stimulates the activity of the c–fos promoter in FRTL5 rat thyroid cells. Damante G, et al. **Mol Cell Endocrinol** 1988 Aug;58(2–3):279–82

Transcriptional regulation of the thyroperoxydase gene by thyrotropin and forskolin. Gerard CM, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):239–42

Retention of cyclic AMP response to TSH in a cloned human thyrocyte/T cell hybridoma (HY2–15). Martin A, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):233–8

Acute in vitro thyrotropin regulation of lysosomal enzyme activity in the thyroid follicular cell. Perrild H, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):75–80

Thyrotropin increases malic enzyme messenger ribonucleic acid levels in rat FRTL–5 thyroid cells. Kohn AD, et al. **Mol Endocrinol** 1989 Mar;3(3):532–8

Primary tissue cultures of benign and malignant human thyroid tumors: effect of TSH. Komlos L, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):10–5

Effect of thyroidectomy of immature male chickens on circulating thyroid hormones and on response to thyroid–stimulating hormone and chronic cold exposure. Haddad EE, et al. **Poult Sci** 1989 Jan;68(1):169–76

[Effects of thyroid–stimulating hormone on adenylate cyclase of well differentiated human carcinoma and adjacent normal tissues] Jap TS, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;42(4):241–8 (Eng. Abstr.) **(Chi)**

PHYSIOLOGY

Effect of TRH on TSH glycosylation and biological action. Weintraub BD, et al. **Ann N Y Acad Sci** 1989;553:205–13 (49 ref.)

Physiological regulation of thyrotropin. Brabant G, et al. **Biochimie** 1989 Feb;71(2):293–301 (65 ref.)

Estrogen increases c–myc RNA in human thyroids. Hanau S, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):791–4

The expression of the microsomal/peroxidase autoantigen in human thyroid cells is thyrotrophin–dependent. Chiovato L, et al. **Clin Exp Immunol** 1989 Apr;76(1):47–53

Direct effect of methimazole on rat thyroidal cell growth induced by thyrotropin and insulin–like growth factor I. Taniguchi S, et al. **Endocrinology** 1989 May;124(5):2046–51

Regulation of lipolysis during the neonatal period. Importance of thyrotropin. Marcus C, et al. **J Clin Invest** 1988 Nov;82(5):1793–7

Thyrotropin: an endogenous regulator of the in vitro immune response. Kruger TE, et al. **J Immunol** 1989 Feb 1; 142(3):744–7

Prolactin and thyrotropin responses to nursing during the

early puerperium. Gehlbach DL, et al. **J Reprod Med** 1989 Apr;34(4):295–8

[Interhormonal relations in the dynamics of immune response during thyroidectomy] Fomicheva EE. **Fiziol Zh SSSR** 1989 Jan;75(1):131–7 (Eng. Abstr.) (Rus)

SECRETION

The role of glucocorticoids in the regulation of thyrotropin. Brabant A, et al. **Acta Endocrinol (Copenh)** 1989 Jul; 121(1):95–100

Clinical response of thyrotropin-secreting macroadenoma to bromocriptine and radiotherapy. McLellan AR, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):189–94

Effect of norfloxacin, a new quinolone, on GABA modulation of TRH-induced TSH release from perifused rat pituitaries. Roussel JP, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):481–7

Hormonal control of thyrotropin and growth hormone secretion in a human thyrotrope pituitary adenoma studied in vitro. Simard M, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):283–90

Thyrotropin-releasing hormone in geriatric patients: intravenous versus intranasal application. Szabolcs I, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):149–54

Pituitary-thyroid interaction: effects of thyroid hormone, non thyroidal illness and various agents on TSH secretion. Vagenakis AG. **Acta Med Austriaca** 1988;15 Suppl 1:52–6 (28 ref.)

Recovery period of hypersecretion of thyroid-stimulating hormone in patients with congenital hypothyroidism treated with thyroid hormone. Sato H, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Dec;29(6):833–6

Studies of the thyrotropic function of the adenopituitary of the offspring of rats treated during pregnancy with dopaminergic agents. Boyadjieva M, et al. **Acta Physiol Pharmacol Bulg** 1988;14(3):63–6

Involvement of D1 dopamine receptors in the control of TSH secretion in the male rat. Andersson K. **Acta Physiol Scand** 1989 Apr;135(4):449–57

ACTH deficiency and TSH hypersecretion in a patient with empty sella turcica. Komatsu M, et al. **Am J Med Sci** 1989 Mar;297(3):186–9

Cell swelling induced by the permeant molecules urea or glycerol induces immediate high amplitude thyrotropin and prolactin secretion by perifused adenohypophyseal cells. Wang X, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):471–5

Lack of effect of histamine in influencing prolactin and TSH release from anterior pituitary gland in vitro. Basile V, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):449–52

Inhibition of thyrotropin secretion during prolonged administration of exogenous thyrotropin-releasing hormone in normal man. Castro N, et al. **Boll Soc Ital Biol Sper** 1989 May;65(5):437–43

Syndrome of inappropriate secretion of TSH [letter] **Clin Endocrinol (Oxf)** 1988 Apr;28(4):445–7

Restoration of normal thyrotrophin secretion reduces the abnormally high serum glutathione S-transferase levels found in patients receiving thyroxine replacement therapy. Gow SM, et al. **Clin Endocrinol (Oxf)** 1988 Sep; 29(3):249–56

Effects of thyroid hormones (T4,T3), bromocriptine and Triac on inappropriate TSH hypersecretion. Salmela PI, et al. **Clin Endocrinol (Oxf)** 1988 May;28(5):497–507

Cholinergic regulation of thyrotropin secretion in male rats. Männistö PT, et al. **Eur J Pharmacol** 1988 Nov 22; 157(2–3):117–24

Effects of calcitonin, 1,25(OH)2 vitamin D3 and trifluoperazine on thyrotropic secretion and their mutual interactions. Zofková I, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):268–74

Delayed suppression of TSH secretion during thyroxine administration. Erfurth EM, et al. **Horm Metab Res** 1989 Mar;21(3):161–3

Opiate receptor subtypes in the regulation of thyrotropin and prolactin secretion in the rat. Rauhala P, et al. **Horm Res** 1988;29(5–6):218–22

Thyrotoxicosis secondary to TSH secreting pituitary tumour. Menon PS, et al. **J Assoc Physicians India** 1988 Apr; 36(4):283–5

Receptor density determines secretory response patterns mediate by inositol lipid-derived second messengers. Comparison of thyrotropin-releasing hormone and carbamylcholine actions in thyroid-stimulating hormone-secreting mouse pituitary tumor cells. Winicov I, et al. **J Biol Chem** 1989 Jun 5;264(16):9438–43

Treatment of hyperthyroidism due to inappropriate secretion of thyrotropin with the somatostatin analog SMS 201–995. Beck-Peccoz P, et al. **J Clin Endocrinol Metab** 1989 Jan; 68(1):208–14

Thyrotropin and prolactin responses to thyrotropin-releasing hormone in premenstrual syndrome. Casper RF, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):608–12

The somatostatin analog octreotide inhibits the secretion of growth hormone (GH)-releasing hormone, thyrotropin, and GH in man. Masuda A, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):906–9

Clinical and molecular studies of a thyrotropin-secreting pituitary adenoma. Samuels MH, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1211–5

Effects of the somatostatin analog BIM 23014 on the secretion of growth hormone, thyrotropin, and digestive peptides in normal men. Sassolas G, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):239–46

A case of hyperthyroidism caused by the syndrome of inappropriate secretion of thyroid stimulating hormone: association of primary hypergonadotropic hypogonadism. Sato M, et al. **Jpn J Med** 1989 Mar–Apr;28(2):223–7

Regulation of GH and TSH release from hyperplastic and ectopic pituitaries: effects of dopamine in vitro. Esquifino AI, et al. **Life Sci** 1989;45(3):199–206

Effects of ingestion of glucose on GH and TSH secretion: evidence for stimulation of somatostatin release from the hypothalamus by acute hyperglycemia in normal man and its impairment in acromegalic patients. Shibasaki T, et al. **Life Sci** 1989;44(6):431–8

Morphology of a plurihormonal human pituitary adenoma composed of FSH, LH and TSH cells. Tașcă C. **Morphol Embryol (Bucur)** 1988 Jul–Sep;34(3):189–94

Influence of age on the control of thyrotropin secretion by thyrotropin-releasing hormone in the male rat. Donda A, et al. **Neuroendocrinology** 1989 Apr;49(4):389–94

Response of a GH- and TSH-secreting pituitary adenoma to a somatostatin analogue (SMS 201–995): evidence that GH and TSH coexist in the same cell and secretory granules. Malarkey WB, et al. **Neuroendocrinology** 1989 Mar;49(3):267–74

The TSH secretion in the human pituitary adenomas. Trouillas J, et al. **Pathol Res Pract** 1988 Sep;183(5):596–600

Further studies of serotonergic activity in the regulation of the cold stimulated thyrotropin secretion in male rats. Männistö PT, et al. **Pharmacol Toxicol** 1988 Aug;63(2):65–9

Cachectin alters anterior pituitary hormone release by a direct action in vitro. Milenkovic L, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2418–22

Role of neuromedin B in the control of the release of thyrotropin in the rat. Rettori V, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4789–92

[Effect of cimetidine on the regulation of the secretion of GH, PRL, ACTH and TSH during insulin-induced hypoglycemia] Wu ZL, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Dec;27(12):750–3, 783–4 (Eng. Abstr.) (Chi)

[New elements in the diagnosis and treatment of thyrotropic pituitary adenomas with hyperthyroidism] Linquette M, et al. **Bull Acad Natl Med** 1989 Feb;173(2):217–20; discussion 221–2 (Eng. Abstr.) (Fre)

[Irradiation of TSH-secreting hypophyseal adenomas] Tschakert H, et al. **Strahlenther Onkol** 1989 Jan; 165(1):47–51 (Eng. Abstr.) (Ger)

[A study of the secretion capacity of TSH-beta in patients with pituitary disorders] Hara H, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Oct 20;64(10):1038–50 (Eng. Abstr.) (Jpn)

[Studies on pulsatile secretion of thyrotropin and prolactin in hypogonadal women] Minakami H, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Nov 20; 64(11):1169–74 (Eng. Abstr.) (Jpn)

[Aging and endocrine function: analysis of the physiological profile from laboratory database] Ichihara K, et al. **Rinsho Byori** 1988 Oct;36(10):1169–76 (Jpn)

[Biochemistry of manic-depressive disorder (II)—neuropeptides and neuroendocrinological research] Takahashi R, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul; 33(8):1300–6 (36 ref.) (Jpn)

[Diurnal rhythm of thyrotropin secretion in women in the third trimester of uncomplicated pregnancy] Bielawski J, et al. **Ginekol Pol** 1988 Feb;59(2):86–8 (Eng. Abstr.) (Pol)

[Relations between therapeutic and hormonal response to neuroleptics of patients with paranoid schizophrenia. I. Secretion of thyrotropin and thyroid hormones] Horodnicki JM, et al. **Psychiatr Pol** 1988 Jul–Aug; 22(4):279–84 (Eng. Abstr.) (Pol)

[Relation of therapeutic and hormonal reactions to thymoleptics in patients with endogenous depression. I. Secretion of thyrotropin and thyroid hormones] Horodnicki JM, et al. **Psychiatr Pol** 1988 May–Jun; 22(3):198–204 (Eng. Abstr.) (Pol)

STANDARDS

Assessment of the bioactivity of human and bovine thyrotrophin preparations using a porcine thyroid cell bioassay. Reader SC, et al. **Ann Clin Biochem** 1989 Jul;26 (Pt 4):341–5

URINE

Measurement of thyroid stimulating hormone (TSH) in human urine. Yoshida K, et al. **Endocrinol Jpn** 1988 Oct; 35(5):733–9

THYROTROPIN ALPHA SUBUNIT see **GLYCOPROTEIN HORMONES, ALPHA SUBUNIT**

THYROTROPIN RECEPTORS see **RECEPTORS, THYROTROPIN**

THYROTROPIN RELEASING HORMONE

Thyrotropin-releasing hormone. Biomedical significance. **Ann N Y Acad Sci** 1989;553:1–631

ADMINISTRATION & DOSAGE

Effects of vasoactive intestinal polypeptide, TRH, and dopamine on prolactin secretion in estrogen-primed postmenopausal women. Couzinet B, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):235–40

Effects of repetitive administration of thyrotropin-releasing hormone at short intervals in acromegaly. Losa M, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):383–9

Thyrotropin-releasing hormone in geriatric patients: intravenous versus intranasal application. Szabolcs I, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):149–54

Thyrotropin-releasing hormone antagonism of ethanol inebriation. Knutsen H, et al. **Alcoholism (N Y)** 1989 Jun; 13(3):365–70

A comparison of the effects of intrathecally administered 5-hydroxytryptamine and thyrotropin-releasing hormone on renal and muscle sympathetic nerve activity. Yusof AP, et al. **J Auton Nerv Syst** 1988 Sep;23(3):181–7

Gonadotropin release by clinically nonfunctioning and gonadotroph pituitary adenomas in vivo and in vitro: relation to sex and effects of thyrotropin-releasing hormone, gonadotropin-releasing hormone, and bromocriptine. Kwekkeboom DJ, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1128–35

Age-related differences in the spontaneous and thyrotropin-releasing hormone-stimulated release of prolactin and thyrotropin in ovariectomized rats. Wang PS, et al. **Neuroendocrinology** 1989 Jun;49(6):592–6

ANALOGS & DERIVATIVES

Effect of TRH and DN-1417 on the vestibulo-ocular reflex in squirrel monkeys. Ishii M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:61–6

Medullary sites for TRH analogue stimulation of gastric contractility in the rat. Garrick T, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1011–5

Intracisternal injection of a TRH analogue stimulates gastric luminal serotonin release in rats. Stephens RL, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G377–83

Influence of TRH and TRH analogues RGH-2202 and DN-1417 on cultured ventral spinal cord neurons. Askanas V, et al. **Ann N Y Acad Sci** 1989;553:325–36

TRH-catecholamine interactions in brain and spinal cord. Bennett GW, et al. **Ann N Y Acad Sci** 1989;553:106–20

Use of receptor antagonist in elucidating the mechanism of action of TRH in GH3 cells. Drummond AH, et al. **Ann N Y Acad Sci** 1989;553:197–204 (37 ref.)

High-dose TRH treatment of neuromuscular diseases: summary of mechanisms and critique of clinical studies. Summary of section IX. Engel WK. **Ann N Y Acad Sci** 1989;553:462–72 (50 ref.)

Comparative metabolism and conformation of TRH and its analogues. Griffiths EC, et al. **Ann N Y Acad Sci** 1989; 553:217–31 (35 ref.)

Use of TRH analogues in motorneurone disease. Guiloff RJ. **Ann N Y Acad Sci** 1989;553:399–421 (41 ref.)

L-6-ketopiperidine-2-carbonyl-L-leucyl-L-proline amide as a novel thyrotropin releasing hormone analogue with improving effects on impaired central nervous systems functions. Oka M, et al. **Arzneimittelforschung** 1989 Mar; 39(3):297–303

First pharmacological characterization of TRH receptors linked to phosphoinositide hydrolysis in GH3 pituitary cells using agonist specificity of eight TRH analogs. Sharif NA, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1306–11

Conformational properties of 2,3-methanopyroglutamic acid in peptides: NMR and x-ray diffraction studies. Mapelli C, et al. **Biopolymers** 1989 Jan;28(1):123–8

Effect of chronic intra-accumbens administration of the TRH analogue CG3509 on histamine-induced behaviour in the rat. Bristow LJ, et al. **Br J Pharmacol** 1989 Jul;97(3):745–52

Involvement of 5-HT2 receptors in the behaviours produced by intrathecal administration of selected 5-HT agonists and the TRH analogue (CG 3509) to rats. Fone KC, et al. **Br J Pharmacol** 1989 Mar;96(3):599–608

Effect of intrathecal proctolin administration on the behaviour evoked by the thyrotrophin-releasing hormone (TRH) analogue (RX 77368) and the indoleamine, TRH, substance P and calcitonin gene-related peptide levels and choline acetyltransferase activity in the rat spinal cord. Fone KC, et al. **Brain Res** 1988 Sep 13;460(1):22–8

Treatment with the thyrotropin-releasing hormone analog CG3703 restores magnesium homeostasis following traumatic brain injury in rats. Vink R, et al. **Brain Res** 1988 Sep 13;460(1):184–8

Clinical study of oral administration of DN-1417, a TRH analog, in patients with intractable epilepsy. Inanaga K, et al. **Epilepsia** 1989 Jul–Aug;30(4):438–45

The TSH, T4, T3 and prolactin responses to consecutive infusions of a potent and stabilized thyrotrophin releasing hormone analogue, RX77368, in man. Eckland DJ, et al. **Eur J Clin Invest** 1988 Aug;18(4):405–9

Interaction of thyrotropin-releasing hormone (TRH) and serotonin in cardiovascular control. Elam R, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):19–25

Medullary sites of action of the TRH analogue, RX 77368, for stimulation of gastric acid secretion in the rat. Ishikawa T, et al. **Gastroenterology** 1988 Dec;95(6):1470–6

Effects of TRH and DN-1417 on high potassium-evoked acetylcholine release from rat basal forebrain slices

determined directly by radioimmunoassay. Suzuki T, et al. **Gen Pharmacol** 1989;20(2):239–42

Subacute administration of a TRH analogue (RX77368) in motorneuron disease: an open study. Modarres-Sadeghi H, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep; 51(9):1146–57

Determination of L-6-keto-piperidine-2-carbonyl-L-leucyl-L-proline amide (RGH-2202), a new analog of thyrotropin-releasing hormone, in plasma by radioimmunoassay. Terauchi Y, et al. **J Pharmacobiodyn** 1988 Jun;11(6):459–64

Measurement of thyrotropin-releasing hormone and its metabolites. Emerson CH. **Methods Enzymol** 1989; 168:567–73

TRH analog administration increases endogenous TRH levels in the central nervous system. Prasad C, et al. **Neuroendocrinology** 1989 Feb;49(2):219–22

Abnormal locomotion in the rat after administration of a TRH analogue. Clarke KA, et al. **Neuropeptides** 1989 Jul; 14(1):65–70

Comparative behavioural and biochemical effects of repeated intrathecal administration of thyrotrophin-releasing hormone (TRH) or two analogues of TRH in adult rats. Fone KC, et al. **Neuropharmacology** 1989 Aug;28(8):867–75

Antagonism of dermorphin-induced catalepsy with naloxone, TRH-analog CG3703 and the benzodiazepine antagonist, Ro 15-1788. Paakkari P, et al. **Neuropharmacology** 1988 Oct;27(10):1007–12

Effects of a new analogue of thyrotropin-releasing hormone on pentobarbital-induced sleeping time in rodents. Yamamoto M, et al. **Neuropharmacology** 1989 Aug; 28(8):863–6

A comparison of the motor behaviours produced by the intrathecal administration of thyrotrophin-releasing hormone and thyrotrophin-releasing hormone analogues in the conscious rat. Johnson JV, et al. **Neuroscience** 1989; 29(2):463–70

Selective inhibition of the binding of 3H-(3-MeHis2) thyrotropin releasing hormone to rat amygdala membranes by some naturally occurring cannabinoids. Bhargava HN, et al. **Peptides** 1988 Jul-Aug;9(4):771–5

TRH analog MK-771 reverses neurochemical and learning deficits in medial septal-lesioned rats. Horita A, et al. **Peptides** 1989 Jan-Feb;10(1):121–4

Propranolol and methylatropine antagonize the cardiovascular effects produced by microinjection of the TRH analog MK-771 into the preoptic suprachiasmatic nucleus. Sills MA, et al. **Peptides** 1988 Jul-Aug;9(4):893–8

Thyroid hormone modulation of TRH precursor levels in rat hypothalamus, pituitary, thyroid and blood. Simard M, et al. **Peptides** 1989 Jan-Feb;10(1):145–55

Intracisternal injection of TRH precursor, TRH-glycine, stimulates gastric acid secretion in rats. Stephens RL Jr, et al. **Regul Pept** 1989 Apr;25(1):51–60

Effects of a new thyrotropin-releasing hormone derivative on behavioral changes after focal cerebral ischemia in rats. Yamamoto M, et al. **Stroke** 1989 Mar;20(3):362–6

[Effect of thyroliberin and its analog on the respiratory activity of intact and vagotomized rabbits] Batyrgozhina AA, et al. **Fiziol Zh SSSR** 1989 Mar;75(3):409–12 **(Rus)**

[Thyroliberin and its analog lacking hormonal properties stimulate respiratory center activity in the frog Rana temporaria] Gurskil IE, et al. **Zh Evol Biokhim Fiziol** 1988 Jul-Aug;24(4):545–50 (Eng. Abstr.) **(Rus)**

ANALYSIS

Distribution of TRH-like immunoreactivity with special reference to coexistence with other neuroactive compounds. Hökfelt T, et al. **Ann N Y Acad Sci** 1989; 553:76–105 (151 ref.)

Neurons containing a N-terminal sequence of the TRH-prohormone (preproTRH53–74) are present in a unique location of the midbrain periaqueductal gray of the rat. Van den Bergh P, et al. **Brain Res** 1988 Sep 27; 461(1):53–63

Radioimmunoassay for thyrotropin-releasing hormone precursor peptide, Lys-Arg-Gln-His-Pro-Gly-Arg-Arg. Mitsuma T, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):53–60

Alteration by thyroid hormones of TRH in the rat median eminence: role of the hypothalamic paraventricular nucleus. Yamada M, et al. **Exp Clin Endocrinol** 1989 Apr; 93(1):104–10

Characterization of thyrotropin-releasing hormone in the central nervous system of African lungfish. Kreider MS, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):115–22

Decrease of hypothalamic TRH levels but not plasmatic TSH levels after ablation of submandibular salivary glands in the rat. Boyer R, et al. **J Biol Buccale** 1988 Jun;16(2):69–74

Processing of thyrotropin-releasing hormone prohormone (pro-TRH) generates pro-TRH-connecting peptides. Identification and characterization of prepro-TRH-(160-169) and prepro-TRH-(178-199) in the rat nervous system. Bulant M, et al. **J Biol Chem** 1988 Nov 15;263(32):17189–96

A novel peptide, pyroglutamylglutamylproline amide, in the rabbit prostate complex, structurally related to thyrotrophin-releasing hormone. Cockle SM, et al. **J Biol Chem** 1989 May 15;264(14):7788–91

Altered balance between thyrotropin-releasing hormone and dopamine in prolactinomas and other pituitary tumors compared to normal pituitaries. Le Dafniet M, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):267–71

Measurement of thyrotropin-releasing hormone and its metabolites. Emerson CH. **Methods Enzymol** 1989; 168:567–73

Assay of glutaminylpeptide cyclase. Koger JB, et al. **Methods Enzymol** 1989;168:358–65

Distribution of Thyroliberin (TRH)- and 12-O-tetradecanoylphorbol 13-acetate (TPA)-activated adenylyl cyclase in normal and neoplastic tissue with special reference to the prostate. Gordeladze JO, et al. **Mol Cell Endocrinol** 1988 Aug;58(2-3):287–90

Thyroid hormone regulation of neurons staining for a pro-TRH-derived cryptic peptide sequence in the rat hypothalamic paraventricular nucleus. Liao N, et al. **Neuroendocrinology** 1989 Aug;50(2):217–21

Cold stress or a pyrogenic substance elevates thyrotropin-releasing hormone levels in the rat hypothalamus and induces thermogenic reactions. Lin MT, et al. **Neuroendocrinology** 1989 Aug;50(2):177–81

The distribution of histidyl-proline diketopiperazine (cyclo(His-Pro)) in discrete rat hypothalamic nuclei. Yamada M, et al. **Neuropeptides** 1989 May-Jun;13(4):221–3

Thyrotropin-releasing hormone-like immunoreactive neurons in rabbit medulla oblongata. Iwase M, et al. **Neurosci Lett** 1988 Sep 23;92(1):30–3

Pro-TRH-connecting peptides in the rat pancreas during ontogenesis. Dutour A, et al. **Peptides** 1989 May-Jun; 10(3):523–7

High-performance liquid chromatographic assay for thyrotropin releasing hormone and benzyl alcohol in injectable formulation. Rao GN, et al. **Pharm Res** 1987 Feb;4(1):38–41

Identification, characterization and localization of thyrotropin-releasing hormone precursor peptides in perinatal rat pancreas. Wu P, et al. **Regul Pept** 1988 Sep; 22(4):347–60

[Effect of amygdaloid kindling on thyrotropin-releasing hormone, somatostatin, cholecystokinin and substance P contents of the amygdala/piriform cortex and hippocampus of rats] Kajita S, et al. **No To Shinkei** 1988 Jun;40(6):525–30 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Suppression of the pressor effect of centrally administered thyrotropin-releasing hormone under halothane, pentobarbital and flunitrazepam anaesthesia. Tanaka H, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):535–40

The interaction of benzodiazepines with thyrotropin-releasing hormone receptors on clonal pituitary cells. Joels LA, et al. **Br J Pharmacol** 1989 Feb; 96(2):450–6

Inhibition of the binding and the behavioral effects of thyrotropin-releasing hormone (TRH) by the triazolobenzodiazepines. Kozlowski MR. **Pharmacol Biochem Behav** 1988 May;30(1):73–5

Characterization and purification of a placental protein that inactivates GnRH, TRH and angiotensin II. Siler-Khodr TM, et al. **Placenta** 1989 May-Jun;10(3):283–96

BIOSYNTHESIS

Development of serotonin, substance P and thyrotrophin-releasing hormone in mouse medullary raphe grown in organotypic tissue culture: developmental regulation by serotonin. Jonakait GM, et al. **Brain Res** 1988 Nov 15;473(2):336–43

Thyroid hormones modulate thyrotropin-releasing hormone biosynthesis in tissues outside the hypothalamic-pituitary axis of male rats. Simard M, et al. **Endocrinology** 1989 Jul; 125(1):524–31

Dexamethasone stimulates thyrotropin-releasing hormone production in a C cell line. Tavianini MA, et al. **Mol Endocrinol** 1989 Apr;3(4):605–10

BLOOD

Thyrotropin-releasing hormone effects on phosphatidylinositol metabolism and binding in rat pituitary and retina. Naseem SM. **Biochem Int** 1989 Jan;18(1):203–10

Comparison of seven sensitive thyrotropin (TSH) assays to predict a suppressed thyroliberin (TRH) test. Body JJ, et al. **Clin Chem** 1989 Mar;35(3):497–8

Effects of carbamazepine on pituitary responsiveness to luteinizing hormone-releasing hormone, thyrotropin-releasing hormone, and metoclopramide in epileptic patients. Isojärvi JI, et al. **Epilepsia** 1989 Jan-Feb; 30(1):50–6

CEREBROSPINAL FLUID

Elevation of immunoreactive CSF TRH in depressed patients. Banki CM, et al. **Am J Psychiatry** 1988 Dec; 145(12):1526–31

CHEMICAL SYNTHESIS

Synthesis and central nervous system actions of thyrotropin-releasing hormone analogs containing a 1-substituted 2-oxoimidazolidine moiety. Maeda H, et al. **Int J Pept Protein Res** 1989 Jun;33(6):403–11

DIAGNOSTIC USE

Prolactin responses to hypoglycemia and thyrotropin-releasing hormone in anorexia nervosa. Karibe C, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):442–7

Endocrine responses to growth hormone-releasing hormone, thyrotropin-releasing hormone and corticotropin-releasing hormone in depression. Lesch KP, et al. **Acta Psychiatr Scand** 1989 Jun;79(6):597–602

Hypothalamic-pituitary-gonadal axis in major depressive disorders. Undén F, et al. **Acta Psychiatr Scand** 1988 Aug; 78(2):138–46

Relationship of age to TSH response to TRH in depressed men. Wahby VS, et al. **Acta Psychiatr Scand** 1988 Sep; 78(3):283–8

Serum concentrations of thyroxine and 3,5,3'-triiodothyronine in dogs before and after administration of freshly reconstituted or previously frozen thyrotropin-releasing hormone. Rosychuk RA, et al. **Am J Vet Res** 1988 Oct;49(10):1722–5

Comparison of GH responses after human GHRH-44 amide administration and TRH-induced TSH release in depressed patients. Lesch KP, et al. **Biol Psychiatry** 1989 Jan 15; 25(2):235–8

TRH test in schizophrenic patients and controls. Roy A, et al. **Biol Psychiatry** 1989 Feb 15;25(4):523–6

Neuroendocrine aspects of primary endogenous depression. V. Serum prolactin measures in patients and matched control subjects. Rubin RT, et al. **Biol Psychiatry** 1989 Jan; 25(1):4–21

The DST and TRH test in bulimia nervosa. Kaplan AS, et al. **Br J Psychiatry** 1989 Jan;154:86–92

Fine adjustment of thyroxine replacement dosage: comparison of the thyrotrophin releasing hormone test using a sensitive thyrotrophin assay with measurement of free thyroid hormones and clinical assessment. Carr D, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):325–33

Borderline hyperprolactinemia in infertile women: evaluation of the prolactin response to thyrotropin releasing hormone and double-blind placebo-controlled treatment with bromocriptine. Glazener CM, et al. **Gynecol Endocrinol** 1987 Dec;1(4):373–8

TRH test in cluster headache. Bussone G, et al. **Headache** 1988 Aug;28(7):462–4

A revised interpretation of the TRH test results in female depressed patients. Part II: Prolactin responses. Relationships with sex hormones, corticosteroid state, age, monoamines and amino acid levels. Maes M, et al. **J Affective Disord** 1989 Mar-Jun;16(2-3):215–21

A revised interpretation of the TRH test results in female depressed patients. Part I: TSH responses. Effects of severity of illness, thyroid hormones, monoamines, age, sex hormonal, corticosteroid and nutritional state. Maes M, et al. **J Affective Disord** 1989 Mar-Jun;16(2-3):203–13

Prolactin and thyroid status in prepubertal children with mild to moderate obesity. Lala VR, et al. **J Am Coll Nutr** 1988 Oct;7(5):361–6

TRH tests in a healthy elderly population. Demonstration of gender differences. Targum SD, et al. **J Am Geriatr Soc** 1989 Jun;37(6):533–6

Decreased basal and stimulated thyrotropin secretion in healthy elderly men. van Coevorden A, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):177–85

Neuroendocrine markers in periodic catatonia [letter] McCall WV. **J Clin Psychiatry** 1989 Mar;50(3):109

Role of smoking in goiter morphology and thyrotropin response to TRH in untreated goitrous women. Lio S, et al. **J Endocrinol Invest** 1989 Feb;12(2):93–7

TRH-induced prolactin release in unipolar depressed patients and controls. Roy A, et al. **J Psychiatr Res** 1988;22(3):221–5

Neuroendocrine aspects of primary endogenous depression. VII. Logistic regression analysis of matched patient-control hormone data for discrimination between groups. Rubin RT, et al. **J Psychiatr Res** 1988;22(4):297–307

Why are the sensitive TSH assay and TRH stimulation test frequently low in very old euthyroid subjects? Caradoc-Davies TH, et al. **N Z Med J** 1988 Oct 26;101(856 Pt 1):662–3

Thyrotropin and prolactin responses to different doses of thyrotropin-releasing hormone in depression. Masturzo P, et al. **Neuropsychobiology** 1989;20(3):120–5

Sensitivity and specificity of TRH stimulation test in depressed and nondepressed adolescents. Khan AU. **Psychiatry Res** 1988 Jul;25(1):11–7

Abnormal thyroid stimulating hormone, prolactin, and growth hormone responses to thyrotropin releasing hormone in abstinent alcoholic men with cerebral atrophy. Marchesi C, et al. **Psychiatry Res** 1989 Apr;28(1):89–96

Luteinizing hormone responses to luteinizing hormone releasing hormone (LHRH) in acute mania and the effects of lithium on LHRH and thyrotrophin releasing hormone tests in volunteers. Hunter R, et al. **Psychol Med** 1989 Feb; 19(1):69–77

Effect of oral administration of haloperidol on plasma thyrotropin concentrations in men. Magliozzi JR, et al. **Psychoneuroendocrinology** 1989;14(1-2):125–30

Anorexia nervosa with elevated serum TSH. Matsubayashi S, et al. **Psychosom Med** 1988 Nov-Dec;50(6):600–6

[The dexamethasone suppression test and TRH stimulation test in endogenous depressives, schizophrenics, and normal volunteers] Ho SL, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;41(4):271–80 (Eng. Abstr.) **(Chi)**

[Ultra-sensitive TSH and the TRH test in the follow-up of thyroid and pituitary diseases] Mathe C, et al. **Ann Endocrinol (Paris)** 1989;50(1):73–6 (Eng. Abstr.) **(Fre)**

[The TSH, TRH test] Von zur Mühlen A, et al.

Internist (Berlin) 1988 Aug;29(8):533–7 (14 ref.) **(Ger)**

[Stimulation of prolactin secretion with thyroliberin (TRH). In vivo and in vitro studies of metastatic breast cancer] Holtkamp W, et al. **Onkologie** 1988 Dec;11(6):267–71 (Eng. Abstr.) **(Ger)**

[The negative TRH test: new differential assessment using a sensitive TSH assay] Lind P, et al. **Schweiz Med Wochenschr** 1988 Aug 9;118(31–32):1130–4 (Eng. Abstr.) **(Ger)**

[Negative TRH test: differentiated reevaluation using sensitive TSH determination (letter)] Marko P. **Schweiz Med Wochenschr** 1988 Oct 29;118(43):1589 **(Ger)**

[Value of determining the basal TSH level with the TSH radioimmunoassay of AdW of East Germany in the staged diagnosis of disorders of thyroid function] Stegner S, et al. **Z Arztl Fortbild (Jena)** 1989;83(10):519–22 **(Ger)**

[Behavior of the basal and stimulated serum level of thyroid stimulating hormone and determination of thyroxine, thyroxine- binding capacity and free thyroxine index in females with chronic uremia] Rudolf K, et al. **Z Gesamte Inn Med** 1988 Oct 15;43(20):590–2 (Eng. Abstr.) **(Ger)**

[Changes in serum levels of glycoprotein hormone alpha subunits in patients with alphoma-type pituitary tumors during LHRH and TRH stimulation tests] Waśko R. **Endokrynol Pol** 1989;40(1):1–8 (Eng. Abstr.) **(Pol)**

[Diagnostic results of the TRH stimulation test. Comparative study in different definitions of endogenous depression] Gómez Angulo L, et al. **Arch Neurobiol (Madr)** 1988 May–Jun;51(3):167–74 (Eng. Abstr.) **(Spa)**

[Changes in thyroid function expressed by the calculation of the area under TRH–TSH curve] Herrera JD, et al. **Medicina (B Aires)** 1987;47(5):464–70 (Eng. Abstr.) **(Spa)**

GENETICS

Decrease in gene expression of substance P and thyrotropin releasing hormone (TRH) in rat medulla oblongata following treatment with an antidepressive drug. Schalling M, et al. **Acta Physiol Scand** 1988 Nov;134(3):455–6

Controversies in TRH biosynthesis and strategies towards the identification of a TRH precursor. Jackson IM. **Ann N Y Acad Sci** 1989;553:7–13 (48 ref.)

Pro–TRH gene expression and precursor peptides in rat brain. Observations by hybridization analysis and immunocytochemistry. Lechan RM, et al. **Ann N Y Acad Sci** 1989;553:29–59

Characterization and expression of the gene–encoding rat thyrotropin–releasing hormone (TRH). Lee SL, et al. **Ann N Y Acad Sci** 1989;553:14–28

Identification and characterization of TRH–precursor peptides. Wu P. **Ann N Y Acad Sci** 1989;553:60–70

Triiodothyronine exerts direct cell–specific regulation of thyrotropin–releasing hormone gene expression in the hypothalamic paraventricular nucleus. Dyess EM, et al. **Endocrinology** 1988 Nov;123(5):2291–7

Processing of thyrotropin–releasing hormone prohormone (pro–TRH) in the adult rat pancreas: identification and localization of pro–TRH–related peptides in beta–cells of pancreatic islets. Leduque P, et al. **Endocrinology** 1989 Sep; 125(3):1492–7

Structure of the gene encoding rat thyrotropin releasing hormone. Lee SL, et al. **J Biol Chem** 1988 Nov 15; 263(32):16604–9

Ontogeny of thyrotropin–releasing hormone gene expression in the rat diencephalon. Burgunder JM, et al. **Neuroendocrinology** 1989 Jun;49(6):631–40

ISOLATION & PURIFICATION

Rapid separation of tritiated thyrotropin–releasing hormone and its catabolic products from mouse and human central nervous system tissues by high–performance liquid chromatography with radioactive flow detection. Turner JG, et al. **J Chromatogr** 1989 Feb 24;487(2):275–86

Thyrotrophin–releasing hormone–related polypeptides in rabbit prostate and semen are different from those in rabbit hypothalamus. Cockle SM, et al. **J Endocrinol** 1989 Jan; 120(1):31–6

METABOLISM

Receptor–stimulated system mediated interactions of neuropeptides in GH3 cells. Ogawa N, et al. **Adv Exp Med Biol** 1988;236:129–35

TRH: immunocytochemical distribution in vagal nuclei of the cat and physiological effects of microinjection. Hornby PJ, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G454–62

Comparative metabolism and conformation of TRH and its analogues. Griffiths EC, et al. **Ann N Y Acad Sci** 1989; 553:217–31 (35 ref.)

Pituitary TRH receptors. Hinkle PM. **Ann N Y Acad Sci** 1989;553:176–87 (57 ref.)

Receptor binding and characterization of TRH receptors. Johnson WA, et al. **Ann N Y Acad Sci** 1989;553:137–46 (28 ref.)

Quantitative autoradiography of TRH receptors in discrete brain regions of different mammalian species. Sharif NA. **Ann N Y Acad Sci** 1989;553:147–75 (130 ref.)

Inhibitors of TRH–degrading enzymes. Wilk S. **Ann N Y Acad Sci** 1989;553:252–64 (43 ref.)

TRH and TRH receptors in the spinal cord. Winokur A, et al. **Ann N Y Acad Sci** 1989;553:314–24 (59 ref.)

The binding of 3H–(3–MeHis2) thyrotropin releasing hormone to brain and pituitary membranes of hyperthyroid rats. Bhargava HN, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:247–59

Effect of intrathecal proctolin administration on the behaviour evoked by the thyrotrophin–releasing hormone (TRH) analogue (RX 77368) and the indoleamine, TRH, substance P and calcitonin gene–related peptide levels and choline acetyltransferase activity in the rat spinal cord. Fone KC, et al. **Brain Res** 1988 Sep 13;460(1):22–8

Cotransmitters: differential effects of serotonin (5–HT)–depleting drugs on levels of 5–HT and TRH and their receptors in rat brain and spinal cord. Sharif NA, et al. **Brain Res** 1989 Feb 20;480(1–2):365–71

Ontogenetic development of thyrotropin–releasing hormone (TRH)–immunoreactive structures in the brain of the mallard embryo. Józsa R, et al. **Cell Tissue Res** 1989 Mar; 255(3):657–62

Changes in brain thyrotropin–releasing hormone in reversible and irreversible hemorrhagic shock in the rat. Mizobe T, et al. **Circ Shock** 1988 Nov;26(3):245–56

Identification and immunocytochemical localization of a new thyrotropin–releasing hormone precursor in rat brain. Merchenthaler I, et al. **Endocrinology** 1989 Apr; 124(4):1888–97

Thyrotropin–releasing hormone (TRH)–Gly conversion to TRH in rat ventral prostate is inhibited by castration and aging. Pekary AE, et al. **Endocrinology** 1989 Aug; 125(2):679–85

In vivo hypothalamic release of thyrotropin–releasing hormone after electrical stimulation of the paraventricular area: comparison between push–pull perfusion technique and collection of hypophysial portal blood. Rondeel JM, et al. **Endocrinology** 1989 Aug;125(2):971–5

An immunocytochemical study of thyrotropin releasing hormone in the porcine, ovine and rodent pineal gland. Lew GM. **Histochemistry** 1989;91(1):43–6

Effects of opioid peptides on thyrotropin–releasing hormone release from the rat caecum in vitro. Mitsuma T, et al. **Horm Metab Res** 1989 Jun;21(6):301–4

Processing of thyrotropin–releasing hormone prohormone (pro–TRH) generates pro–TRH–connecting peptides. Identification and characterization of prepro–TRH–(160–169) and prepro–TRH–(178–199) in the rat nervous system. Bulant M, et al. **J Biol Chem** 1988 Nov 15;263(32):17189–96

Thyrotrophin–releasing hormone (TRH)–induced growth hormone secretion in fowl: binding of TRH to pituitary membranes. Harvey S, et al. **J Mol Endocrinol** 1989 Jul; 3(1):23–32

Regulation of thyrotropin releasing hormone degrading enzymes in rat brain and pituitary by L–3,5,3'–triiodothyronine. Suen CS, et al. **J Neurochem** 1989 Mar;52(3):884–8

Thyrotropin releasing hormone in the pancreas of newborn rats from streptozotocin–treated mothers. Strbák V, et al. **Life Sci** 1989;44(12):779–87

TRH analog administration increases endogenous TRH levels in the central nervous system. Prasad C, et al. **Neuroendocrinology** 1989 Feb;49(2):219–22

Presence of a particulate thyrotropin–releasing hormone–degrading pyroglutamate aminopeptidase activity in rat liver. Scharfmann R, et al. **Neuroendocrinology** 1989 Apr;49(4):442–8

Physiological evidence for alpha 1–adrenergic facilitatory control of the cold–induced TRH release in the rat, obtained by push–pull cannulation of the median eminence. Arancibia S, et al. **Neurosci Lett** 1989 May 22; 100(1–3):169–74

Interactions of thyrotropin–releasing hormone (TRH) with neurotensin and dopamine in the central nucleus of the amygdala during stress ulcer formation in rats. Henke PG, et al. **Neurosci Lett** 1988 Aug 15;91(1):95–100

Co–existence of TRH with mesotocin in the same axon terminals of the bullfrog pars nervosa as revealed by double labeling immunocytochemistry. Shioda S, et al. **Neurosci Lett** 1989 Mar 13;98(1):25–8

Thyroid hormone modulation of TRH precursor levels in rat hypothalamus, pituitary, thyroid and blood. Simard M, et al. **Peptides** 1989 Jan–Feb;10(1):145–55

Effects of hypothermia on thyrotropin–releasing hormone content in the rat brain. Okuda C, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):941–4

Binding of 3H–(3–MeHis2) thyrotropin–releasing hormone to spinal cord membranes of spontaneously hypertensive and Wistar–Kyoto normotensive rats. Bhargava HN, et al. **Pharmacology** 1988;37(6):349–55

The effects of hemorrhagic shock on thyrotropin–releasing hormone and its receptors in discrete regions of rat brain. Ono T, et al. **Regul Pept** 1989 May;25(2):215–22

[Studies on TRH–binding protein in rat serum] Mori M, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Mar 20; 65(3):174–81 (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

TRH pharmacokinetics and nerve stimulation evoked prostatic fluid secretion during TRH infusion in the dog. Liberman C, et al. **Acta Endocrinol (Copenh)** 1989 Feb; 120(2):134–42

Intra– and extravascular turnover of thyrotrophin–releasing hormone in normal man. Iversen E. **J Endocrinol** 1988 Sep; 118(3):511–6

Thyrotropin releasing hormone uptake into serum and cerebrospinal fluid following intravenous or subcutaneous administration. Brooks BR, et al. **Neurol Res** 1988 Dec; 10(4):236–8

PHARMACOLOGY

Simultaneous inhibition by pirenzepine of the GH responses to GnRH and TRH in insulin–dependent diabetics and in patients with major depression. Coiro V, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):143–8

Long–term effects of thyrotropin–releasing hormone and histidyl–proline diketopiperazine on the maturation of homeothermia and mitochondrial enzyme activities in neonatal rats. Miyamori C, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):575–81

Effect of norfloxacin, a new quinolone, on GABA modulation of TRH–induced TSH release from perifused rat pituitaries. Roussel JP, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):481–7

Effect of TRH and DN–1417 on the vestibulo–ocular reflex in squirrel monkeys. Iahii M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:61–6

Hyperthermia and antinociceptive activity of thyrotropin–releasing hormone and morphine following central administration in rats. Zhukov VN, et al. **Acta Physiol Pharmacol Bulg** 1988;14(2):18–23

Gestation–dependent effects of the combined treatment of glucocorticoids and thyrotropin–releasing hormone on surfactant production by fetal rabbit lung. Oulton M, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):961–7

TRH and BAY K 8644 synergistically stimulate prolactin release but not 45Ca2+ uptake. Pachter JA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C633–40

TSH response to TRH in depression with and without panic attacks. Gillette GM, et al. **Am J Psychiatry** 1989 Jun; 146(6):743–8

Hemodynamic and respiratory effects of thyrotropin–releasing hormone and epinephrine in anaphylactic shock. Muelleman RL, et al. **Ann Emerg Med** 1989 May;18(5):534–41

Influence of TRH and TRH analogues RGH–2202 and DN–1417 on cultured ventral spinal cord neurons. Askanas V, et al. **Ann N Y Acad Sci** 1989;553:325–36

TRH–catecholamine interactions in brain and spinal cord. Bennett GW, et al. **Ann N Y Acad Sci** 1989;553:106–20

Thyrotropin–releasing hormone and central nervous system trauma. Faden AI, et al. **Ann N Y Acad Sci** 1989;553:380–4 (23 ref.)

Effects of TRH in circulatory shock and central nervous system ischemia. Holaday JW, et al. **Ann N Y Acad Sci** 1989;553:370–9 (82 ref.)

Effects of TRH on blood flow and the microcirculation. Koskinen LO. **Ann N Y Acad Sci** 1989;553:353–69 (73 ref.)

Functional interactions between TRH and 5–hydroxytryptamine (5–HT) and proctolin in rat brain and spinal cord. Marsden CA, et al. **Ann N Y Acad Sci** 1989; 553:121–34

Central nervous system action of TRH to influence gastrointestinal function and ulceration. Taché Y, et al. **Ann N Y Acad Sci** 1989;553:269–85 (102 ref.)

Liver cell necrosis and regeneration following injections of carbon tetrachloride. Effects of the thyrotropin–releasing hormone and somatostatin. Myren J, et al. **APMIS** 1989 Apr;97(4):334–42

A pharmacological study of the cardiovascular effects of TRH–T in haemorrhagic shock in rats. Guarini S, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:65–76

Effects of thyrotropin–releasing hormone analogues on body shaking and prolactin levels in estrogen–primed and nonprimed rats. Yamada K, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:235–46

Effects of thyrotropin–releasing hormone and its analogue L–6–ketopiperidine–2–carbonyl–leucyl–L–prolin–amide on behaviour and electroencephalogram. Sarkadi A, et al. **Arzneimittelforschung** 1988 Aug;38(8):1134–8

First pharmacological characterization of TRH receptors linked to phosphoinositide hydrolysis in GH3 pituitary cells using agonist specificity of eight TRH analogs. Sharif NA, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1306–11

Rapid transient elevations of cytosolic calcium triggered by thyrotropin releasing hormone in individual cells of the pituitary line GH3B6. Winiger BP, et al. **Biochem J** 1988 Oct 1;255(1):161–7

Effect of nerve growth factor and thyrotropin releasing hormone on cholinergic neurones in developing rat brain reaggregate cultures lesioned with ethylcholine mustard aziridinium. Atterwill CK, et al. **Biochem Pharmacol** 1989 May 15;38(10):1631–8

TRH effect on chlordiazepoxide sedation [letter] Garbutt JC, et al. **Biol Psychiatry** 1989 Apr 1;25(7):983–5

Inhibition of thyrotropin secretion during prolonged administration of exogenous thyrotropin–releasing hormone in normal man. Custro N, et al. **Boll Soc Ital Biol Sper** 1989 May;65(5):437–43

TRH–induced blood flow and mean arterial pressure changes in the rabbit are not dependent on the anaesthetic used. Hugoson–Seligsohn EE, et al. **Br J Pharmacol** 1989 May; 97(1):190–6

Potentiation by TRH of the effect of antidepressants in the forced–swimming test, involvement of dopaminergic and

opioid systems. Reny-Palasse V, et al. **Br J Pharmacol** 1989 May;97(1):197–205

Intra-hypothalamic injection of thyrotropin-releasing hormone suppresses brown fat thermogenesis in the anaesthetized rat. Amir S, et al. **Brain Res** 1989 Jan 30; 478(2):361–4

Diacylglycerol modulates action potential frequency in GH3 pituitary cells: correlative biochemical and electrophysiological studies. Gammon CM, et al. **Brain Res** 1989 Feb 13;479(2):217–24

Large enhancement of excitatory postsynaptic potentials and currents by thyrotropin-releasing hormone (TRH) in frog spinal motoneurones. Lacey G, et al. **Brain Res** 1989 May 29;488(1–2):80–8

TRH fails to antagonize the acute paralytic effects of intrathecal dynorphin A and substance P antagonists in the rat. Martinez-Arizala A, et al. **Brain Res** 1988 Nov 15; 473(2):385–8

TRH stimulation and L-glutamic acid inhibition of proximal gastric motor activity in the rat dorsal vagal complex. Raybould HE, et al. **Brain Res** 1989 Aug 28;495(2):319–28

Calcitonin inhibits the rise of intracellular calcium induced by thyrotropin-releasing hormone in GH3 cells. Epand RM, et al. **Cell Calcium** 1989 Apr;10(3):145–9

Morphometric evaluation of subcellular changes induced by in vivo TRH treatment in the pituitary gland of Rana perezi: effects on prolactin and thyrotropic cells. Malagón MM, et al. **Cell Tissue Res** 1989;256(2):391–8

Non-specific response of serum growth hormone to thyrotropin-releasing hormone in diabetics. Pan CY, et al. **Chin Med J [Engl]** 1989 Jan;102(1):41–4

Effect of thyrotropin releasing hormone on calcitonin [letter] Mahler C, et al. **Clin Endocrinol (Oxf)** 1988 Jan;28(1):145

Effects of domperidone and thyrotropin-releasing hormone on secretion of luteinizing hormone and prolactin during the luteal phase and following induction of luteal regression in sheep. Deaver DR, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):95–102

The influence of methimazole on the thyrotrophic and peripheral activity of thyrotrophin and thyrotrophin-releasing hormone in the chick embryo and growing chicken. Iqbal A, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):291–8

Synergism and diurnal variations of human growth hormone-releasing factor (1–29)NH2 and thyrotropin-releasing factor on growth hormone release in dairy calves. Lapierre H, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):207–14

Effect of thyrotropin releasing hormone injection on blood growth hormone (GH), TSH and growth hormone releasing hormone (GHRH) concentrations in cancer patients. Kamijo K, et al. **Endocrinol Jpn** 1988 Dec; 35(6):827–31

Thyrotropin (TSH)-releasing hormone-stimulated TSH release and TSH concentration in the guinea pig pituitary, as determined by a heterologous radioimmunoassay. DeVito WJ, et al. **Endocrinology** 1989 Mar;124(3):1190–7

Inotropic effect of thyrotropin-releasing hormone on the guinea pig myocardium. Hasegawa J, et al. **Endocrinology** 1988 Dec;123(6):2805–11

Dopamine withdrawal and addition of thyrotropin-releasing hormone stimulate membrane translocation of protein kinase-C and phosphorylation of an endogenous 80K substrate in enriched lactotrophs. Martínez de la Escalera G, et al. **Endocrinology** 1989 Sep;125(3):1168–73

The dynamics of arachidonic acid liberation and prolactin release: a comparison of thyrotropin-releasing hormone, angiotensin II, and neurotensin stimulation in perifused rat anterior pituitary cells. Ross PC, et al. **Endocrinology** 1988 Nov;123(5):2445–53

Effects of aging on the in vivo release of thyrotropin (TSH), triiodothyronine, and thyroxine induced by TSH-releasing hormone in the cynomolgus monkey (Macaca fascicularis). Yoshida T, et al. **Endocrinology** 1989 Mar;124(3):1287–93

Secretion-stimulating and secretion-inhibiting hormones stimulate high-affinity pertussis-toxin-sensitive GTPases in membranes of a pituitary cell line. Offermanns S, et al. **Eur J Biochem** 1989 Mar 15;180(2):283–7

Thyrotropin-releasing hormone (TRH) evokes chloride secretion via cholinergic pathways in the guinea-pig ileum. Carey HV, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):183–6

Inhibitors of 1,2-diacylglycerol kinase potentiate the TRH-induced stimulation of Ca2+-activated K+ current. Mollard P, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):71–9

Effect of maternal hormone treatment on lung protein leakage and lung function of preterm newborn rabbits. Ikegami M, et al. **Eur Respir J [Suppl]** 1989 Mar; 2(3):16s–20s

Immunohistochemical and behavioral analysis of spinal lesions induced by a substance P antagonist and protection by thyrotropin releasing hormone. Freedman J, et al. **Exp Brain Res** 1989;74(2):279–92

Effect of simultaneously administered iopanoic acid and thyrotropin releasing hormone (TRH) on thyroid hormone metabolism in euthyroid subjects. Szabolcs I, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):365–8

Thyrotropin releasing hormone augments growth of spinal cord transplants in oculo. Henschen A, et al. **Exp Neurol** 1988 Oct;102(1):125–9

Central nervous system action of thyrotropin-releasing hormone to increase gastric mucosal blood flow in the rat. Thiefin G, et al. **Gastroenterology** 1989 Aug;97(2):405–11

Several hypothalamic peptides stimulate in vitro thyrotropin secretion by pituitaries of anuran amphibians. Denver RJ. **Gen Comp Endocrinol** 1988 Dec;72(3):383–93

The effects of TRH on plasma thyroid hormone levels of rainbow trout (Salmo gairdneri) and arctic charr (Salvelinus alpinus). Eales JG, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):333–9

Growth hormone release from chicken anterior pituitary cells in primary culture: TRH and hpGRF synergy, protein synthesis, and cyclic adenosine 3'5'-monophosphate. Perez FM, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):12–20

Triiodothyronine inhibition of thyrotropin-releasing hormone- and growth hormone-releasing factor-induced growth hormone secretion in anesthetized chickens. Scanes CG, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):477–84

Effects of TRH and DN-1417 on high potassium-evoked acetylcholine release from rat basal forebrain slices determined directly by radioimmunoassay. Suzuki T, et al. **Gen Pharmacol** 1989;20(2):239–42

Increased prolactin response to TRH in polycystic ovary syndrome with low basal prolactin values. Szilágyi A, et al. **Gynecol Endocrinol** 1988 Dec;2(4):313–7

Thyroid hormone response to thyrotropin releasing hormone after cold treatment during pre- and postnatal development in the domestic fowl. Decuypere E, et al. **Horm Metab Res** 1988 Aug;20(8):484–9

Effects of cold exposure or TRH on the serum TSH levels in the iron-deficient rat. Tang F, et al. **Horm Metab Res** 1988 Oct;20(10):616–9

Paradoxical growth hormone response following thyroid-stimulating hormone administration in the polycystic ovary syndrome. Anapliotou ML, et al. **Horm Res** 1989;31(3):119–24

Synergism of cortisol and thyrotropin-releasing hormone in lung maturation in fetal sheep. Liggins GC, et al. **J Appl Physiol** 1988 Oct;65(4):1880–4

Dorsal medullary serotonin and gastric motility: enhancement of effects by thyrotropin-releasing hormone. McCann MJ, et al. **J Auton Nerv Syst** 1988 Nov;25(1):35–40

Thyrotropin-releasing hormone: effects on identified neurons of the dorsal vagal complex. McCann MJ, et al. **J Auton Nerv Syst** 1989 Mar;26(2):107–12

Selective autonomic nervous control of thyroid hormone and calcitonin secretion during metabolic and cardiorespiratory activation by intracisternal thyrotropin-releasing hormone (TRH). Riedel W, et al. **J Auton Nerv Syst** 1988 Sep; 24(1–2):157–73

Microneurographic analysis of thyrotropin-releasing hormone effects on sympathetic outflow in human muscle nerves. Tsunoda S, et al. **J Auton Nerv Syst** 1988 Sep; 23(3):207–11

Thyrotropin-releasing hormone and phorbol esters stimulate sphingomyelin synthesis in GH3 pituitary cells. Evidence for involvement of protein kinase C. Kolesnick RN. **J Biol Chem** 1989 Jul 15;264(20):11688–92

Receptor density determines secretory response patterns mediate by inositol lipid-derived second messengers. Comparison of thyrotropin-releasing hormone and carbamylcholine actions in thyroid-stimulating hormone-secreting mouse pituitary tumor cells. Winicov I, et al. **J Biol Chem** 1989 Jun 5;264(16):9438–43

Selective suppression of pressor and sympathetic responses to centrally infused TRH in hypothyroid rats. Buñag RD, et al. **J Cardiovasc Pharmacol** 1988 Jul;12(1):51–7

Adenosine triphosphate, bradykinin, and thyrotropin-releasing hormone regulate the intracellular Ca2+ concentration and the 45Ca2+ efflux of human thyrocytes in primary culture. Raspé E, et al. **J Cell Physiol** 1989 Sep;140(3):608–14

Effect of thyrotropin-releasing hormone on cerebral blood flow in conscious rat. Kondoh Y, et al. **J Cereb Blood Flow Metab** 1989 Apr;9(2):196–203

Thyrotropin and prolactin responses to thyrotropin-releasing hormone in premenstrual syndrome. Casper RF, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):608–12

The electrophysiological effects of thyrotropin-releasing hormone are similar in human TSH- and prolactin-secreting pituitary cells. Dufy B, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1178–85

Heterogeneity of growth hormone (GH) release by individual pituitary adenoma cells from acromegalic patients, as determined by the reverse hemolytic plaque assay: effects of SMS 201-995, GH-releasing hormone and thyrotropin-releasing hormone. Hofland LJ, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):613–20

Effects of thyrotropin-releasing hormone and gonadotropin-releasing hormone on inositol phospholipid turnover in endocrinologically inactive pituitary adenomas and prolactinomas. Levy A, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):122–6

Effect of thyrotropin-releasing hormone (TRH) on the chemiluminescence (CL) activity of human mononuclear cells. Lersch C, et al. **J Clin Lab Immunol** 1989 Feb; 28(2):69–71

The anterior pituitary content of neuromedin U-like immunoreactivity is altered by thyrotrophin-releasing hormone and thyroid hormone status in the rat. Domin J, et al. **J Endocrinol** 1989 Aug;122(2):471–6

In-vitro control of growth hormone secretion by synthetic releasing factors in young and adult ducks (Anas platyrhynchos). Foltzer-Jourdainne C, et al. **J Endocrinol** 1988 Dec;119(3):421–9

Hypothalamic hormones that release growth hormone stimulate hepatic 5'-monodeiodination activity in the chick embryo. Kühn ER, et al. **J Endocrinol** 1988 Aug; 118(2):233–6

Effect of lysine vasopressin on basal and TRH stimulated TSH and PRL release in normal men. Chiodera P, et al. **J Endocrinol Invest** 1988 Jul-Aug;11(7):497–500

Inhibitory influence of thyrotropin releasing hormone administration on growth hormone response to low doses of growth hormone-releasing hormone in normal man. Zanoboni A, et al. **J Endocrinol Invest** 1988 Jun;11(6):413–7

Role of calcium in thyrotrophin-releasing hormone-stimulated release of melanocyte-stimulating hormone from frog neurointermediate lobe. Lamacz M, et al. **J Mol Endocrinol** 1988 Sep;1(2):131–9

Inhibition of p-chlorophenylalanine-induced muricide behavior following TRH microinjection into the limbic structures in the rat. Puciłowski O, et al. **J Neural Transm** 1988;74(3):175–80

Impairment of stress-induced secretion of prolactin during development: effects of adrenalectomy, TRH and sulpiride. el Feki A, et al. **J Physiol (Paris)** 1988;83(1):36–42

A possible mechanism for the anti-depressant activity of thyrotropin releasing hormone. Horst WD, et al. **Life Sci** 1974 Sep 15;15(6):1073–82

The pharmacologic induction of prolactin release in the medial preoptic/suprachiasmatic nuclei-lesioned, estrogen-treated ovariectomized rat. Pan JT, et al. **Life Sci** 1988;43(23):1929–34

Effect of naloxone on TRH-induced PRL and TSH response in normal man. Rampinini A, et al. **Minerva Endocrinol** 1989 Apr-Jun;14(2):125–8

An analogue of creatine increases TRH-stimulated prolactin secretion and phosphoinositide hydrolysis in rat pituitary tumor cells. Pryor-Jones RA, et al. **Mol Cell Endocrinol** 1988 Aug;58(2-3):175–81

Ca2+ transients induced by thyrotropin-releasing hormone rapidly lose their ability to cause release of prolactin. Law GJ, et al. **Mol Endocrinol** 1989 Mar;3(3):539–46

Receptor number determines latency and amplitude of the thyrotropin-releasing hormone response in Xenopus oocytes injected with pituitary RNA. Straub RE, et al. **Mol Endocrinol** 1989 Jun;3(6):907–14

Paracoccidioidomycosis in the region of Botucatu (state of São Paulo, Brazil). Evaluation of serum thyroxine (T4) and triiodothyronine (T3) levels and of the response to thyrotropin releasing hormone (TRH). Kiy Y, et al. **Mycopathologia** 1988 Jul;103(1):3–9

Effects of a new TRH analogue, YM-14673 on a passive avoidance test as a possible criterion of improvement in cognitive disturbance in rodents. Yamamoto M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):262–7

Modulation of plasma glucose levels by thyrotropin-releasing hormone administered intracerebroventricularly in the rat. Marubashi S, et al. **Neuroendocrinology** 1988 Dec; 48(6):640–4

Differential effects of thyrotropin-releasing hormone on in vitro release of in vivo or in vitro newly synthesized and mature prolactin by lactating rat adenohypophyses. Further evidence for a sequential pattern of hormone release. Mena F, et al. **Neuroendocrinology** 1989 Feb;49(2):207–14

Effect of transient dopamine antagonism on thyrotropin-releasing hormone-induced prolactin secretion in the serotonin-blocked, estrogen-treated ovariectomized rats. Pan JT, et al. **Neuroendocrinology** 1989 Mar; 49(3):281–5

Spontaneous spiking activities of porcine para intermedia cells: effects of thyrotropin-releasing hormone. Trouslard J, et al. **Neuroendocrinology** 1989 Jul;50(1):33–43

Thyrotropin releasing hormone, cholecystokinin and endogenous opioids in the modulation of spinal reflexes in the rabbit. Clarke RW, et al. **Neuropharmacology** 1988 Dec;27(12):1279–84

Comparative behavioural and biochemical effects of repeated intrathecal administration of thyrotrophin-releasing hormone (TRH) or two analogues of TRH in adult rats. Fone KC, et al. **Neuropharmacology** 1989 Aug;28(8):867–75

Responses of anterior hypothalamic-preoptic thermosensitive neurons to thyrotropin releasing hormone and cyclo(His-Pro). Hori T, et al. **Neuropharmacology** 1988 Sep;27(9):895–901

Effects of thyrotropin-releasing hormone on phencyclidine- and ketamine-induced spinal depression in neonatal rats. Ohno Y, et al. **Neuropharmacology** 1988 Oct;27(10):1013–8

Trophic effect of various neuropeptides on the cultured ventral spinal cord of rat embryo. Iwasaki Y, et al. **Neurosci Lett** 1989 Jul 3;101(3):316–20

Thyrotropin releasing hormone (TRH) modified excitability of spinal cord dorsal horn cells. Jackson DA, et al. **Neurosci Lett** 1988 Oct 5;92(2):171–6

Thyrotropin-releasing hormone enhances event-related brain potentials and growth hormone release in man. Strollo F, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):346–53

Thyrotropin-releasing hormone stimulates porcine melanotrope cells in primary culture. Trouslard J, et al. **Neurosci Lett** 1989 Mar 27;98(2):234–9

Vasoconstrictor effects in spinal cord of the substance P antagonist [D-Arg, D-Trp7,9 Leu11]-substance P (Spantide) and somatostatin and interaction with thyrotropin releasing hormone. Freedman J, et al. **Neuroscience** 1988 Oct;27(1):267–78

A comparison of the motor behaviours produced by the intrathecal administration of thyrotrophin-releasing hormone and thyrotrophin-releasing hormone analogues in the conscious rat. Johnson JV, et al. **Neuroscience** 1989; 29(2):463–70

Opioid involvement in TRH-induced antinociception in the rat following intracerebral administration. Reny-Palasse V, et al. **Pain** 1989 Aug;38(2):193–201

Combined effects of corticosteroid, thyroid hormones, and beta-agonist on surfactant, pulmonary mechanics, and beta-receptor binding in fetal lamb lung. Warburton D, et al. **Pediatr Res** 1988 Aug;24(2):166–70

Substance P antagonist-induced spinal cord vasoconstriction: effects of thyrotropin-releasing hormone and substance P agonists. Helke CJ, et al. **Peptides** 1988 Nov–Dec; 9(6):1307–15

Neuropeptide-dopamine interactions. IV. Effect of thyrotropin-releasing hormone on striatal dopaminergic neurons. Ikegami H, et al. **Peptides** 1989 May–Jun; 10(3):681–5

Neuropeptides and septo-hippocampal neurons: electrophysiological effects and distributions of immunoreactivity. Lamour Y, et al. **Peptides** 1988 Nov–Dec;9(6):1351–9

Chronic administration of thyrotropin-releasing hormone enhances the sensitivity of lumbar motoneurons to 5-hydroxytryptophan in the rat. Tremblay LE, et al. **Pharmacol Biochem Behav** 1989 May;33(1):127–30

The effects of intracisternal thyrotropin releasing hormone (TRH) on gastroduodenal motility in the rat. Davison JS, et al. **Proc West Pharmacol Soc** 1988;31:25–7

TRH: behavioral and endocrine effects in man. Loosen PT. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S87–117 (184 ref.)

Respiratory and cardiovascular effects of thyrotropin-releasing hormone as modified by isoflurane, enflurane, pentobarbital and ketamine. Schaefer CF, et al. **Regul Pept** 1989 Mar;24(3):269–82

Role of inositol lipid second messengers in regulation of secretion: studies of thyrotropin-releasing hormone action in pituitary cells. Gershengorn MC. **Soc Gen Physiol Ser** 1989;44:1–15

Segmental synaptic depression caused by diisopropylphosphorofluoridate and sarin is reversed by thyrotropin-releasing hormone in the neonatal rat spinal cord. Das Gupta S, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):499–506

[Discrepancy between the basal level of TSH and the thyrotropic response to TRH during thyroid hormone treatment of differentiated thyroid cancers] Charrie A, et al. **Ann Endocrinol (Paris)** 1989;50(1):31–5 (Eng. Abstr.) (Fre)

[Effects on growth hormone secretion of a new somatostatin analogue (SMS 201-995) and nonspecific releasing hormones in patients with acromegaly] Candrina R. **Medicina (Firenze)** 1988 Apr–Jun;8(2):180–1 (Eng. Abstr.) (Ita)

[Alteration of CBF and CMRO2 and TRH effects on CBF in spinocerebellar degeneration. The positron emission tomography study] Harada K, et al. **Rinsho Shinkeigaku** 1988 May;28(5):563–8 (Eng. Abstr.) (Jpn)

[Thyroliberin-induced motor asymmetry as an indicator of the individual behavioral strategy of rats in a radial labyrinth] Efimova EV, et al. **Biol Nauki** 1989;(3):23–7 (Eng. Abstr.) (Rus)

[Effect of thyroliberin and its analog on the respiratory activity of intact and vagotomized rabbits] Batyrgozhina AA, et al. **Fiziol Zh SSSR** 1989 Mar;75(3):409–12 (Rus)

[Comparison of the effects of thyroliberin and ACTH4–7 PGP on the learning of rats during the solving of spatial orientation tasks] Chepurnova NE, et al. **Fiziol Zh SSSR** 1989 May;75(5):677–83 (Eng. Abstr.) (Rus)

[Thyroliberin and its analog lacking hormonal properties stimulate respiratory center activity in the frog Rana temporaria] Gurskil IE, et al. **Zh Evol Biokhim Fiziol** 1988 Jul–Aug;24(4):545–50 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Use of receptor antagonist in elucidating the mechanism of action of TRH in GH3 cells. Drummond AH, et al. **Ann N Y Acad Sci** 1989;553:197–204 (37 ref.)

Mechanism of signal transduction by TRH. Gershengorn MC. **Ann N Y Acad Sci** 1989;553:191–6 (22 ref.)

Role of TRH in seizure modulation. Kubek MJ, et al. **Ann N Y Acad Sci** 1989;553:286–303

Thyrotropin-releasing hormone (TRH), the thyroid axis, and affective disorder. Nemeroff CB, et al. **Ann N Y Acad Sci** 1989;553:304–10 (33 ref.)

TRH: historical aspects. Reichlin S. **Ann N Y Acad Sci** 1989; 553:1–6 (30 ref.)

Effect of TRH on TSH glycosylation and biological action. Weintraub BD, et al. **Ann N Y Acad Sci** 1989;553:205–13 (49 ref.)

Thyrotropin-releasing hormone (TRH) effects on spinal cord neuronal excitability. White SR, et al. **Ann N Y Acad Sci** 1989;553:337–50 (52 ref.)

Thyrotropin-releasing hormone (TRH): insulin-like action on glucoregulation. Amir S. **Biochem Pharmacol** 1988 Nov 15;37(22):4245–51 (90 ref.)

Immunological blockade of endogenous thyrotropin-releasing hormone impairs recovery from hyperglycemia in mice. Amir S, et al. **Brain Res** 1988 Oct 11;462(1):160–2

TRH analog YM-14673 improves outcome following traumatic brain and spinal cord injury in rats: dose-response studies. Faden AI. **Brain Res** 1989 May 8;486(2):228–35

Thyrotropin-releasing hormone: medullary site of action to induce gastric ulcers and stimulate acid secretion. Hernandez DE, et al. **Brain Res** 1988 Aug 30;459(1):148–52

Involvement of endogenous thyrotropin-releasing hormone in central regulation of the cardiovascular system after bleeding in conscious rats. Okuda C, et al. **Brain Res** 1988 Dec 6;474(2):399–402

Medullary sites of action of the TRH analogue, RX 77368, for stimulation of gastric acid secretion in the rat. Ishikawa T, et al. **Gastroenterology** 1988 Dec;95(6):1470–6

The effect of beta-endorphin on basal and TRH-stimulated TSH release in conscious male rats. Buydens P, et al. **Horm Metab Res** 1988 Nov;20(11):687–90

Regional dissociation of cyclic AMP and inositol phosphate formation in response to thyrotropin-releasing hormone in the rat brain. Iriuchijima T, et al. **J Neurochem** 1989 Jun;52(6):1944–6

Thyrotropin-releasing hormone stimulates the activity of the rat thyrotropin beta-subunit gene promoter transfected into pituitary cells. Carr FE, et al. **Mol Endocrinol** 1989 Apr; 3(4):717–24

Dopamine has no effect on thyrotropin-releasing hormone mobilization of calcium from intracellular stores in rat anterior pituitary cells. Law GJ, et al. **Mol Endocrinol** 1988 Oct;2(10):966–72

Solubilization and characterization of pituitary thyrotropin-releasing hormone receptors. Phillips WJ, et al. **Mol Pharmacol** 1989 Apr;35(4):533–40

Influence of age on the control of thyrotropin secretion by thyrotropin-releasing hormone in the male rat. Donda A, et al. **Neuroendocrinology** 1989 Apr;49(4):389–94

Role of the hypothalamic TRH in the regulation of its own receptors in rat anterior pituitaries. Mori M, et al. **Neuroendocrinology** 1988 Aug;48(2):153–9

Antagonism of neurotensin induced miosis by thyrotropin-releasing hormone (TRH) in rabbits. Hernandez DE, et al. **Neuropeptides** 1988 Nov–Dec; 12(4):225–8

Effect of the thyrotropin-releasing hormone analogue on an electrographic picture of sleep. Sidneva LN, et al. **Neurosci Behav Physiol** 1988 Jul–Aug;18(4):282–6

[Cascade unidirectional regulatory processes implemented by short-lived peptides (thyroliberin)] Ashmarin IP, et al. **Fiziol Zh SSSR** 1989 May;75(5):627–32 (Eng. Abstr.) (Rus)

[Role of vasopressin- and oxytocinergic cells of macrocellular rat hypothalamic nuclei in regulating the thyroid during the administration of thyroliberin] Krasnovskaia IA, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):67–70 (Eng. Abstr.) (Rus)

SECRETION

Involvement of DHP voltage-sensitive calcium channels and protein kinase C in thyroliberin (TRH) release by developing hypothalamic neurons in culture. Loudes C, et al. **Brain Res** 1988 Jul 26;456(2):324–32

Effect of endogenous opioid peptides on TRH release from rat stomach in vitro. Mitsuma T, et al. **Endocrinol Exp** 1989 Mar;23(1):11–6

Synthetic eel calcitonin stimulates thyrotropin releasing hormone release from rat stomach in vitro. Mitsuma T, et al. **Endocrinol Exp (Bratisl)** 1988 Sep;22(3):159–63

Effects of acetylcholine on thyrotropin-releasing hormone release from the rat caecum in vitro. Mitsuma T, et al. **Horm Metab Res** 1989 Jan;21(1):8–10

Effect of suckling on the in vivo release of thyrotropin-releasing hormone, dopamine and adrenaline in the lactating rat. Rondeel JM, et al. **Neuroendocrinology** 1988 Jul;48(1):93–6

THERAPEUTIC USE

Thyrotropin-releasing hormone in ALS. Are the results of clinical studies inconsistent? Brooke MH. **Ann N Y Acad Sci** 1989;553:422–30 (18 ref.)

A summary of the current position of TRH in ALS therapy. Brooks BR. **Ann N Y Acad Sci** 1989;553:431–61 (99 ref.)

High-dose TRH treatment of neuromuscular diseases: summary of mechanisms and critique of clinical studies. Summary of section IX. Engel WK. **Ann N Y Acad Sci** 1989;553:462–72 (50 ref.)

Use of TRH analogues in motorneurone disease. Guiloff RJ. **Ann N Y Acad Sci** 1989;553:399–421 (41 ref.)

TRH and diseases of the motor system. Munsat TL, et al. **Ann N Y Acad Sci** 1989;553:388–98 (79 ref.)

Protirelin (thyrotropin-releasing hormone) in amyotrophic lateral sclerosis. The role of androgens. Miller SC, et al. **Arch Neurol** 1989 Mar;46(3):330–5 (45 ref.)

Oral thyrotropin-releasing hormone treatment in inherited ataxias. Bonuccelli U, et al. **Clin Neuropharmacol** 1988 Dec; 11(6):520–8

Factors influencing effectiveness of thyrotropin-releasing hormone therapy for severe epilepsy in childhood: significance of serum prolactin levels. Matsumoto A, et al. **Epilepsia** 1989 Jan–Feb;30(1):45–9

Effects of thyrotropin-releasing hormone on cardiovascular function in dogs with hemorrhagic shock. Hu DY, et al. **J Tongji Med Univ** 1988;8(4):223–8

Fetal lung maturation: the combined use of corticosteroids and thyrotropin-releasing hormone. Morales WJ, et al. **Obstet Gynecol** 1989 Jan;73(1):111–6

Efficacy of thyrotropin-releasing hormone in the treatment of cerebellar ataxia. Takeuchi Y, et al. **Pediatr Neurol** 1989 Mar–Apr;5(2):107–10

Acute effects of high-dose thyrotropin releasing hormone infusions in Alzheimer's disease. Mellow AM, et al. **Psychopharmacology (Berlin)** 1989;98(3):403–7

Prevention of respiratory distress syndrome. Moya FR, et al. **Semin Perinatol** 1988 Oct;12(4):348–58 (126 ref.)

[Clinical, electrophysiologic and endocrine effects of the perfusion of high doses of TRH in amyotrophic lateral sclerosis] Gueguen B, et al. **Rev Neurol (Paris)** 1988; 144(11):704–9 (Eng. Abstr.) (Fre)

[Spinal mechanism of the antispastic action of TRH in patients with amyotrophic lateral sclerosis] Morin C, et al. **Rev Neurol (Paris)** 1988;144(11):701–3 (Eng. Abstr.) (Fre)

[Chronic experimentation with TRH administered intramuscularly in spinocerebellar degeneration. Double-blind cross-over study in 30 subjects] Filla A, et al. **Riv Neurol** 1989 Mar–Apr;59(2):83–8 (Eng. Abstr.) (Ita)

[Amine metabolites in cerebrospinal fluids and thyrotropin releasing hormone in spinocerebellar degeneration] Arai M. **Rinsho Shinkeigaku** 1988 Jun;28(6):595–604 (Eng. Abstr.) (Jpn)

[Treatment of amyotrophic lateral sclerosis with TRH] Klimek A, et al. **Neurol Neurochir Pol** 1988 May–Jun; 22(3):206–10 (Eng. Abstr.) (Pol)

THYROXINE

Thermal inactivation of L-thyroxin. Wortsman J, et al. **Clin Chem** 1989 Jan;35(1):90–2

ADMINISTRATION & DOSAGE

Effects of thyroid hormones on cartilage sulphation in sex-linked dwarf chickens. Hoshino S, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):107–11

Thyroid hormone stimulated glucose uptake in human mononuclear blood cells from normal persons and from patients with non-insulin-dependent diabetes mellitus. Kvetny J, et al. **Acta Endocrinol (Copenh)** 1989 Jun; 120(6):715–20

The effect of thyroxine, 3, 5-dimethyl-3 isopropyl-L-thyronine and iodized oil on fetal brain development in the iodine-deficient sheep. Mano MT, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):7–15

Evidence of hyperthyroidism in apparently euthyroid patients treated with levothyroxine. Banovac K, et al. **Arch Intern Med** 1989 Apr;149(4):809–12

Hyperthyroxinemia in patients receiving thyroid replacement therapy. Grund FM, et al. **Arch Intern Med** 1989 Apr; 149(4):921–4

Use of a sensitive thyrotropin assay for monitoring treatment with levothyroxine. Watts NB. **Arch Intern Med** 1989 Feb; 149(2):309–12

Fine adjustment of thyroxine replacement dosage: comparison of the thyrotrophin releasing hormone test using a sensitive thyrotrophin assay with measurement of free thyroid hormones and clinical assessment. Carr D, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):325–33

Thyroxine replacement therapy [letter] Jaeschke R. **Clin Endocrinol (Oxf)** 1988 Dec;29(6):689–90

Normalization of serum sex hormone-binding globulin by L-thyroxine in obese women. Belgorosky A, et al. **Medicina (B Aires)** 1988;48(4):361–4

Pre-operative use of thyroxine to reduce vascularity and bulk of hypervascular multinodular thyroid goitre. A case report. Mokoena T, et al. **S Afr J Surg** 1988 Dec; 26(4):169–70

[Current aspects of prevention of struma recurrence] Pimpl W, et al. **Zentralbl Chir** 1989;114(9):593–6 (Eng. Abstr.) (Ger)

[Changes of creatine phosphokinase and creatine phosphokinase isoenzyme in primary hypothyroidism before and after the treatment with thyroid hormone] Valente O, et al. **Rev Paul Med** 1988 May–Jun; 106(3):126–30 (Eng. Abstr.) (Por)

ADVERSE EFFECTS

Myocardial infarction: severe reversible ischemia and shock following excess thyroid administration in a man with normal coronary arteries [letter] Scarpinato L, et al. **Arch Intern Med** 1989 Mar;149(3):701

Acute myocardial infarction due to coronary spasm associated with L-thyroxine therapy. Hiasa Y, et al. **Clin Cardiol** 1989 Mar;12(3):161–3

Hirsutism due to the treatment with L-thyroxine in patients with thyroid pathology. Koloğlu S, et al. **Endocrinologie** 1988 Jul–Sep;26(3):179–85

Decreased bone density and thyroxine [letter] Heath H 3d. **JAMA** 1988 Oct 21;260(15):2219–20

Schizophrenia induced by restitution of thyroid function in a predisposed patient [letter] Kerwin R, et al. **Lancet** 1989 Aug 5;2(8658):339

Thyroxine replacement therapy and bone mineral density [letter] Heath H 3d. **Mayo Clin Proc** 1989 Feb;64(2):264–6

Subclinical hyperthyroidism: possible danger of overzealous thyroxine replacement therapy. Ross DS. **Mayo Clin Proc** 1988 Dec;63(12):1223–9 (33 ref.)

[Effect of thyroxine and estradiol on the ultrastructural image of the liver] Zwirska–Korczala K, et al. **Patol Pol** 1988 Apr–Jun;39(2):114–25 (Eng. Abstr.) **(Pol)**

ANALYSIS

Possibilities and limitations of continuous thyroxine measurement in an optode using the principle of homogeneous fluoroimmunoassay. Reck B, et al. **Analyst** 1988 Sep;113(9):1423–6

Amperometric enzyme–immunosensor based on ferrocene–mediated amplification. Yao T, et al. **Biosensors** 1987–88;3(5):307–12

One–step enzyme immunoassay for free thyroxin: results with dysalbuminemic sera and one serum containing autoantibodies to thyroxin. Sapin R, et al. **Clin Chem** 1989 May;35(5):888–9

Homogeneous enzyme immunoassay of thyroxine and triiodothyronine using glucose–6–phosphate dehydrogenase and horse radish peroxidase. Bhattacharya M, et al. **Indian J Exp Biol** 1988 Dec;26(12):990–2

Characterization of the binding of thyroxine to high density lipoproteins and apolipoproteins A–I. Benvenga S, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1067–72

Evaluation of enhanced luminescence immunoenzymometric assays (LIA) for ferritin and free T4. Armbruster DA, et al. **J Clin Lab Anal** 1989;3(2):78–83

[Determination of free thyroxine by adsorption on Sephadex gel] Forest JC, et al. **Ann Biol Clin (Paris)** 1989; 47(6):317–22 (Eng. Abstr.) **(Fre)**

[Thyroxine analog and thyroxine immune extraction in serum dilution with an FT4 analog one step RIA (Amerlex): model for the maintenance of "equilibrium" between the serum–binding and antibody–binding potentials] Passath A, et al. **Acta Med Austriaca** 1988;15 Suppl 1:20–1 **(Ger)**

BLOOD

Plasma transport of thyroid hormones. Byfield PG. **Acta Med Austriaca** 1988;15 Suppl 1:10–1 (4 ref.)

Plasma zinc concentration and thyroid function in hyperemetic pregnancies. Lao TT, et al. **Acta Obstet Gynecol Scand** 1988;67(7):599–604

Hyperiodothyroninaemia of neonates, its significance for thermogenesis. Slebodziński AB. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):364–79

Glucose intolerance in thyrotoxic rats: role of insulin, glucagon, and epinephrine. Ikeda T, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E843–9

Serum concentrations of thyroxine and 3,5,3'-triiodothyronine in dogs before and after administration of freshly reconstituted or previously frozen thyrotropin–releasing hormone. Rosychuk RA, et al. **Am J Vet Res** 1988 Oct;49(10):1722–5

Evaluation of normal triiodothyronine and tetraiodothyronine concentrations in llamas (Lama glama). Smith BB, et al. **Am J Vet Res** 1989 Aug;50(8):1215–9

Deprecating the diagnostic significance of free thyroxine levels in human serum. al–Awqati MA, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):335–9

Serum free thyroxine and free tri–iodothyronine in normal children. Butler J, et al. **Ann Clin Biochem** 1988 Sep;25 (Pt 5):536–9

Deprecating the diagnostic significance of free thyroxine levels in human serum [letter] Midgley JE. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):208–9

A simple time–resolved fluoroimmunoassay of total thyroxine in serum. Papanastasiou–Diamandis A, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):238–43

Comparative evaluation of serum thyroxine, free thyroxine and thyrotropin determinations in screening of thyroid function. Nuutila P, et al. **Ann Clin Res** 1988;20(3):158–63

Fluorescent derivative of cysteine–10 reveals thyroxine–dependent conformational modifications in human serum prealbumin. González G. **Arch Biochem Biophys** 1989 May 15;271(1):200–5

Serum thyroxine and thyroid stimulating hormone concentrations after treatment of congenital hypothyroidism. Abusrewil SS, et al. **Arch Dis Child** 1988 Nov;63(11):1368–71

Evidence of hyperthyroidism in apparently euthyroid patients treated with levothyroxine. Banovac K, et al. **Arch Intern Med** 1989 Apr;149(4):809–12

Triiodothyronine, thyroxine, and TSH response to dexamethasone in depressed patients and normal controls. Rupprecht R, et al. **Biol Psychiatry** 1989 Jan;25(1):22–32

Serum thyroxine change and clinical recovery in psychiatric inpatients. Southwick S, et al. **Biol Psychiatry** 1989 Jan; 25(1):67–74

Serum thyroid hormone levels of heifers grazing leucaena leucocephala in southern Taiwan. Huang JC, et al. **Chin J Physiol** 1988;31(1):23–9

Half–life of thyroxine in dogs: explanation for the diurnal plasma level variations? Minten J, et al. **Chronobiol Int** 1987;4(2):127–8

Binding of labeled thyroxin analog to serum proteins evaluated after radioimmunoassay of free thyroxin. Arevalo G. **Clin Chem** 1989 Mar;35(3):475–7

Low–normal concentrations of free thyroxin in serum in late pregnancy: physiological fact, not technical artefact. Ball R, et al. **Clin Chem** 1989 Sep;35(9):1891–6

A simplified strategy for testing thyroid function. Beaman JM, et al. **Clin Chem** 1989 May;35(5):828–30

Effect of albumin on results for the free–thyroxin index as estimated by the total T4/T3 uptake ratio [letter] Beck R, et al. **Clin Chem** 1989 Apr;35(4):706–7

One–step chemiluminescent immunoassay of free thyroxin with acridinium–ester–labeled thyroxin evaluated and compared with a two–step radioimmunoassay. Bounaud JY, et al. **Clin Chem** 1988 Dec;34(12):2556–60

Enzyme–linked immunosorbent assay for free thyroxin in human serum. Chui SH, et al. **Clin Chem** 1989 Aug; 35(8):1770–2

Direct and indirect techniques for free thyroxin compared in patients with nonthyroidal illness. I. Effect of free fatty acids. Csako G, et al. **Clin Chem** 1989 Jan;35(1):102–9

Direct and indirect techniques for free thyroxin compared in patients with nonthyroidal illness. II. Effect of prealbumin, albumin, and thyroxin–binding globulin. Csako G, et al. **Clin Chem** 1989 Aug;35(8):1655–62

Effect of thyroid hormone–binding proteins and fatty acids on modified analog assays of FT4 and FT3 in serum [letter] Ekins R. **Clin Chem** 1989 Apr;35(4):708–10

Direct determination of free thyroxin in undiluted serum by equilibrium dialysis/radioimmunoassay [letter] Ekins R. **Clin Chem** 1989 Mar;35(3):510–2

Multilayer fluorescent immunoassay technique. Grenner G, et al. **Clin Chem** 1989 Sep;35(9):1865–8

Homogeneous time–resolved fluoroimmunoassay of thyroxin in serum. Hemmilä I, et al. **Clin Chem** 1988 Nov; 34(11):2320–2

Intra–individual variation of serum thyroxin and triiodothyronine in pregnancy. Hölzel WG, et al. **Clin Chem** 1988 Oct;34(10):2063–5

Sources of imprecision in laboratories screening for congenital hypothyroidism: analysis of nine years of performance data. Jewell SE, et al. **Clin Chem** 1989 Aug; 35(8):1701–5

Concentration of free thyroxin in serum during nonthyroidal illness—calculation or measurement? Konno N, et al. **Clin Chem** 1989 Jan;35(1):159–63

Possible interference by amiodarone and desethylamiodarone in thyroxin assays. Law LK, et al. **Clin Chem** 1988 Oct; 34(10):2154

Interference in a luminometric enzyme–labeled analog assay for free T4. Lindstedt G, et al. **Clin Chem** 1988 Dec; 34(12):2581–2

Dependence of the thyroxin/thyroxin–binding globulin (TBG) ratio and the free thyroxin index on TBG concentrations. Nelson JC, et al. **Clin Chem** 1989 Apr; 35(4):541–4

Do nonesterified fatty acids displace thyroxin from its plasma binding sites in severe nonthyroidal illnesses? Nicolson RE, et al. **Clin Chem** 1989 Jun;35(6):931–4

Evaluation of four commercially available assays for free thyroxin. Ooi DS, et al. **Clin Chem** 1988 Nov;34(11):2302–7

Four nonisotopic immunoassays of free thyroxin evaluated. Perdrisot R, et al. **Clin Chem** 1989 Jan;35(1):115–20

"Stratus" fluorometric enzyme immunoassay system evaluated for determination of free thyroxin. Sapin R, et al. **Clin Chem** 1988 Oct;34(10):2159–60

Clinical evaluation of Amerlite's one–step immunoassay for determining free thyroxin. Seghers J, et al. **Clin Chem** 1988 Oct;34(10):2160

Diagnostic performance of a modified free–thyroxin assay in subjects with anomalies in their binding proteins. van der Sluijs Veer G, et al. **Clin Chem** 1989 Mar;35(3):493

Performance of the SimulTRAC free T4/TSH assay during pregnancy and treatment with amiodarone [letter] Vanderborght J, et al. **Clin Chem** 1988 Nov;34(11):2387–8

Effect of serum albumin concentration on free thyroxin (Amerlex FT4) values in healthy non–pregnant and pregnant women [letter] Sakata S, et al. **Clin Chim Acta** 1988 Aug 31;176(2):225–6

Association between increased concentrations of free thyroxine and unsaturated free fatty acids in non–thyroidal illnesses: role of albumin. Tikanoja SH, et al. **Clin Chim Acta** 1989 Jan 13;179(1):33–43

The significance of the initial FT4–index for the management of single daily dose methimazole treatment of hyperthyroidism. Arntzenius AB, et al. **Clin Endocrinol (Oxf)** 1988 Sep;29(3):239–47

Seasonal levels of cortisol, triiodothyronine and thyroxine in male axis deer. Bubenik GA, et al. **Comp Biochem Physiol [A]** 1989;92(4):499–503

Levels of T4, T3 and cortisol in the blood serum of the European bison (Bison bonasus) in the winter period. Gill J. **Comp Biochem Physiol [A]** 1989;93(3):567–9

Effects of photoperiod, melatonin implants and castration on molting and on plasma thyroxine, testosterone and prolactin levels in the European badger (Meles meles). Maurel D, et al. **Comp Biochem Physiol [A]** 1989;93(4):791–7

The effect of yohimbine on plasma levels of T3, T4 and cortisol in xylazine–immobilized white–tailed deer. Bubenik GA, et al. **Comp Biochem Physiol [C]** 1989;92(2):315–8

The relationship between insulin–like growth factor–1, growth hormone, thyroid hormones and insulin in chickens selected for growth. Goddard C, et al. **Domest Anim Endocrinol** 1988 Apr;5(2):165–76

The influence of methimazole on the thyrotrophic and peripheral activity of thyrotrophin and thyrotrophin–releasing hormone in the chick embryo and growing chicken. Iqbal A, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):291–8

Postnatal changes in circulating concentrations of growth hormone, somatomedin C and thyroid hormones in pigs. Scanes CG, et al. **Domest Anim Endocrinol** 1987 Oct; 4(4):253–7

Binding parameters of rat liver nuclear receptors for T3 after partial hepatectomy or bilateral adrenalectomy and serum T4 and T3 levels. Brtko J, et al. **Endocrinol Exp** 1988 Dec; 22(4):211–20

Assessment of the relationship between serum thyroid hormone levels and peripheral metabolism in patients with anorexia nervosa. Bannai C, et al. **Endocrinol Jpn** 1988 Jun; 35(3):455–62

Human recombinant interleukin–1 beta decreases plasma thyroid hormone and thyroid stimulating hormone levels in rats. Dubuis JM, et al. **Endocrinology** 1988 Nov; 123(5):2175–81

Serum thyrotropin concentrations are more highly correlated with serum triiodothyronine concentrations than with serum thyroxine concentrations in thyroid hormone–infused thyroidectomized rats. Emerson CH, et al. **Endocrinology** 1989 May;124(5):2415–8

Circulating thyronines and peripheral monodeiodination in lactating rats. Valverde C, et al. **Endocrinology** 1989 Mar; 124(3):1340–4

Effects of human thyroxine–binding globulin and prealbumin on the reverse flow of thyroid hormones from extravascular space into the bloodstream in rabbits. Wahl R, et al. **Endocrinology** 1989 Mar;124(3):1428–37

Effects of aging on the in vivo release of thyrotropin (TSH), triiodothyronine, and thyroxine induced by TSH–releasing hormone in the cynomolgus monkey (Macaca fascicularis). Yoshida T, et al. **Endocrinology** 1989 Mar;124(3):1287–93

The effect of lead on thyroid function in children. Siegel M, et al. **Environ Res** 1989 Aug;49(2):190–6

Thyroid hormone periodicity in healthy adult geldings. Duckett WM, et al. **Equine Vet J** 1989 Mar;21(2):123–5

Thyroid hormone concentrations in epileptic patients. Larkin JG, et al. **Eur J Clin Pharmacol** 1989;36(3):213–6

Thyroid hormone binding in early pregnancy and the risk of spontaneous abortion. Ross HA, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):129–36

Evaluation of thyroid gland activity by hormone assays and flow cytometry in rats. Zbinden G. **Exp Cell Biol** 1988; 56(4):196–200

Effects of photoperiod, temperature and testosterone–treatment on plasma T3 and T4 levels in the Djungarian hamster, Phodopus sungorus. Masuda A, et al. **Experientia** 1989 Jan 15;45(1):102–3

The relationship between basal metabolic rate (BMR) and concentrations of plasma thyroid hormones in fasting cockerels. Sechman A, et al. **Folia Biol (Krakow)** 1989; 37(1–2):83–90

The effect of severe starvation and captivity stress on plasma thyroxine and triiodothyronine concentrations in an antarctic bird (emperor penguin). Groscolas R, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):108–17

Luteinizing hormone–releasing hormone induces thyroxine release together with testosterone in the neotenic axolotl Ambystoma mexicanum. Jacobs GF, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):502–5

Smoltification and seawater adaptation in Atlantic salmon (Salmo salar): plasma prolactin, growth hormone, and thyroid hormones. Prunet P, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):355–64

Seasonal changes in body weight, fat depots, and plasma levels of thyroxine and growth hormone in free–living great tits (Parus major) and willow tits (P. montanus). Silverin B, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):404–16

Smoltification and seawater adaptation in coho salmon (Oncorhynchus kisutch): plasma prolactin, growth hormone, thyroid hormones, and cortisol. Young G, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):335–45

Birth weight and thyroxine–binding globulin in pre–eclampsia. Lao TT, et al. **Gynecol Obstet Invest** 1989; 28(1):8–10

Maternal free thyroxine and thyroxine–binding globulin during pregnancy ending in congenital malformations in the offspring. Skjöldebrand Sparre LS. **Gynecol Obstet Invest** 1989;27(1):19–21

Neonatal hypothyroxinemia. Malik GK, et al. **Indian J Pediatr** 1988 Nov–Dec;55(6):967–71

The relationship between composition of gain and circulating hormones in growing beef bulls fed three dietary crude protein levels. Anderson PT, et al. **J Anim Sci** 1988 Dec; 66(12):3059–67

Thyroid hormones in non–insulin dependent diabetes mellitus. Bhu N, et al. **J Assoc Physicians India** 1988 Dec; 36(12):713–4

Simple method for the determination of hormonal iodine and exogenous iodine from X–ray contrast media drugs. Mezzetti T, et al. **J Chromatogr** 1988 Dec 29;434(1):308–14

Normal cellular uptake of thyroxine from serum of patients with familial dysalbuminemic hyperthyroxinemia or elevated thyroxine–binding globulin. Sarne DH, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1166–70

Normal free thyroxine in critical nonthyroidal illnesses measured by ultrafiltration of undiluted serum and equilibrium dialysis. Surks MI, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):1031–9

Further demonstration of the ambient temperature

dependence of the annual biological cycles in the edible dormouse, Glis glis. Jallageas M, et al. **J Comp Physiol [B]** 1989;159(3):333–8

Effect of maternal hypothyroxinaemia during fetal life on the calmodulin-regulated phosphatase activity in the brain of the adult progeny in the rat. Ruiz de Elvira MC, et al. **J Endocrinol** 1989 May;121(2):331–5

The relation of serum T4 and TSH with the urinary iodine excretion. Moulopoulos DS, et al. **J Endocrinol Invest** 1988 Jun;11(6):437–9

Free thyroxine values in dried blood spots on filter paper in newborns are related to both gestational age and birth body weight. Pacchiarotti A, et al. **J Endocrinol Invest** 1988 Jul–Aug;11(7):515–9

Thyroid function tests in acute viral hepatitis: relative reduction in serum thyroxine levels due to T4-TBG binding inhibitors in patients with severe liver cell necrosis. Pagliacci MC, et al. **J Endocrinol Invest** 1989 Mar; 12(3):149–53

Serum thyroxine levels in schizophrenic and affective disorder diagnostic subgroups. Mason JW, et al. **J Nerv Ment Dis** 1989 Jun;177(6):351–8

Serum thyroid hormone concentrations fluctuate in cats with hyperthyroidism. Peterson ME, et al. **J Vet Intern Med** 1987 Jul–Sep;1(3):142–6

Studies on changes of thyroid hormones in various liver diseases: usefulness of free thyroid hormones as liver function test. Takahashi H, et al. **Jpn J Med** 1989 May–Jun; 28(3):297–302

Hormonal changes in major depressive disorder. Kitamura T, et al. **Keio J Med** 1989 Mar;38(1):40–52

Thyroxine (T4) and triiodothyronine (T3) levels in the Fischer 344 inbred rat. Waner T, et al. **Lab Anim** 1988 Jul;22(3):276–80

Serum thyroxine and triiodothyronine radioimmunoassay values in the normal ferret. Garibaldi BA, et al. **Lab Anim Sci** 1988 Aug;38(4):455–8

The effects of halothane and isoflurane on serum thyroxine (T4) and triiodothyronine (T3). Sum DC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec;26(4):391–4

Quantitation of plasma thyroxine by enzyme immunoassay: a new approach. Chui SH, et al. **Med Lab Sci** 1988 Jul; 45(3):245–9

Paradoxically subnormal serum T4 and T3 in dogs after prolonged excessive TSH stimulation of the thyroid caused by post-cAMP refractoriness of thyroid hormone secretion. Laurberg P. **Metabolism** 1989 Mar;38(3):265–70

The influence of caloric deprivation and food composition on TSH, thyroid hormones and nuclear binding of T3 in mononuclear blood cells in obese women. Matzen LE, et al. **Metabolism** 1989 Jun;38(6):555–61

Transient mild hyperthyroidism with inappropriate TSH secretion in postmenopause. Follow-up of 4 cases. Castro N, et al. **Minerva Endocrinol** 1988 Apr–Jun;13(2):111–4

Paracoccidioidomycosis in the region of Botucatu (state of São Paulo, Brazil). Evaluation of serum thyroxine (T4) and triiodothyronine (T3) levels and of the response to thyrotropin releasing hormone (TRH). Kiy Y, et al. **Mycopathologia** 1988 Jul;103(1):3–9

Maternal thyroxine and congenital hypothyroidism [editorial; comment] Larsen PR. **N Engl J Med** 1989 Jul 6;321(1):44–6 . **Comment on:** N Engl J Med 1989 Jul 6;321(1):13–6

Maternal–fetal transfer of thyroxine in congenital hypothyroidism due to a total organification defect or thyroid agenesis [see comments] Vulsma T, et al. **N Engl J Med** 1989 Jul 6;321(1):13–6. **Comment in:** N Engl J Med 1989 Jul 6;321(1):44–6

Amelioration of Graves' disease during pregnancy [letter] Wu RH, et al. **N Y State J Med** 1988 Oct;88(10):552–3

The relationship of insulin-like growth factor-I to total thyroxine in normal and low birth weight infants. Mitchell ML, et al. **Pediatr Res** 1989 Apr;25(4):336–8

Determination of thyroxine release in vivo: a simple, specific and sensitive method in mice. Hedner P, et al. **Pharmacol Toxicol** 1988 Sep;63(3):169–72

Effect of thyroidectomy of immature male chickens on circulating thyroid hormones and on response to thyroid-stimulating hormone and chronic cold exposure. Haddad EE, et al. **Poult Sci** 1989 Jan;68(1):169–76

Host endocrine responses during tumor growth. Besedovsky H, et al. **Prog Clin Biol Res** 1989;288:203–13

Thyroid hormones in gamma irradiated rats. Ahlersová E, et al. **Radiobiol Radiother (Berl)** 1988;29(4):507–12

Evidence for chicken GH as the only hypophyseal factor responsible for the stimulation of hepatic 5'-monodeiodination activity in the chick embryo. Berghman L, et al. **Reprod Nutr Dev** 1989;29(2):197–202

Effect of the sex-linked dwarf gene on thyrotrophic and somatotrophic axes in the chick embryo. Huybrechts LM, et al. **Reprod Nutr Dev** 1989;29(2):219–26

Thyroid hormones in genetically lean or fat chickens: effects of age and triiodothyronine supplementation. Leclercq B, et al. **Reprod Nutr Dev** 1988;28(4A):931–7

Thyroid hormone concentrations in selenium deficient and selenium sufficient cattle. Arthur JR, et al. **Res Vet Sci** 1988 Jul;45(1):122–3

Concentrations of thyroxine, 3,5,3'-triiodothyronine, 3,3',5'-triiodothyronine, 3,3'-diiodothyronine, and 3',5'-diiodothyronine in human red blood cells. Bregengaard C, et al. **Scand J Clin Lab Invest** 1989 Jun; 49(4):329–36

Hyperthyroidism without elevated levels of thyroxine and triiodothyronine in a patient with pulmonary tuberculosis. Archambeaud-Mouveroux F, et al. **South Med J** 1989 Jul; 82(7):907–10

Endocrinologic evaluation of impotence. Baskin HJ. **South Med J** 1989 Apr;82(4):446–9

Clinical significance of mildly elevated thyrotropin levels with normal thyroxine levels. Brown CA, et al. **South Med J** 1989 Jun;82(6):681–5

Endocrine changes and haemodynamic stability after brain death. Robertson KM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1197–8

Serum thyrotropin, thyroxin and triiodothyronine concentrations in maternal and cord blood of goitrous and non-goitrous pregnant women living in the Black Sea Region of Turkey. Teziç T, et al. **Turk J Pediatr** 1988 Jul–Sep;30(3):153–8

[Relation of hormone levels and the type of diabetes classified by a differentiation of symptoms and signs] Zhang CX. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Dec;8(12):714–6, 707 (Eng. Abstr.) **(Chi)**

[Plasma cortisol and serum thyroxine levels following burn stress] Jin HS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):291–3 (Eng. Abstr.) **(Chi)**

[Diminution of thyroid stimulating hormone level but normal levels of thyroid hormones. Demonstration of occult hyperthyroidism] Schlienger JL, et al. **Presse Med** 1989 Apr 8;18(14):707–10 (Eng. Abstr.) **(Fre)**

[Quality control of the radioimmunoassay of T3, T4 and TSH] Kraiem A, et al. **Tunis Med** 1987 Nov;65(11):701–4 (Eng. Abstr.) **(Fre)**

[Modification of peripheral thyroid hormone metabolism by drugs] Weissel M. **Acta Med Austriaca** 1988;15 Suppl 1:56–9 (5 ref.) **(Ger)**

[Reference values for the concentrations of triiodothyronine, thyroxine and thyrotropin in the blood serum of euthyroid children. Method: luminescence-enhanced enzyme immunoassay] Liappis N, et al. **Klin Padiatr** 1988 Sep–Oct; 200(5):410–3 (Eng. Abstr.) **(Ger)**

[Changes in thyroid function in primary degenerative dementia processes] Bilikiewicz A, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jan;41(1):25–30 (Eng. Abstr.) **(Ger)**

[The role of binding proteins in radioimmunologic determination of the free thyroxine concentration using thyroxine analog methods: thyroxine immunoextraction versus thyroxine analog immunoextraction] Passath A. **Wien Med Wochenschr** 1989 Mar 15;139(5):98–102 (Eng. Abstr.) **(Ger)**

[Behavior of the basal and stimulated serum level of thyroid stimulating hormone and determination of thyroxine, thyroxine- binding capacity and free thyroxine index in females with chronic uremia] Rudolf K, et al. **Z Gesamte Inn Med** 1988 Oct 15;43(20):590–2 (Eng. Abstr.) **(Ger)**

[Hormones of the pituitary–thyroid axis in obese subjects on free and low-calorie diet] Castro N, et al. **Clin Ter** 1987 Feb 15;120(3):199–203 (Eng. Abstr.) **(Ita)**

[Thyroid and adrenal response to acute stimulation with HCG: effects of bilateral ovariectomy] Banchini A, et al. **Minerva Endocrinol** 1988 Apr–Jun;13(2):103–6 (Eng. Abstr.) **(Ita)**

[Thyroid hormone anomalies in patients with insulin-dependent diabetes mellitus and circulating antithyroid microsomal antibodies] Castro N, et al. **Minerva Med** 1989 May;80(5):427–30 (Eng. Abstr.) **(Ita)**

[Neonatal screening for congenital hypothyroidism. Reflections on the methodology based on a statistical analysis of TSH and T4] Principi R, et al. **Minerva Pediatr** 1988 Nov;40(11):633–8 (Eng. Abstr.) **(Ita)**

[Measurement of free thyroxine and free triiodothyronine concentrations by DPC RIA kits] Kasagi K, et al. **Kaku Igaku** 1988 Jun;25(6):569–78 **(Jpn)**

[Clinical significance of the measurements of serum free thyroxine and free triiodothyronine concentrations—evaluation using DPC free T4 and free T3 kits] Kubota K, et al. **Kaku Igaku** 1988 Aug;25(8):821–30 **(Jpn)**

[Determining blood serum level of free thyroxine based on charcoal uptake of I-131-thyroxine] Czech W. **Endokrynol Pol** 1988;39(3):143–50 (Eng. Abstr.) **(Pol)**

[Effect of various beta-adrenolytic drugs and calcium channel blockers (nifedipine) on serum levels of T3 and T4 in patients with hyperthyroidism and simple goiter] Gasińska T, et al. **Endokrynol Pol** 1988;39(3):119–27 (Eng. Abstr.) **(Pol)**

[Serum levels of triiodothyronine, thyroxine and thyrotropin in children with epilepsy treated with amizepine, luminal and mizodine in a monotherapy system. Preliminary report] Kaciński M, et al. **Endokrynol Pol** 1988;39(3):137–42 (Eng. Abstr.) **(Pol)**

[Evaluation of thyroid function in children with body weight deficit] Jabłońska-Ulbrych A, et al. **Pediatr Pol** 1988 Sep; 63(9):545–9 (Eng. Abstr.) **(Pol)**

[Blood levels of thyroid hormones in children with atopic diseases] Steckiewicz W, et al. **Pediatr Pol** 1988 Oct; 63(10):644–9 (Eng. Abstr.) **(Pol)**

[Triiodothyronine (T3) and thyroxine (T4) levels in patients with bronchial asthma] Przybyłowski J, et al. **Wiad Lek** 1989 Jan 1;42(1):20–4 (Eng. Abstr.) **(Pol)**

[Thyroid hormone levels in patients with infiltrative pulmonary tuberculosis] Maskeev KM, et al. **Probl Tuberk** 1988;(9):36–40 (Eng. Abstr.) **(Rus)**

[Importance of changes in plasmatic volume in the evaluation of TSH, L-T3 and L-T4, during muscular activity] Fernández-Pastor VJ, et al. **Rev Esp Fisiol** 1988 Sep; 44(3):331–6 (Eng. Abstr.) **(Spa)**

DEFICIENCY

[Study on testicular tissue in animals with congenital hormone deficiency] Kuroda K. **Nippon Hinyokika Gakkai Zasshi** 1989 Jan;80(1):3–10 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Autoantibodies to thyroxin and triiodothyronine in the immunoglobulin G fraction of serum. Li Calzi L, et al. **Clin Chem** 1988 Dec;34(12):2561–2

Application of solid-phase antibodies to radioimmunoassay. Improved performance of Dynospheres following affinity purification of antisera. McConway MG, et al. **Clin Chim Acta** 1989 Feb 22;179(3):265–70

Enzyme immunoassay for antibodies to thyroxine in human serum using synthesized antibody as a calibrator. Yamamoto R, et al. **J Immunol Methods** 1988 Dec 9; 115(2):263–8

Euthyroid hyperthyroxinaemia due to endogenous antibodies to thyroxine and tri-iodothyronine. A case report. Mulligan GP, et al. **S Afr Med J** 1989 Feb 18;75(4):181–3

METABOLISM

Comparison of maternal to fetal transfer of 3,5,3'-triiodothyronine versus thyroxine in rats, as assessed from 3,5,3'-triiodothyronine levels in fetal tissues. Morreale de Escobar G, et al. **Acta Endocrinol (Copenh)** 1989 Jan; 120(1):20–30

Biochemistry of iodothyronine deiodination. Köhrle J. **Acta Med Austriaca** 1988;15 Suppl 1:22–4 (10 ref.)

The significance of plasma membrane transport of iodothyronines in the regulation of thyroid hormone bioavailability. Krenning EP, et al. **Acta Med Austriaca** 1988;15 Suppl 1:15–7 (6 ref.)

Thyroid hormone metabolism in the central nervous system. Larsen PR. **Acta Med Austriaca** 1988;15 Suppl 1:5–10 (43 ref.)

Maternal–fetal thyroid hormone relationships and the fetal brain. Morreale de Escobar G, et al. **Acta Med Austriaca** 1988;15 Suppl 1:66–70

Keratinocytes convert thyroxine to triiodothyronine. Kaplan MM, et al. **Ann N Y Acad Sci** 1988;548:56–65

Rapid decrease of the peripheral deiodination of thyroxine in malabsorption syndrome in artificially inoculated broilers. Rudas P, et al. **Avian Dis** 1989 Apr–Jun; 33(2):279–84

Binding activities of thyroxine binding globulin versus thyroxine binding prealbumin in rat sera: differential modulation by thyroid hormone ligands, oleic acid and pharmacological drugs. Savu L, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):919–26

Iodothyronine 5'-deiodinase activity and thyroid hormone content in brown adipose tissue during the breeding cycle of the rat. Viñas O, et al. **Biochem J** 1988 Oct 15; 255(2):457–61

Binding of thyroxine to human plasma low density lipoprotein through specific interaction with apolipoprotein B (apoB-100). Benvenga S, et al. **Biochimie** 1989 Feb; 71(2):263–8

Variations in immunocytochemical localization of cathepsin B and thyroxine in follicular cells of the rat thyroid gland and plasma TSH concentrations over 24 hours. Uchiyama Y, et al. **Cell Tissue Res** 1989;256(2):355–60

Discordant RIA results for thyroxin-binding globulin (TBG): a new indicator of variant TBG molecules with decreased affinity for thyroxin. Nelson JC, et al. **Clin Chem** 1989 Jun; 35(6):1257–8

Catecholamine and thyroid hormone metabolism in a case of anorexia nervosa. Sato T, et al. **Endocrinol Jpn** 1988 Apr;35(2):295–301

The 27-kilodalton thyroxine (T4)-binding protein is human apolipoprotein A-I: identification of a 68-kilodalton high density lipoprotein that binds T4. Benvenga S. **Endocrinology** 1989 Mar;124(3):1265–9

Rat enterohepatic circulation and intestinal distribution of enterally infused thyroid hormones. DiStefano JJ 3d, et al. **Endocrinology** 1988 Nov;123(5):2526–39

Thyroxine, triiodothyronine, and reverse triiodothyronine processing in the cerebellum: autoradiographic studies in adult rats. Dratman MB, et al. **Endocrinology** 1989 Sep; 125(3):1723–33

Effect of simultaneously administered iopanoic acid and thyrotropin releasing hormone (TRH) on thyroid hormone metabolism in euthyroid subjects. Szabolcs I, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):365–8

Effects of vertebrate prolactins and growth hormones on thyroxine 5'-monodeiodination in the eel (Anguilla anguilla): a potential bioassay for growth hormone. de Luze A, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):186–93

Effects of bovine TSH on the tissue thyroxine level and metamorphosis in prometamorphic flounder larvae. Inui Y, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):406–10

Oxidative metabolism in a teleost, Anabas testudineus Bloch: effect of thyroid hormones on hepatic enzyme activities.

Peter MC, et al. **Gen Comp Endocrinol** 1989 Jan; 73(1):96–107

A study of hepatic metabolism of thyroxine in BB/W rats treated with L–thyroxine. Banovac K, et al. **Horm Metab Res** 1989 Feb;21(2):69–72

"In vitro" study on release of cyclic AMP and thyroid hormone in autonomously functioning thyroid nodules. Romaldini JH, et al. **Horm Metab Res** 1988 Aug; 20(8):510–2

A proton and fluorine–19 nuclear magnetic resonance and fluorescence study of the binding of some natural and synthetic thyromimetics to prealbumin (transthyretin). Reid DG, et al. **J Biol Chem** 1989 Feb 5;264(4):2013–23

Drug competition for thyroxine binding to transthyretin (prealbumin): comparison with effects on thyroxine–binding globulin. Munro SL, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1141–7

A new inherited abnormality of thyroxine–binding globulin (TBG–San Diego) with decreased affinity for thyroxine and triiodothyronine. Sarne DH, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):114–9

Effects of amiodarone on 5'-deiodination of thyroxine to tri–iodothyronine in rat myocardium. Ceppi JA, et al. **J Endocrinol** 1989 Jun;121(3):431–4

Effect of the glycogenolytic gluconeogenetic hormones, glucagon, vasopressin and angiotensin II, on biliary excretion of iodothyronines in rats is possibly related to the inhibition of 5'-monodeiodination in the liver. Langer P, et al. **J Endocrinol** 1989 May;121(2):299–302

Immunocytochemical localization of cathepsins B, H, L, and T4 in follicular cells of rat thyroid gland. Uchiyama Y, et al. **J Histochem Cytochem** 1989 May;37(5):691–6

Mechanism of the serum thyroid hormone lowering effect of perfluoro–n–decanoic acid (PFDA) in rats. Gutshall DM, et al. **J Toxicol Environ Health** 1989;28(1):53–65

Amiodarone alters thyroxine transfer and distribution in humans. Kaptein EM, et al. **Metabolism** 1988 Dec; 37(12):1107–13

Evidence for thyroxine transport by the lung and heart capillary endothelium. Heltianu C, et al. **Microvasc Res** 1989 Mar;37(2):188–203

Thyroid hormone metabolism in neuron–enriched primary cultures of fetal rat brain cells. Courtin F, et al. **Mol Cell Endocrinol** 1988 Jul;58(1):73–84

The effect of phenobarbital on the metabolism and excretion of thyroxine in rats. McClain RM, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):216–28

[Influence of yang–restoring herb medicines upon metabolism of thyroid hormone in normal rats and a drug administration schedule] Chen MD, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Feb;9(2):93–5, 70 (Eng. Abstr.) **(Chi)**

[Elevated biliary excretion of T4—however, not of T3—in rats with nonthyroidal diseases (NTI)] Grussendorf M, et al. **Acta Med Austriaca** 1988;15 Suppl 1:41–2 **(Ger)**

[Alteration of T4 deiodination in vitro in the brain of rats with nonthyroidal diseases] Grussendorf M, et al. **Acta Med Austriaca** 1988;15 Suppl 1:33–4 **(Ger)**

[Ether bond cleavage of thyroxine to diiodotyrosine (DIT). DIT in serum, a possible new marker of leukocyte activity in sepsis and severe infections] Meinhold H, et al. **Acta Med Austriaca** 1988;15 Suppl 1:25–30 (23 ref.) **(Ger)**

[Thyroxine–and triiodothyronine–binding cytosol proteins in human adipose tissue] Bardowska U, et al. **Endokrynol Pol** 1988;39(1):41–7 (Eng. Abstr.) **(Pol)**

[Beta adrenergic receptors and thyroid hormones] Szymański PT. **Kardiol Pol** 1988;31(10):662–8 (33 ref.) **(Pol)**

[Effect of amiodarone on the conversion of thyroxine to triiodothyronine in the myocardium of rats in vivo and in vitro] Ceppi JA, et al. **Medicina (B Aires)** 1988; 48(1):29–32 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

Biopharmaceutical comparison of two levothyroxine sodium products. Blouin RA, et al. **Clin Pharm** 1989 Aug; 8(8):588–92

Thyroxine transport and distribution in Nagase analbuminemic rats. Mendel CM, et al. **J Clin Invest** 1989 Jan;83(1):143–8

Thyroxine uptake by human hepatoma cells from serum of patients submitted to long–term thyroxine suppressive therapy. Bartalena L, et al. **J Endocrinol Invest** 1988 Oct; 11(9):629–35

Kinetics of thyroxine epicutaneous absorption. Arduino C, et al. **Pharmacol Res** 1989 Jan–Feb;21(1):109–10

PHARMACOLOGY

Acceleration of the internalization of ligand–bound membrane DNA by thyroxine treatment in macrophages. Sudár F, et al. **Acta Histochem (Jena)** 1988;84(2):205–10

Thyroxin induced moult in domestic hen. Szelényi Z, et al. **Acta Physiol Hung** 1988;72(2):143–9

Short–term efficacy of thyroid hormone supplementation for patients with Down syndrome and low–borderline thyroid function. Tirosh E, et al. **Am J Ment Retard** 1989 May; 93(6):652–6

Gastric acid secretion and parietal cell mass: effects of thyroidectomy and thyroxine. Adeniyi KO, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G975–8

Effect of thyroid hormone on gentamicin accumulation in rat proximal tubule lysosomes. Cronin R, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):F86–91

Effects of 10– to 12–day treatment with L–thyroxine in rats with myocardial infarction. Gay RG, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H801–6

Tissue–specific isoform regulation of Na+–K+–ATPase by thyroid hormone in ferrets. Ng YC, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H534–9

Differential effects of thyroxine and cortisone on jejunal sucrase expression in suckling rats. Yeh KY, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G604–12

Effect of thyroxine (T4) and thiourea on the hepatic oxygen consumption of male garden lizards of three different age groups. Sahu N, et al. **Arch Gerontol Geriatr** 1989 Jan; 8(1):55–62

3,3',5–L–triiodothyronine but not L–thyroxine can block the induction of tyrosinase by imidazole in cultured B16 melanoma cells. Smith TJ, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1293–6

Uterine decidualization in hypophysectomized–ovariectomized rats: effects of pituitary hormones. Kennedy TG, et al. **Biol Reprod** 1988 Sep;39(2):318–28

Stimulation of alkaline phosphatase activity by thyroid hormone in mouse osteoblast–like cells (MC3T3–E1): a possible mechanism of hyperalkaline phosphatasia in hyperthyroidism. Kasono K, et al. **Bone Miner** 1988 Sep; 4(4):355–63

Thyroxine influences neuronal connectivity in the adult frog brain. Hofmann MH, et al. **Brain Res** 1989 Jul 17; 492(1–2):389–91

Effects of altered thyroid states and undernutrition on the calbindin–D28K (calcium–binding protein) content of the hippocampal formation in the developing rat. Rami A, et al. **Brain Res** 1989 Apr 17;485(1):20–8

Acute effects of hypophysectomy and administration of pancreatic and thyroid hormones on circulating concentrations of somatomedin–C in young chickens: relationship between growth hormone and somatomedin–C. Lazarus DD, et al. **Domest Anim Endocrinol** 1988 Oct;5(4):283–9

Oophorectomy did not show any additional effect on bone density and mineral content in thyroxine treated mice. Broulik PD, et al. **Endocrinol Exp** 1989 Mar;23(1):49–53

Thyroid hormone regulation of hypothalamic immunoreactive thyrotropin. DeVito WJ. **Endocrinology** 1989 Sep;125(3):1219–23

Effect of thyroid hormone and growth hormone on recovery from hypothyroidism of epiphyseal growth plate cartilage and its adjacent bone. Lewinson D, et al. **Endocrinology** 1989 Feb;124(2):937–45

Regulation of rat pancreatic glucocorticoid receptors by thyroxine during development. Lu RB, et al. **Endocrinology** 1988 Nov;123(5):2235–41

The effect of thyroid hormones on lipid composition and activities of lipid–synthesizing enzymes in the rat heart sarcolemma. Szymański PT, et al. **Endokrynol Pol** 1989; 40(1):43–9

The effect of thyroxine on craniofacial morphology in the growing rat. Part I: A longitudinal cephalometric analysis. Persson EC, et al. **Eur J Orthod** 1989 Feb;11(1):59–66

Alteration by thyroid hormones of TRH in the rat median eminence: role of the hypothalamic paraventricular nucleus. Yamada M, et al. **Exp Clin Endocrinol** 1989 Apr; 93(1):104–10

Effect of thyroid hormone on somatomedin–C release from perfused rat liver. Ikeda T, et al. **Experientia** 1989 Feb 15;45(2):170–1

Effect of thyroxine on testicular activity in the toad Bufo regularis. Sakr SA. **Folia Morphol (Praha)** 1988;36(3):256–9

Corticosteroid receptors in liver cytosol of the clawed toad, Xenopus laevis: influence of thyroid and ovarian hormones. Lange CB, et al. **Gen Comp Endocrinol** 1989 Mar; 73(3):485–97

Age–related changes in the response of hepatic succinic dehydrogenase activity to thyroxine and thiourea in lizards. Sahu N, et al. **Gerontology** 1988;34(4):179–83

Mechanism of action of thyroxine (T4) on the biogenesis of mitochondria using antibiotic–free system: a gerontological survey. Adenuga GA, et al. **Horm Metab Res** 1989 Jun; 21(6):309–12

The lung as a target organ for thyroxine. Datta H, et al. **Horm Metab Res** 1989 Jun;21(6):305–8

Effect of triiodothyronine and thyroxine on malic enzyme activity and protein and nucleic acid contents of liver and muscle of toad, Bufo melanostictus. Dey SS, et al. **Horm Metab Res** 1989 Jan;21(1):49–50

Delayed suppression of TSH secretion during thyroxine administration. Erfurth EM, et al. **Horm Metab Res** 1989 Mar;21(3):161–3

Influence of L–thyroxine, L–triiodothyronine, thyroid stimulating hormone, or estradiol on the cell kinetics of cultured mammary cancer cells. de Launoit Y, et al. **In Vitro Cell Dev Biol** 1989 Jul;25(7):585–91

Effect of hormones on the development of various brush border enzymes across crypt–villus axis in rat intestine. Gupta R, et al. **Indian J Med Res** 1988 Aug;88:169–74

The effect of thyroxine on spontaneous thyroiditis in BB/W rats. Banovac K, et al. **Int Arch Allergy Appl Immunol** 1988; 87(3):301–5

Effect of exogenous thyroxine on the interval from weaning to estrus of the primiparous sow. Giesemann MA, et al. **J Anim Sci** 1989 Jan;67(1):157–67

Selective binding of L–thyroxine by myosin light chain kinase. Hagiwara M, et al. **J Biol Chem** 1989 Jan 5; 264(1):40–4

Thyroid hormones inhibit platelet function and myosin light chain kinase. Mamiya S, et al. **J Biol Chem** 1989 May 25; 264(15):8575–9

Retinoic acid is a modulator of thyroid hormone activation of Ca2+–ATPase in the human erythrocyte membrane [published erratum appears in J Biol Chem 1989 Jun 15;264(17):10326] Smith TJ, et al. **J Biol Chem** 1989 Jan 15;264(2):687–9

Role of beta adrenoceptors in the hypertrophic response to thyroxine. Eliades D, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):58–65

Reversal effect of thyroxine on altered vascular reactivity in diabetic rats. Takiguchi Y, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):520–4

Hormonal regulation of glycogen synthase and phosphorylase activities in human polymorphonuclear leukocytes. Ohtsuka Y, et al. **J Clin Chem Clin Biochem** 1988 Nov;26(11):679–84

Neuronal overload in the developing anuran lateral motor column in response to limb removal and thyroid hormone. Goldberg JF, et al. **J Comp Neurol** 1989 May 22; 283(4):578–86

Harderian glands of golden hamsters: morphological and biochemical responses to thyroid hormones. Hoffman RA, et al. **J Comp Physiol [B]** 1989;159(3):293–9

Effects of thyroxine on oestrogen receptor concentrations in anterior pituitary and hypothalamus of hypothyroid rats. Altschuler LR, et al. **J Endocrinol** 1988 Dec;119(3):383–7

The anabolic actions of growth hormone and thyroxine on protein metabolism in Snell dwarf and normal mice. Bates PC, et al. **J Endocrinol** 1988 Oct;119(1):31–41

The regulation by thyroid hormones and androgen of epidermal growth factor synthesis in the submandibular gland and its plasma concentrations in mice. Kasayama S, et al. **J Endocrinol** 1989 May;121(2):269–75

Effect of a light pulse during the dark on photoperiodic regulation of the rate of thyroxine–induced, spontaneous, and prolactin–inhibited metamorphosis in Rana pipiens tadpoles [published erratum appears in J Exp Zool 1988 Nov;248(2):251] Wright ML, et al. **J Exp Zool** 1988 Jul; 247(1):99–108

Thyroid hormones and the hepatic handling of bilirubin. II. Effects of hypothyroidism and hyperthyroidism on the apparent maximal biliary secretion of bilirubin in the Wistar rat. Van Steenbergen W, et al. **J Hepatol** 1988 Oct; 7(2):229–38

Oxygen diffusion distance in thyroxine–induced hypertrophic rabbit myocardium. Seiden D, et al. **J Mol Cell Cardiol** 1988 Oct;20(10):917–30

Effect of thyroid hormones on benzodiazepine receptors in neuron–enriched primary cultures. Go T, et al. **J Neurochem** 1988 Nov;51(5):1497–500

Effects of melatonin and thyroxine treatment on reproductive organs and thyroid hormone levels in male hamsters. Creighton JA, et al. **J Pineal Res** 1989;6(4):317–23

A comparison of the effects of morphine withdrawal, thyroxine or thyroidectomy on the sensitivity of the anococcygeus muscle to agonists and on serum thyroxine levels in the rat. Gardiner DC, et al. **Life Sci** 1974 Jul 15;15(2):339–49

Thyroid hormones directly interact with vascular smooth muscle strips. Ishikawa T, et al. **Mol Pharmacol** 1989 Jun; 35(6):760–5

Hypophysectomy differentially alters P–450 protein levels and enzyme activities in rat liver: pituitary control of hepatic NADPH cytochrome P–450 reductase. Waxman DJ, et al. **Mol Pharmacol** 1989 Apr;35(4):519–25

Thyroid hormone regulation of neurons staining for a pro–TRH–derived cryptic peptide sequence in the rat hypothalamic paraventricular nucleus. Liao N, et al. **Neuroendocrinology** 1989 Aug;50(2):217–21

Modulation of gamma–aminobutyric acid uptake of rat brain synaptosomes by thyroid hormones. Mason GA, et al. **Neuropsychopharmacology** 1987 Dec;1(1):63–70

Thyroid hormone modulation of TRH precursor levels in rat hypothalamus, pituitary, thyroid and blood. Simard M, et al. **Peptides** 1989 Jan–Feb;10(1):145–55

Effect of the excess of thyroid hormone administration on water and sodium chloride intake in the rat. Belló AA, et al. **Physiol Behav** 1988;43(2):155–7

Regulation of myocardial Ca2+–ATPase and phospholamban mRNA expression in response to pressure overload and thyroid hormone. Nagai R, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2966–70

[Effect of thyroxine and prednisolone and the exogenous RNA induced by them on the proliferation of cells] Arkhipenko VI, et al. **Arkh Anat Gistol Embriol** 1988 Aug; 95(8):57–61 (Eng. Abstr.) **(Rus)**

[In vivo effect of L–thyroxine on carbohydrate content of glycoproteins in subcellular fractions of the rat liver] Panasiuk EN, et al. **Vopr Med Khim** 1988 Nov–Dec; 34(6):64–71 (Eng. Abstr.) **(Rus)**

[Effect of thyroxine on the lactate dehydrogenase isoenzyme composition of chicken tissues in ontogeny] Arutiunian LA, et al. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb;25(1):10–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Alterations in thyroid hormone physiology induced by temperature and feeding in newly hatched chickens. Decuypere E, et al. **Acta Physiol Pol** 1988 Sep-Dec; 39(5-6):380-94

Thyroxin specifically stimulates anuran larvae epidermal sodium pump during metamorphosis. Burón MI, et al. **Comp Biochem Physiol [A]** 1988;91(4):693-5

The role of 3,5,3'-triiodothyronine in the physiological action of thyroxine in the premetamorphic tadpole. Galton VA. **Endocrinology** 1989 May;124(5):2427-33

Thyroxine-induced redistribution of creatine kinase isoenzymes in rat cardiomyocyte cultures. Brik H, et al. **Experientia** 1989 Jun 15;45(6):591-4

Developing rat cerebellum—I. Effects of abnormal thyroid states and undernutrition on sulfated glycosaminoglycans. Normand G, et al. **Int J Dev Neurosci** 1989;7(4):323-8

Developing rat cerebellum—II. Effects of abnormal thyroid states and undernutrition on hyaluronic acid. Normand G, et al. **Int J Dev Neurosci** 1989;7(4):329-34

Developing rat cerebellum—III. Effects of abnormal thyroid states and undernutrition on gangliosides. Vitiello F, et al. **Int J Dev Neurosci** 1989;7(4):335-41

Facilitory role of thyroid hormone in vitamin A uptake in the rat testes. Rajguru S, et al. **Int J Vitam Nutr Res** 1989; 59(2):107-12

Stimulation in vitro of rabbit erythrocyte cytosol phospholipid-dependent protein kinase activity. A novel action of thyroid hormone. Lawrence WD, et al. **J Biol Chem** 1989 Mar 25;264(9):4766-8

Bone-resorbing activity of thyroid hormones is related to prostaglandin production in cultured neonatal mouse calvaria. Klaushofer K, et al. **J Bone Miner Res** 1989 Jun; 4(3):305-12

[Ambivalent effect of thyroxine on the expression of gonadotropin genes in normal and orchidectomized rats] Lerrant Y, et al. **Pathol Biol (Paris)** 1988 Oct;36(8):973-8 (Eng. Abstr.) (Fre)

[Thyroid hormones and lipid metabolism] Nikitin VN, et al. **Fiziol Zh** 1989 May-Jun;35(3):91-8 (46 ref.) (Eng. Abstr.) (Rus)

POISONING

Massive levothyroxine ingestion. Conservative management. Mandel SH, et al. **Clin Pediatr (Phila)** 1989 Aug;28(8):374-6

Thyroxine overdose caused by a suicide attempt in an adult. Sturgis T, et al. **N J Med** 1988 Aug;85(8):665-6

Massive levothyroxine overdose: high anxiety—low toxicity. Gorman RL, et al. **Pediatrics** 1988 Oct;82(4):666-9

Acute thyroxine ingestion in pediatric patients. Lewander WJ, et al. **Pediatrics** 1989 Aug;84(2):262-5

SECRETION

Suppression of T4 secretion in a metastatic follicular carcinoma. Boucher A, et al. **Clin Invest Med** 1989 Jun; 12(3):162-4

Inhibitory effect of lithium on the release of thyroid hormones from thyrotropin-stimulated mouse thyroids in a perifusion system. Mori M, et al. **Endocrinology** 1989 Mar; 124(3):1365-9

Effects of VIP and helodermin on thyroid hormone secretion in the mouse. Ahrén B, et al. **Neuropeptides** 1989 Jan; 13(1):59-64

[Effect of hypercalcemia and calcitonin on changes in the left-ventricular systolic time interval and T3 and T4 secretion in hyperthyroidism and euthyroid goiter] Gasińska T, et al. **Endokrynol Pol** 1988;39(1):49-56 (Eng. Abstr.) (Pol)

[Diurnal rhythm of thyroxine (T4), triiodothyronine (T3) and reverse triiodothyronine (rT3) secretion in women in the third trimester of uncomplicated pregnancy] Dzieciuchowicz L, et al. **Ginekol Pol** 1988 Feb;59(2):89-92 (Eng. Abstr.) (Pol)

[Relations between therapeutic and hormonal response to neuroleptics of patients with paranoid schizophrenia. I. Secretion of thyrotropin and thyroid hormones] Horodnicki JM, et al. **Psychiatr Pol** 1988 Jul-Aug; 22(4):279-84 (Eng. Abstr.) (Pol)

[Relation of therapeutic and hormonal reactions to thymoleptics in patients with endogenous depression. I. Secretion of thyrotropin and thyroid hormones] Horodnicki JM, et al. **Psychiatr Pol** 1988 May-Jun; 22(3):198-204 (Eng. Abstr.) (Pol)

THERAPEUTIC USE

Recovery period of hypersecretion of thyroid-stimulating hormone in patients with congenital hypothyroidism treated with thyroid hormone. Sato H, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Dec;29(6):833-6

Occult thyroid dysfunction in refractory depression [letter] **Am J Psychiatry** 1989 Feb;146(2):280-2

The replacement therapy problem in hypothyroidism. Leslie PJ, et al. **Bailliere's Clin Endocrinol Metab** 1988 Aug; 2(3):653-69 (70 ref.)

Errors in a report: thyroid dysfunction detection strategy [letter] Hammer MR. **Clin Chem** 1989 Jan;35(1):193

Restoration of normal thyrotrophin secretion reduces the abnormally high serum glutathione S-transferase levels found in patients receiving thyroxine replacement therapy. Gow SM, et al. **Clin Endocrinol (Oxf)** 1988 Sep; 29(3):249-56

3,5,3'-Triiodothyroacetic acid minimizes the pituitary thyrotrophin secretion in patients on levo-thyroxine therapy after ablative therapy for differentiated thyroid carcinoma. Mueller-Gaertner HW, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):345-51

A double-blind cross-over 12-month study of L-thyroxine treatment of women with 'subclinical' hypothyroidism. Nyström E, et al. **Clin Endocrinol (Oxf)** 1988 Jul; 29(1):63-75

Optimum replacement dose of thyroid hormone assessed by highly sensitive TSH determination in patients with congenital hypothyroidism. Sato H, et al. **Endocrinol Jpn** 1988 Aug;35(4):531-6

Use of a pharmacological indicator to monitor compliance with thyroxine. Penn ND, et al. **Eur J Clin Pharmacol** 1988; 35(3):327-9

Can thyroxine halt the progression of peripheral arterial disease? Powell JT, et al. **Eur J Vasc Surg** 1989 Feb; 3(1):85-7

Severe sublimate intoxication in the rat. Influence of thyroxine on renal enzymes of fatty acid degradation and on the survival rate of intoxicated rats. Kramar R, et al. **Exp Pathol** 1989;36(2):97-103

Serum bone Gla protein (BGP) in primary hypothyroidism before and during treatment with thyroid hormones. Bergmann P, et al. **Horm Metab Res** 1989 Jan;21(1):47-8

Postoperative recurrence of simple goiter and replacement therapy. Study of 210 patients. Ronga G, et al. **Ital J Surg Sci** 1989;19(1):57-61

Changes in serum thyroid hormone, thyrotropin and thyroglobulin concentrations during thyroxine therapy in patients with solitary thyroid nodules. Morita T, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):227-30

In utero thyroxine therapy for the induction of fetal lung maturity: long term effects. Barkai G, et al. **J Perinat Med** 1988;16(2):145-8

Thyroid function and therapeutic efficacy of thyroxine in depression. Okuno Y, et al. **Jpn J Psychiatry Neurol** 1988 Dec;42(4):763-70

Influence of L-thyroxine on cardiac function in athyreotic thyroid cancer patients—an echophonocardiographic study. Punzengruber C, et al. **Klin Wochenschr** 1988 Aug 15;66(16):729-35

Leukocyte alkaline phosphatase in hypothyroidism and hyperthyroidism. Response to initiation of thyroxine replacement therapy. Barsano CP, et al. **Metabolism** 1989 Apr;38(4):311-4

The usefulness of a sensitive thyrotrophin assay in the fine adjustment of thyroxine therapy following ablation for carcinoma. de Lange WE, et al. **Neth J Med** 1989 Aug; 35(1-2):11-7

Early treatment of congenital hypothyroidism. Fisher DA, et al. **Pediatrics** 1989 May;83(5):785-9

Prediction of remission after antithyroid drug treatment in Graves' disease. Young ET, et al. **Q J Med** 1988 Feb; 66(250):175-89

Pituitary resistance to L-thyroxine after thyroidectomy. A case report. Mulaisho C, et al. **S Afr Med J** 1989 Mar 4; 75(5):236-7

Fatty acid composition in plasma and platelet phospholipid in hypothyroid patients before and after 1-thyroxine substitution. Valdemarsson S, et al. **Scand J Clin Lab Invest** 1988 Feb;48(1):21-5

[Clinical management of pregnancy complicating primary hypothyroidism: report of 11 cases] Xu YH. **Chung Hua Fu Chan Ko Tsa Chih** 1988 May;23(3):132-4, 188 (Eng. Abstr.) (Chi)

[Hypertrophy of the salivary glands and Hashimoto thyroiditis. Regression under substitutive opotherapy] Labussière AS, et al. **Ann Dermatol Venereol** 1989; 116(1):39-41 (Fre)

[Therapy of euthyroid goiter] Bürgi H. **Schweiz Med Wochenschr** 1988 Dec 17;118(50):1881-5 (32 ref.) (Eng. Abstr.) (Ger)

[Thyroxine vs iodine and thyroxine. Comparison of the TSH suppression test] Kahaly G, et al. **Schweiz Med Wochenschr** 1989 Jan 14;119(2):59-64 (Eng. Abstr.) (Ger)

[Regression of a pituitary tumor, associated with primary hyperthyroidism, under the effect of l-thyroxine] Tóth M, et al. **Orv Hetil** 1989 May 21;130(21):1111-3 (Eng. Abstr.) (Hun)

[Therapy with L-thyroxine in thyroid struma. Study with ultrasonic evaluation] Peta M, et al. **Recenti Prog Med** 1989 Jun;80(6):320-5 (Eng. Abstr.) (Ita)

[Effect of the substitute treatment of hypothyroidism on echocardiographic changes] Łącka K, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1301-2 (Pol)

TOXICITY

Induction of experimental thyroid dysfunction in rats with implantable pellets of thyroxine or propylthiouracil. Walker JS, et al. **J Pharmacol Methods** 1989 May;21(3):223-9

[Experimental heart hypertrophy caused by thyroxine administration] Mattfeldt T, et al. **Pathologe** 1989 Jul; 10(4):206-11 (Ger)

D-THYROXINE see **DEXTROTHYROXINE**

L-THYROXINE see **THYROXINE**

THYROXINE-BINDING PROTEIN

Hormone binding globulins undergo serpin conformational change in inflammation. Pemberton PA, et al. **Nature** 1988 Nov 17;336(6196):257-8

ANALYSIS

Elevation of sex hormone binding globulin among patients with thyroxin binding globulin excess [letter] Wortsman J, et al. **Clin Chim Acta** 1988 Aug 31;176(2):229-31

Relationship of visceral proteins to nutritional status in chronic and acute stress. Boosalis MG, et al. **Crit Care Med** 1989 Aug;17(8):741-7

Purification and partial characterization of thyroid hormone binding proteins in canine serum. Larsson M, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):215-29

Birth weight and thyroxine-binding globulin in pre-eclampsia. Lao TT, et al. **Gynecol Obstet Invest** 1989; 28(1):8-10

Characterization of the binding of thyroxine to high density lipoproteins and apolipoproteins A-I. Benvenga S, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1067-72

Hypothyroidism with thyroxine-binding globulin excess [letter] Leung AK, et al. **Pediatrics** 1989 Jul;84(1):197

Hypothyroidism with thyroxine-binding globulin excess [letter] Leung AK, et al. **Pediatrics** 1989 Jan;83(1):147-8

[Isoforms of thyroxine-binding globulin in thyroid gland function disorders] Leopold B, et al. **Acta Med Austriaca** 1988;15 Suppl 1:18-9 (Ger)

[The role of binding proteins in radioimmunologic determination of the free thyroxine concentration using thyroxine analog methods: thyroxine immunoextraction versus thyroxine analog immunoextraction] Passath A. **Wien Med Wochenschr** 1989 Mar 15;139(5):98-102 (Eng. Abstr.) (Ger)

[Thyroxine-binding globulin and its molecular variant in human amniotic fluid] Sviridov OV, et al. **Probl Endokrinol (Mosk)** 1989 Mar-Apr;35(2):48-52 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

Thyroid function tests in acute viral hepatitis: relative reduction in serum thyroxine levels due to T4-TBG binding inhibitors in patients with severe liver cell necrosis. Pagliacci MC, et al. **J Endocrinol Invest** 1989 Mar; 12(3):149-53

BIOSYNTHESIS

Studies on the role of glycosylation for human corticosteroid-binding globulin: comparison with that for thyroxine-binding globulin. Murata Y, et al. **Endocrinology** 1989 Sep;125(3):1424-9

BLOOD

Thyroid hormones and thyroxine-binding globulin in relation to liver function and serum testosterone in men with alcoholic cirrhosis. Becker U, et al. **Acta Med Scand** 1988; 224(4):367-73

Maternal free thyroxine and thyroxine-binding globulin during pregnancy ending in congenital malformations in the offspring. Skjöldebrand Sparre LS. **Gynecol Obstet Invest** 1989;27(1):19-21

Normal cellular uptake of thyroxine from serum of patients with familial dysalbuminemic hyperthyroxinemia or elevated thyroxine-binding globulin. Sarne DH, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1166-70

Congenital hypothyroidism with raised thyroxine binding globulin. Menon G. **J R Soc Med** 1988 Dec;81(12):736-7

DEFICIENCY

Diagnostic performance of a modified free-thyroxin assay in subjects with anomalies in their binding proteins. van der Sluijs Veer G, et al. **Clin Chem** 1989 Mar;35(3):493

Thyroxine-binding globulin deficiency re-examined. Copping S, et al. **Clin Endocrinol (Oxf)** 1988 Jan; 28(1):45-50

GENETICS

Inherited thyroxine-binding globulin abnormalities in man. Refetoff S. **Endocr Rev** 1989 Aug;10(3):275-93 (139 ref.)

A new inherited abnormality of thyroxine-binding globulin (TBG-San Diego) with decreased affinity for thyroxine and triiodothyronine. Sarne DH, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):114-9

Sequence of the variant thyroxine-binding globulin of Australian aborigines. Only one of two amino acid replacements is responsible for its altered properties. Takeda K, et al. **J Clin Invest** 1989 Apr;83(4):1344-8

A mutation causing reduced biological activity and stability of thyroxine-binding globulin probably as a result of abnormal glycosylation of the molecule. Mori Y, et al. **Mol Endocrinol** 1989 Mar;3(3):575-9

Euthyroid hyperthyroxinemia due to familial excess of thyroxine-binding globulin. Tucker WS Jr. **South Med J** 1989 Mar;82(3):368-71

ISOLATION & PURIFICATION

Transthyretin microheterogeneity and thyroxine binding are influenced by non-amino acid components and glutathione

constituents. Pettersson TM, et al.
Biochem Biophys Res Commun 1989 Jan 16;158(1):341–7
The microheterogeneity of rat TBG. Vranckx R, et al.
FEBS Lett 1989 Feb 27;244(2):343–6
[New aspects of isolation and purification of thyroxine–binding globulin from human biological fluids] Sviridov OV, et al. **Biokhimiia** 1989 Mar;54(3):495–502 (Eng. Abstr.) **(Rus)**

METABOLISM

Recent advances on thyroxine–binding globulin. Bartalena L, et al. **Acta Med Austriaca** 1988;15 Suppl 1:12–5 (36 ref.)
Plasma transport of thyroid hormones. Byfield PG.
Acta Med Austriaca 1988;15 Suppl 1:10–1 (4 ref.)
Graves' disease and thyroxine–binding globulin excess [letter] Li Calzi L, et al. **Arch Intern Med** 1989 Mar;149(3):705
Binding activities of thyroxine binding globulin versus thyroxine binding prealbumin in rat sera: differential modulation by thyroid hormone ligands, oleic acid and pharmacological drugs. Savu L, et al.
Biochem Biophys Res Commun 1989 Mar 31;159(3):919–26
Thyroxine–binding globulin and thyroxine–binding prealbumin in hypothyroid and hyperthyroid developing rats. Savu L, et al. **Biochim Biophys Acta** 1989 Sep 15; 992(3):379–84
Discordant RIA results for thyroxin–binding globulin (TBG): a new indicator of variant TBG molecules with decreased affinity for thyroxin. Nelson JC, et al. **Clin Chem** 1989 Jun; 35(6):1257–8
Dependence of the thyroxin/thyroxin–binding globulin (TBG) ratio and the free thyroxin index on TBG concentrations. Nelson JC, et al. **Clin Chem** 1989 Apr; 35(4):541–4
Endocrine, hematological and immunological changes in surgical patients undergoing general anesthesia. Costa A, et al. **Ital J Surg Sci** 1989;19(1):41–9
Drug competition for thyroxine binding to transthyretin (prealbumin): comparison with effects on thyroxine–binding globulin. Munro SL, et al.
J Clin Endocrinol Metab 1989 Jun;68(6):1141–7
Sex hormone–binding globulin and thyroxine–binding globulin levels in premature thelarche. Wenick GB, et al. **Steroids** 1988 Nov–Dec;52(5–6):543–50
Ioxynil and 3,5,3'–triiodothyronine: comparison of binding to human plasma proteins. Ogilvie LM, et al.
Toxicol Lett 1988 Dec;44(3):281–7
[Behavior of the basal and stimulated serum level of thyroid stimulating hormone and determination of thyroxine, thyroxine– binding capacity and free thyroxine index in females with chronic uremia] Rudolf K, et al.
Z Gesamte Inn Med 1988 Oct 15;43(20):590–2 (Eng. Abstr.) **(Ger)**
[Thyroxine–and triiodothyronine–binding cytosol proteins in human adipose tissue] Bardowska U, et al.
Endokrynol Pol 1988;39(1):41–7 (Eng. Abstr.) **(Pol)**

PHARMACOLOGY

Effect of thyroid hormone–binding proteins and fatty acids on modified analog assays of FT4 and FT3 in serum [letter] Ekins R. **Clin Chem** 1989 Apr;35(4):708–10
Effects of human thyroxine–binding globulin and prealbumin on the reverse flow of thyroid hormones from extravascular space into the bloodstream in rabbits. Wahl R, et al.
Endocrinology 1989 Mar;124(3):1428–37

THYROXINE 5'–DEIODINASE see **IODIDE PEROXIDASE**

THYROXINE 5'–MONODEIODINASE see **IODIDE PEROXIDASE**

THYROXINE RECEPTORS see **RECEPTORS, THYROID HORMONE**

TIABENDAZOL see **THIABENDAZOLE**

TIAPRIDE see under **BENZAMIDES**

TIBIA

A parametric axisymmetric model study on the interface motions in porous–surfaced tibial implants. Shirazi–Adl A, et al. **Ann Biomed Eng** 1989;17(4):411–21
Is bone grafting necessary? Analysis of twenty cases of giant cell tumour of bone treated by curettage without graft. Waldram MA, et al. **Arch Orthop Trauma Surg** 1989; 108(5):296–9
Malignant fibrous histiocytoma in a dog. Thomas JB.
Aust Vet J 1988 Aug;65(8):252–4
Tibial osteochondroma and popliteal artery compression. Kirk SJ, et al. **Br J Clin Pract** 1988 Apr;42(4):170–2
A long–term follow–up of Sbarbaro tibial plateau prostheses [letter] Will RK, et al. **Br J Rheumatol** 1989 Jun;28(3):264–5
Biopsy proven eradication of an aneurysmal bone cyst treated by superselective embolization: a case report. Suby–Long T, et al. **Cardiovasc Intervent Radiol** 1988 Oct;11(5):292–5 (10 ref.)
Osteosarcoma metastatic to the kidney. Lockhart SK, et al.
Clin Imaging 1989 Jun;13(2):154–6 (8 ref.)
High–energy, low–dose radiation therapy for aneurysmal bone cyst. Report of a case. Maeda M, et al.
Clin Orthop 1989 Jun;(243):200–3
Limb–sparing surgery for high–grade malignant tumors of the proximal tibia. Surgical technique and a method of extensor mechanism reconstruction. Malawer MM, et al.
Clin Orthop 1989 Feb;(239):231–48
Adamantinoma of the tibia masked by fibrous dysplasia. Report of three cases. Schajowicz F, et al. **Clin Orthop** 1989 Jan;(238):294–301
Hemangiosarcoma of the left foot and tibia: case report. Castillo M, et al. **Foot Ankle** 1988 Aug;9(1):49–53
Results of the surgical treatment of the medial tibial syndrome in athletes. Järvinnen M, et al. **Int J Sports Med** 1989 Feb; 10(1):55–7
Congenital pseudarthrosis of the tibia: treatment with local steroid infiltration. Asquasciati G, et al.
Ital J Orthop Traumatol 1989 Mar;15(1):121–8
Treatment of chronic osteomyelitis of the leg by peroneal myocutaneous island flap transfer. Yoshimura M, et al.
J Bone Joint Surg [Br] 1989 Aug;71(4):593–6
Giant cell tumor of the proximal tibia: MR and CT appearance. Tehranzadeh J, et al.
J Comput Assist Tomogr 1989 Mar–Apr;13(2):282–6
Osteoid osteoma: two unusual case reports. Schilero J.
J Foot Surg 1989 Jan–Feb;28(1):20–2
Osteochondrosis of the tibial tuberosity (Osgood–Schlatter's disease) [letter] Gemmell HA.
J Manipulative Physiol Ther 1989 Aug;12(4):314
Proximal tibial sclerotic reaction. Herring JA, et al.
J Pediatr Orthop 1988 Nov–Dec;8(6):721–4
Adamantinoma of the radius. A case report. Bourne MH, et al. **Orthopedics** 1988 Nov;11(11):1565–6
Adolescent tibia vara. Chmell M, et al. **Orthopedics** 1989 Feb; 12(2):295–7
Resolving solitary osteochondromas. A report of two cases and literature review. Montgomery DM, et al.
Orthopedics 1989 Jun;12(6):861–3
Osteofibrous dysplasia of the tibia and fibula. Blackwell JB, et al. **Pathology** 1988 Jul;20(3):227–33
Intraosseous drug administration: successful resuscitation from asystole. Sacchetti AD, et al. **Pediatr Emerg Care** 1989 Jun;5(2):97–8
Case report 543. Osteofibrous dysplasia of tibia. Abdelwahab IF, et al. **Skeletal Radiol** 1989;18(3):249–51
Osteofibrous dysplasia. A report of two cases. Castellote A, et al. **Skeletal Radiol** 1988;17(7):483–6
Osteosarcoma—presumed lymph node metastases in two cases. English R, et al. **Skeletal Radiol** 1989;18(4):289–93
Case report 517: Ulcerating adamantinoma of the tibia. Tehranzadeh J, et al. **Skeletal Radiol** 1989;17(8):614–9
Unicameral bone cyst of the tibia complicated by genu valgum. Nasca RJ. **South Med J** 1988 Oct;81(10):1301–4
[Postoperative adjuvant chemotherapy of high dose MTX for osteogenic sarcoma]
Chung Hua Chung Liu Tsa Chih 1988 May;10(3):233–5 (Eng. Abstr.) **(Chi)**
[Articular macrogeodic cyst in rheumatoid polyarthritis] Sabri F, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1988; 125(1):41–9 (Eng. Abstr.) **(Fre)**
[Weismann–Netter and Stuhl disease. A review of the literature. Apropos of a case with uncommon radiologic signs] Zakarian H, et al. **J Radiol** 1989 Feb;70(2):133–7 (22 ref.) (Eng. Abstr.) **(Fre)**
[Internal tibial pain in runners] Sepulchre P, et al.
Phlebologie 1988 Jul–Oct;41(3):664–72 (Eng. Abstr.) **(Fre)**
[Punctate osteosclerosis of the tibial shaft. Campanacci's osteofibrous bone dysplasia of the left tibia] Adler CP, et al. **Radiologe** 1988 Dec;28(12):591–2 **(Ger)**
[Massive bone allografts in large bone defects after tumor surgery: a clinical long–term study] Shinohara N, et al.
Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2–3):1820–6 (Eng. Abstr.) **(Jpn)**
[In situ venous bypass in femoro–tibial arterial reconstruction] Wexels JC, et al.
Tidsskr Nor Laegeforen 1989 Apr 30;109(12):1271–2 (Eng. Abstr.) **(Nor)**
[Rationale for expediency in the surgical treatment of patients with chronic hematogenous osteomyelitis of the tibia at a specialized sanatorium] Galko GV, et al. **Klin Khir** 1988; (12):1–3 (Eng. Abstr.) **(Rus)**
[A syndrome of apophysotendopathy of the tuberosity of the tibia of dysplastic origin] Zelenetskiĭ IB, et al.
Ortop Travmatol Protez 1988 Sep;(9):41–6 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Aplasia of the tibia with bifurcation of the femur and ectrodactyly: evidence for an autosomal recessive type. Kohn G, et al. **Am J Med Genet** 1989 Jun;33(2):172–5
Histomorphometry and vitamin D metabolism of valgus–varus deformity in broiler chickens. Newbrey JW, et al. **Avian Dis** 1988 Oct–Dec;32(4):704–12
Congenital pseudarthrosis of the tibia. Long–term follow–up study. Crossett LS, et al. **Clin Orthop** 1989 Aug;(245):16–8
Tibia vara. A critical review. Langenskiöld A.
Clin Orthop 1989 Sep;(246):195–207 (63 ref.)
Dwarfism with congenital bowing of long bones. Folman Y, et al. **Isr J Med Sci** 1989 Jan;25(1):49–51
Autogenous bone grafting for severe angular deformity in total knee arthroplasty. Altchek D, et al. **J Arthroplasty** 1989;4(2):151–5
Congenital longitudinal deficiency of the tibia. Schoenecker PL, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):278–87
Oblique tibial osteotomy in the correction of tibial deformity in children. Kruse RW, et al. **J Pediatr Orthop** 1989 Jul–Aug;9(4):476–82
Bilateral split–hand with bilateral tibial aplasia. Sener RN, et al. **Pediatr Radiol** 1989;19(4):258–60
Development of a quantitative method for the evaluation of varus–angular bone deformity in chickens.
Harter–Dennis JM, et al. **Poult Sci** 1988 Nov; 67(11):1647–50
Longitudinal tibial epiphyseal bracket in Nievergelt syndrome. Burnstein MI, et al. **Skeletal Radiol** 1989; 18(2):121–5
[Congenital defects of tibia and fibula] de Meulemeester FR, et al. **Tijdschr Kindergeneeskd** 1988 Dec;56(6):248–53 (Eng. Abstr.) **(Dut)**
[The tibia component in pes valgus. Its treatment in children] Litt R, et al. **Acta Orthop Belg** 1988;54(3):296–8 (Eng. Abstr.) **(Fre)**
[Congenital diastasis of the tibiofibular joint] Karchinov K.
Ortop Travmatol Protez 1988 Sep;(9):46–50 **(Rus)**
[Surgical treatment of the polyostotic form of fibrous dysplasia in children and adolescents] Snetkov AI.
Vestn Khir 1988 Jun;140(6):85–9 (Eng. Abstr.) **(Rus)**
[Congenital tibia vara (Blount's disease)] Kloppe Villegas P, et al. **An Esp Pediatr** 1988 Aug;29(2):183–4 **(Spa)**

ANALYSIS

Species–specific effects of chronic nerve stimulation upon tibialis anterior muscle in mouse, rat, guinea pig, and rabbit. Simoneau JA, et al. **Pflugers Arch** 1988 Jul;412(1–2):86–92

ANATOMY & HISTOLOGY

Factors affecting the region of most isometric femoral attachments. Part I: The posterior cruciate ligament. Grood ES, et al. **Am J Sports Med** 1989 Mar–Apr;17(2):197–207 (32 ref.)
Factors affecting the region of most isometric femoral attachments. Part II: The anterior cruciate ligament. Hefzy MS, et al. **Am J Sports Med** 1989 Mar–Apr;17(2):208–16 (38 ref.)
Fluoroscopic measurement of tibial torsion in adults. A comparison of three methods. Clementz BG, et al.
Arch Orthop Trauma Surg 1989;108(3):150–3
Orientation of collagen in human tibial and fibular shaft and possible correlation with mechanical properties. Carando S, et al. **Bone** 1989;10(2):139–42
The histology of distraction osteogenesis using different external fixators. Aronson J, et al. **Clin Orthop** 1989 Apr; (241):106–16
Tibial torsion. Normal values in children. Valmassy R, et al. **J Am Podiatr Med Assoc** 1989 Sep;79(9):432–5
Tibial anatomy and functional axes. Yoshioka Y, et al.
J Orthop Res 1989;7(1):132–7
Anatomic basis for implantation of the Ilizarov system in the leg. Borrione F, et al. **Surg Radiol Anat** 1988;10(4):283–9
[Biometry of the tibia] Forriol Campos F, et al.
Anat Anz 1989;168(3):267–73 (Eng. Abstr.) **(Ger)**
[Mass–surface ration of the tibia and fibula] Sárváry A.
Morphol Igazsagugyi Orv Sz 1988 Oct;28(4):287–91 (Eng. Abstr.) **(Hun)**
[Tibiofibular syndesmosis in the normal state and in trauma] Shekhtman AG. **Ortop Travmatol Protez** 1988 Dec;(12):40 **(Rus)**

BLOOD SUPPLY

Blood supply to the periosteum of the canine tibia. Cooper RC Jr, et al. **Am J Vet Res** 1988 Aug;49(8):1419–23
Effect of high tibial osteotomy on upper tibial venous drainage: study by intraosseous phlebography in primary osteoarthritis of knee joint. Dey A, et al.
Ann Rheum Dis 1989 Mar;48(3):188–93
Changes in tibial venous blood flow in the evolving compartment syndrome. Jones WG 2d, et al. **Arch Surg** 1989 Jul;124(7):801–4
Factors affecting the outcome of 463 femorotibial reconstructions. Englund R, et al. **Aust N Z J Surg** 1988 Apr;58(4):279–83
Fibrinolytic therapy in peripheral arterial grafts utilizing the "crossed two catheter" technique. Shewchun J, et al.
Cardiovasc Intervent Radiol 1989 Mar–Apr;12(2):110–2
Patent muscular vessels in atheromatous obstruction of tibial arteries: a support of more peripheral revascularization procedures? Casula G, et al. **Ital J Surg Sci** 1988; 18(2):163–6
Systemic lupus erythematosus with tibial arteritis and foot gangrene. Ferreiro JE, et al. **J Fla Med Assoc** 1988 Dec; 75(12):801–4
Effect of muscle flap coverage on bone blood flow following devascularization of a segment of tibia: an experimental investigation in the dog. Richards RR, et al.
J Orthop Res 1989;7(4):550–8
Tibial fractures with infrapopliteal arterial injuries. Segal D, et al. **J Orthop Trauma** 1987;1(2):160–9
[Vascularization of the tibial diaphysis as affected by open and closed intramedullary osteosynthesis] Onoprienko GA, et al. **Ortop Travmatol Protez** 1988 Sep;(9):19–23 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effect of bone matrix-derived growth factors on skull and tibia in the growing rat. Engström C, et al. **J Oral Pathol** 1988 Aug;17(7):334–40

EMBRYOLOGY

Interrelationship between growth cartilage structures in prenatal osteogenesis. Baltadjiev G. **Folia Med (Plovdiv)** 1987;29(4):52–6

Heterogeneity of the cartilage-marrow interface during uncalcified cartilage resorption in the chick embryo tibia. Aceitero J, et al. **J Anat** 1988 Oct;160:39–50

Tibiofibular torsion from the fetal period until birth. Badelon O, et al. **J Pediatr Orthop** 1989 Mar–Apr;9(2):169–73

ENZYMOLOGY

Ultracytochemical investigation of calcium-activated adenosine triphosphatase (Ca++-ATPase) in chick tibia. Akisaka T, et al. **J Bone Miner Res** 1988 Feb;3(1):19–25

GROWTH & DEVELOPMENT

The rate of bony tissue deposition in the spongiosa of the extremities of long bones in the dog. Lozupone E. **Anat Anz** 1988;166(1–5):175–85

Flurbiprofen enhances growth and cancellous and cortical bone accumulation in rapidly growing long bones. Li XJ, et al. **Bone** 1989;10(1):35–44

Skeletal tissue responses to thermal injury: an experimental study. Schaffler MB, et al. **Bone** 1988;9(6):397–406

The effect of partial periosteal division on growth of the long bones. An experimental study in rabbits. Dimitriou CG, et al. **Clin Orthop** 1988 Nov;(236):265–9

Comparison of long bones and vertebrae in growing male rats: rate of growth, mineralization, and uptake of 3H-tetracycline at the organ level. Coffey SA, et al. **Growth Dev Aging** 1988 Autumn;52(3):151–6

Analysis of differential growth of the right and the left leg. Hermanussen M, et al. **Hum Biol** 1989 Feb;61(1):133–41

Effect of denervation on limb growth. Dietz FR. **J Orthop Res** 1989;7(2):292–303

Remodeling potential of long bones following angular osteotomies. Abraham E. **J Pediatr Orthop** 1989 Jan–Feb; 9(1):37–43

Effect of dietary calcium, phosphorus, chloride, and zeolite on the development of tibial dyschondroplasia. Edwards HM Jr. **Poult Sci** 1988 Oct;67(10):1436–46

Effect of distal femoral growth plate fusion on femoral-tibial length. Wagner SD, et al. **Vet Surg** 1987 Nov–Dec; 16(6):435–9

[Distraction epiphysiolysis of the proximal tibia using the Berlin external fixator—experiences and results] Marks P, et al. **Beitr Orthop Traumatol** 1988 Jun;35(6):241–53 (Eng. Abstr.) **(Ger)**

[Development of torsion of the crural bones in the normal state and in congenital clubfoot] Galko GV, et al. **Ortop Travmatol Protez** 1989 Feb;(2):72–4 (44 ref.) **(Rus)**

INJURIES

Microdamage in response to repetitive torsional loading in the rat tibia. Forwood MR, et al. **Calcif Tissue Int** 1989 Jul;45(1):47–53

Repair of segmental defects of the tibia with cancellous bone grafts augmented with human bone morphogenetic protein. A preliminary report. Johnson EE, et al. **Clin Orthop** 1988 Nov;(236):249–57

Rotational displacement of the distal epiphysis of the tibia without fracture. Smith MG. **Injury** 1988 May;19(3):209–11

Contact stress aberrations following imprecise reduction of simple tibial plateau fractures. Brown TD, et al. **J Orthop Res** 1988;6(6):851–62

Ladder limb: a case of pretibial tumefaction [letter] Gray RG, et al. **J Rheumatol** 1988 Sep;15(9):1454–5

The Ilizarov technique in the treatment of infected tibial nonunions. Pearson RL, et al. **Orthop Rev** 1989 May; 18(5):609–13

[Superior fibulo-tibial traumatic luxation with fracture of the tibia. Apropos of 2 cases and a general review of the literature] de la Caffinière JY, et al. **Rev Chir Orthop** 1988; 74(4):366–9 (5 ref.) (Eng. Abstr.) **(Fre)**

INNERVATION

[Effect of disorders of the afferent and sympathetic innervation on the structural organization of the osteoarticular system (experimental-morphologic study)] Stetsula VI, et al. **Ortop Travmatol Protez** 1988 Aug; (8):45–9 **(Rus)**

METABOLISM

Cross-linking and new bone collagen synthesis in immobilized and recovering primate osteoporosis. Yamauchi M, et al. **Bone** 1988;9(6):415–8

[Effects of antirheumatics on the glycosaminoglycan distribution pattern of fetal tibia cultured in vitro] Karzel K, et al. **Arzneimittelforschung** 1988 Sep;38(9):1327–33 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Assessment of tibial torsion employing fluoroscopy, computed tomography and the cryosectioning technique. Clementz BG, et al. **Acta Radiol** 1989 Jan–Feb;30(1):75–80

Primary lymphoma of bone: the use of MRI in pretreatment evaluation. Salter M, et al. **Am J Clin Oncol** 1989 Apr; 12(2):101–5

A study of the interface between human bone and hydroxylapatite. A morphological and morphometric investigation. Marinoni EC, et al. **Ital J Orthop Traumatol** 1987 Dec;13(4):527–34

Intraosseous ganglion cysts. Daly PJ, et al. **Orthopedics** 1988 Dec;11(12):1715–9

Bilateral Brodie's abscess. Day DL, et al. **Orthopedics** 1989 Jun;12(6):885–8

Case report 560: Parosteal osteoma of tibia. Baum PA, et al. **Skeletal Radiol** 1989;18(5):406–9

Case report 555: Intraosseous ganglion cyst of the distal end of tibia. Dungan DH, et al. **Skeletal Radiol** 1989;18(5):385–8

Case report 527: Giant bone island of tibia. Gold RH, et al. **Skeletal Radiol** 1989;18(2):129–32

Case report 552: Post-traumatic remodelling of the distal tibial epiphysis: a form of aseptic osteonecrosis. Lagier R. **Skeletal Radiol** 1989;18(4):331–3

Fibrous metaphyseal defects. Magnetic resonance imaging appearances. Ritschl P, et al. **Skeletal Radiol** 1989; 18(4):253–9

[Chronic osteomyelitis and cancer of the fistula] Wening JV, et al. **Langenbecks Arch Chir** 1989;374(1):55–9 (Eng. Abstr.) **(Ger)**

[Chronic lymphocytic leukemia presenting with osteolytic ankle lesions] Hekselman I, et al. **Harefuah** 1988 Dec 15; 115(12):369–70 (Eng. Abstr.) **(Heb)**

[Leg lengthening: the value of echography in the evaluation of various phases of bone regeneration] Peretti G, et al. **Chir Organi Mov** 1988 Jan–Mar;73(1):53–8 (Eng. Abstr.) **(Ita)**

[Studies of the effect of ischemia of the legs on the degree of osteoporosis of the femur and tibia using the cortex-shaft index] Skawina A, et al. **Przegl Lek** 1989;46(3):346–9 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

A strain-gauge study of the effect of external fixation on the canine tibia. Matushek KJ, et al. **Arch Orthop Trauma Surg** 1989;108(3):159–65

Phase velocity measurement of flexural waves in human tibia. Fäh D, et al. **J Biomech** 1988;21(11):975–83

Sex differences in age-related remodeling of the femur and tibia. Ruff CB, et al. **J Orthop Res** 1988;6(6):886–96

The effectiveness of shock-absorbing insoles during normal walking. Johnson GR. **Prosthet Orthot Int** 1988 Aug; 12(2):91–5

Increase in bone strength of spent laying hens housed in modified cages with perches. Hughes BO, et al. **Vet Rec** 1989 May 6;124(18):483–4

[Measuring pressure distribution on the human tibia in ski boots] Schaff P, et al. **Sportverletz Sportschaden** 1987 Sep; 1(3):118–29 (Eng. Abstr.) **(Ger)**

[The tension band effect of the iliotibial tract] Tichy P, et al. **Unfallchirurg** 1989 May;92(5):240–4 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

A biomechanical evaluation of tibiofemoral rotation in anterior cruciate deficient knees during walking and running. Czerniecki JM, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):327–31

Tibial collateral ligament bursitis. Kerlan RK, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):344–6

Pathomechanics of posterior sag of the tibia in posterior cruciate deficient knees. An experimental study. Ogata K, et al. **Am J Sports Med** 1988 Nov–Dec;16(6):630–6

Dynamic posterior shift test. An adjuvant in evaluation of posterior tibial subluxation. Shelbourne KD, et al. **Am J Sports Med** 1989 Mar–Apr;17(2):275–7

The tension-stress effect on the genesis and growth of tissues. Part I. The influence of stability of fixation and soft-tissue preservation. Ilizarov GA. **Clin Orthop** 1989 Jan; (238):249–81

Matrix vesicles and calcification of rachitic rat osteoid. Johnson TF, et al. **J Exp Pathol** 1989 Summer;4(3):123–32

RADIOGRAPHY

Remodeling of the tibial plateau after knee replacement. CT bone densitometry. Hvid I, et al. **Acta Orthop Scand** 1988 Oct;59(5):567–73

Two cases of periosteal chondroma. Mora R, et al. **Acta Orthop Scand** 1988 Dec;59(6):723–7

Bilateral distal tibial osteonecrosis in systemic lupus erythematosus [letter] Outwater E, et al. **AJR** 1989 Apr; 152(4):895–6

Quantitative computed tomography at peripheral measuring sites. Rüegsegger P. **Ann Chir Gynaecol** 1988;77(5–6):204–7

Radiographic diagnosis of tibial dyschondroplasia in broilers: a field selection technique. Bartels JE, et al. **Avian Dis** 1989 Apr–Jun;33(2):254–7

Tibia vara caused by focal fibrocartilaginous dysplasia. Husien AM, et al. **Clin Radiol** 1989 Jan;40(1):104–5

Anteroposterior radiographic view of the knee. An unreliable indicator of bone damage. Riddle JM, et al. **Clin Rheumatol** 1988 Dec;7(4):504–13

Pulmonary metastases from Ewing's sarcoma—presenting as spontaneous pneumothorax in a young child. Singla R, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):148–53

Radiology clinic. Female runner with shin pain. Decamp JR. **Indiana Med** 1988 Dec;81(12):1021–2

Extension of monostotic Paget disease from the femur to the tibia after arthrodesis of the knee. A case report. O'Driscoll SW, et al. **J Bone Joint Surg [Am]** 1989 Jan; 71(1):129–32

Density changes at the proximal tibia after medial meniscectomy. Odgaard A, et al. **J Orthop Res** 1989; 7(5):744–53

Prominent transverse (Bowdler) bone spurs as a diagnostic clue in a case of neonatal hypophosphatasia without metaphyseal irregularity. Oestreich AE, et al. **Pediatr Radiol** 1989;19(5):341–2

Localized cortical bone sclerosis and intramedullar linear sclerosis in neurofibromatosis. Kuur E, et al. **Rontgenblatter** 1988 Aug;41(8):329–31

Radiation dose in assessment of tibial torsion with a mobile C-arm fluoroscope. Clementz BG, et al. **Ups J Med Sci** 1989;94(1):67–72

[Medial tibial pain in runners] Sepulchre P, et al. **Int Orthop** 1988;12(3):217–21 (Eng. Abstr.) **(Fre)**

[Recurrent multifocal periostitis in children] Ben Dridi MF, et al. **Tunis Med** 1988 Dec;66(12):867–72 (8 ref.) (Eng. Abstr.) **(Fre)**

[Importance of the ossicle and therapy of Osgood-Schlatter disease] Engel A, et al. **Sportverletz Sportschaden** 1987 Jun; 1(2):100–8 (Eng. Abstr.) **(Ger)**

[Hypophosphatasia: apropos of a case (letter)] Cabero FM, et al. **Rev Clin Esp** 1989 Feb;184(3):161–2 **(Spa)**

RADIONUCLIDE IMAGING

Tears of the medial meniscus associated with increased radionuclide activity of the proximal tibia. Report of three cases. Bauer HC, et al. **Int Orthop** 1989;13(2):153–5

SURGERY

Limb lengthening by physeal distraction. Bjerkreim I. **Acta Orthop Scand** 1989 Apr;60(2):140–2

Advancement of the tibial tuberosity for patellar pain. A 5-year follow-up. Engebretsen L, et al. **Acta Orthop Scand** 1989 Feb;60(1):20–2

Surgical repair of rabbit tibia osteotomy using isobutyl-2-cyanoacrylate. Papatheofanis FJ. **Arch Orthop Trauma Surg** 1989;108(4):236–7

The fillet foot for endweight-bearing cover of below knee amputations. Singer DI, et al. **Aust N Z J Surg** 1988 Oct; 58(10):817–23

Neurological complications arising in bilateral lengthening of the tibiae in an achondroplastic subject. Giglio GC, et al. **Basic Life Sci** 1988;48:325–31

Lengthening of the lower limbs and correction of lumbar hyperlordosis in achondroplasia. Vilarrubias JM, et al. **Basic Life Sci** 1988;48:357–71

Epiphyseal distraction. Chondrodiatasis. Aldegheri R, et al. **Clin Orthop** 1989 Apr;(241):117–27

Epiphyseal distraction. Hemichondrodiatasis. Aldegheri R, et al. **Clin Orthop** 1989 Apr;(241):128–36

The callotasis method of limb lengthening. Aldegheri R, et al. **Clin Orthop** 1989 Apr;(241):137–45

The study of Maquet dome high tibial osteotomy. Arthroscopic-assisted analysis. Hsu RW. **Clin Orthop** 1989 Jun;(243):280–5

Evaluation of patients for high tibial osteotomy. Keene JS, et al. **Clin Orthop** 1989 Jun;(243):157–65

Proximal tibial osteotomy. A new fixation device. Miniaci A, et al. **Clin Orthop** 1989 Sep;(246):250–9

High tibial osteotomy compared with high tibial and Maquet procedures in medial and patellofemoral compartment osteoarthritis. Nguyen C, et al. **Clin Orthop** 1989 Aug; (245):179–87

The healing of canine vascularized segmental tibial osteotomies. The effect of retained endosteal circulation. Zdeblick TA, et al. **Clin Orthop** 1988 Nov;(236):296–302

Degenerative changes in dog articular cartilage induced by a unilateral tibial valgus osteotomy. Johnson RG, et al. **Exp Pathol** 1988;33(3):145–64

Pes planus after tibial osteotomy. McLaren CA, et al. **Foot Ankle** 1989 Jun;9(6):300–3

High tibial osteotomy in the treatment of arthritic varus knee. A medium term (small) review of 61 cases. Rinonapoli E, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):283–92

Domed high tibial osteotomy: the long-term results in tibiofemoral arthritis with and without malalignment of the extensor apparatus. Soccetti A, et al. **Ital J Orthop Traumatol** 1987 Dec;13(4):463–75

Proximal tibial osteotomy. A survivorship analysis. Ritter MA, et al. **J Arthroplasty** 1988;3(4):309–11

Proximal Tibial Osteotomy in Patients Who Are Fifty Years Old or Less. A Long-term Follow-Up Study [letter] **J Bone Joint Surg [Am]** 1989 Jul;71(6):951–2

Bonding behavior of a glass-ceramic containing apatite and wollastonite in segmental replacement of the rabbit tibia under load-bearing conditions. Kitsugi T, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):264–72

Observations on patellar height after proximal tibial osteotomy. Scuderi GR, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):245–8

Osteotomy of the tibial tubercle during total knee replacement. A report of twenty-six cases. Wolff AM, et

al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):848–52

Tibial shortening for leg length discrepancy. Broughton NS, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):242–5

Upper tibial osteotomy for secondary osteoarthritis of the knee. Morrey BF. **J Bone Joint Surg [Br]** 1989 Aug; 71(4):554–9

Knee stability after partial excision of tibial plateau: brief report. Sharif DT, et al. **J Bone Joint Surg [Br]** 1989 Mar; 71(2):320

A technique for removing a fractured interlocking tibial nail. Dugdale TW, et al. **J Orthop Trauma** 1988;2(1):39–42

Double-elevating osteotomy of tibiae in the treatment of severe cases of Blount's disease. Gregosiewicz A, et al. **J Pediatr Orthop** 1989 Mar–Apr;9(2):178–81

Tibial tubercle apophysitis in cerebral palsy treated with proximal tibial epiphysiodesis: report of two cases with 3-year follow-up. Kasser JR, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):704–6

Lower limb lengthening by a modified Wagner technique. Paterson JM, et al. **J Pediatr Orthop** 1989 Mar–Apr; 9(2):129–33 (14 ref.)

Oblique tibial osteotomy for Blount's disease (tibia vara). Rab GT. **J Pediatr Orthop** 1988 Nov–Dec;8(6):715–20

Tibial sequestrectomy in the management of Osgood–Schlatter disease. Trail IA. **J Pediatr Orthop** 1988 Sep–Oct;8(5):554–7

Mid-infrared erbium:YAG laser ablation of bone: the effect of laser osteotomy on bone healing. Nelson JS, et al. **Lasers Surg Med** 1989;9(4):362–74

High tibial osteotomy with fixation by a blade plate for medial compartment osteoarthritis of the knee. Koshino T, et al. **Orthop Clin North Am** 1989 Apr;20(2):227–43

Potential complications of total knee replacement following tibial osteotomy. Cameron HU, et al. **Orthop Rev** 1988 Jan; 17(1):39–43

Proximal tibial osteotomy. Coventry MB. **Orthop Rev** 1988 May;17(5):456–8

The Ilizarov technique in the treatment of infected tibial nonunions. Pearson RL, et al. **Orthop Rev** 1989 May; 18(5):609–13

Treatment of hemophilic pseudotumor with radical debridement and free tissue transfer. A case report. Carroll C 4th, et al. **Orthopedics** 1989 Apr;12(4):561–5

The Ilizarov technique [editorial] D'Ambrosia R. **Orthopedics** 1989 Apr;12(4):495

Infected tibial pseudarthrosis. A 2-year follow up on patients treated by the Ilizarov technique. Morandi M, et al. **Orthopedics** 1989 Apr;12(4):497–508

Rotationplasty: an option for limb salvage in childhood osteosarcoma. Schwartz HS, et al. **Orthopedics** 1989 Feb; 12(2):257–63

Correlation of patient's age, grade of arthrosis and degree of angle deformity correction to clinical results in high tibial osteotomy for gonarthrosis. Jokio PJ, et al. **Rev Chir Orthop** 1988;74 Suppl 2:327–8

Evaluation of the tibia as a source of autogenous cancellous bone in the horse. Boero MJ, et al. **Vet Surg** 1989 Jul–Aug; 18(4):322–7

Evaluation of collagen as a retainer for autogenous cancellous bone used in repair of full thickness cortical bone defects. Johnson AL, et al. **Vet Surg** 1987 Mar–Apr;16(2):146–50

[Pedicled osteocutaneous flap of the fibula for the treatment of tibial defects] Chen ZW, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):32–3, 61 (Eng. Abstr.) (Chi)

[Reverse implantation of osteotomized tibial fragments in the treatment of congenital pseudoarthrosis] Tang TS. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):606–7, 637–8 (Eng. Abstr.) (Chi)

[Osteotomy in the area of the knee joint. I. Indications and surgical technic] Krbec M. **Acta Chir Orthop Traumatol Cech** 1988 Dec;55(6):481–90 (Eng. Abstr.) (Cze)

[500 cases of lower limb lengthening using a personal technic in achondroplasia] Vilarrubias JM, et al. **Acta Orthop Belg** 1988;54(4):384–90 (Eng. Abstr.) (Fre)

[Effects of the dynamization of static bolt nailing. In vivo experimentation] Dagrenat D, et al. **Rev Chir Orthop** 1988; 74 Suppl 2:100–4 (Fre)

[Osteogenesis in distraction in animals submitted to anti-cancer chemotherapy. Experimental study in rabbits] Prevot J, et al. **Rev Chir Orthop** 1988;74 Suppl 2:98–100 (Fre)

[Displacement of the tibial tuberosity in retropatellar cartilage damage and recurrent patellar dislocation] Krause R, et al. **Aktuel Traumatol** 1989 Feb;19(1):35–42 (Eng. Abstr.) (Ger)

[Results following high tibial head osteotomy in varus and valgus gonarthroses] Mayer G, et al. **Beitr Orthop Traumatol** 1988 Sep;35(9):443–9 (Eng. Abstr.) (Ger)

[Loss of correction in valgus osteotomy of the tibial head] Witt M. **Beitr Orthop Traumatol** 1988 Sep;35(9):449–53 (Eng. Abstr.) (Ger)

[Use of a rotation stable telescope interlocking nail in the growth period. Case description] Zwipp H, et al. **Chirurg** 1988 Nov;59(11):797–800 (Ger)

[Should Volkmann's great triangle be screwed?] Fuchs CC, et al. **Helv Chir Acta** 1989 Jun;56(1–2):259–61 (Eng. Abstr.) (Ger)

[The endoprosthesis of the Kotz Modular Femur and Tibia Reconstruction System (KMFTR) and radiologic changes in the prosthesis anchorage] Höppel R. **Wien Klin Wochenschr** 1989 May 26;101(11):394 (Ger)

[Corrective osteotomy of the shaft of the femur and tibia with an interlocking nail] Friedebold G, et al. **Z Orthop** 1988 May–Jun;126(3):326–33 (Eng. Abstr.) (Ger)

[Addition osteotomy of the head of the tibia with joint repair. Indications—technic—results] Müller RT, et al. **Z Orthop** 1989 May–Jun;127(3):308–14 (Eng. Abstr.) (Ger)

[Transposition of the anterior tibial apophysis in the treatment of patellar instability without luxation] Costa P, et al. **Chir Organi Mov** 1988 Oct–Dec;73(4):339–44 (Eng. Abstr.) (Ita)

[Torsion abnormalities of the tibia in the adult] Padovani G, et al. **Chir Organi Mov** 1988 Jan–Mar;73(1):21–6 (Eng. Abstr.) (Ita)

[Medial tibial pain syndrome] Almdahl SM, et al. **Tidsskr Nor Laegeforen** 1988 Aug 30;108(24):1912–3 (Eng. Abstr.) (Nor)

[Lengthening of crural bones using the Anderson-Abbott method] Podesek S, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(5):384–9 (Eng. Abstr.) (Pol)

[Revascularization of a free autologous transplant in correcting an extensive defect of the long bone by bilocal osteosynthesis using the Ilizarov method] Barabash AP, et al. **Ortop Travmatol Protez** 1988 Dec;(12):6–10 (Eng. Abstr.) (Rus)

[An instrument for the osteosynthesis of the internal malleolus] Kuznetsov BV. **Ortop Travmatol Protez** 1988 Sep;(9):69 (Rus)

[Treatment of post-osteomyelitic circular defects in shin bones by the method of compression-distraction osteosynthesis with the use of allogenic bone matrix] Osepian IA, et al. **Ortop Travmatol Protez** 1989 Mar; (3):21–3 (Eng. Abstr.) (Rus)

[Intraosseous osteosynthesis of the tibia in fractures of the lower third] Zverev EV. **Ortop Travmatol Protez** 1988 May;(5):16–9 (Eng. Abstr.) (Rus)

TRANSPLANTATION

Segmental bone grafting. Comparison of different types of graft in dogs. Aebi M, et al. **Int Orthop** 1989;13(2):101–11

Lower limb salvage with autoclaved autogenous tibial diaphysis: case report. Hallock GG, et al. **J Trauma** 1989 Apr;29(4):528–30

ULTRASTRUCTURE

Ultrastructure of the tibial epiphyseal growth plate in microphthalmic (mi/mi) mice. Paxinos-Maroudas D, et al. **Arch Oral Biol** 1989;34(2):77–84

TIBIAL FRACTURES

A unique closed abduction-external rotation ankle fracture. O'Leary C, et al. **J Trauma** 1989 Jan;29(1):119–21

[Fracture of the proximal tibial metaphysis in children] Skak SV. **Ugeskr Laeger** 1988 Sep 12;150(37):2166–9 (Eng. Abstr.) (Dan)

[A case of tri-plane fracture of the proximal tibial epiphysis] Ferrari GP, et al. **Chir Organi Mov** 1988 Apr–Jun; 73(2):165–9 (Eng. Abstr.) (Ita)

[Fractures of the distal end of the tibia in adolescents ("transitional fractures")] Popović Z, et al. **Vojnosanit Pregl** 1989 Jan–Feb;46(1):11–4 (Eng. Abstr.) (Ser)

[Malleolar fractures. Incidence, classification, diagnosis and therapy] Popović Z, et al. **Vojnosanit Pregl** 1988 Jul–Aug; 45(4):288–97 (Ser)

CLASSIFICATION

Pilon fractures of the tibia: a study based on 19 cases. Ayeni JP. **Injury** 1988 Mar;19(2):109–14

COMPLICATIONS

No arthrosis of the ankle 20 years after malaligned tibial-shaft fracture. Kristensen KD, et al. **Acta Orthop Scand** 1989 Apr;60(2):208–9

The Segond fracture of the proximal tibia: a small avulsion that reflects major ligamentous damage. Goldman AB, et al. **AJR** 1988 Dec;151(6):1163–7

Genu recurvatum due to partial growth arrest of the proximal tibial physis: correction by callus distraction. Case report. Pennig D, et al. **Arch Orthop Trauma Surg** 1989; 108(2):119–21

The effects of dexamethasone on periarticular swelling and joint stiffness following fracture in a rabbit hindlimb model. Grauer JD, et al. **Clin Orthop** 1989 May;(242):277–84

Progressive valgus deformity after juxta-epiphyseal fractures of the upper tibia in children. Ben-Itzhak I, et al. **Injury** 1987 May;18(3):169–73

A case of Aspergillus osteomyelitis complicating an open fracture of the tibia. Richards RH, et al. **Injury** 1988 Mar; 19(2):129–30

Fracture of the lower leg with involvement of the posterior malleolus; a neglected combination? van der Werken C, et al. **Injury** 1988 Jul;19(4):241–3

The prevention of infection in open fractures. An experimental study of the effect of antibiotic therapy. Worlock P, et al. **J Bone Joint Surg [Am]** 1988 Oct; 70(9):1341–7

Tibial fractures with infrapopliteal arterial injuries. Segal D, et al. **J Orthop Trauma** 1987;1(2):160–9

The 'occult' compartment syndrome. Wright JG, et al. **J Trauma** 1989 Jan;29(1):133–4

Valgus deformity following fracture of the tibial metaphysis. Mahnken RF, et al. **Orthopedics** 1988 Sep;11(9):1317, 1320–2

Severe trauma to the lower extremity: long-term sequelae. Moore TJ, et al. **South Med J** 1989 Jul;82(7):843–4

[Treatment of traumatic shortening of the legs in adults] Zhu SX. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;69(1):15–6, 2 (Eng. Abstr.) (Chi)

[The compartment syndrome after fractures of the calf] Melichar J, et al. **Rozhl Chir** 1989 Jun;68(6):424–30 (Eng. Abstr.) (Cze)

[Aseptic pseudarthrosis of the tibial shaft: cause and treatment] Vanclooster P, et al. **Acta Chir Belg** 1988 May–Jun;88(3):179–86 (Eng. Abstr.) (Dut)

[Use of a distal pedicle medial hemisoleus flap in the treatment of residual osteitis of the lower quarter of the leg] Ginouves P, et al. **Ann Chir Plast Esthet** 1988; 33(4):350–4 (Eng. Abstr.) (Fre)

[Chronic osteomyelitis and cancer of the fistula] Wening JV, et al. **Langenbecks Arch Chir** 1989;374(1):55–9 (Eng. Abstr.) (Ger)

[Reconstructive surgical treatment of invalids with defects of part of the tibial diaphysis] Blinov BV, et al. **Vestn Khir** 1988 Jun;140(6):110–3 (Eng. Abstr.) (Rus)

[Post-traumatic cerebral fat embolism] Rovira I, et al. **Rev Esp Anestesiol Reanim** 1988 Nov–Dec;35(6):337–40 (Eng. Abstr.) (Spa)

CONGENITAL

[Clinical aspects and therapy of congenital pseudarthrosis of the lower limb. 2 case reports] Krahl H, et al. **Z Orthop** 1988 May–Jun;126(3):250–4 (Eng. Abstr.) (Ger)

DIAGNOSIS

Assessment of tibial torsion employing fluoroscopy, computed tomography and the cryosectioning technique. Clementz BG, et al. **Acta Radiol** 1989 Jan–Feb;30(1):75–80

MRI demonstration of radiographically occult fractures: what have we been missing? Berger PE, et al. **Radiographics** 1989 May;9(3):407–36

Occult cartilage and bone injuries of the knee: detection, classification, and assessment with MR imaging. Mink JH, et al. **Radiology** 1989 Mar;170(3 Pt 1):823–9

Avulsion of the posteromedial tibial plateau by the semimembranosus tendon: diagnosis with MR imaging. Yao L, et al. **Radiology** 1989 Aug;172(2):513–4

[Magnetic resonance tomographic studies of stress fractures] Yousry T, et al. **Digitale Bilddiagn** 1989 Jun;9(2):69–71 (Eng. Abstr.) (Ger)

[Expert evaluation of medical documentation data in estimating the severity of injuries] Kolyuh LB, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):42–4 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Combined effect of foot arch structure and an orthotic device on stress fractures. Simkin A, et al. **Foot Ankle** 1989 Aug; 10(1):25–9

Fracture of the proximal metaphysis of the tibia in children. Skak SV, et al. **Injury** 1987 May;18(3):149–56

Stress fractures in female soldiers: an epidemiological investigation of an outbreak. Zahger D, et al. **Milit Med** 1988 Sep;153(9):448–50

ETIOLOGY

A device for producing experimental fractures. Macdonald W, et al. **Acta Orthop Scand** 1988 Oct;59(5):542–4

Stress fractures in parachute regiment recruits [letter] Murphy GR. **J R Army Med Corps** 1988 Oct;134(3):158

Ipsilateral traumatic supracondylar femoral and proximal tibial fractures following total knee replacement: a case report. Kjaersgaard-Andersen P, et al. **J Trauma** 1989 Mar; 29(3):398–400

[What is the significance of posterior boot edge fracture in Alpine skiing?] Genelin A, et al. **Sportverletz Sportschaden** 1987 Dec;1(4):161–7 (Eng. Abstr.) (Ger)

[Triathlon—continuous stress on muscles, tendons and bones?] Sell S, et al. **Sportverletz Sportschaden** 1988 Sep; 2(3):112–4 (Eng. Abstr.) (Ger)

[Experimental modelling of the clinical types of open fractures of the long bones] Gun'ko IuG, et al. **Ortop Travmatol Protez** 1988 May;(5):25–8 (Eng. Abstr.) (Rus)

METABOLISM

In situ localization of collagen production by chondrocytes and osteoblasts in fracture callus. Sandberg M, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):69–77 (41 ref.)

PATHOLOGY

The role of the tibiofibular interosseous membrane in the repair of fractures of the tibia and fibula. Rosati E, et al. **Ital J Orthop Traumatol** 1987 Dec;13(4):521–5

Long-term follow-up after fractures of the tibial and fibular shafts. Merchant TC, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):599–606

A histological study of acute hematogenous osteomyelitis following physeal injuries in rabbits. Whalen JL, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1383–92

PHYSIOPATHOLOGY

Reduced energy absorption of healed fracture in the rat. Bak B, et al. **Acta Orthop Scand** 1988 Oct;59(5):548–51

The effects of function and fixation stiffness on experimental bone healing. Terjesen T, et al. **Acta Orthop Scand** 1988 Dec;59(6):712–5

The impact experiment as a source of information about the mechanism of origin of lower leg trauma. Svoboda J, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:101–10

Avulsion fractures of the tibial tuberosity in the adolescent athlete. Risk factors, mechanism of injury, and treatment. Mirbey J, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):336–40

The difficult healing of segmental fractures of the tibial shaft. Rommens PM, et al. **Arch Orthop Trauma Surg** 1989;108(4):238–42

An investigation of the fracture characteristics of the tibia of mature rabbits. Oni OO, et al. **Injury** 1988 May;19(3):172–6

Physeal arrest about the knee associated with non-physeal fractures in the lower extremity. Hresko MT, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):698–703

Cruciate ligament replacement using a meniscus. An experimental study. Mitsou A, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):784–6

The healing of closed tibial shaft fractures. The natural history of union with closed treatment. Oni OO, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):787–90

RADIOGRAPHY

Fluoroscopy of rotation in tibial fractures. Clementz BG. **Acta Orthop Scand** 1989 Apr;60(2):204–7

Osteochondral fracture of the tibial plateau in a ballerina. McDonnell MF, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):417–8 (3 ref.)

Ankle swelling is not always 'medical'. Han KH, et al. **Arch Emerg Med** 1989 Mar;6(1):56–8

Fatigue fractures of the proximal tibia simulating malignancy. Davies AM, et al. **Br J Radiol** 1988 Oct;61(730):903–8

The value of internal oblique radiographs for posterolateral bone grafting of the tibia. An HS, et al. **Clin Orthop** 1989 Jan;(238):209–10

Assessment of tibial torsion and rotational deformity with a new fluoroscopic technique. Clementz BG. **Clin Orthop** 1989 Aug;(245):199–209

Osteoporosis and fracture patterns. A study of split-compression fractures of the lateral tibial condyle. Foltin E. **Int Orthop** 1988;12(4):299–303

An experimental study of the patterns of periosteal and endosteal damage in tibial shaft fractures using a rabbit trauma model. Oni OO, et al. **J Orthop Trauma** 1989;3(2):142–7

Analysis of 429 fractures in 189 battered children. King J, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):585–9

Multiple stress fractures in the hindfoot in rheumatoid arthritis. Semba CP, et al. **J Rheumatol** 1989 May;16(5):671–6

Imaging rounds #97. Salter II fracture of the proximal tibia. Emanuel J, et al. **Orthop Rev** 1989 Jan;18(1):137–8, 141–3

Longitudinal stress fractures of the tibia: diagnosis with CT [letter; comment] Goupille P, et al. **Radiology** 1989 May;171(2):583. **Comment on:** Radiology 1988 Jun;167(3):799–801

Conventional radiographic examination in the evaluation of sequelae after tibial plateau fractures. Jensen DB, et al. **Skeletal Radiol** 1988;17(5):330–2

[An isolated fracture of the tibia with rupture of the syndesmosis] Sinding A. **Ugeskr Laeger** 1988 Oct 10;150(41):2470–1 (Eng. Abstr.) **(Dan)**

[Tillaux's fracture] Hoeffel JC, et al. **J Radiol** 1989 Mar;70(3):213–7 (Eng. Abstr.) **(Fre)**

[Apophyseal rupture of the pelvis and lower extremity caused by sports] Ahmadi A, et al. **Sportverletz Sportschaden** 1987 Sep;1(3):113–7 (Eng. Abstr.) **(Ger)**

[Epiphysiolysis of the proximal tibia in high jumping] Bracker W, et al. **Sportverletz Sportschaden** 1987 Sep;1(3):150–1 (Eng. Abstr.) **(Ger)**

[Longitudinal stress fracture of the tibia. CT diagnosis] Mazzonetto M, et al. **Radiol Med (Torino)** 1989 Apr;77(4):411–2 **(Ita)**

[Tibiofibular syndesmosis in the normal state and in trauma] Shekhtman AG. **Ortop Travmatol Protez** 1988 Dec;(12):40 **(Rus)**

RADIONUCLIDE IMAGING

Prediction of the healing potential of closed adult tibial shaft fractures by bone scintigraphy. Oni OO, et al. **Clin Orthop** 1989 Aug;(245):239–45

Detection of stress fractures in athletes and nonathletes. Aspegren D, et al. **J Manipulative Physiol Ther** 1989 Aug;12(4):298–303

[Diagnostic scintigraphy of a spiral fracture of the tibia in young children] Hossein-Foucher C, et al. **Ann Pediatr (Paris)** 1988 Oct;35(8):592–7 (Eng. Abstr.) **(Fre)**

[Radionuclide diagnosis of spiroid fracture of the tibia in young children] Hossein-Foucher C, et al. **Ann Radiol (Paris)** 1988;31(3):157–62 (Eng. Abstr.) **(Fre)**

REHABILITATION

[A method of defined partial load on the lower extremity] Leonhardt K, et al. **Beitr Orthop Traumatol** 1988 Jun;35(6):281–3 (Eng. Abstr.) **(Ger)**

SURGERY

Natural history of a type III fracture of the intercondylar eminence of the tibia in an adult. A case report. Sullivan DJ, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):132–3

Fractures of the posterolateral tibial plateau. Waldrop JI, et al. **Am J Sports Med** 1988 Sep–Oct;16(5):492–8

Paradoxical thrombo-embolism [letter] Callander CC, et al. **Anaesthesia** 1988 Oct;43(10):894–5

Correlation of postoperative bone scintigraphy with healing of vascularized fibula transfer: a clinical study. Greenberg BM, et al. **Ann Plast Surg** 1989 Aug;23(2):147–54

Adolescent-type Tillaux fracture of the ankle: two case reports. Britton PD. **Arch Emerg Med** 1988 Sep;5(3):180–3

Magnetic resonance imaging of tibial shaft fracture repair. Lassonen EM, et al. **Arch Orthop Trauma Surg** 1989;108(1):40–3

Closed intramedullary nailing of tibial fractures in sportsmen [letter] Salai M, et al. **Br J Sports Med** 1988 Jun;22(2):82

Open tibial shaft fractures treated by primary or delayed wound closure. Cai RB, et al. **Chin Med J [Engl]** 1988 Jan;101(1):17–9

Early prophylactic bone grafting of high-energy tibial fractures. Blick SS, et al. **Clin Orthop** 1989 Mar;(240):21–41 (99 ref.)

Pylon fractures of the distal tibia. Bourne RB. **Clin Orthop** 1989 Mar;(240):42–6

Interporous hydroxyapatite as a bone graft substitute in tibial plateau fractures. Bucholz RW, et al. **Clin Orthop** 1989 Mar;(240):53–62

Experimental spiral fractures. An in vitro biomechanical comparison of lag-screw fixation to plate fixation. Cox LG 2d, et al. **Clin Orthop** 1989 Jun;(243):189–94

Intramedullary devices for tibial fracture stabilization. Henley MB. **Clin Orthop** 1989 Mar;(240):87–96

Limb reconstruction versus amputation decision making in massive lower extremity trauma. Lange RH. **Clin Orthop** 1989 Jun;(243):92–9 (31 ref.)

Avulsion fractures of the posterior cruciate ligament of the knee. An experimental percutaneous rigid fixation technique under arthroscopic control. Martinez-Moreno JL, et al. **Clin Orthop** 1988 Dec;(237):204–8

Treatment of infected nonunion and delayed union of tibia fractures with locking intramedullary nails. Miller ME, et al. **Clin Orthop** 1989 Aug;(245):233–8

Distal screw targeting of interlocking nails. Rao JP, et al. **Clin Orthop** 1989 Jan;(238):245–8

Criteria for bone debridement in massive lower limb trauma. Swiontkowski MF. **Clin Orthop** 1989 Jun;(243):41–7

External fixation of fractures of the tibia: clinical experience of a new device. Evans G, et al. **Injury** 1988 Mar;19(2):73–6

Closed medullary nailing for recent fractures of the tibia. Hindley CJ. **Injury** 1988 May;19(3):180–4

Fractures of the tibial plateau in Nottingham. Maheson M, et al. **Injury** 1988 Sep;19(5):324–8

"Ring fixator" for treatment of lower leg fractures. A review of 30 cases treated by a new external fixation system. Reith HB, et al. **Int Surg** 1988 Jul–Sep;73(3):170–2

Orthopaedic treatment of paediatric multiple trauma patients. A new technique. Verstreken L, et al. **Int Surg** 1988 Jul–Sep;73(3):177–9

The subcutaneous overturned skin flap in continuity according to the "double door" technique. Brunelli F. **Ital J Orthop Traumatol** 1988 Jun;14(2):195–200

The treatment of fractures of the tibia by Ender nailing and functional bracing. Results in the first 50 consecutive cases. Diara A, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):221–6

Breakage of the Grosse-Kempf nail: causes and remedies. Tigani D, et al. **Ital J Orthop Traumatol** 1989 Jun;15(2):185–90

Juvenile fracture of tillaux. A distal tibial epiphyseal fracture. Simon WH, et al. **J Am Podiatr Med Assoc** 1989 Jun;79(6):295–9

Reconstruction of large diaphyseal defects, without free fibular transfer, in Grade-IIIB tibial fractures. Christian EP, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):994–1004

Broken intramedullary nails. Franklin JL, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1463–71

Amputation after tibial fracture: preservation of length by use of a neurovascular island (fillet) flap of the foot [letter] Frieden RA. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1109–10

Treatment of open fractures of the tibial shaft: Ender nailing versus external fixation. A randomized, prospective comparison. Holbrook JL, et al. **J Bone Joint Surg [Am]** 1989 Sep;71(8):1231–8

Infection after intramedullary nailing of severe open tibial fractures initially treated with external fixation. Maurer DJ, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):835–8

Amputation after tibial fracture: preservation of length by use of a neurovascular island (fillet) flap of the foot. A brief note. Sanders WE. **J Bone Joint Surg [Am]** 1989 Mar;71(3):435–7

Anterior approach to the knee with osteotomy of the tibial tubercle for bicondylar tibial fractures [letter] Schatzker J. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1575–6

Intramedullary nailing with reaming to treat non-union of the tibia. Sledge SL, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1004–19

Cerclage for torsional fractures of the tibia. Habernek H, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):311–3

New tibial interlocking nail system. Brooker AF Jr, et al. **J Orthop Trauma** 1987;1(3):257–9

A technique for removing a fractured interlocking tibial nail. Dugdale TW, et al. **J Orthop Trauma** 1988;2(1):39–42

Supramalleolar osteotomy for the treatment of symptomatic tibial malunion. Graehl PM, et al. **J Orthop Trauma** 1987;1(4):281–92

Severe open tibial fractures: a study protocol. Johnson KD, et al. **J Orthop Trauma** 1988;2(3):175–80

Minimal internal and external fixation in oblique lower extremity fractures: a report of five cases and description of technique. Mills RM. **J Orthop Trauma** 1988;2(3):250–6

The ring butterfly fragment in diaphyseal fractures: its importance in flexible intramedullary nailing. Pankovich AM, et al. **J Orthop Trauma** 1988;2(1):18–21

One plane external fixation for management of complicated fractures of tibia. Thakur AJ, et al. **J Postgrad Med** 1988 Oct;34(4):237–41

Current thoughts on soft tissue repair of compound injuries of the lower limb (excluding the foot). McGregor JC. **J R Coll Surg Edinb** 1988 Dec;33(6):294–8

The pulse oximeter in free muscle flap surgery. "A microvascular surgeon's sleep aid". Menick FJ. **J Reconstr Microsurg** 1988 Jul;4(4):331–4

The sheep as a model for grade III human tibial trauma. Zoltie N, et al. **J Reconstr Microsurg** 1988 Oct;4(5):399–402

Lower limb salvage with autoclaved autogenous tibial diaphysis: case report. Hallock GG, et al. **J Trauma** 1989 Apr;29(4):528–30

Stable osteosynthesis by interlocking cylinder nailing for fractures of the femur and tibia. Itoman M, et al. **Nippon Seikeigeka Gakkai Zasshi** 1988 Jun;62(6):601–8

Irreducible fracture of the proximal tibial physis in an adolescent. Ciszewski WA, et al. **Orthop Rev** 1989 Aug;18(8):891–3

Team physician #4. Avulsion fracture of the distal tibial epiphysis in skeletally immature athletes (juvenile Tillaux fracture). Spinella AJ, et al. **Orthop Rev** 1988 Dec;17(12):1245–9

Simultaneous bilateral tibial tubercle avulsion fracture. Maar DC, et al. **Orthopedics** 1988 Nov;11(11):1599–601

Compartment syndrome. A complication of intravenous regional anesthesia in the reduction of lower leg shaft fractures. Maletis GB, et al. **Orthopedics** 1989 Jun;12(6):841–6

Difficult reconstruction of an extensive injury in the lower extremity with a large cross-leg microvascular composite-tissue flap containing fibula. Chen HC, et al. **Plast Reconstr Surg** 1989 Apr;83(4):723–7

Free transplantation of venous network pattern skin flap. Chia SL, et al. **Plast Reconstr Surg** 1988 Nov;82(5):892–5

Late results of free-muscle flaps and delayed bone grafting in the secondary treatment of open distal tibial fractures. Seyfer AE, et al. **Plast Reconstr Surg** 1989 Jan;83(1):77–84

[The third type of fracture healing] Xu XX. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;69(1):4–6, 2 (Eng. Abstr.) **(Chi)**

[Specific problems in the management of segmental fractures of the tibial shaft] Coosemans W, et al. **Acta Chir Belg** 1988 Sep–Oct;88(5):347–53 (Eng. Abstr.) **(Dut)**

[Treatment of tibial shaft fractures using plate osteosynthesis] Leeuwenberg A, et al. **Ned Tijdschr Geneeskd** 1989 May 6;133(18):936–40 (Eng. Abstr.) **(Dut)**

[Treatment of tibial shaft fractures using plate osteosynthesis (letter)] van Linge B. **Ned Tijdschr Geneeskd** 1989 May 13;133(19):998–9 **(Dut)**

[Oblique osteotomy of the fibula. Therapeutic aspect of consolidation problems of leg fractures] Elbaz C, et al. **Acta Orthop Belg** 1988;54(4):452–7 (Eng. Abstr.) **(Fre)**

[The treatment of fractures of the tibial condyles] Putz P, et al. **Acta Orthop Belg** 1988;54(4):465–73 (Eng. Abstr.) **(Fre)**

[Osteosynthesis using an internal plate in leg fractures consisting of open war fractures. Apropos of 82 cases] Jawish R, et al. **Ann Chir** 1988;42(9):661–6 (Eng. Abstr.) **(Fre)**

[Superior fibulo-tibial traumatic luxation with fracture of the tibia. Apropos of 2 cases and a general review of the literature] de la Caffinière JY, et al. **Rev Chir Orthop** 1988;74(4):366–9 (5 ref.) (Eng. Abstr.) **(Fre)**

[Percutaneous Goetze cerclage in torsion fractures of the tibia. A computer-assisted follow-up of 186 cases] Habernek H, et al. **Aktuel Traumatol** 1989 Apr;19(2):73–6 (Eng. Abstr.) **(Ger)**

[Treatment of the open tibial fracture with the fixateur externe with special reference to osteosynthesis of the fibula] Köhle H, et al. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:46–53 (Eng. Abstr.) **(Ger)**

[Significance of microsurgery revascularized soft tissue and bone transplants in plastic reconstructive interventions of the extremities] Röhner H, et al. **Aktuel Traumatol** 1988 Oct;18(5):215–8 (Eng. Abstr.) **(Ger)**

[The anterior tibial muscle as a distal pedicled osteomuscular

transposition flap] Papp C, et al. **Chirurg** 1988 Sep; 59(9):610–3 (Ger)

[Use of a rotation stable telescope interlocking nail in the growth period. Case description] Zwipp H, et al. **Chirurg** 1988 Nov;59(11):797–800 (Ger)

[Muscle–flap plasty in fractures of the tibial pilon] Ganzoni N, et al. **Helv Chir Acta** 1989 Jun;56(1–2):255–8 (Eng. Abstr.) (Ger)

[The external ring fixation—experimental studies of bending stability in distraction osteosyntheses] Reith HB, et al. **Langenbecks Arch Chir** 1988;373(4):222–6 (Eng. Abstr.) (Ger)

[Progress and changes in the treatment of shaft fractures of the femur and tibia] Kessler SB, et al. **Orthopade** 1989 Jun; 18(3):187–93 (Eng. Abstr.) (Ger)

[Changes and progress in fracture treatment of the proximal and distal lower leg] Nast–Kolb D, et al. **Orthopade** 1989 Jun;18(3):194–9 (Eng. Abstr.) (Ger)

[Prognosis and therapy of closed, distal, intra–articular fractures of the tibia] Breitfuss H, et al. **Unfallchirurg** 1988 Dec;91(12):557–64 (Eng. Abstr.) (Ger)

[Reosteosyntheses of the tibial shaft. Status of indications—choice of procedure—results of treatment] Dittel KK, et al. **Unfallchirurg** 1988 Sep;91(9):395–401 (Eng. Abstr.) (Ger)

[The incidence, therapy and results of combined ankle joint and tibial shaft fractures] Habernek H, et al. **Unfallchirurg** 1989 Jun;92(6):287–90 (Eng. Abstr.) (Ger)

[Risk of infection and prevention of infection in changing the surgical procedure from fixateur externe to tibial intramedullary nailing] Hansis M, et al. **Unfallchirurg** 1988 Oct;91(10):465–8 (Eng. Abstr.) (Ger)

[The wide open tibial fracture—a soft–tissue problem] Knopp W, et al. **Unfallchirurg** 1988 Aug;91(8):366–73 (Eng. Abstr.) (Ger)

[Pseudarthroses of the fibula following fracture of the lower leg] König M, et al. **Unfallchirurg** 1989 Apr;92(4):191–4 (Eng. Abstr.) (Ger)

[The interposition technic. A possibility for avoiding the end–to– side technic in free microvascular myocutaneous flap transfer of the latissimus dorsi muscle] Müller JE, et al. **Unfallchirurg** 1988 Sep;91(9):402–4 (Eng. Abstr.) (Ger)

[Late results following tibial fractures in childhood] Schmittenbecher PP, et al. **Unfallchirurg** 1989 Feb; 92(2):79–84 (Eng. Abstr.) (Ger)

[Indications for surgical management of lower leg fractures] Habernek H, et al. **Unfallchirurgie** 1988 Aug;14(4):211–7 (Eng. Abstr.) (Ger)

[Tibial fractures: plate osteosynthesis using a dorsal approach] Konold P, et al. **Unfallchirurgie** 1988 Dec;14(6):329–34 (Eng. Abstr.) (Ger)

[A rare combination injury in Alpine skiing] Obrist J, et al. **Unfallchirurgie** 1989 Jun;15(3):141–4 (Eng. Abstr.) (Ger)

[Cortico–spongiosa chips in tibial head impression fractures] Geel C, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988; 81(1):66–7 (Ger)

[Critical analysis of 42 tibial fractures primarily treated with external fixation] Genelin F, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(2):87–92 (Ger)

[Fixateur externe stabilization and early soft tissue coverage in tibial fractures with soft tissue defects] Käch K, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(2):137–40 (Ger)

[Injuries of the proximal tibial epiphysis] Kuner S, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(3):181–6 (Ger)

[Open and closed intramedullary nailing in femoral and tibial shaft fractures] Oertli D, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(1):63–5 (Eng. Abstr.) (Ger)

[Change in the procedure following external fixation—osteosynthesis in closed and 1st to 2d degree open tibial fractures] Weise K, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(2):93–104 (Ger)

[Conservative management versus osteosynthesis in the treatment of tibial shaft fractures] Vara–Thorbeck R, et al. **Zentralbl Chir** 1989;114(12):757–65 (Eng. Abstr.) (Ger)

[Efficacy of interlocking nailing in fractures of the leg] Zeumer B, et al. **Zentralbl Chir** 1989;114(6):357–70 (Eng. Abstr.) (Ger)

[Free transplantation of the fibula with microvascular anastomosis in the substitution of a 21 cm defect in the tibia] Gulyás G, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1988; 31(3):203–8 (Hun)

[unreduced fractures of the tibial plateau: surgical treatment] Specchia L, et al. **Chir Organi Mov** 1988 Oct–Dec; 73(4):323–7 (Eng. Abstr.) (Ita)

[Treatment of diaphyseal fractures of the humerus and the leg bones] Sen'ko EI, et al. **Khirurgiia (Mosk)** 1989 Jan; (1):13–4 (Eng. Abstr.) (Rus)

[External fixation of open fractures of the tibia] Karakhan'iu E, et al. **Klin Khir** 1988;(12):37–9 (Eng. Abstr.) (Rus)

[Osteosynthesis in various types of fractures using pins made of corundum ceramics] Gruntovskii GKh, et al. **Ortop Travmatol Protez** 1988 Dec;(12):33–4 (Eng. Abstr.) (Rus)

[Endoprosthesis with a carbon implant of the tibial condyles] Iumashev GS, et al. **Ortop Travmatol Protez** 1988 Jul; (7):26–9 (Eng. Abstr.) (Rus)

[Vascularization of the tibial diaphysis as affected by open and closed intramedullary osteosynthesis] Onoprienko GA, et al. **Ortop Travmatol Protez** 1988 Sep;(9):19–23 (Eng. Abstr.) (Rus)

[A rod for the Ilizarov apparatus] Prokopova LV, et al. **Ortop Travmatol Protez** 1989 May;(5):54 (Rus)

[Prevention of osteoporosis of bone fragments in distraction osteosynthesis] Pustovoit MI, et al. **Ortop Travmatol Protez** 1988 Dec;(12):14–6 (Eng. Abstr.) (Rus)

[Characteristics of bone regeneration after osteosynthesis using electrets] Rutskii VV, et al. **Ortop Travmatol Protez** 1988 Dec;(12):1–6 (Eng. Abstr.) (Rus)

[Intraosseous osteosynthesis of the tibia in fractures of the lower third] Zverev EV. **Ortop Travmatol Protez** 1988 May;(5):16–9 (Eng. Abstr.) (Rus)

[Closed intramedullary osteosynthesis of diaphyseal fractures] Okhotskii VP, et al. **Sov Med** 1988;(7):42–6 (60 ref.) (Rus)

[Reparative osteogenesis after the treatment of multiple fractures of the crural bones using the Ilizarov method] Sveshnikov AA, et al. **Sov Med** 1989;(2):5–8 (Eng. Abstr.) (Rus)

[Surgical treatment of closed diaphyseal fractures of the crural bones at a polyclinic orthopedic–trauma center] Kriukov VA. **Vestn Khir** 1989 Jan;142(1):68–9 (Rus)

THERAPY

Skiers' lower leg shaft fracture. Outcome in 91 cases treated conservatively with Sarmiento's brace. Peter RE, et al. **Am J Sports Med** 1988 Sep–Oct;16(5):486–91

Structural stiffness of the Hoffmann simple anterior tibial external fixation frame. Voosoughi J, et al. **Ann Biomed Eng** 1989;17(2):127–41

Treatment of delayed union and nonunion of the tibia by pulsed electromagnetic fields. A retrospective follow–up. Meskens MW, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall;48(2):170–5

Plates versus external fixation in severe open tibial shaft fractures. A randomized trial. Bach AW, et al. **Clin Orthop** 1989 Apr;(241):89–94

The cast brace and tibial plateau fractures. Delamarter R, et al. **Clin Orthop** 1989 May;(242):26–31

Controlled mechanical stimulation in the treatment of tibial fractures. Kenwright J, et al. **Clin Orthop** 1989 Apr; (241):36–47

Treatment of open tibial fractures with the Orthofix fixator. Meléndez EM, et al. **Clin Orthop** 1989 Apr;(241):224–30

Ilizarov treatment of tibial nonunions with bone loss. Paley D, et al. **Clin Orthop** 1989 Apr;(241):146–65

Complications of external fixation of open fractures of the tibia. Clifford RP, et al. **Injury** 1987 May;18(3):174–6

The functional brace in the treatment of delayed union and non–union. Falez F, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):113–9

A comparison between delayed and immediate intramedullary nailing in the treatment of comminuted and open fractures (grade 1) of the tibia. Tigani D, et al. **Ital J Orthop Traumatol** 1989 Mar;15(1):25–31

Measurement of fracture movement in patients treated with unilateral external skeletal fixation. Cunningham JL, et al. **J Biomed Eng** 1989 Mar;11(2):118–22

Tibial shaft fractures treated with functional braces. Experience with 780 fractures. Sarmiento A, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):602–9

Localized acquired hypertrichosis associated with fracture and cast application. Leung AK, et al. **J Natl Med Assoc** 1989 Jan;81(1):65–7

Distal tibial physeal injuries in children: a different treatment concept. Dugan G, et al. **J Orthop Trauma** 1987;1(1):63–7

Tibial plateau fractures: definition, demographics, treatment rationale, and long–term results of closed traction management or operative reduction. Moore TM, et al. **J Orthop Trauma** 1987;1(2):97–119

Intrinsic problems with the external fixation device of Hoffmann–Vidal–Adrey: a critical evaluation of 117 patients with complex tibial shaft fractures. Rommens P, et al. **J Trauma** 1989 May;29(5):630–8

Tibial plateau fractures. Anglen JO, et al. **Orthopedics** 1988 Nov;11(11):1527–34

Conservative treatment of fractures of the tibial condyles. Damholt V, et al. **Rev Chir Orthop** 1988;74 Suppl 2:281–2

[Results of the treatment of fractures of the proximal end of the tibia] Pawlik Z, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):307–12 (Eng. Abstr.) (Pol)

[Choice of the method of treatment of unilateral fractures of the femur and bones of the shin] Baksanov KhD, et al. **Ortop Travmatol Protez** 1989 Mar;(3):15–7 (Eng. Abstr.) (Rus)

[Rehabilitation of patients with fractures of the femur and tibia of the same leg] Prokop'ev NIa. **Vestn Khir** 1988 Oct; 141(10):71–4 (Eng. Abstr.) (Rus)

VETERINARY

Treatment of a nonunion fracture of the tibia in a Chinese water dragon, including stimulation of osteogenesis with direct electric current. Mader DR, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1141–2

Use of dynamic compression plates for treatment of tibial diaphyseal fractures in foals: nine cases (1980–1987). Young DR, et al. **J Am Vet Med Assoc** 1989 Jun 15; 194(12):1755–60

Evaluation of 2 types of external skeletal fixation for repair of experimental tibial fractures in foals. Sullins KE, et al. **Vet Surg** 1987 Jul–. .ug;16(4):255–64

TIBIAL MENISCI see **MENISCI, TIBIAL**

TIBIAL NERVE

Foot surgery in Vanuatu: results of combined tibial, common peroneal and saphenous nerve blocks in fifty–six adults. Sparks CJ, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):336–9

Phenol block of the tibial nerve for spasticity: a long–term follow–up study. Petrillo CR, et al. **Int Disabil Stud** 1988; 10(3):97–100

Injury to the tibial and peroneal nerves due to hemorrhage in the popliteal fossa. Two case reports. Logigian EL, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):768–70

The pseudoradicular syndrome. Lower extremity peripheral nerve entrapment masquerading as lumbar radiculopathy. Saal JA, et al. **Spine** 1988 Aug;13(8):926–30

[A case of benign schwannoma of the posterior tibial nerve. Treatment by simple excision without nerve graft (letter)] Tourne Y, et al. **J Chir (Paris)** 1989 Mar;126(3):204–5 (Fre)

ANATOMY & HISTOLOGY

On internodal length. Jacobs JM. **J Anat** 1988 Apr; 157:153–62

Morphometric and freeze–fracture studies on peripheral nerve in shiverer mice. Panagopoulos G, et al. **J Comp Neurol** 1989 Aug 15;286(3):337–44

DRUG EFFECTS

Digital perfusion with tibial nerve block. A comparative study of eight local anesthetics. Green DR, et al. **J Am Podiatr Med Assoc** 1988 Oct;78(10):495–511

[Behavior of neuromuscular blockade parameters in response to vecuronium] Mastronardi P, et al. **Minerva Anestesiol** 1988 Jun;54(6):255–8 (Eng. Abstr.) (Ita)

[Clinico–electroneuromyographic characteristics of occupational polyneuropathies of toxico–allergic origin] Krasheninnikova ON. **Gig Tr Prof Zabol** 1989;(4):54–5 (Rus)

GROWTH & DEVELOPMENT

Maturational study of short–latency somatosensory evoked potentials after posterior tibial nerve stimulation in infants and children. Mutoh K, et al. **Clin Electroencephalogr** 1989 Apr;20(2):91–102

INJURIES

Functional evaluation of complete sciatic, peroneal, and posterior tibial nerve lesions in the rat. Bain JR, et al. **Plast Reconstr Surg** 1989 Jan;83(1):129–38

MICROBIOLOGY

Transneuronal transfer of herpes virus from peripheral nerves to cortex and brainstem. Ugolini G, et al. **Science** 1989 Jan 6;243(4887):89–91

PATHOLOGY

The pathology of ligated nerves in relation to abnormal impulse generators. Tegnér R, et al. **Acta Physiol Scand** 1988 Aug;133(4):589–90

Tibial nerve branching in the tarsal tunnel. Havel PE, et al. **Foot Ankle** 1988 Dec;9(3):117–9

Radial and tibial nerve pathology of two lactating ewes with "kangaroo gait". O'Toole D, et al. **J Comp Pathol** 1989 Apr;100(3):245–58

Localized hypertrophic mononeuropathy involving the tibial nerve. Iyer VG, et al. **Neurosurgery** 1988 Aug;23(2):218–21 (24 ref.)

PHYSIOLOGY

Use of fibrin glue in sucrose gap method. Tuganowski W, et al. **Acta Physiol Pol** 1988 Jul–Aug;39(4):307–10

Stimulating somatic afferent fibers alters coronary arterial resistance. Pitetti KH, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1331–9

Somatosensory–evoked and spinal cord–evoked potentials in response to pudendal and tibial nerve stimulation in cats. Sims MH, et al. **Am J Vet Res** 1989 Apr;50(4):542–5

Cortical somatosensory–evoked potentials in the horse. Strain GM, et al. **Am J Vet Res** 1988 Nov;49(11):1869–72

Somatosensory evoked potentials by tibial nerve stimulation in the rabbit. Azan G, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):171–8

Action of lycorine on neuroadrenergic response of a nerve–skin preparation. Quevedo L, et al. **Cell Mol Biol** 1988;34(3):295–302

Somatosensory evoked potentials elicited by dorsal penile and posterior tibial nerve stimulation. Fitzpatrick DF, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar–Apr;

74(2):95–104
Conduction properties of epidurally recorded spinal cord potentials following lower limb stimulation in man. Halonen JP, et al. **Electroencephalogr Clin Neurophysiol** 1989 May–Jun;74(3):161–74
Somatosensory evoked potentials from posterior tibial nerve; normative data. Verroust J, et al. **Electromyogr Clin Neurophysiol** 1989 Jul–Aug; 29(5):299–303
The origins of lumbosacral spinal evoked potentials [letter] Seyal M, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1600
Nonlinear muscle recruitment during intramuscular and nerve stimulation. Gruner JA, et al. **J Rehabil Res Dev** 1989 Spring;26(2):1–16
In vitro and in situ inhibition of the sodium channel blocker saxitoxin by monoclonal antibodies. Huot RI, et al. **J Toxicol Environ Health** 1989;27(3):381–93
Anatomic and physiologic bases of posterior tibial nerve somatosensory evoked potentials. Emerson RG. **Neurol Clin** 1988 Nov;6(4):735–49 (52 ref.)
Somatosensory evoked potentials: Part I. A review of neural generators and special considerations in pediatrics. Fagan ER, et al. **Pediatr Neurol** 1987 Jul–Aug;3(4):189–96 (55 ref.)
Maturation of somatosensory evoked potentials upon posterior tibial nerve stimulation. Mutoh K, et al. **Pediatr Neurol** 1988 Nov–Dec;4(6):342–9
[Study of the sensory innervation of the lower limbs and the perineum using evoked somatosensory potentials] Guerit JM, et al. **Acta Urol Belg** 1989;57(2):503–24 **(Fre)**

PHYSIOPATHOLOGY

Tibial nerve somatosensory evoked potentials in spinal cord hemisection. Bloom KK, et al. **Am J Phys Med Rehabil** 1989 Apr;68(2):59–65
Influence of ganglioside treatment on acrylamide neuropathy in mice. A morphometric study. Stotzem CD, et al. **Arzneimittelforschung** 1988 Nov;38(11):1563–7
Guanethidine adrenergic neuropathy: an animal model of selective autonomic neuropathy. Zochodne DW, et al. **Brain Res** 1988 Sep 27;461(1):10–6
Selective neurotomy of the tibial nerve for treatment of the spastic foot. Sindou M, et al. **Neurosurgery** 1988 Dec; 23(6):738–44
[The peripheral nerves of non-diabetic rats after streptozotocin administration using automatic microscopic image analysis] Wattig B, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):103–8 (Eng. Abstr.) **(Ger)**
[Short latency somatosensory evoked potentials following the peripheral nerve stimulation of lower extremities in children] Tomita Y, et al. **No To Hattatsu** 1989 Mar; 21(2):138–44 (Eng. Abstr.) **(Jpn)**
[Electrophysiological analysis of the phenomenon of "blocked" neuromuscular synapses in patients with myasthenia gravis] Gekht BM, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):96–102 (Eng. Abstr.) **(Rus)**

SURGERY

A successful case of spastic paresis in a calf by partial tibial neurectomy. Yamada H, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):213–4
[Experimental study of the suture tension of the approximated peripheral nerve] Wang RR. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):466–70, 510 (Eng. Abstr.) **(Chi)**

TRANSPLANTATION

[Evaluation of the results of secondary reconstruction of the median and ulnar nerves by nerve transplantation] Pisarek W, et al. **Pol Tyg Lek** 1988 Nov 14;43(46):1463–6 (Eng. Abstr.) **(Pol)**

TIBRIC ACID see under **PIPERIDINES**

TIC

Tic disorders: an overview. Lesaca T. **W V Med J** 1989 Jan; 85(1):12–4 (10 ref.)

CHEMICALLY INDUCED

Tryptophan antagonism of stimulant-induced tics [letter] Chandler ML, et al. **J Clin Psychopharmacol** 1989 Feb; 9(1):69–70

CLASSIFICATION

Tics and Tourette syndrome. Tardo C. **Semin Neurol** 1988 Spring;8(1):78–82 (24 ref.)

COMPLICATIONS

Desipramine treatment of boys with attention-deficit hyperactivity disorder and tics: preliminary clinical experience. Riddle MA, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov;27(6):811–4
Sensory tics in Tourette's syndrome. Kurlan R, et al. **Neurology** 1989 May;39(5):731–4
[Flexion myelopathy due to tic of neck] Nomura T, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):177–9 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Tic disorders in childhood (and beyond). Leung AK, et al. **Postgrad Med** 1989 Jul;86(1):251–2, 257–61 (29 ref.)

ETIOLOGY

Tic disorders in childhood. Golden GS. **Pediatr Rev** 1987 Feb;8(8):229–34 (22 ref.)

GENETICS

Transient tic disorder and the spectrum of Tourette's syndrome. Kurlan R, et al. **Arch Neurol** 1988 Nov; 45(11):1200–1
The relationship between eye-winking tics, frequent eye-blinking and blepharospasm. Elston JS, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):477–80

PHYSIOPATHOLOGY

Ear wiggling tics [letter] Forrest DV. **Am J Psychiatry** 1989 Mar;146(3):414
The ear wigglers: tics of the ear in 10 patients. Keshavan MS. **Am J Psychiatry** 1988 Nov;145(11):1462–3
Recurrence of complex motor and vocal tics in an elderly woman responsive to opiates. Sandyk R, et al. **Int J Neurosci** 1989 Feb;44(3–4):317–20
The phenomenology of tics. Jankovic J, et al. **Mov Disord** 1986;1(1):17–26 (48 ref.)

TIC DOULOUREUX see **TRIGEMINAL NEURALGIA**

TICARCILLIN see under **PENICILLINS**

TICK CONTROL

Immunologic control of a parasitic arthropod. Identification of a protective antigen from Boophilus microplus. Willadsen P, et al. **J Immunol** 1989 Aug 15;143(4):1346–51
Sheep scab control [letter] [published erratum appears in Vet Rec 1988 Dec 3;123(23):608] Done JT. **Vet Rec** 1988 Nov 26;123(22):584
The effect of East Coast fever immunisation and different acaricidal treatments on the productivity of beef cattle. Morzaria SP, et al. **Vet Rec** 1988 Sep 17;123(12):313–20

METHODS

Vector tick populations and Lyme disease. A summary of control strategies. Schulze TL, et al. **Ann N Y Acad Sci** 1988;539:204–11
A controlled trial of house dust mite eradication using natamycin in homes of patients with atopic dermatitis: effect on clinical status and mite populations. Colloff MJ, et al. **Br J Dermatol** 1989 Aug;121(2):199–208
Lyme disease prevention: personal protection and prospects for tick control. Stafford KC 3d. **Conn Med** 1989 Jun; 53(6):347–51 (24 ref.)
Evaluation of the eradication program for Amblyomma variegatum (Acari:Ixodidae) on Puerto Rico. Garris GI, et al. **Exp Appl Acarol** 1989 Feb;6(1):67–76
[Experience with tick control in multistory houses] Kulanin VL. **Med Parazitol (Mosk)** 1988 May–Jun;(3):91–2 **(Rus)**

TICK INFESTATIONS

Faunistic–ecological studies on the ectoparasites of the small mammals caught in the natural focus of tick-borne encephalitis virus in the region of Gdańsk. Pruszynska I. **Bull Inst Marit Trop Med Gdynia** 1988;39(1–2):91–107
Cell biology of tick/host interaction and disease transmission. Papers presented at the XVIII International Congress of Acarology. 2–9 July 1988, Vancouver, British Columbia, Canada. **Exp Appl Acarol** 1989 Jun;7(1):1–105
Selected tickborne infections. A review of Lyme disease, Rocky Mountain spotted fever, and babesiosis. Zaki MH. **N Y State J Med** 1989 Jun;89(6):320–35 (78 ref.)
Tick exposure and related infections. Jacobs RF. **Pediatr Infect Dis J** 1988 Sep;7(9):612–4

COMPLICATIONS

Childhood infection caused by Ehrlichia canis or a closely related organism. Edwards MS, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):651–4 (21 ref.)

DRUG THERAPY

In-vivo effects of ivermectin on Rhipicephalus appendiculatus: the influence of tick feeding patterns and drug pharmacokinetics. Jackson HC, et al. **Exp Appl Acarol** 1989 Jul;7(2):109–19
[Oral doxycycline in tick-borne Borrelia infection of the CNS] Hagberg L. **Lakartidningen** 1989 Aug 9; 86(32–33):2657–8 **(Swe)**

EPIDEMIOLOGY

Ticks parasitizing humans in a Lyme disease endemic area of southern New York State. Falco RC, et al. **Am J Epidemiol** 1988 Nov;128(5):1146–52
The changing status of tickborne disease in the U.S. Goddard J. **Milit Med** 1988 Oct;153(10):513–9 (46 ref.)

ETIOLOGY

[Neotrombicula autumnalis infestation (Shaw, 1790) in agricultural workers in the Province of Ferrara] Minisci S, et al. **Med Lav** 1988 Mar–Apr;79(2):120–6 (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

Role of saliva in tick/host interactions. Ribeiro JM. **Exp Appl Acarol** 1989 Jun;7(1):15–20 (22 ref.)
Acquired resistance to ixodid ticks induced by tick cement antigen. Shapiro SZ, et al. **Exp Appl Acarol** 1989 Jun; 7(1):33–41
Mast cell associated-immune resistance against ticks. Matsuda H, et al. **Nippon Juigaku Zasshi** 1988 Jun; 50(3):817–20
Repetitive detection by immunoblotting of an integumental 25-kDa antigen in Ixodes ricinus and a corresponding 20-kDa antigen in Rhipicephalus appendiculatus with sera of pluriinfested mice and rabbits. Rutti B, et al. **Parasitol Res** 1989;75(4):325–9
Acquired resistance in rabbits to immature stages of Rhipicephalus evertsi evertsi. Njau BC, et al. **Vet Res Commun** 1988;12(4–5):363–73

PARASITOLOGY

Tick/host interactions for Ixodes holocyclus: role, effects, biosynthesis and nature of its toxic and allergenic oral secretions. Stone BF, et al. **Exp Appl Acarol** 1989 Jun; 7(1):59–69 (31 ref.)

PREVENTION & CONTROL

Treatment of clothing with a permethrin spray for personal protection against the western black-legged tick, Ixodes pacificus (Acari: Ixodidae). Lane RS. **Exp Appl Acarol** 1989 May;6(4):343–52
Transmission of Theileria parva bovis (Boleni strain) to cattle resistant to the brown ear tick Rhipicephalus appendiculatus (Neumann). Fivaz BH, et al. **Trop Anim Health Prod** 1989 May;21(2):129–34

VETERINARY

Remote recognition of Amblyomma variegatum habitats in Guadeloupe using LANDSAT-TM imagery. Hugh-Jones ME, et al. **Acta Vet Scand Suppl** 1988;84:259–61
The ecology of Colorado tick fever in Rocky Mountain National Park in 1974. III. Habitats supporting the virus. McLean RG, et al. **Am J Trop Med Hyg** 1989 Jan; 40(1):86–93
Lyme disease and migrating birds in the Saint Croix River Valley. Weisbrod AR, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1921–4
Immunology of interactions between ticks and laboratory animals. Allen JR. **Exp Appl Acarol** 1989 Jun;7(1):5–13 (43 ref.)
Sites of attachment and density assessment in Amblyomma americanum (Acari: Ixodidae) on nursing beef calves. Barnard DR, et al. **Exp Appl Acarol** 1989 Apr;6(3):245–52
Resistance in cattle against Rhipicephalus appendiculatus with an assessment of cross-resistance to R. pulchellus (Acari: Ixodidae). de Castro JJ, et al. **Exp Appl Acarol** 1989 Apr;6(3):237–44
Instar development and disengagement rate of engorged female winter ticks, Dermacentor albipictus (Acari:Ixodidae), following single- and trickle-exposure of moose (Alces alces). Drew ML, et al. **Exp Appl Acarol** 1989 Apr;6(3):189–96
Effect of Dermacentor albipictus (Acari:Ixodidae) on blood composition, weight gain and hair coat of moose, Alces alces. Glines MV, et al. **Exp Appl Acarol** 1989 Apr; 6(3):197–213
Monitoring of naturally acquired and artificially induced immunity to Amblyomma variegatum and Rhipicephalus appendiculatus ticks under field and laboratory conditions. Jongejan F, et al. **Exp Appl Acarol** 1989 Aug;7(3):181–99
Vaccination against Boophilus microplus: localization of antigens on tick gut cells and their interaction with the host immune system. Kemp DH, et al. **Exp Appl Acarol** 1989 Jun;7(1):43–58 (29 ref.)
Development of resistance in calves to nymphs of Rhipicephalus appendiculatus (Acarina:Ixodidae) during test feeds. Newson RM, et al. **Exp Appl Acarol** 1989 Feb; 6(1):19–27
Control of induced infestations of three African multihost tick species with sustained-release ivermectin. Soll MD, et al. **Exp Appl Acarol** 1989 Jul;7(2):121–30
Introduction of the tick Rhipicephalus sanguineus to Czechoslovakia: an additional case. Černý V. **Folia Parasitol (Praha)** 1989;36(2):184
Cutaneous and blood leucocyte response of pigeons to larval Argas polonicus feeding. Dusbábek F, et al. **Folia Parasitol (Praha)** 1988;35(3):259–68
Antibody-mediated response of pigeons to Argas polonicus larval feeding and characterization of larval antigen. Dusbábek F, et al. **Folia Parasitol (Praha)** 1989;36(1):83–92
Isolation of TBE virus from the tick Ixodes hexagonus. Křivanec K, et al. **Folia Parasitol (Praha)** 1988;35(3):273–6
Hereford cattle protected against Boophilus microplus with antigens purified by immunoaffinity chromatography from larval and adult ticks. Opdebeeck JP, et al. **Immunology** 1989 Jul;67(3):388–93
Efficacy and stability of wettable powder amitraz in field and laboratory studies against Boophilus annulatus (Acari:

Ixodidae) in south Texas. Ahrens EH, et al. **J Econ Entomol** 1989 Jun;82(3):850–3

Habitat use by cattle affects host contact with lone star ticks (Acari: Ixodidae). Barnard DR. **J Econ Entomol** 1989 Jun; 82(3):854–9

Immunologic control of a parasitic arthropod. Identification of a protective antigen from Boophilus microplus. Willadsen P, et al. **J Immunol** 1989 Aug 15;143(4):1346–51

Female mediation of feeding time on cattle in adult lone star ticks (Acari: Ixodidae). Barnard DR. **J Med Entomol** 1989 Jul;26(4):372–4

Isolation of Mono Lake virus (family Reoviridae, genus Orbivirus, Kemerovo serogroup) from Argas cooleyi (Acari: Argasidae) collected in Colorado. Calisher CH, et al. **J Med Entomol** 1988 Sep;25(5):388–90

Suitability of white-tailed deer as hosts for cattle fever ticks (Acari: Ixodidae). Cooksey LM, et al. **J Med Entomol** 1989 May;26(3):155–8

Host associations of ticks (Acari: Ixodidae) parasitizing medium-sized mammals in a Lyme disease endemic area of southern New York. Fish D, et al. **J Med Entomol** 1989 May;26(3):200–9

Lyme disease in California: interrelationship of Ixodes pacificus (Acari: Ixodidae), the western fence lizard (Sceloporus occidentalis), and Borrelia burgdorferi. Lane RS, et al. **J Med Entomol** 1989 Jul;26(4):272–8

Ixodes dammini (Acari: Ixodidae) in Indiana. Pinger RR, et al. **J Med Entomol** 1989 Mar;26(2):130–1

Changes in the concentration of globulins in naive guinea pigs during feeding by the immature stages of Rhipicephalus evertsi evertsi (Acari: Ixodidae). Rechav Y, et al. **J Med Entomol** 1989 Jul;26(4):247–51

Mono Lake virus infecting Argas ticks (Acari: Argasidae) associated with California gulls breeding on islands in Mono Lake, California. Schwan TG, et al. **J Med Entomol** 1988 Sep;25(5):381–7

Dermacentor (Indocentor) steini (Acari: Ixodoidea: Ixodidae): hosts, distribution in the Malay Peninsula, Indonesia, Borneo, Thailand, and Philippines, and New Guinea. Wassef HY, et al. **J Med Entomol** 1988 Sep; 25(5):315–20

The seasonal abundance of adult ixodid ticks on Merino sheep in the south-western Orange Free State. Fourie LJ, et al. **J S Afr Vet Assoc** 1988 Dec;59(4):191–4

Foot abscess in goats in relation to the seasonal abundance of adult Amblyomma hebraeum and adult Rhipicephalus glabroscutatum (Acari: Ixodidae). MacIvor KM, et al. **J S Afr Vet Assoc** 1987 Sep;58(3):113–8

The treatment of ticks on tortoises using amitraz. Petney TN, et al. **J S Afr Vet Assoc** 1988 Dec;59(4):206

Tick (Dermacentor albipictus)-induced winter hair-loss in captive moose (Alces alces). McLaughlin RF, et al. **J Wildl Dis** 1986 Oct;22(4):502–10

Locations of moose in northwestern Canada with hair loss probably caused by the winter tick, Dermacentor albipictus (Acari: Ixodidae). Samuel WM. **J Wildl Dis** 1989 Jul; 25(3):436–9

Hereford cattle immunized and protected against Boophilus microplus with soluble and membrane-associated antigens from the midgut of ticks. Opdebeeck JP, et al. **Parasite Immunol** 1988 Jul;10(4):405–10

Effects of cyclosporin A on humoral immunity to ticks and on cutaneous immediate and delayed hypersensitivity reactions to Ixodes ricinus L. salivary-gland antigens in re-infested rabbits. Girardin P, et al. **Parasitol Res** 1989; 75(8):657–62

Immunological control of ticks and tick-borne parasitic diseases of livestock. Morrison WI. **Parasitology** 1989;98 Suppl:S69–86 (121 ref.)

Use of counter immunoelectrophoresis in detection of antibodies to tickborne fever. Webster KA, et al. **Res Vet Sci** 1988 Jul;45(1):28–30

Populations of the cattle tick (Boophilus microplus) on purebred Nellore, Ibage and Nellore X European crossbreds in the Brazilian savanna. Gomes A, et al. **Trop Anim Health Prod** 1989 Feb;21(1):20–4

Genetic resistance of hosts and its influence on epidemiology. Barger IA. **Vet Parasitol** 1989 Jul 1;32(1):21–35 (46 ref.)

Efficacy of topically applied ivermectin against Boophilus microplus (Canestrini, 1887) in cattle. Cramer LG, et al. **Vet Parasitol** 1988 Oct;29(4):341–9

Relationship between the resistance of crossbred cattle to ticks, Boophilus microplus (Canestrini, 1887) and Hyalomma anatolicum anatolicum (Koch, 1844). Miranpuri GS. **Vet Parasitol** 1989 Jun;31(3–4):289–301

The effect of the brown ear-tick Rhipicephalus appendiculatus on the growth of Sanga and European breed cattle. Norval RA, et al. **Vet Parasitol** 1988 Dec; 30(2):149–64

Ability of adults of Amblyomma hebraeum (Acarina: Ixodidae) to feed repeatedly on sheep and cattle. Norval RA, et al. **Vet Parasitol** 1988 Oct;29(4):351–5

Class I antigens of the bovine major histocompatibility system and resistance to the cattle tick (Boophilus microplus) assessed in three different seasons. Stear MJ, et al. **Vet Parasitol** 1989 Jun;31(3–4):303–15

Immunological control of hematophagous arthropod vectors: utilization of novel antigens. Wikel SK. **Vet Parasitol** 1988 Sep;29(2–3):235–64

Delayed-type hypersensitivity test for assessing tick-immune status of cattle in Zambia. Smith RE, et al. **Vet Rec** 1989 Jun 3;124(22):583–4

Resistance to Rhipicephalus evertsi evertsi in immunosuppressed rabbits. Njau BC. **Vet Res Commun** 1989;13(2):93–102

Rickettsiae of the spotted fever group associated with the host-parasite system Oryctolagus cuniculi/Rhipicephalus pusillus. Ciceroni L, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):211–7

[Effect of natural infestation by Amblyomma variegatum ticks on the growth of Creole cattle and goats] Stachurski F, et al. **Rev Elev Med Vet Pays Trop** 1988;41(4):395–405 (Eng. Abstr.) **(Fre)**

TICK PARALYSIS see under **TICK TOXICOSES**

TICK TOXICOSES

IMMUNOLOGY

Allergic reactions to the Australian paralysis tick, Ixodes holocyclus: diagnostic evaluation by skin test and radioimmunoassay. Gauci M, et al. **Clin Exp Allergy** 1989 May;19(3):279–83

VETERINARY

Infestation in the dog by the paralysis tick, Ixodes holocyclus. 4. Cardiovascular effects. Ilkiw JE, et al. **Aust Vet J** 1988 Aug;65(8):232–5

Infestation in the dog by the paralysis tick, Ixodes holocyclus. 5. Treatment. Ilkiw JE, et al. **Aust Vet J** 1988 Aug; 65(8):236–8

Paralysis of laboratory rabbits by nymphae of Ixodes rubicundus, Neumann 1904 (Acarina: Ixodidae) and some effects on the life-cycle following feeding under different temperature conditions. Spickett AM, et al. **Onderstepoort J Vet Res** 1989 Mar;56(1):59–62

TICKS

Ehrlichia canis: a tick-borne rickettsial-like infection in humans living in the southeastern United States. Conrad ME. **Am J Med Sci** 1989 Jan;297(1):35–7 (23 ref.)

The continuing saga of Lyme disease [editorial] Benenson AS. **Am J Public Health** 1989 Jan;79(1):9–10

Vector tick populations and Lyme disease. A summary of control strategies. Schulze TL, et al. **Ann N Y Acad Sci** 1988;539:204–11

Experimental transmission of Theileria sergenti of cattle in Japan by Haemaphysalis mageshimaensis. Fujisaki K, et al. **Ann Trop Med Parasitol** 1988 Oct;82(5):513–5

Synthetic pyrethroid resistance in field samples in the cattle tick (Boophilus microplus). Nolan J, et al. **Aust Vet J** 1989 Jun;66(6):179–82

Acute scrotum due to tick bite. Asvestis C, et al. **Br J Urol** 1989 Apr;63(4):437

A prospective study of tick bites in an endemic area for Lyme disease. Costello CM, et al. **Conn Med** 1989 Jun; 53(6):338–40

Ode to that dammini Ixodes. Robinson CH. **Conn Med** 1989 Jun;53(6):375

Lyme disease prevention: personal protection and prospects for tick control. Stafford KC 3d. **Conn Med** 1989 Jun; 53(6):347–51 (24 ref.)

Borrelia burgdorferi infections. Kurgansky D, et al. **Cutis** 1989 May;43(5):407–8

A nursery rhyme for tick time [letter] Himmelberg CJ, et al. **DICP** 1989 Jun;23(6):509–10

Evaluation of the eradication program for Amblyomma variegatum (Acari:Ixodidae) on Puerto Rico. Garris GI, et al. **Exp Appl Acarol** 1989 Feb;6(1):67–76

Distribution of some anystid mites (Acari: Anystidae) in Australia and Indonesia and their role as possible predators of the cattle tick, Boophilus microplus (Acari: Ixodidae). Holm E, et al. **Exp Appl Acarol** 1989 Feb;6(1):77–83

Treatment of clothing with a permethrin spray for personal protection against the western black-legged tick, Ixodes pacificus (Acari: Ixodidae). Lane RS. **Exp Appl Acarol** 1989 May;6(4):343–52

Toxicology and metabolism of isomers of flumethrin in larvae of pyrethroid-susceptible and resistant strains of the cattle tick Boophilus microplus (Acari: Ixodidae). Schnitzerling HJ, et al. **Exp Appl Acarol** 1989 Feb;6(1):47–54

Infections following tickbites. Tick-borne encephalitis and Lyme borreliosis—a prospective epidemiological study from Tyrol. Schmutzhard E, et al. **Infection** 1988 Sep–Oct; 16(5):269–72

A tick, in time, may cause Lyme (disease). Reich M. **J Am Osteopath Assoc** 1989 Jul;89(7):948–51

A case of tick-bite from Ixodes ovatus Neumann—a report from west Japan. Fukuoka F, et al. **J Dermatol (Tokyo)** 1989 Feb;16(1):76–8

Ovicidal activity of topically applied acaricides against eggs of the southern cattle tick (Acari: Ixodidae). Davey RB, et al. **J Econ Entomol** 1989 Apr;82(2):539–42

Adult Ixodes dammini on rabbits: development of acute inflammation in the skin and immune responses to salivary gland, midgut, and spirochetal components. Wheeler CM, et al. **J Infect Dis** 1989 Feb;159(2):265–73

Ticks, tetracycline, and backyard terrorism. Bryan CS. **J S C Med Assoc** 1989 Jul;85(7):341–3

Borrelia burgdorferi infection in UK workers at risk of tick bites [letter] **Lancet** 1989 Apr 8;1(8641):789–90

Increased risk of Lyme disease for cat owners [letter] Curran KL, et al. **N Engl J Med** 1989 Jan 19;320(3):183

Ticks, Lyme disease, and spotted fever. Imperato PJ. **N Y State J Med** 1989 Jun;89(6):313–4

Aggregation pheromones of the bont tick Amblyomma hebraeum: identification of candidates for bioassay. Apps PJ, et al. **Onderstepoort J Vet Res** 1988 Sep;55(3):135–7

Is Ixodes (ixodiopsis) angustus a vector of Lyme disease in Washington State? Damrow T, et al. **West J Med** 1989 May;150(5):580–2

[The discovery of Dermacentor reticulatus (Ixodida, Ixodidae) in the East German districts of Leipzig and Halle] Bauch RJ, et al. **Angew Parasitol** 1988 Nov;29(4):250–4 (Eng. Abstr.) **(Ger)**

[Pseudo-obstruction of the colon following tick bite injury] Autschbach R, et al. **Chirurg** 1989 May;60(5):365–7 **(Ger)**

[Infectious diseases transmitted by ticks. A short overview of infectious diseases transmitted by ticks in Europe] Schneider T, et al. **Fortschr Med** 1989 Aug 10; 107(23):489–92 (23 ref.) (Eng. Abstr.) **(Ger)**

[Limb and joint pain in Lyme disease. An important differential neurologic diagnosis] von Albert HH. **Fortschr Med** 1989 Aug 10;107(23):493–5 (Eng. Abstr.) **(Ger)**

[Acrodermatitis chronic atrophicans and sclerodermiform skin changes in Borrelia infection] Langer K, et al. **Hautarzt** 1988 Oct;39(10):647–51 (Eng. Abstr.) **(Ger)**

[Current epidemiology of Central Asiatic tick-borne borreliasis (based on the example of the Fergana region)] Amridinov KN, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):43–6 (Eng. Abstr.) **(Rus)**

[A comparative assessment of methods of collecting and long-term storage of ixodidae ticks] Kislenko GS, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):60–2 (Eng. Abstr.) **(Rus)**

[Cyclical changes in the number of Ixodes persulcatus in Udmurtia] Korotkov IuS, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):65–9 (Eng. Abstr.) **(Rus)**

[Haemaphysalis concinna ticks and tularemia natural foci in the Pavlodar region (north east of Kazakhstan)] Pakizh VI, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):77–9 (Eng. Abstr.) **(Rus)**

[Sensitivity of the tick Ornithodoros papillipes Bir. (Argasidae) to DDT] Vasil'eva IS, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):49–52 (Eng. Abstr.) **(Rus)**

[History of the geographic ranges and migration routes of ticks in the genus Dermacentor Koch, 1844 (Ixodidae)] Berdyev A. **Parazitologiia** 1989 Mar–Apr;23(2):166–72 (Eng. Abstr.) **(Rus)**

[Correlation of the relative population count of ixodid ticks with various recording methods] Bolotin EI, et al. **Parazitologiia** 1989 May–Jun;23(3):274–5 (Eng. Abstr.) **(Rus)**

[Spirochete infected ticks (Ixodes ricinus)—risks even in Norrland] Jaenson TG, et al. **Lakartidningen** 1989 Jul 26; 86(30–31):2584 **(Swe)**

ANALYSIS

A new method for determining vitellogenin in hemolymph of female Ornithodoros moubata (Acari: Argasidae). Chinzei Y. **J Med Entomol** 1988 Nov;25(6):548–50

ANATOMY & HISTOLOGY

Vaginal eversion in a bat tick, Argas (Chiropterargas) boueti Roubaud and Colas-Belcour (Acari: Argasidae). Marzouk AS, et al. **J Med Entomol** 1989 Jul;26(4):349–53

[Sexual dimorphism of the nymphal phase of ixodid tick species in the genus Dermacentor] Voltsit OV. **Parazitologiia** 1989 Jan–Feb;23(1):20–8 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Ticks parasitizing humans in a Lyme disease endemic area of southern New York State. Falco RC, et al. **Am J Epidemiol** 1988 Nov;128(5):1146–52

[The ixodid tick fauna of the Mongolian People's Republic. I. The species distribution] Dash M, et al. **Med Parazitol (Mosk)** 1988 May–Jun;(3):37–42 (Eng. Abstr.) **(Rus)**

[Ixodid ticks of Pavlodar Province and their participation in the circulation of tularemia infection] Amirova NA, et al. **Parazitologiia** 1989 May–Jun;23(3):267–74 (Eng. Abstr.) **(Rus)**

[Diagnosis of species by the larval phase in the genus Rhipicephalus Koch (Ixodidae) in USSR fauna] Filippova NA. **Parazitologiia** 1989 Mar–Apr;23(2):104–17 (Eng. Abstr.) **(Rus)**

[Ixodes trianguliceps (Parasitiformes, Ixodidae) in the southern Lake Baikal area] Vershinina TA. **Parazitologiia** 1988 Jul–Aug;22(4):329–36 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Formulation of medium for tick cell culture. Munderloh UG, et al. **Exp Appl Acarol** 1989 Aug;7(3):219–29

DRUG EFFECTS

Effect of 20-hydroxyecdysone on neurosecretory cell

activity in female Hyalomma dromedarii synganglion (Acari: Ixodidae). Khalil GM, et al. **Exp Appl Acarol** 1988 Sep;5(1-2):101-19

Susceptibility of Ornithodoros parkeri (Cooley) (Acari: Argasidae) and Dermanyssus gallinae (DeGeer) (Acari: Dermanyssidae) to ivermectin. Ash LS, et al. **J Med Entomol** 1989 May;26(3):133-9

[The action of carbon dioxide gas in high concentrations on ixodid ticks] Nsumov RL, et al. **Parazitologiia** 1989 Mar-Apr;23(2):118-28 (Eng. Abstr.) (Rus)

EMBRYOLOGY

Studies on the biology of Argas (A.) reflexus Fabricius, 1794 (Acari: Ixodida: Argasidae). I. Effect of temperature and relative humidity on embryonic development and egg hatch. Buczek A. **Folia Biol (Krakow)** 1988;36(3-4):239-63

ENZYMOLOGY

Purification and properties of a novel nucleotide-hydrolysing enzyme (5'-nucleotidase) from Boophilus microplus. Willadsen P, et al. **Biochem J** 1989 Feb 15;258(1):79-85

Effect of selection pressure on the cholinesterase of Boophilus microplus (Acari: Ixodidae) resistant to coumaphos. Wright FC, et al. **J Econ Entomol** 1989 Apr;82(2):524-9

Effect of age on cholinesterase activity and protein of unfed larval ticks. Wright FC. **J Parasitol** 1989 Feb;75(1):6-10

GENETICS

Characterization of ixodid tick salivary-gland gene products, using recombinant DNA technology. Needham GR, et al. **Exp Appl Acarol** 1989 Jun;7(1):21-32

Comparison of the isozyme phenotypes of the morphologically similar ticks Amblyomma cajennense and A. imitator (Acari: Ixodidae) from south Texas. Hilburn LR, et al. **J Med Entomol** 1989 Jan;26(1):23-9

Differential staining of tick chromosomes: techniques for C-banding and silver-staining and karyology of Rhipicephalus sanguineus (Latreille). Gunn SJ, et al. **J Parasitol** 1989 Apr;75(2):239-45

GROWTH & DEVELOPMENT

Remote recognition of Amblyomma variegatum habitats in Guadeloupe using LANDSAT-TM imagery. Hugh-Jones ME, et al. **Acta Vet Scand Suppl** 1988;84:259-61

Instar development and disengagement rate of engorged female winter ticks, Dermacentor albipictus (Acari:Ixodidae), following single- and trickle-exposure of moose (Alces alces). Drew ML, et al. **Exp Appl Acarol** 1989 Apr;6(3):189-96

Development rates, fecundity and survival of developmental stages of the ticks Rhipicephalus appendiculatus, Boophilus decoloratus and B. microplus under field conditions in Zimbabwe. Short NJ, et al. **Exp Appl Acarol** 1989 Mar; 6(2):123-41

Physiological phases of nymphal molting defined by mobility, body weight decrease, and excretion in Haemaphysalis longicornis (Acari: Ixodidae). Koh K, et al. **J Med Entomol** 1989 Jan;26(1):77-80

Effects of photoperiod on nymphal diapause in Amblyomma americanum (Acari: Ixodidae). Pound JM, et al. **J Med Entomol** 1988 Nov;25(6):479-83

A climate-based model for the development of the ixodid tick, Rhipicephalus appendiculatus in East Coast fever zones. King D, et al. **Vet Parasitol** 1988 Jul;29(1):41-51

IMMUNOLOGY

Cell biology of tick/host interaction and disease transmission. Papers presented at the XVIII International Congress of Acarology. 2-9 July 1988, Vancouver, British Columbia, Canada. **Exp Appl Acarol** 1989 Jun;7(1):1-105

Immunology of interactions between ticks and laboratory animals. Allen JR. **Exp Appl Acarol** 1989 Jun;7(1):5-13 (43 ref.)

Vaccination against Boophilus microplus: localization of antigens on tick gut cells and their interaction with the host immune system. Kemp DH, et al. **Exp Appl Acarol** 1989 Jun;7(1):43-58 (29 ref.)

Development of resistance in calves to nymphs of Rhipicephalus appendiculatus (Acarina:Ixodidae) during test feeds. Newson RM, et al. **Exp Appl Acarol** 1989 Feb; 6(1):19-27

Role of saliva in tick/host interactions. Ribeiro JM. **Exp Appl Acarol** 1989 Jun;7(1):15-20 (22 ref.)

Acquired resistance to ixodid ticks induced by tick cement antigen. Shapiro SZ, et al. **Exp Appl Acarol** 1989 Jun; 7(1):33-41

Antibody-mediated response of pigeons to Argas polonicus larval feeding and characterization of larval antigen. Dusbábek F, et al. **Folia Parasitol (Praha)** 1989;36(1):83-92

Hereford cattle protected against Boophilus microplus with antigens purified by immunoaffinity chromatography from larval and adult ticks. Opdebeeck JP, et al. **Immunology** 1989 Jul;67(3):388-93

Isolation and immunological characterisation of allergens from salivary glands of the Australian paralysis tick Ixodes holocyclus. Gauci M, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):208-12

Quantitative studies of host immunoglobulin G in the hemolymph of ticks (Acari). Ben-Yakir D. **J Med Entomol** 1989 Jul;26(4):243-6

The presence of Cowdria ruminantium antigen in various tissues of Amblyomma hebraeum imagines as detected by an enzyme-linked immunosorbent assay. Viljoen GJ, et al. **Onderstepoort J Vet Res** 1988 Dec;55(4):239-40

Hereford cattle immunized and protected against Boophilus microplus with soluble and membrane-associated antigens from the midgut of ticks. Opdebeeck JP, et al. **Parasite Immunol** 1988 Jul;10(4):405-10

Repetitive detection by immunoblotting of an integumental 25-kDa antigen in Ixodes ricinus and a corresponding 20-kDa antigen in Rhipicephalus appendiculatus with sera of pluriinfested mice and rabbits. Rutti B, et al. **Parasitol Res** 1989;75(4):325-9

Immunological control of ticks and tick-borne parasitic diseases of livestock. Morrison WI. **Parasitology** 1989;98 Suppl:S69-86 (121 ref.)

Immunological control of hematophagous arthropod vectors: utilization of novel antigens. Wikel SK. **Vet Parasitol** 1988 Sep;29(2-3):235-64

Acquired resistance in rabbits to immature stages of Rhipicephalus evertsi evertsi. Njau BC, et al. **Vet Res Commun** 1988;12(4-5):363-73

[Suppression of the reproduction and dissemination of the tick-borne encephalitis virus under the influence of vertebrate immunity against tick antigens] Mishaeva NP, et al. **Med Parazitol (Mosk)** 1988 Sep-Oct;(5):78-81 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Multiple bites from the larvae of the tick Ixodes ricinus. A case report. Halkier-Sørensen L, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):268-9

Potential for exposure to tick bites in recreational parks in a Lyme disease endemic area. Falco RC, et al. **Am J Public Health** 1989 Jan;79(1):12-5

Rodent-ectoparasite association in selected biotopes of Mirzapur and Varanasi Districts of Uttar Pradesh. Saxena VK. **J Commun Dis** 1987 Dec;19(4):310-6

Medium-sized mammal hosts of Amblyomma americanum and Dermacentor variabilis (Acari: Ixodidae) at Land Between the Lakes, Tennessee, and effects of integrated tick management on host infestations. Zimmerman RH, et al. **J Med Entomol** 1988 Nov;25(6):461-6

Ixodes dammini: occurrence and prevalence of infection with Borrelia spp. in Minnesota. Drew ML, et al. **J Wildl Dis** 1988 Oct;24(4):708-10

[Tick-borne relapsing fever in Madagascar: an eradicated disease?] Rodhain F, et al. **Bull Soc Pathol Exot Filiales** 1989;82(2):192-8 (Eng. Abstr.) (Fre)

[Ectoparasites and phoresants of the root vole (Microtus oeconomus Pall.) in the Polesye] Savitskiĭ BP, et al. **Parazitologiia** 1988 Sep-Oct;22(5):372-7 (Eng. Abstr.) (Rus)

METABOLISM

Onset of vitellogenin production and vitellogenesis, and their relationship to changes in the midgut epithelium and oocytes in the tick Dermacentor variabilis. Coons LB, et al. **Exp Appl Acarol** 1989 May;6(4):291-305

Protein phosphorylation and control of tick salivary gland function. Sauer JR, et al. **Exp Appl Acarol** 1989 Jun; 7(1):81-94 (41 ref.)

Biochemical effects of juvenile hormone III on the tick, Argas (Persicargas) arboreus (Acari: Argasidae), during embryogenesis. Gadallah AI, et al. **J Med Entomol** 1989 Jul;26(4):360-7

Distribution and pharmacokinetics of precocene-II in the tick Ornithodoros parkeri (Acari: Argasidae). Zhu XX, et al. **J Med Entomol** 1989 May;26(3):217-21

Ixodes dammini: evidence for salivary prostacyclin secretion. Ribeiro JM, et al. **J Parasitol** 1988 Dec;74(6):1068-9

MICROBIOLOGY

Experimental infection of six species of ixodid ticks with Dugbe virus (family Bunyaviridae, genus Nairovirus). Linthicum KJ, et al. **Am J Trop Med Hyg** 1989 Apr; 40(4):410-7

Experimental studies on the replication and transmission of Crimean-Congo hemorrhagic fever virus in some African tick species. Shepherd AJ, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):326-31

Transstadial and attempted transovarial transmission of Anaplasma marginale by Dermacentor variabilis. Stich RW, et al. **Am J Vet Res** 1989 Aug;50(8):1377-80

Detection of colonies of Anaplasma marginale in salivary glands of three Dermacentor spp infected as nymphs or adults. Stiller D, et al. **Am J Vet Res** 1989 Aug;50(8):1381-5

Development of Borrelia burgdorferi in ixodid tick vectors. Burgdorfer W, et al. **Ann N Y Acad Sci** 1988;539:172-9

Lyme borreliosis in California. Acarological, clinical, and epidemiological studies. Lane RS, et al. **Ann N Y Acad Sci** 1988;539:192-203

Characterization of the first tick isolate of Borrelia burgdorferi from Italy. Cinco M, et al. **APMIS** 1989 Apr; 97(4):381-2

Lyme disease and migrating birds in the Saint Croix River Valley. Weisbrod AR, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1921-4

Isolation of "exotic" Bhanja virus (Bunyaviridae) from ticks in the temperate zone. Hubálek Z, et al. **Arch Virol** 1988; 101(3-4):191-7

Distribution of the Lyme disease agent in wildlife reservoirs in Ontario. Barker IK, et al. **Can Dis Wkly Rep** 1989 Jul 8;15(27):141-2 (Eng, Fre)

Tick-borne Kemerovo group orbiviruses in a Newfoundland seabird colony. Oprandy JJ, et al. **Can J Microbiol** 1988 Jun;34(6):782-6

A study of African swine fever virus infected ticks (Ornithodoros moubata) collected from three villages in the ASF enzootic area of Malawi following an outbreak of the disease in domestic pigs. Haresnape JM, et al. **Epidemiol Infect** 1989 Jun;102(3):507-22

The distribution of African swine fever virus isolated from Ornithodoros moubata in Zambia. Wilkinson PJ, et al. **Epidemiol Infect** 1988 Dec;101(3):547-64

Comparison of culture, indirect immunofluorescence and dark-field microscopy for detection of spirochetes from Ixodes ricinus ticks [letter] Gustafson R, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):570-2

Transmission of Lyme disease spirochetes (Borrelia burgdorferi). Piesman J. **Exp Appl Acarol** 1989 Jun; 7(1):71-80 (51 ref.)

Results of the Czechoslovak-Cuban cooperation concerning investigations of ticks and arboviruses transmitted by ticks. Černý V, et al. **Folia Parasitol (Praha)** 1989;36(1):93-6

Isolation of TBE virus from the tick Ixodes hexagonus. Křivanec K, et al. **Folia Parasitol (Praha)** 1988;35(3):273-6

Analogous cases of Lyme disease. McEnroe WD. **Folia Parasitol (Praha)** 1988;35(4):377-8

Relapsing fever (Borrelia) in an adolescent tourist in Israel. McNamara JJ, et al. **J Adolesc Health Care** 1988 Sep; 9(5):421-3

New Borrelia burgdorferi antigenic variant isolated from Ixodes dammini from upstate New York. Anderson JF, et al. **J Clin Microbiol** 1988 Oct;26(10):2209-12

Antigenically variable Borrelia burgdorferi isolated from cottontail rabbits and Ixodes dentatus in rural and urban areas. Anderson JF, et al. **J Clin Microbiol** 1989 Jan; 27(1):13-20

Ticks and biting insects infected with the etiologic agent of Lyme disease, Borrelia burgdorferi. Magnarelli LA, et al. **J Clin Microbiol** 1988 Aug;26(8):1482-6

Anatomical basis of Thogoto virus infection in BHK cell culture and in the ixodid tick vector, Rhipicephalus appendiculatus. Booth TF, et al. **J Gen Virol** 1989 May; 70 (Pt 5):1093-104

Viral interference in the tick, Rhipicephalus appendiculatus. I. Interference to oral superinfection by Thogoto virus. Davies CR, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2461-8

Genetic diversity of African swine fever virus isolates from soft ticks (Ornithodoros moubata) inhabiting warthog burrows in Zambia. Dixon LK, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):2981-93

Enhancement of virus transmission by tick salivary glands. Jones LD, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1895-8

Viral interference in the tick, Rhipicephalus appendiculatus. II. Absence of interference with Thogoto virus when the tick gut is by-passed by parenteral inoculation. Jones LD, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2469-73

The Great Island subgroup of tick-borne orbiviruses represents a single gene pool. Moss SR, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2721-7

A prospective study of tick bites in an endemic area for Lyme disease. Costello CM, et al. **J Infect Dis** 1989 Jan; 159(1):136-9

Ingestion of Lyme disease spirochetes by ticks feeding on infected hosts [letter] Nakayama Y, et al. **J Infect Dis** 1989 Jul;160(1):166-7

An outbreak of ehrlichiosis in members of an Army Reserve unit exposed to ticks. Petersen LR, et al. **J Infect Dis** 1989 Mar;159(3):562-8

Isolation of Mono Lake virus (family Reoviridae, genus Orbivirus, Kemerovo serogroup) from Argas cooleyi (Acari: Argasidae) collected in Colorado. Calisher CH, et al. **J Med Entomol** 1988 Sep;25(5):388-90

Clearance of African swine fever virus from infected tick (Acari) colonies. Hess WR, et al. **J Med Entomol** 1989 Jul;26(4):314-7

Lyme disease in California: interrelationship of Ixodes pacificus (Acari: Ixodidae), the western fence lizard (Sceloporus occidentalis), and Borrelia burgdorferi. Lane RS, et al. **J Med Entomol** 1989 Jul;26(4):272-8

Ability to Ixodes scapularis, Dermacentor variabilis, and Amblyomma americanum (Acari: Ixodidae) to acquire, maintain, and transmit Lyme disease spirochetes (Borrelia burgdorferi). Piesman J, et al. **J Med Entomol** 1988 Sep; 25(5):336-9

Mono Lake virus infecting Argas ticks (Acari: Argasidae) associated with California gulls breeding on islands in Mono Lake, California. Schwan TG, et al. **J Med Entomol** 1988 Sep;25(5):381-7

Competence of a rabbit-feeding Ixodes (Acari: Ixodidae) as a vector of the Lyme disease spirochete. Telford SR 3d, et al. **J Med Entomol** 1989 Mar;26(2):118-21

Lyme and other tick-borne diseases acquired in South Carolina in 1988: a survey of 1,331 physicians. Schuman SH, et al. **J S C Med Assoc** 1989 Jul;85(7):311-4

Potential for mechanical transmission of human immunodeficiency virus by the hut tampan, Ornithodoros moubata [letter] Humphery-Smith I, et al. **Med J Aust** 1988 Nov 7;149(9):505-6

Epidemiology of boutonneuse fever in western Sicily:

demonstration of multiple spotted fever group–Rickettsiae subtypes. Tringali G, et al. **Microbiologica** 1989 Jul; 12(3):189–94

Hybridization of DNA probes to A. marginale isolates from different sources and detection in Dermacentor andersoni ticks. Ambrosio RE, et al. **Onderstepoort J Vet Res** 1988 Dec;55(4):227–9

An electron microscopic study of Cytoecetes phagocytophila infection in Ixodes ricinus. Webster KA, et al. **Res Vet Sci** 1989 Jul;47(1):30–3

Dugbe virus replication in nymph and adult Amblyomma variegatum. Gonzalez JP, et al. **Res Virol** 1989 Jul–Aug; 140(4):333–6

A mouse lethal dose assay for detection and titration of Cowdria ruminantium (Kwanyanga strain) in goats and ticks. Endris RG, et al. **Vet Microbiol** 1989 Feb; 19(2):151–65

Rickettsiae of the spotted fever group associated with the host–parasite system Oryctolagus cuniculi/Rhipicephalus pusillus. Ciceroni L, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):211–7

Occurrence of tick–borne encephalitis (TBE) virus in Berlin (West). Kahl O, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jun; 268(4):482–6

Prevalence of Borrelia burgdorferi in Ixodes ricinus ticks in Berlin (West). Kahl O, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):434–40

First isolation of Borrelia burgdorferi, the agent of Lyme borreliosis, from Ixodes ricinus (Acari: Ixodidae) in Berlin (West). Schönberg A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jun; 268(4):487–94

Amblyomma variegatum ticks and the occurrence of bovine streptothricosis in Antigua. Morrow AN, et al. **Zentralbl Veterinarmed [B]** 1989 Jun;36(4):241–9

[Uneven distribution of arboviruses transmitted by ticks in sea bird colonies north and south of France] Chastel C, et al. **C R Acad Sci [III]** 1988;307(8):479–84 (Eng. Abstr.) (Fre)

[Lyme disease, erythema migrans disease, borreliosis (review)] Bengert O. **Berl Munch Tierarztl Wochenschr** 1989 May 1;102(5):170–4 (127 ref.) (Eng. Abstr.) (Ger)

[Biological cycle and biotope of ticks in Alpine regions] Sixl W, et al. **Geogr Med** 1989;Suppl 2:153–8 (Ger)

[Ocular findings in tick borreliosis] Kehl F, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):66–8 (Eng. Abstr.) (Ger)

[Transmission of Borrelia burgdorferi from nymphs to imago in the tick Ixodes persulcatus Schulze] Korenberg EI, et al. **Dokl Akad Nauk SSSR** 1988;302(3):759–60 (Rus)

[Behavior of the tick–borne encephalitis virus in Dermacentor marginatus Sulz (Ixodidae) ticks of different physiological ages] Alekseev AN, et al. **Med Parazitol (Mosk)** 1988 May–Jun;(3):17–21 (Eng. Abstr.) (Rus)

[Detection of an increase in the proportion of tick–borne encephalitis virus–infected Dermacentor marginatus Sulz. among active females of older physiological ages] Alekseev AN, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):14–6 (Eng. Abstr.) (Rus)

[Determination of the titer of the tick–borne encephalitis virus in the saliva of fasting ixodid ticks] Chunikhin SP, et al. **Med Parazitol (Mosk)** 1988 May–Jun;(3):89–91 (Eng. Abstr.) (Rus)

[Experimental study of the role of male ixodid ticks in the circulation of the tick–borne encephalitis virus] Chunikhin SP, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):86–7 (Eng. Abstr.) (Rus)

[Factors determining the possibility of tick–borne encephalitis infection. 2. The virus carriage of the vector in the central taiga forests of the Khabarovsk Territory] Kovalevskiĭ IuV, et al. **Med Parazitol (Mosk)** 1988 May–Jun;(3):22–7 (Eng. Abstr.) (Rus)

[Comparative evaluation of 2 methods for demonstrating Borrelia in ticks—the vectors of Lyme disease] Kovalevskiĭ IuV, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):75–7 (Eng. Abstr.) (Rus)

[The role of ixodid ticks in the epizootic process of tick–borne encephalitis in the Maritime Territory] Leonova GN, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):6–11 (Eng. Abstr.) (Rus)

[Demonstration of the tick–borne encephalitis virus in ticks by means of nucleic acid hybridization] Pukhovskaia NM, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):11–4 (Eng. Abstr.) (Rus)

[Effect of Borrelia—the causative agent of tick–borne relapsing fever—on the vector] Vasil'eva IS, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):16–20 (Eng. Abstr.) (Rus)

[Changes in the host–dependent characteristics of the tick–borne encephalitis virus during its adaptation to ticks and its readaptation to white mice] Dzhivanian TI, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):589–95 (Eng. Abstr.) (Rus)

[Intrapopulation differences in the infectivity of adult Ixodes persulcatus P. Sch. with the tick–borne encephalitis virus and an assessment of its total content in ticks] Korenberg EI, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):456–61 (Eng. Abstr.) (Rus)

[Identification of Borrelia isolated in the USSR from Ixodes persulcatus Schulze ticks] Kriuchechnikov VN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):41–4 (Eng. Abstr.) (Rus)

[Acute and chronic borreliosis transmitted by ticks in Europe] Laso Dosal F, et al. **Med Cutan Ibero Lat Am** 1988; 16(3):245–50 (67 ref.) (Eng. Abstr.) (Spa)

PARASITOLOGY

Experimental transmission of Crimean–Congo hemorrhagic fever virus by Hyalomma truncatum Koch. Logan TM, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):207–12

The effect of infection by Babesia sp. on some biological parameters of engorged females of Boophilus microplus. Guglielmone AA, et al. **Folia Parasitol (Praha)** 1989; 36(1):1–6

Aspects of the life history of Cercopithifilaria johnstoni (Nematoda:Filarioidea). Spratt DM, et al. **Int J Parasitol** 1988 Dec;18(8):1087–92

Studies on susceptibility of Ornithodoros moubata as vector of Dipetalonema viteae (Filariodea). Singh DP, et al. **J Commun Dis** 1988 Sep;20(3):220–5

Susceptibility of Amblyomma americanum to natural and experimental infections with Theileria cervi. Laird JS, et al. **J Wildl Dis** 1988 Oct;24(4):679–83

The effect of temperature on the rate of transmission of Theileria parva parva infection to cattle by its tick vector, Rhipicephalus appendiculatus. Ochanda H, et al. **Parasitology** 1988 Oct;97 (Pt 2):239–45

Effect of different methods of maintenance on the pathogenicity and infectivity of Babesia bigemina for the vector Boophilus microplus. de Vos AJ, et al. **Res Vet Sci** 1989 Mar;46(2):139–42

The morphometrics of Babesia motasi (Wales) and its transmission by Haemaphysalis punctata (Canestrini and Fanzago 1877) to sheep. Alani AJ, et al. **Vet Parasitol** 1988 Dec;30(2):87–95

Relative role of male and female Hyalomma anatolicum anatolicum ticks in Theileria transmission. Sangwan AK, et al. **Vet Parasitol** 1989 Apr;31(1):83–7

[The filaria Cercopithifilaria roussilhoni in the tick vector] Petit G, et al. **Ann Parasitol Hum Comp** 1988;63(4):296–302 (Eng. Abstr.) (Fre)

[Epidemiology of human babesiosis in Europe. Prophylactic results] Euzéby J. **Bull Acad Natl Med** 1989 Jan; 173(1):31–6; discussion 36–7 (Eng. Abstr.) (Fre)

PHYSIOLOGY

Epidemiological research of African swine fever (ASF) in Portugal: the role of vectors and virus reservoirs. Caiado JM, et al. **Acta Vet Scand Suppl** 1988;84:136–8

The use of geographical information systems in estimating East Coast fever risk to African livestock. Lessard P, et al. **Acta Vet Scand Suppl** 1988;84:234–6

A technique for collecting saliva from the cattle–tick Boophilus microplus (Canestrini, 1887) using chemical stimulation. Environmental and temporal influences on secretion yield. Bechara GH, et al. **Braz J Med Biol Res** 1988;21(3):479–84

Sites of attachment and density assessment in Amblyomma americanum (Acari: Ixodidae) on nursing beef calves. Barnard DR, et al. **Exp Appl Acarol** 1989 Apr;6(3):245–52

Effect of temperature on the ovipositional biology and egg viability of the cattle tick Boophilus annulatus (Acari: Ixodidae). Davey RB. **Exp Appl Acarol** 1988 Sep; 5(1–2):1–14

Effect of Dermacentor albipictus (Acari:Ixodidae) on blood composition, weight gain and hair coat of moose, Alces alces. Glines MV, et al. **Exp Appl Acarol** 1989 Apr; 6(3):197–213

Feeding performance of Amblyomma variegatum (Acarina: Ixodidae) fed repeatedly on rabbits. Latif AA, et al. **Exp Appl Acarol** 1988 Sep;5(1–2):83–92

Relationship between feeding, mating, vitellogenin production and vitellogenesis in the tick Dermacentor variabilis. Rosell–Davis R, et al. **Exp Appl Acarol** 1989 Jun; 7(1):95–105

Tick/host interactions for Ixodes holocyclus: role, effects, biosynthesis and nature of its toxic and allergenic oral secretions. Stone BF, et al. **Exp Appl Acarol** 1989 Jun; 7(1):59–69 (31 ref.)

Ultrastructure of the midgut and blood meal digestion in the adult tick Dermacentor variabilis. Tarnowski BI, et al. **Exp Appl Acarol** 1989 May;6(4):263–89

A hybrid swarm of Ixodes dammini and Ixodes scapularis (Acari: Ixodidae). McEnroe WD, et al. **Folia Parasitol (Praha)** 1989;36(2):175–6

Spectral sensitivity, absolute threshold, and visual field of two tick species, Hyalomma dromedarii and Amblyomma variegatum. Kaltenrieder M, et al. **J Comp Physiol [A]** 1989; 165(2):155–64

Habitat use by cattle affects host contact with lone star ticks (Acari: Ixodidae). Barnard DR. **J Econ Entomol** 1989 Jun; 82(3):854–9

Population structure and seasonal intra–burrow movement of Ornithodoros turicata (Acari: Argasidae) in gopher tortoise burrows. Adeyeye OA, et al. **J Med Entomol** 1989 Jul;26(4):279–83

Female mediation of feeding time on cattle in adult lone star ticks (Acari: Ixodidae). Barnard DR. **J Med Entomol** 1989 Jul;26(4):372–4

Suitability of white–tailed deer as hosts for cattle fever ticks (Acari: Ixodidae). Cooksey LM, et al. **J Med Entomol** 1989 May;26(3):155–8

Host associations of ticks (Acari: Ixodidae) parasitizing medium–sized mammals in a Lyme disease endemic area of southern New York. Fish D, et al. **J Med Entomol** 1989 May;26(3):200–9

Habitat distribution of Ixodes dammini (Acari: Ixodidae) an Lyme disease spirochetes on Fire Island, New York. Ginsberg HS, et al. **J Med Entomol** 1989 May;26(3):183–9

Effect of temperature on Hyalomma (Hyalomma) dromedarii Koch (Acari: Ixodidae). Hagras AE, et al. **J Med Entomol** 1988 Sep;25(5):354–9

Questing behavior of Ixodes pacificus (Acari: Ixodidae) in relation to meteorological and seasonal factors. Loye JE, et al. **J Med Entomol** 1988 Sep;25(5):391–8

Computer simulation of population dynamics of the American dog tick (Acari: Ixodidae). Mount GA, et al. **J Med Entomol** 1989 Jan;26(1):60–76

Population dynamics of the American dog tick (Acari: Ixodidae) in relation to small mammal hosts. Smart DL, et al. **J Med Entomol** 1988 Nov;25(6):515–22

Paralysis of laboratory rabbits by nymphae of Ixodes rubicundus, Neumann 1904 (Acarina: Ixodidae) and some effects on the life–cycle following feeding under different temperature conditions. Spickett AM, et al. **Onderstepoort J Vet Res** 1989 Mar;56(1):59–62

The neurobiology of feeding in leeches [letter] Kaufman WR. **Sci Am** 1988 Oct;259(4):8

Pheromone–mediation of host–selection in bont ticks (Amblyomma hebraeum koch). Norval RA, et al. **Science** 1989 Jan 20;243(4889):364–5

Wax lipid secretion and ultrastructural development in the egg–waxing (Gene's) organ in ixodid ticks. Booth TF. **Tissue Cell** 1989;21(1):113–22

The effect of the brown ear–tick Rhipicephalus appendiculatus on the growth of Sanga and European breed cattle. Norval RA, et al. **Vet Parasitol** 1988 Dec; 30(2):149–64

Ability of adults of Amblyomma hebraeum (Acarina: Ixodidae) to feed repeatedly on sheep and cattle. Norval RA, et al. **Vet Parasitol** 1988 Oct;29(4):351–5

On the critical transition temperature of unfed adult Rhipicephalus evertsi evertsi and Rhipicephalus evertsi mimeticus (Ixodoidea: Ixodidae). Kalvelage H, et al. **Zentralbl Veterinarmed [B]** 1988 Dec;35(10):729–35

[Sensitivity of Argas (Persicargas) walkerae to optic irradiation and localization and organization of light perceiving or permeability areas of the integument] Gothe R, et al. **Zentralbl Veterinarmed [B]** 1989 Jun;36(4):303–13 (Eng. Abstr.) (Ger)

[Ectoparasites from the nests of the swallow Riparia riparia (L.)] Kaczmarek S. **Wiad Parazytol** 1988;34(3):347–51 (Eng. Abstr.) (Pol)

[The ecology of hungry larvae of Dermacentor reticulatus and their relation to food hosts under natural conditions] Fil'chagov AV, et al. **Parazitologiia** 1988 Sep–Oct; 22(5):366–71 (Eng. Abstr.) (Rus)

[Ethology of the taiga tick Ixodes persulcatus during its spring activity] Leonovich SA. **Parazitologiia** 1989 Jan–Feb;23(1):11–9 (Eng. Abstr.) (Rus)

[Repeated catching of taiga ticks on their permanent routes] Romanenko VN. **Parazitologiia** 1988 May–Jun;22(3):261–3 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Fine structure of the developing oocytes in adult Argas (Persicargas) arboreus (Ixodoidea: Argasidae). el Shoura SM, et al. **Exp Appl Acarol** 1989 Mar;6(2):143–56

Effect of blood meal and mating on the genital tract ultrastructure in the female camel tick Hyalomma (Hyalomma) dromedarii (Ixodoidea: Ixodidae). el Shoura SM. **Exp Appl Acarol** 1989 Mar;6(2):157–75

Ornithodoros (Alectorobius) puertoricensis (Acari: Argasidae): redescription by scanning electron microscopy. Endris RG, et al. **J Med Entomol** 1989 May;26(3):146–54

Scanning electron microscopy of ticks for systematic studies: structure of Haller's organ in eight species of the subgenus Sternalixodes of the genus Ixodes (Acari: Ixodidae). Homsher PJ, et al. **J Med Entomol** 1988 Sep;25(5):348–53

[Ultrastructural study of the internal organs of ixodid ticks in the scanning electron microscope] Balashov IuS. **Parazitologiia** 1988 Nov–Dec;22(6):513–5 (Eng. Abstr.) (Rus)

TICLOPIDINE

ADMINISTRATION & DOSAGE

[Antithrombogenic therapy by use of antiplatelet agents with warfarin—its efficiency for the outpatients with prosthetic valve] Saitoh H. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2396–407 (Eng. Abstr.) (Jpn)

ADVERSE EFFECTS

[Thrombocytopenic thrombotic purpura occurring in spite of antiaggregant treatment using ticlopidine (letter)] Billard JL, et al. **Presse Med** 1989 May 13;18(19):984 (Fre)

[Mainly neutropenic pancytopenia caused by acute bone marrow depression during ticlopidine treatment] Montanari G, et al. **Clin Ter** 1987 Oct 31;123(2):111–4 (Eng. Abstr.)

(Ita)

PHARMACOLOGY

Ticlopidine in China: comparative study on the effect of two dose levels on bleeding time and platelet function in healthy volunteers. Ruan C, et al. **Haemostasis** 1989;19(2):94–9

Study on the interference of ticlopidine on the immune system. Barcellini W, et al. **Int J Tissue React** 1988; 10(3):183–8

Inhibition of ticlopidine of platelet adhesion to human venous subendothelium in patients with diabetes. Orlando E, et al. **J Lab Clin Med** 1988 Nov;112(5):583–8

Pharmacology of ticlopidine: a review. Defreyn G, et al. **Semin Thromb Hemost** 1989 Apr;15(2):159–66 (38 ref.)

[Antiplatelet effects of combined therapy with ticlopidine and low doses of aspirin on patients with ischemic cardiopathy] Davi G, et al. **Cardiologia** 1989 Jan; 34(1):69–71 (Eng. Abstr.) (Ita)

[Evaluation of antiplatelet drugs on platelet functions—comparison between ticlopidine and dipyridamole after prosthetic valve replacement] Saitoh H, et al. **Kokyu To Junkan** 1989 Jan;37(1):87–92 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

An open study with ticlopidine in cerebral reversible ischemia. Landi G, et al. **Acta Neurol (Napoli)** 1987 Oct–Dec;9(5–6):346–53

Ticlopidine–pentoxifylline combination in the treatment of atherosclerosis and the prevention of cerebrovascular accidents. Apollonio A, et al. **J Int Med Res** 1989 Jan–Feb; 17(1):28–35

Ticlopidine in the treatment of intermittent claudication: a 21-month double-blind trial. Balsano F, et al. **J Lab Clin Med** 1989 Jul;114(1):84–91

Large trial finds ticlopidine superior to aspirin in preventing stroke [news] Merz B. **JAMA** 1989 Mar 17;261(11):1541

Aspirin, ticlopidine, and stroke [letter] Carné X, et al. **Lancet** 1989 Aug 19;2(8660):442–3

The Canadian American Ticlopidine Study (CATS) in thromboembolic stroke. Gent M, et al. **Lancet** 1989 Jun 3;1(8649):1215–20

A randomized trial comparing ticlopidine hydrochloride with aspirin for the prevention of stroke in high-risk patients. Ticlopidine Aspirin Stroke Study Group. Hass WK, et al. **N Engl J Med** 1989 Aug 24;321(8):501–7

Ticlopidine in the treatment of peripheral occlusive arterial disease. Arcan JC, et al. **Semin Thromb Hemost** 1989 Apr; 15(2):167–70

The Canadian American Ticlopidine Study (CATS) in thromboembolic stroke. Design, organization, and baseline results. Gent M, et al. **Stroke** 1988 Oct;19(10):1203–10

Autoradiographic observation of platelets in cerebrovascular injuries induced by arachidonic acid and its prevention by ticlopidine. Fujimoto T, et al. **Thromb Haemost** 1988 Oct 31;60(2):319–23

Long-term effects of ticlopidine on fibrinogen and haemorheology in patients with peripheral arterial disease. Palareti G, et al. **Thromb Res** 1988 Dec 15;52(6):621–9

[Correction of bleeding time after administration of desmopressin in a woman treated with ticlopidine (letter)] Calenda E, et al. **Presse Med** 1988 Nov 12;17(40):2143 (Fre)

[Use of ticlopidine in a group of patients with obliterative arteriopathy of the lower extremities] Gemelli A, et al. **Clin Ter** 1987 Jul 31;122(2):89–91 (Eng. Abstr.) (Ita)

[Effects of the treatment with ticlopidine in hemodialyzed patients] Traietti P, et al. **Clin Ter** 1988 Oct 15;127(1):27–35 (Eng. Abstr.) (Ita)

[A case of hypertrophic obstructive cardiomyopathy with left atrial giant thrombus during anti-platelet therapy] Hata K, et al. **Kokyu To Junkan** 1989 Mar;37(3):341–6 (Eng. Abstr.) (Jpn)

[Effect of ticlopidine on the course of diabetic microangiopathy] Smolenskii VS, et al. **Sov Med** 1988; (5):75–7 (Rus)

[Advantages and shortcomings of platelet antiaggregants in the treatment of myocardial infarction] Nechaev DD, et al. **Ter Arkh** 1988;60(8):59–63 (Eng. Abstr.) (Rus)

TICRYNAFEN see under **GLYCOLATES**

TIDAL VOLUME see under **LUNG VOLUME MEASUREMENTS**

TIETZE'S SYNDROME

COMPLICATIONS

Costal chondritis in heroin addicts: a comparative study with postsurgical chondritis. Zapatero J, et al. **Br J Dis Chest** 1988 Oct;82(4):341–6

Tietze's syndrome—a chameleon under the thoracic abdominal pain syndrome. Boehme MW, et al. **Klin Wochenschr** 1988 Nov 15;66(22):1142–5

DIAGNOSIS

[Tietze's syndrome] Chukhrienko DP, et al. **Klin Khir** 1988; (10):47–8 (Eng. Abstr.) (Rus)

TILETAMINE see under **CYCLOHEXANES**

TILIDINE see under **CYCLOHEXANECARBOXYLIC ACIDS**

TILORONE see under **FLUORENES**

TIME

Sensitivity, specificity, and reproducibility of four measures of laboratory turnaround time. Valenstein PN, et al. **Am J Clin Pathol** 1989 Apr;91(4):452–7

A robust orthogonal algorithm for system identification and time-series analysis. Korenberg MJ. **Biol Cybern** 1989; 60(4):267–76

Transition between advance and delay responses to eastbound transmeridian flights. Gundel A, et al. **Chronobiol Int** 1989; 6(2):147–56

The nature of time: implications for research on aging. Schroots JJ, et al. **Compr Gerontol [C]** 1988 Dec;2(1):1–29 (148 ref.)

Time and self-identity in later life. Hulbert RJ, et al. **Int J Aging Hum Dev** 1988;27(4):293–303

Before death: freeing time... [editorial] Roy DJ. **J Palliat Care** 1989 Mar;5(1):5–6

From physical to biological time. Lestienne R. **Mech Ageing Dev** 1988 Jun;43(3):189–228

Time preference for health in cost-effectiveness analysis. Lipscomb J. **Med Care** 1989 Mar;27(3 Suppl):S233–53 (39 ref.)

Preference for individual digits in a railway time-table. Kiczka K, et al. **Rocz Akad Med Bialymstoku** 1984–85; 29–30:255–60

Time management in health care social work. Sheridan MS. **Soc Work Health Care** 1988;13(3):91–9

Time dependency in human cancer. Hayes RB, et al. **Tumori** 1989 Jun 30;75(3):189–95

[The physician and the computer. 30. Evaluation of time, different aspects of the same problem] Kasal P, et al. **Cesk Pediatr** 1989 Jun;44(6):352–5 (Eng. Abstr.) (Cze)

[Temporal logic and expert systems in cancer management] Lardennois B, et al. **Rev Fr Gynecol Obstet** 1989 Apr; 84(4):331–42 (Fre)

[Time from the viewpoint of Cantor's and post-Cantorian set theory—a contribution to the founding of chronobiology] Scharf JH. **Gegenbaurs Morphol Jahrb** 1988;134(6):801–30 (Eng. Abstr.) (Ger)

[Physical time and personal biological time in gerontologic research] Beier W. **Z Gerontol** 1989 Mar–Apr;22(2):90–5 (Eng. Abstr.) (Ger)

[The organization of time in biological systems] MikhallovskiiUi GE. **Zh Obshch Biol** 1989 Jan–Feb; 50(1):72–81 (Eng. Abstr.) (Rus)

TIME AND MOTION STUDIES see under **TASK PERFORMANCE AND ANALYSIS**

TIME FACTORS see under **TIME**

TIME PERCEPTION

Temporal and spatial constructs in projective processes. Crisp P. **Am J Psychoanal** 1989 Jun;49(2):159–68

The timing of mentally represented actions. Decety J, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):35–42

Temporal patterns of the rabbit's nictitating membrane response to compound and component stimuli under mixed CS–US intervals. Kehoe EJ, et al. **Behav Neurosci** 1989 Apr;103(2):283–95

Impaired acquisition of temporal information in retrosplenial amnesia. Bowers D, et al. **Brain Cogn** 1988 Aug;8(1):47–66

On the different roles of the cerebral hemispheres in mental imagery: the "o'Clock Test" in two clinical cases. Grossi D, et al. **Brain Cogn** 1989 May;10(1):18–27

An auditory Stroop effect for pitch, loudness, and time. Morgan AL, et al. **Brain Lang** 1989 May;36(4):592–603

Auditory temporal pattern learning in children with speech and language impairments. Robin DA, et al. **Brain Lang** 1989 May;36(4):604–13

Young children's responses to "when" questions: issues of directionality. French LA. **Child Dev** 1989 Feb; 60(1):225–36

Temporal resolution in children. Wightman F, et al. **Child Dev** 1989 Jun;60(3):611–24

Perception of time by human consciousness. Moiseeva NI. **Chronobiologia** 1988 Oct–Dec;15(4):301–17 (80 ref.)

Boundaries of timelessness. Some thoughts about the temporal dimension of the psychoanalytic space. Sabbadini A. **Int J Psychoanal** 1989;70 (Pt 2):305–13

Tracking irregular acoustic patterns by finger tapping. Franěk M, et al. **Int J Psychophysiol** 1988 Nov;6(4):327–30

Time-delay discrimination training with impulsive children: self-monitoring nonwait responses and the dimensions of prompts. Smeets PM, et al. **J Abnorm Child Psychol** 1988 Dec;16(6):693–706

Depressed affect and time perception. Hawkins WL, et al. **J Abnorm Psychol** 1988 Aug;97(3):275–80

Discrimination of interaural differences of time in the envelopes of high-frequency signals: integration times. Buell TN, et al. **J Acoust Soc Am** 1988 Dec;84(6):2063–6

Duration discrimination of steady and gliding tones: a new method for estimating sensitivity to rate of change. Dooley GJ, et al. **J Acoust Soc Am** 1988 Oct;84(4):1332–7

Could temporal order differences underlie 2-month-olds' discrimination of English voicing contrasts? Jusczyk PW, et al. **J Acoust Soc Am** 1989 Apr;85(4):1741–9

Burying straw men in imaginary graves: a reply to Kewley-Port, Watson, and Foyle (1988). Pastore RE. **J Acoust Soc Am** 1988 Dec;84(6):2262–70

Macropsia, micropsia, and episodic illusions in Japanese adolescents. Abe K, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):493–6

The psychoanalysis of time. Kurtz SA. **J Am Psychoanal Assoc** 1988;36(4):985–1004

Time horizons in rats: the effect of operant control of access to future food. Timberlake W, et al. **J Exp Anal Behav** 1988 Nov;50(3):405–17

Expectancies and memory for spatiotemporal events in 5-month-old infants. Smith PH, et al. **J Exp Child Psychol** 1989 Apr;47(2):210–35

Discrimination of temporal relations by pigeons. Dreyfus LR, et al. **J Exp Psychol [Anim Behav]** 1988 Oct;14(4):349–67

Discrimination of duration ratios. Fetterman JG, et al. **J Exp Psychol [Anim Behav]** 1989 Jul;15(3):253–63

Timing light and tone signals in pigeons. Roberts WA, et al. **J Exp Psychol [Anim Behav]** 1989 Jan;15(1):23–35

Perceptual learning of spatiotemporal events: evidence from an unfamiliar modality. Epstein W, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):28–44

Stress in time. Kelly MH, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):389–403

Mapping musical thought to musical performance. Palmer C. **J Exp Psychol [Hum Percept]** 1989 May;15(2):331–46

Effects of metric and harmonic rhythm on the detection of pitch alterations in melodic sequences. Smith KC, et al. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):457–71

Motion interference in speed discrimination. Bowne SF, et al. **J Opt Soc Am [A]** 1989 Jul;6(7):1112–21

Perception of time-altered monosyllables in a specific group of phonologically disordered children. DeMarco S, et al. **Neuropsychologia** 1989;27(5):753–7

Temporal order judgements in good and poor readers. May JG, et al. **Neuropsychologia** 1988;26(6):917–24

Need for cognition related to time perception. Baugh BT, et al. **Percept Mot Skills** 1986 Apr;62(2):540–2

Norm setting for the verbal estimation of a 40-second interval by women of childbearing age. Beck CT. **Percept Mot Skills** 1988 Oct;67(2):577–8

Auditory illusion analogous to Baldwin illusion redux. Brigner WL. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1065–6

Perceived duration as a function of pitch. Brigner WL. **Percept Mot Skills** 1988 Aug;67(1):301–2

The geometric illusion and induced differences in perceived time. Brigner WL. **Percept Mot Skills** 1988 Oct;67(2):373–4

Validities of the Physical Estimation Scale in predicting running times. Gayton WF, et al. **Percept Mot Skills** 1989 Feb;68(1):252–4

Effect of interpolated temporal activity on temporal short-term memory. Guay M, et al. **Percept Mot Skills** 1988 Dec;67(3):743–8

Weber's law for the reproduction of temporal information. Guay M, et al. **Percept Mot Skills** 1988 Aug;67(1):219–22

Psychology of computer use: V. Computer use and the experience of time. Juhnke R, et al. **Percept Mot Skills** 1988 Dec;67(3):863–70

Time perception: effects of sensory modality, ambient illumination and intervals. Meredith LS, et al. **Percept Mot Skills** 1989 Apr;68(2):373–4

Teaching specific motor skills for conducting to young music students. Neiman Z. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):847–58

Effects of occurrence and time uncertainties on reaction and movement times of children. Ozmun JC, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):931–5

Temporal resolution of the aging tactile sensory system. Petrosino L, et al. **Percept Mot Skills** 1989 Feb;68(1):288–90

Sex differences in time perception. Rammsayer T, et al. **Percept Mot Skills** 1989 Feb;68(1):195–8

Influence of phenomenal time on perceived space. Russo G, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):971–84

Implications of phenomenological grounding in the "microscopic": an experiential relativity from the microcosmos. Strauss MJ, et al. **Percept Mot Skills** 1986 Apr;62(2):611–6 (13 ref.)

Visual demonstration and movement production: effects of timing variations in a model's action. Williams JG. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):891–6

The psychophysics of retrospective and prospective timing. Brown SW, et al. **Perception** 1988;17(3):297–310

Visual information and skill level in time-to-collision estimation. Cavallo V, et al. **Perception** 1988;17(5):623–32

Ratio judgments of empty durations with numeric scales. Nakajima Y, et al. **Perception** 1988;17(1):93–118

The development of time sense in adolescence. Colarusso CA. **Psychoanal Study Child** 1988;43:179–97

Second Workshop on Rhythm Perception and Production. Marburg, September 29–October 2, 1987. Selection of papers. **Psychol Res** 1989;51(1):1–42

The perception of expressive timing in music. Clarke EF. **Psychol Res** 1989;51(1):2–9

A psychological pulse train: how young children use this cognitive framework to structure simple rhythms. Drake C, et al. **Psychol Res** 1989;51(1):16–22

Adjustment and readjustment of the relative timing of a motor pattern. Heuer H. **Psychol Res** 1988;50(2):83–93

Perceptual and motor factors in the imitation of simple

temporal patterns. Summers JJ, et al. **Psychol Res** 1989; 51(1):23–7
Dynamic attending and responses to time. Jones MR, et al. **Psychol Rev** 1989 Jul;96(3):459–91
Heartbeat detection: judgments of the simultaneity of external stimuli and heartbeats. Brener J, et al. **Psychophysiology** 1988 Sep;25(5):554–61
The discriminability of temporal patterns used in the Whitehead discrimination procedure. Jones GE, et al. **Psychophysiology** 1988 Sep;25(5):547–53
Preferred tempo in the learning of a gross cyclical action. van Emmerik RE, et al. **Q J Exp Psychol [A]** 1989 May; 41(2):251–62
Time, context, and subjective experiences in schizophrenia. deVries MW, et al. **Schizophr Bull** 1989;15(2):233–44
Punctuality, pain and time–orientation among Sicilian–Canadians. Migliore S. **Soc Sci Med** 1989; 28(8):851–9
The day I ran without my watch. Sack KE. **South Med J** 1989 Apr;82(4):506
Subjective time estimation in relation to age, health, and interhemispheric brain asymmetry. Polyukhov AM. **Z Gerontol** 1989 Mar–Apr;22(2):79–84
[P. Janet's concept of the notion of time] Fouks L, et al. **Ann Med Psychol (Paris)** 1988 Oct;146(10):941–52 (Eng. Abstr.) (Fre)
[The phenomenon of verbal transformation: study of the rhythm of presentation of auditory material and attention of the subjects] Debigaré J. **Can J Psychol** 1988 Sep; 42(3):364–77 (Eng. Abstr.) (Fre)
[Knowledge of results and spatio–temporal control in an anticipation–coincidence task in children 6 to 10 years of age] Gagnon M, et al. **Can J Psychol** 1988 Sep;42(3):347–63 (Eng. Abstr.) (Fre)
[Temporal perspectives and diabetes in children] Born M, et al. **Rev Med Liege** 1988 Sep 15;43(18):587–96 (Fre)
[Concepts of the future in persons of advanced age] Marx K. **Z Arztl Fortbild (Jena)** 1989;83(8):405–8 (Ger)
[The effect of temporal distribution in relation to constant frequency of stimuli on habituation of the orienting reaction] Baltissen R, et al. **Z Exp Angew Psychol** 1989; 36(2):181–98 (Eng. Abstr.) (Ger)
[The concept of time and time perception] Beier W. **Z Gerontol** 1989 Mar–Apr;22(2):57 (Ger)
[Time and temporality in gerontology and the ontologic privation theory of biological aging] Kment A. **Z Gerontol** 1989 Mar–Apr;22(2):67–72 (33 ref.) (Eng. Abstr.) (Ger)
[Changes in time perspectives in advanced age] Thomae H. **Z Gerontol** 1989 Mar–Apr;22(2):58–66 (54 ref.) (Eng. Abstr.) (Ger)
["Spute dich, Kronos, fort den rasselnden Trott..." Reflections on time perception in the psychoanalytic process and at the end of life] Meerwein F. **Z Psychosom Med Psychoanal** 1989;35(2):156–74 (28 ref.) (Eng. Abstr.) (Ger)

DRUG EFFECTS

The effects of diisopropyl phosphorofluoridate (DFP) on time perception in rats. Raslear TG, et al. **Physiol Behav** 1988;43(6):805–13
[Spatial–temporal structure of the organization of goal–directed behavior under the action of delta 9–tetrahydrocannabinol] Machula AI, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):12–7 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Estimating the duration of gratings under masking and nonmasking conditions. Stoyanova Y, et al. **Acta Physiol Pharmacol Bulg** 1988;14(2):71–4
Spatial and temporal contrast sensitivity in hemianopia. A comparative study of the sighted and blind hemifields. Hess RF, et al. **Brain** 1989 Aug;112 (Pt 4):871–94
Temporal characteristics of tapping responses in healthy subjects and in patients who sustained cerebrovascular accident. Najenson T, et al. **Brain Behav Evol** 1989; 33(2–3):175–8
Physiological and psychophysical correlates of temporal processes in hearing. Javel E, et al. **Hear Res** 1988 Aug; 34(3):275–94 (54 ref.)
Temporal resolution in frog auditory–nerve fibers. Dunia R, et al. **J Acoust Soc Am** 1989 Apr;85(4):1630–8
Temporal overshoot in simultaneous–masked psychophysical tuning curves from normal and hearing–impaired listeners. Kimberley BP, et al. **J Acoust Soc Am** 1989 Apr; 85(4):1660–5
Detection of temporal gaps in sinusoids by normally hearing and hearing–impaired subjects. Moore BC, et al. **J Acoust Soc Am** 1989 Mar;85(3):1266–75
Seashore Rhythm Test performance in patients with unilateral temporal lobe damage. Boone KB, et al. **J Clin Psychol** 1989 Jul;45(4):614–8
Corollary discharge inhibition and preservation of temporal information in a sensory nucleus of mormyrid electric fish. Bell CC, et al. **J Neurosci** 1989 Mar;9(3):1029–44
Spatial–frequency tuning as a function of temporal frequency and stimulus motion. Henning GB. **J Opt Soc Am [A]** 1988 Aug;5(8):1362–73
Discrimination of time: comparison of foveal and peripheral sensitivity. McKee SP, et al. **J Opt Soc Am [A]** 1984 Jun; 1(6):620–7
Auditory temporal perception of children with left or right brain lesions. Aram DM, et al. **Neuropsychologia** 1988; 26(6):931–5
Hemispheric asymmetry of processing temporal aspects of repetitive movement in two patients with infarction involving the corpus callosum. Kashiwagi A, et al. **Neuropsychologia** 1989;27(6):799–809
Remote and autobiographical memory, temporal context memory and frontal atrophy in Korsakoff and Alzheimer patients. Kopelman MD. **Neuropsychologia** 1989; 27(4):437–60
Frontal cortex, timing and memory. Olton DS. **Neuropsychologia** 1989;27(1):121–30 (61 ref.)
On circadian variations in discrimination of duration. Rammsayer T, et al. **Percept Mot Skills** 1989 Apr;68(2):618
Characteristics of psychomotor performance and time cognition in moderately obese patients. Etou H, et al. **Physiol Behav** 1989 May;45(5):985–8
Axonal delay lines for time measurement in the owl's brainstem. Carr CE, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8311–5
[The chronobiology of aging: changes in the temporal–periodic order] Rensing L. **Z Gerontol** 1989 Mar–Apr;22(2):73–8 (53 ref.) (Eng. Abstr.) (Ger)
[How do we remember when and where?] Murata K, et al. **Shinrigaku Kenkyu** 1988 Oct;59(4):248–51 (Eng. Abstr.) (Jpn)
[The discrimination of time microintervals by emotionally excitable personalities] Kostandov EA, et al. **Zh Vysh Nerv Deiat** 1988 Jul–Aug;38(4):614–9 (Eng. Abstr.) (Rus)
[Effect of ablation of the septum pellucidum on the marking of time intervals] Mering TA. **Zh Vysh Nerv Deiat** 1988 Sep–Oct;38(5):864–71 (Eng. Abstr.) (Rus)
[Human assessment of time intervals depending on the manner of their representation] Smirnova AG, et al. **Zh Vysh Nerv Deiat** 1988 Jul–Aug;38(4):633–40 (Eng. Abstr.) (Rus)
[The role of the time factor in human analytical–synthetic activities] Vasil'eva VM, et al. **Zh Vysh Nerv Deiat** 1988 Jul–Aug;38(4):601–6 (26 ref.) (Rus)

TIME–RESOLVED IMMUNOFLUOROMETRIC ASSAY see **FLUOROIMMUNOASSAY**

TIMED–RELEASE PREPARATIONS see **DELAYED–ACTION PREPARATIONS**

TIMED VITAL CAPACITY see **FORCED EXPIRATORY VOLUME**

TIMIDITY see **SHYNESS**

TIMOLOL

ADMINISTRATION & DOSAGE

Comparison of topical timolol vs betaxolol on cardiopulmonary exercise performance in healthy volunteers. Dickstein K, et al. **Acta Ophthalmol (Copenh)** 1988 Aug;66(4):463–6
Timolol maleate in the control of myopia. A preliminary report. Jensen H. **Acta Ophthalmol Suppl (Copenh)** 1988; 185:128–9
Timolol–pilocarpine combined vs timolol and pilocarpine given separately. Söderström MB, et al. **Am J Ophthalmol** 1989 May 15;107(5):465–70
Comparison of timolol maleate and levobunolol: doses and volume per bottle [letter] Schwartz JS, et al. **Arch Ophthalmol** 1989 Jan;107(1):17
Failure in glaucoma surgery and its management. Mithal S, et al. **Indian J Ophthalmol** 1988 Apr–Jun;36(2):67–70
"Effect of topical timolol on intraocular pressure in the presence of systemic indomethacin in normal subjects". Sud RN, et al. **Indian J Ophthalmol** 1988 Apr–Jun;36(2):64–6
Manufacture of polyalkylcyanoacrylate nanoparticles with pilocarpine and timolol by micelle polymerization: factors influencing particle formation. Harmia–Pulkkinen T, et al. **J Microencapsul** 1989 Jan–Mar;6(1):87–93
Bioadhesive dosage form for peroral administration of timolol base. Deasy PB, et al. **Pharm Acta Helv** 1989;64(8):231–5
[Timolol and dapiprazole combination in patients with glaucoma] Sanfelici G, et al. **Ophtalmologie** 1988 Nov–Dec; 2(5):435–7 (Eng. Abstr.) (Fre)
[Lowering the intraocular pressure by a combination of timolol with adrenergic agents] Pfeiffer N, et al. **Fortschr Ophthalmol** 1988;85(5):456–8 (Eng. Abstr.) (Ger)
[Treatment of glaucoma chronicum simplex with a combination of 0.5 percent timolol with 0.5 percent adrenaline plus 0.3 percent guanethidine] Pfeiffer N, et al. **Klin Monatsbl Augenheilkd** 1989 Mar;194(3):161–3 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

A comparative study of the central nervous system effects of betaxolol vs timolol [letter] Cohen JB. **Arch Ophthalmol** 1989 May;107(5):633–4
From timolol to betaxolol [letter] de Vries J, et al. **Arch Ophthalmol** 1989 May;107(5):634
Contact dermatitis due to the beta–blocker befunolol [corrected] in eyedrops [published erratum appears in Contact Dermatitis 1989 Apr;20(4):320] Kanzaki T, et al. **Contact Dermatitis** 1988 Nov;19(5):388
Timolol side effects and inadvertent overdosing. Hayes LP, et al. **J Am Geriatr Soc** 1989 Mar;37(3):261–2
Systemic side effects from ophthalmic timolol and their prevention. Fraunfelder FT, et al. **J Ocul Pharmacol** 1987 Summer;3(2):177–84
Choroidal detachments induced by a systemic beta–blocker [letter] Perell H, et al. **Ophthalmology** 1988 Mar;95(3):410–1
[The riddle of asthma] **Duodecim** 1989;105(6):546 (Fin)
[Asthma and beta–blocker eye drops (timolol, metipranolol, carteolol). Inhibition of chronotropic effects of isoprenaline] Le Jeunne C, et al. **Allerg Immunol (Paris)** 1988 Sep;20(7):267–9 (Eng. Abstr.) (Fre)
[Timolol, betaxolol and befunolol in the treatment of glaucoma. Study of their bronchopulmonary effects] Pecori–Giraldi J, et al. **Fortschr Ophthalmol** 1988; 85(3):235–8 (Eng. Abstr.) (Ger)

ANALYSIS

Timolol prodrugs: preparation and hydrolysis kinetics of N–benzoyl carbamate esters of timolol and related compounds. Bundgaard H, et al. **Acta Pharm Suec** 1988; 25(6):293–306

METABOLISM

Timolol metabolism and debrisoquine oxidation polymorphism: a population study. Lennard MS, et al. **Br J Clin Pharmacol** 1989 Apr;27(4):429–34
Binding of the beta–blockers timolol and H 216/44 to ocular melanin. Abrahamsson T, et al. **Exp Eye Res** 1988 Oct; 47(4):565–77
Timolol binding to bovine ocular melanin in vitro. Aula P, et al. **J Ocul Pharmacol** 1988 Spring;4(1):29–36

PHARMACOKINETICS

Nasal and conjunctival contributions to the systemic absorption of topical timolol in the pigmented rabbit: implications in the design of strategies to maximize the ratio of ocular to systemic absorption. Chang SC, et al. **J Ocul Pharmacol** 1987 Summer;3(2):159–69
Influence of corneal epithelial integrity on the penetration of timolol prodrugs. Chien DS, et al. **J Ocul Pharmacol** 1988 Summer;4(2):137–46
Systemic absorption of topically applied ocular timolol. Kaila T, et al. **J Ocul Pharmacol** 1985 Spring;1(1):79–83
Effects of eyelid closure and nasolacrimal duct occlusion on the systemic absorption of ocular timolol in human subjects. Kaila T, et al. **J Ocul Pharmacol** 1986 Fall;2(4):365–9
Lack of metabolism of timolol by ocular tissues. Potterman GJ, et al. **J Ocul Pharmacol** 1985 Fall;1(3):287–96
Application site dependent ocular absorption of timolol. Urtti A, et al. **J Ocul Pharmacol** 1988 Winter;4(4):335–43
Ophthalmic epinephrine, phenylephrine, and pilocarpine affect the systemic absorption of ocularly applied timolol. Urtti A, et al. **J Ocul Pharmacol** 1989 Summer;5(2):127–32
[Influence of the He–Ne laser on the pharmacokinetics of timolol in ocular humor of rabbits] Weng XY, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):48–52 (Eng. Abstr.) (Chi)

PHARMACOLOGY

Central and peripheral adrenoceptors affect glucose, free fatty acids, and insulin in exercising rats. Scheurink AJ, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R547–56
Cardiovascular responses to metipranolol and timolol eyedrops in healthy volunteers. Bacon PJ, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):1–5
Timolol–induced up–regulation of polymorphonuclear leukocyte beta 2–adrenergic receptors in the elderly. Zahniser NR, et al. **Clin Pharmacol Ther** 1989 May; 45(5):469–75
Difference between beta–1–selective and non–selective beta–blockade during continuous and intermittent exercise. Gullestad L, et al. **Clin Physiol** 1988 Oct;8(5):487–99
Ocular and cardiac beta–antagonism by timolol prodrugs, timolol and levobunolol. Potter DE, et al. **Curr Eye Res** 1988 Aug;7(8):755–9
The effect of betablockers with and without ISA on tonographic outflow facility. Diestelhorst M, et al. **Int Ophthalmol** 1989 Jan;13(1–2):63–5
The effect of timolol, betaxolol and levobunolol on the surface of rabbit cornea. Follmann P, et al. **Int Ophthalmol** 1989 Jan;13(1–2):81–4
The effect of long–term topical administration of commercial beta–blockers on the rat corneal endothelium. Matsuda M, et al. **Int Ophthalmol** 1989 Jan;13(1–2):67–73
Effects of betaxolol/timolol on epinephrine stimulated cyclic–AMP levels in human trabecular meshwork cells. Polansky J, et al. **Int Ophthalmol** 1989 Jan;13(1–2):95–7
Aqueous humor flow measured with fluorophotometry in timolol–treated primates. Bartels SP. **Invest Ophthalmol Vis Sci** 1988 Oct;29(10):1498–504
Effect of topical timolol maleate on the ophthalmic artery blood pressure. Grunwald JE, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1095–100
Effect of coenzyme Q10 on hemodynamic response to ocular timolol. Takahashi N, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):462–8

Influence of pindolol and timolol treatment on the visual fields of glaucoma patients. Flammer J, et al. **J Ocul Pharmacol** 1986 Fall;2(4):305–11

Interaction of timolol and caffeine on intraocular pressure. Opremcak EM, et al. **J Ocul Pharmacol** 1985 Fall; 1(3):227–34

Comparative effects of SCH 19927 and timolol on intraocular pressure of conscious rabbits and relative systemic beta-blockade resulting from topical administration. Watkins RW, et al. **J Ocul Pharmacol** 1985 Summer; 1(2):161–8

Comparison of the effect of timolol versus betaxolol ophthalmic on cardiopulmonary exercise performance in healthy volunteers. Dickstein K. **Surv Ophthalmol** 1989 Apr;33 Suppl:457–8; discussion 459–60

Topical timolol and the human retinal circulation. Grunwald JE. **Surv Ophthalmol** 1989 Apr;33 Suppl:415–6; discussion 421–2

Reversibility by timolol of optic nerve disc cupping and pallor in ocular hypertensives. Schwartz B. **Surv Ophthalmol** 1989 Apr;33 Suppl:419–20; discussion 421–2

Quantification and monitoring of visual field defects and a prospective, randomized comparison of pilocarpine and timolol using computerized perimetry. Sponsel WE. **Surv Ophthalmol** 1989 Apr;33 Suppl:427–8; discussion 435–6

Overview of efficacy and local tolerability of a new timolol/pilocarpine combination. Vogel R. **Surv Ophthalmol** 1989 Apr;33 Suppl:467–8; discussion 471–2

[Modification in amplitude of nycthemeral changes in intraocular pressure under timolol] Martin X, et al. **J Fr Ophtalmol** 1988;11(12):843–8 (46 ref.) (Eng. Abstr.) (Fre)

[Evaluation of the systemic cardiovascular and bronchial effects of beta-blocking eyedrops. Value of isoprenaline and carbachol tests. Therapeutic consequences] Sirbat D, et al. **Ophtalmologie** 1988 Jul–Sep;2(3):213–8 (Eng. Abstr.) (Fre)

[Effect of carteolol and timolol eyedrops on the pressure tolerance of the optic nerve head.] Stodtmeister R, et al. **Ophthalmologica** 1989;198(2):64–77 (Eng. Abstr.) (Ger)

[The effect of sympathomimetic and sympatholytic drugs upon resting point of accommodation] Miwa T, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jul;92(7):1235–41 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Laser trabeculoplasty versus medication treatment as primary therapy for glaucoma. Tuulonen A, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):275–80

Differential effects of non-specific beta-blockade and calcium antagonism on blood-clotting mechanisms. Gleerup G, et al. **Am J Med** 1989 Apr 17;86(4A):127–9

The time-course of intraocular pressure in timolol-treated and untreated glaucoma suspects. Chauhan BC, et al. **Am J Ophthalmol** 1989 May 15;107(5):471–5

Changing therapy from timolol to betaxolol. Effect on intraocular pressure in selected patients with glaucoma. Timolol-Betaxolol Study Group. Vogel R, et al. **Arch Ophthalmol** 1989 Sep;107(9):1303–7

Antiarrhythmic effects of timolol in patients with ventricular arrhythmias. Ribeiro LG, et al. **Arq Bras Cardiol** 1988 Oct; 51(4):359–64

A comparison of the efficacy of betaxolol and timolol in ocular hypertension with or without adrenaline. Clark JB, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):173–7

Timolol: a non-sedative anxiolytic premedicant for day cases. Mackenzie JW, et al. **BMJ** 1989 Feb 11;298(6670):363–4

A comparative study of Spiroprop and Moducren in the treatment of mild to moderate hypertension in general practice. Cranfield FR, et al. **Br J Clin Pract** 1988 Mar; 42(3):101–5

Levobunolol compared with timolol: a four-year study. Geyer O, et al. **Br J Ophthalmol** 1988 Dec;72(12):892–6

Prevention of IOP-rise following Nd-YAG laser capsulotomy with topical timolol and indomethacin. Van der Feltz van der Sloot D, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):209–14

Anticonvulsant and antiarrhythmic actions of the beta blocking agent timolol. Lathers CM, et al. **Epilepsy Res** 1989 Jul–Aug;4(1):42–54

Prevalence of debrisoquine oxidation phenotypes in glaucoma patients. Salminen L, et al. **Int Ophthalmol** 1989 Jan;13(1–2):91–3

The effect of long-term intraocular pressure reduction on the differential light sensitivity in glaucoma suspects. Chauhan BC, et al. **Invest Ophthalmol Vis Sci** 1988 Oct; 29(10):1478–85

Trifluridine decreases ocular HSV-1 recovery, but not herpetic lesions after timolol iontophoresis. Rootman DS, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):678–83

The effect of chronic timolol in an animal model for myocardial infarction. Lathers CM, et al. **J Clin Pharmacol** 1988 Aug;28(8):736–45

Celiprolol versus timolol and placebo: a two week double-blind comparison. Elman J, et al. **J Ocul Pharmacol** 1987 Spring;3(1):5–10

Effect of timolol on intraocular pressure elevation following argon laser iridotomy. Liu PF, et al. **J Ocul Pharmacol** 1987 Fall;3(3):249–55

A clinical trial of timolol and epinephrine in the treatment of primary open-angle glaucoma. Alexander DW, et al. **Ophthalmology** 1988 Feb;95(2):247–51

Intraocular pressure effects of timolol after unilateral instillation. Martin XD, et al. **Ophthalmology** 1988 Dec; 95(12):1620–3

Clinical trials urged [letter] Moody TG. **Ophthalmology** 1988 Sep;95(9):1301

Adjunctive glaucoma therapy. A comparison of apraclonidine to dipivefrin when added to timolol maleate. Morrison JC, et al. **Ophthalmology** 1989 Jan;96(1):3–7

The effects of withdrawal of timolol in chronically treated glaucoma patients. Schlecht LP, et al. **Ophthalmology** 1988 Sep;95(9):1212–6

Ten-year follow-up of timolol-treated open-angle glaucoma. Goethals M. **Surv Ophthalmol** 1989 Apr;33 Suppl:463–4; discussion 471–2

Computerized perimetric monitoring and study of scotomatous fluctuations in timolol-treated open-angle glaucoma patients. Pecori-Giraldi J. **Surv Ophthalmol** 1989 Apr;33 Suppl:423–5; discussion 435–6

[Comparative study of levobunolol and timolol in the treatment of chronic open-angle glaucoma and chronic ocular hypertension] Savelsbergh-Fillette MP, et al. **J Fr Ophtalmol** 1988;11(8–9):587–90 (Eng. Abstr.) (Fre)

[Comparison of the effectiveness and safety of levobunolol and timolol in ocular hypertension and chronic open-angle glaucoma] Freyler H, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):257–60 (Eng. Abstr.) (Ger)

[Use of the preparation optimol in treating primary glaucoma] Zhuravlev VS, et al. **Oftalmol Zh** 1989;(2):127–8 (Rus)

TOXICITY

Toxic effects of topically administered Betagan, Betoptic, and Timoptic on regenerating corneal epithelium. Trope GE, et al. **J Ocul Pharmacol** 1988 Winter;4(4):359–66

TIN

see related

ORGANOTIN COMPOUNDS

Improvement of the reproducibility of ion-pair HPLC of 99mTc(Sn)EHDP complexes and the influence of the Sn(II) concentration on the composition of the reaction mixture. Nieuwland RJ, et al. **Int J Rad Appl Instrum [A]** 1989;40(2):153–7

Etiology of lung cancer at the Gejiu tin mine, China. Sun SQ. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:103–15

Preparation of tin-albumin nanospheres for labelling with 99mTc and application in liver scintigraphy. Knop G, et al. **J Microencapsul** 1984 Jul–Sep;1(3):249–52

Environmental methylation of tin: an assessment. Ashby JR, et al. **Sci Total Environ** 1988 Jul 1;73(1–2):127–33

The accumulation of organotins in adult and seed oysters from selected estuaries prior to the introduction of U.K. regulations governing the use of tributyltin-based antifouling paints. Ebdon L, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):63–84

[Use of SEM-EDX-WDX analysis in studying the etiology of lung cancer in tin miners of Yunnan] Sun SQ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):254–6, 18 (Eng. Abstr.) (Chi)

[Analysis of minerals of lobar lavage fluid from patients with silicosis, stannosis and cement pneumoconiosis] Wang LH. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Mar; 22(2):88–91 (Eng. Abstr.) (Chi)

ADVERSE EFFECTS

Stannosis. A report of 2 cases. Sluis-Cremer GK, et al. **S Afr Med J** 1989 Feb 4;75(3):124–6

ANALYSIS

Determination of hydrides of arsenic, antimony and tin in workplace air. Pedersen B. **Ann Occup Hyg** 1988; 32(3):385–97

Sn in the Ag-Hg phase of dental amalgam. Mahler DB, et al. **J Dent Res** 1988 Oct;67(10):1275–7

Tin in the thymus gland of dogs. Sherman LR, et al. **Thymus** 1988–89;12(2):131–4

DIAGNOSTIC USE

Rapid and precise micro-methods for quantitating active components in commercial bone scintigraphy kits—I. Stannous tin. Gallez B, et al. **Int J Rad Appl Instrum [A]** 1988;39(7):705–8

99mTc-nitrido radiopharmaceuticals based on nitrogen heterocyclic ligands containing a thiol group. Baldas J, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):451–7

An evaluation of technetium-99m tin colloid—its value in the diagnosis of renal transplant rejection. Wijeyesinghe EC, et al. **Nephrol Dial Transplant** 1988;3(2):209–13

Detection of splenosis: 99Tcm tin colloid scanning and computed transmission tomography compared. Logan H, et al. **Nucl Med Commun** 1988 Dec;9(12):993–7

[The clinical usefulness of portal venous flow ratio by hepatic angiography with 99mTc-Sn colloid in chronic liver diseases: a comparison with histological finding] Takegoshi K, et al. **Kaku Igaku** 1989 Apr;26(4):499–505 (Eng. Abstr.) (Jpn)

[An evaluation of predicting postoperative residual liver function using 99mTc tin colloid] Tamai T, et al. **Radioisotopes** 1988 Oct;37(10):558–63 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

In vitro studies on tin-dithiocarbamates. Carrara M, et al. **Anticancer Res** 1989 May–Jun;9(3):775–9

Acceleration by stannous ion of the evoked release of transmitter from motor nerve endings in the frog. Hattori T, et al. **Brain Res** 1988 Nov 8;473(1):157–60

Effects of stannic chloride on human leucocytes in vitro. Ghosh BB, et al. **Cytobios** 1988;56(224):23–7

Significance of alteration in biodistribution of labeled lymphocytes exposed to stannous ion. Tatum JL, et al. **Eur J Nucl Med** 1989;15(4):201–3

Stannous ion-induced tetanic contraction of the frog sartorius muscle. Hattori T, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):343–6

[Current status of research on tin, an essential trace element] Ji ZW, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov;22(6):352–4 (19 ref.) (Chi)

[The corrosion behavior of antimony in a Ag-Sn-Cu-Sb amalgam] Weiland M, et al. **Zahn Mund Kieferheilkd** 1989; 77(1):24–8 (Eng. Abstr.) (Ger)

[Tetraphenylporphyrin-Sn4+ induction of cytochrome P-450] Golovenko NIa, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):291–4 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Manipulation of cytochrome P-450 dependent renal thromboxane synthase activity in spontaneously hypertensive rats. Sessa WC, et al. **J Hypertens** 1989 Jan; 7(1):37–42

Treatment with tin prevents the development of hypertension in spontaneously hypertensive rats. Sacerdoti D, et al. **Science** 1989 Jan 20;243(4889):388–90

TOXICITY

Impact of chromium and tin on a nitrogen-fixing cyanobacterium Anabaena doliolum: interaction with bivalent cations. Rai LC, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):94–104

[Substantiation of the maximum permissible level of tin sulfate in the air of populated regions] Bessmertnyi AN, et al. **Gig Sanit** 1988 Sep;(9):62–4 (Rus)

[Effect of tin sulfate on various indicators of lipid metabolism in pregnant albino rats] Grin' NV, et al. **Gig Sanit** 1989 Mar;(3):94–5 (Rus)

[Embryotoxic effect of tin sulfate after its inhalation] Grin' NV, et al. **Gig Sanit** 1988 Jul;(7):81–2 (Rus)

TIN FLUORIDES see under **FLUORIDES**

TIN POLYPHOSPHATES see under **POLYPHOSPHATES**

TINEA

CLASSIFICATION

[Nosology, epidemiology and prevention of mycosis caused by T. rubrum] Leshchenko VM, et al. **Vestn Dermatol Venerol** 1988;(11):38–41 (7 ref.) (Eng. Abstr.) (Rus)

COMPLICATIONS

Generalized Trichophyton rubrum infection in congenital ichthyosiform erythroderma. Shelley ED, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1133–4

DIAGNOSIS

15-year survey of tinea faciei in the adult. Alteras I, et al. **Dermatologica** 1988;177(2):65–9

[Lupus erythematosus-like tinea faciei] Dietschi R, et al. **Schweiz Rundsch Med Prax** 1988 Oct 25;77(43):1171–4 (Eng. Abstr.) (Ger)

DRUG THERAPY

Activity of ICI 195,739—a novel, orally active bistriazole—in rodent models of fungal and protozoal infections. Ryley JF, et al. **Ann N Y Acad Sci** 1988;544:310–28

Treatment with itraconazole of widespread tinea corporis due to Trichophyton rubrum in a bone marrow transplant recipient. Engelhard D, et al. **Bone Marrow Transplant** 1988 Sep;3(5):517–9

Tinea imbricata in a British nurse. Logan RA, et al. **Clin Exp Dermatol** 1988 Jul;13(4):232–3

Double-blind comparison of itraconazole with griseofulvin in the treatment of tinea corporis and tinea cruris. Bourlond A, et al. **Int J Dermatol** 1989 Jul–Aug;28(6):410–2

Naftifine for fungal skin infections. **Med Lett Drugs Ther** 1988 Oct 21;30(777):98–9

Treatment of experimental dermatophytosis in guinea pigs: a comparative study of bifonazole and a bifonazole-hydrocortisone combination. Shankland GS, et al. **Mycoses** 1989 Mar;32(3):139–44

Double-blind comparison of itraconazole with griseofulvin in the treatment of tinea pedis and tinea manuum. Van Hecke E, et al. **Mycoses** 1988 Dec;31(12):641–9

Tinea infections treated with bifonazole gel. Wheatley D,

et al. **Mycoses** 1988 Sep;31(9):471–5
[Double blind comparative study of 1% econazole cream and 1% bifonazole cream in the treatment of dermatomycoses] Luciani P, et al.
G Ital Dermatol Venereol 1988 Oct;123(10):LIII–LVI (Eng. Abstr.) **(Ita)**
[Therapeutic effectiveness of fenticonazole and evaluation of its in vitro antifungal activity compared to other imidazole derivatives] Pizzino D, et al.
G Ital Dermatol Venereol 1988 Sep;123(9):XLV–XLVIII (Eng. Abstr.) **(Ita)**
[Experience with nizoral treatment of patients with rubromycosis and candidiasis] Panteleeva GA, et al.
Vestn Dermatol Venerol 1988;(5):60–1 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

[Simulation of the dynamics of trichophytosis morbidity] Tesalova OT, et al. **Vestn Dermatol Venerol** 1989;(2):32–8 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Deep dermatophytosis to Trichophyton rubrum and T. verrucosum in an immunosuppressed patient. Lestringant GG, et al. **Int J Dermatol** 1988 Dec;27(10):707–9
Trichophytic granuloma associated with bullous pemphigoid. Ueda–Furukawa M, et al. **J Dermatol (Tokyo)** 1988 Aug; 15(4):339–41
[Dermatophytosis caused by Trichophyton violaceum. Apropos of a new case] Boudghene–Stambouli O, et al. **Ann Dermatol Venereol** 1988;115(9):933–5 **(Fre)**

IMMUNOLOGY

Trichophyton rubrum abscesses in immunocompromised patients. A case report. Faergemann J, et al.
Acta Derm Venereol (Stockh) 1989;69(3):244–7
[Oxygen–dependent indicators of phagocytosis in an infection caused by Trychophyton rubrum] Svirid SG.
Vrach Delo 1989 Feb;(2):109–10 (Eng. Abstr.) **(Rus)**
[Characteristics of the immunocyte cooperation in 2 strains of mice opposite in their sensitivity to dermaphytoses during the immune response to antigens of the causative agent] Medvedev IuA, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Jun;(6):69–73 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Experimental dermatophyte infection. The extent of the fungal invasion. Knudsen EA.
Acta Derm Venereol (Stockh) 1989;69(3):247–9
Tinea of the glans penis. Dekio S, et al. **Dermatologica** 1989; 178(2):112–4
Some remarks concerning Trichophyton proliferans. Pereiro M Jr, et al. **Mycoses** 1989 Feb;32(2):87–92

PATHOLOGY

Experimental dermatophytosis in mice: correlation between light and electron microscopic changes in primary, secondary and chronic infections. Hay RJ, et al.
Br J Exp Pathol 1988 Oct;69(5):703–16
Drugs affecting Trichophyton rubrum–induced neutrophil chemotaxis in vitro. Davies RR, et al.
Clin Exp Dermatol 1988 Jul;13(4):228–31
Tinea nigra palmaris and plantaris: a black fungus producing black spots on the palms and soles. Palmer SR, et al.
Pediatr Infect Dis J 1989 Jan;8(1):48–50
[Unusual clinical manifestations caused by Trichophyton rubrum—atypical "rubrophytoses"] Ginter G, et al.
Hautarzt 1989 Jun;40(6):364–9 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

[Detoxifying function of the liver in patients with rubromycosis during treatment with antimycotics] Lapina IZ, et al. **Vestn Dermatol Venerol** 1989;(4):51–4 (Eng. Abstr.) **(Rus)**

VETERINARY

[The development of immunity after vaccination of cattle against trichophytosis] Rybníkář A, et al.
Vet Med (Praha) 1989 Feb;34(2):97–100 (Eng. Abstr.) **(Cze)**
[Fungicidal effect of iodophor preparations on dermatophyte arthrospores] Wołoszyn S. **Pol Arch Weter** 1987; 27(4):25–34 (Eng. Abstr.) **(Pol)**
[Allergy in Trichophyton infection in the cattle] Wołoszyn S. **Pol Arch Weter** 1987;27(4):5–14 (Eng. Abstr.) **(Pol)**

TINEA CAPITIS

Picture of the month. Cohen PR, et al. **Am J Dis Child** 1989 May;143(5):621–2

COMPLICATIONS

Fungus invasion of human hair tissue in tinea capitis caused by Microsporum canis: light and electron microscopic study. Okuda C, et al. **Arch Dermatol Res** 1989; 281(4):238–46
Surgical and ketoconazole treatment of a Kerion Celsi caused by Trichophyton mentagrophytes and Candida tropicalis. Fiedler L, et al. **Mycoses** 1988;Suppl 1:81–7
[Tinea tonsurans in acquired immunodeficiency syndrome (letter)] Roussin–Bretagne S, et al. **Presse Med** 1988 Oct 29;17(38):2034 **(Fre)**

DIAGNOSIS

[Tinea capitis presenting as staphylococcal pyodermatitis of the scalp] Bigel ML, et al. **Arch Fr Pediatr** 1989 May; 46(5):363–5 (Eng. Abstr.) **(Fre)**
[Don't forget favus] Sfar Z, et al. **Tunis Med** 1988 Jan; 66(1):27–9 (Eng. Abstr.) **(Fre)**

EPIDEMIOLOGY

A contribution to the study of tinea capitis in Lusaka, Zambia. Simpanya MF. **East Afr Med J** 1989 Apr;66(4):269–75
A study of tinea capitis in Sri Lanka. Attapattu MC.
J Med Vet Mycol 1989;27(1):27–32
[Epidemiology of tinea of the scalp in Togo] Dupouy–Camet J, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):299–310 (Eng. Abstr.) **(Fre)**

GENETICS

[Psoriasiform tinea] Vozza A, et al.
G Ital Dermatol Venereol 1988 May;123(5):237–9 (Eng. Abstr.) **(Ita)**

MICROBIOLOGY

Tinea capitis caused by Microsporum canis in an adult. Stehlich G, et al. **Mycoses** 1989 Feb;32(2):97–8

PATHOLOGY

Patchy alopecia in a young girl. Tinea capitis (most likely a Trichophyton tonsurans infection). Zoberman–Saltiel E. **Arch Dermatol** 1989 Jan;125(1):113, 116
Tinea capitis in adults. Barlow D, et al. **Int J Dermatol** 1988 Jul–Aug;27(6):388–90

TINEA FAVOSA

TRANSMISSION

[Familial favus] Khalemin IaA, et al.
Vestn Dermatol Venerol 1988;(9):66–8 (Eng. Abstr.) **(Rus)**

TINEA PEDIS

BLOOD

[The histamine–serotonin–monoamine oxidase system in patients with foot mycosis during treatment] Alziatulov RF, et al. **Vestn Dermatol Venerol** 1989;(5):10–3 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Tinea pedis in prepubertal children: does it occur? Kearse HL, et al. **J Am Acad Dermatol** 1988 Oct;19(4):619–22

DRUG THERAPY

Ciclopirox olamine lotion 1%: bioequivalence to ciclopirox olamine cream 1% and clinical efficacy in tinea pedis. Aly R, et al. **Clin Ther** 1989 May–Jun;11(3):290–303
Screening of medicinal plants of Chhindwara District against Trichophyton mentagrophytes: a causal organism of Tinea pedis. Rai MK, et al. **Hindustan Antibiot Bull** 1988 Feb–May;30(1–2):33–6
Therapy of tinea nigra plantaris. Sayegh–Carreño R, et al. **Int J Dermatol** 1989 Jan–Feb;28(1):46–8
Double–blind comparison of itraconazole with griseofulvin in the treatment of tinea pedis and tinea manuum. Van Hecke E, et al. **Mycoses** 1988 Dec;31(12):641–9
Tinea infections treated with bifonazole gel. Wheatley D, et al. **Mycoses** 1988 Sep;31(9):471–5
Use of tolnaftate powder in the treatment and prophylaxis of foot mycoses. Balogh E, et al. **Ther Hung** 1988;36(2):86–7

ENZYMOLOGY

[Esterase activity of the peripheral blood phagocytes and its nonspecific correction in patients with rubromycosis pedis] Svirid SG, et al. **Vrach Delo** 1988 Jul;(7):92–3 (Eng. Abstr.) **(Rus)**

ETIOLOGY

[Fungal diseases of the feet in farmers] Nowicki R.
Przegl Dermatol 1988 Sep–Oct;75(5):372–5 (Eng. Abstr.) **(Pol)**

GENETICS

[Atypical erythrokeratodermia with deafness, keratitis and double mycotic infection] Ginter G, et al. **Z Hautkr** 1988 Nov 15;63(11):951–7 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

[A comprehensive assessment of the phagocytic activity of the blood neutrophils in patients with rubromycosis treated with griseofulvin and nizoral] Belukha UK, et al.
Vestn Dermatol Venerol 1989;(1):50–2 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Hendersonula toruloides infection in Thailand. Kotrajaras R, et al. **Int J Dermatol** 1988 Jul–Aug;27(6):391–5
Interdigital, cutaneous phaeohyphomycosis due to Scytalidium lignicola Pesante 1957. A case report. Costa AR, et al. **Mycoses** 1988 Dec;31(12):604–12
[Clinico–mycologic analysis of the effectiveness of treatment in patients with rubrophytosis of the feet] Vashchuk ZhE, et al. **Vrach Delo** 1989 Jan;(1):92–4 (Eng. Abstr.) **(Rus)**

TINEA UNGUIUM

[Dermatology workshop. Onychomycosis. 20–21 January 1989, Berlin. Abstracts] **Hautarzt** 1989 Apr;40(4 Suppl):1–12 **(Ger)**

COMPLICATIONS

White nails in AIDS/ARC due to Trichophyton rubrum infection. Weismann K, et al. **Clin Exp Dermatol** 1988 Jan; 13(1):24–5

DRUG THERAPY

Topical treatment of onychomycosis using bifonazole 1% urea/40% paste. Roberts DT, et al. **Ann N Y Acad Sci** 1988;544:586–7
An evaluation of itraconazole in the management of onychomycosis. Hay RJ, et al. **Br J Dermatol** 1988 Sep; 119(3):359–66
The treatment of onychomycosis with a new form of tioconazole. Tulli A, et al. **Chemioterapia** 1988 Jun; 7(3):160–3
The topical treatment of onychomycosis using a new combined urea/imidazole preparation. Hay RJ, et al.
Clin Exp Dermatol 1988 May;13(3):164–7
[Treatment of dermatophytoses and onychodystrophies using metronidazole ointment] Korsunskaia IM, et al.
Vestn Dermatol Venerol 1988;(6):65–7 (Eng. Abstr.) **(Rus)**
[Experience in treating patients with rubrophytosis with nizoral] Leshchenko VM, et al. **Vestn Dermatol Venerol** 1989;(1):75–8 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

[Incidence of onychomycoses in ungual pathology] De Padova MP, et al. **G Ital Dermatol Venereol** 1988 Nov; 123(11):535–6 **(Ita)**

IMMUNOLOGY

[A comprehensive assessment of the phagocytic activity of the blood neutrophils in patients with rubromycosis treated with griseofulvin and nizoral] Belukha UK, et al.
Vestn Dermatol Venerol 1989;(1):50–2 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Onychomycosis due to a fungus of the Aspergillus versicolor group. Torres–Rodriguez JM, et al. **Mycoses** 1988 Nov; 31(11):579–83

PATHOLOGY

Onychomycosis due to Trichophyton soudanense. Kalter DC, et al. **Clin Exp Dermatol** 1988 Jul;13(4):221–7

THERAPY

Dealing with thickened mycotic toenails [letter] Bernstein RK. **Diabetes Care** 1988 Sep;11(8):687
[Treatment of nail mycoses] Rakosi T. **Ther Umsch** 1989 Feb; 46(2):107–10 (Eng. Abstr.) **(Ger)**

TINEA VERSICOLOR

Malassezia furfur. Klotz SA. **Infect Dis Clin North Am** 1989 Mar;3(1):53–64 (26 ref.)

DIAGNOSIS

Pityriasis (tinea) versicolor in infancy. Nanda A, et al.
Pediatr Dermatol 1988 Nov;5(4):260–2 (22 ref.)
[Pityrosporiasis: pityriasis versicolor, folliculitis, pityrosporum, seborrheic dermatitis and pellicular status] Piérard GE, et al. **Rev Med Liege** 1989 Apr 1;44(7):267–71 **(Fre)**

DRUG THERAPY

Activity of triazole derivatives against Pityrosporum orbiculare in vitro and in vivo. Faergemann J.
Ann N Y Acad Sci 1988;544:348–53
Treatment of pityriasis versicolor: comparison of sulconazole nitrate 1% solution and clotrimazole 1 % solution. Tham SN. **Australas J Dermatol** 1987 Dec;28(3):123–5
Double–blind study with fenticonazole or bifonazole lotions in pityriasis versicolor. Aste N, et al.
Int J Clin Pharmacol Res 1988;8(4):271–3
Pityriasis versicolor with ketoconazole. Zaias N.
J Am Acad Dermatol 1989 Apr;20(4):703–5
Treatment of pityriasis versicolor with itraconazole: a double–blind placebo controlled study. Faergemann J.
Mycoses 1988 Jul;31(7):377–9
[Topical application of a 0.1% ciclopiroxolamine solution

for the treatment of pityriasis versicolor] Corte M, et al. **Mycoses** 1989 Apr;32(4):200–3 (Eng. Abstr.) (Ger)
[Local therapy of pityriasis versicolor with 3 imidazole derivatives—results of a therapeutic study. Studies of the rate of recurrence] Senff H, et al. **Z Hautkr** 1988 Dec 15; 63(12):1005–8 (Eng. Abstr.) (Ger)
[Ciclopiroxolamine in the treatment of pityriasis versicolor] Trevisan G, et al. **G Ital Dermatol Venereol** 1988 Jul–Aug; 123(7–8):XXXIII–XXXV (Eng. Abstr.) (Ita)

EPIDEMIOLOGY

Pityriasis versicolor in the aged: a clinical investigation and epidemiological survey in 190 elderly hospitalized patients. Di Silverio A, et al. **Mycopathologia** 1989 Mar; 105(3):187–90
A study of pityriasis versicolor in Bangkok (Thailand). Imwidthaya P, et al. **Mycopathologia** 1989 Mar; 105(3):157–61
Pityriasis versicolor—epidemiological and therapeutical study. Selim MM, et al. **Mycoses** 1989 Feb;32(2):100–3
[Superficial mycotic infections in AIDS and other HIV-infection related syndromes] Calzavara-Pinton PG, et al. **G Ital Dermatol Venereol** 1988 Jun;123(6):297–301 (Eng. Abstr.) (Ita)

ETIOLOGY

[Tinea versicolor and Cushing's disease (letter)] Bellido D, et al. **Rev Clin Esp** 1989 Jan;184(1):52 (Spa)

IMMUNOLOGY

[Specific IgE antibodies to Pityrosporum orbiculare in patients with atopic dermatitis] Schrenker T, et al. **Z Hautkr** 1989 Jun 15;64(6):478–9 (Eng. Abstr.) (Ger)

PATHOLOGY

Tinea versicolor of the face in black children in a temperate region. Pontasch MJ, et al. **Cutis** 1989 Jan;43(1):81–4
Tinea versicolor in immunosuppressed patients [letter] Hughes BR. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):357–8
Malassezia intertrigo, a new clinical entity. Katoh T, et al. **Mycoses** 1988 Nov;31(11):558–62
[Pityriasis versicolor in young infants] Schnake C, et al. **Rev Chil Pediatr** 1988 Jan–Feb;59(1):50–2 (Eng. Abstr.) (Spa)

TINIDAZOLE see under NITROIMIDAZOLES

TINNITUS

[Tinnitus: an etiologic, diagnostic and therapeutic problem] Dvorski I. **Lijec Vjesn** 1989 Mar;111(3):102–5 (Eng. Abstr.) (Ser)
[Tinnitus—examination, management and treatment] Lyttkens L. **Lakartidningen** 1989 Feb 22;86(8):625–8 (Swe)

CHEMICALLY INDUCED

Early symptoms of side effects due to aminoglycoside antibiotics. Miyoshi T. **Adv Otorhinolaryngol** 1988;42:246–9
Imipramine-related tinnitus [letter] Laird LK, et al. **J Clin Psychiatry** 1989 Apr;50(4):146
Tinnitus as an early diagnostic sign of inadvertent intravenous injection of bupivacaine epidural test dose [letter] Eldor J, et al. **Resuscitation** 1988 Oct;16(4):303–4

COMPLICATIONS

Tinnitus as a prognostic factor in sudden deafness. Danino J, et al. **Am J Otolaryngol** 1984 Nov–Dec;5(6):394–6
Unilateral auditory hallucinations [letter] **Br J Psychiatry** 1988 Aug;153:263–4

DIAGNOSIS

Empirical tests demonstrating two coexisting sources of tinnitus: a case study. Penner MJ. **J Speech Hear Res** 1989 Jun;32(2):458–62
A new electronic device for evaluation of objective tinnitus. Sismanis A, et al. **Otolaryngol Head Neck Surg** 1989 Jun; 100(6):644–5

DRUG THERAPY

Zinc and diet for tinnitus. DeBartolo HM Jr. **Am J Otol** 1989 May;10(3):256
Aspirin abolishes tinnitus caused by spontaneous otoacoustic emissions. A case study. Penner MJ. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):871–5
Trial of an extract of Ginkgo biloba (EGB) for tinnitus and hearing loss [letter] Coles R. **Clin Otolaryngol** 1988 Dec; 13(6):501–2
[Tinnitus treated with combined traditional Chinese medicine and Western medicine] Yang DJ. **Chung Hsi I Chieh Ho Tsa Chih** 1989 May;9(5):270–1, 259–60 (Eng. Abstr.) (Chi)
[The effect of intravenous administration of xylocaine for the treatment of tinnitus] Yamanaka E, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr;92(4):566–73 (Eng. Abstr.) (Jpn)
[Phenytoin in the treatment of ear noises] Wertzberger P. **Rev Chir [Otorinolaringol]** 1988 Apr–Jun;33(2):127–34 (Eng. Abstr.) (Rum)

EPIDEMIOLOGY

Tinnitus—a study of its prevalence and characteristics. Axelsson A, et al. **Br J Audiol** 1989 Feb;23(1):53–62
Tinnitus prevalence in industrial hearing loss compensation claimants. McShane DP, et al. **Clin Otolaryngol** 1988 Oct; 13(5):323–30

ETIOLOGY

Vascular tinnitus and arteriovenous meningeal fistula. Kuhweide R, et al. **Acta Otorhinolaryngol Belg** 1988; 42(4):513–28 (25 ref.)
Pulsatile tinnitus during a Valsalva maneuver in a patient with Wolff-Parkinson-White syndrome [letter] Rodenberg H, et al. **Am J Emerg Med** 1988 Nov;6(6):679–81
Protracted tinnitus after discontinuation of long-term therapeutic use of benzodiazepines. Busto U, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):359–62
Objective tinnitus associated with abnormal mastoid emissary vein. Forte V, et al. **J Otolaryngol** 1989 Aug;18(5):232–5
Investigation of tinnitus induced by sound and its relationship to ongoing tinnitus. George RN, et al. **J Speech Hear Res** 1989 Jun;32(2):366–72
Subjective pulsatile tinnitus cured by carotid endarterectomy. A case report. Louwrens HD, et al. **S Afr Med J** 1989 May 20;75(10):496–7
[Direct arteriovenous fistula in the neck: one of the causes of tinnitus] Peeters FL, et al. **Ned Tijdschr Geneeskd** 1989 Apr 15;133(15):778–81 (Eng. Abstr.) (Dut)
[Lyme borreliosis and its significance for the ENT physician] Diehl GE, et al. **Laryngorhinootologie** 1989 Feb;68(2):81–7 (Eng. Abstr.) (Ger)
[Tinnitus] Probst R. **Schweiz Rundsch Med Prax** 1988 Dec 20;77(51):1397–9 (Ger)

PHYSIOPATHOLOGY

Study of the so-called cochlear mechanical tinnitus. O-Uchi T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:94–9
Phantom auditory sensation in rats: an animal model for tinnitus. Jastreboff PJ, et al. **Behav Neurosci** 1988 Dec; 102(6):811–22
Objective evidence of tinnitus in auditory evoked magnetic fields. Hoke M, et al. **Hear Res** 1989 Feb;37(3):281–6
Oto-arhythmic syndrome. Samdarshi TE, et al. **Indian Heart J** 1988 Nov–Dec;40(6):495–9
Adaptation and the masking of tinnitus. Penner MJ, et al. **J Speech Hear Res** 1989 Jun;32(2):339–46
Judgments and measurements of the loudness of tinnitus before and after masking. Penner MJ. **J Speech Hear Res** 1988 Dec;31(4):582–7
[Auditory evoked potentials in distinguishing between peripheral and central tinnitus] de Lavernhe-Lemaire MC, et al. **Arch Int Physiol Biochim** 1989 Apr;97(2):135–44 (Eng. Abstr.) (Fre)
[Electric stimulations of the promontorium. Study of their psycho-acoustic equivalence] Gersdorff M, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):443–6 (12 ref.) (Eng. Abstr.) (Fre)
[Abnormalities of the bulbus venae jugularis: a cause for pulse synchronous tinnitus?] Hofmann E, et al. **HNO** 1989 Feb; 37(2):56–61 (Eng. Abstr.) (Ger)
[Clinical studies on the loudness of tinnitus] Ogasawara M. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1871–82 (Eng. Abstr.) (Jpn)
[Tinnitus] Cuchí A, et al. **An Otorrinolaringol Ibero Am** 1988; 15(4):355–85 (41 ref.) (Eng. Abstr.) (Spa)
[Audiometry by electric response in the study of acousmata] García Bartual E, et al. **An Otorrinolaringol Ibero Am** 1988; 15(6):647–52 (Eng. Abstr.) (Spa)

PSYCHOLOGY

Cognitive variables in tinnitus annoyance. Hallam RS, et al. **Br J Clin Psychol** 1988 Sep;27 (Pt 3):213–22
Psychiatric diagnoses in patients with psychogenic dizziness or severe tinnitus. Simpson RB, et al. **J Otolaryngol** 1988 Oct;17(6):325–30
Psychological characteristics of individuals high and low in their ability to cope with tinnitus. Kirsch CA, et al. **Psychosom Med** 1989 Mar–Apr;51(2):209–17
[Illness behavior and depression in tinnitus patients] Schönweiler R, et al. **Laryngorhinootologie** 1989 May; 68(5):267–70 (Eng. Abstr.) (Ger)

SURGERY

Indications and results of neurovascular decompression of the eighth cranial nerve for vertigo, tinnitus and hearing disturbances. Ryu H, et al. **Adv Otorhinolaryngol** 1988; 42:280–3

THERAPY

Therapies for tinnitus. House JW. **Am J Otol** 1989 May; 10(3):163–5 (10 ref.)
Conservative treatment of tinnitus in Menière's disease. Vernon J. **Am J Otol** 1988 May;9(3):201–2
Behavioural therapy in the clinical management of tinnitus. Lindberg P, et al. **Br J Audiol** 1988 Nov;22(4):265–72
Alternating current at the eardrum for tinnitus reduction. Kuk FK, et al. **J Speech Hear Res** 1989 Jun;32(2):393–400
Tinnitus, membrane stabilizers and taurine. Davies E, et al. **Practitioner** 1988 Oct 22;232(1456 (Pt 2)):1139
[Suppression of tinnitus by electric stimulation in cochlear implant patients] Battmer RD, et al. **HNO** 1989 Apr; 37(4):148–52 (Eng. Abstr.) (Ger)
[Effectiveness of various non-medicinal therapeutic measures in tinnitus. A long-term study] von Wedel H, et al. **Laryngorhinootologie** 1989 May;68(5):259–66 (Eng. Abstr.) (Ger)
[Our clinical experience with electric stimulation of the auditory pathways] Latkowski B. **Otolaryngol Pol** 1988; 42(1-2):67–73 (Eng. Abstr.) (Pol)
[Hearing aids as a good therapeutic alternative in tinnitus] Behrenth E. **Lakartidningen** 1989 May 17;86(20):1884–5 (Swe)

TIOPRONIN see MERCAPTOPROPIONYLGLYCINE

TIRON see under BENZENESULFONATES

TISSUE ADHESIVES

see related
BONE CEMENTS

Use of fibrin glue in sucrose gap method. Tuganowski W, et al. **Acta Physiol Pol** 1988 Jul–Aug;39(4):307–10
The use of histoacryl tissue adhesive for the primary closure of scalp wounds [letter] **Arch Emerg Med** 1989 Jun; 6(2):159–62
Microvascular anastomosis using polyethylene glycol 4000 and fibrin glue. Kamiji T, et al. **Br J Plast Surg** 1989 Jan; 42(1):54–8
Rectal anastomosis with application of luminal fibrin adhesive in the rectum of dogs. An experimental study. Hjortrup A, et al. **Dis Colon Rectum** 1989 May;32(5):422–5
Retropubic urethrocystopexy with fibrin sealant: a long-term follow-up. Larsson B, et al. **Gynecol Obstet Invest** 1988; 26(3):257–61
The use of fibrin adhesive in the repair of chondral and osteochondral injuries. Kaplonyi G, et al. **Injury** 1988 Jul; 19(4):267–72
Non-suture repair of tendons. Powell ES, et al. **J Biomed Eng** 1989 May;11(3):215–8
Oligomers with pendant isocyanate groups as tissue adhesives: II. Adhesion to bone and other tissues. Brauer GM, et al. **J Biomed Mater Res** 1989 Jul;23(7):753–63
Application of single-donor fibrin glue to burns. Stuart JD, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):619–22
Fibrin glue as cement for HA-granules. Wittkampf AR. **J Craniomaxillofac Surg** 1989 May;17(4):179–81
Augmentation of the maxillary alveolar ridge with hydroxylapatite and fibrin glue. Wittkampf AR. **J Oral Maxillofac Surg** 1988 Nov;46(11):1019–21
Esophageal atresia—a rabbit model to study anastomotic healing and the use of tissue adhesive fibrin sealant. Blair GK, et al. **J Pediatr Surg** 1988 Aug;23(8):740–3
Prothrombotic cytotoxicity of cyanoacrylate tissue adhesive. Papatheofanis FJ. **J Surg Res** 1989 Oct;47(4):309–12
Randomized clinical trial of fibrin sealant in patients undergoing resternotomy or reoperation after cardiac operations. A multicenter study. Rousou J, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):194–203
Conservative treatment of renal allograft rupture with polyglactin 910 mesh and gelatin resorcin formaldehyde glue. Chopin DK, et al. **J Urol** 1989 Aug;142(2):363–5
Fibrin glue sealing of polytetrafluoroethylene vascular graft anastomoses: comparison with oxidized cellulose. Kram HB, et al. **J Vasc Surg** 1988 Nov;8(5):563–8
Adhesives in larynx repair. Lyons MB, et al. **Laryngoscope** 1989 Apr;99(4):376–81
Control of intraoperative hemorrhage in gynecology with the use of fibrin glue. Malviya VK, et al. **Obstet Gynecol** 1989 Feb;73(2):284–6
Applicator for cyanoacrylate tissue adhesive. Wessels IF, et al. **Ophthalmic Surg** 1989 Mar;20(3):211–4
Repair of motor nerve defects: comparison of suture and fibrin adhesive techniques. Nishihira S, et al. **Otolaryngol Head Neck Surg** 1989 Jan;100(1):17–21
Use of fibrin glue as a substrate for in vitro endothelialization of PTFE vascular grafts. Zilla P, et al. **Surgery** 1989 Apr; 105(4):515–22
Comparison of adhesive polyurethane membrane and polypropylene sutures for closure of skin incisions in cats. Court MH, et al. **Vet Surg** 1989 May-Jun;18(3):211–5
[Tissucol in septorhinoplasties] Pech A, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(8):629–34 (Eng. Abstr.) (Fre)
[Fibrin gluing of the extraocular eye muscles. Experimental use in the rabbit] Aichmair MW, et al. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):499–503 (Eng. Abstr.) (Ger)
[Experimental transvitreal fibrin gluing of the retina] Emmerich KH, et al. **Klin Monatsbl Augenheilkd** 1989 Jan; 194(1):42–7 (Eng. Abstr.) (Ger)
[The use of collagen fasciae and fibrin adhesive for supporting wound healing in skin defects with large surfaces] Hufnagel H, et al. **Tierarztl Prax** 1989;17(2):163–5 (Eng. Abstr.) (Ger)
[Comparative animal experiments of different tissue adhesives. I. Tensile strength studies. II. Histologic and morphometric studies] Stephan E, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(4):221–34 (Eng. Abstr.) (Ger)

[Preparation and experimental studies with an allogenic tissue adhesive during the addition of a dipeptide which promotes wound healing] Matthes G, et al. **Z Med Lab Diagn** 1989; 30(3):148–53 (Eng. Abstr.) (Ger)

[Fibrin sealant: personal experience in general surgical practice] Eppinger S, et al. **Chir Ital** 1988 Aug–Oct; 40(4–5):340–4 (Eng. Abstr.) (Ita)

[Possible biomedical uses of alkyl-cyanoacrylates] Cugurra F, et al. **Clin Ter** 1988 Feb 15;124(3):173–82 (44 ref.) (Eng. Abstr.) (Ita)

[Experimental study on the use of fibrin glue in vascular microsurgery] Cerillo A, et al. **Minerva Chir** 1988 Aug 31; 43(15–16):1261–5 (Eng. Abstr.) (Ita)

[Human fibrin glue in colorectal surgery] Rodolico G, et al. **Minerva Chir** 1988 Oct 31;43(20):1687–93 (Eng. Abstr.) (Ita)

[Use of fibrin glue at the anterior mediastinum to reduce postoperative drainage in cardiac surgery] Tanemoto K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun; 36(6):942–6 (Jpn)

[Fibrin glue in surgery (a review of the literature)] Fedorov VD, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):122–4 (25 ref.) (Rus)

[Use of fibrin glue in surgery of parenchymatous organs] Gigauri VS, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):89–93 (Eng. Abstr.) (Rus)

[Use of glue and biocompatible sutures in surgery] Kirillov IuB, et al. **Klin Khir** 1989;(1):62–3 (Rus)

ADMINISTRATION & DOSAGE

A technique for spot application of fibrin glue during open heart operations. Garcia-Rinaldi R, et al. **Ann Thorac Surg** 1989 Jan;47(1):59–61

Hemostasis of solid viscus trauma by intraparenchymal injection of fibrin glue. Hauser CJ. **Arch Surg** 1989 Mar; 124(3):291–3

Endoscopic hemostasis in upper GI hemorrhage with tissue adhesion. Li ZL, et al. **Chin Med J [Engl]** 1988 Nov; 101(11):823–7

Pancreatic duct occlusion in the management of acute necrotizing pancreatitis in a canine model. Torino F, et al. **Mt Sinai J Med** 1989 Mar;56(2):79–82

A new technical of liver biopsy with plugging of the needle track using a double channel biopsy device. An experimental study. Zatloukal K, et al. **Z Gastroenterol** 1988 Nov;26(11):699–703

[Protection of the pancreatico-digestive anastomosis following resection of the head of the pancreas by pancreatic duct occlusion with fibrin (–glue). Animal experiment and clinical experiences] Waclawiczek HW, et al. **Chirurg** 1989 Jun;60(6):403–9 (Eng. Abstr.) (Ger)

[Fibrin glue injection—a hemostatic technic after laparoscopic liver biopsy] Thiele H, et al. **Dtsch Med Wochenschr** 1989 Aug 4;114(31–32):1196–8 (Eng. Abstr.) (Ger)

[Management of conjunctival wounds with suture or fibrin glue following intraocular lens implantation—a comparative study] Mellin KB, et al. **Fortschr Ophthalmol** 1989;86(2):129–31 (Eng. Abstr.) (Ger)

[Marshall-Marchetti-Krantz operation with fibrin gluing. Results after 2 years] Stolz W, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):564–7 (Eng. Abstr.) (Ger)

[Proposal of a new method in the medical treatment of thyroid cysts] Grandi M, et al. **Clin Ter** 1988 Sep 15; 126(5):329–34 (Eng. Abstr.) (Ita)

[Preoperative plombage of damaged bronchi in children with bronchiectases using a biopolymeric compound for cupping endobronchitis] Sitko AA, et al. **Grudn Khir** 1989 Mar–Apr; (2):38–41 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

The Nd:YAG laser removal of cyanoacrylate used to repair conjunctival wound leaks. Martinez LA, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):86–7

CHEMICAL SYNTHESIS

Oligomers with pendant isocyanate groups as tissue adhesives. I. Synthesis and characterization. Brauer GM, et al. **J Biomed Mater Res** 1989 Mar;23(3):295–309

PHARMACOLOGY

The influence of fibrin sealant on demineralized bone matrix-dependent osteoinduction. A quantitative and qualitative study in rats. Schwarz N, et al. **Clin Orthop** 1989 Jan;(238):282–7

Effects of fibrin sealant on the fixation of porous titanium and pyrolytic carbon implants. Hetherington VJ, et al. **J Foot Surg** 1989 Mar–Apr;28(2):145–50

[Dura mater healing after repair with aponeurotic plasty. Comparison of results between classical sutures and fibrin adhesive glue. Fibrin adhesive in frontobasal injuries. An experimental study] Dehesdin D, et al. **Neurochirurgie** 1988; 34(5):311–4 (Eng. Abstr.) (Fre)

[Preliminary data on the preparation of a fibrin glue from the patient's own plasma and its use in ENT surgery] Cucuianu AM, et al. **Rev Chir [Otorinolaringol]** 1988 Apr–Jun;33(2):81–7 (Eng. Abstr.) (Rum)

STANDARDS

[The adhesive strength of tissue adhesives] Schimmack K, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989; 22(2):83–91 (Eng. Abstr.) (Ger)

THERAPEUTIC USE

Scleral reinforcement by a teflon graft and a tissue adhesive. Ohrström A, et al. **Acta Ophthalmol (Copenh)** 1988 Dec; 66(6):643–6

n-Butyl 2-cyanoacrylate—substitute for IBCA in interventional neuroradiology: histopathologic and polymerization time studies. Brothers MF, et al. **AJNR** 1989 Jul–Aug;10(4):777–86

Seroma prevention using fibrin glue during modified radical neck dissection in a rat model. Lindsey WH, et al. **Am J Surg** 1988 Oct;156(4):310–3

Treatment of postoperative chylothorax with intrapleural fibrin glue. Akaogi E, et al. **Ann Thorac Surg** 1989 Jul; 48(1):116–8

Mediastinal fibrin glue: hemostatic effect and tissue response in calves. Baker JW, et al. **Ann Thorac Surg** 1989 Mar; 47(3):450–2

Sutureless fixation of long aortocoronary saphenous vein grafts with oxidized regenerated cellulose. Di Lello F, et al. **Ann Thorac Surg** 1989 Mar;47(3):473–4

Transforming growth factor beta. A biologic chorioretinal glue. Smiddy WE, et al. **Arch Ophthalmol** 1989 Apr; 107(4):577–80

Fibrin glue achieves hemostasis in patients with coagulation disorders. Kram HB, et al. **Arch Surg** 1989 Mar; 124(3):385–7

Use of surgical glue without replacement in the treatment of type A aortic dissection. Fabiani JN, et al. **Circulation** 1989 Sep;80(3 Pt 1):1264–8

Fibrinogen prepared from small blood samples for autologous use in a tissue adhesive system. Weis-Fogh US. **Eur Surg Res** 1988;20(5–6):381–9

Prevention of postsurgical adhesions by INTERCEED(TC7), an absorbable adhesion barrier: a prospective randomized multicenter clinical study. INTERCEED(TC7) Adhesion Barrier Study Group. **Fertil Steril** 1989 Jun;51(6):933–8

A new operation for the prevention and treatment of amputation neuromas. Martini A, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):379–82

Laparoscopically applied fibrin glue in experimental liver trauma. Ishitani MB, et al. **J Pediatr Surg** 1989 Sep; 24(9):867–71

Fibrin and fibronectin sealing system in a guided tissue regeneration procedure. A case report. Pini Prato GP, et al. **J Periodontol** 1988 Oct;59(10):679–83

Angioscope-assisted occlusion of venous tributaries with prolamine in in situ femoropopliteal bypass: preliminary results of canine experiments. Pigott JP, et al. **J Vasc Surg** 1989 May;9(5):704–8; discussion 708–9

Management of oral bleeding in haemophilic patients [letter] Baudo F, et al. **Lancet** 1988 Nov 5;2(8619):1082

Problems of fibrin adhesion of the nerves. Herter T. **Neurosurg Rev** 1988;11(3–4):249–58 (110 ref.)

Effects of fibrin glue on rat facial nerve regeneration. Medders G, et al. **Otolaryngol Head Neck Surg** 1989 Feb; 100(2):106–9

A biologic tissue adhesive for vitreoretinal surgery. Coleman DJ, et al. **Retina** 1988;8(4):250–6

Initial experience with the endoscopic application of fibrin tissue adhesive in the upper gastrointestinal tract. Groitl H, et al. **Surg Endosc** 1987;1(2):93–7

Endoscopic sealing of infected bronchus stump fistulae with fibrin following lung resections. Experimental and clinical experience. Waclawiczek HW, et al. **Surg Endosc** 1987; 1(2):99–102

Use of microcrystalline collagen powder and fibrinogen tissue adhesive for hemostasis and prevention of rebleeding in patients with hepatocellular carcinoma associated with cirrhosis of the liver. Sakon M, et al. **Surg Gynecol Obstet** 1989 May;168(5):453–4

Closure of a post-pneumonectomy bronchopleural fistula with fibrin sealant (Tisseel). Onotera RT, et al. **Thorax** 1988 Dec;43(12):1015–6

[Intraoperative use of fibrin sealant in pulmonary surgery. A prospective study on a series of 124 procedures] Grunenwald D. **Ann Chir** 1989;43(2):147–50 (Eng. Abstr.) (Fre)

[Repair of the facial nerve exclusively by fibrin glue. 56 cases] Sterkers O, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(3):176–81 (17 ref.) (Eng. Abstr.) (Fre)

[Fibrinogen glue in ophthalmology. Its use in corneal ulcers] Lagoutte F, et al. **Bull Soc Ophtalmol Fr** 1988 Feb; 88(2):277–9 (Fre)

[Use of a fibrin glue (Tissucol) to plug perforated ulcers in dry eye syndromes] Lagoutte F, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):153–5 (Eng. Abstr.) (Fre)

[Surgery of the thoracic aorta. Value of tissucol] Ninet J, et al. **Presse Med** 1988 Nov 19;17(41):2197–9 (Eng. Abstr.) (Fre)

[Is there a preference among fibrin glues for nerve anastomosis?] Herter T. **HNO** 1989 Jun;37(6):255–8 (Eng. Abstr.) (Ger)

[Fibrin glue in gastroenteric surgery] Giordano L, et al. **Minerva Chir** 1989 May 15;44(9):1371–4 (Eng. Abstr.) (Ita)

[Experimental study of motor nerve repair: comparison of nylon suture and two component fibrin adhesive techniques] Nishihira S. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug;91(8):1208–12 (Eng. Abstr.) (Jpn)

[The late results of treating abscesses of the lungs by filling them with a foaming polymeric compound] Lukomskii GI, et al. **Grudn Khir** 1988 Sep–Oct;(5):47–50 (Eng. Abstr.) (Rus)

[Use of MK-8 glue in treating stomach and duodenal ulcers] Mironiuk NV. **Klin Khir** 1988;(8):41–2 (Eng. Abstr.) (Rus)

TOXICITY

Cytotoxicity of alkyl-2-cyanoacrylate adhesives. Papatheofanis FJ. **J Biomed Mater Res** 1989 Jun; 23(6):661–8

TISSUE BANKS

Some metabolic changes during human corneal organ culture. Hjortdal JO, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):295–300

Endothelial pump function in rabbit corneas kept under eye bank conditions. Medin W, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):75–8

Andrology, semen banks, and IVF centers: HIV/ARC/STD. Hafez ES, et al. **Arch Androl** 1988;21(2):75–119

Public attitudes toward donation of body parts, particularly the eye. Basu PK, et al. **Can J Ophthalmol** 1989 Aug; 24(5):216–20

Donor eyes. A comparison of characteristics and outcomes for Eye Bank and local tissue. Chipman ML, et al. **Cornea** 1989;8(1):62–6

Causes of donor rejection in a sperm banking program. Schroeder-Jenkins M, et al. **Fertil Steril** 1989 May; 51(5):903–6

Eye donation and eye banking [editorial] Fernandez ST. **Indian J Ophthalmol** 1987 Jul–Aug;35(4):175

Exchanging donor kidneys [letter] **N Engl J Med** 1988 Oct 20;319(16):1092–4

Banked bone grafting for bone defect repair—clinical evaluation of bone union and graft incorporation. Itoman M, et al. **Nippon Seikeigeka Gakkai Zasshi** 1988 May; 62(5):461–9

The use of banked femoral head bone allograft in spinal surgery. Paterson MP, et al. **S Afr J Surg** 1989 Jul; 27(3):89–92

Eye banking. Easty DL. **Transplant Proc** 1989 Feb;21(1 Pt 3):3120–1 (4 ref.)

Role of the transplant co-ordinator and multiple organ donation in the UK. Wight C. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1398–9

[2 years of the skin bank at the Plastic Surgery Clinic No. 10 of the Medical School in Prague] Vogtová D, et al. **Rozhl Chir** 1988 Nov;67(11):760–3 (Eng. Abstr.) (Cze)

[The skin bank: its requirements, its future] Micheau P, et al. **Ann Chir Plast Esthet** 1988;33(2):179–83 (Eng. Abstr.) (Fre)

[Bone banks (allografts). Symposium] Gérard Y, et al. **Rev Chir Orthop** 1988;74(2):109–53 (Fre)

[A bone bank: development of the notion of homografts in otology] Boudard P, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):485–8 (Eng. Abstr.) (Fre)

[Reconstruction of facial esthetics with homologous tissue bank cartilage transplants] Matras H, et al. **Fortschr Kiefer Gesichtschir** 1989;34:96–8 (Ger)

[Experimental microbiological criteria for the banking of full-thickness skin] Bäumer P, et al. **Zentralbl Chir** 1988; 113(12):793–800 (Eng. Abstr.) (Ger)

[Heterologous artificial insemination. Analysis of 166 cases treated at the Clinic for Artificial Insemination of Rome] Painvain E, et al. **Minerva Ginecol** 1988 Apr;40(4):245–8 (Eng. Abstr.) (Ita)

[A method of increasing the resources of skin for autoplasty of granulating wounds in burn patients] Biguniak VV, et al. **Klin Khir** 1989;(5):69 (Rus)

ECONOMICS

Special communication. The Cooperative Human Tissue Network. Clausen KP, et al. **Cancer** 1989 Apr 1; 63(7):1452–5

HISTORY

Eye banking: 1944 to the present. Farge EJ. **Surv Ophthalmol** 1989 Jan–Feb;33(4):260–3

LEGISLATION & JURISPRUDENCE

Eye banking in Texas. Farge EJ. **Tex Med** 1989 Feb; 85(2):33–5

ORGANIZATION & ADMINISTRATION

Screening donors for sexually transmitted disease in donor insemination clinics in the UK. A survey. Barratt CL, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):461–6

Hospital-based organ retrieval: impact of an organ procurement organization. White MG. **Tex Med** 1988 Dec; 84(12):44–6

STANDARDS

Bone banking, 1989: challenges and opportunities. Cruess RL. **Can J Surg** 1989 Jul;32(4):227–8
Bone banking in Canada: a review. Russell G, et al. **Can J Surg** 1989 Jul;32(4):231–6 (45 ref.)

TISSUE CAGES see DIFFUSION CHAMBERS, CULTURE

TISSUE COMPATIBILITY see HISTOCOMPATIBILITY

TISSUE CONDITIONING (DENTAL)

Removal of tissue-conditioning material made easier. Rosen J. **J Prosthet Dent** 1989 May;61(5):641
On the functional deformation of maxillary complete dentures. A clinical and experimental study. el Ghazali S. **Swed Dent J Suppl** 1989;59:1–82

TISSUE CULTURE

see related
CELL LINE
CELLS, CULTURED
CLONE CELLS
TUMOR CELLS, CULTURED

A technique for the in vitro culture of human parathyroid gland tissue. Matalanis G, et al. **Aust N Z J Surg** 1988 May;58(5):407–11
Skin explant culture as a model for cutaneous graft-versus-host disease in humans. Dickinson AM, et al. **Bone Marrow Transplant** 1988 Jul;3(4):323–9
Applications of plant cell and tissue culture. **Clin Found Symp** 1988;137:1–269
Fortieth annual meeting of the Tissue Culture Association. June 11–14, 1989. Orlando, FL. Abstracts. **In Vitro Cell Dev Biol** 1989 Mar;25(3 Pt 2):1A–72A
Co-culture of early cattle embryos to the blastocyst stage with oviducal tissue or in conditioned medium. Eyestone WH, et al. **J Reprod Fertil** 1989 Mar;85(2):715–20
Use of tissue culture models to study neuronal regulatory trophic and toxic factors in the aged brain. Azmitia EC, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):743–58 (184 ref.)
Blood culture collection techniques and bacterial contamination [letter] Ashdown LR. **Pathology** 1988 Oct; 20(4):397–8

INSTRUMENTATION

Blood culture bottles improve microbe isolation rate from joint fluids [letter] von Essen R. **Am J Clin Pathol** 1989 Apr;91(4):501–3
The pilosebaceous unit: hormonal regulation in relation to cellular differentiation. Vermorken AJ, et al. **Clin Dermatol** 1988 Oct–Dec;6(4):52–66
A new in vitro assay for quantitating tumor cell invasion. Repesh LA. **Invasion Metastasis** 1989;9(3):192–208
Tissue culture trends. **Nature** 1989 Jun 8;339(6224):488–90

METHODS

Extraction of proteins within ultrathin-layer polyacrylamide electrophoresis (SDS-PAGE) and isoelectric focusing (PAGIF) of cryostat sections and tissue culture specimens. Inczédy-Marcsek M, et al. **Acta Histochem Suppl (Jena)** 1988;36:377–94
Microcarrier cell culture. Nilsson K. **Biotechnol Genet Eng Rev** 1988;6:403–39 (79 ref.)
Defined, serum-free culture conditions for the GM-micro-clonogenic assay using agar-capillaries. Echarti C, et al. **Blut** 1989 Aug;59(2):171–6
Survival and growth of hippocampal neurons in defined medium at low density: advantages of a sandwich culture technique or low oxygen. Brewer GJ, et al. **Brain Res** 1989 Aug 7;494(1):65–74
Influence of the culture substratum on the expression of choline acetyltransferase activity in purified motoneurons from rat embryos. Martinou JC, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):251–62
Growth requirements for human acute lymphoblastic leukemia cells: refinement of a clonogenic assay. Estrov Z, et al. **Cancer Res** 1988 Oct 15;48(20):5901–7
Immature rat epididymal epithelial cells grown in static primary monolayer culture on permeable supports. I. Vectorial secretion. Cooper TG, et al. **Cell Tissue Res** 1989 Jun;256(3):567–72
Immature rat epididymal epithelial cells grown in static primary monolayer culture on permeable supports. II. Histochemistry and ultrastructure. Yeung CH, et al. **Cell Tissue Res** 1989 Jun;256(3):573–80
Automated detection and recognition of live cells in tissue culture using image cytometry. Spadinger I, et al. **Cytometry** 1989 Jul;10(4):375–81
Comparison of six different substrata on the plating efficiency, differentiation and survival of human dorsal root ganglion neurons in culture. Yong VW, et al. **Dev Neurosci** 1988;10(4):222–30
Prolonged expression of differentiated phenotype by chondrocytes cultured at low density on a composite substrate of collagen and agarose that restricts cell spreading. Watt FM, et al. **Differentiation** 1988 Jul; 38(2):140–7
Mechanical confinement inhibits collagen synthesis in gel-cultured fibroblasts. Thie M, et al. **Eur J Cell Biol** 1989 Apr;48(2):294–302
Survival and function of aggregate cultures of rat fetal dopamine neurons grafted in a rat model of Parkinson's disease. Strecker RE, et al. **Exp Brain Res** 1989; 76(2):315–22
Cytoscribing: a method for micropositioning cells and the construction of two- and three-dimensional synthetic tissues. Klebe RJ. **Exp Cell Res** 1988 Dec;179(2):362–73
The use of cell and tissue culture techniques in the study of regulatory peptides. Hassall CJ, et al. **Experientia Suppl** 1989;56:113–36 (140 ref.)
Absorption of compounds in medium by the oil covering microdrop cultures. Miller KF, et al. **Gamete Res** 1987 May;17(1):57–61
Comparison of statistical methods for the analysis of limiting dilution assays. Cobb L, et al. **In Vitro Cell Dev Biol** 1989 Jan;25(1):76–81
Automated selective dissociation of cells from different regions of multicellular spheroids. Freyer JP, et al. **In Vitro Cell Dev Biol** 1989 Jan;25(1):9–19
Power analysis of statistical methods for comparing treatment differences from limiting dilution assays. Schmehl MK, et al. **In Vitro Cell Dev Biol** 1989 Jan;25(1):69–75
Procedure for establishing oligodendroglial cells in primary cultures based on developmental parameters. Juurlink BH, et al. **Int J Dev Neurosci** 1987;5(4):327–36
Isolated hippocampal neurons in cryopreserved long-term cultures: development of neuroarchitecture and sensitivity to NMDA. Mattson MP, et al. **Int J Dev Neurosci** 1988; 6(5):439–52
An ultrathin sectioning alignment tool with application to cell monolayers. Cramer CT. **J Electron Microsc Tech** 1989 Feb;11(2):172–3
Preparation of collagen gel matrices for light and electron microscopy. Turner JW, et al. **J Electron Microsc Tech** 1989 Feb;11(2):134–6
Interaction of soluble and substratum-bound factors influences neurite elongation. Michler A, et al. **J Hirnforsch** 1989;30(2):197–202
A simple method for the Schwann cell preparation from newborn rat sciatic nerves. Oda Y, et al. **J Neurosci Methods** 1989 Jun;28(3):163–9
Establishment, characterization, and evolution of cultures enriched in type-2 astrocytes. Aloisi F, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):188–98
Components of neurite outgrowth that determine neuronal cytoarchitecture: influence of calcium and the growth substrate. Mattson MP, et al. **J Neurosci Res** 1988 Jul; 20(3):331–45
A normal human brain cell aggregate model for neurobiological studies. Pulliam L, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):521–30
Simple method for the culture of glial cells from embryonic rat brain: implications for regional heterogeneity and the radial glial lineage. Wilkie MB, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):220–5
Cultured composite skin grafts: biological skin equivalents permitting massive expansion. Nanchahal J, et al. **Lancet** 1989 Jul 22;2(8656):191–3
Preservation of biological specimens for observation in a confocal fluorescence microscope and operational principles of confocal fluorescence microscopy. Bacallao R, et al. **Methods Cell Biol** 1989;31:437–52
Mycoplasma infection of cultured cells. Hay RJ, et al. **Nature** 1989 Jun 8;339(6224):487–8
Adrenergic development of neural crest cells grown in a defined medium under a reconstituted basement-membrane-like matrix. Maxwell GD, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):64–8
The rabbit retina: a suitable mammalian tissue for obtaining astroglia-free Müller cell cultures. Scherer J, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):51–6
Retinoblastoma cells in tissue culture. Campbell M, et al. **Ophthalmic Paediatr Genet** 1988 Nov;9(3):171–99 (103 ref.)
A simple method for shell-less cultivation of chick embryos. Jakobson AM, et al. **Pharmacol Toxicol** 1989 Feb; 64(2):193–5
Model calculations of oxygen supply to tissue slice preparations. Lipinski HG. **Phys Med Biol** 1989 Aug; 34(8):1103–11
Chorionic villus culture for prenatal diagnosis of chromosome defects: reduction of the long-term cultivation time. Smidt-Jensen S, et al. **Prenat Diagn** 1989 May;9(5):309–19
Growth of single T cells and single thymocytes in a high cloning efficiency filler-cell free microculture system. Chen WF, et al. **Thymus** 1988;12(1):51–68
Immortalization of neural cells via oncogene transduction [news] Cepko C. **Trends Neurosci** 1988 Jan;11(1):6–8 (24 ref.)
Organotypic cultures of neural tissue. Gähwiler BH. **Trends Neurosci** 1988 Nov;11(11):484–9 (34 ref.)
[Long-term culture of split cattle embryos in vitro] Machatková M, et al. **Vet Med (Praha)** 1988 Dec; 33(12):721–6 (Eng. Abstr.) (Cze)
[Epithelium transplantation with cultivated keratinocytes] Soehnchen R, et al. **Hautarzt** 1988 Nov;39(11):701–7 (65 ref.) (Eng. Abstr.) (Ger)
[Effects of different buffers, ethanol and hydrogen peroxide on the morphology of cultured brain cells] Lindner G, et al. **J Hirnforsch** 1989;30(2):213–21 (Eng. Abstr.) (Ger)
[The culturing of human Schwann cells: a new contribution to the study of polyneuropathy] de Martini I, et al. **Boll Soc Ital Biol Sper** 1989 May;65(5):405–11 (Eng. Abstr.) (Ita)
[A new method for cultivation of mouse hair follicle tissue and partial purification and characterization of hair growth stimulating factor in fetal calf serum] Hattori M. **Nippon Hifuka Gakkai Zasshi** 1988 Apr;98(5):539–46 (Eng. Abstr.) (Jpn)
[Stock of chromosome-types and tissue cultured shoot primordium] Tanaka R, et al. **Yakugaku Zasshi** 1988 Nov; 108(11):1023–39 (28 ref.) (Eng. Abstr.) (Jpn)
[A simplified method of preparing a nerve tissue culture for electron microscopy purposes] Buravlev VM, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):85–6 (Eng. Abstr.) (Rus)

TISSUE DISTRIBUTION

Mean time parameters dealing with the tissue distribution of drugs: limitations and extensions. Veng-Pedersen P. **J Pharm Sci** 1989 Mar;78(3):264–6

TISSUE DONORS

Allogeneic bone marrow transplantation. Recent developments and the potential expansion of the donor pool. Prentice HG, et al. **Acta Oncol** 1988;27(5):567–70
Effects of contrast media on renal graft function and survival after cerebral angiography of cadaveric donors. Hietala SO, et al. **Acta Radiol** 1989 May–Jun;30(3):317–9
Donor renal angiography: its influence on the decision to use the right or left kidney. Walker TG, et al. **AJR** 1988 Dec;151(6):1149–51
Renal transplantation from a blood group A1B donor to an A2B recipient: a case report. Albornoz G, et al. **Am J Hematol** 1989 Aug;31(4):286–7
Organ supply—whither growth? McDonald FD. **Am J Kidney Dis** 1988 Dec;12(6):552–4
Living-unrelated renal transplantation: results in 40 patients. Pirsch JD, et al. **Am J Kidney Dis** 1988 Dec;12(6):499–503
Fetal organ and xenograft transplantation. Drugan A, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):289–93
Adequacy of the ELISA test for screening corneal transplant donors. Goode SM, et al. **Am J Ophthalmol** 1988 Oct 15; 106(4):463–6
The multiple organ donor: identification and management [published erratum appears in Ann Intern Med 1989 Jul 15;111(2):189] Soifer B, et al. **Ann Intern Med** 1989 May 15;110(10):814–23 (47 ref.)
Oocyte donation. The Norfolk Program. Rosenwaks Z, et al. **Ann N Y Acad Sci** 1988;541:728–41
Ovum donation. The state of the art. Schenker JG. **Ann N Y Acad Sci** 1988;541:742–54
The pathophysiological effects of brain death on potential donor organs, with particular reference to the heart. Cooper DK, et al. **Ann R Coll Surg Engl** 1989 Jul; 71(4):261–6
Heart/heart-lung transplantation. The domino procedure. Cavarocchi NC, et al. **Ann Thorac Surg** 1989 Jul; 48(1):130–3
Enhancement by dimethyl myleran of donor type chimerism in murine recipients of bone marrow allografts. Lapidot T, et al. **Blood** 1989 May 15;73(7):2025–32
Lymphocyte depletion of donor bone marrow by counterflow centrifugal elutriation: results of a phase I clinical trial. Wagner JE, et al. **Blood** 1988 Oct; 72(4):1168–76
Renal transplantation from HBsAg positive donors to HBsAg negative recipients [letter] al-Khader AA, et al. **BMJ** 1988 Oct 1;297(6652):854
Anencephalic organ donors [editorial] Salaman JR. **BMJ** 1989 Mar 11;298(6674):622–3
DNA-RFLP typing in the selection of related bone marrow donors [letter] Bidwell JL, et al. **Bone Marrow Transplant** 1987 Apr;1(4):413–4
B cell acute lymphoblastic leukemia (ALL) in donor cells following bone marrow transplantation for T cell ALL. Feig SA, et al. **Bone Marrow Transplant** 1988 Jul;3(4):331–7
Cytomegalovirus immunity and T lymphocytes in bone marrow donors and acute graft-versus-host disease. Gratama JW, et al. **Bone Marrow Transplant** 1986 Dec; 1(2):141–6
Assessment and management of donor pain following marrow harvest for allogeneic bone marrow transplantation. Hill HF, et al. **Bone Marrow Transplant** 1989 Mar;4(2):157–61
Histocompatible unrelated donors for bone marrow transplantation. Hows JM. **Bone Marrow Transplant** 1987 Feb;1(3):259–63 (26 ref.)
Experience with marrow harvesting from donors less than two years of age. Sanders J, et al. **Bone Marrow Transplant** 1987 Jun;2(1):45–50
Low rejection rate when using unrelated or haploidentical donors for children with leukemia undergoing marrow transplantation. Trigg ME, et al. **Bone Marrow Transplant** 1989 Jul;4(4):431–7
The unrelated bone marrow donor. van Rood JJ, et al. **Bone Marrow Transplant** 1988 Sep;3(5):371–7
Organizing organ donation. Rudge CJ. **Br J Hosp Med** 1988 Aug;40(2):127–30 (4 ref.)
Organ donors' rights [letter] Taylor RM. **Br J Hosp Med** 1988 Sep;40(3):232

Use of older patients as cadaveric kidney donors. Foster MC, et al. **Br J Surg** 1988 Aug;75(8):767–9
Public attitudes toward donation of body parts, particularly the eye. Basu PK, et al. **Can J Ophthalmol** 1989 Aug; 24(5):216–20
Renal angiography in potential living related renal donors in Iraq. Gleeson MJ, et al. **Clin Radiol** 1988 Nov; 39(6):625–7
Changes in glomerular filtration rate, lithium clearance and plasma protein clearances in the early phase after unilateral nephrectomy in living healthy renal transplant donors. Strandgaard S, et al. **Clin Sci** 1988 Dec;75(6):655–9
Donor eyes. A comparison of characteristics and outcomes for Eye Bank and local tissue. Chipman ML, et al. **Cornea** 1989;8(1):62–6
Clinical utilization of the artificial heart. Borovetz HS, et al. **Crit Rev Biomed Eng** 1989;17(2):179–201 (66 ref.)
John 15:13: a Protestant's view of organ donation. Walters M. **Del Med J** 1988 Sep;60(9):513–5
Do donor age and cold-ischemia time have a detrimental effect on early pancreas-allograft function? Schmid T, et al. **Diabetes** 1989 Jan;38 Suppl 1:4–6
Foreign compound metabolism studies with human liver obtained as surgical waste. Relation to donor characteristics and effects of tissue storage. Powis G, et al. **Drug Metab Dispos** 1988 Jul–Aug;16(4):582–9
Artificial agonadism and hormone replacement for oocyte donation. Meldrum DR, et al. **Fertil Steril** 1989 Sep; 52(3):509–11
Ethical and legal issues in human egg donation. Robertson JA. **Fertil Steril** 1989 Sep;52(3):353–63 (37 ref.)
A trial of superovulation in ovum donors undergoing uterine lavage. Sauer MV, et al. **Fertil Steril** 1939 Jan;51(1):131–4
Establishment of a nonanonymous donor oocyte program: preliminary experience at the University of Southern California. Sauer MV, et al. **Fertil Steril** 1989 Sep; 52(3):433–6
Anencephalic infants as sources of transplantable organs by the Ethics and Social Impact Committee, Transplant Policy Center, Ann Arbor, MI. **Hastings Cent Rep** 1988 Oct–Nov; 18(5):28–30
Organs from anencephalic infants: an idea whose time has not yet come. Fost N. **Hastings Cent Rep** 1988 Oct–Nov; 18(5):5–10
Anencephaly: selected medical aspects. Shewmon DA. **Hastings Cent Rep** 1988 Oct–Nov;18(5):11–9 (73 ref.)
Organ prolongation in anencephalic infants: ethical & medical issues. Walters JW, et al. **Hastings Cent Rep** 1988 Oct–Nov; 18(5):19–27 (30 ref.)
Personhood redux. Willke JC, et al. **Hastings Cent Rep** 1988 Oct–Nov;18(5):30–3 (20 ref.)
Neurosurgeons and the supply of human organs. Prottas JM, et al. **Health Aff (Millwood)** 1989 Spring;8(1):119–31
Social work and organ transplantation. Dhooper SS, et al. **Health Soc Work** 1989 May;14(2):115–21
Persistence of donor-specific class II antigens in allografted human heart two years after transplantation. Rose M, et al. **Hum Immunol** 1988 Nov;23(3):179–90
Oocyte donation in patients without ovarian function. Devroey P, et al. **Hum Reprod** 1988 Aug;3(6):699–704
Embryo donation in patients with primary ovarian failure. Devroey P, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:85–7
Microbial contaminants of donor eyes and their antimicrobial sensitivity patterns. Mahajan VM, et al. **Indian J Ophthalmol** 1987 Jul–Aug;35(4):194–6
Anencephalic donors: a new ethical challenge for clinical neuroscientists. Ivan LP. **J Child Neurol** 1989 Jul; 4(3):158–64 (69 ref.)
New application of the autotrans: autologous support of the organ donor and salvage of the donor's red blood cells for the transfusion support of organ recipients. Valbonesi M, et al. **J Clin Apheresis** 1988;4(4):166–8
Latex agglutination and enzyme-linked immunosorbent assays for cytomegalovirus serologic screening of transplant donors and recipients. Chou SW, et al. **J Clin Microbiol** 1988 Oct;26(10):2116–9
An evaluation of outpatient bone marrow harvesting. Brandwein JM, et al. **J Clin Oncol** 1989 May;7(5):648–50
My son, an organ donor. McBeath L. **J Fla Med Assoc** 1988 Oct;75(10):687–8
Relation between recipient: donor body size match and hemodynamics three months after heart transplantation. Hosenpud JD, et al. **J Heart Transplant** 1989 May–Jun; 8(3):241–3
Preexcitation syndrome in a donor heart. Thompson E, et al. **J Heart Transplant** 1989 Mar–Apr;8(2):177–80
Modified MHC restriction of donor-origin T cells in humans with severe combined immunodeficiency transplanted with haploidentical bone marrow stem cells. Roberts JL, et al. **J Immunol** 1989 Sep 1;143(5):1575–9
Development of donor-derived thymic lymphomas after allogeneic bone marrow transplantation in AKR/J mice. Yasumizu R, et al. **J Immunol** 1988 Sep 15;141(6):2181–6
Reactivation and recombination of multiple cytomegalovirus strains from individual organ donors. Chou SW. **J Infect Dis** 1989 Jul;160(1):11–5
Regulating the clinical uses of fetal tissue. A proposal for legislation. Hillebrecht JM. **J Leg Med** 1989 Jun; 10(2):269–322
Anencephalic infants as organ donors. Legal and ethical perspectives. Leggans T. **J Leg Med** 1988 Sep;9(3):449–65 (119 ref.)
Recognizing property interests in bodily tissues. A need for legislative guidance. Parker PM. **J Leg Med** 1989 Jun; 10(2):357–75
The status of anencephalic babies: should their bodies be used as donor banks? Davis A. **J Med Ethics** 1988 Sep; 14(3):150–3
Organ donations should not be restricted to relatives. Evans M. **J Med Ethics** 1989 Mar;15(1):17–20
Brain life and brain death—the anencephalic as an explanatory example. A contribution to transplantation. Bellér FK, et al. **J Med Philos** 1989 Feb;14(1):5–23 (40 ref.)
The use of fetal and anencephalic tissue for transplantation. Cefalo RC, et al. **J Med Philos** 1989 Feb;14(1):25–43
Moral pluralism and the use of anencephalic tissue and organs. Cutter MA. **J Med Philos** 1989 Feb;14(1):89–95
Anencephalic organ donation: a Japanese case. Kimura R. **J Med Philos** 1989 Feb;14(1):97–102
Brain life and brain death: a proposal for a normative agreement. Sass HM. **J Med Philos** 1989 Feb;14(1):45–59 (27 ref.)
Anencephalic infants as organ donors and the brain death standard. Walters JW, et al. **J Med Philos** 1989 Feb; 14(1):79–87
Anencephalics as organ donors. Zaner RM. **J Med Philos** 1989 Feb;14(1):61–78 (33 ref.)
Black American attitudes toward organ donation and transplantation. Roberts KY. **J Natl Med Assoc** 1988 Oct; 80(10):1121, 1123–4, 1126
Availability of donated oocytes from an ambulatory sterilization program. Feinman M, et al. **J Reprod Med** 1989 Jul;34(7):441–3
Relationship of exercise to semen parameters and fertility success of artificial insemination donors. Baker ER, et al. **J S C Med Assoc** 1988 Dec;84(12):580–2
Orthotopic cardiac transplantation for the neonate. The dilemma of the anencephalic donor. Mavroudis C, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):389–91
Vascular organ procurement in the trauma population. Morris JA Jr, et al. **J Trauma** 1989 Jun;29(6):782–7; discussion 787–8
Re: En bloc kidney and bladder transplantation from an anencephalic donor into an adult recipient [letter] Gómez-Campderá FJ, et al. **J Urol** 1988 Dec;140(6):1553–4
Outpatient angiographic evaluation of living renal donors. Spencer W, et al. **J Urol** 1988 Dec;140(6):1364–6
Flank donor nephrectomy: efficacy in the donor and recipient. Streem SB, et al. **J Urol** 1989 May; 141(5):1099–101
Approach to management of the heartbeating 'brain dead' organ donor. Darby JM, et al. **JAMA** 1989 Apr 21; 261(15):2222–8 (71 ref.)
The use of anencephalic infants as organ sources. A critique. Shewmon DA, et al. **JAMA** 1989 Mar 24–31; 261(12):1773–81 (129 ref.)
Kidney for sale by live donor. Brahams D. **Lancet** 1989 Feb 4;1(8632):285–6
Rising age limit for kidney donors? [letter] Donnelly PK, et al. **Lancet** 1989 Aug 12;2(8659):397
Increasing number of organ donors [letter] Newstead CG. **Lancet** 1989 Mar 25;1(8639):676
Liver transplantation from live donors [letter] Raia S, et al. **Lancet** 1989 Aug 26;2(8661):497
Organ donation—are we moving in the right direction? Krom RA. **Mayo Clin Proc** 1989 Jun;64(6):705–7
Retrieval of donor livers. Sterioff S, et al. **Mayo Clin Proc** 1989 Jan;64(1):112–5
Digital-subtraction angiography and renal donors [letter] Hibberd AD, et al. **Med J Aust** 1988 Dec 5–19; 149(11–12):722
Kidneys for sale: legislation is needed [editorial] Brahams D. **Med Leg J** 1989;57 (Pt 2):73–5
Turning death into life. An organ recipient's story. Gilbert D. **Mich Med** 1989 Apr;88(4):38–9
Procurement and allocation policies: should receiving depend on willingness to give? Muyskens J. **Mt Sinai J Med** 1989 May;56(3):202–6
On the use of anencephalic infants as organ donors. Medearis DN Jr, et al. **N Engl J Med** 1989 Aug 10;321(6):391–3
Experience with anencephalic infants as prospective organ donors. Peabody JL, et al. **N Engl J Med** 1989 Aug 10; 321(6):344–50
HIV transmission through kidney transplantation from a living related donor [letter] Quarto M, et al. **N Engl J Med** 1989 Jun 29;320(26):1754
Ethics of liver transplantation with living donors. Singer PA, et al. **N Engl J Med** 1989 Aug 31;321(9):620–2
Brain donation [letter] Stopa EG, et al. **N Engl J Med** 1989 Jan 5;320(1):62–3
A proposal to increase donations of cadaveric organs [letter] Terasaki PI. **N Engl J Med** 1989 Aug 31;321(9):618–9
Anencephalic newborns. Can organs be transplanted before brain death? Truog RD, et al. **N Engl J Med** 1989 Aug 10;321(6):388–91
Renal transplantation from anencephalic donors [letter] Gómez-Campderá FJ, et al. **Nephron** 1989;52(1):98–9
Teaching patients with life-threatening illnesses. Cardiovascular disease, transplantation, and organ donation. Barr WJ. **Nurs Clin North Am** 1989 Sep; 24(3):639–44
The identification and incidence of human immunodeficiency virus antibodies and hepatitis B virus antigens in corneal donors. Conway MD, et al. **Ophthalmology** 1988 Oct; 95(10):1463–7
The anencephalic controversy [letter] **Pediatrics** 1989 Apr; 83(4 Pt 2):640–4
Pediatric organ donor maintenance: pathophysiologic derangements and nursing requirements. Kissoon N, et al. **Pediatrics** 1989 Oct;84(4):688–93
Conceiving a fetus for bone marrow donation: an ethical problem in prenatal diagnosis. Clark RD, et al. **Prenat Diagn** 1989 May;9(5):329–34
Donors other than HLA-identical siblings. Buckner CD, et al. **Prog Clin Biol Res** 1989;309:383–90
Management of patients refractory t platelet transfusion—an evaluation of methods of donor selection. Schiffer CA. **Prog Hematol** 1987;15:91–113 (113 ref.)
Increasing organ donor awareness [editorial] Allyn KJ. **R I Med J** 1988 Sep;71(9):332–3
Incidental fibromuscular dysplasia in potential renal donors: long-term clinical follow-up. Cragg AH, et al. **Radiology** 1989 Jul;172(1):145–7
Depression and self-report disclos... after live related donor and cadaver renal transplants. Schlebusch L, et al. **S Afr Med J** 1989 May 20;75(10):490–3
Recipient selection for heart-lung transplantation. Harjula AL, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):193–6
Wanted: normal brains [news] Culliton BJ. **Science** 1989 Feb 17;243(4893):889
Increasing organ donation—a review. Ross WB. **Scott Med J** 1989 Jun;34(3):451–2 (10 ref.)
Eye banking in Texas. Farge EJ. **Tex Med** 1989 Feb; 85(2):33–5
Identification and management of organ donors. Trinkle JK, et al. **Tex Med** 1988 Dec;84(12):38–43 (7 ref.)
Donor pool sizes for HLA matching [editorial] Mickey R. **Transfusion** 1989 May;29(4):285–6
Hormonal therapy—a new concept in the management of organ donors. Proceedings of the fourth annual Christiaan N. Barnard Symposium. December 4, 1987, Oklahoma City, Oklahoma, USA. **Transplant Proc** 1988 Oct;20(5 Suppl 7):1–71
The living unrelated donor—a viable alternative for renal transplantation. Abouna GM, et al. **Transplant Proc** 1988 Oct;20(5):802–4
Donor core cooling for multiple organ retrieval: new application of portable cardiopulmonary bypass for transplantation. Adachi H, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1200–2
Flush pressure requirements for optimal cadaveric donor kidney preservation. Anaise D, et al. **Transplant Proc** 1988 Oct;20(5):891–4
Renal allograft recipient immunomodulation by concomitant immunosuppression and donor-specific transfusions. Anderson CB, et al. **Transplant Proc** 1988 Dec;20(6):1074–8
Selection criteria for liver transplantation donors. Ascher NL. **Transplant Proc** 1989 Jun;21(3):3482–3
Misdiagnosis of metastatic cerebral choriocarcinoma in female cadaver donors. Baquero A, et al. **Transplant Proc** 1988 Oct;20(5):776–7
The role of blacks in blood donation and the organ and tissue transplantation process. Bayton JA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1408
Kidney graft survival and immunologic changes in patients conditioned with donor-specific transfusions prior to transplantation. Bean MA, et al. **Transplant Proc** 1988 Dec; 20(6):1084–6
Marrow transplantation from unrelated HLA-matched volunteer donors. Beatty PG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2993–4
The role of donor and recipient factors in initial renal graft non-function. Belli LS, et al. **Transplant Proc** 1988 Oct; 20(5):861–4
Multiorgan donors: a limited resource. Bradley JW, et al. **Transplant Proc** 1988 Oct;20(5):846
Donor rating in human liver transplantation: correlation of oxygen consumption after revascularization with MEGX formation in donors. Burdelski M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2392–3
Priming of cytotoxic T lymphocyte precursors by donor-specific transfusions and modulation post transplant in relation to steroid withdrawal. Burlingham WJ, et al. **Transplant Proc** 1988 Dec;20(6):1166–8
The results of transplantation in blacks: just the tip of the iceberg. Callender CO. **Transplant Proc** 1989 Jun; 21(3):3407–10; discussion 3413–8
Renal function of transplanted kidneys from non-heart-beating cadaver donors. Castelao AM, et al. **Transplant Proc** 1988 Oct;20(5):841–3
Transplantation of single-donor purified canine islets to the spleen or renal subcapsular space with cyclosporine immunosuppression. Cattral MS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2695–6
Optimal use of cadaver donor kidneys: high-risk donors and low-risk recipients. Cecka JM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1417–8
A special strategy to increase the chance of finding cross-match negative kidneys for highly sensitized patients. Claas FH, et al. **Transplant Proc** 1988 Oct;20(5):947–8
Rapid changes in the work of an international organ exchange organization: Eurotransplant. Cohen B. **Transplant Proc** 1988 Oct;20(5):817–21
Hormonal therapy in the brain-dead experimental animal. Cooper DK, et al. **Transplant Proc** 1988 Oct;20(5 Suppl

7):51–4
The lung donor: special considerations. Cooper JD. **Transplant Proc** 1988 Oct;20(5 Suppl 7):17–8
Biopsy assessment of myocardial preservation in 160 human donor hearts. Darracott-Cankovic S, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):44–8
Back-table surgery for liver grafts. Feria G, et al. **Transplant Proc** 1988 Oct;20(5):1003–4
Clinical application of in situ renal cooling: experience with 61 cardiac-arrest donors. Fujita T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1215–7
Long-term renal, endocrine, and hematologic evaluation of kidney donors. Gonzalez R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1946–8
Does drug abuse in the donor have a harmful effect on kidney graft quality and graft survival? Groenewoud AF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1932–3
Successful living-unrelated donor kidney transplantation. Gülay H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2196
Living unrelated donor kidney transplantation. Haberal M, et al. **Transplant Proc** 1988 Oct;20(5):805
Living-related donor kidney transplantation. Haberal M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2194–5
Is donor nephrectomy a safe procedure in the elderly? Haberal M, et al. **Transplant Proc** 1988 Oct;20(5):791–3
Ultraviolet B-modified donor-specific blood transfusions and peritransplant cyclosporine in the induction of specific unresponsiveness to organ allografts. Hardy MA, et al. **Transplant Proc** 1988 Dec;20(6):1147–50 (20 ref.)
Donor criteria and procurement procedures for hearts and veins used as allograft transplants. Heacox AE, et al. **Transplant Proc** 1988 Oct;20(5):751–2
Serum amylase and plasma glucose levels in pancreas cadaver donors: correlation with functional status of the pancreatic graft. Hesse UJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2765–6
Pregraft donor strain transfusions of blood and red blood cells fail to decrease the rate of rejection of rodent foetal pancreas allografts. Hibberd AD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2721–2
Liver transplantation from non-heart-beating donors by core cooling technique. Hoshino T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1206–8
Evaluation of living-related kidney donors by intravenous digital subtraction angiography. Hosny MA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1949–50
Matched unrelated donor transplantation. Hows J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2923–5
Renal function and donor age: five years' experience with cyclosporin A. Hoyer PF, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1930–1
Fetal islet cell transplantation in China. Hu YF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2605–7
The effect of donor age and sex on cyclosporine associated nephrotoxicity. Iguro T, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1554–5
Clinical outcome in 36 patients after at least one and up to 5 years of steroid withdrawal based upon specific mixed lymphocyte reaction hyporesponsiveness toward the living related donor. Kahan BD, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1579–80
Alloreactive cytotoxic T-cell frequency analysis and HLA matching for bone marrow transplants from HLA matched unrelated donors. Kaminski E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2976–7
Pituitary function in brain-stem dead organ donors: a prospective survey. Keogh AM, et al. **Transplant Proc** 1988 Oct;20(5):729–30
The liver donor: special considerations. Klintmalm GB. **Transplant Proc** 1988 Oct;20(5 Suppl 7):9–11
Will there still be an organ shortage in the year 2000? Kootstra G. **Transplant Proc** 1988 Oct;20(5):809–11
Verapamil pretreatment of hemodynamically unstable donors prevents delayed graft function post-transplant. Korb S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1236–8
Intravenous drug abusers as renal allograft donors: a retrospective study. Korb S, et al. **Transplant Proc** 1988 Oct;20(5):753–4
Renal transplantation of organs from donors over 50 years of age. Korb SM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1940–1
Selective allogenic donor T cell subsets in experimental bone marrow transplantation. Korngold R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2940–2 (21 ref.)
A new approach to kidney procurement from non-heart-beating donors: core cooling on cardiopulmonary bypass. Koyama I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1203–5
Is there a future for fetal pancreas transplantation? Lafferty KJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2611–3
Hepatic functional difference between brain death hypotension and hypovolemic hypotension in liver donation. Lin H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2389–91
ABO-incompatible living related donor kidney transplantation: report of two cases. MacDonald AS, et al. **Transplant Proc** 1989 Apr;21(2):3362–3
Living related donor kidney grafts in the cyclosporine era. MacDonald AS, et al. **Transplant Proc** 1989 Apr; 21(2):3364–5
Issues related to race in transplantation. McDonald JC. **Transplant Proc** 1989 Jun;21(3):3411–2; discussion 3413–8
The heart donor: special considerations. Macris MP, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):12–6
Assessment of nucleotides, nucleosides, and oxypurines in human donor kidneys. Maessen JG, et al. **Transplant Proc** 1988 Oct;20(5):889–90
Fate of donor T cells in systemic graft-versus-host reaction. Matsubayashi Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3036–8
Organ transplants from out-of-hospital cardiac arrest patients. Mercatello A, et al. **Transplant Proc** 1988 Oct; 20(5):749–50
Analysis of donor and recipient variables and early graft function after orthotopic liver transplantation. Mimeault R, et al. **Transplant Proc** 1989 Apr;21(2):3355
Post transplantation donor-specific bone marrow transfusion in polyclonal antilymphocyte serum-treated recipients: the optimal cellular antigen for induction of unresponsiveness to organ allografts. Monaco AP, et al. **Transplant Proc** 1988 Dec;20(6):1207–12 (33 ref.)
Relevance of donor liver selection and graft viability in a liver transplantation program. Mora NP, et al. **Transplant Proc** 1988 Oct;20(5):978–9
En-bloc anencephalic cadaver donor renal transplantation. Nezamuddin NM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1934–5
Pancreas donor criteria. Nghiem DD, et al. **Transplant Proc** 1988 Oct;20(5):1007–9
Effects of donor size on long-term function of simultaneous renal and pancreatic transplants from pediatric donors. Nghiem DD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2841–2
Results of hormonal therapy in human brain-dead potential organ donors. Novitzky D, et al. **Transplant Proc** 1988 Oct; 20(5 Suppl 7):59–62
Extreme donor age in kidney transplantation. O'Connor KJ, et al. **Transplant Proc** 1988 Oct;20(5):770–1
Transmission of cancer with donor organs. Penn I. **Transplant Proc** 1988 Oct;20(5):739–40
Organ donation in three major US cities by race/ethnicity. Perez LM, et al. **Transplant Proc** 1988 Oct;20(5):815
The multiple organ donor: prospective multicenter analysis of outcome in the United States of America. Peters TG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1218–20
Multiple organ procurement and sharing: the SEOPF experience. Peters TG, et al. **Transplant Proc** 1988 Oct; 20(5):829–32
Donor data in liver grafts with primary non-function—a preliminary analysis by the European Liver Registry. Pruim J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2383–4
The validity of clinical parameters for the selection of liver donors. Pruim J, et al. **Transplant Proc** 1988 Oct;20(5):973
Donor age does not affect the outcome of cadaver renal transplantation. Rao KV, et al. **Transplant Proc** 1988 Oct; 20(5):773
Endocrine changes and haemodynamic stability after brain death. Robertson KM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1197–8
Improved graft survival after concanavalin A donor and graft pretreatment in sensitized recipients. Rodriguez S, et al. **Transplant Proc** 1988 Oct;20(5):959–61
Poor kidneys may negate the benefits of exchange of well-matched kidneys. Ross WB, et al. **Transplant Proc** 1988 Oct;20(5):851
A computerized kidney donor register—one-year review. Ross WB, et al. **Transplant Proc** 1988 Oct;20(5):816
Donor-specific cytotoxic T-cell alloreactivity in successfully engrafted high-risk cornea patients. Ruiz P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3153–5
Induction of suppressor T cells in vitro by an autologous alloreactive T cell line propagated from a DSBT-enhanced rat renal allograft. Ruiz P, et al. **Transplant Proc** 1989 Apr; 21(2):3289–91
Orthotopic small bowel transplantation in rats: pretreatment of the donor with the aim of ameliorating graft-versus-host disease. Saat RE, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2892–3
Renal function in recipients of kidney allografts from elderly donors: a multicenter study. Sabater R, et al. **Transplant Proc** 1988 Oct;20(5):774–5
Current strategy for donor-specific blood transfusions including a pre- and post transplant role for azathioprine. Salvatierra O Jr. **Transplant Proc** 1988 Dec;20(6 Suppl 8):37–41
The use of HLA-mismatched living related donors for renal transplantation is justified by the highly successful long-term results. Samhan M, et al. **Transplant Proc** 1988 Oct;20(5):800–1
Left ventricular pressure-volume relationships in brain-dead canine hearts—preoperative evaluation of donor hearts. Sasaki H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2570–2
Lidocaine metabolism as an index of liver function in hepatic transplant donors and recipients. Schroeder TJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2299–301
Role of anti-donor antibodies in bone marrow transplant rejection: evaluation by flow cytometry and effect of plasma exchanges. Scornik JC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2974–5
Ethics and priorities of organ procurement and allocation. Sells RA. **Transplant Proc** 1989 Feb;21(1 Pt 2):1391–4
Cadaver kidney donors with hypertensive histories. Smith RB, et al. **Transplant Proc** 1988 Oct;20(5):741–2
Who can serve as a pancreas donor? Steiner E, et al. **Transplant Proc** 1988 Oct;20(5):1005–6
Risk factors for rejection in a donor-specific transfusion plus azathioprine protocol. Stratta RJ, et al. **Transplant Proc** 1988 Dec;20(6):1092–5
Results of living-donor nephrectomy: considerations for the donor and recipient. Streem SB, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1951–2
Transplantation of kidneys harvested from donors over sixty years of age. Szmidt J, et al. **Transplant Proc** 1988 Oct; 20(5):772
Procurement of both liver and whole pancreas/duodenum allografts from a single donor without the use of interposition vascular grafts on transplantation. Thistlethwaite JR Jr, et al. **Transplant Proc** 1988 Oct; 20(5):833–4
Conventional management of the brain-dead potential multi-organ donor. Turcotte JG. **Transplant Proc** 1988 Oct; 20(5 Suppl 7):5–8
Pancreatic islet transplantation in rats following donor-specific and third party blood transfusions combined with immunosuppression. van der Hem LG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2717
Short- and long-term results with adult non-heart-beating donor kidneys. Vromen MA, et al. **Transplant Proc** 1988 Oct;20(5):743–5
Decreased incidence of acute tubular necrosis after cadaveric donor transplantation due to lidocaine donor pretreatment and low-dose dopamine infusion in the recipient. Walaszewski J, et al. **Transplant Proc** 1988 Oct;20(5):913
Effects of hormonal therapy on subsequent organ (kidney) storage in the experimental animal. Wicomb WN, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):55–8
Cardiopulmonary bypass with profound hypothermia: an optimal preservation method for multi-organ procurement. Williams GM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1199
Indication for living donation in kidney transplants. Wilms H, et al. **Transplant Proc** 1988 Oct;20(5):797–8
Assessment of tests for detecting cytomegalovirus antibody in transplant donors and recipients. Wreghitt T. **Transplant Proc** 1988 Oct;20(5):778
Postnephrectomy evaluation of living related donors. Yadav RV, et al. **Transplant Proc** 1988 Oct;20(5):799
Pretreatment of donor corneal endothelium with ultraviolet-B irradiation. Young E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3145–6
Hepatic artery reconstruction during liver transplantation. Brems JJ, et al. **Transplantation** 1989 Feb;47(2):403–6
Orthotopic liver transplantation resulting in amitriptyline toxicity in the recipient. Brems JJ, et al. **Transplantation** 1989 Jul;48(1):159–61
Racial perspectives on kidney transplant donors and recipients. Hagle ME, et al. **Transplantation** 1989 Sep; 48(3):421–4
A poorly differentiated lymphoma of donor origin in a renal allograft recipient. Hjelle B, et al. **Transplantation** 1989 Jun; 47(6):945–8
Recipient pool sizes for prioritized HLA matching. Mickey MR, et al. **Transplantation** 1989 Feb;47(2):401–3
Function of simultaneous kidney and pancreas transplants from pediatric donors. Nghiem DD, et al. **Transplantation** 1989 Jun;47(6):1075–9
The quick western blot, a novel transportable 50-minute HIV-1 antibody test. Application in organ procurement for transplantation. osther K, et al. **Transplantation** 1989 May;47(5):834–8
Nephrotic-range proteinuria after donor nephrectomy and transplantation in a monozygous twin recipient. Paul LC, et al. **Transplantation** 1989 Aug;48(2):348–50
Augmentation of donor-specific transfusion and cyclosporine effects with dietary linoleic acid. Perez RV, et al. **Transplantation** 1989 Jun;47(6):937–40
Living-related donors with bilateral multiple renal arteries. A twenty-year experience. Roza AM, et al. **Transplantation** 1989 Feb;47(2):397–9
Influence of cadaveric organ source on delayed renal allograft function. Scandling JD, et al. **Transplantation** 1989 Feb;47(2):245–9 (21 ref.)
Posttransplant antidonor antibodies and graft rejection. Evaluation by two-color flow cytometry. Scornik JC, et al. **Transplantation** 1989 Feb;47(2):287–90
Unconventional living kidney donors—attitudes and use among transplant centers. Spital A. **Transplantation** 1989 Aug;48(2):243–8
Portal vein thromboembolism of liver allografts from splenectomized donors. Yanaga K, et al. **Transplantation** 1989 Feb;47(2):399–400
[Methods for preparing and preserving skin allografts from live donors following the operation] Martinez A, et al. **Khirurgiia (Sofiia)** 1989;42(1):60–3 (Eng. Abstr.) **(Bul)**
[Bone marrow transplantation in pediatrics—problems in finding suitable donors] Májský A, et al. **Cesk Pediatr** 1988 Dec;43(12):736–8 **(Cze)**
[The Apple II e microcomputer as a databank for registering special donors] Láznička M, et al. **Vnitr Lek** 1989 Jan; 35(1):58–61 (Eng. Abstr.) **(Cze)**
[Removal of cadaver kidneys] Flagstad D. **Ugeskr Laeger** 1988 Sep 19;150(38):2261–2 **(Dan)**
[Anencephalic infants as organ donors; various ethical observations] de Wert GM, et al. **Ned Tijdschr Geneeskd** 1989 Apr 1;133(13):683–6 **(Dut)**
[Which kidneys can be used for transplantation?] Kootstra

G. Ned Tijdschr Geneeskd 1989 Jun 24;133(25):1253–6 (Dut)

[Anesthesia and bone marrow harvesting in children] Buisson C, et al. Ann Fr Anesth Reanim 1989;8(2):90–2 (Eng. Abstr.) (Fre)

[Systematic detection of anti-HIV antibodies in donors before keratoplasty: justification and practical modalities] Cohen SY, et al. J Fr Ophtalmol 1989;12(1):47–52 (38 ref.) (Eng. Abstr.) (Fre)

[Establishment of a registry of voluntary bone marrow donors] Raffoux C, et al. Rev Fr Transfus Immunohematol 1988 Oct;31(3):521–9 (Fre)

[Multi-organ procurement: an essential link in the chain of interdependence] Defraigne JO, et al. Rev Med Liege 1989 Feb 15;44(4):138–48 (Fre)

[Stabilization of the cardiovascular system in organ donors] Kirchner E. Anaesthesiol Reanim 1989;14(2):83–8 (Eng. Abstr.) (Ger)

[Organization of organ donation] Angstwurm H, et al. Chirurg 1988 Jul;59(7):444–6 (Ger)

[Technic of multiple organ procurement] Gubernatis G, et al. Chirurg 1988 Jul;59(7):461–8 (14 ref.) (Ger)

[A sure rapid technic of donor nephrectomy] Gubernatis G. Chirurg 1988 Jul;59(7):491–5 (Ger)

[Legal aspects of organ donation, procurement and transplantation] Liebhardt E, et al. Chirurg 1988 Jul; 59(7):441–3 (Ger)

[Viability of pancreatic transplants] Steiner E, et al. Chirurg 1988 Jul;59(7):469–71 (Eng. Abstr.) (Ger)

[Changed donor criteria for liver transplantation due to new preservation potentials (letter)] Bechstein WO, et al. Dtsch Med Wochenschr 1989 Aug 25;114(34):1305 (Ger)

[Transplantation of bone marrow from unrelated donors in chronic myeloid leukemia] Ehninger G, et al. Dtsch Med Wochenschr 1989 Jun 23;114(25):986–8 (Eng. Abstr.) (Ger)

[Organ donation from a brain-dead patient. Donor criteria, organ-preserving therapy and discussion with the relatives] Prien T, et al. Dtsch Med Wochenschr 1989 Jun 23; 114(25):998–1002 (26 ref.) (Ger)

[Virologic considerations in donor selection for allogeneic keratoplasty] Bialasiewicz AA, et al. Klin Monatsbl Augenheilkd 1988 Jun;192(6):634–6 (Eng. Abstr.) (Ger)

[Consultation with the neurologist in transplantation medicine] Kascha S, et al. Wien Med Wochenschr 1988 Dec 31;138(23–24):617–21 (Eng. Abstr.) (Ger)

[Kidney transplantation from a related living donor—yes! From a non-related living donor—no? (editorial)] Weinstein T, et al. Harefuah 1988 Dec 15;115(12):403–4 (Heb)

[Forensic medicine and questions of medical treatment] Somogyi E. Orv Hetil 1988 Dec 25;129(52):2779–83 (Eng. Abstr.) (Hun)

[Anatomic variations of the renal veins in 97 living donors for renal transplantation] Hasegawa S, et al. Nippon Hinyokika Gakkai Zasshi 1988 Aug;79(8):1458–62 (Eng. Abstr.) (Jpn)

[Remarks on W. NasiŁowski and M. Legień's work entitled "Medico-legal aspects of cadaveric organ explantation"] Dziatkowiak AJ. Przegl Lek 1988;45(9):665–6 (Eng. Abstr.) (Pol)

[Procurement of organs for transplantation (letter)] Marek Z. Przegl Lek 1988;45(9):661–2 (Pol)

[Medico-legal aspects of cadaveric organ explantation] Nasiłowski W, et al. Przegl Lek 1988;45(9):663–4 (Eng. Abstr.) (Pol)

[Remarks on the discussion regarding the definition of death and organ donors for transplantation] Sych M. Przegl Lek 1988;45(9):667–9 (Eng. Abstr.) (Pol)

[Organ donation: a current problem] Chapchap P, et al. AMB Rev Assoc Med Bras 1988 Nov–Dec;34(6):190–2 (Por)

[kidney transplant: criteria for the selection of donors] Garcia VD, et al. AMB Rev Assoc Med Bras 1987 Sep–Oct; 33(9–10):207–9 (Por)

[Tolerance for bone marrow procurement in autologous donors studied by myelokaryocytapheresis] Rakhmatullaeva AR, et al. Gematol Transfuziol 1988 Jun; 33(6):62–3 (Rus)

[The possibilities of biological preservation of a multiple organ donor] Barinov EF. Grudn Khir 1988 Sep–Oct; (5):38–44 (Eng. Abstr.) (Rus)

[The kidney transplant in Spain: an applicable social challenge in danger?] Serrallach i Milá N. Actas Urol Esp 1988 Nov–Dec;12(6):491–2 (Spa)

[Ethics and organ transplant] Santiago Delpín EA. Bol Asoc Med P R 1989 May;81(5):180–2 (Spa)

[Liver transplant in children. Selection of receptors and donors] Casaubón-Garcín PR, et al. Bol Med Hosp Infant Mex 1989 Apr;46(4):298–302 (22 ref.) (Eng. Abstr.) (Spa)

[Pharmacokinetics of ampicillin in kidney donors and in children with kidney transplants] Lares-Asseff I, et al. Bol Med Hosp Infant Mex 1988 Jul;45(7):454–61 (Eng. Abstr.) (Spa)

[Aspects related to extraction and preservation in 60 cases of liver transplant] Mora NP, et al. Rev Esp Enferm Apar Dig 1989 Feb;75(2):119–22 (Eng. Abstr.) (Spa)

[Ethical guidelines in transplantation. The right of self-determination is decisive for organ donation. Agreement is to be assumed when patients have not stated otherwise] Lakartidningen 1989 Mar 15;86(11):980–1 (Swe)

[Medical ethics. Assume agreement to organ donation in unclear cases. That model is the best one from everyone's perspective] Persson I. Lakartidningen 1989 Apr 12; 86(15):1394–5 (Swe)

PSYCHOLOGY

Psychology's contribution to relieving the donor organ shortage: barriers from within. Olbrisch ME. Am Psychol 1989 Jan;44(1):77–8

Organ recovery coordinators can help family work through the grieving process. Sammons BH. AORN J 1988 Dec; 48(6):1181–2

Psychosocial variables associated with willingness to donate organs. Nolan BE, et al. Can Med Assoc J 1989 Jul 1; 141(1):27–32

Living, related kidney donors [letter] Morris P. Med J Aust 1988 Oct 3;149(7):396

Pre-operative anxiety of recipients and donors in renal transplantation from living relatives. Haruki S. Nippon Jinzo Gakkai Shi 1989 Feb;31(2):159–64

Attitudes and physical condition of unrelated bone marrow donors immediately after donation. Stroncek D, et al. Transfusion 1989 May;29(4):317–22

A study of donor families' reactions to letters from organ recipients. Bartucci MR, et al. Transplant Proc 1988 Oct; 20(5):786–90

The delicate question of the donor family. Buckley PE. Transplant Proc 1989 Feb;21(1 Pt 2):1411–2

Sectarianism, uncertainty, and fear: mechanisms that may reverse attitudes toward organ donation. Cantarovich F, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1409–10

US public opinion concerning the procurement and distribution of donor organs. Evans RW, et al. Transplant Proc 1988 Oct;20(5):781–5

The attitudes of young men to cadaveric organ donation and transplantation: the influence of background factors and information. Gäbel H, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1413–4

Mexican-American and Anglo-American attitudes toward organ donation. Johnson LW, et al. Transplant Proc 1988 Oct;20(5):822–3

Living kidney donation: still worth the risk. Spital A. Transplant Proc 1988 Oct;20(5):1051–8 (84 ref.)

[Problems of donations of organs from corpses 20 years after the first transplant in Italy] Fava E, et al. Minerva Chir 1989 Jan 31;44(1–2):51–3 (Ita)

[Psychological changes in kidney transplantation] Bošković S, et al. Acta Chir Iugosl 1988;35(1):113–22 (Eng. Abstr.) (Scr)

STATISTICS & NUMERICAL DATA

Transplants from living donors in the United Kingdom and Ireland: a centre survey. Donnelly PK, et al. BMJ 1989 Feb 25;298(6672):490–3

Extended donor criteria for heart transplantation. Schüler S, et al. J Heart Transplant 1988 Sep–Oct;7(5):326–30

Organ donation in three major American cities with large Latino and black populations. Perez LM, et al. Transplantation 1988 Oct;46(4):553–7

TISSUE EXTRACTS

ADMINISTRATION & DOSAGE

Myelin basic protein present in the acid extracts of rat hypothalami releases insulin and glucagon from isolated rat pancreatic islets. Leppäluoto J, et al. Acta Physiol Scand 1988 Oct;134(2):253–61

Plasma and pituitary gonadotropins and prolactin after hysterectomy and treatment with uterine extracts in female rats. A kinetic study. Biro J, et al. Exp Clin Endocrinol 1988 Dec;92(2):137–44

Labour induction by means of concurrent application of Prostin E2 in the form of gel and Prostin E2 vaginal tablets. Jovanović R, et al. Ginekol Pol 1988 Oct;59(10):601–5

[Antioxidant therapy in the complex treatment of late pregnancy toxemia] Shalina RI, et al. Akush Ginekol (Mosk) 1989 May;(5):37–41 (Eng. Abstr.) (Rus)

[Effect of medicinal leech preparations on indicators of atherogenesis] Baskova IP, et al. Kardiologiia 1989 May; 29(5):75–9 (Eng. Abstr.) (Rus)

[Bone regeneration after correcting bone defect using a brephotransplant with subsequent administration of the extract of xenogenic adrenal glands] Govallo VI, et al. Ortop Travmatol Protez 1988 Dec;(12):11–4 (Eng. Abstr.) (Rus)

[Therapeutic endoscopy in the complex treatment of patients with chronic gastroduodenal ulcer] Tsarev NI, et al. Vestn Khir 1989 Mar;142(3):28–31 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Bovine cartilage and marrow extract [letter] Berg PA, et al. Lancet 1989 Jun 3;1(8649):1275

Nephrotic syndrome after injections of bovine cartilage and marrow extract [letter] Dürk H, et al. Lancet 1989 Mar 18;1(8638):614

Nephrotic syndrome after injections of bovine cartilage and marrow extract [letter] Schacht E, et al. Lancet 1989 Apr 29;1(8644):963

[A new cause of occupational asthma in a pharmacist (letter)] Breton JL, et al. Presse Med 1989 Feb 25;18(8):433 (Fre)

[Side effects of a cartilage extract (letter)] Glogner P, et al. Dtsch Med Wochenschr 1989 Feb 24;114(8):319 (Ger)

[Side effects of a cartilage extract (letter)] Roetz R, et al. Dtsch Med Wochenschr 1989 May 19;114(20):809–10 (Ger)

[Study of the mechanism of hypertensive effect of FMRF-like peptides] Zhukovskiĭ SV, et al. Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR 1989;12(1):45–7 (Eng. Abstr.) (Rus)

[An anaphylactic reaction to the intravenous administration of solcoseryl] Boris IaI. Klin Khir 1989;(3):65–6 (Rus)

ANALYSIS

A quantitative solid-phase assay for identifying radiolabeled glycosaminoglycans in crude cell extracts. Rapraeger A, et al. Anal Biochem 1989 Jun;179(2):361–5

Existence of associated, non-associated, and oligomeric forms of human chorionic gonadotropin subunits in placental extracts. Tominaga N, et al. J Biochem (Tokyo) 1989 Jun; 105(6):992–7

Bacterial action of fertilization envelope extract from eggs of the fish Cyprinus carpio and Plecoglossus altivelis. Kudo S, et al. J Exp Zool 1989 May;250(2):219–28

Preparation of crude cell extract suitable for amplification of RNA by the polymerase chain reaction. Ferre F, et al. Nucleic Acids Res 1989 Mar 11;17(5):2141

[Colorimetric determination of glucose oxidase in enzymatic preparations and cellular extracts] Voget CE, et al. Rev Latinoam Microbiol 1988 Jan–Mar;30(1):47–51 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Sensitization to epithelial antigens in chronic mucosal inflammatory disease: immunochemical similarity of macromolecules in human colonic epithelium with murine intestinal epithelial cell-associated components (ECAC). Paul JW, et al. Immunology 1988 Dec;65(4):551–7

Immunoregulatory effects of catrix. Rosen J, et al. J Biol Response Mod 1988 Oct;7(5):498–512

Antinuclear antibody in juvenile rheumatoid arthritis sera reacts with 50–40 kDa antigen(s) found in HeLa nuclear extracts. Haber PL, et al. J Rheumatol 1989 Jul; 16(7):949–54

A nonimmunoglobulin precipitin to tissue extracts in pathological human sera. Kim DS, et al. Proc Soc Exp Biol Med 1988 Nov;189(2):196–200

[Effect of allogeneic tumor extracts on the development in calves of an experimental infection by the bovine leukemia virus] Kukaĭn RA, et al. Eksp Onkol 1989;11(3):26–8 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

[Isolation of low-molecular weight fractions from the splenic tissue of calves that inhibit the proliferation of leukemic cells in mice] Sheleg SV. Eksp Onkol 1989;11(2):48–51 (Eng. Abstr.) (Rus)

METABOLISM

Enhancement by extracts of mineralized tissues of protein production by human gingival fibroblasts in vitro. Somerman MJ, et al. Arch Oral Biol 1987;32(12):879–83

A soluble brain molecule related to epidermal growth factor receptor is a mitogen inhibitor for astrocytes. Nieto-Sampedro M, et al. J Neurosci Res 1989 Jan; 22(1):28–35

PHARMACOLOGY

On the mechanism of glycolysis stimulation by mitochondria from Guérin epithelioma. Tomasiak M, et al. Acta Biochim Pol 1988;35(3):177–90

Effect of supernatants of dermal leprosy granulomas on lymphocyte morphology and function. Narayanan RB, et al. Acta Leprol (Geneve) 1988 Jan–Mar;(108):17–27

Studies on hepatic hemopoiesis induced by immunization with syngeneic liver extracts in mice. Aizawa K, et al. Acta Pathol Jpn 1988 Sep;38(9):1105–18

Keratinocyte- and tumor-derived inducers of collagenase. Bauer EA, et al. Ann N Y Acad Sci 1988;548:174–9

Chondrocyte activation by a putative interleukin-1 derived from lapine polymorphonuclear leukocytes. Watanabe S, et al. Arch Biochem Biophys 1989 Apr;270(1):69–76

Neurotrophic action of Alzheimer's disease brain extract is due to the loss of inhibitory factors for survival and neurite formation of cerebral cortical neurons. Uchida Y, et al. Brain Res 1989 Feb 27;481(1):190–3

Spatial and temporal patterns of neurotrophic activities in rat adrenal medulla and cortex. Blottner D, et al. Brain Res Dev Brain Res 1989 Aug 1;48(2):243–53

Cultured cell extracts support organelle movement on microtubules in vitro. Dabora SL, et al. Cell Motil Cytoskeleton 1988;10(4):482–95

Inhibitory effect of extracts of muscles of mackerel (Scomber japonicus Houttuyn) on hepatic glycogenolysis in rats. Matsuda R, et al. Chem Pharm Bull (Tokyo) 1989 Feb;

37(2):490–2
Effects of repeated administration of deer antler extract on biochemical changes related to aging in senescence-accelerated mice. Wang BX, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2587–92
Stimulating effect of deer antler extract on protein synthesis in senescence-accelerated mice in vivo. Wang BX, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2593–8
Low-molecular-weight membrane component inhibits the metastatic phenotype of B16–F10 melanoma. Keren Z, et al. **Clin Exp Metastasis** 1989 May–Jun;7(3):315–28
Effect of Solcoseryl on cadaveric split-skin oxygen consumption during 4 degrees C storage and in frozen biopsies. Alsbjörn BF, et al. **Cryobiology** 1989 Apr; 26(2):119–23
Effect of pineal treatment on rat HDL-cholesterol under basal conditions and under stimulation with HCG. Damian E, et al. **Endocrinologie** 1989 Jan–Mar;27(1):9–16
Facilitation of [3H]acetylcholine and [3H]5-hydroxytryptamine release from rat cerebral cortex synaptosomes by a factor extracted from the skin of the Australian frog Pseudophryne coriacea. Raiteri M, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):223–9
Induction of metaphase chromosome condensation in human sperm by Xenopus egg extracts. Lohka MJ, et al. **Exp Cell Res** 1988 Nov;179(1):303–9
A potent DNA synthesis inhibitor expressed by the immortal cell line SUSM-1. Spiering AL, et al. **Exp Cell Res** 1988 Nov;179(1):159–67
Effects of silica pretreatment on allogeneic tumour growth in mice treated with lentil lectin, spleen extract or alloantisera. Hilgert I, et al. **Folia Biol (Praha)** 1988; 34(4):266–76
Estradiol secretion by the ovarian tissue, in response to hypophyseal stimulation, during ontogenesis of the bullfrog. Hsu CY, et al. **Gen Comp Endocrinol** 1989 Apr; 74(1):161–4
Stimulating effects of bovine small intestine mucosal factors on rat hepatocyte development. Takahashi N, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):365–72
Anti-inflammatory effect of two earthworm potions in carrageenan pedal oedema test in rats [letter] Yegnanarayan R, et al. **Indian J Physiol Pharmacol** 1988 Jan–Mar; 32(1):72–4
Influence of an epidermal cell extract on skin healing and scar formation. Silver IA, et al. **Int J Tissue React** 1988; 10(6):381–5
Electrophoretic mobility of polymorphonuclear leukocytes response to scale extracts from psoriasis vulgaris. Higuchi M. **J Dermatol (Tokyo)** 1988 Oct;15(5):367–72
The self-priming action of LHRH increases the low pituitary LH and FSH response caused by ovarian factors: observations in vitro. de Koning J, et al. **J Endocrinol** 1989 Mar;120(3):439–47
Partial purification of (a) low molecular weight ovine pineal compound(s) with an inhibiting effect on the growth of human melanoma cells in vitro. Noteborn HP, et al. **J Neural Transm** 1988;73(2):135–55
The local modulation of vascular permeability by endothelial cell derived products. Chander CL, et al. **J Pharm Pharmacol** 1988 Oct;40(10):745–6
The effects of "matrigenin" activity from bovine bone on the glycosaminoglycans of bovine articular cartilage in culture. A model for cartilage repair by bone derived factors. Brown S, et al. **J Rheumatol** 1989 Feb;16(2):209–16
Effects of rat platelet extracts and human platelet-derived growth factor on megakaryocytopoiesis in vitro. Uyar R, et al. **J Surg Oncol** 1988 Dec;39(4):217–24
The effect of raveron on the detrusor muscle. Susset JG, et al. **J Urol** 1989 Feb;141(2):408–13
Ovarian nerve extracts influence androgen production by cultured ovarian thecal cells. Morley P, et al. **Neuroendocrinology** 1989 Jul;50(1):93–9
Pumiliotoxin B-like alkaloid in extracts of the skin of the Australian myobatrachid frog Pseudophryne coriacea: effects on the systemic blood pressure of experimental animals and the rat heart. Erspamer GF, et al. **Neuropharmacology** 1989 Apr;28(4):319–28
Maintenance of neuronal expression of calbindin by a muscular extract in cultures of chick dorsal root ganglion cells. Barakat I, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):1–5
Modulation of catecholamine metabolism in synaptosomes by a neuroregulatory factor from mammalian brain. Pastuszko A, et al. **Neurosci Lett** 1989 Mar 13;98(1):111–7
Inducing effect of skeletal muscle extracts on the appearance of calbindin-immunoreactive dorsal root ganglion cells in culture. Barakat I, et al. **Neuroscience** 1989;28(1):39–47
Tissue extract recovers cardiac calcium channels from 'run-down'. Kameyama M, et al. **Pflugers Arch** 1988 Aug; 412(3):328–30
Cardiotonic steroids extracted from rabbit uterine tissue and amnionic fluid. Katsiyannis WT, et al. **Proc West Pharmacol Soc** 1989;32:19–22
Pharmacological study of a traditional Chinese medicine: effect of bezoar bovis on the irregular beating pattern of cultured mouse myocardial cells. Takahashi K, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):317–30
The specific 3H-ouabain binding to Na+/K+-ATPase of the human placental tissue is inhibited by newborn plasma extracts. Paci A, et al. **Steroids** 1988 Oct;52(4):363–4
Effect of ethanol extract of cancer patients' serum on the vulnerability of lymphocytes to cortisol. Klein A, et al. **Tumour Biol** 1988;9(5):233–40
[Colony promoting activity in porcine kidney extract] Kashiwakura I, et al. **Yakugaku Zasshi** 1988 Oct; 108(10):984–8 (Eng. Abstr.) (Jpn)
[Effect of water activity on the growth of Campylobacter jejuni in brain–heart infusion] Uradziński J. **Rocz Panstw Zakl Hig** 1988;39(2):139–44 (Eng. Abstr.) (Pol)
[Survival of Campylobacter jejuni in brain and heart extracts of different pH] Uradziński J. **Rocz Panstw Zakl Hig** 1988; 39(4):319–24 (Eng. Abstr.) (Pol)
[Inhibition of kallikrein from human plasma by salivary gland secretion and extracts of the medicinal leech Hirudo medicinalis] Baskova IP, et al. **Biokhimiia** 1988 Sep; 53(9):1467–73 (Eng. Abstr.) (Rus)
[Stimulating effect of biologically active substances from the spleen on the functional activity of hepatocytes] Korpachev VV, et al. **Fiziol Zh** 1989 May–Jun;35(3):80–3 (Eng. Abstr.) (Rus)
[The blood coagulation system after the administration of splenic extract and its complex with heparin] Liapina LA, et al. **Gematol Transfuziol** 1988 Jul;33(7):33–6 (Eng. Abstr.) (Rus)
[Tissue specificity of the regulation of proliferative processes by brain and liver extracts] Vitvitskiĭ VN. **Izv Akad Nauk SSSR [Biol]** 1988 Sep–Oct;(5):694–700 (Eng. Abstr.) (Rus)
[Effect of splenin and splenic protein-free extracts on the adenosine deaminase activity in various organs of the rat] Korpachev VV, et al. **Ukr Biokhim Zh** 1989 May–Jun; 61(3):114–7 (Eng. Abstr.) (Rus)
[Hypothermic effect on mice of a 1–10 kD fraction of the small intestine of the hibernating suslik Citellus undulatus during hypoxia and hypercapnia] Ignat'ev DA, et al. **Zh Evol Biokhim Fiziol** 1989 May–Jun;25(3):318–23 (Eng. Abstr.) (Rus)
[Is the renin-angiotensin system implicated in the hypertensive effect of a water-soluble tissue extract?] de Gandarias JM, et al. **Rev Esp Fisiol** 1988 Jun;44(2):191–5 (Eng. Abstr.) (Spa)

PHYSIOLOGY

Presence of a substance P-like peptide in an acid extract of the intestinal bulb of the carp (Cyprinus carpio). Kitazawa T, et al. **Br J Pharmacol** 1988 Sep;95(1):39–48
The vasopressin-associated glycopeptide is not a prolactin-releasing factor: studies with lactating Brattleboro rats. Hyde JF, et al. **Endocrinology** 1989 Jul; 125(1):35–40
Sexual dimorphism of erythropoietin-degrading activity in mouse submaxillary gland extracts. Tam RC, et al. **Exp Hematol** 1989 Feb;17(2):160–3
Enzymic degradation of bromoxynil by cell-free extracts of Streptomyces felleus. Neužil J, et al. **Folia Microbiol (Praha)** 1988;33(5):349–54
Neonate plains garter snakes (Thamnophis radix) are attracted to conspecific skin extracts. Graves BM, et al. **J Comp Psychol** 1988 Sep;102(3):251–3
Plasminogen activator and prostaglandin E2 levels in human synovial fibroblasts. Differential stimulation by synovial activator and other cytokines. Leizer T, et al. **J Immunol** 1989 Aug 1;143(3):971–8
Distinct regulatory effects of IL-4 and TNF-alpha during CD3-dependent and CD3-independent initiation of human T-cell activation. Damle NK, et al. **Lymphokine Res** 1989 Summer;8(2):85–97

THERAPEUTIC USE

A single-blind, placebo-controlled study of glycosaminoglycan-peptide complex ('Rumalon') in patients with osteoarthritis of the hip or knee. Gramajo RJ, et al. **Curr Med Res Opin** 1989;11(6):366–73
Lymphokine activity in malignant effusions after intracavitary viral oncolysate. Freedman RS, et al. **Lymphokine Res** 1989 Summer;8(2):115–22
[The combined use of cryosurgery and solcoseryl in treating malignant neoplasms] Mosienko VS, et al. **Eksp Onkol** 1989; 11(2):69–71 (Eng. Abstr.) (Rus)
[Induction of the antileukemic activity in nonimmune allogeneic splenocytes using spleen hemoregulators] Svirnovskiĭ AI, et al. **Eksp Onkol** 1988;10(5):57–61 (Eng. Abstr.) (Rus)
[The potential for enhancing the therapeutic efficacy of antitumor preparations] Konovalova NP, et al. **Izv Akad Nauk SSSR [Biol]** 1989 May–Jun;(3):466–8 (Eng. Abstr.) (Rus)
[Solcoseryl in the treatment of peptic ulcer] Trusov VV, et al. **Klin Med (Mosk)** 1989 Jan;67(1):103–5 (Rus)
[Experimental therapy of thermal burns with biogenic peptide-containing preparations] Riabinin VE, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):39–42 (Eng. Abstr.) (Rus)
[Stimulation of the postradiation recovery of hematopoiesis in irradiated animals using a calf splenic extract] Olontseva OI, et al. **Radiobiologiia** 1989 May–Jun;29(3):403–6 (Eng. Abstr.) (Rus)
[Raveron in the treatment of male infertility] Stekhun FI. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):36–8 (Eng. Abstr.) (Rus)

TOXICITY

Kynurenic acid protects against neurotoxicity and lethality of toxic extracts from contaminated Atlantic coast mussels. Pinsky C, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):595–8
Injurious effect of eosinophil extract on the human nasal mucosa. Liu CM, et al. **Rhinology** 1988 Jun;26(2):121–32
Hemolytic and toxic properties of Hydra attenuata nematocysts. Klug M, et al. **Toxicon** 1989;27(3):325–39
[Effect of Bacillus sphaericus on warm-blooded animals] Ignat'ev VI, et al. **Gig Sanit** 1989 Apr;(4):21–2 (Rus)
[Hygienic problems of the study of microbial fungicides] Omel'ianets TG, et al. **Gig Sanit** 1988 Aug;(8):29–31 (Eng. Abstr.) (Rus)
[The nature of the biological effects of the mycoinsecticide entomophthorine] Sprudzha DR, et al. **Gig Sanit** 1989 Mar; (3):76–7 (Rus)

TISSUE FACTOR see **THROMBOPLASTIN**

TISSUE PRESERVATION

EDTA-polyvinylpyrrolidone as a preservation medium for immunohistochemistry. Stosiek P, et al. **Acta Histochem (Jena)** 1989;86(1):39–43
Survival of frozen bone allograft. Broström LA, et al. **Ann Chir Gynaecol** 1988;77(2):85–9
Pregnancies after human oocyte cryopreservation. Chen C. **Ann N Y Acad Sci** 1988;541:541–9
Survey on cryopreservation. van Steirteghem AC, et al. **Ann N Y Acad Sci** 1988;541:571–4
Contamination of K-Sol corneal storage medium with Propionibacterium acnes. Sieck EA, et al. **Arch Ophthalmol** 1989 Jul;107(7):1023–4
Noninvasive metabolic analysis of preserved rabbit cornea. Tsubota K, et al. **Arch Ophthalmol** 1988 Dec; 106(12):1713–7
Birth from replacement of frozen-thawed embryos after failure of gamete intra-fallopian transfer: a successful pregnancy case. Wong PC, et al. **Asia Oceania J Obstet Gynaecol** 1989 Mar;15(1):7–10
Transplantation of cryogenically preserved mandibular condyles in the adult and juvenile goat. Bifano CA, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A76–80
The role of allopurinol and oxygen free radical scavengers in liver preservation. Toledo-Pereyra LH. **Basic Life Sci** 1988;49:1047–52
Cryopreservation of embryos. Ball GD. **Clin Obstet Gynecol** 1989 Sep;32(3):598–604 (28 ref.)
Effect of Solcoseryl on cadaveric split-skin oxygen consumption during 4 degrees C storage and in frozen biopsies. Alsbjörn BF, et al. **Cryobiology** 1989 Apr; 26(2):119–23
Statistical methods for measuring interactions between protectors and sensitizers for freeze-thaw survival data. Chamberlin SR, et al. **Cryobiology** 1989 Aug;26(4):369–77
The effect of cryopreservation on ciliary beat frequency of human respiratory epithelium. Di Benedetto G, et al. **Cryobiology** 1989 Aug;26(4):328–32
The effect of pH on the viability of hypothermically stored rat hepatocytes. Fox LE, et al. **Cryobiology** 1989 Apr; 26(2):186–90
Free radical damage and organ preservation: fact or fiction? A review of the interrelationship between oxidative stress and physiological ion disbalance. Fuller BJ, et al. **Cryobiology** 1988 Oct;25(5):377–93 (72 ref.)
The bioenergetics of mitochondria after cryopreservation. Fuller BJ, et al. **Cryobiology** 1989 Aug;26(4):333–40
Effects of precryopreservation culture on survival of rat islets transplanted after slow cooling and rapid thawing. Warnock GL, et al. **Cryobiology** 1989 Apr;26(2):103–11
Long-term cryogenic storage of purified adult human islets of Langerhans. Kneteman NM, et al. **Diabetes** 1989 Mar; 38(3):386–96
Foreign compound metabolism studies with human liver obtained as surgical waste. Relation to donor characteristics and effects of tissue storage. Powis G, et al. **Drug Metab Dispos** 1988 Jul–Aug;16(4):582–9
Morphologic and functional studies of immature rat oocyte-cumulus complexes after cryopreservation. Pellicer A, et al. **Fertil Steril** 1988 Nov;50(5):805–10
Fine structure of early human embryos frozen with 1,2 propanediol. Ng SC, et al. **Gamete Res** 1988 Mar; 19(3):253–63
Physical factors are involved in the destruction of embryos and oocytes during freezing and thawing procedures. Ashwood-Smith MJ, et al. **Hum Reprod** 1988 Aug; 3(6):795–802
A system for long-term corneal perfusion. Brunette I, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1813–22
Thermal cycling effects on the stored rabbit cornea. Oak SS, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1584–7
Freeze/thaw-induced destabilization of the plasma membrane and the effects of cold acclimation. Steponkus PL, et al. **J Bioenerg Biomembr** 1989 Feb;21(1):21–41 (83 ref.)
Short segments of frozen saphenous allografts for construction of A-V fistula. Halevy A. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):494–5
Reconstitution of structure and cell function in human skin grafts derived from cryopreserved allogeneic dermis and

autologous cultured keratinocytes. Langdon RC, et al. **J Invest Dermatol** 1988 Nov;91(5):478–85

Postmortem– and cryostability of the potassium–evoked release of [3H]5–hydroxytryptamine from rat cerebral cortical miniprisms. Fowler CJ, et al. **J Neural Transm** 1989;75(2):135–48

Histological and biomechanical assessment of articular cartilage from stored osteochondral shell allografts. Kwan MK, et al. **J Orthop Res** 1989;7(5):637–44

Cryopreserved articular chondrocytes grow in culture, maintain cartilage phenotype, and synthesize matrix components. Schachar N, et al. **J Orthop Res** 1989; 7(3):344–51

Function of smooth muscle and nerve after small intestinal transplantation in the rat: effect of storing donor bowel in Eurocollins. Taguchi T, et al. **J Pediatr Surg** 1989 Jul; 24(7):634–8

The effect of storage conditions on amniotic fluid phosphatidylglycerol concentration. Douvas SG, et al. **J Perinatol** 1988 Fall;8(4):356–7

Increase in digyny explains polyploidy after in–vitro fertilization of frozen–thawed mouse oocytes. Carroll J, et al. **J Reprod Fertil** 1989 Mar;85(2):489–94

Cryopreserved and fresh antibiotic–sterilized valved aortic homograft conduits in a long–term sheep model. Hemodynamic, angiographic, and histologic comparisons. Jonas RA, et al. **J Thorac Cardiovasc Surg** 1988 Nov; 96(5):746–55

The use of non–viable glycerol–preserved cadaver skin combined with widely expanded autografts in the treatment of extensive third–degree burns. Kreis RW, et al. **J Trauma** 1989 Jan;29(1):51–4

Detection of measles virus RNA in paraffin–embedded tissue [letter] Jackson DP, et al. **Lancet** 1989 Jun 17;1(8651):1391

University of Wisconsin preservation solute and bradyarrhythmia [letter] Vanrenterghem Y, et al. **Lancet** 1989 Sep 23;2(8665):745

The effect of aging and storage conditions on excised tissues as monitored by longitudinal relaxation dispersion profiles. Fischer HW, et al. **Magn Reson Med** 1989 Mar;9(3):315–24

Effects of moist–chamber and McCarey–Kaufman medium storage on the metabolic status of the cornea: a 31P–magnetic resonance analysis. Lass JH, et al. **Ophthalmic Res** 1988;20(6):368–75

Lysosomal enzyme levels in corneal storage media. K–Sol versus McCarey–Kaufman. Morgan KM, et al. **Ophthalmology** 1988 Nov;95(11):1498–503

Bone marrow cryopreservation and clinical implications in autologous bone marrow transplantation. Tzeng CH, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Apr;12(2):88–94

Preservation of craniotomy bone flaps under the scalp [letter] Wilkinson HA. **Surg Neurol** 1989 May;31(5):412

Cryopreservation of animal cells. Armitage WJ. **Symp Soc Exp Biol** 1987;41:379–93 (89 ref.)

Mechanisms of cryoprotectant action. Ashwood–Smith MJ. **Symp Soc Exp Biol** 1987;41:395–406 (49 ref.)

Biochemical and functional aspects of recovery of mammalian systems from deep sub–zero temperatures. De Loecker R, et al. **Symp Soc Exp Biol** 1987;41:407–27 (113 ref.)

Mechanisms of freezing damage. Pegg DE. **Symp Soc Exp Biol** 1987;41:363–78 (27 ref.)

The effects of non–cryopreservation on colony formation of committed progenitor cells of bone marrow. Tajima T. **Tokai J Exp Clin Med** 1988 Feb;13(1):15–22

Studies of chemical toxicity to fresh and cryopreserved rat hepatocytes. Santone KS, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):370–6

Viability studies on cryopreserved isolated canine islets of Langerhans. Evans MG, et al. **Transplant Proc** 1989 Apr; 21(2):3368–70

Protective effect of alpha tocopherol on Ca2+ regulation by microsomal fractions isolated from preserved rat livers. Kawada T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1301–2

Chronic cyclosporine nephrotoxicity in renal transplantation: is it the effect of preservation? Kumar MS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1552–3

Measurement of viability in preserved kidneys with 31P NMR. Kunikata S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1269–71

Xanthine and hypoxanthine accumulation during storage may contribute to reperfusion injury following liver transplantation in the rat. Marzi I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1319–20

Vascular changes following hypothermic preservation. Neil DA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1389–90

Assessment of renal viability by high–field phosphorus–31 magnetic resonance spectrometry. Pomer S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1268

Advances in organ preservation. Southard JH. **Transplant Proc** 1989 Feb;21(1 Pt 2):1195–6 (13 ref.)

Pathologic recognition of preservation injury in hepatic allografts with six months follow–up. Tillery W, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1330–1

Preservation of hepatocyte suspensions at 4 degrees C. Lund P, et al. **Transplantation** 1988 Oct;46(4):563–5

The peracetic acid/low pressure cold sterilization—a new method to sterilize corticocancellous bone and soft tissue. von Versen R, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(1):18–21

[Optimal conditions for the storage of split–thickness skin at 4C] Zhu ZM. **Chung Hua Wai Ko Tsa Chih** 1989 Mar; 27(3):169–72, 190 (Eng. Abstr.) (Chi)

[Clinical study of cryo–preserved corneal grafts] Qiu XZ. **Chung Hua Yen Ko Tsa Chih** 1988 Mar;24(2):73–5 (Eng. Abstr.) (Chi)

[Endothelial viability of the human cornea preserved at +37 degrees centigrade] Delbosc B, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):379–83 (Eng. Abstr.) (Fre)

[Cialite preserved cartilage tissue for the correction of cleft–induced nose deformities] Michel C, et al. **Fortschr Kiefer Gesichtschir** 1989;34:124–7 (Ger)

[The effect of ascorbic acid in preservation solutions on the antioxidative potential of blood plasma during liver transplantation in miniature swine] Popov I, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(1):22–6 (Eng. Abstr.) (Ger)

INSTRUMENTATION

Storage of apheresis platelets in ethylene–vinyl acetate copolymer bags: relationship between the bag size and the number of platelets maintaining aerobic metabolism. Kouketsu K, et al. **Cryobiology** 1988 Oct;25(5):440–4

Storage of unamplified phage libraries on nylon filters. Whittaker PA, et al. **Nucleic Acids Res** 1989 Jun 12; 17(11):4406

Usefulness of rapid machine cooling in the procurement of livers. Asano T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1307–8

Cryopreservation: a useful technique for storing tissues for pharmacological investigations. Müller–Schweinitzer E. **Trends Pharmacol Sci** 1988 Jun;9(6):221–3 (24 ref.)

[A new method of bone sterilization] Jerosch J, et al. **Biomed Tech (Berlin)** 1989 May;34(5):117–20 (Eng. Abstr.) (Ger)

[Freeze preparation of full–thickness skin transplants] Bäumer F, et al. **Chirurg** 1988 Aug;59(8):565–6 (Ger)

[An ampule for conservation of vascular transplants] Azizov GA. **Klin Khir** 1988;(7):69 (Rus)

METHODS

Long–term follow–up of cryopreserved corneal endothelium. A specular microscopic study. Ruusuvaara P, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):687–91

MR imaging of the temporomandibular joint: comparison of images of autopsy specimens made at 0.3 T and 1.5 T with anatomic cryosections. Hansson LG, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1241–4

Sperm motile efficiency (SME) of fresh spermatozoa in a hypotonic medium correlates with their cryosurvival in fertile men and infertility patients (predicting test). Glander HJ, et al. **Andrologia** 1989 Jul–Aug;21(4):363–9

Survival of human sperm following controlled– and noncontrolled–rate cryopreservation. Hammitt DG, et al. **Andrologia** 1989 Jul–Aug;21(4):311–7

Successful in vitro fertilization of frozen–thawed rabbit and human oocytes. Diedrich K, et al. **Ann N Y Acad Sci** 1988; 541:562–70

Factors involved in the success of human embryo freezing. Does cryopreservation really improve the IVF results? Junca AM, et al. **Ann N Y Acad Sci** 1988;541:575–82

Cryopreservation of immature and mature hamster and human oocytes. Mandelbaum J, et al. **Ann N Y Acad Sci** 1988;541:550–61

Stopping biological time. The freezing of living cells. Mazur P. **Ann N Y Acad Sci** 1988;541:514–31 (41 ref.)

Human embryo freezing. Testart J, et al. **Ann N Y Acad Sci** 1988;541:532–40

Viable and nonviable aortic homografts in the subcoronary position: a comparative study. Bodnar E, et al. **Ann Thorac Surg** 1989 Jun;47(6):799–805; discussion 804–5

Cryopreserved valve conduits for outflow tract reconstruction in pediatric patients. Clarke DR. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S85–6

Actuarial analysis of a uniform and reliable preservation method for viable heart valve allografts. McNally R, et al. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S82–4

A comparison of two preservation media (CSM and K–Sol) by scanning electron microscopy of preserved corneal endothelium. Saggau DD, et al. **Arch Ophthalmol** 1989 Mar; 107(3):429–32

Isolated heart preservation for 24 hours: is O2 important? de Varennes B, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):357–8

Long term liver preservation using artificial blood substitutes. Nakajima I, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):347–54

Human neuronal cell viability demonstrated in culture after cryopreservation. Silani V, et al. **Brain Res** 1988 Nov 8; 473(1):169–74

Clinical experience with glycerol–preserved donor skin treatment in partial thickness burns. Hermans MH. **Burns Incl Therm Inj** 1989 Feb;15(1):57–9

Cryopreservation of human heart cells. Bustamante JO, et al. **Cryobiology** 1988 Oct;25(5):394–408

Effect of cryoprotective diluent and method of freeze–thawing on survival and acrosomal integrity of ram spermatozoa. Pontbriand D, et al. **Cryobiology** 1989 Aug; 26(4):341–54

Effects of chlorpromazine and methylprednisolone on perfusion preservation of rabbit livers. Sundberg R, et al. **Cryobiology** 1988 Oct;25(5):417–24

The calcium requirement for hypothermic storage of the cardiac explant. Batty PR, et al. **Curr Surg** 1989 Jul–Aug; 46(4):313–6

Dimethylthiourea flush improves transplant lung function following 24–hour cold preservation. Paull DE, et al. **Curr Surg** 1989 Jul–Aug;46(4):293–5

Prolonged cryopreservation of purified human pancreatic islets. Kneteman NM, et al. **Diabetes** 1989 Jan;38 Suppl 1:176–8

A simple method for estrogen receptor antigen preservation in cytologic specimens containing breast carcinoma cells. Redard M, et al. **Diagn Cytopathol** 1989;5(2):188–93

A simple method of bone marrow cryopreservation. Skóraki T, et al. **Folia Histochem Cytobiol** 1989;27(2):67–71

Reperfusion injury to endothelial cells following cold ischemic storage of rat livers. Caldwell–Kenkel JC, et al. **Hepatology** 1989 Sep;10(3):292–9

Successful embryo transfer of cryopreserved and in–vitro fertilized rabbit oocytes. al–Hasani S, et al. **Hum Reprod** 1989 Jan;4(1):77–9

In vitro preservation of traumatic human skin autografts in a massive degloving injury. Hoogeboom JE, et al. **J Am Osteopath Assoc** 1989 Aug;89(8):1066–8

Shrinkage of muscle fibres during the fixation of cadaveric tissue. Cutts A. **J Anat** 1988 Oct;160:75–8

Use of betapropiolactone to disinfect fresh tissue without impairing antigenicity: method applicable to human immunodeficiency virus (HIV) positive tissue. Chaplin AJ, et al. **J Clin Pathol** 1989 Mar;42(3):318–21

Use of Peldri II (a fluorocarbon solid at room temperature) as an alternative to critical point drying for biological tissues. Kennedy JR, et al. **J Electron Microsc Tech** 1989 Feb;11(2):117–25

Influence of the mode of preparation on the distortion and consistency of homologous costal cartilage implants. Adlington P, et al. **J Laryngol Otol** 1989 Jun;103(6):572–6

Long–term in vitro turtle preparation for the study of spinal organization. Lennard PR, et al. **J Neurosci Methods** 1989 Aug;29(2):165–9

Is wax on the wane? [editorial] Murray GL. **J Pathol** 1988 Nov;156(3):187–8

A new solution (UCLA formula) for lung preservation. Hachida M, et al. **J Thorac Cardiovasc Surg** 1989 Apr; 97(4):513–20

Extended preservation of human liver grafts with UW solution. Todo S, et al. **JAMA** 1989 Feb 3;261(5):711–4

The effect of steroids on the viability of endothelial cells of stored cornea. Lee JH, et al. **Korean J Ophthalmol** 1987 Jun;1(1):18–22

Cryopreservation of human parathyroid glands. Marrano D, et al. **Life Support Syst** 1983;1 Suppl 1:414–6

Effect of various storage methods on the dielectric properties of compact bone. Saha S, et al. **Med Biol Eng Comput** 1988 Mar;26(2):199–202

Buffered phenol formaldehyde (pH 7.0 and pH 5.5): improved fixation in an enclosed tissue processor. Slidders W, et al. **Med Lab Sci** 1989 Jan;46(1):74–6

Long–term preservation of homologous saphenous veins for vascular access in hemodialysis by deep–freezing [letter] Baraldi A, et al. **Nephron** 1988;50(4):402

Extending corneal storage with 2.5% chondroitin sulfate (K–Sol). Keates RH, et al. **Ophthalmic Surg** 1988 Nov; 19(11):817–20

Comparison of corneal storage in K–Sol and chondroitin sulfate corneal storage medium in human corneal transplantation. Lass JH, et al. **Ophthalmology** 1989 May; 96(5):688–97

A routine method for storing lymphocytes for repeated isolation of DNA. Jørgensen BR, et al. **Prenat Diagn** 1988 Nov;8(9):687–90

Human oocyte and embryo freezing. Trounson A, et al. **Prog Clin Biol Res** 1989;296:355–66

Storage of cells and tissues at hypothermia for clinical use. Fuller BJ. **Symp Soc Exp Biol** 1987;41:341–62 (79 ref.)

Successful allogeneic cryopreserved marrow transplantation. Lasky LC, et al. **Transfusion** 1989 Feb;29(2):182–4

Kidney and liver initial graft function under different procurement techniques. Belli LS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1209–10

Combined cold storage–perfusion preservation of the kidney with a new synthetic perfusate. Belzer FO, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1240–1

Enhanced myocardial viability with hypothermic storage in Euro–Collins solution. Dzielak DJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1364–5

Effective preservation of human pancreas grafts. Florack G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1369–71

Human pancreatic islet isolation and storage. Gray DW. **Transplant Proc** 1989 Feb;21(1 Pt 3):2608–10 (24 ref.)

A comparison of early function between kidney grafts protected with HTK solution versus Euro–Collins solution. Groenewoud AF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1243–4

Improved post–transplant renal function by recipient hemodilution and cold storage in a modified UW–preservation solution. Jacobsson J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1254–5

The 24– to 48–hour preservation of canine liver by simple cold storage using UW lactobionate solution. Jamieson NV, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1292–3

Evaluation of simplified variants of the UW solution using

the isolated perfused rabbit liver. Jamieson NV, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1294–5
Clinical results in liver transplantation using UW solution for extended preservation. Kalayoglu M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1342–3
A new simple two layer (Euro-Collins' solution/perfluorochemical) cold storage method for pancreas preservation. Kawamura T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1376–7
Responses of renal cortical mitochondria to cyclosporine following warm ischemia and cold preservation. Khauli RB, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1258–60
Preservation and reflow damage in liver transplantation in the pig. Koizumi M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1323–6
Prolonged cold storage and the cadaveric kidney transplant recipient. Koyle MA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1283–4
Intermediate normothermic perfusion during cold storage of ischemically injured kidneys. Maessen JG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1252–3
Prolonged rat cardiac preservation with UW lactobionate solution. Makowka L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1350–2
Protective effect of an organic germanium compound on warm ischemia and prolonged kidney preservation. Masaki Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1250–1
The isolated hepatocyte preservation model: a comparison of hypertonic citrate and lactobionate solutions. Michell ID, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1312–3
Prevention of pulmonary edema in autoperfusing heart–lung preparation by FUT–175 and leukocyte depletion. Naka Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1353–6
Long–term liver preservation using artificial blood substitute. Nakajima I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1314–5
Successful orthotopic liver transplantation after –4 degrees C preservation in rats. Nakajima Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1305–6
Liver preservation: 31P and 13C NMR spectroscopic assessment of liver energy and metabolism after cold storage in Collins, Marshall, Ringer's lactate, UW and modified UW solutions. Nedelec JF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1327–9
Decreased loss of liver nucleotides and energy charge during hypothermic preservation by donor pretreatment with glucose—a preliminary report. Palombo JD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1299–300
Pharmacological method (triple–drug therapy) for successful 24–hour preservation of liver allografts. Pereira F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1303–4
The Belzer–UW solution for effective long–term preservation in canine pancreas transplantation. Ploeg RJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1378–80
Efficacy of cytoprotective agents on the function of the hypothermically preserved dog kidney during normothermic reperfusion. Ploeg RJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1247–9
Vasculitis in pig kidney autografts from human albumin perfusion preservation. Roper L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1265
Changes in the weight of the pancreas during preservation in various solutions. Ruka MP, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1372–5
Resuscitation and preservation of agonally arrested hearts for transplantation: a study of 24 hour stored canine hearts. Shirakura R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1347–9
Prolonged simple cold storage does not adversely affect renal allograft outcome in patients receiving cyclosporine. Shoskes D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1280–1
Different cytoprotective effects of calcium blockers in hypothermic liver preservation. Umeshita K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1290–1
Biochemical differences between Ringer's lactate and Collins' solution in hepatic preservation: detection by 31P magnetic resonance spectroscopy. Vine W, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1338–9
Cold–storage preservation of the canine and rat pancreas prior to islet isolation. Munn SR, et al. **Transplantation** 1989 Jan;47(1):28–31
Optimization of cryopreservation procedures for rat and human hepatocytes. Loretz LJ, et al. **Xenobiotica** 1989 May; 19(5):489–98
[Methods for preparing and preserving skin allografts from live donors following the operation] Martinez A, et al. **Khirurgiia (Sofiia)** 1989;42(1):60–3 (Eng. Abstr.) (Bul)
[Cryopreservation of hemopoietic stem cells in autologous bone marrow transplantation] Simonsen AC. **Ugeskr Laeger** 1989 Jan 30;151(5):283–7 (Eng. Abstr.) (Dan)
[Principles of organ preservation] Moukarzel M, et al. **Ann Urol (Paris)** 1989;23(2):87–101 (89 ref.) (Eng. Abstr.) (Fre)
[Cryopreserved allografts in orthognathic surgery] Scheffer P, et al. **Rev Stomatol Chir Maxillofac** 1988;89(4):220–8 (Eng. Abstr.) (Fre)
[The hardness and osseous structure of preserved ear ossicles] Hüttenbriak KB. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct; 67(10):506–12 (Eng. Abstr.) (Ger)
[Experimental approaches to freezing preservation of full–thickness skin transplants] Bäumer F, et al. **Unfallchirurg** 1988 Jul;91(7):320–4 (Eng. Abstr.) (Ger)
[Cryopreservation of early human embryo stages] Vökler T, et al. **Zentralbl Gynakol** 1988;110(20):1290–5 (19 ref.) (Eng. Abstr.) (Ger)
[An experimental study on the heart and lung preservation and transplantation. Autoperfusion method and cardiac and pulmonary functions after transplantation] Nagabuchi M. **Hokkaido Igaku Zasshi** 1988 Sep;63(5):698–707 (Eng. Abstr.) (Jpn)
[Ultrastructure of a sciatic nerve allograft preserved at an ultralow temperature] Chalkovskiĭ IuB, et al. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):17–21 (Eng. Abstr.) (Rus)
[The viability of rat amd mouse embryos in low–temperature preservation] Mezhevikina LM, et al. **Ontogenez** 1988 Sep–Oct;19(5):491–4 (Eng. Abstr.) (Rus)

VETERINARY

[Preservation by deep freezing of oocytes and embryos] Bürkle K, et al. **DTW** 1989 Feb;96(2):57–9 (Eng. Abstr.) (Ger)

TISSUE PROCUREMENT see ORGAN PROCUREMENT

TISSUE SURVIVAL

Transcutaneous electrical nerve stimulation (TENS) increases survival of ischaemic musculocutaneous flaps. Kjartansson J, et al. **Acta Physiol Scand** 1988 Sep; 134(1):95–9
Organization, fine structure, and viability of the human adrenal medulla: considerations for neural transplantation. Hansen JT, et al. **Ann Neurol** 1988 Nov;24(5):599–609
Absorption of onlay bone grafts in immature rabbits: membranous versus enchondral bone and bone struts versus paste. Dado DV, et al. **Ann Plast Surg** 1989 Jul;23(1):39–48
A control unit for maximal–rate continuous tissue expansion (CTE). Logan SE, et al. **Biomed Sci Instrum** 1989;25:27–33
Survival of cultured allogeneic keratinocytes transplanted to deep dermal bed assessed with probe specific for Y chromosome. Brain A, et al. **BMJ** 1989 Apr 8; 298(6678):917–9
Survival of cultured allografts in patients with burns assessed with probe specific for Y chromosome. Burt AM, et al. **BMJ** 1989 Apr 8;298(6678):915–7
Static and dynamic computerised radioactive tracer studies, vital dye staining and theoretical mathematical calculations to ascertain the mode of survival of single cephalad channel venous island flaps. Thatte MR, et al. **Br J Plast Surg** 1989 Jul;42(4):405–13
Invasive bladder cancer. Strategies for cure and bladder preservation. Boileau MA, et al. **Hematol Oncol Clin North Am** 1988 Sep;2(3):447–55 (32 ref.)
HLA & other factors influencing survival of transplanted kidney. Chablani UA, et al. **Indian J Med Res** 1988 Sep; 88:235–9
Accumulation of polymorphonuclear leukocytes in reperfused ischemic canine myocardium: relation with tissue viability assessed by fluorine–18–2–deoxyglucose uptake. Wijns W, et al. **J Nucl Med** 1988 Nov; 29(11):1826–32
Frostbite injury: prediction of tissue viability with triple–phase bone scanning. Mehta RC, et al. **Radiology** 1989 Feb;170(2):511–4
Oxygen free radicals decrease survival time of isolated rat hearts. Semb AG, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):135–8
Preliminary clinical experience with pretransplant assessment of renal viability by phosphorus–31 magnetic resonance spectroscopy (31P–MRS). Bretan PN Jr, et al. **Transplant Proc** 1988 Oct;20(5):852–3
Viability studies on cryopreserved isolated canine islets of Langerhans. Evans MG, et al. **Transplant Proc** 1989 Apr; 21(2):3368–70
Useful parameters for predicting posttransplant liver viability. Hoshino T, et al. **Transplant Proc** 1988 Oct;20(5):987–91
Importance of pH in renal preservation. Nghiem DD, et al. **Transplant Proc** 1988 Oct;20(5):872–4
Assessment of renal viability for transplantation by high field 31P–NMR. Pomer S, et al. **Transplant Proc** 1988 Oct; 20(5):899–901
Pretransplant assessment of renal viability by phosphorus–31 magnetic resonance spectroscopy. Clinical experience in 40 recipient patients. Bretan PN JR, et al. **Transplantation** 1989 Jul;48(1):48–53
[Methods to measure blood supply and detect the viability of the osteomyocutaneous flap] Song BZ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):43–5, 63 (Eng. Abstr.) (Chi)
[Endothelial viability of the human cornea preserved at +37 degrees centigrade] Delbosc B, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):379–83 (Eng. Abstr.) (Fre)
[Graft patency and myocardial viability after aorto–coronary bypass surgery evaluated by exercise 201Tl myocardial SPECT] Yada T, et al. **J Cardiol** 1988 Jun;18(2):299–306 (Eng. Abstr.) (Jpn)
[Estimation of myocardial viability in left ventricular regions with akinetic wall motion by postextrasystolic potentiation using list–mode radionuclide ventriculography in an interesting case with silent ischemia and with premature ventricular complexes (quadrigeminy)] Ishida Y, et al. **Kaku Igaku** 1989 Mar;26(3):425–31 (Eng. Abstr.) (Jpn)
[Significance of cardiac blood pool scintigraphy using intravenous injection of isosorbide dinitrate for the evaluation of viability of ischemic myocardium] Kubota Y, et al. **Kaku Igaku** 1989 Mar;26(3):447–52 (Jpn)
[Quantification of severity and redistribution of ischemic and infarcted myocardium by Thallium–201 polar map: evaluation in patients with single vessel disease] Nakanishi F, et al. **Kaku Igaku** 1989 Mar;26(3):339–47 (Eng. Abstr.) (Jpn)
[Assessment of relative washout rate (rW–R) in stress T1–201 myocardial SPECT] Okuzumi I. **Kaku Igaku** 1989 Mar; 26(3):329–38 (Eng. Abstr.) (Jpn)
[Experimental studies on evaluation of myocardial viability using continuous intramyocardial pH measurements during hypothermic heart preservation] Saitoh K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1307–10 (Eng. Abstr.) (Jpn)
[A method for obtaining a long–lived intestinal tissue culture] Kuberger MB, et al. **Biull Eksp Biol Med** 1989 Apr; 107(4):503–5 (Eng. Abstr.) (Rus)
[Development of short–term habituation in surviving brain slices] Mokrushin AA, et al. **Fiziol Zh SSSR** 1988 Dec; 74(12):1723–30 (Eng. Abstr.) (Rus)
[Neuronal background activity in surviving slices of guinea pig visual cortex] Bortnik AT. **Neirofiziologiia** 1988; 20(6):817–20 (Eng. Abstr.) (Rus)
[The viability of rat amd mouse embryos in low–temperature preservation] Mezhevikina LM, et al. **Ontogenez** 1988 Sep–Oct;19(5):491–4 (Eng. Abstr.) (Rus)
[Use of mathematical diagnosis for determining the viability of the extremity in open fractures in an experiment] Boer VA. **Ortop Travmatol Protez** 1988 May;(5):28–31 (Eng. Abstr.) (Rus)
[Aspects related to extraction and preservation in 60 cases of liver transplant] Mora NP, et al. **Rev Esp Enferm Apar Dig** 1989 Feb;75(2):119–22 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Failure of pentoxifylline to enhance skin flap survival in the rat. Freedman AM, et al. **Ann Plast Surg** 1989 Jul; 23(1):31–4
Influence of cytoprotective agents on renal function after prolonged kidney preservation. Ploeg RJ, et al. **Transplant Proc** 1988 Oct;20(5):858–60
Extending the limits of renal preservation (greater than or equal to 40 hours)—effect of preservation method and immunosuppressive regimen. Toledo–Pereyra LH, et al. **Transplant Proc** 1988 Oct;20(5):938–9

RADIATION EFFECTS

[Postradiation changes of active ion transport systems of the CNS. The effect of superlethal doses of ionizing radiation on the Na,K pump in surviving brain slices] Dvoretskiĭ AI, et al. **Radiobiologiia** 1989 Jul–Aug;29(4):477–80 (Eng. Abstr.) (Rus)

TISSUE THERAPY

[Primary screening of the immunopharmacologic activity of Filatov tissue therapy preparations] Degtiarenko TV, et al. **Oftalmol Zh** 1989;(1):34–9 (Eng. Abstr.) (Rus)

METHODS

[Tissue therapy of trigeminal neuralgia] Pawela T, et al. **Pol Tyg Lek** 1988 Nov 14;43(46):1470–2 (Pol)

TISSUE-TYPE PLASMINOGEN ACTIVATOR see PLASMINOGEN ACTIVATOR, TISSUE-TYPE

TISSUE TYPING see HISTOCOMPATIBILITY TESTING

TITANIUM

Laser welding of titanium in dentistry. Sjögren G, et al. **Acta Odontol Scand** 1988 Aug;46(4):247–53
Development of cochlear–wall implants for electrical stimulation of the auditory nerve. Pfingst BE, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):210–8
Use of titanium wire in cervical spine fixation as a means to reduce MR artifacts. Mirvis SE, et al. **AJNR** 1988 Nov–Dec;9(6):1229–31
Osseointegrated titanium implants for maxillofacial protraction in monkeys. Smalley WM, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):285–95
Aligning, leveling, and torque control—a pilot study. Andreasen GF, et al. **Angle Orthod** 1989 Spring;59(1):51–60
Reactions of surrounding tissue to the cementless hip implant Ti–6Al–4V after an implantation period of several years. Autopsy studies in three cases. Lintner F, et al. **Arch Orthop Trauma Surg** 1988;107(6):357–63
Preliminary clinical experience with the titanium Greenfield vena caval filter. Greenfield LJ, et al. **Arch Surg** 1989 Jun; 124(6):657–9
A titanium–nickel alloy intravascular endoprosthesis. In vitro studies. Oku T, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):399–403
Commercially pure titanium Steinhäuser plate–screw system

for maxillofacial surgery. Breme J, et al. **Biomaterials** 1988 Jul;9(4):310–3
Interface between bone tissue and implants of solid hydroxyapatite or hydroxyapatite-coated titanium implants. de Lange GL, et al. **Biomaterials** 1989 Mar; 10(2):121–5
Recurrent bone regeneration in titanium implants. Experimental model for determining the healing capacity of bone using quantitative microradiography. Kälebo P, et al. **Biomaterials** 1988 Jul;9(4):295–301
Reactions in rat gluteal muscle to titanium implants. Lindberg LR, et al. **Biomaterials** 1988 Nov;9(6):547–9
Cell attachment of human gingival fibroblasts in vitro to porous-surfaced titanium alloy discs coated with collagen and platelet-derived growth factor. Lowenberg BF, et al. **Biomaterials** 1988 Jul;9(4):302–9
Wear of ion-implanted pure titanium against UHMWPE. Röstlund T, et al. **Biomaterials** 1989 Apr;10(3):176–81
Interaction between hydrogen peroxide and titanium: a possible role in the biocompatibility of titanium. Tengvall P, et al. **Biomaterials** 1989 Mar;10(2):118–20
Titanium-hydrogen peroxide interaction: model studies of the influence of the inflammatory response on titanium implants. Tengvall P, et al. **Biomaterials** 1989 Apr; 10(3):166–75
Antibiotic-metal interactions in saline medium. von Fraunhofer JA, et al. **Biomaterials** 1989 Mar;10(2):136–8
Japanese NiTi alloy wire: use of the direct electric resistance heat treatment method. Miura F, et al. **Eur J Orthod** 1988 Aug;10(3):187–91
Titanium-coated hollow screw and reconstruction plate system for bridging of lower jaw defects: biomechanical aspects. Sutter F, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):267–74
A prospective study of titanium ventilation tubes. Handler SD, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct; 16(1):55–60
Central tarsal implant in a racing greyhound. Yocham GD, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):840–2
Biologic response to hydroxylapatite-coated titanium hips. A preliminary study in dogs. Thomas KA, et al. **J Arthroplasty** 1989;4(1):43–53
Ultrastructural differences of the interface zone between bone and Ti 6Al 4V or commercially pure titanium. Johansson C, et al. **J Biomed Eng** 1989 Jan;11(1):3–8
Effects of a grooved titanium-coated implant surface on epithelial cell behavior in vitro and in vivo. Chehroudi B, et al. **J Biomed Mater Res** 1989 Sep;23(9):1067–85
Component wear of total knee prostheses using Ti-6A1-4V, titanium nitride coated Ti-6A1-4V, and cobalt-chromium-molybdenum femoral components. Peterson CD, et al. **J Biomed Mater Res** 1988 Oct; 22(10):887–903
Ultrastructural comparisons of ceramic and titanium dental implants in vivo: a scanning electron microscopic study. Steflik DE, et al. **J Biomed Mater Res** 1989 Aug; 23(8):895–909
Titanium-coated Dacron velour: a study of interfacial connective tissue formation. Yan JY, et al. **J Biomed Mater Res** 1989 Feb;23(2):171–89
The effect of hydroxyapatite coating on bone growth into porous titanium alloy implants. Oonishi H, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):213–6
Effects of fibrin sealant on the fixation of porous titanium and pyrolytic carbon implants. Hetherington VJ, et al. **J Foot Surg** 1989 Mar-Apr;28(2):145–50
Tissue response to implanted ceramic-coated titanium alloys in rats. Satomi K, et al. **J Oral Rehabil** 1988 Jul; 15(4):339–45
Correction of alveolar ridge deformities with titanium implants. Block PL, et al. **J Prosthet Dent** 1988 Aug; 60(2):221–5
Eleven-year study of hydroxyapatite implants. Denissen HW, et al. **J Prosthet Dent** 1989 Jun;61(6):706–12
Prosthetic management of unparallel titanium plasma-sprayed screw implants. Farish SE, et al. **J Prosthet Dent** 1989 Feb;61(2):129–32
Titanium implants in irradiated dog mandibles. Schweiger JW. **J Prosthet Dent** 1989 Aug;62(2):201–5
Irradiating with a prosthesis or metal pin in the radiation treatment field. Nelson TJ, et al. **Med Dosim** 1988 Sep; 13(3):113–8
Titanium wire internal fixation for stabilization of injury of the cervical spine: clinical results and postoperative magnetic resonance imaging of the spinal cord. Geisler FH, et al. **Neurosurgery** 1989 Sep;25(3):356–62
Titanium mesh and acrylic cranioplasty. Malis LI. **Neurosurgery** 1989 Sep;25(3):351–5
The use of nickel-titanium alloy in orthopedic surgery in China. Kuo PP, et al. **Orthopedics** 1989 Jan;12(1):111–6
Mandibular reconstruction with the titanium hollow screw reconstruction plate (THORP) system: evaluation of 62 cases. Vuillemin T, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):804–14
The reaction of bone to titanium, stainless steel and chrome/cobalt implants. Linder L. **Rev Chir Orthop** 1988; 74 Suppl 2:351–2
Corrosion current and pH rise around titanium coupled to dental alloys. Ravnholt G. **Scand J Dent Res** 1988 Oct; 96(5):466–72
Implantable drug delivery systems in computed tomography and magnetic resonance imaging—a comparison between titanium and stainless steel. Krog M, et al. **Ups J Med Sci** 1989;94(2):153–60
Histological analysis of a central tarsal implant in a racing greyhound. Bloebaum RD, et al. **Vet Rec** 1989 Apr 1; 124(13):339–42
[Rigid fixation of mandibular fractures with titanium miniplate] Sung DY, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;42(2):129–34 (Eng. Abstr.) (Chi)
[Experimental study of pathogenic effects of dusts of vanad-titan-magnetite on rats lungs] Song YK. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):87–9 (Eng. Abstr.) (Chi)
[Titanium osteo-integrated fixtures. Otologic applications] Manach Y, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(8):611–21 (Eng. Abstr.) (Fre)
[Titanium nitride cardiac pacemaker electrodes] Schaldach M, et al. **Biomed Tech (Berlin)** 1989 Jul-Aug;34(7–8):185–90 (Eng. Abstr.) (Ger)
[Morel-Fatio temporary management of the paretic eyelid] Bruck JC, et al. **Handchir Mikrochir Plast Chir** 1989 Jul; 21(4):219–22 (Eng. Abstr.) (Ger)
[Initial results following implantation of silastic wrist joint prostheses in patients with chronic polyarthritis with additional use of titanium grommets] Horibeck M, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):48–50 (Eng. Abstr.) (Ger)
[Titanium, a target for progress in dental casting] Nishimura F, et al. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):1–16 (13 ref.) (Jpn)
[Evaluation of super-elasticity characteristics of orthodontic Ni-Ti alloy wire] Yoneyama T, et al. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):93–101 (Eng. Abstr.) (Jpn)
[Craniofacial prostheses. Clinical application of titanium implants for retention of facial prostheses and bone-anchored hearing aids] Lyberg T, et al. **Tidsskr Nor Laegeforen** 1988 Sep 10;108(25):2009–12 (Eng. Abstr.) (Nor)
[Biomechanical substantiation of stability of intraosseous osteosynthesis using titanium rods] Sukhanov GA. **Ortop Travmatol Protez** 1988 Dec;(12):19–22 (Eng. Abstr.) (Rus)

ADMINISTRATION & DOSAGE

Effects of TiF4 solutions on root surfaces in vitro after different application periods. Skartveit L, et al. **Acta Odontol Scand** 1989 Feb;47(1):25–30
In vivo uptake and retention of fluoride after a brief application of TiF4 to dentin. Skartveit L, et al. **Acta Odontol Scand** 1989 Apr;47(2):65–8

ADVERSE EFFECTS

Epidemiologic study of workers exposed to titanium dioxide. Chen JL, et al. **J Occup Med** 1988 Dec;30(12):937–42
Aseptic synovitis. Barone JG, et al. **N J Med** 1989 Jun; 86(6):473–4
[Industrial hygiene and toxicology problems in the manufacture of titanium and its compounds (a review of the literature)] Felgin BG. **Gig Tr Prof Zabol** 1988 Jul; (7):30–3 (41 ref.) (Rus)

ANALYSIS

Examples of high-resolution electron microscopy (HREM) investigation of complex oxides related to perovskite. Hervieu M. **J Electron Microsc Tech** 1989 Mar;11(3):202–21
Quantitative design for photostabilization of nifedipine by using titanium dioxide and/or tartrazine as colourants in model film coating systems. Teraoka R, et al. **J Pharm Pharmacol** 1989 May;41(5):293–7
Subcellular distribution of titanium in the liver after treatment with the antitumor agent titanocene dichloride. A study using electron spectroscopic imaging. Köpf-Maier P, et al. **Virchows Arch [B]** 1989;57(4):213–22

DIAGNOSTIC USE

Titanium plates as bacterial adhesion substrates for scanning electron microscopy. Lentz DL, et al. **J Electron Microsc Tech** 1989 Jun;12(2):174–5

PHARMACOKINETICS

Effects of aerosol exposures to cadmium chloride on the clearance of titanium dioxide from the lungs of rats. Greenspan BJ, et al. **Exp Lung Res** 1988;14(4):491–9
Long-term retention of TiF4 and SnF2 after topical application to dentin in dogs. Tveit AB, et al. **Scand J Dent Res** 1988 Dec;96(6):536–40
Organ distribution and pharmacokinetics of titanium after treatment with titanocene dichloride. Köpf-Maier P, et al. **Toxicology** 1988 Oct;51(2-3):291–8

PHARMACOLOGY

Effects of inhaled titanium dioxide dust on the lung and on the course of experimental Legionnaires' disease. Baskerville A, et al. **Br J Exp Pathol** 1988 Dec;69(6):781–92
Ionic titanocene complexes: a new type of antitumor agent. Köpf-Maier P, et al. **Cancer Chemother Pharmacol** 1989; 24(1):23–7
Comparative study of the effect of chrysotile, quartz and rutile on the release of lymphocyte-activating factor (interleukin 1) by murine peritoneal macrophages in vitro. Godelaine D, et al. **IARC Sci Publ** 1989;(90):149–55
Titanium dioxide induced chemiluminescence of human polymorphonuclear leukocytes. Hedenborg M. **Int Arch Occup Environ Health** 1988;61(1-2):1–6
Inhibition of apatite formation by titanium and vanadium ions. Blumenthal NC, et al. **J Biomed Mater Res** 1989 Apr; 23(A1 Suppl):13–22
The in-vitro effect of a titanium implant on oral microflora: comparison with other metallic compounds. Joshi RI, et al. **J Med Microbiol** 1988 Oct;27(2):105–7
[Effect of titanium on the osteogenic and proliferative potentials of bone marrow cells in vitro] Zalka AI, et al. **Stomatologiia (Mosk)** 1989 May-Jun;68(3):42–4 (Eng. Abstr.) (Rus)

STANDARDS

[Ways to improve the quality of metal dentures with a titanium nitride coating] Bogatskii VA, et al. **Stomatologiia (Mosk)** 1988 Sep-Oct;67(5):52–3 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Tumor inhibition by titanocene complexes: influence on xenografted human adenocarcinomas of the gastrointestinal tract. Köpf-Maier P. **Cancer Chemother Pharmacol** 1989; 23(4):225–30

TOXICITY

Chronic inhalation exposure of rats to titanium dioxide dust. Trochimowicz HJ, et al. **J Appl Toxicol** 1988 Dec; 8(6):383–5
Kinetics of the bronchoalveolar leucocyte response in rats during exposure to equal airborne mass concentrations of quartz, chrysotile asbestos, or titanium dioxide. Donaldson K, et al. **Thorax** 1988 Jul;43(7):525–33
[Biocompatibility of microsurgical suture material modified with element-organic compounds] Makeev SD, et al. **Klin Khir** 1989;(1):19–20 (Eng. Abstr.) (Rus)

TN ELEMENTS see **DNA INSERTION ELEMENTS**

TNF-ALPHA see **TUMOR NECROSIS FACTOR**

TNF-BETA see **TUMOR NECROSIS FACTOR**

TNT see **TRINITROTOLUENE**

TOAD, ARGENTINE see **BUFO ARENARUM**

TOAD, COMMON see **BUFO BUFO**

TOAD, FIRE-BELLIED see **ANURA**

TOAD, GIANT see **BUFO MARINUS**

TOAD, MARINE see **BUFO MARINUS**

TOAD VENOMS see **AMPHIBIAN VENOMS**

TOADS AND FROGS see **ANURA**

TOADS, TRUE see **BUFONIDAE**

TOBACCO

see related
NICOTINE
SMOKING
TOBACCO USE DISORDER

Personality and smokeless tobacco use. Jacobs GA, et al. **Addict Behav** 1988;13(4):311–8
Predictors of chewing tobacco and cigarette use in a multiethnic public school population. Elder JP, et al. **Adolescence** 1988 Fall;23(91):689–702
Gustatory function and dietary habits in users and nonusers of smokeless tobacco. Mela DJ. **Am J Clin Nutr** 1989 Mar; 49(3):482–9
Acute effects of nicotine on resting metabolic rate in cigarette smokers. Perkins KA, et al. **Am J Clin Nutr** 1989 Sep; 50(3):545–50
On the measurement of tobacco use by adolescents. Validity of self-reports of smokeless tobacco use and validity of cotinine as an indicator of cigarette smoking. Bauman KE, et al. **Am J Epidemiol** 1989 Aug;130(2):327–37
Age of initiation and switching patterns between smokeless tobacco and cigarettes among college students in the United States. Glover ED, et al. **Am J Public Health** 1989 Feb;79(2):207–8
Smokeless tobacco use and attitudes toward smokeless tobacco among Native Americans and other adolescents in the northwest. Hall RL, et al. **Am J Public Health** 1988 Dec;78(12):1586–8
Cigarette and smokeless tobacco use among Connecticut adolescents. Kegeles SS, et al. **Am J Public Health** 1989 Oct;79(10):1413–4
Reactivation of imperialism (American tobacco in Taiwan) [letter] Sheh CY. **Am J Public Health** 1989 Jun;79(6):782
Smokeless tobacco: less seen at 1988 World Series [letter] Sussman S, et al. **Am J Public Health** 1989 Apr;79(4):521–2
Use of smokeless tobacco, cigarette smoking, and

hypercholesterolemia. Tucker LA. **Am J Public Health** 1989 Aug;79(8):1048–50

Particle size distribution of mainstream tobacco and marijuana smoke. Analysis using the electrical aerosol analyzer. Anderson PJ, et al. **Am Rev Respir Dis** 1989 Jul; 140(1):202–5

Artifactual chemiluminescence in the determination of nitrogen monoxide in the vapour phase of mainstream cigarette smoke. Houlgate PR, et al. **Analyst** 1989 Jan; 114(1):71–5

Daily use of smokeless tobacco: systemic effects. Benowitz NL, et al. **Ann Intern Med** 1989 Jul 15;111(2):112–6

Developmental neurotoxicity of nicotine, carbon monoxide, and other tobacco smoke constituents. Mactutus CF. **Ann N Y Acad Sci** 1989;562:105–22 (76 ref.)

Respiratory disease and lung function in a tobacco industry. Kjaergaard SK, et al. **Arch Environ Health** 1989 May–Jun; 44(3):164–70

Inhibition of human lymphokine–activated killer activity by smokeless tobacco (snuff) extract. Lindemann RA, et al. **Arch Oral Biol** 1988;33(5):317–21

Hydroxyethylvaline adduct formation in haemoglobin as a biological monitor of cigarette smoke intake. Bailey E, et al. **Arch Toxicol** 1988;62(4):247–53

Comparison of the inhalation toxicity of kretek (clove cigarette) smoke with that of American cigarette smoke. I. One day exposure. Clark GC. **Arch Toxicol** 1989; 63(1):1–6

Association of viral 126 kDa protein–containing X–bodies with nuclei in mosaic–diseased tobacco leaves. Wijdeveld MM, et al. **Arch Virol** 1989;104(3–4):225–39

Interaction of biogenic amines with components of cigarette smoke. Formation of cyanomethylamine derivatives. Yu PH, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3729–34

National Institutes of Health consensus statement. Health implications of smokeless tobacco use. NIH Consensus Development Panel. **Biomed Pharmacother** 1988;42(2):93–8 (0 ref.)

Data Note–15. Alcohol and tobacco tax in the European Community. Powell M. **Br J Addict** 1988 Aug;83(8):971–8

Snuff dipping and oral cancer in Sudan: a retrospective study. Elbeshir EI, et al. **Br J Oral Maxillofac Surg** 1989 Jun; 27(3):243–8

Smokeless tobacco [letter] **CA** 1989 Jan–Feb;39(1):62

Smokeless tobacco and oral disease. A review. Main JH, et al. **Can Dent Assoc J** 1988 Aug;54(8):586–91 (77 ref.)

The use of chewing tobacco and snuff in Canada, 1986. Millar WJ. **Can J Public Health** 1989 Mar–Apr;80(2):131–5

The tobacco industry provides a lesson in effective lobbying. Gray C. **Can Med Assoc J** 1989 Aug 15;141(4):321–2

Boycotting pharmacies that sell tobacco products [letter] Pinsky N. **Can Med Assoc J** 1989 Jul 15;141(2):96

Disparaging capital account [letter] Taylor M. **Can Med Assoc J** 1989 Jun 1;140(11):1260

An epidemiologic assessment of cancer risk in oral precancerous lesions in India with special reference to nodular leukoplakia. Gupta PC, et al. **Cancer** 1989 Jun 1; 63(11):2247–52

Smokeless tobacco use and oral epithelial dysplasia. Kaugars GE, et al. **Cancer** 1989 Oct 1;64(7):1527–30

Contribution of polycyclic aromatic compounds to the carcinogenicity of sidestream smoke of cigarettes evaluated by implantation into the lungs of rats. Grimmer G, et al. **Cancer Lett** 1988 Dec 15;43(3):173–7

A study of tobacco carcinogenesis. XLII. Bioassay in A/J mice of some structural analogues of tobacco–specific nitrosamines. Hecht SS, et al. **Cancer Lett** 1988 Sep–Oct; 42(1–2):141–5

Anticarcinogenic effect of betel leaf extract against tobacco carcinogens. Padma PR, et al. **Cancer Lett** 1989 Jun; 45(3):195–202

Evaluation of the transplacental tumorigenicity of the tobacco–specific carcinogen 4–(methylnitrosamino)–1–(3–pyridyl)–1–butanone in mice. Anderson LM, et al. **Cancer Res** 1989 Jul 15;49(14):3770–5

Formation of cigarette smoke–induced DNA adducts in the rat lung and nasal mucosa. Gupta RC, et al. **Cancer Res** 1989 Apr 15;49(8):1916–20

Snuff–induced carcinogenesis: effect of snuff in rats initiated with 4–nitroquinoline N–oxide. Johansson SL, et al. **Cancer Res** 1989 Jun 1;49(11):3063–9

Analyses of transplacentally induced sister chromatid exchanges and micronuclei in mouse fetal liver cells following maternal exposure to cigarette smoke. Karube T, et al. **Cancer Res** 1989 Jul 1;49(13):3550–2

Carcinogenicity studies of masheri, a pyrolysed product of tobacco. Kulkarni JR, et al. **Carcinogenesis** 1988 Nov; 9(11):2137–8

Benzo[a]pyrene–DNA–adducts and monooxygenase activities in mice treated with benzo[a]pyrene, cigarette smoke or cigarette smoke condensate. Bjelogrlic N, et al. **Chem Biol Interact** 1989;70(1–2):51–61

Clinical pharmacokinetics of theophylline and levels of alpha 1–acid glycoprotein in smokeless tobacco users. Parish RC, et al. **Chest** 1989 Jun;95(6):1253–6

Clinical picture of snuff dipper's lesion in Swedes. Mörnstad H, et al. **Community Dent Oral Epidemiol** 1989 Apr; 17(2):97–101

Public opinion on tobacco advertising, sports sponsorships and taxation prior to the Victorian Tobacco Act, 1987. Hill D. **Community Health Stud** 1988;12(3):282–8

Role of oxygen free radicals in the induction of sister chromatid exchanges by cigarette smoke. Lee CK, et al. **Environ Mol Mutagen** 1989;13(1):54–9

Cytogenetic effects of cigarette smoke on pulmonary alveolar macrophages of the rat. Rithidech K, et al. **Environ Mol Mutagen** 1989;14(1):27–33

Acute cigarette smoke exposure in dogs: the inflammatory response. Abrams WR, et al. **Exp Lung Res** 1988; 14(4):459–75

Dynamic study of respiratory functions in tobacco workers. Yanev I. **Folia Med (Plovdiv)** 1987;29(3):33–41

Tobacco–specific N–nitrosamines in the saliva of habitual male snuff dippers. Osterdahl BG, et al. **Food Addit Contam** 1988 Oct–Dec;5(4):581–6

The American Academy of Oral Medicine has adopted a position condemning the use of smokeless tobacco products [letter] Eskow RN. **Head Neck Surg** 1988 Jan–Feb; 10(3):204

Correlates of adolescents' use of smokeless tobacco. Colborn JW, et al. **Health Educ Q** 1989 Spring;16(1):91–100

Acute effects of tobacco inhalation in the form of 'snuff' on cardio–respiratory parameters. Nanda PK, et al. **Indian J Chest Dis Allied Sci** 1988 Jan–Mar;30(1):19–22

Immediate effect of tobacco chewing in the form of 'paan' on certain cardio–respiratory parameters. Nanda PK, et al. **Indian J Physiol Pharmacol** 1988 Apr–Jun;32(2):105–13

Smokeless tobacco use among American college students. Glover ED, et al. **J Am Coll Health** 1989 Sep;38(2):81–5

Patterns of smokeless tobacco use among university athletes. Levenson–Gingiss P, et al. **J Am Coll Health** 1989 Sep; 38(2):87–90

The contribution of low tar cigarettes to environmental tobacco smoke. Chortyk OT, et al. **J Anal Toxicol** 1989 May–Jun;13(3):129–34

Cigarette smoke extract increases albumin flux across pulmonary endothelium in vitro. Holden WE, et al. **J Appl Physiol** 1989 Jan;66(1):443–9

Overreporting of smokeless tobacco use by adolescent males. Cohen SJ, et al. **J Behav Med** 1988 Aug;11(4):383–93

Saliva cotinine and thiocyanate: chemical indicators of smokeless tobacco and cigarette use in adolescents. Noland MP, et al. **J Behav Med** 1988 Oct;11(5):423–33

Modulations in the biotransformation of tobacco extract and N'–nitrosonornicotine under differential dietary protein status. Ammigan N, et al. **J Biochem Toxicol** 1989 Spring; 4(1):7–13

Weak carcinogenic effect of masheri, a pyrolysed tobacco product, in mouse skin tumor models. Kulkarni J, et al. **J Cancer Res Clin Oncol** 1989;115(2):166–9

Carcinogenicity of Indian bidi and cigarette smoke condensate in Swiss albino mice. Pakhale SS, et al. **J Cancer Res Clin Oncol** 1988;114(6):647–9

The acute effects of smokeless tobacco on transport and barrier function of buccal mucosa. Tobey NA, et al. **J Dent Res** 1988 Nov;67(11):1414–21

Smokeless tobacco use among Ontario students. Adlaf EM, et al. **J Drug Educ** 1988;18(4):353–7

An interpretative review of smokeless tobacco research in the United States: Part II. Glover ED, et al. **J Drug Educ** 1989;19(1):1–19 (79 ref.)

An interpretative review of smokeless tobacco research in the United States: Part I. Glover ED, et al. **J Drug Educ** 1988;18(4):285–310 (140 ref.)

Media manipulation of adolescents' personal level judgements regarding consequences of smokeless tobacco use. Sussman S, et al. **J Drug Educ** 1989;19(1):43–57

Just too d—— much tobacco raised in Georgia! [editorial] Cohen SB. **J Med Assoc Ga** 1989 Sep;78(9):593–4

Congress considers eliminating nearly all tobacco advertising [news] Hensley T. **J Natl Cancer Inst** 1989 Sep 6; 81(17):1281–2

Alaskan teenagers receive awards for work to counter chew and snuff [news] Mahaney FX Jr. **J Natl Cancer Inst** 1989 Jun 21;81(12):894–6

Morphologic and immunohistochemical evidence of human papillomavirus capsid antigen in smokeless tobacco keratoses from juveniles and adults. Greer RO Jr, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):919–29 (66 ref.)

Clinical appearance of lesions associated with the use of loose and portion–bag packed Swedish moist snuff: a comparative study. Andersson G, et al. **J Oral Pathol Med** 1989 Jan;18(1):2–7

Effects of smokeless tobacco on the buccal mucosa of HMT rats. Chen SY. **J Oral Pathol Med** 1989 Feb;18(2):108–12

Snuff tumorigenesis: effects of long–term snuff administration after initiation with 4–nitroquinoline–N–oxide and herpes simplex virus type 1. Larsson PA, et al. **J Oral Pathol Med** 1989 Apr;18(4):187–92

Smokeless tobacco use in the United States: health implications and policy options. Backinger CL, et al. **J Public Health Policy** 1988 Winter;9(4):485–502 (80 ref.)

Smokeless tobacco use by youth in the U.S. Boyd GM, et al. **J Sch Health** 1989 May;59(5):189–94

Applying the theory of reasoned action to early adolescent tobacco chewing. Gerber RW, et al. **J Sch Health** 1988 Dec;58(10):410–3

Anti–smoking programs need to incorporate smokeless tobacco education. Glover ED. **J Sch Health** 1988 Sep; 58(7):266

The influence of self–esteem, parental smoking, and living in a tobacco production region on adolescent smoking behaviors. Murphy NT, et al. **J Sch Health** 1988 Dec; 58(10):401–5

Patterns and prevalence of smokeless tobacco use by high school seniors in New York. Olds RS. **J Sch Health** 1988 Nov;58(9):374–8

Leads from the MMWR. Prevalence of oral lesions and smokeless tobacco use in Northern Plains Indians. **JAMA** 1989 Jan 6;261(1):25–6

Warnings in tobacco advertisements: Marlboro Man vs Surgeon General [letter] Alwitt LF. **JAMA** 1989 May 12; 261(18):2633–4

Recall and eye tracking study of adolescents viewing tobacco advertisements. Fischer PM, et al. **JAMA** 1989 Jan 6; 261(1):84–9

Tobacco use by American Indian youth [letter] Moncher MS, et al. **JAMA** 1989 Sep 15;262(11):1469–70

Cigarette sales to minors through vending machines [letter] Reed WW. **JAMA** 1989 Aug 4;262(5):614–5

The Australian Tobacco Research Foundation [letter] **Med J Aust** 1988 Oct 3;149(7):394

Smoking and tobacco use by U.S. military personnel. Ballweg JA, et al. **Milit Med** 1989 Apr;154(4):165–8

Tobacco or health? Chapman RM. **Mo Med** 1989 Feb; 86(2):81

Tobacco smoke–induced clastogenicity in mouse fetuses and in newborn mice. Balansky RM, et al. **Mutat Res** 1989 May; 223(1):1–6

Human urine mutagenicity study comparing cigarettes which burn or only heat tobacco. Doolittle DJ, et al. **Mutat Res** 1989 Jun;223(2):221–32

Studies on the ability of smoke from different types of cigarettes to induce DNA single–strand breaks in cultured human cells. Fielding S, et al. **Mutat Res** 1989 Sep; 214(1):147–51

Cytogenetic activities of tobacco particulate matter (TPM) derived from a low to middle tar British cigarette. Lafi A, et al. **Mutat Res** 1988 Oct;201(2):365–74

The involvement of reactive oxygen species in oral cancers of betel quid/tobacco chewers. Stich HF, et al. **Mutat Res** 1989 Sep;214(1):47–61 (99 ref.)

Cigarette export promotion by the American government [letter] Wilde H. **N Engl J Med** 1989 Mar 2;320(9):600

Adolescent smokeless tobacco use. Olds RS. **N Y State Dent J** 1988 Dec;54(10):33–6

"Smokeless cigarette" faces legal challenge [news] **N Y State J Med** 1989 Jan;89(1):50

Tobacco use in New York State: 1982–1986 trends. **N Y State J Med** 1988 Sep;88(9):507–8

Smokeless tobacco use in the United States. **NCI Monogr** 1989;(8):1–105

Use of smokeless tobacco among male adolescents: concurrent and prospective relationships. Ary DV. **NCI Monogr** 1989;(8):49–55

Parent characteristics, perceived health risk, and smokeless tobacco use among white adolescent males. Bauman KE, et al. **NCI Monogr** 1989;(8):43–8

Use of smokeless tobacco by age, race, and gender in ten standard metropolitan statistical areas of the southeast United States. Bauman KE, et al. **NCI Monogr** 1989; (8):35–7

Marketing smokeless tobacco in California communities: implications for health education. Braverman MT, et al. **NCI Monogr** 1989;(8):79–85

Prevalence and predictors of smokeless tobacco use: Iowa's program against smoking. Burke JA, et al. **NCI Monogr** 1989;(8):71–7

Development and evaluation of a smokeless tobacco cessation program: a pilot study. Eakin E, et al. **NCI Monogr** 1989; (8):95–100

Advertising and promotion of smokeless tobacco products. Ernster VL. **NCI Monogr** 1989;(8):87–94 (59 ref.)

Use of smokeless tobacco in the United States: recent estimates from the current population survey. Marcus AC, et al. **NCI Monogr** 1989;(8):17–23

Smokeless tobacco: association with increased cancer risk. Mattson ME, et al. **NCI Monogr** 1989;(8):13–6 (31 ref.)

Smokeless tobacco use in the United States: the adult use of tobacco surveys. Novotny TE, et al. **NCI Monogr** 1989; (8):25–8

Smokeless tobacco use among adolescents: a theoretical overview. Orlandi MA, et al. **NCI Monogr** 1989;(8):5–12 (83 ref.)

Initiation and use of smokeless tobacco in relation to smoking. Peterson AV, et al. **NCI Monogr** 1989;(8):63–9

Epidemiology of smokeless tobacco use: a national study. Rouse BA. **NCI Monogr** 1989;(8):29–33

Native youth and smokeless tobacco: prevalence rates, gender differences, and descriptive characteristics. Schinke SP, et al. **NCI Monogr** 1989;(8):39–42

Activity involvement, risk–taking, demographic variables, and other drug use: prediction of trying smokeless tobacco. Sussman S, et al. **NCI Monogr** 1989;(8):57–62

Prevalence of all types of tobacco use in the state of Ohio. Ricer RE, et al. **Ohio Med** 1989 Mar;85(3):214–7

Effect of ingestion of smokeless tobacco on motor distal latency of the median nerve. Lester MJ, et al. **Percept Mot Skills** 1988 Aug;67(1):283–90

Tolerance to tobacco smoke– and nicotine–induced analgesia in rats. Mousa SA, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):265–8

Absorption of nicotine from a cigarette that does not burn tobacco. deBethizy JD, et al. **Pharmacology** 1988; 37(5):328–32

US trade policy on tobacco [letter] Houston TP.

Postgrad Med 1989 May 1;85(6):47–8
Smokeless tobacco use among ninth graders in a north–central metropolitan population: cross–sectional and prospective associations with age, gender, race, family structure, and other drug use. Murray DM, et al. **Prev Med** 1988 Jul;17(4):449–60
A statewide approach to adolescent tobacco–use prevention: the Minnesota–Wisconsin Adolescent Tobacco–Use Research Project. Murray DM, et al. **Prev Med** 1988 Jul; 17(4):461–74
Development of a validation test for self–reported abstinence from smokeless tobacco products: preliminary results. Robertson JB, et al. **Prev Med** 1988 Jul;17(4):496–502
Hemoglobin adducts of aromatic amines: associations with smoking status and type of tobacco. Bryant MS, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9788–91
Adolescent smokeless tobacco use: relationship between epidemiologic and cognitive factors. Williams NJ, et al. **Prog Clin Biol Res** 1989;293:211–20
Smokeless tobacco on campus. Lopez LC. **Psychol Rep** 1988 Oct;63(2):439–42
Nicotine replacement: ten–week effects on tobacco withdrawal symptoms. Gross J, et al. **Psychopharmacology (Berlin)** 1989;98(3):334–41
Topographical features of smokeless tobacco use. Hatsukami DK, et al. **Psychopharmacology (Berlin)** 1988;96(3):428–9
The effects of short–term smokeless tobacco deprivation on performance. Keenan RM, et al. **Psychopharmacology (Berlin)** 1989;98(1):126–30
Reflex bradypnea elicited by cigarette smoke inhaled through an isolated larynx. Lee LY, et al. **Respir Physiol** 1988 Sep; 73(3):301–10
Gender differences in tobacco use in Africa, Asia, the Pacific, and Latin America. Waldron I, et al. **Soc Sci Med** 1988; 27(11):1269–75
Effects of a 7–cent tobacco tax hike. Bullock B. **Tex Med** 1989 Apr;85(4):69–70
Inhaled cigarette smoke induces the formation of DNA adducts in lungs of rats. Bond JA, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):161–72
Effect of cigarette smoke condensate and vitamin A depletion on keratin expression patterns in cultured hamster tracheal epithelium. An immunohistomorphological study using monoclonal antibodies to keratins. Rutten AA, et al. **Virchows Arch [B]** 1988;56(2):111–7
The sin revenue enhancement or 'sin tax'. Atkinson BM. **W V Med J** 1989 Mar;85(3):102
Cigarette taxes—regressive or progressive? [letter] Leigh JP. **West J Med** 1989 Apr;150(4):467
Smokeless tobacco control. Report of a WHO Study Group. **WHO Tech Rep Ser** 1988;773:1–81 (130 ref.)
[Effect of cigarette–smoke tar on oxygenation activity of granulocytes detected by luminol– and lucigenin–enhanced chemiluminescence response of rabbit whole blood] Zhang RQ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Feb;11(1):25–9 (Eng. Abstr.) **(Chi)**
[Changes in the sensomotor cortex of offspring after chronic intoxication with tobacco smoke through the mother–fetus system] Kleshcheva RP. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):10–4 (Eng. Abstr.) **(Rus)**
[Effect of the level of "tar" in tobacco smoke on the risk of the occurrence of malignant tumors] Zaridze DG. **Eksp Onkol** 1989;11(1):3–6 (16 ref.) (Eng. Abstr.) **(Rus)**
[Acute and chronic changes in the respiratory system of workers exposed to tobacco dust] Dzhoze S, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):24–8 **(Rus)**
[Clinical course of lesions of the internal organs in smokers] Shul'tsev GP. **Klin Med (Mosk)** 1988 Oct;66(10):21–7 (19 ref.) **(Rus)**
[Effect of tobacco smoke on the antiaggregation activity of the gingiva] Silenko IuI. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):15–6 (Eng. Abstr.) **(Rus)**
[Effect of tobacco, herpes simplex virus and antioxidants on free–radical oxidation in the oral mucosa] Sulelmanova GG, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):12–4 (Eng. Abstr.) **(Rus)**
[Treatment of chronic bronchitis in tobacco smokers under sanitorium conditions] Siurin SA, et al. **Vrach Delo** 1989 May;(5):91–2 (Eng. Abstr.) **(Rus)**

ANALYSIS

Abrasives in snuff? Dahl BL, et al. **Acta Odontol Scand** 1989 Aug;47(4):239–43
Proposed definition of a smokeless tobacco user based on "potential" nicotine consumption. Schroeder KL, et al. **Addict Behav** 1988;13(4):395–400
Induction of a mixed ductal–squamous–islet cell carcinoma in a rat treated with a tobacco–specific carcinogen. Pour PM, et al. **Am J Pathol** 1989 Mar;134(3):627–31
Evidence for limits on the acceptability of lowest–tar cigarettes. Kozlowski LT. **Am J Public Health** 1989 Feb; 79(2):198–9
Determination of formaldehyde and acetaldehyde in mainstream cigarette smoke by high–performance liquid chromatography. Houlgate PR, et al. **Analyst** 1989 Mar; 114(3):355–60
Evaluation of an apparatus designed for the collection of sidestream tobacco smoke. Proctor CJ, et al. **Analyst** 1988 Oct;113(10):1509–13
Dioxins in cigarette smoke. Muto H, et al. **Arch Environ Health** 1989 May–Jun;44(3):171–4
The occurrence of N–nitrosocompounds [corrected] in zarda tobacco [published erratum appears in Cancer Lett 1989 Jan;44(1):81] Tricker AR, et al. **Cancer Lett** 1988 Sep–Oct; 42(1–2):113–8
The occurrence of N–nitroso compounds in kiwam tobacco. Tricker AR, et al. **Cancer Lett** 1989 Aug;46(3):221–4
Identification and analysis of a nicotine–derived N–nitrosamino acid and other nitrosamino acids in tobacco. Djordjevic MV, et al. **Carcinogenesis** 1989 Sep; 10(9):1725–31
Preformed tobacco–specific nitrosamines in tobacco—role of nitrate and influence of tobacco type. Fischer S, et al. **Carcinogenesis** 1989 Aug;10(8):1511–7
Tobacco–specific nitrosamines in mainstream smoke of West German cigarettes—tar alone is not a sufficient index for the carcinogenic potential of cigarette smoke. Fischer S, et al. **Carcinogenesis** 1989 Jan;10(1):169–73
Preparation by two–dimensional electrophoresis of proteins for antibody production: antibodies against proteins whose synthesis is reduced by auxin in tobacco mesophyll protoplasts. Meyer Y, et al. **Electrophoresis** 1988 Nov; 9(11):704–12
The occurrence of tobacco–specific nitrosamines in oral tobacco products and their potential formation under simulated gastric conditions. Tricker AR, et al. **Food Chem Toxicol** 1988 Oct;26(10):861–5
Quantitative analysis of the hydrogen peroxide formed in aqueous cigarette tar extracts. Nakayama T, et al. **Free Radic Biol Med** 1989;7(1):9–15
Liquid chromatographic determination of propyl paraben in cigarette filler. Castaño JI, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec;71(6):1115–7
Nicotine analysis of commercial tobacco products. Gottscho AM, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec; 71(6):1110–5
Analysis of selected elements in tobacco by wavelength dispersive X–ray fluorescence spectrometry. Martin JM. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):1038–41
Monitoring of harmful constituents of cigarettes and tobacco in Pakistan. Asghar M, et al. **JPMA** 1989 Mar;39(3):66–8
Penetration of malonic dialdehyde on filtration of tobacco smoke. Witas T, et al. **Nahrung** 1988;32(10):961–4
Nutritional and biological evaluation of tobacco leaf protein concentrate. Parameswaran M, et al. **Plant Foods Hum Nutr** 1988;38(4):269–76
[III. Trace elements in cigarettes] Argenziano Cutolo A, et al. **Boll Chim Farm** 1988 Jul–Aug;127(7–8):180–1 (Eng. Abstr.) **(Ita)**
[Medical consequences of polonium in snuff] Samuelsson C. **Lakartidningen** 1989 Jun 14;86(24):2290–1 **(Swe)**

ENZYMOLOGY

Detection of beta–1,3–glucanase activity after native polyacrylamide gel electrophoresis: application to tobacco pathogenesis–related proteins. Côté F, et al. **Electrophoresis** 1989 Jul;10(7):527–9
The induction of manganese superoxide dismutase in response to stress in Nicotiana plumbaginifolia. Bowler C, et al. **EMBO J** 1989 Jan;8(1):31–8
Purification of nitrate reductase from Nicotiana plumbaginifolia by affinity chromatography using 5'AMP–sepharose and monoclonal antibodies. Moureaux T, et al. **Eur J Biochem** 1989 Feb 15;179(3):617–20
Primary structure of a hormonally regulated beta–glucanase of Nicotiana plumbaginifolia. De Loose M, et al. **Gene** 1988 Oct 15;70(1):13–23

GENETICS

Expression of a potyvirus non–structural protein in transgenic tobacco. Graybosch R, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):425–32
Organization and expression of the Nicotiana chloroplast genome. Sugiura M. **Biotechnology** 1989;12:295–315 (108 ref.)
Cotranscription of the genes encoding two P700 chlorophyll a apoproteins with the gene for ribosomal protein CS14: determination of the transcriptional initiation site by in vitro capping. Meng BY, et al. **Curr Genet** 1988 Oct; 14(4):395–400
Expression of a mouse metallothionein gene in transgenic plant tissues. Pautot V, et al. **Gene** 1989 Apr 15;77(1):133–40
The nucleotide sequence of a soybean mosaic virus coat protein–coding region and its expression in Escherichia coli, Agrobacterium tumefaciens and tobacco callus. Eggenberger AL, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1853–60
Ribosomal protein S12 as a site for streptomycin resistance in Nicotiana chloroplasts. Galili S, et al. **Mol Gen Genet** 1989 Aug;218(2):289–92
Induced transposition of Ds by a stable Ac in crosses of transgenic tobacco plants. Hehl R, et al. **Mol Gen Genet** 1989 May;217(1):53–9
Organ regulated expression of Parasponia andersonii haemoglobin gene in transgenic tobacco plants. Landsmann J, et al. **Mol Gen Genet** 1988 Sep;214(1):68–73
Improved expression of streptomycin resistance in plants due to a deletion in the streptomycin phosphotransferase coding sequence. Maliga P, et al. **Mol Gen Genet** 1988 Nov; 214(3):456–9
Dissection of 5' upstream sequences for selective expression of the Nicotiana plumbaginifolia rbcS–8B gene. Poulsen C, et al. **Mol Gen Genet** 1988 Sep;214(1):16–23
Two tobacco DNA–binding proteins with homology to the nuclear factor CREB. Katagiri F, et al. **Nature** 1989 Aug 31;340(6236):727–30
Both RNA level and translation efficiency are reduced by anti–sense RNA in transgenic tobacco. Cornelissen M, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):833–43
Isolation and nucleotide sequence of cDNA clones for the pathogenesis–related proteins PR1a, PR1b and PR1c of Nicotiana tabacum cv. Xanthi nc induced by TMV infection. Cutt JR, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9861
Influence of flanking sequences on variability in expression levels of an introduced gene in transgenic tobacco plants. Dean C, et al. **Nucleic Acids Res** 1988 Oct 11; 16(19):9267–83
Isolation and sequencing of HRS60dim1, a dimeric member of the HRS60–family of a tobacco DNA repeat. Matyášek R, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4377
Are the PR1 proteins of tobacco involved in genetically engineered resistance to TMV? Carr JP, et al. **Virology** 1989 Apr;169(2):470–3
Resistance to TMV in transgenic plants results from interference with an early event in infection. Register JC 3d, et al. **Virology** 1988 Oct;166(2):524–32
[Production of paraquat resistant plants] Furusawa I. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3184–8 **(Jpn)**

IMMUNOLOGY

Cigarette smoke–sensitive asthma: challenge studies. Stankus RP, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):331–8

MICROBIOLOGY

Influence of Pseudomonas syringae culture conditions on initiation of the hypersensitive response of culture tobacco cells. Yucel I, et al. **Appl Environ Microbiol** 1989 Jul; 55(7):1724–9
Molecular cloning of a Pseudomonas syringae pv. syringae gene cluster that enables Pseudomonas fluorescens to elicit the hypersensitive response in tobacco plants. Huang HC, et al. **J Bacteriol** 1988 Oct;170(10):4748–56
Storage temperature and viability of sporangiospores of potentially human pathogenic species of Rhizomucor from Nigerian tobacco. Ogundero VW, et al. **J Basic Microbiol** 1989;29(3):171–5
Size reversion of African cassava mosaic virus coat protein gene deletion mutants during infection of Nicotiana benthamiana. Etessami P, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):277–89
A general method for the detection of potyviral gene products in plant protoplasts and tissue. Luciano CS, et al. **J Virol Methods** 1989 Jun;24(3):347–55
Identification of tomato golden mosaic virus–specific RNAs in infected plants. Sunter G, et al. **Virology** 1989 May; 170(1):243–50
Transgenic tobacco plants accumulating tobacco rattle virus coat protein resist infection with tobacco rattle virus and pea early browning virus. van Dun CM, et al. **Virology** 1988 Dec;167(2):649–52

TOBACCO DEPENDENCE see **TOBACCO USE DISORDER**

TOBACCO MOSAIC VIRUS

DRUG EFFECTS

Indolinone derivatives as potential antimicrobial agents. Singh SP, et al. **Zentralbl Mikrobiol** 1989;144(2):105–9

GENETICS

Rapid, random evolution of the genetic structure of replicating tobacco mosaic virus populations. Aldaoud R, et al. **Intervirology** 1989;30(4):227–33
Visualization of protein–nucleic acid interactions in a virus. Refined structure of intact tobacco mosaic virus at 2.9 A resolution by X–ray fiber diffraction. Namba K, et al. **J Mol Biol** 1989 Jul 20;208(2):307–25
The tobacco mosaic virus assembly origin RNA. Functional characteristics defined by directed mutagenesis. Turner DR, et al. **J Mol Biol** 1988 Oct 5;203(3):531–47
Stability and expression of bacterial genes in replicating geminivirus vectors in plants. Hayes RJ, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2391–403
A translational enhancer derived from tobacco mosaic virus is functionally equivalent to a Shine–Dalgarno sequence. Gallie DR, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(1):129–32
The expression of the TMV–specific 30–kDa protein in tobacco protoplasts is strongly and selectively enhanced by actinomycin. Blum H, et al. **Virology** 1989 Mar; 169(1):51–61
A tobacco mosaic virus–hybrid expresses and loses an added gene. Dawson WO, et al. **Virology** 1989 Sep;172(1):285–92
Sequence and structure at the genome 3' end of the U2–strain of tobacco mosaic virus, a histidine–accepting tobamovirus. García–Arenal F. **Virology** 1988 Nov;167(1):201–6
Nucleotide sequence and translation of satellite tobacco mosaic virus RNA. Mirkov TE, et al. **Virology** 1989 May; 170(1):139–46
Subcellular localization of tobacco mosaic virus minus strand

RNA in infected protoplasts. Okamoto S, et al. **Virology** 1988 Nov;167(1):194–200
Genetic heterogeneity of the RNA genome population of the plant virus U5–TMV. Rodríguez–Cerezo E, et al. **Virology** 1989 Jun;170(2):418–23
Hybrid brome mosaic virus RNAs express and are packaged in tobacco mosaic virus coat protein in vivo. Sacher R, et al. **Virology** 1988 Nov;167(1):15–24

GROWTH & DEVELOPMENT

Evidence that nucleocapsid disassembly and a later step in virus replication are inhibited in transgenic tobacco protoplasts expressing TMV coat protein. Osbourn JK, et al. **Virology** 1989 Sep;172(1):370–3
Resistance to TMV in transgenic plants results from interference with an early event in infection. Register JC 3d, et al. **Virology** 1988 Oct;166(2):524–32

IMMUNOLOGY

Limitations of different ELISA procedures for localizing epitopes in viral coat protein subunits. Dekker EL, et al. **Arch Virol** 1989;105(3–4):269–86
Spurious cross–reactions between plant viruses and monoclonal antibodies can be overcome by saturating ELISA plates with milk proteins. Zimmermann D, et al. **Arch Virol** 1989;106(1–2):15–22

METABOLISM

Time–resolved solution X–ray scattering of tobacco mosaic virus coat protein: kinetics and structure of intermediates. Potschka M, et al. **Biochemistry** 1988 Nov 1;27(22):8481–91
Structure and function of disk aggregates of the coat protein of tobacco mosaic virus. Raghavendra K, et al. **Biochemistry** 1988 Oct 4;27(20):7583–8
Localization of multiple TMV encapsidation initiation sites on rbcL gene transcripts. Atreya CD, et al. **Virology** 1989 Feb;168(2):388–92

PATHOGENICITY

Association of viral 126 kDa protein–containing X–bodies with nuclei in mosaic–diseased tobacco leaves. Wijdeveld MM, et al. **Arch Virol** 1989;104(3–4):225–39
Protection against tobacco mosaic virus in transgenic plants that express tobacco mosaic virus antisense RNA. Powell PA, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):6949–52
Are the PR1 proteins of tobacco involved in genetically engineered resistance to TMV? Carr JP, et al. **Virology** 1989 Apr;169(2):470–3

PHYSIOLOGY

Selective inhibition of photosystem II in spinach by tobacco mosaic virus: an effect of the viral coat protein. Hodgson RA, et al. **FEBS Lett** 1989 Mar 13;245(1–2):267–70
Tobacco mosaic virus replicase and replicative structures. Young N, et al. **J Cell Sci Suppl** 1987;7:277–85
Use of monoclonal antibodies in the purification of an inhibitor of virus replication by affinity chromatography. Gera A, et al. **J Gen Virol** 1989 May;70 (Pt 5):1293–6

RADIATION EFFECTS

UV laser induced RNA–protein crosslinks and RNA chain breaks in tobacco mosaic virus RNA in situ. Dobrov EN, et al. **Photochem Photobiol** 1989 May;49(5):595–8

ULTRASTRUCTURE

Birefringence of macromolecules. Wiener's theory revisited, with applications to DNA and tobacco mosaic virus. Oldenbourg R, et al. **Biophys J** 1989 Jul;56(1):195–205
Visualization of alpha–helices in tobacco mosaic virus by cryo–electron microscopy. Jeng TW, et al. **J Mol Biol** 1989 Jan 5;205(1):251–7

TOBACCO SMOKE POLLUTION

Questionnaire assessment of lifetime and recent exposure to environmental tobacco smoke. Coultas DB, et al. **Am J Epidemiol** 1989 Aug;130(2):338–47
Measurement of lifetime exposure to passive smoke. Cummings KM, et al. **Am J Epidemiol** 1989 Jul; 130(1):122–32
Dietary intake of carotene in nonsmokers with and without passive smoking at home. Sidney S, et al. **Am J Epidemiol** 1989 Jun;129(6):1305–9
Do women with childhood exposure to cigarette smoking have increased fecundability? Wilcox AJ, et al. **Am J Epidemiol** 1989 May;129(5):1079–83
Formaldehyde exposures from tobacco smoke: a review. Godish T. **Am J Public Health** 1989 Aug;79(8):1044–5 (18 ref.)
Biochemical validation of self–reported exposure to environmental tobacco smoke. Haley NJ, et al. **Environ Res** 1989 Jun;49(1):127–35
Does suggestibility modify acute reactions to passive cigarette smoke exposure? Urch RB, et al. **Environ Res** 1988 Oct;47(1):34–47
Assessment of passive and transplacental exposure to tobacco smoke. Sorsa M, et al. **IARC Sci Publ** 1988;(89):129–32
Passive exposure to cigarette smoke does not increase allergic sensitization in children. Ownby DR, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):634–8
Respiratory epithelial permeability after cigarette smoke exposure in guinea pigs. Burns AR, et al. **J Appl Physiol** 1989 May;66(5):2109–16
Assessment of exposure to environmental tobacco smoke using a high–performance liquid chromatographic method for the simultaneous determination of nicotine and two of its metabolites in urine. Parviainen MT, et al. **J Chromatogr** 1988 Sep 23;431(1):216–21
Determination of cotinine in urine using glass capillary gas chromatography and selective detection, with special reference to the biological monitoring of passive smoking. Skarping G, et al. **J Chromatogr** 1988 Nov 11;454:293–301
Serum and saliva concentrations of cotinine in smokers and passive smokers. Jarczyk L, et al. **J Clin Chem Clin Biochem** 1989 Apr;27(4):230–1
Passive smoking on commercial airline flights. Mattson ME, et al. **JAMA** 1989 Feb 10;261(6):867–72
Public attitudes to smoke–free zones in restaurants [letter] [published erratum appears in Med J Aust 1989 May 1;150(9):544] Borland R, et al. **Med J Aust** 1989 Apr 3; 150(7):407
Comparative bone marrow clastogenicity of cigarette sidestream, mainstream and recombined smoke condensates in mice. Mohtashamipur E, et al. **Mutagenesis** 1988 Sep; 3(5):419–22
A genotoxic assessment of environmental tobacco smoke using bacterial bioassays. Claxton LD, et al. **Mutat Res** 1989 Feb;222(2):81–99 (61 ref.)
Application of biochemical intake markers to passive smoking measurement and risk estimation. Jarvis MJ. **Mutat Res** 1989 Feb;222(2):101–10 (32 ref.)
Public exposure to environmental tobacco smoke. Löfroth G, et al. **Mutat Res** 1988 Nov;202(1):103–10
Environmental tobacco smoke: overview of chemical composition and genotoxic components. Löfroth G. **Mutat Res** 1989 Feb;222(2):73–80 (49 ref.)
Reaction time and movement time after active and passive smoking. Beh HC. **Percept Mot Skills** 1989 Apr;68(2):513–4
Relation between lead and cadmium in blood and the involuntary smoking of children. Willers S, et al. **Scand J Work Environ Health** 1988 Dec;14(6):385–9
[Current trends in the epidemiology of smoking, passive smoking and lung cancer] Abelin T. **Schweiz Rundsch Med Prax** 1989 Jan 31;78(5):87–92 (40 ref.) (Eng. Abstr.) **(Ger)**
[Changes in the levels of ACTH and cortisol after passive exposure to cigarette smoke in smokers and non–smokers] Sellini M, et al. **Boll Soc Ital Biol Sper** 1989 Apr;65(4):365–9 (Eng. Abstr.) **(Ita)**
[ACTH and cortisol after cigarette smoke exposure during the dexamethasone suppression test in smokers and non–smokers] Sellini M, et al. **Boll Soc Ital Biol Sper** 1989 Apr;65(4):377–80 (Eng. Abstr.) **(Ita)**
[Smoking and passive smoking during pregnancy and after labor: their effects on birth weight, duration of lactation and cotinine level in mother's milk and its urinary excretion by the infant] Dróżdż M, et al. **Ginekol Pol** 1988 Sep; 59(9):528–33 (Eng. Abstr.) **(Pol)**
[Atmospheric contamination, tobacco use and asthma (editorial)] Pérez Martín J. **Rev Alerg Mex** 1989 Jan–Feb; 36(1):3–4 **(Spa)**

ADVERSE EFFECTS

Exposure to environmental tobacco smoke and urinary excretion of cotinine and nicotine in children. Rylander E, et al. **Acta Paediatr Scand** 1989 May;78(3):449–50
Re: "Effects of passive smoking in the Multiple Risk Factor Intervention Trial" [letter] **Am J Epidemiol** 1989 Jan; 129(1):226–8
Factors associated with past household exposure to tobacco smoke. Sandler DP, et al. **Am J Epidemiol** 1989 Feb; 129(2):380–7
Reduced fecundability in women with prenatal exposure to cigarette smoking. Weinberg CR, et al. **Am J Epidemiol** 1989 May;129(5):1072–8
Environmental tobacco smoke and legal issues [letter] Halfen LN. **Am J Public Health** 1989 Oct;79(10):1433–4
Risk to passive smokers [letter] Holcomb LC. **Am J Public Health** 1989 Oct;79(10):1432–3
Elevated blood levels of carcinogens in passive smokers. Maclure M, et al. **Am J Public Health** 1989 Oct; 79(10):1381–4
Parental smoking and post–infancy wheezing in children: a prospective cohort study. Neuspiel DR, et al. **Am J Public Health** 1989 Feb;79(2):168–71
Deaths from all causes in non–smokers who lived with smokers. Sandler DP, et al. **Am J Public Health** 1989 Feb; 79(2):163–7
A comparison of the prevalence of respiratory illnesses among nonsmoking mothers and their children in Japan and Hong Kong. Koo LC, et al. **Am Rev Respir Dis** 1988 Aug;138(2):290–5
Parental smoking enhances bronchial responsiveness in nine–year–old children. Martinez FD, et al. **Am Rev Respir Dis** 1988 Sep;138(3):518–23
Environmental exposure to tobacco smoke and lung function in young adults. Masi MA, et al. **Am Rev Respir Dis** 1988 Aug;138(2):296–9
Stimulation of hamster pulmonary neuroendocrine cells and associated peptides by repeated exposure to cigarette smoke. Tabassian AR, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):436–40
Passive smoking—bronchial responsiveness and atopy. Tager IB. **Am Rev Respir Dis** 1988 Sep;138(3):507–9 (35 ref.)
Mothers who smoke and the lungs of their offspring. Moessinger AC. **Ann N Y Acad Sci** 1989;562:101–4
Exposure to passive cigarette smoking and child development. A critical review. Rush D, et al. **Ann N Y Acad Sci** 1989;562:74–100 (39 ref.)
Passive smoking affects endothelium and platelets. Davis JW, et al. **Arch Intern Med** 1989 Feb;149(2):386–9
Passive smoking in childhood. Landau L. **Aust Paediatr J** 1988 Oct;24(5):271–2 (14 ref.)
Passive smoking and middle ear effusion in children [letter] **BMJ** 1989 Jul 22;299(6693):258–9
Passive smoking, salivary cotinine concentrations, and middle ear effusion in 7 year old children. Strachan DP, et al. **BMJ** 1989 Jun 10;298(6687):1549–52
Lung cancer and passive smoking: predicted effects from a mathematical model for cigarette smoking and lung cancer. Darby SC, et al. **Br J Cancer** 1988 Dec;58(6):825–31
Cigarette smoke in the home environment: a public health concern? [letter] **Can J Public Health** 1988 Nov–Dec; 79(6):470–1
Domestic pollution as a factor causing respiratory health effects. Boleij JS, et al. **Chest** 1989 Sep;96(3 Suppl):368S–372S (33 ref.)
Synergistic effect of passive smoking and artificial feeding on hospitalization for respiratory illness in early childhood. Chen Y. **Chest** 1989 May;95(5):1004–7
Chronic airways disease. The smoking component. Crofton J, et al. **Chest** 1989 Sep;96(3 Suppl):349S–355S (108 ref.)
Passive smoking and the seasonal difference of severity of asthma in children. Murray AB, et al. **Chest** 1988 Oct; 94(4):701–8
Passive smoking: nuisance or health risk? Wiedemann HP. **Cleve Clin J Med** 1989 Mar–Apr;56(2):115–6
Family cigarette smoking and test performance by adolescents. Bauman KE, et al. **Health Psychol** 1989; 8(1):97–105
Environmental tobacco smoke in the context of indoor air quality [editorial] Brown RC. **Hum Toxicol** 1989 Jan; 8(1):3–4
Passive smoking is risky. Repace JL. **J Am Med Wom Assoc** 1989 Mar–Apr;44(2):50–4
The contribution of low tar cigarettes to environmental tobacco smoke. Chortyk OT, et al. **J Anal Toxicol** 1989 May–Jun;13(3):129–34
Passive smoking and respiratory conditions in primary school children. Somerville SM, et al. **J Epidemiol Community Health** 1988 Jun;42(2):105–10
Parental smoking and middle ear effusions in children. Hinton AE, et al. **J Laryngol Otol** 1988 Nov;102(11):992–6
Surgery for otitis media with effusion in children and its relationship to parental smoking. Hinton AE. **J Laryngol Otol** 1989 Jun;103(6):559–61
Passive smoking and pregnancy. **J Occup Med** 1988 Oct; 30(10):762
Ecology of passive smoking by young infants. Greenberg RA, et al. **J Pediatr** 1989 May;114(5):774–80
Indoor air pollution and environmental tobacco smoke. Crawford WA. **J R Soc Health** 1989 Feb;109(1):30–3, 35 (54 ref.)
Cigarette smoking and exposure to passive smoke are risk factors for cervical cancer [see comments] Slattery ML, et al. **JAMA** 1989 Mar 17;261(11):1593–8. **Comment in:** JAMA 1989 Jul 28;262(4):499
Exposure to cigarette smoke and cervical cancer [letter; comment] Zang EA, et al. **JAMA** 1989 Jul 28;262(4):499 **Comment on:** JAMA 1989 Mar 17;261(11):1593–8
On air pollution, environmental tobacco smoke, radon, and lung cancer. Crawford WA. **JAPCA** 1988 Nov; 38(11):1386–91 (72 ref.)
Hazardous effects of involuntary smoking. Qureshi H. **JPMA** 1989 Jun;39(6):148–51
Passive smoking and low birthweight [letter] Chen Y, et al. **Lancet** 1989 Jul 1;2(8653):54–5
Passive smoking in perspective. Lam TH. **Med Toxicol Adverse Drug Exp** 1989 May–Jun;4(3):153–62 (59 ref.)
Environmental tobacco smoke and passive smoking. Papers from a symposium. Helsinki, June 9–12, 1987. **Mutat Res** 1989 Feb;222(2):71–140
Childhood cancer and malignancies other than lung cancer related to passive smoking. Pershagen G. **Mutat Res** 1989 Feb;222(2):129–35 (49 ref.)
Passive smoking and lung cancer: current evidence and ongoing studies at the International Agency for Research on Cancer. Saracci R, et al. **Mutat Res** 1989 Feb; 222(2):117–27
Cytogenetic effects of tobacco smoke exposure among involuntary smokers. Sorsa M, et al. **Mutat Res** 1989 Feb; 222(2):111–6
Population burden of lung cancer due to environmental tobacco smoke. Vainio H, et al. **Mutat Res** 1989 Feb; 222(2):137–40
Health effects of involuntary smoking. Fielding JE, et al. **N Engl J Med** 1988 Dec 1;319(22):1452–60 (125 ref.)
Health effects of involuntary smoking [letter] Seidman DS. **N Engl J Med** 1989 May 11;320(19):1287
Health effects of involuntary smoking in the workplace. Tager IB. **N Y State J Med** 1989 Jan;89(1):27–31 (20 ref.)

Passive smoking in New Zealand [letter] Kawachi I, et al. **N Z Med J** 1989 Sep 13;102(875):479
Deaths from lung cancer and ischaemic heart disease due to passive smoking in New Zealand. Kawachi I, et al. **N Z Med J** 1989 Jul 12;102(871):337–40
Passive smoking and accident compensation [letter] Kent D. **N Z Med J** 1989 Apr 12;102(865):171
Deaths from lung cancer and ischaemic heart disease due to passive smoking in New Zealand [letter] Lee PN. **N Z Med J** 1989 Aug 23;102(874):448
A critical analysis of the relationship between parental smoking and pulmonary performance in children. Witorsch RJ, et al. **Off Gesundheitswes** 1989 Feb;51(2):78–83 (39 ref.)
Wheezing at 8 and 13 years: changing importance of bronchiolitis and passive smoking. McConnochie KM, et al. **Pediatr Pulmonol** 1989;6(3):138–46
Passive smoking by asthmatics: its greater effect on boys than on girls and on older than on younger children. Murray AB, et al. **Pediatrics** 1989 Sep;84(3):451–9
Further evidence for the effect of passive smoking on neonates. Campbell MJ, et al. **Postgrad Med J** 1988 Sep; 64(755):663–5
Relative participation of the gas phase and total particulate matter in the imbalance in prostacyclin and thromboxane formation seen following chronic cigarette smoke exposure. Sherratt AJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):15–8
Neuroendocrine actions of nicotine and of exposure to cigarette smoke: medical implications. Fuxe K, et al. **Psychoneuroendocrinology** 1989;14(1–2):19–41 (150 ref.)
Effect of maternal exposure to smoke on gas diffusion capacity in neonatal rat. Lichtenbeld H, et al. **Respir Physiol** 1989 Feb;75(2):129–40
Estimating the risks of smoking, air pollution, and passive smoke on acute respiratory conditions. Ostro BD. **Risk Anal** 1989 Jun;9(2):189–96
Indoor radon exposure and active and passive smoking in relation to the occurrence of lung cancer. Axelson O, et al. **Scand J Work Environ Health** 1988 Oct;14(5):286–92
The relationship between passive smoking and child health: methodologic criteria applied to prior studies. Rubin DH, et al. **Yale J Biol Med** 1988 Sep–Oct;61(5):401–11
[Women's passive smoking and coronary heart disease] He Y. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan; 23(1):19–22 (Eng. Abstr.) **(Chi)**
[That's why parents should not smoke] Knol K, et al. **Ned Tijdschr Geneeskd** 1988 Nov 5;132(45):2047–8 **(Dut)**
[Passive smoking and respiratory diseases. Current data] Tredaniel J, et al. **Rev Mal Respir** 1989;6(2):109–20 (100 ref.) (Eng. Abstr.) **(Fre)**
[Passive smoking and domestic pollution] Leuenberger P. **Schweiz Rundsch Med Prax** 1988 Nov 15;77(46):1254–6 (Eng. Abstr.) **(Fre)**
[Dangers due to smoking and passive smoking] Schmidt F. **Onkologie** 1988 Dec;11(6):250–3 (15 ref.) (Eng. Abstr.) **(Ger)**
[Effect of passive smoking on bronchial reactivity in school children] Riedel F, et al. **Pneumologie** 1989 Mar;43(3):164–8 (Eng. Abstr.) **(Ger)**
[Chemical–irritant pathogenesis of bronchial hyperreactivity due to passive smoking in infants—the main cause of today's higher asthma morbidity?] Findeisen DG. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:249–50 (Eng. Abstr.) **(Ger)**
[The significance of passive smoking in pregnancy] Grab D, et al. **Z Geburtshilfe Perinatol** 1988 May–Jun;192(3):126–9 (Eng. Abstr.) **(Ger)**
[The effect of environmental factors on health and development of school children] Sälzler A, et al. **Z Gesamte Hyg** 1988 Nov;34(11):627–9 (Eng. Abstr.) **(Ger)**
[Estimation of passive smoking during pregnancy by cotinine measurement and its effect on fetal growth] Ueda Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Apr; 41(4):454–60 (Eng. Abstr.) **(Jpn)**
[Immunoelectrophoretic analysis of the effect of tobacco smoke on the C 3 component of complement and on other serum proteins] Bartelik S. **Pol Tyg Lek** 1988 Aug 22; 43(34):1082–4 (Eng. Abstr.) **(Pol)**
[Hygienic significance of tobacco smoke air pollution] Kostrodymov NN, et al. **Gig Sanit** 1988 Jul;(7):60–2 **(Rus)**
[The effect of smoking and alcohol on oxidative phosphorylation in mitochondria in the myocardium] Gvozdjáková A, et al. **Bratisl Lek Listy** 1989 Mar; 90(3):175–9 (Eng. Abstr.) **(Slo)**
[The effect of passive smoking on mucociliary transport in children] Kuchta M, et al. **Cesk Pediatr** 1988 Aug; 43(8):492–3 **(Slo)**
[The effect of smoking on the metabolic vitality of cardiomyocytes] Gvozdjáková A, et al. **Vnitr Lek** 1988 Jul;34(7):666–71 (Eng. Abstr.) **(Slo)**
[The effect of passive smoking and alcohol on cardiomyocytes in rabbits] Gvozdjáková A, et al. **Vnitr Lek** 1989 Apr;35(4):363–9 (Eng. Abstr.) **(Slo)**
[Influence of passive exposure to tobacco on the development of sibilus in children] Ballvé Moreno JL, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):291–4 (Eng. Abstr.) **(Spa)**
[Effect of cigarette smoke on the airway of asthmatic children] Ortega González H, et al. **Rev Alerg Mex** 1989 May–Jun;36(3):95–7 (Eng. Abstr.) **(Spa)**
[Effects of domiciliary smoking on the frequency of infantile respiratory diseases] Medina E, et al. **Rev Chil Pediatr** 1988 Jan–Feb;59(1):60–4 (Eng. Abstr.) **(Spa)**
[The quality of indoor air and its significance for health. Ventilation systems and smoking are the most hazardous] Werkö L. **Lakartidningen** 1989 Mar 29;86(13):1158 **(Swe)**

ANALYSIS

Note on ethene and other low-molecular weight hydrocarbons in environmental tobacco smoke. Persson KA, et al. **Acta Chem Scand [B]** 1988 Nov;42(10):690–6
Concentrations of nicotine, RSP, CO and CO2 in nonsmoking areas of offices ventilated by air recirculated from smoking designated areas. Sterling TD, et al. **Am Ind Hyg Assoc J** 1988 Sep;49(9):423–6
Development of epidemiologic tools for measuring environmental tobacco smoke exposure. Coghlin J, et al. **Am J Epidemiol** 1989 Oct;130(4):696–704
Home air nicotine levels and urinary cotinine excretion in preschool children. Henderson FW, et al. **Am Rev Respir Dis** 1989 Jul;140(1):197–201
Exposure to environmental tobacco smoke measured by cotinine 125I-radioimmunoassay. Knight GJ, et al. **Clin Chem** 1989 Jun;35(6):1036–9
Monoclonal antibody ELISA for cotinine in saliva and urine of active and passive smokers. Langone JJ, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):73–8
Environmental tobacco smoke in passenger cabins of commercial aircraft [letter] Oldaker GB 3d. **J Natl Cancer Inst** 1989 Sep 20;81(18):1424–6
[Epidemiologic study of indoor formaldehyde and nitric oxide pollution] Thielebeule U, et al. **Z Gesamte Hyg** 1989 Jan;35(1):53–4 (Eng. Abstr.) **(Ger)**

LEGISLATION & JURISPRUDENCE

Passive smoking: a review of medical and legal issues. Byrd JC, et al. **Am J Public Health** 1989 Feb;79(2):209–15 (90 ref.)
Proposition 65: more warning about the risks of tobacco [letter] Davis RM. **JAMA** 1989 Sep 22–29;262(12):1632–3
Law restricts smoking [news] **Occup Health Saf** 1989 Mar; 58(3):16

PREVENTION & CONTROL

Smoking policy in pediatric hospitals and wards. Jenista JA. **Am J Dis Child** 1989 May;143(5):567–9
Effects of a smoking ban on a general hospital psychiatric service. Smith WR, et al. **Hosp Community Psychiatry** 1989 May;40(5):497–502
Women and smoking. How to operate on your own hospital. Addison R. **J Am Med Wom Assoc** 1989 Mar–Apr; 44(2):45–6
Promoting child health in a smoke-free school: suggestions for school health personnel. Olds RS. **J Sch Health** 1988 Sep;58(7):269–72
The elderly smoker [letter] Bliss MR. **Lancet** 1988 Oct 15; 2(8616):908
Pillars of fire or bash your buddy. LeWorthy GW. **Nebr Med J** 1989 Aug;74(8):233–6
Smoking in hospitals [letter] **Pharos** 1988 Fall;51(4):34–5
Tobacco smoke removal with room air cleaners. Olander L, et al. **Scand J Work Environ Health** 1988 Dec; 14(6):390–7
Smoking in Virginia's hospitals. Gray A, et al. **Va Med** 1988 Nov;115(11):526–7, 530

TOBACCO, SMOKELESS see under **TOBACCO**

TOBACCO USE DISORDER

Nicotine dependence. Milhorn HT Jr. **Am Fam Physician** 1989 Mar;39(3):214–24 (27 ref.)
Adolescent substance abuse [letter] Cohen SB. **J Med Assoc Ga** 1989 Jan;78(1):17
Progress in understanding the relationship between the pharmacological effects of nicotine and human tobacco dependence. Proceedings of a symposium. Baltimore, MD, August 17–21, 1986. **Pharmacol Biochem Behav** 1988 May; 30(1):215–94
Progress in understanding the relationship between the pharmacological effects of nicotine and human tobacco dependence. Henningfield JE, et al. **Pharmacol Biochem Behav** 1988 May;30(1):217–20
Pharmacologic determinants of tobacco self-administration by humans. Henningfield JE, et al. **Pharmacol Biochem Behav** 1988 May;30(1):221–6 (66 ref.)

COMPLICATIONS

Tobacco addiction [letter] Acres JC. **Can Med Assoc J** 1989 Sep 15;141(6):511
Optic neuritis caused by tobaccoism [letter] Murube del Castillo J. **Graefes Arch Clin Exp Ophthalmol** 1989; 227(3):300
Effect of tobacco use on vibration white finger disease. Ekenvall L, et al. **J Occup Med** 1989 Jan;31(1):13–6
[Tobacco–alcohol syndrome: study of a case by visual evoked potentials] Zaffiro A, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):451–3 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

An interpretative review of smokeless tobacco research in the United States: Part II. Glover ED, et al. **J Drug Educ** 1989;19(1):1–19 (79 ref.)
[Diagnostic registries of tobacco use—the use of diagnosis 305 B1] Gilljam H. **Lakartidningen** 1989 Feb 1;86(5):319 **(Swe)**

DRUG THERAPY

Nicotine gum use with nicotine addiction [letter] Resnick MP, et al. **J Clin Psychiatry** 1989 Aug;50(8):310
Controlled trial of transdermal nicotine patch in tobacco withdrawal [see comments] Abelin T, et al. **Lancet** 1989 Jan 7;1(8628):7–10. **Comment in:** Lancet 1989 Feb 11;1(8633):334
Pharmacological treatment of tobacco dependence. Jarvik ME, et al. **Pharmacol Biochem Behav** 1988 May; 30(1):279–94 (187 ref.)

EPIDEMIOLOGY

Smokeless tobacco use among American college students. Glover ED, et al. **J Am Coll Health** 1989 Sep;38(2):81–5
Patterns of smokeless tobacco use among university athletes. Levenson-Gingiss P, et al. **J Am Coll Health** 1989 Sep; 38(2):87–90
Overreporting of smokeless tobacco use by adolescent males. Cohen SJ, et al. **J Behav Med** 1988 Aug;11(4):383–93
Smokeless tobacco use among Ontario students. Adlaf EM, et al. **J Drug Educ** 1988;18(4):353–7
An interpretative review of smokeless tobacco research in the United States: Part I. Glover ED, et al. **J Drug Educ** 1988;18(4):285–310 (140 ref.)
Smokeless tobacco use by youth in the U.S. Boyd GM, et al. **J Sch Health** 1989 May;59(5):189–94
Vocational education students: a difficult-to-reach population at risk for smoking-related cancer. Corcoran RD, et al. **J Sch Health** 1989 May;59(5):195–8
Patterns and prevalence of smokeless tobacco use by high school seniors in New York. Olds RS. **J Sch Health** 1988 Nov;58(9):374–8
The social epidemiology of smoking during pregnancy among Mexican women. Molgaard CA, et al. **N Y State J Med** 1989 Jan;89(1):15–8
Use of smokeless tobacco by age, race, and gender in ten standard metropolitan statistical areas of the southeast United States. Bauman KE, et al. **NCI Monogr** 1989; (8):35–7
Use of smokeless tobacco in the United States: recent estimates from the current population survey. Marcus AC, et al. **NCI Monogr** 1989;(8):17–23
Smokeless tobacco use in the United States: the adult use of tobacco surveys. Novotny TE, et al. **NCI Monogr** 1989; (8):25–8
Smokeless tobacco use among adolescents: a theoretical overview. Orlandi MA, et al. **NCI Monogr** 1989;(8):5–12 (83 ref.)
Initiation and use of smokeless tobacco in relation to smoking. Peterson AV, et al. **NCI Monogr** 1989;(8):63–9
Epidemiology of smokeless tobacco use: a national study. Rouse BA. **NCI Monogr** 1989;(8):29–33
Smokeless tobacco on campus. Lopez LC. **Psychol Rep** 1988 Oct;63(2):439–42
Topographical features of smokeless tobacco use. Hatsukami DK, et al. **Psychopharmacology (Berlin)** 1988;96(3):428–9

ETHNOLOGY

Native youth and smokeless tobacco: prevalence rates, gender differences, and descriptive characteristics. Schinke SP, et al. **NCI Monogr** 1989;(8):39–42

ETIOLOGY

Proposed definition of a smokeless tobacco user based on "potential" nicotine consumption. Schroeder KL, et al. **Addict Behav** 1988;13(4):395–400
Correlates of adolescents' use of smokeless tobacco. Colborn JW, et al. **Health Educ Q** 1989 Spring;16(1):91–100

HISTORY

American physicians and tobacco use: two Surgeons General, 1929 and 1964. Burnham JC. **Bull Hist Med** 1989 Spring; 63(1):1–31

METABOLISM

Saliva cotinine and thiocyanate: chemical indicators of smokeless tobacco and cigarette use in adolescents. Noland MP, et al. **J Behav Med** 1988 Oct;11(5):423–33

PHYSIOPATHOLOGY

[Difficulties in the control of tobacco smoking by patients with stenocardia] Trotsiuk VV, et al. **Kardiologiia** 1988 Sep; 28(9):95–6 **(Rus)**

PREVENTION & CONTROL

Counseling to prevent tobacco use. U.S. Preventive Services Task Force, Washington, D.C. **Am Fam Physician** 1989 Jun;39(6):99–105
The National Cancer Institute's Smoking, Tobacco, and Cancer Program. Cullen JW. **Chest** 1989 Jul;96(1

Suppl):9S–13S
Role of the physician as opinion leader in tobacco control. Kunze M. **Chest** 1989 Jul;96(1 Suppl):13S–14S
Realities of tobacco addiction [letter] Allen AD. **J Clin Psychiatry** 1989 Apr;50(4):148
Marketing smokeless tobacco in California communities: implications for health education. Braverman MT, et al. **NCI Monogr** 1989;(8):79–85
Prevalence and predictors of smokeless tobacco use: Iowa's program against smoking. Burke JA, et al. **NCI Monogr** 1989;(8):71–7
Prevention of tobacco use among adolescents in public schools in San Diego County, U.S.A. Elder JP, et al. **Soz Praventivmed** 1989;34(1):24–9
Smokeless tobacco control. Report of a WHO Study Group. **WHO Tech Rep Ser** 1988;773:1–81 (130 ref.)

PSYCHOLOGY

Personality and smokeless tobacco use. Jacobs GA, et al. **Addict Behav** 1988;13(4):311–8
Smokeless tobacco use among adolescents: correlates and concurrent predictors. Botvin GJ, et al. **J Dev Behav Pediatr** 1989 Aug;10(4):181–6
Media manipulation of adolescents' personal level judgements regarding consequences of smokeless tobacco use. Sussman S, et al. **J Drug Educ** 1989;19(1):43–57
Comparing tobacco cigarette dependence with other drug dependencies. Greater or equal 'difficulty quitting' and 'urges to use,' but less 'pleasure' from cigarettes. Kozlowski LT, et al. **JAMA** 1989 Feb 10;261(6):898–901
Use of smokeless tobacco among male adolescents: concurrent and prospective relationships. Ary DV. **NCI Monogr** 1989;(8):49–55
Parent characteristics, perceived health risk, and smokeless tobacco use among white adolescent males. Bauman KE, et al. **NCI Monogr** 1989;(8):43–8
Adolescent smokeless tobacco use: future research needs. Chassin L, et al. **NCI Monogr** 1989;(8):101–5 (25 ref.)
Activity involvement, risk-taking, demographic variables, and other drug use: prediction of trying smokeless tobacco. Sussman S, et al. **NCI Monogr** 1989;(8):57–62
Reducing onset of habitual smoking among women. Gilchrist LD, et al. **Prev Med** 1989 Mar;18(2):235–48
Tobacco "chippers"—individual differences in tobacco dependence. Shiffman S. **Psychopharmacology (Berlin)** 1989;97(4):539–47

REHABILITATION

Encouraging primary care physicians to help smokers quit. A randomized, controlled trial. Cohen SJ, et al. **Ann Intern Med** 1989 Apr 15;110(8):648–52
Development and evaluation of a smokeless tobacco cessation program: a pilot study. Eakin E, et al. **NCI Monogr** 1989;(8):95–100

THERAPY

Effect of clonidine on cigarette cessation and in the alleviation of withdrawal symptoms [published erratum appears in Br J Addict 1988 Dec;83(12):1467] Hao W, et al. **Br J Addict** 1988 Oct;83(10):1221–6
Women and smoking. Promoting cessation. Ockene JK. **J Am Med Wom Assoc** 1989 Mar–Apr;44(2):60–3

TOBRAMYCIN

Clinical considerations and costs associated with formulary conversion from tobramycin to gentamicin. Green ER, et al. **Am J Hosp Pharm** 1989 Apr;46(4):714–9

ADMINISTRATION & DOSAGE

Effect of various infusion pump administration techniques and rates on tobramycin delivery. Cacek AT, et al. **Am J Hosp Pharm** 1988 Nov;45(11):2381–3
Short course of antibiotic therapy in treatment of postpartum endomyometritis. Morales WJ, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):568–72
Iontophoretic application of tobramycin to uninfected and Pseudomonas aeruginosa-infected rabbit corneas. Hobden JA, et al. **Antimicrob Agents Chemother** 1988 Jul; 32(7):978–81
Evaluation of the combination effects of ampicillin or vancomycin combined with streptomycin, gentamicin, tobramycin or netilmicin against enterococci. Fuursted K. **APMIS** 1989 Jan;97(1):23–6
Treatment of experimental Pseudomonas keratitis using collagen shields containing tobramycin. Hobden JA, et al. **Arch Ophthalmol** 1988 Nov;106(11):1605–7
Dosage and dosage interval of tobramycin in the newborn. Eitelberger F, et al. **Br J Clin Pract Symp Suppl** 1988 Feb; 57:49–53
Computer-assisted aminoglycoside dosage. Sørensen JP, et al. **Br J Clin Pract Symp Suppl** 1988 Feb;57:58–61
Antimicrobial prophylaxis for vaginal hysterectomy: comparison of two regimens. Mele G, et al. **Clin Exp Obstet Gynecol** 1988;15(4):174–7
Tobramycin administration and blood sampling through a dual-lumen peripheral intravenous catheter. Pleasants RA, et al. **DICP** 1989 Jun;23(6):460–3
Tobramycin dosage recommendation in patients with cystic fibrosis. Davis RL, et al. **Infection** 1989 Jan–Feb;17(1):41
Iontophoresis and transcorneal penetration of tobramycin [letter] Maurice D. **Invest Ophthalmol Vis Sci** 1989 Jun; 30(6):1181–2
Tobramycin dosing in mechanically ventilated patients. Inaccuracy of a 'rule of thumb'. Martin C, et al. **J Antimicrob Chemother** 1988 Oct;22(4):505–11
Two-stage reimplantation of septic total knee arthroplasty. Report of three cases using an antibiotic–PMMA spacer block. Cohen JC, et al. **J Arthroplasty** 1988;3(4):369–77
Use of collagen corneal shields versus soft contact lenses to enhance penetration of topical tobramycin. O'Brien TP, et al. **J Cataract Refract Surg** 1988 Sep;14(5):505–7
Collagen shield drug delivery: therapeutic concentrations of tobramycin in the rabbit cornea and aqueous humor. Unterman SR, et al. **J Cataract Refract Surg** 1988 Sep; 14(5):500–4
The use of tobramycin–impregnated polymethylmethacrylate beads in the therapy of deep bone and joint infections. Tsukayama DT, et al. **J Orthop Trauma** 1987;1(3):263–4
Long–term tobramycin aerosol therapy in cystic fibrosis. Steinkamp G, et al. **Pediatr Pulmonol** 1989;6(2):91–8
Aminoglycoside dosing in pediatric patients. Carlstedt BC, et al. **Ther Drug Monit** 1989;11(1):38–43
[Experimental study of antibacterial activity, therapeutic effectiveness and toxic properties of the combination of tobramycin and carbenicillin] Vinogradova IV, et al. **Antibiot Khimioter** 1989 May;34(5):382–6 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

High dose tobramycin therapy and nephrotoxicity. Eze CJ, et al. **Cent Afr J Med** 1988 Mar;34(3):65–7
A multiple–center comparative study of the kidney tolerance of ceftazidime versus cefotaxime and tobramycin. Mondorf A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):331–2
Regarding article by Earl and Sullivan [letter] Moss RB. **J Allergy Clin Immunol** 1989 Jun;83(6):1138
Potential toxicity of tobramycin given daily in a single large dose [letter] Moore CM. **Pediatr Infect Dis J** 1989 Mar; 8(3):191–2
Clinical assessment of a published model to predict aminoglycoside–induced nephrotoxicity. Garrison MW, et al. **Ther Drug Monit** 1989;11(2):171–5
An approach to forecast aminoglycoside–related nephrotoxicity from routinely collected clinical data. Kubota K, et al. **Ther Drug Monit** 1988;10(4):410–20
[A case of pneumonitis due to latamoxef and tobramycin] Ishida M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):756–9 (Eng. Abstr.) **(Jpn)**

ANALOGS & DERIVATIVES

Selective quantitative determination of tobramycin from fermentation broth. Kiss GB, et al. **Acta Microbiol Hung** 1988;35(2):89–92

ANALYSIS

Wound and serum levels of tobramycin with the prophylactic use of tobramycin–impregnated polymethylmethacrylate beads in compound fractures. Eckman JB Jr, et al. **Clin Orthop** 1988 Dec;(237):213–5
Colorimetric determination of tobramycin in parenteral solutions. Das Gupta V. **J Clin Pharm Ther** 1988 Jun; 13(3):195–8

BLOOD

Probability assessment approach to therapeutic drug monitoring: tobramycin. Slaughter RL. **DICP** 1989 Mar; 23(3):240–4
Interpretation of excessive levels of inhaled tobramycin. Bentur Y, et al. **Ther Drug Monit** 1989;11(1):109–10
[Serum levels of tobramycin during selective decontamination of the gastrointestinal tract] Cavaliere F, et al. **Minerva Anestesiol** 1988 May;54(5):223–6 (Eng. Abstr.) **(Ita)**

CEREBROSPINAL FLUID

Concentrations of ceftazidime, tobramycin and ampicillin in the cerebrospinal fluid of newborn infants. Tessin I, et al. **Eur J Pediatr** 1989 Jun;148(7):679–81

METABOLISM

The binding of anti–pseudomonal antibiotics to macromolecules from cystic fibrosis sputum. Ramphal R, et al. **J Antimicrob Chemother** 1988 Oct;22(4):483–90

PHARMACOKINETICS

Influence of infusion systems on pharmacokinetic parameters of tobramycin in newborn infants. Nahata MC. **Chemotherapy** 1988;34(5):361–6
Pharmacokinetics of a 3 mg/kg body weight loading dose of gentamicin or tobramycin in critically ill patients. Chelluri L, et al. **Chest** 1989 Jun;95(6):1295–7
Peritoneal kinetics of different drugs. Keller E. **Clin Nephrol** 1988;30 Suppl 1:S24–8
Aminoglycoside pharmacokinetics: dosage requirements and nephrotoxicity in trauma patients. Townsend PL, et al. **Crit Care Med** 1989 Feb;17(2):154–7
Absence of tobramycin pharmacokinetic and creatinine clearance variation during the menstrual cycle: implied absence of variation in glomerular filtration rate. Nafziger AN, et al. **J Clin Pharmacol** 1989 Aug;29(8):757–63
Evaluation of antibiotic diffusion into cardiac vegetations by quantitative autoradiography. Cremieux AC, et al. **J Infect Dis** 1989 May;159(5):938–44
Gentamicin, tobramycin and netilmicin pharmacokinetics in plasma and pleural fluid. Limthongkul S, et al. **J Med Assoc Thai** 1988 Oct;71(10):541–7
Prediction of the distribution volumes of cefazolin and tobramycin in obese children based on physiological pharmacokinetic concepts. Koshida R, et al. **Pharm Res** 1989 Jun;6(6):486–91
Comparison of aminoglycoside clearance and calculated serum creatinine clearances. Deeter RG, et al. **Ther Drug Monit** 1989;11(2):155–61
Controlled release infusion kinetics of tobramycin. Lane JR Jr, et al. **Ther Drug Monit** 1989;11(3):264–8

PHARMACOLOGY

Inhibition of Leishmania donovani growth by streptomycin and tobramycin. Navin TR, et al. **Ann Trop Med Parasitol** 1987 Dec;81(6):731–3
Inhibition of Pseudomonas aeruginosa exoenzyme expression by subinhibitory antibiotic concentrations. Grimwood K, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):41–7
Comparison of serum bactericidal activities of three experimental antibiotic regimens against Corynebacterium group JK. Chantrenne ML, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):23–5
In vitro study of synergistic activity between netilmicin and tobramycin combined with ceftriaxone versus Pseudomonas and Serratia species. Focà A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):123–4
Effect of minimal antibiotic treatment on bacterial keratitis. Hodges EJ, et al. **Cornea** 1989 Sep;8(3):188–90
Activity of cefotaxime/desacetylcefotaxime with two aminoglycosides against gram–negative pathogens: an example of interactive synergy. Jenkins SG. **Diagn Microbiol Infect Dis** 1989 Jan–Feb;12(1):51–5
The influence of pH on the cardiac depressant action of tobramycin. Name CF, et al. **J Pharm Pharmacol** 1989 Mar; 41(3):188–90
In vitro susceptibility of Pseudomonas aeruginosa from bacteremic and fibrocystic patients to four quinolones and five other antipseudomonal antibiotics. Lester A, et al. **Scand J Infect Dis** 1988;20(5):525–9
[Bactericidal activity of daptomycin and vancomycin alone or in combination with tobramycin, netilmicin or ampicillin against enterococcus] Duez JM, et al. **Pathol Biol (Paris)** 1989 Apr;37(4):263–8 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Right–sided staphylococcal endocarditis [letter] Monane M, et al. **Ann Intern Med** 1989 May 1;110(9):749–50
Successful treatment of empyema thoracis with polymethylmethacrylate antibiotic–impregnated beads in the guinea pig. Mavroudis C, et al. **Ann Thorac Surg** 1988 Dec;46(6):615–8
Cefoperazone compared with ampicillin plus tobramycin for severe biliary tract infections. Bergeron MG, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1231–6
Safety and efficacy of topical norfloxacin versus tobramycin in the treatment of external ocular infections. Jacobson JA, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1820–4
Atracurium and vecuronium interaction with gentamicin and tobramycin. Dupuis JY, et al. **Can J Anaesth** 1989 Jul; 36(4):407–11
European experience of timentin in combination with aminoglycosides as empirical treatment in febrile neutropenic patients. Croydon E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):405–7
Cefotetan versus clindamycin/tobramycin association in mixed aero–anaerobic peritonitis in rats. Nardone A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):182–3
Comparison of aztreonam plus clindamycin with tobramycin plus clindamycin in the treatment of intra–abdominal infections. Birolini D, et al. **Chemotherapy** 1989;35 Suppl 1:49–57
A comparative analysis of aztreonam + clindamycin versus tobramycin + clindamycin or amikacin + mezlocillin in the treatment of gram–negative lower respiratory tract infections. Rivera–Vazquez CR, et al. **Chemotherapy** 1989; 35 Suppl 1:89–100
Experience with brulamycin therapy in dialysed patients. Lőcsey L, et al. **Int Urol Nephrol** 1988;20(5):539–49
Urinary alanine–aminopeptidase (AAP) excretion in patients with urinary tract infection treated with ceftazidime (CAZ) or cefotaxime (CTX) plus tobramycin (TOB). Więcek A, et al. **Int Urol Nephrol** 1988;20(5):461–70
Long–term effects of inhaled tobramycin in patients with cystic fibrosis colonized with Pseudomonas aeruginosa. MacLusky IB, et al. **Pediatr Pulmonol** 1989;7(1):42–8
[The value of antibiotic prophylaxis in percutaneous nephrolithotomy. Retrospective study of 81 patients] Corroy JS, et al. **Acta Urol Belg** 1988;56(3):400–2 (Eng. Abstr.) **(Fre)**
[Randomized prospective study of ceftazidime versus a cefotaxime–tobramycin combination in acute leukemia in therapeutic aplasia] Pellegrin JL, et al. **Presse Med** 1988 Oct 26;17(37):1960–3 (Eng. Abstr.) **(Fre)**
[Effects of prophylactically used latamoxef with tobramycin

against postoperative infections on therapeutic drug monitoring and renal function in the field of obstetrics and gynecology] Chimura T, et al. **Jpn J Antibiot** 1989 Jan; 42(1):189–92 (Eng. Abstr.) **(Jpn)**

[Effectiveness of tobramycin and immunologic preparations in experimental Pseudomonas infection] Minukhin VV, et al. **Antibiot Khimioter** 1989 Apr;34(4):282–6 (Eng. Abstr.) **(Rus)**

[Aztreonam versus tobramycin in acute pyelonephritis. A comparative study] Gallego J, et al. **Arch Esp Urol** 1989 Mar;42(2):116–9 (Eng. Abstr.) **(Spa)**

TOCODYNAMOMETRY see **CARDIOTOCOGRAPHY**

TOCOGRAPHY see **CARDIOTOCOGRAPHY**

TOCOLYSIS

Impact of residual amniotic fluid volume in patients receiving parenteral tocolysis after premature rupture of the membranes. Silver RK, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):784–7

Bolus tocolysis: treatment of preterm labor with pulsatile administration of a beta-adrenergic agonist. Spätling L, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):713–7

Tocolysis during cervical ripening with vaginal PGE2. Insull GM, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):179–82

Comment: Tocolysis in placenta previa [letter] Celayeta MA. **Drug Intell Clin Pharm** 1988 Oct;22(10):828

Erythromycin therapy for subclinical intrauterine infections in threatened preterm delivery—a preliminary report. Winkler M, et al. **J Perinat Med** 1988;16(3):253–6

Serum PGF2 alpha concentration during tocolysis effected with Salbupart "Polfa" in imminent premature labour. Leszczyńska-Bystrzanowska J, et al. **Mater Med Pol** 1988 Oct-Dec;20(4):281–3

ADVERSE EFFECTS

Fetal and neonatal cardiovascular complications from beta-sympathomimetic therapy for tocolysis. Katz VL, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):1–4

Oligohydramnios, renal insufficiency, and ileal perforation in preterm infants after intrauterine exposure to indomethacin. Vanhaesebrouck P, et al. **J Pediatr** 1988 Oct; 113(4):738–43 (48 ref.)

METHODS

Long-term tocolysis with intravenous magnesium sulfate. Dudley D, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):373–8

[Tocolysis with fenoterol suppositories—a comparison with oral administration of fenoterol tablets] Heinze T, et al. **Z Geburtshilfe Perinatol** 1988 Sep-Oct;192(5):226–30 (Eng. Abstr.) **(Ger)**

[Oral tocolytic therapy with clenbuterol—determination of the plasma level] Meinen K, et al. **Z Geburtshilfe Perinatol** 1988 Jul-Aug;192(4):158–62 (Eng. Abstr.) **(Ger)**

[Oral tocolytic therapy with clenbuterol—clinical facts] Meinen K, et al. **Z Geburtshilfe Perinatol** 1988 Jul-Aug; 192(4):163–8 (Eng. Abstr.) **(Ger)**

TOCOLYTIC AGENTS

Cardiac isoenzymes and electrocardiographic changes during ritodrine tocolysis. Hadi HA, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):318–21

Oxytocin receptor blockade: a new principle in the treatment of preterm labor? Andersen LF, et al. **Am J Perinatol** 1989 Apr;6(2):196–9

Profile of an oxytocin antagonist, RWJ 22164 for treatment of preterm labor in laboratory models of uterine contractility. Demarest KT, et al. **Am J Perinatol** 1989 Apr; 6(2):200–4

Oxytocin antagonist (dTVT) and oxytocin receptors in myometrium and decidua. Fuchs AR, et al. **Am J Perinatol** 1989 Apr;6(2):205–8

Low-dose ethanol for inhibition of preterm uterine activity. Schröck A, et al. **Am J Perinatol** 1989 Apr;6(2):191–5

Pharmacokinetic studies on fenoterol in maternal and cord blood. von Mandach U, et al. **Am J Perinatol** 1989 Apr; 6(2):209–13

ADMINISTRATION & DOSAGE

[Evaluation of the efficacy of the intravenous admixture of aspartate magnesium hydrochloride with beta-mimetics in the treatment of impending premature labor (letter)] Spätling L. **Rev Med Suisse Romande** 1988 Aug; 108(8):717–8 **(Fre)**

[Effect of glucocorticoids, tocolytics and oxytocin on the status and fate of premature infants] Szczurowicz A, et al. **Wiad Lek** 1988 Sep 15;41(18):1197–203 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Maternal pulmonary edema complicating beta-adrenergic therapy of preterm labor. Milos M, et al. **AJR** 1988 Nov; 151(5):917–8

The association between decreased amniotic fluid volume and treatment with nonsteroidal anti-inflammatory agents for preterm labor. Hickok DE, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1525–30; discussion 1530–1

Pulmonary edema associated with tocolytic therapy. Pisani RJ, et al. **Ann Intern Med** 1989 May 1;110(9):714–8 (34 ref.)

Neonatal bilirubin production after preterm labor tocolysis with nifedipine. Ferguson JE 2d, et al. **Dev Pharmacol Ther** 1989;12(3):113–7

Congenital rickets associated with magnesium sulfate infusion for tocolysis. Lamm CI, et al. **J Pediatr** 1988 Dec; 113(6):1078–82

[Pulmonary edema during a cesarean] Hernández C, et al. **Rev Esp Anestesiol Reanim** 1988 Nov-Dec;35(6):341–3 (Eng. Abstr.) **(Spa)**

PHARMACOLOGY

The effect of magnesium sulfate tocolysis on the fetal biophysical profile. Peaceman AM, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):771–4

Decreased myometrial beta-adrenoceptors in women receiving beta 2-adrenergic tocolytic therapy: correlation with lymphocyte beta-adrenoceptors. Michel MC, et al. **Clin Pharmacol Ther** 1989 Jan;45(1):1–8

Serum PGF2 alpha concentration during tocolysis effected with Salbupart "Polfa" in imminent premature labour. Leszczyńska-Bystrzanowska J, et al. **Mater Med Pol** 1988 Oct-Dec;20(4):281–3

THERAPEUTIC USE

Cardiovascular and metabolic effects associated with nifedipine and ritodrine tocolysis. Ferguson JE 2d, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):788–95

A national survey on preterm labor. Taslimi MM, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1352–7; discussion 1357–60

The use of ultrasound examinations, intrapartum fetal heart rate monitoring and beta-mimetic drugs in France. Blondel B, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):44–51

An oxytocin inhibitor for suppressing preterm labour [letter] Crankshaw DJ. **Br J Obstet Gynaecol** 1988 Dec; 95(12):1339–41

Assessment of the direct tocolytic action of salbupart and fenoterol in the treatment of imminent premature labour. Szczygielski A, et al. **Mater Med Pol** 1988 Jul-Sep; 20(3):194–6

Terbutaline by pump to prevent recurrent preterm labor. Gill P, et al. **MCN** 1989 May-Jun;14(3):163–7

URINE

Maternal and neonatal urinary excretion of sulfate and glucuronide ritodrine conjugates. Brashear WT, et al. **Clin Pharmacol Ther** 1988 Dec;44(6):634–41

TOCOLYTIC THERAPY see **TOCOLYSIS**

TOCOPHEROL see **VITAMIN E**

TODRALAZINE see under **HYDRAZINES**

TOE JOINT

Surgical management of hallux limitus and rigidus in the young patient. DeLauro TM, et al. **Clin Podiatr Med Surg** 1989 Jan;6(1):83–92 (29 ref.)

Treatment of mucoid cysts of fingers and toes by injection of sclerosant. Audebert C. **Dermatol Clin** 1989 Jan; 7(1):179–81

Jaccoud's arthropathy—diagnostic and therapeutic implications. Thakur R, et al. **Postgrad Med J** 1988 Oct; 64(756):809–11

ANATOMY & HISTOLOGY

Alignment of the first metatarsal-phalangeal joint: important criteria for a new joint replacement. Wyss UP, et al. **J Biomed Eng** 1989 Jan;11(1):19–24

Geometry of the first metatarsophalangeal joint. Yoshioka Y, et al. **J Orthop Res** 1988;6(6):878–85

INJURIES

Traumatic subluxation of the interphalangeal joint of the hallux with interposition of the sesamoid bone [letter] Szucs R, et al. **AJR** 1989 Mar;152(3):652–3

Dorsal dislocation of the first metatarso-phalangeal joint. A case report. Garcia Mata S, et al. **Int Orthop** 1988; 12(3):237–8

Atypical traumatic arthropathy of the hallux interphalangeal joint. Tilles SJ, et al. **J Am Podiatr Med Assoc** 1988 Aug; 78(8):406–10

Traumatic dislocation of the long finger extensor tendon at the metacarpophalangeal joint. A case report and literature review. Ostrowski DM. **Orthopedics** 1989 Apr;12(4):581–3 (16 ref.)

[A case of osteochondropathy of the sesamoid bone of the 1st metatarsophalangeal joint] Grelda BP. **Ortop Travmatol Protez** 1989 Feb;(2):49–50 **(Rus)**

PHYSIOLOGY

Measurement of the first metatarsophalangeal joint range of motion. Buell T, et al. **J Am Podiatr Med Assoc** 1988 Sep; 78(9):439–48

Motion of the first metatarsophalangeal joint. Hetherington VJ, et al. **J Foot Surg** 1989 Jan-Feb;28(1):13–9

PHYSIOPATHOLOGY

[Morton's symptoms—but which?] Palo J, et al. **Duodecim** 1989;105(10):925–8 **(Fin)**

RADIOGRAPHY

Arthrography of the metatarsophalangeal joint. Karpman RR, et al. **Foot Ankle** 1988 Dec;9(3):125–9

Gouty arthritis. A case report. Smith LD, et al. **J Am Podiatr Med Assoc** 1988 Dec;78(12):642–4

Variation in practitioner-measured x-ray angles in hallux abducto valgus evaluation. Fox HR, et al. **J Foot Surg** 1989 Jan-Feb;28(1):33–7

Interevaluator variability in the measurement of proximal articular set angle. Sullivan BT, et al. **J Foot Surg** 1988 Sep-Oct;27(5):466–8

Osteochondral defects of the first metatarsal head in adolescence: a stage in the development of hallux rigidus. Thomas AP, et al. **J Pediatr Orthop** 1989 Mar-Apr; 9(2):236–9

Case report 536: Chronic tophaceous gout in a 17-year-old male. Garagiola DM, et al. **Skeletal Radiol** 1989;18(5):377–9

SURGERY

Resection arthroplasty of the rheumatoid forefoot. Gáspárdy G, et al. **Acta Chir Hung** 1989;30(2):101–8

Interphalangeal asymmetrical V osteotomies. A biomechanical study. Capasso G, et al. **Acta Orthop Belg** 1988;54(4):447–51

Silicone arthroplasty for hallux rigidus. Implant wear and osteolysis. Verhaar J, et al. **Acta Orthop Scand** 1989 Feb; 60(1):30–3

Stress fracture of the lateral metatarsals following double-stem silicone implant arthroplasty of the hallux metatarsophalangeal joint. Kitaoka HB, et al. **Clin Orthop** 1989 Feb;(239):211–6

Bone reaction to silicone metatarsophalangeal joint-1 hemiprosthesis. Verhaar J, et al. **Clin Orthop** 1989 Aug; (245):228–32

Plantarflexory base wedge osteotomy in the treatment of functional and structural metatarsus primus elevatus. Davies GF. **Clin Podiatr Med Surg** 1989 Jan;6(1):93–102 (17 ref.)

The improved Keller arthroplasty. Lombardo MA. **Clin Podiatr Med Surg** 1989 Jan;6(1):133–48 (26 ref.)

Implant arthroplasty: still a consideration. Sollitto RJ. **Clin Podiatr Med Surg** 1989 Jan;6(1):149–60 (11 ref.)

Keller arthroplasty in combination with resection arthroplasty of the lesser metatarsophalangeal joints in rheumatoid arthritis [letter] Clayton ML. **Foot Ankle** 1989 Jun;9(6):314

Silicone implant arthroplasty for second metatarsophalangeal joint disorders with and without hallux valgus deformities. Cracchiolo A 3d, et al. **Foot Ankle** 1988 Aug;9(1):10–8

Keller arthroplasty in combination with resection arthroplasty of the lesser metatarsophalangeal joints in rheumatoid arthritis. McGarvey SR, et al. **Foot Ankle** 1988 Oct;9(2):75–80

Relationship of metatarsophalangeal joint fusion on the intermetatarsal angle. Mann RA, et al. **Foot Ankle** 1989 Aug;10(1):8–11

Prosthetic replacement of the first metatarsophalangeal joint. Merkle PF, et al. **Foot Ankle** 1989 Jun;9(6):267–71

Hallux interphalangeal joint sesamoidectomy using minimal incision technique. Valinsky MS, et al. **J Am Podiatr Med Assoc** 1989 Feb;79(2):60–4

Modified V-Y capsulorrhaphy in hallux abducto valgus surgery. Wenig JA, et al. **J Am Podiatr Med Assoc** 1989 Mar;79(3):132–8 (9 ref.)

Arthrodesis of metatarsophalangeal joints in a dog. van Ee RT, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):82–4

Ultrastructure of collapsed metatarsophalangeal silicone elastomer implant. McCarthy DJ, et al. **J Foot Surg** 1988 Sep-Oct;27(5):418–27 (30 ref.)

Retrospective analysis of surgical treatment of hallux rigidus/limitus: clinical and radiographic follow-up of hinged, silastic implant arthroplasty and cheilectomy. Pontell D, et al. **J Foot Surg** 1988 Nov-Dec;27(6):503–10

[Metatarsophalangeal arthrodesis of the big toe using an axial compression screw. Apropos of a series of 46 cases] Girard F, et al. **Rev Chir Orthop** 1988;74 Suppl 2:221–4 **(Fre)**

[Retrospective study of a continuous series of 49 arthrodeses of the metatarsophalangeal joint of the big toe] Rosset P, et al. **Rev Chir Orthop** 1988;74 Suppl 2:225–7 **(Fre)**

[Resection arthroplasty of metatarsophalangeal joints in patients with rheumatoid arthritis] Schmidt A, et al. **Beitr Orthop Traumatol** 1988 Aug;35(8):380–7 (Eng. Abstr.) **(Ger)**

[Silicone implants of the basal joint of the big toe. A critical 10-year study] Ferdini R, et al. **Z Orthop** 1988 Dec; 126(6):606–8 (Eng. Abstr.) **(Ger)**

[Long-term results using a Swanson silastic endoprosthesis of the metatarsophalangeal joint of the great toe. Discrepancy between clinical and radiologic findings] Ris HB, et al. **Z Orthop** 1988 Sep-Oct;126(5):526–9 (Eng. Abstr.) **(Ger)**

TRANSPLANTATION

Vascular metatarsophalangeal to ankylosed

temporomandibular joint replacement. Ting ZS, et al. **Ann Plast Surg** 1988 Dec;15(6):497–500
Long-term follow-up of free vascularized joint transfers to the hand in children. Singer DI, et al. **J Hand Surg [Am]** 1988 Sep;13(5):776–83
Digital distraction lengthening followed by free vascularized epiphyseal joint transfer. Singer DI, et al. **J Hand Surg [Am]** 1989 May;14(3):508–12
[Experimental and clinical studies on free toe-joint transplantation to replace a finger joint by microvascular technic] Watanabe M. **Nippon Seikeigeka Gakkai Zasshi** 1988 May;62(5):495–510 (Eng. Abstr.) **(Jpn)**
[Transplantation of free vascularized grafts of the proximal interphalangeal joints from the foot] Stepanov GA, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):130–1 **(Rus)**

TOES

Toe walking. A marker for language disorders in the developmentally disabled. Accardo P, et al. **Clin Pediatr (Phila)** 1989 Aug;28(8):347–50
Marcher's digitalgia paresthetica among recruits. Stein M, et al. **Foot Ankle** 1989 Jun;9(6):312–3
Paravertebral abscess due to nondiphtheria coryneform bacteria as a complication of ingrown toenails. Dieleman LA, et al. **Infection** 1989 Jan–Feb;17(1):26–7
Koilonychia of the toenails in children. Yinnon AM, et al. **Int J Dermatol** 1988 Dec;27(10):685–7
Tophaceous gout involving the fourth toes bilaterally. Addante AR, et al. **J Am Podiatr Med Assoc** 1988 Nov; 78(11):599–603
Pedal polydactyly. A case report. Sonoga AL, et al. **J Am Podiatr Med Assoc** 1989 Sep;79(9):454–8
The independent long extensor tendon of the fifth toe as a source of tendon grafts for the hand. Aulicino PL, et al. **J Hand Surg [Br]** 1989 May;14(2):236–8
Colchicine treatment in a case of pachydermoperiostosis with acroosteolysis. Matucci-Cerinic M, et al. **Rheumatol Int** 1988;8(4):185–8
Case report 528: Tuberculous dactylitis (right great toe). Abdelwahab IF, et al. **Skeletal Radiol** 1989;18(2):133–5
Case report 482: Chondrosarcoma (grade 1) arising from the right second toe in patient with multiple enchondromas. Nakajima H, et al. **Skeletal Radiol** 1988;17(4):289–92
An unusual manifestation of tuberculous hypersensitivity. Vermani A, et al. **Tubercle** 1989 Mar;70(1):65–7
[Treatment of hallux valgus by plasty of the adductor tendon of the great toe] Jarde O, et al. **Ann Chir** 1988;42(10):770–2 (Eng. Abstr.) **(Fre)**
[Botryomycosis caused by the toe tourniquet syndrome] Sanciaume C, et al. **Ann Dermatol Venereol** 1988; 115(12):1277–8 **(Fre)**
[Synovialosarcoma] Vignon-Pennamen MD, et al. **Ann Dermatol Venereol** 1988;115(11):1192–4 **(Fre)**
[The Giaccai syndrome as a cause of the development of trophic leg ulcers] Izmailov GA. **Klin Med (Mosk)** 1989 Jun;67(6):130–2 **(Rus)**

ABNORMALITIES

Ectrodactyly, ectodermal dysplasia, and clefting associated with thymic aplasia [letter] Jhaveri M, et al. **Am J Dis Child** 1989 Jan;143(1):12
Congenital scalp defects with distal limb anomalies (Adams–Oliver syndrome): report of ten cases and review of the literature. Küster W, et al. **Am J Med Genet** 1988 Sep;31(1):99–115 (30 ref.)
Congenital scalp defects with distal limb anomalies (Adams–Oliver syndrome–McKusick 10030): further suggestion of autosomal recessive inheritance [letter] Sybert VP. **Am J Med Genet** 1989 Feb;32(2):266–7
Interstitial long-arm deletion of chromosome 7 and ectrodactyly. Tajara EH, et al. **Am J Med Genet** 1989 Feb; 32(2):192–4
Aplasia of the thumbs and great toes as the outstanding feature of Yunis and Varon syndrome. A new entity. A new observation. Pfeiffer RA, et al. **Ann Genet (Paris)** 1988; 31(4):241–3
Proteus syndrome. Samlaska CP, et al. **Arch Dermatol** 1989 Aug;125(8):1109–14 (30 ref.)
The EEC syndrome and its ocular manifestations. McNab AA, et al. **Br J Ophthalmol** 1989 Apr;73(4):261–4
A case of facio-genito-popliteal syndrome. Riley P. **Cent Afr J Med** 1988 Nov;34(11):277–8
Phenotype variability in the Miller acrofacial dysostosis syndrome. Report of two further patients. Chrzanowska KH, et al. **Clin Genet** 1989 Feb;35(2):157–60
Brachydactyly type A-7 (Smorgasbord): a new entity. Meiselman SA, et al. **Clin Genet** 1989 Apr;35(4):261–7
Postaxial acrofacial dysostosis or Miller syndrome. A case report. Barbuti D, et al. **Eur J Pediatr** 1989 Feb; 148(5):445–6
Meckel Gruber syndrome. Anand JS, et al. **Indian Pediatr** 1988 Apr;25(4):386–8
Postaxial polydactylism and subsequent surgical correction. Sprinkle RL 3rd, et al. **J Am Podiatr Med Assoc** 1988 Oct; 78(10):512–7
Attenuation of 2-methoxyethanol and methoxyacetic acid-induced digit malformations in mice by simple physiological compounds: implications for the role of further metabolism of methoxyacetic acid in developmental toxicity. Welsch F, et al. **J Biochem Toxicol** 1987 Fall–Winter;2:225–40
Computed tomography diagnosis of macrodystrophia lipomatosa. Curry NS, et al. **J Comput Tomogr** 1988 Oct; 12(4):295–7
A complicated incomplete syndactylism. Morreale PF, et al. **J Foot Surg** 1988 Sep–Oct;27(5):428–32 (19 ref.)
Symphalangism in Hawaii: a study of three distinct ethnic pedigrees. Gaal SA, et al. **J Hand Surg [Am]** 1988 Sep; 13(5):783–7
A new recessive syndrome of unusual facies, digital abnormalities, and ichthyosis. Clayton-Smith J, et al. **J Med Genet** 1989 May;26(5):339–42
Hypomelanosis of Ito: a manifestation of mosaicism or chimerism. Donnai D, et al. **J Med Genet** 1988 Dec; 25(12):809–18
The possible role of one-carbon moieties in 2-methoxyethanol and 2-methoxyacetic acid-induced developmental toxicity. Mebus CA, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):98–109
[Apparently isolated macrodactyly of the toe with localized angiodysplasia. 2 cases (letter)] Eulry F, et al. **Ann Med Interne (Paris)** 1989;140(3):237–9 **(Fre)**
[Classification of polydactyly of the hand and foot] Buck-Gramcko D, et al. **Handchir Mikrochir Plast Chir** 1989 Jul;21(4):195–204 (Eng. Abstr.) **(Ger)**
[Hallux varus congenitus in polydactyly patients] Falliner A, et al. **Z Orthop** 1988 May–Jun;126(3):239–49 (Eng. Abstr.) **(Ger)**
[Latero-ungual folds of the first toe in the newborn infant] Ceccolini E, et al. **G Ital Dermatol Venereol** 1988 Nov; 123(11):551–2 **(Ita)**
[Cohen syndrome. Contribution to its clinical delineation] Lapetina F, et al. **Pediatr Med Chir** 1988 Mar–Apr; 10(2):217–21 (Eng. Abstr.) **(Ita)**
[Analysis of phenotypic variability of Zimmermann–Laband syndrome] Il'ina EG, et al. **Pediatriia** 1988;(4):86–8 **(Rus)**
[Surgical treatment of valgus deformity of the hallux in polydactyly] I'linskil IS. **Sov Med** 1989;(5):113–4 **(Rus)**
[Aplasia cutis congenita and brachydactyly: Adams–Oliver syndrome] Sánchez Luna M, et al. **An Esp Pediatr** 1988 Dec;29(6):477–8 **(Spa)**
[Type C hereditary brachydactyly] Lorenzo Sanz G, et al. **Rev Clin Esp** 1989 Feb;184(3):139–42 (Eng. Abstr.) **(Spa)**

ANATOMY & HISTOLOGY

Quantitative morphometric analyses of the exercised extensor digitorum longus muscle of the mouse. el-Rimawi AS, et al. **Acta Anat (Basel)** 1989;134(3):191–8
Lateral supporting ligament of the distal phalanx. Winter WG, et al. **Foot Ankle** 1989 Jun;9(6):310–1

BLOOD SUPPLY

Capillary permeability to endogenous macromolecules in the equine digit. Allen D Jr, et al. **Am J Vet Res** 1988 Sep; 49(9):1609–12
Assessment of arterial disease using digital systolic pressure measurement. McCollum PT, et al. **Ann Vasc Surg** 1988 Oct;2(4):349–51
Repeatability of peripheral pulse measurements on ears, fingers and toes using photoelectric plethysmography. Jago JR, et al. **Clin Phys Physiol Meas** 1988 Nov;9(4):319–30
Effect of postural change and thermoregulatory stress on the capillary microcirculation of the human toe. Flynn MD, et al. **Clin Sci** 1989 Mar;76(3):231–6
Idiopathic atrophie blanche associated with digital infarction. Skrokov R, et al. **Int J Dermatol** 1988 Dec;27(10):714–5
Digital perfusion with tibial nerve block. A comparative study of eight local anesthetics. Green DR, et al. **J Am Podiatr Med Assoc** 1988 Oct;78(10):495–511
Digital arterial embolism–true blue toe syndrome. A histopathologic analysis. Sperandio CP, et al. **J Am Podiatr Med Assoc** 1988 Nov;78(11):593–8
Use of digital arterial pressure to detect aortic compression during labour. Kinsella SM, et al. **Lancet** 1989 Sep 23; 2(8665):714–5
A study of ankle and toe pressure prediction following aortofemoral bypass. Kawai M, et al. **Vasa** 1988;17(3):162–7
[Angiography of subungual glomus tumor] Morita Y, et al. **Rinsho Hoshasen** 1988 Jul;33(7):789–95 (Eng. Abstr.) **(Jpn)**
[Arguments against current interpretation of the diagnosis of Raynaud's phenomenon] Borovkov SA. **Vestn Khir** 1989 Mar;142(3):58–9 **(Rus)**

EMBRYOLOGY

Digit development and embryonic weight in mice: analysis of sex-related time difference and mating period-related interlitter variability. Watanabe T, et al. **Teratology** 1988 Aug;38(2):157–63

INJURIES

Phalangeal fracture fragment. Robinson DS, et al. **J Foot Surg** 1988 Jul–Aug;27(4):350–2
Booted babies [letter] Shannon F. **N Z Med J** 1988 Oct 12; 101(855):642
Epidural neurostimulation in the treatment of frostbite. Arregui R, et al. **PACE** 1989 Apr;12(4 Pt 2):713–7
Hair-thread tourniquet syndrome [see comments] Barton DJ, et al. **Pediatrics** 1988 Dec;82(6):925–8. **Comment in:** Pediatrics 1989 Jun; 83(6):1077–8

INNERVATION

Measurements of human pressure–pain thresholds on fingers and toes. Brennum J, et al. **Pain** 1989 Aug;38(2):211–7
Neural consequences of partial toe amputation in chickens. Gentle MJ, et al. **Res Vet Sci** 1988 Nov;45(3):374–6

PATHOLOGY

Spina bifida occulta with atrophy of toes. Talwar S. **Indian J Lepr** 1988 Apr;60(2):306–8
The pathological anatomy of claw and hammer toes. Myerson MS, et al. **J Bone Joint Surg [Am]** 1989 Jan; 71(1):45–9
[Digital necroses induced by beta-blockers] Dompmartin A, et al. **Ann Dermatol Venereol** 1988;115(5):593–6 (16 ref.) **(Fre)**
[Nail dystrophy of the big toe. Description of a clinical case] Bran G, et al. **Med Cutan Ibero Lat Am** 1988;16(2):165–9 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Toe temperatures during Dartmoor training. Travis SP. **J R Nav Med Serv** 1988 Winter;74(3):181–5

PHYSIOPATHOLOGY

[Patients with apoplexy treated with silicone bandaging of the toes] Katz L, et al. **Ugeskr Laeger** 1988 Nov 28; 150(48):2971–2 (Eng. Abstr.) **(Dan)**

RADIOGRAPHY

Phalangeal osteoid osteoma. Meng QF, et al. **Br J Radiol** 1989 Apr;62(736):321–5
Osteosclerosis of the phalanges in Werner syndrome. Goto M, et al. **Radiology** 1989 Sep;172(3):841–3
Idiopathic punctate necrosis of the phalanges of the feet. Keats TE, et al. **Skeletal Radiol** 1989;18(1):25–7

SURGERY

Epidermis, basement membrane, and connective-tissue healing after amputation of mouse digits: implications for mammalian appendage regeneration. Neufeld DA. **Anat Rec** 1989 Apr;223(4):425–32
Treatment of ingrowing toenails [letter] Fowler AW. **BMJ** 1988 Sep 3;297(6648):625
Proximal closing wedge osteotomy and adductor tenotomy for treatment of hallux valgus. Resch S, et al. **Foot Ankle** 1989 Jun;9(6):272–80
Laser matricectomy in the toes. Wright G. **Foot Ankle** 1989 Apr;9(5):246–7
Human cadaveric bone implants. Schneekloth DJ, et al. **J Am Podiatr Med Assoc** 1989 Feb;79(2):77–81
Triplanar closing base wedge osteotomy for tailor's bunion. Shrum DG, et al. **J Am Podiatr Med Assoc** 1989 Mar; 79(3):124–7
Enchondroma: a case report and literature review. Perlman MD, et al. **J Foot Surg** 1988 Nov–Dec;27(6):556–60 (11 ref.)
[Maduromycosis of the extremities] Bolko NT. **Vestn Khir** 1988 May;140(5):72–4 **(Rus)**

TRANSPLANTATION

Thumb reconstruction—great toe transfer. Valauri FA, et al. **Clin Plast Surg** 1989 Jul;16(3):475–89 (76 ref.)
Circulatory crisis in free toe-to-hand transfer and its management: I. Clinical experience. Gu YD, et al. **J Reconstr Microsurg** 1989 Apr;5(2):111–4
Aesthetic reconstruction of long fingers with toe-to-hand transfer. Vitkus K. **J Reconstr Microsurg** 1988 Oct; 4(5):369–80
Combined second and third toe transfer. Wei FC, et al. **Plast Reconstr Surg** 1989 Oct;84(4):651–61
[Economic aspects of reconstruction of the thumb using a microsurgical toe transplant procedure] Egloff DV, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(1):50–6 **(Fre)**
[Autotransplantation of the 2d toe in the reconstruction of the index finger. The microsurgical technic] Ciuce C, et al. **Rev Chir [Chir]** 1988 Sep–Oct;37(5):371–8 (Eng. Abstr.) **(Rum)**
[Multiple transplantation of the toes to the hand] Borovnikov AM, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):46–50 (Eng. Abstr.) **(Rus)**

TOGAVIRIDAE

DRUG EFFECTS

[Fractions from mouse brain which non-specifically inhibit the hemagglutination of various togaviruses] Paglini S. **Rev Argent Microbiol** 1983;15(2):73–81 (Eng. Abstr.) **(Spa)**

GROWTH & DEVELOPMENT

[Propagation of Pixuna virus in rat embryo cultures] Sampieri L, et al. **Rev Argent Microbiol** 1984;16(1):45–8 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

The effects of vaccination with tissue culture-derived viral vaccines on detection of antibodies to equine arteritis virus by enzyme-linked immunosorbent assay (ELISA). Cook RF, et al. **Vet Microbiol** 1989 Jun;20(2):181–9

[Arbovirus infections on the island of Nosy-Be; serologic and entomologic findings] Fontenille D, et al. **Arch Inst Pasteur Madagascar** 1988;54(1):101–15 (Eng. Abstr.) (Fre)

ISOLATION & PURIFICATION

Non-A, non-B hepatitis: visualization of virus-like particles from chimpanzee and human sera. Abe K, et al. **Arch Virol** 1989;104(3–4):351–5

Toga-like virus as a cause of fulminant hepatitis attributed to sporadic non-A, non-B. Fagan EA, et al. **J Med Virol** 1989 Jul;28(3):150–5

METABOLISM

Modulation in response to temperature of Mayaro virus proteosynthesis in Aedes Albopictus cells. Carvalho M da G, et al. **Acta Virol (Praha)** 1989 May;33(3):235–45

TOGAVIRUS INFECTIONS

COMPLICATIONS

Aetiology of Kawasaki disease. Bannister BA, et al. **Arch Dis Child** 1989 Mar;64(3):397–8

Abnormalities of responses to autonomic stimulation in the mouse urinary bladder associated with Semliki Forest virus-induced demyelination. Moss HE, et al. **J Urol** 1989 Sep;142(3):850–4

Infantile gastroenteritis associated with excretion of pestivirus antigens. Yolken R, et al. **Lancet** 1989 Mar 11; 1(8637):517–20

Enhancement of demyelination in the central nervous system of Semliki Forest virus infected mice after pretreatment with muramyl dipeptide. Illavia SJ, et al. **Neuropathol Appl Neurobiol** 1988 Nov-Dec;14(6):483–93

DIAGNOSIS

[Neurologic manifestations of West Nile fever in the Transcarpathian region] Buletsa BA, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):29–30 (Eng. Abstr.) (Rus)

DRUG THERAPY

Antiviral activity and mode of action of ribavirin 5'-sulfamate against Semliki Forest virus. Smee DF, et al. **Antiviral Res** 1988 Dec 11;10(6):253–62

EPIDEMIOLOGY

West Nile fever—occurrence in a new endemic site in the Negev. Katz G, et al. **Isr J Med Sci** 1989 Jan;25(1):39–41

Seroepidemiological study of infection with West Nile virus in Karachi, Pakistan, in 1983 and 1985. Sugamata M, et al. **J Med Virol** 1988 Nov;26(3):243–7

Epidemiology of hemorrhagic fever viruses. LeDuc JW. **Rev Infect Dis** 1989 May-Jun;11 Suppl 4:S730–5 (39 ref.)

[A survey of antibodies to arboviruses in residents in south-western part of Yunnan province] Zhang TS. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Apr; 10(2):74–7 (Eng. Abstr.) (Chi)

IMMUNOLOGY

Semliki Forest virus (A7[74]) infection of adult mice induces an immune-mediated demyelinating encephalomyelitis. Fazakerley JK, et al. **Ann N Y Acad Sci** 1988;540:672–3

West Nile virus infection modulates the expression of class I and class II MHC antigens on astrocytes in vitro. Liu Y, et al. **Ann N Y Acad Sci** 1988;540:483–5

Characterization of B cells and IA expression in Sindbis virus encephalitis. Tyor WR, et al. **Ann N Y Acad Sci** 1988; 540:491–2

Identification of immunoglobulin-containing cells in the central nervous system of the mouse following infection with the demyelinating strain of Semliki Forest virus. Parsons LM, et al. **Br J Exp Pathol** 1989 Jun;70(3):247–55

Evidence for a T-cell related factor as the cause of demyelination in mice following Semliki Forest virus infection. Jenkins HG, et al. **Brain Res** 1988 Aug 30; 459(1):145–7

Impaired interleukin 1 and interleukin 2 production following in vitro abortive infection of murine spleen mononuclear cells by Semliki Forest virus. Wu LX, et al. **Cell Immunol** 1988 Oct 1;116(1):112–22

Identification of cytolytic lymphocytes in West Nile virus-infected murine central nervous system. Liu Y, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):565–73

Role of the immune response in Sindbis virus-induced paralysis of SJL/J mice. Mokhtarian F, et al. **J Immunol** 1989 Jul 15;143(2):633–7

Flavivirus infection up-regulates the expression of class I and class II major histocompatibility antigens on and enhances T cell recognition of astrocytes in vitro. Liu Y, et al. **J Neuroimmunol** 1989 Feb;21(2–3):157–68

Bovine pestivirus and human infection [letter] Wilks CR, et al. **Lancet** 1989 Jan 14;1(8629):107

Immune complexes and Ross River virus disease (epidemic polyarthritis). Fraser JR, et al. **Rheumatol Int** 1988; 8(3):113–7

[Modification during experimental flavivirus infection of the formation of a B-cell immunologic memory to heterologous antigen] Vargin VV, et al. **Vopr Virusol** 1988 Jul-Aug;33(4):476–9 (Rus)

METABOLISM

Dynamic changes in plasma membrane properties of Semliki Forest virus infected cells related to cell fusion. Kempf C, et al. **Biosci Rep** 1988 Jun;8(3):241–54

Redistribution of Mr 75,000 plasma membrane protein, cytovillin, into newly formed microvilli in herpes simplex and Semliki Forest virus infected human embryonal fibroblasts. Pakkanen R, et al. **Eur J Cell Biol** 1988 Aug; 46(3):435–43

MICROBIOLOGY

Molecular pathogenesis of Sindbis virus encephalitis in experimental animals. Griffin DE. **Adv Virus Res** 1989; 36:255–71 (70 ref.)

Identity of Karelian fever and Ockelbo viruses determined by serum dilution-plaque reduction neutralization tests and oligonucleotide mapping. Lvov DK, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):607–10

Flavivirus infection: essential ultrastructural changes and association of Kunjin virus NS3 protein with microtubules. Ng ML, et al. **Arch Virol** 1989;106(1–2):103–20

Genetic stability of Ross River virus during epidemic spread in nonimmune humans. Burness AT, et al. **Virology** 1988 Dec;167(2):639–43

[Results of infecting experimental animals and monkeys with Karshi virus] Terskikh II, et al. **Med Parazitol (Mosk)** 1989 Jan-Feb;(1):71–4 (Eng. Abstr.) (Rus)

PATHOLOGY

Involvement of cytoplasmic membranes in the non-lytic infection of K-562 cells by Semliki Forest virus. Brady BE, et al. **Eur J Cell Biol** 1989 Apr;48(2):203–11

Effect of infection with the ts22 mutant of Semliki Forest virus on development of the central nervous system in the fetal mouse. Mabruk MJ, et al. **J Virol** 1989 Sep; 63(9):4027–33

[Changes in cellular microfilaments in viral infection] Karmysheva BIa, et al. **Vopr Virusol** 1988 Nov-Dec; 33(6):711–7 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Peritoneal barrier to the spread of Semliki forest virus in mice. Walder CE, et al. **Proc Soc Exp Biol Med** 1989 Jan; 190(1):70–8

PREVENTION & CONTROL

Monoclonal antibodies to the E1 and E2 glycoproteins of Sindbis virus: definition of epitopes and efficiency of protection from fatal encephalitis. Mendoza QP, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3015–22

The in vivo antiviral effect of CL246,738 is mediated by the independent induction of interferon-alpha and interferon-beta. Sarzotti M, et al. **J Interferon Res** 1989 Jun;9(3):265–74

Semliki Forest virus E2 envelope epitopes induce a nonneutralizing humoral response which protects mice against lethal challenge. Grosfeld H, et al. **J Virol** 1989 Aug;63(8):3416–22

TRANSMISSION

Comparison of three methods for determining transmission rates in vector competence studies with Culex univittatus and West Nile and Sindbis viruses. Cornel AJ, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):70–2

Vector competence of geographic strains of Aedes albopictus and Aedes polynesiensis and certain other Aedes (Stegomyia) mosquitoes for Ross River virus. Mitchell CJ, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):142–7

VETERINARY

Wesselsbron virus infection in West African dwarf goats (Fouta djallon): virological and immunological studies. Baba SS, et al. **Acta Virol (Praha)** 1989 Jan;33(1):81–6

Identification of Highlands J virus from a Florida horse [published erratum appears in Am J Trop Med Hyg 1989 Mar;40(3):228] Karabatsos N, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):603–6

Susceptibility of dogs to West Nile virus: a survey and pathogenicity trial. Blackburn NK, et al. **J Comp Pathol** 1989 Jan;100(1):59–66

Natural infections of pigs with bovine viral diarrhoea virus associated with signs resembling swine fever. Terpstra C, et al. **Res Vet Sci** 1988 Sep;45(2):137–42

Bovine viral diarrhoea virus infections in piglets born to sows vaccinated against swine fever with contaminated vaccine. Wensvoort G, et al. **Res Vet Sci** 1988 Sep;45(2):143–8

Clinical and pathological responses of West African dwarf goats (Fouta Djallon) infected with Nigerian strain of Wesselsbron virus. Baba SS, et al. **Rev Elev Med Vet Pays Trop** 1988;41(4):329–35

Pathogenicity for horses of original Sagiyama virus, a member of the Getah virus group. Kumanomido T, et al. **Vet Microbiol** 1988 Aug;17(4):367–73

Differentiation of hog cholera and bovine virus diarrhoea viruses in pigs using monoclonal antibodies. Zhou Y, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):76–80

[Epidemic disease in a sheep herd with a possible relationship to a pestivirus] Büttner M, et al. **Tierarztl Prax** 1989; 17(1):39–42 (Eng. Abstr.) (Ger)

TOILET FACILITIES

The importance of toilet facilities and their proper use by the population of Melut, South Sudan. Sixl W, et al. **Geogr Med** 1988;Suppl 1:95–101

The risk of infection from Giardia lamblia due to drinking water supply, use of water, and latrines among preschool children in rural Lesotho. Esrey SA, et al. **Int J Epidemiol** 1989 Mar;18(1):248–53

Primary constipation: an underlying mechanism. Sikirov BA. **Med Hypotheses** 1989 Feb;28(2):71–3

The gonococcus and the toilet seat revisited [letter] Ascher DP. **Pediatr Infect Dis J** 1989 Mar;8(3):191

Increasing the effectiveness of a latrines programme. Muller M. **World Health Forum** 1988;9(3):345–51

STANDARDS

[Economical and clean latrines] Sabbah P, et al. **Med Trop (Mars)** 1989 Jan-Mar;49(1):67–70 (Eng. Abstr.) (Fre)

TOKEN ECONOMY

Application of a token economy with a non-compliant closed head-injured male. Hegel MT. **Brain Inj** 1988 Oct-Dec; 2(4):333–8

Token economy in a hospital rehabilitation system. Baker R. **J Adv Nurs** 1988 Sep;13(5):631–9

The relationship between neuroleptic drug dose and the performance of psychiatric patients in a maximum security token economy program. Harris GT. **J Behav Ther Exp Psychiatry** 1989 Mar;20(1):57–67

The use of token economies with individuals who have developmental disabilities. Williams BF, et al. **Monogr Am Assoc Ment Retard** 1989;(12):3–18 (80 ref.)

[Inpatient rehabilitation of chronic schizophrenic patients with a behavior therapy token reinforcement program] Hubmann W, et al. **Psychiatr Prax** 1989 Jan;16(1):36–42 (Eng. Abstr.) (Ger)

TOKEN REINFORCEMENT see TOKEN ECONOMY

TOLAZAMIDE

PHARMACOLOGY

Coordinate regulation of glucose transporter function, number, and gene expression by insulin and sulfonylureas in L6 rat skeletal muscle cells. Wang PH, et al. **J Clin Invest** 1989 Jul;84(1):62–7

TOLAZOLINE

Effect of tolazoline on xylazine-ketamine-induced anesthesia in turkey vultures. Allen JL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1011–2

ANALOGS & DERIVATIVES

Effects of benzylic hydroxyl substitution on the alpha-adrenoceptor blocking activity of tolazoline. Ruffolo RR Jr, et al. **Eur J Pharmacol** 1988 Nov 22;157(2–3):235–9

PHARMACOLOGY

Effect of prazosin on the cardiopulmonary response to dopamine in awake lambs: comparison with phentolamine and tolazoline. Drummond WH, et al. **Dev Pharmacol Ther** 1988;11(5):297–305

Effects of benzylic hydroxyl substitution on the alpha-adrenoceptor blocking activity of tolazoline. Ruffolo RR Jr, et al. **Eur J Pharmacol** 1988 Nov 22;157(2–3):235–9

Elevation of plasma angiotensin levels in dogs by Indian red scorpion (Buthus tamulus) venom & its reversal by administration of insulin+tolazoline. Murthy KR, et al. **Indian J Med Res** 1988 Oct;88:376–9

Reversal by tolazoline hydrochloride of xylazine hydrochloride-ketamine hydrochloride immobilizations in free-ranging desert mule deer. DelGiudice GD, et al. **J Wildl Dis** 1989 Jul;25(3):347–52

[The effect of tolazoline and phentolamine on the survival of skin flap—experimental study] Gao JH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):57–9 (Chi)

[Xylazine antagonism by tolazoline in the dog. 1. Modification by tolazoline of the duration of anesthesia and secondary action of xylazine on the respiratory and metabolic functions] Amelang D, et al. **Berl Munch Tierarztl Wochenschr** 1988 Aug 1; 101(8):266–70 (Eng. Abstr.) (Ger)

[Xylazine antagonism by tolazoline in the dog. 2. Cardiac and circulatory effects of xylazine anesthesia and its modification by tolazoline] Gräsner F, et al. **Berl Munch Tierarztl Wochenschr** 1988 Aug 1;101(8):271–7

(Eng. Abstr.) (Ger)

THERAPEUTIC USE

Cardiovascular pharmacological therapy in children—a review. Part 4: Manipulation of vascular resistance and patent ductus arteriosus. Chan KY, et al. **J Singapore Paediatr Soc** 1989;31(1-2):26-31 (23 ref.)

TOLBUTAMIDE

ADMINISTRATION & DOSAGE

Rise of plasma t-PA fibrinolytic activity in a group of maturity onset diabetic patients shifted from a first generation (tolbutamide) to a second generation sulphonylurea (gliclazide). Gram J, et al. **J Intern Med** 1989 Apr;225(4):241-7

[Combination treatment with insulin and sulfonylurea. Results of a 5-year study] Holländer E. **Z Gesamte Inn Med** 1989 May 1;44(9):261-4 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Phenytoin toxicity produced by tolbutamide. Beech E, et al. **BMJ** 1988 Dec 17;297(6663):1613-4

DIAGNOSTIC USE

Plasma glucose response after intravenous injection of tolbutamide in insulin-treated type I and type II diabetic patients. Mokuda O, et al. **Exp Clin Endocrinol** 1988 Aug; 91(3):265-70

METABOLISM

In vitro inhibition studies of tolbutamide hydroxylase activity of human liver microsomes by azoles, sulphonamides and quinolines. Back DJ, et al. **Br J Clin Pharmacol** 1988 Jul; 26(1):23-9

Lack of efficacy of cimetidine and ranitidine as inhibitors of tolbutamide metabolism. Adebayo GI, et al. **Eur J Clin Pharmacol** 1988;34(6):633-6

Simple high-performance liquid chromatographic method for the determination of tolbutamide and its metabolites in human plasma and urine using photodiode-array detection. Caillag K, et al. **J Chromatogr** 1989 May 30;490(2):355-63

Inhibition of tolbutamide metabolism by antimalarial drugs. Karbwang J, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):235-41

PHARMACOKINETICS

Bioequivalence of commercial tolbutamide tablets using the beagle as an animal model. López Anaya A, et al. **Arch Invest Med (Mex)** 1988 Jan-Mar;19(1):55-62

PHARMACOLOGY

Effects of tolbutamide, glibenclamide and diazoxide upon action potentials recorded from rat ventricular muscle. Faivre JF, et al. **Biochim Biophys Acta** 1989 Aug 21; 984(1):1-5

Different effects of bombesin on glucose- and tolbutamide-induced insulin release in man. Scarpignato C, et al. **Br J Pharmacol** 1988 Aug;94(4):1023-8

The inotropic action of tolbutamide and glyburide. Rothschild MA, et al. **Clin Pharmacol Ther** 1989 Jun; 45(6):642-9

Tolbutamide enhances insulin action on gluconeogenesis and on fructose 2,6-bisphosphate levels in isolated rat hepatocytes. Monge L, et al. **Diabete Metab** 1988 Dec; 14(6):712-6

Tolbutamide as mimic of glucose on beta-cell electrical activity. ATP-sensitive K+ channels as common pathway for both stimuli. Cook DL, et al. **Diabetes** 1989 Apr; 38(4):416-21

Basal and tolbutamide-induced plasma somatostatin in healthy subjects and in patients with diabetes and impaired glucose tolerance. Segers O, et al. **Diabetic Med** 1989 Apr; 6(3):232-8

The ATP- and tolbutamide-sensitivity of the ATP-sensitive K-channel from human pancreatic B cells. Ashcroft FM, et al. **Diabetologia** 1989 Aug;32(8):591-8

Phosphoinositide hydrolysis and insulin secretion in response to glucose stimulation are impaired in isolated rat islets by prolonged exposure to the sulfonylurea tolbutamide. Zawalich WS. **Endocrinology** 1989 Jul;125(1):281-6

Cytosolic ADP enhances the sensitivity to tolbutamide of ATP-dependent K+ channels from pancreatic B-cells. Zünkler BJ, et al. **FEBS Lett** 1988 Nov 7;239(2):241-4

Tolbutamide inhibits gastrin release in man. Chiba T, et al. **Horm Metab Res** 1988 Oct;20(10):641-4

Inhibition by sulphonylureas of vasorelaxation induced by K+ channel activators in vitro. Wilson C. **J Auton Pharmacol** 1989 Feb;9(1):71-8

Influence of ATP-sensitive potassium channel modulators on ischemia-induced fibrillation in isolated rat hearts. Wolleben CD, et al. **J Mol Cell Cardiol** 1989 Aug; 21(8):783-8

Effects of low-concentration polymyxin B on insulin secretion induced by 12-O-tetradecanoyl-phorbol-13-acetate (TPA), glucose, or tolbutamide from the isolated perfused rat pancreas. Maki Y, et al. **Metabolism** 1989 Apr;38(4):334-7

Effect of sulfonylureas on hepatic glycogen metabolism: activation of glycogen phosphorylase. Mojena M, et al. **Metabolism** 1989 May;38(5):466-70

Glucose modulation of spike activity independently from changes in slow waves of membrane potential in mouse B-cells. Bozem M, et al. **Pflugers Arch** 1988 Dec; 413(2):147-52

Cromakalim, pinacidil and RP 49356 activate a tolbutamide-sensitive K+ conductance in human skeletal muscle fibres. Quasthoff S, et al. **Pflugers Arch** 1989;414 Suppl 1:S179-80

Tolbutamide affects food ingestion in a manner consistent with its glycemic effects in the rat. Vanderweele DA, et al. **Physiol Behav** 1988;44(4-5):679-83

[Effect of tolbutamide on the activity of transglutaminase] Coves MJ, et al. **Rev Esp Fisiol** 1988 Mar;44(1):7-11 (Eng. Abstr.) (Spa)

THERAPEUTIC USE

A randomized crossover study of sulphonylurea and insulin treatment in patients with type 2 diabetes poorly controlled on dietary therapy. Wolffenbuttel BH, et al. **Diabetic Med** 1989 Aug;6(6):520-5

TOLIPROLOL see under **PROPANOLAMINES**

TOLMETIN see under **PYRROLES**

TOLNAFTATE

ADMINISTRATION & DOSAGE

Use of tolnaftate powder in the treatment and prophylaxis of foot mycoses. Balogh E, et al. **Ther Hung** 1988;36(2):86-7

Clinical examinations with chinofungin spray and chinofungin powder. Török I. **Ther Hung** 1989;37(1):46-9

ANALOGS & DERIVATIVES

Inhibitory effect of a new mycotic agent, piritetrate on ergosterol biosynthesis in pathogenic fungi. Morita T, et al. **J Med Vet Mycol** 1989;27(1):17-25

PHARMACOKINETICS

Enhanced percutaneous absorption of homogenized tolnaftate/beta-cyclodextrin polymer ground mixture. Szeman J, et al. **Drug Des Deliv** 1987 May;1(4):325-32

TOLONIUM CHLORIDE

ADVERSE EFFECTS

[Cardiac rhythm disorders following the intravenous injection of toluidine blue (letter)] Heintz B, et al. **Dtsch Med Wochenschr** 1989 Jun 2;114(22):889 (Ger)

DIAGNOSTIC USE

Toluidine blue dye as a breast localization marker. Czarnecki DJ, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):261-3

Use of meta-analysis to evaluate tolonium chloride in oral cancer screening. Rosenberg D, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):621-7

PHARMACOLOGY

Protection of Ustilago violacea from toluidine blue photosensitization and hydrogen peroxide induced killing and mitotic recombination by carotenes. Will OH 3d, et al. **Photochem Photobiol** 1988 Sep;48(3):305-9

TOLOSA-HUNT SYNDROME see **OPHTHALMOPLEGIA**

TOLPERISONE see under **PROPIOPHENONES**

TOLUENE

An unusual case of toluene-induced metabolic acidosis. Jone CM, et al. **Clin Chem** 1988 Dec;34(12):2596-9

Toluene: uses, occurrence and exposure. Fishbein L. **IARC Sci Publ** 1988;(85):97-108 (47 ref.)

Central nervous system effects of chronic toluene abuse—clinical, brainstem evoked response and magnetic resonance imaging studies. Rosenberg NL, et al. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):489-95

[Level of urinary phenol and hippuric acid in control subjects and subjects exposed to benzene and toluene] Premel-Cabic A, et al. **Ann Biol Clin (Paris)** 1988;46(8):683-7 (22 ref.) (Eng. Abstr.) (Fre)

[Electrophysiological studies on visual toxicity of toluene] Toyonaga N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Nov; 92(11):1875-80 (Eng. Abstr.) (Jpn)

[Abuse of volatile solvents: epidemiologic, medico-psychological and experimental aspects] Carlini EA, et al. **AMB Rev Assoc Med Bras** 1988 Mar-Apr; 34(2):61-8 (63 ref.) (Eng. Abstr.) (Por)

ADVERSE EFFECTS

Neurobehavioural symptoms among workers occupationally exposed to toluene. Foo SC, et al. **Asia Pac J Public Health** 1988;2(3):192-7

Toluene-associated myelofibrosis [letter] Bosch X, et al. **Blut** 1989 Apr;58(4):219-20

Conjugated serum bile acid concentrations in workers exposed to low doses of toluene and xylene. Franco G, et al. **Br J Ind Med** 1989 Feb;46(2):141-2

Exposure indices for painters exposed to toluene and xylene at low concentrations. Jonai H, et al. **Ind Health** 1988; 26(3):197-202

Toluene embryopathy: two new cases. Hersh JH. **J Med Genet** 1989 May;26(5):333-7

Liver structure and function in print workers exposed to toluene. Guzelian P, et al. **J Occup Med** 1988 Oct; 30(10):791-6

Urinary hippuric acid excretion after use of spray ski-wax and remover. Sugita M, et al. **Tokai J Exp Clin Med** 1987 Nov;12(4):215-22

[A case of distal renal tubular acidosis associated with toluene sniffing] Suhara T, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1452-3 (Jpn)

ANALOGS & DERIVATIVES

Inactivation of chicken liver mevalonate 5-diphosphate decarboxylase by sulfhydryl-directed reagents: evidence of a functional dithiol. Alvear M, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):7-11

[Effects of dibenzyltoluene on fetal developments of rats] Kurosaki T, et al. **Eisei Shikenjo Hokoku** 1988;(106):61-6 (Eng. Abstr.) (Jpn)

ANALYSIS

Determination of benzene, toluene and xylene in industrial air by charcoal tube, solvent desorption and gas chromatography. Brown RH. **IARC Sci Publ** 1988; (85):225-33

Determination of benzene, toluene and xylene in industrial air by porous polymer adsorption tube, thermal desorption and gas chromatography. Brown RH. **IARC Sci Publ** 1988; (85):235-42

Past and present exposure determination techniques for benzene, toluene and xylene. Fishbein L, et al. **IARC Sci Publ** 1988;(85):123-48 (187 ref.)

Biological monitoring of exposure to benzene, toluene and xylene. Lauwerys R, et al. **IARC Sci Publ** 1988;(85):205-22 (79 ref.)

Determination of benzene, toluene and xylene in breath samples by gas chromatography/mass spectrometry. Pellizzari ED, et al. **IARC Sci Publ** 1988;(85):267-79

Breath and blood levels of benzene, toluene, cumene and styrene in non-occupational exposure. Brugnone F, et al. **Int Arch Occup Environ Health** 1989;61(5):303-11

Detection of toluene in a putrefied human body. Hara K, et al. **Nippon Hoigaku Zasshi** 1988 Aug;42(4-5):354-7

[Determining the levels of toluene, benzene and xylene in hand washings from the skin of workers by a method of vapor-phase chromatographic analysis] Chernitsyna MA. **Gig Sanit** 1989 Jan;(1):38-41 (Rus)

BLOOD

Determination of toluene in blood by head-space gas chromatography. Angerer J. **IARC Sci Publ** 1988; (85):287-91

[Changes in blood toluene concentrations in rats under various kinds of exposure conditions and physical loads] Aikawa H, et al. **Sangyo Igaku** 1988 Sep;30(5):379-84 (Eng. Abstr.) (Jpn)

METABOLISM

The TOL (pWW0) catabolic plasmid. Burlage RS, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1323-8 (54 ref.)

Deuterium isotope effects on toluene metabolism. Product release as a rate-limiting step in cytochrome P-450 catalysis. Ling KH, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):844-9

Central nervous system distribution of inhaled toluene. Gospe SM Jr, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):540-5

Determination of specific mercapturic acids in human urine after experimental exposure to toluene or o-xylene. Norström A, et al. **IARC Sci Publ** 1988;(89):232-4

Skin absorption of organic solvent vapors in nude mice in vivo. Tsuruta H. **Ind Health** 1989;27(2):37-47

Toluene transposons Tn4651 and Tn4653 are class II transposons. Tsuda M, et al. **J Bacteriol** 1989 Mar; 171(3):1386-93

Toluene degradation by Pseudomonas putida F1. Nucleotide sequence of the todC1C2BADE genes and their expression in Escherichia coli. Zylstra GJ, et al. **J Biol Chem** 1989 Sep 5;264(25):14940-6

Identification and characterization of Tn4653, a transposon covering the toluene transposon Tn4651 on TOL plasmid pWW0. Tsuda M, et al. **Mol Gen Genet** 1988 Jul; 213(1):72-7

[Method for simultaneous determination of six metabolites of toluene, xylene and ethylbenzene, and its application to exposure monitoring of workers in a printing factory with gravure machines] Sakai T, et al. **Sangyo Igaku** 1989 Jan;31(1):9-16 (Eng. Abstr.) (Jpn)

PHARMACOKINETICS

Toxicokinetics of benzene, toluene and xylenes. Sato A. **IARC Sci Publ** 1988;(85):47-64 (86 ref.)

Influence of cigarette smoking on the toxicokinetics of toluene in humans. Hjelm EW, et al. **J Toxicol Environ Health** 1988;25(2):155–63

Effects of soil on percutaneous absorption of toluene in male rats. Skowronski GA, et al. **J Toxicol Environ Health** 1989; 26(3):373–84

[Studies on the computer simulated model of toluene elimination from the brain using HPLC measured urinary hippuric acid and the patient's consciousness level and its medical implications] Hirai K. **Nippon Ika Daigaku Zasshi** 1989 Apr;56(2):166–78 (Eng. Abstr.) **(Jpn)**

[Degradation of alpha-methylstyrene and toluene by plasmid-containing bacterial strains of the genus Pseudomonas] Golovleva LA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Jul–Aug;(4):558–64 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Neurotensin modulates the binding characteristics of dopamine D2 receptors in rat striatal membranes also following treatment with toluene. von Euler G, et al. **Acta Physiol Scand** 1989 Apr;135(4):443–8

Effects of acute haloperidol treatment on regional catecholamine levels and utilization in rats exposed to toluene. von Euler G, et al. **Acta Physiol Scand** 1988 Feb; 132(2):199–208

Testicular atrophy and loss of nerve growth factor-immunoreactive germ cell line in rats exposed to n-hexane and a protective effect of simultaneous exposure to toluene or xylene. Nylén P, et al. **Arch Toxicol** 1989; 63(4):296–307

Acute neurobehavioural effects of toluene. Echeverria D, et al. **Br J Ind Med** 1989 Jul;46(7):483–95

Multimodal effects of acute exposure to toluene evidenced by sensory-evoked potentials from Fischer-344 rats. Rebert CS, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):757–68

Evidence of tolerance following repeated exposure to toluene in the rat. Rees DC, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):283–91

Effects of toluene on protein synthesis and the interaction with ethanol in hepatocytes isolated from fed and fasted rats. Smith-Kielland A, et al. **Pharmacol Toxicol** 1989 Jan; 64(1):83–7

Persistent effects of neonatal toluene exposure on regional brain catecholamine levels and turnover in the adult male rat. Von Euler G, et al. **Toxicology** 1989 Jan;54(1):1–16

[Effect of toluene on circadian sleep rhythms in rats] Arito H, et al. **Sangyo Igaku** 1988 Nov;30(6):488–9 **(Jpn)**

POISONING

A fatal case of oral ingestion of toluene. Ameno K, et al. **Forensic Sci Int** 1989 Jun;41(3):255–60

Organic brain syndrome and long-term exposure to toluene: a clinical, psychiatric study of vocationally active printing workers. Larsen F, et al. **J Occup Med** 1988 Nov; 30(11):875–8

[A case of intoxication with thinner, Bond and Optalidon, showing various psychiatric symptoms and polyneuropathy] Tanaka M, et al. **Rinsho Shinkeigaku** 1975 Mar;15(3):116–23 (Eng. Abstr.) **(Jpn)**

TOXICITY

Protective effect of Legalon in workers exposed to organic solvents. Szilárd S, et al. **Acta Med Hung** 1988;45(2):249–56

Neurasthenic complaints and psychometric function of toluene-exposed rotogravure printers. Orbaek P, et al. **Am J Ind Med** 1989;16(1):67–77

Changes in sleep and wakefulness following single and repeated exposures to toluene vapor in rats. Arito H, et al. **Arch Toxicol** 1988 Aug;62(1):76–80

Decrease of inhaled toluene, ethyl benzene, m-xylene, or mesitylene in rat blood after combined exposure to ethyl acetate. Freundt KJ, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):495–8

Immunotoxicological evaluation of toluene exposure via drinking water in mice. Hsieh GC, et al. **Environ Res** 1989 Jun;49(1):93–103

Genetic effects of benzene, toluene and xylene. Fishbein L. **IARC Sci Publ** 1988;(85):19–46 (167 ref.)

Carcinogenicity of benzene, toluene and xylene: epidemiological and experimental evidence. McMichael AJ. **IARC Sci Publ** 1988;(85):3–18 (53 ref.)

Studies on the effect of ethanol and/or toluene on rat erythrocytes. Rosin J, et al. **J Appl Toxicol** 1988 Oct; 8(5):369–72

Toluene-induced alterations in rat synaptosomal membrane composition and function. Le Bel CP, et al. **J Biochem Toxicol** 1988 Winter;3:279–93

Similarities of toluene and o-cresol neuroexcitation in rats. Mattsson JL, et al. **Neurotoxicol Teratol** 1989 Jan–Feb; 11(1):71–5

Ototoxicity of toluene in rats. Sullivan MJ, et al. **Neurotoxicol Teratol** 1988 Nov–Dec;10(6):525–30

Single toluene exposure and changes of response latency in shock avoidance performance. Wada H, et al. **Neurotoxicol Teratol** 1989 May–Jun;11(3):265–72

Repeated toluene exposure and changes of response latency in shock avoidance learning. Wada H, et al. **Neurotoxicol Teratol** 1988 Jul–Aug;10(4):387–91

Acute electrophysiologic effects of inhaled toluene on adult male Long-Evans rats. Rebert CS, et al. **Pharmacol Biochem Behav** 1989 May;33(1):157–65

Toluene. **Rev Environ Contam Toxicol** 1988;106:189–201 (67 ref.)

Toluene exposure during maturation of intraocular brain tissue transplants: alterations of host and graft cerebellar Purkinje neuron function and sensitivity to norepinephrine. Granholm AC, et al. **Toxicol Appl Pharmacol** 1988 Nov; 96(2):296–304

Effects of chronic toluene exposure on central monoamine and peptide receptors and their interactions in the adult male rat. von Euler G, et al. **Toxicology** 1988 Nov 14; 52(1–2):103–26

[Effect of toluene inhalation in rats, mice, and mice offsprings] Kawata F, et al. **Nippon Hoigaku Zasshi** 1988 Apr;42(2):173–8 (Eng. Abstr.) **(Jpn)**

[Effect of elevated temperature on animals' sensitivity to n-pentane, n-hexane, n-heptane, n-octane and toluene and their distribution in the tissues] Babanov GP, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):23–5 (Eng. Abstr.) **(Rus)**

URINE

Strain difference in free p-cresol excretion in urine of rats exposed to toluene at sub-narcotic concentrations. Inoue O, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):74–9

TOLUENE DIISOCYANATE see under **CYANATES**

TOLUENESULFONYL COMPOUNDS see **TOSYL COMPOUNDS**

TOLUIDINE BLUE O see **TOLONIUM CHLORIDE**

TOLUIDINES

ADMINISTRATION & DOSAGE

Efficacy and stability of wettable powder amitraz in field and laboratory studies against Boophilus annulatus (Acari: Ixodidae) in south Texas. Ahrens EH, et al. **J Econ Entomol** 1989 Jun;82(3):850–3

ADVERSE EFFECTS

[2 cases of colonic pbstipation in ponies, probably as a sequela of a treatment with Taktic] Mutsaers CW, et al. **Tijdschr Diergeneeskd** 1988 Nov 15;113(22):1246–8 (Eng. Abstr.) **(Dut)**

ANALYSIS

Analysis of trifluralin and other dinitroaniline herbicide residues by zero-order and derivative ultraviolet spectrophotometry. Traore S, et al. **Analyst** 1989 May; 114(5):609–13

Separation and identification of trifluralin metabolites by open-tubular liquid chromatography/negative chemical ionization mass spectrometry. de Wit JS, et al. **Biomed Environ Mass Spectrom** 1988 Jul;17(1):47–53

Loss of trifluralin from clay and loam soils containing aged and freshly applied residues. Smith AE, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):569–73

[Total residue analysis of Amitraz in the rabbit tissue by gas chromatography] Huang W, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):419–21 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

Cardiovascular responses to amitraz in the presence of autonomic antagonists and agonists. Cullen LK, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:45–56

Formamidine pesticides enhance susceptibility to kindled seizures in amygdala and hippocampus of the rat. Gilbert ME. **Neurotoxicol Teratol** 1988 May–Jun;10(3):221–7

Increased hippocampal excitability produced by amitraz. Gilbert ME, et al. **Neurotoxicol Teratol** 1988 May–Jun; 10(3):229–35

POISONING

Methemoglobinemia due to ingestion of N,N-dimethyl-p-toluidine, a component used in the fabrication of artificial fingernails. Potter JL, et al. **Ann Emerg Med** 1988 Oct;17(10):1098–100

THERAPEUTIC USE

The treatment of ticks on tortoises using amitraz. Petney TN, et al. **J S Afr Vet Assoc** 1988 Dec;59(4):206

TOXICITY

Investigations of amitraz neurotoxicity in rats. III. Effects on motor activity and inhibition of monoamine oxidase. Moser VC, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):12–22

Acute and chronic effects of the pesticide amitraz on alpha 2-adrenoceptors in mouse brain. Costa LG, et al. **Toxicol Lett** 1989 May;47(2):135–43

Effect of norharman on the mutagenicity of toluidine metabolites. Gupta RL, et al. **Toxicol Lett** 1989 Jul; 48(1):75–81

TOMATINE see under **ALKALOIDS**

TOMODENSITOMETRY see **TOMOGRAPHY, X-RAY COMPUTED**

TOMOGRAPHY

Quantitative assessment of the optic nerve head with the laser tomographic scanner. Weinreb RN, et al. **Int Ophthalmol** 1989 Jan;13(1–2):25–9

Reproducibility of topographic measurements of the optic nerve head with laser tomographic scanning. Kruse FE, et al. **Ophthalmology** 1989 Sep;96(9):1320–4

Conventional tomography in musculoskeletal trauma. Ho C, et al. **Radiol Clin North Am** 1989 Sep;27(5):929–32

INSTRUMENTATION

An electric current tomograph. Newell JC, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):828–33

METHODS

Confocal laser tomographic analysis of the retina in eyes with macular hole formation and other focal macular diseases. Bartsch DU, et al. **Am J Ophthalmol** 1989 Sep 15; 108(3):277–87

Xenon computed tomography measuring cerebral blood flow in the determination of brain death in children. Ashwal S, et al. **Ann Neurol** 1989 Jun;25(6):539–46

Commission of the European Communities COMAC-BME 2nd Workshop on Electrical Impedance Tomography—Applied Potential Tomography. 21–23 October 1987, Lyon, France. **Clin Phys Physiol Meas** 1988; 9 Suppl A:1–147

Quantitative assessment of impedance tomography for temperature measurements in microwave hyperthermia. Amasha HM, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:49–53

Errors in reconstruction of resistivity images using a linear reconstruction technique. Barber DC, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:101–4

Data errors and reconstruction algorithms in electrical impedance tomography. Breckon WR, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:105–9

Possibilities and problems of real-time imaging of tissue resistivity. Brown BH, et al. **Clin Phys Physiol Meas** 1988; 9 Suppl A:121–5

Analysis of equipotential lines as a basis for impedance imaging. Dawids S, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:21–4

Methods of cardiac gating applied potential tomography. Eyüboglu BM, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:43–8

Theory and performance of an adaptive current tomography system. Gisser DG, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:35–41

A phantom for electrical impedance tomography. Griffiths H. **Clin Phys Physiol Meas** 1988;9 Suppl A:15–20

A regularised electrical impedance tomography reconstruction algorithm. Hua P, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:137–41

A fast approximation for the calculation of potential distributions in electrical impedance tomography. Kotre CJ. **Clin Phys Physiol Meas** 1988 Nov;9(4):353–61

Three-dimensional reconstruction in electrical impedance tomography. Liu WP, et al. **Clin Phys Physiol Meas** 1988; 9 Suppl A:131–5

The effect of the skull of low-birthweight neonates on applied potential tomography imaging of centralised resistivity changes. McArdle FJ, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:55–60

Aspects of instrumentation design for impedance imaging. Murphy D, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:5–14

Analysis and assessment of errors in a parallel data acquisition system for electrical impedance tomography. Rosell J, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:93–9

Recent North American progress in electrical impedance tomography. Webster JG, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:127–30

Electrical impedance imaging in two and three dimensions. Wexler A. **Clin Phys Physiol Meas** 1988;9 Suppl A:29–33

Evaluation of applied potential tomography as a new non-invasive gastric secretion test. Baxter AJ, et al. **Gut** 1988 Dec;29(12):1730–5

A review of image reconstruction techniques for electrical impedance tomography. Barber DC. **Med Phys** 1989 Mar–Apr;16(2):162–9 (42 ref.)

Microtomography from limited projections in conventional TEM for 3D reconstruction of an intact cell. Nelson AC, et al. **Ultramicroscopy** 1988;25(4):293–301

Numerical study of higher-order diffraction tomography via the sinc basis moment method. Cavicchi TJ, et al. **Ultrason Imaging** 1989 Jan;11(1):42–74

High-resolution, reflection mode tomographic imaging. Part I: Principles and methods. Herment A, et al. **Ultrason Imaging** 1989 Jan;11(1):1–21 (31 ref.)

High-resolution, reflection mode tomographic imaging. Part II: Application to echography. Herment A, et al. **Ultrason Imaging** 1989 Jan;11(1):22–41 (22 ref.)

TOMOGRAPHY, EMISSION COMPUTED

The contribution of 99mTc-pyrophosphate tomoscintigraphy in the evaluation of necrotic myocardial lesions. Bourgeois P, et al. **Acta Cardiol** 1989;44(3):195–202

S-100 protein in cerebrospinal fluid after aneurysmal subarachnoid haemorrhage: relation to functional outcome, late CT and SPECT changes, and signs of higher cortical dysfunction. Härdemark HG, et al. **Acta Neurochir (Wien)** 1989;99(3–4):135–44

Early and late stage positron emission tomography (PET) studies on the haemocirculation and metabolism of seemingly normal brain tissue in patients with gliomas following radiochemotherapy. Mineura K, et al. **Acta Neurochir (Wien)** 1988;93(3–4):110–5

Positron emission tomographical studies of 1-11C-acetoacetate, 2-18F-fluoro-deoxy-D-glucose, and L-1-11C-tyrosine uptake by cat brain with an experimental lesion. Presen GH, et al. **Acta Neurochir (Wien)** 1989; 99(3–4):166–72

Positron emission tomography with 68-Ga-EDTA and computed tomography in patients with subarachnoid haemorrhage. von Holst H, et al. **Acta Neurochir (Wien)** 1989;97(3–4):146–9

PET determination of regional cerebral glucose metabolism in alcohol-dependent men and healthy controls using 11C-glucose. Wik G, et al. **Acta Psychiatr Scand** 1988 Aug; 78(2):234–41

Positron emission tomography and computed tomography in differential diagnosis between recurrent or residual glioma and treatment-induced brain lesions. Lilja A, et al. **Acta Radiol** 1989 Mar-Apr;30(2):121–8

Positron emission tomography compared with magnetic resonance imaging and computed tomography in supratentorial gliomas using multiple stereotactic biopsies as reference. Mosskin M, et al. **Acta Radiol** 1989 May-Jun; 30(3):225–32

Cerebral infarction: diagnosis and assessment of prognosis by using 123IMP-SPECT and CT. Hayman LA, et al. **AJNR** 1989 May-Jun;10(3):557–62

Cerebral blood flow evaluation of arteriovenous malformations with stable xenon CT. Marks MP, et al. **AJNR** 1988 Nov-Dec;9(6):1169–75

Assessment of myocardial viability with SPECT and PET imaging. Cerqueira MD, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):477–83 (48 ref.)

Three-dimensional techniques and artificial intelligence in thallium-201 cardiac imaging. DePuey EG, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1161–8 (24 ref.)

Portosystemic collaterals in portal hypertension: visualization by using blood-pool SPECT imaging. Kashiwagi T, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):281–5

Distinction between hemangioma of the liver and hepatocellular carcinoma: value of labeled RBC-SPECT scanning. Kudo M, et al. **AJR Am J Roentgenol** 1989 May; 152(5):977–83

SPECT of the peritoneal cavity: method for delineating intraperitoneal fluid distribution. Wahl RL, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1205–10

Comparison of technetium 99m methoxy isobutyl isonitrile and thallium 201 for evaluation of coronary artery disease by planar and tomographic methods. Kiat H, et al. **Am Heart J** 1989 Jan;117(1):1–11

The effect of beta blockade on single photon emission computed tomographic (SPECT) thallium-201 images in patients with coronary disease. Narahara KA, et al. **Am Heart J** 1989 May;117(5):1030–5

Dipyridamole-thallium-201 tomography documenting improved myocardial perfusion with therapy in Kawasaki disease. Nienaber CA, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1575–9

Measurement of acute Q-wave myocardial infarct size with single photon emission computed tomography imaging of indium-111 antimyosin. Antunes ML, et al. **Am J Cardiol** 1989 Apr 1;63(12):777–83

Myocardial infarction determined by technetium-99m pyrophosphate single-photon tomography complicating elective coronary artery bypass grafting for angina pectoris. Burns RJ, et al. **Am J Cardiol** 1989 Jun 15;63(20):1429–34

Increased fluorine-18 deoxyglucose uptake after percutaneous transluminal coronary angioplasty in recently infarcted myocardium. Hashimoto T, et al. **Am J Cardiol** 1989 Mar 15;63(11):743–4

Use of technetium-99m isonitrile (RP-30A) in assessing left ventricular perfusion and function at rest and during exercise in coronary artery disease, and comparison with coronary arteriography and exercise thallium-201 SPECT imaging. Iskandrian AS, et al. **Am J Cardiol** 1989 Aug 1; 64(5):270–5

Myocardial ischemia and clinical applications of positron emission tomography. Schelbert HR. **Am J Cardiol** 1989 Sep 5;64(9):46E–53E (36 ref.)

Abnormal myocardial fatty acid metabolism in dilated cardiomyopathy detected by iodine-123 phenylpentadecanoic acid and tomographic imaging. Ugolini V, et al. **Am J Cardiol** 1988 Nov 1;62(13):923–8

Focal fatty infiltration of the liver in acute alcoholic liver injury: hot spots with radiocolloid SPECT scan. Kudo M, et al. **Am J Gastroenterol** 1989 Aug;84(8):948–52

Positron emission tomography to study the effect of eye closure and optic nerve damage on human cerebral glucose metabolism. Kiyosawa M, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):147–52

Rabbit myocardial 82Rb kinetics and a compartmental model for blood flow estimation. Huang SC, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1156–64

Labeled plasma metabolites of L-methyl-hydrogen-3-methionine and L-methyl-carbon-14-methionine in the dog. Buonomo C, et al. **Am J Physiol Imaging** 1988;3(4):178–81

Validation of diagnostic procedures on stratified populations: application on the quantification of thallium myocardial perfusion scintigraphy. Goris ML, et al. **Am J Physiol Imaging** 1989;4(1):11–5

Investigational study of iodine-124 with a positron camera. Lambrecht RM, et al. **Am J Physiol Imaging** 1988; 3(4):197–200

Positron emission tomography of the cerebellum in autism. Heh CW, et al. **Am J Psychiatry** 1989 Feb;146(2):242–5

Pulmonary vascular permeability during the adult respiratory distress syndrome: a positron emission tomographic study. Calandrino FS Jr, et al. **Am Rev Respir Dis** 1988 Aug; 138(2):421–8

Comparisons of planar and tomographic gamma scintigraphy to measure the penetration index of inhaled aerosols. Phipps PR, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1516–23

Positron emission tomography: theory and its application to the study of lung disease. Schuster DP. **Am Rev Respir Dis** 1989 Mar;139(3):818–40 (157 ref.)

A SPECT study in internal carotid artery occlusion: discrepancies between flow image and neurologic deficits. Moriwaki H, et al. **Angiology** 1989 Aug;40(8):721–3

Cerebral blood flow requirement for brain viability in newborn infants is lower than in adults. Altman DI, et al. **Ann Neurol** 1988 Aug;24(2):218–26

Positron tomography demonstrates frontal lobe hypometabolism in progressive supranuclear palsy. Goffinet AM, et al. **Ann Neurol** 1989 Feb;25(2):131–9

The time course of steroid action on blood-to-brain and blood-to-tumor transport of 82Rb: a positron emission tomographic study. Jarden JO, et al. **Ann Neurol** 1989 Mar; 25(3):239–45

Do positron emission tomographic scans measure quality of life? [letter] Schiedermayer DL, et al. **Ann Neurol** 1988 Aug;24(2):288–9

Lymphatic anatomy: functional nodal basins. Eberbach MA, et al. **Ann Plast Surg** 1989 Jan;22(1):25–31

Single photon emission computed tomography in seizure disorders. Denays R, et al. **Arch Dis Child** 1988 Oct; 63(10):1184–8

Positron emission tomographic evaluation of cerebral blood flow during state anxiety in simple phobia. Mountz JM, et al. **Arch Gen Psychiatry** 1989 Jun;46(6):501–4

Positron emission tomographic study in Alzheimer's disease and Pick's disease. Salmon E, et al. **Arch Gerontol Geriatr Suppl** 1989;1:241–7

Prediction of language and neurologic recovery after cerebral infarction with SPECT imaging using N-isopropyl-p-(I 123) iodoamphetamine. Bushnell DL, et al. **Arch Neurol** 1989 Jun;46(6):665–9

Scar or recurrent rectal cancer. Positron emission tomography is more helpful for diagnosis than immunoscintigraphy. Schlag P, et al. **Arch Surg** 1989 Feb; 124(2):197–200

Brain morphology and regional cerebral blood flow in anorexia nervosa. Krieg JC, et al. **Biol Psychiatry** 1989 Apr 15;25(8):1041–8

Drug distribution in dog brain studied by positron emission tomography. Agon P, et al. **Biopharm Drug Dispos** 1988 Nov-Dec;9(6):567–77

PET scanning [letter; comment] Miles KA. **BMJ** 1989 Apr 29;298(6681):1177. **Comment on: BMJ** 1989 Mar 18;298(6675):693–4

Technetium-99m HMPAO and SPECT in the assessment of blood flow in human lung tumours. Rowell NP, et al. **Br J Cancer** 1989 Jan;59(1):135–41

Brain imaging and treatment response in spasmodic torticollis. Besson JA, et al. **Br J Psychiatry** 1988 Sep; 153:399–402

99Tcm-HMPAO single photon emission tomography in the diagnosis of cerebral barotrauma. Macleod MA, et al. **Br J Radiol** 1988 Dec;61(732):1106–9

Three-dimensional shaded-surface images from positron tomography using MUP-PET. Webb S, et al. **Br J Radiol** 1988 Dec;61(732):1172–5

The localization of myocardial ischaemia with technetium-99m methoxy isobutyl isonitrile and single photon emission computed tomography. West DJ, et al. **Br J Radiol** 1989 Apr;62(736):303–13

The cerebral metabolism of glucose and oxygen measured with positron tomography in patients with mitochondrial diseases. Frackowiak RS, et al. **Brain** 1988 Oct;111 (Pt 5):1009–24

PET studies of parkinsonian patients treated with autologous adrenal implants. Guttman M, et al. **Can J Neurol Sci** 1989 Aug;16(3):305–9

Identification of clinically significant skeletal muscle necrosis by single photon emission computed tomography. Forrest I, et al. **Can J Surg** 1989 Mar;32(2):109–12

Noninvasive quantitation of regional myocardial oxygen consumption in vivo with [1-11C]acetate and dynamic positron emission tomography. Buxton DB, et al. **Circulation** 1989 Jan;79(1):134–42

Assessment of coronary artery disease severity by positron emission tomography. Comparison with quantitative arteriography in 193 patients. Demer LL, et al. **Circulation** 1989 Apr;79(4):825–35

Quantification of infarct size by 201Tl single-photon emission computed tomography during acute myocardial infarction in humans. Comparison with enzymatic estimates. Mahmarian JJ, et al. **Circulation** 1988 Oct;78(4):831–9

Determination of cerebral blood flow by SPECT: a valuable tool in the investigation of dementia? Weinstein HC, et al. **Clin Neurol Neurosurg** 1989;91(1):13–9

Viral encephalitis: imaging with SPECT. Ackerman ES, et al. **Clin Nucl Med** 1988 Sep;13(9):640–3

The value of SPECT imaging in the diagnosis of hepatic hemangioma. Brunetti JC, et al. **Clin Nucl Med** 1988 Nov; 13(11):800–4

SPECT imaging of the lumbosacral spine and pelvis. Gates GF. **Clin Nucl Med** 1988 Dec;13(12):907–14

Coexistence of cerebral infarct and arteriovenous malformation demonstrated by Tc-99m HMPAO and Tc-99m RBC SPECT imaging. Gini A, et al. **Clin Nucl Med** 1989 Apr;14(4):303–5

Multimodality evaluation of Klatskin tumor: detection by SPECT alone. Glaser AM, et al. **Clin Nucl Med** 1989 Mar; 14(3):227–8

The utility of SPECT liver-spleen imaging in the evaluation of a possible accessory spleen. Guze BH, et al. **Clin Nucl Med** 1988 Jul;13(7):496–7

Clinical application of SPECT in adrenal imaging with iodine-131 6 beta-iodomethyl-19-norcholesterol. Ishimura J, et al. **Clin Nucl Med** 1989 Apr;14(4):278–81

Initial experience with SPECT imaging of the brain using I-123 p-iodoamphetamine in focal epilepsy. LaManna MM, et al. **Clin Nucl Med** 1989 Jun;14(6):428–30

Detection of left atrial myxoma with SPECT cardiac imaging. McLaughlin MG, et al. **Clin Nucl Med** 1989 Feb; 14(2):101–3

Silent infarction of the brain. Incidental finding demonstrated by SPECT. Mountz JM, et al. **Clin Nucl Med** 1988 Jul; 13(7):498–501

Decreased iodine-123 IMP caudate nucleus uptake in patients with Huntington's disease. Nagel JS, et al. **Clin Nucl Med** 1988 Jul;13(7):486–90

The potential value of serial cerebral SPECT scanning in the evaluation of psychiatric illness. Notardonato H, et al. **Clin Nucl Med** 1989 May;14(5):319–22

The use and diagnostic significance of thallium-201 SPECT imaging in a case of anomalous left coronary artery. Petrozzo PJ, et al. **Clin Nucl Med** 1988 Sep;13(9):629–31

Gallium-67 SPECT imaging in hepatocellular carcinoma. Rush C, et al. **Clin Nucl Med** 1988 Jul;13(7):535–7

Improved specificity of prone versus supine thallium SPECT imaging. Segall GM, et al. **Clin Nucl Med** 1988 Dec; 13(12):915–6

Regional brain function in hallucinations: a study of regional cerebral blood flow with 99m-Tc-HMPAO-SPECT in patients with auditory hallucinations, tactile hallucinations, and normal controls. Musalek M, et al. **Compr Psychiatry** 1989 Jan-Feb;30(1):99–108

Positron emission tomography of the brain. Jamieson DG, et al. **Comput Med Imaging Graph** 1989 Jan-Feb;13(1):61–79 (136 ref.)

The status of nuclear medicine techniques in the diagnosis of bone metastases in breast cancer. Makaiová I, et al. **Czech Med** 1989;12(1):34–9

Iofetamine hydrochloride I 123: a new radiopharmaceutical for cerebral perfusion imaging. Druckenbrod RW, et al. **DICP** 1989 Jan;23(1):19–24 (36 ref.)

Electroencephalographic correlates of blood flow and oxygen metabolism provided by positron emission tomography in patients with cerebral infarction. Nagata K, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan; 72(1):16–30

Improvement in transient and 'persistent' perfusion defects on early and late post-exercise thallium-201 tomograms after coronary artery bypass grafting. Fioretti P, et al. **Eur Heart J** 1988 Dec;9(12):1332–8

Uptake of SPECT radiopharmaceuticals in neocortical brain cultures. de Jong BM, et al. **Eur J Nucl Med** 1989; 15(1):16–20

Clinical experience with Tc-99m HM-PAO high resolution SPECT of the brain in patients with cerebrovascular accidents. De Roo M, et al. **Eur J Nucl Med** 1989; 15(1):9–15

A comparison of Tc-99m HM-PAO and I-123 IMP cerebral SPECT images in Alzheimer's disease and multi-infarct dementia. Gemmell HG, et al. **Eur J Nucl Med** 1988; 14(9–10):463–6

Semi-quantitative analysis of regional cerebral perfusion [letter] Gemmell HG, et al. **Eur J Nucl Med** 1989;15(4):222

Measurement of human blood brain barrier integrity using 11C-inulin and positron emission tomography. Hara T, et al. **Eur J Nucl Med** 1988;14(4):173–6

Quantification of myocardial ischemia and infarction with single photon emission computed tomography. Hoffmeister HM, et al. **Eur J Nucl Med** 1989;15(1):26–31

Two dimensional polar display of cardiac blood pool SPECT. Honda N, et al. **Eur J Nucl Med** 1989;15(3):133–6

Clinical evaluation of the 99mTc-CPI myocardial perfusion imaging. Liu XJ, et al. **Eur J Nucl Med** 1989;15(6):277–9

RCBF-quantification with 99mTc-HMPAO-SPECT: theory and first results. Nickel O, et al.

Eur J Nucl Med 1989;15(1):1–8

Dynamic positron emission tomography with 13N–ammonia in liver tumors. Shibata T, et al. **Eur J Nucl Med** 1988; 14(12):607–11

Semiquantitative assessment of regional cerebral perfusion using 99mTc HM–PAO and emission tomography. Spreafico G, et al. **Eur J Nucl Med** 1988;14(11):565–8

Same day injections of Tc–99m methoxy isobutyl isonitrile (hexamibi) for myocardial tomographic imaging: comparison between rest–stress and stress–rest injection sequences. Taillefer R, et al. **Eur J Nucl Med** 1989; 15(3):113–7

Semiquantifying regional cerebral blood flow by 123I–amphetamine (IMP) SPECT in cerebrovascular disorders: correlations with CBF indices by 133Xe inhalation method. Tsuda Y, et al. **Eur J Nucl Med** 1988; 14(11):546–51

Non–homogeneous intrahepatic drug distribution in intraportal infusional chemotherapy demonstrated by Tc–99m–MAA perfusion SPECT. Aeberhard P, et al. **Eur J Surg Oncol** 1989 Apr;15(2):119–23

Neuropsychological, electroencephalogram and brain computed tomography findings in motor neuron disease. Gallassi R, et al. **Eur Neurol** 1989;29(2):115–20

Brain imaging with 123I–IMP–SPECT in migraine between attacks. Schlake HP, et al. **Headache** 1989 Jun;29(6):344–9

Carotid endarterectomy. Pre– and post–operative monitoring with cerebral SPECT. D'Addato M, et al. **Int Angiol** 1988 Jul–Sep;7(3):234–7

Effect of exercise on the leg distribution of C15O2 and 15O2 in normals and in patients with peripheral ischemia: a study using positron tomography. Depairon M, et al. **Int Angiol** 1988 Jul–Sep;7(3):254–7

Lack of correlation after reperfusion between ventricular function and infarct size estimated by thallium single–photon emission computed tomography. Schofer J, et al. **Int J Card Imaging** 1988–89;3(4):203–8

Automated production of several positron–emitting radiopharmaceuticals using a single laboratory robot. Brodack JW, et al. **Int J Rad Appl Instrum [A]** 1988; 39(7):689–98

11C–labelling of Ro 15–1788 in two different positions, and also 11C–labelling of its main metabolite Ro 15–3890, for PET studies of benzodiazepine receptors. Halldin C, et al. **Int J Rad Appl Instrum [A]** 1988;39(9):993–7

No–carrier–added synthesis of 3–[18F]fluoro–1–(2–nitro–1–imidazolyl)–2–propanol. A potential PET agent for detecting hypoxic but viable tissues. Hwang DR, et al. **Int J Rad Appl Instrum [A]** 1989; 40(2):117–26

The radiosynthesis of [N–methyl–11C]–sertraline. Lasne MC, et al. **Int J Rad Appl Instrum [A]** 1989;40(2):147–51

Synthesis of racemic (+) and (–) N–[methyl–11C]nomifensine, a ligand for evaluation of monoamine re–uptake sites by use of positron emission tomography. Ulin J, et al. **Int J Rad Appl Instrum [A]** 1989; 40(2):171–6

Estimation of hepatic volume by SPECT during liver regeneration: an experimental study in an animal model. Faurous P, et al. **Int J Rad Appl Instrum [B]** 1989; 16(4):375–9

Synthesis of a high specific activity 125I–labeled analog of PK 11195, potential agent for SPECT imaging of the peripheral benzodiazepine binding site. Gildersleeve DL, et al. **Int J Rad Appl Instrum [B]** 1989;16(4):423–9

2–Deoxy–2–[18F]fluoro–D–galactose as an in vivo tracer for imaging galactose metabolism in tumors with positron emission tomography. Ishiwata K, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):247–54

Regional cerebral function and blood flow: complementary single photon emission computed tomography of the brain using xenon–133 and [123I]iodoamphetamine. Simon TR, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):295–300

The effect of acetazolamide on regional cerebral blood flow in patients with Alzheimer's disease or stroke as measured by single–photon emission computed tomography. Bonte FJ, et al. **Invest Radiol** 1989 Feb;24(2):99–103

Positron emission tomography in aging and dementia: effect of cerebral atrophy. Gottschalk A, et al. **Invest Radiol** 1988 Nov;23(11):879–80

Quantification of spatial blood flow distribution in isolated canine lung. Hakim TS, et al. **Invest Radiol** 1988 Jul; 23(7):498–504

Single photon emission computed tomography with 99mTc HM–PAO in the study of focal epilepsy. Grasso E, et al. **Ital J Neurol Sci** 1989 Apr;10(2):175–9

Noninvasive quantitation of myocardial blood flow in human subjects with oxygen–15–labeled water and positron emission tomography. Bergmann SR, et al. **J Am Coll Cardiol** 1989 Sep;14(3):639–52

Myocardial stunning in hypertrophic cardiomyopathy: recovery predicted by single photon emission computed tomographic thallium–201 scintigraphy. Fine DG, et al. **J Am Coll Cardiol** 1989 May;13(6):1415–8

Improved diagnostic performance of exercise thallium–201 single photon emission computed tomography over planar imaging in the diagnosis of coronary artery disease: a receiver operating characteristic analysis. Fintel DJ, et al. **J Am Coll Cardiol** 1989 Mar 1;13(3):600–12

Myocardial metabolism by positron emission tomography in hypertrophic cardiomyopathy [editorial] Gould KL. **J Am Coll Cardiol** 1989 Feb;13(2):325–6

Late reversibility of tomographic myocardial thallium–201 defects: an accurate marker of myocardial viability. Kiat H, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1456–63

Comparison of planar and tomographic exercise thallium–201 imaging methods for the evaluation of coronary artery disease. Kiat H, et al. **J Am Coll Cardiol** 1989 Mar 1; 13(3):613–6

Quantification of regional V/Q ratios in humans by use of PET. I. Theory. Rhodes CG, et al. **J Appl Physiol** 1989 Apr;66(4):1896–904

Quantification of regional V/Q ratios in humans by use of PET. II. Procedure and normal values. Rhodes CG, et al. **J Appl Physiol** 1989 Apr;66(4):1905–13

Cerebral perfusion defects, dysautoregulation and carotid stenosis. Lord RS, et al. **J Cardiovasc Surg (Torino)** 1988 Nov–Dec;29(6):670–5

Quantitative measurements of cerebral blood flow using SPECT and [99mTc]–d,l–HM–PAO compared to xenon–133. Andersen AR, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S69–81

Kinetic analysis of central [11C]raclopride binding to D2–dopamine receptors studied by PET—a comparison to the equilibrium analysis. Farde L, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):696–708

Multicompartmental analysis of [11C]–carfentanil binding to opiate receptors in humans measured by positron emission tomography. Frost JJ, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):398–409

The effect of nimodipine on the evolution of human cerebral infarction studied by PET. Hakim AM, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):523–34 (63 ref.)

Estimation of local cerebral protein synthesis rates with L–[1–11C]leucine and PET: methods, model, and results in animals and humans. Hawkins RA, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):446–60

Linearization correction of 99mTc–labeled hexamethyl–propylene amine oxime (HM–PAO) image in terms of regional CBF distribution: comparison to C15O2 inhalation steady–state method measured by positron emission tomography. Inugami A, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S52–60

Mixing in the human carotid artery during carotid drug infusion studied with PET. Junck L, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):681–9

In vivo cerebral protein synthesis rates with leucyl–transfer RNA used as a precursor pool: determination of biochemical parameters to structure tracer kinetic models for positron emission tomography. Keen RE, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):429–45

Tomographic studies of rCBF with [99mTc]–HM–PAO SPECT in patients with brain tumors: comparison with C15O2 continuous inhalation technique and PET. Langen KJ, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S90–4

A highly accurate method of localizing regions of neuronal activation in the human brain with positron emission tomography. Mintun MA, et al. **J Cereb Blood Flow Metab** 1989 Feb;9(1):96–103

[99mTc]–HM–PAO SPECT in Parkinson's disease. Pizzolato G, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S101–8

SPECT measurements with 99mTc–HM–PAO in focal epilepsy. Ryding E, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S95–100

SPECT with [99mTc]–d,l–hexamethyl–propylene amine oxime (HM–PAO) compared with regional cerebral blood flow measured by PET: effects of linearization. Yonekura Y, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S82–9

Longitudinal study of the early neuropsychological and cerebral metabolic changes in dementia of the Alzheimer type. Grady CL, et al. **J Clin Exp Neuropsychol** 1988 Oct; 10(5):576–96

Cerebral metabolic effects of a verbal fluency test: a PET scan study. Parks RW, et al. **J Clin Exp Neuropsychol** 1988 Oct;10(5):565–75

Subacute and chronic cerebral infarctions: SPECT and gadolinium–DTPA enhanced MR imaging. Cordes M, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):567–71

Evaluation of elastic matching system for anatomic (CT, MR) and functional (PET) cerebral images. Dann R, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):603–11

Brain metabolism in mitochondrial encephalomyopathy: a PET study. De Volder A, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):854–7

Investigation of count rate and deadtime characteristics of a high resolution PET system. Germano G, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):836–46

Differential diagnosis of solitary pulmonary nodules with positron emission tomography using [11C]L–methionine. Kubota K, et al. **J Comput Assist Tomogr** 1988 Sep–Oct; 12(5):794–6

Stratified impairment of pulmonary ventilation in "diffuse panbronchiolitis:" PET and CT studies. Murata K, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):48–53

SPECT imaging of moyamoya disease using 99mTc–HM–PAO. Comparison with computed tomography findings. Mountz JM, et al. **J Comput Tomogr** 1988 Oct;12(4):247–50

Uptake and regional distribution of (+)–(R)– and (–)–(S)–N–[methyl–11C]–nicotine in the brains of rhesus monkey. An attempt to study nicotinic receptors in vivo. Nordberg A, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):195–205

Mechanistic positron emission tomography studies: demonstration of a deuterium isotope effect in the monoamine oxidase–catalyzed binding of [11C]L–deprenyl in living baboon brain. Fowler JS, et al. **J Neurochem** 1988 Nov;51(5):1524–34

4–[18F]fluoro–L–m–tyrosine: an L–3,4–dihydroxyphenylalanine analog for probing presynaptic dopaminergic function with positron emission tomography. Melega WP, et al. **J Neurochem** 1989 Jul; 53(1):311–4

CT, MRI and SPECT neuroimaging in status epilepticus with simple partial and complex partial seizures: case report. Bauer J, et al. **J Neurol** 1989 Jul;236(5):296–9

The development of an epileptogenic focus. A case study with 99mTc–HMPAO SPECT. Dressler D, et al. **J Neurol** 1989 Jul;236(5):300–2

The cerebral localization of neuropsychological impairment in Alzheimer's disease: a SPECT study. Goldenberg G, et al. **J Neurol** 1989 Mar;236(3):131–8

PET and movement disorders. Brooks DJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:68–77 (53 ref.)

The investigation of Alzheimer's disease with single photon emission tomography. Burns A, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):248–53

Regional cerebral blood flow and metabolism in patients with transient global amnesia: a positron emission tomography study. Fujii K, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):622–30

Assessment of cerebral haemodynamic reserve: correlation between PET parameters and CO2 reactivity measured by the intravenous 133 xenon injection technique. Herold S, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug; 51(8):1045–50

CNS changes in Usher's syndrome with mental disorder: CT, MRI and PET findings. Koizumi J, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):987–90

Positron emission tomography in cases of chorea with different underlying disease [letter] Lang AE, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1010–1

Quantitative assessment of blood–brain barrier permeability in multiple sclerosis using 68–Ga–EDTA and positron emission tomography. Pozzilli C, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1058–62

Imaging of cerebral blood flow markers in Huntington's disease using single photon emission computed tomography. Reid IC, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1264–8

Non–steady–state measurement of in vivo receptor binding with positron emission tomography: "dose–response" analysis. Perlmutter JS, et al. **J Neurosci** 1989 Jul; 9(7):2344–52

Use of thallium–201 SPECT to quantitate malignancy grade of gliomas. Black KL, et al. **J Neurosurg** 1989 Sep; 71(3):342–6

PET of malignant cerebral tumors after interstitial brachytherapy. Demonstration of metabolic activity and correlation with clinical outcome. Valk PE, et al. **J Neurosurg** 1988 Dec;69(6):830–8

Simultaneous technetium–99m MIBI angiography and myocardial perfusion imaging. Baillet GY, et al. **J Nucl Med** 1989 Jan;30(1):38–44

Imaging of brain tumors with L–3–[123I]iodo–alpha–methyl tyrosine and SPECT. Biersack HJ, et al. **J Nucl Med** 1989 Jan;30(1):110–2

Dynamic xenon–133 SPECT in dementia [letter] Bonte FJ, et al. **J Nucl Med** 1989 May;30(5):719–20

Validity of estimates of myocardial oxidative metabolism with carbon–11 acetate and positron emission tomography despite altered patterns of substrate utilization. Brown MA, et al. **J Nucl Med** 1989 Feb;30(2):187–93

Two behavioral states studied in a single PET/FDG procedure: error analysis. Chang JY, et al. **J Nucl Med** 1989 Jan;30(1):93–105

Quality control procedure for 6–[18F]fluoro–L–DOPA: a presynaptic PET imaging ligand for brain dopamine neurons. Chen JJ, et al. **J Nucl Med** 1989 Jul;30(7):1249–56

Cerebral metabolism of L–[2–18F]fluorotyrosine, a new PET tracer of protein synthesis. Coenen HH, et al. **J Nucl Med** 1989 Aug;30(8):1367–72

Brain single photon emission computed tomography in neonates. Denays R, et al. **J Nucl Med** 1989 Aug; 30(8):1337–41

Effect of selecting a fixed dephosphorylation rate on the estimation of rate constants and rCMRGlu from dynamic [18F] fluorodeoxyglucose/PET data. Dhawan V, et al. **J Nucl Med** 1989 Sep;30(9):1483–8

Normal SPECT thallium–201 bull's–eye display: gender differences. Eisner RL, et al. **J Nucl Med** 1988 Dec; 29(12):1901–9

Prone decubitus: a solution to inferior wall attenuation in thallium–201 myocardial tomography. Esquerré JP, et al. **J Nucl Med** 1989 Mar;30(3):398–401

SPECT versus planar liver scintigraphy: is SPECT worth it? Fawcett HD, et al. **J Nucl Med** 1989 Jan;30(1):57–9

Noninvasive functional brain mapping by change–distribution analysis of averaged PET images of H215O tissue activity. Fox PT, et al. **J Nucl Med** 1989 Feb;30(2):141–9

Quantitative bone scintigraphy using SPECT. Front D, et al. **J Nucl Med** 1989 Feb;30(2):240–5

Relationship between histologic type of primary lung cancer and carbon–11–L–methionine uptake with positron emission tomography. Fujiwara T, et al. **J Nucl Med** 1989

Jan;30(1):33–7
Simple noninvasive quantification method for measuring myocardial glucose utilization in humans employing positron emission tomography and fluorine-18 deoxyglucose. Gambhir SS, et al. J Nucl Med 1989 Mar; 30(3):359–66
Quantitation of renal uptake of technetium-99m DMSA using SPECT. Groshar D, et al. J Nucl Med 1989 Feb; 30(2):246–50
Three-dimensional attenuation coefficients distribution for SPECT of the chest [letter] Guzzardi R, et al. J Nucl Med 1989 Jan;30(1):128–9
Filling out phenomenon with technetium-99m HM-PAO brain SPECT at the site of mild cerebral ischemia. Hayashida K, et al. J Nucl Med 1989 May;30(5):591–8
Assessment of myocardial oxidative metabolic reserve with positron emission tomography and carbon-11 acetate. Henes CG, et al. J Nucl Med 1989 Sep;30(9):1489–99
Biodistribution, dosimetry, and clinical evaluation of technetium-99m ethyl cysteinate dimer in normal subjects and in patients with chronic cerebral infarction. Holman BL, et al. J Nucl Med 1989 Jun;30(6):1018–24
N-3-[18F]fluoropropylputrescine as potential PET imaging agent for prostate and prostate derived tumors. Hwang DR, et al. J Nucl Med 1989 Jul;30(7):1205–10
Comparison of technetium-99m pyrophosphate and technetium-99m DTPA aerosols for SPECT ventilation lung imaging. Isitman AT, et al. J Nucl Med 1988 Nov; 29(11):1761–7
Quantitation of postexercise lung thallium-201 uptake during single photon emission computed tomography. Kahn JK, et al. J Nucl Med 1989 Mar;30(3):288–94
Experimental increase in brain HIPDM uptake by hypercapnia. Karatzas ND, et al. J Nucl Med 1988 Oct; 29(10):1675–82
Assessment of demented patients by dynamic SPECT of inhaled xenon-133. Komatani A, et al. J Nucl Med 1988 Oct;29(10):1621–6
Manpower requirements for clinical PET [letter; comment] Lambrecht RM, et al. J Nucl Med 1989 Jun;30(6):1132. **Comment on:** J Nucl Med 1988 Nov;29(11):1751–7
Bone SPECT in patients with persistent back pain after lumbar spine surgery. Lusins JO, et al. J Nucl Med 1989 Apr;30(4):490–6
In vivo measurement of carbon-11 thymidine uptake in non-Hodgkin's lymphoma using positron emission tomography. Martiat P, et al. J Nucl Med 1988 Oct; 29(10):1633–7
Evaluation of cerebral collateral circulation by technetium-99m HM-PAO brain SPECT during Matas test: report of three cases. Matsuda H, et al. J Nucl Med 1988 Oct;29(10):1724–9
Simultaneous correction for tracer arrival delay and dispersion in CBF measurements by the H215O autoradiographic method and dynamic PET. Meyer E. J Nucl Med 1989 Jun;30(6):1069–78
SPECT image noise power: effects of nonstationary projection noise and attenuation compensation. Moore SC, et al. J Nucl Med 1988 Oct;29(10):1704–9
Optimum processing protocols for volume determination of the liver and spleen from SPECT imaging with technetium-99m sulfur colloid. Mut F, et al. J Nucl Med 1988 Nov;29(11):1768–75
Dynamic SPECT with iodine-123 IMP in meningiomas. Nakano S, et al. J Nucl Med 1988 Oct;29(10):1627–32
Dynamic SPECT with technetium-99m HM-PAO in meningiomas—a comparison with iodine-123 IMP. Nakano S, et al. J Nucl Med 1989 Jun;30(6):1101–5
Critical cerebral blood flow thresholds studied by SPECT using xenon-133 and iodine-123 iodoamphetamine. Nakano S, et al. J Nucl Med 1989 Mar;30(3):337–42
Comparative study of regional cerebral blood flow images by SPECT using xenon-133, iodine-123 IMP, and technetium-99m HM-PAO. Nakano S, et al. J Nucl Med 1989 Feb;30(2):157–64
Quantification of leg muscle perfusion using thallium-201 single photon emission computed tomography. Oshima M, et al. J Nucl Med 1989 Apr;30(4):458–65
Peritoneal fluid causing inferior attenuation on SPECT thallium-201 myocardial imaging in women. Rab ST, et al. J Nucl Med 1988 Nov;29(11):1860–4
In defense of quantitative PET techniques [letter] Rottenberg DA, et al. J Nucl Med 1989 Apr;30(4):564
Brain blood flow by radioxenon tomography [letter] Stokely EM, et al. J Nucl Med 1988 Nov;29(11):1875–8
Septic arthritis of a lumbar facet joint: detection with bone SPECT imaging. Swayne LC, et al. J Nucl Med 1989 Aug; 30(8):1408–11
Value of rest-stress myocardial positron tomography using nitrogen-13 ammonia for the preoperative prediction of reversible asynergy. Tamaki N, et al. J Nucl Med 1989 Aug;30(8):1302–10
Biodistribution and radiation dosimetry of radioiodinated-SCH 23982, a potential dopamine D-1 receptor imaging agent. Thonoor CM, et al. J Nucl Med 1988 Oct;29(10):1668–74
Thallium-201 single photon emission computed tomography in the evaluation of suspected lung cancer. Tonami N, et al. J Nucl Med 1989 Jun;30(6):997–1004
Thallium-201 SPECT in coronary artery disease patients with left bundle branch block [letter; comment] Winzelberg GG. J Nucl Med 1989 Mar;30(3):419–20. **Comment on:** J Nucl Med 1988 Sep;29(9):1479–85
Stress thallium-201 myocardial scintigraphy: planar imaging versus SPECT. Ferlin G, et al. J Nucl Med Allied Sci 1988 Apr–Jun;32(2):82–6
The use of 99mTc(V)DMSA as imaging for the medullary thyroid carcinoma (MTC). Guerra U, et al. J Nucl Med Allied Sci 1988 Oct–Dec;32(4):242–7
Segmental pulmonary anatomy in man: a method of study with angiography and single photon emission computed tomography. Palla A, et al. J Nucl Med Allied Sci 1989 Jul–Sep;33(3):247–51
SPECT perfusion imaging with 123I-HIPDM in a patient with pulmonary embolism. Petruzzelli S, et al. J Nucl Med Allied Sci 1989 Jan–Mar;33(1):45–8
Sturge-Weber syndrome: a study of cerebral glucose utilization with positron emission tomography. Chugani HT, et al. J Pediatr 1989 Feb;114(2):244–53
Study with positron emission tomography of the osmotic opening of the dog blood–brain barrier for quinidine and morphine. Agon P, et al. J Pharm Pharmacol 1988 Aug; 40(8):539–43
Neuronal uptake and metabolism of 2- and 6-fluorodopamine: false neurotransmitters for positron emission tomographic imaging of sympathetically innervated tissues. Eisenhofer G, et al. J Pharmacol Exp Ther 1989 Jan;248(1):419–27
Positron emission tomography—a new approach to brain chemistry. Council on Scientific Affairs. Report of the Positron Emission Tomography Panel [published erratum appears in JAMA 1989 Jun 16;261(23):3412] JAMA 1988 Nov 11;260(18):2704–10 (53 ref.)
PET scans and technology assessment [editorial] Chalmers TC. JAMA 1988 Nov 11;260(18):2713–5
Dementias appear to have individual profiles in single photon emission computed tomography [news] Kirn TF. JAMA 1989 Feb 17;261(7):965, 968
Morphological assessment of left ventricular wall and ventricular aneurysm by thallium-201 myocardial emission computed tomography. Nakata T, et al. Jpn Circ J 1988 Jul;52(7):589–96
Single photon emission computed tomography (SPECT) in a patient with Wilson's disease. Komine Y, et al. Jpn J Med 1988 Aug;27(3):309–10
Alteration of regional cerebral metabolic rate for glucose at interictal and ictal stages in a case of epilepsy with electrical status epilepticus during slow sleep. Fueki N, et al. Jpn J Psychiatry Neurol 1988 Sep;42(3):611–2
Positron emission tomography in partial epilepsy and its relation to clinical and EEG findings. Hosokawa S, et al. Jpn J Psychiatry Neurol 1988 Sep;42(3):616–7
Regional cerebral blood flow in adult partial epilepsy measured by SPECT using 123I-IMP—regional discrepancy between EEG and SPECT findings at interictal stage in temporal lobe epilepsy. Jibiki I, et al. Jpn J Psychiatry Neurol 1988 Sep;42(3):613–5
Positron emission tomography in three cases of Lennox-Gastaut syndrome. Miyauchi T, et al. Jpn J Psychiatry Neurol 1988 Dec;42(4):795–804
Positron emission tomography findings in dementia disorders: contributions to differential diagnosis and objectivizing of therapeutic effects. Heiss WD, et al. Keio J Med 1989 Jun; 38(2):111–35 (50 ref.)
Cerebral perfusion deficits in dysbaric illness. Adkisson GH, et al. Lancet 1989 Jul 15;2(8655):119–22
99mTc-HMPAO uptake and washout in stroke [letter] Bowler JV, et al. Lancet 1989 May 20;1(8647):1140–1
Role of routine functional brain imaging in temporal lobe epilepsy [letter] Ell PJ, et al. Lancet 1989 Apr 29; 1(8644):959
Diagnosis of herpes simplex encephalitis by single photon emission tomography [letter] [published erratum appears in Lancet 1989 Apr 29;1(8644):972] Lane R, et al. Lancet 1989 Apr 8;1(8641):778–9
Postictal SPET in epilepsy [letter] Rowe CC, et al. Lancet 1989 Feb 18;1(8634):389–90
SPECT and PET in epilepsy [letter] Theodore WH. Lancet 1989 Mar 4;1(8636):502–3
Positron emission tomography—the promise of metabolic imaging. Forstrom LA. Mayo Clin Proc 1989 Jun; 64(6):720–4 (31 ref.)
Positron emission tomography and its role in metabolic imaging. Graham MM, et al. Mayo Clin Proc 1989 Jun; 64(6):725–7
Positron emission tomography of the heart: mapping flow and metabolism in vivo. Merhige ME, et al. Mayo Clin Proc 1989 Jun;64(6):716–9 (15 ref.)
Positron emission tomography: principles and applications in pediatrics. Chugani HT. Mead Johnson Symp Perinat Dev Med 1987;(25):15–8
Regional cerebral glucose metabolism in SLE chorea: further evidence that striatal hypometabolism is not a correlate of chorea. Guttman M, et al. Mov Disord 1987;2(3):201–10
Imaging techniques in Parkinson's disease. Martin WR. Mov Disord 1989;4 Suppl 1:S63–9 (39 ref.)
Positron emission tomography in a patient with progressive multifocal leukoencephalopathy [published erratum appears in Neurology 1989 Apr;39(4):548] Kiyosawa M, et al. Neurology 1988 Dec;38(12):1864–7
Clinical study of radioisotope clearance from the cerebrospinal fluid space using single photon emission computed tomography. Kuchiwaki H, et al. Neuroradiology 1989;31(3):226–31
Two patients with meningioma visualized as high uptake by SPECT with N-isopropyl-p-iodo-amphetamine (I-123). Nishimura T, et al. Neuroradiology 1988;30(4):351–4
A case of primary malignant lymphoma of the brain with high uptake of 123I-IMP. Ohkawa S, et al. Neuroradiology 1989;31(3):270–2
Single photon emission computed tomography in motor neuron disease with dementia. Sawada H, et al. Neuroradiology 1988;30(6):577–8
Bilateral anterior opercular syndrome: localizing value of SPECT and MRI. Tohgi H, et al. Neuroradiology 1988; 30(6):579–81
Intracranial arteriovenous malformation: relationships between clinical and radiographic factors and ipsilateral steal severity. Batjer HH, et al. Neurosurgery 1988 Sep; 23(3):322–8
Positron emission tomography in the detection of malignant degeneration of low-grade gliomas. Francavilla TL, et al. Neurosurgery 1989 Jan;24(1):1–5
In vivo metabolism of radiolabeled putrescine in gliomas: implications for positron emission tomography of brain tumors. Warnick RE, et al. Neurosurgery 1988 Oct; 23(4):464–9
Bone marrow scintigraphy in breast cancer. Bourgeois P, et al. Nucl Med Commun 1989 Jun;10(6):389–400
A comparison of liver-spleen ratios and uptakes obtained using planar and tomographic techniques. Chandler ST. Nucl Med Commun 1989 Apr;10(4):297–307
Five patients with Rasmussen's syndrome investigated by single-photon-emission computed tomography. English R, et al. Nucl Med Commun 1989 Jan;10(1):5–14
An assessment of the role of 123I-N-isopropyl-p-iodoamphetamine with single-photon emission computed tomography in the diagnosis of stroke and Alzheimer's disease. Killen AR, et al. Nucl Med Commun 1989 Apr;10(4):271–84
Investigations of brain tumours with 99Tcm-HMPAO SPECT. Langen KJ, et al. Nucl Med Commun 1989 May; 10(5):325–34
SPECT study of the fluid distribution in the intra-abdominal space during intraperitoneal treatment of ovarian cancer. Slosman D, et al. Nucl Med Commun 1985 Feb;6(2):91–6
Reproducibility of quantitative 99Tcm-MAG 3 measurements in rats. Tondeur M, et al. Nucl Med Commun 1989 Jun;10(6):431–4
Cerebral glucose metabolism in five patients with Lennox-Gastaut syndrome. Iinuma K, et al. Pediatr Neurol 1987 Jan–Feb;3(1):12–8
Regional brain glucose utilization in adenylosuccinase-deficient patients measured by positron emission tomography [published erratum appears in Pediatr Res 1989 Feb;25(2):118] De Volder AG, et al. Pediatr Res 1988 Aug;24(2):238–42
Three-dimensional image reconstruction from complete projections. Defrise M, et al. Phys Med Biol 1989 May; 34(5):573–87
Experimental design optimisation: theory and application to estimation of receptor model parameters using dynamic positron emission tomography. Delforge J, et al. Phys Med Biol 1989 Apr;34(4):419–35
Scatter detection in SPECT imaging: dependence on source depth, energy, and energy window. Floyd CE Jr, et al. Phys Med Biol 1988 Sep;33(9):1075–81
Origin of the false defect in longitudinal emission computed tomography of the left ventricle. Mills JA, et al. Phys Med Biol 1988 Aug;33(8):969–73
Scatter correction in SPECT using non-uniform attenuation data. Mukai T, et al. Phys Med Biol 1988 Oct; 33(10):1129–40
A unified design algorithm of two-dimensional digital filters for radioisotope image processing. Murase K, et al. Phys Med Biol 1989 Jul;34(7):859–73
Placental transfer of methionine during protein restriction in the rhesus monkey studied by position emission tomography. Berglund L, et al. Placenta 1989 Jul–Aug; 10(4):387–97
Striatal and frontal cortex binding of 11-C-labelled clozapine visualized by positron emission tomography (PET) in drug-free schizophrenics and healthy volunteers. Lundberg T, et al. Psychopharmacology (Berlin) 1989;99(1):8–12
A simple technique to measure regional cerebral blood flow during intravascular balloon clamping. Furuhata S, et al. Radioisotopes 1988 Jun;37(6):336–8
PET detection of viable tissue in myocardial segments with persistent defects at T1-201 SPECT. Brunken RC, et al. Radiology 1989 Jul;172(1):65–73
Meningioma subtypes: MR and PET features [letter; comment] Di Chiro G. Radiology 1989 Aug;172(2):578–9 . **Comment on:** Radiology 1989 Mar;170(3 Pt 1):857–62
Alzheimer disease: quantitative analysis of I-123-iodoamphetamine SPECT brain imaging. Hellman RS, et al. Radiology 1989 Jul;172(1):183–8
Success of acute thrombolytic therapy in acute myocardial infarction: what does it demand from cardiac imaging in the 1990s? [editorial] Higgins CB. Radiology 1989 Jul; 172(1):17–9
CT-SPECT fusion to correlate radiolabeled monoclonal antibody uptake with abdominal CT findings. Kramer EL, et al. Radiology 1989 Sep;172(3):861–5
Retrospective geometric correlation of MR, CT, and PET images. Levin DN, et al. Radiology 1988 Dec;169(3):817–23
Detection and quantification of chronic cerebrovascular

disease: comparison of MR imaging, SPECT, and CT. Seiderer M, et al. **Radiology** 1989 Feb;170(2):545–8
Recurrence of colorectal tumors: PET evaluation. Strauss LG, et al. **Radiology** 1989 Feb;170(2):329–32
Automated registration of multimodality images [editorial] Vannier MW, et al. **Radiology** 1988 Dec;169(3):860–1
Spect-studies of the brain with stimulation of the auditory cortex. Schadel A. **Scand Audiol Suppl** 1988;30:177–80
Workshop on schizophrenia, PET, and dopamine D2 receptors in the human neostriatum. Andreasen NC, et al. **Schizophr Bull** 1988;14(3):471–84 (46 ref.)
From syndrome to illness: delineating the pathophysiology of schizophrenia with PET. Cohen RM, et al. **Schizophr Bull** 1988;14(2):169–76 (25 ref.)
Current and future aspects of cancer diagnosis with PET. Matsuzawa T. **Sci Rep Res Inst Tohoku Univ [Med]** 1988 Dec;35(1–4):1–14
Single photon emission computed tomography of the liver. Keyes JW Jr. **Semin Liver Dis** 1989 Feb;9(1):77–85 (69 ref.)
Role of positron emission tomographic scanning in the diagnosis of liver disease. Smith JJ. **Semin Liver Dis** 1989 Feb;9(1):86–9 (33 ref.)
Quantitative SPECT imaging. **Semin Nucl Med** 1989 Jan; 19(1):1–71
The role of antimyosin antibodies in acute myocardial infarction. Johnson LL, et al. **Semin Nucl Med** 1989 Jul; 19(3):238–46 (33 ref.)
Evaluation of bone graft viability. Moskowitz GW, et al. **Semin Nucl Med** 1988 Jul;18(3):246–54
Quantitative SPECT: basic theoretical considerations. Parker JA. **Semin Nucl Med** 1989 Jan;19(1):3–12 (15 ref.)
The use of single photon emission computed tomography (SPECT) in the diagnosis of low-back pain in young patients. Bodner RJ, et al. **Spine** 1988 Oct;13(10):1155–60
Vertebrobasilar insufficiency revealed by xenon–133 inhalation SPECT. Delecluse F, et al. **Stroke** 1989 Jul; 20(7):952–6
Quantification of regional cerebral blood flow with IMP–SPECT. Reproducibility and clinical relevance of flow values. Podreka I, et al. **Stroke** 1989 Feb;20(2):183–91
SPECT analysis of recent cerebral infarction. Raynaud C, et al. **Stroke** 1989 Feb;20(2):192–204
Hemodynamic and metabolic effects of cerebral arteriovenous malformations studied by positron emission tomography. Tyler JL, et al. **Stroke** 1989 Jul;20(7):890–8
Asymptomatic striatal dopamine depletion: PET scans in unilateral MPTP monkeys. Guttman M, et al. **Synapse** 1988; 2(5):469–73
Influx of a choline analog to dog brain measured by positron emission tomography. Redies C, et al. **Synapse** 1988; 2(4):406–11
[Initial results in man of immunolymphoscintigraphy of cancer of the prostate] Teillac P, et al. **Ann Med Interne (Paris)** 1989;140(1):20–4 (Eng. Abstr.) (Fre)
[Short-axis thallium 201 tomography. Changes in the isotope fixation on the circumference of the left ventricle] Levy M, et al. **Arch Mal Coeur** 1988 Sep;81(9):1093–8 (Eng. Abstr.) (Fre)
[Tolerance and prognostic value of Thallium 201 myocardial tomoscintigraphy with dipyridamole in the aged subject] Morelon P, et al. **Arch Mal Coeur** 1988 Sep;81(9):1061–7 (Eng. Abstr.) (Fre)
[Atraumatic approach in myocardial perfusion, metabolism and receptors by positron emission tomography] Syrota A. **Arch Mal Coeur** 1988 Oct;81 Spec No:53–9 (Eng. Abstr.) (Fre)
[Diagnostic value of exercise tomoscintigraphy with thallium 201 in patients with complete left branch block] Tessonnier G, et al. **Arch Mal Coeur** 1989 Feb;82(2):209–13 (Eng. Abstr.) (Fre)
[Tomographical use of Tc hexamethylpropylene amine-oxime. First experience (78 studies)] Steinling M, et al. **Presse Med** 1988 Sep 17;17(31):1565–9 (Eng. Abstr.) (Fre)
[Craniofacial injuries and cerebral tomographic scintigraphy using N-isopropyl-iodo-amphetamine 123 I-AMP] Ducours JL, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(2):89–94 (Eng. Abstr.) (Fre)
[Positron-emission tomography: the potentials and prospects for cardiologic diagnosis] Zimmermann R, et al. **Dtsch Med Wochenschr** 1989 Jul 28;114(30):1165–70 (40 ref.) (Ger)
[Alternating hemiplegia in childhood. Clinical report and single photon emission computed tomography study] Siemes H, et al. **Monatsschr Kinderheilkd** 1988 Aug; 136(8):467–70 (Eng. Abstr.) (Ger)
[Disorders of regional cerebrovascular circulation and neuropsychological findings in dementia of the Alzheimer type] Broich K, et al. **Nervenarzt** 1989 Mar;60(3):141–8 (Ger)
[Positron emission tomography and evoked potentials in the early detection of hereditary ataxias] Nowak A, et al. **Nervenarzt** 1989 May;60(5):284–7 (Ger)
[The modification of 201Tl-SPECT of the myocardium by breast absorption] Bockisch A, et al. **Nuklearmedizin** 1989 Aug;28(4):145–7 (Eng. Abstr.) (Ger)
[Tomographic functional diagnosis in nuclear medicine: determination of regional reserves and balances] Büll U, et al. **Nuklearmedizin** 1989 Apr;28(2):96–9 (49 ref.) (Ger)
[HMPAO-SPECT in cerebral seizures] Grünwald F, et al. **Nuklearmedizin** 1988 Dec;27(6):248–51 (Eng. Abstr.) (Ger)
[133Xe-DSPECT: significance of the cerebrovascular reserve capacity for the diagnosis and therapy of chronic cerebral ischemia] Leinsinger G, et al. **Nuklearmedizin** 1988 Aug;27(4):127–34 (Eng. Abstr.) (Ger)
[SPECT findings in the hemiparkinson syndrome using 99mTc-HMPAO] Neumann C, et al. **Nuklearmedizin** 1989 Jun;28(3):92–4 (Eng. Abstr.) (Ger)
[Preliminary results of 99mTc-HMPAO-SPECT studies in endogenous psychoses] Wilhelm KR, et al. **Nuklearmedizin** 1989 Jun;28(3):88–91 (Eng. Abstr.) (Ger)
[NMR, CT and PET in brain tumors] Schober O, et al. **Radiol Diagn (Berl)** 1988;29(3):457–62 (Eng. Abstr.) (Ger)
[Positron emitters for the study of tumor metabolism] Strauss LG. **Radiologe** 1989 Jul;29(7):318–21 (0 ref.) (Eng. Abstr.) (Ger)
[Diagnosis of tumor metabolism using positron emission tomography and magnetic resonance spectroscopy (editorial)] van Kaick G. **Radiologe** 1989 Jul;29(7):313–4 (Ger)
[Quantitative and morphologic information value of the SPECT perfusion study of thoracic space-occupying lesions] Beyer-Enke SA, et al. **ROFO** 1989 May; 150(5):569–72 (Eng. Abstr.) (Ger)
[Correlation of the perfusion of liver metastases in angio-CT and PET] Beyer-Enke SA, et al. **Rontgenpraxis** 1989 Mar; 42(3):84–8 (Ger)
[Determination of brain death in children: 99mTc-HM-PAO and 123(I)-amphetamine scintigraphy as a new, noninvasive method] Galaske RG, et al. **Wien Klin Wochenschr** 1988 Aug 26;100(16):555–61 (Eng. Abstr.) (Ger)
[Modern imaging nuclear medicine diagnosis in cardiovascular complications of arterial hypertension] Eisenberg BM, et al. **Z Arztl Fortbild (Jena)** 1989; 83(4):191–5 (13 ref.) (Ger)
[Clinical use of magnetic resonance spectroscopy and positron emission tomography in oncology] Schlag P, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:162–3 (Ger)
[Myocardial perfusion with 201-thallium tomography in the post-infarct phase: prognostic significance and 1-year follow-up] Nienaber CA, et al. **Z Kardiol** 1988 Nov; 77(11):721–7 (Eng. Abstr.) (Ger)
[Disorders of myocardial perfusion in Kawasaki syndrome: noninvasive detection by 201 thallium tomography] Nienaber CA, et al. **Z Kardiol** 1988 Aug;77(8):503–7 (Eng. Abstr.) (Ger)
[Reduced myocardial fatty acid utilization in coronary heart disease following symptom limited ergometric stress. Detection of pathologic metabolic patterns using iodine-123-phenylpentadecanoic acid and sequential SPECT] Reske SN, et al. **Z Kardiol** 1989 Apr;78(4):262–70 (Eng. Abstr.) (Ger)
[Thallium single photon emission computed tomography following thrombolysis: missing relation to left ventricular function] Schofer J, et al. **Z Kardiol** 1988 Aug; 77(8):497–502 (Eng. Abstr.) (Ger)
[Accurate detection of hemangioma of the liver by SPECT] Adám E, et al. **Orv Hetil** 1989 Feb 19;130(8):401–3 (Eng. Abstr.) (Hun)
[SPECT—single photon emission computer tomography. A new imaging method in isotope diagnosis] Csernay L. **Orv Hetil** 1989 Mar 19;130(12):603–12 (46 ref.) (Eng. Abstr.) (Hun)
[Recent acquisitions concerning acute cerebral ischemia] Palagi B. **G Clin Med** 1989 Feb;70(2):131–6 (18 ref.) (Ita)
[Study of myocardial perfusion at rest using technetium Tc 99m methoxy-isobutylisonitrile: comparison with labeled microspheres and thallium 201] Santoro GM, et al. **G Ital Cardiol** 1988 Nov;18(11):907–13 (Eng. Abstr.) (Ita)
[Myocardial scintigraphy using 99m-technetium pyrophosphate in the diagnosis of acute myocardial infarct. Comparison of planar and tomographic imaging] Santoro GM, et al. **G Ital Cardiol** 1989 Apr;19(4):295–302 (Eng. Abstr.) (Ita)
[Problems related to tracer concentration and wall thickness: pitfalls in positron CT diagnosis] Himi T, et al. **J Cardiol** 1987 Dec;17(4):831–6 (Eng. Abstr.) (Jpn)
[Comparison of two-dimensional echocardiography with 201Tl-single photon emission computed tomography for evaluating the myocardial infarct zone] Konishiike A, et al. **J Cardiol** 1987 Dec;17(4):699–710 (Eng. Abstr.) (Jpn)
[Regional myocardial blood flow quantitatively measured using O-15 water and dynamic positron emission tomography] Takahashi A, et al. **J Cardiol** 1987 Dec; 17(4):741–8 (Eng. Abstr.) (Jpn)
[Positron emission computed tomography] Torizuka K, et al. **J Cardiol** 1987;17 Suppl 15:51–3 (5 ref.) (Eng. Abstr.) (Jpn)
[Dynamic function studies with positron computed tomography: measurements of regional myocardial blood flow in hypertrophic cardiomyopathy] Yoshida K, et al. **J Cardiol** 1987;17 Suppl 15:55–60 (Eng. Abstr.) (Jpn)
[Evaluation of changes in portal collaterals by single photon emission CT: effects of endoscopic injection sclerotherapy] Azuma M, et al. **Kaku Igaku** 1989 Feb;26(2):171–5 (Eng. Abstr.) (Jpn)
[Radiation dose distribution of gamma and beta+-rays during O-15-labeled gas steady state measurement] Hachiya T, et al. **Kaku Igaku** 1989 Jan;26(1):107–11 (Jpn)
[Studies of left ventricular volume estimation from single photon emission computed tomography] Hiraki Y, et al. **Kaku Igaku** 1988 Nov;25(11):1229–34 (Eng. Abstr.) (Jpn)
[Age-related decrease of 11C-N-methylspiperone in vivo binding to human striatum detected by PET] Iyo M, et al. **Kaku Igaku** 1989 Feb;26(2):213–20 (Eng. Abstr.) (Jpn)
[Bull's eye- analyses in polar coordinate] Maeda H, et al. **Kaku Igaku** 1988 Aug;25(8):759–65 (Eng. Abstr.) (Jpn)
[Regional cerebral blood flow measurement by 133Xe inhalation method using SPECT with dual gamma cameras] Matsumura K, et al. **Kaku Igaku** 1988 Aug;25(8):831–8 (Jpn)
[Detection of multivessel disease in patients with myocardial infarct using exercise myocardial scintigraphy—usefulness of SPECT with qualitative and quantitative analysis] Matsuo T, et al. **Kaku Igaku** 1989 Jan;26(1):1–13 (Eng. Abstr.) (Jpn)
[N-isopropyl I-123 p-iodoamphetamine (IMP) brain SPECT in dementia] Momose T, et al. **Kaku Igaku** 1988 Dec; 25(12):1311–7 (Eng. Abstr.) (Jpn)
[Estimation of total liver uptake and liver uptake per unit of liver volume of Tc-99m(Sn)-N-pyridoxyl-5-methyltryptophan (Tc-99m-PMT) using SPECT] Nakamura K, et al. **Kaku Igaku** 1988 Dec;25(12):1363–9 (Eng. Abstr.) (Jpn)
[Evaluation of SPECT with N-Isopropyl[I-123]-p-Iodoamphetamine (IMP) in epileptic patients] Nambu T, et al. **Kaku Igaku** 1988 Jun; 25(6):525–31 (Eng. Abstr.) (Jpn)
[Clinical evaluation of 99mTc-DTPA-HSA in patients with cerebrovascular diseases: assessment of perfusion reserve with SPECT] Nishizawa S, et al. **Kaku Igaku** 1988 Nov; 25(11):1189–200 (Eng. Abstr.) (Jpn)
[Single photon emission computed tomography (SPECT) using 99mTc-hexamethylpropyleneamine oxime in brain tumor: comparison of N-isopropyl-[123I]-p-iodoamphetamine and 99mTc-DTPA SPECT] Ono S, et al. **Kaku Igaku** 1988 Dec;25(12):1371–9 (Eng. Abstr.) (Jpn)
[Semidecubitus position scanning method for thallium-201 cardiac single photon emission computed tomography] Suzuki A, et al. **Kaku Igaku** 1988 Nov;25(11):1255–62 (Eng. Abstr.) (Jpn)
[Estimation of regional myocardial sympathetic neuronal function with I-123 metaiodobenzylguanidine (MIBG) myocardial images in patients with cardiomyopathy] Tanaka T, et al. **Kaku Igaku** 1989 Feb;26(2):257–61 (Eng. Abstr.) (Jpn)
[Clinical evaluation of Tl-201 single photon emission computed tomography in patients with suspected bronchogenic carcinoma] Tonami N, et al. **Kaku Igaku** 1988 Dec;25(12):1381–94 (Eng. Abstr.) (Jpn)
[Quantification of myocardial infarct size by technetium-99m pyrophosphate single photon emission computed tomography] Yamamoto H, et al. **Kaku Igaku** 1989 Apr; 26(4):469–76 (Eng. Abstr.) (Jpn)
[Evaluation of dilated cardiomyopathy and coronary artery disease using positron CT (PCT)] Fudo T, et al. **Kokyu To Junkan** 1988 Jun;36(6):649–53 (Eng. Abstr.) (Jpn)
[Myocardial blood flow assessed by single-photon emission computed tomography with thallium-201] Hashimoto T, et al. **Kokyu To Junkan** 1988 Jul;36(7):739–43 (24 ref.) (Jpn)
[Positron emission tomography: assessment of myocardial blood flow] Yoshida K, et al. **Kokyu To Junkan** 1988 Jul; 36(7):745–51 (40 ref.) (Jpn)
[Measurement of effective hepatic blood flow using 99mTc-PMT SPECT and single blood sampling] Sakuma H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25;49(1):62–5 (Eng. Abstr.) (Jpn)
[Evaluation of SPECT with 67Ga and 201Tl in patients with primary lung cancer] Tanabe M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1445–50 (Eng. Abstr.) (Jpn)
[Diagnosis of Alzheimer's disease with PET and SPECT] Ichimiya A, et al. **Nippon Rinsho** 1988 Jul;46(7):1555–61 (Jpn)
[Recent advances of positron emission tomography and CT scan for the diagnosis of early cancer] Kubota K, et al. **Nippon Rinsho** 1989 May;47(5):1037–43 (Jpn)
[Tumor imaging in nuclear medicine] Uno K, et al. **Nippon Rinsho** 1989 May;47(5):1051–6 (Jpn)
[Estimation of the volume and percent uptake of the liver and spleen by SPECT] Yamagata A. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1252–9 (Eng. Abstr.) (Jpn)
[Sequential changes of the cardiomyopathy in Duchenne muscular dystrophy by 201Tl myocardial SPECT] Ono S, et al. **Radioisotopes** 1989 Mar;38(3):130–5 (Eng. Abstr.) (Jpn)
[Single photon emission computed tomography of focal nodular hyperplasia of the liver] Ito K, et al. **Rinsho Hoshasen** 1988 Aug;33(8):915–8 (Jpn)
[Basic and clinical evaluation of regional cerebral perfusion scintigraphy of 99mTc-HM-PAO] Tsukatani Y, et al. **Rinsho Hoshasen** 1988 Jul;33(7):741–9 (Eng. Abstr.) (Jpn)

[Clinical cerebral perfusion scintigraphy with 123I-IMP] Watanabe K, et al. **Rinsho Hoshasen** 1989 Mar;34(3):303–12 (38 ref.) (Eng. Abstr.) (Jpn)

[Alteration of CBF and CMRO2 and TRH effects on CBF in spinocerebellar degeneration. The positron emission tomography study] Harada K, et al. **Rinsho Shinkeigaku** 1988 May;28(5):563–8 (Eng. Abstr.) (Jpn)

[Analysis of cerebellar functions in spinocerebellar degeneration using positron emission tomography (PET)] Sakai Y, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):284–9 (Eng. Abstr.) (Jpn)

[Regional cerebrocerebellar perfusion imaging in spinocerebellar degeneration using technetium-99m-HM-PAO] Tanaka M, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):769–74 (Eng. Abstr.) (Jpn)

[Computed tomography with thallium-201 and oral dipyridamole in the diagnosis of coronary artery disease] Borges Neto S, et al. **Arq Bras Cardiol** 1988 Jan;50(1):19–22 (Eng. Abstr.) (Por)

[The use of single-photon emission computed tomography in cardiology] Salvatore M, et al. **Kardiologia** 1988 Aug; 28(8):34–6 (Eng. Abstr.) (Rus)

[Hepatic blood flow studied by computed scintigraphy in patients with chronic diffuse liver diseases] Podymova SD, et al. **Klin Med (Mosk)** 1988 Aug;66(8):102–5 (Eng. Abstr.) (Rus)

[Transaxial tomography in the study of myocardial perfusion with thallium-201] Redondo J, et al. **Rev Esp Cardiol** 1989 Mar;42(3):162–8 (Eng. Abstr.) (Spa)

[PET—new ways inside the body] Bergström K, et al. **Lakartidningen** 1989 Jun 21;86(25):2371–7 (Eng. Abstr.) (Swe)

ECONOMICS

Economic analysis of clinical positron emission tomography of the heart with rubidium-82. Gould KL, et al. **J Nucl Med** 1989 May;30(5):707–17

INSTRUMENTATION

Positron emission tomography instrumentation: an overview. Volkow ND, et al. **Ann J Physiol Imaging** 1988;3(3):142–53 (34 ref.)

Positron emission tomography in clinical cardiology. Brunken RC, et al. **Cardiol Clin** 1989 Aug;7(3):607–29 (104 ref.)

Multidetector SPECT scanner for brain and body: system performance and applications. Yonekura Y, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):732–40

Quantitative comparison of cerebral glucose metabolic rates from two positron emission tomographs. Grady CL, et al. **J Nucl Med** 1989 Aug;30(8):1386–92

The "Harlequin" artifact: cause and correction [letter] Johnson TK, et al. **J Nucl Med** 1989 Jun;30(6):1133–4

Long-term performance of a multiplanar positron emission tomograph. Kearfott KJ. **J Nucl Med** 1989 Aug; 30(8):1378–85

Influence of collimators on SPECT center of rotation measurements [letter; comment] O'Connor MK, et al. **J Nucl Med** 1989 Feb;30(2):265–6. **Comment on:** J Nucl Med 1988 Aug;29(8):1393–7

The application of a masked orbiting transmission source for attenuation correction in PET. Ranger NT, et al. **J Nucl Med** 1989 Jun;30(6):1056–68

Performance characteristics of a whole-body positron tomograph [published erratum appears in J Nucl Med 1989 Feb;30(2):268] Spinks TJ, et al. **J Nucl Med** 1988 Nov; 29(11):1833–41

Distinguishing avascular necrosis from segmental impaction of the femoral head following an acetabular fracture: preliminary report. Gruen GS, et al. **J Orthop Trauma** 1988; 2(1):5–9

The high count rate performance of a two-dimensionally position-sensitive detector for positron emission tomography. Mankoff DA, et al. **Phys Med Biol** 1989 Apr; 34(4):437–56

The performance of a multiwire proportional chamber positron camera for clinical use. Marsden PK, et al. **Phys Med Biol** 1989 Aug;34(8):1043–62

[Principles of positron emission tomography] Ostertag H. **Z Gastroenterol [Verh]** 1989 Jul;24:150–1 (Ger)

[Design concepts and preliminary performances of stationary-sampling whole-body high-resolution positron emission tomography: HEADTOME IV] Kanno I, et al. **Kaku Igaku** 1989 Apr;26(4):477–85 (Eng. Abstr.) (Jpn)

[Comparison of SPECT images with four kinds of 99mTc collimators] Saegusa K, et al. **Radioisotopes** 1989 Apr; 38(4):196–202 (Eng. Abstr.) (Jpn)

[The TESTASCAN single-photon emission multidetector computed gamma tomograph] El'kind Elu, et al. **Med Radiol (Mosk)** 1989 Jul;34(7):11–9 (Eng. Abstr.) (Rus)

[A system for the automated description and recognition of liver scintigrams] Valradian AS, et al. **Med Radiol (Mosk)** 1989 Feb;34(2):16–21 (Rus)

METHODS

SPECT in partial epilepsy: identifying side of the focus. Andersen AR, et al. **Acta Neurol Scand Suppl** 1988;117:90–5

In vivo PET and SPECT receptor imaging: new technology and tactics for receptor measurement. Wong DF, et al. **Adv Exp Med Biol** 1988;236:181–93 (22 ref.)

Composite SPECT-CT images: technique and potential applications in chest and abdominal imaging. Kaplan IL, et al. **AJR** 1989 Apr;152(4):865–6

Semiquantitative analyses of dynamic single photon emission computed tomography (SPECT) of the primary auditory cortex. Schadel A, et al. **Arch Otorhinolaryngol** 1989; 246(3):151–5

18F-labeled insulin: a prosthetic group methodology for incorporation of a positron emitter into peptides and proteins. Shai Y, et al. **Biochemistry** 1989 May 30; 28(11):4801–6

PET scanning [see comments] Frackowiak RS, et al. **BMJ** 1989 Mar 18;298(6675):693–4 (33 ref.). **Comment in:** BMJ 1989 Apr 29;298(6681):1177

Enhanced sensitivity and specificity of thallium-201 imaging for the detection of regional ischemic coronary disease by combining SPECT with "bull's eye" analysis. Kasabali B, et al. **Clin Nucl Med** 1989 Jul;14(7):484–91

A method of analysis of SPECT blood flow image data for comparison with computed tomography. Mountz JM. **Clin Nucl Med** 1989 Mar;14(3):192–6

Initial experience with 99m Tc-hexamethyl-propylene amine oxime (HM-PAO) single photon emission computed tomography (SPECT) in patients with focal epilepsy. Stefan H, et al. **Epilepsy Res** 1987 Mar;1(2):134–8

A fully automated contour detection algorithm the preliminary step for scatter and attenuation compensation in SPECT. Ben Younes R, et al. **Eur J Nucl Med** 1988; 14(12):586–9

Non-stationary spatial filtering and accelerated curve fitting for parametric imaging with dynamic PET. Herholz K. **Eur J Nucl Med** 1988;14(9–10):477–84

Characterization of right or left ventricular contraction heterogeneity using Fourier phase analysis. Application to a group of patients with severe ventricular arrhythmias. Itti R, et al. **Eur J Nucl Med** 1988;14(4):196–202

Improvement of quantification in SPECT studies by scatter and attenuation compensation. Mas J, et al. **Eur J Nucl Med** 1989;15(7):351–6

Interactive reconstruction in single-photon tomography. Miller TR, et al. **Eur J Nucl Med** 1989;15(4):189–93

SPECT volume measurement using an automatic threshold selection method combined with a V filter. Murase K, et al. **Eur J Nucl Med** 1989;15(1):21–5

Gated cardiac tomography. Norton MY, et al. **Eur J Nucl Med** 1988;14(9–10):472–6

SPECT using Bremsstrahlung to quantify 90Y uptake in Baker's cysts: its application in radiation synovectomy of the knee. Smith T, et al. **Eur J Nucl Med** 1988; 14(9–10):498–503

The unfolded map using 201T1 myocardial SPECT. Takishima T, et al. **Eur J Nucl Med** 1988;14(11):572–4

Characterization of the rotating display. Keyes JW Jr, et al. **Invest Radiol** 1988 Sep;23(9):692–4

Localisation in PET images: direct fitting of the intercommissural (AC-PC) line. Friston KJ, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):690–5

The metabolic centroid method for PET brain image analysis. Levy AV, et al. **J Cereb Blood Flow Metab** 1989 Jun; 9(3):388–97

Quantitation of myocardial blood flow with H2 15O and positron emission tomography: assessment and error analysis of a mathematical approach. Herrero P, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):862–73

A simple superimposition method for anatomical adjustments of CT and SPECT images. Vogl G, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):929–31

Reversal of brain metabolic abnormalities following treatment of AIDS dementia complex with 3'-azido-2',3'-dideoxythymidine (AZT, zidovudine): a PET-FDG study. Brunetti A, et al. **J Nucl Med** 1989 May; 30(5):581–90

Quantification of three-dimensional left ventricular segmental wall motion and volumes from gated tomographic radionuclide ventriculograms. Faber TL, et al. **J Nucl Med** 1989 May;30(5):638–49

Assessment and comparison of three scatter correction techniques in single photon emission computed tomography. Gilardi MC, et al. **J Nucl Med** 1988 Dec; 29(12):1971–9

Comparison between 180 degrees and 360 degrees data collection in technetium-99m MIBI SPECT of the myocardium. Maublant JC, et al. **J Nucl Med** 1989 Mar; 30(3):295–300

Prone versus supine thallium myocardial SPECT: a method to decrease artifactual inferior wall defects. Segall GM, et al. **J Nucl Med** 1989 Apr;30(4):548–55

Automated body contour for liver SPECT using photopeak data [letter] Sloboda RS. **J Nucl Med** 1989 Feb;30(2):266–7

Correction of nonuniform attenuation in cardiac SPECT imaging. Tsui BM, et al. **J Nucl Med** 1989 Apr; 30(4):497–507

SPECT and PET in epilepsy. **Lancet** 1989 Jan 21; 1(8630):135–7 (28 ref.)

The peanut orbit: a modified elliptical orbit for single-photon emission computed tomography imaging. Esser PD, et al. **Med Phys** 1989 Jan–Feb;16(1):114–8

Clinical applications of assessments of myocardial substrate utilization with positron emission tomography. Bergmann SR. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):201–9 (54 ref.)

99Tcm-diastereomeric dimercaptosuccinic acid complexes: comparison of their biodistribution. Awh OD, et al. **Nucl Med Commun** 1989 Jun;10(6):449–54

A technique for using CT images in attenuation correction and quantification in SPECT. Fleming JS. **Nucl Med Commun** 1989 Feb;10(2):83–97

Methods of background subtraction in myocardial perfusion imaging with thallium-201: a comparative study in the presence of an artefact. Ros D, et al. **Nucl Med Commun** 1989 Jun;10(6):415–24

The multislice cylinder: a new approach to quantification of cardiac single photon emission tomography. Stone DL, et al. **Nucl Med Commun** 1989 Jun;10(6):409–13

The particle size distribution of technegas and its influence on regional lung deposition. Strong JC, et al. **Nucl Med Commun** 1989 Jun;10(6):425–30

Diagnosis of coronary artery disease using thallium imaging: tomographic versus planar imaging. Taylor DN, et al. **Nucl Med Commun** 1989 Jun;10(6):401–7

Compensation of spatial system response in SPECT with conjugate gradient reconstruction technique. Formiconi AR, et al. **Phys Med Biol** 1989 Jan;34(1):69–84

Image reconstruction algorithm for single-photon-emission computed tomography with uniform attenuation. Inouye T, et al. **Phys Med Biol** 1989 Mar;34(3):299–304

Minimisation of parameter estimation errors in dynamic PET: choice of scanning schedules. Jovkar S, et al. **Phys Med Biol** 1989 Jul;34(7):895–908

Cone beam SPECT reconstruction with camera tilt. Manglos SH, et al. **Phys Med Biol** 1989 May;34(5):625–31

Some physical factors influencing the accuracy of convolution scatter correction in SPECT. Msaki P, et al. **Phys Med Biol** 1989 Mar;34(3):283–98

Thallium-201 myocardial planar scintigrams. Alignment of stress and rest images by correlation. Ros D, et al. **Phys Med Biol** 1989 Jul;34(7):875–84

SPECT reconstruction by simulated annealing. Webb S. **Phys Med Biol** 1989 Mar;34(3):259–81

Neurophysiological aspects of auditory hallucinations. 99mTc-(HMPAO)-SPECT investigations in patients with auditory hallucinations and normal controls—a preliminary report. Musalek M, et al. **Psychopathology** 1988; 21(6):275–80

Gamma camera radionuclide images: improved contrast with energy-weighted acquisition. Halama JR, et al. **Radiology** 1988 Nov;169(2):533–8

The brain: integrated three-dimensional display of MR and PET images. Levin DN, et al. **Radiology** 1989 Sep; 172(3):783–9

Quantitative SPECT of uptake of monoclonal antibodies. DeNardo GL, et al. **Semin Nucl Med** 1989 Jan;19(1):22–32 (34 ref.)

Gated blood pool tomography: a technology whose time has come. Fischman AJ, et al. **Semin Nucl Med** 1989 Jan; 19(1):13–21 (21 ref.)

A practical SPECT technique for quantitation of drug delivery to human tumors and organ absorbed radiation dose. Iosilevsky G, et al. **Semin Nucl Med** 1989 Jan; 19(1):33–46 (48 ref.)

Quantitative SPECT in radiation dosimetry. Zanzonico PB, et al. **Semin Nucl Med** 1989 Jan;19(1):47–61 (76 ref.)

Noninvasive evaluation of ischemic stroke with SPECT. Gomez CR, et al. **South Med J** 1988 Oct;81(10):1245–8

SPECT study of cerebral blood flow reactivity after acetazolamide in patients with transient ischemic attacks. Chollet F, et al. **Stroke** 1989 Apr;20(4):458–64

Endoscopic lymphoscintigraphy. A new tool for target surgery of rectal cancer. Miscusi G, et al. **Surg Endosc** 1987;1(2):113–7

Endogenous dopamine lowers the dopamine D2 receptor density as measured by [3H]raclopride: implications for positron emission tomography of the human brain. Seeman P, et al. **Synapse** 1989;3(1):96–7

[An iterative strategy for determining the source distribution in single photon tomography using a rotating gamma camera (SPECT)] Luig H, et al. **Nuklearmedizin** 1988 Aug; 27(4):140–6 (Eng. Abstr.) (Ger)

[180 degree versus 360 degree rotation in SPECT of bone] Reuland P, et al. **Nuklearmedizin** 1988 Dec;27(6):242–7 (Eng. Abstr.) (Ger)

[Comparison of the clinical value of an iterative reconstruction procedure with that of a filtered back projection in SPECT of the liver] Reuland P, et al. **Nuklearmedizin** 1989 Aug;28(4):139–44 (Eng. Abstr.) (Ger)

[Fundamentals of positron emission tomography] Ostertag H. **Radiologe** 1989 Jul;29(7):315–7 (4 ref.) (Eng. Abstr.) (Ger)

[SPECT-3-D reconstructions of lung perfusion in patients with thoracic space-occupying lesions] Beyer-Enke SA, et al. **ROFO** 1989 Feb;150(2):211–5 (Eng. Abstr.) (Ger)

[Clinical use of positron emission tomography in tumor patients] Schober O, et al. **Z Gastroenterol [Verh]** 1989 Jul; 24:152–4 (58 ref.) (Ger)

[Quantification of the myocardial scar with technetium-99m-isonitrile (MIBI) in emission computerized tomography (SPECT)—comparison with serial creatine kinase determinations and radionuclide ventriculography] Clausen M, et al. **Z Kardiol** 1989 Mar; 78(3):167–71 (Eng. Abstr.) (Ger)

[Improved detection of acute myocardial infarct with combined simultaneous thallium-201/technetium-99m-PPi

tomography in comparison with planar infarct scintigraphy] Krause T, et al. **Z Kardiol** 1989 Mar; 78(3):161–6 (Eng. Abstr.) **(Ger)**

[Myocardial perfusion visualized with SPECT: three-dimensional representation] Ferretti PP, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):18–22 (Eng. Abstr.) **(Ita)**

[Assessment of myocardial circulation and metabolism using positron CT] Shishido F, et al. **J Cardiol** 1987;17 Suppl 15:61–3 (Eng. Abstr.) **(Jpn)**

[Left ventricular pressure–volume diagram determined by forward and backward formatting of radionuclide ventriculography and analog pressure data] Inagaki S, et al. **Kaku Igaku** 1989 Feb;26(2):177–87 (Eng. Abstr.) **(Jpn)**

[Clinical usefulness of three-dimensional brain imaging with N-isopropyl-p-[123I]iodoamphetamine (IMP)] Kasai T, et al. **Kaku Igaku** 1989 Mar;26(3):311–7 (Eng. Abstr.) **(Jpn)**

[Basic and clinical study of the measurement of left ventricular end-diastolic volume using ECG-gated and non-gated single photon emission tomography] Kimura M. **Kaku Igaku** 1988 Jun;25(6):493–504 (Eng. Abstr.) **(Jpn)**

[Assessment of the left atrial myxoma with gated blood pool SPECT] Maeda H, et al. **Kaku Igaku** 1989 Feb;26(2):253–6 (Eng. Abstr.) **(Jpn)**

[Fourier analysis in ECG gated blood pool emission computed tomography—a basic study using cardiac phantoms and its clinical application] Tsuda T, et al. **Kaku Igaku** 1988 Jun;25(6):543–55 (Eng. Abstr.) **(Jpn)**

[Scintigraphy presentation: Dual SPECT imaging of the myocardium with 201Tl and 99mTc] Kojima Y, et al. **Rinsho Hoshasen** 1988 Aug;33(8):897–8 **(Jpn)**

[Xeroradiographic scanning in clinical oncology] Valutskas KK. **Med Radiol (Mosk)** 1989 Feb;34(2):28–34 (Eng. Abstr.) **(Rus)**

[Absolute biventricular volumes and cardiac output by isotopic ventriculography] Estorch M, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:97–101 (Eng. Abstr.) **(Spa)**

[Evaluation of myocardial perfusion with tomography quantified by photon emission with thallium-201] Sánchez Navarro F, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:54–60 (Eng. Abstr.) **(Spa)**

STANDARDS

A unified computer program for assessment of attenuation correction and data acquisition methods in single photon emission computed tomography (SPECT). Murase K, et al. **Eur J Nucl Med** 1989;15(5):248–53

Median polish for quality assurance of a PET scanner. Kearfott KJ, et al. **J Comput Assist Tomogr** 1989 Sep–Oct; 13(5):932–9

Optimal specificity of thallium-201 SPECT through recognition of imaging artifacts. DePuey EG, et al. **J Nucl Med** 1989 Apr;30(4):441–9

Effect of spatial resolution on SPECT quantification values. Kojima A, et al. **J Nucl Med** 1989 Apr;30(4):508–14

SUPPLY & DISTRIBUTION

PET projects. DeMart A. **Hospitals** 1988 Nov 5;62(21):70, 72

TRENDS

[Immunoscintigraphy and -therapy] Hahn K. **Dtsch Med Wochenschr** 1988 Nov 25;113(47):1827–9 (12 ref.) **(Ger)**

UTILIZATION

Clinical PET: is it time to take the plunge? [news] [see comments] Harby K. **J Nucl Med** 1988 Nov;29(11):1751–7 **Comment in:** J Nucl Med 1989 Jun;30(6):1132

TOMOGRAPHY, NMR see **MAGNETIC RESONANCE IMAGING**

TOMOGRAPHY, POSITRON EMISSION see **TOMOGRAPHY, EMISSION COMPUTED**

TOMOGRAPHY, PROTON SPIN see **MAGNETIC RESONANCE IMAGING**

TOMOGRAPHY, RADIONUCLIDE COMPUTED see **TOMOGRAPHY, EMISSION COMPUTED**

TOMOGRAPHY, TRANSMISSION see **TOMOGRAPHY, X-RAY**

TOMOGRAPHY, TRANSMISSION COMPUTED see **TOMOGRAPHY, X-RAY COMPUTED**

TOMOGRAPHY, ULTRASONIC see **ULTRASONIC DIAGNOSIS**

TOMOGRAPHY, X-RAY

Arthrotomography of the unstable shoulder. Ahovuo J, et al. **Acta Orthop Scand** 1988 Dec;59(6):681–3

The radiographic and surgical evaluation of meniscal dysfunction of the temporomandibular joint. Greenwood RE. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):156–62

The role of computed tomography and coronal plane tomography in radiotherapy for laryngeal cancers. Dawes PJ, et al. **Br J Radiol** 1989 Aug;62(740):729–33

Temporomandibular joint comparative imaging: diagnostic efficacy of arthroscopy compared to tomography and arthrography. Bibb CA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):352–9

Rheumatoid arthritis of the temporomandibular joint: radiologic evaluation based on standard reference films. Rohlin M, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):594–9

Scaphoid anatomy: evaluation with complex motion tomography. Smith DK, et al. **Radiology** 1989 Oct; 173(1):177–80

Role of linear tomography in evaluation of patients with nephrolithiasis. Goldwasser B, et al. **Urology** 1989 Mar; 33(3):253–6

[Clinical indications for the use of the Zonarc] D'Haeseleire P, et al. **Acta Stomatol Belg** 1988 Dec;85(4):249–57 (Eng. Abstr.) **(Dut)**

[Radiation dosage and clinical value of conventional tomography and high resolution computerized tomography of the nose and ear] Grobovschek M, et al. **HNO** 1989 Jan;37(1):23–6 (Eng. Abstr.) **(Ger)**

[Digital radiography in tomography of the facial bones] Ibing HP, et al. **Rontgenblatter** 1988 Sep;41(9):362–5 (Eng. Abstr.) **(Ger)**

[Densitometry of tomograms in evaluating the results of radiotherapy of peripheral cancer of the lung] Goncharenko GV, et al. **Med Radiol (Mosk)** 1989 Apr; 34(4):16–8 **(Rus)**

[The potentials of zonography of the visceral cranium] Rabukhina NA, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec; 67(6):29–32 (Eng. Abstr.) **(Rus)**

INSTRUMENTATION

Digital tomosynthesis: phantom and patient studies with a prototype unit. Rimkus DS, et al. **Comput Med Imaging Graph** 1989 Jul–Aug;13(4):307–18

Sagittal tomography in the supine patient. Nakanishi T, et al. **Radiology** 1989 May;171(2):574–6

[A set of devices for preradiation topometry] Stavitskiĭ RV, et al. **Med Radiol (Mosk)** 1989 May;34(5):76–81 (Eng. Abstr.) **(Rus)**

[A device for direct instrumental topometry in the radiation therapy of cancer of the oral mucosa] Volodina GI, et al. **Med Radiol (Mosk)** 1989 May;34(5):82–4 **(Rus)**

[A method of evaluating the basic characteristics of panoramic tomographs] Smekhov ME, et al. **Med Tekh** 1988 Sep–Oct;(5):10–5 (Eng. Abstr.) **(Rus)**

METHODS

An expanded imaging approach for diagnosing tears of the triangular fibrocartilage complex. Green SM, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall;48(2):187–90

Presurgical radiographic assessment for implants. Petrikowski CG, et al. **J Prosthet Dent** 1989 Jan;61(1):59–64

An optimal synthetic aperture for circular tomosynthesis. Ruttimann UE, et al. **Med Phys** 1989 May–Jun; 16(3):398–405

Tomography of the posterior cervical spine fusion: a new concept. Ramthun SK, et al. **Radiol Technol** 1988 Sep–Oct; 60(1):27–31

Complex motion tomography of the sacroiliac joint. An anatomical and roentgenological study. Dijkstra PF, et al. **ROFO** 1989 Jun;150(6):635–42

[Equality and symmetry in the use of vestibular orientation] Canal P, et al. **Orthod Fr** 1987;58 Pt 2:607–14 (Eng. Abstr.) **(Fre)**

[Evaluation of the absorbed dosage in Compton tomography] Arcovito G, et al. **Radiol Med (Torino)** 1989 May; 77(5):540–3 (Eng. Abstr.) **(Ita)**

[Multiple simultaneous stratigraphy. Results with a 5-plane system for pediatric use] Iannaccone G, et al. **Radiol Med (Torino)** 1988 Oct;76(4):333–6 (Eng. Abstr.) **(Ita)**

[Zonographic technics in roentgenologic examination of the skull] Złomaniec J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:175–85 (Eng. Abstr.) **(Pol)**

[Statistical evaluation of various diagnostic technics: plain radiograms, thin-layer tomography and zonography in neuroradiographic examinations] Złomaniec J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:197–215 (Eng. Abstr.) **(Pol)**

[Rational method for determining the optimum layer in tomograms of the lungs] Bukaev NB. **Probl Tuberk** 1989; (3):57–60 **(Rus)**

[Tomography in an oblique projection in lesions of segmental and lobar bronchi] Kartashov VM, et al. **Vestn Rentgenol Radiol** 1988 May–Jun;(3):66–71 (Eng. Abstr.) **(Rus)**

[Diplotomography of the temporomandibular joint] Nespriad'ko VI, et al. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):74–7 (Eng. Abstr.) **(Rus)**

TOMOGRAPHY, X-RAY COMPUTED

Anaesthesia for computerised tomography of the brain in children: a comparison of propofol and thiopentone. Valtonen M. **Acta Anaesthesiol Scand** 1989 Feb;33(2):170–3

Computer-aided three-dimensional graphic reconstructions in a radiological and anatomical setting. Poelmann RE, et al. **Acta Anat (Basel)** 1987;130(2):132–6

Early assessment of acute pancreatitis. A comparative study of computed tomography and laboratory tests. Puolakkainen PA. **Acta Chir Scand** 1989;155(1):25–30

Computed tomography after lumbar disc surgery: a comparison between symptomatic and asymptomatic patients. Cervellini P, et al. **Acta Neurochir Suppl (Wien)** 1988;43:44–7

Intracranial arachnoid cysts in adults. Garcia-Bach M, et al. **Acta Neurochir Suppl (Wien)** 1988;42:205–9

Experience of boron-neutron capture therapy for malignant brain tumours—with special reference to the problems of postoperative CT follow-ups. Hatanaka H. **Acta Neurochir Suppl (Wien)** 1988;42:187–92

CT-guided percutaneous cordotomy. Kanpolat Y, et al. **Acta Neurochir Suppl (Wien)** 1989;46:67–8

Non-invasive follow-up of patients with intracranial arteriovenous malformations after proton-beam radiation therapy. Mehdorn HM, et al. **Acta Neurochir Suppl (Wien)** 1988;42:98–102

Experiences with CT-guided stereotaxic biopsies in 121 cases. Niizuma H, et al. **Acta Neurochir Suppl (Wien)** 1988; 42:157–60

Italian cooperative study on giant intracranial aneurysms: 2. Radiological data. Rosta L, et al. **Acta Neurochir Suppl (Wien)** 1988;42:53–9

Subarachnoid haemorrhage of unknown origin: clinical and tomographical aspects. Cioffi F, et al. **Acta Neurochir (Wien)** 1989;97(1–2):31–9

S-100 protein in cerebrospinal fluid after aneurysmal subarachnoid haemorrhage: relation to functional outcome, late CT and SPECT changes, and signs of higher cortical dysfunction. Hårdemark HG, et al. **Acta Neurochir (Wien)** 1989;99(3–4):135–44

Factors affecting the extension of peritumoural brain oedema. A CT-study. Reulen HJ, et al. **Acta Neurochir (Wien)** 1988; 95(1–2):19–24

Lhermitte-Duclos disease (dysplastic gangliocytoma): a case report with CT and MRI. Sabin HI, et al. **Acta Neurochir (Wien)** 1988;93(3–4):149–53

The incidence and management of the slit ventricle syndrome. Serlo W, et al. **Acta Neurochir (Wien)** 1989; 99(3–4):113–6

Haematoma of cavum septi pellucidi due to hypertension [letter] Sharma S. **Acta Neurochir (Wien)** 1988; 94(3–4):160–1

Non-corresponding radiological and surgical diagnoses in patients operated for sciatica. Slebus FG, et al. **Acta Neurochir (Wien)** 1988;94(3–4):137–43

Lumbar canal stenosis: results in 40 patients surgically treated. Spanu G, et al. **Acta Neurochir (Wien)** 1988; 94(3–4):144–9

Positron emission tomography with 68-Ga-EDTA and computed tomography in patients with subarachnoid haemorrhage. von Holst H, et al. **Acta Neurochir (Wien)** 1989;97(3–4):146–9

"Nidus sparing sign" on computerized tomography in intracerebral haemorrhage due to a rupture of arteriovenous malformation. Wakai S, et al. **Acta Neurochir (Wien)** 1988;95(3–4):102–8

Management of cerebral abscess in adolescents and adults. Experience in the CT-scan era. Westcombe DS, et al. **Acta Neurochir (Wien)** 1988;95(3–4):85–9

Tumors of the neuron series presenting as cysts with mural nodules. Maiuri F, et al. **Acta Neurol (Napoli)** 1989 Feb; 11(1):25–31

Value of the computertomographic findings in predicting the histological malignancy of cerebral gliomas. Maiuri F, et al. **Acta Neurol (Napoli)** 1988 Dec;10(6):360–6

Diagnosis of quadrigeminal plate arachnoid cyst with CT and NMR. A case report. Mancuso P, et al. **Acta Neurol (Napoli)** 1988 Dec;10(6):367–72

Three rare cases of arachnoid cysts. Sakas DE, et al. **Acta Neurol (Napoli)** 1988 Jun;10(3):220–4

Thalamic hemorrhage clinical and CT findings. Simonetti C, et al. **Acta Neurol (Napoli)** 1988 Aug–Oct;10(4–5):246–61 (75 ref.)

Epileptic seizures and cerebrovascular disease. Daniele O, et al. **Acta Neurol Scand** 1989 Jul;80(1):17–22

Multi-infarct dementia: a computed tomographic study. Jayakumar PN, et al. **Acta Neurol Scand** 1989 Apr; 79(4):292–5

Prognosis in solitary intraventricular haemorrhage. Clinical and computed tomographic observations. Jayakumar PN, et al. **Acta Neurol Scand** 1989 Jul;80(1):1–5

Significance of cerebral CT in neurological practice. Myllylä VV, et al. **Acta Neurol Scand** 1988 Sep;78(3):228–33

The value of CT and very low field MRI in the etiological diagnosis of dizziness. Ojala M, et al. **Acta Neurol Scand** 1988 Jul;78(1):26–9

Myeloblastoma of the brain. Simpson TA Jr, et al. **Acta Neuropathol (Berl)** 1989;78(4):444–7

Torsion of the leg determined by computed tomography. Reikerås O, et al. **Acta Orthop Scand** 1989 Jun;60(3):330–3

Brain morphology in schizophrenia: a 2- to 5-year CT scan follow-up study. Vita A, et al. **Acta Psychiatr Scand** 1988 Nov;78(5):618–21

Cysticercosis of the brain. The value of computed tomography. Almeida-Pinto J, et al. **Acta Radiol** 1988 Nov–Dec;29(6):625–8

Computed tomography of ano-rectal anomalies. Correlation between radiologic findings and clinical evaluation of faecal incontinence. Arnbjörnsson E, et al. **Acta Radiol** 1989 Jan-Feb;30(1):25-8

Abdominal computed tomography in macroglobulinemia (Waldenström's disease). Report of a case. Aspelin P, et al. **Acta Radiol** 1989 Mar-Apr;30(2):197-200

Assessment of tibial torsion employing fluoroscopy, computed tomography and the cryosectioning technique. Clementz BG, et al. **Acta Radiol** 1989 Jan-Feb;30(1):75-80

Multicystic acoustic neuroma. Case report and differential diagnosis. Drapkin AJ, et al. **Acta Radiol** 1989 Jan-Feb; 30(1):7-9

Ultra low field magnetic resonance imaging and computed tomography in the diagnosis of lumbar disc disease. Fagerlund MK, et al. **Acta Radiol** 1989 Jul-Aug; 30(4):349-52

Comparison of myelography and computed tomography in establishing lumbar disc herniation. Fagerlund MK, et al. **Acta Radiol** 1989 May-Jun;30(3):241-6

Computed tomography of the lungs in acquired immunodeficiency syndrome. An early indicator of interstitial pneumonia. Hartelius H, et al. **Acta Radiol** 1988 Nov-Dec;29(6):641-4

Evaluation of three methods for measurement of femoral neck anteversion. Femoral neck anteversion, definition, measuring methods and errors. Høiseth A, et al. **Acta Radiol** 1989 Jan-Feb;30(1):69-73

Computed tomography reveals atypical localization of benign mediastinal tumors. Ikezoe J, et al. **Acta Radiol** 1989 Mar-Apr;30(2):175-9

Computed tomography and ultrasonography in parotid tumors. Isaza M, et al. **Acta Radiol** 1989 Jan-Feb;30(1):11-5

Computed tomography in massive pulmonary embolism. Kälebo P, et al. **Acta Radiol** 1989 Jan-Feb;30(1):105-7

Computed tomography and mediastinoscopy in the assessment of resectability of lung cancer. Lähde S, et al. **Acta Radiol** 1989 Mar-Apr;30(2):169-73

Comparison of myelography, CT myelography and magnetic resonance imaging in cervical spondylosis and disk herniation. Pre- and postoperative findings. Larsson EM, et al. **Acta Radiol** 1989 May-Jun;30(3):233-9

Computed tomography and conventional radiography in intrathoracic metastases from non-seminomatous testicular tumor. Lien HH, et al. **Acta Radiol** 1988 Sep-Oct; 29(5):547-9

Positron emission tomography and computed tomography in differential diagnosis between recurrent or residual glioma and treatment-induced brain lesions. Lilja A, et al. **Acta Radiol** 1989 Mar-Apr;30(2):121-8

Contrast enhancement of pathologic lymph nodes demonstrated by computed tomography. Magnusson A, et al. **Acta Radiol** 1989 May-Jun;30(3):307-10

Positron emission tomography compared with magnetic resonance imaging and computed tomography in supratentorial gliomas using multiple stereotactic biopsies as reference. Mosskin M, et al. **Acta Radiol** 1989 May-Jun; 30(3):225-32

Computed tomography in primary and secondary adrenal tumours. Päivänsalo M, et al. **Acta Radiol** 1988 Sep-Oct; 29(5):519-22

Repeated computed tomography in lacunar infarcts of the brain. Skriver EB, et al. **Acta Radiol** 1989 Jan-Feb;30(1):1-6

Evaluation of intrahepatic tumour extent and prediction of resection size in liver tumours by computed tomography, ultrasonography and angiography. Tidebrant G, et al. **Acta Radiol** 1989 Jul-Aug;30(4):395-9

Resectability of liver tumours evaluated by computed tomography. Tidebrant G, et al. **Acta Radiol** 1988 Sep-Oct; 29(5):531-4

Angiomyolipoma of the kidney. Comparison between magnetic resonance imaging, computed tomography, and ultrasonography for diagnosis. Uhlenbrock D, et al. **Acta Radiol** 1988 Sep-Oct;29(5):523-6

Lesions of skull base observed on high resolution computed tomography. A comparison with magnetic resonance imaging. Volle E, et al. **Acta Radiol** 1989 Mar-Apr; 30(2):129-34

Contribution of computerized tomography to the diagnosis of non-tumorous neuropaediatric diseases. Kvíčala V. **Acta Univ Carol [Med Monogr] (Praha)** 1987;121:1-162 (213 ref.)

CT and MR of MELAS syndrome. Allard JC, et al. **AJNR** 1988 Nov-Dec;9(6):1234-8

MR and CT characteristics of gangliocytoma: a rare cause of epilepsy in children. Altman NR. **AJNR** 1988 Sep; 9(5):917-21

Cranial CT of autosomal recessive osteopetrosis. Bartynski WS, et al. **AJNR** 1989 May-Jun;10(3):543-50

Dynamic CT of the laterosellar extradural venous spaces. Bonneville JF, et al. **AJNR** 1989 May-Jun;10(3):535-42

Soft-tissue changes after head and neck radiation: CT findings. Bronstein AD, et al. **AJNR** 1989 Jan-Feb; 10(1):171-5

Hamartoma of the tuber cinereum: a comparison of MR and CT findings in four cases. Burton EM, et al. **AJNR** 1989 May-Jun;10(3):497-501

The CT and MR evaluation of lissencephaly. Byrd SE, et al. **AJNR** 1988 Sep;9(5):923-7

MR imaging and CT in three cases of Sturge-Weber syndrome: prospective comparison. Chamberlain MC, et al. **AJNR** 1989 May-Jun;10(3):491-6

CT of pineal tumors and intracranial germ-cell tumors. Chang T, et al. **AJNR** 1989 Sep-Oct;10(5):1039-44

CT of the temporal bone in achondroplasia. Cobb SR, et al. **AJNR** 1988 Nov-Dec;9(6):1195-9

Globe tenting: a sign of increased orbital tension. Dalley RW, et al. **AJNR** 1989 Jan-Feb;10(1):181-6

Differentiation between meningeal fibrosis and chronic subdural hematoma after ventricular shunting: value of enhanced CT and MR scans. Destian S, et al. **AJNR** 1989 Sep-Oct;10(5):1021-6

Significance of CT and MR findings in sphenoid sinus disease. Digre KB, et al. **AJNR** 1989 May-Jun;10(3):603-6

Prevalence of ethmoid sinus abnormalities on brain CT of asymptomatic adults. Duvoisin B, et al. **AJNR** 1989 May-Jun;10(3):599-601

Air CT cisternography in the diagnosis of vascular loop causing vestibular nerve dysfunction. Esfahani F, et al. **AJNR** 1989 Sep-Oct;10(5):1045-9

Role of diskography after negative postmyelography CT scans [letter] Gould ES, et al. **AJNR** 1989 Jul-Aug; 10(4):848

Cholesterol granuloma of the petrous apex: MR and CT evaluation. Greenberg JJ, et al. **AJNR** 1988 Nov-Dec; 9(6):1205-14

Brain abscess as a complication of halo traction: role of CT in diagnosing penetration of the skull. Hann J, et al. **AJNR** 1989 Mar-Apr;10(2):446

Cerebral infarction: diagnosis and assessment of prognosis by using 123IMP-SPECT and CT. Hayman LA, et al. **AJNR** 1989 May-Jun;10(3):557-62

Comparison of MR imaging and CT in patients with intracranial aneurysm clips. Holtås S, et al. **AJNR** 1988 Sep;9(5):891-7

CT and MR of lymphomatoid granulomatosis of the CNS: report of four cases and review of the literature. Kapila A, et al. **AJNR** 1988 Nov-Dec;9(6):1139-43 (20 ref.)

Temporal lobe atrophy in patients with Alzheimer disease: a CT study. Kido DK, et al. **AJNR** 1989 May-Jun; 10(3):551-5

Diffuse pneumocephalus from Clostridium perfringens meningitis: CT findings. Klein MA, et al. **AJNR** 1989 Mar-Apr;10(2):447

Role of diskography after negative postmyelography CT scans [letter] Laros GS, et al. **AJNR** 1988 Nov-Dec; 9(6):1244

Craniofacial chondrosarcomas: imaging findings in 15 untreated cases. Lee YY, et al. **AJNR** 1989 Jan-Feb; 10(1):165-70

Hypertrophic cranial pachymeningitis: assessment with CT and MR imaging. Martin N, et al. **AJNR** 1989 May-Jun; 10(3):477-84

Inflammatory myelinoclastic diffuse sclerosis (Schilder's disease): neuroradiologic findings. Mehler MF, et al. **AJNR** 1989 Jan-Feb;10(1):176-80

Use of computerized CT analysis to discriminate between Alzheimer patients and normal control subjects. Sandor T, et al. **AJNR** 1988 Nov-Dec;9(6):1181-7

CT of Kimura disease. Smith JR, et al. **AJNR** 1989 Sep-Oct; 10(5 Suppl):S34-6

Differentiation between postoperative scar and recurrent disk herniation: prospective comparison of MR, CT, and contrast-enhanced CT. Sotiropoulos S, et al. **AJNR** 1989 May-Jun;10(3):639-43

Carbon monoxide poisoning: asymmetric and unilateral changes on CT. Taylor R, et al. **AJNR** 1988 Sep;9(5):975-7

Early CT findings after interstitial radiation therapy for primary malignant brain tumors. Tolly TL, et al. **AJNR** 1988 Nov-Dec;9(6):1177-80

MR imaging vs CT in subacute sclerosing panencephalitis. Tsuchiya K, et al. **AJNR** 1988 Sep;9(5):943-6

CT morphology of intrathecal lumbosacral nerve-root compression. Wilmink JT. **AJNR** 1989 Mar-Apr; 10(2):233-48

Cerebral CT of lethal ethylene glycol intoxication with pathologic correlation. Zeiss J, et al. **AJNR** 1989 Mar-Apr; 10(2):440-2

A new radiologic sign of ruptured pulmonary hydatid cyst [letter] Aggarwal S, et al. **AJR** 1989 Feb;152(2):431-2

Angiomyolipoma of the kidney extending into the inferior vena cava: sonographic and CT findings. Arenson AM, et al. **AJR** 1988 Dec;151(6):1159-61

CT evaluation of gallstones in vitro: correlation with chemical analysis. Baron RL, et al. **AJR** 1988 Dec; 151(6):1123-8

Torsion of normal uterine adnexa before menarche: CT appearance. Bellah RD, et al. **AJR** 1989 Jan;152(1):123-4

CT findings of clonorchiasis. Choi BI, et al. **AJR** 1989 Feb; 152(2):281-4

Fibromatosis colli of infancy: CT and sonographic findings. Crawford SC, et al. **AJR** 1988 Dec;151(6):1183-4

CT diagnosis of acute pericardial tamponade after blunt chest trauma. Goldstein L, et al. **AJR** 1989 Apr;152(4):739-41

CT-guided cutting-needle biopsies of selected chest lesions. Goralnik CH, et al. **AJR** 1988 Nov;151(5):903-7

Efficacy of MR vs CT in epilepsy. Heinz ER, et al. **AJR** 1989 Feb;152(2):347-52

Comparison of MR imaging, CT, and angiography in the evaluation of the enlarged cavernous sinus. Hirsch WL Jr, et al. **AJR** 1988 Nov;151(5):1015-23

Hepatic lymphoma in cyclosporine-treated transplant recipients: sonographic and CT findings. Honda H, et al. **AJR** 1989 Mar;152(3):501-3

Cystic pancreatic tumors: CT and sonographic assessment. Johnson CD, et al. **AJR** 1988 Dec;151(6):1133-8

Periportal low-attenuation areas on CT: value as evidence of liver transplant rejection. Kaplan SB, et al. **AJR** 1989 Feb;152(2):285-7

The value of non-contrast-enhanced CT in blunt abdominal trauma. Kelly J, et al. **AJR** 1989 Jan;152(1):41-8

Intraspinal air: a CT finding of epidural abscess. Kirzner H, et al. **AJR** 1988 Dec;151(6):1217-8

Primary retroperitoneal neoplasms: CT findings in 90 cases with clinical and pathologic correlation. Lane RH, et al. **AJR** 1989 Jan;152(1):83-9

CT and sonographic features of pseudomyxoma peritonei [letter] Lawate PS, et al. **AJR** 1989 Feb;152(2):429

Intracranial oligodendrogliomas: imaging findings in 35 untreated cases. Lee YY, et al. **AJR** 1989 Feb;152(2):361-9

First stereoscopic images from CT reconstructions of mummies [letter] Lewin PK. **AJR** 1988 Dec;151(6):1249

Dyke award. Gd-DTPA-enhanced MR imaging of experimental bacterial meningitis: evaluation and comparison with CT. Mathews VP, et al. **AJR** 1989 Jan; 152(1):131-6

Perfluorooctylbromide: a new contrast agent for CT, sonography, and MR imaging. Mattrey RF. **AJR** 1989 Feb; 152(2):247-52 (36 ref.)

Cerebellar atrophy caused by high-dose cytosine arabinoside: CT and MR findings. Miller L, et al. **AJR** 1989 Feb; 152(2):343-4

Passive hepatic congestion in heart failure: CT abnormalities. Moulton JS, et al. **AJR** 1988 Nov;151(5):939-42

Myelolipoma of the adrenal gland: sonographic and CT features. Musante F, et al. **AJR** 1988 Nov;151(5):961-4

Cholangiocarcinoma: diagnosis and evaluation of resectability by CT and sonography as procedures complementary to cholangiography. Nesbit GM, et al. **AJR** 1988 Nov;151(5):933-8

CT-guided nerve root block and ablation. Quinn SF, et al. **AJR** 1988 Dec;151(6):1213-6

On the value of non-contrast-enhanced CT in blunt abdominal trauma [letter] Raptopoulos V. **AJR** 1989 Mar; 152(3):651-2

Imaging of pancreatic neoplasms: comparison of MR and CT. Steiner E, et al. **AJR** 1989 Mar;152(3):487-91

IV Nembutal: safe sedation for children undergoing CT. Strain JD, et al. **AJR** 1988 Nov;151(5):975-9

Motion artifacts on CT simulate bronchiectasis. Tarver RD, et al. **AJR** 1988 Dec;151(6):1117-9

MR and CT of masses of the anterosuperior third ventricle. Waggenspack GA, et al. **AJR** 1989 Mar;152(3):609-14

The subclavian triangle: CT analysis. Wechsler RJ, et al. **AJR** 1989 Feb;152(2):313-7

Giant fibrovascular polyp of the esophagus: CT and MR findings. Whitman GJ, et al. **AJR** 1989 Mar;152(3):518-20

CT of severe renal trauma in children: evaluation and course of healing with conservative therapy. Yale-Loehr AJ, et al. **AJR** 1989 Jan;152(1):109-13

Photodynamic laser therapy to alleviate complete bronchial obstruction: comparison of CT and bronchoscopy to predict outcome. Zwirewich CV, et al. **AJR** 1988 Nov; 151(5):897-901

Brain abnormalities in infants on extracorporeal membrane oxygenation: sonographic and CT findings. Babcock DS, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):571-6

Chronic lung diseases: specific diagnosis by using CT. Bergin CJ, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1183-8

Osseous invasion by soft-tissue sarcoma seen better on MR than on CT [letter] Berthoty D, et al. **AJR Am J Roentgenol** 1989 May;152(5):1131

The value of CT in detecting bowel perforation in children after blunt abdominal trauma. Bulas DI, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):561-4

Giant cavernous hemangioma of the liver: CT and MR imaging in 10 cases. Choi BI, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1221-6

Diagnosis of a myocardial lipoma by using CT. Conces DJ Jr, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):725-6

CT diagnosis of spondylolysis of the axis vertebra [letter] Coughlin WF, et al. **AJR Am J Roentgenol** 1989 Jul; 153(1):195-6

Alzheimer's disease: longitudinal CT studies of ventricular change. de Leon MJ, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1257-62

Primary tumors of the small intestine: CT evaluation. Dudiak KM, et al. **AJR Am J Roentgenol** 1989 May;152(5):995-8

CT findings of a posterior false aneurysm of the left ventricle [letter] Escarous A. **AJR Am J Roentgenol** 1989 Jun; 152(6):1339-40

Low-attenuation mediastinal masses on CT. Glazer HS, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1173-7

Use of the cluster sign in the diagnosis of small pyogenic hepatic abscesses [letter; comment] Grant T, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):429-30. **Comment on:** AJR Am J Roentgenol 1988 Sep;151(3):487-9

CT diagnosis of a giant central pulmonary artery aneurysm arising quickly after pulmonary embolic disease [letter] Hartshorne MF, et al. **AJR Am J Roentgenol** 1989 Jul; 153(1):190-1

Occult fractures of the carpals and metacarpals: demonstration by CT. Hindman BW, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):529-32

CT of nasopharyngeal carcinoma: significance of widening of the preoccipital soft tissue on axial scans. Hoe J.

AJR Am J Roentgenol 1989 Oct;153(4):867–72

Septic pulmonary emboli: CT–radiographic correlation. Huang RM, et al. AJR Am J Roentgenol 1989 Jul; 153(1):41–5

Focal nodular hyperplasia of the liver on delayed enhanced CT [letter] Kier R, et al. AJR Am J Roentgenol 1989 Oct; 153(4):885–6

Biliary cystadenoma and cystadenocarcinoma: CT and sonographic findings. Korobkin M, et al. AJR Am J Roentgenol 1989 Sep;153(3):507–11

Juvenile pilocytic astrocytomas: CT and MR characteristics. Lee YY, et al. AJR Am J Roentgenol 1989 Jun; 152(6):1263–70

Obliteration of periarterial retropancreatic fat on CT in pancreatitis: an exception to the rule. Luetmer PH, et al. AJR Am J Roentgenol 1989 Jul;153(1):63–4

Pediatric radiology case of the day. Diffuse infiltrating lipomatosis. McAlister WH, et al. AJR Am J Roentgenol 1989 Jun;152(6):1331–2

CT features of rounded atelectasis. McHugh K, et al. AJR Am J Roentgenol 1989 Aug;153(2):257–60

Idiopathic cecal ulcer: CT findings. Marn CS, et al. AJR Am J Roentgenol 1989 Oct;153(4):761–3

Chronic eosinophilic pneumonia: CT findings in six cases. Mayo JR, et al. AJR Am J Roentgenol 1989 Oct; 153(4):727–30

Imaging studies for screening native kidneys in long–term dialysis patients. Mindell HJ. AJR Am J Roentgenol 1989 Oct;153(4):768–9

CT of adrenal tumors: frequency and clinical significance of low–attenuation lesions. Miyake H, et al. AJR Am J Roentgenol 1989 May;152(5):1005–7

CT diagnosis of emphysematous gastritis [letter] Monteferrante M, et al. AJR Am J Roentgenol 1989 Jul; 153(1):191–2

The CT findings of pulmonary sarcoidosis: analysis of 25 patients. Müller NL, et al. AJR Am J Roentgenol 1989 Jun;152(6):1179–82

Hepatic perfusion in cavernous transformation of the portal vein: evaluation by using CT angiography. Nakao N, et al. AJR Am J Roentgenol 1989 May;152(5):985–6

Localized clotted blood as evidence of visceral trauma on CT: the sentinel clot sign. Orwig D, et al. AJR Am J Roentgenol 1989 Oct;153(4):747–9

Subcutaneous metastases from malignant melanoma: prevalence and findings on CT. Patten RM, et al. AJR Am J Roentgenol 1989 May;152(5):1009–12

Neuroradiology case of the day. Choroid plexus papilloma, third ventricle. Romano AJ, et al. AJR Am J Roentgenol 1989 Jun;152(6):1333–5

Neuroradiology case of the day. Plasmacytoma of the skull vault. Romano AJ, et al. AJR Am J Roentgenol 1989 Jun; 152(6):1335–7

Arterial perfusion abnormalities of the liver after hepatic arterial infusion chemotherapy and their correlation with changes in the metastases: evaluation with CT and angiography. Roth J, et al. AJR Am J Roentgenol 1989 Oct;153(4):751–4

CT of primary lymphoma of the liver. Sanders LM, et al. AJR Am J Roentgenol 1989 May;152(5):973–6

CT of hyoid osteomyelitis [letter] Schweitzer ME, et al. AJR Am J Roentgenol 1989 Aug;153(2):432–3

CT demonstration of an ossifying bronchial carcinoid simulating broncholithiasis. Shin MS, et al. AJR Am J Roentgenol 1989 Jul;153(1):51–2

Neuroradiology case of the day. Moyamoya disease. Shoemaker EI, et al. AJR Am J Roentgenol 1989 Jun; 152(6):1337–8

Neuroradiology case of the day. Chordoma of the clivus. Shoemaker EI, et al. AJR Am J Roentgenol 1989 Jun; 152(6):1333

Blunt renal and ureteral trauma in childhood: CT patterns of fluid collections. Siegel MJ, et al. AJR Am J Roentgenol 1989 May;152(5):1043–7

Renal imaging in long–term dialysis patients: a comparison of CT and sonography. Taylor AJ, et al. AJR Am J Roentgenol 1989 Oct;153(4):765–7

CT of blunt abdominal trauma in children. Taylor GA, et al. AJR Am J Roentgenol 1989 Sep;153(3):555–9

CT of cerebrovascular injury after neonatal extracorporeal membrane oxygenation: implications for neurodevelopmental outcome. Taylor GA, et al. AJR Am J Roentgenol 1989 Jul;153(1):121–6

Mucoceles of the paranasal sinuses: MR imaging with CT correlation. Van Tassel P, et al. AJR Am J Roentgenol 1989 Aug;153(2):407–12

Pancreatic plasmacytoma: CT findings. Wilson TE, et al. AJR Am J Roentgenol 1989 Jun;152(6):1227–8

Angiogenesis and blood–brain barrier breakdown modulate CT contrast enhancement: an experimental study in a rabbit brain–tumor model. Zagzag D, et al. AJR Am J Roentgenol 1989 Jul;153(1):141–6

Focal renal infarction after retroperitoneal lymph–node dissection: CT diagnosis. Zissin R, et al. AJR Am J Roentgenol 1989 Aug;153(2):325–6

Burkitt lymphoma involving the epididymis and spermatic cord: sonographic and CT findings. Zwanger–Mendelsohn S, et al. AJR Am J Roentgenol 1989 Jul;153(1):85–6

Ultrafast CT in aortic stenosis [letter] Fields CD, et al. Am Heart J 1988 Dec;116(6 Pt 1):1647

Doppler echocardiography and ultrafast cine computed tomography during dynamic exercise in chronic parenchymal pulmonary disease. Himelman RB, et al. Am J Cardiol 1989 Sep 1;64(8):528–33

Detection of calcific deposits in coronary arteries by ultrafast computed tomography and correlation with angiography. Tanenbaum SR, et al. Am J Cardiol 1989 Apr 1; 63(12):870–2

Total and visceral adipose–tissue volumes derived from measurements with computed tomography in adult men and women: predictive equations. Kvist H, et al. Am J Clin Nutr 1988 Dec;48(6):1351–61

Clinical indicators of intracranial lesion on computed tomographic scan in children with parietal skull fracture. Bonadio WA, et al. Am J Dis Child 1989 Feb;143(2):194–6

Computed tomography in the diagnosis of osteoid osteoma in infancy [letter] Fleta J, et al. Am J Dis Child 1989 Sep; 143(9):1000

Radiological case of the month. Suprasellar arachnoid cyst. Wells RG, et al. Am J Dis Child 1988 Oct;142(10):1081–2

Pancreatitis in the annulus of annular pancreas demonstrated by the combined use of computed tomography and endoscopic retrograde cholangiopancreatography. Itoh Y, et al. Am J Gastroenterol 1989 Aug;84(8):961–4

Magnetic resonance imaging versus computed tomographic scanning in neuropsychiatric systemic lupus erythematosus. Sewell KL, et al. Am J Med 1989 May;86(5):625–6

Superiority of magnetic resonance imaging over computer tomography for diagnosing isodense bilateral subdural hematomas. Slowikowski JS, et al. Am J Med 1989 Mar; 86(3):345–6

Head computed tomographic scans in women with eclampsia. Brown CE, et al. Am J Obstet Gynecol 1988 Oct; 159(4):915–20

Computed tomographic features of puerperal ovarian vein thrombosis. Khurana BK, et al. Am J Obstet Gynecol 1988 Oct;159(4):905–8

Three–dimensional computed tomography in orbital osteoma. Ohtsuka K, et al. Am J Ophthalmol 1988 Oct 15; 106(4):502–4

Correlation of high–resolution computed tomography and gross anatomic sections of the temporal bone: II. Vestibular apparatus. Archer CR, et al. Am J Otol 1988 Jul; 9(4):276–81

CT and MRI of the ear and temporal bone: current state of the art and future prospects. Jackler RK. Am J Otol 1988 May;9(3):232–9 (111 ref.)

The use of computed tomography in assessing oral cancer recurrence after flap reconstruction. Brown DH, et al. Am J Otolaryngol 1989 May–Jun;10(3):161–4

Noninvasive diagnosis of cruciate ligament damage with particular reference to computed tomography with arthrography. Büttner–Janz K, et al. Am J Sports Med 1989 Jul–Aug;17(4):501–4

Computed tomography (CT) arthrography of shoulder instabilities in athletes. Rafii M, et al. Am J Sports Med 1988 Jul–Aug;16(4):352–61

Evaluation of intrathoracic extent of lung cancer by plain chest radiography, computed tomography, and magnetic resonance imaging. Batra P, et al. Am Rev Respir Dis 1988 Jun;137(6):1456–62

Pulmonary hemodynamics, gas exchange, and the severity of emphysema as assessed by quantitative CT scan in chronic bronchitis and emphysema. Biernacki W, et al. Am Rev Respir Dis 1989 Jun;139(6):1509–15

Limitations of computed tomography in the assessment of emphysema. Miller RR, et al. Am Rev Respir Dis 1989 Apr;139(4):980–3

High resolution computed tomography and lung function in asbestos–exposed workers with normal chest radiographs. Staples CA, et al. Am Rev Respir Dis 1989 Jun; 139(6):1502–8

Relationships between lung computed tomographic density, gas exchange, and PEEP in acute respiratory failure. Gattinoni L, et al. Anesthesiology 1988 Dec;69(6):824–32

Understanding images: correlation between computerized tomographic scans of lung structure with impaired function in ARDS [editorial] Zapol WM. Anesthesiology 1988 Dec; 69(6):812–4

Primary arteriovenous fistula between common iliac vessels: ultrasound, computer tomographic, and angiographic findings—a case report. Walstra BR, et al. Angiology 1989 Mar;40(3):222–6

An algorithm for computed tomography & diagnostic peritoneal lavage [editorial] Doris PE. Ann Emerg Med 1989 May;18(5):592

Computed tomography versus diagnostic peritoneal lavage: usefulness in immediate diagnosis of blunt abdominal trauma. Frame SB, et al. Ann Emerg Med 1989 May; 18(5):513–6

Computed tomography diagnosis of acute facial swelling in an adult hemophiliac. Kuhlmann TP, et al. Ann Emerg Med 1989 Jun;18(6):681–3

Computed tomography in the initial evaluation of the cervical spine. Schleehauf K, et al. Ann Emerg Med 1989 Aug; 18(8):815–7

Bilateral damage to the head of the caudate nuclei [letter] Croisile B, et al. Ann Neurol 1989 Mar;25(3):313–4

Absence status epilepticus with computed tomographic brain changes following metrizamide myelography. Obeid T, et al. Ann Neurol 1988 Oct;24(4):582–4

Computed tomography in determining laryngeal involvement of hypopharyngeal carcinoma. Hirano M, et al. Ann Otol Rhinol Laryngol 1988 Sep–Oct;97(5 Pt 1):476–82

Temporal bone computed tomography in the preoperative evaluation for cochlear implantation. Mueller DP, et al. Ann Otol Rhinol Laryngol 1989 May;98(5 Pt 1):346–9

Computed tomography of internal jugular vein thrombosis. Wen BC, et al. Ann Otol Rhinol Laryngol 1989 Apr;98(4 Pt 1):318–9

Computed tomography in patients with laryngeal carcinoma: a clinical perspective. Werber JL, et al. Ann Otol Rhinol Laryngol 1989 Jan;98(1 Pt 1):55–8

Two cases of thyroid malignancy [letter] Yaffe D, et al. Ann Otol Rhinol Laryngol 1989 Jan;98(1 Pt 1):85

CT of second branchial cleft cysts and fistula: comparison with MRI in three cases. de Schepper AM, et al. Ann Radiol (Paris) 1988;31(3):141–8

Percutaneous CT guided nerve block of the coeliac plexus and splanchnic nerves. Herpels V, et al. Ann Radiol (Paris) 1988;31(5):291–6 (13 ref.)

Abdominal CT in children with neurologic impairment following blunt trauma. Abdominal CT in comatose children. Taylor GA, et al. Ann Surg 1989 Aug; 210(2):229–33

CT abnormalities in schizophrenia. A preliminary study of their correlations with P300/P200 electrophysiological features and positive/negative symptoms. McCarley RW, et al. Arch Gen Psychiatry 1989 Aug;46(8):698–708

Ventricle–brain ratio, computed tomographic density, and brain area in 50 schizophrenics. Pearlson GD, et al. Arch Gen Psychiatry 1989 Aug;46(8):690–7

White matter low attenuation on CT in Alzheimer's disease. Erkinjuntti T, et al. Arch Gerontol Geriatr 1989 Jan; 8(1):95–104 (34 ref.)

The value of CT scanning in the management of patients with gynecologic malignancies. Mann WJ, et al. Arch Gynecol Obstet 1989;246(1):15–25 (13 ref.)

Diagnosis of vertebral osteomyelitis in a community hospital by using computed tomography. Abbey DM, et al. Arch Intern Med 1989 Sep;149(9):2029–35

Incidental discovery of dislocated lenses by computed tomography [letter] Castillo M, et al. Arch Ophthalmol 1989 Apr;107(4):489

Osteoblastoma of the cervical spine. Case report. Grob D, et al. Arch Orthop Trauma Surg 1989;108(3):179–81

Orbital exenteration in surgery of malignant neoplasms of the paranasal sinuses. The value of preoperative computed tomography. Graamans K, et al. Arch Otolaryngol Head Neck Surg 1989 Aug;115(8):977–80

Spontaneous extracranial pneumatocele associated with mastoid hyperpneumatization. Levenson MJ, et al. Arch Otolaryngol Head Neck Surg 1989 Jan;115(1):107–8

Computed tomography of salivary glands in Sjögren's syndrome. March DE, et al. Arch Otolaryngol Head Neck Surg 1989 Jan;115(1):105–6

Primary aortoduodenal fistula. Diagnosis by computed tomography. Ibrahim IM, et al. Arch Surg 1989 Jul; 124(7):870–1

Examination of subchondral bone architecture in experimental osteoarthritis by microscopic computed axial tomography. Layton MW, et al. Arthritis Rheum 1988 Nov; 31(11):1400–5

Nondestructive evaluation by x–ray computed tomography of dialysate flow patterns in capillary dialyzers. Takesawa S, et al. ASAIO Trans 1988 Jul–Sep;34(3):794–9

Ultrasonography of achilles tendons in primary hypercholesterolemia. Comparison with computed tomography. Steinmetz A, et al. Atherosclerosis 1988 Dec; 74(3):231–9

Late–onset post–hemiplegic hemidystonia: CT and angiographic findings. Hankey GJ, et al. Aust N Z J Med 1989 Apr;19(2):147–50

How useful is pre–operative computerized tomography scanning in staging rectal cancer? Chapuis P, et al. Aust N Z J Surg 1989 Jan;59(1):31–4

Neurotrauma in country hospitals: the role of computerized tomography scanning [editorial] Simpson DA, et al. Aust N Z J Surg 1989 Jan;59(1):1–3

Acute dissection of the aorta: which test? Walters NA, et al. Aust N Z J Surg 1989 Aug;59(8):617–20

A comparison of the radiation dose to the lens of the eye from four modern C.T. scanners. Sim LH, et al. Australas Phys Eng Sci Med 1988 Apr–Jun;11(2):76–80

Rationales for the use of intravenous contrast medium in computed tomography. Albertyn LE. Australas Radiol 1989 Feb;33(1):29–33 (34 ref.)

C.T. measurement of spinal mineral—initial Australian experience using the U.C.S.F. phantom. Alcock MK, et al. Australas Radiol 1988 May;32(2):276–9

The use of computed tomography in diagnosis of osteoid osteoma. Broadfoot JE, et al. Australas Radiol 1988 Nov; 32(4):463–7

Modified "Tores" biopsy needle for use in C.T. guided mediastinal and paraspinal biopsy. Cameron DC. Australas Radiol 1989 Feb;33(1):101–4

Medulloepithelioma: MRI appearances. Davies RP, et al. Australas Radiol 1988 Nov;32(4):503–5

The CT appearances of ruptured abdominal aortic aneurysms. Garb M. Australas Radiol 1989 May;33(2):154–6

CT of anterior intervertebral disc herniation. Garg K, et al. Australas Radiol 1988 Nov;32(4):458–9

High resolution computed tomography in the evaluation of glomus tumours of the petrous temporal bone. Grattan–Smith JD, et al. Australas Radiol 1988 May; 32(2):190–6

Pseudomyxoma peritonei—preoperative diagnosis on CT scan. A report of 2 cases. Khanna S, et al. **Australas Radiol** 1988 Nov;32(4):480–2

C.T. demonstration of thrombosis of the portal venous system. Lee WB, et al. **Australas Radiol** 1988 Aug; 32(3):360–4

Left gastric and coeliac lymph nodes: a problem area for C.T. staging of carcinoma of the gastro-oesophageal junction. Lee WB. **Australas Radiol** 1988 May;32(2):230–1

Radiotherapy planning accuracy in terms of C.T. numbers and inhomogeneity correction techniques. Metcalfe PE, et al. **Australas Radiol** 1988 Aug;32(3):371–9

The value of computed tomography in radiation treatment for multiple myeloma. North CJ, et al. **Australas Radiol** 1988 Nov;32(4):468–72

CT and sonographic diagnosis of thymolipoma. A case report. Nuruddin R, et al. **Australas Radiol** 1988 Nov; 32(4):497–9

Disseminated tuberculosis causing acute adrenal failure, C.T. findings with post mortem correlation. Osborne TM, et al. **Australas Radiol** 1988 Aug;32(3):394–7

Value of CT scanning in assessing location and extent of epidural and paraspinal inflammatory conditions. O'Sullivan R, et al. **Australas Radiol** 1988 May;32(2):203–6

The assessment of inflammatory aortic aneurysms with computed tomography. Waterland M. **Australas Radiol** 1988 Aug;32(3):380–4

Coronary artery calcification identified by CT in patients over forty years of age. Woodring JH, et al. **Australas Radiol** 1989 Feb;33(1):79–83

Brain morphology and regional cerebral blood flow in anorexia nervosa. Krieg JC, et al. **Biol Psychiatry** 1989 Apr 15;25(8):1041–8

Hyperprolactinaemia [letter] Baxter MA, et al. **BMJ** 1989 Jan 14;298(6666):118

Hyperprolactinaemia [letter] Jones TH, et al. **BMJ** 1988 Nov 12;297(6658):1268

Pituitary apoplexy. Lewin IG, et al. **BMJ** 1988 Dec 10; 297(6662):1526–7

PET scanning [letter; comment] Miles KA. **BMJ** 1989 Apr 29;298(6681):1177. **Comment on: BMJ** 1989 Mar 18;298(6675):693–4

In vitro comparison of quantitative computed tomography and broadband ultrasonic attenuation of trabecular bone. McKelvie ML, et al. **Bone** 1989;10(2):101–4

A comparative study of the relative sensitivity and specificity of radiolabelled monoclonal antibody and computerised tomography in the detection of sites of disease in human malignant melanoma. Elliott AT, et al. **Br J Cancer** 1989 Apr;59(4):600–4

Computed tomography of diffuse lung disease. Hansell DM, et al. **Br J Hosp Med** 1989 Mar;41(3):269–73 (32 ref.)

Assessment of adipose tissue distribution by computed axial tomography in obese women: association with body density and anthropometric measurements. Ferland M, et al. **Br J Nutr** 1989 Mar;61(2):139–48

Acute aorto-iliac thrombosis in a young man shown on unenhanced computed tomography. Adler J, et al. **Br J Radiol** 1989 Jul;62(739):627–8

Giant central disc prolapse: a pitfall in computed tomographic diagnosis. Buirski G. **Br J Radiol** 1989 Mar; 62(735):274–6

Primary malignant melanoma of the vagina. Constant O, et al. **Br J Radiol** 1989 Jul;62(739):623–4

The use of real-time orbital ultrasound in Graves' ophthalmopathy: a comparison with computed tomography. Given-Wilson R, et al. **Br J Radiol** 1989 Aug; 62(740):705–9

High-resolution computed tomography in pulmonary cystic fibrosis. Hansell DM, et al. **Br J Radiol** 1989 Jan; 62(733):1–5

Patient doses from computed tomography in Manitoba from 1977 to 1987. Huda W, et al. **Br J Radiol** 1989 Feb; 62(734):138–44

Acute rhabdomyolysis: evaluation with magnetic resonance imaging compared with computed tomography and ultrasonography. Lamminen AE, et al. **Br J Radiol** 1989 Apr;62(736):326–30

Primary orbital lymphoma: staging by computed tomographic scanning. Mills P, et al. **Br J Radiol** 1989 Mar; 62(735):287–9

The anatomy of the first sacral nerve root sheath shown by computed tomography. Moore NR, et al. **Br J Radiol** 1989 Aug;62(740):710–5

Atlanto-axial rotary fixation: diagnosis by functional computed tomography. Moss JG, et al. **Br J Radiol** 1989 Aug;62(740):755–8

Ossified leiomyoma of the stomach: demonstration on computed tomography. Savit RM, et al. **Br J Radiol** 1989 Jan;62(733):79–80

Contribution of computed tomography in the aetiology and prognosis of cerebral palsy in children. Schouman-Claeys E, et al. **Br J Radiol** 1989 Mar;62(735):248–52

The diagnosis of tumours involving the parapharyngeal space by computed tomography. Whyte AM, et al. **Br J Radiol** 1989 Jun;62(738):526–31

Contrast-enhanced CT scan in the early phase of acute pancreatitis [letter] Clavien PA, et al. **Br J Surg** 1989 Aug; 76(8):878–9

Endoluminal ultrasound and computed tomography in the staging of rectal cancer. Holdsworth PJ, et al. **Br J Surg** 1988 Oct;75(10):1019–22

Contrast-enhanced abdominal computed tomography scanning and prediction of severity of acute pancreatitis: a prospective study. London NJ, et al. **Br J Surg** 1989 Mar;76(3):268–72

CT scanning in the diagnosis and management of radiolucent urinary calculi. Dean TE, et al. **Br J Urol** 1988 Nov; 62(5):405–8

Marked cerebrospinal fluid collection associated with hepatic failure. Enomoto T, et al. **Brain Dev** 1988;10(6):389–92

Computed tomographic findings in children with spastic diplegia: correlation with the severity of their motor abnormality. Yokochi K, et al. **Brain Dev** 1989;11(4):236–40

Incidence, CT findings and rehabilitation outcome of patients with communicative hydrocephalus following severe head injury. Groswasser Z, et al. **Brain Inj** 1988 Oct–Dec; 2(4):267–72

Acute subdural haematoma mimicking an epidural haematoma on a CT scan. Hurvitz SA, et al. **Brain Inj** 1989 Jan–Mar;3(1):63–5

Extradural haematoma—earlier detection, better results [editorial] Miller JD, et al. **Brain Inj** 1988 Apr–Jun; 2(2):83–6

Extradural haematomas: an analysis of the changing characteristics of patients admitted from 1980 to 1986. Diagnostic and therapeutic implications in 158 cases. Servadei F, et al. **Brain Inj** 1988 Apr–Jun;2(2):87–100

Computed tomography of the internal auditory canals. Tawn DJ, et al. **Bristol Med Chir J** 1988 Feb;103(1):13–5

Percutaneous fine needle biopsy of abdominal and pelvic lesions: passes necessary for secure diagnosis with fluoroscopy and CT-guidance. Göthlin JH, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1988;125(1):35–9

Lissencephaly and pachygyria. Banna M, et al. **Can Assoc Radiol J** 1989 Jun;40(3):156–8

Computed tomographic features of primary brain lymphoma. Barsky MF, et al. **Can Assoc Radiol J** 1989 Apr;40(2):80–3

Preoperative localization of low-density foreign bodies under CT guidance. Bissonnette RT, et al. **Can Assoc Radiol J** 1988 Dec;39(4):286–7

Computed tomographic evaluation of intracranial metastases from carcinoma of the prostate. Burbridge B, et al. **Can Assoc Radiol J** 1989 Aug;40(4):234–7

Fibromatosis of the brachial plexus and shoulder girdle. Chui M. **Can Assoc Radiol J** 1989 Feb;40(1):28–31

Benign histiocytic fibroma of rib with CT correlation. Friedman L, et al. **Can Assoc Radiol J** 1989 Apr;40(2):114–6

Evolution of a mycotic aneurysm of the thoracoabdominal aorta. Markus J, et al. **Can Assoc Radiol J** 1989 Feb; 40(1):45–6

Late-onset cystic hygromas: the role of CT. Woods D, et al. **Can Assoc Radiol J** 1989 Jun;40(3):159–61

Cerebellar atrophy in epileptic patients. Botez MI, et al. **Can J Neurol Sci** 1988 Aug;15(3):299–303

Computed tomography, magnetic resonance imaging and pathological correlations in a case of Binswanger's disease. Mascalchi M, et al. **Can J Neurol Sci** 1989 May;16(2):214–8

State-of-the-art assessment. Diagnostic oncologic imaging. Bragg DG. **Cancer** 1989 Jul 1;64(1 Suppl):261–5; discussion 269–71

Efficacy of computed tomography of the thorax and upper abdomen and whole-body gallium scintigraphy for staging of lung cancer. MacMahon H, et al. **Cancer** 1989 Oct 1; 64(7):1404–8

Evaluation of the effects of chemotherapy in lung cancer by thoracic computed tomography. Mori K, et al. **Cancer** 1988 Dec 15;62(12):2631–4

Comparison of abdominopelvic computed tomography results and findings at second-look laparotomy in ovarian carcinoma patients. Reuter KL, et al. **Cancer** 1989 Mar 15;63(6):1123–8

Percutaneous fine needle aspiration biopsy using a modified coaxial technique. Bankoff MS, et al. **Cardiovasc Intervent Radiol** 1989 Jan–Feb;12(1):43–4

Computerized tomography in the investigation of groin masses following femoral catheterization. Bourgeois DJ, et al. **Cardiovasc Intervent Radiol** 1988 Dec;11(6):336–9

CT diagnosis of primary mediastinal hydatid cyst rupture into the aorta: a case report. Marti-Bonmati L, et al. **Cardiovasc Intervent Radiol** 1988 Oct;11(5):296–9

Systolic and diastolic performance in normal human subjects as measured by ultrafast computed tomography. Wachspress JD, et al. **Cathet Cardiovasc Diagn** 1988; 15(4):277–83

Cervicogenic headache. Radiological investigations concerning head/neck. Fredriksen TA, et al. **Cephalalgia** 1989 Jun;9(2):139–46

Is CT useful in the unequivocal diagnosis of hydatid cyst on a chest X-ray film? [letter] Aggarwal S, et al. **Chest** 1989 May;95(5):1171–2

Radiologic staging of lung cancer using CT and MRI. Glazer GM. **Chest** 1989 Jul;96(1 Suppl):44S–47S (46 ref.)

"Density mask". An objective method to quantitate emphysema using computed tomography. Müller NL, et al. **Chest** 1988 Oct;94(4):782–7

Computed tomographic detection of cavitary lung lesion complicating use of flow-directed balloon-tipped catheter. Shin MS, et al. **Chest** 1989 Aug;96(2):432–4

Echocardiography vs CT in lung cancer [letter] Stark P. **Chest** 1989 Aug;96(2):447

Computed tomography of the pulmonary parenchyma. An overview. Zerhouni E. **Chest** 1989 Apr;95(4):901–7 (39 ref.)

The calculation of intracranial volume using CT scans. Gault D, et al. **Childs Nerv Syst** 1988 Oct;4(5):271–3

EEG findings in minor head trauma as a clue for indication to CT scan. Liguori G, et al. **Childs Nerv Syst** 1989 Jun; 5(3):160–2

A comparative study of CT and MRI in midline tumors of childhood and adolescence. Sprung C, et al. **Childs Nerv Syst** 1989 Apr;5(2):102–6

Division of lobes and segments of lung on CT scan and topographical relation of segmental bronchi and related vessels. Shen ZW, et al. **Chin Med J [Engl]** 1988 Oct; 101(10):723–30

Computed tomography of gastric lymphoma. Tiu CM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;42(6):463–8

Computed tomography demonstration of inferior lumbar (Petit's) hernia. Chenoweth J, et al. **Clin Imaging** 1989 Jun; 13(2):164–6

Computed tomography versus magnetic resonance imaging of the brain. A collaborative interinstitutional study. Deck MD, et al. **Clin Imaging** 1989 Mar;13(1):2–15

Computed tomography and magnetic resonance imaging of the skull and brain. Deck MD. **Clin Imaging** 1989 Jun; 13(2):95–113 (94 ref.)

Computed tomography in traumatic defects of the diaphragm. Demos TC, et al. **Clin Imaging** 1989 Mar; 13(1):62–7

Omental cakes in American Burkitt lymphoma. Computed tomography demonstration. Goodman P, et al. **Clin Imaging** 1989 Jun;13(2):117–8

Occult lung carcinoma presenting with dysphagia. The value of computed tomography. Heater K, et al. **Clin Imaging** 1989 Jun;13(2):122–6

Staging of cervical carcinoma: accuracy of magnetic resonance imaging and computed tomography. Janus CL, et al. **Clin Imaging** 1989 Jun;13(2):114–6

Magnetic resonance imaging and computed tomography findings in a patient with lymphomatoid granulomatosis. Mendelson DS, et al. **Clin Imaging** 1989 Jun;13(2):130–3

Preoperative computed tomography staging of rectal carcinoma. Nanakawa S, et al. **Clin Imaging** 1989 Mar; 13(1):29–35

Computed tomography findings in the Swyer-James syndrome. Norton KI, et al. **Clin Imaging** 1989 Mar; 13(1):48–50

Computed tomography of Grave's ophthalmopathy. Diagnosis, management, and posttherapeutic evaluation. Shah KJ, et al. **Clin Imaging** 1989 Mar;13(1):58–61

Aggressive infantile fibromatosis. Pulmonary metastases documented by plain film and computed tomography. Shankwiler RA, et al. **Clin Imaging** 1989 Jun;13(2):127–9

Computed tomography of bronchiectasis in association with tuberculosis. Shin MS, et al. **Clin Imaging** 1989 Mar; 13(1):36–43

Extraosseous Ewing's sarcoma. Computed tomography evaluation before and after chemotherapy. Shirkhoda A, et al. **Clin Imaging** 1989 Jun;13(2):142–6

Enlargement of the pancreatic head in patients with pancreas divisum. Soulen MC, et al. **Clin Imaging** 1989 Mar; 13(1):51–7

Mesenteric cyst with atypical computed tomography appearance. Stevens SK, et al. **Clin Imaging** 1989 Jun; 13(2):119–21

Rectus abdominis sheath hematoma as a complication of tetanus. Diagnosis by computed tomography scanning. Suhr GM, et al. **Clin Imaging** 1989 Mar;13(1):82–6

Computed tomography as a diagnostic aid in diabetic and other problem feet. Williamson BR, et al. **Clin Imaging** 1989 Jun;13(2):159–63

Air-filled, multilocular, bronchopulmonary foregut duplication cyst of the mediastinum. Unusual computed tomography appearance. Woodring JH, et al. **Clin Imaging** 1989 Mar;13(1):44–7

Treated invasive cervical carcinoma. Utility of computed tomography in distinguishing between skeletal metastases and radiation necrosis. Yousem DM, et al. **Clin Imaging** 1989 Jun;13(2):147–53

Hydatid cyst of the cavernous sinus. Kanpolat Y, et al. **Clin Neurol Neurosurg** 1988;90(2):175–6

The use of computed tomography-guided stereotactic techniques in the treatment of brain stem abscesses. Rossitch E Jr, et al. **Clin Neurol Neurosurg** 1988;90(4):365–8

Parkinsonian syndrome after cardiac arrest: radiological and neurochemical changes. Verslegers W, et al. **Clin Neurol Neurosurg** 1988;90(2):177–9

Gallium-67 imaging and computed tomography in early retroperitoneal fibrosis. Leibowich S, et al. **Clin Nucl Med** 1988 Nov;13(11):829–30

A method of analysis of SPECT blood flow image data for comparison with computed tomography. Mountz JM. **Clin Nucl Med** 1989 Mar;14(3):192–6

Radiographic evidence of posterior lumbar interbody fusion with an emphasis on computed tomographic scanning. Lin PM. **Clin Orthop** 1989 May;(242):158–63

Imaging of posttraumatic brachial plexus injury. Roger B, et al. **Clin Orthop** 1988 Dec;(237):57–61

Computed tomography solves problems in orthopedic radiology. Schreiber RR. **Clin Orthop** 1989 May; (242):32–42

Olfactory neuroblastoma: imaging by magnetic resonance, CT and conventional techniques. Woodhead P, et al. **Clin Otolaryngol** 1988 Oct;13(5):387–94

Arm and leg composition determined by computed tomography in young and elderly men. Rice CL, et al.

Clin Physiol 1989 Jun;9(3):207–20

Computed tomographic scanning of the foot and ankle. Oloff-Solomon J, et al. **Clin Podiatr Med Surg** 1988 Oct; 5(4):931–44 (57 ref.)

Femoral neuropathy: the role of computed tomography in diagnosis and management in 27 patients. Apter S, et al. **Clin Radiol** 1989 Jan;40(1):30–4

Imaging neural crest tumours with 123I–metaiodobenzylguanidine and X-ray computed tomography: a comparative study. Bomanji J, et al. **Clin Radiol** 1988 Sep;39(5):502–6

Computed tomography of the chest in the trauma patient. Brooks AP, et al. **Clin Radiol** 1989 Mar;40(2):127–32

Aortic displacement on computed tomography of idiopathic retroperitoneal fibrosis. Brooks AP, et al. **Clin Radiol** 1989 Jan;40(1):51–2

Computed tomography in the diagnosis of traumatic rupture of the thoracic aorta. Brooks AP, et al. **Clin Radiol** 1989 Mar;40(2):133–8 (25 ref.)

Prolapsed thoracic intervertebral disc: the importance of CT assisted myelography. Bury RW, et al. **Clin Radiol** 1989 Jul;40(4):416–21

Computed tomographic appearances of treated metastatic testicular tumours. Carey BM, et al. **Clin Radiol** 1989 Jul; 40(4):406–12

Computed tomographic scanning in patients with carcinoma of the tongue. Cooke J, et al. **Clin Radiol** 1989 May; 40(3):254–6

The diagnosis by computed tomography of brachial plexus lesions following radiotherapy for carcinoma of the breast. Cooke J, et al. **Clin Radiol** 1988 Nov;39(6):602–6

The anatomy and pathology of the brachial plexus as demonstrated by computed tomography. Cooke J, et al. **Clin Radiol** 1988 Nov;39(6):595–601

The value of CT in the diagnosis of recurrent carcinoma of the cervix. Heron CW, et al. **Clin Radiol** 1988 Sep; 39(5):496–501

Computed tomography of hepatic oil embolism following lymphangiography. Lorigan JG, et al. **Clin Radiol** 1989 May;40(3):259–61

Three dimensional radiation therapy planning using light projection of CT scans. Ludgate CM. **Clin Radiol** 1989 Jul;40(4):426

Can computed tomography be relied upon to detect skull fractures? Macpherson P, et al. **Clin Radiol** 1989 Jan; 40(1):22–4

Computed tomography appearances of pulmonary alveolar proteinosis. Murch CR, et al. **Clin Radiol** 1989 May; 40(3):240–3

Assessment of computed tomographic artefact in the pituitary fossa following needle implantation of radioactive rods. O'Donnell CJ, et al. **Clin Radiol** 1989 Mar;40(2):154–7

The value of computed tomography in the diagnosis and management of bronchiectasis. Pang JA, et al. **Clin Radiol** 1989 Jan;40(1):40–4

Paediatric pulmonary nodules: a comparison of computed tomography, thoracotomy findings and histology. Robertson PL, et al. **Clin Radiol** 1988 Nov;39(6):607–10

The value of high definition, narrow section computed tomography in fibrosing alveolitis. Strickland B, et al. **Clin Radiol** 1988 Nov;39(6):589–94

Normal CT anatomy of the tongue, floor of mouth and oropharynx. Stutley J, et al. **Clin Radiol** 1989 May; 40(3):248–53

Residual masses on follow-up computed tomography in patients with mediastinal non-Hodgkin's lymphoma. Uematsu M, et al. **Clin Radiol** 1989 May;40(3):244–7

Problems in radiology: CT assessment of the thymus. Williams MP. **Clin Radiol** 1989 Mar;40(2):113–4 (6 ref.)

Computed tomography and magnetic resonance imaging of dilated lumbar lymphatic trunks. Williams MP, et al. **Clin Radiol** 1989 May;40(3):321–2

Computed tomography in the management of nasopharyngeal carcinoma. Zheng GL, et al. **Clin Radiol** 1989 Jan; 40(1):25–9

Hypoplasia of thoracic pedicle: CT diagnosis. A case report with emphasis on CT diagnosis. De Morsier B, et al. **Clin Rheumatol** 1988 Sep;7(3):389–93

Clinical sequelae and sacroiliac joint changes by computed tomography after recovery from septic sacroiliitis. Haanpää M, et al. **Clin Rheumatol** 1989 Jun;8(2):197–201

Recognition of organs in CT-image sequences: a model guided approach. Karssemeijer N, et al. **Comput Biomed Res** 1988 Oct;21(5):434–48

Case report: CT of a duodenal paraganglioma. Alpern MB, et al. **Comput Med Imaging Graph** 1988 Sep–Oct; 12(5):321–3

CT diagnosis of splenic multifocal lesions and abdominal lymphoadenopathy secondary to sarcoidosis. Alvarez FJ, et al. **Comput Med Imaging Graph** 1988 Jul–Aug; 12(4):255–7

Parathyroid adenomas; computed tomographic imaging and the importance of preoperative localization. Awwad EE, et al. **Comput Med Imaging Graph** 1988 Sep–Oct; 12(5):305–14

CT evaluation of esophageal perforation following endoscopic sclerotherapy. Bogan ML, et al. **Comput Med Imaging Graph** 1989 Jul–Aug;13(4):341–2

CT diagnosis of hematocolpometra. Catić D, et al. **Comput Med Imaging Graph** 1988 Sep–Oct;12(5):315–9

CT findings in visceral leishmaniasis mimicking lymphoma. Cohen D, et al. **Comput Med Imaging Graph** 1988 Sep–Oct; 12(5):325–7

Epidural abscess following frontal sinusitis—demonstration of communication by epidural contrast medium and coronal computerized tomography. Dietrich U, et al. **Comput Med Imaging Graph** 1989 Jul–Aug;13(4):351–4

Pleural metastasis of malignant thymoma. A pitfall in the CT-diagnosis of pleural mesothelioma. Görich J, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):169–70

The CT findings in pseudomembranous colitis. Hamrick KM, et al. **Comput Med Imaging Graph** 1989 Jul–Aug; 13(4):343–6

Lacunar syndrome and intracerebral hemorrhage: clinico–computed tomographic correlations. Iwasaki Y, et al. **Comput Med Imaging Graph** 1988 Nov–Dec; 12(6):359–63

Subcortical lobar hematomas: clinico–computed tomographic correlations. Iwasaki Y, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):195–8

Thalamic bleeding: clinico–computed tomographic correlations. Iwasaki Y, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):245–8

Primary pontine hemorrhage: clinico–computed tomographic correlations. Iwasaki Y, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):365–70

The cranial computed tomographic findings in patients with pure sensory stroke. Iwasaki Y, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):375–8

CT demonstration of normal gastric wall thickness: the value of administering gas–producing and paralytic agents. Karantanas AH, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):333–7

Computed tomographic detection of a swallowed denture. McLaughlin MG, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):161–3

CT appearance of primary pleural lymphoma. Malatskey A, et al. **Comput Med Imaging Graph** 1989 Mar–Apr; 13(2):165–7

Non–seminomatous testicular tumors: effect of lesion side on CT detection of lymph node metastasis. Munechika H, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):343–8

Isodense splenic mass: hamartoma, a case report. Norowitz DG, et al. **Comput Med Imaging Graph** 1989 Jul–Aug; 13(4):347–50

Primary cerebral lymphoma in acquired immunodeficiency syndrome (AIDS)—CT manifestations. Orron DE, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):207–14

Post–radiation cranial malignant fibrous histiocytoma studied by CT. Romero FJ, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):191–4

CT demonstration of brain infarcts due to deep venous thrombosis in systemic lupus erythematosus. Shah ZR, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):241–3

Computed tomography of the ileocecal region. Silverman PM, et al. **Comput Med Imaging Graph** 1988 Sep–Oct; 12(5):293–303

CT diagnosis of a gastric trichobezoar. Tamminen J, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):339–41

CT and myelogram findings of os odontoideum. Teng MM, et al. **Comput Med Imaging Graph** 1989 Mar–Apr; 13(2):179–84

Computerized tomographic findings and differential diagnostic considerations in subcortical arteriosclerotic encephalopathy (Binswanger's disease). Weisberg LA, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):249–54

Nontraumatic parietal subcortical hemorrhage: clinical–computed tomographic correlations. Weisberg LA, et al. **Comput Med Imaging Graph** 1989 Jul–Aug; 13(4):355–61

Occipital lobe hemorrhages; clinical–computed tomographic correlations. Weisberg LA, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):353–8

Computerized tomographic diagnostic aspects of acquired immunodeficiency syndrome. Weisberg LA, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):225–36 (11 ref.)

Computed tomographic findings in acute viral encephalitis in adults with emphasis on herpes simplex encephalitis. Weisberg LA, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):385–92

Computed tomographic findings in cerebral toxoplasmosis in adults. Weisberg LA, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):379–83

CT of emphysematous gastritis. Williamson MR, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):175–7

Comparison of MR imaging and CT in the evaluation of renal masses. Amendola MA. **CRC Crit Rev Diagn Imaging** 1989;29(2):117–50 (45 ref.)

Bladder diseases and imaging methods. Lamki N, et al. **CRC Crit Rev Diagn Imaging** 1989;29(1):13–101 (61 ref.)

Meniscal tears—comparison of arthrography, CT, and MRI. Manco LG, et al. **CRC Crit Rev Diagn Imaging** 1989; 29(2):151–79 (69 ref.)

Abdominal CT in the staging of small cell carcinoma of the lung. Whitley NO, et al. **CRC Crit Rev Diagn Imaging** 1989; 29(2):103–16 (27 ref.)

Topographic location of the left atrium by computed tomography: reducing pulmonary artery catheter calibration error. Paolella LP, et al. **Crit Care Med** 1988 Nov;16(11):1154–6

CT of pulmonary edema. Stark P, et al. **Crit Rev Diagn Imaging** 1989;29(3):245–55 (9 ref.)

The preoperative staging of malignant tumors of the stomach by computed tomography and liver function tests. Dulchavsky S, et al. **Curr Surg** 1989 Jan–Feb;46(1):26–8

CT–scan findings in an infant with glutaric aciduria type I. Yager JY, et al. **Dev Med Child Neurol** 1988 Dec; 30(6):808–11 (12 ref.)

Diffuse cavernous hemangioma of the rectosigmoid—CT scan, a new diagnostic modality, and surgical management using sphincter–saving procedures. Report of three cases. Aylward CA, et al. **Dis Colon Rectum** 1988 Oct; 31(10):797–802

Locations of occipital EEG electrodes verified by computed tomography. Myslobodsky MS, et al. **Electroencephalogr Clin Neurophysiol** 1989 Apr;72(4):362–6

Sciatic nerve compression: diagnostic value of electromyography and computerized tomography. Palliyath S, et al. **Electromyogr Clin Neurophysiol** 1989 Jan–Feb;29(1):9–11

Asymptomatic–nonfunctional adrenal masses detected by CT. Kologlu S, et al. **Endocrinologie** 1988 Jul–Sep; 26(3):173–8

CT brain scan and EEG in the diagnosis of adult onset seizures. Reinikainen KJ, et al. **Epilepsy Res** 1987 May; 1(3):178–84 (24 ref.)

Angelman ("happy puppet") syndrome—seven new cases documented by cerebral computed tomography: review of the literature. Dörries A, et al. **Eur J Pediatr** 1988 Dec; 148(3):270–3 (21 ref.)

Optimal CT settings for head imaging in the paediatric patient. An analysis of absorbed dose. Damilakis JE, et al. **Eur J Radiol** 1989 Feb;9(1):48–50

Diagnostic imaging of the occipito–cervical junction in patients with rheumatoid arthritis. Plain films, computed tomography, magnetic resonance imaging. Fezoulidis I, et al. **Eur J Radiol** 1989 Feb;9(1):5–11

Clinical examination, CT and US in tongue cancer staging. Fruehwald FX. **Eur J Radiol** 1988 Nov;8(4):236–41

Evaluation of thyroid calcification using computed radiography with image plate. Fukatsu H, et al. **Eur J Radiol** 1989 Feb;9(1):22–8

Computed tomography of nasopharyngeal carcinoma. A review of CT appearances in 56 patients. Hoe JW. **Eur J Radiol** 1989 May;9(2):83–90

Comparison of CT and chest radiographs in the evaluation of post–therapy lymphoma patients. Khan A, et al. **Eur J Radiol** 1989 May;9(2):96–100

Special radiologic imaging of paranasal sinuses. A prerequisite for functional endoscopic sinus surgery. Kopp W, et al. **Eur J Radiol** 1988 Aug;8(3):153–6

CT features of recurrent lumbar disc herniation. Lähde S, et al. **Eur J Radiol** 1988 Nov;8(4):247–8

CT diagnosis of pedunculated liver tumours. Lüning M, et al. **Eur J Radiol** 1988 Nov;8(4):221–5

Computed tomography of lethal midline granuloma. 5 case reports. Ovtchinnikoff S, et al. **Eur J Radiol** 1988 Aug; 8(3):145–7

Perineural spread of nasopharyngeal carcinoma: radiological and CT demonstration. Pandolfo I, et al. **Eur J Radiol** 1988 Nov;8(4):231–5

US and CT findings in biliary obstruction due to tuberculous adenitis in the periportal area. 2 cases [published erratum appears in Eur J Radiol 1989 May;9(2):127] Pombo F, et al. **Eur J Radiol** 1989 Feb;9(1):71–3

Arachnoid cysts with intracystic and subdural haematoma. Romero FJ, et al. **Eur J Radiol** 1989 May;9(2):119–20

Evaluation of contrast dose reduction for excretory urography using computed radiography. Strautman PR, et al. **Eur J Radiol** 1989 Feb;9(1):60–3

CT scanning after aneurysm repair [letter] Collin J. **Eur J Vasc Surg** 1988 Aug;2(4):274–5

Computerised tomography after abdominal aortic aneurysm repair. Schlosser V, et al. **Eur J Vasc Surg** 1987 Apr; 1(2):117–20

Computed tomography in partial epilepsies in childhood. Fritsch G, et al. **Eur Neurol** 1988;28(6):306–10

Cranial computed tomographic and electroencephalographic abnormalities in children with post–hemiconvulsive hemiplegia. Kataoka K, et al. **Eur Neurol** 1988;28(5):279–84

Bone loss in young hypoestrogenic women due to primary ovarian failure: spinal quantitative computed tomography. Louis O, et al. **Fertil Steril** 1989 Aug;52(2):227–31

Renal excretion and computed tomography enhancement of iotrolan and iopamidol in dogs. Benness G, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:88–90

Clinical trials with iotrolan in myelographic and computed tomography applications in the United States. Goldstein HA, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:167–70

Evaluation of gestational trophoblastic neoplasia using the computerized tomography. Benitez IB, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1568–76

Gastrointestinal imaging in AIDS—abdominal computed tomography and ultrasound. Jeffrey RB Jr. **Gastroenterol Clin North Am** 1988 Sep;17(3):507–21 (39 ref.)

Determination of the integrated CT number of the whole liver in patients with severe hepatitis: as an indicator of the functional reserve of the liver. Kumahara T, et al. **Gastroenterol Jpn** 1989 Jun;24(3):290–7

Transient perihilar attenuation difference in the liver on dynamic CT secondary to portal vein thrombosis: report

of two cases. Takayasu K, et al. **Gastroenterol Jpn** 1989 Apr;24(2):205–8
Evaluation of computed tomography in the assessment of liver iron overload. A study of 46 cases of idiopathic hemochromatosis. Guyader D, et al. **Gastroenterology** 1989 Sep;97(3):737–43
Endosonography and computed tomography of esophageal carcinoma. Preoperative classification compared to the new (1987) TNM system. Tio TL, et al. **Gastroenterology** 1989 Jun;96(6):1478–86
Psoas muscle pancreatic pseudocyst: CT—US diagnosis and percutaneous drainage. Alvarez-Castells A, et al. **Gastrointest Radiol** 1989 Summer;14(3):229–32
Duodenal duplication cyst with enteroliths: computed tomography and ultrasound diagnosis. Bar-Ziv J, et al. **Gastrointest Radiol** 1989 Summer;14(3):220–2
Computed tomography of retained abdominal sponges and towels. Buy JN, et al. **Gastrointest Radiol** 1989 Winter; 14(1):41–5
Hepatosplenic tuberculosis with hypersplenism: CT evaluation. Choi BI, et al. **Gastrointest Radiol** 1989 Summer;14(3):265–7
Inflammatory pseudotumor of the spleen: ultrasound and computed tomographic findings. Franquet T, et al. **Gastrointest Radiol** 1989 Spring;14(2):181–3
The gastric air-fluid sign: aid in CT assessment of gastric wall thickening. Hammerman AM, et al. **Gastrointest Radiol** 1989 Spring;14(2):109–12
Computed tomographic evaluation and staging of cecal carcinoma. Keeney G, et al. **Gastrointest Radiol** 1989 Winter;14(1):65–9
Complications of endoscopic retrograde sphincterotomy: computed tomographic evaluation. Kuhlman JE, et al. **Gastrointest Radiol** 1989 Spring;14(2):127–32
Perforation of the common bile duct during endoscopic sphincterotomy: recognition on computed tomography and successful percutaneous treatment. Lambiase RE, et al. **Gastrointest Radiol** 1989 Spring;14(2):133–6
Intraperitoneal splenosis: diagnosis by ultrasound and computed tomography. Maillard JC, et al. **Gastrointest Radiol** 1989 Spring;14(2):179–80
Lipoma of the liver: US, CT, and MRI appearance. Martí-Bonmatí L, et al. **Gastrointest Radiol** 1989 Spring; 14(2):155–7
Gastric intramural pseudocyst: computed tomographic diagnosis. Millici LP, et al. **Gastrointest Radiol** 1989 Spring; 14(2):113–4
Hepaticodochojejunostomy with afferent limb: CT anatomy. Montalvo BM, et al. **Gastrointest Radiol** 1989 Summer; 14(3):246–50
Exogastric neurilemmoma presenting as acute abdomen: role of computed tomography in diagnosis. Nussinson E, et al. **Gastrointest Radiol** 1988 Oct;13(4):306–8
CT of malignant mesenchymoma of the esophagus. Onomura K, et al. **Gastrointest Radiol** 1989 Summer;14(3):202–4
Liver function tests in patients with computed tomography demonstrated hepatic metastases. Ottmar MD, et al. **Gastrointest Radiol** 1989 Winter;14(1):55–8
Computed tomographic findings in bowel ischemia. Pérez C, et al. **Gastrointest Radiol** 1989 Summer;14(3):241–5
CT demonstration of the appendix in asymptomatic adults. Scatarige JC, et al. **Gastrointest Radiol** 1989 Summer; 14(3):271–3
Giant Meckel diverticulum containing enteroliths diagnosed by computed tomography and sonography. Torii Y, et al. **Gastrointest Radiol** 1989 Spring;14(2):167–9
Innocuous gas collections in pancreatic allografts demonstrated by computed tomography. Vas W, et al. **Gastrointest Radiol** 1989 Spring;14(2):118–22
Utility of the CAT scan in a first psychotic episode. Battaglia J, et al. **Gen Hosp Psychiatry** 1988 Nov;10(6):398–401
Relevance of computed tomography to diagnose Pneumocystis carinii pneumonia [letter] O'Mahony C, et al. **Genitourin Med** 1989 Jun;65(3):196–7
Serial computed tomography scanning in acute pancreatitis: a prospective study. London NJ, et al. **Gut** 1989 Mar; 30(3):397–403
Ultrasound or computed tomography for the initial investigation of biliary obstruction [letter] Martin DF. **Gut** 1988 Nov;29(11):1618
Bilateral paraaortic lymphadenectomy in the presence of double inferior vena cava. Ashraf M, et al. **Gynecol Oncol** 1989 May;33(2):251–4
Preoperative CT study of lymph nodes in cervical cancer—its correlation with histological findings. Matsukuma K, et al. **Gynecol Oncol** 1989 May;33(2):168–71
Computed tomographic evaluation of regional lymph node involvement in cancer of the oral cavity and oropharynx. Close LG, et al. **Head Neck** 1989 Jul–Aug;11(4):309–17
Accidental CT scanning without A1 filtration and its dosimetry. Yoshizumi TT, et al. **Health Phys** 1989 Feb; 56(2):253–4
Computed tomography of rheumatologic disorders. Sartoris DJ, et al. **Hosp Pract [Off]** 1989 Aug 15;24(8):169–73, 176, 181–4 passim
Computerised tomography of the orbits. Talwar I, et al. **Indian J Ophthalmol** 1988 Oct–Dec;36(4):171–5
CT findings in coexistent Paget's disease and multiple myeloma. Chua GT, et al. **Indiana Med** 1988 Jul; 81(7):616–7
Immunoscintigraphy with 131I-labelled monoclonal antibodies HMFG2 and HMFG1 F(ab')2 versus abdominal CT scan in the detection of residual disease in ovarian cancer patients. Pectasides D, et al. **Int J Cancer Suppl** 1988;3:83–8
Left pulmonary isomerism with normal arrangement of the heart and abdominal organs. Computed tomography of two adults. Escarous A. **Int J Cardiol** 1989 Jul;24(1):118–20
The value of computed tomography in staging cervical carcinoma. Botsis D, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):213–8
Unerupted and displaced teeth in CT-scan. Traxler M, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):184–6
Lung density changes observed in vivo in rat lungs after irradiation: variations among and within individual lungs. el-Khatib E, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar; 16(3):745–54
The use of CT densitometry to predict lung toxicity in bone marrow transplant patients. el-Khatib EE, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):85–94
The use of CT densitometry in the assessment of radiation-induced damage to the rat lung: a comparison with other endpoints. Lehnert S, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):117–24
Heavy charged-particle stereotactic radiosurgery: cerebral angiography and CT in the treatment of intracranial vascular malformations. Phillips MH, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):419–26
Radiation therapy for brain stem tumor with special reference to CT feature and prognosis correlations. Shibamoto Y, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):71–6
The value of treatment planning using CT and an immobilizing shell in radiotherapy for paranasal sinus carcinomas. Tsujii H, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):243–9
CT-scan in the diagnosis of patellar malalignment. Fernandez de Rota JJ, et al. **Int Orthop** 1988;12(3):223–7
A comparison of myelography and computer tomography in lumbar disc herniation. Zsernaviczky J, et al. **Int Orthop** 1989;13(1):51–5
Perfluoroctylbromide and hepatosplenic computed tomography. Preliminary clinical study. Bruneton JN, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S306–7
Computed tomographic diagnosis of an endobronchial hamartoma [clinical conference] Davis WK, et al. **Invest Radiol** 1988 Dec;23(12):941–4
Does dilution of contrast media affect contrast enhancement? An experimental study in rats. Dean PB, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S118–21
Evaluation of ultrafast CT scanning of the adult abdomen. Goldberg HI, et al. **Invest Radiol** 1989 Jul;24(7):537–43
Quantitative computed tomographic evaluation of femoral bone mineral content in renal osteodystrophy compared with radial photon absorptiometry. Sakurai K, et al. **Invest Radiol** 1989 May;24(5):375–82
Contrast-carrying liposomes. Current status. Seltzer SE. **Invest Radiol** 1988 Sep;23 Suppl 1:S122–5 (11 ref.)
Three-dimensional imaging of the thoracic cavity. Stern RL, et al. **Invest Radiol** 1989 Apr;24(4):282–8
Abdominal computed tomography in patients with small cell lung cancer. O'Neill H, et al. **Ir J Med Sci** 1988 Nov; 157(11):344–7
Vertebral needle biopsy with CT scan monitoring. Bettelli G, et al. **Ital J Orthop Traumatol** 1989 Jun;15(2):231–6
Computerized tomography in the study of vertebral rotation and torsion in idiopathic scoliosis. Zagra A, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):407–13
A comparison between computerized tomography and myelography in radicular lumbar syndromes. Zirattu G, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):127–32
Genetic risk for schizophrenia, birthweight, and cerebral ventricular enlargement. Silverton L, et al. **J Abnorm Psychol** 1988 Nov;97(4):496–8
Dermatofibrosarcoma protuberans of the scalp: a series of cases. Rockley PF, et al. **J Am Acad Dermatol** 1989 Aug; 21(2 Pt 1):278–83
Exercise ultrafast computed tomography: preliminary findings on its role in diagnosis and prognosis of coronary artery disease. Lipton MJ, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1082–4
Exercise ultrafast computed tomography for the detection of coronary artery disease. Roig E, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1073–81
Patterns of regional diastolic function in the normal human left ventricle: an ultrafast computed tomographic study. Rumberger JA, et al. **J Am Coll Cardiol** 1989 Jul; 14(1):119–26
Double-contrast computed tomography of the shoulder. Finkel LI, et al. **J Am Osteopath Assoc** 1989 Aug; 89(8):1017–20, 1023–6 (54 ref.)
Needle localization of foreign bodies using computed tomography. A case report. Goldenberg RA, et al. **J Am Podiatr Med Assoc** 1988 Dec;78(12):629–31
Role of computed tomography in stroke in the Indian context. Pradhan S, et al. **J Assoc Physicians India** 1988 Jul;36(7):428–30
Value of computed tomography in prognostication of ischaemic stroke. Roy AK, et al. **J Assoc Physicians India** 1988 Sep;36(9):537–8
Brain CT scan in ischaemic stroke [letter] Yeolekar ME. **J Assoc Physicians India** 1988 Apr;36(4):294
A comparative study of CT densitometry of vertebral cancellous bone, abdominal aorta, paravertebral fat and the relative fat volume. Cobben JJ, et al. **J Belge Radiol** 1989 Apr;72(2):101–6
The retrorectal space reviewed by CT. Crommelynck M, et al. **J Belge Radiol** 1988;71(3):356–63
Herpes simplex type I necrotizing meningo-encephalitis leading to arterial-venous thrombosis and brain death in an infant. A pictorial case report. de Baas PD, et al. **J Belge Radiol** 1988;71(6):701–8
Conventional CT and CT arteriography of a splenic hemangioma. De Munck B, et al. **J Belge Radiol** 1988; 71(5):605–9
Computed tomographic detection of a spontaneous mycotic aneurysm of the abdominal aorta. De Somer F, et al. **J Belge Radiol** 1988;71(4):489–91
Subluxation of the patella. Computed tomography analysis of patellofemoral congruence. Inoue M, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1331–7
Correlation of mechanical properties of vertebral trabecular bone with equivalent mineral density as measured by computed tomography. Lang SM, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1531–8
Comparison of computerized tomography parameters of the cervical spine in normal control subjects and spinal cord-injured patients. Matsuura P, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):183–8
Pre-operative evaluation for uncemented hip arthroplasty. The role of computerised tomography. Dias JJ, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):43–6
Models of spinal trabecular bone loss as determined by quantitative computed tomography. Block JE, et al. **J Bone Miner Res** 1989 Apr;4(2):249–57
Neurological complications of hemolytic-uremic syndrome. Hahn JS, et al. **J Child Neurol** 1989 Apr;4(2):108–13
Relationship among CT scans, neurological exam, and neuropsychological test performance in right-brain-damaged stroke patients. Egelko S, et al. **J Clin Exp Neuropsychol** 1988 Oct;10(5):539–64
The "phantom" optic nerve. Demonstration in CT and MR scans 19 years after resection of optic glioma. Brodsky MC, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):67–8
Computed tomography-guided retroperitoneal biopsies. Knelson M, et al. **J Clin Oncol** 1989 Aug;7(8):1169–73
Inability of computed tomography appearance of recurrent malignant astrocytoma to predict survival following reoperation. Wallner KE, et al. **J Clin Oncol** 1989 Oct; 7(10):1492–6
Percutaneous catheter drainage of necrotic tumors: CT demonstration. Abbitt PL, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):437–9
Idiopathic muscular hypertrophy of the esophagus: CT features. Agostini S, et al. **J Comput Assist Tomogr** 1988 Nov-Dec;12(6):1041–3
CT findings in benign expansions of the larynx. Aspestrand F, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):222–5
Post-traumatic spinal synovial cyst with spondylolysis: CT features. Awwad EE, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):334–7
Computed tomography of the stomach with water as an oral contrast agent: technique and preliminary results. Baert AL, et al. **J Comput Assist Tomogr** 1989 Jul-Aug; 13(4):633–6
Computed tomography of fatal cerebral air embolism following percutaneous aspiration biopsy of the lung. Baker BK, et al. **J Comput Assist Tomogr** 1988 Nov-Dec; 12(6):1082–3
CT features of sarcoid infiltration of a lumbosacral nerve root. Baron B, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):364–5
Craniopharyngioma presenting as a nasopharyngeal mass: CT and MR findings. Benitez WI, et al. **J Comput Assist Tomogr** 1988 Nov-Dec;12(6):1068–72
CT appearance of mycotic abdominal aortic aneurysms. Blair RH, et al. **J Comput Assist Tomogr** 1989 Jan-Feb; 13(1):101–4
Intraventricular central neurocytoma: CT and MR findings. Bolen JW Jr, et al. **J Comput Assist Tomogr** 1989 May-Jun; 13(3):495–7
Thyroglossal duct cyst in hyoid bone: CT confirmation. Bourjat P, et al. **J Comput Assist Tomogr** 1988 Sep-Oct; 12(5):871–3
Meningioma of the chiasm and optic nerves: CT and MR findings. Castillo M, et al. **J Comput Assist Tomogr** 1989 Jul-Aug;13(4):679–81
Lockjaw secondary to skull base osteochondroma: CT findings. Castillo M, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):338–9
CT diagnosis of bowel herniation at pelvic fracture site. Catsikis BD, et al. **J Comput Assist Tomogr** 1989 Jan-Feb; 13(1):148–9
Post-treatment calcification of mesenteric non-Hodgkin lymphoma: CT findings. Cheng J, et al. **J Comput Assist Tomogr** 1989 Jan-Feb;13(1):64–6
Closed-loop obstruction of the small bowel: CT and sonographic appearance. Cho KC, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):256–8
Unusually large sialocele: CT characteristics. Cholankeril JV, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):367–8
Computed tomography of primary retroperitoneal malignancies. Cohan RH, et al. **J Comput Assist Tomogr** 1988 Sep-Oct;12(5):804–10
Bilateral retroorbital chloromas in a 16-month-old child: CT features. Cohen R, et al. **J Comput Assist Tomogr** 1988 Sep-Oct;12(5):895–6

CT and MR imaging in cystic abdominal lymphangiomatosis. Cutillo DP, et al. J Comput Assist Tomogr 1989 May–Jun; 13(3):534–6

Absence of fatty replacement in radiation damaged liver: CT demonstration. Cutillo DP, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):259–61

Evaluation of elastic matching system for anatomic (CT, MR) and functional (PET) cerebral images. Dann R, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):603–11

Computed tomography of benign mesenchymoma of the neck. Darwin RH, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):514–6

Computed tomography in paraprosthetic sigmoid fistula. Demaerel P, et al. J Comput Assist Tomogr 1988 Sep–Oct; 12(5):888–90

CT demonstration of right hepatic lobe atrophy. Demaerel P, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):351–3

Benign mediastinal cysts: pointed appearance on CT. Demos TC, et al. J Comput Assist Tomogr 1989 Jan–Feb; 13(1):132–3

Computed tomography of a giant renal oncocytoma. Demos TC, et al. J Comput Assist Tomogr 1988 Sep–Oct; 12(5):899–900

Ultrasound and CT findings in two cases of hemangioma of the adrenal gland. Derchi LE, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):659–61

Intracranial hemangioblastomas: CT and MR findings. Elster AD, et al. J Comput Assist Tomogr 1988 Sep–Oct; 12(5):736–9

Computed tomography in abdominal Castleman's disease. Ferreirós J, et al. J Comput Assist Tomogr 1989 May–Jun; 13(3):433–6

CT characteristics of orbital pseudotumors and other orbital inflammatory processes. Flanders AE, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):40–7

Gastrohepatic ligament fibrosis following esophageal sclerotherapy: CT findings. Foster GS, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):136–7

Computed tomography of the normal and traumatized elbow. Franklin PD, et al. J Comput Assist Tomogr 1988 Sep–Oct; 12(5):817–23

Pelvic carcinomatous neuropathy: CT findings and implications for radiation treatment planning. Gaeta M, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):811–6

Sphenochoanal polyp: CT findings. Hayes E, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):365–6

The value of CT in rectal villous tumors. Hendricks PJ, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):269–72

Computed tomography of elephantiasis neuromatosa. Hertzanu Y, et al. J Comput Assist Tomogr 1989 Jan–Feb; 13(1):156–8

Computed tomography of unusual calcified pancreatic tumors. Hertzanu Y, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):75–6

CT signs of duodenal perforation secondary to blunt abdominal trauma. Hofer GA, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):430–2

Computed tomography of renal sarcoidosis. Hughes JJ, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1057–8

Neonatal dural venous sinus thrombosis associated with central venous catheterization: CT and MR studies. Hurst RW, et al. J Comput Assist Tomogr 1989 May–Jun; 13(3):504–7

Neonatal craniopharyngioma: CT and ultrasonographic features. Hurst RW, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):858–61

CT manifestations of tracheobronchial involvement in relapsing polychondritis. Im JG, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):792–3

Tumor thrombus in the branches of the distal portal vein: CT demonstration. Imaeda T, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):262–8

Long–term follow–up of hepatitis using computed tomography. Ishikawa N, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):645–9

Microcystic adenoma of the pancreas: spectrum of computed tomographic findings. Itai Y, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):797–803

CT and MR imaging of postnecrotic liver scars. Itai Y, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):971–5

Therapeutic angioinfarction of renal carcinoma: CT follow–up. Jafri SZ, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):443–7

CT findings in venous intravasation complicating diverticulitis. Kanehann LB, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1047–9

CT demonstration of "ectopic" thymoma. Kaplan IL, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1037–8

CT diagnosis of traumatic pericardium rupture. Kirsch JD, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):523–4

CT characteristics of intrahepatic, periportal, extramedullary hematopoiesis. Kobayashi A, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):354–6

Computed tomography of urachal carcinoma. Korobkin M, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):981–7 (17 ref.)

Intracaval and intracardiac extension of malignant thymoma: CT diagnosis. Korobkin M, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):348–50

Maxillary sinus hemangioma: MR and CT studies. Kulkarni MV, et al. J Comput Assist Tomogr 1989 Mar–Apr; 13(2):340–2

Aneurysms of superior mesenteric artery: CT demonstration. Lamorgese B. J Comput Assist Tomogr 1988 Nov–Dec; 12(6):1059–60

Renal lymphoma in ataxia–telangiectasia: CT contribution. Levine C, et al. J Comput Assist Tomogr 1989 May–Jun; 13(3):537–9

Unilateral renal cystic disease: CT findings. Levine E, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):273–6

Computed tomography of renal abscesses complicating medullary sponge kidney. Levine E. J Comput Assist Tomogr 1989 May–Jun;13(3):440–2

Computed tomography of acute jejunogastric intussusception. Leyman P, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):531–3

Computed tomography of cervical epidermoid cysts. Li YP, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):164–6

Septic thrombosis of the portal vein: CT and clinical observations. Lim GM, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):656–8

Intrinsic third ventricle craniopharyngioma: CT and MR findings. Linden CN, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):362–3

CT appearance of lunate trachea. Lomasney L, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):520–2

Leukemic infiltrates of the heart: CT findings. McAdams HP, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):525–7

Pulmonary carcinoid tumors: CT assessment. Magid D, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):244–7

CT demonstration of pancreatic atrophy following acute pancreatitis. Magnuson JE, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1050–3

Sarcoidosis of the pineal region: CT and MR studies. Martin N, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):110–2

False–negative bone scan in extensive metastatic disease: CT and MR findings. Mehta RC, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):717–9

Computed tomography of mediastinal collaterals in SVC syndrome. Mendelson DS, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):881–4

Bladder involvement in Crohn disease: role of CT in detection and evaluation. Merine D, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):90–3

Abdominal plexiform neurofibromatosis simulating pseudomyxoma peritonei on computed tomography. Mirich DR, et al. J Comput Assist Tomogr 1989 Jul–Aug; 13(4):709–11

Thickened gastric walls showing diffuse low attenuation on CT. Miyake H, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):253–5

CT and MR imaging in the evaluation of retroperitoneal fibrosis. Mulligan SA, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):277–81

Middle fossa arachnoid cyst and subdural hematoma: CT studies. Munk PL, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1073–5

Stratified impairment of pulmonary ventilation in "diffuse panbronchiolitis:" PET and CT studies. Murata K, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):48–53

Ipsilateral atrophy in children with hemispheric cerebral tumors: CT findings. Mutoh K, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):740–3

Computed tomography of liver sarcoidosis. Nakata K, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):707–8

Subcortical cerebral hemorrhages associated with cocaine abuse: CT and MR findings. Nalls G, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):1–5

CT demonstration of retrohepatic gallbladder in severe cirrhosis. Nardi PM, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):968–70

Unusual cholesteatoma shell: CT findings. Nardis PF, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1084–5

Sinus histiocytosis with massive lymphadenopathy and tracheobronchial lesions: CT and MR findings. Okada K, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1039–40

Multiple sclerosis simulating brain tumor on computed tomography. Otsuka S, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):674–8

Reversibility of CT and MR findings in neuro–Behçet disease. Patel DV, et al. J Comput Assist Tomogr 1989 Jul–Aug; 13(4):669–73

Computed tomography of intralobar bronchopulmonary sequestration supplied from the renal artery. Pedersen ML, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):874–5

Computed tomography of mediastinal hematoma secondary to unusual esophageal laceration: a Boerhaave variant. Pezzulli FA, et al. J Comput Assist Tomogr 1989 Jan–Feb; 13(1):129–31

Contrast material in posterior vaginal fornix mimicking bladder rupture: CT features. Pistoia F, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):153–5

Computed tomography of angioedema of small bowel due to reaction to radiographic contrast medium. Polger M, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1044–6

CT features of primary cerebral lymphoma in AIDS and non–AIDS patients. Poon T, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):6–9

CT diagnosis of superior mesenteric arteriovenous fistula. Radin DR, et al. J Comput Assist Tomogr 1989 Jul–Aug; 13(4):721–3

CT appearance of right gonadal vein. Rebner M, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):460–2

Recurrent esophageal carcinoma at thoracotomy incisions: diagnostic contributions of CT. Recht MP, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):58–60

Computed tomography of rounded atelectasis. Ren H, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1031–4

Fatty replacement of spinal bone marrow due to radiation: demonstration by dual energy quantitative CT and MR imaging. Rosenthal DI, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):463–5

Intravascular bronchioloalveolar tumor: CT and pathologic correlation. Ross GJ, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):240–3 (15 ref.)

CT diagnosis of type A aortic dissections not demonstrated by aortography. St. Amour TE, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):963–7

Pulmonary contusion: CT vs plain radiograms. Schild HH, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):417–20

Mucocele of the anterior clinoid process: CT and MR findings. Schwaighofer BW, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):501–3

CT diagnosis of pyriform sinus perforation. Schwartz JM, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):869–70

CT appearance of cystic adenomatoid malformations. Shackelford GD, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):612–6

Hemorrhagic adrenal metastases: CT findings. Shah HR, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):77–81

Focal xanthogranulomatous pyelonephritis simulating a renal tumor: CT characteristics. Shah M, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):712–3

Multifocal cerebellar medulloblastoma: CT findings. Shen WC, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):894

Pancreatic pseudotumor in pancreas divisum: CT characteristics. Silverman PM, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):140–1

Facial augmentation by injectable silicone: CT appearance. Som PM, et al. J Comput Assist Tomogr 1988 Sep–Oct; 12(5):896–7

Thrombus calcification of renal vein in neonate: ultrasound and CT diagnosis. Starinsky R, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):545–6

Computed tomography of duodenal diverticula. Stone EE, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):61–3

Tracheal chondroma: CT appearance. Swain ME, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1085–6

Leigh disease: value of CT in presymptomatic patients and variability of the lesions with time. Taccone A, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):207–10

Unusually low CT density in a peripheral neurofibroma. Tàpies Barba C, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1086–7

Comparison of CT and MR imaging in musculoskeletal neoplasms. Tehranzadeh J, et al. J Comput Assist Tomogr 1989 May–Jun;13(3):466–72

Giant cell tumor of the proximal tibia: MR and CT appearance. Tehranzadeh J, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):282–6

Pulmonary lymphangioleiomyomatosis: CT and pathologic findings. Templeton PA, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):54–7

Nodular fasciitis of the facial region: CT characteristics. Toledo AS, et al. J Comput Assist Tomogr 1988 Sep–Oct; 12(5):898–9

CT demonstration of spinal epidural emphysema complicating bronchial asthma and violent coughing. Tsuji H, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):38–9

Hereditary multiple exostoses and cervical cord compression: CT and MR studies. Tully RJ, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):330–3

Pyogenic myositis: CT evaluation. Tumeh SS, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1002–5

CT findings of perforated duodenal diverticulitis. Van Beers B, et al. J Comput Assist Tomogr 1989 May–Jun; 13(3):528–30

Breast prosthesis simulating retroperitoneal mass: CT appearance. Van Besien R, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):901–2

Computed tomography in the diagnosis and treatment of solitary splenic abscesses. van der Laan RT, et al. J Comput Assist Tomogr 1989 Jan–Feb;13(1):71–4

Mesothelioma of the pericardium: CT and MR findings. Vogel HJ, et al. J Comput Assist Tomogr 1989 May–Jun; 13(3):543–4

Computed tomography and angiographic findings in metastatic choriocarcinoma. Watanabe AS, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):319–22

CT diagnosis of bronchial rupture. Weir IH, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1035–6

Sequelae of temporal lobe herniation: MR imaging. Wernick S, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):323–5

Pulmonary CT findings in Behçet disease. Winer–Muram HT, et al. J Comput Assist Tomogr 1989 Mar–Apr; 13(2):346–7

CT demonstration of massive cerebral air embolism from pulmonary barotrauma due to cardiopulmonary resuscitation. Yamaki T, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):313–5

Computed tomography of ileoileocolic intussusception caused by a lipoma. Yoshimitsu K, et al. J Comput Assist Tomogr 1989 Jul–Aug;13(4):704–6

Concha bullosa: CT evaluation. Zinreich SJ, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):778–84

Computed tomography characteristics of intermesenteric

hematomas. Chintapalli K, et al. J Comput Tomogr 1988 Apr;12(2):122–8
Neurosarcoidosis: evaluation using computed tomography and magnetic resonance imaging. Cooper SD, et al. J Comput Tomogr 1988 Apr;12(2):96–9
Diagnosis of anemia on computed tomography scans of the thorax. Corcoran HL, et al. J Comput Tomogr 1988 Apr; 12(2):116–21
Computed tomography diagnosis of macrodystrophia lipomatosa. Curry NS, et al. J Comput Tomogr 1988 Oct; 12(4):295–7
Occult occipital condyle fractures presenting as tumors. Deeb ZL, et al. J Comput Tomogr 1988 Oct;12(4):261–3
Computed tomography findings in squamous cell carcinoma of the pancreas. Fajardo LL, et al. J Comput Tomogr 1988 Apr;12(2):138–9
Computed tomography in acute alcoholic myopathy. Grau A, et al. J Comput Tomogr 1988 Apr;12(2):161–4
Gliomas with dural invasion: computed tomography and angiography. Hasuo K, et al. J Comput Tomogr 1988 Apr; 12(2):100–7
Wyburn–Mason syndrome: report of a rare case with computed tomography and angiographic evaluations. Kikuchi K, et al. J Comput Tomogr 1988 Apr;12(2):111–5
Secondary ependymoma presenting as a presacral mass. Kolawole TM, et al. J Comput Tomogr 1988 Apr; 12(2):108–10
Computed tomography in the evaluation of lymphoma of the uterine cervix. Miketic LM, et al. J Comput Tomogr 1988 Apr;12(2):154–8
SPECT imaging of moyamoya disease using 99mTc-HM-PAO. Comparison with computed tomography findings. Mountz JM, et al. J Comput Tomogr 1988 Oct;12(4):247–50
Computed tomography detection of small daughter nodules in hepatocellular carcinoma after iodized oil infusion into the hepatic artery. Ohishi H, et al. J Comput Tomogr 1988 Apr;12(2):129–34
Air–fluid level in axillary vein simulating abscess. Panicek DM, et al. J Comput Tomogr 1988 Apr;12(2):150–3
Computed tomographic appearances of massive neonatal hemangioma of the liver: a case report. Qureshi SA, et al. J Comput Tomogr 1988 Apr;12(2):135–7
Gliomatosis cerebri with formation of a glioblastoma multiform. Study and follow-up by magnetic resonance and computed tomography. Romero FJ, et al. J Comput Tomogr 1988 Oct;12(4):253–7
Chondrosarcoma of the larynx. Report of a case with characteristic computed tomography findings. Shearer JE, et al. J Comput Tomogr 1988 Oct;12(4):292–4
Computed tomography manifestation of a triple-barreled aortic dissection: the Mercedes-Benz mark sign. Shin MS, et al. J Comput Tomogr 1988 Apr;12(2):140–3
Clinical and radiologic staging of locally advanced and inoperable bladder carcinoma. Shirkhoda A, et al. J Comput Tomogr 1988 Oct;12(4):298–302
Accessory cardiac bronchus: demonstration by computed tomography. Sotile SC, et al. J Comput Tomogr 1988 Apr; 12(2):144–6
Traumatic avulsion of the ureter: computed tomography correlation. Templeton PA, et al. J Comput Tomogr 1988 Apr;12(2):159–60
Computed tomography demonstration of unusual diffuse metastatic calcification secondary to renal failure. Varma DG, et al. J Comput Tomogr 1988 Oct;12(4):282–6
Quantitation and pattern of parenchymal lung injury in blunt chest trauma. Diagnostic and therapeutic implications. Wagner RB, et al. J Comput Tomogr 1988 Oct;12(4):270–81
Pericardial cyst. A rare mass abutting the aorta. Williamson BR, et al. J Comput Tomogr 1988 Oct;12(4):264–6
The computed tomography mucous bronchogram sign. Woodring JH. J Comput Tomogr 1988 Apr;12(2):165–8
Computed tomography of pulmonary nodule using a standard reference chest phantom. Flemming MC, et al. J Fla Med Assoc 1988 Jul;75(7):425–31
Head CT in new geriatric psychiatry patients: a prospective study. Chandler JD, et al. J Geriatr Psychiatry Neurol 1989 Apr-Jun;2(2):101–5
Computed radiography (Fuji) as a diagnostic tool for carpal disease. Ueba Y, et al. J Hand Surg [Am] 1989 Mar;14(2 Pt 2):408–10
CT in established Volkmann's contracture in forearm muscles. Landi A, et al. J Hand Surg [Br] 1989 Feb; 14(1):49–52
CT of aortic and mitral valve calcification. Woodring JH, et al. J Ky Med Assoc 1989 Apr;87(4):177–80
Bronchopulmonary sequestration. Facundus DL, et al. J La State Med Soc 1989 Apr;141(4):26–9
A revealing C.T. examination in nasopharyngeal carcinoma. Annis JA, et al. J Laryngol Otol 1989 Aug;103(8):801–2
Coronal CT examination in the evaluation of small frontoethmoidal encephalocoeles. Lundorf E, et al. J Laryngol Otol 1988 Dec;102(12):1119–21
Glomus jugulare or tympanicum? The role of CT and MR imaging with gadolinium DTPA. Phelps PD, et al. J Laryngol Otol 1988 Sep;102(9):766–76
Wildervanck's syndrome—unilateral Mondini dysplasia identified by computed tomography. West PD, et al. J Laryngol Otol 1989 Apr;103(4):408–11
Pre-operative diagnosis of renal angiomyolipoma. Chongchitnant P, et al. J Med Assoc Thai 1989 Feb; 72(2):117–21
Three-dimensional X-ray microscopy with accurate registration of tomographic sections. Dover SD, et al. J Microsc 1989 Feb;153 (Pt 2):187–91
Radiological seminar CCXLXII: CT of adrenal gland pheochromocytoma. Morano JU, et al. J Miss State Med Assoc 1989 Jul;30(7):211–3
Computed tomography findings in delirium. Koponen H, et al. J Nerv Ment Dis 1989 Apr;177(4):226–31
Prognostic value of computed tomography and cerebrospinal fluid analysis in viral encephalitis. Büttner T, et al. J Neuroimmunol 1988 Dec;20(2–3):163–4
CT, MRI and SPECT neuroimaging in status epilepticus with simple partial and complex partial seizures: case report. Bauer J, et al. J Neurol 1989 Jul;236(5):296–9
Japanese encephalitis in the Kurume region of Japan: CT and MRI findings. Shoji H, et al. J Neurol 1989 Jul; 236(5):255–9
Clinical correlation of CT changes in 64 Chinese patients with tuberculous meningitis. Teoh R, et al. J Neurol 1989 Jan;236(1):48–51
Disappearing CT lesions in epilepsy: is tuberculosis or cysticercosis the cause? [letter] Ahuja GK, et al. J Neurol Neurosurg Psychiatry 1989 Jul;52(7):915–6
Rapid development of basal ganglia hyperdensity caused by anoxia [letter] Bamford J, et al. J Neurol Neurosurg Psychiatry 1988 Oct;51(10):1364–5
Epidural haematoma of the posterior fossa: good results after prompt diagnosis with CT [letter] Boiten J. J Neurol Neurosurg Psychiatry 1989 Jul;52(7):914–5
Computed tomography in the diagnosis of malignant brain tumours: do all patients require biopsy? Chokesy MS, et al. J Neurol Neurosurg Psychiatry 1989 Jul;52(7):821–5
Computed tomographic findings of brain and skull in myotonic dystrophy [letter] Cornacchia L, et al. J Neurol Neurosurg Psychiatry 1988 Nov;51(11):1463–4
Regional cerebral blood flow in epilepsy studied with xenon enhanced CT [letter] Duncan R, et al. J Neurol Neurosurg Psychiatry 1988 Oct;51(10):1366–7
Blindness in eclampsia: CT and MR imaging. Duncan R, et al. J Neurol Neurosurg Psychiatry 1989 Jul;52(7):899–902
CT ring sign imitating tumour, disclosed as multiple sclerosis by MRI: a case report. Gütling E, et al. J Neurol Neurosurg Psychiatry 1989 Jul;52(7):903–6
CNS changes in Usher's syndrome with mental disorder: CT, MRI and PET findings. Koizumi J, et al. J Neurol Neurosurg Psychiatry 1988 Jul;51(7):987–90
Neuropsychological and neuroradiological correlates in Huntington's disease. Starkstein SE, et al. J Neurol Neurosurg Psychiatry 1988 Oct;51(10):1259–63
Delayed deterioration in patients with traumatic frontal contusions. Statham PF, et al. J Neurol Neurosurg Psychiatry 1989 Mar;52(3):351–4
Cerebral primitive neuroectodermal tumors in childhood. Tomita T, et al. J Neurooncol 1988 Nov;6(3):233–43 (34 ref.)
Korsakoff's syndrome: radiological (CT) findings and neuropsychological correlates. Shimamura AP, et al. J Neurosci 1988 Nov;8(11):4400–10
Subtle huge intervertebral disc herniation. Flak B, et al. J Neurosurg 1989 Jun;70(6):876–8
The pseudodelta sign in acute head trauma. Yeakley JW, et al. J Neurosurg 1988 Dec;69(6):867–8
Isolated fracture of occipital condyle. Case report. Curri D, et al. J Neurosurg Sci 1988 Oct-Dec;32(4):157–9
Intracranial lipomas. Diagnostic and therapeutic considerations. Maiuri F, et al. J Neurosurg Sci 1988 Oct-Dec;32(4):161–7
Craniocerebral gunshot wounds in civilians. Report on 40 cases. Mancuso P, et al. J Neurosurg Sci 1988 Oct-Dec; 32(4):189–94
Localization of pheochromocytoma: MIGB, CT, and MRI correlation. Velchik MG, et al. J Nucl Med 1989 Mar; 30(3):328–36
A comparative study of magnetic resonance imaging versus computed tomography for the evaluation of maxillary and mandibular tumors. Belkin BA, et al. J Oral Maxillofac Surg 1988 Dec;46(12):1039–47
Percutaneous computed-tomography-stabilization of pelvic fractures: preliminary report. Ebraheim NA, et al. J Orthop Trauma 1987;1(3):197–204
CT detection of intrapelvic origin of lower extremity infections in traumatized limbs. Havel PE, et al. J Orthop Trauma 1987;1(4):306–11
Nonunion of acetabular fractures: evaluation with interactive multiplanar CT. Kuhlman JE, et al. J Orthop Trauma 1989; 3(1):33–40
Three-dimensional computed tomography in evaluation of occipital condyle fracture. Savolaine ER, et al. J Orthop Trauma 1989;3(1):71–5
Three-dimensional imaging of acetabular trauma. Scott WW Jr, et al. J Orthop Trauma 1987;1(3):227–32
Computed tomography scanning of the liver to determine efficacy of iron chelation therapy in thalassemia major. Olivieri NF, et al. J Pediatr 1989 Mar;114(3):427–30
Intestinal duplication in a patient with neurofibromatosis: aid of ultrasound and CT scan in diagnosis. Berezin S, et al. J Pediatr Gastroenterol Nutr 1988 Nov-Dec;7(6):922–5
The effect of limping on vertebral bone density: a study of children with tarsal coalition. Gilsanz V, et al. J Pediatr Orthop 1989 Jan-Feb;9(1):33–6
Computed tomography in children with esophageal and airway trauma. Ben-Ami T, et al. J Pediatr Surg 1988 Oct; 23(10):919–23
Accuracy of diagnostic imaging as determined by delayed operative intervention for advanced neuroblastoma. Foglia RP, et al. J Pediatr Surg 1989 Jul;24(7):708–11
CT assisted evaluation of variation in length and angulation of the lateral pterygoid muscle and variation in angulation of the medial pterygoid muscle: mandibular mechanics implications. Christiansen EL, et al. J Prosthet Dent 1988 Nov;60(5):616–21
Adenocarcinoma in the free wall of a simple renal cyst [letter] Rawlinson J, et al. J R Coll Surg Edinb 1988 Dec;33(6):342
Vascular medullary patency in free vascularized bone grafts: CT scan experimental study. González del Pino J, et al. J Reconstr Microsurg 1988 Jul;4(4):271–6
Pregnancy-induced changes in prolactinomas as assessed with computed tomography. Toffle RC, et al. J Reprod Med 1988 Oct;33(10):821–6
Direct coronal high resolution computed tomography of the temporomandibular joints in patients with rheumatoid arthritis. Avrahami E, et al. J Rheumatol 1989 Mar; 16(3):298–301
Ultrasonography and computer tomography of the salivary glands in the evaluation of Sjögren's syndrome. Comparison with parotid sialography. de Clerck LS, et al. J Rheumatol 1988 Dec;15(12):1777–81
Diagnosis and management of blunt pancreatic injury. Chapman WC, et al. J Tenn Med Assoc 1989 Feb;82(2):84–5
Radiology case of the month. Focal nephritis. Harpole JH Jr, et al. J Tenn Med Assoc 1988 Oct;81(10):636
Indications and applications of MRI Vs. CT scan in diagnosing lesions of the central nervous system. Sherman DD, et al. J Tenn Med Assoc 1989 Jul;82(7):359–62
The value of mediastinoscopy in preoperative staging of bronchogenic carcinoma. Van Schil PE, et al. J Thorac Cardiovasc Surg 1989 Feb;97(2):240–4
Computed tomography in the diagnosis of asbestos-related thoracic disease. Gamsu G, et al. J Thorac Imaging 1989 Jan;4(1):61–7 (25 ref.)
The radiology of right heart dysfunction: chest roentgenogram and computed tomography. Stanford W, et al. J Thorac Imaging 1989 Jul;4(3):7–19 (15 ref.)
The role of magnetic resonance imaging in the assessment of patients with lung cancer: a comparison with computed tomography. Webb WR. J Thorac Imaging 1989 Apr; 4(2):65–75 (47 ref.)
Cross-sectional imaging of the chest wall. Wechsler RJ, et al. J Thorac Imaging 1989 Jan;4(1):29–40 (61 ref.)
The role of abdominal CT in the evaluation of stab wounds to the back. Meyer DM, et al. J Trauma 1989 Sep; 29(9):1226–8; discussion 1228–30
Evaluation of computed tomography and diagnostic peritoneal lavage in blunt abdominal trauma. Meyer DM, et al. J Trauma 1989 Aug;29(8):1168–70; discussion 1170–2
The role of CT scan in evaluation for laparotomy in patients with stab wounds of the abdomen. Rehm CG, et al. J Trauma 1989 Apr;29(4):446–50
The frequency and significance of thoracic injuries detected on abdominal CT scans of multiple trauma patients. Rhea JT, et al. J Trauma 1989 Apr;29(4):502–5
The role of computed tomography in blunt abdominal trauma in children. Taylor GA, et al. J Trauma 1988 Dec; 28(12):1660–4
Management of acute head injuries in a Norwegian county—effects of introducing CT scanning in a local hospital. Wester K, et al. J Trauma 1989 Feb;29(2):238–41
Study of EEG and CT scan in neurologically normal cases of focal convulsions. Vidwans AS, et al. J Trop Pediatr 1989 Jun;35(3):113–6
The ultrasound appearance of radiation-induced hepatic injury. Correlation with computed tomography and magnetic resonance imaging. Garra BS, et al. J Ultrasound Med 1988 Nov;7(11):605–9
Computed tomographic, ultrasound, and plain film appearance of phleboliths in varicoceles. Gottlieb RH, et al. J Ultrasound Med 1989 Jun;8(6):329–31
Mesenteric venous thrombosis. Harward TR, et al. J Vasc Surg 1989 Feb;9(2):328–33
Ultrasonographic and computed tomographic features of renal sinus lymphoma. Ruchman RB, et al. JCU 1988 Jan; 16(1):35–40
An unusual case of intracerebral hematoma caused by an indriven fragment of bone: ultrasound evaluation with CT correlation. Weinberg B, et al. JCU 1988 Jan;16(1):52–4
Presacral neurilemoma (schwannoma)—report of a rare case. Gupta S, et al. Jpn J Surg 1989 Mar;19(2):229–31
A comparison of pelvic retroperitoneal pneumography and computed tomography in the assessment of extramural invasion of rectal carcinoma. Kaibara N, et al. Jpn J Surg 1988 Nov;18(6):675–80
Imaging patients with suspected acoustic neuroma [editorial] Lancet 1988 Dec 3;2(8623):1294
Cysticercosis causing single, small CT lesions in Indian patients with seizures [letter] Chandy MJ, et al. Lancet 1989 Feb 18;1(8634):390–1
Correlation between cranial computed tomographic scans at diagnosis in children with acute lymphoblastic leukaemia and central nervous system relapse. Jankovic M, et al. Lancet 1988 Nov 26;2(8622):1212–4
New imaging techniques in diagnosis of cerebrospinal fluid fistula. Nicklaus P, et al. Laryngoscope 1988 Oct; 98(10):1065–8
3-D CT for cranial facial and laryngeal surgery. Zinreich

SJ, et al. **Laryngoscope** 1988 Nov;98(11):1212–9
Densitometric and electrophysiological changes in uraemic encephalopathy. Di Paolo B, et al. **Life Support Syst** 1983; 1 Suppl 1:151–3
Anterior diaphragmatic lymph nodes. Libehitz I, et al. **Lymphology** 1988 Jun;21(2):99–104
Post-pneumonectomy evaluation of the chest: a prospective comparative study of MRI with CT. Laissy JP, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):55–60
Role of CT scanning in radiation therapy with electron beams. Cygler J, et al. **Med Dosim** 1988;13(2):69–71
CT treatment planning of the liver. Lim M. **Med Dosim** 1988 Sep;13(3):119–26
Impact of CT information on the treatment planning for lung tumors. Muller-Runkel R, et al. **Med Dosim** 1989; 14(1):9–15
Three-dimensional visualization of computerized tomography and laser scan data for the simulation of maxillo-facial surgery. Linney AD, et al. **Med Inf (Lond)** 1989 Apr–Jun;14(2):109–21
The use of computed-tomographic-directed stereotaxis in the diagnosis of intracerebral lesions. Redmond MJ, et al. **Med J Aust** 1988 Nov 7;149(9):468–72
The olivopontocerebellar atrophies. Report of 4 cases. Razak AR, et al. **Med J Malaysia** 1988 Dec;43(4):344–7
Basic imaging properties of a computed radiographic system with photostimulable phosphors. Fujita H, et al. **Med Phys** 1989 Jan–Feb;16(1):52–9
Geometrical aspects of computed tomography: sensitivity profile and exposure profile. Gagne RM. **Med Phys** 1989 Jan–Feb;16(1):29–37
Effect of intervertebral changes of the spinal trabecular and cortical mineral content on the precision requirements in longitudinal single and dual energy computed tomography examinations. Sandor T, et al. **Med Phys** 1989 Mar–Apr; 16(2):218–24
Correction for scattered radiation and other background signals in dual-energy computed tomography material thickness measurements. Vetter JR, et al. **Med Phys** 1988 Sep–Oct;15(5):726–31
Hybrid reconstruction algorithm for x-ray computed tomography. Waggener R, et al. **Med Phys** 1989 Mar–Apr; 16(2):197–201
Percutaneous renal biopsy using CT guidance. Synhavsky A, et al. **Minn Med** 1988 Sep;71(9):543–4
Clinical and CT scan findings in a case of cyanide intoxication. Grandas F, et al. **Mov Disord** 1989;4(2):188–93
Computed tomographic findings in progressive supranuclear palsy: correlation with clinical grade. Schonfeld SM, et al. **Mov Disord** 1987;2(4):263–78
Computerized tomography and magnetic resonance imaging in a case of spinal dysraphism. Lusins JO, et al. **Mt Sinai J Med** 1989 Mar;56(2):133–5
Uncommon CT patterns of subdural hematomas managed nonsurgically. Lusins JO, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):278–82
Risks of lumbar puncture in the presence of intracranial mass lesions. Zisfein J, et al. **Mt Sinai J Med (NY)** 1988 Sep; 55(4):283–7
The human cervical myotomes: an anatomical correlation between electromyography and CT/myelography. Katirji MB, et al. **Muscle Nerve** 1988 Oct;11(10):1070–3
Retroperitoneal fibrosis. The forgotten connective tissue disease. Gilkeson GS, et al. **N C Med J** 1989 Apr; 50(4):192–4
Pancreatic pseudocyst. Stavas J. **Nebr Med J** 1988 Oct; 73(10):313–5
Clinical diagnostic imaging. Bronchiectasis. Stavas J. **Nebr Med J** 1988 Sep;73(9):295–7
Clinical diagnostic imaging. Cerebral venous thrombosis. Steg RE, et al. **Nebr Med J** 1989 Feb;74(2):37–41
Computerised tomography in acquired cystic disease of the kidneys. Sharma AK. **Nephrol Dial Transplant** 1988; 3(4):474–5
Nephronophthisis-cystic renal medulla complex: diagnosis by computerized tomography. McGregor AR, et al. **Nephron** 1989;53(1):70–2
Persistent wedge-shaped low-density lesions on computed tomography of the kidneys without infarction. Sakemi T, et al. **Nephron** 1989;51(1):112–4
Asian form of disseminated histoplasmosis diagnosed by CT-guided biopsy of the adrenals treated with ketoconazol. Apperloo AJ, et al. **Neth J Med** 1988 Dec;33(5–6):225–31
CT findings in subarachnoidal haemorrhage (SAH). A retrospective study of 138 patients. Berlit P, et al. **Neurochirurgia (Stuttg)** 1988 Jul;31(4):123–7
Management of cerebral mass effect lesions in multiple sclerosis. Isla A, et al. **Neurochirurgia (Stuttg)** 1989 Jul; 32(4):125–7
Iron in cicatrix and abnormal CT findings in a patient with posttraumatic epilepsy. Kuchiwaki H, et al. **Neurochirurgia (Stuttg)** 1989 Jul;32(4):116–9
Unusual CT-dense transtentorial epidermoid cyst. Lunardi P, et al. **Neurochirurgia (Stuttg)** 1988 Nov;31(6):219–21
Intracerebral hematoma after evacuation of chronic subdural hematoma. Oviil I, et al. **Neurochirurgia (Stuttg)** 1988 Sep; 31(5):160–1
Transient, bilateral lucency in the basal ganglia—a postictal computed tomographic phenomenon—case report. Nakasu S, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):1024–6
Comparison of dynamic and xenon computed tomography in the evaluation of cerebrovascular ischemia. Terada T, et al. **Neurol Med Chir (Tokyo)** 1989 Jan;29(1):20–5
Clinical–pathologic correlation in Huntington's disease: a neuropsychological and computed tomography study. Bamford KA, et al. **Neurology** 1989 Jun;39(6):796–801
Incidence of cavum septum pellucidum in adults: a sign of boxer's encephalopathy. Bogdanoff B, et al. **Neurology** 1989 Jul;39(7):991–2
Subdural hematoma after normal CT. Deitch D, et al. **Neurology** 1989 Jul;39(7):985–7
Early CT reevaluation after empiric praziquantel therapy in neurocysticercosis. Rawlings D, et al. **Neurology** 1989 May; 39(5):739–41
Ataxic cerebral palsy—clinico-radiologic correlations. Miller G, et al. **Neuropediatrics** 1989 May;20(2):84–9
Cerebral blood flow abnormalities in cerebral palsied children with a normal CT scan. Taudorf K, et al. **Neuropediatrics** 1989 Feb;20(1):33–40
Detection of lacunar infarction in brain CT-scans: no evidence of bias from accompanying patient information. Bonke B, et al. **Neuroradiology** 1989;31(2):170–3
Quantitative evaluation of pontine atrophy using computer tomography. Chida K, et al. **Neuroradiology** 1989; 31(1):13–5
Computed tomography of cavernous sinus diseases. Chung JW, et al. **Neuroradiology** 1988;30(4):319–28
Water lily sign in CT of cerebral hydatid disease: a case report. Gomori JM, et al. **Neuroradiology** 1988;30(4):358
Computed tomographic features of esthesioneuroblastoma. Hurst RW, et al. **Neuroradiology** 1989;31(3):253–7
LCBF values decline while L lambda values increase during normal human aging measured by stable xenon-enhanced computed tomography. Imai A, et al. **Neuroradiology** 1988; 30(6):463–72
Magnetic resonance imaging of cerebral infarction: time course of Gd-DTPA enhancement and CT comparison. Imakita S, et al. **Neuroradiology** 1988;30(5):372–8
Dynamics of the spinal cord: an analysis of functional myelography by CT scan. Ishida Y, et al. **Neuroradiology** 1988;30(6):538–44
Brain stem type neuro-Behçet's syndrome. Correlation of enhanced CT scans and MRI during the acute and chronic stage of the illness. Kataoka S, et al. **Neuroradiology** 1989; 31(3):258–62
Estimation of vertebral arterial asymmetry by computed tomography. Kazui S, et al. **Neuroradiology** 1989; 31(3):237–9
Osteogenic sarcoma of the calvarium in children: CT manifestations. Kornreich L, et al. **Neuroradiology** 1988; 30(5):439–41
Fracture of the anterior arch of the atlas associated with a congenital cleft of the posterior arch. Demonstration by CT. Le Minor JM, et al. **Neuroradiology** 1988;30(5):444–6
CT demonstration of a 5th ventricle—a finding to KO boxers? Macpherson P, et al. **Neuroradiology** 1988; 30(6):506–10
CT of dens axis fractures. Nepper-Rasmussen J. **Neuroradiology** 1989;31(1):104–6
Computed tomography in intracranial, supratentorial metastases in children. Pedersen H, et al. **Neuroradiology** 1989;31(1):19–23
Malignancy criteria in computed tomography of primary supratentorial tumors in infancy and childhood. Pedersen H, et al. **Neuroradiology** 1989;31(1):24–8
CT of cerebral hydatid disease. Rudwan MA, et al. **Neuroradiology** 1988;30(6):496–9
CT muscle scanning in the evaluation of patients with spinal muscular atrophy (SMA). Sambrook P, et al. **Neuroradiology** 1988;30(6):487–95
Brain damage in former association football players. An evaluation by cerebral computed tomography. Sortland O, et al. **Neuroradiology** 1989;31(1):44–8
Brain atrophy in Huntington's disease. A CT-scan study. Starkstein SE, et al. **Neuroradiology** 1989;31(2):156–9
Evaluation of computer advisor in the interpretation of CT images of the head. Teather D, et al. **Neuroradiology** 1988; 30(6):511–7
Cranial computed tomography in acute disseminated encephalomyelitis. Thajeb P, et al. **Neuroradiology** 1989; 31(1):8–12
CT in neuromuscular disorders: a comparison of CT and histology. v.d. Vliet AM, et al. **Neuroradiology** 1988; 30(5):421–5
CT of intracranial tuberculomas with specific reference to the "target sign". van Dyk A. **Neuroradiology** 1988; 30(4):329–36
Nontraumatic frontal lobe hemorrhages: clinical-computed tomographic correlations. Weisberg LA, et al. **Neuroradiology** 1988;30(6):500–5
Computed tomography of the brain in the diagnosis of and prognosis in normal pressure hydrocephalus. Wikkelsö C, et al. **Neuroradiology** 1989;31(2):160–5
Dimensions of the spinal canal in individuals symptomatic and non-symptomatic for sciatica: a CT study. Wilmink JT, et al. **Neuroradiology** 1988;30(6):547–50
Traumatic lesions of the optic, oculomotor, trochlear, and abducens nerves—computer tomographic findings. Adam T, et al. **Neurosurg Rev** 1988;11(3–4):231–7
Post-traumatic defects in computed tomography. Busch G. **Neurosurg Rev** 1987;10(4):269–73
Experimental hydrocephalus and hydrosyringomyelia. Computertomographic studies. Donauer E, et al. **Neurosurg Rev** 1988;11(1):87–94
Difficulties in the diagnosis of brain abscesses. Henze T, et al. **Neurosurg Rev** 1987;10(4):321–4
CT-findings of carotid-cavernous fistula. A case report. Leppien A, et al. **Neurosurg Rev** 1988;11(3–4):293–6
Traumatic brain swelling studied by computerized tomography and densitometry. Rózsa L, et al. **Neurosurg Rev** 1989;12(2):133–40
Intracerebral Nocardia brasiliensis infection. Schmid A, et al. **Neurosurg Rev** 1987;10(4):315–9
Computed tomography in Graves' ophthalmopathy—evaluation regarding the muscle size and density units. Uhlenbrock D. **Neurosurg Rev** 1988; 11(1):45–51
Cerebral blood flow, computerized tomography and angiography in 562 cases of cerebrovascular insufficiency. Ulrich P, et al. **Neurosurg Rev** 1987;10(4):265–7
Intraspinal extension of an air cyst of the lung: case report. Andrews DW, et al. **Neurosurgery** 1989 Mar;24(3):414–7
Intracranial meningiomas in the aged: surgical outcome in the era of computed tomography. Awad IA, et al. **Neurosurgery** 1989 Apr;24(4):557–60
Colloid cysts: experience with the management of 84 cases since the introduction of computed tomography. Camacho A, et al. **Neurosurgery** 1989 May;24(5):693–700
Computed tomography of epidural fibrosis after discectomy: a comparison between symptomatic and asymptomatic patients. Cervellini P, et al. **Neurosurgery** 1988 Dec; 23(6):710–3
Anterior communicating aneurysm missed at angiography: report of two cases treated surgically. Di Lorenzo N, et al. **Neurosurgery** 1988 Oct;23(4):494–9
Lumbar synovial cysts: report of eleven cases. Eyster EF, et al. **Neurosurgery** 1989 Jan;24(1):112–5
The incidence of unexpected pathological findings in an image-guided biopsy series: a review of 100 consecutive cases. Friedman WA, et al. **Neurosurgery** 1989 Aug; 25(2):180–4
Colloid cyst of the fourth ventricle: diagnostic problems and pathogenic considerations. Jan M, et al. **Neurosurgery** 1989 Jun;24(6):939–42
Chemical meningitis: unusual presentation of a cerebellar astrocytoma: case report and review of the literature. Lunardi P, et al. **Neurosurgery** 1989 Aug;25(2):264–70 (48 ref.)
Magnetic resonance imaging stereotactic thalamotomy: report of a case with comparison to computed tomography. Lunsford LD. **Neurosurgery** 1988 Sep;23(3):363–7
Histiocytosis X of the hypothalamus. Ober KP, et al. **Neurosurgery** 1989 Jan;24(1):93–5
Asymptomatic acute bilateral epidural hematoma: results of broader indications for computed tomographic scanning of patients with minor head injuries. Servadei F, et al. **Neurosurgery** 1988 Jul;23(1):41–3
Primary hydatid cyst of the brain in an adult: report of a case. Sharma SC, et al. **Neurosurgery** 1988 Sep;23(3):374–6
Intracranial phycomycosis: case reports. Tang LM, et al. **Neurosurgery** 1988 Jul;23(1):108–11
Cognitive deficits related to computed tomographic findings after surgery for a ruptured intracranial aneurysm. Vilkki J, et al. **Neurosurgery** 1989 Aug;25(2):166–72
Stereotactic interstitial brachytherapy of malignant astrocytomas with remarks on postimplantation computed tomographic appearance. Willis BK, et al. **Neurosurgery** 1988 Sep;23(3):348–54
Detection of splenosis: 99Tcm tin colloid scanning and computed transmission tomography compared. Logan H, et al. **Nucl Med Commun** 1988 Dec;9(12):993–7
67Ga citrate scanning, X-ray computed tomography and chest X-ray in the study of interstitial pneumonia in patients with AIDS. Sabbatani S, et al. **Nucl Med Commun** 1988 Jul;9(7):513–6
Computed tomography versus magnetic resonance imaging for the evaluation of suspected pituitary adenomas. Stein AL, et al. **Obstet Gynecol** 1989 Jun;73(6):996–9
Skeletal muscle metastases from pancreatic cancer. Larson DA, et al. **Oncologie** 1988 Dec;11(6):282–5 (5 ref.)
Sequential cranial computed tomography in infants with retinal hemorrhages. Giangiacomo J, et al. **Ophthalmology** 1988 Mar;95(3):295–9
Magnetic resonance imaging versus computed tomography of leukocoric eyes and use of in vitro proton magnetic resonance spectroscopy of retinoblastoma. Mafee MF, et al. **Ophthalmology** 1989 Jul;96(7):965–75; discussion 975–6
Computed tomographic features of nonthyroid extraocular muscle enlargement. Patrinely JR, et al. **Ophthalmology** 1989 Jul;96(7):1038–47
An interesting condylar fracture revealed by use of computed tomography. A case report. Davis WM Jr. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):31–2
Postoperative changes after bilateral mandibular osteotomies: a computed tomography study. Lund E, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):588–93
Computed tomographic evaluation of the density of the temporomandibular joint meniscus. Paz ME, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):519–24
A study of glenohumeral orientation in patients with anterior recurrent shoulder dislocations using computerized axial tomography. Hill JA, et al. **Orthop Rev** 1989 Jan; 18(1):84–91
Computed tomography of the lower extremity. Part I. Sartoris DJ, et al. **Orthop Rev** 1987 Dec;16(12):801–8 (48 ref.)

Computed tomography of the lower extremity. Part II. Sartoris DJ, et al. **Orthop Rev** 1988 Jan;17(1):20–4 (18 ref.)
Computed tomography of rheumatologic disorders. Part II. Sartoris DJ, et al. **Orthop Rev** 1988 Aug;17(8):757–66 (96 ref.)
Computed tomography of the lower extremity. Part IV. Sartoris DJ, et al. **Orthop Rev** 1988 Mar;17(3):242–7 (32 ref.)
Computed tomography of the lower extremity. Part III. Sartoris DJ, et al. **Orthop Rev** 1988 Feb;17(2):161–5 (8 ref.)
Clinical applications of volumetric three-dimensional imaging. A report of three cases. Wolock BS, et al. **Orthop Rev** 1989 Jul;18(7):787–92
The application of advanced CT imaging and computer graphics methods to reconstructive surgery of the hip. Robertson DD, et al. **Orthopedics** 1989 May;12(5):661–7
Radiologic assessment preoperative to endoscopic sinus surgery. Chow JM, et al. **Otolaryngol Clin North Am** 1989 Aug;22(4):691–701
The CT findings of acute thyroiditis and acute suppurative thyroiditis. Bernard PJ, et al. **Otolaryngol Head Neck Surg** 1988 Nov;99(5):489–93
Prostate cancer presenting as facial paralysis. Gruber B, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):333–8 (40 ref.)
CT findings in sphenoid sinus aspergillosis. Horton WD 2d, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):606–9
Deep spread patterns in CT staging of T2–4 squamous cell laryngeal carcinoma. Isaacs JH Jr, et al. **Otolaryngol Head Neck Surg** 1988 Nov;99(5):455–64
Computed tomography and magnetic resonance imaging of the inner ear. Jackler RK, et al. **Otolaryngol Head Neck Surg** 1988 Nov;99(5):494–504 (40 ref.)
Computed tomography after skull base resection. Krespi YP, et al. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):218–23
Review of CT-guided percutaneous needle biopsy. Sabatelli F, et al. **Pa Med** 1989 Apr;92(4):62–4 (7 ref.)
The percutaneous anterior approach to the celiac plexus using CT guidance. Montero Matamala A, et al. **Pain** 1988 Sep; 34(3):285–8
The usefulness of dynamic CT in patients with aneuryam of Willis circle. Comparative study with the angiography. Bastianello S, et al. **Panminerva Med** 1989 Jan–Mar; 31(1):22–7
Electroencephalographic and neuroradiologic evaluation of children with epilepsy. Holmes GL. **Pediatr Clin North Am** 1989 Apr;36(2):395–420 (75 ref.)
Computed tomography in bacterial meningitis of childhood. Kline MW, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):855–7
Spinal cord birth injury: value of computed tomographic myelography. Adams C, et al. **Pediatr Neurol** 1988 Mar–Apr;4(2):105–9
Primary thalamic and caudate hemorrhage in term neonates presenting with seizures. Adams C, et al. **Pediatr Neurol** 1988 May–Jun;4(3):175–7
Delayed traumatic intracerebral hemorrhage in children. Atluru V, et al. **Pediatr Neurol** 1986 Sep–Oct;2(5):297–301
Congenital fourth nerve palsy and occult cranium bifidum. Bale JF Jr, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):320–1
Neuroradiographic abnormalities in congenital cytomegalovirus infection. Bale JF Jr, et al. **Pediatr Neurol** 1985 Jan–Feb;1(1):42–7
Computed tomography and magnetic resonance imaging in late-onset globoid cell leukodystrophy (Krabbe disease). Brownsworth RD, et al. **Pediatr Neurol** 1985 Jul–Aug; 1(4):242–4
Candida meningitis: clinical and radiographic diagnosis. Coker SB, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):317–9
Outcome of brain abscess treatment in children: reduced morbidity with neuroimaging. Ferriero DM, et al. **Pediatr Neurol** 1987 May–Jun;3(3):148–52
Computed tomography in infantile spasms: effects of hormonal therapy. Glaze DG, et al. **Pediatr Neurol** 1986 Jan–Feb;2(1):23–7
Brain tumors in children with neurofibromatosis: computed tomography and magnetic resonance imaging. Gray J, et al. **Pediatr Neurol** 1987 Nov–Dec;3(6):335–41
Benign extracerebral fluid collections: a cause of macrocrania in infancy. Hamza M, et al. **Pediatr Neurol** 1987 Jul–Aug; 3(4):218–21
Infantile subcortical leukohypodensity demonstrated by computed tomography. Houdou S, et al. **Pediatr Neurol** 1988 May–Jun;4(3):165–7
Acute cerebellar swelling in varicella encephalitis. Hurst DL, et al. **Pediatr Neurol** 1988 Mar–Apr;4(2):122–3
Lesion mistaken for hemorrhage in a premature infant: lipoma of corpus callosum. Imaizumi SO, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):313–6
Hemorrhagic cerebral infarction in pediatric patients. Kelley RE. **Pediatr Neurol** 1986 Mar–Apr;2(2):111–4
Variability of serial CT scans in subacute necrotizing encephalomyelopathy (Leigh disease). Koch TK, et al. **Pediatr Neurol** 1985 Jan–Feb;1(1):48–51
Superior sagittal sinus thrombosis in neonates. Konishi Y, et al. **Pediatr Neurol** 1987 Jul–Aug;3(4):222–5
Magnetic resonance and CT imaging correlated with clinical status in SSPE [published erratum appears in Pediatr Neurol 1986 May–Jun;2(3):147] Lum GB, et al. **Pediatr Neurol** 1986 Mar–Apr;2(2):75–9
Results of computed tomography in "neurologically normal" children after initial onset of seizures. McAbee GN, et al. **Pediatr Neurol** 1989 Mar–Apr;5(2):102–6
Bacterial meningitis as an etiology of perinatal cerebral infarction. Ment LR, et al. **Pediatr Neurol** 1986 Sep–Oct; 2(5):276–9
Hyperdense cerebral lesion in childhood tuberous sclerosis: computed tomographic demonstration and neuropathologic analysis. Pinto-Lord MC, et al. **Pediatr Neurol** 1986 Jul–Aug;2(4):245–8
Comparison of CT and MRI brain tumor imaging using a canine glioma model. Whelan HT, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):279–83
Intracranial arteriovenous anomalies of infancy: modern concepts. Godersky JC, et al. **Pediatr Neurosci** 1987; 13(5):242–50
Significance of basal ganglia calcification on computed tomography in children. Legido A, et al. **Pediatr Neurosci** 1988;14(2):64–70
Role of magnetic resonance imaging and three-dimensional computerized tomography in craniovertebral junction anomalies. Pappas CT, et al. **Pediatr Neurosci** 1988; 14(1):18–22
Choroid plexus papillomas of neonates, infants and children. Tomita T, et al. **Pediatr Neurosci** 1988;14(1):23–30
Cortical heterotopia in Aicardi's syndrome—CT findings. Belenski N, et al. **Pediatr Radiol** 1988;18(5):391–3
The CT and MR evaluation of migrational disorders of the brain. Part II. Schizencephaly, heterotopia and polymicrogyria. Byrd SE, et al. **Pediatr Radiol** 1989; 19(4):219–22
The CT and MR evaluation of migrational disorders of the brain. Part I. Lissencephaly and pachygyria. Byrd SE, et al. **Pediatr Radiol** 1989;19(3):151–6
Cerebral candidiasis. Computed tomography appearance. Chaabane M, et al. **Pediatr Radiol** 1989;19(6–7):436
Post-operative abdominal CT scanning in extrahepatic biliary atresia. Day DL, et al. **Pediatr Radiol** 1989;19(6–7):379–82
The CT manifestations of the primary gynecological chylous reflux syndrome in the pediatric age. Kornreich L, et al. **Pediatr Radiol** 1988;18(6):503–4
CT appearance of large sternoclavicular calcific masses in a teenager with chronic renal disease and secondary hyperparathyroidism, on hemodialysis maintenance. O'Malley BM, et al. **Pediatr Radiol** 1989;19(5):339–40
Computed arthrography: its role in the screening of joint diseases in pediatric radiology. Paille P, et al. **Pediatr Radiol** 1988;18(5):386–90
Computed tomography (CT) in children with herpes simplex encephalitis. Taccone A, et al. **Pediatr Radiol** 1988; 19(1):9–12
CT of anorectal malformation—a postoperative evaluation. Taccone A, et al. **Pediatr Radiol** 1989;19(6–7):375–8
Computerized tomography appearances of pelvic haemangioma involving the large bowel in childhood. Yeoman LJ, et al. **Pediatr Radiol** 1989;19(6–7):414–6
A theoretical analysis of the accuracy of single-energy CT bone-mineral measurements. Crawley EO, et al. **Phys Med Biol** 1988 Oct;33(10):1113–27
Magnetic resonance imaging versus computed tomography—which one? Anderson RE. **Postgrad Med** 1989 Feb 15;85(3):79–83, 86–7
Pyomyositis in patients with diabetes. Computed tomography as a key to diagnosis. Brown RL. **Postgrad Med** 1989 Jul; 86(1):79–81, 84, 89
New developments in bone densitometry. Genant HK, et al. **Postgrad Med** 1989 Apr;Spec No:18–22; discussion 33–43
Trichinosis diagnosed by computed tomography. Kreel L, et al. **Postgrad Med J** 1988 Aug;64(754):626–30
CT scans and neuroleptic response in schizophrenia: a multidimensional approach. Gattaz WF, et al. **Psychiatry Res** 1988 Dec;26(3):293–303
Structural brain abnormalities in patients with bulimia nervosa. Krieg JC, et al. **Psychiatry Res** 1989 Jan; 27(1):39–48
Cerebral structure in borderline personality disorder. Lucas PB, et al. **Psychiatry Res** 1989 Feb;27(2):111–5
CT abnormalities in tardive dyskinesia. Swayze VW 2d, et al. **Psychiatry Res** 1988 Oct;26(1):51–8
The spectrum of structural brain changes in schizophrenia: age of onset as a predictor of cognitive and clinical impairments and their cerebral correlates. Johnstone EC, et al. **Psychol Med** 1989 Feb;19(1):91–103
Quantitative computed tomographic study in schizophrenia: cerebral density and ventricle measures. Rossi A, et al. **Psychol Med** 1989 May;19(2):337–42
Computerized brain tomography measures compared with spontaneous and suppressed plasma cortisol levels in major depression. Schlegel S, et al. **Psychoneuroendocrinology** 1989;14(3):209–16
Computer-aided interactive surgical simulation for craniofacial anomalies based on 3-D surface reconstruction CT images. Fujioka M, et al. **Radiat Med** 1988 Sep–Oct; 6(5):204–12
Hemopneumothorax due to pulmonary metastasis with malignant hemangioendothelioma: CT and pathological findings. Hihara T, et al. **Radiat Med** 1988 Sep–Oct; 6(5):213–5
Comparison between air CT and MRI in the detection of small acoustic neurinomas. Kamei T, et al. **Radiat Med** 1989 Jan–Feb;7(1):16–22
Computed tomographic and magnetic resonance imaging of vanishing cerebral infarct. Mizushima A, et al. **Radiat Med** 1988 Mar–Apr;6(2):54–7
CT evidence of renal angiomyolipoma with subcapsular hemorrhage. Nanjo T, et al. **Radiat Med** 1988 Mar–Apr; 6(2):66–70
CT manifestation of neutron radiotherapy-induced changes in lung. Ohtomo K, et al. **Radiat Med** 1988 May–Jun; 6(3):130–4
Chest CT of unresectable lung cancer. Gay SB, et al. **Radiographics** 1988 Jul;8(4):735–48
Stereoscopic computed three-dimensional surface displays. Herman GT, et al. **Radiographics** 1985 Nov;5(6):825–52
Computed tomography of chest wall masses. Jafri SZ, et al. **Radiographics** 1989 Jan;9(1):51–68
Seminal vesicle imaging. King BF, et al. **Radiographics** 1989 Jul;9(4):653–76
The computed tomographic spectrum of thoracic sarcoidosis. Kuhlman JE, et al. **Radiographics** 1989 May;9(3):449–66
Aberrant carotid artery: radiologic diagnosis with emphasis on high-resolution computed tomography. Lo WW, et al. **Radiographics** 1985 Nov;5(6):985–93
Intestinal ischemia: comparison of plain radiographic and computed tomographic findings. Lund EC, et al. **Radiographics** 1988 Nov;8(6):1083–108
Conventional and high resolution computed tomography in the diagnosis of asbestos-related diseases. Lynch DA, et al. **Radiographics** 1989 May;9(3):523–51
The CT appearance of cystic masses of the liver. Murphy BJ, et al. **Radiographics** 1989 Mar;9(2):307–22 (43 ref.)
Computed tomography and magnetic resonance imaging of the pericardium. Olson MC, et al. **Radiographics** 1989 Jul; 9(4):633–49
The role of the CT scanner in RT planning. Hart E. **Radiography** 1988 Jan–Feb;54(613):20–4
CT of the gastrointestinal tract. **Radiol Clin North Am** 1989 Jul;27(4):631–838
CT diagnosis and staging of acute pancreatitis. Balthazar EJ. **Radiol Clin North Am** 1989 Jan;27(1):19–37 (39 ref.)
CT of intra-abdominal fluid collections. Churchill RJ. **Radiol Clin North Am** 1989 Jul;27(4):653–66 (41 ref.)
Computed tomography of musculoskeletal trauma. Dalinka MK, et al. **Radiol Clin North Am** 1989 Sep;27(5):933–44 (67 ref.)
CT diagnosis of postoperative abdominal complications. Ghahremani GG, et al. **Radiol Clin North Am** 1989 Jul; 27(4):787–804 (55 ref.)
CT of inflammatory bowel disease. Gore RM. **Radiol Clin North Am** 1989 Jul;27(4):717–29 (50 ref.)
CT of esophageal neoplasms. Halvorsen RA Jr, et al. **Radiol Clin North Am** 1989 Jul;27(4):667–85 (53 ref.)
CT of the small bowel and mesentery. Merine D, et al. **Radiol Clin North Am** 1989 Jul;27(4):707–15 (29 ref.)
CT of diverticulitis. Diagnosis and treatment. Neff CC, et al. **Radiol Clin North Am** 1989 Jul;27(4):743–52 (15 ref.)
CT of acute gastrointestinal disorders. Nemcek AA Jr. **Radiol Clin North Am** 1989 Jul;27(4):773–86 (65 ref.)
Technical principles in CT evaluation of the gut. Raptopoulos V. **Radiol Clin North Am** 1989 Jul; 27(4):631–51 (41 ref.)
CT of the stomach and duodenum. Scatarige JC, et al. **Radiol Clin North Am** 1989 Jul;27(4):687–706 (67 ref.)
CT of appendicitis. Diagnosis and treatment. Shapiro MP, et al. **Radiol Clin North Am** 1989 Jul;27(4):753–62 (40 ref.)
CT evaluation of carcinomas of the colon and rectum. Thoeni RF. **Radiol Clin North Am** 1989 Jul;27(4):731–41 (37 ref.)
The value of computed tomography in the diagnosis of the prehepatic portal hypertension. Georgescu SA, et al. **Radiol Diagn (Berl)** 1989;30(1):13–20
The value of computed tomography in the diagnosis of tumors of the nasopharynx and paranasal sinuses. Rotte KH, et al. **Radiol Diagn (Berl)** 1988;29(3):391–6
CT demonstration of a complex anomaly of inferior vena cava. Coppola V, et al. **Radiol Med (Torino)** 1988 Sep; 76(3):232–4
Solitary pulmonary granuloma with marked enhancement on dynamic CT scanning. Stark P, et al. **Radiologe** 1988 Oct; 28(10):489–90
CT of the bowel: use of water to enhance depiction. Angelelli G, et al. **Radiology** 1988 Dec;169(3):848–9
Pulmonary sarcoidosis: what are we learning from CT? Austin JH. **Radiology** 1989 Jun;171(3):603–4 (22 ref.)
In vitro dissolution of gallstones with MTBE: correlation with characteristics at CT and MR imaging. Baron RL, et al. **Radiology** 1989 Oct;173(1):117–21
Sarcoidosis: correlation of pulmonary parenchymal pattern at CT with results of pulmonary function tests. Bergin CJ, et al. **Radiology** 1989 Jun;171(3):619–24
Anatomy of the minor fissure: evaluation with thin-section CT. Berkmen YM, et al. **Radiology** 1989 Mar;170(3 Pt 1):647–51
Thoracic outlet syndrome: evaluation with CT. Bilbey JH, et al. **Radiology** 1989 May;171(2):381–4
Radiologic staging of primary bone sarcoma: MR imaging, scintigraphy, angiography, and CT correlated with pathologic examination. Bloem JL, et al. **Radiology** 1988 Dec;169(3):805–10
Gd-DTPA as a contrast agent in CT. Bloem JL, et al. **Radiology** 1989 May;171(2):578–9
Primary liver tumors in children: comparison of CT and MR imaging. Boechat MI, et al. **Radiology** 1988 Dec; 169(3):727–32
Comparison of information-preserving and information-losing data-compression algorithms for CT

images. Bramble JM. **Radiology** 1989 Feb;170(2):453–5
Pulmonary sarcoidosis: evaluation with high-resolution CT. Brauner MW, et al. **Radiology** 1989 Aug;172(2):467–71
Pulmonary histiocytosis X: evaluation with high-resolution CT. Brauner MW, et al. **Radiology** 1989 Jul;172(1):255–8
Urachal carcinoma: CT findings. Brick SH, et al. **Radiology** 1988 Nov;169(2):377–81
Computed arthrotomography as an adjunct to pediatric arthrography. Brody AS, et al. **Radiology** 1989 Jan;170(1 Pt 1):99–102
Liver, spleen, and vessels: preliminary clinical results of CT with perfluorooctylbromide. Bruneton JN, et al. **Radiology** 1989 Jan;170(1 Pt 1):179–83
Cystic teratoma of the ovary: CT detection. Buy JN, et al. **Radiology** 1989 Jun;171(3):697–701
Peritoneal implants from ovarian tumors: CT findings. Buy JN, et al. **Radiology** 1988 Dec;169(3):691–4
Aging of the diaphragm: a CT study. Caskey CI, et al. **Radiology** 1989 May;171(2):385–9
Evaluation of recurrent pyogenic cholangitis with CT: analysis of 50 patients. Chan FL, et al. **Radiology** 1989 Jan; 170(1 Pt 1):165–9
Hilar cholangiocarcinoma: comparative study with sonography and CT. Choi BI, et al. **Radiology** 1989 Sep; 172(3):689–92
Biliary cystadenoma and cystadenocarcinoma: CT and sonographic findings. Choi BI, et al. **Radiology** 1989 Apr; 171(1):57–61
Blunt hepatic/splenic trauma in adults: CT-based classification and correlation with prognosis and treatment [letter] Conrad MR. **Radiology** 1989 Oct;173(1):285–6
Nephroblastomatosis: missed diagnosis. Cormier PJ, et al. **Radiology** 1988 Dec;169(3):737–8
Imaging of the larynx: current concepts. Curtin HD. **Radiology** 1989 Oct;173(1):1–11 (27 ref.)
Peripheral upper lobe collapse in adults. Don C, et al. **Radiology** 1989 Mar;170(3 Pt 1):657–9
Cushing syndrome due to primary pigmented nodular adrenocortical disease: findings at CT and MR imaging. Doppman JL, et al. **Radiology** 1989 Aug;172(2):415–20
Ectopic adrenocorticotropic hormone syndrome: localization studies in 28 patients. Doppman JL, et al. **Radiology** 1989 Jul;172(1):115–24
Biliary carcinoma: CT evaluation of extrahepatic spread. Engels JT, et al. **Radiology** 1989 Jul;172(1):35–40
Hickman nodule: a mimic of metastatic disease. Fernandez GG, et al. **Radiology** 1989 May;171(2):401–2
Detection of asbestosis with high-resolution CT [letter] Friedman AC, et al. **Radiology** 1989 Jan;170(1 Pt 1):278–9
Recurrent postoperative sciatica: evaluation with MR imaging and enhanced CT. Frocrain L, et al. **Radiology** 1989 Feb;170(2):531–3
Obstructive sleep apnea: diagnosis with ultrafast CT. Galvin JR, et al. **Radiology** 1989 Jun;171(3):775–8
Indeterminate mediastinal invasion in bronchogenic carcinoma: CT evaluation. Glazer HS, et al. **Radiology** 1989 Oct;173(1):37–42
Amyloidosis: diffuse involvement of the retroperitoneum. Glynn TP Jr, et al. **Radiology** 1989 Mar;170(3 Pt 1):726
Pulmonary alveolar proteinosis: CT findings. Godwin JD, et al. **Radiology** 1988 Dec;169(3):609–13
Complications of automatic implantable cardioverter defibrillators: radiographic, CT, and echocardiographic evaluation. Goodman LR, et al. **Radiology** 1989 Feb; 170(2):447–52
Acquired malposition of the colon and gallbladder in patients with cirrhosis: CT findings and clinical implications. Gore RM, et al. **Radiology** 1989 Jun;171(3):739–42
Longitudinal stress fractures of the tibia: diagnosis with CT [letter; comment] Goupille P, et al. **Radiology** 1989 May; 171(2):583. **Comment on:** Radiology 1988 Jun;167(3):799–801
Superior sulcus tumors: CT and MR imaging. Heelan RT, et al. **Radiology** 1989 Mar;170(3 Pt 1):637–41
Retrorenal colon: implications for percutaneous diskectomy. Helms CA, et al. **Radiology** 1989 Jun;171(3):864–5
Orthotopic cardiac transplantation: evaluation with CT. Henry DA, et al. **Radiology** 1989 Feb;170(2):343–50
Inhomogeneous enhancement of liver parenchyma secondary to passive congestion: contrast-enhanced CT. Holley HC, et al. **Radiology** 1989 Mar;170(3 Pt 1):795–800
Solitary pulmonary nodules: evaluation with a CT reference phantom. Huston J 3d, et al. **Radiology** 1989 Mar;170(3 Pt 1):653–6
CT diagnosis of blunt hepatic and splenic injuries: a look to the future [editorial] Jeffrey RB Jr. **Radiology** 1989 Apr; 171(1):17–8
Transient intussusception in Crohn disease: CT evaluation. Knowles MC, et al. **Radiology** 1989 Mar;170(3 Pt 1):814
CT–SPECT fusion to correlate radiolabeled monoclonal antibody uptake with abdominal CT findings. Kramer EL, et al. **Radiology** 1989 Sep;172(3):861–5
Cerebral cysticercosis: documentation of natural history with CT. Kramer LD, et al. **Radiology** 1989 May;171(2):459–62
Premature bullous pulmonary damage in AIDS: CT diagnosis. Kuhlman JE, et al. **Radiology** 1989 Oct; 173(1):23–6
Retrospective geometric correlation of MR, CT, and PET images. Levin DN, et al. **Radiology** 1988 Dec;169(3):817–23
Intratemporal vascular tumors: detection with CT and MR imaging. Lo WW, et al. **Radiology** 1989 May;171(2):445–8
Persistent CT nephrogram: significance in the diagnosis of contrast nephropathy. Love L, et al. **Radiology** 1989 Jul; 172(1):125–9
Chronic pancreatitis: reassessment with current CT. Luetmer PH, et al. **Radiology** 1989 May;171(2):353–7
Asbestos-related focal lung masses: manifestations on conventional and high-resolution CT scans. Lynch DA, et al. **Radiology** 1988 Dec;169(3):603–7
The use of CT in the examination of asbestos-exposed persons [editorial] McLoud TC. **Radiology** 1988 Dec;169(3):862–3
CT findings in Swyer-James syndrome. Marti-Bonmati L, et al. **Radiology** 1989 Aug;172(2):477–80
Chronic diffuse infiltrative lung disease: comparison of diagnostic accuracy of CT and chest radiography. Mathieson JR, et al. **Radiology** 1989 Apr;171(1):111–6
Potential role of perfluorooctylbromide in the detection and characterization of liver lesions with CT [published erratum appears in Radiology 1989 Apr;171(1):287] Mattrey RF. **Radiology** 1989 Jan;170(1 Pt 1):18–20
Intravertebral fat measurement with quantitative CT in patients with Cushing disease and anorexia nervosa. Mayo-Smith W, et al. **Radiology** 1989 Mar;170(3 Pt 1):835–8
Body fat distribution measured with CT: correlations in healthy subjects, patients with anorexia nervosa, and patients with Cushing syndrome. Mayo-Smith W, et al. **Radiology** 1989 Feb;170(2):515–8
Tumors of the bronchi: role of evaluation with CT. Mayr B, et al. **Radiology** 1989 Sep;172(3):647–52
Cystic neoplasms of the pancreas: comparison of MR imaging with CT. Minami M, et al. **Radiology** 1989 Apr;171(1):53–6
Blunt hepatic trauma in adults: CT-based classification and correlation with prognosis and treatment. Mirvis SE, et al. **Radiology** 1989 Apr;171(1):27–32
Blunt splenic trauma in adults: CT-based classification and correlation with prognosis and treatment. Mirvis SE, et al. **Radiology** 1989 Apr;171(1):33–9
Pulmonary histiocytosis X: comparison of radiographic and CT findings. Moore AD, et al. **Radiology** 1989 Jul; 172(1):249–54
Coronary artery calcifications: significance of incidental detection on CT scans. Moore EH, et al. **Radiology** 1989 Sep;172(3):711–6
Fetal dose estimates for CT pelvimetry. Moore MM, et al. **Radiology** 1989 Apr;171(1):265–7
Exophytic spread of hepatobiliary disease via perihepatic ligaments: demonstration with CT and US. Mori H, et al. **Radiology** 1989 Jul;172(1):41–6
Pancreatic transplants: CT with clinical and pathologic correlation. Moulton JS, et al. **Radiology** 1989 Jul; 172(1):21–6
Sarcoidosis: correlation of extent of disease at CT with clinical, functional, and radiographic findings. Müller NL, et al. **Radiology** 1989 Jun;171(3):613–8
Coronoid process hyperplasia: CT studies. Munk PL, et al. **Radiology** 1989 Jun;171(3):783–4
Vesical dome tumors: significance of extravesical extension on CT. Narumi Y, et al. **Radiology** 1988 Nov;169(2):383–5
Hepatic tumors: comparison of CT during arterial portography, delayed CT, and MR imaging for preoperative evaluation. Nelson RC, et al. **Radiology** 1989 Jul;172(1):27–34
Combination gel-inflatable mammary prosthesis: appearance at CT. O'Mara EM, et al. **Radiology** 1989 Jan;170(1 Pt 1):78
Lymphadenopathy in primary biliary cirrhosis: CT observations. Outwater E, et al. **Radiology** 1989 Jun; 171(3):731–3
Direct coronal CT of the scaphoid bone. Pennes DR, et al. **Radiology** 1989 Jun;171(3):870–1
Non-Hodgkin lymphoma: influence of lymphography, CT, and bone marrow biopsy on staging and management. Pond GD, et al. **Radiology** 1989 Jan;170(1 Pt 1):159–64
Staging of rectal carcinoma: prospective comparison of endorectal US and CT. Rifkin MD, et al. **Radiology** 1989 Feb;170(2):319–22
Bowel and mesenteric injury following blunt abdominal trauma: evaluation with CT. Rizzo MJ, et al. **Radiology** 1989 Oct;173(1):143–8
Bone and bone marrow changes in Gaucher disease: evaluation with quantitative CT. Rosenthal DI, et al. **Radiology** 1989 Jan;170(1 Pt 1):143–6
Splenic trauma in adults: impact of CT grading on management. Scatamacchia SA, et al. **Radiology** 1989 Jun; 171(3):725–9
Detection and quantification of chronic cerebrovascular disease: comparison of MR imaging, SPECT, and CT. Seiderer M, et al. **Radiology** 1989 Feb;170(2):545–8
Life-threatening intraperitoneal bleeding: demonstration with CT. Sivit CJ, et al. **Radiology** 1989 May;171(2):430
Chest injury in children with blunt abdominal trauma: evaluation with CT. Sivit CJ, et al. **Radiology** 1989 Jun; 171(3):815–8
Bacterial renal infection: role of CT. Soulen MC, et al. **Radiology** 1989 Jun;171(3):703–7
Current imaging approach to the temporal bone. Swartz JD. **Radiology** 1989 May;171(2):309–17
Acquired disruptions of the incudostapedial articulation: diagnosis with CT. Swartz JD, et al. **Radiology** 1989 Jun; 171(3):779–81
Primary thyroid lymphoma: comparison of CT and US assessment. Takashima S, et al. **Radiology** 1989 May; 171(2):439–43
Sclerosing cholangitis: CT findings. Teefey SA, et al. **Radiology** 1988 Dec;169(3):635–9
Abdominal and pelvic CT: use of oral metoclopramide to enhance bowel opacification. Thoeni RF, et al. **Radiology** 1988 Nov;169(2):391–3
Vertebral bone density in children: effect of puberty. van Kuijk C. **Radiology** 1989 Mar;170(3 Pt 1):895–6
Automated registration of multimodality images [editorial] Vannier MW, et al. **Radiology** 1988 Dec;169(3):860–1
CT-guided biopsy: prospective analysis of 1,000 procedures. Welch TJ, et al. **Radiology** 1989 May;171(2):493–6
Natural history of the false channel of type A aortic dissection after surgical repair: CT study. Yamaguchi T, et al. **Radiology** 1989 Mar;170(3 Pt 1):743–7
Pancreas divisum: thin-section CT. Zeman RK, et al. **Radiology** 1988 Nov;169(2):395–8
Fungal sinusitis: diagnosis with CT and MR imaging. Zinreich SJ, et al. **Radiology** 1988 Nov;169(2):439–44
Manual reconstruction of tumor volumes from CT scans for radiotherapy planning. Flickinger JC, et al. **Radiother Oncol** 1989 Feb;14(2):151–8
CT scanning in intracavitary therapy: unexpected findings in "straightforward" insertions. Makin WF, et al. **Radiother Oncol** 1988 Dec;13(4):253–5
Asymptomatic mucoid impaction in bronchial atresis: roentgenographic and CT patterns. Bighi S, et al. **Rays** 1987 Sep-Dec;12(3):23–6
CT patterns in anthraco-silicosis. Bighi S, et al. **Rays** 1988 May-Aug;13(2):49–52
Adult Wilms' tumor: US and CT features. Bighi S, et al. **Rays** 1988 Sep-Dec;13(3):71–5
Azygos and hemiazygos continuation of inferior vena cava: CT patterns. Bighi S, et al. **Rays** 1988 Sep-Dec;13(3):87–91
Splenic cavernous hemangioma: CT findings and report of an unusual case. Danza FM, et al. **Rays** 1988 Sep-Dec; 13(3):77–9
Site and distribution of atheromatous lesions of the carotid bifurcation identified by computed tomography. Fanucci E, et al. **Rays** 1987 Sep-Dec;12(3):49–53
Neuroradiologic appearance of cystic meningiomas. Ferrante L, et al. **Rays** 1987 Sep-Dec;12(3):15–21
Gallbladder metastasis: CT appearance. Ferrozzi F, et al. **Rays** 1988 May-Aug;13(2):23–5
Acute multiple sclerosis simulating a cerebral tumor: a case report. Longo M, et al. **Rays** 1987 Sep-Dec;12(3):45–8
Radiographic and computed tomographic detection of thymoma in patients with myasthenia gravis. Lupi L, et al. **Rays** 1988 Jan-Apr;13(1):17–21
The role of computed tomography in chronic osteomyelitis. Lupi L, et al. **Rays** 1987 Sep-Dec;12(3):27–9
Routine lateral pelvimetry: a personal experience. al-Meshari AA. **Rays** 1988 Sep-Dec;13(3):43–8
Impact of CT scan on therapeutic management of lung cancer. Pirtoli L, et al. **Rays** 1988 Sep-Dec;13(3):65–9
CT and conventional radiography in detecting lysis and fracture of the odontoid process in rheumatoid arthritis. Trippi D, et al. **Rays** 1988 May-Aug;13(2):39–44
Recurrent polyposis nasi. Documentation. Clement PA, et al. **Rhinology** 1989;Suppl 8:5–14
Posterior lumbar apophyseal ring fracture simulating a mass lesion in computed tomograms. Kolin J, et al. **ROFO** 1989 Jul;151(1):114–5
Intra- and interobserver variation in CT-evaluated cerebral atrophy. Skjsdt T, et al. **ROFO** 1988 Dec;149(6):594–5
Saccular aneurysm of the aortic arch presenting as a nonenhancing mass on CT scanning. Case report. ten Hove W, et al. **ROFO** 1989 Aug;151(2):233–4
Computed tomography as the primary radiological examination of lumbar spine. Iikko E, et al. **Rontgenblatter** 1988 Oct;41(10):414–6
Plain radiography and tomography of the internal auditory canal for the diagnosis of acoustic neuroma. Pyhtinen J, et al. **Rontgenblatter** 1989 Aug;42(8):339–42
Comparative morphological study of the pituitary gland by computed tomography and magnetic resonance imaging. Loxton AJ. **S Afr Med J** 1988 Oct 15;74(8):406–7
Cholesteatomas of the temporal bone. Preoperative C-T versus peroperative findings. Freng A, et al. **Scand Audiol Suppl** 1988;30:185–8
Magnetic resonance imaging (MRI) and high resolution computertomography (HRCT) in cochlear implant candidates. Laszig R, et al. **Scand Audiol Suppl** 1988; 30:197–200
Central vestibulocochlear pathology: role of MRI and CT. Mafee MF. **Scand Audiol Suppl** 1988;30:153–9
Imaging contribution to temporal bone anatomy. Muren C. **Scand Audiol Suppl** 1988;30:139–43
Imaging contributions to the temporal bone anatomy (high jugular fossae). Wadin K. **Scand Audiol Suppl** 1988;30:145–8
Modern radiological diagnostics in colorectal cancer. Göthlin JH. **Scand J Gastroenterol Suppl** 1988;149:59–61
Computerized tomography findings among workers with chronic intoxication of the brain. Greve E. **Scand J Soc Med** 1989;17(2):147–50
Reliability of CT in preoperative evaluation of bladder carcinoma. Nurmi M, et al. **Scand J Urol Nephrol** 1988; 22(2):125–8
Adenocarcinoma of unknown primary site (ACUPS) presenting as a psoas abscess. Stewart IC, et al. **Scott Med J** 1989 Jun;34(3):470
Computed tomography and magnetic resonance imaging of the liver. Bernardino ME, et al. **Semin Liver Dis** 1989 Feb; 9(1):32–49 (87 ref.)

Computed tomography in the evaluation of acute and chronic low back pain syndromes commonly seen. Archer CR, et al. **Semin Neurol** 1986 Dec;6(4):350–71 (28 ref.)

Correlative imaging in abdominal infection: an algorithmic approach using nuclear medicine, ultrasound, and computed tomography. Gagliardi PD, et al. **Semin Nucl Med** 1988 Oct;18(4):320–34

Diseases of the major thoracic vessels with emphasis on CT: Seminar B. **Semin Roentgenol** 1989 Apr;24(2):69–141

Diseases of the major thoracic vessels with emphasis on CT: Seminar A. **Semin Roentgenol** 1989 Jan;24(1):3–68

Congenital anomalies of the superior vena cava: a CT study. Cormier MG, et al. **Semin Roentgenol** 1989 Apr;24(2):77–83

CT of aortic dissection. Demos TC, et al. **Semin Roentgenol** 1989 Jan;24(1):22–37 (58 ref.)

Abnormalities of the azygos system: CT evaluation. Dudiak CM, et al. **Semin Roentgenol** 1989 Jan;24(1):47–55 (29 ref.)

The role of CT in traumatic rupture of the thoracic aorta and its proximal branches. Ishikawa T, et al. **Semin Roentgenol** 1989 Jan;24(1):38–46 (26 ref.)

CT of the adrenal glands. Moulton JS, et al. **Semin Roentgenol** 1988 Oct;23(4):288–303 (79 ref.)

Computed tomography of the normal aorta and thoracic aneurysms. Posniak HV, et al. **Semin Roentgenol** 1989 Jan; 24(1):7–21 (52 ref.)

CT of congenital anomalies of the aortic arch. Predey TA, et al. **Semin Roentgenol** 1989 Apr;24(2):96–113 (15 ref.)

Cross-sectional imaging in the evaluation of osteogenic sarcoma: MRI and CT. Seeger LL, et al. **Semin Roentgenol** 1989 Jul;24(3):174–84

CT findings in superior vena cava obstruction. Yedlicka JW, et al. **Semin Roentgenol** 1989 Apr;24(2):84–90 (20 ref.)

Radiologic evaluation of nonseminomatous germ cell tumor of the testis. Scolnski MA, et al. **Semin Urol** 1988 Aug; 6(3):203–15

Imaging of atypical lipomas of the extremities: report of three cases. Bush CH, et al. **Skeletal Radiol** 1988;17(7):472–5

Computed tomographic appearances of sternocostoclavicular hyperostosis. Chigira M, et al. **Skeletal Radiol** 1989; 18(5):347–52

Computed tomography arthrography in traumatic hip dislocation. Intra-articular and capsular findings. Glynn TP Jr, et al. **Skeletal Radiol** 1989;18(1):29–31

Work in progress: postarthrography computed tomography of the wrist: evaluation of the triangular fibrocartilage complex. Quinn SF, et al. **Skeletal Radiol** 1989;17(8):565–9

Case report 561: Systemic mastocytosis. Schweitzer ME, et al. **Skeletal Radiol** 1989;18(5):411–3

Computed tomography or magnetic resonance for evaluating the solitary tumor or tumor-like lesion of bone? Sundaram M, et al. **Skeletal Radiol** 1988;17(6):393–401

Computed tomography of desmoid tumors of bone: desmoplastic fibroma. Young JW, et al. **Skeletal Radiol** 1988;17(5):333–7

Benign solitary schwannoma of the retroperitoneum: CT features. Ghiatas AA, et al. **South Med J** 1989 Jun; 82(6):801–2 (10 ref.)

Ventral hernia in a massively obese patient: diagnosis by computerized tomography. Rubio PA, et al. **South Med J** 1988 Oct;81(10):1307–8

Neurologically asymptomatic patients with a single cerebral lacuna. Weisberg LA, et al. **South Med J** 1989 Aug; 82(8):981–4

Neuromuscular thermography of the lumbar spine with CT correlation. Chafetz N, et al. **Spine** 1988 Aug;13(8):922–5

CT-guided biopsy of sacral metastatic carcinoma not visible on CT scan. Coombs RJ, et al. **Spine** 1988 May;13(5):588–9

Rotation of the cervical spine by using computerized-tomography (CT) [letter] Dvorak J. **Spine** 1988 May;13(5):595–7

Computer tomography evaluation of Cotrel-Dubousset instrumentation in idiopathic scoliosis. Ecker ML, et al. **Spine** 1988 Oct;13(10):1141–4

Magnetic resonance imaging and contrast CT of the lumbar spine. Comparison of diagnostic methods and correlation with surgical findings. Forristall RM, et al. **Spine** 1988 Sep; 13(9):1049–54

Comparison of CT scan muscle measurements and isokinetic trunk strength in postoperative patients. Mayer TG, et al. **Spine** 1989 Jan;14(1):33–6

Extruded nucleus pulposus causing osseous erosion of a lumbar vertebral body. A report of three cases. Norfray JF, et al. **Spine** 1988 Aug;13(8):941–4

Computed tomographic investigation of the effect of traction on lumbar disc herniations. Onel D, et al. **Spine** 1989 Jan; 14(1):82–90

Congenital absence of lumbar articular facets with computerized axial tomography documentation. Phillips MR, et al. **Spine** 1988 Jun;13(6):676–8

Comparison of MRI to contrast CT in the diagnosis of spinal stenosis. Schnebel B, et al. **Spine** 1989 Mar;14(3):332–7

Disc deterioration in low-back syndromes. A prospective, multi-center CT/discography study. Vanharanta H, et al. **Spine** 1988 Dec;13(12):1349–51

Intraoperative impedance monitoring during CT-guided stereotactic biopsies. Bullard DE. **Stereotact Funct Neurosurg** 1989;52(1):1–17

Computerized axial tomographic and magnetic resonance imaging scan follow-up of two patients after boron neutron capture therapy for glioblastoma multiforme. Marano SR, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):240–2

Early collateral blood supply and late parenchymal brain damage in patients with middle cerebral artery occlusion. Bozzao L, et al. **Stroke** 1989 Jun;20(6):735–40

Measurements of acute cerebral infarction: lesion size by computed tomography. Brott T, et al. **Stroke** 1989 Jul; 20(7):871–5

Repeated cranial computed tomographic and magnetic resonance imaging scans in two cases of eclampsia. Fredriksson K, et al. **Stroke** 1989 Apr;20(4):547–53

Prevalence of silent stroke in patients presenting with initial stroke: the Framingham Study. Kase CS, et al. **Stroke** 1989 Jul;20(7):850–2

Pulmonary contusion. Evaluation and classification by computed tomography. Wagner RB, et al. **Surg Clin North Am** 1989 Feb;69(1):31–40

Risk factors before hepatectomy, hepatic function after hepatectomy and computed tomographic changes as indicators of mortality from hepatic failure. Didolkar MS, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):17–26

Traumatic intracerebral hematoma—which patients should undergo surgical evacuation? CT scan features and ICP monitoring as a basis for decision making. Bullock R, et al. **Surg Neurol** 1989 Sep;32(3):181–7

Extradural hematomas of the posterior cranial fossa. Observations on a series of 32 consecutive cases treated after the introduction of computed tomography scanning. Pozzati E, et al. **Surg Neurol** 1989 Oct;32(4):300–3

Intracranial glossopharyngeal neurinomas. Report of two cases with special emphasis on computed tomography and magnetic resonance imaging findings. Suzuki F, et al. **Surg Neurol** 1989 May;31(5):390–4

Scanographic study of the calcaneus: normal anatomy and clinical applications. Cronier P, et al. **Surg Radiol Anat** 1988;10(4):303–10

Variations in zygapophyseal joint orientation and level of transition at the thoracolumbar junction. Preliminary survey using computed tomography. Singer KP, et al. **Surg Radiol Anat** 1988;10(4):291–5

CT profile of experimental radiofrequency lesion in the thalamus. Ebisutani D. **Tokushima J Exp Med** 1988 Jun; 35(1-2):21–35

Pathologic assessment of computerized tomography accuracy for the evaluation of the laryngeal cartilaginous framework in laryngopharyngeal carcinomas. Sulfaro S, et al. **Tumori** 1989 Apr 30;75(2):156–62

A radiologic study by CT scan of pineal size in cancer patients: correlation to melatonin blood levels. Tagliabue M, et al. **Tumori** 1989 Jun 30;75(3):226–8

Implantable drug delivery systems in computed tomography and magnetic resonance imaging—a comparison between titanium and stainless steel. Krog M, et al. **Ups J Med Sci** 1989;94(2):153–60

Adrenal imaging. Computed tomographic scanning and magnetic resonance imaging. Bretan PN Jr, et al. **Urol Clin North Am** 1989 Aug;16(3):505–13 (28 ref.)

Computed tomography in evaluation of blunt renal trauma. Potential for misdiagnosis of renal infarction. Sant GR, et al. **Urol Int** 1988;43(6):321–3

Value of computed tomography in the staging of testicular tumors. Strohmeyer T, et al. **Urol Int** 1988;43(4):198–200

Xanthogranulomatous pyelonephritis: comparison of extent using computed tomography and magnetic resonance imaging in one case. Feldberg MA, et al. **Urol Radiol** 1988; 10(2):92–4

CT and MR imaging of malignant germ cell tumor of the undescended testis. Lorigan JG, et al. **Urol Radiol** 1989; 11(2):113–7

Computed tomography of posterior pararenal and properitoneal metastases. Posniak HV, et al. **Urol Radiol** 1988;10(2):75–9

MR and CT imaging of perirenal amyloidosis. Sueoka BL, et al. **Urol Radiol** 1989;11(2):97–9

Computerized tomography of spontaneous forniceal extravasation. Epstein A, et al. **Urology** 1989 Apr; 33(4):344–5

Renal trauma assessment [letter] Kauder DH. **Urology** 1989 Feb;33(2):165

Computerized tomography in diagnosis of bladder rupture. Lowe FC, et al. **Urology** 1989 Apr;33(4):341–3

Comparison of angiography and computed tomography using new morphologic criteria in staging of renal cell carcinoma. Ueda T, et al. **Urology** 1988 Nov;32(5):459–64

Evaluating EMP with computed tomography. Fueredi GA, et al. **Wis Med J** 1989 Apr;88(4):15–6

Computerized tomography in metastatic evaluation. Smith RE, et al. **Wis Med J** 1989 May;88(5):25–7

Prospective comparison of radionuclide, ultrasound, and computed tomography in the preoperative localization of parathyroid glands. Carmalt HL, et al. **World J Surg** 1988 Dec;12(6):830–4

Brain computerized tomographic findings in various epileptic children. Coe CJ. **Yonsei Med J** 1988;29(4):321–5

High-resolution computed tomography of cholesteatomatous otitis media: significance of preoperative information. Park KH, et al. **Yonsei Med J** 1988;29(4):367–72

Computed tomography of spinal tuberculosis. Suh JS, et al. **Yonsei Med J** 1988;29(3):252–8

Nuclear magnetic resonance computerised tomography (NMR-CT) in early diagnosis of dumbbell neuroblastoma. Ogita S, et al. **Z Kinderchir** 1989 Apr;44(2):122–3

Computed tomography of a tuberculous paravertebral abscess. Smevik B, et al. **Z Kinderchir** 1988 Dec;43(6):430–2

Some observations on the use of computerised tomography in Legg-Calve-Perthes' disease. Weisz I, et al. **Z Kinderchir** 1988 Dec;43(6):402–4

[CT diagnosis of acoustic neuroma of cerebellopontine angle (analysis of 204 cases)] Chen XR. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Apr;23(2):75–8 (Eng. Abstr.) (Chi)

[CT diagnosis in subcortical arteriosclerotic encephalopathy] Dai JP. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Apr; 23(2):79–81 (Eng. Abstr.) (Chi)

[CT diagnosis of neuron migration anomalies] Gao PY. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb;23(1):2–4 (Eng. Abstr.) (Chi)

[CT diagnosis of xanthogranulomatous pyelonephritis (report of five cases)] Li RF. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Aug;22(4):224–6 (Eng. Abstr.) (Chi)

[Diagnosis of pituitary microadenoma on coronal CT scan] Shao SF. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb; 23(1):5–7 (Eng. Abstr.) (Chi)

[CT diagnosis of pseudocyst of the pancreas] Shen FX. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Dec; 22(6):347–50 (Eng. Abstr.) (Chi)

[Investigation on segmental and lobar anatomy of the lung on CT image] Shen ZW. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Jun;22(3):157–63 (Eng. Abstr.) (Chi)

[Omnipaque (iohexol) CT myelography (CTM) in the diagnosis of cervical spondylotic myelopathy—correlative study of conventional myelography (a report of 100 cases)] Wang YS. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Apr; 23(2):65–8 (Eng. Abstr.) (Chi)

[Investigations on internal derangement of the temporomandibular joint by direct sagittal CT scanning] Ying SX. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb; 23(1):8–10 (Eng. Abstr.) (Chi)

[The experience with CT guided transcutaneous fine-needle biopsy] Zhang XZ. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Jun;22(3):136–9 (Eng. Abstr.) (Chi)

[Computed tomography guidance for skeletal biopsy] Chang CY, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Oct; 42(4):261–8 (Eng. Abstr.) (Chi)

[CT findings in epilepsy and their evaluation—analysis of CT findings in 366 cases] Song ZW. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Jun; 21(3):138–40, 188 (Eng. Abstr.) (Chi)

[Analysis of CT scanning of ophthalmic Graves' disease] Song GX. **Chung Hua Yen Ko Tsa Chih** 1988 Jul; 24(4):200–2 (Eng. Abstr.) (Chi)

[Congenital anomalies of the brain in computed tomography] Lim KS. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Apr;5(4):212–21 (Eng. Abstr.) (Chi)

[The CT scanning of 54 cases of orbital cavernous hemangioma] Song GX, et al. **Yen Ko Hsueh Pao** 1987 Sep;3(3):152–5 (Eng. Abstr.) (Chi)

[Possibilities of predicting the solubility of gallstones using computer tomography. An in vitro study] Trunečka P, et al. **Cas Lek Cesk** 1988 Dec 2;127(49):1512–4 (Eng. Abstr.) (Cze)

[Use of computer tomography in the diagnosis of malignant melanoma of the choroid] Anders M, et al. **Cesk Oftalmol** 1988 Nov;44(6):419–29 (Eng. Abstr.) (Cze)

[CT localization of foreign intra-ocular bodies] Hakenová J, et al. **Cesk Oftalmol** 1989 May;45(3):206–13 (Eng. Abstr.) (Cze)

[Imaging of the larynx using computer tomography] Betka J, et al. **Cesk Otolaryngol** 1988 Sep;37(5):277–81 (Eng. Abstr.) (Cze)

[The importance of CT examination in the diagnosis and therapy of rhino-otogenic intracranial complications] Stárek I, et al. **Cesk Otolaryngol** 1989 May;38(3):143–8 (Eng. Abstr.) (Cze)

[Cephalothoracopagus in the CT picture] Bruna J, et al. **Cesk Radiol** 1988 Aug;42(4):237–41 (Eng. Abstr.) (Cze)

[Detection of changes using computer tomography in newly diagnosed type 2 diabetes] Bruna J, et al. **Cesk Radiol** 1989 May;43(3):173–7 (Eng. Abstr.) (Cze)

[Differential diagnosis of herniation of the disks of the lumbar spine using computer tomography] Dolanský J. **Cesk Radiol** 1989 Jan;43(1):35–7 (Eng. Abstr.) (Cze)

[Initial experience with transabdominal chemical sympathectomy in arterial occlusive diseases of the lower extremities using directed computer tomography] Dolanský J, et al. **Cesk Radiol** 1989 May;43(3):178–54 (Eng. Abstr.) (Cze)

[Diagnostic value of computer tomographic pneumomeatocisternography] Dutka J, et al. **Cesk Radiol** 1988 Nov;42(6):396–401 (Eng. Abstr.) (Cze)

[Computer tomography and its use in orofacial oncology] Peřinka L, et al. **Cesk Radiol** 1989 May;43(3):166–72 (Eng. Abstr.) (Cze)

[Use of computer tomography in the diagnosis and differential diagnosis of lymphedema of the extremities] Prokeš B, et al. **Cesk Radiol** 1988 Aug;42(4):252–8 (Eng. Abstr.) (Cze)

[The contribution of computer tomography in improving the diagnosis of disorders of the thoracic wall and pleura] Salamoun V, et al. **Cesk Radiol** 1988 Nov;42(6):412–9 (Eng. Abstr.) (Cze)

[Vascular pseudotumors in the mediastinum in the CT picture] Salamoun V, et al. **Cesk Radiol** 1988 Nov;

42(6):370–7 (Eng. Abstr.) (Cze)
[Possibilities of computer tomography in examining the adrenal glands] Srp A. **Cesk Radiol** 1988 Aug;42(4):242–51 (Eng. Abstr.) (Cze)
[Computer tomography in the diagnosis and classification of retrocaval ureters] Pink J, et al. **Rozhl Chir** 1989 Mar; 68(3):202–6 (Eng. Abstr.) (Cze)
[CT-guided transthoracic biopsy] Lorentzen T, et al. **Ugeskr Laeger** 1988 Nov 7;150(45):2743–6 (Eng. Abstr.) (Dan)
[Isodense and isoechoic liver metastases] Lorentzen T, et al. **Ugeskr Laeger** 1989 Apr 10;151(15):951–2 (Eng. Abstr.) (Dan)
[The differential diagnosis of intracranial tumors by computed tomography] Lund H, et al. **Ugeskr Laeger** 1988 Sep 12;150(37):2163–6 (Eng. Abstr.) (Dan)
[CT of fractures and ligament ruptures of the 1st and 2d cervical vertebrae] Nepper-Rasmussen HJ, et al. **Ugeskr Laeger** 1989 May 1;151(18):1112–4 (Eng. Abstr.) (Dan)
[Subcortical arteriosclerotic encephalopathy (SAE). Computer tomographic findings related to predisposing factors and clinical symptoms] Rasmussen D, et al. **Ugeskr Laeger** 1988 Sep 26;150(39):2334–6 (Eng. Abstr.) (Dan)
[Osteoid osteoma of the spine] Mespreuve M, et al. **J Belge Radiol** 1989 Apr;72(2):73–8 (Eng. Abstr.) (Dut)
[Echography and CT in mediastinal teratoma] Roelandt W, et al. **J Belge Radiol** 1988;71(5):611–4 (Eng. Abstr.) (Dut)
[Magnetic resonance and computed tomography in brain evaluation] Salonen O, et al. **Duodecim** 1989;105(1):29–37 (Fin)
[Computed tomography and discography in patients with spinal symptoms] Vanharanta H, et al. **Duodecim** 1988; 104(12):917–22 (Fin)
[Computerized tomography in Crohn's disease] Engelholm L, et al. **Acta Gastroenterol Belg** 1987 Sep–Oct;50(5):538–52 (Eng. Abstr.) (Fre)
[Neuroblastoma and Wilm's tumor. Computerized tomography study] Manenti A, et al. **Acta Urol Belg** 1988; 56(3):458–63 (Eng. Abstr.) (Fre)
[Prediction of the intracranial hypertension degree and the course of the brain injury from the initial score of basal cisterns] Convert J, et al. **Agressologie** 1988 Apr;29(4):273–9 (Eng. Abstr.) (Fre)
[Contribution of x-ray computed tomography to the management of extradural hematoma. Apropos of 100 cases] Dautheribes M, et al. **Agressologie** 1988 Apr; 29(4):253–4 (Eng. Abstr.) (Fre)
[Has the development of x-ray computed tomography modified morbidity and mortality of extradural hematoma? 559 cases (1972–1986)] Riche H, et al. **Agressologie** 1988 Apr;29(4):255–60 (Eng. Abstr.) (Fre)
[Clinicoradiological study of the post-traumatic diffuse cerebral lesion] Tomei G, et al. **Agressologie** 1988 Apr; 29(4):267–70 (Eng. Abstr.) (Fre)
[Contribution of x-ray computed tomography in acute pancreatitis] Fagniez PL. **Ann Chir** 1989;43(1):45–7 (Eng. Abstr.) (Fre)
[Surveillance elements of pneumonectomy spaces. Comparison of MRI and x-ray CT] Laissy JP, et al. **Ann Chir** 1988;42(8):602–5 (Eng. Abstr.) (Fre)
[Incidentaloma or adrenal metastasis. Value of puncture-biopsy under x-ray computed tomography. Apropos of 9 cases] Wurtz A, et al. **Ann Chir** 1988; 42(9):667–70 (Eng. Abstr.) (Fre)
[Pseudolymphomatous aspects of mesenteric lymphadenopathies in Whipple's disease. Value of x-ray computed tomography monitoring] Jaubert D, et al. **Ann Med Interne (Paris)** 1988;139(5):341–3 (Eng. Abstr.) (Fre)
[The value of tomodensitometry in histiocytic disorders of the base of the skull in children] Castel JC, et al. **Ann Pediatr (Paris)** 1988 Oct;35(8):586–91 (Eng. Abstr.) (Fre)
[Value of x-ray computed tomography in histiocytic involvements of the base of the skull in children] Castel JC, et al. **Ann Radiol (Paris)** 1988;31(3):151–6 (Eng. Abstr.) (Fre)
[Pulmonary arteriovenous fistulae. Value of x-ray computed tomography study. Apropos of a case] Darmon-Lebrun M, et al. **Ann Radiol (Paris)** 1988;31(5):305–8 (Eng. Abstr.) (Fre)
[Value of brain x-ray computed tomography in small cell bronchial cancers] Fernet M, et al. **Ann Radiol (Paris)** 1988; 31(3):173–6 (Eng. Abstr.) (Fre)
[Value of X-ray computed tomography in the initial staging of cancers of the cervix uteri and in post-therapeutic follow-up] Giffard JM, et al. **Ann Radiol (Paris)** 1988; 31(4):244–50 (Eng. Abstr.) (Fre)
[Arteritis and lumbar sympatholysis guided by x-ray computed tomography. Our experience apropos of 322 procedures] Giron J, et al. **Ann Radiol (Paris)** 1988; 31(6):337–44 (Eng. Abstr.) (Fre)
[Aorto-pulmonary window: normal and pathological x-ray computed tomographic aspects] Hubert C, et al. **Ann Radiol (Paris)** 1988;31(3):163–72 (Eng. Abstr.) (Fre)
[Course of a fracture-dislocation of the hip in coma: value of X-ray computed tomography evaluation] Laissy JP, et al. **Ann Radiol (Paris)** 1988;31(4):255–7 (Eng. Abstr.) (Fre)
[X-ray computed tomography and pancreatic injuries. Apropos of 17 cases] Marsot-Dupuch K, et al. **Ann Radiol (Paris)** 1988;31(5):271–81 (17 ref.) (Eng. Abstr.) (Fre)
[Role of imaging in the study of painful Paget's bone (excluding axial sites)] Martin B, et al. **Ann Radiol (Paris)** 1988;31(5):315–21 (31 ref.) (Eng. Abstr.) (Fre)
[Sarcoma of soft tissues in adults. X-ray computed tomographic aspects and evaluation of the response to induction chemotherapy] Risch M, et al. **Ann Radiol (Paris)** 1988;31(5):283–8 (Eng. Abstr.) (Fre)
[Value of the scanner in acute pyelonephritis] Culot T, et al. **Ann Urol (Paris)** 1989;23(1):79–82 (Eng. Abstr.) (Fre)
[Respective indications for echography, scanning and MRI in diseases of the intra-cranial optic pathways] Cabanis EA, et al. **Annee Ther Clin Ophtalmol** 1987;38:299–318 (Fre)
[Respective indications for echography, scanning and MRI in diseases of the eye and orbit] Catros A, et al. **Annee Ther Clin Ophtalmol** 1987;38:283–98 (Fre)
[Contribution and limits of x-ray computed tomography and magnetic resonance imaging in evaluating the extent of primary cancers of the bronchi] Laurent F, et al. **Bull Cancer (Paris)** 1988;75(9):903–16 (Eng. Abstr.) (Fre)
[Comparison of echography and x-ray computed tomography in cancer of the ovary] Normand F, et al. **Bull Cancer (Paris)** 1988;75(9):889–93 (Eng. Abstr.) (Fre)
[Has the scanner resolved the problem of pseudotumor of the orbit?] Catros A, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):155–7 (Eng. Abstr.) (Fre)
[Respective contributions of x-ray computed tomography and MRI in the diagnosis of meningioma of the optic nerve] Catros A, et al. **Bull Soc Ophtalmol Fr** 1988 Nov; 88(11):1321–2 (Fre)
[Contribution of the scanner in the diagnosis of deep drusen of the papilla] Diallo L, et al. **Bull Soc Ophtalmol Fr** 1988 Jun-Jul;88(6–7):819–21 (Fre)
[Value of x-ray computed tomography in orbital cellulitis] Mercier-Tacheix V, et al. **Bull Soc Ophtalmol Fr** 1988 Nov; 88(11):1325–8 (Eng. Abstr.) (Fre)
[X-ray computed tomography in the Yemen Arab Republic. Analysis of the first 1000 tests] Barbançon O, et al. **Bull Soc Pathol Exot Filiales** 1988;81(4):777–81 (Eng. Abstr.) (Fre)
[Anesthesia using intramuscular methohexital for cerebral computed tomography in the child. Apropos of 100 cases] Bemer M, et al. **Cah Anesthesiol** 1988 Dec;36(8):611–4 (Eng. Abstr.) (Fre)
[X-ray computed tomography in the diagnosis and treatment of fibrovascular polyp of the esophagus] Partensky C, et al. **Chirurgie** 1988;114(3):217–22 (28 ref.) (Eng. Abstr.) (Fre)
[X-ray computed tomography in the initial period of acute pancreatitis] Testas P, et al. **Chirurgie** 1988;114(10):785–9 (Eng. Abstr.) (Fre)
[The value of CT in the diagnosis and treatment of aspergilloma] Delplace PO, et al. **J Belge Radiol** 1988; 71(6):657–63 (Eng. Abstr.) (Fre)
[Computerized tomography symptoms in 2 cases of primary linitis plastica of the rectum] Gilbeau JP, et al. **J Belge Radiol** 1988;71(3):343–6 (Eng. Abstr.) (Fre)
[Computerized tomography of a postoperative rhabdomyolysis] Jaucot J, et al. **J Belge Radiol** 1988; 71(6):697–9 (Eng. Abstr.) (Fre)
[Computerized tomography of the renal sinus] Roy C, et al. **J Belge Radiol** 1988;71(6):677–81 (Eng. Abstr.) (Fre)
[Potential role of peritumoral vascular modifications on the peripheral enhancement of dynamic computerized radiography of hepatic metastases] Tshibwabwa-Tumba E, et al. **J Belge Radiol** 1988;71(4):471–4 (Eng. Abstr.) (Fre)
[Indications of radio-pelvimetry at a university hospital and a district general hospital] Berthet J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):624–8 (Eng. Abstr.) (Fre)
[Clinical and paraclinical identification by various imaging technics of congenital anomalies of the inferior vena cava (apropos of 4 cases)] Rettori R, et al. **J Mal Vasc** 1989; 14(3):191–201 (Eng. Abstr.) (Fre)
[Interventional computed tomography in thoracic oncology. Apropos of 170 cases] Berry M, et al. **J Radiol** 1989 Jan; 70(1):7–16 (Eng. Abstr.) (Fre)
[X-ray computed tomography in surveillance of colorectal cancers treated by radical surgery] Bruneton JN, et al. **J Radiol** 1988 Aug–Sep;69(8–9):501–7 (47 ref.) (Eng. Abstr.) (Fre)
[X-ray computed tomographic aspects of dermoid cysts of the ovary] Buy JN, et al. **J Radiol** 1989 Feb;70(2):103–9 (23 ref.) (Eng. Abstr.) (Fre)
[Unilateral isthmic lysis in x-ray computed tomography] Chevrot A, et al. **J Radiol** 1988 Dec;69(12):767–9 (Eng. Abstr.) (Fre)
[Aorto-digestive fistulae. X-ray computed tomographic diagnosis] Dao T, et al. **J Radiol** 1988 Aug–Sep; 69(8–9):485–8 (13 ref.) (Eng. Abstr.) (Fre)
[Role of arteriography and x-ray computed tomography in the current evaluation of pigmented villonodular synovitis] Darrason R, et al. **J Radiol** 1988 Nov;69(11):645–50 (6 ref.) (Eng. Abstr.) (Fre)
[Hepatic Kaposi's sarcoma and AIDS. Ultrasonographic and x-ray computed tomographic aspects] Defalque D, et al. **J Radiol** 1988 Oct;69(10):617–20 (Eng. Abstr.) (Fre)
[Efficacy of x-ray computed tomography in the diagnosis of tumors of the mediastinum. 103 cases] Frija J, et al. **J Radiol** 1988 Aug–Sep;69(8–9):473–83 (47 ref.) (Eng. Abstr.) (Fre)
[Prostatic abscess. Contribution of the x-ray computed tomography. Apropos of a case] Husain A, et al. **J Radiol** 1988 Aug–Sep;69(8–9):517–9 (19 ref.) (Eng. Abstr.) (Fre)
[Pulmonary hydatidosis. Contribution of x-ray computed tomography] Imani F, et al. **J Radiol** 1988 Aug–Sep; 69(8–9):489–94 (10 ref.) (Eng. Abstr.) (Fre)
[Lymphography and x-ray computed tomography in the evaluation of lymph node invasiveness in cancer of the bladder. Comparison of their diagnostic value] Legusy O, et al. **J Radiol** 1989 Mar;70(3):191–5 (24 ref.) (Eng. Abstr.) (Fre)
[Measurement of tumor volume by x-ray computed tomography in evaluating the response to treatment] Lérier O, et al. **J Radiol** 1988 Nov;69(11):651–6 (Eng. Abstr.) (Fre)
[Computed tomography in the evaluation of recent articular fractures of the calcaneus] Liebault B, et al. **J Radiol** 1989 Jan;70(1):17–23 (Eng. Abstr.) (Fre)
[Lumbar intradural disk herniation. X-ray computed tomographic diagnosis] Martin N, et al. **J Radiol** 1988 Nov; 69(11):681–4 (14 ref.) (Eng. Abstr.) (Fre)
[The financing of medico-technical activities. The example of a scanner in France (1986)] Meyer C, et al. **J Radiol** 1988 Oct;69(10):587–95 (Eng. Abstr.) (Fre)
[X-ray computed tomographic aspects of medium-sized free peritoneal effusions (supramesocolic level)] Radier C, et al. **J Radiol** 1989 Feb;70(2):95–102 (Eng. Abstr.) (Fre)
[Algodystrophy of the femoral head. Contribution of new imaging methods] Sarrat P, et al. **J Radiol** 1988 Aug–Sep; 69(8–9):495–500 (Eng. Abstr.) (Fre)
[The CT scanner and the temporomandibular joint. Anatomo-radiologic comparisons. Apropos of 14 cases of algodysfunctional of the manducator system] Vanneroy F, et al. **J Radiol** 1989 Feb;70(2):127–32 (Eng. Abstr.) (Fre)
[High-resolution x-ray computed tomography in lymphoid interstitial pneumonia] Vilgrain V, et al. **J Radiol** 1989 Mar; 70(3):167–73 (23 ref.) (Eng. Abstr.) (Fre)
[Computed tomography and magnetic resonance imaging in anomalies of neuronal migration] Wilms G, et al. **J Radiol** 1989 Jan;70(1):1–6 (Eng. Abstr.) (Fre)
[Focal infectious lesions of the renal parenchyma. Comparative contribution of echography and x-ray computed tomography] You K, et al. **J Radiol** 1988 Aug–Sep;69(8–9):509–16 (29 ref.) (Eng. Abstr.) (Fre)
[Benign osteoblastoma of the spine. Apropos of 4 cases with a case of spontaneous recovery] Collignon JC, et al. **Neurochirurgie** 1988;34(4):262–70 (Eng. Abstr.) (Fre)
[Predictive value of skull hypodensities in x-ray computed tomography in perinatal asphyxia in full-term newborn infants] Sevely A, et al. **Pediatrie** 1989;44(2):121–4 (18 ref.) (Eng. Abstr.) (Fre)
[Value of X-ray computed tomography of the brain in controlled carotid surgery] Bouttier S, et al. **Presse Med** 1989 Mar 25;18(12):617–20 (Eng. Abstr.) (Fre)
[The celiac block test under x-ray computed tomography before possible surgical splanchnicectomy (letter)] Delassus P, et al. **Presse Med** 1989 Jun 3;18(22):1123 (Fre)
[X-ray computed tomography and magnetic resonance imaging in the diagnosis of trapped popliteal arteries (letter)] Fermand M, et al. **Presse Med** 1989 May 13; 18(19):983 (Fre)
[Thoracic x-ray computed tomography in pneumology] Grenier P. **Presse Med** 1988 Nov 19;17(41):2194–6 (13 ref.) (Eng. Abstr.) (Fre)
[Splenic iconography in Wegener's granulomatosis (letter)] Ruel M, et al. **Presse Med** 1989 Apr 8;18(14):725 (Fre)
[Thoracic x-ray computed tomography in the diagnosis of bronchoesophageal fistula (letter)] Sardin B, et al. **Presse Med** 1989 Jan 28;18(3):131 (Fre)
[The value of computerized tomography in stomatology] Piette E. **Rev Belge Med Dent** 1987;42(6):201–5 (Fre)
[Is there a radiologists behind the scanner console?] Alexandre G, et al. **Rev Chir Orthop** 1988;74 Suppl 2:249–51 (Fre)
[X-ray computed tomography in the study of fractures of the calcaneus] Lemerle R, et al. **Rev Chir Orthop** 1988; 74(5):378–90 (10 ref.) (Eng. Abstr.) (Fre)
[The role of computerized tomography in the study of calcaneus fractures] Lemerle R, et al. **Rev Chir Orthop** 1988;74 Suppl 2:291–2 (Fre)
[Value of the scanner for diagnosing synovial cysts of the hip. Apropos of 2 cases. Review of the literature] Mainard D, et al. **Rev Chir Orthop** 1989;75(4):271–7 (52 ref.) (Eng. Abstr.) (Fre)
[Preoperative evaluation of the extent of femoral head necrosis. Comparison of computerized tomography and magnetic resonance imaging. Apropos of 10 case reports] Pittet LR, et al. **Rev Chir Orthop** 1988;74 Suppl 2:206–8 (Fre)
[Diagnosis of recurrent herniated disk using discographic scanning] Senegas J, et al. **Rev Chir Orthop** 1988;74 Suppl 2:91–4 (Fre)
[Radiologic imaging in acoustic neurinoma] Darrouzet V,

et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):421–7 (16 ref.) (Eng. Abstr.) (Fre)

[The contribution of computerized tomography to the diagnosis of diffuse pulmonary lymphangiomyomatosis. Apropos of a case] Blanchon F, et al. **Rev Mal Respir** 1989; 6(1):75–8 (Eng. Abstr.) (Fre)

[Alzheimer's disease. Statistical analysis of CT scanner data] Leys D, et al. **Rev Neurol (Paris)** 1989;145(2):134–9 (Eng. Abstr.) (Fre)

[X-ray computed tomography of lumbosacral roots and primary hypertrophic neuritis (Dejerine–Sottas disease)] Mas JL, et al. **Rev Neurol (Paris)** 1989;145(3):215–20 (Eng. Abstr.) (Fre)

[Very peculiar bilateral parenchymatous opacities: lipoid pneumonia] Monod B, et al. **Rev Pneumol Clin** 1988; 44(4):205–7 (Fre)

[Value of x-ray computed tomography in muscular pathology. Personal cases and review of the literature] Laroche M, et al. **Rev Rhum Mal Osteoartic** 1989 May; 56(6):433–9 (11 ref.) (Eng. Abstr.) (Fre)

[X-ray computed tomography of phalangeal osteoid osteoma (letter)] Malghem J, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):719 (Fre)

[Facial circumscribed ossifying myositis. Anatomo–clinical and tomodensitometric study] Chomette G, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):1–6 (Eng. Abstr.) (Fre)

[The scanner and the temporomandibular joint; anatomic–radiologic comparisons. Apropos of 26 cases of masticatory apparatus pain–dysfunction syndrome] Vanneroy F, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(4):231–5 (Eng. Abstr.) (Fre)

[The role of x-ray computed tomography in the preoperative evaluation of primary bronchopulmonary cancer] Jammoussi M, et al. **Tunis Med** 1988 Aug–Sep; 66(8–9):599–604 (Eng. Abstr.) (Fre)

[The role of tomodensitometry in the study of superficial metastases: description of clinical cases] Lagala R, et al. **Tunis Med** 1988 Jun–Jul;66(6–7):509–13 (Eng. Abstr.) (Fre)

[Computerized tomography findings and the clinical course in infratentorial trauma] Eppinger B, et al. **Aktuel Traumatol** 1988 Dec;18(6):235–9 (Eng. Abstr.) (Ger)

[Body packing: the value of modern imaging procedures in the detection of intracorporeal transport media] Freisleder A, et al. **Arch Kriminol** 1988 Nov–Dec; 182(5–6):143–53 (Eng. Abstr.) (Ger)

[Computerized tomography and nuclear magnetic tomography of the facial skull and neck] Mees K, et al. **Arch Otorhinolaryngol Suppl** 1989;1:1–40 (Ger)

[Computerized tomography and nuclear magnetic resonance tomography and digital subtraction angiography of the petrous bone and the surrounding area] Valavanis A. **Arch Otorhinolaryngol Suppl** 1989;1:41–70 (Ger)

[Results and assessment of computerized tomography in the initial diagnosis in polytrauma] Neubert M, et al. **Chirurg** 1988 Nov;59(11):763–6 (Eng. Abstr.) (Ger)

[Dose and time dependency of "CT clearance"] Kaltenborn HA, et al. **Digitale Bilddiagn** 1989 Jun;9(2):72–5 (Eng. Abstr.) (Ger)

[Computed tomography findings in hereditary angioneurotic edema] Kullnig P, et al. **Digitale Bilddiagn** 1989 Mar; 9(1):48–50 (15 ref.) (Eng. Abstr.) (Ger)

[The computed tomographic spectrum of pulmonary aspergillosis] Kullnig P, et al. **Digitale Bilddiagn** 1988 Sep; 8(3):133–6 (Eng. Abstr.) (Ger)

[The inverted cockade sign. An indication in CT of an impending rupture of an abdominal aortic aneurysm] Lörcher U. **Digitale Bilddiagn** 1989 Mar;9(1):51–3 (Eng. Abstr.) (Ger)

[The scimitar syndrome in computed tomography and intravenous subtraction angiography] Lörcher U, et al. **Digitale Bilddiagn** 1988 Dec;8(4):184–7 (Eng. Abstr.) (Ger)

[Appendicitis in the computed tomographic image] Lörcher U, et al. **Digitale Bilddiagn** 1989 Jun;9(2):76–82 (Eng. Abstr.) (Ger)

[Benign segmental bronchial obstruction in computed tomography] Lörcher U. **Digitale Bilddiagn** 1988 Sep; 8(3):137–40 (Eng. Abstr.) (Ger)

[Diseases of the lymphatic system of the head and neck region. A comparative study of MRI and CT] Schedel H, et al. **Digitale Bilddiagn** 1988 Dec;8(4):158–67 (Eng. Abstr.) (Ger)

[The use of CT in meniscopathy] Tellkamp H, et al. **Digitale Bilddiagn** 1988 Dec;8(4):180–3 (Eng. Abstr.) (Ger)

[Postoperative computed tomography control of allogeneic vascular prostheses] Zwicker C, et al. **Digitale Bilddiagn** 1989 Mar;9(1):42–7 (Eng. Abstr.) (Ger)

[Magnetic resonance imaging in myasthenia gravis. An alternative to mediastinal computerized tomography?] Emskötter T, et al. **Dtsch Med Wochenschr** 1988 Sep 30; 113(39):1508–10 (Eng. Abstr.) (Ger)

[Diagnosis of intervertebral disk prolapse: myelography, computed tomography or MR tomography?] Russegger L, et al. **Dtsch Med Wochenschr** 1989 Aug 25;114(34):1300–2 (Ger)

[Computerized tomography of the petrous bone. With magnetic resonance tomography] Köster O. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1988; 129:1–92 (Ger)

[Periventricular attenuation of the density of cerebral hemisphere white matter in computerized tomography of neuropsychiatric patients in the 2d half of life. Diagnostic significance and pathogenesis] Kohlmeyer K. **Fortschr Neurol Psychiatr** 1988 Sep;56(9):279–85 (Eng. Abstr.) (Ger)

[Diagnosis of orbital space–occupying lesions—a comparison of magnetic resonance imaging and computerized tomography] Grannemann D, et al. **Fortschr Ophthalmol** 1988;85(3):327–9 (Eng. Abstr.) (Ger)

[The status of computerized tomography in the diagnosis of primary cervix cancer] Räber G, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):17–23 (Eng. Abstr.) (Ger)

[Indications for computerized tomography of the wrist joint and carpal bones] Frahm R, et al. **Handchir Mikrochir Plast Chir** 1989 Jul;21(4):189–94 (Eng. Abstr.) (Ger)

[Computerized tomography studies of the lower legs of patients with chronic venous insufficiency and arthrogenic venous stasis syndrome] Schmeller W, et al. **Hautarzt** 1989 May;40(5):281–9 (Eng. Abstr.) (Ger)

[The accuracy of computerized tomography in the staging of bladder carcinoma] Goebel N, et al. **Helv Chir Acta** 1988 Jul;55(3):329–32 (Eng. Abstr.) (Ger)

[The value of transrectal sonography and computerized tomography in the diagnosis of rectal cancer] Ruf G, et al. **Helv Chir Acta** 1989 Jan;55(5):667–72 (Eng. Abstr.) (Ger)

[Yaws: a rare case of an "invasively growing" tumor of the maxillary sinus] Draws J, et al. **HNO** 1988 Oct;36(10):426–8 (Eng. Abstr.) (Ger)

[Radiation dosage and clinical value of conventional tomography and high resolution computerized tomography of the nose and ear] Grobovschek M, et al. **HNO** 1989 Jan;37(1):23–6 (Eng. Abstr.) (Ger)

[Excluding a recurrence of cholesteatoma using high resolution computerized tomography. Can one dispense with the second–look operation?] Oberascher G, et al. **HNO** 1988 May;36(5):181–7 (Eng. Abstr.) (Ger)

[Imaging of capsule otosclerosis using computerized tomography] von Glass W, et al. **HNO** 1988 Sep; 36(9):373–6 (Eng. Abstr.) (Ger)

[Radiation dosage to the gonads in cranial computerized tomography in young children] Berndt L, et al. **Kinderarztl Prax** 1988 Dec;56(12):599–602 (Eng. Abstr.) (Ger)

[Computerized tomography in the assessment of orbital lesions] Huber P. **Klin Monatsbl Augenheilkd** 1989 May; 194(5):341–9 (Eng. Abstr.) (Ger)

[Preoperative staging of rectal cancer: endosonography versus computerized tomography] Ruf G, et al. **Langenbecks Arch Chir** 1989;374(3):164–8 (Eng. Abstr.) (Ger)

[Magnetic resonance tomography in tumors of the salivary glands—a diagnostic advantage?] Mees K, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):355–61 (Eng. Abstr.) (Ger)

[Ventral enclosure of the thyroid cartilage by the hyoid bone. A complex inhibition abnormality of the laryngeal structure] Friedrich G, et al. **Laryngorhinootologie** 1989 Apr;68(4):239–43 (Eng. Abstr.) (Ger)

[Detection and assessment of cervical lymph node metastases in head–neck tumors. A comparison of methods] Heppt W, et al. **Laryngorhinootologie** 1989 Jun;68(6):327–32 (Eng. Abstr.) (Ger)

[Computerized tomography imaging of calcified arteriosclerosis of the vertebral artery] Vieregge P, et al. **Med Klin** 1988 Jul 15;83(15):477–9 (Ger)

[Computerized tomography of the elbow in ulnar sulcus syndrome] Kessler C, et al. **Nervenarzt** 1989 Jul; 60(7):448–50 (Ger)

[The spontaneous course of disk prolapse in lumbar root compression syndrome. A CT–controlled prospective study] Schultz U, et al. **Nervenarzt** 1988 Nov;59(11):661–8 (Ger)

[What are the advantages of magnetic resonance tomography compared with computerized tomography in imaging spontaneous cerebral hemorrhage?] Schütz HJ, et al. **Nervenarzt** 1988 Nov;59(11):654–60 (Ger)

[Morphologic and functional aspects of epilepsia partialis continua Kosahewnikoff] Spunda C. **Nervenarzt** 1989 Mar; 60(3):171–4 (Ger)

[Pseudotumor forms of spontaneous intracerebral hematomas] Kühner A, et al. **Neurochirurgia (Stuttg)** 1988 Jul;31(4):118–22 (Eng. Abstr.) (Ger)

[Follow–up of computerized tomography findings in traumatic intracerebral hematomas] Schneider T. **Neurochirurgia (Stuttg)** 1989 Jul;32(4):105–9 (Eng. Abstr.) (Ger)

[Xanthogranulomatous pyelonephritis in early childhood] Emhofer J, et al. **Padiatr Padol** 1989;24(2):141–7 (Eng. Abstr.) (Ger)

[Indications for proton spin tomography and computerized tomography in chest diagnoses] Dinkel E, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:327–34 (47 ref.) (Eng. Abstr.) (Ger)

[The differential diagnostic significance of computerized tomography–assisted brain biopsy within the scope of intensive care neurology] Harms L, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:103–6 (Ger)

[The prognostic value of brain stem auditory evoked potentials and CT findings in cerebrovascular and hypoxic coma conditions] Wagner A, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:56–9 (Ger)

[Prospective study of the late sequelae of electroconvulsive treatment] Krause P, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Sep;40(9):532–6 (Eng. Abstr.) (Ger)

[Brain structure and brain function in anorexia nervosa: a computerized tomography study] Krieg JC, et al. **Psychother Psychosom Med Psychol** 1989 Jul;39(7):256–9 (Eng. Abstr.) (Ger)

[Optimization of radiation planning using a combination of simulator and computed tomography] Kamprad F, et al. **Radiobiol Radiother (Berl)** 1988;29(4):449–54 (Eng. Abstr.) (Ger)

[Computed tomography in the diagnosis of isolated bone metastases and its influence in therapy planning] Rotte KH, et al. **Radiobiol Radiother (Berl)** 1989;30(2):107–12 (Eng. Abstr.) (Ger)

[Phantom studies to simulate the magnitude of factors influencing the analysis of the density of pulmonary nodules in computed tomography] Bickhardt J, et al. **Radiol Diagn (Berl)** 1988;29(6):817–25 (Eng. Abstr.) (Ger)

[CT arthrography and MR tomography—a study of the normal anatomy of the cruciate ligaments of the knee joint] Garz G, et al. **Radiol Diagn (Berl)** 1988;29(4):563–70 (Eng. Abstr.) (Ger)

[The place of computed tomography in osteology] Garz G, et al. **Radiol Diagn (Berl)** 1988;29(3):383–90 (Eng. Abstr.) (Ger)

[CT arthrography of the knee joint. A report of experiences with 175 computed tomographic studies of the cruciate ligaments] Garz G, et al. **Radiol Diagn (Berl)** 1988; 29(4):553–61 (Eng. Abstr.) (Ger)

[Experiences with CT–guided percutaneous drainage of pyogenic liver abscesses] Nagel B, et al. **Radiol Diagn (Berl)** 1989;30(1):5–12 (Eng. Abstr.) (Ger)

[The value of computed tomography for the pretherapeutic staging of esophageal cancer] Rotte KH, et al. **Radiol Diagn (Berl)** 1989;30(2):111–7 (Eng. Abstr.) (Ger)

[Study of the lymph nodes in the jaw and facial region and in the neck using computed tomography] Saratschev E. **Radiol Diagn (Berl)** 1988;29(3):417–22 (Eng. Abstr.) (Ger)

[Evaluation of the status of the regional lymph nodes in patients with bronchial carcinoma based on the diameter of the lymph nodes as measured in the computer tomogram] Schmidt M, et al. **Radiol Diagn (Berl)** 1988;29(6):827–33 (Eng. Abstr.) (Ger)

[NMR, CT and PET in brain tumors] Schober O, et al. **Radiol Diagn (Berl)** 1988;29(3):457–62 (Eng. Abstr.) (Ger)

[The MELAS syndrome. Computed tomographic documentation of its course and magnetic resonance tomography] Brühl K, et al. **Radiologe** 1988 Nov; 28(11):514–6 (Eng. Abstr.) (Ger)

[Computed tomographic diagnosis of diseases of the pituitary region] Flentje M, et al. **Radiologe** 1989 Jan;29(1):7–13 (53 ref.) (Eng. Abstr.) (Ger)

[CT diagnosis of malalignment following distal radius fracture] Frahm R, et al. **Radiologe** 1989 Feb;29(2):68–72 (Eng. Abstr.) (Ger)

[Predictive value of magnetic resonance tomography in comparison with sonography and computed tomography in the diagnosis of focal liver lesions] Hauenstein KH, et al. **Radiologe** 1988 Aug;28(8):362–9 (Eng. Abstr.) (Ger)

[Computerized tomography in the diagnosis of allergic bronchopulmonary aspergillosis] Kullnig P, et al. **Radiologe** 1989 May;29(5):228–31 (Eng. Abstr.) (Ger)

[CT and MRT following liver transplantation] Marincek B, et al. **Radiologe** 1988 Dec;28(12):544–8 (17 ref.) (Eng. Abstr.) (Ger)

[CT diagnosis of cystic hygroma] Stark P, et al. **Radiologe** 1989 Feb;29(2):82–4 (Eng. Abstr.) (Ger)

[Computed tomography of complications of cholecystitis] Wimmer B, et al. **Radiologe** 1989 Jul;29(7):349–53 (Eng. Abstr.) (Ger)

[Limitations of computed tomographic differential diagnosis of focal liver changes] Wimmer B, et al. **Radiologe** 1988 Aug;28(8):356–61 (16 ref.) (Eng. Abstr.) (Ger)

[CT morphology and clinical diagnosis of thoracic space–occupying lesions in patients under 40 years of age] Beyer–Enke SA, et al. **ROFO** 1989 Jun;150(6):674–9 (Eng. Abstr.) (Ger)

[Arterio–portal fistula in CT] Brandt J, et al. **ROFO** 1989 Mar;150(3):354–5 (Ger)

[Observations on the Camurati–Engelmann syndrome. Demonstration of changes of the petrous bone using high–resolution computed tomography] Dannenmaier B, et al. **ROFO** 1989 Aug;151(2):175–8 (Eng. Abstr.) (Ger)

[MR tomography following craniocerebral trauma: comparison with computed tomography, electroencephalography and neurologic status] Dewes W, et al. **ROFO** 1989 Mar;150(3):316–22 (Eng. Abstr.) (Ger)

[The bursa iliopectinea—a morphologic–computed tomographic study] Dihlmann W, et al. **ROFO** 1989 Mar; 150(3):274–9 (Eng. Abstr.) (Ger)

[Diagnosis of pelvic fractures: synoptic views of the pelvis versus CT] Dock W, et al. **ROFO** 1989 Mar;150(3):280–3

(Eng. Abstr.) (Ger)
[Computed tomography of a neurinoma of the gastric wall] Doringer E, et al. **ROFO** 1989 Aug;151(2):235–6 (Ger)
[Imaging diagnosis of aggressive fibromatosis and the MRT–pathological correlation] Duda S, et al. **ROFO** 1989 Jul;151(1):57–62 (Eng. Abstr.) (Ger)
[Nontraumatic myositis ossificans circumscripta in CT] Friedrich M, et al. **ROFO** 1989 Feb;150(2):225–7 (Ger)
[CT diagnosis of the postoperative mediastinal lymphocele] Gamroth A, et al. **ROFO** 1989 Mar;150(3):356–7 (Ger)
[Computed tomography and magnetic resonance tomography of the lower leg in chronic venous insufficiency] Gmelin E, et al. **ROFO** 1989 Jul;151(1):50–6 (Eng. Abstr.) (Ger)
[Computed tomographic findings in 36 patients with space-occupying lesions of the thymus] Görich J, et al. **ROFO** 1988 Nov;149(5):466–9 (Eng. Abstr.) (Ger)
[Computed tomographic findings in bronchial adenoma] Görich J, et al. **ROFO** 1989 Feb;150(2):147–50 (Eng. Abstr.) (Ger)
[Diagnosis of liver trauma: ultrasound versus computed tomography] Grabenwöger F, et al. **ROFO** 1989 Feb; 150(2):163–6 (16 ref.) (Eng. Abstr.) (Ger)
[Chemoembolization of hepatocellular carcinoma—computed tomographic follow-up observation] Grote R, et al. **ROFO** 1989 Jul;151(1):15–22 (Eng. Abstr.) (Ger)
[Pulmonary involvement in lymphangioleiomyomatosis: studies using high-resolution computed tomography] Guhl L. **ROFO** 1988 Dec;149(6):576–9 (Eng. Abstr.) (Ger)
[Computed tomography of the rotator cuff—a comparison with other imaging technics] Hanneschläger G, et al. **ROFO** 1989 Jun;150(6):643–9 (Eng. Abstr.) (Ger)
[MR tomography, CT and angiography of vascular malformations of the central nervous system] Harder T, et al. **ROFO** 1989 Feb;150(2):119–24 (Eng. Abstr.) (Ger)
[CT of tumorous lesions of the osseous pelvis] Heller M, et al. **ROFO** 1989 Apr;150(4):383–9 (Eng. Abstr.) (Ger)
[Computed tomographic detection of chemotherapy-induced thymus changes in patients with metastatic testicular tumors] Hendrickx P, et al. **ROFO** 1989 Mar;150(3):268–73 (Eng. Abstr.) (Ger)
[Potentials of high-resolution native computed tomography in meniscal diagnosis] König H, et al. **ROFO** 1989 Jan; 150(1):39–43 (Eng. Abstr.) (Ger)
[CT portography in malignant space-occupying lesions of the liver] Köster O, et al. **ROFO** 1989 Feb;150(2):156–62 (Eng. Abstr.) (Ger)
[Diagnostic evaluation of full x-ray pictures and computed tomography of bone tumors of the spine] Krahe T, et al. **ROFO** 1989 Jan;150(1):13–9 (Eng. Abstr.) (Ger)
[Conventional x-ray study and computed tomography in the diagnosis of orbital fractures] Langen HJ, et al. **ROFO** 1989 May;150(5):582–7 (Eng. Abstr.) (Ger)
[Computed tomography and conventional x-ray diagnosis of interstitial lung diseases] Leipner N, et al. **ROFO** 1988 Nov;149(5):458–65 (Eng. Abstr.) (Ger)
[The clinical value of computed tomography in the pretherapeutic T-staging of orofacial tumors] Lenz M, et al. **ROFO** 1989 Aug;151(2):138–44 (Eng. Abstr.) (Ger)
[Magnetic resonance tomography of the oral cavity, the oropharynx and the mouth floor: comparison with computed tomography] Lenz M, et al. **ROFO** 1989 Apr; 150(4):425–33 (Eng. Abstr.) (Ger)
[Retroperitoneal abscess: a complication following CT-guided fine needle biopsy] Lüning M, et al. **ROFO** 1989 Apr;150(4):485–6 (Ger)
[The value of non-contrast computed tomography in acute pancreatitis] Maier W. **ROFO** 1989 Apr;150(4):458–61 (Eng. Abstr.) (Ger)
[Quantitative computed tomographic flow measurements in aortocoronary venous bypass. I. Analysis of variance studies] Mühlberger V, et al. **ROFO** 1989 Aug;151(2):163–6 (Eng. Abstr.) (Ger)
[Computed tomographic studies of fracture healing] Nutz V, et al. **ROFO** 1988 Oct;149(4):396–401 (Eng. Abstr.) (Ger)
[Morphology of Paget's osteodystrophia deformans in the computed tomogram] Oesterreich FU, et al. **ROFO** 1988 Dec;149(6):603–8 (Eng. Abstr.) (Ger)
[MRT and CT of diaphragmatic lipomas] Reuther G, et al. **ROFO** 1989 Jun;150(6):691–3 (Eng. Abstr.) (Ger)
[The value of computed tomography in monitoring the preoperative chemotherapy of osteosarcoma] Rotte KH, et al. **ROFO** 1989 Jan;150(1):8–12 (Eng. Abstr.) (Ger)
[The value of CT in carcinoma of the lung apex] Schlolaut KH, et al. **ROFO** 1989 Feb;150(2):142–6 (Eng. Abstr.) (Ger)
[Psychomotor epilepsy—a comparison of CT and MR in 100 patients] Schörner W, et al. **ROFO** 1989 Aug;151(2):202–9 (Eng. Abstr.) (Ger)
[Spontaneous chylothorax: its diagnosis through a combination of lymphography and CT] Schumacher KA, et al. **ROFO** 1989 Jul;151(1):108–9 (Ger)
[CT before and after liver transplantation] Schurawitzki H, et al. **ROFO** 1988 Oct;149(4):349–53 (Eng. Abstr.) (Ger)
[CT detection of a spinal fistula following tumor resection] Sievers KW, et al. **ROFO** 1989 Mar;150(3):360 (Ger)
[CT staging of laryngeal carcinoma] Traxler M, et al. **ROFO** 1988 Nov;149(5):473–5 (Eng. Abstr.) (Ger)
[CT morphology of malignant schwannoma] Triebel HJ, et al. **ROFO** 1988 Oct;149(4):354–60 (Eng. Abstr.) (Ger)
[Computed tomography of the menisci] Wagner-Manslau C, et al. **ROFO** 1988 Oct;149(4):392–5 (Eng. Abstr.) (Ger)
[Diagnosis of postpartum complications using CT and MRT] Woerner H, et al. **ROFO** 1989 Aug;151(2):158–62 (Eng. Abstr.) (Ger)
[CT of the upper ankle joint. Anatomy—pathology] Ziegler VM, et al. **ROFO** 1989 May;150(5):588–91 (Eng. Abstr.) (Ger)
[Computed tomographic follow-up of cranio-cerebral injuries in children] Dietrich U, et al. **Rontgenblatter** 1989 Aug;42(8):330–5 (Eng. Abstr.) (Ger)
[Computerized tomography analysis of cement-free total hip endoprostheses] Frühwald F, et al. **Rontgenblatter** 1988 Aug;41(8):313–9 (Eng. Abstr.) (Ger)
[The influence of breathing technic on the visualization of lung metastases in computed tomography] Görich J, et al. **Rontgenblatter** 1989 Apr;42(4):170–1 (Eng. Abstr.) (Ger)
[Computed tomography and the clinical picture of suicidal CO poisoning] Grobovschek M, et al. **Rontgenblatter** 1988 Dec;41(12):497–503 (35 ref.) (Eng. Abstr.) (Ger)
[Heterotopia of the cerebral cortex: a comparison of CT and MRT] Hosten N, et al. **Rontgenblatter** 1989 Aug; 42(8):336–8 (Eng. Abstr.) (Ger)
[Bedside pictures and thorax-CT of intensive care patients] Jend HH, et al. **Rontgenblatter** 1989 Jul;42(7):296–301 (Eng. Abstr.) (Ger)
[Clinical and computed tomographic follow-up of conservatively treated disk prolapse] Köhler D, et al. **Rontgenblatter** 1989 Aug;42(8):346–51 (Eng. Abstr.) (Ger)
[A cerebral air embolism due to a central venous catheter in the computed tomogram] Neubauer N, et al. **Rontgenblatter** 1988 Nov;41(11):462–4 (Eng. Abstr.) (Ger)
[Computed tomography and conventional x-ray diagnosis of tumor bone lesions] Rieden K, et al. **Rontgenblatter** 1989 Jan;42(1):13–8 (Eng. Abstr.) (Ger)
[CT studies of the lung in opportunistic infections] Roos N, et al. **Rontgenblatter** 1989 Jul;42(7):302–6 (20 ref.) (Eng. Abstr.) (Ger)
[Malignant hemangiopericytoma in computed tomography] Roth J, et al. **Rontgenblatter** 1988 Dec;41(12):488–91 (Eng. Abstr.) (Ger)
[Diseases of the aerodigestive tract and of the soft tissues of the neck. Comparison of MRI and CT] Vogl T. **Rontgenblatter** 1989 May;42(5):199–209 (Eng. Abstr.) (Ger)
[Comparison of sonography of the soft tissues of the neck with computerized tomography and magnetic resonance] Westhofen M. **Rontgenblatter** 1989 May;42(5):210–5 (Eng. Abstr.) (Ger)
[A comparison of the quantified determination of the echogeneity of the liver by ultrasound and the density of the liver by CT] Zendel W, et al. **Rontgenblatter** 1989 Mar; 42(3):114–7 (Eng. Abstr.) (Ger)
[Comparison of 2 positive and 1 negative oral contrast media for abdominal CT diagnosis] Zwaan M, et al. **Rontgenblatter** 1989 May;42(5):219–23 (Eng. Abstr.) (Ger)
[Correlation of the perfusion of liver metastases in angio-CT and PET] Beyer-Enke SA, et al. **Rontgenpraxis** 1989 Mar; 42(3):84–8 (Ger)
[A negative oral intestinal contrast medium for abdominal computed tomography] Gmelin E, et al. **Rontgenpraxis** 1989 Jan;42(1):8–10 (Ger)
[Contrast enhancement of the upper gastrointestinal tract for computed tomography using a negative-density lipid emulsion] Schumacher KA, et al. **Rontgenpraxis** 1988 Oct; 41(10):358–60 (Ger)
[Typical cases of an inflammatory aortic aneurysm demonstrated by computed tomography] Wuttke V, et al. **Rontgenpraxis** 1989 Mar;42(3):81–3 (Ger)
[Computed tomography guided positioning of catheters for temperature measurement in hyperthermia of malignant tumors] Müller RD, et al. **Strahlenther Onkol** 1988 Oct; 164(10):593–601 (Eng. Abstr.) (Ger)
[Comparison of the value of magnetic resonance tomography and computerized tomography in the follow-up of augmentation-plasties with carbon fiber ligaments of the anterior cruciate ligament] Sim E, et al. **Unfallchirurgie** 1989 Jun;15(3):152–61 (Eng. Abstr.) (Ger)
[The clinical value of preoperative staging of bladder and prostatic cancers with nuclear magnetic resonance and computerized tomography] Beer M, et al. **Urologe [A]** 1989 Mar;28(2):65–9 (Eng. Abstr.) (Ger)
[Bilateral internal carotid artery occlusions: a clinical and computerized tomography follow-up study] Pohl P, et al. **Vasa Suppl** 1988;26:178–80 (Ger)
[Imaging procedures in gastroenterology. Conventional radiology and CT] Friedmann G. **Verh Dtsch Ges Inn Med** 1988;94:147–54 (Ger)
[Imaging of the pancreas by computerized tomography] Gerhard P, et al. **Verh Dtsch Ges Inn Med** 1988;94:89–100 (15 ref.) (Ger)
[The elderly patient with cerebrovascular insufficiency, a challenge for the internist. Diagnostic possibilities in the clinic] Heiss WD. **Verh Dtsch Ges Inn Med** 1988;94:246–54 (79 ref.) (Ger)
[Indications and significance of percutaneous abdominal sonography in comparison with computerized tomography] Otto RC. **Verh Dtsch Ges Inn Med** 1988;94:637–44 (17 ref.) (Ger)
[Confirmation power of computer tomography for suspected mediastinal tumors] Kriedemann E, et al. **Z Erkr Atmungsorgane** 1988;171(1):5–18 (Eng. Abstr.) (Ger)
[Status of computerized tomography for the diagnosis of diseases of the gallbladder and bile ducts] Blaschke U. **Z Gesamte Inn Med** 1989 Jul 1;44(13):383–7 (35 ref.) (Eng. Abstr.) (Ger)
[Quantifying mineralization processes in post-traumatic algodystrophy using computerized tomography densitometry] Krawzak HW, et al. **Z Orthop** 1989 Mar–Apr;127(2):202–6 (Eng. Abstr.) (Ger)
[CT in the surgical planning in tumorous processes of the sacrum] Schratter M, et al. **Z Orthop** 1989 Jan–Feb; 127(1):32–8 (Eng. Abstr.) (Ger)
[Determination of intramedullary extension of osteosarcomas using CT with special reference to the epiphyseal groove] Schurawitzki H, et al. **Z Orthop** 1989 May–Jun; 127(3):362–6 (Eng. Abstr.) (Ger)
[Fine needle biopsy of the pancreas with computerized tomography control] Hau T, et al. **Zentralbl Chir** 1988; 113(18):1185–9 (Eng. Abstr.) (Ger)
[Soft tissue diagnosis of the shoulder joint using sonography, computerized tomography and magnetic resonance tomography (MRT)] Mellerowicz H, et al. **Zentralbl Chir** 1989;114(4):209–21 (15 ref.) (Eng. Abstr.) (Ger)
[Diagnostic accuracy, sensitivity and specificity of computerized tomography in the staging of renal carcinoma] Noè C, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):89–92 (Eng. Abstr.) (Ita)
[Use of computerized tomography as a guide in thoracic needle biopsies] D'Auria S, et al. **Arch Monaldi Mal Torace** 1987 May–Jun;42(3):219–29 (Eng. Abstr.) (Ita)
[Diagnostic imaging in the evaluation of abdominal masses in childhood] Gualdi GF, et al. **Clin Ter** 1988 Feb 15; 124(3):227–31 (Ita)
[Traumatic pathology of the abdomen: the role of CT] Gualdi GF, et al. **Clin Ter** 1988 Aug 15;126(3):217–20 (Ita)
[Computerized tomography in the evaluation of serous effusions] Gualdi GF, et al. **Clin Ter** 1988 Aug 31; 126(4):277–9 (Ita)
[Evaluation of adipose tissue distribution: comparison of traditional anthropometry and CAT parameters] Branzi P, et al. **Medicina (Firenze)** 1988 Apr–Jun;8(2):187–90 (Eng. Abstr.) (Ita)
[Study of abdominal adipose tissue distribution using CAT in android type obesity] Corradini P, et al. **Medicina (Firenze)** 1988 Apr–Jun;8(2):182–3 (Eng. Abstr.) (Ita)
[Neglected closed chest injury and chylothorax. Importance of computerized axial tomography. Description of a clinical case] Tulli G, et al. **Minerva Anestesiol** 1987 Nov; 53(11):647–50 (Eng. Abstr.) (Ita)
[Role of computerized tomography in Poland syndrome] Genovese MG, et al. **Minerva Chir** 1989 May 15; 44(9):1375–7 (Eng. Abstr.) (Ita)
[Cerebral ischemic malacia. A retrospective study of CAT scan-documented cases] Bottoni P, et al. **Minerva Med** 1989 Feb;80(2):105–10 (Eng. Abstr.) (Ita)
[Preoperative staging of rectal cancer with computed tomography] Briccoli A, et al. **Minerva Med** 1989 Jul; 80(7):703–4 (Ita)
[CT and dysgenesis of the corpus callosum] Ghiorzi M, et al. **Minerva Pediatr** 1988 Oct;40(10):599–604 (Eng. Abstr.) (Ita)
[Intracranial lipoma. Diagnostic contribution of computerized tomography] Ghiorzi M, et al. **Minerva Pediatr** 1989 Mar;41(3):133–6 (Eng. Abstr.) (Ita)
[Comparative evaluation of echography and C.A.T. in diagnosing retinoblastoma] Nucci P, et al. **Minerva Pediatr** 1989 Mar;41(3):129–31 (Eng. Abstr.) (Ita)
[Pseudotumorous "skip area" in subtotal hepatic steatosis. Echographic and computed tomographic aspects] Alessi V, et al. **Radiol Med (Torino)** 1988 Oct;76(4):280–3 (Eng. Abstr.) (Ita)
[The vertebral venous plexus: its physiopathological aspects. A CT study in 2 patients with obstruction of the inferior vena cava] Bellelli A, et al. **Radiol Med (Torino)** 1989 May; 77(5):564–7 (Ita)
[Up-to-date computed tomographic findings on the para- and perirenal spaces under normal and pathologic conditions] Camerini E, et al. **Radiol Med (Torino)** 1988 Oct;76(4):284–8 (Eng. Abstr.) (Ita)
[The usefulness of computed tomography in studying Becker's muscular dystrophy. Apropos of a case] Campanile S, et al. **Radiol Med (Torino)** 1989 Apr; 77(4):418–9 (Ita)
[An original method in the axial radiological study of the femoro-patellar joint in the orthostatic active phase] Casagrande G. **Radiol Med (Torino)** 1989 Jun;77(6):689–90 (Ita)
[MR vs CT: which is the diagnostic advantage in neuroradiology] Cirillo S, et al. **Radiol Med (Torino)** 1988 Nov;76(5):390–8 (Eng. Abstr.) (Ita)
[Diagnostic imaging of renal tumors of small dimensions] Dalla Palma L, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):590–6 (Eng. Abstr.) (Ita)
[The Angelchik prosthesis. A computed tomography study] Fargnoli R, et al. **Radiol Med (Torino)** 1989 May;

77(5):482–4 (Eng. Abstr.) (Ita)
[Hemorrhagic lymph node metastasis from testicular carcinoma. The echo–CT–MR correlations] Ferrozzi F, et al. **Radiol Med (Torino)** 1989 Mar;77(3):283–5 (Ita)
[Computed tomography and anorectal malformations. Their postoperative evaluation] Fondelli P, et al. **Radiol Med (Torino)** 1989 Apr;77(4):361–4 (Eng. Abstr.) (Ita)
[Carcinomatous neuropathy in recurrent rectal carcinoma. The results of radiotherapy and the role of CT] Gaeta M, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):89–93 (Eng. Abstr.) (Ita)
[Evaluation of the usefulness of ultrasonics in the diagnosis of cancerous cirrhosis. Comparison with CT] Garretti L, et al. **Radiol Med (Torino)** 1988 Sep;76(3):187–92 (Eng. Abstr.) (Ita)
[Diagnostic value of CT in an unusual case of multiple myeloma] Gozzi G, et al. **Radiol Med (Torino)** 1988 Sep; 76(3):221–3 (Ita)
[Evaluation of parietal infiltration in carcinoma of the bladder: comparison of MR imaging, CT and histology] Gualdi GF, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):604–9 (Eng. Abstr.) (Ita)
[Vertebral monostotic histiocytosis-X with intraspinal spread. Usefulness of CT] Gugliantini P, et al. **Radiol Med (Torino)** 1989 Jun;77(6):697–700 (Ita)
[Monostotic fibrous dysplasia of the temporal bone. Diagnostic usefulness of computed tomography] Gugliantini P, et al. **Radiol Med (Torino)** 1989 Apr; 77(4):413–5 (Eng. Abstr.) (Ita)
[CT and MR compared in the study of hypophysis] Juliani G, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):51–64 (Eng. Abstr.) (Ita)
[CT in the study of the thymus] Juliani G, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):11–7 (Ita)
[Role of CT and US in the diagnosis of myelolipoma of the adrenal glands] Lamorgese B. **Radiol Med (Torino)** 1989 Jun;77(6):668–71 (Eng. Abstr.) (Ita)
[Traumatic hematomas of the adrenal glands: CT and US findings in 3 cases] Liessi G, et al. **Radiol Med (Torino)** 1988 Dec;76(6):610–3 (Eng. Abstr.) (Ita)
[Early diagnosis of cerebral infarct. Hyperdensity of the middle cerebral artery as the first CT sign of an ischemic lesion] Lutman M. **Radiol Med (Torino)** 1989 Mar; 77(3):171–3 (Eng. Abstr.) (Ita)
[Spontaneous hematoma during anticoagulant therapy. Usefulness of CT] Lutman M, et al. **Radiol Med (Torino)** 1988 Dec;76(6):644–6 (Ita)
[Longitudinal stress fracture of the tibia. CT diagnosis] Mazzonetto M, et al. **Radiol Med (Torino)** 1989 Apr; 77(4):411–2 (Ita)
[High resolution computerized tomography in the study of traumatic pathology of the temporal bone] Monti C, et al. **Radiol Med (Torino)** 1988 Sep;76(3):158–63 (Eng. Abstr.) (Ita)
[Malignant hemangioendothelioma.The CT and ultrasonographic aspects of a case located retroperitoneally] Nardi P, et al. **Radiol Med (Torino)** 1989 Mar;77(3):287–9 (Ita)
[Computed tomography of the pterygopalatine fossa. Normal anatomy and neoplastic pathology] Pandolfo I, et al. **Radiol Med (Torino)** 1988 Oct;76(4):340–6 (Ita)
[Abdominal aortic aneurysms. Comparison of magnetic resonance, ultrasound, CT x-ray and angiography] Pavone P, et al. **Radiol Med (Torino)** 1988 Sep;76(3):168–73 (Eng. Abstr.) (Ita)
[Colloid cysts of the third ventricle. Description of 3 cases diagnosed by CT] Querin F, et al. **Radiol Med (Torino)** 1988 Dec;76(6):625–8 (Ita)
[Pancreatic cystic neoplasms. Echographic–CT aspects and differential diagnosis] Rossi A, et al. **Radiol Med (Torino)** 1988 Nov;76(5):425–33 (Eng. Abstr.) (Ita)
[A comparison of scintigraphy with radioiodinated MIBG and CT in localizing pheochromocytomas] Rufini V, et al. **Radiol Med (Torino)** 1988 Nov;76(5):466–70 (Eng. Abstr.) (Ita)
[ERCP in the diagnosis of bilio-pancreatic pathology. Comparison with echography and CT] Scarabino T, et al. **Radiol Med (Torino)** 1989 Jun;77(6):650–4 (Eng. Abstr.) (Ita)
[Computed tomography and anorectal malformations. Their preoperative evaluation] Taccone A, et al. **Radiol Med (Torino)** 1989 Apr;77(4):356–60 (Eng. Abstr.) (Ita)
[Value and limits of CT in the preoperative assessment of primary malignant tumors of bone. Observations in 138 cases] Torricelli P, et al. **Radiol Med (Torino)** 1989 Jan–Feb; 77(1–2):73–9 (Eng. Abstr.) (Ita)
[Papillary nephrocarcinoma: radiographic and echographic aspects] Veneziano S, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):584–9 (Eng. Abstr.) (Ita)
[Double pseudoaneurysm of the left ventricle. The diagnostic value of computed tomography] Villa A, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):128–31 (Ita)
[CT assessment of encephalic and suprarenal spread of "operable" pulmonary neoplasms. Preliminary results] Volterrani L, et al. **Radiol Med (Torino)** 1989 Apr; 77(4):354–5 (Eng. Abstr.) (Ita)
[Hemorrhagic aneurysm of the celiac trunk. Diagnosis by ultrasound, CT and angiography] Ziviello M, et al. **Radiol Med (Torino)** 1988 Oct;76(4):274–9 (Eng. Abstr.) (Ita)
[Clinical application of dynamic CT] Endow M, et al. **Gan No Rinsho** 1989 Apr;35(5):597–604 (Eng. Abstr.) (Jpn)
[Conventional X-ray and CT diagnosis of lung cancer] Kono M, et al. **Gan No Rinsho** 1988 Aug;34(10):1349–67 (Eng. Abstr.) (Jpn)
[Differential diagnosis of the early cancer: imaging diagnosis "CT"] Tada S, et al. **Gan No Rinsho** 1988 Aug; 34(10):1223–6 (Eng. Abstr.) (Jpn)
[The accuracy of CT and tumor markers in the detection of a recurrent ovarian carcinoma] Wakabayashi Y, et al. **Gan No Rinsho** 1989 Sep;35(10):1127–31 (Eng. Abstr.) (Jpn)
[Gas shadow on CT scan following treatment in metastatic brain tumor—an autopsy case] Shimura T, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2999–3002 (Eng. Abstr.) (Jpn)
[Angiomyolipoma: diagnosed preoperatively as renal cell carcinoma by CT scan] Uemura H, et al. **Hinyokika Kiyo** 1989 Apr;35(4):643–6 (Eng. Abstr.) (Jpn)
[Skin incision simulation at cerebral surgery planning system by using CT 3D images] Jin XY, et al. **Iyodenshi To Seitai Kogaku** 1988 Dec;26(4):231–4 (Eng. Abstr.) (Jpn)
[Myocardial perfusion assessed by dynamic computed tomography before and after percutaneous transluminal coronary angioplasty] Mori T, et al. **J Cardiol** 1987 Dec; 17(4):691–8 (Eng. Abstr.) (Jpn)
[Comparison of X-ray CT and MRI in the diagnosis of cardiovascular disease] Masuda Y. **Kokyu To Junkan** 1989 Feb;37(2):173–8 (Jpn)
[Serial computed tomography of metastatic brain tumors before and after radiation therapy: correlation between changes in CT images and prognosis] Inatsuki S. **Nippon Gan Chiryo Gakkai Shi** 1988 Jun 20;23(6):1315–22 (Eng. Abstr.) (Jpn)
[Significance of lipiodol–CT in the evaluation of therapeutic effects of Lp-TAE for hepatocellular carcinoma—clinicopathologic study] Jinno K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1660–71 (Eng. Abstr.) (Jpn)
[X-ray computed tomography in the post-treatment evaluation of carcinoma of the cervix] Kobayashi H. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2679–86 (Eng. Abstr.) (Jpn)
[Diagnostic value of computed tomography for the detection of invasion of the caudate bile duct branch in carcinoma of the hepatic hilum] Nagino M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):889–97 (Eng. Abstr.) (Jpn)
[Analyses of renal trauma by using CT scan] Imai T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec; 79(12):1996–2001 (Eng. Abstr.) (Jpn)
[Accuracy of computed tomography in the staging of renal cell carcinoma] Masuda F, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):192–6 (Eng. Abstr.) (Jpn)
[A case report of renal cancer detected unexpectedly by X-ray CT during observations in the clinical course of cervical carcinoma] Mikata N, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):596–601 (Eng. Abstr.) (Jpn)
[The value of computed tomography in acute pyelonephritis] Tsugaya M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):841–6 (Eng. Abstr.) (Jpn)
[Evaluation of clinical efficacy of transrectal sonography and computed tomography for prostatic diseases] Watanabe H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul; 79(7):1202–9 (Eng. Abstr.) (Jpn)
[Optimal projection of the cervical arteries in IV-DSA—appraisal of the overlapping vessels by CT] Hashimoto T. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25;48(6):670–9 (Eng. Abstr.) (Jpn)
[On the computed tomographic diagnosis of pulmonary nodules] Higashi Y. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25; 48(12):1483–96 (Eng. Abstr.) (Jpn)
[A new contrast material for CT of the liver and spleen. Iodinated oil emulsified by a non-ionic contrast material] Hori S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25;48(12):1503–10 (Eng. Abstr.) (Jpn)
[The role of computed tomography in blunt hepatic injury] Kaji T. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25;48(9):1123–32 (Eng. Abstr.) (Jpn)
[Computed tomography in the diagnosis of lumbar disk herniation with eroded bony cortex] Kubo K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25; 48(12):1515–22 (Eng. Abstr.) (Jpn)
[CT diagnosis of synchronous multiple primary lung carcinomas] Kuriyama K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):687–93 (Eng. Abstr.) (Jpn)
[Thin-section computed tomography of intrapulmonary metastases after surgical resection of lung cancer] Kuriyama K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25; 49(1):48–54 (Eng. Abstr.) (Jpn)
[Digital tomosynthesis using a 35 mm X-ray cinematogram during an isocentric rotational motion] Maeda H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1451–8 (Eng. Abstr.) (Jpn)
[Clinical evaluation of CT discography in the diagnosis of lumbar disc herniation] Maehara T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1317–25 (Eng. Abstr.) (Jpn)
[CT anatomy of para-caval portion of the caudate lobe of the liver] Matsui O, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):841–6 (Eng. Abstr.) (Jpn)
[CT evaluation of mass lesions in the parotid region] Matsumoto S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):661–9 (Eng. Abstr.) (Jpn)
[CT images of lipomatosis of the ileocecal valve] Mitani T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):955–60 (Eng. Abstr.) (Jpn)
[The limitations of plain chest radiography and the role of computed tomography in diagnosis of traumatic mediastinal hematoma] Nakajima Y. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):961–71 (Eng. Abstr.) (Jpn)
[Improved contrast enhancement with a positive pressure drip infusion method and 350 mg I/ml high concentration contrast media in routine contrast enhanced CT] Okuhata Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25;49(1):35–41 (Eng. Abstr.) (Jpn)
[The role of CT in myocardial infarction: comparison with echocardiography and thallium myocardial scintigraphy] Oyama Y. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25;48(9):1086–96 (Eng. Abstr.) (Jpn)
[A case of rapidly-enlarging multiple giant hepatic cysts—CT analysis and a discussion of the literature] Shimada M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25; 48(12):1511–4 (5 ref.) (Eng. Abstr.) (Jpn)
[Magnetic resonance imaging of post massive hepatic necrosis—a comparison of CT and histologic findings] Ueno E. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25;48(11):1406–17 (Eng. Abstr.) (Jpn)
[Percutaneous biopsy and drainage guided by computed tomography] Yamada T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):694–701 (Eng. Abstr.) (Jpn)
[Clinical efficacy of a new barium sulfate for abdominal CT] Yamada T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25;48(11):1381–90 (Eng. Abstr.) (Jpn)
[Superstructure of stapes: an analysis by high-resolution computed tomography] Horiuchi Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Mar;92(3):383–9 (Eng. Abstr.) (Jpn)
[The experimental study of sinal wall thickening on CT] Kase Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug; 91(8):1213–9 (Eng. Abstr.) (Jpn)
[Clinical usefulness of X-ray CT for diagnosis of emphysema as demonstrated by correlation with lung function and selective alveolobronchography] Nakano H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):602–11 (Eng. Abstr.) (Jpn)
[The usefulness of computed tomography in distinguishing between asthma with irreversible air-flow limitation and pulmonary emphysema] Taniguchi H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):493–8 (Eng. Abstr.) (Jpn)
[Symposium on diagnosis and treatment of cancer. Recent progress. I. Diagnosis 2. Imaging diagnosis. (1) Ultrasonography and computed tomography] Fukuda M. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1646–50 (19 ref.) (Jpn)
[Diagnosis of Alzheimer's disease with CT X-ray] Konno T, et al. **Nippon Rinsho** 1988 Jul;46(7):1550–4 (Jpn)
[Recent advances of positron emission tomography and CT scan for the diagnosis of early cancer] Kubota K, et al. **Nippon Rinsho** 1989 May;47(5):1037–43 (Jpn)
[Computed tomographic (CT) study of the brains of 357 elderly demented patients—clinical usefulness of CT measurements of brain atrophy and its correlation with mental assessment] Kono K, et al. **Nippon Ronen Igakkai Zasshi** 1988 May;25(3):273–81 (Eng. Abstr.) (Jpn)
[Roentgenological analysis of sternocostoclavicular hyperostosis by computed tomography] Shimizu T, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):18–24 (Eng. Abstr.) (Jpn)
[Unruptured cerebral aneurysms in two siblings screened by cerebral computed angiotomography] Kunishio K, et al. **No Shinkei Geka** 1988 Oct;16(11):1267–71 (Eng. Abstr.) (Jpn)
[Cerebral ischemia (1)—Reversibility of ischemic lesion and CT findings] Ujiie H, et al. **No Shinkei Geka** 1988 Aug; 16(9):1023–8 (Eng. Abstr.) (Jpn)
[A comparison of serial MRI with X-ray CT in a patient with Reye-like syndrome] Fujii Y, et al. **No To Hattatsu** 1988;20(5):379–84 (Eng. Abstr.) (Jpn)
[A case of acute disseminated encephalomyelitis with convulsion, gait disturbance, facial palsy and multifocal CT lesions] Nagano T, et al. **No To Hattatsu** 1988 Jul; 20(4):325–9 (Eng. Abstr.) (Jpn)
[Intracranial physiological calcification on computed tomography (Part 2): Calcification in the choroid plexus of the lateral ventricles] Kwak R, et al. **No To Shinkei** 1988 Aug;40(8):707–11 (Eng. Abstr.) (Jpn)
[Cases similar to cerebrovascular moyamoya

disease—investigation by angiography and computed tomography] Tomura N, et al. **No To Shinkei** 1988 Oct; 40(10):905–12 (Eng. Abstr.) (Jpn)

[A case of pituitary apoplexy presented with a niveau formation on computed tomography] Asari S, et al. **Rinsho Hoshasen** 1988 Aug;33(8):905–6 (Eng. Abstr.) (Jpn)

[Computed tomography of retroperitoneal hematoma caused by anticoagulation therapy—report of a case] Hihara T, et al. **Rinsho Hoshasen** 1988 Aug;33(8):943–5 (Eng. Abstr.) (Jpn)

[Plain abdominal film after contrast-enhanced CT; re-evaluation by using iohexol] Ishii C, et al. **Rinsho Hoshasen** 1989 May;34(5):599–604 (Eng. Abstr.) (Jpn)

[Ultrasound and radiological diagnosis of primary splenic tumors] Iwasaki M, et al. **Rinsho Hoshasen** 1988 Jun; 33(6):673–8 (Eng. Abstr.) (Jpn)

[CT in pontine hemorrhage—correlation to clinical feature] Iwasaki Y, et al. **Rinsho Hoshasen** 1988 Jul;33(7):757–60 (Eng. Abstr.) (Jpn)

[CT appearance of uterine adenomyosis] **Katsumata Y**, et al. **Rinsho Hoshasen** 1989 Feb;34(2):227–32 (Eng. Abstr.) (Jpn)

[Useful CT findings in a case of idiopathic perforation of the descending colon] Konishi H, et al. **Rinsho Hoshasen** 1989 May;34(5):629–32 (Eng. Abstr.) (Jpn)

[A case of allergic bronchopulmonary aspergillosis followed up by high resolution X-CT] Miyamoto T, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1019–22 (Eng. Abstr.) (Jpn)

[CT findings of bronchiolo-alveolar carcinoma with special reference to the lucencies within abnormal shadows] Mori Y, et al. **Rinsho Hoshasen** 1989 Jan;34(1):85–90 (Eng. Abstr.) (Jpn)

[Usefulness and limitation of computed tomography in the diagnosis of rectal cancer] Muramatsu Y. **Rinsho Hoshasen** 1989 May;34(5):563–71 (Eng. Abstr.) (Jpn)

[A case of gastric lipoma diagnosed with CT scan] Nakayama M, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1023–6 (19 ref.) (Eng. Abstr.) (Jpn)

[A case of focal fatty liver difficult to distinguish from the liver metastasis of rectal cancer on CT] Nishimoto H, et al. **Rinsho Hoshasen** 1989 Mar;34(3):367–70 (Eng. Abstr.) (Jpn)

[Pharmacodynamic effects of ionic and non-ionic contrast media] Sako M, et al. **Rinsho Hoshasen** 1988 Jul; 33(7):797–800 (Eng. Abstr.) (Jpn)

[Computed tomography of the prostate gland; evaluation by CT score method] Shiina T, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1107–13 (Eng. Abstr.) (Jpn)

[Ring enhancement on CT scan associated with the local ACNU administration therapy following glioblastoma surgery] Shoin K, et al. **Rinsho Hoshasen** 1988 Jul; 33(7):825–8 (Eng. Abstr.) (Jpn)

[The anatomy and pathology of the brain stem demonstrated by thin slice CT cisternography] Takada Y, et al. **Rinsho Hoshasen** 1989 Feb;34(2):199–204 (Eng. Abstr.) (Jpn)

[High resolution computed tomography of diffuse interstitial pneumonia during treatment] Takahashi M, et al. **Rinsho Hoshasen** 1989 Jan;34(1):115–25 (Eng. Abstr.) (Jpn)

[Computed tomography of intraspinal ganglion cysts and synovial cysts: our cases and review of the literature] Terae S, et al. **Rinsho Hoshasen** 1988 Jun;33(6):691–6 (24 ref.) (Eng. Abstr.) (Jpn)

[Computed tomographic evaluation of metastatic and primary ovarian tumors] Wakabayashi Y, et al. **Rinsho Hoshasen** 1988 Aug;33(8):885–8 (Eng. Abstr.) (Jpn)

[Acute spinal epidural hematoma in MRI–CT, following continuous epidural anesthesia with spontaneous recovery] Yoshida T, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):226–9 (Eng. Abstr.) (Jpn)

[Cerebral computed tomography and schizophrenia: a critical review of the literature] Von Krakauer Hübner C, et al. **Arq Neuropsiquiatr** 1988 Sep;46(3):320–9 (96 ref.) (Eng. Abstr.) (Por)

[Computerized tomography in the evaluation of abdominal involvement in paracoccidioidomycosis] Martinez R, et al. **Rev Soc Bras Med Trop** 1988 Apr–Jun;21(2):47–50 (Eng. Abstr.) (Por)

[Computed tomography in a study to localize aphasic symptoms] Drăgoescu ID. **Rev Med Interna [Neurol Psihiatr]** 1988 Jan–Mar;33(1):11–6 (Eng. Abstr.) (Rum)

[Treatment of multiple pyogenic abscesses of the liver by drainage under computed tomography control] Todua FI, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):112–3 (Rus)

[Diagnostic and therapeutic manipulations under computed tomographic control] Uchikov P, et al. **Khirurgiia (Sofiia)** 1988;41(3):36–8 (Eng. Abstr.) (Rus)

[Use of computed tomography in the diagnosis of acute and chronic pancreatitis] Aliev RM, et al. **Klin Khir** 1988; (11):21–4 (Eng. Abstr.) (Rus)

[Diagnostic potentials of computed tomography in cardiology] Rabkin IKh, et al. **Klin Med (Mosk)** 1988 Sep; 66(9):44–51 (Eng. Abstr.) (Rus)

[Ways of improving the diagnosis and treatment of brain diseases under the control of computerized tomography] Viazitskiĭ PO, et al. **Klin Med (Mosk)** 1989 Jan;67(1):55–8 (Rus)

[Computed tomography in pre-irradiation topometry applied to diseases of the thoracic organs] Kostylev VA, et al. **Med Radiol (Mosk)** 1988 Dec;33(12):49–52 (Eng. Abstr.) (Rus)

[Computed tomography in the diagnosis of chronic osteomyelitis] Todua FI, et al. **Sov Med** 1988;(6):35–9 (Eng. Abstr.) (Rus)

[Computerized tomography in aortic aneurysms] Todua FI, et al. **Sov Med** 1989;(3):39–43 (Eng. Abstr.) (Rus)

[Computed tomography in the diagnosis of cystic formations of the mandible] Rud'ko VF, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):18–20 (Eng. Abstr.) (Rus)

[Computerized tomography in anophthalmic syndrome] Gundarova RA, et al. **Vestn Oftalmol** 1989 May–Jun; 105(3):46–9 (Eng. Abstr.) (Rus)

[Correlations between clinico-functional and computerized tomography parameters in patients with optic atrophy of diverse etiology] Linnik LF, et al. **Vestn Oftalmol** 1989 May–Jun;105(3):53–5 (Eng. Abstr.) (Rus)

[Scleroplasty results in progressive myopia as viewed by computed tomography] Shamkhalova ESh, et al. **Vestn Oftalmol** 1988 Nov–Dec;104(6):29–32 (Eng. Abstr.) (Rus)

[Computed tomography in the x-ray diagnosis of pneumonia] Degtiareva IA, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb; (1):8–14 (Eng. Abstr.) (Rus)

[Computed tomography in the Multidisciplinary Science and Technology Complex "Eye Microsurgery"] Fedorov SN, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):57–9 (Eng. Abstr.) (Rus)

[X-ray and computed tomographic diagnosis of aneurysm of the thoracic aorta] Grishkevich AM, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):73–7 (Eng. Abstr.) (Rus)

[A comparative evaluation of the results of classical x-ray study and computed tomography in patients with exogenous allergic alveolitis] Khomenko AG, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):14–9 (Eng. Abstr.) (Rus)

[Computed tomography of the lungs in patients with spontaneous pneumothorax] Kishkovskiĭ AN, et al. **Vestn Rentgenol Radiol** 1988 May–Jun;(3):10–5 (Eng. Abstr.) (Rus)

[Roentgen semiotics of osteochondrosis: new signs and a comparative analysis of the informativeness of traditional methodologies and computed tomography] Kishkovskiĭ AN, et al. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):48–53 (Eng. Abstr.) (Rus)

[Computed tomography of idiopathic fibrosing alveolitis (Hamman–Rich syndrome)] Kitaev VV, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):82–4 (Rus)

[Potentialities of x-ray computed tomography in the evaluation of the spread of esophageal tumors] Luk'ianchenko AB, et al. **Vestn Rentgenol Radiol** 1988 Sep–Oct;(5):11–9 (Eng. Abstr.) (Rus)

[X-ray computed tomographic anatomy of the diaphragm] Rabkin IKh, et al. **Vestn Rentgenol Radiol** 1989 Mar–Apr; (2):5–8 (Eng. Abstr.) (Rus)

[Computed tomographic anatomy of the kidneys and the retroperitoneal space] Savchenko AP, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):77–81 (Eng. Abstr.) (Rus)

[Computed tomography in the diagnosis of bullous diseases of the lungs] Todua FI, et al. **Vestn Rentgenol Radiol** 1988 May–Jun;(3):15–8 (Eng. Abstr.) (Rus)

[Computed tomographic diagnosis of cancer of the gallbladder] Todua FI, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):44–52 (Eng. Abstr.) (Rus)

[Use of puncture biopsy under computed tomographic control] Dmitriev AE, et al. **Voen Med Zh** 1988 Sep;(9):32 (Rus)

[Diagnosis of injuries and diseases of the temporal bone by using computed tomography] Kishkovskiĭ AN, et al. **Voen Med Zh** 1988 Dec;(12):29–31 (Rus)

[Macrostructural analysis of peripheral lung cancer by computed tomography] Rabkin IKh, et al. **Vopr Onkol** 1989;35(4):423–8 (Eng. Abstr.) (Rus)

[Computed tomography in the diagnosis of and tactics of treating abscesses of the brain] Blagoveshchenskaia NS, et al. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):25–7 (Eng. Abstr.) (Rus)

[Evaluation of treatment results in glioma using computed tomography] Kruminia GA. **Zh Vopr Neirokhir** 1988 Nov–Dec;(6):12–20 (Eng. Abstr.) (Rus)

[Computerized tomography and ultrasound in the early diagnosis of brain damage] Bešenski N, et al. **Acta Med Iugosl** 1989;43(1):27–45 (Eng. Abstr.) (Scr)

[Computerized tomography in the analysis of ischemic brain edema] Papa J, et al. **Acta Med Iugosl** 1988;42(3):157–64 (Eng. Abstr.) (Scr)

[The advantages, possibilities and limitations of computerized tomography of the lungs, pleura and thoracic wall] Ašiku V, et al. **Med Pregl** 1988;41(9–10):399–405 (Eng. Abstr.) (Scr)

[Advantages, possibilities and limitations of computer tomography of the mediastinum] Dedić M, et al. **Med Pregl** 1988;41(7–8):313–8 (Eng. Abstr.) (Scr)

[Comparison of CT and MRI findings in the diagnosis of cerebral complications in AIDS] Kulić S, et al. **Neurologija** 1987;36(1–4):29–40 (Eng. Abstr.) (Scr)

[Combination of computer tomography and stereotaxic technic in the diagnosis and therapy of brain tumors] Sramka M, et al. **Bratisl Lek Listy** 1988 Aug;89(8):591–5 (Eng. Abstr.) (Slo)

[Personal experience with computerized tomography in the diagnosis of orbital changes] Kol'ceková O, et al. **Cesk Oftalmol** 1988 Jul;44(4):263–7 (Eng. Abstr.) (Slo)

[Percutaneous puncture and drainage of abdominal abscesses using computerized tomography] Cársky S, et al. **Rozhl Chir** 1988 Jul;67(7):505–9 (Eng. Abstr.) (Slo)

[Personal experience with high-resolution computer tomography in the diagnosis of diseases of the auditory organs] Bofuta P, et al. **Sb Ved Pr Lek Fak Karlovy University Hradci Kralove Suppl** 1987;30(2):91–7 (Eng. Abstr.) (Slo)

[Secondary effects of prophylactic nervous system treatment in childhood ALL. Diagnostic and prognostic evaluation using cranial CAT scans] Indiano JM, et al. **An Esp Pediatr** 1988 Oct;29 Suppl 34:48–51 (Spa)

[Computerized tomography in pediatric oncology] Lucaya J, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 32:87–8 (Spa)

[Effects of the use of cranial radiotherapy. Findings obtained by computerized axial tomography and intellectual function tests] Moro Bayón C, et al. **An Esp Pediatr** 1988 May; 28(5):441–4 (Eng. Abstr.) (Spa)

[CAT in hepatorenal polycystosis in the adult] Gironella Coll J, et al. **Arch Esp Urol** 1988 Nov–Dec;41(9):877–9 (Eng. Abstr.) (Spa)

[Tuberculous encephalopathy. Presentation of a case and characteristics on brain computerized axial tomography] Alarcón Egas F, et al. **Arch Neurobiol (Madr)** 1988 Jul–Aug;51(4):213–5 (Eng. Abstr.) (Spa)

[Comparison of computed tomography and ultrasonic studies of the brain in newborns and infants. Correlation in 40 cases] Robledo AE, et al. **Bol Med Hosp Infant Mex** 1989 Feb;46(2):106–12 (Eng. Abstr.) (Spa)

[Computerized axial tomography in the study of bone mass. Analysis of its reproducibility (letter)] Diez Pérez A, et al. **Med Clin (Barc)** 1989 Apr 8;92(13):518 (Spa)

[Computerized axial tomography in the study of bone mass. Analysis of reproducibility] Farrerons J, et al. **Med Clin (Barc)** 1988 Oct 1;91(10):361–4 (Eng. Abstr.) (Spa)

[Computerized pneumoencephalographic cysternography in the diagnosis of acoustic neurinoma] Meli FJ, et al. **Medicina (B Aires)** 1988;48(1):12–6 (Eng. Abstr.) (Spa)

[Emphysematous cholecystitis. Contribution of computerized axial tomography to its diagnosis. Apropos of a case (letter)] de Juan Burgueño F, et al. **Rev Clin Esp** 1988 May; 182(8):446–7 (Spa)

[Computerized tomography findings in annular pancreas in an adult] Rovira A, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):695–7 (Eng. Abstr.) (Spa)

[Contribution of computerized tomography in pneumatosis intestinalis] Sánchez Corral JA, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):470–2 (Eng. Abstr.) (Spa)

[Evaluation of ultrasound and computerized tomography in jaundice. Prospective study of 68 patients] Stoopen ME, et al. **Rev Gastroenterol Mex** 1988 Oct–Dec;53(4):243–50 (Eng. Abstr.) (Spa)

[Large adrenal tumor visualized by computed tomography: experience with 8 cases] Fardella C, et al. **Rev Med Chil** 1988 Aug;116(8):751–5 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

CT air meatography: review of side effects in 60 patients. Smith IM, et al. **J Laryngol Otol** 1989 Feb;103(2):173–4

[Nursing care of patients with allergic shock caused by intensive CT] Du Y. **Chung Hua Hu Li Tsa Chih** 1988 Aug;23(8):457–8 (Chi)

ECONOMICS

Cost-effectiveness of CT scanning compared with mediastinoscopy in the preoperative staging of lung cancer. Eddy RJ. **Can Assoc Radiol J** 1989 Aug;40(4):189–93

[Cost–benefit analysis of thoracic computerized tomography as exemplified in the N-staging of bronchial carcinoma] Keller R, et al. **Schweiz Med Wochenschr** 1988 Sep 24; 118(38):1366–70 (Eng. Abstr.) (Ger)

HISTORY

Contrast agents used for myelography: an historical perspective. Lemansky E. **Radiol Technol** 1989 Jul–Aug; 60(6):489–96

INSTRUMENTATION

CT-guided "real time" stereotaxy. Reinhardt HF, et al. **Acta Neurochir Suppl (Wien)** 1989;46:107–8

The stereotactic operating microscope: accuracy refinement and clinical experience. Roberts DW, et al. **Acta Neurochir Suppl (Wien)** 1989;46:112–4

Transposition of image-defined trajectories into arc–quadrant centered stereotactic systems. Zamorano L, et al. **Acta Neurochir Suppl (Wien)** 1989;46:109–11

Technique for cranial CT scanning of excessively obese patients. Finch IJ, et al. **AJNR** 1989 Mar–Apr;10(2):434

A comparison of the radiation dose to the lens of the eye from four modern C.T. scanners. Sim LH, et al. **Australas Phys Eng Sci Med** 1988 Apr–Jun;11(2):76–80

A slice width and focal spot alignment camera for computed tomographic scanners. Mott DJ. **Br J Radiol** 1988 Dec; 61(732):1175–6

Ultrafast cardiac CT scanning. Rumberger JA, et al. **Cardiol Clin** 1989 Aug;7(3):713–34 (49 ref.)

CT–assisted chemonucleolysis. Stadnik TW, et al. **Eur J Radiol** 1988 Nov;8(4):249–52

Electrode models for electric current computed tomography. Cheng KS, et al. **IEEE Trans Biomed Eng** 1989 Sep; 36(9):918–24

Modern stereotactic neurosurgery. Cozzens JW, et al. **IMJ** 1988 Aug;174(2):89–92

Ultrafast (cine) CT scanner—new frontier in CT scanning? Van Hove JE, et al. **Indiana Med** 1988 Jul;81(7):630–4

Linearity and contrast scale control in computed tomography. Nosil J, et al. **Med Phys** 1989 Jan–Feb; 16(1):110–3

Practical co–table for direct coronal CT scanning. Zieger A, et al. **Neurosurg Rev** 1989;12(1):51–3

Measurement of absolute energy spectra from a clinical CT machine under working conditions using a Compton spectrometer. Matscheko G, et al. **Phys Med Biol** 1989 Feb; 34(2):209–22

[CAS (computer assisted surgery). A new procedure in head and neck surgery] Schlöndorff G, et al. **HNO** 1989 May; 37(5):187–90 (Eng. Abstr.) **(Ger)**

[A field study to determine dosages in computed tomography] Panzer W, et al. **ROFO** 1988 Nov; 149(5):534–8 (Eng. Abstr.) **(Ger)**

[Radiotherapy planning: a barium sulfate–containing marker paste for computed tomography] Sigmund G, et al. **Roentgenpraxis** 1989 Jan;42(1):22–3 **(Ger)**

[The first version of a whole body stereotactic device] Nádvorník P, et al. **Zentralbl Neurochir** 1988;49(4):310–2 (Eng. Abstr.) **(Ger)**

[Evaluation of the performance of 8 computerized tomographs in clinical use in Italy] Pinto I, et al. **Radiol Med (Torino)** 1988 Sep;76(3):210–6 (Eng. Abstr.) **(Ita)**

[The evaluation of digital X–ray images on CRT monitor display] Itoh Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):1024–31 (Eng. Abstr.) **(Jpn)**

[An experimental and clinical study of thin–slice high–resolution CT for lung detail] Otsuji H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25; 49(1):23–34 (Eng. Abstr.) **(Jpn)**

[Programming requirements of x–ray computed tomography] Rader EI, et al. **Med Tekh** 1989 May–Jun;(3):12–8 (Eng. Abstr.) **(Rus)**

[Evaluation of the instability of x–rays in the computed tomograph] Reznikov BS, et al. **Med Tekh** 1989 Mar–Apr; (2):18–22 (Eng. Abstr.) **(Rus)**

METHODS

Computer–aided three–dimensional reconstruction of paranasal sinuses and its application. Yamashita K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:22–6

Experimental investigation of a new iodinated lipid emulsion for computed tomography of the liver. Ivancev K, et al. **Acta Radiol** 1989 Jul–Aug;30(4):407–13

Quantitative computed tomography in measurement of vertebral trabecular bone mass. A modified method. Nilsson M, et al. **Acta Radiol** 1988 Nov–Dec;29(6):719–25

Absorbed dose resulting from a specially designed computed tomography technique for examination of the urinary bladder. Sager EM, et al. **Acta Radiol** 1989 Jan–Feb; 30(1):57–60

CT evaluation of the temporal bone ossicles by using oblique reformations: a technical note. Lee BC, et al. **AJNR** 1989 Mar–Apr;10(2):431–3

High–resolution CT of benign asbestos–related diseases: clinical and radiographic correlation. Aberle DR, et al. **AJR** 1988 Nov;151(5):883–91

Dynamic hepatic CT scanning. Foley WD. **AJR** 1989 Feb; 152(2):272–4

CT evaluation of suspected hepatic metastases: comparison of techniques for i.v. contrast enhancement. Paushter DM, et al. **AJR** 1989 Feb;152(2):267–71

CT evaluation of blunt abdominal trauma in children: comparison of ultrafast and conventional CT. Brody AS, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):803–6

Gadolinium–DPTA: a radiographic contrast agent [letter] Janon EA. **AJR Am J Roentgenol** 1989 Jun;152(6):1348

Technical aspects of abdominal CT in infants and children. Kaufman RA. **AJR Am J Roentgenol** 1989 Sep; 153(3):549–54

Gantry angulation for CT–guided biopsy or aspiration [letter] Levine ML, et al. **AJR Am J Roentgenol** 1989 Jun; 152(6):1345–6

Direct sagittal CT of the foot [letter] Mann FA, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):886

Pulmonary lymphangioleiomyomatosis: high–resolution CT findings in four cases. Rappaport DC, et al. **AJR Am J Roentgenol** 1989 May;152(5):961–4

Ultrafast computed tomography in the diagnosis of cardiac disease. Marcus ML, et al. **Am J Cardiol** 1989 Sep 5; 64(9):54E–59E (13 ref.)

High–resolution CT in the diagnosis of asbestos–related pleuroparenchymal disease [editorial] Gamsu G. **Am J Ind Med** 1989;16(2):115–7

Computerized tomographic identification of visceral pleural changes other than in interlobar lung fissures. Solomon A. **Am J Ind Med** 1989;15(5):557–63

Femoral bone density measurements by single energy computed tomography related to hip fractures. Alho A, et al. **Ann Chir Gynaecol** 1988;77(5–6):208–11

Quantitative computed tomography at peripheral measuring sites. Rüegsegger P. **Ann Chir Gynaecol** 1988;77(5–6):204–7

Determination of electron density, mass density and calcium fraction by mass of soft and osseous tissues by dual energy CT. Henson PW. **Australas Phys Eng Sci Med** 1989 Mar; 12(1):3–10

Dynamic CT discography: an evaluation of a new technique. Buirski G, et al. **Australas Radiol** 1988 May;32(2):197–202

Uses of direct coronal pelvic CT. Leighton DM, et al. **Australas Radiol** 1989 May;33(2):157–9

Dual energy CT estimation of liver iron content in thalassaemic children. Leighton DM, et al. **Australas Radiol** 1988 May;32(2):214–9

Dynamic low–dose three–dimensional computed tomography: a preliminary study. Gholkar A, et al. **Br J Radiol** 1988 Dec;61(732):1095–9

Contrast enhanced CT scan as a diagnostic procedure in mesenteric ischaemia due to mesenteric venous thrombosis. Clavien PA, et al. **Br J Surg** 1989 Jan;76(1):93–4

Computed tomographic arteriography (C.T.A.) of the liver. Dondelinger RF, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1988;125(1):27–34

Computed tomographic analysis of the intratemporal facial nerve and facial nerve neuromas. Shankar L, et al. **Can Assoc Radiol J** 1989 Jun;40(3):150–5

Air contrast CT for evaluating gastric carcinoma. Li SN, et al. **Chin Med J [Engl]** 1988 Jun;101(6):391–7

A comparison of radiation doses to the breast in computed tomographic chest examinations for two scanning protocols. Evans SH, et al. **Clin Radiol** 1989 Jan;40(1):45–6

Quantitative computed tomography of the rheumatic knee. Rüegsegger P, et al. **Clin Rheumatol** 1988 Dec;7(4):486–91

Three–dimensional reconstruction of human limbs from tomographic views. Richard MJ, et al. **Comput Biomed Res** 1989 Feb;22(1):26–35

Intracranial spaces in childhood macrocephaly: comparison of length measurements and volume calculations. Gooskens RH, et al. **Dev Med Child Neurol** 1988 Aug;30(4):509–19

Reference values for trabecular and cortical vertebral bone density in single and dual–energy quantitative computed tomography. Kalender WA, et al. **Eur J Radiol** 1989 May; 9(2):75–80

The use of a modified direct coronal computed tomographic technique for assessing thoraco–abdominal problems. Bar–Ziv J, et al. **Gastrointest Radiol** 1989 Summer; 14(3):205–8

Use of angio computed tomography to evaluate extent of endometrial carcinoma. Hirai Y, et al. **Gynecol Oncol** 1989 Jun;33(3):372–5

Magnetic resonance imaging of paranasal sinus tumors for craniofacial resection. Lund VJ, et al. **Head Neck** 1989 May–Jun;11(3):279–83

Local convolution in ectomography. Dale SM, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):964–8

Microcomputer–based technique for 3–D reconstruction and volume measurement of computer tomographic images. Part 1: Phantom studies. Albright RE Jr, et al. **Invest Radiol** 1988 Dec;23(12):881–5

Microcomputer–based technique for 3–D reconstruction and volume measurement of computed tomographic images. Part 2: Anaplastic primary brain tumors. Albright RE Jr, et al. **Invest Radiol** 1988 Dec;23(12):886–90

Estimation of tissue volume from serial tomographic sections. A statistical random marking method. Bentley MD, et al. **Invest Radiol** 1988 Oct;23(10):742–7

Comparison of contrast media injection rates and volumes for hepatic dynamic incremented computed tomography. Berland LL, et al. **Invest Radiol** 1988 Dec;23(12):918–22

Asbestos–related pleural and parenchymal fibrosis: detection with high–resolution CT. McLoud TC. **Invest Radiol** 1989 Aug;24(8):636–7

The direct examination of three–dimensional bone architecture in vitro by computed tomography. Feldkamp LA, et al. **J Bone Miner Res** 1989 Feb;4(1):3–11

Dynamic CT in superior mesenteric artery syndrome. Applegate GR, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):976–80

Fidelity of three–dimensional CT imaging for detecting fracture gaps. Drebin RA, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):487–9

Quantification of knee joint fluid volume by MR imaging and CT using three–dimensional data processing. Heuck AF, et al. **J Comput Assist Tomogr** 1989 Mar–Apr; 13(2):287–93

Computed tomography in pulmonary sarcoidosis. Lynch DA, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):405–10

Delayed enhancement of ascites following high–dose contrast CT for liver metastases. Minutoli A, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):916–7

Rapid three–dimensional display of the cerebral ventricles from noncontrast CT scans. Naidich TP, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):779–88

Comparison of vertical and oblique CT in evaluation of bronchial tree. Remy–Jardin M, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):956–62

Computed tomography of inflation–fixed lungs: the beaded septum sign of pulmonary metastases. Ren H, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):411–6

Validation of three–dimensional reconstructions of knee anatomy: CT vs MR imaging. Smith DK, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):294–301

Xenon–CT cerebral blood flow evaluation of cerebral ischemia in children and young adults. Stringer WA, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):386–94

A simple superimposition method for anatomical adjustments of CT and SPECT images. Vogl G, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):929–31

Gantry tilt technique for CT–guided biopsy and drainage. Yueh N, et al. **J Comput Assist Tomogr** 1989 Jan–Feb; 13(1):182–4

Dynamic CT vs 0.5 T MR imaging in the detection of surgically proven hepatic metastases. Zeman RK, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):637–44

Three–dimensional CT imaging for wrist disorders. Nakamura R, et al. **J Hand Surg [Br]** 1989 Feb;14(1):53–8

Plain film assessment of spinal stenosis: method comparison with lumbar CT. Dailey EJ, et al. **J Manipulative Physiol Ther** 1989 Jun;12(3):192–9 (41 ref.)

New model of stereotactic system. Preliminary experience. Ambrosio D, et al. **J Neurosurg Sci** 1988 Apr–Jun; 32(2):55–9

Ultrafast computed tomography techniques in cardiac disease. Flicker S, et al. **J Thorac Imaging** 1989 Jul;4(3):42–9

The Fleischner lecture: computed tomography of diffuse pulmonary disease. Genereux GP. **J Thorac Imaging** 1989 Jul;4(3):50–87 (60 ref.)

Pseudo–shading technique in the two–dimensional domain: a post–processing algorithm for enhancing the Z–buffer of a three–dimensional binary image. Tan AC, et al. **Med Inf (Lond)** 1989 Apr–Jun;14(2):149–56

Real–time 'computer–evaded' pseudo–holography of computed tomography images. Webb JA, et al. **Med Inf (Lond)** 1989 Apr–Jun;14(2):123–34

Therapy imaging: source sizes of radiotherapy beams. Munro P, et al. **Med Phys** 1988 Jul–Aug;15(4):517–24

Localization of inter–rib spaces for lung texture analysis and computer–aided diagnosis in digital chest images. Powell GF, et al. **Med Phys** 1988 Jul–Aug;15(4):581–7

Neoplastic encephalopathy: dynamic CT of cerebral gliomata. Jinkins JR. **Neuroradiology** 1988;30(5):408–20

High–dose contrast–enhanced computed tomography (CECT) with iopamidol in the detection of cerebral metastases. Tolerance of the contrast agent. Leonardi M, et al. **Neuroradiology** 1989;31(2):148–50

Imaging local cerebral blood flow by Xenon–enhanced computed tomography—technical optimization procedures. Meyer JS, et al. **Neuroradiology** 1988; 30(4):283–92

Multiple sclerosis: diagnostic value of computerized tomography with delayed scanning after a double–dose of contrast medium in comparison with other diagnostic tests. Weitze C, et al. **Neurosurg Rev** 1988;11(1):53–8

Three–dimensional computed tomographic reconstructions of intracranial meningiomas. Chalif DJ, et al. **Neurosurgery** 1988 Nov;23(5):570–5

Measurement of intracranial tissue volume using computed tomographic images and a personal computer. Criscuolo GR, et al. **Neurosurgery** 1988 Nov;23(5):671–4

Determination of irreversible ischemia by xenon–enhanced computed tomographic monitoring of cerebral blood flow in patients with symptomatic vasospasm. Yonas H, et al. **Neurosurgery** 1989 Mar;24(3):368–72

Quantitative computed tomography reflects vertebral fracture morbidity in osteopenic patients. Kaplan FS, et al. **Orthopedics** 1989 Jul;12(7):949–55

Complex shoulder trauma: three–dimensional CT imaging. Kuhlman JE, et al. **Orthopedics** 1988 Nov;11(11):1561–3

Evaluation of CSF rhinorrhea by computerized tomography with metrizamide. Chow JM, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):99–105

Complex congenital cardiovascular anomalies evaluated by continuous–rotation computed tomography in children. Yamada T, et al. **Pediatr Cardiol** 1989 Spring;10(2):65–74

Computer–assisted stereotactic biopsy of intracranial lesions in pediatric patients. Davis DH, et al. **Pediatr Neurosci** 1988;14(1):31–6

Three dimensional reconstruction in coronal synostosis: pre and post operative appearances. Cremin BJ, et al. **Pediatr Radiol** 1989;19(5):313–5

CT invertograms. Leighton DM, et al. **Pediatr Radiol** 1989; 19(3):176–8

Quantitative density–time measurements in the lungs of children with suspected airway obstruction using ultrafast CT. Ringertz HG, et al. **Pediatr Radiol** 1989;19(6–7):366–70

Peripheral QCT: a low–risk procedure to identify women predisposed to osteoporosis. Müller A, et al. **Phys Med Biol** 1989 Jun;34(6):741–9

X–ray energy optimisation in computed microtomography. Spanne P. **Phys Med Biol** 1989 Jun;34(6):679–90

Incremental dynamic CT for small hepatic tumours using high–speed, high–resolution CT apparatus. Murayama S, et al. **Radiat Med** 1988 Sep–Oct;6(5):200–3

2D and 3D computed tomography of the pediatric hip. Magid D, et al. **Radiographics** 1988 Sep;8(5):901–33

Clinical experience with rapid acquisition cardiovascular CT imaging (cine CT) in the adult patient. Steiner RM, et al.

Radiographics 1989 Mar;9(2):283–305
CT pelvimetry: replacing conventional with digital. Dobson J, et al. **Radiography** 1988 Jan–Feb;54(613):18–9
Imaging of musculoskeletal trauma in three dimensions. An integrated two–dimensional/three–dimensional approach with computed tomography. Magid D, et al. **Radiol Clin North Am** 1989 Sep;27(5):945–56
Radiographic type p pneumoconiosis: high–resolution CT. Akira M, et al. **Radiology** 1989 Apr;171(1):117–23
Full–frame transform compression of CT and MR images. Chan KK, et al. **Radiology** 1989 Jun;171(3):847–51
Determination of left ventricular mass with ultrafast CT and two–dimensional echocardiography. Diethelm L, et al. **Radiology** 1989 Apr;171(1):213–7
Dynamic hepatic CT. Foley WD. **Radiology** 1989 Mar;170(3 Pt 1):617–22
Detection of focal hepatic masses: prospective evaluation with CT, delayed CT, CT during arterial portography, and MR imaging. Heiken JP, et al. **Radiology** 1989 Apr; 171(1):47–51
Artifacts on lung CT scans: removal with Fourier filtration. Helenon O, et al. **Radiology** 1989 May;171(2):572–4
Costal pleura: appearances at high–resolution CT. Im JG, et al. **Radiology** 1989 Apr;171(1):125–31
Pulmonary parenchymal disease: evaluation with high–resolution CT. Murata K, et al. **Radiology** 1989 Mar; 170(3 Pt 1):629–35
Pulmonary parenchymal high–resolution CT: to be or not to be. Naidich DP. **Radiology** 1989 Apr;171(1):22–4 (42 ref.)
Interactive real–time multiplanar CT imaging. Ney DR, et al. **Radiology** 1989 Jan;170(1 Pt 1):275–6
Right upper lobe versus right middle lobe: differentiation with thin–section, high–resolution CT. Otsuji H, et al. **Radiology** 1989 Sep;172(3):653–6
Portal radiographs: digital enhancement of contrast. Powlis WD, et al. **Radiology** 1988 Dec;169(3):839–41
Acute stroke: detection of changes in cerebral perfusion with dynamic CT scanning. Shih TT, et al. **Radiology** 1988 Nov; 169(2):469–74
Hypovascular hepatocellular carcinoma undetected at angiography and CT with iodized oil. Yoshimatsu S, et al. **Radiology** 1989 May;171(2):343–7
Prediction of the compressive strength of vertebral bodies of the lumbar spine by quantitative computed tomography. Biggemann M, et al. **Skeletal Radiol** 1988;17(4):264–9
Patellofemoral joint motion: evaluation by ultrafast computed tomography. Stanford W, et al. **Skeletal Radiol** 1988; 17(7):487–92
The potential role for ultrafast cardiac computed tomography in patients with stroke. Helgason CM, et al. **Stroke** 1989 Apr;20(4):465–72
Cerebral blood flow determination within the first 8 hours of cerebral infarction using stable xenon–enhanced computed tomography. Hughes RL, et al. **Stroke** 1989 Jun; 20(6):754–60
The use of preoperative localization of adenomas of the parathyroid glands by thallium–technetium subtraction scintigraphy, high–resolution ultrasonography and computed tomography. Roses DF, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):99–106
Recent advances in medical imaging: surgery planning and simulation. McEwan CN, et al. **World J Surg** 1989 Jul–Aug; 13(4):343–8
[Measurement of exophthalmos. A trial of correlating Hertel–x–ray computed tomography] George JL, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1129–32 (Eng. Abstr.) (Fre)
[X–ray computed tomographic evaluation of the anterior ethmoid by parallel and perpendicular sections to the axis of nasofrontal duct. Preliminary study] Duvoisin B, et al. **J Radiol** 1988 Dec;69(12):787–9 (Eng. Abstr.) (Fre)
[New water–soluble iodinated contrast products] Moreau JF, et al. **Presse Med** 1989 May 13;18(19):957–9 (10 ref.) (Fre)
[Synopsis of a standardized, schematic analysis of the ossicles and tympanic walls, visualized with high–resolution computed tomography (using help lines and pictograms)] Grobovschek M. **Digitale Bilddiagn** 1988 Sep;8(3):115–27 (Eng. Abstr.) (Ger)
[Quantitative serial computed tomography. Kidney and tumors] Jeschke G, et al. **Digitale Bilddiagn** 1988 Sep; 8(3):141–6 (Eng. Abstr.) (Ger)
[Visualization of the normal bronchial system by computed tomography] Mayr B, et al. **Digitale Bilddiagn** 1988 Sep; 8(3):128–32 (Eng. Abstr.) (Ger)
[Computerized tomography of the hand: examination technic, normal anatomy, indications] Schmitt R, et al. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):89–96 (Eng. Abstr.) (Ger)
[Multiplanar imaging of the temporal bone. Initial results] Grevers G, et al. **Laryngorhinootologie** 1989 Jul;68(7):392–5 (Eng. Abstr.) (Ger)
[The value of high–resolution computerized tomography in abnormalities of the middle ear] Grevers G, et al. **Laryngorhinootologie** 1989 Feb;68(2):88–91 (Eng. Abstr.) (Ger)
[Computerized tomography determination of bone mineral content in quantitative diagnosis of osteoporosis] Banzer D, et al. **Orthopade** 1989 Feb;18(1):12–7 (Eng. Abstr.) (Ger)
[The 3–dimensional surface reconstruction from computerized tomography sections] Hirschfelder H. **Orthopade** 1989 Feb;18(1):18–23 (Eng. Abstr.) (Ger)
[Approaches in computer–assisted surgical planning in hip dislocation] Hohmann D, et al. **Orthopade** 1988 Nov; 17(6):468–71 (Eng. Abstr.) (Ger)
[Value of the dual–energy method in quantitative CT studies of the brain] Vogl G, et al. **Radiologe** 1988 Nov; 28(11):503–6 (Eng. Abstr.) (Ger)
[Size and density determination by thin–layer CT in relation to structural diameter and the contrast of the surrounding tissue] Beyer–Enke SA, et al. **ROFO** 1989 Jul;151(1):93–6 (Eng. Abstr.) (Ger)
[CT cavography: diagnosis of iliocaval thrombosis by administration of contrast medium into the foot] Bostel F, et al. **ROFO** 1988 Oct;149(4):423–6 (Eng. Abstr.) (Ger)
[High–resolution computed tomography of femur head necrosis. Comment on the paper in: Fortschr. Röntgenstr. 148 (1988) 285–288] Dihlmann W. **ROFO** 1988 Nov; 149(5):539–40 (Ger)
[CT–guided biopsy: methods, results and complications] Feuerbach S, et al. **ROFO** 1989 Jul;151(1):4–9 (Eng. Abstr.) (Ger)
[Angular measurements of the hindfoot in CT] Frahm R, et al. **ROFO** 1989 Jul;151(1):77–81 (Eng. Abstr.) (Ger)
[Fine structure analysis of the petrous bone using high–resolution thin–layer computed tomography. 2: Place and success of CT in comparison with conventional x–ray diagnosis of petrous bone fractures] Fritz P, et al. **ROFO** 1989 Aug;151(2):171–4 (Eng. Abstr.) (Ger)
[The anatomy of the pterygopalatine fossa in CT] Hofmann E, et al. **ROFO** 1989 Jul;151(1):27–31 (Eng. Abstr.) (Ger)
[High–resolution computed tomography of the thorax in lymphangioleiomyomatosis and tuberous sclerosis] Kulinig P, et al. **ROFO** 1989 Jul;151(1):32–5 (Eng. Abstr.) (Ger)
[CT functional images of the larynx and hypopharynx] Lenz M, et al. **ROFO** 1989 May;150(5):509–15 (Eng. Abstr.) (Ger)
[Status of the development and clinical applications of dual–energy CT] Kalender WA. **Rontgenpraxis** 1989 Feb; 42(2):50–7 (34 ref.) (Ger)
[The cerebral circulation in xenon–CT] Majewski A, et al. **Rontgenpraxis** 1988 Sep;41(9):311–8 (Ger)
[Evaluation of bone mineral content by quantitative computed tomography (letter)] Di Pietrantonj F, et al. **Radiol Med (Torino)** 1988 Oct;76(4):363–4 (Ita)
[A new CT technic in the study of intracanalicular neurinoma of the acoustic nerve. Preliminary report] Ettorre GC, et al. **Radiol Med (Torino)** 1988 Sep;76(3):206–9 (Eng. Abstr.) (Ita)
[High–resolution computed tomography in injuries to the cervical spine] Gigli F, et al. **Radiol Med (Torino)** 1989 Mar;77(3):174–81 (Eng. Abstr.) (Ita)
[CT study of the cervical spine with intravenous administration of the contrast medium] Magnaldi S, et al. **Radiol Med (Torino)** 1989 Apr;77(4):329–35 (Eng. Abstr.) (Ita)
[The use of 3–dimensional CT reconstruction in childhood. Technics and dosimetry] Taccone A, et al. **Radiol Med (Torino)** 1989 Mar;77(3):242–5 (Eng. Abstr.) (Ita)
[Diagnosis and treatment of craniosynostoses: the usefulness of CT combined with 3–dimensional reconstruction] Taccone A, et al. **Radiol Med (Torino)** 1989 Apr; 77(4):322–8 (Eng. Abstr.) (Ita)
[A renal trauma: evaluation by dynamic CT] Koh E, et al. **Hinyokika Kiyo** 1989 Jan;35(1):91–4 (Eng. Abstr.) (Jpn)
[Application of computed radiography for the diagnosis of chest diseases] Shida H. **Kokyu To Junkan** 1988 Oct; 36(10):1059–66 (Jpn)
[3D analysis of the aortic arch aneurysm: importance of the transverse arch curve from the horizontal view] Yoshii S, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):972 (Jpn)
[Measurement of normal auditory ossicles by high–resolution CT with application of normal criteria to disease cases] Hara J. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25;48(9):1133–41 (Eng. Abstr.) (Jpn)
[Pleural thickening associated with solitary pulmonary nodule: evaluation with thin–slice CT] Machara Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):253–8 (Eng. Abstr.) (Jpn)
[Experimental and clinical studies of hepatic blood flow evaluation by dynamic CT] Watanabe H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):972–81 (Eng. Abstr.) (Jpn)
[An experimental study of quantitative bone mineral analysis using computed tomography with calibration phantom] Shimizu H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec; 62(12):1199–210 (Eng. Abstr.) (Jpn)
[Development and usefulness of dynamic respiratory scanning by fast CT] Anno H, et al. **Rinsho Hoshasen** 1989 Jan;34(1):27–35 (Eng. Abstr.) (Jpn)
[CT scan of the hypopharynx and larynx—value of phonation scans] Fujii N, et al. **Rinsho Hoshasen** 1988 Aug; 33(8):857–64 (Eng. Abstr.) (Jpn)
[Evaluation of rapid sequence CT scan with intravenous bolus injection of a contrast medium in the diagnosis of pancreatic disease] Hase M, et al. **Rinsho Hoshasen** 1988 Aug;33(8):879–84 (Eng. Abstr.) (Jpn)
[Imaging technics for x–ray computerized tomography] Inoue Y, et al. **Rinsho Hoshasen** 1988 Oct;33(11):1203–9 (Jpn)
[Myelography and CT cisternography] Kobayashi N, et al. **Rinsho Hoshasen** 1988 Oct;33(11):1419–27 (Jpn)
[A new modification of sequential computerized tomography of the heart] Rabkin IH, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jan–Feb;52(1):8–10 (Eng. Abstr.) (Pol)
[Computed tomography with variable levels of energy of x–ray radiation] Anisimov SI, et al. **Med Tekh** 1989 May–Jun;(3):49–50 (Eng. Abstr.) (Rus)

STANDARDS

Computed tomography and diagnostic peritoneal lavage in blunt abdominal trauma. Their combined role. Kearney PA Jr, et al. **Arch Surg** 1989 Mar;124(3):344–7
Right ventricular volume: cine vs CT measurements. Dübel HP, et al. **Cardiovasc Intervent Radiol** 1988 Oct;11(5):300–2
Round CT film static artifacts: simulation of focal pathology. Wilbur AC, et al. **J Comput Assist Tomogr** 1989 Jul–Aug; 13(4):730–1
Practical CT dosimetry. Yoshizumi TT, et al. **Radiol Technol** 1989 Jul–Aug;60(6):505–9
[Quality assurance in computed tomography] Gmeinwieser J, et al. **Rontgenpraxis** 1988 Aug;41(8):283–8 (Ger)
[Torsional defects of the lower limb: an evaluation of the reliability of the results obtained by CT] Allegri F, et al. **Radiol Med (Torino)** 1989 Mar;77(3):182–6 (Eng. Abstr.) (Ita)

SUPPLY & DISTRIBUTION

Availability of computed tomography of the brain in the United Kingdom. Hewer RL, et al. **BMJ** 1989 May 6; 298(6682):1219–20
Influence of CT on radiologic utilization in The Netherlands. Barneveld Binkhuysen FH, et al. **Radiology** 1988 Dec; 169(3):827–9

TRENDS

Computed tomography alive and well. Cerne F. **Hospitals** 1988 Nov 5;62(21):65–6, 69
[Evaluating computerized tomography and other procedures] Thelen M. **Langenbecks Arch Chir** 1988;Suppl 2:393–6 (Eng. Abstr.) (Ger)

UTILIZATION

Intracerebral haemorrhage: incidence and use of computed tomography. Rowe CC, et al. **BMJ** 1988 Nov 5; 297(6657):1177–8
Contrasted diffusion and the use of CT scanner equipment in France. Le Galès C, et al. **Eur J Radiol** 1988 Nov; 8(4):203–7

VETERINARY

Brain abscess in a horse: diagnosis by computed tomography and successful surgical treatment. Allen JR, et al. **Equine Vet J** 1987 Nov;19(6):552–5
Detection by computed tomography of occult osteochondral defects in the fetlock of a horse. Barbee DD, et al. **Equine Vet J** 1987 Nov;19(6):556–8

TONGUE

see related

GLOSSECTOMY

Glossal pulse oximetry [letter] Hickerson W, et al. **Anesth Analg** 1989 Jan;68(1):73–4
Oral hygiene—why neglect the tongue? Ralph WJ. **Aust Dent J** 1988 Jun;33(3):224–5
Drug–induced tremor of the tongue. Gabellini AS, et al. **Ital J Neurol Sci** 1989 Feb;10(1):89–91

ABNORMALITIES

Aglossia with congenital absence of the mandibular rami and other craniofacial abnormalities. Neidich JA, et al. **Am J Med Genet Suppl** 1988;4:161–6
An interesting case of aglossia–adactyly syndrome. Purohit SK, et al. **Br J Plast Surg** 1989 Mar;42(2):228–9
X–linked cleft palate and ankyloglossia in an Icelandic family. Björnsson A, et al. **Cleft Palate J** 1989 Jan;26(1):3–8
Chondrodystrophic mice with coincidental agnathia: evidence for the tongue obstruction hypothesis in cleft palate. Clarke L, et al. **Teratology** 1988 Dec;38(6):565–70
[Lingual goiter in a 14–year–old girl] Bętkowski A, et al. **Otolaryngol Pol** 1988;42(3):205–8 (Eng. Abstr.) (Pol)

ANALYSIS

A cross–sectional study of the effects of alcohol on the protein profile of rat lingual epithelium. Graham GJ, et al. **Arch Oral Biol** 1988;33(9):631–4
Expression of hair–related keratins in a soft epithelium: subpopulations of human and mouse dorsal tongue keratinocytes express keratin markers for hair–, skin– and esophageal–types of differentiation. Dhouailly D, et al. **Exp Cell Res** 1989 Mar;181(1):141–58

ANATOMY & HISTOLOGY

Clinical sign to predict difficult tracheal intubation (hypothesis) [letter] Mallampati SR. **Can Anaesth Soc J** 1983 May;30(3 Pt 1):316–7

Normal CT anatomy of the tongue, floor of mouth and oropharynx. Stutley J, et al. **Clin Radiol** 1989 May; 40(3):248–53

Pseudo-three-dimensional reconstruction of ultrasonic images of the tongue. Watkin KL, et al. **J Acoust Soc Am** 1989 Jan;85(1):496–9

[The tongue as a factor in craniofacial growth. 3. The influence of the height and angle of the lower jaw] Hübner A, et al. **Anat Anz** 1988;167(3):191–7 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

Persistent hypoglossal artery encountered during carotid endarterectomy. McCartney SF, et al. **Ann Vasc Surg** 1989 Jul;3(3):257–60

A morphometric study of age changes in the human lingual artery. Macleod RI, et al. **Arch Oral Biol** 1988;33(6):455–7

Pseudoaneurysm of the lingual artery. Orron DE, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):349–52 (6 ref.)

Innervation of arteriovenous anastomoses in the sheep tongue: immunocytochemical evidence for coexistence of neural transmitters. Molyneux GS, et al. **J Anat** 1988 Apr; 157:203–16

Three-dimensional architecture of capillaries of the intrinsic tongue muscles: a scanning electron microscopic study. Saito H, et al. **J Electron Microsc (Tokyo)** 1988;37(6):342–5

Microvascular revascularization of the tongue. Shemen L, et al. **J Reconstr Microsurg** 1988 Jul;4(4):267–9

Systemic lupus erythematosus presenting with lingual infarction. Korn S, et al. **J Rheumatol** 1988 Aug; 15(8):1281–3

Lingual and scalp infarction as a manifestation of giant cell arteritis: delay in diagnosis leading to blindness [letter] Pye M. **J Rheumatol** 1988 Oct;15(10):1597–8

[On factors related to abnormalities of the sublingual vein in 530 cancer patients] Chen JM, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):590–2, 580 (Eng. Abstr.) **(Chi)**

[An analysis of blood cell pouring on the tongue surface in 3032 healthy persons] Zhang LR, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr;9(4):207–9, 195–6 (Eng. Abstr.) **(Chi)**

[Quantitative measurement of microcirculation of human nailfold, lips, and tongue apex by applying laser Doppler technique] Han XM. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):491–3, 34 (Eng. Abstr.) **(Chi)**

[Aneurysms of the lingual artery as a cause of recurrent late hemorrhage following tonsillectomy] Maurer J, et al. **Laryngorhinootologie** 1989 May;68(5):301–3 (Eng. Abstr.) **(Ger)**

CYTOLOGY

Network thermodynamic model of rat lingual epithelium: effects of hyperosmotic NaCl. Fidelman ML, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G475–87

The development of mast cells in facial skin, palate and tongue of the mouse. Luke DA. **Arch Oral Biol** 1988; 33(11):827–31

Myofibroblasts in healing laser wounds of rat tongue mucosa. Luomanen M, et al. **Arch Oral Biol** 1988;33(1):17–23

DRUG EFFECTS

The sweet taste in the calf. II. Glossopharyngeal nerve responses to taste stimulation of the tongue. Hård af Segerstad CH, et al. **Physiol Behav** 1989 May;45(5):1043–7

Effects of cholinergic and anticholinergic drugs on ketamine-induced linguopharyngeal motor activity. Marco LA, et al. **Psychopharmacology (Berlin)** 1988;96(4):484–6

EMBRYOLOGY

[Prenatal development of the human lingual glands] Bobrik II, et al. **Vrach Delo** 1988 Sep;(9):89–91 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Secondary structures of rat lipolytic enzymes: circular dichroism studies and relation to hydrophobic moments. Roberts IM, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):95–101

Human preduodenal lipase is entirely of gastric fundic origin. Moreau H, et al. **Gastroenterology** 1988 Nov;95(5):1221–6

Purification of lingual amylase from serous glands of rat tongue and characterization of rat lingual amylase and lingual lipase. Field RB, et al. **J Dent Res** 1989 Feb; 68(2):139–45

Enzyme-histochemical visualization of lymphatic capillaries in the mouse tongue: light and electron microscopic study. Kato S, et al. **Okajimas Folia Anat Jpn** 1989 Mar; 65(6):391–403

GROWTH & DEVELOPMENT

[The dialectic of glottogenesis—a contribution to the foundation of biolinguistics] Scharf JH. **Gegenbaurs Morphol Jahrb** 1988;134(5):647–65 (Eng. Abstr.) **(Ger)**

INJURIES

The occurrence of lesions in the tongue of adult cattle and their implications for the development of actinobacillosis. Buttenschøn J. **Zentralbl Veterinarmed [A]** 1989 May; 36(5):393–400

[Medico-economic characteristics of hospital care in diseases and injuries of the tongue] Iamashev IG. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):69–71 **(Rus)**

INNERVATION

Origin of lingual proprioceptive afferents in Japanese monkey, M. fuscata fuscata. Studied by HRP-labeling technique. Kubota K, et al. **Anat Anz** 1988;166(1–5):141–8

Cholinergic innervation of the tongue of the one humped camel, Camelus dromedarius. Qayyum MA, et al. **Anat Anz** 1988;166(1–5):275–83

The possible analgesic effect of soft-laser irradiation on heat nociceptors in the cat tongue. Mezawa S, et al. **Arch Oral Biol** 1988;33(9):693–4

Tongue protrusion mediated by spared anterior ventrolateral neocortex in neonatally decorticate rats: behavioral support for the neurogenetic hypothesis. Whishaw IQ, et al. **Behav Brain Res** 1989 Mar 1;32(2):101–13

Ipsilateral somatosensory tongue representation within the lateral subdivision of the nucleus ventralis posteromedialis parvocellularis of the cat thalamus. Nishikawa Y, et al. **Brain Res** 1988 Aug 23;458(2):394–6

The reinnervation of the tongue and salivary glands after lingual nerve injuries in cats. Robinson PP. **Brain Res** 1989 Apr 3;483(2):259–71

Tongue-muscle-controlling motoneurons in the Japanese toad: neural inputs from the thalamus. Satou M, et al. **Brain Res** 1989 Feb 27;481(1):39–46

Responses of neurons in the lamb nucleus tractus solitarius to stimulation of the caudal oral cavity and epiglottis with different stimulus modalities. Sweazey RD, et al. **Brain Res** 1989 Feb 20;480(1–2):133–50

Efferent projections from the anterior nucleus of the solitary tract of the hamster. Travers JB. **Brain Res** 1988 Aug 2; 457(1):1–11

Centrifugal decrement in diameter of myelinated afferent fibres innervating frog taste organ. Sato T, et al. **Comp Biochem Physiol [A]** 1989;92(3):435–40

Excitatory and inhibitory postsynaptic potentials in cat hypoglossal motoneurons during swallowing. Tomomune N, et al. **Exp Brain Res** 1988;71(2):262–72

Sensory and motor responses of trigeminal and reticular neurons during ingestive behavior in rats. Yamamoto T, et al. **Exp Brain Res** 1989;76(2):386–400

Neuronal pathways for the lingual reflex in the Japanese toad. Matsushima T, et al. **J Comp Physiol [A]** 1988 Dec; 164(2):173–93

Distribution of ion channels on taste cells and its relationship to chemosensory transduction. Roper SD, et al. **J Membr Biol** 1989 Jul;109(1):29–39

The characteristics and regional distribution of afferent fibres in the chorda tympani of the cat. Robinson PP. **J Physiol (Lond)** 1988 Dec;406:345–57

Oral cavity representation at the frontal operculum of macaque monkeys. Ogawa H, et al. **Neurosci Res** 1989 Apr; 6(4):283–98

On the origin and course of sympathetic nerve fibers in the fungiform papillae of the frog's tongue. Inoue K, et al. **Okajimas Folia Anat Jpn** 1988 Oct;65(4):171–5

METABOLISM

Immunocytochemical localization and biochemical analysis of alpha and beta keratins in the avian lingual epithelium. Carver WE, et al. **Am J Anat** 1989 Jan;184(1):66–75

Binding proteins for sweet compounds from gustatory papillae of the cow, pig and rat. Persaud KC, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):65–75

Sugar-activated ion transport in canine lingual epithelium. Implications for sugar taste transduction. Mierson S, et al. **J Gen Physiol** 1988 Jul;92(1):87–111

Fatty acid composition of lipids in tongue and hindleg muscles of muscular dystrophic mice. Futo T, et al. **J Neurol Sci** 1989 Jul;91(3):337–44

[Trophic disorders of tissue in afferent and efferent denervation] Zalko NN, et al. **Vestn Akad Med Nauk SSSR** 1988;(11):14–9 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Intracellular parasitism of parenchymal cells by Mycobacterium leprae. Job CK, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):659–70

Are postmortem studies of glossal candidal infection useful? An experimental study. Peters E, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):177–80

Evaluation of techniques to demonstrate foot-and-mouth disease virus in bovine tongue epithelium: comparison of the sensitivity of cattle, mice, primary cell cultures, cryopreserved cell cultures and established cell lines. House C, et al. **Vet Microbiol** 1989 Jun;20(2):99–109

PARASITOLOGY

New information on the location of Capillaria procyonis (Nematoda: Trichuroidea) in the tongue of a raccoon (Procyon lotor). Snyder DE. **J Wildl Dis** 1989 Apr; 25(2):294–6

Capillaria procyonis (Nematoda: Trichuroidea) eggs from the tongue of the raccoon (Procyon lotor). Synder DE. **J Wildl Dis** 1988 Oct;24(4):722–3

PATHOLOGY

Tongue cancer: correlation of MR imaging and sonography with pathology. Takashima S, et al. **AJNR** 1989 Mar–Apr; 10(2):419–24

Verrucous carcinoma and verrucous hyperplasia of the oral cavity: report of a case. Tsiklakis KD, et al. **Ann Dent** 1988 Winter;47(2):34–6

Amyotrophic lateral sclerosis: abnormalities of the tongue on magnetic resonance imaging. Cha CH, et al. **Ann Neurol** 1989 May;25(5):468–72

Pathologic quiz case 1. Oral hairy leukoplakia (HL). Heller EM, et al. **Arch Otolaryngol Head Neck Surg** 1989 May; 115(5):636–8

Pathologic quiz case 2. Adult rhabdomyoma. Nam HK, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr; 115(4):524–5, 527

Computed tomographic scanning in patients with carcinoma of the tongue. Cooke J, et al. **Clin Radiol** 1989 May; 40(3):254–6

Tongue necrosis after radical neck dissection. Gault DT. **Head Neck Surg** 1988 May–Jun;10(5):344–5

Infiltrating lipoma of the tongue. Shirasuna K, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):68–9

Discussion of "An Unusual, Deep Lingual Hemorrhage as a Consequence of Ligature Strangulation" [letter; comment] Simonsen J. **J Forensic Sci** 1989 May; 34(3):529–31. **Comment on:** J Forensic Sci 1988 May;33(3):806–11

Cephalometric analysis in patients with obstructive sleep apnoea syndrome: II. Soft tissue morphology. Lyberg T, et al. **J Laryngol Otol** 1989 Mar;103(3):293–7

Down's syndrome with lingual tonsil hypertrophy producing sleep apnoea. Phillips DE, et al. **J Laryngol Otol** 1988 Nov; 102(11):1054–5

Morphometric study of pseudoepitheliomatous hyperplasia in granular cell tumors of the tongue. van der Wal N, et al. **J Oral Pathol Med** 1989 Jan;18(1):8–10

Isolated tongue hemiatrophy. Herman PA, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):326–8

Tongue necrosis by giant cell arteritis and fatal pacemaker embolism. Peetermans WE, et al. **Neth J Med** 1988 Dec; 33(5–6):232–5

Hairy leukoplakia: Epstein-Barr virus receptors on oral keratinocyte plasma membranes. Corso B, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):416–21

Epithelial dysplasia produced by carcinogen pretreatment and subsequent wounding. Maeda H, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):50–6

MRI of the floor of the mouth, tongue and orohypopharynx. Kassel EE, et al. **Radiol Clin North Am** 1989 Mar; 27(2):331–51 (46 ref.)

[Study on the mechanism of denuded tongue coating due to yin deficiency] Hu QF, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):153–5, 133 (Eng. Abstr.) **(Chi)**

[Changes in microstructure and ultrastructure between differentiation of cold and heat syndrome in chronic atrophied gastritis and exfoliative cells] Li Y, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jun;9(6):343–4, 325 (Eng. Abstr.) **(Chi)**

[Observation on imprints of the tongue caused by recurrent oropharyngeal ulcers and its clinical significance] Qiu ZX, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):150–2, 132–3 (Eng. Abstr.) **(Chi)**

[Exploration of the relation of pulse, tongue appearance and biochemical, immunologic changes in primary hepatic carcinoma] Tao XC. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul;8(7):405–6, 388 (Eng. Abstr.) **(Chi)**

[Relation of a crimson and pale tongue and levels of some serum trace elements and sex hormones] Xu ZF. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul;8(7):402–4, 388 (Eng. Abstr.) **(Chi)**

[Observation of patient's tongue presentation in clinical nursing] Zhang GM. **Chung Hua Hu Li Tsa Chih** 1988 Sep; 23(9):536–7 **(Chi)**

[Giant cell arteritis and gangrene of the tongue] Hønberg PZ. **Ugeskr Laeger** 1989 Mar 6;151(10):637–8 (Eng. Abstr.) **(Dan)**

[Multiple laryngotracheal block for the biopsy of the base of the tongue and of the piriform sinuses during laryngoscopy] Mahiou P, et al. **Ann Fr Anesth Reanim** 1988; 7(4):333–5 (Eng. Abstr.) **(Fre)**

[A morphologic approach to the mobile oral and pharyngeal structures; a preliminary statistical study of a population of children presenting with a disorder of labiolingual behavior] Doual-Bisser A, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1988 Aug–Dec; 31(3–4):131–40 (Eng. Abstr.) **(Fre)**

[Tongue necrosis following subtotal struma resection caused by Horton giant cell arteritis] Fabian W. **Chirurg** 1989 Apr; 60(4):305–6 **(Ger)**

[Tongue necrosis as a complication of giant cell arteritis] Müller PR, et al. **Chirurg** 1989 Apr;60(4):303–4 **(Ger)**

[Gangrene of the tongue. A form of presentation of temporal arteritis] Maxit MJ, et al. **Medicina (B Aires)** 1988; 48(2):186–8 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Perioral force measurement by a radiotelemetry device. Kato Y, et al. **Am J Orthod Dentofacial Orthop** 1989 May; 95(5):410–4

Activation by saccharides of a cation-selective pathway on canine lingual epithelium. Simon SA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R394–402

Comparison of the human perception of hole size by the tongue and the fingers. Albashaireh ZS, et al. **Arch Oral Biol** 1988;33(3):183–5

Tongue movement of the cat during lapping. Thexton AJ, et al. **Arch Oral Biol** 1988;33(5):331–9

Direct measurement of translingual epithelial NaCl and KCl currents during the chorda tympani taste response. Heck GL, et al. **Biophys J** 1989 May;55(5):843–57

Influence of thiopentone on upper airway muscles. Drummond GB. **Br J Anaesth** 1989 Jul;63(1):12–21

Amiloride inhibition of responses of rat single chorda tympani fibers to chemical and electrical tongue stimulations. Ninomiya Y, et al. **Brain Res** 1988 Jun 7;451(1–2):319–25

Adaptive functional changes in the swallowing pattern of the tongue following expansion of the maxillary dental arch in subjects with and without cleft palate. Ohkiba T, et al. **Cleft Palate J** 1989 Jan;26(1):21–30

Cortical control of tongue contractility in the rat under ketamine anaesthesia. Marco LA, et al. **Clin Exp Pharmacol Physiol** 1989 May;16(5):395–401

Cross-adapted sugar responses in the mouse taste cell. Tonosaki K, et al. **Comp Biochem Physiol [A]** 1989; 92(2):181–3

Effects of clozapine on ketamine-induced linguopharyngeal events in rats. Marco LA, et al. **Eur J Pharmacol** 1989 May 2;164(1):171–3

Electromyographic study of emphatic consonants in standard Jordanian Arabic. Kuriyagawa F, et al. **Folia Phoniatr (Basel)** 1988;40(3):117–22

Effects of speaking rate on tongue position and velocity of movem. t in vowel production. Flege JE. **J Acoust Soc Am** 1988 Sep;84(3):901–16

Chemical access to the vomeronasal organs of the lizard Chalcides ocellatus. Graves BM, et al. **J Exp Zool** 1989 Feb;249(2):150–7

Effect of sensory input from the tongue on jaw movement in normal feeding in the opossum. Thexton AJ, et al. **J Exp Zool** 1989 Jun;250(3):233–43

Magnitude estimation and cross-modal matching of lingual vibrotactile and auditory sensation. Harris D, et al. **J Speech Hear Res** 1989 Sep;32(3):698–702

Manofluorographic analysis of swallowing. McConnel FM, et al. **Otolaryngol Clin North Am** 1988 Nov;21(4):625–35

Left–handedness and tongue–rolling ability. Fry CJ. **Percept Mot Skills** 1988 Aug;67(1):168–70

Effects of auditory masking on lingual vibrotactile magnitude-estimation scaling responses of young children. Petrosino L, et al. **Percept Mot Skills** 1989 Apr;68(2):523–9

Effect of auditory masking on lingual vibrotactile thresholds and magnitude estimation scaling responses. Petrosino L, et al. **Percept Mot Skills** 1988 Oct;67(2):491–4

Lingual vibrotactile/auditory magnitude estimation and cross–modal matching: comparison of suprathreshold responses in men and women. Petrosino L, et al. **Percept Mot Skills** 1988 Aug;67(1):291–300

Some notes on syllable structure in articulatory phonology. Browman CP, et al. **Phonetica** 1988;45(2–4):140–55

Palatoglossus activity during nasal/nonnasal vowels of Hindi. Dixit RP, et al. **Phonetica** 1987;44(4):210–26

Two magnetic methods for articulatory measurements. Panagos G, et al. **Phonetica** 1987;44(4):197–209

[The measurement of lingual pressure during phonation and deglutition: methods and initial results] Maillard–Salin G, et al. **Orthod Fr** 1987;58 Pt 2:869–74 (Eng. Abstr.) (Fre)

[The tongue as a factor in craniofacial growth. 2. The influence of the width dimension of the lower jaw] Becker R, et al. **Anat Anz** 1988;167(2):81–6 (Eng. Abstr.) (Ger)

[The tongue as a factor in craniofacial growth. 4. Results of animal experiments] Pommerenke F, et al. **Anat Anz** 1988;167(4):281–7 (51 ref.) (Eng. Abstr.) (Ger)

[The tongue as a factor in craniofacial growth. 1. Modification of the linear dimensions of the lower jaw] Schumacher GH, et al. **Anat Anz** 1988;166(1–5):309–15 (Eng. Abstr.) (Ger)

[Large tonsils and their effect on head and tongue posture] Behlfelt K, et al. **Fortschr Kieferorthop** 1988 Oct; 49(5):476–83 (Eng. Abstr.) (Ger)

[Temporal muscle proprioceptors involved in evoking jaw–tongue reflex] Ishiwata Y. **Kokubyo Gakkai Zasshi** 1988 Sep;55(3):460–70 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Myokymia of the tongue in a case of brainstem tumour that simulated motor–neuron disease [published erratum appears in Med J Aust 1989 Apr 17;150(8):468] Adams RW, et al. **Med J Aust** 1988 Nov 7;149(9):494, 496–7

[The exposure of ignorance] Chateau M. **Orthod Fr** 1987;58 Pt 2:415–20 (Fre)

RADIATION EFFECTS

Tongue resection with the CO2 laser: the effects of past radiotherapy on postoperative complications. Frame JW, et al. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):464–71

RADIOGRAPHY

What is your diagnosis? Soft tissue mass in the retropharyngeal region. Honnas CM, et al. **J Am Vet Med Assoc** 1989 Jun 15;194(12):1769–70

SURGERY

Mobilisation of the tongue by Tunnelierung and split skin graft insertion. Machtens E, et al. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):152–5

Histological evaluation of the effect of a miniature carbon dioxide laser on oral mucosa. Kardos TB, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):117–20

Tongue flap repair of oro–nasal fistulae in cleft palate patients. A review of 20 patients. Coghlan K, et al. **J Craniomaxillofac Surg** 1989 Aug;17(6):255–9

Improvement of speech intelligibility by a secondary operation to mobilize the tongue after glossectomy. Michi K, et al. **J Craniomaxillofac Surg** 1989 May;17(4):162–6

Neurotization of pectoralis major myocutaneous flap by the hypoglossal nerve in tongue reconstruction: clinical and experimental observations. Katsantonis GP. **Laryngoscope** 1988 Dec;98(12):1313–23

TRANSPLANTATION

Changes in articulation and resonance after tongue flap closure of palatal fistulas: case reports. Kummer AW, et al. **Cleft Palate J** 1989 Jan;26(1):51–5

ULTRASTRUCTURE

Scanning electron microscopic study of the lingual papillae of the one humped camel, Camelus dromedarius. Qayyum MA, et al. **J Anat** 1988 Oct;160:21–6

Morphology of fungiform papillae in canine lingual epithelium: location of intercellular junctions in the epithelium. Holland VF, et al. **J Comp Neurol** 1989 Jan 1;279(1):13–27

Premature aging changes in neuromuscular junctions of transgenic mice with an extra human CuZnSOD gene: a model for tongue pathology in Down's syndrome. Yarom R, et al. **J Neurol Sci** 1988 Dec;88(1–3):41–53

Scanning electron microscopic study on the lingual papillae of the Japanese insectivora. Kobayashi S, et al. **Okajimas Folia Anat Jpn** 1989 Mar;65(6):413–27

Comparative studies on the stereo architecture of the connective tissue papillae in some mammalian tongues. Kobayashi K, et al. **Prog Clin Biol Res** 1989;295:303–8

[Fine structure of the epithelial cells of the lingual dorsal mucosa in the guinea pig] Iwasaki S, et al. **Kaibogaku Zasshi** 1989 Apr;64(2):109–25 (Eng. Abstr.) (Jpn)

TONGUE DISEASES

Actinomycosis of the tongue. A diagnostic dilemma. Brignall ID, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):249–53 (16 ref.)

Thyroglossal duct cyst presenting as an anterior tongue fistula. Ngo HH, et al. **J Otolaryngol** 1988 Aug;17(5):227–8

Lingual abscess presenting as airway obstruction in the infant. Sanders AD, et al. **Otolaryngol Head Neck Surg** 1988 Sep; 99(3):344–5

CHEMICALLY INDUCED

Upper airway obstruction secondary to warfarin–induced sublingual hematoma. Cohen AF, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):718–20 (11 ref.)

Metoclopramide and prochlorperazine: "the blue–tongue sign" [letter] Alroe C, et al. **Med J Aust** 1989 Jun 19; 150(12):724–5

[Parkinson's disease associated with trihexyphenidyl (THP) induced dysphonia plicae ventricularis] Yamamoto K, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):423–5 (Eng. Abstr.) (Jpn)

COMPLICATIONS

Tardive dyskinesia with complaints of pain [letter] Hierholzer RW. **Am J Psychiatry** 1989 Jun;146(6):802

A tongue resection in macroglossia due to primary amyloidosis. Dendy RA, et al. **Br J Oral Maxillofac Surg** 1989 Aug;27(4):329–33

Acquired immunodeficiency syndrome (AIDS) in an elderly female psychiatric patient. Lapeer GL. **Can Dent Assoc J** 1988 Nov;54(11):831–5 (55 ref.)

Severe angioneurotic oedema causing acute airway obstruction. Self F, et al. **J R Soc Med** 1988 Sep;81(9):544–5

Cysts of the base of the tongue in infants: an unusual cause of neonatal airway obstruction. LaBagnara J Jr. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):108–11 (15 ref.)

DIAGNOSIS

The role of the dentist in diagnosing infection in the AIDS patient. Huber MA, et al. **Milit Med** 1989 Jun;154(6):315–8

[Orthodontic failures following overlooked orofacial dyskinesias] Tränkmann J. **Fortschr Kieferorthop** 1988 Aug; 49(4):388–99 (Eng. Abstr.) (Ger)

DRUG THERAPY

Resolution of candidal lesions of the dorsal rat tongue by ketoconazole. Allen CM, et al. **J Oral Pathol** 1988 Apr; 17(4):158–63

ECONOMICS

[Medico–economic characteristics of hospital care in diseases and injuries of the tongue] Iamashev IG. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):69–71 (Rus)

ETIOLOGY

Lingual abscess in a patient with anorexia nervosa. Keith O, et al. **Br Dent J** 1989 Jul 22;167(2):71–2

Acquired angioedema. Postlethwaite KR, et al. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):499–502

Atypical herpes simplex infection in patients with acute myelogenous leukemia recovering from chemotherapy. Burgoyne M, et al. **J Am Acad Dermatol** 1989 Jun; 20(6):1125–6 (7 ref.)

Multiple myeloma and amyloidosis of the tongue. Raubenheimer EJ, et al. **J Oral Pathol** 1988 Nov; 17(9–10):554–9

GENETICS

The application of molecular genetics to detection of craniofacial abnormality. Moore G, et al. **Development** 1988;103 Suppl:233–9

MICROBIOLOGY

Glossal abscess. Roberge RJ, et al. **Am J Emerg Med** 1989 Jul;7(4):406–8

PATHOLOGY

Hairy lesions of the oral cavity. Clinical and histopathologic differentiation of hairy leukoplakia from hairy tongue. Winzer M, et al. **Am J Dermatopathol** 1988 Apr;10(2):155–9

Multifocal verruciform xanthoma of the upper aerodigestive tract in a child with a systemic lipid storage disease. Travis WD, et al. **Am J Surg Pathol** 1989 Apr;13(4):309–16

Kawasaki syndrome. Ogden GR, et al. **Br Dent J** 1988 Nov 5;165(9):327–8

Traumatic eosinophilic ulcer of the oral mucosa. Rongioletti F, et al. **Cutis** 1989 Apr;43(4):357–9

Primary tuberculosis of the tongue: report of a case. Hashimoto Y, et al. **J Oral Maxillofac Surg** 1989 Jul; 47(7):744–6

Squamous cell carcinoma arising in a thyroglossal duct cyst in the tongue. Lustmann J, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):81–5 (19 ref.)

[A morphologic approach to the mobile oral and pharyngeal structures; a preliminary statistical study of a population of children presenting with a disorder of labiolingual behavior] Doual–Bisser A, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1988 Aug–Dec; 31(3–4):131–40 (Eng. Abstr.) (Fre)

[Primary nodular amyloidosis of the tongue] Hausmann G, et al. **Med Cutan Ibero Lat Am** 1988;16(2):175–8 (13 ref.) (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Essential tongue tremor. Biary N, et al. **Mov Disord** 1987; 2(1):25–9

SURGERY

Mobilisation of the tongue by Tunnelierung and split skin graft insertion. Machtens E, et al. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):152–5

Pyogenic granuloma of the tongue treated by carbon dioxide laser. Modica LA. **J Am Geriatr Soc** 1988 Nov; 36(11):1036–8

Treatment of severe microstomia caused by swallowing of caustic soda. Takato T, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):20–4

VETERINARY

Calcinosis circumscripta of the tongue in a cat. Anderson WI, et al. **Cornell Vet** 1988 Oct;78(4):381–4

Lingual abscess in a lowland gorilla. Hinshaw KC. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1227–8

Cud–dropping in sheep [letter] Sproat JB. **Vet Rec** 1988 Nov 26;123(22):582

The occurrence of lesions in the tongue of adult cattle and their implications for the development of actinobacillosis. Buttenschøn J. **Zentralbl Veterinarmed [A]** 1989 May; 36(5):393–400

TONGUE, FISSURED

ETIOLOGY

Pemphigus vegetans presenting as scrotal tongue. Iwata M, et al. **J Dermatol** 1989 Apr;16(2):159–60

SURGERY

[Preliminary report of the surgical treatment of the severely fissured tongue] Hong M. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):103–4 (Chi)

TONGUE, FURROWED see TONGUE, FISSURED

TONGUE, GEOGRAPHIC see GLOSSITIS, BENIGN MIGRATORY

TONGUE HABITS

Tongue protrusion mediated by spared anterior ventrolateral neocortex in neonatally decorticate rats: behavioral support for the neurogenetic hypothesis. Whishaw IQ, et al. **Behav Brain Res** 1989 Mar 1;32(2):101–13

An optic-fiber photocell detector for measuring tongue protrusion in the rat: evaluation of recovery from localized cortical lesions. Whishaw IQ, et al. **Physiol Behav** 1988; 43(3):397–401

Neonatal imitation of tongue protrusion and mouth opening: methodological aspects and evidence of early individual differences. Heimann M, et al. **Scand J Psychol** 1989; 30(2):90–101

TONGUE, HAIRY see under TONGUE DISEASES

TONGUE NEOPLASMS

Angiolipoma of the tongue: report of a case. Lin SC, et al. **Ann Dent** 1989 Summer;48(1):37–8

Cartilaginous choristoma of the tongue. A case report and literature review. Trowbridge M, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):627–9 (21 ref.)

Cancer of the tongue and oral cavity in Auckland, New Zealand, 1970–86. Koea JB, et al. **Aust N Z J Surg** 1989 Jan;59(1):39–45

Squamous cell carcinoma of the tongue in children [letter] Senter TP. **Cancer** 1989 Aug 1;64(3):781–2

Osteoma of the tongue. Nash M, et al. **Ear Nose Throat J** 1989 Jan;68(1):63–5

Tongue hemangiomas. Narasimharao KL, et al. **Indian Pediatr** 1988 Jan;25(1):92–4

Parotid lymph node metastases from primary intra-oral squamous carcinomas. Ord RA, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):104–6 (17 ref.)

Multiple synchronous carcinoma of the aero-digestive tract. McCombe A, et al. **J Laryngol Otol** 1989 Aug;103(8):794–5

Chondroma and osteochondroma of the tongue. Landini G, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug; 68(2):206–9

Chondroma of the tongue. Ishibashi T, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(3):182–6 (21 ref.)

Choristomas of the intraoral soft tissues. West CB Jr, et al. **Otolaryngol Head Neck Surg** 1988 Nov;99(5):528–30

[Kaposi sarcoma of the tongue] Poria Y, et al. **Harefuah** 1988 Oct;115(7–8):178–9 (Eng. Abstr.) (Heb)

[Hamartoma of the base of the tongue] Lępkowski A, et al. **Otolaryngol Pol** 1988;42(1–2):140–2 (Eng. Abstr.) (Pol)

[Characteristics of the clinical course of cancer of different parts of the tongue] Faliieev GV, et al. **Vopr Onkol** 1989; 35(7):875–6 (Rus)

BLOOD

Efficacy of serum sialoglycoproteins as a biomarker of the disease activity & treatment monitoring in patients with base tongue malignancy. Joshi BH, et al. **Indian J Med Res** 1989 Feb;90:17–21

COMPLICATIONS

Lymphangioma and cystic hygroma. Correction of facial growth disharmony and obstructive sleep apnea. Jasper RD, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):152–4

Lingual thyroid in a young infant presenting as airway obstruction: report of a case. Maddern BR, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct;16(1):77–82

Lingual thyroid and associated epiglottitis. Baldwin RL, et al. **South Med J** 1988 Dec;81(12):1538–41 (45 ref.)

[Embolization of a bleeding lingual thyroid] Scherer K, et al. **ROFO** 1988 Dec;149(6):671–2 (Ger)

CONGENITAL

Congenital dermoid cyst of the anterior tongue. Flom GS, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):602–5

DIAGNOSIS

Tongue cancer: correlation of MR imaging and sonography with pathology. Takashima S, et al. **AJNR** 1989 Mar–Apr; 10(2):419–24

Squamous cell carcinoma masquerading as focal myositis of the tongue. McLendon CL, et al. **Head Neck** 1989 Jul–Aug; 11(4):353–7

Aggressive fibromatosis of the tongue: MR demonstration. Chen PC, et al. **J Comput Assist Tomogr** 1989 Mar–Apr; 13(2):343–5

Neurilemoma of the tongue: MR findings. Flickinger FW, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):886–8

Magnetic resonance imaging for the assessment of lingual thyroid. Spinas GA, et al. **J Endocrinol Invest** 1989 Jun; 12(6):429–31

Glial teratoma thought to be a lingual thyroid. Tumushime-Buturo CG, et al. **J Laryngol Otol** 1989 Jun; 103(6):620–1

Magnetic resonance imaging of a lingual thyroid gland. Johnson JC, et al. **Pediatr Radiol** 1989;19(6–7):461–2

[Clinical-instrumental diagnosis of tumors of the tongue and oral floor] Bellioni P, et al. **Riv Eur Sci Med Farmacol** 1987 Sep;9(3):273–92 (11 ref.) (Eng. Abstr.) (Ita)

DRUG THERAPY

Regression of oral hairy leukoplakia during zidovudine therapy. Kessler HA, et al. **Arch Intern Med** 1988 Nov; 148(11):2496–7

EPIDEMIOLOGY

Changing incidence of cancer of the tongue, oral cavity, and pharynx in Denmark. Møller H. **J Oral Pathol Med** 1989 Apr;18(4):224–9

[Epidemiology and natural history of malignant neoplasms of the tongue in the province of Trieste] Silvestri F, et al. **Pathologica** 1988 Nov–Dec;80(1070):649–57 (Eng. Abstr.) (Ita)

[Tumor multiplicity in subjects with malignant neoplasms of the tongue] Silvestri F, et al. **Pathologica** 1988 Nov–Dec; 80(1070):659–64 (Eng. Abstr.) (Ita)

ETIOLOGY

Oral hairy leukoplakia in an HIV-negative renal transplant recipient. Greenspan D, et al. **J Oral Pathol Med** 1989 Jan; 18(1):32–4

Oral hairy leukoplakia is not a specific sign of HIV-infection but related to immunosuppression in general. Syrjänen S, et al. **J Oral Pathol Med** 1989 Jan;18(1):28–31

Fibrosarcoma: a rare occurrence in the tongue. Jabourian Z, et al. **Trans Pa Acad Ophthalmol Otolaryngol** 1988; 40:750–5 (17 ref.)

IMMUNOLOGY

Adoptive immunotherapy for head and neck cancer with killer cells induced by stimulation with autologous or allogeneic tumour cells and recombinant interleukin-2. Ishikawa T, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun; 107(5–6):346–51

METABOLISM

Intermediate filament proteins in spindle cell carcinoma of the larynx and tongue. Meijer JW, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct;106(3–4):306–13

Two squamous cell carcinomas not associated with humoral hypercalcemia produce a potent bone resorption-stimulating factor which is interleukin-1 alpha. Fried RM, et al. **Endocrinology** 1989 Aug;125(2):742–51

MORTALITY

Carcinoma of the tongue in young patients. Jones JB, et al. **J Otolaryngol** 1989 Apr;18(3):105–8

PATHOLOGY

The rabbit VX2 tumour as a model for carcinomas of the tongue and larynx. Jefferis AF, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug;108(1–2):152–60

T-cell malignancy following B-cell lymphoma in remission. Shimizu K, et al. **Am J Clin Pathol** 1989 Sep;92(3):362–6

Follow-up on flow cytometric DNA analysis of squamous cell carcinoma of the tongue. Farrar WB, et al. **Am J Surg** 1989 Apr;157(4):377–80

Verrucous carcinoma and verrucous hyperplasia of the oral cavity: report of a case. Tsiklakis KD, et al. **Ann Dent** 1988 Winter;47(2):34–6

Pathologic quiz case 1. Oral hairy leukoplakia (HL). Heller EM, et al. **Arch Otolaryngol Head Neck Surg** 1989 May; 115(5):636–8

Heterotopic lingual brain in the newborn. Knox R, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):630–2

Pathologic quiz case 2. Adult rhabdomyoma. Nam HK, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr; 115(4):524–5, 527

Prognostic factors in mobile tongue and floor of mouth carcinoma. Brown B, et al. **Cancer** 1989 Sep 15; 64(6):1195–202

Computed tomographic scanning in patients with carcinoma of the tongue. Cooke J, et al. **Clin Radiol** 1989 May; 40(3):254–6

Oral hairy leukoplakia in a HIV-negative renal transplant patient: a marker for immunosuppression? Itin P, et al. **Dermatologica** 1988;177(2):126–8

Chondrolipoma of the tongue. Maes A, et al. **Histopathology** 1989 Jun;14(6):660–2

Characterization of a newly established, TA-4-producing squamous carcinoma cell line derived from metastatic tongue carcinoma. Nakano S, et al. **Int J Cancer** 1989 Aug 15;44(2):301–6

Chondroma of the tongue. Report of a case and review of the literature. Aguirre JM, et al. **Int J Oral Maxillofac Surg** 1988 Oct;17(5):285–7 (25 ref.)

Infiltrating lipoma of the tongue. Shirasuna K, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):68–9

The second carcinoma of the anterior two-thirds of the tongue after successful radiotherapy to the tongue. Ono I, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):773–8

Squamous cell carcinoma of the oral tongue in patients less than fifteen years of age. Report of a case and review of the literature. Amichetti M. **J Craniomaxillofac Surg** 1989 Feb;17(2):75–7 (30 ref.)

Rhabdomyoma of the tongue. Report of a case with light microscopic, ultrastructural and immunohistochemical observations. Boysen M, et al. **J Laryngol Otol** 1988 Dec; 102(12):1185–8

Squamous cell carcinoma arising in a thyroglossal duct cyst in the tongue. Lustmann J, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):81–5 (19 ref.)

Pleomorphic adenoma of the anterior tongue in a 12-year-old girl. Rogers TR, et al. **J Oral Maxillofac Surg** 1989 Jan; 47(1):89–90

Chondroma of the tongue. Tani Y, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):91–2

Tubular adenocarcinoma of the apex of the tongue. Yajima M, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):86–8 (11 ref.)

Morphometric study of pseudoepitheliomatous hyperplasia in granular cell tumors of the tongue. van der Wal N, et al. **J Oral Pathol Med** 1989 Jan;18(1):8–10

Oral hairy leukoplakia with extensive oral mucosal involvement. Report of two cases. Kabani S, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):411–5

Oral hairy leukoplakia: a light microscopic and immunohistochemical study. Kanas RJ, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):334–40

Spindle cell squamous carcinoma of the tongue in the first decade of life. Kessler S, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):470–4 (27 ref.)

Epithelial dysplasia produced by carcinogen pretreatment and subsequent wounding. Maeda H, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):50–6

Spindle and epithelioid cell nevus of tongue at an unusual site. Teh M, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):68–72

Heterotopic gastrointestinal cyst of oral cavity: a developmental lesion? Woolgar JA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug;66(2):223–5

Morphological and functional variations in the transplantable lymph node metastasis of a human tongue carcinoma. Arnold W, et al. **Strahlenther Onkol** 1989 Jul;165(7):490–1

[Effects of hyperbaric oxygen and pingyangmycin on Tca 8113 squamous cell carcinoma of the human tongue] Luo WH. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):161–4 (Chi)

[Effect of hyperthermia on squamous carcinoma cells (Tca8113) of the human tongue in vitro] Nin SC. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):73–5 (Chi)

[Lingual hemangioma—research and treatment limits and possibilities (a clinical case)] Anderes LM, et al. **Rev Chir [Otorinolaringol]** 1989 Jan–Mar;34(1):19–24 (Eng. Abstr.) (Rum)

[Regional metastasis of tongue cancer] Vorob'ev IuI, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):52–4 (Eng. Abstr.) (Rus)

[Giant lipoma of the tongue] Chizh GI. **Vestn Otorinolaringol** 1988 May–Jun;(3):73–4 (Rus)

RADIOGRAPHY

Lingual osteoma. Bernard PJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):989–90

Lingual thyroid: unusual appearance on computed tomography. Shah HR, et al. **Comput Med Imaging Graph** 1988 Jul–Aug;12(4):263–6

Clinical examination, CT and US in tongue cancer staging. Fruehwald FX. **Eur J Radiol** 1988 Nov;8(4):236–41

RADIOTHERAPY

Selection of patients for re-irradiation with local implants in carcinomas of oropharynx and tongue. Langlois D, et al. **Acta Oncol** 1988;27(5):571–3

Odontogenic sarcoma following radiation treatment of tongue cancer—a case report [letter] Monzen Y, et al. **Acta Oncol** 1988;27(6b):858–9

Tongue resection with the CO2 laser: the effects of past radiotherapy on postoperative complications. Frame JW, et al. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):464–71

Discriminant analysis on the treatment results of interstitial radium tongue implants. Hoshina M, et al. **Br J Radiol** 1989 Jan;62(733):59–63

Radiotherapy after excisional biopsy of carcinoma of the oral tongue/floor of the mouth. Mendenhall WM, et al. **Head Neck** 1989 Mar–Apr;11(2):129–31

Radiotherapeutic management and results of T1N0, T2N0 carcinoma of the oral tongue: evaluation of boost techniques. Wang CC. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):287–91

Head and neck tumors: dosimetric considerations of mixed-energy photon beam therapy. Prows J, et al. **Radiology** 1988 Dec;169(3):831–4

Comparison between predicted and actual dose distribution in interstitial therapy of the oral cavity. van 't Riet A, et al. **Radiother Oncol** 1988 Dec;13(4):277–83

[Radiotherapy for T1 and T2 carcinomas of the tongue: combination therapy using low-dose external irradiation and an interstitial implant] Kanehira C, et al. **Gan No Rinsho** 1988 Oct;34(12):1642–6 (Eng. Abstr.) (Jpn)

[Radiotherapy of squamous cell carcinomas of the tongue—a statistical review] Kubo K, et al. **Gan No Rinsho** 1989 Jan;

35(2):264–9 (Eng. Abstr.) (Jpn)
[Frequent occurrences of an enlarged submandibular gland following interstitial irradiation therapy in patients with cancer of the tongue] Moriguchi S, et al. **Gan No Rinsho** 1988 Dec;34(15):2052–6 (Eng. Abstr.) (Jpn)
[Interstitial irradiation of carcinoma of the tongue] Watarai J, et al. **Gan No Rinsho** 1989 Apr;35(5):549–53 (Eng. Abstr.) (Jpn)
[Radiation injury to the mandible following radiotherapy of carcinoma of the tongue—with special reference to radiographic findings] Kubo K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):873–80 (Eng. Abstr.) (Jpn)
[Radioactive P-32 labeled microspheres in the treatment of neoplasms of the parenchymatous organs] Kasprzyk M, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec; 51(6):300–5 (Eng. Abstr.) (Pol)

SECONDARY

Tongue metastasis from carcinoma of the rectum. Davidson NG, et al. **J Laryngol Otol** 1989 Mar;103(3):322–3

SURGERY

Recent experience with reconstructive surgery following major glossectomy. Keyserlingk JR, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):331–8
Approach to the pterygomaxillary space and posterior part of the tongue by lateral stair-step mandibulotomy. Pinsolle J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar; 115(3):313–5
The role of the carbon dioxide laser in treatment of carcinoma of the tongue. Williams SR, et al. **J Laryngol Otol** 1988 Dec;102(12):1122–3
[The lingual thyroid, an unexpected and rare intubation difficulty] Lammer H, et al. **Anaesthesist** 1989 Apr; 38(4):206–7 (Eng. Abstr.) (Ger)
[Correction of a defect of the tongue after its subtotal resection using a skin and muscle flap including the sternohyoid muscle] Matiakin EG. **Vestn Khir** 1988 Aug; 141(8):88–90 (Eng. Abstr.) (Rus)
[Surgical treatment of patients with oropharyngeal cancer] Stadin GI, et al. **Vestn Otorinolaringol** 1988 Sep–Oct; (5):68–9 (Eng. Abstr.) (Rus)

THERAPY

Treatment selection for base of tongue carcinoma. Hintz BL, et al. **J Surg Oncol** 1989 Jul;41(3):165–71
[Carcinomas of the base of tongue: analysis of treatment results in 115 patients] Calais G, et al. **Bull Cancer (Paris)** 1989;76(4):395–401 (Eng. Abstr.) (Fre)
[Therapy of carcinomas of the oro-maxillo-facial region. I. Carcinomas of the mobile part of the tongue] Tartaro S, et al. **Minerva Stomatol** 1988 Jun;37(6):473–80 (Eng. Abstr.) (Ita)
[Study of head and neck cancer treatment by administration of autologous cytotoxic lymphocyte induced by stimulation with tumor cell—effect of adoptive immunotherapy by intra arterial infusion of killer cells stimulated by allogeneic tumor in patients with lingual and maxillary carcinoma] Ishikawa T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2082–8 (Eng. Abstr.) (Jpn)

ULTRASTRUCTURE

Two new human tumor cell lines derived from squamous cell carcinomas of the tongue: establishment, characterization and response to cytotoxic treatment. Gioanni J, et al. **Eur J Cancer Clin Oncol** 1988 Sep; 24(9):1445–55
Osteogenic sarcoma of the tongue: case report with light and electron microscopy studies and review of the literature. Beziat JL, et al. **J Oral Maxillofac Surg** 1989 May;47(5):524–8 (28 ref.)
Expression of intermediate filaments and stromal proteins in granular cell tumor of the tongue. Ophir D, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):689–96
[Dynamic changes of structures of human tongue squamous cell carcinoma cells (Tca 8113) after hyperthermia] Ning SC. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):339–41, 385 (Eng. Abstr.) (Chi)

TONIN see **KININASE II**

TONOMETRY

Tonometry in question: can visual screening tests play a more decisive role in glaucoma diagnosis and management? Sponsel WE. **Surv Ophthalmol** 1989 Feb;33 Suppl:291–300 (58 ref.)
[Medium-term tonometric results of trabeculectomies performed after trabeculoretraction using an argon laser in chronic primary open-angle glaucoma] Demailly P, et al. **J Fr Ophtalmol** 1989;12(1):41–5 (Eng. Abstr.) (Fre)
[Long-term tonometry control of laser therapy of open-angle glaucoma] Malagola R, et al. **Fortschr Ophthalmol** 1988; 85(4):366–8 (Eng. Abstr.) (Ger)
[Tonography and fluorophotometry in the clinical study of aqueous humor dynamics] Pham-Duy T, et al. **Fortschr Ophthalmol** 1989;86(3):210–3 (Eng. Abstr.) (Ger)

HISTORY

The Utrecht Eye Clinic and the development of tonometry in the 19th century. Henkes HE, et al. **Klin Oczna** 1988 Apr–May;90(4–5):183–5
[Questions on the theory of eye tonometry (on the 70th anniversary of Roemer's research)] Vurgaft MB. **Oftalmol Zh** 1988;(8):506–7 (Rus)

INSTRUMENTATION

An evaluation of the Tono-Pen for the measurement of diurnal intraocular pressure. Farrar SM, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):411–6
Clinical evaluation of the Non-Contact Tonometer Mark II. Chauhan BC, et al. **Am J Optom Physiol Opt** 1988 Sep; 65(9):751–6
Corneal damage from improperly cleaned tonometer tips [letter] Levenson JE. **Arch Ophthalmol** 1989 Aug; 107(8):1117
Disinfection of Goldmann tonometers against human immunodeficiency virus type 1. Pepose JS, et al. **Arch Ophthalmol** 1989 Jul;107(7):983–5
Accuracy and precision of the Tono-Pen in measuring intraocular pressure after keratoplasty and epikeratophakia and in scarred corneas. Rootman DS, et al. **Arch Ophthalmol** 1988 Dec;106(12):1697–700
Modification and calibration of the Bigliano-Webb Tonometer for improved accuracy of tonometry in rabbits. Neault TR, et al. **Curr Eye Res** 1989 Jan;8(1):9–15
Tono-Pen, a new tonometer. Hessemer V, et al. **Int Ophthalmol** 1989 Jan;13(1–2):51–6
Clinical evaluation of the Topcon CT10 tonometer. Verdoorn C, et al. **Int Ophthalmol** 1988;12(4):223–5
Portable tonometers: a clinical comparison of applanation and indentation devices. Chiara GF, et al. **J Am Optom Assoc** 1989 Feb;60(2):105–10
A simple, convenient tonometer tip disinfection technique. Machesney W, et al. **Ophthalmic Surg** 1988 Oct; 19(10):748–9
Intraocular pressure measurement after pars plana vitrectomy. Del Priore LV, et al. **Ophthalmology** 1989 Sep; 96(9):1353–6
[Tonometry following lamellating refractive corneal surgery] Böhnke M, et al. **Fortschr Ophthalmol** 1988;85(3):243–7 (Eng. Abstr.) (Ger)
[Clinical evaluation of a new electronic tonometer] Hessemer V, et al. **Fortschr Ophthalmol** 1988;85(4):361–2 (Eng. Abstr.) (Ger)
[Ocular pressure tonometry—value as a procedure in the diagnosis of glaucoma in comparison with classical tonography] Wetzel W, et al. **Fortschr Ophthalmol** 1988; 85(4):363–5 (Eng. Abstr.) (Ger)
[Tono-pen, a new position-independent tonometer. Comparison with the Goldmann tonometer by applanation measurement] Hessemer V, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):420–6 (Eng. Abstr.) (Ger)
[Relation of negative pressure difference and artificially elevated intraocular pressure using the suction cup method] Stodtmeister R, et al. **Klin Monatsbl Augenheilkd** 1989 Mar; 194(3):178–83 (Eng. Abstr.) (Ger)
[The importance of a new compression test in the diagnosis of preglaucoma and initial glaucoma] Vodovozov AM, et al. **Oftalmol Zh** 1989;(2):81–4 (Eng. Abstr.) (Rus)

METHODS

Non-contact tonometry in the postoperative eye. Vernon SA. **Br J Ophthalmol** 1989 Apr;73(4):247–9
Comparison of the Pulsair noncontact tonometer and the Goldmann applanation tonometer. Climenhaga H, et al. **Can J Ophthalmol** 1989 Feb;24(1):7–9
The effect of Goldmann applanation tonometry on automated static threshold perimetry. Ruben JB, et al. **Ophthalmology** 1988 Feb;95(2):267–70
[Theoretical bases of convex tonometry and potentialities of its use] Krasnov MM, et al. **Vestn Oftalmol** 1989 Jan–Feb; 105(1):49–51 (Eng. Abstr.) (Rus)

TONSIL

International Symposium on Tonsils. Kyoto, Japan, October 8–9, 1987. Proceedings. **Acta Otolaryngol Suppl (Stockh)** 1988;454:1–315
Palatine tonsils—their evolution and ontogeny. Slípka J. **Acta Otolaryngol Suppl (Stockh)** 1988;454:18–22
Participation of autonomic nerve in tonsillar focal infection. Yamashita T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:237–40
Tonsillar sarcoidosis. Hoover EL, et al. **J Tenn Med Assoc** 1989 Mar;82(3):131–2 (9 ref.)
Unsuspected sarcoidosis of the tonsil. Erwin SA. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):245–7
[Phenotype expression and production of IL-2 by tonsillar and blood lymphocytes in patients with tonsil pathology] Bussi M, et al. **Acta Otorhinolaryngol Ital** 1989 Mar–Apr; 9(2):149–59 (Eng. Abstr.) (Ita)
[Primary atypical syphilis (bifocal, tonsillar and perianal)] Golumba R, et al. **Rev Chir [Otorinolaringol]** 1988 Jul–Sep; 33(3):213–6 (Eng. Abstr.) (Rus)
[A live foreign body in the palatine tonsil] Skriabin VA. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):86 (Rus)

ANATOMY & HISTOLOGY

Large tonsils and the laryngeal mask airway [letter] van Heerden PV, et al. **Anaesthesia** 1989 Aug;44(8):703
[Age-related aspects of the anatomy and topography of the human tubal tonsil] Sapin MR, et al. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):68–72 (Eng. Abstr.) (Rus)

BLOOD SUPPLY

An architecture of capillary vessels of the palatine tonsils studied by scanning electron microscope—with special references to comparison with the tonsillar cryptscopic images. Fujihara K, et al. **Auris Nasus Larynx** 1988; 15(3):191–7
[Aneurysms of the lingual artery as a cause of recurrent late hemorrhage following tonsillectomy] Maurer J, et al. **Laryngorhinootologie** 1989 May;68(5):301–3 (Eng. Abstr.) (Ger)

CYTOLOGY

Isolation of follicular dendritic cells from human tonsils and adenoids. In vitro culture. Cormann N, et al. **Adv Exp Med Biol** 1988;237:171–5
Identification of alkaline phosphatase positive cells in human germinal centres as follicular dendritic cells. Rademakers LH, et al. **Adv Exp Med Biol** 1988;237:165–9
An immuno-electron microscopic study on interactions among dendritic cells, macrophages and lymphocytes in the human palatine tonsil. Okato S, et al. **Arch Histol Cytol** 1989 Jul;52(3):231–40
Follicular cells of tonsils metabolise more deoxycytidine than other cell populations. Horváth L, et al. **Immunol Lett** 1989 Aug;22(2):161–6
Cytokines produced in lymph follicles. Tsunoda R, et al. **Immunol Lett** 1989 Aug;22(2):129–34
Isolated human follicular dendritic cells display a unique antigenic phenotype. Schriever F, et al. **J Exp Med** 1989 Jun 1;169(6):2043–58
A cDNA clone inducible in human tonsillar lymphocytes by a tumor promoter codes for a novel protein of the beta-thromboglobulin superfamily. Obaru K, et al. **Mol Immunol** 1989 Apr;26(4):423–6
[Effect of tonsillar macrophages on several immune functions] Cai FF. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):125–8 (Eng. Abstr.) (Chi)
[A study of lymphocyte subsets in human normal tonsil and lymph node] Ge ZH, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Mar;22(1):75–85 (Eng. Abstr.) (Chi)
[Assessment of the intensity of lymphocyte blast transformation in the crypts of the palatal tonsils by using DNA cytophotometry] Bogdanova MS, et al. **Tsitologiia** 1988 Jun;30(6):699–704 (Eng. Abstr.) (Rus)

EMBRYOLOGY

Development and functional anatomy of the human tonsilla palatina. von Gaudecker B. **Acta Otolaryngol Suppl (Stockh)** 1988;454:28–32

ENZYMOLOGY

[Enzyme histochemical characteristics of prostaglandin synthetase, adenylate cyclase and cAMP in a focus of inflammation in chronic tonsillitis] Vartazarian ND. **Arkh Patol** 1988;50(7):31–7 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

Formation of lymphoepithelial tissue in the sheep's palatine tonsil. Oláh I, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:7–17

IMMUNOLOGY

The distribution of immunocompetent cells in the compartments of the palatine tonsils in bacterial and viral infections of the upper respiratory tract. Bernstein JM, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:153–62
Immunopathological alterations in tonsillar disease. Brandtzaeg P. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:64–9
Immunological studies on the relation between tonsil and pustulosis palmaris et plantaris. Hayashi Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:227–36
Autologous immune response of tonsillar lymphocytes. Ikawa T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:125–32
Specialization of tonsils as analyzers of the human immune system. Karchev T. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:23–7
Quantitative study on phagocytosis of human tonsillar adherent cells by the flow cytometric and immunocytochemical methods. Kawaguchi M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:108–12
Immunohistological studies on tonsils of recurrent tonsillitis and tonsils with focal infections. Kuki K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:75–82
Comparative immunobiology of the palatine tonsil. Nishikawa K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:43–7
The role of natural killer cells in human tonsillar tissue focussing on the change of tonsillar tissue with aging.

Okada T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:96–107

Analysis of activation markers on tonsillar T lymphocytes. Ptlum J, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:113–7

Immunohistochemical markers of tonsillar crypt epithelium. Surjân L Jr. **Acta Otolaryngol Suppl (Stockh)** 1988;454:60–3

In vitro synthesis of IgE antibody by human tonsil mononuclear cells. Preliminary report. Takenaka H, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:133–7

Immune response of tonsillar B lymphocytes. Yamanaka N, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:148–52

A study on the adjuvant activity of palatine tonsil. Yamazaki Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:256–60

Immunological basis of indications for tonsillectomy and adenoidectomy. Ying MD. **Acta Otolaryngol Suppl (Stockh)** 1988;454:279–85

Immunological aspects of tonsils and of tonsillitis. Zenner HP, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:70–4

IgG subclass distribution in juvenile human tonsil: IgG3 and IgG4 results of specific antibody production using synthetic peptides. Boersma WJ, et al. **Adv Exp Med Biol** 1988; 237:125–32

Characteristics of in vitro production of mucosal antibody to respiratory syncytial virus in tonsillar tissue lymphocytes. Okamoto Y, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):299–307

Human IgE biosynthesis by tonsils. Ohta K, et al. **Clin Rev Allergy** 1989 Summer;7(2):217–32

Tonsillar distribution of IgA, IgG immunocytes and IgA subclasses in IgA nephropathy. Nagy J, et al. **Contrib Nephrol** 1988;67:107–10

Immunology of Waldeyer's ring [letter] Raphael G. **Ear Nose Throat J** 1988 Aug;67(8):612

Human tonsillar dendritic cell–induced T cell responses: analysis of molecular mechanisms using monoclonal antibodies. King PD, et al. **Eur J Immunol** 1989 Apr; 19(4):581–7

Subpopulations of B lymphocytes in germinal centers, II. A germinal center B cell subpopulation expresses sIgD and CD23. Nahm MH, et al. **Immunol Lett** 1989 Jun 1; 21(3):201–8

The tonsils are superior to the peripheral blood as sources of mononuclear cells for B-cell purification. Punnonen J, et al. **J Clin Lab Immunol** 1988 Sep;27(1):29–33

[Immunomorphologic characteristics of the tonsils and their lymph nodes in human fetuses] Khlystova ZS, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):55–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Histocytochemistry of glycoconjugates in tonsillar tissues. Fukami K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:33–8

DNA synthesis and nucleoside metabolism in human tonsillar lymphocyte subpopulations. Staub M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:118–24

Roxithromycin disposition in tonsils after single and repeated administrations. Galioto GB, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1461–3

Concentrations of erythromycin, 2'-acetyl erythromycin, and their anhydro forms in plasma and tonsillar tissue after repeated dosage of erythromycin stearate and erythromycin acistrate. Gordin A, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1019–24

Hyaluronic acid and other glycosaminoglycans of the human palatal tonsils. Wardas M, et al. **Connect Tissue Res** 1988; 18(2):79–81

Xibornol: multiple dose pharmacokinetics and diffusion in lung, tonsillar tissue and laryngeal mucosa. Scaglione F, et al. **Int J Clin Pharmacol Res** 1988;8(6):457–61

Concentrations of flurithromycin in serum and tonsils. Galioto GB, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Mar;27(3):126–8

Penetration of fleroxacin into maxillary sinus mucosa and palatine tonsil. Baba S, et al. **J Antimicrob Chemother** 1988 Oct;22 Suppl D:195–7

Pharmacokinetic evaluation of ofloxacin in serum and tonsils. Van Landuyt HW, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:81–3

Production of lymphotoxin by isolated human tonsillar B lymphocytes and B lymphocyte cell lines. Sung SS, et al. **J Clin Invest** 1989 Jul;84(1):236–43

Superoxide-dependent nitroblue tetrazolium reduction and expression of cytochrome b-245 components by human tonsillar B lymphocytes and B cell lines. Maly FE, et al. **J Immunol** 1989 Feb 15;142(4):1260–7

Preliminary characterization and distribution of vicia villosa binding cells in human tonsils. Almeida BM, et al. **Virchows Arch [A]** 1989;414(2):173–8

[Tonsil diffusion of cefixime in children] Bégué P, et al. **Pathol Biol (Paris)** 1989 May;37(5):433–6 (Eng. Abstr.) **(Fre)**

[Comparative study of the penetration of penicillin V, amoxicillin, cefaclor and josamycin in the tonsils] Bizet C, et al. **Pathol Biol (Paris)** 1989 Apr;37(4):273–5 (Eng. Abstr.) **(Fre)**

MICROBIOLOGY

Microbial ecology and tonsillar infection. Ozawa A, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:178–84

Distribution of persistent Salmonella typhimurium infection in internal organs of swine. Wood RL, et al. **Am J Vet Res** 1989 Jul;50(7):1015–21

Microbiology of the tonsils and adenoids [letter] Brook I, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr; 115(4):528–9

Microbiology of obstructive tonsillar hypertrophy and recurrent tonsillitis. Kielmovitch IH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):721–4

Tonsillar microflora—superficial surface vs deep. Uppal K, et al. **J Laryngol Otol** 1989 Feb;103(2):175–7

Bacteriology of tonsil surface and core in children. Surow JB, et al. **Laryngoscope** 1989 Mar;99(3):261–6

[Bacterial flora from the tonsil core and tonsil surface of patients with habitual tonsillitis] Sugita R, et al. **Kansenshogaku Zasshi** 1988 Aug;62(8):702–7 (Eng. Abstr.) **(Jpn)**

[Effect of immunoglobulin on the microbial flora of the tonsils in patients with rheumatism] Ermalinskiĭ AF, et al. **Vrach Delo** 1988 Nov;(11):53–5 **(Rus)**

PATHOLOGY

Computerized three-dimensional reconstruction of the crypt system of the palatine tonsil. Abbey K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:39–42

Changes in cell shapes and cytoke.atins of epithelial cells during the infiltration of lymphocytes in the human palatine tonsils. Sato Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:48–52

Subsets of tonsillar lymphocytes and activated cells in each subset analysed by three-color flow cytometry. Sugiyama M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:138–47

Distribution and morphology of macrophages in palatine tonsils. Yamamoto Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:83–95

Children with tonsillar obstruction: indications for and efficacy of tonsillectomy. Ahlqvist-Rastad J, et al. **Acta Paediatr Scand** 1988 Nov;77(6):831–5

Respiratory disturbance during sleep due to adenoid–tonsillar hypertrophy. Miyazaki S, et al. **Am J Otolaryngol** 1989 Mar–Apr;10(2):143–9

Recurrent tonsillitis: histologic and bacteriologic evaluation. Bieluch VM, et al. **Ann Otol Rhinol Laryngol** 1989 May; 98(5 Pt 1):332–5

Secondary syphilis of the tonsil. Shimizu T, et al. **Arch Otorhinolaryngol** 1989;246(2):117–20

Comparison of size of tonsils in children with recurrent tonsillitis and in controls. Barr GS, et al. **BMJ** 1989 Mar 25;298(6676):804

Adenotonsillar hypertrophy and cor pulmonale. Yates DW. **Br J Anaesth** 1988 Sep;61(3):355–9

Isolation of multicellular complexes of follicular dendritic cells and lymphocytes: immunophenotypical characterization, electron microscopy and culture studies. Ennas MG, et al. **Cell Tissue Res** 1989 Jul;257(1):9–15

Neuroglial choristoma of the pharynx. Carrillo-Farga J, et al. **Ear Nose Throat J** 1988 Aug;67(8):579–80, 582–3

Identification of Epstein–Barr virus–infected cells in tonsils of acute infectious mononucleosis by in situ hybridization. Niedobitek G, et al. **Hum Pathol** 1989 Aug;20(8):796–9

Cor pulmonale secondary to tonsillar and adenoidal hypertrophy: management consideratlons. Brown OE, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov;16(2):131–9 (21 ref.)

Hair "follicle" in tonsil [letter] Michaels L. **J Clin Pathol** 1989 Apr;42(4):443–4

Immunopathological and ultrastructural studies on the tonsil of gnotobiotic pigs infected with strain 67N of haemagglutinating encephalomyelitis virus. Narita M, et al. **J Comp Pathol** 1989 Apr;100(3):305–12

Down's syndrome with lingual tonsil hypertrophy producing sleep apnoea. Phillips DE, et al. **J Laryngol Otol** 1988 Nov; 102(11):1054–5

The role of Haemophilus influenzae in the pathogenesis of tonsillar hypertrophy in children. Brodsky L, et al. **Laryngoscope** 1988 Oct;98(10):1055–60

Spontaneous lymphoblastoid transformation of cells obtained from human tonsils. Takimoto T, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(2):77–82

Clinical study of malignant lymphoma of head and neck in the nasal cavity and Waldyer's ring. Sasaki A, et al. **Osaka City Med J** 1989 Jun;35(1):13–9

[Cor pulmonale as a sequela of tonsillar hypertrophy] Galal O, et al. **Monatsschr Kinderheilkd** 1989 Jun;137(6):326–9 (Eng. Abstr.) **(Ger)**

[Lymphoepithelial hyperplasia of the tonsil at the base of the tongue] Strunk H, et al. **Rontgenblatter** 1988 Aug; 41(8):324–5 (Eng. Abstr.) **(Ger)**

[Severe adenotonsillar hypertrophy in children: a new modality of surgical treatment] Lippera R, et al. **Pediatr Med Chir** 1988 Jul–Aug;10(4):429–31 (Eng. Abstr.) **(Ita)**

[Morphology of the palatine tonsil lymphocytes in chronic tonsillitis using data of electron microscopic radioautography] Chikovani NV, et al. **Arkh Patol** 1989; 51(2):55–9 (Eng. Abstr.) **(Rus)**

[Electron microscopy and electron autoradiography examinations of the palatine tonsils in relation to age] Tokhadze TL, et al. **Vestn Otorinolaringol** 1988 May–Jun; (3):39–42 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Sequence of a human keratin 13 specific cDNA encompassing coil 1B through the 3' end. Schulz P, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1522–7

[Large tonsils and their effect on head and tongue posture] Behlfelt K, et al. **Fortschr Kieferorthop** 1988 Oct; 49(5):476–83 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

[Blood amylase: a biological marker in irradiation accidents? Preliminary results obtained at the Gustave-Roussy Institut (GRI) and a literature review] Hennequin C, et al. **Bull Cancer (Paris)** 1989;76(6):617–24 (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

Localization of paraoral soft tissue calcifications: the known object rule. Katz JO, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):459–63

SURGERY

Indication of cryosurgery on tonsillar diseases. Furusaka T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:292–8

[A basic and clinical study on thermosurgery of the tonsils] Hashimoto K. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug; 91(8):1179–90 (Eng. Abstr.) **(Jpn)**

TRANSPLANTATION

[Plastic reconstruction of small defects of the soft palate using the tonsil] Bootz F. **Laryngorhinootologie** 1989 Apr; 68(4):246 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Structure of the crypt epithelium in human palatine tonsils. Perry ME, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:53–9

TONSILLAR NEOPLASMS

Clinical and pathological features of non-Hodgkin's lymphoma of the tonsil. Review of the literature and report of 10 cases. Lugassy G, et al. **Isr J Med Sci** 1989 May; 25(5):251–5 (13 ref.)

[A case of bifocal cancer] Szymczyk K, et al. **Wiad Lek** 1988 Apr 15;41(8):520–1 (Eng. Abstr.) **(Pol)**

[Current possibilities of combined diagnosis and treatment of cancer of the tonsils] Shibl O, et al. **Vestn Otorinolaringol** 1989 May–Jun;(3):58–62 **(Rus)**

CHEMICALLY INDUCED

Malignant lymphoma in a renal transplant patient on cyclosporin A therapy. Walker RJ, et al. **Aust N Z J Med** 1989 Apr;19(2):154–5

COMPLICATIONS

Cervicofacial actinomycosis in a patient treated for tonsillar carcinoma. Spapen HD, et al. **Eur J Surg Oncol** 1989 Aug; 15(4):383–5

DIAGNOSIS

Tonsil cancer. Bopp FP, et al. **J La State Med Soc** 1989 Apr;141(4):11–4 (13 ref.)

EPIDEMIOLOGY

[Malignant neoplasms of the palatine tonsils among the cases of the Otolaryngological Clinic, Medical Academy, in Poznań 1977–1986] Szmeja Z, et al. **Otolaryngol Pol** 1988; 42(4):225–31 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

[EBV-specific antibodies in patients with nasopharyngeal cancer and tonsillar cancer. Follow-up of over 4 years] Oberender H, et al. **Laryngorhinootologie** 1989 Mar; 68(3):181–5 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Undifferentiated carcinoma of nasopharyngeal type of tonsil. Klijanienko J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):731–4

Anaplastic small cell (oat cell) carcinoma of the tonsils: report of two cases. Heimann R, et al. **Histopathology** 1989 Jan; 14(1):67–74

Dermoids ('hairy polyps') of the oro-nasopharynx. McShane D, et al. **J Laryngol Otol** 1989 Jun;103(6):612–5

Two malignant melanomas in skin and tonsil during consecutive pregnancies. Walsted A, et al. **J Laryngol Otol** 1989 Aug;103(8):780–2

The relationship between cervical cysts and tonsillar carcinoma in adults. Granström G, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):16–20

[Extramedullary plasmocytoma: clinical, histopathologic and immunohistochemical study of a case with a tonsillar site] Gorini E, et al. **Acta Otorhinolaryngol Ital** 1988 Mar–Apr; 8(2):183–6 (Eng. Abstr.) **(Ita)**

RADIOTHERAPY

Dysphagia after fast neutron therapy to the head and neck.

Alexander MS, et al. **Br J Radiol** 1989 Aug;62(740):724–8
Severe chemotherapy–induced recall of radiation mucositis in a patient with non–Hodgkin's lymphoma of Waldeyer's ring [letter] Eifel PJ, et al.
Int J Radiat Oncol Biol Phys 1989 Oct;17(4):907–8
Exclusive radiation therapy: the treatment of early tonsillar tumors. Lusinchi A, et al.
Int J Radiat Oncol Biol Phys 1989 Aug;17(2):273–7
Definitive radiotherapy for squamous cell carcinoma of the tonsillar fossa. Wong CS, et al.
Int J Radiat Oncol Biol Phys 1989 Mar;16(3):657–62
Head and neck tumors: dosimetric considerations of mixed–energy photon beam therapy. Prows J, et al.
Radiology 1988 Dec;169(3):831–4
A multivariate primary tumour control analysis in 465 patients treated by radical radiotherapy for cancer of the tonsillar region: clinical and treatment parameters as prognostic factors. Batsini JP, et al. **Radiother Oncol** 1989 Apr;14(4):265–77

SECONDARY

Metastatic gall bladder carcinoma of the palatine tonsil. Asami K, et al. **J Laryngol Otol** 1989 Feb;103(2):211–3 (8 ref.)
Adenocarcinoma of the jejunum metastatic to the palatine tonsil. Jalleh RP, et al. **Singapore Med J** 1988 Dec; 29(6):617–8

SURGERY

Indication of cryosurgery on tonsillar diseases. Furusaka T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:292–8

THERAPY

Carcinoma of the tonsillar region: surgical complications relative to the type of reconstruction. Suarez Nieto C, et al. **Clin Otolaryngol** 1989 Apr;14(2):141–5
Chemotherapy versus chemotherapy plus radiotherapy in the treatment of tonsillar squamous cell carcinoma in the dog. Brooks MB, et al. **J Vet Intern Med** 1988 Oct–Dec; 2(4):206–11

VETERINARY

Chemotherapy versus chemotherapy plus radiotherapy in the treatment of tonsillar squamous cell carcinoma in the dog. Brooks MB, et al. **J Vet Intern Med** 1988 Oct–Dec; 2(4):206–11

TONSILLECTOMY

Streptococcal antibody: as an indicator of tonsillectomy. Fujikawa S, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:286–91
Clinical study on the efficacy of tonsilloadenoidectomy. Kim JY, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:265–72
Clinical and immunological study of IgA nephropathy before and after tonsillectomy. Masuda Y, et al.
Acta Otolaryngol Suppl (Stockh) 1988;454:248–55
Surgery of the tonsils and adenoids in relation to secretory otitis media in children. Maw AR, et al.
Acta Otolaryngol Suppl (Stockh) 1988;454:202–7
Iron status in children undergoing tonsillectomy and its short–term modification following surgery. Mira E, et al.
Acta Otolaryngol Suppl (Stockh) 1988;454:261–4
Laser tonsillectomy. Nishimura T, et al.
Acta Otolaryngol Suppl (Stockh) 1988;454:313–5
Long–term observation of postoperative course of habitual tonsillitis. Ogino S, et al.
Acta Otolaryngol Suppl (Stockh) 1988;454:299–304
Immunological basis of indications for tonsillectomy and adenoidectomy. Ying MD.
Acta Otolaryngol Suppl (Stockh) 1988;454:279–85
Indication of tonsillectomy for recurrent tonsillitis. Yoshida A, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:305–12
Children with tonsillar obstruction: indications for and efficacy of tonsillectomy. Ahlqvist–Rastad J, et al.
Acta Paediatr Scand 1988 Nov;77(6):831–5
A patient with Sanfilippo syndrome and pseudocholinesterase deficiency, further complicated by post–tonsillectomy haemorrhage. Myles PS, et al. **Anaesth Intensive Care** 1989 Feb;17(1):86–8
Obstructive sleep apnea syndrome in sickle cell disease. Maddern BR, et al. **Ann Otol Rhinol Laryngol** 1989 Mar; 98(3):174–8
Recurrent adult acute epiglottitis: the role of lingual tonsillectomy. Wilson JF, et al.
Ann Otol Rhinol Laryngol 1989 Aug;98(8 Pt 1):602–4
Failure of tonsil and nose surgery in adults with long–standing severe sleep apnea syndrome.
Aubert–Tulkens G, et al. **Arch Intern Med** 1989 Sep; 149(9):2118–21
Adenotonsillectomy: a safe outpatient procedure [letter] Alpern G. **Arch Otolaryngol Head Neck Surg** 1989 Jun; 115(6):749
Adenoidectomy for secretory otitis media. Austin DF.
Arch Otolaryngol Head Neck Surg 1989 Aug;115(8):936–9
Tonsillectomy–induced changes in anti–keratin antibodies in patients with pustulosis palmaris et plantaris: a clinical correlation. Yamanaka N, et al. **Arch Otorhinolaryngol** 1989;246(2):109–12
Identifying hypoxaemia in children admitted for adenotonsillectomy. van Someren VH, et al. **BMJ** 1989 Apr 22;298(6680):1076
No peak–peak tympanometric conversion following surgery for otitis media with effusion in relation to airway size: a new treatment strategy? Parker AJ, et al.
Clin Otolaryngol 1989 Feb;14(1):27–32
The tonsil and adenoid controversy. Witt RL.
Del Med J 1989 Jun;61(6):289–94 (30 ref.)
Obstructive sleep apnea: a polysomnographic study of sleep apnea before and after tonsillectomy and adenoidectomy. Weninger M, et al. **Helv Paediatr Acta** 1988 Nov; 43(3):203–10
Cor pulmonale secondary to tonsillar and adenoidal hypertrophy: management considerations. Brown OE, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov;16(2):131–9 (21 ref.)
Peritonsillar abscess in children and its indication for tonsillectomy. Wolf M, et al.
Int J Pediatr Otorhinolaryngol 1988 Nov;16(2):113–7
The effects of peritonsillar infiltration on the reduction of intraoperative blood loss and post–tonsillectomy pain in children. Broadman LM, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):578–81
Indications for tonsillectomy and adenoidectomy. Phase I. **Natl Inst Health Consensus Dev Conf Summ** 1977–78;1:27–9 (0 ref.)
Possible role of tonsillectomy and adenoidectomy in children with recurrent fever and tonsillopharyngitis. Abramson JS, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):119–20
Antimicrobial drugs and surgical procedures in the prevention of otitis media. Paradise JL.
Pediatr Infect Dis J 1989 Jan;8(1 Suppl):S35–7 (32 ref.)
Taste disorder from zinc deficiency after tonsillectomy. Bicknell JM, et al. **West J Med** 1988 Oct;149(4):457–60
[Acute tonsillectomy in infectious mononucleosis] Wildt J, et al. **Ugeskr Laeger** 1989 May 1;151(18):1116–8 (Eng. Abstr.) **(Dan)**
[The course of arterial oxygen saturation in 2 anesthesia technics—anesthesia technics for adenotomy and (adeno)tonsillectomy in children under 15 in The Netherlands (letter)] Helmers JH.
Ned Tijdschr Geneeskd 1988 Aug 27;132(35):1630–2 **(Dut)**
[Removal of the tonsils and adenoids. Indications. Current aspects] Pelisse JM. **Ann Pediatr (Paris)** 1988 Nov; 35(9):655–8 **(Fre)**
[Tonsillectomy and allergic and/or asthmatic disorders in children and young adults: current practices] Bord F, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(3):261–3 (Eng. Abstr.) **(Fre)**
[A severe late tonsillar hemorrhage 2 months postoperatively] Swoboda H, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug; 67(8):431–3 (Eng. Abstr.) **(Ger)**
[Hemostasis screening before ENT operations] Deitmer T. **Laryngorhinootologie** 1989 Mar;68(3):188 **(Ger)**
[Aneurysms of the lingual artery as a cause of recurrent late hemorrhage following tonsillectomy] Maurer J, et al.
Laryngorhinootologie 1989 May;68(5):301–3 (Eng. Abstr.) **(Ger)**
[Which analgesics do you recommend following tonsillectomy? (letter)] Terrahe K. **Laryngorhinootologie** 1989 Mar;68(3):189 **(Ger)**
[Lidocaine–induced anaphylactic shock during tonsillectomy] Marzhan NN. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):66 **(Rus)**
[Use of kanoxicel, hemostatic viscose and gauze and feracryl in otorhinolaryngologic practice] Nasyrov VA, et al.
Vestn Otorinolaringol 1989 Mar–Apr;(2):78–9 **(Rus)**
[Peripheral blood indices in local cryosurgery of the palatine tonsils] Voltyna SV. **Vestn Otorinolaringol** 1988 Nov–Dec; (6):68–70 **(Rus)**

ADVERSE EFFECTS

Allergic rhinitis after tonsillectomy [letter] Shenoy P.
Arch Otolaryngol Head Neck Surg 1989 Sep;115(9):1134–5
Fracture of the mandibular condyle as a complication of tonsillectomy [letter] Gupta SC, et al.
Ear Nose Throat J 1989 Jun;68(6):477–9
Speech defects as an unusual complication of adenotonsillectomy. Obiako MN. **Ear Nose Throat J** 1988 Oct;67(10):752–4
Post–tonsillectomy analgesia: the use of benzocaine lozenges. Dempster JH. **J Laryngol Otol** 1988 Sep;102(9):813–4
Antibody response to pneumococcal vaccination as related to tonsillectomy. Stjernquist–Desatnik A, et al.
J Laryngol Otol 1988 Oct;102(10):883–5
Can post–tonsillectomy pain be reduced by topical bupivacaine? Double blind controlled trial. Violaris NS, et al. **J Laryngol Otol** 1989 Jun;103(6):592–3
Oral dantrolene sodium for tonsillectomy pain [letter] Wackym PA, et al. **Otolaryngol Head Neck Surg** 1988 Dec; 99(6):607
[Severe complications of tonsillectomy] Peytral C, et al.
Ann Otolaryngol Chir Cervicofac 1988;105(5):383–6 (Eng. Abstr.) **(Fre)**
[Postoperative complications of adenotonsillectomy] Tarantino V, et al. **Minerva Pediatr** 1988 May;40(5):279–82 (Eng. Abstr.) **(Ita)**
[Bilateral ligation of the external carotid in a case of post–tonsillectomy hemorrhage] Obreja S, et al.
Rev Chir [Otorinolaringol] 1988 Apr–Jun;33(2):145–7 (Eng. Abstr.) **(Rum)**
[Hemorrhagic accidents in palatal tonsil surgery] Roşca G, et al. **Rev Chir [Otorinolaringol]** 1989 Jan–Mar;34(1):33–8 (Eng. Abstr.) **(Rum)**

HISTORY

[Tonsillectomy: its indications. 1939 (classical article)] Muñoz Mac Cormick CE. **Bol Asoc Med P R** 1989 Apr; 81(4):148–51 **(Spa)**

METHODS

Clinical observation on guillotine tonsillectomy without anesthesia. Cheng CY, et al.
Acta Otolaryngol Suppl (Stockh) 1988;454:273–8
Adenotonsillectomy. A safe outpatient procedure. Maniglia AJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan; 115(1):92–4
Local versus general anaesthesia in tonsillectomy. Agren K, et al. **Clin Otolaryngol** 1989 Apr;14(2):97–100
Guillotine and dissection tonsillectomy compared. Wake M, et al. **J Laryngol Otol** 1989 Jun;103(6):588–91
Laser lingual tonsillectomy. Krespi YP, et al.
Laryngoscope 1989 Feb;99(2):131–5
[Severe adenotonsillar hypertrophy in children: a new modality of surgical treatment] Lippert R, et al.
Pediatr Med Chir 1988 Jul–Aug;10(4):429–31 (Eng. Abstr.) **(Ita)**

TONSILLITIS

COMPLICATIONS

Streptococcal tonsillitis and acute nonrheumatic myopericarditis. Karjalainen J. **Chest** 1989 Feb; 95(2):359–63
Rapid development of cor pulmonale following acute tonsillitis in adults. Randall CS, et al. **Chest** 1989 Feb; 95(2):462–3
Recurrent tonsillitis and growth in children. Grace A, et al.
Int J Pediatr Otorhinolaryngol 1988 Nov;16(2):91–3
Toxoplasmosis among cases of chronic tonsillitis. el–Ridi AM, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):85–90
Three cases of inter–sterno–costo–clavicular ossification associated with tonsillar infection. Furukawa M, et al.
J Laryngol Otol 1989 Aug;103(8):783–6
[Urticaria caused by streptococcal tonsillitis. A differential diagnosis of type I penicillin allergy] Sørensen HT, et al.
Ugeskr Laeger 1988 Nov 21;150(47):2913–4 (Eng. Abstr.) **(Dan)**
[Bicycle ergometry in the diagnosis of cardiac lesions in chronic tonsillitis] Karpov RS, et al. **Klin Med (Mosk)** 1989 Mar;67(3):68–71 (Eng. Abstr.) **(Rus)**
[Effectiveness of autotransfusion of ultraviolet ray irradiated blood in the rehabilitation of children with tonsillogenic lesions of the heart] Morenko VM.
Vestn Otorinolaringol 1989 May–Jun;(3):56–8 (Eng. Abstr.) **(Rus)**
[Focal infection and peripheral positional otolithic syndrome] Simeonov KR. **Vestn Otorinolaringol** 1988 Sep–Oct; (5):47–8 **(Rus)**
[Immune disorders in tonsillogenic lesions of the heart] Dutka RIa. **Vrach Delo** 1988 Nov;(11):55–7 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Lemierre's disease: postanginal bacteremia and pulmonary involvement caused by Fusobacterium necrophorum. Moreno S, et al. **Rev Infect Dis** 1989 Mar–Apr;11(2):319–24 (26 ref.)
[Behavior of leukocyte elastase in chronic inflammatory tonsillar diseases] Zöller E. **Laryngorhinootologie** 1989 Jun; 68(6):358–60 (Eng. Abstr.) **(Ger)**
[Incidence of diphtheria (data of the results of the bacteriologic examination of patients with tonsillitis)] Ivanov NR, et al. **Sov Med** 1988;(10):103–5 **(Rus)**
[Angina, chronic tonsillitis and concomitant and related diseases (current evaluation of the problem)] Pal'chun VT.
Ter Arkh 1988;60(10):56–60 **(Rus)**
[Contact thermometry and color liquid–crystalline thermography in the complex examination of patients with tonsillitis and acute sinusitis] Bolko IN, et al.
Vestn Otorinolaringol 1989 Jan–Feb;(1):66–7 **(Rus)**
[Rapid diagnosis of pharyngotonsillitis using an ELISA method (Test Pack Strep A): comparison with culture and clinical data. Analysis of 306 cases] Arribas Blanco JM, et al. **Med Clin (Barc)** 1988 Nov 5;91(15):561–4 (Eng. Abstr.) **(Spa)**
[A rapid test for tonsillitis/pharyngitis as an aid in the diagnostic arsenal] Lind L, et al. **Lakartidningen** 1988 Nov 30;85(48):4209–10 **(Swe)**

DRUG THERAPY

Medical treatment of non–streptococcal recurrent tonsillitis. Brook I. **Am J Otolaryngol** 1989 Jul–Aug;10(4):227–33
Sultamicillin versus amoxicillin in the treatment of tonsillitis and pharyngitis: a European multicenter study. Federspil P, et al. **APMIS Suppl** 1989;5:45–50
Penicillin and clindamycin therapy in recurrent tonsillitis. Effect of microbial flora. Foote PA Jr, et al.
Arch Otolaryngol Head Neck Surg 1989 Jul;115(7):856–9
Double–blind comparison of spiramycin and phenoxymethylpenicillin in treatment of upper respiratory tract infections (tonsillitis and rhinosinusitis). Roenning Arnesen A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):451–2

Short-term treatment of streptococcal tonsillitis with ceftriaxone. Pavesio D, et al. **Chemotherapy** 1988;34 Suppl 1:34–8

Cefadroxil versus penicillin in the treatment of streptococcal tonsillopharyngitis. Milatovic D, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):282–8

Comparison of nimesulide and flurbiprofen in the treatment of non-infectious acute inflammation of the upper respiratory tract. Cadeddu L, et al. **J Int Med Res** 1988 Nov–Dec;16(6):466–73

[Antibiotics policy in acute tonsillitis managed by the family practitioner; a decision analysis] Touw-Otten F, et al. **Ned Tijdschr Geneeskd** 1988 Sep 17;132(38):1743–8 (31 ref.) (Eng. Abstr.) (Dut)

[Rational dosing intervals in streptococcal infections of the pharynx] Rauchegger H, et al. **Wien Klin Wochenschr** 1989 Mar 31;101(7):230–3 (Eng. Abstr.) (Ger)

[Comparison of 2 administration schedules of ampicillin in respiratory infections] Fraschini F, et al. **Clin Ter** 1987 Jun 15;121(5):411–6 (Eng. Abstr.) (Ita)

[Amoxicillin–clavulanic acid combination in bacterial infections of the upper respiratory tract in childhood. Controlled clinical study] Boccazzi A, et al. **Pediatr Med Chir** 1988 Jul–Aug;10(4):395–400 (Eng. Abstr.) (Ita)

[A clinical evaluation of clarithromycin in the treatment of pediatric infections] Furukawa S, et al. **Jpn J Antibiot** 1989 Feb;42(2):420–2 (Eng. Abstr.) (Jpn)

[Clinical studies of rokitamycin dry syrup in the field of pediatrics] Haruta T, et al. **Jpn J Antibiot** 1988 Jul; 41(7):914–9 (Eng. Abstr.) (Jpn)

[Phonophoretic properties of low-frequency ultrasonics in the treatment of patients with chronic tonsillitis] Mishen'kin NV, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):25–7 (Eng. Abstr.) (Rus)

[Usefulness of combined benzathine penicillin in the treatment of streptococcal pharyngotonsillitis] Rodríguez RS, et al. **Bol Med Hosp Infant Mex** 1988 Dec; 45(12):797–802 (Eng. Abstr.) (Spa)

[The frequency of group A beta-hemolytic Streptococcus in acute tonsillopharyngitis and therapy with cefadroxil, ciavulanic acid–amoxicillin combination and erythromycin in patients unresponsive to procaine penicillin therapy] Tuncer AM, et al. **Mikrobiyol Bul** 1987 Jul;21(3):172–7 (Eng. Abstr.) (Tur)

ENZYMOLOGY

[Enzyme histochemical characteristics of prostaglandin synthetase, adenylate cyclase and cAMP in a focus of inflammation in chronic tonsillitis] Vartazarian ND. **Arkh Patol** 1988;50(7):31–7 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

[A tonsillitis epidemic caused by adenoviruses] Kahlich R, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jan;38(1):10–7 (Eng. Abstr.) (Cze)

[The main results of a study on the epidemiology and prevention of angina] Khodyrev AP, et al. **Voen Med Zh** 1989 Feb;(2):36–9 (Rus)

ETIOLOGY

A tickle at the back of the throat [letter] Hasleton PS, et al. **J Clin Pathol** 1988 Oct;41(10):1137–8

Another cause of pharyngotonsillitis [letter] Negreira S, et al. **J Pediatr** 1988 Oct;113(4):785–6

The role of Haemophilus influenzae in the pathogenesis of tonsillar hypertrophy in children. Brodsky L, et al. **Laryngoscope** 1988 Oct;98(10):1055–60

Acute tonsillitis in young men: etiological agents and their differentiation. Ylikoski J, et al. **Scand J Infect Dis** 1989; 21(2):169–74

[Meta-tonsillar focal disease and hypersensitivity] Catalano GB, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 19:35–40 (Eng. Abstr.) (Ita)

[Chlamydia and pharyngotonsillitis in childhood] Ottolenghi A, et al. **Minerva Pediatr** 1989 Apr;41(4):209–14 (27 ref.) (Eng. Abstr.) (Ita)

[Alimentary outbreak of tonsillitis] Sheĭnkman EV, et al. **Klin Med (Mosk)** 1989 Feb;67(2):129–30 (Rus)

IMMUNOLOGY

The distribution of immunocompetent cells in the compartments of the palatine tonsils in bacterial and viral infections of the upper respiratory tract. Bernstein JM, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:153–62

Immunopathological alterations in tonsillar disease. Brandtzaeg P. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:64–9

Immunohistological studies on tonsils of recurrent tonsillitis and tonsils with focal infections. Kuki K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:75–82

Immunological aspects of tonsils and of tonsillitis. Zenner HP, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:70–4

[Chronic streptococcal tonsillitis: significance of specific blastogenic response test and possibilities of its clinical applications] Sartoris A, et al. **Acta Otorhinolaryngol Ital** 1988 Nov–Dec;8(6):605–15 (Eng. Abstr.) (Ita)

MICROBIOLOGY

Bacterial adherence and upper respiratory tract disease: a correlation between S. pyogenes attachment and recurrent throat infections. Galioto GB, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:167–74

Chlamydia trachomatis: a currently recognized pathogen of tonsillitis. Ogawa H, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:197–201

Microbial ecology and tonsillar infection. Ozawa A, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:178–84

Experimental and clinical studies of causative bacteria in tonsillitis. Suzuki K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:185–91

The presence of beta-lactamase-producing bacteria as a guideline in the management of children with recurrent tonsillitis. Brook I. **Am J Otolaryngol** 1984 Nov–Dec; 5(6):382–6

Recurrent tonsillitis: histologic and bacteriologic evaluation. Bieluch VM, et al. **Ann Otol Rhinol Laryngol** 1989 May; 98(5 Pt 1):332–5

Microbiology of obstructive tonsillar hypertrophy and recurrent tonsillitis. Kielmovitch IH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):721–4

Bacterial flora in chronic tonsillitis. Chaturvedi VN, et al. **Indian Pediatr** 1989 Jan;26(1):52–6

Tonsillar microflora—superficial surface vs deep. Uppal K, et al. **J Laryngol Otol** 1989 Feb;103(2):175–7

Bacteriology of tonsil surface and core in children. Surow JB, et al. **Laryngoscope** 1989 Mar;99(3):261–6

Actinomycotic tonsillitis with expectoration of sulfur granules [letter] Drabick JJ, et al. **N Engl J Med** 1989 Mar 2;320(9):599

Erythromycin-resistant beta-hemolytic streptococci group A in Göteborg, Sweden. Zackrisson G, et al. **Scand J Infect Dis** 1988;20(4):419–20

Beta-lactamase producing anaerobic bacteria in the oropharynx and their clinical relevance. Nord CE, et al. **Scand J Infect Dis Suppl** 1988;57:50–4 (23 ref.)

[Bacterial flora from the tonsil core and tonsil surface of patients with habitual tonsillitis] Sugita R, et al. **Kansenshogaku Zasshi** 1988 Aug;62(8):702–7 (Eng. Abstr.) (Jpn)

[Bacterial flora and antistreptolysin O level in chronic tonsillitis treated by ultrasonics] Karnicki C, et al. **Wiad Lek** 1988 Mar 1;41(5):281–5 (Eng. Abstr.) (Pol)

[The occurrence and importance of fungi of the Candida species in the etiology of chronic tonsillitis] Tkalec-Makovec N. **God Vojnomed Akad** 1987;29:73–7 (Ser)

PATHOLOGY

Ciliocytophthoria (ccp) in nasopharyngeal smear from patients with acute tonsillitis. Sasaki Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:175–7

Comparison of size of tonsils in children with recurrent tonsillitis and in controls. Barr GS, et al. **BMJ** 1989 Mar 25;298(6676):804

Immunoglobulin subclasses in chronic tonsillitis. Moro I, et al. **J Oral Pathol** 1988 Nov;17(9–10):475–7

[Image analysis of the differentiation status of lymphatic cells in malignant non-Hodgkin lymphomas and tonsils] Bergmann M, et al. **Verh Dtsch Ges Pathol** 1988;72:354–9 (Eng. Abstr.) (Ger)

[Morphology of the palatine tonsil lymphocytes in chronic tonsillitis using data of electron microscopic radioautography] Chikovani NV, et al. **Arkh Patol** 1989; 51(2):55–9 (Eng. Abstr.) (Rus)

[Electron microscopy and electron autoradiography examinations of the palatine tonsils in relation to age] Tokhadze TL, et al. **Vestn Otorinolaringol** 1988 May–Jun; (3):39–42 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Transmission electron microscopic studies on streptococcal aerosol infection. Haraguchi T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):24–30

Scanning electron microscopic studies on streptococcal aerosol infection. Yoshinaga M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):31–7

Hemorrhagic tonsillitis. Levy S, et al. **Laryngoscope** 1989 Jan; 99(1):15–8

[Indices of central and peripheral hemodynamics in patients with chronic tonsillitis] Dutka RIa, et al. **Vrach Delo** 1988 Sep;(9):56–8 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

[Prevention of acute respiratory viral infections and tonsillitis] Shuster MA, et al. **Sov Med** 1989;(5):73–6 (Rus)

SURGERY

Long-term observation of postoperative course of habitual tonsillitis. Ogino S, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:299–304

Indication of tonsillectomy for recurrent tonsillitis. Yoshida A, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:305–12

The tonsil and adenoid controversy. Witt RL. **Del Med J** 1989 Jun;61(6):289–94 (30 ref.)

Possible role of tonsillectomy and adenoidectomy in children with recurrent fever and tonsillopharyngitis. Abramson JS, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):119–20

Taste disorder from zinc deficiency after tonsillectomy. Bicknell JM, et al. **West J Med** 1988 Oct;149(4):457–60

[Characteristics of the regeneration of postoperative wounds after bilateral tonsillectomy using a helium–neon laser] Romanov VA, et al. **Vestn Otorinolaringol** 1988 May–Jun; (3):80–1 (Rus)

[Cryosurgical treatment of chronic tonsillitis and vasomotor and hypertrophic rhinitis in a troop unit] Karal-Ogly IuR. **Voen Med Zh** 1988 May;(5):61–2 (Rus)

THERAPY

Treatment of recurrent streptococcal tonsillitis by recolonization with alpha-streptococci [letter] Roos K, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):318–9

Peritonsillar abscess in children and its indication for tonsillectomy. Wolf M, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov;16(2):113–7

TRANSMISSION

Beta-haemolytic streptococci group A in a cat, as a possible source of repeated tonsillitis in a family [letter] Roos K, et al. **Lancet** 1988 Nov 5;2(8619):1072

TOOTH

see related
DENTITION
MALOCCLUSION
MASTICATION
ODONTOGENESIS
PALEODONTOLOGY

Impressions for prosthodontic restorations reproducing narrow spaces and severe undercuts. Hansson O, et al. **Acta Odontol Scand** 1988 Aug;46(4):199–206

The statistical unit for analysis of developmental changes in the attached gingiva in children. Bimstein E, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):357–8

'Keeping up-to-date with tooth notation' [letter] **Br Dent J** 1989 Feb 25;166(4):108

Keeping up-to-date with tooth notation. Elderton RJ. **Br Dent J** 1989 Jan 21;166(2):55–6

'Keeping up-to-date with tooth notation' [letter] Rothwell PS. **Br Dent J** 1989 Apr 8;166(7):244–5

"Tooth be or not tooth be" [letter] Rusch RL, et al. **Can J Anaesth** 1988 Nov;35(6):669–70

Removal of tooth from bronchus: role of fiberoptic bronchoscope [letter] Hira HS, et al. **J Assoc Physicians India** 1988 Apr;36(4):291–2

Gingivitis in the deciduous and permanent dentition. An experimental study in the dog. Berglundh T, et al. **J Clin Periodontol** 1989 Aug;16(7):457–66

Abstracts of papers, 67th general session, International Association for Dental Research; 6th meeting, IADR Irish Division; 72nd annual meeting, Scandinavian Association for Dental Research; 26th annual meeting, Continental European Division of the IADR. June 28–July 1, 1989, Dublin, Ireland. **J Dent Res** 1989 Jun;68 Spec No:848–1052

Abstracts of papers. 18th annual session, American Association for Dental Research. March 15–19, 1989, San Francisco, California. **J Dent Res** 1989 Mar;68 Spec No:164–438

Divisional abstracts, supported by the International College of Dentists. **J Dent Res** 1989 Apr;68(4):522–743

Mammal teeth from the Cretaceous of Africa. Jacobs LL, et al. **Nature** 1988 Nov 10;336(6195):158–60

Tensile bond strength of orthodontic resins on the human tooth surface. Wang WN. **Proc Natl Sci Counc Repub China [B]** 1988 Oct;12(4):228–35

Abstracts: 25th annual congress of the Swedish Dental Society. November 23–25, 1988. **Swed Dent J** 1988; 12(6):241–69

[Significance of the "caries experience" at the age of 6] Sticco E, et al. **Minerva Stomatol** 1989 Apr;38(4):415–6 (Eng. Abstr.) (Ita)

ANALYSIS

Dissociative extraction and partial purification of osteogenin, a bone inductive protein, from rat tooth matrix by heparin affinity chromatography. Katz RW, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1253–7

Immunocytochemical localization of osteocalcin in human and bovine teeth. de Vries IG, et al. **Calcif Tissue Int** 1988 Aug;43(2):128–30

Phosphoproteins from teeth and bone. Veis A. **Ciba Found Symp** 1988;136:161–77 (26 ref.)

X-ray fluorescence analysis of lead in teeth of urban children in situ: correlation between the tooth lead level and the concentration of blood lead and free erythroporphyrins. Shapiro IM, et al. **Environ Res** 1978 Aug;17(1):46–52

Methionine-enkephalin peptides in human teeth. Tanzer FS, et al. **Int J Pept Protein Res** 1988 Aug;32(2):117–22

Detection of lead in human teeth by exposure to aqueous sulfide solutions. Sugawara A, et al. **J Nihon Univ Sch Dent** 1989 Mar;31(1):382–96

Strontium-90 and fluoride [letter] Smith GE. **N Z Med J** 1988 Nov 23;101(858):802–3

The significance of teeth in pollution detection. Sharon IM. **Perspect Biol Med** 1988 Autumn;32(1):124–31

Elemental imaging of dental hard tissues by secondary ion mass spectrometry. Chabala JM, et al. **Swed Dent J** 1988;

12(5):201–12

ANATOMY & HISTOLOGY

Changes in the maxillary and mandibular tooth size-arch length relationship from early adolescence to early adulthood. A longitudinal study. Bishara SE, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):46–59

Lingual orthodontics—its renaissance. Creekmore T. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):120–37

The occurrence of tooth size discrepancies among different malocclusion groups. Crosby DR, et al. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):457–61

Reflections on the face of Japan: a multivariate craniofacial and odontometric perspective. Brace CL, et al. **Am J Phys Anthropol** 1989 Jan;78(1):93–113

Human dental reduction: natural selection or the probable mutation effect. Calcagno JM, et al. **Am J Phys Anthropol** 1988 Dec;77(4):505–17

New hominid fossils from the Swartkrans formation (1979–1986 excavations): craniodental specimens. Grine FE. **Am J Phys Anthropol** 1989 Aug;79(4):409–49

Morphological and metrical comparison of San and Central Sotho dentitions from southern Africa. Haeussler AM, et al. **Am J Phys Anthropol** 1989 Jan;78(1):115–22

Small tooth sizes in a nineteenth century South Carolina plantation slave series. Harris EF, et al. **Am J Phys Anthropol** 1989 Mar;78(3):411–20

Odontometric profile of a prehistoric southeastern Florida population. Işcan MY. **Am J Phys Anthropol** 1989 Jan; 78(1):3–8

Allometric relations of teeth and jaws in man. Kieser JA, et al. **Am J Phys Anthropol** 1988 Sep;77(1):57–67

Human skeletal and dental remains from Lapita sites (1600–500 B.C.) in the Mussau Islands, Melanesia. Kirch PV, et al. **Am J Phys Anthropol** 1989 May;79(1):63–76

Complex segregation analysis of dental morphological variants. Nichol CR. **Am J Phys Anthropol** 1989 Jan; 78(1):37–59

Sexual dimorphism in Laccopithecus robustus, a late miocene hominoid from China. Pan YR, et al. **Am J Phys Anthropol** 1989 Jun;79(2):137–58

Phenotypic selection on the dentition in a Late Archaic population of Ohio. Sciulli PW, et al. **Am J Phys Anthropol** 1988 Aug;76(4):527–33

Yugoslav Mesolithic dental reduction. y Edynak G. **Am J Phys Anthropol** 1989 Jan;78(1):17–36

Occlusal contacts following orthodontic treatment: a follow-up study. Razdolsky Y, et al. **Angle Orthod** 1989 Fall;59(3):181–5; discussion 186

Tooth crown size in human females with 45,X/46,XX chromosomes. Varrela J, et al. **Arch Oral Biol** 1988; 33(5):291–4

Examining your smile. Lackey AD. **Dent Clin North Am** 1989 Apr;33(2):133–7

Marginal bone support and tooth lengths in 19-year-olds following orthodontic treatment. Ogaard B. **Eur J Orthod** 1988 Aug;10(3):180–6

Analysis of the dental morphology of Plio-Pleistocene hominids. V. Maxillary postcanine tooth morphology. Wood BA, et al. **J Anat** 1988 Dec;161:1–35

A morphometric study of bone and tooth volumes in the pipid frog Xenopus laevis (Daudin), with comments on the importance of tooth resorption during normal tooth replacement. Shaw JP. **J Exp Zool** 1989 Jan;249(1):99–104

The hinged attachment of teeth in the black bass, Micropterus salmoides. Kakizawa Y, et al. **J Nihon Univ Sch Dent** 1988 Jun;30(2):128–33

Evolution of tooth structure in the Equoidea. Kozawa Y, et al. **J Nihon Univ Sch Dent** 1988 Dec;30(4):287–96

The effects of cusp and jaw morphology on the forces on teeth and the temporomandibular joint. Katona TR. **J Oral Rehabil** 1989 Mar;16(2):211–9

The effect of contact area morphology on operative dental procedures. Long TD, et al. **J Oral Rehabil** 1988 Nov; 15(6):593–8

Emergence profiles in natural tooth contour. Part I: Photographic observations. Croll BM. **J Prosthet Dent** 1989 Jul;62(1):4–10

The taper of clinical preparations for fixed prosthodontics. Nordlander J, et al. **J Prosthet Dent** 1988 Aug;60(2):148–51

Modern mammal origins: evolutionary grades in the Early Cretaceous of North America. Jacobs LL, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4992–5

Teeth and prehistory in Asia. Turner CG 2d. **Sci Am** 1989 Feb;260(2):88–91, 94– . (4 ref.)

Cutting-technique and autoradiographic method for studies on undecalcified mineralized dental tissues. Reichardt R. **Z Mikrosk Anat Forsch** 1988;102(5):785–95

[Action of a CO2 laser on dental tissues] de Raad M, et al. **J Biol Buccale** 1988 Sep;16(3):137–50 (20 ref.) (Eng. Abstr.) (Fre)

[Pedodontics (II). The development of the permanent dentition and its morphological differences with reference to the milk teeth] Maréchaux SC. **Schweiz Monatsschr Zahnmed** 1988;98(12):1372–82 (Fre)

[Morphometry of the dental tissues of human teeth in the primary and secondary dentitions] Lichnovská J. **Acta Univ Palacki Olomuc Fac Med** 1987;117:269–80 (Ger)

[Study on distribution form of mesiodistal crown diameter in large sample: Part II] Iida T, et al. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):24–37 (Eng. Abstr.) (Jpn)

[Dental anthropological study of Peruvian Indians] Miura F, et al. **Kokubyo Gakkai Zasshi** 1988 Dec;55(4):540–69 (Eng. Abstr.) (Jpn)

BLOOD SUPPLY

Normal blood supply to the canine mandible and mandibular teeth. Roush JK, et al. **Am J Vet Res** 1989 Jun;50(6):904–7

Vascular changes after experimentally-induced inflammation in the mandible. Wannfors K. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):79–82

CYTOLOGY

A quantitative comparison of osteoclasts in the teeth of the anuran amphibian Xenopus laevis. Shaw JP. **Arch Oral Biol** 1988;33(6):451–3

Picrosirius red staining of dental structures. Roush JK, et al. **Stain Technol** 1988 Nov;63(6):363–7

DRUG EFFECTS

Fluoride-induced changes in the tooth glycosaminoglycans: an in vivo study in the rabbit. Susheela AK, et al. **Arch Toxicol** 1988;62(4):328–30

Effect of anti-neoplastic therapy on dental hard tissues and saliva in children and adolescents. A clinical and experimental study. Pajari U. **Proc Finn Dent Soc** 1988;84 Suppl 10:1–59

[Evaluation of exposure of forest animals to industrial emissions based on changes in mineral composition of the masticatory system of deer from the regions of Western Pomerania] Dąbkowska E. **Ann Acad Med Stetin** 1988; 34:37–47 (Eng. Abstr.) (Pol)

[Effect of local use of fluorine preparations on selected parameters of the masticatory system of schoolchildren under conditions of optimal and trace levels of this element in tap water] Wojtarowicz R. **Ann Acad Med Stetin** 1988; 34:87–102 (Eng. Abstr.) (Pol)

EMBRYOLOGY

Expression of the c-fos proto-oncogene in bone, cartilage and tooth forming tissues during mouse development. Caubet JF, et al. **Biol Cell** 1988;64(1):101–4

Localization of epidermal growth factor precursor in tooth and lung during embryonic mouse development. Snead ML, et al. **Dev Biol** 1989 Aug;134(2):420–9

ENZYMOLOGY

Histochemical demonstration of carbonic anhydrase activity in the odontogenic cells of the rat incisor. Sugimoto T, et al. **J Dent Res** 1988 Oct;67(10):1271–4

GROWTH & DEVELOPMENT

Disturbances of tooth form and eruption in the microphthalmic (mi) mouse: a light and electron microscopic study. Symons AL, et al. **Arch Oral Biol** 1989; 34(2):71–6

Immunological characterization, developmental pattern and vitamin-D-dependency of calbindin D-28 K in rat teeth ameloblasts. Berdal A, et al. **Differentiation** 1989 Mar; 40(1):27–35

Genetic and epigenetic challenges in tooth development. Slavkin HC. **J Craniofac Genet Dev Biol** 1988;8(3):195–8

INJURIES

Comparison of maxillofacial and dental injuries in four contact team sports: American football, bandy, basketball, and handball. Sane J. **Am J Sports Med** 1988 Nov-Dec; 16(6):647–51

Dentofacial trauma in children. Harrington MS, et al. **ASDC J Dent Child** 1988 Sep-Oct;55(5):334–8

Trauma to the oral cavity. Bakland LK, et al. **Clin Sports Med** 1989 Jan;8(1):25–41 (25 ref.)

Common dental emergencies. Evaluation and management for emergency physicians. Klokkevold P. **Emerg Med Clin North Am** 1989 Feb;7(1):29–63 (40 ref.)

Anesthesia-induced dental injury. Rosenberg MB. **Int Anesthesiol Clin** 1989 Summer;27(2):120–5 (22 ref.)

Changes in teeth and gingiva of dogs following laser surgery: a block surface light microscope study. Goultschin J, et al. **Lasers Surg Med** 1988;8(4):402–8

Reimbursement for dental injury under workers compensation. Hoffman GA. **N Y State Dent J** 1988 Dec; 54(10):38–9

INNERVATION

Masseter inhibitory periods and sensations evoked by electrical tooth-pulp stimulation in subjects under hypnotic anesthesia. Sharav Y, et al. **Brain Res** 1989 Feb 13; 479(2):247–54

Central terminations of periodontal mechanoreceptive and tooth pulp afferents in the trigeminal principal and oral nuclei of the cat. Tsuru K, et al. **Brain Res** 1989 Apr 17; 485(1):29–61

Circadian changes in stimulus threshold and in the effect of a local anaesthetic drug in human teeth: studies with an electronic pulptester. Lemmer B, et al. **Chronobiol Int** 1989; 6(2):157–62

Characteristics of the tooth pulp-driven neurons in a functional column of the cat's somatosensory cortex (SI). Matsumoto N, et al. **Exp Brain Res** 1989;74(2):263–71

A comparison between different models of the relation between recorded intradental nerve impulse activity and reported pain in man. Fors UG, et al. **Int J Biomed Comput** 1989 Mar;24(1):17–28

Comparison of trigeminal receptor location and structure in the periodontal ligament of different types of teeth from the rat, cat, and monkey. Byers MR, et al. **J Comp Neurol** 1989 Jan 1;279(1):117–27

Effects of tooth pulp deafferentation on nociceptive and nonnociceptive neurons of the feline trigeminal subnucleus caudalis (medullary dorsal horn). Hu JW, et al. **J Neurophysiol** 1989 Jun;61(6):1197–206

Tooth pulp stimulation advances both medullary off-cell pause and tail flick. Ramírez F, et al. **Neurosci Lett** 1989 May 22;100(1-3):153–6

METABOLISM

Incorporation of 140-lanthanum into bones, teeth and hydroxyapatite. Fernandez-Gavarron F, et al. **Bone Miner** 1988 Mar;3(4):283–91

[Effect of innervation disorders on sulfate and phosphate incorporation into the mineralized tissues of the teeth and jaw bones] Varava GN, et al. **Stomatologiia (Mosk)** 1988 Sep-Oct;67(5):6–8 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Colonization of rat molar teeth by mutans streptococci with different salivary agglutination characteristics. Brack CM, et al. **Arch Oral Biol** 1988;33(10):695–9

Adhesion of oral streptococci to teeth. Bowscher HJ. **Biochem Soc Trans** 1989 Jun;17(3):458–60

[Antibiotic sensitivity of 32 strains of Stomatococcus mucilaginosus in oral medicine patients in community practice] Chomarat M, et al. **Pathol Biol (Paris)** 1989 May; 37(5):378–81 (Eng. Abstr.) (Fre)

PATHOLOGY

Pattern of alveolar bone loss and reliability of measurements of the radiographic technique. Rise J, et al. **Acta Odontol Scand** 1988 Aug;46(4):227–32

Postmortem pink teeth. Histochemical identification of the causative pigment. van Wyk CW. **Am J Forensic Med Pathol** 1989 Jun;10(2):134–9

Odontometrics of the permanent teeth in cleft lip and palate: systemic size reduction and amplified asymmetry. Werner SP, et al. **Cleft Palate J** 1989 Jan;26(1):36–41

Periodontal diseases in the U.S. in 1981: prevalence, severity, extent, and role in tooth mortality. Brown LJ, et al. **J Periodontol** 1989 Jul;60(7):363–70

PHYSIOLOGY

Intradental nerve activity and jaw-opening reflex in response to mechanical deformation of cat teeth. Olgart L, et al. **Acta Physiol Scand** 1988 Jul;133(3):399–406

Perioral force measurement by a radiotelemetry device. Kato Y, et al. **Am J Orthod Dentofacial Orthop** 1989 May; 95(5):410–4

Force distribution comparisons of various retraction archwires. Chaconas SJ, et al. **Angle Orthod** 1989 Spring; 59(1):25–30

Force systems from an ideal arch—large deflection considerations. Koenig HA, et al. **Angle Orthod** 1989 Spring;59(1):11–6

The reproducibility of gnathosonic recordings over time. Freer TJ, et al. **Aust Dent J** 1989 Jun;34(3):245–53 (10 ref.)

Relationship between subjective pain estimation and somatosensory evoked potentials by electrical tooth stimulation. Umino M, et al. **Bull Tokyo Med Dent Univ** 1988 Sep;35(3):67–74

Marginal ridge strength of restored teeth with modified Class II cavity preparations. Covey D, et al. **J Am Dent Assoc** 1989 Feb;118(2):199–202

The effect of variation of residual ridge angle on partial denture abutment tooth movement. Feingold GM, et al. **J Oral Rehabil** 1988 Jul;15(4):379–84

Photoelastic analysis of stress transfer by endodontically treated teeth to the supporting structure using different restorative techniques. Assif D, et al. **J Prosthet Dent** 1989 May;61(5):535–43

A preliminary study of the effects of tooth guidance on working-side condylar movement. Coffey JP, et al. **J Prosthet Dent** 1989 Aug;62(2):157–62

Temperature gradients at two locations within the tooth during cavity preparation in vitro. Goodis HE, et al. **J Prosthet Dent** 1988 Dec;60(6):684–8

Distribution of occlusal contacts in maximum intercuspation. Maness WL, et al. **J Prosthet Dent** 1989 Aug;62(2):238–42

Influence of variation in anteroposterior occlusal contacts on electromyographic activity. Manns A, et al. **J Prosthet Dent** 1989 May;61(5):617–23

Cuspal deformation and fracture resistance of teeth with dentin adhesives and composites. Sheth JJ, et al. **J Prosthet Dent** 1988 Nov;60(5):560–9

Studies in tooth crown temperature gradients with the use of infrared thermography. Pogrel MA, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):583–7

Experimental teeth clenching in man. Christensen LV. **Swed Dent J Suppl** 1989;60:1–66 (152 ref.)

[Age-related characteristics of the surface bioelectrical

potential of human, canine and rat teeth and features of its distribution over the surface of the crown] Donskil GI, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):26–8 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Retained "hopeless" teeth. Effects on the proximal periodontium of adjacent teeth. DeVore CH, et al. **J Periodontol** 1988 Oct;59(10):647–51

[Study on prosthodontic procedure in patients with unilateral cleft lip and palate—effects of various extensions of splint on tooth-borne ability of teeth adjacent to the cleft] Suzuki R. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):121–40 (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

Fluoride for the head and neck radiation patient. Myers RE, et al. **Millit Med** 1988 Aug;153(8):411–3

[Levels of internal irradiation of the population of the RSFSR by natural alpha emitters] Ponikarova TM, et al. **Gig Sanit** 1989 Apr;(4):22–5 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Population variation in tooth, jaw, and root size: a radiographic study of two populations in a high-attrition environment. Smith P, et al. **Am J Phys Anthropol** 1989 Jun;79(2):197–206

Findings from 1163 panelipse radiographs taken of 12-year-old children living in Hong Kong. Davis PJ. **Community Dent Health** 1988 Sep;5(3):243–9

Computer-assisted image analysis [letter] Benn DK. **J Clin Periodontol** 1988 Oct;15(9):592–3

SURGERY

Postoperative complication rate of oral surgery outpatients: a study of cases treated during 1983–1984. Heliövaara A, et al. **Proc Finn Dent Soc** 1988;84(5–6):291–6

[Surgical extension of the clinical crown] Brägger U, et al. **Schweiz Monatsschr Zahnmed** 1988;98(6):644–53 **(Ger, Fre)**

TRANSPLANTATION

Tooth transplant record? [letter] Bendkowski A. **Br Dent J** 1989 Jul 8;167(1):10

Autogenous free tooth transplantation in man by a 2-stage operation technique. A longitudinal intra-individual radiographic assessment. Nethander G, et al. **Int J Oral Maxillofac Surg** 1988 Oct;17(5):330–6

[Tooth transplantation in orthodontic surgery] Geng WQ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):225–6 **(Chi)**

[The prognosis of autologous tooth transplants in orthodontic treatment planning] Schulz S. **Fortschr Kieferorthop** 1989 Jun;50(3):186–95 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

New specimens of Oligopithecus savagei, early Oligocene primate from the Fayum, Egypt. Rasmussen DT, et al. **Folia Primatol (Basel)** 1988;51(4):182–208

A scanning electron microscopy and electron probe X-ray microanalysis (SEM–EPMA) of pink teeth. Ikeda N, et al. **J Forensic Sci** 1988 Nov;33(6):1328–31

Microscopic effects of predator digestion on the surfaces of bones and teeth. Rensberger JM, et al. **Scanning Microsc** 1988 Sep;2(3):1541–51

Dental elements in mature teratomas of the ovary: scanning electron microscope ultrastructure. Fedele L, et al. **Tumori** 1989 Feb 28;75(1):76–8

[An external aprismatic layer on temporary and permanent teeth] Piacentini C, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1988 Aug–Dec; 31(3–4):177–87 (Eng. Abstr.) **(Fre)**

TOOTH ABNORMALITIES

Gemination, fusion and supernumerary tooth in the primary dentition: report of case. Camm JH, et al. **ASDC J Dent Child** 1989 Jan–Feb;56(1):60–1

Fusion of maxillary third and supernumerary fourth molars. Case report. Hou GL, et al. **Aust Dent J** 1989 Jun; 34(3):219–22

Oral clinicopathologic manifestations in maple syrup urine disease. Gazit D, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):694–7

[Gemination and fusion] Sticco E, et al. **Minerva Stomatol** 1988 Jul;37(7):539–41 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Osteogenesis imperfecta type I with unusual dental abnormalities. Levin LS, et al. **Am J Med Genet** 1988 Dec; 31(4):921–32

Anomalies of form and number, fused primary teeth, a correlation of the dentitions. Hagman FT. **ASDC J Dent Child** 1988 Sep–Oct;55(5):359–61 (14 ref.)

Dental anomalies in patients with familial and sporadic cleft lip and palate. Carretero Quezada MG, et al. **J Biol Buccale** 1988 Sep;16(3):185–90

EPIDEMIOLOGY

Prevalence of selected developmental dental anomalies in children, in Sri Lanka. Warnakulasuriya KA. **ASDC J Dent Child** 1989 Mar–Apr;56(2):137–9

Caries, gingivitis, and dental abnormalities in preschool children with cleft lip and/or palate. Dahllöf G, et al. **Cleft Palate J** 1989 Jul;26(3):233–7; discussion 237–8

Prevalence of selected dental anomalies in Saudi children from Gizan region. Salem G. **Community Dent Oral Epidemiol** 1989 Jun;17(3):162–3

Clinical orodental abnormalities in Mexican children. Sedano HO, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep; 68(3):300–11 (59 ref.)

[Incidence of abnormalities of the stomatognathic system among Polish children 13–14 years of age and its comparison with the data from other countries] Starniewska-Głowacka M, et al. **Przegl Epidemiol** 1988; 42(3):292–8 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Dental and oral abnormalities in selected ectodermal dysplasia syndromes. Levin LS. **Birth Defects** 1988; 24(2):205–27 (58 ref.)

Comparison of dental findings in patients with isolated growth hormone deficiency treated with human growth hormone (hGH) and in untreated patients with Laron-type dwarfism. Sarnat H, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):581–6

Oral findings in patients with autosomal dominant hypophosphatemic bone disease and X-linked hypophosphatemia: further evidence that they are different diseases. Schwartz S, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):310–4

[The systemic environment and dental development. From the clinical to the molecular approach] Berdal A, et al. **Rev Stomatol Chir Maxillofac** 1989;90(2):111–4 (24 ref.) (Eng. Abstr.) **(Fre)**

[Gemination and fusion] Sticco E, et al. **Minerva Stomatol** 1988 Jul;37(7):539–41 (Eng. Abstr.) **(Ita)**

GENETICS

Crown size asymmetry in males with fra (X) or Martin-Bell syndrome. Peretz B, et al. **Am J Med Genet** 1988 May–Jun; 30(1–2):185–90

Taurodontism: an anomaly of teeth reflecting disruptive developmental homeostasis. Witkop CJ Jr, et al. **Am J Med Genet Suppl** 1988;4:85–97

Dominant inheritance of tooth malpositions and their association to hypodontia. Svinhufvud E, et al. **Clin Genet** 1988 Dec;34(6):373–81

[Meyer-Schwickerath syndrome] Huet F, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):1017–9 (Eng. Abstr.) **(Fre)**

[Genetic disorders and dental abnormalities] Morabito A, et al. **Minerva Stomatol** 1988 Nov;37(11):895–8 (Eng. Abstr.) **(Ita)**

[Dental anomalies subsequent to pathogenic noxae and/or noxae associated with genetic factors] Quaranta M, et al. **Minerva Stomatol** 1988 Jun;37(6):447–53 (19 ref.) (Eng. Abstr.) **(Ita)**

HISTORY

Third molar agenesis in human prehistoric populations of the Canary Islands. Bermúdez de Castro JM. **Am J Phys Anthropol** 1989 Jun;79(2):207–15

PATHOLOGY

A complete fusion in the primary human dentition: a histological approach. Surmont PA, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):362–7 (27 ref.)

Bilateral double dens invaginatus of maxillary incisors in a young Chinese girl. Lee AM, et al. **Aust Dent J** 1988 Aug; 33(4):310–2

Dens evaginatus. Case report. McAllan LH, et al. **Aust Dent J** 1989 Apr;34(2):130–1

Odontometrics of the permanent teeth in cleft lip and palate: systemic size reduction and amplified asymmetry. Werner SP, et al. **Cleft Palate J** 1989 Jan;26(1):36–41

Numeric anomalies of teeth in concomitant hypodontia and hyperdontia. Ranta R. **J Craniofac Genet Dev Biol** 1988; 8(3):245–51

"Otodental" dysplasia. Chen RJ, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):353–8 (20 ref.)

Rapp–Hodgkin syndrome: an ectodermal dysplasia involving the teeth, hair, nails, and palate. Report of a case and review of the literature. Crawford PJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):50–62 (23 ref.)

Dental aspects of hypophosphatasia: a case report, family study, and literature review. Macfarlane JD, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):521–6 (44 ref.)

The occurrence of a fibro-osseous lesion and multiple dental anomalies in a patient with the Greig cephalopolysyndactyly syndrome. Pliskin ME, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):475–9

[Dental abnormalities in several malformation conditions (cleft lip and/or palate, multiple malformation syndromes) in several dysostosis in children] Berio A, et al. **Minerva Pediatr** 1988 Dec;40(12):691–700 (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

An inverted upper lateral incisor. Keith O, et al. **Br J Orthod** 1989 Aug;16(3):219–20

Dental abnormalities and bone lesions associated with familial adenomatous polyposis: report of cases. Carl W, et al. **J Am Dent Assoc** 1989 Jul;119(1):137–9

VETERINARY

Mandibular and dental abnormalities of two Pleistocene American lions (Panthera leo atrox) from Yukon Territory. Beebe BF, et al. **Can J Vet Res** 1988 Oct;52(4):468–72

TOOTH ABRASION

DIAGNOSIS

The suitability of a new index for the evaluation of dental wear. Dahl BL, et al. **Acta Odontol Scand** 1989 Aug; 47(4):205–10

[Clinical and experimental longitudinal research on the abrasion behavior of artificial teeth] Göbel B. **Zahn Mund Kieferheilkd** 1989;77(4):319–21 **(Ger)**

EPIDEMIOLOGY

Prevalence and severity of incisal and occlusal tooth wear in an adult Swedish population. Hugoson A, et al. **Acta Odontol Scand** 1988 Oct;46(5):255–65

The prevalence of dental attrition and its association with factors of age, gender, occlusion, and TMJ symptomatology. Seligman DA, et al. **J Dent Res** 1988 Oct;67(10):1323–33 (71 ref.)

[Chronic loss of dental hard substance in early and middle adulthood] Natusch I, et al. **Zahn Mund Kieferheilkd** 1989; 77(2):123–7 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Differences in functional variables, fillings, and tooth wear in two groups of 19-year-old individuals. Dahl BL, et al. **Acta Odontol Scand** 1989 Feb;47(1):35–40

Enamel wear caused by ceramic brackets. Douglass JB. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):96–8

Is tooth wear a correlate of composite microwear? Teaford MF. **J Prosthet Dent** 1988 Sep;60(3):400 (17 ref.)

Cervical abrasion in relation to toothbrushing and periodontal health. Bergström J, et al. **Scand J Dent Res** 1988 Oct; 96(5):405–11

Oral conditions among workers in the Danish granite industry. Petersen PE, et al. **Scand J Work Environ Health** 1988 Oct;14(5):328–31

Dentin abrasion (RDA), enamel abrasion (REA) and polishing scores of dentifrices sold in Switzerland. Barbakow F, et al. **Schweiz Monatsschr Zahnmed** 1989; 99(4):408–13

[Dependence of the dentinal abrasion of human teeth on their microhardness] Remizov SM, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):6–7 (Eng. Abstr.) **(Rus)**

HISTORY

Enlarged occlusal surfaces on first molars due to severe attrition and hypercementosis: examples from prehistoric coastal populations of Texas. Comuzzie AG, et al. **Am J Phys Anthropol** 1989 Jan;78(1):9–15

Population variation in tooth, jaw, and root size: a radiographic study of two populations in a high-attrition environment. Smith P, et al. **Am J Phys Anthropol** 1989 Jun;79(2):197–206

Diet and tooth wear. Kerr NW. **Scott Med J** 1988 Aug; 33(4):313–5

PATHOLOGY

Plaque accumulations caused by interdental stripping [published erratum appears in Am J Orthod Dentofacial Orthop 1989 May;95(5):27A] Radlanski RJ, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):416–20

Tooth wear and the position of the mental foramen. Green RM, et al. **Am J Phys Anthropol** 1988 Sep;77(1):69–75

Tooth wear measurements using a reflex microscope. Adams LP, et al. **J Oral Rehabil** 1988 Nov;15(6):605–13

PHYSIOPATHOLOGY

The estimation of tooth age from attrition of the occlusal surface. Song HW, et al. **Med Sci Law** 1989 Jan;29(1):69–73

RADIOGRAPHY

[X-ray cephalometric characteristics of the facial skeleton in increased abrasiveness of the hard dental tissues] Shul'kov VM. **Stomatologiia (Mosk)** 1989 Mar–Apr; 68(2):46–9 (Eng. Abstr.) **(Rus)**

REHABILITATION

The porcelain-faced pinlay—a simple solution to the worn dentition. Clinical hints and case reports. Carter R. **Aust Dent J** 1989 Jun;34(3):223–5

THERAPY

Clinical performance of three dentine bonding agents in Class V abrasion lesions without enamel etching. Tyas MJ. **Aust Dent J** 1988 Jun;33(3):177–80

[Therapeutic management of tooth injuries in children with special reference to Ellis class III] Fetkowska–Mielnik K, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984; 39:93–6 (Eng. Abstr.) (Pol)

[The use of composite materials for the orthodontic treatment of patients with the vertical form of pathological tooth abrasiveness] Gumetskiĭ RA. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):51–2 (Eng. Abstr.) (Rus)

TOOTH APEX see TOOTH ROOT

TOOTH, ARTIFICIAL

see related
ACRYLIC RESINS
DENTAL PORCELAIN

The influence of cusped and cuspless teeth on patient satisfaction with complete dentures. A 2–year follow–up study. Berg E. **J Dent** 1988 Dec;16(6):269–76

The value of the Gothic arch tracing in the positioning of denture teeth. el–Gheriani AS, et al. **J Oral Rehabil** 1988 Jul;15(4):367–71

Tooth positions in the natural and complete artificial dentitions, with special reference to the incisor teeth: an interactive on–line computer analysis. Watson RM, et al. **J Oral Rehabil** 1989 Mar;16(2):139–53 (19 ref.)

A criterion for the selection of artificial posterior teeth. Yoshida K, et al. **J Oral Rehabil** 1988 Jul;15(4):373–8

Augmenting retention of a removable partial denture repair. Bradigan TW, et al. **J Prosthet Dent** 1989 Feb;61(2):252–3

Comparative bond strengths of light–cured, heat–cured, and autopolymerizing denture resins to denture teeth. Clancy JM, et al. **J Prosthet Dent** 1989 Apr;61(4):457–62

STANDARDS

[Clinical and experimental longitudinal research on the abrasion behavior of artificial teeth] Göbel B. **Zahn Mund Kieferheilkd** 1989;77(4):319–21 (Ger)

TOOTH AVULSION see TOOTH LUXATION

TOOTH BLEACHING

The role of bleaching in esthetics. Arens D. **Dent Clin North Am** 1989 Apr;33(2):319–36

Adhesion of composite resin to bleached and unbleached bovine enamel [published erratum appears in J Dent Res 1989 Feb;68(2):inside back cover] Titley KC, et al. **J Dent Res** 1988 Dec;67(12):1523–8

[Bleaching of tetracycline–stained teeth] Guan YC. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):354–5 (Chi)

METHODS

[Bleaching vital teeth. "B.V. Bleaching Vital"] Delmelle P, et al. **Rev Belge Med Dent** 1988;43(1):79–92 (Fre)

TOOTH CALCIFICATION

Tooth development in children with cleft lip and palate: a longitudinal study from birth to adolescence. Pöyry M, et al. **Eur J Orthod** 1989 May;11(2):125–30

[Ultrastructure of microcalcifications of the pulp mesenchyme of human deciduous teeth] Arys A, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jan; 32(1):23–9 (Eng. Abstr.) (Fre)

[Micromorphologic research on caries–dependent dentinal hypermineralization] Bätz C, et al. **Zahn Mund Kieferheilkd** 1988;76(8):812–5 (Eng. Abstr.) (Ger)

[Recent findings on amelogenesis and mineralization of dental enamel] Morabito A, et al. **Minerva Stomatol** 1989 Jan; 38(1):147–9 (26 ref.) (Eng. Abstr.) (Ita)

[De– and remineralization processes of the surface layer of the enamel in intact and pulp–extirpated teeth] Borovskiĭ EV, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):4–7 (Eng. Abstr.) (Rus)

[Characteristics of the enamel mineralization of the intact permanent teeth in children 6 to 14 years old] Udovitskaia EV, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):63–5 (Eng. Abstr.) (Rus)

DRUG EFFECTS

[Effects of 1–hydroxyethylidene–1, 1–bisphosphonate (HEBP) on the unimpeded eruption rate and the dental hard tissue formation in rat mandibular incisor] Izumi T. **Nippon Yakurigaku Zasshi** 1989 Feb;93(2):75–87 (Eng. Abstr.) (Jpn)

TOOTH CROWDING see MALOCCLUSION

TOOTH, DECIDUOUS

see related
DENTITION

Teething. Leung AK. **Am Fam Physician** 1989 Feb; 39(2):131–4 (24 ref.)

Conservative technique for restoring primary molars after pulpotomy treatment. Berg JH, et al. **ASDC J Dent Child** 1988 Nov–Dec;55(6):463–4

Ameloblastic fibrodentinoma: report of case. Brandt SK, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):372–5

Relationships between def, demographic and behavioral variables among multiracial preschool children. Freeman L, et al. **ASDC J Dent Child** 1989 May–Jun;56(3):205–10

Endodontic treatment of infected primary teeth, using Maisto's paste. Mass E, et al. **ASDC J Dent Child** 1989 Mar–Apr;56(2):117–20 (25 ref.)

Caries prevalence and severity in the primary dentition and Streptococcus mutans levels in the saliva of preschoolchildren in South Africa. Chosack A, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):289–91

Caries experience of the primary dentition among groups of Tanzanian urban preschoolchildren. Mosha HJ, et al. **Community Dent Oral Epidemiol** 1989 Feb;17(1):34–7

Clinical evaluations of composite resin restorations in primary molars: a 4–year follow–up study. Tonn EM, et al. **J Am Dent Assoc** 1988 Oct;117(5):603–6

Gingivitis in the deciduous and permanent dentition. An experimental study in the dog. Berglundh T, et al. **J Clin Periodontol** 1989 Aug;16(7):457–66

Gingivitis in the human deciduous dentition. A correlative clinical and block surface light microscopic (BSLM) study. Bimstein E, et al. **J Clin Periodontol** 1988 Oct;15(9):575–80

Periodontal health at first permanent molars adjacent to primary molar stainless steel crowns. Guelmann M, et al. **J Clin Periodontol** 1988 Oct;15(9):531–3

A retrospective radiographic study of alveolar bone loss in the primary dentition in patients with localized juvenile periodontitis. Sjödin B, et al. **J Clin Periodontol** 1989 Feb; 16(2):124–7

[Cauhépé–Fieux syndrome. Interception in the deciduous dentition of mid–face hypoplasia] Brethaux J, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):236–40 (Eng. Abstr.) (Fre)

[Congenital hypophosphatasia as a possible cause of early loss of deciduous teeth] Márton I, et al. **Fogorv Sz** 1989 Feb;82(2):49–51 (Eng. Abstr.) (Hun)

[Clinico–statistical considerations on a sample of school–age population in the Province of Trieste. I. Period of eruption of the 1st molars and change in permanent incisors] Sticco E, et al. **Minerva Stomatol** 1989 Jun;38(6):687–91 (Eng. Abstr.) (Ita)

[Fluorosis and caries of the deciduous teeth] Gnatiuk PIa. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):67–9 (Eng. Abstr.) (Rus)

ABNORMALITIES

Gemination, fusion and supernumerary tooth in the primary dentition: report of case. Camm JH, et al. **ASDC J Dent Child** 1989 Jan–Feb;56(1):60–1

Anomalies of form and number, fused primary teeth, a correlation of the dentitions. Hagman FT. **ASDC J Dent Child** 1988 Sep–Oct;55(5):359–61 (14 ref.)

Long–term interdisciplinary management of multiple mesiodens and delayed eruption: report of case. Ranalli DN, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):376–80

A complete fusion in the primary human dentition: a histological approach. Surmont PA, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):362–7 (27 ref.)

An inverted upper lateral incisor. Keith O, et al. **Br J Orthod** 1989 Aug;16(3):219–20

Primary canine hypoplasia in Head Start children. Silberman SL, et al. **J Public Health Dent** 1989 Winter;49(1):15–8

"Otodental" dysplasia. Chen RJ, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):353–8 (20 ref.)

ANALYSIS

A longitudinal study of dentine lead levels and intelligence, school performance and behaviour: the measurement of dentine lead. Fergusson JE, et al. **Sci Total Environ** 1989 May 15;80(2–3):229–41

Factors influencing lead concentrations in shed deciduous teeth. Paterson LJ, et al. **Sci Total Environ** 1988 Aug 1; 74:219–33

ANATOMY & HISTOLOGY

Deciduous teeth of the Neandertal mandible from Molare Shelter, near Scario (Salerno, Italy). Mallegni F, et al. **Am J Phys Anthropol** 1989 Aug;79(4):475–82

Cusp height relationships between the upper and lower molars in Japanese subjects. Sekikawa M, et al. **J Dent Res** 1988 Dec;67(12):1515–7

[Morphometry of the dental tissues of human teeth in the primary and secondary dentitions] Lichnovská J. **Acta Univ Palacki Olomuc Fac Med** 1987;117:269–80 (Ger)

[Deciduous incisors with a serrated edge] Szentpétery J, et al. **Fogorv Sz** 1989 Feb;82(2):37–40 (Eng. Abstr.) (Hun)

DRUG EFFECTS

[Evaluation of remineralization solutions on the milk teeth] Ulbricht B. **Zahn Mund Kieferheilkd** 1989;77(3):252–5 (Eng. Abstr.) (Ger)

GROWTH & DEVELOPMENT

[Pedodontics (II). The development of the permanent dentition and its morphological differences with reference to the milk teeth] Maréchaux SC. **Schweiz Monatsschr Zahnmed** 1988;98(12):1372–82 (Fre)

[Type of feeding and the onset of teething] Mierzwińska K. **Pediatr Pol** 1988 Sep;63(9):569–73 (Eng. Abstr.) (Pol)

INJURIES

Effects of trauma to the primary incisors on their permanent successors: multidisciplinary treatment. Ben–Bassat Y, et al. **ASDC J Dent Child** 1989 Mar–Apr;56(2):112–6

Traumatic dental injuries in nursery schoolchildren from Baghdad, Iraq. Yagot KH, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):292–3

[Early tooth injuries and impaction of the permanent central incisor with root abnormalities] Bourdillat C, et al. **Orthod Fr** 1987;58 Pt 2:629–40 (Eng. Abstr.) (Fre)

MICROBIOLOGY

Detection and distribution of Actinobacillus actinomycetemcomitans in the primary dentition. Alaluusua S, et al. **J Periodontol** 1988 Aug;59(8):504–7

PATHOLOGY

Social and biological correlates of localized enamel hypoplasia of the human deciduous canine tooth. Skinner MF, et al. **Am J Phys Anthropol** 1989 Jun;79(2):159–75

Tooth–germ sequestration as a sequela of chronic periapical inflammation of the primary predecessor. Goodman–Topper ED, et al. **ASDC J Dent Child** 1988 Nov–Dec;55(6):455–8

Severe infraclusion ankylosis: report of three cases. Pilo R, et al. **ASDC J Dent Child** 1989 Mar–Apr;56(2):144–6 (16 ref.)

Sizes of dental arches and interdental space in 3–year–old children with and without cleft lip/palate. Nyström M, et al. **Eur J Orthod** 1989 Feb;11(1):82–8

[Age–related changes in the dental arches of preschoolers with sagittal bite anomalies] Kamysheva LI, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):56–8 (Eng. Abstr.) (Rus)

PHYSIOLOGY

The period between exfoliation of primary teeth and the emergence of permanent successors. Nyström M, et al. **Eur J Orthod** 1989 Feb;11(1):47–51

[The time of eruption of the milk teeth in Down's disease] Fischer–Brandies H. **Fortschr Kieferorthop** 1989 Apr; 50(2):144–51 (Eng. Abstr.) (Ger)

[The effects of premature deciduous molar loss on the succeeding premolars] Hennemann K, et al. **Fortschr Kieferorthop** 1989 Feb;50(1):35–42 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Dentin resorption mediated by odontoclasts in physiological root resorption of human deciduous teeth. Sasaki T, et al. **Am J Anat** 1988 Dec;183(4):303–15

RADIOGRAPHY

A radiographic study of interproximal alveolar bone crest between the primary molars in children. Bimstein E, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):348–50

Radiographic evaluation of pulpal therapy for primary anterior teeth. Flaitz CM, et al. **ASDC J Dent Child** 1989 May–Jun;56(3):182–5

Ankylosed deciduous maxillary molar mimicking sinus pathosis. Kreutz RW. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):611–2

[Assessment of the somatic and dental status of children with periodontitis of the deciduous teeth taking into account clinical x–ray and hematologic indices] Roginskiĭ VV, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):64–7 (Eng. Abstr.) (Rus)

SURGERY

Early treatment of palatally erupting maxillary canines by extraction of the primary canines. Ericson S, et al. **Eur J Orthod** 1988 Nov;10(4):283–95

The effect of primary tooth extraction on the eruption of succedaneous premolars. Loevy HT. **J Am Dent Assoc** 1989 Jun;118(6):715–8

ULTRASTRUCTURE

The effect of etch–time on the bond strength of a sealant and on the etch–pattern in primary and permanent enamel: an evaluation. Tandon S, et al. **ASDC J Dent Child** 1989 May–Jun;56(3):186–90

Structure of the so–called 'prismless' enamel in human deciduous teeth. Kodaka T, et al. **Caries Res** 1989; 23(5):290–6

[Ultrastructure of microcalcifications of the pulp mesenchyme of human deciduous teeth] Arys A, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jan; 32(1):23–9 (Eng. Abstr.) (Fre)

[An external aprismatic layer on temporary and permanent teeth] Piacentini C, et al.

Bull Group Int Rech Sci Stomatol Odontol 1988 Aug-Dec; 31(3-4):177-87 (Eng. Abstr.) (Fre)

TOOTH DISCOLORATION

CHEMICALLY INDUCED

Minocycline-induced discoloration of the permanent teeth. Rosen T, et al. J Am Acad Dermatol 1989 Sep;21(3 Pt 1):569 (9 ref.)

ETIOLOGY

Postmortem pink teeth: in vitro production. van Wyk CW. J Oral Pathol 1988 Nov;17(9-10):568-72

[Bleaching of tetracycline-stained teeth] Guan YC. Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Nov; 23(6):354-5 (Chi)

[Experimental formation of pink teeth and their analysis] Ikeda N, et al. Nippon Hoigaku Zasshi 1988 Apr; 42(2):179-83 (Eng. Abstr.) (Jpn)

PREVENTION & CONTROL

[Prevention of development of tetracycline-induced changes in the teeth of children with the use of sodium fluoride] Antalovská Z, et al. Cas Lek Cesk 1986 Oct 24; 125(43):1317-20 (Eng. Abstr.) (Cze)

THERAPY

[Bleaching vital teeth. "B.V. Bleaching Vital"] Delmelle P, et al. Rev Belge Med Dent 1988;43(1):79-92 (Fre)

TOOTH DISEASES

Awareness of dental disorders and discrepancy between "objective" and "subjective" dental treatment needs. Tervonen T, et al. Community Dent Oral Epidemiol 1988 Dec;16(6):345-8

Common dental emergencies. Evaluation and management for emergency physicians. Klokkevold P. Emerg Med Clin North Am 1989 Feb;7(1):29-63 (40 ref.)

Proceedings of the sixth annual conference, The Robert Wood Johnson Dental Services Research Scholars Program. Princeton, New Jersey, June 1-2, 1988. J Dent Educ 1988 Nov;52(11):595-672

Divisional abstracts, supported by the International College of Dentists. J Dent Res 1989 Apr;68(4):522-743

Abstracts of papers. 18th annual session, American Association for Dental Research. March 15-19, 1989, San Francisco, California. J Dent Res 1989 Mar;68 Spec No:164-438

Abstracts of papers, 67th general session, International Association for Dental Research; 6th meeting, IADR Irish Division; 72nd annual meeting, Scandinavian Association for Dental Research; 26th annual meeting, Continental European Division of the IADR. June 28-July 1, 1989, Dublin, Ireland. J Dent Res 1989 Jun;68 Spec No:848-1052

Abstracts: 25th annual congress of the Swedish Dental Society. November 23-25, 1988. Swed Dent J 1988; 12(6):241-69

COMPLICATIONS

Dental infections in association with cerebral infarction in young and middle-aged men. Syrjänen J, et al. J Intern Med 1989 Mar;225(3):179-84

Orodental considerations in facial pain. Solberg WK, et al. Semin Neurol 1988 Dec;8(4):318-23 (26 ref.)

[Mediastinitis caused by odontogenic organisms (dental origin). Apropos of 3 cases] Coche G, et al. Ann Radiol (Paris) 1988;31(4):223-8 (Eng. Abstr.) (Fre)

[Various clinical manifestations with a dentogenic cause] Kirch W, et al. Med Klin 1988 Nov 25;83(23):790-4 (Ger)

DIAGNOSIS

Oral surgery: the diagnosis. Caplin RL. Br Dent J 1989 Feb 11;166(3):91-4

The orodental status of anorexics and bulimics. Milosevic A, et al. Br Dent J 1989 Jul 22;167(2):66-70

Board and home care. Oral health. Auld EM. Geriatr Nurs (New York) 1988 Nov-Dec;9(6):340-1

Subgingival microflora, dental and periodontal conditions in patients with hereditary fructose intolerance. Saxén L, et al. Scand J Dent Res 1989 Apr;97(2):150-8

DRUG THERAPY

Twenty years of antibiotic sensitivity testing of dental infections. Part 1. Antibiotic sensitivities, 1980 to 1986. Woods R. Aust Dent J 1988 Oct;33(5):420-3

Twenty years of antibiotic sensitivity testing of dental infections. Part 2. A review, 1966-1986. Woods R. Aust Dent J 1988 Dec;33(6):505-10

Preliminary pharmacokinetic and clinical evaluation of ofloxacin in dental and oral cavity diseases. Pappalardo G, et al. Int J Clin Pharmacol Res 1989;9(3):229-32

A prospective double-blind evaluation of penicillin versus clindamycin in the treatment of odontogenic infections. Gilmore WC, et al. J Oral Maxillofac Surg 1988 Dec; 46(12):1065-70

[Our experience in the field of therapy of infections in odontostomatology with bacampicillin hydrochloride] Ferlito S. Clin Ter 1987 Jul 15;122(1):9-12 (Eng. Abstr.) (Ita)

[Clinical evaluation of clarithromycin in treatment of acute dental infections. Comparative double-blind study using josamycin as the control] Sasaki J, et al. Jpn J Antibiot 1989 Apr;42(4):983-1013 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

The oral needs and demands of a geriatric population at Mt. Olivet, Brisbane, 1986. Homan BT, et al. Aust Dent J 1988 Oct;33(5):424-32

Dental health of patients suffering from cystic fibrosis in Northern Ireland. Kinirons MJ. Community Dent Health 1989 Jun;6(2):113-20

[Clinico-statistical considerations on a sample of school-age population in the Province of Trieste. 3. Incidence of dental and orthognatodontic pathology] Sticco E, et al. Minerva Stomatol 1989 Jun;38(6):699-704 (Eng. Abstr.) (Ita)

ETIOLOGY

Tobacco use and oral health. McCann D. J Am Dent Assoc 1989 Jan;118(1):18-25

Periodontal manifestations of hyperoxaluria and oxalosis. Moskow BS. J Periodontol 1989 May;60(5):271-8

Comparison of dental findings in patients with isolated growth hormone deficiency treated with human growth hormone (hGH) and in untreated patients with Laron-type dwarfism. Sarnat H, et al. Oral Surg Oral Med Oral Pathol 1988 Nov;66(5):581-6

Oral findings in patients with autosomal dominant hypophosphatemic bone disease and X-linked hypophosphatemia: further evidence that they are different diseases. Schwartz S, et al. Oral Surg Oral Med Oral Pathol 1988 Sep;66(3):310-4

Dentoalveolar ankylosis and associated root resorption in replanted teeth. Experimental and clinical studies in monkeys and man. Andersson L. Swed Dent J Suppl 1988; 56:1-75

[Root resorption, decalcification and orthodontic treatment] Arrigoni C, et al. Ann Osp Maria Vittoria Torino 1987-88; 30(1):72-6 (18 ref.) (Ita)

[Dental pathology from extra-dental causes. Acquired visceral tooth diseases and prenatal tooth diseases] Cheli E, et al. Minerva Stomatol 1988 Apr;37(4):295-303 (21 ref.) (Eng. Abstr.) (Ita)

HISTORY

Enlarged occlusal surfaces on first molars due to severe attrition and hypercementosis: examples from prehistoric coastal populations of Texas. Comuzzie AG, et al. Am J Phys Anthropol 1989 Jan;78(1):9-15

MICROBIOLOGY

The microbiology and chemotherapy of odontogenic infections. Moenning JE, et al. J Oral Maxillofac Surg 1989 Sep;47(9):976-85 (60 ref.)

[Epidemiology of infection in dentistry] Silla M, et al. Minerva Stomatol 1988 Sep;37(9):665-9 (Ita)

PATHOLOGY

Vitamin D-dependent rickets type II: report of three cases. Kikuchi K, et al. ASDC J Dent Child 1988 Nov-Dec; 55(6):465-8

Orofacial manifestations in a child with Fanconi's syndrome. Morisaki I, et al. Oral Surg Oral Med Oral Pathol 1989 Aug;68(2):171-4

PHYSIOPATHOLOGY

Isolated extramedullary relapse of acute myelogenous leukemia in a tooth. Maygarden SJ, et al. Mod Pathol 1989 Jan;2(1):59-62

PREVENTION & CONTROL

'Preventive dental care for toddlers' [letter] Fitton RP. Br Dent J 1989 Jun 10;166(11):397

Who is tackling dental disease? [letter] Lux LB. Br Dent J 1989 Mar 11;166(5):151

Effect of a daily 0.2% chlorhexidine rinse on the oral health of an institutionalized elderly population. Yanover L, et al. Can Dent Assoc J 1988 Aug;54(8):595-8

Guttman scale analysis of dental health attitudes and knowledge. Petersen PE. Community Dent Oral Epidemiol 1989 Aug;17(4):170-2

Stannous fluoride [letter] Mason WE. J Am Dent Assoc 1989 May;118(5):522

Assessment of a dental disease prevention program after three years. Malvitz DM, et al. J Public Health Dent 1989 Winter;49(1):54-8

Dietary study on children within an oral health preventive programme (WHO). Pados R, et al. Nahrung 1988; 32(7):715-20

PSYCHOLOGY

Significance of dental problems to the public and their comparability with general health problems. Westert GP, et al. Community Dent Oral Epidemiol 1988 Dec; 16(6):360-3

RADIOGRAPHY

The diagnostic value of panoramic radiographs in children aged nine to ten years. Neal JJ, et al. Br J Orthod 1988 Aug;15(3):193-7

Multiple radiopaque masses in the jaws. Arendt DM, et al. J Am Dent Assoc 1989 Mar;118(3):349-51 (17 ref.)

Efficacy of panoramic radiography in dental diagnosis and treatment planning. Kantor ML, et al. J Dent Res 1989 May;68(5):810-2

Tumoral calcinosis with unusual dental radiographic findings. Witcher SL Jr, et al. Oral Surg Oral Med Oral Pathol 1989 Jul;68(1):104-7 (19 ref.)

Panoramic screening for dental anomalies assessed by professionals with identical and different backgrounds. Hintze H, et al. Scand J Dent Res 1989 Feb;97(1):60-5

[The advantages and drawbacks of x-ray methods in dental and periodontal diseases and the problems of standardizing x-ray study in therapeutic dentistry] Rabukhina NA, et al. Stomatologiia (Mosk) 1988 Sep-Oct;67(5):82-3 (Rus)

RADIOTHERAPY

'Soft lasers—have they a place in dentistry?' [letter] Merritt R, et al. Br Dent J 1989 Feb 11;166(3):69

The soft laser: therapeutic tool or popular placebo? Wilder-Smith P. Oral Surg Oral Med Oral Pathol 1988 Dec;66(6):654-8

SURGERY

Oral surgery: assessment and treatment. Caplin RL. Br Dent J 1989 Feb 25;166(4):128-31

THERAPY

Dental treatment for patients with ectodermal dysplasias. Nowak AJ. Birth Defects 1988;24(2):243-52 (32 ref.)

Geriatric dentistry. Dent Clin North Am 1989 Jan;33(1):1-131

Dental treatment program for patients with mental retardation. Barnett ML, et al. Ment Retard 1988 Oct; 26(5):310-3

A study of the reasons for patients seeking after hours emergency dental treatment. Beckelheimer RG, et al. Milit Med 1989 Apr;154(4):174-7

[Nonsurgical treatment of radicular cysts] Li YQ. Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Mar; 23(2):115-7 (Chi)

[Dental treatment under anesthesia in institutionalized mentally retarded patients] Pásztor E, et al. Fogorv Sz 1988 Sep;81(9):281-4 (Eng. Abstr.) (Hun)

[Clinico-statistical study and therapeutic approach to odontostomatological pathology in heart surgery patients] Bucci E, et al. Minerva Stomatol 1989 Jun;38(6):657-66 (19 ref.) (Eng. Abstr.) (Ita)

[Comparison of various needs regarding stomatologic care of the population 35-44 years of age in Poland and in other countries] Bołtacz-Rzepkowska E, et al. Przegl Epidemiol 1988;42(3):275-8 (Eng. Abstr.) (Pol)

VETERINARY

Endodontics in veterinary medicine. Gamm DJ. Oral Surg Oral Med Oral Pathol 1988 Sep;66(3):372-7

TOOTH EROSION

Erosion: guidelines for the general practitioner. Bevenius J, et al. Aust Dent J 1988 Oct;33(5):407-11 (23 ref.)

CHEMICALLY INDUCED

[Analytic measurement of the solubility of the enamel surface exposed to acid and morphometric study of the resulting erosion in rat incisors treated with aluminum] Kóbor A, et al. Fogorv Sz 1989 Mar;82(3):65-9 (Eng. Abstr.) (Hun)

EPIDEMIOLOGY

Factors related to dental health and some salivary factors in Finnish Seventh-Day Adventists. Linkosalo E, et al. Proc Finn Dent Soc 1988;84(5-6):279-89

[Chronic loss of dental hard substance in early and middle adulthood] Natusch I, et al. Zahn Mund Kieferheilkd 1989; 77(2):123-7 (Eng. Abstr.) (Ger)

ETIOLOGY

Effects of various sport drink modifications on dental caries and erosion in rats with controlled eating and drinking pattern. Sorvari R. Proc Finn Dent Soc 1989;85(1):13-20

[The role of mechanical factors in the development of cervical wedge-shaped erosions] Frank RM, et al. Schweiz Monatsschr Zahnmed 1989;99(5):521-9 (Eng. Abstr.) (Fre)

HISTORY

Tooth wear in Australian aboriginal populations from the River Murray Valley. Molnar S, et al. Am J Phys Anthropol 1989 Jun;79(2):185-96

PATHOLOGY

Salivary composition and dental erosions in lacto-ovo-vegetarians. Linkosalo E, et al. Proc Finn Dent Soc 1988;84(4):253-60

PREVENTION & CONTROL

Buffering effect of antacids in the mouth--a new treatment of dental erosion? Meurman JH, et al. **Scand J Dent Res** 1988 Oct;96(5):412–7

["Don't turn to the vinegar..." (interview by K. Venner)] Meier R. **Schweiz Monatsschr Zahnmed** 1988;98(10):1134–5, 1147–8 (Fre, Ger)

TOOTH ERUPTION

Teething. Leung AK. **Am Fam Physician** 1989 Feb; 39(2):131–4 (24 ref.)

Nutritional status, tooth eruption, and dental caries: a review. Alvarez JO, et al. **Am J Clin Nutr** 1989 Mar;49(3):417–26 (100 ref.)

A longitudinal cephalometric study of incisor supra-eruption in young and adult rhesus monkeys (Macaca mulatta). Schneiderman ED. **Arch Oral Biol** 1989;34(2):137–41

Disturbances of tooth form and eruption in the microphthalmic (mi) mouse: a light and electron microscopic study. Symons AL, et al. **Arch Oral Biol** 1989; 34(2):71–6

The effects of cerebral hemidecortication on the eruption rate and uptake of [3H]-glycine by the periodontal ligament of the rat incisor. Tse M do C, et al. **Arch Oral Biol** 1988; 33(8):605–11

Teething difficulties in childhood. Conroy J. **Aust Fam Physician** 1988 Sep;17(9):756, 758 (15 ref.)

Precocious tooth eruption and loss in Letterer-Siwe disease. Aldred MJ, et al. **Br Dent J** 1988 Nov 19;165(10):367–70

Extremes in second molar eruption in two oriental patients. Lew KK. **Br Dent J** 1989 Jun 10;166(11):415–6

Relationship between enamel formation and eruption rate in rat mandibular incisors. Robinson C, et al. **Cell Tissue Res** 1988;254(3):655–8

Canines erupted through grafted alveolar cleft defects in patients with alveolar clefts: a pulp testing evaluation study. el Deeb ME, et al. **Cleft Palate J** 1989 Apr;26(2):100–4

Developmental changes in the extracellular matrix of the dental follicle during tooth eruption. Gorski JP, et al. **Connect Tissue Res** 1988;18(3):175–90

Inter-relationships among ages of emergence of teeth. A prospective longitudinal study of Swedish children from birth to 18 years. Hamano Y, et al. **Eur J Orthod** 1988 Aug;10(3):273–80

The period between exfoliation of primary teeth and the emergence of permanent successors. Nyström M, et al. **Eur J Orthod** 1989 Feb;11(1):47–51

Tooth development in children with cleft lip and palate: a longitudinal study from birth to adolescence. Pöyry M, et al. **Eur J Orthod** 1989 May;11(2):125–30

The effect of primary tooth extraction on the eruption of succedaneous premolars. Loevy HT. **J Am Dent Assoc** 1989 Jun;118(6):715–8

Fluoride distribution in the enamel of the mesio-lingual cusps of pairs of erupted and unerupted third molars of man with a low fluoride background. Grobler SR, et al. **J Biol Buccale** 1988 Jun;16(2):89–94

Dental plaque and caries on occlusal surfaces of first permanent molars in relation to stage of eruption. Carvalho JC, et al. **J Dent Res** 1989 May;68(5):773–9

Changes in the tartrate-resistant acid phosphatase cell population in dental follicles and bony crypts of rat molars during tooth eruption. Wise GE, et al. **J Dent Res** 1989 Feb;68(2):150–6

Prematurely erupted teeth in newborn infants. King NM, et al. **J Pediatr** 1989 May;114(5):807–9

The pre- and posteruptive effects of fluoride in the caries decline. Beltran ED, et al. **J Public Health Dent** 1988 Fall; 48(4):233–40 (145 ref.)

Eruption pattern of permanent molars: implications for school-based dental sealant programs. Kuthy RA, et al. **J Public Health Dent** 1989 Winter;49(1):7–14

The eruption of third molars in adults: a 10-year longitudinal study. Garcia RI, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):9–13

Radiographic appearance of nutrient canals in the region of the erupting permanent maxillary cuspid. Goodman-Topper ED, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):606–10

Mandibular third molar eruption in relation to available space as assessed on lateral cephalograms. Forsberg CM, et al. **Swed Dent J** 1989;13(1-2):23–31

[Clinical study of the early eruption of 74 bicuspids] Shi GX. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):105–7, 127 (Eng. Abstr.) (Chi)

[The time of eruption of the milk teeth in Down's disease] Fischer-Brandies H. **Fortschr Kieferorthop** 1989 Apr; 50(2):144–51 (Eng. Abstr.) (Ger)

[Electrothermographic measurements of the alveolar process during tooth eruption] Petersohn K, et al. **Zahn Mund Kieferheilkd** 1988;76(8):821–4 (Eng. Abstr.) (Ger)

[Clinico-statistical considerations on a sample of school-age population in the Province of Trieste. I. Period of eruption of the 1st molars and change in permanent incisors] Sticco E, et al. **Minerva Stomatol** 1989 Jun;38(6):687–91 (Eng. Abstr.) (Ita)

[Clinico-statistical considerations on a sample of school-age population in the Province of Trieste. II. Period of eruption of the second molars and change of the canines and 1st and 2d permanent premolars] Sticco E, et al. **Minerva Stomatol** 1989 Jun;38(6):693–8 (Eng. Abstr.) (Ita)

[Type of feeding and the onset of teething] Mierzwińska K. **Pediatr Pol** 1988 Sep;63(9):569–73 (Eng. Abstr.) (Pol)

[Characteristics of tooth eruption in children with various degrees of exogamy] Savranskiĭ FZ, et al. **Pediatriia** 1988; (10):106 (Rus)

DRUG EFFECTS

The effect of cortisone on the eruption rate of root-resected incisors in the rat. Teng CM, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):67–71

The effect of corticosteroids and cyclophosphamide on the eruption of resected incisor teeth in the rat. Burn-Murdoch RA. **Arch Oral Biol** 1988;33(9):661–7

Continuous monitoring of the movements of erupting and newly erupted teeth of limited growth (ferret mandibular canines) and their responses to hexamethonium. Moxham BJ, et al. **Arch Oral Biol** 1988;33(12):919–23

An autoradiographic study on the effect of epidermal growth factor on cell proliferation in erupting mouse incisors. Rihtniemi L, et al. **Arch Oral Biol** 1987;32(12):859–63

[Effects of 1-hydroxyethylidene-1, 1-bisphosphonate (HEBP) on the unimpeded eruption rate and the dental hard tissue formation in rat mandibular incisor] Izumi T. **Nippon Yakurigaku Zasshi** 1989 Feb;93(2):75–87 (Eng. Abstr.) (Jpn)

TOOTH ERUPTION, ECTOPIC

Tooth germ transposition: report of cases. Ranta R. **ASDC J Dent Child** 1989 Sep-Oct;56(5):366–70

COMPLICATIONS

Resorption of maxillary lateral incisors caused by ectopic eruption of the canines. A clinical and radiographic analysis of predisposing factors. Ericson S, et al. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):503–13

PATHOLOGY

Bilateral asymmetrical transposition of teeth. Report of a case. Al-Shawaf MD. **Ann Dent** 1988 Summer;47(1):41–2, 44 (4 ref.)

THERAPY

Maxillary canine-lateral incisor transposition--orthodontic management. Shapira Y, et al. **Am J Orthod Dentofacial Orthop** 1989 May;95(5):439–44

Early treatment of palatally erupting maxillary canines by extraction of the primary canines. Ericson S, et al. **Eur J Orthod** 1988 Nov;10(4):283–95

Nonsurgical management of ectopic teeth. Lazarus AH. **J Am Dent Assoc** 1989 Jul;119(1):133–5

[Bone inclusion and ectopia of a superior incisor. Clinical case] Cassarino G. **Minerva Stomatol** 1989 Feb;38(2):191–3 (Eng. Abstr.) (Ita)

TOOTH EXFOLIATION

The period between exfoliation of primary teeth and the emergence of permanent successors. Nyström M, et al. **Eur J Orthod** 1989 Feb;11(1):47–51

[Congenital hypophosphatasia as a possible cause of early loss of deciduous teeth] Márton I, et al. **Fogorv Sz** 1989 Feb;82(2):49–51 (Eng. Abstr.) (Hun)

ETIOLOGY

Precocious tooth eruption and loss in Letterer-Siwe disease. Aldred MJ, et al. **Br Dent J** 1988 Nov 19;165(10):367–70

Is faulty collagen formation the cause of the exfoliation of the teeth in the Papillon-Lefèvre syndrome? Sutton PR. **Med Hypotheses** 1989 May;29(1):43–4

TOOTH EXTRACTION

Teeth extraction. Reasons--procedures--circumstances. Komenda S, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:481–527

Comments on ABO case report [letter] Ahlin JH. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):24A

Changes in facial profile during orthodontic treatment with extraction of four first premolars. Drobocky OB, et al. **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):220–30

Vertical dimensional changes of the lips in the North American black patient after four first-premolar extractions. Park S, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):152–60

Class II, Division 1 vertical pattern. Runge ME, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):271–7

Degenerative changes of primary neurons following tooth extraction. Kubota K, et al. **Anat Anz** 1988;166(1-5):133–9

'Oral surgery: assessment and treatment' [letter] Brookman J. **Br Dent J** 1989 May 6;166(9):319

'Oral surgery: assessment and treatment' [letter] Cooksey MW. **Br Dent J** 1989 Apr 22;166(8):283

Intra-oral tumours presenting after dental extraction. Saxby PJ, et al. **Br Dent J** 1989 May 6;166(9):337–8

Oral nalbuphine for the treatment of pain after dental extractions. Kay B, et al. **Br J Anaesth** 1988 Sep;61(3):313–7

Comparison of i.v. sedation with midazolam and inhalation sedation with isoflurane in dental outpatients. Parbrook GD, et al. **Br J Anaesth** 1989 Jul;63(1):81–6

An evaluation of different doses of soluble aspirin and aspirin tablets in postoperative dental pain. Holland IS, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):463–8

A gnathodynanometer as an objective means of pain assessment following wisdom tooth removal. High AS, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):284–91

The effect of smoking on immediate post-extraction socket filling with blood and on the incidence of painful socket. Meechan JG, et al. **Br J Oral Maxillofac Surg** 1988 Oct; 26(5):402–9

Do local analgesics injected at the time of third molar removal under general anaesthesia reduce significantly post operative analgesic requirements? A double-blind controlled trial. Tuffin JR, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):27–32

Long-term comparison of two surgical flap designs for third molar surgery on the health of the periodontal tissue of the second molar tooth. Schofield ID, et al. **Can Dent Assoc J** 1988 Sep;54(9):689–91

The use of pulse oximetry in the immediate recovery phase following dental extractions under general anesthesia in children. Young ER, et al. **Can Dent Assoc J** 1989 Apr; 55(4):305–8

Dental caries. Principal cause of tooth extraction in a sample of US male adults. Chauncey HH, et al. **Caries Res** 1989; 23(3):200–5

The capability of the 1983 Children's Dental Health Survey in Scotland to predict fillings and extractions subsequently undertaken. Nuttall NM, et al. **Community Dent Health** 1988 Dec;5(4):355–62

Flecainide and cardiac dysrhythmias during dental extraction under anaesthesia. Clyburn PA, et al. **Eur J Anaesthesiol** 1989 Jan;6(1):39–48

The efficacy of benorylate in postoperative dental pain. Moore U, et al. **Eur J Clin Pharmacol** 1989;36(1):35–8

Early treatment of palatally erupting maxillary canines by extraction of the primary canines. Ericson S, et al. **Eur J Orthod** 1988 Nov;10(4):283–95

Overbite and overjet correction in a Class II, division 1 sample treated with Edgewise therapy. Hellekant M, et al. **Eur J Orthod** 1989 May;11(2):91–106

The effectiveness of flurazepam as night sedation prior to the removal of third molars. Luyk NH, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):347–51

A comparison of paracetamol and diflunisal for pain control following 3rd molar surgery. Rodrigo C, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):130–2

Primary wound closure in haemophiliacs undergoing dental extractions. Stajčić Z, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):14–6

Irradiation effect of low-energy laser on alveolar bone after tooth extraction. Experimental study in rats. Takeda Y. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):388–91

Desmopressin acetate prophylaxis in a patient with hemophilia A: report of case. Herrin RA, et al. **J Am Dent Assoc** 1988 Oct;117(5):593–4

Extractions and TMJ [letter] Lindquist JT. **J Am Dent Assoc** 1988 Oct;117(5):556

The effect of primary tooth extraction on the eruption of succedaneous premolars. Loevy HT. **J Am Dent Assoc** 1989 Jun;118(6):715–8

Self-extraction [letter] Masillamoni C. **J Am Dent Assoc** 1989 Jun;118(6):682

Ethics and patient initiative. Stevenson RB. **J Am Dent Assoc** 1989 Apr;118(4):414

Treatment of rapidly destructive periodontitis in Papillon-Lefèvre syndrome. Laboratory and clinical observations. Preus HR. **J Clin Periodontol** 1988 Nov; 15(10):639–43

The relationship between loss of first permanent molar teeth and the prevalence of caries and restorations in adjacent teeth: a study of 15-16- year-old children. Oliver SJ, et al. **J Dent** 1988 Aug;16(4):155–9

Time-dependent changes of collagen crosslinks in the socket after tooth extraction in rabbits. Kuboki Y, et al. **J Dent Res** 1988 Jun;67(6):944–8

Does acute intraoral pain alter cutaneous sensibility? Hansson P, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug; 51(8):1032–6

Comparison of the use of nalbuphine and fentanyl during third molar surgery. Canning HB, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1048–50

Cephradine penetration of mandibular bone. Middlehurst RJ, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):672–3

Hemiplegic migraine following third molar extractions under intravenous sedation: report of a case. Strauss RA, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):184–6

Causes of tooth loss in a veteran population. Niessen LC, et al. **J Public Health Dent** 1989 Winter;49(1):19–23

Extraction of third molars [letter] Prigoff W, et al. **N Y State Dent J** 1989 Jan;55(1):8

Multiple autoextractions: oral self-mutilation reviewed. Altom RL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):271–4 (34 ref.)

Polycythemia vera in an oral surgical patient. A case report. Carlson ER, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):673–5

Clinical implications of factor XII deficiency. McDonough RJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep; 68(3):264–6

The effects of two different dental local anesthetic solutions on plasma potassium levels during third molar surgery. Meechan JG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):650–3

Dental extractions and radiotherapy for head and neck cancers [letter] Wong F, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug;66(2):176–8

The site and distribution of mechanoreceptors in the periodontal ligament of the cat represented in the mesencephalic nucleus and their possible regeneration following tooth extraction. Linden RW, et al. **Prog Brain Res** 1988;74:231–6

[Glaphenine: toothache or a matter of choice? (letter)] Arnolds JA. **Ned Tijdschr Geneeskd** 1988 Dec 3; 132(49):2259 (Dut)

[Autologous fibrin glue—a local hemostyptic agent following dental surgical interventions in patients undergoing anticoagulant therapy] Leuthold B, et al. **Zahn Mund Kieferheilkd** 1989;77(3):268–72 (Eng. Abstr.) (Ger)

[Characteristics of the arrest of hemorrhages occurring after tooth extraction in patients with congenital coagulopathies] Soboleva OI, et al. **Stomatologiia (Mosk)** 1989 May–Jun; 68(3):30–2 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

The use of a visual analogue scale in observer assessment of postoperative swelling subsequent to third-molar surgery. Berge TI. **Acta Odontol Scand** 1989 Jun; 47(3):167–74

Visual analogue scale assessment of postoperative swelling. A study of clinical inflammatory variables subsequent to third-molar surgery. Berge TI. **Acta Odontol Scand** 1988 Aug;46(4):233–40

Orthognathic surgery [letter] Douglas BL. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):22A–23A

Legal aspects of orthodontic practice: risk management concepts. The impacted canine. Machen DE. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):270–1

Michigan jury awards +850,000 in ortho case: a tempest in a teapot. Pollack B. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):358–60

Bleeding control after extractions in a patient with aplastic anemia during bone marrow transplantation: report of case. Okamoto GU, et al. **ASDC J Dent Child** 1989 Jan–Feb; 56(1):50–5

A controlled comparison of effectiveness of bupivacaine for post-operative pain control. Chapman PJ. **Aust Dent J** 1988 Aug;33(4):288–90

Should recent dental treatment exclude potential blood donors? Nouri A, et al. **BMJ** 1989 Feb 4;298(6669):295

'An unusual post-extraction complication'. **Br Dent J** 1988 Sep 24;165(6):202–3

Lingual nerve damage associated with the removal of lower third molars. Blackburn CW, et al. **Br Dent J** 1989 Aug 5;167(3):103–7

An unusual post-extraction complication [letter] Caplin RL. **Br Dent J** 1988 Aug 20;165(4):120

Dangers of an uncomplicated tooth extraction. A case of Streptococcus sanguis meningitis. Fernando IN, et al. **Br Dent J** 1988 Sep 24;165(6):220

A comparison of ibuprofen and dihydrocodeine in relieving pain following wisdom teeth removal. Frame JW, et al. **Br Dent J** 1989 Feb 25;166(4):121–4

Prostatic carcinoma presenting as a haemorrhagic diathesis after dental extraction. McKechnie J. **Br Dent J** 1989 Apr 22;166(8):295–6

A clinical study of dry socket in Sri Lanka. Amaratunga NA, et al. **Br J Oral Maxillofac Surg** 1988 Oct;26(5):410–8 (26 ref.)

The effect of chlorhexidine irrigation on the incidence of dry socket: a pilot study. Field EA, et al. **Br J Oral Maxillofac Surg** 1988 Oct;26(5):395–401

Removing the mandibular third molar: neurosensory deficits and consequent litigation. Swanson AE. **Can Dent Assoc J** 1989 May;55(5):383–6

A single dose study of a new analgesic. Ciramadol. Symington JM, et al. **Can Dent Assoc J** 1988 Sep; 54(9):675–8

Lingual nerve damage following lower third molar surgery. Mason DA. **Int J Oral Maxillofac Surg** 1988 Oct; 17(5):290–4

Periodontal damage to third molars prior to transplantation. A histometric study. Schliephake H, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):55–8

Postoperative bleeding in an undiagnosed hemophilia A patient: report of case. Orlian AI, et al. **J Am Dent Assoc** 1989 May;118(5):583–4 (9 ref.)

The safety of dental extractions in patients with hematologic malignancies. Williford SK, et al. **J Clin Oncol** 1989 Jun; 7(6):798–802

Corynebacterium group JK endocarditis after dental extraction under antibiotic cover [letter] Etienne J, et al. **J Infect** 1988 Sep;17(2):188–9

Experimental endocarditis following dental extractions in rats with periodontitis [published erratum appears in J Oral Maxillofac Surg 1989 Feb;47(2):215] Overholser CD, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):857–61

Management of oral bleeding in haemophilic patients [letter] Baudo F, et al. **Lancet** 1988 Nov 5;2(8619):1082

Late presentation of actinomycosis after third molar surgery. Boon LC. **Med J Malaysia** 1987 Sep;42(3):207–8

A double-blind single-dose evaluation of the relative analgesic efficacy and safety of carprofen in the treatment of postoperative pain after oral surgery. Clark MS, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):273–8

Radiology of alveolar complications associated with dental extractions. May OA Jr, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):243–5

[Nimesulide in oral surgery. Clinical experience in postoperative treatment] Bergamini M, et al. **Minerva Stomatol** 1988 Oct;37(10):793–6 (Eng. Abstr.) (Ita)

[Traumatic myositis ossificans of the medial pterygoid muscle] Gotte P, et al. **Minerva Stomatol** 1988 Oct; 37(10):757–62 (Eng. Abstr.) (Ita)

METHODS

[Optimization of the surgical technic for extraction of the lower third molars] Garattini G, et al. **Minerva Stomatol** 1989 Apr;38(4):461–6 (31 ref.) (Eng. Abstr.) (Ita)

[Extraction of teeth in patients with hemophilia] Bernadskii IuI, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):31–3 (Eng. Abstr.) (Rus)

NURSING

[Nursing care during tooth extraction in patients with hemorrhagic diseases] Jiang KS. **Chung Hua Hu Li Tsa Chih** 1989 Mar;24(3):143–4 (Chi)

PSYCHOLOGY

Third molar teeth: differing concepts of oral surgeons and other dentists. Yablon P, et al. **N Y State Dent J** 1988 Oct;54(8):27–31

STATISTICS & NUMERICAL DATA

Declining attendances for general anaesthesia and tooth extractions in children following the fluoridation of Melbourne. Chippendale I, et al. **Aust Dent J** 1988 Oct; 33(5):415–9

UTILIZATION

[An analysis of the reasons for removing teeth in a polyclinic surgical department] Korchevskiĭ VP, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):71–2 (Rus)

VETERINARY

[Extraction of the canine tooth? (letter)] Remeeus PG. **Tijdschr Diergeneeskd** 1988 Dec 1;113(23):1326–7 (Dut)

TOOTH FRACTURES

Intrabony tooth injuries: reports of two cases. Nazif MM, et al. **ASDC J Dent Child** 1989 Jan–Feb;56(1):65–8

COMPLICATIONS

Osteomyelitis of the maxilla with associated vertical root fracture and Pseudomonas infection. Hoen MM, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):494–8

EPIDEMIOLOGY

Some epidemiological and scanning electron microscopic features of crazing of the dental enamel of Polynesians. Hoffman MP, et al. **N Z Dent J** 1989 Jul;85(381):86–90

ETIOLOGY

Multiple autoextractions: oral self-mutilation reviewed. Altom RL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):271–4 (34 ref.)

[The possibility of radicular fracture in relation to the form of the endocanal pin] Treves B, et al. **Minerva Stomatol** 1989 Apr;38(4):477–80 (Eng. Abstr.) (Ita)

PATHOLOGY

[Teeth as an intermediate target—a cause for rapid disintegration of the full metal-jacketed bullets used by the military] Pollak S, et al. **Wien Klin Wochenschr** 1988 Nov 18;100(22):729–33 (Eng. Abstr.) (Ger)

[Histology of 2 cemental tear fractures. A case report] Lehm A, et al. **Zahn Mund Kieferheilkd** 1989;77(2):157–60 (Eng. Abstr.) (Ger)

[Clinico-morphologic basis for the orthodontic treatment of intra-alveolar tooth fractures in children and adolescents] Konstantinov AM, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):76–9 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Fracture resistance of teeth restored with Class II composite restorations. Reel DC, et al. **J Prosthet Dent** 1989 Feb; 61(2):177–80

Cuspal deformation and fracture resistance of teeth with dentin adhesives and composites. Sheth JJ, et al. **J Prosthet Dent** 1988 Nov;60(5):560–9

Effects of incremental versus bulk fill technique on resistance to cuspal fracture of teeth restored with posterior composites. Wieczkowski G Jr, et al. **J Prosthet Dent** 1988 Sep;60(3):283–7

PREVENTION & CONTROL

Cast 'headed' post-cores to resist fracture of endodontically treated anterior teeth. Abadie FR. **J Prosthet Dent** 1988 Dec;60(6):660–1

Occlusal adjustment for initial treatment and prevention of the cracked tooth syndrome. Agar JR, et al. **J Prosthet Dent** 1988 Aug;60(2):145–7 (17 ref.)

Effect of metal collars on resistance of endodontically treated teeth to root fracture. Barkhordar RA, et al. **J Prosthet Dent** 1989 Jun;61(6):676–8

Fracture resistance of posterior teeth restored with glass ionomer–composite resin systems. Joynt RB, et al. **J Prosthet Dent** 1989 Jul;62(1):28–31

THERAPY

Modified acrylic cap splint for dento-alveolar fractures. Dehen M, et al. **Int J Oral Maxillofac Surg** 1989 Apr; 18(2):85–6

Restoration of a fractured incisor with exposed pulp using original tooth fragment: report of case. Ehrmann EH. **J Am Dent Assoc** 1989 Feb;118(2):183–5

Oral trauma. Emergency care of lacerations, fractures, and burns. Comer RW, et al. **Postgrad Med** 1989 Feb 1; 85(2):34–7, 41

[Therapeutic management of tooth injuries in children with special reference to Ellis class III] Fetkowska-Mielnik K, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984; 39:93–6 (Eng. Abstr.) (Pol)

VETERINARY

[Extraction of the canine tooth? (letter)] Remeeus PG. **Tijdschr Diergeneeskd** 1988 Dec 1;113(23):1326–7 (Dut)

TOOTH GERM

see related

ODONTOGENESIS

Tooth germ transposition: report of cases. Ranta R. **ASDC J Dent Child** 1989 Sep–Oct;56(5):366–70

ANALYSIS

Histochemical localization of calcium in the enamel organ of rat incisors in early-stage amelogenesis. Takano Y, et al. **Acta Anat (Basel)** 1989;134(4):305–11

A histochemical demonstration of calcium in the maturation stage enamel organ of rat incisors. Takano Y, et al. **Arch Histol Cytol** 1988 Jul;51(3):241–8

Distribution of intermediate-filament proteins in the human enamel organ: unusually complex pattern of coexpression of cytokeratin polypeptides and vimentin. Kasper M, et al. **Differentiation** 1989 Jun;40(3):207–14

Ultrastructural localization of osteocalcin in rat tooth germs by immunogold staining. Gorter de Vries I, et al. **Histochemistry** 1988;89(5):509–14

Ultrastructural localization of dentine phosphoprotein in rat tooth germs by immunogold staining. Gorter de Vries I, et al. **Histochemistry** 1989;91(1):69–75

Micro-PIGE determination of fluorine distribution in developing hamster tooth germs. Lyaruu DM, et al. **J Histochem Cytochem** 1989 May;37(5):581–7

Cytokeratin expression of the odontogenic epithelia in dental follicles and developmental cysts. Gao Z, et al. **J Oral Pathol Med** 1989 Feb;18(2):63–7

Patterns of expression of intermediate filaments in ameloblastoma and human fetal tooth germ. Heikinheimo K, et al. **J Oral Pathol Med** 1989 May;18(5):264–73

CYTOLOGY

Immunocytochemical detection of proliferating cells in the rat tooth germ by monoclonal antibodies against 5-bromo-2'-deoxyuridine. Casasco A, et al. **Arch Oral Biol** 1989;34(1):65–9

Differentiation of odontoblasts in grafted recombinants of murine epithelial root sheath and dental mesenchyme. Thomas HF, et al. **Arch Oral Biol** 1989;34(1):27–35

DRUG EFFECTS

Growth and development of permanent teeth germ of transplacental Yu-Cheng babies in Taiwan. Lan SJ, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):931–4

EMBRYOLOGY

Changes of secretory ameloblasts in mini-pig fetuses exposed to ethanol in vivo. Matthiessen ME, et al. **J Dent Res** 1988 Nov;67(11):1402–4

Hertwig's epithelial root sheath differentiation and initial cementum and bone formation during long-term organ culture of mouse mandibular first molars using serumless, chemically-defined medium. Slavkin HC, et al. **J Periodont Res** 1989 Jan;24(1):28–40

ENZYMOLOGY

Histochemical demonstration of carbonic anhydrase activity in the odontogenic cells of the rat incisor. Sugimoto T, et al. **J Dent Res** 1988 Oct;67(10):1271–4

GROWTH & DEVELOPMENT

Developmental appearance of Gla proteins (osteocalcin) and

alkaline phosphatase in tooth germs and bones of the rat. Bronckers AL, et al. **Bone Miner** 1987 Aug;2(5):361–73

INJURIES

Effects of trauma to the primary incisors on their permanent successors: multidisciplinary treatment. Ben-Bassat Y, et al. **ASDC J Dent Child** 1989 Mar–Apr;56(2):112–6

METABOLISM

Developmental-specific expression and immunoreactivity of keratins during odontogenesis in rat embryos. Couwenhoven R, et al. **Arch Oral Biol** 1988;33(1):57–63

Effect of tunicamycin on glycogen accumulation in the stratum intermedium and odontoblasts of rat incisor. Chardin H, et al. **Cell Tissue Res** 1989 Jun;256(3):519–27

Syndecan and tenascin expression is induced by epithelial-mesenchymal interactions in embryonic tooth mesenchyme. Vainio S, et al. **J Cell Biol** 1989 May; 108(5):1945–53

PATHOLOGY

Tooth-germ sequestration as a sequela of chronic periapical inflammation of the primary predecessor. Goodman-Topper ED, et al. **ASDC J Dent Child** 1988 Nov–Dec;55(6):455–8

Histopathology of the interactions between alveolar bone and impacted dental germs in osteopetrotic op/op rats. Phillippart C, et al. **J Oral Pathol Med** 1989 Mar; 18(3):157–62

PHYSIOLOGY

Attachment to and phagocytosis of mineral by alveolar bone osteoclasts. Pierce AM. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):63–71

PHYSIOPATHOLOGY

Effects of bone marrow transplantation on impacted dental germs in osteopetrotic op/op rats. Philippart C, et al. **J Oral Pathol Med** 1989 Mar;18(3):163–6

RADIOGRAPHY

Calcification of the dental papilla. A rare finding. Piette E. **Br Dent J** 1989 Feb 11;166(3):86

SURGERY

[Preservation of the germs of the permanent teeth in the surgical treatment of tooth-containing cysts in children] Simanovskaia Elu, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):70–2 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

Autogenic tooth transplantation: a report of ten cases. Hernandez SL, et al. **J Oral Maxillofac Surg** 1988 Dec; 46(12):1051–5

[Use of a tooth graft in mentoplasty. Apropos of a case] Hofmann B, et al. **Rev Stomatol Chir Maxillofac** 1988; 89(3):132–4 (Eng. Abstr.) **(Fre)**

[Autograft of the germ of the lower third molar] Di Lauro F, et al. **Minerva Stomatol** 1988 Aug;37(8):595–601 (Eng. Abstr.) **(Ita)**

[Combined surgical orthodontic therapy in a patient with multiple agenesis] Di Lauro F, et al. **Minerva Stomatol** 1989 Jun;38(6):633–7 (Eng. Abstr.) **(Ita)**

[Viability of embryonic teeth harvested from donors after death and intended for transplantation] Maksudov MM, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):16–7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Budding of small vesicles from the rough-surfaced endoplasmic reticulum in secretory ameloblasts of rat molar tooth germs. Matsuo S, et al. **Anat Rec** 1988 Dec; 222(4):317–22

Autoradiographic, ultrastructural and biosynthetic study of the effect of colchicine on enamel matrix secretion and enamel mineralization in hamster tooth germs in vitro. Bronckers AL, et al. **Arch Oral Biol** 1988;33(1):7–16

Cytochemical study of the Golgi apparatus and related organelles of the secretory ameloblasts of rat molar tooth germs cultured with and without colchicine. Matsuo S, et al. **Arch Oral Biol** 1988;33(6):433–41

The macroscopic and scanning electron-microscopic appearance and microhardness of the enamel, and the related histological changes in the enamel organ of erupting sheep incisors resulting from a prolonged low daily dose of fluoride. Suckling G, et al. **Arch Oral Biol** 1988; 33(5):361–73

Developmental changes in the extracellular matrix of the dental follicle during tooth eruption. Gorski JP, et al. **Connect Tissue Res** 1988;18(3):175–90

A scanning electron microscope study of monkey maturation-stage ameloblasts. Skobe Z, et al. **J Dent Res** 1988 Nov;67(11):1396–401

Changes in the tartrate-resistant acid phosphatase cell population in dental follicles and bony crypts of rat molars during tooth eruption. Wise GE, et al. **J Dent Res** 1989 Feb;68(2):150–6

[Observations of the epithelial sheath of the mouse molar tooth germs in the early root formation] Yu KW. **Kokubyo Gakkai Zasshi** 1988 Jun;55(2):331–80 (Eng. Abstr.) **(Jpn)**

TOOTH, IMPACTED

see related
TOOTH EXTRACTION

Thirty years of dental neglect. A case history. Vernice N, et al. **N Y State Dent J** 1989 May;55(5):38

CLASSIFICATION

Classification of impacted teeth [letter] **J Oral Maxillofac Surg** 1989 Apr;47(4):326, 432

COMPLICATIONS

Root resorption caused by impacted permanent teeth. Case report. Coombs MI, et al. **Aust Dent J** 1989 Jun;34(3):205–8

A migratory abscess pointing intraorally and extraorally. Case report. Ho KH. **Aust Dent J** 1989 Jun;34(3):226–7

DRUG THERAPY

Clinical and microbiological effects of in vivo miocamycin therapy on oral infections and in surgical prophylaxis. De Luca M. **Drugs Exp Clin Res** 1988;14(10):659–63

EPIDEMIOLOGY

Incidence of lower second permanent molar impaction. Evans R. **Br J Orthod** 1988 Aug;15(3):199–203

Prevalence of impacted third molars in dental students. Scherstén E, et al. **Swed Dent J** 1989;13(1–2):7–13

[Epidemiologic and nosological evaluation of impaction of the third molar] Luglié PF, et al. **Minerva Stomatol** 1988 Apr;37(4):323–8 (Eng. Abstr.) **(Ita)**

ETIOLOGY

[Early tooth injuries and impaction of the permanent central incisor with root abnormalities] Bourdillat C, et al. **Orthod Fr** 1987;58 Pt 2:629–40 (Eng. Abstr.) **(Fre)**

PATHOLOGY

Morphology of the maxillary lateral incisor in cases of unilateral impaction of the maxillary canine. Oliver RG, et al. **Br J Orthod** 1989 Feb;16(1):9–16

Histology of the fissure contents in completely impacted teeth. Awazawa Y, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1988 Aug–Dec; 31(3–4):99–117

The unerupted or impacted third molar—a critical appraisal of its pathologic potential. Stephens RG, et al. **Can Dent Assoc J** 1989 Mar;55(3):201–7 (65 ref.)

Histopathology of the interactions between alveolar bone and impacted dental germs in osteopetrotic op/op rats. Phillippart C, et al. **J Oral Pathol Med** 1989 Mar; 18(3):157–62

PHYSIOPATHOLOGY

Effects of bone marrow transplantation on impacted dental germs in osteopetrotic op/op rats. Philippart C, et al. **J Oral Pathol Med** 1989 Mar;18(3):163–6

RADIOGRAPHY

Unerupted and displaced teeth in CT-scan. Traxler M, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):184–6

The necessity to adequately visualize impacted maxillary third molars: report of three cases. Mopsik ER. **J Am Dent Assoc** 1989 Jun;118(6):721–3

Impacted molars. Carrassi A, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):612

Migration of an impacted mandibular second molar. Jasmin JR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr; 67(4):478–9

Technique error mimics impaction. Patel JR. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):363

[Eruption disorders of the permanent molars] Piret JL, et al. **Acta Stomatol Belg** 1988 Dec;85(4):289–97 (Eng. Abstr.) **(Dut)**

[Malposition of the second mandibular molars. Problems with their preservation and corrective orthodontic therapy] Bertelè GP, et al. **Minerva Stomatol** 1988 Aug;37(8):583–90 (Eng. Abstr.) **(Ita)**

SURGERY

The use of a visual analogue scale in observer assessment of postoperative swelling subsequent to third-molar surgery. Berge TI. **Acta Odontol Scand** 1989 Jun; 47(3):167–74

Legal aspects of orthodontic practice: risk management concepts. The impacted canine. Machen DE. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):270–1

Maxillary impaction and advancement reduction genioplasty. Pearson LE, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):363–6

Impacted third molars. A team approach to surgical intervention. Steuer K, et al. **AORN J** 1989 May; 49(5):1363–9

Unerupted first permanent molar. Case report. Spratley MH, et al. **Aust Dent J** 1988 Oct;33(5):392–4

Oral surgery: assessment and treatment' [letter] Cooksey MW. **Br Dent J** 1989 Apr 22;166(8):283

Tooth transplant record? [letter] Fordyce G. **Br Dent J** 1989 May 20;166(10):362

The efficacy of benorylate in postoperative dental pain. Moore U, et al. **Eur J Clin Pharmacol** 1989;36(1):35–8

Lingual nerve damage following lower third molar surgery. Mason DA. **Int J Oral Maxillofac Surg** 1988 Oct; 17(5):290–4

Periodontal damage to third molars prior to transplantation. A histometric study. Schliephake H, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):55–8

Does acute intraoral pain alter cutaneous sensibility? Hansson P, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug; 51(8):1032–6

Comparison of the use of nalbuphine and fentanyl during third molar surgery. Canning HB, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1048–50

Comparison of preoperative and postoperative diflunisal for suppression of postoperative pain. Sisk AL, et al. **J Oral Maxillofac Surg** 1989 May;47(5):464–8

Clinical implications of factor XII deficiency. McDonough RJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep; 68(3):264–6

[Surgical methods for the management of impacted upper cuspids] Tapodi A. **Fogorv Sz** 1989 Jan;82(1):13–6 (Eng. Abstr.) **(Hun)**

[Evaluation of the efficacy and tolerability of nimesulide in various odonto-stomatologic pathologies] Moniaci D, et al. **Minerva Stomatol** 1988 Apr;37(4):291–4 (Eng. Abstr.) **(Ita)**

THERAPY

Uprighting of a deeply impacted mandibular second molar. Ferrazzini G. **Am J Orthod Dentofacial Orthop** 1989 Aug; 96(2):168–71

Management of impacted anterior teeth utilizing basic orthodontic principles. Douglas DE. **ASDC J Dent Child** 1989 Sep–Oct;56(5):353–7

Long-term interdisciplinary management of multiple mesiodens and delayed eruption: report of case. Ranalli DN, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):376–80

An approach to the treatment of malocclusion caused by bone expanding lesions. Pilley JR, et al. **Br Dent J** 1989 Apr 8;166(7):258–60

VETERINARY

What is your diagnosis? Impacted lower left third premolar with nearly 180 degrees rotation. Howard PE, et al. **J Am Vet Med Assoc** 1989 Jul 15;195(2):253–4

TOOTH LUXATION

COMPLICATIONS

Nasotracheal tube obstruction from a central incisor. Report of a case. Kenney JN, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):266–7

REHABILITATION

Prosthodontic rehabilitation of the partially edentulous trauma patient by using osseointegrated implants. Diaz-Arnold AM, et al. **J Prosthet Dent** 1988 Sep; 60(3):354–7

TOOTH MIGRATION

Tooth germ transposition: report of cases. Ranta R. **ASDC J Dent Child** 1989 Sep–Oct;56(5):366–70

DRUG EFFECTS

Bisphosphonate effects on alveolar bone during rat molar drifting. Hardt AB. **J Dent Res** 1988 Nov;67(11):1430–3

PREVENTION & CONTROL

Orthodontic therapy for the restorative patient. Part I: The biomechanic aspects. Miller TE. **J Prosthet Dent** 1989 Mar; 61(3):268–76

Attachment of swing-lock labial bar to an existing removable partial denture: a clinical report. Stevenson RB, et al. **J Prosthet Dent** 1988 Oct;60(4):409–11

RADIOGRAPHY

Migration of an impacted mandibular second molar. Jasmin JR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr; 67(4):478–9

THERAPY

[The design of removable appliances for tooth movement and tooth migration] Voss H. **Fortschr Kieferorthop** 1989 Jun;50(3):213–9 (Eng. Abstr.) **(Ger)**

TOOTH MOBILITY

The effect on intrusive tooth mobility of surgically removing the cervical periodontal ligament in monkeys (Macaca fascicularis). Picton DC. **Arch Oral Biol** 1988;33(5):301–4

[Mobility of premolars under load in partially edentulous dentition] Saito M. **Kokubyo Gakkai Zasshi** 1989 Mar; 56(1):102–20 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Application of mechanical mobility of periodontal tissues to tooth mobility examination. Oka H, et al. **Med Biol Eng Comput** 1989 Jan;27(1):75–81

PREVENTION & CONTROL

A stress-relieved resin-bonded fixed partial denture. Plainfield S, et al. **J Prosthet Dent** 1989 Mar;61(3):291–3

THERAPY

Stabilization technique for mobile teeth. Vitsentzos SI. **J Prosthet Dent** 1989 Jan;61(1):6–9

A one visit procedure to stabilize mobile anterior mandibular teeth. Case report. Silver H, et al. **N Y State Dent J** 1988 Oct;54(8):38–9

TOOTH MOVEMENT, MINOR

Effects of prostaglandin E2 on alveolar bone resorption during orthodontic tooth movement. Chao CF, et al. **Acta Anat (Basel)** 1988;132(4):304–9

The local use of vitamin D to increase the rate of orthodontic tooth movement. Collins MK, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):278–84

Mandibular displacement and dentitional changes during orthodontic treatment and growth. Ghafari J, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):12–9

Labial root torque: effect on the maxilla and incisor root apex. Goldin B. **Am J Orthod Dentofacial Orthop** 1989 Mar; 93(3):208–19

Tooth extrusion effects on microvessel volumes, endothelial areas, and fenestrae in molar apical periodontal ligament. Lew K, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep; 96(3):221–31

Intrusion of incisors in adult patients with marginal bone loss. Melsen B, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):232–41

Leukotrienes in orthodontic tooth movement. Mohammed AH, et al. **Am J Orthod Dentofacial Orthop** 1989 Mar; 95(3):231–7

Periodontal changes after experimentally induced intrusion of the upper incisors in Macaca fuscata monkeys. Murakami T, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb; 95(2):115–26

Class II, Division 1 vertical pattern. Runge ME, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):271–7

An American Board of Orthodontics case report. Snyder DE. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):453–7

Moment to force ratios and the center of rotation. Tanne K, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov; 94(5):426–31

Glycosaminoglycans in human gingival crevicular fluid during orthodontic movement. Last KS, et al. **Arch Oral Biol** 1988;33(12):907–12

An assessment of the fit of a parabolic curve to pre- and post-treatment dental arches. Jones ML, et al. **Br J Orthod** 1989 May;16(2):85–93 (37 ref.)

Histologic reactions in gingival and alveolar tissues during tooth movement in rabbits. van de Velde JP, et al. **Eur J Orthod** 1988 Nov;10(4):296–308

Nonsurgical management of ectopic teeth. Lazarus AH. **J Am Dent Assoc** 1989 Jul;119(1):133–5

Correction of deep overbite. A modified splint permitting rapid extrusion of posterior teeth. Tuinzing DB, et al. **J Craniomaxillofac Surg** 1989 May;17(4):172–4

The effects of upper incisor separation on the submandibular and sublingual glands of rats. Kamogashira K, et al. **J Dent Res** 1988 Mar;67(3):602–10

The role of orthodontics in oral rehabilitation. A case report. Platzer KM. **N Y State Dent J** 1989 May;55(5):34–5

[Periodontal reaction to orthodontic measures] Donath K, et al. **Fortschr Kieferorthop** 1989 Apr;50(2):152–63 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Periodontal implications of orthodontic treatment in adults with reduced or normal periodontal tissues versus those of adolescents. Boyd RL, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):191–8

INSTRUMENTATION

Face frame anchorage for closing spaces by protraction—a solution for missing teeth. Hocevar RA. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):516–24

Effects of a fixed magnetic appliance on the dentofacial complex. Kalra V, et al. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):467–78

Frictional forces in fixed appliances. Tidy DC. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):249–54

Physical and mechanical properties of elastomers in orthodontic positioners. Warunek SP, et al. **Am J Orthod Dentofacial Orthop** 1989 May;95(5):388–400

A clinical study of maxillary canine retraction with a retraction spring and with sliding mechanics. Ziegler P, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb; 95(2):99–106

Teeth in cross-bite: the role of removable appliances. Jacobs SG. **Aust Dent J** 1989 Feb;34(1):20–8

Present and future place in orthodontics for the basic removable appliance [letter] Dixon DA. **Br J Orthod** 1989 May;16(2):119

The orthodontic tooth positioner—an appraisal. Lew KK. **Br J Orthod** 1989 May;16(2):113–6 (17 ref.)

[1st order curves. Their development in the functional phases of treatment] Jegou I, et al. **Orthod Fr** 1987;58 Pt 2:479–87 (Fre)

[The design of removable appliances for tooth movement and tooth migration] Voss H. **Fortschr Kieferorthop** 1989 Jun;50(3):213–9 (Eng. Abstr.) (Ger)

METHODS

A comparison of the Ricketts and Tweed-type arch leveling techniques. Dake ML, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):72–8

Uprighting of a deeply impacted mandibular second molar. Ferrazzini G. **Am J Orthod Dentofacial Orthop** 1989 Aug; 96(2):168–71

The use of magnets to move molars distally. Gianelly AA, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug; 96(2):161–7

Increasing intrusion of anterior teeth. Ponitz PV. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):514–5

Maxillary canine-lateral incisor transposition—orthodontic management. Shapira Y, et al. **Am J Orthod Dentofacial Orthop** 1989 May;95(5):439–44

Aligning, leveling, and torque control—a pilot study. Andreasen GF, et al. **Angle Orthod** 1989 Spring;59(1):51–60

Space closure in adult patients using the segmented arch technique. Manhartsberger C, et al. **Angle Orthod** 1989 Fall; 59(3):205–10

Management of impacted anterior teeth utilizing basic orthodontic principles. Douglas DE. **ASDC J Dent Child** 1989 Sep–Oct;56(5):353–7

An approach to the treatment of malocclusion caused by bone expanding lesions. Pilley JR, et al. **Br Dent J** 1989 Apr 8;166(7):258–60

The closure of residual extraction spaces by means of traction screws: a report of two cases. Brown ID. **Br J Orthod** 1989 May;16(2):95–101

Richard Marx—Begg appliance treatment [interview by Robert Kirachen] Marx R. **Br J Orthod** 1989 Feb;16(1):53–7

Class II correction in Herbst and Bass therapy. Pancherz H, et al. **Eur J Orthod** 1989 Feb;11(1):17–30

Lingual orthodontic treatment [letter] Berke JB. **J Am Dent Assoc** 1989 Feb;118(2):150

Forced eruption combined with gingival fiberotomy. A technique for clinical crown lengthening. Kozlovsky A, et al. **J Clin Periodontol** 1988 Oct;15(9):534–8

Orthodontic therapy for the restorative patient. Part I: The biomechanic aspects. Miller TE. **J Prosthet Dent** 1989 Mar; 61(3):268–76

Orthodontic extrusion of premolar teeth: an improved technique. Nappen DL, et al. **J Prosthet Dent** 1989 May; 61(5):549–54

[Mesial movement of the arc of the mandibular molars using the Edgewise technic] Aknin JJ, et al. **Orthod Fr** 1987;58 Pt 2:723–36 (Eng. Abstr.) (Fre)

[Acceleration of orthodontically induced tooth movement through the local application of prostaglandin (PGE1)] Spielmann T, et al. **Schweiz Monatsschr Zahnmed** 1989; 99(2):162–5 (Eng. Abstr.) (Ger)

[Results of horizontal and vertical transposition of teeth in children as affected by the action of ultrasonics on the bony tissue of the lower jaw] Chumakov AN, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):69–70 (Eng. Abstr.) (Rus)

TOOTH PERMEABILITY

A theoretical model for the hydraulic conductance of human dentine. van der Graaf ER, et al. **Arch Oral Biol** 1988; 33(5):375–7

Effects of distance from the pulp and thickness on the hydraulic conductance of human radicular dentin. Fogel HM, et al. **J Dent Res** 1988 Nov;67(11):1381–5

DRUG EFFECTS

[Changes induced by ouabain and colchicine in the transdentinal flow estimated in vivo by perfusion: the "push-pull" of the incisors of rats] Litovsky B, et al. **J Biol Buccale** 1988 Dec;16(4):209–14 (Eng. Abstr.) (Fre)

TOOTH REIMPLANTATION see TOOTH REPLANTATION

TOOTH REMINERALIZATION

Effect of an anticalculus dentifrice on lesion progression under pH cycling conditions in vitro. Featherstone JD, et al. **Caries Res** 1988;22(6):337–41

Evaluation of the anticaries benefit of fluoride toothpastes using an enamel insert model. Schäfer F. **Caries Res** 1989; 23(2):81–6

Comparison of the effects of two topical fluoride regimens on demineralized enamel in vivo. Clark JW, et al. **J Dent Res** 1988 Jun;67(6):954–8

Mineral density and fluoride content of in vitro remineralized lesions. Iijima Y, et al. **J Dent Res** 1988 Mar;67(3):577–81

The effects of 1% pyrophosphate and 0.02% sodium fluoride on artificial caries lesions in vivo. Mellberg JR, et al. **J Dent Res** 1988 Dec;67(12):1461–5

A method of semi-quantitative microradiographic analysis of root surface lesion remineralization. Graves CN, et al. **J Oral Pathol** 1988 May;17(5):241–9

[De- and remineralization processes of the surface layer of the enamel in intact and pulp-extirpated teeth] Borovskii EV, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):4–7 (Eng. Abstr.) (Rus)

METHODS

Remineralization of bovine dentine in vitro. The influence of the F content in solution on mineral distribution. Arends J, et al. **Caries Res** 1989;23(5):309–14

[Evaluation of remineralization solutions on the milk teeth] Ulbricht B. **Zahn Mund Kieferheilkd** 1989;77(3):252–5 (Eng. Abstr.) (Ger)

[Physiological remineralization of artificially decalcified monkey dentin under adhesive composite resin restoration] Tatsumi T. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):47–74 (Eng. Abstr.) (Jpn)

[Ways to enhance the resistance of hard dental tissues after pulp removal] Grechishnikov VI. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):27–9 (Eng. Abstr.) (Rus)

TOOTH REPLANTATION

Dentin and osteodentin matrix formation in apicoectomized replanted incisors in cats. Kvinnsland I, et al. **Acta Odontol Scand** 1989 Feb;47(1):41–52

ADVERSE EFFECTS

Dentoalveolar ankylosis and associated root resorption in replanted teeth. Experimental and clinical studies in monkeys and man. Andersson L. **Swed Dent J Suppl** 1988; 56:1–75

TOOTH RESORPTION

ETIOLOGY

Resorption of maxillary lateral incisors caused by ectopic eruption of the canines. A clinical and radiographic analysis of predisposing factors. Ericson S, et al. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):503–13

Resorption of a first permanent molar. Hall FM, et al. **Br Dent J** 1989 Jan 7;166(1):19–20

External resorption of a maxillary lateral incisor by a labially placed canine: pathology and management. Regan D, et al. **Br J Orthod** 1988 Nov;15(4):261–7

PATHOLOGY

Multiple idiopathic internal resorption. Eveson JW, et al. **Br Dent J** 1989 Jan 21;166(2):49–50

Tooth root resorption induced in rats by diphenylhydantoin and parathyroidectomy. Robinson PB, et al. **Br J Exp Pathol** 1989 Feb;70(1):65–72

Idiopathic external resorption of teeth. Owens PD, et al. **J Oral Pathol** 1988 Sep;17(8):404–8

PHYSIOPATHOLOGY

A morphometric study of bone and tooth volumes in the pipid frog Xenopus laevis (Daudin), with comments on the importance of tooth resorption during normal tooth replacement. Shaw JP. **J Exp Zool** 1989 Jan;249(1):99–104

[Comparative morphogenesis of resorptive osteoid hyperregeneration of the periodontium and endodontium] Hoffmann T, et al. **Zahn Mund Kieferheilkd** 1988; 76(7):704–10 (Eng. Abstr.) (Ger)

TOOTH ROOT

see related
APICOECTOMY
ROOT RESORPTION

A technique for closing persistent open proximal contacts. Latcham N. **Aust Dent J** 1988 Dec;33(6):476–7

'The closure of open apices in non-vital immature incisor teeth' [letter] Cooke C, et al. **Br Dent J** 1988 Dec 24; 165(12):420–1

A proliferative inflammation in the mandible caused by implantation of an infected dental root. A possible experimental model for chronic osteomyelitis. Wannfors K, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):179–83

The effect of a fluoridated dentifrice on root and coronal caries in an older adult population. Jensen ME, et al. **J Am Dent Assoc** 1988 Dec;117(7):829–32

Microleakage of root restorations. Wenner KK, et al. **J Am Dent Assoc** 1988 Dec;117(7):825–8

Interfacial analysis of fiber-reinforced bioactive glass dental root implants. Schepers E, et al. **J Biomed Mater Res** 1989 Jul;23(7):735–52

Computer-assisted densitometric image analysis (CADIA) for the assessment of alveolar bone density changes in furcations. Bräegger U, et al. **J Clin Periodontol** 1989 Jan; 16(1):46–52

Placement of a porous membrane underneath the mucoperiosteal flap and its effect on periodontal wound healing in dogs. Claffey N, et al. **J Clin Periodontol** 1989 Jan;16(1):12–6

The effect of ultrasonic cleaning and air polishing on the marginal integrity of radicular amalgam and composite resin restorations. An in vitro study. Gorfil C, et al.

J Clin Periodontol 1989 Mar;16(3):137–9
Histological evaluation of periodontal probe penetration in untreated facial molar furcations. Moriarty JD, et al. J Clin Periodontol 1989 Jan;16(1):21–6
Guided tissue regeneration in the treatment of furcation defects in mandibular molars. A clinical study of degree III involvements. Pontoriero R, et al. J Clin Periodontol 1989 Mar;16(3):170–4
Prevalence of and factors associated with root decay in older adults in Canada. Locker D, et al. J Dent Res 1989 May; 68(5):768–72
Histological and histomorphometrical analysis of bioactive glass and fibre reinforced bioactive glass dental root implants. Schepers E, et al. J Oral Rehabil 1988 Sep; 15(5):473–87
The prognosis of tunnel preparations in treatment of class III furcations. A follow-up study. Hellden LB, et al. J Periodontol 1989 Apr;60(4):182–7
The effectiveness of two sonic and two ultrasonic scaler tips in furcations. Patterson M, et al. J Periodontol 1989 Jun; 60(6):325–9
Submerged alumina dental root implants in humans: five-year evaluation. Brose MO, et al. J Prosthet Dent 1989 May; 61(5):594–601
Special matrix for restoring teeth with subgingival Class II root caries. Purk JH. J Prosthet Dent 1989 Feb;61(2):254
Three-year root caries increments: implications for clinical trials. Leske GS, et al. J Public Health Dent 1989 Summer; 49(3):142–6
A comparison of current root form implants. Biomechanical design and prosthodontic applications. Ismail JY. N Y State Dent J 1989 Apr;55(4):34–6
Cervical abrasion in relation to toothbrushing and periodontal health. Bergström J, et al. Scand J Dent Res 1988 Oct; 96(5):405–11

ABNORMALITIES

Three-rooted mandibular first premolar tooth. Takeda Y. Ann Dent 1988 Summer;47(1):43–4 (2 ref.)
Facial radicular groove in a maxillary central incisor. A case report. Kozlovsky A, et al. J Periodontol 1988 Sep; 59(9):615–7
Unusual cuspid. Thamby SV. Oral Surg Oral Med Oral Pathol 1989 Jun;67(6):783
[Early tooth injuries and impaction of the permanent central incisor with root abnormalities] Bourdillat C, et al. Orthod Fr 1987;58 Pt 2:629–40 (Eng. Abstr.) (Fre)
[The incidence of enamel projections on the roots of the permanent teeth] Sutalo J, et al. Schweiz Monatsschr Zahnmed 1989;99(2):174–80 (Eng. Abstr.) (Ger)

ANATOMY & HISTOLOGY

The relationship between mandibular morphology and apical root curvature in man. Marklund M, et al. Arch Oral Biol 1988;33(6):391–4
Apical closure and periapical healing in a non-vital permanent tooth. Case report. Bourke LF. Aust Dent J 1988 Oct;33(5):412–4
The position of the inferior dental canal and its relation to the mandibular second molar. Fox NA. Br Dent J 1989 Jul 8;167(1):19–21
Dental root translucency as an indicator of age. Solheim T. Scand J Dent Res 1989 Jun;97(3):189–97
[304 lower third molars: anatomo-topographical position and root morphology] Zoccola GC, et al. Minerva Stomatol 1988 Nov;37(11):905–9 (Eng. Abstr.) (Ita)

CYTOLOGY

Differentiation of odontoblasts in grafted recombinants of murine epithelial root sheath and dental mesenchyme. Thomas HF, et al. Arch Oral Biol 1989;34(1):27–35

DRUG EFFECTS

An in vitro evaluation of the prevention of caries on overdenture abutments. Ettinger RL, et al. J Dent Res 1988 Oct;67(10):1338–41
The effects of different levels of dietary sucrose on root caries subsequent to gingivectomy in conventional rats infected with Actinomyces viscosus M-100. Firestone AR, et al. J Dent Res 1988 Oct;67(10):1342–5
Improvement of the caries resistance of human dental roots by a two-step conversion of the root mineral into fluoridated hydroxylapatite. Hoppenbrouwers PM, et al. J Dent Res 1988 Oct;67(10):1254–6
A method of semi-quantitative microradiographic analysis of root surface lesion remineralization. Graves CN, et al. J Oral Pathol 1988 May;17(5):241–9
Effect of collagen solution application on healing following surgical treatment in colony-bred monkeys. Minabe M, et al. J Periodont Res 1988 Sep;23(5):313–7

EMBRYOLOGY

Hertwig's epithelial root sheath differentiation and initial cementum and bone formation during long-term organ culture of mouse mandibular first molars using serumless, chemically-defined medium. Slavkin HC, et al. J Periodont Res 1989 Jan;24(1):28–40

GROWTH & DEVELOPMENT

Calcium hydroxide and apexogenesis. Saad AY. Oral Surg Oral Med Oral Pathol 1988 Oct;66(4):499–501
[Observations of the epithelial sheath of the mouse molar tooth germs in the early root formation] Yu KW. Kokubyo Gakkai Zasshi 1988 Jun;55(2):331–80 (Eng. Abstr.) (Jpn)

INJURIES

The closure of open apices in non-vital immature incisor teeth. Mackie IC, et al. Br Dent J 1988 Sep 10; 165(5):169–73
Osteomyelitis of the maxilla with associated vertical root fracture and Pseudomonas infection. Hoen MM, et al. Oral Surg Oral Med Oral Pathol 1988 Oct;66(4):494–8
[The possibility of radicular fracture in relation to the form of the endocanal pin] Treves B, et al. Minerva Stomatol 1989 Apr;38(4):477–80 (Eng. Abstr.) (Ita)

METABOLISM

Effects of TiF4 solutions on root surfaces in vitro after different application periods. Skartveit L, et al. Acta Odontol Scand 1989 Feb;47(1):25–30
Effect of topical F- solutions on caries-like lesions in root surfaces. Dérand T, et al. Caries Res 1989;23(3):135–40
[In vitro analysis of diffusion through radicular tissue of paraformaldehyde contained in a paste commonly used in endodontics] Giuliana G. Minerva Stomatol 1989 May; 38(5):497–9 (Eng. Abstr.) (Ita)

MICROBIOLOGY

Microbial caries induction in the roots of human teeth in vitro. Kaufman HW, et al. Arch Oral Biol 1988; 33(7):499–503

PATHOLOGY

Endodontic instrumentation—quo vadis? Mayne JR. Aust Dent J 1988 Oct;33(5):384–91
Tooth root resorption induced in rats by diphenylhydantoin and parathyroidectomy. Robinson PB, et al. Br J Exp Pathol 1989 Feb;70(1):65–72
Localisation of retained roots by fibre-optic transillumination. Niederdellmann H, et al. Br J Oral Maxillofac Surg 1989 Feb;27(1):77–9
Prostheses for multi-rooted teeth having badly damaged parodontium. Tafkova K, et al. Folia Med (Plovdiv) 1987; 29(4):47–51
Clinical effects of root debridement in molar and non-molar teeth. A 2-year follow-up. Loos B, et al. J Clin Periodontol 1989 Sep;16(8):498–504
The reliability of diagnosing root caries using oral examinations. Bauer JG, et al. J Dent Educ 1988 Nov; 52(11):622–9
Occurrence of root caries in relation to dental health behavior. Vehkalahti MM, et al. J Dent Res 1988 Jun; 67(6):911–4
The paradental cyst: a clinicopathologic study of six new cases and review of the literature. Fowler CB, et al. J Oral Maxillofac Surg 1989 Mar;47(3):243–8 (16 ref.)
Human root caries: histopathology of initial lesions in cementum and dentin. Schüpbach P, et al. J Oral Pathol Med 1989 Mar;18(3):146–56
Evaluation of furcation region response to periodontal therapy. Kalkwarf KL, et al. J Periodontol 1988 Dec; 59(12):794–804
Effect of metal collars on resistance of endodontically treated teeth to root fracture. Barkhordar RA, et al. J Prosthet Dent 1989 Jun;61(6):676–8
Restoration of carious exposed abutment teeth to fit existing fixed partial dentures. Lu DP. J Prosthet Dent 1988 Dec; 60(6):678–81

PHYSIOLOGY

Formation of a new fibrous attachment to human dental roots. A new vitro model for studying periodontal regeneration. Bernstein AB, et al. Cell Tissue Res 1988; 254(3):659–70
Rate and growth pattern of cementum apposition as compared to dentine and root formation in a fluorochrome-labelled monkey (Macaca fascicularis). Bosshardt D, et al. J Biol Buccale 1989 Mar;17(1):3–13
Ultrastructural evidence of directed cell migration during initial cementoblast differentiation in root formation. Cho MI, et al. J Periodont Res 1988 Jul;23(4):268–76
The effects of exclusion of epithelium from healing periodontal pockets. McHugh WD. J Periodontol 1988 Nov;59(11):750–7
Growth and migration of gingival epithelial cells on mineralized and partially demineralized root surfaces in an in vitro system. Pitaru S, et al. J Periodontol 1988 Aug; 59(8):531–4
Photoelastic analysis of stress transfer by endodontically treated teeth to the supporting structure using different restorative techniques. Assif D, et al. J Prosthet Dent 1989 May;61(5):535–43

PHYSIOPATHOLOGY

Labial root torque: effect on the maxilla and incisor root apex. Goldin B. Am J Orthod Dentofacial Orthop 1989 Mar; 95(3):208–19
In vivo progress of enamel and root surface lesions under plaque as a function of time. Ogaard B, et al. Caries Res 1988;22(5):302–5
Role of "diseased" root cementum in healing following treatment of periodontal disease. A clinical study. Nyman S, et al. J Clin Periodontol 1988 Aug;15(7):464–8

RADIOGRAPHY

Suitability of the panoramic radiograph for assessment of mesiodistal angulation of teeth in the buccal segments of the mandible. Lucchesi MV, et al. Am J Orthod Dentofacial Orthop 1988 Oct;94(4):303–10
Population variation in tooth, jaw, and root size: a radiographic study of two populations in a high-attrition environment. Smith P, et al. Am J Phys Anthropol 1989 Jun;79(2):197–206
Calcification of the dental papilla. A rare finding. Piette E. Br Dent J 1989 Feb 11;166(3):86
A comparison between xeroradiography and conventional radiography in the diagnosis of endodontic lesions. Barkhordar RA, et al. Oral Surg Oral Med Oral Pathol 1988 Oct;66(4):489–93

SURGERY

The effect of cortisone on the eruption rate of root-resected incisors in the rat. Teng CM, et al. Am J Orthod Dentofacial Orthop 1989 Jan;95(1):67–71
Refractory chronic periodontitis: effect of oral tetracycline hydrochloride and root planning. Papli R, et al. Aust Dent J 1989 Feb;34(1):60–8
Clinical and microbiological effects of root debridement in periodontal furcation pockets. Loos B, et al. J Clin Periodontol 1988 Aug;15(7):453–63
Treatment of recurrent periodontal disease by root planing and Ornidazole (Tiberal). Clinical and microbiological findings. Mombelli A, et al. J Clin Periodontol 1989 Jan; 16(1):38–45
The effectiveness of root debridement in open flap procedures by means of a comparison between hand instruments and diamond burs. A SEM study. Schwarz JP, et al. J Clin Periodontol 1989 Sep;16(8):510–8
Scaling and root planing effectiveness: the effect of root surface access and operator experience. Brayer WK, et al. J Periodontol 1989 Jan;60(1):67–72
Evaluation of root-resected teeth. Results after 10 years. Bühler H. J Periodontol 1988 Dec;59(12):805–10
Scaling and root planing efficacy in multirooted teeth. Fleischer HC, et al. J Periodontol 1989 Jul;60(7):402–9
Scanning electron microscope evaluation of wear of stainless steel and high carbon steel curettes. Tal H, et al. J Periodontol 1989 Jun;60(6):320–4
Management of root-amputated maxillary molar teeth: periodontal and prosthetic considerations. Schmitt SM, et al. J Prosthet Dent 1989 Jun;61(6):648–52
Clinical observations of the effects of nonsurgical periodontal therapy on human periodontal disease. II. Ultrasonic scaling and root planing for 6 months. Hou GL, et al. Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1989 Feb; 5(2):72–86
[Substitution of the dental root by aquatic invertebrate skeletons in animals and man] Camprasse G, et al. C R Acad Sci [III] 1988;307(8):485–91 (Eng. Abstr.) (Fre)
[Stabilization of the resected tooth root with a transdental 2-piece metal-ceramic implant of our own construction] Skundrić A. God Vojnomed Akad 1987;29:59–63 (Eng. Abstr.) (Ser)

ULTRASTRUCTURE

Citric acid burnishing of dentinal root surfaces. A scanning electron microscopy report. Sterrett JD, et al. J Clin Periodontol 1989 Feb;16(2):98–104
In vitro interaction between gingival fibroblasts and various root surfaces. Nishimura K, et al. J Electron Microsc (Tokyo) 1989;38(1):24–33
Collagen linkage in periodontal connective tissue reattachment. An ultrastructural study in beagle dogs. Selvig KA, et al. J Periodontol 1988 Nov;59(11):758–68

TOOTH, SUPERNUMERARY

Gemination, fusion and supernumerary tooth in the primary dentition: report of case. Camm JH, et al. ASDC J Dent Child 1989 Jan-Feb;56(1):60–1
Fusion of maxillary third and supernumerary fourth molars. Case report. Hou GL, et al. Aust Dent J 1989 Jun; 34(3):219–22

COMPLICATIONS

Anomalies of form and number, fused primary teeth, a correlation of the dentitions. Hagman FT. ASDC J Dent Child 1988 Sep-Oct;55(5):359–61 (14 ref.)
[Sequence of therapeutic interventions in the treatment of disorders of eruption of the upper middle incisors with a supernumerary tooth as one of the etiologic factors] Novák J. Sb Ved Pr Lek Fak Karlovy University Hradci Kralove Suppl 1987;30(3):359–65 (Eng. Abstr.) (Cze)

HISTORY

[Remarks on the contribution "Displaced and supernumerary molar of the ethmoid bone" by J. Silberzahn (Giessen) in this periodical, volume 67, issue 10 1988, p. 545–546 (letter)] Becker W. **Laryngorhinootologie** 1989 Feb;68(2):133 (Ger)

METABOLISM

Application to forensic odontology of aspartic acid racemization in unerupted and supernumerary teeth. Ogino T, et al. **J Dent Res** 1988 Oct;67(10):1319–22

PATHOLOGY

A supernumerary tooth located at the facial of a mandibular lateral incisor: a case report. Krayer JW. **J Periodontol** 1989 Jul;60(7):410–2

Cleidocranial dysplasia: a light microscope, electron microscope, and crystallographic study. Yamamoto H, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug; 68(2):195–200

[The mesiodens anomaly with a reversion to older dentin forms] Güngler P, et al. **Zahn Mund Kieferheilkd** 1988; 76(8):808–11 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Progressive development of supernumerary teeth in cleidocranial dysplasia. Frame K, et al. **Br J Orthod** 1989 May;16(2):103–6

RADIOGRAPHY

Pieces of eight. Brown ID, et al. **Br Dent J** 1988 Nov 19; 165(10):354

A maxillary fourth molar? Howe GS. **Br J Orthod** 1988 Aug; 15(3):205–6

[Displaced and supernumerary molar of the ethmoid sinus] Silberzahn J. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct; 67(10):545–6 (Eng. Abstr.) (Ger)

SURGERY

[Clinico-surgical evaluation of supernumerary dental anomalies] Berrone S, et al. **Minerva Stomatol** 1989 Feb; 38(2):261–7 (Eng. Abstr.) (Ita)

THERAPY

Long-term interdisciplinary management of multiple mesiodens and delayed eruption: report of case. Ranalli DN, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):376–80

TOOTH SUPPORTING STRUCTURES see PERIODONTIUM

TOOTH, UNERUPTED

see related TOOTH, IMPACTED

A lateral periodontal cyst in association with a follicular cyst. Buckley FM, et al. **Br Dent J** 1989 Jul 8;167(1):26–8

[Sequence of therapeutic interventions in the treatment of disorders of eruption of the upper middle incisors with a supernumerary tooth as one of the etiologic factors] Novák J.
Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1987;30(3):359–65 (Eng. Abstr.) (Cze)

ANALYSIS

The relative distribution of fluoride in erupted and unerupted enamel of human third molars from a low fluoride area. Grobler SR, et al. **Arch Oral Biol** 1988;33(9):627–30

Fluoride distribution in the enamel of the mesio-lingual cusps of pairs of erupted and unerupted third molars of man with a low fluoride background. Grobler SR, et al.
J Biol Buccale 1988 Jun;16(2):89–94

Application to forensic odontology of aspartic acid racemization in unerupted and supernumerary teeth. Ogino T, et al. **J Dent Res** 1988 Oct;67(10):1319–22

COMPLICATIONS

Resorption of a first permanent molar. Hall FM, et al.
Br Dent J 1989 Jan 7;166(1):19–20

A case of gigantiform cementoma associated with multiple unerupted teeth. Chen CH.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1989 May; 5(5):299–303

ETIOLOGY

Ameloblastic fibrodentinoma: report of case. Brandt SK, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):372–5

Delayed eruption of a maxillary central incisor associated with an odontome: report of case. Oliver RG, et al.
ASDC J Dent Child 1988 Sep–Oct;55(5):368–71

Long-term interdisciplinary management of multiple mesiodens and delayed eruption: report of case. Ranalli DN, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):376–80

HISTORY

[Remarks on the contribution "Displaced and supernumerary molar of the ethmoid bone" by J. Silberzahn (Giessen) in this periodical, volume 67, issue 10 1988, p. 545–546 (letter)] Becker W. **Laryngorhinootologie** 1989 Feb;68(2):133 (Ger)

INJURIES

Intrabony tooth injuries: reports of two cases. Nazif MM, et al. **ASDC J Dent Child** 1989 Jan–Feb;56(1):65–8

PATHOLOGY

The unerupted or impacted third molar—a critical appraisal of its pathologic potential. Stephens RG, et al.
Can Dent Assoc J 1989 Mar;55(3):201–7 (65 ref.)

Idiopathic external resorption of teeth. Owens PD, et al.
J Oral Pathol 1988 Sep;17(8):404–8

Cleidocranial dysplasia: a light microscope, electron microscope, and crystallographic study. Yamamoto H, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug; 68(2):195–200

PHYSIOPATHOLOGY

Progressive development of supernumerary teeth in cleidocranial dysplasia. Frame K, et al. **Br J Orthod** 1989 May;16(2):103–6

RADIOGRAPHY

Pieces of eight. Brown ID, et al. **Br Dent J** 1988 Nov 19; 165(10):354

Vertical parallax radiology to localize an object in the anterior part of the maxilla. Southall PJ, et al.
Br J Orthod 1989 May;16(2):79–83

Unerupted and displaced teeth in CT-scan. Traxler M, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):184–6

Well-circumscribed mixed-density lesion coronal to an unerupted permanent tooth. Warnock GR, et al.
J Am Dent Assoc 1989 Aug;119(2):311–2

[Eruption disorders of the permanent molars] Piret JL, et al. **Acta Stomatol Belg** 1988 Dec;85(4):289–97 (Eng. Abstr.) (Dut)

[Displaced and supernumerary molar of the ethmoid sinus] Silberzahn J. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct; 67(10):545–6 (Eng. Abstr.) (Ger)

SURGERY

Unerupted first permanent molar. Case report. Spratley MH, et al. **Aust Dent J** 1988 Oct;33(5):392–4

Unerupted third molars [letter] **Can Dent Assoc J** 1989 Jun; 55(6):453

Development of gingiva following surgical exposure of a facially positioned unerupted incisor. Lundberg M, et al.
J Periodontol 1988 Oct;59(10):652–5

[Clinico-surgical evaluation of dental elements in bone inclusions] Berrone S, et al. **Minerva Stomatol** 1989 Jan; 38(1):139–45 (Eng. Abstr.) (Ita)

THERAPY

[Bone inclusion and ectopia of a superior incisor. Clinical case] Cassarino G. **Minerva Stomatol** 1989 Feb;38(2):191–3 (Eng. Abstr.) (Ita)

TRANSPLANTATION

Autogenic tooth transplantation: a report of ten cases. Hernandez SL, et al. **J Oral Maxillofac Surg** 1988 Dec; 46(12):1051–5

TOOTH, WISDOM see MOLAR, THIRD

TOOTHACHE

Common dental emergencies. Evaluation and management for emergency physicians. Klokkevold P.
Emerg Med Clin North Am 1989 Feb;7(1):29–63 (40 ref.)

DIAGNOSIS

Intra-oral tumours presenting after dental extraction. Saxby PJ, et al. **Br Dent J** 1989 May 6;166(9):337–8

ETIOLOGY

The tender tooth. Dentoalveolar, pericoronal, and periodontal infections. Kureishi A, et al.
Infect Dis Clin North Am 1988 Mar;2(1):163–82 (42 ref.)

Pain referred to teeth as the sole discomfort in undiagnosed mediastinal lymphoma: report of case. Kant KS.
J Am Dent Assoc 1989 May;118(5):587–8

Undiagnosed benign cementoblastoma in a patient with a 6-year pain condition. Report of a case. Forsslund HG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug; 66(2):243–8

Orodental considerations in facial pain. Solberg WK, et al.
Semin Neurol 1988 Dec;8(4):318–23 (26 ref.)

[Clinical lessons: various toothaches] Willemsen WL.
Rev Belge Med Dent 1988;43(1):72–8 (Fre)

PHYSIOPATHOLOGY

The intensive aspect of information processing in the intradental A-delta system in man—a psychophysiological analysis of sharp dental pain. Franzén OG, et al.
Behav Brain Res 1989 May 1;33(1):1–11

TOOTHBRUSHING

Pre-brushing mouthrinse Plax [letter] Gallichan C.
Br Dent J 1989 Jul 22;167(2):52

Cultural variations in oral hygiene practices among infants resident in an inner city area. Williams SA, et al.
Community Dent Health 1988 Sep;5(3):265–71

Effect of toothbrushing with 0.4% stannous fluoride and 0.22% sodium fluoride gel on gingivitis for 18 months. Wolff LF, et al. **J Am Dent Assoc** 1989 Aug;119(2):283–9

The retention of newly-acquired brushing and flossing skills. Stewart JE, et al. **J Clin Periodontol** 1989 May;16(5):331–2

Clinical and microbiological effects of daily brushing with either NaF or SnF2 gels in subjects with fixed or removable dental prostheses. Tinanoff N, et al. **J Clin Periodontol** 1989 May;16(5):284–90

The effects of experimental variations in dietary sugar intake and oral hygiene on the biochemical composition and pH of free smooth-surface and approximal plaque. Wilson RF, et al. **J Dent Res** 1988 Jun;67(6):949–53

Comparative effectiveness of flossing and brushing in reducing interproximal bleeding. Graves RC, et al.
J Periodontol 1989 May;60(5):243–7

Dentin abrasion (RDA), enamel abrasion (REA) and polishing scores of dentifrices sold in Switzerland. Barbakow F, et al. **Schweiz Monatsschr Zahnmed** 1989; 99(4):408–13

ADVERSE EFFECTS

Cervical abrasion in relation to toothbrushing and periodontal health. Bergström J, et al. **Scand J Dent Res** 1988 Oct; 96(5):405–11

INSTRUMENTATION

Residual contamination of toothbrushes by microorganisms. Kozai K, et al. **ASDC J Dent Child** 1989 May–Jun; 56(3):201–4

Traumatic implantation of a toothbrush: an unusual hazard of oral hygiene. MacLeod SP. **ASDC J Dent Child** 1989 Jan–Feb;56(1):69–70

Clinical and laboratory investigation of the plaque-reducing effect of a fluoride containing toothpaste and an electrophoretic toothbrush. Vladimirov S, et al.
Folia Med (Plovdiv) 1987;29(3):21–6

Actinobacillus actinomycetemcomitans contamination of toothbrushes from patients harbouring the organism. Müller HP, et al. **J Clin Periodontol** 1989 Jul;16(6):388–90

Toothbrush: an unusual foreign body in ENT practice. Shirali GN, et al. **J Laryngol Otol** 1988 Nov;102(11):1068–9

The effect of a new electric toothbrush on supragingival plaque and gingivitis. Baab DA, et al. **J Periodontol** 1989 Jun;60(6):336–41

Effect on periodontal status of rotary electric toothbrushes vs. manual toothbrushes during periodontal maintenance. I. Clinical results. Boyd RL, et al. **J Periodontol** 1989 Jul; 60(7):390–5

Effect of periodontal status of rotary electric toothbrushes vs. manual toothbrushes during periodontal maintenance. II. Microbiological results. Murray PA, et al.
J Periodontol 1989 Jul;60(7):396–401

Toothbrush ingestion. Salman RA.
Oral Surg Oral Med Oral Pathol 1988 Sep;66(3):386

[The significance of the contamination of dental care articles. The results of a field study] Hingst V.
Zentralbl Bakteriol Mikrobiol Hyg [B] 1989 Apr; 187(4–6):337–64 (Eng. Abstr.) (Ger)

METHODS

Comparison of manual and power toothbrushing, with and without adjunctive oral irrigation, for controlling plaque and gingivitis. Walsh M, et al. **J Clin Periodontol** 1989 Aug; 16(7):419–27

TOOTHPASTE see under DENTIFRICES

TOPECTOMY see PSYCHOSURGERY

TORP see OSSICULAR REPLACEMENT PROSTHESIS

TORPEDO

ANATOMY & HISTOLOGY

Ion channel of acetylcholine receptor reconstructed from images of postsynaptic membranes. Toyoshima C, et al.
Nature 1988 Nov 17;336(6196):247–50

METABOLISM

Primary structure of a novel
4-acetamido-4'-isothiocyanostilbene-2,2'-disulphonic acid (SITS)-binding membrane protein highly expressed in Torpedo californica electroplax. Jentsch TJ, et al.
Biochem J 1989 Jul 1;261(1):155–66

Cesium ion liquid secondary ion mass spectrometry of membrane-bound glycoproteins: structural and topological considerations of acetylcholine receptor from Torpedo californica. Poulter L, et al.
Biomed Environ Mass Spectrom 1988 Oct;16(1–12):25–30

Isolation of the tachykinin, des[Ser1Pro2]scyliorhinin II from the intestine of the ray, Torpedo marmorata. Conlon JM, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):383–8

Expression of the four subunits of the Torpedo californica nicotinic acetylcholine receptor in Saccharomyces cerevisiae. Jansen KU, et al. **J Biol Chem** 1989 Sep 5; 264(25):15022–7

Purification and crystallization of a dimeric form of acetylcholinesterase from Torpedo californica subsequent to solubilization with phosphatidylinositol-specific phospholipase C. Sussman JL, et al. **J Mol Biol** 1988 Oct 5;203(3):821–3

AH5183 and cetiedil: two potent inhibitors of acetylcholine uptake into isolated synaptic vesicles from Torpedo marmorata. Diebler MF, et al. **J Neurochem** 1989 Mar; 52(3):813–21

Compared effects of two vesicular acetylcholine uptake blockers, AH5183 and cetiedil, on cholinergic functions in Torpedo synaptosomes: acetylcholine synthesis, choline transport, vesicular uptake, and evoked acetylcholine release. Gaudry-Talarmain YM, et al. **J Neurochem** 1989 Mar;52(3):822–9

Ganglioside composition of synaptic vesicles from Torpedo electric organ. Ledeen RW, et al. **J Neurochem** 1988 Nov; 51(5):1465–9

Regulation of the vesamicol receptor in cholinergic synaptic vesicles by acetylcholine and an endogenous factor. Noremberg K, et al. **J Neurochem** 1989 Mar;52(3):913–20

Binding of [3H]hemicholinium-3 to the high-affinity choline transporter in electric organ synaptosomal membranes. O'Regan S. **J Neurochem** 1988 Dec;51(6):1682–8

Affinity labelling and identification of the high-affinity choline carrier from synaptic membranes of Torpedo electromotor nerve terminals with [3H]choline mustard. Rylett RJ. **J Neurochem** 1988 Dec;51(6):1942–5

GABAergic modulation of acetylcholine release in cholinergic synaptosomes from Torpedo marmorata electric organ. Ramírez G, et al. **Neuroscience** 1989; 30(1):251–5

Immunochemical identification of desmin in Torpedo postsynaptic membranes and at the rat neuromuscular junction. Sealock R, et al. **Synapse** 1989;3(4):315–24

PHYSIOLOGY

Characteristics of the Na+/K+-ATPase from Torpedo californica expressed in Xenopus oocytes: a combination of tracer flux measurements with electrophysiological measurements. Schwarz W, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):167–74

TORSADE DE POINTES see **TACHYCARDIA**

TORSION DYSTONIA see **DYSTONIA MUSCULORUM DEFORMANS**

TORTICOLLIS

[Benign infantile paroxysmal torticollis. Apropos of 3 cases] Guerrero Vázquez J, et al. **An Esp Pediatr** 1988 Aug; 29(2):149–52 (12 ref.) (Eng. Abstr.) (Spa)

CEREBROSPINAL FLUID

Electrophoresis and immunoblot of cerebrospinal fluid proteins in spasmodic torticollis. Cullis PA, et al. **Mov Disord** 1986;1(3):179–86

COMPLICATIONS

Cervical myelopathy secondary to movement disorders: case report. el-Mallakh RS, et al. **Neurosurgery** 1989 Jun; 24(6):902–5

Idiopathic muscular torticollis complicated with vertebral artery compression and brachial plexus neuropathy. Mertol T, et al. **Zentralbl Neurochir** 1988;49(2):109–12

[Nodding spasm] Rodriguez Pereira R. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2158–9 (Eng. Abstr.) (Dut)

[Nystagmus with double neutral zone and double torticollis. Value of artificial divergence surgery] Dahan A, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):287–90 (Eng. Abstr.) (Fre)

CONGENITAL

Sternocleidomastoid fibrosis in congenital muscular torticollis: MR appearance. Whyte AM, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):163–4

Congenital torticollis: evaluation by fine-needle aspiration biopsy. Gonzales J, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):651–4

DRUG THERAPY

Botulinum toxin in spasmodic torticollis. Stell R, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):920–3

Controlled trial of botulinum toxin injections in the treatment of spasmodic torticollis. Gelb DJ, et al. **Neurology** 1989 Jan;39(1):80–4

Haloperidol and cognitive shifting. Berger HJ, et al. **Neuropsychologia** 1989;27(5):629–39

Improvement in spasmodic torticollis following treatment and withdrawal from high dose lorazepam—clinical observations. Lal S. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):531–5

ETIOLOGY

Vestibular involvement in spasmodic torticollis: an old hypothesis with new data from otolith testing. Diamond SG, et al. **Adv Otorhinolaryngol** 1988;42:219–23

Torticollis due to a combination of sternomastoid contracture and congenital vertebral anomalies. Brougham DI, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):404–7

Disproportionate antecollis in multiple system atrophy [letter] Quinn N. **Lancet** 1989 Apr 15;1(8642):844

Torticollis following radiation therapy. Landau I, et al. **Mov Disord** 1987;2(4):317–9

Case 1, 1988. Head tilt in a young girl associated with neck pain and limitation of neck movement. Shale H, et al. **Mov Disord** 1988;3(4):347–51

Pressure-related torticollis: an unusual manifestation of pseudotumor cerebri. Baquis GD, et al. **Pediatr Neurol** 1989 Mar–Apr;5(2):111–3

Atypical spasmus nutans as an initial sign of thalamic neoplasm. Baram TZ, et al. **Pediatr Neurol** 1986 Nov–Dec; 2(6):375–6

[Torticollis—an unusual origin] Jensen JH, et al. **Ugeskr Laeger** 1989 Apr 10;151(15):950–1 (Eng. Abstr.) (Dan)

[Ocular torticollis] Jensen S. **Ugeskr Laeger** 1989 Jul 24; 151(30):1942–3 (Eng. Abstr.) (Dan)

[Torticollis in children] Carlioz H, et al. **Ann Pediatr (Paris)** 1988 Nov;35(9):651–4 (Fre)

[Malformation of the atlas: a rare symptomatic case] Rizqallah Y, et al. **Chir Organi Mov** 1988 Jul–Sep; 73(3):265–8 (Eng. Abstr.) (Ita)

[Myofascicular hypertonia as a generator of peripheral determinant structure] Ivanichev GA. **Zh Nevropatol Psikhiatr** 1989;89(4):58–60 (Eng. Abstr.) (Rus)

METABOLISM

Spasmodic torticollis-like posture and caudate nucleus monoamine in cats: in vivo dialysis study. Miyake H. **Neurol Res** 1988 Dec;10(4):213–6

PATHOLOGY

[Histologic changes of the nutatory muscles in spastic torticollis] Volobuev IuM. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):58–9 (Rus)

PHYSIOPATHOLOGY

Vestibular hyperreactivity in patients with idiopathic spasmodic torticollis. Huygen PL, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):782–5

Stability of the head: studies in normal subjects and in patients with labyrinthine disease, head tremor, and dystonia. Gresty M. **Mov Disord** 1987;2(3):165–85

Blink reflex studies in focal dystonias: enhanced excitability of brainstem interneurons in cranial dystonia and spasmodic torticollis. Tolosa E, et al. **Mov Disord** 1988;3(1):61–9

[Idiopathic spasmodic torticollis: a focal dystonia] Deuschl G. **Nervenarzt** 1989 Jul;60(7):377–85 (81 ref.) (Ger)

[Eye–head coordination in two cases of congenital strabismus syndrome with torticollis] Ohtsuki H, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2080–8 (Eng. Abstr.) (Jpn)

PSYCHOLOGY

[Torticollis spasmodicus. A contribution to psychogenesis and psychotherapy] Schulz G, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Sep; 40(9):564–71 (Eng. Abstr.) (Ger)

[Torticollis spasmodicus and addiction] Schulze A. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Dec; 40(12):724–30 (Eng. Abstr.) (Ger)

RADIOGRAPHY

Intervertebral disc calcification in children. Pattisapu JV, et al. **Pediatr Neurol** 1987 Mar–Apr;3(2):108–10

RADIONUCLIDE IMAGING

Brain imaging and treatment response in spasmodic torticollis. Besson JA, et al. **Br J Psychiatry** 1988 Sep; 153:399–402

SURGERY

Head posture and dentofacial asymmetries in surgically treated muscular torticollis patients. Pirttiniemi P, et al. **Acta Odontol Scand** 1989 Aug;47(4):193–7

[Surgical treatment of myogenic torticollis—report of 90 cases] Can WA. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):21–4 (Chi)

[Operative treatment of 128 cases of myogenic torticollis] Li FJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Dec;2(4):259–61 (Chi)

[Surgical treatment of spasmodic torticollis: effectiveness of microvascular decompression] Nagata K, et al. **No To Shinkei** 1989 Jan;41(1):97–102 (18 ref.) (Eng. Abstr.) (Jpn)

THERAPY

Botulinum toxin treatment of spasmodic torticollis [letter] Stell R, et al. **BMJ** 1988 Sep 3;297(6648):616

An apparatus for a complimentary treatment of spasmodic torticollis. Saito I, et al. **Hokkaido Igaku Zasshi** 1988 Jul; 63(4):567–72

Vestibulo-ocular abnormalities in spasmodic torticollis before and after botulinum toxin injections. Stell R, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):57–62

Who needs botulinum toxin? [letter] **Med J Aust** 1988 Dec 5–19;149(11–12):723–4

Torticollis. Wolfort FG, et al. **Plast Reconstr Surg** 1989 Oct; 84(4):682–92 (45 ref.)

[Vertebro-basilar vascular accident after manipulation of the cervical spine] Ponge T, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):545–8 (Fre)

[Botulinum toxin in therapy of craniocervical dystonia] Dressler D, et al. **Nervenarzt** 1989 Jul;60(7):386–93 (49 ref.) (Eng. Abstr.) (Ger)

[Types of disease courses in torticollis spasmodicus—an evaluation study] Schulze A, et al. **Psychother Psychosom Med Psychol** 1988 Nov;38(11):401–4 (Eng. Abstr.) (Ger)

[Decoupling or ultra-short therapy of torticollis] Drees A, et al. **Z Psychosom Med Psychoanal** 1989;35(1):38–47 (Eng. Abstr.) (Ger)

TORTURE

Sleep disturbances in torture survivors. Astrup C, et al. **Acta Neurol Scand** 1989 Feb;79(2):150–4

Torture. Başoğlu M, et al. **BMJ** 1988 Dec 3;297(6661):1423–4

Anorexia nervosa following torture in a young African woman. Fahy TA, et al. **Br J Psychiatry** 1988 Sep; 153:385–7

Safari to Kenya [letter] Walker RE. **Can Med Assoc J** 1988 Oct 15;139(8):704–5

Why are torturers never punished? Vesti P. **Dan Med Bull** 1988 Oct;35(5):493–5

Physical and psychological sequelae to torture. A controlled clinical study of exiled asylum applicants. Hougen HP. **Forensic Sci Int** 1988 Oct;39(1):5–11

Teaching nurses about torture. Dind C. **Int Nurs Rev** 1989 May–Jun;36(3):81–2

Treatment of torture survivors and their families: the nurse's function. Jacobsen L, et al. **Int Nurs Rev** 1989 May–Jun; 36(3):75–80

Allegations of torture in Turkey [letter] **Lancet** 1989 Jul 22; 2(8656):220–1

Israel and The Lancet [letter] **Lancet** 1989 Sep 2;2(8662):565

Turks in Bulgaria [letter] Forrest D, et al. **Lancet** 1989 Sep 9;2(8663):621

Prevention of torture and inhuman or degrading treatment: medical implications of a new European convention. Harding TW. **Lancet** 1989 May 27;1(8648):1191–3

Interpreting scars [letter] Robinson A. **Lancet** 1989 Sep 9; 2(8663):620–1

Torture of Turkish Kurds [letter] Turner SW, et al. **Lancet** 1989 Jun 10;1(8650):1319

Torture: diagnosis and rehabilitation. Juhler M, et al. **Med War** 1989 Apr–Jun;5(2):69–79

Torture victims. A pathway to recovery. Feldman MK. **Minn Med** 1988 Sep;71(9):535–8, 540

How to treat torture victims. Feldman MK. **Minn Med** 1988 Sep;71(9):539

Torture and health care professionals. Plachta LR. **N Y State J Med** 1989 Mar;89(3):143–8

Human inhumanity. Davis JM. **Postgrad Med** 1989 Feb 15; 85(3):24, 26

Facing war, murder, torture, and death in latency. Gampel Y. **Psychoanal Rev** 1988 Winter;75(4):499–509

The controlled study of torture victims. Epidemiological considerations and some future aspects. Petersen HD. **Scand J Soc Med** 1989;17(1):13–20 (38 ref.)

The effects of torture and political repression in a sample of Chilean families. **Soc Sci Med** 1989;28(7):735–40

[Methods of torture and their consequences] Berg A. **Tidsskr Nor Laegeforen** 1989 Jun 20;109(17–18):1863–6 (Eng. Abstr.) (Nor)

[Methods of torture and its consequences] Eitinger L. **Tidsskr Nor Laegeforen** 1989 Jun 20;109(17–18):1860–2 (Eng. Abstr.) (Nor)

[Refugees who had been exposed to torture—a reality in the Swedish society] Finer D. **Lakartidningen** 1988 Dec 7; 85(49):4332–3, 4337–8 (Swe)

[Imprisonment and torture are common causes of psychiatric and somatic symptoms among refugees in Sweden] Nordström A, et al. **Lakartidningen** 1988 Oct 26; 85(43):3560–1 (Swe)

HISTORY

The crucifixion and death of a man called Jesus. Ball DA. **J Miss State Med Assoc** 1989 Mar;30(3):77–83

Upon the wracke of this tough world. Traction as treatment or torture. Goldblatt D. **Semin Neurol** 1986 Dec;6(4):431–6

TORULA see **CRYPTOCOCCUS**

TORULOPSIS see **CANDIDA**

TORULOSIS see **CRYPTOCOCCOSIS**

TOSYL COMPOUNDS

METABOLISM

A 13C-n.m.r. investigation of the ionizations within an inhibitor—alpha-chymotrypsin complex. Evidence that both alpha-chymotrypsin and trypsin stabilize a hemiketal oxyanion by similar mechanisms. Finucane MD, et al. **Biochem J** 1989 Mar 15;258(3):853–9

TOSYLARGININE METHYL ESTER see under **ARGININE**

TOSYLLYSINE CHLOROMETHYL KETONE see under **AMINO ACID CHLOROMETHYL KETONES**

TOSYLPHENYLALANYL CHLOROMETHYL KETONE see under **AMINO ACID CHLOROMETHYL KETONES**

TOTAL BODY CLEARANCE RATE see **METABOLIC CLEARANCE RATE**

TOTAL BODY IRRADIATION see **WHOLE BODY IRRADIATION**

TOTAL LUNG CAPACITY see under **LUNG VOLUME MEASUREMENTS**

TOTAL MASTECTOMY see **MASTECTOMY, SIMPLE**

TOTAL PARENTERAL NUTRITION see **PARENTERAL HYPERALIMENTATION**

TOUCH

Why now? Ours J. **Am J Nurs** 1988 Oct;88(10):1452

Density of toruli tactiles in the Japanese monkey. Wakuri H. **Anat Histol Embryol** 1988 Dec;17(4):312–8

Development of visual and tactile rod orientation in children. Meerwaldt JD, et al. **Behav Brain Res** 1988 Sep 15; 30(2):145–9

Audiological rehabilitation of older people: visual and vibrotactile considerations. Oyer HJ, et al. **Br J Audiol** 1989 Feb;23(1):33–7 (26 ref.)

Overt and covert attention and vibrotactile reaction times: gaze direction, spatial compatibility and hemispatial asymmetry. Bradshaw JL, et al. **Can J Psychol** 1988 Mar; 42(1):44–56

The effects of a tactile stimulation/range-finding programme on the development of very low birth weight infants during initial hospitalization. Helders PJ, et al. **Child Care Health Dev** 1988 Sep–Oct;14(5):341–54

Young children's ability to differentiate appearance-reality and level 2 perspectives in the tactile modality. Flavell JH, et al. **Child Dev** 1989 Feb;60(1):201–13

Sensory processing in the term and preterm infant: use of reflex modification procedures. Anday EK, et al. **Dev Psychobiol** 1989 Apr;22(3):211–9

Tactile presentation of voice fundamental frequency as an aid to the speechreading of sentences. Hanin L, et al. **Ear Hear** 1988 Dec;9(6):335–41

Perception of frequency contours via temporal and spatial tactile transforms. Hnath-Chisolm T, et al. **Ear Hear** 1988 Dec;9(6):322–8

Tactile presentation of voice fundamental frequency as an aid to the perception of speech pattern contrasts. Hnath-Chisolm T, et al. **Ear Hear** 1988 Dec;9(6):329–34

A wearable multichannel tactile display of voice fundamental frequency. Yeung E, et al. **Ear Hear** 1988 Dec;9(6):342–50

Touch: a nursing strategy in the intensive care unit. Estabrooks CA. **Heart Lung** 1989 Jul;18(4):392–401

Evaluation of tactile prompts with a student who is deaf, blind, and mentally retarded. Berg WK, et al. **J Appl Behav Anal** 1989 Spring;22(1):93–9

Discriminant validity of lateral sensorimotor tests in children. Francis DJ, et al. **J Clin Exp Neuropsychol** 1988 Dec; 10(6):779–99

Some physical factors influencing tactile perception with disposable non-sterile gloves. Burke FJ, et al. **J Dent** 1989 Apr;17(2):72–6

Perceptual learning of spatiotemporal events: evidence from an unfamiliar modality. Epstein W, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):28–44

Visual-haptic perceptual nonequivalence for shape information and its impact upon cross-modal performance. Garbin CP. **J Exp Psychol [Hum Percept]** 1988 Nov; 14(4):547–53

Haptic integration of object properties: texture, hardness, and planar contour. Klatzky RL, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):45–57

Haptically perceiving the distances reachable with hand-held objects. Solomon HY, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):404–27

Perceiving extents of rods by wielding: haptic diagonalization and decomposition of the inertia tensor. Solomon HY, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):58–68

Proposed use of a digital signal processor in an experimental tactile hearing aid for the profoundly deaf: preliminary communication. Mathijssen RW, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):84–6

Preliminary investigation towards optimal use of the tactile sense as communication channel. Wang X, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):81–3

Tactile sensibility in parietal lesions. Tegnér R. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):669–70

Take time to touch. Ridzon P. **J Nurs Adm** 1989 Sep;19(9):3

Synaptic control of hindlimb motoneurones during three forms of the fictive scratch reflex in the turtle. Robertson GA, et al. **J Physiol (Lond)** 1988 Oct;404:101–28

Pressure sensitivity in bulimic women: a contribution to research in body image distortion. Florin I, et al. **J Psychosom Res** 1988;32(4–5):439–44

Tactile communication of speech: comparison of two computer-based displays. Clements MA, et al. **J Rehabil Res Dev** 1988 Fall;25(4):25–44

Preliminary results of speech-reception tests obtained with the synthetic Tadoma system. Leotta DF, et al. **J Rehabil Res Dev** 1988 Fall;25(4):45–52

Extended physiologic taction: design and evaluation of a proportional force feedback system. Meek SG, et al. **J Rehabil Res Dev** 1989 Summer;26(3):53–62 (26 ref.)

A self-report measure of touching behavior. Schutte NS, et al. **J Soc Psychol** 1988 Oct;128(5):597–604

Phonemic information transmitted by a multichannel electrotactile speech processor. Blamey PJ, et al. **J Speech Hear Res** 1988 Dec;31(4):620–9

Vibrotactile perception of segmental features of speech: a comparison of single-channel and multichannel instruments. Carney AE. **J Speech Hear Res** 1988 Sep; 31(3):438–48

Magnitude estimation and cross-modal matching of lingual vibrotactile and auditory sensation. Harris D, et al. **J Speech Hear Res** 1989 Sep;32(3):698–702

Multisensory narrative tracking by a profoundly deaf subject using an electrocutaneous vocoder and a vibrotactile aid. Lynch MP, et al. **J Speech Hear Res** 1989 Jun;32(2):331–8

Evaluation of the Siemens Minifonator vibrotactile aid. Weisenberger JM. **J Speech Hear Res** 1989 Mar;32(1):24–32

Comparison of two single-channel vibrotactile aids for the hearing-impaired. Weisenberger JM, et al. **J Speech Hear Res** 1989 Mar;32(1):83–92

Vibrotactile stimulator for use with patients suffering from hemineglect. Wood RG, et al. **Med Biol Eng Comput** 1988 Mar;26(2):207–12

Cold-induced peripheral nerve damage: involvement of touch receptors of the foot. Carter JL, et al. **Muscle Nerve** 1988 Oct;11(10):1065–9

The integration of sensory information in the development of precise manual pointing. von Hofsten C, et al. **Neuropsychologia** 1988;26(6):805–21

Psychophenomenon of paradoxical rotation provoked by acoustic and tactile stimuli. Kollàr A, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(6):385–8

Vibrotactile threshold shift during magnitude-estimation scaling on the hand: effects on magnitude-estimation responses and scaling behavior. Fucci D, et al. **Percept Mot Skills** 1989 Aug;69(1):187–94

What does "touch" mean to young children? An empirical study. Hashima PY, et al. **Percept Mot Skills** 1988 Dec; 67(3):683–90

Sensory-substitution systems for the sensorily impaired: the case for the use of tactile-vibratory stimulation. Lechelt EC. **Percept Mot Skills** 1986 Apr;62(2):356–8

Effects of auditory masking on lingual vibrotactile magnitude-estimation scaling responses of young children. Petrosino L, et al. **Percept Mot Skills** 1989 Apr;68(2):523–9

Effect of auditory masking on lingual vibrotactile thresholds and magnitude estimation scaling responses. Petrosino L, et al. **Percept Mot Skills** 1988 Oct;67(2):491–4

Temporal resolution of the aging tactile sensory system. Petrosino L, et al. **Percept Mot Skills** 1989 Feb;68(1):288–90

Lingual vibrotactile/auditory magnitude estimation and cross-modal matching: comparison of suprathreshold responses in men and women. Petrosino L, et al. **Percept Mot Skills** 1988 Aug;67(1):291–300

Cultural and sex differences in touch avoidance. Remland MS, et al. **Percept Mot Skills** 1988 Oct;67(2):544–6

Tactile memory in sighted and blind observers: the influence of orientation and rate of presentation. Heller MA. **Perception** 1989;18(1):121–33

Agitation and touch in the nursing home. Marx MS, et al. **Psychol Rep** 1989 Jun;64(3 Pt 2):1019–26

PHYSIOLOGY

Tactile extinction to simple (elementary) and complex stimuli. Ito K, et al. **Acta Neurol Scand** 1989 Jul;80(1):68–77

Comparison of tactile discrimination ability of visually deprived and normal monkeys. Carlson S, et al. **Acta Physiol Scand** 1989 Mar;135(3):405–10

Effect of tactile stimulation pulse characteristics on sensation threshold and power consumption. Nunziata E, et al. **Ann Biomed Eng** 1989;17(4):423–35

Touch. The beneficial effects for the surgical patient. Tovar MK, et al. **AORN J** 1989 May;49(5):1356–61

Penile and finger sensory thresholds in young, aging, and diabetic males. Rowland DL, et al. **Arch Sex Behav** 1989 Feb;18(1):1–12

Rats can learn a roughness discrimination using only their vibrissal system. Guić-Robles E, et al. **Behav Brain Res** 1989 Jan 1;31(3):285–9

The neural structures involved in cross-modal recognition and tactile discrimination performance: an investigation using 2-DG. Hörster W, et al. **Behav Brain Res** 1989 Jun 1;33(2):209–27

Acquisition and reversal of taste/tactile discrimination after forebrain noradrenaline depletion. Jarbe TU, et al. **Behav Neurosci** 1988 Dec;102(6):925–33

Vibrotactile reaction times in unilateral neglect. The effects of hand location, rehabilitation and eyes open/closed. Pierson-Savage JM, et al. **Brain** 1988 Dec;111 (Pt 6):1531–45

Somatosensory cortical mechanisms of feature detection in tactile and kinesthetic discrimination. Gardner EP. **Can J Physiol Pharmacol** 1988 Apr;66(4):439–54

Regional brain function in hallucinations: a study of regional cerebral blood flow with 99m-Tc-HMPAO-SPECT in patients with auditory hallucinations, tactile hallucinations, and normal controls. Musalek M, et al. **Compr Psychiatry** 1989 Jan–Feb;30(1):99–108

Hemispheric specialization for tactile perception opposed by contralateral noise. Cohen H, et al. **Cortex** 1988 Sep; 24(3):425–31

Interhemispheric transfer of spatial tactile information in callosal agenesis and partial commissurotomy. Jeeves MA, et al. **Cortex** 1988 Dec;24(4):601–4

Hemispheric asymmetry in tactile forgetting induced by tactually-guided movement. Sullivan EV. **Cortex** 1989 Mar;25(1):83–92

Quantitative estimation of aesthesiometric thresholds for assessing impaired tactile sensation in workers exposed to vibration. Bovenzi M, et al. **Int Arch Occup Environ Health** 1989;61(7):431–5

Contralateral and ipsilateral tactile extinction in patients with right and left focal brain damage. Gainotti G, et al. **Int J Neurosci** 1989 Mar;45(1–2):81–9

Single-channel vibrotactile supplements to visual perception of intonation and stress. Bernstein LE, et al. **J Acoust Soc Am** 1989 Jan;85(1):397–405

Four channels mediate the mechanical aspects of touch. Bolanowski SJ Jr, et al. **J Acoust Soc Am** 1988 Nov; 84(5):1680–94

Tactile sensory changes in hands occupationally exposed to vibration. Brammer AJ, et al. **J Acoust Soc Am** 1988 Nov; 84(5):1940–1

Vibrotactile masking: effects of stimulus onset asynchrony and stimulus frequency. Gescheider GA, et al. **J Acoust Soc Am** 1989 May;85(5):2059–64

A model of spatiotemporal tactile sensitivity linking psychophysics to tissue mechanics. Van Doren CL. **J Acoust Soc Am** 1989 May;85(5):2065–80

Surface deflection of primate fingertip under line load. Srinivasan MA. **J Biomech** 1989;22(4):343–9

Perioral somatosensory determinants of nursing behavior in Norway rats (Rattus norvegicus). Stern JM, et al. **J Comp Psychol** 1989 Sep;103(3):269–80

The utility of testing tactile perception of direction of scratch as a sensitive clinical sign of posterior column dysfunction in spinal cord disorders. Hankey GJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):395–8

Further physiological observations on the ventralis intermedius neurons in the human thalamus. Ohye C, et al. **J Neurophysiol** 1989 Mar;61(3):488–500

Spatial and temporal factors determining afferent fiber responses to a grating moving sinusoidally over the monkey's fingerpad. Goodwin AW, et al. **J Neurosci** 1989 Apr;9(4):1280–93

Perceived roughness of a grating: correlation with responses of mechanoreceptive afferents innervating the monkey's fingerpad. Sathian K, et al. **J Neurosci** 1989 Apr; 9(4):1273–9

Sensory thresholds among construction trade painters: a cross-sectional study using new methods for measuring temperature and vibration sensitivity. Bove FJ, et al. **J Occup Med** 1989 Apr;31(4):320–5

The healing touch. Leduc E. **MCN** 1989 Jan–Feb;14(1):41–3

Involuntary grasping and groping responses to space-related visual stimuli. Magnani G, et al. **Mov Disord** 1987;2(1):9–23

Basal forebrain lesions impair tactile discrimination and working memory. Wozniak DF, et al. **Neurobiol Aging** 1989 Mar–Apr;10(2):173–9

Position sense in the lateral funiculus? Lockard BI, et al. **Neurol Res** 1988 Jun;10(2):81–6

Right cerebral specialization for tactile attention as evidenced by intracarotid sodium amytal. Meador KJ, et al. **Neurology** 1988 Nov;38(11):1763–6

Tactual extinction without anomia: evidence of attentional factors in a patient with a partial callosal disconnection. Mayer E, et al. **Neuropsychologia** 1988;26(6):851–68

Mathematical modeling of the reactivity of analyzer systems during the course of adaptation. Prisnyakov VF, et al. **Neurosci Behav Physiol** 1988 Nov–Dec;18(6):474–80

Long latency inhibition of H-reflex recovery by cutaneous tactile stimulation in man: a cutaneous transcortical reflex. Chandran AP, et al. **Neuroscience** 1988 Dec;27(3):1037–48

Lateral asymmetry and tactile sensitivity. Kaplan-Solms KL, et al. **Percept Mot Skills** 1988 Aug;67(1):55–62

Comparison of orosensory confusions of hearing and hearing-impaired adults. Lieberth AK. **Percept Mot Skills** 1988 Dec;67(3):975–80

The anxiolytic action of benzodiazepines is not present in handling-habituated rats. Boix F, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):541–6

Isolation, tactile startle and resting blood pressure in Long-Evans rats. Woodworth CH, et al. **Physiol Behav** 1988;43(5):609–16

Vibration perception thresholds in 279 diabetic patients.

McKillop GM, et al. **Scott Med J** 1988 Oct;33(5):334–5
The capacity of human subjects to process directional information provided at two skin sites. Essick GK, et al. **Somatosens Mot Res** 1988;6(1):1–20
Discrimination and scaling of velocity of stimulus motion across the skin. Essick GK, et al. **Somatosens Mot Res** 1988; 6(1):21–40
Temperature and the two-point threshold. Stevens JC. **Somatosens Mot Res** 1989;6(3):275–84
Neural mechanisms of absolute tactile localization in monkeys. Vierck CJ Jr, et al. **Somatosens Mot Res** 1988; 6(1):41–61
[Acoustic and tactile stimuli: bioelectric responses] Zito F, et al. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):389–95 (Eng. Abstr.) **(Ita)**
[Tactile sensitivity in diseases of the skin of various etiologies] Tsirul'nikov EM, et al. **Vestn Dermatol Venerol** 1988; (12):11–4 (Eng. Abstr.) **(Rus)**

TOURETTE SYNDROME

The Gilles de la Tourette syndrome: the current status. Robertson MM. **Br J Psychiatry** 1989 Feb;154:147–69 (241 ref.)
Tourette's syndrome and movement disorders. Proceedings of a conference. Grand Forks, ND, October 16, 1987. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):177–320

BLOOD

Gonadotropin deficiency in Tourette's syndrome: a preliminary communication. Sandyk R, et al. **Int J Neurosci** 1988 Sep;42(1–2):121–5

CEREBROSPINAL FLUID

Elevated CSF dynorphin A [1–8] in Tourette's syndrome. Leckman JF, et al. **Life Sci** 1988;43(24):2015–23

CHEMICALLY INDUCED

Opiate withdrawal unmasks Tourette's syndrome. Lichter D, et al. **Clin Neuropharmacol** 1988 Dec;11(6):559–64
Transient exacerbation of tics in treatment of Tourette's syndrome with clonidine. Huk SG. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):583–6
Methylphenidate treatment of attention-deficit hyperactivity disorder in boys with Tourette's syndrome. Sverd J, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):574–9; discussion 580–2
Phenobarbital-induced Tourette-like symptoms. Sandyk R. **Pediatr Neurol** 1986 Jan–Feb;2(1):54–5

COMPLICATIONS

Naltrexone suppresses abnormal sexual behavior in Tourette's syndrome. Sandyk R. **Int J Neurosci** 1988 Nov; 43(1–2):107–10
Tics in a patient with Parkinson's disease. Shale H, et al. **Mov Disord** 1986;1(1):79–83
Tardive dystonia in patients with Tourette's syndrome. Singh SK, et al. **Mov Disord** 1988;3(3):274–80
Sensory tics in Tourette's syndrome. Kurlan R, et al. **Neurology** 1989 May;39(5):731–4
Familial pervasive development disorder, Tourette disorder and hyperlexia. Burd L, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):233–4
Tourette syndrome and social functioning in a Canadian population. Champion LM, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):255–7
Tourette disorder and schizophrenia in children. Kerbeshian J, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter; 12(3–4):267–70
Tourette disorder and mutational falsetto. Kerbeshian J, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):271–3
Tourette syndrome and educational problems in Canada. Shady GA, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter; 12(3–4):263–5

DIAGNOSIS

A case of Tourette's syndrome with midbrain involvement. Sandyk R. **Int J Neurosci** 1988 Dec;43(3–4):171–5
The Yale Global Tic Severity Scale: initial testing of a clinician-rated scale of tic severity. Leckman JF, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):566–73
Tourette-like symptoms associated with neuroleptic therapy in an autistic child. Perry R, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):93–6

DRUG THERAPY

Controlled study of haloperidol, pimozide and placebo for the treatment of Gilles de la Tourette's syndrome. Shapiro E, et al. **Arch Gen Psychiatry** 1989 Aug;46(8):722–30
Nicotine potentiates the effects of haloperidol in animals and in patients with Tourette syndrome. Sanberg PR, et al. **Biomed Pharmacother** 1989;43(1):19–23
Gilles de la Tourette's syndrome. Amelioration following acute akinesia during lorazepam withdrawal. Wright S, et al. **Br J Psychiatry** 1989 Feb;154:257–9
Clinical and neurobiological findings in children suffering from tic disease following treatment with tiapride. Eggers C, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(4):223–9
Clomiphene citrate in Tourette's syndrome. Sandyk R. **Int J Neurosci** 1988 Nov;43(1–2):103–6
Nifedipine–haloperidol combination in the treatment of Gilles de la Tourette's syndrome: a case study. Alessi NE, et al. **J Clin Psychiatry** 1989 Mar;50(3):103–4
Failure of haloperidol to alter gonadotropin release in Tourette's syndrome [letter] Sandyk R. **J Clin Psychopharmacol** 1989 Feb;9(1):60
Marijuana and Tourette's syndrome [letter] Sandyk R, et al. **J Clin Psychopharmacol** 1988 Dec;8(6):444–5
Successful treatment of acquired Tourettism and major depression. Malone DA Jr, et al. **J Geriatr Psychiatry Neurol** 1988 Jul–Sep;1(3):169–71
Nicotine and cannabinoids as adjuncts to neuroleptics in the treatment of Tourette syndrome and other motor disorders. Moss DE, et al. **Life Sci** 1989;44(21):1521–5 (18 ref.)
An evaluation of Tourette syndrome and medication use in Canada. Fulton WA, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):251–4
Intermittent medication cessation in the treatment of Tourette syndrome. Fulton WA. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):235–40
A clinical pharmacological approach to treating Tourette syndrome in children and adolescents. Kerbeshian J, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):241–5 (61 ref.)
Differential responsiveness to lithium in patients with Tourette disorder. Kerbeshian J, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):247–50
Tourette's medications: effect on minor oxidative and reductive pathways of biogenic amines. Messiha FS. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):215–8
Biochemical pharmacology of Gilles de la Tourette's syndrome. Messiha FS. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):295–305 (187 ref.)
Tourette syndrome and medical treatment in Canada. Wand RR, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter; 12(3–4):229–31
Nifedipine augments haloperidol in the treatment of Tourette syndrome. Alessi NE, et al. **Pediatr Neurol** 1988 May–Jun; 4(3):191
Tardive dyskinesia in Tourette syndrome. Golden GS. **Pediatr Neurol** 1985 May–Jun;1(3):192–4
Estrogen as adjuvant treatment of Tourette syndrome. Sandyk R, et al. **Pediatr Neurol** 1987 Mar–Apr;3(2):122
[Tourette syndrome. New aspects on pharmacological treatment] Aabech HS. **Tidsskr Nor Laegeforen** 1989 Mar 30;109(9):961–3 (Eng. Abstr.) **(Nor)**

EPIDEMIOLOGY

Tourette disorder in North Dakota. Burd L, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):223–8

ETIOLOGY

Tourette-like disorder after herpes encephalitis [letter] Turley JM. **Am J Psychiatry** 1988 Dec;145(12):1604–5
Tourette syndrome: recent advances. Golden GS. **Pediatr Neurol** 1986 Jul–Aug;2(4):189–92 (32 ref.)
[Comparative characteristics of somatic risk factors for the development of Tourette syndrome and slowly-progressing schizophrenia in childhood] Kozlova IA, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):12–7 (Eng. Abstr.) **(Rus)**

GENETICS

Transient tic disorder and the spectrum of Tourette's syndrome. Kurlan R, et al. **Arch Neurol** 1988 Nov; 45(11):1200–1
Concordant Gilles de la Tourette's syndrome in monozygotic twins: a clinical, neurophysiological and CT study. Vieregge P, et al. **J Neurol** 1988 Jul;235(6):366–7
Tourette's syndrome hypothesis creates controversy among geneticists [news] Merz B. **JAMA** 1988 Nov 11; 260(18):2619
Difficulties in gene localization for Tourette's syndrome. Clinical aspects. Kurlan R. **Mol Chem Neuropathol** 1989 Feb;10(1):21–6 (35 ref.)

METABOLISM

Abnormal opiate receptor functions in Tourette's syndrome. Sandyk R. **Int J Neurosci** 1989 Feb;44(3–4):209–14 (36 ref.)
Dynorphin deficiency in Tourette's syndrome [letter] Sandyk R. **Int J Neurosci** 1989 May;46(1–2):65–6

NURSING

Tourette syndrome: a bizarre and frightening neurological disorder. Jenson CE. **J Neurosci Nurs** 1988 Aug;20(4):213–6 (15 ref.)

PHYSIOPATHOLOGY

Auditory event-related potentials in adult patients with Gilles de la Tourette's syndrome in the oddball paradigm. Van Woerkom TC, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov–Dec; 71(6):443–9
Brain reward systems and Tourette's syndrome [letter] Sandyk R, et al. **Int J Neurosci** 1989 Apr;45(3–4):255–7
Recurrence of complex motor and vocal tics in an elderly woman responsive to opiates. Sandyk R, et al. **Int J Neurosci** 1989 Feb;44(3–4):317–20
Oculomotor control in Gilles de la Tourette syndrome. Bollen EL, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug; 51(8):1081–3
Abnormalities of the blink reflex in Gilles de la Tourette syndrome. Smith SJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):895–8
The autonomic nervous system in Gilles de la Tourette's syndrome. Goetz CG, et al. **Mov Disord** 1987;2(2):99–102
Tourette syndrome [letter] Sandyk R, et al. **Pediatr Neurol** 1987 Jan–Feb;3(1):63

PSYCHOLOGY

The psychopathology of the Gilles de la Tourette syndrome. A phenomenological analysis. Robertson MM, et al. **Br J Psychiatry** 1988 Mar;152:383–90
Tourette disorder and bipolar symptomatology in childhood and adolescence. Kerbeshian J, et al. **Can J Psychiatry** 1989 Apr;34(3):230–3
Tourette's syndrome: clinical and neurochemical correlates. Riddle MA, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Jul;27(4):409–12
Behavior disorder and attention deficits in boys with Tourette syndrome. Sverd J, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Jul;27(4):413–7
Inappropriate sexual behavior and denervation supersensitivity of limbic and midbrain LHRH receptors in Tourette's syndrome [letter] Sandyk R, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):295–6
Psychopathology and movement disorders: a new perspective on the Gilles de la Tourette syndrome. Trimble M. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:90–5 (20 ref.)
The emotional adjustment of children with Tourette's syndrome. Edell BH, et al. **J Psychol** 1989 Jan;123(1):51–7
Tourette syndrome: impact on Canadian family functioning. Hubka GB, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter; 12(3–4):259–61
Development of behavioral and emotional problems in Tourette syndrome. Singer HS, et al. **Pediatr Neurol** 1989 Jan–Feb;5(1):41–4
Educating children and adults on coping with Tourette syndrome. Fisher W, et al. **Percept Mot Skills** 1986 Apr; 62(2):530
[Schizophrenic psychosis in a patient with Gilles de la Tourette syndrome] Becker T, et al. **Nervenarzt** 1988 Oct; 59(10):616–20 (Eng. Abstr.) **(Ger)**

THERAPY

A four-step hypnotherapy model for Gilles de la Tourette's syndrome. Culbertson FM. **Am J Clin Hypn** 1989 Apr; 31(4):252–6
A new hypnobehavioral method for the treatment of children with Tourette's disorder. Young MH, et al. **Am J Clin Hypn** 1988 Oct;31(2):97–106
Habit reversal for the treatment of Tourette syndrome. Azrin NH, et al. **Behav Res Ther** 1988;26(4):347–51
A behavioural intervention for Gilles de la Tourette syndrome in a severely mentally handicapped girl. Zarkowska E, et al. **J Ment Defic Res** 1989 Jun;33 (Pt 3):245–53
Symptom substitution in Tourette disorder [letter] Burd L, et al. **Lancet** 1988 Nov 5;2(8619):1072
Gum chewing as therapy for Tourette syndrome. Brill CB. **Pediatr Neurol** 1988 Mar–Apr;4(2):128

URINE

Neuropsychological correlates of urinary amine metabolites in Tourette's syndrome. Bornstein RA, et al. **Int J Neurosci** 1988 Sep;42(1–2):113–20

TOURETTE'S DISORDER see **TOURETTE SYNDROME**

TOURNIQUET PAIN TEST see **PAIN MEASUREMENT**

TOURNIQUETS

"Tourniquet effect" can alter delayed static bone scan [letter] Orzel JA, et al. **AJR** 1989 Apr;152(4):896
Uncomplicated accidental early tourniquet deflation during intravenous regional anaesthesia with prilocaine [letter] Robinson DA, et al. **Anaesthesia** 1989 Jan;44(1):83–4
Respiratory responses associated with release of intraoperative tourniquets. Bourke DL, et al. **Anesth Analg** 1989 Oct;69(4):541–4
Lidocaine disposition following intravenous regional anesthesia with different tourniquet deflation technics. Sukhani R, et al. **Anesth Analg** 1989 May;68(5):633–7
Bier block tourniquet pressure [letter] Wilson JK, et al. **Anesth Analg** 1989 Jun;68(6):823–4
Clean up varicose vein surgery—use a tourniquet. Corbett R, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):57–8
Simplified hepatectomy: the tourniquet method. Li AK, et al. **Aust N Z J Surg** 1989 Feb;59(2):161–3
Tourniquet infusion chemotherapy of the lower extremities—clinical and pharmacokinetic results. Ingvar C, et al. **Eur J Surg Oncol** 1989 Aug;15(4):375–9
A study of the use of a double tourniquet technique to obtain hemostasis in combination with local standby sedation during podiatric surgery. Fuselier CO, et al. **J Foot Surg** 1988 Nov–Dec;27(6):515–27
Tourniquet usage for lower extremity procedures [editorial] Reinherz RP, et al. **J Foot Surg** 1988 Jul–Aug;27(4):293
Sensory changes with prolonged double-cuff tourniquet time

in hand surgery. Dreyfuss UY, et al. **J Hand Surg [Am]** 1988 Sep;13(5):736–40

New finger cuffs for use with digital tourniquets. McEwen JA, et al. **J Hand Surg [Am]** 1988 Nov;13(6):888–92

Tourniquet: basic principles, biomechanics and clinical applications. Parkash S, et al. **J Indian Med Assoc** 1988 Oct;86(10):261–9 (64 ref.)

Isometric contractile function recovery following tourniquet ischemia. Fish JS, et al. **J Surg Res** 1989 Oct;47(4):365–70

Giant pediatric aneurysm treated with ligation of the middle cerebral artery with the Drake tourniquet and extracranial–intracranial bypass. Lansen TA, et al. **Neurosurgery** 1989 Jul;25(1):81–5

Tips of the trade #7. A sterile pneumatic tourniquet for surgical procedures about the elbow. Hankin FM, et al. **Orthop Rev** 1988 Dec;17(12):1240–3

Effect of the timing of tourniquet release on postoperative hematoma formation: an experimental animal study. Himel HN, et al. **Plast Reconstr Surg** 1989 Apr;83(4):692–700

A convenient infant tourniquet. Upton J, et al. **Plast Reconstr Surg** 1989 Jan;83(1):171–2

[Use of the tourniquet in gastrointestinal surgery] Fortýn K, et al. **Rozhl Chir** 1989 May;68(5):323–7 (Eng. Abstr.) **(Cze)**

[Surgery in a bloodless field with roll cuffs] Löfqvist J. **Chirurg** 1988 Dec;59(12):853–4 **(Ger)**

[Effect of tourniquet occlusion on peripheral blood pooling and ventricular function] Klein HO, et al. **Harefuah** 1989 Jan 1;116(1):32–4 (Eng. Abstr.) **(Heb)**

[Increased thromboxane A2 release after tourniquet ischemia in patients with lower limb surgery] Sakio H, et al. **Masui** 1988 Oct;37(10):1224–7 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

The effect of tourniquet pressure on muscle function. Gersoff WK, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):123–7

Paradoxical thrombo–embolism [letter] Callander CC, et al. **Anaesthesia** 1988 Oct;43(10):894–5

Structural assessment of rat sciatic nerve following tourniquet compression and vascular manipulation. Nitz AJ, et al. **Anat Rec** 1989 Sep;225(1):67–76

Tourniquet use and intraoperative hypothermia [letter] dos Reis Júnior A. **Anesth Analg** 1989 Oct;69(4):549–50

Tourniquet pain during bupivacaine and tetracaine spinal anesthesia [letter] Gibbons JJ. **Anesth Analg** 1989 Sep; 69(3):410–1

Changes in venous blood lactate, venous blood gases, and somatosensory evoked potentials after tourniquet application. Benzon HT, et al. **Anesthesiology** 1988 Nov; 69(5):677–82

Severe increase of intracranial pressure after deflation of a pneumatic tourniquet. Conaty KR, et al. **Anesthesiology** 1989 Aug;71(2):294–5

Chemical burns beneath tourniquets [letter] **BMJ** 1989 Jan 28;298(6668):254

Chemical burns beneath tourniquets. Dickinson JC, et al. **BMJ** 1988 Dec 10;297(6662):1513

Prevention of tourniquet pain by spinal isobaric bupivacaine with clonidine. Bonnet F, et al. **Br J Anaesth** 1989 Jul; 63(1):93–6

Effect of high–dose of methylprednisolone on tourniquet ischaemia. Goto H, et al. **Can J Anaesth** 1988 Sep; 35(5):484–8

Prilocaine leakage during tourniquet inflation in intravenous regional anaesthesia: the influence of fracture manipulation. Quinton DN, et al. **Injury** 1988 Sep;19(5):333–5

Upper extremity tourniquet effects in carpal tunnel release. Nitz AJ, et al. **J Hand Surg [Am]** 1989 May;14(3):499–504

Reduced intimal injury to canine arteries with controlled application of vessel loops. Pabst TS3d, et al. **J Surg Res** 1989 Sep;47(3):235–41

A case of snake–bite with unusual features [letter] Potter D, et al. **Med J Aust** 1988 Nov 21;149(10):565

Isokinetic, electrophysiologic, and clinical function relationships following tourniquet–aided knee arthrotomy. Krebs DE. **Phys Ther** 1989 Oct;69(10):803–15

VETERINARY

Tourniquet–induced hypertension in a horse. Abrahamsen E, et al. **J Am Vet Med Assoc** 1989 Feb 1;194(3):386–8

TOWN PLANNING see **CITY PLANNING**

TOXAPHENE see under **INSECTICIDES, ORGANOCHLORINE**

TOXASCARIASIS see **NEMATODE INFECTIONS**

TOXEMIA

see related
PREGNANCY TOXEMIAS

[Contradictions in the interpretation of the term "toxicosis"] Bogadel'nikov IV, et al. **Pediatriia** 1988;(6):92–4 **(Rus)**

BLOOD

Endotoxaemia, pulmonary complications, and thrombocytopenia in liver transplantation. Miyata T, et al. **Lancet** 1989 Jul 22;2(8656):189–91

Lactoferrin as an indicator of septicemia and endotoxemia in pigs. Gutteberg TJ, et al. **Scand J Infect Dis** 1988; 20(6):659–66

[Morphometric parameters of erythrocytes during hemosorption in relation to burn toxemia in an experiment] Mikaelian NP, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug; (4):35–8 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

[Endogenous intoxication in patients with encephalopathies caused by critical states and resuscitation] Novikova RI, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):44–8 (Eng. Abstr.) **(Rus)**

[Methods for determining the degree of intoxication] Karashurov ES, et al. **Vrach Delo** 1988 Jul;(7):47–9 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

The elastase–inhibitor eglin has no effect in an ovine model of endotoxemia. Redl H, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:153–6

Therapeutic effect of dexamethasone in T–2 toxicosis. Shohami E, et al. **Pharm Res** 1987 Dec;4(6):527–30

[Effects of rhubarb and anti–pneumonia mixture III on endotoxemia in acute infections] Chen YW, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):654–7, 644 (Eng. Abstr.) **(Chi)**

[Endolymphatic polytherapy in the complex treatment of endotoxicosis] Mezentsev SS, et al. **Sov Med** 1988;(5):25–8 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Biochemical, physiological and clinical aspects of endotoxemia. Olson NC, et al. **Mol Aspects Med** 1988; 10(6):511–629 (723 ref.)

[Experimental study on the development of endotoxemia in biliary tract infection with special reference to lymphatic pathway at controlled biliary duct pressure] Kodama T. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):1978–89 (Eng. Abstr.) **(Jpn)**

[Endotoxemia and the criteria of its substantiation in patients with burns] Smirnov SV, et al. **Klin Med (Mosk)** 1989 May; 67(5):128–31 **(Rus)**

[Endotoxemia as a problem of clinical surgery] Eriukhin IA, et al. **Vestn Khir** 1989 Mar;142(3):3–7 (Eng. Abstr.) **(Rus)**

[Endogenous toxemia in acute pancreatitis] Shugaev AI, et al. **Vestn Khir** 1989 Mar;142(3):126–30 (58 ref.) **(Rus)**

[Syndrome of endogenous toxemia in complications of pancreonecrosis] Shurkalin BK. **Vestn Khir** 1989 Mar; 142(3):7–11 (Eng. Abstr.) **(Rus)**

METABOLISM

Effect of calcium ion on lipid peroxide formation in endotoxemic mice. Sakaguchi S, et al. **Microbiol Immunol** 1989;33(2):99–110

[Effects of increased left atrial pressure, endotoxemia and pulmonary air embolism on the measurement of extravascular lung thermal volume] Kubo K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):825–32 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Role of gastric colonization in nosocomial infections and endotoxemia: a prospective study in neurosurgical patients on mechanical ventilation. Reusser P, et al. **J Infect Dis** 1989 Sep;160(3):414–21

PARASITOLOGY

The diagnosis and treatment of acute toxaemic schistosomiasis in children. Farid Z, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):959

PHYSIOPATHOLOGY

Effect of inhibition of 5–lipoxygenase metabolism of arachidonic acid on response to endotoxemia in sheep. Coggeshall JW, et al. **J Appl Physiol** 1988 Sep;65(3):1351–9

Catalase prevents prostanoid release and lung lipid peroxidation after endotoxemia in sheep. Seekamp A, et al. **J Appl Physiol** 1988 Sep;65(3):1210–6

Effects of platelet–activating factor antagonist SRI 63–441 on endotoxemia in sheep. Sessler CN, et al. **J Appl Physiol** 1988 Dec;65(6):2624–31

[Study on mechanism of onset of endogenous endotoxemia during obstructive jaundice—with special reference to involvement of biliary infection] Yamaguchi T. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1223–32 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Prevention of lethal endotoxemia in actinomycin D–sensitized mice by incubation of Salmonella minnesota R595 lipopolysaccharide with monoclonal antibodies to R595. Appelmelk BJ, et al. **Microb Pathog** 1988 Oct; 5(4):251–7

Comparison of monoclonal antibodies to the deeper core region of gram–negative lipopolysaccharide by means of polymyxin B inhibition studies. Appelmelk BJ, et al. **Microb Pathog** 1988 Oct;5(4):297–301

[Control of hematologic adverse effects of antineoplastic drugs] Wiktor–Jędrzejczak W. **Pol Tyg Lek** 1988 Aug 15; 43(33):1043–6 **(Pol)**

[The reserve deposition system in the pathogenesis of endogenous toxemia] Asaturov BI. **Sov Med** 1989;(1):48–51 (63 ref.) **(Rus)**

[Use of plasmapheresis in su.gery] Gromov MI. **Vestn Khir** 1989 Jan;142(1):134–8 (31 ref.) **(Rus)**

THERAPY

[Detoxication therapy of patients with chronic occlusive arterial diseases of the lower extremities] Kungurtsev VV, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):8–11 (Eng. Abstr.) **(Rus)**

[Experience with extracorporeal detoxification of acute exo– and endotoxicoses] Akhunbaeva NI, et al. **Klin Khir** 1989; (3):67–8 **(Rus)**

[The reaction to heparin in patients with burn toxemia during extracorporeal detoxification] Kholodov Alu, et al. **Klin Khir** 1989;(3):37–9 (Eng. Abstr.) **(Rus)**

[Pathogenesis and principles of directed therapy in the acute period of burns in children] Povstianoi NE, et al. **Klin Khir** 1989;(3):22–5 (Eng. Abstr.) **(Rus)**

[Use of charcoal enterosorbents in the complex treatment of patients with obstructive jaundice. Report II. Experimental study] Shor–Chudnovskiĭ ME, et al. **Klin Khir** 1989;(4):30–2 (Eng. Abstr.) **(Rus)**

[Methods and means of controlling endogenous toxemia and multiple organ failure in peritonitis] Bachev II. **Klin Med (Mosk)** 1989 May;67(5):28–32 (35 ref.) **(Rus)**

[Hemoperfusion during resuscitation of children with toxic pneumonia] Kireev SS, et al. **Pediatriia** 1988;(4):40–2 (Eng. Abstr.) **(Rus)**

[Sorption detoxication in cirrhosis of the liver] Sitnikov VA, et al. **Sov Med** 1988;(5):108–12 **(Rus)**

[Efferent methods of detoxication in the treatment of patients with prostatic adenoma complicated by suppurative–septic toxemia with renal failure] Lopatkin NA, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):3–7 (Eng. Abstr.) **(Rus)**

[Hemosorption in the complex treatment of patients with suppurative arthritis] Agadzhanian VV, et al. **Vestn Khir** 1988 Jun;140(6):119–23 (Eng. Abstr.) **(Rus)**

[Photomodification of autologous blood and hemosorption in suppurative and septic diseases] Chalenko VV, et al. **Vestn Khir** 1989 Mar;142(3):75–6 (Eng. Abstr.) **(Rus)**

[Effectiveness of the elimination of lipid peroxidation products in various methods of detoxication therapy of patients with traumatic shock] Grinev MV, et al. **Vestn Khir** 1988 Jun;140(6):53–8 (Eng. Abstr.) **(Rus)**

[Progressive and nonprogressive tendencies in the treatment of endotoxemia] Kutushev FK, et al. **Vestn Khir** 1988 Jul; 141(7):80–3 **(Rus)**

[Experimental substantiation of enterosorption with polyfepan in acute peritonitis] Miroshnichenko AG, et al. **Vestn Khir** 1988 Sep;141(9):97–8 **(Rus)**

[Hemosorption in the correction of disorders of the transport function of erythrocytes in diseases of the respiratory organs] Ostapenko VA. **Vestn Khir** 1989 Feb;142(2):85–7 (Eng. Abstr.) **(Rus)**

[Experience using exchange plasmapheresis in the treatment of suppurative and septic complications] Perveev VI, et al. **Vestn Khir** 1988 Jul;141(7):83–6 (Eng. Abstr.) **(Rus)**

[Use of lymphosorption detoxication in the treatment of lung abscesses and their complications] Samsonov VP. **Vestn Khir** 1988 May;140(5):92–5 (Eng. Abstr.) **(Rus)**

VETERINARY

Escherichia coli sepsis and endotoxemia in conscious young pigs. Schrauwen E, et al. **Vet Res Commun** 1988; 12(4–5):295–303

TOXIC SHOCK SYNDROME see **SHOCK, SEPTIC**

TOXIC SUBSTANCES, ENVIRONMENTAL see **HAZARDOUS SUBSTANCES**

TOXICODENDRON see **RHUS**

TOXICOLOGY

see related
POISONS

Toxicology: an annotated bibliography of the recent literature. Litovitz TL. **Am J Emerg Med** 1989 Jan; 7(1):104–9

Concepts in teratology and developmental toxicology derived from animal research. Vorhees CV. **Ann N Y Acad Sci** 1989;562:31–41

The inhibition of a membrane–bound enzyme as a model for anaesthetic action and drug toxicity. Hasinoff BB, et al. **Biochem J** 1989 Feb 15;258(1):101–7

Use of primary cultures of human hepatocytes in toxicology studies. Butterworth BE, et al. **Cancer Res** 1989 Mar 1; 49(5):1075–84

The new frontier for medical science in the Republic of China—clinical toxicology. Tsou CS. **Chung Hua I Hsueh Tsa Chih** 1987 Jul;40(1):10–3

Special issue dedicated to John H. Welsh on the occasion of his 85th birthday. **Comp Biochem Physiol [C]** 1988; 91(1):1–279

Toward a quantitative comparative toxicology of organic compounds. Hansch C, et al. **CRC Crit Rev Toxicol** 1989;

19(3):185–226 (132 ref.)
Toxicology case data reporting system. Joynt BP. **Forensic Sci Int** 1988 Nov;39(2):143–53
Algebraic potential of the Hill equation as an alternative tool for plotting dose (or time)/effects relationships in toxicology: a theoretical study. Bounias M. **Fundam Clin Pharmacol** 1989;3(1):1–9
Papers presented at a symposium in honour of Dr. Roy Goulding. London, 20–21 November 1987. **Hum Toxicol** 1988 Sep;7(5):391–513
New approaches to the use of pharmacokinetics in toxicology and drug development. Campbell DB, et al. **Hum Toxicol** 1988 Sep;7(5):469–79 (35 ref.)
What is toxicology? Connors TA. **Hum Toxicol** 1988 Sep; 7(5):393–5
Ecotoxicology. Moriarty F. **Hum Toxicol** 1988 Sep; 7(5):437–41 (26 ref.)
Clinical toxicology—past, present and future. Proudfoot AT. **Hum Toxicol** 1988 Sep;7(5):481–7 (36 ref.)
TOXBASE: a microcomputer database for post mortem toxicology. Robinson K, et al. **J Clin Pathol** 1988 Nov; 41(11):1240–1
Have we overlooked important cohorts for follow-up studies? Report of the Chemical Industry Institute of Toxicology Conference of World War II–era Industrial Health Specialists. Levine RJ, et al. **J Occup Med** 1988 Aug;30(8):655–60 (15 ref.)
Epidemiology and experimental toxicology—is there a meeting ground? Discussion paper. Grasso P. **J R Soc Med** 1989 Aug;82(8):470–3
Twenty-five years of developments in carcinogen hazard assessment. Purchase IF. **J R Soc Med** 1989 May; 82(5):254–9
Report of the survey of poison control centres and related toxicological services 1984–1986. Haines JA, et al. **J Toxicol Clin Exp** 1988 Sep–Oct;8(5):305–81
Multistrain experiments for screening toxic substances. Felton RP, et al. **J Toxicol Environ Health** 1989;26(4):399–411
A semiautomatic image analyzer for cell counts in monolayers. III. Statistical considerations. Lanke J, et al. **J Toxicol Environ Health** 1989;27(4):533–45
A semiautomatic image analyzer for cell counts in monolayers. II. Application to toxicity estimation and comparisons between two cell–viability markers, fluorescein diacetate and lactate dehydrogenase. Thorén SA. **J Toxicol Environ Health** 1989;27(4):523–32
Fifth International Workshop on In Vitro Toxicology. Schloss Elmau, West Germany, November 1988. Proceedings. **Mol Toxicol** 1987–88 Fall;1(4):277–603
Deutsche Gesellschaft für Pharmakologie und Toxikologie. Abstracts, fall meeting. September 19–22, 1988, Hamburg. **Naunyn Schmiedebergs Arch Pharmacol** 1988;338 Suppl:R1–87
Deutsche Gesellschaft für Pharmakologie und Toxikologie. Abstracts of the 30th spring meeting. 14–17 March 1989, Mainz. **Naunyn Schmiedebergs Arch Pharmacol** 1989;339 Suppl:R1–124
Abstracts of papers. Toxicological meeting. Utrecht (The Netherlands), 17 March 1989. **Pharm Weekbl [Sci]** 1989 Jun 23;11(3 Suppl G):G1–7
Comparative structure–activity relationships. Hansch C. **Prog Clin Biol Res** 1989;291:23–30
Are negative toxicological data suspect: an epilog. Gehring PJ. **Regul Toxicol Pharmacol** 1989 Feb;9(1):53–5
Immunological aspects of toxicology: premises not promises. Yoshida S, et al. **Regul Toxicol Pharmacol** 1989 Feb; 9(1):56–80 (145 ref.)
Immunochronotoxicology. Apostol S. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):347–50 (25 ref.)
On the relationship between carcinogenicity and acute toxicity. Metzger B, et al. **Risk Anal** 1989 Jun;9(2):169–77
1989 Frank R. Blood Award. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):368
1989 Toxicology Education Award. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):369–70
1989 Achievement Award. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):371–2
1989 Arnold J. Lehman Award. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):373
1989 Merit Award. **Toxicol Appl Pharmacol** 1989 Jun 15; 99(2):374
1989 Burroughs Wellcome Toxicology Scholar Award. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):375
Free radical mechanisms in chemical pathogenesis. Summary of the symposium presented at the 1988 annual meeting of the Society of Toxicology. Kehrer JP, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):349–62
17th Conference on Toxicology. Quantitative toxicology. November 3–5, 1987, Dayton, Ohio. Proceedings. **Toxicol Lett** 1988 Oct;43(1–3):1–379
Magnetic resonance imaging (MRI): a new tool in experimental toxicologic pathology. Dixon D, et al. **Toxicol Pathol** 1988;16(3):386–91
Standard nomenclature and diagnostic criteria in toxicologic pathology [editorial] Streett CS. **Toxicol Pathol** 1988; 16(2):305–6
Immunotoxicology—1987. Irons RD. **Year Immunol** 1989; 4:296–9 (14 ref.)
[French Society of Toxicology. Abstracts. Marseilles, 6 October 1988] **J Toxicol Clin Exp** 1989 Jan–Feb;9(1):27–60 (Fre)
[Toxins in the environment: lucidity without panic (interview by Robert Henry)] Plaa GL. **Union Med Can** 1988 Oct; 117(5):300–3, 306–7 (Fre)
[The state of research on the late effects of chemical substances on humans] Musiichuk IuI, et al. **Gig Tr Prof Zabol** 1988 Sep;(9):4–8 (Eng. Abstr.) (Rus)
[Toxicology today] Vojvodić V. **Srp Arh Celok Lek** 1986 Apr;114(4):431–46 (Eng. Abstr.) (See)
[Toxicologic research in Spain as seen through the databases (1985–1986)] Guardiola E, et al. **Med Clin (Barc)** 1988 May 28;91(1):11–5 (Eng. Abstr.) (Spa)

HISTORY

Quantification of toxic response and the development of the median effective dose (ED50)—a historical perspective. Piegorsch WW. **Toxicol Ind Health** 1989 Jan;5(1):55–62
[75th anniversary of the Department of Pharmacology with General Toxicology and a Clinical Pharmacology Course of the Leningrad Health and Hygiene Medical Institute] Denisenko PP, et al. **Farmakol Toksikol** 1988 Jul–Aug; 51(4):109–13 (Rus)
[50th anniversary of the journal Farmakologiia i toksikologiia] Mashkovskii MD. **Farmakol Toksikol** 1988 Nov–Dec;51(6):5–16 (Rus)
[Control of drug abuse and toxicomania among children and adolescents during the 1920's and 1930's] Popov VA. **Sov Zdravookhr** 1989;(5):67–70 (Rus)

METHODS

Approximate lethal dose versus median lethal dose in acute toxicity testing of pharmaceuticals. A retrospective study. Vit PJ. **Arch Toxicol** 1989;63(4):343–4
A system for toxicological screening by capillary gas chromatography with use of a drug retention index based on nitrogen–containing reference compounds. Manca D, et al. **Clin Chem** 1989 Apr;35(4):601–7
Biomarkers in aging and toxicity. Hart RW, et al. **Exp Gerontol** 1988;23(4–5):241–3
Wide–bore capillary column gas chromatography in toxicological analysis of biological samples from multidrug overdoses fatalities. Klys M, et al. **Forensic Sci Int** 1988 Sep;38(3–4):185–92
Analytical toxicology. Flanagan RJ, et al. **Hum Toxicol** 1988 Sep;7(5):489–502 (57 ref.)
Toxicity testing: some principles and some pitfalls in histopathological evaluation. Roe FJ. **Hum Toxicol** 1988 Sep;7(5):405–10
Reproductive toxicity tests: retrospect and prospect. Sullivan FM. **Hum Toxicol** 1988 Sep;7(5):423–7 (12 ref.)
Liquid/solid extraction on diatomaceous earth for drug analysis in postmortem blood. Logan BK, et al. **J Forensic Sci** 1989 May;34(3):553–64
SOFT position statement on HHS guidelines for forensic toxicology laboratory analyses. Society of Forensic Toxicologists, Inc. [letter] McGee M. **J Forensic Sci** 1988 Jul;33(4):883–4
Seeking scientific acceptance of in vitro tests [news] Marwick C. **JAMA** 1989 Jun 2;261(21):3068–9
Mediating role of metabolic activation in in vitro cytotoxicity assays. Babich H, et al. **Mol Toxicol** 1987–88 Fall; 1(4):363–72
Validation of alternative toxicity test systems: lessons learned and to be learned. Balls M, et al. **Mol Toxicol** 1987–88 Fall;1(4):547–59
Development of cytotoxicity tests for assessment of the toxicity of water samples taken from the environment. Benford DJ, et al. **Mol Toxicol** 1987–88 Fall;1(4):419–25
Comparison of the in vitro cytotoxicities and acute in vivo toxicities of 59 chemicals. Clothier RH, et al. **Mol Toxicol** 1987–88 Fall;1(4):571–7
Prediction of phototoxic potential using human A431 cells and mouse 3T3 cells. Duffy PA, et al. **Mol Toxicol** 1987–88 Fall;1(4):579–87
Search for cell culture systems with diverse xenobiotic–metabolizing activities and their use in toxicological studies. Glatt H, et al. **Mol Toxicol** 1987–88 Fall;1(4):313–34 (52 ref.)
Multilayered keratinocyte culture used for in vitro toxicology. Hoh A, et al. **Mol Toxicol** 1987–88 Fall; 1(4):537–46
Assessment of two alternative methods for predicting the in vivo toxicities of metallic compounds. Hulme LM, et al. **Mol Toxicol** 1987–88 Fall;1(4):589–96
Validation project of alternatives for the Draize eye test. Kalweit S, et al. **Mol Toxicol** 1987–88 Fall;1(4):597–603
New methods for cytotoxicity testing: quantitative video microscopy of intracellular motion and mitochondria–specific fluorescence. Maile W, et al. **Mol Toxicol** 1987–88 Fall;1(4):427–37
Do we find relevant parameters for in vitro cytotoxicity testing? Reinhardt CA. **Mol Toxicol** 1987–88 Fall; 1(4):383–91
Videomicroscopic measurements in living cells: dynamic determination of multiple end points for in vitro toxicology. Weiss DG. **Mol Toxicol** 1987–88 Fall;1(4):465–88
Review of interspecies risk comparisons. Brown SL, et al. **Regul Toxicol Pharmacol** 1988 Jun;8(2):191–206 (38 ref.)
Putting the eco in ecotoxicology. Cairns J Jr. **Regul Toxicol Pharmacol** 1988 Jun;8(2):226–38 (31 ref.)
Ecosystem health. II. Quantifying and predicting ecosystem effects of toxic chemicals: can mammalian testing be used for lab–to–field and field–to–lab extrapolations? Schaeffer DJ, et al. **Regul Toxicol Pharmacol** 1989 Jun;9(3):296–311 (75 ref.)
Interspecific scaling of toxicity data: a question of interpretation [letter] Chappell WR. **Risk Anal** 1989 Mar; 9(1):13–4
Alternatives to animals in toxicity testing. Goldberg AM, et al. **Sci Am** 1989 Aug;261(2):24–30 (5 ref.)
Developmental toxicity screen: results of rat studies with diethylhexyl phthalate and ethylene glycol monomethyl ether. Morrissey RE, et al. **Teratogenesis Carcinog Mutagen** 1989;9(2):119–29
Limb bud cell culture for in vitro teratogen screening: validation of an improved assessment method using 51 compounds. Renault JY, et al. **Teratogenesis Carcinog Mutagen** 1989;9(2):83–96
Test of six chemicals for embryotoxicity using fetal mouse salivary glands in culture. Lyng RD. **Teratology** 1989 Jun; 39(6):591–9
A review of the biology and toxicologic implications of the induction of lysosomal lamellar bodies by drugs. Reasor MJ. **Toxicol Appl Pharmacol** 1989 Jan;97(1):47–56 (53 ref.)
Review of the Office of Pesticide Program's current toxicology guidelines for the testing of pesticides. Engler R, et al. **Toxicol Ind Health** 1988 Sep;4(3):323–9
Applicability of cancer risk assessment techniques to other toxic effects. Gaylor DW. **Toxicol Ind Health** 1988 Dec; 4(4):453–9
Animal rights and modern toxicology. Rack L, et al. **Toxicol Ind Health** 1989 Jan;5(1):133–43
Potential future requirements for immunotoxicology testing of pesticides. Sjoblad RD. **Toxicol Ind Health** 1988 Sep; 4(3):391–5
In vitro screens from CNS, liver and kidney for systemic toxicity. Tyson CA, et al. **Toxicol Ind Health** 1989 Jan; 5(1):107–32 (161 ref.)
QSAR approaches to predicting toxicity. Dunn WJ 3d. **Toxicol Lett** 1988 Oct;43(1–3):277–83
Quantitation of naturalistic behaviors. Evans HL. **Toxicol Lett** 1988 Oct;43(1–3):345–59 (40 ref.)
Quantitative sensory assessment in toxicology and occupational medicine: applications, theory, and critical appraisal. Maurissen JP. **Toxicol Lett** 1988 Oct; 43(1–3):321–43 (96 ref.)
Research needs and advances in inhalation dosimetry identified through the use of mathematical dosimetry models of ozone. Miller FJ, et al. **Toxicol Lett** 1988 Dec; 44(3):231–46
Toxicological screening for benzodiazepines in urine: EMITST versus high–performance liquid chromatography with photodiode array detection. Minder EI, et al. **Toxicol Lett** 1989 Jan;45(1):93–9
Quantification of motor function in toxicology [published erratum appears in Toxicol Lett 1989 Apr;47(1):107] Newland MC. **Toxicol Lett** 1988 Oct;43(1–3):295–319 (54 ref.)
Quantification of operant behavior. Rice DC. **Toxicol Lett** 1988 Oct;43(1–3):361–79 (33 ref.)
Quantitative perspectives on behavioral toxicology. Weiss B. **Toxicol Lett** 1988 Oct;43(1–3):285–93
What is the proper experimental unit for long–term rodent studies? An examination of the NTP benzyl acetate study. Young SS. **Toxicology** 1989 Mar;54(3):233–9
What was injected?—A suggested analytical protocol. Smith RA. **Vet Hum Toxicol** 1989 Apr;31(2):130
Effects of drinking water acidification, restriction of water supply and individual caging on parameters of toxicological studies in rats. Clausing P, et al. **Z Versuchstierkd** 1989; 32(3):129–34
[A proposed new method of determining the properties of allergenic substances used in industry] Rudzki E, et al. **Pol Tyg Lek** 1988 Oct 17–24;43(42–43):1369–70 (Eng. Abstr.) (Pol)
[Dispersion analysis in toxicologic and hygienic studies with data processing using a microcomputer "Elektronika MK–52"] Bogorad VS. **Gig Sanit** 1989 Apr;(4):49–52 (Rus)
[Determining the toxicity of biologically active chemical substances] Kornelchuk EP, et al. **Gig Sanit** 1988 Sep; (9):38–9 (Rus)
[Comparative characteristics of methods of mathematical evaluation of the combined effects of 2 or more harmful chemical factors in their single and successive administration in acute experiments] Manenko AK, et al. **Gig Sanit** 1988 Nov;(11):55–8 (Rus)
[A method of evaluating reliable limits of lethal doses of harmful substances] Manenko AK, et al. **Gig Sanit** 1989 May;(5):47–9 (Rus)
[Study and evaluation of the health status of various population groups exposed to environmental factors] Sidorenko GI, et al. **Gig Sanit** 1989 Mar;(3):14–6 (Eng. Abstr.) (Rus)
[Criteria of the evaluation of selective effects of xenobiotics in toxicologic experiments] Trakhtenberg IM, et al. **Gig Sanit** 1988 Sep;(9):53–6 (23 ref.) (Rus)
[An experimental biotechnical system for determining an index of toxicity] Es'kov AP, et al. **Med Tekh** 1988 Jul–Aug;(4):49–51 (Eng. Abstr.) (Rus)
[Basic principles and objectives of using chemobiokinetics in toxicology] Filov VA. **Vestn Akad Med Nauk SSSR** 1988;(6):82–9 (32 ref.) (Rus)
[Methodological questions in assessing the body's reaction

to the action of chemical substances] Kopelka IG. **Vrach Delo** 1988 Aug;(8):101–4 (Eng. Abstr.) (Rus)

ORGANIZATION & ADMINISTRATION

The advisory subgroup in toxicology of the european medical research councils. Aldridge WN. **Arch Toxicol** 1989; 63(4):253–6 (14 ref.)

STANDARDS

Use and abuse of the Toxi-Lab TLC system. Dawling S, et al. **Ann Clin Biochem** 1988 Nov;25 (Pt 6):708–9

[The significance of the retention index in toxicologic analysis II] Schlitz H, et al. **Pharm Unserer Zeit** 1988 Jul; 17(4):97–101 (10 ref.) (Ger)

[Chemical safety (I): The origin of the problem] Indulski JA, et al. **Med Pr** 1988;39(4):262–70 (40 ref.) (Eng. Abstr.) (Pol)

[Chemical safety (II)—Methodologic and practical problems] Indulski JA, et al. **Med Pr** 1988;39(6):406–15 (32 ref.) (Eng. Abstr.) (Pol)

[Methodological aspects of hygienic standardization of pesticide level in food products] Shitskova AP, et al. **Gig Sanit** 1989 Feb;(2):4–7 (Eng. Abstr.) (Rus)

[Ecological and hygienic classification of pesticides] Spynu EI, et al. **Gig Sanit** 1989 Feb;(2):66–8 (Rus)

[Current aspects of WHO activities in the field of safety of chemical substances] Vashkova VV, et al. **Gig Sanit** 1989 Apr;(4):25–9 (Rus)

[Criteria of hygienic evaluation of the allergenic effect of environmental chemical factors] Vinogradov GI. **Gig Sanit** 1989 Mar;(3):63–7 (23 ref.) (Rus)

[Photometric determination of calcium-carboxymethylcellulose in the air of the work area] Dorogova VB, et al. **Gig Tr Prof Zabol** 1989;(5):39–40 (Rus)

[Brief review of documents with data on the toxicity and hazards of chemical substances developed in various countries] Sanotskii IV, et al. **Gig Tr Prof Zabol** 1989; (3):33–6 (Eng. Abstr.) (Rus)

[Necessity of a unified concept of adaptation] Shepelin OP. **Gig Tr Prof Zabol** 1988 Dec;(12):34–7 (Eng. Abstr.) (Rus)

[Maximum permissible levels of skin contamination of the hands of persons working with harmful substances (approved by the Ministry of Public Health of the USSR in 1988)] Sidorov KK. **Gig Tr Prof Zabol** 1989;(3):32 (Rus)

STATISTICS & NUMERICAL DATA

[Statistical evaluation of the combined effects of physical and chemical factors] Tiul'menkov VV. **Gig Sanit** 1989 Apr; (4):84–5 (Rus)

TRENDS

Toward a meaningful ecotoxicological risk assessment. Slooff W. **Arch Toxicol Suppl** 1989;13:389–93 (9 ref.)

Immunotoxicology in 1987: problems and challenges. Spreafico F. **Fundam Clin Pharmacol** 1988;2(4):353–67 (20 ref.)

Preparing for the twenty-first century: report of the TOX-90's Commission. Planning Committee. Miya TS, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):1–6

On the significance of animal experiments in toxinology. Meier J, et al. **Toxicon** 1989;27(1):91–104 (41 ref.)

[Responsibilities and limits of chemical toxicology] Lohs K. **Z Arztl Fortbild (Jena)** 1988;82(18):909–11 (Ger)

[Recent views as to content and method in the field of clinicotoxological analysis with special reference to modern rapid tests] Geldmacher-von Mallinckrodt M. **Z Med Lab Diagn** 1989;30(3):139–47 (37 ref.) (Ger)

[Immunotoxicology—the most important field of research in environmental health] Sidorenko GI, et al. **Gig Sanit** 1989 Mar;(3):7–11 (Rus)

[Fundamental studies as the basis of scientific potential of research on environmental health] Sidorenko GI. **Gig Sanit** 1989 Mar;(3):4–7 (Rus)

[Prospects of the development of studies on cellular and molecular mechanisms of the effect of chemical factors in the occupational environment] Ivanov VV. **Gig Tr Prof Zabol** 1988 Sep;(9):1–4 (Eng. Abstr.) (Rus)

[Modern problems in toxicology research] Rosić N, et al. **Srp Arh Celok Lek** 1986 Mar;114(3):345–58 (Eng. Abstr.) (Scc)

TOXIFERINE

ANALOGS & DERIVATIVES

Doses of muscle relaxants [letter] Northwood D. **Anaesthesia** 1989 Feb;44(2):172–3

Adverse reactions to atracurium and alcuronium. A prospective surveillance study. Beemer GH, et al. **Br J Anaesth** 1988 Dec;61(6):680–4

Priming with alcuronium and tubocurarine accelerates the onset of neuromuscular block. Pollard BJ. **Br J Anaesth** 1989 Jul;63(1):7–11

[Quantitative determination of alcuronium in plasma and urine by high pressure liquid chromatography using ultraviolet detection] Okutani R, et al. **Masui** 1988 Aug; 37(8):938–42 (Eng. Abstr.) (Jpn)

TOXIN-ANTIBODY CONJUGATES see ANTIBODY-TOXIN CONJUGATES

TOXIN-ANTIBODY HYBRIDS see ANTIBODY-TOXIN CONJUGATES

TOXINS

Detection and quantification of ligand leakage from lectin affinity columns. Walzel H, et al. **Biomed Biochim Acta** 1989;48(4):221–6

Symposium on toxins. Proceedings of the 35th symposium. Kagawa, July 8–10, 1988. Abstracts. **Jpn J Med Sci Biol** 1988 Oct–Dec;41(5–6):203–47

Fluorescent analogs of toxins. Angelides KJ. **Methods Cell Biol** 1989;29:29–58

Recent advances in chemical ecology. Harborne JB. **Nat Prod Rep** 1989 Feb;6(1):85–109 (262 ref.)

Antiglomerular basement membrane glomerulonephritis after inhalation of chemical toxins [letter] Pirson Y, et al. **Nephron** 1989;51(1):125–6

Preventive action of quisqualic acid against grayanotoxin-induced suppression of locomotor activity in mice. Ohzaki T, et al. **Neuropharmacology** 1988 Oct; 27(10):1045–53

ADVERSE EFFECTS

Chechum (poison sap tree) toxin, a potent activator of protein kinase C [letter] Markby DP, et al. **Lancet** 1989 Jun 10; 1(8650):1320

ANALYSIS

Preparation of accurate multicomponent gas standards of volatile toxic organic compounds in the low-parts-per-billion range. Rhoderick GC, et al. **Anal Chem** 1988 Nov 15;60(22):2454–60

Occurrence of the hepatotoxic cyanobacterium Nodularia spumigena in the Baltic Sea and structure of the toxin. Sivonen K, et al. **Appl Environ Microbiol** 1989 Aug; 55(8):1990–5

Domain-specific bias in arginine/lysine usage by protein toxins. London E, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):333–9

Tick/host interactions for Ixodes holocyclus: role, effects, biosynthesis and nature of its toxic and allergenic oral secretions. Stone BF, et al. **Exp Appl Acarol** 1989 Jun; 7(1):59–69 (31 ref.)

An improved device for continuous intraventricular infusions prevents the introduction of pump-derived toxins and increases the effectiveness of NGF treatments. Vahlsing HL, et al. **Exp Neurol** 1989 Sep;105(3):233–43

Toxicity testing: some principles and some pitfalls in histopathological evaluation. Roe FJ. **Hum Toxicol** 1988 Sep;7(5):405–10

Sampling and sample preparation for detection and quantitation of natural toxicants in food and feed. Park DL, et al. **J Assoc Off Anal Chem** 1989 May-Jun;72(3):399–404 (39 ref.)

The peptide toxin of the cyanobacterium Microcystis aeruginosa PCC 7941. Isolation and analysis by nuclear magnetic resonance and fast atom bombardment mass spectroscopy. Birk IM, et al. **J Chromatogr** 1988 Oct 7; 449(2):423–31

Lack of association between Clostridium difficile toxin and diarrhea in infants. Kotloff KL, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):662–3

Computational approaches to the identification of suspect toxic molecules. Politzer P. **Toxicol Lett** 1988 Oct; 43(1–3):257–76 (93 ref.)

[Determination of middle molecule peptides in the blood and amniotic fluid in nephropathy of pregnancy] Avakian ZA, et al. **Lab Delo** 1988;(11):46–8 (Eng. Abstr.) (Rus)

[The structure of toxic protein, the mistletoe lectin, at different pH: the study using intrinsic fluorescence method] Bushueva TL, et al. **Mol Biol (Mosk)** 1988 May-Jun; 22(3):628–34 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Associated bacterial flora, growth, and toxicity of cultured benthic dinoflagellates Ostreopsis lenticularis and Gambierdiscus toxicus. Tosteson TR, et al. **Appl Environ Microbiol** 1989 Jan;55(1):137–41

BLOOD

Leukocytic oxygen activation and microbicidal oxidative toxins. Hurst JK, et al. **Crit Rev Biochem Mol Biol** 1989; 24(4):271–328 (375 ref.)

New biological method for determination of the desintoxication rate of human plasma after dialysis. Kovatchev D, et al. **Life Support Syst** 1983;1 Suppl 1:191–4

[Changes in the content of middle molecules of the blood in patients with chronic post-traumatic osteomyelitis as affected by hemosorption] Kosiakov AN, et al. **Klin Khir** 1988;(12):50–1 (Rus)

[Study of the level of "middle molecules" in patients with pathology of the organs of the hepatobiliary system] Romashov FN, et al. **Klin Khir** 1988;(9):60–1 (Rus)

[A method of diagnosing endogenous poisoning] Togalbaev AA, et al. **Lab Delo** 1988;(9):22–4 (Eng. Abstr.) (Rus)

[Study of middle molecular weight fraction in the plasma of patients with uremia using high performance liquid chromatography and thin layer chromatography] Kovalishin IaF, et al. **Vopr Med Khim** 1988 Nov–Dec; 34(6):23–6 (Eng. Abstr.) (Rus)

GENETICS

The primary structure of the operons coding for Shigella dysenteriae toxin and temperature phage H30 shiga-like toxin. Kozlov YuV, et al. **Gene** 1988 Jul 30;67(2):213–21

Dissecting mouse development with toxigenics. Evans GA. **Genes Dev** 1989 Mar;3(3):259–63 (22 ref.)

Isolation and characterization of EG2158, a new strain of Bacillus thuringiensis toxic to coleopteran larvae, and nucleotide sequence of the toxin gene. Donovan WP, et al. **Mol Gen Genet** 1988 Nov;214(3):365–72

IMMUNOLOGY

Production and partial characterization of monoclonal antibodies to Bothrops asper (terciopelo) myotoxin. Lomonte B, et al. **Toxicon** 1988;26(7):675–89

[The reserve deposition system in the pathogenesis of endogenous toxemia] Asaturov BI. **Sov Med** 1989;(1):48–51 (63 ref.) (Rus)

ISOLATION & PURIFICATION

Toxicity and partial structure of a hepatotoxic peptide produced by the cyanobacterium Nodularia spumigena Mertens emend. L575 from New Zealand. Carmichael WW, et al. **Appl Environ Microbiol** 1988 Sep;54(9):2257–63

Nontoxic and toxic oligopeptides with D-amino acids and unusual residues in Microcystis aeruginosa PCC 7806. Birk IM, et al. **Arch Microbiol** 1989;151(5):411–5

The detoxication with bioselective carbon sorbents. Mikhalovsky SV. **Biomater Artif Cells Artif Organs** 1989; 17(2):157–60

Studies on the constitution of edible and medicinal plants. I. Isolation and identification of 4-O-methylpyridoxine, toxic principle from the seed of Ginkgo biloba L. Wada K, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1779–82

Toxicants from mangrove plants, V. Isolation of the piscicide, 2-hydroxy-5-methoxy-3-undecyl-1,4 benzoquinone (5-O-methylembelin) from Aegiceras corniculatum. Gomez E, et al. **J Nat Prod** 1989 May-Jun;52(3):649–51

Membrane and chromatography separation techniques for the preparative isolation of uremic toxins. Brunner H, et al. **Life Support Syst** 1983;1 Suppl 1:199–206

Paralytic shellfish poisoning in northwest Spain: the toxicity of the dinoflagellate Gymnodinium catenatum. Anderson DM, et al. **Toxicon** 1989;27(6):665–74

Improved method for purification of toxic peptides produced by cyanobacteria. Harada K, et al. **Toxicon** 1988; 26(5):433–9

Isolation and characterization of three lethal and hemolytic toxins from the sea anemone Actinia equina L. Maček P, et al. **Toxicon** 1988;26(5):441–51

[Removal of middle molecule peptides from the blood during hemodialysis] Bakaev VV, et al. **Lab Delo** 1989;(1):64 (Rus)

[Problems in the development of methods for extracorporeal detoxication] Vyrenkov IuE, et al. **Sov Med** 1988;(6):3–6 (Eng. Abstr.) (Rus)

METABOLISM

Receptor-mediated endocytosis of plant and bacterial toxins in Chinese hamster ovary cells. Wu HC, et al. **Indian J Biochem Biophys** 1988 Feb-Apr;25(1–2):70–5

[The secretory performance of eccrine sweat glands from the nephrologic viewpoint—II: Middle molecules] Koban F, et al. **Z Gesamte Inn Med** 1989 May 1;44(9):257–60 (Eng. Abstr.) (Ger)

[Uremic toxicity] Djukanović L, et al. **Srp Arh Celok Lek** 1986 Mar;114(3):331–9 (Eng. Abstr.) (Scc)

PHARMACOKINETICS

A model system for studying the bioavailability of intestinally administered microcystin-LR, a hepatotoxic peptide from the cyanobacterium Microcystis aeruginosa. Dahlem AM, et al. **Pharmacol Toxicol** 1989 Feb;64(2):177–81

[Kinetics in toxicity studies] Rauws AG. **Ned Tijdschr Geneeskd** 1989 Jun 24;133(25):1260–4 (Dut)

PHARMACOLOGY

Leukocytes biosynthesize leukotoxin (9,10-epoxy-12-octadecenoate)—a novel cytotoxic linoleate epoxide. Ozawa T, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:164–7

Effect of excretory-secretory products of Giardia lamblia on glucose and phenylalanine transport in the small intestine of Swiss albino mice. Samra HK, et al. **Biochem Int** 1988 Nov;17(5):801–12

The endolymphatic perfusion of lymph nodes with toxic materials. Hall JG, et al. **Br J Exp Pathol** 1989 Jun; 70(3):283–92

Modulatory potency of the beta-galactoside-specific lectin from mistletoe extract (Iscador) on the host defense system in vivo in rabbits and patients. Hajto T, et al. **Cancer Res** 1989 Sep 1;49(17):4803–8

Effects of plasma, tumour necrosis factor, endotoxin and dexamethasone on extracellular proteolysis by neutrophils

from healthy subjects and patients with emphysema. Burnett D, et al. **Clin Sci** 1989 Jul;77(1):35–41

Staphylococcal alpha-toxin increases the permeability of lipid vesicles by cholesterol- and pH-dependent assembly of oligomeric channels. Forti S, et al. **Eur J Biochem** 1989 May 15;181(3):767–73

Targeting drugs and toxins to the brain: magic bullets. Simpson LL. **Int Rev Neurobiol** 1988;30:123–47 (85 ref.)

An emerging pharmacology of peptide toxins targeted against potassium channels. Moczydlowski E, et al. **J Membr Biol** 1988 Oct;105(2):95–111 (131 ref.)

Neutrophil-derived epoxide, 9,10-epoxy-12-octadecenoate, induces pulmonary edema. Hu JN, et al. **Lung** 1988; 166(6):327–37

Glucocorticoids attenuate taste aversions produced by toxins in rats. Revusky S, et al. **Psychopharmacology (Berlin)** 1988; 96(3):400–7

POISONING

Nutritional toxicology: the significance of natural toxins. de Wolff FA. **Hum Toxicol** 1988 Sep;7(5):443–7 (13 ref.)

Blue-green algae (Anabaena spiroides) toxicosis in pigs. Chengappa MM, et al. **J Am Vet Med Assoc** 1989 Jun 15; 194(12):1724–5

Intestinal autointoxication: a medical leitmotif. Chen TS, et al. **J Clin Gastroenterol** 1989 Aug;11(4):434–41

Poisoning of wildlife in southern Africa. Basson PA. **J S Afr Vet Assoc** 1987 Dec;58(4):219–28 (43 ref.)

Immunotoxicotherapy: present status and future trends. Scherrmann JM, et al. **J Toxicol Clin Toxicol** 1989; 27(1–2):1–35 (37 ref.)

Algae intoxication in livestock and waterfowl. Beasley VR, et al. **Vet Clin North Am Food Anim Pract** 1989 Jul; 5(2):345–61 (75 ref.)

Toxicologic problems in food animals affecting reproduction. Putnam MR. **Vet Clin North Am Food Anim Pract** 1989 Jul;5(2):325–44 (54 ref.)

SECRETION

Xenopus skin mucus induces oral dyskinesias that promote escape from snakes. Barthalmus GT, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):957–9

TOXICITY

Natural inhibitors of complement. IV. Systemic toxicity of the complement inhibitor from pokeweed fruits and the effect of antioxidizing enzymes, glutathione and phenobarbital. Popescu C, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jan–Mar; 47(1):37–41

Effect of Lathyrus sativus toxin on cognitive functions & urinary catecholamines in experimental animals. Karanth KS, et al. **Indian J Med Res** 1988 May;87:459–62

Bistramide A, a new toxin from the urochordata Lissoclinum bistratum Sluiter: isolation and preliminary characterization. Gouiffes D, et al. **Toxicon** 1988; 26(12):1129–36

Toxic coral reef crabs from Australian waters. Llewellyn LE, et al. **Toxicon** 1988;26(11):1085–8

On the significance of animal experiments in toxinology. Meier J, et al. **Toxicon** 1989;27(1):91–104 (41 ref.)

Mosquito inoculation: an alternative bioassay for toxins. Turell MJ, et al. **Toxicon** 1988;26(11):1089–94

The long and the short of snake toxins. Dufton MJ, et al. **Trends Pharmacol Sci** 1989 Jul;10(7):258–9 (14 ref.)

[Inhibitory effect of uremic fluorescent substances on the cellular energy generation] Konobu K, et al. **Nippon Jinzo Gakkai Shi** 1989 Jan;31(1):105–9 (Eng. Abstr.) **(Jpn)**

[Toxic action of viruses (editorial)] **Vopr Virusol** 1988 May–Jun;33(3):373–4 **(Rus)**

URINE

[Middle molecules in the urine of patients with renal failure] Popławski A. **Pol Tyg Lek** 1988 Aug 1–8;43(31–32):1019–20 (Eng. Abstr.) **(Pol)**

TOXINS, TARGETED see **ANTIBODY-TOXIN CONJUGATES**

TOXOCARA

The relationship of park maintenance and accessibility to dogs to the presence of Toxocara spp. ova in the soil. Ludlam KE, et al. **Am J Public Health** 1989 May; 79(5):633–4

ENZYMOLOGY

Toxocara canis: proteolytic enzymes secreted by the infective larvae in vitro. Robertson BD, et al. **Exp Parasitol** 1989 Jul;69(1):30–6

IMMUNOLOGY

Antigenic relationships between the surface-exposed, secreted and somatic materials of the nematode parasites Ascaris lumbricoides, Ascaris suum, and Toxocara canis. Kennedy MW, et al. **Clin Exp Immunol** 1989 Mar; 75(3):493–500

A serological survey of toxocariasis in patients and healthy donors in Barcelona (Spain). Portús M, et al. **Eur J Epidemiol** 1989 Jun;5(2):224–7

Immunodiagnostics of visceral toxocariasis. Khalil HM, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):381–93

Pulmonary granuloma formation in murine toxocariasis: transfer of granulomatous hypersensitivity using bronchoalveolar lavage cells. Kayes SG, et al. **J Parasitol** 1988 Dec;74(6):950–6

The surfaces of the parasitic nematodes Trichinella spiralis and Toxocara canis differ in the binding of post-C3 components of human complement by the alternative pathway. Kennedy MW, et al. **Parasite Immunol** 1988 Jul; 10(4):459–63

An epidemiological and serological study of toxocara infection in Sweden. Ljungström I, et al. **Scand J Infect Dis** 1989;21(1):87–93

Enhancement of neutrophil adherence to Toxocara canis larvae by the C3 component of complement and IgG antibodies. Huwer M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):418–23

[The indirect immunofluorescence test in the study of Toxocara species in soldiers] Joković B, et al. **Vojnosanit Pregl** 1988 Nov–Dec;45(6):413–6 (Eng. Abstr.) **(Scr)**

ISOLATION & PURIFICATION

[The geography of toxocariasis in the USSR. 1. The geographic range of Toxocara canis (Werner, 1782)] Kupriianova NIu, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):73–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Studies on crude drugs effective on visceral larva migrans. III. The bursting activity of tannins on dog roundworm larva. Kiuchi F, et al. **Chem Pharm Bull (Tokyo)** 1988 May; 36(5):1796–802

Observations on egg production by Toxocara pteropodis. Prociv P. **Int J Parasitol** 1989 Jul;19(4):441–3

TOXOCARIASIS

COMPLICATIONS

Surgical management of retinal traction caused by toxocariasis. Small KW, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):10–4

[Simultaneous toxoplasmosis and larval toxocariasis infection in the Czechoslovak population] Hübner J, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Mar;38(2):119–25 (Eng. Abstr.) **(Cze)**

DIAGNOSIS

A serological survey of toxocariasis in patients and healthy donors in Barcelona (Spain). Portús M, et al. **Eur J Epidemiol** 1989 Jun;5(2):224–7

[Toxocariasis in children] Lanning M, et al. **Duodecim** 1988; 104(10):786–9 (13 ref.) **(Fin)**

DRUG THERAPY

Toxocariasis: a practical approach to management of ocular disease. Dinning WJ, et al. **Eye** 1988;2 (Pt 5):580–2

EPIDEMIOLOGY

Seroprevalence of Toxocara canis infection in tropical Venezuela. Lynch NR, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):275–81

[The geography of toxocariasis in the USSR. 1. The geographic range of Toxocara canis (Werner, 1782)] Kupriianova NIu, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):73–7 (Eng. Abstr.) **(Rus)**

[The geography of toxocariasis in the USSR. 2. The nosogeographic range] Lysenko AIa, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):78–80 **(Rus)**

IMMUNOLOGY

Detection of circulating parasite antigen and specific antibody in Toxocara canis infections. Robertson BD, et al. **Clin Exp Immunol** 1988 Nov;74(2):236–41

Pulmonary granuloma formation in murine toxocariasis: transfer of granulomatous hypersensitivity using bronchoalveolar lavage cells. Kayes SG, et al. **J Parasitol** 1988 Dec;74(6):950–6

Enhancement of neutrophil adherence to Toxocara canis larvae by the C3 component of complement and IgG antibodies. Huwer M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):418–23

PATHOLOGY

Allergic necrotizing eosinophilic granulomatosis. Gaffney MG, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1282–5 (12 ref.)

PREVENTION & CONTROL

A critical look at the importance, prevalence and control of toxocariasis and the possibilities of immunological control. Barriga OO. **Vet Parasitol** 1988 Sep; 29(2–3):195–234 (232 ref.)

VETERINARY

Effects of milbemycin on adult Toxocara canis in dogs with experimentally induced infection. Bowman DD, et al. **Am J Vet Res** 1988 Nov;49(11):1986–9

Pathological and haematological responses of cats experimentally infected with Toxocara canis larvae. Parsons JC, et al. **Int J Parasitol** 1989 Aug;19(5):479–88

Observations on egg production by Toxocara pteropodis. Prociv P. **Int J Parasitol** 1989 Jul;19(4):441–3

Disseminated granulomatous disease in a cat caused by larvae of Toxocara canis. Parsons JC, et al. **J Comp Pathol** 1988 Oct;99(3):343–6

Toxocara vitulorum: treatment based on the duration of the infectivity of buffalo cows (Bubalus bubalis) for their calves. Roberts JA. **J Vet Pharmacol Ther** 1989 Mar; 12(1):5–13

[Problem of toxocariasis in Lithuania] Bajoriniene D, et al. **Wiad Parazytol** 1988;34(3):233–8 (Eng. Abstr.) **(Pol)**

[Ancylostoma and Toxocara infestation in dogs and cats captured in the streets, São Paulo (Brazil)] Côrtes V de A, et al. **Rev Saude Publica** 1988 Aug;22(4):341–3 (Eng. Abstr.) **(Por)**

[Canine toxocariasis: age, sex and breed as risk factors. Retrospective study of clinical records] Ernst S, et al. **Bol Chil Parasitol** 1987 Jul–Dec;42(3–4):90–2 (Eng. Abstr.) **(Spa)**

TOXOIDS

Mortality and morbidity from invasive bacterial infections during a clinical trial of acellular pertussis vaccines in Sweden. Storsaeter J, et al. **Pediatr Infect Dis J** 1988 Sep; 7(9):637–45

Biological and biochemical activities of a toxoid of erythrogenic toxin type A. Knöll H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):468–78

ANALYSIS

Molecular differences between type A botulinum neurotoxin and its toxoid. Singh BR, et al. **Toxicon** 1989;27(4):403–10

IMMUNOLOGY

Systemic delayed-type hypersensitivity to cholera toxin and a detoxified derivative. Kay RA, et al. **Clin Exp Immunol** 1989 Apr;76(1):111–6

Evaluation of neutralizing antibodies to type A, B, E, and F botulinum toxins in sera from human recipients of botulinum pentavalent (ABCDE) toxoid. Siegel LS. **J Clin Microbiol** 1989 Aug;27(8):1906–8

Subclass compositions of immunoglobulin G to pertussis toxin in patients with whooping cough, in healthy individuals, and in recipients of a pertussis toxoid vaccine. Zackrisson G, et al. **J Clin Microbiol** 1989 Jul;27(7):1567–71

Tissue cages for study of experimental streptococcal infection in rabbits. III. Influence of immunization with erythrogenic toxin type A (ET A) and its toxoid on subsequent infection with an ET A producing strain. Knöll H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):366–76

[Immune response of donors, previously hyperimmunized with staphylococcus anatoxin to Pseudomonas aeruginosa antigen] Fedorovskaia EA, et al. **Vrach Delo** 1989 May; (5):123–4 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

[The population composition of cultures of Vibrio cholerae strain 569 B Pakistan in relation to the manufacture of a cholera vaccine (choleragen-anatoxin+O-antigen)] Lobanov VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):73–6 (Eng. Abstr.) **(Rus)**

STANDARDS

[A hemagglutination inhibition test for control of the quality and effectiveness of highly-purified C. chauvoei toxoid vaccine] Roth F, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jan 1;102(1):20–5 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

[Experimental preventive properties of a complex of Pseudomonas aeruginosa and Clostridium tetani anatoxins] Podgornaia LG, et al. **Mikrobiol Zh** 1987 Sep–Oct; 49(5):55–8 (Eng. Abstr.) **(Rus)**

TOXOPLASMA

ANALYSIS

Detection and localization of actin in Toxoplasma gondii. Endo T, et al. **Parasitol Res** 1988;75(2):102–6

Immunocytochemical localization of actin in Toxoplasma gondii. Yasuda T, et al. **Parasitol Res** 1988;75(2):107–13

DRUG EFFECTS

Zidovudine antagonizes the action of pyrimethamine in experimental infection with Toxoplasma gondii. Israelski DM, et al. **Antimicrob Agents Chemother** 1989 Jan;

33(1):30-4

Toxoplasma gondii: the biochemical basis of resistance to emimycin. Pfefferkorn ER, et al. **Exp Parasitol** 1989 Aug; 69(2):129-39

Beta interferon inhibits Toxoplasma gondii growth in human monocyte-derived macrophages. Schmitz JL, et al. **Infect Immun** 1989 Oct;57(10):3254-6

In-vitro toxoplasmacidal activity of cationic electron carriers. Chang HR, et al. **J Antimicrob Chemother** 1989 Feb;23(2):229-35

Activity of A-56268 (TE-031), a new macrolide, against Toxoplasma gondii in mice. Chang HR, et al. **J Antimicrob Chemother** 1988 Sep;22(3):359-61

Activity of spiramycin against Toxoplasma gondii in vitro, in experimental infections and in human infection. Chang HR, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:87-92

ENZYMOLOGY

Isoenzymic characterization of seven strains of Toxoplasma gondii by isoelectrofocusing in polyacrylamide gels. Darde ML, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):551-8

The role of phospholipase in host cell penetration by Toxoplasma gondii. Saffer LD, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):145-9

Isoenzyme studies on Toxoplasma gondii isolates using isoelectric focusing. Barnert G, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jun; 268(4):476-81

GENETICS

Molecular analysis of the gene encoding the major surface antigen of Toxoplasma gondii. Burg JL, et al. **J Immunol** 1988 Nov 15;141(10):3584-91

Isolation of a potential DNA probe for Toxoplasma gondii. Savva D. **Microbios** 1989;58(236-237):165-72

Cloning of cDNAs encoding a 28 kilodalton antigen of Toxoplasma gondii. Prince JB, et al. **Mol Biochem Parasitol** 1989 Apr;34(1):3-13

GROWTH & DEVELOPMENT

Incorporation of recombinant gamma interferon into liposomes enhances its ability to induce peritoneal macrophage antitoxoplasma activity. Mellors JW, et al. **Infect Immun** 1989 Jan;57(1):132-7

Reactivation of Toxoplasma gondii by cytomegalovirus disease in mice: antimicrobial activities of macrophages. Pomeroy C, et al. **J Infect Dis** 1989 Aug;160(2):305-11

Susceptibility of Eimeria bovis and Toxoplasma gondii to oxygen intermediates and a new mathematical model for parasite killing. Hughes HP, et al. **J Parasitol** 1989 Aug; 75(4):489-97

Toxoplasma gondii: a simple method for titration of infectivity with monolayer cells. Endoh T, et al. **Jpn J Med Sci Biol** 1989 Feb;42(1):13-23

[Observations on the growth dynamics of 4 strains of Toxoplasma gondii in HeLa cells] Yang XZ, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(1):8-11 (Eng. Abstr.) **(Chi)**

[In vitro measurement of the inhibitory effect of macrolides, lincosamides and synergestines on the growth of Toxoplasma gondii] Derouin F, et al. **Pathol Biol (Paris)** 1988 Dec;36(10):1204-10 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Change of immunoglobulin G antibody levels to Toxoplasma gondii during pregnancy in an obstetric population. Konishi E. **Am J Obstet Gynecol** 1989 Feb;160(2):356-7

Lymphocyte proliferative responses of patients with ocular toxoplasmosis to parasite and retinal antigens. Nussenblatt RB, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):632-41

Resistance to avirulent Toxoplasma gondii in normal and vaccinated rats. Pettersen EK. **APMIS** 1988 Sep; 96(9):820-4

Recognition of Toxoplasma gondii excreted and secreted antigens by human sera from acquired and congenital toxoplasmosis: identification of markers of acute and chronic infection. Decoster A, et al. **Clin Exp Immunol** 1988 Sep;73(3):376-82

Rapid antibody response following intrasplenic inoculation of formalin-treated Toxoplasma gondii into mice [letter] Humphery-Smith I, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):573-5

Relationship between Toxoplasma gondii antibodies and blood group [letter] Midtvedt T, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):575-6

Comparative study of three immunoassays for detection of immunoglobulin M antibodies against Toxoplasma gondii. Rotmans J, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):535-8

Toxoplasma gondii: characterization of monoclonal antibodies that recognize rhoptries. Schwartzman JD, et al. **Exp Parasitol** 1989 Jan;68(1):74-82

Detection of antibodies to Toxoplasma gondii by ELISA test in high risk personnel. Srivastava L, et al. **Indian J Pathol Microbiol** 1988 Apr;31(2):54-9

Identification of stage-specific antigens of Toxoplasma gondii. Kasper LH. **Infect Immun** 1989 Mar;57(3):668-72

Regulation of immunoglobulin E production in mice immunized with an extract of Toxoplasma gondii. Watanabe N, et al. **Infect Immun** 1989 May;57(5):1405-8

Serologic diagnosis of toxoplasmosis in cats fed Toxoplasma gondii tissue cysts. Dubey JP, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1297-9

The major surface antigen, P30, of Toxoplasma gondii is anchored by a glycolipid. Nagel SD, et al. **J Biol Chem** 1989 Apr 5;264(10):5569-74

Fc receptors on the surface of Toxoplasma gondii trophozoites: a confounding factor in testing for anti-Toxoplasma antibodies by indirect immunofluorescence. Budzko DB, et al. **J Clin Microbiol** 1989 May;27(5):959-61

Significance of specific immunoglobulin M in the chronological diagnosis of 38 cases of toxoplasmic lymphadenopathy. Del Bono V, et al. **J Clin Microbiol** 1989 Sep;27(9):2133-5

Toxoplasma antigens recognized by immunoglobulin G subclasses during acute and chronic infection. Huskinson J, et al. **J Clin Microbiol** 1989 Sep;27(9):2031-8

Application of quantitative immunofluorescence to clinical serology: antibody levels of Toxoplasma gondii. Kaplan DS, et al. **J Clin Microbiol** 1989 Sep;27(9):2008-13

Latex agglutination test for detection of antibodies to Toxoplasma gondii. Mazumder P, et al. **J Clin Microbiol** 1988 Nov;26(11):2444-6

Indirect enzyme-linked immunosorbent assay for immunoglobulin G and four immunoassays for immunoglobulin M to Toxoplasma gondii in a series of heart transplant recipients. Sluiters JF, et al. **J Clin Microbiol** 1989 Mar;27(3):529-35

Direct agglutination test and other assays for measuring antibodies to Toxoplasma gondii. Johnson J, et al. **J Clin Pathol** 1989 May;42(5):536-41

Biotin-labelled antigen screening test for toxoplasma IgM antibody. Joss AW, et al. **J Clin Pathol** 1989 Feb; 42(2):206-9

Five commercial enzyme linked immunosorbent assay kits for toxoplasma specific IgM antibody. Joynson DH, et al. **J Clin Pathol** 1989 Jun;42(6):653-7

False positive latex tests negative by ELISA for toxoplasma IgG. Sutehall GM, et al. **J Clin Pathol** 1989 Feb;42(2):204-5

False positive results in the Toxoreagent test for Toxoplasma gondii in immunocompetent patients [letter] [published erratum appears in J Clin Pathol 1989 Jan;42(1):116] Wood JK, et al. **J Clin Pathol** 1988 Oct;41(10):1135-6

The prevalence of Toxoplasma gondii antibodies among cats from Mahalla El-Kobra, Gharbia Governorate. Abu-Zakham AA, et al. **J Egypt Soc Parasitol** 1989 Jun; 19(1):225-9

Anti-Toxoplasma antibodies in some patients with fever [letter] Fayad ME, et al. **J Egypt Soc Parasitol** 1989 Dec; 19(2):767-8

Comparative study between latex agglutination and indirect immunofluorescent antibody tests in diagnosis of toxoplasmosis. el-Gamal RL, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):471-6

Toxoplasma gondii: mechanism of resistance to complement-mediated killing. Fuhrman SA, et al. **J Immunol** 1989 Feb 1;142(3):940-7

Induction of antigen-specific parasiticidal cytotoxic T cell splenocytes by a major membrane protein (P30) of Toxoplasma gondii. Khan IA, et al. **J Immunol** 1988 Nov 15;141(10):3600-5

Diagnosis of congenital toxoplasmosis in Scotland. Chatterton JM, et al. **J Infect** 1989 May;18(3):249-55

Failure to diagnose fatal disseminated toxoplasmosis in a bone marrow transplant recipient: the possible significance of declining antibody titres. Heurkens AH, et al. **J Infect** 1989 May;18(3):283-8

Recent primary toxoplasma infection indicated by a low avidity of specific IgG. Hedman K, et al. **J Infect Dis** 1989 Apr;159(4):736-40

Prevalence of toxoplasma antibodies in blood donors and pregnant women in Khon Kaen Province. Maleewong W, et al. **J Med Assoc Thai** 1989 May;72(5):256-9

Antigen presentation by Toxoplasma gondii-infected cells to CD4+ proliferative T cells and CD8+ cytotoxic cells. Yano A, et al. **J Parasitol** 1989 Jun;75(3):411-6

Cytotoxic activity of monocytes against Toxoplasma gondii in acute, chronic and reactivated murine toxoplasmosis. Goyal M, et al. **Med Microbiol Immunol (Berl)** 1988; 177(6):339-48

Annual change in immunoglobulin G and M antibody levels to Toxoplasma gondii in human sera. Konishi E. **Microbiol Immunol** 1989;33(5):403-11

Demonstration of Toxoplasma gondii antigen in stillborn piglets using immunoperoxidase technique. Haritani M, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):954-6

Induction of a protective antibody-dependent response against toxoplasmosis by in vitro excreted/secreted antigens from tachyzoites of Toxoplasma gondii. Darcy F, et al. **Parasite Immunol** 1988 Sep;10(5):553-67

Toxoplasma gondii: antigenic differences between endozoites and cystozoites defined by monoclonal antibodies. Omata Y, et al. **Parasitol Res** 1989;75(3):189-93

The infection-stage-related IgG response to Toxoplasma gondii studied by immunoblotting. Verhofstede C, et al. **Parasitol Res** 1988;74(6):516-20

Surface antigens of Toxoplasma gondii. Couvreur G, et al. **Parasitology** 1988 Aug;97 (Pt 1):1-10

Serodiagnosis of ovine toxoplasmosis: an assessment of the latex agglutination test and the value of IgM specific titres after experimental oocyst-induced infections. Trees AJ, et al. **Res Vet Sci** 1989 Jan;46(1):67-72

The determination of anti-Toxoplasma gondii antibodies in different IgG subclasses of human sera by the enzyme-linked immunosorbent assay (ELISA). Ee TY, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):71-9

Human toxoplasmosis in Somalia. Prevalence of Toxoplasma antibodies in a village in the lower Scebelli region and in Mogadishu. Ahmed HJ, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):330-2

Sero-epidemiological survey for toxoplasmosis in Burundi. Excler JL, et al. **Trop Med Parasitol** 1988 Jun;39(2):139-41

Titration of Toxoplasma gondii oocysts in non-pregnant sheep and the effects of subsequent challenge during pregnancy. McColgan C, et al. **Vet Rec** 1988 Oct 29; 123(18):467-70

Diagnosis of ovine toxoplasmosis [letter] Trees AJ, et al. **Vet Rec** 1988 Nov 19;123(21):554

Circulating antigen of Toxoplasma gondii in patients with AIDS: significance of detection and structural properties. Hassl A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov;270(1-2):302-9

Evidence of structural proteins of Toxoplasma gondii in sera of experimentally infected mice. Hassl A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1-2):310-2

Comparison of different serotests for specific Toxoplasma IgM-antibodies (ISAGA, SPIHA, IFAT) and detection of circulating antigen in two cases of laboratory acquired Toxoplasma infection. Hermentin K, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):534-41

Efforts towards a vaccine against Toxoplasma gondii: a review. Hermentin K, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):423-36 (109 ref.)

[Antitoxoplasma serum—derivation of the national standard (ELISA)] Frühbauer Z, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 May;38(3):150-4 (Eng. Abstr.) **(Cze)**

[Detection of Toxoplasma antibodies using the c-ELISA method] Sýkora J, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 May;38(3):155-60 (Eng. Abstr.) **(Cze)**

[Antigen analysis of Toxoplasma gondii using chromatography, polyacrylamide gel electrophoresis and immunoprecipitation] Hafid J, et al. **Ann Soc Belg Med Trop** 1989 Mar;69(1):41-8 (Eng. Abstr.) **(Fre)**

[Detection of circulating antigens of Toxoplasma gondii using immunoprecipitation reactions in murine toxoplasmosis] Hafid J, et al. **Ann Soc Belg Med Trop** 1989 Mar;69(1):49-56 (Eng. Abstr.) **(Fre)**

[Transplacental passage of toxoplasma antibodies. The difference between African and European mothers] Richard-Lenoble D, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):365-8 (Eng. Abstr.) **(Fre)**

[The effect of a subretinal injection of Toxoplasma gondii on the serum antibody titer in a rabbit model of ocular toxoplasmosis] Friedrich R, et al. **Angew Parasitol** 1989 Feb;30(1):15-7 (Eng. Abstr.) **(Ger)**

[Severe fetopathy—toxoplasma despite serologic screening. A case report] Mayer HO, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):504-5 (Eng. Abstr.) **(Ger)**

[Antibody levels in women with toxoplasmosis of the lymph nodes] Andrzejewska I. **Pol Tyg Lek** 1988 Nov 7; 43(45):1444-6 **(Pol)**

[Morphologic changes of the nucleolar system of lymphocytes as the indicator of sensitivity to tuberculin and Toxoplasma antigen] Gavrilova LO, et al. **Pediatriia** 1989;(7):43-7 (Eng. Abstr.) **(Rus)**

[Toxoplasma antibody titers in workers with a potentially increased risk for toxoplasma infection] Nemec R, et al. **Bratisl Lek Listy** 1988 Oct;89(10):779-83 (Eng. Abstr.) **(Slo)**

[Comparison of the IFA, ELISA IgG, ELISA IgM, IHA and the direct agglutination tests in Toxoplasma gondii serology] Ozkuyumcu C, et al. **Mikrobiyol Bul** 1988; 22(4):271-5 (Eng. Abstr.) **(Tur)**

ISOLATION & PURIFICATION

Direct and sensitive detection of a pathogenic protozoan, Toxoplasma gondii, by polymerase chain reaction. Burg JL, et al. **J Clin Microbiol** 1989 Aug;27(8):1787-92

A method for obtaining large numbers of trophozoites of avirulent strains of Toxoplasma gondii using an antibody to interferon-gamma. Suzuki Y, et al. **J Parasitol** 1989 Feb; 75(1):174-6

Detection of Toxoplasma gondii in liver tissue sections from brown hares (Lepus europaeus P.) and mountain hares (Lepus timidus L.) using the peroxidase anti-peroxidase (PAP) technique as a complement to conventional histopathology. Gustafsson K, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):402-7

METABOLISM

Purine metabolism in Toxoplasma gondii. Krug EC, et al. **J Biol Chem** 1989 Jun 25;264(18):10601-7

Characterization of de novo folate synthesis in Pneumocystis carinii and Toxoplasma gondii: potential for screening therapeutic agents. Kovacs JA, et al. **J Infect Dis** 1989 Aug;160(2):312–20

PATHOGENICITY

Pathogenicity of Toxoplasma gondii cysts and oocysts measured by fever and weight loss in mice. Johnson AM. **Int J Parasitol** 1988 Sep;18(6):865–8

Differences in virulence and development of encephalitis during chronic infection vary with the strain of Toxoplasma gondii. Suzuki Y, et al. **J Infect Dis** 1989 Apr; 159(4):790–4

PHYSIOLOGY

Modification of host cell phagosomes by Toxoplasma gondii involves redistribution of surface proteins and secretion of a 32 kDa protein. Sibley LD, et al. **Eur J Cell Biol** 1988 Oct;47(1):81–7

Cytochemical localization of plasma membrane enzyme markers during interiorization of tachyzoites of Toxoplasma gondii by macrophages. de Carvalho L, et al. **J Protozool** 1989 Mar–Apr;36(2):164–70

Transformation of oocysts from several coccidian species by heat treatment. Matsui T, et al. **Parasitol Res** 1989; 75(4):264–7

ULTRASTRUCTURE

Host–parasite relationship in the brains of mice with congenital toxoplasmosis. Sims TA, et al. **J Pathol** 1988 Nov;156(3):255–61

TOXOPLASMOSIS

Recent investigations of toxoplasmosis. I. Acquired toxoplasmosis and its role in pathology. Sibalić D, et al. **Acta Med Iugosl** 1988;42(4):321–33

Toxoplasmosis needs evaluation. An overview and proposals. Koskiniemi M, et al. **Am J Dis Child** 1989 Jun;143(6):724–8 (58 ref.)

Acquired toxoplasmic retinochoroiditis after platelet transfusions. Nelson JC, et al. **Ann Ophthalmol** 1989 Jul; 21(7):253–4

Unilateral "akathisia" in a patient with AIDS and a toxoplasmosis subthalamic abscess. Carrazana E, et al. **Neurology** 1989 Mar;39(3):449–50

BLOOD

The determination of anti-Toxoplasma gondii antibodies in different IgG subclasses of human sera by the enzyme-linked immunosorbent assay (ELISA). Ee TY, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):71–9

COMPLICATIONS

Disseminated toxoplasmosis in the acquired immunodeficiency syndrome. Tschirhart D, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1237–41

Toxoplasma-induced occlusive hypertrophic arteritis as the cause of discrete coagulative necrosis in the CNS [letter] de la Torre FE, et al. **Hum Pathol** 1989 Jun;20(6):604–5

Occlusive hypertrophic arteritis as the cause of discrete necrosis in CNS toxoplasmosis in the acquired immunodeficiency syndrome. Huang TE, et al. **Hum Pathol** 1988 Oct;19(10):1210–4

Toxoplasmic encephalitis in patients with AIDS. Israelski DM, et al. **Infect Dis Clin North Am** 1988 Jun;2(2):429–45 (69 ref.)

Pulmonary infiltrate in acute toxoplasmosis. Shimoni Z, et al. **Isr J Med Sci** 1989 Jan;25(1):46–7

Toxoplasmosis among cases of chronic tonsillitis. el-Ridi AM, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):85–90

Retrovesical squamous cell carcinoma associated with toxoplasmosis: diagnostic images, serum detection of SCC-antigen, and successful treatment by M-VAC regimen. Tada K, et al. **J Surg Oncol** 1989 Jan;40(1):61–4

Hemichorea–hemiballismus associated with acquired immune deficiency syndrome and cerebral toxoplasmosis. Sanchez-Ramos JR, et al. **Mov Disord** 1989;4(3):266–73

Non-Hodgkin's lymphoma presenting as 'chronic active toxoplasmosis'. Dudley NJ, et al. **Postgrad Med J** 1988 Nov;64(757):883–5

Haemorrhage in cerebral toxoplasmosis. A report on a patient with the acquired immunodeficiency syndrome. Chaudhari AB, et al. **S Afr Med J** 1989 Sep 16;76(6):272–4

[Simultaneous toxoplasmosis and larval toxocariasis infection in the Czechoslovak population] Hübner J, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Mar;38(2):119–25 (Eng. Abstr.) (Cze)

[The association of dermatomyositis and toxoplasmosis] Noé C, et al. **Ann Dermatol Venereol** 1988;115(9):927–31 (Eng. Abstr.) (Fre)

[Polymyositis and subcutaneous fat necrosis, manifestations of toxoplasmosis origin (letter)] Couzineau P, et al. **Presse Med** 1989 May 20;18(20):1035 (Fre)

[The association of pneumocystosis and pulmonary toxoplasmosis in a female patient with HIV infection (letter)] Roux P, et al. **Rev Pneumol Clin** 1989;45(1):42 (Fre)

[Toxoplasmosis and dermatomyositis: a causal or casual relationship?] Lapetina F. **Pediatr Med Chir** 1989 Mar–Apr; 11(2):197–203 (54 ref.) (Eng. Abstr.) (Ita)

[Unusual calcification in brain suspected to be caused by toxoplasmosis: a report of an autopsy case] Fukunaga T, et al. **Nippon Hoigaku Zasshi** 1989 Feb;43(1):52–7 (Eng. Abstr.) (Jpn)

[Myositis and toxoplasmosis] Santiago MB, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Mar–Apr; 43(2):121–3 (Eng. Abstr.) (Por)

[Cerebral toxoplasmosis in the acquired immunodeficiency syndrome. Study of the clinical, radiological, and pathological findings in 10 cases] Bonaventura I, et al. **Med Clin (Barc)** 1988 May 28;91(1):1–6 (Eng. Abstr.) (Spa)

DIAGNOSIS

Cerebral toxoplasmosis masquerading as herpes encephalitis in a patient with the acquired immunodeficiency syndrome. Carrazana EJ, et al. **Am J Med** 1989 Jun;86(6 Pt 1):730–2

Toxoplasmosis simulating progressive multifocal leukoencephalopathy. Vélez-Borrás JR, et al. **Bol Asoc Med P R** 1989 Jun;81(6):219–20

Rapid antibody response following intrasplenic inoculation of formalin-treated Toxoplasma gondii into mice [letter] Humphery-Smith I, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):573–5

Rapid dot-immunobinding for detecting antibodies to Toxoplasma gondii in human serum. Leonardi MS, et al. **G Batteriol Virol Immunol** 1987 Jan–Dec;80(1–12):215–23

Interpreting negative test results. Kassirer JP, et al. **Hosp Pract [Off]** 1989 Aug 15;24(8):45, 48–9, 52 passim

Two fevers with a common etiology. Teklu B, et al. **Hosp Pract [Off]** 1989 Aug 15;24(8):93, 96

Fc receptors on the surface of Toxoplasma gondii trophozoites: a confounding factor in testing for anti-Toxoplasma antibodies by indirect immunofluorescence. Budzko DB, et al. **J Clin Microbiol** 1989 May;27(5):959–61

Direct and sensitive detection of a pathogenic protozoan, Toxoplasma gondii, by polymerase chain reaction. Burg JL, et al. **J Clin Microbiol** 1989 Aug;27(8):1787–92

Significance of specific immunoglobulin M in the chronological diagnosis of 38 cases of toxoplasmic lymphadenopathy. Del Bono V, et al. **J Clin Microbiol** 1989 Sep;27(9):2133–5

Laboratory diagnosis of pulmonary toxoplasmosis in patients with acquired immunodeficiency syndrome. Derouin F, et al. **J Clin Microbiol** 1989 Jul;27(7):1661–3

Indirect enzyme-linked immunosorbent assay for immunoglobulin G and four immunoassays for immunoglobulin M to Toxoplasma gondii in a series of heart transplant recipients. Sluiters JF, et al. **J Clin Microbiol** 1989 Mar;27(3):529–35

Diagnosis of toxoplasmic encephalitis in patients with acquired immunodeficiency syndrome by using a new serologic method. Suzuki Y, et al. **J Clin Microbiol** 1988 Dec;26(12):2541–3

Annotation: Diagnosis of toxoplasmosis. Fleck DG. **J Clin Pathol** 1989 Feb;42(2):191–3 (7 ref.)

Discrepant toxoplasma latex agglutination test results. Holliman RE, et al. **J Clin Pathol** 1989 Feb;42(2):200–3

Comparative study between latex agglutination and indirect immunofluorescent antibody tests in diagnosis of toxoplasmosis. el-Gamal RI, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):471–6

Failure to diagnose fatal disseminated toxoplasmosis in a bone marrow transplant recipient: the possible significance of declining antibody titres. Heurkens AH, et al. **J Infect** 1989 May;18(3):283–8

Recent primary toxoplasma infection indicated by a low avidity of specific IgG. Hedman K, et al. **J Infect Dis** 1989 Apr;159(4):736–40

Circulating antigen of Toxoplasma gondii in patients with AIDS: significance of detection and structural properties. Hassl A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov;270(1–2):302–9

[Diagnosis of toxoplasmosis in pregnancy] Prömpeler HJ, et al. **Geburtshilfe Frauenheilkd** 1989 Jul;49(7):642–8 (Eng. Abstr.) (Ger)

[The AIDS patient with miliary tuberculosis, toxoplasmosis and herpes infection] Zaiss AW, et al. **Med Klin** 1988 Aug 12;83(16):528–31 (Ger)

[Toxoplasmosis: modern diagnostic and therapeutic management (Part I)] Shimoni Z, et al. **Harefuah** 1988 Dec 1;115(11):339–42 (33 ref.) (Heb)

[Toxoplasmosis: modern diagnostic and therapeutic management (Part II)] Shimoni Z, et al. **Harefuah** 1988 Dec 15;115(12):390–3 (34 ref.) (Heb)

[Persistent headache as an early symptom of acquired toxoplasmosis not manifested by the enlargement of the peripheral lymph nodes] Prandota J, et al. **Pediatr Pol** 1988 Aug;63(8):483–9 (Pol)

[Evaluation of the results of serologic studies in routine diagnosis of toxoplasmosis in Poland] Zemburowa K, et al. **Wiad Parazytol** 1988;34(4–6):705–11 (Pol)

[Preparation and study of the efficacy of a toxoplasmic erythrocytic diagnostic agent] Kuz'min IuA, et al. **Lab Delo** 1989;(6):47–50 (Eng. Abstr.) (Rus)

[Study results and outlook on the problem of toxoplasmosis] Nikiforov VN, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug; (4):36–40 (69 ref.) (Rus)

[The role of toxoplasmosis in obstetrical-gynecological pathology] Saidov MS, et al. **Med Parazitol (Mosk)** 1988 May–Jun;(3):93–4 (Rus)

[Comparison of seroreactions in the diagnosis of toxoplasmosis] Holková R, et al. **Bratisl Lek Listy** 1988 Oct;89(10):770–4 (Eng. Abstr.) (Slo)

[Toxoplasma antibody titers in workers with a potentially increased risk for toxoplasma infection] Nemec R, et al. **Bratisl Lek Listy** 1988 Oct;89(10):779–83 (Eng. Abstr.) (Slo)

DRUG THERAPY

Evaluation of the policy of empiric treatment of suspected Toxoplasma encephalitis in patients with the acquired immunodeficiency syndrome. Cohn JA, et al. **Am J Med** 1989 May;86(5):521–7

Treatment of toxoplasmic encephalitis with intravenous clindamycin. Dannemann BR, et al. **Arch Intern Med** 1988 Nov;148(11):2477–82

Pyrimethamine–sulfadiazine for treating Pneumocystis carinii pneumonia and toxoplasmosis in AIDS. Gilman TM, et al. **Clin Pharm** 1989 Feb;8(2):84, 87 (14 ref.)

Activity of spiramycin against Toxoplasma gondii in vitro, in experimental infections and in human infection. Chang HR, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:87–92

Toxoplasmosis in AIDS patients. Tuazon CU. **J Antimicrob Chemother** 1989 Jan;23 Suppl A:77–82 (13 ref.)

New perspectives in the chemoprophylaxis of toxoplasmosis. Piens MA, et al. **J Chemother** 1989 Feb;1(1):46–51

An open study of the pyrimethamine–clindamycin combination in AIDS patients with brain toxoplasmosis [letter] Leport C, et al. **J Infect Dis** 1989 Sep;160(3):557–8

Sulfadiazine revisited [letter] Ventura MG, et al. **J Infect Dis** 1989 Sep;160(3):556–7

Clindamycin therapy of cerebral toxoplasmosis in an AIDS patient. Westblom TU, et al. **Scand J Infect Dis** 1988; 20(5):561–3

Arteether, a qinghaosu derivative, in toxoplasmosis. Chang HR, et al. **Trans R Soc Trop Med Hyg** 1988;82(6):867

[Induction of tolerance to sulfadiazine in a patient with acquired immunodeficiency syndrome (letter)] Gilquin J, et al. **Presse Med** 1988 Dec 3;17(43):2306 (Fre)

[Zidovudine efficacy and tolerance in 32 patients with cerebral toxoplasmosis in the acquired immunodeficiency syndrome (letter)] Leport C, et al. **Presse Med** 1988 Oct 15;17(35):1813–4 (Fre)

[Clinical aspects of Toxoplasma primary infection in pregnancy] Scheibe J, et al. **Angew Parasitol** 1988 Jun; 29(2):81–4 (Eng. Abstr.) (Ger)

[Seizure within the scope of poisoning with pyrimethamine (Tindurin)] Todt H, et al. **Z Arztl Fortbild (Jena)** 1988; 82(21):1089–90 (Ger)

[Clindamycin in the treatment of cerebral toxoplasmosis in a patient with AIDS (letter)] Santos Gil I, et al. **Rev Clin Esp** 1989 Jun;185(1):47 (Spa)

EPIDEMIOLOGY

Brain lesions in patients with acquired immunodeficiency syndrome. Bishburg E, et al. **Arch Intern Med** 1989 Apr; 149(4):941–3

Serological study of patients clinically suspected to have toxoplasmosis in Kashmir. Thokar MA, et al. **Indian J Med Res** 1988 Jul;88:29–34

Epidemiology of toxoplasmosis among pregnant women in the Paris area. Jeannel D, et al. **Int J Epidemiol** 1988 Sep; 17(3):595–602

Toxoplasmosis in heart and heart and lung transplant recipients. Wreghitt TG, et al. **J Clin Pathol** 1989 Feb; 42(2):194–9

Anti-Toxoplasma antibodies in some patients with fever [letter] Fayad ME, et al. **J Egypt Soc Parasitol** 1989 Dec; 19(2):767–8

Epidemiology of toxoplasmosis in pregnant women in Tabasco, Mexico. Torrano MF. **J Trop Pediatr** 1988 Aug; 34(4):143–6

Surveillance of toxoplasmosis in different groups. Ahmed M, et al. **JPMA** 1989 Jul;39(7):183–6

Epidemiological aspects of toxoplasmosis in schoolchildren residing in localities with urban or rural characteristics within the city of Rio de Janeiro, Brazil. Souza WJ, et al. **Mem Inst Oswaldo Cruz** 1987 Oct–Dec;82(4):475–82

Incidence of toxoplasmosis in pregnant women in the city of Malmö, Sweden. Ahlfors K, et al. **Scand J Infect Dis** 1989;21(3):315–21

Human toxoplasmosis in Somalia. Prevalence of Toxoplasma antibodies in a village in the lower Scebelli region and in Mogadishu. Ahmed HJ, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):330–2

Sero-epidemiological survey for toxoplasmosis in Burundi. Excler JL, et al. **Trop Med Parasitol** 1988 Jun;39(2):139–41

[The application of catalytic model on Toxoplasma infection in epidemiological survey] Cui JZ, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Aug; 9(4):233–4 (Eng. Abstr.) (Chi)

[Epidemiological study on Toxoplasma infection in human beings and animals in Shandong Province] Zhang GN. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Feb; 10(1):30–3 (Eng. Abstr.) (Chi)

[Toxoplasmosis in pregnant women in Niamey (Niger)] Develoux M, et al. **Bull Soc Pathol Exot Filiales** 1989;

82(3):406–9 (Eng. Abstr.) (Pre)
[Serologic study of toxoplasmosis in an ambulatory population in 1984–1986] Chelucci M, et al. **Quad Sclavo Diagn** 1987 Sep;23(3):318–24 (Eng. Abstr.) (Ita)
[Toxoplasmosis 1986] Dzbeński TH, et al. **Przegl Epidemiol** 1988;42(1):109–12 (Pol)

ETIOLOGY

Toxoplasma peritonitis in AIDS. **Am Fam Physician** 1989 Jan;39(1):284
Toxoplasma infection after human allogeneic bone marrow transplantation: clinical and serological study of 80 patients. Derouin F, et al. **Bone Marrow Transplant** 1986 May; 1(1):67–73
Toxoplasmic encephalitis in AIDS. Dannemann BR, et al. **Hosp Pract [Off]** 1989 Mar 15;24(3):139–47, 151–4
Diffuse "encephalitic" cerebral toxoplasmosis in AIDS. Report of four cases. Gray F, et al. **J Neurol** 1989 Jul; 236(5):273–7
Unilateral "akathisia" in a patient with AIDS and a toxoplasmosis subthalamic abscess. Carrazana E, et al. **Neurology** 1989 Mar;39(3):449–50
Pathology of the central nervous system in 40 cases of acquired immune deficiency syndrome (AIDS). Gray F, et al. **Neuropathol Appl Neurobiol** 1988 Sep–Oct; 14(5):365–80
[Toxoplasmic pleuro-pericarditis associated with Hodgkin's disease] Guignard E, et al. **Rev Med Interne** 1988 Nov–Dec; 9(5):473–6 (17 ref.) (Eng. Abstr.) (Fre)
[Toxoplasma infection in dermatomyositis] Wilfert H, et al. **Hautarzt** 1988 Oct;39(10):671–4 (Eng. Abstr.) (Ger)
[Clinical picture and the course of infection in hemolytic disease of the newborn] Maszkiewicz W, et al. **Acta Haematol Pol** 1988 Jan–Jun;19(1–2):99–103 (Eng. Abstr.) (Pol)
[Desensitization to sulfamide in a patient with AIDS and cerebral toxoplasmosis (letter)] Laguna Cuesta F, et al. **Rev Clin Esp** 1988 Oct;183(6):332–3 (Spa)

IMMUNOLOGY

Elevated Toxoplasma IgG antibody in patients tested for infectious mononucleosis in an urban emergency department. Sayre MR, et al. **Ann Emerg Med** 1989 Apr; 18(4):383–6
Antibody patterns in the serological diagnosis of toxoplasmosis [letter] Robertson PW, et al. **Aust N Z J Med** 1988 Oct;18(6):811–2
Recognition of Toxoplasma gondii excreted and secreted antigens by human sera from acquired and congenital toxoplasmosis: identification of markers of acute and chronic infection. Decoster A, et al. **Clin Exp Immunol** 1988 Sep;73(3):376–82
Toxoplasma antigens recognized by immunoglobulin G subclasses during acute and chronic infection. Huskinson J, et al. **J Clin Microbiol** 1989 Sep;27(9):2031–8
Direct agglutination test and other assays for measuring antibodies to Toxoplasma gondii. Johnson J, et al. **J Clin Pathol** 1989 May;42(5):536–41
Antigen presentation by Toxoplasma gondii-infected cells to CD4+ proliferative T cells and CD8+ cytotoxic cells. Yano A, et al. **J Parasitol** 1989 Jun;75(3):411–6
IgA antibodies against P30 as markers of congenital and acute toxoplasmosis. Decoster A, et al. **Lancet** 1988 Nov 12; 2(8620):1104–7
Induction of a protective antibody-dependent response against toxoplasmosis by in vitro excreted/secreted antigens from tachyzoites of Toxoplasma gondii. Darcy F, et al. **Parasite Immunol** 1988 Sep;10(5):553–67
The infection-stage-related IgG response to Toxoplasma gondii studied by immunoblotting. Verhofstede C, et al. **Parasitol Res** 1988;74(6):516–20
New prospects in immunology of toxoplasmosis: skin-tests for control of immunity and immuno-assays and agglutination tests for the detection of specific IgM antibodies. Ambroise-Thomas P, et al. **Parassitologia** 1986 Aug–Dec;28(2–3):85–93
Toxoplasmosis of the central nervous system. Clinical, immunological and serological investigations. Axmann A, et al. **Ther Hung** 1988;36(3):123–8
Comparison of different serotests for specific Toxoplasma IgM-antibodies (ISAGA, SPIHA, IFAT) and detection of circulating antigen in two cases of laboratory acquired Toxoplasma infection. Hermentin K, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):534–41
[Antibody levels in women with toxoplasmosis of the lymph nodes] Andrzejewska I. **Pol Tyg Lek** 1988 Nov 7; 43(45):1444–6 (Pol)

PATHOLOGY

Two cases of acquired toxoplasmic lymphadenitis. Light and electron microscopic and immunohistochemical studies. Ito M, et al. **Acta Pathol Jpn** 1988 Dec;38(12):1565–73
Benign vascular proliferation in a lymph node following acute toxoplasmosis. A differential diagnosis from Kaposi's sarcoma. Rousselet MC, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1264–6
Solitary midbrain toxoplasmosis and olivary hypertrophy in a patient with acquired immunodeficiency syndrome. Kure K, et al. **Clin Neuropathol** 1989 Jan–Feb;8(1):35–40
Toxoplasmosis of the brain and heart: autopsy report of a patient with AIDS. Tolat D, et al. **Tex Med** 1989 Jul; 85(7):40–2
[Toxoplasmosis associated with a parotid tumor. A case report] Imamoto C, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):434–5 (Jpn)
[Toxoplasmosis of the central nervous system. Clinicopathological correlation with 7 autopsy cases] de Queiroz AC, et al. **Rev Soc Bras Med Trop** 1987 Jul–Sep; 20(3):175–9 (Eng. Abstr.) (Por)

PREVENTION & CONTROL

Screening for toxoplasmosis in pregnancy. al-Meshari AA, et al. **Int J Gynaecol Obstet** 1989 May;29(1):39–45
Screening for toxoplasmosis in pregnancy [letter] Fuith LC, et al. **Lancet** 1988 Nov 19;2(8621):1196
Screening for infections in pregnancy [letter] Ho-Yen DO, et al. **Lancet** 1988 Oct 29;2(8618):1031
Screening for toxoplasma in pregnancy [letter] Salmon RL. **Lancet** 1988 Nov 5;2(8619):1085–6
Maternal and congenital toxoplasmosis. Is prevention possible? Rosenfeld JA. **Postgrad Med** 1988 Dec; 84(8):187–90
Efforts towards a vaccine against Toxoplasma gondii: a review. Hermentin K, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):423–36 (109 ref.)
[Direct agglutination as a tool for toxoplasma control in pregnancy] Janitschke K, et al. **Immun Infekt** 1988 Oct; 16(5):189–91 (Eng. Abstr.) (Ger)
[Preventive studies of congenital toxoplasmosis based on studies conducted in other countries] Rydzewski A. **Wiad Parazytol** 1988;34(4–6):713–8 (Pol)

PSYCHOLOGY

Deteriorating neurologic status in a young woman with schizophrenia [clinical conference] Schneiderman H, et al. **Conn Med** 1988 Jul;52(7):409–14

RADIOGRAPHY

Computed tomographic findings in cerebral toxoplasmosis in adults. Weisberg LA, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):379–83

RADIONUCLIDE IMAGING

Gallium-67 imaging of unsuspected cerebral toxoplasmosis in AIDS. Gilbertson V, et al. **Clin Nucl Med** 1988 Sep; 13(9):679–80

THERAPY

[Complex treatment of toxoplasmosis in women with a history of severe obstetric problems] Chaitsev VG, et al. **Akush Ginekol (Mosk)** 1989 May;(5):41–3 (Eng. Abstr.) (Rus)

TOXOPLASMOSIS, ANIMAL

Acute disseminated toxoplasmosis in two captive lions (Panthera leo) in Nigeria. Ocholi RA, et al. **Vet Rec** 1989 May 13;124(19):515–6

COMPLICATIONS

Toxoplasma gondii-induced abortion in sheep. Dubey JP, et al. **J Am Vet Med Assoc** 1988 Sep 15;193(6):697–700
Epidemiologic observations on feline immunodeficiency virus and Toxoplasma gondii coinfection in cats in Baltimore, Md. Witt CJ, et al. **J Am Vet Med Assoc** 1989 Jan 15; 194(2):229–33
The histopathological picture of concomitant infection with Leishmania major and Toxoplasma gondii in albino mice. Abdel Wahab RM, et al. **J Egypt Soc Parasitol** 1989 Jun; 19(1):1–12
[Spontaneous mixed infections with distemper virus and Toxoplasma in dogs] Ehrensperger F, et al. **DTW** 1989 Apr;96(4):184–6 (Eng. Abstr.) (Ger)

CONGENITAL

Myositis in mice with congenital toxoplasmosis. Hay J, et al. **Ann Trop Med Parasitol** 1988 Dec;82(6):631–3
Demonstration of Toxoplasma gondii antigen in stillborn piglets using immunoperoxidase technique. Haritani M, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):954–6
Congenital toxoplasmosis in Abyssinian cats. Dubey JP, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):261–4

DIAGNOSIS

Serologic diagnosis of toxoplasmosis in cats fed Toxoplasma gondii tissue cysts. Dubey JP, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1297–9
Clinical feline toxoplasmosis. Serologic diagnosis and therapeutic management of 15 cases. Lappin MR, et al. **J Vet Intern Med** 1989 Jul–Sep;3(3):139–43
Serodiagnosis of ovine toxoplasmosis: an assessment of the latex agglutination test and the value of IgM specific titres after experimental oocyst-induced infections. Trees AJ, et al. **Res Vet Sci** 1989 Jan;46(1):67–72
Diagnosis of ovine toxoplasmosis [letter] Trees AJ, et al. **Vet Rec** 1988 Nov 19;123(21):554
Detection of Toxoplasma gondii in liver tissue sections from brown hares (Lepus europaeus P.) and mountain hares (Lepus timidus L.) using the peroxidase anti-peroxidase (PAP) technique as a complement to conventional histopathology. Gustafsson K, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):402–7
[The importance of the microprecipitation reaction in agar in the diagnosis of toxoplasmosis] Bozděch V, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jan;38(1):35–9 (Eng. Abstr.) (Cze)
[Study results and outlook on the problem of toxoplasmosis] Nikiforov VN, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug; (4):36–40 (69 ref.) (Rus)

DRUG THERAPY

Chemotherapy of experimental toxoplasmosis with special reference to robenidine. Bakhtari SK, et al. **Folia Parasitol (Praha)** 1988;35(3):193–8
Activity of spiramycin against Toxoplasma gondii in vitro, in experimental infections and in human infection. Chang HR, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:87–92
The effect of some drugs on acute toxoplasmosis in mice. Hamadto HH, et al. **J Egypt Soc Parasitol** 1989 Dec; 19(2):523–6
Use of monensin sodium against Toxoplasma [letter] Lawrence K. **Vet Rec** 1988 Sep 17;123(12):323
Alternative to monensin in sheep [letter] Millard KW, et al. **Vet Rec** 1989 May 20;124(20):547

ENZYMOLOGY

Aminopeptidase activity in the brains of mice with chronic Toxoplasma gondii infections. Akao S, et al. **Parasitol Res** 1989;75(3):186–8

EPIDEMIOLOGY

Helminthiasis and toxoplasmosis among exotic mammals at the Santiago National Zoo. Gorman TR, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1068–70
Epizootic of toxoplasmosis in kangaroos, wallabies, and potaroos: possible transmission via domestic cats. Patton S, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1166–9
The prevalence of Toxoplasma gondii antibodies among cats from Mahalla El-Kobra, Gharbia Governorate. Abu-Zakham AA, et al. **J Egypt Soc Parasitol** 1989 Jun; 19(1):225–9
Toxoplasmosis in black-faced kangaroos (Macropus fuliginosus melanops). Dubey JP, et al. **Vet Parasitol** 1988 Dec;30(2):97–105
[Epidemiological study on Toxoplasma infection in human beings and animals in Shandong Province] Zhang GN. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Feb; 10(1):30–3 (Eng. Abstr.) (Chi)
[Toxoplasma gondii infections and oocyst shedding in domestic cats and the significance of this for the epidemiology and epizootiology of toxoplasmosis] Knaus BU, et al. **Angew Parasitol** 1989 May;30(2):155–60 (Eng. Abstr.) (Ger)
[Toxoplasma gondii infection among wild and domestic animals] Dymon M, et al. **Wiad Parazytol** 1988; 34(4–6):690–704 (117 ref.) (Eng. Abstr.) (Pol)
[The incidence of toxoplasmosis among wild vertebrates of Turkmenia (based on serologic data)] Berdyev AS, et al. **Parazitologiia** 1988 Sep–Oct;22(5):378–83 (Eng. Abstr.) (Rus)
[Epidemiology of toxoplasmosis in Chile. IV. Prevalence of infection in domestic animals from rural-periurban localities of the first 7 regions of Chile, 1982–1985] Schenone H, et al. **Bol Chil Parasitol** 1987 Jul–Dec; 42(3–4):76–9 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Resistance to avirulent Toxoplasma gondii in normal and vaccinated rats. Pettersen EK. **APMIS** 1988 Sep; 96(9):820–4
Absence of a role for natural killer cells in the control of acute infection by Toxoplasma gondii oocysts. Hughes HP, et al. **Clin Exp Immunol** 1988 Jun;72(3):394–9
Regulation of immunoglobulin E production in mice immunized with an extract of Toxoplasma gondii. Watanabe N, et al. **Infect Immun** 1989 May;57(5):1405–8
Detection of antigens in urine during acute toxoplasmosis. Huskinson J, et al. **J Clin Microbiol** 1989 May; 27(5):1099–101
Immune responses associated with early survival after peroral infection with Toxoplasma gondii. McLeod R, et al. **J Immunol** 1989 May 1;142(9):3247–55
Cytotoxic activity of monocytes against Toxoplasma gondii in acute, chronic and reactivated murine toxoplasmosis. Goyal M, et al. **Med Microbiol Immunol (Berl)** 1988; 177(6):339–48
Immunological response in experimentally reactivated toxoplasmosis in mice. Goyal M, et al. **Med Microbiol Immunol (Berl)** 1989;178(5):269–78
Augmented production of gamma interferon in mice experimentally infected with Toxoplasma gondii. Shirahata T, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):380–8
Induction of a protective antibody-dependent response against toxoplasmosis by in vitro excreted/secreted antigens from tachyzoites of Toxoplasma gondii. Darcy F, et al. **Parasite Immunol** 1988 Sep;10(5):553–67

Titration of Toxoplasma gondii oocysts in non-pregnant sheep and the effects of subsequent challenge during pregnancy. McColgan C, et al. **Vet Rec** 1988 Oct 29; 123(18):467–70

Evidence of structural proteins of Toxoplasma gondii in sera of experimentally infected mice. Hasal A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):310–2

[Enhancement of resistance of mice Toxoplasma gondii by 2 polysaccharides beta 1–3, beta 1–6 (PSAT and Scleroglucan)] Bousquet M, et al. **Ann Parasitol Hum Comp** 1988;63(6):398–409 (Eng. Abstr.) (Fre)

PARASITOLOGY

Pathogenicity of Toxoplasma gondii cysts and oocysts measured by fever and weight loss in mice. Johnson AM. **Int J Parasitol** 1988 Sep;18(6):865–8

Differences in virulence and development of encephalitis during chronic infection vary with the strain of Toxoplasma gondii. Suzuki Y, et al. **J Infect Dis** 1989 Apr; 159(4):790–4

Host–parasite relationship in the brains of mice with congenital toxoplasmosis. Sims TA, et al. **J Pathol** 1988 Nov;156(3):255–61

Fatal toxoplasmosis and enteroepithelial stages of Toxoplasma gondii in a Pallas cat (Felis manul). Dubey JP, et al. **J Protozool** 1988 Nov;35(4):528–30

PATHOLOGY

An electron microscope and immunohistochemical study of the intracellular location of Toxoplasma tissue cysts within the brains of mice with congenital toxoplasmosis. Sims TA, et al. **Br J Exp Pathol** 1989 Jun;70(3):317–25

Treatment with anti-L3T4 (CD4) monoclonal antibody reduces the inflammatory response in toxoplasmic encephalitis. Israelski DM, et al. **J Immunol** 1989 Feb 1; 142(3):954–8

Tissue cyst rupture in mice chronically infected with Toxoplasma gondii. An immunocytochemical and ultrastructural study. Ferguson DJ, et al. **Parasitol Res** 1989;75(8):599–603

Lesions in goats fed Toxoplasma gondii oocysts. Dubey JP. **Vet Parasitol** 1989 Jul 15;32(2–3):133–44

PHYSIOPATHOLOGY

Effect of ambient temperature changes on chronic toxoplasmosis in rats. Hamadto HH, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):527–32

[Neurohumoral and immune homeostasis in experimental toxoplasmosis in white rats] P'lanova RE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):75–80 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Importance of endogenous IFN-gamma for prevention of toxoplasmic encephalitis in mice. Suzuki Y, et al. **J Immunol** 1989 Sep 15;143(6):2045–50

Monensin and toxoplasmosis in sheep [letter] Trees AJ. **Vet Rec** 1989 Jul 29;125(5):116

TRANSMISSION

On a unique tribute to Theobald Smith, 1915 [letter] Frenkel J. **Rev Infect Dis** 1988 Sep–Oct;10(5):1061–2

TOXOPLASMOSIS, CONGENITAL

Recent investigations of toxoplasmosis II. Congenital toxoplasmosis and its role in neonatology. Durković-Daković O, et al. **Acta Med Iugosl** 1988; 42(5):391–405

Congenital toxoplasmosis [letter] Ferson MJ, et al. **Med J Aust** 1989 Jan 16;150(2):110

[Congenital toxoplasmosis] Lappalainen M, et al. **Duodecim** 1988;104(4):239–46 (Fin)

[Case of congenital toxoplasmosis] Gracheva LI, et al. **Pediatriia** 1988;(9):88–9 (Rus)

COMPLICATIONS

Congenital toxoplasmosis presenting as massive neonatal ascites. Vanhaesebrouck P, et al. **Helv Paediatr Acta** 1988 Aug;43(1–2):97–101

Multiple intrauterine/neonatal infections. Kagalwala TY, et al. **Indian Pediatr** 1989 Feb;26(2):177–80

Congenital skin defects, twins and toxoplasmosis. McCrossin DB, et al. **J R Soc Med** 1989 Feb;82(2):108–9

DIAGNOSIS

Should we expand the TORCH complex? A description of clinical and diagnostic aspects of selected old and new agents. Kinney JS, et al. **Clin Perinatol** 1988 Dec; 15(4):727–44 (119 ref.)

T-cell subpopulations of fetuses infected by Toxoplasma gondii [letter] Lecolier B, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):572–3

Diagnosis of congenital toxoplasmosis in Scotland. Chatterton JM, et al. **J Infect** 1989 May;18(3):249–55

The use of an IgM immunosorbent agglutination assay to diagnose congenital toxoplasmosis. Skinner LJ, et al. **J Med Microbiol** 1989 Feb;28(2):125–8

Prenatal diagnosis of fetal infection: advances from amniocentesis to cordocentesis—congenital toxoplasmosis, rubella, cytomegalovirus, varicella virus, parvovirus and human immunodeficiency virus. Grose C, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):459–68 (65 ref.)

Use of an IgM-ELISA for diagnosis of acute toxoplasmosis. Wieland F. **Wiad Parazytol** 1988;34(3):255–8

[Comparison of ELIFA and IGM-immunocapture technics in the diagnosis of 50 cases of congenital toxoplasmosis] Poirriez J, et al. **Ann Biol Clin (Paris)** 1988;46(10):811–4 (Eng. Abstr.) (Fre)

[Sonographic demonstration of intracranial changes in congenital toxoplasmosis] Schwalbe J. **Padiatr Grenzgeb** 1988;27(4):239–44 (Eng. Abstr.) (Ger)

[Prenatal diagnosis of congenital toxoplasmosis] Taglioretti A, et al. **Ann Ostet Ginecol Med Perinat** 1989 Jan–Feb; 110(1):49–54 (Eng. Abstr.) (Ita)

[Diagnosis of congenital toxoplasmosis in the first year of life] Szczepańska-Putz M. **Pediatr Pol** 1988 Oct; 63(10):626–32 (Eng. Abstr.) (Pol)

[Evaluation of the results of serologic studies in routine diagnosis of toxoplasmosis in Poland] Zemburowa K, et al. **Wiad Parazytol** 1988;34(4–6):705–11 (Pol)

[Let us eliminate subjectivity in assessing the toxoplasmosis problem (a comment on the article by A. Ia. Lyaenko and M. M. Asatova, "Toxoplasmosis: facts and conjectures. 3. Congenital toxoplasmosis", printed in Meditsinskaia parazitologiia i parazitarnye bolezni No. 6, 1986)] Karimova DF. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):92–3 (Rus)

EPIDEMIOLOGY

Toxoplasmosis in Australia [letter] Robertson PW, et al. **Med J Aust** 1979 Oct 20;2(8):430

[Congenital toxoplasmosis and its social and economic significance] Filippova-Nutrikhina ZL, et al. **Pediatriia** 1989;(2):96–100 (66 ref.) (Rus)

ETIOLOGY

Congenital acquired immunodeficiency syndrome and congenital toxoplasmosis: pathologic support for a chronology of events. Cohen-Addad NE, et al. **J Perinatol** 1988 Fall;8(4):328–31

IMMUNOLOGY

Simultaneous serological screening for congenital cytomegalovirus and toxoplasma infection. Joss AW, et al. **Public Health** 1988 Sep;102(5):409–17

MORTALITY

[Generalized congenital toxoplasmosis as the cause of death of a newborn infant] Duchiński W, et al. **Wiad Lek** 1988 Jul 1;41(13):884–9 (Eng. Abstr.) (Pol)

PATHOLOGY

An electron microscope and immunohistochemical study of the intracellular location of Toxoplasma tissue cysts within the brains of mice with congenital toxoplasmosis. Sims TA, et al. **Br J Exp Pathol** 1989 Jun;70(3):317–25

[Severe fetopathy—toxoplasma despite serologic screening. A case report] Mayer HO, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):504–5 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Prophylaxis of congenital toxoplasmosis. Effects of spiramycin on placental infection. Couvreur J, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:193–200

Screening for congenital cytomegalovirus and toxoplasmosis [letter] Ho-Yen DO. **Lancet** 1989 Sep 30;2(8666):803

Screening for toxoplasma in pregnancy [letter] Salmon RL. **Lancet** 1988 Nov 5;2(8619):1085–6

Maternal and congenital toxoplasmosis. Is prevention possible? Rosenfeld JA. **Postgrad Med** 1988 Dec; 84(8):187–90

[Clinical aspects of Toxoplasma primary infection in pregnancy] Scheibe J, et al. **Angew Parasitol** 1988 Jun; 29(2):81–4 (Eng. Abstr.) (Ger)

[Preventive studies of congenital toxoplasmosis based on studies conducted in other countries] Rydzewski A. **Wiad Parazytol** 1988;34(4–6):713–8 (Pol)

[Congenital toxoplasmosis and its prevention] Shevkunova EA. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):40–6 (53 ref.) (Eng. Abstr.) (Rus)

TOXOPLASMOSIS, OCULAR

Toxoplasmic retinochoroiditis—a historical review and current concepts. Dutton GN. **Ann Acad Med Singapore** 1989 Mar;18(2):214–21 (99 ref.)

Outer retinal toxoplasmosis. Matthews JD, et al. **Ophthalmology** 1988 Jul;95(7):941–6

Toxoplasmic scleritis. Schuman JS, et al. **Ophthalmology** 1988 Oct;95(10):1399–403

BLOOD

[Morphologic changes of the nucleolar system of lymphocytes as the indicator of sensitivity to tuberculin and Toxoplasma antigen] Gavrilova LO, et al. **Pediatriia** 1989;(7):43–7 (Eng. Abstr.) (Rus)

COMPLICATIONS

Ocular toxoplasmosis in patients with the acquired immunodeficiency syndrome. Holland GN, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):653–67

Acute unilateral toxoplasmic iridocyclitis in an AIDS patient. Rehder JR, et al. **Am J Ophthalmol** 1988 Dec 15; 106(6):740–1

Unilateral pigmentary retinopathy associated with ocular toxoplasmosis. Silveira C, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):682–4

Toxoplasmic retinochoroiditis as an emerging problem in AIDS patients [editorial] Smith RE. **Am J Ophthalmol** 1988 Dec 15;106(6):738–9

DIAGNOSIS

Optic neuritis due to acquired toxoplasmosis. Roach ES, et al. **Pediatr Neurol** 1985 Mar–Apr;1(2):114–6

[Retinitis in AIDS patients: diagnosis, follow-up and treatment] Hansen LL, et al. **Fortschr Ophthalmol** 1989; 86(3):232–8 (Eng. Abstr.) (Ger)

[Evaluation of the results of serologic studies in routine diagnosis of toxoplasmosis in Poland] Zemburowa K, et al. **Wiad Parazytol** 1988;34(4–6):705–11 (Pol)

[Positive diagnosis and treatment of ocular toxoplasmosis] Popa DP, et al. **Rev Chir [Oftalmol]** 1988 Jul–Sep; 32(3):161–6 (Eng. Abstr.) (Rum)

DRUG THERAPY

[Stevens-Johnson syndrome and toxoplasmic choroiditis] Mimoun G, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep; 88(8–9):961–5 (14 ref.) (Fre)

[Treatment of ocular toxoplasmosis] Lukasik-Czerkowa A. **Klin Oczna** 1988 Mar;90(3):96–7 (Eng. Abstr.) (Pol)

EPIDEMIOLOGY

[Serum survey of toxoplasmosis in ophthalmic patients] Liu FH. **Chung Hua Yen Ko Tsa Chih** 1988 May;24(3):171–2 (Chi)

ETIOLOGY

Experimental ocular toxoplasmosis with RH strain of Toxoplasma gondii. Malla N, et al. **Jpn J Exp Med** 1988 Dec;58(6):279–81

IMMUNOLOGY

Lymphocyte proliferative responses of patients with ocular toxoplasmosis to parasite and retinal antigens. Nussenblatt RB, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):632–41

[The effect of a subretinal injection of Toxoplasma gondii on the serum antibody titer in a rabbit model of ocular toxoplasmosis] Friedrich R, et al. **Angew Parasitol** 1989 Feb;30(1):15–7 (Eng. Abstr.) (Ger)

[Clinico-immunological characteristics of patients with ocular toxoplasmosis] Shcheulov AP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):65–9 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Isotypic characterization of anti-Toxoplasma gondii antibodies in 18 cases of congenital toxoplasmic chorioretinitis. Poirriez J, et al. **Acta Ophthalmol (Copenh)** 1989 Apr;67(2):164–8

PARASITOLOGY

Invasion of the guinea pig conjunctiva by Toxoplasma gondii. Skorich DN, et al. **Invest Ophthalmol Vis Sci** 1988 Dec; 29(12):1871–80

[Toxoplasma study of uveitis patients] Wang CG. **Chung Hua Yen Ko Tsa Chih** 1988 Mar;24(2):101–2 (Eng. Abstr.) (Chi)

PATHOLOGY

[Intraocular in vivo immunofluorescence] Scheiffarth OF, et al. **Fortschr Ophthalmol** 1988;85(6):716–8 (Eng. Abstr.) (Ger)

SURGERY

Endolaser photocoagulation of toxoplasmosis. Steahly LP. **Ann Ophthalmol** 1988 Dec;20(12):463–5

Laser treatment of toxoplasmosis. Steahly LP. **Ann Ophthalmol** 1989 Jan;21(1):36–8

TOYOCAMYCIN see under **ANTIBIOTICS, AMINOGLYCOSIDE**

TOYOMICIN see under **CHROMOMYCINS**

TOYS see **PLAY AND PLAYTHINGS**

TPN see **NADP**

TRABECULAR MESHWORK

Human trabecular meshwork organ culture. Urakawa Y, et al. **Jpn J Ophthalmol** 1988;32(4):401–11

ANALYSIS

Analysis of the proteins of calf and cow trabecular meshwork: development of a model system to study aging effects and glaucoma. Russell P, et al. **Exp Eye Res** 1989 Feb;48(2):251–60

Fibronectin detection in drainage outflow system of human eyes in ageing and progression of open-angle glaucoma. Babizhayev MA, et al. **Mech Ageing Dev** 1989 Feb; 47(2):145–57

[Cytochemical localization of actin filaments in endothelial cells of rabbit trabecular meshwork] Kobayashi T, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar;93(3):389–95 (Eng. Abstr.) (Jpn)

CYTOLOGY

Trabecular repopulation by anterior trabecular meshwork cells after laser trabeculoplasty. Acott TS, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):1–6

Does pigmentation affect the trabecular meshwork? Johnson DH. **Arch Ophthalmol** 1989 Feb;107(2):250–4

The effect of organ culture on human trabecular meshwork. Johnson DH, et al. **Exp Eye Res** 1989 Jul;49(1):113–27

DRUG EFFECTS

The effect of epinephrine and benzalkonium chloride on cultured corneal endothelial and trabecular meshwork cells. Samples JR, et al. **Exp Eye Res** 1989 Jul;49(1):1–12

The effect of platelet-derived growth factor on phagocytosis of cultured human trabecular cells. Tamura M, et al. **Exp Eye Res** 1989 Jun;48(6):761–70

Hydrocortisone-induced DNA endoreplication in human trabecular cells in vitro. Tripathi BJ, et al. **Exp Eye Res** 1989 Aug;49(2):259–70

Effects of betaxolol/timolol on epinephrine stimulated cyclic-AMP levels in human trabecular meshwork cells. Polansky J, et al. **Int Ophthalmol** 1989 Jan;13(1–2):95–7

Dexamethasone induces specific proteins in human trabecular meshwork cells. Partridge CA, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1843–7

[The effect of levobunolol eyedrops on trabecular outflow of aqueous humor in chronic simple glaucoma] Călugăru M. **Klin Monatsbl Augenheilkd** 1989 Mar;194(3):164–9 (Eng. Abstr.) (Ger)

EMBRYOLOGY

Neural crest origin of trabecular meshwork cells and other structures of the anterior chamber [editorial] Kaiser-Kupfer MI. **Am J Ophthalmol** 1989 Jun 15; 107(6):671–2

ENZYMOLOGY

Neural crest origin of human trabecular meshwork and its implications for the pathogenesis of glaucoma. Tripathi BJ, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):583–90

[The acid phosphatase, alkaline phosphatase, lactate dehydrogenase, and succinate dehydrogenase in the endothelium on the trabecular meshwork in primary glaucoma] Wang JH, et al. **Yen Ko Hsueh Pao** 1988 Dec; 4(4):210–2, 224 (Eng. Abstr.) (Chi)

[Ultracytochemical study of Ca++-ATPase activity in rabbit trabecular meshwork] Kobayashi T, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar;93(3):396–403 (Eng. Abstr.) (Jpn)

METABOLISM

Presence and distribution of vimentin in cynomolgus monkey trabecular cells. Ken J, et al. **Anat Rec** 1988 Dec; 222(4):309–16

Experimental formation of 100 nm periodic fibrils in the mouse corneal stroma and trabecular meshwork. Hirano K, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):869–74

Effects of dopamine receptor activation on the level of cyclic AMP in the trabecular meshwork. Karnezis TA, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1090–4

Characterization of beta-adrenergic receptors in cultured human trabecular cells and in human trabecular meshwork. Wax MB, et al. **Invest Ophthalmol Vis Sci** 1989 Jan; 30(1):51–7

Arachidonic acid metabolism in human trabecular meshwork cells. Weinreb RN, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1708–12

Immunofluorescence studies of the cytoskeletal and contractile elements in cultured human trabecular cells. Tamura M, et al. **Jpn J Ophthalmol** 1989;33(1):95–102

Fluorescent low density lipoprotein and acetylated low density lipoprotein labeling of cultured bovine trabecular endothelial cells. Ahn BH, et al. **Korean J Ophthalmol** 1987 Dec;1(2):90–4

Monoclonal antibodies and lectins as probes for investigation of the cell biology of human trabecular meshwork: a preliminary report. Tripathi BJ, et al. **Ophthalmic Res** 1989; 21(1):27–32

Prostaglandin production by cultured cynomolgus monkey trabecular meshwork cells. Weinreb RN, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 May; 36(2):97–100

[The participation of fibronectin in the mechanisms of dystrophic changes in the ocular drainage system in open-angle glaucoma] Brodskaia MV, et al. **Vestn Oftalmol** 1988 Nov-Dec;104(6):10–3 (Eng. Abstr.) (Rus)

PATHOLOGY

Trabecular repopulation by anterior trabecular meshwork cells after laser trabeculoplasty [letter] Melamed S. **Am J Ophthalmol** 1989 Aug 15;108(2):209–10

Short-pulsed neodymium-YAG laser trabeculotomy. An in vivo morphological study in the human eye. Lee WR, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1698–707

[Histopathological study of the anterior chamber angle in glaucoma] Li JH. **Chung Hua Yen Ko Tsa Chih** 1988 Jul; 24(4):193–5 (Eng. Abstr.) (Chi)

[The role of the ocular drainage system in progressive myopia] Levchenko OG. **Vestn Oftalmol** 1988 Nov-Dec; 104(6):34–6 (Eng. Abstr.) (Rus)

[Biomicroscopic characterization of the eye drainage zone at a distant period after laser goniopuncture] Litvinova GG, et al. **Vestn Oftalmol** 1988 May-Jun;104(3):14–7 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Trabecular outflow facility determined by fluorophotometry in human subjects. Hayashi M, et al. **Exp Eye Res** 1989 May;48(5):621–5

Phagocytosis by trabecular meshwork cells: sequence of events in cats and monkeys. Sherwood ME, et al. **Exp Eye Res** 1988 Jun;46(6):881–95

Trabecular meshwork cells grown on filters. Conductivity and cytochalasin effects. Perkins TW, et al. **Invest Ophthalmol Vis Sci** 1988 Dec;29(12):1836–46

PHYSIOPATHOLOGY

Obstruction of the trabecular meshwork by retinal rod outer segments. Lambrou FH, et al. **Arch Ophthalmol** 1989 May; 107(5):742–5

Pathophysiology of laser trabeculoplasty. Van Buskirk EM. **Surv Ophthalmol** 1989 Jan-Feb;33(4):264–72 (59 ref.)

[Cofactorial glaucoma—causes] Scullica L. **Klin Monatsbl Augenheilkd** 1989 Mar;194(3):173–7 (35 ref.) (Eng. Abstr.) (Ger)

SECRETION

Proteins secreted by human trabecular cells. Glucocorticoid and other effects. Yun AJ, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2012–22

SURGERY

Trabeculectomy versus trabeculotomy in congenital glaucoma. Debnath SC, et al. **Br J Ophthalmol** 1989 Aug; 73(8):608–11

[Trabeculoretraction (autorecanalization of the scleral sinus)] Alekseev BN. **Vestn Oftalmol** 1988 Jul-Aug;104(4):7–12 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

The sclerocorneal trabecula of the primates. Ruano-Gil D, et al. **Acta Anat (Basel)** 1989;135(2):189–92

Morphologic features of the aqueous humor drainage pathways in horses. Samuelson D, et al. **Am J Vet Res** 1989 May;50(5):720–7

Immunomicroscopical study of type VI collagen in the trabecular meshwork of normal and glaucomatous eyes. Lütjen-Drecoll E, et al. **Exp Eye Res** 1989 Jan;48(1):139–47

The effect of argon laser trabeculoplasty upon the normal human trabecular meshwork. Alexander RA, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):72–7

Sclerocorneal trabecula and glaucoma. A scanning electron microscopic study. Ruano-Gil D, et al. **Prog Clin Biol Res** 1989;295:511–4

[Histochemical and electron microscopic studies of the trabecular meshwork in primary open-angle glaucoma] Li Y, et al. **Yen Ko Hsueh Pao** 1985 Sep;1(1):17–22 (Eng. Abstr.) (Chi)

[Histochemical and electron microscopic studies of the trabecular meshwork in normal human eyes] Yi YZ, et al. **Yen Ko Hsueh Pao** 1985 Sep;1(1):9–16 (Eng. Abstr.) (Chi)

TRABECULECTOMY

Treatment of diabetic neovascular glaucoma by panretinal ablation and trabeculectomy. Fernández-Vigo J, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):612–6

Argon laser trabeculoplasty for chronic angle-closure glaucoma uncontrolled by iridotomy. Shirakashi M, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):265–70

Laser trabeculoplasty versus medication treatment as primary therapy for glaucoma. Tuulonen A, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):275–80

Trabecular repopulation by anterior trabecular meshwork cells after laser trabeculoplasty. Acott TS, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):1–6

Bilateral argon laser trabeculoplasty in primary open-angle glaucoma. Bishop KI, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):591–5

Management of anterior chamber depth after trabeculectomy [letter] Fourman S. **Am J Ophthalmol** 1988 Oct 15; 106(4):508–9

Hypotony following instillation of apraclonidine for increased intraocular pressure after trabeculoplasty. Jampel HD. **Am J Ophthalmol** 1989 Aug 15;108(2):191–2

The effect of repeat argon laser trabeculoplasty. Jorizzo PA, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):682–5

Management of anterior chamber depth after trabeculectomy [letter] Mackool RJ, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):767–8

A review of extracapsular cataract extraction and intraocular lens implantation combined with trabeculectomy. Kriger SH, et al. **Ann Ophthalmol** 1989 Jul;21(7):266–8

Trabeculectomy with cyclocryotherapy for infantile glaucoma in the Sturge-Weber syndrome. Wagner RS, et al. **Ann Ophthalmol** 1988 Aug;20(8):289–91, 295

The Glaucoma Laser Trial. I. Acute effects of argon laser trabeculoplasty on intraocular pressure. Glaucoma Laser Trial Research Group. **Arch Ophthalmol** 1989 Aug; 107(8):1135–42

Laser trabeculoplasty in glaucoma. Ten-year evaluation. Ticho U, et al. **Arch Ophthalmol** 1989 Jun;107(6):844–6

Primary trabeculectomy in congenital glaucoma. Burke JP, et al. **Br J Ophthalmol** 1989 Mar;73(3):188–90

Ptosis following cataract and trabeculectomy surgery. Deady JP, et al. **Br J Ophthalmol** 1989 Apr;73(4):283–5

Trabeculectomy versus trabeculotomy in congenital glaucoma. Debnath SC, et al. **Br J Ophthalmol** 1989 Aug; 73(8):608–11

Early trabeculectomy versus conventional management in primary open angle glaucoma. Jay JL, et al. **Br J Ophthalmol** 1988 Dec;72(12):881–9

Prevention of the immediate intraocular pressure rise following argon laser trabeculoplasty. Metcalfe TW, et al. **Br J Ophthalmol** 1989 Aug;73(8):612–6

Effect of intraocular lens implantation on combined extracapsular cataract extraction with trabeculectomy: a comparative study. Neumann R, et al. **Br J Ophthalmol** 1988 Oct;72(10):741–5

Taxol, cytochalasin B and colchicine effects on fibroblast migration and contraction: a role in glaucoma filtration surgery? Joseph JP, et al. **Curr Eye Res** 1989 Feb; 8(2):203–15

Wound healing as a barrier to successful filtration surgery. Joseph JP, et al. **Eye** 1988;2 Suppl:S113–23 (68 ref.)

Congenital glaucoma: long-term results after surgery. Sampaolesi R. **Fortschr Ophthalmol** 1988;85(6):626–31

The effect of argon laser trabeculoplasty upon the normal human trabecular meshwork. Alexander RA, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):72–7

Raised intraocular pressure with topical steroids after trabeculectomy. Thomas R, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):337–40

Glaucoma triple procedure. Alexander TA, et al. **Indian J Ophthalmol** 1987;35(5–6):282–4

A prospective comparison between trabeculectomy, Scheie's sclerostomy under scleral flap operation and thermal (Sub Scleral Scheie's) procedure. Kalr J, et al. **Indian J Ophthalmol** 1988 Oct-Dec;36(4):158–61

Combined trabeculectomy and cataract extraction—a retrospective study. Prasad VN, et al. **Indian J Ophthalmol** 1988 Oct-Dec;36(4):156–7

Argon laser trabeculoplasty in primary open-angle glaucoma—results in black Jamaican population. Moriarty BJ, et al. **Int Ophthalmol** 1988;12(4):217–21

Long-term results of 5-fluorouracil trabeculectomy for primary open-angle glaucoma. Taniguchi T, et al. **Int Ophthalmol** 1989 Jan;13(1–2):145–9

Consultation section. Superiorly placed trabeculectomy for chronic open angle glaucoma. **J Cataract Refract Surg** 1989 Jul;15(4):458–62

One versus two simultaneous goniotomies as the initial surgical procedure for primary infantile glaucoma. Catalano RA, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jan-Feb;26(1):9–13

Gonioscopic findings in trabeculectomies in young children. Hauviller V. **J Pediatr Ophthalmol Strabismus** 1989 May-Jun;26(3):133–5

Deep sclerectomy with trabeculotomy ab externo: one-stage procedure (DS 1). Harn T, et al. **Ophthalmic Surg** 1989 Jun;20(6):406–9

Morbidity following prolonged postoperative hypotony after trabeculectomy. Migdal C, et al. **Ophthalmic Surg** 1988 Dec;19(12):865–7

Trabeculectomy as an introduction to intraocular surgery in an ophthalmic training program. Morrell AJ, et al. **Ophthalmic Surg** 1989 Aug;20(8):557–60

Comparative study of argon laser trabeculoplasty in primary open-angle and pseudoexfoliation glaucoma. Psilas K, et al. **Ophthalmologica** 1989;198(2):57–63

Corneal endothelial cell density after trabeculoplasty. Rouhiainen H, et al. **Ophthalmologica** 1988;196(4):182–4

Risk factors for the development of Tenon's capsule cysts after trabeculectomy. Feldman RM, et al. **Ophthalmology** 1989 Mar;96(3):336–41

The efficacy and safety of combined trabeculectomy, cataract extraction, and intraocular lens implantation. McCartney DL, et al. **Ophthalmology** 1988 Jun;95(6):754–63

Anterior chamber depth after trabeculectomy [letter] Mackool RJ. **Ophthalmology** 1989 Jul;96(7):1121

Laser suture lysis after trabeculectomy. Savage JA, et al. **Ophthalmology** 1988 Dec;95(12):1631–8

Pathophysiology of laser trabeculoplasty. Van Buskirk EM. **Surv Ophthalmol** 1989 Jan-Feb;33(4):264–72 (59 ref.)

Argon laser trabeculoplasty in primary open angle glaucoma: long-term clinical results and its future. Lee PF, et al.

Yen Ko Hsueh Pao 1986 Jun;2(2):90–4
[Partial trabeculoplasty using the argon laser in the microsurgery of glaucoma] Výborný P, et al. Cesk Oftalmol 1989 Mar;45(2):100–4 (Eng. Abstr.) (Cze)
[Combined extracapsular trabeculectomy and implant of the posterior chamber] Gauthier L, et al. Bull Soc Ophtalmol Fr 1988 Jun–Jul;88(6–7):793–5 (Fre)
[Comparative study of long-term tonometry results of 2 surgical technics combining extraction of the crystalline lens and trabeculectomy] Karray H, et al. Bull Soc Ophtalmol Fr 1988 Jan;88(1):59–62, 65 (Fre)
[Trabeculoretraction using argon laser and open-angle glaucoma: results after 4 years] Madelain J, et al. Bull Soc Ophtalmol Fr 1988 Aug–Sep;88(8–9):1041–5 (Eng. Abstr.) (Fre)
[Medium-term tonometric results of trabeculectomies performed after trabeculoretraction using an argon laser in chronic primary open-angle glaucoma] Demailly P, et al. J Fr Ophtalmol 1989;12(1):41–5 (Eng. Abstr.) (Fre)
[Argon laser trabeculoplasty in the treatment of primary open-angle glaucoma] Andreanos D, et al. Ophtalmologie 1988 Nov–Dec;2(5):439–41 (Eng. Abstr.) (Fre)
[Indications for combined surgery in cataract associated with glaucoma] Chachia N, et al. Ophtalmologie 1988 Apr–Jun; 2(2):81–3 (Eng. Abstr.) (Fre)
[Chronic open-angle glaucoma treated by trabecular retraction using an argon laser. Results over 4 years in the first 200 cases] Moulin F, et al. Ophtalmologie 1988 Apr–Jun;2(2):75–80 (Eng. Abstr.) (Fre)
[Goniotrepanation in the treatment of pseudoexfoliative glaucoma] Kontić D, et al. Fortschr Ophthalmol 1988; 85(6):635–6 (Eng. Abstr.) (Ger)
[Long-term tonometry control of laser therapy of open-angle glaucoma] Malagola R, et al. Fortschr Ophthalmol 1988; 85(4):366–8 (Eng. Abstr.) (Ger)
[Cataract operation with posterior chamber lens implantation following filtering glaucoma operation] Schelenz J, et al. Fortschr Ophthalmol 1988;85(4):381–4 (Eng. Abstr.) (Ger)
[Laser trabeculoplasty in glaucoma chronicum simplex. Results of a prospective, clinical study] Vogel M, et al. Klin Monatsbl Augenheilkd 1988 Jul;193(1):8–15 (Eng. Abstr.) (Ger)
[Effectiveness of repeat laser trabeculoplasty in open-angle glaucoma] Akopian VS, et al. Vestn Oftalmol 1988 Nov–Dec;104(6):16–9 (Eng. Abstr.) (Rus)
[Intracapsular implantation of the Saturn-type intraocular lens during simultaneous cataract extraction and trabeculectomy] Bocharov VE, et al. Vestn Oftalmol 1989 May–Jun;105(3):12–6 (Eng. Abstr.) (Rus)
[Laser trabeculoplasty and the status of the crystalline lens in open-angle glaucoma] Kazakova EL. Vestn Oftalmol 1989 Jan–Feb;105(1):10–3 (Eng. Abstr.) (Rus)
[Effectiveness of laser trabeculoplasty in primary open-angle and pseudoexfoliative glaucoma] Krasnov MM, et al. Vestn Oftalmol 1988 May–Jun;104(3):10–4 (Eng. Abstr.) (Rus)
[Argon laser trabeculoplasty in the treatment of primary closed-angle glaucoma] Juhás T. Cesk Oftalmol 1989 May; 45(3):197–205 (Eng. Abstr.) (Slo)
[Argon laser trabeculoplasty in the treatment of secondary glaucoma] Juhás T. Cesk Oftalmol 1989 Mar;45(2):105–10 (Eng. Abstr.) (Slo)

ADVERSE EFFECTS

Filtering bleb thrombolysis with tissue plasminogen activator. Ortiz JR, et al. Am J Ophthalmol 1988 Nov 15;106(5):624–5
Transconjunctival reopening of an occluded filtration fistula with the Q-switched neodymium-YAG laser. van Rens GH. Doc Ophthalmol 1988 Oct–Nov;70(2–3):205–8
Medical management of a high bleb phase after trabeculectomies. Scott DR, et al. Ophthalmology 1988 Sep; 95(9):1169–73
[Hypertensive reaction after argon laser trabecular retraction in the treatment of open-angle glaucoma] Pedrotti M. Ophtalmologie 1988 Nov–Dec;2(5):443–5 (Eng. Abstr.) (Fre)
[Complications of argon laser trabeculoplasty] Juhás T, et al. Cesk Oftalmol 1989 Mar;45(2):111–21 (Eng. Abstr.) (Slo)

METHODS

The effects of different energy levels in argon laser trabeculoplasty. Hugkulstone CE. Acta Ophthalmol (Copenh) 1989 Jun;67(3):271–4
Trabecular repopulation by anterior trabecular meshwork cells after laser trabeculoplasty [letter] Melamed S. Am J Ophthalmol 1989 Aug 15;108(2):209–10
Argon laser trabeculoplasty five years on. Brooks AM, et al. Aust N Z J Ophthalmol 1988 Nov;16(4):343–51 (19 ref.)
Pulsed neodymium-YAG laser trabeculotomy: energy requirements and replicability. Dutton GN, et al. Br J Ophthalmol 1989 Mar;73(3):177–81
Triple procedure: penetrating keratoplasty, trabeculectomy and cataract extraction. Barraquer J, et al. Dev Ophthalmol 1989;18:142–5
Primary congenital glaucoma clinical presentation and evaluation of modified trabeculectomy. Bhade AV, et al. Indian J Ophthalmol 1987;35(5–6):265–70
Trabeculectomy vs goniopunch--combined with cataract extraction. Khurana AK, et al. Indian J Ophthalmol 1988 Apr–Jun;36(2):71–3
Irrigating needle goniotomy. Murthy KR. Indian J Ophthalmol 1987;35(5–6):271–3
[Glaucoma cataract (personal technic)] Peyresblanques J. Bull Soc Ophtalmol Fr 1988 Apr;88(4):539–40, 542 (Fre)
[Combined trabeculotomy and trabeculectomy in primary congenital glaucoma] Turut P, et al. Bull Soc Ophtalmol Fr 1988 Aug–Sep;88(8–9):1021–4 (Eng. Abstr.) (Fre)
[Laser trabeculoplasty: argon laser or krypton laser?] Brancato R, et al. Ophtalmologie 1988 Jul–Sep;2(3):221–2 (Eng. Abstr.) (Fre)
[Microtrabeculoprosthesis. A new technic for shielded filtration] Kamoun M, et al. Ophtalmologie 1988 Jul–Sep; 2(3):227–9 (Eng. Abstr.) (Fre)
[Goniotrepanation with an inverse-folded flap] Hennekes R, et al. Fortschr Ophthalmol 1988;85(4):373–4 (Eng. Abstr.) (Ger)
[Long-term results following goniotrepanation (Elliot-Fronimopoulos)] Meyer-Rüsenberg HW, et al. Fortschr Ophthalmol 1988;85(4):375–7 (Eng. Abstr.) (Ger)
[Surgical anatomy of covered goniotrepanation] Schnaudigel OE. Fortschr Ophthalmol 1988;85(5):467–9 (Eng. Abstr.) (Ger)
[Long-term results following argon laser trabeculoplasty] Lund OE, et al. Klin Monatsbl Augenheilkd 1988 Dec; 193(6):572–8 (Eng. Abstr.) (Ger)
[Laser trabeculoplasty in the treatment of glaucoma] Kałużny J, et al. Klin Oczna 1988 Oct;90(10):359–61 (Eng. Abstr.) (Pol)
[Immediate and long-term results of modified trabeculectomy] Cherkunov BF, et al. Vestn Oftalmol 1988 May–Jun;104(3):7–10 (Eng. Abstr.) (Rus)

TRABECULOPLASTY see TRABECULECTOMY

TRACE ELEMENTS

Nutritional significance of the ultratrace elements. Nielsen FH. Nutr Rev 1988 Oct;46(10):337–41 (35 ref.)
Placental handling of trace elements. Shennan DB, et al. Placenta 1988 May–Jun;9(3):333–43 (62 ref.)
Silicon as a trace nutrient. Carlisle EM. Sci Total Environ 1988 Jul 1;73(1–2):95–106
[Studies on the stability of ternary complexes of glycine and DL-alanine with Cu(II), Ni(II), Co(II) and Zn(II)] He XW, et al. Hua Hsi I Ko Ta Hsueh Hsueh Pao 1988 Sep; 19(3):320–3 (Eng. Abstr.) (Chi)
[Studies on the stability of complexes of Cu(II), Ni(II), Zn(II) and Co(II) with DL-alanine and DL-valine] Zhou JY, et al. Hua Hsi I Ko Ta Hsueh Hsueh Pao 1988 Dec; 19(4):422–5 (Eng. Abstr.) (Chi)
[Trace elements: endocrine-metabolic correlations] Relli P, et al. G Clin Med 1988 May;69(5):371–8 (55 ref.) (Ita)

ADMINISTRATION & DOSAGE

Parenteral and partial enteral nutrition, essential fatty acids and trace elements [letter] O'Connor CJ, et al. N Z Med J 1989 May 10;102(867):233–4
[Trace elements in artificial nutrition. Art and practice] Saudin F, et al. Ann Fr Anesth Reanim 1988;7(4):320–32 (69 ref.) (Eng. Abstr.) (Fre)
[Hygienic significance of microelements in drinking water with low mineral level] Kondratiuk VA. Gig Sanit 1989 Feb;(2):81–2 (Rus)

ADVERSE EFFECTS

Trypanosoma lewisi: effects of trace metal contaminants on immunological responses. Hogan Y, et al. J Natl Med Assoc 1988 Nov;80(11):1217–27 (47 ref.)
[Oligo-elements and uremic encephalopathy: speculations and reality] Balestri PL. Recenti Prog Med 1989 Jan; 80(1):33–6 (26 ref.) (Ita)

ANALYSIS

The levels of zinc in breast milk of urban African women in Zimbabwe. Nyazema NZ, et al. Afr J Med Med Sci 1989 Jun;18(2):159–62
Spectrographic analysis of trace elements in archaeological skeletal material from Florida: a preliminary report. Iscan MY, et al. Am J Phys Anthropol 1989 Aug;79(4):483–8
A method for the indirect determination of trace bound selenomethionine in plants and some biological materials. Ouyang Z, et al. Anal Biochem 1989 Apr;178(1):77–81
Identification and quantitation of arsenic species in a dogfish muscle reference material for trace elements. Beauchemin D, et al. Anal Chem 1988 Oct 15;60(20):2209–12
Quantitative trace element analysis of microdroplet residues by secondary ion mass spectrometry. Odom RW, et al. Anal Chem 1988 Oct 1;60(19):2070–5
Evaluation of inductively coupled plasma mass spectrometry for the determination of trace elements in foods. Satzger RD. Anal Chem 1988 Nov 15;60(22):2500–4
Determination of trace elements in a marine reference material of lobster hepatopancreas (TORT-1) using inductively coupled plasma mass spectrometry. Ridout PS, et al. Analyst 1988 Sep;113(9):1363–6
Trace metals in organisms from ocean disposal sites of the middle eastern United States. Greig RA, et al. Arch Environ Contam Toxicol 1977;6(4):395–409
Hair trace elements and mental retardation among children. Shrestha KP, et al. Arch Environ Health 1988 Nov–Dec; 43(6):396–8
Food processing and trace element supply. Sandström B. Bibl Nutr Dieta 1989;(43):165–72 (28 ref.)
Trace elements in meconium from preterm and full-term infants. Friel JK, et al. Biol Neonate 1989;55(4–5):214–7
Potential of inductively coupled plasma mass spectrometry for trace element metabolism studies in man. Dalgarno BG, et al. Biomed Environ Mass Spectrom 1988 Oct; 16(1–12):377–80
Minerals and trace elements in total diets in The Netherlands. van Dokkum W, et al. Br J Nutr 1989 Jan;61(1):7–15
Analysis of magnesium and trace elements in urinary calculi by atomic absorption spectrophotometry. Durak I, et al. Br J Urol 1988 Sep;62(3):203–5
Survey of trace elements in human nails: an international comparison. Takagi Y, et al. Bull Environ Contam Toxicol 1988 Nov;41(5):690–5
Discriminant analysis of trace element distribution in normal and malignant human tissues. Drake EN 2d, et al. Cancer Res 1989 Aug 1;49(15):4210–5
X-ray microanalysis of the element content in the hearts of mice treated with digoxin. Djaldetti M, et al. Cardiology 1988;75(5):344–7
Micro-quantity tissue digestion for metal measurements by use of a microwave acid-digestion bomb. Nicholson JR, et al. Clin Chem 1989 Mar;35(3):488–90
Concentrations of some trace elements (Se, Zn, Cu, Fe, Mg, K) in blood and heart tissue of patients with coronary heart disease. Oster O, et al. Clin Chem 1989 May;35(5):851–6
Trace elements in blood cells of diabetic subjects. Raz I, et al. Diabetes Res 1989 Jan;10(1):21–4
A study of the trace elements in human cataractous lenses and sera. Sethi A, et al. Indian J Ophthalmol 1987; 35(5–6):201–3
Investigation of ischaemic necrosis of the femoral head with trace elements. Milachowski KA. Int Orthop 1988; 12(4):323–30
The rapid decomposition of biological materials by using a microwave acid digestion bomb. Stripp RA, et al. J Anal Toxicol 1989 Jan–Feb;13(1):57–9
Trace element analyses in pseudoxanthoma elasticum. Kanzaki T, et al. J Dermatol (Tokyo) 1988 Apr;15(2):99–103
A newly designed high-pressure wet digester and its application to trace element analysis in human body. Qiao WJ, et al. J Tongji Med Univ 1988;8(1):51–5
Trace element imbalances in hair and nails of Alzheimer's disease patients. Vance DE, et al. Neurotoxicology 1988 Summer;9(2):197–208
Serum and tissue trace metal levels in lung cancer. Diez M, et al. Oncology 1989;46(4):230–4
Hair mineral analysis: biochemical imbalances and violent criminal behavior. Cromwell PF, et al. Psychol Rep 1989 Feb;64(1):259–66
Total and extractable contents of trace metals in agricultural soils of the Valderas area, Spain. Aller AJ, et al. Sci Total Environ 1989 Apr;79(3):253–70
Effect of applications of sewage sludge on N, P, K, Ca, Mg and trace element contents of plant tissues. Couillard D, et al. Sci Total Environ 1989 May 15;80(2–3):113–25
A study of the sources of external metal contamination of hair. Doi R, et al. Sci Total Environ 1988 Dec; 77(2–3):153–61
Multielemental assay of tissues of deceased smelter workers and controls. Gerhardsson L, et al. Sci Total Environ 1988 Aug 1;74:97–110
The assessment of air and soil as contributors of some trace metals to vegetable plants. I. Use of a filtered air growth cabinet. Harrison RM, et al. Sci Total Environ 1989 Jul 1;83(1–2):13–34
Geotoxicology of multiple sclerosis: the Henribourg, Saskatchewan, Cluster Focus. I. The water. Irvine DG, et al. Sci Total Environ 1989 Aug;84:45–59
Trace elements intake in the Faroe Islands. III. Element concentrations in human organs in populations from Bergen (Norway) and the Faroe Islands. Julshamn K, et al. Sci Total Environ 1989 Aug;84:25–33
Elevated lead concentrations in Japanese ribs of the Edo era (300–120 BP). Kosugi H, et al. Sci Total Environ 1988 Oct 15;76(2–3):109–15
Trace element profiles in oesophageal neoplasms determined by proton-induced X-ray emission. Lal M, et al. Sci Total Environ 1989 Jan;78:167–72
Accumulation of trace elements in the fruiting bodies of macrofungi in the Krušné Hory Mountains Czechoslovakia. Lepiová A, et al. Sci Total Environ 1988 Oct 15; 76(2–3):117–28
Concentrations of some trace elements in hair, liver and kidney from autopsy subjects--relationship between hair and internal organs. Muramatsu Y, et al. Sci Total Environ 1988 Sep 15;76(1):29–40
Trace element analysis in environmental and occupational health: box plot representation of elemental composition results. Nicolaou G, et al. Sci Total Environ 1989 May 15; 80(2–3):167–74
Salts as a source of metals in dialysis fluids: an assessment study by means of neutron activation analysis. Sabbioni E, et al. Sci Total Environ 1989 Aug;84:13–23
Trace element residues in bluegills and common carp from the lower San Joaquin River, California, and its tributaries

[published erratum appears in Sci Total Environ 1988 Nov 1;77(1):91] Saiki MK, et al. **Sci Total Environ** 1988 Aug 1;74:199–217

Trace elements in hair: a study of residents in Darjeeling (India) and San Diego, California (U.S.A). Shrestha KP, et al. **Sci Total Environ** 1989 Mar;79(2):171–7

The effect of ambient cadmium air pollution on the hair mineral content of children. Stewart-Pinkham SM. **Sci Total Environ** 1989 Jan;78:289–96

Sex- and age-related variation in elemental concentrations of contemporary Japanese ribs. Yoshinaga J, et al. **Sci Total Environ** 1989 Apr;79(3):209–21

Multivariate data analysis of sea waters and mussels in relation to pollution sources of trace elements. Favretto L, et al. **Z Lebensm Unters Forsch** 1988 Jul;187(1):8–14

Chemometric studies of some trace elements in cows' milk. Favretto LG, et al. **Z Lebensm Unters Forsch** 1989 Aug; 189(2):123–7

Trace elements in excavated human hair. Grupe G, et al. **Z Morphol Anthropol** 1989;77(3):297–308

Sequential changes of mineral and trace elements in milk during the course of endotoxin-induced mastitis as analyzed by particle induced -X-ray (PIXE), -gamma-ray emission (PIGE) and ion selective electrodes. Lappalainen R, et al. **Zentralbl Veterinarmed** [B] 1988 Nov;35(9):664–76

[Observation on trace elements in anorexia in children] Xu CZ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Dec; 8(12):723–5, 708–9 (Eng. Abstr.) (Chi)

[Determination of trace elements in the Chinese herbal medicines Salvia yunnanensis etc. and their clinical significance] Zhao X, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul;8(7):419–20, 390 (Eng. Abstr.) (Chi)

[Particle induced X-ray emission for trace element analysis of hairs from patients with cancer] Yao HY, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):92–4 (Eng. Abstr.) (Chi)

[Trace elements in human bone in the Beijing area by neutron activation analysis] Lin LQ, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Mar; 22(2):98–100 (Eng. Abstr.) (Chi)

[A probe into the relation of the effects of Chinese medicine and four trace elements] Chen HL. **Chung Kuo Chung Yao Tsa Chih** 1989 Mar;14(3):36–9, 63 (Eng. Abstr.) (Chi)

[Analysis and comparison of amino acids and trace elements of rhizoma dioscoreae] Hang YY, et al. **Chung Yao Tung Pao** 1988 Jul;13(7):37–9, 63 (Eng. Abstr.) (Chi)

[Analysis and comparison of microelements in Rehmannia glutinosa Libosch, and its processed products] Ni MY. **Chung Yao Tung Pao** 1988 Apr;13(4):18–9, 62 (Eng. Abstr.) (Chi)

[Analysis of trace elements in Chinese traditional drugs and their preparation] Yao GG. **Chung Yao Tung Pao** 1988 Apr; 13(4):55–6, 64 (30 ref.) (Eng. Abstr.) (Chi)

[Study of K, Na, Ca, Mn, Cu, Fe, Zn and Mg in the human lens] Hu YZ, et al. **Yen Ko Hsueh Pao** 1985 Sep;1(1):29–33 (Eng. Abstr.) (Chi)

[Epidemiologic study on the content of some trace elements in saliva in relation to caries pathology during the developing age] Cantoni E, et al. **Minerva Stomatol** 1988 Dec;37(12):935–45 (Eng. Abstr.) (Ita)

[Trace elements in raw materials and nutrient media for cultivation of antibiotic-producing organisms] Romantseva LM, et al. **Antibiot Khimioter** 1988 Sep;33(9):643–6 (Eng. Abstr.) (Rus)

[Comparative study of the macro- and microelemental composition of the hair on the head in inhabitants of various regions] Pavlov IuV, et al. **Fiziol Cheloveka** 1989 Jan–Feb; 15(1):154–61 (Rus)

[Microelement composition of the hair of workers in the ceramic paint industry] Liubchenko PN, et al. **Gig Tr Prof Zabol** 1989;(3):7–9 (Eng. Abstr.) (Rus)

[Determination of microelements in human hair using an atomic absorption spectrophotometer] Iudina TV, et al. **Lab Delo** 1989;(6):74–5 (Rus)

[Analysis of the composition of the microelements in the hair of normal subjects and in disseminated sclerosis] Mzhel'skaia TI, et al. **Lab Delo** 1989;(1):20–4 (Eng. Abstr.) (Rus)

[Direct atomic absorption determination of the 3d elements (Fe, Cu, Mn, Co, Ni) and zinc in biological material] Shamgunov AN, et al. **Lab Delo** 1989;(1):25–8 (Eng. Abstr.) (Rus)

[The content of calcium, magnesium, sodium, potassium and phosphorus of the hair in patients with alcoholism] Skal'nyi AV, et al. **Lab Delo** 1989;(2):42–4 (Eng. Abstr.) (Rus)

[Mineral composition of watermelon pulp in relation to the degree of ripeness and the region of its cultivation] Sukholotiuk II, et al. **Vopr Pitan** 1988 Sep–Oct;(5):68–9 (Rus)

[Disruption of the electrolyte and microelement composition of gastric juice and bile in patients with chronic diseases of the hepatobiliary system] Gubergrits AIa, et al. **Vrach Delo** 1989 May;(5):64–6 (Eng. Abstr.) (Rus)

[The effect of growth stimulators on the levels of various trace elements in chickens] Tokošová M. **Vet Med (Praha)** 1989 Feb;34(2):107–12 (Eng. Abstr.) (Slo)

[Deficit of essential elements in children of Antofagasta. Analysis by neutron activation] Jamett A, et al. **Rev Med Chil** 1987 Dec;115(12):1139–43 (Eng. Abstr.) (Spa)

BLOOD

Alcohol intake correlated with serum trace elements. Kärkkäinen P, et al. **Alcohol Alcohol** 1988;23(4):279–82

Trace element status in multiple sclerosis. Smith DK, et al. **Am J Clin Nutr** 1989 Jul;50(1):136–40

Trace metals, surface receptors and growth of human normal and leukemic lymphocytes. Carpentieri U, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1393–7

Blood vitamin and trace metal levels in epidermolysis bullosa. Fine JD, et al. **Arch Dermatol** 1989 Mar;125(3):374–9

Studies on antepartum prolapse of the vagina in buffalo—plasma trace element concentrations. Kelkar MA, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):315–8

Vanadium and other trace elements in patients taking lithium. Campbell CA, et al. **Biol Psychiatry** 1988 Nov;24(7):775–81

Serum trace elements in juvenile chronic arthritis. Honkanen V, et al. **Clin Rheumatol** 1989 Mar;8(1):64–70

Hyperinsulinaemia and trace metals [letter] Nestler JE, et al. **Diabetologia** 1988 Nov;31(11):858

The X-ray microanalysis method for investigation of chemical composition of normal and pathologic human peripheral blood lymphocytes. Pilch J, et al. **Folia Haematol (Leipz)** 1988;115(5):727–35

Trace metals in neonatal hyperbilirubinemia. Misra PK, et al. **Indian Pediatr** 1988 Aug;25(8):761–4

Problems involving the use of aspiration flame atomic absorption spectroscopy in the estimation of metals in plasma, serum or whole blood. Haider S, et al. **JPMA** 1989 Jan;39(1):17–8

Study of trace elements in patients with rheumatoid arthritis stage I–II, before and after treatment. Georgescu C, et al. **Med Interne** 1982 Oct–Dec;20(4):271–5

Trace element alterations in infectious diseases. Srinivas U, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):495–500

Trace element levels in the blood of workers in two steel works and a non-ferrous plant handling lead and cadmium compared with a non-exposed population. Triger DR, et al. **Sci Total Environ** 1989 Jan;78:241–61

[Concentration of trace elements in the maternal serum in fetal anomalies] Marinov B, et al. **Akush Ginekol (Sofiia)** 1988;27(3):31–3 (Eng. Abstr.) (Bul)

[Zinc, copper, calcium, magnesium, iron and respiratory disease] Dang KS. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):341–3, 385 (Eng. Abstr.) (Chi)

[Changes in serum levels of trace elements in normal pregnancy and placental barrier modulation] Fu YL. **Chung Hua Fu Chan Ko Tsa Chih** 1988 May;23(3):135–8, 188 (Eng. Abstr.) (Chi)

[Relation of trace elements and lipids in erythrocytes and coronary artery stenosis] Wang XF, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Dec; 16(6):347–9, 383 (Eng. Abstr.) (Chi)

[The behavior of trace elements in bronchial carcinoma] Dawczynski H, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(6):344–7 (Eng. Abstr.) (Ger)

[Problems of mineral therapy in pregnancy] Piccione E. **Clin Ter** 1988 Jun 15;125(5):375–8 (22 ref.) (Ita)

[Changes in biochemical indicators after exposure to carbon disulfide] Pavlova SD, et al. **Gig Tr Prof Zabol** 1988 Sep; (9):12–5 (Eng. Abstr.) (Rus)

[Indicators of lipid peroxidation and the level of essential microelements in healthy newborn infants and in those with a history of intrauterine hypotrophy] Deshchekina MF, et al. **Pediatriia** 1989;(3):18–21 (Eng. Abstr.) (Rus)

[Trace element content of the blood in patients with chronic nonspecific lung diseases] Tadzhiev FS, et al. **Probl Tuberk** 1988;(8):51–3 (Eng. Abstr.) (Rus)

[Indices of bioelement metabolism in patients with psoriasis] Dovzhanskil SI, et al. **Vestn Dermatol Venerol** 1988;(9):25–7 (Eng. Abstr.) (Rus)

[Mineral metabolism and tissue-specific cytotoxic activity of the blood serum in the progeny in chronic alcoholic intoxication of the progenitors] Skal'nyi AV, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):107–9 (Eng. Abstr.) (Rus)

[Determination of trace elements, ceruloplasmin and blood proteins in pulmonary neoplasms] Giménez Martín E, et al. **Rev Esp Oncol** 1985;32(4):633–40 (Eng. Abstr.) (Spa)

DEFICIENCY

Nutrition and behavior. Lozoff B. **Am Psychol** 1989 Feb; 44(2):231–6 (13 ref.)

Clinical aspects of vitamin and trace element metabolism. Shenkin A. **Baillieres Clin Gastroenterol** 1988 Oct; 2(4):765–98 (80 ref.)

Advances in trace elements research in nutrition. Kirchgessner M. **Bibl Nutr Dieta** 1988;(42):70–87 (79 ref.)

Esophageal cancer and microelements. Barch DH. **J Am Coll Nutr** 1989 Apr;8(2):99–107 (85 ref.)

Carcinogenesis as the result of the deficiency of some essential trace elements. Marczynski B. **Med Hypotheses** 1988 Aug;26(4):239–49 (89 ref.)

ISOLATION & PURIFICATION

Methods of removing external metal contamination from hair samples for environmental monitoring. Raghupathy L, et al. **Sci Total Environ** 1988 Dec;77(2–3):141–51

METABOLISM

Trace element metabolism in adult patients requiring total parenteral nutrition. Fleming CR. **Am J Clin Nutr** 1989 Mar;49(3):573–9 (64 ref.)

Trace element nutrition in infants. Lönnerdal B. **Annu Rev Nutr** 1989;9:109–25 (108 ref.)

Correlation between some selected trace metal concentrations in six species of fish from the Arabian Sea. Ashraf M, et al. **Bull Environ Contam Toxicol** 1988 Jul; 41(1):86–93

Comparative effects of chelating drugs on trace metal and biochemical alterations in the rat. Misra M, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):172–84

The role of trace elements in male infertility. Abou-Shakra FR, et al. **Fertil Steril** 1989 Aug;52(2):307–10

Essential trace metal concentrations in beagle liver and bone tissue after prolonged Zn-DTPA treatment. Jones CW, et al. **Health Phys** 1989 Feb;56(2):223–7

Trace minerals and the kidney: an overview. Lindeman RD. **J Am Coll Nutr** 1989 Aug;8(4):285–91 (37 ref.)

Antioxidant enzymes and related trace elements in aging brain capillaries and choroid plexus. Tayarani I, et al. **J Neurochem** 1989 Sep;53(3):817–24

Effect of molybdenum supplementation on hepatic trace elements and enzymes of female rats. Yang MT, et al. **J Nutr** 1989 Feb;119(2):221–7

Diabetes mellitus: the trace element connection. Manser WW. **JPMA** 1989 Apr;39(4):91–3

Sex dependent differences in trace element levels in rat tissues. Wachnik A, et al. **Nahrung** 1988;32(10):999–1001

Trace element losses during bed rest. **Nutr Rev** 1988 Nov; 46(11):379–81

Factors influencing the uptake of trace elements from the digestive tract. Sandström B. **Proc Nutr Soc** 1988 Jul; 47(2):161–7 (58 ref.)

The assessment of air and soil as contributors of some trace metals to vegetable plants. II. Translocation of atmospheric and laboratory-generated cadmium aerosols to and within vegetable plants. Harrison RM, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):35–45

The assessment of air and soil as contributors of some trace metals to vegetable plants. III. Experiments with field-grown plants. Harrison RM, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):47–62

Investigations of trace elements in metastases and primary carcinoma of the prostate. Feustel A, et al. **Urol Res** 1989; 17(2):107–9

[Levels of trace elements in the serum, urine and feces in patients with Crohn's disease] Bastens B, et al. **Acta Gastroenterol Belg** 1987 Sep–Oct;50(5):560–73 (Eng. Abstr.) (Fre)

[Trace metal metabolism disorders associated with alcoholism] Tanikawa K, et al. **Nippon Rinsho** 1988 Aug; 46(8):1778–83 (Jpn)

[Studies of the presence and levels of trace elements in trophoblasts from spontaneous and induced abortions] Lembrych S, et al. **Ginekol Pol** 1988 Jun;59(6):353–7 (Eng. Abstr.) (Pol)

[Iron, copper and zinc in the female system during pregnancy. II. Iron, copper and zinc levels in the blood serum, hair and saliva] Zimna-Walendzik E, et al. **Ginekol Pol** 1988 Sep;59(9):543–7 (Eng. Abstr.) (Pol)

[Changes in the content of iron, copper and manganese in animals during disadaptation caused by heavy loads] Rusin VIa, et al. **Biol Nauki** 1989;(2):51–5 (Eng. Abstr.) (Rus)

[The significance of trace elements in the development of iron-deficiency anemia in the Volga River basin] Shustov VIa. **Gematol Transfuziol** 1988 Jun;33(6):32–5 (Eng. Abstr.) (Rus)

[Trace element composition of bone tissue of mice in the normal state and in hypokinesia] Burkovskaia TE, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):51–6 (Eng. Abstr.) (Rus)

[Changes in microelement, prostaglandin and cyclic nucleotide levels in the bile of patients at the early periods after cholecystectomy] Vygodner EB, et al. **Ter Arkh** 1989; 61(2):55–8 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Trace metal interactions involving the intestinal absorption mechanisms of iron and zinc. Flanagan PR. **Adv Exp Med Biol** 1989;249:35–44 (69 ref.)

[Effects of total parenteral nutrition containing essential trace elements on their concentrations in rats] Matsuda A, et al. **Nippon Eiseigaku Zasshi** 1989 Feb;43(6):1140–8 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

Effect of trace metals on the synthesis of toxic shock syndrome toxin 1. Reeves MW. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S145–49; discussion S149–50

PHYSIOLOGY

Recent developments in trace element metabolism and function: trace elements, disease resistance and immune responsiveness in ruminants. Suttle NF, et al. **J Nutr** 1989 Jul;119(7):1055–61 (34 ref.)

[The essentiality of trace elements] Schmidt LH. **Pharmazie** 1989 Jun;44(6):377–80 (25 ref.) **(Ger)**

[Essential aspects of trace elements] Schmidt LH. **Z Arztl Fortbild (Jena)** 1988;82(9):397–400 (20 ref.) **(Ger)**

[Cellular homeostasis and trace elements] Avtsyn AP, et al. **Arkh Patol** 1988;50(9):6–11 (47 ref.) (Eng. Abstr.) **(Rus)**

[Trace elements in medical practice] Frenk S, et al. **Gac Med Mex** 1988 Jan–Feb;124(1–2):1–18 **(Spa)**

THERAPEUTIC USE

Chemoprevention of lung cancer. Problems and progress. Greenwald P, et al. **Chest** 1989 Jul;96(1 Suppl):14S–17S (11 ref.)

TOXICITY

Retinal toxicity of trace elements. Khosla PK, et al. **Indian J Ophthalmol** 1987;35(5–6):311–4

Influence of trace metals on serum total sialic acids and perchloric acid—soluble proteins and sialic acids in mice. Patel AB, et al. **J Appl Toxicol** 1989 Feb;9(1):67–8

Studies on the etiology of trace metal–induced porphyria: effects of porphyrinogenic metals on coproporphyrinogen oxidase in rat liver and kidney. Woods JS, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):183–90

TRACHEA

see related
ANESTHESIA, INTRATRACHEAL
INTUBATION, INTRATRACHEAL

Tracheobronchial foreign bodies. A persistent problem in pediatric patients. Puhakka H, et al. **Am J Dis Child** 1989 May;143(5):543–5

Foreign bodies in the tracheobronchial tree: a review of 102 cases in Benghazi, Libya. Agarwal RK, et al. **Ann Trop Paediatr** 1988 Dec;8(4):213–6 (11 ref.)

Foreign body in the trachea: a case report. Amin MN, et al. **Bangladesh Med Res Counc Bull** 1988 Dec;14(2):87–9

Respiratory failure caused by intratracheal saline: additive effect of xanthine oxidase. Saugstad OD, et al. **Biol Neonate** 1988;54(2):61–7

Vessel dilator cricothyrotomy for transtracheal jet ventilation. Boyce JR, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):350–3

Hazards associated with passage of nasogastric tubes into the trachea [letter] Dodd CM, et al. **Can J Anaesth** 1988 Sep;35(5):541–2

Percutaneous transtracheal ventilation. Jorden RC. **Emerg Med Clin North Am** 1988 Nov;6(4):745–52 (30 ref.)

Laryngo–tracheo–bronchial foreign bodies in children. Banerjee A, et al. **J Laryngol Otol** 1988 Nov; 102(11):1029–32

A coin as a tracheal foreign body for 30 years. Su CY. **J Laryngol Otol** 1989 Aug;103(8):798–800

Tracheobronchial foreign bodies in the Middle East. A Baghdad study. Elhassani NB. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):621–5

Radiological findings in tracheo–bronchial foreign body aspiration. Hussain S, et al. **JPMA** 1988 Dec;38(12):328–9

A simple technique for repeated intratracheal instillation of foreign material in newborn rabbits. Venkatesh VC, et al. **Lab Anim Sci** 1988 Oct;38(5):618–9

Fiberoptic identification of the obscured trachea. Drucker C, et al. **Laryngoscope** 1989 Apr;99(4):456

The optimal dose of atropine via the endotracheal route. Lee PL, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Mar;27(1):35–8

Foreign bodies in the laryngotracheobronchial tree. Razi Hadi A, et al. **Med J Malaysia** 1988 Mar;43(1):74–83

Foreign bodies in the larynx and tracheo–bronchial tree. Yip CH, et al. **Med J Malaysia** 1988 Jun;43(2):150–4

Cafe coronary: recognition, treatment and prevention. Kitay G, et al. **Nurse Pract** 1989 Jun;14(6):35–8, 43, 46

Near–miss asphyxiation from a toy ball: a small parts failure. Baker MD. **Pediatr Emerg Care** 1989 Mar;5(1):34–6

[Tracheal access for jet ventilation in otorhinolaryngologic surgery] Vilette B, et al. **Cah Anesthesiol** 1988 Jun–Jul; 36(4):275–9 (14 ref.) **(Fre)**

[Tracheobronchial foreign body aspiration in children. Report of over 94 patients] Steen KH, et al. **Monatsschr Kinderheilkd** 1989 Mar;137(3):138–43 (Eng. Abstr.) **(Ger)**

[Tracheobronchial foreign bodies in childhood] Bevilacqua A, et al. **Minerva Med** 1988 Dec;79(12):1121–48 (48 ref.) **(Ita)**

[A tracheobronchial foreign body tolerated for 41 days] Pănescu V, et al. **Rev Chir [Otorinolaringol]** 1988 Oct–Dec; 33(4):293–4 (Eng. Abstr.) **(Rum)**

[Iatrogenic bilateral pneumothorax after tracheostomy in childhood] Kharitonov VA, et al. **Pediatriia** 1988;(7):88 **(Rus)**

[Removal of foreign bodies from the upper sections of the gastrointestinal tract and tracheobronchial tree] Chalyĭ NN, et al. **Voen Med Zh** 1988 Jun;(6):56–7 **(Rus)**

ABNORMALITIES

Congenital laryngo–tracheo–oesophageal cleft. Report of a case with difficulties of diagnosis and treatment. Jørgensen K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:105–7

Histochemical study of normal and collapsed tracheas in dogs. Dallman MJ, et al. **Am J Vet Res** 1988 Dec; 49(12):2117–25

Lightwand intubation in children with abnormal upper airways. Holzman RS, et al. **Anesthesiology** 1988 Nov; 69(5):784–7

Short trachea, a hazard in tracheal intubation of neonates and infants: syndromal associations. Wells AL, et al. **Anesthesiology** 1989 Sep;71(3):367–73

G syndrome and its otolaryngologic manifestations. Howell L, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):185–90 (18 ref.)

Laryngotracheoesophageal cleft: endoscopic diagnosis and surgical repair. Chitwood WR Jr, et al. **Ann Thorac Surg** 1989 Aug;48(2):292–4

Vascular sling with tracheomalacia: surgical management. Conti VR, et al. **Ann Thorac Surg** 1989 Feb;47(2):310–1

Tracheal agenesis. A case report and literature review. Diaz EM Jr, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun; 115(6):741–5 (41 ref.)

Fetal lung growth in laryngeal atresia and tracheal agenesis. Scurry JP, et al. **Aust Paediatr J** 1989 Feb;25(1):47–51

Tracheal agenesis. Niranjan V, et al. **Indian J Pediatr** 1988 Jul–Aug;55(4):635–7

Total laryngotracheal hypoplasia in a case of G syndrome. Buckley JG, et al. **J Laryngol Otol** 1988 Nov; 102(11):1056–9 (20 ref.)

Treatment of laryngotracheoesophageal cleft. Ogawa T, et al. **J Pediatr Surg** 1989 Apr;24(4):341–2

Association of tracheoesophageal anomalies with visceral and parietal malformations in a human embryo (Carnegie stage 21). Nebot–Cegarra J, et al. **Teratology** 1989 Jan;39(1):11–7

[Congenital laryngo–tracheo–esophageal cleft] Sørensen JA, et al. **Ugeskr Laeger** 1989 Jan 2;151(1):9–11 (Eng. Abstr.) **(Dan)**

[Tracheal agenesis] Branger B, et al. **Arch Fr Pediatr** 1989 May;46(5):359–62 (14 ref.) (Eng. Abstr.) **(Fre)**

[Congenital tracheal stenosis due to complete circular rings. Tracheoplasty using autologous pericardium] Chambran P, et al. **Presse Med** 1988 Oct 15;17(35):1810–2 (Eng. Abstr.) **(Fre)**

[Agenesis of the trachea] Herbert M, et al. **Pathologe** 1988 Sep;9(5):313–7 (16 ref.) **(Ger)**

[Total laryngo–tracheo–esophageal cleft with situs inversus totalis, aplasia of the right diaphragm and hypoplasia of the lung on the right side] Heitmann F, et al. **Z Geburtshilfe Perinatol** 1988 Jul–Aug;192(4):181–3 (Eng. Abstr.) **(Ger)**

[Tracheal agenesis: which surgical measures are sensible?] Zimmermann H, et al. **Z Kinderchir** 1988 Dec;43(6):414–6 (Eng. Abstr.) **(Ger)**

[A case of tracheal agenesis] Ishii K, et al. **Rinsho Hoshasen** 1989 Jan;34(1):161–3 (Eng. Abstr.) **(Jpn)**

[Tracheal bronchus in a child] Poliakov VV, et al. **Pediatriia** 1988;(4):85–6 **(Rus)**

[Agenesis of the trachea: apropos of a case] Esque Ruiz MT, et al. **An Esp Pediatr** 1988 Aug;29(2):185–7 (12 ref.) **(Spa)**

[Agenesis of the trachea. Presentation of a case and review of the literature] Arizmendi–Dorantes JG, et al. **Bol Med Hosp Infant Mex** 1989 Apr;46(4):285–8 (21 ref.) (Eng. Abstr.) **(Spa)**

ANALYSIS

Protein components of human tracheobronchial mucin: partial characterization of a closely associated 65–kilodalton protein. Ringler NJ, et al. **Biochemistry** 1988 Oct 18;27(21):8056–63

Transepithelial prostacyclin gradient in isolated canine trachea. Eidelman DH, et al. **J Appl Physiol** 1989 Jul; 67(1):276–81

Electrolyte and other chemical concentrations in tracheal airway surface liquid and mucus. Robinson NP, et al. **J Appl Physiol** 1989 May;66(5):2129–35

Antagonists and agonists interactions with the muscarinic receptor of the rat large airways. Scott T, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):136–42

Purification and reconstitution of chloride channels from kidney and trachea. Landry DW, et al. **Science** 1989 Jun 23;244(4911):1469–72

ANATOMY & HISTOLOGY

The use of the internal perimeter to compare airway size and to calculate smooth muscle shortening. James AL, et al. **Am Rev Respir Dis** 1988 Jul;138(1):136–9

Structure of the guinea–pig trachea at rest and in contraction. Amiri MH, et al. **Anat Embryol (Berl)** 1988;178(5):389–97

Dimensions of the trachea to age 6 years related to height. Griscom NT, et al. **Pediatr Pulmonol** 1989;6(3):186–90

The position of the trachea in infants and children with right aortic arch. Strife JL, et al. **Pediatr Radiol** 1989;19(4):226–9

The use of the DENTACRYL rapid (Spofa) resin for preparation of the rat tracheobronchial casts. Havránková J, et al. **Z Versuchstierkd** 1989;32(2):97–100

[Morphological study as to the appropriate size of an endotracheal tube size] Sato K, et al. **Masui** 1988 Nov; 37(11):1388–93 (Eng. Abstr.) **(Jpn)**

[Prevention of tracheo–innominate fistula following tracheostomy: anatomic relations of the trachea and brachiocephalic trunk] Rodrigues Júnior AJ, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jan–Feb;43(1):71–4 (Eng. Abstr.) **(Por)**

BLOOD SUPPLY

Effects of neuropeptides and capsaicin on tracheobronchial blood flow of the pig. Matran R, et al. **Acta Physiol Scand** 1989 Mar;135(3):335–42

Vagally mediated vasodilatation by motor and sensory nerves in the tracheal and bronchial circulation of the pig. Matran R, et al. **Acta Physiol Scand** 1989 Jan;135(1):29–37

Pulmonary and systemic blood flow contributions to upper airways in canine lung. Barman SA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1130–5

Passive sensitization and antigen challenge increase vascular permeability in rat airways. Sertl K, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1295–9

Effects of neuropeptides and capsaicin on the canine tracheal vasculature in vivo. Salonen RO, et al. **Br J Pharmacol** 1988 Dec;95(4):1262–70

Morphological studies on the venous drainage of the trachea in the neck of sheep. Barrow RE, et al. **Can J Vet Res** 1989 Jul;53(3):255–8

Substance P–induced increase in vascular permeability in the rat trachea does not depend on neutrophils or other components of circulating blood. Bethel RA, et al. **Exp Lung Res** 1988;14(6):769–79

Neurally mediated increase in vascular permeability in the rat trachea: onset, duration, and tachyphylaxis. Brokaw JJ, et al. **Exp Lung Res** 1988;14(6):757–67

Tracheal mucosal blood flow responses to autonomic agonists. Barker JA, et al. **J Appl Physiol** 1988 Aug; 65(2):829–34

Airway blood flow response to eucapnic dry air hyperventilation in sheep. Parsons GH, et al. **J Appl Physiol** 1989 Mar;66(3):1443–7

CYTOLOGY

The analysis of mineral deposits and proteoglycans content in the cartilage of mouse trachea using PIXE in combination with proton microprobe. Cichocki T, et al. **Acta Histochem (Jena)** 1989;85(1):39–45

In vitro and in vivo growth and differentiation of clones of tracheal basal cells. Inayama Y, et al. **Am J Pathol** 1989 Mar;134(3):539–49

Differentiated properties of rabbit tracheal epithelial cells in primary culture. Liedtke CM. **Am J Physiol** 1988 Dec;255(6 Pt 1):C760–70

Uptake, release and novel species–dependent oxygenation of arachidonic acid in human and animal airway epithelial cells. Holtzman MJ, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):401–13

Effects of bryostatins and retinoic acid on phorbol ester– and diacylglycerol–induced squamous differentiation in human tracheobronchial epithelial cells. Jetten AM, et al. **Cancer Res** 1989 Jul 15;49(14):3990–5

Squamous differentiation in normal and transformed rat tracheal epithelial cells. Nettesheim P, et al. **Carcinogenesis** 1989 Apr;10(4):743–8

Changes in response to, and production of, transforming growth factor type beta during neoplastic progression in cultured rat tracheal epithelial cells. Terzaghi–Howe M. **Carcinogenesis** 1989 Jun;10(6):973–80

Multistep process of squamous differentiation in tracheobronchial epithelial cells in vitro: analogy with epidermal differentiation. Jetten AM. **Environ Health Perspect** 1989 Mar;80:149–60 (155 ref.)

Effect of substratum and retinoids upon the mucosecretory differentiation of airway epithelial cells in vitro. Rearick JI, et al. **Environ Health Perspect** 1989 Mar;80:229–37 (62 ref.)

Secretions from primary hamster tracheal surface epithelial cells in culture: mucin–like glycoproteins, proteoglycans, and lipids. Kim KC, et al. **Exp Lung Res** 1989 Mar; 15(2):299–314

Ciliated cells in vitamin A–deprived cultured hamster tracheal epithelium do divide. Rutten AA, et al. **In Vitro Cell Dev Biol** 1988 Sep;24(9):931–5

Chloride transport in apical membrane vesicles from bovine tracheal epithelium: characterization using a fluorescent indicator. Fong P, et al. **J Membr Biol** 1988 Sep; 104(3):233–9

Stimulation of ciliary activity by indomethacin in rabbit tracheal epithelial organ culture. Tamaoki J, et al. **Respiration** 1988;54(2):127–31

Changes in the tracheal ciliated cells in rabbits treated by cis–diamminedichloroplatinum (II) as studied by electron microscopy. Albertsson M, et al. **Scanning Microsc** 1988 Dec;2(4):2173–9

The development of ciliated and mucus cells from basal cells in hamster tracheal epithelial cell cultures. Moller PC, et al. **Tissue Cell** 1989;21(2):195–8

[Inhibitory effects of secretio bufonis on carcinogenesis of the rat trachea with chick embryonic skin in culture] Zhu YM, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan; 9(1):29–30, 6 (Eng. Abstr.) **(Chi)**

DRUG EFFECTS

Role of platelet activating factor in the endotoxin induced tracheal hyperreactivity to histamine in the guinea pig. Nijkamp FP, et al. **Agents Actions** 1989 Jan;26(1–2):117–8

Analysis of the beta–adrenoceptor mediated inhibition of IgG1 and IgE dependent guinea–pig anaphylactic tracheal smooth muscle contraction. van Amsterdam RG, et al. **Agents Actions** 1989 Jan;26(1–2):48–51

Biochemical mechanisms in the effects of kerosene on airways of experimental animals. Garcia Mesa M, et al. **Allergol Immunopathol (Madr)** 1988 Sep-Oct;16(5):363-7
Effects of formaldehyde on normal xenotransplanted human tracheobronchial epithelium. Ura H, et al. **Am J Pathol** 1989 Jan;134(1):99-106
Toxicity of eosinophil cationic proteins for guinea pig tracheal epithelium in vitro. Motojima S, et al. **Am Rev Respir Dis** 1989 Mar;139(3):801-5
Effect of nipradilol, a new beta-blocker, on leukotriene D4-induced contraction in guinea pig tracheal smooth muscle. Sugiyama S, et al. **Am Rev Respir Dis** 1988 May; 137(5):1045-7
Adenosine-mediated cyclic AMP-dependent inhibition of ciliary activity in rabbit tracheal epithelium. Tamaoki J, et al. **Am Rev Respir Dis** 1989 Feb;139(2):441-5
Effects of enflurane on contractile response of canine trachealis muscle. Kochi T, et al. **Anesth Analg** 1989 Jul; 69(1):60-8
Interference of WEB 2086 and BN 52021 with Paf-induced effects on guinea-pig trachea. Brunelleschi S, et al. **Br J Pharmacol** 1989 Jun;97(2):469-74
Phospholipase A2 induced airway hyperreactivity to cooling and acetylcholine in rat trachea: pharmacological modulation. Chand N, et al. **Br J Pharmacol** 1988 Aug; 94(4):1057-62
Endotoxin-induced hyperreactivity of the guinea-pig isolated trachea coincides with decreased prostaglandin E2 production by the epithelial layer. Folkerts G, et al. **Br J Pharmacol** 1989 Feb;96(2):388-94
Beta-adrenoceptor stimulation inhibits histamine-stimulated inositol phospholipid hydrolysis in bovine tracheal smooth muscle. Hall IP, et al. **Br J Pharmacol** 1988 Dec; 95(4):1204-12
Cholecystokinin-octapeptide constricts guinea-pig and human airways. Stretton CD, et al. **Br J Pharmacol** 1989 Jul;97(3):675-82
Purine receptors and guinea-pig trachea: evidence for a direct action of ATP. Welford LA, et al. **Br J Pharmacol** 1988 Nov;95(3):689-94
Tracheal responsiveness to histamine, PAF-acether and acetylcholine in normal and actively ovalbumin-sensitized guinea pigs. Medeiros YS, et al. **Braz J Med Biol Res** 1989; 22(1):97-101
Effect of Desmodium adscendens fractions on antigen- and arachidonic acid-induced contractions of guinea pig airways. Addy ME, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):820-5
Pharmacology of L-660,711 (MK-571): a novel potent and selective leukotriene D4 receptor antagonist. Jones TR, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):17-28
Leukotriene and anti-IgE induced contractions of human isolated trachea: studies with leukotriene receptor antagonists and a novel 5-lipoxygenase inhibitor. Jones TR, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):762-8
The detection of DNA-protein cross-links in rat tracheal implants exposed in vivo to benzo[a]pyrene and formaldehyde. Cosma GN, et al. **Cancer Lett** 1988 Sep-Oct; 42(1-2):13-21
Ascorbic acid inhibits the squamous metaplasia that results from treatment of tracheal explants with asbestos or benzo[a]pyrene-coated asbestos. Holtz G, et al. **Cancer Lett** 1988 Sep-Oct;42(1-2):23-8
In vitro morphological changes induced by 4-(methylnitrosamino)-1-(3-pyridyl)-1-(butanone) in fetal hamster respiratory tract tissue. Joshi PA, et al. **Cancer Lett** 1989 Mar;44(3):173-8
Sensitivity of hamster tracheal epithelial cells to asbestiform minerals modulated by serum and by transforming growth factor beta 1. Sesko AM, et al. **Cancer Res** 1989 May 15; 49(10):2743-9
2,3,7,8-Tetrachlorodibenzo-p-dioxin enhancement of N-methyl-N'-nitro-N-nitrosoguanidine-induced transformation of rat tracheal epithelial cells in culture. Tanaka N, et al. **Cancer Res** 1989 May 15;49(10):2703-8
Azelastine inhibits agonist-induced electromechanical activity in canine tracheal muscle. Lee HK, et al. **Chest** 1989 Sep;96(3):665-9
Effect of nedocromil sodium on antigen-induced airway responses in allergic sheep. Abraham WM. **Drugs** 1989;37 Suppl 1:78-86; discussion 127-36
Antitracheobronchospastic interaction in vitro and in vivo between salbutamol and flunisolide. Lampa E, et al. **Drugs Exp Clin Res** 1985;11(9):653-8
Mechanisms of asbestos-induced squamous metaplasia in tracheobronchial epithelial cells. Cameron G, et al. **Environ Health Perspect** 1989 Mar;80:101-8
Sulfuric acid-induced changes in the physiology and structure of the tracheobronchial airways. Gearhart JM, et al. **Environ Health Perspect** 1989 Feb;79:127-36
Effect of concentration and cumulative exposure of inhaled sulfuric acid on tracheobronchial particle clearance in healthy humans. Spektor DM, et al. **Environ Health Perspect** 1989 Feb;79:167-72
Evaluation of a rat tracheal epithelial cell culture assay system to identify respiratory carcinogens. Steele VE, et al. **Environ Mol Mutagen** 1989;14(1):48-54
Effect of paf-acether on isoprenaline-induced relaxation in isolated tracheal segments of rats and guinea pigs. Chand N, et al. **Eur J Pharmacol** 1988 Dec 6;158(1-2):135-7
Beta-adrenoceptor desensitization in guinea-pig isolated trachea. Fernandes LB, et al. **Eur J Pharmacol** 1988 Nov 22;157(2-3):135-45
Ethanol-induced bronchodilatation in TEA-treated canine tracheal smooth muscle is mediated by a beta-adrenoceptor-dependent mechanism. Richards IS, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):155-60
Effects of SO2 exposure on canine pulmonary epithelial functions. Man SF, et al. **Exp Lung Res** 1989 Mar; 15(2):181-98
The toxicity of constituents of cedar and pine woods to pulmonary epithelium. Ayars GH, et al. **J Allergy Clin Immunol** 1989 Mar;83(3):610-8
Collapse of intercellular spaces of canine tracheal mucosa by epinephrine. al-Bazzaz FJ, et al. **J Appl Physiol** 1988 Sep;65(3):1274-80
Effect of PAF on parasympathetic contraction of canine airways. Bethel RA, et al. **J Appl Physiol** 1989 Jun; 66(6):2629-34
Epithelial augmentation of trachealis contraction caused by major basic protein of eosinophils. Brofman JD, et al. **J Appl Physiol** 1989 Apr;66(4):1867-73
Epithelium removal alters responsiveness of guinea pig trachea to substance P. Fine JM, et al. **J Appl Physiol** 1989 Jan;66(1):232-7
Influence of respiratory drive on airway responses to excitation of lung C-fibers. Haxhiu MA, et al. **J Appl Physiol** 1989 Jul;67(1):203-9
Beta-adrenergic relaxation of dog trachealis: contractile agonist-specific interaction. Koenig SM, et al. **J Appl Physiol** 1989 Jul;67(1):181-5
Protective role of epithelium in the guinea pig airway. Munakata M, et al. **J Appl Physiol** 1989 Apr;66(4):1547-52
Effect of pyocyanin and 1-hydroxyphenazine on in vivo tracheal mucus velocity. Munro NC, et al. **J Appl Physiol** 1989 Jul;67(1):316-23
Electromechanical coupling of ferret airway smooth muscle in response to leukotriene C4. Murlas CG, et al. **J Appl Physiol** 1989 Jun;66(6):2533-8
PAF-induced contraction of canine trachea mediated by 5-hydroxytryptamine in vivo. Murphy TM, et al. **J Appl Physiol** 1989 Feb;66(2):638-43
Respiratory reflex responses to stimulation of tracheal mucosa in enflurane-anesthetized humans. Nishino T, et al. **J Appl Physiol** 1988 Sep;65(3):1069-74
Inhibitory effects of CO2 on airway defensive reflexes in enflurane-anesthetized humans. Nishino T, et al. **J Appl Physiol** 1989 Jun;66(6):2642-6
VIP augments cholinergic-induced glycoconjugate secretion in tracheal submucosal glands. Shimura S, et al. **J Appl Physiol** 1988 Dec;65(6):2537-44
Inhibition of neutral endopeptidase potentiates neurogenic inflammation in the rat trachea. Umeno E, et al. **J Appl Physiol** 1989 Jun;66(6):2647-52
Prostaglandin F2 alpha augments the response to parasympathetic fibre stimulation in an isolated innervated preparation of rabbit trachea. Armour CL, et al. **J Auton Pharmacol** 1988 Sep;8(3):251-8
Contractile responses of tracheal smooth muscle in organophosphate-treated swine: 2. Effects of antagonists. Murali Mohan P, et al. **J Auton Pharmacol** 1988 Jun; 8(2):107-17
Contractile responses of tracheal smooth muscle in organophosphate-treated swine: 1. Agonist changes. Murali Mohan P, et al. **J Auton Pharmacol** 1988 Jun; 8(2):93-106
Changes in affinity states during down-regulation of muscarinic receptors in tracheal smooth muscle of organophosphate-treated swine. Yang CM, et al. **J Auton Pharmacol** 1988 Jun;8(2):79-91
Mast cell tryptase and chymase reverse airway smooth muscle relaxation induced by vasoactive intestinal peptide in the ferret. Franconi GM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):947-51
Influence of epithelium on guinea pig airway responses to tachykinins: role of endopeptidase and cyclooxygenase. Frossard N, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):292-8
Pharmacologic discrimination between receptor heterogeneity and allosteric interaction: resultant analysis of gallamine and pirenzepine antagonism of muscarinic responses in rat trachea. Kenakin T, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):944-52
Investigation of the effects of histamine inhalation on the tracheobronchial tree of calves by the forced oscillation technique. Gustin P, et al. **J Vet Pharmacol Ther** 1988 Dec; 11(4):374-80
Stimulation of submucosal glands by nicotine applied locally to the airway mucosa. Hümmer B, et al. **Klin Wochenschr** 1988;66 Suppl 11:161-9
Effect of systemic nicotine on mucus secretion from tracheal submucosal glands and on cardiovascular, pulmonary, and hematologic variables. Lang M, et al. **Klin Wochenschr** 1988;66 Suppl 11:170-9
Effects of tannins from different sources on airway epithelial and platelet function. Cloutier MM, et al. **Lung** 1989; 167(2):117-28
Bronchoconstrictor action of neuropeptide Y (NPY) in isolated guinea pig airways. Cadieux A, et al. **Neuropeptides** 1989 May-Jun;13(4):215-9
Comparison of the effects of RP 49356, cromakalim and nifedipine on guinea-pig trachea in vitro. Brown TJ, et al. **Pflugers Arch** 1989;414 Suppl 1:S188-9
New methylxanthine thio-derivatives inducing marked tracheal relaxation without increasing cardiac inotropism or motor activity. Ragazzi E, et al. **Pharmacol Res Commun** 1988 Jul;20(7):621-2
Resveratrol activity on guinea pig isolated trachea from normal and albumin-sensitized animals. Ragazzi E, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:79-82
Inhibitory effects of a lipoxygenase inhibitor nordihydroguaiaretic acid on antagonism of leukotriene C4-induced contractions of isolated guinea-pig trachea. Shikada K, et al. **Prostaglandins** 1988 Oct;36(4):533-46
Wy-48,252 (1,1,1-trifluoro-N-[3-(2-quinolinylmethoxy)= phenyl]methane sulfonamide) an orally active leukotriene D4 antagonist: pharmacological characterization in vitro and in vivo in the guinea pig. Hand JM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Aug; 37(2):97-106
Relationship between in vivo airway reactivity and in vitro responsiveness of tracheal smooth muscle in inbred rats. Di Maria GU, et al. **Respiration** 1988;54 Suppl 1:108-13
Fenspiride and relaxation of tracheobronchial musculature. Mechanism of action. Advenier C. **Rhinology** 1988;Suppl 4:67-74
Effect of three weeks' treatment with budesonide on in vitro contractile and relaxant airway effects in the rat. Gustafsson B, et al. **Thorax** 1989 Jan;44(1):24-7
Beta adrenoceptor binding and induced relaxation in airway smooth muscle from patients with chronic airflow obstruction. van Koppen CJ, et al. **Thorax** 1989 Jan; 44(1):28-35
Tracheal gland mucous cells stimulated in vitro with adrenergic and cholinergic drugs. Gashi AA, et al. **Tissue Cell** 1989;21(1):59-67
[3H]benzo[a]pyrene utilization in rats following tracheal implant exposure. Marchok AC, et al. **Toxicology** 1989 May 31;56(1):63-77
[Calcium antagonists and chronic obstructive bronchopneumopathies] Hilbert G, et al. **Rev Mal Respir** 1989;6(3):209-14 (Eng. Abstr.) (Fre)
[The effect of Ca2+ blockers on the response of respiratory tract smooth muscle to bronchoconstrictor and bronchodilator agents] Haxhiu MA, et al. **Plucne Bolesti** 1988 Jan-Jun;40(1-2):3-8 (Eng. Abstr.) (Scr)

EMBRYOLOGY

In vivo ciliogenesis in human fetal tracheal epithelium. Gaillard DA, et al. **Am J Anat** 1989 Aug;185(4):415-28

ENZYMOLOGY

Cyclooxygenase metabolism of endogenous arachidonic acid by cultured human tracheal epithelial cells. Churchill L, et al. **Am Rev Respir Dis** 1989 Aug;140(2):449-59

IMMUNOLOGY

Specific antibody containing cells in the porcine respiratory tract following intraperitoneal and intratracheal immunisation. Sheldrake RF, et al. **Res Vet Sci** 1988 Nov; 45(3):369-73

INJURIES

Tracheal tear during laryngopharyngectomy and transhiatal oesophagectomy: a case report. Sung HM, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):333-5
Mechanisms of laryngotracheal injury following prolonged tracheal intubation. Bishop MJ. **Chest** 1989 Jul;96(1):185-6 (19 ref.)
Fiberoptic bronchoscopy in the evaluation of acute chest and upper airway trauma. Hara KS, et al. **Chest** 1989 Sep; 96(3):627-30
Airway complications from free-basing cocaine. Taylor RF, et al. **Chest** 1989 Feb;95(2):476-7
Endotracheal tube rupture, accidental extubation, and tracheal avulsion: three airway catastrophes associated with significant decrease in leak pressure. Spear RM, et al. **Crit Care Med** 1989 Jul;17(7):701-3
Blunt traumatic rupture of cervical trachea. Beg MH, et al. **Indian J Chest Dis Allied Sci** 1988 Oct-Dec;30(4):291-4
Cervical airway injuries as a result of impact with steering wheel rim. Mittleman RE. **J Forensic Sci** 1988 Sep; 33(5):1198-205
Tracheopleuropulmonary injuries following enteral tube insertion. Odocha O, et al. **J Natl Med Assoc** 1989 Mar; 81(3):275-81
Tracheoesophageal injury secondary to disc battery ingestion. Sigalet D, et al. **J Pediatr Surg** 1988 Nov; 23(11):996-8
Treatment dilemmas in laryngotracheal trauma. Gussack GS, et al. **J Trauma** 1988 Oct;28(10):1439-44
Laryngotracheal injury following cricothyroidotomy. Kuriloff DB, et al. **Laryngoscope** 1989 Feb;99(2):125-30
Tracheobronchial disruption from blunt chest trauma. Reyes A, et al. **Milit Med** 1988 Aug;153(8):395-6
Puncture of the trachea during catheterization of the subclavian vein [letter] Breen MT, et al. **N Engl J Med** 1989 Apr 27;320(17):1148
Bronchoscopic findings in infants treated with high-frequency jet ventilation versus conventional ventilation. Kercsmar CM, et al. **Pediatrics** 1988 Dec; 82(6):884-7
Determinants of tracheobronchial histologic alterations

during conventional mechanical ventilation. Wiswell TE, et al. **Pediatrics** 1989 Aug;84(2):304–11

Blunt injuries of the cervical trachea: review of 51 patients. Reece GP, et al. **South Med J** 1988 Dec;81(12):1542–8 (46 ref.)

Tracheobronchial and esophageal injuries [published erratum appears in Surg Clin North Am 1989 Jun;69(3):following viii] Pate JW. **Surg Clin North Am** 1989 Feb;69(1):111–23 (32 ref.)

Post traumatic tracheal stenosis in a cat. Corcoran BM. **Vet Rec** 1989 Apr 1;124(13):342–3

[A case of chemical burns of the tracheobronchial tree in childhood] Boicheva A, et al. **Khirurgiia (Sofiia)** 1989; 42(1):82–5 (Eng. Abstr.) **(Bul)**

[Tracheal rupture after intubation in surgical procedures using general anesthesia (letter)] Her B, et al. **Ann Fr Anesth Reanim** 1989;8(1):80 **(Fre)**

[Fatal penetrating injuries caused by incorrect use of angular abrasive wheels] Lemke R. **Aktuel Traumatol** 1989 Jun; 19(3):110–2 (Eng. Abstr.) **(Ger)**

[Meta-traumatic laryngo-tracheal stenosis: clinical picture, therapeutic directions and critical evaluation from personal experience] de Campora E, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 18:1–28 (60 ref.) (Eng. Abstr.) **(Ita)**

[Injuries of the trachea] Drozdov VP, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):133–4 **(Rus)**

[Therapeutic fibrobronchoscopy in the treatment of patients with burns of the respiratory tract] Boenko SK, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):50–3 (Eng. Abstr.) **(Rus)**

[Rupture of the trachea in a child] Selin VN. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):70–1 **(Rus)**

[Intubation lesions of the oropharynx, larynx and trachea] Kujundžić I, et al. **Lijec Vjesn** 1989 Jan–Feb;111(1–2):21–4 (Eng. Abstr.) **(Scr)**

INNERVATION

Influence of bilateral subnodular vagotomy and section of retrotracheal plexus on allergic bronchial constriction in guinea pigs. Becher G, et al. **Allergol Immunopathol (Madr)** 1988 May–Jun;16(3):163–6

Innervation of the guinea pig trachea: a quantitative morphological study of intrinsic neurons and extrinsic nerves. Baluk P, et al. **J Comp Neurol** 1989 Jul 1; 285(1):117–32

Neurogenic inflammation in the rat trachea. II. Identity and distribution of nerves mediating the increase in vascular permeability. McDonald DM, et al. **J Neurocytol** 1988 Oct; 17(5):605–28

Cigarette smoke–induced irritation in the airways in relation to peptide–containing, capsaicin–sensitive sensory neurons. Lundberg JM, et al. **Klin Wochenschr** 1988;66 Suppl 11:151–60

Structure and functional anatomy of viscereroreceptors in the mammalian respiratory system. von Düring M, et al. **Prog Brain Res** 1988;74:139–54 (44 ref.)

The tracheal nonadrenergic noncholinergic inhibitory system during antigen challenge. Ko WC, et al. **Respir Physiol** 1988 Nov;74(2):129–38

Cyclic GMP affecting the tracheal nonadrenergic noncholinergic inhibitory system. Ko WC, et al. **Respir Physiol** 1988 Sep;73(3):351–62

[Experimental basis for the reinnervation of the larynx with median stenoses] Antoniv VF, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):37–43 (Eng. Abstr.) **(Rus)**

METABOLISM

Alpha–adrenergic regulation of Na–Cl cotransport in human airway epithelium. Liedtke CM. **Am J Physiol** 1989 Aug; 257(2 Pt 1):L125–9

Characterization of beta–adrenergic receptors in cultured bovine tracheal gland cells. Madison JM, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C310–4

Human neutrophil elastase causes glycoconjugate release from the epithelial cell surface of hamster trachea in organ culture. Breuer R, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):779–82

Neurogenic inflammation in the airways. I. Neurogenic stimulation induces plasma protein extravasation into the rat airway lumen. Kowalski ML, et al. **Am Rev Respir Dis** 1989 Jul;140(1):101–9

The effect of inhaled histamine on human tracheal mucus velocity and bronchial mucociliary clearance. Mussatto DJ, et al. **Am Rev Respir Dis** 1988 Oct;138(4):775–9

The effect of platelet–activating factor on histamine and muscarinic receptor function in guinea pig airways. Robertson DN, et al. **Am Rev Respir Dis** 1988 Jun; 137(6):1317–22

Muscarinic cholinergic inhibition of cyclic AMP accumulation in airway smooth muscle. Role of a pertussis toxin–sensitive protein. Sankary RM, et al. **Am Rev Respir Dis** 1988 Jul;138(1):145–50

Tracheobronchial epithelium of the sheep: IV. Lectin histochemical characterization of secretory epithelial cells. Mariassy AT, et al. **Anat Rec** 1988 Sep;222(1):49–59

Relationship between tracheobronchial particle clearance rates and sites of initial deposition in man. Ilowite JS, et al. **Arch Environ Health** 1989 Jul–Aug;44(4):267–73

Fluid transport by airway epithelia. Widdicombe JH. **Biorheology** 1987;24(6):551–5 (27 ref.)

Co–axial bioassay of a smooth muscle relaxant factor released from guinea–pig tracheal epithelium. Fernandes LB, et al. **Br J Pharmacol** 1989 Jan;96(1):117–24

H1– and H2–receptor characterization in the tracheal circulation of sheep. Webber SE, et al. **Br J Pharmacol** 1988 Oct;95(2):551–61

Metabolism of 4–(methylnitrosamino)–1–(3–pyridyl)–1–butanone by hamster respiratory tissues cultured with ellagic acid. Castonguay A, et al. **Cancer Lett** 1989 Jul 15;46(2):93–105

DNA adduct formation in primary rabbit tracheal epithelial cells following treatment with 1,8–dinitropyrene and its partially reduced derivative, 1–nitro–8–nitrosopyrene. Norman CA, et al. **Carcinogenesis** 1989 Jul;10(7):1323–7

Neuronal galanin is widely distributed in the chicken respiratory tract and coexists with multiple neuropeptides. Luts A, et al. **Cell Tissue Res** 1989 Apr;256(1):95–103

Usefulness of the lecithin/sphingomyelin ratio and uselessness of phosphatidylglycerol determinations in tracheal aspirates of preterm infants [letter] Wijnands JB, et al. **Clin Chem** 1989 Apr;35(4):706

The physiological disposition of aerosolized 4–[(3–(4–acetyl–3–hydroxy–2–propylphenoxy)propyl)= sulfonyl]–gamma –oxobenzenebutanoate (L–648,051) in rats. Tocco DJ, et al. **Drug Metab Dispos** 1988 Sep–Oct; 16(5):697–700

Keratin 13 expression is linked to squamous differentiation in rabbit tracheal epithelial cells and down–regulated by retinoic acid. Jetten AM, et al. **Exp Cell Res** 1989 Jun; 182(2):622–34

Arachidonic acid metabolism in normal and transformed rat tracheal epithelial cells and its possible role in the regulation of cell proliferation. Duniec ZM, et al. **Exp Lung Res** 1989 May;15(3):391–408

Transport across rat trachea in vitro after exposure to cytoskeleton–active drugs in vitro or to ozone in vivo. Rasmussen RE, et al. **Exp Lung Res** 1989 Mar;15(2):253–68

Adrenergic stimulation of inositol phosphate accumulation in tracheal epithelium. Bainbridge T, et al. **J Appl Physiol** 1989 Jan;66(1):504–8

Paths of ion transport across canine fetal tracheal epithelium. Cotton CU, et al. **J Appl Physiol** 1988 Dec;65(6):2376–82

Acetylcholine–stimulated chloride flux in tracheal submucosal gland cells. Yang CM, et al. **J Appl Physiol** 1988 Oct;65(4):1891–4

Comparison of the muscarinic receptors of the guinea–pig oesophageal muscularis mucosae and trachea in vitro. Eglen RM, et al. **J Auton Pharmacol** 1988 Sep;8(3):181–9

Regulation of cytosolic calcium by cAMP and cGMP in freshly isolated smooth muscle cells from bovine trachea. Felbel J, et al. **J Biol Chem** 1988 Nov 15;263(32):16764–71

The transport of albumin across the ferret in vitro whole trachea. Webber SE, et al. **J Physiol (Lond)** 1989; 408:457–72

Evidence for vasoactive intestinal peptide receptors in apical membranes from tracheal epithelium. Elgavish A, et al. **Life Sci** 1989;44(15):1037–42

Pharmacodynamic and pharmacokinetic aspects on the transport of bronchodilator drugs through the tracheal epithelium of the guinea–pig. Jepsson AB, et al. **Pharmacol Toxicol** 1989 Jan;64(1):58–63

Effect of aerosol challenge with sensitising antigen on the permeability of the surface of the rat trachea in life. Mukherjee S, et al. **Thorax** 1988 Dec;43(12):1007–10

Effect of cigarette smoke condensate and vitamin A depletion on keratin expression patterns in cultured hamster tracheal epithelium. An immunohistomorphological study using monoclonal antibodies to keratins. Rutten AA, et al. **Virchows Arch [B]** 1988;56(2):111–7

Detection of free radicals as a consequence of dog tracheal epithelial cellular xenobiotic metabolism. Rosen GM, et al. **Xenobiotica** 1989 Jun;19(6):635–43

[Effects of autonomic agents and chemical mediators on ion transport by canine tracheal epithelium] Baba T, et al. **Masui** 1988 Jun;37(6):638–45 (Eng. Abstr.) **(Jpn)**

[Adherence of gram negative bacteria to human tracheobronchial mucin] Katoh O, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1182–6 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Immunofluorescent staining of influenza virus antigen in fixed and paraffin–embedded tissue of experimentally infected hamsters. Lück PC, et al. **Acta Histochem (Jena)** 1989; 85(1):47–50

Comparison of tracheal aspirates and protected brush catheter specimens for identifying pathogenic bacteria in mechanically ventilated patients. Lambert RS, et al. **Am J Med Sci** 1989 Jun;297(6):377–82

The effect of antecedent influenza A virus infection on the adherence of Hemophilus influenzae to chinchilla tracheal epithelium. Bakaletz LO, et al. **Am J Otolaryngol** 1988 May–Jun;9(3):127–34

Routine endotracheal cultures for the prediction of sepsis in ventilated babies. Slagle TA, et al. **Arch Dis Child** 1989 Jan;64(1 Spec No):34–8

Passive immunization versus adhesion of Bordetella avium to the tracheal mucosa of turkeys. Arp LH, et al. **Avian Dis** 1988 Jul–Sep;32(3):494–500

Patterns and routes of tracheobronchial colonization in mechanically ventilated patients. The role of nutritional status in colonization of the lower airway by Pseudomonas species. Niederman MS, et al. **Chest** 1989 Jan;95(1):155–61

Diagnostic efficacy of a nasotracheal protected specimen brush in patients with suspected bacterial pneumonia. Gong H Jr, et al. **Diagn Microbiol Infect Dis** 1988 Oct; 11(2):87–100

Bacterial adherence as a mechanism of airway colonization. Niederman MS. **Eur J Clin Microbiol Infect Dis** 1989 Jan; 8(1):15–20 (23 ref.)

Branhamella catarrhalis in lower respiratory tract secretions in adults. Schønheyder H, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):299–300

Evidence that in vitro adherence of Klebsiella pneumoniae to ciliated hamster tracheal cells is mediated by type 1 fimbriae. Fader RC, et al. **Infect Immun** 1988 Nov; 56(11):3011–3

Adherence of Pseudomonas aeruginosa to tracheal epithelium. Marcus H, et al. **Infect Immun** 1989 Apr; 57(4):1050–3

The effects of Mycoplasma mobile 163 K on the ciliary epithelium of tracheal organ cultures. Stadtländer C, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):355–65

[Pneumonia in artificially ventilated patients: the significance of Gram preparation und bronchoscopic specimen collection methods in diagnosis and therapy] Konrad F, et al. **Anasth Intensivther Notfallmed** 1989 Jun;24(3):147–52 (Eng. Abstr.) **(Ger)**

[The differentiation of Bordetella bronchiseptica strains. 6. Detection of adhesion in Bordetella bronchiseptica] Schilowa B, et al. **Arch Exp Veterinarmed** 1988 Nov; 42(6):867–76 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Acquired tracheomegaly in adults as a complication of diffuse pulmonary fibrosis. Woodring JH, et al. **AJR** 1989 Apr; 152(4):743–7

Comparison of airway pathologic lesions after high–frequency jet or conventional ventilation. Polak MJ, et al. **Am J Dis Child** 1989 Feb;143(2):228–32

Ozone–induced bronchial hyperresponsiveness in the rat is not accompanied by neutrophil influx or increased vascular permeability in the trachea. Evans TW, et al. **Am Rev Respir Dis** 1988 Jul;138(1):140–4

Tracheal dilatation followed by stenosis in Mounier–Kuhn syndrome. A case report. Messahel FM. **Anaesthesia** 1989 Mar;44(3):227–9

Cryopreservation of canine trachea: functional and histological changes. Deschamps C, et al. **Ann Thorac Surg** 1989 Feb;47(2):208–12

Tracheobronchial submucous gland profiles in smokers and non–smokers. Whimster WF. **Appl Pathol** 1988;6(4):241–6

Bronchoscopic appearance of acute tracheobronchial compression by an endo–oesophageal tube. Ti TK. **Aust N Z J Surg** 1989 May;59(5):427–9

Morphological and cytokinetic responses of hamster airways to intralaryngeal or intratracheal cannulation with instillation of saline or ferric oxide particles in saline. Keenan KP, et al. **Cancer Res** 1989 Mar 15;49(6):1521–7

In vitro neoplastic progression of rat tracheal epithelial cells transformed by diverse carcinogens. Walker C, et al. **Cancer Res** 1989 Aug 15;49(16):4427–30

Massive tracheal necrosis complicating endotracheal intubation. Abbey NC, et al. **Chest** 1989 Feb;95(2):459–60

Comparison of transtracheal aspirate and bronchoalveolar lavage cytology in 50 horses with chronic lung disease. Derksen FJ, et al. **Equine Vet J** 1989 Jan;21(1):23–6

Dexamethasone reduces rat tracheal goblet cell hyperplasia produced by human neutrophil products. Lundgren JD, et al. **Exp Lung Res** 1988;14(6):853–63

Lectin–detectable effects of localized pneumonia on airway mucous cell populations: role of cyclooxygenase metabolites. Mariassy AT, et al. **Exp Lung Res** 1989; 15(1):113–37

Biological activities and chemical composition of purified tracheal cytotoxin of Bordetella pertussis. Cookson BT, et al. **Infect Immun** 1989 Jul;57(7):2223–9

Neurogenic inflammation in the rat trachea. I. Changes in venules, leucocytes and epithelial cells. McDonald DM. **J Neurocytol** 1988 Oct;17(5):583–603

Electron microscopic observations of ciliated epithelium of mouse trachea treated in vitro with a membrane–damaging factor from Bordetella bronchiseptica. Sekiya K, et al. **Kitasato Arch Exp Med** 1988 Dec;61(4):181–6

Electron microscopic observations on ciliated epithelium of tracheal organ cultures infected with Bordetella bronchiseptica. Sekiya K, et al. **Microbiol Immunol** 1989; 33(2):111–21

Sequential pathological studies in Japanese quails infected experimentally with Aspergillus fumigatus. Chaudhary SK, et al. **Mycopathologia** 1988 Sep;103(3):157–66

Shallow versus deep endotracheal suctioning in young rabbits: pathologic effects on the tracheobronchial wall. Bailey C, et al. **Pediatrics** 1988 Nov;82(5):746–51

Intermediate filament expression in normal and vitamin A depleted cultured hamster tracheal epithelium as detected by monoclonal antibodies. A study with emphasis on histological changes. Rutten AA, et al. **Virchows Arch [B]** 1988;56(2):103–10

Light–microscopic examination of ABH and Lewis antigens in human tracheal and epiglottic glands using the avidin–biotin–peroxidase complex technique. Nishi K, et

al. Z Rechtsmed 1989;102(4):255–62
[Application of organ culture in studying the carcinogenesis of respiratory epithelium] He MC. Chung-hua Ping Li Hsueh Tsa Chih 1988 Jun;17(2):91–3 (Eng. Abstr.) (Chi)
[Heterotransplantation of human fetal tracheobronchial segments and its effect on carcinoma induction] Hui P. Chung-hua Ping Li Hsueh Tsa Chih 1988 Jun;17(2):94–7 (Eng. Abstr.) (Chi)
[Clinically relevant mechanisms of mucus gland hypertrophy] Hahn HL. Prax Klin Pneumol 1988 Jul;42(7):504–9 (Eng. Abstr.) (Ger)
[ABH and Lewis antigens of tracheal glands. II. Lewis negative individuals] Pedal I, et al. Z Rechtsmed 1988; 100(2–3):123–31 (Eng. Abstr.) (Ger)

PHYSIOLOGY

Pancuronium bromide does not lower airway pressures during intermittent positive pressure ventilation in young cats. Norsted T, et al. Acta Anaesthesiol Scand 1989 Jan; 33(1):21–5
Tracheal and phrenic responses to neurotensin applied to ventral medulla. Haxhiu MA, et al. Am J Physiol 1988 Nov;255(5 Pt 2):R780–6
Volume and ion transport by fetal rat alveolar and tracheal epithelia in submersion culture. Krochmal EM, et al. Am J Physiol 1989 Mar;256(3 Pt 2):F397–407
Release of intracellular calcium by two different second messengers in airway epithelium. McCann JD, et al. Am J Physiol 1989 Aug;257(2 Pt 1):L116–24
Effect of water vapor–saturated air therapy on bronchoalveolar lavage and tracheal mucus transport rate in clinically normal horses. Sweeney CR, et al. Am J Vet Res 1989 Feb;50(2):276–9
The effects of epithelial cell supernatant on contractions of isolated canine tracheal smooth muscle. Barnett K, et al. Am Rev Respir Dis 1988 Oct;138(4):780–3
Ozone–induced bronchial hyperresponsiveness in the rat is not accompanied by neutrophil influx or increased vascular permeability in the trachea. Evans TW, et al. Am Rev Respir Dis 1988 Jul;138(1):140–4
Airway secretions influence upper airway patency in the rabbit. Olson LG, et al. Am Rev Respir Dis 1988 Jun; 137(6):1379–81
Long–term effects of substance P on the isolated guinea pig trachea. Schreiber J, et al. Biomed Biochim Acta 1988; 47(8):799–803
Inhibitor production by normal rat tracheal epithelial cells influences the frequency of spontaneous and X–ray–induced enhanced growth variants. Terzaghi–Howe M. Carcinogenesis 1989 Jun;10(6):967–71
Functional reconstitution of an isolated sodium channel from bovine trachea. Cherkasy BD. Comp Biochem Physiol [A] 1988;90(4):771–3
The intracellular calcium stores in the rabbit trachealis. Nousiltetas VL, et al. Eur J Pharmacol 1988 Nov 22; 157(2–3):165–72
Mucosal inhibition of cholinergic contractions in ferret trachea can be transferred between organ baths. Ullman A, et al. Eur Respir J 1988 Dec;1(10):908–12
Airway mucus. Widdicombe JG. Eur Respir J 1989 Feb; 2(2):107–15
Mucociliary transport and epithelial morphology with elongation and collapse in rat trachea. Gatto LA, et al. Exp Lung Res 1989 Mar;15(2):239–51
Response of the tracheobronchial mucociliary clearance system to repeated irritant exposure: effect of sulfuric acid mist on function and structure. Gearhart JM, et al. Exp Lung Res 1988;14(5):587–605
Neutrophil response following intratracheal instillation of collagen peptides into rat lungs. Riley DJ, et al. Exp Lung Res 1988;14(4):549–63
Sensor for measuring surface fluid conductivity in vivo. Fouke JM, et al. IEEE Trans Biomed Eng 1988 Oct; 35(10):877–81
Cold and hyperosmolar fluids in canine trachea: vascular and smooth muscle tone and albumin flux. Deffebach ME, et al. J Appl Physiol 1989 Mar;66(3):1309–15
Absence of nonadrenergic noncholinergic relaxation in the cat cervical trachea. Don H, et al. J Appl Physiol 1988 Dec;65(6):2524–30
In vitro tracheal mechanics by nuclear magnetic resonance imaging. Lambert RK, et al. J Appl Physiol 1988 Oct; 65(4):1872–9
Differential effects of prostaglandin E2 on contractions of airway smooth muscle. Madison JM, et al. J Appl Physiol 1989 Mar;66(3):1397–407
Effects of soman and its antidotes on tracheal mucociliary transport of ferrets. Marin MG, et al. J Appl Physiol 1989 Mar;66(3):1390–6
Ca2+–dependent facilitated shortening in isotonic contraction of trachealis muscle. Mitchell RW, et al. J Appl Physiol 1989 Feb;66(2):632–7
Intravenous papain–induced cartilage softening decreases preload of tracheal smooth muscle. Moreno RH, et al. J Appl Physiol 1989 Apr;66(4):1694–8
Expression of airway contractile properties and acetylcholinesterase activity in swine. Murphy TM, et al. J Appl Physiol 1989 Jul;67(1):174–80
External mechanical loading in conscious humans: role of upper airway mechanoreceptors. O'Donnell DE, et al. J Appl Physiol 1988 Aug;65(2):541–8
A comparison of preterm and adult airway smooth muscle mechanics. Panitch HB, et al. J Appl Physiol 1989 Apr; 66(4):1760–5
Effect of tracheal smooth muscle tone on collapsibility of immature airways. Penn RB, et al. J Appl Physiol 1988 Aug;65(2):863–9
Role of platelets in contraction of canine tracheal muscle elicited by PAF in vitro. Popovich KJ, et al. J Appl Physiol 1988 Aug;65(2):914–20
Mechanisms of protein kinase C regulation of airway contractility. Schramm CM, et al. J Appl Physiol 1989 Apr; 66(4):1935–41
Specific reaginic antibody IgG1–induced changes of airway smooth muscle cells. Souhrada M, et al. J Appl Physiol 1988 Aug;65(2):767–75
Nasal and tracheal responses to chemical and somatic afferent stimulation in anesthetized cats. Strohl KP, et al. J Appl Physiol 1988 Aug;65(2):870–7
Effect of cAMP on ciliary function in rabbit tracheal epithelial cells. Tamaoki J, et al. J Appl Physiol 1989 Mar; 66(3):1035–9
Stimulation of ciliary beat frequency by autonomic agonists: in vivo. Wong LB, et al. J Appl Physiol 1988 Aug; 65(2):971–81
Study of airway epithelial permeability with dextran. Hulbert WC, et al. J Electron Microsc Tech 1989 Feb;11(2):137–42
Voltage–gated chloride currents in cultured canine tracheal epithelial cells. Schoppa N, et al. J Membr Biol 1989 Apr; 108(1):73–90
Influence of electrical field stimulation on antigen–induced contraction and mediator release in the guinea pig isolated superfused trachea and bronchus. Undem BJ, et al. J Pharmacol Exp Ther 1989 Apr;249(1):23–30
Portable in vitro bath for an unsubmerged complete trachea. Braga PC, et al. J Pharmacol Methods 1988 Dec; 20(4):307–12
Novel and versatile superfusion system. Its use in the evaluation of some spasmogenic and spasmolytic agents using guinea–pig isolated tracheal smooth muscle. Coleman RA, et al. J Pharmacol Methods 1989 Mar;21(1):71–86
Plasma extravasation by chemical mediators in rat skin and trachea: a role of neurogenic agents on tracheal edema formation. Morimoto H, et al. Jpn J Pharmacol 1989 Mar; 49(3):389–95
Effects of hormones and nucleotides on ciliary beating in frog esophagus and guinea pig trachea. Carlson HE, et al. Life Sci 1974 Jun 16;14(12):2413–26
Electromechanical effects of leukotriene D4 on ferret tracheal muscle and its muscarinic responsiveness. Lee HK, et al. Lung 1989;167(3):173–85
Reducing inadvertent PEEP by controlling end–tidal pressures in the trachea. Gonzalez F, et al. Pediatr Pulmonol 1989;6(1):31–5
Influence of smooth muscle tone and longitudinal tension on the collapsibility of immature airways. Penn RB, et al. Pediatr Pulmonol 1988;5(3):132–8
In vivo mechanical properties of the developing airway. Shaffer TH, et al. Pediatr Res 1989 Feb;25(2):143–6
Steroid hormones: modulators of Na+ absorption and Cl– secretion in cultured tracheal epithelia. Zeitlin PL, et al. Proc Natl Acad Sci U S A 1989 Apr;86(7):2502–5
Is the epithelium–derived inhibitory factor in guinea–pig trachea a prostanoid? Hay DW, et al. Prostaglandins 1988 Apr;35(4):625–37
Specific enhancement of LTD4–induced contractions of isolated guinea pig trachea by 5–hydroxyeicosatetraenoic acid (5–HETE). Malo PE. Prostaglandins 1989 May; 37(5):539–51
In vivo and in vitro studies on cold–induced airway response in normal and sensitized rabbits. Badier M, et al. Respir Physiol 1988 Jul;73(1):1–10
Reversal of the relation between respiratory drive and airway tone in cats. Baker DG, et al. Respir Physiol 1988 Jul; 73(1):21–30
The unsteady form of the Bernoulli equation for estimating pressure drop in the airways. Moslehi F, et al. Respir Physiol 1989 Jun;76(3):319–26
Response of stretch receptors to static inflations and deflations in an isolated tracheal segment. Ogilvie MD, et al. Respir Physiol 1989 Mar;75(3):289–307
Relationship between forced expiratory flow and tracheal sounds. Possible effect of vortices on flow. Mori M, et al. Respiration 1988;54(2):78–88
Sources of calcium for the contraction induced by various agonists in trachealis muscle from normal and sensitized guinea pigs. Perpiña M, et al. Respiration 1989;55(2):105–12
Reconstitution and phosphorylation of chloride channels from airway epithelium membranes. Valdivia HH, et al. Science 1988 Dec 9;242(4884):1441–4
Laser light scattering spectroscopy: a new method to measure tracheobronchial mucociliary activity. Svartengren K, et al. Thorax 1989 Jul;44(7):539–47
[Physiology of the tracheal epithelium] Durand J. Arch Int Physiol Biochim 1988 Sep;96(4):A347–62 (71 ref.) (Eng. Abstr.) (Fre)
[Airway hyperreactivity and airway epithelial function] Munakata M. Kokyu To Junkan 1989 May;37(5):499–503 (Jpn)
[Effects of tachykinins on respiratory epithelial functions] Tamaoki J. Kokyu To Junkan 1989 May;37(5):487–92 (Jpn)
[Influence of electric stimulation of the medulla oblongata on the smooth muscle tone of the airway in cats] Talvan IL, et al. Neirofiziologiia 1989;21(3):320–7 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Dichotomous airway response to exercise in asthmatic patients. Rubinstein I, et al. Am Rev Respir Dis 1988 Nov; 138(5):1164–8
Trachea–noise biofeedback in asthma: a comparison of the effect of trachea–noise biofeedback, a bronchodilator, and no treatment on the rate of recovery from exercise– and eucapnic hyperventilation–induced asthma. Mussell MJ, et al. Biofeedback Self Regul 1988 Sep;13(3):219–34
Ion channels in the metabolic regulation of respiratory cells. Jacobs ER, et al. Clin Chest Med 1989 Mar;10(1):25–36 (90 ref.)
Conventional physiotherapy and forced expiration manoeuvres have similar effects on tracheobronchial clearance. van Hengstum M, et al. Eur Respir J 1988 Aug; 1(8):758–61
Plasma exudation. Correlation between Evans blue dye and radiolabeled albumin in guinea pig airways in vivo. Rogers DF, et al. J Pharmacol Methods 1989 Jul;21(4):309–15
Reflex tracheal contraction during pulmonary venous congestion in the dog. Kappagoda CT, et al. J Physiol (Lond) 1988 Aug;402:335–46
Respiratory syncytial virus alters electrophysiologic properties in cotton rat airway epithelium. Cloutier MM, et al. Pediatr Pulmonol 1989;6(3):164–8
Breathing pattern, lung inflation reflex and airway tone in acrylamide neuropathy. Hersch MI, et al. Respir Physiol 1989 May;76(2):257–76
Platelet–activating factor–induced functional changes in the guinea pig trachea in vitro. Inoue T, et al. Respir Physiol 1989 Aug;77(2):157–71
A comparison of tracheal breath sounds, airflow, and impedance pneumography in the detection of childhood apnea. Beckerman RC, et al. Sleep 1985 Dec;8(4):342–6

RADIATION EFFECTS

[Experimental effect of ultraviolet laser radiation on lung, tracheal and bronchial tissues] Vladimirtseva AL, et al. Biull Eksp Biol Med 1989 May;107(5):566–8 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Airway size and the rate of pulmonary function decline in grain handlers. Vedal S, et al. Am Rev Respir Dis 1988 Dec;138(6):1584–8
Demonstration on computed tomography of tracheomalacia in tracheobronchomegaly (Mounier–Kuhn syndrome). Doyle AJ. Br J Radiol 1989 Feb;62(734):176–7
Postmediastinoscopy changes in the chest radiograph. Don C, et al. Can Assoc Radiol J 1988 Dec;39(4):270–2
Relapsing polychondritis. Crockford MP, et al. Clin Radiol 1988 Jul;39(4):386–90
CT manifestations of tracheobronchial involvement in relapsing polychondritis. Im JG, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):792–3
Tracheal obstruction secondary to esophageal achalasia. Akhter J, et al. J Pediatr Gastroenterol Nutr 1988 Sep–Oct; 7(5):769–72
[Roentgen image of the trachea in the supine position in substernal struma: a further possibility in avoiding radioiodine diagnosis] Schröder F, et al. Z Gesamte Inn Med 1988 Oct 1;43(19):556–7 (Eng. Abstr.) (Ger)

SECRETION

Studies of tracheal secretion using serous cell cultures and monoclonal antibodies. Basbaum CB, et al. Biorheology 1987;24(6):585–8
Composition of glycoproteins secreted by tracheal explants from various animal species. Kaizu T, et al. Comp Biochem Physiol [B] 1979;62(3):195–200
Effect of erdosteine and its metabolites on tracheobronchial mucus production and transport. Scuri R, et al. Drugs Exp Clin Res 1988;14(11):693–8
Mucus hypersecretion and viscoelasticity changes in cigarette–smoking dogs. King M, et al. Exp Lung Res 1989 May;15(3):375–89
Substance P receptor–mediated secretion of respiratory glycoconjugate from feline airways in vitro. Lundgren JD, et al. Exp Lung Res 1989;15(1):17–29
Noninvasive superfusion of canine tracheal segment to study prostaglandin release in vivo. Aizawa H, et al. Fukuoka Igaku Zasshi 1989 Feb;80(2):95–101
Airway secretion: a cell–specific analysis. Basbaum CB, et al. Horm Metab Res 1988 Nov;20(11):661–7 (51 ref.)
Effect of antihistamines on antigen–induced increase of rat tracheal mucous gel layer thickness. Yanni JM, et al. Int Arch Allergy Appl Immunol 1988;87(4):430–4
Effect of epithelium on mucus secretion from feline tracheal submucosal glands. Sasaki T, et al. J Appl Physiol 1989 Feb;66(2):764–70
Mast cell chymase. A potent secretagogue for airway gland serous cells. Sommerhoff CP, et al. J Immunol 1989 Apr 1;142(7):2450–6

SURGERY

Morphology of tracheal scar after resection with CO2-laser and high-frequency cutting loop. A study in normal pigs. Vorre P, et al. **Acta Otolaryngol (Stockh)** 1989 Mar-Apr; 107(3-4):307-12

Laryngotracheal reconstruction following trauma or cancer ablative surgery. Schuller DE, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:144-50

Voice evaluation of myomucosal shunt after total laryngectomy: comparison with esophageal speech. Braanu D, et al. **Am J Otolaryngol** 1989 Jul-Aug;10(4):267-72

The tracheoesophageal diversion and laryngotracheal separation procedures for treatment of intractable aspiration. Eisele DW, et al. **Am J Surg** 1989 Feb; 157(2):230-6

Prosthetic reconstruction of the trachea. Shaha A, et al. **Am J Surg** 1988 Oct;156(4):306-9

Neuromuscular pedicle graft for restoration of arytenoid abductor function in dogs with experimentally induced laryngeal hemiplegia. Greenfield CL, et al. **Am J Vet Res** 1988 Aug;49(8):1360-6

A tracheal tube extension for emergency tracheal reanastomosis [letter] Holzman RS. **Anesthesiology** 1989 Jan;70(1):170-1

Laryngotracheal reconstruction with composite nasal septal cartilage grafts. Duncavage JA, et al. **Ann Otol Rhinol Laryngol** 1989 Aug;98(8 Pt 1):581-5

Indications for the tracheoesophageal diversion procedure and the laryngotracheal separation procedure. Eisele DW, et al. **Ann Otol Rhinol Laryngol** 1988 Sep-Oct;97(5 Pt 1):471-5 (27 ref.)

Advantages of the rotary door flap in laryngotracheal reconstruction: is skeletal support necessary? Eliachar I, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):37-40

Hydroxylapatite for laryngotracheal framework reconstruction. Hirano M, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):713-7

Laryngotracheal separation for intractable aspiration. Snyderman CH, et al. **Ann Otol Rhinol Laryngol** 1988 Sep-Oct;97(5 Pt 1):466-70 (23 ref.)

Voice restoration following laryngectomy: the role of primary versus secondary tracheoesophageal puncture. Wenig BL, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):70-3

Notes on the windpipe. Grillo HC. **Ann Thorac Surg** 1989 Jan;47(1):9-26

Laryngotracheoplasty. Repair of subglottic stenosis in the pediatric patient. Starbuck HS. **AORN J** 1988 Sep; 48(3):449-50, 452-3, 455 passim

Secondary tracheoesophageal puncture for voice rehabilitation after laryngectomy. Lavertu P, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):350-5

Hypertrophic scarring of tracheoesophageal fistula causing vocal failure. Modica LA. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1324-5

Simple mucodermal tracheoesophageal shunt method for voice restoration. Saito H, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):494-6

Further experience with the myomucosal tracheoesophageal shunt. Strome M, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1303-6

The effects of radiation on tracheoesophageal puncture. A retrospective study. Trudeau MD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1116-7

Isoelastic polyurethane prosthesis for segmental trachea replacement in beagle dogs. Schauwecker HH, et al. **Artif Organs** 1989 Jun;13(3):216-8

Surgical voice restoration following laryngectomy: the tracheo-oesophageal fistula technique (Singer-Blom). Perry A. **Br J Disord Commun** 1988 Apr;23(1):23-30

Repair of subglottic stenosis with a free perichondrial graft. Ishikawa K, et al. **Br J Plast Surg** 1988 Nov;41(6):652-6

Bronchoplastic and bronchovascular procedures of the tracheobronchial tree in the management of primary lung cancer. Naruke T. **Chest** 1989 Jul;96(1 Suppl):53S-56S

Atypical resections of the lung: bronchoplasties, sleeve resections, and segmentectomies--their evolution and present status. Kittle CF. **Curr Probl Surg** 1989 Feb; 26(2):57-132 (302 ref.)

Laryngotracheoplasty in the management of subglottic stenosis. Luft JD, et al. **Int J Pediatr Otorhinolaryngol** 1989 Jul;17(3):297-303

Broken Aboulker stents in the tracheal lumen. Zalzal GH, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov;16(2):125-30

Tracheal reconstruction with jejunal loop autograft. Saita S, et al. **Ital J Surg Sci** 1988;18(2):155-8

A new intratracheal stent for tracheobronchial reconstruction: experimental and clinical studies. Loeff DS, et al. **J Pediatr Surg** 1988 Dec;23(12):1173-7

Clinical modification of the tracheostoma breathing valve for voice restoration. Doyle PC, et al. **J Speech Hear Disord** 1989 May;54(2):189-92

Statistical survey of tracheobronchoplasty in Japan. Maeda M, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):402-14

Investigations into tracheal prosthetic reconstruction. Jacobs JR. **Laryngoscope** 1988 Nov;98(11):1239-45

Revision procedure for the tracheoesophageal puncture. Singer MI, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):761-3

Reconstruction of the mediastinal trachea with a tubed pectoralis major myocutaneous flap. Fleischer A, et al. **Plast Reconstr Surg** 1989 Aug;84(2):342-6

The clinical value of high-frequency jet ventilation in major airway reconstructive surgery. Watanabe Y, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):227-33

Anatomic and surgical basis of a technique for total replacement of the trachea by a heterotopically transplanted reinforced pedicled musculocutaneous flap. Riquet M, et al. **Surg Radiol Anat** 1988;10(4):333-4

[Post-pneumonectomy bronchial fistula. Treatment by resection of the carina] Christides C, et al. **Presse Med** 1988 Dec 3;17(43):2299-301 (Eng. Abstr.) (Fre)

[A new metal tube for laser surgery of the laryngotracheal region] Heine P. **Anaesthesist** 1989 Aug;38(8):434-6 (Eng. Abstr.) (Ger)

[Early and long-term results following tracheal segment resection] von Glass W, et al. HNO 1989 Jun;37(6):259-63 (Eng. Abstr.) (Ger)

[Circumferential, segmental tracheal replacement by transplantation of autologous rib cartilage] Eckersberger F, et al. **Prax Klin Pneumol** 1988 Jul;42(7):585-7 (Eng. Abstr.) (Ger)

[Surgical technics for implantation of tracheo-esophageal prosthesis in patients previously laryngectomized] Motta G, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 20:57-67 (25 ref.) (Eng. Abstr.) (Ita)

[Resection and reconstruction of the carina] Ishihara T, et al. **Kyobu Geka** 1988 May;41(6):490-5 (Jpn)

[A case of adenoid cystic carcinoma of the trachea reconstructed with woven Cooley graft patch] Nakamura H, et al. **Kyobu Geka** 1988 Nov;41(12):1020-3 (Eng. Abstr.) (Jpn)

[A case of tracheal adenocarcinoma subjected to carinal reconstruction with total thoracic esophagectomy] Nishimura Y, et al. **Kyobu Geka** 1988 Sep;41(10):830-4 (Eng. Abstr.) (Jpn)

[Growth of tracheal anastomoses in growing animals] Togo T, et al. **Kyobu Geka** 1989 May;42(5):374-7 (Eng. Abstr.) (Jpn)

[Tracheobronchoplasty combined with esophagectomy in the treatment of thoracic esophageal cancer] Tomita M, et al. **Kyobu Geka** 1988 Nov;41(12):962-5 (Eng. Abstr.) (Jpn)

[Functional evaluation of T-E shunt] Satoh N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep;91(9):1388-94 (Eng. Abstr.) (Jpn)

[Basic and clinical studies of tracheal and bronchial reconstruction] **Nippon Kyobu Geka Gakkai Zasshi** 1987 May;35(5):638-49 (Jpn)

[A case of tracheal adenoid cystic carcinoma with symptoms of emphysema aggravated after tracheoplasty] Terada Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul; 36(7):1180-4 (Eng. Abstr.) (Jpn)

[Reconstruction of the collapsed lung] Tsubota N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec; 36(12):2667-72 (Eng. Abstr.) (Jpn)

[Microsurgical sutures of the trachea and bronchi (experimental study)] Biriukov IuV, et al. **Grudn Khir** 1989 Mar-Apr;(2):55-9 (Eng. Abstr.) (Rus)

[Replacement of the trachea with an experimental silicone prosthesis] Dzhafarov ChM, et al. **Grudn Khir** 1988 Sep-Oct;(5):61-7 (Eng. Abstr.) (Rus)

[Endoscopic electrosurgery of the trachea and bronchi] Gerasin VA, et al. **Grudn Khir** 1988 Sep-Oct;(5):50-3 (Eng. Abstr.) (Rus)

[Evaluation of the area of the minimal passage incision of the trachea in the presence of pronounced fixed stenosis with the aid of measurements of airway resistance] Zhivotovskaia EV, et al. **Grudn Khir** 1989 May-Jun; (3):53-6 (Rus)

[Posterior right-sided transpericardial approach to the left pulmonary artery during reconstruction of the tracheal bifurcation] Perel'man MI, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):120-2 (Rus)

[Use of carbon dioxide laser in the treatment of tuberculosis of the bronchi and trachea in children and adolescents] Lebedev KM, et al. **Probl Tuberk** 1989;(3):30-3 (Eng. Abstr.) (Rus)

TRANSPLANTATION

Cell-line-dependent inhibition of phenotypic expression of preneoplastic and neoplastic tracheal epithelial cells by normal tracheal cells in denuded tracheal transplants. Gillett NA, et al. **Carcinogenesis** 1989 Jul;10(7):1147-54

Tracheal reconstruction using irradiated homologous grafts in rabbits. Zalzal GH, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):119-25

Experimental tracheal allotransplantration using omentopexy. Moriyama S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2596-600

[Experimental tracheal reconstruction by allotransplantation] Moriyama S. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb; 37(2):218-26 (Eng. Abstr.) (Jpn)

[Experimental study of segmental esophageal replacement with glutaraldehyde treated tracheal biograft] Shima S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2417-24 (Eng. Abstr.) (Jpn)

ULTRASTRUCTURE

Tracheobronchial epithelium in the adult rhesus monkey: a quantitative histochemical and ultrastructural study. Plopper CG, et al. **Am J Anat** 1989 Jan;184(1):31-40

Development, organization, and function of tight junctional complexes in the tracheal epithelium of infant ferrets. Carson JL, et al. **Am Rev Respir Dis** 1988 Sep;138(3):666-74

Scanning and transmission electron microscopic study of the tracheal air sac system in a grasshopper Chrotogonus senegalensis (Kraus)--Orthoptera: Acrididae: Pyrgomorphinae. Maina JN. **Anat Rec** 1989 Apr; 223(4):393-405

An improved embedding method for obtaining semithin and ultrathin sections from critical-point dried trachea specimens. Brockmeyer C, et al. **Exp Pathol** 1989; 36(4):233-6

Spontaneous lesions in the respiratory epithelium of the Syrian golden hamster as seen by scanning electron microscopy. Brockmeyer C, et al. **Exp Pathol** 1989; 36(4):247-54

Effects of ethanol on in vitro ciliary motility. Maurer DR, et al. **J Appl Physiol** 1988 Oct;65(4):1617-20

Regulation of ciliary beat frequency by autonomic mechanisms: in vitro. Wong LB, et al. **J Appl Physiol** 1988 Oct;65(4):1895-901

A simple freeze-drying device using t-butyl alcohol for SEM specimens. Akahori H, et al. **J Electron Microsc (Tokyo)** 1988;37(6):351-2

Effects of tracheostomy on human tracheobronchial mucosa: a scanning electron microscopic study. Roessler F, et al. **Laryngoscope** 1988 Nov;98(11):1261-7

Electron microscopic observations on tracheal epithelia of mice infected with Bordetella bronchiseptica. Sekiya K, et al. **Microbiol Immunol** 1988;32(5):461-72

Ciliogenesis and ciliation of the respiratory epithelium in the human fetal cartilaginous trachea. Moscoso G, et al. **Pathol Res Pract** 1989 Feb;184(2):161-7

Effects of 90% oxygen exposure on the ultrastructure of the tracheal epithelium in rabbits. Konrádová V, et al. **Respiration** 1988;54(1):24-32

The response phase--the first six hours after acute airway injury by SO_2 inhalation: an in vivo and in vitro study. Hulbert WC, et al. **Scanning Microsc** 1989 Mar;3(1):369-78

[The ultrastructure of components of the tracheobronchial tree epithelium] Boykov AK, et al. **Arkh Patol** 1989; 51(2):85-9 (89 ref.) (Eng. Abstr.) (Rus)

TRACHEAL CYST see MEDIASTINAL CYST

TRACHEAL DISEASES

Calcification of the laryngeal, tracheal, and bronchial cartilages in children [letter] Hoeffel JC, et al. **Am J Dis Child** 1988 Oct;142(10):1024-6

Neonatal tracheobronchomegaly [letter] Griscom NT, et al. **Am J Perinatol** 1989 Jul;6(3):372

Laryngotracheal involvement in epidermolysis bullosa. Gonzalez C, et al. **Int J Pediatr Otorhinolaryngol** 1989 Jul; 17(3):305-11

COMPLICATIONS

Tracheal dilatation followed by stenosis in Mounier-Kuhn syndrome. A case report. Messahel FM. **Anaesthesia** 1989 Mar;44(3):227-9

Differences in acoustic and dynamic characteristics of spontaneous cough in pulmonary diseases. Piirilä P, et al. **Chest** 1989 Jul;96(1):46-53

Rapid progression of tracheal stenosis associated with tracheopathia osteo-chondroplastica. Molloy AR, et al. **Intensive Care Med** 1988;15(1):60-2

Large airway collapse in bronchopulmonary dysplasia. McCubbin M, et al. **J Pediatr** 1989 Feb;114(2):304-7

[Shortness of breath caused by a tracheal amyloid nodule] Puolijoki H, et al. **Duodecim** 1989;105(12):1202-5 (Fin)

[Tracheobronchomegaly and pulmonary tuberculosis] Krasitskiĭ IV, et al. **Probl Tuberk** 1989;(4):71-4 (Rus)

[2 cases of tracheobronchomegaly in combination with cancer of the lungs] Krut'ko VS, et al. **Vestn Rentgenol Radiol** 1988 May-Jun;(3):84-7 (Rus)

[Osteochondroplastic tracheopathy and spontaneous chylothorax: report of a case] Gil Madre J, et al. **Rev Clin Esp** 1988 May;182(9):478-9 (Eng. Abstr.) (Spa)

CONGENITAL

[A case of congenital tracheobiliary fistula in an adult] Regnard JF, et al. **Ann Chir** 1988;42(8):606-9 (14 ref.) (Eng. Abstr.) (Fre)

DIAGNOSIS

Safety and efficacy of flexible endoscopy in children with bronchopulmonary dysplasia. Cohn RC, et al. **Am J Dis Child** 1988 Nov;142(11):1225-8

Tracheobronchopathia osteochondroplastica presenting as right middle lobe collapse. Diagnosis by bronchoscopy and computerized tomography. Hodges MK, et al. **Chest** 1988 Oct;94(4):842-4

[Localized tracheobronchial amyloidosis. A new case studied with x-ray computed tomographic and nuclear magnetic resonance. Review of the literature] M'Rad S, et al. **Rev Pneumol Clin** 1988;44(6):260-5 (55 ref.) (Eng. Abstr.) (Fre)

[Comparative cinematographic, endoscopic and functional analytic studies of the pre- and postoperative evaluation of the severity of the tracheobronchial collapse syndrome] Scheel W, et al. **Z Erkr Atmungsorgane** 1989;172(1):53-64 (Eng. Abstr.) (Ger)

[Tracheobronchomegaly—a case report] Adolph W, et al. **Z Gesamte Inn Med** 1988 Nov 1;43(21):622–4 (Eng. Abstr.) (Ger)

[Value of bronchoscopic examination in the diagnosis of respiratory tract diseases. II. Bacteriological examinations. Sarcoidosis and tracheo-bronchial collapse] Owsiński J. **Przegl Lek** 1988;45(6):493–9 (Eng. Abstr.) (Pol)

[A case of tracheal amyloidosis] Skripal' AIu. **Klin Med (Mosk)** 1989 May;67(5):131–2 (Rus)

[Osteochondroplastic tracheopathy. Diagnostic confirmation. Experience with 8 cases] Núñez Cálix N, et al. **Rev Clin Esp** 1989 Jan;184(1):12–5 (23 ref.) (Eng. Abstr.) (Spa)

DRUG THERAPY

[Discussion on improving the diagnosis and treatment of tracheobronchial disease by integrated traditional and Western medicine] Yan CX. **Chung Hsi I Chieh Ho Tzu Chih** 1988 Nov;8(11):686–7 (Chi)

ETIOLOGY

Tracheal occlusion following oesophageal foreign body removal. Woods I, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):356–8

Osteoradionecrosis of the head and neck: a case of a clavicular–tracheal fistula secondary to osteoradionecrosis of the sternoclavicular joint. Stofman GM, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):545–9

Gastrotracheal fistula: a late complication after transhiatal esophagectomy. Kron IL, et al. **Ann Thorac Surg** 1989 May; 47(5):767–8

Tracheal compression by an innominate artery aneurysm. Montgomery PQ, et al. **Eur J Vasc Surg** 1987 Dec; 1(6):425–7

Vascular anomalies causing tracheoesophageal compression. Review of experience in children. Backer CL, et al. **J Thorac Cardiovasc Surg** 1989 May;97(5):725–31

Airway obstruction secondary to tuberculosis lymph node erosion into the trachea: drainage via bronchoscopy. Schwartz MS, et al. **Otolaryngol Head Neck Surg** 1988 Dec; 99(6):604–6

Arteriotracheal fistula in patients treated for lymphoma. Dickman PS, et al. **Pediatr Pathol** 1989;9(3):329–36

Tracheal compression caused by achalasia. Chapman S, et al. **Pediatr Pulmonol** 1989;7(1):49–51

Tracheoesophageal compression syndromes related to vascular ring. Vallette RC, et al. **South Med J** 1989 Mar; 82(3):338–41

Tracheomalacia from compressing goiter: management after thyroidectomy. Geelhoed GW. **Surgery** 1988 Dec; 104(6):1100–8

[Abnormalities of the aortic arch in adults. A rare cause of tracheo-oesophageal compression. Apropos of 2 cases] Georges JL, et al. **Ann Chir** 1989;43(2):99–104 (Eng. Abstr.) (Fre)

[Bronchogenic cysts compressing the trachea, an unusual cause of neonatal respiratory distress] Richard O, et al. **Pediatrie** 1988;43(6):521–3 (Eng. Abstr.) (Fre)

[Late lesions of the trachea following tracheotomy. Radiographic and clinical studies] Kucher R, et al. **Klin Med Osterr Z Wiss Prakt Med** 1967;22(12):570–2 (Ger)

METABOLISM

Effect of aerosol challenge with sensitising antigen on the permeability of the surface of the rat trachea in life. Mukherjee S, et al. **Thorax** 1988 Dec;43(12):1007–10

MICROBIOLOGY

Long-standing indolent blastomycosis at internal opening of tracheostomy. Christie AJ, et al. **Chest** 1989 Apr; 95(4):932–3

PATHOLOGY

Diffuse thickening of the tracheal wall [clinical conference] Müller NL, et al. **Can Assoc Radiol J** 1989 Aug;40(4):213–5

Tracheomalacia and bronchomalacia associated with Larsen syndrome. Rock MJ, et al. **Pediatr Pulmonol** 1988;5(1):55–9

PHYSIOPATHOLOGY

Lung function in patients with tracheobronchopathia osteochondroplastica. Tukiainen H, et al. **Eur Respir J** 1988 Jul;1(7):632–5

PREVENTION & CONTROL

Prevention of delayed hemorrhage after tracheotomy. Mamikunian C. **Ear Nose Throat J** 1988 Dec;67(12):881–2, 884, 886–7 passim

RADIOGRAPHY

Tracheobronchial calcification in members of a fixed population sample. Fukuya T, et al. **Acta Radiol** 1989 May–Jun;30(3):277–80

Demonstration on computed tomography of tracheomalacia in tracheobronchomegaly (Mounier–Kuhn syndrome). Doyle AJ. **Br J Radiol** 1989 Feb;62(734):176–7

Tracheomegaly in children. Karsh S, et al. **Clin Imaging** 1989 Mar;13(1):77–81 (14 ref.)

CT appearance of lunate trachea. Lomasney L, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):520–2

The deviated trachea. Hustad GJ, et al. **Nebr Med J** 1989 Jul;74(7):182–4

[Roentgen image of the trachea in the supine position in substernal struma: a further possibility in avoiding radioiodine diagnosis] Schröder F, et al. **Z Gesamte Inn Med** 1988 Oct 1;43(19):556–7 (Eng. Abstr.) (Ger)

[Tracheopatia osteoplastica. Report of a case examined by CT] Cortese G, et al. **Radiol Med (Torino)** 1989 Mar; 77(3):272–5 (Ita)

SURGERY

Refractory bradycardia during aspiration of a tracheal cyst in a young infant. Uejima T, et al. **Anesthesiology** 1988 Nov;69(5):776–8

Resection with laser and high frequency cutting loop in tracheo–bronchial diseases. Illum P. **J Laryngol Otol** 1989 Apr;103(4):386–9

Treatment of tracheocutaneous fistulae in children. White AK, et al. **J Otolaryngol** 1989 Feb;18(1):49–52

A new intratracheal stent for tracheobronchial reconstruction: experimental and clinical studies. Loeff DS, et al. **J Pediatr Surg** 1988 Dec;23(12):1173–7

[The carbon dioxide laser in tracheobronchial diseases in children. A prospective study of 11 cases] Garabedian EN, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(3):206–9 (Eng. Abstr.) (Fre)

[Tracheotomy using an ultrasonic scalpel] Ferkel'man LA, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):32–4 (Eng. Abstr.) (Rus)

[Use of lasers and cryocoagulation in the complex therapy of scleroma of the trachea] Bolotov PA, et al. **Vrach Delo** 1989 Feb;(2):44–5 (Rus)

[Laser photoresection in tracheobronchial pathology] Díaz Jiménez JP. **Med Clin (Barc)** 1989 May 13;92(18):708–15 (Spa)

THERAPY

Tracheostomy in children—the Red Cross War Memorial Children's Hospital experience 1980–1985. Prescott CA, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):97–107

VETERINARY

Respiratory cryptosporidiosis in chickens. Goodwin MA, et al. **Poult Sci** 1988 Dec;67(12):1684–93

TRACHEAL NEOPLASMS

Endotracheal neurofibroma in a patient with von Recklinghausen's disease. Lossos IS, et al. **Eur Respir J** 1988 May;1(5):464–5 (7 ref.)

[Malignant non-Hodgkin's lymphoma of tracheo–bronchial sites] Roden S, et al. **Rev Pneumol Clin** 1988;44(3):132–5 (9 ref.) (Eng. Abstr.) (Fre)

[Principles in the prevention, early diagnosis, treatment and after care of malignant neoplasms of the trachea, bronchus and lung] Ebeling K, et al. **Radiobiol Radiother (Berl)** 1988; 29(5):561–70 (Eng. Abstr.) (Ger)

[Carcinoid neoplasms: current aspects of diagnosis and therapy] Flammia M, et al. **Minerva Chir** 1989 Feb 28; 44(4):623–31 (73 ref.) (Ita)

[Cylindroma of the subglottic area of the larynx and the upper third of the trachea] Oloviannikov IA, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):79–80 (Rus)

CHEMICALLY INDUCED

Promoting effect of polybrominated biphenyls on tracheal papillomas in Syrian golden hamsters. Wasito, et al. **J Toxicol Environ Health** 1989;27(2):173–87

COMPLICATIONS

An unusual case of airway obstruction in a child. Baines DB, et al. **Anaesth Intensive Care** 1989 Feb;17(1):88–90

Obstructing tumors of the subglottic larynx and cervical trachea: airway management and treatment. Shapshay SM, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):487–92

Polypoid neurilemmoma of the trachea: an unusual cause of major airway obstruction. Robin J, et al. **Aust N Z J Surg** 1988 Nov;58(11):912–4

Kaposi's sarcoma of the trachea. Rajaratnam K, et al. **J Laryngol Otol** 1988 Oct;102(10):951–3

DIAGNOSIS

Diagnosis and Nd-YAG laser treatment of unsuspected malignant tracheal obstruction. Gelb AF, et al. **Chest** 1988 Oct;94(4):767–71

Sinus histiocytosis with massive lymphadenopathy and tracheobronchial lesions: CT and MR findings. Okada K, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1039–40

[Difficulties in the diagnosis of tracheal tumors] Sekula J, et al. **Przegl Lek** 1988;45(10):757–9 (Eng. Abstr.) (Pol)

[Endoscopic semeiotics of tracheal neoplasms] Bagirov MM, et al. **Klin Khir** 1988;(10):12–3 (Eng. Abstr.) (Rus)

DRUG THERAPY

Long term survival after treatment of disseminated T cell lymphoma presenting with tracheal obstruction in a patient with coeliac disease. Seddon DJ, et al. **Thorax** 1989 Jun; 44(6):519–20

ETIOLOGY

Multifactorial hamster respiratory carcinogenesis with interdependent effects of cannula-induced mucosal wounding, saline, ferric oxide, benzo[a]pyrene and N-methyl-N-nitrosourea. Keenan KP, et al. **Cancer Res** 1989 Mar 15;49(6):1528–40

Endobronchial pseudolymphoma associated with Sjögren's syndrome. Report of a case. Miyazaki N, et al. **Endoscopy** 1989 Mar;21(2):99–101

METABOLISM

Arachidonic acid metabolism in normal and transformed rat tracheal epithelial cells and its possible role in the regulation of cell proliferation. Duniec ZM, et al. **Exp Lung Res** 1989 May;15(3):391–408

MORTALITY

Mortality for tracheal, bronchial and lung cancer: possibilities and limits in data quality–control. Guidi E, et al. **Tumori** 1988 Aug 31;74(4):369–75

PATHOLOGY

Chondrosarcoma of the trachea. A case report and literature review. Matsuo T, et al. **Acta Cytol** 1988 Nov–Dec; 32(6):908–12 (13 ref.)

Malignant pleomorphic adenoma (malignant mixed tumor) of the trachea. Report of a case. Hemmi A, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1215–26

Glomus tumor of the trachea. Report of a case with ultrastructural observation. Kim YI, et al. **Cancer** 1989 Aug 15;64(4):881–6

In vitro neoplastic progression of rat tracheal epithelial cells transformed by diverse carcinogens. Walker C, et al. **Cancer Res** 1989 Aug 15;49(16):4427–30

Cell–line–dependent inhibition of phenotypic expression of preneoplastic and neoplastic tracheal epithelial cells by normal tracheal cells in denuded tracheal transplants. Gillett NA, et al. **Carcinogenesis** 1989 Jul;10(7):1147–54

Cytologic diagnosis of adenoid cystic carcinoma in tracheal wash specimens. Buchanan AJ, et al. **Diagn Cytopathol** 1988;4(2):130–2

Glomus tumour of the trachea. Sheffield E, et al. **Histopathology** 1988 Aug;13(2):234–6

Adenoid cystic carcinoma of trachea metastatic to the placenta. Schmitt FC, et al. **Hum Pathol** 1989 Feb; 20(2):193–5

Invasive fibrous tumor of the tracheobronchial tree: clinical and pathologic study of seven cases. Tan–Liu NS, et al. **Hum Pathol** 1989 Feb;20(2):180–4

Adenoid cystic carcinoma of the tracheobronchial tree: clinicopathology and immunohistochemistry. Ishida T, et al. **J Surg Oncol** 1989 May;41(1):52–9

Glomus tumor of the trachea. Immunohistochemical and electron microscopic studies. Ito H, et al. **Pathol Res Pract** 1988 Nov;183(6):778–84

Subglottic inflammatory pseudotumor in a 6-year-old child. Zapatero J, et al. **Pediatr Pulmonol** 1989;6(4):268–71

[Re-evaluation of the TNM classification of cancers of the carena (letter)] Voloch A, et al. **Presse Med** 1989 Mar 4; 18(9):495 (Fre)

[Malignant degeneration of laryngotracheal papillomas] Cotulbea S, et al. **Rev Chir [Otorinolaringol]** 1988 Oct–Dec; 33(4):295–8 (Eng. Abstr.) (Rum)

PREVENTION & CONTROL

[Principles for prevention, early detection, treatment and after-care of malignant neoplasms of the trachea, bronchus and lung] **Z Erkr Atmungsorgane** 1989;172(2):159–68 (Ger)

RADIOGRAPHY

Malignant neoplasms of the trachea. Morency G, et al. **Can Assoc Radiol J** 1989 Aug;40(4):198–200 (13 ref.)

Radiology clinic. Young woman with a wheeze. Lee FE, et al. **Indiana Med** 1989 Jan;82(1):19–20

Tracheal chondroma: CT appearance. Swain ME, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1085–6

Primary neurilemoma of the trachea. Pang LC. **South Med J** 1989 Jun;82(6):785–7

RADIOTHERAPY

Primary tumors of the trachea. Results of radiation therapy. Fields JN, et al. **Cancer** 1989 Jun 15;63(12):2429–33

Radiotherapy for primary carcinoma of the trachea. Cheung AY. **Radiother Oncol** 1989 Apr;14(4):279–85

[Treatment of tracheobronchial tumors with endoluminal irradiation with iridium 192 (afterloading technic)] Huber RM, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:357–9 (Eng. Abstr.) (Ger)

[Neodymium–Yag laser in the treatment of inoperable tumors of the trachea and the large bronchi] Izzo L, et al. **Minerva Chir** 1988 Nov 30;43(22):1915–8 (Eng. Abstr.) (Ita)

SECONDARY

Esthesioneuroblastoma metastatic to the trachea. Franklin D, et al. **Head Neck Surg** 1987 Nov–Dec;10(2):102–6

[Problems of tracheotomy in locally invasive anaplastic thyroid cancer] Hölting T, et al. **Langenbecks Arch Chir** 1989;374(2):72–6 (Eng. Abstr.) (Ger)

[Stomal recurrence following total laryngectomy—a clinicopathological study] Sato K, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Jan;92(1):1–6 (Eng. Abstr.) (Jpn)

SURGERY

Emergency laser vaporization and helium–oxygen administration for acute malignant tracheobronchial obstruction. Torre M, et al. **Am J Emerg Med** 1989 May; 7(3):294–6

Cartilaginous tumors of the trachea and larynx. Neis PR, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):31–6 (24 ref.)

Universal ventilation laser tracheoscope. Shapshay SM, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):550–1

Tracheal papillomatosis treated with Nd–Yag laser resection. Hunt JM, et al. **Aust N Z J Med** 1988 Oct;18(6):781–4

Treatment of tracheobronchial granular cell myoblastomas with endoscopic bipolar cautery. Cunningham L, et al. **Chest** 1989 Aug;96(2):427–9

Successful cryotherapy of a benign tracheal neoplasm. Rodgers BM, et al. **J Pediatr Surg** 1988 Aug;23(8):771–4

Bronchoscopic use of the neodymium–yttrium–aluminium–garnet laser for lesions of the trachea and bronchus. Clarke CP, et al. **Med J Aust** 1989 Mar 6;150(5):260–2

Laser treatment of tracheobronchial tumours. Hulks G, et al. **Scott Med J** 1988 Oct;33(5):323–4 (35 ref.)

Solitary plasmacytoma of the trachea treated by loop resection and laser therapy. Kairalla RA, et al. **Thorax** 1988 Dec;43(12):1011–2

[Tumoral tracheobronchial desobstruction by cryotherapy using a flexible catheter (letter)] Eichler B, et al. **Presse Med** 1988 Nov 12;17(40):2138–9 (Fre)

[Intraluminal leiomyoma of the trachea] Stinner B, et al. **Chirurg** 1989 May;60(5):361–4 (Ger)

[Endobronchial laser therapy—a life-saving emergency measure in stenosing tracheal tumors] Häussinger K, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:338–9 (Eng. Abstr.) (Ger)

[Principles of prevention, early detection, treatment and after-care of malignant neoplasms of the trachea, bronchus and lung] Ebeling K, et al. **Zentralbl Chir** 1988; 113(17):1136–45 (Ger)

[A case of adenoid cystic carcinoma of the trachea reconstructed with woven Cooley graft patch] Nakamura H, et al. **Kyobu Geka** 1988 Nov;41(12):1020–3 (Eng. Abstr.) (Jpn)

[A case of tracheal adenocarcinoma subjected to carinal reconstruction with total thoracic esophagectomy] Nishimura Y, et al. **Kyobu Geka** 1988 Sep;41(10):830–4 (Eng. Abstr.) (Jpn)

[Endoscopic Nd–YAG laser therapy of tracheobronchial lesions] Eguchi S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25; 48(9):1153–66 (Eng. Abstr.) (Jpn)

[A case report of tracheal leiomyoma] Koshiishi Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):1003–7 (Eng. Abstr.) (Jpn)

[A case of tracheal adenoid cystic carcinoma with symptoms of emphysema aggravated after tracheoplasty] Terada Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul; 36(7):1180–4 (Eng. Abstr.) (Jpn)

[Surgical treatment of tracheobronchopulmonary cancer] Coman C, et al. **Rev Ig [Pneumoftiziol]** 1988 Apr–Jun; 37(2):131–6 (Eng. Abstr.) (Rum)

THERAPY

[The combined therapy of local administration of OK-432 and radiation in carcinoma of the trachea] Mukai M, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Mar 20;24(3):622–5 (Eng. Abstr.) (Jpn)

[2 cases of primary cancer of the trachea] Bednarski Z. **Wiad Lek** 1989 Jan 1;42(1):44–7 (Eng. Abstr.) (Pol)

ULTRASTRUCTURE

[Amyloid tumor of the trachea. Presentation of a pediatric case] Plaa. Martos JA, et al. **An Esp Pediatr** 1989 Jan; 30(1):61–2 (Spa)

TRACHEAL STENOSIS

[Our experiences concerning the etiology and treatment of laryngo–tracheal stenosis] Kup W. **Acta Otorhinolaryngol Ital** 1986 Sep–Oct;6(5):473–8 (Eng. Abstr.) (Fre)

[Meta–traumatic laryngo–tracheal stenosis: clinical picture, therapeutic directions and critical evaluation from personal experience] de Campora E, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 18:1–28 (60 ref.) (Eng. Abstr.) (Ita)

CHEMICALLY INDUCED

The tracheal nonadrenergic noncholinergic inhibitory system during antigen challenge. Ko WC, et al. **Respir Physiol** 1988 Nov;74(2):129–38

CONGENITAL

Anaesthesia in the management of congenital tracheal stenosis. Rowbottom SJ, et al. **Anaesth Intensive Care** 1989 Feb;17(1):93–6

Congenital tracheal stenosis: a review of 22 patients from 1965 to 1987. Loeff DS, et al. **J Pediatr Surg** 1988 Aug; 23(8):744–8

[Congenital tracheal stenosis due to complete circular rings. Tracheoplasty using autologous pericardium] Chambran P, et al. **Presse Med** 1988 Oct 15;17(35):1810–2 (Eng. Abstr.) (Fre)

[Treatment of congenital tracheal stenosis. Retrospective study of thirteen cases] Minato N, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):434–9 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Tracheal compression and the innominate artery: MR evaluation in infants. Fletcher BD, et al. **Radiology** 1989 Jan;170(1 Pt 1):103–7

Tuberculous stenosis of the trachea. Watson JM, et al. **Tubercle** 1988 Sep;69(3):223–6

[Treatment possibilities in rhinopharyngolaryngo–tracheobronchial scleroma] Pop T, et al. **Rev Chir [Otorinolaringol]** 1988 Oct–Dec; 33(4):299–302 (Eng. Abstr.) (Rum)

ETIOLOGY

Tracheal dilatation followed by stenosis in Mounier–Kuhn syndrome. A case report. Messahel FM. **Anaesthesia** 1989 Mar;44(3):227–9

"Saber–sheath" trachea. Callan E, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):512–5

Tracheal stenosis in Larsen's syndrome. Crowe AV, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):626

Diagnosis and Nd–YAG laser treatment of unsuspected malignant tracheal obstruction. Gelb AF, et al. **Chest** 1988 Oct;94(4):767–71

Rapid progression of tracheal stenosis associated with tracheopathia osteo–chondroplastica. Molloy AR, et al. **Intensive Care Med** 1988;15(1):60–2

Emergency surgical management of retrosternal goiter causing tracheal compression. Abrescia F, et al. **Ital J Surg Sci** 1989;19(2):149–53

Management of achalasia and laryngo–tracheal compression. Barr GD, et al. **J Laryngol Otol** 1989 Jul;103(7):713–4

Mediastinal mass and tracheal obstruction during general anesthesia [letter] Curtis JL, et al. **Mayo Clin Proc** 1989 Apr;64(4):475–6

Mediastinal mass and tracheal obstruction during general anesthesia. Prakash UB, et al. **Mayo Clin Proc** 1988 Oct; 63(10):1004–11

[Respiratory distress on recovery from anesthesia due to tracheal stenosis] Arbault C, et al. **Cah Anesthesiol** 1988 Dec;36(8):649–50 (Fre)

[Laryngotracheal obstruction in ulcerative colitis (apropos of a case)] Karasalihoğlu A, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):469–71 (10 ref.) (Eng. Abstr.) (Fre)

[Etiology and pathogenesis of cicatricial stenosis of the larynx and trachea in children] Shuster AM. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):83–9 (87 ref.) (Rus)

[Wegener's disease with lesions of the larynx and trachea in a child] Tsvetkov EA, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):71–2 (Rus)

PATHOLOGY

Symmetrical bronchial pattern with normal atrial morphology. Devine WA, et al. **Int J Cardiol** 1988 Sep; 20(3):395–8

[Comparative cinematographic, endoscopic and functional studies of the preoperative estimation of the severity of tracheal stenoses] Strauss HJ, et al. **Z Erkr Atmungsorgane** 1989;172(2):130–42 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Use of maximal expiratory flows to evaluate central airways obstruction in infants. Tepper RS, et al. **Pediatr Pulmonol** 1989;6(4):272–4

[Various parameters of the mechanics of respiration during expiratory stenosis of the trachea and bronchi] Khadartsev AA, et al. **Ter Arkh** 1989;61(3):76–7 (Eng. Abstr.) (Rus)

SURGERY

Laryngotracheal reconstruction with composite nasal septal cartilage grafts. Duncavage JA, et al. **Ann Otol Rhinol Laryngol** 1989 Aug;98(8 Pt 1):581–5

Correction of segmental tracheal stenosis in children. Healy GB, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):444–7

Repair of subglottic stenosis with a free perichondrial graft. Ishikawa K, et al. **Br J Plast Surg** 1988 Nov;41(6):652–6

Surgical management of congenital tracheal stenosis. Hamelink MC, et al. **Heart Lung** 1989 Mar;18(2):178–83 (41 ref.)

The anterior cricoid split: the Children's Hospital of Philadelphia experience. Anderson GJ, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct;16(1):31–8

A new intratracheal stent for tracheobronchial reconstruction: experimental and clinical studies. Loeff DS, et al. **J Pediatr Surg** 1988 Dec;23(12):1173–7

Reversed free periosteal grafting of extensive tracheal defects in dogs. Moutsouris C, et al. **J Pediatr Surg** 1989 Jun; 24(6):570–2

Pulmonary artery sling: primary repair by tracheal resection in infancy. Jonas RA, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):548–50

The surgical treatment of congenital tracheal stenosis—a report of two cases. Takahashi H, et al. **Jpn J Surg** 1989 May;19(3):358–62

Tracheal reconstruction using irradiated homologous grafts in rabbits. Zalzal GH, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):119–25

[Results of surgical and conservative therapy of tracheal and tracheoesophageal lesions] Hájek M, et al. **Rozhl Chir** 1989 Jan;68(1):1–5 (Eng. Abstr.) (Cze)

[The use of the jet ventilation technic in surgical interventions on the trachea] Klein U, et al. **Anaesthesiol Reanim** 1989; 14(1):3–11 (Eng. Abstr.) (Ger)

[Surgical therapy in tracheal stenoses] Swoboda L, et al. **Helv Chir Acta** 1988 Nov;55(4):459–63 (Eng. Abstr.) (Ger)

[Early and long-term results following tracheal segment resection] von Glass W, et al. **HNO** 1989 Jun;37(6):259–63 (Eng. Abstr.) (Ger)

[The value of endoscopic CO2 laser surgery in subglottic stenoses] Sutter R, et al. **Laryngorhinootologie** 1989 Jun; 68(6):323–6 (Eng. Abstr.) (Ger)

[Endobronchial laser therapy—a life-saving emergency measure in stenosing tracheal tumors] Häussinger K, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:338–9 (Eng. Abstr.) (Ger)

[Successful simultaneous repair of tetralogy of Fallot and congenital tracheal stenosis in a 5-year old child] Oshima Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):535–9 (Eng. Abstr.) (Jpn)

[Evaluation of the area of the minimal passage incision of the trachea in the presence of pronounced fixed stenosis with the aid of measurements of airway resistance] Zhivotovskaia EV, et al. **Grudn Khir** 1989 May–Jun; (3):53–6 (Rus)

[Characteristics of postoperative healing in patients with stenoses of the hollow organs of the neck (clinico–morphologic study)] Tarasov DI, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):70–7 (Eng. Abstr.) (Rus)

[Surgical treatment of disseminated cicatricial stenoses of the larynx and trachea in children] Tsvetkov EA. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):33–7 (Eng. Abstr.) (Rus)

[Tracheal stenosis. Presentation of a case treated by laser (letter)] Hueto Pérez de Heredia J, et al. **Rev Clin Esp** 1988 May;182(8):444–5 (Spa)

THERAPY

Near-fatal complication of tracheal T-tube use. Calhoun KH, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):542–4

Balloon dilatation of postoperative tracheal stenosis. Philippart AI, et al. **J Pediatr Surg** 1988 Dec;23(12):1178–9

[Tracheobronchial stenosis of the premature infant. Treatment by balloon dilatation] Devlieger H, et al. **Arch Fr Pediatr** 1988 Oct;45(8):561–3 (Eng. Abstr.) (Fre)

[The double helix spiral for bridging of severe tracheal stenosis] Buchmann P, et al. **Schweiz Rundsch Med Prax** 1988 Oct 18;77(42):1142–3 (Eng. Abstr.) (Ger)

[A case of tracheobronchial stenosis after esophageal resection and tracheoplasty managed by a silicon T-tube] Tanimura S, et al. **Kyobu Geka** 1988 Jul;41(8):660–3 (Eng. Abstr.) (Jpn)

[Sclerosing endoscopic therapy of expiratory stenosis of the trachea and the principal bronchi] Alimov AT, et al. **Grudn Khir** 1989 Jan–Feb;(1):40–3 (Eng. Abstr.) (Rus)

[Use of staphylococcal anatoxin in the complex treatment of patients with chronic cicatricial stenoses of the hollow organs of the neck] Tarasov DI, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):29–33 (Eng. Abstr.) (Rus)

VETERINARY

Post traumatic tracheal stenosis in a cat. Corcoran BM. **Vet Rec** 1989 Apr 1;124(13):342–3

The use of a silicone T-tube to treat tracheal stenosis in a llama. Levine SA, et al. **Vet Surg** 1987 May–Jun;16(3):241–4

TRACHEITIS

COMPLICATIONS

[Acute bacterial laryngotracheobronchitis] Gárate A, et al. **Rev Chil Pediatr** 1987 Nov–Dec;58(6):472–8 (Eng. Abstr.)

(Spa)

DRUG THERAPY

Acyclovir-responsive herpetic tracheobronchitis. Legge RH, et al. Am J Med 1988 Oct;85(4):561–3

[Use of cefaclor monohydrate in infections of the upper and lower respiratory tract] Abbatangelo R, et al. Clin Ter 1988 Aug 31;126(4):261–5 (Eng. Abstr.) (Ita)

[Enoxacin in the treatment of bacterial infections of the respiratory system] Marchioni CF, et al. Clin Ter 1989 Jun 30;129(6):429–36 (Eng. Abstr.) (Ita)

ETIOLOGY

Necrotizing tracheobronchitis. An ischemic lesion. Hanson JB, et al. Am J Dis Child 1988 Oct;142(10):1094–8

Respiratory tract infections increase susceptibility to neurogenic inflammation in the rat trachea. McDonald DM. Am Rev Respir Dis 1988 Jun;137(6):1432–40

Acute airway obstruction due to necrotizing tracheobronchial aspergillosis in immunocompromised patients: a new clinical entity. Berlinger NT, et al. Ann Otol Rhinol Laryngol 1989 Sep;98(9):718–20

Bacterial tracheitis in children. Kasian GF, et al. Can Med Assoc J 1989 Jan 1;140(1):46–50 (125 ref.)

Necrotizing tracheobronchitis following mechanical ventilation of the newborn. Arad I, et al. Isr J Med Sci 1989 May;25(5):271–3

Inhibition of neutral endopeptidase potentiates neurogenic inflammation in the rat trachea. Umeno E, et al. J Appl Physiol 1989 Jun;66(6):2647–52

Bacterial tracheitis in children. Donaldson JD, et al. J Otolaryngol 1989 Apr;18(3):101–4 (16 ref.)

Tracheobronchitis and pneumonia due to herpes simplex virus (HSV) infection. Chakraborty A, et al. Nebr Med J 1988 Dec;73(12):347–50

Necrotizing tracheobronchitis in intubated newborns [letter] Drut R, et al. Pediatr Pathol 1988;8(5):567

MICROBIOLOGY

Phenotypic characteristics of Branhamella catarrhalis strains. Soto-Hernandez JL, et al. J Clin Microbiol 1989 May; 27(5):903–8

Tracheitis and supraglottis associated with Branhamella catarrhalis and respiratory syncytial virus [letter] Alligood GA, et al. Pediatr Infect Dis J 1989 Mar;8(3):190–1

THERAPY

Treatment of neonatal necrotizing tracheobronchitis with extracorporeal membrane oxygenation and bronchoscopy. Michael EJ, et al. J Pediatr Surg 1988 Sep;23(9):798–801

[Treatment of children with acute stenosing laryngotracheitis during prolonged tracheal intubation] Prutovykh NN, et al. Vestn Otorinolaringol 1989 May-Jun;(3):50–2 (Eng. Abstr.) (Rus)

VETERINARY

Conjunctivitis, tracheitis, and pneumonia associated with herpesvirus infection in green sea turtles. Jacobson ER, et al. J Am Vet Med Assoc 1986 Nov 1;189(9):1020–3

A recurrent epizootic of proliferative tracheobronchitis in black korhaans. Munson L, et al. J Am Vet Med Assoc 1986 Nov 1;189(9):1120–1

The isolation and attenuation of a virus causing rhinotracheitis in turkeys in South Africa. Buys SB, et al. Onderstepoort J Vet Res 1989 Jun;56(2):87–98

Necrotizing tracheobronchitis following high-frequency ventilation: effect of lung deflation. Cordero L, et al. Pediatr Pathol 1988;8(5):525–33

TRACHEOBRONCHOMEGALY see under TRACHEAL DISEASES

TRACHEOESOPHAGEAL FISTULA

Tracheoesophageal procedures and voice restoration [letter] Singer MI. Arch Otolaryngol Head Neck Surg 1989 May; 115(5):633

Speech restoration and complications of primary versus secondary tracheoesophageal puncture following total laryngectomy. Maniglia AJ, et al. Laryngoscope 1989 May; 99(5):489–91

COMPLICATIONS

Urogenital tract abnormalities associated with esophageal atresia and tracheoesophageal fistula. Berkhoff WB, et al. J Urol 1989 Feb;141(2):362–3 (13 ref.)

CONGENITAL

Congenital tracheo-oesophageal fistula in an adult. Peat SJ, et al. Br J Surg 1989 Apr;76(4):412

VATER association. A unifying concept of multiple anomalies. Beals RK, et al. J Bone Joint Surg [Am] 1989 Jul;71(6):948–50 (21 ref.)

Double aortic arch associated with esophageal atresia and tracheoesophageal fistula. Hartenberg MA, et al. J Pediatr Surg 1989 May;24(5):488–90

Bronchopulmonary foregut malformation in 3 infants—with special references to cases in childhood. Chiba T, et al. Z Kinderchir 1989 Apr;44(2):105–8

DIAGNOSIS

[Isolated tracheoesophageal fistulas. Apropos of 3 cases revealed in the newborn] Geiss S, et al. Chir Pediatr 1988; 29(4):205–7 (Eng. Abstr.) (Fre)

ETIOLOGY

Massive tracheal necrosis complicating endotracheal intubation. Abbey NC, et al. Chest 1989 Feb;95(2):459–60

Tracheoesophageal injury secondary to disc battery ingestion. Sigalet D, et al. J Pediatr Surg 1988 Nov; 23(11):996–8

[Description of a case of tracheoesophageal fistula following endotracheal intubation] Amodei C, et al. Minerva Anestesiol 1987 Nov;53(11):651–3 (Eng. Abstr.) (Ita)

GENETICS

Congenital nephrotic syndrome and tracheoesophageal fistula with esophageal atresia (type IIIB). Stefanidis CJ, et al. Prog Clin Biol Res 1989;305:211–4

PATHOLOGY

Spontaneous esophagotracheal fistula [letter] Appelman HD. Gastroenterology 1989 Mar;96(3):956

RADIOGRAPHY

Difficulties in diagnosis of congenital H-type tracheo-oesophageal fistulae. Kirk JM, et al. Clin Radiol 1989 Mar;40(2):150–3

Neonatal radiologic casebook. H-type tracheo–esophageal fistula. Vinstein AL. J Perinatol 1987 Fall;7(4):386–7

RADIONUCLIDE IMAGING

Gastrointestinal visualization during xenon-133 ventilation study in a patient with tracheoesophageal fistula. Takehara Y, et al. J Nucl Med 1989 Feb;30(2):258–9

SURGERY

Vascularised fasciocutaneous flap for reconstruction of the hypopharynx. Delaere P, et al. Acta Otorhinolaryngol Belg 1988;42(4):557–63

Current results in repair of esophageal atresia with tracheoesophageal fistula using physiologic status as a guide to therapy. Randolph JG, et al. Ann Surg 1989 May; 209(5):526–30; discussion 530–1

Current surgical management of oesophageal atresia and/or tracheo–oesophageal fistula. Beasley SW, et al. Aust N Z J Surg 1989 Sep;59(9):707–12

Management of esophageal atresia and tracheoesophageal fistula. Reyes HM, et al. Clin Perinatol 1989 Mar; 16(1):79–84

Surgical resection of high cervical esophageal carcinoma with malignant tracheoesophageal fistula: a case report [letter] Picone A, et al. J Thorac Cardiovasc Surg 1989 Jan;97(1):153–5

Surgical treatment of recurrent tracheo–esophageal fistula using a latissimus dorsi pedicled muscle flap—report of a case. Fujita H, et al. Jpn J Surg 1989 Jan;19(1):78–81

Developments in the management of oesophageal atresia and tracheo–oesophageal fistulas. Beasley SW, et al. Med J Aust 1989 May 1;150(9):501–3

Esophageal atresia with tracheo–esophageal fistula. End–to–end versus end–to–side repair. Ziv Y, et al. Panminerva Med 1988 Oct–Dec;30(4):205–7

Tracheoesophageal fistula in the patient with lymphoma: case report and review of the literature. Perry RR, et al. Surgery 1989 Jun;105(6):770–7 (49 ref.)

[Results of surgical and conservative therapy of tracheal and tracheoesophageal lesions] Hájek M, et al. Rozhl Chir 1989 Jan;68(1):1–5 (Eng. Abstr.) (Cze)

[Postoperative recurrence of esophago-tracheal fistula. Significance of peroperative catheterization of the fistula with tracheoscopy. Apropos of 10 cases] Audry G, et al. Chir Pediatr 1989;30(2):77–81 (Eng. Abstr.) (Fre)

[Cytochemical criteria of the prognosis of the postoperative course of esophageal atresia and tracheoesophageal fistulas in newborn infants] Proshchitskaia EL. Pediatriia 1988; (7):109–10 (Rus)

THERAPY

Gax-collagen injection to correct an enlarged tracheoesophageal fistula for a vocal prosthesis. Remacle MJ, et al. Laryngoscope 1988 Dec;98(12):1350–2

[Inflammatory and neoplastic esophagotracheal fistula. Intubation or surgery?] Richelme H, et al. Ann Chir 1989; 43(1):40–4 (Eng. Abstr.) (Fre)

TRACHEOSTOMY

Intubation risk with patients with tracheostomy [letter] Callander CC. Anaesthesia 1988 Dec;43(12):1061

Tracheostomy in obstetric practice? [letter; comment] Collier CB. Anaesthesia 1989 Apr;44(4):358. Comment on: Anaesthesia 1988 Aug;43(8):703–4

Minitracheostomy and laryngectomy [letter] Harrison CA, et al. Anaesthesia 1988 Oct;43(10):900–1

Tracheostomy performed under cervical epidural blockade. Ullman DA, et al. Anesthesiology 1989 Jul;71(1):161–2

Tracheostomies in burn patients. Jones WG, et al. Ann Surg 1989 Apr;209(4):471–4

Coronary artery bypass grafting in patients with a tracheostoma: use of a bilateral thoracotomy incision. Marshall WG Jr, et al. Ann Thorac Surg 1988 Oct; 46(4):465–6

Facilitating training in tracheoesophageal prosthesis placement. Enderle EE, et al. Arch Otolaryngol Head Neck Surg 1989 Jul;115(7):853–5

Tracheoesophageal puncture for voice restoration after extended laryngopharyngectomy. Juarbe C, et al. Arch Otolaryngol Head Neck Surg 1989 Mar;115(3):356–9

Tracheostomy—an overview. Management and complications. Quigley RL. Br J Clin Pract 1988 Oct; 42(10):430–4 (7 ref.)

Long-standing indolent blastomycosis at internal opening of tracheostomy. Christie AJ, et al. Chest 1989 Apr; 95(4):932–3

Recurrence of sleep apnea syndrome following tracheostomy. A shift from obstructive to central apnea. Fletcher EC. Chest 1989 Jul;96(1):205–9

Timing of tracheostomy in the critically ill patient. Marsh HM, et al. Chest 1989 Jul;96(1):190–3

Selective left endobronchial suctioning in the intubated patient. Panacek EA, et al. Chest 1989 Apr;95(4):885–7

Cricothyroidotomy, a useful alternative to tracheostomy in maxillofacial surgery. Ward Booth RP, et al. Int J Oral Maxillofac Surg 1989 Feb;18(1):24–6 (11 ref.)

Gaining access to school for the child with a tracheostomy. Grundfast KM, et al. Int J Pediatr Otorhinolaryngol 1988 Nov;16(2):101–12

Tracheostomy in children—the Red Cross War Memorial Children's Hospital experience 1980–1985. Prescott CA, et al. Int J Pediatr Otorhinolaryngol 1989 May;17(2):97–107

Acute epiglottis in children and adults. Nasotracheal intubation, tracheostomy or careful observation? Current status in Scandinavia. Arndal H, et al. J Laryngol Otol 1988 Nov;102(11):1012–6

Management of achalasia and laryngo–tracheal compression. Barr GD, et al. J Laryngol Otol 1989 Jul;103(7):713–4

Asthma therapy and a tracheostomy. O'Callaghan C, et al. J Laryngol Otol 1989 Apr;103(4):427–8

Tracheostomy study. Cinnamond MJ. J Laryngol Otol Suppl 1988;17:9–10

Nursing and home aspects of the care of a child with tracheostomy. Jennings P. J Laryngol Otol Suppl 1988; 17:25–9

Effects of tracheostomy breathing on brain and body temperatures in hyperthermic sheep. Laburn HP, et al. J Physiol (Lond) 1988 Dec;406:331–44

Airway complications in the head injured. Woo P, et al. Laryngoscope 1989 Jul;99(7 Pt 1):725–31

Use of pulse oximetry for monitoring tracheostomy tube obstruction. Rao AJ, et al. ORL J Otorhinolaryngol Relat Spec 1988;50(5):345–8

Tracheostomal reconstruction with the latissimus dorsi myocutaneous flap. Granick MS, et al. Otolaryngol Head Neck Surg 1988 Oct;99(4):427–9

[Voice restoration after total laryngectomy by tracheoesophageal fistula] Lacau St Guily J, et al. Ann Otolaryngol Chir Cervicofac 1989;106(5):360–3 (Eng. Abstr.) (Fre)

[Efficacy of erythromycin (EM) for extubation of tracheostomy tube in 4 cases of chronic respiratory disease] Mikasa K, et al. Kansenshogaku Zasshi 1988 Jul; 62(7):675–81 (Eng. Abstr.) (Jpn)

[Prevention and treatment of pneumonia in burn patients using a microtracheostomy] Matveenko AV, et al. Klin Khir 1989;(3):55–6 (Eng. Abstr.) (Rus)

[A newly constructed silent speech ventilator increases the quality of life of patients with cannulations] Andersson G, et al. Lakartidningen 1989 May 31;86(22):2096–7 (Swe)

ADVERSE EFFECTS

Aspiration in patients with head and neck cancer and tracheostomy. Muz J, et al. Am J Otolaryngol 1989 Jul–Aug;10(4):282–6

Delayed hemorrhage from an anomalous carotid artery following tracheostomy. Edelson RJ, et al. Am Surg 1989 Aug;55(8):488–91

Cuff dilatation of a tracheostomy pack [letter] Madden AP. Anaesthesia 1989 May;44(5):450

Developmental sequelae of long-term infant tracheostomy. Singer LT, et al. Dev Med Child Neurol 1989 Apr; 31(2):224–30

Spontaneous intramural perforation of the esophagus: case report and review of the literature. Kuo YC, et al. Endoscopy 1989 May;21(3):153–4 (12 ref.)

A complication of cricothyroid "minitracheostomy"—oesophageal perforation. Claffey LP, et al. Intensive Care Med 1989;15(2):140–1

Brain damage due to blocked tracheostomy tube: a 12-year saga. Brahams D. Lancet 1989 Jan 7;1(8628):55

Effects of tracheostomy on human tracheobronchial mucosa: a scanning electron microscopic study. Roessler F, et al. Laryngoscope 1988 Nov;98(11):1261–7

[Hemorrhage from the brachiocephalic trunk following tracheostomy] Fot IaF. Klin Khir 1988;(10):53–4 (Rus)

[Iatrogenic bilateral pneumothorax after tracheostomy in childhood] Kharitonov VA, et al. Pediatriia 1988;(7):88 (Rus)

ECONOMICS

Financial implications of prolonged ventilator care under DRGs 474 and 475. Gracey DR, et al. **Chest** 1989 Jul; 96(1):193–4

INSTRUMENTATION

Pressure flow characteristics of commonly used heat–moisture exchangers. Ploysongsang Y, et al. **Am Rev Respir Dis** 1988 Sep;138(3):675–8

Model of a new generation of tracheostomy and endotracheal tubes. A preliminary study of sensors to monitor obstruction. Rao AJ, et al. **Ann Otol Rhinol Laryngol** 1989 Feb;98(2):157–9

Foreign body in the trachea: a case report. Amin MN, et al. **Bangladesh Med Res Counc Bull** 1988 Dec;14(2):87–9

A speaking adaptor for a tracheostomy tube [letter] Wee M. **Br J Anaesth** 1988 Oct;61(4):516

Airway obstruction from overinflation and herniation of tracheostomy tube balloon. Sinfield A, et al. **Heart Lung** 1989 May;18(3):260–2

Unique indication for doing tracheostomy [letter] Parikh AP, et al. **J Assoc Physicians India** 1988 Jun;36(6):400

Fractured tracheostomy tube in the tracheobronchial tree. Ming CC, et al. **J Laryngol Otol** 1989 Mar;103(3):335–6

Olfaction through oral tracheal breathing tube. Knudson RC, et al. **J Prosthet Dent** 1989 Apr;61(4):471–2

Voice intensity of patients using a Communi–Trach I cuffed speaking tracheostomy tube. Leder SB, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):744–7

An endostomal tracheostomy tube for leakproof retention of the Blom–Singer stomal valve. Barton D, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):38–41

Disposable inner cannula tracheotomy tube: a prospective clinical trial. Johnson JT, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):83–4

[A new cannula for tracheostomy] Fauza D de O. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Nov–Dec; 43(6):291–3 (Eng. Abstr.) (Por)

METHODS

Minitracheostomy—a report of a proposed further development [letter] Madden GJ, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4):272–3

Percutaneous endoscopic tracheostomy. Paul A, et al. **Ann Thorac Surg** 1989 Feb;47(2):314–5

Percutaneous approach to tracheostomy [letter] Holtzman RB. **Crit Care Med** 1989 Jun;17(6):595

Emergency department tracheostomy. Piotrowski JJ, et al. **Emerg Med Clin North Am** 1988 Nov;6(4):737–44 (33 ref.)

Guidelines on tracheostomy. The Hospital Infection Control Group of Thailand. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:72–3

[Unusual use of myocutaneous pedicled grafts in cervico–facial cancer] Moreau P, et al. **Acta Otorhinolaryngol Belg** 1988;42(4):548–56 (Eng. Abstr.) (Fre)

[Vocal rehabilitation with tracheo–esophageal prosthesis: protocol adopted by the Naples School. I—Surgical technic for the creation of tracheo–esophageal fistula] Motta G, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 20:87–90 (3 ref.) (Eng. Abstr.) (Ita)

REHABILITATION

Brain injury: functional outcome in children with tracheostomies and gastrostomies. Splaingard ML, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):318–21

STANDARDS

Tracheostomy in the intensive care unit: a safe alternative to the operating room. Hawkins ML, et al. **South Med J** 1989 Sep;82(9):1096–8

VETERINARY

The use of a silicone T–tube to treat tracheal stenosis in a llama. Levine SA, et al. **Vet Surg** 1987 May–Jun;16(3):241–4

TRACHEOTOMY

Management of a newborn infant with congenital laryngeal atresia. Hoka S, et al. **Anesth Analg** 1989 Oct;69(4):535–6

Tracheotomies: a 10–year experience in 319 children. Crysdale WS, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):439–43

Tracheostomy service for ITU patients [letter] Rady M, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):400

Medical indications for tracheotomy. Heffner JE. **Chest** 1989 Jul;96(1):186–90 (6 ref.)

The child with a tracheotomy: making home care work. Myer CM 3d, et al. **Ear Nose Throat J** 1989 Jan;68(1):6, 8, 10 (9 ref.)

Tracheotomy in children with recurrent respiratory papillomatosis. Cole RR, et al. **Head Neck** 1989 May–Jun; 11(3):226–30

Cricothyroidotomy vs. tracheotomy. Abelson L. **Laryngoscope** 1988 Dec;98(12):1358

[Acute upper respiratory tract obstruction in adults (letter)] Egyedi P. **Ned Tijdschr Geneeskd** 1989 Jan 7;133(1):43–4 (Dut)

[Tracheotomy in children. Apropos of 144 cases] Contencin P, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):251–4 (20 ref.) (Eng. Abstr.) (Fre)

[Home care of tracheotomized infants] Betremieux P, et al. **Pediatrie** 1989;44(3):213–9 (Eng. Abstr.) (Fre)

[Surgical therapy in tracheal stenoses] Swoboda L, et al. **Helv Chir Acta** 1988 Nov;55(4):459–63 (Eng. Abstr.) (Ger)

[Problems of tracheotomy in locally invasive anaplastic thyroid cancer] Hölting T, et al. **Langenbecks Arch Chir** 1989;374(2):72–6 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Pneumothorax caused by minitracheotomy. Silk JM, et al. **Anaesthesia** 1989 Aug;44(8):663–4

Prevention of delayed hemorrhage after tracheotomy. Mamikunian C. **Ear Nose Throat J** 1988 Dec;67(12):881–2, 884, 886–7 passim

Ossification of the cricothyroid membrane following minitracheotomy. Pedersen J, et al. **Intensive Care Med** 1989;15(4):272–3 (6 ref.)

Haemorrhage during minitracheotomy: reduction of risk by altered incision. Terry RM, et al. **J Laryngol Otol** 1989 Feb;103(2):207–8

Prolonged intubation vs. tracheotomy: complications, practical and psychological considerations. Astrachan DI, et al. **Laryngoscope** 1988 Nov;98(11):1165–9

Laryngotracheal injury following cricothyroidotomy. Kurlioff DB, et al. **Laryngoscope** 1989 Feb;99(2):125–30

The anatomical basis for post–tracheotomy innominate artery rupture. Oshinsky AE, et al. **Laryngoscope** 1988 Oct; 98(10):1061–4

Swallowing problems in the tracheotomized patient. Nash M. **Otolaryngol Clin North Am** 1988 Nov;21(4):701–9 (14 ref.)

[Analysis of causes leading to dyspnea in patients after tracheotomy] Zhang CF. **Chung Hua Hu Li Tsa Chih** 1988 Jun;23(6):343–4 (Chi)

[Late lesions of the trachea following tracheotomy. Radiographic and clinical studies] Kucher R, et al. **Klin Med Osterr Z Wiss Prakt Med** 1967;22(12):570–2 (Ger)

HISTORY

[Tracheotomies before 1800. On 55 successful cases and their indications] Biefel K, et al. **Gesnerus** 1988;45 Pt 3–4:521–39 (Eng. Abstr.) (Ger)

INSTRUMENTATION

A study of the performance of cricothyroidotomy on cadavers using the Minitrach II. Clancy MJ. **Arch Emerg Med** 1989 Jun;6(2):143–5

Vessel dilator cricothyrotomy for transtracheal jet ventilation. Boyce JR, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):350–3

Obese hypoventilation syndrome of early childhood requiring ventilatory support. Bourne RA, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct;16(1):61–8

Broken Aboulker stents in the tracheal lumen. Zalzal GH, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov;16(2):125–30

Stomal complications and airflow line problems of the Communi–Trach I cuffed talking tracheotomy tube. Leder SB, et al. **Laryngoscope** 1989 Feb;99(2):194–6

Disposable inner cannula tracheotomy tube: a prospective clinical trial. Johnson JT, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):83–4

[High–frequency jet ventilation in emergency tracheal puncture] Hartwein J, et al. **Laryngorhinootologie** 1989 Mar; 68(3):186–7 (Eng. Abstr.) (Ger)

[Tracheotomy using an ultrasonic scalpel] Ferkel'man LA, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):32–4 (Eng. Abstr.) (Rus)

METHODS

Minitracheotomy in children. The management of sputum retention in older children by minitracheotomy. Allen PW, et al. **Anaesthesia** 1988 Sep;43(9):760–1

How to insert a Minitrach. Hutchinson J, et al. **Br J Hosp Med** 1989 Aug;42(2):112–4

Emergency tracheotomy in patients with massive neck swelling. Simon RR. **Emerg Med Clin North Am** 1989 Feb; 7(1):95–101

The anterior cricoid split: the Children's Hospital of Philadelphia experience. Anderson GJ, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct;16(1):31–8

Minitracheotomy in the early respiratory management of patients with spinal injuries. Gupta A, et al. **Paraplegia** 1989 Aug;27(4):269–77

Minitracheotomy: a simple alternative to tracheostomy in obstructive sleep apnoea. Hasan A, et al. **Thorax** 1989 Mar; 44(3):224–5

TRACHOMA

Trachoma: an overview. Tabbara KF. **Int Ophthalmol** 1988; 12(1):5–8

General assembly of the I.O.A.T. and of the Ligue Française contre le Trachome in association with the XXVth International Congress of Ophthalmalogy. (Rome, Italy, May 8, 1986). **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1987;(64):11–190 (Eng, Fre)

The awarding of the Trachoma Gold Medal 1987 to Professor J. Murube del Castillo. Coscas G. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1988;65(1–2):13–6, 20–1 (Eng, Fre)

[General assembly of the I.O.A.T. and of Ligue Française Contre le Trachome. International Organization Against Trachoma. Paris, France, May 3, 1987. Proceedings] **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1988;65(1–2):17–136 (Fre)

[Trachoma in Israel] Simreich Z, et al. **Harefuah** 1988 Apr 15;114(8):384–5 (Eng. Abstr.) (Heb)

CLASSIFICATION

Trachoma grading: a new grading scheme. Taylor HR. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1987;(64):175–81 (Eng, Fre)

New classification of trachoma. Verin P, et al. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1988;65(1–2):25–81 (Eng, Fre)

[Current classification of trachoma (clinical, histological and ultrastructural)] Vérin P, et al. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1987;(64):115–21 (Eng. Abstr.) (Fre)

COMPLICATIONS

Cryotherapy for trichiasis in trachoma. Rice CD, et al. **Arch Ophthalmol** 1989 Aug;107(8):1180–2

Vernal keratoconjunctivitis and trachoma. Friedlaender MH, et al. **Int Ophthalmol** 1988;12(1):47–51

Tear function in relation to the World Health Organization classification of cicatrization in trachoma. el–Rakhawy KE, et al. **Int Ophthalmol** 1988;12(1):31–5

The prevention of blindness from trachoma [editorial] Schachter J. **Int Ophthalmol** 1988;12(1):3–4

In herpes or chlamydial infections, immune response may be key factor in lost vision [news] [published erratum appears in JAMA 1989 May 26;261(20):2958] Olson CM. **JAMA** 1989 Feb 10;261(6):819–20

[Treatment and prevention of the major cause of blindness in the world: trachoma] Aouchiche M. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1987;(64):89–93 (Eng. Abstr.) (Fre)

DIAGNOSIS

Improved sensitivity of a modified polymerase chain reaction amplified DNA probe in comparison with serial tissue culture passage for detection of Chlamydia trachomatis in conjunctival specimens from nepal. Dean D, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):133–7

Immunodiagnosis of ocular chlamydial infection. Rahi A, et al. **Int Ophthalmol** 1988;12(1):65–72

Monoclonal antibodies in the laboratory diagnosis of trachoma. Taylor PB, et al. **Int Ophthalmol** 1988;12(1):81–6

Use of a Chlamydia trachomatis DNA probe for detection of ocular chlamydiae. Dean D, et al. **J Clin Microbiol** 1989 May;27(5):1062–7

Nonculture methods for diagnosing chlamydial infection in patients with trachoma: a clue to the pathogenesis of the disease? Schachter J, et al. **J Infect Dis** 1988 Dec; 158(6):1347–52

[Role of the ophthalmologist in detecting sexually transmitted diseases caused by Chlamydia trachomatis. Apropos of 100 cases] Belloir–Furet F. **Ophtalmologie** 1988 Oct;2(4):381–4 (Fre)

DRUG THERAPY

Treatment of trachoma in the West Bank. Chumbley LC, et al. **Eye** 1988;2 (Pt 5):471–5

Minocycline effects in patients with active trachoma. Tabbara KF, et al. **Int Ophthalmol** 1988;12(1):59–63

[A preliminary study of norfloxacin in the treatment of trachoma] Nabli B, et al. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1988;65(1–2):123–7 (Eng. Abstr.) (Fre)

EPIDEMIOLOGY

Trachoma and blindness in the Nile Delta: current patterns and projections for the future in the rural Egyptian population. Courtright P, et al. **Br J Ophthalmol** 1989 Jul; 73(7):536–40

Water, trachoma and conjunctivitis. Prost A, et al. **Bull WORLD Health Organ** 1989;67(1):9–18 (28 ref.)

Water availability and trachoma. West S, et al. **Bull WORLD Health Organ** 1989;67(1):71–5

Epidemiology of trachoma in north–western Ethiopia. Okubagzhi GS. **East Afr Med J** 1987 Sep;64(9):611–6

Epidemiology of trachoma in the West Bank and Gaza Strip. Chumbley LC, et al. **Eye** 1988;2 (Pt 5):463–70

Village and household clustering of xerophthalmia and trachoma. Katz J, et al. **Int J Epidemiol** 1988 Dec; 17(4):865–9

The epidemiology of infection in trachoma. Taylor HR, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1823–33

Trachoma "down the track" [editorial] Hollows FC. **Med J Aust** 1989 Aug 21;151(4):182–3

Trachoma in the Northern Territory of Australia, 1940–1986. Meredith SJ, et al. **Med J Aust** 1989 Aug 21;151(4):190, 192, 194–9

Trachoma research advances. Cornand G, et al. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique**

1987;(64):61–74 (35 ref.) (Eng, Fre)
The epidemiology of trachoma in Chiapas (Mexico). Wilson M, et al.
Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique 1987;(64):159–74 (Eng, Fre)
Trachoma in Kaduna, northern Nigeria. Recent observations on pattern of clinical presentation. Babalola OE.
Trop Geogr Med 1989 Jan;41(1):41–4
[Trachoma in Czechoslovakia at the present time] Mach R, et al. **Cesk Oftalmol** 1988 Jul;44(4):283–6 (Eng. Abstr.) (Cze)
[Results of a survey of the prevalence of trachoma and glaucoma in 2 departments of Southern Algeria and practical deductions] Aouchiche M, et al.
Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique 1988;65(1–2):113–21 (Eng. Abstr.) (Fre)
[Multifocal study of human chlamydia infections due to Chlamydia trachomatis. Initial descriptive study and deductions apropos of a survey conducted at Sidi-Okba (South Algeria)] Aouchiche M, et al.
Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique 1987;(64):95–101 (Eng. Abstr.) (Fre)

ETIOLOGY

[Current findings on the etiology of trachoma] Kubik J.
Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique 1987;(64):187–90 (Fre)
[Malnutrition and trachoma: study of the correlations with the epidemiological scheme] Resnikoff S, et al.
Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique 1987;(64):75–87 (Eng. Abstr.) (Fre)

HISTORY

Trachoma through history. al-Rifai KM. **Int Ophthalmol** 1988;12(1):9–14
[Prof. Emanuel Machek and his role in the control of trachoma in the Eastern Malopolska territory at the turn of the 19th and 20th centuries] Wojtkiewicz-Rok W.
Arch Hist Filoz Med 1988;51(2):163–70 (Eng. Abstr.) (Pol)

IMMUNOLOGY

Immunopathology of trachomatous conjunctivitis. el-Asrar AM, et al. **Br J Ophthalmol** 1989 Apr;73(4):276–82
Conjunctival epithelial cells infected with Chlamydia trachomatis express HLA-DR antigens [letter] el-Asrar AM, et al. **Br J Ophthalmol** 1989 May;73(5):399–400
Micro-immunofluorescence antibody responses to trachoma vaccines. Wang SP, et al. **Int Ophthalmol** 1988;12(1):73–80
Immune responses of mice after conjunctival exposure to Chlamydia trachomatis serovar A. Barsoum IS, et al.
Med Microbiol Immunol (Berl) 1988;177(6):349–56

METABOLISM

Minocycline levels in tears of patients with active trachoma. Tabbara KF, et al. **Arch Ophthalmol** 1989 Jan;107(1):93–5

MICROBIOLOGY

The microbial epidemiology of trachoma. Treharne JD.
Int Ophthalmol 1988;12(1):25–9

PATHOLOGY

Herbert's pits and lid concretions: an important association. Chumbley LC. **Eye** 1988;2 (Pt 5):476–7
Goblet cell population among patients with inactive trachoma. Blodi BA, et al. **Int Ophthalmol** 1988;12(1):41–5
Conjunctival lymphocyte subsets in trachoma. Burd EM, et al. **Int Ophthalmol** 1988;12(1):53–7
[Some specific characteristics of trachoma in China] Ji MS.
Chung Hua Yen Ko Tsa Chih 1988 Mar;24(2):86–7 (Eng. Abstr.) (Chi)
[Crystallization of the tears of trachoma patients] Hussein FA, et al. **Ophtalmologie** 1988 Jul-Sep;2(3):255–6 (Eng. Abstr.) (Fre)
[Conjunctival imprint in dry eye syndromes] Shawki D, et al. **Ophtalmologie** 1988 Apr-Jun;2(2):135–6 (Eng. Abstr.) (Fre)

PHYSIOPATHOLOGY

Trachoma research: laboratory and epidemiologic aspects. Taylor HR.
Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique 1987;(64):25–58 (77 ref.) (Eng, Fre)
[Electrophoresis of lacrimal proteins and immunoglobulins in Egyptian patients with trachoma] Sabry N, et al.
Ophtalmologie 1988 Oct;2(4):349–51 (Eng. Abstr.) (Fre)

PREVENTION & CONTROL

Community-based intervention programs for trachoma control. West S, et al. **Int Ophthalmol** 1988;12(1):19–23
Oral immunization with chlamydial major outer membrane protein (MOMP). Taylor HR, et al.
Invest Ophthalmol Vis Sci 1988 Dec;29(12):1847–53
Public health approach in trachoma control activity. Cedrone C, et al.
Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique 1987;(64):103–14 (Eng, Fre)
The eradication of trachoma in an immigration country: Israel. Romano A, et al.
Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique 1987;(64):133–42 (Eng, Fre)
[Strategy of the campaign against trachoma in Tunisia] Daghfous MT, et al.
Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique 1987;(64):123–9 (Eng. Abstr.) (Fre)

PSYCHOLOGY

Social factors and trachoma: a review of the literature. Marx R. **Soc Sci Med** 1989;29(1):23–34 (63 ref.)

SURGERY

Correction of trachomatous entropion/trichiasis in Kaduna: an assessment of two simplified methods. Babalola OE.
East Afr Med J 1988 Aug;65(8):525–31

THERAPY

Management and prevention of ocular viral and chlamydial infections. Darougar S, et al. **CRC Crit Rev Microbiol** 1989; 16(5):369–418 (281 ref.)

TRACHOMA VIRUS see **CHLAMYDIA TRACHOMATIS**

TRACK AND FIELD

Peak torque and OBLA running capacity in male orienteers. Johansson C, et al. **Acta Physiol Scand** 1988 Apr; 132(4):525–30
Oxygen uptake and heart rate during cross-country skiing and track walking after myocardial infarction. Oldridge NB, et al. **Am Heart J** 1989 Feb;117(2):495–7
Avulsion fractures of the tibial tuberosity in the adolescent athlete. Risk factors, mechanism of injury, and treatment. Mirbey J, et al. **Am J Sports Med** 1988 Jul-Aug; 16(4):336–40
Semimembranosus tendinitis: an overlooked cause of medial knee pain. Ray JM, et al. **Am J Sports Med** 1988 Jul-Aug; 16(4):347–51
Virus infections and sports performance—a prospective study. Roberts JA, et al. **Br J Sports Med** 1988 Dec; 22(4):161–2
An approach to noninvasive fiber type determination by NMR. Boicelli CA, et al. **Int J Sports Med** 1989 Feb; 10(1):53–4
Analysis of wheelchair track performances [letter] Cooper RA. **Med Sci Sports Exerc** 1989 Apr;21(2):235–6
A three-dimensional analysis of angular momentum in the hammer throw. Dapena J, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):206–20
Mood profiles of Masters track and field athletes. Ungerleider S, et al. **Percept Mot Skills** 1989 Apr;68(2):607–17
[Effect of various types of sports on the anatomy of the common carotid artery and the internal jugular vein] Mikhallova OM, et al. **Arkh Anat Gistol Embriol** 1988 Oct; 95(10):47–50 (Eng. Abstr.) (Rus)

TRACTION

Neurological complications of dynamic reduction of Colles' fractures without anesthesia compared with traditional manipulation after local infiltration anesthesia. Kongsholm J, et al. **J Orthop Trauma** 1987;1(1):43–7
Management of femoral shaft fractures in the adolescent. Herndon WA, et al. **J Pediatr Orthop** 1989 Jan-Feb; 9(1):29–32
Conservative treatment of fractures of the tibial condyles. Damholt V, et al. **Rev Chir Orthop** 1988;74 Suppl 2:281–2
Computed tomographic investigation of the effect of traction on lumbar disc herniations. Onel D, et al. **Spine** 1989 Jan; 14(1):82–90
Hip fractures—treatment and early complications. Dolk T. **Ups J Med Sci** 1989;94(2):195–207

ADVERSE EFFECTS

Brain abscess complicating cervical traction [letter] **BMJ** 1988 Oct 1;297(6652):853–4
Brain abscess complicating cervical traction. Reece AT, et al. **BMJ** 1988 Aug 20-27;297(6647):539
Brain abscess following insertion of skull traction. Sharma BS, et al. **Clin Neurol Neurosurg** 1988;90(4):361–3
Acute volar compartment syndrome during skeletal traction in distal radius fracture. A case report. Naito M, et al. **Clin Orthop** 1989 Apr;(241):234–7
Subdural abscess associated with halo-pin traction. Garfin SR, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1338–40
Deformation of the nail following elastic band traction—a case report. Hoddinott C, et al. **J Hand Surg [Br]** 1989 Feb;14(1):23–4
An experimental study on spinal cord traction effect. Fujita Y, et al. **Spine** 1989 Jul;14(7):698–705
[Trophic disorders of the femur head in non-surgical treatment of congenital dislocation of the hip joint] Gregosiewicz A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(2):113–8 (Eng. Abstr.) (Pol)

HISTORY

Upon the wracke of this tough world. Traction as treatment or torture. Goldblatt D. **Semin Neurol** 1986 Dec;6(4):431–6

INSTRUMENTATION

Meningoencephalitis and cerebral abscess as a complication of the halo device. Lammens J, et al. **Acta Orthop Belg** 1988;54(3):360–2
Brain abscess as a complication of halo traction: role of CT in diagnosing penetration of the skull. Hann J, et al.
AJNR 1989 Mar-Apr;10(2):446
The role of external cranial fixation in simplifying scalp composite tissue transfer. Hallock GG. **Ann Plast Surg** 1989 Jan;22(1):76–9
The design of a new spring-loaded tong-type caliper for cervical traction. Minns RJ, et al. **Injury** 1987 Mar; 18(2):137–8
Zygomatico-maxillary fractures. Late results after traction-hook reduction. Kaastad E, et al.
J Craniomaxillofac Surg 1989 Jul;17(5):210–4
Traction bow for acute reduction of fracture and/or dislocation of the thoracic or thoracolumbar spine. Wang GJ, et al. **J Orthop Trauma** 1988;2(2):124–9
Pull-off strength of gardner-Wells tongs from cadaveric crania. Krag MH, et al. **Spine** 1989 Mar;14(3):247–50
[Measurement of loading power of femur fracture treated by balanced fixed traction frame] Wang ZB, et al.
Chung Hsi I Chieh Ho Tsa Chih 1988 Jun;8(6):347–8, 325 (Eng. Abstr.) (Chi)
[A new version of a skull clamp of our design] Malawski S. **Chir Narzadow Ruchu Ortop Pol** 1988;53(5):412–5 (Eng. Abstr.) (Pol)
[Treatment of compound fractures of the distal meta-epiphyses of the forearm bones using a traction device] Prokin BM, et al. **Ortop Travmatol Protez** 1988 Aug;(8):60 (Rus)
[Use of nail fixators with porolon padding in the treatment of transcondylar and epicondylar fractures of the humerus in children using skeletal traction] Shvetsov GP, et al.
Vestn Khir 1989 Jan;142(1):73–4 (Rus)

METHODS

Fractures of the metatarsals: management of complicated injuries with a simple traction system. Ahmed A, et al.
Injury 1988 Sep;19(5):345–9
Reduction of Colles' fractures without anaesthesia using a new dynamic bone alignment system. Kongsholm J, et al.
Injury 1987 Mar;18(2):133–6
A comparison of results of extensor tendon repair followed by early controlled mobilisation versus static immobilisation. Chow JA, et al. **J Hand Surg [Br]** 1989 Feb;14(1):18–20
Dynamic traction after extensor tendon repair in zones 6, 7, and 8: a retrospective study. Kerr CD, et al.
J Hand Surg [Br] 1989 Feb;14(1):21–2
Unstable femoral shaft fractures: a comparison of interlocking nailing versus traction and casting methods. Webb LX, et al. **J Orthop Trauma** 1988;2(1):10–2
Preoperative intermittent manual traction in congenital dislocation of the hip. Sun DZ, et al. **J Pediatr Orthop** 1989 Mar-Apr;9(2):205–7
Comparative study finds McKenzie protocol 97% effective against lumbar syndrome [letter] Kumarlal Fernando C. **Phys Ther** 1988 Dec;68(12):1949, 1951
[Body traction using centrifugal force in the treatment of spinal diseases] Kelp HH. **Z Orthop** 1989 May-Jun; 127(3):354–7 (Eng. Abstr.) (Ger)
[Treatment of congenital dislocation of the hip joint by over-head traction] Bernardczyk K, et al.
Chir Narzadow Ruchu Ortop Pol 1988;53(2):106–12 (Eng. Abstr.) (Pol)
[Limits of non-surgical treatment and the indications for the surgical treatment of congenital dislocation of the hip joint] Bernardczyk K. **Chir Narzadow Ruchu Ortop Pol** 1988; 53(2):119–25 (Eng. Abstr.) (Pol)

STANDARDS

Safety of axial traction [letter] Pointer JE, et al.
Ann Emerg Med 1989 Apr;18(4):428–9

TRADE UNIONS see **LABOR UNIONS**

TRADITIONAL BIRTH ATTENDANT see **MIDWIFERY**

TRADITIONAL MEDICINE, CHINESE see **MEDICINE, CHINESE TRADITIONAL**

TRADITIONAL MEDICINE, ORIENTAL see **MEDICINE, ORIENTAL TRADITIONAL**

TRAGACANTH see under **POLYSACCHARIDES**

TRAIL MAKING TEST see under **NEUROPSYCHOLOGICAL TESTS**

TRAINING SUPPORT

The Robert Wood Johnson Foundation. Cluff LE.
Acad Med 1989 May;64(5):246
Medical education in Puerto Rico: proposals in search of a sponsor. Ramírez Rivera J. **Bol Asoc Med P R** 1989 Feb; 81(2):57–8
GrantWatch. Foundation funding for AIDS education. Wells JA, et al. **Health Aff (Millwood)** 1988 Winter;7(5):146–58
University of Arkansas for Medical Sciences medical student

awards. Walls E, et al. **J Arkansas Med Soc** 1988 Sep; 85(4):179–82

Evaluation for the Nursing Research Emphasis Grants for Doctoral Programs in Nursing Grant Program, 1979 to 1984. Holzemer WL, et al. **J Prof Nurs** 1988 Sep–Oct; 4(5):381–6

The NIH clinician–investigator award: how to write a training grant application. Pollock RE, et al. **J Surg Res** 1989 Jan;46(1):1–3

BMA scorns loans [news] McGourty C. **Nature** 1989 Feb 2;337(6206):397

Training pediatric scientists. Kelch RP, et al. **Pediatr Res** 1989 Jan;25(1):1–5

Animals in research: educational funds [letter] Nicoll CS, et al. **Science** 1989 Feb 3;243(4891):590

Training under Superfund. Dement J. **Toxicol Ind Health** 1989 Jul;5(4):103–10; discussion 111–4

A Kellogg–supported program at the University of Iowa. Merchant J. **Toxicol Ind Health** 1989 Jul;5(4):61–77; discussion 79–84

NIOSH training in occupational health. Pierce J. **Toxicol Ind Health** 1989 Jul;5(4):39–48; discussion 79–84

Early worker and employer training initiatives at OSHA. Whiting BJ. **Toxicol Ind Health** 1989 Jul;5(4):87–95; discussion 111–4

ECONOMICS

Preventing default: the care for HEAL. Heningburg M. **Acad Med** 1989 May;64(5):248

Loans for medical students [editorial] Alexander DA. **BMJ** 1988 Dec 17;297(6663):1561

Economic problems facing the infectious disease academic division—the perspective of a division chief. Andriole VT. **Bull N Y Acad Med** 1988 Jul–Aug;64(6):557–64

Clinical funding for geriatric fellowship programs. Pawlson LG. **J Am Geriatr Soc** 1989 Jul;37(7):651–4

NIH cuts bring in hard times for biomedical researchers [news] Barinaga M. **Nature** 1988 Dec 1;336(6198):414

For clinical research: a formula for improved prognosis [letter] Gruber KA. **Perspect Biol Med** 1988 Summer; 31(4):612–4

Radiologic research and education: now is the time for all to come to the aid [editorial] Baker HL Jr. **Radiology** 1989 Jun;171(3):612

HISTORY

NIH centennial: the influence of NIH on dermatology research training. Miller LH, et al. **J Invest Dermatol** 1989 Apr;92(4 Suppl):177S–178S

LEGISLATION & JURISPRUDENCE

The government, medical education and research [editorial] Bain J. **J R Coll Gen Pract** 1988 Jul;38(312):293–4

Paying back student loans [letter] Bodnar AG. **N Engl J Med** 1989 Feb 2;320(5):322

STATISTICS & NUMERICAL DATA

Paying for clinical education: fact or fiction? Holder L. **J Allied Health** 1988 Aug;17(3):221–9

TRENDS

Academic medicine: problems and solutions. The Academic Medicine Group. **BMJ** 1989 Mar 4;298(6673):573–9

The hospital "exodus" from in–house sponsored education programs. Ludema DC. **Radiol Technol** 1989 Mar–Apr; 60(4):329–32

An agenda for the future. Ashford NA. **Toxicol Ind Health** 1989 Jul;5(4):131–2

The role of the private sector in innovative approaches to research and training. Whiting BJ. **Toxicol Ind Health** 1989 Jul;5(4):115–21; discussion 125–30

TRAMADOL see under **CYCLOHEXANOLS**

TRANEXAMIC ACID see under **CYCLOHEXANECARBOXYLIC ACIDS**

TRANQUILIZING AGENTS

see related

HYPNOTICS AND SEDATIVES

Alcohol and drug use among the elderly: trends in use and characteristics of users. Smart RG, et al. **Can J Public Health** 1988 Jul–Aug;79(4):236–42

The use of meperidine hydrochloride for chemical restraint in certain cetaceans and pinnipeds. Joseph BE, et al. **J Wildl Dis** 1988 Oct;24(4):691–4

[Pathogenetic role of the dependence potential of drugs of the hypnotic and tranquilizer type with special reference to the iatrogenic factor] Fritzsche S. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Dec; 40(12):731–8 (Eng. Abstr.) (Ger)

[Characteristics of the development of drug addiction and toxicomania in adolescents] Lukacher GIa, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):114–8 (Eng. Abstr.) (Rus)

ADMINISTRATION & DOSAGE

The search for the ultimate equine sedative: are we waiting for Godot? [editorial] Hubbell JA. **Equine Vet J** 1988 Sep; 20(5):314–5

Tranquilizer use before and after coronary bypass operation. Young LD, et al. **J Psychosom Res** 1988;32(4–5):475–81

Clinical spectrum of neuroleptic malignant syndrome [letter] Clarke CE, et al. **Lancet** 1988 Oct 22;2(8617):969–70

[Consumption of tranquilizing agents and sleeping pills in the municipality of Holbaek] Veje JO, et al. **Ugeskr Laeger** 1988 Dec 19;150(51):3175–8 (Eng. Abstr.) (Dan)

[Prescription of tranquilizers and hypnotics in the municipality of Holbaek] Veje JO, et al. **Ugeskr Laeger** 1989 Aug 21;151(34):2134–6 (Eng. Abstr.) (Dan)

[An analysis of massive prescription of tranquilizers and hypnotics] Veje JO, et al. **Ugeskr Laeger** 1989 Aug 21; 151(34):2139–41 (Eng. Abstr.) (Dan)

ANALYSIS

Determination of residues of carazolol and a number of tranquilizers in swine kidney by high–performance liquid chromatography with ultraviolet and fluorescence detection. Keukens HJ, et al. **J Chromatogr** 1989 Feb 17; 464(1):149–61

PHARMACOKINETICS

Pharmacokinetic study of iminodibenzyl antipsychotic drugs, clocapramine and Y–516 in dog and man. Ishigooka J, et al. **Psychopharmacology (Berlin)** 1989;97(3):303–8

PHARMACOLOGY

Clinical pharmacology of aggressive behavior. Sheard MH. **Clin Neuropharmacol** 1988 Dec;11(6):483–92 (39 ref.)

Effect of etizolam (Depas) on production of superoxide anion by platelet–activating factor and N–formyl–methionyl–leucyl–phenylalanine–stimulated guinea pig polymorphonuclear leukocytes. Aratani H, et al. **Jpn J Pharmacol** 1988 Jun;47(2):200–3

Impairment of passive avoidance performance in SART–stressed mice and the action of drugs. Nishimura Y, et al. **Jpn J Pharmacol** 1989 Jan;49(1):111–7

Thigmotaxis as a test for anxiolytic activity in rats. Treit D, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):959–62

The problem of influencing specific or unspecific emotional states by drugs: effects of a tranquilizer and two beta–blocking agents under noise conditions. Pohl J, et al. **Pharmacopsychiatry** 1988 Nov;21(6):350–2

Some clinical, haematological and biochemical effects of four tranquilizers in camels (Camelus dromedarius). Ali BH, et al. **Rev Elev Med Vet Pays Trop** 1989;42(1):13–7

[Clinico–pharmacologic analysis of the neurotropic action of tranquilizers] Aleksandrovskiĭ IuA, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):104–10 (Eng. Abstr.) (Rus)

POISONING

[Rapid identification of poisoning by psychotropic drugs in common use] Yin JL. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Oct; 21(5):271–3, 318 (Eng. Abstr.) (Chi)

THERAPEUTIC USE

Early phase–II semi double–blind study of the new alkaline propanolamine derivative enciprazine (short communication). Linden M, et al. **Arzneimittelforschung** 1988 Jun;38(6):814–6

The Scottish First Episode Schizophrenia Study V. One–year follow–up. The Scottish Schizophrenia Research Group. **Br J Psychiatry** 1988 Apr;152:470–6

A single–blind study of clocapramine and sulpiride in hospitalized chronic schizophrenic patients. Yamagami S, et al. **Drugs Exp Clin Res** 1988;14(11):707–13

Two double–blind, controlled studies comparing chlorethate, a new sedative–tranquilizer, with meprobamate and with phenobarbital. Beard WJ, et al. **J Clin Pharmacol J New Drugs** 1967 Jan–Feb;7(1):41–5

Tranquilizers in the management of alcoholics: a review of the literature to 1964. Part II. Benor D, et al. **J Clin Pharmacol J New Drugs** 1967 Jan–Feb;7(1):17–25 (101 ref.)

[Medical management of aggressive and violent behavior] Virkkunen M. **Duodecim** 1989;105(12):1206–10 (18 ref.) (Fin)

[Tranquilizing agents: their indications and risks] Khalfallah K, et al. **Tunis Med** 1987 Apr;65(4):299–302 (Eng. Abstr.) (Fre)

[Effectiveness of the treatment of endogenous subdepressive conditions in polyclinical geriatric–psychiatry practice] Mikhailova NM, et al. **Zh Nevropatol Psikhiatr** 1988; 88(9):74–9 (Eng. Abstr.) (Rus)

[Experimental and clinical study of the effectiveness of the combined use of anticonvulsants and tranquilizers in epilepsy] Zalesov VS, et al. **Zh Nevropatol Psikhiatr** 1988; 88(6):53–6 (Eng. Abstr.) (Rus)

TRANQUILIZING AGENTS, MAJOR

Addiction to neuroleptics? [letter] Breggin PR. **Am J Psychiatry** 1989 Apr;146(4):560

Neuroleptanesthesia versus thoracic epidural anesthesia for abdominal aortic surgery. Bonnet F, et al. **Ann Vasc Surg** 1989 Jul;3(3):214–9

Neuroleptic–like, anticonvulsant and antinociceptive effects of aporphine alkaloids: bulbocapnine, corytuberine, boldine and glaucine. Zetler G. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:255–81

Neuroleptic–like properties of cholecystokinin analogs: distinctive mechanisms underlying similar behavioral profiles depending on the route of administration. De Witte P, et al. **Peptides** 1988 Jul–Aug;9(4):739–43

Computer–aided molecular modelling applied to the dopaminergic system. Chrétien JR, et al. **Prog Clin Biol Res** 1989;291:243–6

[New data on tardive dyskinesias] Huttunen MO. **Duodecim** 1989;105(3):229–33 (12 ref.) (Fin)

ADMINISTRATION & DOSAGE

Rapid tranquilization of the violent patient. Dubin WR, et al. **Am J Emerg Med** 1989 May;7(3):313–20 (69 ref.)

Maladaptive behaviors associated with neuroleptic drug maintenance. Chadsey–Rusch J, et al. **Am J Ment Retard** 1989 May;93(6):607–17

Changing patterns of neuroleptic dosage over a decade. Reardon GT, et al. **Am J Psychiatry** 1989 Jun;146(6):726–9

Ethics of drug discontinuation studies in schizophrenia [letter] Chandler JD. **Arch Gen Psychiatry** 1989 Apr; 46(4):387

Trial of brief intermittent neuroleptic prophylaxis for selected schizophrenic outpatients: clinical outcome at one year. Jolley AG, et al. **BMJ** 1989 Apr 15;298(6679):985–90

Enhancement of dopamine metabolism in rat brain frontal cortex: a common effect of chronically administered antipsychotic drugs. Mefford IN, et al. **Brain Res** 1988 Dec 20;475(2):380–4

Effects of long–term administration of antidepressants and neuroleptics on receptors in the central nervous system. Baker GB, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):1–44 (192 ref.)

Which atypical antipsychotics are identified by screening tests? Moore NC, et al. **Clin Neuropharmacol** 1989 Jun; 12(3):167–84 (62 ref.)

Neuroleptic dose reduction for schizophrenic outpatients: a three–year follow–up study. Farsone SV, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1207–8

Integrating research projects into clinical service settings. Madakasira S, et al. **Hosp Community Psychiatry** 1988 Aug; 39(8):888–90

Guidelines for the dosage of neuroleptics. I: Chlorpromazine equivalents of orally administered neuroleptics. Rey MJ, et al. **Int Clin Psychopharmacol** 1989 Apr;4(2):95–104 (41 ref.)

Guidelines for the dosage of neuroleptics. II: Changing from daily oral to long acting injectable neuroleptics. Schulz P, et al. **Int Clin Psychopharmacol** 1989 Apr;4(2):105–14 (23 ref.)

The relationship between neuroleptic drug dose and the performance of psychiatric patients in a maximum security token economy program. Harris GT. **J Behav Ther Exp Psychiatry** 1989 Mar;20(1):57–67

Twenty neuroleptic rechallenges after neuroleptic malignant syndrome in 15 patients [corrected; erratum to be published] Rosebush PI, et al. **J Clin Psychiatry** 1989 Aug; 50(8):295–8

Outcome of a low dose neuroleptic treatment strategy [letter] Miller F, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):378–9

Psychosocial changes in persistently psychotic schizophrenic patients after an 80% reduction of neuroleptic medication [corrected] [published erratum appears in J Psychosoc Nurs Ment Health Serv 1988 Dec;26(12):34] DeLuca A, et al. **J Psychosoc Nurs Ment Health Serv** 1988 Aug;26(8):13–7

The institutionalized mental health patient's right to refuse psychotropic medication. Feather RB. **Perspect Psychiatr Care** 1985;23(2):45–68 (54 ref.)

Information processing and maintenance dose requirements in schizophrenia. Marder SR, et al. **Psychopharmacol Bull** 1988;24(2):247–50

Intermittent medication for schizophrenic outpatients: who is eligible? Chiles JA, et al. **Schizophr Bull** 1989; 15(1):117–21

[A clinical analysis of 30 cases of affective disorder with rapid cyclic episodic features] Mei QY. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Aug; 21(4):236–8, 256 (Eng. Abstr.) (Chi)

[Alcohol withdrawal syndrome. Effects of short–term treatment with dapiprazole] Bono G, et al. **Minerva Med** 1988 Dec;79(12):1085–9 (Eng. Abstr.) (Ita)

[Use of insulin and neuroleptics in treating schizophrenics] Maliarov SA, et al. **Vrach Delo** 1988 Sep;(9):96–7 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Neuroleptic medication facilitates the natural occurrence of tardive dyskinesia. A critical review. Driesens F. **Acta Psychiatr Belg** 1988 May–Jun;88(3):195–205 (46 ref.)

Priapism and neuroleptics: a case report [letter] Fishbain DA. **Acta Psychiatr Scand** 1989 Feb;79(2):207

Neuroleptic–induced marching–in–place. Frost L, et al. **Acta Psychiatr Scand** 1989 Jan;79(1):48–51

Successful treatment with clonazepam for neuroleptic–induced akathisia. Horiguchi J, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):106–7

Management of neuroleptic–induced movement disorders:

effects of physician training. Dixon L, et al. **Am J Psychiatry** 1989 Jan;146(1):104–6

Calcium blockers in tardive dyskinesia [letter] Doggett NS, et al. **Am J Psychiatry** 1989 Jan;146(1):121–2

Beta blockers for treatment of priapism associated with use of neuroleptics [letter] Greenberg WM, et al. **Am J Psychiatry** 1988 Nov;145(11):1480

Informed consent and tardive dyskinesia. Kleinman I, et al. **Am J Psychiatry** 1989 Jul;146(7):902–4

The Shanghai 800: prevalence of tardive dyskinesia in a Chinese psychiatric hospital. Ko GN, et al. **Am J Psychiatry** 1989 Mar;146(3):387–9

Quinine for neuroleptic-induced dystonia and muscle stiffness [letter] Leven L. **Am J Psychiatry** 1989 Jun;146(6):801

Use of "addictive" to describe neuroleptic drugs [letter] McCormick S. **Am J Psychiatry** 1989 Sep;146(9):1239–40

Higher frequency of neuroleptic-induced dystonia in mania than in schizophrenia. Nasrallah HA, et al. **Am J Psychiatry** 1988 Nov;145(11):1455–6

Underrecognized and underresearched side effects of neuroleptics [letter] Sanberg PR, et al. **Am J Psychiatry** 1989 Mar;146(3):411–2

Neuroleptic-induced dystonia [letter] Simpson GM, et al. **Am J Psychiatry** 1989 Jul;146(7):945

Parkinsonism following neuroleptic withdrawal [letter] Nelli AC, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):383–4

Identifying akinesia and akathisia: the relationship between patient's self-report and nurse's assessment. Michaels RA, et al. **Arch Psychiatr Nurs** 1989 Apr;3(2):97–101

Tardive dyskinesia clinic [letter] Achimovich LM. **Aust N Z J Psychiatry** 1989 Mar;23(1):15

Pisa syndrome in a Chinese patient. Chiu HF, et al. **Aust N Z J Psychiatry** 1989 Mar;23(1):127–8

Failure of clonidine in tardive dystonia: implications for nosology. Adityanjee, et al. **Biol Psychiatry** 1989 Jun; 26(2):199–202

Muscarinic receptor subclassification and G-proteins: significance for lithium action in affective disorders and for the treatment of the extrapyramidal side effects of neuroleptics. Avissar S, et al. **Biol Psychiatry** 1989 Jun; 26(2):113–30 (89 ref.)

The effect of neuroleptic discontinuation on psychopathology, involuntary movements, and biochemical measures in patients with persistent tardive dyskinesia. Glazer WM, et al. **Biol Psychiatry** 1989 Jul;26(3):224–33

Electroconvulsive therapy in neuroleptic-induced parkinsonism. Goswami U, et al. **Biol Psychiatry** 1989 Jul; 26(3):234–8

Effect of neuroleptic withdrawal on plasma prolactin: a possible marker of receptor adaptation. Kirkpatrick B, et al. **Biol Psychiatry** 1989 Jun;26(2):131–8

Neuroleptic malignant syndrome [letter] Koponen H, et al. **Biol Psychiatry** 1988 Dec;24(8):943–5

Propranolol in the treatment of neuroleptic-induced akathisia (NIA) in schizophrenics: a double-blind, placebo-controlled study. Kramer MS, et al. **Biol Psychiatry** 1988 Nov;24(7):823–7

R–R interval during neuroleptic treatment [letter] Motomura N, et al. **Biol Psychiatry** 1989 Jun;26(2):219–20

Melanocyte-stimulating hormone in tardive dyskinesia [letter] Sandyk R. **Biol Psychiatry** 1989 Jun;26(2):213–4

A note on the drug-induced arterialization of venous blood in schizophrenics: possible microcirculation disturbances. Takei M. **Biol Psychiatry** 1989 Jan;25(1):110–4

Increased saccadic distractibility in tardive dyskinesia: functional evidence for subcortical GABA dysfunction. Thaker GK, et al. **Biol Psychiatry** 1989 Jan;25(1):49–59

Alterations in sleep polygraphy after neuroleptic withdrawal: a putative supersensitive dopaminergic mechanism. Thaker GK, et al. **Biol Psychiatry** 1989 Jan;25(1):75–86

State-dependent movement disorder [letter] Wessely S, et al. **Biol Psychiatry** 1988 Dec;24(8):945

A clinical trial of the efficacy and acceptability of D-fenfluramine in the treatment of neuroleptic-induced obesity. Goodall E, et al. **Br J Psychiatry** 1988 Aug; 153:208–13

Calcium therapy for neuroleptic-induced extrapyramidal symptoms [letter] Jancar J. **Br J Psychiatry** 1988 Aug; 153:256–7

Relationship of adverse drug reactions to length of hospital-stay in genetically subgrouped schizophrenics. Galdi J, et al. **Can J Psychiatry** 1988 Dec;33(9):816–8

Neuroleptic malignant syndrome. The results of a 6-month prospective study of incidence in a state psychiatric hospital. Friedman JH, et al. **Clin Neuropharmacol** 1988 Aug;11(4):373–7

Successful propranolol therapy for neuroleptic-induced akathisia resistant to anticholinergic and benzodiazepine drugs. Hermesh H, et al. **Clin Neuropharmacol** 1988 Aug; 11(4):369–72

Biperiden withdrawal in schizophrenic inpatients receiving long-term antipsychotic medication. Wada Y, et al. **Clin Neuropharmacol** 1987 Aug;10(4):370–5

A summary of current knowledge of tardive dyskinesia. Baldessarini RJ. **Encephale** 1988 Sep;14 Spec No:263–8 (44 ref.)

Affective disorders and tardive dyskinesia. Casey DE. **Encephale** 1988 Sep;14 Spec No:221–6 (32 ref.)

Legal aspects of tardive dyskinesia. Davis JM, et al. **Encephale** 1988 Sep;14 Spec No:257–61 (49 ref.)

Preventing neuroleptic-induced tardive dyskinesia in adults and children. Lam RW, et al. **Encephale** 1988 Sep;14 Spec No:251–5 (50 ref.)

Bone density and reproductive hormones in patients with neuroleptic-induced hyperprolactinemia. Ataya K, et al. **Fertil Steril** 1988 Dec;50(6):876–81

Antipsychotic withdrawal phenomena in the medical-surgical setting. Dilsaver SC, et al. **Gen Hosp Psychiatry** 1988 Nov;10(6):438–46 (44 ref.)

Extrapyramidal reactions. Neuropsychiatric mimics in patients with AIDS. Swenson JR, et al. **Gen Hosp Psychiatry** 1989 Jul;11(4):248–53

Propranolol as a primary treatment of neuroleptic-induced akathisia. Irwin M, et al. **Hillside J Clin Psychiatry** 1988; 10(2):244–50

How to examine patients using the Abnormal Involuntary Movement Scale. Munetz MR, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1172–7

L-tryptophan in neuroleptic-induced tardive dyskinesia. Sandyk R, et al. **Int J Neurosci** 1988 Sep;42(1–2):127–30

Antipsychotic-withdrawal akathisia versus antipsychotic-induced akathisia: further evidence for the existence of tardive akathisia. Dufresne RL, et al. **J Clin Psychiatry** 1988 Nov;49(11):435–8

Mania secondary to amantadine treatment of neuroleptic-induced hyperprolactinemia. Rego MD, et al. **J Clin Psychiatry** 1989 Apr;50(4):143–4

Neuroendocrine side effects of neuroleptics: comment [letter] **J Clin Psychopharmacol** 1988 Oct;8(5):375–8

Possible enhancing effects of diazepam with reserpine in a chronic schizophrenic patient with tardive dyskinesia [letter] Bacher NM, et al. **J Clin Psychopharmacol** 1989 Aug;9(4):312

Psychotic patients who become worse on neuroleptics. Bowers MB Jr, et al. **J Clin Psychopharmacol** 1988 Dec; 8(6):417–21

Buspirone suppression of neuroleptic-induced akathisia: multiple case reports [letter] D'Mello DA, et al. **J Clin Psychopharmacol** 1989 Apr;9(2):151–2

The natural history of tardive dyskinesia. Gardos G, et al. **J Clin Psychopharmacol** 1988 Aug;8(4 Suppl):31S–37S

Prediction of neuroleptic-induced dystonia [letter] Hooper JF. **J Clin Psychopharmacol** 1989 Aug;9(4):307–8

Efficacy of low-dose metoprolol in neuroleptic-induced akathisia. Kim A, et al. **J Clin Psychopharmacol** 1989 Aug; 9(4):294–6

Beta-adrenergic antagonists in psychosis: is improvement due to treatment of neuroleptic-induced akathisia? Lipinski JF Jr, et al. **J Clin Psychopharmacol** 1988 Dec;8(6):409–16 (80 ref.)

Stable remission of tardive dyskinesia by L-dopa. Ludatscher JI. **J Clin Psychopharmacol** 1989 Feb;9(1):39–41

Bromocriptine sensitization of neuroleptic-induced acute dystonia [letter] Patterson JF. **J Clin Psychopharmacol** 1988 Oct;8(5):373–4

Tardive dyskinesia, dopamine receptors, and neuroleptic damage to cell membranes. Seeman P. **J Clin Psychopharmacol** 1988 Aug;8(4 Suppl):3S–9S (115 ref.)

Reversible anorexia and rapid weight loss associated with neuroleptic administration in Alzheimer's disease. Rohrbaugh RM, et al. **J Geriatr Psychiatry Neurol** 1989 Jan–Mar;2(1):45–7

Akathisia in neuroleptic medicated mentally handicapped subjects. Ganesh S, et al. **J Ment Defic Res** 1989 Aug;33 (Pt 4):323–9

Tardive dyskinesia with schizophrenic relapse. Jawed SH, et al. **J Ment Defic Res** 1989 Aug;33 (Pt 4):331–4

Neuroleptic-induced parkinsonian side effects in the mentally handicapped. Rao JM, et al. **J Ment Defic Res** 1989 Feb; 33 (Pt 1):81–6

Increased extrapyramidal symptoms with addition of lithium to neuroleptics. Addonizio G, et al. **J Nerv Ment Dis** 1988 Nov;176(11):682–5

Topographic subtypes of tardive dyskinesia in schizophrenic patients aged less than 60 years: relationship to demographic, clinical, treatment, and neuropsychological variables. Gureje O. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1525–30

Neuroleptic malignant syndrome in a patient with Wilson's disease [letter] Kontaxakis V, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1001–2

It's on the tip of the tongue tardive dyskinesia. Beeber LS. **J Psychosoc Nurs Ment Health Serv** 1988 Aug;26(8):32–3

Issues in the use of depot antipsychotics. Middlemiss MA, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Jun; 27(6):36–7

Opioids a better treatment for acute than tardive akathisia: possible role for the endogenous opiate system in neuroleptic-induced akathisia. Walters AS, et al. **Med Hypotheses** 1989 Jan;28(1):1–2

Tardive akathisia: an analysis of clinical features and response to open therapeutic trials. Burke RE, et al. **Mov Disord** 1989;4(2):157–75

HLA antigens in drug-induced parkinsonism. Metzer WS, et al. **Mov Disord** 1989;4(2):121–8

Electroencephalographic changes and other indices of neurotoxicity with haloperidol-lithium therapy. Saran A, et al. **Neuropsychobiology** 1989;20(3):152–7

Dopamine, GABA, cholecystokinin and opioids in neuroleptic-induced tardive dyskinesia. Ebadi M, et al. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3–4):179–87 (129 ref.)

Intermittent medication cessation in the treatment of Tourette syndrome. Fulton WA. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3–4):235–40

Sensorimotor and cognitive performance of schizophrenic inpatients treated with haloperidol, flupenthixol, or clozapine. Classen W, et al. **Pharmacopsychiatry** 1988 Nov; 21(6):295–7

Ionized calcium and neuroleptic-induced extrapyramidal symptoms. Kuny S, et al. **Pharmacopsychiatry** 1988 Nov; 21(6):300–1

A pilot study of the role of prophylactic antiparkinson treatment during neuroleptic therapy. Perényi A, et al. **Pharmacopsychiatry** 1989 May;22(3):108–10

Dyscognitive syndromes in neuroleptic therapy. Strauss WH, et al. **Pharmacopsychiatry** 1988 Nov;21(6):298–9

Cognitive functions in schizophrenic patients with tardive dyskinesia. Tegeler J, et al. **Pharmacopsychiatry** 1988 Nov; 21(6):308–9

Does smoking reduce the risk of neuroleptic parkinsonoids? Wagner B, et al. **Pharmacopsychiatry** 1988 Nov;21(6):302–3

Failure of antipsychotic drug dose to explain abnormal diurnal weight gain among 129 chronically psychotic inpatients. Victor W, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(5):709–23

The possible role of dopamine autoreceptors in neuroleptic atypicality. Javitt DC, et al. **Psychiatr Dev** 1988 Spring; 6(1):57–71 (91 ref.)

Effects of a specific beta 2-receptor blocker in neuroleptic-induced akathisia. Adler L, et al. **Psychiatry Res** 1989 Jan;27(1):1–4

BAEP screening for the prediction of tardive dyskinesia in schizophrenia [letter] Coger RW, et al. **Psychiatry Res** 1989 Apr;28(1):117–8

Plasma amine metabolites before and after withdrawal from neuroleptic treatment in chronic schizophrenic inpatients. Kirch DG, et al. **Psychiatry Res** 1988 Sep;25(3):233–42

Platelet monoamine oxidase activity and tardive dyskinesia. Morgenstern H, et al. **Psychiatry Res** 1988 Aug; 25(2):163–71

A double-blind trial of essential fatty acid supplementation in patients with tardive dyskinesia. Vaddadi KS, et al. **Psychiatry Res** 1989 Mar;27(3):313–23

Neuroleptic-induced akathisia: a review. Adler LA, et al. **Psychopharmacology (Berlin)** 1989;97(1):1–11 (83 ref.)

Lack of dyskinesias in unmedicated schizophrenics [letter] Chorfi M, et al. **Psychopharmacology (Berlin)** 1989;97(3):423

Neuroleptic-induced akathisia: a role for MSH peptides [letter] Sandyk R. **Psychopharmacology (Berlin)** 1989; 99(1):134–5

Onset and course of tardive dyskinesia. Munetz MR, et al. **Psychosomatics** 1989 Summer;30(3):346–8

Vitamin E in the treatment of tardive dyskinesia: the possible involvement of free radical mechanisms. Lohr JB, et al. **Schizophr Bull** 1988;14(2):291–6

Drug treatment of hyperkinetic movement disorders [letter] Howsepian AA. **Semin Neurol** 1987 Dec;7(4):382

Blocking of cyclosporine immunosuppression by neuroleptics [letter] Kast R. **Transplantation** 1989 Jun;47(6):1095–6

[An evaluation of the therapeutic safety of anti-psychotic agents: analysis of 104 mortality cases in the past 30 years] Jiang ZN. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Oct; 21(5):267–70, 318 (Eng. Abstr.) (Chi)

[Akathisia, a literature review] van der Kruijk RA, et al. **Ned Tijdschr Geneeskd** 1988 Sep 10;132(37):1684–6 (36 ref.) (Dut)

[Tardive dyskinesia: a current review] Shriqui CL. **Can J Psychiatry** 1988 Oct;33(7):637–44 (57 ref.) (Eng. Abstr.) (Fre)

[Risk factors and prevention of tardive dyskinesias] Wolf MA, et al. **Can J Psychiatry** 1989 Apr;34(3):177–81 (36 ref.) (Eng. Abstr.) (Fre)

[Tardive dyskinesia and affective disorders] Azorin JM, et al. **Encephale** 1988 Sep–Oct;14(5):359–63 (50 ref.) (Eng. Abstr.) (Fre)

[Neuroleptic-induced tardive dyskinesias in France] Bourgeois M. **Encephale** 1988 Sep;14 Spec No:195–201 (57 ref.) (Eng. Abstr.) (Fre)

[Senile dyskinesias and tardive dyskinesias] Brion S, et al. **Encephale** 1988 Sep;14 Spec No:215–9 (54 ref.) (Eng. Abstr.) (Fre)

[Use of the methylxanthines, caffeine and theophylline, in the treatment of extrapyramidal disorders caused by treatment with neuroleptics. Development of a therapeutic hypothesis] Casas M, et al. **Encephale** 1989 Jan–Feb;15 Spec No:177–80 (Fre)

[Epidemiology of tardive dyskinesias in the Maghreb] Moussaoui D, et al. **Encephale** 1988 Sep;14 Spec No:203–8 (Eng. Abstr.) (Fre)

[Clinical aspects of tardive dyskinesias induced by neuroleptics] Villeneuve A, et al. **Encephale** 1988 Sep;14 Spec No:209–14 (39 ref.) (Eng. Abstr.) (Fre)

[Psychopathology and cognitive disorders in chronic schizophrenic patients with tardive dyskinesia] Kaiser W. **Nervenarzt** 1989 Apr;60(4):206–12 (61 ref.) (Ger)

[The malignant neuroleptic syndrome] Pietzcker A. **Nervenarzt** 1988 Dec;59(12):691–700 (40 ref.) (Ger)

[Movement patterns of demented and non-demented nursing home patients using the Involuntary Movements and Extrapyramidal Scale. Effects of pharmacotherapy] Schönenberger PM, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(2):147–57 (Eng.

Abstr.) (Ger)
[Urinary incontinence induced by neuroleptics—a little known complication] Böhler A, et al. **Schweiz Rundsch Med Prax** 1988 Nov 8;77(45):1231–4 (22 ref.) (Eng. Abstr.) (Ger)
[Psychosomatic aspects of neuroleptic side effects] Modestin J. **Z Psychosom Med Psychoanal** 1989;35(1):30–7 (Eng. Abstr.) (Ger)
[Acute myopathy caused by psychotropic agents. Report of 2 cases] Romanelli R, et al. **Pathologica** 1988 Nov–Dec; 80(1070):711–6 (Eng. Abstr.) (Ita)
[A case of tardive dystonia] Jyoichi T, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):59–62 (Eng. Abstr.) (Jpn)
[Side effects of psychopharmacotherapy in patients with schizophrenia proceeding against a background of organic cerebral insufficiency] Niss AI, et al. **Zh Nevropatol Psikhiatr** 1989;89(1):91–5 (Eng. Abstr.) (Rus)
[Neuroleptic-induced respiratory dyskinesia. Apropos of a case (letter)] Rubio Esteban G, et al. **Med Clin (Barc)** 1988 Dec 3;91(19):758 (Spa)

ANALYSIS

Spectroscopic analysis of charge transfer complex formation between neuroleptics and iodine. Comby F, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan;37(1):151–4
[Left-turning tetrahydropalmatine in Chinese tablets] de Smet PA, et al. **Ned Tijdschr Geneeskd** 1989 Feb 11; 133(6):308 (Dut)

BLOOD

Serum neuroleptic activities required to inhibit relapse in schizophrenic patients—a study by radioreceptor assay. Sarai K, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):821–31
[Determination of isofloxythepin in biological fluids by high-performance liquid chromatography with fluorometric detection] Fukuhara K, et al. **Yakugaku Zasshi** 1988 May;108(5):454–7 (Eng. Abstr.) (Jpn)

CHEMICAL SYNTHESIS

Studies on 2(1H)-quinolinone derivatives as neuroleptic agents. I. Synthesis and biological activities of (4-phenyl-1-piperazinyl)-propoxy-2(1H)-quinolinone derivatives. Banno K, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4377–88
Antihypertensive activity in a series of 1-piperazino-3-phenylindans with potent 5-HT2-antagonistic activity. Bøgesø KP, et al. **J Med Chem** 1988 Dec;31(12):2247–56
2-Phenylpyrroles as conformationally restricted benzamide analogues. A new class of potential antipsychotics. 2. van Wijngaarden I, et al. **J Med Chem** 1988 Oct;31(10):1934–40
Antipsychotic properties of new N-(4-substituted-1-piperazinylethyl)- and N-(4-substituted-1-piperidinylethyl)-phthalimides. al-Rashood KA, et al. **J Pharm Sci** 1988 Oct; 77(10):898–901

HISTORY

From chlorpromazine to tardive dyskinesia (brief history of the neuroleptics). Deniker P. **Psychiatr J Univ Ottawa** 1989 Mar;14(1):253–9

IMMUNOLOGY

Cytostatic effect of neuroleptics [letter] Neumann NU. **Acta Psychiatr Scand** 1988 Jul;78(1):109

METABOLISM

Neuroleptic binding to human brain receptors: relation to clinical effects. Richelson E. **Ann N Y Acad Sci** 1988; 537:435–42 (24 ref.)
In vivo assay for neuroleptic receptor binding in the striatum. Positron tomography in humans. Cambon H, et al. **Br J Psychiatry** 1987 Dec;151:824–30
Novel antipsychotic drugs share high affinity for sigma receptors. Largent BL, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):345–7

PHARMACOKINETICS

Disposition and pharmacokinetics of the new neuroleptic drug VUFB 15496 (cloflumide) in rats. Lapka R, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):44–5
Neuroleptic augmentation with alprazolam: clinical effects and pharmacokinetic correlates [see comments] Douyon R, et al. **Am J Psychiatry** 1989 Feb;146(2):231–4. **Comment in:** Am J Psychiatry 1989 Aug;146(8):1087–8
Neuroleptics and their metabolites binding to alpha 1 and D2 receptors. Osman OT, et al. **Biol Psychiatry** 1988 Nov; 24(7):815–8
Neuroleptic drug levels and antipsychotic effects: a difficult correlation; potential advantage of free (or derivative) versus total plasma levels. Garver DL. **J Clin Psychopharmacol** 1989 Aug;9(4):277–81 (20 ref.)
D2-dopamine receptor specific brain uptake of carbon-11-labeled YM-09151-2. Hatano K, et al. **J Nucl Med** 1989 Apr;30(4):515–22
Biochemical profile of risperidone, a new antipsychotic. Leysen JE, et al. **J Pharmacol Exp Ther** 1988 Nov; 247(2):661–70
Pharmacokinetics of three different injectable zuclopenthixol preparations. Aaes-Jørgensen T. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1-2):77–85
Clinical implications of increased antipsychotic plasma concentrations upon anticonvulsant cessation. Jann MW, et al. **Psychiatry Res** 1989 May;28(2):153–9
Remoxipride—a new potential antipsychotic compound. Tolerability and pharmacokinetics after single oral and intravenous administration in healthy male volunteers. Grind M, et al. **Psychopharmacology (Berlin)** 1989; 98(3):304–9
Pharmacokinetic study of iminodibenzyl antipsychotic drugs, clocapramine and Y-516 in dog and man. Ishigooka J, et al. **Psychopharmacology (Berlin)** 1989;97(3):303–8
Pharmacokinetics of long-acting injectable neuroleptic drugs: clinical implications. Marder SR, et al. **Psychopharmacology (Berlin)** 1989;98(4):433–9 (40 ref.)

PHARMACOLOGY

Visual evoked potentials during the treatment with isofloxythepine. Libiger J, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):34–5
Effect of RG-tannin on yawning behaviour induced by apomorphine or physostigmine in rats. Starec M, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):71–2
Effects of acute and chronic neuroleptic treatment on the activity of midbrain dopamine neurons. Bunney BS. **Ann N Y Acad Sci** 1988;537:77–85 (55 ref.)
A rapidly acquired one-way conditioned avoidance procedure in rats as a primary screening test for antipsychotics: influence of shock intensity on avoidance performance. van der Heyden JA, et al. **Behav Brain Res** 1988 Nov 1;31(1):61–7
Comparison of prolactin responses to D-1 and D-2 antagonists in rats: Ro 22-1319 is a potent D-2 antagonist. Kaneda H, et al. **Biol Psychiatry** 1989 Feb 15;25(4):517–22
Actions of dopamine antagonists on stimulated striatal and limbic dopamine release: an in vivo voltammetric study. Stamford JA, et al. **Br J Pharmacol** 1988 Jul;94(3):924–32
Met5-enkephalin-Arg6-Gly7-Leu8 immunoreactivity in rat and human cerebrospinal fluid: influence of neuroleptic drugs and electroconvulsive shock. Iadarola MJ, et al. **Brain Res** 1988 Nov 22;474(1):75–85
Regional, reversible ultrastructural changes in rat brain with chronic neuroleptic treatment. Meshul CK, et al. **Brain Res** 1989 Jun 12;489(2):338–46
Psychotropic drugs block voltage-gated ion channels in neuroblastoma cells. Ogata N, et al. **Brain Res** 1989 Jan 2;476(1):140–4
Blockade of both D1- and D2-dopamine receptors inhibits amphetamine-induced ascorbate release in the neostriatum. Oh C, et al. **Brain Res** 1989 Feb 20;480(1-2):184–9
Dopamine receptor blocking action of a dibenzothiepin derivative isofloxythepin in rats. Yamada K, et al. **Clin Exp Pharmacol Physiol** 1989 Feb;16(2):109–16
Activation of the A10 mesolimbic system by the sigma-receptor agonist (+)SKF 10,047 can be blocked by rimcazole, a novel putative antipsychotic. Ceci A, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):53–7
[3H]SCH 23390 labels a novel 5-hydroxytryptamine binding site in human blood platelet membranes. De Keyser J, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):437–45
Intermittent neuroleptic treatment induces long-lasting abnormal mouthing in the rat. Glenthøj B, et al. **Eur J Pharmacol** 1989 May 19;164(2):393–6
Spontaneous activity of A9 and A10 dopamine neurons after acute and chronic administration of the selective dopamine D-1 receptor antagonist SCH 23390. Goldstein JM, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):175–80
Differential effects of pimozide and SCH 23390 on acquisition of learning in mice. Ichihara K, et al. **Eur J Pharmacol** 1989 May 19;164(2):189–95
Effects of classical and atypical antipsychotic drugs on isolation-induced aggression in male mice. McMillen BA, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):149–53
Antagonism of serotonin receptor mediated neuroendocrine and temperature responses by atypical neuroleptics in the rat. Nash JF, et al. **Eur J Pharmacol** 1988 Jul 14; 151(3):463–9
[3H]SCH 23390 labels dopamine D-1 receptor sites in the rat kidney. Zdilar D, et al. **Eur J Pharmacol** 1989 May 2;164(1):159–62
Effects of TRH and DN-1417 on high potassium-evoked acetylcholine release from rat basal forebrain slices determined directly by radioimmunoassay. Suzuki T, et al. **Gen Pharmacol** 1989;20(2):239–42
Activity of aromatic substituted phenylpiperazines lacking affinity for dopamine binding sites in a preclinical test of antipsychotic efficacy. Martin GE, et al. **J Med Chem** 1989 May;32(5):1052–6
Dopamine D-2 antagonists reverse apomorphine-induced decreased water intake in the rat: prediction of antipsychotic drugs with few extrapyramidal side-effects? Ljungberg T. **J Neural Transm** 1989;76(2):79–90
Neuroleptic-sensitive binding sites in the nigrostriatal system: evidence for differential distribution of sigma sites in the substantia nigra, pars compacta of the cat. Graybiel AM, et al. **J Neurosci** 1989 Jan;9(1):326–38
Effects of SCH23390 injection into the dorsal striatum and nucleus accumbens on methamphetamine-induced gnawing and hyperlocomotion in rats. Koshikawa N, et al. **J Nihon Univ Sch Dent** 1989 Jun;31(2):451–7
Reversal of neuroleptic-induced catalepsy by novel aryl-piperazine anxiolytic drugs. McMillen BA, et al. **J Pharm Pharmacol** 1988 Dec;40(12):885–7
Effects of chronic administration of neuroleptic and anticholinergic agents on densities of D2 dopamine and muscarinic cholinergic receptors in rat striatum. Boyson SJ, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):987–93
Pharmacological profile of SCH39166: a dopamine D1 selective benzonaphthazepine with potential antipsychotic activity. Chipkin RE, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1093–102
Effects of ICI 169,369, a selective serotonin2 antagonist, in electrophysiological tests predictive of antipsychotic activity. Goldstein JM, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):673–80
Effect of isofloxythepin, a novel neuroleptic, on hippocampal stimulation-induced wet-dog shaking in the rat. Ohno M, et al. **Jpn J Pharmacol** 1989 Jan;49(1):21–6
Effects of isofloxythepin on central and peripheral histamine systems. Saeki K, et al. **Jpn J Pharmacol** 1989 May; 50(1):55–62
Persistence of cyclicity of the plasma dopamine metabolite, homovanillic acid, in neuroleptic treated schizophrenic patients. Davila R, et al. **Life Sci** 1989;44(16):1117–21
Atypical antipsychotics—recent findings and new perspectives. Lowe JA 3d, et al. **Med Res Rev** 1988 Oct-Dec;8(4):475–97 (166 ref.)
Exploratory behavior and the dual activity of some psychoactive drugs. Part IV. Neuroleptics. Valzelli L, et al. **Methods Find Exp Clin Pharmacol** 1988 Oct; 10(10):635–7
Dopamine neurochemical profile of atypical antipsychotics resembles that of D-1 antagonists. Altar CA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):162–8
Synchronization of the EEG and sedation induced by neuroleptics depend upon blockade of both D1 and D2 dopamine receptors. Bo P, et al. **Neuropharmacology** 1988 Aug;27(8):799–805
Attenuation of SCH 23390-induced alteration of striatal dopamine D1 receptor ontogeny by prolyl-leucyl-glycinamide in the rat. Kostrzewa RM, et al. **Neuropharmacology** 1989 Aug;28(8):805–10
Effects of prenatal exposure to neuroleptic drugs on children's growth. Platt JE, et al. **Neuropsychopharmacology** 1988 Sep;1(3):205–12
Potency of antipsychotics in reversing the effects of a hallucinogenic drug on locus coeruleus neurons correlates with 5-HT2 binding affinity. Rasmussen K, et al. **Neuropsychopharmacology** 1988 May;1(2):101–7
Non-competitive inhibition of GABA currents by phenothiazines in cultured chick spinal cord and rat hippocampal neurons. Zoramski CF, et al. **Neurosci Lett** 1988 Sep 23;92(1):86–91
Changes in chlorpromazine induced CNS effects when associated with other neuroleptics and anxiolytics. Pérez-Raya MD, et al. **Pharm Acta Helv** 1989; 64(5-6):146–50
Neuroleptic-induced reduction of quipazine-elicited head-twitches in rats: possible involvement of striatal dopaminergic supersensitivity. Dall'Olio R, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):941–4
An hypothesis regarding the antipsychotic effect of neuroleptic drugs. Freed WJ. **Pharmacol Biochem Behav** 1989 Jan;32(1):337–45
Effects of isofloxythepin enantiomers on prolactin secretion and postdecapitation convulsions in rats. Matsuo N, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1081–3
Effects of clozapine on fixed-consecutive-number responding in rats: a comparison to other neuroleptic drugs. Picker M. **Pharmacol Biochem Behav** 1988 Jul;30(3):603–12
Differential effects of neuroleptic drugs on the delayed matching-to-sample performance of pigeons. Picker MJ, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):953–7
CGS 10746B is able to attenuate the effects of amphetamine: further evidence for dopaminergic mediation. Schechter MD, et al. **Pharmacol Biochem Behav** 1988 Aug; 30(4):1089–92
Debrisoquine oxidation in schizophrenic patients treated with neuroleptics. Spina E, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1103–4
Dual effects of nicotine on neuroleptic-induced changes of striatal dopamine metabolism in mice. Haikala H. **Pharmacol Toxicol** 1989 Apr;64(4):334–9
Trimipramine and other antipsychotics inhibit Campylobacter pylori in vitro. Kristiansen JE, et al. **Pharmacol Toxicol** 1989 Apr;64(4):386–8
Pharmacological properties of SDZ 208-912: a potential high potency, non-classical neuroleptic. Coward DM, et al. **Pharmacopsychiatry** 1988 Nov;21(6):312–3
KC 9172 (free base of KC 7218)—an antipsychotic/anxiolytic compound. II. Discrimination from typical neuroleptics and benzodiazepine-like minor tranquilizers. Krählng H, et al. **Pharmacopsychiatry** 1988 Nov;21(6):399–401
KC 9172 (free base of KC 7218)—an antipsychotic/anxiolytic compound. I. Antipsychotic and anxiolytic activity in comparison with chlorpromazine, clozapine, diazepam and

buspirone. Ruhland M, et al. **Pharmacopsychiatry** 1988 Nov;21(6):396–8

Ethopharmacology of social conflict and communication: anxiolytics, antidepressants, antipsychotics, and analgesics. Second international meeting of the European Behavioural Pharmacology Society. Athens, Greece, 31 August–3 September 1988. Proceedings.
Psychopharmacology (Berlin) 1989;97(2):141–283

Blockade of acquisition of one-way conditioned avoidance responding by haloperidol and metoclopramide but not by thioridazine or clozapine: implications for screening new antipsychotic drugs. Blackburn JR, et al.
Psychopharmacology (Berlin) 1989;98(4):453–9

Dose–response curves of homovanillic acid in pre-frontal cortex and caudate following antipsychotic drugs: relation to clinical potencies. Chang WH, et al.
Psychopharmacology (Berlin) 1988;95(4):459–62

Chronic neuroleptics alter the effects of the D1 agonist SK&F 38393 and the D2 agonist LY171555 on oral movements in rats. Ellison G, et al.
Psychopharmacology (Berlin) 1988;96(2):253–7

Rats administered chronic neuroleptics develop oral movements which are similar in form to those in humans with tardive dyskinesia. Ellison G, et al.
Psychopharmacology (Berlin) 1989;98(4):564–6

The effects of haloperidol on the partial reinforcement extinction effect (PREE): implications for neuroleptic drug action on reinforcement and nonreinforcement. Feldon J, et al. **Psychopharmacology (Berlin)** 1988;95(4):528–33

Regional differences in the induction of behavioral supersensitivity by prolonged treatment with atypical neuroleptics. Halperin R, et al.
Psychopharmacology (Berlin) 1989;98(3):386–91

Differential tolerance to cataleptic effects of SCH 23390 and haloperidol after repeated administration. Lappalainen J, et al. **Psychopharmacology (Berlin)** 1989;98(4):472–5

Chronic neuroleptic effects on spatial reversal learning in monkeys. Levin ED, et al. **Psychopharmacology (Berlin)** 1989;97(4):496–500

Differential effects of the new antipsychotic risperidone on large and small motor movements in rats: a comparison with haloperidol. Megens AA, et al.
Psychopharmacology (Berlin) 1988;95(4):493–6

Haloperidol- and SCH23390-induced dopaminergic supersensitivities are not additive in the rat. Parashos SA, et al. **Psychopharmacology (Berlin)** 1989;98(2):189–92

Chronic neuroleptic-induced mouth movements in the rat: suppression by CCK and selective dopamine D1 and D2 receptor antagonists. Stoessl AJ, et al.
Psychopharmacology (Berlin) 1989;98(3):372–9

Differences in the cataleptogenic actions of SCH23390 and selected classical neuroleptics. Undie AS, et al.
Psychopharmacology (Berlin) 1988;96(3):311–6

[Dopaminergic modifications caused by neuroleptics. Functional and therapeutic hypotheses on tardive dyskinesias] Tassin JP. **Encephale** 1988 Sep;14 Spec No:157–62 (30 ref.) (Eng. Abstr.) (Fre)

[The effect of neuroleptics and neuroleptic/analgesic combinations on the sensitivity to seizures in mice] Hashem A, et al. **Anaesthesist** 1988 Oct;37(10):631–5 (Eng. Abstr.) (Ger)

[Synthesis and the effect of new derivatives of perhydro-1,4,6-oxadiazocine on the central nervous system] Brzezińska E, et al. **Acta Pol Pharm** 1988; 45(5):400–5 (Eng. Abstr.) (Pol)

[Dynamic changes in the heart beat frequency of rabbits to auditory and nociceptive signals against the background of neuroleptic action] Trubachev VV, et al.
Fiziol Zh SSSR 1988 Sep;74(9):1269–77 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Pharmacokinetic properties of haloperidol decanoate. Alda M, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):38–9

Intraindividual comparison of the effect of perphenazine and of the combination of perphenazine and lithium in schizophrenia. Ryšánek R, et al.
Act Nerv Super (Praha) 1989 Apr;31(1):37–8

Cross-over comparison of the therapeutic effects of sulpiride and perphenazine in schizophrenic and schizoaffective psychoses. Svestka J, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):35–6

Controlled cross-over comparison of isofloxythepin and perphenazine in the treatment of schizophrenic psychoses. Svestka J, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):32–4

Therapeutic results in acute phases of manic depressive and schizophrenic psychoses as possible predictors of the prophylactic effect. Svestka J, et al.
Act Nerv Super (Praha) 1989 Apr;31(1):51–2

Oxyprothepin and clorotepin compared in the hyperkinetic syndrome. Výborová L, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):45–6

Haloperidol decanoate in the treatment of schizophrenia. Zapletálek M, et al. **Act Nerv Super (Praha)** 1989 Apr; 31(1):39–41

Results of the long term treatment with clozapine. Clinical and electroencephalographic study. Zapletálek M, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):36–7

Haloperidol decanoate in the treatment of sexual deviations. Zbytovský J, et al. **Act Nerv Super (Praha)** 1989 Apr; 31(1):41–2

Risperidone (R64 766) in psychotic patients. A first clinical therapeutic exploration. Rocse K, et al.
Acta Psychiatr Belg 1988 May–Jun;88(3):233–41

Clinical characteristics, health beliefs and compliance with maintenance treatment: a comparison between regular and irregular attenders at a depot clinic. Pan PC, et al.
Acta Psychiatr Scand 1989 Jun;79(6):564–70

The antipsychotics. Harris E. **Am J Nurs** 1988 Nov; 88(11):1508–11

Comments on posttraumatic stress disorder [letter]
Am J Psychiatry 1989 Jan;146(1):128–9

Issues of treatment efficacy in legal proceedings [letter] Kanofsky JD. **Am J Psychiatry** 1988 Dec;145(12):1612

Time course of antipsychotic effects of neuroleptic drugs. Keck PE Jr, et al. **Am J Psychiatry** 1989 Oct; 146(10):1289–92

Alprazolam augmentation of neuroleptics in schizophrenia [letter; comment] Wolkowitz OM, et al.
Am J Psychiatry 1989 Aug;146(8):1087–8. **Comment on:** Am J Psychiatry 1989 Feb;146(2):231–4

Dopamine receptors and psychiatric drug treatment. Syvälahti EK. **Ann Clin Res** 1988;20(5):340–7

Dopamine neuronal tracts in schizophrenia: their pharmacology and in vivo glucose metabolism. Tamminga CA, et al. **Ann N Y Acad Sci** 1988;537:443–50 (35 ref.)

Atypical neuroleptics, dose–response relationships, and treatment-resistant psychosis [letter] Cohen BM, et al.
Arch Gen Psychiatry 1989 Apr;46(4):381–3

Neuroleptic responsiveness in siblings concordant for schizophrenia [letter] DeLisi LE, et al.
Arch Gen Psychiatry 1989 May;46(5):477

The positive–negative distinction in drug-free schizophrenic patients. Stability, response to neuroleptics, and prognostic significance. Kay SR, et al. **Arch Gen Psychiatry** 1989 Aug; 46(8):711–8

Duration of a clozapine trial in neuroleptic-resistant schizophrenia [letter] Meltzer HY. **Arch Gen Psychiatry** 1989 Jul;46(7):672

Plasma HVA, neuroleptics, and dopaminergic plasticity [editorial] Dávila R. **Biol Psychiatry** 1989 Jan;25(1):1–3

A mechanism for the involvement of colocalized neuropeptides in the actions of antipsychotic drugs. Gariano RF, et al. **Biol Psychiatry** 1989 Jul;26(3):303–14 (120 ref.)

Neuroleptics reverse attention asymmetries in schizophrenic patients. Tomer R, et al. **Biol Psychiatry** 1989 Apr 1; 25(7):852–60

Pharmacotherapy of schizophrenia. Remington G.
Can J Psychiatry 1989 Apr;34(3):211–20 (182 ref.)

Treatment of acute agitation in the elderly. Bauwens SF. **Clin Pharm** 1988 Dec;7(12):865–6

Effect of maprotiline combined with conventional neuroleptics against negative symptoms of chronic schizophrenia. Yamagami S, et al. **Drugs Exp Clin Res** 1989; 15(4):171–6

Clozapine: new research on efficacy and mechanism of action. Meltzer HY, et al.
Eur Arch Psychiatry Neurol Sci 1989;238(5–6):332–9 (90 ref.)

Debrisoquine oxidative phenotyping and psychiatric drug treatment. Derenne F, et al. **Eur J Clin Pharmacol** 1989; 36(1):53–8

Determining competency to assent to neuroleptic drug treatment. Beck JC. **Hosp Community Psychiatry** 1988 Oct; 39(10):1106–8

Prescription of neuroleptics for geriatric nursing home patients. Cantú TG, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):645–7

Justifying neuroleptic drug treatment. Overall JE, et al.
Hosp Community Psychiatry 1989 Jul;40(7):749–51

The course and treatment of schizophrenia in later life. Ruskin PE, et al. **Hosp Community Psychiatry** 1988 Sep; 39(9):929–30 (15 ref.)

The ageing brain, neuroleptic drugs and the enigma of schizophrenia. Waddington JL. **Ir J Med Sci** 1988 May; 157(5):135–41 (80 ref.)

Rapid tranquilization: antipsychotics or benzodiazepines? Dubin WR. **J Clin Psychiatry** 1988 Dec;49 Suppl:5–12 (58 ref.)

The role of neuroleptics in manic-depressive illness. Kane JM. **J Clin Psychiatry** 1988 Nov;49 Suppl:12–4 (5 ref.)

The current status of neuroleptic therapy. Kane JM.
J Clin Psychiatry 1989 Sep;50(9):322–8 (49 ref.)

A randomized clinical trial of haloperidol decanoate and fluphenazine decanoate in the outpatient treatment of schizophrenia. Chouinard G, et al.
J Clin Psychopharmacol 1989 Aug;9(4):247–53

Neuroleptic–valproic acid combination in treatment of psychotic symptoms: a three-case report. Wassef A, et al.
J Clin Psychopharmacol 1989 Feb;9(1):45–8

Clinical pharmacology of antipsychotic drugs. Lader M.
J Int Med Res 1989 Jan–Feb;17(1):1–16 (78 ref.)

3H-spiperone binding sites in post-mortem brains from schizophrenic patients: relationship to neuroleptic drug treatment, abnormal movements, and positive symptoms. Kornhuber J, et al. **J Neural Transm** 1989;75(1):1–10

The effects of antipsychotic drugs and symptomatology on perceptual asymmetry in schizophrenia. Carr V, et al.
J Neurol Neurosurg Psychiatry 1988 Dec;51(12):1531–7

Neuroleptic-resistant schizophrenics. Murray JB.
J Psychol 1989 Jan;123(1):69–78 (75 ref.)

The angry adolescent. Treatment versus containment practices. Pond VE.
J Psychosoc Nurs Ment Health Serv 1988 Dec;26(12):15–7 (14 ref.)

The effect of neuroleptics on dysfunction in a prefrontal substrate of sustained attention in schizophrenia. Cohen RM, et al. **Life Sci** 1988;43(14):1141–50

Nicotine and cannabinoids as adjuncts to neuroleptics in the treatment of Tourette syndrome and other motor disorders. Moss DE, et al. **Life Sci** 1989;44(21):1521–5 (18 ref.)

Management of the agitated patient. A pharmacological update. McGough JJ, et al. **N C Med J** 1988 Oct; 49(10):497–9

New insights into schizophrenia through atypical antipsychotic drugs. Meltzer HY.
Neuropsychopharmacology 1988 Sep;1(3):193–6

Psychotogenic drugs as models for schizophrenia. Snyder SH. **Neuropsychopharmacology** 1988 Sep;1(3):197–9

An evaluation of Tourette syndrome and medication use in Canada. Fulton WA, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):251–4

A clinical pharmacological approach to treating Tourette syndrome in children and adolescents. Kerbeshian J, et al.
Neurosci Biobehav Rev 1988 Fall–Winter;12(3–4):241–5 (61 ref.)

Maintenance medication for chronic schizophrenics: risk/benefit assessment. Driscoll PL.
Perspect Psychiatr Care 1985;23(3):104–10 (18 ref.)

The course of neuroleptic and antidepressant treatment in severe depressive illness. Koch R, et al.
Pharmacopsychiatry 1988 Nov;21(6):276–7

Recording automatic and controlled information processing by means of bioelectrical brain signals in normals and paranoid schizophrenics with and without neuroleptic medication. Krieger S, et al. **Pharmacopsychiatry** 1988 Nov; 21(6):331–3

Suspension of neuroleptic therapy in acute schizophrenia. Kuhs H, et al. **Pharmacopsychiatry** 1988 Jul;21(4):197–202

Efficacy and tolerability of a new antipsychotic compound (savoxepine): results of a pilot-study. Möller HJ, et al.
Pharmacopsychiatry 1989 Jan;22(1):38–41

Zuclopenthixol and haloperidol/levomepromazine in the treatment of elderly patients with symptoms of aggressiveness and agitation: a double-blind, multi-centre study. Fuglum E, et al. **Pharmatherapeutica** 1989; 5(5):285–91

Zuclopenthixol decanoate in the management of behavioural disorders in mentally handicapped patients. Izmeth MG, et al. **Pharmatherapeutica** 1988;5(4):217–27

Management of the behavioral symptoms associated with dementia. Elmer M. **Prim Care** 1989 Jun;16(2):431–50 (88 ref.)

Psychobiologic aspects of the treatment of primary mania. Clower CG. **Psychiatr Med** 1988;6(3):83–91

The influences of cultural and racial factors upon therapeutic response of the schizophrenic patients. Masłowski J.
Psychiatr Pol 1988 Jul–Aug;22(4):273–8

Neuroleptic nonresponse and affective symptoms: a 2-year prospective study of schizophrenic outpatients. Faraone SV, et al. **Psychiatry Res** 1989 Jun;28(3):315–21

RBC and plasma choline in neuroleptic-treated schizophrenic patients. Lawson WB, et al. **Psychiatry Res** 1989 Jul; 29(1):45–53

Changes in eye tracking during clinical stabilization in schizophrenia. Rea MM, et al. **Psychiatry Res** 1989 Apr; 28(1):31–9

Response to drugs in schizophrenia: the influence of family history, obstetric complications and ventricular enlargement. Nimgaonkar VL, et al. **Psychol Med** 1988 Aug;18(3):583–92

Zotepine vs. haloperidol in paranoid schizophrenia: a double-blind trial. Fleischhacker WW, et al.
Psychopharmacol Bull 1989;25(1):97–100

The relationship of symptomatology and medication to electrodermal activity in schizophrenia. Green MF, et al.
Psychophysiology 1989 Mar;26(2):148–57

Antipsychotic use in the medically ill. Silver PA, et al.
Psychother Psychosom 1988;49(2):120–36 (76 ref.)

Response to neuroleptic drugs as a device for classifying schizophrenia. Brown WA, et al. **Schizophr Bull** 1989; 15(1):123–9 (33 ref.)

The therapeutic latency of neuroleptic drugs and nonspecific postjunctional supersensitivity. Freed WJ.
Schizophr Bull 1988;14(2):269–77 (51 ref.)

Perspectives on a time-dependent model of neuroleptic action. Pickar D. **Schizophr Bull** 1988;14(2):255–68 (98 ref.)

Drug treatment of pain syndromes. Portenoy RK.
Semin Neurol 1987 Jun;7(2):139–49 (112 ref.)

Pharmacology of behavioral syndromes in neurology. Schiffer RB, et al. **Semin Neurol** 1987 Jun;7(2):167–77 (41 ref.)

The prevalence of depot neuroleptic treatment among West Indians and Asians in the London borough of Newham. Glover G, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):281–4

Possible neuroleptic-induced resistance to the human immunodeficiency virus [letter] Corbascio AN, et al.
West J Med 1989 Jan;150(1):92–3

[Analysis of the effective psychiatric spectrum of some antipsychotics] Ding QZ.
Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1988 Oct; 21(5):306–10, 320 (Eng. Abstr.) (Chi)

[Preliminary study of schizophrenics with brain atrophy treated with antipsychotic drugs] Wang XY.

Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1988 Oct; 21(5):294–6, 319 (Eng. Abstr.) (Chi)
[Neuroleptics as anxiolytic and antidepressive agents (letter)] Deimann LG. Ned Tijdschr Geneeskd 1988 Nov 19; 132(47):2173–4 (Dut)
[Adherence to neuroleptic treatment of schizophrenic patients] Blondiaux I, et al. Encephale 1988 Nov–Dec; 14(6):431–8 (51 ref.) (Eng. Abstr.) (Fre)
[Retrospective comparative study of treatment with delayed–action neuroleptics and neuroleptics administrated orally in long–term psychosis] Chambon O, et al. Encephale 1988 Jul–Aug;14(4):293–7 (Eng. Abstr.) (Fre)
[Epileptic psychoses and their drug treatment] Klosterkötter J, et al. Fortschr Neurol Psychiatr 1989 Feb;57(2):61–9 (47 ref.) (Eng. Abstr.) (Ger)
[Treatment continuity in schizophrenic patients in ambulatory care. A 5–year follow–up] Gmür M, et al. Nervenarzt 1988 Dec;59(12):727–30 (Eng. Abstr.) (Ger)
[A differential effect profile of neuroleptic therapy of acute schizophrenic patients? Results of a clinico–naturalistic study] Schmidt LG, et al. Nervenarzt 1988 Dec; 59(12):721–6 (Ger)
[Use of services and treatment profile after the Psychiatric Reform Act] Bollini P, et al. Epidemiol Prev 1987 Jun; 9(31):31–4 (Ita)
[Dapiprazole in the treatment of drug withdrawal symptoms] Fogari R, et al. Farmaco [Prat] 1988 Sep;43(9):279–89 (Eng. Abstr.) (Ita)
[Effects of selective D–1 and D–2 dopamine antagonists on methamphetamine–induced behavioral sensitization] Ujike H, et al. Seishin Shinkeigaku Zasshi 1988;90(8):636–41 (Jpn)
[Relations between therapeutic and hormonal response to neuroleptics of patients with paranoid schizophrenia. I. Secretion of thyrotropin and thyroid hormones] Horodnicki JM, et al. Psychiatr Pol 1988 Jul–Aug; 22(4):279–84 (Eng. Abstr.) (Pol)
[Relations between therapeutic and hormonal response to neuroleptics of patients with paranoid schizophrenia. II. Secretion of prolactin and gonadotropins] Horodnicki JM, et al. Psychiatr Pol 1988 Jul–Aug;22(4):285–9 (Eng. Abstr.) (Pol)
[Relations between therapeutic and hormonal response to neuroleptics of patients with paranoid schizophrenia. III. Secretion of growth hormone (GH), adrenocorticotropic hormone (ACTH), cortisol (CORT) and insulin (INS)] Horodnicki JM, et al. Psychiatr Pol 1988 Jul–Aug; 22(4):290–5 (Eng. Abstr.) (Pol)
[Changes in the symptomatological picture of schizophrenia in relation to the introduction of neuroleptics] Modrzewska K. Psychiatr Pol 1988 Sep–Oct;22(5):349–55 (Eng. Abstr.) (Pol)
[Comparative evaluation of the effect of carbidine and levamisole on the E–rosette–forming activity of the lymphocytes in alcoholic intoxication] Proskuriakova TV, et al. Farmakol Toksikol 1989 Jan–Feb;52(1):94–8 (Eng. Abstr.) (Rus)
[A method of staining peripheral blood basophils and their dynamics in patients with psychic diseases during treatment with neuroleptics] Grishkova LI, et al. Lab Delo 1988; (6):13–6 (Eng. Abstr.) (Rus)
[Alcoholic psychoses: therapeutic schemes] Aravena R, et al. Rev Med Chil 1988 Apr;116(4):371–80 (28 ref.) (Eng. Abstr.) (Spa)
[Recommendations from a meeting of experts: Neuroleptics—rational use in the treatment of psychoses and geriatrics] Lakartidningen 1989 Jul 12; 86(28–29):2538–41 (Swe)

TOXICITY

Acute extrapyramidal syndrome in Cebus monkeys: development mediated by dopamine D2 but not D1 receptors. Coffin VL, et al. J Pharmacol Exp Ther 1989 Jun;249(3):769–74
Phase 1 study of a new antipsychotic drug, OPC–4392. Murasaki M, et al. Prog Neuropsychopharmacol Biol Psychiatry 1988; 12(5):793–802

TRANQUILIZING AGENTS, MINOR

Evidence that central 5–hydroxytryptaminergic neurones are involved in the anxiolytic activity of buspirone. Carli M, et al. Br J Pharmacol 1989 Apr;96(4):829–36
Immigration, stress, and prescription drug use among Cuban women in south Florida. Kirby DG. Med Anthropol 1989 Apr;10(4):287–95
Does RO 15–4513 reverse the anxiolytic effects of ethanol by its intrinsic properties? Belzung C, et al. Pharmacol Biochem Behav 1988 Aug;30(4):867–70
Effects of amperozide in two animal models of anxiety. Engel JA, et al. Pharmacol Toxicol 1989 May;64(5):429–33
Cimetidine–diazepam interaction in the four–plate test. Wilimowski M, et al. Pol J Pharmacol Pharm 1988 Mar–Apr;40(2):155–8
A comparison of the effects of diazepam versus several typical and atypical anti–depressant drugs in an animal model of anxiety. Bodnoff SR, et al. Psychopharmacology (Berlin) 1989;97(2):277–9
Time course of ethanol's effects on locomotor activity, exploration and anxiety in mice. Durcan MJ, et al. Psychopharmacology (Berlin) 1988;96(1):67–72
Centrally administered neuropeptide Y (NPY) produces anxiolytic–like effects in animal anxiety models. Heilig M, et al. Psychopharmacology (Berlin) 1989;98(4):524–9
[Characteristics of the anxiolytic action of benzodiazepine and GABA derivatives on experimentally modelled anxiety states] Talalaenko AN, et al. Farmakol Toksikol 1988 Jul–Aug;51(4):20–2 (Eng. Abstr.) (Rus)
[Anxiolytics 1985–1986] Novotný V. Cesk Psychiatr 1989 Feb;85(1):62–9 (93 ref.) (Slo)

ADVERSE EFFECTS

Drug–related dizziness. Wennmo K, et al. Acta Otolaryngol Suppl (Stockh) 1988;455:11–3 (8 ref.)
Sleep studies and rebound insomnia: methodological problems, laboratory findings, and clinical implications. Lader M, et al. Clin Neuropharmacol 1987 Aug; 10(4):291–312 (76 ref.)
[A scale for evaluating withdrawal symptoms induced by anxiolytic agents] Bourin M. Encephale 1988 Jul–Aug; 14(4):283–5 (Eng. Abstr.) (Fre)
[Side–effects of frequently administered hypnotics and sedatives as well as of anxiolytics. Results from a Comprehensive Hospital Drug Monitoring (CHDM) program] Blatter M, et al. Schweiz Med Wochenschr 1988 Dec 10;118(49):1859–64 (Eng. Abstr.) (Ger)

ANALYSIS

Simultaneous determination of buspirone, gepirone, ipsapirone and their common metabolite 1–(2–pyrimidinyl)piperazine in rat plasma and brain by high–performance liquid chromatography. Bianchi G, et al. J Chromatogr 1988 Oct 14;431(2):477–80

ANTAGONISTS & INHIBITORS

Benzodiazepine antagonist RO 15–1788 partly reverses some anxiolytic effects of ethanol in the mouse. Belzung C, et al. Psychopharmacology (Berlin) 1988;95(4):516–9

BLOOD

Determination of a new non–benzodiazepine anxiolytic and its O–demethyl metabolite in plasma by high–performance liquid chromatography using automated column–switching. Timm U, et al. J Chromatogr 1988 Dec 2;456(1):21–31

CHEMICAL SYNTHESIS

Synthesis and structure–activity relationship of substituted tetrahydro– and hexahydro–1,2–benzisothiazol–3–one 1,1–dioxides and thiadiazinones: potential anxiolytic agents. Abou–Gharbia M, et al. J Med Chem 1989 May; 32(5):1024–33

HISTORY

Small comfort: the introduction of minor tranquilizers to the public and the medical profession. Smith MC. J Psychoactive Drugs 1988 Oct–Dec;20(4):409–18 (27 ref.)

PHARMACOLOGY

Animal model of anxiety: interaction of nicergoline and scopolamine in the genetically hypertensive rats. Golda V, et al. Act Nerv Super (Praha) 1989 Apr;31(1):76–7
Sedative and anxiolytic potency of benzodiazepines: some structure–activity relationships. Kršiak M, et al. Act Nerv Super (Praha) 1989 Apr;31(1):59–61
Ethological pharmacology of anxiogenic and anxiolytic drugs. Poshivalov VP, et al. Ann Ist Super Sanita 1988; 24(3):453–9
Analysis of the mechanism of psychotropic action of a 3–hydroxypyridine derivative. Voronina TA, et al. Ann Ist Super Sanita 1988;24(3):461–6
Behavior of mother rats in conflict tests sensitive to antianxiety agents. Ferreira A, et al. Behav Neurosci 1989 Feb;103(1):193–201
Effects of non–sedative anxiolytic drugs on responses to GABA and on diazepam–induced enhancement of these responses on mouse neurones in cell culture. De Deyn PP, et al. Br J Pharmacol 1988 Sep;95(1):109–20
Physical dependence on diazepam in the dog: precipitation of different abstinence syndromes by the benzodiazepine receptor antagonists Ro 15–1788 and ZK 93426. Löscher W, et al. Br J Pharmacol 1989 Jul;97(3):843–52
Buspirone, 8–OH–DPAT and ipsapirone: effects on hippocampal cerebellar and sciatic fiber excitability. Hiner BC, et al. Brain Res 1988 Sep 27;461(1):1–9
Alpidem, a novel anxiolytic drug. A double–blind, placebo–controlled study in anxious outpatients. Bassi S, et al. Clin Neuropharmacol 1989 Feb;12(1):67–74
Antidepressant and anxiolytic activities of tianeptine: an overview of clinical trials. Defrance R, et al. Clin Neuropharmacol 1988;11 Suppl 2:S74–82 (10 ref.)
Structure activity relationships of anxiolytics. Wong MG. Drug Des Deliv 1988 Jul;3(1):15–33
The alpha 2–adrenoceptor antagonist activity of ipsapirone and gepirone is mediated by their common metabolite 1–(2–pyrimidinyl)–piperazine (PmP). Bianchi G, et al. Eur J Pharmacol 1988 Jul 14;151(3):365–71
Foot–shock stress and anxiogenic beta–carbolines increase t–[35S]butylbicyclophosphorothionate binding in the rat cerebral cortex, an effect opposite to anxiolytics and gamma–aminobutyric acid mimetics. Concas A, et al. J Neurochem 1988 Dec;51(6):1868–76
Reversal of neuroleptic–induced catalepsy by novel aryl–piperazine anxiolytic drugs. McMillen BA, et al. J Pharm Pharmacol 1988 Dec;40(12):885–7
Behavioral studies with anxiolytic drugs. VI. Effects on punished responding of drugs interacting with serotonin receptor subtypes. Gleeson S, et al. J Pharmacol Exp Ther 1989 Sep;250(3):809–17
Effect of gepirone and ipsapirone on the stimulated and unstimulated secretion of prolactin in the rat. Nash JF, et al. J Pharmacol Exp Ther 1989 Apr;249(1):236–41
CGS 20625, a novel pyrazolopyridine anxiolytic. Williams M, et al. J Pharmacol Exp Ther 1989 Jan;248(1):89–96
Pharmacologic characterization of a novel non–benzodiazepine selective anxiolytic, DN–2327. Wada T, et al. Jpn J Pharmacol 1989 Mar;49(3):337–49
Interactions of isamoltane (CGP 361A), an anxiolytic phenoxypropanolamine derivative, with 5–HT1 receptor subtypes in the rat brain. Waldmeier PC, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Jun; 337(6):609–20
The effects of anxiolytic and anxiogenic benzodiazepine receptor ligands on motor activity and levels of ascorbic acid in the nucleus accumbens and striatum of the rat. Brose N, et al. Neuropharmacology 1989 May;28(5):509–14
Effect of 5–HT1A agonists on stress–induced deficit in open field locomotor activity of rats: evidence that this model identifies anxiolytic–like activity. Carli M, et al. Neuropharmacology 1989 May;28(5):471–6
Effects of ipsapirone on the behaviour of mice during social encounters. Cutler MG, et al. Neuropharmacology 1988 Oct; 27(10):1039–44
Comparison of changes in the EEG of freely moving rats induced by enciprazine, buspirone and diazepam. Nickel B, et al. Neuropharmacology 1989 Aug;28(8):799–803
Changes in chlorpromazine induced CNS effects when associated with other neuroleptics and anxiolytics. Pérez–Raya MD, et al. Pharm Acta Helv 1989; 64(5–6):146–50
Effects of buspirone differ from those of gepirone and 8–hydroxy–2–(di–n–propylamino)tetralin (8–OH–DPAT) on unpunished responding of pigeons. Barrett JE, et al. Pharmacol Biochem Behav 1988 Jul;30(3):723–7
Conditioned defensive burying as a model for identifying anxiolytics. Craft RM, et al. Pharmacol Biochem Behav 1988 Jul;30(3):775–80
The effects of beta–antagonists and anxiolytics on conflict behavior in the rat. Fontana DJ, et al. Pharmacol Biochem Behav 1989 Mar;32(3):807–13
Effects of 5–HT1A receptor agonists and L–5–HTP in Montgomery's conflict test. Söderpalm B, et al. Pharmacol Biochem Behav 1989 Jan;32(1):259–65
The role of central– and peripheral–type benzodiazepine receptors in anxiolytic–agent augmentation of NaCl solution intake: effects of clonazepam and Ro 5–4864. Tang M, et al. Pharmacol Biochem Behav 1988 Jul;30(3):749–52
Anxiolytic effect of caffeine and caffeine–clonazepam interaction: evaluation by NaCl solution intake. Tang M, et al. Pharmacol Biochem Behav 1989 Mar;32(3):773–6
Effect of restraint stress and anxiolytics on 5–HT turnover in rat brain. Mitchell SN, et al. Pharmacology 1988; 37(2):105–13
Differential effects of anxiolytics and beta–receptor blocking drugs on novelty–oriented ("neophobic") behavior in the rat. Delini–Stula A, et al. Pharmacopsychiatry 1988 Jul; 21(4):186–91
KC 9172 (free base of KC 7218)—an antipsychotic/anxiolytic compound. II. Discrimination from typical neuroleptics and benzodiazepine–like minor tranquilizers. Krähling H, et al. Pharmacopsychiatry 1988 Nov;21(6):399–401
Ro 16–6028: a novel anxiolytic acting as a partial agonist at the benzodiazepine receptor. Martin JR, et al. Pharmacopsychiatry 1988 Nov;21(6):360–2
KC 9172 (free base of KC 7218)—an antipsychotic/anxiolytic compound. I. Antipsychotic and anxiolytic activity in comparison with chlorpromazine, clozapine, diazepam and buspirone. Ruhland M, et al. Pharmacopsychiatry 1988 Nov;21(6):396–8
Relationship of increased food intake and plasma ACTH levels to 5–HT1A receptor activation in rats. Gilbert F, et al. Psychoneuroendocrinology 1988;13(6):471–8
The effect of anxiolytic drugs on memory in anxious subjects. Lucki I, et al. Psychopharmacol Ser 1988;6:128–39
Ethopharmacology of social conflict and communication: anxiolytics, antidepressants, antipsychotics, and analgesics. Second international meeting of the European Behavioural Pharmacology Society. Athens, Greece, 31 August–3 September 1988. Proceedings. Psychopharmacology (Berlin) 1989;97(2):141–283
Temporal and sequential patterns of agonistic behavior: effects of alcohol, anxiolytics and psychomotor stimulants. Miczek KA, et al. Psychopharmacology (Berlin) 1989; 97(2):149–51
Effects of benzodiazepine and GABA antagonists on anticonflict effects of antianxiety drugs injected into the rat amygdala in a water–lick suppression test. Shibata S, et al. Psychopharmacology (Berlin) 1989;98(1):38–44
[Experimental studies on the effect of Bulgarian anxiolytic lonetil on some endocrine functions] Boiadzhieva N. Eksp Med Morfol 1989;28(1):37–40 (Bul)
[Electroencephalographic study on the central action of a new anxiolytic: 3a alpha, 4 beta, 7 beta, 7a

alpha-hexahydro-2-(4-(4-(2-pyrimidinyl)-1-piperazinyl)-butyl)-4, 7-methano-1H-isoindole-1, 3(2H)-dione dihydrogen citrate (SM-3997)] Hirose A, et al. **Nippon Yakurigaku Zasshi** 1989 Feb;93(2):41-7 (Eng. Abstr.) **(Jpn)**

[The pharmacology of 1-(2-pyrimidinyl)piperazine, a metabolite of buspirone] Komissarov IV, et al. **Farmakol Toksikol** 1989 Mar-Apr;52(2):27-30 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Clorazepat in the treatment of anxiety-depression syndroms in neuroses. Florkowski A, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):26-7

Topics in clinical pharmacology: buspirone: a new nonbenzodiazepine anxiolytic agent. Funck-Brentano C. **Am J Med Sci** 1989 Jan;297(1):49-52 (29 ref.)

A double blind controlled clinical trial of benzoctamin (Tacitin) and imipramine (Tofranil) in the treatment of 'internal heat' and its association symptoms. Ahmed MH, et al. **East Afr Med J** 1988 Apr;65(4):230-7

Recent advances in the psychopharmacological treatment of anxiety disorders. Lydiard RB, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1157-65 (107 ref.)

Changes in brain biogenic amines under influence of an indigenous drug, geriforte, following immobilization stress. Upadhya L, et al. **Indian J Exp Biol** 1988 Nov;26(11):911-2

Information processing, psychological performance and anxiolytic drugs. Hindmarch I. **Postgrad Med J** 1988;64 Suppl 2:10-5 (45 ref.)

Neurochemical and cognitive aspects of anxiety disorders. Kidman A. **Prog Neurobiol** 1989;32(5):391-402 (61 ref.)

The acute treatment of anxiety and depression. Swinson RP. **Psychiatr J Univ Ottawa** 1989 Jun;14(2):375-8; discussion 379-80 (38 ref.)

New findings with anxiolytic drugs. Proceedings of a satellite conference held during the XVIth Collegium Internationale Neuro-Psychopharmacologicum (C.I.N.P) Congress. Munich, August 15-19, 1988. **Psychopathology** 1989;22 Suppl 1:1-78

Animal models for anxiety and response to serotonergic drugs. Broekkamp CL, et al. **Psychopathology** 1989;22 Suppl 1:2-12 (57 ref.)

The new generation of serotonergic anxiolytics: possible clinical roles. Eison MS. **Psychopathology** 1989;22 Suppl 1:13-20 (45 ref.)

Serotonin-1A anxiolytics: an overview. Feighner JP, et al. **Psychopathology** 1989;22 Suppl 1:21-6 (31 ref.)

Serotonin and alcohol: interrelationships. Tollefson GD. **Psychopathology** 1989;22 Suppl 1:37-48 (99 ref.)

Treatment of panic disorder: nonbenzodiazepine anxiolytics, including buspirone. Robinson DS, et al. **Psychopharmacol Bull** 1989;25(1):21-6

Use of anti-anxiety drugs in the medically ill. Wheatley D. **Psychother Psychosom** 1988;49(2):63-80 (71 ref.)

[Neuroleptics as anxiolytic and antidepressive agents (letter)] Deimann LG. **Ned Tijdschr Geneeskd** 1988 Nov 19; 132(47):2173-4 **(Dut)**

[Current trends and prospects in pharmacotherapy with anxiolytics] Mungiu OC, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul-Sep;92(3):471-83 (32 ref.) (Eng. Abstr.) **(Rum)**

TOXICITY

Strychnine seizure potentiation by azaspirodecanedione anxiolytics in rats. Anderson MC, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):279-83

TRANSACTIONAL ANALYSIS

Social zeitgebers, biological rhythms, and transactional analysis [letter] Patterson CW. **Arch Gen Psychiatry** 1989 Sep;46(9):859-60

Is expressed emotion an index of a transactional process? I. Parents' affective style. Miklowitz DJ, et al. **Fam Process** 1989 Jun;28(2):153-67

Is expressed emotion an index of a transactional process? II. Patient's coping style. Strachan AM, et al. **Fam Process** 1989 Jun;28(2):169-81

TRANSALDOLASE see under **TRANSFERASES**

TRANSAMIDINASES see **AMIDINOTRANSFERASES**

TRANSAMINASES see **AMINOTRANSFERASES**

TRANSCOBALAMIN II see **TRANSCOBALAMINS**

TRANSCOBALAMINS

ANALYSIS

Expression of vitamin B12 R-binder in breast tumors. An immunohistochemical study. Ogawa K, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1117-20

Immunological characterization and clinical implication of cobalamin binding protein in human gastric cancer. Wakatsuki Y, et al. **Cancer Res** 1989 Jun 1;49(11):3122-8

Cobalamin-binding capacity of haptocorrin and transcobalamin: age-correlated reference intervals and values from patients. Gimsing P, et al. **Clin Chem** 1989 Jul;35(7):1447-51

Concentration and physicochemical characterisation of unsaturated cobalamin binding proteins in amniotic fluid. Guéant JL, et al. **Clin Chim Acta** 1989 May 15; 181(2):151-61

Amniotic fluid folate, vitamin B12 and transcobalamins in neural tube defects. Gardiki-Kouidou P, et al. **Clin Genet** 1988 Jun;33(6):441-8

Vitamin B12 and vitamin B12 binding proteins in amniotic fluid. Areekul S, et al. **J Med Assoc Thai** 1988 Dec; 71(12):685-8

[Plasma carriers of vitamin B 12 in normal controls and in the initial diagnosis of pernicious anemia] Remacha A, et al. **Sangre (Barc)** 1988 Oct;33(5):357-60 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

Endothelial cells from human umbilical vein secrete functional transcobalamin II. Quadros EV, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C296-303

BLOOD

Serum unsaturated vitamin B12 proteins in adult patients with sickle cell anaemia (HbSS). Osifo BO, et al. **Acta Haematol (Basel)** 1989;81(3):117-21

Serum cobalamins and cobalamin-binding proteins during total parenteral nutrition. van Spreeuwel JP, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov-Dec;12(6):607-9

[Quantitative evaluation of the surface membrane receptors of leukemic cells to blood serum transcobalamin-II] Oreshkin AE, et al. **Eksp Onkol** 1989;11(2):45-8 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Transcobalamin II deficiency: long-term follow-up of two cases. Arrabal MC, et al. **Acta Haematol (Basel)** 1988; 80(3):162-6

GENETICS

Structure of the cDNA encoding transcobalamin I, a neutrophil granule protein. Johnston J, et al. **J Biol Chem** 1989 Sep 25;264(27):15754-7

ISOLATION & PURIFICATION

Characterization of the vitamin B12-binding protein isolated from sow's milk and its affinity for cyanocobalamin and other corrinoids. Trugo NM. **Braz J Med Biol Res** 1988; 21(5):883-94

Separation of transcobalamin II isoproteins by means of chromatofocusing. Lindemans J, et al. **J Chromatogr** 1988 Nov 18;432:103-11

METABOLISM

Effect of glycosidases and proteinases on cobalamin binding and physicochemical properties of purified saturated haptocorrin and intrinsic factor. Guéant JL, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):390-8

Isoelectric focusing of apo- and holo-transcobalamin present in human blood. Identification of a protein complexing with transcobalamin. Hansen M, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):209-14

Cobalamin binding proteins in stomach and serum from various animal species data for B12 binding capacities and molecular sizes of the binding proteins. Hippe E, et al. **Comp Biochem Physiol [B]** 1977;56(3):305-9

Distribution of vitamin B12 R-binder in lung tumors. Implications for cell differentiation. Ogawa K, et al. **Pathol Res Pract** 1989 Feb;184(2):234-41

[Evaluation of exocrine pancreatic function by the haptocorrin degradation test of the duodenal fluid collected by endoscopy] Champigneulle B, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):372-8 (Eng. Abstr.) **(Fre)**

[Serum vitamin B12 and vitamin B12 binding protein in chronic myeloproliferative disorders] Iseki T, et al. **Rinsho Ketsueki** 1988 Jul;29(7):960-8 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

The function of cellular transcobalamin II in cultured human cells. Hall CA, et al. **Exp Cell Res** 1989 Jul;183(1):159-67

The role of transcobalamin II in the methionine dependency of human lymphocytes. Hall CA, et al. **Proc Soc Exp Biol Med** 1988 Nov;189(2):217-22

Cobalamin binding proteins in the human fetus. Hansen M, et al. **Scand J Clin Lab Invest Suppl** 1989;194:23-6

SECRETION

Effects of human GM-CSF on neutrophil degranulation in vitro. Kaufman SE, et al. **Exp Hematol** 1989 Aug; 17(7):800-4

TRANSCORTIN

ANALYSIS

Corticosteroid-binding globulin in depression. Leake A, et al. **Clin Endocrinol (Oxf)** 1989 Jan;30(1):39-45

Marked elevation and cyclic variation of corticosteroid-binding globulin: an inherited abnormality? Coolens JL, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):492-4

Rat corticosteroid binding globulin: primary structure and messenger ribonucleic acid levels in the liver under different physiological conditions. Smith CL, et al. **Mol Endocrinol** 1989 Feb;3(2):420-6

Preparation of electrophoretic variants of corticosteroid-binding globulin (CBG) using liquid liquid partition chromatography. Juchem M, et al. **Steroids** 1988 Oct;52(4):417-8

Measurement of SBP and CBG using a same standardized immunoassay: application to the clinical evaluation of oral contraceptives. Loric S, et al. **Steroids** 1988 Oct;52(4):401-2

Investigation of steroid-CBG (transcortin)-interactions with fluorescent 4,6,8(14)-triene-3-one steroids. Müller RF, et al. **Steroids** 1988 Oct;52(4):419-20

[Variety of transcortin in the blood of women during normal pregnancy] Avvakumov GV, et al. **Probl Endokrinol (Mosk)** 1988 Sep-Oct;34(5):32-5 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Studies on the role of glycosylation for human corticosteroid-binding globulin: comparison with that for thyroxine-binding globulin. Murata Y, et al. **Endocrinology** 1989 Sep;125(3):1424-9

Transcortin biosynthesis and intracellular distribution of rat liver polyribosomes synthesizing transcortin. Kraujelis K, et al. **J Steroid Biochem** 1989 Jan;32(1A):121-5

[Identification of transcortin-synthesizing polyribosomes in the rat liver] Krauialis KI, et al. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):14-8 (Eng. Abstr.) **(Rus)**

BLOOD

Characterization of the corticosteroid-binding globulin response to decidualization in the hamster. Selcer KW, et al. **Endocrinology** 1989 Aug;125(2):976-83

[Mechanisms of sex differentiation of the level of corticosteroid-binding globulin in rats] Kurabekova RM, et al. **Probl Endokrinol (Mosk)** 1988 Nov-Dec;34(6):66-70 (Eng. Abstr.) **(Rus)**

GENETICS

Molecular analyses of human corticosteroid-binding globulin. Expression and gene structure. Hammond GL. **Ann N Y Acad Sci** 1988;538:25-9

The amino acid sequence of rat CBG deduced from a cDNA, and identification of CBG mRNA in the liver under different physiological states. Smith CL, et al. **Steroids** 1988 Oct;52(4):331-2

Isolation and characterization of the structural region of the human CBG gene. Underhill DA, et al. **Steroids** 1988 Oct; 52(4):329-30

ISOLATION & PURIFICATION

[Isolation and comparative characteristics of rat transcortin in normal conditions and during experimental circulatory insufficiency] Nadol'nik LI, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):25-30 (Eng. Abstr.) **(Rus)**

METABOLISM

The effect of transportation/relocation on cortisol, CBG and induction of puberty in gilts with delayed puberty. Dalin AM, et al. **Acta Vet Scand** 1988;29(2):207-18

Influence of naturally occurring and synthetic glucocorticoids on corticosteroid-binding globulin-steroid interaction in human peripheral plasma. Fraïria R, et al. **Ann N Y Acad Sci** 1988;538:287-303 (70 ref.)

Corticosteroid-binding globulin interactions with target cells and plasma membranes. Kuhn RW. **Ann N Y Acad Sci** 1988;538:146-58 (43 ref.)

Study of the transcortin binding to human endometrium plasma membrane. Avvakumov GV, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):143-50

Hamster uterine tissues accumulate corticosteroid-binding globulin during decidualization. Selcer KW, et al. **Biol Reprod** 1988 Oct;39(3):592-602

Decreased immunoreactivity and binding activity of corticosteroid-binding globulin in serum in septic shock. Pugeat M, et al. **Clin Chem** 1989 Aug;35(8):1675-9

Roles of plasma clearance and corticosteroid-binding globulin in the developmental increase in circulating corticosterone in infant rats. Schroeder RJ, et al. **Endocrinology** 1989 May;124(5):2612-8

Biological half-life and transfer of maternal corticosteroid-binding globulin to amniotic fluid in the rabbit. Seralini GE, et al. **Endocrinology** 1989 Sep; 125(3):1321-5

Effect of alcohol on the interaction of cortisol with plasma proteins, glucocorticoid receptors and erythrocytes. Hiramatsu R, et al. **J Steroid Biochem** 1989 Jul;33(1):65-70

Human transcortin (CBG): fatty acids induce selective steroid binding changes associated with immunological modifications. Martin ME, et al. **Steroids** 1988 Oct; 52(4):379-80

PHYSIOLOGY

Physiology of corticosteroid-binding globulin in humans. Heyns W, et al. **Ann N Y Acad Sci** 1988;538:122-9 (46 ref.)

Are corticosteroid-binding globulin and sex hormone-binding globulin hormones? Rosner W, et al. **Ann N Y Acad Sci** 1988;538:137-45 (33 ref.)

TRANSCRIPTASES see RNA POLYMERASES

TRANSCRIPTION FACTORS

Structure and function of bacterial sigma factors. Helmann JD, et al. **Annu Rev Biochem** 1988;57:839-72 (162 ref.)

Combining thermostable mutations increases the stability of lambda repressor. Stearman RS, et al. **Biochemistry** 1988 Sep 20;27(19):7571-4

Enhancers and transcription factors in the control of gene expression. Wasylyk B. **Biochim Biophys Acta** 1988 Nov 10;951(1):17-35 (211 ref.)

Selective suppression of endogenous beta-globin gene expression by transferred beta-globin/TK chimeric gene in murine erythroleukemia cells. Takada S, et al. **Cell Differ Dev** 1989 Jun;27(1):9-18

Secondary structure determination for the Antennapedia homeodomain by nuclear magnetic resonance and evidence for a helix-turn-helix motif. Otting G, et al. **EMBO J** 1988 Dec 20;7(13):4305-9

NMR studies of the Escherichia coli trp aporepressor. Sequence-specific assignment of the aromatic proton resonances. Hyde EI, et al. **Eur J Biochem** 1989 Aug 15; 183(3):545-53

Crystallization of the bifunctional biotin operon repressor. Brennan RG, et al. **J Biol Chem** 1989 Jan 5;264(1):5

The Arc and Mnt repressors. A new class of sequence-specific DNA-binding protein. Knight KL, et al. **J Biol Chem** 1989 Mar 5;264(7):3639-42

Repression of polyoma virus DNA replication by 5'-flanking region of mouse DNA polymerase beta gene containing transcriptional silencer elements. Yamaguchi M, et al. **J Biol Chem** 1989 Oct 5;264(28):16887-91

Hepatocyte-specific promoter element HP1 of the Xenopus albumin gene interacts with transcriptional factors of mammalian hepatocytes. Schorpp M, et al. **J Mol Biol** 1988 Jul 20;202(2):307-20

Nucleoprotein structures at positively regulated bacterial promoters: homology with replication origins and some hypotheses on the quaternary structure of the activator proteins in these complexes. Raibaud O. **Mol Microbiol** 1989 Mar;3(3):455-8 (27 ref.)

Alternative packing arrangements in the hydrophobic core of lambda repressor. Lim WA, et al. **Nature** 1989 May 4; 339(6219):31-6

Gene regulation. A hit-and-run mechanism for transcriptional activation? [news] Schaffner W. **Nature** 1988 Dec 1;336(6198):427-8

Xenopus transcription factor IIIA forms a complex of covalent character with 5S DNA. Blanco J, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11267-84

DNA polymerase of bacteriophage T4 is an autogenous translational repressor. Andrake M, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7942-6

The amino-terminal domain of LexA repressor is alpha-helical but differs from canonical helix-turn-helix proteins: a two-dimensional 1H NMR study. Lamerichs RM, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6863-7

A model for the tertiary structure of the 28 residue DNA-binding motif ('zinc finger') common to many eukaryotic transcriptional regulatory proteins. Gibson TJ, et al. **Protein Eng** 1988 Sep;2(3):209-18

Preferential heterodimer formation by isolated leucine zippers from fos and jun. O'Shea EK, et al. **Science** 1989 Aug 11; 245(4918):646-8

Evidence that the leucine zipper is a coiled coil. O'Shea EK, et al. **Science** 1989 Jan 27;243(4890):538-42

[Eukaryotic gene expression: regulation of transcription] Blomhoff HK. **Tidsskr Nor Laegeforen** 1988 Oct 20; 108(29):2499-501 (Eng. Abstr.) **(Nor)**

[The induction of interferon formation: interferon as a possible repressor] Bokhon'ko AI, et al. **Vopr Virusol** 1988 Nov-Dec;33(6):745-7 **(Rus)**

ANALYSIS

Determination of the secondary structure of the DNA binding protein Ner from phage Mu using 1H homonuclear and 15N-1H heteronuclear NMR spectroscopy. Gronenborn AM, et al. **Biochemistry** 1989 Jun 13; 28(12):5081-9

Preproenkephalin DNA-binding proteins in the rat: 5' flanking region. La Gamma EF, et al. **Brain Res Mol Brain Res** 1989 Mar;5(2):131-40

Evidence that the upstream stimulatory factor and the Sp1 transcription factor bind in vitro to the promoter of the human-growth-hormone gene. Lemaigre FP, et al. **Eur J Biochem** 1989 May 15;181(3):555-61

Topology of the transposon Tn10-encoded tetracycline resistance protein within the inner membrane of Escherichia coli. Eckert B, et al. **J Biol Chem** 1989 Jul 15;264(20):11663-70

Correlation of MDR1 gene expression with chemotherapy in neuroblastoma. Bourhis J, et al. **J Natl Cancer Inst** 1989 Sep 20;81(18):1401-5

Loss of responsiveness of an AP1-related factor, PEBP1, to 12-O-tetradecanoylphorbol-13-acetate after transformation of NIH 3T3 cells by the Ha-ras oncogene. Satake M, et al. **J Virol** 1989 Sep;63(9):3669-77

Separation of primary structural components conferring autoregulation, transactivation, and DNA-binding properties to the herpes simplex virus transcriptional regulatory protein ICP4. Shepard AA, et al. **J Virol** 1989 Sep;63(9):3714-28

Identification of factors specific for transcription of the late class of vaccinia virus genes. Wright CF, et al. **J Virol** 1989 Oct;63(10):4224-33

Rapid detection of octamer binding proteins with 'mini-extracts', prepared from a small number of cells. Schreiber E, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):6419

Recognition helices of lac and lambda repressor are oriented in opposite directions and recognize similar DNA sequences. Lehming N, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7947-51

Stable expression of the tax gene of type I human T-cell leukemia virus in human T cells activates specific cellular genes involved in growth. Wano Y, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9733-7

[Local homology of amino acid sequences of histones H3, H4 and the protein repressor lambda Cro. Possible conformation of homologous histone sites in DNP] Mil' EM, et al. **Biokhimiia** 1988 Dec;53(12):1980-6 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Purification and partial characterization of a transcription-inhibitory peptide from Tetrahymena. Andersen HA, et al. **Biol Chem Hoppe Seyler** 1989 Jan; 370(1):41-6

I kappa B: a specific inhibitor of the NF-kappa B transcription factor. Baeuerle PA, et al. **Science** 1988 Oct 28;242(4878):540-6

BIOSYNTHESIS

Augmentation and stable expression of a novel transcription factor SII in CD4-positive cells on infection with human immunodeficiency virus type-1 (HIV-1). Hamamoto Y, et al. **Biochem Biophys Res Commun** 1988 Sep 30; 155(3):1346-52

Production of functional S-II in Bombyx mori cells. Hirashima S, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1093-9

Transforming growth factor-alpha stimulates proto-oncogene c-jun expression and a mitogenic program in primary cultures of adult rat hepatocytes. Brenner DA, et al. **DNA** 1989 May;8(4):279-85

Biosynthesis of a repressor/nuclease hybrid protein. Panayotatos N, et al. **J Biol Chem** 1989 Sep 5; 264(25):15066-9

Increases in levels of procollagenase messenger RNA in cultured fibroblasts induced by human recombinant interleukin 1 beta or serum follow c-jun expression and are dependent on new protein synthesis. Conca W, et al. **J Clin Invest** 1989 May;83(5):1753-7

Theoretical mechanisms for synthesis of carcinogen-induced embryonic proteins: XX. Embryonic gene perturbations expressed in terms of matrix algebra. Hancock RL. **Med Hypotheses** 1988 Sep;27(1):15-8

Formation of heterodimers between wild type and mutant trp aporepressor polypeptides of Escherichia coli. Graddis TJ, et al. **Proteins** 1988;4(3):173-81

CHEMICAL SYNTHESIS

Autonomous functional domains of chemically synthesized human immunodeficiency virus tat trans-activator protein. Green M, et al. **Cell** 1988 Dec 23;55(6):1179-88

GENETICS

The effect of homocysteine on MetR regulation of metE, metR and metH expression in vitro. Cai XY, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):79-83

Chemical synthesis and expression of a gene encoding HIV-1 TAT protein. Ferguson BQ, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1429-37

cDNA cloning of Gb, the substrate for botulinum ADP-ribosyltransferase from bovine adrenal gland and its identification as a rho gene product. Ogorochi T, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1175-81

Human cell lines stably expressing HIV env and tat gene products. Sosa MA, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):305-11

A type II DNA-binding protein genetically engineered for fluorescence spectroscopy: the "arm" of transcription factor 1 binds in the DNA grooves. Härd T, et al. **Biochemistry** 1989 Apr 4;28(7):2813-9

Cis- and trans-acting factors for transcription of the adenovirus 12 E1A gene. Shibata H, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):184-91

Effect of DNA supercoiling and catabolite repression on the expression of the tetA genes in Escherichia coli. León P, et al. **Can J Microbiol** 1988 Jul;34(7):839-42

The jun proto-oncogene is positively autoregulated by its product, Jun/AP-1. Angel P, et al. **Cell** 1988 Dec 2; 55(5):875-85

A purified Drosophila homeodomain protein represses transcription in vitro. Biggin MD, et al. **Cell** 1989 Aug 11;58(3):433-40

The pituitary-specific transcription factor GHF-1 is a homeobox-containing protein. Bodner M, et al. **Cell** 1988 Nov 4;55(3):505-18

A single glutamic acid residue plays a key role in the transcriptional activation function of lambda repressor. Bushman FD, et al. **Cell** 1989 Sep 22;58(6):1163-71

Fos and Jun: the AP-1 connection. Curran T, et al. **Cell** 1988 Nov 4;55(3):395-7 (47 ref.)

SPT15, the gene encoding the yeast TATA binding factor TFIID, is required for normal transcription initiation in vivo. Eisenmann DM, et al. **Cell** 1989 Sep 22;58(6):1183-91

The erythroid-specific transcription factor Eryf1: a new finger protein. Evans T, et al. **Cell** 1989 Sep 8;58(5):877-85

The C. elegans cell lineage and differentiation gene unc-86 encodes a protein with a homeodomain and extended similarity to transcription factors. Finney M, et al. **Cell** 1988 Dec 2;55(5):757-69

Mutational analysis of HIV-1 Tat minimal domain peptides: identification of trans-dominant mutants that suppress HIV-LTR-driven gene expression. Green M, et al. **Cell** 1989 Jul 14;58(1):215-23

Isolation of the gene encoding the yeast TATA binding protein TFIID: a gene identical to the SPT15 suppressor of Ty element insertions. Hahn S, et al. **Cell** 1989 Sep 22; 58(6):1173-81

Synergistic activation and repression of transcription by Drosophila homeobox proteins. Han K, et al. **Cell** 1989 Feb 24;56(4):573-83

A tissue-specific transcription factor containing a homeodomain specifies a pituitary phenotype. Ingraham HA, et al. **Cell** 1988 Nov 4;55(3):519-29

Transcriptional activation and repression by Ultrabithorax proteins in cultured Drosophila cells. Krasnow MA, et al. **Cell** 1989 Jun 16;57(6):1031-43

Homeobox proteins as sequence-specific transcription factors. Levine M, et al. **Cell** 1988 Nov 18;55(4):537-40 (0 ref.)

Converting a eukaryotic transcriptional inhibitor into an activator. Ma J, et al. **Cell** 1988 Nov 4;55(3):443-6

The sex-determining region of the mouse Y chromosome encodes a protein with a highly acidic domain and 13 zinc fingers. Mardon G, et al. **Cell** 1989 Mar 10;56(5):765-70

Temporal fluctuations in HIV quasispecies in vivo are not reflected by sequential HIV isolations. Meyerhans A, et al. **Cell** 1989 Sep 8;58(5):901-10

A new DNA binding and dimerization motif in immunoglobulin enhancer binding, daughterless, MyoD, and myc proteins. Murre C, et al. **Cell** 1989 Mar 10; 56(5):777-83

The MerR heavy metal receptor mediates positive activation in a topologically novel transcription complex. O'Halloran TV, et al. **Cell** 1989 Jan 13;56(1):119-29

Gene activation and DNA binding by Drosophila Ubx and abd-A proteins. Samson ML, et al. **Cell** 1989 Jun 16; 57(6):1045-52

The leucine repeat motif in Fos protein mediates complex formation with Jun/AP-1 and is required for transformation. Schuermann M, et al. **Cell** 1989 Feb 10; 56(3):507-16

Coupling of GCN4 mRNA translational activation with decreased rates of polypeptide chain initiation. Tzamarias D, et al. **Cell** 1989 Jun 16;57(6):947-54

Transcriptional activation by the v-myb oncogene and its cellular progenitor, c-myb. Weston K, et al. **Cell** 1989 Jul 14;58(1):85-93

Role of the octamer motif in hybrid cell extinction of immunoglobulin gene expression: extinction is dominant in a two enhancer system. Yu H, et al. **Cell** 1989 Aug 11; 58(3):441-8

Jun: oncogene and transcriptional regulator. Ball AR Jr, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:687-93

Identification of growth-factor-inducible genes in mouse fibroblasts. Bravo R, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:901-5

YAP1 encodes a yeast homolog of mammalian transcription factor AP-1. Moye-Rowley WS, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:711-7

Genomic response to growth factors. Nathans D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:893-900

Transcriptional activation by yeast GCN4, a functional homolog to the jun oncoprotein. Struhl K, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:701-9

Multicopy plasmids containing the gene for the transcriptional activator LAC9 are not tolerated by K. lactis cells. Breunig KD. **Curr Genet** 1989 Feb;15(2):143-8

Isolation and characterization of a Neurospora glucose-repressible gene. McNally MT, et al. **Curr Genet** 1988 Dec;14(6):545-51

Stability of RNA in developing Xenopus embryos and identification of a destabilizing sequence in TFIIIA messenger RNA. Harland R, et al. **Development** 1988 Apr; 102(4):837-52

A threonine to alanine exchange at position 40 of Tet repressor alters the recognition of the sixth base pair of tet operator from GC to AT. Altschmied L, et al. **EMBO J** 1988 Dec 1;7(12):4011-7

Cell type specific trans-acting factors are involved in alternative splicing of human fibronectin pre-mRNA. Barone MV, et al. **EMBO J** 1989 Apr;8(4):1079-85

Evidence that the Abdominal-B r element function is conferred by a trans-regulatory homeoprotein. DeLorenzi M, et al. **EMBO J** 1988 Oct;7(10):3223-31

A cell-specific activator in the Xenopus A2 vitellogenin

gene: promoter elements functioning with rat liver nuclear extracts. Döbbeling U, et al. EMBO J 1988 Aug; 7(8):2495–501
Evidence for a nuclear factor(s), IRF–1, mediating induction and silencing properties to human IFN–beta gene regulatory elements. Fujita T, et al. EMBO J 1988 Nov; 7(11):3397–405
Functional domains required for tat–induced transcriptional activation of the HIV–1 long terminal repeat. Garcia JA, et al. EMBO J 1988 Oct;7(10):3143–7
Structural and mutational analysis of E2 trans–activating proteins of papillomaviruses reveals three distinct functional domains. Giri I, et al. EMBO J 1988 Sep; 7(9):2823–9
Sequence–specific and general transcriptional activation by the bovine papillomavirus–1 E2 trans–activator require an N–terminal amphipathic helix–containing E2 domain. Haugen TH, et al. EMBO J 1988 Dec 20;7(13):4245–53
Characterization of junD: a new member of the jun proto–oncogene family. Hirai SI, et al. EMBO J 1989 May; 8(5):1433–9
Epstein–Barr virus bicistronic mRNAs generated by facultative splicing code for two transcriptional trans–activators. Manet E, et al. EMBO J 1989 Jun; 8(6):1819–26
Direct combinatorial interaction between a herpes simplex virus regulatory protein and a cellular octamer–binding factor mediates specific induction of virus immediate–early gene expression. O'Hare P, et al. EMBO J 1988 Dec 20; 7(13):4231–8
Novel Jun– and Fos–related proteins in Drosophila are functionally homologous to enhancer factor AP–1. Perkins KK, et al. EMBO J 1988 Dec 20;7(13):4265–73
lac repressor mutants with double or triple exchanges in the recognition helix bind specifically to lac operator variants with multiple exchanges. Sartorius J, et al. EMBO J 1989 Apr;8(4):1265–70
Ubiquitous and lymphocyte–specific factors are involved in the induction of the mouse interleukin 2 gene in T lymphocytes. Serfling E, et al. EMBO J 1989 Feb; 8(2):465–73
The cellular response to induction of the p21 c–Ha–ras oncoprotein includes stimulation of jun gene expression. Sistonen L, et al. EMBO J 1989 Mar;8(3):815–22
Synergistic action of the glucocorticoid receptor with transcription factors. Strähle U, et al. EMBO J 1988 Nov; 7(11):3389–95
The Epstein–Barr virus early protein EB1 activates transcription from different responsive elements including AP–1 binding sites. Urier G, et al. EMBO J 1989 May; 8(5):1447–53
Transforming but not immortalizing oncogenes activate the transcription factor PEA1. Wasylyk C, et al. EMBO J 1988 Aug;7(8):2475–83
Tissue–specific and steroid–dependent interaction of transcription factors with the oestrogen–inducible apoVLDL II promoter in vivo. Wijnholds J, et al. EMBO J 1988 Sep;7(9):2757–63
Putative start codon TTG for the regulatory protein VirG of the hairy–root–inducing plasmid pRiA4. Aoyama T, et al. Gene 1989 May 15;78(1):173–8
Multicopy expression vector based on temperature–regulated lac repressor: expression of human immunodeficiency virus env gene in Escherichia coli. Bukrinsky MI, et al. Gene 1988 Oct 30;70(2):415–7
Repression of damage–inducible (din) genes by the lexA3 mutation or by plasmid carrying the lexA gene; effect on pyrimidine dimer excision in UV–irradiated Escherichia coli. Malek F, et al. Gene 1989 May 15;78(1):195–9
Mutational analysis of the herpes simplex virus trans–inducing factor Vmw65. Werstuck G, et al. Gene 1989 Feb 20;75(2):213–24
Postnatal repression of the alpha–fetoprotein gene is enhancer independent. Camper SA, et al. Genes Dev 1989 Apr; 3(4):537–46
Developmental control of promoter–specific factors responsible for the embryonic activation and inactivation of the sea urchin early histone H3 gene. DiLiberto M, et al. Genes Dev 1989 Jul;3(7):973–85
The human c–fos serum response factor and the yeast factors GRM/PRTF have related DNA–binding specificities. Hayes TE, et al. Genes Dev 1988 Dec;2(12B):1713–22
A trans–acting factor required for cAMP–induced gene expression in Dictyostelium is regulated developmentally and induced by cAMP. Hjorth AL, et al. Genes Dev 1989 Jun;3(6):747–59
The yeast transcription activator PRTF, a homolog of the mammalian serum response factor, is encoded by the MCM1 gene. Jarvis EE, et al. Genes Dev 1989 Jul; 3(7):936–45
Tandem genes encoding sigma–factors for consecutive steps of development in Bacillus subtilis. Karmazyn–Campelli C, et al. Genes Dev 1989 Feb;3(2):150–7
Functional analysis of the papilloma virus E2 trans–activator in Saccharomyces cerevisiae. Lambert PF, et al. Genes Dev 1989 Jan;3(1):38–48
An avian muscle factor related to MyoD1 activates muscle–specific promoters in nonmuscle cells of different germ–layer origin and in BrdU–treated myoblasts. Lin ZY, et al. Genes Dev 1989 Jul;3(7):986–96
A pituitary POU domain protein, Pit–1, activates both growth hormone and prolactin promoters transcriptionally. Mangalam HJ, et al. Genes Dev 1989 Jul;3(7):946–58
Yeast YAP1 encodes a novel form of the jun family of transcriptional activator proteins. Moye–Rowley WS, et al. Genes Dev 1989 Mar;3(3):283–92
The Drosophila su(Hw) gene, which controls the phenotypic effect of the gypsy transposable element, encodes a putative DNA–binding protein. Parkhurst SM, et al. Genes Dev 1988 Oct;2(10):1205–15
In vitro analysis of the Antennapedia P2 promoter: identification of a new Drosophila transcription factor. Perkins KK, et al. Genes Dev 1988 Dec;2(12a):1615–26
Fos–Jun interaction: mutational analysis of the leucine zipper domain of both proteins. Ransone LJ, et al. Genes Dev 1989 Jun;3(6):770–81
Fos and Jun bind cooperatively to the AP–1 site: reconstitution in vitro. Rauscher FJ 3d, et al. Genes Dev 1988 Dec;2(12B):1687–99
DNA–binding activity of the adenovirus–induced E4F transcription factor is regulated by phosphorylation. Raychaudhuri P, et al. Genes Dev 1989 May;3(5):620–7
Positive and negative regulation of the gene for transcription factor IIIA in Xenopus laevis oocytes. Scotto KW, et al. Genes Dev 1989 May;3(5):651–62
Cloning and expression of AP–2, a cell–type–specific transcription factor that activates inducible enhancer elements. Williams T, et al. Genes Dev 1988 Dec; 2(12a):1557–69
Phage lambda Cro protein and cI repressor use two different patterns of specific protein–DNA interactions to achieve sequence specificity in vivo. Benson N, et al. Genetics 1989 Jan;121(1):5–12
Molecular evolution of the telomere–associated MAL loci of Saccharomyces. Charron MJ, et al. Genetics 1989 Jun; 122(2):307–16
Second–site revertants of Escherichia coli trp repressor mutants. Klig LS, et al. Genetics 1988 Nov;120(3):651–5
Amino acid sequence similarity between GCN3 and GCD2, positive and negative translational regulators of GCN4: evidence for antagonism by competition. Paddon CJ, et al. Genetics 1989 Jul;122(3):551–9
a/Alpha–specific repression by MAT alpha 2. Strathern J, et al. Genetics 1988 Sep;120(1):75–81
A model system for the rescue of cDNA encoding transacting transcription activator by contingent replication assay. Vasavada HA, et al. Indian J Biochem Biophys 1988 Dec; 25(6):488–94
Levels of DNA topoisomerases, single–stranded–DNA–binding protein, and DNA polymerase I in rho+ and rho–15 strains of Escherichia coli. Arnold GF, et al. J Bacteriol 1989 Sep;171(9):5183–6
Cloning and sequencing of an Escherichia coli gene, nlp, highly homologous to the ner genes of bacteriophages Mu and D108. Choi YL, et al. J Bacteriol 1989 Sep; 171(9):5222–5
Homology between virF, the transcriptional activator of the Yersinia virulence regulon, and AraC, the Escherichia coli arabinose operon regulator. Cornelis G, et al. J Bacteriol 1989 Jan;171(1):254–62
appR gene product activates transcription of microcin C7 plasmid genes. Díaz–Guerra L, et al. J Bacteriol 1989 May; 171(5):2906–8
Allele replacement in Escherichia coli by use of a selectable marker for resistance to spectinomycin: replacement of the lexA gene. Hill SA, et al. J Bacteriol 1988 Dec; 170(12):5913–5
Identification of multiple repressor recognition sites in the hut system of Pseudomonas putida. Hu L, et al. J Bacteriol 1989 Aug;171(8):4189–95
Involvement of Pseudomonas putida RpoN sigma factor in regulation of various metabolic functions. Köhler T, et al. J Bacteriol 1989 Aug;171(8):4326–33
Genetic analysis of bacteriophage lambda cIII gene: mRNA structural requirements for translation initiation. Kornitzer D, et al. J Bacteriol 1989 May;171(5):2563–72
MalI, a novel protein involved in regulation of the maltose system of Escherichia coli, is highly homologous to the repressor proteins GalR, CytR, and LacI. Reidl J, et al. J Bacteriol 1989 Sep;171(9):4888–99
Evidence that the transcription activator encoded by the Pseudomonas putida nahR gene is evolutionarily related to the transcription activators encoded by the Rhizobium nodD genes. Schell MA, et al. J Bacteriol 1989 Apr; 171(4):1952–9
Demonstration, characterization, and mutational analysis of NahR protein binding to nah and sal promoters. Schell MA, et al. J Bacteriol 1989 Feb;171(2):837–46
Method for selection of transposable DNA and characterization of a new insertion sequence, IS493, from Streptomyces lividans. Solenberg PJ, et al. J Bacteriol 1989 Sep;171(9):4807–13
Structural analysis of the carboxy terminus of bacteriophage lambda repressor determined by antipeptide antibodies. Sussman R, et al. J Bacteriol 1989 Mar;171(3):1235–44
Control of the ccd operon in plasmid F. Tam JE, et al. J Bacteriol 1989 May;171(5):2353–60
Mutational analysis of the fine specificity of binding of monoclonal antibody 51F to lambda repressor. Breyer RM, et al. J Biol Chem 1989 Aug 5;264(22):13355–60
Genomic structure and amino acid sequence domains of the human La autoantigen. Chambers JC, et al. J Biol Chem 1988 Dec 5;263(34):18043–51
The antimitogenic action of tumor necrosis factor is associated with increased AP–1/c–jun proto–oncogene transcription. Dixit VM, et al. J Biol Chem 1989 Oct 5; 264(28):16905–9
Rapid rescue of cellular transcriptional activator elements by amplification of a single copy selection gene. Garbrecht S, et al. J Biol Chem 1989 Jul 25;264(21):12278–83
Transcript analyses of the uvsX–40–41 region of bacteriophage T4. Changes in the RNA as infection proceeds. Hinton DM. J Biol Chem 1989 Aug 25; 264(24):14432–9
Identification of functionally important residues in the DNA binding region of the mnt repressor. Knight KL, et al. J Biol Chem 1989 Aug 15;264(23):13706–10
Substrate for botulinum ADP–ribosyltransferase, Gb, has an amino acid sequence homologous to a putative rho gene product. Narumiya S, et al. J Biol Chem 1988 Nov 25; 263(33):17255–7
Escherichia coli gene purR encoding a repressor protein for purine nucleotide synthesis. Cloning, nucleotide sequence, and interaction with the purF operator. Rolfes RJ, et al. J Biol Chem 1988 Dec 25;263(36):19653–61
Regulation of Escherichia coli purF. Mutations that define the promoter, operator, and purine repressor gene. Rolfes RJ, et al. J Biol Chem 1988 Dec 25;263(36):19649–52
Sequence–specific binding of arc repressor to DNA. Effects of operator mutations and modifications. Vershon AK, et al. J Biol Chem 1989 Feb 25;264(6):3267–73
dnaA protein regulates transcriptions of the rpoH gene of Escherichia coli. Wang QP, et al. J Biol Chem 1989 May 5;264(13):7338–44
Regulation and over–expression of the fnr gene of Escherichia coli. Spiro S, et al. J Gen Microbiol 1987 Dec; 133 (Pt 12):3279–88
Properties of the herpes simplex virus type 2 trans–inducing factor Vmw65 in wild–type and mutant viruses. Moss H. J Gen Virol 1989 Jun;70 (Pt 6):1579–85
A mutant Escherichia coli sigma 70 subunit of RNA polymerase with altered promoter specificity. Gardella T, et al. J Mol Biol 1989 Apr 20;206(4):579–90
ban operon of bacteriophage P1. Mutational analysis of the c1 repressor–controlled operator. Heinzel T, et al. J Mol Biol 1989 Jan 5;205(1):127–35
Tet repressor–tet operator contacts probed by operator DNA–modification interference studies. Heuer C, et al. J Mol Biol 1988 Aug 5;202(3):407–15
Nuclear factor I can functionally replace transcription factor Sp1 in a U2 small nuclear RNA gene enhancer. Janson L, et al. J Mol Biol 1989 Jan 20;205(2):387–96
LexA repressor induces operator–dependent DNA bending. Lloubès R, et al. J Mol Biol 1988 Dec 20;204(4):1049–54
Regulation of the phosphate regulon of Escherichia coli. Activation of pstS transcription by PhoB protein in vitro. Makino K, et al. J Mol Biol 1988 Sep 5;203(1):85–95
Lambda cro repressor complex with OR3 operator DNA. 19F nuclear magnetic resonance observations. Metzler WJ, et al. J Mol Biol 1989 Jan 5;205(1):149–64
Structure of phage 434 Cro protein at 2.35 A resolution. Mondragón A, et al. J Mol Biol 1989 Jan 5;205(1):179–88
Structure of the amino–terminal domain of phage 434 repressor at 2.0 A resolution. Mondragón A, et al. J Mol Biol 1989 Jan 5;205(1):189–200
Altered promoter recognition by mutant forms of the sigma 70 subunit of Escherichia coli RNA polymerase. Siegele DA, et al. J Mol Biol 1989 Apr 20;206(4):591–603
Mutations in the Tn10 tet repressor that interfere with induction. Location of the tetracycline–binding domain. Smith LD, et al. J Mol Biol 1988 Oct 20;203(4):949–59
SPXX, a frequent sequence motif in gene regulatory proteins. Suzuki M. J Mol Biol 1989 May 5;207(1):61–84
Saturation mutagenesis of the Tn10–encoded tet operator O1. Identification of base–pairs involved in Tet repressor recognition. Wissmann A, et al. J Mol Biol 1988 Aug 5; 202(3):397–406
Mutation changing the specificity of an RNA polymerase sigma factor. Zuber P, et al. J Mol Biol 1989 Apr 20; 206(4):605–14
Construction and characterization of a herpes simplex virus type 1 mutant unable to transinduce immediate–early gene expression. Ace CI, et al. J Virol 1989 May;63(5):2260–9
The cellular transcription factor E2f requires viral E1A and E4 gene products for increased DNA–binding activity and functions to stimulate adenovirus E2A gene expression. Babiss LE. J Virol 1989 Jun;63(6):2709–17
In vitro mutagenesis of the human T–cell leukemia virus types I and II tax genes. Cann AJ, et al. J Virol 1989 Mar; 63(3):1474–9
Proposed gag–encoded transcriptional activator is not necessary for Rous sarcoma virus replication or transformation. Carlberg K, et al. J Virol 1988 Nov; 62(11):4003–8
Adeno–associated virus P5 promoter contains an adenovirus E1A–inducible element and a binding site for the major late transcription factor. Chang LS, et al. J Virol 1989 Aug; 63(8):3479–88
Bovine papillomavirus type 1 encodes two forms of a transcriptional repressor: structural and functional analysis of new viral cDNAs. Choe J, et al. J Virol 1989 Apr; 63(4):1743–55
The putative trans–activator in the MAgag region of Rous sarcoma virus is not required for cell transformation. Dutta A, et al. J Virol 1988 Dec;62(12):4767–9
Limited temperature–sensitive transactivation by mutant

adenovirus type 2 E1a proteins. Fahnestock ML, et al. J Virol 1989 May;63(5):2348–51

A unique enhancer element for the trans activator (p40tax) of human T-cell leukemia virus type I that is distinct from cyclic AMP- and 12-O-tetradecanoylphorbol-13-acetate-responsive elements. Fujisawa J, et al. J Virol 1989 Aug;63(8):3234–9

Role of SP1-binding domains in in vivo transcriptional regulation of the human immunodeficiency virus type 1 long terminal repeat. Harrich D, et al. J Virol 1989 Jun; 63(6):2585–91

Mutational analysis of the conserved basic domain of human immunodeficiency virus tat protein. Hauber J, et al. J Virol 1989 Mar;63(3):1181–7

Induction of human interferon gene expression is associated with a nuclear factor that interacts with the NF-kappa B site of the human immunodeficiency virus enhancer. Hiscott J, et al. J Virol 1989 Jun;63(6):2557–66

Characterization of cellular factors that interact with the human T-cell leukemia virus type I p40x-responsive 21-base-pair sequence. Jeang KT, et al. J Virol 1988 Dec; 62(12):4499–509

The Epstein-Barr virus (EBV) BZLF1 immediate-early gene product differentially affects latent versus productive EBV promoters. Kenney S, et al. J Virol 1989 Apr;63(4):1729–36

Genetic assignment of multiple E2 gene products in bovine papillomavirus-transformed cells. Lambert PF, et al. J Virol 1989 Jul;63(7):3151–4

Responsiveness of the Epstein-Barr virus NotI repeat promoter to the Z transactivator is mediated in a cell-type-specific manner by two independent signal regions. Lieberman PM, et al. J Virol 1989 Jul; 63(7):3040–50

Identification of proteins encoded by Epstein-Barr virus trans-activator genes. Marschall M, et al. J Virol 1989 Feb; 63(2):938–42

Activation of endogenous c-fos proto-oncogene expression by human T-cell leukemia virus type I-encoded p40tax protein in the human T-cell line, Jurkat. Nagata K, et al. J Virol 1989 Aug;63(8):3220–6

Multiple transcription factor binding sites mediate adenovirus E1A transactivation. Pei R, et al. J Virol 1989 Aug; 63(8):3499–506

Mutational analysis of autonomously functioning trans-activating peptides encoded by adenovirus E1A: evidence for two subdomains. Pusztai R, et al. J Virol 1989 Aug;63(8):3516–8

Structural and functional characterization of human immunodeficiency virus tat protein. Ruben S, et al. J Virol 1989 Jan;63(1):1–8

The herpes simplex virus type 1 alpha protein ICP27 can act as a trans-repressor or a trans-activator in combination with ICP4 and ICP0. Sekulovich RE, et al. J Virol 1988 Dec;62(12):4510–22

Intragenic complementation among partial peptides of herpes simplex virus regulatory protein ICP4. Shepard AA, et al. J Virol 1989 Mar;63(3):1203–11

Functional comparison of transactivation by simian immunodeficiency virus from rhesus macaques and human immunodeficiency virus type 1. Viglianti GA, et al. J Virol 1988 Dec;62(12):4523–32

Purification and characterization of TTF1, a factor that mediates termination of mouse ribosomal DNA transcription. Bartsch I, et al. Mol Cell Biol 1988 Sep; 8(9):3891–7

Fusion of adenovirus E1A to the glucocorticoid receptor by high-resolution deletion cloning creates a hormonally inducible viral transactivator. Becker DM, et al. Mol Cell Biol 1989 Sep;9(9):3878–87

Promoter upstream elements of the chicken cardiac myosin light-chain 2-A gene interact with trans-acting regulatory factors for muscle-specific transcription. Braun T, et al. Mol Cell Biol 1989 Jun;9(6):2513–25

Prolactin upstream factor I mediates cell-specific transcription. Cao ZD, et al. Mol Cell Biol 1988 Dec; 8(12):5432–8

Glucose-regulated protein (GRP94 and GRP78) genes share common regulatory domains and are coordinately regulated by common trans-acting factors. Chang SC, et al. Mol Cell Biol 1989 May;9(5):2153–62

Molecular analysis of GCN3, a translational activator of GCN4: evidence for posttranslational control of GCN3 regulatory function. Hannig EM, et al. Mol Cell Biol 1988 Nov;8(11):4808–20

A common trans-acting factor is involved in transcriptional regulation of neurotransmitter genes by cyclic AMP. Hyman SE, et al. Mol Cell Biol 1988 Oct;8(10):4225–33

An embryonic enhancer determines the temporal activation of a sea urchin late H1 gene. Lai ZC, et al. Mol Cell Biol 1989 Jun;9(6):2315–21

ROX1 encodes a heme-induced repression factor regulating ANB1 and CYC7 of Saccharomyces cerevisiae. Lowry CV, et al. Mol Cell Biol 1988 Nov;8(11):4651–8

The first and fourth upstream open reading frames in GCN4 mRNA have similar initiation efficiencies but respond differently in translational control to change in length and sequence. Mueller PP, et al. Mol Cell Biol 1988 Dec; 8(12):5439–47

Enhanced jun gene expression is an early genomic response to transforming growth factor beta stimulation. Pertovaara L, et al. Mol Cell Biol 1989 Mar;9(3):1255–62

Genetic dissection of functional domains within the avian erythroblastosis virus v-erbA oncogene. Privalsky ML, et al. Mol Cell Biol 1988 Oct;8(10):4510–7

Structural determinant of the species-specific transcription of the mouse rRNA gene promoter. Safrany G, et al. Mol Cell Biol 1989 Jan;9(1):349–53

Localization of a minimal binding domain and activation regions in yeast regulatory protein ADR1. Thukral SK, et al. Mol Cell Biol 1989 Jun;9(6):2360–9

Expression of raf oncogenes activates the PEA1 transcription factor motif. Wasylyk C, et al. Mol Cell Biol 1989 May; 9(5):2247–50

The C-terminal domain of transcription factor IIIA interacts differently with different 5S RNA genes. Xing YY, et al. Mol Cell Biol 1989 Feb;9(2):499–514

Interaction of nuclear proteins with a positive cis-acting element of rat embryonic myosin heavy-chain promoter: identification of a new transcriptional factor. Yu YT, et al. Mol Cell Biol 1989 May;9(5):1839–49

The mgtB sequence of Salmonella typhimurium LT2; promoter analysis by gene fusions and evidence for a divergently oriented gene coding for the mgt repressor. Benner-Luger D, et al. Mol Gen Genet 1988 Nov; 214(3):579–87

The repressor of the PEP:fructose phosphotransferase system is required for the transcription of the pps gene of Escherichia coli. Geerse RH, et al. Mol Gen Genet 1989 Aug;218(2):348–52

Molecular analysis and nucleotide sequence of finQ, a transcriptional inhibitor of the F plasmid transfer genes. Ham LM, et al. Mol Gen Genet 1989 Mar;216(1):99–105

Mapping of the multiple regulatory sites for putP and putA expression in the putC region of Escherichia coli. Nakao T, et al. Mol Gen Genet 1988 Nov;214(3):379–88

Salmonella typhimurium LT2 metF operator mutations. Stauffer GV, et al. Mol Gen Genet 1988 Sep;214(1):32–6

PHO85, a negative regulator of the PHO system, is a homolog of the protein kinase gene, CDC28, of Saccharomyces cerevisiae. Toh-e A, et al. Mol Gen Genet 1988 Sep;214(1):162–4

A dual transcriptional activation system for the 230 kb plasmid genes coding for virulence-associated antigens of Shigella flexneri. Adler B, et al. Mol Microbiol 1989 May; 3(5):627–35

Mutations that alter the helix-turn-helix region of the spoIIAC protein: a Bacillus subtilis sporulation-specific sigma factor. Yudkin MD, et al. Mol Microbiol 1989 Feb; 3(2):257–9

Prolonged activation of jun and collagenase genes by tumour necrosis factor-alpha. Brenner DA, et al. Nature 1989 Feb 16;337(6208):661–3

Altering DNA-binding specificity of GAL4 requires sequences adjacent to the zinc finger. Corton JC, et al. Nature 1989 Aug 31;340(6236):724–7

The Drosophila fushi tarazu polypeptide is a DNA-binding transcriptional activator in yeast cells. Fitzpatrick VD, et al. Nature 1989 Feb 16;337(6208):666–8

The Drosophila posterior-group gene nanos functions by repressing hunchback activity. Irish V, et al. Nature 1989 Apr 20;338(6217):646–8

Two tobacco DNA-binding proteins with homology to the nuclear factor CREB. Katagiri F, et al. Nature 1989 Aug 31;340(6236):727–30

A cloned octamer transcription factor stimulates transcription from lymphoid-specific promoters in non-B cells. Müller MM, et al. Nature 1988 Dec 8;336(6199):544–51

Differing strategies for organizing anterior and posterior body pattern in Drosophila embryos. Struhl G. Nature 1989 Apr 27;338(6218):741–4

The POU domain is a bipartite DNA-binding structure. Sturm RA, et al. Nature 1988 Dec 8;336(6199):601–4

Drosophila homoeotic genes encode transcriptional activators similar to mammalian OTF-2 [published erratum appears in Nature 1989 Jan 19;337(6204):290] Thali M, et al. Nature 1988 Dec 8;336(6199):598–601

COUP transcription factor is a member of the steroid receptor superfamily. Wang LH, et al. Nature 1989 Jul 13; 340(6229):163–6

Nucleotide sequence of the quail c-jun protooncogene. Brun G, et al. Nucleic Acids Res 1989 Aug 11;17(15):6393

Sequence requirement for specific interaction of an enhancer binding protein (EBP1) with DNA. Clark L, et al. Nucleic Acids Res 1989 Jan 25;17(2):499–516

A novel tRNA(Ala) gene and its adjacent sigma element downstream from the CYP1 (HAP1) gene in Saccharomyces cerevisiae. Creusot F, et al. Nucleic Acids Res 1989 Mar 11;17(5):1865–6

Species variation in transcription factor IIIA. Gaskins CJ, et al. Nucleic Acids Res 1989 Jan 25;17(2):781–94

Characterization of a putative transcription factor gene expressed in the 20-OH-ecdysone inducible puff 74EF in Drosophila melanogaster. Janknecht R, et al. Nucleic Acids Res 1989 Jun 26;17(12):4455–64

Multiple functional domains of Tat, the trans-activator of HIV-1, defined by mutational analysis. Kuppuswamy M, et al. Nucleic Acids Res 1989 May 11;17(9):3551–61

The DNA-binding domain of the transcriptional activator protein NifA resides in its carboxy terminus, recognises the upstream activator sequences of nif promoters and can be separated from the positive control function of NifA. Morett E, et al. Nucleic Acids Res 1988 Dec 23; 16(24):11469–88

Multiple cooperative interactions constrain BPV-1 E2 dependent activation of transcription. Sowden M, et al. Nucleic Acids Res 1989 Apr 25;17(8):2959–72

The structure of nucleosomal core particles within transcribed and repressed gene regions. Studitsky VM, et al. Nucleic Acids Res 1988 Dec 9;16(23):11187–205

Expression of functional Xenopus TFIIIA in Escherichia coli. Tao JY, et al. Nucleic Acids Res 1989 Mar 11; 17(5):2145

DNA conformational change in Gal repressor-operator complex: involvement of central G-C base pair(s) of dyad symmetry. Wartell RM, et al. Nucleic Acids Res 1988 Dec 23;16(24):11531–41

Activation of the GM-CSF promoter by HTLV-I and -II tax proteins. Nimer SD, et al. Oncogene 1989 Jun;4(6):671–6

Mutations in RNA polymerase II enhance or suppress mutations in GAL4. Allison LA, et al. Proc Natl Acad Sci U S A 1989 Apr;86(8):2794–8

Identifying determinants of folding and activity for a protein of unknown structure. Bowie JU, et al. Proc Natl Acad Sci U S A 1989 Apr;86(7):2152–6

OxyR, a positive regulator of hydrogen peroxide-inducible genes in Escherichia coli and Salmonella typhimurium, is homologous to a family of bacterial regulatory proteins. Christman MF, et al. Proc Natl Acad Sci U S A 1989 May; 86(10):3484–8

Characterization of a cDNA clone encoding the virus transactivating protein. Davis JL, et al. Proc Natl Acad Sci U S A 1989 Jan;86(2):414–8

Regulated expression of foreign genes in mammalian cells under the control of coliphage T3 RNA polymerase and lac repressor. Deuschle U, et al. Proc Natl Acad Sci U S A 1989 Jul;86(14):5400–4

Transfer of the inducible lac repressor/operator system from Escherichia coli to a vaccinia virus expression vector. Fuerst TR, et al. Proc Natl Acad Sci U S A 1989 Apr; 86(8):2549–53

Specific binding of a HeLa cell nuclear protein to RNA sequences in the human immunodeficiency virus transactivating region. Gaynor R, et al. Proc Natl Acad Sci U S A 1989 Jul;86(13):4858–62

Bioassay for trans-activation using purified human immunodeficiency virus tat-encoded protein: trans-activation requires mRNA synthesis. Gentz R, et al. Proc Natl Acad Sci U S A 1989 Feb;86(3):821–4

Formation of pilin in Pseudomonas aeruginosa requires the alternative sigma factor (RpoN) of RNA polymerase. Ishimoto KS, et al. Proc Natl Acad Sci U S A 1989 Mar; 86(6):1954–7

DNA binding specificity of the Arc and Mnt repressors is determined by a short region of N-terminal residues. Knight KL, et al. Proc Natl Acad Sci U S A 1989 Feb; 86(3):797–801

In vivo DNA loops in araCBAD: size limits and helical repeat. Lee DH, et al. Proc Natl Acad Sci U S A 1989 Jan;86(2):476–80

An in vivo titration of regulatory factors required for expression of a fusion gene in transgenic sea urchin embryos. Livant DL, et al. Proc Natl Acad Sci U S A 1988 Oct;85(20):7607–11

E2 polypeptides encoded by bovine papillomavirus type 1 form dimers through the common carboxyl-terminal domain: transactivation is mediated by the conserved amino-terminal domain. McBride AA, et al. Proc Natl Acad Sci U S A 1989 Jan;86(2):510–4

Two developmental genes encoding sigma factor homologs are arranged in tandem in Bacillus subtilis. Masuda ES, et al. Proc Natl Acad Sci U S A 1988 Oct;85(20):7637–41

Retroregulation of the synthesis of ribosomal proteins L14 and L24 by feedback repressor S8 in Escherichia coli. Mattheakis L, et al. Proc Natl Acad Sci U S A 1989 Jan; 86(2):448–52

jun-D: a third member of the jun gene family. Ryder K, et al. Proc Natl Acad Sci U S A 1989 Mar;86(5):1500–3

Convulsant-induced increase in transcription factor messenger RNAs in rat brain. Saffen DW, et al. Proc Natl Acad Sci U S A 1988 Oct;85(20):7795–9

Regulation of the iron uptake system in Vibrio anguillarum: evidence for a cooperative effect between two transcriptional activators. Salinas PC, et al. Proc Natl Acad Sci U S A 1989 May;86(10):3529–33

Interaction of cellular factors related to the Jun oncoprotein with the promoter of a replication-dependent hamster histone H3.2 gene. Sharma A, et al. Proc Natl Acad Sci U S A 1989 Jan;86(2):491–5

Juxtaposition of domains homologous to protein kinases and histidyl-tRNA synthetases in GCN2 protein suggests a mechanism for coupling GCN4 expression to amino acid availability. Wek RC, et al. Proc Natl Acad Sci U S A 1989 Jun;86(12):4579–83

Amino acid substitutions that increase the thermal stability of the lambda Cro protein. Pakula AA, et al. Proteins 1989; 5(3):202–10

POU! Goes the homeobox [news] Benditt J. Sci Am 1989 Feb;260(2):20, 22 (0 ref.)

Mutant Trp repressors with new DNA-binding specificities. Bass S, et al. Science 1988 Oct 14;242(4876):240–5

Purification of growth hormone-specific transcription factor GHF-1 containing homeobox. Castrillo JL, et al. Science 1989 Feb 10;243(4892):814–7

Distinct regions of Sp1 modulate DNA binding and transcriptional activation. Kadonaga JT, et al. Science 1988 Dec 16;242(4885):1566–70

Switch protein alters specificity of RNA polymerase containing a compartment-specific sigma factor. Kroos L, et al. **Science** 1989 Jan 27;243(4890):526-9
Homeobox linked to gene control [news] Marx JL. **Science** 1988 Nov 18;242(4881):1008-9
Transcriptional regulation in mammalian cells by sequence-specific DNA binding proteins. Mitchell PJ, et al. **Science** 1989 Jul 28;245(4916):371-8 (72 ref.)
Many transcription factors interact synergistically with steroid receptors. Schüle R, et al. **Science** 1988 Dec 9; 242(4884):1418-20
Chromosomal rearrangement generating a composite gene for a developmental transcription factor. Stragier P, et al. **Science** 1989 Jan 27;243(4890):507-12
Multiple principal sigma factor homologs in eubacteria: identification of the "rpoD box". Tanaka K, et al. **Science** 1988 Nov 18;242(4881):1040-2
Hypomethylation and ADA gene expression in mouse CAK cells. Stallings RL, et al. **Somat Cell Mol Genet** 1989 Jan; 15(1):1-11
Helix-turn-helix, zinc-finger, and leucine-zipper motifs for eukaryotic transcriptional regulatory proteins. Struhl K. **Trends Biochem Sci** 1989 Apr;14(4):137-40 (36 ref.)
Vertebrate homeodomain proteins: families of region-specific transcription factors. Wright CV, et al. **Trends Biochem Sci** 1989 Feb;14(2):52-6 (36 ref.)
An update on the vertebrate homeobox. Dressler GR. **Trends Genet** 1989 May;5(5):129-31 (21 ref.)
Autoregulation--a common property of eukaryotic transcription factors? Serfling E. **Trends Genet** 1989 May; 5(5):131-3 (21 ref.)
The open reading frame S of visna virus genome is a trans-activating gene. Gourdou I, et al. **Virology** 1989 Jul; 171(1):170-8
The bovine papillomavirus type 1 transcriptional activator E2 protein binds to its DNA recognition sequence as a dimer. Moskaluk CA, et al. **Virology** 1989 Mar;169(1):236-8
trans-activation of viral enhancers including long terminal repeat of the human immunodeficiency virus by the hepatitis B virus X protein. Siddiqui A, et al. **Virology** 1989 Apr;169(2):479-84
Structural and functional characterization of mutants of the bovine leukemia virus transactivator protein p34. Willems L, et al. **Virology** 1989 Aug;171(2):615-8
Role of the cysteine-rich region of HIV tat protein on its trans-activational ability. Kubota S, et al. **Virus Genes** 1989 Mar;2(2):113-8
Characterization of a binding factor that interacts with the sequences upstream of the vaccinia virus thymidine kinase gene. Wilson EM, et al. **Virus Genes** 1988 Oct;2(1):31-48
Characterization of the adr1-1 nonsense mutation identifies the translational start of the yeast transcriptional activator ADR1. Bemis LT, et al. **Yeast** 1989 Jul-Aug;5(4):291-8
[Trans-acting transcription factor] Onodera K, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(15):2549-58 (96 ref.) (Jpn)
[Amino acid substitutions in the beta-subunit of RNA-polymerase from E. coli compensating for mutation-induced damage of the rho termination factors] Ogryz'ko EP, et al. **Biorg Khim** 1988 Jul;14(7):963-4 (Eng. Abstr.) (Rus)
[Interaction of negative (CytT) and positive (cAMP-CRP) regulation in the promoter region of the uridine phosphorylase (udp) gene in Escherichia coli K-12] Mironov AS, et al. **Genetika** 1989 Mar;25(3):438-47 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Structure and function of the sigma-70 subunit of Escherichia coli RNA polymerase. Monoclonal antibodies: localization of epitopes by peptide mapping and effects on transcription. Strickland MS, et al. **Biochemistry** 1988 Jul 26; 27(15):5755-62
Antibodies to HLA class I promoter-binding proteins in sera from patients with systemic lupus erythematosus. Le Bouteiller P, et al. **Eur J Immunol** 1989 Apr;19(4):735-9
A family of immunologically related transcription factors that includes multiple forms of ATF and AP-1. Hai TW, et al. **Genes Dev** 1988 Oct;2(10):1216-26
The prevalence of antibody to p42 of HTLV-I among ATLL patients in comparison with healthy carriers in Japan. Yokota T, et al. **Int J Cancer** 1989 Jun 15;43(6):970-4
Production and characterization of monoclonal antibodies to the N-terminal domain of lambda repressor. Breyer RM, et al. **J Biol Chem** 1989 Aug 5;264(22):13348-54
T cell receptor gene usage in the response to lambda repressor cI protein. An apparent bias in the usage of a V alpha gene element. Lai MZ, et al. **J Exp Med** 1988 Sep 1;168(3):1081-97
Natural antibodies to HIV-tat epitopes and expression of HIV-1 genes in vivo. Krone WJ, et al. **J Med Virol** 1988 Nov;26(3):261-70
High risk of mother-to-child transmission of HTLV-I in p40tax antibody-positive mothers. Sawada T, et al. **Jpn J Cancer Res** 1989 Jun;80(6):506-8
A human lymphoid-specific transcription factor that activates immunoglobulin genes is a homoeobox protein. Scheidereit C, et al. **Nature** 1988 Dec 8;336(6199):551-7
Anti-OTF-1 antibodies inhibit NFIII stimulation of in vitro adenovirus DNA replication. Pruijn JM, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1845-63
Tumor necrosis factor alpha induces proteins that bind specifically to kappa B-like enhancer elements and regulate interleukin 2 receptor alpha-chain gene expression in primary human T lymphocytes. Lowenthal JW, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2331-5

ISOLATION & PURIFICATION

Purification and characterization of the deoR repressor of Escherichia coli. Mortensen L, et al. **EMBO J** 1989 Jan; 8(1):325-31
Identification of a novel lymphoid specific octamer binding protein (OTF-2B) by proteolytic clipping bandshift assay (PCBA). Schreiber E, et al. **EMBO J** 1988 Dec 20; 7(13):4221-9
A common liver-specific factor binds to the rat albumin and alpha-foetoprotein promoters in vitro and acts as a positive trans-acting factor in vivo. Jose-Estanyol M, et al. **Eur J Biochem** 1989 May 15;181(3):761-6
Factors involved in preferential transcription of the fibroin gene. Takiya S, et al. **Eur J Biochem** 1989 Jan 15;179(1):1-9
Commentary on the article: Purification and Characterization of the Ner Repressor of Bacteriophage Mu (1989) FEBS Lett. 244, 369-375 by G. Kukolj, P.P. Tolias and M.S. DuBow. Allet B, et al. **FEBS Lett** 1989 Jul 17;251(1-2):282
Purification and characterization of the Ner repressor of bacteriophage Mu. Kukolj G, et al. **FEBS Lett** 1989 Feb 27;244(2):369-75
Developmental and tissue-specific regulation of a novel transcription factor of the sea urchin. Barberis A, et al. **Genes Dev** 1989 May;3(5):663-75
Identification and purification of EBP1: a HeLa cell protein that binds to a region overlapping the 'core' of the SV40 enhancer. Clark L, et al. **Genes Dev** 1988 Aug;2(8):991-1002
Purification of the human histone H4 gene-specific transcription factors H4TF-1 and H4TF-2. Dailey L, et al. **Genes Dev** 1988 Dec;2(12B):1700-12
Identification of a new sigma-factor involved in compartmentalized gene expression during sporulation of Bacillus subtilis. Sun DX, et al. **Genes Dev** 1989 Feb; 3(2):141-9
Identification of subunits of gonococcal RNA polymerase by immunoblot analysis: evidence for multiple sigma factors. Klimpel KW, et al. **J Bacteriol** 1989 Jul; 171(7):3713-8
Identification and purification of the enhancer-binding factor of human immunodeficiency virus-1. Multiple proteins and binding to other enhancers. Maekawa T, et al. **J Biol Chem** 1989 Feb 15;264(5):2826-31
Purification of human transcription factor IIIA and its interaction with a chemically synthesized gene encoding human 5 S rRNA. Seifart KH, et al. **J Biol Chem** 1989 Jan 25;264(3):1702-9
Purification and in vitro DNA-binding specificity of the Bacillus subtilis phage phi 105 repressor. Van Kaer L, et al. **J Biol Chem** 1989 Sep 5;264(25):14784-91
Purification of a specific repressor of ferritin mRNA translation from rabbit liver. Walden WE, et al. **J Biol Chem** 1989 Aug 15;264(23):13765-9
Purification and characterization of Saccharomyces cerevisiae transcription factor IIIA. Wang CK, et al. **J Biol Chem** 1989 Jan 15;264(2):1092-9
Purification and characterization of transcription factor IIIC2. Yoshinaga SK, et al. **J Biol Chem** 1989 Jun 25; 264(18):10726-31
Purification and characterization of a 43-kDa transcription factor required for rat somatostatin gene expression. Zhu Z, et al. **J Biol Chem** 1989 Apr 15;264(11):6550-6
Purification and characterization of human mitochondrial transcription factor 1. Fisher RP, et al. **Mol Cell Biol** 1988 Aug;8(8):3496-509
Identification of a 150-kilodalton polypeptide that copurifies with yeast TFIIIC and binds specifically to tRNA genes. Johnson DL, et al. **Mol Cell Biol** 1989 May;9(5):2018-24
Purification and properties of the Rous sarcoma virus internal enhancer binding factor. Karnitz L, et al. **Mol Cell Biol** 1989 May;9(5):1929-39
Purification of multiple erythroid cell proteins that bind the promoter of the alpha-globin gene. Kim CG, et al. **Mol Cell Biol** 1988 Oct;8(10):4270-81
An RNA polymerase II transcription factor inactivated in poliovirus-infected cells copurifies with transcription factor TFIID. Kliewer S, et al. **Mol Cell Biol** 1988 Aug; 8(8):3175-82
Factors involved in specific transcription by mammalian RNA polymerase II: purification, genetic specificity, and TATA box-promoter interactions of TFIID. Nakajima N, et al. **Mol Cell Biol** 1988 Oct;8(10):4028-40
The testis-specific octamer-binding protein of the sea urchin has a molecular weight of 85 kDa. Barberis A, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):7114
Magnetic DNA affinity purification of yeast transcription factor tau--a new purification principle for the ultrarapid isolation of near homogeneous factor. Gabrielsen OS, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6253-67
Purification of DNA-binding transcription factors by their selective adsorption on the affinity latex particles. Kawaguchi H, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):6229-40
Purification of human transcription factor IIIC and its binding to the gene for ribosomal 5S RNA. Schneider HR, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5003-16
Silver-stained protein gels allow recovery of transcription factors still active in specific DNA-binding. Schröter H, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6415
Analysis of transcription control elements of the mouse myelin basic protein gene in HeLa cell extracts: demonstration of a strong NFI-binding motif in the upstream region. Tamura T, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11441-59
Presence of multiple species of polypeptides immunologically related to transcription factor TFIIIA in adult Xenopus tissues. Yasui W, et al. **Nucleic Acids Res** 1989 Jul 25; 17(14):5597-610
Isolation and characterization of the tax protein of HTLV-I. Beimling P, et al. **Oncogene** 1989 Apr;4(4):511-6
Purification and analysis of RNA polymerase II transcription factors by using wheat germ agglutinin affinity chromatography. Jackson SP, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1781-5
Resolution and partial characterization of factors required for in vitro transcription by mammalian RNA polymerase II. Kitajima S, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6106-10
NF-kappa B protein purification from bovine spleen: nucleotide stimulation and binding site specificity. Lenardo MJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8825-9
Identification and purification of a Saccharomyces cerevisiae protein with the DNA binding specificity of mammalian activating transcription factor. Lin YS, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):109-13
Translational repression in eukaryotes: partial purification and characterization of a repressor of ferritin mRNA translation. Walden WE, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9503-7
The studies of COUP transcription factor from HeLa cells: purification and partial characterization. Wang LH, et al. **Prog Clin Biol Res** 1988;284:37-51

METABOLISM

Thermal denaturation of engineered tet repressor proteins and their complexes with tet operator and tetracycline studied by temperature gradient gel electrophoresis. Wagenhöfer M, et al. **Anal Biochem** 1988 Dec; 175(2):422-32
Eukaryotic transcriptional regulatory proteins. Johnson PF, et al. **Annu Rev Biochem** 1989;58:799-839 (291 ref.)
cAMP-dependent binding of a trans-acting factor to the thyrogiobulin promoter. Hansen C, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):722-31
Interactions of factors bound at two different sites in the 5'-upstream region of the adenovirus 12 E1A gene. Nakanishi Y, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):685-9
Footprint of the sigma protein. Ramesh U, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):121-5
Transcription of 5S RNA genes containing insertion mutation and the assembly of preinitiation complexes. Shastry BS. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):639-45
Protein binding domains of the rat thyroglobulin promoter. Ursini MV, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):481-8
NMR assignments for the amino-terminal residues of trp repressor and their role in DNA binding. Arrowsmith CH, et al. **Biochemistry** 1989 May 2;28(9):3875-9
Solution conformations of DNAs containing binding sites of the catabolite gene activator protein and lac repressor protein: characterization by Raman spectroscopy. DeGrazia H, et al. **Biochemistry** 1988 Aug 23; 27(17):6359-65
Thermodynamic and enzymological characterization of the interaction between transcription termination factor rho and lambda cro mRNA. Faus I, et al. **Biochemistry** 1989 Apr 18;28(8):3510-7
Conformation states of Xenopus transcription factor IIIA. Hanas JS, et al. **Biochemistry** 1989 May 2;28(9):4083-8
H NMR study of a complex between the lac repressor headpiece and a 22 base pair symmetric lac operator. Lamerichs RM, et al. **Biochemistry** 1989 Apr 4; 28(7):2985-91
Structure of the Tet repressor and Tet repressor-operator complexes in solution from electrooptical measurements and hydrodynamic simulations. Porschke D, et al. **Biochemistry** 1988 Jun 28;27(13):4674-9
The role of highly conserved single-stranded nucleotides of Xenopus 5S RNA in the binding of transcription factor IIIA. Romaniuk PJ. **Biochemistry** 1989 Feb 7;28(3):1388-95
Association of Tat protein and viral mRNA with nuclear matrix from HIV-1-infected H9 cells. Müller WE, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):208-12
The protein CDP, but not CP1, footprints on the CCAAT region of the gamma-globin gene in unfractionated B-cell extracts. Superti-Furga G, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):237-42
Pressure-induced changes in the secondary structure of the Escherichia coli methionine repressor protein. Wong PT, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):260-2
DNA binding specificity of steroid receptors. Berg JM. **Cell** 1989 Jun 30;57(7):1065-8 (22 ref.)
c-Jun dimerizes with itself and with c-Fos, forming complexes of different DNA binding affinities. Halazonetis TD, et al. **Cell** 1988 Dec 2;55(5):917-24
O-glycosylation of eukaryotic transcription factors: implications for mechanisms of transcriptional regulation. Jackson SP, et al. **Cell** 1988 Oct 7;55(1):125-33
Interactions between heterologous helix-loop-helix proteins

generate complexes that bind specifically to a common DNA sequence. Murre C, et al. **Cell** 1989 Aug 11; 58(3):537–44

Phorbol–ester–induced activation of the NF–kappa B transcription factor involves dissociation of an apparently cytoplasmic NF–kappa B/inhibitor complex. Baeuerle PA, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:789–98

Cooperative action of the glucocorticoid receptor and transcription factors. Ströhle U, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:835–41

Mutational analysis of the upstream activation site of yeast ribosomal protein genes. Nieuwint RT, et al. **Curr Genet** 1989 Apr;15(4):247–51

Transcriptional regulation of the gene encoding the 78–kD glucose–regulated protein GRP78 in mouse sertoli cells: binding of specific factor(s) to the GRP78 promoter. Day AR, et al. **DNA** 1989 Jun;8(5):301–10

Measurement of protein–DNA interaction parameters by electrophoresis mobility shift assay. Fried MG. **Electrophoresis** 1989 May–Jun;10(5–6):366–76

The DNA binding site of the Xenopus transcription factor IIIA has a non–B–form structure. Fairall L, et al. **EMBO J** 1989 Jun;8(6):1809–17

Epstein–Barr virus BZLF1 trans–activator specifically binds to a consensus AP–1 site and is related to c–fos. Farrell PJ, et al. **EMBO J** 1989 Jan;8(1):127–32

Autoregulation and multiple DNA interactions by a transcriptional regulatory protein in E. coli pili biogenesis. Forsman K, et al. **EMBO J** 1989 Apr;8(4):1271–7

Two distinct factors interact with the promoter regions of several liver–specific genes. Hardon EM, et al. **EMBO J** 1988 Jun;7(6):1711–9

RNA polymerase and gal repressor bind simultaneously and with DNA bending to the control region of the Escherichia coli galactose operon. Kuhnke G, et al. **EMBO J** 1989 Apr;8(4):1247–55

The quaternary structure of Tet repressors bound to the Tn10–encoded tet gene control region determined by neutron solution scattering. Lederer H, et al. **EMBO J** 1989 Apr;8(4):1257–63

Transcription factors AP–3 and AP–2 interact with the SV40 enhancer in a mutually exclusive manner. Mercurio F, et al. **EMBO J** 1989 May;8(5):1455–60

MalT, the regulatory protein of the Escherichia coli maltose system, is an ATP–dependent transcriptional activator. Richet E, et al. **EMBO J** 1989 Mar;8(3):981–7

Tissue specific trans–acting factor interaction with proximal rat prolactin gene promoter sequences. Schuster WA, et al. **EMBO J** 1988 Jun;7(6):1721–33

Rapid turnover of adenovirus E1A is determined through a co–translational mechanism that requires an aminoterminal domain. Slavicek JM, et al. **EMBO J** 1988 Oct;7(10):3171–80

The transition state transcription regulator abrB of Bacillus subtilis is a DNA binding protein. Strauch MA, et al. **EMBO J** 1989 May;8(5):1615–21

Interactions of purified transcription factors: binding of yeast MAT alpha 1 and PRTF to cell type–specific, upstream activating sequences. Tan S, et al. **EMBO J** 1988 Dec 20; 7(13):4255–64

Double–stranded RNA activates binding of NF–kappa B to an inducible element in the human beta–interferon promoter. Visvanathan KV, et al. **EMBO J** 1989 Apr; 8(4):1129–38

The product of a novel growth factor activated gene, fos B, interacts with JUN proteins enhancing their DNA binding activity. Zerial M, et al. **EMBO J** 1989 Mar; 8(3):805–13

The influence of tryptophan on mobility of residues in the trp repressor of Escherichia coli. Lane AN. **Eur J Biochem** 1989 Jun 1;182(1):95–104

Investigation of RecA—polynucleotide interactions from the measurement of LexA repressor cleavage kinetics. Presence of different types of complex. Takahashi M, et al. **Eur J Biochem** 1989 Aug 15;183(3):617–22

Competition between DNA templates injected into Xenopus laevis oocytes. Mancebo MJ, et al. **Exp Cell Res** 1988 Oct; 178(2):469–78

Interaction of BlaI, the repressor for the beta–lactamase gene of Bacillus licheniformis, with the blaP and blaI promoters. Grossman MJ, et al. **FEBS Lett** 1989 Mar 27;246(1–2):83–8

Stimulation of transcription from accurate initiation sites by purified S–II. Hirai H, et al. **FEBS Lett** 1988 Sep 26; 238(1):119–22

Thermodynamic parameters of the binding of the tight–binding I12X86 lac repressor to operator and non–operator DNA. Maurizot JC, et al. **FEBS Lett** 1988 Oct 24;239(1):105–8

Photo–CIDNP study of the interaction between lac repressor headpiece and lac operator DNA. Stob S, et al. **FEBS Lett** 1988 Oct 24;239(1):99–104

Conferring new specificity upon restriction endonucleases by combining repressor–operator interaction and methylation. Koob M, et al. **Gene** 1988 Dec 25;74(1):165–7

A liver–specific factor essential for albumin transcription differs between differentiated and dedifferentiated rat hepatoma cells. Cereghini S, et al. **Genes Dev** 1988 Aug; 2(8):957–74

EivF, a factor required for transcription of the adenovirus EIV promoter, binds to an element involved in EIa–dependent activation and cAMP induction. Cortes P, et al. **Genes Dev** 1988 Aug;2(8):975–90

Sp1 transcription factor binds DNA and activates transcription even when the binding site is CpG methylated. Höller M, et al. **Genes Dev** 1988 Sep; 2(9):1127–35

A protein involved in minichromosome maintenance in yeast binds a transcriptional enhancer conserved in eukaryotes. Passmore S, et al. **Genes Dev** 1989 Jul;3(7):921–35

Induction of proto–oncogene fos transcription through the adenylate cyclase pathway: characterization of a cAMP–responsive element. Sassone–Corsi P, et al. **Genes Dev** 1988 Dec;2(12a):1529–38

Cytosine methylation prevents binding to DNA of a HeLa cell transcription factor required for optimal expression of the adenovirus major late promoter. Watt F, et al. **Genes Dev** 1988 Sep;2(9):1136–43

The sigma E subunit of Bacillus subtilis RNA polymerase is present in both forespore and mother cell compartments. Carlson HC, et al. **J Bacteriol** 1989 Apr;171(4):2216–8

Features of the rho–dependent transcription termination polar element within the hisG cistron of Salmonella typhimurium. Ciampi MS, et al. **J Bacteriol** 1989 Aug; 171(8):4472–8

New recA mutations that dissociate the various RecA protein activities in Escherichia coli provide evidence for an additional role for RecA protein in UV mutagenesis. Dutreix M, et al. **J Bacteriol** 1989 May;171(5):2415–23

Genetic separation of Escherichia coli recA functions for SOS mutagenesis and repressor cleavage. Ennis DG, et al. **J Bacteriol** 1989 May;171(5):2533–41

DNA–binding properties of the transcription activator (OmpR) for the upstream sequences of ompF in Escherichia coli are altered by envZ mutations and medium osmolarity. Forst SA, et al. **J Bacteriol** 1989 Jun; 171(6):2949–55

The Bacillus subtilis flagellin gene (hag) is transcribed by the sigma 28 form of RNA polymerase. Mirel DB, et al. **J Bacteriol** 1989 Jun;171(6):3095–101

Escherichia coli sigma 54 RNA polymerase recognizes Caulobacter crescentus flbG and flaN flagellar gene promoters in vitro. Ninfa AJ, et al. **J Bacteriol** 1989 Jan; 171(1):383–91

A novel sigma factor is involved in expression of the rpoH gene of Escherichia coli. Wang QP, et al. **J Bacteriol** 1989 Aug;171(8):4248–53

Overproduced bacteriophage T4 gene 33 protein binds RNA polymerase. Williams KP, et al. **J Bacteriol** 1989 Jun; 171(6):3579–82

Identification of C–terminal extensions that protect proteins from intracellular proteolysis. Bowie JU, et al. **J Biol Chem** 1989 May 5;264(13):7596–602

trp repressor arms contribute binding energy without occupying unique locations on DNA. Carey J. **J Biol Chem** 1989 Feb 5;264(4):1941–5

A multisubunit transcription factor essential for accurate initiation by RNA polymerase II. Conaway JW, et al. **J Biol Chem** 1989 Feb 5;264(4):2357–62

Site–directed alterations in the ATP–binding domain of rho protein affect its activities as a termination factor. Dombroski AJ, et al. **J Biol Chem** 1988 Dec 15; 263(35):18802–9

The ATP binding site on rho protein. Affinity labeling of Lys181 by pyridoxal 5'–diphospho–5'–adenosine. Dombroski AJ, et al. **J Biol Chem** 1988 Dec 15; 263(35):18810–5

Interaction of a putative repressor protein with an extended control region of the Bacillus subtilis pur operon. Ebbole DJ, et al. **J Biol Chem** 1989 Feb 25;264(6):3553–61

Xenopus transcription factor IIIA–dependent DNA renaturation. Fiser–Littell RM, et al. **J Biol Chem** 1988 Nov 15;263(32):17136–41

Factors involved in specific transcription by mammalian RNA polymerase II. Factors IIE and IIF independently interact with RNA polymerase II. Flores O, et al. **J Biol Chem** 1989 May 25;264(15):8913–21

Identification of an operator sequence for the Bacillus subtilis gnt operon. Fujita Y, et al. **J Biol Chem** 1989 Mar 5; 264(7):4201–6

Two polypeptide chains in yeast transcription factor tau interact with DNA. Gabrielsen OS, et al. **J Biol Chem** 1989 May 5;264(13):7505–11

Identification of distinct cytoplasmic targets for ras/R–ras and rho regulatory proteins. Garrett MD, et al. **J Biol Chem** 1989 Jan 5;264(1):10–3

Purified human factor activates heat shock promoter in a HeLa cell–free transcription system. Goldenberg CJ, et al. **J Biol Chem** 1988 Dec 25;263(36):19734–9

Binding of transcription factors to the promoter of the human U1 RNA gene studied by footprinting. Gunderson SI, et al. **J Biol Chem** 1988 Nov 25;263(33):17603–10

A protein–protein interaction is essential for stable complex formation on a 5 S RNA gene. Hayes J, et al. **J Biol Chem** 1989 Apr 15;264(11):6009–12

Nuclear factor ETF specifically stimulates transcription from promoters without a TATA box. Kageyama R, et al. **J Biol Chem** 1989 Sep 15;264(26):15508–14

Stereochemical effects of L–tryptophan and its analogues on trp repressor's affinity for operator–DNA. Marmorstein RQ, et al. **J Biol Chem** 1989 Jun 5;264(16):9149–54

Complex formation with the fibroin gene enhancer through a protein–protein interaction analyzed by a modified DNA–binding assay. Matsuno K, et al. **J Biol Chem** 1989 Mar 15;264(8):4599–604

Identification of yolk protein factor 1, a sequence–specific DNA–binding protein from Drosophila melanogaster. Mitsis PG, et al. **J Biol Chem** 1989 Mar 25;264(9):5188–94

RecA protein–promoted cleavage of LexA repressor in the presence of ADP and structural analogues of inorganic phosphate, the fluoride complexes of aluminum and beryllium. Moreau PL, et al. **J Biol Chem** 1989 Feb 5; 264(4):2302–6

Proteins that bind to the yeast rDNA enhancer. Morrow BE, et al. **J Biol Chem** 1989 May 25;264(15):9061–8

The structural stability of a protein is an important determinant of its proteolytic susceptibility in Escherichia coli. Parsell DA, et al. **J Biol Chem** 1989 May 5; 264(13):7590–5

Thyroid hormone regulation of transcription factors involved in malic enzyme gene expression. Petty KJ, et al. **J Biol Chem** 1989 Jul 5;264(19):11483–90

Transcription of a U6 small nuclear RNA gene in vitro. Transcription of a mouse U6 small nuclear RNA gene in vitro by RNA polymerase III is dependent on transcription factor(s) different from transcription factors IIIA, IIIB, and IIIC. Reddy R. **J Biol Chem** 1988 Nov 5;263(31):15980–4

Transcription elongation factor SII (TFIIS) enables RNA polymerase II to elongate through a block to transcription in a human gene in vitro. Reines D, et al. **J Biol Chem** 1989 Jun 25;264(18):10799–809

The mast cell–specific expression of a protease gene, RMCP II, is regulated by an enhancer element that binds specifically to mast cell trans–acting factors. Sarid J, et al. **J Biol Chem** 1989 Jan 15;264(2):1022–6

Facilitated target location in biological systems. von Hippel PH, et al. **J Biol Chem** 1989 Jan 15;264(2):675–8 (43 ref.)

Mithramycin blocks protein binding and function of the SV40 early promoter. Ray R, et al. **J Clin Invest** 1989 Jun; 83(6):2003–7

Two forms of RecA–single–stranded DNA–adenosine 5'–O–(3–thiotriphosphate) complexes with different activities for cleavage of phage phi 80 cI repressor. Eguchi Y, et al. **J Mol Biol** 1988 Nov 5;204(1):61–7

Cleavage of bacteriophage phi 80 CI repressor by RecA protein. Eguchi Y, et al. **J Mol Biol** 1988 Aug 5; 202(3):565–73

Stimulation of RecA–mediated cleavage of phage phi 80 cI repressor by deoxydinucleotides. Eguchi Y, et al. **J Mol Biol** 1988 Nov 5;204(1):69–77

Lambda repressor mutants that are better substrates for RecA–mediated cleavage. Gimble FS, et al. **J Mol Biol** 1989 Mar 5;206(1):29–39

trp repressor interactions with the trp aroH and trpR operators. Comparison of repressor binding in vitro and repression in vivo. Klig LS, et al. **J Mol Biol** 1988 Aug 20;202(4):769–77

Effect of ethylation of operator–phosphates on Gal repressor binding. DNA contortion by repressor. Majumdar A, et al. **J Mol Biol** 1989 Jul 20;208(2):217–23

DNA binding and gene regulation by the herpes simplex virus type 1 protein ICP4 and involvement of the TATA element. DiDonato JA, et al. **J Virol** 1989 Sep; 63(9):3737–47

Interplay of viral and cellular proteins along the long control region of human papillomavirus type 18. Garcia–Carranca A, et al. **J Virol** 1988 Nov;62(11):4321–30

Characterization of the DNA–binding properties of herpes simplex virus regulatory protein ICP4. Kattar–Cooley P, et al. **J Virol** 1989 Feb;63(2):696–704

Modification of an adenovirus major late promoter–binding factor during poliovirus infection. Lazard D, et al. **J Virol** 1989 Sep;63(9):3858–64

Independent cyclic AMP and E1A induction of adenovirus early region 4 expression. Leza MA, et al. **J Virol** 1989 Jul;63(7):3057–64

Distinct factors bind the AP–1 consensus sites in gibbon ape leukemia virus and simian virus 40 enhancers. Quinn JP, et al. **J Virol** 1989 Apr;63(4):1737–42

Interleukin–1 alpha gene intron containing variable repeat region coding for the SP1 transcription factor recognition sequence is polymorphic. Haugen A, et al. **Mol Carcinog** 1989;2(2):68–71

Localization of transcriptional regulatory elements and nuclear factor binding sites in mouse ribosomal protein gene rpL32. Atchison ML, et al. **Mol Cell Biol** 1989 May; 9(5):2067–74

NF–kappa B binds within a region required for B–cell–specific expression of major histocompatibility complex class II gene E alpha d. Blanar MA, et al. **Mol Cell Biol** 1989 Feb;9(2):844–6

Identification of a myocyte nuclear factor that binds to the muscle–specific enhancer of the mouse muscle creatine kinase gene. Buskin JN, et al. **Mol Cell Biol** 1989 Jun; 9(6):2627–40

DNA binding of the mouse class II major histocompatibility CCAAT factor depends on two components. Celada A, et al. **Mol Cell Biol** 1989 Jul;9(7):3097–100

A yeast protein possesses the DNA–binding properties of the adenovirus major late transcription factor. Chodosh LA, et al. **Mol Cell Biol** 1989 Feb;9(2):820–2

Identification of a cell–specific DNA–binding activity that interacts with a transcriptional activator of genes expressed in the acinar pancreas. Cockell M, et al. **Mol Cell Biol** 1989 Jun;9(6):2464–76

Ordering promoter binding of class III transcription factors

TFIIIC1 and TFIIIC2. Dean N, et al. **Mol Cell Biol** 1988 Aug;8(8):3017–25

An AP1–binding site in the c–fos gene can mediate induction by epidermal growth factor and 12–O–tetradecanoyl phorbol–13–acetate. Fisch TM, et al. **Mol Cell Biol** 1989 Mar;9(3):1327–31

Regulation of the visna virus long terminal repeat in macrophages involves cellular factors that bind sequences containing AP–1 sites. Gabuzda DH, et al. **Mol Cell Biol** 1989 Jun;9(6):2728–33

Negative regulation of the human polyomavirus BK enhancer involves cell–specific interaction with a nuclear repressor. Grinnell BW, et al. **Mol Cell Biol** 1988 Aug;8(8):3448–57

Functional interaction between transcriptional elements in the long terminal repeat of reticuloendotheliosis virus: cooperative DNA binding of promoter– and enhancer–specific factors. Hirano A, et al. **Mol Cell Biol** 1988 Dec;8(12):5232–44

Activity of the carbamyl phosphate synthetase I promoter in liver nuclear extracts is dependent on a cis–acting C/EBP recognition element. Howell BW, et al. **Mol Cell Biol** 1989 Jul;9(7):2928–33

Transcription factor IIIB generates extended DNA interactions in RNA polymerase III transcription complexes on tRNA genes. Kassavetis GA, et al. **Mol Cell Biol** 1989 Jun;9(6):2551–66

Structural differences between repressed and derepressed forms of p60c–src. MacAuley A, et al. **Mol Cell Biol** 1989 Jun;9(6):2648–56

Transcription factor Sp1 binds to and activates a human hsp70 gene promoter. Morgan WD. **Mol Cell Biol** 1989 Sep;9(9):4095–104

Functional domains of a negative regulatory protein, GAL80, of Saccharomyces cerevisiae. Nogi Y, et al. **Mol Cell Biol** 1989 Jul;9(7):3009–17

Defining the sequence specificity of DNA–binding proteins by selecting binding sites from random–sequence oligonucleotides: analysis of yeast GCN4 protein. Oliphant AR, et al. **Mol Cell Biol** 1989 Jul;9(7):2944–9

Purified mu EBP–E binds to immunoglobulin enhancers and promoters. Peterson CL, et al. **Mol Cell Biol** 1988 Nov; 8(11):4972–80

Octamer transcription factors 1 and 2 each bind to two different functional elements in the immunoglobulin heavy–chain promoter. Poellinger L, et al. **Mol Cell Biol** 1989 Feb;9(2):747–56

Dynamic interaction between a Drosophila transcription factor and RNA polymerase II. Price DH, et al. **Mol Cell Biol** 1989 Apr;9(4):1465–75

Transcription elongation factor SII interacts with a domain of the large subunit of human RNA polymerase II. Rappaport J, et al. **Mol Cell Biol** 1988 Aug;8(8):3136–42

Interaction between transcriptional activator protein LAC9 and negative regulatory protein GAL80. Salmeron JM Jr, et al. **Mol Cell Biol** 1989 Jul;9(7):2950–6

Interleukin 1 and cyclic AMP induce kappa immunoglobulin light–chain expression via activation of an NF–kappa B–like DNA–binding protein. Shirakawa F, et al. **Mol Cell Biol** 1989 Mar;9(3):959–64

In vitro activation and nuclear translocation of NF–kappa B catalyzed by cyclic AMP–dependent protein kinase and protein kinase C. Shirakawa F, et al. **Mol Cell Biol** 1989 Jun;9(6):2424–30

A cysteine–rich nuclear protein activates yeast metallothionein gene transcription. Szczypka MS, et al. **Mol Cell Biol** 1989 Feb;9(2):421–9

Purification and characterization of multiple nuclear factors that bind to the TAX–inducible enhancer within the human T–cell leukemia virus type 1 long terminal repeat. Tan TH, et al. **Mol Cell Biol** 1989 Apr;9(4):1733–45

Sea urchin early and late H4 histone genes bind a specific transcription factor in a stable preinitiation complex. Tung L, et al. **Mol Cell Biol** 1989 Apr;9(4):1476–87

Genetic evidence for the existence of a repressor that modulates colicin D expression on plasmid ColD–CA23. Ghersa P, et al. **Mol Gen Genet** 1988 Jul;213(1):36–41

Induction of endogenous IFN–alpha and IFN–beta genes by a regulatory transcription factor, IRF–1. Fujita T, et al. **Nature** 1989 Jan 19;337(6204):270–2

Activation of HIV gene expression during monocyte differentiation by induction of NF–kappa B. Griffin GE, et al. **Nature** 1989 May 4;339(6219):70–3

A transcriptional repressor of c–myc. Kakkis E, et al. **Nature** 1989 Jun 29;339(6227):718–21

Leucine zippers of fos, jun and GCN4 dictate dimerization specificity and thereby control DNA binding. Kouzarides T, et al. **Nature** 1989 Aug 17;340(6234):568–71

The role of the leucine zipper in the fos–jun interaction. Kouzarides T, et al. **Nature** 1988 Dec 15;336(6200):646–51

A Fos protein containing the Jun leucine zipper forms a homodimer which binds to the AP1 binding site. Neuberg M, et al. **Nature** 1989 Sep 21;341(6239):243–5

Transcription factor IIIA induced bending of the Xenopus somatic 5S gene promoter. Schroth GP, et al. **Nature** 1989 Aug 10;340(6233):487–8

Structure of a phage 434 Cro/DNA complex. Wolberger C, et al. **Nature** 1988 Oct 27;335(6193):789–95

A difference in the importance of bulged nucleotides and their parent base pairs in the binding of transcription factor IIIA to Xenopus 5S RNA and 5S RNA genes. Baudin F, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2043–56

Flanking DNA–sequences contribute to the specific binding of cI–repressor and OR1. Brenowitz M, et al. **Nucleic Acids Res** 1989 May 25;17(10):3747–55

Distamycins inhibit the binding of OTF–1 and NFE–1 transfactors to their conserved DNA elements. Broggini M, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1051–9

Protein–induced unwinding of DNA: measurement by gel electrophoresis of complexes with DNA minicircles. Application to restriction endonuclease EcoRI, catabolite gene activator protein and lac repressor. Douc–Rasy S, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5173–89

Whole genome PCR: application to the identification of sequences bound by gene regulatory proteins. Kinzler KW, et al. **Nucleic Acids Res** 1989 May 25;17(10):3645–53

Measurement of the binding of transcription factor Sp1 to a single GC box recognition sequence. Letovsky J, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2639–53

Rapid test for in vivo stability and DNA binding of mutated octamer binding proteins with 'mini–extracts' prepared from transfected cells. Müller MM, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6420

Differential activation of the 21–base–pair enhancer element of human T–cell leukemia virus type I by its own trans–activator and cyclic AMP. Nakamura M, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5207–21

In vivo photocrosslinking reveals that transcription factor binding to the mammalian ATF recognition sequence is required for E1A–induced transactivation in injected Xenopus laevis oocytes. Richter JD. **Nucleic Acids Res** 1989 Jun 26;17(12):4503–16

Tet repressor binding induced curvature of tet operator DNA. Tovar K, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6515–22

Studies of heterologous promoter trans–activation by the HTLV–II tax protein. Williams JL, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5737–49

Micrococcal nuclease as a probe for bound and distorted DNA in lac transcription and repression complexes. Zhang L, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5017–28

Labile repressors are involved in the transcriptional control of PDGF–responsive genes. Hall DJ, et al. **Oncogene Res** 1989;4(3):177–84

Yeast GCN4 transcriptional activator protein interacts with RNA polymerase II in vitro. Brandl CJ, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2652–6

Association of charge clusters with functional domains of cellular transcription factors. Brendel V, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5698–702

Evidence for a trans–acting factor that regulates the transcription of class II major histocompatibility complex genes: genetic and functional analysis. Calman AF, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8830–4

Cleavage of the cII protein of phage lambda by purified HflA protease: control of the switch between lysis and lysogeny. Cheng HH, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):7882–6

Human immunodeficiency virus 1 tat protein binds trans–activation–responsive region (TAR) RNA in vitro. Dingwall C, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):6925–9

Dual mechanism of repression at a distance in the lac operon. Flashner Y, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):8968–72

c–fos promoter trans–activation by the tax1 protein of human T–cell leukemia virus type I. Fujii M, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8526–30

Cooperative activation of a eukaryotic transcription factor: interaction between Cu(I) and yeast ACE1 protein. Fürst P, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5267–71

DNA bending is induced by a transcription factor that interacts with the human c–FOS and alpha–actin promoters. Gustafson TA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2162–6

Yeast TATA–binding protein TFIID binds to TATA elements with both consensus and nonconsensus DNA sequences. Hahn S, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5718–22

Purification of a yeast TATA box–binding protein that exhibits human transcription factor IID activity. Horikoshi M, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4843–7

Copper–induced binding of cellular factors to yeast metallothionein upstream activation sequences. Huibregtse JM, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):65–9

Mammalian cAMP–responsive element can activate transcription in yeast and binds a yeast factor(s) that resembles the mammalian transcription factor ANF. Jones RH, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(7):2176–80

Promoters largely determine the efficiency of repressor action. Lanzer M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8973–7

Cis–acting elements of the sea urchin histone H2A modulator bind transcriptional factors. Palla F, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6033–7

Lambda repressor recognizes the approximately 2–fold symmetric half–operator sequences asymmetrically. Sarai A, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6513–7

Altered binding of human histone gene transcription factors during the shutdown of proliferation and onset of differentiation in HL–60 cells. Stein G, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1865–9

Analysis of the sequence–specific interactions between Cro repressor and operator DNA by systematic base substitution experiments. Takeda Y, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):439–43

Negative and positive factors determine the activity of the polyoma virus enhancer alpha domain in undifferentiated and differentiated cell types. Wasylyk B, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7952–6

Gene Q antiterminator proteins of Escherichia coli phages 82 and lambda suppress pausing by RNA polymerase at a rho–dependent terminator and at other sites. Yang XJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5301–5

Recognition of a DNA operator by the repressor of phage 434: a view at high resolution. Aggarwal AK, et al. **Science** 1988 Nov 11;242(4880):899–907

Functionally distinct NF–kappa B binding sites in the immunoglobulin kappa and IL–2 receptor alpha chain genes. Cross SL, et al. **Science** 1989 Apr 28;244(4903):466–9

Parallel association of Fos and Jun leucine zippers juxtaposes DNA binding domains. Gentz R, et al. **Science** 1989 Mar 31;243(4899):1695–9

Structure of the lambda complex at 2.5 A resolution: details of the repressor–operator interactions. Jordan SR, et al. **Science** 1988 Nov 11;242(4880):893–9

Leucine repeats and an adjacent DNA binding domain mediate the formation of functional cFos–cJun heterodimers. Turner R, et al. **Science** 1989 Mar 31; 243(4899):1689–94

How do different transcription factors binding the same DNA sequence sort out their jobs? Schaffner W. **Trends Genet** 1989 Feb;5(2):37–9 (32 ref.)

Evidence for phosphorylation of trans–activator p40x of human T–cell leukemia virus type I produced in insect cells with a baculovirus expression vector. Nyunoya H, et al. **Virology** 1988 Dec;167(2):538–44

PHARMACOKINETICS

Cellular uptake of the tat protein from human immunodeficiency virus. Frankel AD, et al. **Cell** 1988 Dec 23;55(6):1189–93

PHARMACOLOGY

The protein encoded by a murine male germ cell–specific transcript is a putative ATP–dependent RNA helicase. Leroy P, et al. **Cell** 1989 May 19;57(4):549–59

Induction of HLA class II genes by IFN–gamma is transcriptional and requires a trans–acting protein. Amaldi I, et al. **J Immunol** 1989 Feb 1;142(3):999–1004

Trans activation by the bovine papillomavirus E2 protein in Saccharomyces cerevisiae. Morrissey LC, et al. **J Virol** 1989 Oct;63(10):4422–5

Cell–line specific activation of SV40 transcriptional enhancer by p40tax of HTLV–1. Fujisawa J, et al. **Jpn J Cancer Res** 1988 Jul;79(7):800–4

Functional replacement of the HIV–1 rev protein by the HTLV–1 rex protein. Rimsky L, et al. **Nature** 1988 Oct 20;335(6192):738–40

Transcriptional activation of homologous viral long terminal repeats by the human immunodeficiency virus type 1 or the human T–cell leukemia virus type I tat proteins occurs in the absence of de novo protein synthesis. Jeang KT, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8291–5

PHYSIOLOGY

Stable indicator cell lines exhibiting HIV–1 tat function. Bacheler LT, et al. **AIDS Res Hum Retroviruses** 1989 Jun; 5(3):275–8

CRE–binding proteins interact cooperatively to enhance placental–specific expression of the glycoprotein hormone alpha–subunit gene. Nilson JH, et al. **Ann N Y Acad Sci** 1989;564:77–85

Functional similarity of HIV–I rev and HTLV–I rex proteins: identification of a new nucleolar–targeting signal in rev protein. Kubota S, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):963–70

Transrepression of the N–myc expression by c–myc protein. Kubota Y, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):991–7

Enhancer of human polyoma JC virus contains nuclear factor I–binding sequences; analysis using mouse brain nuclear extracts. Tamura T, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):419–25

Nus A protein affects transcriptional pausing and termination in vitro by binding to different sites on the transcription complex. Sigmund CD, et al. **Biochemistry** 1988 Jul 26; 27(15):5622–7

Effects of Escherichia coli Nus A protein on transcription termination in vitro are not increased or decreased by DNA sequences sufficient for antitermination in vivo. Sigmund CD, et al. **Biochemistry** 1988 Jul 26;27(15):5628–35

Single and double loop formation when deoR repressor binds to its natural operator sites. Amouyal M, et al. **Cell** 1989 Aug 11;58(3):545–51

HIV–1 TAT "activates" presynthesized RNA in the nucleus. Braddock M, et al. **Cell** 1989 Jul 28;58(2):269–79

Five intermediate complexes in transcription initiation by RNA polymerase II. Buratowski S, et al. **Cell** 1989 Feb 24;56(4):549–61

Analysis of Sp1 in vivo reveals multiple transcriptional domains, including a novel glutamine–rich activation motif. Courey AJ, et al. **Cell** 1988 Dec 2;55(5):887–98

Two amino acids within the knuckle of the first zinc finger specify DNA response element activation by the

glucocorticoid receptor. Danielsen M, et al. **Cell** 1989 Jun 30;57(7):1131–8

Erythroid–specific activation and derepression of the chick beta–globin promoter in vitro. Emerson BM, et al. **Cell** 1989 Jun 30;57(7):1189–200

DNA specificity of the bicoid activator protein is determined by homeodomain recognition helix residue 9. Hanes SD, et al. **Cell** 1989 Jun 30;57(7):1275–83

Structurally similar but functionally distinct factors, IRF–1 and IRF–2, bind to the same regulatory elements of IFN and IFN–inducible genes. Harada H, et al. **Cell** 1989 Aug 25;58(4):729–39

Multiple and cooperative trans–activation domains of the human glucocorticoid receptor. Hollenberg SM, et al. **Cell** 1988 Dec 2;55(5):899–906

The involvement of NF–kappa B in beta–interferon gene regulation reveals its role as widely inducible mediator of signal transduction. Lenardo MJ, et al. **Cell** 1989 Apr 21; 57(2):287–94

NF–kappa B: a pleiotropic mediator of inducible and tissue–specific gene control. Lenardo MJ, et al. **Cell** 1989 Jul 28;58(2):227–9 (27 ref.)

A glycosylated liver–specific transcription factor stimulates transcription of the albumin gene. Lichtsteiner S, et al. **Cell** 1989 Jun 30;57(7):1179–87

Functional dissection of the HIV–1 Rev trans–activator—derivation of a trans–dominant repressor of Rev function. Malim MH, et al. **Cell** 1989 Jul 14; 58(1):205–14

The proline–rich transcriptional activator of CTF/NF–I is distinct from the replication and DNA binding domain. Mermod N, et al. **Cell** 1989 Aug 25;58(4):741–53

Steroid hormone receptors compete for factors that mediate their enhancer function. Meyer ME, et al. **Cell** 1989 May 5;57(3):433–42

DNA binding activities of three murine Jun proteins: stimulation by Fos. Nakabeppu Y, et al. **Cell** 1988 Dec 2;55(5):907–15

The ability of a ternary complex to form over the serum response element correlates with serum inducibility of the human c–fos promoter. Shaw PE, et al. **Cell** 1989 Feb 24; 56(4):563–72

The gradient morphogen bicoid is a concentration–dependent transcriptional activator. Struhl G, et al. **Cell** 1989 Jun 30; 57(7):1259–73

Unusual mRNA pseudoknot structure is recognized by a protein translational repressor. Tang CK, et al. **Cell** 1989 May 19;57(4):531–6

Transcriptional activation by the Antennapedia and fushi tarazu proteins in cultured Drosophila cells. Winslow GM, et al. **Cell** 1989 Jun 16;57(6):1017–30

Embryonic inducers, growth factors, transcription factors and oncogenes. Knöchel W, et al. **Cell Differ Dev** 1989 May;26(3):163–71 (90 ref.)

Transcriptional regulation by the AP–1 family of enhancer–binding proteins: a nuclear target for signal transduction. Bohmann D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:695–700

Beyond the second messenger: oncogenes and transcription factors. Curran T, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:769–77 (37 ref.)

Response and binding elements for ligand–dependent positive transcription factors integrate positive and negative regulation of gene expression. Rosenfeld MG, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:545–56

Transcriptional activation by yeast GCN4, a functional homolog to the jun oncoprotein. Struhl K, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:701–9

Steroid–induced cell proliferation in vivo is associated with increased c–myc proto–oncogene transcript abundance. Rempel SA, et al. **Development** 1988 Sep;104(1):87–95

Yeast upstream activator protein GCN4 can stimulate transcription when its binding site replaces the TATA element. Chen W, et al. **EMBO J** 1989 Jan;8(1):261–8

Proteins bound at adjacent DNA elements act synergistically to regulate human proenkephalin cAMP inducible transcription. Comb M, et al. **EMBO J** 1988 Dec 1; 7(12):3793–805

The Escherichia coli LexA repressor–operator system works in mammalian cells. Smith GM, et al. **EMBO J** 1988 Dec 1;7(12):3975–82

Positionally exact initiation is required for the formation of a stable RNA polymerase II transcription complex in vivo. Tebb G, et al. **EMBO J** 1988 Dec 1;7(12):3785–92

A zinc–responsive factor interacts with a metal–regulated enhancer element (MRE) of the mouse metallothionein–I gene. Westin G, et al. **EMBO J** 1988 Dec 1;7(12):3763–70

Nuclear factor NF–kappa B can interact functionally with its cognate binding site to provide lymphoid–specific promoter function. Wirth T, et al. **EMBO J** 1988 Oct; 7(10):3109–13

1,25(OH)2–vitamin D3 receptors: gene regulation and genetic circuitry. Minghetti PP, et al. **FASEB J** 1988 Dec; 2(15):3043–53 (74 ref.)

Stimulation of transcription from different RNA polymerase II promoters by high mobility group proteins 1 and 2. Tremethick DJ, et al. **FEBS Lett** 1989 Jan 2;242(2):346–50

Rho–dependent transcription termination in the tyrT operon of Escherichia coli. Madden KA, et al. **Gene** 1989; 76(2):271–80

Octamer–binding proteins from B or HeLa cells stimulate transcription of the immunoglobulin heavy–chain promoter in vitro. LeBowitz JH, et al. **Genes Dev** 1988 Oct; 2(10):1227–37

Hormone–mediated repression: a negative glucocorticoid response element from the bovine prolactin gene. Sakai DD, et al. **Genes Dev** 1988 Sep;2(9):1144–54

DNA bending by negative regulatory proteins: Gal and Lac repressors. Zwieb C, et al. **Genes Dev** 1989 May;3(5):606–11

Novel region within the V kappa gene promoter is responsible for tissue and stage–specific expression of immunoglobulin genes in human lymphoid neoplasms. Kossakowska AE, et al. **Immunology** 1989 Mar; 66(3):328–34

Evidence for direct regulation of diphtheria toxin gene transcription by an Fe2+–dependent DNA–binding repressor, DtoxR, in Corynebacterium diphtheriae. Fourel G, et al. **Infect Immun** 1989 Oct;57(10):3221–5

Characterization of two mutant metJ proteins with reduced, temperature–dependent capacity to regulate Escherichia coli K–12 met regulon elements. Bala GA, et al. **J Bacteriol** 1989 Jul;171(7):4095–9

The central domain of Rhizobium meliloti NifA is sufficient to activate transcription from the R. meliloti nifH promoter. Huala E, et al. **J Bacteriol** 1989 Jun;171(6):3354–65

Promoter specificity of sigma G–containing RNA polymerase from sporulating cells of Bacillus subtilis: identification of a group of forespore–specific promoters. Nicholson WL, et al. **J Bacteriol** 1989 May;171(5):2708–18

RNA polymerase as a repressor of transcription in the hut(P) region of mutant Klebsiella aerogenes histidine utilization operons. Nieuwkoop AJ, et al. **J Bacteriol** 1988 Oct; 170(10):4986–90

Bacillus subtilis subtilisin gene (aprE) is expressed from a sigma A (sigma 43) promoter in vitro and in vivo. Park SS, et al. **J Bacteriol** 1989 May;171(5):2657–65

In vitro proteolytic cleavage of the Escherichia coli Ada protein by the ompT gene product. Sedgwick B. **J Bacteriol** 1989 Apr;171(4):2249–51

Interaction of a nuclear factor–1–like protein with the regulatory region of the human polyomavirus JC virus. Amemiya K, et al. **J Biol Chem** 1989 Apr 25; 264(12):7025–32

The yeast H+–ATPase gene is controlled by the promoter binding factor TUF. Capieaux E, et al. **J Biol Chem** 1989 May 5;264(13):7437–46

Factors involved in specific transcription by mammalian RNA polymerase II. Role of factors IID and MLTF in transcription from the adenovirus major late and IVa2 promoters. Carcamo J, et al. **J Biol Chem** 1989 May 5; 264(13):7704–14

Mutation in hinge region of lactose repressor protein alters physical and functional properties. Chou WY, et al. **J Biol Chem** 1989 Apr 15;264(11):6171–6

In vitro use of monoclonal antibodies in Escherichia coli S–30 extracts to determine the RNA polymerase sigma subunit required by a promoter. Jovanovich SB, et al. **J Biol Chem** 1989 Mar 5;264(7):3794–8

Identification of rat ovarian nuclear factors that interact with the cAMP–inducible lactate dehydrogenase A subunit promoter. Kwast–Welfeld J, et al. **J Biol Chem** 1989 Apr 25;264(12):6941–7

Induction of nuclear protein factors specific for hormone–responsive region during activation of thyroglobulin gene by thyrotropin in rat thyroid FRTL–5 cells. Lee NT, et al. **J Biol Chem** 1989 May 5; 264(13):7523–30

The adenovirus EIIA enhancer. Analysis of regulatory sequences and changes in binding activity of ATF and EIIF following adenovirus infection. Loeken MR, et al. **J Biol Chem** 1989 Apr 15;264(11):6572–9

Human H4 histone gene transcription requires the proliferation–specific nuclear factor HiNF–D. Auxiliary roles for HiNF–C (Sp1–like) and HiNF–A (high mobility group–like). van Wijnen AJ, et al. **J Biol Chem** 1989 Sep 5;264(25):15034–42

dnaA protein regulates transcriptions of the rpoH gene of Escherichia coli. Wang QP, et al. **J Biol Chem** 1989 May 5;264(13):7338–44

Developmental and tissue–specific expression of nuclear proteins that bind the regulatory element of the major histocompatibility complex class I gene. Burke PA, et al. **J Exp Med** 1989 Apr 1;169(4):1309–21

Mutational analysis of the herpes simplex virus type 1 trans–inducing factor Vmw65. Ace CI, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2595–605

Tumor necrosis factor–alpha activation of the IL–2 receptor–alpha gene involves the induction of kappa B–specific DNA binding proteins. Lowenthal JW, et al. **J Immunol** 1989 May 1;142(9):3121–8

A transcription factor from simian virus 40 chromosomes which activates the viral late promoter in vitro. Beard P, et al. **J Virol** 1988 Nov;62(11):4296–302

The human papillomavirus type 18 (HPV18) E2 gene product is a repressor of the HPV18 regulatory region in human keratinocytes. Bernard BA, et al. **J Virol** 1989 Oct; 63(10):4317–24

NF–kappa B–mediated activation of the human immunodeficiency virus enhancer: site of transcriptional initiation is independent of the TATA box. Bielinska A, et al. **J Virol** 1989 Sep;63(9):4097–100

Stimulation of the human immunodeficiency virus type 1 enhancer by the human T–cell leukemia virus type I tax gene product involves the action of inducible cellular proteins. Böhnlein E, et al. **J Virol** 1989 Apr;63(4):1578–86

Examination of the roles of transcription factor Sp1–binding sites and an octamer motif in trans induction of the herpes simplex virus thymidine kinase gene. Böni J, et al. **J Virol** 1989 Sep;63(9):4088–92

The Epstein–Barr virus (EBV) early promoter DR contains a cis–acting element responsive to the EBV transactivator EB1 and an enhancer with constitutive and inducible activities. Chavrier P, et al. **J Virol** 1989 Feb;63(2):607–14

Functional significance of phosphorylation to the human immunodeficiency virus Rev protein. Cochrane AW, et al. **J Virol** 1989 Oct;63(10):4438–40

Transcriptionally active immediate–early protein of pseudorabies virus binds to specific sites on class II gene promoters. Cromlish WA, et al. **J Virol** 1989 May; 63(5):1869–76

Activation of the human immunodeficiency virus long terminal repeat by herpes simplex virus type 1 is associated with induction of a nuclear factor that binds to the NF–kappa B/core enhancer sequence. Gimble JM, et al. **J Virol** 1988 Nov;62(11):4104–12

Activation of human papillomavirus type 18 gene expression by herpes simplex virus type 1 viral transactivators and a phorbol ester. Gius D, et al. **J Virol** 1989 Feb;63(2):555–63

Separation of requirements for protein–DNA complex assembly from those for functional activity in the herpes simplex virus regulatory protein Vmw65. Greaves R, et al. **J Virol** 1989 Apr;63(4):1641–50

Sequences in the visna virus long terminal repeat that control transcriptional activity and respond to viral trans–activation: involvement of AP–1 sites in basal activity and trans–activation. Hess JL, et al. **J Virol** 1989 Jul; 63(7):3001–15

The Epstein–Barr virus immediate–early gene product, BMLF1, acts in trans by a posttranscriptional mechanism which is reporter gene dependent. Kenney S, et al. **J Virol** 1989 Sep;63(9):3870–7

The Epstein–Barr virus BMLF1 promoter contains an enhancer element that is responsive to the BZLF1 and BRLF1 transactivators. Kenney S, et al. **J Virol** 1989 Sep; 63(9):3878–83

Chromatin structure of recombinant Moloney murine leukemia virus proviral DNAs that contain tax–responsive sequences from human T–cell lymphotropic virus type II in the presence and absence of tax. Kitado H, et al. **J Virol** 1989 Jul;63(7):3072–9

Increased expression of CD4 molecules on Jurkat cells mediated by human immunodeficiency virus tat protein. Koka P, et al. **J Virol** 1988 Nov;62(11):4353–7

Activation of the human T–cell leukemia virus type I long terminal repeat by 12–O–tetradecanoylphorbol–13–acetate and by tax (p40x) occurs through similar but functionally distinct target sequences. Radonovich M, et al. **J Virol** 1989 Jul;63(7):2987–94

Direct correlation between a negative autoregulatory response element at the cap site of the herpes simplex virus type 1 IE175 (alpha 4) promoter and a specific binding site for the IE175 (ICP4) protein. Roberts MS, et al. **J Virol** 1988 Nov;62(11):4307–20

Utilization of signal transduction pathway by the human T–cell leukemia virus type I transcriptional activator tax. Tan TH, et al. **J Virol** 1989 Sep;63(9):3761–8

Maximal binding levels of an H1 histone gene–specific factor in S–phase correlate with maximal H1 gene transcription. Dalton S, et al. **Mol Cell Biol** 1988 Oct;8(10):4576–8

B–cell control region at the 5' end of a major histocompatibility complex class II gene: sequences and factors. Dorn A, et al. **Mol Cell Biol** 1988 Oct;8(10):3975–87

The yeast regulatory protein ADR1 binds in a zinc–dependent manner to the upstream activating sequence of ADH2. Eisen A, et al. **Mol Cell Biol** 1988 Oct;8(10):4552–6

Constitutive transcription of yeast ribosomal protein gene TCM1 is promoted by uncommon cis– and trans–acting elements. Hamil KG, et al. **Mol Cell Biol** 1988 Oct; 8(10):4328–41

Multiple hepatic trans–acting factors are required for in vitro transcription of the human alpha–1–antitrypsin gene. Li Y, et al. **Mol Cell Biol** 1988 Oct;8(10):4362–9

T–cell activation signals and human T–cell leukemia virus type I–encoded p40x protein activate the mouse granulocyte–macrophage colony–stimulating factor gene through a common DNA element. Miyatake S, et al. **Mol Cell Biol** 1988 Dec;8(12):5581–7

A common factor regulates skeletal and cardiac alpha–actin gene transcription in muscle. Muscat GE, et al. **Mol Cell Biol** 1988 Oct;8(10):4120–33

Factors involved in specific transcription by mammalian RNA polymerase II: purification, genetic specificity, and TATA box–promoter interactions of TFIID. Nakajima N, et al. **Mol Cell Biol** 1988 Oct;8(10):4028–40

The general control activator protein GCN4 is essential for a basal level of ARO3 gene expression in Saccharomyces cerevisiae. Paravicini G, et al. **Mol Cell Biol** 1989 Jan; 9(1):144–51

E1a transactivation of the human HSP70 promoter is mediated through the basal transcriptional complex. Williams GT, et al. **Mol Cell Biol** 1989 Jun;9(6):2574–87

FNR–dependent repression of the ndh gene of Escherichia coli and metal ion requirement for FNR–regulated gene expression. Spiro S, et al. **Mol Microbiol** 1989 May;

3(5):601–8
Role of cysteine residues and of metal ions in the regulatory functioning of FNR, the transcriptional regulator of anaerobic respiration in Escherichia coli. Trageser M, et al. **Mol Microbiol** 1989 May;3(5):593–9
Gene regulation. Action of leucine zippers [news] Abel T, et al. **Nature** 1989 Sep 7;341(6237):24–5 (24 ref.)
Dual regulatory role for thyroid–hormone receptors allows control of retinoic–acid receptor activity. Graupner G, et al. **Nature** 1989 Aug 24;340(6235):653–6
Exocrinopathy resembling Sjögren's syndrome in HTLV–1 tax transgenic mice. Green JE, et al. **Nature** 1989 Sep 7; 341(6237):72–4
Interaction at a distance between lambda repressors disrupts gene activation. Hochschild A, et al. **Nature** 1988 Nov 24; 336(6197):353–7
Similarities between prokaryotic and eukaryotic cyclic AMP–responsive promoter elements. Lin YS, et al. **Nature** 1989 Aug 24;340(6235):656–9
Functional cooperativity between protein molecules bound at two distinct sequence elements of the immunoglobulin heavy–chain promoter. Poellinger L, et al. **Nature** 1989 Feb 9;337(6207):573–6
Direct interaction between fos and jun nuclear oncoproteins: role of the 'leucine zipper' domain. Sassone–Corsi P, et al. **Nature** 1988 Dec 15;336(6200):692–5
Changing fos oncoprotein to a jun–independent DNA binding protein with GCN4 dimerization specificity by swapping "leucine zippers". Sellers JW, et al. **Nature** 1989 Sep 7;341(6237):74–6
Dual function of a nuclear factor I binding site in MMTV transcription regulation. Buetti E, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3065–78
Sigma–G RNA polymerase controls forespore–specific expression of the glucose dehydrogenase operon in Bacillus subtilis. Nakatani Y, et al. **Nucleic Acids Res** 1989 Feb 11; 17(3):999–1017
Pleiotropic derepression of developmentally regulated cellular and viral genes by c–myc protooncogene products in undifferentiated embryonal carcinoma cells. Onclercq R, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):735–53
Translational repression by bacteriophage MS2 coat protein does not require cysteine residues. Peabody DS. **Nucleic Acids Res** 1989 Aug 11;17(15):6017–27
DNA recognition element required for PUF–I mediated cell–type–specific transcription of the rat prolactin gene. Sharp ZD, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2705–22
Mouse DNA polymerase beta gene promoter: fine mapping and involvement of Sp1–like mouse transcription factor in its function. Yamaguchi M, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8773–87
A nuclear factor is required for transactivation of HTLV–I gene expression. Park RE, et al. **Oncogene** 1988 Sep; 3(3):275–9
The Fos and Jun/AP–1 proteins are involved in the downregulation of Fos transcription. Schönthal A, et al. **Oncogene** 1989 May;4(5):629–36
Negative regulation of c–myc transcription involves myc family proteins. Cleveland JL, et al. **Oncogene Res** 1988; 3(4):357–75
Secondary sigma factor controls transcription of flagellar and chemotaxis genes in Escherichia coli. Arnosti DN, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):830–4
Multiple states of protein–DNA interaction in the assembly of transcription complexes on Saccharomyces cerevisiae 5S ribosomal RNA genes. Braun BR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2530–4
E1A–dependent trans–activation of the human MYC promoter is mediated by the E2F factor. Hiebert SW, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3594–8
Regulation of cytochrome P–450b/e gene expression by a heme– and phenobarbitone–modulated transcription factor. Rangarajan PN, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3963–7
Activation of prophage P4 by the P2 Cox protein and the sites of action of the Cox protein on the two phage genomes. Saha S, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3973–7
Saturation mutagenesis of the octopine synthase enhancer: correlation of mutant phenotypes with binding of a nuclear protein factor. Singh K, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3733–7
How gene activators work. Ptashne M. **Sci Am** 1989 Jan; 260(1):40–7 (4 ref.)
tat's surprising. Rusting R. **Sci Am** 1989 Mar;260(3):30, 32
AP1/jun function is differentially induced in promotion–sensitive and resistant JB6 cells. Bernstein LR, et al. **Science** 1989 May 5;244(4904):566–9
Induction of kappa transcription by interferon–gamma without activation of NF–kappa B. Briskin M, et al. **Science** 1988 Nov 18;242(4881):1036–7
Gene control research gets a boost [news] Marx JL. **Science** 1989 Sep 22;245(4924):1329–30
The E. coli Rho protein: an ATPase that terminates transcription. Bear DG, et al. **Trends Biochem Sci** 1988 Sep;13(9):343–7 (38 ref.)
Q–mediated late gene transcription of bacteriophage lambda: RNA start point and RNase III processing sites in vivo. Daniels DL, et al. **Virology** 1988 Dec;167(2):568–77
The human cytomegalovirus major immediate early promoter can be trans–activated by adenovirus early proteins. Gorman CM, et al. **Virology** 1989 Aug;171(2):377–85
Regulation of JCVL promoter function: transactivation of JCVL promoter by JCV and SV40 early proteins. Lashgari MS, et al. **Virology** 1989 May;170(1):292–5
Activation of HIV LTR–directed expression: analysis with pseudorabies virus immediate early gene. Yuan R, et al. **Virology** 1989 Sep;172(1):92–9
[Signals and transcription factors] Ito Y. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):509–15 (12 ref.) (Eng. Abstr.) (Jpn)

ULTRASTRUCTURE

Electron microscopy reveals that transcription factor TFIIIA bends 5S DNA. Bazett–Jones DP, et al. **Mol Cell Biol** 1989 Jan;9(1):336–41
The interaction of lac repressor headpiece with its operator: an NMR view. Boelens R, et al. **Protein Seq Data Anal** 1988;1(6):487–98

TRANSCRIPTION, GENETIC

see related
TRANSCRIPTION FACTORS

Enhanced full–length transcription of Sindbis virus RNA by effective denaturation with methylmercury hydroxide. Scheip C, et al. **Acta Virol (Praha)** 1989 May;33(3):297–302
Regulation of EGF receptor and transforming growth factor–alpha expression. Kudlow JE, et al. **Adv Exp Med Biol** 1988;234:105–26 (74 ref.)
NK sensitivity, H–2, c–K–ras proto–oncogene expression and metastases: analysis of the metastatic potential of H–2 gene transfected fibrosarcoma cells. Rager–Zisman B, et al. **Adv Exp Med Biol** 1988;233:151–60
Cloning, nucleotide sequence and gene expression of bovine lung prostaglandin F synthetase. Watanabe K, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:462–5
Topography of early HPV 16 transcription in high–grade genital precancers. Crum CP, et al. **Am J Pathol** 1989 Jun; 134(6):1183–8
Carbonic anhydrase II gene expression in isolated canine gastric parietal cells. Campbell VW, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G631–6
Physiological regulation at the level of mRNA: analysis of steady–state levels of specific mRNAs by DNA–excess solution hybridization. Hadcock JR, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C457–65 (33 ref.)
Kidney epithelial cells express c–sis protooncogene and secrete PDGF–like protein. Kartha S, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F800–6
Interactions between sustained contractile activity and beta–adrenergic receptors in regulation of gene expression in skeletal muscles. Kraus WE, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C506–14
Angiotensinogen gene expression in 3T3–L1 cells. Saye JA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C448–51
Homologous rat hepatic protease inhibitor genes show divergent functional responses to inflammation. Schwarzenberg SJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C413–9
Mesangial cells express PDGF mRNAs and proliferate in response to PDGF. Shultz PJ, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F674–84
An efficiently mutagenizable recombinant plasmid for in vitro transcription of the Escherichia coli 16 S RNA gene. Krzyzosiak WJ, et al. **Anal Biochem** 1988 Dec; 175(2):373–85
A colony–blot technique for the detection of specific transcripts in eukaryotes. Maniak M, et al. **Anal Biochem** 1989 Jan;176(1):78–81
IFN–gamma is an essential cosignal for triggering IFN–beta 2/BSF–2/IL–6 gene expression in human monocytic cell lines. Sanceau J, et al. **Ann N Y Acad Sci** 1989;557:130–41, discussion 141–3
Tissue–specific expression of the mammalian bombesin gene. Sunday ME. **Ann N Y Acad Sci** 1988;547:95–113
Expression of IL–6 in normal individuals and in patients with autoimmune disease. Tovey MG, et al. **Ann N Y Acad Sci** 1989;557:363–71; discussion 371–3
Transcription by RNA polymerase III. Geiduschek EP, et al. **Annu Rev Biochem** 1988;57:873–914 (299 ref.)
Molecular mechanisms of transcriptional regulation in yeast. Struhl K. **Annu Rev Biochem** 1989;58:1051–77 (133 ref.)
Effects of insulin on gene transcription. Meisler MH, et al. **Annu Rev Physiol** 1989;51:701–14 (49 ref.)
Amplification, expression and localization of the c–myc gene in BSp73 rat tumor cell lines. Birnbaum M, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1185–91
Oncogene expression and regulation in normal lymphocytes and lymphocytes from patients with autoimmune diseases. Boumpas DT, et al. **Anticancer Res** 1988 Sep–Oct; 8(5A):977–84 (51 ref.)
Chromatin motion in interphase nuclei, its modulation and its potential role in gene expression. De Boni U. **Anticancer Res** 1988 Sep–Oct;8(5A):885–98 (89 ref.)
Possible role of the first intron of c–H–ras in gene expression: anti–cancer elements in oncogenes. Hashimoto–Gotoh T, et al. **Anticancer Res** 1988 Sep–Oct;8(5A):851–9 (40 ref.)
Detection of human Ha–ras transcripts in tumor cells by in situ hybridization. Lang SM, et al. **Anticancer Res** 1989 May–Jun;9(3):805–10
Oncodevelopmental expression and structure of alkaline phosphatase genes. Millán JL. **Anticancer Res** 1988 Sep–Oct;8(5A):995–1004 (90 ref.)
Gene transcription in a temperature–sensitive mutant of RNA polymerase II. Jaskulski D, et al. **APMIS Suppl** 1988;2:82–9
Nuclear uptake of monoclonal antibody to a surface glycoprotein and its effect on transcription. Rakowicz–Szulczynska EM, et al. **Arch Biochem Biophys** 1989 Jun;271(2):366–79
Expression of an endogenous retroviral transcript is associated with murine lupus. Krieg AM, et al. **Arthritis Rheum** 1989 Mar;32(3):322–9
Expression of messenger RNA for GM–CSF by blood mononuclear cells after allogeneic bone marrow transplantation. Atkinson K, et al. **Behring Inst Mitt** 1988 Aug;(83):330–4
Induction of antigen presentation capacity and MHC class II gene expression in bone marrow macrophages derived from GM–CSF–supplemented in vitro cultures. Reske–Kunz AB, et al. **Behring Inst Mitt** 1988 Aug; (83):258–64
Erythropoietin gene expression in macrophages detected by in situ hybridization. Rich IN, et al. **Behring Inst Mitt** 1988 Aug;(83):202–6
Role of GM–CSF in phagocyte recruitment and regulation of c–fos protooncogene expression. Wang JM, et al. **Behring Inst Mitt** 1988 Aug;(83):270–3
Discriminator base of tRNA(Asp) is involved in amino acid acceptor activity. Hasegawa T, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1534–8
Interleukin–4 inhibits interleukin–1 synthesis by a posttranscriptional mechanism. Hurme M, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):861–6
RNA polymerase II transcription complexes are destabilized by ATP or GTP. Kundzicz H, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1133–9
Human T–cell leukemia virus minus strand transcription in infected T–cells. Larocca D, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1006–13
Interleukin–6 gene expression in human endothelial cells: RNA start sites, multiple IL–6 proteins and inhibition of proliferation. May LT, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):991–8
Initiation of transcription of rDNA in rice. Nandabalan K, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1117–23
Putative termination sites for rDNA transcription in rice. Nandabalan K, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):68–74
Transcription of 5S RNA genes containing insertion mutation and the assembly of preinitiation complexes. Shastry BS. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):639–45
Induction of c–fos by an anti–epidermal growth factor receptor monoclonal antibody. Taetle R, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):129–35
Post–transcriptional control of IL–1 gene expression in the acute monocytic leukemia line THP–1. Turner M, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):830–9
Inhibition of in vitro amino acylation and translation by adenosine antibodies. Vaishnav YN, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1381–6
Transcriptional and translational events during reovirus infection. Lemay G. **Biochem Cell Biol** 1988 Aug; 66(8):803–12 (80 ref.)
Transcriptional activation of heat–shock genes in eukaryotes. Tanguay RM. **Biochem Cell Biol** 1988 Jun;66(6):584–93 (55 ref.)
DNA rearrangement causes multiple changes in gene expression at the amylase locus in Drosophila melanogaster. Hickey DA, et al. **Biochem Genet** 1988 Dec; 26(11–12):757–68
A novel transcription unit within the exon sequence of the rat insulin like growth factor II gene. Matsuguchi T, et al. **Biochem Int** 1989 Jan;18(1):71–9
The transcription and translation in vitro of individual cereal storage–protein genes from wheat (Triticum aestivum, cv. Chinese Spring). Evidence for translocation of the translation products and disulphide–bond formation. Bulleid NJ, et al. **Biochem J** 1988 Sep 15;254(3):805–10
Effect of Sarkosyl and heparin on single–step addition reactions catalysed by wheat–germ RNA polymerase II—poly[d(A–T)]transcription complexes. De Mercoyrol L, et al. **Biochem J** 1989 Jun 15;260(3):795–801
A model for regulation of mammalian ribosomal DNA transcription. Co–ordination of initiation and termination. Nashimoto M, et al. **Biochem J** 1988 Dec 1;256(2):329–33
Altered expression and transcription of the topoisomerase II gene in nitrogen mustard–resistant human cells [published erratum appears in Biochem Pharmacol 1989 May 1;38(9):1541] Tan KB, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4413–6
Structure and expression of neural cell adhesion molecule complementary DNA clones in skeletal muscle. Barton CH, et al. **Biochem Soc Trans** 1988 Aug;16(4):457–60
Photoregulation of transcription of chloroplast genes. Harmey J, et al. **Biochem Soc Trans** 1988 Oct;16(5):711
Changes in tachykinin and actin gene expression in rat sensory neurones after cutting or crushing the sciatic nerve. Nielsch U, et al. **Biochem Soc Trans** 1988 Aug;16(4):465–6
Characterization of primary transcripts and identification of transcription initiation sites on the heavy and light strands of mouse mitochondrial DNA. Bhat KS, et al. **Biochemistry** 1989 Jan 24;28(2):763–9

Cloning, sequencing, and regulation of rat liver carnitine octanoyltransferase: transcriptional stimulation of the enzyme during peroxisome proliferation. Chatterjee B, et al. **Biochemistry** 1988 Dec 13;27(25):9000–6

Isolation, nucleotide sequence, and expression of a cDNA encoding pig citrate synthase. Evans CT, et al. **Biochemistry** 1988 Jun 28;27(13):4680–6

Transcription of left-handed Z-DNA templates: increased rate of single-step addition reactions catalyzed by wheat germ RNA polymerase II. Job D, et al. **Biochemistry** 1988 Aug 23;27(17):6371–8

Human rhinovirus 3C protease: cloning and expression of an active form in Escherichia coli. Libby RT, et al. **Biochemistry** 1988 Aug 23;27(17):6262–8

Chicken globin gene transcription is cell lineage specific during the time of the switch. Lois R, et al. **Biochemistry** 1989 Mar 7;28(5):2281–7

Processivity of proteolytically modified forms of T7 RNA polymerase. Muller DK, et al. **Biochemistry** 1988 Jul 26; 27(15):5763–71

Ubiquitinated histone H2B is preferentially located in transcriptionally active chromatin. Nickel BE, et al. **Biochemistry** 1989 Feb 7;28(3):958–63

Kinetics of interleukin 2 mRNA and protein produced in the human T-cell line Jurkat and effect of cyclosporin A. Nordmann R, et al. **Biochemistry** 1989 Feb 21;28(4):1791–7

Expression of Go alpha mRNA and protein in bovine tissues. Price SR, et al. **Biochemistry** 1989 May 2;28(9):3803–7

Positive and negative regulatory elements control the steroid-responsive ovalbumin promoter. Sanders MM, et al. **Biochemistry** 1988 Aug 23;27(17):6550–7

Transcriptional switching by the metalloregulatory MerR protein: initial characterization of DNA and mercury (II) binding activities. Shewchuk LM, et al. **Biochemistry** 1989 Mar 7;28(5):2331–9

Transcriptional switching by the MerR protein: activation and repression mutants implicate distinct DNA and mercury(II) binding domains. Shewchuk LM, et al. **Biochemistry** 1989 Mar 7;28(5):2340–4

Effects of Escherichia coli Nus A protein on transcription termination in vitro are not increased or decreased by DNA sequences sufficient for antitermination in vivo. Sigmund CD, et al. **Biochemistry** 1988 Jul 26;27(15):5628–35

Nus A protein affects transcriptional pausing and termination in vitro by binding to different sites on the transcription complex. Sigmund CD, et al. **Biochemistry** 1988 Jul 26; 27(15):5622–7

Terminator-distal sequences determine the in vitro efficiency of the early terminators of bacteriophages T3 and T7. Telesnitsky A, et al. **Biochemistry** 1989 Jun 13; 28(12):5210–8

Regulation of collagen gene expression in 3T3-L1 cells. Effects of adipocyte differentiation and tumor necrosis factor alpha. Weiner FR, et al. **Biochemistry** 1989 May 2;28(9):4094–9

Specificity of arginine binding by the Tetrahymena intron. Yarus M. **Biochemistry** 1989 Feb 7;28(3):980–8

Transcription of rat aldolase B gene: minor RNAs are transcribed by RNA polymerase III. Arai Y, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):91–8

RNA-editing in trypanosome mitochondria. Benne R. **Biochim Biophys Acta** 1989 Mar 1;1007(2):131–9 (29 ref.)

Biosynthesis and import into the mitochondrion of L-3-glycerophosphate dehydrogenase, and the effect of thyroid hormone deficiency on gene expression. Clay VJ, et al. **Biochim Biophys Acta** 1989 Jun 23;975(1):112–8

Avian adipose lipoprotein lipase: cDNA sequence and reciprocal regulation of mRNA levels in adipose and heart. Cooper DA, et al. **Biochim Biophys Acta** 1989 Jun 1; 1008(1):92–101

Differential expression of the human insulin-like growth factor II gene. Characterization of the IGF-II mRNAs and an mRNA encoding a putative IGF-II-associated protein. de Pagter-Holthuizen P, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):282–95

Compared expression levels of ornithine transcarbamylase and carbamylphosphate synthetase in liver and small intestine of normal and mutant mice. Dubois N, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):321–8

Presence of transcription signals in two putative DNA replication origins of human cells. Falaschi A, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2–3):430–42

Identification of a proliferation-related transcript with an elevated expression in the mid-gestation mouse embryo. Filion M, et al. **Biochim Biophys Acta** 1988 Sep 7; 950(3):255–62

Rat pulmonary surfactant protein A is expressed as two differently sized mRNA species which arise from differential polyadenylation of one transcript. Fisher JH, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):338–45

Response of skeletal muscle RNA polymerases I and II to tumour growth. Goodlad GA, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):296–302

Effects of insulin and fructose on transcriptional and post-transcriptional regulation of malic enzyme synthesis in diabetic rat liver. Katsurada A, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):103–7

The phosphoprotein p53 is down-regulated post-transcriptionally during embryogenesis in vertebrates. Louis JM, et al. **Biochim Biophys Acta** 1988 Sep 7; 950(3):395–402

Functions of the DnaA protein of Escherichia coli in replication and transcription. Messer W, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2–3):351–8 (56 ref.)

Fibrinogen and albumin synthesis are regulated at the transcriptional level during the acute phase response. Moshage HJ, et al. **Biochim Biophys Acta** 1988 Sep 7; 950(3):450–4

Characterization of catalase transcripts and their differential expression in maize. Redinbaugh MG, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):104–16

Expression of the human cardiac actin gene in differentiating rat skeletal myoblasts. Ruben MM, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):374–84

Transcriptional deviation of the rat insulin-like growth factor II gene initiated at three alternative leader-exons between neonatal tissues and ascites hepatomas. Ueno T, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):411–9

Localization, implications for function, and gene expression of chymotrypsin-like proteinases of cytotoxic RNK-16 lymphocytes. Zunino SJ, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):331–40

Symmetrical transcription in bacteriophage phi 29 DNA. Barthelemy I, et al. **Biochimie** 1988 May;70(5):605–9

A single rat genomic DNA fragment encodes both the oxytocin and vasopressin genes separated by 11 kilobases and oriented in opposite transcriptional directions. Mohr E, et al. **Biochimie** 1988 May;70(5):649–54

Characterization and promoter selectivity of Lactobacillus acidophilus RNA polymerase. Natori Y, et al. **Biochimie** 1988 Dec;70(12):1765–74

The trans-activation of herpes simplex virus gene expression: comparison of two factors and their cis sites. Roizman B, et al. **Biochimie** 1988 Aug;70(8):1031–43 (51 ref.)

DNA——DNA, and DNA——RNA——protein: orchestration by a single complex operon. Lupski JR, et al. **Bioessays** 1989 May;10(5):152–7 (39 ref.)

Does early replication control transcription of genes? [letter] Poot M. **Bioessays** 1989 Jan;10(1):35–6

Expression of the human serum apolipoprotein AI and AII genes in Xenopus laevis oocytes. Lipid-associated secretion of gene products. Haase A, et al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):585–93

Twelfth Fritz Lipmann lecture. Initiation of transcription—a general tool for affinity labeling of RNA polymerases by autocatalysis. Hartmann GR, et al. **Biol Chem Hoppe Seyler** 1988 Sep;369(9):775–88 (53 ref.)

SRP-dependent membrane integration of the beta-subunit of Na+,K+-ATPase. Huth A, et al. **Biomed Biochim Acta** 1989;48(1):77–84

Relationship between rearrangement and transcription of the T-cell receptor alpha, beta, and gamma genes in B-precursor acute lymphoblastic leukemia. Hara J, et al. **Blood** 1989 Feb;73(2):500–8

Observations on the transcriptional activity of the glutathione S-transferase pi gene in human haematological malignancies and in the peripheral leucocytes of cancer patients under chemotherapy. McQuaid S, et al. **Br J Cancer** 1989 Apr;59(4):540–3

R-loop mapping of RNA transcripts from bovine papillomavirus type 4. Coggins LW, et al. **Br J Cancer Suppl** 1988 Dec;9:85–8

Transcriptional regulation of the human c-myc gene. Lang JC, et al. **Br J Cancer Suppl** 1988 Dec;9:62–6 (34 ref.)

Temporal changes in PO and MBP gene expression after crush-injury of the adult peripheral nerve. Gupta SK, et al. **Brain Res** 1988 Sep;464(2):133–41

The vasopressin gene is expressed prior to regulation in the supraoptic nuclei of fetal rats. Reppert SM, et al. **Brain Res** 1988 Jul 26;456(2):392–6

The duplicated myelin basic protein gene in mld mutant mice does not impair transcription. Roch JM, et al. **Brain Res** 1989 Jan 16;477(1–2):292–9

Differential splicing of MAG transcripts during CNS and PNS development. Tropak MB, et al. **Brain Res** 1988 Sep; 464(2):143–55

Vasopressin and oxytocin gene expression in the supraoptic and paraventricular nucleus of the spontaneously hypertensive rat (SHR) during development of hypertension. van Tol HH, et al. **Brain Res** 1988 Dec; 464(4):303–11

Transient increases and individual variations in preprocholecystokinin gene expression in rat telencephalic regions during postnatal development: a quantitative comparison between preprocholecystokinin mRNA and preproenkephalin mRNA. Yoshikawa K, et al. **Brain Res** 1988 Sep;464(2):87–96

Strain-specific differences in transcription of the gene for the epinephrine-synthesizing enzyme phenylethanolamine N-methyltransferase. Evinger MJ, et al. **Brain Res Mol Brain Res** 1989 Mar;5(2):141–7

Transcriptional control of adrenal catecholamine and opiate peptide transmitter genes. La Gamma EF, et al. **Brain Res Mol Brain Res** 1989 Jan;5(1):17–22

Attenuation of transcription of biotin genes in Escherichia coli. Nath SK. **Can J Microbiol** 1988 Dec;34(12):1288–96

Constitutive and steroid hormone regulated transcriptional enhancer elements in the genome of the human papilloma virus type 16, which is associated with neoplasia of the cervix. Klock G, et al. **Cancer Detect Prev** 1988; 12(1–6):23–9

Antiimmunoglobulin inhibition of Burkitt's lymphoma cell proliferation and concurrent reduction of c-myc and mu heavy chain gene expression. Arasi VE, et al. **Cancer Res** 1989 Jun 15;49(12):3235–41

Expression of growth factor and epidermal growth factor receptor encoded transcripts in human gastric tissues. Bennett C, et al. **Cancer Res** 1989 Apr 15;49(8):2104–11

Examination of urokinase protein/transcript levels and their relationship with laminin degradation in cultured colon carcinoma. Boyd D, et al. **Cancer Res** 1989 Feb 15; 49(4):816–20

Transcriptional down-regulation of a rat gene, WDNM2, in metastatic DMBA-8 cells. Dear TN, et al. **Cancer Res** 1989 Oct 1;49(19):5323–8

Identification of two regions of the human glucocorticoid receptor hormone binding domain that block activation. Hollenberg SM, et al. **Cancer Res** 1989 Apr 15;49(8 Suppl):2292a–2294a

Altered expression of retrovirus-like sequences and cellular oncogenes in mice fed methyl-deficient diets. Hsieh LL, et al. **Cancer Res** 1989 Jul 15;49(14):3795–9

Polyadenylate polymerases from normal and cancer cells and their potential role in messenger RNA processing: a review. Jacob ST, et al. **Cancer Res** 1989 Jun 1;49(11):2827–33 (79 ref.)

Oncogene mediated repression of glucocorticoid hormone response elements and glucocorticoid receptor levels. Jaggi R, et al. **Cancer Res** 1989 Apr 15;49(8 Suppl):2266a–2274a

Cytokine gene expression during the generation of human lymphokine-activated killer cells: early induction of interleukin 1 beta by interleukin 2. Kovacs EJ, et al. **Cancer Res** 1989 Feb 15;49(4):940–4

Expression of transforming growth factor alpha and epidermal growth factor receptor messenger RNA in neoplastic and nonneoplastic human kidney tissue. Mydlo JH, et al. **Cancer Res** 1989 Jun 15;49(12):3407–11

Transcripts of the insulin-like growth factors I and II in human hepatoma. Su TS, et al. **Cancer Res** 1989 Apr 1; 49(7):1773–7

Expression of the oncogenes mil and ras abolishes the in vivo differentiation of mammary epithelial cells. Günzburg WH, et al. **Carcinogenesis** 1988 Oct;9(10):1849–56

Characterization and in vitro expression of the cytochrome b-559 genes of barley. II. In vitro transcription and translation. Krupinska K. **Carlsberg Res Commun** 1988; 53(4):233–46

In vitro transcription and translation of the psbD gene encoding the D-2 protein of photosystem II in barley. Neumann EM. **Carlsberg Res Commun** 1988;53(7):395–409

Characterization of cytochrome c oxidase III transcripts that are edited only in the 3' region. Abraham JM, et al. **Cell** 1988 Oct 21;55(2):267–72

A putative murine ecotropic retrovirus receptor gene encodes a multiple membrane-spanning protein and confers susceptibility to virus infection. Albritton LM, et al. **Cell** 1989 May 19;57(4):659–66

In vivo analysis of the mechanisms responsible for strong transcriptional polarity in a "sense" mutant within an intercistronic region. Alifano P, et al. **Cell** 1988 Oct 21; 55(2):351–60

A suppressor of a HIS4 transcriptional defect encodes a protein with homology to the catalytic subunit of protein phosphatases. Arndt KT, et al. **Cell** 1989 Feb 24; 56(4):527–37

Reactivation of thyroglobulin gene expression in transformed thyroid cells by 5-azacytidine. Avvedimento EV, et al. **Cell** 1989 Sep 22;58(6):1135–42

Transcriptional activation of initiation of replication from the E. coli chromosomal origin: an RNA-DNA hybrid near oriC. Baker TA, et al. **Cell** 1988 Oct 7;55(1):113–23

A purified Drosophila homeodomain protein represses transcription in vitro. Biggin MD, et al. **Cell** 1989 Aug 11;58(3):433–40

Five intermediate complexes in transcription initiation by RNA polymerase II. Buratowski S, et al. **Cell** 1989 Feb 24;56(4):549–61

A single glutamic acid residue plays a key role in the transcriptional activation function of lambda repressor. Bushman FD, et al. **Cell** 1989 Sep 22;58(6):1163–71

Analysis of Sp1 in vivo reveals multiple transcriptional domains, including a novel glutamine-rich activation motif. Courey AJ, et al. **Cell** 1988 Dec 2;55(5):887–98

SPT15, the gene encoding the yeast TATA binding factor TFIID, is required for normal transcription initiation in vivo. Eisenmann DM, et al. **Cell** 1989 Sep 22;58(6):1183–91

The ultrastructure of upstream and downstream regions of an active Balbiani ring gene. Ericsson C, et al. **Cell** 1989 Feb 24;56(4):631–9

Supercoiling of intracellular DNA can occur in eukaryotic cells. Glaever GN, et al. **Cell** 1988 Dec 2;55(5):849–56

Bacterial gene regulation from distant DNA sites. Gralla JD. **Cell** 1989 Apr 21;57(2):193–5 (12 ref.)

Stable propagation of the active transcriptional state of an immunoglobulin mu gene requires continuous enhancer function. Grosschedl R, et al. **Cell** 1988 Nov 18; 55(4):645–54

Synergistic activation and repression of transcription by Drosophila homeobox proteins. Han K, et al. **Cell** 1989 Feb 24;56(4):573–83

Epstein-Barr virus small RNA (EBER) genes: unique transcription units that combine RNA polymerase II and III promoter elements. Howe JG, et al. **Cell** 1989 Jun 2; 57(5):825–34

O-glycosylation of eukaryotic transcription factors: implications for mechanisms of transcriptional regulation.

Jackson SP, et al. **Cell** 1988 Oct 7;55(1):125–33
Transcriptional activation and repression by Ultrabithorax proteins in cultured Drosophila cells. Krasnow MA, et al. **Cell** 1989 Jun 16;57(6):1031–43
Retrovirus-induced insertional mutation in Mov13 mice affects collagen I expression in a tissue-specific manner. Kratochwil K, et al. **Cell** 1989 Jun 2;57(5):807–16
Highly localized tracks of specific transcripts within interphase nuclei visualized by in situ hybridization. Lawrence JB, et al. **Cell** 1989 May 5;57(3):493–502
A 7 bp mutation converts a human RNA polymerase II snRNA promoter into an RNA polymerase III promoter. Lobo SM, et al. **Cell** 1989 Jul 14;58(1):55–67
On the displacement of histones from DNA by transcription. Lorch Y, et al. **Cell** 1988 Dec 2;55(5):743–4
Converting a eukaryotic transcriptional inhibitor into an activator. Ma J, et al. **Cell** 1988 Nov 4;55(3):443–6
Ectopic expression of the proto-oncogene int-1 in Xenopus embryos leads to duplication of the embryonic axis. McMahon AP, et al. **Cell** 1989 Sep 22;58(6):1075–84
Two erbA homologs encoding proteins with different T3 binding capacities are transcribed from opposite DNA strands of the same genetic locus. Miyajima N, et al. **Cell** 1989 Apr 7;57(1):31–9
An enhancer stimulates transcription in trans when attached to the promoter via a protein bridge. Müller HP, et al. **Cell** 1989 Aug 25;58(4):767–77
Change in the pattern of histone binding to DNA upon transcriptional activation. Nacheva GA, et al. **Cell** 1989 Jul 14;58(1):27–36
The MerR heavy metal receptor mediates positive activation in a topologically novel transcription complex. O'Halloran TV, et al. **Cell** 1989 Jan 13;56(1):119–29
The genes and transcripts of an antigen gene expression site from T. brucei. Pays E, et al. **Cell** 1989 Jun 2;57(5):835–45
DNA supercoiling and prokaryotic transcription. Pruss GJ, et al. **Cell** 1989 Feb 24;56(4):521–3 (17 ref.)
Activation of immunoglobulin kappa gene rearrangement correlates with induction of germline kappa gene transcription. Schlissel MS, et al. **Cell** 1989 Sep 8; 58(5):1001–7
The leucine repeat motif in Fos protein mediates complex formation with Jun/AP-1 and is required for transformation. Schuermann M, et al. **Cell** 1989 Feb 10; 56(3):507–16
The ability of a ternary complex to form over the serum response element correlates with serum inducibility of the human c-fos promoter. Shaw PE, et al. **Cell** 1989 Feb 24; 56(4):563–72
RNA editing and the mitochondrial cryptogenes of kinetoplastid protozoa. Simpson L, et al. **Cell** 1989 May 5;57(3):355–66 (66 ref.)
The gradient morphogen bicoid is a concentration-dependent transcriptional activator. Struhl G, et al. **Cell** 1989 Jun 30; 57(7):1259–73
Elevated recombination rates in transcriptionally active DNA. Thomas BJ, et al. **Cell** 1989 Feb 24;56(4):619–30
Germ line transmission and expression of a corrected HPRT gene produced by gene targeting in embryonic stem cells. Thompson S, et al. **Cell** 1989 Jan 27;56(2):313–21
Cooperative binding of steroid hormone receptors contributes to transcriptional synergism at target enhancer elements. Tsai SY, et al. **Cell** 1989 May 5;57(3):443–8
Transcription-driven supercoiling of DNA: direct biochemical evidence from in vitro studies. Tsao YP, et al. **Cell** 1989 Jan 13;56(1):111–8
Transcriptional activation by the v-myb oncogene and its cellular progenitor, c-myb. Weston K, et al. **Cell** 1989 Jul 14;58(1):85–93
Transcriptional activation by the Antennapedia and fushi tarazu proteins in cultured Drosophila cells. Winslow GM, et al. **Cell** 1989 Jun 16;57(6):1017–30
Transcriptional regulation by the immediate early protein of pseudorabies virus during in vitro nucleosome assembly. Workman JL, et al. **Cell** 1988 Oct 21;55(2):211–9
Transcription of methylated viral DNA by eukaryotic RNA polymerase II. Willis DB, et al. **Cell Biophys** 1989 Aug–Oct; 15(1–2):97–111
Expression of c-myc and c-Ha-ras oncogenes in human lymphoblastoid cells (Namalva). Mahmoudi M, et al. **Cell Mol Biol** 1989;35(1):75–80
Transfer of information from mRNA to chromosomes by reverse transcription in early development of goldfish eggs. Niu MC, et al. **Cell Mol Biol** 1989;35(3):333–45
Association of DNA topoisomerase I and RNA polymerase I: a possible role for topoisomerase I in ribosomal gene transcription. Rose KM, et al. **Chromosoma** 1988; 96(6):411–6
Proviral position effects: possible probes for genes that suppress transcription. Wyke JA, et al. **Ciba Found Symp** 1989;142:117–27; discussion 127–30
Mapping of the human renin transcription start site: evidence for a single functional promoter. Paul M, et al. **Clin Exp Hypertens [A]** 1988;10(6):1313–6
Transcriptional and post-transcriptional mechanisms are responsible for the increased expression of c-myc protooncogene in lymphocytes from patients with systemic lupus erythematosus. Eleftheriades EG, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):507–15
Jun: oncogene and transcriptional regulator. Ball AR Jr, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:687–93
Transcriptional regulation by the AP-1 family of enhancer-binding proteins: a nuclear target for signal transduction. Bohmann D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:695–700
Molecular analyses of gene products associated with the response of cells to mitogenic stimulation. Erikson RL, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:143–51
Cooperative and positional independent trans-activation domains of the human glucocorticoid receptor. Evans RM, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:813–8
Expression of wild-type and mutant subunits of the cAMP-dependent protein kinase. McKnight GS, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:111–9
Gene regulation by growth factors. Metz R, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:727–37
YAP1 encodes a yeast homolog of mammalian transcription factor AP-1. Moye-Rowley WS, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:711–7
Transcriptional regulation of c-fos. Prywes R, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:739–48
Response and binding elements for ligand-dependent positive transcription factors integrate positive and negative regulation of gene expression. Rosenfeld MG, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:545–56
Regulation of proto-oncogene fos: a paradigm for early response genes. Sassone-Corsi P, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:749–60
Types I and IV procollagen gene expression in cultured rat hepatocytes. Clement B, et al. **Coll Relat Res** 1988 Jul; 8(4):349–59
In situ hybridization analysis of the expression of the type II collagen gene in the developing chicken limb bud. Nah HD, et al. **Coll Relat Res** 1988 Jul;8(4):277–94
Transcription elements and factors of RNA polymerase B promoters of higher eukaryotes. Wasylyk B. **CRC Crit Rev Biochem** 1988;23(2):77–120 (384 ref.)
Functional relationship among TATA sequences, gene induction and transcription initiation in the beta-galactosidase, LAC4, gene from Kluyveromyces lactis. Ficca AG, et al. **Curr Genet** 1989 Apr;15(4):261–9
Molecular analysis of the transcripts encoding the light-harvesting chlorophyll a/b protein in Euglena gracilis: unusual size of the mRNA. Houlne G, et al. **Curr Genet** 1987;12(8):611–6
Initiation of rrn transcription in chloroplasts of Euglena gracilis bacillaris. McGarvey P, et al. **Curr Genet** 1988 Nov; 14(5):493–500
Identification in maize mitochondrial 26S rRNA of a short 5'-end sequence possibly involved in transcription initiation and processing. Maloney AP, et al. **Curr Genet** 1989 Mar; 15(3):207–12
Cotranscription of the genes encoding two P700 chlorophyll a apoproteins with the gene for ribosomal protein CS14: determination of the transcriptional initiation site by in vitro capping. Meng BY, et al. **Curr Genet** 1988 Oct; 14(4):395–400
Structure and expression of a split chloroplast gene from mustard (Sinapis alba): ribosomal protein gene rps16 reveals unusual transcriptional features and complex RNA maturation. Neuhaus H, et al. **Curr Genet** 1989 Jan; 15(1):63–70
Chloroplast and nuclear genomes of Chlamydomonas reinhardtii share homology with Escherichia coli genes for DNA replication, repair and transcription. Oppermann T, et al. **Curr Genet** 1989 Jan;15(1):39–46
Darkness and antibiotics increase the steady-state transcripts of the elongation factor gene (tuf) in Chlamydomonas reinhardtii. Silk GW, et al. **Curr Genet** 1988 Aug; 14(2):119–26
Two small open reading frames are co-transcribed with the pea chloroplast genes for the polypeptides of cytochrome b-559. Willey DL, et al. **Curr Genet** 1989 Mar;15(3):213–20
Electron microscopic autoradiographic analysis: evidence of RNA transcription along pachytene chromosomes of rad-4, him-4 and wild-type Caenorhabditis elegans. Lerner K, et al. **Cytobios** 1988;55(220):51–61
Alternative 5C actin transcripts are localized in different patterns during Drosophila embryogenesis. Burn TC, et al. **Dev Biol** 1989 Feb;131(2):345–55
Transcription in nematodes: early Ascaris embryos are transcriptionally active. Cleavinger PJ, et al. **Dev Biol** 1989 Jun;133(2):600–4
The mRNA encoding elongation factor 1-alpha (EF-1 alpha) is a major transcript at the midblastula transition in Xenopus. Krieg PA, et al. **Dev Biol** 1989 May;133(1):93–100
Transcriptional regulation of type X collagen during chondrocyte maturation [published erratum appears in Dev Biol 1989 Oct;135(2):462] LuValle P, et al. **Dev Biol** 1989 Jun;133(2):613–6
Expression of collagen type transcripts in chick embryonic bone detected by in situ cDNA-mRNA hybridization [published erratum appears in Dev Biol 1989 Aug;134(2):491] McDonald SA, et al. **Dev Biol** 1989 May; 133(1):221–34
Tissue-specific transcriptional control of alpha- and beta-tropomyosins in chicken muscle development. Meinnel T, et al. **Dev Biol** 1989 Feb;131(2):430–8
Regulation of mouse preimplantation development: inhibition of synthesis of proteins in the two-cell embryo that require transcription by inhibitors of cAMP-dependent protein kinase. Poueymirou WT, et al. **Dev Biol** 1989 Jun; 133(2):588–99
A Ca2+-dependent signal transduction system participates in coupling expression of some cAMP-dependent prespore genes to the cell surface receptor. Blumberg DD, et al. **Dev Genet** 1988;9(4–5):359–69 (32 ref.)
Characterization of two divergently transcribed Dictyostelium gene pairs and identification of G-rich sequence element lying between them with the characteristics of a basal promoter element. Driscoll DM, et al. **Dev Genet** 1988;9(4–5):455–68
Structure and expression of the cAMP cell-surface receptor. Saxe CL 3d, et al. **Dev Genet** 1988;9(4–5):227–35
Deactivation of gene expression upon the onset of development in dictyostelium discoideum. Singleton CK, et al. **Dev Genet** 1988;9(4–5):327–35
Pretranslational control of the levels of glyoxysomal protein gene expression by the embryonic axis in maize. Skadsen RW, et al. **Dev Genet** 1989;10(1):1–10
Transcription of the segment-polarity gene wingless in the imaginal discs of Drosophila, and the phenotype of a pupal-lethal wg mutation. Baker NE. **Development** 1988 Mar;102(3):489–97
Localization of transcripts from the wingless gene in whole Drosophila embryos. Baker NE. **Development** 1988 Jun; 103(2):289–98
Dietary components modulate yolk protein gene transcription in Drosophila melanogaster. Bownes M, et al. **Development** 1988 May;103(1):119–28
Mouse homeobox gene transcripts occupy different but overlapping domains in embryonic germ layers and organs: a comparison of Hox-3.1 and Hox-1.5. Gaunt SJ. **Development** 1988 May;103(1):135–44
Pepsinogen gene transcription induced in heterologous epithelial-mesenchymal recombinations of chicken endoderms and glandular stomach mesenchyme. Hayashi K, et al. **Development** 1988 Aug;103(4):725–31
Testis-specific transcripts detected by a human Y-DNA-derived probe. Leroy P, et al. **Development** 1987; 101 Suppl:177–83
Transcripts of alpha-cardiac and alpha-skeletal actins are early markers for myogenesis in the mouse embryo. Sassoon DA, et al. **Development** 1988 Sep;104(1):155–64
Regulation of human IGF-II transcription in fetal and adult tissues. Schofield PN, et al. **Development** 1987 Dec; 101(4):793–803
Spatial- and temporal-restricted pattern for amelogenin gene expression during mouse molar tooth organogenesis. Snead ML, et al. **Development** 1988 Sep;104(1):77–85
Patterns of mRNA prevalence and expression of B1 and B2 transcripts in early mouse embryos. Taylor KD, et al. **Development** 1987 Dec;101(4):877–92
Highly efficient beta globin transcription in the absence of both a viral enhancer and erythroid factors. Walmsley ME, et al. **Development** 1987 Dec;101(4):815–27
Requirements for X-linked zygotic gene activity during cellularization of early Drosophila embryos. Wieschaus E, et al. **Development** 1988 Nov;104(3):483–93
Coordinate decrease of tissue insulinlike growth factor I posttranscriptional alternative mRNA transcripts in diabetes mellitus. Fagin JA, et al. **Diabetes** 1989 Apr; 38(4):428–34
Tissue-specific alterations in somatostatin mRNA accumulation in streptozocin-induced diabetes. Papachristou DN, et al. **Diabetes** 1989 Jun;38(6):752–7
Impaired estrogen-induced uterine insulin-like growth factor-I gene expression in the streptozotocin diabetic rat. Murphy LJ. **Diabetologia** 1988 Nov;31(11):842–7
Transcriptional regulation of the gene encoding the 78-kD glucose-regulated protein GRP78 in mouse sertoli cells: binding of specific factor(s) to the GRP78 promoter. Day AR, et al. **DNA** 1989 Jun;8(5):301–10
A cis-acting sequence within the rat ribosomal DNA enhancer region can modulate RNA polymerase II-directed transcription of the metallothionein I gene in vitro. Dixit A, et al. **DNA** 1989 Jun;8(5):311–20
Processing of the primary transcript for the rat growth hormone gene in vivo. Gardner DG, et al. **DNA** 1988 Oct; 7(8):537–44
Sequence of a chicken phenobarbital-inducible cytochrome P450 cDNA: regulation of two P450 mRNAs transcribed from different genes. Hansen AJ, et al. **DNA** 1989 Apr; 8(3):179–91
Differential regulation of closely related members of the hsp16 gene family in Caenorhabditis elegans. Jones D, et al. **DNA** 1989 Sep;8(7):481–90
Transcriptional start site in the mouse Cyp1a1 (cytochrome P1450) gene. Jones JE, et al. **DNA** 1989 Sep;8(7):527–34
Transduction of the human insulin gene via retroviral vectors fails to yield spliced transcripts. Perkins AS, et al. **DNA** 1989 Jan–Feb;8(1):59–68
Transcriptional activation of an intermediate filament protein gene in mice with retinal dystrophy. Sarthy PV, et al. **DNA** 1989 Jul–Aug;8(6):437–46
Nucleotide sequence of the S-acyl fatty acid synthase thioesterase gene and its tissue-specific expression. Sasaki GC, et al. **DNA** 1988 Sep;7(7):449–57
Expression of the 31-kD stress protein in rat myoblasts and hepatocytes. Shuman J, et al. **DNA** 1988 Sep;7(7):475–82
Complementation between two cell lines lacking kappa enhancer activity: implications for the developmental control of immunoglobulin transcription. Atchison ML, et al. **EMBO J** 1988 Dec 20;7(13):4213–20
Proteins encoded by a complex chloroplast transcription unit are each translated from both monocistronic and

polycistronic mRNAs. Barkan A. **EMBO J** 1988 Sep; 7(9):2637–44

Yeast upstream activator protein GCN4 can stimulate transcription when its binding site replaces the TATA element. Chen W, et al. **EMBO J** 1989 Jan;8(1):261–8

Proteins bound at adjacent DNA elements act synergistically to regulate human proenkephalin cAMP inducible transcription. Comb M, et al. **EMBO J** 1988 Dec 1; 7(12):3793–805

The human beta-globin promoter; nuclear protein factors and erythroid specific induction of transcription. deBoer E, et al. **EMBO J** 1988 Dec 20;7(13):4203–12

Evidence for a nuclear factor(s), IRF-1, mediating induction and silencing properties to human IFN-beta gene regulatory elements. Fujita T, et al. **EMBO J** 1988 Nov; 7(11):3397–405

Human immunodeficiency virus type 1 LTR TATA and TAR region sequences required for transcriptional regulation. Garcia JA, et al. **EMBO J** 1989 Mar;8(3):765–78

The RNA binding protein La influences both the accuracy and the efficiency of RNA polymerase III transcription in vitro. Gottlieb E, et al. **EMBO J** 1989 Mar;8(3):841–50

Function of the mammalian La protein: evidence for its action in transcription termination by RNA polymerase III. Gottlieb E, et al. **EMBO J** 1989 Mar;8(3):851–61

Sequence-specific and general transcriptional activation by the bovine papillomavirus-1 E2 trans-activator require an N-terminal amphipathic helix-containing E2 domain. Haugen TH, et al. **EMBO J** 1988 Dec 20;7(13):4245–53

A rabbit beta-globin polyadenylation signal directs efficient termination of transcription of polyomavirus DNA. Lanoix J, et al. **EMBO J** 1988 Aug;7(8):2515–22

In vitro synthesis of vertebrate U1 snRNA. Lund E, et al. **EMBO J** 1989 Jan;8(1):287–92

Suppression in Drosophila: su(Hw) and su(f) gene products interact with a region of gypsy (mdg4) regulating its transcriptional activity. Mazo AM, et al. **EMBO J** 1989 Mar;8(3):903–11

A novel spatial transcription pattern associated with the segmentation gene, giant, of Drosophila. Mohler J, et al. **EMBO J** 1989 May;8(5):1539–48

The CArG promoter sequence is necessary for muscle-specific transcription of the cardiac actin gene in Xenopus embryos. Mohun TJ, et al. **EMBO J** 1989 Apr; 8(4):1153–61

Functional analysis of alternatively spliced tyrosinase gene transcripts. Müller G, et al. **EMBO J** 1988 Sep;7(9):2723–30

Transcription in the reverse orientation at either terminus of the adenovirus type 5 genome. Ooyama S, et al. **EMBO J** 1989 Mar;8(3):863–8

The genes for the alpha 1(IV) and alpha 2(IV) chains of human basement membrane collagen type IV are arranged head-to-head and separated by a bidirectional promoter of unique structure. Pöschl E, et al. **EMBO J** 1988 Sep; 7(9):2687–95

Multiple transcripts of the mouse tyrosinase gene are generated by alternative splicing. Ruppert S, et al. **EMBO J** 1988 Sep;7(9):2715–22

Directionality of DnaA protein/DNA interaction. Active orientation of the DnaA protein/dnaA box complex in transcription termination. Schaefer C, et al. **EMBO J** 1989 May;8(5):1609–13

Regulation of the bgl operon of Escherichia coli by transcriptional antitermination. Schnetz K, et al. **EMBO J** 1988 Oct;7(10):3271–7

Differential regulation of the two transcripts from the Drosophila gap segmentation gene hunchback. Schröder C, et al. **EMBO J** 1988 Sep;7(9):2881–7

A point mutation in the CYC1 UAS1 creates a new combination of regulatory elements that activate transcription synergistically. Sousa R, et al. **EMBO J** 1989 Jun;8(6):1801–8

In vivo and in vitro expression of U7 snRNA genes: cis- and trans-acting elements required for RNA polymerase II-directed transcription. Southgate C, et al. **EMBO J** 1989 Feb;8(2):539–49

Herpes simplex virus type 1 latency-associated transcripts are evidently not essential for latent infection. Steiner I, et al. **EMBO J** 1989 Feb;8(2):505–11

Synergistic action of the glucocorticoid receptor with transcription factors. Strähle U, et al. **EMBO J** 1988 Nov; 7(11):3389–95

Positionally exact initiation is required for the formation of a stable RNA polymerase II transcription complex in vivo. Tebb G, et al. **EMBO J** 1988 Dec 1;7(12):3785–92

Expression of human estrogen receptor mutants in Xenopus oocytes: correlation between transcriptional activity and ability to form protein-DNA complexes. Theulaz I, et al. **EMBO J** 1988 Jun;7(6):1653–60

The Epstein-Barr virus early protein EB1 activates transcription from different responsive elements including AP-1 binding sites. Urier G, et al. **EMBO J** 1989 May; 8(5):1447–53

Transcripts from the frameshifted MURF3 gene from Crithidia fasciculata are edited by U insertion at multiple sites. van der Spek H, et al. **EMBO J** 1988 Aug; 7(8):2509–14

Derepression of a novel class of vaccinia virus genes upon DNA replication. Vos JC, et al. **EMBO J** 1988 Nov; 7(11):3487–92

Transforming but not immortalizing oncogenes activate the transcription factor PEA1. Wasylyk C, et al. **EMBO J** 1988 Aug;7(8):2475–83

The transcriptional activation function located in the hormone-binding domain of the human oestrogen receptor is not encoded in a single exon. Webster NJ, et al. **EMBO J** 1989 May;8(5):1441–6

Fos C-terminal mutations block down-regulation of c-fos transcription following serum stimulation. Wilson T, et al. **EMBO J** 1988 Dec 20;7(13):4193–202

Regulation of mRNAs for human steroidogenic enzymes. Miller WL. **Endocr Res** 1989;15(1-2):1–16 (47 ref.)

Insulin-like growth factor I messenger ribonucleic acids with alternative 5'-untranslated regions are differentially expressed during development of the rat. Adamo M, et al. **Endocrinology** 1989 Jun;124(6):2737–44

Differential expression of placental lactogen-II and prolactin-like protein-A in the rat chorioallantoic placenta. Campbell WJ, et al. **Endocrinology** 1989 Sep;125(3):1565–74

Aromatase cytochrome P450 and cholesterol side-chain cleavage cytochrome P450 in corpora lutea of pregnant rats: diverse regulation by peptide and steroid hormones. Hickey GJ, et al. **Endocrinology** 1989 Sep;125(3):1673–82

A dominant phenocopy of hypopituitarism in transgenic mice resulting from central nervous system synthesis of human growth hormone. Hollingshead PG, et al. **Endocrinology** 1989 Sep;125(3):1556–64

Expression of alpha-subunit and luteinizing hormone (LH) beta messenger ribonucleic acid in the rat during lactation and after pup removal: relationship to pituitary gonadotropin-releasing hormone receptors and pulsatile LH secretion. Lee LR, et al. **Endocrinology** 1989 Feb; 124(2):776–82

Insulin-like growth factor I gene expression in the rat ovary is confined to the granulosa cells of developing follicles. Oliver JE, et al. **Endocrinology** 1989 Jun;124(6):2671–9

Transforming growth factor-alpha gene expression and action in the seminiferous tubule: peritubular cell-Sertoli cell interactions. Skinner MK, et al. **Endocrinology** 1989 Feb;124(2):845–54

Lactotransferrin gene expression in the mouse uterus and mammary gland. Teng CT, et al. **Endocrinology** 1989 Feb; 124(2):992–9

cDNA-directed expression of rat testosterone 7 alpha-hydroxylase using the modified vaccinia virus, T7-RNA-polymerase system and evidence for 6 alpha-hydroxylation and delta 6-testosterone formation. Aoyama T, et al. **Eur J Biochem** 1989 May 1;181(2):331–6

Hormone-induced expression of the CHS1 gene from Saccharomyces cerevisiae. Appeltauer U, et al. **Eur J Biochem** 1989 Apr 15;181(1):243–7

Effect of DNA conformation on the transcription of mitochondrial DNA. Barat-Gueride M, et al. **Eur J Biochem** 1989 Aug 1;183(2):297–302

Possible control of transcript levels by chlorophyll precursors in Chlamydomonas. Johanningmeier U. **Eur J Biochem** 1988 Nov 1;177(2):417–24

Mouse U3-RNA-processed pseudogenes are nonrandomly integrated into genomic DNA. Implications for the process of retrogene formation. Mazan S, et al. **Eur J Biochem** 1989 May 15;181(3):599–605

Enhancer sequences and the regulation of gene transcription. Müller MM, et al. **Eur J Biochem** 1988 Oct 1;176(3):485–95 (217 ref.)

Factors involved in preferential transcription of the fibroin gene. Takiya S, et al. **Eur J Biochem** 1989 Jan 15;179(1):1–9

Accumulation of carbamoylphosphate-synthetase and phosphoenolpyruvate-carboxykinase mRNA in embryonic rat hepatocytes. Evidence for translational control during the initial phases of hepatocyte-specific gene expression in vitro. van Roon MA, et al. **Eur J Biochem** 1988 Dec 1;178(1):191–6

Transcription of the alpha A-globin gene of the duck. Development of a homologous in vitro system and identification of trans-acting factors. Weingart S, et al. **Eur J Biochem** 1989 Jul 15;183(1):145–53

The abnormal T lymphocytes in lpr mice transcribe interferon-gamma and tumor necrosis factor-alpha genes spontaneously in vivo. Murray L, et al. **Eur J Immunol** 1989 Mar;19(3):563–5

Expression of T cell receptor gamma-chain in murine cytotoxic T cells: analysis of a highly transcribed nonrearranged gene cluster. Schulz M, et al. **Exp Cell Biol** 1988;56(4):181–9

The block of thyroglobulin synthesis, which occurs upon transformation of rat thyroid epithelial cells, is at the transcriptional level and it is associated with methylation of the 5' flanking region of the gene. Berlingieri MT, et al. **Exp Cell Res** 1989 Aug;183(2):277–83

Effects of anti-C23 (nucleolin) antibody on transcription of ribosomal DNA in Chironomus salivary gland cells. Egyhazi E, et al. **Exp Cell Res** 1988 Oct;178(2):264–72

Regulation of the S100 protein and GFAP genes is mediated by two common mechanisms in RT4 neuro-glial cell lines. Freeman MR, et al. **Exp Cell Res** 1989 Jun;182(2):370–83

Myeloma kappa gene transcription is blocked upon fusion with fibroblasts. Junker S, et al. **Exp Cell Res** 1989 Jan; 180(1):63–71

Transcriptional and post-transcriptional regulation of c-myc, c-myb, and p53 during proliferation and differentiation of murine erythroleukemia cells treated with DFMO and DMSO. Klinken SP, et al. **Exp Cell Res** 1988 Oct; 178(2):185–98

Competition between DNA templates injected into Xenopus laevis oocytes. Mancebo MJ, et al. **Exp Cell Res** 1988 Oct; 178(2):469–78

Promoter specificity and modulation of RNA polymerase II transcription. Saltzman AG, et al. **FASEB J** 1989 Apr; 3(6):1723–33 (70 ref.)

The interaction of nuclear proteins with essential promoter element of the chicken cardiac myosin light chain 2 gene is involved in muscle-specific transcription. Braun T, et al. **FEBS Lett** 1988 Nov 7;239(2):309–12

Expression of the glyceraldehyde-3-phosphate dehydrogenase gene from the extremely thermophilic archaebacterium Methanothermus fervidus in E. coli. Enzyme purification, crystallization, and preliminary crystal data. Fabry S, et al. **FEBS Lett** 1988 Sep 12; 237(1-2):213–7

Stimulation of transcription from accurate initiation sites by purified S-II. Hirai H, et al. **FEBS Lett** 1988 Sep 26; 238(1):119–22

The cDNA clone for strictosidine synthase from Rauvolfia serpentina. DNA sequence determination and expression in Escherichia coli. Kutchan TM, et al. **FEBS Lett** 1988 Sep 12;237(1-2):40–4

The testicular transcript of the angiotensin I-converting enzyme encodes for the ancestral, non-duplicated form of the enzyme. Lattion AL, et al. **FEBS Lett** 1989 Jul 31; 252(1-2):99–104

The high-molecular-mass kininogen deficient rat expresses all kininogen mRNA species, but does not export the high-molecular-mass kininogen synthesized. Lattion AL, et al. **FEBS Lett** 1988 Oct 24;239(1):59–64

In vitro transcription of the mouse whey acidic protein promoter is affected by upstream sequences. Lubon H, et al. **FEBS Lett** 1989 Jul 17;251(1-2):173–6

Yeast adenylate kinase is transcribed constitutively from a promoter in the short intergenic region to the histone H2A-1 gene. Oechsner U, et al. **FEBS Lett** 1988 Dec 19; 242(1):187–93

Processing of transcripts of a dimeric tRNA gene in yeast uses the nuclease responsible for maturation of the 3' termini upon 5 S and 37 S precursor rRNAs. Piper PW, et al. **FEBS Lett** 1989 Jul 3;250(2):311–6

Clones containing variant forms of complete human rRNA genes. Characterization and sequence of their transcription initiation region. Renalier MH, et al. **FEBS Lett** 1989 Apr 24;247(2):298–302

Structure of the 5'-external transcribed spacer of the human ribosomal RNA gene. Renalier MH, et al. **FEBS Lett** 1989 Jun 5;249(2):279–84

Alpha- and beta-tubulin mRNAs of Trypanosoma cruzi originate from a single multicistronic transcript. Soares CM, et al. **FEBS Lett** 1989 Jul 3;250(2):497–502

Transcriptional characteristics of in vitro assembled chromatin assayed by microinjection into Xenopus laevis oocytes. Steinbeisser H, et al. **FEBS Lett** 1989 Jun 5; 249(2):367–70

Stimulation of transcription from different RNA polymerase II promoters by high mobility group proteins 1 and 2. Tremethick DJ, et al. **FEBS Lett** 1989 Jan 2;242(2):346–50

Interaction of cytosol fractions containing activated glucocorticoid-receptor complexes from rat liver and thymus with heterologous nuclei: effects on transcription. Tzavaras TJ, et al. **FEBS Lett** 1989 Jun 19;250(1):30–4

Analysis of 3'-untranslated regions of seven c-myc genes reveals conserved elements prevalent in post-transcriptionally regulated genes. Vriz S, et al. **FEBS Lett** 1989 Jul 17;251(1-2):201–6

Transcription initiation and a RNA polymerase binding site upstream of the purE gene of the archaebacterium Methanobacterium thermosautotrophicum strain delta H. Brown JW, et al. **FEMS Microbiol Lett** 1989 Jul 15; 51(1):131–6

Cationic control of gene transcription in tumour cells. Kaz'min SD, et al. **Folia Biol (Praha)** 1989;35(3):143–51

Papers presented at the EMBO/INSERM Workshop on Regulation of Gene Expression by RNA Structure and Anti-messengers. Les Arcs, Savoie (France), 28 February–4 March 1988. **Gene** 1988 Dec 10;72(1-2):1–376

Mechanism of puf mRNA degradation: the role of an intercistronic stem-loop structure. Belasco JG, et al. **Gene** 1988 Dec 10;72(1-2):109–17

Expression of naturally occurring RNA molecules complementary to the murine L27' ribosomal protein mRNA. Belhumeur P, et al. **Gene** 1988 Dec 10; 72(1-2):277–85

Negative and positive promoter elements contribute to tissue specificity of apolipoprotein B expression. Carlsson P, et al. **Gene** 1989 Apr 15;77(1):113–21

Analysis of the promoters and transcripts involved in IS10 anti-sense RNA control. Case CC, et al. **Gene** 1988 Dec 10;72(1-2):219–36

Anti-IgM antibodies inhibit IgM expression in lipopolysaccharide-stimulated normal murine B-cells: study of RNA metabolism and translation. Chen U. **Gene** 1988 Dec 10;72(1-2):209–17

Probable cloning artefacts previously interpreted as unusual leader sequences of rodent ornithine decarboxylase mRNAs—a cautionary tale. Coffino P. **Gene** 1988 Sep 30; 69(2):365–8

A general method for the construction of recombinant vaccinia viruses expressing multiple foreign genes. Coupar BE, et al. **Gene** 1988 Aug 15;68(1):1–10

Promoter inhibition by DNA methylation: a reversible signal.

Doerfler W, et al. Gene 1988 Dec 25;74(1):129–33 (18 ref.)
Evidence that mouse promotion–sensitivity gene pro1 is transcribed by RNA polymerase III. Garrity RR, et al. Gene 1988 Aug 15;68(1):63–72
Coliphage lambda to terminator lowers the stability of messenger RNA in Escherichia coli hosts. Gross G, et al. Gene 1988 Dec 10;72(1–2):119–28
Nucleotide sequence, transcription and deduced function of a gene involved in polyketide antibiotic synthesis in Streptomyces coelicolor. Hallam SE, et al. Gene 1988 Dec 30;74(2):305–20
Antisense RNA does not significantly affect expression of the galK gene of Escherichia coli or the N gene of coliphage lambda. Hasan N, et al. Gene 1988 Dec 10; 72(1–2):247–52
Repetitive extragenic palindromic sequences, mRNA stability and gene expression: evolution by gene conversion? A review. Higgins CF, et al. Gene 1988 Dec 10;72(1–2):3–14 (45 ref.)
Antisense RNA: its functions and applications in gene regulation—a review. Inouye M. Gene 1988 Dec 10; 72(1–2):25–34 (56 ref.)
Promoters and transcription of the plasmid–mediated citrate–utilization system in Escherichia coli. Ishiguro N, et al. Gene 1988 Sep 7;68(2):181–92
Transcript characterisation, gene disruption and nucleotide sequence of the Saccharomyces cerevisiae WH12 gene. Kelly DE, et al. Gene 1988 Jun 30;66(2):205–13
Cooperative interactions between the GRP78 enhancer and promoter elements in hamster fibroblasts. Kim YK, et al. Gene 1989 Apr 15;77(1):123–31
RNA synthesis: strategies for the use of bacteriophage RNA polymerases. Krupp G. Gene 1988 Dec 10;72(1–2):75–89
A plasmid vector for the isolation of transcriptional terminators in Bacillus subtilis. Kupsch J. Gene 1989 May 15;78(1):179–82
Nucleotide sequence and transcriptional analysis of a third function (Flm) involved in F–plasmid maintenance. Loh SM, et al. Gene 1988 Jun 30;66(2):259–68
High–level expression of the simian virus 40 genes LP1, VP1 and VP2 as fusion proteins in Escherichia coli. Lowman HB, et al. Gene 1988 Aug 15;68(1):23–33
Rho–dependent transcription termination in the tyrT operon of Escherichia coli. Madden KA, et al. Gene 1989; 76(2):271–80
Structure and neural expression of a zebrafish homeobox sequence. Njølstad PR, et al. Gene 1988 Dec 15;73(1):33–46
Expression and secretion of interferon–alpha 1 by Streptomyces lividans: use of staphylokinase signals and amplification of a neo gene. Noack D, et al. Gene 1988 Aug 15;68(1):53–62
Identification of a site that mediates transcriptional response of the human beta–actin gene to serum factors. Orita S, et al. Gene 1989 Jan 30;75(1):13–9
The Drosophila hsp70 message is rapidly degraded at normal temperatures and stabilized by heat shock. Petersen R, et al. Gene 1988 Dec 10;72(1–2):161–8
Role of RNA structures in c–myc and c–fos gene regulations. Piechaczyk M, et al. Gene 1988 Dec 10;72(1–2):287–95
A temporally expressed gene from Schwanniomyces alluvius and detection of homologous sequences in other yeasts. Prakash K, et al. Gene 1988 Dec 15;73(1):131–40
Differential expression of the human glucocerebrosidase–coding gene. Reiner O, et al. Gene 1988 Dec 20;73(2):469–78
Transcription termination in animal viruses and cells. Resnekov O, et al. Gene 1988 Dec 10;72(1–2):91–104
Nucleotide sequence and transcription of a rat tRNA(Phe) gene and a neighboring Alu–like element. Rosen A, et al. Gene 1988 Sep 30;69(2):275–85
Symmetric transcription of bacteriophage T4 base plate genes. Santoro M, et al. Gene 1988 Dec 10;72(1–2):241–5
Multiple transcription terminators in E1a and E1b genes of adenovirus type 5. Sato K, et al. Gene 1988 Nov 30; 71(2):371–9
Symmetric transcription of the replication origin of rat mitochondrial DNA. Sbisà E, et al. Gene 1988 Dec 10; 72(1–2):309–10
Termination of the Escherichia coli asnC transcript. The DnaA protein/dnaA box complex blocks transcribing RNA polymerase. Schaefer C, et al. Gene 1988 Dec 20; 73(2):347–54
Transcriptional regulation and gene arrangement of Escherichia coli, Citrobacter freundii and Salmonella typhimurium biotin operons. Shiuan D, et al. Gene 1988 Jul 30;67(2):203–11
Nucleotide sequence analysis and expression studies of a chloramphenicol–acetyltransferase–coding gene from Clostridium perfringens. Steffen C, et al. Gene 1989 Feb 20;75(2):349–54
Flanking sequences are required for efficient transcription and stable complex formation for the human tRNAiMet3–coding gene. Wahab SZ, et al. Gene 1989 Apr 30;77(2):361–70
Transcription from the Escherichia coli melR promoter is dependent on the cyclic AMP receptor protein. Webster C, et al. Gene 1988 Sep 7;68(2):297–305
Isolation of a phytoalexin–detoxification gene from the plant pathogenic fungus Nectria haematococca by detecting its expression in Aspergillus nidulans. Weltring KM, et al. Gene 1988 Sep 7;68(2):335–44
Transcription of mammalian genes in vitro. Manley JL, et al. Gene Amplif Anal 1981;2:369–82
A small–scale procedure for preparation of nuclear extracts that support efficient transcription and pre–mRNA splicing. Lee KA, et al. Gene Anal Tech 1988 Mar–Apr;5(2):22–31
Transcriptional control of Drosophila fushi tarazu zebra stripe expression. Dearolf CR, et al. Genes Dev 1989 Mar; 3(3):384–98
The promoter–proximal rDNA terminator augments initiation by preventing disruption of the stable transcription complex caused by polymerase read–in [published erratum appears in Genes Dev 1989 Apr;3(4):584] Henderson SL, et al. Genes Dev 1989 Feb; 3(2):212–23
Sp1 transcription factor binds DNA and activates transcription even when the binding site is CpG methylated. Höller M, et al. Genes Dev 1988 Sep; 2(9):1127–35
A bacterial environmental sensor that functions as a protein kinase and stimulates transcriptional activation. Igo MM, et al. Genes Dev 1989 May;3(5):598–605
CpG methylation of the cAMP–responsive enhancer/promoter sequence TGACGTCA abolishes specific factor binding as well as transcriptional activation. Iguchi–Ariga SM, et al. Genes Dev 1989 May;3(5):612–9
Unusual transcriptional and translational features of the aminoglycoside phosphotransferase gene (aph) from Streptomyces fradiae. Janssen GR, et al. Genes Dev 1989 Mar;3(3):415–29
Structural arrangements of transcription control domains within the 5'–untranslated leader regions of the HIV–1 and HIV–2 promoters. Jones KA, et al. Genes Dev 1988 Sep; 2(9):1101–14
A Drosophila rRNA gene located in euchromatin is active in transcription and nucleolus formation. Karpen GH, et al. Genes Dev 1988 Dec;2(12B):1745–63
3'–end formation of mouse pre–rRNA involves both transcription termination and a specific processing reaction. Kuhn A, et al. Genes Dev 1989 Feb;3(2):224–31
Induction of proto–oncogene fos transcription through the adenylate cyclase pathway: characterization of a cAMP–responsive element. Sassone–Corsi P, et al. Genes Dev 1988 Dec;2(12a):1529–38
Structure, sequence, and position of the stem–loop in tar determine transcriptional elongation by tat through the HIV–1 long terminal repeat. Selby MJ, et al. Genes Dev 1989 Apr;3(4):547–58
Nuclear factor E2F mediates basic transcription and trans–activation by E1a of the human MYC promoter. Thalmeier K, et al. Genes Dev 1989 Apr;3(4):527–36
Promoter occlusion prevents transcription of adenovirus polypeptide IX mRNA until after DNA replication. Vales LD, et al. Genes Dev 1989 Jan;3(1):49–59
Prepupal differentiation of Drosophila imaginal discs: identification of four genes whose transcripts accumulate in response to a pulse of 20–hydroxyecdysone. Fechtel K, et al. Genetics 1988 Oct;120(2):465–74
Studies on the expression and evolution of the glycogen phosphorylase gene family in the rat. Crerar MM, et al. Genome 1988 Aug;30(4):582–90
The baboon apolipoprotein E gene: structure, expression, and linkage with the gene for apolipoprotein C–1. Hixson JE, et al. Genomics 1988 May;2(4):315–23
The effect of hypophysectomy on inhibin production by adult rat ovaries: changes in ovarian inhibin gene expression and serum inhibin. Davis SR, et al. Gynecol Endocrinol 1988 Sep;2(3):223–32
Analysis of hepatitis B virus transcripts in infected human livers. Su TS, et al. Hepatology 1989 Feb;9(2):180–5
Amplification and overexpression of the P–glycoprotein genes and differential amplification of three other genes in SEWA murine multidrug–resistant cells. Ståhl F, et al. Hereditas 1988;108(2):251–8
Variability of human rRNA genes: inheritance and nonrandom chromosomal distribution of structural variants of nontranscribed spacer sequences. Garkavtsev IV, et al. Hum Genet 1988 Dec;81(1):31–7
Molecular mechanisms of induction of transcription of beta–actin gene by tumour promoters and serum factors. Kakunaga T, et al. IARC Sci Publ 1988;(92):90–101 (30 ref.)
Transcriptional regulation alone does not explain the constitutive expression of the interleukin 2 receptor (Tac/L–chain) in HTLV–1 infected cells. Kanamori H, et al. Immunol Lett 1989 Mar;20(4):293–8
The expression of immunoglobulin genes. Neuberger MS, et al. Immunol Today 1988 Sep;9(9):278–81 (53 ref.)
Interaction energy studies on 6–azapyrimidine antimetabolites during transcription process. Ojha RP, et al. Indian J Biochem Biophys 1988 Jun;25(3):237–43
Transcriptive activity of right arm of 4th chromosome in Drosophila melanogaster in different doses and problem of autosomal dosage compensation. Ghosh AK, et al. Indian J Exp Biol 1988 May;26(5):329–32
Transcriptional regulation of the protective antigen gene of Bacillus anthracis. Bartkus JM, et al. Infect Immun 1989 Aug;57(8):2295–300
Evidence for direct regulation of diphtheria toxin gene transcription by an Fe2+–dependent DNA–binding repressor, DtoxR, in Corynebacterium diphtheriae. Fourel G, et al. Infect Immun 1989 Oct;57(10):3221–5
Flagellin expression in Campylobacter jejuni is regulated at the transcriptional level. Nuijten PJ, et al. Infect Immun 1989 Apr;57(4):1084–8
Effect of age and busulphan treatment on the hsp70 gene–related transcript level in rat testes. Krawczyk Z, et al. Int J Androl 1989 Feb;12(1):72–9
Putative elements in the vicinity of viral transcription initiation sites. Nussinov R. Int J Biochem 1988; 20(7):721–30
Characterization of immunoglobulin mRNA expression in Burkitt lymphoma cell lines. Anker R, et al. Int J Cancer 1989 May 15;43(5):930–5
A functional and phenotypic comparison of murine natural killer (NK) cells and lymphokine–activated killer (LAK) cells. Hoskin DW, et al. Int J Cancer 1989 May 15; 43(5):940–8
Partial transcription map of Marek's disease herpesvirus in lytically infected cells and lymphoblastoid cell lines. Schat KA, et al. Int J Cancer 1989 Jul 15;44(1):101–9
Urokinase–type plasminogen activator biosynthesis is induced by the EJ–Ha–ras oncogene in CL26 mouse colon carcinoma cells. Testa JE, et al. Int J Cancer 1989 May 15;43(5):816–22
Role of the c–fos gene expression on the mitogenic response in EL2 rat fibroblasts. Di Francesco P, et al. Int J Tissue React 1988;10(5):311–9
Transcriptional activity of the herpes simplex virus genome during establishment, maintenance, and reactivation of in vitro virus latency. Scheck AC, et al. Intervirology 1989; 30(3):121–36
Presence of erythroid and nonerythroid spectrin transcripts in human lens and cerebellum. Yoon SH, et al. Invest Ophthalmol Vis Sci 1989 Aug;30(8):1860–6
Transcriptional regulation of decreased protein synthesis during skeletal muscle unloading. Howard G, et al. J Appl Physiol 1989 Mar;66(3):1093–8
Structural and functional analysis of transcriptional control of the Rhodobacter capsulatus puf operon. Adams CW, et al. J Bacteriol 1989 Jan;171(1):473–82
Cloning and expression in Escherichia coli of genes encoding a multiprotein complex involved in secretion of proteins from Staphylococcus aureus. Adler LA, et al. J Bacteriol 1988 Nov;170(11):5337–43
Identification, cloning, and expression of bolA, an ftsZ–dependent morphogene of Escherichia coli. Aldea M, et al. J Bacteriol 1988 Nov;170(11):5169–76
Distribution of 5'–triphosphate termini on the mRNA of Escherichia coli. Bieger CD, et al. J Bacteriol 1989 Jan; 171(1):141–7
Analysis of the transcriptional unit encoding the genes for rubredoxin (rub) and a putative rubredoxin oxidoreductase (rbo) in Desulfovibrio vulgaris Hildenborough. Brumlik MJ, et al. J Bacteriol 1989 Sep;171(9):4996–5004
Temporal expression of transcription and relative copy number of plasmid pSFB–1 in Scytalidium flavo–brunneum. Caprioglio DR, et al. J Bacteriol 1989 Sep;171(9):4876–80
Altered transcriptional patterns affecting several metabolic pathways in strains of Salmonella typhimurium which overexpress the fructose regulon. Chin AM, et al. J Bacteriol 1989 May;171(5):2424–34
Cloning and expression of genes encoding pheromone–inducible antigens of Enterococcus (Streptococcus) faecalis. Christie PJ, et al. J Bacteriol 1988 Nov;170(11):5161–8
Features of the rho–dependent transcription termination polar element within the hisG cistron of Salmonella typhimurium. Ciampi MS, et al. J Bacteriol 1989 Aug; 171(8):4472–8
Induction of anaerobic gene expression in Rhodobacter capsulatus is not accompanied by a local change in chromosomal supercoiling as measured by a novel assay. Cook DN, et al. J Bacteriol 1989 Sep;171(9):4836–43
Control of mucoidy in Pseudomonas aeruginosa: transcriptional regulation of algR and identification of the second regulatory gene, algQ. Deretic V, et al. J Bacteriol 1989 Jul;171(7):3680–8
appR gene product activates transcription of microcin C7 plasmid genes. Díaz–Guerra L, et al. J Bacteriol 1989 May; 171(5):2906–8
Identification of promoter mutants defective in growth–rate–dependent regulation of rRNA transcription in Escherichia coli. Dickson RR, et al. J Bacteriol 1989 Sep;171(9):4862–70
Regulation of ompC and ompF expression in Escherichia coli in the absence of envZ. Forst S, et al. J Bacteriol 1988 Nov;170(11):5080–5
Overexpression of N antitermination proteins of bacteriophages lambda, 21, and P22: loss of N protein specificity. Franklin NC, et al. J Bacteriol 1989 May; 171(5):2513–22
Transcription mapping of the Escherichia coli chromosome by electron microscopy. French SL, et al. J Bacteriol 1989 Aug;171(8):4207–16
Transcription of the isoamylase gene (iam) in Pseudomonas amyloderamosa SB–15. Fujita M, et al. J Bacteriol 1989 Aug;171(8):4320–5
DNA sequence, products, and transcriptional pattern of the genes involved in production of the DNA replication inhibitor microcin B17. Genilloud O, et al. J Bacteriol 1989 Feb;171(2):1126–35
Acinetobacter calcoaceticus genes involved in biosynthesis of the coenzyme pyrrolo–quinoline–quinone: nucleotide sequence and expression in Escherichia coli K–12. Goosen

N, et al. J Bacteriol 1989 Jan;171(1):447–55
Homologous metalloregulatory proteins from both gram–positive and gram–negative bacteria control transcription of mercury resistance operons. Helmann JD, et al. J Bacteriol 1989 Jan;171(1):222–9
Rhizobium meliloti regulatory gene fixJ activates transcription of R. meliloti nifA and fixK genes in Escherichia coli. Hertig C, et al. J Bacteriol 1989 Mar; 171(3):1736–8
Nucleotide sequence and transcriptional analysis of the Streptomyces griseus gene (afsA) responsible for A–factor biosynthesis. Horinouchi S, et al. J Bacteriol 1989 Feb; 171(2):1206–10
Staphylococcus aureus chromosomal mutation plaC1 amplifies plasmid pT181 by depressing synthesis of its negative–effector countertranscripts. Iordanescu S. J Bacteriol 1989 Sep;171(9):4831–5
Cyclic–AMP–dependent switch in initiation of transcription from the two promoters of the Escherichia coli gal operon: identification and assay of 5'–triphosphate ends of mRNA by GTP:RNA guanyltransferase. Irani M, et al. J Bacteriol 1989 Mar;171(3):1623–30
Alcohol dehydrogenase gene from Alcaligenes eutrophus: subcloning, heterologous expression in Escherichia coli, sequencing, and location of Tn5 insertions. Jendrossek D, et al. J Bacteriol 1988 Nov;170(11):5248–56
Molecular cloning, expression, and analysis of the genes of the homoprotocatechuate catabolic pathway of Escherichia coli C. Jenkins JR, et al. J Bacteriol 1988 Nov; 170(11):5317–24
Purification and characterization of the wild–type and mutant carboxy–terminal domains of the Escherichia coli Tar chemoreceptor. Kaplan N, et al. J Bacteriol 1988 Nov; 170(11):5134–40
Characterization of a cyanobacterial iron stress–induced gene similar to psbC. Laudenbach DE, et al. J Bacteriol 1988 Nov;170(11):5018–26
Analysis of transcription termination signals in the nin region of bacteriophage lambda: the roc deletion. Leason KR, et al. J Bacteriol 1988 Nov;170(11):5051–8
Site–specific integration and expression of a developmental promoter in Myxococcus xanthus. Li SF, et al. J Bacteriol 1988 Dec;170(12):5552–6
Bacteriophage Mu late promoters: four late transcripts initiate near a conserved sequence. Margolin W, et al. J Bacteriol 1989 Apr;171(4):2003–18
Nucleotide sequence and transcriptional organization of the Escherichia coli enterobactin biosynthesis cistrons entB and entA. Nahlik MS, et al. J Bacteriol 1989 Feb;171(2):784–90
RNA polymerase as a repressor of transcription in the hut(P) region of mutant Klebsiella aerogenes histidine utilization operons. Nieuwkoop AJ, et al. J Bacteriol 1988 Oct; 170(10):4986–90
Nucleotide sequence of the transcriptional control region of the osmotically regulated proU operon of Salmonella typhimurium and identification of the 5' endpoint of the proU mRNA. Overdier DG, et al. J Bacteriol 1989 Sep; 171(9):4694–706
Cotranscription of genes encoding indoleacetic acid production in Pseudomonas syringae subsp. savastanoi. Palm CJ, et al. J Bacteriol 1989 Feb;171(2):1002–9
Evidence for an additional temporal class of gene expression in the forespore compartment of sporulating Bacillus subtilis. Panzer S, et al. J Bacteriol 1989 Jan;171(1):561–4
Retroregulation of the bacteriophage lambda int gene: limited secondary degradation of the RNase III–processed transcript. Plunkett G 3d, et al. J Bacteriol 1989 Jan; 171(1):588–92
Role of countertranscript RNA in the copy number control system of an IncB miniplasmid. Praszkier J, et al. J Bacteriol 1989 Sep;171(9):5056–64
Compartment–specific transcription in Bacillus subtilis: identification of the promoter for gdh. Rather PN, et al. J Bacteriol 1988 Nov;170(11):5086–92
Genetic analysis of transcriptional activation and repression in the Tn21 mer operon. Ross W, et al. J Bacteriol 1989 Jul;171(7):4009–18
Transcription initiation at multiple promoters of the pfl gene by E sigma 70–dependent transcription in vitro and heterologous expression in Pseudomonas putida in vivo. Sawers G, et al. J Bacteriol 1989 Sep;171(9):4930–7
Ribosome–binding sites and RNA–processing sites in the transcript of the Escherichia coli unc operon. Schaefer EM, et al. J Bacteriol 1989 Jul;171(7):3901–8
Characterization of strains containing mutations in the contiguous flaF, flbT, or flbA–flaG transcription unit and identification of a novel fla phenotype in Caulobacter crescentus. Schoenlein PV, et al. J Bacteriol 1989 Mar; 171(3):1554–61
Alteration of the carboxyl–terminal domain of Ada protein influences its inducibility, specificity, and strength as a transcriptional activator. Shevell DE, et al. J Bacteriol 1988 Nov;170(11):5263–71
Effect of mutations in the cyclic AMP receptor protein–binding site on araBAD and araC expression. Stoltzfus L, et al. J Bacteriol 1989 Feb;171(2):1178–84
Induction of the alkylation–inducible aidB gene of Escherichia coli by anaerobiosis. Volkert MR, et al. J Bacteriol 1989 Feb;171(2):1196–8
Cloning and expression in Escherichia coli of an extremely thermostable oligo–1,6–glucosidase gene from Bacillus thermoglucosidasius. Watanabe K, et al. J Bacteriol 1989 Feb;171(2):1219–22
A protein required for transcriptional regulation of Agrobacterium virulence genes spans the cytoplasmic membrane. Winans SC, et al. J Bacteriol 1989 Mar; 171(3):1616–22
Transcription of pfl is regulated by anaerobiosis, catabolite repression, pyruvate, and oxrA: pfl::Mu dA operon fusions of Salmonella typhimurium. Wong KK, et al. J Bacteriol 1989 Sep;171(9):4900–5
Regulation of transcription of the Bacillus subtilis spoIIA locus. Wu JJ, et al. J Bacteriol 1989 Feb;171(2):692–8
Expression of the human interferon–alpha 1 gene under transcriptional and translational control of the speA gene. Laplace F, et al. J Basic Microbiol 1988;28(1–2):55–61
In vitro sequence–specific cleavage in transcribed spacer of mouse precursor ribosomal RNA. Nashimoto M, et al. J Biochem (Tokyo) 1988 Jun;103(6):992–7
In vitro requirements for N4 RNA polymerase II–specific initiation. Abravaya K, et al. J Biol Chem 1989 Jul 25; 264(21):12695–9
Mutant human adenosine deaminase alleles and their expression by transfection into fibroblasts. Akeson AL, et al. J Biol Chem 1988 Nov 5;263(31):16291–6
Promoter–dependent transcription by RNA polymerase II using immobilized enzyme complexes. Arias JA, et al. J Biol Chem 1989 Feb 25;264(6):3223–9
Cloning and characterization of the mouse gene that encodes the peptide core of secretory granule proteoglycans and expression of this gene in transfected rat–1 fibroblasts. Avraham S, et al. J Biol Chem 1989 Oct 5;264(28):16719–26
Expression and processing of biologically active fibroblast growth factors in the yeast Saccharomyces cereviaiae. Barr PJ, et al. J Biol Chem 1988 Nov 5;263(31):16471–8
Phorbol ester modulates interleukin 6– and interleukin 1–regulated expression of acute phase plasma proteins in hepatoma cells. Baumann H, et al. J Biol Chem 1988 Nov 25;263(33):17390–6
The mouse porphobilinogen deaminase gene. Structural organization, sequence, and transcriptional analysis. Beaumont C, et al. J Biol Chem 1989 Sep 5; 264(25):14829–34
A block of transcription elongation by RNA polymerase II at synthetic sites in vitro. Bengal E, et al. J Biol Chem 1989 Jun 15;264(17):9791–8
Transcriptional regulation of the gene encoding the major surfactant protein (SP–A) in rabbit fetal lung. Boggaram V, et al. J Biol Chem 1988 Dec 15;263(35):19060–5
Characterization of mRNA species related to human liver cytochrome P–450 nifedipine oxidase and the regulation of catalytic activity. Bork RW, et al. J Biol Chem 1989 Jan 15;264(2):910–9
Two distinct pathways for cAMP–mediated down–regulation of the beta 2–adrenergic receptor. Phosphorylation of the receptor and regulation of its mRNA level. Bouvier M, et al. J Biol Chem 1989 Oct 5;264(28):16786–92
The major kidney band 3 gene transcript predicts an amino–terminal truncated band 3 polypeptide. Brosius FC 3d, et al. J Biol Chem 1989 May 15;264(14):7784–7
Requirements for the translational repression of ferritin transcripts in wheat germ extracts by a 90–kDa protein from rabbit liver. Brown PH, et al. J Biol Chem 1989 Aug 15;264(23):13383–6
Factors involved in specific transcription by mammalian RNA polymerase II. Role of factors IID and MLTF in transcription from the adenovirus major late and IVa2 promoters. Carcamo J, et al. J Biol Chem 1989 May 5; 264(13):7704–14
Formation of transcription preinitiation complexes with an amanitin–resistant RNA polymerase II. Carthew RW, et al. J Biol Chem 1988 Nov 15;263(32):17128–35
Primary structure of the lactose permease gene from the yeast Kluyveromyces lactis. Presence of an unusual transcript structure. Chang YD, et al. J Biol Chem 1988 Nov 15; 263(32):16696–703
Adenosine deaminase gene expression. Tissue–dependent regulation of transcriptional elongation. Chinsky JM, et al. J Biol Chem 1989 Aug 25;264(24):14561–5
The human H1 histone gene FNC16 is functionally expressed in proliferating HeLa S3 cells and is down–regulated during terminal differentiation in HL60 cells. Collar DG, et al. J Biol Chem 1988 Nov 5;263(31):15860–3
A multisubunit transcription factor essential for accurate initiation by RNA polymerase II. Conaway JW, et al. J Biol Chem 1989 Feb 5;264(4):2357–62
Differential effect of platelet–derived growth factor– versus serum–induced growth on smooth muscle alpha–actin and nonmuscle beta–actin mRNA expression in cultured rat aortic smooth muscle cells. Corjay MH, et al. J Biol Chem 1989 Jun 25;264(18):10501–6
Regulation of low density lipoprotein receptor gene expression in human lymphocytes. Cuthbert JA, et al. J Biol Chem 1989 Jan 15;264(2):1298–304
Cloning and regulation of a mRNA specifically expressed in the preadipose state. Dani C, et al. J Biol Chem 1989 Jun 15;264(17):10119–25
Distinct pathways mediate transcriptional regulation of platelet–derived growth factor B/c–sis expression. Daniel TO, et al. J Biol Chem 1988 Dec 25;263(36):19815–20
Affinity isolation of transcriptionally active murine erythroleukemia cell DNA using a cleavable biotinylated nucleotide analog. Dawson BA, et al. J Biol Chem 1989 Aug 5;264(22):12830–7
A protein kinase inhibitor gene reduces both basal and multihormone–stimulated prolactin gene transcription. Day RN, et al. J Biol Chem 1989 Jan 5;264(1):431–6
Structural determinants for transcriptional activation by cAMP–responsive DNA elements. Deutsch PJ, et al. J Biol Chem 1988 Dec 5;263(34):18466–72
Identification of a muscle–specific enhancer within the 5'–flanking region of the human myoglobin gene. Devlin BH, et al. J Biol Chem 1989 Aug 15;264(23):13896–901
Interaction of a putative repressor protein with an extended control region of the Bacillus subtilis pur operon. Ebbole DJ, et al. J Biol Chem 1989 Feb 25;264(6):3553–61
Specific alterations in transcript prevalence during the yeast life span. Egilmez NK, et al. J Biol Chem 1989 Aug 25; 264(24):14312–7
Heat shock–induced appearance of RNA polymerase II in karyoskeletal protein–enriched (nuclear "matrix") fractions correlates with transcriptional shutdown in Drosophila melanogaster. Fisher PA, et al. J Biol Chem 1989 Feb 25; 264(6):3464–9
Factors involved in specific transcription by mammalian RNA polymerase II. Factors IIE and IIF independently interact with RNA polymerase II. Flores O, et al. J Biol Chem 1989 May 25;264(15):8913–21
Isolation and characterization of cDNA clones derived from the divergently transcribed gene in the region upstream from the human dihydrofolate reductase gene. Fujii H, et al. J Biol Chem 1989 Jun 15;264(17):10057–64
Reconstitution of template–dependent in vitro transcriptase activity of a yeast double–stranded RNA virus. Fujimura T, et al. J Biol Chem 1989 Jun 25;264(18):10872–7
Interaction of a positive regulatory factor(s) with a 106–base pair upstream region controls transcription of metallothionein–I gene in the liver. Garg LC, et al. J Biol Chem 1989 Feb 5;264(4):2134–8
A 37–base pair element in the far upstream spacer region can enhance transcription of rat rDNA in vitro and can bind to the core promoter–binding factor(s). Garg LC, et al. J Biol Chem 1989 Jan 5;264(1):220–4
HTLV–I tax gene product activates transcription via pre–existing cellular factors and cAMP responsive element. Giam CZ, et al. J Biol Chem 1989 Sep 15;264(26):15236–41
Purified human factor activates heat shock promoter in a HeLa cell–free transcription system. Goldenberg CJ, et al. J Biol Chem 1988 Dec 25;263(36):19734–9
A novel Ca2+ pump expressed in brain, kidney, and stomach is encoded by an alternative transcript of the slow–twitch muscle sarcoplasmic reticulum Ca–ATPase gene. Identification of cDNAs encoding Ca2+ and other cation–transporting ATPases using an oligonucleotide probe derived from the ATP–binding site. Gunteski–Hamblin AM, et al. J Biol Chem 1988 Oct 15; 263(29):15032–40
Tandemly reiterated negative enhancer–like elements regulate transcription of a human gene for the large subunit of calcium–dependent protease. Hata A, et al. J Biol Chem 1989 Apr 15;264(11):6404–11
trans–splicing of transcripts for the chloroplast psaA1 gene. In vivo requirement for nuclear gene products. Herrin DL, et al. J Biol Chem 1988 Oct 15;263(29):14601–4
Supercoiling and integration host factor change the DNA conformation and alter the flow of convergent transcription in phage Mu. Higgins NP, et al. J Biol Chem 1989 Feb 15;264(5):3035–42
Transcript analyses of the uvsX–40–41 region of bacteriophage T4. Changes in the RNA as infection proceeds. Hinton DM. J Biol Chem 1989 Aug 25; 264(24):14432–9
In vitro synthesis, phosphorylation, and localization on 48 S initiation complexes of human protein synthesis initiation factor 4E. Hiremath LS, et al. J Biol Chem 1989 Jan 15; 264(2):1132–8
The separation of transcriptionally engaged genes. Ip YT, et al. J Biol Chem 1988 Oct 5;263(28):14044–52
Primary structure and transcriptional regulation of rat pepsinogen C gene. Ishihara T, et al. J Biol Chem 1989 Jun 15;264(17):10193–9
Complete murine cDNA sequence, genomic structure, and tissue expression of the high mobility group protein HMG–I(Y). Johnson KR, et al. J Biol Chem 1988 Dec 5;263(34):18338–42
In vitro use of monoclonal antibodies in Escherichia coli S–30 extracts to determine the RNA polymerase sigma subunit required by a promoter. Jovanovich SB, et al. J Biol Chem 1989 Mar 5;264(7):3794–8
In an Escherichia coli coupled transcription–translation system, expression of the osmoregulated gene proU is stimulated at elevated potassium concentrations and by an extract from cells grown at high osmolality. Jovanovich SB, et al. J Biol Chem 1989 May 15;264(14):7821–5
Nuclear factor ETF specifically stimulates transcription from promoters without a TATA box. Kageyama R, et al. J Biol Chem 1989 Sep 15;264(26):15508–14
Purification, characterization, and transcriptional analyses of RNA polymerases from Rhodobacter sphaeroides cells grown chemoheterotrophically and photoheterotrophically. Kansy JW, et al. J Biol Chem 1989 Aug 15;264(23):13751–9
Elements modulating the block of transcription elongation at the adenovirus 2 attenuation site. Kessler M, et al. J Biol Chem 1989 Jun 15;264(17):9785–90
The major late promoter of adenovirus–2 is accurately

transcribed by RNA polymerases IIO, IIA, and IIB. Kim WY, et al. J Biol Chem 1989 Feb 25;264(6):3169–76
Alternative splicing mechanism in a cytochrome P-450 (P-450PB-1) gene generates the two mRNAs coding for proteins of different functions. Kimura H, et al. J Biol Chem 1989 Feb 5;264(4):2338–42
The Pseudomonas oleovorans alkane hydroxylase gene. Sequence and expression. Kok M, et al. J Biol Chem 1989 Apr 5;264(10):5435–41
cDNA cloning of porcine transforming growth factor-beta 1 mRNAs. Evidence for alternate splicing and polyadenylation. Kondaiah P, et al. J Biol Chem 1988 Dec 5;263(34):18313–7
Characterization of the promoter region of the human thrombospondin gene. DNA sequences within the first intron increase transcription. Laherty CD, et al. J Biol Chem 1989 Jul 5;264(19):11222–7
Transcription-dependent structural changes in the C-terminal domain of mammalian RNA polymerase subunit IIa/o. Laybourn PJ, et al. J Biol Chem 1989 Apr 25;264(12):6693–8
Transcription of Xenopus selenocysteine tRNA Ser (formerly designated opal suppressor phosphoserine tRNA) gene is directed by multiple 5'-extragenic regulatory elements. Lee BJ, et al. J Biol Chem 1989 Jun 5;264(16):9696–702
Sites of initiation and pausing in the Escherichia coli rnpB (M1 RNA) transcript. Lee Y, et al. J Biol Chem 1989 Mar 25;264(9):5098–103
A regulatory element in the ApoCIII promoter that directs hepatic specific transcription binds to proteins in expressing and nonexpressing cell types. Leff T, et al. J Biol Chem 1989 Sep 25;264(27):16132–7
Attenuation in the regulation of the pyrBI operon in Escherichia coli. In vivo studies of transcriptional termination. Levin HL, et al. J Biol Chem 1989 Sep 5; 264(25):14638–45
Chloroplast rpoA, rpoB, and rpoC genes specify at least three components of a chloroplast DNA-dependent RNA polymerase active in tRNA and mRNA transcription. Little MC, et al. J Biol Chem 1988 Oct 5;263(28):14302–7
The expression of a functional cDNA encoding the chicken cytochrome P-450arom (aromatase) that catalyzes the formation of estrogen from androgen. McPhaul MJ, et al. J Biol Chem 1988 Nov 5;263(31):16358–63
Identification and purification of the enhancer-binding factor of human immunodeficiency virus-1. Multiple proteins and binding to other enhancers. Maekawa T, et al. J Biol Chem 1989 Feb 15;264(5):2826–31
Cloning and expression of the Photobacterium phosphoreum luminescence system demonstrates a unique lux gene organization. Mancini JA, et al. J Biol Chem 1988 Oct 5; 263(28):14308–14
Regulation of rat growth hormone receptor gene expression. Mathews LS, et al. J Biol Chem 1989 Jun 15; 264(17):9905–10
Characterization of a new termination signal for RNA polymerase III responsible for generation of a discrete-sized RNA transcribed from salmon total genomic DNA in a HeLa cell extract. Matsumoto K, et al. J Biol Chem 1989 Jan 15;264(2):1124–31
Loss of transcriptional repression of three sterol-regulated genes in mutant hamster cells. Metherall JE, et al. J Biol Chem 1989 Sep 15;264(26):15634–41
The yeast lysyl-tRNA synthetase gene. Evidence for general amino acid control of its expression and domain structure of the encoded protein. Mirande M, et al. J Biol Chem 1988 Dec 5;263(34):18443–51
Proteins that bind to the yeast rDNA enhancer. Morrow BE, et al. J Biol Chem 1989 May 25;264(15):9061–8
Transcription initiation site selection and abortive initiation cycling of phage SP6 RNA polymerase. Nam SC, et al. J Biol Chem 1988 Dec 5;263(34):18123–7
In vitro transcription of the origin region of replication of the Escherichia coli chromosome. Nozaki N, et al. J Biol Chem 1988 Oct 5;263(28):14176–83
Differential expression of the Na,K-ATPase alpha 1 and alpha 2 subunit genes in a murine myogenic cell line. Induction of the alpha 2 isozyme during myocyte differentiation. Orlowski J, et al. J Biol Chem 1988 Nov 25;263(33):17817–21
Developmental regulation of peptidylglycine alpha-amidating monooxygenase (PAM) in rat heart atrium and ventricle. Tissue-specific changes in distribution of PAM activity, mRNA levels, and protein forms. Ouafik L, et al. J Biol Chem 1989 Apr 5;264(10):5839–45
Transcriptional activation of pBR322 DNA can lead to duplex DNA unwinding catalyzed by the Escherichia coli preprimosome. Parada CA, et al. J Biol Chem 1989 Sep 5;264(25):15120–9
Hormonal regulation of mouse fatty acid synthase gene transcription in liver. Paulauskis JD, et al. J Biol Chem 1989 Jan 5;264(1):574–7
Transcriptional mapping and nucleotide sequence of the Escherichia coli fepA-fes enterobactin region. Identification of a unique iron-regulated bidirectional promoter. Pettis GS, et al. J Biol Chem 1988 Dec 15; 263(35):18857–63
Transcriptional regulation of human stromelysin. Quinones S, et al. J Biol Chem 1989 May 15;264(14):8339–44
The beta actin promoter. High levels of transcription depend upon a CCAAT binding factor. Quitschke WW, et al. J Biol Chem 1989 Jun 5;264(16):9539–46
Regulated expression of the overlapping ubiquitous and erythroid transcription units of the human porphobilinogen deaminase (PBG-D) gene introduced into non-erythroid and erythroid cells. Raich N, et al. J Biol Chem 1989 Jun 15;264(17):10186–92
Virus infection and interferon can activate gene expression through a single synthetic element, but endogenous genes show distinct regulation. Raj NB, et al. J Biol Chem 1989 Oct 5;264(28):16658–66
Thyroid hormones regulate G-protein beta-subunit mRNA expression in vivo. Rapiejko PJ, et al. J Biol Chem 1989 Sep 25;264(27):16183–9
Transcription of a U6 small nuclear RNA gene in vitro. Transcription of a mouse U6 small nuclear RNA gene in vitro by RNA polymerase III is dependent on transcription factor(s) different from transcription factors IIIA, IIIB, and IIIC. Reddy R. J Biol Chem 1988 Nov 5;263(31):15980–4
Transcription elongation factor SII (TFIIS) enables RNA polymerase II to elongate through a block to transcription in a human gene in vitro. Reines D, et al. J Biol Chem 1989 Jun 25;264(18):10799–809
RNA secondary structure is an integral part of the in vitro mechanism of attenuation in simian virus 40. Resnekov O, et al. J Biol Chem 1989 Jun 15;264(17):9953–9
Tissue- and species-specific regulation of murine alpha 1-antitrypsin gene transcription. Rheaume C, et al. J Biol Chem 1988 Oct 15;263(29):15118–21
Identification of a transcriptional enhancer in a mouse amyloid gene. Rienhoff HY Jr. J Biol Chem 1989 Jan 5; 264(1):419–25
RNA contacts the two large polymerase subunits and a 52-kDa polypeptide in nucleolar RNA polymerase I transcribing complexes. Roberge M, et al. J Biol Chem 1988 Dec 5;263(34):18553–7
Ribosome release modulates basal level expression of the trp operon of Escherichia coli. Roesser JR, et al. J Biol Chem 1988 Oct 5;263(28):14251–5
Regulation of basal level expression of the tryptophan operon of Escherichia coli. Roesser JR, et al. J Biol Chem 1989 Jul 25;264(21):12284–8
Overlapping transcription and termination of the convergent ilvA and ilvY genes of Escherichia coli. Sameshima JH, et al. J Biol Chem 1989 Jan 15;264(2):1224–31
KMnO4 as a probe for lac promoter DNA melting and mechanism in vivo. Sasse-Dwight S, et al. J Biol Chem 1989 May 15;264(14):8074–81
Transcriptional control of the rat heme oxygenase gene by a nuclear protein that interacts with adenovirus 2 major late promoter. Sato M, et al. J Biol Chem 1989 Jun 15; 264(17):10251–60
Developmental regulation of sodium channel expression in the rat forebrain. Scheinman RI, et al. J Biol Chem 1989 Jun 25;264(18):10660–6
Induction of ras gene expression by homologous aggregation factor in cells from the sponge Geodia cydonium. Schröder HC, et al. J Biol Chem 1988 Nov 5;263(31):16334–40
A gene amplified in a transformed mouse cell line undergoes complex transcriptional processing and encodes a nuclear protein. Snyder LC, et al. J Biol Chem 1988 Nov 15; 263(32):17150–8
Roles of the narJ and narI gene products in the expression of nitrate reductase in Escherichia coli. Sodergren EJ, et al. J Biol Chem 1988 Nov 5;263(31):16156–62
Molecular cloning and characterization of cDNAs coding for apo-polysialoglycoprotein of rainbow trout eggs. Multiple mRNA species transcribed from multiple genes contain diverged numbers of exact 39-base (13-amino acid) repeats. Sorimachi H, et al. J Biol Chem 1988 Nov 25; 263(33):17678–84
The two Xenopus laevis SRC genes are co-expressed and each produces functional pp60src. Steele RE, et al. J Biol Chem 1989 Jun 25;264(18):10649–53
DNA supercoiling facilitates formation of the transcription initiation complex on the fibroin gene promoter. Tabuchi H, et al. J Biol Chem 1988 Oct 25;263(30):15282–7
fos/jun and octamer-binding protein interact with a common site in a negative element of the human c-myc gene. Takimoto M, et al. J Biol Chem 1989 May 25; 264(15):8992–9
Stimulation of the human heat shock protein 70 promoter in vitro by simian virus 40 large T antigen. Taylor IC, et al. J Biol Chem 1989 Sep 25;264(27):15160–4
The expression of alpha(1)-acid glycoprotein mRNA during rat development. High levels of expression in the decidua. Thomas T, et al. J Biol Chem 1989 Apr 5;264(10):5784–90
Inhibition of in vivo and in vitro transcription by monoclonal antibodies prepared against wheat germ RNA polymerase II that react with the heptapeptide repeat of eukaryotic RNA polymerase II. Thompson NE, et al. J Biol Chem 1989 Jul 5;264(19):11511–20
Induction of P-450IIB genes within the rat liver acinus is not dependent on the chemical inducer or on the acinar organization. Traber PG, et al. J Biol Chem 1989 Jun 15; 264(17):10292–8
Total sequence, flanking regions, and transcripts of bacteriophage T4 nrdA gene, coding for alpha chain of ribonucleoside diphosphate reductase. Tseng MJ, et al. J Biol Chem 1988 Nov 5;263(31):16242–51
Identification of the DNA-binding domain of the OmpR protein required for transcriptional activation of the ompF and ompC genes of Escherichia coli by in vivo DNA footprinting. Tsung K, et al. J Biol Chem 1989 Jun 15; 264(17):10104–9
Human H4 histone gene transcription requires the proliferation-specific nuclear factor HiNF-D. Auxiliary roles for HiNF-C (Sp1-like) and HiNF-A (high mobility group-like). van Wijnen AJ, et al. J Biol Chem 1989 Sep 5;264(25):15034–42
NAD-specific glutamate dehydrogenase of Neurospora crassa. cDNA cloning and gene expression during derepression. Vierula PJ, et al. J Biol Chem 1989 Jan 15; 264(2):1108–14
Transcriptional analysis of Bacillus subtilis rRNA-tRNA operons. I. The tRNA gene cluster of rrnB has an internal promoter. Vold BS, et al. J Biol Chem 1988 Oct 5; 263(28):14480–4
Transcriptional analysis of Bacillus subtilis rRNA-tRNA operons. II. Unique properties of an operon containing a minor 5 S rRNA gene. Vold BS, et al. J Biol Chem 1988 Oct 5;263(28):14485–90
Overlapping transcriptional units on the same strand within the murine beta-glucuronidase gene complex. Wang B, et al. J Biol Chem 1988 Nov 5;263(31):15841–4
dnaA protein regulates transcriptions of the rpoH gene of Escherichia coli. Wang QP, et al. J Biol Chem 1989 May 5;264(13):7338–44
Expression of the germ cell alkaline phosphatase gene in human choriocarcinoma cells. Watanabe S, et al. J Biol Chem 1989 Jul 25;264(21):12611–9
Cloning of the glutamine:fructose-6-phosphate amidotransferase gene from yeast. Pheromonal regulation of its transcription. Watzele G, et al. J Biol Chem 1989 May 25;264(15):8753–8
Temperature-dependent expression of a collagen splicing defect in the fibroblasts of a patient with Ehlers-Danlos syndrome type VII. Weil D, et al. J Biol Chem 1989 Oct 5;264(28):16804–9
The rat facilitated glucose transporter gene. Transformation and serum-stimulated transcription initiate from identical sites. Williams SA, et al. J Biol Chem 1988 Dec 25; 263(36):19513–8
Formation of large, sedimentable transcription complexes with VARNA genes and other related genes. Wu GJ. J Biol Chem 1989 Jun 15;264(17):9753–61
Receptor-mediated gene delivery and expression in vivo. Wu GY, et al. J Biol Chem 1988 Oct 15;263(29):14621–4
Repression of polyoma virus DNA replication by 5'-flanking region of mouse DNA polymerase beta gene containing transcriptional silencer elements. Yamaguchi M, et al. J Biol Chem 1989 Oct 5;264(28):16887–91
Transcription termination directed by heteroduplex thr attenuator templates. Evidence that the transcript stem and loop structure is the termination signal. Yang MT, et al. J Biol Chem 1989 Feb 15;264(5):2634–9
Proteolytic cleavage of Ada protein that carries methyltransferase and transcriptional regulator activities. Yoshikai T, et al. J Biol Chem 1988 Dec 15; 263(35):19174–80
Osteonectin promoter. DNA sequence analysis and S1 endonuclease site potentially associated with transcriptional control in bone cells. Young MF, et al. J Biol Chem 1989 Jan 5;264(1):450–6
Secondary structure analysis of adenovirus tripartite leader. Zhang Y, et al. J Biol Chem 1989 Jun 25;264(18):10679–84
Structural organization, DNA sequence, and expression of the calmodulin gene. Zimmer WE, et al. J Biol Chem 1988 Dec 25;263(36):19370–83
The transcription of bacterial luminescence is regulated by sigma 32. Ulitzur S, et al. J Biolumin Chemilumin 1988 Apr-Jun;2(2):81–93
TGF beta gene transcription in normal and neoplastic liver growth. Carr BI, et al. J Cell Biochem 1989 Apr; 39(4):477–87
Novel method for studying mRNA phenotypes in single or small numbers of cells. Rappolee DA, et al. J Cell Biochem 1989 Jan;39(1):1–11
Interferon-alpha-(IFN) producing CHO cell lines are resistant to the antiproliferative activity of IFN: a correlation with gene expression. van Heuvel M, et al. J Cell Biochem 1988 Dec;38(4):269–78
The apolipoprotein A-I gene is actively expressed in the rapidly myelinating avian peripheral nerve. LeBlanc AC, et al. J Cell Biol 1989 Sep;109(3):1245–56
Antibodies specific to acetylated histones document the existence of deposition- and transcription-related histone acetylation in Tetrahymena. Lin R, et al. J Cell Biol 1989 May;108(5):1577–88
Expression of mRNAs coding for the alpha 1 chain of type XIII collagen in human fetal tissues: comparison with expression of mRNAs for collagen types I, II, and III. Sandberg M, et al. J Cell Biol 1989 Sep;109(3):1371–9
The expression of sarcomeric muscle-specific contractile protein genes in BC3H1 cells: BC3H1 cells resemble skeletal myoblasts that are defective for commitment to terminal differentiation. Taubman MB, et al. J Cell Biol 1989 May;108(5):1799–806
Skeletal muscle denervation activates acetylcholine receptor genes. Tsay HJ, et al. J Cell Biol 1989 Apr;108(4):1523–6
Multiple intracellular pathways induce expression of a zinc-finger encoding gene (EGR1): relationship to activation of the Na/H exchanger. Jamieson GA Jr, et al. J Cell Physiol 1989 May;139(2):262–8
Elevated c-fos expression inhibits differentiation of L6 rat myoblasts. Rahm M, et al. J Cell Physiol 1989 May;

139(2):237–44
Regulation of levels of IL-1 mRNA in human fibroblasts. Yamato K, et al. **J Cell Physiol** 1989 Jun;139(3):610–6
Expression of the atrial natriuretic peptide gene in human fetal heart. Gardner DG, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):729–37
Molecular basis of hypoxanthine–guanine phosphoribosyltransferase deficiency in ten subjects determined by direct sequencing of amplified transcripts. Davidson BL, et al. **J Clin Invest** 1989 Jul;84(1):342–6
Alpha 1-adrenergic receptor stimulation of sarcomeric actin isogene transcription in hypertrophy of cultured rat heart muscle cells. Long CS, et al. **J Clin Invest** 1989 Mar; 83(3):1078–82
Expression of platelet-derived growth factor (PDGF)-related transcripts and synthesis of biologically active PDGF-like proteins by human malignant epithelial cell lines. Sariban E, et al. **J Clin Invest** 1988 Oct; 82(4):1157–64
Identification of an alternative polyadenylation site in the human C3b/C4b receptor (complement receptor type 1) transcriptional unit and prediction of a secreted form of complement receptor type 1. Hourcade D, et al. **J Exp Med** 1988 Oct 1;168(4):1255–70
Relative V beta transcript levels in thymus and peripheral lymphoid tissues from various mouse strains. Inverse correlation of I-E and Mls expression with relative abundance of several V beta transcripts in peripheral lymphoid tissues. Okada CY, et al. **J Exp Med** 1989 May 1;169(5):1703–19
Interleukin 3 (IL-3) induces transcription from nonrearranged T cell receptor gamma loci in IL-3-dependent cell lines. Weinstein Y, et al. **J Exp Med** 1989 Jun 1;169(6):2059–71
Strain differences in early mouse embryo development in vitro: role of the nucleus. Robl JM, et al. **J Exp Zool** 1988 Sep;247(3):251–6
Over-production and characterization of the nifA gene product of Klebsiella pneumoniae—the transcriptional activator of nif gene expression. Tuli R, et al. **J Gen Microbiol** 1988 Feb;134 (Pt 2):425–32
The transcription termination region of the adenovirus 2 major late transcript contains multiple functional elements. Dressler GR, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1337–45
Detection of herpes simplex virus type 1 gene expression in latently and productively infected mouse ganglia using the polymerase chain reaction. Lynas C, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2345–55
Analysis of transcription initiation in the Panolia flammea nuclear polyhedrosis virus polyhedrin gene. Oakey R, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):769–75
Sequence, transcription and translation of a late gene of the Autographa californica nuclear polyhedrosis virus encoding a 34.8K polypeptide. Wu JG, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2449–59
In vitro promoter activity associated with the latency-associated transcript gene of herpes simplex virus type 1. Zwaagstra J, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2163–9
Rabbit IL-1. Cloning, expression, biologic properties, and transcription during endotoxemia. Cannon JG, et al. **J Immunol** 1989 Apr 1;142(7):2299–306
Transcriptional control of MHC class II gene expression during differentiation from B cells to plasma cells. Dellabona P, et al. **J Immunol** 1989 Apr 15;142(8):2902–10
Protective modulation of class II MHC gene expression in tubular epithelium by target antigen-specific antibodies. Cell-surface directed down-regulation of transcription can influence susceptibility to murine tubulointerstitial nephritis. Haverty TP, et al. **J Immunol** 1989 Aug 15; 143(4):1133–41
Expression of mutant H-2d proteins encoded by class I genes which alternatively process the 5' end of their transcripts. Hedley ML, et al. **J Immunol** 1989 Aug 1;143(3):1026–31
The activation of IL-2 transcription in L3T4+ and Lyt-2+ lymphocytes during virus infection in vivo. Kasaian MT, et al. **J Immunol** 1989 Feb 15;142(4):1287–92
Absence of transcription of lck (lymphocyte specific protein tyrosine kinase) message in IL-2-independent, HTLV-I-transformed T cell lines. Koga Y, et al. **J Immunol** 1989 Jun 15;142(12):4493–9
Transcriptional and post-transcriptional regulation of human MHC class II genes require the synthesis of short-lived proteins. Maffei A, et al. **J Immunol** 1989 May 15; 142(10):3657–61
Tissue-specific initiation of murine complement factor B mRNA transcription. Nonaka M, et al. **J Immunol** 1989 Feb 15;142(4):1377–82
Molecular events during B lymphocyte differentiation. Induction of endogenous mouse mammary tumor proviral envelope transcripts after B cell stimulation. Sharma S, et al. **J Immunol** 1988 Oct 1;141(7):2510–8
Role of transcriptional termination in the regulation of mu mRNA expression in B lymphocytes. Weiss EA, et al. **J Immunol** 1989 Aug 1;143(3):1046–52
MHC class II transcription in different mouse cell types. Differential requirement for protein synthesis between B cells and macrophages. Woodward JG, et al. **J Immunol** 1989 Jun 1;142(11):4062–9
Mapping of the transcriptional regulatory domains responsible for the difference in the promoter activity between mouse C4 and Slp (sex-limited protein) genes. Yu DY, et al. **J Immunol** 1988 Dec 15;141(12):4381–7
In situ transcription and detection of CD1a mRNA in epidermal cells: an alternative to standard in situ hybridization techniques. Longley J, et al. **J Invest Dermatol** 1989 Sep;93(3):432–5
Transcriptional activation of the c-myc proto-oncogene in murine keratinocytes enhances the response to epidermal growth factor. Reiss M, et al. **J Invest Dermatol** 1989 Jul; 93(1):136–41
Transcription termination in Escherichia coli. Measurement of the rate of enzyme release from Rho-independent terminators. Arndt KM, et al. **J Mol Biol** 1988 Jul 20; 202(2):271–85
Promoter sequence and cell type can dramatically affect the efficiency of transcriptional activation induced by herpes simplex virus type 1 and its immediate-early gene products Vmw175 and Vmw110. Everett RD. **J Mol Biol** 1988 Oct 5;203(3):739–51
Early transcribed sequences affect termination efficiency of Escherichia coli RNA polymerase. Goliger JA, et al. **J Mol Biol** 1989 Jan 20;205(2):331–41
Regulation of transcription in Escherichia coli from the mer and merR promoters in the transposon Tn501. Lund PA, et al. **J Mol Biol** 1989 Jan 20;205(2):343–53
Regulation of the phosphate regulon of Escherichia coli. Activation of pstS transcription by PhoB protein in vitro. Makino K, et al. **J Mol Biol** 1988 Sep 5;203(1):85–95
Transcriptional regulation of early functions of bacteriophage phi 80. Ogawa T, et al. **J Mol Biol** 1988 Aug 5; 202(3):551–63
A complex nucleoprotein structure involved in activation of transcription of two divergent Escherichia coli promoters. Raibaud O, et al. **J Mol Biol** 1989 Feb 5; 205(3):471–85
Cis-acting elements involved in the regulated expression of a human HSP70 gene. Schiller P, et al. **J Mol Biol** 1988 Sep 5;203(1):97–105
Mutations in rpoD, the gene encoding the sigma 70 subunit of Escherichia coli RNA polymerase, that increase expression of the lac operon in the absence of CAP-cAMP [published erratum appears in J Mol Biol 1989 Jan 20;205(2):469] Siegele DA, et al. **J Mol Biol** 1988 Sep 5; 203(1):29–37
RNA polymerases stall and/or prematurely terminate nearby both early and late promoters on polyomavirus DNA. Skarnes WC, et al. **J Mol Biol** 1988 Sep 5;203(1):153–71
Sequences linked to prokaryotic promoters can affect the efficiency of downstream termination sites. Telesnitsky AP, et al. **J Mol Biol** 1989 Jan 20;205(2):315–30
Multiple promoters for transcription of the Escherichia coli DNA topoisomerase I gene and their regulation by DNA supercoiling. Tse-Dinh YC, et al. **J Mol Biol** 1988 Aug 20;202(4):735–42
Evolution and transcription of old world monkey globin genes. Vincent KA, et al. **J Mol Biol** 1989 Jun 5; 207(3):465–80
Transcriptional activation at adjacent operators in the divergent-overlapping ilvY and ilvC promoters of Escherichia coli. Wek RC, et al. **J Mol Biol** 1988 Oct 5; 203(3):643–63
The androgen-dependent rat prostatic binding protein: comparison of the sequences in the 5' part and upstream region of the C1 and C2 genes and analysis of their transcripts. Claessens F, et al. **J Mol Endocrinol** 1989 Sep; 3(2):93–103
Organization and nucleotide sequence of a transcriptional unit of Methanococcus vannielii comprising genes for protein synthesis elongation factors and ribosomal proteins. Lechner K, et al. **J Mol Evol** 1989 Jul;29(1):20–7
X-ray-induced changes in gene expression in normal and oncogene-transformed rat cell lines. Lambert M, et al. **J Natl Cancer Inst** 1988 Nov 16;80(18):1492–7
In situ hybridization analysis of myelin gene transcripts in developing mouse spinal cord. Jordan C, et al. **J Neurosci** 1989 Jan;9(1):248–57
Expression of carbonic anhydrase II gene in early brain cells as revealed by in situ hybridization and immunohistochemistry. De Vitry F, et al. **J Neurosci Res** 1989 Feb;22(2):120–9
Molecular hypotheses for position-effect variegation: anti-sense transcription and promoter occlusion. Frankham R. **J Theor Biol** 1988 Nov 8;135(1):85–107
Potential memory and hysteretic effects in transcription. Job D, et al. **J Theor Biol** 1988 Oct 7;134(3):273–89
A transcription-translation activation feedback circuit as a function of protein degradation, with the quality of protein mass adaptation related to the average functional load. Mader A. **J Theor Biol** 1988 Sep 17;134(2):135–57
Nonlinear waves in DNA and regulation of transcription. Polozov RV, et al. **J Theor Biol** 1988 Feb 21;130(4):423–30
Transcriptional termination between bovine papillomavirus type 1 (BPV-1) early and late polyadenylation sites blocks late transcription in BPV-1-transformed cells. Baker CC, et al. **J Virol** 1989 Aug;63(8):3529–34
Interactions between coronavirus nucleocapsid protein and viral RNAs: implications for viral transcription. Baric RS, et al. **J Virol** 1988 Nov;62(11):4280–7
In vitro transcription of bacteriophage phi 29 DNA: inhibition of early promoters by the viral replication protein p6. Barthelemy I, et al. **J Virol** 1989 Jan;63(1):460–2
NF-kappa B-mediated activation of the human immunodeficiency virus enhancer: site of transcriptional initiation is independent of the TATA box. Bielinska A, et al. **J Virol** 1989 Sep;63(9):4097–100
Control elements situated downstream of the major transcriptional start site are sufficient for highly efficient polyomavirus late transcription. Bourachot B, et al. **J Virol** 1989 Jun;63(6):2567–77
Loss of Marek's disease virus tumorigenicity is associated with truncation of RNAs transcribed within BamHI-H. Bradley G, et al. **J Virol** 1989 Oct;63(10):4129–35
Structure of the Marek's disease virus BamHI-H gene family: genes of putative importance for tumor induction. Bradley G, et al. **J Virol** 1989 Jun;63(6):2534–42
A human cytomegalovirus early gene has three inducible promoters that are regulated differentially at various times after infection. Chang CP, et al. **J Virol** 1989 Jan; 63(1):281–90
Identification of a doubly spliced viral transcript joining the separated domains for putative protease and reverse transcriptase of hepatitis B virus. Chen PJ, et al. **J Virol** 1989 Oct;63(10):4165–71
Detection of pseudorabies virus transcripts in trigeminal ganglia of latently infected swine. Cheung AK. **J Virol** 1989 Jul;63(7):2908–13
Transcriptional activation of homologous and heterologous genes by the hepatitis B virus X gene product in cells permissive for viral replication. Colgrove R, et al. **J Virol** 1989 Sep;63(9):4019–26
Retinoic acid-induced differentiation of retrovirus-infected HL-60 cells is associated with enhanced transcription from the viral long terminal repeat. Collins SJ. **J Virol** 1988 Nov; 62(11):4349–52
Viral transcription is necessary and sufficient for vesicular stomatitis virus to inhibit maturation of small nuclear ribonucleoproteins. Crose DE, et al. **J Virol** 1989 Oct; 63(10):4172–80
Identification of the latency-associated transcript promoter by expression of rabbit beta-globin mRNA in mouse sensory nerve ganglia latently infected with a recombinant herpes simplex virus. Dobson AT, et al. **J Virol** 1989 Sep; 63(9):3844–51
Sequence and genetic organization of adenovirus type 35 early region 3. Flomenberg PR, et al. **J Virol** 1988 Nov; 62(11):4431–7
Effect of proviral insertion on transcription of the murine B2mb gene. Frankel WN, et al. **J Virol** 1989 Jun; 63(6):2623–8
Bacterial lipopolysaccharide and gamma interferon induce transcription of beta interferon mRNA and interferon secretion in murine macrophages. Gessani S, et al. **J Virol** 1989 Jun;63(6):2783–9
Role of SP1-binding domains in in vivo transcriptional regulation of the human immunodeficiency virus type 1 long terminal repeat. Harrich D, et al. **J Virol** 1989 Jun; 63(6):2585–91
Sequences in the visna virus long terminal repeat that control transcriptional activity and respond to viral trans-activation: involvement of AP-1 sites in basal activity and trans-activation. Hess JL, et al. **J Virol** 1989 Jul; 63(7):3001–15
Characterization of cellular factors that interact with the human T-cell leukemia virus type I p40x-responsive 21-base-pair sequence. Jeang KT, et al. **J Virol** 1988 Dec; 62(12):4499–509
Defect of adenovirus type 12 replication in hamster cells: absence of transcription of viral virus-associated and L1 RNAs. Jüttermann R, et al. **J Virol** 1989 Aug;63(8):3535–40
Reactivation of a methylation-silenced gene in adenovirus-transformed cells by 5-azacytidine or by E1A trans activation. Knust B, et al. **J Virol** 1989 Aug; 63(8):3519–24
Detection and preliminary characterization of herpes simplex virus type 1 transcripts in latently infected human trigeminal ganglia. Krause PR, et al. **J Virol** 1988 Dec; 62(12):4819–23
Genetic evidence for involvement of vaccinia virus DNA-dependent ATPase I in intermediate and late gene expression. Künzi MS, et al. **J Virol** 1989 Sep; 63(9):3999–4010
A deletion mutant of the latency-associated transcript of herpes simplex virus type 1 reactivates from the latent state with reduced frequency. Leib DA, et al. **J Virol** 1989 Jul; 63(7):2893–900
Transcription inhibition site on the M protein of vesicular stomatitis virus located by marker rescue of mutant tsO23(III) with M-gene expression vectors. Li Y, et al. **J Virol** 1989 Jun;63(6):2841–3
Herpes simplex virus type 1 ICP27 deletion mutants exhibit altered patterns of transcription and are DNA deficient. McCarthy AM, et al. **J Virol** 1989 Jan;63(1):18–27
Trans activation by the bovine papillomavirus E2 protein in Saccharomyces cerevisiae. Morrissey LC, et al. **J Virol** 1989 Oct;63(10):4422–5
Construction and analysis of deletion mutations in the U5 region of Moloney murine leukemia virus: effects on RNA packaging and reverse transcription. Murphy JE, et al. **J Virol** 1989 Jan;63(1):319–27
Molecular analysis of the transcriptional regulatory region of an early baculovirus gene. Nissen MS, et al. **J Virol** 1989 Feb;63(2):493–503
Multiple transcription factor binding sites mediate adenovirus E1A transactivation. Pei R, et al. **J Virol** 1989 Aug; 63(8):3499–506

The adenovirus E4 gene, in addition to the E1A gene, is important for trans-activation of E2 transcription and for E2F activation. Reichel R, et al. **J Virol** 1989 Sep; 63(9):3643–50

Simian virus 40 late transcripts lacking excisable intervening sequences are defective in both stability in the nucleus and transport to the cytoplasm. Ryu WS, et al. **J Virol** 1989 Oct;63(10):4386–94

Role of 3'-end sequences in infectivity of poliovirus transcripts made in vitro. Sarnow P. **J Virol** 1989 Jan; 63(1):467–70

Herpes simplex virus type 1 latency-associated transcription plays no role in establishment or maintenance of a latent infection in murine sensory neurons. Sedarati F, et al. **J Virol** 1989 Oct;63(10):4455–8

Comparison of human and monkey cells for the ability to attenuate transcripts that begin at the adenovirus major late promoter. Seiberg M, et al. **J Virol** 1989 Sep; 63(9):4093–6

Identification of a new transcriptional initiation site and the corresponding functional gene 2b in the murine coronavirus RNA genome. Shieh CK, et al. **J Virol** 1989 Sep; 63(9):3729–36

Hepatitis B virus transcript produced by RNA splicing. Su TS, et al. **J Virol** 1989 Sep;63(9):4011–8

ICP4-binding sites in the promoter and coding regions of the herpes simplex virus gD gene contribute to activation of in vitro transcription by ICP4. Tedder DG, et al. **J Virol** 1989 Jun;63(6):2510–20

Latency-associated transcript but not reactivatable virus is present in sensory ganglion neurons after inoculation of thymidine kinase-negative mutants of herpes simplex virus type 1. Tenser RB, et al. **J Virol** 1989 Jun;63(6):2861–5

Methylation of the promoter for an immediate-early frog virus 3 gene does not inhibit transcription. Thompson JP, et al. **J Virol** 1988 Dec;62(12):4680–5

Adenovirus E1A represses transcription of the cellular JE gene. Timmers HT, et al. **J Virol** 1989 Mar;63(3):1470–3

Identification of a region within the human immunodeficiency virus type 1 long terminal repeat that is essential for transactivation by the hepatitis B virus gene X. Twu JS, et al. **J Virol** 1989 Jun;63(6):2857–60

Transcription of the human beta interferon gene is inhibited by hepatitis B virus. Twu JS, et al. **J Virol** 1989 Jul; 63(7):3065–71

Modified model for the switch from Sendai virus transcription to replication. Vidal S, et al. **J Virol** 1989 May;63(5):1951–8

Functional comparison of transactivation by simian immunodeficiency virus from rhesus macaques and human immunodeficiency virus type 1. Viglianti GA, et al. **J Virol** 1988 Dec;62(12):4523–32

The herpes simplex virus latency-associated transcript is spliced during the latent phase of infection. Wagner EK, et al. **J Virol** 1988 Dec;62(12):4577–85

Posttranscriptional regulation of a class of human cytomegalovirus phosphoproteins encoded by an early transcription unit. Wright DA, et al. **J Virol** 1989 Jul; 63(7):3117–27

Transcriptional regulatory elements in the noncoding region of human papillomavirus type 6. Wu TC, et al. **J Virol** 1988 Dec;62(12):4722–9

Transcription-inhibition and RNA-binding domains of influenza A virus matrix protein mapped with anti-idiotypic antibodies and synthetic peptides. Ye ZP, et al. **J Virol** 1989 Sep;63(9):3586–94

Reverse transcription and subsequent DNA amplification of rubella virus RNA. Carman WF, et al. **J Virol Methods** 1989 Jul;25(1):21–9

Cell-line specific activation of SV40 transcriptional enhancer by p40tax of HTLV-1. Fujisawa J, et al. **Jpn J Cancer Res** 1988 Jul;79(7):800–4

Gene expression in response to acute unilateral ureteral obstruction. Sawczuk IS, et al. **Kidney Int** 1989 Jun; 35(6):1315–9

C-erbB-2 gene product, a membrane protein commonly expressed on human fetal epithelial cells. Mori S, et al. **Lab Invest** 1989 Jul;61(1):93–7

Direct carrier testing in 14 families with haemophilia B. Bottema CD, et al. **Lancet** 1989 Sep 2;2(8662):526–9

Enhanced transcription of TNF in systemic vasculitis [letter] Deguchi Y, et al. **Lancet** 1989 Sep 23;2(8665):745–6

Transcription of human type I collagen genes. Variation in the relative rates of transcription of the pro alpha 1 and pro alpha 2 genes. Olsen AS, et al. **Matrix** 1989 Mar; 9(2):73–81

Decreased in vitro polymerase II activity of whole-cell extracts from late passage human diploid fibroblasts. Fong TC, et al. **Mech Ageing Dev** 1988 Dec;46(1-3):219–23

Changes in neurofilament gene expression occur after axotomy of dorsal root ganglion neurons: an in situ hybridization study. Wong J, et al. **Metab Brain Dis** 1987 Dec;2(4):291–303

Nuclease digestion of transcriptionally active chromatin. Bellard M, et al. **Methods Enzymol** 1989;170:317–46

Regulation of neuroendocrine peptide gene expression. Blum M. **Methods Enzymol** 1989;168:618–33

Analysis of RNA polymerase III transcription in vitro using chromatin and cloned gene templates. Gottesfeld JM. **Methods Enzymol** 1989;170:347–59

Solution hybridization-nuclease protection assays for sensitive detection of differentially spliced substance P- and neurokinin A-encoding messenger ribonucleic acids. Krause JE, et al. **Methods Enzymol** 1989;168:634–52

Neuropeptide gene transcription in central and peripheral nervous system tissue by nuclear run-on assay. White JD, et al. **Methods Enzymol** 1989;168:681–90

Molecular cloning and characterization of the genetic determinant encoding CS3 fimbriae of enterotoxigenic Escherichia coli. Boylan M, et al. **Microb Pathog** 1987 Mar; 2(3):195–209

Transcription of the yop regulon from Y. enterocolitica requires trans acting pYV and chromosomal genes. Cornelis G, et al. **Microb Pathog** 1987 May;2(5):367–79

Nucleotide sequence and transcription analysis of yop51 from Yersinia enterocolitica W22703. Michiels T, et al. **Microb Pathog** 1988 Dec;5(6):449–59

Expression of avian sarcoma virus genes in tumor cells derived from different periods of tumor growth. Poulin L, et al. **Microb Pathog** 1987 Feb;2(2):101–12

Transcripts from the co-transposed segment of variant surface glycoprotein genes are in Trypanosoma brucei polyribosomes. Aline RF Jr, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2-3):169–78

Genes encoding the major surface glycoprotein in Leishmania are tandemly linked at a single chromosomal locus and are constitutively transcribed. Button LL, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2-3):271–83

Accurate and efficient RNA polymerase III transcription in a cell-free extract prepared from Ascaris suum embryos. Maroney PA, et al. **Mol Biochem Parasitol** 1989 Jul; 35(3):277–83

Expression site associated genes of Trypanosoma brucei rhodesiense. Son HJ, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):59–66

Chromatin structure and transcriptional regulation of human papillomavirus type 18 DNA in HeLa cells. Rösl F, et al. **Mol Carcinog** 1989;2(2):72–80

Changes in DNA topology can modulate in vitro transcription of certain RNA polymerase III genes. Sekiguchi JM, et al. **Mol Cell Biochem** 1989 Feb 21; 85(2):123–33

Yeast regulatory gene GAL3: carbon regulation; UASGal elements in common with GAL1, GAL2, GAL7, GAL10, GAL80, and MEL1; encoded protein strikingly similar to yeast and Escherichia coli galactokinases. Bajwa W, et al. **Mol Cell Biol** 1988 Aug;8(8):3439–47

Expression of v-rel induces mature B-cell lines that reflect the diversity of avian immunoglobulin heavy- and light-chain rearrangements. Barth CF, et al. **Mol Cell Biol** 1988 Dec;8(12):5358–68

Purification and characterization of TTFI, a factor that mediates termination of mouse ribosomal DNA transcription. Bartsch I, et al. **Mol Cell Biol** 1988 Sep; 8(9):3891–7

Interactions between the promoter and first intron are involved in transcriptional control of alpha 1(I) collagen gene expression. Bornstein P, et al. **Mol Cell Biol** 1988 Nov; 8(11):4851–7

Concentration dependence of transcriptional transactivation in inducible E1A-containing human cells. Brunet LJ, et al. **Mol Cell Biol** 1988 Nov;8(11):4799–807

Connections between transcriptional activators, silencers, and telomeres as revealed by functional analysis of a yeast DNA-binding protein. Buchman AR, et al. **Mol Cell Biol** 1988 Dec;8(12):5086–99

Prolactin upstream factor I mediates cell-specific transcription. Cao ZD, et al. **Mol Cell Biol** 1988 Dec; 8(12):5432–8

Nerve growth factor regulates gene expression by several distinct mechanisms. Cho KO, et al. **Mol Cell Biol** 1989 Jan;9(1):135–43

cDNA cloning and expression of a human platelet-derived growth factor (PDGF) receptor specific for B-chain-containing PDGF molecules. Claesson-Welsh L, et al. **Mol Cell Biol** 1988 Aug;8(8):3476–86

Presence of transcription regulatory elements within an intron of the virus-inducible murine TIMP gene. Coulombe B, et al. **Mol Cell Biol** 1988 Aug;8(8):3227–34

DNA sequences involved in transcriptional regulation of the mouse beta-globin promoter in murine erythroleukemia cells. Cowie A, et al. **Mol Cell Biol** 1988 Aug;8(8):3122–8

Transpositional competence and transcription of endogenous Ty elements in Saccharomyces cerevisiae: implications for regulation of transposition. Curcio MJ, et al. **Mol Cell Biol** 1988 Sep;8(9):3571–81

Both cell substratum regulation and hormonal regulation of milk protein gene expression are exerted primarily at the posttranscriptional level. Eisenstein RS, et al. **Mol Cell Biol** 1988 Aug;8(8):3183–90

Structure and regulation of a nuclear gene in Saccharomyces cerevisiae that specifies MRP7, a protein of the large subunit of the mitochondrial ribosome. Fearon K, et al. **Mol Cell Biol** 1988 Sep;8(9):3636–46

Isolation of mutations that act in trans to alter expression from a yeast hsp70 promoter. Findly RC, et al. **Mol Cell Biol** 1988 Aug;8(8):3423–31

Purification and characterization of human mitochondrial transcription factor 1. Fisher RP, et al. **Mol Cell Biol** 1988 Aug;8(8):3496–509

Expression and regulation of the pituitary- and placenta-specific human glycoprotein hormone alpha-subunit gene is restricted to the pituitary in transgenic mice. Fox N, et al. **Mol Cell Biol** 1988 Dec; 8(12):5470–6

Fast skeletal muscle-specific expression of a quail troponin I gene in transgenic mice. Hallauer PL, et al. **Mol Cell Biol** 1988 Dec;8(12):5072–9

Constitutive transcription of yeast ribosomal protein gene TCM1 is promoted by uncommon cis- and trans-acting elements. Hamil KG, et al. **Mol Cell Biol** 1988 Oct; 8(10):4328–41

The Drosophila melanogaster tropomyosin II gene produces multiple proteins by use of alternative tissue-specific promoters and alternative splicing. Hanke PD, et al. **Mol Cell Biol** 1988 Sep;8(9):3591–602

Promoter sequences required for transcription of Xenopus laevis histone genes in injected frog oocyte nuclei. Heindl LM, et al. **Mol Cell Biol** 1988 Sep;8(9):3676–82

Functional interaction between transcriptional elements in the long terminal repeat of reticuloendotheliosis virus: cooperative DNA binding of promoter- and enhancer-specific factors. Hirano A, et al. **Mol Cell Biol** 1988 Dec;8(12):5232–44

Role of arachidonic acid metabolism in transcriptional induction of tumor necrosis factor gene expression by phorbol ester. Horiguchi J, et al. **Mol Cell Biol** 1989 Jan; 9(1):252–8

Transcriptional and posttranscriptional regulation of CSF-1 gene expression in human monocytes. Horiguchi J, et al. **Mol Cell Biol** 1988 Sep;8(9):3951–4

One of the tightly clustered genes of the mouse surfeit locus is a highly expressed member of a multigene family whose other members are predominantly processed pseudogenes. Huxley C, et al. **Mol Cell Biol** 1988 Sep;8(9):3898–905

Structure and expression of B-myc, a new member of the myc gene family. Ingvarsson S, et al. **Mol Cell Biol** 1988 Aug;8(8):3168–74

The human transforming growth factor alpha promoter directs transcription initiation from a single site in the absence of a TATA sequence. Jakobovits EB, et al. **Mol Cell Biol** 1988 Dec;8(12):5549–54

Determinants that contribute to cytoplasmic stability of human c-fos and beta-globin mRNAs are located at several sites in each mRNA. Kabnick KS, et al. **Mol Cell Biol** 1988 Aug;8(8):3244–50

Effect of c-myc gene expression on early inducible reactions required for erythroid differentiation in vitro. Kaneko-Ishino T, et al. **Mol Cell Biol** 1988 Dec; 8(12):5545–8

Individual protein-binding domains of the insulin gene enhancer positively activate beta-cell-specific transcription. Karlsson O, et al. **Mol Cell Biol** 1989 Feb; 9(2):823–7

Development of an in vitro transcription system for Neurospora crassa mitochondrial DNA and identification of transcription initiation sites. Kennell JC, et al. **Mol Cell Biol** 1989 Sep;9(9):3603–13

Intrinsic sites of transcription termination and pausing in the c-myc gene. Kerppola TK, et al. **Mol Cell Biol** 1988 Oct; 8(10):4389–94

An RNA polymerase II transcription factor inactivated in poliovirus-infected cells copurifies with transcription factor TFIID. Kliewer S, et al. **Mol Cell Biol** 1988 Aug; 8(8):3175–82

Assembly of RNA polymerase II preinitiation complexes before assembly of nucleosomes allows efficient initiation of transcription on nucleosomal templates. Knezetic JA, et al. **Mol Cell Biol** 1988 Aug;8(8):3114–21

Differential expression of five tRNA(UAGTrp) amber suppressors in Caenorhabditis elegans. Kondo K, et al. **Mol Cell Biol** 1988 Sep;8(9):3627–35

Developmental and tissue-specific expression of U4 small nuclear RNA genes. Korf GM, et al. **Mol Cell Biol** 1988 Dec;8(12):5566–9

Adenovirus transcriptional regulatory regions are conserved in mammalian cells and Saccharomyces cerevisiae. Kornuc M, et al. **Mol Cell Biol** 1988 Sep;8(9):3717–25

Multiple mechanisms for transcriptional regulation of the myc gene family in small-cell lung cancer. Krystal G, et al. **Mol Cell Biol** 1988 Aug;8(8):3373–81

Transcriptional and posttranscriptional mechanisms regulate murine thymidine kinase gene expression in serum-stimulated cells. Lieberman HB, et al. **Mol Cell Biol** 1988 Dec;8(12):5280–91

Regulation of 4F2 heavy-chain gene expression during normal human T-cell activation can be mediated by multiple distinct molecular mechanisms. Lindsten T, et al. **Mol Cell Biol** 1988 Sep;8(9):3820–6

Dual bidirectional promoters at the mouse dhfr locus: cloning and characterization of two mRNA classes of the divergently transcribed Rep-1 gene. Linton JP, et al. **Mol Cell Biol** 1989 Jul;9(7):3058–72

The development expression of the rat alpha-vascular and gamma-enteric smooth muscle isoactins: isolation and characterization of a rat gamma-enteric actin cDNA. McHugh KM, et al. **Mol Cell Biol** 1988 Dec;8(12):5224–31

Transcriptional regulation of the cell cycle-dependent thymidylate synthase gene of Saccharomyces cerevisiae. McIntosh EM, et al. **Mol Cell Biol** 1988 Nov;8(11):4616–24

Evolution, expression, and chromosomal location of a novel receptor tyrosine kinase gene, eph. Maru Y, et al. **Mol Cell Biol** 1988 Sep;8(9):3770–6

Gene structure and transcription in mouse cells with extensively demethylated DNA. Michalowsky LA, et al. **Mol Cell Biol** 1989 Mar;9(3):885–92

Coordinate changes in heat shock element-binding activity and HSP70 gene transcription rates in human cells. Mosser DD, et al. **Mol Cell Biol** 1988 Nov;8(11):4736–44

Polycistronic transcripts in trypanosomes and their accumulation during heat shock: evidence for a precursor role in mRNA synthesis. Muhich ML, et al. **Mol Cell Biol** 1988 Sep;8(9):3837–46

Factors involved in specific transcription by mammalian RNA polymerase II: purification, genetic specificity, and TATA box-promoter interactions of TFIID. Nakajima N, et al. **Mol Cell Biol** 1988 Oct;8(10):4028–40

Enhanced transcription of the 78,000-dalton glucose-regulated protein (GRP78) gene and association of GRP78 with immunoglobulin light chains in a nonsecreting B-cell myeloma line (NS-1). Nakaki T, et al. **Mol Cell Biol** 1989 May;9(5):2233–8

Analysis of pre-rRNAs in heat-shocked HeLa cells allows identification of the upstream termination site of human polymerase I transcription. Parker KA, et al. **Mol Cell Biol** 1989 Jun;9(6):2500–12

Structure and regulation of a nuclear gene in Saccharomyces cerevisiae that specifies MRP13, a protein of the small subunit of the mitochondrial ribosome. Partaledis JA, et al. **Mol Cell Biol** 1988 Sep;8(9):3647–60

Transcription termination at the chicken beta H-globin gene. Pribyl TM, et al. **Mol Cell Biol** 1988 Dec;8(12):5369–77

c-myc antisense transcripts accelerate differentiation and inhibit G1 progression in murine erythroleukemia cells. Prochownik EV, et al. **Mol Cell Biol** 1988 Sep;8(9):3683–95

Transcription elongation factor SII interacts with a domain of the large subunit of human RNA polymerase II. Rappaport J, et al. **Mol Cell Biol** 1988 Aug;8(8):3136–42

Transcription and processing of RNA from mouse ribosomal DNA transfected into hamster cells. Raziuddin, et al. **Mol Cell Biol** 1989 Apr;9(4):1667–71

Effect of sequence differences between somatic and oocyte 5S RNA genes on transcriptional efficiency in an oocyte S150 extract. Reynolds WF. **Mol Cell Biol** 1988 Nov; 8(11):5056–8

Structural determinant of the species-specific transcription of the mouse rRNA gene promoter. Safrany G, et al. **Mol Cell Biol** 1989 Jan;9(1):349–53

Interaction of a hepatoma-specific nuclear factor with transcription-regulatory sequences of the human alpha-fetoprotein and albumin genes. Sawadaishi K, et al. **Mol Cell Biol** 1988 Dec;8(12):5179–87

c-myc can induce expression of G0/G1 transition genes. Schweinfest CW, et al. **Mol Cell Biol** 1988 Aug;8(8):3080–7

A transcriptional cascade governs entry into meiosis in Saccharomyces cerevisiae. Smith HE, et al. **Mol Cell Biol** 1989 May;9(5):2142–52

Transcriptional unit of the murine Thy-1 gene: different distribution of transcription initiation sites in brain. Spanopoulou E, et al. **Mol Cell Biol** 1988 Sep;8(9):3847–56

Tissue-specific gene expression in mouse hepatocytes cultured in growth-restricting medium. Spiegelberg T, et al. **Mol Cell Biol** 1988 Aug;8(8):3338–44

Transcription of HLA class II genes in the absence of B-cell-specific octamer-binding factor. Stimac E, et al. **Mol Cell Biol** 1988 Sep;8(9):3734–9

tRNA(Tyr) genes of Drosophila melanogaster: expression of single-copy genes studied by S1 mapping. Suter B, et al. **Mol Cell Biol** 1988 Aug;8(8):3322–31

A cysteine-rich nuclear protein activates yeast metallothionein gene transcription. Szczypka MS, et al. **Mol Cell Biol** 1989 Feb;9(2):421–9

Structure of the two promoters of the human lck gene: differential accumulation of two classes of lck transcripts in T cells. Takadera T, et al. **Mol Cell Biol** 1989 May; 9(5):2173–80

Tissue-specific in vitro transcription from the mouse myelin basic protein promoter. Tamura T, et al. **Mol Cell Biol** 1989 Jul;9(7):3122–6

Isolation of cDNA clones for mouse cytoskeletal gamma-actin and differential expression of cytoskeletal actin mRNAs in mouse cells. Tokunaga K, et al. **Mol Cell Biol** 1988 Sep;8(9):3929–33

Transcription of the chicken histone H5 gene is mediated by distinct tissue-specific elements within the promoter and the 3' enhancer. Trainor CD, et al. **Mol Cell Biol** 1989 May;9(5):2228–32

Sea urchin early and late H4 histone genes bind a specific transcription factor in a stable preinitiation complex. Tung L, et al. **Mol Cell Biol** 1989 Apr;9(4):1476–87

Conserved pattern of antisense overlapping transcription in the homologous human ERCC-1 and yeast RAD10 DNA repair gene regions. van Duin M, et al. **Mol Cell Biol** 1989 Apr;9(4):1794–8

Stability of transcription complexes on class II genes. Van Dyke MW, et al. **Mol Cell Biol** 1989 Jan;9(1):342–4

Expression of the c-myb and c-myc genes is regulated independently in differentiating mouse erythroleukemia cells by common processes of premature transcription arrest and increased mRNA turnover. Watson RJ. **Mol Cell Biol** 1988 Sep;8(9):3938–42

Transcriptional promiscuity of the human alpha-globin gene. Whitelaw E, et al. **Mol Cell Biol** 1989 Jan;9(1):241–51

Developmental expression of transforming growth factors alpha and beta in mouse fetus. Wilcox JN, et al. **Mol Cell Biol** 1988 Aug;8(8):3415–22

The positive regulatory function of the 5'-proximal open reading frames in GCN4 mRNA can be mimicked by heterologous, short coding sequences. Williams NP, et al. **Mol Cell Biol** 1988 Sep;8(9):3827–36

Cysteine residues in the zinc finger and amino acids adjacent to the finger are necessary for DNA binding by the LAC9 regulatory protein of Kluyveromyces lactis. Witte MM, et al. **Mol Cell Biol** 1988 Sep;8(9):3726–33

Purification and characterization of a high-mobility-group-like DNA-binding protein that stimulates rRNA synthesis in vitro. Yang-Yen HF, et al. **Mol Cell Biol** 1988 Aug;8(8):3406–14

Transcriptional and posttranscriptional regulation contributes to the sex-regulated expression of two sequence-related genes at the janus locus of Drosophila melanogaster. Yanicostas C, et al. **Mol Cell Biol** 1989 Jun;9(6):2526–35

Adjacent upstream activation sequence elements synergistically regulate transcription of ADH2 in Saccharomyces cerevisiae. Yu J, et al. **Mol Cell Biol** 1989 Jan;9(1):34–42

A region internal to the coding sequences is essential for transcription of the yeast Ty-D15 element. Yu K, et al. **Mol Cell Biol** 1989 Sep;9(9):3667–78

Some of the signals for 3'-end formation in transcription of the Saccharomyces cerevisiae Ty-D15 element are immediately downstream of the initiation site. Yu K, et al. **Mol Cell Biol** 1989 Jun;9(6):2431–44

P21 v-ras inhibits induction of c-myc and c-fos expression by platelet-derived growth factor. Zullo JN, et al. **Mol Cell Biol** 1988 Dec;8(12):5080–5

Prolactin (PRL) mRNA from human decidua differs from pituitary PRL mRNA but resembles the IM-9-P3 lymphoblast PRL transcript. Gellersen B, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):127–30

Glucocorticoid responsiveness of mouse mammary tumor virus (MMTV) promoters in a down-transcription hepatoma tissue culture (HTC) variant. John NJ, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):57–68

High level, cell-specific expression of ornithine decarboxylase transcripts in rat genitourinary tissues. Blackshear PJ, et al. **Mol Endocrinol** 1989 Jan;3(1):68–78

Differential thyroid hormone-regulated rat thyrotropin beta gene expression detected by blot hybridization. Carr FE, et al. **Mol Endocrinol** 1988 Aug;2(8):667–73

Variable modes of proopiomelanocortin gene transcription in human tumors. de Keyzer Y, et al. **Mol Endocrinol** 1989 Jan;3(1):215–23

Chicken calmodulin promoter activity in proliferating and differentiated cells. Epstein PN, et al. **Mol Endocrinol** 1989 Jan;3(1):193–202

Progestin increases gene transcription and messenger ribonucleic acid stability of fatty acid synthetase in breast cancer cells. Joyeux C, et al. **Mol Endocrinol** 1989 Apr; 3(4):681–6

Analysis of rat prolactin promoter sequences that mediate pituitary-specific and 3',5'-cyclic adenosine monophosphate-regulated gene expression in vivo. Keech CA, et al. **Mol Endocrinol** 1989 May;3(5):832–9

Developmental and steroid hormonal regulation of insulin-like growth factor II expression. Levinovitz A, et al. **Mol Endocrinol** 1989 May;3(5):797–804

Proenkephalin gene expression in the primate uterus: regulation by estradiol in the endometrium. Low KG, et al. **Mol Endocrinol** 1989 May;3(5):852–7

Developmentally regulated male-specific transfactor(s) enable in vitro transcription of a cloned alpha 2u-globulin gene. Sarkar P, et al. **Mol Endocrinol** 1989 Feb;3(2):342–8

Full expression of uncoupling protein gene requires the concurrence of norepinephrine and triiodothyronine. Silva JE. **Mol Endocrinol** 1988 Aug;2(8):706–13

Transcriptional regulation and chromosomal assignment of the mammalian calbindin-D28k gene. Varghese S, et al. **Mol Endocrinol** 1989 Mar;3(3):495–502

Transcriptional occlusion of transposon targets. Casadesus J, et al. **Mol Gen Genet** 1989 Apr;216(2-3):204–9

The repressor of the PEP:fructose phosphotransferase system is required for the transcription of the pps gene of Escherichia coli. Geerse RH, et al. **Mol Gen Genet** 1989 Aug;218(2):348–52

Transcription in the region of the replication origin, oriC, of Escherichia coli: termination of asnC transcripts. Gielow A, et al. **Mol Gen Genet** 1988 Nov;214(3):474–81

The rpoA341 allele of Escherichia coli specifically impairs the transcription of a group of positively-regulated operons. Giffard PM, et al. **Mol Gen Genet** 1988 Sep; 214(1):148–52

Transcriptional interaction between the promoters of the maize chloroplast genes which encode the beta subunit of ATP synthase and the large subunit of ribulose 1,5-bisphosphate carboxylase. Hanley-Bowdoin L, et al. **Mol Gen Genet** 1989 Jan;215(2):217–24

Transcription of a region downstream from lambda ori is required for replication of plasmids derived from coliphage lambda. Hase T, et al. **Mol Gen Genet** 1989 Mar; 216(1):120–5

afsB stimulates transcription of the actinorhodin biosynthetic pathway in Streptomyces coelicolor A3(2) and Streptomyces lividans. Horinouchi S, et al. **Mol Gen Genet** 1989 Jan;215(2):355–7

Identification of the promoters directing in vivo expression of hemolysin genes in Proteus vulgaris and Escherichia coli. Koronakis V, et al. **Mol Gen Genet** 1988 Jul; 213(1):99–104

The intron of a plastid gene from a green alga contains an open reading frame for a reverse transcriptase-like enzyme. Kück U. **Mol Gen Genet** 1989 Aug;218(2):257–65

A nuclear gene essential for mitochondrial replication suppresses a defect of mitochondrial transcription in Saccharomyces cerevisiae. Lisowsky T, et al. **Mol Gen Genet** 1988 Oct;214(2):218–23

The effect of DnaA protein levels and the rate of initiation at oriC on transcription originating in the ftsQ and ftsA genes: in vivo experiments. Masters M, et al. **Mol Gen Genet** 1989 Apr;216(2-3):475–83

Discoordinate gene expression in the dnaA-dnaN operon of Escherichia coli. Quiñones A, et al. **Mol Gen Genet** 1988 Jul;213(1):118–24

A NADH dehydrogenase subunit gene is co-transcribed with the abnormal Petunia mitochondrial gene associated with cytoplasmic male sterility. Rasmussen J, et al. **Mol Gen Genet** 1989 Jan;215(2):332–6

Transcriptional organization of the DNA region controlling expression of the K99 gene cluster. Roosendaal B, et al. **Mol Gen Genet** 1989 Jan;215(2):250–6

Termination of transcription of ribosomal RNA genes of mung bean occurs within a 175 bp repetitive element of the spacer region. Schiebel K, et al. **Mol Gen Genet** 1989 Aug;218(2):302–7

Gene structure and in situ transcript localization of pathogenesis-related protein 1 in parsley. Somssich IE, et al. **Mol Gen Genet** 1988 Jul;213(1):93–8

The chloroplast genome of the green alga Chlamydomonas moewusii: localization of protein-coding genes and transcriptionally active regions. Turmel M, et al. **Mol Gen Genet** 1988 Nov;214(3):412–9

Functional expression of Aquaspirillum magnetotacticum genes in Escherichia coli K12. Waleh NS. **Mol Gen Genet** 1988 Nov;214(3):592–4

Hybridoma fusion cell lines contain an aberrant kappa transcript. Carroll WL, et al. **Mol Immunol** 1988 Oct; 25(10):991–5

Transcriptional regulation of F plasmid gene sraB: rifampicin-promoted in vitro readthrough of a terminator in the leader region. Akimoto S, et al. **Mol Microbiol** 1989 Jun;3(6):787–96

Transcriptional analysis of the 16S rRNA gene of the rrnD gene set of Streptomyces coelicolor A3(2). Baylis HA, et al. **Mol Microbiol** 1988 Sep;2(5):569–79

Sense and antisense transcripts of traM, a conjugal transfer gene of the antibiotic resistance plasmid R100. Dempsey WB. **Mol Microbiol** 1989 Apr;3(4):561–70

Transcription of rhiA, a gene on a Rhizobium leguminosarum bv. viciae Sym plasmid, requires rhiR and is repressed by flavanoids that induce nod genes. Economou A, et al. **Mol Microbiol** 1989 Jan;3(1):87–93

Nucleotide sequence and transcriptional analysis of the aerCaerA region of Aeromonas sobria encoding aerolysin and its regulatory region. Husslein V, et al. **Mol Microbiol** 1988 Jul;2(4):507–17

Genetic analysis of phycobilisome mutants in the cyanobacterium Synechococcus species PCC 6301. Kalla R, et al. **Mol Microbiol** 1989 Mar;3(3):339–47

Sequence of the nagBACD operon in Escherichia coli K12 and pattern of transcription within the nag regulon. Plumbridge JA. **Mol Microbiol** 1989 Apr;3(4):505–15

Nucleoprotein structures at positively regulated bacterial promoters: homology with replication origins and some hypotheses on the quaternary structure of the activator proteins in these complexes. Raibaud O. **Mol Microbiol** 1989 Mar;3(3):455–8 (27 ref.)

Functional characterization of a putative internal promoter sequence between the 16S and the 23S RNA genes within the Escherichia coli rrnB operon. Zacharias M, et al. **Mol Microbiol** 1989 Mar;3(3):405–10

Changes in skeletal muscle gene transcription induced by chronic stimulation. Brownson C, et al. **Muscle Nerve** 1988 Nov;11(11):1183–9

Human lymphocytes aged in vivo have reduced levels of methylation in transcriptionally active and inactive DNA. Drinkwater RD, et al. **Mutat Res** 1989 Jan;219(1):29–37

Role of transcriptional interference in the Drosophila melanogaster Adh promoter switch. Corbin V, et al. **Nature** 1989 Jan 19;337(6204):279–82

Molecular evolution. rDNA world falling to pieces [news] Dover GA. **Nature** 1988 Dec 15;336(6200):623–4

The bicoid protein is a positive regulator of hunchback transcription in the early Drosophila embryo. Driever W, et al. **Nature** 1989 Jan 12;337(6203):138–43

A novel genetic system to detect protein-protein interactions. Fields S, et al. **Nature** 1989 Jul 20;340(6230):245–6

The Drosophila fushi tarazu polypeptide is a DNA-binding transcriptional activator in yeast cells. Fitzpatrick VD, et al. **Nature** 1989 Feb 16;337(6208):666–8

Gene transcription. Waves of DNA supercoiling [news] Frank-Kamenetskii M. **Nature** 1989 Jan 19;337(6204):206

Activation and repression of transcription by homoeodomain-containing proteins that bind a common site. Jaynes JB, et al. **Nature** 1988 Dec 22-29; 336(6201):744–9

A transcriptional repressor of c-myc. Kakkis E, et al. **Nature** 1989 Jun 29;339(6227):718–21

Transcription activation by the adenovirus E1a protein. Lillie JW, et al. **Nature** 1989 Mar 2;338(6210):39–44

An autosomal transcript in skeletal muscle with homology to dystrophin. Love DR, et al. **Nature** 1989 May 4; 339(6219):55–8

Segment-specific expression of a homoeobox-containing gene in the mouse hindbrain. Murphy P, et al. **Nature** 1989 Sep 14;341(6238):156–9

How eukaryotic transcriptional activators work. Ptashne M. **Nature** 1988 Oct 20;335(6192):683–9 (83 ref.)

Gene regulation. A hit-and-run mechanism for transcriptional activation? [news] Schaffner W. **Nature** 1988 Dec 1;336(6198):427–8

Persistent and transcriptionally-dependent increase in protein phosphorylation in long-term facilitation of Aplysia sensory neurons. Sweatt JD, et al. **Nature** 1989 May 4; 339(6219):51–4

Primary structure and expression from complementary DNA of skeletal muscle ryanodine receptor. Takeshima H, et al. **Nature** 1989 Jun 8;339(6224):439–45

Changes in the template activity of chromatin isolated from sarcoma-180 ascites cells treated with mitomycin C and gamma irradiation in vivo. Karuri A, et al. **Neoplasma** 1989; 36(3):321–6

APP-695 transcript prevalence is selectively reduced during Alzheimer's disease in cortex and hippocampus but not in cerebellum. Johnson SA, et al. **Neurobiol Aging** 1989 May-Jun;10(3):267–72

Genes expressed in cortical neurons—chromatin conformation and DNase I hypersensitive sites. Ivanov TR, et al. **Neurochem Res** 1989 Feb;14(2):129–37

Expression of the preproenkephalin A gene in tumor cells and brain glioma: a northern and in situ hybridization study. Rost N, et al. **Neuropeptides** 1989 Feb-Mar;13(2):133–8

In situ hybridization demonstrates vasopressin gene transcription in hypothalamic neurons of crossbred hypertensive x diabetes insipidus rats. McCabe JT, et al. **Neuroscience** 1988 Oct;27(1):159–67

Molecular analysis of eight U1 RNA gene candidates from tomato that could potentially be transcribed into U1 RNA sequence variants differing from each other in similar regions of secondary structure. Abel S, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6319–37

Protein kinase NII and the regulation of rDNA transcription in mammalian cells. Belenguer P, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6625–36

An enhancer associated with the mouse immunoglobulin lambda 1 gene is specific for lambda light chain producing cells. Bich-Thuy LT, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5307–21

The contribution of the N- and C-terminal regions of steroid receptors to activation of transcription is both receptor and cell-specific. Bocquel MT, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2581–95

Rom transcript of plasmid ColE1. Brenner M, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4309–26

Mutations in the RNA polymerase recognition sequence of the Klebsiella pneumoniae nifH promoter permitting transcriptional activation in the absence of NifA binding to upstream activator sequences. Buck M, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2597–612

Nuclear protein factors and erythroid transcription of the human A gamma-globin gene. Catala F, et al. **Nucleic Acids Res** 1989 May 25;17(10):3811–27

Specific and ubiquitous expression of different Zn finger protein genes in the mouse. Chowdhury K, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):9995–10011

Foreign transcriptional enhancers in yeast. II. Interplay of the polyomavirus transcriptional enhancer and Saccharomyces cerevisiae promoter elements. Ciaramella M, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8869–86

Nuclear transcriptional activity of the tobacco plastid psbA promoter. Cornelissen M, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):19–29

Transcription from the intron-containing chicken histone H2A.F gene is not S-phase regulated. Dalton S, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1745–56

An efficient strategy for cloning 5' extremities of rare transcripts permits isolation of multiple 5'-untranslated regions of rat tryptophan hydroxylase mRNA. Delort J, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6439–48

DNA supercoiling and aerobic regulation of transcription from the Klebsiella pneumoniae nifLA promoter. Dixon RA, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):9933–46

Effects of all single base substitutions in the loop of boxB on antitermination of transcription by bacteriophage lambda's N protein. Doelling JH, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5565–77

Transcription of the chicken myb proto-oncogene starts within a CpG island. Dvořák M, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5651–64

An in vitro transcription vector which generates nearly correctly ended RNAs by self-cleavage of longer transcripts. Dzianott AM, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10940

Identification of sequences regulating the transcription of a Dictyostelium gene selectively expressed in prespore cells. Early AE, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6473–84

Ubiquitin mRNA is a major stress-induced transcript in mammalian cells. Fornace AJ Jr, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1215–30

5' flanking and first intron sequences of the human beta-actin gene required for efficient promoter activity. Frederickson RM, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):253–70

Involvement of a cis-element that binds an H2TF-1/NF kappa B like factor(s) in the virus-induced interferon-beta gene expression. Fujita T, et al. **Nucleic Acids Res** 1989 May 11;17(9):3335–46

One-step amplification of transcripts in total RNA using the polymerase chain reaction. Goblet C, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2144

Transcriptional analysis of the CDC7 protein kinase gene of Saccharomyces cerevisiae. Ham J, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5781–92

Transient expression of heterologous RNAs using tomato golden mosaic virus. Hanley-Bowdoin L, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10511–28

Transcription regulation in vitro by an E. coli promoter containing a DNA cruciform in the '-35' region. Horwitz MS. **Nucleic Acids Res** 1989 Jul 25;17(14):5537–45

Analysis of potential expression of highly related members of the ribosomal protein L32 gene family. Jacks CM, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10751–64

Direct recovery of in vitro transcripts in a protected form suitable for prolonged storage and shipment at ambient temperatures. Jupin I, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):815

Pseudorevertants of a lac promoter mutation reveal overlapping nascent promoters. Karls R, et al. **Nucleic Acids Res** 1989 May 25;17(10):3927–49

Differential premature termination of transcription as a proposed mechanism for the regulation of coronavirus gene expression. Konings DA, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10849–60

Unusual promoter-independent transcription reactions with bacteriophage RNA polymerases. Krupp G. **Nucleic Acids Res** 1989 Apr 25;17(8):3023–36

The regulation of SV40 early gene expression in embryonal carcinoma stem cells—faithful transcriptional regulation in vitro. La Thangue NB, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11417–30

Cell type-specific transcriptional regulation of the human adenosine deaminase gene. Lattier DL, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1061–76

Abortive initiation by bacteriophage T3 and T7 RNA polymerases under conditions of limiting substrate [published erratum appears in Nucleic Acids Res 1989 Jun 12;17(11):4430] Ling ML, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1605–18

Sequence analysis and regulation of the htrA gene of Escherichia coli: a sigma 32-independent mechanism of heat-inducible transcription. Lipinska B, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10053–67

Transcriptional regulation of two cytotoxic T lymphocyte-specific serine protease genes. Lobe CG, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5765–79

A test of 'polymerase handover' as a mechanism for stimulating initiation by RNA polymerase I. Lucchini R, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):373–87

CMER, an RNA encoded by human cytomegalovirus is most likely transcribed by RNA polymerase III. Marschalek R, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):631–43

An oocyte-expressed alpha-tubulin gene in Xenopus laevis; sequences required for the initiation of transcription. Middleton KM, et al. **Nucleic Acids Res** 1989 Jul 11; 17(13):5041–55

Isolation of the Xenopus homolog of int-1/wingless and expression during neurula stages of early development. Noordermeer J, et al. **Nucleic Acids Res** 1989 Jan 11; 17(1):11–8

Do transcriptional enhancers also augment DNA replication? O'Connor DT, et al. **Nucleic Acids Res** 1988 Dec 9; 16(23):11207–22

Secondary structure analysis of the RepA mRNA leader transcript involved in control of replication of plasmid R1. Ohman M, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2557–79

Sequence organization and gene expression of pGD1, a plasmid found in a wild isolate of Dictyostelium. Orii H, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1395–408

The Xenopus U2 gene PSE is a single, compact, element required for transcription initiation and 3' end formation. Parry HD, et al. **Nucleic Acids Res** 1989 May 25; 17(10):3633–44

The regions of the herpes simplex virus type 1 immediate early protein Vmw175 required for site specific DNA binding closely correspond to those involved in transcriptional regulation. Paterson T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11005–25

The effects of transcription on the nucleosome structure of four Dictyostelium genes. Pavlovic J, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2315–32

Transient expression analysis of the reticuloendotheliosis virus long terminal repeat element. Ridgway AA, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3199–215

Liver cell specific gene transcription in vitro: the promoter elements HP1 and TATA box are necessary and sufficient to generate a liver-specific promoter. Ryffel GU, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):939–53

The modulatory element TNNCT affects transcription of a Drosophila tRNA(Val)4 gene without affecting transcription complex stability. Sajjadi FG, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):755–66

RNA polymerase induces DNA bending at yeast mitochondrial promoters. Schinkel AH, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9147–63

A family of heat shock protein 70-related genes are expressed in the promastigotes of Leishmania major. Searle S, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5081–95

Codon usage and gene expression level in Dictyostelium discoideum: highly expressed genes do 'prefer' optimal codons. Sharp PM, et al. **Nucleic Acids Res** 1989 Jul 11; 17(13):5029–39

DNA recognition element required for PUF-I mediated cell-type-specific transcription of the rat prolactin gene. Sharp ZD, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2705–22

Kinetoplastid mitochondria contain functional tRNAs which are encoded in nuclear DNA and also contain small minicircle and maxicircle transcripts of unknown function. Simpson AM, et al. **Nucleic Acids Res** 1989 Jul 25; 17(14):5427–45

The transcriptional control regions of the copia retrotransposon. Sneddon A, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4025–35

The structure of nucleosomal core particles within transcribed and repressed gene regions. Studitsky VM, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11187–205

Isolation and in vitro expression of the ricin A-chain gene: effect of deletions on biological activity. Sundan A, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1717–32

Characterization of single base substitutions in edited apolipoprotein B transcripts. Tennyson GE, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):691–8

A novel nuclear transcription system which responds correctly to cloned estrogen receptor. Thorburn A, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10469–76

In vitro transcription analysis of the role of flanking sequence on the DNA sequence specificity of adriamycin. Trist H, et al. **Nucleic Acids Res** 1989 May 25;17(10):3673–88

Characteristics of a multicopy gene family predominantly consisting of processed pseudogenes. Van den Ouweland AM, et al. **Nucleic Acids Res** 1989 May 25;17(10):3829–43

Design, synthesis and expression of a human interleukin-2 gene incorporating the codon usage bias found in highly expressed Escherichia coli genes. Williams DP, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10453–67

Transcriptional activation of Xenopus class III genes in chromatin isolated from sperm and somatic nuclei. Wolffe AP. **Nucleic Acids Res** 1989 Jan 25;17(2):767–80

Organization and expression of the COX6 genetic locus in Saccharomyces cerevisiae: multiple mRNAs with different 3' termini are transcribed from COX6 and regulated differentially. Wright RM, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1103–20

Micrococcal nuclease as a probe for bound and distorted DNA in lac transcription and repression complexes. Zhang L, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5017–28

The synthesis, cloning and expression of a repeating segment of the circumsporozoite surface protein of Plasmodium falciparum. Armah GE, et al. **Nucleic Acids Symp Ser** 1988; (19):165–9

Inquiries into the cloning and expression of the tuf gene of Thermus thermophilus HB8. Kushiro A, et al. **Nucleic Acids Symp Ser** 1988;(19):161–4

Several aspects of total genomic DNA transcription in a HeLa cell extract. Okada N, et al. **Nucleic Acids Symp Ser** 1988;(19):181–4

Mechanism of transcription termination in eukaryotic cell. Sato K, et al. **Nucleic Acids Symp Ser** 1988;(19):185–8

An intracellular retinoic acid receptor activates transcription. **Nutr Rev** 1988 Nov;46(11):394–7 (12 ref.)

Molecular requirements for transcriptional initiation of the murine c-myc gene. Asselin C, et al. **Oncogene** 1989 May; 4(5):549–58

Altered myc gene transcription and intron-induced stabilization of myc RNAs in two mouse plasmacytomas. Bauer SR, et al. **Oncogene** 1989 May;4(5):615–23

Receptor-mediated phagocytosis by macrophages induces a calcium-dependent transient increase in c-fos transcription. Collart MA, et al. **Oncogene** 1989 Feb;4(2):237–41

Modulation of major histocompatibility complex (MHC) class I genes in adenovirus 12 transformed cells: interferon-gamma increases class I expression by a mechanism that circumvents E1A induced-repression and tumor necrosis factor enhances the effect of interferon-gamma. Eager KB, et al. **Oncogene** 1989 Jan; 4(1):39–44

The int-1 proto-oncogene is transcriptionally activated during neuroectodermal differentiation of P19 mouse embryonal carcinoma cells. St-Arnaud R, et al. **Oncogene** 1989 Sep;4(9):1077–80

The Fos and Jun/AP-1 proteins are involved in the downregulation of Fos transcription. Schönthal A, et al. **Oncogene** 1989 May;4(5):629–36

In situ and in vitro evidence for intragenic binding of nuclear factors at the murine c-myc locus. Tourkine N, et al. **Oncogene** 1989 Aug;4(8):973–8

Mode of c-myc gene regulation in folic acid-induced kidney regeneration. Asselin C, et al. **Oncogene Res** 1989; 5(1):67–72

Increased rates of specific RNA polymerase III transcription precede overexpression of cellular oncogenes upon induction of transformation. Gallant JW, et al. **Oncogene Res** 1989;4(1):39–46

Expression of a novel gene encoding a 51.5 kD precursor protein is induced by different retroviral oncogenes in quail neuroretinal cells. Michel D, et al. **Oncogene Res** 1989; 4(2):127–36

Coexistence of a c-myc mRNA initiated in intron 1 with

the normal c-myc mRNA and similar regulation of both transcripts in mammalian cells. Ray D, et al. **Oncogene Res** 1989;5(1):73–8

Hormonal regulation of gene expression: regulation of growth hormone gene transcription by growth hormone releasing factor. Barinaga M, et al. **Oxf Surv Eukaryot Genes** 1985;2:49–73 (110 ref.)

The transcriptional regulation of liver-specific gene expression. de Simone V, et al. **Oxf Surv Eukaryot Genes** 1988;5:51–90 (126 ref.)

Expression of proviral DNA of mouse mammary tumour virus and its transcriptional control sequences. Groner B, et al. **Oxf Surv Eukaryot Genes** 1984;1:87–110 (76 ref.)

The promotion of ribosomal transcription in eukaryotes. Moss T, et al. **Oxf Surv Eukaryot Genes** 1985;2:207–50 (120 ref.)

Viral and cellular transcription enhancers. Picard D. **Oxf Surv Eukaryot Genes** 1985;2:24–48 (95 ref.)

Regulation of immunoglobulin transcription. Queen C. **Oxf Surv Eukaryot Genes** 1984;1:169–91 (50 ref.)

Growth hormone regulation of growth hormone–releasing hormone gene expression. de Gennaro Colonna V, et al. **Peptides** 1988 Sep–Oct;9(5):985–8

Reduced growth hormone releasing factor (GHRF)–like immunoreactivity and GHRF gene expression in the hypothalamus of aged rats. DeGennaro Colonna V, et al. **Peptides** 1989 May–Jun;10(3):705–8

Isolation and characterization of small phosphorylated peptides controlling transcription "in vitro" from trout testis chromatin DNA. Coderoni S, et al. **Physiol Chem Phys Med NMR** 1988;20(2):91–108

A plasmid to visualize and assay termination and antitermination of transcription in Escherichia coli. Franklin NC. **Plasmid** 1989 Jan;21(1):31–42

Transcriptional analysis of the F plasmid surface exclusion region: mapping of traS, traT, and traD transcripts. Ham LM, et al. **Plasmid** 1989 Jan;21(1):1–8

Use of lacZ expression to monitor transcription. Tomich CS, et al. **Plasmid** 1988 Sep;20(2):167–70

Mutations in RNA polymerase II enhance or suppress mutations in GAL4. Allison LA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2794–8

In vitro transcription directed from the somatostatin promoter is dependent upon a purified 43-kDa DNA-binding protein. Andrisani OM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2181–5

Secondary sigma factor controls transcription of flagellar and chemotaxis genes in Escherichia coli. Arnosti DN, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):830–4

Regulation of the low density lipoprotein receptor and hydroxymethylglutaryl coenzyme A reductase genes by protein kinase C and a putative negative regulatory protein. Auwerx JH, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(4):1133–7

Chromosomal translocation in a human leukemic stem-cell line disrupts the T-cell antigen receptor delta-chain diversity region and results in a previously unreported fusion transcript. Begley CG, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2031–5

An analysis of T-cell receptor variable region gene expression in major histocompatibility complex disparate mice. Bill J, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9184–8

Differential expression of alpha and beta thyroid hormone receptor genes in rat brain and pituitary. Bradley DJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7250–4

Yeast GCN4 transcriptional activator protein interacts with RNA polymerase II in vitro. Brandl CJ, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2652–6

Multiple states of protein-DNA interaction in the assembly of transcription complexes on Saccharomyces cerevisiae 5S ribosomal RNA genes. Braun BR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2530–4

Association of charge clusters with functional domains of cellular transcription factors. Brendel V, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5698–702

Control of Torpedo acetylcholine receptor biosynthesis in Xenopus oocytes. Buller AL, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8717–21

Evidence for a trans-acting factor that regulates the transcription of class II major histocompatibility complex genes: genetic and functional analysis. Calman AF, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8830–4

Identification of a transcriptional silencer in the 5'-flanking region of the human epsilon-globin gene. Cao SX, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5306–9

Enhanced B2 transcription in simian virus 40–transformed cells is mediated through the formation of RNA polymerase III transcription complexes on previously inactive genes. Carey MF, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7059–63

Illegitimate transcription: transcription of any gene in any cell type. Chelly J, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2617–21

Different 3'-end processing produces two independently regulated mRNAs from a single H1 histone gene. Cheng GH, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7002–6

Human beta-globin gene expression in transgenic mice is enhanced by a distant DNase I hypersensitive site. Curtin PT, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7082–6

Transcriptional bias: a non-Lamarckian mechanism for substrate-induced mutations. Davis BD. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5005–9

Regulated expression of foreign genes in mammalian cells under the control of coliphage T3 RNA polymerase and lac repressor. Deuschle U, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5400–4

Cyclic AMP and phorbol ester–stimulated transcription mediated by similar DNA elements that bind distinct proteins. Deutsch PJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7922–6

Transcription of thrombomodulin mRNA in mouse hemangioma cells is increased by cycloheximide and thrombin. Dittman WA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7179–82

Derivation of an infectious viral RNA by autolytic cleavage of in vitro transcribed viral cDNAs. Dzianott AM, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4823–7

Extra-renal transcription of the renin genes in multiple tissues of mice and rats. Ekker M, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5155–8

Evidence that the familial adenomatous polyposis gene is involved in a subset of colon cancers with a complementable defect in c-myc regulation. Erisman MD, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4264–8

Transcription induces gyration of the DNA template in Escherichia coli. Figueroa N, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9416–20

Chromosomal translocation in T-cell leukemia line HUT 78 results in a MYC fusion transcript. Finger LR, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9158–62

DNA damage–inducible transcripts in mammalian cells. Fornace AJ Jr, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):8800–4

Rapid production of full-length cDNAs from rare transcripts: amplification using a single gene-specific oligonucleotide primer. Frohman MA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8998–9002

Mechanism by which cellulose triggers cellobiohydrolase I gene expression in Trichoderma reesei. el-Gogary S, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6138–41

Coordinate viral induction of tumor necrosis factor alpha and interferon beta in human B cells and monocytes. Goldfeld AE, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1490–4

Salmonella typhimurium phoP virulence gene is a transcriptional regulator. Groisman EA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7077–81

Molecular cloning of the alpha-subunit of human prolyl 4-hydroxylase: the complete cDNA-derived amino acid sequence and evidence for alternative splicing of RNA transcripts. Helaakoski T, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4392–6

Trans-inactivation of the Drosophila brown gene: evidence for transcriptional repression and somatic pairing dependence. Henikoff S, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6704–8

A T-cell-specific transcriptional enhancer element 3' of C alpha in the human T-cell receptor alpha locus. Ho IC, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6714–8

Polyomavirus early-late switch is not regulated at the level of transcription initiation and is associated with changes in RNA processing. Hyde-DeRuyscher R, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8993–7

Transcriptional activation of homologous viral long terminal repeats by the human immunodeficiency virus type 1 or the human T-cell leukemia virus type I tat proteins occurs in the absence of de novo protein synthesis. Jeang KT, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8291–5

Mammalian cAMP-responsive element can activate transcription in yeast and binds a yeast factor(s) that resembles the mammalian transcription factor ANF. Jones RH, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(7):2176–80

Coexpression of granulocyte-macrophage colony-stimulating factor, gamma interferon, and interleukins 3 and 4 is random in murine alloreactive T-lymphocyte clones. Kelso A, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9189–93

Detection of mRNA for the tax1/rex1 gene of human T-cell leukemia virus type I in fresh peripheral blood mononuclear cells of adult T-cell leukemia patients and viral carriers by using the polymerase chain reaction. Kinoshita T, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5620–4

Resolution and partial characterization of factors required for in vitro transcription by mammalian RNA polymerase II. Kitajima S, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6106–10

Transcription-based amplification system and detection of amplified human immunodeficiency virus type 1 with a bead-based sandwich hybridization format. Kwoh DY, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1173–7

High initiation rates at the ribosomal gene promoter do not depend upon spacer transcription. Labhart P, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3155–8

Estrogen receptor selectively binds the "coding strand" of an estrogen responsive element. Lannigan DA, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):863–7

Molecular cloning of plant transcripts encoding protein kinase homologs. Lawton MA, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3140–4

Neonatal induction of a nuclear protein that binds to the c-fos enhancer. Levi BZ, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2262–6

S-phase-specific regulation by deletion mutants of the human thymidine kinase promoter. Lipson KE, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6848–52

Activation of yeast RNA polymerase II transcription by a thymidine-rich upstream element in vitro. Luo NF, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):486–90

Structural features of the acetyl-CoA carboxylase gene: mechanisms for the generation of mRNAs with 5' end heterogeneity. Luo XC, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4042–6

U3 small nuclear RNA can be psoralen–cross-linked in vivo to the 5' external transcribed spacer of pre-ribosomal-RNA. Maser RL, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6523–7

Multiple post-transcriptional regulatory mechanisms in ferritin gene expression. Mattia E, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1801–5

Regulation of transcription by cyclic AMP-dependent protein kinase. Mellon PL, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4887–91

Regulation of neuronal oxytocin mRNA by ovarian steroids in the mature and developing hypothalamus. Miller FD, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2468–72

Transcript encoded on the opposite strand of the human steroid 21-hydroxylase/complement component C4 gene locus. Morel Y, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6582–6

An element downstream of the cap site is required for transcription of the gene encoding mouse ribosomal protein L32. Moura-Neto R, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3997–4001

Numerous transcription initiation sites exist for the maize mitochondrial genes for subunit 9 of the ATP synthase and subunit 3 of cytochrome oxidase. Mulligan RM, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7998–8002

Visual experience regulates gene expression in the developing striate cortex. Neve RL, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4781–4

Genetic switching in the flagellar gene hierarchy of Caulobacter requires negative as well as positive regulation of transcription. Newton A, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6651–5

Human immunodeficiency virus type 1 negative factor is a transcriptional silencer. Niederman TM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1128–32

Transient expression of the cholecystokinin gene in male germ cells and accumulation of the peptide in the acrosomal granule: possible role of cholecystokinin in fertilization. Persson H, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6166–70

Marked increases in hepatic NAD(P)H:oxidoreductase gene transcription and mRNA levels correlated with a mouse chromosome 7 deletion. Petersen DD, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6699–703

Two transcripts encode rat cytochrome b5 reductase. Pietrini G, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7246–50

Temporal and pharmacological division of fibroblast cyclooxygenase expression into transcriptional and translational phases. Raz A, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1657–61

RNA polymerase II is capable of pausing and prematurely terminating transcription at a precise location in vivo and in vitro. Reznekov O, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):12–6

Evidence for expression of the facilitated glucose transporter in rat hepatocytes. Rhoads DB, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9042–6

Role of the ribosome in suppressing transcriptional termination at the pyrBI attenuator of Escherichia coli K-12. Roland KL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7149–53

Targeting of a chromosomal protein to the nucleus and to lampbrush chromosome loops. Roth MB, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1269–72

Cellular differentiation in the emerging fetal rat small intestinal epithelium: mosaic patterns of gene expression. Rubin DC, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(4):1278–82

High-level erythroid expression of human alpha-globin genes in transgenic mice. Ryan TM, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):37–41

Delineation of three functional domains of the transcriptional activator encoded by the c-myb protooncogene. Sakura H, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5758–62

Molecular cloning of a neuron-specific transcript and its regulation during normal and aberrant cerebellar development. Sangameswaran L, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5651–5

Rapid increase in enzyme and peptide mRNA in sympathetic ganglia after electrical stimulation in humans. Schalling M, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4302–5

Internal frameshifts within the mitochondrial genes for cytochrome oxidase subunit II and maxicircle unidentified reading frame 3 of Leishmania tarentolae are corrected by RNA editing: evidence for translation of the edited cytochrome oxidase subunit II mRNA. Shaw JM, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6220–4

Identification of a human transcription unit affected by the variant chromosomal translocations 2;8 and 8;22 of Burkitt lymphoma. Shtivelman E, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3257–60

Estrogen differentially regulates neuropeptide gene

expression in a sexually dimorphic olfactory pathway. Simerly RB, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4766–70

A signal peptide encoded within the precore region of hepatitis B virus directs the secretion of a heterogeneous population of e antigens in Xenopus oocytes. Standring DN, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8405–9

Immunoglobulin heavy-chain switching may be directed by prior induction of transcripts from constant-region genes. Stavnezer J, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(20):7704–8

Tissue-specific genetic variation in the level of mouse alcohol dehydrogenase is controlled transcriptionally in kidney and posttranscriptionally in liver. Tussey L, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5903–7

Even transcriptionally competent proviruses are silent in bovine leukemia virus-induced sheep tumor cells. Van den Broeke A, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9263–7

Conserved terminal hairpin sequences of histone mRNA precursors are not involved in duplex formation with the U7 RNA but act as a target site for a distinct processing factor. Vasserot AP, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4345–9

Properties of two 5'-coterminal RNAs transcribed part way and across the S component origin of DNA synthesis of the herpes simplex virus 1 genome. Voss JH, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8454–8

DNA sequences that mediate attenuation of transcription from the mouse protooncogene myc. Wright S, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):505–9

Cell-specific transcriptional control of the mouse DNA-binding protein mC/EBP. Xanthopoulos KG, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4117–21

Negative transcriptional regulation in the Caulobacter flagellar hierarchy. Xu H, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6656–60

Gene Q antiterminator proteins of Escherichia coli phages 82 and lambda suppress pausing by RNA polymerase at a rho-dependent terminator and at other sites. Yang XJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5301–5

Binding and transcription of relaxed DNA templates by fractions of maize chloroplast extracts. Zaitlin D, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):876–80

Conditional enhancement of liver-specific gene transcription. Zaret KS, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9076–80

Gene expression during growth and meiotic maturation of mouse oocytes. Bachvarova R, et al. **Prog Clin Biol Res** 1988;267:67–85 (46 ref.)

Oncogene expression: a new horizon in the study of sepsis. Carcillo JA, et al. **Prog Clin Biol Res** 1989;286:71–6

The expression of oncogenes in germ cells. Cooper GM, et al. **Prog Clin Biol Res** 1988;267:275–89 (47 ref.)

Tissue-specific differences in the expression of the genes encoding the alpha and beta subunits of rat Na,K-ATPase. Gick GG, et al. **Prog Clin Biol Res** 1988;268B:65–70

Post-meiotic gene expression during spermatogenesis. Hecht NB. **Prog Clin Biol Res** 1988;267:291–313 (47 ref.)

Development of a heterologous gene expression system for the Na,K-ATPase subunits in the yeast Saccharomyces cerevisiae. Horowitz B, et al. **Prog Clin Biol Res** 1988; 268B:85–90

Multiple forms of the Na,K-ATPase: their genes and tissue specific expression. Lingrel JB, et al. **Prog Clin Biol Res** 1988;268B:105–12

Human ferritin gene expression. Drysdale JW. **Prog Nucleic Acid Res Mol Biol** 1988;35:127–72 (55 ref.)

Early signals underlying the induction of the c-fos and c-myc genes in quiescent fibroblasts: studies with bombesin and other growth factors. Rozengurt E, et al. **Prog Nucleic Acid Res Mol Biol** 1988;35:261–95 (173 ref.)

The specific consequences of c-fos expression in transgenic mice. Rüther U, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:235–45

Expression of the c-erbB-2 proto-oncogene protein in human breast cancer. Gullick WJ. **Recent Results Cancer Res** 1989;113:51–6

Gene expression during multistage hepatocarcinogenesis. Pitot HC, et al. **Scand J Gastroenterol Suppl** 1988;151:52–61

Myelin basic protein transcriptional activity in myelin-deficient mutant mice. Roch JM, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):6–10

Association of adenovirus DNA transcribed activity with nuclear matrix of host cells. Zhai ZH, et al. **Sci China [B]** 1989 Feb;32(2):176–85

In vitro transcription enhancement by purified derivatives of the glucocorticoid receptor. Freedman LP, et al. **Science** 1989 Jul 21;245(4915):298–301

Regulation of the erythropoietin gene: evidence that the oxygen sensor is a heme protein. Goldberg MA, et al. **Science** 1988 Dec 9;242(4884):1412–5

Enhancement of bacteriophage T4 late transcription by components of the T4 DNA replication apparatus. Herendeen DR, et al. **Science** 1989 Sep 1;245(4921):952–8

Competitive inhibition of hsp70 gene expression causes thermosensitivity. Johnston RN, et al. **Science** 1988 Dec 16;242(4885):1551–4

Distinct regions of Sp1 modulate DNA binding and transcriptional activation. Kadonaga JT, et al. **Science** 1988 Dec 16;242(4885):1566–70

Distinct cloned class II MHC DNA binding proteins recognize the X box transcription element. Liou HC, et al. **Science** 1988 Oct 7;242(4875):69–71

Transcriptional regulation in mammalian cells by sequence-specific DNA binding proteins. Mitchell PJ, et al. **Science** 1989 Jul 28;245(4916):371–8 (72 ref.)

Chromosome mapping and expression of a putative testis-determining gene in mouse. Nagamine CM, et al. **Science** 1989 Jan 6;243(4887):80–3

Function of a bacterial activator protein that binds to transcriptional enhancers. Popham DL, et al. **Science** 1989 Feb 3;243(4891):629–35

Dynamic expression pattern of the myc protooncogene in midgestation mouse embryos. Schmid P, et al. **Science** 1989 Jan 13;243(4888):226–9

A protein that binds to a cis-acting element of wheat histone genes has a leucine zipper motif. Tabata T, et al. **Science** 1989 Sep 1;245(4921):965–7

Translation of unspliced transcripts after heat shock. Yost HJ, et al. **Science** 1988 Dec 16;242(4885):1544–8

Transcriptional and post-transcriptional control of liver gene expression during various physiologic and pathophysiologic states. Shafritz DA. **Semin Liver Dis** 1988 Nov;8(4):285–92

Steady-state and nuclear run-on analyses of transcription in a temperature-sensitive Chinese hamster cell mutant with a defect in RNA metabolism. Slezynger TC, et al. **Somat Cell Mol Genet** 1988 Sep;14(5):439–59

Generation of effector T cells expressing chimeric T cell receptor with antibody type-specificity. Gross G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):127–30

Lymphokine transcription in vascularized mouse heart grafts: effects of "tolerance" induction. Lowry RP, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):72–3

How 'hidden' reading frames are expressed. Cattaneo R. **Trends Biochem Sci** 1989 May;14(5):165–7

How RNA polymerase II terminates transcription in higher eukaryotes. Proudfoot NJ. **Trends Biochem Sci** 1989 Mar; 14(3):105–10 (31 ref.)

Helix-turn-helix, zinc-finger, and leucine-zipper motifs for eukaryotic transcriptional regulatory proteins. Struhl K. **Trends Biochem Sci** 1989 Apr;14(4):137–40 (36 ref.)

Transforming potential of fibroblast growth factor genes. Thomas KA. **Trends Biochem Sci** 1988 Sep;13(9):327–8 (17 ref.)

Supercoiling and transcription, or vice versa? Futcher B. **Trends Genet** 1988 Oct;4(10):271–2 (22 ref.)

Nuclear receptors enhance our understanding of transcription regulation. Green S, et al. **Trends Genet** 1988 Nov; 4(11):309–14 (45 ref.)

Transcriptional and post-transcriptional control of plastid mRNA levels in higher plants. Gruissem W, et al. **Trends Genet** 1988 Sep;4(9):258–63 (35 ref.)

Promoter selectivity of prokaryotic RNA polymerases. Ishihama A. **Trends Genet** 1988 Oct;4(10):282–6 (36 ref.)

Common mechanisms of promoter recognition by RNA polymerases II and III. Murphy S, et al. **Trends Genet** 1989 Apr;5(4):122–6 (40 ref.)

Mitochondrial RNA polymerase: dual role in transcription and replication. Schinkel AH, et al. **Trends Genet** 1989 May;5(5):149–54 (31 ref.)

Genome organization of mouse adenovirus type 1 early region 1: a novel transcription map. Ball AO, et al. **Virology** 1989 Jun;170(2):523–36

Characterization of RNA transcripts from herpes simplex virus-1 DNA fragment BamHI-B. Ben-Hur T, et al. **Virology** 1989 Mar;169(1):1–8

Location, sequence, transcriptional mapping, and temporal expression of the gp64 envelope glycoprotein gene of the Orgyia pseudotsugata multicapsid nuclear polyhedrosis virus. Blissard GW, et al. **Virology** 1989 Jun;170(2):537–55

The role of operator position in SV40 T-antigen-mediated repression. Cox M, et al. **Virology** 1988 Nov;167(1):293–5

Vesicular stomatitis virus and its defective interfering particles exhibit in vitro transcriptional and replicative competition for purified L-NS polymerase molecules. Giachetti C, et al. **Virology** 1989 May;170(1):264–7

The human cytomegalovirus major immediate early promoter can be trans-activated by adenovirus early proteins. Gorman CM, et al. **Virology** 1989 Aug;171(2):377–85

Infectivity of chimeric viroid transcripts reveals the presence of alternative processing sites in potato spindle tuber viroid. Hammond RW, et al. **Virology** 1989 Jun;170(2):486–95

Redistributive properties of the vesicular stomatitis virus polymerase. Helfman WB, et al. **Virology** 1989 Aug; 171(2):319–30

The L protein of a VSV mutant isolated from a persistent infection is responsible for viral interference and dominance over the wild-type. Jordan JA, et al. **Virology** 1989 Mar; 169(1):137–41

Lymphocytic choriomeningitis virus selectively alters differentiated but not housekeeping functions: block in expression of growth hormone gene is at the level of transcriptional initiation. Klavinskis LS, et al. **Virology** 1989 Feb;168(2):232–5

Expression of a hepatitis B virus transcript containing fused mitochondrial-like domains in human hepatoma cells. Koch I, et al. **Virology** 1989 Jun;170(2):591–4

Signals important for high-level expression of foreign genes in Autographa californica nuclear polyhedrosis virus expression vectors. Luckow VA, et al. **Virology** 1988 Nov; 167(1):56–71

Monoclonal antibodies to the NS protein of vesicular stomatitis virus inhibit initiation of transcripts in vitro and dissociate leader RNA from mRNA synthesis. Williams PM, et al. **Virology** 1988 Dec;167(2):342–8

Transcriptional activation by the pseudorabies virus immediate early protein requires the TATA box element in the adenovirus 2 E1B promoter. Wu L, et al. **Virology** 1988 Nov;167(1):318–22

The 3'-terminal sequence of a wound tumor virus transcript can influence conformational and functional properties associated with the 5'-terminus. Xu ZK, et al. **Virology** 1989 Jun;170(2):511–22

Transcriptional activation is not responsible for increased levels of autonomously expressed simian virus 40 T-antigen in herpes simplex virus-infected cells. Blair ED, et al. **Virus Genes** 1989 May;2(3):253–67

Development of cell systems to study viral gene transcription at the initial phase of Epstein-Barr virus infection. Harada H, et al. **Virus Genes** 1987 Nov;1(1):73–82

Human RNA polymerase II can prematurely terminate transcription of the adenovirus type 2 late transcription unit at a precise site that resembles a prokaryotic termination signal. Seiberg M, et al. **Virus Genes** 1987 Nov; 1(1):97–116

DNA sequence and RNA transcription through a site of recombination in a non-neurovirulent herpes simplex virus intertypic recombinant. Thompson RL, et al. **Virus Genes** 1988 Jun;1(3):275–86

Synthesis and metabolism of cellular transcripts in HSV-1 infected cells. Yager DR, et al. **Virus Genes** 1988 Mar; 1(2):135–48

The kinetics of expression of individual herpes simplex virus type 1 transcripts. Zhang YF, et al. **Virus Genes** 1987 Nov; 1(1):49–60

Arrangement and expression of integrated adenovirus type 12 DNA in the transformed hamster cell line HA12/7: amplification of Ad12 and c-myc DNAs and evidence for hybrid viral-cellular transcripts. Jessberger R, et al. **Virus Res** 1989 Jun;13(2):113–28

The responsiveness of human papillomavirus upstream regulatory regions to herpes simplex virus immediate early proteins. McCusker CT, et al. **Virus Res** 1988 Oct; 11(3):199–207

[The expression of c-myb is strongly associated with the presence of estrogen and progesterone receptors in breast cancer] Guerin M, et al. **C R Acad Sci [III]** 1988; 307(20):855–61 (Eng. Abstr.) **(Fre)**

[Experimental conditions of a technic of in vitro transcription using placental nuclei] Hess K, et al. **C R Soc Biol (Paris)** 1988;182(3):286–95 (Eng. Abstr.) **(Fre)**

[AIDS. New models disclose the pathophysiology] **Fortschr Med** 1989 Apr 30;107(13):15 **(Ger)**

[Transcription of hepatitis B virus (HBV) and hepatitis delta virus (HDV) in chronic active hepatitis] Melegari M, et al. **Medicina (Firenze)** 1988 Apr-Jun;8(2):173–5 (Eng. Abstr.) **(Ita)**

[Transcriptional regulation of adenovirus E2a gene] Hashimoto S. **Seikagaku** 1989 Mar;61(3):199–201 **(Jpn)**

[Cell cycle-dependent regulation of transcription of plant genes] Iwabuchi M, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):207–16 (32 ref.) **(Jpn)**

[Eukaryotic sequence specific DNA binding proteins involved in replication and transcription] Nagata K. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(11):1774–83 **(Jpn)**

[DNA replication and RNA transcription regulated by c-myc protein] Sanae M, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(11):1758–65 **(Jpn)**

[Transcriptional control of endogenous c-myc gene by antisense RNA] Yokoyama K. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(8):1255–70 (17 ref.) **(Jpn)**

[Eukaryotic gene expression: regulation of transcription] Blomhoff HK. **Tidsskr Nor Laegeforen** 1988 Oct 20; 108(29):2499–501 (Eng. Abstr.) **(Nor)**

[Genes of plastid genomes, their organization, structure and transcription] Goździcka-Józefiak A, et al. **Postepy Biochem** 1988;34(1–2):7–22 (120 ref.) **(Pol)**

[RNA synthesis using T7 phage RNA polymerase: transcription of synthetic DNA templates in solution and on polymer support] Elov AA, et al. **Bioorg Khim** 1989 Feb;15(2):159–65 (Eng. Abstr.) **(Rus)**

[Primary structure of the transcription initiation region of the esterase S gene of Drosophila virilis] Enikolopov GN, et al. **Bioorg Khim** 1988 Dec;14(12):1671–7 (Eng. Abstr.) **(Rus)**

[Localization of mRNA segments, screened by ribosomes in initiator complexes with the help of a reverse transcription reaction] Balakin AG, et al. **Dokl Akad Nauk SSSR** 1989; 305(4):1000–3 **(Rus)**

[Production of a transgenic rabbit, carrying the transcribed gene for human growth hormone releasing-factor] Gazarian KG, et al. **Dokl Akad Nauk SSSR** 1989; 305(3):726–8 **(Rus)**

[Changes in the interaction of histones with DNA during transcription] Gushchin DIu, et al. **Dokl Akad Nauk SSSR** 1988;303(6):1504–7 **(Rus)**

[Detection of paired transcription complexes in bacterial chromatin] Kiseleva EV, et al. **Dokl Akad Nauk SSSR** 1989; 305(5):1235–8 **(Rus)**

[Drosophila mobile element jockey is transcribed from the internal promoter by RNA-polymerase II] Mizrokhi LIu, et al. **Dokl Akad Nauk SSSR** 1988;301(5):1250–4 **(Rus)**

[The transcriptional efficiency of loach oocyte 5S rRNA genes depends on the region of 5'-flanking spacer] Sedman IuE, et al. **Dokl Akad Nauk SSSR** 1988;303(3):736–7 **(Rus)**

[The effect of differences in the structure of transcription-active and inactive chromatin by a DNP electrophoresis method] Spirin KS, et al. **Dokl Akad Nauk SSSR** 1988;300(2):490–3 **(Rus)**

[Transcription of the genome of Pseudomonas aeruginosa phage-transposon D3112 in an homologous host] Bidnenko EM, et al. **Genetika** 1988 Sep;24(9):1579–85 (Eng. Abstr.) **(Rus)**

[Isolation of cDNA clones which are specifically transcribed in metastatic and nonmetastatic murine tumors] Ebralidze AK, et al. **Genetika** 1989 May;25(5):932–6 (Eng. Abstr.) **(Rus)**

[The Drosophila mobile element jockey, being a typical LINE, is transcribed from the internal promoter by RNA polymerase II] Georgieva SG, et al. **Genetika** 1988 Aug; 24(8):1353–63 (Eng. Abstr.) **(Rus)**

[Interaction of products of su(Hw) and su(f) genes with MDG4 region regulating its transcription suppresses mutations in Drosophila caused by insertion of this gene] Mizrokhi LIu, et al. **Genetika** 1989 May;25(5):784–98 (Eng. Abstr.) **(Rus)**

[detection of products of reverse transcription in Saccharomyces cells] Ratovitskii EA. **Genetika** 1989 May; 25(5):819–28 (Eng. Abstr.) **(Rus)**

[A mechanism of transcription in prokaryotes: stages and place in the realization of genetic information] Babichev VV. **Mikrobiol Zh** 1989 Mar–Apr;51(2):107–17 (91 ref.) (Eng. Abstr.) **(Rus)**

[Tissue-specific transcription of the gene for immunoglobulin kappa-chains in a cell-free system] Adzhalov VA, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):830–6 (Eng. Abstr.) **(Rus)**

[Transcription and expression in Escherichia coli of arc gene cloned sequences of rous sarcoma virus] Ambartsumian NS, et al. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):127–34 (Eng. Abstr.) **(Rus)**

[Antisense RNA p53 inhibits proliferation of normal and transformed cells] Prasolov VS, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1371–80 (Eng. Abstr.) **(Rus)**

[The structure of nucleosomal core particles located on the transcribed genome regions] Studitskii VM, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):706–17 (Eng. Abstr.) **(Rus)**

[Nucleotide sequence of intergenic and external transcribed spacers of rDNA of diploid wheat Triticum urartu Thum. ex Candil] Vakhitov VA, et al. **Mol Biol (Mosk)** 1989 Mar–Apr;23(2):441–8 (Eng. Abstr.) **(Rus)**

[Topoisomerase I is connected with the regulatory zone of transcripted active mini-chromosomes of the SV40 virus] Vasetskii ES, et al. **Mol Biol (Mosk)** 1989 Jan–Feb; 23(1):165–74 (Eng. Abstr.) **(Rus)**

[Possibility of cloning the gene of the regulatory protein of rp1JL-operon of Escherichia coli on the multicopy plasmid pUC supported by convergent transcription induced by the promoter Plac of the vector] Paton EB, et al. **Mol Gen Mikrobiol Virusol** 1989 Mar;(3):39–43 (Eng. Abstr.) **(Rus)**

[Factors interacting with promoter region of immunoglobulin genes. Determination of the binding site boundaries] Stepchenko AG, et al. **Mol Gen Mikrobiol Virusol** 1988 Oct;(10):20–3 (Eng. Abstr.) **(Rus)**

[The role of nontranscribable chromatin in the cellular mechanisms of morphogenesis] Maksimovskii LF. **Ontogenez** 1988 Sep–Oct;19(5):461–7 (34 ref.) (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Endotoxin increases lung Cu,Zn superoxide dismutase mRNA: O2 raises enzyme synthesis. Iqbal J, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L61–4

Effects of cholecystokinin on pancreatic ornithine decarboxylase gene expression. Rosewicz S, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G818–21

Modulation in the expression of murine mammary tumor virus, ras proto-oncogene, and of alveolar hyperplasia by fatty acids in mouse mammary explant cultures. Telang NT, et al. **Anticancer Res** 1988 Sep–Oct;8(5A):971–6

Induction of mRNA for HLA-DR beta in human keratinocytes cocultured with interferon-gamma. Nilsson H, et al. **Arch Dermatol Res** 1989;281(4):260–6

Induction of an Alu-sequence containing transcript by insulin in human hepatoma cells. Chuang LM, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1287–92

Transforming growth factor-beta stimulates the expression of endothelin mRNA by vascular endothelial cells. Kurihara H, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1435–40

The response time of transcription and translation of the leu-2 gene of Neurospora to its inducer, alpha-isopropylmalate, approaches the permissible minimum. Mary A, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1286–90

The transcription of the interleukin 1 beta gene is induced with PMA and inhibited with dexamethasone in U937 cells. Nishida T, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):269–74

Antagonistic effect of PDGF and NGF on transcription of ribosomal DNA and tumor cell proliferation. Rakowicz-Szulczynska EM, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):649–56

Correlation between the activity of a 5,6-dichloro-1-beta-D-ribofuranosylbenzimidazole-insensitive puff and the synthesis of major heat-shock polypeptide, hsp70, in Chironomus thummi. Barettino D, et al. **Biochem Cell Biol** 1988 Nov;66(11):1177–85

Inhibitory effect of interferon-gamma on adenovirus replication and late transcription. Mistchenko AS, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1971–8

Drug-DNA dissociation kinetics. In vitro transcription and sodium dodecyl sulphate sequestration. White RJ, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):331–4

Structure and negative transcriptional regulation by glucocorticoids of the acute-phase rat alpha 1-inhibitor III gene. Northemann W, et al. **Biochemistry** 1989 Jan 10; 28(1):84–95

Sequence-dependent termination of bacteriophage T7 transcription in vitro by DNA-binding drugs. White RJ, et al. **Biochemistry** 1989 May 16;28(10):4277–83

Transcriptional analysis of multisite drug-DNA dissociation kinetics: delayed termination of transcription by actinomycin D. White RJ, et al. **Biochemistry** 1988 Dec 27;27(26):9122–32

Inhibition of DNA-dependent RNA synthesis by 8-methoxypsoralen. Gniazdowski M, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):346–53

Inhibition of mitochondrial protein synthesis in regenerating rat liver stimulates mitochondrial transcription. Kuzela S, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):372–6

Inhibition of DNA polymerization and DNA transcription to RNA by seminal plasma peptides. Lugaro G, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):420–8

Prespore gene expression in Dictyostelium requires concomitant protein synthesis. Ratner DI, et al. **Biochim Biophys Acta** 1989 Jun 1;1008(1):71–8

Regulation of insulin gene expression by dexamethasone, Ca2+ and a phorbol ester. Welsh M, et al. **Biomed Biochim Acta** 1988;47(4–5):299–303

Butyrate induces selective transcriptional activation of a hypomethylated embryonic globin gene in adult erythroid cells. Burns LJ, et al. **Blood** 1988 Nov;72(5):1536–42

Stimulation of erythropoietin gene transcription during hypoxia and cobalt exposure. Schuster SJ, et al. **Blood** 1989 Jan;73(1):13–6

Neurofilament gene expression following beta,beta'-iminodipropionitrile (IDPN) intoxication. Parhad IM, et al. **Brain Res** 1988 Dec;464(4):293–301

Estrogen regulation of proenkephalin gene expression in the ventromedial hypothalamus of the rat: temporal qualities and synergism with progesterone. Romano GJ, et al. **Brain Res Mol Brain Res** 1989 Jan;5(1):51–8

Reversible suppression of c-myc expression in a human colon carcinoma line by the anticancer agent N-methylformamide [published erratum appears in Cancer Res 1989 Sep 15;49(18):5236] Chatterjee D, et al. **Cancer Res** 1989 Jul 15;49(14):3910–6

The tumor promoters 12-O-tetradecanoylphorbol-13-acetate and okadaic acid differ in toxicity, mitogenic activity and induction of gene expression. Herschman HR, et al. **Carcinogenesis** 1989 Aug; 10(8):1495–8

Transcription-terminating lesions induced by bifunctional alkylating agents in vitro. Pieper RO, et al. **Carcinogenesis** 1989 Jul;10(7):1307–14

Copper activates metallothionein gene transcription by altering the conformation of a specific DNA binding protein [published erratum appears in Cell 1989 Jan 27;56(2):following 321] Fürst P, et al. **Cell** 1988 Nov 18; 55(4):705–17

Termination of transcription in human mitochondria: identification and purification of a DNA binding protein factor that promotes termination. Kruse B, et al. **Cell** 1989 Jul 28;58(2):391–7

Transcriptional inhibition by a glucocorticoid receptor-beta-galactosidase fusion protein. Oro AE, et al. **Cell** 1988 Dec 23;55(6):1109–14

The "initiator" as a transcription control element. Smale ST, et al. **Cell** 1989 Apr 7;57(1):103–13

Regulation of tumor necrosis factor expression in a macrophage-like cell line by lipopolysaccharide and cyclic AMP. Taffet SM, et al. **Cell Immunol** 1989 May; 120(2):291–300

Identification of growth-factor-inducible genes in mouse fibroblasts. Bravo R, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:901–5

Platelet-derived growth factor generates at least two distinct intracellular signals that modulate gene expression. Jones SD, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:531–6

Transcriptional regulation of interferon-stimulated genes: a DNA response element and induced proteins that recognize it. Levy D, et al. **Cold Spring Harb Symp Quant Biol** 1988; 53 Pt 2:799–802

Genomic response to growth factors. Nathans D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:893–900

Analysis of cis and trans elements involved in cAMP-inducible gene expression in Dictyostelium discoideum. Hjorth A, et al. **Dev Genet** 1988;9(4–5):435–54

Lithium respecifies cyclic AMP-induced cell-type specific gene expression in Dictyostelium. Van Lookeren Campagne MM, et al. **Dev Genet** 1988;9(4–5):589–96

A Dictyostelium prespore-specific gene is transcriptionally repressed by DIF in vitro. Early AE, et al. **Development** 1988 Jul;103(3):519–24

Interferon-gamma induces transcription and differential expression of MHC genes in rat insulinoma cell line RINm5F. Ono SJ, et al. **Diabetes** 1989 Jul;38(7):911–6

Effects of antibiotics on RNA polymerase III transcription. Logan K, et al. DNA 1988 Sep;7(7):483–91

Transient superinducibility of cytochrome P450c (CYP1A1) mRNA and transcription. Teifeld RM, et al. DNA 1989 Jun;8(5):329–38

Effects of polynucleotide inhibitors on transcriptional events of influenza virions. Jackson ML, et al. **Drug Des Deliv** 1986 Aug;1(1):39–45

Overlapping sites for constitutive and induced DNA binding factors involved in interferon-stimulated transcription. Dale TC, et al. **EMBO J** 1989 Mar;8(3):831–9

Cells resistant to interferon are defective in activation of a promoter-binding factor. Kessler DS, et al. **EMBO J** 1988 Dec 1;7(12):3779–83

Increased turnover of the messenger RNA encoding tyrosine aminotransferase can account for the desensitization and de-induction of tyrosine aminotransferase by 8-bromo-cyclic AMP treatment and removal. Smith JD, et al. **EMBO J** 1988 Dec 1;7(12):3711–6

Regional specificity of testosterone regulation of proopiomelanocortin gene expression in the arcuate nucleus of the male rat brain. Chowen-Breed JA, et al. **Endocrinology** 1989 Jun;124(6):2875–81

A tyrosine aminotransferase glucocorticoid response element also mediates androgen enhancement of gene expression. Denison SH, et al. **Endocrinology** 1989 Feb;124(2):1091–3

1,25-Dihydroxyvitamin D3 inhibits transcription of type I collagen genes in the rat osteosarcoma cell line ROS 17/2.8. Harrison JR, et al. **Endocrinology** 1989 Jul;125(1):327–33

Triiodothyronine rapidly reverses inhibition of S14 gene transcription by glucagon. Kinlaw WB, et al. **Endocrinology** 1988 Nov;123(5):2255–60

An adenosine 3'5'-monophosphate-responsive deoxyribonucleic acid element confers forskolin sensitivity on gene expression by primary rat granulosa cells. Kurten RC, et al. **Endocrinology** 1989 Sep;125(3):1345–57

Stimulation of androgen-dependent gene expression by the adrenal precursors dehydroepiandrosterone and androstenedione in the rat ventral prostate. Labrie C, et al. **Endocrinology** 1989 Jun;124(6):2745–54

Parathyroid hormone enhances the transcript and polypeptide levels of insulin-like growth factor I in osteoblast-enriched cultures from fetal rat bone. McCarthy TL, et al. **Endocrinology** 1989 Mar;124(3):1247–53

Insulin and dexamethasone regulation of a rat hepatoma messenger ribonucleic acid: insulin has a transcriptional and a posttranscriptional effect. Messina JL. **Endocrinology** 1989 Feb;124(2):754–61

Transcriptional regulation of osteocalcin production by transforming growth factor-beta in rat osteoblast-like cells. Noda M. **Endocrinology** 1989 Feb;124(2):612–7

Gonadotropin-releasing hormone regulates follicle-stimulating hormone beta-subunit gene expression in the male rat. Rodin DA, et al. **Endocrinology** 1989 Sep; 125(3):1282–9

Estrogen regulation of prolactin gene transcription in vivo: paradoxical effects of 17 beta-estradiol dose. Shull JD, et al. **Endocrinology** 1989 Jan;124(1):279–85

Basic proline-rich proteins of murine parotid glands. Induction of mRNA by isoprenaline and post-secretion processing. Bannister AJ, et al. **Eur J Biochem** 1989 May 1;181(2):371–9

Insulin antagonism of dexamethasone induction of tyrosine aminotransferase in cultured fetal hepatocytes. A correlation between enzyme activity, synthesis, level of messenger RNA and transcription. Cake MH, et al. **Eur J Biochem** 1989 Jun 15;182(2):429–35

Control of mitochondrial transcription by thyroid hormone. Mutvei A, et al. **Eur J Biochem** 1989 Mar 1;180(1):235–40

Heme may not be a positive regulator of cytochrome-P450 gene expression. Srivastava G, et al. **Eur J Biochem** 1989 Jan 2;178(3):689–92

Effects of a DNA helix-destabilizing protein on transcription in living cells. Egyházi E, et al. **Eur J Cell Biol** 1989 Feb; 48(1):88–94

Interleukin 1 and tumor necrosis factor enhance transcription from the SV40 early promoter in a T cell line. Plaetinck G, et al. **Eur J Immunol** 1989 May;19(5):897–904

Effect of DNA supercoiling on in vitro transcription from the adenovirus early region 4. Handa H, et al. **FEBS Lett** 1989 May 22;249(1):17–20

Site-selective 8-Cl-cAMP which causes growth inhibition and differentiation increases DNA (CRE)-binding activity in cancer cells. Mednieks MI, et al. **FEBS Lett** 1989 Aug 28;254(1-2):83–8

Dexamethasone regulation of the expression of cytokine mRNAs induced by interleukin-1 in the astrocytoma cell line U373MG. Nishida T, et al. **FEBS Lett** 1989 Jan 16; 243(1):25–9

Expression of the enkephalin precursor gene in rat Sertoli cells. Regulation by follicle-stimulating hormone. Yoshikawa K, et al. **FEBS Lett** 1988 Sep 12;237(1-2):183–6

Steroid regulation of glue protein genes in Drosophila melanogaster. Hansson L, et al. **Hereditas** 1989;110(1):61–7

Angiotensin II induces c-fos expression in smooth muscle via transcriptional control. Nahilan AJ, et al. **Hypertension** 1989 Jun;13(6 Pt 2):706–11

Sensitivity of protein and RNA synthesis to antiamoebic drugs in axenic Entamoeba histolytica (NIH–200). Agrawal A, et al. **Int J Med Microbiol** 1989 Jul;271(2):244–8

Mechanism for iron-regulated transcription of the Escherichia coli cir gene: metal-dependent binding of fur protein to the promoters. Griggs DW, et al. **J Bacteriol** 1989 Feb;171(2):1048–52

Two transcribing activities are involved in expression of the Streptomyces galactose operon. Westpheling J, et al. **J Bacteriol** 1989 Mar;171(3):1355–61

Glucocorticoids induce the accumulation of novel angiotensinogen gene transcripts. Ben-Ari ET, et al. **J Biol Chem** 1989 Aug 5;264(22):13074–9

Triiodothyronine amplifies norepinephrine stimulation of uncoupling protein gene transcription by a mechanism not requiring protein synthesis. Bianco AC, et al. **J Biol Chem** 1988 Dec 5;263(34):18168–75

Regulation of expression of the gene encoding the major surfactant protein (SP-A) in human fetal lung in vitro. Disparate effects of glucocorticoids on transcription and on mRNA stability. Boggaram V, et al. **J Biol Chem** 1989 Jul 5;264(19):11421–7

Polyamines differentially modulate the transcription of growth-associated genes in human colon carcinoma cells. Celano P, et al. **J Biol Chem** 1989 May 25;264(15):8922–7

5,6-Dichloro-1-beta-D-ribofuranosylbenzimidazole inhibits transcription elongation by RNA polymerase II in vitro. Chodosh LA, et al. **J Biol Chem** 1989 Feb 5;264(4):2250–7

Stimulation of collagen gene expression by ascorbic acid in cultured human fibroblasts. A role for lipid peroxidation? Chojkier M, et al. **J Biol Chem** 1989 Oct 5;264(28):16957–62

Regulation of pim and myb mRNA accumulation by interleukin 2 and interleukin 3 in murine hematopoietic cell lines. Dautry F, et al. **J Biol Chem** 1988 Nov 25; 263(33):17615–20

Regions of the rat osteocalcin gene which mediate the effect of 1,25-dihydroxyvitamin D3 on gene transcription. Demay MB, et al. **J Biol Chem** 1989 Feb 5;264(4):2279–82

The antimitogenic action of tumor necrosis factor is associated with increased AP-1/c-jun proto-oncogene transcription. Dixit VM, et al. **J Biol Chem** 1989 Oct 5; 264(28):16905–9

Lithium dramatically potentiates neurotensin/neuromedin N gene expression. Dobner PR, et al. **J Biol Chem** 1988 Oct 5;263(28):13983–6

Dual regulation of GAP-43 gene expression by nerve growth factor and glucocorticoids. Federoff HJ, et al. **J Biol Chem** 1988 Dec 25;263(36):19290–5

Mechanism of induction of mouse kidney alcohol dehydrogenase by androgen. Androgen-induced stimulation of transcription of the Adh-1 gene. Felder MR, et al. **J Biol Chem** 1988 Oct 5;263(28):14531–7

The regulation by insulin of glucose transporter gene expression in 3T3 adipocytes. Garcia de Herreros A, et al. **J Biol Chem** 1989 Jun 15;264(17):9885–90

Molecular cloning of cDNA coding for kidney aldose reductase. Regulation of specific mRNA accumulation by NaCl-mediated osmotic stress. Garcia-Perez A, et al. **J Biol Chem** 1989 Oct 5;264(28):16815–21

Insulin stimulates the translation of ribosomal proteins and the transcription of rDNA in mouse myoblasts. Hammond ML, et al. **J Biol Chem** 1988 Nov 25;263(33):17785–91

Transcriptional regulation of the parathyroid hormone-related peptide gene by glucocorticoids and vitamin D in a human C-cell line. Ikeda K, et al. **J Biol Chem** 1989 Sep 25;264(27):15743–6

Rapid induction of rat liver S14 gene transcription by thyroid hormone. Jump DB. **J Biol Chem** 1989 Mar 15; 264(8):4698–703

Transforming growth factor beta 1 and cAMP inhibit transcription of epidermal growth factor- and oncogene-induced transin RNA. Kerr LD, et al. **J Biol Chem** 1988 Nov 15;263(32):16999–7005

Induction of nuclear protein factors specific for hormone-responsive region during activation of thyroglobulin gene by thyrotropin in rat thyroid FRTL-5 cells. Lee NT, et al. **J Biol Chem** 1989 May 5; 264(13):7523–30

Interleukin 1 increases stability and transcription of mRNA encoding nerve growth factor in cultured rat fibroblasts. Lindholm D, et al. **J Biol Chem** 1988 Nov 5; 263(31):16348–51

Regulation of the expression of type 1 plasminogen activator inhibitor in Hep G2 cells by epidermal growth factor. Lucore CL, et al. **J Biol Chem** 1988 Nov 5;263(31):15845–8

Plasminogen activator inhibitor type-1 protein, mRNA and gene transcription are increased by phorbol esters in human rhabdomyosarcoma cells. Mayer M, et al. **J Biol Chem** 1988 Oct 25;263(30):15688–93

Inhibitors of translation induce low density lipoprotein receptor gene expression in human skin fibroblasts. Mazzone T, et al. **J Biol Chem** 1989 Sep 15; 264(26):15529–34

Stimulation of phosphatidylinositol hydrolysis, diacylglycerol release, and gene expression in response to endothelin, a potent new agonist for fibroblasts and smooth muscle cells. Muldoon LL, et al. **J Biol Chem** 1989 May 25; 264(15):8529–36

Transcriptional regulation of alpha-fetoprotein expression by dexamethasone in human hepatoma cells. Nakabayashi H, et al. **J Biol Chem** 1989 Jan 5;264(1):266–71

Requirements of both glucocorticoids and glucagon as co-inducers for activation of transcription of the serine dehydratase gene in cultured rat hepatocytes. Noda C, et al. **J Biol Chem** 1988 Oct 15;263(29):14764–8

Thyroid hormone regulation of transcription factors involved in malic enzyme gene expression. Petty KJ, et al. **J Biol Chem** 1989 Jul 5;264(19):11483–90

Regulation of the rabbit cytochrome P-450 3c gene. Age-dependent expression and transcriptional activation by rifampicin. Potenza CL, et al. **J Biol Chem** 1989 Sep 25;264(27):16222–8

Regulation of type 1 plasminogen activator inhibitor gene expression in cultured bovine aortic endothelial cells. Induction by transforming growth factor-beta, lipopolysaccharide, and tumor necrosis factor-alpha. Sawdey M, et al. **J Biol Chem** 1989 Jun 25; 264(18):10396–401

Transcriptional activation and stabilization of malic enzyme mRNA precursor by thyroid hormone. Song MK, et al. **J Biol Chem** 1988 Dec 5;263(34):17970–4

Studies on the expression of genes encoding apolipoproteins B100 and B48 and the low density lipoprotein receptor in nonhuman primates. Comparison of dietary fat and cholesterol. Sorci-Thomas M, et al. **J Biol Chem** 1989 May 25;264(15):9039–45

Monokine-induced neutrophil chemotactic factor gene expression in human fibroblasts. Strieter RM, et al. **J Biol Chem** 1989 Jun 25;264(18):10621–6

Effect of sucrose diet on apolipoprotein biosynthesis in rat liver. Increase in apolipoprotein E gene transcription. Strobl W, et al. **J Biol Chem** 1989 Jan 15;264(2):1190–4

Control of low density lipoprotein receptor gene promoter activity. Ketoconazole inhibits serum lipoprotein but not oxysterol suppression of gene transcription. Takagi K, et al. **J Biol Chem** 1989 Jul 25;264(21):12352–7

Angiotensin II induces c-fos mRNA in aortic smooth muscle. Role of Ca2+ mobilization and protein kinase C activation. Taubman MB, et al. **J Biol Chem** 1989 Jan 5;264(1):526–30

Transforming growth factor-beta increases transcription of the genes encoding the epidermal growth factor receptor and fibronectin in normal rat kidney fibroblasts. Thompson KL, et al. **J Biol Chem** 1988 Dec 25;263(36):19519–24

Nerve growth factor induces the proto-oncogene c-jun in PC12 cells. Wu BY, et al. **J Biol Chem** 1989 May 25; 264(15):9000–3

Glucocorticoid effect on oncogene/growth gene expression in human T lymphoblastic leukemic cell line CCRF-CEM. Specific c-myc mRNA suppression by dexamethasone. Yuh YS, et al. **J Biol Chem** 1989 Jun 25;264(18):10904–10

Transcriptional regulation of osteopontin production in rat osteoblast-like cells by parathyroid hormone. Noda M, et al. **J Cell Biol** 1989 Feb;108(2):713–8

Glucagon gene transcription is negatively regulated by insulin in a hamster islet cell line. Philippe J. **J Clin Invest** 1989 Aug;84(2):672–7

Effect of interferon on the accumulation of RNA transcripts of genes coding for cellular and viral proteins. Lambropoulos AF, et al. **J Gen Virol** 1989 May;70 (Pt 5):1267–71

Oestrogen stimulates differential transcription of human papillomavirus type 16 in SiHa cervical carcinoma cells. Mitrani-Rosenbaum S, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2227–32

Transcriptional regulation of transferrin receptor expression by cultured lymphoblastoid T cells treated with phorbol diesters. Alcantara O, et al. **J Immunol** 1989 Mar 1; 142(5):1719–26

Induction of HLA class II genes by IFN-gamma is transcriptional and requires a trans-acting protein. Amaldi I, et al. **J Immunol** 1989 Feb 1;142(3):999–1004

A beta-adrenergic agonist modulates DR alpha gene transcription via enhanced cAMP levels in a glioblastoma multiforme line. Basta PV, et al. **J Immunol** 1989 Apr 15; 142(8):2895–901

Cyclosporin A-mediated inhibition of mitogen-induced gene transcription is specific for the mitogenic stimulus and cell type. Gunter KC, et al. **J Immunol** 1989 May 1; 142(9):3286–91

Tumor necrosis factor-alpha affects LTR-controlled oncogene expression in transformed mouse fibroblasts at the post-transcriptional level. Seliger B, et al. **J Immunol** 1988 Sep 15;141(6):2138–44

Selenotrisulfide inhibits initiation by RNA polymerase II but not elongation. Frenkel GD, et al. **J Inorg Biochem** 1989 Mar;35(3):179–89

Alternative use of a polyadenylation signal and of a downstream 3' splice site. Effect of 5,6-dichloro-1-beta-D-ribofuranosylbenzimidazole. Gallinaro H, et al. **J Mol Biol** 1988 Dec 20;204(4):1031–40

K-252a inhibits the increase in c-fos transcription and the increase in intracellular calcium produced by nerve growth factor in PC12 cells. Lazarovici P, et al. **J Neurosci Res** 1989 May;23(1):1–8

Adenovirus type 12 E1A down regulates expression of a transgene under control of a major histocompatibility complex class I promoter: evidence for transcriptional control. Meijer I, et al. **J Virol** 1989 Sep;63(9):4039–42

Upstream region of hepatitis B virus S gene responsible for transcriptional stimulation by dexamethasone. Masuda M, et al. **Microbiol Immunol** 1988;32(7):741–7

Effect of 5-azacytidine on gene expression in marrow stromal cells. Andrews DF 3d, et al. **Mol Cell Biol** 1989 Jun; 9(6):2748–51

Estrogen and progesterone receptor-binding sites on the chicken vitellogenin II gene: synergism of steroid hormone action. Cato AC, et al. **Mol Cell Biol** 1988 Dec; 8(12):5323–30

Selective inhibition of growth-related gene expression in murine keratinocytes by transforming growth factor beta. Coffey RJ Jr, et al. **Mol Cell Biol** 1988 Aug;8(8):3088–93

Tumor necrosis factor suppresses transcription of the thrombomodulin gene in endothelial cells. Conway EM, et al. **Mol Cell Biol** 1988 Dec;8(12):5588–92

Isolation and characterization of the human chorionic gonadotropin beta subunit (CG beta) gene cluster: regulation of transcriptionally active CG beta gene by cyclic AMP. Jameson JL, et al. **Mol Cell Biol** 1988 Dec; 8(12):5100–7

Transcriptional and posttranscriptional modulation of myeloid colony-stimulating factor expression by tumor necrosis factor and other agents. Koeffler HP, et al. **Mol Cell Biol** 1988 Aug;8(8):3432–8

Negative regulation of transcription in vitro by a glucocorticoid response element is mediated by a trans-acting factor. Langer SJ, et al. **Mol Cell Biol** 1988 Sep;8(9):3872–81

Early retinoic acid-induced F9 teratocarcinoma stem cell gene ERA-1: alternate splicing creates transcripts for a homeobox-containing protein and one lacking the homeobox. LaRosa GJ, et al. **Mol Cell Biol** 1988 Sep; 8(9):3906–17

Rapid transcriptional regulation by phytochrome of the genes for phytochrome and chlorophyll a/b-binding protein in Avena sativa. Lissemore JL, et al. **Mol Cell Biol** 1988 Nov; 8(11):4840–50

The NF-kappa B-binding site mediates phorbol ester-inducible transcription in nonlymphoid cells. Nelsen B, et al. **Mol Cell Biol** 1988 Aug;8(8):3526–31

Molecular genetics of androgen-inducible RP2 gene transcription in the mouse kidney. Rheaume C, et al. **Mol Cell Biol** 1989 Feb;9(2):477–83

Glucocorticoid and developmental regulation of amylase mRNAs in mouse liver cells. Samuelson LC, et al. **Mol Cell Biol** 1988 Sep;8(9):3857–63

The adenovirus-inducible factor E2F stimulates transcription after specific DNA binding. Yee AS, et al. **Mol Cell Biol** 1989 Feb;9(2):578–85

Transcriptional regulation of the thyroperoxydase gene by thyrotropin and forskolin. Gerard CM, et al. **Mol Cell Endocrinol** 1988 Dec;60(2-3):239–42

Cyclic AMP-responsive region of the human proopiomelanocortin (POMC) gene. Usui T, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):141–6

Glucocorticoid regulation of proopiomelanocortin messenger ribonucleic acid content of rat hypothalamus. Beaulieu S, et al. **Mol Endocrinol** 1988 Aug;2(8):727–31

Human calpactin II (lipocortin I) messenger ribonucleic acid is not induced by glucocorticoids. Brönnegård M, et al. **Mol Endocrinol** 1988 Aug;2(8):732–9

The distal enhancer region of the rat prolactin gene contains elements conferring response to multiple hormones. Day RN, et al. **Mol Endocrinol** 1989 Jan;3(1):3–9

Differential cytokine regulation of MHC class II and thyroglobin mRNAs in rat thyroid cells. Graves P, et al. **Mol Endocrinol** 1989 May;3(5):758–62

Distinct adenosine 3',5'-monophosphate and phorbol ester-responsive signal transduction pathways converge at the level of transcriptional activation by the interactions of DNA-binding proteins. Hoeffler JP, et al. **Mol Endocrinol** 1989 May;3(5):868–80

Acute and chronic regulation of phosphoenolpyruvate carboxykinase mRNA by insulin and glucose. Kahn CR, et al. **Mol Endocrinol** 1989 May;3(5):840–5

Parathyroid hormone inhibits collagen synthesis at both ribonucleic acid and protein levels in rat osteogenic sarcoma cells. Partridge NC, et al. **Mol Endocrinol** 1989 Feb;3(2):232–9

1,25-Dihydroxyvitamin D3 silences 3',5'-cyclic adenosine monophosphate enhancement of somatostatin gene transcription in human thyroid C cells. Rogers DG, et al. **Mol Endocrinol** 1989 Mar;3(3):547–51

Transcriptional regulation by estrogen of episomal prolactin gene regulatory elements. Seyfred MA, et al. **Mol Endocrinol** 1989 Feb;3(2):305–14

Divergent effects of estradiol on gonadotropin gene transcription in pituitary fragments. Shupnik MA, et al. **Mol Endocrinol** 1989 Mar;3(3):474–80

Prolonged activation of jun and collagenase genes by tumour necrosis factor-alpha. Brenner DA, et al. **Nature** 1989 Feb 16;337(6208):661–3

Nerve growth factor regulates expression of neuropeptide genes in adult sensory neurons. Lindsay RM, et al. **Nature** 1989 Jan 26;337(6205):362–4

Repression of transcription mediated at a thyroid hormone response element by the v-erb-A oncogene product. Sap J, et al. **Nature** 1989 Jul 20;340(6230):242–4

Interaction of psoralen-derivatized oligodeoxyribonucleoside methylphosphonates with synthetic DNA containing a promoter for T7 RNA polymerase. Lee BL, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10681–97

Differential binding of interferon-induced factors to an oligonucleotide that mediates transcriptional activation.

Reich NC, et al. **Nucleic Acids Res** 1989 May 11; 17(9):3415–24

Efficient activation of transcription in yeast by the BPV1 E2 protein. Stanway CA, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2187–96

Effects of high mobility group proteins 1 and 2 on initiation and elongation of specific transcription by RNA polymerase II in vitro. Tremethick DJ, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11107–23

Labile repressors are involved in the transcriptional control of PDGF-responsive genes. Hall DJ, et al. **Oncogene Res** 1989;4(3):177–84

Recombinant tumor necrosis factor alpha and interleukin 1 alpha increase expression of c-abl protooncogene mRNA in cultured human marrow stromal cells. Andrews DF 3d, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6788–92

Estrogen-responsive element of the human pS2 gene is an imperfectly palindromic sequence. Berry M, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1218–22

Structure of the NGFI-A gene and detection of upstream sequences responsible for its transcriptional induction by nerve growth factor. Changelian PS, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):377–81

cAMP stimulates transcription of the beta 2-adrenergic receptor gene in response to short-term agonist exposure. Collins S, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):4853–7

Growth hormone stimulates c-fos gene expression by means of protein kinase C without increasing inositol lipid turnover. Doglio A, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1148–52

Prolactin and glucocorticoid hormones synergistically induce expression of transfected rat beta-casein gene promoter constructs in a mammary epithelial cell line. Doppler W, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):104–8

Regulation of beta-adrenergic receptors by "permissive" hormones: glucocorticoids increase steady-state levels of receptor mRNA. Hadcock JR, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8415–9

Sequential expression and cooperative interaction of c-Ha-ras and c-erbB genes in in vivo chemical carcinogenesis. Husain Z, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1264–8

Sequence elements in the human osteocalcin gene confer basal activation and inducible response to hormonal vitamin D3. Kerner SA, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4455–9

Differential regulation of oligodendrocyte markers by glucocorticoids: post-transcriptional regulation of both proteolipid protein and myelin basic protein and transcriptional regulation of glycerol phosphate dehydrogenase. Kumar S, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6807–11

Structure of the rat osteocalcin gene and regulation of vitamin D-dependent expression. Lian J, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1143–7

Rat glucokinase gene: structure and regulation by insulin. Magnuson MA, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):4838–42

Tumor necrosis factor alpha and interleukin 1 stimulate the human immunodeficiency virus enhancer by activation of the nuclear factor kappa B. Osborn L, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2336–40

Identification of a phorbol ester-repressible v-src-inducible gene. Simmons DL, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1178–82

Transcriptional regulation of competence genes in Balb/c-3T3 cells. Cochran BH, et al. **Prog Clin Biol Res** 1988;284:225–41

Regulation of the expression of the rat alcohol dehydrogenase gene by glucocorticoids. Qulali M, et al. **Prog Clin Biol Res** 1989;290:143–53

Effects of aldosterone on Na,K-ATPase transcription, mRNAs, and protein synthesis, and on transepithelial Na+ transport in A6 cells. Verrey F, et al. **Prog Clin Biol Res** 1988;268B:463–8

The effect of gamma interferon on interleukin 1 release of human monocytes. Dependence on the activating agent and correlation to the mRNA levels. Sihvola M, et al. **Scand J Immunol** 1989 Jun;29(6):689–98

Induction of kappa transcription by interferon-gamma without activation of NF-kappa B. Briskin M, et al. **Science** 1988 Nov 18;242(4881):1036–7

Growth factors regulate transin gene expression by c-fos-dependent and c-fos-independent pathways. Kerr LD, et al. **Science** 1988 Dec 9;242(4884):1424–7

Incubation of T cell or monocytic cell lines with 1,25-dihydroxyvitamin D3 before mitogen stimulation potentiates IL-2 and IL-1 beta mRNA levels. Prehn JL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):90–1

Verapamil selectively inhibits expression of interleukin-2 messenger RNA in mitogen activated mononuclear blood cells. Zanker B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):85–7

Repression of transcription from the b2-att region of coliphage lambda by integration host factor. Kur J, et al. **Virology** 1989 Feb;168(2):236–44

[Effect of transcription inhibitors on RNA synthesis in the polytene chromosomes of Drosophila melanogaster] Vlasova IE, et al. **Tsitologiia** 1988 May;30(5):568–72 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Ultraviolet light-induced inhibition of small nuclear RNA synthesis. Eliceiri BP, et al. **J Cell Physiol** 1989 Mar; 138(3):586–92

Effect of ultraviolet light on the expression of genes for human U1 RNA. Thirunavukkarasu C, et al. **J Cell Physiol** 1988 Oct;137(1):55–64

Trypanosoma brucei: enrichment by UV of intergenic transcripts from the variable surface glycoprotein gene expression site. Coquelet H, et al. **Mol Cell Biol** 1989 Sep; 9(9):4022–5

Effect of radiofrequency radiation on mRNA expression in cultured rodent cells. Parker JE, et al. **Physiol Chem Phys Med NMR** 1988;20(2):129–34

TRANSCRIPTIONAL REGULATORY ELEMENTS see **GENES, REGULATOR**

TRANSCULTURAL STUDIES see **CROSS-CULTURAL COMPARISON**

TRANSCUTANEOUS ADMINISTRATION see **ADMINISTRATION, CUTANEOUS**

TRANSCUTANEOUS BLOOD GAS MONITORING see **BLOOD GAS MONITORING, TRANSCUTANEOUS**

TRANSCUTANEOUS CAPNOMETRY see **BLOOD GAS MONITORING, TRANSCUTANEOUS**

TRANSCUTANEOUS OXIMETRY see **BLOOD GAS MONITORING, TRANSCUTANEOUS**

TRANSDERMAL ADMINISTRATION see **ADMINISTRATION, CUTANEOUS**

TRANSDUCERS

A device for continuous monitoring of water consumption by rats. Schultz TJ, et al. **Biomed Sci Instrum** 1989;25:39–46

Comparison of the frequency response characteristics of catheter-mounted piezoelectric and micromanometric phonotransducers. Garcia JC, et al. **Cathet Cardiovasc Diagn** 1989 May;17(1):48–55

The 57 mm thermal clearance probe: a non-invasive tool for measuring subcutaneous blood flow. Greenhalgh PM, et al. **Clin Sci** 1989 Jul;77(1):121–7

Mechanical transduction in biological systems. Sachs F. **Crit Rev Biomed Eng** 1988;16(2):141–69 (105 ref.)

Safe and cost-effective cleaning of pressure-monitoring transducers [published erratum appears in Infect Control Hosp Epidemiol 1988 Nov;9(11):487] Platt R, et al. **Infect Control Hosp Epidemiol** 1988 Sep;9(9):409–16

Diffraction effects of planar transducers using a numerical expression for edge waves. Mair HD, et al. **J Acoust Soc Am** 1988 Oct;84(4):1517–25

Recovery of diaphragm function after laparotomy and chronic sonomicrometer implantation. Easton PA, et al. **J Appl Physiol** 1989 Feb;66(2):613–21

Buckle muscle tension transducer: what does it measure? Hahs DW, et al. **J Biomech** 1989;22(2):165–6

Selection of transducer material for use with 'optical' foot pressure systems. Franks CI, et al. **J Biomed Eng** 1988 Jul; 10(4):365–7

Assessment of control ability in the physically handicapped. Ison KT. **J Biomed Eng** 1988 Oct;10(5):430–7

Transducers, sensors, and instrumentation in clinical biomechanics. Payne PA. **J Biomed Eng** 1989 May; 11(3):180–4 (31 ref.)

Method for measuring suture tension in surgery. Bassini R, et al. **Med Biol Eng Comput** 1988 Jul;26(4):451–4

Strain-gauged haemostatic forceps for clinical and experimental use. Nissan M, et al. **Med Biol Eng Comput** 1988 Jul;26(4):448–50

Ultrasound attenuation in biological tissues using a bone transducer. Ray S, et al. **Med Biol Eng Comput** 1987 Nov; 25(6):689–92

Intrapartum uterine activity: evaluation of an intrauterine pressure transducer [letter] Goodlin RC. **Obstet Gynecol** 1989 Aug;74(2):283–4

Comparison of electromechanical measures and observer ratings of tardive dyskinesia. Bartzokis G, et al. **Psychiatry Res** 1989 Feb;27(2):193–8

Flush pressure requirements for optimal cadaveric donor kidney preservation. Analse D, et al. **Transplant Proc** 1988 Oct;20(5):891–4

The design and fabrication of high frequency poly(vinylidene fluoride) transducers. Sherar MD, et al. **Ultrason Imaging** 1989 Apr;11(2):75–94

[Comparative study of unidirectional transducers for invasive blood pressure monitoring] Matzek F, et al. **Biomed Tech (Berlin)** 1989 Mar;34(3):34–41 (Eng. Abstr.) **(Ger)**

[Development of passive telemetry system for intracranial pressure measurement with corrector of errors caused by temperature variation] Magara M, et al. **Iyodenshi To Seitai Kogaku** 1989 Mar;27(1):35–44 (Eng. Abstr.) **(Jpn)**

[Characteristics of the vibration modes and the contact compliances of a soft material measured with a newly developed piezoelectric vibrometer] Omata S. **Iyodenshi To Seitai Kogaku** 1988 Mar;26(1):32–40 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Epidemic bloodstream infections associated with pressure transducers: a persistent problem. Beck-Sague CM, et al. **Infect Control Hosp Epidemiol** 1989 Feb;10(2):54–9

Epidemic bloodstream infections from hemodynamic pressure monitoring: signs of the times. Mermel LA, et al. **Infect Control Hosp Epidemiol** 1989 Feb;10(2):47–53

Outbreak of infection with Achromobacter xylosoxidans from contaminated intravascular pressure transducers. Gahrn-Hansen B, et al. **J Hosp Infect** 1988 Jul;12(1):1–6

ECONOMICS

How to beat the high pressure cost. Etherington TJ, et al. **Biomed Sci Instrum** 1989;25:35–7

TRANSDUCERS, PRESSURE see under **TRANSDUCERS**

TRANSDUCIN

Evidence for oligomeric forms of transducins alpha subunit: formation of intermolecular alpha-alpha disulfide linkages. Wessling-Resnick M, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):651–7

Light and GTP dependence of transducin solubility in retinal rods. Further analysis by near infra-red light scattering. Bruckert F, et al. **Eur Biophys J** 1988;16(4):207–18

Rat pineal S-antigen: sequence analysis reveals presence of alpha-transducin homologous sequence. Abe T, et al. **FEBS Lett** 1989 Apr 24;247(2):307–11

ANALYSIS

The intrinsic fluorescence of the alpha subunit of transducin. Measurement of receptor-dependent guanine nucleotide exchange. Phillips WJ, et al. **J Biol Chem** 1988 Oct 25; 263(30):15498–505

ANTAGONISTS & INHIBITORS

Mechanism of inhibition of transducin guanosine triphosphatase activity by vanadate. Kanaho Y, et al. **J Biol Chem** 1988 Nov 25;263(33):17584–9

Inhibition of transducin activation and guanosine triphosphatase activity by aluminum ion. Miller JL, et al. **J Biol Chem** 1989 Jan 5;264(1):243–50

GENETICS

The STE4 and STE18 genes of yeast encode potential beta and gamma subunits of the mating factor receptor-coupled G protein. Whiteway M, et al. **Cell** 1989 Feb 10; 56(3):467–77

The gene for the alpha-subunit of retinal rod transducin is on mouse chromosome 9. Danciger M, et al. **Genomics** 1989 Feb;4(2):215–7

Characterization of the mouse rod transducin alpha subunit gene. Raport CJ, et al. **J Biol Chem** 1989 May 5; 264(13):7122–8

Nucleotide sequence for a cDNA encoding the alpha subunit of retinal transducin (GNAT1) isolated from the human eye. Van Dop C, et al. **Nucleic Acids Res** 1989 Jun 26; 17(12):4887

ISOLATION & PURIFICATION

Similarities between G-proteins in visual cells of Sepia and cattle. Stieve H, et al. **FEBS Lett** 1989 Aug 14; 253(1-2):6–10

Beta gamma-subunit of bovine transducin composed of two components with distinctive gamma-subunits. Fukada Y, et al. **J Biol Chem** 1989 Apr 5;264(10):5937–43

METABOLISM

ADP-ribosylation of bovine S-antigen by cholera toxin. Komori N, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1160–5

Identification of a retina-specific MEKA protein as a 33 K protein. Kuo CH, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1063–8

G protein-effector coupling: binding of rod phosphodiesterase inhibitory subunit to transducin. Fung BK, et al. **Biochemistry** 1989 Apr 18;28(8):3133–7

Transducin GTPase provides for rapid quenching of the cGMP cascade in rod outer segments. Arshavsky VYu, et al. **FEBS Lett** 1989 Jul 3;250(2):353–6

Chicken red-sensitive cone visual pigment retains a binding domain for transducin. Fukada Y, et al. **FEBS Lett** 1989 Mar 27;246(1-2):69–72

Mapping of the carboxyl terminus within the tertiary structure of transducin's alpha subunit using the heterobifunctional cross-linking reagent, 125I-N-(3-iodo-4-azidophenylpropionamido-S-(2-thiopyridyl) cysteine. Dhanasekaran N, et al. **J Biol Chem** 1988 Dec 5;263(34):17942–50

Fluorescent labeling of signal-transducing G-proteins. Pertussis toxin-catalyzed etheno-ADP ribosylation of transducin. Hingorani VN, et al. **J Biol Chem** 1988 Dec 25;263(36):19804–8

The regulation of the cyclic GMP phosphodiesterase by the GDP-bound form of the alpha subunit of transducin. Kroll S, et al. **J Biol Chem** 1989 Mar 15;264(8):4490–7

An antibody-induced enhancement of the transducin-stimulated cyclic GMP phosphodiesterase activity. Phillips WJ, et al. **J Biol Chem** 1989 Oct 5; 264(28):16679–88

Light-dependent subcellular movement of photoreceptor proteins. Whelan JP, et al. **J Neurosci Res** 1988; 20(2):263–70

Transducin activation by molecular species of rhodopsin other than metarhodopsin II. Okada D, et al. **Photochem Photobiol** 1989 Feb;49(2):197–205

Three cytoplasmic loops of rhodopsin interact with transducin. König B, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6878–82

PHARMACOLOGY

Regulation of cGMP-dependent conductance in cytoplasmic membrane of rod outer segments by transducin. Krapivinsky GB, et al. **FEBS Lett** 1989 Apr 24;247(2):435–7

Interaction of the gamma-subunit of retinal rod outer segment phosphodiesterase with transducin. Use of synthetic peptides as functional probes. Morrison DF, et al. **J Biol Chem** 1989 Jul 15;264(20):11671–81

PHYSIOLOGY

Concentration effects on reactions in membranes: rhodopsin and transducin. Saxton MJ, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):27–34

Visual signal transduction: the cycle of transducin shuttling between rhodopsin and cGMP phosphodiesterase. Chabre M, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:313–24 (29 ref.)

Calcium regulates the rate of rhodopsin disactivation and the primary amplification step in visual transduction. Wagner R, et al. **FEBS Lett** 1989 Jan 2;242(2):249–54

A monoclonal antibody against the rod outer segment guanyl nucleotide-binding protein, transducin, blocks the stimulatory and inhibitory G proteins of adenylate cyclase. Hamm HE, et al. **J Biol Chem** 1989 Jul 5;264(19):11475–82

Transducin inhibition of light-dependent rhodopsin phosphorylation: evidence for beta gamma subunit interaction with rhodopsin. Kelleher DJ, et al. **Mol Pharmacol** 1988 Oct;34(4):452–60

[Structural elucidation of phototransduction proteins] Shinohara T, et al. **Tanpakushitsu Kakusan Koso** 1989 May; 34(5):537–45 **(Jpn)**

TRANSDUCTION, GENETIC

Immortalization of neural cells via retrovirus-mediated oncogene transduction. Cepko CL. **Annu Rev Neurosci** 1989;12:47–65 (75 ref.)

Genetic exchange in the environment. Coughter JP, et al. **Antonie Van Leeuwenhoek** 1989;55(1):15–22 (33 ref.)

Use of a biotinylated DNA probe to detect bacteria transduced by bacteriophage P1 in soil. Zeph LR, et al. **Appl Environ Microbiol** 1989 Mar;55(3):661–5

Specialized transduction in Bacillus subtilis by the phages IG1, IG3, and IG4. Fernandes RM, et al. **Arch Virol** 1989; 105(1–2):137–40

A novel oncogene related to c-mil is transduced in chicken neuroretina cells induced to proliferate by infection with an avian lymphomatosis virus. Marx M, et al. **EMBO J** 1988 Nov;7(11):3369–73

D-arabinose metabolism in Escherichia coli B: induction and cotransductional mapping of the L-fucose-D-arabinose pathway enzymes. Elsinghorst EA, et al. **J Bacteriol** 1988 Dec;170(12):5423–32

Transduction and transformation of plasmid DNA in Streptomyces fradiae strains that express different levels of restriction. Matsushima P, et al. **J Bacteriol** 1989 Jun; 171(6):3080–4

Low-frequency infection of F- bacteria by transducing particles of filamentous bacteriophages. Russel M, et al. **J Bacteriol** 1988 Nov;170(11):5312–6

Movement of multiple DNA units between Myxococcus xanthus cells. Starich T, et al. **J Bacteriol** 1989 May; 171(5):2323–36

Formation of lambda transducing phage in vitro: involvement of DNA gyrase. Tomono M, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):423–8

Transduction of cytochrome P3-450 by retroviruses: constitutive expression of enzymatically active microsomal hemoprotein in animal cells. Battula N. **J Biol Chem** 1989 Feb 15;264(5):2991–6

Infection of a murine T-cell line with a retrovirus carrying c-myc decreases the interleukin-2 cell dependence by a nonautocrine mechanism. Shapiro IM, et al. **J Leukoc Biol** 1988 Dec;44(6):559–65

Genetic analysis of attTn7, the transposon Tn7 attachment site in Escherichia coli, using a novel M13-based transduction assay. Qadri MI, et al. **J Mol Biol** 1989 May 5;207(1):85–98

Photoreactivation in phr mutants of Escherichia coli K-12: cloning from the gal-att lambda interval increases the photoreactivable response in phrA strains. Smith AW, et al. **J Photochem Photobiol B** 1988 Jul;2(1):21–32

Transduction of proto-src sequences in tissue culture by a molecular clone of transformation-defective Rous sarcoma virus with an internal src deletion. Phares W. **J Virol** 1988 Dec;62(12):4791–6

Retroviral transduction of the human c-Ha-ras-1 oncogene into midgestation mouse embryos promotes rapid epithelial hyperplasia. Compere SJ, et al. **Mol Cell Biol** 1989 Jan; 9(1):6–14

High efficiency transduction of single strand plasmid DNA into enteric bacteria. Benedik MJ. **Mol Gen Genet** 1989 Aug;218(2):353–4

Packaging of transducing DNA by bacteriophage P1. Hanks MC, et al. **Mol Gen Genet** 1988 Nov;214(3):523–32

Bacteriophage P22 as a vehicle for transducing cosmid gene banks between smooth strains of Salmonella typhimurium: use in identifying a role for aroD in attenuating virulent Salmonella strains. Miller IA, et al. **Mol Gen Genet** 1989 Jan;215(2):312–6

Complete nucleotide sequence of IC10, a retrovirus containing the Rmil oncogene transduced in chicken neuroretina cells infected with avian retrovirus RAV-1. Eychène A, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1250

Phasduction—a simplified protocol for oligonucleotide-directed mutagenesis by the gapped duplex DNA method. Friedrich K, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5862

The ras and myc oncogenes cooperate in tumor induction in many tissues when introduced into midgestation mouse embryos by retroviral vectors. Compere SJ, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2224–8

Transformation to continuous growth of primary human T lymphocytes by human T-cell leukemia virus type I X-region genes transduced by a Herpesvirus saimiri vector. Grassmann R, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3351–5

Behavior of genetically engineered microbes in natural environments and their potential use in in situ reclamation of contaminated sites. Stotzky G, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:293–343 (59 ref.)

The mechanism of DNA transfer in the mating system of an archaebacterium. Rosenshine I, et al. **Science** 1989 Sep 22;245(4924):1387–9

High-level recombinant gene expression in rabbit endothelial cells transduced by retroviral vectors. Zwiebel JA, et al. **Science** 1989 Jan 13;243(4888):220–2

[Rpo pathway as a possible recombination mechanism of the interaction between DNA of transducing phages and the Escherichia coli genome] Kholodil GIa, et al. **Genetika** 1988 Oct;24(10):1739–51 (Eng. Abstr.) **(Rus)**

[Plasmid transduction by Bacillus anthracis bacteriophage CP54] Stepanov AS, et al. **Mol Gen Mikrobiol Virusol** 1989 Jan;(1):14–9 (Eng. Abstr.) **(Rus)**

TRANSFECTION

Type IV collagenolytic activity linkage with the metastatic phenotype induced by ras transfection. Garbisa S, et al. **Adv Exp Med Biol** 1988;233:179–86

Analysis of growth, selection, and metastasis of tumor cell populations in vivo using random insertions of foreign DNA as genetic tags. Waghorne C, et al. **Adv Exp Med Biol** 1988;233:27–37

In vitro testing of a potential retroviral vector for producing transgenic livestock. Squire KR, et al. **Am J Vet Res** 1989 Aug;50(8):1423–7

The introduction of biologically active foreign genes into human respiratory epithelial cells using electroporation. Iannuzzi MC, et al. **Am Rev Respir Dis** 1988 Oct; 138(4):965–8

Advantages of firefly luciferase as a reporter gene: application to the interleukin-2 gene promoter. Williams TM, et al. **Anal Biochem** 1989 Jan;176(1):28–32

On interspecies gene transfer: the case of the argF gene of Escherichia coli [letter] Van Vliet F, et al. **Ann Inst Pasteur Microbiol** 1988 Jul-Aug;139(4):493–6

Cloning of human repair genes by genomic DNA transfection. Van Duin M, et al. **Ann Ist Super Sanita** 1989; 25(1):131–42

Gene transfer. A potential approach to gene therapy for sickle cell disease. Bank A, et al. **Ann N Y Acad Sci** 1989; 565:37–43 (21 ref.)

Expression of immunoglobulin genes in transgenic mice and transfected cells. Storb U, et al. **Ann N Y Acad Sci** 1988; 546:51–6 (24 ref.)

Transfection with bacterial genes as a marker for cells seeded on vascular flow surfaces. Etchberger KJ, et al. **Ann Vasc Surg** 1989 Apr;3(2):123–6

Foreign genes in plants: transfer, structure, expression, and applications. Weising K, et al. **Annu Rev Genet** 1988; 22:421–77 (386 ref.)

Cooperation of oncogenes in the multistep transformation of established fibroblasts in culture. Davenport EA, et al. **Anticancer Res** 1988 Sep-Oct;8(5A):959–69

Transfection of Lactobacillus bulgaricus protoplasts by bacteriophage DNA. Boizet B, et al. **Appl Environ Microbiol** 1988 Dec;54(12):3014–8

Formation, regeneration, and transfection of Lactobacillus plantarum protoplasts. Cosby WM, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2599–602

Influence of soil variables on in situ plasmid transfer from Escherichia coli to Rhizobium fredii. Richaume A, et al. **Appl Environ Microbiol** 1989 Jul;55(7):1730–4

Expression of human plasminogen cDNA in a baculovirus vector-infected insect cell system. Whitefleet-Smith J, et al. **Arch Biochem Biophys** 1989 Jun;271(2):390–9

Generation of myc/fos transfectant Balb-3T3 cell lines. Armelin MC, et al. **Arch Biol Med Exp (Santiago)** 1988 Dec;21(3–4):429–33

Methylation of human ornithine decarboxylase gene before transfection abolishes its transient expression in Chinese hamster ovary cells. Halmekytö M, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):528–34

Expression of the rat growth hormone gene in transfected CV-1 cells. Howland DS, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1166–74

A dual-circular plasmid structure dependent on DNA replication generated in monkey COS7 cells and cell extracts. Jenab S, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):53–9

Construction and characterization of a packaging cell line for MMTV-based conditional retroviral vectors. Salmons B, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1191–8

DNA-mediated transfection as a model for oncogenesis. Moyer MP, et al. **Biochem Cell Biol** 1988 Jun;66(6):594–616 (137 ref.)

Transfection of insulin-producing cells with a transforming c-Ha-ras oncogene stimulates phospholipase C activity. Berggren PO, et al. **Biochem J** 1989 May 1;259(3):701–7

A truncated v-abl-derived tyrosine-specific tyrosine kinase expressed in Escherichia coli. Pritchard ML, et al. **Biochem J** 1989 Jan 15;257(2):321–9

Expression of human angiogenin in cultured baby hamster kidney cells. Kurachi K, et al. **Biochemistry** 1988 Aug 23; 27(17):6557–62

Expression of the human cardiac actin gene in differentiating rat skeletal myoblasts. Ruben MM, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):374–84

RNA transfection of Escherichia coli by electroporation. Taketo A. **Biochim Biophys Acta** 1989 Jan 23;1007(1):127–9

Integration and germ line transmission of foreign genes microinjected into fertilized trout eggs. Guyomard R, et al. **Biochimie** 1989 Jul;71(7):857–63

Development of an efficient spheroplast transformation procedure for S. thermophilus: the use of transfection to define a regeneration medium. Mercenier A, et al. **Biochimie** 1988 Apr;70(4):567–77

Susceptibility of Xeroderma pigmentosum cells to transformation with oncogenes. Suarez H, et al. **Biochimie** 1988 Jul;70(7):969–73

Mutagenesis and gene transfer define site-specific roles of the gonadotropin oligosaccharides. Matzuk MM, et al. **Biol Reprod** 1989 Jan;40(1):48–53 (70 ref.)

Transfer of a human preproinsulin gene containing plasmid into non-pancreatic mammalian cells. Walther R, et al. **Biomed Biochim Acta** 1988;47(4–5):343–8

Cotransfection of nucleic acid segments by Sendai virus envelopes. Bartzatt R. **Biotechnol Appl Biochem** 1989 Feb; 11(1):133–5

Expression of human adenosine deaminase from various strong promoters after gene transfer into human hematopoietic cell lines. Hock RA, et al. **Blood** 1989 Aug 1;74(2):876–81

In utero gene transfer and expression: a sheep transplantation model. Kantoff PW, et al. **Blood** 1989 Mar;73(4):1066–73

Production of human factor IX in animals by genetically modified skin fibroblasts: potential therapy for hemophilia B. Palmer TD, et al. **Blood** 1989 Feb;73(2):438–45

Implantation of fibroblasts transfected with human granulocyte colony-stimulating factor cDNA into mice as a model of cytokine-supplement gene therapy. Tani K, et al. **Blood** 1989 Sep;74(4):1274–80

Paul and Carol—3. Gene transfer. Powell DJ, et al. **Br J Rheumatol** 1989 Jun;28(3):259–63

Longterm survival of normal, diploid Syrian hamster-cells in tumors induced by transfection with v-Ha-ras and v-myc oncogenes. Oshimura M, et al. **Cancer Lett** 1989 Apr;45(1):35–41

Relationship between the formation of promutagenic adducts and the activation of the K-ras protooncogene in lung tumors from A/J mice treated with nitrosamines. Belinsky SA, et al. **Cancer Res** 1989 Oct 1;49(19):5305–11

Comparison of mouse pro-1 and pro-2 transfectants for responses to tumor promoters and antipromoters. Colburn NH, et al. **Cancer Res** 1988 Nov 1;48(21):6076–80

Abolishment of metastasis formation by murine tumor cells transfected with "foreign" H-2K genes. Gelber C, et al. **Cancer Res** 1989 May 1;49(9):2366–73

Enhanced efflux of [3H]vinblastine from Chinese hamster ovary cells transfected with a full-length complementary DNA clone for the mdr1 gene. Hammond JR, et al. **Cancer Res** 1989 Jul 15;49(14):3867–71

Generation of antigenic variants from a nonantigenic murine tumor cell line by transfection with a gene encoding a novel tumor-specific transplantation antigen. Kaba DS, et al. **Cancer Res** 1989 Jan 1;49(1):38–43

Transformation of human neonatal prostate epithelial cells by strontium phosphate transfection with a plasmid containing SV40 early region genes. Kaighn ME, et al. **Cancer Res** 1989 Jun 1;49(11):3050–6

Sensitivities of NIH/3T3-derived clonal cell lines to ionizing radiation: significance for gene transfer studies. Kasid UN, et al. **Cancer Res** 1989 Jun 15;49(12):3396–400

Mid-G1 arrest and epidermal growth factor independence of ras-transfected mouse cells. Leof EB, et al. **Cancer Res** 1989 May 1;49(9):2356–61

Immortalization of primary baby rat kidney cells by retroviral mediated gene transfer of adenovirus E1A genes. Lynch

MJ, et al. **Cancer Res** 1989 Oct 1;49(19):5429–34
Metastatic potential of cloned murine melanoma cells transfected with activated c-Ha-ras. Price JE, et al. **Cancer Res** 1989 Aug 1;49(15):4274–81
Induction of tumorigenicity and lack of in vitro growth requirement for 12-O-tetradecanoylphorbol-13-acetate by transfection of murine melanocytes with v-Ha-ras. Wilson RE, et al. **Cancer Res** 1989 Feb 1;49(3):711–6
Secreted and cellular polypeptide patterns of MCF-7 human breast cancer cells following either estrogen stimulation or v-H-ras transfection. Worland PJ, et al. **Cancer Res** 1989 Jan 1;49(1):51–7
A review of genomic physical mapping. Bentley KL, et al. **Cancer Surv** 1988;7(2):267–94 (92 ref.)
Chromosome fragmentation by chromosome mediated gene transfer. Goodfellow PN, et al. **Cancer Surv** 1988; 7(2):251–65 (48 ref.)
Genetic analysis of human malignancy using somatic cell hybrids and monochromosome transfer. Stanbridge EJ. **Cancer Surv** 1988;7(2):317–24 (38 ref.)
Transfection of a human cytochrome P-450 gene into the human lymphoblastoid cell line, AHH-1, and use of the recombinant cell line in gene mutation assays. Crespi CL, et al. **Carcinogenesis** 1989 Feb;10(2):295–301
Development of a human cell line by selection and drug-metabolizing gene transfection with increased capacity to activate promutagens. Davies RL, et al. **Carcinogenesis** 1989 May;10(5):885–91
Development of neoplastic phenotype following transfection of HNF cells with sarcoma DNA. Kumari HL, et al. **Carcinogenesis** 1989 Feb;10(2):401–4
Excision repair of O6-methylguanine synthesized at the rat H-ras N-methyl-N-nitrosourea activation site and introduced into Escherichia coli. Rossi SC, et al. **Carcinogenesis** 1989 Feb;10(2):373–7
Characterization of the human cell line TE671. Stratton MR, et al. **Carcinogenesis** 1989 May;10(5):899–905
Transformation of diploid human fibroblasts by transfection of N-ras-oncogenes. Wilson DM, et al. **Carcinogenesis** 1989 Apr;10(4):635–40
Stage-dependent expression of the chicken delta-crystallin gene in transgenic fish embryos. Inoue K, et al. **Cell Differ Dev** 1989 Jun;27(1):57–68
Selective suppression of endogenous beta-globin gene expression by transferred beta-globin/TK chimeric gene in murine erythroleukemia cells. Takada S, et al. **Cell Differ Dev** 1989 Jun;27(1):9–18
The reversal of the metastatic phenotype by gene transfer. Feldman M, et al. **Ciba Found Symp** 1988;141:170–92 (29 ref.)
Correlation between Ha-ras gene amplification and spontaneous metastasis in NIH 3T3 cells transfected with genomic DNA from human skin cancers. Ananthaswamy HN, et al. **Clin Exp Metastasis** 1989 May-Jun;7(3):301–13
Tumorigenicity, invasiveness and metastatic capability of FR3T3 rat cells before and after transfection with bovine papilloma virus type 1 DNA. Coopman P, et al. **Clin Exp Metastasis** 1989 Jan-Feb;7(1):69–84
Expression of a transfected mouse muscle-creatine kinase gene is induced upon growth factor deprivation of myogenic but not of nonmyogenic cells. Johnson JE, et al. **Dev Biol** 1989 Jul;134(1):258–62
Retroviruses and the study of cell lineage. Price J. **Development** 1987 Nov;101(3):409–19 (69 ref.)
Biosynthetic regulation of endogenous hamster insulin and exogenous rat insulin II in transfected HIT cells. Gold G, et al. **Diabetes** 1988 Nov;37(11):1509–14
Regulation of the transfected human glycoprotein hormone alpha-subunit gene by dexamethasone and thyroid hormone. Gurr JA, et al. **DNA** 1989 Sep;8(7):473–80
Replica filter screening technique to detect transfected cells expressing beta 2-adrenergic receptor. Machida CA, et al. **DNA** 1989 Jul-Aug;8(6):447–55
Electroporation of mammalian cells with a firefly luciferase expression plasmid: kinetics of transient expression differ markedly among cell types. Maxwell IH, et al. **DNA** 1988 Oct;7(8):557–62
Efficient DNA-mediated gene transfer into primary cultures of adult rat hepatocytes. Pasco DS, et al. **DNA** 1989 Sep; 8(7):535–41
Sensitive radiometric assay for chloramphenicol acetyltransferase using automated HPLC. Zajac JD, et al. **DNA** 1988 Sep;7(7):509–13
Expression of functional human EGF receptor on murine bone marrow cells. von Rüden T, et al. **EMBO J** 1988 Sep;7(9):2749–56
Recovery of responsiveness to ACTH and cAMP in a protein kinase-defective adrenal cell mutant following transfection with a protein kinase gene. Wong M, et al. **Endocr Res** 1989;15(1–2):49–65
Expression of functional human acid beta-glucosidase in COS-1 and Spodoptera frugiperda cells. Grabowski GA, et al. **Enzyme** 1989;41(3):131–42
Cloning and sequencing of the genes of 2-hydoxyglutaryl-CoA dehydratase from Acidaminococcus fermentans. Dutscho R, et al. **Eur J Biochem** 1989 May 15;181(3):741–6
Transfection of hepatic genes into adult rat hepatocytes in primary culture and their tissue-specific expression. Ginot F, et al. **Eur J Biochem** 1989 Mar 15;180(2):289–94
The production of normal and variant human glucose-6-phosphate dehydrogenase in cos cells. Mason PJ, et al. **Eur J Biochem** 1988 Dec 1;178(1):109–13
A B-type PDGF receptor lacking most of the intracellular domain escapes degradation after ligand binding. Severinsson L, et al. **Eur J Biochem** 1989 Jul 1; 182(3):679–86
Repression of cytochrome P-450c gene expression by cotransfection with adenovirus E1a DNA. Sogawa K, et al. **Eur J Biochem** 1989 May 15;181(3):539–44
Transfection of EK-3, a subline of NIH 3T3, with the oncogene Ha-ras does not abolish its anchorage dependence. Katz E, et al. **Eur J Cell Biol** 1989 Aug; 49(2):221–4
Demonstration by class I gene transfer that reduced susceptibility of human cells to natural killer cell-mediated lysis is inversely correlated with HLA class I antigen expression. Shimizu Y, et al. **Eur J Immunol** 1989 Mar; 19(3):447–51
Protection of uninfected human bone marrow cells in long-term culture from G418 toxicity after retroviral-mediated transfer of the NEOr gene. Bayever E, et al. **Exp Cell Res** 1988 Nov;179(1):168–80
Cellular senescence involves stochastic processes causing loss of expression of differentiated function genes: transfection with SV40 as a means for dissociating effects of senescence on growth and on differentiated function gene expression. Cheng CY, et al. **Exp Cell Res** 1989 Jan;180(1):49–62
Synthesis and localization of myeloperoxidase protein in transfected BHK cells. Cully J, et al. **Exp Cell Res** 1989 Feb;180(2):440–50
Synthesis and fate of keratins 8 and 18 in nonepithelial cells transfected with cDNA. Domenjoud L, et al. **Exp Cell Res** 1988 Dec;179(2):352–61
Positive and negative regulation of a transfected chimeric tyrosine aminotransferase gene: effect of copy number. Grange T, et al. **Exp Cell Res** 1989 Jan;180(1):220–33
Electroporation of cultured adult rat hepatocytes with the c-myc gene potentiates DNA synthesis in response to epidermal growth factor. Muakkassah-Kelly SF, et al. **Exp Cell Res** 1988 Oct;178(2):296–306
Transformation of human epidermal cells by transfection with plasmid containing simian virus 40 DNA linked to a neomycin gene in a defined medium. Su RT, et al. **Exp Cell Res** 1989 Jan;180(1):117–33
Carbachol-induced reverse transformation of Chinese hamster ovary cells transfected with and expressing the m5 muscarinic acetylcholine receptor. Felder CC, et al. **FEBS Lett** 1989 Mar 13;245(1–2):75–9
Expression of sodium pump activities in BALB/c 3T3 cells transfected with cDNA encoding alpha 3-subunits of rat brain Na+,K+-ATPase. Hara Y, et al. **FEBS Lett** 1988 Sep 26;238(1):27–30
Genetic transfer of the pigment bacteriorhodopsin into the eukaryote Schizosaccharomyces pombe. Hildebrandt V, et al. **FEBS Lett** 1989 Jan 30;243(2):137–40
The effect of cell synchronization on the efficiency of stable gene transfer by electroporation. Yorifuji T, et al. **FEBS Lett** 1989 Mar 13;245(1–2):201–3
Conjugal transfer of plasmid pIP501 from Lactococcus lactis to Lactobacillus delbrückii subsp. bulgaricus and Lactobacillus helveticus. Langella P, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):149–52
Vectors for efficient expression in mammalian fibroblastoid, myeloid and lymphoid cells via transfection or infection. Artelt P, et al. **Gene** 1988 Sep 7;68(2):213–9
Human tissue-type plasminogen activator synthesized by using a baculovirus vector in insect cells compared with human plasminogen activator produced in mouse cells. Steiner H, et al. **Gene** 1988 Dec 20;73(2):449–57
Vectors for Drosophila P-element-mediated transformation and tissue culture transfection. Thummel CS, et al. **Gene** 1988 Dec 30;74(2):445–56
A new expression system for mammalian cells based on putative replicator sequences of the mouse and a truncated thymidine kinase gene. Weidle UH, et al. **Gene** 1988 Dec 20;73(2):427–37
A protease-hypersensitive deletion derivative of human tissue-type plasminogen activator. Weidle UH, et al. **Gene** 1988 Dec 20;73(2):439–47
Isolation of overproducing recombinant mammalian cell lines by a fast and simple selection procedure. Wirth M, et al. **Gene** 1988 Dec 20;73(2):419–26
Storage of spheroplasts at -70 degrees C for transfection with phi X174 RF DNA. Malling HV, et al. **Gene Anal Tech** 1987 Mar-Apr;4(2):23–6
Electric field-mediated gene transfer (electroporation) into mouse Friend and human K562 erythroleukemic cells. Spandidos DA. **Gene Anal Tech** 1987 May-Jun;4(3):50–6
Homologous integration in mammalian cells without target gene selection. Jasin M, et al. **Genes Dev** 1988 Nov; 2(11):1353–63
Differential requirements for cell-specific elastase I enhancer domains in transfected cells and transgenic mice. Swift GH, et al. **Genes Dev** 1989 May;3(5):687–96
Confirmation and refinement of the localisation of the c-MEL locus on chromosome 19 by physical and genetic mapping. Nimmo E, et al. **Hum Genet** 1989 Mar;81(4):382–4
Secretion of genetically engineered human/mouse class I antigens. Cohen N, et al. **Hum Immunol** 1989 Jul; 25(3):207–222
Differential transport requirements of HLA and H-2 class I glycoproteins. Alexander J, et al. **Immunogenetics** 1989; 29(6):380–8
Production and secretion of recombinant soluble CD3 polypeptides by myeloma-derived transfectant clones. Tunnacliffe A, et al. **Immunol Lett** 1989 Jun 1;21(3):243–8
Isolation, survival & transfer of R-plasmid of Salmonella typhimurium in Dal Lake of Kashmir (India). Koul K, et al. **Indian J Med Res** 1989 May;89:138–43
Fibronectin/laminin and their receptors in aberrant growth control in FR3T3 cells transformed by Ha-ras oncogene and epidermal growth factor gene. Chakrabarty S, et al. **Int J Cancer** 1989 Aug 15;44(2):325–31
Expression of the Epstein-Barr virus encoded EBNA-1 gene in stably transfected human and murine cell lines. Patel GV, et al. **Int J Cancer** 1988 Oct 15;42(4):592–8
SV40 transfection of human kidney epithelial cells and stability of chromosome 11. Poirier V, et al. **Int J Cancer** 1988 Dec 15;42(6):887–94
Systemic immunity against a murine colon tumor (CT-26) produced by immunization with syngeneic cells expressing a transfected viral gene product. Schackert HK, et al. **Int J Cancer** 1989 May 15;43(5):823–7
Gene transfer into hemopoietic stem cells using retroviral vectors. Chang JM, et al. **Int J Cell Cloning** 1989 Sep; 7(5):264–80 (56 ref.)
raf involvement in the simultaneous genetic transfer of the radioresistant and transforming phenotypes. Pirollo KF, et al. **Int J Radiat Biol** 1989 May;55(5):783–96
Replication of HIV in human fetal retinal cultures and established pigment epithelial cell lines. Dutt K, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1535–41
Gene transfer and expression of human ornithine aminotransferase. Hotta Y, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1024–31
Efficient transformation of Micromonospora purpurea with pIJ702 plasmid. Kelemen GH, et al. **J Antibiot (Tokyo)** 1989 Feb;42(2):325–8
Mutagenesis of the Tra1 core region of RK2 by using Tn5: identification of plasmid-specific transfer genes. Guiney DG, et al. **J Bacteriol** 1989 Jul;171(7):4100–3
Gene transfer system for Rhodopseudomonas viridis. Lang FS, et al. **J Bacteriol** 1989 Aug;171(8):4425–35
Properties of electroporation-mediated DNA transfer in Escherichia coli. Taketo A. **J Biochem (Tokyo)** 1989 May; 105(5):813–7
Mutant human adenosine deaminase alleles and their expression by transfection into fibroblasts. Akeson AL, et al. **J Biol Chem** 1988 Nov 5;263(31):16291–6
Cloning and characterization of the mouse gene that encodes the peptide core of secretory granule proteoglycans and expression of this gene in transfected rat-1 fibroblasts. Avraham S, et al. **J Biol Chem** 1989 Oct 5;264(28):16719–26
Functional characterization of the rat growth hormone promoter elements required for induction by thyroid hormone with and without a co-transfected beta type thyroid hormone receptor. Brent GA, et al. **J Biol Chem** 1989 Jan 5;264(1):178–82
Muscle-specific regulation of a transfected rabbit myosin heavy chain beta gene promoter. Cribbs LL, et al. **J Biol Chem** 1989 Jun 25;264(18):10672–8
Sequence requirements for apolipoprotein B RNA editing in transfected rat hepatoma cells. Davies MS, et al. **J Biol Chem** 1989 Aug 15;264(23):13395–8
Stable expression of blood group H determinants and GDP-L-fucose: beta-D-galactoside 2-alpha-L-fucosyltransferase in mouse cells after transfection with human DNA. Ernst LK, et al. **J Biol Chem** 1989 Feb 25;264(6):3436–47
Expression, tyrosine sulfation, and secretion of yolk protein 2 of Drosophila melanogaster in mouse fibroblasts. Friederich E, et al. **J Biol Chem** 1988 Oct 15; 263(29):14930–8
The metabolic and mitogenic effects of both insulin and insulin-like growth factor are enhanced by transfection of insulin receptors into NIH3T3 fibroblasts. Hofmann C, et al. **J Biol Chem** 1989 May 25;264(15):8606–11
Expression of human cation-independent mannose 6-phosphate receptor cDNA in receptor-negative mouse P388D1 cells following gene transfer. Kyle JW, et al. **J Biol Chem** 1988 Nov 5;263(31):16230–5
Fusion of a cleavable signal peptide to the ectodomain of neutral endopeptidase (EC 3.4.24.11) results in the secretion of an active enzyme in COS-1 cells. Lemay G, et al. **J Biol Chem** 1989 Sep 15;264(26):15620–3
Insulin regulates expression of the human growth hormone gene in transfected cells. Prager D, et al. **J Biol Chem** 1988 Nov 15;263(32):16580–5
Complete structure of the mouse mast cell receptor for IgE (Fc epsilon RI) and surface expression of chimeric receptors (rat-mouse-human) on transfected cells. Ra C, et al. **J Biol Chem** 1989 Sep 15;264(26):15323–7
Regulated expression of the overlapping ubiquitous and erythroid transcription units of the human porphobilinogen deaminase (PBG-D) gene introduced into non-erythroid and erythroid cells. Raich N, et al. **J Biol Chem** 1989 Jun 15;264(17):10186–92
A cloned human DNA restriction fragment determines expression of a GDP-L-fucose: beta-D-galactoside 2-alpha-L-fucosyltransferase in transfected cells. Evidence for isolation and transfer of the human H blood group locus. Rajan VP, et al. **J Biol Chem** 1989 Jul 5;264(19):11158–67
K562 leukemia cells transfected with the human c-fes gene acquire the ability to undergo myeloid differentiation. Yu G, et al. **J Biol Chem** 1989 Jun 15;264(17):10276–81

Induction of urokinase activity and malignant phenotype in bladder carcinoma cells after transfection of the activated Ha-ras oncogene. Brunner G, et al. J Cancer Res Clin Oncol 1989;115(2):139-44

Induction of the metastatic phenotype by transfection of the nuclear oncogene p53: increases in cytoplasmic diacylglycerol levels and reduction in class I major histocompatibility antigen expression are not sufficient to explain the changes in metastatic capacities. Pohl J, et al. J Cancer Res Clin Oncol 1989;115(2):145-7

Selective expression of mRNA encoding platelet-derived growth factor B chain following transfection of foreign genes into cell lines derived from baby hamster kidney. Sakariassen KS, et al. J Cell Biochem 1989 Jan;39(1):87-94

18th annual UCLA symposium. Abstracts: Plant gene transfer. J Cell Biochem Suppl 1989;13D:227-347

Alcohol oxidase expressed under nonmethylotrophic conditions is imported, assembled, and enzymatically active in peroxisomes of Hansenula polymorpha. Distel B, et al. J Cell Biol 1988 Nov;107(5):1669-75

Neuronal process outgrowth of human sensory neurons on monolayers of cells transfected with cDNAs for five human N-CAM isoforms. Doherty P, et al. J Cell Biol 1989 Aug; 109(2):789-98

Expression of multiple tau isoforms and microtubule bundle formation in fibroblasts transfected with a single tau cDNA. Kanai Y, et al. J Cell Biol 1989 Sep;109(3):1173-84

Intermediate filament formation after transfection with modified hamster vimentin and desmin genes. van den Heuvel RM, et al. J Cell Sci 1987 Nov;88 (Pt 4):475-82

Genetic transfer systems for delivery of plasmid deoxyribonucleic acid to Lactobacillus acidophilus ADH: conjugation, electroporation, and transduction. Luchansky JB, et al. J Dairy Sci 1989 Jun;72(6):1408-17

Glucocorticoid regulation of human growth hormone expression in transgenic mice and transiently transfected cells. Selden RF, et al. J Endocrinol 1989 Jul;122(1):49-60

Characterization of bacteriophage phi C69 of Saccharopolyspora erythraea and demonstration of heterologous actinophage propagation by transfection of Streptomyces and Saccharopolyspora. Katz L, et al. J Gen Microbiol 1988 Jul;134 (Pt 7):1765-71

Bovine leukaemia virus packaging cell line for retrovirus-mediated gene transfer. Ban J, et al. J Gen Virol 1989 Aug;70 (Pt 8):1987-93

Engineering of an Oryctes baculovirus recombinant: insertion of the polyhedrin gene from the Autographa californica nuclear polyhedrosis virus. Crawford AM. J Gen Virol 1989 Apr;70 (Pt 4):1017-24

Analysis of epitope expression and the functional repertoire of recombinant complement receptor 2 (CR2/CD21) in mouse and human cells. Carel JC, et al. J Immunol 1989 Aug 1;143(3):923-30

Isolation of murine fetal thymus cell lines after infection with recombinant retroviruses containing the v-myc and v-Ha-ras oncogenes. Cattermole JA, et al. J Immunol 1989 Jun 1;142(11):3746-53

Introduction of T cell receptor (TCR)-alpha cDNA has differential effects on TCR-gamma delta/CD3 expression by PEER and Lyon-1 cells. De Waal Malefyt R, et al. J Immunol 1989 May 15;142(10):3634-42

Analysis of gene structure and antigen determinants of DR2 antigens using DR gene transfer into mouse L cells. Kawai J, et al. J Immunol 1989 Jan 1;142(1):312-7

Analysis of the molecular specificities of anti-class II monoclonal antibodies by using L cell transfectants expressing HLA class II molecules. Klohe EP, et al. J Immunol 1988 Sep 15;141(6):2158-64

Structural and functional studies of HLA-DR restricted antigen recognition by human helper T lymphocyte clones by using transfected murine cell lines. Lechler RI, et al. J Immunol 1988 Nov 1;141(9):3003-9

Production of human cells expressing individual transferred HLA-A,-B,-C genes using an HLA-A,-B,-C null human cell line. Shimizu Y, et al. J Immunol 1989 May 1; 142(9):3320-8

Characterization of CD45 and CD45R monoclonal antibodies using transfected mouse cell lines that express individual human leukocyte common antigens. Streuli M, et al. J Immunol 1988 Dec 1;141(11):3910-4

Sequence and gene transfer analyses of HLA-CwBL18 (HLA-C blank) and HLA-Cw5 genes. Implications for the control of expression and immunogenicity of HLA-C antigens. Tibensky D, et al. J Immunol 1989 Jul 1; 143(1):348-55

Expression of retrovirus-related, cytotoxic T lymphocyte- and transplantation-defined antigens in NIH/3T3 transfectants after a single passage in nude mice. Traversari C, et al. J Immunol 1989 Apr 15;142(8):2887-94

Transient expression of a transfected gene in cultured epidermal keratinocytes: implications for future studies. Lee JI, et al. J Invest Dermatol 1989 Feb;92(2):267-71

Differentiation of human hematopoietic cells increases expression of a gene transferred by a retroviral vector. Holland CA, et al. J Leukoc Biol 1989 Sep;46(3):221-9

Gene transfer trial approved [news] Antoine F, et al. J Natl Cancer Inst 1989 Feb 15;81(4):257-8

First human gene transfer trial [news] Antoine FS. J Natl Cancer Inst 1988 Nov 2;80(17):1364-5

Expression and localization of myelin basic protein in oligodendrocytes and transfected fibroblasts. Barbarese E, et al. J Neurochem 1988 Dec;51(6):1737-45

Expression of functional human monoamine oxidase A and B cDNAs in mammalian cells. Lan NC, et al. J Neurochem 1989 May;52(5):1652-4

Synthesis of L-3,4-dihydroxyphenylalanine by tyrosine hydroxylase cDNA-transfected C6 cells: application for intracerebral grafting. Uchida K, et al. J Neurochem 1989 Sep;53(3):728-32

Immortalization of bipotential glial progenitors and generation of permanent "blue" cell lines. Evrard C, et al. J Neurosci Res 1988 Sep;21(1):80-7

Tumorigenic transformation of mouse NIH 3T3 cells by transfection with plasmid pSV2neo. Wallace JS, et al. J Pathol 1988 Sep;156(1):73-6

Multihormone regulation of MMTV-LTR in transfected T-47-D human breast cancer cells. Glover JF, et al. J Steroid Biochem 1989 Mar;32(3):357-63

Replication-defective vectors of reticuloendotheliosis virus transduce exogenous genes into somatic stem cells of the unincubated chicken embryo. Bosselman RA, et al. J Virol 1989 Jun;63(6):2680-9

Interferon inhibits hepatitis B virus replication in a stable expression system of transfected viral DNA. Hayashi Y, et al. J Virol 1989 Jul;63(7):2936-40

Design of retrovirus vectors for transfer and expression of the human beta-globin gene [published erratum appears in J Virol 1989 Mar;63(3):1493] Miller AD, et al. J Virol 1988 Nov;62(11):4337-45

C3b receptor activity on transfected cells expressing glycoprotein C of herpes simplex virus types 1 and 2. Seidel-Dugan C, et al. J Virol 1988 Nov;62(11):4027-36

Transcription of the human beta interferon gene is inhibited by hepatitis B virus. Twu JS, et al. J Virol 1989 Jul; 63(7):3065-71

Protamine sulfate as an effective alternative to polybrene in retroviral-mediated gene-transfer: implications for human gene therapy. Cornetta K, et al. J Virol Methods 1989 Feb; 23(2):187-94

Gene-transfer study approval awaits more data [news] Marwick C. JAMA 1988 Nov 18;260(19):2783

Construction of mouse A9 clones containing a single human chromosome tagged with neomycin-resistance gene via microcell fusion. Koi M, et al. Jpn J Cancer Res 1989 May; 80(5):413-8

Isolation and characterization of ras-transfected BALB/3T3 clone showing morphological transformation by 12-O-tetradecanoyl-phorbol-13-acetate. Sasaki K, et al. Jpn J Cancer Res 1988 Aug;79(8):921-30

Xenogenization of tumor cells by transfection with plasmid containing env gene of Friend leukemia virus. Sugiura C, et al. Jpn J Cancer Res 1988 Dec;79(12):1259-63

Assaying the reporter gene chloramphenicol acetyltransferase. Crabb DW, et al. Methods Enzymol 1989; 168:690-701

Mutagenesis of cyanobacteria by classical and gene-transfer-based methods. Golden SS. Methods Enzymol 1988;167:714-27

Colonies of procyclic Trypanosoma brucei on semi-solid agarose plates. Lee MG, et al. Mol Biochem Parasitol 1989 May 1;34(2):193-6

Malignant conversion of murine squamous papilloma cell lines by transfection with the fos oncogene. Greenhalgh DA, et al. Mol Carcinog 1988;1(2):134-43

Transformation of an established mouse mammary epithelial cell line following transfection with a human transforming growth factor alpha cDNA. Shankar V, et al. Mol Carcinog 1989;2(1):1-11

Transient transfection of mammalian cells with DNA of the plant-pathogenic Ti-plasmid and expression of marker and resident sequences. Geider K, et al. Mol Cell Biochem 1989 Jan 23;85(1):19-28

Expression of human adenosine deaminase in murine hematopoietic cells. Belmont JW, et al. Mol Cell Biol 1988 Dec;8(12):5116-25

Mechanism of autocrine stimulation in hematopoietic cells producing interleukin-3 after retrovirus-mediated gene transfer. Browder TM, et al. Mol Cell Biol 1989 Jan; 9(1):204-13

Calcium phosphate-mediated transfection alters metallothionein gene expression in response to Cd2+ and Zn2+. Foster R, et al. Mol Cell Biol 1989 Sep;9(9):4105-8

Chromosome instability associated with human alphoid DNA transfected into the Chinese hamster genome. Heartlein MW, et al. Mol Cell Biol 1988 Sep;8(9):3611-8

trans activation of type 1 interferon promoters by simian virus 40 T antigen. Hiscott J, et al. Mol Cell Biol 1988 Aug; 8(8):3397-405

Glycosylation and secretion of human tissue plasminogen activator in recombinant baculovirus-infected insect cells. Jarvis DL, et al. Mol Cell Biol 1989 Jan;9(1):214-23

Increased amount of a 25-kilodalton phosphoprotein after v-mos transfection of CHO cells. Mayo JK, et al. Mol Cell Biol 1988 Nov;8(11):4685-91

c-myc can induce expression of G0/G1 transition genes. Schweinfest CW, et al. Mol Cell Biol 1988 Aug;8(8):3080-7

Spontaneous germ line virus infection and retroviral insertional mutagenesis in eighteen transgenic Srev lines of mice. Spence SE, et al. Mol Cell Biol 1989 Jan; 9(1):177-84

Complementation of a methotrexate uptake defect in Chinese hamster ovary cells by DNA-mediated gene transfer. Underhill TM, et al. Mol Cell Biol 1989 Apr;9(4):1754-8

Kinds and spectrum of mutations induced by 1-nitrosopyrene adducts during plasmid replication in human cells. Yang JL, et al. Mol Cell Biol 1988 Aug;8(8):3364-72

Thyrotropin-releasing hormone stimulates the activity of the rat thyrotropin beta-subunit gene promoter transfected into pituitary cells. Carr FE, et al. Mol Endocrinol 1989 Apr; 3(4):717-24

Characterization of the domain structure of chick c-erbA by deletion mutation: in vitro translation and cell transfection studies. Horowitz ZD, et al. Mol Endocrinol 1989 Jan;3(1):148-56

Mode of antigen presentation required for triggering of T cell response: analysis by use of azobenzenearsonate-tyrosine derivatives as antigens and L cells transfected with I-Ak genes as antigen presenting cells. Saito S, et al. Mol Immunol 1988 Jun;25(6):569-75

The effect of a transfected c-myc proto-oncogene on cellular differentiation. Segal S, et al. Mol Immunol 1988 Nov; 25(11):1129-32

Purification and characterization of radiolabelled biosynthetic human insulin from Escherichia coli. Kinetics of processing by antigen presenting cells. Semple JW, et al. Mol Immunol 1988 Dec;25(12):1291-8

Elevation of pi class glutathione S-transferase activity in human breast cancer cells by transfection of the GST pi gene and its effect on sensitivity to toxins. Moscow JA, et al. Mol Pharmacol 1989 Jul;36(1):22-8

The mutagenic and carcinogenic effects of gene transfer. Bardwell L. Mutagenesis 1989 Jul;4(4):245-53 (145 ref.)

Decreased stable transfection frequencies of six X-ray-sensitive CHO strains, all members of the xrs complementation group. Jeggo PA, et al. Mutat Res 1989 Sep;218(2):75-86

Cotransfection of ICAM-1 and HLA-DR reconstitutes human antigen-presenting cell function in mouse L cells. Altmann DM, et al. Nature 1989 Apr 6;338(6215):512-4

Cationic liposome-mediated transfection. Felgner PL, et al. Nature 1989 Jan 26;337(6205):387-8

Gene targeting. Getting nearer the mark [news] Hogan B, et al. Nature 1988 Nov 24;336(6197):304-5

Production of a mutation in mouse En-2 gene by homologous recombination in embryonic stem cells. Joyner AL, et al. Nature 1989 Mar 9;338(6211):153-6

Analysis of specificity for antigen, Mls, and allogenic MHC by transfer of T-cell receptor alpha- and beta-chain genes. Kaye J, et al. Nature 1988 Dec 8;336(6199):580-3

Disruption of the proto-oncogene int-2 in mouse embryo-derived stem cells: a general strategy for targeting mutations to non-selectable genes. Mansour SL, et al. Nature 1988 Nov 24;336(6197):348-52

Go-ahead for gene transfer experiment [news] Palca J. Nature 1989 May 25;339(6222):243

NIH delay first gene transfer [news] Palca J. Nature 1988 Oct 27;335(6193):754

Gene transfer to humans approved in face of advice [news] Palca J. Nature 1988 Oct 13;335(6191):577

Oncogenic potential of bcl-2 demonstrated by gene transfer. Reed JC, et al. Nature 1988 Nov 17;336(6196):259-61

Rifkin tries to block human gene transfer experiment [news] Swinbanks D. Nature 1989 Feb 2;337(6206):398

Production of chimaeric mice containing embryonic stem (ES) cells carrying a homoeobox Hox 1.1 allele mutated by homologous recombination. Zimmer A, et al. Nature 1989 Mar 9;338(6211):150-3

Transfection of IL-3 gene to a factor-dependent murine myeloid cell line (FDC-P2). Suda T, et al. Nippon Ketsueki Gakkai Zasshi 1988 Dec;51(8):1498-504

The rat albumin gene promoter is appropriately regulated in transient but not in stable transfections. Berland R, et al. Nucleic Acids Res 1988 Dec 23;16(24):11573-90

Electrotransfection of human lymphoid and myeloid cell lines. Döffinger R, et al. Nucleic Acids Res 1988 Dec 23; 16(24):11840

ADP-ribosylation is involved in the integration of foreign DNA into the mammalian cell genome. Farzaneh F, et al. Nucleic Acids Res 1988 Dec 9;16(23):11319-26

Enhanced transfection efficiency and improved cell survival after electroporation of G2/M-synchronized cells and treatment with sodium butyrate. Goldstein S, et al. Nucleic Acids Res 1989 May 25;17(10):3959-71

Transfection of DNA into adherent cells by DEAE-dextran/DMSO method increases drastically if the cells are removed from surface and treated in suspension. Golub EI, et al. Nucleic Acids Res 1989 Jun 26;17(12):4902

Helper activity for gene expression, a novel function of the SV40 enhancer. Graessmann M, et al. Nucleic Acids Res 1989 Aug 25;17(16):6603-12

An improved retroviral vector for gene transfer into undifferentiated cells. Hawley RG, et al. Nucleic Acids Res 1989 May 25;17(10):4001

Amplified inverted duplications within and adjacent to heterologous selectable DNA. Heartlein MW, et al. Nucleic Acids Res 1989 Feb 25;17(4):1697-716

Construction of plasmids that express E. coli beta-galactosidase in mammalian cells. MacGregor GR, et al. Nucleic Acids Res 1989 Mar 25;17(6):2365

Rapid test for in vivo stability and DNA binding of mutated octamer binding proteins with 'mini-extracts' prepared from transfected cells. Müller MM, et al. Nucleic Acids Res 1989 Aug 11;17(15):6420

Electroporation: application to human lymphoid cell lines for stable introduction of a transactivator gene of human T-cell leukemia virus type I. Ohtani K, et al.

Nucleic Acids Res 1989 Feb 25;17(4):1589–604

High efficiency expression of transfected genes in a Drosophila melanogaster haploid (1182) cell line. Saunders SE, et al. Nucleic Acids Res 1989 Aug 11;17(15):6205–16

Gene transfer of truncated NGF receptor clones leads to cell surface expression in mouse fibroblasts. Sehgal A, et al. Nucleic Acids Res 1989 Jul 25;17(14):5623–32

An upstream enhancer and a negative element in the 5' flanking region of the human urokinase plasminogen activator gene. Verde P, et al. Nucleic Acids Res 1988 Nov 25;16(22):10699–716

Aberrant expression of platelet-derived growth factor A-chain cDNAs due to cryptic splicing of RNA transcripts in COS-1 cells. Wise RJ, et al. Nucleic Acids Res 1989 Aug 25;17(16):6591–601

Simple and effective method of electroporation for introduction of plasmid and cosmid DNAs to mammalian cells. Hama-Inaba H, et al. Nucleic Acids Symp Ser 1988; (19):149–52

A new transfection method of mouse FM3A mammary carcinoma cells with plasmid DNA. Ogawa T, et al. Nucleic Acids Symp Ser 1988;(19):153–5

Induction of human cervical squamous cell carcinoma by sequential transfection with human papillomavirus 16 DNA and viral Harvey ras. DiPaolo JA, et al. Oncogene 1989 Apr;4(4):395–9

Introduction of a Ha-ras oncogene into rat liver epithelial cells and parenchymal hepatocytes confers resistance to the growth inhibitory effects of TGF-beta. Houck KA, et al. Oncogene 1989 Jan;4(1):19–25

Scrape-loading of Swiss 3T3 cells with ras protein rapidly activates protein kinase C in the absence of phosphoinositide hydrolysis. Morris JD, et al. Oncogene 1989 Jan;4(1):27–31

Mouse fibroblasts transformed with the human c-myc gene express a high level of mRNA but a low level of c-myc protein and are non-tumorigenic in nude mice. Ray R, et al. Oncogene 1989 May;4(5):593–600

Generation of new oncogenic murine retroviruses by cotransfection of cloned AKR and MH2 proviruses. Righi M, et al. Oncogene 1989 Feb;4(2):223–30

Transfection of normal and transformed hamster cerebral cortex glial cells with activated c-H-ras-1 results in the acquisition of a diffusely invasive phenotype. Fetherston JD, et al. Oncogene Res 1989;5(1):25–30

Ha-Ras-1 oncogene dosage differentially affects Balb/3T3 cells' growth factor requirement and tumorigenicity. Kovary K, et al. Oncogene Res 1989;4(1):55–64

Human oncogenes in mouse/human microcell hybrids. Sanford JA, et al. Oncogene Res 1989;4(3):195–204

Expression of Ba currents in Xenopus oocyte injected with pregnant rat myometrium mRNA. Fournier F, et al. Pflugers Arch 1989 Apr;413(6):682–4

Gene transfer and expression studies in cultured avian neural crest cells differentiating into melanocytes. Vielkind JR, et al. Pigment Cell Res 1989 Jan-Feb;2(1):44–52

Inhibition of transient gene expression in Chinese hamster ovary cells by cyclobutane dimers and (6–4) photoproducts in transfected ultraviolet-irradiated plasmid DNA. Mitchell DL, et al. Plasmid 1989 Jan;21(1):21–30

Cloning and genetic analysis of tra cistrons of the Tra 2/Tra 3 region of plasmid RP1. Palombo EA, et al. Plasmid 1989 Jul;22(1):59–69

DNA methylation prevents transfection of genes for specific surface antigens. Alberti S, et al. Proc Natl Acad Sci U S A 1988 Nov;85(22):8391–4

Cotransfection of granulosa cells with simian virus 40 and Ha-RAS oncogene generates stable lines capable of induced steroidogenesis. Amsterdam A, et al. Proc Natl Acad Sci U S A 1988 Oct;85(20):7582–6

Asbestos fibers mediate transformation of monkey cells by exogenous plasmid DNA [published erratum appears in Proc Natl Acad Sci U S A 1989 Feb;86(3):997] Appel JD, et al. Proc Natl Acad Sci U S A 1988 Oct;85(20):7670–4

Efficient gene transfer into mammalian primary endocrine cells with lipopolyamine-coated DNA. Behr JP, et al. Proc Natl Acad Sci U S A 1989 Sep;86(18):6982–6

Successive steps in the process of immortalization identified by transfer of separate bovine papillomavirus genes into rat fibroblasts. Cerni C, et al. Proc Natl Acad Sci U S A 1989 May;86(9):3266–70

Prolactin and glucocorticoid hormones synergistically induce expression of transfected rat beta-casein gene promoter constructs in a mammary epithelial cell line. Doppler W, et al. Proc Natl Acad Sci U S A 1989 Jan;86(1):104–8

Transfection of fetal rat intestinal epithelial cells by viral oncogenes: establishment and characterization of the E1A-immortalized SLC-11 cell line. Emami S, et al. Proc Natl Acad Sci U S A 1989 May;86(9):3194–8

A cell line producing recombinant nerve growth factor evokes growth responses in intrinsic and grafted central cholinergic neurons. Ernfors P, et al. Proc Natl Acad Sci U S A 1989 Jun;86(12):4756–60

Cell sorting-out is modulated by both the specificity and amount of different cell adhesion molecules (CAMs) expressed on cell surfaces. Friedlander DR, et al. Proc Natl Acad Sci U S A 1989 Sep;86(18):7043–7

Partial suppression of anchorage-independent growth and tumorigenicity in immunodeficient mice by transfection of the H-2 class I gene H-2Ld into a human colon cancer cell line (HCT). Gattoni-Celli S, et al. Proc Natl Acad Sci U S A 1988 Nov;85(22):8543–7

Partial diversion of a mutant proinsulin (B10 aspartic acid) from the regulated to the constitutive secretory pathway in transfected AtT-20 cells. Gross DJ, et al. Proc Natl Acad Sci U S A 1989 Jun;86(11):4107–11

Two dominant-acting selectable markers for gene transfer studies in mammalian cells. Hartman SC, et al. Proc Natl Acad Sci U S A 1988 Nov;85(21):8047–51

Retroviral transfer of a human tyrosine hydroxylase cDNA in various cell lines: regulated release of dopamine in mouse anterior pituitary AtT-20 cells. Horellou P, et al. Proc Natl Acad Sci U S A 1989 Sep;86(18):7233–7

Malignant transformation of human fibroblasts caused by expression of a transfected T24 HRAS oncogene. Hurlin PJ, et al. Proc Natl Acad Sci U S A 1989 Jan;86(1):187–91

A region in the coding sequence is required for high-level expression of murine histone H3 gene. Hurt MM, et al. Proc Natl Acad Sci U S A 1989 Jun;86(12):4450–4

Infectious potential of human immunodeficiency virus type 1 reverse transcriptase mutants with altered inhibitor sensitivity. Larder BA, et al. Proc Natl Acad Sci U S A 1989 Jul;86(13):4803–7

Gene transfer from targeted liposomes to specific lymphoid cells by electroporation. Machy P, et al. Proc Natl Acad Sci U S A 1988 Nov;85(21):8027–31

Cationic liposome-mediated RNA transfection. Malone RW, et al. Proc Natl Acad Sci U S A 1989 Aug;86(16):6077–81

Construction of epithelioid sheets by transfection of mouse sarcoma cells with cDNAs for chicken cell adhesion molecules. Mege RM, et al. Proc Natl Acad Sci U S A 1988 Oct;85(19):7274–8

Deletion of transfected oncogenes from NIH 3T3 transformants by inhibitors of poly(ADP-ribose) polymerase. Nakayasu M, et al. Proc Natl Acad Sci U S A 1988 Dec;85(23):9066–70

Retroviral-mediated gene transfer and expression of human phenylalanine hydroxylase in primary mouse hepatocytes. Peng H, et al. Proc Natl Acad Sci U S A 1988 Nov; 85(21):8146–50

Common acute lymphoblastic leukemia antigen (CALLA) is active neutral endopeptidase 24.11 ("enkephalinase"): direct evidence by cDNA transfection analysis. Shipp MA, et al. Proc Natl Acad Sci U S A 1989 Jan;86(1):297–301

Monoclonal antibodies to the insulin receptor mimic metabolic effects of insulin but do not stimulate receptor autophosphorylation in transfected NIH 3T3 fibroblasts. Soos MA, et al. Proc Natl Acad Sci U S A 1989 Jul; 86(14):5217–21

Reversal of natural killing susceptibility in target cells expressing transfected class I HLA genes. Storkus WJ, et al. Proc Natl Acad Sci U S A 1989 Apr;86(7):2361–4

Altered growth of a human neuroendocrine carcinoma line after transfection of a major histocompatibility complex class I gene. Sunday ME, et al. Proc Natl Acad Sci U S A 1989 Jun;86(12):4700–4

Molecular cloning of a mouse DNA repair gene that complements the defect of group-A xeroderma pigmentosum. Tanaka K, et al. Proc Natl Acad Sci U S A 1989 Jul;86(14):5512–6

Construction of a genetic map of human chromosome 17 by use of chromosome-mediated gene transfer. Xu WM, et al. Proc Natl Acad Sci U S A 1988 Nov;85(22):8563–7

Cationic liposome mediated transfection. Felgner PL, et al. Proc West Pharmacol Soc 1989;32:115–21

Novel antibodies by DNA manipulation. Brüggemann M, et al. Prog Allergy 1988;45:91–105

Application of gene transfer and gene mapping techniques to functional analysis of the Na,K-ATPase. Kent RB, et al. Prog Clin Biol Res 1988;268B:97–104

Spontaneous germ-line ecotropic murine leukemia virus infection: implications for retroviral insertional mutagenesis and germ-line gene transfer. Copeland NG, et al. Prog Nucleic Acid Res Mol Biol 1989;36:221–34

Gene transfer into primates and prospects for gene therapy in humans. Cornetta K, et al. Prog Nucleic Acid Res Mol Biol 1989;36:311–22 (24 ref.)

Homologous recombination in mammalian somatic cells. Kucherlapati RS. Prog Nucleic Acid Res Mol Biol 1989; 36:301–10 (39 ref.)

The transformation-suppressive function is lost in tumorigenic cells and is restored upon transfer of a suppressor gene. Iten E, et al. Recent Results Cancer Res 1989;113:78–89

Cloning in Yersinia enterocolitica of K99 antigen gene from Escherichia coli. Sun WL, et al. Sci Sin [B] 1988 Aug; 31(8):944–52

Transforming genes in duck hepatic carcinoma—mht(raf) and v-Ha-ras. Tan H, et al. Sci Sin [B] 1988 Nov;31(11):1325–32

Expression of a bacterial gene in a trypanosomatid protozoan. Bellofatto V, et al. Science 1989 Jun 9;244(4909):1167–9

Further liaisons with sperm [letter] Birnstiel ML, et al. Science 1989 Jul 21;245(4915):243–4

Germline transmission of exogenous genes in the chicken. Bosselman RA, et al. Science 1989 Jan 27;243(4890):533–5

Commitment of mouse fibroblasts to adipocyte differentiation by DNA transfection. Chen S, et al. Science 1989 May 5;244(4904):582–5

Gene transfer test: so far, so good [news] Culliton BJ. Science 1989 Sep 22;245(4924):1325

Fighting cancer with designer cells [news] Culliton BJ. Science 1989 Jun 23;244(4911):1430–3

NIH delays gene transfer experiment [news] Culliton BJ. Science 1988 Nov 11;242(4880):856–7

Gene test begins [news] Culliton BJ. Science 1989 May 26; 244(4907):913

"Dangerous" liaisons in cell biology [news] Dickson D. Science 1989 Jun 30;244(4912):1539–40

Selection for precise chromosomal targeting of a dominant marker by homologous recombination. Dorin JR, et al. Science 1989 Mar 10;243(4896):1357–60

Suppression of the neoplastic phenotype by replacement of the RB gene in human cancer cells. Huang HJ, et al. Science 1988 Dec 16;242(4885):1563–6

Gene transfer is coming on target [news] Marx JL. Science 1988 Oct 14;242(4876):191–2

Expression of high-affinity binding of human immunoglobulin E by transfected cells. Miller L, et al. Science 1989 Apr 21;244(4902):334–7

Genetic engineering of livestock. Pursel VG, et al. Science 1989 Jun 16;244(4910):1281–8

Transfer of a protein encoded by a single nucleus to nearby nuclei in multinucleated myotubes. Ralston E, et al. Science 1989 Jun 2;244(4908):1066–9

Introduction of human DNA into mouse eggs by injection of dissected chromosome fragments. Richa J, et al. Science 1989 Jul 14;245(4914):175–7

Human gene transfer test approved [letter] Roberts L. Science 1989 Jan 27;243(4890):473

Gene transfer test back on track [news] Roberts L. Science 1988 Dec 16;242(4885):1502

Implantation of vascular grafts lined with genetically modified endothelial cells. Wilson JM, et al. Science 1989 Jun 16;244(4910):1344–6

High-level recombinant gene expression in rabbit endothelial cells transduced by retroviral vectors. Zwiebel JA, et al. Science 1989 Jan 13;243(4888):220–2

Gene expression in implanted rat hepatocytes following retroviral-mediated gene transfer. Anderson KD, et al. Somat Cell Mol Genet 1989 May;15(3):215–27

Long-range structure of H-ras 1-selected transgenomes. Bickmore WA, et al. Somat Cell Mol Genet 1989 May; 15(3):229–35

Construction of microcell hybrid panel containing different neo gene insertions in mouse chromosome 17 used for chromosome-mediated gene transfer. Sidén TS, et al. Somat Cell Mol Genet 1989 May;15(3):245–53

Two types of mouse FM3A cell mutants deficient in 5-aminoimidazole-4-carboxamide ribonucleotide transformylase and their transformants isolated by human chromosome-mediated gene transfer. Yamauchi M, et al. Somat Cell Mol Genet 1989 Jan;15(1):39–48

Generation of effector T cells expressing chimeric T cell receptor with antibody type-specificity. Gross G, et al. Transplant Proc 1989 Feb;21(1 Pt 1):127–30

Induction of immunological unresponsiveness using recipient cells transfected with donor class I or class II MHC genes. Madsen JC, et al. Transplant Proc 1989 Feb;21(1 Pt 1):477

Effect of HLA class II antigen in in vitro and in vivo cellular responses. Matsuno N, et al. Transplant Proc 1989 Feb;21(1 Pt 1):158–9

Hemopoietic growth factor gene transfer. Metcalf D. Transplant Proc 1989 Feb;21(1 Pt 1):65–6

Selecting for enhancer sequences. Vasavada HA, et al. Trends Genet 1988 Aug;4(8):213

Activation by point mutation of Ki-ras gene occurring in transfected human normal DNA. Viel A, et al. Tumori 1988 Oct 31;74(5):499–506

Expression and characterization of hepatitis B virus precore-core antigen in E. coli. Lanford RE, et al. Viral Immunol 1987;1(2):97–109

Replication of duck hepatitis B virus in two differentiated human hepatoma cell lines after transfection with cloned viral DNA. Hirsch R, et al. Virology 1988 Nov; 167(1):136–42

[Studies on oncogene of nasopharyngeal carcinoma. I. Transforming activity of CNE-2 DNA in NIH3T3 cells] Yao GQ. Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1989 Apr; 11(2):112–5 (Eng. Abstr.) (Chi)

[Studies on the transformation of NIH 3 T 3 cells with v-fos gene] Jin JJ, et al. Shih Yen Sheng Wu Hsueh Pao 1988 Dec;21(4):467–79 (Eng. Abstr.) (Chi)

[Studies on the structural alterations of the human thymidine kinase gene occurring in the process of cotransfection] Weng ZP, et al. Shih Yen Sheng Wu Hsueh Pao 1988 Jun; 21(2):231–8 (Eng. Abstr.) (Chi)

[Gene transfer in swine by DNA microinjection into zygotes] Brem G, et al. Tierarztl Prax 1989;Suppl 4:31–4 (7 ref.) (Eng. Abstr.) (Ger)

[Embryo transfer in swine in relation to a gene transfer program] Sprinqmann K, et al. Tierarztl Prax 1989;Suppl 4:21–5 (Eng. Abstr.) (Ger)

[Technics in molecular biology in cancer research. DNA transfection in mammalian cells] Hayashi Y, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 1):867–72 (Jpn)

[Introduction to the experiments of genetic engineering. XIII. Vector-systems and gene transfer techniques for mammalian cells. (2)] Nishimori K, et al. Radioisotopes 1988 Dec;37(12):697–704 (124 ref.) (Jpn)

[Introduction to the experiments of genetic engineering. XIII. Vector-systems and gene transfer techniques for mammalian cells (1)] Nishimori K, et al. Radioisotopes 1988 Nov;37(11):645–57 (0 ref.) (Jpn)

[Current topics on gene transfer] Kaneda Y, et al.

Seikagaku 1988 Dec;60(12):1381–6 (Jpn)
[Gene transfer into plant cells by electric field pulse] Morikawa H. Tanpakushitsu Kakusan Koso 1987 Jul;(30 Suppl):109–18 (29 ref.) (Jpn)
[Gene expression by direct DNA transfer] Uchimiya H. Tanpakushitsu Kakusan Koso 1987 Jul;(30 Suppl):119–22 (Jpn)
[Genetic transformation of cultured animal cells using the high-velocity mechanical DNA poration] Kolesnikov VA, et al. Dokl Akad Nauk SSSR 1988;302(5):1236–8 (Rus)
[Change in the organization of the actin cytoskeleton and extracellular fibronectin in the REF(LT) cell line after a series of successive transfections of the Ha-ras oncogene] Komissarova EV, et al. Dokl Akad Nauk SSSR 1989; 306(4):985–7 (Rus)
[The use of retrovirus vectors for the expression of chromosomal genes within introns: synthesis of biologically active tumor necrosis factor--human beta (lymphotoxin)] Prasolov VS, et al. Dokl Akad Nauk SSSR 1988; 300(6):1498–502 (Rus)
[Activity of topoisomerase I and endonucleases in cells transfected by a ras oncogene] Basnak'ian AG, et al. Mol Biol (Mosk) 1989 May-Jun;23(3):750–7 (Eng. Abstr.) (Rus)
[Foreign DNA in developing embryos of the loach Misgurnus Fossilis L.] Kozlov AP, et al. Mol Biol (Mosk) 1988 Nov-Dec;22(6):1614–22 (Eng. Abstr.) (Rus)
[Retroviral vectors--an effective system for transfer and expression of foreign genes in mammalian cells] Prasolov VS. Mol Biol (Mosk) 1989 Mar-Apr;23(2):348–55 (14 ref.) (Eng. Abstr.) (Rus)
[New methods of transfection of mammalian cells] Titomirov AV, et al. Mol Biol (Mosk) 1988 Nov-Dec;22(6):1445–50 (25 ref.) (Eng. Abstr.) (Rus)
[Study of the horizontal transfer of mercury resistance genes in natural populations of bacteria using antibodies to mercury reductases] Bogdanova ES, et al. Mol Gen Mikrobiol Virusol 1988 Dec;(12):16–23 (Eng. Abstr.) (Rus)
[New data on the type of structural changes in DNA of simian adenovirus SA7 microinjected into mouse zygotes] Kuznetsova ED, et al. Mol Gen Mikrobiol Virusol 1989 Apr;(4):6–10 (Eng. Abstr.) (Rus)
[Injection of gene p53 into the pronuclei of mouse zygotes] Sergienko VG, et al. Ontogenez 1989 May-Jun;20(3):323–6 (Eng. Abstr.) (Rus)
[Transfer of the gene of the BTSh 70 heat-shock protein from Drosophila into the mouse genome] Sergienko VG, et al. Ontogenez 1988 May-Jun;19(3):317–9 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Use of a simian virus 40-based shuttle vector to analyze enhanced mutagenesis in mitomycin C-treated monkey cells. Roilides E, et al. Mol Cell Biol 1988 Sep;8(9):3943–6
Inhibition of thyroid hormone action by a non-hormone binding c-erbA protein generated by alternative mRNA splicing. Koenig RJ, et al. Nature 1989 Feb 16; 337(6208):659–61

INSTRUMENTATION

An automated method for calcium phosphate-mediated gene transfer. Steiner C, et al. Trends Genet 1989 May;5(5):138

METHODS

DNA transfection into mammalian cells, selective markers and gene cointegration. Colbère-Garapin F, et al. Dev Biol Stand 1989;70:85–9
Transfection and transformation of human and animal cells by recombinant DNA vectors: issues relevant to use of these substrates for the production of biologicals. Moyer MP, et al. Dev Biol Stand 1989;70:91–100
Use of fluorescence in situ hybridization to detect and monitor transfected and amplified sequences in recombinant CHO cells. Pallavicini MG, et al. Dev Biol Stand 1989;70:165–72
Genetic transformation of mouse cultured cells with the help of high-velocity mechanical DNA injection. Zelenin AV, et al. FEBS Lett 1989 Feb 13;244(1):65–7
Transfection of primary human skin fibroblasts by electroporation. Fountain JW, et al. Gene 1988 Aug 15; 68(1):167–72
A simple procedure for transferring genes cloned in Escherichia coli vectors into other gram-negative bacteria: phenotypic analysis and mapping of TOL plasmid gene xylK. Harayama S, et al. Gene 1989 May 15;78(1):19–27
Replacement of the macronuclear ribosomal RNA genes of a mutant Tetrahymena using electroporation. Orias E, et al. Gene 1988 Oct 30;70(2):295–301
Application of electroporation for transfer of plasmid DNA to Lactobacillus, Lactococcus, Leuconostoc, Listeria, Pediococcus, Bacillus, Staphylococcus, Enterococcus and Propionibacterium. Luchansky JB, et al. Mol Microbiol 1988 Sep;2(5):637–46

RADIATION EFFECTS

A promising genomic transfectant into Xeroderma pigmentosum group A with highly amplified mouse DNA and intermediate UV resistance turns revertant. Blum M, et al. Biochem Biophys Res Commun 1989 Apr 28; 160(2):647–55
Retention of immunogenicity after X-irradiation of mouse colon tumor cells expressing the transfected influenza virus hemagglutinin gene. Itaya T, et al. Cancer Immunol Immunother 1989;28(4):248–52
Determination of the spectrum of mutations induced by defined-wavelength solar UVB (313-nm) radiation in mammalian cells by use of a shuttle vector. Keyse SM, et al. Mol Cell Biol 1988 Dec;8(12):5425–31
Effect of gamma rays on efficiency of gene transfer in DNA repair-proficient and -deficient cell lines. Rubin JS. Somat Cell Mol Genet 1988 Nov;14(6):613–21

VETERINARY

[Gene transfer in laboratory animals] Voss AK, et al. DTW 1989 Feb;96(2):59–62 (Eng. Abstr.) (Ger)

TRANSFER (PSYCHOLOGY)

Intelligence-related differences in learning and transfer and enhancement of transfer among mentally retarded persons. Day JD, et al. Am J Ment Retard 1988 Sep;93(2):125–37
Classical discrimination conditioning of the rabbit's eyelid response using pontine stimulation as a conditioned stimulus. Rosen DJ, et al. Behav Neural Biol 1989 Jul; 52(1):51–62
Reply to Stigler, Nusbaum, and Chalip. Kail R. Child Dev 1988 Aug;59(4):1154–7
Individual differences in infants' information processing: reliability, stability, and prediction. Rose SA, et al. Child Dev 1988 Oct;59(5):1177–97
The role of practice in dual-task performance: toward workload modeling in a connectionist/control architecture. Schneider W, et al. Hum Factors 1988 Oct;30(5):539–66
Interhemispheric transfer in schizophrenics, depressives, and normals with schizoid tendencies. Raine A, et al. J Abnorm Psychol 1989 Feb;98(1):35–41
Tactual learning and cross-modal transfer of an oddity problem in young children. Krekling S, et al. J Exp Child Psychol 1989 Feb;47(1):88–96
Odd-item search in pigeons: display size and transfer effects. Blough DS. J Exp Psychol [Anim Behav] 1989 Jan; 15(1):14–22
Does transfer of training help children learn juggling? Hautala RM. Percept Mot Skills 1988 Oct;67(2):563–7
Tactile recognition of mirror images by children: intermanual transfer and rotation of the palm. Heath B, et al. Perception 1988;17(4):535–47
The behavior equivalence problem in within-subject treatment comparisons. Romer LT, et al. Res Dev Disabil 1988;9(3):305–15 (19 ref.)
Cross-modal transfer of forms between vision and touch. Juurmaa J, et al. Scand J Psychol 1988;29(2):95–110

PHYSIOLOGY

Anomalous patterns of response learning and transfer in decorticate rats. Terry P, et al. Behav Brain Res 1989 May 1;33(1):105–9
Negative evidence of difference between right- and left-handers in interhemispheric transfer of information. Piccirilli M, et al. Neuropsychologia 1989;27(7):1023–6

TRANSFER FACTOR

ADMINISTRATION & DOSAGE

Inability of oral bovine transfer factor to eradicate cryptosporidial infection in a patient with congenital dysgammaglobulinemia. Chng HH, et al. Clin Immunol Immunopathol 1989 Mar;50(3):402–6

ISOLATION & PURIFICATION

Chromatographic and enzymatic effects on transfer factor-like activity from human leukocytes and porcine spleen dialysate. Karhumäki E, et al. Int J Biochem 1988; 20(10):1067–72

PHYSIOLOGY

Transfer factor: past, present and future. Fudenberg HH, et al. Annu Rev Pharmacol Toxicol 1989;29:475–516 (148 ref.)

THERAPEUTIC USE

Application of immunotherapy in proctosurgery. Skácel V, et al. Acta Univ Palacki Olomuc Fac Med 1988;120:335–42
Transfer factor therapy of thoracic sarcoidosis. Vezendi S, et al. Allergol Immunopathol (Madr) 1989 Jan-Feb; 17(1):35–7
Biological response modifiers. Interferons, interleukins, and transfer factor. Kirkpatrick CH. Ann Allergy 1989 Mar; 62(3):170–6 (92 ref.)
Use of transfer factor in a pediatric AIDS patient with disseminated Mycobacterium avium intracellulare. Perrick D, et al. Ann Allergy 1989 May;62(5):437–40
Transfer factor in Hodgkin's disease: a randomized clinical and immunological study. Hancock BW, et al. Eur J Cancer Clin Oncol 1988 May;24(5):929–33
Interferon-alpha and transfer factor in the treatment of multiple sclerosis: a double-blind, placebo-controlled trial. AUSTIMS Research Group. J Neurol Neurosurg Psychiatry 1989 May;52(5):566–74
First experience with immunomodulation in septic shock. Josten C, et al. Prog Clin Biol Res 1989;308:989–94
[The dialysate of leukocyte homogenate in the treatment of sepsis] Lokaj J. Bratisl Lek Listy 1988 Aug;89(8):586–90 (Eng. Abstr.) (Cze)

TRANSFER-GLUCOSIDASE see GLYCOGEN DEBRANCHING ENZYME SYSTEM

TRANSFERASES

Arginine chemical modification of Petunia hybrida 5-enol-pyruvylshikimate-3-phosphate synthase. Padgette SR, et al. Arch Biochem Biophys 1988 Oct;266(1):254–62
The primary structure of rabbit liver mitochondrial serine hydroxymethyltransferase. Martini F, et al. J Biol Chem 1989 May 25;264(15):8509–19
Electron microscopy of subnanometer surface features on metal-decorated protein crystals. Bachmann L, et al. J Mol Biol 1989 Jun 5;207(3):575–84
Heavy riboflavin synthase from Bacillus subtilis. Crystal structure analysis of the icosahedral beta 60 capsid at 3.3 A resolution. Ladenstein R, et al. J Mol Biol 1988 Oct 20;203(4):1045–70

ANALYSIS

Assay of strictosidine synthase from plant cell cultures by high-performance liquid chromatography. Pennings EJ, et al. Anal Biochem 1989 Feb 1;176(2):412–5
Electrostatic effects in a large enzyme complex: subunit interactions and electrostatic potential field of the icosahedral beta 60 capsid of heavy riboflavin synthase. Karshikov A, et al. Proteins 1989;5(3):248–57

ANTAGONISTS & INHIBITORS

Effects of a triazine antifolate (NSC 127755) on serine hydroxymethyltransferase in myeloma cells in culture. Snell K, et al. Cancer Lett 1989 Mar;44(3):217–20
Antitumor effect of a new multienzyme inhibitor of polyamine synthetic pathway, methylglyoxal-bis(cyclopentylamidinohydrazone), against human and mouse leukemia cells. Hibasami H, et al. Cancer Res 1989 Apr 15;49(8):2065–8
Trans-4-methylcyclohexylamine, a potent new inhibitor of spermidine synthase. Shirahata A, et al. Chem Pharm Bull (Tokyo) 1988 Aug;36(8):3220–2
Inhibition of mammalian spermine synthase by N-alkylated-1,3-diaminopropane derivatives in vitro and in cultured rat hepatoma cells. Baillon JG, et al. Eur J Biochem 1989 Jan 15;179(1):17–21
Interaction of cibacron blue F3GA with human liver serine hydroxymethyltransferase. Vijayalakshmi D, et al. Indian J Biochem Biophys 1988 Dec;25(6):642–7
Approaches to isozyme-specific inhibitors. 16. A novel methyl-C5' covalent adduct of L-ethionine and beta,gamma-imido-ATP as a potent multisubstrate inhibitor of rat methionine adenosyltransferases. Vrudhula VM, et al. J Med Chem 1989 Apr;32(4):885–90
Synthesis and biological evaluation of S-adenosyl-1,12-diamino-3-thio-9-azadodecane, a multisubstrate adduct inhibitor of spermine synthase. Woster PM, et al. J Med Chem 1989 Jun;32(6):1300–7
Comparative QSAR analysis in dihydropteroate synthase inhibition by sulphones. Design and synthesis of some new derivatives with improved potency. De Benedetti PG, et al. Prog Clin Biol Res 1989;291:345–8

BLOOD

Transmethylation in depression. Bottiglieri T, et al. Ala J Med Sci 1988 Jul;25(3):296–301 (40 ref.)
MAT kinetics in affective disorders and schizophrenia. An account. Tolbert LC. Ala J Med Sci 1988 Jul;25(3):291–6
One-carbon cycle metabolism in obsessive-compulsive disorder [letter] Alarcon RD, et al. Biol Psychiatry 1988 Oct;24(6):721–3
[Changes in serum aspartate and alanine aminotransferase, lactate dehydrogenase, gamma-glutamyltransferase and creatine kinase activities and the myoglobin level during hemodialysis] Starzyk J, et al. Wiad Lek 1988 Oct 15; 41(20):1357–60 (Eng. Abstr.) (Pol)
[Evolution of antibodies and ABH plasmatic transferases in transplants with ABH difference between the recipient and donor] Barbolla L. Sangre (Barc) 1989 Jun;34(3):177–85 (Eng. Abstr.) (Spa)

DEFICIENCY

Clinical effects of serine medication in non-ketotic hyperglycinaemia due to deficiency of P-protein of the glycine cleavage complex. Wijburg FA, et al. J Inherited Metab Dis 1988;11 Suppl 2:218–20

GENETICS

Approaching the structures of mammalian propylamine transferases and their genes. Elorants T, et al. Adv Exp Med Biol 1988;250:117–26
RSF1010 and a conjugative plasmid contain sulII, one of two known genes for plasmid-borne sulfonamide resistance dihydropteroate synthase. Rådström P, et al. Antimicrob Agents Chemother 1988 Nov;32(11):1684–92

Developmental changes in the expression of genes involved in cholesterol biosynthesis and lipid transport in human and rat fetal and neonatal livers. Levin MS, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):293–300

The cDNA clone for strictosidine synthase from Rauvolfia serpentina. DNA sequence determination and expression in Escherichia coli. Kutchan TM, et al. **FEBS Lett** 1988 Sep 12;237(1–2):40–4

Transformation of Penicillium chrysogenum to sulfonamide resistance. Carramolino L, et al. **Gene** 1989 Apr 15; 77(1):31–8

Cloning and expression of the Campylobacter jejuni glyA gene in Escherichia coli. Chan VL, et al. **Gene** 1988 Dec 15;73(1):185–91

Evidence for frameshift mutations in the hisH gene of Escherichia coli causing synthesis of a partially active glutamine amidotransferase. Pons FW, et al. **Genetics** 1988 Nov;120(3):657–65

Regulation of the Escherichia coli glyA gene by the metR gene product and homocysteine. Plamann MD, et al. **J Bacteriol** 1989 Sep;171(9):4958–62

Identification and regulation of a rat liver cDNA encoding farnesyl pyrophosphate synthetase. Ashby MN, et al. **J Biol Chem** 1989 Jan 5;264(1):635–40

Chloroplast transport of a ribulose bisphosphate carboxylase small subunit–5–enolpyruvyl 3–phosphoshikimate synthase chimeric protein requires part of the mature small subunit in addition to the transit peptide. Comai L, et al. **J Biol Chem** 1988 Oct 15;263(29):15104–9

A cysteine–histidine–aspartate catalytic triad is involved in glutamine amide transfer function in purF–type glutamine amidotransferases. Mei B, et al. **J Biol Chem** 1989 Oct 5; 264(28):16613–9

Construction and characterization of vaccine strains of Salmonella harboring mutations in two different aro genes. Dougan G, et al. **J Infect Dis** 1988 Dec;158(6):1329–35

SAM2 encodes the second methionine S–adenosyl transferase in Saccharomyces cerevisiae: physiology and regulation of both enzymes. Thomas D, et al. **Mol Cell Biol** 1988 Dec; 8(12):5132–9

Lux C, D and E genes of the Vibrio fischeri luminescence operon code for the reductase, transferase, and synthetase enzymes involved in aldehyde biosynthesis. Boylan M, et al. **Photochem Photobiol** 1989 May;49(5):681–8

IMMUNOLOGY

Monospecific antiserum to rat spermidine synthase and its application to rat tissues and several mammals. Shirahata A, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):717–21

ISOLATION & PURIFICATION

Purification of geranylgeranyl diphosphate synthase from Phycomyces blakesleanus. Brinkhaus FL, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):607–12

Partial purification and properties of geranyl pyrophosphate synthase from Lithospermum erythrorhizon cell cultures. Heide L, et al. **Arch Biochem Biophys** 1989 Sep; 273(2):331–8

Partial purification and properties of the isozymes of S–adenosylmethionine synthetase from sheep liver. Xue GP, et al. **Biochem Int** 1989 Mar;18(3):525–35

Purification and partial characterization of human polyamine synthases. Kajander EO, et al. **Biochem J** 1989 May 1; 259(3):879–86

Purification and characterization of amidating enzyme from nuclei of gamma–irradiated potato buds. Nair PM. **Indian J Biochem Biophys** 1985 Dec;22(6):339–43

Purification and partial characterization of the glycine decarboxylase multienzyme complex from Eubacterium acidaminophilum. Freudenberg W, et al. **J Bacteriol** 1989 Apr;171(4):2209–15

Isolation of an atypically small lipoamide dehydrogenase involved in the glycine decarboxylase complex from Eubacterium acidaminophilum. Freudenberg W, et al. **J Bacteriol** 1989 Mar;171(3):1346–54

Serine hydroxymethyltransferase from pyrimethamine–sensitive and –resistant strains of Plasmodium chabaudi. Ruenwongsa P, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):265–71

METABOLISM

Aminopropyltransferases: mechanistic studies and the synthesis of specific inhibitors. Coward JK. **Adv Exp Med Biol** 1988;250:111–5 (13 ref.)

Changes in dehydrodolichyl diphosphate synthase during spermatogenesis in the rat. Chen Z, et al. **Arch Biochem Biophys** 1988 Oct;266(1):98–110

Geranyl pyrophosphate synthase: characterization of the enzyme and evidence that this chain–length specific prenyltransferase is associated with monoterpene biosynthesis in sage (Salvia officinalis). Croteau R, et al. **Arch Biochem Biophys** 1989 Jun;271(2):524–35

Dihydroxyacetone phosphate acyltransferase and alkyldihydroxyacetone phosphate synthase activities in rat liver subcellular fractions and human skin fibroblasts. Singh H, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):676–86

Effect of cell surface trypsinization on ethanolamine base exchange enzymatic activity of astrocyte primary cultures and derived spontaneously transformed cell lines. el–Achkar P, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1055–64

Different roles of the diphosphate moieties of allylic and homoallylic diphosphates in prenyltransferase reaction. Gotoh T, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):396–402

Formation of a stable and catalytically active complex of the two essential components of hexaprenyl diphosphate synthase from Micrococcus luteus B–P 26. Yoshida I, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):448–52

Chymotrypsin activates cardiac mitochondrial carnitine–acylcarnitine translocase. Wolkowicz PE, et al. **Biochem J** 1989 Jul 15;261(2):363–70

A tetrahedral intermediate in the EPSP synthase reaction observed by rapid quench kinetics. Anderson KS, et al. **Biochemistry** 1988 Sep 20;27(19):7395–406

Involvement and identification of a tryptophanyl residue at the pyruvate binding site of transcarboxylase. Kumar GK, et al. **Biochemistry** 1988 Aug 9;27(16):5978–83

Involvement of tryptophans at the catalytic and subunit–binding domains of transcarboxylase. Kumar GK, et al. **Biochemistry** 1988 Aug 9;27(16):5972–8

Serine hydroxymethyltransferase: mechanism of the racemization and transamination of D– and L–alanine. Shostak K, et al. **Biochemistry** 1988 Oct 18;27(21):8007–14

Interaction of tetrahydropteroylpolyglutamates with two enzymes from mitochondria. Strong WB, et al. **Biochemistry** 1989 Jan 10;28(1):106–14

Rat liver dihydroxyacetone–phosphate acyltransferase: enzyme characteristics and localization studies. Hardeman D, et al. **Biochim Biophys Acta** 1988 Nov 4;963(1):1–9

Reactivity of artificial substrates for prenyltransferase. Nishino T, et al. **Biochim Biophys Acta** 1971 May 12; 235(2):322–5

Protection of hexaprenyl–diphosphate synthase of Micrococcus luteus B–P 26 against inactivation by sulphydryl reagents and arginine–specific reagents. Yoshida I, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):138–43

Misaminoacylation and transamidation are required for protein biosynthesis in Lactobacillus bulgaricus. Schön A, et al. **Biochimie** 1988 Mar;70(3):391–4

Toxicity of sodium dichloro S–triazinetrione to Drosophila melanogaster. Shayela S, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):108–13

The carboxyltransferase activity of the sodium–ion–translocating methylmalonyl–CoA decarboxylase of Veillonella alcalescens. Hoffmann A, et al. **Eur J Biochem** 1989 Feb 15;179(3):645–50

S–adenosylmethionine synthetase in the thermophilic archaebacterium Sulfolobus solfataricus. Purification and characterization of two isoforms. Porcelli M, et al. **Eur J Biochem** 1988 Nov 1;177(2):273–80

Some evidence of the enzymatic conversion of bovine suppressor phosphoseryl–tRNA to selenocysteyl–tRNA. Mizutani T. **FEBS Lett** 1989 Jul 3;250(2):142–6

Specific loss of the high–molecular–weight form of S–adenosyl–L–methionine synthetase in human liver cirrhosis. Cabrero C, et al. **Hepatology** 1988 Nov–Dec; 8(6):1530–4

Undecaprenyl diphosphate synthase from Micrococcus luteus B–P 26: essential factors for the enzymatic activity. Koyama T, et al. **J Biochem (Tokyo)** 1988 May; 103(5):867–71

Characterization of dolichol diphosphate oligosaccharide: protein oligosaccharyltransferase and glycoprotein–processing glucosidases occurring in trypanosomatid protozoa. Bosch M, et al. **J Biol Chem** 1988 Nov 25;263(33):17360–5

Biosynthesis of lipopolysaccharide in Escherichia coli. Cytoplasmic enzymes that attach 3–deoxy–D–manno–octulosonic acid to lipid A. Brozek KA, et al. **J Biol Chem** 1989 Apr 25;264(12):6956–66

Effect of phospholipids on thyroid oligosaccharyltransferase activity and orientation. Evaluation of structural determinants for stimulation of N–glycosylation. Chalifour RJ, et al. **J Biol Chem** 1988 Oct 25;263(30):15673–80

Dehydrodolichyl diphosphate synthase in Sertoli and spermatogenic cells of prepuberal rats. Chen Z, et al. **J Biol Chem** 1989 Mar 5;264(7):3849–53

Coordinate regulation of 3–hydroxy–3–methylglutaryl–coenzyme A synthase, 3–hydroxy–3–methylglutaryl–coenzyme A reductase, and prenyltransferase synthesis but not degradation in HepG2 cells. Rosser DS, et al. **J Biol Chem** 1989 Jul 25; 264(21):12653–6

Essential role of T4 phage deoxycytidylate hydroxymethylase in a multienzyme complex for deoxyribonucleotide synthesis. Thylén C, et al. **J Biol Chem** 1989 Sep 15;264(26):15169–72

Effect of threonine and glycine concentrations on threonine aldolase activity of yogurt microorganisms during growth in a modified milk prepared by ultrafiltration. Marranzini RM, et al. **J Dairy Sci** 1989 May;72(5):1142–8

Developmental changes and regional distribution of phospholipase D and base exchange enzyme activities in rat brain. Kobayashi M, et al. **Neurochem Res** 1988 Aug; 13(8):771–6

[Characteristics of the products of thiamine degradation by molluskan thiaminase I] Puzach SS, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):82–4 (Eng. Abstr.) (Rus)

TRANSFERENCE (PSYCHOLOGY)

Importance of the transference and therapeutic alliance in pharmacotherapy [letter] Kaminstein P. **Am J Psychiatry** 1989 Mar;146(3):404–5

Reconstruction and repetition: the significance of time–lags in psychoanalytic psychotherapy. Crisp P. **Am J Psychoanal** 1988 Winter;48(4):347–54

Forging a transference relationship with a self–destructive preschooler. Trad PV. **Am J Psychother** 1988 Oct; 42(4):630–40

Types of institutional transference. Martin HP. **Bull Menninger Clin** 1989 Jan;53(1):58–62

The provocative masochistic patient. An intersubjective approach to treatment. Shapiro S. **Bull Menninger Clin** 1989 Jul;53(4):319–30

Hypnosis and transference: a measure of archaic involvement. Nash MR, et al. **Int J Clin Exp Hypn** 1989 Apr;37(2):129–44

Twinship and alter ego selfobject transferences in group therapy with the elderly: a reanalysis of the pairing phenomenon. Lothstein LM, et al. **Int J Group Psychother** 1988 Jul;38(3):303–17

The unconscious history of Vietnam in the group: an innovative multiphasic model for working through authority transferences in guilt–driven veterans. Parson ER. **Int J Group Psychother** 1988 Jul;38(3):275–301

Transference, language, and affect in the treatment of bulimarexia. Rizzuto AM. **Int J Psychoanal** 1988;69 (Pt 3):369–87

The role of family re–enactment in group psychotherapy. Collison CR, et al. **Perspect Psychiatr Care** 1985;23(2):74–8

When the nurse psychotherapist is pregnant (implications for transference–countertransference). Comeau KM. **Perspect Psychiatr Care** 1987–88;24(3–4):127–31

Converging evidence for identification of recurrent relationship themes: comparison of two methods. Johnson ME, et al. **Psychiatry** 1989 Aug;52(3):275–88

Transference and the beta adrenergic receptor: a case presentation. Kantor SJ. **Psychiatry** 1989 Feb;52(1):107–15

A transference resistance in male patients with inhibition of urination in public places. Myers WA. **Psychoanal Q** 1989 Apr;58(2):245–50

Transference: one concept or many? Ehrenreich JH. **Psychoanal Rev** 1989 Spring;76(1):37–65 (78 ref.)

"Say you're sorry": a sadomasochistic transference. Pekowsky J. **Psychoanal Rev** 1988 Fall;75(3):459–68

The interface of the real and transference relationships in the treatment of schizoid phenomena. Robbins A. **Psychoanal Rev** 1988 Fall;75(3):393–417

Transference: terminable, interminable. Roustang F. **Psychoanal Rev** 1989 Summer;76(2):139–47

Transference and the therapeutic process. Stolorow RD. **Psychoanal Rev** 1988 Summer;75(2):245–54 (22 ref.)

On the fate of the intrapsychic image of the psychoanalyst after termination of the analysis. Bergmann MS. **Psychoanal Study Child** 1988;43:137–53

The transference neurosis in child analysis. Chused JF. **Psychoanal Study Child** 1988;43:51–81

[Subjective transference] Jacquey X. **Psychiatr Enfant** 1988; 31(2):643–55 (Eng. Abstr.) (Fre)

[Transference, taboo and truth] Bloom H. **Psyche (Stuttg)** 1989 May;43(5):397–414 (Eng. Abstr.) (Ger)

[Negative transference: from splitting to integration] Eskelinen de Folch T, et al. **Psyche (Stuttg)** 1988 Aug; 42(8):689–708 (Eng. Abstr.) (Ger)

[Therapeutic insight and tolerance of ambiguity] Hohage R. **Psyche (Stuttg)** 1989 Aug;43(8):736–52 (Eng. Abstr.) (Ger)

[Reflections on transference and countertransference reactions in the treatment of AIDS patients] Weinel E. **Psyche (Stuttg)** 1989 Aug;43(8):710–9 (Eng. Abstr.) (Ger)

[A fragment from everyday psychotherapy—"insanity in analysis?"] Straeter U. **Psychother Psychosom Med Psychol** 1988 Sep–Oct; 38(9–10):365–7 (Ger)

TRANSFERRIN

Zero–field Mössbauer studies of diferric human transferrin [published erratum appears in Biochem Biophys Res Commun 1989 Apr 14;160(1):417] Kilár F, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):755–61

Molecular structure of serum transferrin at 3.3–A resolution. Bailey S, et al. **Biochemistry** 1988 Jul 26;27(15):5804–12

Comparative study of the primary structures of sero–, lacto– and ovotransferrin glycans from different species. Spik G, et al. **Biochimie** 1988 Nov;70(11):1459–69

A comparison of the structure and properties of human, rat and rabbit serum transferrin. Welch S, et al. **Comp Biochem Physiol [B]** 1989;93(2):417–24

Characterization of genetic variants of human serum transferrin by isoelectric focusing: comparison between conventional and immobilized pH gradients, and application to a protocol for paternity testing. Pascali VL, et al. **Electrophoresis** 1988 Aug;9(8):411–7

Evidence for a single glycan moiety in rabbit serum transferrin and location of the glycan within the polypeptide chain. Evans RW, et al. **FEBS Lett** 1988 Sep 26;238(1):39–42

Role of phosphate–containing compounds in the transfer of indium–111 and gallium–67 from transferrin to ferritin.

Weiner RE. J Nucl Med 1989 Jan;30(1):70–9

ADMINISTRATION & DOSAGE

Comparison of the abilities of different protein sources of iron to enhance Neisseria meningitidis infection in mice. Schryvers AB, et al. Infect Immun 1989 Aug;57(8):2425–9

ANALOGS & DERIVATIVES

Carbohydrate-deficient transferrin (CDT) in serum in women with early alcohol addiction. Stibler H, et al. Alcohol 1988 Sep–Oct;5(5):393–8

Changes in carbohydrate-deficient transferrin levels after alcohol withdrawal. Behrens UJ, et al. Alcoholism (NY) 1988 Aug;12(4):539–44

The behavior of asialotransferrin-iron in the rat. Beguin Y, et al. Am J Hematol 1988 Dec;29(4):204–10

Disialotransferrin developmental deficiency syndrome and olivopontocerebellar atrophy [letter] Jaeken J. Arch Dis Child 1989 May;64(5):764–5

Disialotransferrin developmental deficiency syndrome. Kristiansson B, et al. Arch Dis Child 1989 Jan;64(1):71–6

Comparison of desialylation of rat transferrin by cellular and non-cellular methods. Irie S, et al. Biochem J 1989 Apr 15;259(2):427–31

Altered glycosylation of serum transferrin of patients with hepatocellular carcinoma. Yamashita K, et al. J Biol Chem 1989 Feb 15;264(5):2415–23

ANALYSIS

Human seminal transferrin: correlation with seminal and hormonal parameters. Canale D, et al. Andrologia 1988 Sep–Oct;20(5):379–83

The use of serum transferrin in the evaluation of protein-calorie malnutrition in cancer patients. Thean K, et al. Ann Acad Med Singapore 1988 Jan;17(1):124–8

Changes of serum iron transferrin and copper ceruloplasmin in rats given Cu(II)2 (acetylsalicylate)4 during acute inflammation. Ferrari RP, et al. Anticancer Res 1989 May–Jun;9(3):771–3

Red cell distribution width, mean corpuscular volume, and transferrin saturation in the diagnosis of iron deficiency. Thompson WG, et al. Arch Intern Med 1988 Oct; 148(10):2128–30

Studies of rabbit serum transferrin. Beg OU, et al. Biochem Int 1988 Dec;17(6):1135–42

Analysis of the microheterogeneity of the glycan chain of rat transferrin. Irie S, et al. Biochem Int 1988 Dec; 17(6):1079–85

The N-acetylneuraminic acid content of five forms of human transferrin. Petrén S, et al. Biochim Biophys Acta 1989 Feb 2;994(2):161–5

High-performance liquid affinity chromatography: rapid immunoanalysis of transferrin in serum. Ohlson S, et al. Clin Chem 1988 Oct;34(10):2039–43

Different patterns of human serum transferrin on isoelectric focusing using synthetic carrier ampholytes or immobilized pH gradients. D'Alessandro AM, et al. Electrophoresis 1988 Feb;9(2):80–3

Fast and high resolution analysis of human serum transferrin by high performance isoelectric focusing in capillaries. Kilár F, et al. Electrophoresis 1989 Jan;10(1):23–9

Localization of transferrin and its receptor in ovarian follicular cells: morphologic studies in relation to follicular development. Aleshire SL, et al. Fertil Steril 1989 Mar; 51(3):444–9

Transferrin and transferrin receptor expression in intraocular proliferative disease. APAAP-immunolabeling of retinal membranes and ELISA for vitreal transferrin. Weller M, et al. Graefes Arch Clin Exp Ophthalmol 1989;227(3):281–6

Biochemical exploration of azoospermia: interest of the seminal transferrin assay. Dadoun C, et al. Hum Reprod 1989 Apr;4(3):265–9

Transferrin: an early marker of oligodendrocytes in culture. Espinosa de los Monteros A, et al. Int J Dev Neurosci 1988;6(2):167–75

Altered glycosylation of serum transferrin of patients with hepatocellular carcinoma. Yamashita K, et al. J Biol Chem 1989 Feb 15;264(5):2415–23

Duodenal iron proteins in idiopathic hemochromatosis. Whittaker P, et al. J Clin Invest 1989 Jan;83(1):261–7

Monoclonal antibody detects embryonic epitope specific for nerve-derived transferrin. Festoff BW, et al. J Neurosci Res 1989 Apr;22(4):425–38

Sertoli cell proteins in the human seminiferous tubule. Forti G, et al. J Steroid Biochem 1989 Jan;32(1B):135–44

Quantitative study of characteristic aqueous humor transferrin, serum transferrin and desialized serum transferrin in aqueous humor. Yu TC, et al. Jpn J Ophthalmol 1988;32(3):268–74

Serum prealbumin, transferrin and alpha-1-acid glycoprotein in patients with gynecological carcinomas. Tolner J, et al. Neoplasma 1988;35(4):403–11

Nonidentical distribution of transferrin and ferric iron in human brain. Dwork AJ, et al. Neuroscience 1988 Oct; 27(1):333–45

Localization of transferrin within the developing vertebrate nervous system. Markelonis GJ, et al. Rev Neurol (Paris) 1988;144(11):648–55 (53 ref.)

A comparison of serum carbohydrate-deficient transferrin with other biological markers of excessive drinking. Gjerde H, et al. Scand J Clin Lab Invest 1988 Feb;48(1):1–6

Seminal plasma transferrin concentration in idiopathic oligozoospermia. Yoshida K, et al. Urology 1989 May; 33(5):395–8

[Immunohistochemical findings in proliferative retinal diseases—on the significance of fibronectin, macrophages and transferrin] Weller M, et al. Fortschr Ophthalmol 1989; 86(2):121–3 (Eng. Abstr.) (Ger)

[Bacteriological findings in bronchial secretions of children with chronic, nontuberculous lung diseases and their relationship to local transferrin values] Groh A, et al. Z Erkr Atmungsorgane 1988;171(3):224–9 (Eng. Abstr.) (Ger)

[Study of transferrin concentration in the human seminal plasma] Yoshida K. Nippon Hinyokika Gakkai Zasshi 1989 Feb;80(2):216–23 (Eng. Abstr.) (Jpn)

[The changes in immunoglobulin, complements and serum protein in patients using different types of cardiopulmonary bypass] Sakai H, et al. Rinsho Byori 1989 May;37(5):522–6 (Jpn)

[A new immunochemical fecal occult blood test—combination assay of hemoglobin and transferrin] Uchida K, et al. Rinsho Byori 1989 Jan;37(1):58–62 (Jpn)

[Indices of lipid peroxidation and the ceruloplasmin–transferrin antioxidant system in donors] Podoprigorova VG, et al. Lab Delo 1989;(1):13–5 (Eng. Abstr.) (Rus)

[Effect of hyperbaric oxygenation on lipid peroxidation and the antioxidant system of the blood in hepatitis B] Boldyrev NA, et al. Sov Med 1989;(4):93–5 (Rus)

[Changes in iron metabolism in Osler–Rendu disease] Livandovskiĭ IuA. Ter Arkh 1989;61(2):109–10 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Chronic iron overload inhibits protein secretion by adult rat hepatocytes maintained in long-term primary culture. Desvergne B, et al. Eur J Cell Biol 1989 Jun;49(1):162–70

Influence of branched-chain amino acid composition of culture media on the synthesis of plasma proteins by serum-free cultured rat hepatocytes. Montoya A, et al. In Vitro Cell Dev Biol 1989 Apr;25(4):358–64

[Formation of transferrin and ceruloplasmin in the blood of rats with acute nitrite-induced methemoglobinemia] Kialiakoc IuIa, et al. Patol Fiziol Eksp Ter 1988 Jul–Aug; (4):51–4 (Eng. Abstr.) (Rus)

BLOOD

Immunochemical assays for IgG, IgA, IgM and transferrin compared. Christenson RH, et al. Clin Biochem 1989 Aug; 22(4):271–6

TSF, RBP and TBPA as nutritional indices in surgical patients with gynecological cancer. Pittoni G, et al. Clin Exp Obstet Gynecol 1989;16(1):48–51

Transferrin and mitochondrial aspartate aminotransferase in young adult alcoholics. Chan AW, et al. Drug Alcohol Depend 1989 Jan;23(1):13–8

Plasma transferrin levels in abnormal endocrine states. I. The changes in hypophysial diseases before and after treatment. Matsubara M, et al. Horm Metab Res 1988 Aug;20(8):506–9

Plasma transferrin levels in abnormal endocrine states. II. The changes in various endocrine states. Matsubara M, et al. Horm Metab Res 1989 Jun;21(6):334–7

Serum transferrin levels in the longitudinal assessment of protein-energy status in preterm infants. Georgieff MK, et al. J Pediatr Gastroenterol Nutr 1989 Feb;8(2):234–9

[Anemia in malignant tumor diseases. V. The relation of tumor-induced hypotransferrinemia and the degree of anemia] Aulbert E, et al. Onkologie 1989 Apr;12(2):81–9 (Eng. Abstr.) (Ger)

[Changes in the content of transferrin, ceruloplasmin, iron, and copper in blood serum and granulation tissue in wound healing in an experiment] Mamedov LA, et al. Patol Fiziol Eksp Ter 1988 Jul–Aug;(4):58–61 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

The ceruloplasmin and transferrin system in cerebrospinal fluid of acute leukemia patients. Del Principe D, et al. Acta Paediatr Scand 1989 Mar;78(2):327–8

The diagnosis of CSF fistulae on the basis of detection of beta 2-transferrin by polyacrylamide gel electrophoresis and immunoblotting. Reisinger PW, et al. J Clin Chem Clin Biochem 1989 Mar;27(3):169–72

A modern concept of cerebrospinal fluid diagnosis in oto- and rhinorrhea. Oberascher G. Rhinology 1988 Jun; 26(2):89–103

GENETICS

Transferrin: evolution and genetic regulation of expression. Bowman BH, et al. Adv Genet 1988;25:1–38 (122 ref.)

Segregation of genetic hemochromatosis indexed by latent capacity of transferrin. Borecki IB, et al. Am J Hum Genet 1989 Sep;45(3):465–70

Transferrin (Tf) polymorphism in wild rabbit, Oryctolagus cuniculus. Ferrand N, et al. Anim Genet 1988;19(3):295–300

Genetic polymorphism of plasma alpha 1 B-glycoprotein and transferrin in arctic and silver foxes. Juneja RK, et al. Anim Genet 1988;19(3):237–44

A new transferrin variant from Iran (Tf B-Iran): review of 36 variant alleles. Farhud DD, et al. Anthropol Anz 1988 Dec;46(4):357–63

Protein subtype polymorphisms (Gc and Tf) in a Catalan population from Gerona (northeastern Spain). Moreno P, et al. Anthropol Anz 1988 Sep;46(3):201–5

A splicing defect in the mouse transferrin gene leads to congenital atransferrinemia. Huggenvik JI, et al. Blood 1989 Jul;74(1):482–6

Genetic variation of haptoglobin and transferrin in relation to DNA content and stage in renal cell carcinoma. Fröhlander N, et al. Cancer 1989 Mar 15;63(6):1138–42

Characterization of genetic variants of human serum transferrin by isoelectric focusing: comparison between conventional and immobilized pH gradients, and application to a protocol for paternity testing. Pascali VL, et al. Electrophoresis 1988 Aug;9(8):411–7

Application of immobilized pH gradient isoelectric focusing to forensic hemogenetics: a survey on a three year experience with the transferrin (TF) and alpha 1-antitrypsin (PI) systems. Skoda U, et al. Electrophoresis 1988 Sep;9(9):606–9

Regulation of Sertoli cell differentiated function: testicular transferrin and androgen-binding protein expression. Skinner MK, et al. Endocrinology 1989 Jun;124(6):3015–24

Alpha-1-antitrypsin and transferrin null alleles in the Portuguese population. Espinheira R, et al. Hum Hered 1988;38(6):372–4

Distribution of transferrin subtypes in Aragon (north-east Spain). Martínez-Jarreta B, et al. Hum Hered 1988; 38(4):258–60

Population studies in northern Sweden. XV. Transferrin C subtypes. Sikström C, et al. Hum Hered 1988;38(6):341–52

Transferrin C subtype frequencies in the Finnish population. Tenkanen H, et al. Hum Hered 1989;39(1):55–7

Cell type-specific expression of the human transferrin gene. Role of promoter, negative, and enhancer elements. Schaeffer E, et al. J Biol Chem 1989 May 5;264(13):7153–60

Transferrin gene expression and synthesis by cultured choroid plexus epithelial cells. Regulation by serotonin and cyclic adenosine 3',5'-monophosphate. Tsutsumi M, et al. J Biol Chem 1989 Jun 5;264(16):9626–31

Different liver nuclear proteins binds to similar DNA sequences in the 5' flanking regions of three hepatic genes. Ochoa A, et al. Nucleic Acids Res 1989 Jan 11;17(1):119–33

Molecular biology of the Sertoli cell. Griswold MD, et al. Oxf Rev Reprod Biol 1988;10:124–61 (171 ref.)

Changes in brain gene expression shared by scrapie and Alzheimer disease. Duguid JR, et al. Proc Natl Acad Sci U S A 1989 Sep;86(18):7260–4

[Sources of error in the determination of transferrin in frozen blood samples and blood stains] Schwerd W, et al. Z Rechtsmed 1988;100(4):227–30 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Electrophoretic location of epitopes on human transferrin. Slavičková A. Folia Biol (Praha) 1988;34(5):301–7

ISOLATION & PURIFICATION

Physiological significance of the marked increased branching of the glycans of human serotransferrin during pregnancy. Léger D, et al. Biochem J 1989 Jan 1;257(1):231–8

A growth-promoting factor for human myeloid leukemia cells from horse serum identified as horse serum transferrin. Yoshinari K, et al. Biochim Biophys Acta 1989 Jan 17; 1010(1):28–34

Electrophoretic transferrin variation in fur seals (Arctocephalus spp.) at Marion Island. Kerley GI. Comp Biochem Physiol [B] 1989;92(2):361–4

Microheterogeneity of human serum transferrin: a biological phenomenon studied by isoelectric focusing in immobilized pH gradients. de Jong G, et al. Electrophoresis 1988 Sep; 9(9):589–98

METABOLISM

Study on rapid turnover proteins in neonates. Yen KW, et al. Acta Paediatr Jpn Overseas Ed 1987 Oct;29(5):737–41

Equilibrium constants for the complexation of metal ions by serum transferrin. Harris WR. Adv Exp Med Biol 1989; 249:67–93

An improved method for determining the microbial inhibitory activity of serum and its application to the study of patients with leukemia. Towns ML, et al. Am J Clin Pathol 1989 Aug;92(2):192–8

Effect of ferrous and ferric chelators on transferrin–iron–macrophage interactions. Baynes RD, et al. Am J Hematol 1988 Sep;29(1):27–32

Hemolysates reduce iron released from transferrin. Zhan H, et al. Am J Hematol 1989 Jul;31(3):203–7

Endothelial mediation is necessary for subsequent hepatocyte uptake of transferrin. Soda R, et al. Am J Med Sci 1989 May;297(5):314–20

Uptake and distribution of transferrin and iron in perfused, iron-deficient rat liver. Holmes JM, et al. Am J Physiol 1989 Jun;256(6 Pt 1):G1022–7

Do oligodendrocytes mediate iron regulation in the human brain? Gerber MR, et al. Ann Neurol 1989 Jul;26(1):95–8

Comparison of the endotoxin-binding capacity of human transferrin and a human applicable immunoglobulin preparation. Berger D, et al. Arzneimittelforschung 1988 Jun;38(6):817–20

The resistance of transferrin, lactoferrin and caeruloplasmin

to oxidative damage [letter] Halliwell B, et al. **Biochem J** 1988 Nov 15;256(1):311–2

The superoxide-dependent transfer of iron from ferritin to transferrin and lactoferrin. Monteiro HP, et al. **Biochem J** 1988 Dec 15;256(3):923–8

Effect of synthetic carrier ampholytes on saturation of human serum transferrin. Oratore A, et al. **Biochem J** 1989 May 1;259(3):909–12

Chelation of transferrin iron by desferrioxamine in K562 cells. The partition of iron between ferrioxamine and ferritin. Roberts S, et al. **Biochem J** 1988 Sep 15;254(3):869–75

Receptor-mediated endocytosis of asialoglycoproteins and diferric transferrin is independent of second messengers. Sharma RJ, et al. **Biochem J** 1989 Apr 1;259(1):81–9

Covalent modification of serum transferrin with phospholipid and incorporation into liposomal membranes. Afzelius P, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):231–8

Human platelets mediate iron release from transferrin by adenine nucleotide-dependent and -independent mechanisms. Brieland JK, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):191–6

Structure and spatial conformation of the iron-binding sites of transferrins. Legrand D, et al. **Biochimie** 1988 Sep; 70(9):1185–95 (93 ref.)

Concentration of lactoferrin and transferrin throughout lactation in cow's colostrum and milk. Sánchez L, et al. **Biol Chem Hoppe Seyler** 1988 Sep;369(9):1005–8

Nontransferrin-bound iron in plasma from hemochromatosis patients: effect of phlebotomy therapy. Aruoma OI, et al. **Blood** 1988 Oct;72(4):1416–9

Effect of cadmium on Fe+3-transferrin formation in the rat intestinal mucosa. Sugawara N, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):50–5

The effect of in vivo administration of endotoxin on plasma levels of C3, transferrin, and haemolytic activity. Ogle CK, et al. **Burns** 1989 Apr;15(2):108–11

Comparative analysis of the transferrin and lactoferrin binding proteins in the family Neisseriaceae. Schryvers AB, et al. **Can J Microbiol** 1989 Mar;35(3):409–15

Transformation-induced changes in transferrin and iron metabolism in myogenic cells. Sorokin LM, et al. **Cancer Res** 1989 Apr 15;49(8):1941–7

Biochemistry of nonheme iron in man. I. Iron proteins and cellular iron metabolism. Bezkorovainy A. **Clin Physiol Biochem** 1989;7(1):1–17 (97 ref.)

Immunocytochemical localization of transferrin and mitochondrial malate dehydrogenase in the developing nervous system of the rat. Dion TL, et al. **Dev Neurosci** 1988;10(3):152–64

Gastric luminal digestion of lactoferrin and transferrin by preterm infants. Britton JR, et al. **Early Hum Dev** 1989 May;19(2):127–35

Domain preference in iron removal from human transferrin by the bacterial siderophores aerobactin and enterochelin. Ford S, et al. **Eur J Biochem** 1988 Dec 15;178(2):477–81

Free radical and cytotoxic effects of chelators and their iron complexes in the hepatocyte. Mostert LJ, et al. **Free Radic Res Commun** 1987;3(6):379–88

Blocking action of parenteral desferrioxamine on iron absorption in rodents and men. Levine DS, et al. **Gastroenterology** 1988 Nov;95(5):1242–8

Affinities of Treponema pallidum for human lactoferrin and transferrin. Alderete JF, et al. **Genitourin Med** 1988 Dec; 64(6):359–63

Loss of transferrin receptor activity in Neisseria meningitidis correlates with inability to use transferrin as an iron source. Tsai J, et al. **Infect Immun** 1988 Dec;56(12):3132–8

Stimulatory effect of phosphate, ATP and ADP on iron transfer from Fe(III)-bleomycin to apotransferrin. Løvstad RA. **Int J Biochem** 1989;21(5):555–9

Interaction of iron-adriamycin complexes with ceruloplasmin and apotransferrin. Løvstad RA. **Int J Biochem** 1988; 20(8):783–6

Seminal plasma transferrin concentration in normozoospermic fertile men and oligozoospermic men associated with varicocele. Yoshida KI, et al. **Int J Fertil** 1988 Nov–Dec;33(6):432–6

Evidence of conformational changes in the non-equivalent binding sites of human serum transferrin. Marsden PJ, et al. **Int J Rad Appl Instrum [A]** 1989;40(8):715–22

Involvement of transferrin in the uptake of 67Ga in inflammatory and normal tissues. Ohkubo Y, et al. **Int J Rad Appl Instrum [B]** 1989;16(4):337–41

Relationship between serum ferritin, erythrocyte protoporphyrin and transferrin saturation in Mauritanian free living children. Galan P, et al. **Int J Vitam Nutr Res** 1989;59(2):214–8

Transferrin and the growth-promoting effect of nerves. Mescher AL, et al. **Int Rev Cytol** 1988;110:1–26 (157 ref.)

Inactivation of transferrin iron binding capacity by the neutrophil myeloperoxidase system. Clark RA, et al. **J Biol Chem** 1989 Jun 5;264(16):9420–7

Comparison of the electron spin echo envelope modulation (ESEEM) for human lactoferrin and transferrin complexes of copper(II) and vanadyl ion. Eaton SS, et al. **J Biol Chem** 1989 Mar 25;264(9):4776–81

Non-transferrin-bound iron in plasma or serum from patients with idiopathic hemochromatosis. Characterization by high performance liquid chromatography and nuclear magnetic resonance spectroscopy. Grootveld M, et al. **J Biol Chem** 1989 Mar 15;264(8):4417–22

Hepatocytes and reticulocytes have different mechanisms for the uptake of iron from transferrin. Thorstensen K. **J Biol Chem** 1988 Nov 15;263(32):16837–41

Formation of coated vesicles from coated pits in broken A431 cells. Smythe E, et al. **J Cell Biol** 1989 Mar;108(3):843–53

Relations between the intracellular pathways of the receptors for transferrin, asialoglycoprotein, and mannose 6-phosphate in human hepatoma cells. Stoorvogel W, et al. **J Cell Biol** 1989 Jun;108(6):2137–48

Concentration of transferrin receptor in human placental coated vesicles. Turkewitz AP, et al. **J Cell Biol** 1989 Jun; 108(6):2127–35

Transferrin endocytosis and iron uptake in developing myogenic cells in culture: effects of microtubular and metabolic inhibitors, sulphydryl reagents and lysosomotrophic agents. Sorokin LM, et al. **J Cell Physiol** 1988 Dec;137(3):483–9

Species specificity of transferrin binding, endocytosis and iron internalization by cultured chick myogenic cells. Sorokin LM, et al. **J Comp Physiol [B]** 1988;158(5):559–66

Transferrin degradation by gastrointestinal fluids of suckling and weanling rats. Britton JR, et al. **J Dev Physiol** 1989 Feb;11(2):57–61

Influence of germ cells upon transferrin secretion by rat Sertoli cells in vitro. Le Magueresse B, et al. **J Endocrinol** 1988 Sep;118(3):R13–6

Identification of the transferrin- and lactoferrin-binding proteins in Haemophilus influenzae. Schryvers AB. **J Med Microbiol** 1989 Jun;29(2):121–30

Myelin basic protein and transferrin characterize different subpopulations of oligodendrocytes in rat primary glial cultures. Espinosa de los Monteros A, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):181–7

Difference of immunohistochemical reactions in epithelial cells of adenolymphoma. Takahashi H, et al. **J Oral Pathol** 1988 Jul;17(6):287–92

Occupancy of the iron-binding sites of human transferrin in sera obtained from different anatomical sites. Vogel W, et al. **Klin Wochenschr** 1989 May 15;67(10):538–42

Magnesium potentiation of iron-transferrin binding. Parent ME, et al. **Life Sci** 1989;44(15):1007–12

Effect of ornithine on transferrin secretion of rat and human hepatocyte cultures. Lescoat G, et al. **Liver** 1988 Dec; 8(6):360–5

Isolation by streptonigrin enrichment and characterization of a transferrin-specific iron uptake mutant of Neisseria meningitidis. Dyer DW, et al. **Microb Pathog** 1987 Nov; 3(5):351–63

Iron and transferrin uptake by phytohemagglutinin-stimulated human peripheral blood lymphocytes. Taylor PG, et al. **Microbiol Immunol** 1988; 32(9):949–55

Transferrin concentration and location during formation of chick retina: developmental correlates. Zeevalk GD, et al. **Neurosci Lett** 1988 Oct 5;92(2):149–54

Parallel mechanisms of iron uptake by cells. **Nutr Rev** 1989 Feb;47(2):54–5 (11 ref.)

Formula with reduced protein content: effects on growth and protein metabolism during weaning. Axelsson IE, et al. **Pediatr Res** 1988 Sep;24(3):297–301

Transferrin microheterogeneity in rats treated chronically with ethanol. Stibler H, et al. **Pharmacol Toxicol** 1989 Apr; 64(4):383–5

Receptor-mediated endocytosis of 125I-labelled transferrin by human choriocarcinoma (JAR) cells. Douglas GC, et al. **Placenta** 1988 May–Jun;9(3):253–65

Growth factors in human testis. Ultrastructural demonstration of receptor-mediated endocytosis. Balboni GC, et al. **Prog Clin Biol Res** 1989;296:197–206

Vitellogenin-iron and hemoglobin synthesis in avian reticulocytes. Sánchez J, et al. **Rev Esp Fisiol** 1989 Mar; 45(1):61–4

Two pathways of transferrin recycling evident in a variant of mouse LMTK- cells. O'Keefe DO, et al. **Somat Cell Mol Genet** 1988 Sep;14(5):473–87

[The coefficient of saturation of iron in transferrin] Dezier JF, et al. **Ann Biol Clin (Paris)** 1988;46(8):692–5 (Eng. Abstr.) **(Fre)**

[Interactions of alcohol and iron proteins] Moirand R, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Mar–Apr; 25(2):51–4 (45 ref.) (Eng. Abstr.) **(Fre)**

[Detection of transferrin in the digestive juices of rat and its possible role in iron absorption from the small intestine] Mugitani K. **Nippon Ika Daigaku Zasshi** 1989 Apr; 56(2):144–52 (Eng. Abstr.) **(Jpn)**

[Identification of the segment for binding of transferrin using a cellular receptor] Rubikaite BI, et al. **Mol Biol (Mosk)** 1989 May–Jun;23(3):765–71 (Eng. Abstr.) **(Rus)**

[Characteristics of the process of transferrin iron utilization by Yersinia pestis at various incubation temperatures] Tianianova VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):3–7 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Rat aglycotransferrin and human monoglycotransferrin: production and metabolic properties. Regoeczi E, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):637–42

Kinetics and distribution volumes for tracers of different sizes in the brain plasma space. Smith QR, et al. **Brain Res** 1988 Oct 11;462(1):1–9

Studies of the slow bidirectional transport of iron and transferrin across the blood-brain barrier. Banks WA, et al. **Brain Res Bull** 1988 Dec;21(6):881–5

Transferrin iron interactions with cultured hepatocellular carcinoma cells (PLC/PRF/5). Baynes R, et al. **Eur J Cell Biol** 1988 Jun;46(2):282–8

Gallium-transferrin as a macromolecular tracer of vascular permeability. Brunetti A, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):665–72

PHARMACOLOGY

Inhibition of leukemic HL60 cell growth by transferrin-gallium: effects on ribonucleotide reductase and demonstration of drug synergy with hydroxyurea. Chitambar CR, et al. **Blood** 1988 Dec;72(6):1930–6

Effect of transferrin-gallium on leukemic cells [letter] Kaplinsky C. **Blood** 1989 Aug 1;74(2):887–8

Studies on the roles of apotransferrin and caeruloplasmin (EC 1.16.3.1) on iron absorption in copper-deficient rats using an isolated vascularly- and luminally-perfused intestinal preparation. Coppen DE, et al. **Br J Nutr** 1988 Sep; 60(2):361–73

Modulation of lymphocyte proliferation and immunoglobulin production by transferrin-gallium. Chitambar CR, et al. **Cancer Res** 1989 Mar 1;49(5):1125–9

Effects of transferrin-indium on cellular proliferation of a human leukemia cell line. Moran PL, et al. **Cancer Res** 1989 Aug 1;49(15):4237–41

The effect of epidermal growth factor, inulin and transferrin on the growth-promoting properties of serum depleted by repeated culture of postimplantation rat embryos. Pratten MK, et al. **Development** 1988 Sep;104(1):137–45

Growth factor effects on small cell lung cancer cells using a colorimetric assay: can a transferrin-like factor mediate autocrine growth? Nakanishi Y, et al. **Exp Cell Biol** 1988; 56(1–2):74–85

Growth-stimulating effect of transferrin on a hybridoma cell line: relation to transferrin iron-transporting function. Kovář J, et al. **Exp Cell Res** 1989 Jun;182(2):358–69

Transferrin receptor-mediated suppression of in vitro hematopoiesis by transferrin-gallium. Chitambar CR, et al. **Exp Hematol** 1989 Jun;17(5):418–22

Transferrin stimulates proteoglycan accumulation by fetal lung cells in culture. Skinner SJ, et al. **Exp Lung Res** 1989 Mar;15(2):269–83

Experimental studies on the treatment of hepatocellular carcinoma with cis-platin.transferrin complex. Hamada Y. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):864–74

A new serum-free method of measuring growth factor activities for human breast cancer cells in culture. Ogasawara M, et al. **In Vitro Cell Dev Biol** 1988 Sep; 24(9):911–20

Damage of the outer membrane of enteric gram-negative bacteria by lactoferrin and transferrin. Ellison RT 3d, et al. **Infect Immun** 1988 Nov;56(11):2774–81

Schistosoma mansoni: effect of transferrin and growth factors on development of schistosomula in vitro. Clemens LE, et al. **J Parasitol** 1989 Jun;75(3):417–21

Basis for the assay of myogenic cell growth in vitro using creatine kinase activity as an index, with special reference to measurement of power ratio of transferrins in growth promotion. Hagiwara Y, et al. **Jpn J Pharmacol** 1989 Jan; 49(1):53–8

Iron-binding proteins and 67Ga accumulation by tumor cells. Anghileri LJ, et al. **Nuklearmedizin** 1989 Jun;28(3):105–9

PHYSIOLOGY

Effect of ATP depletion and temperature on the transferrin-mediated uptake and release of iron by BeWo choriocarcinoma cells. van der Ende A, et al. **Biochem J** 1989 May 1;259(3):685–92

Uptake of ferritin and iron bound to ferritin by rat hepatocytes: modulation by apotransferrin, iron chelators and chloroquine. Sibille JC, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):204–9

Transferrin in FRTL5 cells: regulation of its receptor by mitogenic agents and its role in growth. Lombardi A, et al. **Endocrinology** 1989 Aug;125(2):652–8

Modulation of transferrin receptor expression and function by anti-transferrin receptor antibodies and antibody fragments. Lesley J, et al. **Exp Cell Res** 1989 May; 182(1):215–33

Regulation of the hepatic transferrin receptor in hereditary hemochromatosis. Lombard M, et al. **Hepatology** 1989 Jan; 9(1):1–5

Functional properties of the carbohydrate moiety of human transferrin. de Jong G, et al. **Int J Biochem** 1989; 21(3):253–63 (79 ref.)

Experimental candidiasis associated with liver injury. Role of transferrin. Abe F, et al. **Mycopathologia** 1988 Oct; 104(1):3–6

On the role of transferrin in 67Ga uptake by tumor cells. Anghileri LJ, et al. **Nuklearmedizin** 1988 Aug;27(4):151–3

[Transferrin] Pré J. **Pathol Biol (Paris)** 1989 Mar;37(3):222–35 (93 ref.) (Eng. Abstr.) **(Fre)**

[Role of the ceruloplasmin-transferrin system in regulating lipid peroxidation of the blood serum under various regimens of hyperbaric oxygenation] Vartanian OA, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):31–5 (Eng. Abstr.) **(Rus)**

SECRETION

Secretion of transferrin by human breast cancer cells. Vandewalle B, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):149–54

Effects of iron overload on transferrin secretion by cultured fetal rat hepatocytes. Lescoat G, et al. **Biol Cell** 1989; 65(3):221–9

Sertoli cells in culture are heterogeneous with respect to transferrin release: analysis by reverse hemolytic plaque assay. Boockfor FR, et al. **Endocrinology** 1989 Sep; 125(3):1128–33

Transferrin is an autocrine growth factor secreted by Reuber H-35 cells in serum-free culture. Shapiro LE, et al. **In Vitro Cell Dev Biol** 1989 Jul;25(7):650–4

Transferrin secretion in response to different modes of FSH stimulation and cycloheximide in superfused Sertoli cell cultures. Jakubowiak A, et al. **J Androl** 1988 Nov–Dec; 9(6):390–6

Culture patterns and sorting of rat Sertoli cell secretory proteins. Ueda H, et al. **J Cell Sci** 1988 Feb;89 (Pt 2):175–88

Effect of continuous low-dose gamma-irradiation on rat Sertoli cell function. Kamtchouing P, et al. **Reprod Nutr Dev** 1988;28(4B):1009–17

THERAPEUTIC USE

Preliminary evaluation of platinum transferrin (MPTC-63) as a potential nontoxic treatment for breast cancer. Elliott RL, et al. **Cancer Detect Prev** 1988;12(1–6):469–80

Aluminium chelator (transferrin) reverses biochemical deficiency in Alzheimer brain preparations [letter] Cowburn JD, et al. **Lancet** 1989 Jan 14;1(8629):99

URINE

Effects of urinary transferrin and ornithine decarboxylase-inducing fraction on rat bladder carcinogenesis. Noguchi S, et al. **Cancer Lett** 1989 Apr; 45(1):65–70

Urinary excretion of transferrin by non-insulin-dependent diabetics: a marker for early complications? Cheung CK, et al. **Clin Chem** 1989 Aug;35(8):1672–4

The diagnostic value of urinary transferrin compared to serum prostatic specific antigen (PSA) and prostatic acid phosphatase (PAP) in patients with prostatic cancer. van Dieijen-Visser MP, et al. **Clin Chim Acta** 1988 Sep 30; 177(1):77–80

TRANSFERRIN RECEPTORS see RECEPTORS, TRANSFERRIN

TRANSFORMATION, BACTERIAL

Electroporation-induced transformation of intact cells of Clostridium perfringens. Allen SP, et al. **Appl Environ Microbiol** 1988 Sep;54(9):2322–4

Construction of an Escherichia coli–Clostridium perfringens shuttle vector and plasmid transformation of Clostridium perfringens. Kim AY, et al. **Appl Environ Microbiol** 1989 Feb;55(2):360–5

Genetic transformation of intact Lactococcus lactis subsp. lactis by high-voltage electroporation. McIntyre DA, et al. **Appl Environ Microbiol** 1989 Mar;55(3):604–10

Transformation of Xenorhabdus nematophilus. Xu J, et al. **Appl Environ Microbiol** 1989 Apr;55(4):806–12

Expression of rat renal gamma-glutamyltransferase cDNA in Escherichia coli. Angele C, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1040–6

Strategies for the development of bacterial transformation systems. Mercenier A, et al. **Biochimie** 1988 Apr; 70(4):503–17 (116 ref.)

Development of an efficient spheroplast transformation procedure for S. thermophilus: the use of transfection to define a regeneration medium. Mercenier A, et al. **Biochimie** 1988 Apr;70(4):567–77

Genetic transformation of Streptococcus thermophilus by electroporation. Somkuti GA, et al. **Biochimie** 1988 Apr; 70(4):579–85

The influence of lipopolysaccharide on the transformation efficiency of Klebsiella pneumoniae. Camprubí S, et al. **Can J Microbiol** 1989 Jul;35(7):735–7

Gene transfer in Neisseria gonorrhoeae. Biswas GD, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S24–8 (45 ref.)

DNA restriction and modification systems in Neisseria gonorrhoeae. Davies JK. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S78–82 (25 ref.)

Introduction of cloned genes into Neisseria gonorrhoeae. Stein DC. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S146–9 (33 ref.)

Transformation and expression of a cloned delta-endotoxin gene in Bacillus thuringiensis. Lereclus D, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):211–7

Construction of shuttle vectors useful for transforming Clostridium acetobutylicum. Truffaut N, et al. **FEMS Microbiol Lett** 1989 Mar;49(1):15–20

Characterization of a wide host range plasmid pANV-6 from Citrobacter diversus. Misra AK, et al. **Indian J Med Res** 1989 Jan;89:28–35

Transformation-deficient mutants of piliated Neisseria gonorrhoeae. Biswas GD, et al. **J Bacteriol** 1989 Feb; 171(2):657–64

Transformation of the archaebacterium Halobacterium volcanii with genomic DNA. Cline SW, et al. **J Bacteriol** 1989 Sep;171(9):4987–91

High-frequency transformation of Rhizobium meliloti. Courtois J, et al. **J Bacteriol** 1988 Dec;170(12):5925–7

Transformation of a conditionally peptidoglycan-deficient mutant of Staphylococcus aureus with plasmid DNA. Nieuwlandt DT, et al. **J Bacteriol** 1989 Sep;171(9):4906–13

Preferential uptake of restriction fragments from a gonococcal cryptic plasmid by competent Neisseria gonorrhoeae. Burnstein KL, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):547–57

Occurrence, transfer and mobilization in epilithic strains of Acinetobacter of mercury-resistance plasmids capable of transformation. Rochelle PA, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):2933–41

Complement binding on serum-sensitive and serum-resistant transformants of Neisseria gonorrhoeae: effect of presensitization with a non-bactericidal monoclonal antibody. Joiner KA, et al. **Microb Pathog** 1989 May; 6(5):343–50

Salmonella typhimurium aroA mutants as carriers of the Escherichia coli heat-labile enterotoxin B subunit to the murine secretory and systemic immune systems. Maskell DJ, et al. **Microb Pathog** 1987 Mar;2(3):211–21

Introduction of genes for leucine biosynthesis from Clostridium pasteurianum into C. acetobutylicum by cointegrate conjugal transfer. Oultram JD, et al. **Mol Gen Genet** 1988 Sep;214(1):177–9

Efficient transformation of Bacillus thuringiensis and B. cereus via electroporation: transformation of acrystalliferous strains with a cloned delta-endotoxin gene. Schurter W, et al. **Mol Gen Genet** 1989 Jul;218(1):177–81

Construction, transfer and properties of a novel temperature-sensitive integrable plasmid for genomic analysis of Staphylococcus aureus. Luchansky JB, et al. **Mol Microbiol** 1989 Jan;3(1):65–78

Storage of competent cells for Agrobacterium transformation. Höfgen R, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9877

Efficient transformation of Agrobacterium spp. by electroporation. Mattanovich D, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6747

High voltage E. coli electro-transformation with DNA following ligation. Willson TA, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11820

Transformation of Azotobacter vinelandii OP with a broad host range plasmid containing a cloned chromosomal nif-DNA marker. Bingle WH. **Plasmid** 1988 May; 19(3):242–50

One-step preparation of competent Escherichia coli: transformation and storage of bacterial cells in the same solution. Chung CT, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2172–5

Genetic determinants of microbial resistance to antibiotics. Young FE, et al. **Rev Infect Dis** 1979 Jan–Feb;1(1):55–63

Construction of large DNA segments in Escherichia coli. O'Connor M, et al. **Science** 1989 Jun 16;244(4910):1307–12

Detection and interspecies-transformation of a beta-lactamase-encoding plasmid from Pasteurella haemolytica. Schwarz S, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):462–9

[Transformation of Streptomyces sp. 1912–8 protoplasts using plasmid pSG 1912 DNA] Polishchuk LV, et al. **Mikrobiol Zh** 1987 Jan–Feb;49(1):24–8 (Eng. Abstr.) (Rus)

[Intraspecies plasmid transformation of Bacillus thuringiensis] Bessol'tsev VV, et al. **Mol Gen Mikrobiol Virusol** 1989 Mar; (3):25–8 (Eng. Abstr.) (Rus)

[Glycine-dependent cryotransformation of Bacillus cereus by plasmid DNA] Loginova OG, et al. **Mol Gen Mikrobiol Virusol** 1988 Nov;(11):45–9 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Differential effects of DNA gyrase inhibitors on the genetic transformation of Neisseria gonorrhoeae. Parham C, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1788–92

RADIATION EFFECTS

DNA repair and the evolution of transformation in Bacillus subtilis. II. Role of inducible repair. Wojciechowski MF, et al. **Genetics** 1989 Mar;121(3):411–22

[Effect on Haemophilus influenzae of its transforming deoxyribonucleic acid irradiated in vitro using ultraviolet light at -70 degrees] Muñoz-Sanchez JL, et al. **Rev Latinoam Microbiol** 1988 Apr–Jun;30(2):201–7 (Eng. Abstr.) (Spa)

TRANSFORMATION, GENETIC

see related DNA, RECOMBINANT

Transformation of Mycobacterium smegmatis with E. coli plasmids. Zainuddin ZF, et al. **Acta Leprol (Geneve)** 1989; 7 Suppl 1:212–6

Microinjection of DNA into Aedes triseriatus ova and detection of integration. McGrane V, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):502–10

Basic processes underlying Agrobacterium-mediated DNA transfer to plant cells. Zambryski P. **Annu Rev Genet** 1988; 22:1–30 (115 ref.)

Genetic exchange in the environment. Coughter JP, et al. **Antonie Van Leeuwenhoek** 1989;55(1):15–22 (33 ref.)

Transformation of Bacillus cereus vegetative cells by electroporation. Belliveau BH, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1649–52

Plasmid transformation by electroporation of Leuconostoc paramesenteroides and its use in molecular cloning. David S, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1483–9

Campbell-like integration of heterologous plasmid DNA into the chromosome of Lactococcus lactis subsp. lactis. Leenhouts KJ, et al. **Appl Environ Microbiol** 1989 Feb; 55(2):394–400

Genetic transformation system for the aflatoxin-producing fungus Aspergillus flavus. Woloshuk CP, et al. **Appl Environ Microbiol** 1989 Jan;55(1):86–90

DNA-mediated transformation of N-acetylglucosaminyltransferase I activity into an enzyme deficient cell line. Ripka J, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):554–60

Entrapment of high-molecular-mass DNA molecules in liposomes for the genetic transformation of animal cells. Szelei J, et al. **Biochem J** 1989 Apr 15;259(2):549–53

Transformation of Neurospora crassa by an integrative transforming plasmid is not enhanced by ribosomal DNA sequences. Russell PJ, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):243–6

Genetic manipulation of the chloroplast genome. Gray JC. **Biotechnology** 1989;12:317–35 (73 ref.)

Vectors for P-mediated transformation in Drosophila. Pirrotta V. **Biotechnology** 1988;10:437–56 (38 ref.)

Transformation methods for halophilic archaebacteria. Cline SW, et al. **Can J Microbiol** 1989 Jan;35(1):148–52

Characterization of the small endogenous plasmid of Halobacterium strain SB3 and its use in transformation of H. halobium. Hackett NR, et al. **Can J Microbiol** 1989 Jan; 35(1):86–91

Introduction of nonselectible 2 mu plasmid into [cir(o)] cells of the yeast S. cerevisiae by DNA transformation and in vivo site-specific resolution. Bruschi CV, et al. **Curr Genet** 1989 Feb;15(2):83–90

Transformation of seven species of filamentous fungi using the nitrate reductase gene of Aspergillus nidulans. Daboussi MJ, et al. **Curr Genet** 1989 Jun;15(6):453–6

Heterologous gene expression of the glyphosate resistance marker and its application in yeast transformation. Kunze G, et al. **Curr Genet** 1989 Feb;15(2):91–8

Comparison of Tetrahymena ARS sequence function in the yeasts Saccharomyces cerevisiae and Schizosaccharomyces pombe. Luehrsen KR, et al. **Curr Genet** 1988 Sep; 14(3):225–33

Molecular transformation of Fusarium solani with an antibiotic resistance marker having no fungal DNA homology. Marek ET, et al. **Curr Genet** 1989 Jun; 15(6):421–8

Transformation as a method of increasing gene copy number and gene expression in the basidiomycete fungus Coprinus cinereus. Mellon FM, et al. **Curr Genet** 1988 Nov; 14(5):451–6

Cosmids carrying Aspergillus terreus DNA can integrate into Saccharomyces cerevisiae chromosome XII via recombination between yeast and foreign DNAs. Shoubochkina EA, et al. **Curr Genet** 1988 Sep;14(3):183–9

Rescue of a Dictyostelium discoideum mutant defective in cyclic nucleotide phosphodiesterase. Faure M, et al. **Dev Biol** 1989 Feb;131(2):366–72

Transfection and transformation of human and animal cells by recombinant DNA vectors: issues relevant to use of these substrates for the production of biologicals. Moyer MP, et al. **Dev Biol Stand** 1989;70:91–100

Monitoring positional information during oogenesis in adult Drosophila. Fasano L, et al. **Development** 1988 Oct; 104(2):245–53

Identification of a fully-functional hobo transposable element and its use for germ-line transformation of Drosophila. Blackman RK, et al. **EMBO J** 1989 Jan;8(1):211–7

Continued expression of HPV-16 E7 protein is required for maintenance of the transformed phenotype of cells co-transformed by HPV-16 plus EJ-ras. Crook T, et al. **EMBO J** 1989 Feb;8(2):513–9

Identification of an amber nonsense mutation in the rosy516 gene by germline transformation of an amber suppressor tRNA gene. Doerig RE, et al. **EMBO J** 1988 Aug; 7(8):2579–84

Functional complementation of catalase-defective peroxisomes in a methylotrophic yeast by import of the catalase A from Saccharomyces cerevisiae. Hansen H, et al. **Eur J Biochem** 1989 Sep 1;184(1):173–9

Endocytosis and inositol hexakisphosphate levels in ras transformants of Dictyostelium discoideum amoebae. Klein G, et al. **Experientia** 1989 Apr 15;45(4):365–7

Genetic transformation of mouse cultured cells with the help of high-velocity mechanical DNA injection. Zelenin AV, et al. **FEBS Lett** 1989 Feb 13;244(1):65–7

Transformation of Bacillus thuringiensis by electroporation. Bone EJ, et al. **FEMS Microbiol Lett** 1989 Apr; 49(2–3):171–7

Transformation of Penicillium chrysogenum with selection for increased resistance to benomyl. Picknett TM, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):165–8

Transformation of Penicillium chrysogenum to sulfonamide resistance. Carramolino L, et al. **Gene** 1989 Apr 15; 77(1):31–8

Identification and characterization of Clostridium difficile promoter element that is functional in Escherichia coli. Dailey DC, et al. **Gene** 1988 Oct 30;70(2):343–50

Stable allele replacement and unstable non–homologous integration events during transformation of Ascobolus immersus. Faugeron G, et al. **Gene** 1989 Mar 15; 76(1):109–19

Gene function identified by interspecific transformation. Katz ME, et al. **Gene** 1989 May 15;78(1):167–71

Cloning of the nitrate reductase gene (niaD) of Aspergillus nidulans and its use for transformation of Fusarium oxysporum. Malardier L, et al. **Gene** 1989 May 15; 78(1):147–56

Non–homologous integration of transforming vectors in the fungus Podospora anserina: sequences of junctions at the integration sites. Razanamparany V, et al. **Gene** 1988 Dec 30;74(2):399–409

The cyclization of linear DNA in Escherichia coli by site–specific recombination. Sauer B, et al. **Gene** 1988 Oct 30;70(2):331–41

Vectors for Drosophila P–element–mediated transformation and tissue culture transfection. Thummel CS, et al. **Gene** 1988 Dec 30;74(2):445–56

Transformation of Aspergillus niger with the homologous nitrate reductase gene. Unkles SE, et al. **Gene** 1989 May 15;78(1):157–66

Sequences 3' of the human c–Ha–ras1 gene positively regulate its expression and transformation potential. Colby WW, et al. **Gene Amplif Anal** 1986;4:39–52

Transformation of yeast by agitation with glass beads. Costanzo MC, et al. **Genetics** 1988 Nov;120(3):667–70

Hybrid dysgenesis in Drosophila simulans lines transformed with autonomous P elements. Daniels SB, et al. **Genetics** 1989 Feb;121(2):281–91

Molecular structure and transformation of the glucose dehydrogenase gene in Drosophila melanogaster. Whetten R, et al. **Genetics** 1988 Oct;120(2):475–84

Genetic transformation in Haemophilus influenzae: physical and biological properties of three DNA constructs carrying nov gene. Joshi VP, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):523–7

Transformation of fluoride resistance genes in Streptococcus mutans. Chansley PE, et al. **Infect Immun** 1989 Jul; 57(7):1968–70

Transformation of the dermatophyte Trichophyton mentagrophytes to hygromycin B resistance. Gonzalez R, et al. **Infect Immun** 1989 Sep;57(9):2923–5

raf involvement in the simultaneous genetic transfer of the radioresistant and transforming phenotypes. Pirollo KF, et al. **Int J Radiat Biol** 1989 May;55(5):783–96

Transformation of Schwanniomyces occidentalis with an ADE2 gene cloned from S. occidentalis. Klein RD, et al. **J Bacteriol** 1988 Dec;170(12):5572–8

Insertional mutagenesis by random cloning of antibiotic resistance genes into the genome of the cyanobacterium Synechocystis strain PCC 6803. Labarre J, et al. **J Bacteriol** 1989 Jun;171(6):3449–57

Transformation of Mycoplasma pulmonis: demonstration of homologous recombination, introduction of cloned genes, and preliminary description of an integrating shuttle system. Mahairas GG, et al. **J Bacteriol** 1989 Apr; 171(4):1775–80

Transduction and transformation of plasmid DNA in Streptomyces fradiae strains that express different levels of restriction. Matsushima P, et al. **J Bacteriol** 1989 Jun; 171(6):3080–4

Chromosomal transformation of Escherichia coli recD strains with linearized plasmids. Russell CB, et al. **J Bacteriol** 1989 May;171(5):2609–13

Transposon mutagenesis, characterization, and cloning of transformation genes of Haemophilus influenzae Rd. Tomb JF, et al. **J Bacteriol** 1989 Jul;171(7):3796–802

A gene–cloning system for Kluyveromyces lactis and isolation of a chromosomal gene required for killer toxin production. Chen XJ, et al. **J Basic Microbiol** 1988; 28(4):211–20

Transformation of methylotrophic yeast Hansenula polymorpha: cloning and expression of genes. Tikhomirova LP, et al. **J Basic Microbiol** 1988;28(5):343–51

Mineralocorticosteroid receptor of the chick intestine. Oligomeric structure and transformation. Rafestin–Oblin ME, et al. **J Biol Chem** 1989 Jun 5;264(16):9304–9

The construction and characterization of Neisseria gonorrhoeae lacking protein III in its outer membrane. Wetzler LM, et al. **J Exp Med** 1989 Jun 1;169(6):2199–209

Highly efficient genetic transformation of Bacillus subtilis attached to sand grains. Lorenz MG, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):107–12

DNA–mediated transformation in the aquatic filamentous fungus Achlya ambisexualis. Manavathu EK, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):2019–28

Transformation of Streptococcus sanguis to intrinsic penicillin resistance. Zito ET, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1237–49

Genomic DNA with transformation–related activity and melanoma antigen expression. Tagawa M, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):284S–288s

The human cytomegalovirus mtrII colinear region in strain Tanaka is transformation defective. Jahan N, et al. **J Virol** 1989 Jun;63(6):2866–9

Transformation in Synechocystis PCC 6714 and 6803: preparation of chromosomal DNA. Joset F. **Methods Enzymol** 1988;167:712–4

DNA transformation. Porter RD. **Methods Enzymol** 1988; 167:703–12

Immortalization of murine leukocytes by oncogenes. II. Phenotypic characterization of transformants immortalized by v–src or Ha–ras oncogenes: expression of B220, a B–cell lineage specific antigen. Komatsubara S, et al. **Microbiol Immunol** 1988;32(8):869–75

Transformation in fungi. Fincham JR. **Microbiol Rev** 1989 Mar;53(1):148–70 (155 ref.)

Cloning of the PYR3 gene of Ustilago maydis and its use in DNA transformation. Banks GR, et al. **Mol Cell Biol** 1988 Dec;8(12):5417–24

Mechanism of activation of the human trk oncogene. Coulier F, et al. **Mol Cell Biol** 1989 Jan;9(1):15–23

Autonomous replication and addition of telomerelike sequences to DNA microinjected into Paramecium tetraurelia macronuclei. Gilley D, et al. **Mol Cell Biol** 1988 Nov;8(11):4765–72

Targeted transformation of Ascobolus immersus and de novo methylation of the resulting duplicated DNA sequences. Goyon C, et al. **Mol Cell Biol** 1989 Jul;9(7):2818–27

Human progesterone receptor transformation and nuclear down–regulation are independent of phosphorylation. Sheridan PL, et al. **Mol Endocrinol** 1988 Dec;2(12):1329–42

Efficient transformation of Arabidopsis thaliana using direct gene transfer to protoplasts. Damm B, et al. **Mol Gen Genet** 1989 May;217(1):6–12

Use of transformation to make targeted sequence alterations at the am (GDH) locus of Neurospora. Frederick GD, et al. **Mol Gen Genet** 1989 Jun;217(2–3):294–300

DNA sequences required to induce localized conversion in Streptococcus pneumoniae transformation. Garcia P, et al. **Mol Gen Genet** 1988 Nov;214(3):509–13

Observations on integrative transformation in Schizosaccharomyces pombe. Grimm C, et al. **Mol Gen Genet** 1988 Dec;215(1):87–93

One–step gene disruption by cotransformation to isolate double auxotrophs in Candida albicans. Kelly R, et al. **Mol Gen Genet** 1988 Sep;214(1):24–31

Polarity of DNA entry in transformation of Streptococcus pneumoniae. Méjean V, et al. **Mol Gen Genet** 1988 Aug; 213(2–3):444–8

Characterization of genetic transformation in Streptococcus oralis NCTC 11427: expression of the pneumococcal amidase in S. oralis using a new shuttle vector. Ronda C, et al. **Mol Gen Genet** 1988 Dec;215(1):53–7

Transformation of various species of gram–negative bacteria belonging to 11 different genera by electroporation. Wirth R, et al. **Mol Gen Genet** 1989 Mar;216(1):175–7

Transformation of Mycobacterium smegmatis with Escherichia coli plasmids carrying a selectable resistance marker. Zainuddin ZF, et al. **Mol Microbiol** 1989 Jan; 3(1):29–34

Effect of DNA damage on stable transformation of mammalian cells with integrative and episomal plasmids. Vos JM, et al. **Mutat Res** 1989 Mar–May;220(2–3):205–20

DNA transformation leads to pilin antigenic variation in Neisseria gonorrhoeae. Seifert HS, et al. **Nature** 1988 Nov 24;336(6197):392–5

Influence of flanking sequences on variability in expression levels of an introduced gene in transgenic tobacco plants. Dean C, et al. **Nucleic Acids Res** 1988 Oct 11; 16(19):9267–83

The nucleotide sequence of the region of src gene deletion in transformation–defective Rous sarcoma virus adapted to semi–permissive host cells. Kashuba VI, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2120

A rapid procedure for the transformation of Saccharomyces cerevisiae by plasmids extracted from yeasts. Keszenman–Pereyra D, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4893

Efficient transformation of Agrobacterium spp. by electroporation. Mattanovich D, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6747

Specialized binary vector for plant transformation: expression of the Arabidopsis thaliana AHAS gene in Nicotiana tabacum. Olszewski NE, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10765–82

Elevation of 1,2–diacylglycerol in ras–transformed neonatal liver and pancreas of transgenic mice. Wilkison WO, et al. **Oncogene** 1989 May;4(5):625–8

Plasmids can stably transform yeast mitochondria lacking endogenous mtDNA. Fox TD, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7288–92

A genomic DNA segment from Petunia hybrida leads to increased transformation frequencies and simple integration patterns. Meyer P, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8568–72

The transformation–suppressive function is lost in tumorigenic cells and is restored upon transfer of a suppressor gene. Iten E, et al. **Recent Results Cancer Res** 1989;113:78–89

Transformation by v–sis occurs by an internal autoactivation mechanism. Bejcek BE, et al. **Science** 1989 Sep 29; 245(4925):1496–9

Persistence of abnormal chloride conductance regulation in transformed cystic fibrosis epithelia. Jetten AM, et al. **Science** 1989 Jun 23;244(4911):1472–5

Organelle transformation. Howe CJ. **Trends Genet** 1988 Jun; 4(6):150–2 (10 ref.)

Specificity of DNA uptake during whole cell transformation of S. cerevisiae. Bruschi CV, et al. **Yeast** 1987 Jun; 3(2):131–7

Expression of the Drosophila 70,000 Dalton heat shock protein is translationally controlled in yeast. Collatz E, et al. **Yeast** 1985 Sep;1(1):49–56

[Increase in the transforming activity of plasmid DNA by means of its inclusion in the interpolyelectrolytic complex with a carbon–chain cation] Kabanov AV, et al. **Dokl Akad Nauk SSSR** 1989 May–Jun;306(1):226–9 (Rus)

[Structure of a new transformation–defective mutant of Rous sarcoma virus] Kashuba VI, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb;304(1):206–8 (Rus)

[Genetic control of plasmid recombination in the cotransformation of Saccharomyces cerevisiae: the role of RAD52 and FLP genes] Kozhina TN, et al. **Genetika** 1988 Jun;24(6):993–7 (Eng. Abstr.) (Rus)

[Effect of DNA methylation on transformation of Saccharomyces cerevisiae] Lebenka AIu. **Genetika** 1988 Nov;24(11):1935–9 (Eng. Abstr.) (Rus)

[Prospects of the use of chromosomal transformation for the identification of the causative agent melioidosis] Riapis LA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug; (8):16–9 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Initial characterizations of nontransformed and transformed [3H]aldosterone–type I receptor complexes in brain cytosol. Luttge WG, et al. **Endocrinology** 1989 Apr; 124(4):1813–21

DNA interstrand cross–links promote chromosomal integration of a selected gene in human cells. Vos JM, et al. **Mol Cell Biol** 1989 Jul;9(7):2897–905

Induction of transforming growth factor alpha expression in mouse mammary epithelial cells after transformation with a point–mutated c–Ha–ras protooncogene. Ciardiello F, et al. **Mol Endocrinol** 1988 Dec;2(12):1202–16

[The somatic transformation of hens using high–polymeric DNA] Strazhevskaia NB, et al. **Tsitol Genet** 1988 Jul–Aug; 22(4):60–4 (Eng. Abstr.) (Rus)

TRANSFORMED CELL LINE see **CELL LINE, TRANSFORMED**

TRANSFORMING GENES see **ONCOGENES**

TRANSFORMING GROWTH FACTOR ALPHA see **TRANSFORMING GROWTH FACTORS**

TRANSFORMING GROWTH FACTOR ALPHA RECEPTORS see **RECEPTORS, EPIDERMAL GROWTH FACTOR–UROGASTRONE**

TRANSFORMING GROWTH FACTOR BETA see **TRANSFORMING GROWTH FACTORS**

TRANSFORMING GROWTH FACTORS

Tumour growth factors. Ernberg IT. **Acta Chir Scand Suppl** 1989;549:11–6 (14 ref.)

Transforming growth factor beta. Roberts AB, et al. **Adv Cancer Res** 1988;51:107–45 (206 ref.)

1H NMR assignment and secondary structural elements of human transforming growth factor alpha. Brown SC, et al. **Biochemistry** 1989 Jan 24;28(2):593–9

Lung cancer and autocrine growth factors. Yamaguchi K, et al. **Chest** 1989 Jul;96(1 Suppl):29S–31S (13 ref.)

A high–resolution 1H–NMR study of human transforming growth factor alpha. Structure and pH–dependent conformational interconversion. Tappin MJ, et al. **Eur J Biochem** 1989 Feb 15;179(3):629–37

Identification of mannose 6–phosphate in two asparagine–linked sugar chains of recombinant transforming growth factor–beta 1 precursor. Purchio AF, et al. **J Biol Chem** 1988 Oct 5;263(28):14211–5

EGF and TGF–alpha are potent chemoattractants for endothelial cells and EGF–like peptides are present at sites of tissue regeneration. Grotendorst GR, et al. **J Cell Physiol** 1989 Jun;139(3):617–23

Active suppression of host–vs graft reaction in pregnant mice. IX. Soluble suppressor activity obtained from allopregnant mouse decidua that blocks the cytolytic effector response to IL–2 is related to transforming growth factor–beta. Clark DA, et al. **J Immunol** 1988 Dec 1;141(11):3833–40

Role for carbohydrate structures in TGF–beta 1 latency. Miyazono K, et al. **Nature** 1989 Mar 9;338(6211):158–60

Sequence–specific 1H–NMR assignments and identification of two small antiparallel beta–sheets in the solution structure of recombinant human transforming growth factor alpha. Montelione GT, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1519–23

ADMINISTRATION & DOSAGE

Inhibition of early murine hemopoietic progenitor cell proliferation after in vivo locoregional administration of transforming growth factor–beta 1. Goey H, et al. **J Immunol** 1989 Aug 1;143(3):877–80

ANALYSIS

High levels of transforming growth factor–beta are present in the epithelial lining fluid of the normal human lower

respiratory tract. Yamauchi K, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1360–3

Transforming growth factor alpha in human mammary carcinomas and their metastases. Macias A, et al. **Anticancer Res** 1989 Jan–Feb;9(1):177–9

Transforming growth factor–alpha in the adult bovine ovary: identification in growing ovarian follicles. Lobb DK, et al. **Biol Reprod** 1989 May;40(5):1087–93

Epidermal and transforming growth factor alpha in patients with breast tumours. Gregory H, et al. **Br J Cancer** 1989 Apr;59(4):605–9

Immunodetection and quantitation of the two forms of transforming growth factor–beta (TGF–beta 1 and TGF–beta 2) secreted by cells in culture. Danielpour D, et al. **J Cell Physiol** 1989 Jan;138(1):79–86

Identification of a 15,000–molecular–weight form of immunoreactive transforming growth factor alpha in extracts of porcine pituitary. Rius TL, et al. **J Cell Physiol** 1989 Feb;138(2):393–404

Characterization of transforming growth factors produced by the insulin–independent teratoma–derived cell line 1246–3A. Yamada Y, et al. **J Cell Physiol** 1989 Aug; 140(2):254–63

Transforming growth factor–alpha expression in the anterior pituitary gland: regulation by epidermal growth factor and phorbol ester in dispersed cells. Mueller SG, et al. **Mol Endocrinol** 1989 Jun;3(6):976–83

EGF– and TGF–alpha–like peptides in human fetal gut. Miettinen PJ, et al. **Pediatr Res** 1989 Jul;26(1):25–30

Modulation by estrogen and growth factors of transforming growth factor–alpha and epidermal growth factor receptor expression in normal and malignant human mammary epithelial cells. Salomon DS, et al. **Recent Results Cancer Res** 1989;113:57–69

[Transforming growth factors—molecular structure and biological role] Popik W. **Postepy Hig Med Dosw** 1988 Sep–Oct;42(5):523–42 (80 ref.) (Eng. Abstr.) (Pol)

ANTAGONISTS & INHIBITORS

One of two subunits of masking protein in latent TGF–beta is a part of pro–TGF–beta. Okada F, et al. **FEBS Lett** 1989 Jan 2;242(2):240–4

Introduction of a Ha–ras oncogene into rat liver epithelial cells and parenchymal hepatocytes confers resistance to the growth inhibitory effects of TGF–beta. Houck KA, et al. **Oncogene** 1989 Jan;4(1):19–25

BIOSYNTHESIS

The growth inhibitor of African green monkey (BSC–1) cells is transforming growth factors beta 1 and beta 2. McPherson JM, et al. **Biochemistry** 1989 Apr 18; 28(8):3442–7

Production of transforming growth factor–alpha in human tumour cell lines. Imanishi K, et al. **Br J Cancer** 1989 May; 59(5):761–5

Decreased growth inhibition by recombinant gamma interferon is associated with increased transforming growth factor–alpha production in keratinocytes cultured from psoriatic lesions. Nickoloff BJ, et al. **Br J Dermatol** 1989 Aug;121(2):161–74

Expression of transforming growth factor alpha during development. Han VK, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1113–21 (40 ref.)

Growth factor production by human colon carcinoma cell lines. Anzano MA, et al. **Cancer Res** 1989 Jun 1; 49(11):2898–904

Changes in response to, and production of, transforming growth factor type beta during neoplastic progression in cultured rat tracheal epithelial cells. Terzaghi–Howe M. **Carcinogenesis** 1989 Jun;10(6):973–80

Embryonic expression pattern of TGF beta type–1 RNA suggests both paracrine and autocrine mechanisms of action. Lehnert SA, et al. **Development** 1988 Oct; 104(2):263–73

The tumor cells (FA–6) established from a pancreatic cancer associated with humoral hypercalcemia of malignancy: a simultaneous production of parathyroid hormone–like activity and transforming growth factor activity. Nagata N, et al. **Endocrinol Jpn** 1989 Feb;36(1):75–85

The production of transforming growth factor–beta activity by rat granulosa cell cultures. Kim IC, et al. **Endocrinology** 1989 Mar;124(3):1345–51

Regulation of ovarian cell growth through the local production of transforming growth factor–alpha by theca cells. Skinner MK, et al. **Endocrinology** 1988 Dec; 123(6):2632–8

Transformation of mouse mammary epithelial cells with the Ha–ras but not with the neu oncogene results in a gene dosage–dependent increase in transforming growth factor–alpha production. Ciardiello F, et al. **FEBS Lett** 1989 Jul 3;250(2):474–8

Site–selective 8–chloroadenosine 3',5'–cyclic monophosphate inhibits transformation and transforming growth factor alpha production in Ki–ras–transformed rat fibroblasts. Tortora G, et al. **FEBS Lett** 1989 Jan 2;242(2):363–7

Acidic cellular environments: activation of latent TGF–beta and sensitization of cellular responses to TGF–beta and EGF. Jullien P, et al. **Int J Cancer** 1989 May 15; 43(5):886–91

Induction of transforming growth factor–alpha expression in human keratinocytes by phorbol esters. Pittelkow MR, et al. **J Biol Chem** 1989 Mar 25;264(9):5164–71

Growth factor production by a human megakaryocytic tumor cell line. Witte DP, et al. **J Cell Physiol** 1988 Oct; 137(1):86–94

Macrophage production of transforming growth factor beta and fibroblast collagen synthesis in chronic pulmonary inflammation. Khalil N, et al. **J Exp Med** 1989 Sep 1; 170(3):727–37

Transforming growth factor–beta production by synovial tissues from rheumatoid patients and streptococcal cell wall arthritic rats. Studies on secretion by synovial fibroblast–like cells and immunohistologic localization. Lafyatis R, et al. **J Immunol** 1989 Aug 15;143(4):1142–8

mRNA expression of transforming growth factor alpha in human breast carcinomas and its activity in effusions of breast cancer patients. Ciardiello F, et al. **J Natl Cancer Inst** 1989 Aug 2;81(15):1165–71

An activated form of transforming growth factor beta is produced by cocultures of endothelial cells and pericytes. Antonelli–Orlidge A, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4544–8

CLASSIFICATION

A new type of transforming growth factor–beta, TGF–beta 3. Derynck R, et al. **EMBO J** 1988 Dec 1;7(12):3737–43

GENETICS

Regulation of EGF receptor and transforming growth factor–alpha expression. Kudlow JE, et al. **Adv Exp Med Biol** 1988;234:105–26 (74 ref.)

Association of genetic variation of the transforming growth factor–alpha gene with cleft lip and palate. Ardinger HH, et al. **Am J Hum Genet** 1989 Sep;45(3):348–53

The expression of the platelet–derived and transforming growth factor genes in human nonsmall lung cancer cell lines is related to tumor stroma formation in nude mice tumors. Bergh J. **Am J Pathol** 1988 Dec;133(3):434–9

Mechanisms by which genes encoding growth factors and growth factor receptors contribute to malignant transformation. Kraus MH, et al. **Ann N Y Acad Sci** 1988; 551:320–35; discussion 336 (52 ref.)

Expression of growth factor and epidermal growth factor receptor encoded transcripts in human gastric tissues. Bennett C, et al. **Cancer Res** 1989 Apr 15;49(8):2104–11

Endogenous growth factor expression in T–47D, human breast cancer cells, associated with reduced sensitivity to antiproliferative effects of progestins and antiestrogens. Murphy LC, et al. **Cancer Res** 1989 Feb 1;49(3):599–604

Regulation of transforming growth factor alpha messenger RNA expression in a chemically transformed rat hepatic epithelial cell line by phorbol ester and hormones. Raymond VW, et al. **Cancer Res** 1989 Jul 1;49(13):3608–12

TGF–alpha and EGF–receptor mRNAs in human oral cancers. Todd R, et al. **Carcinogenesis** 1989 Aug; 10(8):1553–6

Transforming growth factor–beta: a negative regulator. **Ciba Found Symp** 1989;142:112–6

Localization of the expression of types I, III, and IV collagen, TGF–beta 1 and c–fos genes in developing human calvarial bones. Sandberg M, et al. **Dev Biol** 1988 Nov;130(1):324–34

Enhanced expression of TGF–beta and c–fos mRNAs in the growth plates of developing human long bones. Sandberg M, et al. **Development** 1988 Mar;102(3):461–70

Differentially regulated production of platelet–derived growth factor and of transforming growth factor beta by a human teratocarcinoma cell line. Weima SM, et al. **Differentiation** 1988 Sep;38(3):203–10

Expression and characterization of recombinant TGF–beta 2 proteins produced in mammalian cells. Madisen L, et al. **DNA** 1989 Apr;8(3):205–12

Structural and sequence analysis of TGF–beta 2 cDNA clones predicts two different precursor proteins produced by alternative mRNA splicing. Webb NR, et al. **DNA** 1988 Sep;7(7):493–7

Transforming growth factor–alpha gene expression and action in the seminiferous tubule: peritubular cell–Sertoli cell interactions. Skinner MK, et al. **Endocrinology** 1989 Feb;124(2):845–54

Involvement of oncogene–coded growth factors in the neoplastic process. Robbins KC, et al. **Gene Amplif Anal** 1986;4:161–76 (44 ref.)

A Taqi RFLP of the human TGF alpha gene is significantly associated with cutaneous malignant melanoma. Hayward N, et al. **Int J Cancer** 1988 Oct 15;42(4):558–61

Expression of transforming growth factor alpha messenger RNA in the normal and neoplastic gastro–intestinal tract. Malden LT, et al. **Int J Cancer** 1989 Mar 15;43(3):380–4

Expression of TGF–beta and procollagen type I and type III in human gastric carcinomas. Yoshida K, et al. **Int J Cancer** 1989 Sep 15;44(3):394–8

Phorbol ester or epidermal growth factor (EGF) stimulates the concurrent accumulation of mRNA for the EGF receptor and its ligand transforming growth factor–alpha in a breast cancer cell line. Bjorge JD, et al. **J Biol Chem** 1989 Mar 5;264(7):4021–7

Site–directed mutagenesis of cysteine residues in the pro region of the transforming growth factor beta 1 precursor. Expression and characterization of mutant proteins. Brunner AM, et al. **J Biol Chem** 1989 Aug 15; 264(23):13660–4

Promoter sequences of the human transforming growth factor–beta 1 gene responsive to transforming growth factor–beta 1 autoinduction. Kim SJ, et al. **J Biol Chem** 1989 Apr 25;264(12):7041–5

Characterization of the promoter region of the human transforming growth factor–beta 1 gene. Kim SJ, et al. **J Biol Chem** 1989 Jan 5;264(1):402–8

cDNA cloning of porcine transforming growth factor–beta 1 mRNAs. Evidence for alternate splicing and polyadenylation. Kondaiah P, et al. **J Biol Chem** 1988 Dec 5;263(34):18313–7

TGF beta gene transcription in normal and neoplastic liver growth. Carr BI, et al. **J Cell Biochem** 1989 Apr; 39(4):477–87

Early increases in pulmonary mRNA encoding procollagens and transforming growth factor–beta in mice sensitive to cyclophosphamide–induced pulmonary fibrosis. Hoyt DG, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):38–43

Expression and purification of biologically active v–sis/platelet–derived growth factor B protein by using a baculovirus vector system. Giese N, et al. **J Virol** 1989 Jul;63(7):3080–6

Substitution of lysine for arginine at position 42 of human transforming growth factor–alpha eliminates biological activity without changing internal disulfide bonds. Defeo–Jones D, et al. **Mol Cell Biol** 1989 Sep;9(9):4083–6

Epidermal growth factor receptor binding is affected by structural determinants in the toxin domain of transforming growth factor–alpha–Pseudomonas exotoxin fusion proteins. Edwards GM, et al. **Mol Cell Biol** 1989 Jul; 9(7):2860–7

The human transforming growth factor alpha promoter directs transcription initiation from a single site in the absence of a TATA sequence. Jakobovits EB, et al. **Mol Cell Biol** 1988 Dec;8(12):5549–54

Transforming growth factor alpha: an aromatic side chain at position 38 is essential for biological activity. Lazar E, et al. **Mol Cell Biol** 1989 Feb;9(2):860–4

Developmental expression of transforming growth factors alpha and beta in mouse fetus. Wilcox JN, et al. **Mol Cell Biol** 1988 Aug;8(8):3415–22

Induction of transforming growth factor alpha expression in mouse mammary epithelial cells after transformation with a point–mutated c–Ha–ras protooncogene. Ciardiello F, et al. **Mol Endocrinol** 1988 Dec;2(12):1202–16

The effects of a constitutive expression of transforming growth factor–alpha on the growth of MCF–7 human breast cancer cells in vitro and in vivo. Clarke R, et al. **Mol Endocrinol** 1989 Feb;3(2):372–80

A novel low molecular weight ribonucleic acid (RNA) related to transforming growth factor alpha messenger RNA. Jakowlew SB, et al. **Mol Endocrinol** 1988 Nov; 2(11):1056–63

Complementary deoxyribonucleic acid cloning of a novel transforming growth factor–beta messenger ribonucleic acid from chick embryo chondrocytes. Jakowlew SB, et al. **Mol Endocrinol** 1988 Aug;2(8):747–55

Complementary deoxyribonucleic acid cloning of a messenger ribonucleic acid encoding transforming growth factor beta 4 from chicken embryo chondrocytes. Jakowlew SB, et al. **Mol Endocrinol** 1988 Dec; 2(12):1186–95

Regulation of transforming growth factor alpha and transforming growth factor beta messenger ribonucleic acid abundance in T–47D, human breast cancer cells. Murphy LC, et al. **Mol Endocrinol** 1989 Apr;3(4):611–7

Transforming growth factor beta gene expression and action in the seminiferous tubule: peritubular cell–Sertoli cell interactions. Skinner MK, et al. **Mol Endocrinol** 1989 Apr; 3(4):625–34

Transforming growth factor alpha production and epidermal growth factor receptor expression in normal and oncogene transformed human mammary epithelial cells. Valverius EM, et al. **Mol Endocrinol** 1989 Jan;3(1):203–14

Chromosomal mapping of genes for transforming growth factors beta 2 and beta 3 in man and mouse: dispersion of TGF–beta gene family. Barton DE, et al. **Oncogene Res** 1988;3(4):323–31

Increased expression of growth factor mRNAs accompanies viral transformation of rodent cells. Jakowlew SB, et al. **Oncogene Res** 1988;2(2):135–48

Regulation of intestinal epithelial cell growth by transforming growth factor type beta. Barnard JA, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1578–82

Vgr–1, a mammalian gene related to Xenopus Vg–1, is a member of the transforming growth factor beta gene superfamily. Lyons K, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4554–8

Localized maternal mRNA related to transforming growth factor beta mRNA is concentrated in a cytokeratin–enriched fraction from Xenopus oocytes. Pondel MD, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(20):7612–6

Overexpression of transforming growth factor alpha in psoriatic epidermis. Elder JT, et al. **Science** 1989 Feb 10; 243(4892):811–4

Developmental expression of PDGF, TGF–alpha, and TGF–beta genes in preimplantation mouse embryos. Rappolee DA, et al. **Science** 1988 Sep 30;241(4874):1823–5

IMMUNOLOGY

Keratinocytes produce a lymphocyte inhibitory factor which is partially reversible by an antibody to transforming

growth factor-beta. Nickoloff BJ. **Ann N Y Acad Sci** 1988; 548:312-20

Bacterial cell wall-induced immunosuppression. Role of transforming growth factor beta. Wahl SM, et al. **J Exp Med** 1988 Oct 1;168(4):1403-17

Monoclonal antibodies recognizing transforming growth factor-beta. Bioactivity neutralization and transforming growth factor beta 2 affinity purification. Dasch JR, et al. **J Immunol** 1989 Mar 1;142(5):1536-41

Comparison of transforming growth factor-beta and a macrophage- deactivating polypeptide from tumor cells. Differences in antigenicity and mechanism of action. Tsunawaki S, et al. **J Immunol** 1989 May 15;142(10):3462-8

Inhibition of growth of human lung adenocarcinoma cell lines by anti-transforming growth factor-alpha monoclonal antibody. Imanishi K, et al. **J Natl Cancer Inst** 1989 Feb 1;81(3):220-3

ISOLATION & PURIFICATION

Automation of data acquisition and processing in assays for anchorage-independent growth: application to the purification of epithelial transforming growth factor. Dunnington DJ, et al. **Anal Biochem** 1988 Oct; 174(1):257-64

Separation of transforming growth factors TGF alpha and TGF beta during chromatographic purification of extracts from mouse C-234 tumors. Popik W. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):839-51

A new method for high yield purification of type beta transforming growth factor from human platelets. van den Eijnden-van Raaij AJ, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):16-23

Characterization of high molecular weight transforming growth factor alpha produced by rat hepatocellular carcinoma cells. Luetteke NC, et al. **Biochemistry** 1988 Aug 23;27(17):6487-94

Isolation of growth factors from adult bovine bone. Canalis E, et al. **Calcif Tissue Int** 1988 Dec;43(6):346-51

Copurification of osteolytic and transforming growth factor beta activities produced by human lung tumor cells associated with humoral hypercalcemia of malignancy. Linkhart TA, et al. **Cancer Res** 1989 Jan 15;49(2):271-8

Localization of transforming growth factor alpha and its receptor in gastric mucosal cells. Implications for a regulatory role in acid secretion and mucosal renewal. Beauchamp RD, et al. **J Clin Invest** 1989 Sep;84(3):1017-23

[Mesodermalizing factor from bovine amniotic fluid] Chertov OIu, et al. **Dokl Akad Nauk SSSR** 1989;305(3):749-51 **(Rus)**

METABOLISM

Immunocytochemical study of transforming growth factor expression in benign and malignant gliomas. Samuels V, et al. **Am J Pathol** 1989 Apr;134(4):894-902

Interactions of recombinant and platelet transforming growth factor-beta 1 precursor with the insulin-like growth factor II/mannose 6-phosphate receptor. Kovacina KS, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):393-403

Activation of the bone-derived latent TGF beta complex by isolated osteoclasts. Oreffo RO, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):817-23

Polypeptide chain fold of human transforming growth factor alpha analogous to those of mouse and human epidermal growth factors as studied by two-dimensional 1H NMR. Kohda D, et al. **Biochemistry** 1989 Feb 7;28(3):953-8

Adenylate cyclase-stimulating, bone-resorbing and B TGF-like activities in canine apocrine cell adenocarcinoma of the anal sac. Weir EC, et al. **Calcif Tissue Int** 1988 Dec; 43(6):359-65

Expression of transforming growth factor alpha and epidermal growth factor receptor messenger RNA in neoplastic and nonneoplastic human kidney tissue. Mydlo JH, et al. **Cancer Res** 1989 Jun 15;49(12):3407-11

The TGF-alpha precursor expressed on the cell surface binds to the EGF receptor on adjacent cells, leading to signal transduction. Wong ST, et al. **Cell** 1989 Feb 10; 56(3):495-506

Cellular origin and distribution of transforming growth factor-beta in the normal rat myocardium. Eghbali M. **Cell Tissue Res** 1989 Jun;256(3):553-8

Separation of parathyroid hormone-like activity from transforming growth factor-alpha and -beta in the canine adenocarcinoma (CAC-8) model of humoral hypercalcemia of malignancy. Merryman JI, et al. **Endocrinology** 1989 May;124(5):2456-63

Production of insulin-like growth factors, platelet-derived growth factor, and transforming growth factors and their role in the density-dependent growth regulation of a differentiated embryonal carcinoma cell line. van Zoelen EJ, et al. **Endocrinology** 1989 Apr;124(4):2029-41

Inhibition of stimulus-dependent epidermal growth factor receptor and transforming growth factor-alpha mRNA accumulation by the protein kinase C inhibitor staurosporine. Bjorge JD, et al. **FEBS Lett** 1989 Jan 30; 243(2):404-8

Expression of TGF-alpha/EGF and TGF-beta receptors in human colon carcinoma cell lines. Murthy U, et al. **Int J Cancer** 1989 Jul 15;44(1):110-5

Transforming growth factor alpha and its receptor in neural retina. Fassio JB, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1916-22

Expression of transforming growth factor-beta in wound healing of vitamin A-deficient rat corneas. Hayashi K, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):239-47

A surface component on GH3 pituitary cells that recognizes transforming growth factor-beta, activin, and inhibin. Cheifetz S, et al. **J Biol Chem** 1988 Nov 25;263(33):17225-8

Transforming growth factor-beta (TGF-beta) receptor proteoglycan. Cell surface expression and ligand binding in the absence of glycosaminoglycan chains. Cheifetz S, et al. **J Biol Chem** 1989 Jul 15;264(20):12025-8

Vascular smooth muscle cells express distinct transforming growth factor-beta receptor phenotypes as a function of cell density in culture. Goodman LV, et al. **J Biol Chem** 1989 Mar 25;264(9):5241-4

Attenuated processing of epidermal growth factor in the face of marked degradation of transforming growth factor-alpha. Korc M, et al. **J Biol Chem** 1989 Sep 5; 264(25):14990-9

Transforming growth factor-alpha in the mammalian brain. Immunohistochemical detection in neurons and characterization of its mRNA. Kudlow JE, et al. **J Biol Chem** 1989 Mar 5;264(7):3880-3

Proteolytic processing of mullerian inhibiting substance produces a transforming growth factor-beta-like fragment. Pepinsky RB, et al. **J Biol Chem** 1988 Dec 15; 263(35):18961-4

Accumulation, localization, and compartmentation of transforming growth factor beta during endochondral bone development. Carrington JL, et al. **J Cell Biol** 1988 Nov; 107(5):1969-75

In vitro and in vivo association of transforming growth factor-beta 1 with hepatic fibrosis. Czaja MJ, et al. **J Cell Biol** 1989 Jun;108(6):2477-82

An evolutionarily conserved enzyme degrades transforming growth factor-alpha as well as insulin. Garcia JV, et al. **J Cell Biol** 1989 Sep;109(3):1301-7

Production of transforming growth factor beta by human peripheral blood monocytes and neutrophils. Grotendorst GR, et al. **J Cell Physiol** 1989 Aug;140(2):396-402

Effects of N,N-dimethylformamide and extracellular matrix on transforming growth factor-beta binding to a human colon carcinoma cell line. Levine AE, et al. **J Cell Physiol** 1989 Mar;138(3):459-66

Correlation of fibrosis and transforming growth factor-beta type 2 levels in the eye. Connor TB Jr, et al. **J Clin Invest** 1989 May;83(5):1661-6

Differential expression of transforming growth factors alpha and beta in rat intestinal epithelial cells. Koyama SY, et al. **J Clin Invest** 1989 May;83(5):1768-73

Transforming growth factor-beta. Murine glomerular receptors and responses of isolated glomerular cells. MacKay K, et al. **J Clin Invest** 1989 Apr;83(4):1160-7

Active and latent forms of transforming growth factor beta activity in synovial effusions. Fava R, et al. **J Exp Med** 1989 Jan 1;169(1):291-6

TGF-beta-like activity in CNS tumors [letter] Samuels-Pakalnis V. **J Neurosurg** 1988 Nov;69(5):806-7

Analysis of transforming growth factor beta receptor binding in embryonic, fetal, and adult rabbit fibroblasts. Durham LA 3d, et al. **J Pediatr Surg** 1989 Aug;24(8):784-8

Molecular events in the processing of recombinant type 1 pre-pro-transforming growth factor beta to the mature polypeptide. Gentry LE, et al. **Mol Cell Biol** 1988 Oct; 8(10):4162-8

Binding of transforming growth factor-beta to cell surface proteins varies with cell type. Segarini PR, et al. **Mol Endocrinol** 1989 Feb;3(2):261-72

Interaction between transforming growth factor-alpha and c-Ha-ras p21 in progression of human gastric carcinoma. Yamamoto T, et al. **Pathol Res Pract** 1988 Nov; 183(6):663-9

PHARMACOLOGY

The effect of type beta transforming growth factor on proliferation of clonogenic cells from human gliomas. Helseth E, et al. **Acta Neurochir Suppl (Wien)** 1988; 43:118-20

Regulation of cyclooxygenase synthesis by EGF and corticosteroids. Bailey JM. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:450-3

Collagen synthesis by normal and fibrotic human lung fibroblasts and the effect of transforming growth factor-beta. Raghu G, et al. **Am Rev Respir Dis** 1989 Jul; 140(1):95-100

Inhibitory action of transforming growth factor beta on thyroid cells. Colletta G, et al. **Ann N Y Acad Sci** 1988; 551:372-3

Transforming growth factor-beta: multifunctional regulator of cell growth and phenotype. Wakefield LM, et al. **Ann N Y Acad Sci** 1988;551:290-7; discussion 297-8

Acceleration of tensile strength of incisions treated with EGF and TGF-beta. Brown GL, et al. **Ann Surg** 1988 Dec; 208(6):788-94

Transforming growth factor-beta 1 is a potent inducer of plasminogen activator inhibitor type-1 in human glioblastoma and carcinoma cell lines. Helseth E, et al. **APMIS** 1988 Sep;96(9):845-9

Fatty acid cyclooxygenase activity stimulated by transforming growth factor-beta in mouse osteoblastic cells (MC3T3-E1). Sumitani K, et al. **Arch Biochem Biophys** 1989 May 1;270(2):588-95

Transforming growth factor-beta causes partial inhibition of interleukin 1-stimulated cartilage degradation in vitro. Andrews HJ, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):144-50

Liver fat storing cell proliferation is stimulated by epidermal growth factor/transforming growth factor alpha and inhibited by transforming growth factor beta. Bachem MG, et al. **Biochem Biophys Res Commun** 1989 Jul 31; 162(2):708-14

Transforming growth factor-beta is a potent inhibitor of IL-1 induced protease activity and cartilage proteoglycan degradation. Chandrasekhar S, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1352-9

Transforming growth factor-beta-induced mitogenesis of human bone cancer cells. Datta HK, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):672-6

Regulation of colony formation of differentiated chondrocytes in soft agar by transforming growth factor-beta. Iwamoto M, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1006-11

Suppression of TNF-stimulated proliferation of diploid fibroblasts and TNF-induced cytotoxicity against transformed fibroblasts by TGF-beta. Kamijo R, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):155-62

Multiple forms of SppI (secreted phosphoprotein, osteopontin) synthesized by normal and transformed rat bone cell populations: regulation by TGF-beta. Kubota T, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1453-9

Transforming growth factor-beta stimulates the expression of endothelin mRNA by vascular endothelial cells. Kurihara H, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1435-40

Inhibitory effect of transforming growth factor-beta on epidermal growth factor-induced proliferation of cultured rat aortic smooth muscle cells. Ouchi Y, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):301-7

Transforming growth factor alpha stimulates prostacyclin production by cultured human vascular endothelial cells more potently than epidermal growth factor. Ristimäki A. **Biochem Biophys Res Commun** 1989 May 15;160(3):1100-5

Stimulation of insulin secretion by transforming growth factor-beta. Totsuka Y, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1060-5

Transforming growth factor-beta (TGF beta) is chemotactic for human monocytes and induces their expression of angiogenic activity. Wiseman DM, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):793-800

Collagen synthesis by human fibroblasts. Regulation by transforming growth factor-beta in the presence of other inflammatory mediators. Narayanan AS, et al. **Biochem J** 1989 Jun 1;260(2):463-9

Transforming growth factor beta selectively inhibits normal and leukemic human bone marrow cell growth in vitro. Sing GK, et al. **Blood** 1988 Nov;72(5):1504-11

Effects of type beta transforming growth factors on haematopoietic progenitor cells. Hino M, et al. **Br J Haematol** 1988 Oct;70(2):143-7

Effect of transforming growth factor-beta on DNA synthesis by growth plate chondrocytes: modulation by factors present in serum. O'Keefe RJ, et al. **Calcif Tissue Int** 1988 Dec;43(6):352-8

Diverse cellular responses elicited from human colon carcinoma cells by transforming growth factor-beta. Chakrabarty S, et al. **Cancer Res** 1989 Apr 15;49(8):2112-7

Dual effect of transforming growth factor beta on rat thyroid cells: inhibition of thyrotropin-induced proliferation and reduction of thyroid-specific differentiation markers. Colletta G, et al. **Cancer Res** 1989 Jul 1;49(13):3457-62

Lack of correlation between sensitivity to growth inhibition and receptor number for transforming growth factor beta in human squamous carcinoma cell lines. Hébert CD, et al. **Cancer Res** 1989 Jun 15;49(12):3196-202

Effects of serum, transforming growth factor type beta, or 12-O-tetradecanoyl-phorbol-13-acetate on ionized cytosolic calcium concentration in normal and transformed human bronchial epithelial cells. Miyashita M, et al. **Cancer Res** 1989 Jan 1;49(1):63-7

Characterization of transforming growth factor-beta-resistant subclones isolated from a transforming growth factor-beta-sensitive human colon carcinoma cell line. Mulder KM, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7120-5

Growth stimulation, altered regulation of epidermal growth factor receptors, and autocrine transformation of spontaneously transformed normal rat kidney cells by transforming growth factor beta. Nugent MA, et al. **Cancer Res** 1989 Jul 15;49(14):3884-90

Control of the expression of c-sis mRNA in human glioblastoma cells by phorbol ester and transforming growth factor beta 1. Press RD, et al. **Cancer Res** 1989 Jun 1;49(11):2914-20

Modulation of plasminogen activator activity in human endometrial adenocarcinoma cells by basic fibroblast growth factor and transforming growth factor beta. Presta M, et al. **Cancer Res** 1988 Nov 15;48(22):6384-9

Loss of growth factor dependence and conversion of transforming growth factor-beta 1 inhibition to stimulation in metastatic H-ras-transformed murine fibroblasts. Schwarz LC, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):6999-7003

Sensitivity of hamster tracheal epithelial cells to asbestiform

minerals modulated by serum and by transforming growth factor beta 1. Seako AM, et al. **Cancer Res** 1989 May 15; 49(10):2743–9

Increased resistance to transforming growth factor beta accompanies neoplastic progression of rat tracheal epithelial cells. Hubbs AF, et al. **Carcinogenesis** 1989 Sep; 10(9):1599–605

Altered regulation of intercellular communication by epidermal growth factor, transforming growth factor–beta and peptide hormones in normal human keratinocytes. Madhukar BV, et al. **Carcinogenesis** 1989 Jan;10(1):13–20

Bovine colostric transforming growth factor–beta–like peptide that induces growth inhibition and changes in morphology of human osteogenic sarcoma cells (MG–63). Tokuyama H, et al. **Cell Biol Int Rep** 1989 Mar;13(3):251–8

Effect of platelet–derived transforming growth factor (TGF) type beta 1 on murine inflammatory mononuclear phagocytes: increased fibronectin production. Strassmann G, et al. **Cell Immunol** 1989 Jul;121(2):306–16

Regulation of Fc epsilon receptor 2 (CD23) expression on a human eosinophilic cell line EoL3 and a human monocytic cell line U937 by transforming growth factor beta. Tanaka M, et al. **Cell Immunol** 1989 Aug; 122(1):96–107

The effect of transforming growth factor–beta on mouse mesangial cell proliferation. Yamashita W, et al. **Clin Exp Immunol** 1989 Aug;77(2):285–8

Chemotactic response of embryonic limb bud mesenchymal cells and muscle–derived fibroblasts to transforming growth factor–beta. Lucas PA, et al. **Connect Tissue Res** 1988;18(1):1–7

Recombinant transforming growth factor beta accelerates incisional wound healing. McGee GS, et al. **Curr Surg** 1989 Mar–Apr;46(2):103–6

TGF–beta 1–induced inhibition of mouse mammary ductal growth: developmental specificity and characterization. Daniel CW, et al. **Dev Biol** 1989 Sep;135(1):20–30

Promotion of embryonic chick limb cartilage differentiation by transforming growth factor–beta. Kulyk WM, et al. **Dev Biol** 1989 Oct;135(2):424–30

Epithelial–mesenchymal cell transformation in the embryonic heart can be mediated, in part, by transforming growth factor beta. Potts JD, et al. **Dev Biol** 1989 Aug; 134(2):392–401

Tenascin: cDNA cloning and induction by TGF–beta. Pearson CA, et al. **EMBO J** 1988 Oct;7(10):2977–82

Parathyroid hormone–related protein modulates the effect of transforming growth factor–beta on deoxyribonucleic acid and collagen synthesis in fetal rat bone cells. Centrella M, et al. **Endocrinology** 1989 Jul;125(1):199–208

Activin–A, inhibin and transforming growth factor–beta modulate growth of two gonadal cell lines. Gonzalez–Manchon C, et al. **Endocrinology** 1989 Sep; 125(3):1666–72

Interleukin–1 in combination with transforming growth factor–alpha produces enhanced bone resorption in vitro. Lorenzo JA, et al. **Endocrinology** 1988 Nov; 123(5):2194–200

Transcriptional regulation of osteocalcin production by transforming growth factor–beta in rat osteoblast–like cells. Noda M. **Endocrinology** 1989 Feb;124(2):612–7

In vivo stimulation of bone formation by transforming growth factor–beta. Noda M, et al. **Endocrinology** 1989 Jun; 124(6):2991–4

Interleukin 7 (murine pre–B cell growth factor/lymphopoietin 1) stimulates thymocyte growth: regulation by transforming growth factor beta. Chantry D, et al. **Eur J Immunol** 1989 Apr;19(4):783–6

Transforming growth factor–beta 2 down–regulates HLA–DR antigen expression on human malignant glioma cells. Zuber P, et al. **Eur J Immunol** 1988 Oct;18(10):1623–6

Transforming growth factor (TGF beta) decreases the proliferation of human bone marrow fibroblasts by inhibiting the platelet–derived growth factor (PDGF) binding. Bryckaert MC, et al. **Exp Cell Res** 1988 Dec; 179(2):311–21

Differential sensitivity of subclasses of human colon carcinoma cell lines to the growth inhibitory effects of transforming growth factor–beta 1. Hoosein NM, et al. **Exp Cell Res** 1989 Apr;181(2):442–53

Uncoupling of the calcium–induced terminal differentiation and the activation of membrane–associated transglutaminase in murine keratinocytes by type–beta transforming growth factor. Reiss M, et al. **Exp Cell Res** 1989 Jul;183(1):101–11

Opposing effects of basic fibroblast growth factor and transforming growth factor–beta on the proliferation of cultured bovine retinal capillary endothelial (BREC) cells. Bensaid M, et al. **Exp Eye Res** 1989 Jun;48(6):791–9

Interaction of transforming growth factor–beta 1 with hemopoietic growth factors in the regulation of human normal and leukemic myelopoiesis. Aglietta M, et al. **Exp Hematol** 1989 Mar;17(3):296–9

Synergistic enhancement of type I and III collagen production in cultured fibroblasts by transforming growth factor–beta and ascorbate. Appling WD, et al. **FEBS Lett** 1989 Jul 3;250(2):541–4

Transforming growth factors beta 1 and beta 2 as well as milk growth factor decrease anti–CD3–induced proliferation of human lymphocytes without inhibiting the anti–CD3–mediated increase of [Ca2+]i and the activation of protein kinase C. Stoeck M, et al. **FEBS Lett** 1989 Jun 5;249(2):289–92

TGF beta down–regulates TLiSA1 expression and inhibits the differentiation of precursor lymphocytes into CTL and LAK cells. Jin B, et al. **Immunology** 1989 Apr;66(4):570–6

Effects of transforming growth factor beta on growth of human mammary epithelial cells in culture. Hosobuchi M, et al. **In Vitro Cell Dev Biol** 1989 Aug;25(8):705–13

Modulation of actin mRNAs in cultured vascular cells by matrix components and TGF–beta 1. Kocher O, et al. **In Vitro Cell Dev Biol** 1989 May;25(5):424–34

Transforming growth factor–beta inhibits cellular adenylate cyclase activity in cultured human arterial endothelial cells. Mioh H, et al. **In Vitro Cell Dev Biol** 1989 Jan;25(1):101–4

Stimulatory role of transforming growth factors in multistage skin carcinogenesis: possible explanation for the tumor–inducing effect of wounding in initiated NMRI mouse skin. Fürstenberger G, et al. **Int J Cancer** 1989 May 15;43(5):915–21

The glioblastoma–derived T–cell suppressor factor/transforming growth factor beta 2 inhibits the generation of lymphokine–activated killer (LAK) cells. Kuppner MC, et al. **Int J Cancer** 1988 Oct 15;42(4):562–7

Integrin–receptor–mediated differentiation and growth inhibition are enhanced by transforming growth factor–beta in colorectal tumour cells grown in collagen gel. Pignatelli M, et al. **Int J Cancer** 1989 Sep 15;44(3):518–23

Transforming growth factor–beta inhibition of epithelial cell proliferation linked to the expression of a 53–kDa membrane receptor. Boyd FT, et al. **J Biol Chem** 1989 Feb 5;264(4):2272–8

Transforming growth factor–beta stimulation of lung fibroblast prostaglandin E2 production. Diaz A, et al. **J Biol Chem** 1989 Jul 15;264(20):11554–7

Transcriptional regulation of proto–oncogene expression by epidermal growth factor, transforming growth factor beta 1, and triiodothyronine in MDA–468 cells. Fernandez–Pol JA, et al. **J Biol Chem** 1989 Mar 5;264(7):4151–6

Differential regulation of expression of two platelet–derived growth factor receptor subunits by transforming growth factor–beta. Gronwald RG, et al. **J Biol Chem** 1989 May 15;264(14):8120–5

Regulation of cell adhesion receptors by transforming growth factor–beta. Concomitant regulation of integrins that share a common beta 1 subunit. Heino J, et al. **J Biol Chem** 1989 Jan 5;264(1):380–8

Regulation of cell adhesion receptors by transforming growth factor–beta. Regulation of vitronectin receptor and LFA–1. Ignotz RA, et al. **J Biol Chem** 1989 Jan 5;264(1):389–92

Transforming growth factor beta 1 and cAMP inhibit transcription of epidermal growth factor– and oncogene–induced transin RNA. Kerr LD, et al. **J Biol Chem** 1988 Nov 15;263(32):16999–7005

Transforming growth factor beta and epidermal growth factor alter calcium influx and phosphatidylinositol turnover in rat–1 fibroblasts. Muldoon LL, et al. **J Biol Chem** 1988 Dec 15;263(35):18834–41

Independent regulation of collagenase, 72–kDa progelatinase, and metalloendoproteinase inhibitor expression in human fibroblasts by transforming growth factor–beta. Overall CM, et al. **J Biol Chem** 1989 Jan 25;264(3):1860–9

Regulation of type 1 plasminogen activator inhibitor gene expression in cultured bovine aortic endothelial cells. Induction by transforming growth factor–beta, lipopolysaccharide, and tumor necrosis factor–alpha. Sawdey M, et al. **J Biol Chem** 1989 Jun 25; 264(18):10396–401

Transforming growth factor–beta increases transcription of the genes encoding the epidermal growth factor receptor and fibronectin in normal rat kidney fibroblasts. Thompson KL, et al. **J Biol Chem** 1988 Dec 25;263(36):19519–24

Effects of transforming growth factor type beta upon bone cell populations grown either in monolayer or semisolid medium. Guenther HL, et al. **J Bone Miner Res** 1988 Jun; 3(3):269–78

Effects of transforming growth factors beta 1 and beta 2 on a mouse clonal, osteoblastlike cell line MC3T3–E1. Ibbotson KJ, et al. **J Bone Miner Res** 1989 Feb;4(1):37–45

Transforming growth factor beta modulates proliferation of osteoblastic cells: relation to its effect on receptor levels for epidermal growth factor. Uneno S, et al. **J Bone Miner Res** 1989 Apr;4(2):165–71

Transforming growth factor–beta does not alter interleukin–1 expression in cultured human macrophages. Hurme M, et al. **J Cell Biochem** 1989 Apr;39(4):467–75

Transforming growth factor–beta 1 enhances the suppression of human hematopoiesis by tumor necrosis factor–alpha or recombinant interferon–alpha. Sing GK, et al. **J Cell Biochem** 1989 Feb;39(2):107–15

Transforming growth factor–beta activity is potentiated by heparin via dissociation of the transforming growth factor–beta/alpha 2–macroglobulin inactive complex. McCaffrey TA, et al. **J Cell Biol** 1989 Jul;109(1):441–8

Altered structure of the hybrid cell surface proteoglycan of mammary epithelial cells in response to transforming growth factor–beta. Rasmussen S, et al. **J Cell Biol** 1988 Nov;107(5):1959–67

Modulation of adipocyte differentiation by tumor necrosis factor and transforming growth factor beta. Torti FM, et al. **J Cell Biol** 1989 Mar;108(3):1105–13

Regulation of skeletal muscle satellite cell proliferation and differentiation by transforming growth factor–beta, insulin–like growth factor I, and fibroblast growth factor. Allen RE, et al. **J Cell Physiol** 1989 Feb;138(2):311–5

Effects of transforming growth factor beta and epidermal growth factor on cell proliferation and the formation of bone nodules in isolated fetal rat calvaria cells. Antosz ME, et al. **J Cell Physiol** 1989 Aug;140(2):386–95

Transforming growth factor beta responsiveness is modulated by the extracellular collagen matrix during hepatic ito cell culture. Davis BH. **J Cell Physiol** 1988 Sep;136(3):547–53

Transforming growth factor–beta and fibroblast growth factor act synergistically to inhibit collagen II synthesis through a mechanism involving regulatory DNA sequences. Horton WE Jr, et al. **J Cell Physiol** 1989 Oct; 141(1):8–15

Stimulation of cartilage–matrix proteoglycan synthesis by morphologically transformed chondrocytes grown in the presence of fibroblast growth factor and transforming growth factor–beta. Inoue H, et al. **J Cell Physiol** 1989 Feb;138(2):329–37

Comparison of the biological actions of TGF beta–1 and TGF beta–2: differential activity in endothelial cells. Jennings JC, et al. **J Cell Physiol** 1988 Oct;137(1):167–72

Differential inhibitory effects of TGF–beta on EGF–, PDGF–, and HBGF–1–stimulated MG63 human osteosarcoma cell growth: possible involvement of growth factor interactions at the receptor and postreceptor levels. Mioh H, et al. **J Cell Physiol** 1989 Jun;139(3):509–16

Growth–inhibitory effect of TGF–B on human fetal adrenal cells in primary monolayer culture. Riopel L, et al. **J Cell Physiol** 1989 Aug;140(2):233–8

Environment–dependent growth inhibition of human epidermal keratinocytes by recombinant human transforming growth factor–beta. Rollins BJ, et al. **J Cell Physiol** 1989 Jun;139(3):455–62

TGF–beta stimulates primary human skin fibroblast DNA synthesis via an autocrine production of PDGF–related peptides. Soma Y, et al. **J Cell Physiol** 1989 Aug; 140(2):246–53

Transforming growth factors beta slow down cell–cycle progression in a murine interleukin–2 dependent T–cell line. Stoeck M, et al. **J Cell Physiol** 1989 Oct;141(1):65–73

Native and a synthetic analogue of the malignancy–associated parathyroid hormone–like protein have in vitro transforming growth factor–like properties. Insogna KL, et al. **J Clin Invest** 1989 Mar;83(3):1057–60

Anchorage–independent growth of synoviocytes from arthritic and normal joints. Stimulation by exogenous platelet–derived growth factor and inhibition by transforming growth factor–beta and retinoids. Lafyatis R, et al. **J Clin Invest** 1989 Apr;83(4):1267–76

Transforming growth factor beta specifically enhances IgA production by lipopolysaccharide–stimulated murine B lymphocytes. Coffman RL, et al. **J Exp Med** 1989 Sep 1;170(3):1039–44

Transforming growth factor–beta 1 selectively inhibits IL–3–dependent mast cell proliferation without affecting mast cell function or differentiation. Broide DH, et al. **J Immunol** 1989 Sep 1;143(5):1591–7

Modulation of cytokine production by transforming growth factor–beta. Chantry D, et al. **J Immunol** 1989 Jun 15; 142(12):4295–300

Normal B cell precursors responsive to recombinant murine IL–7 and inhibition of IL–7 activity by transforming growth factor–beta. Lee G, et al. **J Immunol** 1989 Jun 1; 142(11):3875–83

Immortalization of EBV–infected B cells is not influenced by exogenous signals acting on B cell proliferation. Effects of mutant EL–4 thymoma cells and transforming growth factor–beta. Straub C, et al. **J Immunol** 1989 Jan 1; 142(1):87–93

Stimulatory effects of transforming growth factor–beta and epidermal growth factor on epidermal cell outgrowth from porcine skin explant cultures. Hebda PA. **J Invest Dermatol** 1988 Nov;91(5):440–5

The cytostatic effects of alpha–interferon may be mediated by transforming growth factor–beta. Kerr DJ, et al. **J Mol Endocrinol** 1989 Mar;2(2):131–6

Inhibition and promotion of differentiated–like phenotype of a human lung carcinoma in athymic mice by natural and recombinant forms of transforming growth factor–beta. Twardzik DR, et al. **J Natl Cancer Inst** 1989 Aug 2; 81(15):1182–5

The effects of type beta transforming growth factor on proliferation and epidermal growth factor receptor expression in a human glioblastoma cell line. Helseth E, et al. **J Neurooncol** 1988 Nov;6(3):269–76

Type beta transforming growth factor and epidermal growth factor suppress the plasminogen activator activity in a human glioblastoma cell line. Helseth E, et al. **J Neurooncol** 1988 Nov;6(3):277–83

Inhibition of lymphocyte function by glioblastoma–derived transforming growth factor beta 2. Kuppner MC, et al. **J Neurosurg** 1989 Aug;71(2):211–7

Contractile actions of epidermal growth factor–urogastrone in isolated smooth muscle preparations from guinea pig stomach: structure–activity relationships and comparison with the effects of human transforming growth factor–alpha. Hollenberg MD, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):384–90

Transforming growth factor–beta inhibits the growth of renal cell carcinoma in vitro. Gomella LG, et al. **J Urol** 1989 May;141(5):1240–4

Potentiation of invasive capacity of rat ascites hepatoma cells

by transforming growth factor-beta. Mukai M, et al. **Jpn J Cancer Res** 1989 Feb;80(2):107–10

Inhibitory action of transforming growth factor-beta on induction of differentiation of myeloid leukemia cells. Okabe-Kado J, et al. **Jpn J Cancer Res** 1989 Mar; 80(3):228–32

Endothelial cell behavior after denudation injury is modulated by transforming growth factor-beta1 and fibronectin. Madri JA, et al. **Lab Invest** 1989 Jun; 60(6):755–65

The suppressive effects of type beta transforming growth factor (TGF beta) on primitive murine hemopoietic progenitors are abrogated by interleukin-6 and granulocyte colony-stimulating factor. Kishi K, et al. **Leukemia** 1989 Oct;3(10):687–91

Inhibition of the in vitro growth of blast progenitors from acute myeloblastic leukemia patients by transforming growth factor-beta (TGF-beta). Nara N, et al. **Leukemia** 1989 Aug;3(8):572–7

Effects of human transforming growth factors on topoisomerases from normal fibroblasts. Genovese JA, et al. **Life Sci** 1988;43(25):2137–43

Transforming growth factor beta increases cell surface binding and assembly of exogenous (plasma) fibronectin by normal human fibroblasts. Allen-Hoffmann BL, et al. **Mol Cell Biol** 1988 Oct;8(10):4234–42

Selective inhibition of growth-related gene expression in murine keratinocytes by transforming growth factor beta. Coffey RJ Jr, et al. **Mol Cell Biol** 1988 Aug;8(8):3088–93

Structure-function analysis of synthetic and recombinant derivatives of transforming growth factor alpha. Defeo-Jones D, et al. **Mol Cell Biol** 1988 Aug; 8(8):2999–3007

Enhanced jun gene expression is an early genomic response to transforming growth factor beta stimulation. Pertovaara L, et al. **Mol Cell Biol** 1989 Mar;9(3):1255–62

Ovarian transforming growth factor-beta (TGF beta): cellular site(s), and mechanism(s) of action. Adashi EY, et al. **Mol Cell Endocrinol** 1989 Feb;61(2):247–56

Effects of transforming growth factor beta on ovine adrenocortical cells. Rainey WE, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):189–98

Androgens and transforming growth factor beta modulate the growth response to epidermal growth factor in human prostatic tumor cells (LNCaP). Schuurmans AL, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):101–4

Differential effects of transforming growth factor beta on human prostate cancer cells in vitro. Wilding G, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):79–87

Transforming growth factor beta enhances basal and FSH-stimulated inhibin production by rat granulosa cells in vitro. Zhang ZW, et al. **Mol Cell Endocrinol** 1988 Aug; 58(2–3):161–6

Blockade of the epidermal growth factor receptor inhibits transforming growth factor alpha-induced but not estrogen-induced growth of hormone-dependent human breast cancer. Arteaga CL, et al. **Mol Endocrinol** 1988 Nov; 2(11):1064–9

Mesoderm induction by transforming growth factor beta: medium conditioned by TGF-beta-treated ectoderm enhances the inducing activity. Knöchel W, et al. **Naturwissenschaften** 1989 Jun;76(6):270–2

Transforming growth factor beta stimulates phosphoinositol metabolism and translocation of protein kinase C in cultured astrocytes. Robertson PL, et al. **Neurosci Lett** 1988 Oct 31;93(1):107–13

Megakaryocytic inhibitors derived from platelets: effect of transforming growth factor-beta (TGF-beta) on murine megakaryocytopoiesis. Ishibashi T. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1597–605

Modulation of chondroblast phenotype by transforming growth factor-beta. Seyedin SM, et al. **Pathol Immunopathol Res** 1988;7(1–2):38–42

Terminal differentiation and calcification in rabbit chondrocyte cultures grown in centrifuge tubes: regulation by transforming growth factor beta and serum factors. Kato Y, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9552–6

Transforming growth factor beta reverses the glucocorticoid-induced wound-healing deficit in rats: possible regulation in macrophages by platelet-derived growth factor. Pierce GF, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2229–33

Actions of transforming growth factors on amnion cell prostaglandin biosynthesis. Mitchell MD. **Prostaglandins Leukot Essent Fatty Acids** 1988 Sep; 33(3):157–8

Endothelial adhesiveness for blood neutrophils is inhibited by transforming growth factor-beta. Gamble JR, et al. **Science** 1988 Oct 7;242(4875):97–9

Reversal of Adriamycin-impaired wound healing by transforming growth factor-beta. Curtsinger LJ, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):517–22

[Modulation, by transforming growth factor beta (TGF beta), of the mitogenic effect of fibroblast growth factor (FGF) on rat oligodendrocytes in culture] Besnard F, et al. **C R Acad Sci [III]** 1989;308(10):287–92 (Eng. Abstr.) **(Fre)**

[Transforming growth factor of beta-type] Stolka RS. **Ukr Biokhim Zh** 1988 Sep–Oct;60(5):91–103 (69 ref.) (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Transforming growth factor beta in the control of epidermal proliferation. Barnard JA, et al. **Am J Med Sci** 1988 Sep; 296(3):159–63 (46 ref.)

Regulation of mesangial cell growth by polypeptide mitogens. Inhibitory role of transforming growth factor beta. Jaffer F, et al. **Am J Pathol** 1989 Aug;135(2):261–9

Keratinocytes produce and are regulated by transforming growth factors. Pittelkow MR, et al. **Ann N Y Acad Sci** 1988;548:211–24 (83 ref.)

A strategy for determining the pathogenesis of systemic sclerosis. Is transforming growth factor beta the answer? Leroy EC, et al. **Arthritis Rheum** 1989 Jul;32(7):817–25 (66 ref.)

Transforming growth factor-beta: new chemical forms and new biological roles. Sporn MB, et al. **Biofactors** 1988 Jan; 1(1):89–93 (69 ref.)

Secreted growth factors from estrogen receptor-negative human breast cancer do not support growth of estrogen receptor-positive breast cancer in the nude mouse model. Osborne CK, et al. **Breast Cancer Res Treat** 1988 Jul; 11(3):211–9

Transforming growth factors in the regulation of malignant cell growth and invasion. Keski-Oja J, et al. **Cancer Invest** 1988;6(6):705–24 (206 ref.)

Participation of tenascin and transforming growth factor-beta in reciprocal epithelial-mesenchymal interactions of MCF7 cells and fibroblasts. Chiquet-Ehrismann R, et al. **Cancer Res** 1989 Aug 1;49(15):4322–5

Transmembrane TGF-alpha precursors activate EGF/TGF-alpha receptors. Brachmann R, et al. **Cell** 1989 Feb 24;56(4):691–700

Transforming growth factor-beta: multiple effects on cell differentiation and extracellular matrices. Rizzino A. **Dev Biol** 1988 Dec;130(2):411–22 (148 ref.)

Transforming growth factor-alpha stimulates proto-oncogene c-jun expression and a mitogenic program in primary cultures of adult rat hepatocytes. Brenner DA, et al. **DNA** 1989 May;8(4):279–85

Chemical induction of oncogene mutations and growth factor activity in mouse skin carcinogenesis. Bailleul B, et al. **Environ Health Perspect** 1989 May;81:23–7 (36 ref.)

Skeletal tissue and transforming growth factor beta. Centrella M, et al. **FASEB J** 1988 Dec;2(15):3066–73 (48 ref.)

Growth control of A431 cells in protein-free medium: secretory products do not affect cell growth. Masuda Y, et al. **In Vitro Cell Dev Biol** 1988 Sep;24(9):893–9

Regulation of epithelial cell proliferation by transforming growth factors. Bascom CC, et al. **J Cell Biochem** 1989 Jan;39(1):25–32 (77 ref.)

Transforming growth factor beta: possible roles in the regulation of normal and leukemic hematopoietic cell growth. Keller JR, et al. **J Cell Biochem** 1989 Feb; 39(2):175–84 (26 ref.)

Platelet-derived growth factor and transforming growth factor-beta enhance tissue repair activities by unique mechanisms. Pierce GF, et al. **J Cell Biol** 1989 Jul; 109(1):429–40

Inhibition of endothelial cell movement by pericytes and smooth muscle cells: activation of a latent transforming growth factor-beta 1-like molecule by plasmin during co-culture. Sato Y, et al. **J Cell Biol** 1989 Jul;109(1):309–15

Modulation of TGF-beta type 1 receptor: flow cytometric detection with biotinylated TGF-beta. Newman W, et al. **J Cell Physiol** 1989 Oct;141(1):170–80

Transforming growth factor beta regulates thyroid growth. Role in the pathogenesis of nontoxic goiter. Grubeck-Loebenstein B, et al. **J Clin Invest** 1989 Mar; 83(3):764–70

Products of lipopolysaccharide-activated macrophages (tumor necrosis factor-alpha, transforming growth factor-beta) but not lipopolysaccharide modify DNA synthesis by rat trophoblast cells exhibiting the 80-kDa lipopolysaccharide-binding protein. Hunt JS, et al. **J Immunol** 1989 Sep 1;143(5):1606–13

Further studies of the role of transforming growth factor-beta in human B cell function. Kehrl JH, et al. **J Immunol** 1989 Sep 15;143(6):1868–74

Transforming growth factor beta (TGF-beta) induces fibrosis in a fetal wound model. Krummel TM, et al. **J Pediatr Surg** 1988 Jul;23(7):647–52

Transforming growth factor-beta. Multiple actions and potential clinical applications [clinical conference] Sporn MB, et al. **JAMA** 1989 Aug 18;262(7):938–41 (28 ref.)

Regulation of liver growth: protooncogenes and transforming growth factors. Fausto N, et al. **Lab Invest** 1989 Jan; 60(1):4–13 (83 ref.)

Peptide regulatory factors in embryonic development. Slack JM. **Lancet** 1989 Jun 10;1(8650):1312–5 (25 ref.)

Effect of transforming growth factor-beta on human chorionic gonadotropin induced testosterone production by cultured rat testicular cells. Fauser BC, et al. **Life Sci** 1988;43(17):1363–70

TGF alpha stimulates growth of skin papillomas by autocrine and paracrine mechanisms but does not cause neoplastic progression. Finzi E, et al. **Mol Carcinog** 1988;1(1):7–12

Autocrine interaction between TGF alpha and the EGF-receptor: quantitative requirements for induction of the malignant phenotype. Di Marco E, et al. **Oncogene** 1989 Jul;4(7):831–8

TGF beta inhibits Go/S-phase transition in primary fibroblasts. Loss of response to the antigrowth effect of TGF beta is observed after immortalization. Sorrentino V, et al. **Oncogene** 1989 May;4(5):569–74

Transforming growth factor alpha may be a physiological regulator of liver regeneration by means of an autocrine mechanism. Mead JE, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1558–62

Transforming growth factor beta: biochemistry and roles in embryogenesis, tissue repair and remodeling, and carcinogenesis. Roberts AB, et al. **Recent Prog Horm Res** 1988;44:157–97 (165 ref.)

Transforming growth factor beta and inhibition of hepatocellular proliferation. Strain AJ. **Scand J Gastroenterol Suppl** 1988;151:37–45 (103 ref.)

Membrane-anchored growth factors work! Steele RE. **Trends Biochem Sci** 1989 Jun;14(6):201–2 (19 ref.)

Lineage and pattern in the developing vertebrate limb. Newman SA. **Trends Genet** 1988 Dec;4(12):329–32 (35 ref.)

[Transforming growth factor alpha] Qian DP, et al. **Sheng Li Ke Hsueh Chin Chan** 1988 Oct;19(4):342–6 (51 ref.) **(Chi)**

[Role of growth factors of platelets (PDGF, TGF-beta, EGF) in the pathogenesis of myelofibrosis] Kimura A, et al. **Rinsho Byori** 1989 Apr;Spec No 81:1–8 **(Jpn)**

SECRETION

L-428 nodular sclerosing Hodgkin's cell secretes a unique transforming growth factor-beta active at physiologic pH. Newcom SR, et al. **J Clin Invest** 1988 Dec;82(6):1915–21

Evaluation of the paracrine and endocrine effects of genitourinary tumor produced growth factors. Linehan WM, et al. **Prog Clin Biol Res** 1988;277:135–43 (20 ref.)

THERAPEUTIC USE

Transforming growth factor beta. A biologic chorioretinal glue. Smiddy WE, et al. **Arch Ophthalmol** 1989 Apr; 107(4):577–80

Growth factors bFGF and TGB beta accelerate the rate of wound repair in normal and in diabetic rats. Broadley KN, et al. **Int J Tissue React** 1988;10(6):345–53

TRANSFORMING REGION see **BASE SEQUENCE**

TRANSGENIC ANIMALS see **ANIMALS, TRANSGENIC**

TRANSGENIC MICE see **MICE, TRANSGENIC**

TRANSGLUTAMINASE see **PROTEIN-GLUTAMINE GAMMA-GLUTAMYLTRANSFERASE**

TRANSIENT ISCHEMIC ATTACK see **CEREBRAL ISCHEMIA, TRANSIENT**

TRANSIENT SITUATIONAL DISTURBANCE see **ADJUSTMENT DISORDERS**

TRANSIENTS AND MIGRANTS

Blood pressure patterns and migration: a 14-year cohort study of adult Tokelauans. Salmond CE, et al. **Am J Epidemiol** 1989 Jul;130(1):37–52

Migration models of prehistoric postmarital residence. Konigsberg LW. **Am J Phys Anthropol** 1988 Dec; 77(4):471–82

Statistical analysis of the migration component of genetic drift. Rogers AR, et al. **Am J Phys Anthropol** 1988 Dec; 77(4):451–7

Three components of genetic drift in subdivided populations. Rogers AR. **Am J Phys Anthropol** 1988 Dec;77(4):435–49

Lead toxicity and iron deficiency in Utah migrant children. Ratcliffe SD, et al. **Am J Public Health** 1989 May; 79(5):631–3

Migration pattern and genetic marker distribution of the Afro-American population of Bluefields, Nicaragua. Biondi G, et al. **Ann Hum Biol** 1988 Nov–Dec;15(6):399–412

Migrants and health [letter] Spencer R. **Aust Fam Physician** 1989 Jul;18(7):869

A few comments on migrants in The Netherlands. Van Geuns HA. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):32–3

Older Canadians in Florida. The social networks of international seasonal migrants. Marshall VW, et al. **Compr Gerontol [B]** 1988 Aug;2(2):63–8

The prevalence of Schistosoma mansoni in migrants from endemic areas living in the Entebbe Peninsula, Uganda. Odongo-Aginya EI, et al. **East Afr Med J** 1987 Sep; 64(9):671–9

Migration, ethnic minorities and tuberculosis [editorial] Tala E. **Eur Respir J** 1989 Jun;2(6):492–3

Hormonal correlates of migration and territorial behavior in juvenile willow tits during autumn. Silverin B, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):148–56

State economic implications of elderly interstate migration. Crown WH. **Gerontologist** 1988 Aug;28(4):533–9 (50 ref.)

Clan-structured migration and phenotypic differentiation in the Jirels of Nepal. Williams-Blangero S. **Hum Biol** 1989 Apr;61(2):143–57

As farmworkers help keep America healthy, illness may be their harvest [news] Goldsmith MF. **JAMA** 1989 Jun 9; 261(22):3207–9, 3213

Tuberculosis among migrant farm workers [letter] Hibbs J, et al. **JAMA** 1989 Oct 6;262(13):1775

Migration and geographic variations in ischaemic heart

disease in Great Britain. Elford J, et al. **Lancet** 1989 Feb 18;1(8634):343–6
Medical students, Aborigines and migrants: evaluation of a teaching programme. Copeman RC. **Med J Aust** 1989 Jan 16;150(2):84–7
Migrants and medicine—many challenges [editorial] Jamrozik K, et al. **Med J Aust** 1989 Apr 17;150(8):415–7
Cancer incidence among migrant populations in South Australia. McMichael AJ, et al. **Med J Aust** 1989 Apr 17; 150(8):417–20
Tuberculosis control migrant study of 1988. Simmons JD, et al. **N C Med J** 1989 Jun;50(6):309–10
Vision care for migrant workers. Roggenkamp JR. **Optom Vis Sci** 1989 Jan;66(1):20–2
American Academy of Pediatrics Committee on Community Health Services: Health care for children of migrant families. **Pediatrics** 1989 Oct;84(4):739–40
Validity of international, time trend, and migrant studies of dietary factors and disease risk. Prentice RL, et al. **Prev Med** 1989 Mar;18(2):167–79
Mortality among migrant tunnel workers. Une H, et al. **Sangyo Igaku** 1988 Nov;30(6):481–5
Sickness absence of migrant workers. Chia KS. **Singapore Med J** 1988 Aug;29(4):387–92
[Cysticercosis. Travellers' and migrants' disease] Verin P, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):211–4, 216 (Eng. Abstr.) (Fre)
[Prevention of prematurity in a community. Study in a community of Maghrebian immigrants] Berardi JC, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(7):851–9 (Eng. Abstr.) (Fre)
[Chronic backache in migrant workers from Mediterranean countries in comparison to central European patients: demographic and psychosocial aspects] Keel P, et al. **Schweiz Med Wochenschr** 1989 Jan 7;119(1):22–31 (Eng. Abstr.) (Ger)
[Demographic genetic characteristics of the population of a large multiethnic city (the example of Alma-Ata). An analysis of assortative mating and migrations] Sviatova GS, et al. **Genetika** 1988 Jul;24(7):1269–75 (Eng. Abstr.) (Rus)
[Tropical malaria in European children temporarily living in Nigeria] Reutskii IA, et al. **Pediatriia** 1988;(7):88–90 (Rus)
[Prevention of tuberculosis in the migrant rural population and means of improving its effectiveness] Shimko EP. **Probl Tuberk** 1989;(1):14–6 (Eng. Abstr.) (Rus)
[Assessment of the activity of pulmonary tuberculosis detected in a migrating rural population] Shimko ZP. **Vrach Delo** 1989 Mar;(3):65–7 (Eng. Abstr.) (Rus)
[Hydatidosis as an urban zoonosis] Larrieu E, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jan–Feb;30(1):28–31 (Eng. Abstr.) (Spa)
[Migration and AIDS in Mexico] Cárdenas-Elizalde MR. **Salud Publica Mex** 1988 Jul–Aug;30(4):613–8 (Eng. Abstr.) (Spa)

HISTORY

[The Egyptian so-called Barmakids and Medieval gypsy migration—chronologic research] Kutlik-Garudo IE. **Gegenbaurs Morphol Jahrb** 1988;134(6):831–45 (Eng. Abstr.) (Ger)

PSYCHOLOGY

Somatization of psychiatric illness in Mediterranean migrants in Belgium. Van Moffaert M, et al. **Cult Med Psychiatry** 1989 Sep;13(3):297–313
Leaving, longing, and loving: a developmental perspective of migration. de Vryer MA. **J Am Coll Health** 1989 Sep; 38(2):75–80
What protects a child during migration? Moilanen I, et al. **Scand J Soc Med** 1989;17(1):21–4
[The effect of the migration adaptation period on behavior, views and sexual morale tendencies] Iatsukha MV, et al. **Vestn Dermatol Venerol** 1988;(12):27–30 (Eng. Abstr.) (Rus)

TRANSILLUMINATION

Transilluminated tracheal intubation. Ainsworth QP, et al. **Br J Anaesth** 1989 May;62(5):494–7
An investigation of the polymerization of orthodontic adhesives by the transillumination of tooth tissue. Cheng L, et al. **Br J Orthod** 1989 Aug;16(3):183–8
In vivo transillumination of the hand using near infrared laser pulses and differential spectroscopy. Jarry G, et al. **J Biomed Eng** 1989 Jul;11(4):293–9 (37 ref.)
The detection of incipient caries with tracer dyes. O'Brien WJ, et al. **J Dent Res** 1989 Feb;68(2):157–8
Scientific basis of breast diaphanography. Profio AE, et al. **Med Phys** 1989 Jan–Feb;16(1):60–5
Estimation of optical pathlength through tissue from direct time of flight measurement. Delpy DT, et al. **Phys Med Biol** 1988 Dec;33(12):1433–42
Use of transillumination in tissue expansion [letter] O'Connell JB, et al. **Plast Reconstr Surg** 1989 Mar;83(3):574–5
Fundamental studies of breast tumor detection with narrow beam laser scanning (report 1). Kaneko M, et al. **Radiat Med** 1988 Mar–Apr;6(2):61–5
[Transillumination (diaphanography)—an alternative imaging procedure in the diagnosis of breast diseases] Hasert V. **Radiol Diagn (Berl)** 1988;29(5):669–79 (22 ref.) (Eng. Abstr.) (Ger)
[Differentiation of organ dose distribution during exposure to plain film and transillumination in relation to the path of the rays] Hentschel F. **Radiol Diagn (Berl)** 1989; 30(2):189–96 (Eng. Abstr.) (Ger)

INSTRUMENTATION

Intubation by use of the light wand: experience in 253 patients. Weis FR, et al. **J Oral Maxillofac Surg** 1989 Jun; 47(6):577–80; discussion 581
Fiber optic probe augmented sonic scaling versus conventional sonic scaling. Johnson GK, et al. **J Periodontol** 1989 Mar;60(3):131–6
System for long-term measurement of cerebral blood and tissue oxygenation on newborn infants by near infra-red transillumination. Cope M, et al. **Med Biol Eng Comput** 1988 May;26(3):289–94

METHODS

Transmission illumination of teeth. A system for operative dentistry procedures. Hunt DR, et al. **Aust Dent J** 1988 Aug;33(4):280–7
Localisation of retained roots by fibre-optic transillumination. Niederdellmann H, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):77–9
Design and evaluation of a new reflectance pulse oximeter sensor. Mendelson Y, et al. **Med Instrum** 1988 Aug; 22(4):167–73
[Angiotensometry in peritoneo-anal resection of the rectum in cancer] Martyniuk VV, et al. **Vopr Onkol** 1988; 34(12):1468–71 (Eng. Abstr.) (Rus)

TRANSISTORS see under **SEMICONDUCTORS**

TRANSKETOLASE

ANTAGONISTS & INHIBITORS

Conversion of Woodward's Reagent K in an aqueous medium: mathematical analysis applied to enzyme modification. Kuimov AN, et al. **Anal Biochem** 1988 Jul; 172(1):56–60
Inhibition of transketolase by N-acetylimidazole. Kuimov AN, et al. **Biochem Int** 1988 Sep;17(3):517–21

BLOOD

Studies on the effect of low-molecule uremic toxins on the activity of glucose-6-phosphate dehydrogenase (E.C.1.1.1.49) and transketolase (E.C.2.2.1.1) in human red blood cells. Kopczyński Z, et al. **Acta Physiol Pol** 1988 Jul–Aug;39(4):269–75
The evaluation of erythrocyte thiamin diphosphate as an indicator of thiamin status in man, and its comparison with erythrocyte transketolase activity measurements. Baines M, et al. **Ann Clin Biochem** 1988 Nov;25 (Pt 6):698–705
Analysis of transketolase and identification of an enzyme variant in human leukocytes. Paoletti F, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):150–5
Effect of substrate concentration on erythrocyte transketolase assay [letter] Farzami B. **Clin Chem** 1989 Jul;35(7):1557
Studies on the nature of thiamine pyrophosphate binding and dependency on divalent cations of transketolase from human erythrocytes. Jung EH, et al. **Int J Biochem** 1988; 20(11):1255–9

ISOLATION & PURIFICATION

Transketolase from human leukocytes. Isolation, properties and induction of polyclonal antibodies. Mocali A, et al. **Eur J Biochem** 1989 Mar 1;180(1):213–9
Isolation of transketolase from human erythrocytes. Himmo SD, et al. **Prep Biochem** 1988;18(3):261–76

METABOLISM

Interactions with hemoglobin: a source of error in measurements of transketolase activity in hemolysates. Grudzinski A, et al. **Clin Chim Acta** 1989 Apr 14; 180(3):265–75
Effect of consumption of green and black tea on the level of various enzymes in rats. Ali M, et al. **Experientia** 1989 Jan 15;45(1):112–4
Regionally selective alterations in enzymatic activities and metabolic fluxes during thiamin deficiency. Gibson G, et al. **Neurochem Res** 1989 Jan;14(1):17–24

TRANSLATING

Health-care interpreters and cancer [letter] Gorman D, et al. **Med J Aust** 1989 Mar 6;150(5):284
[The influence of English language text format on its German translation] Bosshardt HG, et al. **Arch Psychol (Frankf)** 1988;140(2):127–35 (Eng. Abstr.) (Ger)

TRANSLATION, GENETIC

Translational and post-translational processing in apolipoprotein metabolism. Brewer HB Jr, et al. **Agents Actions Suppl** 1988;26:133
Evidence for posttranslational control of fetal hemoglobin synthesis. Qiu CC, et al. **Am J Hematol** 1988 Sep;29(1):58–9
In situ nick translation of the fragile X region. Nolin SL, et al. **Am J Med Genet** 1988 May–Jun;30(1–2):443–50
Nick translation detection in situ of cellular DNA strand break induced by radiation. Maehara Y, et al. **Am J Pathol** 1989 Jan;134(1):7–10
Total translation of vasopressin and oxytocin in neurohypophysis of rats. Robinson AG, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R109–17
Posttranscriptional regulatory mechanisms in Escherichia coli. Gold L. **Annu Rev Biochem** 1988;57:199–233 (150 ref.)
In vitro translation of the protease catalyzing Bombyx mori egg-specific protein and identification of a nascent peptide with biological activity. Indrasith LS, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):328–33
Nick translation of lambda phage DNA with a deoxycytidine analog spin labeled in the 5 position. Strobel OK, et al. **Arch Biochem Biophys** 1989 Sep;273(2):597–601
Betaine aldehyde dehydrogenase from spinach leaves: purification, in vitro translation of the mRNA, and regulation by salinity. Weretilnyk EA, et al. **Arch Biochem Biophys** 1989 May 15;271(1):56–63
Inability of translation of mRNA for HVJ (Sendai virus) M protein in a rat glioma cell line at nonpermissive temperatures. Ogura H, et al. **Arch Virol** 1988; 102(3–4):263–8
Immunoprecipitation of the in vitro translation product of rabbit muscle protein phosphatase C-I mRNA. Zheng SY, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1398–402
Features of the cell-free translation of a spider fibroin mRNA. Candelas GC, et al. **Biochem Cell Biol** 1989 Feb–Mar;67(2–3):173–6
Transcriptional and translational events during reovirus infection. Lemay G. **Biochem Cell Biol** 1988 Aug; 66(8):803–12 (80 ref.)
Translation of globin RNA spliced in vitro. Abraham AK, et al. **Biochem J** 1988 Aug 15;254(1):21–6
The transcription and translation in vitro of individual cereal storage-protein genes from wheat (Triticum aestivum, cv. Chinese Spring). Evidence for translocation of the translation products and disulphide-bond formation. Bulleid NJ, et al. **Biochem J** 1988 Sep 15;254(3):805–10
Characterization of translation systems in vitro from three developmental stages of Strongylocentrotus purpuratus. Lopo AC, et al. **Biochem J** 1989 Mar 1;258(2):553–61
A model for the initiation of translation at the late stage after infection by adenoviruses. Murasugi A. **Biochem J** 1989 Jun 1;260(2):621–2
Cotranslational processing and protein turnover in eukaryotic cells. Arfin SM, et al. **Biochemistry** 1988 Oct 18; 27(21):7979–84 (51 ref.)
Translation of the human C3b/C4b receptor mRNA in a cell-free system and by Xenopus oocytes. Kumar V, et al. **Biochemistry** 1989 May 2;28(9):4040–6
Relationship between guanosine tetraphosphate and accuracy of translation in Salmonella typhimurium. Nègre D, et al. **Biochemistry** 1989 Feb 21;28(4):1814–9
Kinetics of interleukin 2 mRNA and protein produced in the human T-cell line Jurkat and effect of cyclosporin A. Nordmann R, et al. **Biochemistry** 1989 Feb 21;28(4):1791–7
Biosynthesis and import into the mitochondrion of L-3-glycerophosphate dehydrogenase, and the effect of thyroid hormone deficiency on gene expression. Clay VJ, et al. **Biochim Biophys Acta** 1989 Jun 23;975(1):112–8
Yeast, Saccharomyces cerevisiae, cell-free translation: the inhibition of translation by high temperature is reversible. Mandel T, et al. **Biochim Biophys Acta** 1989 Jan 23; 1007(1):80–3
Identification of the primary translation product of the sex steroid-binding protein from monkey liver mRNA in a cell-free system. Kottler ML, et al. **Biochimie** 1988 Oct; 70(10):1423–27
Contribution of normal and error-prone ribosomes to translational error formation in vivo. Ringström K, et al. **Biochimie** 1988 Jun;70(6):803–9
DNA——DNA, and DNA——RNA——protein: orchestration by a single complex operon. Lupski JR, et al. **Bioessays** 1989 May;10(5):152–7 (39 ref.)
Translational control in E. coli: the case of threonyl-tRNA synthetase. Springer M, et al. **Biosci Rep** 1988 Dec; 8(6):619–32
Translational control of alpha-amylase gene expression in Aspergillus awamori [letter] Dias FF. **Biotechnol Appl Biochem** 1988 Aug;10(4):394–5
Evidence for a pretranslational defect in hereditary and acquired myeloperoxidase deficiency. Tobler A, et al. **Blood** 1989 May 15;73(7):1980–6
Alzheimer's disease-associated reduction of polysomal mRNA translation. Langstrom NS, et al. **Brain Res Mol Brain Res** 1989 Jun;5(4):259–69
Characterization and in vitro expression of the cytochrome b-559 genes of barley. II. In vitro transcription and translation. Krupinska K. **Carlsberg Res Commun** 1988; 53(4):233–46
In vitro transcription and translation of the psbD gene encoding the D-2 protein of photosystem II in barley. Neumann EM. **Carlsberg Res Commun** 1988;53(7):395–409
A fused chimeric protein made in human cells. Borst P, et al. **Cell** 1989 Aug 11;58(3):421–2 (13 ref.)
Activation of double-stranded RNA-dependent kinase (dsl) by the TAR region of HIV-1 mRNA: a novel translational control mechanism. Edery I, et al. **Cell** 1989 Jan 27;

56(2):303–12
Signals for ribosomal frameshifting in the Rous sarcoma virus gag–pol region. Jacks T, et al. **Cell** 1988 Nov 4;55(3):447–58
Translation of cyclin mRNA is necessary for extracts of activated xenopus eggs to enter mitosis. Minshull J, et al. **Cell** 1989 Mar 24;56(6):947–56
Trypanosoma cruzi invade a mammalian epithelial cell in a polarized manner. Schenkman S, et al. **Cell** 1988 Oct 7;55(1):157–65
RNA pseudoknots that interact with components of the translation apparatus. Schimmel P. **Cell** 1989 Jul 14; 58(1):9–12 (25 ref.)
Unusual mRNA pseudoknot structure is recognized by a protein translational repressor. Tang CK, et al. **Cell** 1989 May 19;57(4):531–6
Translation of the bacteriophage Mu mom gene is positively regulated by the phage com gene product. Wulczyn FG, et al. **Cell** 1989 Jun 30;57(7):1201–10
A non–radioactive in situ hybridization method for the localization of specific RNAs in Drosophila embryos reveals translational control of the segmentation gene hunchback. Tautz D, et al. **Chromosoma** 1989 Aug; 98(2):81–5
MHC class I and class I–like gene product expression by malignant T cells: relationships between CD1a, HLA–ABC and beta 2–microglobulin. Jones RA, et al. **Clin Exp Immunol** 1988 Dec;74(3):454–8
Translation of Taenia crassiceps mRNA in cell–free heterologous systems. Agosin M, et al. **Comp Biochem Physiol [B]** 1978;60(2):183–7
Hemolysates from guinea–pig reticulocytes also efficiently translate added mRNA. Rosenberg JM, et al. **Comp Biochem Physiol [B]** 1988;91(1):33–7
The allosuppressor gene SAL4 encodes a protein important for maintaining translational fidelity in Saccharomyces cerevisiae. Crouzet M, et al. **Curr Genet** 1988 Dec; 14(6):537–43
An efficient cell–free translation system from Aspergillus nidulans and in vitro translocation of prepro–alpha–factor across Aspergillus microsomes. Devchand M, et al. **Curr Genet** 1988 Dec;14(6):561–6
The accumulation and translation of a spicule matrix protein mRNA during sea urchin embryo development. Killian CE, et al. **Dev Biol** 1989 May;133(1):148–56
Xenopus oocyte poly(A) RNAs that hybridize to a cloned interspersed repeat sequence are not translatable. McGrew LL, et al. **Dev Biol** 1989 Jul;134(1):267–70
Glycogen phosphorylase in Dictyostelium discoideum: demonstration of two developmentally regulated forms, purification to homogeneity, immunochemical analysis, cAMP induction, in vitro translation, and molecular cloning. Rutherford CL, et al. **Dev Genet** 1988; 9(4–5):469–81
A strategy to optimize translation initiation in recombinant mRNA: application to the Rop gene. Bottaro G, et al. **DNA** 1989 Jun;8(5):369–75
Translational selection in the expression of the hepatitis B virus envelope proteins. Price PM, et al. **DNA** 1988 Jul–Aug;7(6):417–22
Expression of the 31–kD stress protein in rat myoblasts and hepatocytes. Shuman J, et al. **DNA** 1988 Sep;7(7):475–82
Proteins encoded by a complex chloroplast transcription unit are each translated from both monocistronic and polycistronic mRNAs. Barkan A. **EMBO J** 1988 Sep; 7(9):2637–44
Mutational analysis of the 5' non–coding region of human immunodeficiency virus type 1: effects of secondary structure on translation. Parkin NT, et al. **EMBO J** 1988 Sep;7(9):2831–7
Evidence that the GCN2 protein kinase regulates reinitiation by yeast ribosomes. Tzamarias D, et al. **EMBO J** 1988 Nov;7(11):3547–51
Ribosome pausing and stacking during translation of a eukaryotic mRNA. Wolin SL, et al. **EMBO J** 1988 Nov; 7(11):3559–69
Insulin–like growth factor I messenger ribonucleic acids with alternative 5'-untranslated regions are differentially expressed during development of the rat. Adamo M, et al. **Endocrinology** 1989 Jun;124(6):2737–44
Normal–sized thyroglobulin messenger ribonucleic acid in Dutch goats with a thyroglobulin synthesis defect is translated into a 35,000 molecular weight N–terminal fragment. Sterk A, et al. **Endocrinology** 1989 Jan; 124(1):477–83
Interaction of Escherichia coli translation–initiation factor IF–1 with ribosomes. Celano B, et al. **Eur J Biochem** 1988 Dec 15;178(2):351–5
Regulation of gene expression at the translational level. The rescue factor reverses thermosensitive protein synthesis in N4316, a conditionally–lethal mutant of Escherichia coli defective in translation. Ganoza MC, et al. **Eur J Biochem** 1989 Jan 2;178(3):663–74
Thyroid hormone regulation of nuclear–encoded mitochondrial inner membrane polypeptides of the liver. Joste V, et al. **Eur J Biochem** 1989 Sep 1;184(1):255–60
Structural requirements for protein N–glycosylation. Influence of acceptor peptides on cotranslational glycosylation of yeast invertase and site–directed mutagenesis around a sequon sequence. Roitsch T, et al. **Eur J Biochem** 1989 May 1;181(2):525–9
Antisense oligonucleotide inhibition of encephalomyocarditis virus RNA translation. Sankar S, et al. **Eur J Biochem** 1989 Sep 1;184(1):39–45
Cell–free translation of mRNA encoding an arterial smooth muscle cell proteoglycan core protein. Sandell LJ, et al. **Eur J Cell Biol** 1988 Jun;46(2):253–8
Translational regulation of the differential synthesis of nonmuscle tropomyosin isoforms. Hendricks MB. **Exp Cell Res** 1989 Feb;180(2):546–50
Antigenic proteins of Eimeria maxima gametocytes: cell–free translation and detection with recovered chicken serum. Mencher D, et al. **Exp Parasitol** 1989 Jan;68(1):40–8
Regulation of LacZ mRNA translatability in a cell–free system at heat shock by the last four sense codons. Denisenko ON, et al. **FEBS Lett** 1989 Apr 24;247(2):251–4
Reconstitution of cyc– S49 membranes by in vitro translated Gs alpha. Membrane anchorage and functional implications. Journot L, et al. **FEBS Lett** 1989 Jul 17; 251(1–2):230–6
Functional activity of oligosaccharide–deficient (Na,K)ATPase expressed in Xenopus oocytes. Takeda K, et al. **FEBS Lett** 1988 Sep 26;238(1):201–4
Papers presented at the EMBO/INSERM Workshop on Regulation of Gene Expression by RNA Structure and Anti–messengers. Les Arcs, Savoie (France), 28 February–4 March 1988. **Gene** 1988 Dec 10;72(1–2):1–376
Anti–IgM antibodies inhibit IgM expression in lipopolysaccharide–stimulated normal murine B–cells: study of RNA metabolism and translation. Chen U. **Gene** 1988 Dec 10;72(1–2):209–17
Secondary structure of the Escherichia coli translational operator of threonyl–tRNA synthetase and relationship to its function. Ehresmann B, et al. **Gene** 1988 Dec 10; 72(1–2):187–8
Identification of a translation inhibitory element (TIE) in the 3'untranslated region of the human interferon–beta mRNA. Kruys VI, et al. **Gene** 1988 Dec 10;72(1–2):191–200
The differential stability of the Escherichia coli ompA and bla mRNA at various growth rates is not correlated to the efficiency of translation. Lundberg U, et al. **Gene** 1988 Dec 10;72(1–2):141–9
Post–transcriptional control in Escherichia coli: translation and degradation of the atp operon mRNA. McCarthy JE, et al. **Gene** 1988 Dec 10;72(1–2):131–9
Translational control by antisense RNA in control of plasmid replication. Nordström K, et al. **Gene** 1988 Dec 10; 72(1–2):237–40
The Drosophila hsp70 message is rapidly degraded at normal temperatures and stabilized by heat shock. Petersen R, et al. **Gene** 1988 Dec 10;72(1–2):161–8
The role of bases upstream of the Shine–Dalgarno region and in the coding sequence in the control of gene expression in Escherichia coli: translation and stability of mRNAs in vivo. Schauder B, et al. **Gene** 1989 May 15;78(1):59–72
Point mutations that affect translation initiation of the transposon Tn10 tetA gene. Schneider K, et al. **Gene** 1988 Dec 30;74(2):559–63
Gene arrangement in sea star mitochondrial DNA demonstrates a major inversion event during echinoderm evolution. Smith MJ, et al. **Gene** 1989 Mar 15;76(1):181–5
Effect of deletions in the 5'-noncoding region on the translational efficiency of phosphoglycerate kinase mRNA in yeast. van den Heuvel JJ, et al. **Gene** 1989 Jun 30; 79(1):83–95
Portable Shine–Dalgarno regions; nucleotides between the Shine–Dalgarno sequence and the start codon affect the translation efficiency. de Boer HA, et al. **Gene Amplif Anal** 1983;3:103–16
In vitro translation of eukaryotic messenger RNA. Hendrick D. **Gene Amplif Anal** 1981;2:439–54 (139 ref.)
Comparison of synthetic ribosome binding sites for the efficient expression of eukaryotic proteins in Escherichia coli. Jay E, et al. **Gene Amplif Anal** 1983;3:89–101
Dot hybridization and hybrid–selected translation: methods for determining nucleic acid concentrations and sequence homologies. Kafatos FC, et al. **Gene Amplif Anal** 1981; 2:537–50
Structural gene identification utilizing eukaryotic cell–free translational systems. Paterson BM, et al. **Gene Amplif Anal** 1981;2:417–37
Antisense RNA: effect of ribosome binding sites, target location, size, and concentration on the translation of specific mRNA molecules. Daugherty BL, et al. **Gene Anal Tech** 1989 Jan–Feb;6(1):1–16
A synthetic translation–terminator gene. A tool for dissecting the translation direction of a gene. Maruyama IN, et al. **Gene Anal Tech** 1989 May–Jun;6(3):57–61
Protamine 3'-untranslated sequences regulate temporal translational control and subcellular localization of growth hormone in spermatids of transgenic mice. Braun RE, et al. **Genes Dev** 1989 Jun;3(6):793–802
Unusual transcriptional and translational features of the aminoglycoside phosphotransferase gene (aph) from Streptomyces fradiae. Janssen GR, et al. **Genes Dev** 1989 Mar;3(3):415–29
Structural arrangements of transcription control domains within the 5'-untranslated leader regions of the HIV–1 and HIV–2 promoters. Jones KA, et al. **Genes Dev** 1988 Sep; 2(9):1101–14
Poly(A) elongation during Xenopus oocyte maturation is required for translational recruitment and is mediated by a short sequence element. McGrew LL, et al. **Genes Dev** 1989 Jun;3(6):803–15
Destruction of a translationally controlled mRNA in Xenopus oocytes delays progesterone–induced maturation. Smith RC, et al. **Genes Dev** 1988 Oct;2(10):1296–306
The PET54 gene of Saccharomyces cerevisiae: characterization of a nuclear gene encoding a mitochondrial translational activator and subcellular localization of its product. Costanzo MC, et al. **Genetics** 1989 Jun;122(2):297–305
Cotranslational fatty acylation of mucus glycoprotein. Addition of palmitic acid to peptidyl–tRNA occurs prior to peptide chain completion and its release. Slomiany A, et al. **Int J Biochem** 1988;20(12):1381–90
Export–defective lamB protein is a target for translational control caused by ompC porin overexpression. Click EM, et al. **J Bacteriol** 1989 Jan;171(1):616–9
Translational coupling between the ilvD and ilvA genes of Escherichia coli. Harms E, et al. **J Bacteriol** 1988 Oct; 170(10):4798–807
mRNA secondary structure in an open reading frame reduces translation efficiency in Bacillus subtilis. Kubo M, et al. **J Bacteriol** 1989 Jul;171(7):4080–2
Translational coupling of the two proximal genes in the S10 ribosomal protein operon of Escherichia coli. Lindahl L, et al. **J Bacteriol** 1989 May;171(5):2639–45
Translation and processing of Bacillus amyloliquefaciens extracellular RNase. Paddon CJ, et al. **J Bacteriol** 1989 Feb;171(2):1185–7
SecA protein autogenously represses its own translation during normal protein secretion in Escherichia coli. Schmidt MG, et al. **J Bacteriol** 1989 Feb;171(2):643–9
Autogenous regulation of the Escherichia coli ksgA gene at the level of translation. van Gemen B, et al. **J Bacteriol** 1989 Jul;171(7):4002–8
Expression of the human interferon–alpha 1 gene under transcriptional and translational control of the speA gene. Laplace F, et al. **J Basic Microbiol** 1988;28(1–2):55–61
A convenient procedure for the isolation of intact translatable mRNA by potassium iodide gradient centrifugation. Münzner P, et al. **J Biochem Biophys Methods** 1989 May; 18(3):183–93
Vaccinia specific kinase inhibitory factor prevents translational inhibition by double–stranded RNA in rabbit reticulocyte lysate. Akkaraju GR, et al. **J Biol Chem** 1989 Jun 15;264(17):10321–5
Inhibition of translational initiation in eukaryotic cells by calcium ionophore. Brostrom CO, et al. **J Biol Chem** 1989 Jan 25;264(3):1644–9
Loss of a calcium requirement for protein synthesis in pituitary cells following thermal or chemical stress. Brostrom MA, et al. **J Biol Chem** 1989 Jan 25; 264(3):1638–43
The iron–responsive element is the single element responsible for iron–dependent translational regulation of ferritin biosynthesis. Evidence for function as the binding site for a translational repressor. Caughman SW, et al. **J Biol Chem** 1988 Dec 15;263(35):19048–52
Expression of the mammalian mitochondrial genome. Stability of mitochondrial translation products as a function of membrane potential. Côté C, et al. **J Biol Chem** 1989 May 25;264(15):8487–90
Differential translation of two distinct preprosomatostatin messenger RNAs. Danoff A, et al. **J Biol Chem** 1988 Nov 5;263(31):16461–6
Increased translatable mRNA and decreased lipogenesis are responsible for the augmented secretion of lipid–deficient apolipoprotein E by hepatocytes from fasted rats. Davis RA, et al. **J Biol Chem** 1989 May 25;264(15):8970–7
Mutants of translational components that alter reading frame by two steps forward or one step back. Falahee MB, et al. **J Biol Chem** 1988 Dec 5;263(34):18099–103
In an Escherichia coli coupled transcriptioe–translation system, expression of the osmoregulated gene proU is stimulated at elevated potassium concentrations and by an extract from cells grown at high osmolality. Jovanovich SB, et al. **J Biol Chem** 1989 May 15;264(14):7821–5
The type X collagen gene. Intron sequences split the 5'-untranslated region and separate the coding regions for the non–collagenous amino–terminal and triple–helical domains. LuValle P, et al. **J Biol Chem** 1988 Dec 5; 263(34):18378–85
Posttranslational processing of alpha–, beta–, and gamma–preprotachykinins. Cell–free translation and early posttranslational processing events. MacDonald MR, et al. **J Biol Chem** 1988 Oct 15;263(29):15176–83
Translational control in heat–shocked Drosophila embryos. Evidence for the inactivation of initiation factor(s) involved in the recognition of mRNA cap structure. Maroto FG, et al. **J Biol Chem** 1988 Oct 25;263(30):15720–5
Uncoupling of co–translational translocation from signal peptidase processing in a mutant rat preapolipoprotein–A–IV with a deletion that includes the COOH–terminal region of its signal peptide. Nothwehr SF, et al. **J Biol Chem** 1989 Mar 15;264(8):4642–7
Translation initiation at non–AUG triplets in mammalian cells. Peabody DS. **J Biol Chem** 1989 Mar 25;264(9):5031–5
Interleukin–1 receptor–like proteins synthesized by translation, in vitro, of immunopurified polysomal messenger RNA. Rangnekar VM, et al. **J Biol Chem** 1988 Nov 5;263(31):16414–20
The effect of Escherichia coli ribosomal protein S1 on the translational specificity of bacterial ribosomes. Roberts MW, et al. **J Biol Chem** 1989 Feb 5;264(4):2228–35
Possible involvement of the 90–kDa heat shock protein in

the regulation of protein synthesis. Rose DW, et al. J Biol Chem 1989 Apr 15;264(11):6239–44
mRNA–induced expression of the cardiac Na+–Ca2+ exchanger in Xenopus oocytes. Sigel E, et al. J Biol Chem 1988 Oct 15;263(29):14614–6
A type 1 phosphoprotein phosphatase active with phosphorylated Mr = 68,000 initiation factor 2 kinase. Szyszka R, et al. J Biol Chem 1989 Mar 5;264(7):3827–31
HSP70 mRNA translation in chicken reticulocytes is regulated at the level of elongation. Theodorakis NG, et al. J Biol Chem 1988 Oct 5;263(28):14579–85
Translational frameshifts induced by mutant species of the polypeptide chain elongation factor Tu of Escherichia coli. Vijgenboom E, et al. J Biol Chem 1989 Aug 5; 264(22):13012–17
Purification of a specific repressor of ferritin mRNA translation from rabbit liver. Walden WE, et al. J Biol Chem 1989 Aug 15;264(23):13765–9
Factors influencing the in vitro translocation of the Escherichia coli maltose–binding protein. Weiss JB, et al. J Biol Chem 1989 Feb 15;264(5):3021–7
Translation of beta–tubulin mRNA in vitro generates multiple molecular forms. Yaffe MB, et al. J Biol Chem 1988 Nov 5;263(31):16023–31
Unusual behavior of the cytoplasmic transcript of hsr omega: an abundant, stress–inducible RNA that is translated but yields no detectable protein product. Fini ME, et al. J Cell Biol 1989 Jun;108(6):2045–57
Regulation of acetylcholine receptor synthesis at the level of translation in rat primary muscle cells. Horovitz O, et al. J Cell Biol 1989 May;108(5):1817–22
The scanning model for translation: an update. Kozak M. J Cell Biol 1989 Feb;108(2):229–41 (287 ref.)
N–myc gene product expression in neuroblastoma. Hashimoto H, et al. J Clin Pathol 1989 Jan;42(1):52–5
Strain differences in early mouse embryo development in vitro: role of the nucleus. Robl JM, et al. J Exp Zool 1988 Sep;247(3):251–6
Triiodothyronine increases translatable albumin messenger RNA in Rana catesbeiana tadpole liver. Schultz JJ, et al. J Exp Zool 1988 Jul;247(1):69–76
Translational fusions with fragments of the trpE gene improve the expression of a poorly expressed heterologous gene in Escherichia coli. Makoff A, et al. J Gen Microbiol 1989 Jan;135 (Pt 1):11–24
Interferon inhibits herpes simplex virus–specific translation: a reinvestigation. Altinkilic B, et al. J Gen Virol 1988 Dec; 69 (Pt 12):3107–12
Identification of L2 open reading frame gene products of bovine papillomavirus type 1 using monoclonal antibodies. Jin XW, et al. J Gen Virol 1989 May;70 (Pt 5):1133–40
Sequence, transcription and translation of a late gene of the Autographa californica nuclear polyhedrosis virus encoding a 34.8K polypeptide. Wu JG, et al. J Gen Virol 1989 Sep;70 (Pt 9):2449–59
Detection of hepatitis B virus core gene products in sera and liver of HBV–infected individuals. Theilmann L, et al. J Hepatol 1989 Jan;8(1):77–85
Isolation and in vitro translation of mRNA from rat peritoneal mast cells and rat basophilic leukemia cells. Fujimaki H, et al. J Immunol Methods 1988 Nov 10; 114(1–2):219–25
Mechanism of interferon action: studies on the activation of protein phosphorylation and the inhibition of translation in cell–free systems. Jacobs BL, et al. J Interferon Res 1988 Oct;8(5):617–31
Differential expression of ras oncogene products among the types of human melanomas and melanocytic nevi. Yasuda H, et al. J Invest Dermatol 1989 Jul;93(1):54–9
Roles of operator and non–operator RNA sequences in bacteriophage R17 capsid assembly. Beckett D, et al. J Mol Biol 1988 Dec 20;204(4):939–47
Translational regulation of the spc operon in Escherichia coli. Identification and structural analysis of the target site for S8 repressor protein. Cerretti DP, et al. J Mol Biol 1988 Nov 20;204(2):309–29
What constitutes the signal for the initiation of protein synthesis on Escherichia coli mRNAs? Dreyfus M. J Mol Biol 1988 Nov 5;204(1):79–94
Translational control and differential RNA decay are key elements regulating postsegregational expression of the killer protein encoded by the parB locus of plasmid R1. Gerdes K, et al. J Mol Biol 1988 Sep 5;203(1):119–29
Expression of native rabbit light meromyosin in Escherichia coli. Observation of a powerful internal translation initiation site. Maeda K, et al. J Mol Biol 1989 Jan 5; 205(1):269–73
ermC leader peptide. Amino acid sequence critical for induction by translational attenuation. Mayford M, et al. J Mol Biol 1989 Mar 5;206(1):69–79
Long–range translational coupling in the rplJL–rpoBC operon of Escherichia coli. Petersen C. J Mol Biol 1989 Mar 20;206(2):323–32
The role of a template sugar–phosphate backbone in the ribosomal decoding mechanism. Comparative study of poly(U) and poly(dT) template activity. Potapov AP, et al. J Mol Biol 1988 Oct 20;203(4):885–93
Codon usage determines translation rate in Escherichia coli. Sørensen MA, et al. J Mol Biol 1989 May 20;207(2):365–77
On the role of the Shine–Dalgarno sequence in determining the efficiency of translation initiation at a weak start codon in the car operon of Escherichia coli K12. Weyens G, et al. J Mol Biol 1988 Dec 20;204(4):1045–8
Growth hormone regulates the rodent hepatic epidermal growth factor receptor at a pretranslational level. Johansson S, et al. J Mol Endocrinol 1989 Sep;3(2):113–20
In–vitro biosynthesis of multiple preproglucagons results from acetylation of the primary translation products. Okun MM, et al. J Mol Endocrinol 1989 Mar;2(2):137–44
Translational regulation of myelin protein synthesis by steroids. Verdi JM, et al. J Neurochem 1989 Jan;52(1):321–4
Differential biosynthesis and posttranslational processing of vasopressin and oxytocin in rat brain during embryonic and postnatal development. Altstein M, et al. J Neurosci 1988 Nov;8(11):3967–77
Translational capacity of sheep oocytes microinjected with messenger RNA. Moor RM, et al. J Reprod Fertil 1989 May;86(1):289–95
Depressed translational activity in the androgen sensitive levator ani muscle of the rat. Boissonneault G, et al. J Steroid Biochem 1989 Apr;32(4):507–13
Stop is not the end: physiological implications of translational readthrough. Engelberg–Kulka H, et al. J Theor Biol 1988 Apr 21;131(4):477–85
A transcription–translation activation feedback circuit as a function of protein degradation, with the quality of protein mass adaptation related to the average functional load. Mader A. J Theor Biol 1988 Sep 17;134(2):135–57
The cellular 68,000–Mr protein kinase is highly autophosphorylated and activated yet significantly degraded during poliovirus infection: implications for translational regulation. Black TL, et al. J Virol 1989 May; 63(5):2244–51
Stimulation of chloramphenicol acetyltransferase mRNA translation by reovirus capsid polypeptide sigma 3 in cotransfected COS cells. Giantini M, et al. J Virol 1989 Jun;63(6):2415–21
The gag gene products of human immunodeficiency virus type 1: alignment within the gag open reading frame, identification of posttranslational modifications, and evidence for alternative gag precursors. Mervis RJ, et al. J Virol 1988 Nov;62(11):3993–4002
Mutational analysis of upstream AUG codons of poliovirus RNA. Pelletier J, et al. J Virol 1988 Dec;62(12):4486–92
Internal binding of eucaryotic ribosomes on poliovirus RNA: translation in HeLa cell extracts. Pelletier J, et al. J Virol 1989 Jan;63(1):441–4
Translational efficiencies of polyomavirus late mRNA molecules that differ in the sequences of their 5' noncoding late leader exons. Rhee E, et al. J Virol 1989 Jan; 63(1):432–5
Characterization of the translational defect to fiber synthesis in monkey cells abortively infected with human adenovirus: role of ancillary leaders. Silverman L, et al. J Virol 1989 Oct;63(10):4376–85
Anomalous electrophoretic behavior of the major potato virus X RNA translation product. Karasev AV, et al. J Virol Methods 1989 Feb;23(2):223–7
The poly(U) translational capacity of Fischer 344 rat liver does not deteriorate with age and is not affected by dietary regime. Laughrea M, et al. Mech Ageing Dev 1988 Nov 14;45(2):137–43
Measurement of translational kinetic parameters. Ehrenberg M, et al. Methods Enzymol 1988;164:611–31
Ribosomal synthesis of polypeptides from aminoacyl–tRNA without polynucleotide template. Spirin AS, et al. Methods Enzymol 1988;164:631–49
Signals determining translational start–site recognition in eukaryotes and their role in prediction of genetic reading frames. Louis BG, et al. Mol Biol Rep 1988;13(2):103–15
The phosphorylation state of eucaryotic initiation factor 2 alters translational efficiency of specific mRNAs. Kaufman RJ, et al. Mol Cell Biol 1989 Mar;9(3):946–58
Opposite replication polarity of the germ line c–myc gene in HeLa cells compared with that of two Burkitt lymphoma cell lines. Leffak M, et al. Mol Cell Biol 1989 Feb; 9(2):586–93
The first and fourth upstream open reading frames in GCN4 mRNA have similar initiation efficiencies but respond differently in translational control to change in length and sequence. Mueller PP, et al. Mol Cell Biol 1988 Dec; 8(12):5439–47
Characterization of the domain structure of chick c–erbA by deletion mutation: in vitro translation and cell transfection studies. Horowitz ZD, et al. Mol Endocrinol 1989 Jan;3(1):148–56
Translational regulation of the lysis gene in RNA bacteriophage fr requires a UUG initiation codon. Adhin MR, et al. Mol Gen Genet 1989 Jul;218(1):137–42
Positioning ribosomes on leader mRNA for translational activation of the message of an inducible Staphylococcus aureus cat gene. Dick T, et al. Mol Gen Genet 1988 Sep; 214(1):108–11
Chromosomal localization and expression of CBS1, a translational activator of cytochrome b in yeast. Forsbach V, et al. Mol Gen Genet 1989 Jul;218(1):57–63
Yeast nuclear gene CBS2, required for translational activation of cytochrome b, encodes a basic protein of 45 kDa. Michaelis U, et al. Mol Gen Genet 1988 Oct;214(2):263–70
Translational signals of a major head protein gene of bacteriophage lambda. Suissa M, et al. Mol Gen Genet 1988 Nov;214(3):570–3
Translation in Xenopus laevis oocytes of hybrid selected LEW rat RT1.B alpha– and beta–chain transcripts results in serologically discrete class II polypeptide chain complexes. Henkes W, et al. Mol Immunol 1989 Feb; 26(2):171–9
Mistranslation induces the heat–shock response in the yeast Saccharomyces cerevisiae. Grant CM, et al. Mol Microbiol 1989 Feb;3(2):215–20
Defective co–translational formation of disulphide bonds in protein disulphide–isomerase–deficient microsomes. Bulleid NJ, et al. Nature 1988 Oct 13;335(6191):649–51
Molecular evolution. rDNA world falling to pieces [news] Dover GA. Nature 1988 Dec 15;336(6200):623–4
Induction of odorant–evoked current transients in Xenopus oocytes injected with mRNA isolated from the olfactory mucosa of Rana pipiens. Getchell TV. Neurosci Lett 1988 Aug 31;91(2):217–21
Characteristics of synaptic receptors translated by Xenopus oocyte after injection of chick retina mRNA. Ando H, et al. Neurosci Res Suppl 1988;8:S15–25
A highly conserved, 5' untranslated, inverted repeat sequence is ineffective in translational control of the alpha 1(I) collagen gene [published erratum appears in Nucleic Acids Res 1988 Dec 9;16(23):11399] Bornstein P, et al. Nucleic Acids Res 1988 Oct 25;16(20):9721–36
Comparative inhibition of rabbit globin mRNA translation by modified antisense oligodeoxynucleotides. Cazenave C, et al. Nucleic Acids Res 1989 Jun 12;17(11):4255–73
Both RNA level and translation efficiency are reduced by anti–sense RNA in transgenic tobacco. Cornelissen M, et al. Nucleic Acids Res 1989 Feb 11;17(3):833–43
Beta–globin mRNAs capped with m7G, m2.7(2)G or m2.2.7(3)G differ in intrinsic translation efficiency. Darzynkiewicz E, et al. Nucleic Acids Res 1988 Sep 26; 16(18):8953–62
On the fidelity of mRNA translation in the nuclease–treated rabbit reticulocyte lysate system. Dasso MC, et al. Nucleic Acids Res 1989 Apr 25;17(8):3129–44
Efficient initiation of mammalian mRNA translation at a CUG codon. Dasso MC, et al. Nucleic Acids Res 1989 Aug 25;17(16):6485–97
Terminal sequences do not contain the rate–limiting decay determinants of E. coli cat mRNA. DeFranco C, et al. Nucleic Acids Res 1989 Feb 11;17(3):1139–57
An efficient strategy for cloning 5' extremities of rare transcripts permits isolation of multiple 5'–untranslated regions of rat tryptophan hydroxylase mRNA. Delort J, et al. Nucleic Acids Res 1989 Aug 25;17(16):6439–48
Autoregulation of phage mu transposase at the level of translation. Parsons RL, et al. Nucleic Acids Res 1988 Dec 9;16(23):11285–301
Translational repression by bacteriophage MS2 coat protein does not require cysteine residues. Peabody DS. Nucleic Acids Res 1989 Aug 11;17(15):6017–27
Modulations of the in vitro translational efficiencies of Yellow Fever virus mRNAs: interactions between coding and noncoding regions. Ruiz–Linares A, et al. Nucleic Acids Res 1989 Apr 11;17(7):2463–76
Preparative synthesis of globin in a continuous cell–free translation system from rabbit reticulocytes. Ryabova LA, et al. Nucleic Acids Res 1989 Jun 12;17(11):4412
Isolation and in vitro expression of the ricin A–chain gene: effect of deletions on biological activity. Sundan A, et al. Nucleic Acids Res 1989 Feb 25;17(4):1717–32
Characteristics of a multicopy gene family predominantly consisting of processed pseudogenes. Van den Ouweland AM, et al. Nucleic Acids Res 1989 May 25;17(10):3829–43
Identification of two translational products for c–myb. Dudek H, et al. Oncogene 1989 Sep;4(9):1061–6
A broad–host–range vector system for cloning and translational lacZ fusion analysis. Tai TN, et al. Plasmid 1988 May;19(3):175–88
DNA polymerase of bacteriophage T4 is an autogenous translational repressor. Andrake M, et al. Proc Natl Acad Sci U S A 1988 Nov;85(21):7942–6
Translation in Saccharomyces cerevisiae: initiation factor 4A–dependent cell–free system. Blum S, et al. Proc Natl Acad Sci U S A 1989 Aug;86(16):6043–6
Control of Torpedo acetylcholine receptor biosynthesis in Xenopus oocytes. Buller AL, et al. Proc Natl Acad Sci U S A 1988 Nov;85(22):8717–21
Codon choice and gene expression: synonymous codons differ in translational accuracy. Dix DB, et al. Proc Natl Acad Sci U S A 1989 Sep;86(18):6888–92
Cap–independent translation of mRNA conferred by encephalomyocarditis virus 5' sequence improves the performance of the vaccinia virus/bacteriophage T7 hybrid expression system. Elroy–Stein O, et al. Proc Natl Acad Sci U S A 1989 Aug;86(16):6126–30
A translational enhancer derived from tobacco mosaic virus is functionally equivalent to a Shine–Dalgarno sequence. Gallie DR, et al. Proc Natl Acad Sci U S A 1989 Jan; 86(1):129–32
Thymidine kinase synthesis is repressed in nonreplicating muscle cells by a translational mechanism that does not affect the polysomal distribution of thymidine kinase mRNA. Gross MK, et al. Proc Natl Acad Sci U S A 1989 Jul;86(13):4987–91
Decreased messenger RNA translation in herpesvirus–infected arterial cells: effects on cholesteryl ester hydrolase. Hajjar DP, et al. Proc Natl Acad Sci U S A 1989 May;86(9):3366–70
Evidence for regulation of reinitiation in translational control of GCN4 mRNA. Hinnebusch AG, et al.

Proc Natl Acad Sci U S A 1988 Oct;85(19):7279–83

mRNA from NCB-20 cells encodes the N-methyl-D-aspartate/phencyclidine receptor: a Xenopus oocyte expression study. Lerma J, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1708–11

Translational repression in bacteriophage f1: characterization of the gene V protein target on the gene II mRNA. Michel B, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4002–6

Messenger RNA structure and gene regulation at the translational level in Escherichia coli: the case of threonine:tRNAThr ligase. Moine H, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7892–6

Circadian regulation of bioluminescence in Gonyaulax involves translational control. Morse D, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):172–6

Temporal and pharmacological division of fibroblast cyclooxygenase expression into transcriptional and translational phases. Raz A, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1657–61

Isolation and sequence determination of a cDNA clone for rat peroxisomal urate oxidase: liver-specific expression in the rat. Reddy PG, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9081–5

Translation of glucose-regulated protein 78/immunoglobulin heavy-chain binding protein mRNA is increased in poliovirus-infected cells at a time when cap-dependent translation of cellular mRNAs is inhibited. Sarnow P. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5795–9

Internal frameshifts within the mitochondrial genes for cytochrome oxidase subunit II and maxicircle unidentified reading frame 3 of Leishmania tarentolae are corrected by RNA editing: evidence for translation of the edited cytochrome oxidase subunit II mRNA. Shaw JM, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6220–4

Detection of two growth hormone receptor mRNAs and primary translation products in the mouse [published erratum appears in Proc Natl Acad Sci U S A 1989 May;86(10):3664] Smith WC, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9576–9

Translation of the sequence AGG-AGG yields 50% ribosomal frameshift. Spanjaard RA, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7967–71

Coregulation of processing and translation: mature 5' termini of Escherichia coli 23S ribosomal RNA form in polysomes. Srivastava AK, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7144–8

Human immunodeficiency virus tat-activated expression of poliovirus protein 2A inhibits mRNA translation. Sun XH, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2143–6

Translational repression in eukaryotes: partial purification and characterization of a repressor of ferritin mRNA translation. Walden WE, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9503–7

Expression in Xenopus oocytes of rat liver mRNA coding for a bile salt-dependent cholesteryl ester hydrolase. Zolfaghari R, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):6913–6

In vitro expression of the alpha and beta subunits of the Na,K-ATPase. Gilmore-Hebert M, et al. **Prog Clin Biol Res** 1988;268B:71–6

Translational control of gene expression in the human brain. Langstrom N, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):469–79 (27 ref.)

Polycistronic animal virus mRNAs. Samuel CE. **Prog Nucleic Acid Res Mol Biol** 1989;37:127–53 (141 ref.)

Cap-binding proteins of eukaryotic messenger RNA: functions in initiation and control of translation. Sonenberg N. **Prog Nucleic Acid Res Mol Biol** 1988;35:173–207 (197 ref.)

Amino acid composition is correlated with protein abundance in Escherichia coli: can this be due to optimization of translational efficiency? Shpaer EG. **Protein Seq Data Anal** 1989 Feb;2(2):107–10

Language of translation. Wright K. **Sci Am** 1988 Jul; 259(1):37, 40

Prevention of translational frameshifting by the modified nucleoside 1-methylguanosine. Björk GR, et al. **Science** 1989 May 26;244(4907):986–9

Translational blockade imposed by cytokine-derived UA-rich sequences. Kruys V, et al. **Science** 1989 Aug 25; 245(4920):852–5

Changing the acceptor identity of a transfer RNA by altering nucleotides in a "variable pocket". McClain WH, et al. **Science** 1988 Sep 30;241(4874):1804–7

A continuous cell-free translation system capable of producing polypeptides in high yield. Spirin AS, et al. **Science** 1988 Nov 25;242(4882):1162–4

Translation of unspliced transcripts after heat shock. Yost HJ, et al. **Science** 1988 Dec 16;242(4885):1544–8

Cap recognition and the entry of mRNA into the protein synthesis initiation cycle. Rhoads RE. **Trends Biochem Sci** 1988 Feb;13(2):52–6

Novel mechanisms of translational control in Saccharomyces cerevisiae. Hinnebusch AG. **Trends Genet** 1988 Jun; 4(6):169–74 (27 ref.)

Cloning of serotonin and substance K receptors by functional expression in frog oocytes [news] Levitan ES. **Trends Neurosci** 1988 Feb;11(2):41–3 (16 ref.)

Isolation and in vitro translation of Onchocerca volvulus mRNA. Connor VM, et al. **Trop Med Parasitol** 1988 Dec; 39 Suppl 4:460–2

Cauliflower mosaic virus 35 S RNA leader region inhibits translation of downstream genes. Baughman G, et al. **Virology** 1988 Nov;167(1):125–35

Avian retroviral vectors derived from avian defective leukemia virus: role of the translational context of the inserted gene on efficiency of the vectors. Benchaibi M, et al. **Virology** 1989 Mar;169(1):15–26

Nontranslated cellular mRNAs are associated with the cytoskeletal framework in influenza virus or adenovirus infected cells. Katze MG, et al. **Virology** 1989 Apr; 169(2):312–22

Signals important for high-level expression of foreign genes in Autographa californica nuclear polyhedrosis virus expression vectors. Luckow VA, et al. **Virology** 1988 Nov; 167(1):56–71

Conserved structural domains in the 5'-untranslated region of picornaviral genomes: an analysis of the segment controlling translation and neurovirulence. Pilipenko EV, et al. **Virology** 1989 Feb;168(2):201–9

Virus-ribosome complexes from cell-free translation systems supplemented with cowpea chlorotic mottle virus particles. Roenhorst JW, et al. **Virology** 1989 Jan;168(1):138–46

Control of reovirus messenger RNA translation efficiency by the regions upstream of initiation codons. Roner MR, et al. **Virology** 1989 Feb;168(2):292–301

Southern bean mosaic virus RNA remains associated with swollen virions during translation in wheat germ cell-free extracts. Shields SA, et al. **Virology** 1989 Aug;171(2):602–6

Bean mild mosaic virus: genome and its translation products. Hari V, et al. **Virus Genes** 1989 May;2(3):211–21

Translational regulation of influenza virus mRNAs. Yamanaka K, et al. **Virus Genes** 1988 Oct;2(1):19–30

5'-secondary structure formation, in contrast to a short string of non-preferred codons, inhibits the translation of the pyruvate kinase mRNA in yeast. Bettany AJ, et al. **Yeast** 1989 May-Jun;5(3):187–98

Expression of the Drosophila 70,000 Dalton heat shock protein is translationally controlled in yeast. Collatz E, et al. **Yeast** 1985 Sep;1(1):49–56

The psi factor of yeast: a problem in inheritance. Cox BS, et al. **Yeast** 1988 Sep;4(3):159–78 (86 ref.)

mRNA-dependent yeast cell-free translation systems: theory and practice. Tuite MF, et al. **Yeast** 1986 Mar;2(1):35–52

[Role of the code redundancy in determining cotranslational protein folding] Krasheninnikov IA, et al. **Biokhimiia** 1989 Feb;54(2):187–200 (Eng. Abstr.) **(Rus)**

[Dynamics of the biosynthesis of components of the protein synthesizing apparatus of the rat liver at the stage of restoration of translation, inhibited by cycloheximide] Mitrokhin IuI, et al. **Biokhimiia** 1988 Dec;53(12):2033–41 (Eng. Abstr.) **(Rus)**

[Location of the initiating codon AUG in relation to the 5'-end of mRNA mediates the effectiveness of translation in E. coli cells] Kravchenko VV, et al. **Bioorg Khim** 1988 Oct;14(10):1387–92 (Eng. Abstr.) **(Rus)**

[Effectiveness of distal gene translation in polycistrons depends upon the arrangement of regulatory signals on a template] Kravchenko VV, et al. **Bioorg Khim** 1988 Oct; 14(10):1372–86 (Eng. Abstr.) **(Rus)**

[Synthesis of visual rhodopsin in a cell-free translation system. I. Influence of the structure of the synthetic bovine visual opsin mRNA on its translational efficiency] Zozulia SA, et al. **Bioorg Khim** 1988 Dec;14(12):1663–70 (Eng. Abstr.) **(Rus)**

[Structural changes of the ribosomes during interaction with the elongation factor Tu] Bubunenko MG, et al. **Dokl Akad Nauk SSSR** 1988;303(2):494–6 **(Rus)**

[Nonsense-suppression during amplification of the gene coding for protein translation factor] Chernov IuO, et al. **Dokl Akad Nauk SSSR** 1988;301(5):1227–9 **(Rus)**

[Role of the rare codon clusters in defining the boundaries of polypeptide chain regions with identical secondary structures in the process of co-translational folding of proteins] Krasheninnikov IA, et al. **Dokl Akad Nauk SSSR** 1988;303(4):995–9 **(Rus)**

[Effect of alternative secondary structures on the effectiveness of translation of polycistron mRNA] Kravchenko VV, et al. **Dokl Akad Nauk SSSR** 1988; 301(2):480–3 **(Rus)**

[Functional analysis of 5'-nontranslatable region of poliovirus RNA] Pestova TV, et al. **Dokl Akad Nauk SSSR** 1989; 305(6):1503–5 **(Rus)**

[Use of a cell-free protein synthesizing system from cells of ascites carcinoma Krebs-2 for RNA translation of plant viruses] Karasev AV, et al. **Mol Biol (Mosk)** 1989 Jan-Feb; 23(1):119–26 (Eng. Abstr.) **(Rus)**

[Structural analysis of translating ribosomes. Proton magnetic resonance method] Riabova LA, et al. **Mol Biol (Mosk)** 1988 Jul-Aug;22(4):1026–32 (Eng. Abstr.) **(Rus)**

[Influence of various tRNA conformers on mRNA translation in cell-free protein-synthesizing systems] Negrutskiĭ BS, et al. **Ukr Biokhim Zh** 1989 May-Jun; 61(3):58–62 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Isolation of a translation-inhibiting peptide from myocardium. Havre PA, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):H1024–31

The response time of transcription and translation of the leu-2 gene of Neurospora to its inducer, alpha-isopropylmalate, approaches the permissible minimum. Mary A, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1286–90

Polyamine-mediated control of mammalian S-adenosyl-L-methionine decarboxylase expression: effects on the content and translational efficiency of the mRNA. Persson L, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1196–202

Characterization of a translation inhibitory protein from Luffa aegyptiaca. Ramakrishnan S, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):509–16

Inhibition of eukaryotic translation by nucleoside 5'-monophosphate analogues of mRNA 5'-cap: changes in N7 substituent affect analogue activity. Darzynkiewicz E, et al. **Biochemistry** 1989 May 30;28(11):4771–8

Angiogenin abolishes cell-free protein synthesis by specific ribonucleolytic inactivation of 40S ribosomes. St. Clair DK, et al. **Biochemistry** 1988 Sep 20;27(19):7263–8

Note on the activation of the heme-stabilized translational inhibitor of reticulocyte lysates by oxidized glutathione. Palomo C, et al. **Biochimie** 1988 Jun;70(6):827–31

Presence of translational inhibitory activity in partially purified extracts from two Petrocoptis species. Ferreras JM, et al. **Cell Mol Biol** 1989;35(1):89–95

Alternative occupancy of a dual ribosomal binding site by mRNA affected by translation initiation factors. Canonaco MA, et al. **Eur J Biochem** 1989 Jul 1;182(3):501–6

The Aspergillus toxin restriction is a suitable cytotoxic agent for generation of immunocongugates with monoclonal antibodies directed against human carcinoma cells. Conde FP, et al. **Eur J Biochem** 1989 Jan 2;178(3):795–802

The poly(A)-binding protein facilitates in vitro translation of poly(A)-rich mRNA. Grossi de Sa MF, et al. **Eur J Biochem** 1988 Oct 1;176(3):521–6

Expression of muscle-specific proteins is necessary to regulate translation of the mRNA for a 40-kDa housekeeping polypeptide in rat L6 cells. Pramanik SK, et al. **Eur J Biochem** 1989 Jul 1;182(3):687–98

Hemin and cyclic AMP stimulate message-dependent translation in lysates from Friend erythroleukemia cells. Chinchar VG, et al. **Exp Hematol** 1989 Jun;17(5):405–10

Protein synthesis in rat cardiac myocytes is stimulated at the level of translation by phorbol esters. Fuller SJ, et al. **FEBS Lett** 1989 Apr 24;247(2):209–12

In vitro translation of cytosolic and peroxisomal epoxide hydrolase and catalase on liver polyribosomes from untreated and clofibrate-treated C57B1/6 mice. Joste V, et al. **FEBS Lett** 1989 May 22;249(1):83–8

Do pyrimidine nucleotides regulate translatability of globin mRNA as purine nucleotides do? Rubin HN, et al. **Int J Biochem** 1988;20(10):1051–9

Sensitivity of protein and RNA synthesis to antiamoebic drugs in axenic Entamoeba histolytica (NIH-200). Agrawal A, et al. **Int J Med Microbiol** 1989 Jul;271(2):244–8

Requirements for the translational repression of ferritin transcripts in wheat germ extracts by a 90-kDa protein from rabbit liver. Brown PH, et al. **J Biol Chem** 1989 Aug 15;264(23):13383–6

Internucleosomal DNA cleavage precedes diphtheria toxin-induced cytolysis. Evidence that cell lysis is not a simple consequence of translation inhibition. Chang MP, et al. **J Biol Chem** 1989 Sep 15;264(26):15261–7

Sequence specific inhibition of in vitro translation of mutated or normal ras p21. Yu ZP, et al. **J Exp Pathol** 1989; 4(2):97–108

Differential pattern of misreading induced by streptomycin in vitro. Negre D, et al. **J Mol Biol** 1988 Nov 5;204(1):213–6

Androgen induction of beta-glucuronidase translational yield in submaxillary gland of B6.N mice. Bracey LT, et al. **Mol Endocrinol** 1988 Aug;2(8):701–5

Parathyroid hormone inhibits collagen synthesis at both ribonucleic acid and protein levels in rat osteogenic sarcoma cells. Partridge NC, et al. **Mol Endocrinol** 1989 Feb;3(2):232–9

Regulation of estrogen receptor messenger ribonucleic acid and protein levels in human breast cancer cell lines by sex steroid hormones, their antagonists, and growth factors. Read LD, et al. **Mol Endocrinol** 1989 Feb;3(2):295–304

Aminoglycoside-induced mistranslation in thermophilic archaebacteria. Londei P, et al. **Mol Gen Genet** 1988 Sep; 214(1):48–54

Reduction of the translation fidelity by kanamycin: effects on growth and mutant frequency in S. typhimurium TA102. Gocke E. **Mutat Res** 1989 Jul;226(3):211–4

In vitro localization of the protein synthesis defect associated with experimental phenylketonuria. Elsliger MA, et al. **Neurochem Res** 1989 Jan;14(1):81–4

Translational regulation in growing clonal human astrocytoma cells in culture. Tewari S, et al. **Neurochem Res** 1988 Aug;13(8):749–60

Effects of aldosterone on Na,K-ATPase transcription, mRNAs, and protein synthesis, and on transepithelial Na+ transport in A6 cells. Verrey F, et al. **Prog Clin Biol Res** 1988;268B:463–8

TRANSLATIONS

Development and initial validation of a dual-language English-Spanish format for the Arthritis Impact Measurement Scales. Hendricson WD, et al. **Arthritis Rheum** 1989 Sep;32(9):1153–9

Escherichia coli 3'-terminal 16S rRNA sequence modulated fidelity during translation. Latif FA, et al. **Biochimie** 1988 Dec;70(12):1831–9

High fidelity of guanine translation in a plasmid-directed in vitro system. Negre D, et al. **Biochimie** 1988 Dec; 70(12):1715–8

Mistranslations and absolutes [letter] Katz SR. **Conn Med** 1988 Oct;52(10):629

Translation affects immunoglobulin mRNA stability. Jäck HM, et al. **Eur J Immunol** 1989 May;19(5):843–7

This and that: on transport and translation. Max B. **Trends Pharmacol Sci** 1988 Feb;9(2):48–51

Translation products of cauliflower mosaic virus ORF V, the coding region corresponding to the retrovirus pol gene. Pietrzak M, et al. **Virus Genes** 1987 Nov;1(1):83–96

[The Helsinki Declaration—a misleading Norwegian translation?] Wetlesen J. **Tidsskr Nor Laegeforen** 1989 Apr 20;109(11):1179–80 (Eng. Abstr.) (Nor)

HISTORY

Paravicius immortal? Weisser U. **Sudhoffs Arch** 1988; 72(2):239–40

TRANSLOCATION, CHROMOSOMAL see **TRANSLOCATION (GENETICS)**

TRANSLOCATION (GENETICS)

8;21 translocation in acute nonlymphocytic leukemia. Occurrence in M1 and M2 FAB subtypes. Davey DD, et al. **Am J Clin Pathol** 1989 Aug;92(2):172–6

8;21 translocation in myelodysplasia secondary to essential thrombocythemia. Knoitenbelt E, et al. **Am J Hematol** 1989 Apr;30(4):233–5

Acute nonlymphocytic leukemia with basophilic differentiation and t(9,11)(p22,q23) in a child. Kubota M, et al. **Am J Hematol** 1989 Jun;31(2):133–5

Heterogeneity in the breakpoints of chromosome 19 among acute leukemic patients with the t(11;19)(q23;p13) translocation. Mitani K, et al. **Am J Hematol** 1989 Aug; 31(4):253–7

Complete remission in acute promyelocytic leukemia despite the persistence of the 15;17 translocation. Wallace PJ. **Am J Hematol** 1989 Aug;31(4):266–8

Comparative mapping of the constitutional and tumor-associated 11;22 translocations. Budarf M, et al. **Am J Hum Genet** 1989 Jul;45(1):128–39

Re: Pellestor et al. on sperm chromosomes [letter] Egozcue J, et al. **Am J Hum Genet** 1989 Sep;45(3):477

Precise localization of NF1 to 17q11.2 by balanced translocation. Ledbetter DH, et al. **Am J Hum Genet** 1989 Jan;44(1):20–4

Segregation analysis of translocations by the study of human sperm chromosome complements. Martin RH. **Am J Hum Genet** 1989 Apr;44(4):461–3

Prenatal diagnosis and carrier detection of a cryptic translocation by using DNA markers from the short arm of chromosome 5. Overhauser J, et al. **Am J Hum Genet** 1989 Aug;45(2):296–303

Direct segregation analysis of reciprocal translocations: a study of 283 sperm karyotypes from four carriers. Pellestor F, et al. **Am J Hum Genet** 1989 Apr;44(4):464–73

Molecular and cytogenetic characterization of a de novo t(5p;21q) in a patient previously diagnosed as monosomy 21. Phelan MC, et al. **Am J Hum Genet** 1988 Oct; 43(4):511–9

An extended long-range restriction map of the human sex-determining region on Yp, including ZFY, finds marked homology on Xp and no detectable Y sequences in an XX male. Verga V, et al. **Am J Hum Genet** 1989 May;44(5):756–65

Insertional translocations: report of two new families and review of the literature. Abuelo DN, et al. **Am J Med Genet** 1988 Oct;31(2):319–29 (72 ref.)

De novo reciprocal 1p;2q translocation in a child with multiple congenital anomalies/mental retardation syndrome. Chitayat D, et al. **Am J Med Genet** 1989 Jan; 32(1):36–41

Complex chromosomal rearrangements [letter] Creasy MR. **Am J Med Genet** 1989 Apr;32(4):560

Spontaneous loss of fetuses with chromosomally unbalanced D/21—or reciprocal translocations in late pregnancy. Daniel A. **Am J Med Genet** 1989 Jun;33(2):285

Clinical, cytogenetic, and pedigree findings in 18 cases of Aicardi syndrome. Donnenfeld AE, et al. **Am J Med Genet** 1989 Apr;32(4):461–7

A presumptive translocation 1p;2q resulting in duplication 1p and deletion 2q. Halal F, et al. **Am J Med Genet** 1989 Mar;32(3):376–9 (17 ref.)

Balanced X;15 translocation 46,X,t(X;15)(q21;q23) associated with primary amenorrhea. Ji XW, et al. **Am J Med Genet** 1988 Dec;31(4):783–6

Greig syndrome in a large kindred due to reciprocal chromosome translocation t(6;7)(q27;p13). Krüger G, et al. **Am J Med Genet** 1989 Mar;32(3):411–6

Sex vesicle "entrapment": translocation or nonhomologous recombination of misaligned Yp and Xp as alternative mechanisms for abnormal inheritance of the sex-determining region. Stalvey JR, et al. **Am J Med Genet** 1989 Apr;32(4):564–72

Comments on estimations of risks to translocation carriers. Stene J. **Am J Med Genet** 1989 May;33(1):54–7

Deletion 9p, duplication 18q in two sisters resulting from a maternal (9;18) (p22;q21.3) translocation. Tayel SM, et al. **Am J Med Genet** 1988 Dec;31(4):853–61

Duplication of 5q11.2——q13.1 from a familial (5;20) balanced insertion. Yip MY, et al. **Am J Med Genet** 1989 Jun;33(2):220–3

"Possibly" de novo translocations: prenatal risk counseling. Wasserman ER, et al. **Am J Obstet Gynecol** 1989 Sep; 161(3):698–702

Treatment of t(4;11) acute leukemia with aggressive multiagent chemotherapy. Preliminary results. Hays T, et al. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):16–9

A lineage switch in acute monocytic leukemia. A case report. Shimizu H, et al. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):162–6

Robertsonian translocations and abnormal phenotypes. Groupe de Cytogénéticiens Français. **Ann Genet** 1989; 32(1):3–9

Digeorge anomaly associated with partial deletion of chromosome 22. Report of a case with X/22 translocation and review of the literature. Dallapiccola B, et al. **Ann Genet** 1989;32(2):92–6 (39 ref.)

A case of Alagille's syndrome with translocation (4;14) (q21;q21). Mujica P, et al. **Ann Genet** 1989;32(2):117–9

Partial duplication 14q/deletion 2q in two sibs due to t(2;14) (q37.1;q31.2) pat. de la Fuente AA, et al. **Ann Genet (Paris)** 1988;31(4):254–7

Trisomy 8p by malsegregation of a t(5;8)(p15;p11)mat in a case of XY pure gonadal dysgenesis. Memo L, et al. **Ann Genet (Paris)** 1988;31(3):181–5 (16 ref.)

Hydrops fetalis as an indication for prenatal chromosome analysis with the example of the diagnosis of a duplication 15q11 and 17q25 due to a familial translocation 15/17. Schwanitz G, et al. **Ann Genet (Paris)** 1988;31(3):186–9

Molecular characterization of human X/Y translocations suggests their aetiology through aberrant exchange between homologous sequences on Xp and Yq. Ballabio A, et al. **Ann Hum Genet** 1989 Jan;53 (Pt 1):9–14

The nonrandom participation of human acrocentric chromosomes in Robertsonian translocations. Therman E, et al. **Ann Hum Genet** 1989 Jan;53 (Pt 1):49–65 (223 ref.)

Molecular pathogenesis of Ph-positive leukemias. Clark SS, et al. **Annu Rev Med** 1989;40:113–22 (49 ref.)

Chromosome pattern of leukemias induced in mice with normal karyotype and with T/1:17/190Ca chromosome translocation. Włodarska I. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):205–21

In vitro study of translocation t(4;11) acute leukemia. Sequential range of phenotype. Léglise MC, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):164–8

Insulin receptor overexpression in a human pre-B acute lymphocytic leukemia cell line with a t(1;19) chromosome translocation near the INSR locus. Kaplan GC, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1275–82

Missense and nonsense suppressors can correct frameshift mutations. Tucker SD, et al. **Biochimie** 1989 Jun; 71(6):729–39

The T-cell receptor delta chain locus is disrupted in the T-ALL associated t(11;14)(p13;q11) translocation. Champagne E, et al. **Blood** 1989 May 1;73(6):1672–6

Ph1-positive, bcr-negative acute leukemias: clustering of breakpoints on chromosome 22 in the 3' end of the BCR gene first intron. Chen SJ, et al. **Blood** 1989 Apr; 73(5):1312–5

The t(5;14) chromosomal translocation in a case of acute lymphocytic leukemia joins the interleukin-3 gene to the immunoglobulin heavy chain gene. Grimaldi JC, et al. **Blood** 1989 Jun;73(8):2081–5

Two karyotypically independent leukemic clones with the t(8;21) and 11q23 translocation in acute myeloblastic leukemia at relapse [published erratum appears in Blood 1989 Aug 15;74(3):1180] Hayashi Y, et al. **Blood** 1989 May 1;73(6):1650–5

A novel translocation, t(2;5)(p23;q35), in childhood phagocytic large T-cell lymphoma mimicking malignant histiocytosis. Kaneko Y, et al. **Blood** 1989 Feb 15; 73(3):806–13

The site of the breakpoint within the bcr is a prognostic factor in Philadelphia-positive CML patients. Mills KI, et al. **Blood** 1988 Oct;72(4):1237–41

Lack of involvement of the c-fms and N-myc genes by chromosomal translocation t(2;5)(p23;q35) common to malignancies with features of so-called malignant histiocytosis. Morgan R, et al. **Blood** 1989 Jun; 73(8):2155–64

Detection of chromosomal translocation t(14;18) within the minor cluster region of bcl-2 by polymerase chain reaction and direct genomic sequencing of the enzymatically amplified DNA in follicular lymphomas. Ngan BY, et al. **Blood** 1989 May 15;73(7):1759–62

A novel leukemia cell line, MR-87, with positive Philadelphia chromosome and negative breakpoint cluster region rearrangement coexpressing myeloid and early B-cell markers. Okamura J, et al. **Blood** 1988 Oct; 72(4):1261–8

Rearrangement of the breakpoint cluster region and expression of P210 BCR-ABL in a "masked" Philadelphia chromosome-positive acute myeloid leukemia. Price CM, et al. **Blood** 1988 Nov;72(5):1829–32

Childhood acute lymphoblastic leukemia with chromosomal breakpoints at 11q23. Raimondi SC, et al. **Blood** 1989 May 1;73(6):1627–34

Characterization of a new non-Hodgkin's lymphoma cell line (NCEB-1) with a chromosomal (11:14) translocation [t(11:14)(q13;q32)] Saltman DL, et al. **Blood** 1988 Dec; 72(6):2026–30

Detection of occult follicular lymphoma by specific DNA amplification. Stetler-Stevenson M, et al. **Blood** 1988 Nov; 72(5):1822–5

Translocation of c-abl oncogene and PDGFB (c-sis) gene in a case of CML with 46,XY, t(22;22). Gradl G, et al. **Blut** 1989 Jun;58(6):279–85

Variant (3;21) translocation and megakaryocytic involvement in blastic crisis of Philadelphia positive chronic myeloid leukaemia. Aventin A, et al. **Br J Haematol** 1989 Apr; 71(4):562–4

Translocation t(1;3) (p36;q21) in chronic myelomonocytic leukaemia. Iselius L, et al. **Br J Haematol** 1989 May; 72(1):109–10

HRAS1 and INS genes are relocated but not structurally altered as a result of the t(7;11)(p15;p15) in a clone from a patient with acute myeloid leukaemia (M4). Morris CM, et al. **Br J Haematol** 1989 Apr;71(4):481–6

A translocation involving a specific breakpoint (q35) on chromosome 5 is characteristic of anaplastic large cell lymphoma ('Ki-1 lymphoma'). Rimokh R, et al. **Br J Haematol** 1989 Jan;71(1):31–6

Association of a chromosomal 9,12 translocation with B cell precursor lymphoblastic blast crisis of a Ph+ chronic myelogenous leukaemia. Solary E, et al. **Br J Haematol** 1989 May;72(1):106–8

The establishment of Epstein-Barr virus nuclear antigen-positive (SP-50B) and Epstein-Barr virus nuclear antigen-negative (SP-53) cell lines with t(11;14)(q13;q32) chromosome abnormality from an intermediate lymphocytic lymphoma. Daibata M, et al. **Cancer** 1989 Sep 15;64(6):1248–53

Chromosomal translocations and gene rearrangements in non-Hodgkin lymphomas. Yunis JJ. **Cancer Detect Prev** 1988;12(1–6):291–6

A translocation (7;10)(q35;q21) in a differentiated papillary carcinoma of the thyroid. Antonini P, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):139–44

Philadelphia-positive chronic myeloid leukemia with translocation t(3;21) [letter] Aventin A, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):133–4

Translocation t(11;11)(p15;p15) in a case of acute lymphoblastic leukemia. Baranger L, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):225–6

Translocation t(8;16)(p11;p13) in acute nonlymphoblastic leukemia (M4) possibly secondary to Hodgkin's disease. Barbata G, et al. **Cancer Genet Cytogenet** 1989 Jan; 37(1):127–31

Cytogenetic findings on eight follicular thyroid adenomas including one with a t(10;19). Bartnitzke S, et al. **Cancer Genet Cytogenet** 1989 May;39(1):65–8

Translocation t(2;8) in AIDS-associated Burkitt leukemia [letter] Berkowicz M, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):131

Loss of the Y chromosome associated with translocation t(6;9)(p23;q34) in a patient with acute nonlymphocytic leukemia. Bernstein R, et al. **Cancer Genet Cytogenet** 1989 May;39(1):81–7 (25 ref.)

A unique chromosome translocation, t(7;15), in a pediatric patient with pre-B-cell lymphoma presenting as a primary tumor of bone. Biegel JA, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):211–5

A new translocation involving chromosomes 8 and 9 in a Philadelphia-negative chronic myelogenous leukemia. Botti AC, et al. **Cancer Genet Cytogenet** 1988 Oct 1; 35(1):51–4

Translocations involving chromosomes 2 and 13 in benign and malignant cartilaginous neoplasms. Bridge JA, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):83–8

Translocation t(11;19)(q21;p13.1) as the sole chromosome abnormality in a cystadenolymphoma (Warthin's tumor) of the parotid gland. Bullerdiek J, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):129–32

A der(11)t(8;11) in two medulloblastomas. A possible nonrandom cytogenetic abnormality. Callen DF, et al. **Cancer Genet Cytogenet** 1989 Apr;38(2):255–60

Extraskeletal Ewing's tumor with translocation t(11;22) in a patient with Down syndrome. Casorzo L, et al. **Cancer Genet Cytogenet** 1989 Jan;37(1):79–84

A t(3;5) in blastic phase of a Philadelphia chromosome-negative chronic myeloid leukemia. De Braekeleer M, et al. **Cancer Genet Cytogenet** 1989 Feb; 37(2):163–8

A further case of Philadelphia chromosome-positive chronic myeloid leukemia with t(3;9;22) [letter] De Braekeleer M, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):279–80

der(1)t(1;9): a specific chromosome abnormality in polycythemia vera? Cytogenetic and in situ hybridization studies. den Nijs van Weert JI, et al. **Cancer Genet Cytogenet** 1989 Jul 1;40(1):121–7

Translocation (X;19) with involvement of the inactive X chromosome in oligoblastic granulocytic leukemia. Gibas Z, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):237–42

Translocations t(15;17) and t(9;14)(q34;q22) in a case of acute promyelocytic leukemia with increased number of basophils. Gotoh H, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):103–7

Robertsonian chromosome recombinants are rare in cancer. Hecht F, et al. **Cancer Genet Cytogenet** 1988 Oct 1; 35(1):79–81

Two unrelated clonal chromosome rearrangements in a nasal papilloma. Jin YS, et al. **Cancer Genet Cytogenet** 1989 May;

39(1):29–34
Pleomorphic adenoma with translocation (3;8)(p24;q13) in a child [letter] Kameyama J, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):281–2
Trisomy 5 and t(5;14)(q11;q32) as the sole abnormalities in two different clones from a centroblastic non–Hodgkin's lymphoma. Kristoffersson U, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):173–6
Translocation t(10;17)(p13;q12) in two cases of acute nonlymphocytic leukemia with phagocytic activity of blasts. A new cytogenetic entity? Lai JL, et al. **Cancer Genet Cytogenet** 1989 May;39(1):45–53
Translocation t(1;19)(q23;p13) in acute lymphoblastic leukemia. A report on six new cases and an unusual t(17;19)(q11;q13), with special reference to prognostic factors. Lai JL, et al. **Cancer Genet Cytogenet** 1989 Jan; 37(1):9–17
Translocation (4;11) in a case of malignant lymphoma. Leroux D, et al. **Cancer Genet Cytogenet** 1988 Dec; 36(2):159–63
Combined trisomy 1q and monosomy 17p due to translocation t(1;17) in a patient with myelodysplastic syndrome. Mamaev N, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):21–5
Translocation t(1;11)(q21;q23), a new subgroup within M4 acute nonlymphocytic leukemia. Meloni-Balliet AM, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):269–71
Cytogenetic and clinical studies in acute promyelocytic leukemia (M3) and cytologic M3 variant (M3V). Montaldi A, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):263–8
A cytogenetic and molecular analysis of five variant Philadelphia translocations in chronic myeloid leukemia. Morris CM, et al. **Cancer Genet Cytogenet** 1988 Oct 15; 35(2):179–97
Ring formation and structural rearrangements of chromosome 1 as secondary changes in uterine leiomyomas with t(12;14)(q14–15;q23–24). Nilbert M, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):183–90
t(6;9) in bone marrow cells in two patients with sarcoidosis and acute myeloid leukemia. Nordenson I, et al. **Cancer Genet Cytogenet** 1989 Apr;38(2):297–300
Involvement of c–myc oncogene in lymphoma cell lines with no detectable chromosome rearrangement of band 8q24. Ohno H, et al. **Cancer Genet Cytogenet** 1989 Jul 1; 40(1):73–82
Philadelphia-positive thrombocythemia with a complex translocation involving chromosomes 9, 15, and 22. Palumbo AP, et al. **Cancer Genet Cytogenet** 1989 May; 39(1):77–80
Translocation of the MOS gene in a rare t(8;16) associated with acute myeloblastic leukemia and Down syndrome. Pettenati MJ, et al. **Cancer Genet Cytogenet** 1989 Feb; 37(2):221–7
Translocation (8;16)(p11;p13) in patients with acute monocytic leukemias. An evolving syndrome? Powell BL, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):109–15 (25 ref.)
An unusual t(9;12)(p13;q24) in childhood acute lymphocytic leukemia [letter] Price C, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):293–5
Translocation 10;17 in clear cell sarcoma of the kidney. A first report. Punnett HH, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):123–8
Two new chromosomal abnormalities in chronic myelogenous leukemia 46,XY,t(9;15;22)(q34;q22;q11) and 46,XY,t(6;9;12;22)(p21;q34;q24;q11). Ramirez GM, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):115–9
A uterine leiomyoma showing both t(12;14) and del(7) abnormalities. Sait SN, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):157–61
Translocation 1;7 in four cases of myeloid disorders. Sheppard DM, et al. **Cancer Genet Cytogenet** 1989 Mar; 38(1):49–52
Another case of acute myelomonocytic leukemia with t(8;16)(p11;p13). Smadja N, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):137–9
Translocation (2;7)(p13;q36) in a case of acute nonlymphocytic leukemia evolving from a myelodysplastic syndrome. Sreekantaiah C, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):199–204
Involvement of bands 9q21–q22 in five cases of acute nonlymphocytic leukemia. Sreekantaiah C, et al. **Cancer Genet Cytogenet** 1989 May;39(1):55–64
KRAS2 oncogene overexpression in myelodysplastic syndrome with translocation 5;12. Srivastava A, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):61–71
Der(5)t(5;7)(q11.2;p11.2): a new recurring abnormality in malignant myeloid disorders. Thangavelu M, et al. **Cancer Genet Cytogenet** 1989 Jan;37(1):1–8
Translocation 3;21 in Philadelphia chromosome positive chronic myeloid leukemia at diagnosis. Thompson PW, et al. **Cancer Genet Cytogenet** 1989 Jun;39(2):143–6
Variant t(8;18;21) translocation in acute myeloid leukemia. Uchida H, et al. **Cancer Genet Cytogenet** 1988 Dec; 36(2):231–2
Translocation t(1;7) revisited. Report of three further cases and review. Willem P, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):45–54 (32 ref.)
Translocation t(16;21) in acute nonlymphocytic leukemia with abnormal eosinophils. Yao E, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):221–3
Chromosomal translocations with specific breakpoints in asbestos-induced rat mesotheliomas. Libbus BL, et al. **Cancer Res** 1988 Nov 15;48(22):6455–61
Nonrandom rearrangement of chromosome 14 at band q32.33 in human lymphoid malignancies with mature B-cell phenotype. Nishida K, et al. **Cancer Res** 1989 Mar 1; 49(5):1275–81
Identification of a recurring translocation site involving chromosome 6 in human malignant melanoma. Trent JM, et al. **Cancer Res** 1989 Jan 15;49(2):420–3 (30 ref.)
SecA protein is required for secretory protein translocation into E. coli membrane vesicles. Cabelli RJ, et al. **Cell** 1988 Nov 18;55(4):683–92
Heterosynapsis in a heterozygous fertile boar carrier of a 3;7 translocation. Gabriel-Robez O, et al. **Chromosoma** 1988;97(1):26–32
Fertility and X-chromosome rearrangements: isodicentric X-chromosome formation in the mother and Xp deletion in her daughter. Fryns JP, et al. **Clin Genet** 1988 Nov; 34(5):321–4
Familial partial trisomy 5p resulting from segregation of an insertional translocation. Gustavson KH, et al. **Clin Genet** 1988 Jun;33(6):404–9
"Unstable" translocation not proven unstable [letter] Hecht BK, et al. **Clin Genet** 1989 Jan;35(1):78–9
De novo Robertsonian D/D type translocations: the Leuven experience. Kleczkowska A, et al. **Clin Genet** 1989 Jul; 36(1):65–8
Ataxia-without-telangiectasia in two sisters with rearrangements of chromosomes 7 and 14. Maserati E, et al. **Clin Genet** 1988 Nov;34(5):283–7
Unusual segregation in a family with a 11/21 translocation. Steensen P, et al. **Clin Genet** 1988 Jun;33(6):449–53
X-linked hypohidrotic ectodermal dysplasia and t(X;12) in a female. Turleau C, et al. **Clin Genet** 1989 Jun;35(6):462–6
Complex chromosome rearrangements involving chromosomes 1;3 and 2;3 in two abnormal children. Voullaire LE, et al. **Clin Genet** 1988 Nov;34(5):313–20
Robertsonian translocation and extra microchromosome [letter] Waters JJ, et al. **Clin Genet** 1988 Aug;34(2):140–1
Genetic counseling in families with inherited balanced translocations: experience with 36 families. Wolff G, et al. **Clin Genet** 1989 Jun;35(6):404–16
A familial chromosomal translocation t(6q;7q) with habitual abortions. Zhang SZ, et al. **Clin Genet** 1989 Jul;36(1):1–4
Determination of the breakpoints of 1;7 translocations in myelodysplastic syndrome by in situ hybridization using chromosome-specific alpha satellite DNA from human chromosomes 1 and 7. Alitalo T, et al. **Cytogenet Cell Genet** 1989;50(1):49–53
A familial translocation involving chromosomes 3 and 21: clinical findings and implications. Bell CW, et al. **Cytogenet Cell Genet** 1989;50(1):59–60
Segregation and transmission of chromosomes from a reciprocal translocation in Gallus domesticus cockerels. Bonaminio GA, et al. **Cytogenet Cell Genet** 1988; 48(4):193–7
Mapping of 12 translocation breakpoints in the Xp21 region with respect to the locus for Duchenne muscular dystrophy. Boyd Y, et al. **Cytogenet Cell Genet** 1988; 48(1):28–34
Report of the committee on clinical disorders and chromosomal deletion syndromes. Harper P, et al. **Cytogenet Cell Genet** 1988;49(1–3):254–6
Meiotic analysis of two human reciprocal X-autosome translocations. Quack B, et al. **Cytogenet Cell Genet** 1988; 48(1):43–7
Characterization of an X;X translocation by cytological analysis and in situ hybridization. Raimondi E, et al. **Cytogenet Cell Genet** 1989;50(2–3):123–4
Pachytene pairing in relation to sperm and oocyte numbers in a male-fertile reciprocal translocation in the mouse. Setterfield LA, et al. **Cytogenet Cell Genet** 1988;49(4):293–9
Chronic myelomonocytic leukemia with chromosomal changes involving 1p36 and hepatocellular carcinoma in a case of Fanconi's anemia. Bessho F, et al. **Eur J Haematol** 1989 May;42(5):492–5
Translocation (1;5)(q23;q33) in adult acute non-lymphocytic leukemia. Gyger M, et al. **Eur J Haematol** 1989 Mar; 42(3):246–9
Chromosome translocation (2;13)(q37;q14) in a disseminated alveolar rhabdomyosarcoma. Engel R, et al. **Eur J Pediatr** 1988 Oct;148(1):69–71
Translocations are infrequent among couples having repeated spontaneous abortions but no other abnormal pregnancies. Simpson JL, et al. **Fertil Steril** 1989 May;51(5):811–4
Chromosomal affinities of Callimico goeldii (Platyrrhini) and characterization of a Y-autosome translocation in the male. Dutrillaux B, et al. **Folia Primatol (Basel)** 1988; 50(3–4):230–6
Segregation products of male mice doubly heterozygous for the RB(6.16) and RB (16.17) translocations: influence of sperm karyotype on fertilizing competence under varying mating frequencies. Zackowski JL, et al. **Gamete Res** 1989 Jan;22(1):93–107
The influence of the Robertsonian translocation Rb(X.2)2Ad on anaphase I non-disjunction in male laboratory mice. Adler ID, et al. **Genet Res** 1989 Apr;53(2):77–86
Cytogenetics and karyosystematics of phyllotine rodents (Cricetidae, Sigmodontinae). I. Chromosome multiformity and gonosomal-autosomal translocation in Reithrodon. Ortells MO, et al. **Genetica** 1988 Jul 31;77(1):53–63
The effects of translocations on recombination frequency in Caenorhabditis elegans. McKim KS, et al. **Genetics** 1988 Dec;120(4):987–1001
Mapping RFLP loci in maize using B-A translocations. Weber D, et al. **Genetics** 1989 Mar;121(3):583–90
Orientation and segregation of Robertsonian trivalents in Dichroplus pratensis (Acrididae). Bidau CJ, et al. **Genome** 1988 Dec;30(6):947–55
Meiotic chromosome segregation in human t(11;22)(q23;q11) carriers: a theoretical consideration. Koduru PR, et al. **Genome** 1989 Feb;32(1):24–9
Mapping of four translocation breakpoints within the Duchenne muscular dystrophy gene. Bodrug SE, et al. **Genomics** 1989 Jan;4(1):101–4
Regional and physical mapping studies characterizing the Greig polysyndactyly 3;7 chromosome translocation, t(3;7)(p21.1;p13). Drabkin H, et al. **Genomics** 1989 May; 4(4):518–29
Mapping of Xp21 translocation breakpoints in and around the DMD gene by pulsed field gel electrophoresis. Meitinger T, et al. **Genomics** 1988 Nov;3(4):315–22
The ETS genes on chromosome 21 are distal to the breakpoint of the acute myelogenous leukemia translocation (8;21). Sacchi N, et al. **Genomics** 1988 Aug; 3(2):110–6
Regional localization of mouse Abl and Mos proto-oncogenes by in situ hybridization. Threadgill DW, et al. **Genomics** 1988 Jul;3(1):82–6
Acute leukemia with the (4;11) chromosome translocation following treatment for Hodgkin's disease: a case study. Orazi A, et al. **Haematologica (Pavia)** 1988 Jul–Aug; 73(4):279–83
Trisomy 3q2 and Pierre-Robin sequence in a boy with unbalanced 46,XY, der(10), t(3;10)(q23;q26.3) de novo karyotype. Kleczkowska A, et al. **Helv Paediatr Acta** 1988 Nov;43(3):245–8
Philadelphia chromosome without breakpoint cluster region rearrangement in a case of Lennert's lymphoma of suppressor phenotype. Terjanian T, et al. **Hematol Oncol** 1989 May–Jun;7(3):189–94
Lineage heterogeneity in acute leukemia with the t(4;11) abnormality: implications for acute mixed lineage leukemia. Childs CC, et al. **Hematol Pathol** 1988;2(3):145–57
Chromosome banding studies and synaptonemal complex analyses of four reciprocal translocations in the domestic pig. Gustavsson I, et al. **Hereditas** 1988;109(2):169–84
Reciprocal chromosome translocations, (1p–; 11q+ and (1p+; 15q–), in domestic pigs with reduced litter size. Kuokkanen MT, et al. **Hereditas** 1988;109(1):69–73
Unbalanced Robertsonian translocations in canine lymphocytes and bone marrow cells in vitro. Welling J, et al. **Hereditas** 1988;109(2):193–6
Detection of an unbalanced translocation (4;14) in a mildly retarded father and son by flow cytometry. Cooke A, et al. **Hum Genet** 1989 Aug;83(1):83–7
Incontinentia pigmenti and X-autosome translocations. Non-isotopic in situ hybridization with an X-centromere-specific probe (pSV2X5) reveals a possible X-centromeric breakpoint in one of five published cases. Crolla JA, et al. **Hum Genet** 1989 Feb;81(3):269–72
Centromeric alpha satellite DNA amplification and translocation in an unusually large chromosome 14p+ variant. Dale S, et al. **Hum Genet** 1989 May;82(2):154–8
Amplification of satellite III DNA in an unusually large chromosome 14p+ variant. Earle E, et al. **Hum Genet** 1989 May;82(2):187–90
An unusual translocation associated with recurrent spontaneous abortions. Gregori-Romero M, et al. **Hum Genet** 1989 Sep;83(2):202
Congenital hyperthyroidism with reciprocal translocation t(1;17)(q25;q21). Gregori-Romero M, et al. **Hum Genet** 1989 Sep;83(2):203
Non-random aberrant breakpoints in chronic myelogenous leukaemia revisited. A call for a collaborative study [letter] Huret JL, et al. **Hum Genet** 1989 Sep;83(2):208
Unbalanced translocation between chromosomes 2 and 7 with de novo deletion of band 35 on the long arm of chromosome 2. Lundbech PE, et al. **Hum Genet** 1989 Apr; 82(1):92–3
Cytogenetic analysis of sperm from a male heterozygous for a 13;14 Robertsonian translocation. Martin RH. **Hum Genet** 1988 Dec;80(4):357–61
Localization of human c-mos to chromosome band 8q11 in leukemic cells with the t(8;21) (q22;q22). Morris CM, et al. **Hum Genet** 1989 Mar;81(4):339–42
Molecular detection of a Yp/18 translocation in a 45,X holoprosencephalic male. Münke M, et al. **Hum Genet** 1988 Nov;80(3):219–23
Molecular cloning of the translocation breakpoint in T-ALL 11;14 (p13;q11): genomic map of TCR alpha and delta region on chromosome 14q11 and long-range map of region 11p13. Royer-Pokora B, et al. **Hum Genet** 1989 Jun; 82(3):264–70
Investigation of the "variable spreading" of X inactivation into a translocated autosome. Schanz S, et al. **Hum Genet** 1989 Jun;82(3):244–8
Long-range restriction map of a region of human chromosome 19 containing the apolipoprotein genes, a CLL-associated translocation breakpoint, and two polymorphic MluI sites. Shaw DJ, et al. **Hum Genet** 1989 Aug;83(1):71–4
Familial translocation t(17;22), including the segregation in five consecutive abortuses. Subrt I, et al. **Hum Genet** 1988

Oct;80(2):195–6
A new rare distamycin A-inducible fragile site, fra(11)(p15.1), found in two acute nonlymphocytic leukemia (ANLL) patients with t(7;11)(p15–p13;p15). Takahashi E, et al. **Hum Genet** 1988 Oct;80(2):124–6
Kinetochore development in two dicentric chromosomes in man. A light and electron microscopic study. Wandall A. **Hum Genet** 1989 May;82(2):137–41
Robertsonian translocation with reciprocal product in the father of a 46, XY t(21q;21q) boy. Victor R, et al. **Indian J Pediatr** 1988 Sep–Oct;55(5):797–801
t(2;8) variant translocation in Burkitt's lymphoma: mapping of chromosomal breakpoints by in situ hybridization. Adolph S, et al. **Int J Cancer** 1989 Aug 15;44(2):261–5
Tissue-specific expression of a constitutional 3;6 translocation: development of multiple bilateral renal-cell carcinomas. Kovacs G, et al. **Int J Cancer** 1989 Mar 15; 43(3):422–7
Reversion of tumorigenicity and decreased agarose clonability after EBV conversion of an IgH/myc translocation-carrying BL line. Torsteinsdóttir S, et al. **Int J Cancer** 1989 Feb 15;43(2):273–8
Premature ovarian failure in a 35-year-old woman with a Robertsonian translocation. Orczyk GP, et al. **Int J Fertil** 1989 May-Jun;34(3):184–7
Trisomy 12 and translocation (7;9) in an ovarian immature teratoma. López Ginés C, et al. **Int J Gynecol Pathol** 1989; 8(3):277–85
Low fertility related to 1/29 centric fusion anomaly in cattle. Weber AF, et al. **J Am Vet Med Assoc** 1989 Sep 1; 195(5):643–6 (25 ref.)
A simple and precise aberrant translocation of the rat c-myc gene into the epsilon-heavy chain switch region of the IgE-producing immunocytoma, IR162. Tian SS, et al. **J Biol Chem** 1989 Jan 25;264(3):1846–53
Association of granulocytosis with poor prognosis in patients with acute myelogenous leukemia and translocation of chromosomes 8 and 21. O'Brien S, et al. **J Clin Oncol** 1989 Aug;7(8):1081–6
Translocation t(14;18) in B cell lymphomas as a cause for defective immunoglobulin production. de Jong D, et al. **J Exp Med** 1989 Mar 1;169(3):613–24
Consistent breakage between consensus recombinase heptamers of chromosome 9 DNA in a recurrent chromosomal translocation of human T cell leukemia. Tycko B, et al. **J Exp Med** 1989 Feb 1;169(2):369–77
Familial trisomy 11p resulting from a balanced paternal translocation: 3 new cases including first trimester diagnosis. Ogur G, et al. **J Genet Hum** 1988 Aug; 36(4):323–9
Markedly increased platelet membrane fluidity in Down syndrome with a (14q, 21q) translocation. Zubenko GS, et al. **J Geriatr Psychiatry Neurol** 1988 Oct–Dec;1(4):218–9
Molecular evidence of Y-autosomal translocations in owl monkeys. Ma NS, et al. **J Hered** 1989 Jul–Aug;80(4):259–63
The gene that encodes the human CD20 (B1) differentiation antigen is located on chromosome 11 near the t(11;14)(q13;q32) translocation site. Tedder TF, et al. **J Immunol** 1989 Apr 1;142(7):2555–9
A hitherto unreported case of 21-hydroxylase deficiency associated with Bartter's syndrome and a balanced 6–9 translocation. Yabe R, et al. **J Med** 1987;18(5–6):333–49
An unusual case of mosaic Down's syndrome involving two different Robertsonian translocations. Clarke MJ, et al. **J Med Genet** 1989 Mar;26(3):198–201 (12 ref.)
Familial translocation t(9;16). Dowman C, et al. **J Med Genet** 1989 Aug;26(8):525–8 (5 ref.)
Familial transmission of autosomal whole arm translocation. Fryns JP, et al. **J Med Genet** 1988 Nov;25(11):783–4
Simultaneous occurrence of heritable t(3;7) and t(14;21) in two sibs. Kruger AJ, et al. **J Med Genet** 1988 Oct; 25(10):718–20
Partial trisomy 16q secondary to a maternal 9;16 translocation. Lessick ML, et al. **J Med Genet** 1989 Jan; 26(1):63–4
Trisomy 3p23——pter and monosomy 11q23——qter in an infant with two translocation carrier parents. Neu RL, et al. **J Med Genet** 1988 Sep;25(9):631–3
Late replication studies and esterase D levels in a case of unbalanced X;autosome translocation, 46,X,t(X;13)(q27;q12). Romain DR, et al. **J Med Genet** 1988 Oct;25(10):716–8
Microdeletion syndromes, balanced translocations, and gene mapping. Schinzel A. **J Med Genet** 1988 Jul;25(7):454–62 (92 ref.)
Deletion of band 5q21 in association with a de novo translocation involving 2p and 5q. Yung JF, et al. **J Med Genet** 1988 Aug;25(8):570–2
Unbalanced form of translocation deletion between chromosomes 6 and 22 in a mentally handicapped female [45,XX,–6,–22,+der(6),t(6;22)(q25.1:q11.2)] Jancar J, et al. **J Ment Defic Res** 1989 Jun;33 (Pt 3):255–9
HeLa nuclear protein recognizing DNA termini and translocating on DNA forming a regular DNA–multimeric protein complex. de Vries E, et al. **J Mol Biol** 1989 Jul 5;208(1):65–78
Nicotinic and muscarinic agonists stimulate rapid protein kinase C translocation in PC12 cells. Messing RO, et al. **J Neurosci** 1989 Feb;9(2):507–12
Familial XX chromosomal maleness does not arise from a Y chromosomal translocation. Ostrer H, et al. **J Pediatr** 1989 Jun;114(6):977–82
Translocation t(9;11)(p23;q12): a primary chromosomal change in renal oncocytoma. Walter TA, et al. **J Urol** 1989 Jul;142(1):117–9
The molecular analysis of chromosomal translocations as a diagnostic, epidemiological and potentially prognostic tool in lymphoid neoplasia. Magrath I, et al. **J Virol Methods** 1988 Sep;21(1–4):275–89 (29 ref.)
Familial X;Y translocation in a malformed male infant and his mother. Ohdo S, et al. **Jinrui Idengaku Zasshi** 1988 Sep;33(3):377–84
Construction of mouse A9 clones containing a single human chromosome (X/autosome translocation) via micro-cell fusion. Koi M, et al. **Jpn J Cancer Res** 1989 Feb;80(2):122–5
Detecting t(14;18) in paraffin-embedded lymphoma tissue [letter] Hickish T, et al. **Lancet** 1989 May 20;1(8647):1131–2
Detection of 14;18 chromosomal translocation in paraffin-embedded lymphoma tissue [letter] Pezzella F, et al. **Lancet** 1989 Apr 8;1(8641):779–80
The 8p11 anomaly in "monoblastic" leukaemia. Brizard A, et al. **Leuk Res** 1988;12(8):693–7
Establishment and characterization of a human lymphoma cell line (WSU-NHL) with 14;18 translocation. Mohamed AN, et al. **Leuk Res** 1988;12(10):833–43
A rare restriction enzyme site polymorphism in the breakpoint cluster region (bcr) of chromosome 22. Benn P, et al. **Leukemia** 1988 Nov;2(11):760–2
Chromosomal rearrangement on chromosome 11q14–q21 in T cell acute lymphoblastic leukemia. Berger R, et al. **Leukemia** 1989 Aug;3(8):560–2
Acute myeloblastic leukemia with t(8;21) following Philadelphia positive acute lymphoblastic leukemia. De Cuia MR, et al. **Leukemia** 1989 Apr;3(4):310–3
A novel translocation, t(9;17)(q34;q23), in aggressive childhood lymphoblastic lymphoma. Kaneko Y, et al. **Leukemia** 1988 Nov;2(11):745–8
Clinical characteristics of infant acute leukemia with or without 11q23 translocations. Kaneko Y, et al. **Leukemia** 1988 Oct;2(10):672–6
Translocation (3;21) in Philadelphia positive chronic myeloid leukemia: high resolution chromosomal analysis and immunological study on five new cases. Lafage-Pochitaloff-Huvalé M, et al. **Leukemia** 1989 Aug; 3(8):554–9
Acute lymphoblastic leukemia with the 4;11 translocation exhibiting early T cell features. Lo Coco F, et al. **Leukemia** 1989 Jan;3(1):79–82
No correlation between locations of bcr breakpoints and clinical states in Ph1-positive CML patients. Ogawa H, et al. **Leukemia** 1989 Jul;3(7):492–6
Clinicopathologic manifestations and breakpoints of the t(3;5) in patients with acute nonlymphocytic leukemia. Raimondi SC, et al. **Leukemia** 1989 Jan;3(1):42–7 (31 ref.)
Three breakpoints of variant t(2;8) translocations in Burkitt's lymphoma cells fall within a region 140 kilobases distal from c-myc. Henglein B, et al. **Mol Cell Biol** 1989 May; 9(5):2105–13
Molecular detection of chromosomal translocations that disrupt the putative retinoblastoma susceptibility locus. Higgins MJ, et al. **Mol Cell Biol** 1989 Jan;9(1):1–5
The t(11;14)(p15;q11) in a T-cell acute lymphoblastic leukemia cell line activates multiple transcripts, including Ttg-1, a gene encoding a potential zinc finger protein. McGuire EA, et al. **Mol Cell Biol** 1989 May;9(5):2124–32
A translocation associated, loss-of-function mutation in the nitrogen metabolite repression regulatory gene of Aspergillus nidulans can revert intracistronically. Arst HN Jr, et al. **Mol Gen Genet** 1989 Jan;215(2):364–7
Gene involvement in Japanese 14q+ marker-positive cancer. Ohno H, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec; 51(8):1522–7
Congenital acute monoblastic leukemia with double translocation (8;16) (p11;p13) and (16;20) (q13;p13). Zandecki M, et al. **Nouv Rev Fr Hematol** 1988;30(4):247–50
The first BCR gene intron contains breakpoints in Philadelphia chromosome positive leukemia. Heisterkamp N, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10069–81
Detection of translocation breakpoints by pulsed field gel analysis: practical considerations. Reilly DS, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5414
Nucleotide sequence of both reciprocal translocation junction regions in a patient with Ph positive acute lymphoblastic leukaemia, with a breakpoint within the first intron of the BCR gene. van der Feltz MJ, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):1–10
Juxtaposition of human bcl-2 and immunoglobulin lambda light chain gene in chronic lymphocytic leukemia is the result of a reciprocal chromosome translocation between chromosome 18 and 22. Adachi M, et al. **Oncogene** 1989 Sep;4(9):1073–5
Ph1+bcr– acute leukemias: implication of Alu sequences in a chromosomal translocation occurring in the new cluster region within the BCR gene. Chen SJ, et al. **Oncogene** 1989 Feb;4(2):195–202
Translocations and rearrangements in T-cell acute leukemias with the t(11;14) (p13;q11) chromosomal translocations [published erratum appears in Oncogene 1989 Aug;4(8):1057] Harvey RC, et al. **Oncogene** 1989 Mar; 4(3):341–9
Molecular analysis of breaks in BCL-1 proto-oncogene in B-cell lymphomas with abnormalities of 11q13. Koduru PR, et al. **Oncogene** 1989 Jul;4(7):929–34
Predisposition to retinoblastoma due to a translocation within the 4.7R locus. Mitchell CD, et al. **Oncogene** 1989 Feb; 4(2):253–7
Molecular analysis of a t(9;14)(p11;q32) translocation occurring in a case of human alpha heavy chain disease. Pellet P, et al. **Oncogene** 1989 May;4(5):653–7
Characterization of the translocation between chromosomes X and 18 in human synovial sarcomas. Reeves BR, et al. **Oncogene** 1989 Mar;4(3):373–8
Molecular characterization of variant translocations in chronic myelogenous leukemia. Verma RS, et al. **Oncogene** 1989 Sep;4(9):1145–8
The human pim-1 gene is not directly activated by the translocation (6;9) in acute nonlymphocytic leukemia. von Lindern M, et al. **Oncogene** 1989 Jan;4(1):75–9
The bcr gene is joined to c-abl in Ph1 chromosome negative chronic myelogenous leukemia. Dreazen O, et al. **Oncogene Res** 1988;2(2):167–75
Finding order in chaos. Rowley JD. **Perspect Biol Med** 1989 Spring;32(3):371–84
Translocation trisomy 21 in CVS not found in embryoblast: three different cell lines in CVS, amnion- and placental culture. Eiben B, et al. **Prenat Diagn** 1989 May;9(5):365–7
Prenatal detection of de novo 1; 15 translocation with the same breakpoints as those identified in a previous unrelated case report [letter] McCorquodale MM, et al. **Prenat Diagn** 1988 Jul;8(6):475–6
Confirmation of a balanced chromosomal translocation using molecular techniques. Smart RD, et al. **Prenat Diagn** 1989 Jul;9(7):505–13
Chorionic villus sampling—short-term versus long-term culture in a subtle 2; 18 translocation. Smith A, et al. **Prenat Diagn** 1989 Mar;9(3):217–20
Variant translocation of the bcl-2 gene to immunoglobulin lambda light chain gene in chronic lymphocytic leukemia. Adachi M, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2771–4
Chromosomal translocation in a human leukemic stem-cell line disrupts the T-cell antigen receptor delta-chain diversity region and results in a previously unreported fusion transcript. Begley CG, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2031–5
Juxtaposition of the T-cell receptor alpha-chain locus (14q11) and a region (14q32) of potential importance in leukemogenesis by a 14;14 translocation in a patient with T-cell chronic lymphocytic leukemia and ataxia-telangiectasia. Davey MP, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9287–91
Involvement of the TCL5 gene on human chromosome 1 in T-cell leukemia and melanoma. Finger LR, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5039–43
Chromosomal translocation in T-cell leukemia line HUT 78 results in a MYC fusion transcript. Finger LR, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9158–62
Clustering of breakpoints on chromosome 10 in acute T-cell leukemias with the t(10;14) chromosome translocation. Kagan J, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4161–5
Fluorescence in situ hybridization with human chromosome-specific libraries: detection of trisomy 21 and translocations of chromosome 4. Pinkel D, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9138–42
Molecular analysis of a t(14;14) translocation in leukemic T-cells of an ataxia telangiectasia patient. Russo G, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):602–6
Identification of a human transcription unit affected by the variant chromosomal translocations 2;8 and 8;22 of Burkitt lymphoma. Shtivelman E, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3257–60
Overexpression of the human BCL-2 gene product results in growth enhancement of Epstein-Barr virus-immortalized B cells. Tsujimoto Y. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1958–62
Molecular genetics of lymphoid tumorigenesis. Haluska FG, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:269–80 (29 ref.)
Physical mapping of a translocation breakpoint in neurofibromatosis. Fountain JW, et al. **Science** 1989 Jun 2;244(4908):1085–7
Cloning of breakpoints of a chromosome translocation identifies the AN2 locus. Gessler M, et al. **Science** 1989 Jun 30;244(4912):1575–8
Two NF1 translocations map within a 600-kilobase segment of 17q11.2. O'Connell P, et al. **Science** 1989 Jun 2; 244(4908):1087–8
elk, tissue-specific ets-related genes on chromosomes X and 14 near translocation breakpoints. Rao VN, et al. **Science** 1989 Apr 7;244(4900):66–70
Down on chromosome 21? Hardy J, et al. **Trends Neurosci** 1989 Jun;12(6):209–10 (19 ref.)
t(1;7) in acute myeloblastic leukemia following myelodysplastic syndrome (RAEB-T). Defferrari R, et al. **Tumori** 1988 Oct 31;74(5):555–8
Azoospermic male with a balanced Y-autosome translocation. Matsuda T, et al. **Urol Int** 1989;44(1):43–6 (22 ref.)
Giant-cell tumor of bone, stage II, displaying translocation t(12;19)(q13;q13). Noguera R, et al. **Virchows Arch [A]** 1989;415(4):377–82
[A retinoblastoma patient with complex translocation-deletion involving chromosomes 5 and 13] Lin XH, et al. **Yen Ko Hsueh Pao** 1988 Dec;4(4):243–5, 237 (Eng. Abstr.) (Chi)

[Nucleolus organizer region--centromere translocation] de Blois MC, et al. **Ann Genet** 1989;32(2):106–8 (Eng. Abstr.) **(Fre)**

[Lethal polymalformative syndrome with 13q deletion secondary to a maternal X; 13 translocation] Vittu G, et al. **J Genet Hum** 1989 Jun;37(2):141–7 (Eng. Abstr.) **(Fre)**

[The effect of reciprocal translocations on the fertility of the mouse] Michelmann HW. **DTW** 1988 Jul–Aug;95(7):271–4 (Eng. Abstr.) **(Ger)**

[Immunotherapy following habitual abortion in paternal chromosome translocation] Glaser D, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):58–60 (Eng. Abstr.) **(Ger)**

[Prenatal diagnosis and obstetric management in association of hydramnios and homozygosity] Zienert A, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):595–6 (Eng. Abstr.) **(Ger)**

[Unbalanced translocation 8/X in a girl] Ickstadt A, et al. **Monatsschr Kinderheilkd** 1989 Apr;137(4):239–42 (Eng. Abstr.) **(Ger)**

[46,XX,trcp(1;10),trcp(2;8) karyotype of maternal origin and 2p trisomy] Vianello MG, et al. **Minerva Pediatr** 1988 Sep; 40(9):561–9 (30 ref.) (Eng. Abstr.) **(Ita)**

[A case of 9p partial monosomy caused by paternal translocation. Clinical and cytogenetic aspects] Calzolari C, et al. **Pediatr Med Chir** 1988 Sep–Oct;10(5):531–4 (Eng. Abstr.) **(Ita)**

[Case report of a prenatal diagnosis of 46, XY, t(13q; 14q) mat, +18] Matsuo T, et al. **Fukuoka Igaku Zasshi** 1988 Dec;79(12):927–30 (Eng. Abstr.) **(Jpn)**

[Refractory anemia showing excess of blasts (BAEB) that transformed into acute myelogenous leukemia (AML–M2) with a t (7&20) chromosomal abnormality] Maekawa T, et al. **Gan No Rinsho** 1988 Dec;34(15):2109–13 (Eng. Abstr.) **(Jpn)**

[A case of t(4;11) congenital leukemia that transformed from pre B lymphoid to monocytic morphology] Shibuya A, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Aug;51(5):872–8 (Eng. Abstr.) **(Jpn)**

[Two cases of acute lymphoblastic leukemia associated with translocation 1;19] Fujita K, et al. **Rinsho Byori** 1988 Oct; 36(10):1217–22 **(Jpn)**

[Triploid clone observed at blastic crisis in chronic myelogenous leukemia with complex Ph1 translocation (9; 22; 12)] Ito K, et al. **Rinsho Ketsueki** 1989 Apr;30(4):558–62 (Eng. Abstr.) **(Jpn)**

[t(11;19) (q23.3;p13.3) in a adult with acute myelogenous leukemia] Kamano H, et al. **Rinsho Ketsueki** 1988 Sep; 29(9):1493–8 (23 ref.) (Eng. Abstr.) **(Jpn)**

[Myelodysplastic syndrome showing translocation (1 ; 7) and translocation (3 ; 3)] Kishimoto Y, et al. **Rinsho Ketsueki** 1988 May;29(5):743–7 (Eng. Abstr.) **(Jpn)**

[Chronic myelogenous leukemia in child: association with t(1;3) (p36;q21)] Kiyokawa N, et al. **Rinsho Ketsueki** 1988 Dec;29(12):2317–22 (Eng. Abstr.) **(Jpn)**

[Acute promyelocytic leukemia with a history of RAEB in transformation and the 15/17 translocation] Ogawa K, et al. **Rinsho Ketsueki** 1989 Jan;30(1):67–71 (Eng. Abstr.) **(Jpn)**

[Marked dysmyelopoiesis after induction chemotherapy in a case of acute myelomonocytic leukemia (M 4) with t(6; 11)] Tagawa M, et al. **Rinsho Ketsueki** 1989 Feb;30(2):232–8 (Eng. Abstr.) **(Jpn)**

[Translocation (8; 22) (q24; q11) and Epstein–Barr viral genome in a case of Burkitt's type of acute lymphoblastic leukemia (L3)] Watanabe T, et al. **Rinsho Ketsueki** 1989 Feb;30(2):211–5 (Eng. Abstr.) **(Jpn)**

[Evaluation of the capacity of chromosomal genes of erythromycin resistance for translocation in hospital strains of Staphylococcus aureus] Młynarczyk G, et al. **Med Dosw Mikrobiol** 1988;40(4):181–6 (Eng. Abstr.) **(Pol)**

[Duchenne muscular dystrophy in a girl with chromosomal translocation] Werneck LC, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):401–5 (Eng. Abstr.) **(Por)**

[Characteristics of forms of acute myeloblastic leukemias] Protasova AK, et al. **Lab Delo** 1988;(5):17–20 (Eng. Abstr.) **(Rus)**

[Partial chromosome 9 trisomy in a child—the result of maternal translocation of chromosomes 3 and 9] Levina LIa, et al. **Pediatriia** 1988;(5):95–8 **(Rus)**

[Detailed analysis of a new translocation in a domestic pig] Astakhova NM, et al. **Tsitol Genet** 1988 Sep–Oct;22(5):26–9 (Eng. Abstr.) **(Rus)**

[Case of unbalanced translocation (18, 22) in a child with congenital mental retardation] Ginzburg IA, et al. **Tsitol Genet** 1988 May–Jun;22(3):52–3 (Eng. Abstr.) **(Rus)**

[Trisomy 13 by translocation. Possible prenatal ultrasonic diagnosis] Asencio Marchante MJ, et al. **An Esp Pediatr** 1988 Jun;28(6):585–7 **(Spa)**

[8:11 translocation. A familial study] Vargas de los Monteros MT, et al. **An Esp Pediatr** 1989 Apr;30(4):303–5 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Mitomycin C effect on Robertsonian translocations. Frias S, et al. **Ann Genet (Paris)** 1988;31(3):162–6

The induction of reciprocal translocations in mouse germ cells by chemicals and ionizing radiations. I. Dose–response relationships and combined effects of bleomycin with thio–tepa and gamma–rays. De Luca JC, et al. **Mutat Res** 1988 Nov;202(1):65–70

RADIATION EFFECTS

The induction of reciprocal translocations in mouse germ cells by chemicals and ionizing radiations. I. Dose–response relationships and combined effects of bleomycin with thio–tepa and gamma–rays. De Luca JC, et al. **Mutat Res** 1988 Nov;202(1):65–70

The induction by ionizing radiation of chromosomal aberrations in rhesus monkey pre–meiotic germ cells: effects of dose rate and radiation quality. van Buul PP. **Mutat Res** 1989 Mar;225(3):83–9

[Studies of induction of chromosome aberrations in rat spermatogonia after exposure to radon–222 and its degradation products] Rudnicki T, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jul–Oct;52(4–5):237–41 (Eng. Abstr.) **(Pol)**

[Comparative study of the genetic effect of various tritium compounds in male mice] Pomerantseva MD, et al. **Genetika** 1989 Feb;25(2):277–82 (Eng. Abstr.) **(Rus)**

TRANSMISSIBLE ENTERITIS OF TURKEYS see **ENTERITIS, TRANSMISSIBLE, OF TURKEYS**

TRANSMISSIBLE GASTROENTERITIS OF SWINE see **GASTROENTERITIS, TRANSMISSIBLE, OF SWINE**

TRANSMITTER UPTAKE INHIBITORS, NEURONAL

see related
ADRENERGIC NEUROHUMOR DEPLETERS
BIOLOGICAL TRANSPORT, ACTIVE

METABOLISM

Evidence for the existence of at least two different binding sites for 5HT–reuptake inhibitors within the 5HT–reuptake system from human platelets. Biessen EA, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3959–66

In vivo and in vitro autoradiographic labelling of central dopaminergic systems with [3H]GBR12783 in rodents. Leroux–Nicollet I, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):7–12

PHARMACOLOGY

In vivo neurochemical and anatomical heterogeneity of the dopamine uptake system in the rat caudate putamen. Glynn GE, et al. **Brain Res** 1989 Mar 6;481(2):235–41

AP4 inhibits chloride–dependent binding and uptake of [3H]glutamate in rabbit retina. Mitchell CK, et al. **Brain Res** 1988 Sep 6;459(2):298–311

Inhibition of high affinity choline transport attenuates both cholinergic and non–cholinergic effects of ethylcholine aziridinium (AF64A). Potter PE, et al. **Brain Res** 1989 May 22;487(2):238–44

Prophylaxis of amygdala kindling–induced epileptogenesis: comparison of a GABA uptake inhibitor and diazepam. Schwark WS, et al. **Epilepsy Res** 1987 Jan;1(1):63–9

Potentiation by dopexamine of the cardiac responses to circulating and neuronally released norepinephrine: a possible mechanism for the therapeutic effects of the drug. Bass AS, et al. **J Cardiovasc Pharmacol** 1989 Apr; 13(4):667–71

Involvement of norepinephrine neurons in the hypothermia induced by intracerebroventricular administration of 6–hydroxydopamine in mice, evidenced by antidepressants. Leroux–Nicollet I, et al. **J Neural Transm** 1988;74(1):17–27

McN–5652: a highly potent inhibitor of serotonin uptake. Shank RP, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):1032–8

Inhibition by excitatory sulphur amino acids of the high–affinity L–glutamate transporter in synaptosomes and in primary cultures of cortical astrocytes and cerebellar neurons. Griffiths R, et al. **Neurochem Res** 1989 Apr; 14(4):333–43

Frequency–dependence of 3H–noradrenaline release from rabbit pulmonary artery: effect of alpha–adrenoceptor antagonists and inhibitors of transmitter inactivation. Nedergaard OA. **Pharmacol Toxicol** 1988 Nov;63(5):317–23

[3H]vesamicol binding in brain: autoradiographic distribution, pharmacology, and effects of cholinergic lesions. Altar CA, et al. **Synapse** 1988;2(5):486–93

THERAPEUTIC USE

Anticonvulsant activity of intracerebroventricularly administered glial GABA uptake inhibitors and other GABAmimetics in chemical seizure models. Gonsalves SF, et al. **Epilepsy Res** 1989 Jul–Aug;4(1):34–41

GABA uptake inhibitors: relevance to antiepileptic drug research. Krogsgaard–Larsen P, et al. **Epilepsy Res** 1987 Mar;1(2):77–93 (131 ref.)

TRANSPHOSPHORYLASES see **PHOSPHOTRANSFERASES**

TRANSPLACENTAL EXPOSURE see **MATERNAL–FETAL EXCHANGE**

TRANSPLANTATION

see related
HISTOCOMPATIBILITY TESTING
NEOPLASM TRANSPLANTATION
TISSUE DONORS
TISSUE PRESERVATION

Fetal tissue transplantation [editorial] Nadler HL. **Am J Dis Child** 1989 Feb;143(2):149

The pathology of posttransplant lymphoproliferative disorders occurring in the setting of cyclosporine A–prednisone immunosuppression. Nalesnik MA, et al. **Am J Pathol** 1988 Oct;133(1):173–92

Blood bank support of clinical transplantation programs. Moore SB. **Arch Pathol Lab Med** 1989 Mar;113(3):279–84 (35 ref.)

Transplanting fetal tissue: how ethics and emotions interact. Dafler CE. **Calif Med** 1989 Sep;86(15):264–5

Choose life: Jewish tradition and organ transplantation. Cohen KS. **Del Med J** 1988 Sep;60(9):509–11

Medical ethics: a rediscovered discipline [editorials] Liebesman M. **Del Med J** 1988 Sep;60(9):475, 523

Ethical considerations in solid organ transplantation. Noseworthy J. **Del Med J** 1988 Sep;60(9):497–504

A Catholic perspective on religion and organ transplantation [published erratum appears in Del Med J 1988 Dec;60(12):726] Ulshafer TR. **Del Med J** 1988 Sep; 60(9):505–7

Genug ist genug: a fetus is not a kidney. Nolan K. **Hastings Cent Rep** 1988 Dec;18(6):13–9

Rights, symbolism, and public policy in fetal tissue transplants. Robertson JA. **Hastings Cent Rep** 1988 Dec; 18(6):5–12

Non–specific reactivity in HIV antigen assay of sera from organ transplant recipients [letter] Sönnerborg A, et al. **Infection** 1989 May–Jun;17(3):168–9

Transplantation immunobiology in relation to neural grafting: lessons learned from immunologic privilege in the eye. Streilein JW. **Int J Dev Neurosci** 1988;6(6):497–511 (49 ref.)

Organ transplantation in children. Broyer M, et al. **Intensive Care Med** 1989;15 Suppl 1:S76–9 (20 ref.)

Harvesting organs for paediatric transplantation: medical features. Nivet H. **Intensive Care Med** 1989;15 Suppl 1:S64–6

Organ transplantation. Papers from the symposium "Organ transplantation policy: issues and prospects". 26–28 June 1988, Vanderbilt. **J Health Polit Policy Law** 1989 Spring; 14(1):1–238

Government's role in organ transplantation policy. Blumstein JF. **J Health Polit Policy Law** 1989 Spring;14(1):5–39 (33 ref.)

The politics of organ transplantation: a parable of our time. Rettig RA. **J Health Polit Policy Law** 1989 Spring; 14(1):191–227 (85 ref.)

Is there a rationale for regionalizing organ transplantation services? Sloan FA, et al. **J Health Polit Policy Law** 1989 Spring;14(1):115–67 (113 ref.)

Transplantation: today's decisions [editorial] Wheeler KE. **J Med Assoc Ga** 1988 Oct;77(10):755–6

The indirect effects of cytomegalovirus infection on the outcome of organ transplantation. Rubin RH. **JAMA** 1989 Jun 23–30;261(24):3607–9 (34 ref.)

Immunosuppressive properties of FK–506 and rapamycin [letter] Thomson AW, et al. **Lancet** 1989 Aug 19; 2(8660):443–4

Using fetal tissue [editorial] **Nature** 1989 Aug 3; 340(6232):327–8

Teaching patients with life–threatening illnesses. Cardiovascular disease, transplantation, and organ donation. Barr WJ. **Nurs Clin North Am** 1989 Sep; 24(3):639–44

Organ transplantation in adolescence: moral issues. Moskop JC. **Pediatr Ann** 1989 Apr;18(4):246–53 (37 ref.)

Panel backs fetal tissue research [news] Culliton BJ. **Science** 1988 Dec 23;242(4886):1625–6

Fetal tissue transplants win U.K. approval [news] Dickson D. **Science** 1989 Aug 4;245(4917):464

Challenges of organ transplantation: selected social issues. Brody BA. **Tex Med** 1988 Dec;84(12):80–2 (3 ref.)

Solid organ transplantation affects all physicians [editorial] Young JB. **Tex Med** 1988 Dec;84(12):4

Solid organ transplantation today: problems and possibilities. Young JB, et al. **Tex Med** 1988 Dec;84(12):27–9 (17 ref.)

Is there room for "transplantation medicine" as a medical discipline in its own right? Land W. **Transpl Int** 1988 Apr; 1(1):43–6

Are there ethical problems posed by multiple small transplant centres? Morris PJ. **Transpl Int** 1988 Apr;1(1):47–8

Proceedings of the twelfth international congress of the Transplantation Society. August 14–19, 1988, Sydney, Australia. Book III. **Transplant Proc** 1989 Feb;21(1 Pt 3):2477–3238

Value conflicts in organ allocation. Benjamin M. **Transplant Proc** 1989 Jun;21(3):3378–80; discussion 3413–8

Problems in the policies and criteria used to allocate organs for transplantation in the United States. Caplan AL. **Transplant Proc** 1989 Jun;21(3):3381–7; discussion 3413–8

The attitudes of young men to cadaveric organ donation and transplantation: the influence of background factors and information. Gäbel H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1413–4

Transplantation tolerance: a 1988 perspective. Hall BM.

Transplant Proc 1989 Feb;21(1 Pt 1):816–9 (50 ref.)
Organ transplants: the just and human expectations of nonresidents. Kleinig J. **Transplant Proc** 1989 Jun; 21(3):3430–1; discussion 3440–4
Monoclonal antibody–drug/toxin immunoconjugates in transplantation. McKenzie IF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):823–5 (10 ref.)
Should selected patients ever be moved up? Macklin R. **Transplant Proc** 1989 Jun;21(3):3395–6; discussion 3413–8
A transplant surgeon's views on social factors in organ transplantation. Monaco AP. **Transplant Proc** 1989 Jun; 21(3):3403–6; discussion 3413–8
Second generation transplantation biology through the molecular revolution. Nossal GJ. **Transplant Proc** 1989 Feb; 21(1 Pt 1):5–9 (16 ref.)
Multiple organ retrieval and preservation with normothermic autoperfusion. Prieto M, et al. **Transplant Proc** 1988 Oct; 20(5):827–8
Nonresident aliens and access to organ transplant. Prottas JM. **Transplant Proc** 1989 Jun;21(3):3426–9; discussion 3440–4
Patient selection for organ transplantation: age, incarceration, family support, and other social factors. Robertson JA. **Transplant Proc** 1989 Jun;21(3):3397–402; discussion 3413–8
Advances in organ preservation. Southard JH. **Transplant Proc** 1989 Feb;21(1 Pt 2):1195–6 (13 ref.)
Equity in organ distribution: a plea for a return to reality. Waltzer WC, et al. **Transplant Proc** 1989 Jun;21(3):3388–9; discussion 3413–8
Equity, efficacy, and the point system for transplant recipient selection. Wikler D. **Transplant Proc** 1989 Jun;21(3):3437–9; discussion 3440–4
Infection with human immunodeficiency virus in the Pittsburgh transplant population. A study of 583 donors and 1043 recipients, 1981–1986. Dummer JS, et al. **Transplantation** 1989 Jan;47(1):134–40
American Society of Transplant Physicians. 1988 presidential address. Hunsicker LG. **Transplantation** 1989 Feb; 47(2):207–8
Transplantation surgery in Uppsala. Frödin L. **Ups J Med Sci** 1988;93(2):187–8
[Organ transplantation] Leenen HJ. **Ned Tijdschr Geneeskd** 1989 May 27;133(21):1084–91 (Dut)
[Survival and transplantation] Häyry P. **Duodecim** 1988; 104(12):893–910 (56 ref.) (Fin)
[Immunosuppressive treatment after organ transplantation] Niaudet P. **Arch Fr Pediatr** 1988;45 Suppl 1:741–4 (Eng. Abstr.) (Fre)
[Ethical and general problems posed by organ transplantation in children] Royer P. **Arch Fr Pediatr** 1988;45 Suppl 1:773–4 (Fre)
[Cytomegalovirus (CMV): virologic protocols for transplantation] Gaudin O, et al. **Nephrologie** 1988; 9(4):159–62 (Eng. Abstr.) (Fre)
[Mechanisms of action of immunosuppressors used in organ transplantation] Dupont E. **Rev Med Brux** 1988 Nov;Spec No:67–70 (Fre)
[The status of organ transplantation in France and Europe in November 1987] Duboust A. **Rev Pneumol Clin** 1988; 44(5):224–8 (Eng. Abstr.) (Fre)
[Legal aspects of organ donation, procurement and transplantation] Liebhardt E, et al. **Chirurg** 1988 Jul; 59(7):441–3 (Ger)
[Earning capacity after organ transplantation] Grundmann R. **Dtsch Med Wochenschr** 1989 Sep 1;114(35):1343 (Ger)
[Imaging technics and organ transplantation (editorial)] Fuchs WA. **Radiologe** 1988 Dec;28(12):543 (Ger)
[Organ donation: a current problem] Chapchap P, et al. **AMB Rev Assoc Med Bras** 1988 Nov–Dec;34(6):190–2 (Por)
[Ethics and organ transplant] Santiago Delpín EA. **Bol Asoc Med P R** 1989 May;81(5):180–2 (Spa)
[Ethical guidelines in transplantation. The right of self–determination is decisive for organ donation. Agreement is to be assumed when patients have not stated otherwise] **Lakartidningen** 1989 Mar 15;86(11):980–1 (Swe)
[A symposium of the Swedish Medical Society's ethical delegation: Ethical questions and transplantation] **Lakartidningen** 1988 Nov 23;85(47):4102–4, 4108 (Swe)
[The ethical delegation of the Swedish Medical Society recommends disobeying the transplantation law] Ifvarsson CA, et al. **Lakartidningen** 1989 May 3;86(18):1681 (Swe)
[Medical ethics questions: When is an organism a person?] Seidal T. **Lakartidningen** 1989 Mar 29;86(13):1156–7 (Swe)

ADVERSE EFFECTS

Lung function in allogeneic bone marrow transplantation recipients. Rodríguez–Roisin R, et al. **Eur Respir J** 1989 Apr;2(4):359–65
The problem of human immunodeficiency virus (HIV) infection and transplantation. Rubin RH, et al. **Transpl Int** 1988 Apr;1(1):36–42 (31 ref.)
[Urologic complications in renal transplantation] De Pauw L, et al. **Rev Med Brux** 1988 Nov;Spec No:57–60 (Eng. Abstr.) (Fre)

ECONOMICS

Government funding for organ transplants. Schuck PH. **J Health Polit Policy Law** 1989 Spring;14(1):169–90 (29 ref.)
Oregon's decision to curtail funding for organ transplantation [letter] **N Engl J Med** 1988 Nov 24;319(21):1419–20
Ability to pay and access to transplantation. Daniels N. **Transplant Proc** 1989 Jun;21(3):3424–5; discussion 3440–4
Money matters: should ability to pay ever be a consideration in gaining access to transplantation? Evans RW. **Transplant Proc** 1989 Jun;21(3):3419–23; discussion 3440–4
Organ transplants. A search for health policy at the state level. Crawshaw R, et al. **West J Med** 1989 Mar; 150(3):361–3
[The Public Health Council advice on heart transplantation; the price of progress] Dunning AJ. **Ned Tijdschr Geneeskd** 1989 May 20;133(20):1013–5 (Eng. Abstr.) (Dut)
[Organ transplantation: development, possibilities, socioeconomic aspects] Land W. **Versicherungsmedizin** 1989 Jan 1;41(1):7–9 (Eng. Abstr.) (Ger)

HISTORY

My early days as a transplanter. Billingham RE. **Allergy Proc** 1988 Nov–Dec;9(6):677–81
From radiation chimeras to 1988. van Bekkum DW. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:216–21 (50 ref.)
[Organ transplantation] Landmann J. **Schweiz Rundsch Med Prax** 1988 Oct 25;77(43):1155–60 (Eng. Abstr.) (Ger)

METHODS

Grafting genetically modified cells into the rat brain: characteristics of E. coli beta–galactosidase as a reporter gene. Shimohama S, et al. **Brain Res Mol Brain Res** 1989 Jun;5(4):271–8
Transplantation. Starzl TE. **JAMA** 1989 May 19; 261(19):2894–5
Risk factors for sensitization by blood transfusions. Comparison of the UW/Madison and UC/San Francisco donor–specific transfusion experience. Burlingham WJ, et al. **Transplantation** 1989 Jan;47(1):140–4
[Production of arteriovenous shunts for the free grafts (letter)] Germain MA, et al. **Presse Med** 1988 Nov 5; 17(39):2088 (Fre)

PSYCHOLOGY

Psychiatric aspects of organ transplantation. Surman OS. **Am J Psychiatry** 1989 Aug;146(8):972–82 (144 ref.)
Obstacles to organ donation. Wakeford RE, et al. **Br J Surg** 1989 May;76(5):436–9
Canadian doctors and Japanese tot help change Japanese attitudes on transplants. Helwig D. **Can Med Assoc J** 1988 Dec 1;139(11):1088–9
Psychiatric aspects of organ transplantation [letter] Wise MG, et al. **JAMA** 1988 Dec 16;260(23):3437
Turning death into life. An organ recipient's story. Gilbert D. **Mich Med** 1989 Apr;88(4):38–9
Defining death: organ transplants, tradition and technology in Japan. Feldman EA. **Soc Sci Med** 1988;27(4):339–43
Liver transplantation—the rejected patients. Heyink J, et al. **Transplantation** 1989 Jun;47(6):1069–71

STANDARDS

Patient selection criteria in organ transplantation: the critical questions. Proceedings of a conference. March 14,15, 1989, Ann Arbor, Michigan. **Transplant Proc** 1989 Jun; 21(3):3377–445

STATISTICS & NUMERICAL DATA

Analysis of bone marrow transplantation data in man. Gale RP. **Bone Marrow Transplant** 1986 May;1(1):3–9 (9 ref.)

SUPPLY & DISTRIBUTION

Misleading statistics [letter] Rao TN. **Minn Med** 1989 Aug; 72(8):449
Criteria for transplantation: a physician's perspective. Burrows L. **Mt Sinai J Med** 1989 May;56(3):197–201
The report of the U.S. Task Force on Organ Transplantation: criticisms and alternatives. Kamm FM. **Mt Sinai J Med** 1989 May;56(3):207–20
Procurement and allocation policies: should receiving depend on willingness to give? Muyskens J. **Mt Sinai J Med** 1989 May;56(3):202–6

TRENDS

Transplantation: 1988. Mandel TE. **Immunol Today** 1989 Jan; 10(1):1–3
Congress review: progress and prospects in bone marrow transplantation. Sullivan KM. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2919–22 (56 ref.)

VETERINARY

Clinical transplantation in veterinary medicine [editorial] Schall WD, et al. **J Vet Intern Med** 1987 Apr–Jun;1(2):95–6

TRANSPLANTATION, ALLOGENEIC see

TRANSPLANTATION, HOMOLOGOUS

TRANSPLANTATION, AUTOLOGOUS

Organization, fine structure, and viability of the human adrenal medulla: considerations for neural transplantation. Hansen JT, et al. **Ann Neurol** 1988 Nov;24(5):599–609
Circulating stem cell autografts. Bell AJ, et al. **Bone Marrow Transplant** 1986 Dec;1(2):103–10 (58 ref.)
Autotransplants in leukaemia. Gale RP, et al. **Lancet** 1989 Aug 5;2(8658):315–7 (32 ref.)
Autologous bone marrow transplantation in acute leukaemia. Burnett AK. **Leuk Res** 1988;12(7):531–6 (57 ref.)
Islet autotransplantation in humans—a model for allotransplantation. Fontana I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2621
Mixed autologous allogeneic bone marrow transplantation in rabbits. Gratwohl A, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):3079–81
72–hours preservation of pancreatic autotransplants in dogs using a urinary drainage technique. Heise JW, et al. **Transplant Proc** 1988 Oct;20(5):1029–30
Autologous blood stem cell transplantation. Juttner CA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2929–31 (14 ref.)
Autologous peripheral blood stem cell transplantation: analysis of autografted cells and lymphocyte recovery. Kiesel S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3084–8
[Autologous bone marrow transfusion in the treatment of adults with hematologic neoplasms. Experiences from Bern] Brun del Re GP, et al. **Schweiz Med Wochenschr** 1989 Jun 24;119(25):902–10 (Eng. Abstr.) (Ger)
[High–dosage chemo–radiotherapy with autologous bone marrow transfusion in malignant lymphoma: indications and personal experience] Stahel RA, et al. **Schweiz Med Wochenschr** 1989 Jun 24;119(25):911–7 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Miliary pulmonary neuroblastoma. A risk of autologous bone marrow transplantation? Graeve JL, et al. **Cancer** 1988 Nov 15;62(10):2125–7
Donor site morbidity following harvesting of autogenous rib grafts. Skouteris CA, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):808–12
[Obstruction of strangulated intestine as a complication of autotransplantation of the spleen after its injury] Kleba T, et al. **Wiad Lek** 1988 Aug 15;41(16):1112–5 (Eng. Abstr.) (Pol)

HISTORY

Historical review and present status of free fat graft autotransplantation in plastic and reconstructive surgery. Billings E Jr, et al. **Plast Reconstr Surg** 1989 Feb; 83(2):368–81

INSTRUMENTATION

[A device for preparing a splenic autotransplant] Kushch NL, et al. **Klin Khir** 1989;(1):71 (Rus)

METHODS

Autologous bone marrow transplantation in non–Hodgkin's lymphoma: monoclonal antibodies plus complement for ex vivo marrow treatment. Hurd DD, et al. **Am J Med** 1988 Dec;85(6):829–34
Segmental bone grafting. Comparison of different types of graft in dogs. Aebi M, et al. **Int Orthop** 1989;13(2):101–11
Donor island harvesting for micro– and minigrafting. Cohen IS. **J Dermatol Surg Oncol** 1989 Apr;15(4):384–5
Evaluating the efficacy of the punch hair grafting technique. Nordström RE. **J Dermatol Surg Oncol** 1989 Apr; 15(4):404–8
[Testicular autotransplantation in children. Apropos of 2 cases] Van Kote G, et al. **Chir Pediatr** 1988;29(5):281–6 (Eng. Abstr.) (Fre)
[Cortico–spongiosa chips in tibial head impression fractures] Geel C, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988; 81(1):66–7 (Ger)

UTILIZATION

Autologous bone marrow transplants: different indications in Europe and North America. Advisory Committee of the International Autologous Bone Marrow Transplant Registry (ABMTR). **Lancet** 1989 Aug 5;2(8658):317–8

TRANSPLANTATION, HETEROLOGOUS

Fetal organ and xenograft transplantation. Drugan A, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):289–93
Reduction of the antigenicity and immunogenicity of xenografts by a new cross–linking reagent. Murayama Y, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):546–9
Human non–Hodgkin's malignant lymphomas serially transplanted in nude mice conditioned with whole–body irradiation. Igarashi T, et al. **Br J Cancer** 1989 Mar; 59(3):356–60
Progressive growth of a human pleural mesothelioma xenografted to athymic rats and mice. Lindén CJ, et al. **Br J Cancer** 1988 Nov;58(5):614–8
Effect of striatal implantation of bovine adrenal chromaffin

cells on turning behavior in a rat model of Parkinson's disease. Fitzgerald LR, et al. **Brain Res** 1989 Mar 6; 481(2):373–7

Immunological reaction and blood–brain barrier in mouse–to–rat cross–species neural graft. Nakashima H, et al. **Brain Res** 1988 Dec 20;475(2):232–43

myc family gene abnormality in lung cancers and its relation to xenotransplantability. Gemma A, et al. **Cancer Res** 1988 Nov 1;48(21):6025–8

Evaluation of Dacron–covered and plain bovine xenografts as replacements for the anterior cruciate ligament. Berry JL, et al. **Clin Orthop** 1988 Nov;(236):270–8

Survival of astroglial cell lineage from adult brain transplant. Ignacio V, et al. **Dev Neurosci** 1989;11(3):175–8

Successful long–term cryopreservation and transplantation of human fetal pancreas. Hullett DA, et al. **Diabetes** 1989 Apr;38(4):448–53

Human fetal spinal cord xenografts survive in the eye of athymic nude rat hosts. Henschen AF, et al. **Exp Brain Res** 1989;75(2):317–26

Origin of cells in human oral mucosa heterotransplants in nude mice. Holmstrup P, et al. **Exp Cell Biol** 1988; 56(1–2):108–12

Immunohistochemical detection of biotin–labeled murine monoclonal antibody in nude mice transplanted with human colon cancer. Yokota T, et al. **Gastroenterol Jpn** 1989 Feb;24(1):22–4

Growth and metastasis of human tumors in nude mice following tumor–cell inoculation into a vascularized polyurethane sponge matrix. Thiede K, et al. **Int J Cancer** 1988 Dec 15;42(6):939–45

Influence of dispase and angiogenesis factors on the growth of human xenografts. Köpf–Maier P, et al. **J Cancer Res Clin Oncol** 1988;114(6):547–52

The fate of the freeze–preserved xenograft: an experimental study on rabbits, cats, and dogs. Siegal A, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):76–80

Behavioral and anatomical correlates of immunologically induced rejection of nigral xenografts. Carder RK, et al. **J Comp Neurol** 1988 Nov 15;277(3):391–402

Optimalization of immunosuppression after xenogeneic heart transplantation in primates. Reichenspurner H, et al. **J Heart Transplant** 1989 May–Jun;8(3):200–7; discussion 207–8

Use of xenograft tissue for the initial screening of human monoclonal antibodies by immunohistological technique. Imam A, et al. **J Immunol Methods** 1988 Nov 10; 114(1–2):69–72

Benzo[a]pyrene diol epoxide I modification of DNA in human skin xenografts. Yohn J, et al. **J Invest Dermatol** 1988 Oct;91(4):363–8

Implantation of rabbit embryo brain fragments into newborn mice: integration and survival of xenogeneic astrocytes. Suard IM, et al. **J Neurosci Res** 1989 Jun;23(2):172–9

The role of ABO blood group compatibility in heart transplantation between closely related animal species. An experimental study using the vervet monkey to baboon cardiac xenograft model. Cooper DK, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):447–55

Features of central giant cell granuloma of the jaws xenografted in nude mice. Cohen MA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug;66(2):209–17

Value of nude mice xenografts in the expression of cell heterogeneity of human sarcomas of bone and soft tissue. Llombart–Bosch A, et al. **Pathol Res Pract** 1988 Nov; 183(6):683–92

Passot and fat grafts [letter] Stephenson KL. **Plast Reconstr Surg** 1989 Oct;84(4):700–1

Human fetal cortices and spinal cord transplanted to the anterior chamber of immunodeficient nude rats: immunohistochemical studies. Olson L, et al. **Prog Brain Res** 1988;78:583–90

Xenografts of mouse hippocampal tissue. Formation of nerve connections between the graft fascia dentata and the host rat brain. Zimmer J, et al. **Prog Brain Res** 1988;78:271–80

Nude mice in oncology 1987. **Strahlenther Onkol** 1989 Jul; 165(7):481–569

Nude mice in oncology 1987: workshop guide–lines for establishment and characterisation of human xenografted tumor lines. Bamberg M, et al. **Strahlenther Onkol** 1989 Jul;165(7):481–2

Establishment and characterization of human tumours in nu/nu–mice. Budach V, et al. **Strahlenther Onkol** 1989 Jul; 165(7):500–1

Combined in vitro/in vivo test procedure with human tumor xenografts for anticancer drug development. Fiebig HH, et al. **Strahlenther Onkol** 1989 Jul;165(7):522–4

The influence of endogenous and exogenous factors on the course and the results of experimental work with human tumor tissue on athymic nude rodents. Fortmeyer HP. **Strahlenther Onkol** 1989 Jul;165(7):483–4

Human ventral mesencephalic xenografts to the catecholamine–depleted striata of athymic rats: ultrastructure and immunocytochemistry. Mahalik TJ, et al. **Synapse** 1989;4(1):19–29

Prolongation of graft survival in hamster to rat xenografting. Bouwman E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):540–1

Preformed natural antibodies (PNAB) and possibilities of modulation of hyperacute xenogeneic rejection (HXAR). Hammer C. **Transplant Proc** 1989 Feb;21(1 Pt 1):522–3

The mechanism of discordant xenograft rejection. Miyagawa S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):520–1

CD4+ lymphocytes play a dominant role in murine xenograft rejection. Pierson RN 3d, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):519

Xenografts. Reemtsma K. **Transplant Proc** 1989 Feb;21(1 Pt 1):517–8

Rejection/acceptance of xenografts. Sakakibara N, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):524–6

Cross–species retinal transplantation to the central nervous system. Sefton AJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3169–70 (27 ref.)

Differentiation of fetal pig pancreas in vitro and in nude mice. Thompson SC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2669–70

Prolongation of heart xenograft survival in the rat: effectiveness of cyclosporine in preventing early xenoantibody rebound after membrane plasmapheresis. Van de Stadt J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):543–5

Xenograft transplantation [letter] Cooper DK. **Transplantation** 1989 Feb;47(2):408

Fine specificity of xenogeneic antigen recognition by human T cells. Gress RE, et al. **Transplantation** 1989 Jul;48(1):93–8

Donor–specific transfusion and cardiac xenografts. Kaplan E, et al. **Transplantation** 1988 Oct;46(4):605–7

The mechanism of discordant xenograft rejection. Miyagawa S, et al. **Transplantation** 1988 Dec;46(6):825–30

A new method of investigating the efficacy of regional thermotherapy in subcutaneous xenografts of nude mice. Fabricius PG, et al. **Urol Res** 1989;17(4):219–21

Transplantation of cryopreserved human pancreatic islets into diabetic nude mice. Ricordi C, et al. **World J Surg** 1988 Dec;12(6):861–5

[Morphometric and histologic studies after transplantation of avital xenogenic tissues] Buntrock P, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):221–3 (Eng. Abstr.) (Ger)

[Orthotopic heart–lung xenotransplantation using primates] Asai Y, et al. **Kyobu Geka** 1988 Dec;41(13):1061–4 (Eng. Abstr.) (Jpn)

[Effect of cyclosporin on tumor xenotransplantation under the renal capsule in mice] Viadro MM, et al. **Antibiot Khimioter** 1989 Apr;34(4):280–2 (Eng. Abstr.) (Rus)

[Transplantation of pancreatic islet cell cultures in the treatment of suppurative surgical diseases in patients with diabetes mellitus] Rozental' RL, et al. **Vestn Khir** 1988 May; 140(5):83–6 (Eng. Abstr.) (Rus)

METHODS

A new technique of experimental heterotopic cardiac transplantation. Dasmahapatra HK, et al. **Cardiovasc Res** 1988 Apr;22(4):296–9

New techniques for the grafting of cultured human epidermal cells onto athymic animals. Barrandon Y, et al. **J Invest Dermatol** 1988 Oct;91(4):315–8

[Experimental study of penetrating heterograft of the cornea] Xu JT, et al. **Yen Ko Hsueh Pao** 1987 Mar;3(1):52–6 (Eng. Abstr.) (Chi)

TRENDS

Heterologous heart valves: past, present, and future. Burman SO. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S75–6

TRANSPLANTATION, HOMOLOGOUS

Treatment of absent pulmonary valve syndrome with homograft. Kron IL, et al. **Ann Thorac Surg** 1988 Nov; 46(5):579–81

Can acquired immunodeficiency syndrome and Creutzfeldt–Jakob disease be transmitted via otologic homografts? Glasscock ME 3d, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1252–5

Modification of the sponge allograft model to study the immune response to bone marrow cells. Moen RC, et al. **Bone Marrow Transplant** 1987 Apr;1(4):389–96

Immunological aspects of grafting in the mammalian central nervous system. A review and speculative synthesis. Widner H, et al. **Brain Res** 1988 Nov;472(3):287–324 (270 ref.)

Ethical dilemmas in organ donation and transplantation. Grenvik A. **Crit Care Med** 1988 Oct;16(10):1012–8

Histological and immunohistochemical findings in experimental rhabdomyosarcomas. Comparisons between original tumors, tumor recurrences and allotransplants in nude mice. Kosmehl H, et al. **Exp Pathol** 1989;36(2):81–8

Histopathology of skin lesions in renal allograft recipients—an assessment of viral features and dysplasia. Blessing K, et al. **Histopathology** 1989 Feb;14(2):129–39

Spectral analysis of heart rate variability following human heart transplantation: evidence for functional reinnervation. Fallen EL, et al. **J Auton Nerv Syst** 1988 Sep;23(3):199–206

Transplantation—resources. Matas memorial lecture. Bahnson HT. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb; 30(1):1–10

Evaluation of ethylene oxide sterilization of tissue implants. Kearney JN, et al. **J Hosp Infect** 1989 Jan;13(1):71–80

Rapamycin for immunosuppression in organ allografting [letter] Calne RY, et al. **Lancet** 1989 Jul 22;2(8656):227

Classification and terminology of hepatic allograft rejection: whither bound? Ludwig J. **Mayo Clin Proc** 1989 Jun; 64(6):676–9

Transplantation: the future. Reynolds G. **Med Lab Sci** 1988 Apr;45(2):113–5

The politics of transplantation of human fetal tissue. Annas GJ, et al. **N Engl J Med** 1989 Apr 20;320(16):1079–82

The ethical use of human fetal tissue in medicine. Stanford University Medical Center Committee on Ethics. Greely HT, et al. **N Engl J Med** 1989 Apr 20;320(16):1093–6

Transplant evaluation. **Semin Nucl Med** 1988 Jul; 18(3):177–268

Transplantation: the realization of a dream. Starzl TE. **Semin Nucl Med** 1988 Jul;18(3):178–80

Refined techniques for heterotopic cardiac transplantation in the rat. Araneda D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2562

Antiidiotypic responses in the suppression of allograft rejection. Batchelor JR. **Transplant Proc** 1989 Feb;21(1 Pt 1):57–8 (18 ref.)

Interleukin–2 reconstitutes natural killer activity in transplant recipients. Citterio F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):80–1

Clinical pancreas transplantation: a learning curve of its management. Daloze P, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2858–61

Islet autotransplantation in humans—a model for allotransplantation. Fontana I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2621

Experimental study of cervical heterotopic cardiac transplantation as a temporary left ventricular assist device. Hirooka Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2563–6

Procedure in highly immunized patients treated with kidney transplants. Kirste G, et al. **Transplant Proc** 1988 Oct; 20(5):949–50

Does depletion of donor dendritic cells in an organ allograft lead to prolongation of graft survival on transplantation? Lloyd DM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):482–3

Simplified rat lung transplantation using a cuff technique. Mizuta T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):260–2

Experimental tracheal allotransplantration using omentopexy. Moriyama S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2596–600

Surgical complications in pediatric renal transplantation. Nelson EW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2006–7

Orthotopic small intestine transplantation in the rat—how long a small intestinal graft is necessary? Oki K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2909–12

Lung transplantation in humans, with emphasis on en bloc technique for simultaneous bilateral transplantation without the heart. Raju S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2594–5

Predictors of intraoperative death and long–term survival in liver transplantation: a multistage analysis. Roberts MS, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2439–42

Procurement of kidneys with anomalies: long–term outcome. Rosenberg L, et al. **Transplant Proc** 1988 Oct;20(5):768–9

Genetic analysis of the anti–leukemic effect of mixed allogeneic bone marrow transplantation. Sykes M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3022–4

Transplantation of kidneys with nonvascular anatomical abnormalities. Szmidt J, et al. **Transplant Proc** 1988 Oct; 20(5):767

Procurement of both liver and whole pancreas/duodenum allografts from a single donor without the use of interposition vascular grafts on transplantation. Thistlethwaite JR Jr, et al. **Transplant Proc** 1988 Oct; 20(5):833–4

Advances in the understanding of rejection mechanisms. Tilney NL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):10–3 (84 ref.)

The use of horseshoe kidneys for transplantation. Vromen MA, et al. **Transplant Proc** 1988 Oct;20(5):765–6 (7 ref.)

[Osseous allografts in microsurgery of the ear] Gersdorff M, et al. **Acta Otorhinolaryngol Belg** 1988;42(5):640–5 (Fre)

[Organ transplantation in children] Broyer M, et al. **Ann Pediatr (Paris)** 1988 Nov;35(9):626–31 (Fre)

[Immunology of transplantation] Chatenoud L, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:693–7 (Eng. Abstr.) (Fre)

[Forensic medicine and questions of medical treatment] Somogyi E. **Orv Hetil** 1988 Dec 25;129(52):2779–83 (Eng. Abstr.) (Hun)

[Remarks on W. NasiLowski and M. Legień's work entitled "Medico–legal aspects of cadaveric organ explantation"] Dziatkowiak AJ. **Przegl Lek** 1988;45(9):665–6 (Eng. Abstr.) (Pol)

[Procurement of organs for transplantation (letter)] Marek Z. **Przegl Lek** 1988;45(9):661–2 (Pol)

[Medico–legal aspects of cadaveric organ explantation] Nasiłowski W, et al. **Przegl Lek** 1988;45(9):663–4 (Eng. Abstr.) (Pol)

[Remarks on the discussion regarding the definition of death and organ donors for transplantation] Sych M. **Przegl Lek** 1988;45(9):667–9 (Eng. Abstr.) (Pol)

ADVERSE EFFECTS

An autopsy case of disseminated histoplasmosis probably due to infection from a renal allograft. Watanabe M, et al. **Acta Pathol Jpn** 1988 Jun;38(6):769–80

Bronchiolitis obliterans in heart–lung transplantation patients: radiologic findings in 11 patients. Skeens JL, et al.

AJR Am J Roentgenol 1989 Aug;153(2):253–6
Biliary tract complications in orthotopic adult liver transplantation. Wilson BJ, et al. Am J Surg 1989 Jul; 158(1):68–70
Transplanted infections: donor–to–host transmission with the allograft. Gotteadiener KM. Ann Intern Med 1989 Jun 15; 110(12):1001–16 (208 ref.)
Bone transplant recipient found positive for AIDS. AORN J 1989 Mar;49(3):732
Major abdominal complications following cardiac transplantation. Utah Transplantation Affiliated Hospitals Cardiac Transplant Program. Merrell SW, et al. Arch Surg 1989 Aug;124(8):889–94
Ureteric obstruction after allogeneic bone marrow transplantation: an unusual complication. Hiraoka A, et al. Bone Marrow Transplant 1989 Jul;4(4):449–51
Secondary neoplasms as a consequence of transplantation and cancer therapy. Penn I. Cancer Detect Prev 1988; 12(1–6):39–57 (118 ref.)
The diagnosis and treatment of posttransplant lymphoproliferative disorders. Nalesnik MA, et al. Curr Probl Surg 1988 Jun;25(6):367–472 (274 ref.)
Cytomegalovirus infection in allograft recipients. Lancet 1989 Feb 11;1(8633):303–4 (24 ref.)
Epstein–Barr virus associated B–cell lymphomas in AIDS and after organ transplantation [letter] Thomas JA, et al. Lancet 1989 May 13;1(8646):1075–6
Cutaneous Mycobacterium thermoresistibile infection in a heart transplant recipient. Neeley SP, et al. Rev Infect Dis 1989 Jul–Aug;11(4):608–11
Third International Alexis Carrel Conference: Accelerated atherosclerosis. March 30–31, 1989, Washington, D.C. Proceedings. Transplant Proc 1989 Aug;21(4):3655–720
Misdiagnosis of metastatic cerebral choriocarcinoma in female cadaver donors. Baquero A, et al. Transplant Proc 1988 Oct;20(5):776–7
Diagnosis of renal transplant urinary fistulas. Bretan PN Jr, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1962–6
Polar artery damage in kidney procurement: incidence and follow–up of 300 renal allografts. Franco E, et al. Transplant Proc 1988 Oct;20(5):887–8
Frequency of allograft renal vascular thrombosis under three immunosuppressive regimens at a single institution. Gruber SA, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2139–40
Ultraviolet B–modified donor–specific blood transfusions and peritransplant cyclosporine in the induction of specific unresponsiveness to organ allografts. Hardy MA, et al. Transplant Proc 1988 Dec;20(6):1147–50 (20 ref.)
Urolithiasis after renal transplantation. Hayes JM, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1960–1
Postoperative endogenous serum cortisol levels as an index of acute rejection and severe infection in renal allograft recipients. Kozaki M, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1864–6
Long term results and complications of transplantation: the kidney. Mahony JF. Transplant Proc 1989 Feb;21(1 Pt 2):1433–4
Infection: the new problems. Rubin RH, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1440–5 (31 ref.)
[Effects of allogeneic LAK cells on the function of immune system of the recipients] Zhang HT. Chung Hua Chung Liu Tsa Chih 1988 Sep;10(5):342–5 (Eng. Abstr.) (Chi)

METHODS

A simplified technique for transplantation of the canine liver. Jamieson NV, et al. Acta Chir Scand 1988 Sep;154(9):511–6
Nigrostriatal reconstruction after 6–OHDA lesions in rats: combination of dopamine–rich nigral grafts and nigrostriatal "bridge" grafts. Dunnett SB, et al. Exp Brain Res 1989;75(3):523–35
Segmental bone grafting. Comparison of different types of graft in dogs. Aebi M, et al. Int Orthop 1989;13(2):101–11
One–stage correction of interrupted aortic arch combined with heart–lung transplantation. Aranki S, et al. J Thorac Cardiovasc Surg 1989 Aug;98(2):285–8
Sequentially paced heterotopic heart transplant in the left chest provides improved circulatory support for the failed left ventricle. A potential biologic bridge to orthotopic transplantation. Raza ST, et al. J Thorac Cardiovasc Surg 1989 Aug;98(2):266–74
Heart–lung transplantation. Technical modifications that may improve the early outcome. Vouhé PR, et al. J Thorac Cardiovasc Surg 1989 Jun;97(6):906–10
Transplantation using inverted renal unit and donor vena cava–iliac vein conduit to bypass recipient distal vena cava and iliac venous systems. Gibel LJ, et al. J Urol 1988 Dec; 140(6):1480–1
Auxiliary liver transplantation [editorial] Lancet 1989 Mar 11;1(8637):533–4
Massive allografts in surgery of bone tumors. Mnaymneh W, et al. Orthop Clin North Am 1989 Jul;20(3):455–67
A new method? [letter] Calne R. Surgery 1989 Jul;106(1):114
Orpitt: a computerized chart for intraoperative real time management of liver transplant data. Avolio AW, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2353–6
In situ versus bench resection of liver allografts before orthotopic liver transplantation. Crucitti F, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2364–6
Organ procurement for multivisceral abdominal transplantation in the pig. Gridelli B, et al. Transplant Proc 1988 Oct;20(5):844–5
Effect of retrograde coronary sinus perfusion during implantation of the preserved canine heart. Morishita Y, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1359–62
Intraoperative measurements related to subsequent hepatic graft failure. Paulsen AW, et al. Transplant Proc 1989 Feb; 21(1 Pt 2):2337–8
Reoperative procedures following liver transplantation. Pinson CW, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2334–6
Donor portal vein arterialization during liver transplantation. Sheil AG, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2343–4
A modified cannulation technique for veno–venous bypass during orthotopic liver transplantation. Slooff MJ, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2328–9
Rapid infusion technique as a safe alternative to veno–venous bypass in orthotopic liver transplant (TX). Stock PG, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2322–5
Vascular anastomosis in liver grafting by use of a synthetic absorbable cuff material. Sumimoto K, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2371–3
Partial liver transplantation in dogs: preserving the IVC of the recipient and use of a heparinized catheter (Anthron) for portal vein bypass. Taira N, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2362–3
[Current possibilities of transplantation of the small intestine] Bielicki D. Wiad Lek 1988 Jul 1;41(13):874–9 (26 ref.) (Eng. Abstr.) (Pol)

MORTALITY

Factors influencing early survival after liver transplantation. Stock PG, et al. Am J Surg 1989 Feb;157(2):215–9
Exploratory analysis of time–dependent risk for infection, rejection, and death after cardiac transplantation. Greene PS, et al. Ann Thorac Surg 1989 May;47(5):650–4
Stratifying the causes of death in liver transplant recipients. An approach to improving survival. Shaw BW Jr, et al. Arch Surg 1989 Aug;124(8):895–900

PSYCHOLOGY

Pre–operative anxiety of recipients and donors in renal transplantation from living relatives. Haruki S. Nippon Jinzo Gakkai Shi 1989 Feb;31(2):159–64
[Psychological nursing care of 10 patients with bone marrow transplantation] Chen HY. Chung Hua Hu Li Tsa Chih 1988 Aug;23(8):481–2 (Chi)
[Psychological changes in kidney transplantation] Bošković S, et al. Acta Chir Iugosl 1988;35(1):113–22 (Eng. Abstr.) (Ser)

REHABILITATION

The status of rehabilitation, morbidity, and mortality of long–term survivors of pediatric kidney transplants. Lee HM, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1989–91

TRENDS

Current problems and future goals in clinical bone marrow transplantation. Slavin S, et al. Blood Rev 1988 Dec; 2(4):259–69 (63 ref.)

TRANSPLANTATION IMMUNOLOGY

see related
HISTOCOMPATIBILITY TESTING
IMMUNOSUPPRESSION

Dendritic cells and antigen presentation in the regulation of cytotoxic T lymphocyte responses against viruses and transplantation antigens. Melief CJ, et al. Ann N Y Acad Sci 1988;532:280–91 (35 ref.)
New trends in heart transplantation. 1st Vienna symposium. Vienna, September 18–19, 1987. Proceedings. Bibl Cardiol 1988;(43):1–167
Restriction fragment analysis of the HLA class II region: application to tissue transplantation. Bushell A, et al. Biosci Rep 1989 Feb;9(1):41–53 (25 ref.)
Transfer of specific immunity in marrow recipients given HLA–mismatched, T cell–depleted, or HLA–identical marrow grafts. Lum LG, et al. Bone Marrow Transplant 1988 Sep;3(5):399–406
Immunology of intermingled skin grafts in rats: preliminary results. Hufnagel B, et al. Burns Incl Therm Inj 1989 Feb; 15(1):31–5
Immune reconstitution after bone–marrow transplantation. Symann M, et al. Cancer Treat Rev 1989 Jun;16 Suppl A:15–9 (20 ref.)
Immunoarchitecture of regenerated splenic transplants: influence of donor and host age on the regeneration of splenic compartments. Westermann J, et al. Cell Tissue Res 1988 Nov;254(2):403–13
Predisposing factors in corneal graft rejection. Hoffmann F, et al. Cornea 1989 Sep;8(3):215–9
Unilateral graft rejection after bilateral antigenically identical corneal transplantation. Olkowski JD, et al. Cornea 1989 Sep;8(3):230–2
Prostaglandins and surgical diseases: Part II. Jaffe BM, et al. Curr Probl Surg 1988 Nov;25(11):711–47 (246 ref.)
Interference in thyrotropin (TSH) determination: falsely elevated TSH values in a transplanted patient. Seghers J, et al. Eur J Nucl Med 1989;15(4):194–6
Abstracts from the fourteenth annual meeting of ASHI. American Society for Histocompatibility and Immunogenetics. Hum Immunol 1988 Oct;23(2):75–161
Induction in human allograft recipients of unresponsiveness to anti–lymphocyte globulin. Martin CA, et al. Immunol Invest 1988 Jun;17(4):265–72
Articles based on presentations at the Sir Peter Medawar Memorial Symposium. London, December 5th and 6th, 1988. Immunol Lett 1989 Apr;21(1):1–99
The role of immunology in the development of clinical transplantation. Brent L, et al. Immunol Lett 1989 Apr; 21(1):81–9
Peter Medawar and clinical transplantation. Hamilton D. Immunol Lett 1989 Apr;21(1):9–13
T cells in transplantation immunity. Mitchison NA. Immunol Lett 1989 Apr;21(1):15–9 (21 ref.)
T–cell subsets, bm mutants, and the mechanisms of allogeneic skin graft rejection. Auchincloss H Jr, et al. Immunol Res 1989;8(2):149–64 (42 ref.)
Lymphocyte migration patterns in organ allograft recipients. Kupiec–Weglinski JW, et al. Immunol Rev 1989 Apr; 108:63–82 (70 ref.)
Mixed allogeneic chimerism as an approach to transplantation tolerance. Sykes M, et al. Immunol Today 1988 Jan; 9(1):23–7 (41 ref.)
Anti–idiotype to MHC receptors—a possible route to specific transplantation tolerance? Sachs DH. Int Rev Immunol 1988 Aug;3(4):313–21 (30 ref.)
Immunological factors in organ transplantation. Niaudet P. Intensive Care Med 1989;15 Suppl 1:S61–3 (16 ref.)
Anaphylaxis to infusion of autologous bone marrow: an apparent reaction to self, mediated by IgE antibody to bovine serum albumin. Macy E, et al. J Allergy Clin Immunol 1989 May;83(5):871–5
Induction of classical transplantation tolerance in the adult. Qin SX, et al. J Exp Med 1989 Mar 1;169(3):779–94
Antibodies as a barrier to kidney transplantation. Lancet 1989 Feb 18;1(8634):357–8 (20 ref.)
Transplantation for diabetes mellitus. Merrell RC. Minerva Chir 1989 Jan 31;44(1–2):65–9 (20 ref.)
Regulation of pro–opiomelanocortin biosynthesis and processing by transplantation immunity. Zakarian S, et al. Nature 1989 Jun 15;339(6225):553–6
Immunological response in the mouse brain: I. Transplantation immunity to mouse lymphoma graft. Keyaki A, et al. Nippon Geka Hokan 1988 May 1; 57(3):191–201
Transplantation of lungs. Higenbottam T, et al. Postgrad Med J 1988;64 Suppl 4:120–4 (27 ref.)
Cellular and molecular immunology of tissue transplantation. La Rosa FG, et al. Rev Biol Celular 1988;17:1–114 (418 ref.)
Memories of mother. Beardsley TM. Sci Am 1988 Dec; 259(6):30–1
Positive crossmatches—when is it safe to transplant? Ting A. Transpl Int 1989 Apr;2(1):2–7
Proceedings of the twelfth International Congress of the Transplantation Society. August 14–19, 1988, Sydney, Australia. Book II. Transplant Proc 1989 Feb;21(1 Pt 2):1195–2475
International Symposium on Immunosuppression in Renal Transplantation. October 5–6, 1987, Barcelona, Spain. Proceedings. Transplant Proc 1988 Oct;20(5 Suppl 6):1–103
Optimization of immunosuppressive therapy while minimizing infection in renal transplantation. Striking a balance. Proceedings of a symposium. Boca Raton, Florida, March 25–26, 1988. Transplant Proc 1988 Dec;20(6 Suppl 8):1–53
Third International Alexis Carrel Conference: Accelerated atherosclerosis. March 30–31, 1989, Washington, D.C. Proceedings. Transplant Proc 1989 Aug;21(4):3655–720
Seventh annual meeting of the Canadian Transplantation Society. Ottawa, Canada, September 24–25, 1988. Proceedings. Transplant Proc 1989 Apr;21(2):3311–74
Fifth International Workshop on Aspiration Cytology and Other Noninvasive Methods of Diagnosis of Rejection in Transplantation. March 27–29, 1989, Washington, DC. Proceedings. Transplant Proc 1989 Aug;21(4):3567–654
Twelfth international congress of the Transplantation Society. August 14–19, 1988, Sydney, Australia. Proceedings. Transplant Proc 1989 Feb;21(1 Pt 1):1–1193
Cyclosporine in clinical transplantation and autoimmune disease. The Third Asian Sandimmun Workshop. Penang, Malaysia, November 12–13, 1989. Kaoshing, Taiwan, ROC, November 19–20, 1989. Proceedings. Transplant Proc 1989 Jun;21(3 Suppl 1):1–113
Sixth annual meeting of the Canadian Transplantation Society. Transplant Proc 1988 Dec;20(6):1219–80
Biology of transfusion–induced immunosuppression. Proceedings of a symposium. Snowbird, Utah, January 20–23, 1988. Transplant Proc 1988 Dec;20(6):1065–218
Local events in graft rejection. Häyry P, et al. Transplant Proc 1989 Aug;21(4):3716–20 (21 ref.)
Immunological considerations in neural transplantation. Lund RD, et al. Transplant Proc 1989 Feb;21(1 Pt 3):3159–62 (37 ref.)
Patterns of immune activation during the first four weeks in liver transplant patients. Nashan B, et al. Transplant Proc 1989 Aug;21(4):3623–4
Immunosuppression with monoclonal antibodies: some speculations about tolerance in the context of tissue grafting. Waldmann H. Transplant Proc 1988 Dec;20(6 Suppl 8):46–52 (41 ref.)
Seventh annual meeting of the American Society of

Transplant Physicians. June 1988, Chicago, Illinois. Proceedings. **Transplantation** 1989 Feb;47(2):207–387

Interleukin 2 receptor-targeted therapy—rationale and applications in organ transplantation. Kupiec-Weglinski JW, et al. **Transplantation** 1988 Dec;46(6):785–92 (87 ref.)

Impairment of allograft tumor immunity by isotype-like suppression of antigen-specific T cell factors. Van Loveren H, et al. **Transplantation** 1989 Mar;47(3):504–12

[Evaluation of the immunologic response in various types of bone grafts using lymphocytic nucleoli activity] Janovec M, et al. **Acta Chir Orthop Traumatol Cech** 1989 Jun; 56(3):234–9 (Eng. Abstr.) (Cze)

[Transplantation antigens and the recognition of foreign elements] Hašková V, et al. **Cas Lek Cesk** 1988 Sep 30; 127(39–40):1241–4 (Eng. Abstr.) (Cze)

[The use of islands of Langerhans as an alternative to the pancreas graft] Reach G.
Journ Annu Diabetol Hotel Dieu 1989;:151–60 (61 ref.) (Fre)

[Cytomegalovirus and immunomodulation] Charpentier B. **Nephrologie** 1988;9(4):163–5 (Eng. Abstr.) (Fre)

[Cytomegalovirus infections following transplantation: diagnosis, prevention and treatment] Calain P, et al.
Rev Med Suisse Romande 1988 Aug;108(8):697–701 (Fre)

[Immunologic monitoring in heart transplant] Adorno D, et al. **Minerva Chir** 1989 Jan 31;44(1–2):45–6 (Ita)

[Transplantation immunology] Natori T.
Hokkaido Igaku Zasshi 1988 Sep;63(5):683–6 (16 ref.) (Jpn)

[The sensitized rate of preformed antibodies in the candidate of renal transplant recipient] Nishigaki F, et al.
Hokkaido Igaku Zasshi 1988 Nov;63(6):859–63 (Eng. Abstr.) (Jpn)

[A fatal case of skin cancer 18 years after cadaveric donor renal transplantation] Arita S, et al.
Nippon Geka Gakkai Zasshi 1988 Oct;89(10):1726–9 (Eng. Abstr.) (Jpn)

[Detection of donor specific cytotoxic T lymphocyte activity in lung grafted mongrel dogs] Fujisawa T, et al.
Nippon Kyobu Geka Gakkai Zasshi 1989 Feb;37(2):203–7 (Eng. Abstr.) (Jpn)

[Transfusion and transplantation. Aged (senescent) red blood cells and young red blood cells (neocytes)—transfusional properties] Galvão M, et al. **AMB Rev Assoc Med Bras** 1988 Nov–Dec;34(6):193–5 (Por)

[The antigen of transplantable cells immunologically related to the antigen of the normal human gastric mucosa] Bobrova TS, et al. **Eksp Onkol** 1988;10(6):35–9 (Eng. Abstr.) (Rus)

[Immunologic support for clinical bone marrow transplants] Zaretskaia IuM. **Gematol Transfuziol** 1988 Oct;33(10):3–7 (Eng. Abstr.) (Rus)

[Characteristics of the distribution of transplantation antigens of the HLA system in patients with acute pyelonephritis] Vozianov AF, et al. **Urol Nefrol (Mosk)** 1989 May–Jun; (3):11–4 (Eng. Abstr.) (Rus)

[Prognostic immunologic pretransplantation monitoring in clinical kidney allotransplantation] Sochnev AM, et al.
Vestn Akad Med Nauk SSSR 1988;(7):63–70 (Eng. Abstr.) (Rus)

[Plasmapheresis, immunosuppressive therapy and kidney transplant in a pre-sensitized patient] Cuéllar-Cabrera H, et al. **Bol Med Hosp Infant Mex** 1989 Apr;46(4):246–50 (Eng. Abstr.) (Spa)

[Prevention of acute graft versus host disease using 3 prophylactic schemes] Conde E, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):5–9 (Eng. Abstr.) (Spa)

[Engraftment markers in allogenic bone marrow graft (editorial)] Ribera JM, et al. **Med Clin (Barc)** 1989 Apr 29;92(16):612–4 (Spa)

[Parasitic diseases and immunosuppression (editorial)] González Cappa S, et al. **Medicina (B Aires)** 1988; 48(1):100–3 (Spa)

[Future perspectives of kidney transplant: towards a specific immunosuppression?] Ortiz Arduan A, et al.
Rev Clin Esp 1989 Jun;185(1):41–3 (20 ref.) (Eng. Abstr.) (Spa)

[Evolution of antibodies and ABH plasmatic transferases in transplants with ABH difference between the recipient and donor] Barbolla L. **Sangre (Barc)** 1989 Jun;34(3):177–85 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Inhibition of the immune response to experimental fresh osteoarticular allografts. Rodrigo JJ, et al. **Clin Orthop** 1989 Jun;(243):235–53

[Current status of immunosuppression in organ transplantation] Wonigeit K. **Chirurg** 1988 Jul;59(7):447–53 (19 ref.) (Ger)

RADIATION EFFECTS

The role of irradiation in solid organ transplantation. Halperin EC, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):979–88 (98 ref.)

TRANSPLANTATION, ISOGENEIC

Expression of cell adhesion molecules from the L2/HNK-1 family in cerebellar isografts in mice. Poltorak M, et al. **Brain Res** 1989 May 29;488(1–2):265–74

TRANSPLANTATION, SYNGENEIC see **TRANSPLANTATION, ISOGENEIC**

TRANSPORT, BIOLOGICAL see **BIOLOGICAL TRANSPORT**

TRANSPORT OF WOUNDED AND SICK see **TRANSPORTATION OF PATIENTS**

TRANSPORT PROTEINS see **CARRIER PROTEINS**

TRANSPORTATION

Special report: perils, problems, and minimum requirements in shipping pathology slides. Rosen PP.
Am J Clin Pathol 1989 Mar;91(3):348–54

Suppression of lymphocyte blastogenesis by sera from calves transported by road. Murata H. **Br Vet J** 1989 May–Jun; 145(3):257–62

Injury risks posed by incompatibilities between trucks and other highway users. Ervin RD. **Bull N Y Acad Med** 1988 Sep–Oct;64(7):816–34

A behavioral science approach to transportation safety. Geller ES. **Bull N Y Acad Med** 1988 Sep–Oct;64(7):632–61 (24 ref.)

Protective action guide for radioactive material transportation accidents. Dodd B, et al. **Health Phys** 1988 Dec;55(6):957–62

Hazards assessment of worst case transportation accidents involving typical radioactive material shipments [published erratum appears in Health Phys 1989 Jun;56(6):974] Dodd B, et al. **Health Phys** 1988 Dec;55(6):963–83

Risks of radioactive material transportation accidents in Oregon. Humphries LL, et al. **Health Phys** 1989 Jul; 57(1):131–9

Orthopaedic diseases among transport workers. Luttmann A, et al. **Int Arch Occup Environ Health** 1988;61(3):197–205

Cancer incidence among urban bus drivers in Denmark. Netterstrøm B. **Int Arch Occup Environ Health** 1988; 61(3):217–21

Predictors of stress-related illness in city bus drivers. Bartone PT. **J Occup Med** 1989 Aug;31(8):657–63 (62 ref.)

All-terrain vehicle accidents: a survey of a community hospital's experience. Rogers WD. **J Orthop Trauma** 1987; 1(3):223–6

Constitutional Amendment One [letter] Medlock TT.
J S C Med Assoc 1989 Jan;85(1):48

Bus-door accidents [letter] Dunn PM. **Lancet** 1989 Feb 11; 1(8633):330

Psychological aftereffects of transportation disaster. Hodgkinson PE. **Med Sci Law** 1988 Oct;28(4):304–9

Mortality among migrant tunnel workers. Une H, et al.
Sangyo Igaku 1988 Nov;30(6):481–5

Low back trouble among urban bus drivers in Denmark. Netterstrøm B, et al. **Scand J Soc Med** 1989;17(2):203–6

Measurement of particle and gaseous pollution of the atmosphere due to buses. Joumard R, et al.
Sci Total Environ 1988 Sep 15;76(1):55–62

The impact of road construction on hospital in-patient catchments in the Meru District of Kenya. Airey T.
Soc Sci Med 1989;29(1):95–106

Shipped kidneys: are they worse? A single-center study. Wagner K, et al. **Transplant Proc** 1988 Oct;20(5):869–71

[Incidence of cholera outbreaks in the world: distribution in the environment and imported seafoods] Minami A, et al. **Nippon Rinsho** 1989 Jan;47(1):52–7 (Jpn)

METHODS

Design and development of a powered vehicle for handicapped people. Marinissen AH, et al.
J Med Eng Technol 1989 Jan–Apr;13(1–2):149–55

STANDARDS

Establishment of atmospheric pollution standards for motor vehicles. Georgiades Y, et al. **Sci Total Environ** 1988 Dec; 77(2–3):215–30

[Physiologic and hygienic evaluation of the work of river transport workers during the navigation period] Evstaf'ev VN. **Gig Sanit** 1988 Nov;(11):83–5 (Rus)

TRANSPORTATION OF PATIENTS

Certifying aeromedical services in Alaska. Johnson MS.
Alaska Med 1988 Jul–Aug;30(4):121–3

Helicopter transport of critical cardiac patients [letter] Morgan MT. **Am J Emerg Med** 1989 Jul;7(4):454–5

A stand for a defibrillator [letter] Clancy MJ. **Anaesthesia** 1989 Jul;44(7):618

Oxygen administration prevents hypoxemia during post-anesthetic transport in children. Patel R, et al.
Anesthesiology 1988 Oct;69(4):616–8

Identification and transport of patients with acute myocardial infarction for thrombolytic therapy. Burney RE, et al.
Ann Emerg Med 1988 Nov;17(11):1158–65 (46 ref.)

Defibrillation safety in emergency helicopter transport. Dedrick DK, et al. **Ann Emerg Med** 1989 Jan;18(1):69–71

Pacemaker function during helicopter transport. French RS, et al. **Ann Emerg Med** 1989 Mar;18(3):305–7

Aeromedicine and trauma arrest: a question of perspective [editorial] Heller MB. **Ann Emerg Med** 1989 Jul;18(7):791–2

Pediatric critical care transport: is a physician always needed on the team? McCloskey KA, et al. **Ann Emerg Med** 1989 Mar;18(3):247–9

Should surgical support within the same institution be required for percutaneous transluminal coronary angioplasty? Bonchek LI. **Ann Thorac Surg** 1989 Aug; 48(2):159–60

Feasibility and safety of emergency interhospital transport of patients during early hours of acute myocardial infarction. Gore JM, et al. **Arch Intern Med** 1989 Feb; 149(2):353–5

A retrospective analysis of air-evacuated hypothermia patients. Fox JB, et al. **Aviat Space Environ Med** 1988 Nov; 59(11 Pt 1):1070–5

Effect of electromagnetic interference by neonatal transport equipment on aircraft operation. Nish WA, et al.
Aviat Space Environ Med 1989 Jun;60(6):599–600

Early postoperative hypoxia during transport. Smith DC, et al. **Br J Anaesth** 1988 Nov;61(5):625–7

Medical evacuations from offshore structures. Norman JN, et al. **Br J Ind Med** 1988 Sep;45(9):619–23

Decreases in arterial oxygen saturation in paediatric outpatients during transfer to the postanaesthetic recovery room. Chripko D, et al. **Can J Anaesth** 1989 Mar; 36(2):128–32

Safe intrahospital transport of critically ill ventilator-dependent patients. Weg JG, et al. **Chest** 1989 Sep;96(3):631–5

Simple method for ventilating transported newborn infants [letter] Weintraub Z, et al. **Crit Care Med** 1989 Jan; 17(1):109

Emergency transport and positioning of young children who have an injury of the cervical spine. The standard backboard may be hazardous. Herzenberg JE, et al.
J Bone Joint Surg [Am] 1989 Jan;71(1):15–22

Is aeromedical transport of patients during acute myocardial infarction safe? Sternbach G, et al. **J Emerg Med** 1989 Jan–Feb;7(1):73–7

The effect of transportation between the recovery room and intensive care unit on postoperative acoustic tumor patients. Hamm CW, et al. **J Neurosci Nurs** 1988 Oct;20(5):303–8

Comparison of neonatal mortality rates between transports to tertiary and intermediate neonatal intensive care units. Chan LS, et al. **J Perinatol** 1989 Jun;9(2):141–6

Neonatal transport: communication—the essential element. Finsterwald W. **J Perinatol** 1988 Fall;8(4):358–60

The use of pulse oximetry during infant transport from outside facilities. Hankins CT. **J Perinatol** 1987 Fall; 7(4):346

Emergency interhospital transport of the major trauma patient: air versus ground. Boyd CR, et al. **J Trauma** 1989 Jun;29(6):789–93; discussion 793–4

Surgical cricothyrotomy in the field: experience of a helicopter transport team. Miklus RM, et al. **J Trauma** 1989 Apr;29(4):506–8

Implementation of intraosseous infusion technique by aeromedical transport programs. Zimmerman JJ, et al.
J Trauma 1989 May;29(5):687–9

Helicopter rescues and deaths among trekkers in Nepal. Shlim DR, et al. **JAMA** 1989 Feb 17;261(7):1017–9

London Hospital helicopter emergency medical service [letter] Earlam R, et al. **Lancet** 1988 Dec 24–31; 2(8626–8627):1492–3

Risky business [letter] McCoy S. **MCN** 1989 Mar–Apr; 14(2):130

An injector-bag assembly for manual ventilation with PEEP during patient transport. Baraka A, et al.
Middle East J Anesthesiol 1988 Jun;9(5):467–70

NZ death from malaria [letter] Ewing RL. **N Z Med J** 1988 Sep 28;101(854):614

Maternal and neonatal transport: results of a national collaborative survey of preterm and very low birth weight infants in The Netherlands. Kollée LA, et al.
Obstet Gynecol 1988 Nov;72(5):729–32

Adverse events during interhospital transport: physiologic deterioration associated with pretransport severity of illness. Kanter RK, et al. **Pediatrics** 1989 Jul;84(1):43–8

Acute myocardial infarction. The race to the hospital. Wehrmacher WH. **Postgrad Med** 1989 Feb 1;85(2):112–5, 118, 122 (21 ref.)

Helicopter transport of patients with acute myocardial infarction. Rodgers G, et al. **Tex Med** 1988 Oct;84(10):35–7

[The transport of newborn infants at risk] Rankova S.
Akush Ginekol (Sofiia) 1988;27(5):58–63 (12 ref.) (Bul)

[Organization of transportation of pathologic neonates in the South Bohemia Region] Veleminský M. **Cesk Pediatr** 1989 Jun;44(6):367–8 (Cze)

[The Vejle transport stretcher] Ahlburg P, et al.
Ugeskr Laeger 1988 Nov 21;150(47):2915 (Dan)

[Safety and efficacy of thrombolysis during ambulance transportation of patients with an acute heart infarct] Oemrawsingh PV, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):354–8 (Eng. Abstr.) (Dut)

[Antenatal emergency call. Indications. Role of the SAMU (Medical Emergency Care Services)] Lallemand E, et al.
Rev Fr Gynecol Obstet 1989 Jan;84(1):37–40 (Eng. Abstr.) (Fre)

[Monitoring critically ill patients during transport by helicopter using a patient with abdomen apertum as an example] Mertzlufft FO, et al. **Anaesthesist** 1989 Feb; 38(2):89–94 (Eng. Abstr.) (Ger)

[A new mobile respiration and monitoring system for transporting critically ill patients] Vandermeersch E, et al.
Anasth Intensivther Notfallmed 1988 Oct;23(5):276–8 (Eng.

Abstr.) (Ger)
[Treatment strategy in pediatric polytrauma] Popp W. **Beitr Orthop Traumatol** 1989 Apr;36(4):129–37 (Eng. Abstr.) (Ger)
[Air transport of patients (letter)] Neumann H. **Dtsch Med Wochenschr** 1989 Aug 4;114(31–32):1225 (Ger)
[Air transportation of patients: a danger of hypoxic organ lesions?] Schneck HJ, et al. **Dtsch Med Wochenschr** 1989 Jan 27;114(4):123–7 (Eng. Abstr.) (Ger)
[Responsibility of the medical specialty faculty and employees of the emergency medicine patient transport system in organized emergency medicine] Burgkhardt M. **Z Arztl Fortbild (Jena)** 1989;83(13):660–1 (Ger)
[Use of mobile coronary care unit by patients with myocardial infarction] Galtmidi J, et al. **Harefuah** 1989 Feb 15;116(4):199–202 (Eng. Abstr.) (Heb)
[Evacuation of patients from the North Sea] Freund KG. **Tidsskr Nor Laegeforen** 1989 Jun 10;109(16):1757–8 (Eng. Abstr.) (Nor)
[Changes in homeostatic parameters during transportation of patients from the operating room to the resuscitation and intensive care unit] Gochashvili ND, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):19–21 (Eng. Abstr.) (Rus)
[A hand cart with a removable panel for transporting patients] Sevas'ianova NF, et al. **Med Tekh** 1989 Jan–Feb;(1):60–1 (Rus)
[Transportation devices in the system of rehabilitation of patients and invalids] Kostetskii MV. **Ortop Travmatol Protez** 1988 Aug;(8):54–7 (Rus)
[A device for the emergency removal of intermaxillary fixation for transportation in jaw fractures] Chigarin VN, et al. **Voen Med Zh** 1988 Dec;(12):50–1 (Rus)
[The organization of the delivery of medical care to the wounded and ill during their evacuation] Nikulin ND. **Voen Med Zh** 1989 Apr;(4):28–9 (Rus)

ECONOMICS

Financial analysis of an inner-city helicopter service: charges versus collections. Saywell RM Jr, et al. **Ann Emerg Med** 1989 Jan;18(1):21–5
Certificate of Need and aviation [editorial] Gelber BR. **Nebr Med J** 1989 Jul;74(7):171
[Repatriation of psychotic patients from their vacation address abroad (letter)] van Erkel AW. **Ned Tijdschr Geneeskd** 1988 Sep 24;132(39):1810 (Dut)

HISTORY

The coming of the aeroplane. By R. H. Cordner, 1913 [classical article] Cordner RH. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1109–10
To pop a balloon: aeromedical evacuation in the 1870 siege of Paris. Lam DM. **Aviat Space Environ Med** 1988 Oct; 59(10):988–91
The Sylvia stretcher: a perspective of Sister Elizabeth Kenny's contribution to the first-aid management of injured patients. Pearn J. **Med J Aust** 1988 Dec 5–19; 149(11–12):636–8
Evolution of civil aeromedical helicopter aviation. Meier DR, et al. **South Med J** 1989 Jul;82(7):885–91
[Evacuation of the sick and wounded via inland water routes during World War II] Amusin BM. **Voen Med Zh** 1988 Jun;(6):71–3 (Rus)
[The experience of carrying and transporting those wounded in battles at Ardon in November–December of 1942] Ivanov AI. **Voen Med Zh** 1989 May;(5):72–4 (Rus)

INSTRUMENTATION

[Universal litters for transporting patients from the operating table] Aliev RG. **Klin Khir** 1988;(8):75 (Rus)

METHODS

Helicopter transport of ruptured abdominal aortic aneurysms. Kent RB 3d, et al. **Ala Med** 1989 Jan;58(7):13–4
Helicopter use by rural emergency departments to transfer trauma victims: a study of time-to-request intervals. Garrison HG, et al. **Am J Emerg Med** 1989 Jul;7(4):384–6
A rural retrieval service. Burrell AR, et al. **Anaesth Intensive Care** 1989 May;17(2):175–9
A modified stretcher-lifter device for transfer of patients during extra corporeal shock wave lithotripsy (ESWL) [letter] Malhotra V. **Anesth Analg** 1989 May;68(5):699–700
External transcutaneous pacemakers in interhospital transport of cardiac patients. Vukov LF, et al. **Ann Emerg Med** 1989 Jul;18(7):738–40
Aeromedical transport of patients with post-traumatic cardiac arrest. Wright SW, et al. **Ann Emerg Med** 1989 Jul;18(7):721–6
Otolaryngic health service support in the airland battle. Zajtchuk JT. **Ann Otol Rhinol Laryngol Suppl** 1989 May; 140:5–8
Operative stretchers. Use in ophthalmologic procedures. Mawhinney MS. **AORN J** 1989 Aug;50(2):310–5
Caring for people at home. **Aust Fam Physician** 1989 Feb; 18(2):160, 162, 164
Patient transport: an organized method with direct clinical benefits. Petre JH, et al. **Biomed Instrum Technol** 1989 Mar–Apr;23(2):100–7
Emergency transport by aeromedical blimp. Cottrell JJ, et al. **BMJ** 1989 Apr 1;298(6677):869–70
Aeromedical transfer of burned patients: a review with special reference to European civilian practice. Judkins KC. **Burns Incl Therm Inj** 1988 Jun;14(3):171–9 (35 ref.)
A technique for transfer of patients to a fracture table. Tate K. **Injury** 1988 Jan;19(1):53
A bed-mounted mobile intensive-care unit. Railton R, et al. **J Med Eng Technol** 1988 May–Jun;12(3):121–3
The efficacy of ground versus helicopter transport in patient outcome. Campbell JP, et al. **J Okla State Med Assoc** 1989 Jul;82(7):311–4
Ventilatory changes in convalescent infants positioned in car seats. Willett LD, et al. **J Pediatr** 1989 Sep;115(3):451–5
Direct transport to the operating room for resuscitation of trauma patients. Rhodes M, et al. **J Trauma** 1989 Jul; 29(7):907–13; discussion 913–5
Pre-hospital coronary care—an important extension of hospital coronary care. Nuri MM. **JPMA** 1989 Jun; 39(6):157–60
Providing safe Med-Evac helicopter transport: Maryland's 18-year experience. Cowley RA, et al. **Md Med J** 1988 Jul;37(7):521–4
Seeing the writing on the wall. And helping patients to make decisions regarding it [editorial] Metzler MH. **Mo Med** 1989 Sep;86(9):611, 614
Survey of maternal transports to the North Carolina Memorial Hospital. Thorp JM Jr, et al. **N C Med J** 1989 Aug;50(8):423–5
Journey patterns of the elderly and disabled in the Cotswolds: a spatial analysis. Gant RL, et al. **Soc Sci Med** 1988; 27(2):173–80
[Mortality risk after intrauterine and after neonatal transport] Kollée LA, et al. **Ned Tijdschr Geneeskd** 1989 Mar 18; 133(11):553–6 (Eng. Abstr.) (Dut)

ORGANIZATION & ADMINISTRATION

The child requiring critical care transport [letter] McCloskey KA. **Pediatr Emerg Care** 1988 Sep;4(3):230–1

STANDARDS

Helicopter Emergency Medical Services—HEMS One. Earlam R, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4 Suppl):60–4

TRENDS

The helicopter and the EMS system. Hankins DG, et al. **Minn Med** 1988 Nov;71(11):700–2

TRANSPOSABLE ELEMENTS see **DNA INSERTION ELEMENTS**

TRANSPOSITION OF GREAT VESSELS

COMPLICATIONS

Rapid development of biventricular heart failure in corrected transposition of the great arteries during pregnancy. Lam D, et al. **Am Heart J** 1988 Oct;116(4):1111–3
Complete transposition with posteriorly located aorta and multiple ventricular septal defects. Virdi IS, et al. **Int J Cardiol** 1988 Dec;21(3):347–51
Transposition of the great arteries with straddling tricuspid valve. Report of two rare cases with acquired subaortic stenosis after main pulmonary artery banding. de Vivie R, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):205–13
Neonatal arterial switch operation complicated by intramural left coronary artery and treated by left internal mammary artery bypass graft [letter] Ebels T, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):473–5
Congenital mitral valve anomalies in transposition of the great arteries. Ammirati A, et al. **Jpn Heart J** 1989 Mar; 30(2):187–95
Möbius syndrome and transposition of the great vessels. Raroque HG Jr, et al. **Neurology** 1988 Dec;38(12):1894–5
[Angiocardiographic diagnosis of ventricular septal defects in complete transposition of great vessels] Alekian BG, et al. **Grudn Khir** 1989 May–Jun;(3):34–41 (Eng. Abstr.) (Rus)

DIAGNOSIS

MR imaging of congenitally corrected transposition of the great vessels in adults. Park JH, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):491–4
In utero diagnosis of interrupted aortic arch with transposition of the great arteries and tricuspid atresia. Johnson BL, et al. **Am Heart J** 1989 Mar;117(3):690–2
Double outlet right ventricle in inverted position mimicking corrected transposition of great arteries. Dalvi BV, et al. **Indian Heart J** 1988 Jul–Aug;40(4):271–4
Double-outlet right ventricle in inverted position mimicking corrected transposition of great arteries [letter] Tandon R. **Indian Heart J** 1988 Nov–Dec;40(6):438
Right-sided heart with mirror-image atrial arrangement, complete transposition, ventricular septal defect and subpulmonary stenosis. Davidson A, et al. **Int J Cardiol** 1989 Feb;22(2):264–7
The vectorcardiogram in 4 children undergoing the arterial switch repair. Fong LV, et al. **Int J Cardiol** 1989 Sep; 24(3):277–82
Analysis of the hypoplastic right ventricle utilizing electrocardiographic body surface potential mapping (BSPM). Liebman J, et al. **J Electrocardiol** 1989 Jul; 22(3):195–209
[A loud second heart sound] van den Heuvel AH, et al. **Tijdschr Kindergeneeskd** 1989 Feb;57(1):32–4 (Eng. Abstr.) (Dut)
[Pre- and postoperative study of neonatal transposition of the great vessels by magnetic resonance imaging] Livolsi A, et al. **Ann Cardiol Angeiol (Paris)** 1989 May;38(5):261–4 (Eng. Abstr.) (Fre)

EMBRYOLOGY

[The development of the aortic channel when it arises from the right ventricle: an analytical experimental approach to the morphogenesis of transposition of the great arteries (TGA)] Koizumi K, et al. **Kaibogaku Zasshi** 1988 Jun; 63(3):169–80 (Eng. Abstr.) (Jpn)

ETIOLOGY

Arrested rotation of the outflow tract may explain tetralogy of Fallot and transposition of the great arteries. Lomonico MP, et al. **Pediatr Pathol** 1988;8(3):267–81

MORTALITY

[Corrected transposition of the great arteries (letter)] Alegría E, et al. **Rev Esp Cardiol** 1989 May;42(5):351 (Spa)

NURSING

A new beginning: nursing care of the infant undergoing the arterial switch operation for transposition of the great arteries. Callow LB. **Heart Lung** 1989 May;18(3):248–55

PATHOLOGY

Comparison of types of pulmonary stenosis with the state of the ventricular septum in complete transposition of the great arteries. Silberbach M, et al. **Pediatr Cardiol** 1989 Winter;10(1):11–5
Malformations of the cardiac infundibulum. Karczenski K. **Perspect Pediatr Pathol** 1988;12:100–14

PHYSIOPATHOLOGY

Long-term function of the morphologic right ventricle in adult patients with corrected transposition of the great arteries. Dimas AP, et al. **Am Heart J** 1989 Sep; 118(3):526–30
Late functional deterioration after atrial correction for transposition of the great arteries. Turina MI, et al. **Circulation** 1989 Sep;80(3 Pt 1):I162–7
Hemodynamics in transposition of the great arteries with comparison to ventricular septal defect. Tu C, et al. **Comput Biol Med** 1989;19(2):95–128

RADIOGRAPHY

Corrected transposition presenting as aortic stenosis in an infant. Garrick ML, et al. **Int J Cardiol** 1988 Aug; 20(2):287–90
[Kommerell diverticulum. Current aspects of the imaging diagnosis] Florio F, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):132–4 (Ita)

SURGERY

Atrial automatic ectopic tachycardia successfully treated with encainide in a 4-week-old infant after Senning procedure. Hays MD, et al. **Am Heart J** 1989 Feb; 117(2):489–92
Right ventricular myocardial function after atrial switch operation for transposition of the great arteries. Kato H, et al. **Am J Cardiol** 1989 Jan 15;63(3):226–30
Two-dimensional and Doppler echocardiographic evaluation after arterial switch repair in infancy for complete transposition of the great arteries. Martin MM, et al. **Am J Cardiol** 1989 Feb 1;63(5):332–6
Transposition of the great arteries: a comparison of results of the mustard procedure versus the arterial switch. Backer CL, et al. **Ann Thorac Surg** 1989 Jul;48(1):10–4
Ten years' experience with the Senning operation for transposition of the great arteries: physiological results and late follow-up. Bender HW Jr, et al. **Ann Thorac Surg** 1989 Feb;47(2):218–23
The asymptomatic child a long time after the Mustard operation for transposition of the great arteries. Bink-Boelkens MT, et al. **Ann Thorac Surg** 1989 Jan; 47(1):45–50
Heart transplantation in repaired transposition of the great arteries. Harjula AL, et al. **Ann Thorac Surg** 1988 Dec; 46(6):611–4
The arterial switch procedure for the neonate: coming of age [editorial] Laks H. **Ann Thorac Surg** 1989 Jul;48(1):3–4
An anterior longitudinal aortotomy with a distal aortic transection for the arterial switch operation. Sakamoto K, et al. **Ann Thorac Surg** 1989 Aug;48(2):303–4
Transposition of the great arteries. The Jatene procedure. Blonshine SK. **AORN J** 1989 Apr;49(4):973–6, 978–81, 984–7
Longitudinal study of ventricular function after the Mustard operation for transposition of the great arteries: a long term follow up. Wong KY, et al. **Br Heart J** 1988 Oct; 60(4):316–23

Transposition of the great arteries: the arterial switch operation. Castaneda AR, et al. **Cardiol Clin** 1989 May; 7(2):369–76

Arterial repair for transposition of the great arteries and large ventricular septal defect in early infancy. Bove EL, et al. **Circulation** 1988 Nov;78(5 Pt 2):III26–31

Rapid, two-stage arterial switch for transposition of the great arteries and intact ventricular septum beyond the neonatal period. Jonas RA, et al. **Circulation** 1989 Sep;80(3 Pt 1):I203–8

Fate of pulmonary artery after anatomic correction of simple transposition of great arteries in newborn infants. Paillole C, et al. **Circulation** 1988 Oct;78(4):870–6

To switch or not to switch? The Senning alternative. Rubay J, et al. **Circulation** 1988 Nov;78(5 Pt 2):III1–4

Experience with Damus procedure. Waldman JD, et al. **Circulation** 1988 Nov;78(5 Pt 2):III32–9

Perfusion lung scan in patients operated for transposition of the great arteries. Houzard C, et al. **Clin Nucl Med** 1989 Apr;14(4):268–70

Myocardial scintigraphy with Tc-99m TBI in a 6-month-old infant with myocardial infarction after Mustard operation. Sandrock D, et al. **Clin Nucl Med** 1989 May;14(5):381

Surgical relief of subpulmonary stenosis after previous Senning (or Mustard) operation for complete transposition. Battistessa S, et al. **Int J Cardiol** 1989 Aug;24(2):230–3

Lung function in simple complete transposition after intracardiac repair. Samánek M, et al. **Int J Cardiol** 1989 Jul;24(1):13–7

Balloon dilation of pulmonary venous pathway obstruction after Mustard repair for transposition of the great arteries. Cooper SG, et al. **J Am Coll Cardiol** 1989 Jul;14(1):194–8

Surgical options for complex transposition of the great arteries. Corno A, et al. **J Am Coll Cardiol** 1989 Sep; 14(3):742–9 (43 ref.)

Two-dimensional and Doppler echocardiographic assessment of neonatal arterial repair for transposition of the great arteries. Gleason MM, et al. **J Am Coll Cardiol** 1989 May;13(6):1320–8

A quantitative evaluation of aortic regurgitation after anatomic correction of transposition of the great arteries. Martin RP, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1281–4

Assessment of right ventricular performance by pulsed Doppler echocardiography in patients after intraatrial repair of aortopulmonary transposition in infancy or childhood. Schmidt KG, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1578–85

Hypoxemia and pulmonary hyperperfusion due to systemic collateral arteries after total repair of transposition of the great arteries. Aghaji MA, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):338–41

Prolonged aortic cross-clamping in early infancy and method of myocardial preservation. Aoshima M, et al. **J Cardiovasc Surg (Torino)** 1988 Sep-Oct;29(5):591–5

Profile of creatine phosphokinase (CK) and its isoenzyme MB (CK-MB) during corrective procedures of congenital cyanotic heart disease. Ngalikpima VF, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):342–7

Neonatal cardiology casebook. Stanton RE. **J Perinatol** 1988 Fall;8(4):376–8

Arrhythmia and late mortality after Mustard and Senning operation for transposition of the great arteries. An eight-year prospective study. Deanfield J, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):569–76

Intermediate results of the arterial switch repair. A 20-institution study. Norwood WI, et al. **J Thorac Cardiovasc Surg** 1988 Dec;96(6):854–63

The Mustard procedure in infants (less than 100 days of age). Ten-year follow-up. Turley K, et al. **J Thorac Cardiovasc Surg** 1988 Dec;96(6):849–53

Atresia of the coronary sinus orifice. Fatal outcome after intraoperative division of the drainage left superior vena cava. Yokota M, et al. **J Thorac Cardiovasc Surg** 1989 Jul; 98(1):30–2

Changes in left ventricular dimensions after pulmonary artery banding and Jatene operation in children with complete transposition of the great arteries. Echocardiographic study. Tooyama K, et al. **Jpn Heart J** 1988 Jul;29(4):421–7

Concealed atrial parasystole following the Senning operation. Young ML, et al. **PACE** 1988 Nov;11(11 Pt 1):1504–6

Anatomic correction for transposition of the great arteries: first follow-up (38 patients). Klautz RJ, et al. **Pediatr Cardiol** 1989 Winter;10(1):1–9

Long-term follow-up of right ventricular function after Mustard operation for transposition of the great arteries. Buch J, et al. **Scand J Thorac Cardiovasc Surg** 1988; 22(3):197–202

Anatomically corrected malposition of the great arteries, inflow ventricular septal defect, and subaortic stenosis: diagnostic and operative implications. Schmid FX, et al. **Thorac Cardiovasc Surg** 1989 Jun;37(3):147–50

[The Rastelli operation in transposition of the great arteries and Taussig-Bing syndrome] Wang ZW. **Chung Hua Wai Ko Tsa Chih** 1988 Sep;26(9):535–8, 573 (Eng. Abstr.) (Chi)

[Atrial tachycardia after anatomic repair of transposition of the great vessels (letter)] Vaksmann G, et al. **Presse Med** 1989 Jan 21;18(2):79–80 (Fre)

[Late results following Rastelli corrective operations in transposition of great vessels] Kececioglu D, et al. **Z Kardiol** 1988 Jul;77(7):432–5 (Eng. Abstr.) (Ger)

[Supravalvular pulmonary stenosis following anatomic correction of transposition of great vessels: report of a successful balloon dilatation] Schranz D, et al. **Z Kardiol** 1988 Nov;77(11):743–5 (Eng. Abstr.) (Ger)

[A successful operation by de Leval's procedure in corrected transposition of the great arteries with ventricular septal defect and pulmonary atresia] Hayashibe Y, et al. **Kokyu To Junkan** 1989 May;37(5):553–7 (Eng. Abstr.) (Jpn)

[Successful one stage anatomic correction for simple transposition of the great arteries in a 28-day-old neonate] Fukutomi M, et al. **Kyobu Geka** 1988 Dec;41(13):1090–4 (Eng. Abstr.) (Jpn)

[Closure of VSD in congenitally corrected transposition of the great arteries] Kurosawa H. **Kyobu Geka** 1988 May; 41(6):461–7 (14 ref.) (Eng. Abstr.) (Jpn)

[Closure of a ventricular septal defect in complete transposition of the great arteries] Oku H, et al. **Kyobu Geka** 1988 May;41(6):450–6 (9 ref.) (Eng. Abstr.) (Jpn)

[Follow-up study of 11 years after the atrial switching operation in transposition of the great arteries with intact ventricular septum] Sakurada T, et al. **Kyobu Geka** 1988 Nov;41(12):998–1002 (Eng. Abstr.) (Jpn)

[Transposition of the great arteries with interrupted aortic arch: a successful staged correction] Ueno Y, et al. **Kyobu Geka** 1988 Oct;41(11):898–901 (Eng. Abstr.) (Jpn)

[Prevention of the conduction disturbance secondary to closure of ventricular septal defect of complete transposition of the great arteries] Yasui H, et al. **Kyobu Geka** 1988 May;41(6):457–60 (9 ref.) (Eng. Abstr.) (Jpn)

[Size and configuration of the functional aortic root after the arterial switch operation for complete transposition of the great arteries] Sugawara E, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1699–706 (Eng. Abstr.) (Jpn)

[A case report of successful surgical treatment in a patient with Taussig-Bing anomaly and coarctation of the aorta by multiple staged approaches] Hayashibe Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2122–5 (Eng. Abstr.) (Jpn)

[Arterial switch operation for transposition of the great arteries with intact interventricular septum] Kawata H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun; 36(6):898–904 (Eng. Abstr.) (Jpn)

[Total correction of A(I)LL transposition of the great arteries with polysplenia syndrome] Terada M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1422–6 (Eng. Abstr.) (Jpn)

[Intracardiac repair in anatomically corrected malposition of the great arteries (SDL): report on 2 successful repair] Tsuchida K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):760–5 (Eng. Abstr.) (Jpn)

[Analysis of clinical results in infant cardiac surgical context of TGA and TAPVC in terms of cardioplegia] Yamamoto F, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul; 36(7):1128–34 (Eng. Abstr.) (Jpn)

[Pulmonary artery banding in simple transposition of the great arteries to prepare the left ventricle for anatomic correction] Yonenaga K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2048–57 (Eng. Abstr.) (Jpn)

[Anatomical correction of transposition of the great arteries by Jatene's technic using the Lecompte maneuver and maintaining the interventricular septal defect. Report of a case] Jucá ER, et al. **Arq Bras Cardiol** 1988 Mar; 50(3):193–6 (Eng. Abstr.) (Por)

[Balloon atrial septostomy by 2-dimensional echocardiography] Serra Júnior A, et al. **Arq Bras Cardiol** 1988 Mar;50(3):179–82 (Eng. Abstr.) (Por)

[Transposition of the great vessels combined with juxtaposition of the auriculae atrii] Aleksi-Meskhishvili VV, et al. **Gruds Khir** 1988 Sep-Oct;(5):88–9 (Rus)

[Correction of transposition of the great vessels in young children] Fal'kovskii GE, et al. **Gruds Khir** 1988 Sep-Oct; (5):5–10 (Eng. Abstr.) (Rus)

[Radical correction of the single left heart ventricle with sinistrotransposition of the aorta] Podzolkov VP, et al. **Gruds Khir** 1988 May-Jun;(3):89–92 (Rus)

[2-dimensional and Doppler echocardiography during atrioseptostomy using the Rashkind method. Alternative umbilical approach in the newborn infant] Ibarra Henríquez O, et al. **An Esp Pediatr** 1988 Sep;29(3):211–5 (23 ref.) (Eng. Abstr.) (Spa)

[Corrected transposition of great vessels. Presentation of a case in an adult] Fulquet E, et al. **Rev Esp Cardiol** 1988 Oct;41(8):504–7 (16 ref.) (Eng. Abstr.) (Spa)

THERAPY

Balloon atrial septostomy using echocardiographic monitoring. Ozkutlu S, et al. **Jpn Heart J** 1988 Jul; 29(4):415–9

Transposition of great arteries: a preliminary report on local experience with balloon atrial septostomy. Chan KC, et al. **Med J Malaysia** 1987 Jun;42(2):97–103

[Percutaneous atrioseptostomy under the control of two-dimensional echocardiography] Książyk J, et al. **Kardiol Pol** 1988;31(8):535–9 (9 ref.) (Eng. Abstr.) (Pol)

TRANSPOSONS see DNA INSERTION ELEMENTS

TRANSSEXUALISM

The legal determination of the sexual identity of a post-operative transsexual seen as a human rights issue. Taitz J. **Med Law** 1989;7(5):467–74

BLOOD

The effects of long term testosterone administration on pulsatile luteinizing hormone secretion and on ovarian histology in eugonadal female to male transsexual subjects. Spinder T, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):151–7

Pulsatile luteinizing hormone release and ovarian steroid levels in female-to-male transsexuals compared to heterosexual women. Spinder T, et al. **Psychoneuroendocrinology** 1989;14(1-2):97–102

DIAGNOSIS

Guidelines for the diagnosis of transsexualism [letter] Robin A. **Br J Hosp Med** 1989 Jun;41(6):590

DRUG THERAPY

Effects of the pure antiandrogen RU 23.903 (anandron) on sexuality, aggression, and mood in male-to-female transsexuals. van Kemenade JF, et al. **Arch Sex Behav** 1989 Jun;18(3):217–28

Mortality and morbidity in transsexual patients with cross-gender hormone treatment. Asscheman H, et al. **Metabolism** 1989 Sep;38(9):869–73

Histopathology of the breasts of 12 women receiving long-term exogenous androgen therapy. Futterweit W, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):309–12

ENZYMOLOGY

Evidence for several fold more activity of NAD+-dependent uterine prostaglandin 15-hydroxydehydrogenase in transsexual than in non-transsexual women. Roy AC, et al. **Prostaglandins** 1989 Feb;37(2):171–80

EPIDEMIOLOGY

The prevalence of transsexualism in Singapore. Tsoi WF. **Acta Psychiatr Scand** 1988 Oct;78(4):501–4

Transsexualism and anatomic sex ratio reversal in Poland. Godlewski J. **Arch Sex Behav** 1988 Dec;17(6):547–8

Prevalence of transsexualism in The Netherlands. Eklund PL, et al. **Br J Psychiatry** 1988 May;152:638–40

PHYSIOPATHOLOGY

Prolactin levels and pituitary enlargement in hormone-treated male-to-female transsexuals. Asscheman H, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):583–8

Effects of long-term testosterone administration on gonadotropin secretion in agonadal female to male transsexuals compared with hypogonadal and normal women. Spinder T, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):200–7

[Frequency analytic EEG study on the topic of temporal function disorders in transsexuality] Grasser T, et al. **EEG EMG** 1989 Jun;20(2):117–20 (Eng. Abstr.) (Ger)

PSYCHOLOGY

The development of female transsexualism. Volkan VD, et al. **Am J Psychother** 1989 Jan;43(1):92–107

The classification and labeling of nonhomosexual gender dysphorias. Blanchard R. **Arch Sex Behav** 1989 Aug; 18(4):315–34 (51 ref.)

Transsexuals in the military: flight into hypermasculinity. Brown GR. **Arch Sex Behav** 1988 Dec;17(6):527–37

Existence of transsexualism in the military setting [letter] Brown GR. **Arch Sex Behav** 1989 Aug;18(4):371–3

Male-to-female and female-to-male transsexuals: a comparison. Kockott G, et al. **Arch Sex Behav** 1988 Dec; 17(6):539–46

Aspects of psychiatric symptoms at different stages in the treatment of transsexualism. Mate-Kole C, et al. **Br J Psychiatry** 1988 Apr;152:550–3

Trance-related pseudocyesis in a male. Barrett D. **Int J Clin Exp Hypn** 1988 Oct;36(4):256–61

Cross-gender behavior and psychopathology in boy psychiatric outpatients. Pleak RR, et al. **J Am Acad Child Adolesc Psychiatry** 1989 May; 28(3):385–93

Utility of the Gd scale for the measurement of Gender-Dysphoria in males. Ross MW, et al. **Psychol Rep** 1988 Aug;63(1):87–90

[Childhood and transsexualism] Chiland C. **Psychiatr Enfant** 1988;31(2):313–73 (138 ref.) (Eng. Abstr.) (Fre)

[Transsexualism as a symptom of personality disorder and its treatment] Küchenhoff B. **Nervenarzt** 1988 Dec; 59(12):734–8 (Ger)

SURGERY

Judicial determination of the sexual identity of post-operative transsexuals: a new form of sex discrimination. Taitz J. **Am J Law Med** 1987;13(1):53–69 (108 ref.)

Sex reassignment surgery in male to female transsexuals. Bouman FG. **Ann Plast Surg** 1988 Dec;21(6):526–31

Sex reassignment surgery: a study of 141 Dutch transsexuals. Kuiper B, et al. **Arch Sex Behav** 1988 Oct;17(5):439–57
Spironolactone with physiological female steroids for presurgical therapy of male–to–female transsexualism. Prior JC, et al. **Arch Sex Behav** 1989 Feb;18(1):49–57
Effects of adequacy of gender reassignment surgery on psychological adjustment: a follow–up of fourteen male–to–female patients. Ross MW, et al. **Arch Sex Behav** 1989 Apr;18(2):145–53
Sex reassignment surgery [editorial] Jabuni B, et al. **Br J Hosp Med** 1989 Jan;41(1):15, 19
Prediction of regrets in postoperative transsexuals. Blanchard R, et al. **Can J Psychiatry** 1989 Feb;34(1):43–5
Silicon–rubber vaginal stent [letter] Nicolai JP, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1105–6
[Manifestation of schizophrenic psychosis in a transsexual patient following surgical sex change] Kampik E, et al. **Nervenarzt** 1989 Jun;60(6):361–3 (Ger)

THERAPY

Australian Transsexualism Committee [letter] Walters WA, et al. **Med J Aust** 1979 Oct 20;2(8):420, 422

TRANSUDATES see EXUDATES AND TRANSUDATES

TRANSVESTISM

DRUG THERAPY

Buspirone hydrochloride in the treatment of transvestic fetishism. Fedoroff JP. **J Clin Psychiatry** 1988 Oct; 49(10):408–9

PSYCHOLOGY

The classification and labeling of nonhomosexual gender dysphorias. Blanchard R. **Arch Sex Behav** 1989 Aug; 18(4):315–34 (51 ref.)
Transvestites' women revisited: a nonpatient sample. Brown GR, et al. **Arch Sex Behav** 1989 Feb;18(1):73–83
Distressed transvestites. Psychometric characteristics. Fagan PJ, et al. **J Nerv Ment Dis** 1988 Oct;176(10):626–32

TRANYLCYPROMINE

Addiction to tranylcypromine (Parnate): a case report. Westermeyer J. **Am J Drug Alcohol Abuse** 1989; 15(3):345–50

ADMINISTRATION & DOSAGE

Successful treatment of acquired Tourettism and major depression. Malone DA Jr, et al. **J Geriatr Psychiatry Neurol** 1988 Jul–Sep;1(3):169–71

ADVERSE EFFECTS

Combined mianserin and tranylcypromine [letter] Graham PM. **Br J Psychiatry** 1988 Sep;153:415–7
Tranylcypromine withdrawal delirium [letter] Absher JR, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):379–80
Oral tyramine pressor test and the safety of monoamine oxidase inhibitor drugs: comparison of brofaromine and tranylcypromine in healthy subjects. Bieck PR, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):237–45
Autoinduction of hypertensive reactions by tranylcypromine? Keck PE Jr, et al. **J Clin Psychopharmacol** 1989 Feb; 9(1):48–51
Hypertensive episodes with tranylcypromine treatment [letter] Kraus R. **J Clin Psychopharmacol** 1989 Jun; 9(3):232–3
A dystonic reaction occurring during treatment with tranylcypromine [letter] Pande AC, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):229–30
Danger of MAOI therapy after fluoxetine withdrawal [letter] Sternbach H. **Lancet** 1988 Oct 8;2(8615):850–1
Common side effects associated with monoamine oxidase inhibitors. Remick RA, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):497–504

ANALOGS & DERIVATIVES

Chronic effects of tranylcypromine and 4–fluorotranylcypromine on regional brain monoamine metabolism in rats: a comparison with clorgyline. Greenshaw AJ, et al. **Biol Psychiatry** 1989 Apr 15; 25(8):1014–20
N–(2–cyanoethyl)tranylcypromine, a potential prodrug of tranylcypromine: its disposition and interaction with catecholamine neurotransmitters in brain. Nazarali AJ, et al. **Pharm Res** 1987 Feb;4(1):16–20

ANALYSIS

Determination of enantiomeric purity of tranylcypromine sulfate by proton magnetic resonance spectroscopy with chiral lanthanide shift reagent. Hanna GM, et al. **J Assoc Off Anal Chem** 1989 Jul–Aug;72(4):552–5
Determination of diastereomeric purity of tranylcypromine sulfate by proton magnetic resonance spectroscopy with lanthanide shift reagent. Hanna GM, et al. **J Assoc Off Anal Chem** 1989 Jul–Aug;72(4):556–8

PHARMACOKINETICS

N–(2–cyanoethyl)tranylcypromine, a potential prodrug of tranylcypromine: its disposition and interaction with catecholamine neurotransmitters in brain. Nazarali AJ, et al. **Pharm Res** 1987 Feb;4(1):16–20

PHARMACOLOGY

Chronic effects of tranylcypromine and 4–fluorotranylcypromine on regional brain monoamine metabolism in rats: a comparison with clorgyline. Greenshaw AJ, et al. **Biol Psychiatry** 1989 Apr 15; 25(8):1014–20
The influence of phenelzine and tranylcypromine on the release of prostaglandins from the rat mesenteric vascular bed. Nassar BA, et al. **Can J Physiol Pharmacol** 1988 Sep; 66(9):1206–9
Differential effects of tranylcypromine and imidazole on mammary carcinogenesis in rats fed low and high fat diets. McCormick DL, et al. **Cancer Res** 1989 Jun 15; 49(12):3168–72
Chronic tranylcypromine treatment induces functional alpha 2–adrenoceptor down–regulation in rats. Greenshaw AJ, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):67–72
Relaxation of rabbit middle cerebral arteries in vitro by H1 histaminergic agonists is inhibited by indomethacin and tranylcypromine. Ea Kim L, et al. **Fundam Clin Pharmacol** 1988;2(6):463–75
Lithium alters the stereoselectivity of monoamine oxidase in rat brain. Smith DF. **J Neural Transm** 1989;76(3):205–10
Release of some endogenous trace amines from rat striatal slices in the presence and absence of a monoamine oxidase inhibitor. Dyck LE. **Life Sci** 1989;44(17):1149–56
[The anticonvulsive action of tranylcypromine in maximal electroshock in the mouse] Fischer W. **Pharmazie** 1988 Oct; 43(10):733–4 (Ger)

POISONING

Ping Pong gaze in reversible coma due to overdose of monoamine oxidase inhibitor [letter] Watkins HC, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):539

THERAPEUTIC USE

Treatment strategy in depression. II. MAO inhibitors in depression resistant to cyclic antidepressants: two controlled crossover studies with tranylcypromine versus L–5–hydroxytryptophan and nomifensine. Nolen WA, et al. **Acta Psychiatr Scand** 1988 Dec;78(6):676–83
Platelet serotonin response to treatment in geriatric depression [letter] McIntyre IM, et al. **Biol Psychiatry** 1989 Aug;26(4):434–6
Determination and comparison of the pressor effect of tyramine during long–term moclobemide and tranylcypromine treatment in healthy volunteers. Berlin I, et al. **Clin Pharmacol Ther** 1989 Sep;46(3):344–51
Tranylcypromine in social phobia. Versiani M, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):279–83
High dose tranylcypromine therapy for refractory depression. Amsterdam JD, et al. **Pharmacopsychiatry** 1989 Jan;22(1):21–5
Tranylcypromine in depression resistant to cyclic antidepressions. Nolen WA. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):155–8

TOXICITY

Can disulfiram (Antabuse) be safely co–administered with the monoamine oxidase inhibitor (MAOI) antidepressants? Despite the ability of the major metabolite of disulfiram (diethyldithiocarbamate) to inhibit the enzyme dopamine beta–hydroxylase and a report of the induction in rats of central motor disturbances, convulsions, and death following the co–administration of tranylcypromine, there appears to be surprisingly little in the literature that directly addresses this question. Ciraulo DA. **J Clin Psychopharmacol** 1989 Aug;9(4):315–6

TRAPIDIL see under PYRIMIDINES

TRAUMA see WOUNDS AND INJURIES

TRAUMA CENTERS

Admission surgery for the multiple trauma patient. Statistics from a Level I trauma center. Freeman MC, et al. **AORN J** 1989 Jul;50(1):31, 34–6, 38
Current concepts in trauma: 1. Principles and directions for development. McMurtry RY, et al. **Can Med Assoc J** 1989 Sep 15;141(6):529–33 (39 ref.)
Head injury at the southeastern Georgia Regional Trauma Center: a three–year review. Boyd CR, et al. **J Med Assoc Ga** 1989 Jun;78(6):341–4
Emergency medical services for children and pediatric trauma system components. Ramenofsky ML. **J Pediatr Surg** 1989 Feb;24(2):153–5
The role of a regional trauma system in the management of a mass disaster: an analysis of the Keystone, Colorado, chairlift accident. Ammons MA, et al. **J Trauma** 1988 Oct; 28(10):1468–71
Mortality of patients with head injury and extracranial injury treated in trauma centers. Gennarelli TA, et al. **J Trauma** 1989 Sep;29(9):1193–201; discussion 1201–2
Presence of three or more rib fractures as an indicator of need for interhospital transfer. Lee RB, et al. **J Trauma** 1989 Jun;29(6):795–9; discussion 799–800
Methodologic approach for a large functional trauma registry. Dunham CM, et al. **Md Med J** 1989 Mar; 38(3):227–33

ECONOMICS

Financial analysis of an inner–city helicopter service: charges versus collections. Saywell RM Jr, et al. **Ann Emerg Med** 1989 Jan;18(1):21–5

LEGISLATION & JURISPRUDENCE

Trauma—the medical term for injury [letter] Ebert PA. **Am J Surg** 1988 Nov;156(5):428

MANPOWER

Many surgeons unwilling to staff trauma centers. Koska MT. **Hospitals** 1989 May 5;63(9):46, 48
[With initiators of competition] Zakharov VP. **Voen Med Zh** 1988 Nov;(11):13–5 (Rus)

ORGANIZATION & ADMINISTRATION

Preventable deaths in a self–designated trauma system. Campbell S, et al. **Am Surg** 1989 Jul;55(7):478–80
Current concepts in trauma: 2. The Sunnybrook Medical Centre trauma program: the first 11 years. McMurtry RY, et al. **Can Med Assoc J** 1989 Sep 15;141(6):555–9
A model: systems management of life threatening injuries in children for the state of Maryland, USA. Haller JA, et al. **Intensive Care Med** 1989;15 Suppl 1:S53–6
Discharge planning for burn patients. Neville C, et al. **J Burn Care Rehabil** 1988 Jul–Aug;9(4):414–20
A protocol for pediatric trauma receiving units. Harris BH, et al. **J Pediatr Surg** 1989 May;24(5):419–22
Creating pediatric trauma systems. Harris BH. **J Pediatr Surg** 1989 Feb;24(2):149–52
Institutionally shared trauma rotations are viable solutions to deficiencies in trauma training. Richardson JD, et al. **J Trauma** 1989 Sep;29(9):1211–5; discussion 1215–6
Trauma systems [letter] Bassett M. **JAMA** 1989 Mar 10; 261(10):1445
Aeromedical trauma programs lift off. Lieber D. **Pa Med** 1989 Jun;92(6):38–42
Organisation of a trauma centre. Lim SK, et al. **Singapore Med J** 1988 Aug;29(4):367–70
[Evaluation of the activities of the Rabies Prevention Center in the Koszalin province 1985–6] Witczuk J, et al. **Przegl Epidemiol** 1988;42(4):403–9 (Eng. Abstr.) (Pol)
[Improving the control of injuries in the Krivol Rog iron ore region] Tatarovskiĭ AP. **Sov Zdravookhr** 1988;(8):50–2 (Eng. Abstr.) (Rus)
[Surgical treatment of closed diaphyseal fractures of the crural bones at a polyclinic orthopedic–trauma center] Kriukov VA. **Vestn Khir** 1989 Jan;142(1):68–9 (Rus)

STANDARDS

Quality assessment in the pediatric trauma care system. Nakayama DK, et al. **J Pediatr Surg** 1989 Feb;24(2):159–62
Status of trauma center designation. Aprahamian C, et al. **J Trauma** 1989 May;29(5):566–70

STATISTICS & NUMERICAL DATA

Trauma registry and trauma center biases in injury research. Payne SR, et al. **J Trauma** 1989 Apr;29(4):424–9

SUPPLY & DISTRIBUTION

The need for trauma units [editorial] Smith EJ. **Br J Hosp Med** 1988 Jul;40(1):9
A time for decisions. Trunkey DD. **Br J Surg** 1988 Oct; 75(10):937–9
Trauma center closings threaten other hospitals. Larkin H. **Hospitals** 1989 Feb 20;63(4):22–4

TRENDS

Federal initiative and leadership toward creating a favorable environment for the growth of trauma care systems [letter] Cowley RA, et al. **J Trauma** 1989 May;29(5):702
Pride in St. Paul [interview by Richard L. Reece] Cicero J. **Minn Med** 1988 Nov;71(11):660, 710–3
Trauma systems. Where does Minnesota really stand? Moore MP. **Minn Med** 1988 Nov;71(11):692–7
Trauma care the Mayo way [interview by Richard L. Reece] Mucha P Jr. **Minn Med** 1988 Nov;71(11):661–7
A traumatic week for Minnesota. Reece RL. **Minn Med** 1988 Nov;71(11):659, 668
Trauma categorization in Minnesota. Ruiz E. **Minn Med** 1988 Nov;71(11):674–6

TRAUMA, MULTIPLE see MULTIPLE TRAUMA

TRAUMA UNITS see TRAUMA CENTERS

TRAUMATOLOGY

see related
WOUNDS AND INJURIES

Emergency medicine in the Third World: two years as

director of the Kingston, Jamaica, Public Hospital Casualty Department. Berk WA. **Ann Emerg Med** 1989 May; 18(5):567–72

Traumatology today: old dogma, new directions. Presidential address to the 5th annual meeting of the Trauma Association of Canada/L'Association Canadienne de Traumatologie. Wesson DE. **J Trauma** 1989 Jun; 29(6):709–15

The trauma anesthesiologist. Grande CM, et al. **Md Med J** 1988 Jul;37(7):531–6

[Research tasks in Czechoslovak traumatology] Michek J. **Rozhl Chir** 1988 Sep;67(8–9):521–4 **(Cze)**

[The "Patent" Automatic Information-Retrieval System in traumatology and orthopedics] Mattis ER. **Vestn Akad Med Nauk SSSR** 1988;(12):78–82 **(Rus)**

EDUCATION

Advanced trauma life support in Alaska. Kilkenny SJ. **Alaska Med** 1988 Jul–Aug;30(4):125–31

Trauma and forensic medicine. Carmona R, et al. **J Trauma** 1989 Sep;29(9):1222–5

Institutionally shared trauma rotations are viable solutions to deficiencies in trauma training. Richardson JD, et al. **J Trauma** 1989 Sep;29(9):1211–5; discussion 1215–6

Physician education in trauma: a comprehensive program. Wiles CE 3d, et al. **Md Med J** 1988 Jul;37(7):571–3

[Current problems of training students in orthopedics–traumatology and military and field surgery at the medical institutes of the country] Trubnikov VF, et al. **Ortop Travmatol Protez** 1988 Nov;(11):68–70 **(Rus)**

HISTORY

A history of trauma care. From cutter to trauma surgeon. Foss J. **AORN J** 1989 Jul;50(1):21–3, 26–8, 30

A history of the American Association for the Surgery of Trauma: the first 50 years. Peltier LF, et al. **J Trauma** 1989 Feb;29(2):143–51

[An outstanding representative of our national orthopedics and traumatology (on the 90th birthday of N. P. Novachenko)] Korzh AA, et al. **Ortop Travmatol Protez** 1988 Nov;(11):71–5 **(Rus)**

[The centenary of the Department of Traumatology and Orthopedics of the S.M. Kirov Order of Lenin, Red Banner, Military Medical Academy] Tkachenko SS. **Ortop Travmatol Protez** 1988 Aug;(8):6–12 **(Rus)**

[On the centenary of the Department of Military Traumatology and Orthopedics of the S. M. Kirov Military Medical Academy] **Voen Med Zh** 1988 Oct;(10):74–6 **(Rus)**

METHODS

[Prospects for using numerical methods in research in traumatology and orthopedics] Kalnberz VK, et al. **Vestn Akad Med Nauk SSSR** 1988;(8):74–9 (Eng. Abstr.) **(Rus)**

TRENDS

Trauma nursing: past, present, and future. Trimble P, et al. **Md Med J** 1988 Jul;37(7):547–50

[Results and prospects of the development of traumatologic-orthopedic services in the republics of Central Asia and Kazakhstan] Shaposhnikov IuG. **Ortop Travmatol Protez** 1988 Nov;(11):1–5 **(Rus)**

[Status and objectives of the reorganization of orthopedic and traumatologic services for children in the Ukrainian SSR] Shumada IV, et al. **Ortop Travmatol Protez** 1988 Aug; (8):1–6 (Eng. Abstr.) **(Rus)**

[The pathway of perestroika and further improvement in military traumatology and injury prevention] Tkachenko SS. **Voen Med Zh** 1988 Sep;(9):3–6 **(Rus)**

[Efforts are concentrated on traumatology and emergency departments of the emergency medical services in the Netherlands] Brismar B. **Lakartidningen** 1988 Nov 23; 85(47):4113–4 **(Swe)**

TRAVEL

Substance abuse and international travel. Lange WR, et al. **Adv Alcohol Subst Abuse** 1989;8(2):37–51 (52 ref.)

An outbreak of influenza A/Taiwan/1/86 (H1N1) infections at a naval base and its association with airplane travel. Klontz KC, et al. **Am J Epidemiol** 1989 Feb;129(2):341–8

Murine typhus acquired during short-term urban travel. Wilson ME, et al. **Am J Med** 1989 Aug;87(2):233–4

Travellers' diarrhoea among children returning to the United Kingdom from visits abroad. Msengi AE, et al. **Ann Trop Paediatr** 1988 Sep;8(3):173–80

Heat susceptibility of bacterial enteropathogens. Implications for the prevention of travelers' diarrhea. Bandres JC, et al. **Arch Intern Med** 1988 Oct;148(10):2261–3

Reported illness and compliance in US travelers attending an immunization facility. Hilton E, et al. **Arch Intern Med** 1989 Jan;149(1):178–9

A cost-effectiveness comparison of the use of antimicrobial agents for treatment or prophylaxis of travelers' diarrhea. Reves RR, et al. **Arch Intern Med** 1988 Nov;148(11):2421–7

Travelling [letter] Ruff T. **Aust Fam Physician** 1988 Sep; 17(9):734

Acute schistosomiasis (Katayama fever) among British air crew. Chapman PJ, et al. **BMJ** 1988 Oct 29;297(6656):1101

Providencia alcalifaciens and travellers' diarrhoea. Haynes J, et al. **BMJ** 1989 Jul 8;299(6691):94–5

Chancroid and HIV [letter] Waugh MA. **BMJ** 1989 Feb 4; 298(6669):321

Imported rickettsial African spotted fever in Japan. Ishii N, et al. **Br J Dermatol** 1989 May;120(5):701–4

Analysis of the reasons and circumstances of traumas and accidents on passenger vessel. Jaremin B. **Bull Inst Marit Trop Med Gdynia** 1988;39(1–2):51–60

Statement on screening of international travellers for infection with human immunodeficiency virus. Why is HIV screening of international travellers ineffective and impractical [news] **Bull Int Union Tuberc Lung Dis** 1988 Sep;63(3):38

AIDS information for travellers. Mann J. **Bull Int Union Tuberc Lung Dis** 1988 Jun;63(2):29–30

Japanese encephalitis vaccination, with reference to travellers to Seoul, Korea. **Can Dis Wkly Rep** 1988 Sep 10; 14(36):161–2 **(Eng, Fre)**

Melioidosis in a traveller—Quebec. Germain M, et al. **Can Dis Wkly Rep** 1989 May 27;15(21):109–11 **(Eng, Fre)**

Chloroquine-resistant Plasmodium falciparum malaria acquired in central Africa—Quebec. Pichette G, et al. **Can Dis Wkly Rep** 1988 Apr 23;14(16):65–6 **(Eng, Fre)**

Travel restrictions and HIV antibody screening. William C, et al. **Can Dis Wkly Rep** 1988 Jul 2;14(26):116 **(Eng, Fre)**

The changing pattern of imported malaria. Yechouron A, et al. **Can Dis Wkly Rep** 1988 Jul 30;14(30):133–6 **(Eng, Fre)**

An evaluation of sources of information on health and travel. Demeter SJ. **Can J Public Health** 1989 Jan–Feb;80(1):20–2

Mixed falciparum and vivax malaria in Canadian travellers [letter] Nguyen CD, et al. **Can Med Assoc J** 1989 Jul 15; 141(2):100, 104

Free-alcohol policy on airlines [see comments] Swann DR. **Can Med Assoc J** 1988 Dec 1;139(11):1051. **Comment in:** Can Med Assoc J 1989 Jan 15;140(2):116

Safari to Kenya [letter] Walker RE. **Can Med Assoc J** 1988 Oct 15;139(8):704–5

How necessary is immunoglobulin for travellers going abroad? Cossar JH, et al. **Community Med** 1989 Feb; 11(1):9–12

Older Canadians in Florida. The social networks of international seasonal migrants. Marshall VW, et al. **Compr Gerontol [B]** 1988 Aug;2(2):63–8

International travel amongst patients on chronic anticoagulation therapy. Thulin LI. **Cor Vasa** 1988; 30(4):292–7

Skin diseases in tourists to Hawaii. Funaki B, et al. **Cutis** 1988 Oct;42(4):313–5

A two-year survey of the incidence of heat-labile enterotoxin-producing Escherichia coli and other enteric pathogens in travellers returning to the Sheffield area. Chapman PA, et al. **Epidemiol Infect** 1988 Oct; 101(2):239–47

Isolation of Legionella pneumophila from hotels of Greece. Alexiou SD, et al. **Eur J Epidemiol** 1989 Mar;5(1):47–50

Traveller's diarrhea among Austrian tourists in warm climate countries: I. Epidemiology. Kollaritsch H. **Eur J Epidemiol** 1989 Mar;5(1):74–81

Medical geography and travel medicine. Votrubec C, et al. **Geogr Med** 1989;19:207–12

Medicare confuses geriatricians, too [editorial] Butler RN. **Geriatrics** 1988 Nov;43(11):13

Double blind trial of loperamide for treating acute watery diarrhoea in expatriates in Bangladesh. van Loon FP, et al. **Gut** 1989 Apr;30(4):492–5

Pleural effusion in Michigan caused by Coccidioides immitis after travel to an endemic area. Hughes CW, et al. **Henry Ford Hosp Med J** 1989;37(1):47–9

Ciguatera fish poisoning. Glantz RH, et al. **IMJ** 1988 Aug; 174(2):101–2

Prevalence of antibodies to human immunodeficiency virus among intravenous drug users in Israel—association with travel abroad. Dan M, et al. **Int J Epidemiol** 1989 Mar; 18(1):239–41

AIDS and travel [news] **Int J Gynaecol Obstet** 1988 Aug; 27(1):145

Relapsing fever (Borrelia) in an adolescent tourist in Israel. McNamara JJ, et al. **J Adolesc Health Care** 1988 Sep; 9(5):421–3

Treatment of travellers' diarrhoea with pivmecillinam [letter] Christensen OE, et al. **J Antimicrob Chemother** 1988 Oct; 22(4):570–1

Short-term self-treatment of travellers' diarrhoea with norfloxacin: a placebo-controlled study. Wistrőm J, et al. **J Antimicrob Chemother** 1989 Jun;23(6):905–13

Primary prevention and international travel: infections, immunizations, and antimicrobial prophylaxis. Ferenchick GS, et al. **J Gen Intern Med** 1989 May–Jun;4(3):247–58 (103 ref.)

The importation of multiple-resistant bacterial pathogens into British hospitals [letter] Brown EM, et al. **J Hosp Infect** 1988 Aug;12(2):138–9

Malaria prophylaxis in travellers from Britain. Coole L, et al. **J Infect** 1989 May;18(3):209–12

Pregnancy and travel: the risks of hepatitis and scuba diving [letter; comment] **JAMA** 1989 Jul 28;262(4):497–8. **Comment on:** JAMA 1989 Feb 3;261(5):728–31

Leads from the MMWR. Cholera vaccine. **JAMA** 1988 Nov 4;260(17):2489–90

Diagnostic and therapeutic technology assessment. Traveler's diarrhea. **JAMA** 1989 Sep 1;262(9):1243

Pregnancy and travel [see comments] Barry M, et al. **JAMA** 1989 Feb 3;261(5):728–31. **Comment in:** JAMA 1989 Jul 28;262(4):497–8

Frequency and types of medical emergencies among commercial air travelers. Cummins RO, et al. **JAMA** 1989 Mar 3;261(9):1295–9

The accidental tourist: medical emergencies in the air [editorial] Dan BB. **JAMA** 1989 Mar 3;261(9):1328

The availability of proguanil for overseas travelers [letter] Dardick KR, et al. **JAMA** 1989 Jan 13;261(2):247

HIV infection following motor vehicle trauma in central Africa. Hill DR. **JAMA** 1989 Jun 9;261(22):3282–3

Group A meningococcal carriage in travelers returning from Saudi Arabia. Moore PS, et al. **JAMA** 1988 Nov 11; 260(18):2686–9

The spread of chloroquine-resistant malaria in Africa. Implications for travelers. Moran JS, et al. **JAMA** 1989 Jul 14;262(2):245–8 (20 ref.)

Protection of an insulin pump in the Amazonian jungle [letter] Stillman AE, et al. **JAMA** 1989 Sep 15;262(11):1470

Economy class syndrome [letter] **Lancet** 1988 Nov 5; 2(8619):1077

Mobility of injection drug users and transmission of HIV [letter; comment] Bisset C, et al. **Lancet** 1989 Jul 1; 2(8653):44. **Comment on:** Lancet 1989 Apr 8;1(8641):782–3

Outbreak of amoebiasis in tourists returning from Thailand [letter] de Lalla F, et al. **Lancet** 1988 Oct 8;2(8615):847

Reye's syndrome in children travelling abroad [letter] Donaldson M, et al. **Lancet** 1988 Nov 5;2(8619):1073

Thromboembolism and air travel [letter] Finch PJ, et al. **Lancet** 1988 Oct 29;2(8618):1025

Intercontinental spread of an epidemic group A Neisseria meningitidis strain. Moore PS, et al. **Lancet** 1989 Jul 29; 2(8657):260–3

Acute otitis media in very young infants [letter] Panter-Brick M. **Lancet** 1989 Sep 30;2(8666):809

Shigella dysenteriae type 1 infections in US travellers to Mexico, 1988. Parsonnet J, et al. **Lancet** 1989 Sep 2; 2(8662):543–5

Malarial prophylaxis for Australians who are travelling or are temporarily resident overseas [editorial] Cook IF. **Med J Aust** 1988 Nov 7;149(9):454–5

Preventive health advice for Australian travellers to Bali. Grayson ML, et al. **Med J Aust** 1988 Nov 7;149(9):462–6

Japanese encephalitis after a two-week holiday in Bali [see comments] Macdonald WB, et al. **Med J Aust** 1989 Mar 20;150(6):334–6, 339. **Comment in:** Med J Aust 1989 Jun 19;150(12):725–6

Health advice for Australian travellers [letter] Stürchler D. **Med J Aust** 1989 May 1;150(9):542

Prolonged human survival alone at sea: a prospective study. Mallory DL, et al. **Milit Med** 1988 Sep;153(9):459–64

'Fishhook medicine' in Minnesota's resort towns. Feldman MK. **Minn Med** 1989 Jul;72(7):403–6

Cholera vaccine. **MMWR** 1988 Oct 14;37(40):617–8, 623–4

Imported dengue—United States, 1987. **MMWR** 1989 Jul 7; 38(26):463–5

Malaria in travelers returning from Kenya: failure of self-treatment with pyrimethamine/sulfadoxine. **MMWR** 1989 May 26;38(20):363–4

NZ death from malaria [letter] Ewing RL. **N Z Med J** 1988 Sep 28;101(854):614

AIDS. Controversial visa ban [news] Ezzell C. **Nature** 1989 Apr 27;338(6218):696

Vaccines, health counseling needed when employees travel overseas. Strasser AL. **Occup Health Saf** 1988 Oct;57(11):18

What should you tell your traveling patients? Edwards KS. **Ohio Med** 1988 Jun;84(6):431–4

Hazards of air travel for a child with otitis. **Pediatr Infect Dis J** 1989 Aug;8(8):542–3

International travel and the child younger than two years: I. Recommendations for immunization. Preblud SR, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):416–25 (63 ref.)

Travel vision: "collicular visual system"? Jan JE, et al. **Pediatr Neurol** 1986 Nov–Dec;2(6):359–62

Continuing medical education and international romance [letter] Johnson HA. **Plast Reconstr Surg** 1989 May; 83(5):928

Brucellosis contracted during foreign travel. Revak DM, et al. **Postgrad Med** 1989 May 1;85(6):101–2, 104

Salmonella typhi infections in the United States, 1975–1984: increasing role of foreign travel. Ryan CA, et al. **Rev Infect Dis** 1989 Jan–Feb;11(1):1–8

An outbreak of salmonellosis amongst holidaymakers in Madeira, July 1988. Smyth B, et al. **Ulster Med J** 1989 Apr;58(1):36–9

[Poriomania] Rejlek J. **Cesk Psychiatr** 1988 Aug;84(4):245–8 (Eng. Abstr.) **(Cze)**

[The effect of prevention of infections in travelers to (sub)tropical areas (letter)] Bol JG. **Ned Tijdschr Geneeskd** 1989 Jan 28;133(4):180 **(Dut)**

[The effect of prevention of infectious diseases in travelers to (sub)tropical areas] Brusé H, et al. **Ned Tijdschr Geneeskd** 1988 Nov 12;132(46):2106–9 (Eng. Abstr.) **(Dut)**

[Jet lag: what is it and what can be done about it?] Koopmans R. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):430–2 **(Dut)**

[Repatriation of psychotic patients from their vacation

address abroad] Monden MA. Ned Tijdschr Geneeskd 1988 Aug 6;132(32):1492–4 (Eng. Abstr.) (Dut)
[Cysticercosis. Travellers' and migrants' disease] Verin P, et al. Bull Soc Ophtalmol Fr 1988 Feb;88(2):211–4, 216 (Eng. Abstr.) (Fre)
[Imported falciparum malaria in Marseilles hospitals in 1987. Apropos of 104 cases] Bourgeade A, et al. Bull Soc Pathol Exot Filiales 1989 Jan;82(1):101–9 (Eng. Abstr.) (Fre)
[32 cases of recurrent localized edema on return from the Tropics] Bourgeade A, et al. Bull Soc Pathol Exot Filiales 1989 Jan;82(1):21–8 (Eng. Abstr.) (Fre)
[Malaria in Gabon. Bioclinical survey of non immune Europeans during short stay and prophylactic attitude] Richard-Lenoble D, et al. Bull Soc Pathol Exot Filiales 1989;82(3):359–67 (Eng. Abstr.) (Fre)
[A new etiology of traveler's diarrhea in children: Cryptosporidium diarrhea] Abel C, et al. Pediatrie 1989; 44(2):77–81 (Eng. Abstr.) (Fre)
[Medical evaluation of travelers returning from the tropics: which diagnostic studies and for whom?] Raeber PA, et al. Schweiz Rundsch Med Prax 1989 Jun 20;78(25):710–4 (31 ref.) (Eng. Abstr.) (Fre)
[Criminal process and legal autopsy for insurance purposes following death in a foreign country] Madea B, et al. Arch Kriminol 1989 Mar–Apr;183(3–4):95–100 (Eng. Abstr.) (Ger)
[Sleeping sickness in German travelers to the tropics] Löscher T, et al. Dtsch Med Wochenschr 1989 Aug 4; 114(31–32):1203–6 (Eng. Abstr.) (Ger)
[Sexually transmitted diseases/AIDS. Few foreign travelers are HIV positive (news)] Fortschr Med 1988 Jul 20; 106(21):13–4 (Ger)
[Prophylaxis in travel (malaria)] Piekarski G. Immun Infekt 1989 Jun;17(3):91 (Ger)
[Paracoccidioidomycosis infections caused by an adventure vacation in the Amazon] Neveling F. Prax Klin Pneumol 1988 Sep;42(9):722–5 (Eng. Abstr.) (Ger)
[The status of travel by severely handicapped patients by railroads] Mittler H. Rehabilitation (Stuttg) 1989 Feb; 28(1):38–42 (Eng. Abstr.) (Ger)
[Infectious diarrhea diseases] Graninger W, et al. Wien Med Wochenschr 1989 May 15;139(9):211–5 (12 ref.) (Eng. Abstr.) (Ger)
[Travel medicine: status of current recommendations for preventive measures in international travel] Kollaritsch H. Wien Med Wochenschr 1989 May 15;139(9):207–11 (11 ref.) (Eng. Abstr.) (Ger)
[Parasitic intestinal infestations and infections] Stemberger H. Wien Med Wochenschr 1989 May 15;139(9):216–21 (0 ref.) (Eng. Abstr.) (Ger)
[Therapy of severe malaria] Stuby U, et al. Wien Med Wochenschr 1989 May 15;139(9):222–7 (24 ref.) (Eng. Abstr.) (Ger)
[Prevention, diagnosis and therapy of significant important tropical diseases] Kupferschmidt HG. Z Arztl Fortbild (Jena) 1988;82(12):591–3 (0 ref.) (Ger)
[Assessment of fitness for airplane and ship travel] Wirth J, et al. Z Arztl Fortbild (Jena) 1988;82(13):631–4 (Ger)
[Airline transportation medicine (emporiatrics)] Glazer I. Harefuah 1988 Aug;115(3–4):82–7 (Eng. Abstr.) (Heb)
[Medical guidelines for the traveller] Seidman DS, et al. Harefuah 1988 Oct;115(7–8):196–201 (Heb)
[Comments on the Second Session on Prevention of Travelers' Malaria. Ecole du Val de Grace (Paris), 9–10 October 1987] Caroli G. Boll Ist Sieroter Milan 1988; 67(1):79–82 (Ita)
[Implementation of vaccine prophylaxis in confronting international travellers] Ballada D, et al. Nuovi Ann Ig Microbiol 1988 Jul–Oct;39(4–5):419–29 (Ita)
[International prevention: geographic aspects] Calamo-Specchia FP. Nuovi Ann Ig Microbiol 1988 Jul–Oct;39(4–5):439–48 (Ita)
[Enteroinvasive Escherichia coli O29:H—isolated from travellers' diarrheal cases] Matsushita S, et al. Kansenshogaku Zasshi 1989 Mar;63(3):228–33 (Eng. Abstr.) (Jpn)
[Chloroquine-resistant Plasmodium falciparum malaria confirmed by semi-micro sensitivity test for chloroquine seen in a person returned from Nigeria to Japan] Obana M, et al. Kansenshogaku Zasshi 1989 Jan;63(1):83–8 (Eng. Abstr.) (Jpn)
[Clinical study on changes in imported diseases and countermeasures] Akao M. Nippon Rinsho 1989 Jan; 47(1):16–21 (Jpn)
[Clinical and epidemiological aspects of imported hepatitis] Fujisawa K, et al. Nippon Rinsho 1989 Jan;47(1):92–100 (Jpn)
[Present situation, prevention and therapy of imported helminthic disease] Fujita K. Nippon Rinsho 1989 Jan; 47(1):118–22 (Jpn)
[The first imported case of Lassa fever in Japan] Hirabayashi Y, et al. Nippon Rinsho 1989 Jan;47(1):71–5 (Jpn)
[Campylobacter enteritis in travellers' diarrhea] Itoh T. Nippon Rinsho 1989 Jan;47(1):45–51 (Jpn)
[Clinical features of overseas travellers' infectious enteritis admitted in the hospitals for infectious diseases] Kim YK. Nippon Rinsho 1989 Jan;47(1):28–32 (Jpn)
[Imported diarrheal diseases caused by Escherichia coli] Matsushita S. Nippon Rinsho 1989 Jan;47(1):40–4 (Jpn)
[Incidence of cholera outbreaks in the world: distribution in the environment and imported seafoods] Minami A, et al. Nippon Rinsho 1989 Jan;47(1):52–7 (Jpn)
[Internationalization and imported infectious diseases] Miwatani T. Nippon Rinsho 1989 Jan;47(1):5–10 (Jpn)
[Imported protozoan infections in Japan: the current status and countermeasure] Nakabayashi T. Nippon Rinsho 1989 Jan;47(1):112–7 (Jpn)
[Survey on overseas traveller's diarrhea at Narita Airport Quarantine Station—the species of bacteria isolated and the suspected countries for infection] Nakajima K, et al. Nippon Rinsho 1989 Jan;47(1):22–7 (Jpn)
[Current status of imported infectious diseases and control policy of the Ministry of Health and Welfare] Shimizu H. Nippon Rinsho 1989 Jan;47(1):11–5 (Jpn)
[Highly endemic areas of HAV and present state of imported type A hepatitis and its prevention] Suzuki S. Nippon Rinsho 1989 Jan;47(1):106–11 (Jpn)
[Plesiomonas for imported diarrheal disease] Tsukamoto T, et al. Nippon Rinsho 1989 Jan;47(1):58–62 (Jpn)
[Imported type B hepatitis as STD in overseas travelers] Unuma T, et al. Nippon Rinsho 1989 Jan;47(1):101–5 (Jpn)
[A first Lassa fever from Sierra Leone treated in high security ward] Yamaguchi T, et al. Nippon Rinsho 1989 Jan; 47(1):76–81 (Jpn)
[Demonstration of new K-antigens in strains of Vibrio parahaemolyticus isolated from patients with traveller's diarrhea] Ishibashi M, et al. Nippon Saikingaku Zasshi 1988 May;43(3):673–5 (Eng. Abstr.) (Jpn)
[Tourists, the number of physicians and emergency care in Tönsberg. Utilization and epidemiology] Otterstad HK, et al. Tidsskr Nor Laegeforen 1989 May 20;109(14):1506–8 (Eng. Abstr.) (Nor)
[Tropical parasitic diseases and the problems of tropical medicine in Poland] Dolmierski R, et al. Wiad Parazytol 1988;34(4–6):641–7 (Pol)
[Cutaneous leishmaniasis among the cases of the Institute of Infectious and Parasitic Diseases, Medical Academy, in Warsaw] Dziubek Z, et al. Wiad Parazytol 1988; 34(4–6):663–4 (Pol)
[Plasmodium falciparum malaria: a difficult diagnostic and therapeutic problem] Kocięcka W, et al. Wiad Parazytol 1988;34(4–6):649–53 (Eng. Abstr.) (Pol)
[Value of immunoserologic tests in the diagnosis of parasitic invasions in persons returning from tropical countries] Myjak P. Wiad Parazytol 1988;34(4–6):665–9 (Pol)
[Our experiences regarding imported malaria] Nahorski W, et al. Wiad Parazytol 1988;34(4–6):655–62 (Pol)
[Patients returning from tropical countries] Pawłowski Z. Wiad Parazytol 1988;34(4–6):637–9 (Pol)
[More effective and standardized guidelines for travel medicine is wanted] Norrbohm O, et al. Lakartidningen 1988 Nov 23;85(47):4063–4 (Swe)
[Vaccines today and tomorrow] Stenbeck J, et al. Lakartidningen 1989 May 31;86(22):2126–8 (Swe)

TRENDS

Passengers and patients: some ruminations about quality of care. Dans PE. Pharos 1988 Summer;51(3):2–7

TRAZODONE

[Use of trazodone in maintaining general anesthesia during cesarean section] Giudice G, et al. Ann Ostet Ginecol Med Perinat 1988 Sep–Oct;109(5):272–8 (Eng. Abstr.) (Ita)

ADMINISTRATION & DOSAGE

A combination of hypothalamic phospholipid liposomes with trazodone for treatment of depression. An open controlled study. Giannelli A, et al. Acta Psychiatr Scand 1989 Jan; 79(1):52–8
A comparative study of conventional and controlled-release formulations of trazodone in elderly depressed patients. Bayer AJ, et al. Clin Neuropharmacol 1989;12 Suppl 1:S50–5; Discussion S56–7
Plasma trazodone concentrations and clinical response in elderly depressed patients: a preliminary study. Monteleone P, et al. J Clin Psychopharmacol 1989 Aug;9(4):284–7
Management of monoamine oxidase inhibitor–associated insomnia with trazodone. Nierenberg AA, et al. J Clin Psychopharmacol 1989 Feb;9(1):42–5

ADVERSE EFFECTS

Side effects of trazodone in a geriatric population [letter] Spivak B, et al. J Clin Psychopharmacol 1989 Feb;9(1):62–3
Re: Priapism associated with trazodone therapy [letter] Fishbain DA. J Urol 1989 Sep;142(3):831
Severe anorexia and possible psychosis or hypomania after trazodone–tryptophan treatment of aggression [letter] Patterson BD, et al. Lancet 1989 May 6;1(8645):1017

ANALOGS & DERIVATIVES

Blockade of conditioned avoidance responding by trazodone, etoperidone, and MCPP. Martin GE, et al. Psychopharmacology (Berlin) 1989;99(1):94–7

ANALYSIS

The chemistry of trazodone. Baiocchi L. Farmaco [Sci] 1988 Dec;43(12 Suppl):1053–62 (28 ref.)
Quantitative analysis of trazodone hydrochloride in tablets by an ion-selective electrode. Suzuki H, et al. J Pharm Sci 1989 Jan;78(1):62–5

BLOOD

Elevated antidepressant plasma levels after addition of fluoxetine. Aranow AB, et al. Am J Psychiatry 1989 Jul; 146(7):911–3
HPLC of trazodone in serum after microscale protein precipitation. Lam S, et al. Biomed Chromatogr 1986 Aug; 1(4):177–9
A retrospective evaluation of plasma trazodone concentrations and clinical response in a primary care clinic. Tollefson GD, et al. Hillside J Clin Psychiatry 1988; 10(2):183–7

ISOLATION & PURIFICATION

[Determination of trasodone in cadaveric material] Mironova TV. Sud Med Ekspert 1989 Apr–Jun;32(2):34–5 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

[The existence on the serotonin carrier of 2 independent sites for the specific binding of trazodone and imizin] Katanasov AB, et al. Farmakol Toksikol 1988 Nov–Dec;51(6):32–5 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Trazodone: from the mental pain to the "dys-stress" hypothesis of depression. Silvestrini B. Clin Neuropharmacol 1989;12 Suppl 1:S4–10 (29 ref.)
The effects of imipramine, mianserin and trazodone on the chronotropic, inotropic and coronary vascular responses in the isolated perfused rat heart. Boschmans SA, et al. Gen Pharmacol 1989;20(2):233–7
Blockade of conditioned avoidance responding by trazodone, etoperidone, and MCPP. Martin GE, et al. Psychopharmacology (Berlin) 1989;99(1):94–7
[Effect of trazodone (KB-831) and its metabolites on brain monoamines in rat] Ikegami A, et al. Nippon Yakurigaku Zasshi 1989 Mar;93(3):145–54 (Eng. Abstr.) (Jpn)
[Sensitivity of the retrograde uptake of H3-serotonin to imipramine and trazodone in patients with endogenous depression treated with antidepressive drugs] Katasonov AB, et al. Zh Nevropatol Psikhiatr 1989;89(2):125–8 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Propranolol, clonidine, urapidil and trazodone infusion in essential tremor: a double-blind crossover trial. Caccia MR, et al. Acta Neurol Scand 1989 May;79(5):379–83
Trazodone: an antidepressant with adrenolytic activity. Based on a symposium to the Collegium Internationale Neuro-Psychopharmalogicum 16th C.I.N.P. congress. Munich, F.R.G., August 15, 1988. Clin Neuropharmacol 1989;12 Suppl 1:S1–59
Clinical activity and tolerability of trazodone, mianserin, and amitriptyline in elderly subjects with major depression: a controlled multicenter trial. Altamura AC, et al. Clin Neuropharmacol 1989;12 Suppl 1:S25–33; S34–7
New treatment for anxious depression syndrome. Cazzullo CL. Clin Neuropharmacol 1989;12 Suppl 1:S1–3 (14 ref.)
United States experience and perspectives with trazodone. Febre LF. Clin Neuropharmacol 1989;12 Suppl 1:S11–7 (29 ref.)
Treatment of bulimia nervosa with trazodone: short-term response and long-term follow-up. Hudson JI, et al. Clin Neuropharmacol 1989;12 Suppl 1:S38–46; Discussion S47–9
Experimental examination of trazodone. Klieser E, et al. Clin Neuropharmacol 1989;12 Suppl 1:S18–24
Tradozone in essential tremor. Probe of serotoninergic mechanisms. Koller WC. Clin Neuropharmacol 1989 Apr; 12(2):134–7
Fluoxetine versus trazodone in the treatment of outpatients with major depression. Debus JR, et al. J Clin Psychiatry 1988 Nov;49(11):422–6
A comparative trial of fluoxetine versus trazodone in outpatients with major depression. Perry PJ, et al. J Clin Psychiatry 1989 Aug;50(8):290–4
Trazodone for treatment of older depressed patients: comment [letter] Jarvik LF. J Clin Psychopharmacol 1988 Dec;8(6):449–50
A placebo-controlled study of trazodone in bulimia nervosa. Pope HG Jr, et al. J Clin Psychopharmacol 1989 Aug; 9(4):254–9
Trazodone treatment of bulimia nervosa. Solyom L, et al. J Clin Psychopharmacol 1989 Aug;9(4):287–90
[The effect of imipramine and trazodone on the re-uptake of (3H) serotonin by thrombocytes in patients with endogenous depression: changes in antidepressive therapy] Katasonow AB, et al. Psychiatr Neurol Med Psychol (Leipz) 1989 Apr;41(4):210–7 (Eng. Abstr.) (Ger)

TREACHER COLLINS SYNDROME see

MANDIBULOFACIAL DYSOSTOSIS

TREATMENT PROTOCOLS see CLINICAL PROTOCOLS

TREATMENT REFUSAL see PATIENT COMPLIANCE

TREES

Multidisc RAST: a reliable method for screening of specific IgE antibodies in serum? Pletscher M, et al. **Allergy** 1988 Oct;43(7):530–5

Experimental evaluation of mimosa tenuiflora (willd.) poir. (Tepescohuite) I. Screening of the antimicrobial properties of bark extracts. Lozoya X, et al.
Arch Invest Med (Mex) 1989 Jan–Mar;20(1):87–93

Inhibition of the vacuolar ATPase of Acer pseudoplatanus cells by vanadate. Montrichard F, et al. **Biochimie** 1989 Jul;71(7):813–7

Ultrastructure in leaves of Fagus silvatica and Carpinus betulus individuals tolerant and susceptible to SO2 and heavy metal pollutants. Stirban M, et al.
Ecotoxicol Environ Safety 1988 Aug;16(1):45–56

Comparative study of electrophoretic patterns of latex proteins from clones of Hevea brasiliensis. Arreguín B, et al. **Electrophoresis** 1988 Jul;9(7):323–6

Investigations on spruce decline in the Bavarian forest. Osswald WF, et al. **Free Radic Res Commun** 1987; 3(1–5):185–92

Technetium–99 cycling in maple trees: characterization of changes in chemical form. Garten CT Jr, et al.
Health Phys 1989 Aug;57(2):299–307

Specificities of IgE and IgG antibodies in patients with birch pollen allergy. Jarolim E, et al.
Int Arch Allergy Appl Immunol 1989;88(1–2):180–2

Vertical distribution and species coexistence of tree hole mosquitoes in Louisiana. Schreiber ET, et al.
J Am Mosq Control Assoc 1988 Mar;4(1):9–14

The effect of surfactants on the microencapsulation and release of phenobarbitone from gelatin–acacia complex coacervate microcapsules. Duquemin SJ, et al.
J Microencapsul 1986 Apr–Jun;3(2):89–93

Preparation of microencapsulated liposomes, II. Systems containing nylon–gelatin and nylon–gelatin–acacia walling material. Nixon JR, et al. **J Microencapsul** 1989 Jan–Mar; 6(1):43–52

Distribution of 90Sr and 137Cs in annual tree rings of Japanese cedar, Cryptomeria japonica D. Don. Chigira M, et al. **J Radiat Res (Tokyo)** 1988 Jun;29(2):152–60

Safety education and training of Swedish farmer–loggers. Jansson BR. **J Soc Occup Med** 1988 Winter;38(4):113–7

Isolation of aflatoxin from Acacia and the incidence of Aspergillus flavus in the Sudan. Abdalla MH.
Mycopathologia 1988 Dec;104(3):143–7

Fair dinkum koala kuisine—eucalyptus oil poisoning. Mack RB. **N C Med J** 1988 Nov;49(11):599–600

Sugars of the unfermented sap and the wine from the oil palm, Elaeis guinensis, tree. Eze MO, et al.
Plant Foods Hum Nutr 1988;38(2):121–6

The palm tree Copernicia cerifera (carnaúba) as an ecotope of Rhodnius nasutus in rural areas of the state of Piauí, Northeastern Brazil. Pinto A da S, et al.
Rev Soc Bras Med Trop 1986 Oct–Dec;19(4):243–5

The toxicity of Indian Calotropis procera RBr latex in the black rat, Rattus rattus Linn. Pahwa R, et al.
Vet Hum Toxicol 1988 Aug;30(4):305–8

Eucalyptus oil: 14 cases of exposure. Spoerke DG, et al.
Vet Hum Toxicol 1989 Apr;31(2):166–8

[Clinico–microbiological trial of the preparation pinol A] Katranushkova N, et al. **Akush Ginekol (Sofiia)** 1988; 27(5):48–51 (Eng. Abstr.) (Bul)

[Chemical composition of the essential oil of Cryptocarya alba (Mol.) Looser (Lauraceae) in Chile] Montes M, et al.
Ann Pharm Fr 1988;46(1):41–7 (Eng. Abstr.) (Fre)

[The antiviral effect of an extract from the leaves of Cotini coggygriae] Tonew E. **Arch Exp Veterinarmed** 1988 Sep; 42(5):731–6 (Eng. Abstr.) (Ger)

[A new kind of damage to forests in Central Europe] Thriene B, et al. **Z Gesamte Hyg** 1988 Dec;34(12):682–6 (Eng. Abstr.) (Ger)

[Effects of combined exposure to gamma radiation and sulfur dioxide or N–methyl–N'–nitro–N–nitrosoguanidine on bacteria and higher plants] Kal'chenko VA, et al.
Izv Akad Nauk SSSR [Biol] 1988 Nov–Dec;(6):908–14 (Rus)

[Diseases of the locomotor system in workers in the timber–processing industry] Druz' RA, et al.
Ortop Travmatol Protez 1989 Feb;(2):61–4 (Rus)

[Use of an anti–H extract of elder berries in the absorption–elution reaction during the examination of blood stains, saliva and sperm] Lantsova AI, et al.
Sud Med Ekspert 1989 Jan–Mar;32(1):32–5 (Eng. Abstr.) (Rus)

[Clinico–epidemiologic study of accidental poisoning with Robinia pseudoacacia L. in school children] Artero Sivera A, et al. **An Esp Pediatr** 1989 Mar;30(3):191–4 (35 ref.) (Eng. Abstr.) (Spa)

[Peroxidases and ethylene formation in olive tree leaves] Vioque B, et al. **Rev Esp Fisiol** 1989 Mar;45(1):47–52 (Eng. Abstr.) (Spa)

ANALYSIS

Relationship of sulphur content in tree leaves to SO2 concentration in air. Li XZ, et al.
Bull Environ Contam Toxicol 1989 Jun;42(6):878–83

Isolation of amentoflavone from Ginkgo biloba. Lobstein–Guth A, et al. **Planta Med** 1988 Dec;54(6):555–6

Teratological evaluation of Juniperus sabina essential oil in mice. Pages N, et al. **Planta Med** 1989 Apr;55(2):144–6

[Antipyretic and analgesic constituents of the leaves of Populus tomentosa Carr] Shen QL.
Chung Yao Tung Pao 1988 Apr;13(4):36–7, 63 (Eng. Abstr.) (Chi)

[GC–MS analysis of the essential oils in pine needles in Northeast China] Yan ZK, et al. **Chung Yao Tung Pao** 1988 Jul;13(7):34–6, 63 (Eng. Abstr.) (Chi)

GENETICS

Spatial autocorrelation analysis of the distribution of genotypes within populations of lodgepole pine. Epperson BK, et al. **Genetics** 1989 Feb;121(2):369–77

Isolation and characterization of messenger RNA from male inflorescences and pollen of the white birch (Betula verrucosa). Breiteneder H, et al.
Int Arch Allergy Appl Immunol 1988;87(1):19–24

A human miniasatellite probe reveals RFLPs among individuals of two angiosperms. Rogstad SH, et al.
Nucleic Acids Res 1988 Dec 9;16(23):11378

Nucleotide sequence of a full length cDNA clone of light harvesting chlorophyll a/b binding protein gene from green dark–grown pine (Pinus tunbergii) seedling. Yamamoto N, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11829

Nucleotide sequence of a full length cDNA clone of ribulose bisphosphate carboxylase small subunit gene from green dark–grown pine (Pinus tunbergii) seedling. Yamamoto N, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11830

IMMUNOLOGY

Isolation and characterization of messenger RNA from male inflorescences and pollen of the white birch (Betula verrucosa). Breiteneder H, et al.
Int Arch Allergy Appl Immunol 1988;87(1):19–24

The international collaborative study on the first international standard of birch (Betula verrucosa)–pollen extract. Arntzen FC, et al. **J Allergy Clin Immunol** 1989 Jan; 83(1):66–82

Immunoblotting of pollen proteins: Tween 20 mediates nonspecific binding of gammaglobulins to immunoblots of oak–pollen proteins. Loria RC, et al.
J Allergy Clin Immunol 1988 Nov;82(5 Pt 1):834–41

Allergic reactions to blackwood (Acacia melanoxylon) [letter] [published erratum appears in Med J Aust 1989 Apr 3;150(7):412] Clarke PS. **Med J Aust** 1989 Feb 20; 150(4):222–3

TREESHREWS see TUPAIIDAE

TREHALASE

ANALYSIS

Differential location of regulatory and nonregulatory trehalases in Candida utilis cells. Arguelles JC, et al.
Antonie Van Leeuwenhoek 1988;54(6):555–65

ANTAGONISTS & INHIBITORS

Purification and characterization of trehalase inhibitor from hemolymph of the American cockroach, Periplaneta americana. Hayakawa Y, et al. **J Biol Chem** 1989 Sep 25; 264(27):16165–9

BIOSYNTHESIS

Increased trehalase expression after glucose limitation of LLC–PK1 clones. Yoneyama Y, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C816–21

20–Hydroxyecdysone acts in the male pupa to commit accessory glands toward trehalase production in the adult mealworm beetle (Tenebrio molitor). Yaginuma T, et al.
Gen Comp Endocrinol 1989 Feb;73(2):173–85

BLOOD

Studies on the trehalase from the hemolymph of Triatoma infestans. Conter PF, et al. **Rev Bras Biol** 1988 Nov; 48(4):761–9

DEFICIENCY

Trehalase deficiency in Greenland. Gudmand–Høyer E, et al. **Scand J Gastroenterol** 1988 Sep;23(7):775–8

GENETICS

Analysis and DNA sequence of the osmoregulated treA gene encoding the periplasmic trehalase of Escherichia coli K12. Gutierrez C, et al. **Mol Gen Genet** 1989 Jun;217(2–3):347–54

ISOLATION & PURIFICATION

Determination of trehalose in biological samples by a simple and stable trehalase preparation. Araujo PS, et al.
Anal Biochem 1989 Feb 1;176(2):432–6

METABOLISM

Transport of yeast vacuolar trehalase to the vacuole. Harris SD, et al. **Can J Microbiol** 1988 Jul;34(7):835–8

Comparative specificities of trehalases from various species. Labat–Robert J, et al. **Comp Biochem Physiol [B]** 1978; 61(1):111–4

Membrane anchors of alkaline phosphatase and trehalase associated with the plasma membrane of larval midgut epithelial cells of the silkworm, Bombyx mori. Takesue Y, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):998–1001

Regulation of trehalase activity during the cell cycle of Saccharomyces cerevisiae. Van Doorn J, et al.
J Gen Microbiol 1988 Mar;134 (Pt 3):785–90

Trehalose enzymes as models for signal transduction in Saccharomyces. Panek AD, et al. **Yeast** 1989 Apr;5 Spec No:S537–40

URINE

Urinary trehalase activity as an indicator of kidney injury due to environmental cadmium exposure. Iwata K, et al.
Arch Toxicol 1988;62(6):435–9

TREHALOSE see under DISACCHARIDES

TREMATODA

Factors affecting the acquisition of Plagiorchis noblei (Trematoda: Plagiorchiidae) metacercariae by larvae and pupae of Aedes aegypti in the laboratory. Dempster SJ, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):607–10

Susceptibility of Aedes aegypti and Anopheles quadrimaculatus larvae to infection with the cercariae of Plagiorchis noblei (Trematoda: Plagiorchiidae). Webber RA, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):193–5

Effects of concurrent infections on growth, development, distribution, and infectivity of adult Philophthalmus megalurus and Philophthalmus gralli. Nollen PM.
J Parasitol 1989 Feb;75(1):102–7

ANALYSIS

Immunocytochemical localization of regulatory peptides in six species of trematode parasites. Basch PF, et al.
Comp Biochem Physiol [C] 1988;91(2):565–70

Immunocytochemical demonstration of neuropeptides in the fish–gill parasite, Diclidophora merlangi (Monogenoidea). Maule AG, et al. **Int J Parasitol** 1989 May;19(3):307–16

ANATOMY & HISTOLOGY

Paraquadriacanthus nasalis gen. et sp. n. (Monogenea: Ancyrocephalidae) from Clarias lazera Cuvier et Valenciennes. Ergens R. **Folia Parasitol (Praha)** 1988; 35(2):189–91

The morphology of Trianchoratus aecleithrium Price et Berry, 1966 (Dactylogyridae, Monogenea) from a new host Trichogaster trichopterus trichopterus (Pallas, 1777). Gelnar M. **Folia Parasitol (Praha)** 1989;36(1):7–11

At least eight types of sense receptors in an endoparasitic flatworm: a counter–trend to sacculinization. Rohde K.
Naturwissenschaften 1989 Aug;76(8):383–5

A new intestinal fluke, Plagiorchis harinasutai n.sp. Radomyos P, et al.
Southeast Asian J Trop Med Public Health 1989 Mar; 20(1):101–7

[Studies of the nervous system of Brachylaimus fuscatus (Rud., 1819), (Trematoda, Brachylaimidae)] Okulewicz A.
Wiad Parazytol 1988;34(2):125–9 (Eng. Abstr.) (Pol)

CLASSIFICATION

Monogenea in the light of new evidence and their position among platyhelminths. Lebedev BI. **Angew Parasitol** 1988 Sep;29(3):149–67 (65 ref.)

A review of genus Eumegacetes Looss, 1900 (Eumegacetidae), with description of species from the Egyptian house sparrow: Passer d. niloticus. Ramadan MM, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):173–8

The phylogenetic status of the Ancyrocephalidae Bychowsky, 1937 (Monogenea: Dactylogyroidea). Kritsky DC, et al. **J Parasitol** 1989 Apr;75(2):207–11

Systematic analysis of the Diplostomidae and Strigeidae (Trematoda) [published erratum appears in J Parasitol 1989 Jun;75(3):352] Shoop WL. **J Parasitol** 1989 Feb;75(1):21–32

[New trematode genera from fishes of the southern Atlantic] Gaevskaia AV, et al. **Parazitologiia** 1988 Nov–Dec; 22(6):509–13 (Eng. Abstr.) (Rus)

[Pellucidhaptor fidus n. sp. (Monogenea, Dactylogyridae) from the lake minnow Phoxinus percnurus from the Anadyr River basin] Pugachev ON. **Parazitologiia** 1989 May–Jun; 23(3):257–9 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Treatment of fish parasites. 4. Effects of sym. triazinone (toltrazuril) on Monogenea. Schmahl G, et al.
Parasitol Res 1988;75(2):132–43

ENZYMOLOGY

Histochemical demonstration of the inhibitory effect of Nuvan and Neguvon on cholinesterase activity in Pseudodactylogyrus anguillae (Monogenea). Buchmann K, et al. **Acta Vet Scand** 1988;29(1):51–5

Electrophoretic separation of esterases of Alaria marcianae (La Rue, 1917) (Trematoda). Dickinson JP, et al.
Comp Biochem Physiol [B] 1978;60(3):277–9

GROWTH & DEVELOPMENT

Developmental variation of Heteraxinoides xanthophilis (Monogenea) on hosts of different sizes. Thoney DA. **J Parasitol** 1988 Dec;74(6):999–1003

[The biology of the trematode Echinochasmus milvi under the southern conditions of the Far East] Besprozvannykh VV. **Parazitologiia** 1989 May–Jun;23(3):237–43 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

The application of sodium dodecyl sulphate–polyacrylamide gel electrophoresis to the taxonomic identification of the total body protein band profiles of Diplostomum spp. metacercariae (Digenea), parasites of fish eyes. Faulkner M. **Electrophoresis** 1989 Apr;10(4):260–4

Alaria nasuae (Trematoda: Diplostomidae) from domestic dogs. Shoop WL, et al. **J Parasitol** 1989 Apr;75(2):325–7

[Detection of Centrocestus armatus (Trematoda: Heterophyidae) trematode in the southern part of the Far East USSR] Besprozvannykh VV. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):86–8 (Eng. Abstr.) (Rus)

[Distribution and infection rate of mollusks—intermediate hosts of trematodes in the Central Amur region] Dovgalev AS. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):71–4 (Eng. Abstr.) (Rus)

METABOLISM

Chemical signals of fish skin for the attachment response of Acanthostomum brauni cercariae. Haas W, et al. **Parasitol Res** 1988;74(6):552–7

The diet and gastrodermal ultrastructure of polystomatid monogeneans infecting chelonians. Allen KM, et al. **Parasitology** 1989 Apr;98 Pt 2:265–73

[Histochemical study of the nervous system of trematode cercariae] Nezlin LP, et al. **Zh Obshch Biol** 1988 Sep–Oct; 49(5):695–703 (Eng. Abstr.) (Rus)

PHYSIOLOGY

On the effect of Gangatrema dehradoonense (Digenea: Opecoelidae) on the pH of small intestine in the freshwater fish Labeo dero. Kumar R. **Angew Parasitol** 1988 Jun; 29(2):89–90

Sexual, seasonal and tissue variation in the encystment of Cotylurus variegatus metacercariae in perch, Perca fluviatilis. Faulkner M, et al. **Int J Parasitol** 1989 May; 19(3):285–90

Orientation and locomotion in the monogenean parasite Entobdella soleae on the skin of its host (Solea solea). Kearn GC. **Int J Parasitol** 1988 Sep;18(6):753–9

Plagiorchis noblei in Aedes aegypti: cercarial age and infectivity. Dempster SJ, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):261–3

The effect of xiphidiocercarial infection on the ventricular blood pressure of Lanistes carinatus. Kamel EG. **J Egypt Soc Parasitol** 1989 Dec;19(2):707–16

[Verification of antagonism between larvae of Schistosoma mansoni and other Digenea in Biomphalaria tenagophila, a planorbid mollusc from a natural breeding in the region of Campinas, SP, Brazil] Machado SM, et al. **Rev Saude Publica** 1988 Dec;22(6):484–8 (Eng. Abstr.) (Por)

ULTRASTRUCTURE

Ultrastructure of the excretory system of Brachylaimus aequans (Trematoda: Brachylaimoidea). Soboleva TN, et al. **Folia Parasitol (Praha)** 1988;35(4):335–9

[Ultrastructure of the tail appendage in microphallid cercariae (Trematoda, Microphallidae)] Malkova II. **Parazitologiia** 1989 Mar–Apr;23(2):159–65 (Eng. Abstr.) (Rus)

TREMATODE INFECTIONS

[Preliminary investigation on cercarial dermatitis in Ali area of Xizang Autonomous Region, China] Shao GN. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):169–70 (Eng. Abstr.) (Chi)

COMPLICATIONS

Heterologous synergistic interactions in concurrent experimental infection in the mouse with Schistosoma mansoni, Echinostoma revolutum, Plasmodium yoelii, Babesia microti, and Trypanosoma brucei. Christensen NO, et al. **Parasitol Res** 1988;74(6):544–51

DRUG THERAPY

Effect of selected anthelmintics on three common helminths in the brown pelican (Pelecanus occidentalis). Grimes J, et al. **J Wildl Dis** 1989 Jan;25(1):139–42

Encouraging self-reliance in the fight against liver fluke. Mongkolintra S, et al. **World Health Forum** 1988;9(3):341–4

[Preliminary study on praziquantel in the treatment of Echinochasmus perfoliatus and Metagonimus yokogawai infections] Xu LQ, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jul;27(7):399–401, 453 (Eng. Abstr.) (Chi)

[Transmission electron microscopical observations on the effects of pyquiton on Pagumogonimus skrjabini in dogs] Zheng SC, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):214–6 (Eng. Abstr.) (Chi)

IMMUNOLOGY

Serum and intestinal immunoglobulins in heterophyiasis. el-Ganayni GA, et al. **J Egypt Soc Parasitol** 1989 Jun; 19(1):219–23

METABOLISM

[Rifampicin pharmacokinetics in patients with pulmonary tuberculosis with concomitant helminthiasis] Korablev VN, et al. **Antibiot Khimioter** 1989 Apr;34(4):287–8 (Eng. Abstr.) (Rus)

PARASITOLOGY

Echinostoma caproni in mice: studies on the attachment site of an intestinal trematode. Simonsen PE, et al. **Int J Parasitol** 1989 Aug;19(5):561–6

Echinostoma population regulation in experimental rodent definitive hosts. Christensen NO, et al. **Parasitol Res** 1988; 75(2):83–7 (32 ref.)

PATHOLOGY

Echinostoma revolutum: pathology of extraintestinal infection in the golden hamster. Huffman JE, et al. **Int J Parasitol** 1988 Sep;18(6):873–4

PHYSIOPATHOLOGY

Reduced fertility in mice double-infected with Schistosoma mansoni and Echinostoma revolutum. Bindseil E, et al. **Acta Trop (Basel)** 1989 Jul;46(4):269–71

PREVENTION & CONTROL

Echinostoma caproni in mice: shedding of antigens from the surface of an intestinal trematode. Andresen K, et al. **Int J Parasitol** 1989 Feb;19(1):111–8

[Experimental control study of fasciolopsiasis in Taiwan] Lee HH, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Jun;5(6):335–44 (Eng. Abstr.) (Chi)

TRANSMISSION

The spread of freshwater snails including those of medical and veterinary importance. Madsen H, et al. **Acta Trop (Basel)** 1989 May;46(3):139–46 (65 ref.)

[The discovery of Melanoides tuberculata as the first intermediate host of Echinochasmus japonicus] Cheng YZ, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(1):47–8 (Eng. Abstr.) (Chi)

[Duck bilharziasis in the medical anthropologic perspective. Interview data as a principle for public health control measures] Effelsberg W. **Off Gesundheitswes** 1989 Mar; 51(3):123–7 (Eng. Abstr.) (Ger)

VETERINARY

Protein polymorphism of some amphistomes and their host tissue. Alam SM, et al. **Acta Vet Hung** 1988;36(3–4):247–50

On the effect of Gangatrema dehradoonense (Digenea: Opecoelidae) on the pH of small intestine in the freshwater fish Labeo dero. Kumar R. **Angew Parasitol** 1988 Jun; 29(2):89–90

Effect of petroleum aromatic hydrocarbons on monogeneids parasitizing Atlantic cod, Gadus morhua L. Khan RA, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):94–100

Paraquadriacanthus nasalis gen. et sp. n. (Monogenea: Ancyrocephalidae) from Clarias lazera Cuvier et Valenciennes. Ergens R. **Folia Parasitol (Praha)** 1988; 35(2):189–91

The morphology of Trianchoratus aecleithrium Price et Berry, 1966 (Dactylogyridae, Monogenea) from a new host Trichogaster trichopterus trichopterus (Palias, 1777). Gelnar M. **Folia Parasitol (Praha)** 1989;36(1):7–11

The ecology of Crepidostomum species (Allocreadiidae: Digenea) in the salmonoids of Lake Yli-Kitka in northeastern Finland. Rahkonen R, et al. **Folia Parasitol (Praha)** 1989;36(1):13–24

Sexual, seasonal and tissue variation in the encystment of Cotylurus variegatus metacercariae in perch, Perca fluviatilis. Faulkner M, et al. **Int J Parasitol** 1989 May; 19(3):285–90

Immunocytochemical demonstration of neuropeptides in the fish-gill parasite, Diclidophora merlangi (Monogenoidea). Maule AG, et al. **Int J Parasitol** 1989 May;19(3):307–16

Ineffectiveness of clorsulon against Nanophyetus salmincola in coyotes. Foreyt WJ, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1101–2

Treatment of flukes in a toucan. Giddings RF. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1555–6

Hepatic trematodiasis in five cockatoos. Quesenberry KE, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1103–5

Effects of concurrent infections on growth, development, distribution, and infectivity of adult Philophthalmus megalurus and Philophthalmus gralli. Nollen PM. **J Parasitol** 1989 Feb;75(1):102–7

Alaria nasuae (Trematoda: Diplostomidae) from domestic dogs. Shoop WL, et al. **J Parasitol** 1989 Apr;75(2):325–7

Developmental variation of Heteraxinoides xanthophilis (Monogenea) on hosts of different sizes. Thoney DA. **J Parasitol** 1988 Dec;74(6):999–1003

Metacercariae of Diplostomum spathaceum in the eyes of fishes from Yellowstone Lake, Wyoming. Dwyer WP, et al. **J Wildl Dis** 1989 Jan;25(1):126–9

Experimental infections of waterfowl with Sphaeridiotrema globulus (Digenea). Huffman JE, et al. **J Wildl Dis** 1989 Jan;25(1):143–6

Phagicola angrense (Digenea: Heterophyidae) as a cause of enteritis in a raccoon (Procyon lotor). Snyder DE, et al. **J Wildl Dis** 1989 Apr;25(2):273–5

Eurytrema procyonis in a raccoon (Procyon lotor) from New York state—a first report. Wade SE, et al. **J Wildl Dis** 1989 Apr;25(2):270–2

Fecundity of Pharyngostomum cordatum parasitic in domestic cats. To M, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):908–12

Sym. triazinone (toltrazuril) effective against fish-parasitizing Monogenea. Schmahl G, et al. **Parasitol Res** 1988; 75(1):67–8

Treatment of fish parasites. 4. Effects of sym. triazinone (toltrazuril) on Monogenea. Schmahl G, et al. **Parasitol Res** 1988;75(2):132–43

The diet and gastrodermal ultrastructure of polystomatid monogeneans infecting chelonians. Allen KM, et al. **Parasitology** 1989 Apr;98 Pt 2:265–73

Prevalence and pathology of helminth parasites in domestic ducks of Bangladesh. Islam MR, et al. **Vet Parasitol** 1988 Jul;29(1):73–7

[Epidemiology of trematodosis in livestock in the Kolda region, Casamance (Senegal)] Diaw OT, et al. **Rev Elev Med Vet Pays Trop** 1988;41(3):257–64 (Eng. Abstr.) (Fre)

[Effect of nitroammofoska on the aldolase activity of the normal hemolymph in the mollusk Planorbarius banaticus and in trematode invasion] Stadnichenko AP, et al. **Parazitologiia** 1988 Sep–Oct;22(5):394–7 (Eng. Abstr.) (Rus)

TREMOR

[Tremor-like pathological grasp phenomenon—a case report] Motomura S, et al. **Rinsho Shinkeigaku** 1988 Oct; 28(10):1118–21 (Eng. Abstr.) (Jpn)

[Pathogenesis, clinical aspects and therapy of tremor] Orovčanec K. **Med Pregl** 1988;41(3–4):162–8 (Eng. Abstr.) (Scr)

CHEMICALLY INDUCED

Prospective studies on a lithium cohort. 3. Tremor, weight gain, diarrhea, psychological complaints. Vestergaard P, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):434–41

An exaggerated response to beta-adrenergics. Ozog D, et al. **Ann Allergy** 1989 Jan;62(1):11–3

Parkinsonism, tremor, and depression induced by cinnarizine and flunarizine. Capellà D, et al. **BMJ** 1988 Sep 17; 297(6650):722–3

Widespread tremor after injection of sodium calcitonin. Conget JI, et al. **BMJ** 1989 Jan 21;298(6667):189

Assessment of airways, tremor and chronotropic responses to inhaled salbutamol in the quantification of beta 2-adrenoceptor blockade. Lipworth BJ, et al. **Br J Clin Pharmacol** 1989 Jul;28(1):95–102

Tremorogenesis by LON-954 [N-carbamoyl-2-(2,6-dichlorophenyl) acetamidine hydrochloride]: evidence for the involvement of 5-hydroxytryptamine. Mohanakumar KP, et al. **Brain Res Bull** 1989 Feb;22(2):191–5

Essential tremor and flunarizine [letter] Amery WK, et al. **Cephalalgia** 1988 Sep;8(3):227

Pindolol-induced tremor. Koller W, et al. **Clin Neuropharmacol** 1987 Oct;10(5):449–52

Characterization of the beta-adrenoreceptors which mediate the isoprenaline-induced changes in finger tremor and cardiovascular function in man. Pringle TH, et al. **Eur J Clin Pharmacol** 1988;35(5):507–14

Tremor: a possible side effect of prolonged therapy with low doses of amiodarone [letter] Della Sala S, et al. **Ital J Neurol Sci** 1989 Apr;10(2):219–20

Drug-induced tremor of the tongue. Gabellini AS, et al. **Ital J Neurol Sci** 1989 Feb;10(1):89–91

Non-invasive evaluation of hemodynamic, tremorogenic and biochemical effects in response to beta-adrenoceptor stimulation. Adamus WS, et al. **Methods Find Exp Clin Pharmacol** 1989 Jan;11(1):57–62

Dystonia and tremor following exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Klawans HL. **Mov Disord** 1987;2(4):255–61

Tolerance to the tremorogenic effects of harmaline: evidence for altered olivo-cerebellar function. Lutes J, et al. **Neuropharmacology** 1988 Aug;27(8):849–55

The effectiveness of different isomers of octanol as blockers of harmaline-induced tremor. Sinton CM, et al. **Pflugers Arch** 1989 May;414(1):31–6

Diazepam reverses the effects of pentylenetetrazole in rat pups by acting at type 2 benzodiazepine receptors. Johnston AL, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):823–5

[Seizure and tremor occurring in acute leukemia patients treated with imipenem/cilastatin] Fujishita M, et al. **Rinsho Ketsueki** 1989 Mar;30(3):392–5 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Essential tremor and Parkinson's disease [letter] Jankovic J. **Ann Neurol** 1989 Feb;25(2):211–2
Tremor disorders of aging: diagnosis and management. Koller WC, et al. **Geriatrics** 1989 May;44(5):33–6, 41 (14 ref.)
Orthostatic tremor: diagnostic entity or variant of essential tremor? [letter] Cleeves L, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):130–1
What is it? Case 1, 1986. **Mov Disord** 1986;1(4):275–80
What is it? Case 4, 1986. **Mov Disord** 1986;1(4):299–308
[Surface EMG study in tremor] Chang MK, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;42(2):111–20 (Eng. Abstr.) (Chi)

DRUG THERAPY

Propranolol, clonidine, urapidil and trazodone infusion in essential tremor: a double–blind crossover trial. Caccia MR, et al. **Acta Neurol Scand** 1989 May;79(5):379–83
Psychoses associated with propranolol withdrawal. Golden RN, et al. **Biol Psychiatry** 1989 Feb 1;25(3):351–4
The effect of theophylline on thyrotoxic tremor. Buss DC, et al. **Br J Clin Pharmacol** 1989 Jul;28(1):103–7
Tradozone in essential tremor. Probe of serotoninergic mechanisms. Koller WC. **Clin Neuropharmacol** 1989 Apr; 12(2):134–7
Essential tremor variants: effect of treatment. Koller WC, et al. **Clin Neuropharmacol** 1987 Aug;10(4):342–50
Aminophylline and essential tremor [letter] Mally J. **Lancet** 1989 Jul 29;2(8657):278–9
Clonidine in the treatment of essential tremor. Koller W, et al. **Mov Disord** 1986;1(4):235–7
The use of glutethimide for treatment of essential tremor. McDowell FH. **Mov Disord** 1989;4(1):75–80
Adrenergic beta 2–selective blocker in isoprenaline–enhanced essential tremor. Teräväinen H, et al. **Mov Disord** 1987; 2(2):103–8
Treatment of cerebellar tremors with carbamazepine: a controlled trial with long–term follow–up. Sechi GP, et al. **Neurology** 1989 Aug;39(8):1113–5

ENZYMOLOGY

[Dopamine beta–monooxygenase activity in the brain and adrenal glands of pt rabbits] Kowalczuk K, et al. **Neuropatol Pol** 1988;26(2):225–32 (Eng. Abstr.) (Pol)

ETIOLOGY

Suckling stimulation test for neonatal tremor. Linder N, et al. **Arch Dis Child** 1989 Jan;64(1 Spec No):44–6
Detection of hand tremor in workers exposed to mercury vapor: a comparative study of three methods. Roels H, et al. **Environ Res** 1989 Aug;49(2):152–65
Infantile tremor syndrome. Arya LS, et al. **Indian J Pediatr** 1988 Nov–Dec;55(6):913–8
Unilateral essential tremor after wrist immobilization: a case report [letter] Cole JD, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):286–7
Dystonia and tremor induced by peripheral trauma: predisposing factors. Jankovic J, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1512–9
Infantile tremor syndrome: a vitamin B12 deficiency syndrome in infants. Garewal G, et al. **J Trop Pediatr** 1988 Aug;34(4):174–8
What is it? Case 1, 1987: unusual tremors, bradykinesia, and cerebral lucencies. Shale H, et al. **Mov Disord** 1987; 2(4):321–38
Post–traumatic tremor. Biary N, et al. **Neurology** 1989 Jan; 39(1):103–6
Episodic confusion and tremor associated with extrahepatic portacaval shunting in cirrhotic liver disease. Russell DM, et al. **Neurology** 1989 Mar;39(3):403–5
The shaking limb—a lacunar syndrome. Nagaratnam N, et al. **Postgrad Med J** 1988 Apr;64(750):311–2
Performance under simulated offshore climate conditions. Vaerner RJ, et al. **Scand J Psychol** 1988;29(2):111–22
[Static tremor and encephalopathy disclosing Conn's syndrome (letter)] Amarenco P, et al. **Presse Med** 1989 May 20;18(20):1031 (Fre)
[Intention tremor after head injury. Clinical features and computed tomographic findings] Iwadate Y, et al. **Neurol Med Chir (Tokyo)** 1989 Feb;29(2):122–7 (Eng. Abstr.) (Jpn)

GENETICS

Hereditary essential tremor in Buenos Aires (Argentina). Herskovits E, et al. **Arq Neuropsiquiatr** 1988 Sep; 46(3):238–47
A single family with writer's cramp, essential tremor, and primary writing tremor [published erratum appears in Mov Disord 1987;2(3):224] Cohen LG, et al. **Mov Disord** 1987; 2(2):109–16
[Essential tremor: a follow–up study] Taddei IM, et al. **Schweiz Arch Neurol Psychiatr** 1988;139(6):33–46 (Eng. Abstr.) (Ger)

PATHOLOGY

Bobble–head doll syndrome due to trapped fourth ventricle and aqueduct. Coker SB. **Pediatr Neurol** 1986 Mar–Apr; 2(2):115–6

PHYSIOPATHOLOGY

Orthostatic tremor: report of two cases and an electrophysiological study. Uncini A, et al. **Acta Neurol Scand** 1989 Feb;79(2):119–22
Measuring parkinsonian symptoms with a tracking device. Hacisalihzade SS, et al. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):257–68
24 hour continuous tremor quantification based on EMG recording. Bacher M, et al. **Electroencephalogr Clin Neurophysiol** 1989 Feb; 72(2):176–83
The impact of paired motor unit discharges on tremor. Dengler R, et al. **Electromyogr Clin Neurophysiol** 1989 Mar; 29(2):113–7
Twenty–four–hour tremor recordings in the evaluation of the treatment of Parkinson's disease. Scholz E, et al. **J Neurol** 1988 Nov;235(8):475–84
The effect of frontoparietal lesions on stability and tremor in the finger. Cole JD, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1411–9
Stability and tremor in the fingers associated with cerebellar hemisphere and cerebellar tract lesions in man [published erratum appears in J Neurol Neurosurg Psychiatry 1989 Jun;52(6):816] Cole JD, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1558–68
Finger tremor in Parkinson's disease. Lakie M, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):392–4
Visual and mechanical control of postural and kinetic tremor in cerebellar system disorders. Sanes JN, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):934–43
Essential tongue tremor. Biary N, et al. **Mov Disord** 1987; 2(1):25–9
Homolateral disappearance of essential tremor after cerebellar stroke. Dupuis MJ, et al. **Mov Disord** 1989; 4(2):183–7
Stability of the head: studies in normal subjects and in patients with labyrinthine disease, head tremor, and dystonia. Gresty M. **Mov Disord** 1987;2(3):165–85
Orthostatic tremor: an essential tremor variant? Papa SM, et al. **Mov Disord** 1988;3(2):97–108
Bobble–head doll syndrome: review of the pathophysiology and CSF dynamics. Wiese JA, et al. **Pediatr Neurol** 1985 Nov–Dec;1(6):361–6 (31 ref.)
Stereoencephalotomy and control of skeletal muscle tone. Struppler A. **Stereotact Funct Neurosurg** 1989; 52(2–4):205–18

PREVENTION & CONTROL

Device for quantitating tremor activity in mice: antitremor activity of atropine versus soman– and oxotremorine–induced tremor:. Clement JG, et al. **J Pharmacol Methods** 1989 Aug;22(1):25–36

PSYCHOLOGY

Volitional control of involuntary movements. Koller WC, et al. **Mov Disord** 1989;4(2):153–6
Psychogenic tremors. Koller W, et al. **Neurology** 1989 Aug; 39(8):1094–9

SURGERY

Stereotaxic Vim thalamotomy for treatment of tremor. Narabayashi H. **Ear Neurol** 1989;29 Suppl 1:29–32 (16 ref.)
Lateral coordinates of nucleus ventralis intermedius target for tremor alleviation. Maeda T. **Stereotact Funct Neurosurg** 1989;52(2–4):191–9

THERAPY

Functional neuroanatomy of the target area for the treatment of pathological tremor: an electrophysiological approach. Birk P, et al. **Stereotact Funct Neurosurg** 1989; 52(2–4):164–70
Electrical stimulation across the midline and between basal ganglion nuclei. Heimburger RF. **Stereotact Funct Neurosurg** 1989;52(2–4):227–33
Clinical application of biofeedback treatment with a microvibration transducer. Hosaka T, et al. **Tokai J Exp Clin Med** 1987 Dec;12(5–6):319–24
[Treatment of Parkinson tremor by chronic stimulation of the ventral intermediate nucleus of the thalamus] Benabid AL, et al. **Rev Neurol (Paris)** 1989;145(4):320–3 (Eng. Abstr.) (Fre)
[Essential tremor: therapeutic possibilities] Kostić V, et al. **Neurologija** 1987;36(1–4):97–104 (Eng. Abstr.) (Scr)

VETERINARY

Abnormalities of myelination of the central nervous system associated with congenital tremor. Duncan ID. **J Vet Intern Med** 1987 Jan–Mar;1(1):10–23 (53 ref.)
Tremorgenic syndromes in livestock. Nicholson SS. **Vet Clin North Am Food Anim Pract** 1989 Jul;5(2):291–300 (6 ref.)
[Intention tremor in a heifer with persistent BVD viremia] Stöber M, et al. **DTW** 1988 Oct;95(9):392–4 (Eng. Abstr.) (Ger)

TRENBOLONE see under **ESTRENES**

TRENCH FEVER

HISTORY

Trench fever in Belfast, and the nature of the 'relapsing fevers' in the United Kingdom in the nineteenth century. Logan JS. **Ulster Med J** 1989 Apr;58(1):83–8

TRENCH MOUTH see **GINGIVITIS, NECROTIZING ULCERATIVE**

TREPHINING

A new ultrasound–guided brain biopsy technique through a burr hole. Technical note. Tsutsumi Y, et al. **Acta Neurochir (Wien)** 1989;96(1–2):72–5
Coaxial frontal sinus drainage catheter. Myssiorek D, et al. **Laryngoscope** 1989 Mar;99(3):342–3
Use of intraoperative ultrasonography to improve the diagnostic accuracy of exploratory burr holes in patients with traumatic tentorial herniation. Andrews BT, et al. **Neurosurgery** 1989 Mar;24(3):345–7
Excimer laser trephination in penetrating keratoplasty. Morphologic features and wound healing. Serdarevic ON, et al. **Ophthalmology** 1988 Apr;95(4):493–505
[A model for microsurgical interference of the rat cranium] Steube D, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(6):334–9 (Eng. Abstr.) (Ger)
[Chronic subdural hematoma. A comparison of bore hole trepanation and craniotomy] Schulz W, et al. **Zentralbl Neurochir** 1988;49(4):280–9 (Eng. Abstr.) (Ger)
[Plastic surgery of a defect in the cranial vault using bone chips in the acute period of trauma] Kunitsa VD, et al. **Ortop Travmatol Protez** 1988 Sep;(9):63 (Rus)

ADVERSE EFFECTS

[Intraoperative complications in neurosurgical patients operated on in a seated position (personal observations)] Kopliński A, et al. **Neurol Neurochir Pol** 1988 Jul–Aug; 22(4):352–5 (Eng. Abstr.) (Pol)

HISTORY

Ancient medical history [letter] Rossitch E Jr. **N C Med J** 1989 Feb;50(2):106
Cranial surgery in ancient Peru. Rifkinson–Mann S. **Neurosurgery** 1988 Oct;23(4):411–6
Neurological sciences at their origin: neurology and neurological surgery in the medicine of ancient Egypt. Mazzone P, et al. **Pathologica** 1987 Nov–Dec; 79(1064):787–800
[2 trephined skulls from Schleswig–Holstein] Kühl I. **Anthropol Anz** 1988 Dec;46(4):335–47 (Eng. Abstr.) (Ger)

INSTRUMENTATION

A centering device for the Hessburg–Barron vacuum trephine. Gilbard JP, et al. **Am J Ophthalmol** 1988 Nov 15;106(5):633–4
Low cost device for removing human and small primate temporal bone plugs. Trune DR, et al. **Hear Res** 1989 Jan; 37(2):189–90
Technique, indications, and complications of percutaneous needle puncture. Gilsoach J, et al. **Neurochirurgia (Stuttg)** 1988 Jul;31(4):114–7

METHODS

[Decompressive trepanation in therapy refractory brain edema] Burkert W, et al. **Zentralbl Neurochir** 1988; 49(4):318–23 (33 ref.) (Eng. Abstr.) (Ger)
[Value of trephining puncture in the diagnosis and treatment of frontal sinusitis] Costaş V, et al. **Rev Chir [Otorinolaringol]** 1988 Apr–Jun;33(2):95–102 (Eng. Abstr.) (Rum)
[Anatomical validation of the size and location of the trephination opening in the surgical treatment of traumatic intracranial hematoma] Nikulin AM. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):6–11 (Eng. Abstr.) (Rus)

TREPONEMA

ANALYSIS

Lipooligosaccharides from Treponema hyodysenteriae and Treponema innocens. Halter MR, et al. **Infect Immun** 1988 Dec;56(12):3152–6
Optimizing the solid–phase immunofiltration assay. A rapid alternative to immunoassays. IJsselmuiden OE, et al. **J Immunol Methods** 1989 Apr 21;119(1):35–43

CLASSIFICATION

Proposed revisions to the serological typing system for Treponema hyodysenteriae. Hampson DJ, et al. **Epidemiol Infect** 1989 Feb;102(1):75–84
Typing of Treponema hyodysenteriae by restriction endonuclease analysis. Combs B, et al. **Vet Microbiol** 1989 Apr;19(4):351–9

DRUG EFFECTS

The action of sodium fluoride on suspected

periodontopathogens. Yotis WW. **J Periodont Res** 1988 Sep;23(5):340–4
[In vitro antibiotic sensitivity of several species of oral spirochetes] Sbordone L, et al. **Minerva Stomatol** 1989 Feb; 38(2):227–31 (Eng. Abstr.) (Ita)

ENZYMOLOGY

Synthesis and secretion of phospholipase C by oral spirochetes. Siboo R, et al. **J Clin Microbiol** 1989 Mar; 27(3):568–70
Enzyme profiles of oral spirochetes in RapID-ANA system. Syed SA, et al. **J Clin Microbiol** 1988 Oct;26(10):2226–8

GENETICS

Comparison of the genomes of pathogenic treponemes of human and animal origin. de Wergifosse P, et al. **Infect Immun** 1989 May;57(5):1629–31

GROWTH & DEVELOPMENT

Ceruloplasmin can substitute for rabbit serum in stimulating the growth of Treponema denticola. Suzuki M, et al. **Infect Immun** 1989 Feb;57(2):643–4
Extensive colonization of the porcine colonic epithelium by a spirochete similar to Treponema innocens. Jacques M, et al. **J Clin Microbiol** 1989 May;27(5):1139–41
Treponema hyodysenteriae growth under various culture conditions. Stanton TB, et al. **Vet Microbiol** 1988 Oct; 18(2):177–90

IMMUNOLOGY

A major antigen on the outer envelope of a human oral spirochete, Treponema denticola. Umemoto T, et al. **Infect Immun** 1989 Aug;57(8):2470–4
Characterization of the major outer membrane antigens of Treponema hyodysenteriae. Wannemuehler MJ, et al. **Infect Immun** 1988 Dec;56(12):3032–9
Use of an enzyme-linked immunosorbent assay for detection of Treponema hyodysenteriae infection in swine. Wright JC, et al. **J Clin Microbiol** 1989 Mar;27(3):411–6

ISOLATION & PURIFICATION

Improved selective medium for the isolation of Treponema hyodysenteriae. Kunkle RA, et al. **J Clin Microbiol** 1988 Nov;26(11):2357–60

METABOLISM

Production, purification and molecular weight determination of the haemolysin of Treponema hyodysenteriae. Kent KA, et al. **J Med Microbiol** 1988 Nov;27(3):215–24

PATHOGENICITY

Comparison of the biological responses induced by lipopolysaccharide and endotoxin of Treponema hyodysenteriae and Treponema innocens. Greer JM, et al. **Infect Immun** 1989 Mar;57(3):717–23

PHYSIOLOGY

Locomotory characteristics of Treponema denticola. Pietrantonio F, et al. **Can J Microbiol** 1988 Jun;34(6):748–52
Association of Treponema hyodysenteriae with porcine intestinal mucosa. Kennedy MJ, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1565–76

ULTRASTRUCTURE

Isolation of Fusobacterium nucleatum and electron microscopic observations of spirochetes from tropical skin ulcers in Papua New Guinea. Falkler WA Jr, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):390–8
Isolation and characterization of cytoplasmic fibrils from treponemes. Masuda K, et al. **Microbiol Immunol** 1989; 33(8):619–30

TREPONEMA IMMOBILIZATION TEST

Treponema pallidum-immobilizing antibodies in guinea pig experimental syphilis. Wicher K, et al. **Infect Immun** 1989 Sep;57(9):2900–2

METHODS

[The significance of the TPI indices with an increased blood serum volume in removing patients from the syphilis registry] Magaryshkina OV, et al.
Vestn Dermatol Venerol 1988;(11):54–7 (Eng. Abstr.) (Rus)

TREPONEMA PALLIDUM

[The effect of micro-fields of magnetically ordered media on Treponema pallidum] Milich MV, et al.
Vestn Dermatol Venerol 1989;(3):20–6 (Eng. Abstr.) (Rus)
[The effect of magnetoregulated microfields on Treponema pallidum. 2] Milich MV, et al. **Vestn Dermatol Venerol** 1989; (2):23–7 (Eng. Abstr.) (Rus)

ANALYSIS

Penicillin-binding proteins and peptidoglycan of Treponema pallidum subsp. pallidum. Radolf JD, et al.
Infect Immun 1989 Apr;57(4):1248–54

DRUG EFFECTS

Tissue fluid penetration and anti-treponemal activity of trospectomycin (a new spectinomycin analog) in the rabbit syphilis model. Rice RJ, et al. **Sex Transm Dis** 1988 Jul–Sep;15(3):152–5
[Characteristics of the action of synthetic polyampholytes on the capsules of pathogenic and cultured Treponema pallidum] Milich MV, et al. **Vestn Dermatol Venerol** 1988; (5):25–32 (Eng. Abstr.) (Rus)

GENETICS

Cloning and sequencing of a Treponema pallidum gene encoding a 31.3-kilodalton endoflagellar subunit (FlaB2). Pallesen L, et al. **Infect Immun** 1989 Jul;57(7):2166–72
Overproduction and purification of Treponema pallidum recombinant-DNA-derived proteins TmpA and TmpB and their potential use in serodiagnosis of syphilis. Schouls LM, et al. **Infect Immun** 1989 Sep;57(9):2612–23
Treponema pallidum subspecies pallidum (Nichols) and Treponema pallidum subspecies pertenue (CDC 2575) differ in at least one nucleotide: comparison of two homologous antigens. Noordhoek GT, et al.
Microb Pathog 1989 Jan;6(1):29–42

GROWTH & DEVELOPMENT

Cultivation of cottontail rabbit epidermal (SflEp) cells on microcarrier beads and their use for suspension cultivation of Treponema pallidum subsp. pallidum. Riley BS, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2862–5

IMMUNOLOGY

Quantitative profile of cardiolipin and group treponemal IgG, IgA and IgM antibodies in syphilis assayed by radial immunodiffusion technique. Ionescu AD, et al.
Arch Roum Pathol Exp Microbiol 1988 Jul–Dec; 47(3–4):261–82
Kinetics of pathogen-specific humoral response in Treponema pallidum-infected young and old inbred strain 2 guinea pigs. Wicher V, et al. **Clin Exp Immunol** 1989 Jul;77(1):144–50
An IgM capture enzyme linked immunosorbent assay to detect IgM antibodies to treponemes in patients with syphilis. Ijsselmuiden OE, et al. **Genitourin Med** 1989 Apr; 65(2):79–83
Screening for treponemal infection by a new enzyme immunoassay. Young H, et al. **Genitourin Med** 1989 Apr; 65(2):72–8
Serological investigations for antibodies against Treponema pallidum on the Cape Verde Islands (Santiago and Santo Antao)—2. report. Brosch R, et al. **Geogr Med** 1988;Suppl 1:93–4
Acylation of the 47-kilodalton major membrane immunogen of Treponema pallidum determines its hydrophobicity. Chamberlain NR, et al. **Infect Immun** 1989 Sep; 57(9):2878–85
Major integral membrane protein immunogens of Treponema pallidum are proteolipids. Chamberlain NR, et al.
Infect Immun 1989 Sep;57(9):2872–7
Sequence analysis of the 47-kilodalton major integral membrane immunogen of Treponema pallidum. Hsu PL, et al. **Infect Immun** 1989 Jan;57(1):196–203
Primary structure of an oligomeric antigen of Treponema pallidum. Walfield AM, et al. **Infect Immun** 1989 Feb; 57(2):633–5
Immunogenicity of three recombinant Treponema pallidum antigens examined in guinea pigs. Wicher K, et al.
Int Arch Allergy Appl Immunol 1989;89(2–3):128–35
Sensitivity and specificity of an enzyme-linked immunosorbent assay using the recombinant DNA-derived Treponema pallidum protein TmpA for serodiagnosis of syphilis and the potential use of TmpA for assessing the effect of antibiotic therapy. Ijsselmuiden OE, et al.
J Clin Microbiol 1989 Jan;27(1):152–7
Enzyme-linked immunosorbent assays for detection of immunoglobulin M to nontreponemal and treponemal antigens for the diagnosis of congenital syphilis. Pedersen NS, et al. **J Clin Microbiol** 1989 Aug;27(8):1835–40
Development of cellular immunity to individual soluble antigens of Treponema pallidum during experimental syphilis. Baker-Zander SA, et al. **J Immunol** 1988 Dec 15; 141(12):4363–9
Phagocytosis of Treponema pallidum pertenue by hamster macrophages on membrane filters. Alder JD, et al.
J Infect Dis 1989 Aug;160(2):289–97
Characterization of the components in circulating immune complexes from infants with congenital syphilis. Dobson SR, et al. **J Infect Dis** 1988 Nov;158(5):940–7
Molecular analysis of the fetal IgM response to Treponema pallidum antigens: implications for improved serodiagnosis of congenital syphilis. Sánchez PJ, et al. **J Infect Dis** 1989 Mar;159(3):508–17
Identification, cloning, and purification of protein antigens of Treponema pallidum. Stamm LV, et al.
Rev Infect Dis 1988 Jul–Aug;10 Suppl 2:S403–7 (18 ref.)
[Evaluation of the prevalence of 3 markers (HIV antibodies, anti-treponema antibodies, HBs antigen) of sexually transmitted diseases in so-called "at risk" subjects in Madagascar] Genin C, et al.
Arch Inst Pasteur Madagascar 1988;54(1):197–216 (Fre)
[Suspected syphilis during pregnancy due to cross reactions in Borrelia infection] Enders G, et al.
Dtsch Med Wochenschr 1988 Sep 30;113(39):1511–4 (Eng. Abstr.) (Ger)
[Passive microhemagglutination reaction to Treponema pallidum in the cerebrospinal fluid in the diagnosis of neurosyphilis] Machado A de B, et al.
Arq Neuropsiquiatr 1988 Dec;46(4):369–73 (Eng. Abstr.) (Por)
[The dynamics of antibodies with IgD-class cardiolipin and treponemal group specificity in syphilis assessed quantitatively by radial immunodiffusion] Ionescu DA, et al. **Rev Ig [Bacteriol]** 1989 Apr-Jun;34(2):141–54 (Eng. Abstr.) (Rum)

ISOLATION & PURIFICATION

[In situ immunological identification of Treponema pallidum as an aid in the diagnosis of syphilis] Barbareschi M, et al. **G Ital Dermatol Venereol** 1988 Jun;123(6):315–8 (Eng. Abstr.) (Ita)

METABOLISM

Affinities of Treponema pallidum for human lactoferrin and transferrin. Alderete JF, et al. **Genitourin Med** 1988 Dec; 64(6):359–63
Serum lipoprotein binding by Treponema pallidum: possible role for proteoglycans. Alderete JF, et al.
Genitourin Med 1989 Jun;65(3):177–82

PATHOGENICITY

Interactions of Treponema pallidum with endothelial cell monolayers. Thomas DD, et al. **Eur J Epidemiol** 1989 Mar; 5(1):15–21
In vitro model of Treponema pallidum invasiveness. Riviere GR, et al. **Infect Immun** 1989 Aug;57(8):2267–71
[Pathogenicity determinants of Treponema pallidum] Ionescu AD. **Rev Ig [Bacteriol]** 1989 Jan-Mar;34(1):75–83 (86 ref.) (Rum)

PHYSIOLOGY

[Effect of microfields of magnetically aligned media on Treponema pallidum. 1] Milich MV, et al.
Vestn Dermatol Venerol 1989;(1):29–34 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Selective release of the Treponema pallidum outer membrane and associated polypeptides with Triton X-114. Cunningham TM, et al. **J Bacteriol** 1988 Dec; 170(12):5789–96
Demonstration of rare protein in the outer membrane of Treponema pallidum subsp. pallidum by freeze-fracture analysis. Walker EM, et al. **J Bacteriol** 1989 Sep; 171(9):5005–11
Outer membrane ultrastructure explains the limited antigenicity of virulent Treponema pallidum. Radolf JD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2051–5

TREPONEMAL INFECTIONS

Treponemal bone disease in an Ethiopian immigrant. Sperber AD, et al. **Isr J Med Sci** 1989 Aug;25(8):459–61

COMPLICATIONS

Role of sexually transmissible pathogens in transmitting HIV I [letter] Schrijvers D, et al. **Genitourin Med** 1988 Dec; 64(6):395–6
Ocular manifestations of endemic syphilis (bejel). Tabbara KF, et al. **Ophthalmology** 1989 Jul;96(7):1087–91

DIAGNOSIS

Nonvenereal treponemal disease [editorial] Alkan ML.
Isr J Med Sci 1989 Aug;25(8):417–8

EPIDEMIOLOGY

[Endemic treponemal infections: a rising danger (editorial)] Meheus A, et al. **Ann Soc Belg Med Trop** 1988 Dec; 68(4):281–4 (Fre)

HISTORY

Treponematosis: a possible case from the late prehistoric of North Carolina. Reichs KJ. **Am J Phys Anthropol** 1989 Jul;79(3):289–303

MICROBIOLOGY

Isolation of Fusobacterium nucleatum and electron microscopic observations of spirochetes from tropical skin ulcers in Papua New Guinea. Falkler WA Jr, et al.
Am J Trop Med Hyg 1989 Apr;40(4):390–8

PATHOLOGY

[Jeanselme-Lutz syndrome (juxta-articular nodosities)] Loseva VA, et al. **Vestn Dermatol Venerol** 1988;(9):69–71 (10 ref.) (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

[The campaign against sexually transmissible diseases and endemic treponematoses] Causse G, et al. **World Health Stat Q** 1988;41(2):82–102 (Eng. Abstr.) (Fre)

VETERINARY

Extensive colonization of the porcine colonic epithelium by a spirochete similar to Treponema innocens. Jacques M, et al. **J Clin Microbiol** 1989 May;27(5):1139–41

Use of an enzyme-linked immunosorbent assay for detection of Treponema hyodysenteriae infection in swine. Wright JC, et al. **J Clin Microbiol** 1989 Mar;27(3):411–6

Association of Treponema hyodysenteriae with porcine intestinal mucosa. Kennedy MJ, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1565–76

[The occurrence of Treponema in fecal samples from dogs and cats with and without intestinal diseases] Weber A, et al. **Berl Munch Tierarztl Wochenschr** 1989 Mar 1; 102(3):73–7 (Eng. Abstr.) (Ger)

TRETAMINE see **TRIETHYLENEMELAMINE**

TRETINOIN

Purification and characterization of a murine cellular retinoic acid–binding protein. Bailey JS, et al. **Biochem Cell Biol** 1988 Jul;66(7):750–7

Differential expression of the alpha and beta retinoic acid receptors in tissues of the rat. Rees JL, et al. **Biochem J** 1989 May 1;259(3):917–9

13-cis-retinoic acid v placebo in myelodysplasia [letter] Jacobs A, et al. **Blood** 1988 Oct;72(4):1439–40

ADMINISTRATION & DOSAGE

Radiofrequency hyperthermia and topical retinoic acid therapy in murine melanoma. Levine N, et al. **Am J Med Sci** 1989 May;297(5):285–9

Triple combination of retinoic acid+aclacinomycin A+ dimethylformamide induces differentiation of human acute myeloid leukaemic blasts in primary culture. Hassan HT, et al. **Anticancer Res** 1989 May–Jun;9(3):647–51

Topical retinoic acid treatment for conjunctival squamous metaplasia. Nelson MN. **Arch Ophthalmol** 1988 Dec; 106(12):1723

Inhibition of initiator–promoter–induced skin tumorigenesis in female SENCAR mice fed a vitamin A–deficient diet and reappearance of tumors in mice fed a diet adequate in retinoid or beta–carotene. De Luca LM, et al. **Cancer Res** 1989 Oct 1;49(19):5400–6

Reactive perforating collagenosis of renal failure/diabetes responsive to topical retinoic acid. Berger RS. **Cutis** 1989 Jun;43(6):540–2

Early results of local application of 13-cis retinoic acid in the treatment of leukoplakia of the vulva. Kwaśniewski SW, et al. **Eur J Gynaecol Oncol** 1989;10(2):129–30

Topical application of all-trans-retinoic acid. A look at the cornea and limbus. Stonecipher KG, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):371–6

Comparison of the stability of topical isotretinoin and topical tretinoin and their efficacy in acne. Elbaum DJ. **J Am Acad Dermatol** 1988 Sep;19(3):486–91

Guidelines for the use of topical tretinoin (Retin–A) for photoaged skin. Kligman AM. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 2):650–4

Tretinoin for photoaging skin: North Carolina vs New York [letter] Burke KE, et al. **JAMA** 1988 Dec 2;260(21):3130–1

Tretinoin therapy for precancerous skin. Papa CM. **N J Med** 1989 May;86(5):361–5

Topical retinoic acid, aging, and the skin. Elias PM. **West J Med** 1988 Dec;149(6):766–7

[Favorable outcome of the treatment of Mibelli's porokeratosis linearis using occlusive dressings with retinoic acid] Ratka P, et al. **Przegl Dermatol** 1988 Mar–Apr;75(2):149–53 (Eng. Abstr.) (Pol)

ADVERSE EFFECTS

Corneal calcification in dry eye disorders associated with retinoic acid therapy. Avisar R, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):753–5

Adverse reactions to tretinoin and collagen injections [letter] Elson ML. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):861–2

Adverse reaction to retin–A [letter] Rosenbluth M. **J Am Dent Assoc** 1989 Sep;119(3):346

ANALOGS & DERIVATIVES

A double–blind comparison of acitretin and etretinate in the treatment of severe psoriasis. Results of a Nordic multicentre study. Kragballe K, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):35–40

Clinical and ultrastructural effects of acitretin in Darier's disease. Lauharanta J, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):492–8

Acitretin induces an increased adherence of S. aureus to epithelial cells. Lianou P, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):330–2

Serum lipid changes during acitretin (etretin) treatment of psoriasis and palmo–plantar pustulosis. Vahlquist C, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):300–5

Intra–epidermal accumulation of polymorphonuclear leukocytes in persistent palmoplantar pustulosis during treatment with acitretin. van de Kerkhof PC, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):499–503

Acitretin monotherapy in acrodermatitis continua Hallopeau. van Dooren–Greebe RJ, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):344–6

Characterization of retinyl beta–glucuronide in human blood. Barua AB, et al. **Am J Clin Nutr** 1989 Aug;50(2):370–4

Acitretin (RO10–1670) and oral contraceptives: interaction study. Berbis P, et al. **Arch Dermatol Res** 1988;280(6):388–9

Netherton's syndrome: ultrastructure of the active lesion under retinoid therapy. Hausser I, et al. **Arch Dermatol Res** 1989;281(3):165–72

Comparative distribution, pharmacokinetics and placental permeabilities of all–trans–retinoic acid, 13–cis–retinoic acid, all–trans–4–oxo–retinoic acid, retinyl acetate and 9–cis–retinal in hamsters. Howard WB, et al. **Arch Toxicol** 1989;63(2):112–20

Metabolism of the chemopreventive retinoid N–(4–hydroxyphenyl)retinamide by mammary gland in organ culture. Mehta RG, et al. **Biochem J** 1988 Dec 1; 256(2):579–84

Pharmacokinetics of acitretin and its 13–cis metabolite in patients on haemodialysis. Stuck AE, et al. **Br J Clin Pharmacol** 1989 Mar;27(3):301–4

Combined treatment of psoriasis with acitretin and UVB phototherapy compared with acitretin alone and UVB alone. Iest J, et al. **Br J Dermatol** 1989 May;120(5):665–70

Acitretin and etretinate in the treatment of palmoplantar pustulosis: a double–blind comparative trial. Lassus A, et al. **Br J Dermatol** 1988 Dec;119(6):755–9

A double–blind comparison of acitretin and etretinate in combination with bath PUVA in the treatment of extensive psoriasis. Lauharanta J, et al. **Br J Dermatol** 1989 Jul; 121(1):107–12

The synthetic retinoid fenretinide does not affect circulating hormone concentrations [letter] Secreto G, et al. **Breast Cancer Res Treat** 1988 Dec;12(3):315–6

Chemopreventive efficacy of combined retinoid and tamoxifen treatment following surgical excision of a primary mammary cancer in female rats. Ratko TA, et al. **Cancer Res** 1989 Aug 15;49(16):4472–6

Suppression of rat mammary cancer development by N–(4–hydroxyphenyl)retinamide (4–HPR) following surgical removal of first palpable tumor. Moon RC, et al. **Carcinogenesis** 1989 Sep;10(9):1645–9

Residual plasma concentrations of acitretin (Ro 10–1670) and its metabolite (Ro 13–7652) after chronic administration. Berbis P, et al. **Dermatologica** 1988;177(4):244–6

Benefit of progressively increasing doses during the initial treatment with acitretin in psoriasis. Berbis P, et al. **Dermatologica** 1989;178(2):88–92

Overview of recent clinical pharmacokinetic studies with acitretin (Ro 10–1670, etretin). Brindley CJ. **Dermatologica** 1989;178(2):79–87 (22 ref.)

Cutaneous metastasis from papillary carcinoma of the thyroid. A case confirmed by monoclonal antithyroglobulin antibody. Doutre MS, et al. **Dermatologica** 1988; 177(4):241–3

Lack of effect of acitretin on the hypothrombinemic action of phenprocoumon in healthy volunteers. Hartmann D, et al. **Dermatologica** 1989;178(1):33–6

Randomized double–blind multicenter study comparing acitretin–PUVA, etretinate–PUVA and placebo–PUVA in the treatment of severe psoriasis. Saurat JH, et al. **Dermatologica** 1988;177(4):218–24

Effects of pretreatment with the retinoid N–(4–hydroxyphenyl)–all–trans–retinamide and phenobarbital on the disposition and metabolism of N–(4–hydroxyphenyl)–all–trans–retinamide in mice. Hultin TA, et al. **Drug Metab Dispos** 1988 Nov–Dec;16(6):783–8

Tolerability of the synthetic retinoid Fenretinide (HPR). Costa A, et al. **Eur J Cancer Clin Oncol** 1989 May; 25(5):805–8

Pharmacokinetics, tissue distribution, and placental permeability of all–trans– and 13–cis–N–ethyl retinamides in pregnant hamsters. Howard WB, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):621–7

Inhibitory effects of synthetic acidic retinoid and polyprenoic acid on the development of hepatoma in rats induced by 3'–methyl–N, N–dimethyl–4–aminoazobenzene. Moriwaki H, et al. **Gastroenterol Jpn** 1988 Oct;23(5):546–52

Diverse responses to retinoid in morphological differentiation, tumorigenesis and N–myc expression in human neuroblastoma sublines. Hino T, et al. **Int J Cancer** 1989 Aug 15;44(2):286–91

Pharmacokinetics of N–4–hydroxyphenyl–retinamide and the effect of its oral administration on plasma retinol concentrations in cancer patients [published erratum appears in Int J Cancer 1989 Sep 15;44(3):567] Peng YM, et al. **Int J Cancer** 1989 Jan 15;43(1):22–6

Acitretin (Ro 10–1670) in the treatment of severe psoriasis. A randomized double–blind parallel study comparing acitretin and etretinate. Ledo A, et al. **Int J Dermatol** 1988 Nov;27(9):656–60

Acitretin versus etretinate in psoriasis. Clinical and pharmacokinetic results of a German multicenter study. Gollnick H, et al. **J Am Acad Dermatol** 1988 Sep; 19(3):458–68

Side–effect profile of acitretin therapy in psoriasis. Gupta AK, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1088–93

Successful treatment of hidradenitis suppurativa with acitretin [letter] Hogan DJ, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):355–6

Simultaneous microassay for etretinate and its active metabolite, etretin, by reversed–phase high–performance liquid chromatography. Thongnopnua P, et al. **J Chromatogr** 1988 Dec 9;433:345–51

Quantitative analysis of retinoids in biological fluids by high–performance liquid chromatography using column switching. II. Simultaneous determination of etretinate, acitretin and 13–cis–acitretin in plasma. Wyss R, et al. **J Chromatogr** 1988 Oct 14;431(2):297–307

Food increases the bioavailability of acitretin. McNamara PJ, et al. **J Clin Pharmacol** 1988 Nov;28(11):1051–5

Fenretinide does not block visual pigment formation in the rat. Crouch RK, et al. **J Ocul Pharmacol** 1988 Fall; 4(3):253–7

Phase II trial of fenretinide [N–(4–hydroxyphenyl) retinamide] in myelodysplasia: possible retinoid–induced disease acceleration. Garewal HS, et al. **Leuk Res** 1989; 13(4):339–43

Chemopreventive effect of N–homocysteine thiolactonyl retinamido cobalamin on carcinogenesis by ethyl carbamate in mice. McCully KS, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):346–51

Pharmacokinetic assessment of teratologically effective concentrations of an endogenous retinoic acid metabolite. Satre MA, et al. **Teratology** 1989 Apr;39(4):341–8

Teratogenicity and placental transfer of all–trans–, 13–cis–, 4–oxo–all–trans–, and 4–oxo–13–cis–retinoic acid after administration of a low oral dose during organogenesis in mice. Creech Kraft J, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):162–76

Toxicologic and immunologic evaluations of N–(all–trans–retinoyl)–DL–leucine and N–(all–trans–retinoyl)glycine. Lindamood C 3d, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):279–95

[Effects of retinoids on tumor specific immune response in mice] Hu XZ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):407–10 (Eng. Abstr.) (Chi)

[Induction of differentiation of human promyelocytic leukemia (HL–60) cells by new retinoid R–81001] Jiao L. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):102–6 (Eng. Abstr.) (Chi)

[Harlequin fetus treated with etretin (RO 10–1670)] Cambazard F, et al. **Ann Dermatol Venereol** 1988; 115(11):1128–30 (Fre)

[Acitretin (RO 10–1670). A successor of etretinate?] Saurat JH. **Ann Dermatol Venereol** 1988;115(8):849–52 (Fre)

[Successful retinoid therapy of Netherton syndrome] Hartachuh W, et al. **Hautarzt** 1989 Jul;40(7):430–3 (Eng. Abstr.) (Ger)

[The Kyrle disease entity and its therapeutic modification by acitretin (etretin)] Baumer FE, et al. **Z Hautkr** 1989 Apr 15;64(4):286, 289–91 (Eng. Abstr.) (Ger)

BIOSYNTHESIS

Retinoic acid synthesis by cytosol from the alcohol dehydrogenase negative deermouse. Posch KC, et al. **Arch Biochem Biophys** 1989 Oct;274(1):171–8

Biogenesis of retinoic acid from beta–carotene. Differences between the metabolism of beta–carotene and retinal. Napoli JL, et al. **J Biol Chem** 1988 Nov 25;263(33):17372–7

GENETICS

Assignment of the human hap retinoic acid receptor RAR beta gene to the p24 band of chromosome 3. Mattei MG, et al. **Hum Genet** 1988 Oct;80(2):189–90

Mapping of the human retinoic acid receptor to the q21 band of chromosome 17. Mattei MG, et al. **Hum Genet** 1988 Oct;80(2):186–8

[Hepatitis B virus and hepatocarcinoma: integration of HBV DNA in the gene coding for the receptor of retinoic acid (editorial)] de Thé H, et al. **Pathol Biol (Paris)** 1989 Jan; 37(1):5–6 (Fre)

METABOLISM

Metabolism of retinol and retinoic acid by human liver cytochrome P450IIC8. Leo MA, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):305–12

Enzymatic oxidation of all–trans retinal to retinoic acid in rat tissues. Bhat PV, et al. **Biochem Cell Biol** 1988 Jul; 66(7):735–40

Increased retinoic acid metabolism following 3,3',4,4',5,5'–hexabromobiphenyl injection. Spear PA, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1181–6

Metabolism of retinol and retinoic acid in N–methyl–N–nitrosourea–induced mammary carcinomas in rats. Bhat PV, et al. **Cancer Res** 1989 Jan 1;49(1):139–44

Oxidation of retinol to retinoic acid as a requirement for biological activity in mouse epidermia. Connor MJ. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7038–40

How do retinoids work on human epidermis? A breakthrough and its implications. Saurat JH. **Clin Exp Dermatol** 1988 Nov;13(6):360–4 (25 ref.)

Phorbol ester binding to oral epithelial cells in the presence of retinoic acid or N–nitrosonornicotine. Schuster GS, et al. **Cytobios** 1988;54(216):53–60

Preferential expression of cellular retinoic acid binding protein in a subpopulation of neural cells in the developing mouse embryo. Vaessen MJ, et al. **Differentiation** 1989

May;40(2):99–105
Differential expression and ligand regulation of the retinoic acid receptor alpha and beta genes. de The H, et al. **EMBO J** 1989 Feb;8(2):429–33
Retinoic acid acylation (retinoylation) of a nuclear protein in the human acute myeloid leukemia cell line HL60. Takahashi N, et al. **J Biol Chem** 1989 Mar 25; 264(9):5159–63
Models of retinoid metabolism: microbial biotransformation of alpha–ionone and beta–ionone. Hartman DA, et al. **J Nat Prod** 1988 Sep–Oct;51(5):947–53
Spatial and temporal expression of the retinoic acid receptor in the regenerating amphibian limb [published erratum appears in Nature 1989 Sep 7;341(6237):80] Giguère V, et al. **Nature** 1989 Feb 9;337(6207):566–9
Spatial distribution of cellular protein binding to retinoic acid in the chick limb bud. Maden M, et al. **Nature** 1988 Oct 20;335(6192):733–5
Identification and characterization of nuclear retinoic acid–binding activity in human myeloblastic leukemia HL–60 cells. Nervi C, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5854–8

PHARMACOKINETICS

Comparative distribution, pharmacokinetics and placental permeabilities of all–trans–retinoic acid, 13–cis–retinoic acid, all–trans–4–oxo–retinoic acid, retinyl acetate and 9–cis–retinal in hamsters. Howard WB, et al. **Arch Toxicol** 1989;63(2):112–20
Elevations in the endogenous levels of the putative morphogen retinoic acid in embryonic mouse limb–buds associated with limb dysmorphogenesis. Satre MA, et al. **Dev Biol** 1989 Jun;133(2):529–36
Uptake and cellular transport of [11–3H] all–trans–retinoic acid in the liver of vitamin A–deficient hamsters. Chowdhury A, et al. **Tissue Cell** 1988;20(4):555–65

PHARMACOLOGY

Suppression of erythroid cell differentiation in mouse embryos exposed to retinoic acid in utero. Yasuda Y, et al. **Anat Rec** 1989 Jan;223(1):1–12
Interleukin–1 alpha mRNA induced by cycloheximide PMA, and retinoic acid is reduced by dexamethasone in PAM–212 keratinocytes. McGuire J, et al. **Ann N Y Acad Sci** 1988; 548:283–90
Topical tretinoin and epithelial wound healing. Hung VC, et al. **Arch Dermatol** 1989 Jan;125(1):65–9
Comparison of the effects of dexamethasone and 13–cis–retinoic acid on connective tissue biosynthesis in human skin fibroblasts. Oikarinen A, et al. **Arch Dermatol Res** 1989;281(4):273–8
Effect of retinol and retinoic acid on testosterone production by rat Leydig cells in primary culture. Chaudhary LR, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):400–6
Retinoic acid rapidly induces lung cellular retinol–binding protein mRNA levels in retinol deficient rats. Haq R, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):712–6
Pertussis toxin inhibits differentiation induced by retinoic acid in a human promyelocytic leukemia cell line HL–60. Hemmi H, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):797–802
Retinoic acid inhibits phosphatidylinositol turnover only in RA–sensitive while not in RA–resistant human neuroblastoma cells. Lanciotti M, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):284–9
EGF–induced PGE2 release is synergistically enhanced in retinoic acid treated fetal rat lung cells. Oberg KC, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1515–21
Effect of retinoic acid on cAMP dependent protein phosphorylation in psoriatic fibroblasts. Raynaud F, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):263–8
Retinoic acid blockade of imidazole–induced tyrosinase expression in B16 melanoma cultures: similar effects of the active retinoid and triiodothyronine. Smith TJ, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):288–93
Induction of gamma–glutamyl transpeptidase activity by all–trans retinoic acid in cultured rat liver epithelial cells. Tsao MS, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1039–45
Comparison of the effects of auranofin and retinoic acid on plasminogen activator activity of peritoneal macrophages and Lewis lung carcinoma cells. Lison D, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2107–12
Fetal calf serum and retinoic acid affect proliferation and terminal differentiation of a rat rhabdomyosarcoma cell line (BA–HAN–1C). Gerharz CD, et al. **Br J Cancer** 1989 Jan; 59(1):61–7
Effect of retinoic acid on asbestos induced plasminogen activator activity of peritoneal macrophages. Lison D, et al. **Br J Ind Med** 1989 Jul;46(7):496–7
Stimulation of choline acetyltransferase activity by retinoic acid and sodium butyrate in a cultured human neuroblastoma. Casper D, et al. **Brain Res** 1989 Jan 23; 478(1):74–84
Mechanism of activation of choline acetyltransferase in a human neuroblastoma cell line. Casper D, et al. **Brain Res** 1989 Jan 23;478(1):85–94
The role of polyamines in interferon and retinoic acid mediated synergistic antiproliferative action. Marth C, et al. **Cancer Lett** 1989 Jan;44(1):55–9
Effect of all–trans–retinoic acid on nuclear RNA polymerase activity in chemically–induced rat mammary tumors. Mehta RG, et al. **Cancer Lett** 1988 Sep–Oct;42(1–2):1–5
A model to account for the effects of oncogenes, TPA, and retinoic acid on the regulation of genes involved in metastasis. Pohl J, et al. **Cancer Metastasis Rev** 1988 Dec; 7(4):347–56 (102 ref.)
Effects of retinoic acid on morphological features and biological markers of a neoplastic human salivary intercalated duct cell line in culture. Azuma M, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7219–25
Changes observed in the growth fraction, labeling index, duration of S phase, and total cell cycle times of HL–60 cells as they undergo differentiation in response to retinoic acid. Gezer S, et al. **Cancer Res** 1988 Nov 1;48(21):5989–94
Changes in c–myc, c–fms, and N–ras proto–oncogene expression associated with retinoic acid–induced monocytic differentiation of human leukemia HL60/MRI cells. Imaizumi M, et al. **Cancer Res** 1988 Dec 1;48(23):6733–8
Effects of bryostatins and retinoic acid on phorbol ester– and diacylglycerol–induced squamous differentiation in human tracheobronchial epithelial cells. Jetten AM, et al. **Cancer Res** 1989 Jul 15;49(14):3990–5
Effect of retinoic acid on DNA cleavage and cytotoxicity of topoisomerase II–reactive drugs in a human head and neck squamous carcinoma cell line. Kim HK, et al. **Cancer Res** 1989 Mar 1;49(5):1197–201
Biochemical and immunological characterization of K–1735P melanoma galactoside–binding lectins and their modulation by differentiation inducers. Lotan R, et al. **Cancer Res** 1989 Mar 1;49(5):1261–8
Inhibition by retinoids of platelet growth factor–dependent stimulation of DNA synthesis and cell division in density–arrested C3H 10T1/2 fibroblasts. Mordan LJ. **Cancer Res** 1989 Feb 15;49(4):906–9
Inhibition by retinoic acid of type IV collagenolysis and invasion through reconstituted basement membrane by metastatic rat mammary adenocarcinoma cells. Nakajima M, et al. **Cancer Res** 1989 Apr 1;49(7):1698–706
Induction of protein kinase C in mouse melanoma cells by retinoic acid. Niles RM, et al. **Cancer Res** 1989 Aug 15; 49(16):4483–7
Neuronal cell differentiation of human neuroblastoma cells by retinoic acid plus herbimycin A. Preis PN, et al. **Cancer Res** 1988 Nov 15;48(22):6530–4
Lack of correlation between induction of chemotactic peptide receptors and stimulus–induced actin polymerization in HL–60 cells treated with dibutyryl cyclic adenosine monophosphate or retinoic acid. Rao KM, et al. **Cancer Res** 1988 Dec 1;48(23):6721–6
Mouse cellular retinoic acid binding protein: cloning, complementary DNA sequence, and messenger RNA expression during the retinoic acid–induced differentiation of F9 wild type and RA–3–10 mutant teratocarcinoma cells. Stoner CM, et al. **Cancer Res** 1989 Mar 15;49(6):1497–504
Effect of retinoic acid on phorbol ester–stimulated differentiation and protein kinase C–dependent phosphorylation in the U937 human monoblastoid cell. Ways DK, et al. **Cancer Res** 1988 Oct 15;48(20):5779–87
Modulation of growth and epidermal growth factor receptor activity by retinoic acid in human glioma cells. Yung WK, et al. **Cancer Res** 1989 Feb 15;49(4):1014–9
Ornithine decarboxylase basal activity in liver, oesophagus and lung of vitamin A deficient rats, and the effect of retinoic acid. Daliam A, et al. **Carcinogenesis** 1988 Dec; 9(12):2161–4
Enhancement of gap junctional communication by retinoids correlates with their ability to inhibit neoplastic transformation. Hossain MZ, et al. **Carcinogenesis** 1989 Sep; 10(9):1743–8
Effects of methylmercury on retinoic acid–induced neuroectodermal derivatives of embryonal carcinoma cells. Cadrin M, et al. **Cell Biol Toxicol** 1988 Mar;4(1):61–80
Inhibition of chondrogenesis by retinoic acid in limb mesenchymal cells in vitro: effects on PGE2 and cyclic AMP concentrations. Biddulph DM, et al. **Cell Differ Dev** 1988 Sep;25(1):65–75
The effect of retinoids on dendritic cell function. Bedford PA, et al. **Clin Exp Immunol** 1989 Mar;75(3):481–6
1,25–Dihydroxyvitamin D3, but not retinoic acid, induces the differentiation of U937 cells. Bhalla AK, et al. **Clin Exp Immunol** 1989 May;76(2):274–7
Inhibitory effect of retinoic acid on the respiratory burst of adult and cord blood neutrophils and macrophages: potential implication to bronchopulmonary dysplasia. Wolfson M, et al. **Clin Exp Immunol** 1988 Jun;72(3):505–9
Reversal of conjunctival transdifferentiation by topical retinoic acid. Tseng SC, et al. **Cornea** 1988;7(4):273–9
Retinoic acid improves epidermal morphogenesis. Asselineau D, et al. **Dev Biol** 1989 Jun;133(2):322–35
Retinoic acid promotes proliferation and chondrogenesis in the distal mesodermal cells of chick limb bud. Ide H, et al. **Dev Biol** 1988 Dec;130(2):767–73
Retinoic acid alters EGF receptor expression during palatogenesis. Abbott BD, et al. **Development** 1988 Apr; 102(4):853–67
Retinoic acid coordinately proximalizes regenerate pattern and blastema differential affinity in axolotl limbs. Crawford K, et al. **Development** 1988 Apr;102(4):687–98
Enhancement of interferon–induced 2–5 oligoadenylate synthetase activity by retinoic acid in human histiocytic lymphoma U937 cells and WISH cells. Ho CK, et al. **Differentiation** 1989 Mar;40(1):70–5
Differential effects of physiological concentrations of retinoic acid in vitro on chondrogenesis and myogenesis in chick craniofacial mesenchyme. Langille RM, et al. **Differentiation** 1989 May;40(2):84–92
Selective stimulation of in vitro limb–bud chondrogenesis by retinoic acid. Paulsen DF, et al. **Differentiation** 1988 Dec;39(2):123–30
Rat calvarial cell lines immortalized with SV–40 large T antigen: constitutive and retinoic acid–inducible expression of osteoblastic features. Heath JK, et al. **Endocrinology** 1989 Jun;124(6):3060–8
Retinoic acid selectively stimulates growth hormone secretion and messenger ribonucleic acid levels in rat pituitary cells. Morita S, et al. **Endocrinology** 1989 May; 124(5):2052–6
Effects of epidermal growth factor, fibroblast growth factor, retinoic acid and serum on anchorage–dependent and anchorage–independent growth of HRRT cells. Eker P. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):499–504
Retinoic acid regulates IgG Fc receptor expression in human myelomonocytic leukemia cells and normal peripheral monocytes. Nakamura T, et al. **Eur J Haematol** 1988 Sep; 41(3):258–66
The actions of retinal and retinoic acid on histamine release from rat peritoneal mast cells. Cantwell ME, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):43–51
Characteristics of cyclic AMP enhancement of retinoic acid induction of increased transglutaminase activity in HL60 cells. Maddox AM, et al. **Exp Cell Biol** 1988;56(1–2):49–59
Retinoic acid induces a specific membrane glycoprotein in human epithelial cell lines. Bakke O, et al. **Exp Cell Res** 1989 Jan;180(1):20–9
Specificity in the synergism between retinoic acid and EGF on the growth of adult human skin fibroblasts. Harper RA. **Exp Cell Res** 1988 Oct;178(2):254–63
Keratin 13 expression is linked to squamous differentiation in rabbit tracheal epithelial cells and down–regulated by retinoic acid. Jetten AM, et al. **Exp Cell Res** 1989 Jun; 182(2):622–34
Correlation between transglutaminase activity and polyamine levels in human neuroblastoma cells. Effect of retinoic acid and alpha–difluoromethylornithine. Melino G, et al. **Exp Cell Res** 1988 Dec;179(2):429–45
Biphasic response to retinoic acid dose in differentiation of F9 cells into primitive endoderm–like cells. Miki K, et al. **Exp Cell Res** 1988 Dec;179(2):344–51
Retinoic acid treatment of fibroblasts causes a rapid decrease in [3H]inositol uptake. Sinha R, et al. **Exp Cell Res** 1989 Apr;181(2):385–99
The effect of retinoids on the migration of Tenon's capsule fibroblasts. Joseph JP, et al. **Eye** 1988;2 (Pt 5):529–32
Phosphatidylinositol turnover is not a general regulator of neuroblastoma cell differentiation: comparison between two differentiating agents, retinoic acid and gamma–interferon. Lanciotti M, et al. **FEBS Lett** 1989 Jan 30;243(2):285–8
Retinoic acid inhibits phospholipid turnover and protein kinase C activity in RA–sensitive but not in RA–resistant cells. Vanier MC, et al. **FEBS Lett** 1988 Dec 5; 241(1–2):154–8
Retinoic acid enhances VIP receptor expression and responsiveness in human neuroblastoma cell, SH–SY5Y. Waschek JA, et al. **FEBS Lett** 1989 Jul 3;250(2):611–4
Modulation by retinoic acid of the growth of bone marrow cell progenitors from patients with myelodysplastic syndrome. De Francesco A, et al. **Haematologica (Pavia)** 1989 Jan–Feb;74(1):25–8
Absent clinical effects of retinoic acid and isoretinoin treatment in the myelodysplastic syndrome. Hast R, et al. **Hematol Oncol** 1989 Jul–Aug;7(4):297–301
Retinoic acid protects Langerhans' cells from the effects of the tumour promotor 12–O–tetradecanoylphorbol 13–acetate. Halliday GM, et al. **Immunology** 1989 Jul; 67(3):298–302
Inducer mediated in vitro differentiation in a neurogenic transplantable murine teratocarcinoma. Thakare AV, et al. **Indian J Exp Biol** 1988 Jun;26(6):440–4
Inhibition by retinoic acid of multiplication of virulent tubercle bacilli in cultured human macrophages. Crowle AJ, et al. **Infect Immun** 1989 Mar;57(3):840–4
Retinoic–acid–induced modulation of c–myc not dependent on its continued presence: possible role in pre–commitment for HL–60 cells. Guernsey DL, et al. **Int J Cancer** 1988 Oct 15;42(4):576–81
Modification of radiosensitivity and recovery from X ray damage in vitro by retinoic acid. Rutz HP, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1285–8
Differential induction of monocytic functions by dibutyryl cyclic AMP and retinoic acid in a human monoblast cell line U937. Gavison R, et al. **Isr J Med Sci** 1988 Dec; 24(12):697–701
Effects of retinoic acid and phorbol ester on lymphocytes and monocytes in B–lymphocytic leukemia. Polliack A, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):522–32
Human myelogenous leukemia cell line HL–60 cells resistant to differentiation induction by retinoic acid. Decreased content of glycosphingolipids and granulocytic differentiation by neolacto series gangliosides. Kitagawa S, et al. **J Biol Chem** 1989 Sep 25;264(27):16149–54
Retinoic acid is a modulator of thyroid hormone activation of Ca2+–ATPase in the human erythrocyte membrane

[published erratum appears in J Biol Chem 1989 Jun 15;264(17):10326] Smith TJ, et al. **J Biol Chem** 1989 Jan 15;264(2):687–9

Regulation of epidermal growth factor receptor gene expression by retinoic acid and epidermal growth factor. Thompson KL, et al. **J Biol Chem** 1989 Feb 25; 264(6):3230–4

Defective post–translational modification of collagen IV in a mutant F9 teratocarcinoma cell line is associated with delayed differentiation and growth arrest in response to retinoic acid. Wang SY, et al. **J Biol Chem** 1989 Sep 15; 264(26):15556–64

Retinoic acid or methionine enhance interferon's inhibition of the transformed phenotype with no effect on tumorigenicity. Brouty–Boyé D, et al.
J Biol Regul Homeost Agents 1988 Jan–Mar;2(1):45–9

Effects of retinoic acid on the activation and fusion of mouse alveolar macrophages induced by 1 alpha,25–dihydroxyvitamin D3. Miyaura C, et al.
J Bone Miner Res 1986 Aug;1(4):359–68

Regulation of alkaline phosphatase expression in a neonatal rat clonal calvarial cell strain by retinoic acid. Ng KW, et al. **J Bone Miner Res** 1988 Feb;3(1):53–61

Effect of vitamin A on bone resorption: evidence for direct stimulation of isolated chicken osteoclasts by retinol and retinoic acid. Oreffo RO, et al. **J Bone Miner Res** 1988 Apr;3(2):203–10

The use of retinoic acid to probe the relation between hyperproliferation–associated keratins and cell proliferation in normal and malignant epidermal cells. Kopan R, et al.
J Cell Biol 1989 Jul;109(1):295–307

Effect of retinoic acid on the phosphorylation of endogenous proteins in HL–60 cells. Spearman TN, et al.
J Cell Physiol 1989 Feb;138(2):349–57

Effect of donor age and prior sun exposure on growth inhibition of cultured human dermal fibroblasts by all trans–retinoic acid. Stanulis–Praeger BM, et al.
J Cell Physiol 1989 Apr;139(1):116–24

Retinoic acid modulates dome formation by MDCK cells in defined medium. Taub M. **J Cell Physiol** 1989 Oct; 141(1):24–32

Action of phorbol esters, bryostatins, and retinoic acid on cholesterol sulfate synthesis: relation to the multistep process of differentiation in human epidermal keratinocytes. Jetten AM, et al. **J Invest Dermatol** 1989 Jul;93(1):108–15

Down–regulation of glucocorticoid binding sites by retinoic acid in squamous carcinoma cells resistant to the induction of keratinization by hydrocortisone. Reiss M, et al.
J Invest Dermatol 1988 Oct;91(4):344–8

Hyaluronate accumulation in human epidermis treated with retinoic acid in skin organ culture. Tammi R, et al.
J Invest Dermatol 1989 Mar;92(3):326–32

Regulatory role of retinoic acid on cultured mouse keratinocyte inositol phospholipid metabolism: dose–dependent release of inositol triphosphate. Tang W, et al. **J Invest Dermatol** 1989 Jan;92(1):72–7

All–trans retinoic acid stimulates growth of adult human keratinocytes cultured in growth factor–deficient medium, inhibits production of thrombospondin and fibronectin, and reduces adhesion. Varani J, et al. **J Invest Dermatol** 1989 Oct;93(4):449–54

Antagonistic effects of retinoic acid and hydrocortisone on terminal differentiation of human squamous carcinoma cells. Violette SM, et al. **J Invest Dermatol** 1989 Jul; 93(1):165–8

Retinoic acid and tumour necrosis factor–alpha act in concert to control the level of alkaline phosphatase mRNA. Ng KW, et al. **J Mol Endocrinol** 1989 Jul;3(1):57–64

Changes in DNA copy numbers of bovine papillomavirus type 1 after termination of retinoic acid treatment. Li G, et al. **J Natl Cancer Inst** 1988 Dec 7;80(19):1567–70

Differentiation of human neuroblastoma cells: marked potentiation of prostaglandin E–stimulated accumulation of cyclic AMP by retinoic acid. Yu VC, et al.
J Neurochem 1988 Dec;51(6):1892–9

Development of cholinergic pedunculopontine neurons in vitro: comparison with cholinergic septal cells and response to nerve growth factor, ciliary neuronotrophic factor, and retinoic acid. Knusel B, et al. **J Neurosci Res** 1988 Oct–Dec; 21(2–4):365–75

The effect of 13–cis retinoic acid on hematopoiesis in human long–term bone marrow culture. Bleiberg I, et al.
Leuk Res 1988;12(7):545–50

Quantitative morphological aspects of granulocytic differentiation induced in HL–60 cells by dimethylsulfoxide and retinoic acid. Dufer J, et al. **Leuk Res** 1989;13(7):621–7

Effects of simultaneous and sequential exposure to granulocytic and monocytic inducers on the choice of differentiation pathway in HL–60 promyelocytic leukemia cells. Zinzar S, et al. **Leuk Res** 1989;13(1):23–30

Biphasic action of retinoids on gonadotropin receptor induction in rat granulosa cells in vitro. Bagavandoss P, et al. **Life Sci** 1988;43(20):1607–14

Effect of retinyl palmitate and 13–cis retinoic acid on immune functions in immunodeficient, nude mice. Watson RR, et al. **Life Sci** 1989;44(6):387–95

Proto–oncogene expression during retinoic acid–induced neural differentiation of embryonal carcinoma cells. Nakamura KD, et al. **Mech Ageing Dev** 1989 Apr; 48(1):53–62

Early retinoic acid–induced F9 teratocarcinoma stem cell gene ERA–1: alternate splicing creates transcripts for a homeobox–containing protein and one lacking the homeobox. LaRosa GJ, et al. **Mol Cell Biol** 1988 Sep; 8(9):3906–17

Differentiation–responsive elements in the 5' region of the mouse tissue plasminogen activator gene confer two–stage regulation by retinoic acid and cyclic AMP in teratocarcinoma cells. Rickles RJ, et al. **Mol Cell Biol** 1989 Apr;9(4):1691–704

1,25–Dihydroxyvitamin D3 interaction with dexamethasone and retinoic acid: effects on procollagen messenger ribonucleic acid levels in rat osteoblast–like cells. Kim HT, et al. **Mol Endocrinol** 1989 Jan;3(1):97–104

Accumulation of epidermal growth factor receptors in retinoic acid–treated fetal rat lung cells is due to enhanced receptor synthesis. Oberg KC, et al. **Mol Endocrinol** 1988 Oct;2(10):959–65

Regulation of the cellular retinoid–binding proteins and their messenger ribonucleic acids during P19 embryonal carcinoma cell differentiation induced by retinoic acid. Wei LN, et al. **Mol Endocrinol** 1989 Mar;3(3):454–63

Retinoic acid regulates growth hormone gene expression. Bedo G, et al. **Nature** 1989 May 18;339(6221):231–4

Retinoic acid and thyroid hormone induce gene expression through a common responsive element. Umesono K, et al. **Nature** 1988 Nov 17;336(6196):262–5

Nongenomic interactions of retinoic acid and thyroid hormone at the plasma membrane. **Nutr Rev** 1989 Jul; 47(7):213–5 (10 ref.)

The expression of multiple proto–oncogenes is differentially regulated during retinoic acid induced maturation of human neuroblastoma cell lines. Thiele CJ, et al. **Oncogene** 1988 Sep;3(3):281–8

Ability of retinoic and ascorbic acid to interfere with the binding of benzo(a)pyrene to DNA in explants from donors with bronchial cancer. Bodo M, et al. **Oncology** 1989; 46(3):178–82

Heterogeneity of the response to inducers of differentiation and to cytostatics of tumor cell populations. Pályi I.
Pathol Res Pract 1988 Dec;184(1):11–7

Prevention of UV irradiation induced suppression of monocyte functions by retinoids and carotenoids in vitro. Schoen DJ, et al. **Photochem Photobiol** 1988 Nov; 48(5):659–63

Median effect and long term recovery analysis of biological modifier interactions with difluoromethylornithine on the proliferation of human melanoma cells. Bregman MD, et al. **Pigment Cell Res** 1987;1(2):124–8

[In vitro induction of differentiation in leukemic cells by various inducers] Chen CM, et al.
Chung Hsi I Hsueh Tsa Chih 1987 Nov;40(5):417–24 (Eng. Abstr.) **(Chi)**

[The inducing effect of retinoic acid and harringtonine on differentiation of human leukemic cells in primary culture] Ji H. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):509–12, 36 (Eng. Abstr.) **(Chi)**

[Effects of retinoids on tumor specific immune response in mice] Hu XZ.
Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1988 Dec; 10(6):407–10 (Eng. Abstr.) **(Chi)**

[Ultrastructural studies on differentiation of human leukemic cell induced by retinoic acid and harringtonine] Si JY.
Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1988 Oct; 10(5):376–8 (Eng. Abstr.) **(Chi)**

[Effect of retinoic acid on the differentiation and growth of murine mastocyte precursors] Arock M, et al.
C R Soc Biol (Paris) 1988;182(4):361–71 (Eng. Abstr.) **(Fre)**

[Effect of long–term incubation with retinoic acid and FCS–depleted medium on the differentiation and proliferation of an experimental rhabdomyosarcoma cell line in vitro] Gerharz CD, et al. **Verh Dtsch Ges Pathol** 1988;72:218–22 (Eng. Abstr.) **(Ger)**

[Retinoic acid effect on the differentiation of blast cells in suspension] Burgaleta C, et al. **Sangre (Barc)** 1989 Jun; 34(3):186–90 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Changes in expression of tyrosine hydroxylase immunoreactivity in human SMS–KCNR neuroblastoma following retinoic acid or phorbol ester–induced differentiation. Pennypacker KR, et al.
Brain Res Mol Brain Res 1989 Jun;5(4):251–8

Cellular retinoic acid–binding protein and the role of retinoic acid in the development of the chick embryo. Maden M, et al. **Dev Biol** 1989 Sep;135(1):124–32

Lineage and pattern in the developing vertebrate limb. Newman SA. **Trends Genet** 1988 Dec;4(12):329–32 (35 ref.)

RADIATION EFFECTS

Photoisomerization of retinoic acid and its photoprotection in physiologic–like solutions. Curley RW Jr, et al.
Photochem Photobiol 1988 Jun;47(6):831–5

THERAPEUTIC USE

Clinical studies of 20% azelaic acid cream in the treatment of acne vulgaris. Comparison with vehicle and topical tretinoin. Katsambas A, et al.
Acta Derm Venereol Suppl (Stockh) 1989;143:35–9

Topical tretinoin therapy. Bondi EE. **Am Fam Physician** 1989 May;39(5):269–72 (17 ref.)

Ocular surface keratinization as a predictor of response to topical retinoic acid therapy [letter] Herbort CP, et al.
Arch Ophthalmol 1989 Sep;107(9):1275–6

Synergistic interaction between 13–cis–retinoic acid and glucarate: activity against rat mammary tumor induction and MCF–7 cells. Abou–Issa H, et al.
Biochem Biophys Res Commun 1989 Sep 29;163(3):1364–9

Allergic and irritant contact dermatitis compared in the treatment of alopecia totalis and universalis. A comparison of the value of topical diphencyprone and tretinoin gel. Ashworth J, et al. **Br J Dermatol** 1989 Mar;120(3):397–401

Topical tretinoin and photoaged skin. Goldfarb MT, et al.
Cutis 1989 May;43(5):476–82

Prevention and repair of photoaging: sunscreens and retinoids. Kligman LH. **Cutis** 1989 May;43(5):458–65 (35 ref.)

Prevention of skin cancer in xeroderma pigmentosum with oral isotretinoin. Moshell AN. **Cutis** 1989 May;43(5):485–90

The treatment of photoaged human skin by topical tretinoin. Kligman AM. **Drugs** 1989 Jul;38(1):1–8

Retinoic acid inhibition of a head and neck multicellular tumor spheroid model. Sacks PG, et al. **Head Neck** 1989 May–Jun;11(3):219–25

Topical tretinoin therapy: its use in photoaged skin. Goldfarb MT, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 2):645–50 (26 ref.)

Topical all–trans–retinoic acid prevents corticosteroid–induced skin atrophy without abrogating the anti–inflammatory effect. Lesnik RH, et al.
J Am Acad Dermatol 1989 Aug;21(2 Pt 1):186–90

Treatment of photodamaged facial skin with topical tretinoin. Leyden JJ, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 2):638–44

Linear keratosis follicularis: a specific entity? Report of a case responding to combined topical retinoid and alpha–hydroxy acid therapy. Thomas I, et al.
J Am Acad Dermatol 1989 Jun;20(6):1122–3

Retinoic acid in the treatment of keloids. Panabiere–Castaings MH. **J Dermatol Surg Oncol** 1988 Nov;14(11):1275–6

Retinoic acid therapy for promyelocytic leukaemia [letter] Chomienne C, et al. **Lancet** 1989 Sep 23;2(8665):746–7

Conflict of interest over Harvard drug [news] Shulman S.
Nature 1988 Oct 27;335(6193):754

Topical retinoid therapy for squamous metaplasia of various ocular surface disorders. A multicenter, placebo–controlled double–masked study. Soong HK, et al. **Ophthalmology** 1988 Oct;95(10):1442–6

[Localized Darier's disease. Topical treatment with retinoic acid] Zamora Martín E, et al.
Med Cutan Ibero Lat Am 1988;16(2):161–3 (Eng. Abstr.) **(Spa)**

TOXICITY

Influence of 13–cis and all–trans retinoic acid on rat embryonic development in vitro: correlation with isomerisation and drug transfer to the embryo. Klug S, et al. **Arch Toxicol** 1989;63(3):185–92

The molecular basis of retinoic acid induced night blindness. Law WC, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):825–9

Protein–energy malnutrition increases teratogenicity of hypervitaminosis A in rats. Malheiros LR, et al.
Braz J Med Biol Res 1988;21(3):659–62

Retinoic acid causes an anteroposterior transformation in the developing central nervous system. Durston AJ, et al.
Nature 1989 Jul 13;340(6229):140–4

Retinoic–acid–induced limb–reduction defects: perturbation of zones of programmed cell death as a pathogenetic mechanism. Alles AJ, et al. **Teratology** 1989 Aug; 40(2):163–71

Retinoic acid induction of featherlike structures from reticulate scales. Fisher CJ, et al. **Teratology** 1988 Oct; 38(4):321–8

Direct effects of retinoic acid on the development of the tail bud in chick embryos. Griffith CM, et al.
Teratology 1989 Mar;39(3):261–75

Retinoic acid vs. excess vitamin A. Kalter H. **Teratology** 1989 Jun;39(6):611–6

Interaction between the splotch mutation and retinoic acid in mouse neural tube defects in vitro. Kapron–Brás CM, et al. **Teratology** 1988 Aug;38(2):165–73

Effect of a high systemic background level of vitamin A on the teratogenicity of all–trans–retinoic acid given either acutely or subacutely. Nolen GA. **Teratology** 1989 Apr; 39(4):331–9

Cellular alterations and enhanced induction of cleft palate after coadministration of retinoic acid and TCDD. Abbott BD, et al. **Toxicol Appl Pharmacol** 1989 Jun 15; 99(2):287–301

Retinoic acid and 2,3,7,8–tetrachlorodibenzo–p–dioxin selectively enhance teratogenesis in C57BL/6N mice. Birnbaum LS, et al. **Toxicol Appl Pharmacol** 1989 May; 98(3):487–500

Derivation of retinoic acid and metabolites from a teratogenic dose of retinol (vitamin A) in mice. Kochhar DM, et al.
Toxicol Appl Pharmacol 1988 Dec;96(3):429–41

Toxicologic and immunologic evaluations of N–(all–trans–retinoyl)–DL–leucine and N–(all–trans–retinoyl)glycine. Lindamood C 3d, et al.
Toxicol Appl Pharmacol 1988 Nov;96(2):279–95

[Effect of retinyl acetate and retinoic acid on twilight vision, blood indicators and immunity] Afanas'ev IuI, et al.
Gig Tr Prof Zabol 1988 Sep;(9):29–31 (Eng. Abstr.) **(Rus)**

TRETOQUINOL see under ISOQUINOLINES

TRI-ALLATE see under THIOCARBAMATES

TRIACETIN see under TRIGLYCERIDES

TRIACETONEAMINE-N-OXYL see under CYCLIC N-OXIDES

TRIACETYLOLEANDOMYCIN

ADMINISTRATION & DOSAGE

[Controlled use of glucocorticoids in asthma. Monitoring by peak flow measurements—new therapies] Stemmer B. **Fortschr Med** 1988 Sep 20;106(27):67–8 (Ger)

ADVERSE EFFECTS

The incidence of corticosteroid side effects in chronic steroid-dependent asthmatics on TAO (troleandomycin) and methylprednisolone. Harris R, et al. **Ann Allergy** 1989 Aug;63(2):110–1

[Crossed hepatotoxicity of erythromycin propionate and troleandomycin? (letter)] Luherne JY, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):869–70 (Fre)

[Myocardial infarct caused by an ergotamine tartrate–troleandomycin combination] Baudouy PY, et al. **Rev Med Interne** 1988 Sep–Oct;9(4):420–2 (Fre)

PHARMACOLOGY

In vivo and in vitro effects of a new macrolide antibiotic roxithromycin on rat liver cytochrome P-450: comparison with troleandomycin and erythromycin. Delaforge M, et al. **Chem Biol Interact** 1988;68(3–4):179–88

TRIACYLGLYCEROL LIPASE see LIPASE

TRIACYLGLYCEROLS see TRIGLYCERIDES

TRIAGE see under EMERGENCY MEDICAL SERVICES

TRIAL OF LABOR

see related
CESAREAN SECTION
DELIVERY

VBAC delivery [letter] Flaster DJ. **Am Fam Physician** 1988 Dec;38(6):45–6

Unknown uterine scar and trial of labor. Pruett KM, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):807–10

Vaginal delivery in first pregnancy following a primary caesarean section. Ojo VA, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):121–6

Trial of labour after previous caesarean section: obstetric outcome. Chua S, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):12–7

Vaginal delivery after caesarean section: is it safe in a developing country? De Muylder X. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):99–102

Caesarean section and trial of scar. Targett C. **Aust N Z J Obstet Gynaecol** 1988 Nov;28(4):249–62 (74 ref.)

Trial of scar. Davies JA, et al. **Br J Hosp Med** 1988 Nov; 40(5):379–81 (25 ref.)

Trial of scar with induction/oxytocin in delivery following prior section. Meehan FP. **Clin Exp Obstet Gynecol** 1988; 15(4):117–23

True rupture of the caesarean section scar (a 15 year review, 1972–1987). Meehan FP, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):129–35

Trial of labour following prior section; a 5 year prospective study (1982–1987). Meehan FP, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):109–17

Vaginal delivery after caesarean section in primigravidae. Gibson DH. **Ir J Med Sci** 1988 Sep;157(9):290–2

Vaginal birth after cesarean section in a community hospital: a family practice residency experience. Guerdan BR, et al. **J Am Board Fam Pract** 1989 Jul–Sep;2(3):169–71

The effect of induced abortion on the risks and outcome of a trial of labor after a previous cesarean birth. Edelin KC, et al. **J Natl Med Assoc** 1988 Sep;80(9):993–5

VBAC program in a nurse-midwifery service. Five years of experience. Hangsleben KL, et al. **J Nurse Midwifery** 1989 Jul–Aug;34(4):179–84

Twice a cesarean, always a cesarean? Phelan JP, et al. **Obstet Gynecol** 1989 Feb;73(2):161–5

Trial of labor following cesarean section: dilemma. Ophir E, et al. **Obstet Gynecol Surv** 1989 Jan;44(1):19–24 (49 ref.)

Vaginal birth after cesarean section. A safe option in carefully selected patients. McKenna JP, et al. **Postgrad Med** 1988 Nov 1;84(6):211–5 (18 ref.)

[Vaginal delivery following cesarean section] Jansen FW, et al. **Ned Tijdschr Geneeskd** 1989 Apr 1;133(13):666–9 (Eng. Abstr.) (Dut)

[Outcome of delivery following previous cesarean section] Roumen FJ, et al. **Ned Tijdschr Geneeskd** 1989 Apr 1; 133(13):672–5 (Eng. Abstr.) (Dut)

[Induced labor and a trial of labor] Dubecq JP, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):792–3 (Fre)

[Comparison of 3 methods of a trial of labor: classic, using peridural anesthesia, after inducing labor] Dubecq JP, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):788–91 (Fre)

[Peridural anesthesia and a trial of labor] Horovitz J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):792 (Fre)

[Fetal morbidity and perinatal mortality in a trial of labor] Mezghani M, et al. **Tunis Med** 1987 Dec;65(12):759–62 (Eng. Abstr.) (Fre)

[Indications for cesarean section in the delivery of the 2d twin after vaginal birth of the 1st twin] Schröder W. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):165–8 (Eng. Abstr.) (Ger)

[The course of labor following previous Cesarean section] Wessel J, et al. **Gynakol Rundsch** 1988;28 Suppl 2:235–6 (Ger)

[Special obstetric problems in managing labor following cesarean section] Wessel J, et al. **Z Geburtshilfe Perinatol** 1989 May–Jun;193(3):134–8 (Eng. Abstr.) (Ger)

[Once cesarean section—always cesarean section?] Lembke J, et al. **Zentralbl Gynakol** 1988;110(21):1385–91 (Eng. Abstr.) (Ger)

[Labor in patients previously subjected to cesarean section: maternal and fetal aspects. Review of the literature] Ceruti M, et al. **Ann Ostet Ginecol Med Perinat** 1989 Jan–Feb; 110(1):28–34 (16 ref.) (Eng. Abstr.) (Ita)

TRIALKYLTIN COMPOUNDS

Proton magnetic resonance studies of triethyltin-induced edema during perinatal brain development in rabbits. Lorenzo AV, et al. **J Neurosurg** 1989 Mar;70(3):432–40

The accumulation of organotins in adult and seed oysters from selected estuaries prior to the introduction of U.K. regulations governing the use of tributyltin-based antifouling paints. Ebdon L, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):63–84

ADVERSE EFFECTS

[Hyperbaric oxygenation in experimental toxic brain edema] Romasenko MV, et al. **Zh Nevropatol Psikhiatr** 1989; 89(5):57–62 (Eng. Abstr.) (Rus)

ANALYSIS

Analysis of tributyltin compounds in shellfish by using gas chromatography–mass spectrometry. Hannah DJ, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):22–7

Determination of tri-n-butyltin and di-n-butyltin compounds in yellowtails. Sasaki K, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):888–93

Tributyltin contamination in the Firth of Forth (1975–87). Bailey SK, et al. **Sci Total Environ** 1988 Oct 15; 76(2–3):185–92

PHARMACOKINETICS

The disposition of 14C-trimethyltin in the pregnant rat and fetus. Lipscomb JC, et al. **Neurotoxicol Teratol** 1989 Mar–Apr;11(2):185–91

PHARMACOLOGY

Actions of orally administered organotin compounds on heme metabolism and cytochrome P-450 content and function in intestinal epithelium. Rosenberg DW, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1155–61

Parallel changes in operant behavioral adaptation and hippocampal corticosterone binding in rats treated with trimethyltin. Gerbec EN, et al. **Brain Res** 1988 Sep 20; 460(2):346–51

Effects of tributyltin compounds on ionic regulation and gill ATPase activity in estuarine fish. Pinkney AE, et al. **Comp Biochem Physiol [C]** 1989;92(1):125–9

Grafts containing fetal hippocampal tissue reduce activity and improve passive avoidance in hippocampectomized or trimethyltin-exposed rats. Woodruff ML, et al. **Exp Neurol** 1988 Oct;102(1):130–43

Chloride-dependent uncoupling of oxidative phosphorylation by triethyllead and triethyltin increases cytosolic free calcium in guinea pig cerebral cortical synaptosomes [published erratum appears in J Neurochem 1989 Feb;52(2):661] Kauppinen RA, et al. **J Neurochem** 1988 Nov;51(5):1617–25

Effects of delay, intertrial interval, delay behavior and trimethyltin on spatial delayed response in rats. Bushnell PJ. **Neurotoxicol Teratol** 1988 May–Jun;10(3):237–44

Time-dependent deficits in delay conditioning produced by trimethyltin. Peele DB, et al. **Psychopharmacology (Berlin)** 1989;97(4):521–8

Effects of tributyltin on biomembranes: alteration of flow cytometric parameters and inhibition of Na+, K+-ATPase two-dimensional crystallization. Zucker RM, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):393–403

POISONING

Dose-specific effects of trimethyltin poisoning on learning and hippocampal corticosterone binding. Messing RB, et al. **Neurotoxicology** 1988 Fall;9(3):491–502

TOXICITY

Tributyltin is a teratogen in producing deformities in limbs of the fiddler crab, Uca pugilator. Weis JS, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):583–7

Variations in the neurotoxic potency of trimethyltin. O'Callaghan JP, et al. **Brain Res Bull** 1989 Apr; 22(4):637–42

Acute toxicity of malathion, tetrabromobisphenol-A, and tributyltin chloride to mysids (Mysidopsis bahia) of three ages. Goodman LR, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):746–53

Acute toxicity of tributyltin (TBT) to early life history stages of the hard shell clam, Mercenaria mercenaria. Laughlin RB Jr, et al. **Bull Environ Contam Toxicol** 1989 Mar; 42(3):351–8

Toxicity assessment of bis(tri-n-butyltin) oxide (TBTO) using yeast Saccharomyces cerevisiae and human KB cells. Mochida K, et al. **Bull Environ Contam Toxicol** 1988 Dec; 41(6):847–50

Organotin-induced hemolysis, shape transformation and intramembranous aggregates in human erythrocytes. Gray BH, et al. **Cell Biol Toxicol** 1987 Mar;3(1):23–38

Dibutyltin and tributyltin compounds induce thymus atrophy in rats due to a selective action on thymic lymphoblasts. Snoeij NJ, et al. **Int J Immunopharmacol** 1988;10(7):891–9

Effects of tricyclohexylhydroxytin on the kinetics of adenosine triphosphatase system and protection by thiol reagents. Rao KS, et al. **J Biochem Toxicol** 1987 Summer; 2:125–40

Early metabolic responses of retinal neurons to trimethyltin intoxication. Toews AD, et al. **Neurochem Pathol** 1988 Apr; 8(2):63–78

Triethyltin exposure suppresses synaptic transmission in area CA1 of the rat hippocampal slice. Fountain SB, et al. **Neurotoxicol Teratol** 1988 Nov–Dec;10(6):539–48

The time-course of trimethyltin-induced fiber and terminal degeneration in hippocampus. Whittington DL, et al. **Neurotoxicol Teratol** 1989 Jan–Feb;11(1):21–33

Behavioral and physiological effects of trimethyltin in the rat hippocampus. Segal M. **Neurotoxicology** 1988 Fall; 9(3):481–9

Prenatal or postnatal exposure to bis(tri-n-butyltin)oxide in the rat: postnatal evaluation of teratology and behavior. Crofton KM, et al. **Toxicol Appl Pharmacol** 1989 Jan; 97(1):113–23

Flow cytometric analysis of the cellular toxicity of tributyltin. Zucker RM, et al. **Toxicol Lett** 1988 Oct;43(1–3):201–18

Immunotoxicity of tributyltin oxide in rats exposed as adults or pre-weanlings. Smialowicz RJ, et al. **Toxicology** 1989 Jul 3;57(1):97–111

[Implication of lipid peroxidation in triethyltin poisoning in the rat] Boulieu R, et al. **C R Soc Biol (Paris)** 1988; 182(2):196–201 (Eng. Abstr.) (Fre)

TRIAMCINOLONE

ADMINISTRATION & DOSAGE

Tenosynovitis [letter] Watson NA. **J R Soc Med** 1988 Dec; 81(12):742

Local injection therapy for the treatment of chronic pain. Bourne J. **Practitioner** 1988 Jun 8;232(1450):692–4

ANALOGS & DERIVATIVES

Investigations on the development and regression of corticosteroid-induced thinning of the skin in various parts of the human body during and after topical application of amcinonide. Lubach D, et al. **Dermatologica** 1989; 178(2):93–7

Adrenocortical suppression associated with topical otic administration of glucocorticoids in dogs. Moriello KA, et al. **J Am Vet Med Assoc** 1988 Aug 1;193(3):329–31

[Long-term therapy using beclomethasone preparations in our experience] Frank-Piskorska A, et al. **Pneumonol Pol** 1988 Nov;56(11):518–22 (Eng. Abstr.) (Pol)

[Effect of the thymus factor (TFX Polfa) on the clinical status of patients on long-term treatment with corticosteroids] Matusiewicz R, et al. **Wiad Lek** 1988 Dec 15;41(24):1630–2 (Eng. Abstr.) (Pol)

PHARMACOKINETICS

[Pharmacokinetics of triamcinolone following oral administration] Pörtner M, et al. **Arzneimittelforschung** 1988 Dec;38(12):1838–40 (Eng. Abstr.) (Ger)

[Thermographic study of the percutaneous absorption of corticosteroids] Ippolito F, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):9–12 (Eng. Abstr.) (Ita)

PHARMACOLOGY

Glucocorticoid regulation of human growth hormone expression in transgenic mice and transiently transfected cells. Selden RF, et al. **J Endocrinol** 1989 Jul;122(1):49–60

Steroid-induced ocular hypertension in the rabbit: a model using subconjunctival injections. Hester DE, et al. **J Ocul Pharmacol** 1987 Fall;3(3):185–9

THERAPEUTIC USE

Longitudinal melanonychia after healing of lichen planus. Juhlin L, et al. **Acta Derm Venereol (Stockh)** 1989; 69(4):338–9

Antiinflammatory effects of a corticosteroid and protease

inhibitor agents on antigen-induced otitis media in chinchillas. Hamaguchi Y, et al. **Am J Otolaryngol** 1988 May-Jun;9(3):142-8

Injections and physiotherapy for the painful stiff shoulder. Dacre JE, et al. **Ann Rheum Dis** 1989 Apr;48(4):322-5

Triamcinolone into the knee joint in juvenile chronic arthritis. Earley A, et al. **Clin Exp Rheumatol** 1988 Apr-Jun; 6(2):153-5

Lichen planus of the nail: treatment with antimalarials. Mostafa WZ. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):289-90

Posterior sub-Tenon's injections of corticosteroids in uveitis patients with cystoid macular edema. Jennings T, et al. **Jpn J Ophthalmol** 1988;32(4):385-91

Epidural steroids, epidural morphine and epidural steroids combined with morphine in the treatment of post-laminectomy syndrome. Rocco AG, et al. **Pain** 1989 Mar;36(3):297-303

TRIAMCINOLONE ACETONIDE

Unnecessary addition of ethylenediamine hydrochloride to "generic" nystatin creams. Fisher AA.
J Am Acad Dermatol 1989 Jan;20(1):129-30

[Effects of psychotropic drugs of the phenothiazine series on matrix activity of thymocyte DNA and glucocorticoid receptor interactions] Golikov PP. **Biull Eksp Biol Med** 1989 Jan;107(1):56-8 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

A retrospective review of the effects of one year of triamcinolone acetonide aerosol treatment on the growth patterns of asthmatic children. Brown DC, et al.
Ann Allergy 1989 Jul;63(1):47-51

Spinal epidural abscess following steroid injection for sciatica. Case report. Chan ST, et al. **Spine** 1989 Jan; 14(1):106-8

[Distention arthrography in the treatment of adhesive capsulitis of the shoulder] Morency G, et al.
Can Assoc Radiol J 1989 Apr;40(2):84-6 (Eng. Abstr.) **(Fre)**

[Treatment of lumbosciatica by intradisk injection of triamcinolone hexacetonide (hexatrione). Open study with 30 patients] Houvenagel E, et al.
Rev Rhum Mal Osteoartic 1988 Oct;55(10):763-6 **(Fre)**

[Evoked potentials with intrathecal and systemic corticosteroid therapy in multiple sclerosis] Heun R, et al. **EEG EMG** 1989 Jun;20(2):88-91 (Eng. Abstr.) **(Ger)**

[Efficacy and tolerance of a preparation containing triamcinolone acetonide, nystatin and neomycin] Flati G, et al. **Clin Ter** 1987 Nov 15;123(3):185-9 (Eng. Abstr.) **(Ita)**

[Activity and tolerance of a dermatologic preparation with a triamcinolone acetonide and nystatin base in skin diseases caused by Candida albicans] Rozzoni M, et al. **Clin Ter** 1987 Dec 15;123(5):363-8 (Eng. Abstr.) **(Ita)**

[Treatment of patients with gonarthrosis by intra-articular administration of drugs] Popov VV, et al.
Klin Med (Mosk) 1989 Apr;67(4):104-8 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Retinal and choroidal vascular occlusion secondary to corticosteroid embolisation. Wilkinson WS, et al.
Br J Ophthalmol 1989 Jan;73(1):32-4

Comparative teratogenicity of triamcinolone acetonide and dexamethasone in the rhesus monkey (Macaca mulatta). Jerome CP, et al. **J Med Primatol** 1988;17(4):195-203

Local subcutaneous atrophy following arthroscopy of the TMJ. Goldberg JS, et al. **J Oral Maxillofac Surg** 1989 Sep; 47(9):986-7

Scleroderma linear atrophy after the use of intralesional steroids for periorbital hemangiomas: a review of complications. Vazquez-Botet R, et al.
J Pediatr Ophthalmol Strabismus 1989 May-Jun; 26(3):124-7

[Adverse effect of the long-term use of triamcinolone acetonide in patients with bronchial asthma] Madalińska M, et al. **Pol Tyg Lek** 1988 May 23;43(21):685-8 (Eng. Abstr.) **(Pol)**

ANALOGS & DERIVATIVES

Corticosteroid-induced cleft palate in short-ear mice. Marazita ML, et al. **J Craniofac Genet Dev Biol** 1988; 8(1):47-51

[Local treatment of chronic juvenile arthritis] Manigne P, et al. **Ann Pediatr (Paris)** 1988 Oct;35(8):561-3 (Eng. Abstr.) **(Fre)**

METABOLISM

The effect of hormonal imprinting on 3H-steroid incorporation of Tetrahymena pyriformis. Fülöp AK, et al. **Acta Morphol Hung** 1988;36(1-2):27-33

Comparison of in vivo activation of triamcinolone acetonide- and RU 38486-receptor complexes in the CEM-C7 and IM-9 human leukemic cell lines. Schmidt TJ.
Cancer Res 1989 Aug 15;49(16):4390-5

The corticosteroid receptor and the action of various steroids in rainbow trout fibroblasts. Lee LE, et al.
Gen Comp Endocrinol 1989 Apr;74(1):85-95

Binding of hormone accelerates the kinetics of glucocorticoid and progesterone receptor binding to DNA. Schauer M, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1123-7

PHARMACOLOGY

Effect of intra-articular glucocorticoids on the disposition of sulphadimidine in chronic osteoarthritis patients. Reeves PT, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):563-8

Autocrine growth factor in defined serum-free medium of human salivary gland adenocarcinoma cell line HSG. Kurokawa R, et al. **Cancer Res** 1989 Sep 15;49(18):5135-42

Rebound of aldosterone but not of corticosterone after suppression of adrenal function by triamcinolone acetonide in rats. Meier G. **Clin Sci** 1988 Nov;75(5):551-7

Glucocorticoid hormone adversely affects the growth and regeneration of cartilage in vitro. Weiss A, et al.
Growth Dev Aging 1988 Summer;52(2):67-75

Multiple binding components for methyltrienolone in canine prostatic epithelial cells. Turcotte G, et al.
J Steroid Biochem 1988 Dec;31(6):955-62

Effect of in vivo glucocorticoid administration on histamine metabolism in rat brain synaptosomes. Walajtys-Rode E, et al. **Neurosci Lett** 1989 Feb 27;97(3):340-4

Rate of formation of tertiary dentin in dogs' teeth in response to lining materials. Ivanovic V, et al.
Oral Surg Oral Med Oral Pathol 1989 Jun;67(6):684-8

THERAPEUTIC USE

A double-blind comparative study to compare the efficacy of Locoid C with Tri-Adcortyl in children with infected eczema. Meenan FO. **Br J Clin Pract** 1988 May;42(5):200-2

Mometasone furoate ointment and cream 0.1 percent in treatment of psoriasis: comparison with ointment and cream formulations of fluocinolone acetonide 0.025 percent and triamcinolone acetonide 0.1 percent. Medansky RS, et al. **Cutis** 1988 Nov;42(5):480-5

Psoriasis therapy: comparative studies with a hydrocolloid dressing, plastic film occlusion, and triamcinolone acetonide cream. David M, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):511-4

Prolongation of skin allograft survival by pretreatment of allograft with monoclonal antibody and steroids. Levinson R, et al. **J Burn Care Rehabil** 1988 Nov-Dec;9(6):623-8

Evaluation of the effect of topical steroids on human scar contracture using a nude mouse model. Waymack JP, et al. **J Burn Care Rehabil** 1988 Nov-Dec;9(6):640-2

Intralesional steroids in cutaneous hemangioma. Reyes BA, et al. **J Dermatol Surg Oncol** 1989 Aug;15(8):828-32

Nonoperative treatment of trigger fingers and thumbs. Freiberg A, et al. **J Hand Surg [Am]** 1989 May;14(3):553-8

Intralesional corticosteroid therapy for infantile hemangiomas. Sloan GM, et al. **Plast Reconstr Surg** 1989 Mar;83(3):459-67

[Continuous high-dose corticosteroid pressured aerosol therapy in steroid-dependent asthma] Even P, et al.
Presse Med 1989 Jun 17;18(24):1191-4 (Eng. Abstr.) **(Fre)**

[Multicenter randomized double-blind study of triamcinolone hexacetonide versus chymopapain in the treatment of disk lumbosciatica. Initial results at 6 months] Bourgeois P, et al. **Rev Rhum Mal Osteoartic** 1988 Oct;55(10):767-9 **(Fre)**

[Clinical-therapeutic evaluation of a new dermatologic preparation for topical use with a base of alcyonide and neomycin] Cappelletti E, et al.
Riv Eur Sci Med Farmacol 1987 Sep;9(3):335-40 (Eng. Abstr.) **(Ita)**

TOXICITY

Central nervous system malformations induced by triamcinolone acetonide in nonhuman primates: pathogenesis. Tarara RP, et al. **Teratology** 1988 Sep; 38(3):259-70

Central nervous system malformations induced by triamcinolone acetonide in nonhuman primates: pathology. Tarara RP, et al. **Teratology** 1989 Jan;39(1):75-84

TRIAMTERENE

ADVERSE EFFECTS

Triamterene nephrolithiasis. Dooley DP, et al. **Milit Med** 1989 Mar;154(3):126-7

Triamterene and the kidney. Sica DA, et al. **Nephron** 1989; 51(4):454-61 (72 ref.)

Incidence of cardiac arrhythmias associated with mild hypokalemia induced by low-dose diuretic therapy for hypertension. Peters RW, et al. **South Med J** 1989 Aug; 82(8):966-9, 976

ANALOGS & DERIVATIVES

Deconjugation of p-hydroxytriamterene sulphate in the rat. Muirhead MR, et al. **Xenobiotica** 1989 Jun;19(6):655-60

ANALYSIS

Physicochemical and structural studies of triamterene. Dahl O, et al. **J Pharm Sci** 1989 Jul;78(7):598-606

PHARMACOKINETICS

Pharmacokinetics of triamterene in geriatric patients—influence of piretanide and hydrochlorothiazide. Mühlberg W, et al. **Arch Gerontol Geriatr** 1989 Jan; 8(1):73-85

Effects of formulation and food on the absorption of hydrochlorothiazide and triamterene or amiloride from combination diuretic products. Williams RL, et al.
Pharm Res 1987 Aug;4(4):348-52

PHARMACOLOGY

Pharmacodynamics and pharmacokinetics of furosemide-retard and furosemide-retard/triamterene. Heimsoth V, et al. **Eur J Drug Metab Pharmacokinet** 1988 Jul-Sep;13(3):161-4

Dissociation of the natriuretic and antikaliuretic properties of triamterene derivatives by dose-response experiments. Priewer H, et al. **Pharm Res** 1987 Feb;4(1):66-9

[Localization of the action of furosemide and triamterene in the nephron by means of correlating their pharmacokinetics and pharmacodynamics] Lebedev AA, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):44-7 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Postmarketing surveillance in 70,898 patients treated with a triamterene/hydrochlorothiazide combination (Maxzide). Hollenberg NK, et al. **Am J Cardiol** 1989 Jan 17; 63(4):37B-41B

Long-term metabolic effects of spironolactone and thiazides combined with potassium-sparing agents for treatment of essential hypertension. Jeunemaitre X, et al.
Am J Cardiol 1989 Nov 15;62(16):1072-7

Efficacy and safety of triamterene/hydrochlorothiazide combinations in mild systemic hypertension. Schnaper HW, et al. **Am J Cardiol** 1989 Jan 17;63(4):32B-36B

Hyperkalemia in diabetes mellitus. Effect of a triamterene-hydrochlorothiazide combination. Hollenberg NK, et al. **Arch Intern Med** 1989 Jun;149(6):1327-30

A comparison of a hydrochlorothiazide plus triamterene combination (Dyazide) and atenolol in the treatment of patients with mild hypertension: a multicentre study in general practice. Philip IG, et al. **Br J Clin Pract** 1987 Oct;41(10):947-53

Comparative efficacy and bioequivalence of a brand-name and a generic triamterene-hydrochlorothiazide combination product. Sharoky M, et al. **Clin Pharm** 1989 Jul;8(7):496-500

Comparison of two combined diuretics in the treatment of essential hypertension. Verhiest W, et al.
Int J Clin Pharmacol Ther Toxicol 1989 Jul;27(7):342-5

Isolated systolic hypertension: data from the European Working Party on High Blood Pressure in the Elderly. O'Malley K, et al. **J Hypertens Suppl** 1988 Nov;6(1):S105-8

Clinical use of the potassium-sparing diuretics. Krishna GG, et al. **Semin Nephrol** 1988 Dec;8(4):354-64 (110 ref.)

[Basic therapy of chronic heart failure with digitalis or diuretics?] Sievert H, et al. **Dtsch Med Wochenschr** 1989 Mar 10;114(10):363-7 (Eng. Abstr.) **(Ger)**

TRIATOMA see under **TRIATOMIDAE**

TRIATOMIDAE

The hemocytes of Panstrongylus megistus (Hemiptera: Reduviidae). Barracco MA, et al.
Mem Inst Oswaldo Cruz 1987 Jul-Sep;82(3):431-8

Current research on Amazonian triatominae. Barrett TV.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:441-7

[Control of transmission of Chagas disease in Mambaí-Goiás, Brazil (1982-1984)] Garcia-Zapata MT, et al.
Rev Soc Bras Med Trop 1986 Oct-Dec;19(4):219-25 (Eng. Abstr.) **(Por)**

ANATOMY & HISTOLOGY

The effects of artificial diets on the anterior intestinal cell ultrastructure of Rhodnius prolixus (Hemiptera:Reduviidae). Billingsley PF, et al.
Int J Parasitol 1989 May;19(3):291-9

Junctional specializations in the seminiferous epithelium of an insect (Triatoma infestans): a freeze fracture and lanthanum tracer study. Miranda JC, et al. **Tissue Cell** 1988; 20(4):611-9

The development of microtubular arrays in the germ tissue of an insect telotrophic ovary. Valdimarsson G, et al.
Tissue Cell 1989;21(1):123-38

DRUG EFFECTS

Short- and long-term effects of proallatotoxin (ethoxyprecocene II) on Rhodnius prolixus females. de Azambuja P, et al. **Mem Inst Oswaldo Cruz** 1987 Apr-Jun; 82(2):247-51

Effects of precocene and azadirachtin in Rhodnius prolixus: some data on development and reproduction. Garcia ES, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:67-73

ENZYMOLOGY

Inhibition of xanthine dehydrogenase from Triatoma infestans by some purine analogues. Ribeiro LP.
Biomed Biochim Acta 1988;47(2):107-13

Studies on the trehalase from the hemolymph of Triatoma infestans. Conter PF, et al. **Rev Bras Biol** 1988 Nov; 48(4):761-9

GENETICS

Polyploidization of the BTC-32 cell line from Triatoma infestans (Hemiptera, Reduviidae). Mello ML, et al. **Genetica** 1987 Oct 15;74(2):131-6

Dispersing behaviour of T. infestans: evidence from a genetical study of field populations in Bolivia. Dujardin JP, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:435-40

GROWTH & DEVELOPMENT

Developmental and diurnal changes in ecdysteroid biosynthesis by prothoracic glands of Rhodnius prolixus (Hemiptera) in vitro during the last larval instar. Vafopoulou X, et al. **Gen Comp Endocrinol** 1989 Jun; 74(3):484-93

METABOLISM

Transport and utilization of free fatty acids in Triatoma infestans. Soulages JL, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):465-71

MICROBIOLOGY

Characterization of Triatoma virus, a picorna-like virus isolated from the triatomine bug Triatoma infestans. Muscio OA, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2929-34

PARASITOLOGY

Urban Trypanosoma cruzi: biological characterization of isolates from Panstrongylus geniculatus. Sampson-Ward L, et al. **Ann Soc Belg Med Trop** 1988 Jun;68(2):95-106

Trypanosoma cruzi: quantitative studies of development of two strains in small intestine and rectum of the vector Triatoma infestans. Schaub GA. **Exp Parasitol** 1989 Apr; 68(3):260-73

Cannibalism and coprophagy are modes of transmission of Blastocrithidia triatomae (Trypanosomatidae) between triatomines. Schaub GA, et al. **J Protozool** 1989 Mar-Apr; 36(2):171-5

Studies on Trypanosoma rangeli Tejera, 1920. IX. Course of infection in different stages of Rhodnius prolixus. Añez N, et al. **Mem Inst Oswaldo Cruz** 1987 Jan-Mar;82(1):1-6

Effects of precocene and azadirachtin on the development of Trypanosoma cruzi in Rhodnius prolixus. Garcia ES. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:578-9

Metacyclogenesis of Trypanosoma cruzi in the vector Triatoma infestans. Schaub GA. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:563-70

Parasite-host interrelationships of Blastocrithidia triatomae and tristomines. Schaub GA. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:622-32

Studies in search of a suitable experimental insect model for xenodiagnosis of hosts with Chagas' disease. 2 Attempts to upgrade the reliability and the efficacy of xenodiagnosis in chronic Chagas' disease. Szumlewicz AP, et al. **Mem Inst Oswaldo Cruz** 1987 Apr-Jun;82(2):259-72

Azadirachtin inhibits Trypanosoma cruzi infection of its triatomine insect host, Rhodnius prolixus. Rembold H, et al. **Naturwissenschaften** 1989 Feb;76(2):77-8

Development of isolated and group-reared first instars of Triatoma infestans infected with Trypanosoma cruzi. Schaub GA. **Parasitol Res** 1988;74(6):593-4

Influence of Blastocrithidia triatomae (Trypanosomatidae) on the reduviid bug Triatoma infestans: alterations in the Malpighian tubules. Schaub GA, et al. **Parasitol Res** 1988; 75(2):88-97

Cultivation of Blastocrithidia triatomae (Trypanosomatidae) on a cell line of its host Triatoma infestans (Reduviidae). Reduth D, et al. **Parasitology** 1989 Jun;98 Pt 3:387-93

Studies in search of a suitable experimental insect model for xenodiagnosis of hosts with Chagas' disease. 3—On the interaction of vector species and parasite strain in the reaction of bugs to infection by Trypanosoma cruzi. Perlowagora-Szumlewicz A, et al. **Rev Saude Publica** 1988 Oct;22(5):390-400

Dipetalogaster maxima or D. maximus as a xenodiagnostic agent. Marsden PD. **Rev Soc Bras Med Trop** 1986 Oct-Dec; 19(4):205-7 (20 ref.) (Eng, Por)

The palm tree Copernicia cerifera (carnaúba) as an ecotope of Rhodnius nasutus in rural areas of the state of Piauí, Northeastern Brazil. Pinto A da S, et al. **Rev Soc Bras Med Trop** 1986 Oct-Dec;19(4):243-5

Developmental time and mortality of larvae of Triatoma infestans infected with Trypanosoma cruzi. Schaub GA. **Trans R Soc Trop Med Hyg** 1988;82(1):94-6

Chagas' disease and its insect vector. Effect of azadirachtin A on the interaction of a triatomine host (Rhodnius prolixus) and its parasite (Trypanosoma cruzi). Garcia ES, et al. **Z Naturforsch [C]** 1989 Mar-Apr;44(3-4):317-22

[Control of Chagas' disease vectors in Brazil and risk of domiciliary reinfestation by secondary vectors] Dias JC. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:387-91 (17 ref.) (Por)

[Distribution and natural infection index of triatominae captured in the Campinas region, São Paulo, Brazil] Ferraz Filho AN, et al. **Rev Soc Bras Med Trop** 1987 Jan-Mar; 20(1):25-30 (Eng. Abstr.) (Por)

[Post-mortem artificial xenodiagnosis in chronic chagasic patients] Lopes ER, et al. **Rev Soc Bras Med Trop** 1986 Oct-Dec;19(4):259-62 (Eng. Abstr.) (Por)

[Effect of desiccation of triatoma feces on the survival of metacyclic forms of Trypanosoma cruzi] Soares VA, et al. **Rev Soc Bras Med Trop** 1986 Oct-Dec;19(4):233-7 (Eng. Abstr.) (Por)

[Behavior of the infection and morphologic differentiation of Trypanosoma cruzi and T. rangeli in the intestine of the vector Rhodnius prolixus] Vallejo GA, et al. **Rev Bras Biol** 1988 Aug;48(3):577-87 (Eng. Abstr.) (Spa)

PHYSIOLOGY

Inputs to the hormonal control of egg development in Rhodnius prolixus. Davey KG. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:103-8

Induced-antibacterial factors in the hemolymph of Rhodnius prolixus. de Azambuja P. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:576-7

The roles of haemolymphatic lipoproteins in the oogenesis of Rhodnius prolixus. Gondim KC, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:89-92

Behavior of triatomines (Hemiptera:Reduviidae) vectors of Chagas' disease. IV. Fecundity, fertility and longevity of Panstrongylus megistus (Burm., 1835) pairs and virgin females starved under laboratory conditions. Lima MM, et al. **Mem Inst Oswaldo Cruz** 1987 Oct-Dec;82(4):501-9

Behavior of triatomines (Hemiptera: Reduviidae) vectors of Chagas' disease. III. Influence of the number of matings on the fecundity and fertility of Panstrongylus megistus (Burm., 1835) in the laboratory. Lima MM, et al. **Mem Inst Oswaldo Cruz** 1987 Jan-Mar;82(1):37-41

Secretory activity and endocrine regulation of male accessory glands in the blood-sucking bug Panstrongylus megistus (Hemiptera: Reduviidae). Regis L, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:75-8

[Comparative study of the development cycle of Rhodnius neglectus fed on pigeons or mice] Diotaiuti L, et al. **Rev Soc Bras Med Trop** 1987 Apr-Jun;20(2):95-9 (Eng. Abstr.) (Por)

[Feeding and defecation patterns in 5th instar nymphs of 4 species of triatomines (Rhodnius prolixus, Triatoma pallidipennis, T. infestans and T. brasiliensis, Hemiptera, Reduviidae)] Zabala NA, et al. **Acta Cient Venez** 1988; 39(1):79-83 (Eng. Abstr.) (Spa)

[Vital statistics of Rhodnius neivai Lent, 1953 (Hemiptera: Reduviidae) under experimental conditions] Cabello DR, et al. **Mem Inst Oswaldo Cruz** 1987 Oct-Dec;82(4):511-24 (Eng. Abstr.) (Spa)

[Effect of the hemolymph of Triatoma infestans on the morphogenesis of Trypanosoma cruzi] Isola EL, et al. **Rev Argent Microbiol** 1983;15(3):181-5 (Eng. Abstr.) (Spa)

[Home ecology of trypanosomiasis americana: feeding profile of Triatoma infestans in a rural area of the Santiago del Estero province, Argentina] Wisnivesky-Colli C, et al. **Rev Soc Bras Med Trop** 1987 Jan-Mar;20(1):31-9 (Eng. Abstr.) (Spa)

ULTRASTRUCTURE

Recombination nodules, synaptonemal complexes and heterochromatin in the hemipteran Triatoma infestans. Solari AJ, et al. **Microsc Electron Biol Celular** 1987 Dec; 11(2):179-95

[Ultrastructural aspects of the corpus cardiacum, corpus allatum and aorta of Panstrongylus megistus (Hemiptera: Reduviidae)] Schuetz MJ, et al. **Rev Bras Biol** 1988 Aug; 48(3):625-34 (Eng. Abstr.) (Por)

TRIATOMINAE see **TRIATOMIDAE**

TRIATRIAL HEART see **COR TRIATRIATUM**

TRIAZENES

PHARMACOLOGY

Inhibition of glycoprotein oligosaccharide processing in vitro and in influenza-virus-infected cells by alpha-D-mannopyranosylmethyl-p-nitrophenyltriazene. McDowell W, et al. **Biochem J** 1988 Nov 1;255(3):991-8

Changes in the tumorigenic and metastatic properties of murine melanoma cells treated with a triazene derivative. Allegrucci M, et al. **Clin Exp Metastasis** 1989 May-Jun; 7(3):329-41

Changes of immunological patterns of human cancer cells treated in vitro with a triazene compound. D'Atri S, et al. **Immunopharmacol Immunotoxicol** 1989;11(1):101-18

Triacsin C: a differential inhibitor of arachidonoyl-CoA synthetase and nonspecific long chain acyl-CoA synthetase. Hartman EJ, et al. **Prostaglandins** 1989 Jun; 37(6):655-71

THERAPEUTIC USE

Role of host responses in the drug treatment of metastasis. Giraldi T, et al. **Adv Exp Med Biol** 1988;233:351-60

TOXICITY

Teratogenicity of 3,3-dimethyl-1-phenyltriazene in the rat: gross malformations including micrognathism. Frank AA, et al. **Teratology** 1989 Jan;39(1):53-61

TRIAZINES

A systematic evaluation of bathophenanthroline, ferrozine and ferene in an ICSH-based method for the measurement of serum iron. Derman DP, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):144-7

Ultrastructure of the contractile apparatus of rat skeletal muscle embedded in an aqueous medium. Jakubiec-Puka A, et al. **Gen Physiol Biophys** 1989 Jun;8(3):185-202

Observations on the effect of cyromazine on inhibition of larval mosquito development in diluted wastewater. Cohen J. **J Am Mosq Control Assoc** 1986 Sep;2(3):367-8

A laboratory study of cyromazine on Aedes aegypti and Culex quinquefasciatus and its activity on selected predators of mosquito larvae. Nelson FR, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):296-9

A protein-free blocking system for the covalently binding matrix cyanuric chloride-activated paper in immunological procedures. Hunger HD, et al. **J Biochem Biophys Methods** 1988 Sep;17(1):43-50

X-ray diffraction analyses of crystals of rat liver NAD(P)H:(quinone-acceptor) oxidoreductase containing cibacron blue. Ysern X, et al. **J Biol Chem** 1989 May 15; 264(14):7765-7

Design and applications of biomimetic anthraquinone dyes. Purification of calf intestinal alkaline phosphatase with immobilised terminal ring analogues of C.I. reactive blue 2. Lindner NM, et al. **J Chromatogr** 1989 Jun 28; 473(1):227-40

Inhibition of growth and development of tobacco hornworm (Lepidoptera: Sphingidae) larvae by cyromazine. Hughes PB, et al. **J Econ Entomol** 1989 Feb;82(1):45-51

Crystallographic resolution and crystal and molecular structures of stereoisomers of 1,3,5-triglycidyl-s-triazinetrione. Hempel A, et al. **J Med Chem** 1989 Mar;32(3):648-51

A new method for cell culture on an electron-transparent melamine foil suitable for successive LM, TEM and SEM studies of whole cells. Westphal C, et al. **J Microsc** 1988 Jun;150 (Pt 3):225-31

Re: Effect of silver oxide/trichloroisocyanuric acid antimicrobial urinary drainage system on catheter-associated bacteriuria [letter] Burke HB. **J Urol** 1989 May;141(5):1213

Molecular modelling of inhibitors and herbicides for photosynthetic systems. Oettmeier W, et al. **Prog Clin Biol Res** 1989;291:251-4

[Synthesis of 1-(dichloro-1,3,5-triazinyl)-2-methylisoindole as a new fluorescent derivatization reagent and its reactivity for estrogens. II. Determination of estriol in pregnancy urine] Fujino H, et al. **Yakugaku Zasshi** 1988 Aug; 108(8):801-3 (Eng. Abstr.) (Jpn)

ADMINISTRATION & DOSAGE

Use of sodium dichloroisocyanurate granules for spills of body fluids. Coates D, et al. **J Hosp Infect** 1989 Apr; 13(3):241-51

ADVERSE EFFECTS

Azapropazone induced hepatitis. Lo TC, et al. **BMJ** 1988 Dec 17;297(6663):1614

Allergic contact dermatitis from triglycidyl isocyanurate in polyester paint pigments. Mathias CG. **Contact Dermatitis** 1988 Jul;19(1):67-8

Occupational contact allergy to triglycidyl isocyanurate (TGIC, Tepic). Nishioka K, et al. **Contact Dermatitis** 1988 Nov;19(5):379-80

Effect of non-steroidal anti-inflammatory drugs on the course of osteoarthritis. Rashad S, et al. **Lancet** 1989 Sep 2;2(8662):519-22

ANALYSIS

A field evaluation of air sampling methods for TNT and RDX. Bishop RW, et al. **Am Ind Hyg Assoc J** 1988 Dec; 49(12):635-8

Residue analysis of the herbicides cyanazine and bentazone in sugar maize and surface water using high-performance liquid chromatography and an on-line clean-up column-switching procedure. Hogendoorn EA, et al. **J Chromatogr** 1989 Jul 28;475:432-41

Liquid chromatographic method for the determination of cyanazine in the presence of some normal soil constituents. Sánchez-Rasero F, et al. **J Chromatogr** 1988 Aug 26; 447(2):426-31

High-performance liquid chromatographic assay for the benzotriazine di-N-oxide (SR 4233) and its reduced metabolites in biological materials. Walton MI, et al. **J Chromatogr** 1988 Sep 9;430(2):429-37

Water quality criteria for hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX). Etnier EL. **Regul Toxicol Pharmacol** 1989 Apr;9(2):147-57 (54 ref.)

ANTAGONISTS & INHIBITORS

Effect of the PAF-antagonist WEB 2086 on anaphylactic lung reaction: comparison of inhalative and intravenous challenge. Heuer H, et al. **Agents Actions Suppl** 1988; 23:207-15

BLOOD

Degradation of plasma bilirubin by a bilirubin oxidase

derivative which has a relatively long half-life in the circulation. Sugi K, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):405–9

A sensitive bioassay for serum cycloguanil using Plasmodium falciparum in vitro. Scott HV, et al. **Int J Parasitol** 1988 Jul;18(5):605–9

CHEMICAL SYNTHESIS

Pyrido [3,4-e]-1,2,4-triazines and related heterocycles as potential antifungal agents. Reich MF, et al. **Ann N Y Acad Sci** 1988;544:101–4

Synthesis of 3-[2-(2,3-dihydro-5-phenyl-4-substituted-3H-1,2,4-triazole-3-thione-2-yl)-acetylamino]-2-methyl-4(3H)-quinazolinones and their pharmacological activities. Büyüktimkin S, et al. **Arch Pharm (Weinheim)** 1989 Jan; 322(1):49–51

The influence of 1,2,4-benzotriazine derivatives on the apparent viscosity of human blood. Böhme HR, et al. **Drug Des Deliv** 1986 Nov;1(2):109–12

Synthesis and antibacterial activity of some new 2-aryloxymethyl-3-substituted-quinazolin-4(3H)-ones. Khan A, et al. **Pharmazie** 1988 Dec;43(12):864–5

[Antimycotic agents. 22. Chlor-(1-piperazinyl)-1,3,5-triazines] Kreutzberger A, et al. **Arch Pharm (Weinheim)** 1988 Dec;321(12):836–40 (Eng. Abstr.) **(Ger)**

[Central depressive substances. 7. Nuclear substituted (diallylamino)-1,3,5-triazines] Kreutzberger A, et al. **Arch Pharm (Weinheim)** 1988 Nov;321(11):827–30 (Eng. Abstr.) **(Ger)**

[Preparation and pharmacologic activity of amido-derivatives of 3-methyl-3,4-dihydro benzo- and pyrido-1,2,4-triazin-3-acetic acids] Boido A, et al. **Farmaco** 1989 Mar;44(3):279–301 (Eng. Abstr.) **(Ita)**

[Synthesis of 1-(difluoro-1,3,5-triazinyl)-2-methylisoindole as a fluorescent derivatization reagent and its reactivity for corticosteroids] Fujino H, et al. **Yakugaku Zasshi** 1989 Mar;109(3):195–8 (Eng. Abstr.) **(Jpn)**

DIAGNOSTIC USE

Probing the substrate-binding sites of aminoacyl-tRNA synthetases with the procion dye green HE-4BD. McArdell JE, et al. **Biochem J** 1989 Mar 15;258(3):715–21

EM-compatible melamine substrate foil for cell culture [letter] Westphal C, et al. **In Vitro Cell Dev Biol** 1989 May; 25(5):393–4

METABOLISM

PAF-receptors on eosinophils: identification with a novel ligand, [3H]WEB 2086. Ukena D, et al. **Biochem Pharmacol** 1989 May 15;38(10):1702–5

A differential scanning calorimetric study of the binding of sulfate ion and of Cibacron blue F3GA to yeast phosphoglycerate kinase. Hu CQ, et al. **Biochemistry** 1989 Jan 24;28(2):813–8

Fatty acyl coupled catalase. Rosen G, et al. **Biochim Biophys Acta** 1989 Feb 23;994(3):264–9

Inter-subject variability in the metabolism of proguanil to the active metabolite cycloguanil in man. Ward SA, et al. **Br J Clin Pharmacol** 1989 Jun;27(6):781–7

Metabolism of SR 4233 by Chinese hamster ovary cells: basis of selective hypoxic cytotoxicity. Baker MA, et al. **Cancer Res** 1988 Nov 1;48(21):5947–52

Characterization of PAF receptors on human neutrophils using the specific antagonist, WEB 2086. Correlation between receptor binding and function. Dent G, et al. **FEBS Lett** 1989 Feb 27;244(2):365–8

Molecular enzymology of the reductive bioactivation of hypoxic cell cytotoxins. Walton MI, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):983–6

Interaction of 4-carboxy-2-hydroxymuconate-6-semialdehyde dehydrogenase with Reactive Blue 2 and related dyes. Maruyama K. **J Biochem (Tokyo)** 1988 Apr;103(4):714–21

[Use of liquid chromatography for the identification of metabolites of active azo dyes on a base of cyanuric chloride] Kurliandskil BA, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):51–2 **(Rus)**

PHARMACOKINETICS

Tumor pharmacokinetics of hexamethylmelamine in CDF1 mice bearing P388 leukemia. Dubois J, et al. **Anticancer Res** 1989 Jan-Feb;9(1):255–9

The pharmacokinetics of lamotrigine (BW430C) in healthy subjects with unconjugated hyperbilirubinaemia (Gilbert's syndrome). Posner J, et al. **Br J Clin Pharmacol** 1989 Jul; 28(1):117–20

Pharmacokinetics and metabolism of hexamethylmelamine in mice bearing renal cell tumors. Dubois J, et al. **Cancer Chemother Pharmacol** 1988;22(4):282–8

Steady-state kinetics of proguanil and its active metabolite, cycloguanil, in man. Edstein MD, et al. **Chemotherapy** 1988; 34(5):385–92

Lamotrigine: single-dose pharmacokinetics and initial 1 week experience in refractory epilepsy. Jawad S, et al. **Epilepsy Res** 1987 May;1(3):194–201

Influence of inhibition of the metabolic activation on the mutagenicity of some nitrosamines, triazenes, hydrazines and seniciphylline in Drosophila melanogaster. Zijlstra JA, et al. **Mutat Res** 1988 Nov;202(1):251–67

PHARMACOLOGY

A molecular shape analysis and quantitative structure-activity relationship investigation of some triazine-antifolate inhibitors of Leishmania dihydrofolate reductase. Koehler MG, et al. **Arch Biochem Biophys** 1988 Oct;266(1):152–61

Purification and crystallization of rat liver NAD(P)H:(quinone-acceptor) oxidoreductase by cibacron blue affinity chromatography: identification of a new and potent inhibitor. Prochaska HJ. **Arch Biochem Biophys** 1988 Dec;267(2):529–38

The benzodiazepine receptor ligands RO 5-4864 and RO 15-1788 do not block the inhibition of PAF-induced platelet aggregation seen with the hetrazepine WEB2086. Griffin K, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):263–7

Interference of WEB 2086 and BN 52021 with Paf-induced effects on guinea-pig trachea. Brunelleschi S, et al. **Br J Pharmacol** 1989 Jun;97(2):469–74

Pharmacological modulation of Paf-induced rat pleurisy and its role in inflammation by zymosan. Martins MA, et al. **Br J Pharmacol** 1989 Feb;96(2):363–71

Reactive blue 2 selectively inhibits P2y-purinoceptor-stimulated surfactant phospholipid secretion from rat isolated alveolar type II cells. Rice WR, et al. **Br J Pharmacol** 1989 May;97(1):158–62

Platelet-activating factor (Paf) antagonist, WEB 2086, protects against Paf-induced hypotension in Macaca fascicularis. Stanton AW, et al. **Br J Pharmacol** 1989 Jul; 97(3):643–6

Effects of a triazine antifolate (NSC 127755) on serine hydroxymethyltransferase in myeloma cells in culture. Snell K, et al. **Cancer Lett** 1989 Mar;44(3):217–20

1-Methyl-3-phenyl-1,2,4-triazinium-5-olate: a new zwitterion with cytotoxic activity against human cancer cell-lines. Vuddhakul V, et al. **Cancer Lett** 1988 Sep-Oct; 42(1-2):29–35

Safety, tolerability, and pharmacologic activity of multiple doses of the new platelet activating factor antagonist WEB 2086 in human subjects. Adamus WS, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):270–6

Effects of lamotrigine on electrically induced afterdischarge duration in anaesthetised rat, dog, and marmoset. Wheatley PL, et al. **Epilepsia** 1989 Jan-Feb;30(1):34–40

Inhibitory effect of oral WEB 2086, a novel selective PAF-acether antagonist, on ex vivo platelet aggregation. Adamus WS, et al. **Eur J Clin Pharmacol** 1988;35(3):237–40

Haemorheological investigations with benzotriazines in vitro. Böhme HR. **Folia Haematol (Leipz)** 1988;115(4):577–80

Interaction of cibacron blue F3GA with human liver serine hydroxymethyltransferase. Vijayalakshmi D, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):642–7

Pre- and post-irradiation radiosensitization by SR 4233. Zeman EM, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):967–71

Structure-activity relationships for benzotriazine di-N-oxides. Zeman EM, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):977–81

A possible role for PAF in allergen-induced late responses: modification by a selective antagonist. Abraham WM, et al. **J Appl Physiol** 1989 May;66(5):2351–7

A PAF antagonist blocks antigen-induced airway hyperresponsiveness and inflammation in sheep. Solèr M, et al. **J Appl Physiol** 1989 Jul;67(1):406–13

In vivo action of the anticoccidial diclazuril (Clinacox) on the developmental stages of Eimeria tenella: a histological study. Maes L, et al. **J Parasitol** 1988 Dec;74(6):931–8

In vivo action of the anticoccidial diclazuril (Clinacox) on the developmental stages of Eimeria tenella: an ultrastructural evaluation. Verheyen A, et al. **J Parasitol** 1988 Dec;74(6):939–49

Comparative effects of azapropazone on cellular events at inflamed sites. Influence on joint pathology in arthritic rats, leucocyte superoxide and eicosanoid production, platelet aggregation, synthesis of cartilage proteoglycans, synovial production and actions of interleukin-1 in cartilage resorption correlated with drug uptake into cartilage in-vitro. Rainsford KD, et al. **J Pharm Pharmacol** 1989 May;41(5):322–30

Imazaquin and chlorsulfuron resistance and cross resistance in mutants of Chlamydomonas reinhardtii. Winder T, et al. **Mol Gen Genet** 1988 Aug;213(2-3):394–9

Anticonvulsant activity of the diaryltriazine, LY81067: studies using electroencephalographic recording and positron emission tomography. Brouillet E, et al. **Neuropharmacology** 1989 Apr;28(4):351–8

Ultrastructural evaluation of the effects of diclazuril on the endogenous stages of Eimeria maxima and E. brunetti in experimentally inoculated chickens. Verheyen A, et al. **Parasitol Res** 1989;75(8):604–10

Effects of CGA-72662 (Larvadex) in turkeys during rearing and reproduction. Brake J, et al. **Poult Sci** 1989 Jun; 68(6):731–8

Effect of a new and specific PAF-antagonist, WEB 2086, on PAF and endotoxin/tumor necrosis factor induced changes in mortality and intestinal transit velocity. Heuer H. **Prog Clin Biol Res** 1989;308:919–24

QSARs and pesticides design. Tosato ML, et al. **Prog Clin Biol Res** 1989;291:417–20

Enhancement of radiation-induced tumor cell killing by the hypoxic cell toxin SR 4233. Zeman EM, et al. **Radiother Oncol** 1988 Jul;12(3):209–18

The thieno-triazolodiazepine WEB 2086 inhibits platelet aggregation and ATP release from porcine platelets induced by platelet activating factor (PAF). Griffin KJ, et al. **Thromb Res** 1988 Jul 15;51(2):219–23

Superior antimalarial activity of proguanil to cycloguanil after in vitro bioconversion. Ramanaiah TV, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):358–9

Effects of asymmetrical triazine copper complexes on superoxide radical formation and on the Sendai virus multiplication. Zuivertz A, et al. **Virologie** 1988 Jul-Sep; 39(3):217–20

[Influence of cyanuric acid on virucidal effect of chlorine and the comparative study in actual swimming pool waters] Yamashita T, et al. **Kansenshogaku Zasshi** 1988 Mar; 62(3):200–5 (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

One-electron oxidation and reduction of azapropazone and phenylbutazone derivatives in aqueous solution: a pulse radiolysis study. Jones RA, et al. **Photochem Photobiol** 1988 Oct;48(4):401–8

THERAPEUTIC USE

Efficacy of diclazuril against turkey coccidiosis in dose-titration studies. Vanparijs O, et al. **Avian Dis** 1989 Jul-Sep;33(3):422–4

Efficacy of diclazuril against turkey coccidiosis in a floor-pen experiment. Vanparijs O, et al. **Avian Dis** 1989 Jul-Sep; 33(3):479–81

Phase I trial and pharmacokinetics of trimelamol (N2,N4,N6-trihydroxymethyl-N2,N4,N6-trimethylmelamine). Judson IR, et al. **Cancer Res** 1989 Oct 1;49(19):5475–9

Combined effects of host antitumor immune responses and chemotherapy. Studies with hexamethylmelamine. Tricarico M, et al. **Chemioterapia** 1988 Jun;7(3):203–7

Controlled trial of lamotrigine (Lamictal) for refractory partial seizures. Jawad S, et al. **Epilepsia** 1989 May-Jun; 30(3):356–63

Seven day administration of lamotrigine in epilepsy: placebo-controlled add-on trial. Binnie CD, et al. **Epilepsy Res** 1987 May;1(3):202–8

Concurrent chemotherapy and single high-dose plus whole abdominopelvic radiation for persistent ovarian carcinoma. Homesley HD, et al. **Gynecol Oncol** 1989 Aug;34(2):170–4

Hexamethylmelamine as first-line chemotherapy in the treatment of advanced or recurrent carcinoma of the endometrium: a phase II trial of the Gynecologic Oncology Group. Thigpen JT, et al. **Gynecol Oncol** 1988 Nov; 31(3):435–8

Propethampos, cyromazine and blowfly strike in sheep [letter] Hyman WB. **J S Afr Vet Assoc** 1988 Dec;59(4):180

Diclazuril for Isospora belli infection in AIDS [letter] Kayembe K, et al. **Lancet** 1989 Jun 17;1(8651):1397–8

Idiopathic thrombocytopenia treated with Paf-acether antagonist WEB 2086 [letter] Lohmann HF, et al. **Lancet** 1988 Nov 12;2(8620):1147

Toltrazuril effective against a broad spectrum of protozoan parasites. Mehlhorn H, et al. **Parasitol Res** 1988;75(1):64–6

Treatment of fish parasites. 4. Effects of sym. triazinone (toltrazuril) on Monogenea. Schmahl G, et al. **Parasitol Res** 1988;75(2):132–43

Sym. triazinone (toltrazuril) effective against fish-parasitizing Monogenea. Schmahl G, et al. **Parasitol Res** 1988; 75(1):67–8

Diclazuril, a new broad spectrum anticoccidial drug in chickens. 1. Dose titration studies and pilot floor pen trials. Vanparijs O, et al. **Poult Sci** 1989 Apr;68(4):489–95

Diclazuril, a new broad spectrum anticoccidial drug in chickens. 2. Battery trials. Vanparijs O, et al. **Poult Sci** 1989 Apr;68(4):496–500

Effect of PAF-antagonists in endotoxin shock—ovine and rat experiments. Bahrami S, et al. **Prog Clin Biol Res** 1989; 308:931–6

The pathophysiological role of PAF in anaphylactic lung reaction in the guinea pig and in endotoxin shock evidenced by the specific PAF-antagonist WEB 2086. Heuer H, et al. **Prog Clin Biol Res** 1989;308:925–30

Intraruminal controlled release of cyromazine for the prevention of Lucilia cuprina myiasis in sheep. Anderson N, et al. **Res Vet Sci** 1989 Mar;46(2):131–8

Chemotherapy of caecal coccidiosis: efficacy of toltrazuril, sulphaquinoxaline/pyrimethamine and amprolium/ethopabate, given in drinking water, against field isolates of Eimeria tenella. Chapman HD. **Res Vet Sci** 1989 May;46(3):419–20

Action of the anticoccidial clazuril on the endogenous stages of Eimeria labbeana and E columbarum in experimentally infected pigeons. Coussement W, et al. **Res Vet Sci** 1988 Jul;45(1):117–9

Protective effects of a specific platelet activating factor (PAF) antagonist, WEB 2086, in traumatic shock. Stahl GL, et al. **Thromb Res** 1989 Feb 1;53(3):327–38

Efficacy of diclazuril in the prevention and cure of intestinal and hepatic coccidiosis in rabbits. Vanparijs O, et al. **Vet Parasitol** 1989 Jul 15;32(2-3):109–17

Effects of treatment of lambs with a probiotic, containing lactic acid bacteria. Asby CB, et al. **Vet Rec** 1989 Jun 3; 124(22):588–9

Coccidiocidal efficacy of a single treatment of toltrazuril in naturally infected lambs. Taylor SM, et al. **Vet Rec** 1988 Nov 26;123(22):573

TOXICITY

Effects of the herbicides 2,4-D, glyphosate, hexazinone, and triclopyr on the growth of three species of ectomycorrhizal fungi. Estok D, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):835-9

Toxicity of sodium dichloro S-triazinetrione to Drosophila melanogaster. Shayela S, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):108-13

Evaluation of the acute toxicity to juvenile pacific salmonids of hexazinone and its formulated products: Pronone 10G, Velpar L, and their carriers. Wan MT, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):609-16

In vitro hepatotoxicity of SR 4233 (3-amino-1,2,4-benzotriazine-1,4-dioxide), a hypoxic cytotoxin and potential antitumor agent. Costa AK, et al. **Cancer Res** 1989 Feb 15;49(4):925-9

Virucidal effect of chlorinated water containing cyanuric acid. Yamashita T, et al. **Epidemiol Infect** 1988 Dec; 101(3):631-9

[The viscoelastic properties of the arterial vessels in workers in contact with cyanuric chloride] Soboleva LP. **Vrach Delo** 1988 Sep;(9):103-5 (Eng. Abstr.) (Rus)

URINE

[Use of liquid chromatography for the identification of metabolites of active azo dyes on a base of cyanuric chloride] Kurliandskil BA, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):51-2 (Rus)

TRIAZOLAM

Triazolam--'uniformly good results' [letter] Young ER. **Can Dent Assoc J** 1989 Jan;55(1):20

ADMINISTRATION & DOSAGE

Clinical use of triazolam [letter] Paton DM. **Can Dent Assoc J** 1988 Dec;54(12):883

A treatment trial of delayed sleep phase syndrome with triazolam. Ozaki N, et al. **Jpn J Psychiatry Neurol** 1989 Mar;43(1):51-5

The use of benzodiazepine hypnotics in the elderly. Baker MI, et al. **Pharmacotherapy** 1988;8(4):241-7

ADVERSE EFFECTS

Triazolam impairs learning and fails to improve sleep in a long-range aerial deployment. Penetar DM, et al. **Aviat Space Environ Med** 1989 Jun;60(6):594-8

Respiratory depression requiring ventilatory support following 0.5 mg of triazolam. Sullivan RJ Jr. **J Am Geriatr Soc** 1989 May;37(5):450-2

Anterograde amnesia following triazolam use in two emergency physicians. Huff JS, et al. **J Emerg Med** 1989 Mar-Apr;7(2):153-5 (16 ref.)

Triazolam syndrome 10 years on [letter] Oswald I. **Lancet** 1989 Aug 19;2(8660):451-2

Triazolam: adverse effects in relation to dosage. Schou JS. **Pharmacol Toxicol** 1989 Jan;64(1):6-8

[Clinical experiences with triazolam (Halcion) (letter)] Enge A. **Tidsskr Nor Laegeforen** 1989 Aug 20;109(23):2347-8 (Nor)

ANTAGONISTS & INHIBITORS

Reversal by caffeine of triazolam-induced impairment of waking function. Roehrs T, et al. **Psychopharmacol Ser** 1988;6:194-202

METABOLISM

Oxidation of midazolam and triazolam by human liver cytochrome P450IIIA4. Kronbach T, et al. **Mol Pharmacol** 1989 Jul;36(1):89-96

PHARMACOKINETICS

Pharmacokinetic determinants of dynamic differences among three benzodiazepine hypnotics. Flurazepam, temazepam, and triazolam [published erratum appears in Arch Gen Psychiatry 1989 Sep;46(9):793] Greenblatt DJ, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):326-32

Arithmetic versus harmonic mean values of elimination half-life: a study of triazolam. Greenblatt DJ, et al. **J Clin Pharmacol** 1989 Jul;29(7):655-6

PHARMACOLOGY

Administering triazolam on a circadian basis entrains the activity rhythm of hamsters. Van Reeth O, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R639-45

Ventilatory effects of single, high-dose triazolam in awake human subjects. Skatrud JB, et al. **Clin Pharmacol Ther** 1988 Dec;44(6):684-9

Dose equivalence of midazolam and triazolam. A psychometric study based on flicker sensitivity, reaction time and digit symbol substitution test. Sostmann HJ, et al. **Eur J Clin Pharmacol** 1989;36(2):181-7

Single injections of triazolam, a short-acting benzodiazepine, lengthen the period of the circadian activity rhythm in golden hamsters. Joy JE, et al. **Experientia** 1989 Feb 15; 45(2):152-4

Beta-methyl carboline, a benzodiazepine inverse agonist, attenuates the effect of triazolam on the circadian rhythm of locomotor activity. Smith RD, et al. **Experientia** 1989 Apr 15;45(4):334-7

Use of benzodiazepines to manipulate the circadian clock regulating behavioral and endocrine rhythms. Turek FW, et al. **Horm Res** 1989;31(1-2):59-65 (22 ref.)

The use of triazolam in phase-advanced sleep. Bonnet MH, et al. **Neuropsychopharmacology** 1988 Sep;1(3):225-34

Arousal induced by injection of triazolam into the dorsal raphe nucleus of rats. Mendelson WB, et al. **Neuropsychopharmacology** 1987 Dec;1(1):85-8

Effects of flunitrazepam and triazolam in man: are they influenced by the time of ingestion? Wickstrøm E, et al. **Pharmacol Toxicol** 1989 May;64(5):417-20

Effects of triazolam on heart rate level and on phasic cardiac response to noise during sleep. Libert JP, et al. **Psychopharmacology (Berlin)** 1988;96(2):188-93

Triazolam attenuates amphetamine but not morphine conditioned place preferences. Pettit HO, et al. **Psychopharmacology (Berlin)** 1989;98(4):483-6

Altering the mammalian circadian clock with the short-acting benzodiazepine, triazolam. Turek FW, et al. **Trends Neurosci** 1988 Dec;11(12):535-41 (43 ref.)

[Pharmacologic characteristics of new triazolobenzodiazepine derivatives, triazolam and alprazolam] Metyš J, et al. **Cesk Farm** 1988 Dec; 37(10):443-9 (Eng. Abstr.) (Cze)

[Comparison of the effects of zopiclone and triazolam on the sleep of normal subjects] Tiberge M, et al. **Encephale** 1988 Jul-Aug;14(4):319-24 (Eng. Abstr.) (Fre)

POISONING

Fatal triazolam poisoning. O'Dowd JJ, et al. **BMJ** 1988 Oct 22;297(6655):1048

Three cases of fatal triazolam poisoning. Sunter JP, et al. **BMJ** 1988 Sep 17;297(6650):719

Three deaths involving triazolam--analytical aspects. Bal TS, et al. **J Forensic Sci Soc** 1989 Mar-Apr;29(2):119-23

Involuntary self-intoxication with triazolam [letter] Lasagna L. **Psychiatr J Univ Ottawa** 1988 Sep;13(3):175

[News from abroad. Fatal cases of overdose of triazolam (Halcion)] **Lakartidningen** 1989 Mar 15;86(11):978 (Swe)

THERAPEUTIC USE

Effectiveness of triazolam, diazepam, and placebo as preanesthetic medications. Baughman VL, et al. **Anesthesiology** 1989 Aug;71(2):196-200

Effect of triazolam on sleep and arterial oxygen saturation in patients with chronic obstructive pulmonary disease. Timms RM, et al. **Arch Intern Med** 1988 Oct; 148(10):2159-63

Evaluation of long-term triazolam use in an ambulatory Veterans Administration Medical Center population. De Tullio P, et al. **DICP** 1989 Apr;23(4):290-3

Triazolam [letter] Drucker RF, et al. **Lancet** 1989 Sep 16; 2(8664):680

[Triazolam 0.25 mg versus loprazolam 1 mg in the treatment of common insomnia treated in general practice. Double-blind cross-over randomized trial] Bourin M, et al. **Therapie** 1989 Mar-Apr;44(2):107-14 (Eng. Abstr.) (Fre)

[Double-blind parallel comparison of midazolam and triazolam in sleep disorders in the aged] Francescangeli MA, et al. **Clin Ter** 1987 Jan 31;120(2):125-30 (Eng. Abstr.) (Ita)

TRIAZOLES

New polymeric benzotriazole reagents for off-line derivatizations of amines and polyamines in HPLC. Gao CX, et al. **J Chromatogr Sci** 1988 Sep;26(9):449-57

On the use of 1H-NMR and 13C-NMR chemical shifts in a QSAR of benzotriazole derivatives. Caliendo G, et al. **Prog Clin Biol Res** 1989;291:387-90

ADMINISTRATION & DOSAGE

Oral fluconazole therapy for patients with acquired immunodeficiency syndrome and cryptococcosis: experience with 22 patients. Stern JJ, et al. **Am J Med** 1988 Oct;85(4):477-80

Oral fluconazole as suppressive therapy of disseminated cryptococcosis in patients with acquired immunodeficiency syndrome. Sugar AM, et al. **Am J Med** 1988 Oct; 85(4):481-9

A comparison of single-dose oral fluconazole with 3-day intravaginal clotrimazole in the treatment of vaginal candidiasis. Report of an international multicentre trial. **Br J Obstet Gynaecol** 1989 Feb;96(2):226-32

Fluconazole and candidosis [letter] Kirk AJ, et al. **Lancet** 1989 Feb 11;1(8633):339

[Timolol and dapiprazole combination in patients with glaucoma] Sanfelici G, et al. **Ophtalmologie** 1988 Nov-Dec; 2(5):435-7 (Eng. Abstr.) (Fre)

[AIDS: bad prognosis in candidiasis. Cryptococcosis in brain involvement is usually fatal--experiences with a new therapeutic drug] Dietrich D. **Fortschr Med** 1989 Mar 15; 107(8):52 (Ger)

[Alcohol withdrawal syndrome. Effects of short-term treatment with dapiprazole] Bono G, et al. **Minerva Med** 1988 Dec;79(12):1085-9 (Eng. Abstr.) (Ita)

ADVERSE EFFECTS

Interaction of fluconazole and cyclosporine [letter] Sugar AM, et al. **Ann Intern Med** 1989 May 15;110(10):844

Fluconazole and phenytoin: a predictable interaction [published erratum appears in BMJ 1989 Jul 29;299(6694):326] Mitchell AS, et al. **BMJ** 1989 May 13; 298(6683):1315

Metabolic effects of low-dose fluconazole in healthy female users and non-users of oral contraceptives. Devenport MH, et al. **Br J Clin Pharmacol** 1989 Jun;27(6):851-9

Interaction of fluconazole with cyclosporin [letter] [see comments] Collignon P, et al. **Lancet** 1989 Jun 3; 1(8649):1262. **Comment in:** Lancet 1989 Jul 8;2(8654):104-5

Influenza-like syndrome after terconazole [letter] Geiger AJ. **Lancet** 1988 Nov 19;2(8621):1192

Hypokalaemia in patients with acute myeloid leukaemia after treatment with fluconazole [letter] Kidd D, et al. **Lancet** 1989 May 6;1(8645):1017

Influenza-like syndrome after terconazole [letter] Moebius UM. **Lancet** 1988 Oct 22;2(8617):966-7

ANALYSIS

Residue characterization of triadimefon in grapes by gas chromatography and mass spectrometry/mass spectrometry. Cairns T, et al. **Biomed Environ Mass Spectrom** 1989 Feb;18(2):110-5

Gas-liquid chromatographic resolution of some racemic synthons for lamtidine analogous histamine H2-receptor antagonists via diastereomeric amides of (1S)-(-)-camphanic acid. Büyüktimkin N, et al. **J Chromatogr** 1989 Apr 28;467(2):402-5

Analysis of a new H2 receptor antagonist, 3-amino-5-[3-[4-(1-piperidinoindanyloxy)]propylamino]-1-methyl-1 H-1,2,4-triazole, in human plasma and urine by high-performance liquid chromatography. Miksic JR, et al. **J Chromatogr** 1988 Jun 24;428(1):113-21

Determination of fluconazole in biological fluids by capillary column gas chromatography with a nitrogen detector. Debruyne D, et al. **J Pharm Sci** 1988 Jun;77(6):534-5

CHEMICAL SYNTHESIS

Synthesis and structure-activity relationships of a novel antifungal agent, ICI 195,739. Boyle FT, et al. **Ann N Y Acad Sci** 1988;544:86-100

Synthesis of antifungal imidazoles and triazoles. Ogata M. **Ann N Y Acad Sci** 1988;544:12-31

Design and evaluation of a systemically active agent, fluconazole. Richardson K, et al. **Ann N Y Acad Sci** 1988; 544:4-11

Chemotherapeutic agents, XV. Synthesis of 4-amino-3-pyrazolo-1,2,4-triazoles as antimicrobial agents. Ram VJ, et al. **Arch Pharm (Weinheim)** 1989 Feb; 322(2):63-6

Synthesis and antihypertensive activity of some aminoguanidine and amidrazone derivatives. Vio L, et al. **Arch Pharm (Weinheim)** 1988 Oct;321(10):713-7

Benzodiazepine receptor ligands. Synthesis and preliminary pharmacological evaluation of some 3,7-disubstituted-4H-[1,2,4]triazino[3,4-a]phthalazines and 3,7-disubstituted-4H-[1,2,4]triazino[3,4-a]phthalazine-4-ones. Occelli E, et al. **Farmaco** 1989 Jan;44(1):29-37

Benzodiazepine receptor ligands. Synthesis and in vitro binding activity of some 6-substituted-3-aryl-1,2,4-triazolo[3,4-a]phthalazines. Tarzia G, et al. **Farmaco** 1989 Jan;44(1):3-16

Benzodiazepine receptor ligands. Synthesis and preliminary pharmacological evaluation of 2-aminoalkyl-8-chloro- and 2-aryl-1,2,4-triazolo[3,4-a]phthalazine-3(2H)-ones. Tarzia G, et al. **Farmaco** 1989 Jan;44(1):17-28

1,2,3-Triazoles: structural changes on two effective inhibitors of the prostaglandin synthesis in vitro. Biagi G, et al. **Farmaco [Sci]** 1988 Jul-Aug;43(7-8):597-611

Benzodiazepine receptor ligands. Synthesis and pharmacological evaluation of 6-aryl-3,8-disubstituted-1,2,4-triazolo[3,4-a]phthalazines. Tarzia G, et al. **Farmaco [Sci]** 1988 Nov;43(11):921-33

5-(1-piperazinyl)-1H-1,2,4-triazol-3-amines as antihypertensive agents. Meyer WE, et al. **J Med Chem** 1989 Mar;32(3):593-7

Synthesis and pharmacological screening of some new triazoles. Agarwal S, et al. **Pol J Pharmacol Pharm** 1988 May-Jun;40(3):313-9

[Aminoalkyl derivatives of benzotriazole and naphthotriazole] Savelli F, et al. **Boll Chim Farm** 1988 Jun; 127(6):144-7 (Eng. Abstr.) (Ita)

[Preparation and pharmacologic activity of N-oxides of 4'-(benzotriazol-2-yl-phenylalkanoic and -phenoxyalkanoic acids] Boido A, et al. **Farmaco** 1989 Mar; 44(3):257-77 (Eng. Abstr.) (Ita)

[The structure and antiviral activity of ribavirin analogs. I. Molecular and crystal structure of 1-(2-hydroxyethoxymethyl)-1,2,4-triazole-5-carboxamide] Tsapkina EN, et al. **Bioorg Khim** 1988 Aug; 14(8):1086-91 (Eng. Abstr.) (Rus)

[The structure and antiviral activity of ribavirin analogs. II. Molecular and crystal structure of 1-(1,5-dihydroxy-3-oxapent-2-yl)-1,2,4-triazole-5-

carboxamide] Tsapkina EN, et al. **Bioorg Khim** 1988 Aug; 14(8):1092–7 (Eng. Abstr.) **(Rus)**

[The structure and antiviral activity of ribavirin analogs. III. Molecular and crystal structure of 1-(2-hydroxyethoxymethyl)-1,2,4-triazole-carboxamide] Tsapkina EN, et al. **Bioorg Khim** 1988 Aug;14(8):1098–102 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Steady state parenteral kinetics of fluconazole in man. Foulds G, et al. **Ann N Y Acad Sci** 1988;544:427–30

Sputum levels of fluconazole in humans. Ebden P, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):963–4

Assay of fluconazole by megabore capillary gas–liquid chromatography with nitrogen–selective detection. Harris SC, et al. **Antimicrob Agents Chemother** 1989 May; 33(5):714–6

Pharmacokinetics and tissue penetration of fluconazole in rabbits. Walsh TJ, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):467–9

Biopharmaceutical characterization of 450191–S, a ring–opened derivative of 1,4–benzodiazepine. II. Evidence for reduced first–pass extraction by rat liver. Koike M, et al. **Drug Metab Dispos** 1988 Jul–Aug;16(4):609–15

Pharmacokinetics of ribavirin and urinary excretion of the major metabolite 1,2,4–triazole–3–carboxamide in normal volunteers. Paroni R, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jun;27(6):302–7

Pharmacokinetics of oral fluconazole in autologous bone marrow transplantation recipients given TBI and high–dose melphalan. Milliken S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3067

Disposition of bemitradine, a renal vasodilator and diuretic, in man. Walls CM, et al. **Xenobiotica** 1988 Dec; 18(12):1413–23

[Pharmacokinetic evaluation of fluconazole in healthy volunteers] Shiba K, et al. **Jpn J Antibiot** 1989 Jan; 42(1):17–30 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Histamine H2–receptor blocking activity of ranitidine and lamtidine analogues containing aminomethyl–substituted aliphatic systems. Orsetti M. **Agents Actions** 1988 Dec; 25(3–4):291–5

Effects of 3–amino–1,2,4–triazole on ethanol–induced open–field activity: evidence for brain catalase mediation of ethanol's effects. Aragon CM, et al. **Alcoholism (NY)** 1989 Feb;13(1):104–8

Biochemical studies with a novel antifungal agent, ICI 195,739. Barrett–Bee K, et al. **Ann N Y Acad Sci** 1988; 544:231–44

In vitro antifungal activity of novel substituted 3,5–diphenyl–3–(1H–1,2,4–triazol–1–ylmethyl)–2–methylisoxazolidine derivatives. Bennett GA, et al. **Ann N Y Acad Sci** 1988;544:375–7

Activity of triazole derivatives against Pityrosporum orbiculare in vitro and in vivo. Faergemann J. **Ann N Y Acad Sci** 1988;544:348–53

Vibunazole and its enantiomers. Synthesis, antifungal activity, and pharmacokinetics. Ritter W, et al. **Ann N Y Acad Sci** 1988;544:74–85

Fluconazole in the treatment of Candida–associated denture stomatitis. Budtz–Jørgensen E, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1859–63

In vitro susceptibilities of yeasts to a new antifungal triazole, SCH 39304: effects of test conditions and relation to in vivo efficacy. McIntyre KA, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1095–100

Morphological sequelae of anterior segment hydrogen peroxide in young and adult rabbits with or without 3–aminotriazole treatment. Costarides A, et al. **Basic Life Sci** 1988;49:1039–42

Anterior chamber hydrogen peroxide: effects of 3–aminotriazole on peroxide kinetics and on the status of glutathione. Csukas S, et al. **Basic Life Sci** 1988;49:1035–8

A comparative study of 1–substituted imidazole and 1,2,4–triazole antifungal compounds as inhibitors of testosterone hydroxylations catalysed by mouse hepatic microsomal cytochromes P–450. Ballard SA, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4643–51

The effects of propiconazole on hepatic xenobiotic biotransformation in the rat. Leslie C, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4177–81

Inhibition of 3–methylindole bioactivation by the cytochrome P–450 suicide substrates 1–aminobenzotriazole and alpha–methylbenzylaminobenzotriazole. Huijzer JC, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):37–42

Fluconazole is a potent inhibitor of antipyrine metabolism in vivo in mice. La Delfa I, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):49–53

Testing of organisms for susceptibility to triazoles: is it justified? Kobayashi GS, et al. **Eur J Clin Microbiol Infect Dis** 1989 May;8(5):387–9 (16 ref.)

Role of acidosis in the changes of rat brain monoamines after methanol administration & effect of blocking methanol metabolism by 4–methyl pyrazole & 3–amino–1,2,4–triazole. Jeganathan PS, et al. **Indian J Med Res** 1988 Sep;88:282–90

Effects of azole antifungals in vitro on host/parasite interactions relevant to Candida infections. Odds FC, et al. **J Antimicrob Chemother** 1988 Oct;22(4):473–81

Fluconazole treatment of Candida glabrata peritonitis [letter] Thomas MG, et al. **J Antimicrob Chemother** 1989 Jul; 24(1):94–6

1-(2–aminoethyl)–6–aryl–4H–[1,2,4]triazolo[4,3–a][1,4]benzodiazepines with diuretic and natriuretic activity. Hester JB, et al. **J Med Chem** 1989 Jun;32(6):1157–63

Specific inhibition of benzodiazepine receptor binding by some 1,2,3–triazole derivatives. Martini C, et al. **J Pharm Sci** 1988 Nov;77(11):977–80

Inhibition of renal vasoconstriction induced by intrarenal hypertonic saline by the nonxanthine adenosine antagonist CGS 15943A. Callis JT, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1123–9

Effects of two oral antimycotics, ketoconazole and fluconazole, upon steroidogenesis in rat adrenal cells in vitro. Eckhoff C, et al. **J Steroid Biochem** 1988 Nov; 31(5):819–23

R 76713, a new specific non–steroidal aromatase inhibitor. Wouters W, et al. **J Steroid Biochem** 1989 Jun;32(6):781–8

Interaction of fluconazole with cyclosporin [letter; comment] Ehninger G, et al. **Lancet** 1989 Jul 8;2(8654):104–5. **Comment on:** Lancet 1989 Jun 3;1(8649):1262

Effects of antimycotic azoles on growth and sterol biosynthesis of Leishmania promastigotes. Beach DH, et al. **Mol Biochem Parasitol** 1988 Nov;31(2):149–62

Endotoxin pretreatment increases endogenous myocardial catalase activity and decreases ischemia–reperfusion injury of isolated rat hearts. Brown JM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2516–20

Evidence for monoaminergic involvement in triadimefon–induced hyperactivity. Crofton KM, et al. **Psychopharmacology (Berlin)** 1989;97(3):326–30

A comparative study of the effects of ketoconazole and fluconazole on 17–beta estradiol production by rat ovaries in vitro. Latrille F, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr;64(1):173–6

[In vitro activity of fluconazole, a novel bistriazole antifungal agent] Yamaguchi H, et al. **Jpn J Antibiot** 1989 Jan; 42(1):1–16 (Eng. Abstr.) **(Jpn)**

[Synthesis and pharmacologic properties of s–triazolo–1,4–diazepine derivatives] Guryn R, et al. **Acta Pol Pharm** 1988;45(6):512–6 (Eng. Abstr.) **(Pol)**

[Studies of the effects of new derivatives of 3–oxo–2,3,5,6,7–8–hexahydro–S–triazolo[4,3–A]pyrimidine on the central nervous system] Szadowska A, et al. **Acta Pol Pharm** 1988;45(3):288–93 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Fungal peritonitis complicating continuous ambulatory peritoneal dialysis: successful treatment with fluconazole, a new orally active antifungal agent. Levine J, et al. **Am J Med** 1989 Jun;86(6 Pt 2):825–7

Fluconazole treatment of cryptococcosis in patients with acquired immunodeficiency syndrome. Tozzi V, et al. **Am J Med** 1989 Sep;87(3):353

Fluconazole for cryptococcal meningitis [letter] Esposito R, et al. **Ann Intern Med** 1989 Jan 15;110(2):170

Single–dose oral fluconazole in the treatment of vaginal candidosis. Brammer KW, et al. **Ann N Y Acad Sci** 1988; 544:561–3

Fluconazole for the treatment of fungal diseases in immunosuppressed patients. Dupont B, et al. **Ann N Y Acad Sci** 1988;544:564–70

Activity of ICI 195,739—a novel, orally active bistriazole—in rodent models of fungal and protozoal infections. Ryley JF, et al. **Ann N Y Acad Sci** 1988;544:310–28

Fluconazole (UK–49,858) treatment of candidiasis in normal and diabetic rats. Fisher MA, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1042–5

Activity of ICI 195,739, a new oral triazole, compared with that of ketoconazole in the therapy of experimental murine blastomycosis. Tucker RM, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):573–5

Treatment of candidal leukoplakia with fluconazole. Lamey PJ, et al. **Br Dent J** 1989 Apr 22;166(8):296–8

Fluconazole in the management of patients with chronic mucocutaneous candidosis [letter] Hay RJ, et al. **Br J Dermatol** 1988 Nov;119(5):683–4

Cutaneous cryptococcosis: treatment with oral fluconazole. Shuttleworth D, et al. **Br J Dermatol** 1989 May; 120(5):683–7

Use of fluconazole in a patient with documented malabsorption of ketoconazole. Drew RH, et al. **Clin Pharm** 1988 Aug;7(8):622–3

Effects of dapiprazole, clonidine and yohimbine on the development of dependence and withdrawal behaviour in mice. Valeri P, et al. **Drug Alcohol Depend** 1989 Jan; 23(1):73–7

A comparison of fluconazole and ketoconazole in the oral treatment of vaginal candidiasis; report of a double–blind multicentre trial. Kutzer E, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Dec;29(4):305–13

Fluconazole in the treatment of fungal infections associated with AIDS. De Wit S, et al. **Infection** 1989 May–Jun; 17(3):121–3 (18 ref.)

Secondary mycosis in surgery: treatment with fluconazole. Kujath P, et al. **Infection** 1989 Mar–Apr;17(2):111–7 (24 ref.)

Characteristics of fluorinated nitroazoles as hypoxic cell radiosensitizers. Shibamoto Y, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1045–8

Treatment of systemic yeast infection with fluconazole. Cohen J. **J Antimicrob Chemother** 1989 Feb;23(2):294–5

Single–dose therapy for oral candidiasis with fluconazole in HIV–infected adults: a pilot study [letter] Chave JP, et al. **J Infect Dis** 1989 Apr;159(4):806–7

Treatment of coccidioidal meningitis with fluconazole [letter] Classen DC, et al. **J Infect Dis** 1988 Oct;158(4):903–4

A comparison of fluconazole and ketoconazole in the treatment of rat palatal candidosis. Martin MV. **J Med Vet Mycol** 1989;27(2):63–70

Fluconazole therapy for pulmonary mucormycosis complicating acute leukemia. Funada H, et al. **Jpn J Med** 1989 Mar–Apr;28(2):228–31

Fluconazole versus ketoconazole in oropharyngeal candidiasis in AIDS [letter; comment] **Lancet** 1989 May 20;1(8647):1130–1. **Comment on:** Lancet 1989 Apr 8;1(8641):746–8

Fluconazole in renal candidosis [letter] Dave J, et al. **Lancet** 1989 Jan 21;1(8630):163–4

Comparison of fluconazole and ketoconazole for oropharyngeal candidiasis in AIDS [see comments] De Wit S, et al. **Lancet** 1989 Apr 8;1(8641):746–8. **Comment in:** Lancet 1989 May 20;1(8647):1130–1

Fluconazole resistance in Candida glabrata [letter] Warnock DW, et al. **Lancet** 1988 Dec 3;2(8623):1310

Terconazole for Candida vaginitis. **Med Lett Drugs Ther** 1988 Dec 30;30(782):118–9

Treatment of vaginal candidosis with fluconazole. Herzog RE, et al. **Mycoses** 1989 Apr;32(4):204–8

Oral fluconazole for treatment of disseminated fungal infection [letter] Busin N, et al. **Pediatr Infect Dis J** 1989 Jan;8(1):62

Esophageal candidosis in progressive systemic sclerosis: occurrence, significance, and treatment with fluconazole. Hendel L, et al. **Scand J Gastroenterol** 1988 Dec; 23(10):1182–6

New triazole antifungal agents (fluconazole and itraconazole) in the treatment of HIV–related gastrointestinal candidiasis [letter] Nathwani D, et al. **Scand J Infect Dis** 1989; 21(3):355–6

[AIDS fungus infections. Fluconazole—a new preparation in development] Keil TU. **Fortschr Med** 1989 Mar 30; 107(10):69–70 **(Ger)**

[International symposium: Fluconazole in fungal infections. 20–21 January 1989, Berlin. Abstracts] **Gynakologe** 1989 Apr;22(2 Suppl):1–12 **(Ger)**

[Dapiprazole in the treatment of drug withdrawal symptoms] Fogari R, et al. **Farmaco [Prat]** 1988 Sep;43(9):279–89 (Eng. Abstr.) **(Ita)**

[Fluconazole in the treatment of esophageal, bronchial and oral candidiasis in patients with ARC and AIDS] Gritti FM, et al. **G Ital Chemioter** 1988 Jan–Dec;35(1–3):61–8 (Eng. Abstr.) **(Ita)**

[Fluconazole in the treatment of candidiasis of the alimentary tract. Preliminary results] Tortorano AM, et al. **G Ital Chemioter** 1988 Jan–Dec;35(1–3):49–51 **(Ita)**

[Fluconazole in the treatment of cryptococcosis] Tortorano AM, et al. **G Ital Chemioter** 1988 Jan–Dec;35(1–3):53–6 (Eng. Abstr.) **(Ita)**

[Fluconazole in the treatment of deep–seated candidiasis in surgical patients] Viviani MA, et al. **G Ital Chemioter** 1988 Jan–Dec;35(1–3):57–60 (Eng. Abstr.) **(Ita)**

[Experience of fluconazole in pediatric patients] Arai S, et al. **Jpn J Antibiot** 1989 Jan;42(1):165–70 (Eng. Abstr.) **(Jpn)**

[Clinical study of fluconazole on deep–seated fungal infections] Ikemoto H, et al. **Jpn J Antibiot** 1989 Jan; 42(1):63–116 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy of fluconazole in the patient with pulmonary mycosis] Lee Y, et al. **Jpn J Antibiot** 1989 Jan; 42(1):138–43 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of fluconazole in the case of deep mycosis associated with leukemia] Maruta A, et al. **Jpn J Antibiot** 1989 Jan;42(1):117–26 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of fluconazole in patients with mycotic infection] Matsushima T, et al. **Jpn J Antibiot** 1989 Jan; 42(1):153–63 (Eng. Abstr.) **(Jpn)**

[Fluconazole treatment of systemic mycoses] Mori T, et al. **Jpn J Antibiot** 1989 Jan;42(1):55–62 (Eng. Abstr.) **(Jpn)**

[The clinical study of fluconazole against pulmonary mycosis. Effects of fluconazole on pulmonary cryptococcosis and aspergillosis, and its pharmacokinetics in patients] Nakashima M. **Jpn J Antibiot** 1989 Jan;42(1):127–37 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy of fluconazole in urinary tract fungal infections] Nito H. **Jpn J Antibiot** 1989 Jan;42(1):171–8 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of fluconazole] Oka S, et al. **Jpn J Antibiot** 1989 Jan;42(1):31–9 (Eng. Abstr.) **(Jpn)**

[A clinical evaluation of injectable fluconazole in the treatment of deep mycosis associated with hematological malignancy] Toyama K, et al. **Jpn J Antibiot** 1989 Jan; 42(1):47–54 (Eng. Abstr.) **(Jpn)**

[A clinical evaluation of fluconazole in the treatment of deep mycosis] Yagi S, et al. **Jpn J Antibiot** 1989 Jan;42(1):144–52 (Eng. Abstr.) **(Jpn)**

[A clinical study of fluconazole in pulmonary aspergillosis] Yoneda R. **Jpn J Antibiot** 1989 Jan;42(1):40–6 (Eng. Abstr.) **(Jpn)**

TOXICITY

Neurobehavioral effect of triadimefon, a triazole fungicide, in male and female rats. Moser VC, et al. **Neurotoxicol Teratol** 1989 May-Jun;11(3):285-93

TRIBOLIUM

GENETICS

Genetic analysis of the homeotic gene complex (HOM-C) in the beetle Tribolium castaneum. Beeman RW, et al. **Dev Biol** 1989 May;133(1):196-209

PHYSIOLOGY

Environmental factors affecting reproductive incompatibility in flour beetles, genus Tribolium. Stevens L. **J Invertebr Pathol** 1989 Jan;53(1):78-84

RADIATION EFFECTS

Radiation factors and their influence on induction of oxygen resistance. Lee YJ, et al. **Radiat Res** 1989 Jan;117(1):158-62

TRIBROMOETHANOL

ADMINISTRATION & DOSAGE

Fifty-eight years ago in Anesthesia & Analgesia. B. Bolliger, K. Maddox: Experimental anesthesia with tri-bromethyl alcohol (Avertin) and sodium iso-amyl-ethyl-barbiturate (Amytal). Current Researches in Anesthesia and Analgesia: 1931; 10:112-115. **Anesth Analg** 1989 Apr;68(4):540

ADVERSE EFFECTS

Ultrastructural analysis of abnormalities in the morphology of the second meiotic spindle in ethanol-induced parthenogenones. O'Neill GT, et al. **Gamete Res** 1989 Mar; 22(3):285-99

TRIBUTYRINASE see LIPASE

TRICARBOXYLIC ACID CYCLE see CITRIC ACID CYCLE

TRICARBOXYLIC ACIDS

METABOLISM

Homocitrate is a component of the iron-molybdenum cofactor of nitrogenase. Hoover TR, et al. **Biochemistry** 1989 Apr 4;28(7):2768-71

Tricarboxylate carrier of bovine liver mitochondria. Purification and reconstitution. Claeys D, et al. **J Biol Chem** 1989 Sep 5;264(25):14627-30

Characterization of sodium and pyruvate interactions of the two carrier systems specific of mono- and di- or tricarboxylic acids by renal brush-border membrane vesicles. Mengual R, et al. **J Membr Biol** 1989 Jun; 108(3):197-205

PHARMACOLOGY

Retardation of calcification of bovine pericardium used in bioprosthetic heart valves by phosphocitrate and a synthetic analogue. Tsao JW, et al. **Biomaterials** 1988 Sep; 9(5):393-7

TRICHINA see TRICHINELLA

TRICHINELLA

Destruction of Trichinella spiralis spiralis during the preparation of the "dry cured" pork products proscuitto, proscuittini and Genoa salami. Smith HJ, et al. **Can J Vet Res** 1989 Jan;53(1):80-3

ANALYSIS

[Intrastrain heterogeneity of Trichinella spiralis: a sedimentation analysis] Vaserin IuI, et al. **Parazitologiia** 1989 Jan-Feb;23(1):68-70 (Eng. Abstr.) (Rus)

CLASSIFICATION

The molecular phylogenic tree of the genus Trichinella constructed from isozyme patterns. Fukumoto S, et al. **Parasitol Res** 1988;74(6):574-80

[Genetic differentiation of the Trichinella genus with isoenzymatic analysis] Pozio E, et al. **Parassitologia** 1987 Apr;29(1):49-62 (Eng. Abstr.) (Ita)

ENZYMOLOGY

Purification, characterization, and immunochemical studies of beta-N-acetyl-D-hexosaminidase from the parasitic nematode Trichinella spiralis. Rhoads ML. **Mol Biochem Parasitol** 1988 Oct;31(1):57-69

GENETICS

Molecular characterization of sylvatic isolates of Trichinella spiralis. Minchella DJ, et al. **J Parasitol** 1989 Jun; 75(3):388-92

Characterization of the ribosomal DNA from Trichinella spiralis. Boyd D, et al. **Mol Biochem Parasitol** 1989 Jun 1;35(1):67-72

GROWTH & DEVELOPMENT

Studies on the cryopreservation of Trichinella species. Pozio E, et al. **Exp Parasitol** 1988 Dec;67(2):182-9

Trichinella spiralis: the fate of the accessory layer of the cuticle of infective larvae. Wright KA, et al. **Exp Parasitol** 1989 Jan;68(1):105-7

IMMUNOLOGY

Prevalence of trichinosis in Canadian swine determined serologically by enzyme-linked immunosorbent assay. Smith HJ, et al. **Can J Vet Res** 1988 Jul;52(3):392-3

Trichinella spiralis: antigenic substances associated with the alimentary tract. Takahashi Y, et al. **Exp Parasitol** 1989 May;68(4):414-22

Rapid expulsion of Trichinella spiralis in suckling rats: mediation by monoclonal antibodies. Appleton JA, et al. **Immunology** 1988 Nov;65(3):487-92

Simulation of parasite-induced gut hypersensitivity: implications for vaccination. Harari Y, et al. **Immunology** 1989 Feb;66(2):302-7

Intestinal immunity to Trichinella spiralis is a property of OX8- OX22- T-helper cells that are generated in the intestine. Korenaga M, et al. **Immunology** 1989 Apr; 66(4):588-94

Genetic control of eosinophilia in parasitic infections: responses of mouse strains to treatment with cyclophosphamide and parasite antigen. Lammas DA, et al. **Int J Parasitol** 1988 Dec;18(8):1077-85

The use of three immunologic tests in detection of antibodies against Trichinella spiralis. Makarem SS, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):331-6

Comparison of three immunodiagnostic tests in detection of trichinosis in naturally infected rats. Morsy TA, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):465-9

A comparison of immunological methods for the detection of Trichinella spiralis antigen. Choy WF, et al. **J Immunol Methods** 1988 Oct 4;113(1):17-24

Lack of correlation between in vitro and in vivo activation of complement in mice by infective Trichinella spiralis larvae. Stankiewicz M, et al. **J Parasitol** 1989 Aug; 75(4):647-9

The surfaces of the parasitic nematodes Trichinella spiralis and Toxocara canis differ in the binding of post-C3 components of human complement by the alternative pathway. Kennedy MW, et al. **Parasite Immunol** 1988 Jul; 10(4):459-63

Antigenic characteristics of two strains of Trichinella spiralis isolated during the horsemeat-related outbreaks of 1985 in France. Dupouy-Camet J, et al. **Parasitol Res** 1988; 75(1):79-80

Protection against Trichinella spiralis induced by purified stage-specific surface antigens of infective larvae. Ortega-Pierres G, et al. **Parasitol Res** 1989;75(7):563-7

The effect of the intestinal worms and migrating L1 larvae of Trichinella spiralis on the production of antiparasitic IgE antibodies. Santamarina MT, et al. **Parasitol Res** 1988; 74(6):581-5

Ultrastructural localization of antigenic substances in Trichinella spiralis. Takahashi Y, et al. **Parasitol Res** 1989; 75(4):316-24

Detection of IgA antibodies and quantification of IgA antibody-producing cells specific for ovalbumin or Trichinella spiralis in the rat. Van Loveren H, et al. **Scand J Immunol** 1988 Sep;28(3):377-81

Evaluation of excretory-secretory antigens for the serodiagnosis of swine trichinellosis. Gamble HR, et al. **Vet Parasitol** 1988 Dec;30(2):131-7

Immunogenetic analysis of Trichinella spiralis infections in swine. Lunney JK, et al. **Vet Parasitol** 1988 Sep; 29(2-3):179-93

A preliminary study on the use of enzyme-linked immunosorbent assay (ELISA) for detection of Trichinella spiralis infections in dogs. Yang SM. **Vet Parasitol** 1989 May;31(2):165-71

[Modulation of immunologic response by parasitic invasion] Bany J. **Wiad Parazytol** 1988;34(4-6):497-501 (Eng. Abstr.) (Pol)

[Seroepidemiologic characteristics of a trichinelliasis focus in Rostov Province] Tverdokhlebova TI, et al. **Med Parazitol (Mosk)** 1988 Sep-Oct;(5):57-61 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Nonenzymatic isolation of Trichinella pseudospiralis infective L1 larvae at pH 7.4. Stewart GL, et al. **J Parasitol** 1989 Feb;75(1):171-3

A simple and reliable method for purification of Trichinella spiralis larvae using Percoll. Candolfi E, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):288

Trichinellosis in Thailand: epidemiology and biochemical identification of the aethiological agent. Pozio E, et al. **Trop Med Parasitol** 1989 Mar;40(1):73-4

A rapid method for detecting Trichinella spiralis larvae in pork using a monoclonal antibody-latex conjugate. Choy WF, et al. **Vet Parasitol** 1989 Aug 1;32(4):301-10

METABOLISM

An analysis of Trichinella pseudospiralis excretions and study of their effect on striated muscles of mouse. Zenka J, et al. **Folia Parasitol (Praha)** 1989;36(2):177-83

PHYSIOLOGY

Survival of sylvatic Trichinella spiralis isolates in frozen tissue and processed meat products. Worley DE, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1047-9

Survival of Trichinella muscle larvae in frozen wolf tissue in Italy. Pozio E, et al. **J Parasitol** 1989 Jun;75(3):472-3

[Frost resistance of Trichinella larvae in the muscles of the European brown bear] Kolokol'tsev MM. **Med Parazitol (Mosk)** 1988 Sep-Oct;(5):62-3 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Morphology of the alimentary tract of Trichinella spiralis muscle larvae with emphasis on the esophagus. Takahashi Y, et al. **Parasitol Res** 1988;75(1):42-9

The morphology of Trichinella spiralis: ultrastructural study of the mid- and hindgut of the muscle larvae. Takahashi Y, et al. **Parasitol Res** 1988;75(1):19-27

TRICHINELLIASIS see TRICHINOSIS

TRICHINELLOIDEA see TRICHUROIDEA

TRICHINOSIS

A case report of human trichinosis in Tanta [letter] Antonios SN, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):363-4

BLOOD

Lack of correlation between in vitro and in vivo activation of complement in mice by infective Trichinella spiralis larvae. Stankiewicz M, et al. **J Parasitol** 1989 Aug; 75(4):647-9

COMPLICATIONS

Bilateral facial paralysis secondary to trichinosis. Lopez-Lozano JJ, et al. **Acta Neurol Scand** 1988 Sep; 78(3):194-7

Genetic control of eosinophilia. Analysis of production and response to eosinophil-differentiating factor in strains of mice infected with Trichinella spiralis. Lammas DA, et al. **Clin Exp Immunol** 1989 Jul;77(1):137-43

The dynamics of eosinophilia in concurrent infections with Trichinella spiralis Owen, 1835 and Toxascaris leonina Linstow, 1909. Figallová V, et al. **Folia Parasitol (Praha)** 1988;35(4):365-9

Experimental trichinosis in alloxan induced diabetes in mice. Antonios SN, et al. **J Egypt Soc Parasitol** 1989 Jun; 19(1):149-56

[Differential diagnostic aspects of trichinosis in childhood with special reference to neurologic manifestations] Kemmerling S. **Z Arztl Fortbild (Jena)** 1989;83(3):125-8 (Ger)

[Complications in trichinosis] Klašnja B. **Med Pregl** 1988; 41(9-10):393-5 (Eng. Abstr.) (Scr)

[Complications of the central nervous system in trichinosis] Vega E, et al. **Rev Chil Pediatr** 1987 Nov-Dec;58(6):478-80 (Eng. Abstr.) (Spa)

DIAGNOSIS

Comparison of three immunodiagnostic tests in detection of trichinosis in naturally infected rats. Morsy TA, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):465-9

Comparative efficacy of antigen and antibody detection tests for human trichinellosis. Ivanoska D, et al. **J Parasitol** 1989 Feb;75(1):38-41

Comparison between standard ELISA and dot-ELISA for serodiagnosis of human trichinosis. Chan SW, et al. **Trans R Soc Trop Med Hyg** 1988;82(6):892-4

[A case of fever with eosinophilia and symptoms of muscular necrosis (clinical conference)] Demonty J, et al. **Rev Med Liege** 1989 Jan 15;44(2):61-7 (Fre)

[Usefulness of biochemical tests in the diagnosis of trichinosis] Boczoń K. **Wiad Parazytol** 1988;34(4-6):631-5 (Eng. Abstr.) (Pol)

[New clinical problems of trichinosis] Kocięcka W. **Wiad Parazytol** 1988;34(4-6):607-15 (Eng. Abstr.) (Pol)

[Involvement of the central nervous system in trichinosis] Olszyńska M, et al. **Wiad Parazytol** 1988;34(4-6):621-3 (Pol)

[Experience in the early detection and treatment of patients with trichinelliasis] Gorbachevskiĭ GI, et al. **Med Parazitol (Mosk)** 1988 May-Jun;(3):92 (Eng. Abstr.) (Rus)

[Errors in the diagnosis of trichinelliasis] Pinchuk DN, et al. **Vrach Delo** 1989 Apr;(4):114 (Rus)

DRUG THERAPY

Effect of vitamins on Trichinella spiralis Owen, 1835 infection in mice. Figallová V, et al. **Folia Parasitol (Praha)** 1988;35(2):157-63

Experimental and theoretical studies of anthelmintics: oxfendazole and its imidazo[1,2-a]pyridine-2-carbamate isomer. McCracken RO, et al. **Int J Parasitol** 1989 Jul; 19(4):363-8

Randomized trial of albendazole versus tiabendazole plus flubendazole during an outbreak of human trichinellosis.

Fourestié V, et al. **Parasitol Res** 1988;75(1):36–41
The effect of cyclosporine A on murine trichinellosis. Leiro J, et al. **Parasitol Res** 1989;75(4):330–2
[Treatment of trichinosis] Kocięcka W. **Wiad Parazytol** 1988; 34(4–6):519–20 (Pol)

ENZYMOLOGY

[Serum lysozyme activity in patients after the acute phase of trichinosis] Prokopowicz D. **Wiad Parazytol** 1988; 34(4–6):625–30 (33 ref.) (Pol)

EPIDEMIOLOGY

Trichinosis in the Canadian Arctic: report of five outbreaks and a new clinical syndrome. MacLean JD, et al. **J Infect Dis** 1989 Sep;160(3):513–20
Trichinosis surveillance, United States, 1986. Bailey TM, et al. **MMWR CDC Surveill Summ** 1988 Dec;37(5):1–8
Antigenic characteristics of two strains of Trichinella spiralis isolated during the horsemeat-related outbreaks of 1985 in France. Dupouy-Camet J, et al. **Parasitol Res** 1988; 75(1):79–80
Trichinellosis in Thailand: epidemiology and biochemical identification of the aethiological agent. Pozio E, et al. **Trop Med Parasitol** 1989 Mar;40(1):73–4
[Trichinosis 1986] Adonajlo A. **Przegl Epidemiol** 1988; 42(1):113–5 (Pol)
[Trichinosis—1987] Adonajlo A. **Przegl Epidemiol** 1989; 43(1):107–9 (Pol)
[Urgent epizootic and epidemiologic problems of trichinosis in Poland] Ramisz A. **Wiad Parazytol** 1988;34(4–6):601–6 (Pol)
[Seroepidemiologic characteristics of a trichinelliasis focus in Rostov Province] Tverdokhlebova TI, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):57–61 (Eng. Abstr.) (Rus)
[Trichinosis: presentation of 2 cases] de la Torre Cecilia C, et al. **An Esp Pediatr** 1989 Mar;30(3):227–8 (Spa)

ETIOLOGY

Trichinosis following ingestion of wild pig in Hawaii: a case report. Satta S. **Hawaii Med J** 1988 Aug;47(8):366

GENETICS

Genetic control of mast cell development in bone marrow cultures. Strain-dependent variation in cultures from inbred mice. Reed ND, et al. **Clin Exp Immunol** 1988 Sep; 73(3):510–5

HISTORY

Public health or protectionism? The German-American pork war, 1880–1891. Hoy S, et al. **Bull Hist Med** 1989 Summer; 63(2):198–224
[The morphological view and investigations of trichinellosis] Steger G. **DTW** 1988 Nov–Dec;95(10):459–61 (Eng. Abstr.) (Ger)

IMMUNOLOGY

The sequential appearance of IgG subclasses and IgE during the course of Trichinella spiralis infection. Ljungström I, et al. **Clin Exp Immunol** 1988 Nov;74(2):230–5
The use of three immunologic tests in detection of antibodies against Trichinella spiralis. Makarem SS, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):331–6
Effects of rat and human intestinal lamina propria cells on viability and muscle establishment of Trichinella spiralis newborn larvae. Lee TD, et al. **J Parasitol** 1989 Feb; 75(1):124–8
Complement activation, phagocytosis, tumor growth and parasitic infection after magnesium supplementation in diet of mice. Stankiewicz M, et al. **Magnesium** 1989;8(2):87–93
The effect of the intestinal worms and migrating L1 larvae of Trichinella spiralis on the production of antiparasitic IgE antibodies. Santamarina MT, et al. **Parasitol Res** 1988; 74(6):581–5
Kinetics of IgA plasma cells in the intestine of NIH mice infected with Trichinella spiralis. Brown PJ, et al. **Res Vet Sci** 1989 Mar;46(2):187–91
[Modulation of immunologic response by parasitic invasion] Bany J. **Wiad Parazytol** 1988;34(4–6):497–501 (Eng. Abstr.) (Pol)
[Morphometric and cytologic methods of assessing the host's immune response to invasion by Trichinella spiralis] D'iachenko GN, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):65–7 (Eng. Abstr.) (Rus)

METABOLISM

An analysis of Trichinella pseudospiralis excretions and study of their effect on striated muscles of mouse. Zenka J, et al. **Folia Parasitol (Praha)** 1989;36(2):177–83
IL-2 production, IL-2 receptor expression, and IL-2 responsiveness of spleen and mesenteric lymph node cells from inbred mice infected with Trichinella spiralis. Zhu DH, et al. **J Immunol** 1989 May 1;142(9):3262–7

PATHOLOGY

Granule proteinases define mast cell heterogeneity in the serosa and the gastrointestinal mucosa of the mouse. Miller HR, et al. **Immunology** 1988 Dec;65(4):559–66
[Selected pathologic problems of trichinosis] Gabryel P, et al. **Wiad Parazytol** 1988;34(4–6):617–9 (Eng. Abstr.) (Pol)
[Morphologic changes in cervical sympathetic ganglia of rats with trichinelliasis] Bekish OIa, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):63–6 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Immunological regulation of colonic ion transport. Russell DA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G396–403
Antigen-induced contraction of jejunal smooth muscle in the sensitized rat. Vermillion DL, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G701–8
Regeneration in mouse skeletal muscle injured by Trichinella larvae. Hulínská D, et al. **Folia Parasitol (Praha)** 1989; 36(2):185–90
Single fibre and quantitative EMG study in acute stage of human trichinosis [letter] Cruz Martínez A, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):681–3
Presidential address. Pariahs of the scientific caste system. Castro GA. **J Parasitol** 1988 Dec;74(6):904–14

PREVENTION & CONTROL

Protection against Trichinella spiralis induced by purified stage-specific surface antigens of infective larvae. Ortega-Pierres G, et al. **Parasitol Res** 1989;75(7):563–7

RADIOGRAPHY

Trichinosis diagnosed by computed tomography. Kreel L, et al. **Postgrad Med J** 1988 Aug;64(754):626–30
[X-ray manifestations of trichinosis on chest radiograph (analysis of 15 cases)] Pu FS. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb;23(1):21–2 (Eng. Abstr.) (Chi)

TRANSMISSION

[Urgent epidemiologic and epizootic problems of trichinosis in the world] Pawłowski Z. **Wiad Parazytol** 1988; 34(4–6):597–600 (Pol)

VETERINARY

Prevalence of trichinosis in Canadian swine determined serologically by enzyme-linked immunosorbent assay. Smith HJ, et al. **Can J Vet Res** 1988 Jul;52(3):392–3
Experimental trichinosis in sheep. Smith HJ, et al. **Can J Vet Res** 1989 Jan;53(1):112–4
Sylvatic trichinosis in Canada. Smith HJ, et al. **Can J Vet Res** 1988 Oct;52(4):488–9
Molecular characterization of sylvatic isolates of Trichinella spiralis. Minchella DJ, et al. **J Parasitol** 1989 Jun; 75(3):388–92
Trichinella spiralis in an agricultural ecosystem. III. Epidemiological investigations of Trichinella spiralis in resident wild and feral animals. Leiby DA, et al. **J Wildl Dis** 1988 Oct;24(4):606–9
Evaluation of excretory-secretory antigens for the serodiagnosis of swine trichinellosis. Gamble HR, et al. **Vet Parasitol** 1988 Dec;30(2):131–7
Immunogenetic analysis of Trichinella spiralis infections in swine. Lunney JK, et al. **Vet Parasitol** 1988 Sep; 29(2–3):179–93
Experimental trichinellosis in horses: biological and parasitological evaluation. Soule C, et al. **Vet Parasitol** 1989 Apr;31(1):19–36
A preliminary study on the use of enzyme-linked immunosorbent assay (ELISA) for detection of Trichinella spiralis infections in dogs. Yang SM. **Vet Parasitol** 1989 May;31(2):165–71
[The occurrence of Trichinella in indigenous wildlife] Wagner JA, et al. **Berl Munch Tierarztl Wochenschr** 1988 Dec 1;101(12):413–6 (Eng. Abstr.) (Ger)

TRICHLORBUTANOL see CHLOROBUTANOL

TRICHLORFON

ADVERSE EFFECTS

[The role of various pesticides in nitrosamine-induced carcinogenesis] Ponomareva LA, et al. **Gig Sanit** 1989 May; (5):7–9 (Rus)

ANALYSIS

Capillary gas chromatographic analysis of trichlorfon in dosed feed formulations. Cox CL, et al. **J Anal Toxicol** 1989 Mar–Apr;13(2):84–8

BLOOD

A rapid and sensitive quantitation of Dipterex in serum by solid-phase extraction and gas chromatography with flame thermionic detection. Ameno K, et al. **J Anal Toxicol** 1989 May–Jun;13(3):150–1

PHARMACOLOGY

Histochemical demonstration of the inhibitory effect of Nuvan and Neguvon on cholinesterase activity in Pseudodactylogyrus anguillae (Monogenea). Buchmann K, et al. **Acta Vet Scand** 1988;29(1):51–5
Physostigmine, tacrine and metrifonate: the effect of multiple doses on acetylcholine metabolism in rat brain. Haliak M, et al. **Neuropharmacology** 1989 Mar;28(3):199–206
[Effects of IPO-63, Carbaryl, Foschlor and Reglone on Newcastle disease virus replication in chick embryo and chick embryo cell cultures] Grabowska G, et al. **Med Dosw Mikrobiol** 1989;41(1):47–52 (Eng. Abstr.) (Pol)

POISONING

[The ambiguous nature of the action of m-cholinolytics in chlorophos poisoning] Kosmachev AB, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):86–9 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Chemotherapy-based control of schistosomiasis haematobia. I. Metrifonate versus praziquantel in control of intensity and prevalence of infection. King CH, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):295–305
Poor patient compliance reduces the efficacy of metrifonate treatment of Schistosoma haematobium in Somalia. Aden Abdi Y, et al. **Eur J Clin Pharmacol** 1989;36(2):161–4
The effectiveness of Ivomec and Neguvon in the control of murine mites. Baumans V, et al. **Lab Anim** 1988 Jul; 22(3):243–5
The use of repeated treatment with Ivomec and Neguvon spray in the control of murine fur mites and oxyurid worms. Baumans V, et al. **Lab Anim** 1988 Jul;22(3):246–9
Experimental chemotherapy of Schistosoma curassoni in mice. Vercruysse J, et al. **Parasitol Res** 1989;75(7):559–62
Antischistosomal treatment and the measurement of incidence of schistosomiasis in a community of high transmission. Chandiwana SK. **Trop Geogr Med** 1988 Oct; 40(4):314–7

TOXICITY

In vivo and in vitro effect of triclorfon on esterases of the red crayfish Procambarus clarkii. Repetto G, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):597–603
Some studies of the antischistosomal drug, metrifonate. Shehata MM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):173–4
[Processes of sorption and desorption of chlorophos as criteria of health hazards for the population] Muzychuk NT, et al. **Gig Sanit** 1988 Nov;(11):85–6 (Rus)

TRICHLORMETHIAZIDE

ADMINISTRATION & DOSAGE

Effects of long term oral administration of ketanserin and trichlormethiazide on blood pressure in stroke-prone spontaneously hypertensive rats. Minami M, et al. **Drugs** 1988;36 Suppl 1:92–6

THERAPEUTIC USE

Trichlormethiazide and oral phosphate therapy in patients with absorptive hypercalciuria. Insogna KL, et al. **J Urol** 1989 Feb;141(2):269–74

TRICHLOROACETIC ACID

Chemical composition of phase I Coxiella burnetii soluble antigen prepared by trichloroacetic acid extraction. Lukáčová M, et al. **Acta Virol (Praha)** 1989 Jan;33(1):75–80
Stability-time profile of trichloroacetic acid at various concentrations and storage conditions. Spinowitz AL, et al. **J Dermatol Surg Oncol** 1989 Sep;15(9):974–5
Extraction and rapid inactivation of proteins from Saccharomyces cerevisiae by trichloroacetic acid precipitation. Wright AP, et al. **Yeast** 1989 Jan–Feb; 5(1):51–3

ADMINISTRATION & DOSAGE

Depths of chemexfoliation induced by various concentrations and application techniques of trichloroacetic acid in a porcine model. Brodland DG, et al. **J Dermatol Surg Oncol** 1989 Sep;15(9):967–71
Trichloroacetic acid peels revisited. Collins PS. **J Dermatol Surg Oncol** 1989 Sep;15(9):933–40 (11 ref.)
The Jessner's + TCA peel: a medium-depth chemical peel. Monheit GD. **J Dermatol Surg Oncol** 1989 Sep; 15(9):945–50

ADVERSE EFFECTS

Relationship between vapor exposure and urinary metabolite excretion among workers exposed to trichloroethylene. Inoue O, et al. **Am J Ind Med** 1989;15(1):103–10

PHARMACOKINETICS

Physiologically based pharmacokinetic modeling of the pregnant rat: a multiroute exposure model for trichloroethylene and its metabolite, trichloroacetic acid. Fisher JW, et al. **Toxicol Appl Pharmacol** 1989 Jul; 99(3):395–414

PHARMACOLOGY

Tissue responses in the rat to trichloracetic acid—an agent used in the treatment of invasive cervical resorption.

Heithersay GS, et al. **Aust Dent J** 1988 Dec;33(6):451–61
Studies on the enzymatic and physicochemical behaviour of the trichloroacetic acid-treated and untreated bovine pancreatic ribonuclease. Sagar AJ, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):144–50

THERAPEUTIC USE

[Chemosurgery to inferior turbinates—trichloroacetic acid application] Yao K, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jul;91(7):1031–41 (Eng. Abstr.) (Jpn)

TOXICITY

Effects of trichloroethylene and its metabolites on rodent hepatocyte intercellular communication. Klaunig JE, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):454–65

TRICHLOROEPOXYPROPANE see under **HYDROCARBONS, CHLORINATED**

TRICHLOROETHANES see under **HYDROCARBONS, CHLORINATED**

TRICHLOROETHYLENE

Trichloroethylene [letter] Stetson JB. **Anaesthesia** 1988 Nov; 43(11):991
IARC carcinogenicity evaluations of vinylidine chloride, methylene dichloride and trichloroethylene. Van Duuren BL. **Environ Res** 1989 Aug;49(2):333–4

ADMINISTRATION & DOSAGE

Sister-chromatid exchanges in lymphocytes of workers exposed to trichloroethylene. Nagaya T, et al. **Mutat Res** 1989 Mar;222(3):279–82

ADVERSE EFFECTS

Relationship between vapor exposure and urinary metabolite excretion among workers exposed to trichloroethylene. Inoue O, et al. **Am J Ind Med** 1989;15(1):103–10
Generalized eruption with severe liver dysfunction associated with occupational exposure to trichloroethylene. Nakayama H, et al. **Contact Dermatitis** 1988 Jul;19(1):48–51
A report of a worker suffering from pneumatosis cystoides intestinalis following trichloroethylene exposure. Ogata M, et al. **Ind Health** 1988;26(3):179–82
Trichloroethylene cranial neuropathy: is it really a toxic neuropathy or does it activate latent herpes virus? Cavanagh JB, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):297–303 (47 ref.)
Increased subjective symptom prevalence among workers exposed to trichloroethylene at sub-OEL levels. Liu YT, et al. **Tohoku J Exp Med** 1988 Jun;155(2):183–95
[The clinical aspect of pneumatosis cystoides coli with special reference to association of trichloroethylene exposure] Yamaguchi K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2161–7 (Eng. Abstr.) (Jpn)

METABOLISM

Preliminary development of a bench-scale treatment system for aerobic degradation of trichloroethylene. Nelson MJ, et al. **Basic Life Sci** 1988;45:203–9
Degradation of trichloroethylene by the ammonia-oxidizing bacterium Nitrosomonas europaea. Arciero D, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):640–3

PHARMACOKINETICS

Potential of physiologically based pharmacokinetics to amalgamate kinetic data of trichloroethylene and tetrachloroethylene obtained in rats and man. Koizumi A. **Br J Ind Med** 1989 Apr;46(4):239–49
Respiratory input in inhalation experiments. Opdam JJ. **Br J Ind Med** 1989 Mar;46(3):145–56
A method for the retrospective estimation of the individual respiratory intake of a highly and a poorly metabolising solvent during rest and physical exercise. Opdam JJ, et al. **Br J Ind Med** 1989 Apr;46(4):250–60
Pharmacokinetics for regulatory risk analysis: the case of trichloroethylene. Bogen KT. **Regul Toxicol Pharmacol** 1988 Dec;8(4):447–66
Physiologically based pharmacokinetic modeling of the pregnant rat: a multiroute exposure model for trichloroethylene and its metabolite, trichloroacetic acid. Fisher JW, et al. **Toxicol Appl Pharmacol** 1989 Jul; 99(3):395–414

PHARMACOLOGY

Effect of different concentrations of trichloroethylene on intracranial pressure during hypocapnia in neurosurgical anaesthesia. Mandal P, et al. **Indian J Med Res** 1988 Jun; 87:620–3
Metabolic activity of antipyrine in workers occupationally exposed to trichloroethylene. Skender L, et al. **Int Arch Occup Environ Health** 1988;61(3):189–95
Genetic effects of chlorinated ethylenes in the yeast Saccharomyces cerevisiae. Koch R, et al. **Mutat Res** 1988 Oct;206(2):209–16
Induction of cytochrome P-450, cytochrome b-5, NADPH-cytochrome c reductase and change of cytochrome P-450 isozymes with long-term trichloroethylene treatment. Kawamoto T, et al. **Toxicology** 1988 Dec 30;53(2–3):239–49

POISONING

Acute renal failure due to trichloroethylene poisoning. David NJ, et al. **Br J Ind Med** 1989 May;46(5):347–9
Trichlorethylene neurology [letter] Laureno R. **Can J Neurol Sci** 1988 Aug;15(3):354
Effect of cimetidine on hepatic biochemical changes, liver toxicity and major urinary metabolite excretion of trichloroethylene in rats. Landriault H, et al. **J Appl Toxicol** 1989 Apr;9(2):75–81
[A new therapeutic approach in the treatment of acute trichloroethylene poisoning. First clinical results] Pelaia P, et al. **Minerva Anestesiol** 1988 Jun;54(6):291–5 (Eng. Abstr.) (Ita)
[Subacute trichloroethylene poisoning with myocardial lesion and atrial fibrillation] Panov BV, et al. **Sov Med** 1988; (5):119–20 (Rus)
[Hyperthermia in chlorinated solvent poisoning (letter)] Rodríguez Pérez JC, et al. **Med Clin (Barc)** 1988 Sep 17; 91(8):314–5 (Spa)

RADIATION EFFECTS

Radiation-induced decomposition of small amounts of trichloroethylene in drinking water. Proksch E, et al. **Int J Rad Appl Instrum [A]** 1989;40(2):133–8

TOXICITY

Maternal exposure to 1,1,2-trichloroethylene affects myelin in the hippocampal formation of the developing rat. Isaacson LG, et al. **Brain Res** 1989 May 29;488(1–2):403–7
Metabolism, toxicity, and carcinogenicity of trichloroethylene. Bruckner JV, et al. **Crit Rev Toxicol** 1989;20(1):31–50 (87 ref.)
Pulmonary toxicity of trichloroethylene in mice. Covalent binding and morphological manifestations. Forkert PG, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):106–13
Conditions affecting the mutagenicity of trichloroethylene in Salmonella. McGregor DB, et al. **Environ Mol Mutagen** 1989;13(3):197–202
Differing hepatotoxicity and lethality after subacute trichloroethylene exposure in aqueous or corn oil gavage vehicles in B6C3F1 mice. Merrick BA, et al. **J Appl Toxicol** 1989 Feb;9(1):15–21
Genetic toxicology of 1,1,2-trichloroethylene. Crebelli R, et al. **Mutat Res** 1989 Jul;221(1):11–37 (143 ref.)
Trichloroethylene: a cardiac teratogen in developing chick embryos. Loeber CP, et al. **Pediatr Res** 1988 Dec; 24(6):740–4
Trichloroethylene. **Rev Environ Contam Toxicol** 1988; 106:203–12 (40 ref.)
Potential role of alpha-2 mu-globulin, protein droplet accumulation, and cell replication in the renal carcinogenicity of rats exposed to trichloroethylene, perchloroethylene, and pentachloroethane. Goldsworthy TL, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):367–79
Effects of trichloroethylene and its metabolites on rodent hepatocyte intercellular communication. Klaunig JE, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):454–65
Toxicity of mixtures of trichloroethylene, tetrachloroethylene and 1,1,1-trichloroethane: similarity of in vitro to in vivo responses. Stacey NH. **Toxicol Ind Health** 1989 May;5(3):441–50
In-vitro spin-trapping of free radicals produced during trichloroethylene and diethylether metabolism. Gonthier BP, et al. **Toxicol Lett** 1989 Jun;47(3):225–34
Lipid peroxidation: a possible mechanism of trichloroethylene-induced nephrotoxicity. Cojocel C, et al. **Toxicology** 1989 Apr;55(1–2):131–41
[Studies of trichloroethylene-induced glycosuria: blood glucose and renal glucose reabsorption in rats exposed to trichloroethylene] Arai H. **Sangyo Igaku** 1989 Mar; 31(2):52–61 (Eng. Abstr.) (Jpn)
[Health effects of high concentration of trichloroethylene exposure for 12 weeks in rats] Arai H, et al. **Sangyo Igaku** 1988 Sep;30(5):410–1 (Jpn)

2,4,5-TRICHLOROPHENOXYACETIC ACID

Dioxin levels in Vietnam veterans [letter] Rippee B. **JAMA** 1989 Apr 21;261(15):2201

ADVERSE EFFECTS

The boring story of Agent Orange and the Australian Royal Commission [letter] Hardell L, et al. **Med J Aust** 1989 May 15;150(10):602
Dioxin and health. Agent Orange study blasted [news] McGourty C. **Nature** 1989 Jul 20;340(6230):179
Agent Orange studies [letter] **Science** 1989 Sep 8; 245(4922):1031
Agent Orange: Congress impatient for answers [news] Barinaga M. **Science** 1989 Jul 21;245(4915):249–50
The logic of a controversy: the case of Agent Orange in Australia. Hall W. **Soc Sci Med** 1989;29(4):537–44

ANALOGS & DERIVATIVES

Silvex (2,4,5-TP). **Rev Environ Contam Toxicol** 1988; 104:195–202 (27 ref.)

PHARMACOKINETICS

Cloning, physical mapping and expression of chromosomal genes specifying degradation of the herbicide 2,4,5-T by Pseudomonas cepacia AC1100. Sangodkar UM, et al. **Gene** 1988 Nov 30;71(2):267–77

PHARMACOLOGY

Effect of exposure of Pieris brassicae larvae to 2,4,5-trichlorophenoxyacetic acid on the natural antibacterial activity of serum. Jones RD, et al. **J Invertebr Pathol** 1989 Jul;54(1):63–70

POISONING

Collective judicial management of mass toxic tort controversies: lessons and issues from the Agent Orange litigation. Novey LB. **Soc Sci Med** 1988;27(10):1071–84 (37 ref.)

TOXICITY

The effects of 2,4,5-trichlorophenoxyacetic acid and 2,3,7,8-tetrachlorodibenzo-p-dioxin on developing chicken embryos. Allred PM, et al. **Arch Environ Contam Toxicol** 1977;6(4):483–9
Comparative study on cerebrovascular injuries by three chlorophenoxyacetic acids (2,4-D, 2,4,5-T and MCPA). Elo HA, et al. **Comp Biochem Physiol [C]** 1988;90(1):65–8
Phenoxy herbicides and cancer: insufficient epidemiologic evidence for a causal relationship. Bond GG, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):172–88 (63 ref.)

TRICHOBEZOARS see **BEZOARS**

TRICHOCEPHALIASIS see **TRICHURIASIS**

TRICHOCEPHALUS see **TRICHURIS**

TRICHODERMA see under **HYPHOMYCETES**

TRICHODERMIN see under **SESQUITERPENES**

TRICHOMONAS

DRUG EFFECTS

Effects of 2,4-dinitrophenol on trichomonads and Entamoeba invadens. Müller M, et al. **Comp Biochem Physiol [B]** 1979; 64(1):97–100

ENZYMOLOGY

Tritrichomonas foetus: purification and characterization of hydrogenosomal ATP:AMP phosphotransferase (adenylate kinase). Dinbergs ID, et al. **Exp Parasitol** 1989 Aug; 69(2):150–6
Trichomonas vaginalis and Tritrichomonas foetus secrete neuraminidase into the culture medium. Costa e Silva Filho F, et al. **Mol Biochem Parasitol** 1989 Jun 1;35(1):73–8

GROWTH & DEVELOPMENT

Effect of metronidazole on the cell surface charge of Trichomonas vaginalis and Tritrichomonas foetus. Silva-Filho FC, et al. **Braz J Med Biol Res** 1988; 21(5):1037–45

IMMUNOLOGY

[Complement-binding antibodies in women simultaneously infected with various species of Trichomonas] Cvetkova A, et al. **Wiad Parazytol** 1988;34(2):185–90 (Eng. Abstr.) (Pol)

ISOLATION & PURIFICATION

Oral protozoa in a Kenyan population. Chunge RN, et al. **East Afr Med J** 1988 Mar;65(3):203–7

METABOLISM

Multiple populations of double-stranded RNA in two virus-harbouring strains of Trichomonas vaginalis. Flegr J, et al. **Folia Microbiol (Praha)** 1988;33(6):462–5

PATHOGENICITY

The interaction of Trichomonas vaginalis and Tritrichomonas foetus with epithelial cells in vitro. Silva Filho FC, et al. **Cell Struct Funct** 1988 Aug;13(4):301–10
Pathogenicity of Trichomonas hominis in Kenya. Chunge CN, et al. **East Afr Med J** 1988 Aug;65(8):532–4

TRICHOMONAS INFECTIONS

Trichomonas infections in men. Saultz JW, et al. **Am Fam Physician** 1989 Feb;39(2):177–80

COMPLICATIONS

Cervical intraepithelial neoplasia among women with papillomavirus infection compared to women with Trichomonas infection. Boyle CA, et al. **Cancer** 1989 Jul 1;64(1):168–72
[Coital dysfunction in chronic prostatitis of

trichomonal-bacterial etiology] Khudalberdiev NA. **Vrach Delo** 1989 Mar;(3):85–8 (Eng. Abstr.) (Rus)

DIAGNOSIS

Clinical manifestations of vaginal trichomoniasis. Wølner-Hanssen P, et al. **JAMA** 1989 Jan 27;261(4):571–6

EPIDEMIOLOGY

High prevalence of Trichomona infections in adolescents [letter] DeCastro FJ. **Clin Pediatr (Phila)** 1989 Jan;28(1):33

[A survey of Entamoeba gingivalis and Trichomonas buccalis in Xian] Li Z. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Sep;23(5):307–9 (Chi)

[Epidemiologic aspects of trichomoniasis] Iatsukha MV. **Vestn Dermatol Venerol** 1989;(1):36–40 (70 ref.) (Rus)

IMMUNOLOGY

[Complement-binding antibodies in women simultaneously infected with various species of Trichomonas] Cvetkova A, et al. **Wiad Parazytol** 1988;34(2):185–90 (Eng. Abstr.) (Pol)

[Immunologic changes in women and their sexual partners with urogenital Trichomonas infection] Cvetkova A, et al. **Wiad Parazytol** 1988;34(2):191–6 (Eng. Abstr.) (Pol)

PARASITOLOGY

Human amnion membrane as a model for studying the host-parasite relationship in trichomoniasis. Warton A, et al. **Int J Parasitol** 1988 Nov;18(7):1003–5

[Trichomonas vaginalis, epithelial cells, spermatozoa, and immunologic reactions. How and why an infection persists unchanged despite knowing an adequate drug therapy] Granucci C, et al. **G Ital Chemioter** 1988 Jan–Dec; 35(1–3):75–81 (Eng. Abstr.) (Ita)

[Organization of interlaboratory quality control of the bacterioscopic diagnosis of gonorrhea and trichomoniasis] Fedotova TI. **Lab Delo** 1989;(3):69–70 (Rus)

VETERINARY

Disappearing food animal drugs [news] **J Am Vet Med Assoc** 1989 Apr 1;194(7):875

Bovine trichomoniasis in the north western Cape Province, western Transvaal and the Orange Free State. Erasmus JA, et al. **J S Afr Vet Assoc** 1989 Mar;60(1):51–2

Trichomoniasis and campylobacteriosis in bulls in the Republic of Transkei. Pefanis SM, et al. **J S Afr Vet Assoc** 1988 Sep;59(3):139–40

The use of metronidazole, tinidazole and dimetridazole in eliminating trichomonads from laboratory mice. Roach PD, et al. **Lab Anim** 1988 Oct;22(4):361–4

Haematological findings in budgerigars with megabacterium and Trichomonas infections associated with 'going light'. Henderson GM, et al. **Vet Rec** 1988 Nov 5;123(19):492–4

[Verification of the therapeutic effects of ornidazole (1-(3-chloro-2-hydroxypropyl)-2-methyl-5-nitroimidazole) manufactured in Czechoslovakia in trichomoniasis in pigeons] Kučera J, et al. **Vet Med (Praha)** 1988 Sep;33(9):551–6 (Eng. Abstr.) (Cze)

TRICHOMONAS VAGINALIS

ANALYSIS

Trichomonas vaginalis: preliminary characterization of a sperm motility inhibiting factor. Jarecki-Black JC, et al. **Ann Clin Lab Sci** 1988 Nov–Dec;18(6):484–9

Localization of acetylated alpha-tubulin in Tritrichomonas foetus and Trichomonas vaginalis. Batista CM, et al. **Cell Struct Funct** 1988 Oct;13(5):445–53

CYTOLOGY

A simple flagella staining technique for Trichomonas vaginalis. Adebayo JA. **Med Lab Sci** 1988 Jul;45(3):273–4

DRUG EFFECTS

Antiparasitic activity of nine pyrazole derivatives against Trichomonas vaginalis, Entamoeba invadens and Plasmodium berghei. Escario JA, et al. **Ann Trop Med Parasitol** 1988 Jun;82(3):257–62

Effects of antimicrobial agents on growth and chemotaxis of Trichomonas vaginalis. Sugarman B, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1323–6

The effect of hormones on Trichomonas vaginalis. Sugarman B, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1623–8

Effect of DL-alpha-difluoromethylornithine on polyamine synthesis and interconversion in Trichomonas vaginalis grown in a semi-defined medium. Yarlett N, et al. **Mol Biochem Parasitol** 1988 Oct;31(1):1–9

In vitro inhibition of Trichomonas vaginalis growth by some ortho-phenacyloxy-benzyl alcohols and their derivatives. Chiarini F, et al. **Parassitologia** 1987 Apr;29(1):87–91

[Comparative study of the susceptibility of Candida albicans and Trichomonas vaginalis, on some products used as larvicides, trichomonacides and/or bactericides] Lacroix R, et al. **Ann Pharm Fr** 1988;46(3):205–9 (Eng. Abstr.) (Fre)

[In vitro effect of nonoxynol-9 on herpes virus 1 and 2 and on other sexually transmitted micro-organisms] Del Piano M, et al. **Minerva Ginecol** 1988 Dec;40(12):709–14 (Eng. Abstr.) (Ita)

ENZYMOLOGY

Trichomonas vaginalis: characterization of its glutamate dehydrogenase. Turner AC, et al. **Exp Parasitol** 1988 Oct; 67(1):47–53

Trichomonas vaginalis surface proteinase activity is necessary for parasite adherence to epithelial cells. Arroyo R, et al. **Infect Immun** 1989 Oct;57(10):2991–7

Secretory hydrolases of Trichomonas vaginalis. Savoia D, et al. **Microbiologica** 1989 Apr;12(2):133–8

Trichomonas vaginalis and Tritrichomonas foetus secrete neuraminidase into the culture medium. Costa e Silva Filho F, et al. **Mol Biochem Parasitol** 1989 Jun 1;35(1):73–8

The release of hydrolases from Trichomonas vaginalis and Tritrichomonas foetus. Lockwood BC, et al. **Mol Biochem Parasitol** 1988 Aug;30(2):135–42

Isoenzyme patterns of isolates of Trichomonas vaginalis from Vancouver. Proctor EM, et al. **Sex Transm Dis** 1988 Oct–Dec;15(4):181–5

GROWTH & DEVELOPMENT

Effect of metronidazole on the cell surface charge of Trichomonas vaginalis and Tritrichomonas foetus. Silva-Filho FC, et al. **Braz J Med Biol Res** 1988; 21(5):1037–45

Evaluation of six media for the growth of Trichomonas vaginalis from vaginal secretions. Schmid GP, et al. **J Clin Microbiol** 1989 Jun;27(6):1230–3

[Sensitivity of Trichomonas vaginalis to desiccation] Zajac W, et al. **Wiad Parazytol** 1988;34(3):249–54 (Eng. Abstr.) (Pol)

IMMUNOLOGY

Relatedness of structures of a major immunogen in Trichomonas vaginalis isolates. Alderete JF, et al. **Infect Immun** 1989 Jun;57(6):1849–53

Alternating phenotypic expression of two classes of Trichomonas vaginalis surface markers. Alderete JF. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S408–12 (30 ref.)

[Observation of the processes of phagocytosis and digestion of Staphylococcus aureus by Trichomonas vaginalis using a transmission electron microscope] Szreter H, et al. **Wiad Parazytol** 1989;35(2):121–6 (Eng. Abstr.) (Pol)

[Intradermal test with Trichomonas vaginalis allergen in patients with urogenital Trichomonas infection] Bednova VN, et al. **Vestn Dermatol Venerol** 1988;(7):25–8 (Eng. Abstr.) (Rus)

[Use of the ELISA method in the determination of antibodies to Trichomonas vaginalis] Gombolová A, et al. **Bratisl Lek Listy** 1988 Sep;89(9):689–93 (Eng. Abstr.) (Slo)

ISOLATION & PURIFICATION

Survival of Trichomonas vaginalis in human semen. Daly JJ, et al. **Genitourin Med** 1989 Apr;65(2):106–8

Fewer Trichomonas vaginalis organisms in vaginas of infected women during menstruation [letter] Fox H. **Genitourin Med** 1988 Aug;64(4):280

Comparison of Diamond's medium modified and Kupferberg medium for detection of Trichomonas vaginalis. Gelbart SM, et al. **J Clin Microbiol** 1989 May;27(5):1095–6

Monoclonal-antibody-based enzyme-linked immunosorbent assay for Trichomonas vaginalis. Lisi PJ, et al. **J Clin Microbiol** 1988 Sep;26(9):1684–6

Comparison of four methods to detect Trichomonas vaginalis. Thomason JL, et al. **J Clin Microbiol** 1988 Sep; 26(9):1869–70

Evaluation of the laboratory diagnosis of vaginal trichomoniasis in Khartoum. Omer EF, et al. **J Trop Med Hyg** 1988 Dec;91(6):292–5

Detection of microorganisms in clinical specimens using slides prestained with acridine orange (AOS). Giorgio A, et al. **Microbiologica** 1989 Jan;12(1):97–100

[Diagnostic-detecting value of selected methods used for evaluating the vaginal biocenosis in women] Grys E. **Ginekol Pol** 1988 Feb;59(2):103–8 (Eng. Abstr.) (Pol)

[A dried nutrient medium made from the fermented hydrolysates of a microorganism biomass for isolating Trichomonas vaginalis] Bednova VN, et al. **Vestn Dermatol Venerol** 1988;(10):13–6 (Eng. Abstr.) (Rus)

METABOLISM

Characterization of a secreted cytoactive factor from Trichomonas vaginalis. Lushbaugh WB, et al. **Am J Trop Med Hyg** 1989 Jul;41(1):18–28

Evolutionary conservation of laminin-binding proteins. Lopes JD, et al. **Braz J Med Biol Res** 1988;21(6):1269–73 (23 ref.)

Carbohydrate, energy and hydrogenosomal metabolism of Tritrichomonas foetus and Trichomonas vaginalis. Lindmark DG, et al. **J Protozool** 1989 Mar–Apr; 36(2):214–6 (27 ref.)

Quantitation of concanavalin A and wheat germ agglutinin binding by two strains of Trichomonas vaginalis of differing pathogenicity using gold particle-conjugated lectins. Kon VB, et al. **Parasitol Res** 1988;75(1):7–13

PATHOGENICITY

Presence of laminin-binding proteins in trichomonads and their role in adhesion. Casta e Silva Filho F, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8042–6

PHYSIOLOGY

Human amnion membrane as a model for studying the host-parasite relationship in trichomoniasis. Warton A, et al. **Int J Parasitol** 1988 Nov;18(7):1003–5

Isolation of a cell-detaching factor of Trichomonas vaginalis. Garber GE, et al. **J Clin Microbiol** 1989 Jul;27(7):1548–53

Role of divalent cations, pH, cytoskeleton components and surface charge on the adhesion of Trichomonas vaginalis to a polystyrene substrate. Silva Filho FC, et al. **Mem Inst Oswaldo Cruz** 1987 Jul–Sep;82(3):379–84

ULTRASTRUCTURE

Scanning electron microscopy of Trichomonas vaginalis. Aboul-Magd LA, et al. **J Egypt Soc Parasitol** 1989 Jun; 19(1):231–8

Demonstration of concanavalin A- and wheat germ agglutinin-binding sites on the Trichomonas vaginalis surface coat using lectin-gold particle conjugates. Warton A, et al. **J Electron Microsc (Tokyo)** 1988;37(3):134–40

[Observation on Trichomonas vaginalis by scanning electron microscopy] Du ZM, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):128–9 (Eng. Abstr.) (Chi)

[Ultrastructural analysis of the interrelation of the causative agents of urogenital infections with the cells of the macro-organism in syphilis patients] Delektorskil VV, et al. **Vestn Dermatol Venerol** 1988;(8):26–9 (Eng. Abstr.) (Rus)

[Morphology and biological activity of Trichomonas vaginalis grown on various nutrient media] Vasil'ev MM, et al. **Vestn Dermatol Venerol** 1988;(8):23–6 (Eng. Abstr.) (Rus)

TRICHOMONAS VAGINITIS

Evaluation and management of vaginitis. An update for primary care practitioners. McCue JD. **Arch Intern Med** 1989 Mar;149(3):565–8 (56 ref.)

Trichomonas vaginalis. Thomason JL, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):536–41 (36 ref.)

COMPLICATIONS

N-nitrosamines, trichomoniasis and cervical cancer [letter] O'Farrell N. **S Afr Med J** 1989 Mar 4;75(5):247–8

DIAGNOSIS

The emergency department diagnosis of Trichomonas vaginitis. Bennett JR, et al. **Ann Emerg Med** 1989 May; 18(5):564–6

Comparison of Diamond's medium modified and Kupferberg medium for detection of Trichomonas vaginalis. Gelbart SM, et al. **J Clin Microbiol** 1989 May;27(5):1095–6

Monoclonal-antibody-based enzyme-linked immunosorbent assay for Trichomonas vaginalis. Lisi PJ, et al. **J Clin Microbiol** 1988 Sep;26(9):1684–6

Comparison of four methods to detect Trichomonas vaginalis. Thomason JL, et al. **J Clin Microbiol** 1988 Sep; 26(9):1869–70

Differentiation of Gardnerella vaginalis, Candida albicans, and Trichomonas vaginalis infections of the vagina. Reed BD, et al. **J Fam Pract** 1989 Jun;28(6):673–80 (61 ref.)

Evaluation of the laboratory diagnosis of vaginal trichomoniasis in Khartoum. Omer EF, et al. **J Trop Med Hyg** 1988 Dec;91(6):292–5

[Intradermal test with Trichomonas vaginalis allergen in patients with urogenital Trichomonas infection] Bednova VN, et al. **Vestn Dermatol Venerol** 1988;(7):25–8 (Eng. Abstr.) (Rus)

[Verification of the value of the ELISA test in the diagnosis of urogenital trichomoniasis] Gombolová A, et al. **Bratisl Lek Listy** 1988 Oct;89(10):784–8 (Eng. Abstr.) (Slo)

DRUG THERAPY

Vaginal trichomoniasis: treatment of male sexual partners [letter] Ranelli PL. **Clin Pharm** 1989 Jun;8(6):392

Treatment failure in Trichomonas vaginalis vaginitis. Lumsden WH, et al. **Genitourin Med** 1988 Aug;64(4):217–8 (12 ref.)

Trichomonal vaginitis refractory to conventional treatment [letter] Seligman SA. **Genitourin Med** 1989 Jun;65(3):200–1

Split dose metronidazole in the treatment of vaginal trichomoniasis. O-Prasertsawat P, et al. **J Med Assoc Thai** 1988 Jul;71 Suppl 2:58–60

Chlamydia and trichomoniasis in pregnancy. Nurse-midwifery management. Uzodinma MS, et al. **J Nurse Midwifery** 1989 Jan–Feb;34(1):31–4

[Current therapeutic aspects of Trichomonas vaginalis infections in gynecology] Sesti F, et al. **Clin Ter** 1987 Oct 31;123(2):11?–26 (95 ref.) (Eng. Abstr.) (Ita)

EPIDEMIOLOGY

[Epidemiologic study of changes in vaginal biozoonoses in patients of the Greifswald gynecologic university clinic in

the last 25 years] Birnbaum H. **Zentralbl Gynakol** 1988; 110(18):1161–5 (Eng. Abstr.) (Ger)

ETHNOLOGY

Infection with Trichomonas vaginalis in a black population. Miller JM, et al. **J Natl Med Assoc** 1989 Jun;81(6):701–2

ETIOLOGY

[Gonorrhea, Chlamydia infection, Trichomonas vaginitis and candidiasis in drug addicts. Second report] Stapiński A, et al. **Przegl Dermatol** 1988 Sep–Oct;75(5):381–5 (Eng. Abstr.) (Pol)

IMMUNOLOGY

[Immunologic changes in women and their sexual partners with urogenital Trichomonas infection] Cvetkova A, et al. **Wiad Parazytol** 1988;34(2):191–6 (Eng. Abstr.) (Pol)

PARASITOLOGY

Evaluation of six media for the growth of Trichomonas vaginalis from vaginal secretions. Schmid GP, et al. **J Clin Microbiol** 1989 Jun;27(6):1230–3

THERAPY

Trichomonal vaginitis refractory to treatment: case report. Sprott MS, et al. **Genitourin Med** 1988 Dec;64(6):369–72

TRANSMISSION

Survival of Trichomonas vaginalis in human semen. Daly JJ, et al. **Genitourin Med** 1989 Apr;65(2):106–8

TRICHOPHYTIN see under **ANTIGENS, FUNGAL**

TRICHOPHYTON

CLASSIFICATION

Rapid method for differentiation of Trichophyton rubrum, Trichophyton mentagrophytes, and related dermatophyte species. Summerbell RC, et al. **J Clin Microbiol** 1988 Nov; 26(11):2279–82

Mycological studies on zoophilic dermatophyte isolates of Finish and Swedish origin. Aho R. **Mycoses** 1988 Jun; 31(6):295–302

Some remarks concerning Trichophyton proliferans. Pereiro M Jr, et al. **Mycoses** 1989 Feb;32(2):87–92

DRUG EFFECTS

Activities of compound G2 isolated from alfalfa roots against dermatophytes. Evron R, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1586–7

Screening of medicinal plants of Chhindwara District against Trichophyton mentagrophytes: a causal organism of Tinea pedis. Rai MK, et al. **Hindustan Antibiot Bull** 1988 Feb–May;30(1–2):33–6

Laboratory evaluation of essential oil of Mentha piperita Linn. against Trichophyton mentagrophytes. Rai MK, et al. **Hindustan Antibiot Bull** 1988 Aug–Nov;30(3–4):82–4

Susceptibility of Microsporum and Trichophyton species to suicide inhibitors of polyamine biosynthesis. Boyle SM, et al. **J Med Vet Mycol** 1988;26(4):227–35

Inhibitory effect of a new mycotic agent, piritetrate on ergosterol biosynthesis in pathogenic fungi. Morita T, et al. **J Med Vet Mycol** 1989;27(1):17–25

[Fungicidal effect of iodophor preparations on dermatophyte arthrospores] Wołoszyn S. **Pol Arch Weter** 1987; 27(4):25–34 (Eng. Abstr.) (Pol)

ENZYMOLOGY

Purification and characterization of a 27,000-Mr extracellular proteinase from Trichophyton rubrum. Apodaca G, et al. **Infect Immun** 1989 Oct;57(10):3072–80

Regulation of Trichophyton rubrum proteolytic activity. Apodaca G, et al. **Infect Immun** 1989 Oct;57(10):3081–90

GENETICS

Mutants of Trichophyton equinum. Weigl E, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:123–36

Transformation of the dermatophyte Trichophyton mentagrophytes to hygromycin B resistance. Gonzalez R, et al. **Infect Immun** 1989 Sep;57(9):2923–5

GROWTH & DEVELOPMENT

Temperature-dependent dimorphism and growth rate of Trichophyton equinum mutants. Hejtmánek M, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:23–40

Steroid metabolism as a mechanism of escape from progesterone-mediated growth inhibition in Trichophyton mentagrophytes. Clemons KV, et al. **J Biol Chem** 1989 Jul 5;264(19):11186–92

Inhibition of growth of Trichophyton rubrum by the myeloperoxidase-hydrogen peroxide-chloride system. MacCarthy KG, et al. **J Invest Dermatol** 1989 Apr; 92(4):639–41

Aberrant development of Trichophyton mentagrophytes hyphae cultured in the presence of Congo red. Pancaldi S, et al. **Microbios** 1988;54(219):81–6

[The dependence of the physiological properties of Trichophyton mentagrophytes on the pH value of the culture medium] Danew P, et al. **Mycoses** 1989 Jun; 32(6):303–8 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Trichophyton asthma: sensitisation of bronchi and upper airways to dermatophyte antigen. Ward GW Jr, et al. **Lancet** 1989 Apr 22;1(8643):859–62

[Allergy in Trichophyton infection in the cattle] Wołoszyn S. **Pol Arch Weter** 1987;27(4):5–14 (Eng. Abstr.) (Pol)

[Characteristics of the immunocyte cooperation in 2 strains of mice opposite in their sensitivity to dermaphytoses during the immune response to antigens of the causative agent] Medvedev IuA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):69–73 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

[Clinico-mycologic analysis of the effectiveness of treatment in patients with rubrophytosis of the feet] Vashchuk ZhE, et al. **Vrach Delo** 1989 Jan;(1):92–4 (Eng. Abstr.) (Rus)

METABOLISM

Dermatophyte-hormone relationships: characterization of progesterone-binding specificity and growth inhibition in the genera Trichophyton and Microsporum. Clemons KV, et al. **J Clin Microbiol** 1988 Oct;26(10):2110–5

[Amino acid and carbohydrate levels in Trichophyton verrucosum and homologous purified trichophytin] Wołoszyn S. **Pol Arch Weter** 1987;27(4):15–23 (Eng. Abstr.) (Pol)

PATHOGENICITY

Genetic basis of virulence in dermatophytes. Weigl E. **Acta Univ Palacki Olomuc Fac Med** 1988;119:111–22

[Etiology of dermatomycoses in the Łódź region] Bienias L, et al. **Przegl Dermatol** 1988 Mar–Apr;75(2):136–40 (Eng. Abstr.) (Pol)

PHYSIOLOGY

Hybridization and sexual stimulation in Trichophyton mentagrophytes. Hejtmánek M, et al. **Folia Microbiol (Praha)** 1989;34(1):77–9

[Electron microscopic analysis of the effect of Trichophyton rubrum on the reproduction of the human immunodeficiency virus] Bykovskiĭ AF, et al. **Vestn Dermatol Venerol** 1989;(5):13–6 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

[Electron microscopic study of the interaction of human neutrophils and mononuclear cells with: Trichophyton rubrum] Katsitadze AG. **Vestn Dermatol Venerol** 1989; (4):14–21 (Eng. Abstr.) (Rus)

TRICHOPHYTOSIS see **TINEA**

TRICHOSPORON see under **HYPHOMYCETES**

TRICHOSTRONGYLOIDEA

ANATOMY & HISTOLOGY

Redescription and multivariate morphometrics of Moguranema nipponicum Yamaguti, 1941. Yokohata Y, et al. **Jpn J Vet Res** 1988 Oct;36(3–4):223–33

[Redescription of Dictyocaulus noerneri Ralliet et Henry, 1907, parasite of Capreolus capreolus in Europe. Comparison with D. viviparus (Bloch, 1782), a parasite of cattle] Durette-Desset MC, et al. **Ann Parasitol Hum Comp** 1988;63(4):285–95 (Eng. Abstr.) (Fre)

CLASSIFICATION

The presence of the trichostrongylid Teladorsagia davtiani in sheep in the south-western Cape. Louw JP. **Onderstepoort J Vet Res** 1988 Sep;55(3):185–6

DRUG EFFECTS

Investigation of the mechanism of levamisole resistance trichostrongylid nematodes of sheep. Sangster NC, et al. **Int J Parasitol** 1988 Sep;18(6):813–8

Changes in anthelmintic resistance status of Haemonchus contortus and Trichostrongylus colubriformis exposed to different anthelmintic selection pressures in grazing sheep. Waller PJ, et al. **Int J Parasitol** 1989 Feb;19(1):99–110

In vitro response of Haemonchus contortus larvae harvested during different times of the patent period to anthelmintics. Folz SD, et al. **Res Vet Sci** 1988 Sep;45(2):264–6

Colorimetric assay for the detection of benzimidazole resistance in trichostrongyles. Sutherland IA, et al. **Res Vet Sci** 1989 May;46(3):363–6

Motility response of levamisole/benzimidazole-resistant Haemonchus contortus larvae. Coles GC, et al. **Vet Parasitol** 1989 Jun;31(3–4):253–7

Effects of the chitin synthesis inhibitor diflubenzuron on development of Ascaris suum and Haemonchus contortus. Fetterer RH, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):181–92

Anthelmintic resistance by Haemonchus contortus to ivermectin in Brazil: a preliminary report. Echevarria FA, et al. **Vet Rec** 1989 Feb 11;124(6):147–8

Haemonchus contortus: infectivity and resistance to benzimidazoles. Kerboeuf D, et al. **Vet Rec** 1989 Apr 15; 124(15):399–400

Benzimidazole resistance in nematodes of goats. Scott EW, et al. **Vet Rec** 1989 May 6;124(18):492

[Primary anthelminthic screening on the L4 and L5 developmental stages of the lungworm, Dictyocaulus viviparus, in guinea pigs] Kinkorová J, et al. **Vet Med (Praha)** 1989 Mar;34(3):181–8 (Eng. Abstr.) (Cze)

ENZYMOLOGY

Purification of a 44 kilodalton protease which mediates the ecdysis of infective Haemonchus contortus larvae. Gamble HR, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):49–58

GENETICS

Restriction fragment length patterns of DNA from parasitic nematodes of sheep. Beh KJ, et al. **Res Vet Sci** 1989 Jan; 46(1):127–8

GROWTH & DEVELOPMENT

Evaluation of Haemonchus contortus infections in sexually intact and ovariectomized ewes. Fleming MW, et al. **Am J Vet Res** 1988 Oct;49(10):1733–5

Delayed resumption of development of inhibited Cooperia oncophora in a yearling calf. Smith HJ. **Can J Vet Res** 1989 Jan;53(1):111

Trichostrongylid parasite populations in pregnant or lactating and unmated Florida Native and Dorset/Rambouillet ewes. Zajac AM, et al. **Int J Parasitol** 1988 Nov;18(7):981–5

The influence of cryopreservation on a benzimidazole-resistant isolate of Haemonchus contortus conditioned for inhibited development. Hendrikx WM, et al. **Parasitol Res** 1988;74(6):569–73

A comparison of two methods and two additives for faecal cultivation of bovine trichostrongyle larvae. Steffan P, et al. **Vet Parasitol** 1989 Jun;31(3–4):269–73

[Development and survival of free-living stages of Trichostrongylidae of sheep on irrigated pastures in Zaragoza (Spain)] Uriarte J, et al. **Ann Rech Vet** 1989; 20(1):83–91 (Eng. Abstr.) (Fre)

IMMUNOLOGY

A preliminary evaluation of factors affecting an experimental system for vaccination-and-challenge with Haemonchus contortus in sheep. Adams DB. **Int J Parasitol** 1989 Apr; 19(2):169–75

Infection with Haemonchus contortus in sheep and the role of adaptive immunity in selection of the parasite. Adams DB. **Int J Parasitol** 1988 Dec;18(8):1071–5

Resistance of young lambs to Haemonchus contortus infection, and its loss following anthelmintic treatment. Barger IA. **Int J Parasitol** 1988 Dec;18(8):1107–9

PHYSIOLOGY

Abundance and survival of infective larvae of the cattle nematodes Cooperia punctata, Haemonchus placei and Oesophagostomum radiatum from faecal pats in a wet tropical climate. Fabiyi JP, et al. **Aust Vet J** 1988 Aug; 65(8):229–31

Experimental Haemonchus contortus infections in guinea pigs. Wagland BM, et al. **Int J Parasitol** 1989 May; 19(3):301–5

The ecology of infective larvae of bovine gastrointestinal trichostrongylids in dry season contaminated pastures in the Nigerian derived savanna. Chiejina SN, et al. **J Helminthol** 1989 Jun;63(2):127–39

Size of inoculum dose regulates in part worm burdens, fecundity, and lengths in ovine Haemonchus contortus infections. Fleming MW. **J Parasitol** 1988 Dec;74(6):975–8

Larval ecology of bovine strongylid worms in tropical soils. I. In vitro studies on the longevity of infective strongylid larvae in different soil types. Lyaku JR, et al. **Trop Anim Health Prod** 1988 Aug;20(3):190–2

[2 trichostrongyloid nematode parasites in an African murid. IV. Migration in the vertebrate] Durette-Desset MC, et al. **Ann Parasitol Hum Comp** 1989;64(2):120–33 (Eng. Abstr.) (Fre)

ULTRASTRUCTURE

Light and scanning electron microscopy of the ecdysis of Haemonchus contortus infective larvae. Gamble HR, et al. **J Parasitol** 1989 Apr;75(2):303–7

TRICHOSTRONGYLOIDIASIS

DIAGNOSIS

One human case of trichostrongyliasis in Thailand [letter] Jariya P, et al. **J Med Assoc Thai** 1988 Aug;71(8):469–70

DRUG THERAPY

Activity of commercial Bacillus thuringiensis preparations against Trichostrongylus colubriformis and Nippostrongylus brasiliensis. Bone LW. **J Invertebr Pathol** 1989 Mar;53(2):276–7

ENZYMOLOGY

Changes in enzyme activities in the small intestine of rabbits during early infection with Trichostrongylus colubriformis. Hoste H, et al. **Ann Rech Vet** 1988;19(4):253–8

EPIDEMIOLOGY

Haemonchosis in sheep and goats in Sierra Leone. Asanji MF. **J Helminthol** 1988 Sep;62(3):243–9

PARASITOLOGY

Population biology of the parasitic phase of Ostertagia circumcincta. Smith G. **Int J Parasitol** 1989 Jul; 19(4):385–93

Size of inoculum dose regulates in part worm burdens, fecundity, and lengths in ovine Haemonchus contortus infections. Fleming MW. **J Parasitol** 1988 Dec;74(6):975–8

The influence of cryopreservation on a benzimidazole-resistant isolate of Haemonchus contortus conditioned for inhibited development. Hendrikx WM, et al. **Parasitol Res** 1988;74(6):569–73

PATHOLOGY

Trichostrongylus colubriformis: epithelial cell kinetics in the small intestine of infected rabbits. Hoste H. **Exp Parasitol** 1989 Jan;68(1):99–104

Trichostrongylus colubriformis: epithelial cell migration in the proximal and distal small intestine of infected rabbits. Hoste H, et al. **Exp Parasitol** 1989 Apr;68(3):347–53

Trichostrongylus colubriformis: effects on villi and crypts along the whole small intestine in infected rabbits. Hoste H, et al. **Exp Parasitol** 1988 Oct;67(1):39–46

VETERINARY

A study on the effects of tactical drenchings with a benzimidazole against ostertagiasis in calves. Nansen P, et al. **Acta Vet Scand** 1988;29(1):85–90

Efficacy of levamisole against immature and mature nematodes in goats with induced infections. Coles GC, et al. **Am J Vet Res** 1989 Jul;50(7):1074–5

Evaluation of Haemonchus contortus infections in sexually intact and ovariectomized ewes. Fleming MW, et al. **Am J Vet Res** 1988 Oct;49(10):1733–5

High concentration of serum gastrin immunoreactivity and abomasal mucosal hyperplasia in calves infected with Ostertagia ostertagi and/or Trichostrongylus axei. Snider TG 3d, et al. **Am J Vet Res** 1988 Dec;49(12):2101–4

Efficacy of febantel against abomasal nematodes and lungworms in cattle. Williams JC, et al. **Am J Vet Res** 1988 Dec;49(12):2085–9

Field trials with closantel and Haemonchus contortus in sheep in Papua New Guinea. Owen IL. **Aust Vet J** 1988 Sep;65(9):267–70

Anthelmintic resistance in the field: changes in resistance status of parasitic populations in response to anthelmintic treatment. Waller PJ, et al. **Aust Vet J** 1988 Dec; 65(12):376–9

Effects of parasitism and of supplementing ewes with methyl methionine hydroxy analogue on the wool production of their lambs as adults. Wheeler JL, et al. **Aust Vet J** 1988 Nov;65(11):358–9

Delayed resumption of development of inhibited Cooperia oncophora in a yearling calf. Smith HJ. **Can J Vet Res** 1989 Jan;53(1):111

Infection with Haemonchus contortus in sheep and the role of adaptive immunity in selection of the parasite. Adams DB. **Int J Parasitol** 1988 Dec;18(8):1071–5

The effect of dexamethasone on a single and a superimposed infection with Haemonchus contortus in sheep. Adams DB. **Int J Parasitol** 1988 Jul;18(5):575–9

A preliminary evaluation of factors affecting an experimental system for vaccination–and–challenge with Haemonchus contortus in sheep. Adams DB. **Int J Parasitol** 1989 Apr; 19(2):169–75

Resistance of young lambs to Haemonchus contortus infection, and its loss following anthelmintic treatment. Barger IA. **Int J Parasitol** 1988 Dec;18(8):1107–9

Eosinophil responses in sheep selected for high and low responsiveness to Trichostrongylus colubriformis. Dawkins HJ, et al. **Int J Parasitol** 1989 Apr;19(2):199–205

The response of young Romney lambs to immunization with Trichostrongylus colubriformis larvae. Douch PG. **Int J Parasitol** 1988 Dec;18(8):1035–8

The effects of immunization of sheep with Trichostrongylus colubriformis larvae on worm burdens acquired during grazing. Douch PG. **Int J Parasitol** 1989 Apr;19(2):177–81

Anthelmintic resistance and the control of ovine ostertagiasis: a drug action model for genetic selection. Gettinby G, et al. **Int J Parasitol** 1989 Jul;19(4):369–76

Extraction and identification of a 31,000 mol.wt glycoprotein antigen of Ostertagia circumcincta by sera from resistant sheep. McGillivery DJ, et al. **Int J Parasitol** 1989 Aug; 19(5):473–8

Selection for thiabendazole resistance in Ostertagia spp. by low efficiency anthelmintic treatment. Martin PJ. **Int J Parasitol** 1989 May;19(3):317–25

A novel host–protective antigen from Trichostrongylus colubriformis. O'Donnell IJ, et al. **Int J Parasitol** 1989 May; 19(3):327–35

An ovine lymphocyte antigen marker for acquired resistance to Trichostrongylus colubriformis. Outteridge PM, et al. **Int J Parasitol** 1988 Sep;18(6):853–8

Trixacarus caviae infection of guinea pigs with genetically determined differences in susceptibility to Trichostrongylus colubriformis infection. Rothwell TL, et al. **Int J Parasitol** 1989 May;19(3):347–8

Experimental Haemonchus contortus infections in guinea pigs. Wagland BM, et al. **Int J Parasitol** 1989 May; 19(3):301–5

Changes in anthelmintic resistance status of Haemonchus contortus and Trichostrongylus colubriformis exposed to different anthelmintic selection pressures in grazing sheep. Waller PJ, et al. **Int J Parasitol** 1989 Feb;19(1):99–110

Trichostrongylid parasite populations in pregnant or lactating and unmated Florida Native and Dorset/Rambouillet ewes. Zajac AM, et al. **Int J Parasitol** 1988 Nov;18(7):981–5

Post–mortem changes in the abomasal mucosae of sheep infected with Haemonchus contortus compared with those in uninfected sheep. Nicholls CD, et al. **J Comp Pathol** 1989 Jan;100(1):19–25

Attempts to control infection with Ostertagia ostertagi (Trichostrongylidae) in grazing calves by adding mycelium of the nematode–trapping fungus Arthrobotrys oligospora (Hyphomycetales) to cow pats. Grønvold J, et al. **J Helminthol** 1989 Jun;63(2):115–26

Comparison of egg excretion and serum pepsinogen levels as measures of nematode worm burdens in calves with limited pasture exposure. Murrell KD, et al. **J Parasitol** 1989 Jun;75(3):360–6

Resistance of Libyostrongylus douglassi in ostriches to levamisole. Malan FS, et al. **J S Afr Vet Assoc** 1988 Dec; 59(4):202–3

A field evaluation of benzimidazole and nonbenzimidazole drugs in a herd of dairy goats. Uhlinger C, et al. **J Vet Intern Med** 1988 Jul–Sep;2(3):113–6

Do intestinal helminths affect condition and fecundity of adult mountain hares? Iason GR, et al. **J Wildl Dis** 1988 Oct;24(4):599–605

Hepatic lesions associated with Cooperioides hepaticae (Nematoda: Trichostrongyloidea) infection in impala (Aepyceros melampus) of the Kruger National Park. Pletcher JM, et al. **J Wildl Dis** 1988 Oct;24(4):650–5

Redescription and multivariate morphometrics of Moguranema nipponicum Yamaguti, 1941. Yokohata Y, et al. **Jpn J Vet Res** 1988 Oct;36(3–4):223–33

Susceptibility of laboratory–reared Afghan pika, Ochotona rufescens rufescens (Lagomorpha: Ochotonidae), to gastro–intestinal nematodes of ruminants. Okamoto M, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):913–7

Overberg Research Projects. IV. The development of resistance to Nematodirus in lambs and spontaneous cure of Teladorsagia in weaners. Reinecke RK. **Onderstepoort J Vet Res** 1989 Mar;56(1):81–4

The problem of escalating resistance of Haemonchus contortus to the modern anthelmintics in South Africa. Van Wyk JA, et al. **Onderstepoort J Vet Res** 1989 Mar; 56(1):41–9

Lymphocyte phenotypes in the abomasal mucosa of sheep infected with Haemonchus contortus. Gorrell MD, et al. **Parasite Immunol** 1988 Nov;10(6):661–74

The effect of immunosuppression with dexamethasone on Haemonchus contortus infections in genetically resistant merino sheep. Presson BL, et al. **Parasite Immunol** 1988 Nov;10(6):675–80

Primary and secondary infection of the domestic chicken with Trichostrongylus tenuis (Nematoda), a parasite of red grouse, with observations on the effect on the caecal mucosa. Watson H, et al. **Parasitology** 1988 Aug;97 (Pt 1):89–99

Influence of dietary protein on the pathophysiology of haemonchosis in lambs given continuous infections. Abbott EM, et al. **Res Vet Sci** 1988 Jul;45(1):41–9

Influence of two levels of concurrent infection with Ostertagia circumcincta and Trichostrongylus vitrinus on the growth performance of lambs. Coop RL, et al. **Res Vet Sci** 1988 Nov;45(3):275–80

Susceptibility of the pre–parturient ewe to infection with Trichostrongylus vitrinus and Ostertagia circumcincta. Jackson F, et al. **Res Vet Sci** 1988 Sep;45(2):213–8

Hypergastrinaemia of sheep infected with Haemonchus contortus. Nicholls CD, et al. **Res Vet Sci** 1988 Jul; 45(1):124–6

Blood gastrin and pepsinogen responses to subclinical infection with Ostertagia ostertagi in adult dairy cattle. Pitt SR, et al. **Res Vet Sci** 1988 Jul;45(1):130–1

Development of immunity to incoming radiolabelled larvae in lambs continuously infected with Ostertagia circumcincta. Seaton DS, et al. **Res Vet Sci** 1989 Mar; 46(2):241–6

Development of immunity to incoming radiolabelled larvae in lambs continuously infected with Trichostrongylus vitrinus. Seaton DS, et al. **Res Vet Sci** 1989 Jan;46(1):22–6

Arrested development of Trichostrongylus tenuis as third stage larvae in red grouse. Shaw JL. **Res Vet Sci** 1988 Sep;45(2):256–8

Pathophysiological and parasitological studies on Ostertagia ostertagi infections in calves. Taylor LM, et al. **Res Vet Sci** 1989 Mar;46(2):218–25

Effect of strategic anthelmintic treatment and pasture management on productivity and control of nematode parasites in weaner–yearling beef cattle. Williams JC, et al. **Res Vet Sci** 1988 Jul;45(1):31–40

The influence of host immunity on the epidemiology of trichostrongyle infections in cattle. Armour J. **Vet Parasitol** 1989 Jul 1;32(1):5–19 (35 ref.)

Comparison of the effects of infection with Trichostrongylus colubriformis, T. vitrinus and T. rugatus in merino lambs. Beveridge I, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):229–45

Effects of the chitin synthesis inhibitor diflubenzuron on development of Ascaris suum and Haemonchus contortus. Fetterer RH, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):181–92

Selection of ivermectin–resistant Trichostrongylus colubriformis in lambs. Giordano DJ, et al. **Vet Parasitol** 1988 Dec;30(2):139–48

Development of protection and of self–cure in lambs infected daily with Ostertagia circumcincta. Hong C, et al. **Vet Parasitol** 1989 May;31(2):125–31

Visualization of eosinophil chemotactic factor in abomasal tissue of cattle by immunoperoxidase staining during Ostertagia ostertagi infection. Klesius PH, et al. **Vet Parasitol** 1989 Apr;31(1):49–56

Outbreaks of early–season trichostrongylosis in calves in Denmark. Nansen P, et al. **Vet Parasitol** 1989 Jul 15; 32(2–3):199–211

The effects on merino lambs of chronic infection with Trichostrongylus rugatus. Pullman AL, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):213–28

Level of benzimidazole resistance in a strain of Ostertagia circumcincta studied over several infections in lambs. Scott EW, et al. **Vet Parasitol** 1989 Mar;30(4):305–14

Levels of serum IgE in response to gastrointestinal nematodes in cattle. Thatcher EF, et al. **Vet Parasitol** 1989 Jul 15; 32(2–3):153–61

Clinical nematodiriasis in calves due to Nematodirus battus infection. Armour J, et al. **Vet Rec** 1988 Aug 27; 123(9):230–1

Efficacy of oxfendazole against inhibited larvae of Ostertagia ostertagi in naturally infected calves in the southern USA. Couvillion CE, et al. **Vet Rec** 1989 Apr 29;124(17):462–4

Cobalt deficiency and Ostertagia circumcincta infection in lambs. Ferguson EG, et al. **Vet Rec** 1989 Jan 7;124(1):20

Evaluation of the morantel sustained release trilaminate in the control of parasitic gastroenteritis in first season grazing cattle. Grimshaw WT, et al. **Vet Rec** 1989 Apr 29; 124(17):453–6

Interpretation of abomasal worm burdens in cattle. Hong C. **Vet Rec** 1989 Jan 28;124(4):87–8

Efficacy of nitroxynil against a benzimidazole–resistant strain of Haemonchus contortus in sheep. Jeannin PC. **Vet Rec** 1989 Jun 24;124(25):662–3

Haemonchus contortus: infectivity and resistance to benzimidazoles. Kerboeuf D, et al. **Vet Rec** 1989 Apr 15; 124(15):399–400

Benzimidazole resistance in nematodes of goats. Scott EW, et al. **Vet Rec** 1989 May 6;124(18):492

Field observations on the control of ovine parasitic gastroenteritis in south–east England. Taylor MA, et al. **Vet Rec** 1988 Sep 3;123(10):241–5

Resistance of field strains of Haemonchus contortus to ivermectin, closantel, rafoxanide and the benzimidazoles in South Africa. van Wyk JA, et al. **Vet Rec** 1988 Aug 27;123(9):226–8

[Haemonchosis in camels] Richard D. **Rev Elev Med Vet Pays Trop** 1989;42(1):45–53 (36 ref.) (Eng. Abstr.) **(Fre)**

[Ecoepidemiology of Haemonchus contortus bahiensis, ecotype present in sheep of arid zones of Venezuela] Morales G, et al. **Mem Inst Oswaldo Cruz** 1987 Jul–Sep; 82(3):359–69 (Eng. Abstr.) **(Spa)**

TRICHOSTRONGYLOSIS see under **TRICHOSTRONGYLOIDIASIS**

TRICHOSTRONGYLUS

DRUG EFFECTS

Anthelmintic resistance in the field: changes in resistance status of parasitic populations in response to anthelmintic treatment. Waller PJ, et al. **Aust Vet J** 1988 Dec; 65(12):376–9

A genetic model describing the evolution of levamisole resistance in Trichostrongylus colubriformis, a nematode parasite of sheep. Dobson RJ, et al. **IMA J Math Appl Med Biol** 1987;4(4):279–93

The inheritance of thiabendazole resistance in Trichostrongylus colubriformis. Martin PJ, et al. **Int J Parasitol** 1988 Sep;18(6):703–9

Investigation of the mechanism of levamisole resistance trichostrongylid nematodes of sheep. Sangster NC, et al. **Int J Parasitol** 1988 Sep;18(6):813–8

Changes in anthelmintic resistance status of Haemonchus contortus and Trichostrongylus colubriformis exposed to different anthelmintic selection pressures in grazing sheep. Waller PJ, et al. **Int J Parasitol** 1989 Feb;19(1):99–110

Activity of commercial Bacillus thuringiensis preparations against Trichostrongylus colubriformis and Nippostrongylus brasiliensis. Bone LW. **J Invertebr Pathol** 1989 Mar;53(2):276–7

Selection of ivermectin–resistant Trichostrongylus colubriformis in lambs. Giordano DJ, et al. **Vet Parasitol** 1988 Dec;30(2):139–48

GROWTH & DEVELOPMENT

Predicting populations of Trichostrongylus colubriformis

infective larvae on pasture from meteorological data. Barnes EH, et al. **Int J Parasitol** 1988 Sep;18(6):767–74
Arrested development of Trichostrongylus tenuis as third stage larvae in red grouse. Shaw JL. **Res Vet Sci** 1988 Sep;45(2):256–8

IMMUNOLOGY

The response of young Romney lambs to immunization with Trichostrongylus colubriformis larvae. Douch PG. **Int J Parasitol** 1988 Dec;18(8):1035–8
The effects of immunization of sheep with Trichostrongylus colubriformis larvae on worm burdens acquired during grazing. Douch PG. **Int J Parasitol** 1989 Apr;19(2):177–81
A novel host-protective antigen from Trichostrongylus colubriformis. O'Donnell IJ, et al. **Int J Parasitol** 1989 May; 19(3):327–35
Trichostrongylus colubriformis: analysis of monoclonal antibody and lectin binding to the larval cuticle. Milner AR, et al. **Parasite Immunol** 1988 Jul;10(4):425–32
Development of immunity to incoming radiolabelled larvae in lambs continuously infected with Trichostrongylus vitrinus. Seaton DS, et al. **Res Vet Sci** 1989 Jan;46(1):22–6

METABOLISM

Derivatives of epinephrine, norepinephrine, octopamine and histamine formed by homogenates of Trichostrongylus colubriformis, a nematode parasite of ruminants. Frandsen JC, et al. **Comp Biochem Physiol [C]** 1988;91(2):385–7

PHYSIOLOGY

Factors influencing lethality of Bacillus thuringiensis kurstaki toxin for eggs and larvae of Trichostrongylus colubriformis (Nematoda). Meadows J, et al. **J Parasitol** 1989 Apr; 75(2):191–4
Primary and secondary infection of the domestic chicken with Trichostrongylus tenuis (Nematoda), a parasite of red grouse, with observations on the effect on the caecal mucosa. Watson H, et al. **Parasitology** 1988 Aug;97 (Pt 1):89–99

ULTRASTRUCTURE

The formation of the first-stage cuticle within the egg of Trichostrongylus colubriformis. Wharton DA, et al. **Parasitology** 1988 Dec;97 (Pt 3):459–67

TRICHOTHECENES see under **SESQUITERPENES**

TRICHOTILLOMANIA see under **OBSESSIVE-COMPULSIVE DISORDER**

TRICHURIASIS

DIAGNOSIS

[Clinico-immunologic examinations of foreign nationals with parasitic diseases] Lukačovičová Z, et al. **Bratisl Lek Listy** 1989 Apr;90(4):282–5 (Eng. Abstr.) **(Slo)**

DRUG THERAPY

Treatment with a single dose of albendazole improves growth of Kenyan schoolchildren with hookworm, Trichuris trichiura, and Ascaris lumbricoides infections. Stephenson LS, et al. **Am J Trop Med Hyg** 1989 Jul;41(1):78–87
Open study in the treatment of Trichuris trichiura and Taenia saginata with 800 mg albendazole as a single dose. Pamba HO, et al. **East Afr Med J** 1987 Sep;64(9):590–4
Mebendazole retention enema for severe Trichuris trichiura (whipworm) infection: a case report. Sebastian VJ, et al. **J Trop Med Hyg** 1989 Feb;92(1):39–40

EPIDEMIOLOGY

The evidence for predisposition to trichuriasis in humans: comparison of institutional and community studies. Bundy DA, et al. **Ann Trop Med Parasitol** 1988 Jun;82(3):251–6
Prevalence, incidence, intensity and associated morbidity of intestinal helminths in south Thailand. Upatham ES, et al. **Int J Parasitol** 1989 Apr;19(2):217–28
An outbreak of Trichuris trichiura in a mental handicap hospital. Allen KD, et al. **J Hosp Infect** 1989 Feb; 13(2):161–6
Epidemiology and population dynamics of Ascaris lumbricoides and Trichuris trichiura infection in the same community. Bundy DA, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):987–93
Clustering of Ascaris lumbricoides and Trichuris trichiura infections within households. Forrester JE, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):282–8

IMMUNOLOGY

Genetic variation in the humoral immune responses of mice to the nematode Trichuris muris. Else K, et al. **Parasite Immunol** 1989 Jan;11(1):77–90
Effect of age and initial infection intensity on the rate of reinfection with Trichuris trichiura after treatment. Bundy DA, et al. **Parasitology** 1988 Dec;97 (Pt 3):469–76
Host predisposition to trichuriasis: the mouse—T. muris model. Else KJ, et al. **Parasitology** 1989 Apr;98 Pt 2:275–82

MICROBIOLOGY

[Microparasitocenosis of the intestines and the activity of intestinal enzymes in patients with trichocephaliasis during treatment Blagov NA, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):49–53 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Density dependence in establishment, growth and worm fecundity in intestinal helminthiasis: the population biology of Trichuris muris (Nematoda) infection in CBA/Ca mice. Michael E, et al. **Parasitology** 1989 Jun;98 Pt 3:451–8

PATHOLOGY

[Clinico-morphologic and immunologic characteristics of imported trichocephaliasis] Tokmalaev AK, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):54–7 (Eng. Abstr.) **(Rus)**

VETERINARY

Gastric trichuriasis in a black and white colobus monkey. Loomis MR, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1214–5
Influence of helminth parasite exposure and strategic application of anthelmintics on the development of immunity and growth of swine. Urban JF Jr, et al. **J Anim Sci** 1989 Jul;67(7):1668–77
Concurrent infection of a Patas monkey (Erythrocebus patas) by Citrobacter freundii and Trichuris trichiura. Ocholi RA, et al. **J Wildl Dis** 1989 Jan;25(1):124–5

TRICHURIS

ANATOMY & HISTOLOGY

Variations in egg size of Trichuris trichiura. Yoshikawa H, et al. **Parasitol Res** 1989;75(8):649–54

GROWTH & DEVELOPMENT

Density dependence in establishment, growth and worm fecundity in intestinal helminthiasis: the population biology of Trichuris muris (Nematoda) infection in CBA/Ca mice. Michael E, et al. **Parasitology** 1989 Jun;98 Pt 3:451–8

IMMUNOLOGY

Genetic variation in the humoral immune responses of mice to the nematode Trichuris muris. Else K, et al. **Parasite Immunol** 1989 Jan;11(1):77–90

TRICHUROIDEA

ANATOMY & HISTOLOGY

[Capillaria brochieri n. sp. (Nematoda: Capillariinae) intestinal parasite of the chimpanzee (Pan paniscus) in Zaire] Justine JL. **Ann Parasitol Hum Comp** 1988; 63(6):420–38 (44 ref.) (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

Capillaria procyonis (Nematoda: Trichuroidea) eggs from the tongue of the raccoon (Procyon lotor). Synder DE. **J Wildl Dis** 1988 Oct;24(4):722–3

PHYSIOLOGY

New information on the location of Capillaria procyonis (Nematoda: Trichuroidea) in the tongue of a raccoon (Procyon lotor). Snyder DE. **J Wildl Dis** 1989 Apr; 25(2):294–6
Models to assess the potential of Capillaria hepatica to control population outbreaks of house mice. McCallum HI, et al. **Parasitology** 1989 Jun;98 Pt 3:425–37

TRICLOSAN see under **PHENYL ETHERS**

TRICUSPID VALVE

Tricuspid valve endocarditis. Chan P, et al. **Am Heart J** 1989 May;117(5):1140–6 (60 ref.)
Tricuspid valve endocarditis in children with normal hearts. Tornos MP, et al. **Am Heart J** 1989 Sep;118(3):624–5
The return of elastomer valves. Kolff WJ, et al. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S98–9
Balloon valvuloplasty 1988: a review [letter] Cheng TO. **Clin Cardiol** 1989 Jun;12(6):A4
Septicaemia due to Actinobacillus actinomycetemcomitans with endocarditis and spinal epidural abscess. Brisseau JM, et al. **J Infect** 1988 Sep;17(2):131–4
The tricuspid valve: an unusual site of endocardial pacemaker lead fracture. Clarke B, et al. **PACE** 1989 Jul;12(7 Pt 1):1077–9
[Behçet's disease and tricuspid endocarditis (letter)] Chakroun M, et al. **Ann Med Interne (Paris)** 1989; 140(3):230–1 (15 ref.) **(Fre)**
[Tricuspid endocarditis caused by Staphylococcus aureus in AIDS. Discussion of a case] Serra W, et al. **G Ital Cardiol** 1988 Mar;18(3):240–3 (Eng. Abstr.) **(Ita)**
[A surgical case report of severe infundibular PS—especially transtricuspid flow by pulsed Doppler cardiography] Otaki M, et al. **Kokyu To Junkan** 1988 Dec;36(12):1361–3 (Eng. Abstr.) **(Jpn)**
[A case report of tricuspid valve endocarditis due to Staphylococcus aureus with successful surgical treatment] Takayama T, et al. **Kyobu Geka** 1989 Feb;42(2):160–3 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Successful pregnancy following modified Fontan procedure in a patient with tricuspid atresia and recurrent atrial flutter. Fyfe DA, et al. **Am Heart J** 1989 Jun;117(6):1387–8
In utero diagnosis of interrupted aortic arch with transposition of the great arteries and tricuspid atresia. Johnson BL, et al. **Am Heart J** 1989 Mar;117(3):690–2
Anomalies of the mitral valve and of the left ventricular architecture in tricuspid valve atresia. Ottenkamp J, et al. **Am J Cardiol** 1989 Apr 1;63(12):880–1
Course of tricuspid atresia in the Fontan era. Tam CK, et al. **Am J Cardiol** 1989 Mar 1;63(9):589–93
Imperforate tricuspid valve with single cardiac outlet from right ventricle. Knight WB, et al. **Br Heart J** 1988 Sep; 60(3):259–61
Left ventricular function in double inlet left ventricle before the Fontan operation: comparison with tricuspid atresia. Redington AN, et al. **Br Heart J** 1988 Oct;60(4):324–31
Angiocardiographic evaluation of right ventricular size and morphology in tricuspid atresia. Boucek MM, et al. **Cathet Cardiovasc Diagn** 1989 Jul;17(3):152–7
Magnetic resonance evaluation of patency of stented polytetrafluoroethylene graft connecting right atrium to pulmonary artery. Nawa S, et al. **Chest** 1988 Nov; 94(5):1105–7
Tricuspid atresia and pregnancy. Bitsch M, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun;31(3):277–82
Left ventricular characteristics during exercise in patients after Fontan's operation for tricuspid atresia. Kondoh C, et al. **Heart Vessels** 1988;4(1):34–9
Ebstein's anomaly of the tricuspid valve associated with rheumatic mitral stenosis and aortic incompetence. Yavagal ST, et al. **Indian Heart J** 1988 Mar–Apr;40(2):138–40
Tricuspid atresia: angiographic and hemodynamic profile of 26 cases. Gupta SR, et al. **Indian Pediatr** 1988 Sep; 25(9):827–33
Tricuspid and pulmonary atresia with coarctation of the aorta: a rare combination possibly explained by persistence of the fifth aortic arch with a systemic-to-pulmonary arterial connection. Freedom RM, et al. **Int J Cardiol** 1989 Aug;24(2):241–5
Relation between preoperative left ventricular muscle mass and outcome of the Fontan procedure in patients with tricuspid atresia. Seliem M, et al. **J Am Coll Cardiol** 1989 Sep;14(3):750–5
Long-term clinical outcome of patients with tricuspid atresia. I. "Natural history". Fesslova V, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):262–72
Analysis of the hypoplastic right ventricle utilizing electrocardiographic body surface potential mapping (BSPM). Liebman J, et al. **J Electrocardiol** 1989 Jul; 22(3):195–209
The arterial supply to the right atrium and the sinus node in classic tricuspid atresia. Battistessa SA, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):816–22
Transposition of the great arteries with straddling tricuspid valve. Report of two rare cases with acquired subaortic stenosis after main pulmonary artery banding. de Vivie R, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):205–13
Incessant atrial tachycardias in a dog with tricuspid dysplasia. Clinical management and electrophysiology. de Madron E, et al. **J Vet Intern Med** 1987 Oct–Dec;1(4):163–9
Fetal echocardiography: the prenatal diagnosis of tricuspid atresia (type Ic) during the second trimester of pregnancy. De Vore GR, et al. **JCU** 1987 Jun;15(5):317–24
Modified Fontan operation for complex cardiac anomalies—postoperative hemodynamics, cardiac function and clinical status. Abe T, et al. **Jpn Circ J** 1988 Nov; 52(11):1221–30
Echocardiographic diagnosis of congenital left ventricular–right atrial communication. Saraçlar M, et al. **Jpn Heart J** 1988 Sep;29(5):671–6
Problems with permanent atrial pacing in the Fontan patient. Case CL, et al. **PACE** 1989 Jan;12(1 Pt 1):92–6
Massive systemic venous thrombosis after Fontan operation: report of a case. Okita Y, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):234–6
[Medium-term results of the Fontan's operation in tricuspid atresia] Leca F, et al. **Ann Chir** 1988;42(8):540–3 (Eng. Abstr.) **(Fre)**
[A 21-year-old male with progressive body position-dependent cyanosis following 3 corrective operations in tricuspid valve atresia] von Scheidt W, et al. **Internist (Berlin)** 1989 May;30(5):338–40 **(Ger)**
[Heart transplantation in childhood] Schüler S, et al. **Z Kardiol** 1989 Apr;78(4):220–7 (Eng. Abstr.) **(Ger)**
[Hydrops fetalis in an infrequent form of tricuspid atresia] Guía Torrent JM, et al. **An Esp Pediatr** 1989 Mar; 30(3):234–6 **(Spa)**
[Tricuspid atresia with pulmonary atresia] de Rubens J, et al. **Arch Inst Cardiol Mex** 1989 Mar–Apr;59(2):139–43 (Eng. Abstr.) **(Spa)**
[Duplication of the tricuspid valve] Cabrera A, et al. **Rev Esp Cardiol** 1988 Aug–Sep;41(7):443–5 (Eng. Abstr.) **(Spa)**

ANATOMY & HISTOLOGY

The distribution and structure of the lymphatic system in dog atrioventricular valves. Noguchi T, et al. **Arch Histol Cytol** 1988 Oct;51(4):361–70

[Histologic and split-line study of the human right atrioventricular valve] Vieira MC, et al. **Arq Bras Cardiol** 1988 May;50(5):301–4 (Eng. Abstr.) (Por)

[Quantitative evaluation of normal mitral and tricuspid valves (comparison of the data of echocardiometric and morphometric studies)] Berishvili II, et al. **Kardiologiia** 1989 Feb;29(2):77–81 (Eng. Abstr.) (Rus)

INJURIES

Tricuspid regurgitation due to chest trauma: an unusual laceration around the annulus of the anterior leaflet. Ishii K, et al. **Heart Vessels** 1988;4(1):44–7

Mitral and tricuspid valve rupture from blunt trauma sustained during a motor vehicle collision. Werne C, et al. **J Trauma** 1989 Jan;29(1):113–5

[A combined rupture of the interventricular septum and the tricuspid valve in closed chest injury] Babliak DE, et al. **Grudn Khir** 1989 Jan–Feb;(1):88–9 (Rus)

INNERVATION

Development of the autonomic ground plexus in the atrioventricular valves of the rat. Kálmán G. **Acta Morphol Hung** 1988;36(1–2):15–25

MICROBIOLOGY

[Evolutive aspect of the echocardiographic image of the vegetation in tricuspid valve endocarditis cured with clinical treatment. A case report] Saraiva LR, et al. **Arq Bras Cardiol** 1988 Nov;51(5):415–7 (Eng. Abstr.) (Por)

PATHOLOGY

Echocardiographic and clinical correlates in drug addicts with infective endocarditis. Implications of vegetation size. Manolis AS, et al. **Arch Intern Med** 1988 Nov; 148(11):2461–5

Tricuspid valve vegetation simulating an intracardiac tumor. Pérez R, et al. **Bol Asoc Med P R** 1988 Aug;80(8):283–5

Tricuspid and pulmonary valve involvement in carcinoid syndrome. Rajan A, et al. **Indian Heart J** 1988 Jan–Feb; 40(1):67–71

Endocarditis in an infant causing "tricuspid atresia". Ho SY, et al. **Int J Cardiol** 1989 Mar;22(3):393–4

[The pathomorphology of endocardiosis in swine] Guarda F, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):377–9 (Eng. Abstr.) (Ger)

[Echocardiographic examination in assessing the efficacy of valve-preserving operations] Solov'ev GM, et al. **Sov Med** 1988;(8):48–52 (Rus)

PHYSIOLOGY

Real-time and simultaneous measurement of tricuspid orifice and tricuspid anulus areas in anesthetized dogs. Tamiya K, et al. **Circ Res** 1989 Mar;64(3):427–36

Effect of sample volume location on pulsed Doppler diastolic flow parameters in newborn infants. Johnson GL, et al. **Pediatr Cardiol** 1988;9(4):221–4

SURGERY

Long-term follow-up after Carpentier tricuspid valvuloplasty. Lambertz H, et al. **Am Heart J** 1989 Mar; 117(3):615–22

Adjustable annuloplasty for tricuspid insufficiency [letter] Kurlansky PA, et al. **Ann Thorac Surg** 1989 Sep;48(3):457

A tricuspid polyurethane heart valve as an alternative to mechanical prostheses or bioprostheses. Lo HB, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):839–44

Surgical excision of the vegetation as treatment of tricuspid valve endocarditis. Evora PR, et al. **Cardiology** 1988; 75(4):287–8

Intraoperative color Doppler assessment of mitral and tricuspid valvuloplasty. Maurer G, et al. **Int J Card Imaging** 1989;4(1):11–3

Surgical experience with diseases of the tricuspid valve. Cross-sectional and Doppler echocardiographic evaluation following DeVega's repair. Kulshrestha P, et al. **Int J Cardiol** 1989 Apr;23(1):19–26

Segmental tricuspid annuloplasty: a new technique [letter] Revuelta JM, et al. **J Thorac Cardiovasc Surg** 1989 May; 97(5):799–801

Tricuspid valve avulsion or excision for right ventricular decompression in pulmonary atresia with intact ventricular septum. Squitieri C, et al. **J Thorac Cardiovasc Surg** 1989 May;97(5):779–84

Conservative or substitutive treatment in tricuspid valve disease? Marinelli G, et al. **Life Support Syst** 1983;1 Suppl 1:320–3

Thrombotic lesions of the tricuspid valve in a newborn: surgical management. Hartyánszky IL, et al. **Pediatr Cardiol** 1989 Spring;10(2):109–12

[Indications and results of surgery of organic involvement of the tricuspid valve] Chaouch H, et al. **Arch Mal Coeur** 1989 Jun;82(6):879–84 (Eng. Abstr.) (Fre)

[Valve-preserving surgery in the correction of rheumatic tricuspid valve disease] Moskalu VD, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):53–9 (Eng. Abstr.) (Rus)

[Controlled annuloplasty of an incompetent tricuspid valve in the surgical treatment of multivalvular heart disease] Solov'ev GM, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):45–9 (Eng. Abstr.) (Rus)

TRICUSPID VALVE INSUFFICIENCY

COMPLICATIONS

The significance of tricuspid regurgitation in hypoplastic left-heart syndrome. Barber G, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1563–7

Mitral and tricuspid valve regurgitation in dilated cardiomyopathy. Dickerman SA, et al. **Am J Cardiol** 1989 Mar 1;63(9):629–31

Pulsatile varicose veins associated with tricuspid regurgitation [letter] Hollins GW, et al. **Br J Surg** 1989 Feb;76(2):207

Eisenmenger ventricular septal defect with tricuspid regurgitation—a rare association. Saxena A, et al. **Indian Heart J** 1988 May–Jun;40(3):200–2

[Tricuspid regurgitation in mitral valve prolapse studied by two-dimensional color flow mapping] Namiki A, et al. **J Cardiol** 1988 Sep;18(3):731–8 (Eng. Abstr.) (Jpn)

[Management of tricuspid regurgitation associated with atrial septal defect in adults] Sugimoto T, et al. **Kyobu Geka** 1988 Dec;41(13):1046–9 (Eng. Abstr.) (Jpn)

[A case of unroofed coronary sinus with mitral and tricuspid valve regurgitation] Egoh Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):755–9 (Eng. Abstr.) (Jpn)

CONGENITAL

[Prenatal diagnosis of severe tricuspid valve insufficiency in Ebstein anomaly with pulmonary valve atresia by 2-dimensional color coded Doppler echocardiography] Gembruch U, et al. **Geburtshilfe Frauenheilkd** 1989 Mar; 49(3):296–8 (Eng. Abstr.) (Ger)

DIAGNOSIS

Prevalence of valvular regurgitation by Doppler echocardiography in patients with structurally normal hearts by two-dimensional echocardiography. Choong CY, et al. **Am Heart J** 1989 Mar;117(3):636–42

Doppler-detected tricuspid, mitral or aortic regurgitation in end-stage renal disease. Bryg RJ, et al. **Am J Cardiol** 1989 Mar 15;63(11):750–2

Simple, rapid method for quantification of tricuspid regurgitation by two-dimensional echocardiography. Fisher EA, et al. **Am J Cardiol** 1989 Jun 1;63(18):1375–8

Pansystolic murmur in the newborn: tricuspid regurgitation versus ventricular septal defect. Kelley JR, et al. **Arch Dis Child** 1988 Oct;63(10 Spec No):1172–4

Transient neonatal tricuspid regurgitation: a Doppler echocardiographic study of three cases. Gewillig M, et al. **Br Heart J** 1988 Nov;60(5):446–51

Colour Doppler flow imaging in regurgitant valvular heart disease. Skwarok D, et al. **Can J Cardiol** 1988 Oct; 4(7):333–7

Quantifying valvular regurgitation. Limitations and inherent assumptions of Doppler techniques. Bolger AF, et al. **Circulation** 1988 Nov;78(5 Pt 1):1316–8 (12 ref.)

Noninvasive evaluation of pulmonary artery pressure during exercise by saline-enhanced Doppler echocardiography in chronic pulmonary disease. Himelman RB, et al. **Circulation** 1989 Apr;79(4):863–71

Intraoperative color Doppler assessment of mitral and tricuspid valvuloplasty. Maurer G, et al. **Int J Card Imaging** 1989;4(1):11–3

Reversed splitting of the second heart sound due to tricuspid regurgitation. Strickland NH, et al. **Int J Cardiol** 1988 Sep; 20(3):412–5

Pulsed and continuous wave Doppler echocardiographic assessment of valvular regurgitation in normal subjects. Berger M, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1540–5

[Diagnostic value of the pulsed Doppler echocardiogram in tricuspid regurgitation] Deng WJ. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Dec; 16(6):358–9 (Chi)

[Mitral, tricuspid and aortic regurgitation. Diagnosis and quantification] Dumesnil JG. **Ann Cardiol Angeiol (Paris)** 1988 Nov;37(9):493–7 (Eng. Abstr.) (Fre)

[Use of Doppler pulse in the qualitative and quantitative diagnosis of aortic, mitral and tricuspid valve insufficiency. Angiographic comparison of the results] Mouelhi E, et al. **Tunis Med** 1987 Mar;65(3):175–81 (Eng. Abstr.) (Fre)

[A pulsating swelling in the neck (clinical conference)] Richter M, et al. **Schweiz Rundsch Med Prax** 1989 Jan 10; 78(1–2):19–21 (Eng. Abstr.) (Ger)

[Asymptomatic course of severe tricuspid valve insufficiency with ateroseptal infarct, coronary fistula and ventricular septum defect as a sequela of blunt thoracic trauma] Renner U, et al. **Z Kardiol** 1989 May;78(5):343–7 (Eng. Abstr.) (Ger)

[Contrast-color Doppler echocardiography. Improved right heart diagnosis following intravenous injection of Echovist] von Bibra H, et al. **Z Kardiol** 1989 Feb;78(2):101–8 (Eng. Abstr.) (Ger)

[Value of Doppler echocardiography in the indications for correction of tricuspid valve insufficiency in the course of mitral valve implantation] Lengyel M, et al. **Orv Hetil** 1989 Jul 23;130(30):1583–7 (Eng. Abstr.) (Hun)

[Multiparameter evaluation of tricuspid insufficiency using two-dimensional echocardiography, Doppler and contrast echocardiography] Barletta GA, et al. **G Ital Cardiol** 1987 Dec;17(12):1031–8 (Eng. Abstr.) (Ita)

[Tricuspid regurgitation evaluated by intraoperative epicardial pulsed Doppler echocardiography: investigation of patients with combined valvular diseases] Iida K, et al. **J Cardiol** 1987 Dec;17(4):797–806 (Eng. Abstr.) (Jpn)

[Intraoperative epicardial two-dimensional and pulsed Doppler echocardiography for assessing functional tricuspid regurgitation] Tanaka M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1292–7 (Eng. Abstr.) (Jpn)

[Evaluation of the usefulness of contrast echocardiography in the diagnosis of tricuspid valve insufficiency in patients with atrial fibrillation] Sobkowicz-Woźniak B, et al. **Kardiol Pol** 1988;31(7):449–57 (Eng. Abstr.) (Pol)

EPIDEMIOLOGY

Color Doppler evaluation of valvular regurgitation in normal subjects. Yoshida K, et al. **Circulation** 1988 Oct;78(4):840–7

ETIOLOGY

Prevalence of catheter-induced valvular regurgitation as determined by Doppler echocardiography. Shandling AH, et al. **Am J Cardiol** 1989 Jun 1;63(18):1369–74

Diastolic atrioventricular valve closure and regurgitation following atrial contraction: their relation to timing of atrial contraction. Okamoto M, et al. **Clin Cardiol** 1989 Mar; 12(3):149–53

Tricuspid regurgitation due to chest trauma: an unusual laceration around the annulus of the anterior leaflet. Ishii K, et al. **Heart Vessels** 1988;4(1):44–7

[Rheumatic involvement of the tricuspid valve. Anatomical types and possibilities of dilatation] Penther P, et al. **Arch Mal Coeur** 1988 Sep;81(9):1079–83 (Eng. Abstr.) (Fre)

[Post-traumatic aneurysm of the right ventricular outflow tract with concomitant tricuspid valve insufficiency] Jacksch R, et al. **Z Kardiol** 1988 Dec;77(12):814–8 (Eng. Abstr.) (Ger)

[A case of two-chambered right ventricle complicating infective endocarditis and tricuspid regurgitation] Hayase S, et al. **Kyobu Geka** 1989 Feb;42(2):150–4 (Eng. Abstr.) (Jpn)

[Traumatic tricuspid insufficiency] Villarroel MT, et al. **Rev Esp Cardiol** 1989 Feb;42(2):145–7 (Eng. Abstr.) (Spa)

GENETICS

Congenital pulmonary atresia with intact ventricular septum, tricuspid insufficiency, and patent ductus arteriosus in two sibs. Eriksen NL, et al. **Am J Med Genet** 1989 Feb; 32(2):187–8

METABOLISM

Paracetamol elimination in patients with tricuspid regurgitation without cardiac failure. Pradeep Kumar N, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar;33(1):70–1

PHYSIOPATHOLOGY

Underestimation of cardiac output by thermodilution in patients with tricuspid regurgitation. Cigarroa RG, et al. **Am J Med** 1989 Apr;86(4):417–20

Model to evaluate ventricular insufficiency utilizing first-pass radioventriculogram component analysis [letter; comment] Eterović D. **J Nucl Med** 1989 Mar;30(3):417–9, **Comment on:** J Nucl Med 1988 Feb;29(2):159–67

[Incidence and concomitant factors of tricuspid valve insufficiency in patients with aortic and mitral valve diseases] Dittmann H, et al. **Z Kardiol** 1989 Jun;78(6):380–5 (Eng. Abstr.) (Ger)

[Isolated mitral valve insufficiency in comparison with mitral-tricuspid insufficiency: various mechanisms of compensating for the defect and functional status of the myocardium] Petrovskiĭ PF, et al. **Kardiologiia** 1988 Sep; 28(9):27–31 (Eng. Abstr.) (Rus)

[Study of diastolic regurgitation of the atrioventricular valves using Doppler echocardiography] Durán M, et al. **Rev Esp Cardiol** 1989 Feb;42(2):131–4 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Tricuspid regurgitation diagnosed by intravenous digital subtraction angiography. Tomizawa T, et al. **J Cardiol** 1988 Jun;18(2):403–14

SURGERY

Long-term follow-up after Carpentier tricuspid valvuloplasty. Lambertz H, et al. **Am Heart J** 1989 Mar; 117(3):615–22

Adjustable annuloplasty for tricuspid insufficiency [letter]

Davila JC. **Ann Thorac Surg** 1989 Apr;47(4):639–40

Tricuspid regurgitation associated with mitral valve disease: repair and replacement. Kay GL, et al. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S93–5

Adjustable annuloplasty for tricuspid insufficiency [letter] Kurlansky PA, et al. **Ann Thorac Surg** 1989 Sep;48(3):457

Tricuspid valve repair. Operative and follow-up evaluation by Doppler color flow mapping. Czer LS, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):101–10; discussion 110–1

Thrombolysis of tricuspid Björk-Shiley prosthesis with tissue-type plasminogen activator. Matsuda M, et al. **Jpn Circ J** 1988 Jun;52(6):583–7

Surgery for tricuspid regurgitation [editorial] **Lancet** 1988 Nov 5;2(8619):1061–2

Conservative or substitutive treatment in tricuspid valve disease? Marinelli G, et al. **Life Support Syst** 1983;1 Suppl 1:320–3

[Two cases of valve replacement in patients with 100% cardiothoracic ratios] Iida H, et al. **Kokyu To Junkan** 1988 Nov;36(11):1261–4 (Eng. Abstr.) (Jpn)

[A case of isolated tricuspid regurgitation associated with protein-losing gastroenteropathy] Yamanaka O, et al. **Kokyu To Junkan** 1989 Mar;37(3):351–6 (Eng. Abstr.) (Jpn)

[Tricuspid valvular regurgitation due to infective endocarditis with ventricular septal defect] Niwaya K, et al. **Kyobu Geka** 1988 Nov;41(12):983–7 (Eng. Abstr.) (Jpn)

[Surgical repair of TR and PC caused by cryosurgery of WPW syndrome] Sato T, et al. **Kyobu Geka** 1988 Dec; 41(13):1077–81 (Eng. Abstr.) (Jpn)

[Surgical treatment of tricuspid regurgitation] Tabayashi K, et al. **Kyobu Geka** 1989 Mar;42(3):178–84 (Eng. Abstr.) (Jpn)

[A case report of tricuspid valve endocarditis due to Staphylococcus aureus with successful surgical treatment] Takayama T, et al. **Kyobu Geka** 1989 Feb;42(2):160–3 (Eng. Abstr.) (Jpn)

[Open-heart surgery in a patient with chronic leukemia] Sekino Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar; 90(3):450–3 (Eng. Abstr.) (Jpn)

[Experimental study on the optimal size of the tricuspid valve annular area on annuloplasty] Higashidate M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):40–3 (Eng. Abstr.) (Jpn)

[The surgical treatment of tricuspid insufficiency associated with acquired valvular disease—a comparative study of tricuspid annuloplasty and tricuspid valve supra-annular imposition] Matsuura A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1075–81 (Eng. Abstr.) (Jpn)

[A case of concomitant surgery of advanced valvular disease and lung cancer under cardiopulmonary bypass] Nakao M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):551–4 (Eng. Abstr.) (Jpn)

[Preoperative analysis and surgical treatment of tricuspid regurgitation associated with acquired valvular heart disease] Okabe M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec; 36(12):2608–14 (Eng. Abstr.) (Jpn)

[Surgical treatment of right atrial myxoma with tricuspid regurgitation—report of a case and review of literature] Sawatani O, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):1021–6 (21 ref.) (Eng. Abstr.) (Jpn)

[Prospect of early postoperative hemodynamics after modified Fontan procedure in tricuspid atresia] Tamaki S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep; 36(9):2020–7 (Eng. Abstr.) (Jpn)

[Tricuspid stenosis. Diagnostic peculiarities] Tarasoutchi F, et al. **Arq Bras Cardiol** 1988 Nov;51(5):377–80 (Eng. Abstr.) (Por)

[Controlled annuloplasty of an incompetent tricuspid valve in the surgical treatment of multivalvular heart disease] Solov'ev GM, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):45–9 (Eng. Abstr.) (Rus)

THERAPY

Percutaneous balloon valvuloplasty for tricuspid stenosis: hemodynamic and pathological findings. Bourdillon PD, et al. **Am Heart J** 1989 Feb;117(2):492–5

TRICUSPID VALVE PROLAPSE see under **HEART VALVE DISEASES**

TRICUSPID VALVE STENOSIS

DIAGNOSIS

A prospective study comparing the haemodynamic with the cross-sectional echocardiographic diagnosis of rheumatic tricuspid stenosis. Ribeiro PA, et al. **Eur Heart J** 1989 Feb; 10(2):120–6

Rheumatic tricuspid stenosis without involvement of the mitral valve. Mittal SR, et al. **Int J Cardiol** 1989 Jul; 24(1):112–5

[Tricuspid stenosis. Diagnostic peculiarities] Tarasoutchi F, et al. **Arq Bras Cardiol** 1988 Nov;51(5):377–80 (Eng. Abstr.) (Por)

EPIDEMIOLOGY

Rheumatic tricuspid stenosis: an echocardiographic study [letter] Singham KT, et al. **Med J Aust** 1979 Oct 20; 2(8):428–9

ETIOLOGY

Pacemaker lead-induced tricuspid stenosis: diagnosis by Doppler echocardiography. Old WD, et al. **Am Heart J** 1989 May;117(5):1165–7

Primary fibrosarcoma of the heart presenting as obstruction at the tricuspid valve: diagnosis by cross-sectional echocardiography. Sethi KK, et al. **Int J Cardiol** 1989 Aug; 24(2):228–30

[Rheumatic involvement of the tricuspid valve. Anatomical types and possibilities of dilatation] Penther P, et al. **Arch Mal Coeur** 1988 Sep;81(9):1079–83 (Eng. Abstr.) (Fre)

PATHOLOGY

Doppler echocardiographic assessment of the valve area in patients with atrioventricular valve stenosis by application of the continuity equation. Karp K, et al. **J Intern Med** 1989 Apr;225(4):261–6

SURGERY

Thrombolysis of tricuspid Björk-Shiley prosthesis with tissue-type plasminogen activator. Matsuda M, et al. **Jpn Circ J** 1988 Jun;52(6):583–7

[Conservative surgical treatment of organic tricuspid stenosis] Bellitti R, et al. **Minerva Cardioangiol** 1988 Dec; 36(12):593–6 (Eng. Abstr.) (Ita)

[Atrioventricular septal defect with severely stenotic right-sided atrioventricular valve—report of a successful surgical repair] Fukuda T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1374–8 (Eng. Abstr.) (Jpn)

THERAPY

Percutaneous double balloon valvuloplasty for severe tricuspid stenosis. Goldenberg IF, et al. **Am Heart J** 1989 Aug;118(2):417–9

Balloon dilatation of a stenosed bioprosthesis in the tricuspid valve position. Wren C, et al. **Br Heart J** 1989 Jan; 61(1):65–7

[Percutaneous transluminal valvuloplasty in stenosis of the tricuspid valve. Presentation of a case] Rico Blázquez J, et al. **Rev Esp Cardiol** 1988 Dec;41(10):636–8 (Eng. Abstr.) (Spa)

TRICYCLIC ANTIDEPRESSIVE AGENTS see **ANTIDEPRESSIVE AGENTS, TRICYCLIC**

TRIETHYLENEMELAMINE

PHARMACOLOGY

Long-term effects of triethylenemelamine exposure on mouse testis cells and sperm chromatin structure assayed by flow cytometry. Evenson DP, et al. **Environ Mol Mutagen** 1989; 14(2):79–89

TOXICITY

Initiating carcinogen, triethylenemelamine, induces micronuclei in skin target cells. He SI, et al. **Environ Mol Mutagen** 1989;14(1):1–5

Triethylene melamine-induced sister-chromatid exchange in murine lymphocytes exposed in vivo. Neft RE, et al. **Mutat Res** 1989 Apr;222(4):323–8

TRIETHYLENETETRAMINE see under **ETHYLENEDIAMINES**

TRIETHYLTIN COMPOUNDS see under **TRIALKYLTIN COMPOUNDS**

TRIFLUOPERAZINE

ADMINISTRATION & DOSAGE

Trifluoperazine stimulated sodium transport through the apical surface of isolated frog skin. Bjerregaard HF, et al. **Acta Physiol Scand** 1988 Sep;134(1):43–52

ADVERSE EFFECTS

Use of neuroleptics after an episode of neuroleptic malignant syndrome. Padgett R, et al. **Can J Psychiatry** 1989 May; 34(4):323–5

Blinking-blepharospasm after long-term neuroleptic treatment. Sachdev PS. **Med J Aust** 1989 Mar 20; 150(6):341–3

METABOLISM

Effects of Ca2+ and Zn2+ on trifluoperazine-S100 proteins interactions: induced circular dichroism and fluorescence spectra. Ogoma Y, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):188–92

Spectral studies of the Ca2+-dependent interaction of trifluoperazine with S100b. Pingerelli PL, et al. **J Protein Chem** 1989 Apr;8(2):183–96

PHARMACOLOGY

Calmodulin antagonist reduces release of malondialdehyde from isolated ischemic/reperfused rat heart. Beręsewicz A, et al. **Acta Physiol Pol** 1988 Sep-Dec;39(5–6):442–9

Antagonists of calmodulin delay injury development in the severely ischemic perfused working rat heart. Beręsewicz A. **Acta Physiol Pol** 1988 Jul-Aug;39(4):225–43

H1-antihistamines and calmodulin antagonists inhibit the ionophore A23187-induced eicosanoid formation by human leukocytes. Simmet T, et al. **Agents Actions** 1989 Mar; 26(3–4):273–8

Trifluoperazine does not affect doxorubicin cardiotoxicity in the rat. Villani F, et al. **Anticancer Res** 1988 Jul-Aug; 8(4):659–63

Calmodulin and protein kinase C antagonists also inhibit the Ca2+-dependent protein protease, calpain I. Brumley LM, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1297–303

Effects of chlorpromazine and trifluoperazine on choline metabolism and phosphatidylcholine biosynthesis in cultured chick heart cells under normoxic and anoxic conditions. Rabkin SW. **Biochem Pharmacol** 1989 Jul 15; 38(14):2349–55

Receptor binding potencies of chlorpromazine, trifluoperazine, fluphenazine and their 10-N-substituted analogues. Savelyeva MV, et al. **Biomed Biochim Acta** 1988; 47(12):1085–7

Modulation in vitro and in vivo of cytotoxicity but not cellular levels of doxorubicin by the calmodulin inhibitor trifluoperazine is dependent on the level of resistance. Ganapathi R, et al. **Br J Cancer** 1988 Sep;58(3):335–40

Calmodulin antagonist trifluoperazine inhibits polyamine biosynthesis and liver regeneration. Alexander RW, et al. **Br J Surg** 1988 Dec;75(12):1160–2

Modulation by adriamycin, daunomycin, verapamil, and trifluoperazine of the biochemical processes linked to mouse skin tumor promotion by 12-O-tetradecanoylphorbol-13-acetate. Satyamoorthy K, et al. **Cancer Res** 1989 Oct 1;49(19):5364–70

Influence of calcium antagonists on the antitumor activity and the cardiac toxicity of doxorubicin in the rat. Villani F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):686–7

Stimulative effects of TMB-8 and trifluoperazine on pancreatic hormone release. Yasuda H, et al. **Diabetes Res Clin Pract** 1989 Apr 1;6(3):227–32

The effect of trifluoperazine, a calmodulin antagonist, on the growth of normal and malignant epidermal keratinocytes in culture. Grief F, et al. **Eur J Cancer Clin Oncol** 1989 Jan;25(1):19–26

The membrane transport system responsible for multidrug resistance is operating in nonresistant cells. Neyfakh AA, et al. **Exp Cell Res** 1988 Oct;178(2):513–7

Effects of calcitonin, 1,25(OH)2 vitamin D3 and trifluoperazine on thyrotropic secretion and their mutual interactions. Zofková I, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):268–74

Preventive effect of trifluoperazine on atherosclerosis induced by cholesterol & adrenaline in rabbits. Mohindroo A, et al. **Indian J Med Res** 1989 Jun;90:215–9

Trifluoperazine stimulates the coordinate degradation of sphingomyelin and phosphatidylcholine in GH3 pituitary cells. Kolesnick RN, et al. **J Biol Chem** 1989 Aug 25; 264(24):14057–61

Phenothiazines inhibit cholesteryl ester formation in J 774 monocyte-like cells. Houtia NE, et al. **J Clin Chem Clin Biochem** 1988 Nov;26(11):673–8

Low concentrations of trifluoperazine arrest the cell division cycle of Saccharomyces cerevisiae at two specific stages. Eilam Y, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):1063–9

Trifluoperazine blocks GABA-gated chloride currents in cultured chick spinal cord neurons. Yang J, et al. **J Neurophysiol** 1989 Feb;61(2):363–73

Increase by trifluoperazine in calcium sensitivity of myofibrils in a skinned fibre from frog skeletal muscle. Kurebayashi N, et al. **J Physiol (Lond)** 1988 Sep;403:407–24

Improvement of myocardial function by trifluoperazine, a calmodulin antagonist, after acute coronary artery occlusion and coronary revascularization. Otani H, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):267–74

The effect of trifluoperazine on muscle tension and cytoplasmic Ca2+ level in guinea pig ileum. Hori M, et al. **Jpn J Pharmacol** 1989 Apr;49(4):540–3

Phase-shifts of the Bulla ocular circadian pacemaker in the presence of calmodulin antagonists. Khalsa SB, et al. **Life Sci** 1988;43(19):1551–6

A dominant trifluoperazine resistance gene from Saccharomyces cerevisiae has homology with F0F1 ATP synthase and confers calcium-sensitive growth. Shih CK, et al. **Mol Cell Biol** 1988 Aug;8(8):3094–103

Modulation of calcium current by calmodulin antagonists. Doroshenko PA, et al. **Neuroscience** 1988 Dec; 27(3):1073–80

Alteration of calcium sensitivity of skinned frog skeletal muscle fibres by inositol triphosphate and calmodulin antagonists. Isac M, et al. **Pflugers Arch** 1988 Aug; 412(3):253–7

Effects of quinine and of calmodulin inhibitors on calcium-dependent potassium channels of human aorta. Serebryakov VN, et al. **Pflugers Arch** 1989;414 Suppl 1:S185

Comparison of the effect of cyclosporine, verapamil, and trifluoperazine on calcium-induced membrane permeability

of mitochondria. Strzelecki T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):182–3

[Facilitatory effect of trifluoperazine on adrenergic transmitter release from rat portal vein] Meng XL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):397–401 (Eng. Abstr.) **(Chi)**

[The effects of the calmodulin antagonist–trifluoperazine in cell proliferation and microtubule assembly] Zhao YL, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Dec;21(4):481–91 (Eng. Abstr.) **(Chi)**

[The effect of trifluoroperazine on cAMP levels in the rat myocardium during various phases of heart cycle] Prokop'eva VD, et al. **Ukr Biokhim Zh** 1988 Nov–Dec; 60(6):85–8 (Eng. Abstr.) **(Rus)**

[Effect of calcium, glucose and trifluoroperazine on the carboxymethylation of proteins in pancreatic islets of rats] Mena P, et al. **Rev Esp Fisiol** 1988 Jun;44(2):211–4 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Resolution of spontaneous contrast with platelet disaggregatory therapy (trifluoperazine). Mahony C, et al. **Am J Cardiol** 1989 Apr 15;63(13):1009–10

Effect of trifluoperazine on CSF and plasma HVA levels in schizophrenic subjects [letter] Sharma R, et al. **Am J Psychiatry** 1988 Nov;145(11):1480–1

Phenothiazines reduce ischemic damage to the central nervous system. Zivin JA, et al. **Brain Res** 1989 Mar 13; 482(1):189–93

Comparative short-term evaluation of penfluridol and trifluoperazine in chronic schizophrenia. Khorana AB, et al. **Indian J Physiol Pharmacol** 1988 Oct–Dec;32(4):293–8

TRIFLUOROACETIC ACID see under **FLUOROACETATES**

TRIFLUOROETHANOL see under **ALCOHOL, ETHYL**

TRIFLUOROPERAZINE see **TRIFLUOPERAZINE**

TRIFLUOROTHYMIDINE see under **THYMIDINE**

TRIFLURALIN see under **TOLUIDINES**

TRIFTAZIN see **TRIFLUOPERAZINE**

TRIGEMINAL CAUDAL NUCLEUS see under **TRIGEMINAL NUCLEUS, SPINAL**

TRIGEMINAL NERVE

Edema of the corneal stroma induced by cold in trigeminal neuropathy. Wilson SE, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):52–9

Bradycardia and asystole associated with trigeminal ganglion injection [letter] Davies A. **Anaesthesia** 1988 Oct;43(10):895

The trigeminal (V), an oft-neglected nerve. Liebesman WP, et al. **Ann Ophthalmol** 1989 Jul;21(7):245–50, 252

Neurogenic pulmonary edema after trigeminal nerve blockade. Wright RS, et al. **Chest** 1989 Aug;96(2):436–8

Gradenigo's syndrome: a rare complication of otitis media. de Graaf J, et al. **Clin Neurol Neurosurg** 1988;90(3):237–9

A comparison of the anaesthetic properties of propofol and methohexitone when used as the sole induction agent for thermocoagulation of the gasserian ganglion. Vercauteren M, et al. **Eur J Anaesthesiol** 1989 Mar;6(2):121–9

Leiomyosarcoma of a lower limb presenting with multiple cranial nerve palsies. Shotton JC. **Eur J Surg Oncol** 1989 Aug;15(4):380–2

Bulbar encephalitis complicating trigeminal zoster in the acquired immune deficiency syndrome. Rosenblum MK. **Hum Pathol** 1989 Mar;20(3):292–5

Intracranial trigeminal nerve rhabdomyoma/choristoma in a child: a case report and discussion of possible histogenesis. Zwick DL, et al. **Hum Pathol** 1989 Apr;20(4):390–2

Herpes zoster maxillaries—a case report. Tandon MP, et al. **Indian J Ophthalmol** 1987 May–Jun;35(3):160–1

Microvascular decompression for intractable trigeminal neuralgia. Shapiro SA, et al. **Indiana Med** 1988 Sep; 81(9):776–8

Trigeminal pain due to whiplash injury. McGlone R, et al. **Injury** 1988 Sep;19(5):366

Needle for use during percutaneous compression of gasserian ganglion for trigeminal neuralgia. Technical note. Gerber AM. **J Neurosurg** 1989 Sep;71(3):455

Trigeminal schwannoma. Surgical series of 14 cases with review of the literature. McCormick PC, et al. **J Neurosurg** 1988 Dec;69(6):850–60 (63 ref.)

Neurilemomas of the trigeminal nerve. Pollack IF, et al. **J Neurosurg** 1989 May;70(5):737–45

Parapontine trigeminal cryptic angiomas presenting as trigeminal neuralgia. Tsubaki S, et al. **J Neurosurg** 1989 Sep;71(3):368–74

Contributions from the upper cervical dorsal roots and trigeminal ganglia to the feline circle of Willis. Saito K, et al. **Stroke** 1989 Apr;20(4):524–6

[A cheek without feeling] Nauta JM, et al. **Ned Tijdschr Geneeskd** 1989 Jun 3;133(22):1105–7 **(Dut)**

[Trigeminal neurotrophic ulcer caused by isolated sensitive neuropathy of the trigeminal nerve] Larrègue M, et al. **Ann Dermatol Venereol** 1988;115(11):1228–9 (7 ref.) **(Fre)**

[Sensory neuropathy of the trigeminal nerve and scleroderma] Fain O, et al. **Rev Neurol (Paris)** 1989; 145(3):236–8 (13 ref.) (Eng. Abstr.) **(Fre)**

[Clinical analysis of trigeminal neuropathy as initial manifestations—an etiological study] Sawamura Y, et al. **No To Shinkei** 1988 Sep;40(9):863–8 (Eng. Abstr.) **(Jpn)**

[Hemangioma of Meckel's cavum: a case report] Lopes JE. **Arq Neuropsiquiatr** 1988 Jun;46(2):187–90 (Eng. Abstr.) **(Por)**

[The clinical picture and treatment of neuropathies of the trigeminal nerve system] Mamedbekov FN, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):58–62 (Eng. Abstr.) **(Rus)**

ANALYSIS

[Biochemical and immunocytochemical study of the axonal domain of mature and immature microtubules] Binet S, et al. **Rev Neurol (Paris)** 1988;144(11):688–96 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

The sensory trigeminal tract of Pacific hagfish. Primary afferent projections and neurons of the tract nucleus. Ronan M. **Brain Behav Evol** 1988;32(3):169–80

Morphological and functional properties of trigeminal nucleus oralis neurons projecting to the trigeminal motor nucleus of the cat. Shigenaga Y, et al. **Brain Res** 1988 Sep 27;461(1):143–9

Somatotopic organization of tooth pulp primary afferent neurons in the cat. Shigenaga Y, et al. **Brain Res** 1989 Jan 16;477(1–2):66–89

Nucleolar eccentricity in trigeminal ganglion neurons. Palmer RJ, et al. **J Anat** 1988 Apr;157:163–8

Trigeminal nerve pathways to the cerebral arteries in monkeys. Ruskell GL, et al. **J Anat** 1987 Dec;155:23–37

Comparison of trigeminal receptor location and structure in the periodontal ligament of different types of teeth from the rat, cat, and monkey. Byers MR, et al. **J Comp Neurol** 1989 Jan 1;279(1):117–27

Afferent projections of the trigeminal nerve in the goldfish, Carassius auratus. Puzdrowski RL. **J Morphol** 1988 Nov; 198(2):131–47

Dendritic ramifications of trigeminal motor neurons innervating jaw-closing muscles of rats. Mong FS, et al. **J Neurol Sci** 1988 Sep;86(2–3):251–64

Noradrenergic neurons with divergent projections to the motor trigeminal nucleus and the spinal cord: a double retrograde neuronal labeling study. Lyons WE, et al. **Neuroscience** 1988 Aug;26(2):681–93

[An applied anatomical study on the trigeminal ganglion and sensory root for radiofrequency controlled thermocoagulation] Zhang JG. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):183–5, 191 (Eng. Abstr.) **(Chi)**

[Determination of the peripheral field of several trigeminal afferent fibers present in the oculomotor nerve] Bortolami R, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1067–70 (Eng. Abstr.) **(Ita)**

BLOOD SUPPLY

[Mesoscopic anatomy of the arterial supply of meningeal origin to Gasser's ganglion] de Montes Meana C, et al. **Bull Assoc Anat (Nancy)** 1989 Mar;73(220):27–30 (Eng. Abstr.) **(Fre)**

CYTOLOGY

An image analysis morphometric method for the study of myelinated nerve fibers from mouse trigeminal root. Savy C, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):307–16

Cerebellar connections of the trigeminal system in the pigeon (Columba livia). Arends JJ, et al. **Brain Res** 1989 May 15; 487(1):69–78

An HRP study of the central projections from primary sensory neurons innervating the rat masseter muscle. Arvidsson J, et al. **Brain Res** 1989 Feb 20;480(1–2):111–8

Topographic study of the feline trigeminal ganglion via the horseradish peroxidase tracer method. Oyagi S, et al. **Brain Res** 1989 Jan 9;476(2):382–3

The allocation of nerve fibres to the anterior eye segment and peripheral ganglia of rats. I. The sensory innervation. ten Tusscher MP, et al. **Brain Res** 1989 Aug 7;494(1):95–104

HRP study of the central components of the trigeminal nerve in the larval sea lamprey: organization and homology of the primary medullary and spinal nucleus of the trigeminus. Anadón R, et al. **J Comp Neurol** 1989 May 22;283(4):602–10

Structure–function relationships in rat brainstem subnucleus interpolaris: IV. Projection neurons. Jacquin MF, et al. **J Comp Neurol** 1989 Apr 1;282(1):45–62

K+-channel blockade in trigeminal root ganglion neurons: effects on membrane outward currents. Spigelman I, et al. **J Neurophysiol** 1989 Sep;62(3):802–9

Cooperation and competition during development: neonatal lesioning of the superior cervical ganglion induces cell death of trigeminal neurons innervating the cerebral blood vessels but prevents the loss of axon collaterals from the neurons that survive. O'Connor TP, et al. **J Neurosci** 1989 May;9(5):1490–501

DRUG EFFECTS

Quantitative estimation of enzymatic changes in the trigeminal ganglia of rat with acute high dose of methylmercuric chloride. Unnikumar KR, et al. **J Environ Pathol Toxicol Oncol** 1989 Mar–Apr;9(2):201–9

Trichloroethylene cranial neuropathy: is it really a toxic neuropathy or does it activate latent herpes virus? Cavanagh JB, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):297–303 (47 ref.)

Consequences of 4-aminopyridine applications to trigeminal root ganglion neurons. Puil E, et al. **J Neurophysiol** 1989 Sep;62(3):810–20

EMBRYOLOGY

The trigeminal system: an advantageous experimental model for studying neuronal development. Davies AM. **Development** 1988;103 Suppl:175–83 (35 ref.)

The trigeminal ganglion in human embryos at stage 15 (5th week). Bruska M. **Folia Morphol (Warsz)** 1987; 46(3–4):141–6

Effects of nerve growth factor on sensory neurons in the chick embryo: a stereological study. Dimberg Y, et al. **Int J Dev Neurosci** 1987;5(3):207–13

Embryonic development of the chick primary trigeminal sensory–motor complex. Covell DA Jr, et al. **J Comp Neurol** 1989 Aug 22;286(4):488–503

Extracellular matrix components of the peripheral pathway of chick trigeminal axons. Moody SA, et al. **J Comp Neurol** 1989 May 1;283(1):38–53

ENZYMOLOGY

Quantitative enzyme histochemistry of rat foetal brain and trigeminal ganglion. Chieco P, et al. **Histochem J** 1988 Aug; 20(8):455–63

Further observations on the relationship between adenosine deaminase-containing axons and trigeminal mesencephalic neurons: an electron microscopic, immunohistochemical and anterograde tracing study. Yamamoto T, et al. **Neuroscience** 1988 Aug;26(2):669–80

GROWTH & DEVELOPMENT

Structure and histogenesis of the principal sensory nucleus of the trigeminal nerve: effects of prenatal exposure to ethanol. Miller MW, et al. **J Comp Neurol** 1989 Apr 22; 282(4):570–80

Trigeminal motoneurons in frogs develop a new dendritic field during metamorphosis. Rosenthal BM, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):53–8

IMMUNOLOGY

T lymphocytes in the trigeminal ganglia of rabbits during corneal HSV infection. Gebhardt BM, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1683–91

INJURIES

Degeneration and regeneration of peripheral nerve in the rat trigeminal system: III. Abnormal sensory reinnervation of rat guard hairs following nerve transection and crush. Munger BL, et al. **J Comp Neurol** 1989 May 8;283(2):169–76

Central trigeminal injury: a sign of basal skull fracture. Aucott WR. **J R Coll Surg Edinb** 1988 Jun;33(3):161–2

[Reconstruction of the branches of the trigeminal nerve using microsurgery methods] Mozsáry PG. **Fogorv Sz** 1989 May; 82(5):141–7 (Eng. Abstr.) **(Hun)**

[Case report of comprehensive therapy] Novotný V, et al. **Cas Lek Cesk** 1988 Aug 26;127(35):1108–9 (Eng. Abstr.) **(Slo)**

METABOLISM

Subarachnoid blood and headache: altered trigeminal tachykinin gene expression. Linnik MD, et al. **Ann Neurol** 1989 Feb;25(2):179–84

Enkephalin-, substance P- and serotonin-like immunoreactive axonal varicosities in close apposition to perikarya of mesencephalic trigeminal nucleus neurons in the cat. Tashiro T, et al. **Brain Res** 1989 Aug 7;494(1):162–7

Proenkephalin opioid peptide product in the sensory ganglia of the rat: a developmental immunohistochemical study. Senba E, et al. **Brain Res Dev Brain Res** 1989 Aug 1; 48(2):263–71

Non myelin-forming perineuronal Schwann cells in rat trigeminal ganglia express P0 myelin glycoprotein mRNA during postnatal development. Lamperth L, et al. **Brain Res Mol Brain Res** 1989 Mar;5(2):177–81

Peptidergic regulation of secretory activity in amphibian olfactory mucosa: immunohistochemistry, neural stimulation, and pharmacology. Getchell ML, et al. **Cell Tissue Res** 1989;256(2):381–9

Cytochemistry of the trigeminal and dorsal root ganglia and spinal cord of the rat. Kai-Kai MA. **Comp Biochem Physiol [A]** 1989;93(1):183–93 (43 ref.)

Increased axonal transport of trigeminal ganglion proteins in an electrode model. Chan KY, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2050–5

Enrichment of a vasoactive neuropeptide (calcitonin gene related peptide) in the trigeminal sensory projection to the intracranial arteries. O'Connor TP, et al. **J Neurosci** 1988 Jul;8(7):2468–76

Changes of calcitonin gene-related peptide-like immunoreactivity in cerebrovascular nerve fibers in the dog after experimentally produced subarachnoid hemorrhage. Nozaki K, et al. **Neurosci Lett** 1989 Jul 17;102(1):27–32

Galanin-positive nerves of trigeminal origin innervate rat cerebral vessels. Suzuki N, et al. **Neurosci Lett** 1989 May 22;100(1-3):123-9

Expression of substance P and of a Ca2+-activated Cl- current in quail sensory trigeminal neurons. Schlichter R, et al. **Neuroscience** 1989;30(3):585-94

Trigeminal fibre collaterals storing substance P and calcitonin gene-related peptide associate with ganglion cells containing choline acetyltransferase and vasoactive intestinal polypeptide in the sphenopalatine ganglion of the rat. An axon reflex modulating parasympathetic ganglionic activity? Suzuki N, et al. **Neuroscience** 1989;30(3):595-604

MICROBIOLOGY

Variation in the number of sites of latency of herpes simplex virus in trigeminal ganglia of inbred mice. Abghari SZ, et al. **Curr Eye Res** 1988 Dec;7(12):1155-62

Establishment of latent ganglionic infection with herpes simplex virus via maxillary gingiva and viral re-activation in vivo after trauma. Shimizu F, et al. **J Dent Res** 1989 Mar;68(3):472-5

Detection of herpes simplex virus type 1 gene expression in latently and productively infected mouse ganglia using the polymerase chain reaction. Lynas C, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2345-55

Fine mapping of the major latency-related RNA of herpes simplex virus type 1 in humans. Wechsler SL, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3101-6

Detection of pseudorabies virus transcripts in trigeminal ganglia of latently infected swine. Cheung AK. **J Virol** 1989 Jul;63(7):2908-13

Detection and preliminary characterization of herpes simplex virus type 1 transcripts in latently infected human trigeminal ganglia. Krause PR, et al. **J Virol** 1988 Dec; 62(12):4819-23

Effects of lipofuscin on in situ hybridization in human neuronal tissue. Steiner I, et al. **J Virol Methods** 1989 Apr-May;24(1-2):1-9

Thymidine kinase-negative herpes simplex virus mutants establish latency in mouse trigeminal ganglia but do not reactivate. Coen DM, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4736-40

Patterns of gene expression and sites of latency in human nerve ganglia are different for varicella-zoster and herpes simplex viruses. Croen KD, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9773-7

Spread of a neurotropic murine coronavirus into the CNS via the trigeminal and olfactory nerves. Perlman S, et al. **Virology** 1989 Jun;170(2):556-60

PATHOLOGY

Lymphomatous involvement of the trigeminal nerve and Meckel cave: CT and MR appearance. De Pena CA, et al. **AJNR** 1989 Sep-Oct;10(5 Suppl):S15-7

Neuronal degeneration and neurofilament accumulation in the trigeminal ganglia in Creutzfeldt-Jakob disease. Guiroy DC, et al. **Ann Neurol** 1989 Jan;25(1):102-6

Pathology of the peripheral nerve in the twitcher mouse following bone marrow transplantation. Kondo A, et al. **Brain Res** 1988 Sep 13;460(1):178-83

Effects of sex difference, gonadectomy and estradiol on N-ethyl-N-nitrosourea-induced trigeminal nerve tumors in rats. Aoyama H, et al. **Carcinogenesis** 1989 Aug; 10(8):1505-9

Trigeminal neuropathy in pontine hemorrhage. Berlit P. **Eur Neurol** 1989;29(3):169-70

Intracranial fibro-osseous lesion. Case report. Garen PD, et al. **J Neurosurg** 1989 Mar;70(3):475-7

Experimental retrograde adriamycin trigeminal sensory ganglionectomy. Kato S, et al. **J Neurosurg** 1988 Nov; 69(5):760-5

Effect of DMBA on oral cancer development in hamsters with latent HSV-1 infections in trigeminal ganglia. Cornella FA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):167-71

Trigeminal neuralgia: MR imaging features. Tash RR, et al. **Radiology** 1989 Sep;172(3):767-70

Trigeminal neurilemoma: appearance on magnetic resonance imaging. Embry BM, et al. **South Med J** 1989 May; 82(5):653-6

[Problem of pathology of neurocytes of the trigeminal ganglion in lesions of the head and brain (quantitative analysis)] Reshetnikov SS, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):32-4 (Eng. Abstr.) **(Rus)**

[Dissemination of an epidermoid carcinoma of the lip through the mental nerve (letter)] Peñarrocha M, et al. **Med Clin (Barc)** 1988 May 28;91(1):37-8 **(Spa)**

[Sensory neuropathy of the 5th cranial nerve secondary to collagenosis. (Review of the literature and report of 3 cases)] Ponce González F, et al. **Rev Clin Esp** 1988 May; 182(8):423-5 (26 ref.) (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Trigeminofacial reflex. III. Effect of auriculotherapy. Steidl L, et al. **Acta Univ Palacki Olomuc Fac Med** 1987; 117:141-50

The role of trigeminal nerve in acupuncture. Skokljev A, et al. **Acupunct Electrother Res** 1988;13(2-3):67-78

Degenerative changes of primary neurons following tooth extraction. Kubota K, et al. **Anat Anz** 1988;166(1-5):133-9

Contamination of trigeminal evoked potentials by muscular artifacts [letter] Leandri M, et al. **Ann Neurol** 1989 May; 25(5):527-8

Feeding behavior by parasitic phase lampreys, Ichthyomyzon unicuspis. Kawasaki R, et al. **Brain Behav Evol** 1988; 32(6):317-29

Electrophysiological analysis of the trigemino-olivo-cerebellar (crura I and II, lobulus simplex) projection in the rat. Akaike T. **Brain Res** 1989 Mar 20; 482(2):402-6

Changes in mechanoreceptive field properties of trigeminal somatosensory brainstem neurons induced by stimulation of nucleus raphe magnus in cats. Chiang CY, et al. **Brain Res** 1989 Apr 24;485(2):371-81

Structure and function of barrel 'precursor' cells in trigeminal nucleus principalis. Jacquin MF, et al. **Brain Res** 1988 Oct 1;471(2):309-14

Central terminations of periodontal mechanoreceptive and tooth pulp afferents in the trigeminal principal and oral nuclei of the cat. Tsuru K, et al. **Brain Res** 1989 Apr 17; 485(1):29-61

Response characteristics of lamb trigeminal neurons to stimulation of the oral cavity and epiglottis with different sensory modalities. Sweazey RD, et al. **Brain Res Bull** 1989 May;22(5):883-91

Excitatory responses of trigeminal neurons to substance P suggest involvement in sensory transmission. Spigelman I, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):845-8

Early scalp responses evoked by stimulation of the supraorbital nerve in man. Leandri M, et al. **Electroencephalogr Clin Neurophysiol** 1989 Sep-Oct; 74(5):367-77

Normative data on scalp responses evoked by infraorbital nerve stimulation. Leandri M, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov-Dec; 71(6):415-21

Modifications of masticatory behavior after trigeminal deafferentation in the rabbit. Inoue T, et al. **Exp Brain Res** 1989;74(3):579-91

Sensory and motor responses of trigeminal and reticular neurons during ingestive behavior in rats. Yamamoto T, et al. **Exp Brain Res** 1989;76(2):386-400

Structure-function relationships in rat brainstem subnucleus interpolaris: V. Functional consequences of neonatal infraorbital nerve section. Jacquin MF. **J Comp Neurol** 1989 Apr 1;282(1):63-79

Degeneration and regeneration of peripheral nerve in the rat trigeminal system: III. Abnormal sensory reinnervation of rat guard hairs following nerve transection and crush. Munger BL, et al. **J Comp Neurol** 1989 May 8;283(2):169-76

A comparison of the discriminatory ability and sensitivity of the trigeminal and olfactory systems to chemical stimuli in the tiger salamander. Silver WL, et al. **J Comp Physiol [A]** 1988 Nov;164(1):55-66

Physiological properties of sensory trigeminal neurons projecting to mesencephalic parabrachial area in the cat. Hayashi H, et al. **J Neurophysiol** 1989 Jun;61(6):1153-60

Physiological and anatomical consequences of infraorbital nerve transection in the trigeminal ganglion and trigeminal spinal tract of the adult rat. Renehan WE, et al. **J Neurosci** 1989 Feb;9(2):548-57

An electrophysiologically defined trigemino-reticulo-facial pathway related to the blink reflex in the cat. Inagaki M, et al. **Neurosci Lett** 1989 Jan 2;96(1):64-9

Candidate interneurons mediating peripherally evoked disynaptic inhibition of masseter motoneurons of both sides. Kamogawa H, et al. **Neurosci Lett** 1988 Dec 19; 95(1-3):149-54

Effects of purinoceptor agonists on electrophysiological properties of rat mesencephalic trigeminal neurones in vitro. Regenold JT, et al. **Neurosci Lett** 1988 Oct 17; 92(3):347-50

KNa. A sodium-activated potassium current. Bertrand D, et al. **Pflugers Arch** 1989;414 Suppl 1:S76-9

Immunohistochemical evidence for a co-transmitter role of opioid peptides in primary sensory neurons. Weihe E, et al. **Prog Brain Res** 1988;74:189-99

[The effect of trigeminal zone irritation on parameters of forced vital capacity in humans] Javorka K, et al. **Bratisl Lek Listy** 1989 Jan;90(1):32-6 (Eng. Abstr.) **(Slo)**

PHYSIOPATHOLOGY

Nociceptive responses of trigeminal neurons in SII-7b cortex of awake monkeys. Dong WK, et al. **Brain Res** 1989 Apr 10;484(1-2):314-24

Trigemino-cervical reflex in pathology of the brain stem and of the first cervical cord segments. Rossi B, et al. **Electromyogr Clin Neurophysiol** 1989 Mar;29(2):67-71

Trigeminal trophic syndrome. Arasi R, et al. **Laryngoscope** 1988 Dec;98(12):1330-3

The effect of unilateral corneal anesthesia on the Schirmer test. Crabtree G, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):631-2

Unilateral impairment of pupillary response to trigeminal nerve stimulation in cluster headache. Fanciullacci M, et al. **Pain** 1989 Feb;36(2):185-91

Evoked potentials directly recorded from the trigeminal root in man. Leandri M, et al. **Pain** 1988 Nov;35(2):227-9

Post-herpetic neuralgia: 208 cases. Watson CP, et al. **Pain** 1988 Dec;35(3):289-97

Trigeminovascular fibers increase blood flow in cortical gray matter by axon reflex-like mechanisms during acute severe hypertension or seizures. Sakas DE, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1401-5

Organization of trigeminal nociceptive pathways. Maciewicz R, et al. **Semin Neurol** 1988 Dec;8(4):255-64 (100 ref.)

[Changes in the sensitivity of the cornea in patients with intracerebral tumors. Studies of patients with meningioma of the cranial base and neurinoma of the trigeminal nerve and the vestibulocochlear nerve using the Draeger esthesiometer] Heller H, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):356-9 (Eng. Abstr.) **(Ger)**

[Intracranially recorded trigeminal compound action potential: with special reference to trigeminal neuralgia] Igarashi S, et al. **No Shinkei Geka** 1989 May;17(5):435-41 (Eng. Abstr.) **(Jpn)**

[Trigeminal nerve dysfunction as a false localizing sign: a case of the choroid plexus papilloma in the IVth ventricle] Nishizawa S, et al. **No Shinkei Geka** 1989 Mar;17(3):273-7 (Eng. Abstr.) **(Jpn)**

[Evoked potentials in experimental neuritis (neuropathies) of the trigeminal nerve] Grechko VE, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):98-102 (Eng. Abstr.) **(Rus)**

[Somatosensory evoked potentials in patients with lesions of the trigeminal nerve system] Melzerov EE, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):12-7 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

The radiologic assessment of trigeminal neuropathy. Hutchins LG, et al. **AJNR** 1989 Sep-Oct;10(5):1031-8

Trigeminal neuroma. A report of eleven cases. Bordi L, et al. **Surg Neurol** 1989 Apr;31(4):272-6

SURGERY

Stimulation of internal capsule, thalamic sensory nucleus (VPM) and cerebral cortex inhibited deafferentation hyperactivity provoked after gasserian ganglionectomy in cat. Namba S, et al. **Acta Neurochir Suppl (Wien)** 1988; 42:243-7

Percutaneous surgical treatment of trigeminal neuralgia. Frank F, et al. **Acta Neurochir (Wien)** 1989;97(3-4):128-30

The management of trigeminal neuralgia with cryotherapy. Politis C, et al. **Acta Stomatol Belg** 1988 Sep;85(3):197-205

Posterior fossa partial trigeminal rhizotomy: an alternative to microvascular decompression. Gelber BR, et al. **Nebr Med J** 1989 May;74(5):105-8

Percutaneous microcompression of the trigeminal ganglion [letter] Brown JA, et al. **Neurosurgery** 1988 Aug;23(2):270

Treatment of trigeminal neuralgia by thermocoagulation, glycerolization, and percutaneous compression of the gasserian ganglion and/or retrogasserian rootlets: long-term results and therapeutic protocol. Fraioli B, et al. **Neurosurgery** 1989 Feb;24(2):239-45

The microsurgical anatomy of the infratentorial lateral supracerebellar approach to the trigeminal nerve for tic douloureux. Matsushima T, et al. **Neurosurgery** 1989 Jun; 24(6):890-5

Spontaneous lateral pontine hemorrhage with associated trigeminal nerve root hematoma. Veerapen R. **Neurosurgery** 1989 Sep;25(3):451-3; discussion 453-4

[The value of destructive surgery of the trigeminal nerve in atypical facial pain] Kühner A. **Neurochirurgia (Stuttg)** 1988 Nov;31(6):210-2 (Eng. Abstr.) **(Ger)**

[Results of electrocoagulation of Gasser's ganglion in 250 patients with idiopathic trigeminal neuralgia] Grunert P, et al. **Zentralbl Neurochir** 1988;49(3):196-201 (Eng. Abstr.) **(Ger)**

[Spinal and medullary DREZ lesions for deafferentation pain] Ishijima B. **No Shinkei Geka** 1988 Nov;16(12):1331-7 **(Jpn)**

[Differentiated high-frequency rhizotomy in trigeminal neuralgia] Ogleznev KIa, et al. **Zh Vopr Neirokhir** 1989 Mar-Apr;(2):38-41 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Distribution and termination of trigeminal nerves to the cerebral arteries in monkeys. Simons T, et al. **J Anat** 1988 Aug;159:57-71

TRIGEMINAL NEURALGIA

BLOOD

[Prostaglandin E levels in patients with pain syndromes of the face and head] Puzin MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):117-20 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

The association of hemifacial spasm and facial pain. Perkin GD, et al. **J Neurol Neurosurg Psychiatry** 1989 May; 52(5):663-5 (20 ref.)

DIAGNOSIS

Parapontine trigeminal cryptic angiomas presenting as trigeminal neuralgia. Tsubaki S, et al. **J Neurosurg** 1989 Sep;71(3):368-74

Magnetic resonance imaging of vascular compression in

trigeminal neuralgia. Case report. Wong BY, et al. **J Neurosurg** 1989 Jan;70(1):132–4

Trigeminal neuralgia: MR imaging features. Tash RR, et al. **Radiology** 1989 Sep;172(3):767–70

[Clinical characteristics and treatment of bilateral odontogenic trigeminal neuralgia] Puzin MN, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):44–6 (Eng. Abstr.) (Rus)

[Problems of trigeminal neuralgia] Savitskaia ON, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):3–8 (Eng. Abstr.) (Rus)

[Clinical aspects of trigeminal neuralgia] Stepanchenko AV. **Zh Nevropatol Psikhiatr** 1989;89(4):8–12 (Eng. Abstr.) (Rus)

DRUG THERAPY

Pimozide therapy for trigeminal neuralgia. Lechin F, et al. **Arch Neurol** 1989 Sep;46(9):960–3

Transoval trigeminal cisternography and glycerol injection in trigeminal neuralgia. Van de Velde C, et al. **J Belge Radiol** 1989 Apr;72(2):83–7

Intravenous chlormethiazole in the management of primary trigeminal neuralgia resistant to conventional therapy. Zurak N, et al. **J Int Med Res** 1989 Jan–Feb;17(1):87–92

Definite and sustained improvement with pimozide of two patients with severe trigeminal neuralgia. Some neurochemical, neurophysiological and neuroendocrinological findings. Lechin F, et al. **J Med** 1988;19(3–4):243–56

Oxcarbazepine: a new drug in the management of intractable trigeminal neuralgia. Zakrzewska JM, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):472–6

Retrograde axoplasmic transport of adriamycin [letter] Smith FP. **J Neurosurg** 1989 May;70(5):819–20

Phenytoin monitoring: clinical or scientific? Fulton JD, et al. **Scott Med J** 1988 Jun;33(3):267–8

Medical treatment of the major neuralgias. Dalessio DJ. **Semin Neurol** 1988 Dec;8(4):286–90 (10 ref.)

[Trigeminal neuralgia. Approaches in basic diagnosis—administration of antiepileptics] von Albert HH. **Fortschr Med** 1989 May 10;107(14):26–9 (Ger)

[Treatment of trigeminal neuralgia with retrogasserian glycerol injection. Preliminary results] Orlandini G. **Minerva Anestesiol** 1988 Dec;54(12):525–6 (Eng. Abstr.) (Ita)

[Sodium oxybutyrate in the treatment of trigeminal neuralgia (clinico–physiological study)] Karlov VA, et al. **Sov Med** 1988;(7):112–5 (Rus)

[Use of carbamazepine in trigeminal neuralgia] Puzin MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):105–8 (Eng. Abstr.) (Rus)

ETIOLOGY

Neurosyphilis presenting with Raeder's syndrome [letter] Watanabe K, et al. **Ann Neurol** 1989 Apr;25(4):418

Arteriovenous malformation in the cerebellopontine angle presenting as trigeminal neuralgia. Figueiredo PC, et al. **Arq Neuropsiquiatr** 1989 Mar;47(1):61–71 (59 ref.)

Progressive systemic sclerosis presenting as a case of trigeminal neuropathy [letter] Heald A. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):918–20

Views on microvascular compression [letter] **J Neurosurg** 1989 Sep;71(3):459–64

Tic douloureux caused by primitive trigeminal artery or its variant. Morita A, et al. **J Neurosurg** 1989 Mar;70(3):415–9

Symptomatic trigeminal neuralgia. Vassilakis D, et al. **J Neurosurg Sci** 1988 Jul–Sep;32(3):117–20

Intramedullary cavernous angioma with trigeminal neuralgia: a case report and review of the literature. Saito N, et al. **Neurosurgery** 1989 Jul;25(1):97–101 (19 ref.)

[Trigeminal neuralgia caused by brain tumors; study of 125 cases] Hamada S, et al. **Masui** 1988 Aug;37(8):1002–6 (Eng. Abstr.) (Jpn)

[A case of Raeder's syndrome caused by metastatic malignant lymphoma] Nogaki H, et al. **No To Shinkei** 1989 Mar; 41(3):259–62 (14 ref.) (Eng. Abstr.) (Jpn)

GENETICS

Familial trigeminal neuralgia: case report. Kirkpatrick DB. **Neurosurgery** 1989 May;24(5):758–61

IMMUNOLOGY

[The immune status of patients with trigeminal neuralgia and its correction] Iuodzhbalis GIu, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):44–6 (Eng. Abstr.) (Rus)

[Immunological aspects of trigeminal neuralgia] Puzin MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):17–9 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

The pharmacology of trigeminal neuralgia. Fromm GH. **Clin Neuropharmacol** 1989 Jun;12(3):185–94 (46 ref.)

Herpes zoster infection with trigeminal and facial nerve involvement. Waterman G, et al. **Cutis** 1989 Mar; 43(3):262–3

Trigeminal neuralgia and related disorders. Fromm GH. **Neurol Clin** 1989 May;7(2):305–19 (86 ref.)

Trigeminal depressor response during percutaneous microcompression of the trigeminal ganglion for trigeminal neuralgia. Brown JA, et al. **Neurosurgery** 1988 Dec; 23(6):745–8

Organization of trigeminal nociceptive pathways. Maciewicz R, et al. **Semin Neurol** 1988 Dec;8(4):255–64 (100 ref.)

[Intracranially recorded trigeminal compound action potential: with special reference to trigeminal neuralgia] Igarashi S, et al. **No Shinkei Geka** 1989 May;17(5):435–41 (Eng. Abstr.) (Jpn)

[Somatosensory evoked potentials in patients with lesions of the trigeminal nerve system] Meizerov EE, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):12–7 (Eng. Abstr.) (Rus)

RADIOTHERAPY

[Treatment of vasomotor rhinitis, trigeminal neuralgia and Sluder's syndrome by irradiation of the sphenopalatine ganglion with helium–neon lasers] Shuster MA, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):35–40 (Eng. Abstr.) (Rus)

[Radiotherapy of trigeminal neuralgia and post-neuritic contracture of the mimetic muscles] Podliashchuk EL, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):111–2 (Eng. Abstr.) (Rus)

[Treatment of trigeminal neuralgia, ganglioneuritis of the pterygopalatine ganglion and other types of prosopalgias by helium–neon laser irradiation of the pterygopalatine ganglion] Shuster MA, et al. **Zh Nevropatol Psikhiatr** 1988; 88(7):96–8 (Eng. Abstr.) (Rus)

SURGERY

Craniofacial postherpetic neuralgia managed by stereotactic spinal trigeminal nucleotomy. Schvarcz JR. **Acta Neurochir Suppl (Wien)** 1989;46:62–4

Microvascular decompression for trigeminal neuralgia. Dahle L, et al. **Acta Neurochir (Wien)** 1989;99(3–4):109–12

Percutaneous surgical treatment of trigeminal neuralgia. Frank F, et al. **Acta Neurochir (Wien)** 1989;97(3–4):128–30

Neurophysiologic monitoring in posterior fossa surgery. I. Technical principles, applicability and limitations. Schramm J, et al. **Acta Neurochir (Wien)** 1989;98(1–2):9–18

The management of trigeminal neuralgia with cryotherapy. Politis C, et al. **Acta Stomatol Belg** 1988 Sep;85(3):197–205

Coronary vasospasm during percutaneous trigeminal rhizotomy. Swerdlow B, et al. **Anaesthesia** 1988 Oct; 43(10):861–3

Retrosigmoidal approach in otoneurological surgery. Wang PZ. **Chin Med J [Engl]** 1988 Jun;101(6):456–7

A comparison of the anaesthetic properties of propofol and methohexitone when used as the sole induction agent for thermocoagulation of the gasserian ganglion. Vercauteren M, et al. **Eur J Anaesthesiol** 1989 Mar;6(2):121–9

Microvascular decompression for intractable trigeminal neuralgia. Shapiro SA, et al. **Indiana Med** 1988 Sep; 81(9):776–8

Evaluation of microvascular decompression and partial sensory rhizotomy in 252 cases of trigeminal neuralgia. Bederson JB, et al. **J Neurosurg** 1989 Sep;71(3):359–67

Microvascular compression–decompression: a recollection [letter] Parkinson D. **J Neurosurg** 1989 May;70(5):819

Posterior fossa partial trigeminal rhizotomy: an alternative to microvascular decompression. Gelber BR, et al. **Nebr Med J** 1989 May;74(5):105–8

The microsurgical anatomy of the infratentorial lateral supracerebellar approach to the trigeminal nerve for tic douloureux. Matsushima T, et al. **Neurosurgery** 1989 Jun; 24(6):890–5

Percutaneous procedures for trigeminal neuralgia: microcompression versus radiofrequency thermocoagulation. Personal experience. Meglio M, et al. **Pain** 1989 Jul;38(1):9–16

Surgical therapy of neuralgia: vascular decompression procedures. Wilkins RH. **Semin Neurol** 1988 Dec;8(4):280–5 (35 ref.)

[The value of destructive surgery of the trigeminal nerve in atypical facial pain] Kühner A. **Neurochirurgia (Stuttg)** 1988 Nov;31(6):210–2 (Eng. Abstr.) (Ger)

[Results of electrocoagulation of Gasser's ganglion in 250 patients with idiopathic trigeminal neuralgia] Grunert P, et al. **Zentralbl Neurochir** 1988;49(3):196–201 (Eng. Abstr.) (Ger)

[Percutaneous retrogasserian thermorhizotomy using radiofrequency in a case of trigeminal neuralgia caused by ectasia of the basilar artery] Gori F, et al. **Minerva Anestesiol** 1988 Dec;54(12):531–4 (Eng. Abstr.) (Ita)

[Residual symptoms after microvascular decompression for trigeminal neuralgia previously treated by percutaneous nerve blocking] Niwa J, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1103–6 (Eng. Abstr.) (Jpn)

[Differentiated high-frequency rhizotomy in trigeminal neuralgia] Ogleznev KIa, et al. **Zh Vopr Neirokhir** 1989 Mar–Apr;(2):38–41 (Eng. Abstr.) (Rus)

THERAPY

Percutaneous trigeminal ganglion compression for trigeminal neuralgia. Experience in 22 patients and review of the literature. Brown JA, et al. **J Neurosurg** 1989 Jun; 70(6):900–4

Needle for use during percutaneous compression of gasserian ganglion for trigeminal neuralgia. Technical note. Gerber AM. **J Neurosurg** 1989 Sep;71(3):455

Treatment of trigeminal neuralgia by thermocoagulation, glycerolization, and percutaneous compression of the gasserian ganglion and/or retrogasserian rootlets: long-term results and therapeutic protocol. Fraioli B, et al. **Neurosurgery** 1989 Feb;24(2):239–45

Trigeminal neuralgia—management decisions. Keet PC. **S Afr Med J** 1989 May 20;75(10):478–80 (8 ref.)

Percutaneous methods for the treatment of trigeminal neuralgia and other faciocephalic pain; comparison with microvascular decompression. Sweet WH. **Semin Neurol** 1988 Dec;8(4):272–9 (18 ref.)

[Comparison of percutaneous heat- and glycerol-induced root lesions in essential trigeminal neuralgia] Vladyka V, et al. **Cesk Neurol Neurochir** 1988 Sep;51(5):313–8 (Eng. Abstr.) (Cze)

[Tissue therapy of trigeminal neuralgia] Pawela T, et al. **Pol Tyg Lek** 1988 Nov 14;43(46):1470–2 (Pol)

TRIGEMINAL NUCLEI

ANATOMY & HISTOLOGY

The sensory trigeminal tract of Pacific hagfish. Primary afferent projections and neurons of the tract nucleus. Ronan M. **Brain Behav Evol** 1988;32(3):169–80

Morphological and functional properties of trigeminal nucleus oralis neurons projecting to the trigeminal motor nucleus of the cat. Shigenaga Y, et al. **Brain Res** 1988 Sep 27;461(1):143–9

Amygdaloid projections to commissural interneurons for masticatory motoneurons. Takeuchi Y, et al. **Brain Res Bull** 1988 Jul;21(1):123–7

The somatotopy of the masticatory neurons in the rat trigeminal motor nucleus as revealed by HRP study. Chen KN, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Jul; 12(3):146–55

[Cytoarchitecture and ultrastructure of the mesencephalon trigeminal nucleus of the domestic chicken] Hummel G, et al. **J Hirnforsch** 1988;29(6):695–700 (Eng. Abstr.) (Ger)

CYTOLOGY

A horseradish peroxidase study of the central projections of primary trigeminal neurons innervating the hard palate in the cat. Arvidsson J, et al. **Brain Res** 1988 Jun 7; 451(1–2):197–204

Non-motoneurons in the facial and motor trigeminal nuclei projecting to the cerebellar flocculus in the cat. A fluorescent double-labelling and WGA–HRP study. Rüste GK. **Exp Brain Res** 1989;75(2):295–305

[Trigeminal motor nuclei in the mouse: effects of microstimulation and sources of afferent projections] Pronichev IV, et al. **Neirofiziologiia** 1989;21(3):423–5 (Eng. Abstr.) (Rus)

DRUG EFFECTS

The pharmacology of trigeminal neuralgia. Fromm GH. **Clin Neuropharmacol** 1989 Jun;12(3):185–94 (46 ref.)

IMMUNOLOGY

The monoclonal antibody B30 recognizes a specific neuronal cell surface antigen in the developing mesencephalic trigeminal nucleus of the mouse. Stainier DY, et al. **J Neurosci** 1989 Jul;9(7):2468–85

MICROBIOLOGY

herpes simplex virus infection accelerates the age-related reactivity of mouse trigeminal ganglia neurons with anti-mouse IgG antibody in immunostaining. Wroblewska Z, et al. **Microb Pathog** 1988 Oct;5(4):233–40

PHYSIOLOGY

Evidence for excitatory amino acid transmission between mesencephalic nucleus of V afferents and jaw-closer motoneurons in the guinea pig. Chandler SH. **Brain Res** 1989 Jan 16;477(1–2):252–64

Neurotoxic effects of p-chloroamphetamine on the serotoninergic innervation of the trigeminal motor nucleus: a retrograde transport study. Fritschy JM, et al. **Brain Res** 1988 Nov 15;473(2):261–70

Efferent projections of the parvocellular reticular nucleus to the mesencephalic trigeminal nucleus in rat. Jüch PJ, et al. **Brain Res** 1988 Oct 11;462(1):185–9

Sensory components facilitating jaw-closing muscle activities in the rabbit. Morimoto T, et al. **Exp Brain Res** 1989; 76(2):424–40

Structure–function relationships in the rat brainstem subnucleus interpolaris: VI. Cervical convergence in cells deafferented at birth and a potential primary afferent substrate. Jacquin MF, et al. **J Comp Neurol** 1989 May 22;283(4):513–25

Effect of trigeminal subnucleus caudalis cold block on the cerebrovascular-evoked responses of rostral trigeminal complex neurons. Davis KD, et al. **Neurosci Lett** 1988 Dec 5;94(3):303–8

SURGERY

[Percutaneous retrogasserian thermorhizotomy using

radiofrequency in a case of trigeminal neuralgia caused by ectasia of the basilar artery] Gori F, et al. **Minerva Anestesiol** 1988 Dec;54(12):531–4 (Eng. Abstr.) **(Ita)**

TRIGEMINAL NUCLEUS, SPINAL

ANATOMY & HISTOLOGY

Amygdaloid pathway to the trigeminal motor nucleus via the pontine reticular formation in the rat. Takeuchi Y, et al. **Brain Res Bull** 1988 Nov;21(5):829–33

Spinal ascending projections to the nucleus tractus spinalis nervi trigemini of the dog. Mariala J, et al. **Folia Morphol (Praha)** 1989;37(1):64–70

Distribution and central projections of primary afferent neurons that innervate the masseter muscle and mandibular periodontium: a double-label study. Capra NF, et al. **J Comp Neurol** 1989 Jan 15;279(3):341–52

Ultrastructural and neurochemical analysis of synaptic input to trigemino–thalamic projection neurones in lamina I of the rat: a combined immunocytochemical and retrograde labelling study. Priestley JV, et al. **J Comp Neurol** 1989 Jul 22;285(4):467–86

Noradrenergic neurons with divergent projections to the motor trigeminal nucleus and the spinal cord: a double retrograde neuronal labeling study. Lyons WE, et al. **Neuroscience** 1988 Aug;26(2):681–93

An analysis of the cyto- and myeloarchitectonic organization of trigeminal nucleus interpolaris in the rat. Phelan KD, et al. **Somatosens Mot Res** 1989;6(4):333–66

The interstitial system of the spinal trigeminal tract in the rat: anatomical evidence for morphological and functional heterogeneity. Phelan KD, et al. **Somatosens Mot Res** 1989; 6(4):367–99

CYTOLOGY

An HRP study of the central projections from primary sensory neurons innervating the rat masseter muscle. Arvidsson J, et al. **Brain Res** 1989 Feb 20;480(1–2):111–8

HRP study of the central components of the trigeminal nerve in the larval sea lamprey: organization and homology of the primary medullary and spinal nucleus of the trigeminus. Anadón R, et al. **J Comp Neurol** 1989 May 22;283(4):602–10

A possible spino (trigemino)–ponto–amygdaloid pathway for pain. Bernard JF, et al. **Neurosci Lett** 1989 May 22; 100(1–3):83–8

EMBRYOLOGY

Development of the peripheral trigeminal system in the chick revealed by an isotype-specific anti-beta-tubulin monoclonal antibody. Moody SA, et al. **J Comp Neurol** 1989 Jan 22;279(4):567–80

ENZYMOLOGY

Ultrastructural changes in acetylcholinesterase activity in the deafferented spinal trigeminal nucleus. Wilson FR, et al. **Synapse** 1988;2(4):341–52

METABOLISM

In vivo electrochemical detection of 5-hydroxyindole within the trigeminal nucleus caudalis of freely moving rats: the effect of morphine. Rivot JP, et al. **Brain Res** 1988 Nov 1;463(2):275–83

Multiple opioid peptides and the modulation of pain: immunohistochemical analysis of dynorphin and enkephalin in the trigeminal nucleus caudalis and spinal cord of the cat. Cruz L, et al. **J Comp Neurol** 1985 Oct 22;240(4):331–48

Morphological characterization of substance P–like immunoreactive glomeruli in the superficial dorsal horn of the rat spinal cord and trigeminal subnucleus caudalis: a quantitative study. Ribeiro-da-Silva A, et al. **J Comp Neurol** 1989 Mar 22;281(4):497–15

Effect of neonatal infraorbital nerve transection on substance P- and leucine enkephalin-like immunoreactivities in trigeminal subnucleus caudalis of the rat. Rhoades RW, et al. **J Neurosci** 1988 Jul;8(7):2234–47

PHYSIOLOGY

Characterization of midline medulla role in the trigeminal depressor response. Clement ME, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1111–20

Substance P and GABAergic effects on adrenal and autonomic function evoked by microinjections into trigeminal subnucleus caudalis in the cat. Bereiter DA, et al. **Brain Res** 1989 Jun 26;490(2):307–19

Maintenance of discrete somatosensory maps in subcortical relay nuclei is dependent on an intact sensory cortex. Erzurumlu RS, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):302–8

Differential effect of ethosuximide and of electrical stimulation on inhibitory and excitatory mechanisms. Shibuya T, et al. **Epilepsy Res** 1987 Jan;1(1):35–9

Physiological properties of sensory neurons of the interstitial nucleus in the spinal trigeminal tract. Hayashi H, et al. **Exp Neurol** 1989 Aug;105(2):219–20

Viscerotopic representation of the upper alimentary tract in the rat: sensory ganglia and nuclei of the solitary and spinal trigeminal tracts. Altschuler SM, et al. **J Comp Neurol** 1989 May 8;283(2):248–68

Polysensory properties of neurons in the anterior bank of the caudal superior temporal sulcus of the macaque monkey. Hikosaka K, et al. **J Neurophysiol** 1988 Nov; 60(5):1615–37

Effects of tooth pulp deafferentation on nociceptive and nonnociceptive neurons of the feline trigeminal subnucleus caudalis (medullary dorsal horn). Hu JW, et al. **J Neurophysiol** 1989 Jun;61(6):1197–206

Responses of monkey medullary dorsal horn neurons during the detection of noxious heat stimuli. Maixner W, et al. **J Neurophysiol** 1989 Aug;62(2):437–49

Physiological and anatomical consequences of infraorbital nerve transection in the trigeminal ganglion and trigeminal spinal tract of the adult rat. Renehan WE, et al. **J Neurosci** 1989 Feb;9(2):548–57

Effect of trigeminal subnucleus caudalis cold block on the cerebrovascular-evoked responses of rostral trigeminal complex neurons. Davis KD, et al. **Neurosci Lett** 1988 Dec 5;94(3):303–8

[Effect of the stimulation of the central gray substance of the midbrain on the neuronal responses of the trigeminal caudal nucleus during peripheral excitations] Gura EV, et al. **Neirofiziologiia** 1988;20(6):729–36 (Eng. Abstr.) **(Rus)**

SURGERY

Craniofacial postherpetic neuralgia managed by stereotactic spinal trigeminal nucleotomy. Schvarcz JR. **Acta Neurochir Suppl (Wien)** 1989;46:62–4

ULTRASTRUCTURE

Reticulo- and trigemino-hypoglossal connections: a quantitative comparison of ultrastructural substrates. Borke RC, et al. **Brain Res Bull** 1988 Nov;21(5):795–803

Synaptic organization of primary axons in trigeminal nucleus oralis. Falls WM. **J Electron Microsc Tech** 1988 Nov; 10(3):213–27

TRIGGER POINTS, MYOFASCIAL see **MYOFASCIAL PAIN SYNDROMES**

TRIGLYCERIDE LIPASE see **LIPASE**

TRIGLYCERIDES

Interactions of triglycerides with phospholipids: incorporation into the bilayer structure and formation of emulsions. Hamilton JA. **Biochemistry** 1989 Mar 21; 28(6):2514–20

Infant feeding formulas using coconut oil and the medium chain triglycerides [letter] Blackburn GL, et al. **J Am Coll Nutr** 1989 Jun;8(3):253–4

A new parenteral emulsion for the administration of taxol. Tarr BD, et al. **Pharm Res** 1987 Apr;4(2):162–5

ADMINISTRATION & DOSAGE

Administration of structured lipid composed of MCT and fish oil reduces net protein catabolism in enterally fed burned rats. Teo TC, et al. **Ann Surg** 1989 Jul;210(1):100–7

Inhibition of experimental liver tumor growth in mice by liposomes containing a lipophilic muramyl dipeptide derivative. Phillips NC, et al. **Cancer Res** 1989 Feb 15; 49(4):936–9

Changes of serum apo A-IV levels in a newborn with chylothorax treated with medium-chain triglyceride milk. Seishima M, et al. **Clin Chim Acta** 1988 Aug 31; 176(2):195–201

Intravenous infusion of a medium-chain triglyceride-enriched lipid emulsion. Weissman C, et al. **Crit Care Med** 1988 Dec;16(12):1183–90

Ketogenic diets in the treatment of epilepsy: short-term clinical effects. Schwartz RH, et al. **Dev Med Child Neurol** 1989 Apr;31(2):145–51

Metabolic effects of three ketogenic diets in the treatment of severe epilepsy. Schwartz RM, et al. **Dev Med Child Neurol** 1989 Apr;31(2):152–60

Effect of colostrum or medium-chain triglyceride supplementation on the pattern of plasma glucose, non-esterified fatty acids and survival of neonatal pigs. Lepine AJ, et al. **J Anim Sci** 1989 Apr;67(4):983–90

Effects of dietary retinoid and triglyceride on the lipid composition of rat liver stellate cells and stellate cell lipid droplets. Moriwaki H, et al. **J Lipid Res** 1988 Nov; 29(11):1523–34

Neonatal parenteral nutrition with medium-chain triglycerides: rationale for research. Lima LA. **JPEN J Parenter Enteral Nutr** 1989 May–Jun;13(3):312–7 (70 ref.)

Early biochemical and EEG correlates of the ketogenic diet in children with atypical absence epilepsy. Ross DL, et al. **Pediatr Neurol** 1985 Mar–Apr;1(2):104–8

[Hepatic CoA availability in the use of long-chain and medium-chain triglycerides] Gheith S, et al. **Monatsschr Kinderheilkd** 1988 Oct;136(10):669–72 (Eng. Abstr.) **(Ger)**

[Medium-chain triglycerides—useful energy carriers in parenteral nutrition] Wolfram G. **Wien Klin Wochenschr** 1989 Apr 14;101(8):300–3 (26 ref.) (Eng. Abstr.) **(Ger)**

[Distribution and elimination of medium- and long-chain fatty acids of a fat emulsion in lipoproteins of severely injured patients following bolus injection] Wolfram G, et al. **Z Ernahrungswiss** 1989 Jun;28(2):173–80 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Invited comment: toxicity and regulatory approval. Valicente A. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):133S–135S

Changes in lipid composition of liver microsomes and fatty acyl-CoA desaturase activities induced by medium chain triglyceride feeding. Periago JL, et al. **Lipids** 1989 May; 24(5):383–8

[Changes in ultrasonic findings in the liver in relation to parenteral nutrition with long chain triglyceride and medium chain triglyceride/long chain triglyceride lipid solutions] Baldermann H, et al. **Infusionstherapie** 1988 Aug; 15(4):140–3 (Eng. Abstr.) **(Ger)**

ANALYSIS

Analysis of butter fat triacylglycerols by supercritical fluid chromatography/electron impact mass spectrometry. Kallio H, et al. **Anal Chem** 1989 Apr 1;61(7):698–700

Aortic intimal lipid content and serum lipoproteins in patients undergoing coronary by-pass surgery as related to clinical prognosis. Bondjers G, et al. **Atherosclerosis** 1988 Aug; 72(2–3):231–9

Comparative study of triacylglycerol fatty acids in milk from two Leporidae species: rabbit (Oryctolagus cuniculus) and hare (Lepus europaeus). Demarne Y, et al. **Comp Biochem Physiol [B]** 1978;61(2):223–6

Fatty acid composition of hump triglycerides of the camel Camelus dromedarius. Mirgani T. **Comp Biochem Physiol [B]** 1977;58(2):211–3

Fecal triglyceride excretion is not excessive in pancreatic insufficiency. Khouri MR, et al. **Gastroenterology** 1989 Mar;96(3):848–52

Glycogen and triacylglycerol concentrations in gastric mucosa in patients with diabetes mellitus (type I). Namiot Z, et al. **Horm Metab Res** 1988 Aug;20(8):527–8

The influence of the triglyceride content of low density lipoprotein on the interaction of apolipoprotein B-100 with cells. Aviram M, et al. **J Biol Chem** 1988 Nov 15; 263(32):16842–8

Densitometric identification of triglycerides separated by reversed-phase thin-layer chromatography. Amidzhin B, et al. **J Chromatogr** 1988 Jul 27;446:259–66

Separation of molecular species of triacylglycerols by high-performance liquid chromatography with a silver ion column. Christie WW. **J Chromatogr** 1988 Nov 11; 454:273–84

Comparison of retention mechanisms of homologous series and triglycerides in non-aqueous reversed-phase liquid chromatography. Martin M, et al. **J Chromatogr** 1988 Oct 28;452:157–73

Identification of the more complex triacylglycerols in bovine milk fat by gas chromatography–mass spectrometry using polar capillary columns. Myher JJ, et al. **J Chromatogr** 1988 Oct 28;452:93–118

Rapid analysis of triacylglycerols using high-performance liquid chromatography with light scattering detection. Palmer AJ, et al. **J Chromatogr** 1989 Mar 31;465(2):369–77

Salivary concentrations of glucose, urate, cholesterol and triacylglycerols. Weber C. **J Clin Chem Clin Biochem** 1989 Apr;27(4):239–41

Gastric cancer with special references to WHO and Laurén's classifications: glycogen and triacylglycerol concentrations in the tumor. Namiot Z, et al. **Neoplasma** 1989;36(3):363–8

High temperature capillary gas liquid chromatography of triacylglycerols and other intact lipids. Mareš P. **Prog Lipid Res** 1988;27(2):107–33 (74 ref.)

[Comparative study of the lipid composition of seminal fluid and ovulatory peritoneal fluid in humans] Vignon F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(4):459–62 (Eng. Abstr.) **(Fre)**

[Value of ascitic lipids and sero-ascitic gradient of albumin in the differential diagnosis of ascites] Cabral JE, et al. **Acta Med Port** 1989 Jan–Feb;2(1):17–20 (Eng. Abstr.) **(Por)**

[Determination of molecular types of triacylglycerols in plasma lipoproteins by a method of high performance liquid chromatography using a computer] Liapkov BG, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):118–22 **(Rus)**

[Identification of nutritious vegetable oils by their triglyceride composition] Liapkov BG, et al. **Vopr Pitan** 1988 May–Jun;(3):61–5 (Eng. Abstr.) **(Rus)**

[Usefulness of the determination of lipids parameters in pleural effusions] Romero Candeira S, et al. **Med Clin (Barc)** 1989 Apr 1;92(12):450–3 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

Effect of noradrenaline on triacylglycerol synthesis in rat brown adipocytes. Baht HS, et al. **Biochem J** 1989 Mar 1;258(2):369–73

What factors control hepatic triacylglycerol accumulation in alcohol abuse? Brindley DN. **Biochem Soc Trans** 1988 Jun;16(3):251–3

Regulation of the biosynthesis of triacylglycerol, phosphatidylcholine and phosphatidylethanolamine in the liver. Tijburg LB, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):1–19 (228 ref.)

Effects of moderate intensity treadmill exercise on triglyceride production in the laying fowl. Brackenbury

JH, et al. **Comp Biochem Physiol [A]** 1989;93(4):913–7
Influence of diet on adiposal lipoprotein lipase and hepatic triacylglyceride synthetase activities in the developing pullet (Gallus domesticus). Pfaff FE Jr, et al. **Comp Biochem Physiol [B]** 1977;58(4):345–8
Triacylglycerol synthesis in cultured rat hepatocytes. The rate-limiting role of diacylglycerol acyltransferase. Mayorek N, et al. **Eur J Biochem** 1989 Jun 15; 182(2):395–400
Hepatic triacylglycerol synthesis during a period of fatty liver development in sheep. Herdt TH, et al. **J Anim Sci** 1988 Aug;66(8):1997–2013
Glycerolipid biosynthesis in porcine adipose tissue in vitro: effect of adiposity and depot site. Rule DC, et al. **J Anim Sci** 1989 Feb;67(2):364–73
Interaction of plasma-derived lipid transfer protein with macrophages in culture. Morton RE. **J Lipid Res** 1988 Oct; 29(10):1367–77
Eicosapentaenoic acid reduces hepatic synthesis and secretion of triacylglycerol by decreasing the activity of acyl-coenzyme A:1,2-diacylglycerol acyltransferase. Rustan AC, et al. **J Lipid Res** 1988 Nov;29(11):1417–26
The effect of ASP on the adipocyte of the morbidly obese. Walsh MJ, et al. **J Surg Res** 1989 May;45(5):470–3
In vivo incorporation of lauric acid into rat adipose tissue triacylglycerols. Bugaut M. **Lipids** 1989 Mar;24(3):193–203

BLOOD

Serum cholesterol and triglycerides in hematological malignancies. Marini A, et al. **Acta Haematol (Basel)** 1989; 81(2):75–9
Influence of experimental diets on cholesterol and triglyceride levels of rabbit blood serum lipoproteins. Wehr H, et al. **Acta Physiol Pol** 1988 May-Jun;39(3):202–6
In vivo evidence for cholesterol ester and triglyceride exchange between high density lipoprotein and infused triglyceride rich particles in abetalipoproteinemia. Erkelens DW, et al. **Adv Exp Med Biol** 1988;243:247–53
Cholesterol esterification and net mass transfer of cholesterylesters and triglycerides in plasma from healthy subjects and hyperlipidemic coronary heart disease patients. Van Tol A, et al. **Adv Exp Med Biol** 1988;243:231–7
Antihypertensive drugs and serum cholesterol levels. Dipalma JR. **Am Fam Physician** 1988 Dec;38(6):181–4 (20 ref.)
Influence of plasma triglycerides on lipoprotein patterns in normal subjects and in patients with coronary artery disease. Richards EG, et al. **Am J Cardiol** 1989 May 15; 63(17):1214–20
Postprandial lipemia and chylomicron clearance in athletes and in sedentary men. Cohen JC, et al. **Am J Clin Nutr** 1989 Mar;49(3):443–7
Serum triglyceride responses [letter] Demise JJ, et al. **Am J Clin Nutr** 1989 Feb;49(2):389–91
Fructose-induced in vivo insulin resistance and elevated plasma triglyceride levels in rats. Thorburn AW, et al. **Am J Clin Nutr** 1989 Jun;49(6):1155–63
Multicompartment analysis of the effects of plasmapheresis. Application to lipid kinetics in humans. May ME, et al. **Am J Clin Pathol** 1989 Jun;91(6):688–94
The effect of weight control on lipid changes in obese children. Epstein LH, et al. **Am J Dis Child** 1989 Apr; 143(4):454–7
Plasma triglyceride as a risk factor for coronary heart disease. The epidemiologic evidence and beyond. Austin MA. **Am J Epidemiol** 1989 Feb;129(2):249–59 (77 ref.)
Serum triglycerides as an independent risk factor for death from coronary heart disease in middle-aged Norwegian men. Tverdal A, et al. **Am J Epidemiol** 1989 Mar; 129(3):458–65
Relationship between corticosteroid exposure and plasma lipid levels in heart transplant recipients. Becker DM, et al. **Am J Med** 1988 Nov;85(5):632–8
Lipid and lipoprotein changes in women taking low-dose, triphasic oral contraceptives: a controlled, comparative, 12-month clinical trial. Notelovitz M, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 2):1269–80
Maternal, cord, and neonatal carnitine correlations and lipid profiles of various birthweight infants. Sachan DS, et al. **Am J Perinatol** 1989 Jan;6(1):14–7
Impaired very low-density lipoprotein-triglyceride catabolism in acute and chronic fructose-fed rats. Hirano T, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E559–65
Plasma lipid levels in patients with panic disorder or agoraphobia. Hayward C, et al. **Am J Psychiatry** 1989 Jul; 146(7):917–9
Preparation of human cord sera for enzymatic triglyceride assays: removal of free glycerol by ultrafiltration. Khan IM, et al. **Anal Biochem** 1988 Nov 1;174(2):496–500
The effect of vasectomy on serum lipids. Nikkanen V, et al. **Andrologia** 1989 Mar-Apr;21(2):174–7
Cholesterol and triglyceride stability in whole blood. Virdi NK, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):197–8
Effects of modest doses of omega-3 fatty acids on lipids and lipoproteins in hypertriglyceridemic subjects. A randomized controlled trial. Deck C, et al. **Arch Intern Med** 1989 Aug;149(8):1857–62
Plasma triglycerides and cholesterol in diabetic ketosis. Fulop M, et al. **Arch Intern Med** 1989 Sep;149(9):1997–2002
Mechanisms of HDL reduction after probucol. Changes in HDL subfractions and increased reverse cholesteryl ester transfer. Franceschini G, et al. **Arteriosclerosis** 1989 Jul-Aug;9(4):462–9
Contraceptive steroid effects on lipids and lipoproteins in cynomolgus monkeys. Parks JS, et al. **Arteriosclerosis** 1989 Mar-Apr;9(2):261–8
Hypolipemic activity of K12.148 in rats, marmosets and pigs. Schliack M, et al. **Artery** 1989;16(2):90–104
Selective removal of triglyceride-rich lipoproteins by plasmapheresis in diabetic patients with severe hypertriglyceridemia. Ito H, et al. **Artif Organs** 1989 Jun; 13(3):190–6
Interrelationship of plasma triglyceride and coagulant factor VII levels in normotriglyceridemic hypercholesterolemia. Bruckert E, et al. **Atherosclerosis** 1989 Feb;75(2-3):129–34
Lipids and endurance physical activity [letter] Hellsten G, et al. **Atherosclerosis** 1989 Jan;75(1):93–4
Serum lipoproteins in patients with myocardial infarction. Kauppinen-Mäkelin R, et al. **Atherosclerosis** 1988 Nov; 74(1-2):65–74
Lipid and lipoprotein abnormalities in diabetic patients with peripheral vascular disease. Laakso M, et al. **Atherosclerosis** 1988 Nov;74(1-2):55–63
Effects of magnesium oxide on the lipid profile of healthy volunteers. Marken PA, et al. **Atherosclerosis** 1989 May; 77(1):37–42
Cholesterol-lowering effect of N-(alpha-methylbenzyl)linoleamide (melinamide) in cholesterol-fed diabetic rats. Matsubara K, et al. **Atherosclerosis** 1988 Aug;72(2-3):199–204
Effects of cessation of smoking on serum lipids and high density lipoprotein-cholesterol. Moffatt RJ. **Atherosclerosis** 1988 Nov;74(1-2):85–9
Hyperglycemia in normotriglyceridemic, hypercholesterolemic insulin-treated diabetic rabbits does not accelerate atherogenesis. Nordestgaard BG, et al. **Atherosclerosis** 1988 Jul;72(1):37–47
Plasma lipoprotein lipids in relation to the MspI polymorphism of the apolipoprotein AII gene in Caucasian men. Lack of association with plasma triglyceride concentration. Rajput-Williams J, et al. **Atherosclerosis** 1989 May;77(1):31–6
Effect of dietary vitamin E on plasma lipids and atherogenesis in restricted ovulator chickens. Smith TL, et al. **Atherosclerosis** 1989 Feb;75(2-3):105–9
Omega-3 fatty acids increase the arachidonic acid content of liver cholesterol ester and plasma triacylglycerol fractions in the rat. Garg ML, et al. **Biochem J** 1989 Jul 1;261(1):11–5
Effect of diabetes on the metabolism of triacylglycerol-rich lipoproteins. Arbeeny CM, et al. **Biochem Soc Trans** 1989 Feb;17(1):51–3
Studies with etofibrate in the rat. Part I: Effects on glycerol, free fatty acid and triacylglycerol metabolism. Herrera E, et al. **Biochim Biophys Acta** 1988 Nov 4;963(1):42–52
Impaired triacylglycerol catabolism in hypertriglyceridemia of the diabetic, cholesterol-fed rabbit: a possible mechanism for protection from atherosclerosis. Minnich A, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):324–32
Relationship between fatty acid pattern and platelet aggregation in long-term insulin-dependent type I diabetics. Schimke E, et al. **Biomed Biochim Acta** 1988; 47(10-11):S274–7
Concentrations of high density lipoprotein cholesterol, triglycerides, and total cholesterol in ischaemic heart disease. Pocock SJ, et al. **BMJ** 1989 Apr 15; 298(6679):998–1002
Fish oil and plasma fibrinogen [letter] Saynor R, et al. **BMJ** 1988 Nov 5;297(6657):1196
Effect of prolonged sedation with propofol on serum triglyceride and cholesterol concentrations. Gottardis M, et al. **Br J Anaesth** 1989 Apr;62(4):393–6
Hypertriglyceridemia and lower LDL cholesterol concentration in relation to apolipoprotein E phenotypes in myotonic dystrophy. Moorjani S, et al. **Can J Neurol Sci** 1989 Feb;16(1):129–33
Persistence of the hypertriglyceridemic effect of tumor necrosis factor despite development of tachyphylaxis to its anorectic/cachectic effects in rats. Grunfeld C, et al. **Cancer Res** 1989 May 15;49(10):2554–60
The relationship between serum lipid levels and nutrient intake in healthy inhabitants of urban and rural Shanghai. Chen HZ, et al. **Chin Med J [Engl]** 1989 Jan;102(1):60–6
Serum-lipid and lipoprotein patterns of Beijing populations from birth to senescence. Li JZ, et al. **Chin Med J [Engl]** 1988 Sep;101(9):659–64
Exercise, lipoproteins, and coronary artery disease. Krauss RM. **Circulation** 1989 May;79(5):1143–5
Physical exercise conditioning in the absence of weight loss reduces fasting and postprandial triglyceride-rich lipoprotein levels. Weintraub MS, et al. **Circulation** 1989 May;79(5):1007–14
Calculation of low-density lipoprotein cholesterol with use of triglyceride/cholesterol ratios in lipoproteins compared with other calculation methods. Rao A, et al. **Clin Chem** 1988 Dec;34(12):2532–4
Falsely high high-density lipoprotein triglyceride values by the heparin-manganese precipitation method. Simo IE, et al. **Clin Chem** 1988 Oct;34(10):2127–9
Elimination of free glycerol interference in a colorimetric enzymic triglyceride assay. Artiss JD, et al. **Clin Chim Acta** 1989 Jun 15;182(1):109–16
Triglyceride lowering effect of MaxEPA fish lipid concentrate: a multicentre placebo controlled double blind study. Miller JP, et al. **Clin Chim Acta** 1988 Dec 30; 178(3):251–9
Plasma lipoproteins and adrenocortical hormones in men—positive association of low density lipoprotein cholesterol with plasma cortisol concentration. Nanjee MN, et al. **Clin Chim Acta** 1989 Feb 28;180(2):113–20
Variability in lipoprotein concentrations in serum after prolonged storage at -20 degrees C. Tiedink HG, et al. **Clin Chim Acta** 1989 Feb 28;180(2):147–55
The status of hypertriglyceridemia as a risk factor for coronary heart disease. Avins AL, et al. **Clin Lab Med** 1989 Mar;9(1):153–68 (59 ref.)
Triglyceride measurement and its relationship to heart disease. Stein EA, et al. **Clin Lab Med** 1989 Mar;9(1):169–85 (68 ref.)
Measurement of cholesterol, triglycerides, and HDL using compact analysis systems. Warnick GR. **Clin Lab Med** 1989 Mar;9(1):73–88 (26 ref.)
Plasma lipid levels and lipoprotein ratios in ten rodent species. Galster W, et al. **Comp Biochem Physiol [B]** 1977; 58(1):39–42
Metabolic effects of three new low-dose pills: a six-month experience. Miccoli R, et al. **Contraception** 1989 Jun; 39(6):643–52
Persistence of hypertriglyceridemic effect of low-fat high-carbohydrate diets in NIDDM patients. Coulston AM, et al. **Diabetes Care** 1989 Feb;12(2):94–101
Elevated plasma glucose and lowered triglyceride levels from omega-3 fatty acid supplementation in type II diabetes. Friday KE, et al. **Diabetes Care** 1989 Apr;12(4):276–81
Quantitative relationship between plasma lipids and glycohemoglobin in type I patients. Longitudinal study of 212 patients. Ostlund RE Jr, et al. **Diabetes Care** 1989 May; 12(5):332–6
Recommendation for strict control of plasma triglyceride in diabetic subjects. Yoshino G, et al. **Diabetes Care** 1988 Nov-Dec;11(10):794–5
Effects of dietary sucrose on age-related changes in VLDL-triglyceride kinetics in the rat. Kazumi T, et al. **Diabetes Res Clin Pract** 1989 Apr 1;6(3):185–90
Estimation of cholesterol loading of the low-density lipoprotein fraction in diabetic subjects without ultracentrifugation. Yoshino G, et al. **Diabetes Res Clin Pract** 1989 Aug 1;7(2):155–7
Effect of enprostil on glucose and lipid metabolism in type 2 diabetes. Davis TM, et al. **Diabetic Med** 1989 Jul; 6(5):400–5
Alterations in lipid metabolism induced by antihypertensive therapy. Amery A, et al. **Drugs** 1988;36 Suppl 2:1–5 (13 ref.)
Effects of diuretic drugs on the lipid profile. Ames R. **Drugs** 1988;36 Suppl 2:33–40 (30 ref.)
Effects of acebutolol on the serum lipid profile. Clucas A, et al. **Drugs** 1988;36 Suppl 2:41–50 (39 ref.)
Effects of training on the serum lipid profile in normal men. Hespel P, et al. **Drugs** 1988;36 Suppl 2:27–32
Circulating lipid and lipoprotein concentrations during danazol and high-dose medroxyprogesterone acetate therapy of endometriosis. Telimaa S, et al. **Fertil Steril** 1989 Jul;52(1):31–5
Coagulation factor VII and plasma triglycerides. Decreased catabolism as a possible mechanism of factor VII hyperactivity. Carvalho de Sousa J, et al. **Haemostasis** 1989; 19(3):125–30
Plasma factor VII, triglyceride concentration and fibrin degradation products in primary hyperlipidemia: a clinical and laboratory study. Carvalho de Sousa J, et al. **Haemostasis** 1989;19(2):83–90
Influence of fast, body weight and diet on serum cholesterol, triglycerides, and phospholipids concentrations in the aging rat. Boudet J, et al. **Horm Metab Res** 1988 Dec;20(12):734–7
Lipids changes in alcoholic & non-alcoholic cirrhotics. Manocha S, et al. **Indian J Med Res** 1989 Feb;90:55–61
Hypolipidemic effect of guar gum in rats & rabbits. Singh L, et al. **Indian J Med Res** 1988 Dec;88:550–7
Effect of raw deseeded fruit powder of Trichosanthes dioica (Roxb) on blood sugar, serum cholesterol, high density lipo-protein, phospholipid and triglyceride levels in the normal albino rabbits. Sharma G, et al. **Indian J Physiol Pharmacol** 1988 Apr-Jun;32(2):161–3
Serum lipids in neonatal cord blood in families with diabetes mellitus type-I. Dogra J, et al. **Indian Pediatr** 1988 Mar; 25(3):267–71
Cord blood triglyceride and free fatty acid levels in normal and asphyxiated newborns—an indicator of peripartum stress. Kumar A, et al. **Indian Pediatr** 1988 Sep;25(9):857–9
A study of lipid levels in Indian patients with coronary arterial disease. Krishnaswami S, et al. **Int J Cardiol** 1989 Sep;24(3):337–45
Deficiency of the insulin, glucose-mediated decrease in serum triglycerides in normolipidemic obese subjects. Eckel RH, et al. **Int J Obes** 1988;12(5):369–76
Heparin-released plasma lipase activities, lipoprotein and apoprotein levels in young adult cyclists and sedentary men. Giada F, et al. **Int J Sports Med** 1988 Aug;9(4):270–4
The 'Reflotron' for cholesterol and triglyceride measurements in the surgery. Chambers JP, et al. **Ir Med J** 1988 Nov;81(1):38–9
Changes in serum lipids in patients with condylomata acuminata treated with interferon alfa-n1 (Wellferon). Olsen EA, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):286–9

Increased serum concentrations of cholesterol and triglycerides in the progression of breast cancer. Zielinski CC, et al. **J Cancer Res Clin Oncol** 1988;114(5):514–8

Effects of doxazosin on lipids, lipoprotein lipases, and cholesterol synthesis in the golden hamster. Jansen H, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 2:S5–9; discussion S9–10

Effect of doxazosin on plasma lipids and atherogenesis: a preliminary report. Kowala MC, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 2:S45–9; discussion S49

Effects of doxazosin and other antihypertensives on serum lipid levels and lipoprotein lipase in the C57BR/cdJ mouse. Krupp MN, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 2:S11–8; discussion S18–9

Influence of doxazosin on lipid transport in rats and hamsters. Ontko JA, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 2:S31–6; discussions 36–7

Acute and chronic effects of dihydropyridines on triglycerides in humans. Pasanisi F, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S140–1

Relation of serum lipoproteins and lipids to the ABO blood groups in patients with intermittent claudication. Hørby J, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug; 30(4):533–7

Profiling of plasma cholesterol ester and triglyceride fatty acids as their methyl esters by capillary gas chromatography, preceded by a rapid aminopropyl–silica column chromatographic separation of lipid classes. Hoving EB, et al. **J Chromatogr** 1988 Dec 30; 434(2):395–409

Relationship between change in height and changes in serum lipid and lipoprotein levels in adolescent males: the Bogalusa Heart Study. Chiang YK, et al. **J Clin Epidemiol** 1989;42(5):409–15

The effect of coffee on blood lipids and blood pressure. Results from a Norwegian cross–sectional study, men and women, 40–42 years. Stensvold I, et al. **J Clin Epidemiol** 1989;42(9):877–84

Lipaemic interference: effects of lipaemic serum and intralipid [letter] Nanji AA, et al. **J Clin Pathol** 1988 Sep; 41(9):1026–7

Effect on days of lactation and methionine hydroxy analog on incorporation of plasma fatty acids into plasma triglycerides. Pullen DL, et al. **J Dairy Sci** 1989 Jan; 72(1):49–58

Triglyceride levels affect cognitive function in noninsulin–dependent diabetics. Perlmuter LC, et al. **J Diabetic Complications** 1988 Oct–Dec;2(4):210–3

Adrenergic blocking agents and lipoprotein lipase activity. Rubba P, et al. **J Endocrinol Invest** 1989 Feb;12(2):119–22

Cholesterol guidelines, lipoprotein cholesterol levels, and triglyceride levels: potential for misclassification of coronary heart disease risk. Laemmle P, et al. **J Lab Clin Med** 1989 Mar;113(3):325–34

Genetic analysis of total cholesterol and triglycerides in a pedigree of St. Thomas rabbits. Beaty TH, et al. **J Lipid Res** 1989 Mar;30(3):387–94

Reduction of postprandial triglyceridemia in humans by dietary n–3 fatty acids. Harris WS, et al. **J Lipid Res** 1988 Nov;29(11):1451–60

Correlation between apolipoprotein A–IV and triglyceride concentrations in human sera. Lagrost L, et al. **J Lipid Res** 1989 May;30(5):701–10

Comparative effects of combined oral contraceptives containing desogestrel or levonorgestrel on serum lipids, lipoproteins and sex hormone binding globulin in healthy women. Sirimongkolkasem R, et al. **J Med Assoc Thai** 1988 Jul;71 Suppl 2:68–73

Free fatty acid and triglyceride levels in neonates receiving triple mix hyperalimentation. Neal PR, et al. **J Perinatol** 1988 Summer;8(3):199–202

The effects of aerobic dance training on serum lipids, lipoproteins and cardiopulmonary function. Williford HN, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):151–7

Lipid level alterations in the Helsinki Heart Study [letter] **JAMA** 1989 Jan 27;261(4):554–5

Peanutaholic has hyperpeanutemia [letter] Scheier NR. **JAMA** 1989 Jul 28;262(4):500–1

Effect of Grewia asiatica, Gossypium herbacium and Gymnema sylvestre on blood glucose, cholesterol and triglycerides levels in normoglycaemic and alloxan diabetic rabbits. Dogar IA, et al. **JPMA** 1988 Nov;38(11):289–95

The effects of antihypertensive drugs on serum lipids and lipoproteins in patients with mild to moderate hypertension. Goto Y, et al. **Jpn J Med** 1989 Mar–Apr;28(2):267–8 (12 ref.)

Changes of serum lipids after cerebral infarction. Iwasaki Y, et al. **Jpn J Med** 1989 Mar–Apr;28(2):156–8

Effects of polyunsaturated fatty acids and/or lecithin on the plasma concentrations of very low density lipoprotein–tryglyceride (VLDL) and ketone bodies in humans. Kurinami S, et al. **Kurume Med J** 1988;35(2):71–6

DNA restriction fragment length polymorphisms as markers of familial coronary heart disease. Price WH, et al. **Lancet** 1989 Jun 24;1(8652):1407–11

The effects of immobilization stress on serum triglycerides, nonesterified fatty acids, and total cholesterol in male rats after dietary modifications. Hershock D, et al. **Life Sci** 1989; 45(2):157–65

Estradiol is a potent inhibitor of the hypotriglyceridemic effect of levonorgestrel in female rats. Taves EH, et al. **Lipids** 1989 Jul;24(7):669–72

Increased plasma triglyceride secretion in EFA–deficient rats fed diets with or without saturated fat. Williams MA, et al. **Lipids** 1989 May;24(5):448–53

The relationship of subtle differences in fasting serum triglycerides with subtle differences in the electrocardiogram: a study of the PR interval. Cheraskin E. **Med Hypotheses** 1989 Mar;28(3):185–6

Abnormalities in the metabolism of postprandial and fasting triglyceride–rich lipoprotein subfractions in normal and insulin–dependent diabetic subjects: effects of sex. Georgopoulos A, et al. **Metabolism** 1989 Aug;38(8):781–9

Plasma triglyceride levels and coronary disease [editorial] Brunzell JD, et al. **N Engl J Med** 1989 May 11; 320(19):1273–5

L–carnitine addition to dialysis fluid. A therapeutic alternative for hemodialysis patients. Vacha GM, et al. **Nephron** 1989;51(2):237–42

i.r. Beta–endorphin, corticosterone, cholesterol and triglyceride concentrations in rat plasma after stress, cingulotomy or both. Recher H, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):75–9

Relationship of serum triglyceride concentration to lipoprotein composition and concentration in normolipidemic and hyperlipidemic subjects. Sommariva D, et al. **Ric Clin Lab** 1988 Oct–Dec;18(4):281–90

Concentrations of apolipoproteins B, C–I, C–II, C–III, E and lipids in serum and serum lipoproteins of normal subjects during alimentary lipaemia. Annuzzi G, et al. **Scand J Clin Lab Invest** 1989 Feb;49(1):73–81

Epidemiologic associations between hypertriglyceridemia and coronary heart disease. Austin MA. **Semin Thromb Hemost** 1988 Apr;14(2):137–42 (42 ref.)

Normal but not hypertriglyceridemic very low–density lipoprotein induces rapid release of tissue plasminogen activator from cultured human umbilical vein endothelial cells. Booyse FM, et al. **Semin Thromb Hemost** 1988 Apr; 14(2):175–9

Lipoprotein receptors and endothelial cells. Fogelman AM, et al. **Semin Thromb Hemost** 1988 Apr;14(2):206–9 (29 ref.)

Lipoprotein–mediated cellular mechanisms for atherogenesis in hypertriglyceridemia. Gianturco SH, et al. **Semin Thromb Hemost** 1988 Apr;14(2):165–9 (28 ref.)

Hypertriglyceridemia: causes and relation to coronary heart disease. Grundy SM, et al. **Semin Thromb Hemost** 1988 Apr;14(2):149–64 (69 ref.)

Clinical significance of hypertriglyceridemia. Schaefer EJ, et al. **Semin Thromb Hemost** 1988 Apr;14(2):143–8 (37 ref.)

Hypertriglyceridemia in noninsulin dependent diabetes mellitus. Schonfeld G. **Semin Thromb Hemost** 1988 Apr; 14(2):184–8 (68 ref.)

A comparative study of venous occlusion and DDAVP stimulated fibrinolysis in normolipidemic subjects. Smith P, et al. **Thromb Res** 1988 Dec 15;52(6):655–60

Effects of immunosuppression on glucose and lipid metabolism after heart transplantation. Livi U, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2477–8

[Effect of Polygonum multiflorum on the life–span and lipid metabolism in senile Japanese quails] Wang W, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Apr;8(4):223–4, 198 (Eng. Abstr.) (Chi)

[Serum lipid and lipoprotein levels in populations of Beijing] Li JZ. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):327–31, 24 (Eng. Abstr.) (Chi)

[Plasma level of total cholesterol, triglycerides, HDL–C, and apolipoproteins A–I and B in normal and healthy Chinese adults] Mu JY, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;41(4):255–62 (Eng. Abstr.) (Chi)

[Preliminary report of effect of chromium on blood glucose and serum lipids in diabetes mellitus] Liang JZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):413–5 (Eng. Abstr.) (Chi)

[Serum lipid screening in children and young people] Porkka K, et al. **Duodecim** 1989;105(4):340–9 (60 ref.) (Fin)

[The method of dry chemical analysis of trout blood with Reflotron] Mohr A, et al. **Tierarztl Prax** 1988;16(3):321–4 (Eng. Abstr.) (Ger)

[The effects of the intake of cod liver oil on the blood lipid level, the lipoprotein profile and bleeding time] Burchard HU, et al. **Z Ernahrungswiss** 1989 Mar;28(1):84–91 (Eng. Abstr.) (Ger)

[Clinical, biochemical and anthropometric studies and determination of biological age in relation to body mass in a longitudinal study] Hunecke I, et al. **Z Gesamte Inn Med** 1989 Jan 15;44(2):68–72 (Eng. Abstr.) (Ger)

[The value of hypertension and metabolic factors on the development of coronary heart disease in type II diabetic patients] Schmechel H, et al. **Z Gesamte Inn Med** 1988 Dec 1;43(23):669–74 (Eng. Abstr.) (Ger)

[A microprocedure for the determination of triglycerides in serum using the Spekol 220 photometer] Hildmann W. **Z Med Lab Diagn** 1988;29(4):231–2 (Ger)

[Triglyceride determination with the Sumal system in routine operations] Schauer I, et al. **Z Med Lab Diagn** 1989; 30(2):109–12 (Eng. Abstr.) (Ger)

[Diagnostic value of serum lipid and apolipoprotein parameters for the detection of a coronary risk even in the range of nonpathological serum cholesterol and triglyceride values] Winkler L, et al. **Z Med Lab Diagn** 1988;29(6):314–20 (Eng. Abstr.) (Ger)

[Blood serum levels of cholesterol, HDL–cholesterol and triglycerides in diseases of the cerebrovascular circulation] Szirmai I, et al. **Orv Hetil** 1988 Jun 19;129(25):1307–11 (Eng. Abstr.) (Hun)

[Studies on serum lipids in obese children. I. Changes in serum total cholesterol, triglycerides, lipoprotein–cholesterols and apoproteins] Igari J, et al. **Rinsho Byori** 1988 Sep;36(9):1061–4 (Jpn)

[Evaluation of selected parameters of lipid metabolism in children with arterial hypertension] Krawczuk–Rybakowa M, et al. **Kardiol Pol** 1988;31(3):180–5 (Eng. Abstr.) (Pol)

[Lipid changes in elderly patients with arteriosclerotic complications] Netto MP, et al. **Arq Bras Cardiol** 1988 Jan; 50(1):11–4 (Eng. Abstr.) (Por)

[The fat absorption test in children] Moreira FL, et al. **Arq Gastroenterol** 1987 Apr–Jun;24(2):113–8 (Eng. Abstr.) (Por)

[Lipid changes in elderly subjects with non–insulin–dependent diabetes mellitus] Figueira JL, et al. **Rev Paul Med** 1988 Mar–Apr;106(2):89–94 (Eng. Abstr.) (Por)

[Study of changes in the protein–lipid components of blood lipoproteins and the dynamics of coronary arteriosclerosis based on repeated angiographic examinations] Nechaev AS. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):93 (Rus)

[Study of the changes in protein–lipid components of blood lipoproteins and the dynamics of coronary arteriosclerosis based on repeated angiographic examination] Nechaev AS, et al. **Kardiologiia** 1989 Apr;29(4):16–21 (Rus)

[Determination of triglycerides using the FP–901 analyzer] Volkov AS, et al. **Lab Delo** 1989;(4):73–4 (Rus)

[Excessive intake of fats and cholesterol in hypercholesterolemic individuals. Effects of dietary intervention on plasma lipids and lipoprotein cholesterol] Ros E, et al. **Med Clin (Barc)** 1989 Jan 21;92(2):41–6 (Eng. Abstr.) (Spa)

[Hyperlipoproteinemia type I] Bustos P, et al. **Rev Chil Pediatr** 1987 Nov–Dec;58(6):481–4 (Eng. Abstr.) (Spa)

[Correlation of the levels of glycosylated hemoglobin and total cholesterol, total triglycerides and HDL cholesterol in a sample of insulin–dependent diabetics] Ezcurra Ferrer EJ, et al. **Rev Clin Esp** 1989 Mar;184(4):182–4 (Eng. Abstr.) (Spa)

[Triglycerides and chylomicrons in acute pancreatitis (editorial)] Arias Vallejo E. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):150 (Spa)

[Effects of antihypertensive therapy with acebutolol on plasma lipids] Román O, et al. **Rev Med Chil** 1987 Sep; 115(9):836–41 (Eng. Abstr.) (Spa)

[The National Board of Social Health and Welfare recommends: treatment of hyperlipidemia—the significance of cholesterol and triglycerides as risk factors] **Lakartidningen** 1988 Nov 9;85(45):3841–5 (Swe)

[A tip for occupational health services: triglyceride levels and unhealthy life style] Hedenberg L. **Lakartidningen** 1988 Dec 21;85(51):4514 (Swe)

CHEMICAL SYNTHESIS

[Total synthesis and properties of prostaglandins. XXIV. Synthesis of glycerides with prostaglandin acyl residues] Sokolov GP, et al. **Bioorg Khim** 1989 May;15(5):690–7 (Eng. Abstr.) (Rus)

DIAGNOSTIC USE

Triglyceride tolerance test: is it useful [letter] Dayal AK, et al. **J Assoc Physicians India** 1988 Feb;36(2):185–6

Use of a fluorescent radiolabeled triacylglycerol as a substrate for lipoprotein lipase and hepatic triglyceride lipase. Dousset N, et al. **Lipids** 1988 Jun;23(6):605–8

ISOLATION & PURIFICATION

Changes in phospholipid fatty acid composition and triacylglycerol content in mouse tissues after infection with bacille Calmette–Guérin. Jackson SK, et al. **Br J Exp Pathol** 1989 Aug;70(4):435–41

Separation of triglyceride groups by reversed–phase thin–layer chromatography on silanized Kieselguhr. Nikolova–Damyanova B, et al. **J Chromatogr** 1988 Jul 27; 446:283–91

Normal–phase high–performance liquid chromatography of triacylglycerols. Rhodes SH, et al. **J Chromatogr** 1988 Aug 31;448(1):135–43

A simple method for the separation of triacylglycerols from fatty acids released in lipase assays. Borensztajn J, et al. **J Lipid Res** 1988 Nov;29(11):1549–52

METABOLISM

Effect of cold exposure on the concentration of triglyceride in the liver of the rat. Górski J, et al. **Acta Physiol Pol** 1988 Mar–Apr;39(2):136–42

An immunologically related family of apolipoproteins associated with triacylglycerol storage in the Cruciferae. Au DM, et al. **Arch Biochem Biophys** 1989 Sep; 273(2):516–26

Effect of exposure to cold and fasting on the placental glycogen and triglyceride content in the rat. Górski J, et al. **Arch Gynecol Obstet** 1989;244(3):151–5

Effect of CS–514 (pravastatin) on VLDL–triglyceride

kinetics in rats. Yoshino G, et al. **Atherosclerosis** 1988 Oct; 73(2–3):191–5

Absorption of eicosapentaenoic acid and docosahexaenoic acid from fish oil triacylglycerols or fish oil ethyl esters co-ingested with a high-fat meal. Lawson LD, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):960–3

Secretion and storage of newly synthesized hepatic triacylglycerol fatty acids in vivo in different nutritional states and in diabetes. Duerden JM, et al. **Biochem J** 1988 Nov 1;255(3):929–35

Factors regulating the secretion of lysophosphatidylcholine by rat hepatocytes compared with the synthesis and secretion of phosphatidylcholine and triacylglycerol. Effects of albumin, cycloheximide, verapamil, EGTA and chlorpromazine. Graham A, et al. **Biochem J** 1988 Aug 1;253(3):687–92

Fatty acids generated by gastric lipase promote human milk triacylglycerol digestion by pancreatic colipase-dependent lipase. Bernbäck S, et al. **Biochim Biophys Acta** 1989 Feb 20;1001(3):286–93

Hydrolysis of triacylglycerol arachidonic and linoleic acid ester bonds by human pancreatic lipase and carboxyl ester lipase. Chen Q, et al. **Biochim Biophys Acta** 1989 Aug 22; 1004(3):372–85

Contribution of cytoplasmic storage triacylglycerol to VLDL-triacylglycerol in isolated rat hepatocytes. Francone OL, et al. **Biochim Biophys Acta** 1989 Mar 14; 1002(1):28–36

Further studies on the mechanism of inhibition of intestinal chylomicron transport by Pluronic L-81. Nutting D, et al. **Biochim Biophys Acta** 1989 Aug 22;1004(3):357–62

Lipid modification during cytodifferentiation of Tetrahymena vorax. Whole cell phospholipids and triacylglycerols of microstomal and macrostomal phenotypes. Ryals PE, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):438–44

Phosphatidylcholine and triacylglycerol hydrolysis in HDL as induced by hepatic lipase: modulation of the phospholipase activity by changes in the particle surface or in the lipid core. Simard G, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):225–33

Utilization of medium-chain triglycerides and octanoic acid by cultured human fibroblasts and lymphoblasts. Lemmen C, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1267–73

Effects of treadmill exercise on the transfer of plasma triglyceride into the ovary of the laying fowl. Vincent R, et al. **Br Poult Sci** 1988 Dec;29(4):801–14

Cerebral phosphoinositide, triacylglycerol and energy metabolism during severe hypoxia and recovery. Ikeda M, et al. **Brain Res** 1988 Sep 6;459(2):344–50

Effect of colchicine on alkaline triglyceride lipase activity and triglyceride content in rat skeletal muscle. Gorski J, et al. **Can J Physiol Pharmacol** 1988 Dec;66(12):1555–9

Metabolic effects of intravenous medium- and long-chain triacylglycerols in critically ill patients. Ball MJ, et al. **Clin Sci** 1989 Feb;76(2):165–70

Activity of enzymes of glucose and triglyceride metabolism in adipose and muscle tissue from normal pregnant women at term. Anderson O, et al. **Diabetic Med** 1989 Mar; 6(2):131–6

Effects of estradiol-17 beta on the net hepatic extraction of triglyceride in vivo in fed and fasted sheep. Kerr DE, et al. **Domest Anim Endocrinol** 1988 Apr;5(2):191–7

Independence of triacylglycerol-containing compartments in cultured fibroblasts from Wolman disease and multisystemic lipid storage myopathy. Salvayre R, et al. **FEBS Lett** 1989 Jun 19;250(1):35–9

Effect of capsaicin on triglyceride accumulation & secretion in ethanol fed rats. Sambaiah K, et al. **Indian J Med Res** 1989 Apr;90:154–8

Site-specific and sex differences in the rates of fatty acid/triacylglycerol substrate cycling in adipose, tissue and muscle of sedentary and exercised dwarf hamsters (Phodopus sungorus). Mattacks CA, et al. **Int J Obes** 1988; 12(6):585–97

Comparison of medium and long chain triglyceride metabolism in intensive care patients on parenteral nutrition. Ball MJ, et al. **Intensive Care Med** 1989; 15(4):250–4

Cardiac triacylglycerol content and lipase activity during recovery from exercise. Podbielski B, et al. **J Appl Physiol** 1989 Mar;66(3):1099–103

The fatty liver dystrophy (fld) mutation. A new mutant mouse with a developmental abnormality in triglyceride metabolism and associated tissue-specific defects in lipoprotein lipase and hepatic lipase activities. Langner CA, et al. **J Biol Chem** 1989 May 15;264(14):7994–8003

Regulation of triglyceride mobilization in isolated hepatocytes by dibutyryl cyclic AMP and epinephrine. Woodside WF, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 2:S38–44; discussion S44

Mechanisms by which saturated triacylglycerols elevate the plasma low density lipoprotein-cholesterol concentration in hamsters. Differential effects of fatty acid chain length. Woollett LA, et al. **J Clin Invest** 1989 Jul;84(1):119–28

B.CAT CONFIRM, a rapid test for confirmation of Branhamella catarrhalis. Janda WM, et al. **J Clin Microbiol** 1989 May;27(5):1130–1

Neutral lipid storage disease with ichthyosis: lipid content and metabolism of fibroblasts. Williams ML, et al. **J Inherited Metab Dis** 1988;11(2):131–43

Regulation of triglyceride-rich lipoprotein secretion by fatty acids in CaCo-2 cells. Field FJ, et al. **J Lipid Res** 1988 Nov;29(11):1427–37

Inhibition of acylcoenzyme A:cholesterol acyltransferase activity in CaCo-2 cells results in intracellular triglyceride accumulation. Kam NT, et al. **J Lipid Res** 1989 Mar; 30(3):371–7

Triglyceride and cholesteryl ester hydrolysis in a cell culture model of smooth muscle foam cells. Minor LK, et al. **J Lipid Res** 1989 Feb;30(2):189–97

Application of encapsulated enzyme as a continuous packed-bed reactor. Iso M, et al. **J Microencapsul** 1989 Jul–Sep;6(3):285–99

Interaction of bile acids, phospholipids, cholesterol and triglyceride with dietary fibers in the small intestine of rats. Ebihara K, et al. **J Nutr** 1989 Aug;119(8):1100–6

Reduction of plasma and hepatic triacylglycerides with whole milk-containing diets in rats. Schneeman BO, et al. **J Nutr** 1989 Jul;119(7):965–70

Effects of dietary casein and soybean protein on triglyceride turnover in rat liver. Iritani N, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Jun;34(3):309–15

Triglyceride accumulation in long-term cultures of adult rat hepatocytes by chronic exposure to Aroclor 1254. Mendoza-Figueroa T, et al. **J Toxicol Environ Health** 1989; 26(3):293–308

Medium-chain triglyceride-based fat emulsions: an alternative energy supply in stress and sepsis. Bach AC, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):82S–88S (101 ref.)

Invited comment: the role of synthetic compounds in clinical nutrition. Birkhahn RH. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):89S–90S

Effect of different energy sources on hepatic triglyceride secretion during parenteral nutrition. Burgess P, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):569–73

Invited comment: short-chain fatty acids: present prospect--future alternative? Campos AC, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):98S–101S (43 ref.)

Effects of parenteral lipid on leucine metabolism: dependence of fatty acid chain length. Haymond MW, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):94S–97S (41 ref.)

Arachidonic acid uptake by phospholipids and triacylglycerols of rat brain subcellular membranes. Lin TN, et al. **Lipids** 1988 Oct;23(10):942–7

Role of the alkaline TG lipase in regulating intramuscular TG content. Oscai LB, et al. **Med Sci Sports Exerc** 1988 Dec;20(6):539–44 (53 ref.)

Appearance of circulating and tissue 14C-lipids after oral 14C-tripalmitate administration in the late pregnant rat. Argilés J, et al. **Metabolism** 1989 Feb;38(2):104–8

Role of triglyceride-rich lipoproteins from the liver and intestine in the etiology of postprandial peaks in plasma triglyceride concentration. Cohn JS, et al. **Metabolism** 1989 May;38(5):484–90

Activities of lipoprotein lipase and hepatic lipase on long- and medium-chain triglyceride emulsions used in parenteral nutrition. Lutz O, et al. **Metabolism** 1989 Jun;38(6):507–13

Hormones and triacylglycerol metabolism under normoxic and ischemic conditions. Schoonderwoerd K, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):129–37 (72 ref.)

Degradation of phospholipids and triacylglycerol, and accumulation of fatty acids in anoxic myocardial tissue, disrupted by freeze-thawing. van der Vusse GJ, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):83–90

Triglycerides and apoproteins in toxemia of pregnancy. Yamaguchi K. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec;40(12):1875–82

Role of medium-chain triglycerides in formulas for premature infants. **Nutr Rev** 1989 Jun;47(6):188–9 (5 ref.)

Triacylglycerols: influence of structure on metabolism in the rat. **Nutr Rev** 1989 Jul;47(7):221–2 (4 ref.)

The role of calcium ions and bile salts on the pancreatic lipase-catalyzed hydrolysis of triglyceride emulsions stabilized with lecithin. Alvarez FJ, et al. **Pharm Res** 1989 Jun;6(6):449–57

Use of compartmental analysis to describe effects of dietary fat saturation and load on plasma triglyceride dynamics in the rat. Green MH, et al. **Prog Food Nutr Sci** 1988; 12(3):255–78

A novel anti-lipolytic action of norepinephrine in uteri isolated from spayed rats appears subserved by the activation of alpha 1-adrenoreceptors diminishing the generation and release of lipolytic prostaglandins. Gonzalez ET, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Nov;34(2):101–8

Endogenous triacylglycerol utilization by the isolated rat atria. Varela A, et al. **Rev Esp Fisiol** 1988 Mar;44(1):87–91

Comparison of the effects of enteral feeding with continuous and intermittent parenteral nutrition on hepatic triglyceride secretion in human beings. Isabel-Martinez L, et al. **Surgery** 1989 Mar;105(3):415–20

Intracytoplasmic triglyceride accumulation produced by dexamethasone in adult rat hepatocytes cultivated on 3T3 cells. Mendoza-Figueroa T, et al. **Toxicology** 1988 Nov 30;52(3):273–86

[Hereditary lipidosis with triglyceride overload: a metabolic study in cultured cells] Douste-Blazy L, et al. **Bull Acad Natl Med (Paris)** 1988 Apr;172(4):523–8 (Eng. Abstr.) (Fre)

[Influences of endotoxin on oxidation of fatty acid in rabbits: a comparison between medium chain- and long chain-fatty acids] Hioki T. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):483–8 (Eng. Abstr.) (Jpn)

[Lipoprotein lipase, diabetes mellitus and hypertriglyceridemia] Goldsztajn P. **Przegl Lek** 1988; 45(11):787–92 (40 ref.) (Pol)

[Absorption of medium chain triglycerides in patients with blind loop syndrome] Pereira Filho RA, et al. **Arq Gastroenterol** 1988 Apr–Jun;25(2):75–81 (Eng. Abstr.) (Por)

PHARMACOKINETICS

Chylomicron triglyceride clearance: comparison of three assessment methods. Cohen JC. **Am J Clin Nutr** 1989 Feb; 49(2):306–13

Contribution of plasma protein and lipoproteins to intestinal lymph: comparison of long-chain with medium-chain triglyceride duodenal infusion. Sipahi AM, et al. **Lymphology** 1989 Mar;22(1):13–9

[Lipolytic activity of the small intestine in patients with duodenal ulcer] Linevskiĭ IuV. **Vopr Pitan** 1988 Jul–Aug; (4):29–31 (Eng. Abstr.) (Rus)

PHARMACOLOGY

The effect of MCT oil supplement in very low birth weight infants, with evaluation by the 13C-labeled MCT breath test. Yamada T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Oct;30(5):564–8

Calcium, magnesium, and phosphorus metabolism in dogs given intravenous triacetin. Bailey JW, et al. **Am J Clin Nutr** 1989 Feb;49(2):385–8

Hypocaloric feeding in obese women: metabolic effects of medium-chain triglyceride substitution. Yost TJ, et al. **Am J Clin Nutr** 1989 Feb;49(2):326–30

Impairment of glucose disposal by infusion of triglycerides in humans: role of glycemia. Felley CP, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E747–52

Enhanced lipolysis of myocardial triglycerides during low-flow ischemia and anoxia in the isolated rat heart. Schoonderwoerd K, et al. **Basic Res Cardiol** 1989 Mar–Apr; 84(2):165–73

Dietary triacylglycerol modulates sodium-dependent D-glucose transport, fluidity and fatty acid composition of rat small intestinal brush-border membrane. Brasitus TA, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):177–86

Inhibition of murine hepatic tumor growth by liposomes containing a lipophilic muramyl dipeptide. Brodt P, et al. **Cancer Immunol Immunother** 1989;28(1):54–8

Enhancement of oral bioavailability of d-alpha-tocopherol acetate by lecithin-dispersed aqueous preparation containing medium-chain triglycerides in rats. Kimura T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):439–41

Induction of human basophil histamine release by a novel protein kinase C activator, sn-1,2-isopropylidene-3-decanoyl-glycerol (IpOCOC9): partial characterization of secretagogue characteristics. Bergstrand H, et al. **Eur J Haematol** 1988 Nov;41(5):467–77

Regulation of the metabolism of lipid emulsion model lipoproteins by a saturated acyl chain at the 2-position of triacylglycerol. Mortimer BC, et al. **J Lipid Res** 1988 Jun; 29(6):713–20

In-vitro evaluation of filaricidal activity of GABA and 1,3-dipalmitoyl-2-(4-aminobutyryl)glycerol HCl: a diglyceride prodrug. Deverre JR, et al. **J Pharm Pharmacol** 1989 Mar;41(3):191–3

Enhancing effect of medium-chain triglycerides on intestinal absorption of d-alpha-tocopherol acetate from lecithin-dispersed preparations in the rat. Fukui E, et al. **J Pharmacobiodyn** 1989 Feb;12(2):80–6

Effects of bile salt-stimulated lipase-treated triglycerides and free fatty acids on extracellular stages of Eimeria tenella. Winterrowd CA, et al. **J Protozool** 1989 Mar–Apr; 36(2):146–9

Thermogenesis in humans during overfeeding with medium-chain triglycerides. Hill JO, et al. **Metabolism** 1989 Jul;38(7):641–8

Gastric lipolysis and fat absorption in preterm infants: effect of medium-chain triglyceride or long-chain triglyceride-containing formulas. Hamosh M, et al. **Pediatrics** 1989 Jan;83(1):86–92

[Long-term consumption of a diet with moderate medium chain triglyceride content does not inhibit the activity of enzymes involved in hepatic lipogenesis in the rat] Chanez M, et al. **C R Acad Sci [III]** 1988;307(12):685–8 (Eng. Abstr.) (Fre)

SECRETION

Triacylglycerol output by the isolated perfused liver of endotoxin-treated rats. Deaciuc IV, et al. **Circ Shock** 1988 Jul;25(3):165–72

THERAPEUTIC USE

A comparison of long-chain triglycerides and medium-chain triglycerides on weight loss and tumour size in a cachexia model. Tisdale MJ, et al. **Br J Cancer** 1988 Nov;58(5):580–3

Carnitine supplementation vs. medium-chain triglycerides in postburn nutritional support. Trocki O, et al. **Burns Incl Therm Inj** 1988 Oct;14(5):379–87

Nitrogen excretion in cancer cachexia and its modification by a high fat diet in mice. Beck SA, et al. **Cancer Res**

1989 Jul 15;49(14):3800–4
Novel triglycerides for special medical purposes. Mascioli EA, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec; 12(6 Suppl):127S–132S (28 ref.)
[Evaluation of the effectiveness of the ketogenic diet with medium–chain triglycerides, in the treatment of refractory epilepsy in children. Apropos of a series of cases] Ros Pérez P, et al. **An Esp Pediatr** 1989 Mar;30(3):155–8 (Eng. Abstr.) (Spa)

TOXICITY

Lipolytic surface remnants of triglyceride–rich lipoproteins are cytotoxic to macrophages but not in the presence of high density lipoprotein. A possible mechanism of atherogenesis? Chung BH, et al. **J Clin Invest** 1989 Apr; 83(4):1363–74

TRIHEXOSYLCERAMIDES see under **GLYCOSPHINGOLIPIDS**

TRIHEXYPHENIDYL

ADMINISTRATION & DOSAGE

Effects of 4 weeks treatment with chlorpromazine and/or trihexyphenidyl on the pituitary–gonadal axis in male paranoid schizophrenics. Rinieris P, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(4):189–93

ADVERSE EFFECTS

Anticholinergic–induced chorea in the treatment of focal dystonia. Nomoto M, et al. **Mov Disord** 1987;2(1):53–6
[Parkinson's disease associated with trihexyphenidyl (THP) induced dysphonia plicae ventricularis] Yamamoto K, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):423–5 (Eng. Abstr.) (Jpn)

ANALOGS & DERIVATIVES

Identification and quantification of trihexyphenidyl and its hydroxylated metabolite by gas chromatography with nitrogen–phosphorus detection. Kintz P, et al. **J Anal Toxicol** 1989 Jan–Feb;13(1):47–9

ANALYSIS

Identification and quantification of trihexyphenidyl and its hydroxylated metabolite by gas chromatography with nitrogen–phosphorus detection. Kintz P, et al. **J Anal Toxicol** 1989 Jan–Feb;13(1):47–9

PHARMACOKINETICS

Pharmacokinetic evaluation of a sustained–release formulation of trihexyphenidyl in healthy volunteers. Cheung WK, et al. **J Pharm Sci** 1988 Sep;77(9):748–50

PHARMACOLOGY

Stereoselectivity of the enantiomers of trihexyphenidyl and its methiodide at muscarinic receptor subtypes. Lambrecht G, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):167–70
Effects of single doses of diazepam, chlorpromazine, imipramine and trihexyphenidyl on visual–evoked potentials. Bartel P, et al. **Neuropsychobiology** 1988; 20(4):212–7

THERAPEUTIC USE

Brain imaging and treatment response in spasmodic torticollis. Besson JA, et al. **Br J Psychiatry** 1988 Sep; 153:399–402
Treatment of movement disorders with trihexyphenidyl. Jabbari B, et al. **Mov Disord** 1989;4(3):202–12
Effectiveness of trihexyphenidyl against pendular nystagmus and palatal myoclonus: evidence of cholinergic dysfunction. Jabbari B, et al. **Mov Disord** 1987;2(2):93–8
Low–dose trihexyphenidyl in the treatment of dystonia. Tsao CY. **Pediatr Neurol** 1988 Nov–Dec;4(6):381
[Effect of trihexyphenidyl–HCL on posttraumatic prolonged disturbance of consciousness: report of two cases] Kajiima M, et al. **No Shinkei Geka** 1989 May;17(5):467–71 (Eng. Abstr.) (Jpn)

TRIHYDROXYPREGNADIENES see **PREGNADIENETRIOLS**

TRIIODOBENZOIC ACIDS see under **IODOBENZOATES**

TRIIODOTHYRONINE

Gonadotrophin–releasing hormone regulation of gonadotrophin subunit gene expression: studies in tri–iodothyronine–suppressed rats. Haisenleder DJ, et al. **J Endocrinol** 1989 Jul;122(1):117–25

ADMINISTRATION & DOSAGE

Effects of thyroid hormones on cartilage sulphation in sex–linked dwarf chickens. Hoshino S, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):107–11
Thyroid hormone stimulated glucose uptake in human mononuclear blood cells from normal persons and from patients with non–insulin–dependent diabetes mellitus. Kvetny J, et al. **Acta Endocrinol (Copenh)** 1989 Jun; 120(6):715–20
Thyroid hormone and not growth hormone is the principle regulator of mammalian mitochondrial biogenesis. Mutvei A, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):223–8
Triiodothyronine affects the phytohemagglutinin to concanavalin A proliferative response ratio in sex–linked dwarf chickens. Erf GF, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):5–12

ADVERSE EFFECTS

A thyroid hormone–influences number and size of platelets—rebuttal [letter] van Doormaal JJ, et al. **Thromb Haemost** 1988 Dec 22;60(3):525

ANALOGS & DERIVATIVES

The importance of membrane stabilization in protecting the developing rat myocardium from the actions of triac. Pearce PC, et al. **Am J Cardiovasc Pathol** 1988;2(2):173–9
3,5,3'–Triiodothyroacetic acid minimizes the pituitary thyrotrophin secretion in patients on levo–thyroxine therapy after ablative therapy for differentiated thyroid carcinoma. Mueller–Gaertner HW, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):345–51
Effects of thyroid hormones (T4,T3), bromocriptine and Triac on inappropriate TSH hypersecretion. Salmela PI, et al. **Clin Endocrinol (Oxf)** 1988 May;28(5):497–507
Thyroid hormone structure–activity relationships: molecular structure of 3,5,3'–triiodothyropropionic acid. Cody V. **Endocr Res** 1988;14(2–3):165–76
Increased plasma 3,5,3'–triiodothyronine sulfate in rats with inhibited type I iodothyronine deiodinase activity, as measured by radioimmunoassay. Rooda SJ, et al. **Endocrinology** 1989 Feb;124(2):740–5
Metabolism of triiodothyroacetic acid (TA3) in rat liver. I. Deiodination of TA3 and TA3 sulfate by microsomes. Rutgers M, et al. **Endocrinology** 1989 Jul;125(1):424–32
Metabolism of triiodothyroacetic acid (TA3) in rat liver. II. Deiodination and conjugation of TA3 by rat hepatocytes and in rats in vivo. Rutgers M, et al. **Endocrinology** 1989 Jul;125(1):433–43
Triiodothyroacetic acid (TRIAC) potentiation of antidepressant–induced reversal of learned helplessness in rats. Massol J, et al. **Eur J Pharmacol** 1988 Aug 2; 152(3):347–51
Triac reduces serum TSH without decreasing alpha and beta TSH messenger RNAs. Mirell CJ, et al. **Horm Metab Res** 1989 Mar;21(3):123–6
Serum triiodothyronine sulfate in man measured by radioimmunoassay. Eelkman Rooda SJ, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):552–6
3,5,3'–triiodothyroacetic acid therapy for thyroid hormone resistance. Kunitake JM, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):461–6
[Hepatitis with auto–immunization probably caused by Plethoryl (letter)] Causse X, et al. **Gastroenterol Clin Biol** 1989 May;13(5):526–7 (Fre)
[Probable side effects caused by plethoryl. Common acute hepatitis, anicteric hepatitis, cirrhosis due to hypervitaminosis A, inflammatory arthralgias] Maroy B, et al. **Presse Med** 1989 Mar 18;18(11):567–70 (Eng. Abstr.) (Fre)

ANALYSIS

Shaking polystyrene beads during coating with antibody: effect on the precision profile of enzyme immunoassay of triiodothyronine [letter] Kothari K, et al. **Clin Chem** 1989 Apr;35(4):701
Homogeneous enzyme immunoassay of thyroxine and triiodothyronine using glucose–6–phosphate dehydrogenase and horse radish peroxidase. Bhattacharya M, et al. **Indian J Exp Biol** 1988 Dec;26(12):990–2
Analysis of term human milk concentrations of 3,5,3'–triiodo–L–thyronine by high–performance liquid chromatography and radioimmunoassay: correlation with circulating serum levels in lactating women. Oberkotter LV. **J Chromatogr** 1989 Feb 24;487(2):445–9
Thyroid hormone and the mitochondrial population in the rat heart. de Martino Rosaroll P, et al. **J Endocrinol Invest** 1988 Sep;11(8):559–65
[Immunohistochemical detection of triiodothyronine in thyroid tumors using T3–01 monoclonal antibody] Michal M, et al. **Cas Lek Cesk** 1989 Apr 21;128(17):517–9 (Eng. Abstr.) (Cze)

ANTAGONISTS & INHIBITORS

Inhibition of thyroid hormone action by a non–hormone binding c–erbA protein generated by alternative mRNA splicing. Koenig RJ, et al. **Nature** 1989 Feb 16; 337(6208):659–61

BIOSYNTHESIS

Keratinocytes convert thyroxine to triiodothyronine. Kaplan MM, et al. **Ann N Y Acad Sci** 1988;548:56–65
Monoamine oxidase activity and triiodothyronine biosynthesis in human cultured thyroid cells. Kraiem Z, et al. **Br J Pharmacol** 1989 Feb;96(2):465–9
Preferential formation of triiodothyronine residues in newly synthesized [14C]tyrosine–labeled thyroglobulin molecules in follicles reconstructed in a suspension culture of hog thyroid cells. Sho K, et al. **Mol Cell Endocrinol** 1988 Sep; 59(1–2):117–24
[Effect of amiodarone on the conversion of thyroxine to triiodothyronine in the myocardium of rats in vivo and in vitro] Ceppi JA, et al. **Medicina (B Aires)** 1988; 48(1):29–32 (Eng. Abstr.) (Spa)

BLOOD

Plasma transport of thyroid hormones. Byfield PG. **Acta Med Austriaca** 1988;15 Suppl 1:10–1 (4 ref.)
Alterations in thyroid hormone physiology induced by temperature and feeding in newly hatched chickens. Decuypere E, et al. **Acta Physiol Pol** 1988 Sep–Dec; 39(5–6):380–94
Hyperiodothyroninaemia of neonates, its significance for thermogenesis. Slebodziński AB. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):364–79
Very–low–calorie diets with high and low protein content: impact on triiodothyronine, energy expenditure, and nitrogen balance. Hendler R, et al. **Am J Clin Nutr** 1988 Nov;48(5):1239–47
Glucose intolerance in thyrotoxic rats: role of insulin, glucagon, and epinephrine. Ikeda T, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E843–9
Serum concentrations of thyroxine and 3,5,3'–triiodothyronine in dogs before and after administration of freshly reconstituted or previously frozen thyrotropin–releasing hormone. Rosychuk RA, et al. **Am J Vet Res** 1988 Oct;49(10):1722–5
Evaluation of normal triiodothyronine and tetraiodothyronine concentrations in llamas (Lama glama). Smith BB, et al. **Am J Vet Res** 1989 Aug;50(8):1215–9
Serum free thyroxine and free tri–iodothyronine in normal children. Butler J, et al. **Ann Clin Biochem** 1988 Sep;25 (Pt 5):536–9
Serum albumin and the specificity of free tri–iodothyronine as a test for hypothyroidism. Wright DJ, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):233–7
Low plasma triiodothyronine concentrations and outcome in preterm infants. Lucas A, et al. **Arch Dis Child** 1988 Oct;63(10):1201–6
Triiodothyronine, thyroxine, and TSH response to dexamethasone in depressed patients and normal controls. Rupprecht R, et al. **Biol Psychiatry** 1989 Jan;25(1):22–32
Plasma insulin, 3,5,3'–triiodothyronine concentrations and muscle growth in the rat [letter] Symonds ME. **Br J Nutr** 1989 Mar;61(2):425–7
Serum thyroid hormone levels of heifers grazing leucaena leucocephala in southern Taiwan. Huang JC, et al. **Chin J Physiol** 1988;31(1):23–9
Effect of albumin on results for the free–thyroxin index as estimated by the total T4/T3 uptake ratio [letter] Beck R, et al. **Clin Chem** 1989 Apr;35(4):706–7
Effect of thyroid hormone–binding proteins and fatty acids on modified analog assays of FT4 and FT3 in serum [letter] Ekins R. **Clin Chem** 1989 Apr;35(4):708–10
Intra–individual variation of serum thyroxin and triiodothyronine in pregnancy. Hölzel WG, et al. **Clin Chem** 1988 Oct;34(10):2063–5
Free triiodothyronine measured in dried blood spots from normal, low–birth–weight, and hypothyroid neonates. Laroche D, et al. **Clin Chem** 1988 Dec;34(12):2448–51
Seasonal levels of cortisol, triiodothyronine and thyroxine in male axis deer. Bubenik GA, et al. **Comp Biochem Physiol [A]** 1989;92(4):499–503
Levels of T4, T3 and cortisol in the blood serum of the European bison (Bison bonasus) in the winter period. Gill J. **Comp Biochem Physiol [A]** 1989;93(3):567–9
The effect of yohimbine on plasma levels of T3, T4 and cortisol in xylazine–immobilized white–tailed deer. Bubenik GA, et al. **Comp Biochem Physiol [C]** 1989;92(2):315–8
The relationship between insulin–like growth factor–I, growth hormone, thyroid hormones and insulin in chickens selected for growth. Goddard C, et al. **Domest Anim Endocrinol** 1988 Apr;5(2):165–76
The influence of methimazole on the thyrotrophic and peripheral activity of thyrotrophin and thyrotrophin–releasing hormone in the chick embryo and growing chicken. Iqbal A, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):291–8
Postnatal changes in circulating concentrations of growth hormone, somatomedin C and thyroid hormones in pigs. Scanes CG, et al. **Domest Anim Endocrinol** 1987 Oct; 4(4):253–7
Binding parameters of rat liver nuclear receptors for T3 after partial hepatectomy or bilateral adrenalectomy and serum T4 and T3 levels. Brtko J, et al. **Endocrinol Exp** 1988 Dec; 22(4):211–20
Assessment of the relationship between serum thyroid hormone levels and peripheral metabolism in patients with anorexia nervosa. Bannai C, et al. **Endocrinol Jpn** 1988 Jun; 35(3):455–62
Human recombinant interleukin–1 beta decreases plasma thyroid hormone and thyroid stimulating hormone levels in rats. Dubuis JM, et al. **Endocrinology** 1988 Nov; 123(5):2175–81
Serum thyrotropin concentrations are more highly correlated with serum triiodothyronine concentrations than with serum thyroxine concentrations in thyroid hormone–infused thyroidectomized rats. Emerson CH, et al. **Endocrinology** 1989 May;124(5):2415–8
Characterization of triiodothyronine transport and accumulation in rat erythrocytes. Osty J, et al.

Endocrinology 1988 Nov;123(5):2303–11

Circulating thyronines and peripheral monodeiodination in lactating rats. Valverde C, et al. **Endocrinology** 1989 Mar; 124(3):1340–4

Effects of human thyroxine–binding globulin and prealbumin on the reverse flow of thyroid hormones from extravascular space into the bloodstream in rabbits. Wahl R, et al. **Endocrinology** 1989 Mar;124(3):1428–37

Effects of aging on the in vivo release of thyrotropin (TSH), triiodothyronine, and thyroxine induced by TSH–releasing hormone in the cynomolgus monkey (Macaca fascicularis). Yoshida T, et al. **Endocrinology** 1989 Mar;124(3):1287–93

The effect of lead on thyroid function in children. Siegel M, et al. **Environ Res** 1989 Aug;49(2):190–6

Thyroid hormone periodicity in healthy adult geldings. Duckett WM, et al. **Equine Vet J** 1989 Mar;21(2):123–5

Thyroid hormone concentrations in epileptic patients. Larkin JG, et al. **Eur J Clin Pharmacol** 1989;36(3):213–6

Evaluation of thyroid gland activity by hormone assays and flow cytometry in rats. Zbinden G. **Exp Cell Biol** 1988; 56(4):196–200

Effects of photoperiod, temperature and testosterone–treatment on plasma T3 and T4 levels in the Djungarian hamster, Phodopus sungorus. Masuda A, et al. **Experientia** 1989 Jan 15;45(1):102–3

The relationship between basal metabolic rate (BMR) and concentrations of plasma thyroid hormones in fasting cockerels. Sechman A, et al. **Folia Biol (Krakow)** 1989; 37(1–2):83–90

The effect of severe starvation and captivity stress on plasma thyroxine and triiodothyronine concentrations in an antarctic bird (emperor penguin). Groscolas R, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):108–17

Smoltification and seawater adaptation in Atlantic salmon (Salmo salar): plasma prolactin, growth hormone, and thyroid hormones. Prunet P, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):355–64

Smoltification and seawater adaptation in coho salmon (Oncorhynchus kisutch): plasma prolactin, growth hormone, thyroid hormones, and cortisol. Young G, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):335–45

Birth weight and thyroxine–binding globulin in pre–eclampsia. Lao TT, et al. **Gynecol Obstet Invest** 1989; 28(1):8–10

Decline of T3 and elevation in reverse T3 induced by hyperglucagonemia: changes in thyroid hormone metabolism, not altered release of thyroid hormones. Kabadi UM, et al. **Horm Metab Res** 1988 Aug;20(8):513–6

Thyroid hormones and muscle metabolism in dogs. Kruk B, et al. **Horm Metab Res** 1988 Oct;20(10):620–3

Seasonal variations of glucose and triiodothyronine concentrations in serum of carp (Cyprinus carpio L). Stryjek–Kaminska D, et al. **Horm Metab Res** 1988 Dec; 20(12):727–9

The relationship between composition of gain and circulating hormones in growing beef bulls fed three dietary crude protein levels. Anderson PT, et al. **J Anim Sci** 1988 Dec; 66(12):3059–67

Thyroid hormones in non–insulin dependent diabetes mellitus. Bhu N, et al. **J Assoc Physicians India** 1988 Dec; 36(12):713–4

Kinetics of triiodothyronine uptake by erythrocytes in hyperthyroidism, hypothyroidism, and thyroid hormone resistance. Holm AC, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):364–8

Changes in serum thyroid hormone, thyrotropin and thyroglobulin concentrations during thyroxine therapy in patients with solitary thyroid nodules. Morita T, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):227–30

The influence of plasma concentrations of tri–iodothyronine on the acute increases in insulin and muscle protein synthesis in the refed fasted rat. Millward DJ, et al. **J Endocrinol** 1988 Sep;118(3):417–22

T4, T3 and rT3 levels in serum and cerebrospinal fluid of patients with amyotrophic lateral sclerosis. Malin JP, et al. **J Neurol** 1989 Jan;236(1):57–9

Serum thyroid hormone concentrations fluctuate in cats with hyperthyroidism. Peterson ME, et al. **J Vet Intern Med** 1987 Jul–Sep;1(3):142–6

Studies on changes of thyroid hormones in various liver diseases: usefulness of free thyroid hormones as liver function test. Takahashi H, et al. **Jpn J Med** 1989 May–Jun; 28(3):297–302

Thyroxine (T4) and triiodothyronine (T3) levels in the Fischer 344 inbred rat. Waner T, et al. **Lab Anim** 1988 Jul;22(3):276–80

Serum thyroxine and triiodothyronine radioimmunoassay values in the normal ferret. Garibaldi BA, et al. **Lab Anim Sci** 1988 Aug;38(4):455–8

The effects of halothane and isoflurane on serum thyroxine (T4) and triiodothyronine (T3). Sum DC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec;26(4):391–4

Paradoxically subnormal serum T4 and T3 in dogs after prolonged excessive TSH stimulation of the thyroid caused by post–cAMP refractoriness of thyroid hormone secretion. Laurberg P. **Metabolism** 1989 Mar;38(3):265–70

The influence of caloric deprivation and food composition on TSH, thyroid hormones and nuclear binding of T3 in mononuclear blood cells in obese women. Matzen LE, et al. **Metabolism** 1989 Jun;38(6):555–61

Transient mild hyperthyroidism with inappropriate TSH secretion in postmenopause. Follow–up of 4 cases. Custro N, et al. **Minerva Endocrinol** 1988 Apr–Jun;13(2):111–4

Paracoccidioidomycosis in the region of Botucatu (state of São Paulo, Brazil). Evaluation of serum thyroxine (T4) and triiodothyronine (T3) levels and of the response to thyrotropin releasing hormone (TRH). Kiy Y, et al. **Mycopathologia** 1988 Jul;103(1):3–9

Triiodothyronine bound to red blood cells is not available for transport through the blood–brain barrier. Crandall RL, et al. **Neurochem Res** 1989 Jul;14(7):657–9

Effect of thyroidectomy of immature male chickens on circulating thyroid hormones and on response to thyroid–stimulating hormone and chronic cold exposure. Haddad EE, et al. **Poult Sci** 1989 Jan;68(1):169–76

Thyroid hormones in gamma irradiated rats. Ahlersová E, et al. **Radiobiol Radiother (Berl)** 1988;29(4):507–12

Evidence for chicken GH as the only hypophyseal factor responsible for the stimulation of hepatic 5'–monodeiodination activity in the chick embryo. Berghman L, et al. **Reprod Nutr Dev** 1989;29(2):197–202

Effect of the sex–linked dwarf gene on thyrotrophic and somatotrophic axes in the chick embryo. Huybrechts LM, et al. **Reprod Nutr Dev** 1989;29(2):219–26

Thyroid hormones in genetically lean or fat chickens: effects of age and triiodothyronine supplementation. Leclercq B, et al. **Reprod Nutr Dev** 1988;28(4A):931–7

Thyroid hormone concentrations in selenium deficient and selenium sufficient cattle. Arthur JR, et al. **Res Vet Sci** 1988 Jul;45(1):122–3

Thyroid hormone resistance in blood monocyte cells and elevated serum T3 in patients with autosomal dominant osteopetrosis. Bollerslev J, et al. **Scand J Clin Lab Invest** 1988 Dec;48(8):795–9

Concentrations of thyroxine, 3,5,3'–triiodothyronine, 3,3',5'–triiodothyronine, 3,3'–diiodothyronine, and 3',5'–diiodothyronine in human red blood cells. Bregengaard C, et al. **Scand J Clin Lab Invest** 1989 Jun; 49(4):329–36

Hyperthyroidism without elevated levels of thyroxine and triiodothyronine in a patient with pulmonary tuberculosis. Archambeaud–Mouveroux F, et al. **South Med J** 1989 Jul; 82(7):907–10

Endocrine changes and haemodynamic stability after brain death. Robertson KM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1197–8

Serum thyrotropin, thyroxin and triiodothyronine concentrations in maternal and cord blood of goitrous and non–goitrous pregnant women living in the Black Sea Region of Turkey. Teziç T, et al. **Turk J Pediatr** 1988 Jul–Sep;30(3):153–8

[Preliminary study of the relation of acute myocardial infarction and thyroid hormones] Chen SX, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jun;27(6):339–40, 388–9 (Eng. Abstr.) (Chi)

[The level of whole blood triiodothyronine (T3) using fluorescence polarization (letter)] Malandain H, et al. **Ann Biol Clin (Paris)** 1988;46(8):701–2 (Fre)

[Diminution of thyroid stimulating hormone level but normal levels of thyroid hormones. Demonstration of occult hyperthyroidism] Schlienger JL, et al. **Presse Med** 1989 Apr 8;18(14):707–10 (Eng. Abstr.) (Fre)

[Quality control of the radioimmunoassay of T3, T4 and TSH] Kraiem A, et al. **Tunis Med** 1987 Nov;65(11):701–4 (Eng. Abstr.) (Fre)

[Modification of peripheral thyroid hormone metabolism by drugs] Weissel M. **Acta Med Austriaca** 1988;15 Suppl 1:56–9 (5 ref.) (Ger)

[Reference values for the concentrations of triiodothyronine, thyroxine and thyrotropin in the blood serum of euthyroid children. Method: luminescence–enhanced enzyme immunoassay] Liappis N, et al. **Klin Padiatr** 1988 Sep–Oct; 200(5):410–3 (Eng. Abstr.) (Ger)

[Changes in thyroid function in primary degenerative dementia processes] Bilikiewicz A, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jan;41(1):25–30 (Eng. Abstr.) (Ger)

[Changes in 99mTc uptake by the thyroid gland and serum triiodothyronine and thyrotropin concentrations following completion of alimentary iodine administration] Schröder F, et al. **Z Gesamte Inn Med** 1988 Oct 1;43(19):544–7 (Eng. Abstr.) (Ger)

[Hormones of the pituitary–thyroid axis in obese subjects on free and low–calorie diet] Custro N, et al. **Clin Ter** 1987 Feb 15;120(3):199–203 (Eng. Abstr.) (Ita)

[Thyroid and adrenal response to acute stimulation with HCG: effects of bilateral ovariectomy] Banchini A, et al. **Minerva Endocrinol** 1988 Apr–Jun;13(2):103–6 (Eng. Abstr.) (Ita)

[Measurement of free thyroxine and free triiodothyronine concentrations by DPC RIA kits] Kasagi K, et al. **Kaku Igaku** 1988 Jun;25(6):569–78 (Jpn)

[Clinical significance of the measurements of serum free thyroxine and free triiodothyronine concentrations—evaluation using DPC free T4 and free T3 kits] Kubota K, et al. **Kaku Igaku** 1988 Aug;25(8):821–30 (Jpn)

[Effect of various beta–adrenolytic drugs and calcium channel blockers (nifedipine) on serum levels of T3 and T4 in patients with hyperthyroidism and simple goiter] Gasińska T, et al. **Endokrynol Pol** 1988;39(3):119–27 (Eng. Abstr.) (Pol)

[Serum levels of triiodothyronine, thyroxine and thyrotropin in children with epilepsy treated with amizepine, luminal and mizodine in a monotherapy system. Preliminary report] Kaciński M, et al. **Endokrynol Pol** 1988;39(3):137–42 (Eng. Abstr.) (Pol)

[Evaluation of thyroid function in children with body weight deficit] Jabłońska–Ulbrych A, et al. **Pediatr Pol** 1988 Sep; 63(9):545–9 (Eng. Abstr.) (Pol)

[Blood levels of thyroid hormones in children with atopic diseases] Steckiewicz W, et al. **Pediatr Pol** 1988 Oct; 63(10):644–9 (Eng. Abstr.) (Pol)

[Triiodothyronine (T3) and thyroxine (T4) levels in patients with bronchial asthma] Przybyłowski J, et al. **Wiad Lek** 1989 Jan 1;42(1):20–4 (Eng. Abstr.) (Pol)

[A new method of assessing disorders of thyroid status experimentally] Trapkova AA, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):68–70 (Rus)

[Thyroid hormone levels in patients with infiltrative pulmonary tuberculosis] Maskeev KM, et al. **Probl Tuberk** 1988;(9):36–40 (Eng. Abstr.) (Rus)

[Concentration of thyroid hormones and thyrotropin in the blood of patients with chronic pancreatitis] Gidaiatov AA, et al. **Ter Arkh** 1988;60(9):50–2 (Eng. Abstr.) (Rus)

[Importance of changes in plasmatic volume in the evaluation of TSH, L–T3 and L–T4, during muscular activity] Fernández–Pastor VJ, et al. **Rev Esp Fisiol** 1988 Sep; 44(3):331–6 (Eng. Abstr.) (Spa)

DEFICIENCY

Generalized deficiency of 3,5,3'–triiodo–L–thyronine (T3) in tissues from rats on a low iodine intake, despite normal circulating T3 levels. Escobar del Rey F, et al. **Acta Endocrinol (Copenh)** 1989 Apr;120(4):490–8

Causes and effects of the low T3 syndrome during caloric deprivation and non–thyroidal illness: an overview. Hennemann G, et al. **Acta Med Austriaca** 1988;15 Suppl 1:42–5 (17 ref.)

[Deficiency of the triiodothyronine pool in patients with stomach cancer] Vereshchagina GV, et al. **Vopr Onkol** 1989;35(3):299–304 (Eng. Abstr.) (Rus)

DIAGNOSTIC USE

Relationship among thyrotropin (TSH), thyroid stimulating immunoglobulins, and results of triiodothyronine (T3) suppression test in patients with Graves' disease. Horimoto M, et al. **Endocrinol Jpn** 1988 Dec;35(6):841–8

GENETICS

Thyroid hormone–, carbohydrate, and age–dependent regulation of a methylation site in the hepatic S14 gene. Wong NC, et al. **Mol Endocrinol** 1989 Apr;3(4):645–50

IMMUNOLOGY

Autoantibodies to thyroxin and triiodothyronine in the immunoglobulin G fraction of serum. Li Calzi L, et al. **Clin Chem** 1988 Dec;34(12):2561–2

A 3,3',5–triiodothyronine autoantibody (IgG, lambda) in a case of Hashimoto's thyroiditis. Muratsugu M, et al. **Clin Chim Acta** 1988 Dec 15;178(2):171–80

Anti–triiodothyronine antibodies associated with hypothyroidism and lymphocytic thyroiditis in a dog. Chastain CB, et al. **J Am Vet Med Assoc** 1989 Feb 15; 194(4):531–4

Euthyroid hyperthyroxinaemia due to endogenous antibodies to thyroxine and tri–iodothyronine. A case report. Mulligan GP, et al. **S Afr Med J** 1989 Feb 18;75(4):181–3

[Triiodothyroxine(T3) autoantibodies in a woman with nonthyroidal disorder: a study on preparation of serum IgG fraction employing protein A column chromatography] Mizuno E, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Aug 20;64(8):677–86 (Eng. Abstr.) (Jpn)

[IgA class anti–triiodothyronine antibodies in a patient with chronic thyroiditis] Tomita M, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1087–8 (Jpn)

METABOLISM

The hidden, nonexchangeable pool of 3,5,3'–triiodothyronine and 3,3',5'–triiodothyronine in man: does it exist? Faber J, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):667–71

Biochemistry of iodothyronine deiodination. Köhrle J. **Acta Med Austriaca** 1988;15 Suppl 1:22–4 (10 ref.)

The significance of plasma membrane transport of iodothyronines in the regulation of thyroid hormone bioavailability. Krenning EP, et al. **Acta Med Austriaca** 1988;15 Suppl 1:15–7 (6 ref.)

Thyroid hormone metabolism in the central nervous system. Larsen PR. **Acta Med Austriaca** 1988;15 Suppl 1:5–10 (43 ref.)

Maternal–fetal thyroid hormone relationships and the fetal brain. Morreale de Escobar G, et al. **Acta Med Austriaca** 1988;15 Suppl 1:66–70

Hepatic metabolism, biliary clearance and enterohepatic circulation of thyroid hormone. Visser TJ, et al. **Acta Med Austriaca** 1988;15 Suppl 1:37–9 (9 ref.)

Exercise regulation of triiodothyronine metabolism. Katzeff HL, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E824–8

Binding activities of thyroxine binding globulin versus thyroxine binding prealbumin in rat sera: differential modulation by thyroid hormone ligands, oleic acid and pharmacological drugs. Savu L, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):919–26

Regulation of fatty acid and carbohydrate metabolism by

insulin, growth hormone and tri-iodothyronine in hepatocyte cultures from normal and hypophysectomized rats. Betley S, et al. **Biochem J** 1989 Mar 1;258(2):547–52

Iodothyronine 5'-deiodinase activity and thyroid hormone content in brown adipose tissue during the breeding cycle of the rat. Vilas O, et al. **Biochem J** 1988 Oct 15; 255(2):457–61

Experimental values of the ionization constants for L-3,5-di-iodotyrosine and a model for ionic interactions of thyroid hormone (T3) and its nuclear receptor. Gent WL, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):343–6

Binding characteristics of a major thyroid hormone metabolite, 3,3',5'-triiodo-L-thyronine, to bovine serum albumin as measured by fluorescence. Okabe N, et al. **Biochim Biophys Acta** 1989 Mar 24;990(3):303–5

In vitro studies of the thyroglobulin degradation pathway: endocytosis and delivery of thyroglobulin to lysosomes, release of thyroglobulin cleavage products—iodotyrosines and iodothyronines. Rousset B, et al. **Biochimie** 1989 Feb; 71(2):247–62

Changes in glutathione status and 3,5,3'-triiodothyronine action in livers of rats given cysteine-deficient diets. Garcin H, et al. **Br J Nutr** 1989 Mar;61(2):301–7

Immunocytochemical localization of nuclear 3,5,3'-triiodothyronine (L-T3) receptors in astrocyte cultures. Luo M, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):131–6

3,5,3'-triiodo-L-thyronine binding sites in nuclei of human trophoblastic cells. Ashitaka Y, et al. **Endocrinol Jpn** 1988 Apr;35(2):197–206

Catecholamine and thyroid hormone metabolism in a case of anorexia nervosa. Sato T, et al. **Endocrinol Jpn** 1988 Apr;35(2):295–301

Carrier-mediated [125I]-T3 uptake by mouse thymocytes. Centanni M, et al. **Endocrinology** 1989 May;124(5):2443–8

Rat enterohepatic circulation and intestinal distribution of enterally infused thyroid hormones. DiStefano JJ 3d, et al. **Endocrinology** 1988 Nov;123(5):2526–39

Thyroxine, triiodothyronine, and reverse triiodothyronine processing in the cerebellum: autoradiographic studies in adult rats. Dratman MB, et al. **Endocrinology** 1989 Sep; 125(3):1723–33

Triiodothyronine transport into differentiated and undifferentiated mouse neuroblastoma cells (NB41A3). Gonçalves E, et al. **Endocrinology** 1989 Jan;124(1):293–300

Counterregulation of nuclear 3,5,3'-triiodo-L-thyronine (T3) binding by oxidized and reduced-nicotinamide adenine dinucleotide phosphates in the presence of cytosolic T3-binding protein in vitro. Hashizume K, et al. **Endocrinology** 1989 Apr;124(4):1678–83

Cytosolic 3,5,3'-triiodo-L-thyronine (T3)-binding protein (CTBP) regulation of nuclear T3 binding: evidence for the presence of T3-CTBP complex-binding sites in nuclei. Hashizume K, et al. **Endocrinology** 1989 Jun;124(6):2851–6

Phloretin inhibits cellular uptake and nuclear receptor binding of triiodothyronine in human hep G2 hepatocarcinoma cells. Movius EG, et al. **Endocrinology** 1989 Apr;124(4):1988–97

Different intracellular and intranuclear transport of triiodothyronine enantiomers in rat skeletal myoblasts. Pontecorvi A, et al. **Endocrinology** 1988 Dec;123(6):2922–9

Uptake of 3,5,3'-triiodothyronine by cultured rat hepatoma cells is inhibitable by nonbile acid cholephils, diphenylhydantoin, and nonsteroidal antiinflammatory drugs. Topliss DJ, et al. **Endocrinology** 1989 Feb; 124(2):980–6

Purification and characterization of 55-kDa protein with 3,5,3'-triiodo-L-thyronine-binding activity and protein disulfide-isomerase activity from beef liver membrane. Horiuchi R, et al. **Eur J Biochem** 1989 Aug 15; 183(3):529–38

Effect of simultaneously administered iopanoic acid and thyrotropin releasing hormone (TRH) on thyroid hormone metabolism in euthyroid subjects. Szabolcs I, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):365–8

Thyroid hormone binds to human corpus luteum. Bhattacharya S, et al. **Experientia** 1988 Dec 1; 44(11–12):1005–7

Heterogeneous distribution of nuclear triiodothyronine receptors in liver and preadipose cells as evidenced by their reactivity to antibodies against different protein products of erb A oncogenes. Torresani J, et al. **FEBS Lett** 1989 Jul 3;250(2):251–6

Studies on the mechanism of inhibition of nuclear triiodothyronine binding by fatty acids. van der Klis FR, et al. **FEBS Lett** 1989 Mar 27;246(1–2):6–12

Differences in nuclear thyroid hormone receptors among species. Ichikawa K, et al. **Gen Comp Endocrinol** 1989 Apr; 74(1):68–76

Oxidative metabolism in a teleost, Anabas testudineus Bloch: effect of thyroid hormones on hepatic enzyme activities. Peter MC, et al. **Gen Comp Endocrinol** 1989 Jan; 73(1):96–107

Inhibition of free triiodothyronine release from mouse thyroid lobes by N-(3',4'-dimethoxycinnamoyl)anthranilic acid (tranilast). Iwasa Y, et al. **Horm Metab Res** 1988 Nov; 20(11):722–3

"In vitro" study on release of cyclic AMP and thyroid hormone in autonomously functioning thyroid nodules. Romaldini JH, et al. **Horm Metab Res** 1988 Aug; 20(8):510–2

T3-thyrotoxicosis in a schizophrenic patient—comment on triiodothyronine to mental function. Nakanishi T. **Igaku Kenkyu** 1988 Oct;58(5):289–90

Purification and characterization of NADPH-dependent cytosolic 3,5,3'-triiodo-L-thyronine binding protein in rat kidney. Hashizume K, et al. **J Biol Chem** 1989 Mar 25; 264(9):4857–63

Evidence for the presence of two active forms of cytosolic 3,5,3'-triiodo-L-thyronine (T3)-binding protein (CTBP) in rat kidney. Specialized functions of two CTBPs in intracellular T3 translocation. Hashizume K, et al. **J Biol Chem** 1989 Mar 25;264(9):4864–71

A proton and fluorine-19 nuclear magnetic resonance and fluorescence study of the binding of some natural and synthetic thyromimetics to prealbumin (transthyretin). Reid DG, et al. **J Biol Chem** 1989 Feb 5;264(4):2013–23

Effect of zinc(II) and other divalent cations on binding of 3,5,3'-triiodo-L-thyronine to nuclear receptors from cultured GC cells. Surks MI, et al. **J Biol Chem** 1989 Jun 15;264(17):9820–6

A new inherited abnormality of thyroxine-binding globulin (TBG-San Diego) with decreased affinity for thyroxine and triiodothyronine. Sarne DH, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):114–9

Effects of amiodarone on 5'-deiodination of thyroxine to tri-iodothyronine in rat myocardium. Ceppi JA, et al. **J Endocrinol** 1989 Jun;121(3):431–4

Vitamin A deficiency and tri-iodothyronine action at the cellular level in the rat. Higueret P, et al. **J Endocrinol** 1989 Apr;121(1):75–9

Conformational transition of thyroid hormone receptor upon hormone binding: demonstration by aqueous two-phase partitioning. Ichikawa K, et al. **J Endocrinol** 1988 Dec; 119(3):431–7

Effect of the glycogenolytic gluconeogenetic hormones, glucagon, vasopressin and angiotensin II, on biliary excretion of iodothyronines in rats is possibly related to the inhibition of 5'-monodeiodination in the liver. Langer P, et al. **J Endocrinol** 1989 May;121(2):299–302

Effect of adrenaline on biliary excretion of triiodothyronines in rats mediated by alpha 1-adrenoceptors and related to the inhibition of 5'-monodeiodination in liver. Langer P, et al. **J Endocrinol Invest** 1988 Jul-Aug;11(7):471–6

Mechanism of the serum thyroid hormone lowering effect of perfluoro-n-decanoic acid (PFDA) in rats. Gutshall DM, et al. **J Toxicol Environ Health** 1989;28(1):53–65

On the enterohepatic cycle of triiodothyronine in rats; importance of the intestinal microflora. de Herder WW, et al. **Life Sci** 1989;45(9):849–56

Rat hepatic and renal 5'-deiodination of rT3 during fasting: supportive role of intermediate Mr cytosolic non-glutathione thiol cofactor and NADPH. Iwase K, et al. **Metabolism** 1989 Mar;38(3):230–7

Inhibition of nuclear T3 binding by fatty acids. Wiersinga WM, et al. **Metabolism** 1988 Oct;37(10):996–1002

Thyroid hormone metabolism in neuron-enriched primary cultures of fetal rat brain cells. Courtin F, et al. **Mol Cell Endocrinol** 1988 Jul;58(1):73–84

Identification of a rat c-erbA alpha-related protein which binds deoxyribonucleic acid but does not bind thyroid hormone. Lazar MA, et al. **Mol Endocrinol** 1988 Oct; 2(10):893–901

Tight linkage between the syndrome of generalized thyroid hormone resistance and the human c-erbA beta gene. Usala SJ, et al. **Mol Endocrinol** 1988 Dec;2(12):1217–20

Ioxynil and 3,5,3'-triiodothyronine: comparison of binding to human plasma proteins. Ogilvie LM, et al. **Toxicol Lett** 1988 Dec;44(3):281–7

[Influence of yang-restoring herb medicines upon metabolism of thyroid hormone in normal rats and a drug administration schedule] Chen MD, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Feb;9(2):93–5, 70 (Eng. Abstr.) (Chi)

[Effect of traditional Chinese medicine on primary hypothyroidism in relation to nuclear T3 receptors of lymphocytes] Kuang AK. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):650–3, 643 (Eng. Abstr.) (Chi)

[Elevated biliary excretion of T4—however, not of T3—in rats with nonthyroidal diseases (NTI)] Grussendorf M, et al. **Acta Med Austriaca** 1988;15 Suppl 1:41–2 (Ger)

[Thyroxine-and triiodothyronine-binding cytosol proteins in human adipose tissue] Bardowska U, et al. **Endokrynol Pol** 1988;39(1):41–7 (Eng. Abstr.) (Pol)

[Beta adrenergic receptors and thyroid hormones] Szymański PT. **Kardiol Pol** 1988;31(10):662–8 (33 ref.) (Pol)

PHARMACOKINETICS

Uptake of 3,5,3'-L-tri-iodothyronine in human erythrocytes. Yamauchi K, et al. **J Endocrinol** 1989 Jun;121(3):585–91

Mechanism of L-triiodothyronine (T3) uptake by glial C6 cells: regulation by butyrate. Yusta B, et al. **Mol Cell Endocrinol** 1988 Aug;58(2–3):191–8

PHARMACOLOGY

Food intake, body and heart composition, and heart rate in T3 plus atenolol-treated rats. Bürgi U, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E459–66

Effects of thyroid hormone on Na+-K+ transport in resting and stimulated rat skeletal muscle. Everts ME, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E604–12

Selective induction of high-ouabain-affinity isoform of Na+-K+-ATPase by thyroid hormone. Haber RS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E912–9

Triiodothyronine (T3) antagonizes adverse effects of high circulating reverse-T3 (rT3) during hemorrhagic shock. Yuan XQ, et al. **Am Surg** 1988 Dec;54(12):720–5

The response of individual polypeptides of the mammalian respiratory chain to thyroid hormone. Mutvei A, et al. **Arch Biochem Biophys** 1989 Jan;268(1):215–20

The effect of triiodothyronine on the association of the rat apolipoprotein A-I, C-III and A-IV genes with the nuclear matrix. Apostolopoulos JJ, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):576–82

Precocious induction of malic enzyme by nutritional and hormonal factors in rat foetal hepatocyte primary cultures. Fabregat I, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1028–34

Thyroid hormone action on glucose transporter activity in astrocytes. Roeder LM, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):275–81

Retinoic acid blockade of imidazole-induced tyrosinase expression in B16 melanoma cultures: similar effects of the active retinoid and triiodothyronine. Smith TJ, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):288–93

3,3',5-L-triiodothyronine but not L-thyroxine can block the induction of tyrosinase by imidazole in cultured B16 melanoma cells. Smith TJ, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1293–6

Thyroid hormone suppression of hepatic levels of phenobarbital-inducible P-450b and P-450e and other neonatal P-450s in hypophysectomized rats. Yamazoe Y, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):609–14

Dexamethasone blocks adaptive increase of Na+-Pi cotransport in renal brush border membrane elicited by thyroid hormone. Yusufi AN, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1160–5

Rapid stimulation of calcium uptake into rat liver by L-tri-iodothyronine. Hummerich H, et al. **Biochem J** 1989 Mar 1;258(2):363–7

Thyroid hormone effect on alpha-fetoprotein and albumin coordinate expression by a human hepatoma cell line. Conti R, et al. **Biochim Biophys Acta** 1989 Aug 14;1008(3):315–21

Permissive action of triiodothyronine on the long-term increase of glycolysis by insulin in cultured rat hepatocytes. Rosa J, et al. **Biol Chem Hoppe Seyler** 1988 Sep; 369(9):997–1003

Maternal treatments with corticosteroids and/or T3 change lung volumes and rupture pressures in preterm rabbits. ElKady T, et al. **Biol Neonate** 1988;54(4):203–10

Triiodothyronine stimulates urinary excretion of calcium and hydroxyproline in autosomal dominant osteopetrosis. Bollerslev J, et al. **Bone** 1988;9(4):205–8

Stimulation of alkaline phosphatase activity by thyroid hormone in mouse osteoblast-like cells (MC3T3-E1): a possible mechanism of hyperalkaline phosphatasia in hyperthyroidism. Kasono K, et al. **Bone Miner** 1988 Sep; 4(4):355–63

Triiodothyronine alters the cornification of cultured human keratinocytes. Isseroff RR, et al. **Br J Dermatol** 1989 Apr; 120(4):503–10

Influence of triiodothyronine (L-T3) on the morphological and biochemical development of fetal brain acetylcholinesterase-positive neurons cultured in a chemically defined medium. Garza R, et al. **Brain Res** 1988 Oct 1;471(2):287–97

Thyroid hormone control of preganglionic innervation of the adrenal medulla and chromaffin cell development in the rat. An ultrastructural, morphometric and biochemical evaluation. Lau C, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):109–17

Effects of different thyroid treatments on the biochemical characteristics of rabbit myocardium. Ling E, et al. **Can J Cardiol** 1988 Sep;4(6):301–6

Effects of triiodothyronine and tamoxifen on cell transformation induced by an activated c-Ha-ras oncogene. Lopez CA, et al. **Cancer Res** 1989 Feb 15;49(4):895–8

Effects of triiodothyronine on resting membrane potential of primary cultured rat submandibular gland cells. Bryant HJ, et al. **Cell Biol Int Rep** 1988 Dec;12(12):1027–36

Acceleration by triiodothyronine of adipose conversion of rat preadipocytes from two adipose localizations. Sztalryd C, et al. **Cell Mol Biol** 1989;35(1):81–8

Regulation of alpha- and beta-myosin heavy chain messenger RNAs in the rat myocardium by amiodarone and by thyroid status. Franklyn JA, et al. **Clin Sci** 1989 May; 76(5):463–7

Developmental patterns of peroxisomal enzymes in amphibian liver during spontaneous and triiodothyronine-induced metamorphosis. Ciolek E, et al. **Comp Biochem Physiol [B]** 1989;93(2):477–84

Role of thyroid hormones in the normal and glucocorticosteroid hormone-induced evolution of carbamoyl-phosphate synthase (ammonia) activity in axolotl liver. Lamers WH, et al. **Comp Biochem Physiol [B]** 1978;59(2):103–10

Thyroid hormone directly induces hepatocyte competence for estrogen-dependent vitellogenin synthesis during the metamorphosis of Xenopus laevis. Kawahara A, et al. **Dev Biol** 1989 Mar;132(1):73–80

Cell death in the anuran tadpole tail: thyroid hormone induces keratinization and tail-specific growth inhibition of epidermal cells. Nishikawa A, et al. **Dev Biol** 1989 Feb;

131(2):337–44
Effect of dietary triiodothyronine on mixed-lymphocyte responsiveness in young male chickens. Erf GF, et al. **Dev Comp Immunol** 1989 Spring;13(2):177–86
Effect of myo-inositol and T3 on myocardial lipids and cardiac function in streptozocin-induced diabetic rats. Xiang H, et al. **Diabetes** 1988 Nov;37(11):1542–8
Stage-specific polypeptide and villin expression during thyroid-hormone-induced substitution of the amphibian intestinal epithelium. Figiel A, et al. **Differentiation** 1989 Jun;40(3):166–75
Regulation of the transfected human glycoprotein hormone alpha-subunit gene by dexamethasone and thyroid hormone. Gurr JA, et al. **DNA** 1989 Sep;8(7):473–80
Acute effects of hypophysectomy and administration of pancreatic and thyroid hormones on circulating concentrations of somatomedin-C in young chickens: relationship between growth hormone and somatomedin-C. Lazarus DD, et al. **Domest Anim Endocrinol** 1988 Oct;5(4):283–9
In vivo effects of thyroid hormone, glucocorticoid, androgen, and somatotropin on RNA polymerase I activities in isolated liver nuclei. Matsui H, et al. **Endocrinol Jpn** 1988 Oct;35(5):697–704
Effects of low dose L-triiodothyronine administration on mental, behavioural and thyroid states in elderly subjects. Mori T, et al. **Endocrinol Jpn** 1988 Aug;35(4):585–92
Time course of hepatic 3-hydroxy-3-methylglutaryl coenzyme A reductase activity and messenger ribonucleic acid, biliary lipid secretion, and hepatic cholesterol content in methimazole-treated hypothyroid and hypophysectomized rats after triiodothyronine administration: possible linkage of cholesterol synthesis to biliary secretion. Day R, et al. **Endocrinology** 1989 Jul; 125(1):459–68
Thyroid hormone regulation of hypothalamic immunoreactive thyrotropin. DeVito WJ. **Endocrinology** 1989 Sep;125(3):1219–23
Triiodothyronine exerts direct cell-specific regulation of thyrotropin-releasing hormone gene expression in the hypothalamic paraventricular nucleus. Dyess EM, et al. **Endocrinology** 1988 Nov;123(5):2291–7
Development and characterization of a variant GC cell line with L-triiodothyronine-independent growth and growth hormone production. Halperin Y, et al. **Endocrinology** 1989 Aug;125(2):778–84
Attenuation of thyroid hormone action by 1,25-dihydroxyvitamin D3 in pituitary cells. Kaji H, et al. **Endocrinology** 1989 Feb;124(2):930–6
Triiodothyronine rapidly reverses inhibition of S14 gene transcription by glucagon. Kinlaw WB, et al. **Endocrinology** 1988 Nov;123(5):2255–60
A rapid, extranuclear effect of 3,5,3'-triiodothyronine on sugar uptake by several tissues in the rat in vivo. Evidence for a physiological role for the thyroid hormone action at the level of the plasma membrane. Segal J. **Endocrinology** 1989 Jun;124(6):2755–64
Evidence that an increase in cytoplasmic calcium is the initiating event in certain plasma membrane-mediated responses to 3,5,3'-triiodothyronine in rat thymocytes. Segal J, et al. **Endocrinology** 1989 Apr;124(4):1949–55
3,5,3'-Triiodothyronine increases cellular adenosine 3',5'-monophosphate concentration and sugar uptake in rat thymocytes by stimulating adenylate cyclase activity: studies with the adenylate cyclase inhibitor MDL 12330A. Segal J, et al. **Endocrinology** 1989 May;124(5):2166–71
Heat shock of cultured GC cells enhances the level of triiodothyronine induced growth hormone (GH) and GH messenger ribonucleic acid. Shapiro LE, et al. **Endocrinology** 1989 Jul;125(1):180–5
3,5,3'-Triiodothyronine determines the viability of GC cells after heat shock. Shapiro LE, et al. **Endocrinology** 1989 Feb;124(2):1026–32
Thyroid hormone regulation of alpha-lactalbumin: differential glycosylation and messenger ribonucleic acid synthesis in mouse mammary glands. Ziska SE, et al. **Endocrinology** 1988 Nov;123(5):2242–8
Thyroid hormone regulation of nuclear-encoded mitochondrial inner membrane polypeptides of the liver. Joste V, et al. **Eur J Biochem** 1989 Sep 1;184(1):255–60
Effect of maternal hormone treatment on lung protein leakage and lung function of preterm newborn rabbits. Ikegami M, et al. **Eur Respir J [Suppl]** 1989 Mar; 2(3):16s–20s
Effects of 3,5,3'-triiodothyronine (T3) on rat liver peroxisomal compartment during cold exposure. Goglia F, et al. **Exp Biol** 1989;48(3):135–40
Fatty acid composition of liver lipids during ontogeny of the chick embryo: effect of a single dose of triiodothyronine. Gomez-Munoz A, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):323–7
Cholinephosphate cytidylyltransferase in fetal rat lung cells: activity and subcellular distribution in response to dexamethasone, triiodothyronine, and fibroblast-conditioned medium. Viscardi RM, et al. **Exp Lung Res** 1989 Mar;15(2):223–37
Relation between renal and hepatic excretion in drugs. VIII. Influence of triiodothyronine on maturation of phenol red excretion in rats. Fleck C, et al. **Exp Pathol** 1988; 34(2):89–98
Relation between renal and hepatic excretion of drugs. XII. Influence of dexamethasone, triiodothyronine, or phenobarbital on the elimination of sulfonamides in rats of different ages. Fleck C, et al. **Exp Pathol** 1989; 36(1):43–52
Effect of thyroid hormone on somatomedin-C release from perfused rat liver. Ikeda T, et al. **Experientia** 1989 Feb 15;45(2):170–1
Chemiluminescent and respiratory responses related to thyroid hormone-induced liver oxidative stress. Fernandez V, et al. **Free Radic Res Commun** 1988;5(2):77–84
Corticosteroid receptors in liver cytosol of the clawed toad, Xenopus laevis: influence of thyroid and ovarian hormones. Lange CB, et al. **Gen Comp Endocrinol** 1989 Mar; 73(3):485–97
Triiodothyronine inhibition of thyrotropin-releasing hormone- and growth hormone-releasing factor-induced growth hormone secretion in anesthetized chickens. Scanes CG, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):477–84
Sex differences of the influence of T3 on the topical distribution of phosphoenolpyruvate carboxykinase activity in the liver acinus. Wimmer M. **Histochemistry** 1989; 92(2):109–13
Effect of triiodothyronine and thyroxine on malic enzyme activity and protein and nucleic acid contents of liver and muscle of toad, Bufo melanostictus. Dey SS, et al. **Horm Metab Res** 1989 Jan;21(1):49–50
Influence of L-thyroxine, L-triiodothyronine, thyroid stimulating hormone, or estradiol on the cell kinetics of cultured mammary cancer cells. de Launoit Y, et al. **In Vitro Cell Dev Biol** 1989 Jul;25(7):585–91
Effects of thyroid hormone on light/dark melatonin synthesis and release by young and maturing rat pineal glands in vitro. Catala MD, et al. **Int J Dev Neurosci** 1988;6(3):285–8
Effects of triiodothyronine on the development of GFAP-immunoreactivity and CAT-activity in monolayer cultures of embryonal rat forebrain cells. Madarász E. **Int J Dev Neurosci** 1987;5(3):255–62
Effect of triiodothyronine on glucose utilization in diaphragm of obese (ob/ob) mice. Oh SS, et al. **Int J Obes** 1989 Feb; 13(1):21–30
Triiodothyronine amplifies norepinephrine stimulation of uncoupling protein gene transcription by a mechanism not requiring protein synthesis. Bianco AC, et al. **J Biol Chem** 1988 Dec 5;263(34):18168–75
Functional characterization of the rat growth hormone promoter elements required for induction by thyroid hormone with and without a co-transfected beta type thyroid hormone receptor. Brent GA, et al. **J Biol Chem** 1989 Jan 5;264(1):178–82
Transcriptional regulation of proto-oncogene expression by epidermal growth factor, transforming growth factor beta 1, and triiodothyronine in MDA-468 cells. Fernandez-Pol JA, et al. **J Biol Chem** 1989 Mar 5;264(7):4151–6
Rapid induction of rat liver S14 gene transcription by thyroid hormone. Jump DB. **J Biol Chem** 1989 Mar 15; 264(8):4698–703
Thyroid hormones inhibit platelet function and myosin light chain kinase. Mamiya S, et al. **J Biol Chem** 1989 May 25; 264(15):8575–9
Thyroid hormone regulation of transcription factors involved in malic enzyme gene expression. Petty KJ, et al. **J Biol Chem** 1989 Jul 5;264(19):11483–90
Thyroid hormones regulate G-protein beta-subunit mRNA expression in vivo. Rapiejko PJ, et al. **J Biol Chem** 1989 Sep 25;264(27):16183–9
Thyroid hormone regulates alpha and alpha + isoforms of Na,K-ATPase during development in neonatal rat brain. Schmitt CA, et al. **J Biol Chem** 1988 Nov 25; 263(33):17643–9
Retinoic acid is a modulator of thyroid hormone activation of Ca2+-ATPase in the human erythrocyte membrane [published erratum appears in J Biol Chem 1989 Jun 15;264(17):10326] Smith TJ, et al. **J Biol Chem** 1989 Jan 15;264(2):687–9
Transcriptional activation and stabilization of malic enzyme mRNA precursor by thyroid hormone. Song MK, et al. **J Biol Chem** 1988 Dec 5;263(34):17970–4
Thyroid hormone regulates the mouse thyrotropin beta-subunit gene promoter in transfected primary thyrotropes. Wood WM, et al. **J Biol Chem** 1989 Sep 5; 264(25):14840–7
Thyroid hormone 5'-deiodinase activity, nuclear binding, and effects on mitogenesis in UMR-106 osteoblastic osteosarcoma cells. LeBron BA, et al. **J Bone Miner Res** 1989 Apr;4(2):173–8
Triiodothyronine potentiation of the antidepressant effect of pheneizine. Joffe RT. **J Clin Psychiatry** 1988 Oct; 49(10):409–10
Harderian glands of golden hamsters: morphological and biochemical responses to thyroid hormones. Hoffman RA, et al. **J Comp Physiol [B]** 1989;159(3):293–9
Effects of hypothyroidism, tri-iodothyronine and glucocorticoids on growth hormone responses to growth hormone-releasing hormone and His-D-Trp-Ala-Trp-D-Phe-Lys-NH2. Edwards CA, et al. **J Endocrinol** 1989 Apr;121(1):31–6
Differential regulation by thyroid hormones of myosin heavy chain alpha and beta mRNAs in the rat ventricular myocardium. Green NK, et al. **J Endocrinol** 1989 Jul; 122(1):193–200
Influence of tri-iodothyronine or lipid administration on the response of the pituitary-thyroid axis to exposure to cold in the newborn lamb. Wrutniak C, et al. **J Endocrinol** 1989 May;121(2):361–5
Triiodothyronine increases translatable albumin messenger RNA in Rana catesbeiana tadpole liver. Schultz JJ, et al. **J Exp Zool** 1988 Jul;247(1):69–76
L-triiodothyronine at a slightly over physiologic dose increases leucine flux, which suggests an increase in protein degradation in normal subjects. Tsalikian E, et al. **J Lab Clin Med** 1989 Aug;114(2):171–5
Effect of triiodothyronine on cultured neonatal rat heart cells: beating rate, myosin subunits and CK-isozymes. Kessler-Icekson G. **J Mol Cell Cardiol** 1988 Jul; 20(7):649–55
The effects of triiodothyronine on cultured neonatal rat cardiac myocytes. Williams HM, et al. **J Mol Cell Cardiol** 1988 Aug;20(8):689–99
Effect of thyroid hormones on benzodiazepine receptors in neuron-enriched primary cultures. Go T, et al. **J Neurochem** 1988 Nov;51(5):1497–500
Regulation of thyrotropin releasing hormone degrading enzymes in rat brain and pituitary by L-3,5,3'-triiodothyronine. Suen CS, et al. **J Neurochem** 1989 Mar;52(3):884–8
Calcium and inorganic phosphate transport in embryonic chick intestine: triiodothyronine enhances the genomic action of 1,25-dihydroxycholecalciferol. Cross HS, et al. **J Nutr** 1988 Dec;118(12):1529–34
Effect of triiodothyronine (T3) on myocardial high energy phosphates and lactate after ischemia and cardiopulmonary bypass. An experimental study in baboons. Novitzky D, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):600–7
Thyroid hormone induces constitutive keratin gene expression during Xenopus laevis development. Mathisen PM, et al. **Mol Cell Biol** 1989 May;9(5):1823–31
Effect of triiodothyronine treatment on thyrotrophin beta- and alpha-messenger RNAs in the pituitary of the euthyroid rat. Franklyn JA, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):1–5
Multihormonal regulation of the human, rat, and bovine growth hormone promoters: differential effects of 3',5'-cyclic adenosine monophosphate, thyroid hormone, and glucocorticoids. Brent GA, et al. **Mol Endocrinol** 1988 Sep;2(9):792–8
Identification of an adenosine 3',5'-monophosphate (cAMP)-responsive region in the rat growth hormone gene: evidence for independent and synergistic effects of cAMP and thyroid hormone on gene expression. Copp RP, et al. **Mol Endocrinol** 1989 May;3(5):790–6
Thyroid hormone-responsive elements of the prolactin gene: evidence for both positive and negative regulation. Day RN, et al. **Mol Endocrinol** 1989 Jun;3(6):931–8
Thyroid hormone effect on gene expression of the adenine nucleotide translocase in different rat tissues. Höppner W, et al. **Mol Endocrinol** 1988 Nov;2(11):1127–31
Hormonal regulation of the S14 gene in 3T3-F442A cells. Lepar GJ, et al. **Mol Endocrinol** 1989 Aug;3(8):1207–14
Full expression of uncoupling protein gene requires the concurrence of norepinephrine and triiodothyronine. Silva JE. **Mol Endocrinol** 1988 Aug;2(8):706–13
Thyroid hormones directly interact with vascular smooth muscle strips. Ishikawa T, et al. **Mol Pharmacol** 1989 Jun; 35(6):760–5
Tissue-specific regulation of pyroglutamate aminopeptidase II activity by thyroid hormones. Ponce G, et al. **Neuroendocrinology** 1988 Aug;48(2):211–3
The effects of acute and repeated administration of T3 to mice on 5-HT1 and 5-HT2 function in the brain and its influence on the actions of repeated electroconvulsive shock. Heal DJ, et al. **Neuropharmacology** 1988 Dec; 27(12):1239–48
Modulation of gamma-aminobutyric acid uptake of rat brain synaptosomes by thyroid hormones. Mason GA, et al. **Neuropsychopharmacology** 1987 Dec;1(1):63–70
Healing of experimental rickets by thyroid hormone: biochemical and histological study. Umano T, et al. **Osaka City Med J** 1988 Oct;34(2):159–68
Vitamin K-dependent carboxylase activity in fetal rat lung: developmental effects of dexamethasone and triiodothyronine. Gallaher KJ, et al. **Pediatr Res** 1989 May; 25(5):530–4
Thyroid hormone modulation of TRH precursor levels in rat hypothalamus, pituitary, thyroid and blood. Simard M, et al. **Peptides** 1989 Jan-Feb;10(1):145–55
Effect of the excess of thyroid hormone administration on water and sodium chloride intake in the rat. Belló AA, et al. **Physiol Behav** 1988;43(2):155–7
Time course of changes in Na,K-pump concentration and passive Na,K-fluxes in skeletal muscle after administration of thyroid hormone. Everts ME, et al. **Prog Clin Biol Res** 1988;268B:371–6
Effects of triiodothyronine (T3) on the potentiation by antidepressants of L-5-hydroxytryptophan-induced head-twitches in mice. Martin P, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(5):735–48
Are antidepressant-like effects of triiodothyronine (T3) in rodents related to an hyperthyroid state? Massol J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(5):749–64
Early extranuclear effect of triiodothyronine (T3) on tissue slices: relevance to organ donor viability. Wicomb WN, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1263–4
Effects of hormonal therapy on subsequent organ (kidney)

storage in the experimental animal. Wicomb WN, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):55–8

[Influence of 3,5,3'-triiodo-L-thyronine on the hepatic enzyme activities responsible for the metabolism of xenobiotics during the development of the chick embryo] Goudonnet H, et al. **C R Soc Biol (Paris)** 1988; 182(3):316–23 (Eng. Abstr.) (Fre)

[Effects of 3,5,3'-triiodo-L-thyronine on the enzymes responsible for the metabolism of xenobiotics in the rat after increase in the dietary supply of cholesterol] Mounié J, et al. **C R Soc Biol (Paris)** 1988;182(3):308–15 (Eng. Abstr.) (Fre)

[The effect of triiodothyronine (T3) and reverse triiodothyronine (rT3) on canine hemorrhagic shock] Shigematsu H, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct; 89(10):1587–93 (Eng. Abstr.) (Jpn)

[The effect of thyroid hormones on structural-functional relations in rat liver chromatin] Adylova AT, et al. **Biokhimiia** 1988 Aug;53(8):1339–43 (Eng. Abstr.) (Rus)

[The effect of triiodothyronine and catecholamines on the stability of trace effects of cold adaptation in rats] Sobolev VI, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):110–6 (Eng. Abstr.) (Rus)

[Stimulation with triiodothyronine of the synthesis of DNA, total proteins, nuclear proteins and nuclear matrix proteins in cultured cells of hepatoma Morris 7777] Adylova AT, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):113–7 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Individual rabbit cardiac myocytes have different thresholds for alpha myosin heavy chain regulation by thyroid hormone. Lin ZY, et al. **Am J Anat** 1989 Aug;185(4):455–61

Role of T3 in thermogenic and trophic responses of brown adipose tissue to cold. Park IR, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E81–7

Thyroid hormone induces synthesis and accumulation of tropomyosin and myosin heavy chain in limb buds of premetamorphic tadpoles. Dhanarajan ZC, et al. **Biochem Cell Biol** 1988 Jul;66(7):724–34

The role of 3,5,3'-triiodothyronine in the physiological action of thyroxine in the premetamorphic tadpole. Galton VA. **Endocrinology** 1989 May;124(5):2427–33

Thyroxine-induced redistribution of creatine kinase isoenzymes in rat cardiomyocyte cultures. Brik H, et al. **Experientia** 1989 Jun 15;45(6):591–4

Thyroid hormone regulation of the rat glycoprotein hormone alpha-subunit gene promoter activity. Burnside J, et al. **J Biol Chem** 1989 Apr 25;264(12):6886–91

Bone-resorbing activity of thyroid hormones is related to prostaglandin production in cultured neonatal mouse calvaria. Klaushofer K, et al. **J Bone Miner Res** 1989 Jun; 4(3):305–12

Differential effects of triiodothyronine on rat left and right ventricular function and the influence of metoprolol. Zierhut W, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):617–24

Thyroid hormones regulate rat thyrotropin beta gene promoter activity expressed in GH3 cells. Carr FE, et al. **Mol Endocrinol** 1989 Apr;3(4):709–16

[Thyroid hormones and lipid metabolism] Nikitin VN, et al. **Fiziol Zh** 1989 May–Jun;35(3):91–8 (46 ref.) (Eng. Abstr.) (Rus)

[Effect of triiodothyronine on nucleic acid synthesis of immunocytes in cell culture] Baeva EV. **Probl Endokrinol (Mosk)** 1989 Jan–Feb;35(1):79–83 (Eng. Abstr.) (Rus)

SECRETION

Triiodothyronine and 3',5'-cyclic AMP secretion by cultured human thyroid cells in response to thyrotropin and thyroid-stimulating immunoglobulin. Krsiem Z, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):493–500

Inhibitory effect of lithium on the release of thyroid hormones from thyrotropin-stimulated mouse thyroids in a perifusion system. Mori M, et al. **Endocrinology** 1989 Mar; 124(3):1365–9

Effects of VIP and helodermin on thyroid hormone secretion in the mouse. Ahrén B, et al. **Neuropeptides** 1989 Jan; 13(1):59–64

[Aging and endocrine function: analysis of the physiological profile from laboratory database] Ichihara K, et al. **Rinsho Byori** 1988 Oct;36(10):1169–76 (Jpn)

[Effect of hypercalcemia and calcitonin on changes in the left-ventricular systolic time interval and T3 and T4 secretion in hyperthyroidism and euthyroid goiter] Gasińska T, et al. **Endokrynol Pol** 1988;39(1):49–56 (Eng. Abstr.) (Pol)

[Diurnal rhythm of thyroxine (T4), triiodothyronine (T3) and reverse triiodothyronine (rT3) secretion in women in the third trimester of uncomplicated pregnancy] Dzieciuchowicz L, et al. **Ginekol Pol** 1988 Feb;59(2):89–92 (Eng. Abstr.) (Pol)

[Relations between therapeutic and hormonal response to neuroleptics of patients with paranoid schizophrenia. I. Secretion of thyrotropin and thyroid hormones] Horodnicki JM, et al. **Psychiatr Pol** 1988 Jul–Aug; 22(4):279–84 (Eng. Abstr.) (Pol)

[Relation of therapeutic and hormonal reactions to thymoleptics in patients with endogenous depression. I. Secretion of thyrotropin and thyroid hormones] Horodnicki JM, et al. **Psychiatr Pol** 1988 May–Jun; 22(3):198–204 (Eng. Abstr.) (Pol)

THERAPEUTIC USE

What is the duration for augmentation with T3 or lithium in resistant depression? [letter] Price LH. **J Clin Psychopharmacol** 1989 Feb;9(1):73

Decreased growth hormone (GH) response to oral clonidine in endemic cretinism: effect of L-T3 therapy. Martins MC, et al. **J Endocrinol Invest** 1988 Jul–Aug;11(7):477–81

Triiodothyronine therapy for heart donor and recipient. Novitzky D, et al. **J Heart Transplant** 1988 Sep–Oct; 7(5):370–6

Radiotherapy and L-triiodothyronine in the treatment of high-grade astrocytoma. Morales P, et al. **J Surg Oncol** 1988 Oct;39(2):119–21

Control of breathing in patients with short-term primary hypothyroidism. Gorini M, et al. **Lung** 1989;167(1):43–53

Hormonal therapy in the brain-dead experimental animal. Cooper DK, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):51–4

Triiodothyronine therapy in the cardiac transplant recipient. Novitzky D, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):65–8

TOXICITY

Comparison of the toxicity of orally administered L-triiodothyronine (T3) in rat and cynomolgus monkey. Atterwill CK, et al. **Toxicology** 1988 Dec 16;53(1):89–105

URINE

Urinary triiodothyronine excretion. Orden I, et al. **Rev Esp Fisiol** 1988 Jun;44(2):179–84

3,3',5'-TRIIODOTHYRONINE see **TRIIODOTHYRONINE, REVERSE**

TRIIODOTHYRONINE RECEPTORS see **RECEPTORS, THYROID HORMONE**

TRIIODOTHYRONINE, REVERSE

ADMINISTRATION & DOSAGE

3,3',5'-Triiodothyronine inhibits ontogenetic development of iodothyronine-5'-deiodinase in the liver of the neonatal mouse. Han DC, et al. **Acta Endocrinol (Copenh)** 1988 Oct; 119(2):181–8

ANTAGONISTS & INHIBITORS

Triiodothyronine (T3) antagonizes adverse effects of high circulating reverse-T3 (rT3) during hemorrhagic shock. Yuan XQ, et al. **Am Surg** 1988 Dec;54(12):720–5

BLOOD

Causes and effects of the low T3 syndrome during caloric deprivation and non-thyroidal illness: an overview. Hennemann G, et al. **Acta Med Austriaca** 1988;15 Suppl 1:42–5 (17 ref.)

Serum reverse T3 and amiodarone efficacy. Haberman RJ, et al. **Clin Cardiol** 1989 Mar;12(3):140–4

Screening for thyroid disease in the elderly. Serum concentrations of thyrotropin and 3,5,3'-triiodothyronine in a representative population of 79-year-old women and men. Edén S, et al. **Compr Gerontol [A]** 1988 Feb;2(1):40–5

Circulating thyronines and peripheral monodeiodination in lactating rats. Valverde C, et al. **Endocrinology** 1989 Mar; 124(3):1340–4

Decline of T3 and elevation in reverse T3 induced by hyperglucagonemia: changes in thyroid hormone metabolism, not altered release of thyroid hormones. Kabadi UM, et al. **Horm Metab Res** 1988 Aug;20(8):513–6

T4, T3 and rT3 levels in serum and cerebrospinal fluid of patients with amyotrophic lateral sclerosis. Malin JP, et al. **J Neurol** 1989 Jan;236(1):57–9

A comparison of three methods to assess metabolic control in diabetic patients on CAPD treatment. Bilo HJ, et al. **Neth J Med** 1988 Dec;33(5–6):217–24

Concentrations of thyroxine, 3,5,3'-triiodothyronine, 3,3',5'-triiodothyronine, 3,3'-diiodothyronine, and 3',5'-diiodothyronine in human red blood cells. Bregengaard C, et al. **Scand J Clin Lab Invest** 1989 Jun; 49(4):329–36

Endocrine changes and haemodynamic stability after brain death. Robertson KM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1197–8

[Preliminary study of the relation of acute myocardial infarction and thyroid hormones] Chen SX, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jun;27(6):339–40, 388–9 (Eng. Abstr.) (Chi)

[Thyroid function and trisomy 21. TSH increase and rT3 deficiency] Lejeune J, et al. **Ann Genet (Paris)** 1988; 31(3):137–43 (Eng. Abstr.) (Fre)

[Reverse T3 values] Grebe SF, et al. **Acta Med Austriaca** 1988;15 Suppl 1:35–6 (Ger)

[The galactose clearance capacity and values of reverse T3 in liver cirrhosis] Relli P, et al. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):329–32 (Eng. Abstr.) (Ita)

METABOLISM

The hidden, nonexchangeable pool of 3,5,3'-triiodothyronine and 3,3',5'-triiodothyronine in man: does it exist? Faber J, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):667–71

Comparison of maternal to fetal transfer of 3,5,3'-triiodothyronine versus thyroxine in rats, as assessed from 3,5,3'-triiodothyronine levels in fetal tissues. Morreale de Escobar G, et al. **Acta Endocrinol (Copenh)** 1989 Jan; 120(1):20–30

Properties of 5'-deiodinase of 3,3',5'-triiodothyronine in rat skeletal muscle. Tsukahara F, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):69–74

Thyroxine, triiodothyronine, and reverse triiodothyronine processing in the cerebellum: autoradiographic studies in adult rats. Dratman MB, et al. **Endocrinology** 1989 Sep; 125(3):1723–33

A proton and fluorine-19 nuclear magnetic resonance and fluorescence study of the binding of some natural and synthetic thyromimetics to prealbumin (transthyretin). Reid DG, et al. **J Biol Chem** 1989 Feb 5;264(4):2013–23

[Influence of yang-restoring herb medicines upon metabolism of thyroid hormone in normal rats and a drug administration schedule] Chen MD, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Feb;9(2):93–5, 70 (Eng. Abstr.) (Chi)

PHARMACOLOGY

Lack of effect of 3,3'5'-triiodothyronine (reverse T3) on cardiac function in the rabbit. Kannan R, et al. **Endocr Res** 1988–89;14(4):227–42

Thyroid hormones directly interact with vascular smooth muscle strips. Ishikawa T, et al. **Mol Pharmacol** 1989 Jun; 35(6):760–5

Effects of reverse triiodothyronine on bone and calcium metabolism in rats. Ohashi H, et al. **Osaka City Med J** 1988 Oct;34(2):179–89

[The effect of triiodothyronine (T3) and reverse triiodothyronine (rT3) on canine hemorrhagic shock] Shigematsu H, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct; 89(10):1587–93 (Eng. Abstr.) (Jpn)

PHYSIOLOGY

Is there a physiological role for reverse triiodothyronine? Burger AG. **Acta Med Austriaca** 1988;15 Suppl 1:30–3 (11 ref.)

TRIKETOCHOLANIC ACID see **DEHYDROCHOLIC ACID**

TRILOGY OF FALLOT see under **HEART SEPTAL DEFECTS, ATRIAL**

TRIMEBUTINE see under **BENZOATES**

TRIMECAINE see under **ACETANILIDES**

TRIMEDOXIME see under **OXIMES**

TRIMEPRANOL see under **PROPANOLAMINES**

TRIMEPRAZINE

THERAPEUTIC USE

Trimeprazine modified chemotherapeutic and hyperthermic response of a mouse fibrosarcoma. George KC, et al. **Indian J Exp Biol** 1988 May;26(5):341–4

TRIMESTER, FIRST see **PREGNANCY TRIMESTER, FIRST**

TRIMESTER, SECOND see **PREGNANCY TRIMESTER, SECOND**

TRIMESTER, THIRD see **PREGNANCY TRIMESTER, THIRD**

TRIMETAPHAN see **TRIMETHAPHAN**

TRIMETAZIDINE see under **PIPERAZINES**

TRIMETHADIONE see under **OXAZOLES**

TRIMETHAPHAN

ADMINISTRATION & DOSAGE

Alteration of intracranial pressure, cerebral blood flow, autoregulation and carbondioxide-reactivity by hypotensive agents in baboons with intracranial hypertension. Hartmann A, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):37–43

ADVERSE EFFECTS

Acute left bundle branch block precipitated by trimethaphan [letter] Young WL, et al. **Anesth Analg** 1989 Sep; 69(3):413–4

The effect of trimethaphan-induced hypotension on canine spinal cord blood flow. Measurement at different cord levels using radiolabelled microspheres. Wilton NC, et al. **Spine** 1988 May;13(5):490–3

PHARMACOLOGY

[Effects of GIK and trimetaphan on glucose metabolism and peripheral circulation] Tanioka F, et al. **Masui** 1988 Aug; 37(8):933–7 (Eng. Abstr.) **(Jpn)**

SUPPLY & DISTRIBUTION

Future unavailability of trimetaphan (Arfonad) [letter] Swift D. **Anaesth Intensive Care** 1989 May;17(2):236

THERAPEUTIC USE

Wegener's granulomatosis and trimethoprim/sulfamethoxazole treatment [letter] Boudes P. **Arthritis Rheum** 1989 Aug;32(8):1052

Comment on the article by DeRemee [letter] Steppat D, et al. **Arthritis Rheum** 1989 Aug;32(8):1050–2

Trimethaphan or nitroprusside in the setting of intracranial hypertension. Murphy JM, et al. **Clin Neuropharmacol** 1988 Oct;11(5):436–42 (23 ref.)

TRIMETHOPRIM

ADMINISTRATION & DOSAGE

Single dose trimethoprim for urinary tract infection. Nolan T, et al. **Arch Dis Child** 1989 Apr;64(4):581–6

Long–term suppression of Salmonella aortitis with an oral antibiotic. Donabedian H. **Arch Intern Med** 1989 Jun; 149(6):1452

AIDS–related Pneumocystis carinii pneumonia successfully treated with dapsone–trimethoprim [letter] Green ST, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):487–8

Stable human immunodeficiency virus encephalopathy in two infants receiving early intravenous gammaglobulin plus antimicrobial prophylaxis. Hunziker UA, et al. **Eur J Pediatr** 1989 Feb;148(5):417–22

Studies on efficacy of treatment with sulfamethoxazole + trimethoprim and sulfalene + pyrimethamine combinations in Plasmodium falciparum malaria of known and unknown resistant status. Barkakaty BN, et al. **J Commun Dis** 1988 Sep;20(3):165–74

Minimum effective dose of trimethoprim for urinary tract infection. Blackstone V, et al. **J R Coll Gen Pract** 1988 Jul;38(312):320

Stage–adapted treatment of Wegener's granulomatosis. First results of a prospective study. Steppat D, et al. **Klin Wochenschr** 1989 Jul 3;67(13):666–71

Treatment and prophylaxis of Isospora belli infection in patients with the acquired immunodeficiency syndrome. Pape JW, et al. **N Engl J Med** 1989 Apr 20;320(16):1044–7

The risks and benefits of low–dose cotrimoxazole prophylaxis for Pneumocystis pneumonia in renal transplantation. Higgins RM, et al. **Transplantation** 1989 Mar;47(3):558–60

[Combined treatment of chronic prostatitis with sulfamethoxazole–trimethoprim and hachimi–ji–oh–gan] Kaneko S, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1091–5 (Eng. Abstr.) **(Jpn)**

[Treatment of acute urinary infection with the usual regimen and a single dose of antibiotic (letter)] Sánchez MI. **Rev Med Chil** 1988 Feb;116(2):184–6 **(Spa)**

ADVERSE EFFECTS

Therapeutic challenge for Isospora belli enteritis in an AIDS patient who developed Lyell syndrome after co–trimoxazole therapy. Romeu J, et al. **Am J Gastroenterol** 1989 Feb;84(2):207–9

Trimethoprim–sulfamethoxazole–associated aseptic meningitis: case reports and review of the literature. Joffe AM, et al. **Am J Med** 1989 Sep;87(3):332–8 (90 ref.)

Acute granulomatous interstitial nephritis due to co–trimoxazole. Cryst C, et al. **Am J Nephrol** 1988; 8(6):483–8

Agranulocytosis and anaemia induced by sulfametopyrazine in a sulfametopyrazine–trimethoprim combination. Teo CP, et al. **Ann Acad Med Singapore** 1989 May;18(3):307–10

Desensitization to trimethoprim sulfamethoxazole in patients with acquired immune deficiency syndrome and Pneumocystis carinii pneumonia. White MV, et al. **Ann Allergy** 1989 Mar;62(3):177–9

Pancytopenia and methotrexate with trimethoprim–sulfamethoxazole [letter] Jeurissen ME, et al. **Ann Intern Med** 1989 Aug 1;111(3):261

Megaloblastic pancytopenia associated with dapsone and trimethoprim treatment of Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome [letter] McKinsey DS, et al. **Arch Intern Med** 1989 Apr;149(4):965

Mineralocorticoid deficiency in HIV infection [letter; comment] Murphy CE, et al. **BMJ** 1989 Apr 29; 298(6681):1181. **Comment on:** BMJ 1989 Feb 25;298(6672):496–7

Hypoglycemia induced by co–trimoxazole in AIDS. Schattner A, et al. **BMJ** 1988 Sep 17;297(6650):742

Intrahepatic cholestasis associated with co–trimoxazole. Oliver RM, et al. **Br J Clin Pract** 1987 Oct;41(10):975–6

Adverse cutaneous drug reactions in AIDS. De Raeve L, et al. **Br J Dermatol** 1988 Oct;119(4):521–3

Drug interactions with methotrexate [letter] Liddle BJ, et al. **Br J Dermatol** 1989 Apr;120(4):582–3

Reaction after re–exposure to trimethoprim–sulfamethoxazole [letter] Ulstad DR, et al. **Chest** 1989 Apr;95(4):937–8

Fixed drug eruption due to cotrimexasole [letter] Varsano I, et al. **Dermatologica** 1989;178(4):232

Comment: TMP/SMX—warfarin interaction [letter] Fredrika DA. **DICP** 1989 Jul–Aug;23(7–8):619–20

Heinz–body hemolytic anemia associated with phenazopyridine and sulfonamide. Ponte CD, et al. **DICP** 1989 Feb;23(2):140–2

Trimethoprim induced intrahepatic cholestasis. Kumar VV, et al. **Indian Pediatr** 1989 Feb;26(2):181–3

Co–prescribing chloramphenicol and cotrimoxazole [letter] Agarwal BD. **J Assoc Physicians India** 1988 Mar;36(3):236

Therapy of pneumocystis carinii pneumonia after trimethoprim–sulfamethoxazole desensitization. Papakonstantinou G, et al. **Klin Wochenschr** 1989 Mar 1; 67(5):316

Fatal toxic epidermal necrolysis associated with co–trimoxazole [letter] Carmichael AJ, et al. **Lancet** 1989 Sep 30;2(8666):808–9

Toxic epidermal necrolysis and co–trimoxazole [letter] Whittington RM. **Lancet** 1989 Sep 2;2(8662):574

What influences prescribing—scientific articles or promotional pressure? [letter] Heery PJ. **Med J Aust** 1989 Mar 6;150(5):282, 284

Acute tubular necrosis following co–trimoxazole therapy [letter] Rudra T, et al. **Nephron** 1989;53(1):85–6

Death from drug–induced hemolytic anemia. Taraszewski R, et al. **Postgrad Med** 1989 May 15;85(7):79–80, 84

Thrombophlebitis migrans following co–trimoxazole therapy. Verne–Pignatelli J, et al. **Postgrad Med J** 1989 Jan; 65(759):51–2

Effect of folic and folinic acid on cytopenia occurring during co–trimoxazole treatment of Pneumocystis carinii pneumonia. Bygbjerg IC, et al. **Scand J Infect Dis** 1988; 20(6):685–6

[Acute aseptic meningitis induced by trimethoprim] Saha H, et al. **Duodecim** 1988;104(4):257–61 **(Fin)**

[Reflections on the sources of cases and the information they provide. Apropos of a survey] Maury MO, et al. **Therapie** 1988 Oct–Dec;43(6):497–500 (Eng. Abstr.) **(Fre)**

[Status asthmaticus following administration of drugs] Brändli O. **Schweiz Rundsch Med Prax** 1988 Oct 18; 77(42):1136–7 (Eng. Abstr.) **(Ger)**

[Allergy to trimethoprim–sulfamethoxazole in normal, atopic and immunodepressed subjects] Pioda GB, et al. **Clin Ter** 1987 Aug 15;122(3):171–5 (Eng. Abstr.) **(Ita)**

[A case of drug–induced recurrent cholestatic hepatitis] Pavlova MV, et al. **Ter Arkh** 1989;61(2):125–7 **(Rus)**

[Cotrimoxazole–induced agranulocytosis (letter)] **Med Clin (Barc)** 1988 May 7;90(18):755 **(Spa)**

[Adverse effects of cotrimoxazole and Pneumocystis carinii pneumonia (letter)] Soler–Bel J, et al. **Rev Clin Esp** 1989 Feb;184(2):115–6 **(Spa)**

ANALOGS & DERIVATIVES

Some pharmacokinetic data of aditoprim and trimethoprim in healthy and tick–borne fever infected dwarf goats. Knoppert NW, et al. **J Vet Pharmacol Ther** 1988 Jun; 11(2):135–44

Conformational analysis of antifolates: molecular structure and enzyme binding of the 4'–COOH trimethoprim derivative. Cody V, et al. **Prog Clin Biol Res** 1989; 291:247–50

ANALYSIS

Stability of concentrated trimethoprim–sulfamethoxazole admixtures. Jarosinski PF, et al. **Am J Hosp Pharm** 1989 Apr;46(4):732–7

Stability of a nonaqueous trimethoprim preparation. Tu YH, et al. **Am J Hosp Pharm** 1989 Feb;46(2):301–4

High–performance liquid chromatographic analysis of trimethoprim and sulfamethoxazole in microliter volumes of chinchilla middle ear effusion and serum. Erdmann GR, et al. **J Chromatogr** 1988 Dec 9;433:187–95

Degradation of trimethoprim. Bergh JJ, et al. **J Pharm Sci** 1989 Apr;78(4):348–50

Trimethoprim analysis [letter] Watson ID. **Ther Drug Monit** 1988;10(3):363

ANTAGONISTS & INHIBITORS

Reversal of activity of trimethoprim against gram–positive cocci by thymidine, thymine and folates'. Hamilton–Miller JM. **J Antimicrob Chemother** 1988 Jul;22(1):35–9

BLOOD

Effect of trenbolone and testosterone on the plasma elimination rates of sulfamethazine, trimethoprim, and antipyrine in female dwarf goats. van Miert AS, et al. **Am J Vet Res** 1988 Dec;49(12):2060–4

Dapsone, trimethoprim, and sulfamethoxazole plasma levels during treatment of Pneumocystis pneumonia in patients with the acquired immunodeficiency syndrome (AIDS). Evidence of drug interactions. Lee BL, et al. **Ann Intern Med** 1989 Apr 15;110(8):606–11

High–performance liquid chromatographic determination of trimethoprim in serum. Meatherall R. **Ther Drug Monit** 1989;11(1):79–83

[Quantitative determination of trimethoprim in the blood serum] Pashov D, et al. **Eksp Med Morfol** 1988;27(2):36–42 (Eng. Abstr.) **(Bul)**

DIAGNOSTIC USE

Fragile X expression in normal and mentally retarded subjects: effect of treatment with an antifolic agent. Sanfilippo S, et al. **Am J Med Genet** 1988 May–Jun; 30(1–2):369–76

METABOLISM

Conformational analysis of antifolates: molecular structure and enzyme binding of the 4'–COOH trimethoprim derivative. Cody V, et al. **Prog Clin Biol Res** 1989; 291:247–50

Structure and energetics of ligand binding to proteins: Escherichia coli dihydrofolate reductase–trimethoprim, a drug–receptor system. Dauber–Osguthorpe P, et al. **Proteins** 1988;4(1):31–47

N–oxidation, O–demethylation, and excretion of trimethoprim by the turtle Pseudemys scripta elegans. Vree TB, et al. **Vet Q** 1989 Apr;11(2):125–8

PHARMACOKINETICS

Serum and synovial fluid steady–state concentrations of trimethoprim and sulfadiazine in horses with experimentally induced infectious arthritis. Bertone AL, et al. **Am J Vet Res** 1988 Oct;49(10):1681–7

Pharmacokinetics of sulfadiazine/trimethoprim in neonatal male calves: effect of age and penetration into cerebrospinal fluid. Shoaf SE, et al. **Am J Vet Res** 1989 Mar;50(3):396–403

Changes in trimethoprim pharmacokinetics after the newborn period. Hoppu K. **Arch Dis Child** 1989 Mar;64(3):343–5

Co–trimoxazole (sulphamethoxazole plus trimethoprim) peritoneal barrier transfer pharmacokinetics. Svirbely JE, et al. **Clin Pharmacokinet** 1989 May;16(5):317–25

Effect of food on the absorption and pharmacokinetics of sulphadiazine and trimethoprim after administration of Aubril to healthy human volunteers. Ghosh SS, et al. **J Assoc Physicians India** 1988 Oct;36(10):607–10

Pharmacokinetics of trimethoprim in the rat. Tu YH, et al. **J Pharm Sci** 1989 Jul;78(7):556–60

Some pharmacokinetic data of aditoprim and trimethoprim in healthy and tick–borne fever infected dwarf goats. Knoppert NW, et al. **J Vet Pharmacol Ther** 1988 Jun; 11(2):135–44

[Studies of the pharmacokinetics and bioavailability of a new trimethoprim/sulfamethoxazole preparation in healthy volunteers] Hutt V, et al. **Arzneimittelforschung** 1988 Sep; 38(9):1347–50 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Wall degradation of antibiotic–pretreated staphylococci within macrophages. Wecke J, et al. **Acta Paediatr Hung** 1988–89;29(1–2):159–61

Trimethoprim/sulphamethoxazole resistance in Escherichia coli and Klebsiella spp. urinary isolates. Obaseiki–Ebor EE. **Afr J Med Med Sci** 1988 Sep;17(3):175–9

Emergence of highly trimethoprim–sulfamethoxazole–resistant Shigella in a native American population: an epidemiologic study. Griffin PM, et al. **Am J Epidemiol** 1989 May;129(5):1042–51

Pharmacodynamic evaluation of ofloxacin and trimethoprim–sulfamethoxazole in vaginal fluid of women treated for acute cystitis. Tartaglione TA, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1640–3

Trimethoprim inhibition of the renal clearance of procainamide and N–acetylprocainamide. Vlasses PH, et al. **Arch Intern Med** 1989 Jun;149(6):1350–3

In vitro activity of the combination trimethoprim plus sulfamethoxazole compared with that of other chemotherapeutic agents. Focht J, et al. **Arzneimittelforschung** 1988 Aug;38(8):1085–8

Trimethoprim alters the disposition of procainamide and N–acetylprocainamide. Kosoglou T, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):467–77

Trimethoprim–polymyxin B sulphate ophthalmic ointment versus chloramphenicol ophthalmic ointment in the treatment of bacterial conjunctivitis—a review of four clinical studies. The Trimethoprim–Polymyxin B Sulphate Ophthalmic Ointment Study Group. **J Antimicrob Chemother** 1989 Feb;23(2):261–6

Bacteria highly resistant to trimethoprim [letter] Amyes SG, et al. **J Antimicrob Chemother** 1989 May;23(5):793

Spiramycin alone and in combination with trimethoprim against Haemophilus influenzae. Arditi M, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:57–62

Biotinylated DNA probes for trimethoprim–resistant dihydrofolate reductases types IV and V. Towner KJ, et al. **J Antimicrob Chemother** 1988 Sep;22(3):285–91

Influence of cefaclor, phenethicillin, co–trimoxazole and doxycycline on colonization resistance in healthy volunteers. Vollaard EJ, et al. **J Antimicrob Chemother** 1988 Nov;22(5):747–58

In–vitro and in–vivo studies of trimethoprim–sulphamethoxazole against multiple resistant Staphylococcus aureus. Yeldandi V, et al. **J Antimicrob Chemother** 1988 Dec;22(6):873–80

The influence of ofloxacin versus trimethoprim–sulfamethoxazole on the aerobic flora in granulocytopenic subjects. Bartolosi A, et al. **J Chemother** 1989 Apr;1(2):91–4

Trimethoprim resistance and single–agent use [letter] Maskell R, et al. **Lancet** 1989 Sep 2;2(8662):557–8

Mutations in cloned Escherichia coli P fimbriae genes that makes fimbriae-production resistant to suppression by trimethoprim. Väisänen-Rhen V, et al. **Microb Pathog** 1988 May;4(5):369–77

Trimethoprim resistance in enterococci: microbiological and biochemical aspects. Hamilton-Miller JM, et al. **Microbios** 1988;56(226):45–55

Site-specific recombination promotes linkage between trimethoprim- and sulfonamide resistance genes. Sequence characterization of dhfrV and sulI and a recombination active locus of Tn21. Sundström L, et al. **Mol Gen Genet** 1988 Aug;213(2–3):191–201

[Study of trimethoprim sensitivity in strains of Yersinia pestis isolated from various natural foci of plague] Kravchenko AN, et al. **Antibiot Khimioter** 1989 Jan;34(1):42–6 (Eng. Abstr.) (Rus)

[Sensitivity of Pseudomonas mallei to sulfanilamide combinations in vitro] Lozovaia NA. **Antibiot Khimioter** 1989 Jan;34(1):48–52 (Eng. Abstr.) (Rus)

[Susceptibility of gram negative bacteria to TMP-SMX and ofloxacin] Ünal S, et al. **Mikrobiyol Bul** 1988;22(4):316–21 (Eng. Abstr.) (Tur)

THERAPEUTIC USE

Attempts to eradicate methicillin-resistant Staphylococcus aureus colonization with the use of trimethoprim-sulfamethoxazole, rifampin, and bacitracin. Roccaforte JS, et al. **Am J Infect Control** 1988 Aug; 16(4):141–6

Randomized, double-blind comparison of ciprofloxacin and trimethoprim-sulfamethoxazole for complicated urinary tract infections. Allais JM, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1327–30

Comparison of single-dose treatment with norfloxacin and standard 5-day treatment with trimethoprim-sulfamethoxazole for acute shigellosis in adults. Gotuzzo E, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1101–4

Early treatment of Campylobacter jejuni enteritis. Williams D, et al. **Antimicrob Agents Chemother** 1989 Feb; 33(2):248–50

Sultamicillin versus trimethoprim/sulfamethoxazole in the treatment of urinary tract infections. Naber KG, et al. **APMIS Suppl** 1989;5:57–62

The treatment of Wegener's granulomatosis with sulfamethoxazole and trimethoprim [letter] Boudes P. **Arch Intern Med** 1989 Jun;149(6):1467, 1471

Sulfamethoxazole-trimethoprim therapy for Wegener's granulomatosis. Israel HL. **Arch Intern Med** 1988 Oct; 148(10):2293–5

Wegener's granulomatosis [letter; comment] King JW, et al. **Arch Intern Med** 1989 Jul;149(7):1695, 1698. **Comment on:** Arch Intern Med 1988 Sep;148(9):2065–6

Three cases of Wegener's granulomatosis treated with an antimicrobial agent. Fukuda K, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):515–8

Comparison of Mictral with amoxycillin, trimethoprim and nitrofurantoin in the treatment of acute cystitis. Lightstone BL, et al. **Br J Clin Pract** 1988 Jul;42(7):283–8

Trimethoprim-sulfamethoxazole v. amoxicillin in the treatment of acute otitis media. Feldman W, et al. **Can Med Assoc J** 1988 Nov 15;139(10):961–4

Trimethoprim in enteric fever. Gargalianos P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):486–7

New forms of multidrug therapy for the treatment of leprosy. First report for the practice on rifampicin + sulfamethoxazole-trimethoprim + protionamide and rifampicin + sulfamethoxazole-trimethoprim + isoniazid. Freerksen E, et al. **Chemotherapy** 1989;35(2):133–9

Trimethoprim in pediatric urinary tract infection. Rajkumar S, et al. **Child Nephrol Urol** 1988–89;9(1–2):77–81

Oxygen consumption and central hemodynamics in septic shock treated with antibiotics, fluid infusions, and corticosteroids. Ottosson J, et al. **Crit Care Med** 1989 Aug; 17(8):772–9

Trimethoprim-polymyxin B sulphate ophthalmic ointment in the treatment of bacterial conjunctivitis: a double-blind study versus chloramphenicol ophthalmic ointment. Behrens-Baumann W, et al. **Curr Med Res Opin** 1988; 11(4):227–31

Cinoxacin vs trimethoprim—safety and efficacy in the prophylaxis of uncomplicated urinary tract infections. Seppänen J. **Drugs Exp Clin Res** 1988;14(10):669–71

Prophylactic co-trimoxazole versus norfloxacin in neutropenic children—perspective randomized study. Cruciani M, et al. **Infection** 1989 Mar-Apr;17(2):65–9

Comparison of erythromycin ethylsuccinate and co-trimoxazole for treatment of pertussis. Hoppe JE, et al. **Infection** 1989 Jul-Aug;17(4):227–31

Comparative study of ciprofloxacin versus co-trimoxazole in the treatment of Salmonella enteric fever [letter] Limson BM, et al. **Infection** 1989 Mar-Apr;17(2):105–6

Peritonsillar abscess in an infant. Zohar S, et al. **Int J Pediatr Otorhinolaryngol** 1988 Sep;15(3):291–4

Successful prophylaxis of Pneumocystis carinii pneumonia with trimethoprim-sulfamethoxazole in AIDS patients with previous allergic reactions. Shafer RW, et al. **J Acquir Immune Defic Syndr** 1989;2(4):389–93

The possible role of corticosteroid therapy for pneumocystis pneumonia in the acquired immune deficiency syndrome (AIDS). Walmsley S, et al. **J Acquir Immune Defic Syndr** 1988;1(4):354–60

Identification of a novel plasmid-encoded dihydrofolate reductase mediating high-level resistance to trimethoprim. Wylie BA, et al. **J Antimicrob Chemother** 1988 Oct; 22(4):429–35

Trimethoprim/sulfamethoxazole therapy of Pasteurella multocida infection [letter] Sands M, et al. **J Infect Dis** 1989 Aug;160(2):353–4

Clinical comparison of topical solutions containing trimethoprim in treating ocular surface bacterial infections. Foulks GN, et al. **J Ocul Pharmacol** 1988 Summer; 4(2):111–5

A multicenter, double-blind, trimethoprim-sulfamethoxazole controlled study of enoxacin in the treatment of patients with complicated urinary tract infections. Cox CE, et al. **J Urol** 1989 Mar;141(3):575–8

Conservative management of a seminal vesicle abscess. Kennelly MJ, et al. **J Urol** 1989 Jun;141(6):1432–3 (8 ref.)

Trial of co-trimoxazole versus procaine penicillin with ampicillin in treatment of community-acquired pneumonia in young Gambian children. Campbell H, et al. **Lancet** 1988 Nov 19;2(8621):1182–4

Co-trimoxazole in the treatment of Wegener's granulomatosis [letter] Bowden FJ, et al. **Med J Aust** 1989 Sep 4;151(5):303–4

Antibiotics may prevent PCP infections [news] **Ohio Med** 1988 Jun;84(6):427

Comparison of three topical antimicrobials for acute bacterial conjunctivitis. Lohr JA, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):626–9

Cost analysis of therapy of acute otitis media [letter] Stoddard J, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):189–90

Management of Pneumocystis carinii pneumonia in patients with AIDS and other conditions: experience in a Philadelphia University Teaching Hospital. Furio MM, et al. **Pharmacotherapy** 1988;8(4):221–34

TMP-SMZ in the treatment of brucellar meningitis [letter] Roldan A, et al. **Rev Infect Dis** 1988 Nov-Dec;10(6):1233–4

Experience with trimethoprim-sulfamethoxazole in treatment of infective endocarditis. Street AC, et al. **Rev Infect Dis** 1988 Sep-Oct;10(5):915–21 (52 ref.)

Chronic non-specific diarrhea of infancy successfully treated with trimethoprim-sulfamethoxazole. Dahlström KA, et al. **Scand J Gastroenterol** 1989 Jun;24(5):589–92

Trimethoprim-sulphadiazine prophylaxis in children with vesico-ureteric reflux. Hanson E, et al. **Scand J Infect Dis** 1989;21(2):201–4

Norfloxacin versus co-trimoxazole in the treatment of acute bacterial diarrhoea: a placebo controlled study. Lolekha S, et al. **Scand J Infect Dis Suppl** 1988;56:35–45

Norfloxacin versus co-trimoxazole for the treatment of upper urinary tract infections: a double blind trial. Tungsanga K, et al. **Scand J Infect Dis Suppl** 1988;56:28–34

Treatment of urinary tract infections in Hong Kong: a comparative study of norfloxacin and co-trimoxazole. Wong WT, et al. **Scand J Infect Dis Suppl** 1988;56:22–7

Empirical treatment without bronchoscopy for Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. Miller RF, et al. **Thorax** 1989 Jul;44(7):559–64

Brucellosis: an unusual cause of a child's fever of unknown origin. Chusid MJ, et al. **Wis Med J** 1989 Mar;88(3):11–3

[VUFB trimethoprim in the prevention of urinary infections] Horčičková M, et al. **Cas Lek Cesk** 1988 Nov 11; 127(46):1434–6 (Eng. Abstr.) (Cze)

[Considerable improvement of spasticity and dystonic phenomena by sulfamethoxazole-trimethoprim in Joseph's disease (letter)] Dehen H, et al. **Presse Med** 1988 Sep 10; 17(30):1543 (Fre)

[Favorable course under cotrimoxazole of excavated pneumopathy complicating rapidly progressive glomerulonephritis: Wegener's granulomatosis?] Pagniez D, et al. **Rev Med Interne** 1989 Mar-Apr;10(2):143–6 (Fre)

[The effectiveness of antimicrobial chemotherapy in patients with acute infection of the upper respiratory tract] Kunze M, et al. **Z Arztl Fortbild (Jena)** 1989;83(1):29–31 (Ger)

[Cotrimazine in the treatment of urinary tract infections in infants] Dore A, et al. **Clin Ter** 1988 Feb 15;124(3):187–92 (Eng. Abstr.) (Ita)

[Co-trimoxazole chemoprophylaxis in immunocompromised patients: analysis of the literature] Gava R, et al. **G Clin Med** 1989 Jan;70(1):37–9, 42–6 (63 ref.) (Ita)

[Nocardial brain abscess: case report] Yamaguchi Y, et al. **No Shinkei Geka** 1989 Mar;17(3):285–9 (14 ref.) (Eng. Abstr.) (Jpn)

[Continuous treatment with trimethoprim-sulfamethoxypyrazine of immunocompromised patients] González B, et al. **Rev Chil Pediatr** 1987 Nov-Dec;58(6):449–54 (Eng. Abstr.) (Spa)

[A single dose of sulfamethoxazole-trimethoprim vs. a 7-day course of nitrofurantoin in the treatment of acute non-complicated urinary tract infection in women] Abadi T, et al. **Rev Med Chil** 1987 Dec;115(12):1166–9 (Eng. Abstr.) (Spa)

[Effectiveness and tolerance of norfloxacin compared with trimethoprim-sulfamethoxazole in the treatment of uncomplicated urinary tract infections] Ballesteros JJ, et al. **Rev Med Univ Navarra** 1988 Jul-Sep;32(3):135–7 (Eng. Abstr.) (Spa)

TOXICITY

[Studies on nephrotoxicity of cyclosporin. II. Nephrotoxicity in rats receiving cyclosporin and sulfamethoxazole-trimethoprim] Pak K, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1723–31 (Eng. Abstr.) (Jpn)

TRIMETHOPRIM RESISTANCE

N-terminal amino acid sequence of the chromosomal dihydrofolate reductase purified from trimethoprim-resistant Staphylococcus aureus. Hartman PG, et al. **FEBS Lett** 1988 Dec 19;242(1):157–60

Trimethoprim resistance in urinary tract pathogens in two Nigerian hospitals. Lamikanra A, et al. **J Antimicrob Chemother** 1989 Jan;23(1):151–4

Dissemination of trimethoprim-resistant clones of Shigella sonnei in Bulgaria. Bratoeva MP, et al. **J Infect Dis** 1989 Apr;159(4):648–53

[Characteristics of the trimethoprim resistance of Enterobacteriaceae of medical interest] Rusu V, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jul-Dec; 47(3–4):205–25 (Eng. Abstr.) (Fre)

GENETICS

High-level resistance to trimethoprim in Shigella sonnei associated with plasmid-encoded dihydrofolate reductase type I. Delgado R, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1598–9

Transfer of low level trimethoprim resistance in faecal isolates obtained from apparently healthy Nigerian students. Lamikanra A, et al. **FEMS Microbiol Lett** 1989 Jun;50(3):275–8

Trimethoprim resistance in enterobacteria isolated in Chile. Urbina R, et al. **J Antimicrob Chemother** 1989 Jan; 23(1):143–9

The success of plasmid-encoded resistance genes in clinical bacteria. An examination of plasmid-mediated ampicillin and trimethoprim resistance genes and their resistance mechanisms. Amyes SG. **J Med Microbiol** 1989 Feb; 28(2):73–83 (84 ref.)

Trimethoprim resistance transposon Tn4003 from Staphylococcus aureus encodes genes for a dihydrofolate reductase and thymidylate synthetase flanked by three copies of IS257. Rouch DA, et al. **Mol Microbiol** 1989 Feb;3(2):161–75

[Localization of insertion into E. coli chromosome of Tn7-like transposons controlling resistance to trimethoprim and streptothricin] Tietze E, et al. **Mol Gen Mikrobiol Virusol** 1988 Nov;(11):18–20 (Eng. Abstr.) (Rus)

[Characteristics of transposition of Tn7-like elements determining resistance to trimethoprim and streptomycin] Tietze E, et al. **Mol Gen Mikrobiol Virusol** 1988 Oct; (10):10–7 (Eng. Abstr.) (Rus)

TRIMETHOXYPHENETHYLAMINE see **MESCALINE**

TRIMETHYLSILYL COMPOUNDS see under **SILICON**

TRIMETHYLTIN COMPOUNDS see under **TRIALKYLTIN COMPOUNDS**

TRIMIPRAMINE see under **DIBENZAZEPINES**

TRINITROBENZENES see under **NITROBENZENES**

TRINITROBENZENESULFONIC ACID see under **NITROBENZENES**

TRINITROTOLUENE

ADVERSE EFFECTS

Erythema multiforme-like eruption from trinitrotoluene allergy. Goh CL. **Int J Dermatol** 1988 Nov;27(9):650–1

[Digestive organ diseases in workers in contact with trinitrotoluene] Vysochin VI, et al. **Vrach Delo** 1989 Apr; (4):101–2 (Eng. Abstr.) (Rus)

ANALYSIS

A field evaluation of air sampling methods for TNT and RDX. Bishop RW, et al. **Am Ind Hyg Assoc J** 1988 Dec; 49(12):635–8

METABOLISM

Metabolic studies of explosives. 5. Detection and analysis of 2,4,6-trinitrotoluene and its metabolites in urine of munition workers by micro liquid chromatography/mass spectrometry. Yinon J, et al. **Biomed Chromatogr** 1986 Jun; 1(3):123–5

PHARMACOKINETICS

[Transformation of 2,4,6-trinitrotoluene during oxygen and nitrate respiration in Pseudomonas fluorescens] Naumova RP, et al. **Prikl Biokhim Mikrobiol** 1988 Jul-Aug; 24(4):493–8 (Eng. Abstr.) (Rus)

POISONING

[Characteristics of the course of appendicitis in miners exposed to trinitrotoluene-containing substances] Vysochin VI. **Klin Khir** 1989;(4):63 (Rus)

TOXICITY

Liver cirrhosis and hepatocellular carcinoma after prolonged exposure to TNT: causal relationship or mere coincidence? Garfinkel D, et al. **Med Interne** 1988 Oct-Dec;26(4):287-90

TRIOLEIN

Interactions of triglycerides with phospholipids: incorporation into the bilayer structure and formation of emulsions. Hamilton JA. **Biochemistry** 1989 Mar 21; 28(6):2514-20

DIAGNOSTIC USE

14C triolein breath test: an assessment in the elderly. Mylvaganam K, et al. **Gut** 1989 Aug;30(8):1082-6

Fat malabsorption in patients before and after total gastrectomy, studied by the triolein breath test. Walther B, et al. **Scand J Gastroenterol** 1989 Apr;24(3):309-14

METABOLISM

Intraenterocyte distribution of absorbed lipid and effects of phosphatidylcholine. Parlier RD, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G349-55

Interaction of ApoA-1 and ApoE-3 with triglyceride-phospholipid emulsions containing increasing cholesterol concentrations. Model of triglyceride-rich nascent and remnant lipoproteins. Derksen A, et al. **Biochemistry** 1989 Jan 24;28(2):900-6

Effects of phospholipids on hydrolysis of trioleoylglycerol by human serum carboxylesterase. Shirai K, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):377-83

Effect of sodium taurodeoxycholate, CaCl2 and albumin on the action of pancreatic lipase on droplets of trioleoylglycerol and the release of lipolytic products into aqueous media. Scow RO. **Biochimie** 1988 Sep; 70(9):1251-61

PHARMACOKINETICS

Tumour necrosis factor alpha (cachectin) mimics some of the effects of tumour growth on the disposal of a [14C]lipid load in virgin, lactating and litter-removed rats. Evans RD, et al. **Biochem J** 1988 Dec 15;256(3):1055-8

Tissue-specific effects of starvation and refeeding on the disposal of oral [1-14C]triolein in the rat during lactation and on removal of litter. Oller do Nascimento CM, et al. **Biochem J** 1988 Sep 1;254(2):539-46

The in-vitro percutaneous absorption of glycerol trioleate through hairless mouse skin. Moloney SJ. **J Pharm Pharmacol** 1988 Nov;40(11):819-21

TRIOSEPHOSPHATE DEHYDROGENASE see **GLYCERALDEHYDEPHOSPHATE DEHYDROGENASE**

TRIOSEPHOSPHATE ISOMERASE see under **CARBOHYDRATE ISOMERASES**

TRIOSES

PHARMACOLOGY

Effect of glycerol and dihydroxyacetone on hepatic lipogenesis. Carmona A, et al. **Arch Biochem Biophys** 1989 May 15;271(1):130-8

Reduction of carcass fat in swine with dietary addition of dihydroxyacetone and pyruvate. Stanko RT, et al. **J Anim Sci** 1989 May;67(5):1272-8

TRIOXOCHOLATE see **DEHYDROCHOLIC ACID**

TRIOXSALEN see under **PSORALENS**

TRIPARANOL

PHARMACOLOGY

Inhibition of cholesterol synthesis and cell growth by 24(R,S),25-iminolanosterol and triparanol in cultured rat hepatoma cells. Popják G, et al. **J Biol Chem** 1989 Apr 15;264(11):6230-8

TRIPELENNAMINE

ANALYSIS

Characterization of the antihistamines tripelennamine, methapyrilene, and thenyldiamine and their N-oxides by thermospray mass spectrometry. Korfmacher WA, et al. **J Anal Toxicol** 1989 Mar-Apr;13(2):94-6

METABOLISM

A comparative in vitro metabolic study of methaphenilene and pyribenzamine. Kammerer RC, et al. **Xenobiotica** 1988 Sep;18(9):1085-96

PHARMACOLOGY

Interactions between pentazocine and tripelennamine on autonomic and nociceptive measures in the dog. Vaupel DB. **Pharmacol Biochem Behav** 1989 May;33(1):245-51

TRIPHENYL COMPOUNDS see **TERPHENYL COMPOUNDS**

TRIPHENYLMETHYL COMPOUNDS see **TRITYL COMPOUNDS**

TRIPHOSPHOPYRIDINE NUCLEOTIDE see **NADP**

TRIPLE SYMPTOM COMPLEX see **BEHCET'S SYNDROME**

TRIPLETS

Frequency of triplets and triplet zygosity types among U.S. births, 1964. Allen G. **Acta Genet Med Gemellol (Roma)** 1988;37(3-4):299-306

The Northwestern University Triplet Study. III: Neonatal outcome. Collins JW Jr, et al. **Acta Genet Med Gemellol (Roma)** 1988;37(1):77-80

Mode of delivery in multiple birth of higher order. Feingold M, et al. **Acta Genet Med Gemellol (Roma)** 1988;37(1):105-9

The Northwestern University Triplet Study. I: Overview of the international literature. Keith LG, et al. **Acta Genet Med Gemellol (Roma)** 1988;37(1):55-63 (44 ref.)

Triplet and higher-order births: what is the optimal delivery route? Thiery M, et al. **Acta Genet Med Gemellol (Roma)** 1988;37(1):89-98 (24 ref.)

Prenatal diagnosis of dicephalous conjoined twins in a triplet pregnancy. Apuzzio JJ, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1214-5

The Northwestern University triplet study. IV. Biochemical parameters. Creinin M, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1140-3

Outpatient triplet management: a contemporary review. Newman RB, et al. **Am J Obstet Gynecol** 1989 Sep; 161(3):547-53; discussion 553-5

Similarities and differences in a set of 7-year-old triplets, two of whom are monozygotic. Rosner J, et al. **Am J Optom Physiol Opt** 1988 Nov;65(11):890-2

The frequency of multiple births in Gondar Hospital northwestern Ethiopia. Zein AZ. **Ethiop Med J** 1989 Jan; 27(1):21-6

The surrogate triplets of Perth, Western Australia. Austin CR. **Hum Reprod** 1989 Apr;4(3):346

Consecutive triplet pregnancies following in-vitro fertilization and embryo transfer. Two case reports. Kingsland CR, et al. **Hum Reprod** 1989 May;4(4):473-4

Antenatal diagnosis of cephalothoracopagus twins in a triplet pregnancy. A case report. Sakala EP, et al. **J Reprod Med** 1989 May;34(5):365-8 (22 ref.)

Ultrasound-guided selective feticide of hydrocephalic fetus in triplet pregnancy. Shalev E, et al. **JCU** 1988 Jan; 16(1):41-3

[A diagnostic zygosity study on two sets of triplets] Yang HM. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;68(10):582-5 (Chi)

[Management of triple pregnancies] Pons JC, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):72-8 (23 ref.) (Eng. Abstr.) (Fre)

[Arthrogryposis multiplex congenita with associated abnormalities. Case report of a fatal course in a premature triplet] Cremer R, et al. **Monatsschr Kinderheilkd** 1988 Aug; 136(8):464-6 (Eng. Abstr.) (Ger)

[Determination of monozygotic origin of same-sex triplets by comparing their blood groups, haptoglobins and dermatoglyphics] Arosemena G, et al. **Rev Med Panama** 1988 May;13(2):115-20 (Eng. Abstr.) (Spa)

TRIPROLIDINE see under **PYRIDINES**

TRIS BUFFER see **TROMETHAMINE**

TRISACCHARIDES

Further use of O-(2,3,4-tri-O-acetyl-alpha-L-fucopyranosyl)-(1——3)-O-(2-acetamido-4 ,6-di-O-acetyl-2-deoxy-beta-D-glucopyranosyl)-(1——3)-2,4,6-tri-O-acetyl-a lph a-D- galactopyranosyl bromide as a glycosyl donor. Synthesis of two mucin-type tetrasaccharides. Dubey R, et al. **Carbohydr Res** 1988 Oct 1;181:236-41

The determination of complex carbohydrate structure by using carbonyl carbon resonances of peracetylated derivatives. Goux WJ. **Carbohydr Res** 1988 Dec 31; 184:47-65

Synthesis of a trisaccharide of 3-deoxy-D-manno-2-octulopyranosylonic acid (KDO) residues related to the genus-specific lipopolysaccharide epitope of Chlamydia. Kosma P, et al. **Carbohydr Res** 1988 Dec 1;183(2):183-99

ANALYSIS

Further specific triglycosyl phenol phthiocerol diester from Mycobacterium tuberculosis. Daffé M. **Biochim Biophys Acta** 1989 Apr 3;1002(2):257-60

Characterization of human neutrophil glycoproteins expressing the CD15 differentiation antigen (3-fucosyl-N-acetyllactosamine). Albrechtsen M, et al. **Br J Haematol** 1989 Jul;72(3):312-20

Chromatographic evaluation of sorption and diffusion characteristics of glucose, maltose and maltotriose in silica gels. Ching CB, et al. **J Chromatogr** 1989 Feb 3; 463(2):261-70

BLOOD

Modification of the glyoxalase system in human red blood cells by glucose in vitro. Thornalley PJ. **Biochem J** 1988 Sep 15;254(3):751-5

CHEMICAL SYNTHESIS

Synthesis and immunoreactivity of neoglycoproteins containing the trisaccharide unit of phenolic glycolipid I of Mycobacterium leprae. Chatterjee D, et al. **Carbohydr Res** 1988 Dec 1;183(2):241-60

Synthesis of O-alpha-L-fucopyranosyl-(1——3)-O-beta-D-galactopyranosyl-(1——4)-2-acetamido-2-deoxy-D-glucopyranose (N-acetyl-3'-O-alpha-L-fucopyranosyllactosamine). Dubey R, et al. **Carbohydr Res** 1988 Dec 1;183(2):155-62

Synthesis of a trisaccharide of 3-deoxy-D-manno-2-octulopyranosylonic acid (KDO) residues related to the genus-specific lipopolysaccharide epitope of Chlamydia. Kosma P, et al. **Carbohydr Res** 1988 Dec 1;183(2):183-99

Chemical synthesis of an artificial antigen containing the trisaccharide hapten of Mycobacterium leprae. Mariño-Albernas J, et al. **Carbohydr Res** 1988 Dec 1; 183(2):175-82

Enzymic synthesis of di- and tri-saccharide glycosides, using glycosidases and beta-D-galactoside 3-alpha-sialyl-transferase. Nilsson KG. **Carbohydr Res** 1989 Jun 1;188:9-17

Synthesis of a di-, tri-, and tetra-saccharide unit of the group B streptococcal common antigen. Pozsgay V, et al. **Carbohydr Res** 1988 Aug 15;179:61-75

Recognition of oligosaccharide substrates by N-acetyl-glucosaminyltransferase-V. Srivastava OP, et al. **Carbohydr Res** 1988 Aug 15;179:137-61

Synthesis of the 3"-sulfate ester of beta-D-GalpNAc-(1——4)-beta-D-GlcpNAc-(1——2)-alpha-D-Manp. Srivastava V, et al. **Carbohydr Res** 1989 Jan 15;185(1):163-9

Synthetic mucin fragments. Benzyl O-beta-D-galactopyranosyl-(1——3)-O-(2-acetamido-2-deoxy-beta-D-glucopyranosyl)-(1——6)-2-acetamido-2-deoxy-alpha-D-galactopyranoside and O-alpha-L-fucopyranosyl-(1——3)-O-(2-acetamido-2-deoxy-beta-D-glucopyranosyl)-(1——6)-2-acetamido-2-deoxy-D-galactopyranose. Thomas RL, et al. **Carbohydr Res** 1989 Jun 15;189:21-30

[Synthesis of trisaccharide units from capsular polysaccharides of Streptococcus pneumoniae] Paulsen H, et al. **Carbohydr Res** 1988 Aug 15;179:173-97 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Production and characterization of antisera raised to the manninotrionate group [alpha-D-Galp-(1——6)-alpha-D-Galp-(1——6)-D-gluconate] Shibata S, et al. **Carbohydr Res** 1989 Jun 15; 189:301-7

ISOLATION & PURIFICATION

New galactosyllactose containing alpha-glycosidic linkage isolated from ovine (Booroola dorset) colostrum. Urashima T, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):375-8

METABOLISM

Binding of anti-EMA, AGF 4:48 and the lectin UEA-1 to human ovarian carcinomas: histological and clinical correlations. Bradgate MG, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):854-60

Immunochemical studies on the N-acetyllactosamine beta-(1——6)-linked trisaccharide specificity of Ricinus communis agglutinin. Wu AM, et al. **Carbohydr Res** 1988 Jul 15;178:243-57

PHARMACOLOGY

Sleep patterns in the genetically obese Zucker rat: effect of acarbose treatment. Danguir J. **Am J Physiol** 1989 Jan; 256(1 Pt 2):R281-3

Acarbose is a competitive inhibitor of mammalian lysosomal acid alpha-D-glucosidases. Calder PC, et al. **Carbohydr Res** 1989 Aug 1;191(1):71-8

Effect of alpha-glucosidase inhibitor on exocrine and endocrine pancreatic function in rats fed a high-carbohydrate diet consisting of sucrose or glucose. Otsuki M, et al. **Diabetes Res Clin Pract** 1988 Oct 14; 5(4):257-63

Metabolic effects of acarbose in young healthy men. Couet C, et al. **Eur J Clin Nutr** 1989 Mar;43(3):187-96 (48 ref.)

Effect of acarbose (BAY-g-5421) on expression of noninsulin-dependent diabetes mellitus in sucrose-fed SHR/N-corpulent rats. Carswell N, et al. **J Nutr** 1989 Mar; 119(3):388-94

THERAPEUTIC USE

Effect of alpha-inhibitors on blood glucose and insulin levels. Laube H, et al. **Adv Exp Med Biol** 1988;246:287–93

A new approach to the treatment of nocturnal hypoglycemia using alpha-glucosidase inhibition. McCulloch DK, et al. **Diabetes Care** 1983 Sep–Oct;6(5):483–7

Peptide YY in diabetics treated chronically with an intestinal glucosidase inhibitor. Füessl HS, et al. **Klin Wochenschr** 1988 Oct 3;66(19):985–9

TRISAMINE see TROMETHAMINE

TRISMUS

Think trismus–pseudocamptodactyly,' say 'Dutch–Kentucky.' But 'Dutch–Kennedy'? [letter] Trimble GX. **JAMA** 1989 Sep 8;262(10):1327

CHEMICALLY INDUCED

More on succinylcholine and trismus in children [letter] Berry FA, et al. **Anesthesiology** 1989 May;70(5):878

Succinylcholine and trismus [letter] Berry FA, et al. **Anesthesiology** 1989 Jan;70(1):161–3

ETIOLOGY

Submucous fibrosis [letter] Allen PW, et al. **Anaesthesia** 1988 Sep;43(9):809–10

Long standing trismus as the initial presentation of acute catatonic schizophrenia. Von Arx DP.
Br J Oral Maxillofac Surg 1989 Feb;27(1):22–6

Pan Masala [letter] Didwania Pradid DK, et al.
J Assoc Physicians India 1988 Feb;36(2):181

Lockjaw secondary to skull base osteochondroma: CT findings. Castillo M, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):338–9

Intraoral mass associated with trismus [clinical conference] Bottenbley A, et al. **J Oral Maxillofac Surg** 1989 Sep; 47(9):970–5

Facial trismus and myofascial pain associated with infections and malignant disease [letter] Brooke RI.
Oral Surg Oral Med Oral Pathol 1988 Oct;66(4):450

[Horton's disease revealed by a trismus. 2 new cases] Taillan B, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):955–6 (Fre)

SURGERY

Surgery for severe trismus in submucous fibrosis [letter] Kavarana NM. **Br J Plast Surg** 1988 Sep;41(5):557

TRISOMY

A case of chronic neutrophilic leukemia with trisomy 8. Orazi A, et al. **Acta Haematol (Basel)** 1989;81(3):148–51

Pregnancy in a 50-year-old. Helm P, et al.
Acta Obstet Gynecol Scand 1988;67(4):373–4

A case of 48, XXX, +18 double trisomy. Imai I, et al.
Acta Paediatr Jpn Overseas Ed 1987 Feb;29(1):178–81 (12 ref.)

A patient with an extra psu dic(15) chromosome. Sakiyama T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct; 29(5):768–71

Clinical and postmortem findings of two cases with karyotype: 48, XXX, +18. Sonoda T, et al.
Acta Paediatr Jpn Overseas Ed 1987 Feb;29(1):173–7

A case of complete trisomy 2p/triploidy mosaicism. Dahl N, et al. **Acta Paediatr Scand** 1988 Nov;77(6):925–9

Acute myelogenous leukemia with eosinophilic differentiation and trisomy-1. Harrington DS, et al.
Am J Clin Pathol 1988 Oct;90(4):464–9 (22 ref.)

Myelodysplastic syndrome with trisomy 11 associated with polycythemia vera. Ohyashiki K, et al. **Am J Hematol** 1989 Jun;31(2):122–5

Myelodysplastic syndrome with trisomy 8 in an adolescent with Fanconi anaemia and selective IgA deficiency. Standen GR, et al. **Am J Hematol** 1989 Aug;31(4):280–3

The probability of detecting the origin of nondisjunction of autosomal trisomies. Chakravarti A. **Am J Hum Genet** 1989 May;44(5):639–45

Placental mosaicism and intrauterine survival of trisomies 13 and 18. Kalousek DK, et al. **Am J Hum Genet** 1989 Mar; 44(3):338–43

Trisomy 18 associated with ectopia cordis and occipital meningocele. Bick D, et al. **Am J Med Genet** 1988 Jul; 30(3):805–10

Meiotic origin of autosomal trisomies [letter] Côté GB.
Am J Med Genet 1988 Aug;30(4):997–8

Spontaneous loss of fetuses with chromosomally unbalanced D/21—or reciprocal translocations in late pregnancy. Daniel A. **Am J Med Genet** 1989 Jun;33(2):285

Trisomy 18 with Cantrell pentalogy in a stillborn infant. Fox JE, et al. **Am J Med Genet** 1988 Oct;31(2):391–4

Bilateral renal agenesis and Mullerian anomalies in a 47,XXX fetus. Hogge WA, et al. **Am J Med Genet** 1989 Jun; 33(2):242–3

Duplication 8q24.2——qter and 15q14——pter resulting from a 3:1 meiotic segregation of a maternal reciprocal translocation. Kausch K, et al. **Am J Med Genet** 1988 Dec; 31(4):981–5

Mosaic trisomy 7 confined to the placenta. McKinley MJ, et al. **Am J Med Genet** 1988 Nov;31(3):697–9

Trisomy 18 and hepatoblastoma. Mamlok V, et al.
Am J Med Genet 1989 May;33(1):125–6

A man with isochromosome Xq Klinefelter syndrome with lack of height increase and normal androgenization. Richer CL, et al. **Am J Med Genet** 1989 Jan;32(1):42–4

Secondary trisomy or mosaic "tetrasomy" 8p. Robinow M, et al. **Am J Med Genet** 1989 May;32(3):320–4

Partial trisomy 9—further delineation of the phenotype. Smart RD, et al. **Am J Med Genet** 1988 Dec;31(4):947–51

Microscopic study of holoprosencephalic facial anomalies in trisomy 13 fetuses. Sperber GH, et al.
Am J Med Genet 1989 Apr;32(4):443–51

Prenatal diagnosis in metropolitan Atlanta and the impact on autosomal trisomies [letter] Priest JH, et al.
Am J Obstet Gynecol 1988 Nov;159(5):1306–7

Diagnosis of trisomy 18 in monozygotic twins by cordocentesis. Shah DM, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):214–5

Enlarged cisterna magna in trisomy 18: prenatal ultrasonographic diagnosis. Thurmond AS, et al.
Am J Obstet Gynecol 1989 Jul;161(1):83–5

First trimester growth delay in trisomy 18. Lynch L, et al.
Am J Perinatol 1989 Apr;6(2):237–9

De novo dir dup (1)(q3200——4200) in an adult. Further delineation of the pure 1q trisomy syndrome. Barros-Núñez P, et al. **Ann Genet** 1989;32(2):97–101 (26 ref.)

Partial trisomy 13q22——qter. A new case. Galán F, et al.
Ann Genet 1989;32(2):114–6

A new case of partial 2p trisomy due to de novo interstitial duplication 2p21–22. Parruti G, et al. **Ann Genet** 1989; 32(1):55–8

Classical Prader-Willi syndrome with trisomy 15(pter——q12) plus de novo variant 15p11. Smith A, et al. **Ann Genet** 1989;32(1):39–42

Partial duplication of 17 long arm. Lenzini E, et al.
Ann Genet (Paris) 1988;31(3):175–80

Complete trisomy 17p a relatively new syndrome. Marsolf JT, et al. **Ann Genet (Paris)** 1988;31(3):172–4 (10 ref.)

Trisomy 8p by malsegregation of a t(5;8)(p15;p11)mat in a case of XY pure gonadal dysgenesis. Memo L, et al.
Ann Genet (Paris) 1988;31(3):181–5 (16 ref.)

Hydrops fetalis as an indication for prenatal chromosome analysis with the example of the diagnosis of a duplication 15q11 and 17q25 due to a familial translocation 15/17. Schwanitz G, et al. **Ann Genet (Paris)** 1988;31(3):186–9

Maternal age in trisomy. Morton NE, et al.
Ann Hum Genet 1988 Jul;52 (Pt 3):227–35

Eye tracking dysfunction is associated with partial trisomy of chromosome 5 and schizophrenia: a response [letter] Holzman PS, et al. **Arch Gen Psychiatry** 1989 Aug; 46(8):756–8

Eye tracking dysfunction is associated with partial trisomy of chromosome 5 and schizophrenia [letter] Iacono WG, et al. **Arch Gen Psychiatry** 1988 Dec;45(12):1140–1

Chromosome pattern of leukemias induced in mice with normal karyotype and with T/1:17/190Ca chromosome translocation. Włodarska I.
Arch Immunol Ther Exp (Warsz) 1988;36(2):205–21

Prune-belly syndrome with prostatic hypoplasia, bladder wall rupture, and massive ascites in a fetus with trisomy 18. Hoagland MH, et al. **Arch Pathol Lab Med** 1988 Nov; 112(11):1126–8

Acute nonlymphocytic leukemia (M2) with chromosome abnormality trisomy 4 developing eight years after radiation therapy for breast cancer. Yokota S, et al.
Blut 1989 Jan;58(1):27–31

Acute transformation of chronic large granular lymphocyte leukemia associated with additional chromosome abnormality. Ohno Y, et al. **Cancer** 1989 Jul 1;64(1):63–7

Trisomy 20 in acute myelogenous leukemia. Attas L, et al.
Cancer Genet Cytogenet 1989 May;39(1):25–8

Association of trisomy 8 and squamous differentiation in an endometrial adenocarcinoma. Fletcher JA, et al.
Cancer Genet Cytogenet 1989 Jun;39(2):185–9

Trisomy and tetrasomy of the long arm of chromosome 1 in a direct preparation of human endometrial adenocarcinoma. Horgas G, et al.
Cancer Genet Cytogenet 1988 Oct 15;35(2):269–72

Trisomy 4 in acute nonlymphocytic leukemia. Horsman DE, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):155–7

Trisomy 5 and t(5;14)(q11;q32) as the sole abnormalities in two different clones from a centroblastic non-Hodgkin's lymphoma. Kristoffersson U, et al.
Cancer Genet Cytogenet 1988 Dec;36(2):173–6

Trisomy 13 in a case of myelodysplastic syndrome. Limon J, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):153–6

Combined trisomy 1q and monosomy 17p due to translocation t(1;17) in a patient with myelodysplastic syndrome. Mamaev N, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):21–5

The origin of trisomy 12 in B-cell chronic lymphocytic leukemia. Mecucci C, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):203–4

Triple X chromosome constitution and acute nonlymphocytic leukemia. Ozkaynak MF, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):1–3

A further case of acute myelogenous leukemia with trisomy 4 and double minutes. Parry SH, et al.
Cancer Genet Cytogenet 1989 Jun;39(2):295–7

Trisomy 5 as sole anomaly in acute lymphoblastic leukemia. Sandberg AA, et al. **Cancer Genet Cytogenet** 1988 Nov; 36(1):31–4

Acute nonlymphocytic leukemia with trisomy 4 [letter] Temperani P, et al. **Cancer Genet Cytogenet** 1989 Sep; 41(2):203–5

Hyperdiploidy including trisomy 8 in a cystic partially differentiated nephroblastoma. Timmons CF, et al.
Cancer Genet Cytogenet 1989 Aug;41(1):79–85

Trisomy 7 in a case of transitional cell carcinoma of the kidney [letter] Vanni R, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):149–51

Is trisomy 11 another nonrandom chromosomal anomaly in acute nonlymphocytic leukemia and myelodysplastic syndromes? Weh HJ, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):205–11

The cardiovascular abnormalities associated with duplicated segments of chromosome 7. Talley JD, et al.
Clin Cardiol 1989 Apr;12(4):227–32 (40 ref.)

Trisomy 5 mosaicism in amniotic fluid with normal outcome. Casamassima AC, et al. **Clin Genet** 1989 Apr;35(4):282–4

Trisomy (1q)(q42——qter): confirmation of a syndrome. Chia NL, et al. **Clin Genet** 1988 Oct;34(4):224–9

Rates and survival of individuals with trisomy 13 and 18. Data from a 10-year period in Denmark. Goldstein H, et al. **Clin Genet** 1988 Dec;34(6):366–72

Familial partial trisomy 5p resulting from segregation of an insertional translocation. Gustavson KH, et al.
Clin Genet 1988 Jun;33(6):404–9

Mosaic 47,XY,+8/48,XXYY in a mentally non-retarded man with phenotypical and neurological abnormalities. Hoovers JM, et al. **Clin Genet** 1989 Jun;35(6):446–9

Trisomy 1q [letter] Kiss P, et al. **Clin Genet** 1989 Jul; 36(1):75–6

Karyotyping urine sediment cells confirms trisomy 12 mosaicism detected at amniocentesis. Leschot NJ, et al.
Clin Genet 1988 Aug;34(2):135–9 (13 ref.)

Neural tube defects and omphalocele in trisomy 18. Moore CA, et al. **Clin Genet** 1988 Aug;34(2):98–103

Non-mosaic trisomy 20 in amniotic fluid cultures with minor anomalies in the fetus. Myers TL, et al. **Clin Genet** 1989 Apr;35(4):233–6

Fibroblasts of two patients with trisomy 18 show 1.5-fold increase in peptidase A activity over normal human diploid fibroblasts. Namba M, et al. **Clin Genet** 1988 Sep; 34(3):161–4

Trisomy 9q3 syndrome: a case report and review of the literature. Naritomi K, et al. **Clin Genet** 1989 Apr; 35(4):293–8 (15 ref.)

Unusual segregation in a family with a 11/21 translocation. Steensen P, et al. **Clin Genet** 1988 Jun;33(6):449–53

A case of de novo trisomy 12p syndrome. Tayel S, et al.
Clin Genet 1989 May;35(5):382–6

Neural tube defects and omphalocele in trisomy 18 [letter] van Maldergem L, et al. **Clin Genet** 1989 Jan;35(1):77–8

Alterations in thymocyte subpopulations in Down's syndrome (trisomy 21). Larocca LM, et al.
Clin Immunol Immunopathol 1988 Nov;49(2):175–86

Trisomy 8 mosaicism syndrome. Two cases demonstrating variability in phenotype. Kurtyka ZE, et al.
Clin Pediatr (Phila) 1988 Nov;27(11):557–64

Studies of X-chromosome inactivation in trisomies. Jacobs PA, et al. **Cytogenet Cell Genet** 1989;50(2–3):75–7

The sex-chromosome constitution and early postimplantation development of diandric triploid mouse embryos. Kaufman MH, et al. **Cytogenet Cell Genet** 1989;50(2–3):98–101

Influence of mouse trisomy 16 on expression of specific genes. Fundele R, et al. **Dev Genet** 1987;8(1):35–43

Neurochemical characterization of embryonic brain development in trisomy 19 (Ts19) mice: implications of selective deficits observed for abnormal neural development in aneuploidy. Saltarelli MD, et al.
Dev Genet 1987;8(4):267–79

Evidence of a gene-dosage effect for the glucocorticoid receptor in trisomy 18 mice. Vogliolo D, et al.
Dev Genet 1987;8(2):73–82

Trisomy 22: report of a patient diagnosed as a neonate. Vohra K, et al. **Dis Markers** 1987 Mar;5(1):13–8 (19 ref.)

Autosomal trisomy in a Standardbred colt. Klunder LR, et al. **Equine Vet J** 1989 Jan;21(1):69–70

Karyotype analysis and marker chromosomes of renal cell carcinoma. Schärfe T, et al. **Eur Urol** 1988;14(5):402–6

Trisomy 3q2 and Pierre-Robin sequence in a boy with unbalanced 46,XY, der(10), t(3;10)(q23;q26.3) de novo karyotype. Kleczkowska A, et al. **Helv Paediatr Acta** 1988 Nov;43(3):245–8

An autosomal trisomic cell line in a wild common shrew (Sorex araneus). Searle JB. **Hereditas** 1989;110(2):183–4

Tissue-specific 45,X0/47,XY,+13 mosaicism in an 18-year-old woman. Eiben B, et al. **Hum Genet** 1989 Jul; 82(4):391–2

Recurrences of trisomy 18 and trisomy 13 after trisomy 21. FitzPatrick DR, et al. **Hum Genet** 1989 Jun;82(3):301

Familial transmission of 16p trisomy in an infant. Jalal SM, et al. **Hum Genet** 1989 Jan;81(2):196–8

The pathology of trisomy 13 syndrome. A study of 12 cases. Moerman P, et al. **Hum Genet** 1988 Dec;80(4):349–56

Partial trisomy of distal 8q derived from mother with mosaic 8q23.3——24.13 deletion, and relatively mild expression of trichorhinophalangeal syndrome I. Naritomi K, et al.
Hum Genet 1989 May;82(2):199–201

Pure partial trisomy of the short arm of chromosome 5. Rethoré MO, et al. **Hum Genet** 1989 Jun;82(3):296–8

Gene dosage evidence for the regional assignment of GPT (glutamate-pyruvate transaminase; E.C. 2.6.1.2) locus to 8q24.2——8qter. Rocha J, et al. **Hum Genet** 1988 Nov;

80(3):299–300
Detection of 1q polysomy in interphase nuclei of human solid tumors with a biotinylated probe. Viegas–Péquignot E, et al. **Hum Genet** 1989 Mar;81(4):311–4
Composition and synthesis of polyunsaturated fatty acyl groups in the embryonic brain of the trisomy–16 mouse. Brooksbank BW, et al. **Int J Dev Neurosci** 1988; 6(2):193–201
Trisomy 12 and translocation (7;9) in an ovarian immature teratoma. López Ginés C, et al. **Int J Gynecol Pathol** 1989; 8(3):277–85
Cardiac malformations in trisomy–18: a study of 41 postmortem cases. Van Praagh S, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1586–97
Trisomy 11 in acute lymphoblastic leukaemia [letter] Reid MM, et al. **J Clin Pathol** 1989 May;42(5):555–6
Microtia in infants with chromosomal trisomy. Zlotogora J, et al. **J Craniofac Genet Dev Biol** 1988;8(3):205–6
Mosaic trisomy 9 detected by amniocentesis. Freud M, et al. **J Genet Hum** 1989 Jan;37(1):87–9
Familial trisomy 11p resulting from a balanced paternal translocation: 3 new cases including first trimester diagnosis. Ogur G, et al. **J Genet Hum** 1988 Aug; 36(4):323–9
Delayed thymocyte maturation in the trisomy 16 mouse fetus. Berger CN, et al. **J Immunol** 1989 Jul 15;143(2):389–96
Trisomy 18 syndrome with cleft foot. Castle D, et al. **J Med Genet** 1988 Aug;25(8):568–70
Partial trisomy 16q secondary to a maternal 9;16 translocation. Lessick ML, et al. **J Med Genet** 1989 Jan; 26(1):63–4
Gastrointestinal abnormalities in the syndrome of mosaic trisomy 9. Levy I, et al. **J Med Genet** 1989 Apr;26(4):280–1
A third case of de novo partial trisomy 4p. Oorthuys JW, et al. **J Med Genet** 1989 May;26(5):344–5
Familial distal trisomy 8(q24.13——qter). Romain DR, et al. **J Med Genet** 1989 Feb;26(2):133–8
Pubertal development in partial trisomy 14q. Smith A, et al. **J Med Genet** 1988 Nov;25(11):782–3
Sibs with tetrasomy 18p born to a mother with trisomy 18p. Takeda K, et al. **J Med Genet** 1989 Mar;26(3):195–7 (8 ref.)
Simultaneous trisomy 9q3 and monosomy 5p in two children with der(5),t(5;9)(p15.1;q34.13): report of an extended family. Wellesley D, et al. **J Med Genet** 1988 Oct; 25(10):707–10 (7 ref.)
Eleven pairs of ribs of trisomy 18 [letter] Ho NK. **J Pediatr** 1989 May;114(5):902
Further observations of ocular pathology in trisomy 9. Ginsberg J, et al. **J Pediatr Ophthalmol Strabismus** 1989 May–Jun;26(3):146–9
Application of personal computer to an analysis of small de novo chromosomal insertion: a case of de novo 3q2 trisomy with ins(8;3). Naritomi K, et al. **Jinrui Idengaku Zasshi** 1989 Jun;34(2):113–21
Partial monosomy 5p and partial trisomy 5q due to paternal pericentric inversion 5(p15.1q35.1). Sonoda T, et al. **Jinrui Idengaku Zasshi** 1989 Jun;34(2):129–34 (13 ref.)
Distal 14q trisomy syndrome in two siblings: further delineation of its phenotype. Wakita Y, et al. **Jinrui Idengaku Zasshi** 1988 Dec;33(4):469–75
Presenile dementia associated with mosaic trisomy 21 in a patient with a Down syndrome child [letter] Rowe IF, et al. **Lancet** 1989 Jul 22;2(8656):229
Characteristics of trisomy 11 in childhood acute leukemia with review of the literature. Ingram L, et al. **Leukemia** 1989 Oct;3(10):695–8 (28 ref.)
Cytogenetic abnormalities in a secondary lymphoma complicating cardiac transplantation. Olopade OL, et al. **Leukemia** 1989 Apr;3(4):303–4
Sequential trisomization of chromosomes 6 and 7 in mouse skin premalignant lesions. Aldaz CM, et al. **Mol Carcinog** 1989;2(1):22–6
Chromosome analyses from urinary sediment: postnatal confirmation of a prenatally diagnosed trisomy 20 mosaicism [letter] Miny P, et al. **N Engl J Med** 1989 Mar 23;320(12):809
A sonographic and karyotypic study of second–trimester fetal choroid plexus cysts. Chan L, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):703–6
Choroid plexus cysts in fetuses with trisomy 18. Fitzsimmons J, et al. **Obstet Gynecol** 1989 Feb;73(2):257–60
Fetal choroid plexus cysts [letter] Hershey DW. **Obstet Gynecol** 1989 Feb;73(2):301–2
Ocular findings in partial trisomy 3q. A case report and review of the literature. Chrousos GA, et al. **Ophthalmic Paediatr Genet** 1988 Jul;9(2):127–30 (12 ref.)
Aortic root dilatation associated with partial trisomy 7(q31.2——qter). Roche KB, et al. **Pediatr Cardiol** 1989 Winter;10(1):53–5
Prenatal diagnosis, fetal pathology, and cytogenetic analysis of mosaic trisomy 14. Cheung SW, et al. **Prenat Diagn** 1988 Nov;8(9):677–82
Cardiac defects in chromosomally abnormal human embryos of 10–14 weeks' gestation. Coerdt W, et al. **Prenat Diagn** 1988 Nov;8(9):647–59
Trisomy 16 detected at chorion villus sampling. Hashish AF, et al. **Prenat Diagn** 1989 Jun;9(6):427–32
Mosaicism of 46,XX/47,XX,+9/47,XX,+?mar in the same amniotic fluid with apparent loss of one cell line after delivery. Herens C, et al. **Prenat Diagn** 1989 May;9(5):373–5
Umbilical cord pseudocyst in trisomy 18. Jauniaux E, et al. **Prenat Diagn** 1988 Oct;8(8):557–63
Trisomy 20 mosaicism confirmed in a phenotypically normal liveborn. Park JP, et al. **Prenat Diagn** 1989 Jul;9(7):501–4
Resorbed co–twin as an explanation for discrepant chorionic villus results: non–mosaic 47,XX,+16 in villi (direct and culture) with normal (46,XX) amniotic fluid and neonatal blood. Tharapel AT, et al. **Prenat Diagn** 1989 Jul; 9(7):467–72
Trisomy 12 mosaicism in amniocytes and dysmorphic child despite normal chromosomes in fetal blood sample. von Koskull H, et al. **Prenat Diagn** 1989 Jun;9(6):433–7
Cardiac and extra–cardiac anomalies as indicators for trisomies 13 and 18: a prenatal ultrasound study. Wladimiroff JW, et al. **Prenat Diagn** 1989 Jul;9(7):515–20
Umbilical cord pseudocyst in trisomy 13 [letter] Zelante L, et al. **Prenat Diagn** 1989 Jun;9(6):448–9
Effects of increased major histocompatibility complex dosage on chicken monocyte–macrophage function. Qureshi MA, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):195–202
Gene–centromere mapping and the study of non–disjunction in autosomal trisomies and ovarian teratomas. Chakravarti A, et al. **Prog Clin Biol Res** 1989;311:45–79
Analysis of non–disjunction in human trisomic spontaneous abortions. Hassold TJ, et al. **Prog Clin Biol Res** 1989; 311:115–34
Tissue specific trisomy—the significance of confined placental mosaicism. Kalousek DK. **Prog Clin Biol Res** 1989;311:153–63
Early postnatal development of the testes in mice with trisomy 19. Lorke DE, et al. **Prog Clin Biol Res** 1989; 296:71–6
An investigation of factors influencing the survival of trisomic fetuses in the mouse. Vekemans M. **Prog Clin Biol Res** 1989;311:245–62
The effect of maternal age on the frequency of trisomy: change in meiosis or in utero selection? Warburton D. **Prog Clin Biol Res** 1989;311:165–81 (31 ref.)
The rib gap anomaly in partial or mosaic trisomy 8. Kozlowski K, et al. **Skeletal Radiol** 1988;17(4):251–4
Down syndrome, Alzheimer's disease and the trisomy 16 mouse. Coyle JT, et al. **Trends Neurosci** 1988 Sep; 11(9):390–4 (42 ref.)
An intersex horse with X chromosome trisomy. Moreno–Millan M, et al. **Vet Rec** 1989 Feb 18;124(7):169–70
[Similarity between the syndrome of partial trisomy of the long arm of chromosome 3 and the Cornelia de Lange syndrome] Polívková Z, et al. **Cesk Pediatr** 1988 Dec; 43(12):723–6 (Eng. Abstr.) (Cze)
[Results of pregnancies characterized by a decrease in the level of alpha–fetoprotein in the maternal blood] Guibaud S, et al. **J Genet Hum** 1989 Jan;37(1):71–5 (Eng. Abstr.) (Fre)
[Detection of triple X syndrome during a familial inquiry for hemophilia A] Plaisancie H, et al. **J Genet Hum** 1989 Jun;37(2):149–53 (Eng. Abstr.) (Fre)
[Strategies in screening for chromosome number aberrations in women younger than 35 years of age] Klinke S, et al. **Ther Umsch** 1988 Oct;45(10):682–7 (Eng. Abstr.) (Fre)
[Trisomy 22—prenatal findings in various developmental stages] Zerres K, et al. **Geburtshilfe Frauenheilkd** 1988 Oct; 48(10):720–3 (Eng. Abstr.) (Ger)
[Alpha fetoprotein in maternal serum in pregnancies with trisomy 18] Dix U, et al. **Z Geburtshilfe Perinatol** 1988 Sep–Oct;192(5):231–3 (Eng. Abstr.) (Ger)
[Trisomy 8 mosaicism syndrome] Hummel P, et al. **Z Kinder Jugendpsychiatr** 1988 Dec;16(4):217–9 (Eng. Abstr.) (Ger)
[46,XX,trcp(1;10),trcp(2;8) karyotype of maternal origin and 2p trisomy] Vianello MG, et al. **Minerva Pediatr** 1988 Sep; 40(9):561–9 (30 ref.) (Eng. Abstr.) (Ita)
[Multiple calcifications of the intervertebral disks and other unusual anomalies in a neonatal case report of trisomy 13 syndrome (Patau's disease)] Perale R, et al. **Radiol Med (Torino)** 1988 Sep;76(3):230–2 (Ita)
[Case report of a prenatal diagnosis of 46, XY, t(13q; 14q) mat, +18] Matsuo T, et al. **Fukuoka Igaku Zasshi** 1988 Dec;79(12):927–30 (Eng. Abstr.) (Jpn)
[13 trisomy born to a mother with galactorrhea–amenorrhea syndrome] Imai T, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1714–8 (Jpn)
[So–called Ph1–negative chronic myelogenous leukemia with a mosaic pattern of trisomy 8 and normal karyotypes—report of 2 cases] Murase T, et al. **Rinsho Ketsueki** 1989 Apr;30(4):509–13 (Eng. Abstr.) (Jpn)
[Genetics of partial trisomies. Trisomy 4p] Rumiantseva PV, et al. **Genetika** 1989 Mar;25(3):565–8 (Eng. Abstr.) (Rus)
[Partial chromosome 9 trisomy in a child—the result of maternal translocation of chromosomes 3 and 9] Levina LIa, et al. **Pediatriia** 1988;(5):95–8 (Rus)
[Trisomy 13 by translocation. Possible prenatal ultrasonic diagnosis] Asencio Marchante MJ, et al. **An Esp Pediatr** 1988 Jun;28(6):585–7 (Spa)
[Partial trisomy 3q. Contribution of a new case to the literature] Elorza Arizmendi JF, et al. **An Esp Pediatr** 1989 May;30(5):391–3 (12 ref.) (Spa)

TRITERPENES

Identity of maprounic acid with aleuritolic acid. Revision of the structure of maprounic acid: X–ray crystal structure of p–bromobenzyl acetylmaprounate. McPhail AT, et al. **J Nat Prod** 1985 Jan–Feb;52(1):212–6

ANALYSIS

Phytochemical studies of seeds of medicinal plants. I. Two sulfated triterpenoid glycosides, sulfapatrinosides I and II, from seeds of Patrinia scabiosaefolia FISCHER. Inada A, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4269–74
Determination of limonin in grapefruit juice and other citrus juices by high–performance liquid chromatography. Van Beek TA, et al. **J Chromatogr** 1989 Mar 3;464(2):375–86
Quantitative determination of limonin in citrus juices by HPLC using computerized solvent optimization. Shaw PE, et al. **J Chromatogr Sci** 1988 Sep;26(9):478–81
Determination of stereo– and positional isomers of oxygenated triterpenoids by reversed phase high performance liquid chromatography. Shiao MS, et al. **J Lipid Res** 1989 Feb;30(2):287–91
[Studies on the constituents of trichosanthes root. I. Constituents of roots of Trichosanthes kirilowii Maxim. var. japonicum Kitam] Kitajima J, et al. **Yakugaku Zasshi** 1989 Apr;109(4):250–5 (Eng. Abstr.) (Jpn)
[Studies on the constituents of trichosanthes root. II. Constituents of roots of Trichosanthes cucumeroides Maxim] Kitajima J, et al. **Yakugaku Zasshi** 1989 Apr; 109(4):256–64 (Eng. Abstr.) (Jpn)
[Studies on the constituents of trichosanthes root. III. Constituents of roots of Trichosanthes bracteata Voigt] Kitajima J, et al. **Yakugaku Zasshi** 1989 Apr;109(4):265–70 (Eng. Abstr.) (Jpn)

CHEMICAL SYNTHESIS

Tetracyclic triterpenes. XII. Reduction of 7–carbonyl group in 4,4,14 alpha–trimethyl–5 alpha–cholestane with unnatural 9 beta–configuration. Paryzek Z. **Steroids** 1988 Sep;52(3):173–80

IMMUNOLOGY

Vaccination as a possible means of preventing lantana poisoning. Stewart C, et al. **Aust Vet J** 1988 Nov; 65(11):349–52

ISOLATION & PURIFICATION

Biological study of triterpenequinones from celastraceae. Gonzáles AG, et al. **Farmaco [Sci]** 1988 Jun;43(6):501–5
Comparison of the chromatographic properties of sterols, select additional steroids and triterpenoids: gravity–flow column liquid chromatography, thin–layer chromatography, gas–liquid chromatography and high–performance liquid chromatography. Xu SH, et al. **J Chromatogr** 1988 Oct 28;452:377–98
Chemical studies on Mexican plants used in traditional medicine, V. Cucurbitacin glucosides from Cigarrilla mexicana. Mata R, et al. **J Nat Prod** 1988 Sep–Oct; 51(5):836–9
3 beta–O–palmityl longispinogenin from Trichocereus chilensis. Morales G, et al. **J Nat Prod** 1989 Mar–Apr; 52(2):381–4
Ellagic acid derivatives of Agrostistachys hookeri. Choi YH, et al. **Planta Med** 1988 Dec;54(6):511–3
A cytotoxic triterpenoid and flavonoids from Crossopteryx febrifuga. Tomás–Barberán FA, et al. **Planta Med** 1988 Jun; 54(3):266–7
[The chemical constituents of Ardisia crenata Sims] Ni MY, et al. **Chung Yao Tung Pao** 1988 Dec;13(12):33–4, 59 (Eng. Abstr.) (Chi)
[Studies of chemical constituents from Tamarix chinensis Lour] Jiang YQ, et al. **Yao Hsueh Hsueh Pao** 1988; 23(10):749–55 (Eng. Abstr.) (Chi)
[Studies on triterpenoids of Huperzia serrata Thunb.] Li J, et al. **Yao Hsueh Hsueh Pao** 1988 Jul;23(7):549–52 (Eng. Abstr.) (Chi)
[Studies on the constituents of Leucosceptrum stellipillum] Isobe T, et al. **Yakugaku Zasshi** 1989 Mar;109(3):175–8 (Eng. Abstr.) (Jpn)

METABOLISM

Binding proteins for sweet compounds from gustatory papillae of the cow, pig and rat. Persaud KC, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):65–75
The biosynthesis of triterpenoids, steroids, and carotenoids. Harrison DM. **Nat Prod Rep** 1988 Aug;5(4):387–415 (268 ref.)

PHARMACOLOGY

Histamine release from mast cells by terpenoid aldehydes isolated from glanded varieties of cotton. Elissalde MH, et al. **Am Ind Hyg Assoc J** 1985 Jul;46(7):396–401
Activities of compound G2 isolated from alfalfa roots against dermatophytes. Evron R, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1586–7
The effect of citrus limonoids on hamster buccal pouch carcinogenesis. Miller EG, et al. **Carcinogenesis** 1989 Aug; 10(8):1535–7
Cytotoxic triterpenes from a Chinese medicine, Goreishi. Numata A, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar; 37(3):648–51
Effects of precocene and azadirachtin in Rhodnius prolixus: some data on development and reproduction. Garcia ES,

et al. Mem Inst Oswaldo Cruz 1987;82 Suppl 3:67–73
Effects of precocene and azadirachtin on the development of Trypanosoma cruzi in Rhodnius prolixus. Garcia ES. Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:578–9
Azadirachtin inhibits Trypanosoma cruzi infection of its triatomine insect host, Rhodnius prolixus. Rembold H, et al. Naturwissenschaften 1989 Feb;76(2):77–8
Inhibition of benzo[a]pyrene-induced forestomach neoplasia in mice by citrus limonoids. Lam LK, et al. Nutr Cancer 1989;12(1):43–7
Hypoglycemic and insulin release effects of tormentic acid: a new hypoglycemic natural product. Ivorra MD, et al. Planta Med 1988 Aug;54(4):282–5
The cytotoxic principles of Prunella vulgaris, Psychotria serpens, and Hyptis capitata: ursolic acid and related derivatives. Lee KH, et al. Planta Med 1988 Aug; 54(4):308–11
New hepatoprotective triterpenes from Canarium album. Tamai M, et al. Planta Med 1989 Feb;55(1):44–7
Inhibition of rat brain Na+-K+-ATPase by triterpene glycosides from holothurians. Gorshkova IA, et al. Toxicon 1989;27(8):927–36
Physicochemical characteristics of interaction of toxic triterpene glycosides from holothurians with rat brain Na+-K+-ATPase. Gorshkova IA, et al. Toxicon 1989; 27(8):937–45
Chagas' disease and its insect vector. Effect of azadirachtin A on the interaction of a triatomine host (Rhodnius prolixus) and its parasite (Trypanosoma cruzi). Garcia ES, et al. Z Naturforsch [C] 1989 Mar–Apr;44(3–4):317–22
[Linear system analysis and physiological model in estimating disposition kinetics of sophocarpine in rats] Liu XD, et al. Yao Hsueh Hsueh Pao 1988 Jul;23(7):481–9 (Eng. Abstr.) (Chi)
[Effect of holotoxin A1 on microviscosity of model and biological membranes] Aminin DL, et al. Bioftalika 1989 Mar–Apr;34(2):318–9 (Eng. Abstr.) (Rus)
[Action of adaptogens: cucurbitacin R diglucoside as a stimulator of arachidonic acid metabolism in the rat adrenal gland] Panosian AG, et al. Probl Endokrinol (Mosk) 1989 Mar–Apr;35(2):70–4 (Eng. Abstr.) (Rus)
[Effect of stress and the adaptogen cucurbitacin R diglycoside on arachidonic acid metabolism] Panosian AG, et al. Probl Endokrinol (Mosk) 1989 Jan–Feb;35(1):58–61 (Eng. Abstr.) (Rus)

TRITICUM see WHEAT

TRITICUM VULGARE LECTINS see WHEAT GERM AGGLUTININS

TRITIUM

Are (13C)cortisol and (3H)cortisol metabolized identically to natural cortisol in adrenalectomized piglets? Chapman TE, et al. Biomed Environ Mass Spectrom 1988 Nov; 17(5):343–53
Dose-modification factor for accumulated dose to cell nucleus due to protein-bound 3H. Saito M, et al. Health Phys 1989 Jun;56(6):869–74
Effect of tritiated water on female germ cells: mouse oocyte killing and RBE. Satow Y, et al. Int J Radiat Biol 1989 Sep;56(3):293–9
Standardization of tritium-sensitive film for quantitative autoradiography. Baskin DG, et al. J Histochem Cytochem 1989 Sep;37(9):1337–44
Oxidation of molecular tritium by surface soils. Ichimasa M, et al. J Radiat Res (Tokyo) 1988 Jun;29(2):144–51
The effects of tritiated water on the bone marrow cells in mice. Tsuchiya T, et al. J Radiat Res (Tokyo) 1988 Dec; 29(4):238–45
Chemical integrity of [3H]GABA used in binding studies. Balcar VJ. Neurochem Res 1989 Jul;14(7):593–5
Relative biological effectiveness of tritiated water to gamma radiation for germ line mutations. Byrne BJ, et al. Radiat Res 1989 Mar;117(3):469–79
Neuromorphometrical changes in cerebral cortex of Swiss albino mice during postnatal development under HTO-exposure. Bhatia AL, et al. Radiobiol Radiother (Berl) 1988;29(6):717–27
Biochemical study on the postnatally developing mouse liver after a low level tritiated (HTO) in utero exposure. Pareek S, et al. Radiobiol Radiother (Berl) 1989;30(2):167–72
[Lethal and mutagenic effect of incorporated 6-3H-pyrimidines on extracellular phage lambda] Konevega LV, et al. Radiobiologiia 1989 Jan–Feb; 29(1):17–22 (Eng. Abstr.) (Rus)
[Relative biological effectiveness of tritium oxide based on DNA destruction and thymus depletion in rats] Rusinova GG, et al. Radiobiologiia 1988 Nov–Dec;28(6):836–40 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Tritium toxicity in postnatally developing mouse brain: neurochemical changes after continuous exposure. Pareek S, et al. Int J Rad Appl Instrum [B] 1989;16(4):347–50
Tritium and health. Grainger CR. J R Soc Health 1988 Dec; 108(6):203–6 (12 ref.)
Induction of malignant transformation in mouse 10T1/2 cells by low-dose-rate exposure to tritiated water and gamma-rays at two different temperatures, 4 degrees C and 37 degrees C. Yamaguchi T, et al. J Radiat Res (Tokyo) 1989 Mar;30(1):112–21
Cell death (apoptosis) in mouse intestine after continuous irradiation with gamma rays and with beta rays from tritiated water. Ijiri K. Radiat Res 1989 Apr;118(1):180–91
Teratogenic effect of fission neutron and tritium water on rat embryo. Satow Y, et al. Sangyo Ika Daigaku Zasshi 1989 Mar 20;11 Suppl:416–31

ANALYSIS

Use of the water-soluble fluor sodium salicylate for fluorographic detection of tritium in thin-layer chromatograms and nitrocellulose blots. Lucher LA, et al. Anal Biochem 1989 May 1;178(2):327–30
Tritium thermal activation study of bacteriorhodopsin topography. Tsetlin VI, et al. Eur J Biochem 1988 Dec 1;178(1):123–9

DIAGNOSTIC USE

A preparative suspension culture system permitting quantitation of anchorage-independent growth by direct radiolabeling of cellular DNA. Assoian RK, et al. Anal Biochem 1989 Feb 15;177(1):95–9
Differential quenching and limits of resolution in autoradiograms of brain tissue labeled with 3H-, 125I- and 14C-compounds. Lidow MS, et al. Brain Res 1988 Aug 30;459(1):103–19
Contamination of tritiated glucose tracers. Pedersen B, et al. Diabete Metab 1989 Mar–Apr;15(2):102–3
Uptake of three [3H]progestins by target tissues in vivo: implications for the design of diagnostic imaging agents. Carlson KE, et al. Int J Rad Appl Instrum [B] 1988; 15(4):403–8
Changes in oligosaccharides of human blood cells measured by tritium- and FITC-labeled lectins after in vitro- and in vivo-irradiation—lectin binding as a biological dosemeter? Schreiber GA, et al. Int J Radiat Biol 1989 May;55(5):843–59
Tritiated water as a measure of body water in immature rats growing at different rates. Sheng HP, et al. J Appl Physiol 1989 Jan;66(1):476–80
Anterograde tracing in the brain using autoradiography and HRP-histochemistry. A comparison at the ultrastructural level. Holstege JC, et al. J Microsc 1988 Jun;150 (Pt 3):233–43 (39 ref.)
Measurement of fractionated water loss and CO2 production using triply labelled water. Haggarty P, et al. J Theor Biol 1988 Oct 7;134(3):291–308
Estimation of cell cycle parameters from double labeling experiments. Voit EO, et al. J Theor Biol 1988 Apr 21; 131(4):435–40
Lack of differences between the neuronal and extraneuronal handling of 3H-7- and 3H-ring-2,5,6-(-)noradrenaline. Grohmann M, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Aug; 338(2):180–4

METABOLISM

Endothelial injury assessed by isotope release: 3H-adenine compared with 51Cr. Warren JB, et al. In Vitro Cell Dev Biol 1989 Apr;25(4):334–5
Evidence for loss of tritium from 3 beta-tritiated deoxycholic acid during enterohepatic cycling in man. Marcus SN, et al. Lipids 1988 Jun;23(6):629–30
Metabolism of tritiated water in the cell nucleus and intracellular substances of the rat. Takizawa Y, et al. Radiat Res 1989 Mar;117(3):523–30

PHARMACOKINETICS

[Estimation of absorbed dose of beta radiation into the critical tissues by a single injection of tritiated water] Tsuchiya T, et al. Sangyo Ika Daigaku Zasshi 1988 Dec 1;10(4):403–9 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

[Effect of tritium oxide in a wide range of doses on the nucleic acid metabolism of the rat spleen] Mushkacheva GS, et al. Radiobiologiia 1989 Jul–Aug;29(4):554–7 (Eng. Abstr.) (Rus)
[The frequency of chromosome aberrations in rat bone marrow cells in the late period after a single uptake of tritium] Muksinova KN, et al. Tsitol Genet 1988 Nov–Dec; 22(6):39–42 (Eng. Abstr.) (Rus)

TOXICITY

The effects of tritium on embryo development: the embryotoxic effects of [3H]tryptophan. Killen HM, et al. Int J Radiat Biol 1989 Aug;56(2):139–49
[Comparative study of the genetic effect of various tritium compounds in male mice] Pomerantseva MD, et al. Genetika 1989 Feb;25(2):277–82 (Eng. Abstr.) (Rus)

TRITOLYL PHOSPHATES see under CRESOLS

TRITONS see POLYETHYLENE GLYCOLS

TRITRICHOMONAS

ANALYSIS

Localization of acetylated alpha-tubulin in Tritrichomonas foetus and Trichomonas vaginalis. Batista CM, et al. Cell Struct Funct 1988 Oct;13(5):445–53

ENZYMOLOGY

The release of hydrolases from Trichomonas vaginalis and Tritrichomonas foetus. Lockwood BC, et al. Mol Biochem Parasitol 1988 Aug;30(2):135–42

IMMUNOLOGY

Antigenic relationship among field isolates of Tritrichomonas foetus from cattle. Huang JC, et al. Am J Vet Res 1989 Jul;50(7):1064–8
Basic properties of Tritrichomonas mobilensis hemagglutinin. Pindak FF, et al. J Clin Microbiol 1988 Aug;26(8):1460–3
Development and preliminary assessment of a polyclonal antibody-based enzyme immunoassay for the detection of Tritrichomonas foetus antigen in breeding cattle. Yule A, et al. Vet Parasitol 1989 May;31(2):115–23

ISOLATION & PURIFICATION

Intestinal trichomonads (Tritrichomonas mobilensis) in the natural host Saimiri sciureus and Saimiri boliviensis. Scimeca JM, et al. Vet Pathol 1989 Mar;26(2):144–7

METABOLISM

Reduction of 5-nitroimidazoles, nitrofurazone, and 2,4-dinitrophenol to their free radical metabolites by Tritrichomonas foetus hydrogenosomes. Moreno SN, et al. Basic Life Sci 1988;49:759–64
Carbohydrate, energy and hydrogenosomal metabolism of Tritrichomonas foetus and Trichomonas vaginalis. Lindmark DG, et al. J Protozool 1989 Mar–Apr; 36(2):214–6 (27 ref.)
Purine base transport in wild-type and mycophenolic acid-resistant Tritrichomonas foetus. Hedstrom L, et al. Mol Biochem Parasitol 1989 Jul;35(3):219–27

PATHOGENICITY

Presence of laminin-binding proteins in trichomonads and their role in adhesion. Casta e Silva Filho F, et al. Proc Natl Acad Sci U S A 1988 Nov;85(21):8042–6

PHYSIOLOGY

Adherence of Tritrichomonas foetus to bovine vaginal epithelial cells. Corbeil LB, et al. Infect Immun 1989 Jul; 57(7):2158–65
Adherence and surface properties of Tritrichomonas mobilensis, an intestinal parasite of the squirrel monkey. Demeš P, et al. Parasitol Res 1989;75(8):589–94
Use of DMSO for the cryopreservation of Tritrichomonas foetus in liquid nitrogen. Campero CM. Vet Parasitol 1989 Jun;31(3–4):339–43

ULTRASTRUCTURE

Electron spectroscopic imaging of calcium in the hydrogenosomes of Tritrichomonas foetus. De Souza W, et al. J Submicrosc Cytol Pathol 1988 Jul;20(3):619–21

TRITURUS

BLOOD

The first sequenced normal hemoglobin lacking histidine in position 146 of the beta-chains. The primary structures of the major and minor hemoglobin components of the great crested newt (Triturus cristatus, Urodela, Amphibia). Kleinschmidt T, et al. Biol Chem Hoppe Seyler 1988 Dec; 369(12):1343–60
Multiple hemoglobins in Triturus cristatus: their degradation by sulfhydryl compounds. Grasso JA, et al. Comp Biochem Physiol [B] 1979;63(1):93–101
Sites and trend of erythropoiesis in anemic, normal, and splenectomized newts. Frangioni G, et al. J Exp Zool 1988 Sep;247(3):244–50

EMBRYOLOGY

Identification of pigment cells during early amphibian development (Triturus alpestris, Ambystoma mexicanum). Epperlein HH, et al. Cell Tissue Res 1988 Sep; 253(3):493–505
Cytology, embryology, and evolution of the developmental arrest syndrome in newts of the genus Triturus (Caudata: Salamandridae). Sessions SK, et al. J Exp Zool 1988 Dec; 248(3):321–34

GENETICS

Heterochromatic DNA in Triturus (Amphibia, Urodela) II. A centromeric satellite DNA. Cremisi F, et al. Chromosoma 1988 Nov;97(3):204–11
Distribution and homologies of subunits in the LDH isoenzyme pattern of urodeles. Faulhaber I, et al. Comp Biochem Physiol [B] 1978;59(4):307–15
Characterization of heterochromatic regions in two Triturus alpestris subspecies (Urodela: Salamandridae). Herrero P, et al. Heredity (Edinburgh) 1989 Aug;63 (Pt 1):119–23
Extra-ribosomal spacer sequences in Triturus. De Lucchini S, et al. J Mol Biol 1988 Dec 20;204(4):805–13

IMMUNOLOGY

The distribution of GABA-like-immunoreactive neurons in the brain of the newt, Triturus cristatus carnifex, and the green frog, Rana esculenta. Franzoni MF, et al. **Cell Tissue Res** 1989 Jan;255(1):155–66

PHYSIOLOGY

Opening of blood–brain barrier in Triturus cristatus carnifex by hyperosmolar mannitol solutions. Franceschini V, et al. **Basic Appl Histochem** 1988;32(3):327–32

Long day photoperiods and temperature of 20 degrees C induce spermatogenesis in blinded and non-blinded marbled newts during the period of testicular quiescence. Fraile B, et al. **Biol Reprod** 1988 Oct;39(3):649–55

Influence of vitamin A palmitate on the growth of regenerating Triturus alpestris forelimbs. Koussoulakos S, et al. **Biol Struct Morphog** 1988;1(3):124–9

Evaluation of the carcinogenic risk of the phenoxyherbicide MCPA to an urodele amphibian. Zavanella T, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):114–22

TRITYL COMPOUNDS

An investigation of the fixation and staining of lipids by a combination of malachite green or other triphenylmethane dyes with glutaraldehyde. Lawton JR. **J Microsc** 1989 Apr; 154 (Pt 1):83–92

ISOLATION & PURIFICATION

Bis(4-hydroxyphenyl)[2-(phenoxysulfonyl)= phenyl]methane: isolation and structure elucidation of a novel estrogen from commercial preparations of phenol red (phenolsulfonphthalein). Bindal RD, et al. **J Med Chem** 1988 Oct;31(10):1978–83

PHARMACOKINETICS

Membrane potential in liposomes measured by the transmembrane distribution of 86Rb+, tetraphenylphosphonium or triphenylmethylphosphonium: effect of cholesterol in the lipid bilayer. Nakazato K, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):143–50

PHARMACOLOGY

Effect of heterocyclic analogues of triphenylmethane dyes against Trypanosoma cruzi. De Diego C, et al. **Ann Trop Med Parasitol** 1988 Jun;82(3):235–41

TRNA-AMINO ACID see RNA, TRANSFER, AMINO ACID-SPECIFIC

TRNA-AMINO ACYL see RNA, TRANSFER, AMINO ACYL

TROCHLEAR NERVE

Contralateral trochlear nerve paresis and ipsilateral Horner's syndrome. Guy J, et al. **Am J Ophthalmol** 1989 Jan 15; 107(1):73–6

Leiomyosarcoma of a lower limb presenting with multiple cranial nerve palsies. Shotton JC. **Ear J Surg Oncol** 1989 Aug;15(4):380–2

Bilateral trochlear nerve paresis in hydrocephalus. Guy JR, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):105–11

Trochlear nerve palsy following minor head trauma. A sign of structural disorder. Jacobson DM, et al. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):263–8

Isolated palsy of the fourth cranial nerve caused by an intracavernous aneurysm [letter] Maurice-Williams RS, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):679

Bilateral fourth nerve palsy due to cerebellar haemangioblastoma. Sawle GV, et al. **J R Soc Med** 1989 Feb;82(2):111–2 (15 ref.)

Diplopia due to 4th nerve palsy and enlargement of the right medial rectus muscle [letter] Goldman JA, et al. **J Rheumatol** 1989 Jul;16(7):1010–1

[Isolated fourth nerve palsy—analysis of 78 cases] Yen MY. **Chung Hua I Hsueh Tsa Chih** 1988 Feb;41(2):131–6 (Eng. Abstr.) (Chi)

[Differential diagnosis of superior orbital fissure syndrome] Berlit P, et al. **Schweiz Med Wochenschr** 1988 Jul 30; 118(30):1104–9 (Eng. Abstr.) (Ger)

[Paralysis of the pathetic nerve associated with dolichobasilar artery (letter)] Leno Camarero C, et al. **Rev Clin Esp** 1989 Mar;184(5):272–3 (Spa)

ANALYSIS

Axon-myelin relationships in rat cranial nerves III, IV, and VI: a morphometric study of large- and small-fibre classes. Fraher JP. **J Comp Neurol** 1989 Aug 15;286(3):384–90

ANATOMY & HISTOLOGY

Cavernous portion of the trochlear nerve with special reference to its site of entrance. Bisaria KK. **J Anat** 1988 Aug;159:29–35

The central–peripheral transitional regions of cranial nerves. Trochlear and abducent nerves. Fraher JP, et al. **J Anat** 1988 Dec;161:115–23

Ipsilateral and contralateral projections to the trochlear nucleus arise from different subdivisions in the vestibular nuclei. Coffey AR, et al. **Neurosci Lett** 1989 May 8; 99(3):274–80

DRUG EFFECTS

Temporary paralysis of cranial nerves III, IV, and VI after a Gow-Gates injection. Fish LR, et al. **J Am Dent Assoc** 1989 Jul;119(1):127–8, 130; discussion 129

PATHOLOGY

Congenital fourth nerve palsy and occult cranium bifidum. Bale JF Jr, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):320–1

PHYSIOPATHOLOGY

Familial recurrent cranial nerve palsies. Sørensen TT. **Acta Neurol Scand** 1988 Dec;78(6):542–3

Measurement of vertical deviations in different gaze positions in patients with a superior oblique palsy. Catalano RA, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct; 25(5):221–5

SURGERY

Trochlear nerve meningioma in von Recklinghausen's disease. Tada T, et al. **Neurochirurgia (Stuttg)** 1988 Nov; 31(6):226–7

TROLEANDOMYCIN see TRIACETYLOLEANDOMYCIN

TROMBICULIASIS see under MITE INFESTATIONS

TROMBICULID MITES see under MITES

TROMETAMOL see TROMETHAMINE

TROMETHAMINE

Interference of Bis-Tris buffer with the diaminobenzoic acid fluorescence assay used to quantify DNA. Schy WE, et al. **Mutat Res** 1989 Aug;226(4):263–6

ANALOGS & DERIVATIVES

Lodoxamide tromethamine prevents neutrophil accumulation in reexpansion pulmonary edema. Veal CF Jr, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):227–32

Positive modulators of muscle acetylcholine receptor. Eterovic VA, et al. **J Recept Res** 1989;9(2):107–25

ANALYSIS

Preformulation salt selection. Physical property comparisons of the tris(hydroxymethyl)aminomethane (THAM) salts of four analgesic/antiinflammatory agents with the sodium salts and the free acids. Gu L, et al. **Pharm Res** 1987 Jun; 4(3):255–7

Kinetics and mechanism of zinc ion-mediated degradation of cephalosporins in tromethamine solution. Tomida H, et al. **Pharm Res** 1987 Jun;4(3):214–9

BLOOD

The transfer of ketorolac tromethamine from maternal to foetal blood. Walker JJ, et al. **Eur J Clin Pharmacol** 1988; 34(5):509–11

PHARMACOKINETICS

Pharmacokinetics of ketorolac tromethamine in humans after intravenous, intramuscular and oral administration. Jung D, et al. **Eur J Clin Pharmacol** 1988;35(4):423–5

The excretion of ketorolac tromethamine into breast milk after multiple oral dosing. Wischnik A, et al. **Eur J Clin Pharmacol** 1989;36(5):521–4

Pharmacokinetics of ketorolac and p-hydroxyketorolac following oral and intramuscular administration of ketorolac tromethamine. Jung D, et al. **Pharm Res** 1989 Jan;6(1):62–5

PHARMACOLOGY

The effect of CO2 and non-CO2-generating buffers on cerebral acidosis after cardiac arrest: A 31P NMR study. Rosenberg JM, et al. **Ann Emerg Med** 1989 Apr;18(4):341–7

Further assessment of a pharmacological effect of Tris buffer. Burton D. **Comp Biochem Physiol [C]** 1988;90(1):263–5

Effect of ketorolac on phagocytosis of Candida albicans by peritoneal macrophages. Fraser-Smith EB, et al. **Immunopharmacology** 1988 Nov–Dec;16(3):151–5

Buffer effects on high affinity [3H]-prazosin binding in brain and spinal cord. Herr DW, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):831–4

THERAPEUTIC USE

Comparative analgesic efficacy and tolerability of ketorolac tromethamine and glafenine in patients with post-operative pain. Arsac M, et al. **Curr Med Res Opin** 1988;11(4):214–20

Effects of tromethamine and sodium bicarbonate buffers during cardiac resuscitation. von Planta M, et al. **J Clin Pharmacol** 1988 Jul;28(7):594–9

Effect of ketorolac on herpes simplex virus type one ocular infection in rabbits. Fraser-Smith EB, et al. **J Ocul Pharmacol** 1988 Winter;4(4):321–6

The effect of ketorolac tromethamine solution 0.5% in reducing postoperative inflammation after cataract extraction and intraocular lens implantation. Flach AJ, et al. **Ophthalmology** 1988 Sep;95(9):1279–84

[An infusion of THAM (trishydroxymethylaminomethane) as therapy to lower increased intracranial pressure in acute craniocerebral injuries] Pfenninger E, et al. **Anaesthesist** 1989 Apr;38(4):189–92 (Eng. Abstr.) (Ger)

TOXICITY

[Cytotoxicity of tris: it's effect on the secretory pathway] Oda K, et al. **Seikagaku** 1989 Apr;61(4):290–4 (Jpn)

TROPANES

ADMINISTRATION & DOSAGE

An evaluation of the effectiveness of intramuscular atropine or homatropine eyedrops in preventing the effects of physostigmine eyedrops on human vision. Kay CD, et al. **Q J Exp Physiol** 1988 Jul;73(4):511–9

[The effect of premedication with neurotropic and myotropic vasodilators on the effect of adrenaline in the isolated liver in rabbits. II. Premedication with phenoxybenzamine, papaverine and Palerol] Tiller I, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):513–26 (Eng. Abstr.) (Cze)

ADVERSE EFFECTS

The dose-response relationship for memory impairment by anticholinergic drugs. McEvoy JP, et al. **Compr Psychiatry** 1989 Mar-Apr;30(2):135–8

BLOOD

Serial serum drug concentrations and prolonged anticholinergic toxicity after benztropine (Cogentin) overdose. Fahy P, et al. **Am J Emerg Med** 1989 Mar; 7(2):199–202

PHARMACOKINETICS

Characterization of argentosomes, a type of secondary lysosomes, and the sub-organellar distribution of a lysosomotropic basic compound. Matsumoto Y, et al. **J Pharmacobiodyn** 1988 Oct;11(10):679–84

PHARMACOLOGY

Status of cyclopentolate as a cycloplegic in children: a comparison with atropine and homatropine. Khurana AK, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):721–4

Interactions of benztropine, atropine and ketamine with veratridine-activated sodium channels: effects on membrane depolarization, K+-efflux and neurotransmitter amino acid release. Erecińska M, et al. **Br J Pharmacol** 1988 Jul;94(3):871–81

Effects of atropine and azaprophen on matching and detection in rhesus monkeys. Genovese RF, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):495–8

[Use of tropaphen to increase alpha adrenergic blockade for the purpose of reducing fentanyl dose in general anesthesia during aortocoronary bypass] Kuliev EA, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):15–9 (Eng. Abstr.) (Rus)

POISONING

Serial serum drug concentrations and prolonged anticholinergic toxicity after benztropine (Cogentin) overdose. Fahy P, et al. **Am J Emerg Med** 1989 Mar; 7(2):199–202

THERAPEUTIC USE

Efficacy of benztropine therapy for drooling. Camp-Bruno JA, et al. **Dev Med Child Neurol** 1989 Jun;31(3):309–19

Antiemetic therapy for chemotherapy-induced vomiting: metoclopramide, benztropine, dexamethasone, and lorazepam regimen compared with chlorpromazine alone. Marshall G, et al. **J Pediatr** 1989 Jul;115(1):156–60

Effects of etybenzatropine and diazepam on levodopa-induced diphasic dyskinesias in Parkinson's disease. Pourcher E, et al. **Mov Disord** 1989;4(3):195–201

TOXICITY

Anticholinergic effects on memory: benztropine versus amantadine. Gelenberg AJ, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):180–5

TROPHOBLAST

Peritoneal trophoblastic tissue implants after laparoscopic treatment of tubal ectopic pregnancy. Reich H, et al. **Fertil Steril** 1989 Aug;52(2):337–9

[Persistent trophoblast following tubal pregnancy] Clausen IH. **Ugeskr Laeger** 1988 Dec 19;150(51):3198 (Eng. Abstr.) (Dan)

[Determining the level of trophoblastic beta 1-glycoprotein for the diagnosis of early pregnancy and the control of the treatment of early abortion] Povedinskii NM, et al. **Akush Ginekol (Mosk)** 1988 Dec;(12):10–2 (Eng. Abstr.) (Rus)

ANALYSIS

Human trophoblast glycoproteins defined by monoclonal antibody 1D2. Hole N, et al. **Exp Cell Biol** 1988; 56(1-2):39-48

Isolation and characterization of a novel trophoblast-specific cDNA in the mouse. Lescisin KR, et al. **Genes Dev** 1988 Dec;2(12a):1639-46

Chorionic gonadotrophin-beta mRNA, a trophoblast marker, is expressed in human 8-cell embryos derived from triproнucleate zygotes. Bonduelle ML, et al. **Hum Reprod** 1988 Oct;3(7):909-14

Laminin in human trophoblast--decidua interaction. Loke YW, et al. **Hum Reprod** 1989 May;4(4):457-63

Expression of merosin, a tissue-specific basement membrane protein, in the intermediate trophoblast cells of choriocarcinoma and placenta. Leivo I, et al. **Lab Invest** 1989 Jun;60(6):783-90

Localization of mRNA for the oncotrophoblastic protein oncomodulin during implantation and early placentation in the rat. Brewer LM, et al. **Placenta** 1989 Jul-Aug; 10(4):359-75

Receptors for alpha 2-macroglobulin- and pregnancy zone protein-proteinase complexes in the human placental syncytiotrophoblast. Jensen PH, et al. **Placenta** 1988 Sep-Oct;9(5):463-77

The interleukin 2 gene is expressed in the syncytiotrophoblast of the human placenta. Boehm KD, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):656-60

ANATOMY & HISTOLOGY

[Trophoblast in villi of the early human chorion according to the data of optico-structural analysis and electron microscopy] Novikov VD, et al. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):69-71 (Eng. Abstr.) (Rus)

[Morphological characteristics of normal trophoblast and choriocarcinoma] Semenovskiĭ AV. **Vopr Onkol** 1988; 34(10):1195-8 (Eng. Abstr.) (Rus)

CYTOLOGY

Characterization of pure human first-trimester cytotrophoblast cells in long-term culture: growth pattern, markers, and hormone production. Yagel S, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):938-45

Trophic effects of first-trimester human trophoblasts and human chorionic gonadotropin on lymphocyte proliferation. Yagel S, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):946-53

Membrane fluidity of trophoblast cells and susceptibility to natural cytotoxicity. Szekeres-Bartho J, et al. **Am J Reprod Immunol** 1989 Mar;19(3):92-8

Culture of early-stage bovine embryos inside day-13 and day-14 precultured trophoblastic vesicles. Pool SH, et al. **Ann N Y Acad Sci** 1988;541:407-18

Human placental cytotrophoblast cells: identification and culture. Truman P, et al. **Arch Gynecol Obstet** 1989; 246(1):39-49

Mouse blastocyst surface expression of galactose-containing epitopes coinciding with trophoblast differentiation. Svalander PC, et al. **Cell Differ Dev** 1989 May; 26(3):191-200

Detection of trophoblast cellular elements in maternal peripheral blood using monoclonal antibodies and flow cytometry. Adinolfi M. **Cytometry Suppl** 1988;3:104-5 (13 ref.)

Analysis of cell surface galactosyltransferase activity during mouse trophectodermal differentiation. Hathaway HJ, et al. **Dev Biol** 1989 Aug;134(2):351-61

Chimeras between parthenogenetic or androgenetic blastomeres and normal embryos: allocation to the inner cell mass and trophectoderm. Thomson JA, et al. **Dev Biol** 1989 Feb;131(2):580-3

3,5,3'-triiodo-L-thyronine binding sites in nuclei of human trophoblastic cells. Ashitaka Y, et al. **Endocrinol Jpn** 1988 Apr;35(2):197-206

Adhesive and degradative properties of human placental cytotrophoblast cells in vitro. Fisher SJ, et al. **J Cell Biol** 1989 Aug;109(2):891-902

Normal nonmetastatic human trophoblast cells share in vitro invasive properties of malignant cells. Yagel S, et al. **J Cell Physiol** 1988 Sep;136(3):455-62

Isolation of pure villous cytotrophoblast from term human placenta using immunomagnetic microspheres. Douglas GC, et al. **J Immunol Methods** 1989 May 12;119(2):259-68

Rapid method for cultured trophoblast cells identification. Laureti E, et al. **Panminerva Med** 1989 Jan-Mar;31(1):42-5

Isolation of phenotypically distinct trophoblast cell lines from normal rat chorioallantoic placentas. Hunt JS, et al. **Placenta** 1989 Mar-Apr;10(2):161-77

The killing of mouse trophoblast cells by granulated metrial gland cells in vitro. Stewart I, et al. **Placenta** 1988 Jul-Aug; 9(4):417-25

Enzymatic isolation of human trophoblast and culture on various substrates: comparison of first trimester with term trophoblast. Yeger H, et al. **Placenta** 1989 Mar-Apr; 10(2):137-51

DRUG EFFECTS

Neurotransmitters and peptides modulate the release of immunoreactive corticotropin-releasing factor from cultured human placental cells. Petraglia F, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):247-51

Stereological re-examination of the effects of varying oxygen tensions on human placental villi maintained in organ culture for up to 12 h. Burton GJ, et al. **Placenta** 1989 May-Jun;10(3):263-73

[In vitro culture of humana trophoblastic tissue: evaluation of its functionality in basic conditions and after administration of potentially toxic substances] Zanini PG. **Medicina (Firenze)** 1988 Apr-Jun;8(2):204-6 (Eng. Abstr.) (Ita)

ENZYMOLOGY

Calcium pump epitopes in placental trophoblast basal plasma membranes. Borke JL, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):c341-6

Lack of effect of insulin or insulin-like growth factor I on the steroid sulfatase activity of human placental cytotrophoblasts. Nestler JE. **Horm Metab Res** 1989 May; 21(5):258-60

5'-Nucleotidase of human placental trophoblastic microvilli possesses cobalt-stimulated FAD pyrophosphatase activity. Lee RS, et al. **J Biol Chem** 1988 Oct 15;263(29):14878-83

Estrogen synthetase (aromatase) activity in primary culture of human term placental cells: effects of cell preparation, growth medium, and serum on adenosine 3',5'-monophosphate response. Lobo JO, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):868-74

Immunohistochemical detection of human placental cytochrome P-450-associated mono-oxygenase system inducible by maternal cigarette smoking. Pasanen M, et al. **Placenta** 1988 May-Jun;9(3):267-75

Maternal tobacco smoking and changes in amino acid uptake by human placental villi: induction of uptake systems, gammaglutamyltranspeptidase and membrane fluidity. Sastry BV, et al. **Placenta** 1989 Jul-Aug;10(4):345-58

IMMUNOLOGY

Immunoregulatory activity in supernatants from cultures of normal human trophoblast cells of the first trimester. Sanyal MK, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):446-53

Trophoblast induction of suppressor-type cell activity in human endometrial tissue. Daya S, et al. **Am J Reprod Immunol** 1989 Feb;19(2):65-72

Trophoblast-derived immunoregulatory factor: demonstration of the biological function and the physicochemical characteristics of the factor derived from choriocarcinoma cell lines. Matsuzaki N, et al. **Am J Reprod Immunol** 1989 Apr;19(4):121-7

Impaired susceptibility of human trophoblast to MHC nonrestricted killer cells: implication in the maternal-fetal relationship. Saji F, et al. **Am J Reprod Immunol** 1989 Mar; 19(3):108-13

Monoclonal antibody GB24 recognizes a trophoblast-lymphocyte cross-reactive antigen. Hsi BL, et al. **Am J Reprod Immunol Microbiol** 1988 Sep;18(1):21-7

Trophoblast antigens in human seminal plasma. Kajino T, et al. **Am J Reprod Immunol Microbiol** 1988 Jul;17(3):91-5

Specificity of trophoblast-reactive antibodies in human pregnancy [letter] Cheng HM, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1081-2

Early human decidual cells exhibit NK activity against the K562 cell line but not against first trimester trophoblast. King A, et al. **Cell Immunol** 1989 Feb;118(2):337-44

PGE2-mediated immunosuppression by first trimester human decidual cells blocks activation of maternal leukocytes in the decidua with potential anti-trophoblast activity. Parhar RS, et al. **Cell Immunol** 1989 Apr 15;120(1):61-74

Murine trophoblast resists cell-mediated lysis. II. Resistance to natural cell-mediated cytotoxicity. Zuckermann FA, et al. **Cell Immunol** 1988 Oct 15;116(2):274-86

Seminal vesicles: a source of trophoblast lymphocyte cross-reactive antigen. Thaler CJ, et al. **Fertil Steril** 1989 Sep;52(3):463-8

The maternal immune response to a new human trophoblast antigen. Crainie M, et al. **J Clin Lab Immunol** 1988 Nov; 27(3):103-7

Lack of expression of HLA-B27 gene in transgenic mouse trophoblast. Conserved genetic pressures underlying extra-embryonic development. Oudejans CB, et al. **J Exp Med** 1989 Feb 1;169(2):447-56

Murine trophoblast can be killed by lymphokine-activated killer cells. Drake BL, et al. **J Immunol** 1989 Jul 1; 143(1):9-14

Murine trophoblast can be killed by allospecific cytotoxic T lymphocytes generated in GIBCO Opti-MEM medium. Drake BL, et al. **J Reprod Immunol** 1989 Mar;15(1):71-7

Antibodies to trophoblast in normal pregnant and secondary aborting women. Kajino T, et al. **J Reprod Immunol** 1988 Dec;14(3):267-82

Analysis of site of action of a choriocarcinoma-derived immunoregulatory factor on IL-2-mediated T cell responses. Matsuzaki N, et al. **J Reprod Immunol** 1989 Jul; 15(3):181-94

Differential expression of blood-group-related carbohydrate antigens by trophoblast subpopulations. King A, et al. **Placenta** 1988 Sep-Oct;9(5):513-21

Circulating 'trophoblast' cells in pregnancy have maternal genetic markers. Bertero MT, et al. **Prenat Diagn** 1988 Oct; 8(8):585-90

Analysis of peripheral maternal blood samples for the presence of placenta-derived cells using Y-specific probes and McAb H315. Covone AE, et al. **Prenat Diagn** 1988 Oct;8(8):591-607

Induction of class I major histocompatibility complex antigen expression by West Nile virus on gamma interferon-refractory early murine trophoblast cells. King NJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):911-5

An immunoregulatory role of human trophoblasts. Saji F, et al. **Prog Clin Biol Res** 1989;294:435-46

Class I MHC antigens on rat placental trophoblast and yolk sac fetal membrane. Billington WD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):555-6

Expression on the trophoblast of an independent molecule bearing the Pa antigen [letter] Gill TJ 3d, et al. **Transplantation** 1989 Apr;47(4):745-7

[A study on maternal humoral immune responses to villous trophoblast using Epstein-Barr virus] Fujino T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):660-4 (Eng. Abstr.) (Jpn)

[Immunohistochemical analysis of the expression of HLA on the trophoblast of normal pregnancy] Honma S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):737-43 (Eng. Abstr.) (Jpn)

[HLA-DP and HLA-DQ antigen expression on trophoblasts of normal human pregnancy and trophoblastic diseases] Sasagawa M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Oct; 40(10):1525-30 (Eng. Abstr.) (Jpn)

METABOLISM

Evidence suggesting the trophoblastic origin of follicle-stimulating hormone, luteinizing hormone and prolactin in hydatidiform mole. Loganath A, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):383-8

Aberrant postendocytotic fate of a 34-kDa molecular mass growth factor from human trophoblasts. Das M, et al. **Cancer Res** 1989 May 15;49(10):2761-5

Expression of the c-fms proto-oncogene and of the cytokine, CSF-1, during mouse embryogenesis. Regenstreif LJ, et al. **Dev Biol** 1989 May;133(1):284-94

In vitro metabolism of 25-hydroxyvitamin D3 by human trophoblastic homogenates, mitochondria, and microsomes: lack of evidence for the presence of 25-hydroxyvitamin D3-1 alpha- and 24R-hydroxylases. Hollis BW, et al. **Endocrinology** 1989 Sep;125(3):1224-30

Parathyroid hormone receptor in human placental syncytiotrophoblast brush border and basal plasma membranes. Lafond J, et al. **Endocrinology** 1988 Dec; 123(6):2834-40

O-glycosylation of the alpha-subunit does not limit the assembly of chorionic gonadotropin alpha beta dimer in human malignant and nonmalignant trophoblast cells. Peters BP, et al. **Endocrinology** 1989 Apr;124(4):1602-12

Persistence of remnants of hormonally active tubal trophoblast 3 months following linear salpingostomy in the face of undetectable serum beta human chorionic gonadotropin. Katz E, et al. **Int J Gynaecol Obstet** 1989 May;29(1):79-81

Changes in epidermal growth factor receptor and its messenger ribonucleic acid levels in human placenta and isolated trophoblast cells during pregnancy. Chen CF, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1171-7

Discordant secretion of placental protein hormones in differentiating trophoblasts in vitro. Kato Y, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):814-20

Angiotensin II stimulates both inositol phosphate production and human placental lactogen release from human trophoblastic cells. Petit A, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):280-6

Interleukin-1 stimulates human chorionic gonadotropin secretion by first trimester human trophoblast. Yagel S, et al. **J Clin Endocrinol Metab** 1989 May;68(5):992-5

Pathways of purine nucleotide synthesis in the human trophoblast early and late in gestation. Vettenranta K. **J Dev Physiol** 1988 Dec;10(6):547-54

Products of lipopolysaccharide-activated macrophages (tumor necrosis factor-alpha, transforming growth factor-beta) but not lipopolysaccharide modify DNA synthesis by rat trophoblast cells exhibiting the 80-kDa lipopolysaccharide-binding protein. Hunt JS, et al. **J Immunol** 1989 Sep 1;143(5):1606-13

Expression of the proliferation markers Ki67 and transferrin receptor by human trophoblast populations. Bulmer JN, et al. **J Reprod Immunol** 1988 Dec;14(3):291-302

Plasminogen activator inhibitor types 1 and 2 in human trophoblasts. PAI-1 is an immunocytochemical marker of invading trophoblasts. Feinberg RF, et al. **Lab Invest** 1989 Jul;61(1):20-6

Significance and value of immunohistochemical localization of pregnancy specific proteins in feto-maternal tissue throughout pregnancy. Sabet LM, et al. **Mod Pathol** 1989 May;2(3):227-32

Differential transcription of exon 1 of the human c-fms gene in placental trophoblasts and monocytes. Visvader J, et al. **Mol Cell Biol** 1989 Mar;9(3):1336-41

Effects of 8-bromo-cAMP on expression of endocrine functions by cultured human trophoblast cells. Regulation of specific mRNAs. Ringler GE, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):13-21

Adenine nucleotide catabolism in the human trophoblast early and late in gestation. Vettenranta K, et al. **Pediatr Res** 1988 Sep;24(3):373-9

The appearance of transferrin receptors on cultured human cytotrophoblast and in vitro-formed syncytiotrophoblast. Bierings MB, et al. **Placenta** 1988 Jul-Aug;9(4):387-96

Oestrogen synthetase (aromatase) and hormone secretion in primary cultures of human placental trophoblast cells. Effects of cyclic AMP addition at the start of culture in attached and unattached cell populations. Lobo JO, et al. **Placenta** 1989 Jul-Aug;10(4):377-85

Isolation of human extravillous trophoblast cells by attachment to laminin-coated magnetic beads. Loke YW, et al. **Placenta** 1989 Jul-Aug;10(4):407-15

Placental handling of trace elements Shennan DB, et al. **Placenta** 1988 May-Jun;9(3):333-43 (62 ref.)

Study of the permeability of the intact guinea pig placenta to hydrophilic molecules [letter] Stulc J. **Placenta** 1989 Jul-Aug;10(4):427-8

Transport of radioactive deoxyglucose by the isolated perfused human placental cotyledon as measured by the paired-tracer dilution method. Inconsistency of the transfer rates across the two trophoblast borders with the simultaneously measured rate of transplacental transfer. Stulc J, et al. **Placenta** 1988 May-Jun;9(3):227-35

[Effect of tyrosine on progesterone and hCG production by human trophoblast cells in vitro] Yang XS, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):209-14 (Eng. Abstr.) **(Chi)**

[Studies of the presence and levels of trace elements in trophoblasts from spontaneous and induced abortions] Lembrych S, et al. **Ginekol Pol** 1988 Jun;59(6):353-7 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Morphological demonstration of the failure of Mus caroli trophoblast in the Mus musculus uterus. Crepeau MA, et al. **J Reprod Fertil** 1989 May;86(1):277-88

Pelvic trophoblastic implants after laparoscopic removal of a tubal pregnancy. Thatcher SS, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):514-5

[Evaluation of the effectiveness and safety of the methods of obtaining trophoblastic villi in the first trimester of pregnancy] Chazan B, et al. **Ginekol Pol** 1988 Sep; 59(9):521-7 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Release of prostacyclin (PGI2) from trophoblast in tissue culture: the effect of glucose concentration. Rákóczi I, et al. **Acta Physiol Hung** 1988;71(4):545-9

Trophoblast differentiation during the transition from trophoblastic plate to lacunar stage of implantation in the rhesus monkey and human. Enders AC. **Am J Anat** 1989 Sep;186(1):85-98

Temporal and constitutive expression of homeobox-2 gene (Hu-2), human heat shock gene (hsp-70), and oncogenes C-sis and N-myc in early human trophoblast. Su BC, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1195-9

The dynamic structure of rabbit blastocyst coverings. II. Ultrastructural evidence for a role of the trophoblast in neozona formation. Leiser R, et al. **Anat Embryol (Berl)** 1988;179(2):129-34

The human villous cytotrophoblast: interactions with extracellular matrix proteins, endocrine function, and cytoplasmic differentiation in the absence of syncytium formation. Kao LC, et al. **Dev Biol** 1988 Dec; 130(2):693-702

Regulation of human trophoblast function by glucocorticoids: dexamethasone promotes increased secretion of chorionic gonadotropin [published erratum appears in Endocrinology 1989 Jun;124(6):3002] Ringler GE, et al. **Endocrinology** 1989 Apr;124(4):1625-31

Ultrastructure of trophoblast giant cell transformation during the invasive stage of implantation of the mouse embryo. Bevilacqua EM, et al. **J Morphol** 1988 Dec;198(3):341-51

Functional and morphologic expressions of trophoblast. Yeh IT, et al. **Lab Invest** 1989 Jul;61(1):1-4 (40 ref.)

Human chorionic somatomammotropin gene expression in primary placental cell cultures. Klassen ME, et al. **Placenta** 1989 Jul-Aug;10(4):321-9

Uterine receptivity in the primate. Anderson TL, et al. **Prog Clin Biol Res** 1989;294:389-99

Morphological manifestations of maturation of the blastocyst. Enders AC. **Prog Clin Biol Res** 1989;294:211-23

The human trophoblast: homotypic and heterotypic cell-cell interactions. Kliman HJ, et al. **Prog Clin Biol Res** 1989; 294:425-34

Effects of indomethacin, prostaglandin E2 and prostaglandin F2 alpha on mouse blastocyst attachment and trophoblastic outgrowth in vitro. Chida S, et al. **Prostaglandins** 1989 Apr; 37(4):411-6

[Trophoblastic proteins] Martal J, et al. **Reprod Nutr Dev** 1988;28(6B):1655-72 (134 ref.) (Eng. Abstr.) **(Fre)**

SECRETION

Effect of gonadal steroids on gonadotropin-releasing hormones stimulated human chorionic gonadotropin release by trophoblast cells. Iwashita M, et al. **Placenta** 1989 Jan-Feb;10(1):103-12

Identification of trophoblast membrane-originated proteins in human placental blood. Kim IC. **Tumour Biol** 1989; 10(1):31-7

[Noradrenaline and interleukin-1 stimulate CRF secretion from human placental cells in culture] Coukos G, et al. **Medicina (Firenze)** 1988 Oct-Dec;8(4):441-2 (Eng. Abstr.) **(Ita)**

ULTRASTRUCTURE

The ultrastructure of the trophoblast fossal regions in the pig placenta during pregnancy. Its steroidogenic features. Czarnowska E. **Anat Histol Embryol** 1988 Sep;17(3):207-25

Ultrastructure of trophoblast of hydatidiform mole. Tang MY, et al. **Chin Med J [Engl]** 1988 Aug;101(8):608-14

Ultrastructural changes and immunocytochemical analysis of human placental trophoblast during short-term culture. Bax CM, et al. **Placenta** 1989 Mar-Apr;10(2):179-94

Hydatidiform mole: an ultrastructural analysis of syncytiotrophoblast surface organization. Ockleford C, et al. **Placenta** 1989 Mar-Apr;10(2):195-212

Vacuolated cytotrophoblast: a subpopulation of trophoblast in the chorion laeve. Yeh IT, et al. **Placenta** 1989 Sep-Oct; 10(5):429-38

[The expression of c-myc, c-fms, c-sis oncogenes in the trophoblast of normal pregnancy and trophoblastic disease] Yokoyama S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1867-74 (Eng. Abstr.) **(Jpn)**

[Ultrastructural features of the nucleus and cytoplasm of rat trophoblast cells of the connective zone of the placenta and labyrinth] Zybina EV, et al. **Tsitologiia** 1988 Nov; 30(11):1283-90 (Eng. Abstr.) **(Rus)**

TROPHOBLASTIC TUMOR

Placental-site trophoblastic tumor: diagnosis, treatment, and biological behavior. Heintz AP, et al. **Int J Gynecol Pathol** 1985;4(1):75-82

Trophoblastic disease. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):435-590

[The Center for Trophoblastic Diseases] Zavadil M, et al. **Cesk Gynekol** 1988 Nov;53(9):695-700 **(Cze)**

[The Center for Trophoblastic Disease] Zavadil M, et al. **Cesk Patol** 1988 Aug;24(3):189-92 (Eng. Abstr.) **(Cze)**

[Principles of prevention, early diagnosis, treatment and after-care of gestational trophoblastic tumors] Ebeling K, et al. **Radiobiol Radiother (Berl)** 1989;30(1):25-30 (Eng. Abstr.) **(Ger)**

[Choriocarcinoma of the uterine cervix] Lampe D, et al. **Zentralbl Gynakol** 1988;110(15):960-3 (Eng. Abstr.) **(Ger)**

ANALYSIS

Endothelium and thrombomodulin: expression and distribution of thrombomodulin on altered endothelium and neoplastic syncytiotrophoblast. Maruyama I, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):150-5

[Human chorionic prealbumin: its identification, physicochemical properties and detection in the blood serum in trophoblastic disease] Tatarinov IuS, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):552-3 (Eng. Abstr.) **(Rus)**

BLOOD

Serum methotrexate and human chorionic gonadotropin concentrations during five-day chemotherapy for low-risk metastatic gestational trophoblastic neoplasia. Hilgers RD, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):421-5

Comparison of human chorionic gonadotrophin concentrations in the sera of patients with normal and abnormal pregnancy measured by radio-immunoassay and immunoradiometric assay. Norman RJ, et al. **S Afr Med J** 1989 Apr 1;75(7):318-9

[The serum concentration of specific beta 1-glycoprotein in trophoblastic disease] Radikov N. **Akush Ginekol (Sofiia)** 1989;28(2):15-9 (Eng. Abstr.) **(Bul)**

[Clinical significance of pregnancy-specific beta glycoprotein, human placental lactogen and beta-human chorionic gonadotropin in the serum of patients with trophoblastic diseases] Zhang WY. **Chung Hua I Hsueh Tsa Chih** 1989 Apr;69(4):206-8, 16 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

Eclampsia as a possible risk factor for persistent trophoblastic disease. Newman RB, et al. **Gynecol Oncol** 1989 Aug; 34(2):212-5 (33 ref.)

[Pelvic arterio-venous fistula of gestational trophoblastic neoplasms] Yang XY. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Mar;23(2):91-4, 128 (Eng. Abstr.) **(Chi)**

[Fertility after trophoblastic disease] Garozzo G, et al. **G Ital Oncol** 1987 Apr-Sep;7(2-3):91-4 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Radioimmunoassay of free beta-subunit of human chorionic gonadotropin in diagnosis of high-risk and low-risk gestational trophoblastic disease. Khazaeli MB, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):444-9

Don't ignore a positive pregnancy test. Smith DB, et al. **BMJ** 1988 Oct 29;297(6656):1119-20

In vivo release of beta human chorionic gonadotropin by luteinizing hormone releasing hormone stimulation and its clinical application as a remission criterion in patients with gestational trophoblastic disease. Kim SJ, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):193-8

Metastatic adnexal trophoblastic neoplasm: contribution of MR imaging. Mirich DR, et al. **J Comput Assist Tomogr** 1988 Nov-Dec;12(6):1061-7

Antibody imaging to locate a placental site trophoblastic tumour following a complete hydatidiform mole. Heyderman RS, et al. **J R Soc Med** 1989 May;82(5):299-300

Human chorionic gonadotropin assays and their uses. Tyrey L. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):457-75 (76 ref.)

[Gestational trophoblastic diseases in women aged 50 or over] Zhang SZ. **Chung Hua Fu Chan Ko Tsa Chih** 1988 May; 23(3):159-61, 189 (Eng. Abstr.) **(Chi)**

[HCG and SP-1 as markers in trophoblast tumors. The HCG/SP-1 ratio] Than GN, et al. **Gynakol Rundsch** 1988; 28(3):157-65 (Eng. Abstr.) **(Ger)**

[Up-to-date diagnosis and therapy of trophoblastic diseases] Gáti I. **Orv Hetil** 1988 Sep 18;129(38):2011-6 (41 ref.) (Eng. Abstr.) **(Hun)**

DRUG THERAPY

Results of low-dose methotrexate treatment of persistent gestational trophoblastic disease in Sheffield 1980-1987. Dorreen MS, et al. **Acta Oncol** 1988;27(5):551-6

The role of low-dose methotrexate and folinic acid in gestational trophoblastic tumours (GTT). Bagshawe KD, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):795-802

Evaluation of management of gestational trophoblastic tumor in National Taiwan University Hospital. Ouyang PC. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1544-52

Treatment of nonmetastatic gestational trophoblastic disease with sequential intramuscular and oral methotrexate. Barter JF, et al. **Gynecol Oncol** 1989 Apr;33(1):82-4

EMA/CO regimen in high-risk gestational trophoblastic tumor (GTT). Bolis G, et al. **Gynecol Oncol** 1988 Nov; 31(3):439-44

High risk malignant gestational trophoblastic disease: experience with triple chemotherapy (MAC) in Third World circumstances. du Toit JP. **Gynecol Oncol** 1989 Mar; 32(3):310-3

Successful salvage therapy of resistant gestational trophoblastic disease with etoposide, methotrexate, dactinomycin, vincristine, and cyclophosphamide. Gallion HH, et al. **Gynecol Oncol** 1989 Jul;34(1):98-100

High-risk metastatic gestational trophoblastic disease: further stratification into two clinical entities. Gordon AN, et al. **Gynecol Oncol** 1989 Jul;34(1):54-6

Vinblastine, cisplatin and bleomycin as salvage therapy for refractory high-risk metastatic gestational trophoblastic disease. DuBeshter B, et al. **J Reprod Med** 1989 Mar; 34(3):189-92

Alternating methotrexate and dactinomycin in nonmetastatic gestational trophoblastic disease. Rose PG, et al. **J Surg Oncol** 1989 Jul;41(3):148-52

Low-risk metastatic gestational trophoblastic disease. Morrow CP, et al. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):521-9 (24 ref.)

ENZYMOLOGY

Estrogen synthetase (aromatase) in cultured human term placental cells and neoplastic human trophoblast. Bellino FL, et al. **Steroids** 1987 Jul-Sep;50(1-3):73-87

EPIDEMIOLOGY

Clinical experience with trophoblastic diseases in Nepal. Soma H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1577-81

Trophoblastic disease: 20 years' experience. Remy JC, et al. **Int J Gynaecol Obstet** 1989 Apr;28(4):355-60

The occurrence of trophoblastic disease in Western Samoa. Paksoy N, et al. **N Z Med J** 1989 Apr 12;102(865):162-3

Epidemiologic study of gestational trophoblastic diseases in Saudi Arabia. Chattopadhyay SK, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):393-8

[New trends in trophoblastic disease] Obata N. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1582-7 (Eng. Abstr.) **(Jpn)**

[Statistical analysis of trophoblastic disease in Kanagawa prefecture] Iwata Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):48-54 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Gestational trophoblastic disease: a case-control study from the People's Republic of China. Brinton LA, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):121-7

Hormonal contraception and trophoblastic sequelae after hydatidiform mole (a Gynecologic Oncology Group Study). Curry SL, et al. **Am J Obstet Gynecol** 1989 Apr; 160(4):805-9; discussion 809-11

Persistent ectopic syndrome. Cairns JD, et al. **Can J Surg** 1989 Sep;32(5):387-9

GENETICS

DNA content as a prognostic index in gestational trophoblastic neoplasia. Martin DA, et al. **Gynecol Oncol** 1989 Sep;34(3):383-8

[The expression of c-myc, c-fms, c-sis oncogenes in the

trophoblast of normal pregnancy and trophoblastic disease] Yokoyama S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1867–74 (Eng. Abstr.) (Jpn)

HISTORY

Gestational trophoblastic neoplasms: history of the current understanding. Hammond CB. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):435–41

IMMUNOLOGY

[HLA-DP and HLA-DQ antigen expression on trophoblasts of normal human pregnancy and trophoblastic diseases] Sasagawa M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Oct; 40(10):1525–30 (Eng. Abstr.) (Jpn)

METABOLISM

O-glycosylation of the alpha-subunit does not limit the assembly of chorionic gonadotropin alpha beta dimer in human malignant and nonmalignant trophoblast cells. Peters BP, et al. **Endocrinology** 1989 Apr;124(4):1602–12

[Structural changes in human chorionic gonadotropin in trophoblastic diseases] Nishimura R, et al. **Rinsho Byori** 1988 Nov;Spec No 79:78–88 (Jpn)

PATHOLOGY

Pelvic trophoblastic implants after laparoscopic removal of a tubal pregnancy. Thatcher SS, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):514–5

High-risk metastatic trophoblastic disease. Bagshawe KD. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):531–43 (29 ref.)

Classification and staging of gestational trophoblastic tumors. Miller DS, et al. **Obstet Gynecol Clin North Am** 1988 Sep; 15(3):477–90 (36 ref.)

Trophoblastic neoplasms: occult disease. Pattillo RA. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):577–85 (13 ref.)

Nonmetastatic gestational trophoblastic disease. Soper JT, et al. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):505–19 (42 ref.)

[Trophoblastic disease: study and clinical review of 107 cases] Garozzo G, et al. **G Ital Oncol** 1987 Apr–Sep;7(2–3):119–22 (Eng. Abstr.) (Ita)

[Placental-site trophoblastic tumor of the uterus—a case report] Tsujimura T, et al. **Gan No Rinsho** 1988 Nov; 34(14):2002–6 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Reproductive performance of patients with gestational trophoblastic disease in Hong Kong. Ngan HY, et al. **Acta Obstet Gynecol Scand** 1988;67(1):11–4

Spectrum of thyroid function abnormalities in gestational trophoblastic neoplasia. Desai RK, et al. **Clin Endocrinol (Oxf)** 1988 Dec;29(6):583–92

RADIOGRAPHY

Evaluation of gestational trophoblastic neoplasia using the computerized tomography. Benitez IB, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1568–76

SECONDARY

A prospective randomized comparison of methotrexate, dactinomycin, and chlorambucil versus methotrexate, dactinomycin, cyclophosphamide, doxorubicin, melphalan, hydroxyurea, and vincristine in "poor prognosis" metastatic gestational trophoblastic disease: a Gynecologic Oncology Group study. Curry SL, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):357–62

Renal metastases of gestational trophoblastic disease: a report of eight cases. Soper JT, et al. **Obstet Gynecol** 1988 Nov; 72(5):796–8

SURGERY

Integration of surgery and other techniques in the management of trophoblastic malignancy. Jones WB, et al. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):565–76 (51 ref.)

THERAPY

Multidisciplinary approach in the management of gestational trophoblastic tumor (GTT). Kim SJ, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1561–7

The treatment of malignant trophoblastic tumors. Wang SL, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1553–60

Asian approaches in the treatment of trophoblastic disease. Teoh ES. **Obstet Gynecol Clin North Am** 1988 Sep; 15(3):545–64 (69 ref.)

[Therapeutic and preventive care of trophoblastic disease in Czechoslovakia] Zavadil M, et al. **Cas Lek Cesk** 1989 May 5;128(19):586–9 (Eng. Abstr.) (Cze)

ULTRASTRUCTURE

Trophoblastic tumors: ultrastructural comparison of choriocarcinoma and placental-site trophoblastic tumor. Duncan DA, et al. **Hum Pathol** 1989 Apr;20(4):370–81

Chorangiocarcinoma: an unusual tumour of the placenta. The missing link? Jauniaux E, et al. **Placenta** 1988 Nov–Dec; 9(6):607–13

TROPICAL CLIMATE

Formulation of polyethylene glycol ointment bases suitable for tropical and subtropical climates. I. Hadi IA, et al. **Acta Pharm Hung** 1989 May;59(3):137–42

Formulation of Polyethylene Glycol ointment bases suitable for tropical and subtropical climates. II. Ugriné Hunyadvári E, et al. **Acta Pharm Hung** 1989 Jul;59(4):157–65

Evaluation of iron status in tropical populations: choice of epidemiological indicators. Hercberg S, et al. **Ann Trop Paediatr** 1988 Sep;8(3):196–7

In situ survival of Vibrio cholerae and Escherichia coli in a tropical rain forest watershed. Pérez-Rosas N, et al. **Appl Environ Microbiol** 1989 Feb;55(2):495–9

Shelf-life of tooth-coloured restorative materials in Papua New Guinea. Stewart BL, et al. **Aust Dent J** 1989 Jun; 34(3):254–8

Abundance and survival of infective larvae of the cattle nematodes Cooperia punctata, Haemonchus placei and Oesophagostomum radiatum from faecal pats in a wet tropical climate. Fabiyi JP, et al. **Aust Vet J** 1988 Aug; 65(8):229–31

Analysis of the egg production pattern in a tropical wet climate: influences of the phase of production and the estimated period of oviposition. Essien AI. **Beitr Trop Landwirtsch Veterinarmed** 1989;27(1):101–7

Calenture—a psychopathological syndrome of a long-lasting sea voyage. Szeluga J, et al. **Bull Inst Marit Trop Med Gdynia** 1988;39(1–2):45–9

Factors affecting the survival of pathogenic bacteria in subtropical river water. Chao WL, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 May;21(2):85–92

Seasonal changes in circadian rhythms of body temperatures in humans living in a dry tropical climate. Buguet A, et al. **Eur J Appl Physiol** 1988;58(3):334–9

Physiological and metabolic responses to work in heat with graded hypohydration in tropical subjects. Pichan G, et al. **Eur J Appl Physiol** 1988;58(1–2):214–8

Traveller's diarrhea among Austrian tourists in warm climate countries: I. Epidemiology. Kollaritsch H. **Eur J Epidemiol** 1989 Mar;5(1):74–81

Effect of fibre supplementation and activated charcoal on faecal parameters and transits in the tropics. Kurpad AV, et al. **Indian J Gastroenterol** 1988 Oct;7(4):199–201

Laboratory evaluation of controlled-release repellent formulations on human volunteers under three climatic regimens. Gupta RK, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):52–5

The effect of tropical ambient temperature on growth and metabolism in pigs. Christon R. **J Anim Sci** 1988 Dec; 66(12):3112–23

Use of doubly labeled water technique in soldiers training for jungle warfare. Forbes-Ewan CH, et al. **J Appl Physiol** 1989 Jul;67(1):14–8

Some aspects of tropical endocrine and metabolic pediatrics. Wong HB. **J Singapore Paediatr Soc** 1988;30(1–2):31–45 (41 ref.)

Choosing and using a microcomputer for tropical epidemiology. I. Preliminary considerations. Byass P. **J Trop Med Hyg** 1989 Aug;92(4):282–7

Osmotic fragility of erythrocytes of two breeds of domestic fowl in the warm humid tropics. Oyewale JO, et al. **Lab Anim** 1988 Jul;22(3):250–4

Personal risk-factor chart for cutaneous melanoma. MacKie RM, et al. **Lancet** 1989 Aug 26;2(8661):487–90

Tropical rain forests: potential source of new drugs? Soejarto DD, et al. **Perspect Biol Med** 1989 Winter;32(2):244–56 (54 ref.)

Chemistry of tropical marine systems. Proceedings of the second international conference. Rio de Janeiro, Brazil, 1–5 September 1987. **Sci Total Environ** 1988 Sep 1; 75(2–3):151–354

Larval ecology of bovine strongylid worms in tropical soils. I. In vitro studies on the longevity of infective strongylid larvae in different soil types. Lyaku JR, et al. **Trop Anim Health Prod** 1988 Aug;20(3):190–2

Use of a portable glucose meter in a Nigerian diabetic clinic. Udezue EO, et al. **Trop Geogr Med** 1989 Apr;41(2):141–5

Energy expenditure of preschool children in a subtropical area. Ho ZC, et al. **World Rev Nutr Diet** 1988;57:75–94 (20 ref.)

[Application of solar disinfection to drinking water in tropical regions] De Lorenzi G, et al. **Bull Soc Pathol Exot Filiales** 1989;82(2):255–9 (Eng. Abstr.) (Fre)

[Diagnosis of hyper-eosinophilic blood on return to the tropics (apropos of 32 cases)] Imbert P, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):283–5 (Fre)

[Sleeping sickness in German travelers to the tropics] Löscher T, et al. **Dtsch Med Wochenschr** 1989 Aug 4; 114(31–32):1203–6 (Eng. Abstr.) (Ger)

[The value of medical laboratory examinations of subjects from tropical countries] Năstoiu I, et al. **Rev Ig [Bacteriol]** 1988 Apr–Jun;33(2):165–70 (Eng. Abstr.) (Rum)

[Effect of relative air humidity on the results of sanitaro-chemical studies of polymer materials] Antonenkov AG, et al. **Gig Sanit** 1989 May;(5):90 (Rus)

[Functional state of the cardiovascular system in patients with post-infarction cardiosclerosis and the hypokinetic type of blood circulation in a tropical climate] Zakhar'iants RL. **Kardiologiia** 1989 May;29(5):96–7 (Rus)

[Experience with the mass use of an oral rehydration method in acute intestinal infections in children in a hot climate] Melent'ev IA. **Pediatriia** 1988;(10):73–6 (Rus)

[Epidemiology and prevention of malaria in a mountain desert locale with a hot climate] Perepelkin VS, et al. **Voen Med Zh** 1988 Jun;(6):39–41 (Rus)

[Characteristics of the course of Reiter's disease in a hot, humid climate] Volosevich AN, et al. **Voen Med Zh** 1988 Sep;(9):30–2 (Rus)

TROPICAL MEDICINE

Socio-medical aspects of a physician's work in the tropics. Tomaszewski R. **Bull Inst Marit Trop Med Gdynia** 1987; 38(3–4):210–5

Tropical medicine and the acute abdomen. Hoffman SH. **Emerg Med Clin North Am** 1989 Aug;7(3):591–609 (50 ref.)

Medical geography and travel medicine. Votrubec C, et al. **Geogr Med** 1989;19:207–12

Investigating interactions between HIV infection and tropical diseases. Smith PG, et al. **Int J Epidemiol** 1988 Dec; 17(4):705–7

Blending with surroundings, 'NAMRU' aids hosts while studying disease threats to US military [news] Raymond C. **JAMA** 1989 May 19;261(19):2798, 2801

Tropical diseases and HIV infection; UNDF-World Bank-WHO, Kenya, 1987 [news] **Lepr Rev** 1988 Sep; 59(3):277

Epidemiology and tropical public health: current and future contributions with particular emphasis on the role of the London School of Hygiene and Tropical Medicine. Feachem RG. **Trans R Soc Trop Med Hyg** 1988;82(5):790–8

Britain's role and responsibility for health in the tropics. Patten C. **Trans R Soc Trop Med Hyg** 1988;82(5):660–4

Epidemiological study designs appropriate for investigating interactions between HIV infection and tropical diseases. Smith PG, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):753–7

New brooms [editorial] Barker A. **Trop Doct** 1989 Jan; 19(1):1–2

XIIth International Congress for Tropical Medicine and Malaria. Amsterdam, September 18–23, 1988. Abstracts. **Trop Geogr Med** 1988 Jul;40(3):S1–60

Viral infections and cancer in the tropics. Epstein MA. **Trop Geogr Med** 1988 Jul;40(3):S52–60 (64 ref.)

[Institut Pasteur de Madagascar: Annual report 1986] **Arch Inst Pasteur Madagascar** 1987;55(2):1–219 (Fre)

[32 cases of recurrent localized edema on return from the Tropics] Bourgeade A, et al. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):21–8 (Eng. Abstr.) (Fre)

[Tropical diabetes (editorial)] Cuisinier Raynal J. **Presse Med** 1989 Apr 8;18(14):703–5 (Fre)

[Prevention, diagnosis and therapy of significant important tropical diseases] Kupferschmidt HG. **Z Arztl Fortbild (Jena)** 1988;82(12):591–3 (0 ref.) (Ger)

[Endemic and tropical helminthiases] Schubert S, et al. **Z Arztl Fortbild (Jena)** 1988;82(12):579–85 (49 ref.) (Ger)

[Cutaneous leishmaniasis in the light of personal observations with regard to its diagnosis and treatment in tropical countries] Kotłowski A. **Wiad Parazytol** 1988; 34(4–6):509–14 (Pol)

[Value of immunoserologic tests in the diagnosis of parasitic invasions in persons returning from tropical countries] Myjak P. **Wiad Parazytol** 1988;34(4–6):665–9 (Pol)

[Patients returning from tropical countries] Pawłowski Z. **Wiad Parazytol** 1988;34(4–6):637–9 (Pol)

[Tropical pyomyositis, necrotic fasciitis and Fournier's gangrene] Ryndin VD, et al. **Vestn Khir** 1988 May; 140(5):48–52 (Rus)

[International cooperation in the development of the Instituto de Medicina Tropical "Pedro Kourí"] Cantelar de Francisco N, et al. **Rev Cubana Med Trop** 1988 May-Aug; 40(2):147–50 (Eng. Abstr.) (Spa)

[Malacologic studies at the Instituto de Medicina Tropical "Pedro Kourí"] Perera G, et al. **Rev Cubana Med Trop** 1988 May-Aug;40(2):103–8 (Eng. Abstr.) (Spa)

EDUCATION

Geographic medicine: a new movement within international health. Olds GR. **Acad Med** 1989 Apr;64(4):190–2

[Staff training in tropical medicine] Cantelar de Francisco N, et al. **Rev Cubana Med Trop** 1988 May-Aug; 40(2):139–46 (Eng. Abstr.) (Spa)

HISTORY

Sir Ronald Ross vs. Sir Patrick Manson: a matter of libel. Chernin E. **J Hist Med Allied Sci** 1988 Jul;43(3):262–74

[Ephemerides 1889–1939–1989] Dodin A. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):9–12 (Fre)

[Further data on the development of tropical medicine in Hungary (letter)] Ringelhann B. **Orv Hetil** 1989 Jul 23; 130(30):1633–4 (Hun)

[The development of tropical medicine in Hungary in the past 25 years] Várnai F. **Orv Hetil** 1988 Nov 13; 129(46):2449–55 (40 ref.) (Eng. Abstr.) (Hun)

[25th anniversary of the Parasitic and Tropical Disease Clinic, Medical Academy, in Poznań] Jara Z. **Wiad Parazytol** 1988; 34(3):366–70 (Pol)

[Organization, activities and scientific problems of the Department of Tropical Parasitology of the Institute of Naval and Tropical Medicine in Gdynia] Wegner Z. **Wiad Parazytol** 1988;34(3):358–66 (Pol)

[Balance sheet for the 50th anniversary of the Instituto de Medicina Tropical "Pedro Kouri"] Kouri G, et al. **Rev Cubana Med Trop** 1988 May–Aug;40(2):11–28 (Spa)

[Inauguration of the commemorative year of the 50th anniversary of the Instituto de Medicina Tropical] Molinert HT. **Rev Cubana Med Trop** 1988 May–Aug;40(2):7–9 (Spa)

METHODS

[Medical evaluation of travelers returning from the tropics: which diagnostic studies and for whom?] Raeber PA, et al. **Schweiz Rundsch Med Prax** 1989 Jun 20;78(25):710–4 (31 ref.) (Eng. Abstr.) (Fre)

STANDARDS

[Tropical parasitic diseases and the problems of tropical medicine in Poland] Dolmierski R, et al. **Wiad Parazytol** 1988;34(4–6):641–7 (Pol)

TRENDS

Concerns about the future of medical entomology in tropical medicine research [editorial] Reeves WC. **Am J Trop Med Hyg** 1989 Jun;40(6):569–70

[Pediatric research in the tropics: pros and cons] Ehrich JH, et al. **Monatsschr Kinderheilkd** 1988 Jul;136(7):348–51 (Eng. Abstr.) (Ger)

TROPICAL SPASTIC PARAPARESIS see **PARAPARESIS, TROPICAL SPASTIC**

TROPICAMIDE see under **PYRIDINES**

TROPOELASTIN see under **ELASTIN**

TROPOLONE see under **CYCLOHEPTANES**

TROPOMYOSIN

Amino acid sequence of a 15 kilodalton actin-binding fragment of turkey gizzard caldesmon: similarity with dystrophin, tropomyosin and the tropomyosin-binding region of troponin T. Leszyk J, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):210–6

Comparison of the structure and dynamics of chicken gizzard and rabbit cardiac tropomyosins: 1H NMR spectroscopy and measurement of amide hydrogen exchange rates. Sanders C, et al. **Biochemistry** 1988 Sep 6;27(18):7000–8

Alpha-helix-to-random-coil transitions of two-chain coiled coils: experiments on the thermal denaturation of beta beta tropomyosin cross-linked selectively at C-190. Bracken WC, et al. **Biopolymers** 1988 Aug;27(8):1223–37

The effect of sequence-specific interactions on the stability of the alpha-helix in synthetic tropomyosin-analogue peptides. Holtzer A. **Biopolymers** 1989 Apr;28(4):901–5

The CD of two-chain coiled coils: experiments on tropomyosin and tropomyosin segments in the tyrosine/disulfide spectral region. Holtzer ME, et al. **Biopolymers** 1989 Sep;28(9):1597–612

Flexibility of smooth and skeletal tropomyosins. Swenson CA, et al. **Biopolymers** 1989 May;28(5):955–63

Shape of the myosin head in the rigor complex. Three-dimensional image reconstruction of the actin-tropomyosin-heavy meromyosin complex. Kajiyama H. **J Mol Biol** 1988 Dec 5;204(3):639–52

[Effect of troponin and troponin T1 on the iodination of tyrosyl residues of alpha-tropomyosin] Suenaga N. **Fukuoka Igaku Zasshi** 1988 Jul;79(7):493–6 (Eng. Abstr.) (Jpn)

ANALYSIS

Fluorescence from pyrene-labeled native and reconstituted chicken gizzard tropomyosins. Burtnick LD, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):622–7

A novel host-protective antigen from Trichostrongylus colubriformis. O'Donnell IJ, et al. **Int J Parasitol** 1989 May; 19(3):327–35

Localization of paratropomyosin in skeletal muscle myofibrils and its translocation during postmortem storage of muscles. Hattori A, et al. **J Biochem (Tokyo)** 1988 May;103(5):809–14

Tropomyosin isoforms in developing chicken gizzard smooth muscle. Hosoya M, et al. **J Biochem (Tokyo)** 1989 May; 105(5):712–7

Fluorescence titration and fluorescence stopped-flow studies of skeletal muscle troponin-nonpolymerizable tropomyosin complex. Iio T, et al. **J Biochem (Tokyo)** 1988 Aug; 104(2):306–11

Structure of tropomyosin-troponin T cocrystals. Carr HJ, et al. **J Muscle Res Cell Motil** 1988 Oct;9(5):384–92

An X-ray diffraction study of alpha-tropomyosin magnesium tactoid. Yagi N. **J Muscle Res Cell Motil** 1988 Oct; 9(5):393–402

[The role of the N-terminal fragment of troponin T in the interaction with troponin-tropomyosin complex components of the heart] Verin AD, et al. **Biokhimiia** 1988 Aug;53(8):1235–46 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Suppression of synthesis of tropomyosin isoform 2 in metastatic v-Ha-ras-transformed NIH3T3 cells. Takenaga K, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1111–6

Thyroid hormone induces synthesis and accumulation of tropomyosin and myosin heavy chain in limb buds of premetamorphic tadpoles. Dhanarajan ZC, et al. **Biochem Cell Biol** 1988 Jul;66(7):724–34

Translational regulation of the differential synthesis of nonmuscle tropomyosin isoforms. Hendricks MB. **Exp Cell Res** 1989 Feb;180(2):546–50

Alternative splicing of tropomyosin pre-mRNAs in vitro and in vivo. Helfman DM, et al. **Genes Dev** 1988 Dec; 2(12a):1627–38

GENETICS

The tropomyosin mRNAs of mouse striated muscles: molecular cloning of beta-tropomyosin. McInnes C, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):117–22

Structural analysis of human skeletal beta-tropomyosin produced in E. coli. Ferraz C, et al. **Biochimie** 1989 Mar; 71(3):307–12

Disruption of the single tropomyosin gene in yeast results in the disappearance of actin cables from the cytoskeleton. Liu HP, et al. **Cell** 1989 Apr 21;57(2):233–42

Mutually exclusive splicing of alpha-tropomyosin exons enforced by an unusual lariat branch point location: implications for constitutive splicing. Smith CW, et al. **Cell** 1989 Mar 10;56(5):749–58

Tissue-specific transcriptional control of alpha- and beta-tropomyosins in chicken muscle development. Meinnel T, et al. **Dev Biol** 1989 Feb;131(2):430–8

Coordinate induction of fibronectin, fibronectin receptor, tropomyosin, and actin genes in serum-stimulated fibroblasts. Ryseck RP, et al. **Exp Cell Res** 1989 Feb; 180(2):537–45

A single gene codes for the beta subunits of smooth and skeletal muscle tropomyosin in the chicken. Libri D, et al. **J Biol Chem** 1989 Feb 15;264(5):2935–44

Paramyosin gene (unc-15) of Caenorhabditis elegans. Molecular cloning, nucleotide sequence and models for thick filament structure. Kagawa H, et al. **J Mol Biol** 1989 May 20;207(2):311–33

A lambda gt11 cDNA recombinant that encodes Dirofilaria immitis paramyosin. Grandea AG 3d, et al. **Mol Biochem Parasitol** 1989 Jun 1;35(1):31–41

Isolation and characterization of related cDNA clones encoding skeletal muscle beta-tropomyosin and a low-molecular-weight nonmuscle tropomyosin isoform. Bradac JA, et al. **Mol Cell Biol** 1989 Jan;9(1):185–92

The Drosophila melanogaster tropomyosin II gene produces multiple proteins by use of alternative tissue-specific promoters and alternative splicing. Hanke PD, et al. **Mol Cell Biol** 1988 Sep;8(9):3591–602

Isolation and characterization of a cDNA that encodes mouse fibroblast tropomyosin isoform 2. Takenaga K, et al. **Mol Cell Biol** 1988 Dec;8(12):5561–5

Differential expression of a tropomyosin isoform in low- and high-metastatic Lewis lung carcinoma cells. Takenaga K, et al. **Mol Cell Biol** 1988 Sep;8(9):3934–7

Branch point selection in alternative splicing of tropomyosin pre-mRNAs. Helfman DM, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5633–50

Chick alpha tropomyosin gene contains three sets of mutually exclusive alternatively spliced exons. Lemonnier M, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5400

A subfragment of the beta tropomyosin gene is alternatively spliced when transfected into differentiating muscle cells. Libri D, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6449–62

Avian tropomyosin gene expression. Lindquester GJ, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2099–118

Antigenic sites of the muscle protein, paramyosin, in Caenorhabditis elegans determined with exon-expression plasmid. Kagawa H, et al. **Nucleic Acids Symp Ser** 1988; (19):81–4

Activation of the trk oncogene by alternatively spliced muscle and non-muscle tropomyosin sequences. Barnes D, et al. **Oncogene** 1989 Feb;4(2):259–62

[Regulation of the expression of alpha and beta tropomyosin genes during development of the pectoral muscle in the chicken] Meinnel T, et al. **Reprod Nutr Dev** 1988; 28(3B):715–20 (Eng. Abstr.) (Fre)

IMMUNOLOGY

Induction of resistance to Schistosoma mansoni infection in mice by purified parasite paramyosin. Flanigan TP, et al. **J Clin Invest** 1989 Mar;83(3):1010–4

Tropomyosin shares immunologic epitopes with group A streptococcal M proteins. Fenderson PG, et al. **J Immunol** 1989 Apr 1;142(7):2475–81

ISOLATION & PURIFICATION

Tropomyosin in the sea urchin egg cortex. Maekawa S, et al. **Eur J Biochem** 1989 Jan 2;178(3):657–62

Purification of tropomyosin from Saccharomyces cerevisiae and identification of related proteins in Schizosaccharomyces and Physarum. Liu HP, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):90–3

METABOLISM

35 kDa fragment of h-caldesmon conserves two consensus sequences of the tropomyosin-binding domain in troponin T. Hayashi K, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):38–45

Characteristics of the myosin and tropomyosin binding regions of the smooth muscle caldesmon. Katayama E, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1316–22

Effects of deletion of tropomyosin overlap on regulated actomyosin subfragment 1 ATPase. Heeley DH, et al. **Biochem J** 1989 Mar 15;258(3):831–6

In-register homodimers of smooth muscle tropomyosin. Graceffa P. **Biochemistry** 1989 Feb 7;28(3):1282–7

Interaction between caldesmon and tropomyosin in the presence and absence of smooth muscle actin. Horiuchi KY, et al. **Biochemistry** 1988 Nov 1;27(22):8388–93

Fluorescence properties of acrylodan-labeled tropomyosin and tropomyosin-actin: evidence for myosin subfragment 1 induced changes in geometry between tropomyosin and actin. Lehrer SS, et al. **Biochemistry** 1988 Aug 9; 27(16):5899–906

Interaction of smooth muscle tropomyosin and smooth muscle myosin. Effect on the properties of myosin. Merkel L, et al. **Biochemistry** 1989 Mar 7;28(5):2215–20

Phosphorylation of alpha alpha- and beta beta-tropomyosin and synthetic peptide analogues. Watson MH, et al. **Biochemistry** 1988 Jun 14;27(12):4506–12

Rate of binding of tropomyosin to actin filaments. Wegner A, et al. **Biochemistry** 1988 Sep 6;27(18):6994–7000

Comparison of Ca2+-dependent effects of caldesmon-tropomyosin-calmodulin and troponin-tropomyosin complexes on the structure of F-actin in ghost fibers and its interaction with myosin heads. Dobrowolski Z, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):140–50

Interaction of tropomyosin with F-actin-heavy meromyosin complex. Szczesna D, et al. **Biol Chem Hoppe Seyler** 1989 May;370(5):399–407

Ca2+-dependent regulation of the dynamic polarity of F-actin under the influence of tropomyosin and troponin. Mihashi K, et al. **Biophys Chem** 1989 May;33(2):195–204

Mg2+-paracrystal formation of tropomyosin as a condensation phenomenon. Effects of pH, salt, temperature, and troponin binding. Ishii Y, et al. **Biophys J** 1989 Jul;56(1):107–14

Electric birefringence studies of rabbit skeletal tropomyosin. Swenson CA, et al. **Biopolymers** 1988 Jul;27(7):1127–41

Expression of alpha and beta tropomyosin subunits during early myogenesis in somites and limb buds of chick embryos. Delezoide AL, et al. **Cell Tissue Res** 1989 Jun; 256(3):631–4

Interaction of iodoacetamidofluorescein-labelled tropomyosin with deoxyribonuclease I. Burtnick LD, et al. **FEBS Lett** 1989 Feb 27;244(2):319–22

Immunocytochemical localization of myosin, tropomyosin and actin in vestibular hair cells of human fetuses and cats. Sans A, et al. **Hear Res** 1989 Jun 15;40(1–2):117–25

Interaction between chicken gizzard caldesmon and tropomyosin. Fujii T, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):734–7

Fluorescence quenching studies of fluorescein attached to Lys-61 or Cys-374 in actin: effects of polymerization, myosin subfragment-1 binding, and tropomyosin-troponin binding. Miki M, et al. **J Biochem (Tokyo)** 1988 Aug; 104(2):232–5

Effect of phosphorylation on the interaction and functional properties of rabbit striated muscle alpha alpha-tropomyosin. Heeley DH, et al. **J Biol Chem** 1989 Feb 15;264(5):2424–30

Annealing of gelsolin-severed actin fragments by tropomyosin in the presence of Ca2+. Potentiation of the annealing process by caldesmon. Ishikawa R, et al. **J Biol Chem** 1989 Oct 5;264(28):16764–70

Differential modulation of actin-severing activity of gelsolin by multiple isoforms of cultured rat cell tropomyosin. Potentiation of protective ability of tropomyosins by 83-kDa nonmuscle caldesmon. Ishikawa R, et al. **J Biol Chem** 1989 May 5;264(13):7490–7

Removal of tropomyosin overlap modifies cooperative binding of myosin S-1 to reconstituted thin filaments of rabbit striated muscle. Pan BS, et al. **J Biol Chem** 1989 May 25;264(15):8495–8

Expression of nuclear lamin A and muscle-specific proteins in differentiating muscle cells in ovo and in vitro. Lourim D, et al. **J Cell Biol** 1989 Aug;109(2):495–504

Calcium-triggered movement of regulated actin in vitro. A fluorescence microscopy study. Honda H, et al. **J Mol Biol** 1989 Feb 20;205(4):677–83

Phosphorylation of the N-terminal region of Caenorhabditis elegans paramyosin. Schriefer LA, et al. **J Mol Biol** 1989 May 20;207(2):451–4

Analysis of actin and tropomyosin in hearts of cardiac mutant axolotls by two-dimensional gel electrophoresis, western blots, and immunofluorescent microscopy. Starr CM, et al. **J Morphol** 1989 Jul;201(1):1–10

Disordered metabolism of microfilament proteins, tropomyosin and actin, in mouse mammary epithelial cells expressing the Ha-ras oncogene. Bhattacharya B, et al.

Oncogene Res 1988;3(1):51–65

PHARMACOLOGY

Tropomyosin inhibits the rate of actin polymerization by stabilizing actin filaments. Hitchcock-DeGregori SE, et al. Biochemistry 1988 Dec 27;27(26):9182–5

Inhibitory effect of squid (Todarodes pacificus) paramyosin on actomyosin ATPase and on superprecipitation. Konno K, et al. Comp Biochem Physiol [B] 1988;90(4):795–801

Effect of paratropomyosin on the increase in sarcomere length of rigor-shortened skeletal muscles. Yamanoue M, et al. J Biochem (Tokyo) 1988 May;103(5):843–7

The binding of caldesmon to actin and its effect on the ATPase activity of soluble myosin subfragments in the presence and absence of tropomyosin. Velaz L, et al. J Biol Chem 1989 Jun 5;264(16):9602–10

[Tropomyosin and myosin subfragment 1 induce in thin muscle fiber filaments differing conformational changes in the C-terminal portion of the polypeptide chain of actin] Borovikov IuS, et al. Tsitologiia 1988 Aug;30(8):1014–7 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Regulation of tropomyosin expression in the maturing ovary and in primary granulosa cell cultures. Ben-Ze'ev A, et al. Dev Biol 1989 Sep;135(1):191–201

Actin stress fiber disruption and tropomyosin isoform switching in normal thyroid epithelial cells stimulated by thyrotropin and phorbol esters. Roger PP, et al. Exp Cell Res 1989 May;182(1):1–13

Probing the role of nonmuscle tropomyosin isoforms in intracellular granule movement by microinjection of monoclonal antibodies. Hegmann TE, et al. J Cell Biol 1989 Sep;109(3):1141–52

[Tropomyosin from smooth and skeletal muscles initiates various conformational changes in skeletal F-actin] Borovikov IuS, et al. Biokhimiia 1988 Nov;53(11):1817–20 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

A novel troponin T-like protein (calponin) in vascular smooth muscle: interaction with tropomyosin paracrystals. Takahashi K, et al. J Hypertens Suppl 1988 Dec;6(4):S40–3

TROPONIN

Amino acid sequence of a 15 kilodalton actin-binding fragment of turkey gizzard caldesmon: similarity with dystrophin, tropomyosin and the tropomyosin-binding region of troponin T. Leszyk J, et al. Biochem Biophys Res Commun 1989 Apr 14;160(1):210–6

N-terminal amino acid sequences of three functionally different troponin T isoforms from rabbit fast skeletal muscle. Briggs MM, et al. J Mol Biol 1989 Mar 5; 206(1):245–9

Refined crystal structure of troponin C from turkey skeletal muscle at 2.0 A resolution. Herzberg O, et al. J Mol Biol 1988 Oct 5;203(3):761–79

Photolysis of the single tryptophan residue of eel troponin C. Pigault C, et al. Photochem Photobiol 1988 Sep; 48(3):349–51

[Effect of troponin and troponin T1 on the iodination of tyrosyl residues of alpha-tropomyosin] Suenaga N. Fukuoka Igaku Zasshi 1988 Jul;79(7):493–6 (Eng. Abstr.) (Jpn)

ANALYSIS

Structural change of the troponin C molecule upon Ca2+ binding measured in solution by the X-ray scattering technique. Fujisawa T, et al. J Biochem (Tokyo) 1989 Mar; 105(3):377–83

Fluorescence titration and fluorescence stopped-flow studies of skeletal muscle troponin-nonpolymerizable tropomyosin complex. Iio T, et al. J Biochem (Tokyo) 1988 Aug; 104(2):306–11

Amino acid sequence of porcine cardiac muscle troponin C. Kobayashi T, et al. J Biochem (Tokyo) 1989 Jul;106(1):55–9

Amino acid sequence of horseshoe crab, Tachypleus tridentatus, striated muscle troponin C. Kobayashi T, et al. J Biochem (Tokyo) 1989 May;105(5):823–8

Biochemical characteristics of the Mr 52,000 component of Akazara scallop troponin. Ojima T, et al. J Biochem (Tokyo) 1988 Aug;104(2):207–10

Identification of troponin-I of crayfish myofibrils. Shinoda Y, et al. J Biochem (Tokyo) 1988 Apr;103(4):636–40

Conformational change of skeletal muscle troponin. Yamakita Y, et al. J Biochem (Tokyo) 1989 Jun;105(6):870–4

Amino acid sequence of crayfish troponin I. Kobayashi T, et al. J Biol Chem 1989 Jan 25;264(3):1551–7

Troponin I switching in the developing heart. Saggin L, et al. J Biol Chem 1989 Sep 25;264(27):16299–302

Tandem duplication and divergence of a sea urchin protein belonging to the troponin C superfamily. Xiang MQ, et al. J Biol Chem 1988 Nov 15;263(32):17173–80

Structure of tropomyosin-troponin T cocrystals. Carr HJ, et al. J Muscle Res Cell Motil 1988 Oct;9(5):384–92

Identification and distribution of the fast class of troponin T in the adult and developing avian skeletal muscle. Dhoot GK. J Muscle Res Cell Motil 1988 Oct;9(5):446–55

[The role of the N-terminal fragment of troponin T in the interaction with troponin-tropomyosin complex components of the heart] Verin AD, et al. Biokhimiia 1988 Aug;53(8):1235–46 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Coordinate changes in fast thin filament and Z-line protein expression in the early response to chronic stimulation. Schachat F, et al. J Biol Chem 1988 Oct 5;263(28):13975–8

GENETICS

35 kDa fragment of h-caldesmon conserves two consensus sequences of the tropomyosin-binding domain in troponin T. Hayashi K, et al. Biochem Biophys Res Commun 1989 May 30;161(1):38–45

Developmentally regulated slow troponin C messenger RNA in chicken skeletal and cardiac muscles. Berezowsky C, et al. Biochem Cell Biol 1988 Aug;66(8):880–8

Developmental and muscle-specific regulation of avian fast skeletal troponin T isoform expression by mRNA splicing. Bucher EA, et al. J Biol Chem 1989 Jul 25;264(21):12482–91

Isolation and characterization of cDNA clones encoding embryonic and adult isoforms of rat cardiac troponin T. Jin JP, et al. J Biol Chem 1989 Aug 25;264(24):14471–7

cDNA clone and expression analysis of rodent fast and slow skeletal muscle troponin I mRNAs. Koppe RI, et al. J Biol Chem 1989 Aug 25;264(24):14327–33

Structure and expression of the murine slow/cardiac troponin C gene. Parmacek MS, et al. J Biol Chem 1989 Aug 5; 264(22):13217–25

Sequences of complete cDNAs encoding four variants of chicken skeletal muscle troponin T. Smillie LB, et al. J Biol Chem 1988 Dec 15;263(35):18816–20

Expression of the troponin complex genes: transcriptional coactivation during myoblast differentiation and independent control in heart and skeletal muscles. Bucher EA, et al. Mol Cell Biol 1988 Oct;8(10):4134–42

Fast skeletal muscle-specific expression of a quail troponin I gene in transgenic mice. Hallauer PL, et al. Mol Cell Biol 1988 Dec;8(12):5072–9

An internal regulatory element controls troponin I gene expression. Yutzey KE, et al. Mol Cell Biol 1989 Apr; 9(4):1397–405

The molecular cloning of the complementary deoxyribonucleic acid for bovine vitamin D-dependent calcium-binding protein: structure of the full-length protein and evidence for homologies with other calcium-binding proteins of the troponin-C superfamily of proteins. Kumar R, et al. Mol Endocrinol 1989 Feb; 3(2):427–32

IMMUNOLOGY

Caldesmon150, caldesmon77 and skeletal muscle troponin T share a common antigenic determinant. Shirinsky VP, et al. FEBS Lett 1989 Jul 17;251(1-2):65–8

ISOLATION & PURIFICATION

Generation of multiple troponin T isoforms is a common feature of the muscles in various chordate animals. Ohshima S, et al. Comp Biochem Physiol [B] 1988;90(4):779–84

The multiplicity of troponin T isoforms. Distribution in normal rabbit muscles and effects of chronic stimulation. Härtner KT, et al. Eur J Biochem 1989 Jan 15;179(1):31–8

Removal of troponin C from natural actomyosin of rabbit skeletal muscle by CDTA. Shiraishi F, et al. Fukuoka Igaku Zasshi 1989 Apr;80(4):167–9

Separation of Akazara scallop and rabbit troponin components by a single-step chromatography on CM-Toyopearl. Ojima T, et al. J Biochem (Tokyo) 1988 Jul;104(1):9–11

[Various properties of cardiac troponin C tryptic peptides] Verin AD, et al. Biokhimiia 1988 Jul;53(7):1069–77 (Eng. Abstr.) (Rus)

METABOLISM

Subcellular distribution and immunocytochemical localization of protein kinase C in myocardium, and phosphorylation of troponin in isolated myocytes stimulated by isoproterenol or phorbol ester. Liu JD, et al. Biochem Biophys Res Commun 1989 Aug 15; 162(3):1105–10

Interaction of rabbit skeletal muscle troponin T and F-actin at physiological ionic strength. Heeley DH, et al. Biochemistry 1988 Oct 18;27(21):8227–32

Effects of Ca2+ and subunit interactions on surface accessibility of cysteine residues in cardiac troponin. Ingraham RH, et al. Biochemistry 1988 Aug 9; 27(16):5891–8

Distance distributions in proteins recovered by using frequency-domain fluorometry. Applications to troponin I and its complex with troponin C. Lakowicz JR, et al. Biochemistry 1988 Dec 27;27(26):9149–60

Cross-linking of rabbit skeletal muscle troponin subunits: labeling of cysteine-98 of troponin C with 4-maleimidobenzophenone and analysis of products formed in the binary complex with troponin T and the ternary complex with troponins I and T. Leszyk J, et al. Biochemistry 1988 Sep 6;27(18):6983–7

Ca2+ dependence of the distance between Cys-98 of troponin C and Cys-133 of troponin I in the ternary troponin complex. Resonance energy transfer measurements. Tao T, et al. Biochemistry 1989 Jul 11; 28(14):5902–8

Calmodulin and troponin C structures studied by Fourier transform infrared spectroscopy: effects of Ca2+ and Mg2+ binding. Trewhella J, et al. Biochemistry 1989 Feb 7;28(3):1294–301

Comparison of Ca2+-dependent effects of caldesmon-tropomyosin-calmodulin and troponin-tropomyosin complexes on the structure of F-actin in ghost fibers and its interaction with myosin heads. Dobrowolski Z, et al. Biochim Biophys Acta 1988 Sep 21;956(2):140–50

Structure-function relationships in cardiac troponin T. Raggi A, et al. Biochim Biophys Acta 1989 Jul 27;997(1-2):135–43

Ca2+-induced conformational changes in cardiac troponin C as measured by N-(1-pyrene)maleimide fluorescence. Verin AD, et al. Biochim Biophys Acta 1988 Sep 21; 956(2):197–208

Phosphorylation of phospholamban and troponin I in the ischemic and reperfused heart: attenuation and restoration of isoprenaline responsiveness. Bartel S, et al. Biomed Biochim Acta 1989;48(2-3):S108–13

Perhexiline increases calcium-activated force in skinned psoas fibres by raising calcium affinity of troponin-C. Morano I, et al. Biomed Biochim Acta 1989;48(5-6):S329–34

Conformational properties of Ca2+-binding segments of proteins from the troponin C superfamily. Boguta G, et al. Biophys Chem 1988 Aug;31(1-2):133–7

Ca2+-dependent regulation of the dynamic polarity of F-actin under the influence of tropomyosin and troponin. Mihashi K, et al. Biophys Chem 1989 May;33(2):195–204

Mg2+-paracrystal formation of tropomyosin as a condensation phenomenon. Effects of pH, salt, temperature, and troponin binding. Ishii Y, et al. Biophys J 1989 Jul;56(1):107–14

Developmental changes in the expression of rabbit left ventricular troponin T. Anderson PA, et al. Circ Res 1988 Oct;63(4):742–7

Coordinate accumulation of troponin subunits in chicken breast muscle. Nakamura M, et al. Dev Biol 1989 Apr; 132(2):389–97

Effect of acidosis on Ca2+ sensitivity of skinned cardiac muscle with troponin C exchange. Implications for myocardial ischemia. Gulati J, et al. FEBS Lett 1989 Mar 13;245(1-2):279–82

Calpain proteolysis of free and bound forms of calponin, a troponin T-like protein in smooth muscle. Tsunekawa S, et al. FEBS Lett 1989 Jul 3;250(2):493–6

Fluorescence quenching studies of fluorescein attached to Lys-61 or Cys-374 in actin: effects of polymerization, myosin subfragment-1 binding, and tropomyosin-troponin binding. Miki M, et al. J Biochem (Tokyo) 1988 Aug; 104(2):232–5

Ca2+ binding to skeletal muscle troponin C in skeletal and cardiac myofibrils. Morimoto S, et al. J Biochem (Tokyo) 1989 Mar;105(3):435–9

The sites on calmodulin cross-linked to myosin light chain kinase and troponin I with water-soluble carbodiimide. Yamamoto K, et al. J Biochem (Tokyo) 1988 Aug; 104(2):251–4

Crystallization of a synthetic analog of calcium-binding site III of rabbit skeletal troponin C. Delbaere LT, et al. J Biol Chem 1989 Jun 15;264(17):10261–3

Site-directed mutation of the trigger calcium-binding sites in cardiac troponin C. Putkey JA, et al. J Biol Chem 1989 Jul 25;264(21):12370–8

Troponin T switching in the developing rat heart. Saggin L, et al. J Biol Chem 1988 Dec 5;263(34):18488–92

Troponin of asynchronous flight muscle. Bullard B, et al. J Mol Biol 1988 Dec 5;204(3):621–37

Calcium-triggered movement of regulated actin in vitro. A fluorescence microscopy study. Honda H, et al. J Mol Biol 1989 Feb 20;205(4):677–83

Identification of and changes in the expression of troponin T isoforms in developing avian and mammalian heart. Sabry MA, et al. J Mol Cell Cardiol 1989 Jan;21(1):85–91

Identification and pattern of expression of a developmental isoform of troponin I in chicken and rat cardiac muscle. Sabry MA, et al. J Muscle Res Cell Motil 1989 Feb; 10(1):85–91

Potent stimulation of myofilament force and adenosine triphosphatase activity of canine cardiac muscle through a direct enhancement of troponin C Ca++ binding by MCI-154, a novel cardiotonic agent. Kitada Y, et al. J Pharmacol Exp Ther 1989 Jul;250(1):272–7

Theoretical estimation of the calcium-binding constants for proteins from the troponin C superfamily based on a secondary structure prediction method. I. Estimation procedure. Boguta G, et al. J Theor Biol 1988 Nov 8; 135(1):41–61

Theoretical estimation of the calcium-binding constants for proteins from the troponin C superfamily based on a secondary structure prediction method. II. Applications. Boguta G, et al. J Theor Biol 1988 Nov 8;135(1):63–73

[Effect of calcium ions on the interaction of troponin C with rabbit skeletal muscle troponin I and troponin T immobilized on polyvinyl chloride] Feoktistov IA, et al. Biokhimiia 1989 Feb;54(2):265–72 (Eng. Abstr.) (Rus)

[The effect of troponin I on Ca2+-induced conformation transitions of troponin C modified by N-1-pyrene maleimide] Verin AD, et al. Dokl Akad Nauk SSSR 1988; 300(2):476–9 (Rus)

PHARMACOLOGY

Down-regulation of fast-twitch skeletal muscle fiber with cardiac troponin-C and recombinant mutants. Structure/function studies with site-directed mutagenesis. Gulati J, et al. **FEBS Lett** 1989 May 8;248(1-2):5-8

Restoration of Ca2+-activated tension of CDTA-treated single skeletal muscle fibers by troponin C. Morimoto S, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):873-4

PHYSIOLOGY

Information transfer in the regulation of striated muscle contraction. Grabarek Z, et al. **Biomed Biochim Acta** 1989; 48(5-6):S297-305 (48 ref.)

Depression of Ca2+ insensitive tension due to reduced pH in partially troponin-extracted skinned skeletal muscle fibers. Metzger JM, et al. **Biophys J** 1988 Dec;54(6):1169-73

Effect of substitution of troponin C in cardiac myofibrils with skeletal troponin C or calmodulin on the Ca2+- and Sr2+-sensitive ATPase activity. Morimoto S, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):149-54

Variations in contractile properties of rabbit single muscle fibres in relation to troponin T isoforms and myosin light chains. Greaser ML, et al. **J Physiol (Lond)** 1988 Dec; 406:85-98

THERAPEUTIC USE

Alpha-mercaptopropionylglycine in haemorrhagic shock. Weidler B, et al. **Prog Clin Biol Res** 1989;308:897-905

ULTRASTRUCTURE

Electron microscopic study of troponin. Ohtsuki I, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):913-9

TROUT see under **SALMONIDAE**

TRUNCAL VAGOTOMY see **VAGOTOMY, TRUNCAL**

TRUNCUS ARTERIOSUS

Surgical pathology of the truncal valve: a study of 12 cases. Fuglestad SJ, et al. **Am J Cardiovasc Pathol** 1988 Apr; 2(1):39-47

ANALYSIS

The localization of fibronectin and 140 Kd fibronectin receptor in the truncus arteriosus of the chick embryonic heart. Sumida H, et al. **Arch Histol Cytol** 1989 Mar; 52(1):31-6

EMBRYOLOGY

[Changes in the aortic arch in chick embryos resulting from modified hemodynamic factors] Pérez de Migueisanz J, et al. **Rev Esp Cardiol** 1989 Jun-Jul;42(6):394-8 (Eng. Abstr.) **(Spa)**

TRUNCUS ARTERIOSUS, PERSISTENT

CHEMICALLY INDUCED

Pathogenesis of persistent truncus arteriosus induced by nimustine hydrochloride in chick embryos. Miyagawa S, et al. **Teratology** 1989 Mar;39(3):287-94

COMPLICATIONS

Anaesthetic management for caesarean section in a patient with uncorrected truncus arteriosus. Wilton NC, et al. **Br J Anaesth** 1989 Apr;62(4):434-8

[Asymptomatic common truncus arteriosus in a 25-year-old patient with paroxysmal tachycardia and truncal valve insufficiency] del Campo F, et al. **Rev Esp Cardiol** 1989 May;42(5):343-5 (Eng. Abstr.) **(Spa)**

SURGERY

Repair of truncus arteriosus in the neonate and young infant. Bove EL, et al. **Ann Thorac Surg** 1989 Apr;47(4):499-505; discussion 506

Truncus arteriosus [editorial] Castaneda AR. **Ann Thorac Surg** 1989 Apr;47(4):491-2

Successful diagnosis and surgical treatment of single ventricle, truncus arteriosus. Shaddy RE, et al. **Ann Thorac Surg** 1989 Aug;48(2):298-300

Internal banding for palliation of truncus arteriosus in the neonate. Young JN, et al. **Ann Thorac Surg** 1989 Apr; 47(4):620-2

[Progressive pulmonary hypertension following repair of pseudotruncus arteriosus with major aorto-pulmonary collateral arteries in a 20-year-old patient] Miura T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):546-50 (Eng. Abstr.) **(Jpn)**

[A case report of Rastelli operation in 2-month-old infant with truncus arteriosus (type II)] Takeuchi Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar;37(3):574-8 (Eng. Abstr.) **(Jpn)**

[Successful reimplantation of a conduit 7 years after radical correction of a persistent truncus arteriosus] Zelenikin MA, et al. **Grudn Khir** 1989 Mar-Apr;(2):94-5 **(Rus)**

TRUSSES

Use of rib belts in acute rib fractures. Lazcano A, et al. **Am J Emerg Med** 1989 Jan;7(1):97-100

TRUSTEES see under **GOVERNING BOARD**

TRUTH DISCLOSURE

Early detection of harmful alcohol consumption: comparison of clinical, laboratory, and self-report screening procedures. Babor TF, et al. **Addict Behav** 1989; 14(2):139-57

Underreporting of alcohol use in pregnancy: relationship to alcohol problem history. Morrow-Tlucak M, et al. **Alcoholism (N Y)** 1989 Jun;13(3):399-401

The impact of changing methods of data collection on the reliability of self-reported drug use of adolescents. Needle RH, et al. **Am J Drug Alcohol Abuse** 1989;15(3):275-89

The genetics of secrecy in adoption, artificial insemination, and in vitro fertilization. Lamport AT. **Am J Law Med** 1988;14(1):109-24

AIDS, ethics, and the truth. Laufman JK. **Am J Nurs** 1989 Jul;89(7):924, 929-30

Child abuse allegations [letter] Duncombe ML, et al. **Am J Orthopsychiatry** 1989 Apr;59(2):313-5

How knowing the facts about the polygraph test alters pharmacy students' attitudes. Pink LA, et al. **Am Pharm** 1989 Feb;NS29(2):31-3, 37-40

Childhood cancer survivors' knowledge of their diagnosis and treatment. Byrne J, et al. **Ann Intern Med** 1989 Mar 1;110(5):400-3

Legal aspects of whistle-blowing. Murphy EK. **AORN J** 1989 Feb;49(2):480, 482, 484

Difficulties raised by insurance medical reports. Beale JD. **BMJ** 1989 Jun 3;298(6686):1469-70

Communicating with cancer patients [letter] Dennison JA. **BMJ** 1988 Nov 5;297(6657):1192

How informed is patients' consent to release of medical information to insurance companies? Lorge RE. **BMJ** 1989 Jun 3;298(6686):1495-6

Communicate with cancer patients: 2. Handling uncertainty, collusion, and denial. Maguire P, et al. **BMJ** 1988 Oct 15; 297(6654):972-4

Imparting the diagnosis of life threatening illness in children. Woolley H, et al. **BMJ** 1989 Jun 17;298(6688):1623-6

Oral cancer and precancer--a dilemma [letter] Feaver GP. **Br Dent J** 1989 Jul 8;167(1):10

Oral cancer and precancer--a dilemma [letter] Nally FF, et al. **Br Dent J** 1989 Jun 10;166(11):398

Economical with the truth? What to tell the patient in a clinical trial [letter] Johns A. **Br J Addict** 1988 Sep; 83(9):1115-7

Validity of self-reported alcohol use: a literature review and assessment. Midanik LT. **Br J Addict** 1988 Sep; 83(9):1019-30 (66 ref.)

Children's use of a verbal-nonverbal consistency principle to infer truth and lying. Rotenberg KJ, et al. **Child Dev** 1989 Apr;60(2):309-22

Criteria for judging the credibility of children's statements about their sexual abuse. Faller KC. **Child Welfare** 1988 Sep-Oct;67(5):389-401

A prospective randomized trial of early diagnosis and treatment of cystic fibrosis: a unique ethical dilemma. Fost N, et al. **Clin Res** 1989 Sep;37(3):495-500

HIV-infected physicians and the practice of seriously invasive procedures. Gostin L. **Hastings Cent Rep** 1989 Jan-Feb;19(1):32-9

The whole truth and nothing but the truth? Minogue BP, et al. **Hastings Cent Rep** 1988 Oct-Nov;18(5):34-6

Accusations of child abuse [letter] Abramson R, et al. **Hosp Community Psychiatry** 1989 Mar;40(3):305

In Nigeria: views and notions of patients attending some selected hospitals. Fawole JO. **Hygie** 1988 Jun;7(2):35-8

Validity of claims to lifelong non-smoking at age 36 in a longitudinal study. Britten N. **Int J Epidemiol** 1988 Sep; 17(3):525-9

More on sex abuse allegations [letter] Demb HB. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):298

False allegations of sexual abuse by children and adolescents. Everson MD, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):230-5

Adoption [letter] Brassel AL Jr. **J Am Board Fam Pract** 1988 Jul-Sep;1(3):224

Empiricism in family practice [letter] Gillette RD. **J Am Board Fam Pract** 1988 Oct-Dec;1(4):296

Patient information and patient preparation in orthognathic surgery. The role of an information brochure a medical audit study. Rittersma J. **J Craniomaxillofac Surg** 1989 Aug; 17(6):278-9

Assessing the validity of self-reported adolescent cigarette smoking. Martin GL, et al. **J Drug Educ** 1988;18(4):275-84

The dangerous patient. Lande RG. **J Fam Pract** 1989 Jul; 29(1):74-8

Foundations of decision-making: the necessity for philosophical considerations in the physician-patient relationship. Meyers S. **J La State Med Soc** 1988 Oct; 140(10):3-5

Telling the whole truth--optimist or crepe hanger? Summers R. **J Med Assoc Ga** 1988 Dec;77(12):889-91

To tell or not to tell the diagnosis of schizophrenia. Atkinson JM. **J Med Ethics** 1989 Mar;15(1):21-4

The myth of informed consent: in daily practice and in clinical trials. Silverman WA. **J Med Ethics** 1989 Mar; 15(1):6-11

Censoring of patient-held records by doctors. Jones RB, et al. **J R Coll Gen Pract** 1988 Mar;38(308):117-8

Cancer patients: their desire for information and participation in treatment decisions. Sutherland HJ, et al. **J R Soc Med** 1989 May;82(5):260-3

Interrelationships among self-reported alcohol intake, physiological indices and alcoholism screening measures. Lee DJ, et al. **J Stud Alcohol** 1988 Nov;49(6):532-7

No pretending not to know [letter] Rokey R, et al. **JAMA** 1989 Mar 3;261(9):1276-7

Informing patients about clinical disagreement [editorial] **Lancet** 1989 Aug 12;2(8659):367-8

Right to know in Japan. Brahams D. **Lancet** 1989 Jul 15; 2(8655):173

Informed consent and 25% risk of paralysis. Brahams D. **Lancet** 1989 Jul 1;2(8653):57-8

Informing patients about clinical disagreement [letter] O'Dowd TC. **Lancet** 1989 Sep 23;2(8665):744

Medical students' fears about breaking bad news [letter] Sykes N. **Lancet** 1989 Sep 2;2(8662):564

Fund-raising advertisements [letter] Walton J. **Lancet** 1989 Jan 14;1(8629):104

Confessions--their reliability. Simpson R. **Med Leg J** 1988; 56 (Pt 3):125-39

Minnesota's physician reporting law: when am I my brother's or sister's keeper? Part I. Eelkema R, et al. **Minn Med** 1988 Sep;71(9):551-3

A physician's duty to disclose that his patient has AIDS. Nissenbaum GD. **N J Med** 1989 Feb;86(2):123-5

Changing standards [letter] Watt PJ. **N Z Med J** 1989 Jun 14;102(869):297-8

Medical ethics: Japanese doctors keep quiet [news] Swinbanks D. **Nature** 1989 Jun 8;339(6224):409

Whistle-blowing by nurses: a matter of ethics. Fry ST. **Nurs Outlook** 1989 Jan-Feb;37(1):56

Declared vs. true age of patients. Kragha IK. **Optom Vis Sci** 1989 Jul;66(7):480-2

Overview of physician reporting requirements. Jones KB. **Pa Med** 1988 Nov;91(11):20

Should physicians always offer hope? [letter] Rifkin A. **Pharos** 1989 Summer;52(3):38

The Greek cancer patient's knowledge and attitudes towards his diagnosis and prognosis. Lavrentiadis G, et al. **Psychother Psychosom** 1988;49(3-4):171-8

The emperor's choice [editorial] Holm RP. **S D J Med** 1989 Apr;42(4):13

What should we tell patients with cancer? Reid A, et al. **Scott Med J** 1988 Jun;33(3):260

[Terminal care, information and cooperation (editorial)] Klee M, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):479-80 **(Dan)**

[Psychosocial consequences of HIV infection] Pollak M, et al. **Rev Epidemiol Sante Publique** 1988;36(3):202-8 (Eng. Abstr.) **(Fre)**

[Informing the HTLV-I positive blood donor: summary of epidemiologic data and recommended attitude] Habibi B. **Rev Fr Transfus Immunohematol** 1988 Dec;31(5):735-45 (46 ref.) **(Fre)**

[Truth at bedside in relation to poor prognosis. From the viewpoint of the clinician] Kessler FJ. **Langenbecks Arch Chir** 1988;Suppl 2:543-6 (Eng. Abstr.) **(Ger)**

[Truth at bedside in relation to poor prognosis. Psychological aspects] Lehr U. **Langenbecks Arch Chir** 1988;Suppl 2:551-6 (26 ref.) (Eng. Abstr.) **(Ger)**

[Truth at bedside in relation to poor prognosis. From the viewpoint of the hospital chaplain] Michelbrand PG. **Langenbecks Arch Chir** 1988;Suppl 2:547-9 (Eng. Abstr.) **(Ger)**

[Truth at bedside in relation to poor prognosis. Legal aspects] Schreiber HL. **Langenbecks Arch Chir** 1988;Suppl 2:557-62 (Eng. Abstr.) **(Ger)**

[Transference, taboo and truth] Bloom H. **Psyche (Stuttg)** 1989 May;43(5):397-414 (Eng. Abstr.) **(Ger)**

[The importance of patient education at the bedside and saying good-by for managing grief by those left behind] Böhme S. **Z Arztl Fortbild (Jena)** 1988;82(17):837-8 **(Ger)**

[Informing advanced cancer patients of the terminal nature of their disease and how this influenced their mental state] Okazaki N, et al. **Gan No Rinsho** 1989 Feb;35(3):331-4 (Eng. Abstr.) **(Jpn)**

[Telling the patient the diagnosis of cancer] Doi T. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1025-30 (Eng. Abstr.) **(Jpn)**

[Medical secrecy and openness in physician-patient relations] Ostapenko AL. **Sov Med** 1989;(5):48-51 **(Rus)**

[Tell the truth to the patient?] Fernández Zúmel M. **An R Acad Nac Med (Madr)** 1988;105(3):353-64 **(Spa)**

[Truth and the patient] Monge MA. **Rev Med Univ Navarra** 1988 Jul-Sep;32(3):171-5 **(Spa)**

TRYPAN BLUE

In vivo and in vitro staining of acidophilic neurons as indicative of cell death following kainic acid-induced lesions in rat brain. Lees GJ. **Acta Neuropathol (Berl)** 1989; 77(5):519-24

[Trypan blue staining capacities of the culture cells]

Suganuma M, et al. **Rinsho Byori** 1989 Feb;37(2):187–93 (Jpn)

TOXICITY

The production of cardiovascular malformations with combined use of trypan blue and anti-heart serum in the rat. Ono S, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Dec; 29(6):800–6

Lymph node siderosis in trypan blue treated rats. Dumont AE. **Lymphology** 1988 Dec;21(4):234–8

TRYPANOCIDAL AGENTS

Synergistic effects of ketoconazole and SF–86327 on the proliferation of epimastigotes and amastigotes of Trypanosoma (Schizotrypanum) cruzi. Urbina JA, et al. **Ann N Y Acad Sci** 1988;544:357–8

Biochemical approaches to chemotherapy of trypanosomiasis. Wang CC. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:291–300 (31 ref.)

Trypanothione is the primary target for arsenical drugs against African trypanosomes. Fairlamb AH, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2607–11

ADVERSE EFFECTS

Assessment of cytogenetic damage in chagasic children treated with benznidazole. Gorla NB, et al. **Mutat Res** 1988 Oct;206(2):217–20

[Chagas' disease: clastogenic effect of nifurtimox and benznidazole in children] Moya PR, et al. **Medicina (B Aires)** 1988;48(5):487–91 (Eng. Abstr.) (Spa)

ANALYSIS

ELISA assay for melarsoprol. Maes L, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):557–60

Development of a radioimmunoassay for isometamidium. Kinabo LD, et al. **Vet Res Commun** 1988;12(4–5):375–82

CHEMICAL SYNTHESIS

Trypanocidal activity of a new series of arsenical compounds the spiroarsorans. Loiseau P, et al. **Farmaco [Sci]** 1988 Jul–Aug;43(7–8):657–63

Synthetic trypanocides: growth-inhibiting properties of new 1,2,3,4-tetrahydrocarbazoles on Trypanosoma cruzi. Albónico SM, et al. **Rev Argent Microbiol** 1987 Jul–Sep; 19(3):121–4

[A new series of antiparasitic organic arsenicals: the spiroarsoranes. Experimental trypanocidal activity] Dreyfuss G, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):561–70 (Eng. Abstr.) (Fre)

ISOLATION & PURIFICATION

A new method for the isolation of the trypanocidal factor from normal human serum. Barth P. **Acta Trop (Basel)** 1989 Jan;46(1):71–3

METABOLISM

The reductive metabolism of nifurtimox and benznidazole in Crithidia fasciculata is similar to that in Trypanosoma cruzi. Moreno SN. **Comp Biochem Physiol [C]** 1988; 91(2):321–5

Studies on binding of berenil to microsomal protein and its significance with respect to microsomal metabolism of trypanocidal drug. Dalvi R. **Indian J Exp Biol** 1988 Jun; 26(6):464–6

PHARMACOKINETICS

Pharmacokinetics of two spiroarsoranes administered intravenously or orally to rabbits. Rekik L, et al. **J Pharm Sci** 1989 Mar;78(3):203–5

The influence of Trypanosoma congolense infection on the disposition kinetics of diminazene aceturate in the dog. Onyeyili PA, et al. **Vet Res Commun** 1989;13(3):231–6

PHARMACOLOGY

Enzyme immunoassay in cell monolayers for evaluation of in vitro activity of chemotherapeutic agents against Trypanosoma cruzi. De Titto EH, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):274–81

Effect of ivermectin and isometamidium chloride on Glossina palpalis palpalis (Diptera: Glossinidae). Van den Abbeele J, et al. **Ann Soc Belg Med Trop** 1988 Mar;68(1):53–9

Synthesis and biological evaluation of new Rh (I) complexes with sulfonamide derivatives. Craciunescu G, et al. **Anticancer Res** 1989 May–Jun;9(3):781–5

Antibacterial activities of the antiparasitic drugs nifurtimox and benznidazole. Hof H. **Antimicrob Agents Chemother** 1989 Mar;33(3):404–5

Feeder layer–free in vitro assay for screening antitrypanosomal compounds against Trypanosoma brucei brucei and T. b. evansi. Kaminsky R, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):881–5

Antiproliferative synergism of the allylamine SF 86–327 and ketoconazole on epimastigotes and amastigotes of Trypanosoma (Schizotrypanum) cruzi. Urbina JA, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1237–42

Effects of trypanocidal drugs on protein biosynthesis in vitro and in vivo by Trypanosoma cruzi. Gonzalez NS, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2873–7

Compartmentation of glycolysis in trypanosomes: a potential target for new trypanocidal drugs. Michels PA. **Biol Cell** 1988;64(2):157–64 (40 ref.)

Some effects of the trypanocidal drug isometamidium on encapsulation in bovine carrier erythrocytes. DeLoach JR, et al. **Biotechnol Appl Biochem** 1988 Oct;10(5):447–53

Screening compounds for sleeping sickness therapy without relapse. Ormerod WE, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):543–7

The biochemistry of the mode of action of drugs and the detoxication mechanisms in Trypanosoma cruzi. Morello A. **Comp Biochem Physiol [C]** 1988;90(1):1–12 (97 ref.)

Trypanothione reductase from Trypanosoma cruzi. Catalytic properties of the enzyme and inhibition studies with trypanocidal compounds. Jockers-Scherübl MC, et al. **Eur J Biochem** 1989 Mar 15;180(2):267–72

Effect of in vitro cultivation on the stability of resistance of Trypanosoma brucei brucei to diminazene, isometamidium, quinapyramine, and Mel B. Kaminsky R, et al. **J Parasitol** 1989 Feb;75(1):42–5

Amelioration of the hypotensive effect of trypanocidal diamidines by use of heavy soluble salts. Steinmann U, et al. **J Pharm Pharmacol** 1988 Dec;40(12):896

The pharmacology of isometamidium. Kinabo LD, et al. **J Vet Pharmacol Ther** 1988 Sep;11(3):233–45 (130 ref.)

Chemiluminescence enhancement by trypanocidal drugs and by inhibitors of antioxidant enzymes in Trypanosoma cruzi. Giulivi C, et al. **Mol Biochem Parasitol** 1988 Sep; 30(3):243–51

Azadirachtin inhibits Trypanosoma cruzi infection of its tristomine insect host, Rhodnius prolixus. Rembold H, et al. **Naturwissenschaften** 1989 Feb;76(2):77–8

Interference between drug-resistant and drug-sensitive stocks of Trypanosoma congolense in goats. Sones KR, et al. **Res Vet Sci** 1989 Jul;47(1):75–7

Screening of drugs for rapid activity against Trypanosoma cruzi trypomastigotes in vitro. Croft SL, et al. **Trop Med Parasitol** 1988 Jun;39(2):145–8

Effects of trypanocides on Herpetosoma in a mammalian feeder layer cell culture. Owolabi OA, et al. **Vet Parasitol** 1988 Dec;30(2):107–12

Chagas' disease and its insect vector. Effect of azadirachtin A on the interaction of a tristomine host (Rhodnius prolixus) and its parasite (Trypanosoma cruzi). Garcia ES, et al. **Z Naturforsch [C]** 1989 Mar–Apr;44(3–4):317–22

[Action of drugs tested in an acellular medium and in mice infected with Trypanosoma brucei brucei] Bouteille B, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):533–42 (Eng. Abstr.) (Fre)

[Effects of nifurtimox, benznidazole, and beta-lapachone on the metabolism of DNA, RNA and proteins in Trypanosoma cruzi] Goijman SG, et al. **Rev Argent Microbiol** 1983;15(4):193–204 (Eng. Abstr.) (Spa)

[Introduction of changes in the DNA of Trypanosoma cruzi by trypanocidal agents] Goijman SG, et al. **Rev Argent Microbiol** 1984;16(2):75–86 (Eng. Abstr.) (Spa)

THERAPEUTIC USE

Berenil (diminazene aceturate)-resistant Trypanosoma congolense in cattle under natural tsetse challenge at Kibaha, Tanzania. Mbwambo HA, et al. **Acta Trop (Basel)** 1988 Sep;45(3):239–44

Trypanosoma lewisi: study of the activity of lonidamine in vitro and in vivo in rats. Manganaro M, et al. **Cell Mol Biol** 1988;34(5):517–28

Hypoxanthine and inosine analogues as chemotherapeutic agents in Chagas' disease. Marr JJ, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:301–7

Efficacy of experimental trypanocidal compounds against a multiple drug-resistant Trypanosoma brucei brucei stock in mice. Zweygarth E, et al. **Parasitol Res** 1989; 75(3):178–82

Eflornithine. A new drug in the treatment of sleeping sickness. Van Bogaert I, et al. **Pharm Weekbl [Sci]** 1989 Jun 23;11(3):69–75 (40 ref.)

Phenothiazines in murine African trypanosomiasis. Rice H, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):932

Notes on the routine intravenous use of isometamidium in the control of bovine trypanosomiasis on the Kenya coast. Dowler ME, et al. **Trop Anim Health Prod** 1989 Feb; 21(1):4–10

Field studies on animal trypanosomiasis in Mozambique. I. Effectiveness of the prophylactic drugs isometamidium chloride and pyrithidium bromide. Takken W, et al. **Trop Anim Health Prod** 1988 Nov;20(4):243–55

[Treatment of experimental trypanosomiasis of sheep caused by Trypanosoma brucei brucei: efficacy of Ro 15–0216 (a 2-nitroimidazole derivative)] Bouteille B, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):616–22 (Eng. Abstr.) (Fre)

[Antiparasitic activity of Cis-Pt (II) pentamidine in experimental trypanosomiasis of sheep caused by Trypanosoma brucei brucei] Dreyfuss G, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):626–31 (Eng. Abstr.) (Fre)

[Efficacy of Ro 15–0216 against human strains of Trypanosoma gambiense maintained in rodents. A preliminary study] Richard-Lenoble D, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):609–15 (Eng. Abstr.) (Fre)

[Compounds for treatment of trypanosoma infections] Clement B. **Pharm Unserer Zeit** 1989 Jul;18(4):97–111 (19 ref.) (Ger)

TOXICITY

Hemodynamic side effects of trypanocidal diamidines in rats. Studies on possible antagonisms. Steinmann U, et al. **Arzneimittelforschung** 1989 Feb;39(2):254–6

Ultrastructural alterations in ovaries from nifurtimox or benznidazole-treated rats: their relation to ovarian nitroreductive biotransformation of both drugs. de Castro CR, et al. **Exp Mol Pathol** 1989 Jun;50(3):385–97

Genotoxicity testing of antiparasitic nitrofurans in the Drosophila wing somatic mutation and recombination test. Moraga AA, et al. **Mutagenesis** 1989 Mar;4(2):105–10

TRYPANOSOMA

Cellular and molecular biology of trypanosomes and Plasmodium. Dakar, March 28–30, 1988. Proceedings. **Biol Cell** 1988;64(2):107–260

ANALYSIS

Studies on trypanosomatid actin. I. Immunochemical and biochemical identification. Mortara RA. **J Protozool** 1989 Jan–Feb;36(1):8–13

CLASSIFICATION

Species-specific DNA probes for the identification of African trypanosomes in tsetse flies. Gibson WC, et al. **Parasitology** 1988 Aug;97 (Pt 1):63–73

Trypanosoma (Herpetosoma) rangeli Tejera, 1920: influence of host weight, size of inoculum, and route of infection upon experimental parasitemia. Tejero F, et al. **Rev Soc Bras Med Trop** 1988 Jul–Sep;21(3):135–8

Nomenclature of Trypanosoma evansi [letter] Zainal-Abidin BA, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):655

[The trypanosomes of birds of the family Estrildidae. I. Morphologic and systematic study] Chandenier J, et al. **Ann Parasitol Hum Comp** 1988;63(3):184–92 (Eng. Abstr.) (Fre)

[2 new species of Trypanosoma from the blood of the lake frog in the Caspian Sea] Guselnov MA. **Parazitologiia** 1988 Nov–Dec;22(6):506–9 (Rus)

DRUG EFFECTS

Enhancing and suppressive effects of tumour necrosis factor/cachectin on growth of Trypanosoma musculi. Kongshavn PA, et al. **Parasite Immunol** 1988 Sep; 10(5):581–8

[Effect of quinones and nitrofurans on Trypanosoma mega and Crithidia fasciculata] de Pahn EM, et al. **Rev Argent Microbiol** 1988 Jul–Sep;20(3):107–18 (Eng. Abstr.) (Spa)

ENZYMOLOGY

Isoenzyme characterization of Trypanosoma evansi isolated from capybaras and dogs in Brazil. Stevens JR, et al. **Acta Trop (Basel)** 1989 Jul;46(4):213–22

Compartmentation of glycolysis in trypanosomes: a potential target for new trypanocidal drugs. Michels PA. **Biol Cell** 1988;64(2):157–64 (40 ref.)

The phosphoglucose isomerases of the bloodstream forms of Trypanosoma brucei and Trypanosoma vivax. Hannon RH, et al. **Comp Biochem Physiol [B]** 1978;60(2):177–81

Drug-promoted cleavage of kinetoplast DNA minicircles. Evidence for type II topoisomerase activity in trypanosome mitochondria. Shapiro TA, et al. **J Biol Chem** 1989 Mar 5;264(7):4173–8

Characterization of Trypanosoma (Trypanozoon) evansi from dromedary camels in Kuwait by isoenzyme electrophoresis. al-Taqi MM. **Vet Parasitol** 1989 Jul 15; 32(2–3):247–53

GENETICS

Control of antigen gene expression in African trypanosomes. Pays E, et al. **Annu Rev Genet** 1988;22:107–26 (116 ref.)

Replication of kinetoplast DNA in trypanosomes. Ryan KA, et al. **Annu Rev Microbiol** 1988;42:339–58 (79 ref.)

RNA-editing in trypanosome mitochondria. Benne R. **Biochim Biophys Acta** 1989 Mar 1;1007(2):131–9 (29 ref.)

Tubulin expression in trypanosomes. Gallo JM, et al. **Biol Cell** 1988;64(2):137–43 (46 ref.)

Expression of variant-specific antigen genes in African trypanosomes. Pays E. **Biol Cell** 1988;64(2):121–30 (106 ref.)

RNA editing and the mitochondrial cryptogenes of kinetoplastid protozoa. Simpson L, et al. **Cell** 1989 May 5;57(3):355–66 (66 ref.)

The karyotype of Trypanosoma cruzi Dm 28c: comparison with other T. cruzi strains and trypanosomatids. Aymerich S, et al. **Exp Parasitol** 1989 Aug;69(2):107–15

Replication of kinetoplast DNA in Trypanosoma equiperdum. Minicircle H strand fragments which map at specific locations. Ryan KA, et al. **J Biol Chem** 1989 Jan 15;264(2):823–30

Nucleoside analysis of DNA from Trypanosoma brucei and Trypanosoma equiperdum. Crozatier M, et al. **Mol Biochem Parasitol** 1988 Nov;31(2):127–31

Hybridisation with a repetitive DNA probe reveals the presence of small chromosomes in Trypanosoma vivax. Dickin SK, et al. **Mol Biochem Parasitol** 1989 Mar 1; 33(2):135–42

Characterization of tubulin genes in Trypanosoma rangeli. Esquenazi D, et al. **Mol Biochem Parasitol** 1989 May 15; 34(3):253–9

Conserved sequence blocks in kinetoplast minicircles from diverse species of trypanosomes. Ray DS. **Mol Cell Biol** 1989 Mar;9(3):1365–7

Evidence for diploidy in metacyclic forms of African trypanosomes. Kooy RF, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5469–72

Trans splicing in trypanosomes—archaism or adaptation? Laird PW. **Trends Genet** 1989 Jul;5(7):204–8 (31 ref.)

GROWTH & DEVELOPMENT

Isolation and cultivation in vitro to the infective, metacyclic stage of Trypanosoma (Nannomonas) simiae from Glossina morsitans submorsitans. Dukes P, et al. **Acta Trop (Basel)** 1989 May;46(3):191–203

New observations on cyclical development of Trypanosoma vivax in Glossina. Moloo SK, et al. **Acta Trop (Basel)** 1989 May;46(3):167–72

Effect of tumor necrosis factor on growth of Trypanosoma musculi in vivo and in vitro. Kongshavn PA, et al. **Adv Exp Med Biol** 1988;239:257–62

Differentiation, multiplication and control of bloodstream form Trypanosoma (Duttonella) vivax in mice. Mahan SM, et al. **J Protozool** 1989 Jul–Aug;36(4):424–8

A simple semi-defined culture medium for the growth of Trypanosoma rangeli. Takle GB, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):247

The use of amphotericin B in prevention of Trypanosoma theileri growth in bovine cell culture. Lostrie-Trussart N, et al. **Vet Parasitol** 1988 Jul;29(1):9–17

IMMUNOLOGY

A card agglutination test (CATT) for veterinary use based on an early VAT RoTat 1/2 of Trypanosoma evansi. Bajyana Songa E, et al. **Ann Soc Belg Med Trop** 1988 Sep; 68(3):233–40

A summary of the molecular biology of antigenic variation in African trypanosomes. Donelson JE. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:244–8

Identification of a trypanocidal factor against Trypanosoma equiperdum in normal human serum. Verducci G, et al. **Parasitology** 1989 Jun;98 Pt 3:401–7

Role of hypochlorous acid in Trypanosoma musculi killing by phagocytes. Vincendeau P, et al. **Parasitology** 1989 Apr; 98 Pt 2:253–7

Attempts to protect goats against challenge with Trypanosoma vivax by initiation of primary infections with large numbers of metacyclic trypanosomes. Vos GJ, et al. **Parasitology** 1988 Dec;97 (Pt 3):383–92

Evidence for the presence of an innate trypanosomicidal factor in the serum of a non-immune African waterbuck (Kobus ellipsiprymnus). Mulla AF, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):97–8

In vitro stimulation of pony peripheral blood lymphocytes by a soluble fraction of Trypanosoma evansi. Ahmed JS, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):462–6

[African trypanosomes: parasites with protective mechanisms] Risse HJ. **Naturwissenschaften** 1988 Oct; 75(10):489–95 (54 ref.) (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Use of DNA probes to identify Trypanosoma congolense and T. simiae in tsetse flies from The Gambia. McNamara J, et al. **Acta Trop (Basel)** 1989 Jan;46(1):55–61

Trypanosoma (Herpetosoma) leeuwenhoeki in Choloepus hoffmanni and Didelphis marsupialis of the Pacific Coast of Colombia. Travi BL, et al. **J Parasitol** 1989 Apr; 75(2):218–24

Use of kidney impressions for the detection of trypanosomes of anura. Jones SR, et al. **J Wildl Dis** 1989 Jul;25(3):413–5

Trypanosoma kansasensis sp. n. from Neotoma floridana in Kansas. Upton SJ, et al. **J Wildl Dis** 1989 Jul;25(3):410–2

Schizotrypanum in British bats. Gardner RA, et al. **Parasitology** 1988 Aug;97 (Pt 1):43–50

METABOLISM

A novel pathway for glycan assembly: biosynthesis of the glycosyl-phosphatidylinositol anchor of the trypanosome variant surface glycoprotein. Masterson WJ, et al. **Cell** 1989 Mar 10;56(5):793–800

A comparison of the isoenzymes, soluble proteins, polypeptides and free amino acids from ten isolates of Trypanosoma evansi. Gibson WC, et al. **Comp Biochem Physiol [B]** 1978;60(2):137–42

Trypanosoma musculi co-express several receptors binding rodent IgM, IgE, and IgG subclasses. Vincendeau P, et al. **J Immunol** 1989 Mar 1;142(5):1702–9

RNA editing—a novel RNA processing phenomenon in trypanosome mitochondria. Simpson L, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:243

PATHOGENICITY

Infectivity and virulence in a serodeme of Trypanosoma vivax. Joshua RA. **Comp Immunol Microbiol Infect Dis** 1988;11(2):99–104

Studies on Trypanosoma rangeli Tejera, 1920. IX. Course of infection in different stages of Rhodnius prolixus. Añez N, et al. **Mem Inst Oswaldo Cruz** 1987 Jan–Mar;82(1):1–6

PHYSIOLOGY

Adaptation of the pig parasite Trypanosoma simiae to the laboratory rat. Opiyo EA, et al. **Ann Trop Med Parasitol** 1988 Aug;82(4):397–8

Biology of African trypanosomes in the tsetse fly. Vickerman K, et al. **Biol Cell** 1988;64(2):109–19 (30 ref.)

Trypanosoma acomys (Wenyon, 1909): reproductive forms and course of parasitemia in the natural host Acomys cahirinus (Desmarest, 1819). Abdallah MA, et al. **Parasitol Res** 1989;75(6):439–43

Host–parasite relationship of Trypanosoma corvi in Ornithomyia avicularia. Mungomba LM, et al. **Parasitol Res** 1989;75(3):167–74

A general model for the African trypanosomiases. Rogers DJ. **Parasitology** 1988 Aug;97 (Pt 1):193–212

[Trypanosomes of Estrildidae birds. II. Biological studies] Chandenier J, et al. **Ann Parasitol Hum Comp** 1988; 63(4):243–52 (Eng. Abstr.) **(Fre)**

[Behavior of the infection and morphologic differentiation of Trypanosoma cruzi and T. rangeli in the intestine of the vector Rhodnius prolixus] Vallejo GA, et al. **Rev Bras Biol** 1988 Aug;48(3):577–87 (Eng. Abstr.) **(Spa)**

TRYPANOSOMA BRUCEI see **TRYPANOSOMA BRUCEI BRUCEI**

TRYPANOSOMA BRUCEI BRUCEI

A new method for the isolation of the trypanocidal factor from normal human serum. Barth P. **Acta Trop (Basel)** 1989 Jan;46(1):71–3

ANALYSIS

The glycosylphosphatidylinositol membrane anchor of Trypanosoma brucei variant surface glycoprotein. Ferguson MA, et al. **Biochem Soc Trans** 1988 Jun; 16(3):265–8

Molecular heterogeneity of the isolated surface glycoprotein from variant AnTat 1.1 of Trypanosoma brucei brucei. Boutignon F, et al. **Biol Cell** 1988;64(2):131–5

Reversed phase HPLC of different membrane-bound variant surface glycoprotein preparations from Trypanosoma brucei brucei. Tetaert D, et al. **Biomed Chromatogr** 1989 Mar;3(2):53–7

Evidence of myristylated disulfide-linked dimer of variant surface glycoprotein of Trypanosoma brucei-brucei. Hublart M, et al. **Comp Biochem Physiol [B]** 1989; 92(4):705–10

Characterization of the cross-reacting determinant (CRD) of the glycosyl-phosphatidylinositol membrane anchor of Trypanosoma brucei variant surface glycoprotein. Zamze SE, et al. **Eur J Biochem** 1988 Oct 1;176(3):527–34

Trypanosoma brucei brucei: variability in the association of some variant surface glycoproteins. Huet-Duvillier G, et al. **Exp Parasitol** 1988 Oct;67(1):31–8

The procyclic acidic repetitive proteins of Trypanosoma brucei. Purification and post-translational modification. Clayton CE, et al. **J Biol Chem** 1989 Sep 5;264(25):15088–93

A glycosomal protein (p60) which is predominantly expressed in procyclic Trypanosoma brucei. Characterization and DNA sequence. Kueng V, et al. **J Biol Chem** 1989 Mar 25;264(9):5203–9

Spectrin-like proteins in the paraflagellar rod structure of Trypanosoma brucei. Schneider A, et al. **J Cell Sci** 1988 Jun;90 (Pt 2):307–15

Trypanosome glycosomal protein P60 is homologous to phosphoenolpyruvate carboxykinase (ATP). Parsons M, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6411

[The fatty acids of Trypanosoma brucei brucei. A comparative study with those of T. b. rhodesiense and T. b. gambiense] Breton JC, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):622–36 (Eng. Abstr.) **(Fre)**

CLASSIFICATION

Characterization and grouping of Trypanosoma brucei brucei, T.b. gambiense and T.b. rhodesiense by quantitative DNA-cytofluorometry and discriminant analysis. Mühlpfordt H, et al. **Trop Med Parasitol** 1989 Mar; 40(1):1–8

CYTOLOGY

The cell division cycle of Trypanosoma brucei brucei: timing of event markers and cytoskeletal modulations. Sherwin T, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1218):573–88

DRUG EFFECTS

Physiological activation of the mitochondrion and the transformation capacity of DFMO induced intermediate and short stumpy bloodstream form trypanosomes. Giffin BF, et al. **Am J Trop Med Hyg** 1989 May;40(5):487–93

Feeder layer-free in vitro assay for screening antitrypanosomal compounds against Trypanosoma brucei brucei and T. b. evansi. Kaminsky R, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):881–5

Lysis of Trypanosoma brucei by a toxic subspecies of human high density lipoprotein. Hajduk SL, et al. **J Biol Chem** 1989 Mar 25;264(9):5210–7

Effect of in vitro cultivation on the stability of resistance of Trypanosoma brucei brucei to diminazene, isometamidium, quinapyramine, and Mel B. Kaminsky R, et al. **J Parasitol** 1989 Feb;75(1):42–5

Ribosome-inactivating proteins from plants inhibit ribosome activity of Trypanosoma and Leishmania. Cenini P, et al. **J Protozool** 1988 Aug;35(3):384–7

Drug resistance in recent isolates of Trypanosoma brucei and Trypanosoma congolense. Joshua RA. **Rev Elev Med Vet Pays Trop** 1988;41(4):359–64

[Action of drugs tested in an acellular medium and in mice infected with Trypanosoma brucei brucei] Bouteille B, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):533–42 (Eng. Abstr.) **(Fre)**

[DFMO: an alternative therapeutic agent for human African trypanosomiasis] Breton JC, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):571–7 (27 ref.) (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Topogenesis of glycolytic enzymes in Trypanosoma brucei. Opperdoes FR. **Biochem Soc Symp** 1987;53:123–9 (16 ref.)

Characterization of cytochrome c oxidase III transcripts that are edited only in the 3' region. Abraham JM, et al. **Cell** 1988 Oct 21;55(2):267–72

The phosphoglucose isomerases of the bloodstream forms of Trypanosoma brucei and Trypanosoma vivax. Hannon RH, et al. **Comp Biochem Physiol [B]** 1978;60(2):177–81

Trypanosoma brucei brucei: regulation of ornithine decarboxylase in procyclic forms and trypomastigotes. Bacchi CJ, et al. **Exp Parasitol** 1989 May;68(4):392–402

The enzymes of the classical pentose phosphate pathway display differential activities in procyclic and bloodstream forms of Trypanosoma brucei. Cronin CN, et al. **FEBS Lett** 1989 Feb 13;244(1):26–30

Trypanosoma brucei ornithine decarboxylase: enzyme purification, characterization, and expression in Escherichia coli. Phillips MA, et al. **J Biol Chem** 1988 Dec 5; 263(34):17933–41

Purification in a single step and kinetic characterization of the pyruvate kinase of Trypanosoma brucei. Barnard JP, et al. **Mol Biochem Parasitol** 1988 Nov;31(2):141–7

Sequence and expression of the glycosyl-phosphatidylinositol-specific phospholipase C of Trypanosoma brucei. Carrington M, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):289–96

Elevated phosphoglycerate kinase mRNA but not protein in monomorphic Trypanosoma brucei: implications for stage-regulation and post-transcriptional control. Parsons M, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):215–27

Trypanosoma brucei releases proteases extracellularly. Nwagwu M, et al. **Trans R Soc Trop Med Hyg** 1988; 82(4):577

GENETICS

Trypanosoma brucei contains two RNA polymerase II largest subunit genes with an altered C-terminal domain [published erratum appears in Cell 1989 Jul 28;58(2):following 419] Evers R, et al. **Cell** 1989 Feb 24; 56(4):585–97

The genes and transcripts of an antigen gene expression site from T. brucei. Pays E, et al. **Cell** 1989 Jun 2;57(5):835–45

In trypanosomes the homolog of the largest subunit of RNA polymerase II is encoded by two genes and has a highly unusual C-terminal domain structure. Smith JL, et al. **Cell** 1989 Mar 10;56(5):815–27

Physical identification of branched intron side-products of splicing in Trypanosoma brucei. Ralph D, et al. **EMBO J** 1988 Aug;7(8):2539–45

Trypanosoma brucei: frequent loss of a telomeric variant surface glycoprotein gene. Aline RF Jr, et al. **Exp Parasitol** 1989 Jan;68(1):8–16

Trypanosoma brucei: conserved sequence organization 3' to telomeric variant surface glycoprotein genes. Aline RF Jr, et al. **Exp Parasitol** 1989 Jan;68(1):57–66

Complete sequence of the gene encoding the largest subunit of RNA polymerase I of Trypanosoma brucei. Jess W, et al. **FEBS Lett** 1989 May 22;249(1):123–8

Boundaries of telomere conversion in Trypanosoma brucei. Kooter JM, et al. **Gene** 1988 Sep 15;69(1):1–11

Discontinuously synthesized mRNA from Trypanosoma brucei contains the highly methylated 5' cap structure, m7GpppA*A*C(2'-O)mU*A. Freistadt MS, et al. **J Biol Chem** 1988 Oct 15;263(29):15071–5

Synthesis of trypanosome hsp70 mRNA is resistant to disruption of trans-splicing by heat shock. Muhich ML, et al. **J Biol Chem** 1989 May 5;264(13):7107–10

Transcripts from the co-transposed segment of variant surface glycoprotein genes are in Trypanosoma brucei polyribosomes. Aline RF Jr, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):169–78

Nucleoside analysis of DNA from Trypanosoma brucei and Trypanosoma equiperdum. Crozatier M, et al. **Mol Biochem Parasitol** 1988 Nov;31(2):127–31

A gene expressed only in serum-resistant variants of Trypanosoma brucei rhodesiense. De Greef C, et al.

Mol Biochem Parasitol 1989 Sep;36(2):169–76
Colonies of procyclic Trypanosoma brucei on semi-solid agarose plates. Lee MG, et al. Mol Biochem Parasitol 1989 May 1;34(2):193–6
Different allele frequencies in Trypanosoma brucei brucei and Trypanosoma brucei gambiense populations. Paindavoine P, et al. Mol Biochem Parasitol 1989 Jan 1; 32(1):61–71
Expression of Trypanosoma brucei procyclin as a fusion protein in Escherichia coli. Roditi I, et al. Mol Biochem Parasitol 1989 Apr;34(1):35–43
A novel telomeric gene conversion in Trypanosoma brucei. Scholler JK, et al. Mol Biochem Parasitol 1989 Jun 1; 35(1):11–9
Expression site associated genes of Trypanosoma brucei rhodesiense. Son HJ, et al. Mol Biochem Parasitol 1989 Feb;33(1):59–66
Gene exchange in African trypanosomes: frequency and allelic segregation. Sternberg J, et al. Mol Biochem Parasitol 1989 May 15;34(3):269–79
Trypanosoma brucei: enrichment by UV of intergenic transcripts from the variable surface glycoprotein gene expression site. Coquelet H, et al. Mol Cell Biol 1989 Sep; 9(9):4022–5
Isolation and sequence of four small nuclear U RNA genes of Trypanosoma brucei subsp. brucei: identification of the U2, U4, and U6 RNA analogs. Mottram J, et al. Mol Cell Biol 1989 Mar;9(3):1212–23
Polymorphism in the procyclic acidic repetitive protein gene family of Trypanosoma brucei. Mowatt MR, et al. Mol Cell Biol 1988 Oct;8(10):4055–62
Variation of tandem repeats in the developmentally regulated procyclic acidic repetitive proteins of Trypanosoma brucei. Mowatt MR, et al. Mol Cell Biol 1989 Mar;9(3):1332–5
Polycistronic transcripts in trypanosomes and their accumulation during heat shock: evidence for a precursor role in mRNA synthesis. Muhich ML, et al. Mol Cell Biol 1988 Sep;8(9):3837–46
Trypanosoma brucei: posttranscriptional control of the variable surface glycoprotein gene expression site. Pays E, et al. Mol Cell Biol 1989 Sep;9(9):4018–21
Posttranscriptional regulation of cytochrome c expression during the developmental cycle of Trypanosoma brucei. Torri AF, et al. Mol Cell Biol 1988 Nov;8(11):4625–33
A 5' exo-ribonuclease and RNA ligase of T. brucei. Huang J, et al. Nucleic Acids Res 1988 Oct 25;16(20):9737–59
Structure and sequence of the gene for the largest subunit of trypanosomal RNA polymerase III. Köck J, et al. Nucleic Acids Res 1988 Sep 26;16(18):8753–72
A silent open reading frame of Trypanosoma brucei coding for a protein which shares epitopes with the major structural protein of the paraflagellar rod. Schlaeppi K, et al. Nucleic Acids Res 1989 Jul 11;17(13):5399
Improved separation of chromosome-sized DNA from Trypanosoma brucei, stock 427–60. Van der Ploeg LH, et al. Nucleic Acids Res 1989 Apr 25;17(8):3217–27
Activation of genes for variant surface glycoproteins in trypanosomes. Michels PA. Oxf Surv Eukaryot Genes 1984; 1:145–68 (83 ref.)
The timing and frequency of hybrid formation in African trypanosomes during cyclical transmission. Schweizer J, et al. Parasitol Res 1988;75(2):98–101
cDNA encoding the glycosyl-phosphatidylinositol-specific phospholipase C of Trypanosoma brucei. Hereld D, et al. Proc Natl Acad Sci U S A 1988 Dec;85(23):8914–8

GROWTH & DEVELOPMENT

A simple and rapid method to initiate Trypanosoma brucei brucei and T. brucei evansi bloodstream form cultures. Zweygarth E, et al. Acta Trop (Basel) 1989 May;46(3):205–6
The role of polyamines in the growth and transformation of the African trypanosome. Giffin BF. Adv Exp Med Biol 1988;250:651–65
Procyclin gene expression and loss of the variant surface glycoprotein during differentiation of Trypanosoma brucei. Roditi I, et al. J Cell Biol 1989 Feb;108(2):737–46
Identification of a developmentally regulated cysteine protease of Trypanosoma brucei. Pamer EG, et al. Mol Biochem Parasitol 1989 Feb;33(1):27–32
Comparative study on the suceptibility of different Glossina species to Trypanosoma brucei brucei infection. Moloo SK, et al. Trop Med Parasitol 1988 Sep;39(3):211–3

IMMUNOLOGY

Serodiagnosis of African sleeping sickness in vervet monkeys by detection of parasite antigens. Liu MK, et al. Acta Trop (Basel) 1988 Dec;45(4):321–30
Immunological clearance of 75Se-labelled Trypanosoma brucei in goats. Whitelaw DD, et al. Acta Trop (Basel) 1989 Mar;46(2):101–6
Immune complex formation in the kidney: recent observations in experimental trypanosomiasis. Bruijn JA, et al. Ann Soc Belg Med Trop 1988 Mar;68(1):11–4
Mapping of segmental antigenic determinants on structurally related variant surface glycoproteins of Trypanosoma brucei. Carruthers VB, et al. Biochem Cell Biol 1988 Nov; 66(11):1231–7
Solution structure of the glycosylphosphatidylinositol membrane anchor glycan of Trypanosoma brucei variant surface glycoprotein. Homans SW, et al. Biochemistry 1989 Apr 4;28(7):2881–7
African trypanosomes: inheritance of factors involved in resistance. Seed JR, et al. Exp Parasitol 1989 Jul;69(1):1–8
Procyclin: an unusual immunodominant glycoprotein surface antigen from the procyclic stage of African trypanosomes. Richardson JP, et al. Mol Biochem Parasitol 1988 Dec; 31(3):203–16
Analysis of Propionibacterium acnes-induced non-specific immunity to Trypanosoma brucei in mice. Black SJ, et al. Parasite Immunol 1989 Jul;11(4):371–83
An antigen detection enzyme immunoassay for the diagnosis of rhodesiense sleeping sickness. Nantulya VM. Parasite Immunol 1989 Jan;11(1):69–75
Loss of variable antigen during transformation of Trypanosoma brucei rhodesiense from bloodstream to procyclic forms in the tsetse fly. Turner CM, et al. Parasitol Res 1988;74(6):507–11
Life-cycle-stage- and stock-specific labelling by monoclonal antibodies of Trypanosoma brucei procyclic forms. Turner CM, et al. Parasitol Res 1989;75(5):414–5
An estimate of the size of the metacyclic variable antigen repertoire of Trypanosoma brucei rhodesiense. Turner CM, et al. Parasitology 1988 Oct;97 (Pt 2):269–76
The acquisition of human serum resistance during cyclical passage of a Trypanosoma brucei brucei clone through tsetse maintained on human serum: a retraction [letter] Dukes P, et al. Trans R Soc Trop Med Hyg 1988;82(6):944
Fractionation of trypanosome antigens for species-specific sero-diagnosis. Ijagbone IF, et al. Vet Parasitol 1989 Aug 1;32(4):293–9

ISOLATION & PURIFICATION

The isolation of human serum-resistant Trypanosoma (Trypanozoon) species from zebra and impala in Luangwa Valley, Zambia. Mulla AF, et al. Trans R Soc Trop Med Hyg 1988;82(5):718
In vitro differentiation between Trypanosoma brucei brucei and T.b. evansi. Zweygarth E, et al. Trop Med Parasitol 1989 Jun;40(2):115–6

METABOLISM

Chitin derivatives as novel substrates for Trypanosoma brucei brucei attachment in vitro. Wallbanks KR, et al. Acta Trop (Basel) 1989 Jan;46(1):63–8
The role of succinate in the respiratory chain of Trypanosoma brucei procyclic trypomastigotes. Turrens JF. Biochem J 1989 Apr 15;259(2):363–8
Regulation of variant surface glycoprotein synthesis in Trypanosoma brucei. Czichos J, et al. Biochem Soc Trans 1988 Jun;16(3):261–3
Trypanosoma brucei brucei: the catabolism of glycolytic intermediates by digitonin-permeabilized bloodstream trypomastigotes and some aspects of regulation of anaerobic glycolysis. Kisira JK, et al. Int J Biochem 1988; 20(10):1165–70
Biosynthesis of a variant surface glycoprotein of Trypanosoma brucei. Processing of the glycolipid membrane anchor and N-linked oligosaccharides. Bangs JD, et al. J Biol Chem 1988 Nov 25;263(33):17697–705
Release of the variant surface glycoprotein during differentiation of bloodstream to procyclic forms of Trypanosoma brucei. Bülow R, et al. Mol Biochem Parasitol 1989 Jan 1;32(1):85–92
Phosphorylation of fructose bisphosphate aldolase in Trypanosoma brucei. Clayton CE, et al. Mol Biochem Parasitol 1989 Feb;33(1):73–9

PHYSIOLOGY

Spread of Trypanosoma brucei to the nervous system: early attack on circumventricular organs and sensory ganglia. Schultzberg M, et al. J Neurosci Res 1988 Sep;21(1):56–61

ULTRASTRUCTURE

Endocytosis by African trypanosomes. I. Three-dimensional structure of the endocytic organelles in Trypanosoma brucei and T. congolense. Webster P. Eur J Cell Biol 1989 Aug;49(2):295–302
Endocytosis by African trypanosomes. II. Occurrence in different life-cycle stages and intracellular sorting. Webster P, et al. Eur J Cell Biol 1989 Aug;49(2):303–10
Biosynthesis of the glycosyl phosphatidylinositol membrane anchor of the trypanosome variant surface glycoprotein. Origin of the non-acetylated glucosamine. Doering TL, et al. J Biol Chem 1989 Jul 5;264(19):11168–73
Coated vesicles from the protozoan parasite Trypanosoma brucei: purification and characterization. Shapiro SZ, et al. J Protozool 1989 Jul–Aug;36(4):344–9

TRYPANOSOMA BRUCEI GAMBIENSE

ANALYSIS

[The fatty acids of Trypanosoma brucei brucei. A comparative study with those of T. b. rhodesiense and T. b. gambiense] Breton JC, et al. Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):622–36 (Eng. Abstr.) (Fre)

CLASSIFICATION

Characterization and grouping of Trypanosoma brucei brucei, T.b. gambiense and T.b. rhodesiense by quantitative DNA-cytofluorometry and discriminant analysis. Mühlpfordt H, et al. Trop Med Parasitol 1989 Mar; 40(1):1–8

CYTOLOGY

Fixed and temporary fluctuations in the cell cycle of monomorphic lines of Trypanosoma brucei gambiense. Diffley P, et al. Mol Biochem Parasitol 1989 Jan 1;32(1):1–5

DRUG EFFECTS

In vitro lysis of the bloodstream forms of Trypanosoma brucei gambiense by stearylamine-bearing liposomes. Tachibana H, et al. Antimicrob Agents Chemother 1988 Jul; 32(7):966–70

GENETICS

Two variant surface glycoprotein genes distinguish between different substrains of Trypanosoma brucei gambiense. Barnes DA, et al. Mol Biochem Parasitol 1989 May 1; 34(2):135–46
Different allele frequencies in Trypanosoma brucei brucei and Trypanosoma brucei gambiense populations. Paindavoine P, et al. Mol Biochem Parasitol 1989 Jan 1; 32(1):61–71
The U6 small nuclear RNA from Trypanosoma brucei. Tschudi C, et al. Nucleic Acids Res 1988 Dec 9;16(23):11375

GROWTH & DEVELOPMENT

Production of metacyclic forms by cyclical transmission of west African Trypanosoma (T.) brucei isolates from man and animals. Richner D, et al. Acta Trop (Basel) 1988 Dec; 45(4):309–19
Trypsin-stimulated transformation of Trypanosoma brucei gambiense bloodstream forms to procyclic forms in vitro. Yabu Y, et al. Parasitol Res 1988;74(6):501–6

IMMUNOLOGY

Immunodiagnosis of sleeping sickness due to Trypanosoma brucei gambiense by detection of antiprocyclic antibodies and trypanosome antigens in patients' sera. Liu MK, et al. Acta Trop (Basel) 1989 Jul;46(4):257–66
Polyclonal B-cell stimulative and immunosuppressive activities at different developmental stages of Trypanosoma gambiense. Oka M, et al. Microbiol Immunol 1988; 32(11):1175–7
Immune response to minor variant antigen types (VATs) in a mixed VAT infection of the African trypanosomes. Seed JR, et al. Parasite Immunol 1988 Sep;10(5):569–79

METABOLISM

Severe African trypanosomiasis with spurious hypoglycemia. Nieman RE, et al. J Infect Dis 1989 Feb;159(2):360–2
A comparative study of D-lactate, L-lactate and glycerol formation by four species of Leishmania and by Trypanosoma lewisi and Trypanosoma brucei gambiense. Darling TN, et al. Mol Biochem Parasitol 1988 Sep; 30(3):253–7

PATHOGENICITY

The epidemiological importance of the animal reservoir of Trypanosoma brucei gambiense in the Congo. 2. Characterization of the Trypanosoma brucei complex. Noireau F, et al. Trop Med Parasitol 1989 Mar;40(1):9–11

TRYPANOSOMA BRUCEI RHODESIENSE see TRYPANOSOMA BRUCEI BRUCEI

TRYPANOSOMA CONGOLENSE

DRUG EFFECTS

Berenil (diminazene aceturate)-resistant Trypanosoma congolense in cattle under natural tsetse challenge at Kibaha, Tanzania. Mbwambo HA, et al. Acta Trop (Basel) 1988 Sep;45(3):239–44
Interference between drug-resistant and drug-sensitive stocks of Trypanosoma congolense in goats. Sones KR, et al. Res Vet Sci 1989 Jul;47(1):75–7
Drug resistance in recent isolates of Trypanosoma brucei and Trypanosoma congolense. Joshua RA. Rev Elev Med Vet Pays Trop 1988;41(4):359–64
[Effects of sublethal doses of deltamethrin on the pair Glossina morsitans morsitans-Trypanosoma (Nannomonas) congolense] Nitcheman S, et al. C R Acad Sci [III] 1988; 307(7):423–6 (Eng. Abstr.) (Fre)

ENZYMOLOGY

Trypanothione reductase of Trypanosoma congolense: gene isolation, primary sequence determination, and comparison to glutathione reductase. Shames SL, et al. Biochemistry 1988 Jul 12;27(14):5014–9
Detection of parasite peptidase in the plasma of heifers infected with Trypanosoma congolense. Knowles G, et al. Mol Biochem Parasitol 1989 Apr;34(1):25–34

GENETICS

Expression of Trypanosoma congolense trypanothione

reductase in Escherichia coli: overproduction, purification, and characterization. Sullivan FX, et al. **Biochemistry** 1989 Jun 13;28(12):4986–92

Shared surface epitopes among trypanosomes of the same serodeme expressing different variable surface glycoprotein genes. Barbet AF, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):191–9

The chromosome profiles of Trypanosoma congolense isolates from Kilifi, Kenya and their relationship to serodeme identity. Masake RA, et al. **Mol Biochem Parasitol** 1988 Aug;30(2):105–12

GROWTH & DEVELOPMENT

[Chancre: an old–fashioned concept or a modern solution for sleeping sickness?] Dwinger RH. **Tijdschr Diergeneeskd** 1988 Oct 1;113(19):1049–58 (57 ref.) (Eng. Abstr.) (Dut)

IMMUNOLOGY

Disulfide bond involvement in the maintenance of the cryptic nature of the cross–reacting determinant of metacyclic forms of Trypanosoma congolense. Fish WR, et al. **Biochemistry** 1989 Jun 27;28(13):5415–21

Formation of filopodia in Trypanosoma congolense by crosslinking the variant surface antigen. Frevert U, et al. **J Ultrastruct Mol Struct Res** 1988 May;99(2):124–36

Trypanosoma congolense: interactions between trypanosomes expressing different metacyclic variable antigen types in vitro and in vivo. Prain CJ, et al. **Parasitology** 1988 Oct;97 (Pt 2):277–86

Fractionation of trypanosome antigens for species–specific sero–diagnosis. Ijagbone IF, et al. **Vet Parasitol** 1989 Aug 1;32(4):293–9

ISOLATION & PURIFICATION

Use of DNA probes to identify Trypanosoma congolense and T. simiae in tsetse flies from The Gambia. McNamara J, et al. **Acta Trop (Basel)** 1989 Jan;46(1):55–61

[Trypanosoma (Nannomonas) congolese Broden, 1904 (Kinetoplastida, Trypanosomatidae) in epithelial cells of the anterior segment of the midgut of Glossina morsitans morsitans Westwood, 1850 (Diptera, Glossinidae)] Ladikpo E, et al. **Rev Elev Med Vet Pays Trop** 1988;41(2):165–7 (Eng. Abstr.) (Fre)

METABOLISM

Endocytosis and intracellular occurrence of the variant surface glycoprotein in Trypanosoma congolense. Frevert U, et al. **J Ultrastruct Mol Struct Res** 1988 May; 99(2):137–49

PATHOGENICITY

Occurrence of human serum–resistant Trypanosoma congolense in goats and sheep in Nigeria. Joshua RA. **Vet Parasitol** 1989 May;31(2):107–13

PHYSIOLOGY

Rickettsial infections of midgut cells are not associated with susceptibility of Glossina morsitans centralis to Trypanosoma congolense infection. Moloo SK, et al. **Acta Trop (Basel)** 1989 Jul;46(4):223–7

[Localization of Trypanosoma (Nannomonas) congolense Broden, 1904 (Kinetoplastida, Trypanosomatidae) in the proboscis of Glossina morsitans morsitans Westwood, 1850 (Diptera, Glossinidae)] Ladikpo E, et al. **Ann Parasitol Hum Comp** 1988;63(3):193–6 (Eng. Abstr.) (Fre)

ULTRASTRUCTURE

Some concepts of the interaction of Trypanosoma (Nannomonas) congolense and Glossina pallidipes. Kaddu JB, et al. **Ann Trop Med Parasitol** 1988 Jun;82(3):229–34

Endocytosis by African trypanosomes. II. Occurrence in different life–cycle stages and intracellular sorting. Webster P, et al. **Eur J Cell Biol** 1989 Aug;49(2):303–10

Endocytosis by African trypanosomes. I. Three–dimensional structure of the endocytic organelles in Trypanosoma brucei and T. congolense. Webster P. **Eur J Cell Biol** 1989 Aug;49(2):295–302

TRYPANOSOMA CRUZI

Concentration and time dependence of the effects of ketoconazole on growth and sterol synthesis by Trypanosoma (Schizotrypanum) cruzi epimastigotes. Larralde G, et al. **Acta Cient Venez** 1988;39(2):140–6

Trypanosoma cruzi invade a mammalian epithelial cell in a polarized manner. Schenkman S, et al. **Cell** 1988 Oct 7;55(1):157–65

Comparative aspects of T cell activation in vivo following stimulation with anti–CD3 MAB, allogeneic cells and Trypanosoma cruzi. Pereira GM, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:284–90

Dipetalogaster maxima or D. maximus as a xenodiagnostic agent. Marsden PD. **Rev Soc Bras Med Trop** 1986 Oct–Dec; 19(4):205–7 (20 ref.) (Eng, Por)

The palm tree Copernicia cerifera (carnaúba) as an ecotope of Rhodnius nasutus in rural areas of the state of Piauí, Northeastern Brazil. Pinto A da S, et al. **Rev Soc Bras Med Trop** 1986 Oct–Dec;19(4):243–5

Developmental time and mortality of larvae of Tristoma infestans infected with Trypanosoma cruzi. Schaub GA. **Trans R Soc Trop Med Hyg** 1988;82(1):94–6

[Characteristics of cells parasitized with Trypanosoma cruzi in the walls of the central vein of the suprarenal glands of chronic chagasic patients] Almeida H de O, et al. **Rev Soc Bras Med Trop** 1986 Oct–Dec;19(4):227–31 (Eng. Abstr.) (Por)

ANALYSIS

Fatty acid composition of amastigote and trypomastigote forms of Trypanosoma cruzi. Leon W, et al. **Acta Trop (Basel)** 1989 Mar;46(2):131–6

Exposure of sialic acids at the surface in Trypanosoma cruzi epimastigotes. González MJ, et al. **Arch Biol Med Exp (Santiago)** 1988 Dec;21(3–4):461–5

Isolation of the peptide inhibitor of H+–ATP synthase from Crithidia fasciculata and Trypanosoma cruzi. Rilo MC, et al. **Biochem Int** 1989 Feb;18(2):447–54

A study on the amphiphilic proteins of three Trypanosoma cruzi populations. Giovanni–de–Simone S, et al. **Braz J Med Biol Res** 1988;21(3):435–43

The detection of a spectrin–like protein in Trypanosoma cruzi with a polyclonal antibody. Alcina A, et al. **Cell Biol Int Rep** 1988 Nov;12(11):979–85

Trypanosoma cruzi: studies on the interactions of lectins with glycoconjugates of different zymodemes. Stevens AF, et al. **Exp Parasitol** 1988 Dec;67(2):324–33

Interaction of benznidazole reactive metabolites with nuclear and kinetoplastic DNA, proteins and lipids from Trypanosoma cruzi. Díaz de Toranzo EG, et al. **Experientia** 1988 Oct 15;44(10):880–1

Changes in fatty acid composition associated with differentiation of Trypanosoma cruzi. Esteves MG, et al. **FEMS Microbiol Lett** 1989 May;50(1–2):31–4

Isolation and characterization of paraflagellar proteins from Trypanosoma cruzi. Saborio JL, et al. **J Biol Chem** 1989 Mar 5;264(7):4071–5

Characterization of a protein from Trypanosoma cruzi trypomastigotes that cleaves non–immune IgG bound through its Fab fragment. Cicarelli RM, et al. **J Immunol** 1989 Mar 1;142(5):1685–90

Identification of membrane components of Trypanosoma cruzi modulators of complement system. Kipnis TL, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:571–5

Trypanosoma cruzi: elemental composition heterogeneity of cloned stocks. Dvorak JA, et al. **Mol Biochem Parasitol** 1988 Oct;31(1):19–26

DRUG EFFECTS

Enzyme immunoassay in cell monolayers for evaluation of in vitro activity of chemotherapeutic agents against Trypanosoma cruzi. De Titto EH, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):274–81

Effect of immunotoxins against Trypanosoma cruzi. Santana JM, et al. **Am J Trop Med Hyg** 1989 Aug;41(2):177–82

Effect of heterocyclic analogues of triphenylmethane dyes against Trypanosoma cruzi. De Diego C, et al. **Ann Trop Med Parasitol** 1988 Jun;82(3):235–41

Activity of P536, a UDP–glucose analog, against Trypanosoma cruzi. Alcina A, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1412–5

Antiproliferative synergism of the allylamine SF 86–327 and ketoconazole on epimastigotes and amastigotes of Trypanosoma (Schizotrypanum) cruzi. Urbina JA, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1237–42

Cyclic AMP as an inducer of the cell differentiation of Trypanosoma cruzi. Rangel–Aldao R, et al. **Biochem Int** 1988 Aug;17(2):337–44

Effects of trypanocidal drugs on protein biosynthesis in vitro and in vivo by Trypanosoma cruzi. Gonzalez NS, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2873–7

Metabolism and preservation of fresh and stored erythrocytes in blood treated with gentian violet. Moraes–Souza H, et al. **Braz J Med Biol Res** 1988;21(2):241–6

Amphotericin B–induced damage of Trypanosoma cruzi epimastigotes. Haido RM, et al. **Chem Biol Interact** 1989; 71(1):91–103

The biochemistry of the mode of action of drugs and the detoxication mechanisms in Trypanosoma cruzi. Morello A. **Comp Biochem Physiol [C]** 1988;90(1):1–12 (97 ref.)

The activity of tricyclic antidepressant drugs against Trypanosoma cruzi. Doyle PS, et al. **Exp Parasitol** 1989 Feb;68(2):230–4

In vitro cytocidal effect of novel lytic peptides on Plasmodium falciparum and Trypanosoma cruzi. Jaynes JM, et al. **FASEB J** 1988 Oct;2(13):2878–83

Fibronectin increases Trypanosoma cruzi amastigote binding to and uptake by murine macrophages and human monocytes. Noisin EL, et al. **Infect Immun** 1989 Apr; 57(4):1030–4

Novobiocin–induced ultrastructural changes and antagonism of DNA synthesis in Trypanosoma cruzi amastigotes growing in cell–free medium. Kerschmann RL, et al. **J Protozool** 1989 Jan–Feb;36(1):14–20

Effect of drugs on Trypanosoma cruzi and on its interaction with heart muscle cell "in vitro". de Castro SL, et al. **Mem Inst Oswaldo Cruz** 1987 Apr–Jun;82(2):209–18

Metabolism and mode of action of gentian violet. Moreno SN. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:308–20 (14 ref.)

The mitochondrion of Trypanosoma cruzi is a target of crystal violet toxicity. Gadelha FR, et al. **Mol Biochem Parasitol** 1989 May 1;34(2):117–26

Synthetic trypanocides: growth–inhibiting properties of new 1,2,3,4–tetrahydrocarbazoles on Trypanosoma cruzi. Albónico SM, et al. **Rev Argent Microbiol** 1987 Jul–Sep; 19(3):121–4

Limited activity of bacterial DNA topoisomerase II inhibitors against Leishmania donovani and Trypanosoma cruzi amastigotes in vitro. Croft SL, et al. **Trans R Soc Trop Med Hyg** 1988;82(6):856

Comparative studies of drug susceptibility of five strains of Trypanosoma cruzi in vivo and in vitro. Neal RA, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):709–14

Screening of drugs for rapid activity against Trypanosoma cruzi trypomastigotes in vitro. Croft SL, et al. **Trop Med Parasitol** 1988 Jun;39(2):145–8

[Active trypanocidal alkaloids, bisbenzylisoquinoles ii. active in vitro against trypanosoma cruzi the agent responsible for trypanosomiasis, south america.] Fournet A, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):337–43 (Eng. Abstr.) (Fre)

[Chagas' disease and blood transfusion: trypanocidal activity of maprotiline hydrochloride and gentian violet] Celentano AM, et al. **Medicina (B Aires)** 1988;48(3):265–8 (Eng. Abstr.) (Spa)

[Introduction of changes in the DNA of Trypanosoma cruzi by trypanocidal agents] Goijman SG, et al. **Rev Argent Microbiol** 1984;16(2):75–86 (Eng. Abstr.) (Spa)

[Effects of nifurtimox, benznidazole, and beta–lapachone on the metabolism of DNA, RNA and proteins in Trypanosoma cruzi] Goijman SG, et al. **Rev Argent Microbiol** 1983;15(4):193–204 (Eng. Abstr.) (Spa)

[Growth and DNA synthesis inhibition and superoxide anion formation by iminoquinones in Trypanosoma cruzi] Schwarcz de Tarlovsky MN, et al. **Rev Argent Microbiol** 1988 Oct–Dec;20(4):183–93 (Eng. Abstr.) (Spa)

[In vivo and in vitro susceptibility of Trypanosoma cruzi to ketoconazole] Rubiolo ER, et al. **Rev Latinoam Microbiol** 1987 Oct–Dec;29(4):395–401 (Eng. Abstr.) (Spa)

ENZYMOLOGY

Differential energetic metabolism during Trypanosoma cruzi differentiation. I. Citrate synthase, NADP–isocitrate dehydrogenase, and succinate dehydrogenase. Adroher FJ, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):252–61

Cyclic AMP–dependent protein kinase activity in Trypanosoma cruzi. Ulloa RM, et al. **Biochem J** 1988 Oct 1;255(1):319–26

ATP–independent DNA topoisomerase II as potential drug target in trypanosomes. Douc–Rasy S, et al. **Biol Cell** 1988; 64(2):145–56

NAD–linked glutamate dehydrogenase in Trypanosoma cruzi. Cazzulo JJ, et al. **Comp Biochem Physiol [B]** 1979; 64(1):129–31

Glutamate dehydrogenase and aspartate aminotransferase in Trypanosoma cruzi. Cazzulo JJ, et al. **Comp Biochem Physiol [B]** 1977;56(3):301–3

Adenosine triphosphatase activities in Trypanosoma cruzi. Frasch AC, et al. **Comp Biochem Physiol [B]** 1978; 60(3):271–5

Solubilization and some properties of the Mg2+–activated adenosine triphosphatase from Trypanosoma cruzi. Frasch AC, et al. **Comp Biochem Physiol [B]** 1978;61(2):207–12

Inhibition of the NADP–linked glutamate dehydrogenase from Trypanosoma cruzi by sulfhydryl reagents. Juan SM, et al. **Comp Biochem Physiol [B]** 1979;63(4):531–5

Isoenzyme patterns of cultured Trypanosoma cruzi: changes after prolonged subculture. Romanha AJ, et al. **Comp Biochem Physiol [B]** 1979;62(2):139–42

Trypanothione reductase from Trypanosoma cruzi. Catalytic properties of the enzyme and inhibition studies with trypanocidal compounds. Jockers–Scherübl MC, et al. **Eur J Biochem** 1989 Mar 15;180(2):267–72

The NADP–linked aldehyde reductase from Trypanosoma cruzi: subcellular localization and some properties. Arauzo S, et al. **FEMS Microbiol Lett** 1989 Apr;49(2–3):283–6

On the regulatory properties of the pyruvate kinase from Trypanosoma cruzi epimastigotes. Cazzulo JJ, et al. **FEMS Microbiol Lett** 1989 Jun;50(3):259–63

Trypanosoma cruzi isoenzyme pattern as an epidemiological tool. Romanha AJ, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:383–6 (30 ref.)

Trypanosoma cruzi: major clones rather than principal zymodemes. Tibayrenc M, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:249–55

Zymodemes of Trypanosoma cruzi isolated from wild mammals in Bolivia. Valette E, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar;83(1):139–40

Subcellular localization of a cysteine proteinase from Trypanosoma cruzi. Bontempi E, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):43–7

Further characterization and partial amino acid sequence of a cysteine proteinase from Trypanosoma cruzi. Cazzulo JJ, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):33–41

Protein kinase C in Trypanosoma cruzi epimastigote forms: partial purification and characterization. Gómez ML, et

al. Mol Biochem Parasitol 1989 Sep;36(2):101–8
Serine proteases from nematode and protozoan parasites: isolation of sequence homologs using generic molecular probes. Sakanari JA, et al. Proc Natl Acad Sci U S A 1989 Jul;86(13):4863–7

GENETICS

Genomic DNA sequence polymorphism of Trypanosoma (Schizotrypanum) cruzi isolates with phenotypic variation [published errstum appears in Comp Biochem Physiol 1989;92(2):417] Castañeda M, et al.
Comp Biochem Physiol [B] 1988;91(4):707–10
The karyotype of Trypanosoma cruzi Dm 28c: comparison with other T. cruzi strains and trypanosomatids. Aymerich S, et al. Exp Parasitol 1989 Aug;69(2):107–15
Alpha- and beta-tubulin mRNAs of Trypanosoma cruzi originate from a single multicistronic transcript. Soares CM, et al. FEBS Lett 1989 Jul 3;250(2):497–502
Trypanosoma cruzi expresses diverse repetitive protein antigens. Hoft DF, et al. Infect Immun 1989 Jul; 57(7):1959–67
Indiscriminate representation of VH-gene families in the murine B lymphocyte responses to Trypanosoma cruzi. Minoprio P, et al. J Immunol 1989 Jun 1;142(11):4017–21
Trypanosoma cruzi: cloning of the 26 S ribosomal gene and its associated spacer. de Mello MP, et al.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:334–6
Thermal and developmental regulation of gene expression in Trypanosoma cruzi. Soares CM, et al.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:337–44
Structure and expression of two Trypanosoma cruzi genes encoding antigenic proteins bearing repetitive epitopes. Lafaille JJ, et al. Mol Biochem Parasitol 1989 Jun 15; 35(2):127–36
Sensitive detection and schizodeme classification of Trypanosoma cruzi cells by amplification of kinetoplast minicircle DNA sequences: use in diagnosis of Chagas' disease. Sturm NR, et al. Mol Biochem Parasitol 1989 Mar 15;33(3):205–14
Complete nucleotide sequence of the hsp70 gene of T. cruzi. Requena JM, et al. Nucleic Acids Res 1989 Jan 25;17(2):797
In vitro 3' end processing and poly(A) tailing of RNA in Trypanosoma cruzi. Zwierzynski TA, et al.
Nucleic Acids Res 1989 Jun 26;17(12):4647–60

GROWTH & DEVELOPMENT

Increase in growth rates and yields by agitation of Trypanosoma cruzi cultures in liquid medium. Castillo FJ, et al. Acta Cient Venez 1987;38(3):382–3
Synergistic effects of ketoconazole and SF-86327 on the proliferation of epimastigotes and amastigotes of Trypanosoma (Schizotrypanum) cruzi. Urbina JA, et al. Ann N Y Acad Sci 1988;544:357–8
Trypanosoma cruzi: explant organ cultures from mice with chronic Chagas' disease. McCabe RE, et al.
Exp Parasitol 1989 May;68(4):462–9
Trypanosoma cruzi: quantitative studies of development of two strains in small intestine and rectum of the vector Triatoma infestans. Schaub GA. Exp Parasitol 1989 Apr; 68(3):260–73
Metacyclic neutralizing effect of monoclonal antibody 10D8 directed to the 35- and 50-kilodalton surface glycoconjugates of Trypanosoma cruzi. Yoshida N, et al. Infect Immun 1989 Jun;57(6):1663–7
Amastigote and epimastigote stage-specific components of Trypanosoma cruzi characterized by using monoclonal antibodies. Purification and molecular characterization of an 83-kilodalton amastigote protein. Pan AA, et al.
J Immunol 1989 Aug 1;143(3):1001–8
Trypanosoma cruzi: cell biological behavior of epimastigote and amastigote forms in axenic culture. Engel JC, et al. J Protozool 1988 Nov;35(4):513–8
Some factors inducing formation of metacyclic stages of Trypanosoma cruzi. Homsy JJ, et al. J Protozool 1989 Mar-Apr;36(2):150–3
Effects of precocene and azadirachtin on the development of Trypanosoma cruzi in Rhodnius prolixus. García ES. Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:578–9
Metacyclogenesis of Trypanosoma cruzi in the vector Triatoma infestans. Schaub GA.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:563–70
Purification and characterization of stage-specific glycoproteins from Trypanosoma cruzi. Harth G, et al. Mol Biochem Parasitol 1989 Mar 1;33(2):143–50
Azadirachtin inhibits Trypanosoma cruzi infection of its triatomine insect host, Rhodnius prolixus. Rembold H, et al. Naturwissenschaften 1989 Feb;76(2):77–8
A stereological study of the differentiation process in Trypanosoma cruzi. Soares MJ, et al. Parasitol Res 1989; 75(7):522–7
Trypanosoma cruzi: conditions required to improve metacyclic differentiation in axenic culture. Isola EL, et al. Rev Argent Microbiol 1989 Jan-Mar;21(1):9–14
[Effect of the hemolymph of Triatoma infestans on the morphogenesis of Trypanosoma cruzi] Isola EL, et al.
Rev Argent Microbiol 1983;15(3):181–5 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Presence of antibodies to the major surface glycoprotein of Trypanosoma cruzi amastigotes in sera from Chagasic patients. Andrews NW, et al. Am J Trop Med Hyg 1989 Jan;40(1):46–9
Antibody response and antigen recognition in human infection with Trypanosoma cruzi. Israelski DM, et al.
Am J Trop Med Hyg 1988 Nov;39(5):445–55
Trypanosoma cruzi: endocytosis and degradation of specific antibodies by parasite forms. Teixeira AR, et al.
Am J Trop Med Hyg 1989 Feb;40(2):165–70
The glycoconjugates of mammalian parasites with particular reference to Trypanosoma cruzi. Allen AK.
Biochem Soc Trans 1988 Jun;16(3):257–9
Leishmania donovani donovani antigens recognized by kala-azar patient sera and identification of cross-reacting antigens to Chagas' disease. Andrade CR, et al.
Braz J Med Biol Res 1988;21(3):511–5
Comparison between the antigenic composition of bloodstream and cell culture-derived trypomastigotes of Trypanosoma cruzi. da Silva AM, et al.
Braz J Med Biol Res 1988;21(5):991–3
Evasion of Trypanosoma cruzi from complement lysis. Kipnis TL, et al. Braz J Med Biol Res 1989;22(1):1–16
Anti-alpha-galactosyl antibodies in chagasic patients. Possible biological significance. Milani SR, et al.
Braz J Med Biol Res 1988;21(6):1275–86 (30 ref.)
Terminal beta-D-galactofuranosyl epitopes recognized by antibodies that inhibit Trypanosoma cruzi internalization into mammalian cells. De Arruda MV, et al.
Eur J Biochem 1989 Jun 15;182(2):413–21
Identification of anti-acetylcholinesterase and anti-idiotype antibodies in human and experimental Chagas' disease: pathological implications. Ouaissi A, et al.
Eur J Immunol 1988 Dec;18(12):1889–94
Rapid determination of Trypanosoma cruzi urinary antigens in human chronic Chagas disease by agglutination test. Katzin AM, et al. Exp Parasitol 1989 Feb;68(2):208–15
Lytic rabbit IgG for tissue culture trypomastigotes of Trypanosoma cruzi alters the extent and form of complement deposition. Rimoldi MT, et al.
Exp Parasitol 1989 Feb;68(2):160–7
Trypanosoma cruzi: antibody-dependent killing of bloodstream trypomastigotes by mouse bone marrow-derived mast cells and by mastocytoma cells. Tambourgi DV, et al. Exp Parasitol 1989 Feb;68(2):192–201
Characterization of antibody isotype responsible for immune clearance in mice infected with Trypanosoma cruzi. Brodskyn CI, et al. Immunol Lett 1988 Aug;18(4):255–8
The effect of C3 depletion on the clearance of Trypanosoma cruzi induced by IgG antibodies. Mota I, et al.
Immunol Lett 1989 Jun 1;21(3):223–5
Decreased human IL-2 receptor expression due to a protozoan pathogen. Kierszenbaum F, et al.
Immunol Today 1989 Apr;10(4):129–31
gp 58/68, a parasite component that contributes to the escape of the trypomastigote form of T. cruzi from damage by the human alternative complement pathway. Fischer E, et al. Immunology 1988 Oct;65(2):299–303
Interaction of human eosinophils or neutrophils with Trypanosoma cruzi in vitro causes bystander cardiac cell damage. Molina HA, et al. Immunology 1989 Feb; 66(2):289–95
Effects of IL-4 on macrophage functions: increased uptake and killing of a protozoan parasite (Trypanosoma cruzi). Wirth JJ, et al. Immunology 1989 Feb;66(2):296–301
Development of resistance to Trypanosoma cruzi in mice depends on a viable population of L3T4+ (CD4+) T lymphocytes. Araujo FG. Infect Immun 1989 Jul; 57(7):2246–8
Selective suppressive effects of Trypanosoma cruzi on activated human lymphocytes. Beltz LA, et al.
Infect Immun 1989 Aug;57(8):2301–5
Purification of a Trypanosoma cruzi membrane glycoprotein which elicits lytic antibodies. Norris KA, et al.
Infect Immun 1989 Aug;57(8):2372–7
Autoimmunity in Chagas' disease: specific inhibition of reactivity of CD4+ T cells against myosin in mice chronically infected with Trypanosoma cruzi. Rizzo LV, et al. Infect Immun 1989 Sep;57(9):2640–4
Inhibition by Trypanosoma cruzi of interferon-gamma production by mitogen-stimulated mouse spleen cells. Beltz LA, et al. Int J Parasitol 1989 Aug;19(5):555–9
Experimental American leishmaniasis and Chagas' disease in the Brazilian squirrel monkey: cross immunity and electrocardiographic studies of monkeys infected with Leishmania braziliensis and Trypanosoma cruzi. Pung OJ, et al. Int J Parasitol 1988 Dec;18(8):1053–9
Purification and characterization of an 80-kilodalton Trypanosoma cruzi urinary antigen. Corral RS, et al.
J Clin Microbiol 1989 Jan;27(1):145–51
Anti-Trypanosoma cruzi and anti-laminin antibodies in chagasic patients after specific treatment. Gazzinelli RT, et al. J Clin Microbiol 1988 Sep;26(9):1795–800
Immunoglobulin A antibodies to Trypanosoma cruzi antigens in digestive forms of Chagas' disease. Primavera KS, et al. J Clin Microbiol 1988 Oct;26(10):2101–4
Amastigotes of Trypanosoma cruzi escape destruction by the terminal complement components. Iida K, et al.
J Exp Med 1989 Mar 1;169(3):881–91
Fl-160. A surface antigen of Trypanosoma cruzi that mimics mammalian nervous tissue. Van Voorhis WC, et al.
J Exp Med 1989 Mar 1;169(3):641–52
Immunogenic Gal alpha 1——3Gal carbohydrate epitopes are present on pathogenic American Trypanosoma and Leishmania. Avila JL, et al. J Immunol 1989 Apr 15; 142(8):2828–34
Trypanosoma cruzi reduces the number of high-affinity IL-2 receptors on activated human lymphocytes by suppressing the expression of the p55 and p70 receptor components. Kierszenbaum F, et al. J Immunol 1989 Jul 1;143(1):275–9
Evaluation of a competitive antibody enzyme immunoassay for specific diagnosis of Chagas' disease. Cuna WR, et al.
J Parasitol 1989 Jun;75(3):357–9
Relative resistance of Brazil strain trypomastigote forms of Trypanosoma cruzi to in vitro antibody-dependent complement-mediated lysis. Murfin DJ, et al.
J Parasitol 1988 Dec;74(6):1046–50
Isolation-characterization and preliminary immunological studies of a Trypanosoma cruzi antigenic component. Malchiodi EL, et al. Medicina (B Aires) 1987;47(5):509–15
Stage-specific surface antigens during the morphogenesis of Trypanosoma cruzi: developmentally regulated expression of a glycosyl-phosphatidylinositol anchored glycoprotein of amastigotes. Andrews NW, et al.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:561–2
Human Chagas' disease: evolution of the antibody response and recognition of antigens of Trypanosoma cruzi. Araujo FG, et al. Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:522–6
Analysis of cloned Trypanosoma cruzi proteins that are antigenic during the acute and chronic phase of Chagas' disease. Frasch AC, et al. Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:345–6
Identification of Trypanosoma cruzi antigens recognized by T cells and immune sera from chagasic patients. Gazzinelli RT, et al. Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:272–9
Detection of parasite antigens in different biological fluids. Katzin AM. Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:478–81
Glycoprotein GP57/51 of Trypanosoma cruzi: structural and conformational epitopes defined with monoclonal antibodies. Murta AC, et al. Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:419–22
Major surface immunogens of Trypanosoma cruzi trypomastigotes. Ouaissi A, et al.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:502
Chemical characterization of epitopes common to Trypanosoma cruzi and mammalian nervous cells. Petry K, et al. Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:498–501
An immunodominant and immunogenetically defined polypeptide present in T. cruzi. Ramos R, et al.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:418
Autoimmunity in Chagas' disease: immunomodulation of autoimmune and T. cruzi-specific immune responses. Rizzo LV, et al. Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:360–2
Relationship of parasite specific antibodies and heart specific autoantibodies in mice infected with Trypanosoma cruzi. Rowland EC, et al. Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:367
Evaluation of a monoclonal antibody affinity purified antigen for zymodeme specific serological diagnosis of Trypanosoma cruzi infection. Schechter M.
Mem Inst Oswaldo Cruz 1987 Jan-Mar;82(1):81–5
Immunobiological responses to short carbohydrate epitopes in Trypanosoma cruzi. Travassos LR, et al.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:427–30 (17 ref.)
The 90kDa surface antigen of metacyclic forms of Trypanosoma cruzi. Yoshida N.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:423–6
Carbohydrate epitopes (Galf——Manp) recognized by antibodies that inhibit trypomastigote interiorization into mammalian cells. Zingales B, et al.
Mem Inst Oswaldo Cruz 1988 Nov;83 Suppl 1:240–2
A surface antigen of Trypanosoma cruzi involved in cell invasion (Tc-85) is heterogeneous in expression and molecular constitution. Abuin G, et al.
Mol Biochem Parasitol 1989 Jul;35(3):229–37
Identification of a Trypanosoma cruzi antigen that is shed during the acute phase of Chagas' disease. Affranchino JL, et al. Mol Biochem Parasitol 1989 May 15;34(3):221–8
Sulfated lipids represent common antigens on the surface of Trypanosoma cruzi and mammalian tissues. Petry K, et al. Mol Biochem Parasitol 1988 Aug;30(2):113–21
Complementary surface epitopes, myotropic adhesion and active grip in Trypanosoma cruzi-host cell recognition. von Kreuter BF, et al. Mol Biochem Parasitol 1988 Sep; 30(3):197–208
Trypanosoma cruzi metacyclic trypomastigotes: neutralization by the stage-specific monoclonal antibody 1G7 and immunogenicity of 90 kD surface antigen. Araguth MF, et al. Parasite Immunol 1988 Nov; 10(6):707–12
Reactivity of stage-specific monoclonal antibody 1G7 with metacyclic trypomastigotes of Trypanosoma cruzi strains: lytic property and 90,000 mol. wt surface antigen polymorphism. Mortara RA, et al. Parasite Immunol 1988 Jul;10(4):369–78
A radiometric assay for diagnosing lytic antibodies in Trypanosoma cruzi infection. Cardoni RL, et al.
Parasitol Res 1988;74(6):512–5
Exoantigens of Trypanosoma cruzi. II. Physicochemical properties. Moretti ER, et al. Rev Argent Microbiol 1987

Oct–Dec;19(4):139–44

Immunogenicity of Trypanosoma cruzi strains determined by neutralization test. Muller LA, et al. **Rev Argent Microbiol** 1987 Jul–Sep;19(3):101–7

Lytic antibodies elicited by Trypanosoma cruzi infection recognize epitopes present on both bloodstream trypomastigote and epimastigote forms of parasite. Takehara HA, et al. **Rev Inst Med Trop Sao Paulo** 1988 Sep–Oct;30(5):351–6

Trypanosoma cruzi antigens detected by immunoelectron microscopy in the spleen of mice serologically positive but parasitologically cured by chemotherapy. (Preliminary report). Andrade SG, et al. **Rev Soc Bras Med Trop** 1988 Jan–Mar;21(1):41–2

Studies on anti–component 5 antibodies in animals infected with Trypanosoma cruzi. Santoro F, et al. **Rev Soc Bras Med Trop** 1987 Apr–Jun;20(2):91–4

Most B cells in acute Trypanosoma cruzi infection lack parasite specificity. Minoprio P, et al. **Scand J Immunol** 1988 Nov;28(5):553–61

Anti–laminin and specific antibodies in acute Chagas disease. Gazzinelli R, et al. **Trans R Soc Trop Med Hyg** 1988; 82(4):574–6

[Temporal variation of titers of serologic reactions in the chronic phase of Chagas disease and its possible clinical correlation] Arteaga–Fernández E, et al. **Arq Bras Cardiol** 1988 Aug;51(2):143–6 (Eng. Abstr.) (Por)

[Trypanosoma cruzi antibodies in the cerebrospinal fluid: a search using complement fixation and immunofluorescence reactions] Spina–França A, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):374–8 (Eng. Abstr.) (Por)

[Exoantigens of Trypanosoma cruzi. Epitopes reactive against immunoglobulins of patients with Chagas' disease] Gruppi A, et al. **Medicina (B Aires)** 1988;48(2):161–6 (Eng. Abstr.) (Spa)

ISOLATION & PURIFICATION

Detection of Trypanosoma cruzi by DNA amplification using the polymerase chain reaction. Moser DR, et al. **J Clin Microbiol** 1989 Jul;27(7):1477–82

Presence of Trypanosoma cruzi in the anal glands of naturally infected opossum (Didelphis marsupialis) in the state of Santa Catarina, Brazil. Steindel M, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar;83(1):135–7

Trypanosoma cruzi: advantages of isolating bloodstream trypomastigotes by the carboxy methyl cellulose method. da Silva AM, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):715–8

[In vitro xenodiagnosis. II. Comparison with in vivo xenodiagnosis] de Souza HB, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 May–Jun; 43(3):165–7 (Eng. Abstr.) (Por)

[Distribution and natural infection index of triatominae captured in the Campinas region, São Paulo, Brazil] Ferraz Filho AN, et al. **Rev Soc Bras Med Trop** 1987 Jan–Mar; 20(1):25–30 (Eng. Abstr.) (Por)

[Post–mortem artificial xenodiagnosis in chronic chagasic patients] Lopes ER, et al. **Rev Soc Bras Med Trop** 1986 Oct–Dec;19(4):259–62 (Eng. Abstr.) (Por)

METABOLISM

Lipid composition of Trypanosoma cruzi. Oliveira MM, et al. **Comp Biochem Physiol [B]** 1977;58(2):195–9

The reductive metabolism of nifurtimox and benznidazole in Crithidia fasciculata is similar to that in Trypanosoma cruzi. Moreno SN. **Comp Biochem Physiol [C]** 1988; 91(2):321–5

Ca2+ transport by coupled Trypanosoma cruzi mitochondria in situ. Docampo R, et al. **J Biol Chem** 1989 Jan 5; 264(1):108–11

Secretion by Trypanosoma cruzi of a hemolysin active at low pH. Andrews NW, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):249–56

Nucleoside uptake in Trypanosoma cruzi: analysis of a mutant resistant to tubercidin. Finley RW, et al. **Mol Biochem Parasitol** 1988 Nov;31(2):133–40

The activity of ketoconazole and other azoles against Trypanosoma cruzi: biochemistry and chemotherapeutic action in vitro. Goad LJ, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):179–89

Alteration of lipid order profile and permeability of plasma membranes from Trypanosoma cruzi epimastigotes grown in the presence of ketoconazole. Urbina JA, et al. **Mol Biochem Parasitol** 1988 Aug;30(2):185–95

Identification and isolation of Trypanosoma cruzi trypomastigote collagen–binding proteins: possible role in cell–parasite interaction. Velge P, et al. **Parasitology** 1988 Oct;97 (Pt 2):255–68

[Cytochemical study of nucleic acids in relation to the polymorphism of the trypomastigote forms of Trypanosoma cruzi] Kallinnikova VD. **Tsitologiia** 1989 Jan; 31(1):66–72 (Eng. Abstr.) (Rus)

PATHOGENICITY

Relationship of route of infection to susceptibility and immune response of inbred mice to Y strain Trypanosoma cruzi. Murfin DJ, et al. **Am J Trop Med Hyg** 1989 Jul; 41(1):41–9

Heart damage comparing three strains of mice chronically infected with Trypanosoma cruzi. Morales MC, et al. **Medicina (B Aires)** 1987;47(5):493–9

Trypanosoma cruzi trypomastigote clones differentially express a parasite cell adhesion molecule. Lima MF, et al. **Mol Biochem Parasitol** 1989 Mar 1;33(2):159–70

Studies in search of a suitable experimental insect model for xenodiagnosis of hosts with Chagas' disease. 3—On the interaction of vector species and parasite strain in the reaction of bugs to infection by Trypanosoma cruzi. Perlowagora–Szumlewicz A, et al. **Rev Saude Publica** 1988 Oct;22(5):390–400

Chagas' disease and its insect vector. Effect of azadirachtin A on the interaction of a triatomine host (Rhodnius prolixus) and its parasite (Trypanosoma cruzi). Garcia ES, et al. **Z Naturforsch [C]** 1989 Mar–Apr;44(3–4):317–22

[The 1st indigenous case of South American trypanosomiasis in the State of Acre (Brazil) and its correlation with the strains isolated from human cases and from wild triatomines in the area] Barata JM, et al. **Rev Saude Publica** 1988 Oct; 22(5):401–10 (Eng. Abstr.) (Por)

PHYSIOLOGY

Urban Trypanosoma cruzi: biological characterization of isolates from Panstrongylus geniculatus. Sampson–Ward L, et al. **Ann Soc Belg Med Trop** 1988 Jun;68(2):95–106

Intracellular signaling transduction in the differentiation of Trypanosoma cruzi: role of cAMP. Rangel–Aldao R, et al. **Arch Biol Med Exp (Santiago)** 1988 Dec;21(3–4):403–8

The use of albumin–gold to follow lysosome–phagosome fusion. De Carvalho TU, et al. **J Submicrosc Cytol Pathol** 1988 Oct;20(4):773–6

Trypanosoma cruzi: mechanisms of cell–invasion and intracellular survival. Andrews NW, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:452–5

Biological aspects of the Dm 28c clone of Trypanosoma cruzi after metacyclogenesis in chemically defined media. Contreras VT, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar; 83(1):123–33

Cultured embryonic mouse heart cells as models for T. cruzi–muscle cell interaction: characterization of spontaneous firing and chronotropic responses to norepinephrine. de Nazareth M, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:497

Aspects of successful host–parasite association: opossum and Trypanosoma cruzi. Jansen AM. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:491–6

Enhanced invasion of mononuclear phagocytes by serum–treated Trypanosoma cruzi is due to Clq. Rimoldi MT, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:456–8

Studies in search of a suitable experimental insect model for xenodiagnosis of hosts with Chagas' disease. 2 Attempts to upgrade the reliability and the efficacy of xenodiagnosis in chronic Chagas' disease. Szumlewicz AP, et al. **Mem Inst Oswaldo Cruz** 1987 Apr–Jun;82(2):259–72

Monitoring of interactions between macrophage hybridoma and Trypanosoma cruzi by chemiluminescence. Vray B, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:503–5

Chemiluminescence enhancement by trypanocidal drugs and by inhibitors of antioxidant enzymes in Trypanosoma cruzi. Giulivi C, et al. **Mol Biochem Parasitol** 1988 Sep; 30(3):243–51

Trypanosoma cruzi: involvement of proteolytic activity during cell fusion induced by epimastigote form. Calderon RO, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):189–200

Trypanosoma cruzi: the effect of variations in experimental conditions on the levels of macrophage infection in vitro. Araújo–Jorge TC, et al. **Parasitol Res** 1989;75(4):257–63

Development of isolated and group–reared first instars of Triatoma infestans infected with Trypanosoma cruzi. Schaub GA. **Parasitol Res** 1988;74(6):593–4

[Effect of desiccation of triatoma feces on the survival of metacyclic forms of Trypanosoma cruzi] Soares VA, et al. **Rev Soc Bras Med Trop** 1986 Oct–Dec;19(4):233–7 (Eng. Abstr.) (Por)

[Behavior of the infection and morphologic differentiation of Trypanosoma cruzi and T. rangeli in the intestine of the vector Rhodnius prolixus] Vallejo GA, et al. **Rev Bras Biol** 1988 Aug;48(3):577–87 (Eng. Abstr.) (Spa)

ULTRASTRUCTURE

Characteristics of Ca2+ transport by Trypanosoma cruzi mitochondria in situ. Docampo R, et al. **Arch Biochem Biophys** 1989 Jul;272(1):122–9

Reconstruction of the chondriome of the amastigote form of Trypanosoma cruzi. Newberry LB, et al. **J Parasitol** 1989 Aug;75(4):649–52

Enrichment of right–side–out Trypanosoma cruzi plasma membrane vesicles. Von Kreuter BF, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):193–200

Ultrastructural analysis of the interaction between host cells and Trypanosoma cruzi in experimental chagomas. Bijovsky AT, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):704–8

TRYPANOSOMA GAMBIENSE see **TRYPANOSOMA BRUCEI GAMBIENSE**

TRYPANOSOMA LEWISI

GENETICS

Bent helical structure in Trypanosoma lewisi minicircles. Costanzo G, et al. **Cell Biol Int Rep** 1988 Oct;12(10):867–76

GROWTH & DEVELOPMENT

Trypanosoma lewisi: study of the activity of lonidamine in vitro and in vivo in rats. Manganaro M, et al. **Cell Mol Biol** 1988;34(5):517–28

METABOLISM

A comparative study of D–lactate, L–lactate and glycerol formation by four species of Leishmania and by Trypanosoma lewisi and Trypanosoma brucei gambiense. Darling TN, et al. **Mol Biochem Parasitol** 1988 Sep; 30(3):253–7

TRYPANOSOMA RHODESIENSE see **TRYPANOSOMA BRUCEI BRUCEI**

TRYPANOSOMA VARIANT SURFACE COAT GLYCOPROTEINS see **VARIANT SURFACE GLYCOPROTEINS, TRYPANOSOMA**

TRYPANOSOMATIDAE

ANALYSIS

The cell surface of Phytomonas davidi. Esteves MJ, et al. **Cytobios** 1988;54(217):71–84

ANATOMY & HISTOLOGY

The cytoskeleton of trypanosomatids. de Souza W. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:546–60 (35 ref.)

DRUG EFFECTS

Changes in cell surface anionogenic groups induced by propranolol in Herpetomonas muscarum muscarum. Lopes AH, et al. **J Protozool** 1989 May–Jun;36(3):231–7

Effects of trypanocides on Herpetosoma in a mammalian feeder layer cell culture. Owolabi OA, et al. **Vet Parasitol** 1988 Dec;30(2):107–12

GENETICS

Trypanosomatids: mitochondrial RNA editing. Stuart K. **Exp Parasitol** 1989 May;68(4):486–90 (21 ref.)

Expression of a bacterial gene in a trypanosomatid protozoan. Bellofatto V, et al. **Science** 1989 Jun 9;244(4909):1167–9

Rapid and simple amplification of a specific RNA sequence by the polymerase chain reaction. Sherman DR, et al. **Trends Genet** 1989 May;5(5):137

GROWTH & DEVELOPMENT

Cultivation of Blastocrithidia triatomae (Trypanosomatidae) on a cell line of its host Triatoma infestans (Reduviidae). Reduth D, et al. **Parasitology** 1989 Jun;98 Pt 3:387–93

Coconut water in the culture of Trypanosomatidae [letter] Marzochi MC, et al. **Trans R Soc Trop Med Hyg** 1988; 82(3):511–2

IMMUNOLOGY

Monoclonal antibodies specific for members of the genus Endotrypanum. Lopes AH, et al. **J Protozool** 1989 Jul–Aug;36(4):354–61

Studies on cross–immunity in Herpetosoma trypanosomes of Microtus, Clethrionomys and Apodemus. Maraghi S, et al. **Parasitol Res** 1989;75(3):175–7

METABOLISM

Synthesis of dolichol derivatives and protein glycosylation in trypanosomatids. Bosch M, et al. **Biochem Soc Trans** 1988 Jun;16(3):268–71

PHYSIOLOGY

Cannibalism and coprophagy are modes of transmission of Blastocrithidia triatomae (Trypanosomatidae) between triatomines. Schaub GA, et al. **J Protozool** 1989 Mar–Apr; 36(2):171–5

Parasite–host interrelationships of Blastocrithidia triatomae and triatomines. Schaub GA. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:622–32

Influence of Blastocrithidia triatomae (Trypanosomatidae) on the reduviid bug Triatoma infestans: alterations in the Malpighian tubules. Schaub GA, et al. **Parasitol Res** 1988; 75(2):88–97

ULTRASTRUCTURE

Cell volume regulation in the trypanosomatid Herpetomonas samuelpessoai. Andrade CR, et al. **Braz J Med Biol Res** 1988;21(2):379–84

[Ultrafine organization of Leptomonas peterhoffi flagellates cultured in broth and solid nutrient media] Malysheva MN, et al. **Tsitologiia** 1989 Mar;31(3):267–72 (Eng. Abstr.) (Rus)

TRYPANOSOMIASIS

Proceedings: XV annual meeting on basic research in Chagas' disease. IV meeting of the Brazilian Society of Protozoology. São Paulo, November 1988. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:1–674

BLOOD

Haematological and biochemical changes in human and animal trypanosomiasis. Part II. Anosa VO. **Rev Elev Med Vet Pays Trop** 1988;41(2):151–64 (0 ref.)

DRUG THERAPY

Activity of ICI 195,739—a novel, orally active bistriazole—in rodent models of fungal and protozoal infections. Ryley JF, et al. **Ann N Y Acad Sci** 1988;544:310–28

Trypanosoma lewisi: study of the activity of lonidamine in vitro and in vivo in rats. Manganaro M, et al. **Cell Mol Biol** 1988;34(5):517–28

Oxidative stress as a defense mechanism against parasitic infections [published erratum appears in Free Radic Res Commun 1987;4(1):following 67] Schirmer RH, et al. **Free Radic Res Commun** 1987;3(1–5):3–12

Biochemical approaches to chemotherapy of trypanosomiasis. Wang CC. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:291–300 (31 ref.)

Enhancing and suppressive effects of tumour necrosis factor/cachectin on growth of Trypanosoma musculi. Kongshavn PA, et al. **Parasite Immunol** 1988 Sep; 10(5):581–8

[Compounds for treatment of trypanosoma infections] Clement B. **Pharm Unserer Zeit** 1989 Jul;18(4):97–111 (19 ref.) (Ger)

EPIDEMIOLOGY

The dynamics of vector-transmitted diseases in human communities. Rogers DJ. **Philos Trans R Soc Lond [Biol]** 1988 Oct 31; 321(1207):513–39 (59 ref.)

[Imported protozoan infections in Japan: the current status and countermeasure] Nakabayashi T. **Nippon Rinsho** 1989 Jan;47(1):112–7 (Jpn)

IMMUNOLOGY

Dual role of macrophages in the suppression of interleukin 2 production and interleukin 2 receptor expression in trypanosome-infected mice. Sileghem M, et al. **Eur J Immunol** 1989 May;19(5):829–35

Trypanosoma musculi: characterization of the T-lymphocyte dependency of immunity by selective immunomodulation of the mouse, Mus musculus. House RV, et al. **Exp Parasitol** 1988 Oct;67(1):104–15

Immunological and nonimmunological control of severity of Trypanosoma musculi infections in C3H and C57BL/6 inbred mice. Albright JW, et al. **Infect Immun** 1989 Jun; 57(6):1647–55

Trypanosoma lewisi: effects of trace metal contaminants on immunological responses. Hogan Y, et al. **J Natl Med Assoc** 1988 Nov;80(11):1217–27 (47 ref.)

MORTALITY

Studies on Trypanosoma rangeli Tejera, 1920. IX. Course of infection in different stages of Rhodnius prolixus. Añez N, et al. **Mem Inst Oswaldo Cruz** 1987 Jan–Mar;82(1):1–6

PARASITOLOGY

Isolation and cultivation in vitro to the infective, metacyclic stage of Trypanosoma (Nannomonas) simiae from Glossina morsitans submorsitans. Dukes P, et al. **Acta Trop (Basel)** 1989 May;46(3):191–203

Trypanosoma (Herpetosoma) rangeli Tejera, 1920: influence of host weight, size of inoculum, and route of infection upon experimental parasitemia. Tejero F, et al. **Rev Soc Bras Med Trop** 1988 Jul–Sep;21(3):135–8

[Behavior of the infection and morphologic differentiation of Trypanosoma cruzi and T. rangeli in the intestine of the vector Rhodnius prolixus] Vallejo GA, et al. **Rev Bras Biol** 1988 Aug;48(3):577–87 (Eng. Abstr.) (Spa)

PREVENTION & CONTROL

Immunization against Trypanosoma cruzi: adjuvant effect of glucan. Williams DL, et al. **Int J Immunopharmacol** 1989; 11(4):403–10

TRANSMISSION

The hosts of Glossina fuscipes fuscipes (Newstead) in Busoga, Uganda, and epidemiological implications for trypanosomiasis. Okoth JO, et al. **Ann Trop Med Parasitol** 1988 Oct;82(5):517–8

VETERINARY

Isoenzyme characterization of Trypanosoma evansi isolated from capybaras and dogs in Brazil. Stevens JR, et al. **Acta Trop (Basel)** 1989 Jul;46(4):213–22

A card agglutination test (CATT) for veterinary use based on an early VAT RoTat 1/2 of Trypanosoma evansi. Bajyana Songa E, et al. **Ann Soc Belg Med Trop** 1988 Sep; 68(3):233–40

A general survey of blood and tissue parasites of some rodents in Arbil province, Iraq. Molan AL, et al. **APMIS Suppl** 1988;3:47–9

Infectivity and virulence in a serodeme of Trypanosoma vivax. Joshua RA. **Comp Immunol Microbiol Infect Dis** 1988;11(2):99–104

Trypanosoma (Herpetosoma) leeuwenhoeki in Choloepus hoffmanni and Didelphis marsupialis of the Pacific Coast of Colombia. Travi BL, et al. **J Parasitol** 1989 Apr; 75(2):218–24

The pharmacology of isometamidium. Kinabo LD, et al. **J Vet Pharmacol Ther** 1988 Sep;11(3):233–45 (130 ref.)

Trypanosoma acomys (Wenyon, 1909): reproductive forms and course of parasitemia in the natural host Acomys cahirinus (Desmarest, 1819). Abdallah MA, et al. **Parasitol Res** 1989;75(6):439–43

Schizotrypanum in British bats. Gardner RA, et al. **Parasitology** 1988 Aug;97 (Pt 1):43–50

Haematological and biochemical changes in human and animal trypanosomiasis. Part I. Anosa VO. **Rev Elev Med Vet Pays Trop** 1988;41(1):65–78 (0 ref.)

In vitro stimulation of pony peripheral blood lymphocytes by a soluble fraction of Trypanosoma evansi. Ahmed JS, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):462–6

[The trypanosomes of birds of the family Estrildidae. I. Morphologic and systematic study] Chandenier J, et al. **Ann Parasitol Hum Comp** 1988;63(3):184–92 (Eng. Abstr.) (Fre)

TRYPANOSOMIASIS, AFRICAN

The sheep (Ovis aries) as an experimental model for African trypanosomiasis. I. Clinical study. Bouteille B, et al. **Ann Trop Med Parasitol** 1988 Apr;82(2):141–8

Amebiasis and trypanosomiasis. Richman TB, et al. **Dermatol Clin** 1989 Apr;7(2):301–11 (41 ref.)

[International Symposium on African Trypanosomiasis. Limoges, 30 September–3 October 1987. Proceedings] **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):415–631 (Fre)

BLOOD

Haematology of experimental gambiense trypanosomiasis, I. Platelet and other haemostatic changes. Emeribe AO, et al. **Cent Afr J Med** 1988 Dec;34(12):286–90

CEREBROSPINAL FLUID

[Contribution of serologic technics to the analysis of the cerebrospinal fluid in Congolese patients with sleeping sickness] Lemesre JL, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):506–10 (Eng. Abstr.) (Fre)

[Human African trypanosomiasis and normality of the cerebrospinal fluid] Pepin J, et al. **Med Trop (Mars)** 1989 Jan–Mar;49(1):29–31 (Eng. Abstr.) (Fre)

COMPLICATIONS

African trypanosomiasis in a Caucasian associated with anaphylactic shock. Harries AD, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):578

[Endocrine function and African trypanosomiasis. Evaluation of 79 cases] Hublart M, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):468–76 (Eng. Abstr.) (Fre)

[Clinical neurological signs of human African trypanosomiasis at the meningoencephalitis stage (apropos of 23 cases)] Nkanga NG, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):449–58 (Eng. Abstr.) (Fre)

[Clinical review of endocrine disorders observed in adults with trypanosomiasis] Noireau F, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):464–7 (Eng. Abstr.) (Fre)

[Where has Kérandel's key disappeared to?] Nozais JP. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):477–9 (13 ref.) (Eng. Abstr.) (Fre)

[Hemiplegic forms of human African trypanosomiasis] Sonan T, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):459–63 (9 ref.) (Eng. Abstr.) (Fre)

DIAGNOSIS

Serodiagnosis of African sleeping sickness in vervet monkeys by detection of parasite antigens. Liu MK, et al. **Acta Trop (Basel)** 1988 Dec;45(4):321–30

Immunodiagnosis of sleeping sickness due to Trypanosoma brucei gambiense by detection of antiprocyclic antibodies and trypanosome antigens in patients' sera. Liu MK, et al. **Acta Trop (Basel)** 1989 Jul;46(4):257–66

Severe African trypanosomiasis with spurious hypoglycemia. Nieman RE, et al. **J Infect Dis** 1989 Feb;159(2):360–2

An antigen detection enzyme immunoassay for the diagnosis of rhodesiense sleeping sickness. Nantulya VM. **Parasite Immunol** 1989 Jan;11(1):69–75

Serodiagnosis of sleeping sickness in the Republic of the Congo: comparison of indirect immunofluorescent antibody test and card agglutination test. Noireau F, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):237–40

Fractionation of trypanosome antigens for species-specific sero-diagnosis. Ijagbone IF, et al. **Vet Parasitol** 1989 Aug 1;32(4):293–9

[The different present-day clinical picture of human African trypanosomiasis caused by T. b. gambiense. Analysis of 300 cases from a focus in Daloa, Ivory Coast] Bos YF, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):427–44 (Eng. Abstr.) (Fre)

[Trypanosomiasis at the Neuropsychopathologic Center of Kinshasa University] Dechef G, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):445–8 (Eng. Abstr.) (Fre)

DRUG THERAPY

Inhibition of ornithine or arginine decarboxylase as an experimental approach to African or American trypanosomiasis. McCann PP, et al. **Adv Exp Med Biol** 1988;250:727–35 (23 ref.)

Physiological activation of the mitochondrion and the transformation capacity of DFMO induced intermediate and short stumpy bloodstream form trypanosomes. Giffin BF, et al. **Am J Trop Med Hyg** 1989 May;40(5):487–93

The monitoring of trypanocidal treatment with a sensitive ELISA method for measuring melarsoprol levels in serum and in cerebrospinal fluids. Maes L, et al. **Ann Soc Belg Med Trop** 1988 Sep;68(3):219–31

The potentiation of arsenicals with difluoromethylornithine (DFMO): experimental studies in murine trypanosomiasis. Jennings FW. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):595–607

Screening compounds for sleeping sickness therapy without relapse. Ormerod WE, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):543–7

Melarsoprol toxicity in the treatment of human African trypanosomiasis. Ten cases treated with dimercaprol. Scena MR. **Cent Afr J Med** 1988 Nov;34(11):264–8

Trypanosoma brucei rhodesiense: effect of immunosuppression on the efficacy of melarsoprol treatment of infected mice. Frommel TO. **Exp Parasitol** 1988 Dec;67(2):364–6

Use of extracts of Picralima nitida bark in the treatment of experimental trypanosomiasis: a preliminary study. Wosu LO, et al. **J Ethnopharmacol** 1989 May;25(3):263–8

Trial of prednisolone for prevention of melarsoprol-induced encephalopathy in gambiense sleeping sickness. Pepin J, et al. **Lancet** 1989 Jun 3;1(8649):1246–50

Tryparsamide [letter] Thomson KD. **Lancet** 1989 Sep 2; 2(8662):573

Efficacy of experimental trypanocidal compounds against a multiple drug-resistant Trypanosoma brucei brucei stock in mice. Zweygarth E, et al. **Parasitol Res** 1989; 75(3):178–82

Eflornithine. A new drug in the treatment of sleeping sickness. Van Bogaert I, et al. **Pharm Weekbl [Sci]** 1989 Jun 23;11(3):69–75 (40 ref.)

Suramin and metronidazole in the treatment of Trypanosoma brucei rhodesiense. Arroz J, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):421

An unusual course of west African trypanosomiasis in a Caucasian man. Grau Junyent JM, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):931–2

Chemotherapy of chronic trypanosomiasis: the failure of ketoconazole to cure murine infections of Trypanosoma brucei with central nervous system involvement. Jennings FW. **Trans R Soc Trop Med Hyg** 1988;82(2):246

Phenothiazines in murine African trypanosomiasis. Rice H, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):932

Trypanosomiasis in a rural hospital in Tanzania. A retrospective study of its management and the results of treatment. Veeken HJ, et al. **Trop Geogr Med** 1989 Apr; 41(2):113–7

[Action of drugs tested in an acellular medium and in mice infected with Trypanosoma brucei brucei] Bouteille B, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):533–42 (Eng. Abstr.) (Fre)

[Treatment of experimental trypanosomiasis caused by Trypanosoma brucei brucei in sheep: study of the minimum active dose of melarsoprol] Bouteille B, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):548–54 (Eng. Abstr.) (Fre)

[Treatment of experimental trypanosomiasis of sheep caused by Trypanosoma brucei brucei: efficacy of Ro 15–0216 (a 2-nitroimidazole derivative)] Bouteille B, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):616–22 (Eng. Abstr.) (Fre)

[DFMO: an alternative therapeutic agent for human African trypanosomiasis] Breton JC, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):571–7 (27 ref.) (Eng. Abstr.) (Fre)

[Antiparasitic activity of Cis-Pt (II) pentamidine in experimental trypanosomiasis of sheep caused by Trypanosoma brucei brucei] Dreyfuss G, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):626–31 (Eng. Abstr.) (Fre)

[EEG and treatment with Arsobal in human African trypanosomiasis] Giordano C, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):482–3 (Eng. Abstr.) (Fre)

[Arsenical resistance and difluoromethylornithine in the treatment of human African trypanosomiasis] Kazyumba GL, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):591–4 (Eng. Abstr.) (Fre)

[Trial of pentamidine in the treatment of trypanosomiasis of sheep inoculated with Trypanosoma brucei brucei] Nicolas JA, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):623–5

(Eng. Abstr.) (Fre)
[Arsenical-induced encephalopathy during the treatment of African trypanosomiasis. Apropos of a case with a favorable outcome] Pialoux G, et al.
Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):555-6 (Eng. Abstr.) (Fre)
[Efficacy of Ro 15-0216 against human strains of Trypanosoma gambiense maintained in rodents. A preliminary study] Richard-Lenoble D, et al.
Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):609-15 (Eng. Abstr.) (Fre)
[Treatment of human trypanosomiasis caused by Trypanosoma brucei gambiense using alpha-difluoromethylornithine. Results in 7 patients] Taelman H, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):578-88 (Eng. Abstr.) (Fre)
[The use of difluoromethylornithine in congenital trypanosomiasis due to Trypanosoma brucei-gambiense] Pepin J, et al. **Med Trop (Mars)** 1989 Jan-Mar;49(1):83-5 (Eng. Abstr.) (Fre)
[African trypanosomiasis in children treated with eflornithine. A case] Benhamou PH, et al. **Presse Med** 1989 Jun 17;18(24):1199-202 (Eng. Abstr.) (Fre)

EPIDEMIOLOGY

A general model for the African trypanosomiases. Rogers DJ. **Parasitology** 1988 Aug;97 (Pt 1):193-212
Human African trypanosomiasis (sleeping sickness): new endemic foci in Bendel State, Nigeria. Edeghere H, et al. **Trop Med Parasitol** 1989 Mar;40(1):16-20
African trypanosomiasis and S. intercalatum infection in Equatorial Guinea: comparative epidemiology and feasibility of integrated control. Simarro PP, et al. **Trop Med Parasitol** 1989 Jun;40(2):159-62
[Epidemiology and developmental aspects of trypanosomiasis in the source of the Sangha, Congo] Noireau F, et al.
Ann Soc Belg Med Trop 1988 Dec;68(4):331-41 (Eng. Abstr.) (Fre)
[Human African trypanosomiasis in the north of Benin. A preliminary serologic survey] Avode G, et al.
Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):513-21 (Eng. Abstr.) (Fre)
[Development in and epidemiology of African human trypanosomiasis in Zaire] Kabeya NM, et al.
Med Trop (Mars) 1988 Jul-Sep;48(3):277-83 (Eng. Abstr.) (Fre)
[Sleeping sickness in German travelers to the tropics] Löscher T, et al. **Dtsch Med Wochenschr** 1989 Aug 4; 114(31-32):1203-6 (Eng. Abstr.) (Ger)
[Epidemiologic aspects of the Gambian type of trypanosomiasis in southern Africa] Khot'ko NI.
Med Parazitol (Mosk) 1988 Sep-Oct;(5):15-9 (Eng. Abstr.) (Rus)

GENETICS

African trypanosomes: inheritance of factors involved in resistance. Seed JR, et al. **Exp Parasitol** 1989 Jul;69(1):1-8

HISTORY

[Eugène Jamot (1879-1937): a son of Limousin] Ducloux M.
Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):419-26 (Fre)

IMMUNOLOGY

Immune complex formation in the kidney: recent observations in experimental trypanosomiasis. Bruijn JA, et al. **Ann Soc Belg Med Trop** 1988 Mar;68(1):11-4
The sheep (Ovis aries) as an experimental model for African trypanosomiasis. II. Biological study. Bouteille B, et al.
Ann Trop Med Parasitol 1988 Apr;82(2):149-58
Immunodiagnosis of rhodesiense sleeping sickness: detection of circulating trypanosomal antigens in sera and cerebrospinal fluid by enzyme immunoassay using a monoclonal antibody. Nantulya VM.
Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):511-2
Analysis of Propionibacterium acnes-induced non-specific immunity to Trypanosoma brucei in mice. Black SJ, et al.
Parasite Immunol 1989 Jul;11(4):371-83
Immune response to minor variant antigen types (VATs) in a mixed VAT infection of the African trypanosomes. Seed JR, et al. **Parasite Immunol** 1988 Sep;10(5):569-79
Absence of relationship between human immunodeficiency virus 1 and sleeping sickness. Noireau F, et al.
Trans R Soc Trop Med Hyg 1987;81(6):1000
[Lymphocyte system and relative resistance of inbred mice to Trypanosoma brucei brucei] Makumyaviri AM, et al.
Ann Inst Pasteur Immunol 1988 Sep-Oct;139(5):545-56 (Eng. Abstr.) (Fre)
[Complement: a sign of infestation of sheep by Trypanosoma brucei brucei in an experimental model: its evolution following treatment] Bouteille B, et al.
Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):522-31 (Eng. Abstr.) (Fre)

METABOLISM

Neurochemical changes in experimental African trypanosomiasis in voles and mice. Stibbs HH, et al.
Ann Trop Med Parasitol 1987 Dec;81(6):673-9
Changes in albumin levels in blood and urine of Microtus montanus chronically infected with Trypanosoma brucei gambiense. Frommel TO, et al. **J Parasitol** 1988 Dec; 74(6):957-62

PARASITOLOGY

Trypanosoma brucei brucei: the catabolism of glycolytic intermediates by digitonin-permeabilized bloodstream trypomastigotes and some aspects of regulation of anaerobic glycolysis. Kiaira JK, et al. **Int J Biochem** 1988; 20(10):1165-70
Differentiation, multiplication and control of bloodstream form Trypanosoma (Duttonella) vivax in mice. Mahan SM, et al. **J Protozool** 1989 Jul-Aug;36(4):424-8
The epidemiological importance of the animal reservoir of Trypanosoma brucei gambiense in the Congo. 2. Characterization of the Trypanosoma brucei complex. Noireau F, et al. **Trop Med Parasitol** 1989 Mar;40(1):9-11

PATHOLOGY

Light microscopic neuropathology of long-term experimental Trypanosoma brucei gambiense infection in the rat. Chirimwami B, et al. **Ann Soc Belg Med Trop** 1988 Sep;68(3):195-203
Progression of central nervous system lesions in the rat infected with Trypanosoma brucei gambiense. A light microscopic study. Chirimwami B, et al.
Ann Soc Belg Med Trop 1988 Sep;68(3):205-18
Spread of Trypanosoma brucei to the nervous system: early attack on circumventricular organs and sensory ganglia. Schultzberg M, et al. **J Neurosci Res** 1988 Sep;21(1):56-61
Immunohistochemical characterization of the mononuclear cells in the brain of the rat with an experimental chronic Trypanosoma brucei gambiense infection. Anthoons JA, et al. **Parasitol Res** 1989;75(4):251-6

PHYSIOPATHOLOGY

Degeneration of serotonin-specific neurons in the brain in experimental Trypanosoma brucei infection. Ormerod WE, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):480-1
Evidence of blood cerebrospinal fluid barrier permeability impairment in Trypanosoma rhodesiense infection in vervet monkeys. Watumbi JN, et al.
Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):502-5
24 hour polysomnographic evaluation in a patient with sleeping sickness. Buguet A, et al.
Electroencephalogr Clin Neurophysiol 1989 Jun;72(6):471-8
[Early auditory evoked potentials in normal sheep and in sheep with trypanosomiasis] Tapie P, et al.
Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):484-9 (Eng. Abstr.) (Fre)
[Functional and immunologic involvement in human African trypanosomiasis caused by Trypanosoma gambiense] Tsala Mbala P, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):490-501 (Eng. Abstr.) (Fre)

PREVENTION & CONTROL

[The use of sentinel animals for the evaluation of the control of vectors of sleeping sickness: preliminary reports at a Congolese site] Gouteux JP, et al. **Acta Trop (Basel)** 1988 Dec;45(4):331-8 (Eng. Abstr.) (Fre)
[Trypanosomiasis caused by T. b. gambiense: methods of control] Stanghellini A. **Bull Soc Pathol Exot Filiales** 1988; 81(3 Pt 2):637-44 (Eng. Abstr.) (Fre)
[Integration of African human trypanosomiasis control in a network of multipurpose health centers] Pepin J, et al.
Bull WORLD Health Organ 1989;67(3):301-8 (Eng. Abstr.) (Fre)
[A community battle against a tropical endemic disease: supernatural beliefs and tsetse fly traps in the Congo] Leygues M, et al. **Soc Sci Med** 1989;28(12):1255-67 (Eng. Abstr.) (Fre)

THERAPY

Plasmapheresis for late-stage trypanosomiasis [letter] Spinazzola F, et al. **Lancet** 1989 May 27;1(8648):1200

TRANSMISSION

[House effect and family contamination in sleeping sickness: interpretative trial of the phenomenon. Study of 3 Congolese foci] Gouteux JP, et al.
Ann Parasitol Hum Comp 1988;63(5):315-33 (67 ref.) (Eng. Abstr.) (Fre)

VETERINARY

Anaemia in bovine African trypanosomiasis. A review. Murray M, et al. **Acta Trop (Basel)** 1988 Dec;45(4):389-432 (83 ref.)
Trypanosome-induced ovarian dysfunction. Evidence of higher residual fertility in trypanotolerant small East African goats. Mutayoba BM, et al. **Acta Trop (Basel)** 1988 Sep;45(3):225-37
The feeding habits of the tsetse, Glossina pallidipes Austen on the south Kenya coast, in the context of its host range and trypanosome infection rates in other parts of east Africa. Snow WF, et al. **Acta Trop (Basel)** 1988 Dec; 45(4):339-49
Immunological clearance of 75Se-labelled Trypanosoma brucei in goats. Whitelaw DD, et al. **Acta Trop (Basel)** 1989 Mar;46(2):101-6
Effect of tick-borne fever (Ehrlichia phagocytophila) and trypanosomiasis (Trypanosoma brucei 1066) on the pharmacokinetics of sulfadimidine and its metabolites in goats. van Gogh H, et al. **Drug Metab Dispos** 1989 Jan-Feb; 17(1):1-6
Evaluation of enzyme immunoassays in the diagnosis of camel (Camelus dromedarius) trypanosomiasis: a preliminary investigation. Rae PF, et al. **Epidemiol Infect** 1989 Apr; 102(2):297-307
Different mechanisms account for the suppression of interleukin 2 production and the suppression of interleukin 2 receptor expression in Trypanosoma brucei-infected mice. Sileghem M, et al. **Eur J Immunol** 1989 Jan; 19(1):119-24
Response to anaemia in experimental Trypanosoma vivax infection of sheep. Igbokwe IO, et al. **J Comp Pathol** 1989 Feb;100(2):111-8
Attempts to protect goats against challenge with Trypanosoma vivax by initiation of primary infections with large numbers of metacyclic trypanosomes. Vos GJ, et al.
Parasitology 1988 Dec;97 (Pt 3):383-92
Extravascular foci of Trypanosoma vivax in goats: the central nervous system and aqueous humor of the eye as potential sources of relapse infections after chemotherapy. Whitelaw DD, et al. **Parasitology** 1988 Aug;97 (Pt 1):51-61
Interference between drug-resistant and drug-sensitive stocks of Trypanosoma congolense in goats. Sones KR, et al. **Res Vet Sci** 1989 Jul;47(1):75-7
Assessing hepatic dysfunction in rabbits experimentally infected with Trypanosoma brucei. Arowolo RO, et al.
Rev Elev Med Vet Pays Trop 1988;41(3):277-81
The response of the Nigerian indigenous chicken (Gallus domesticus) to trypanosomes. Dina OA, et al.
Rev Elev Med Vet Pays Trop 1988;41(4):365-6
Clinical parameters of donkeys before and after Trypanosoma vivax infection. Kyewalabye Kaggwa E, et al.
Rev Elev Med Vet Pays Trop 1988;41(3):265-9
A survey of trypanosomiasis in Gamu Gofa region (Ethiopia). Takele A, et al. **Rev Elev Med Vet Pays Trop** 1988; 41(3):271-6
Mixed outbreak of trypanosomiasis and babesiosis in pigs in Nigeria. Ocholi RA, et al. **Trop Anim Health Prod** 1988 Aug;20(3):140
Camel trypanosomiasis and its vectors in Somalia. Dirie MF, et al. **Vet Parasitol** 1989 Aug 1;32(4):285-91
Interference in the establishment of tsetse-transmitted Trypanosoma congolense, T. brucei or T. vivax superinfections in goats already infected with T. congolense or T. vivax. Dwinger RH, et al. **Vet Parasitol** 1989 Jan; 30(3):177-89
Occurrence of human serum-resistant Trypanosoma congolense in goats and sheep in Nigeria. Joshua RA.
Vet Parasitol 1989 May;31(2):107-13
Comparative trypanotolerance of the small east African breed of goats from different localities to Trypanosoma congolense infection. Mutayoba BM, et al. **Vet Parasitol** 1989 May;31(2):95-105
Characterization of Trypanosoma (Trypanozoon) evansi from dromedary camels in Kuwait by isoenzyme electrophoresis. al-Taqi MM. **Vet Parasitol** 1989 Jul 15; 32(2-3):247-53
Ultrastructural pathology of hemopoietic organs in Trypanosoma vivax infection of goats. Anosa VO, et al.
Vet Pathol 1989 Jan;26(1):78-83
The influence of Trypanosoma congolense infection on the disposition kinetics of diminazene aceturate in the dog. Onyeyili PA, et al. **Vet Res Commun** 1989;13(3):231-6

TRYPANOSOMIASIS, BOVINE

BLOOD

Detection of parasite peptidase in the plasma of heifers infected with Trypanosoma congolense. Knowles G, et al.
Mol Biochem Parasitol 1989 Apr;34(1):25-34

COMPLICATIONS

Haemorrhagic syndrome associated with T. vivax infections of cattle in Somalia. Dirie MF, et al. **Acta Trop (Basel)** 1988 Sep;45(3):291-2
Haemorrhagic lesions resulting from Trypanosoma vivax infection in Ayrshire cattle. Gardiner PR, et al.
Vet Parasitol 1989 Jun;31(3-4):187-97

DRUG THERAPY

Berenil (diminazene aceturate)-resistant Trypanosoma congolense in cattle under natural tsetse challenge at Kibaha, Tanzania. Mbwambo HA, et al.
Acta Trop (Basel) 1988 Sep;45(3):239-44
Drug resistance in recent isolates of Trypanosoma brucei and Trypanosoma congolense. Joshua RA.
Rev Elev Med Vet Pays Trop 1988;41(4):359-64

EPIDEMIOLOGY

Incidence of Trypanosoma vivax infection on three cattle farms on the north coast of Colombia. Otte MJ, et al.
Acta Vet Scand Suppl 1988;84:104-6
Acute bovine trypanosomiasis in a tsetse-free zone of Nigeria. Nawathe DR, et al. **Trop Anim Health Prod** 1988 Aug; 20(3):141-2

IMMUNOLOGY

Detection of antibodies to platelets and erythrocytes during infection with haemorrhage-causing Trypanosoma vivax in Ayrshire cattle. Assoku RK, et al. **Vet Parasitol** 1989 Jun;31(3-4):199-216

PARASITOLOGY

Trypanosoma theileri associated with T-lymphocytes isolated from a latently infected cow. Griebel PJ, et al. **J Protozool** 1989 Jul-Aug;36(4):415-21

The chromosome profiles of Trypanosoma congolense isolates from Kilifi, Kenya and their relationship to serodeme identity. Masake RA, et al. **Mol Biochem Parasitol** 1988 Aug;30(2):105-12

[Chancre: an old-fashioned concept or a modern solution for sleeping sickness?] Dwinger RH. **Tijdschr Diergeneeskd** 1988 Oct 1;113(19):1049-58 (57 ref.) (Eng. Abstr.) (Dut)

PHYSIOPATHOLOGY

The effects of Trypanosoma congolense infection on the oestrous cycle of the Boran cow. Llewelyn CA, et al. **Br Vet J** 1988 Jul-Aug;144(4):379-87

The effect of Trypanosoma vivax and Trypanosoma congolense infections on the reaction time and semen characteristics in the zebu bull. Sekoni VO, et al. **Br Vet J** 1988 Jul-Aug;144(4):388-94

PREVENTION & CONTROL

The economics of trypanosomiasis control in western Zambia. Putt SN, et al. **Acta Vet Scand Suppl** 1988;84:394-7

Pyrethroid impregnated ear tags in trypanosomiasis control. Dolan RB, et al. **Trop Anim Health Prod** 1988 Nov; 20(4):267-8

Notes on the routine intravenous use of isometamidium in the control of bovine trypanosomiasis on the Kenya coast. Dowler ME, et al. **Trop Anim Health Prod** 1989 Feb; 21(1):4-10

Field studies on animal trypanosomiasis in Mozambique. I. Effectiveness of the prophylactic drugs isometamidium chloride and pyrithidium bromide. Takken W, et al. **Trop Anim Health Prod** 1988 Nov;20(4):243-55

[Use of traps and screens impregnated with insecticides for controlling animal trypanosomiasis] Mawuena K, et al. **Rev Elev Med Vet Pays Trop** 1988;41(1):93-6 (Eng. Abstr.) (Fre)

TRYPANOSOMIASIS, CARDIOVASCULAR see CHAGAS CARDIOMYOPATHY

TRYPANOSOMIASIS, SOUTH AMERICAN

Chagasic megaesophagus and megacolon. Historical review and present concepts. de Rezende JM, et al. **Arq Gastroenterol** 1988;25 Spec No:32-43 (110 ref.)

Amebiasis and trypanosomiasis. Richman TB, et al. **Dermatol Clin** 1989 Apr;7(2):301-11 (41 ref.)

Proceedings: XV annual meeting on basic research in Chagas' disease. IV meeting of the Brazilian Society of Protozoology. São Paulo, November 1988. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:1-674

BLOOD

Plasma norepinephrine in Chagas' cardioneuromyopathy: a marker of progressive dysautonomia. Iosa D, et al. **Am Heart J** 1989 Apr;117(4):882-7

The separation of complement inhibitors from patients with schistosomiasis or Chagas' disease by gel filtration on Sephadex G-200: a preliminary study. Nascimento BC, et al. **Braz J Med Biol Res** 1988;21(2):295-9

Tissue damage markers in experimental Chagas' disease. Palhares PE, et al. **Braz J Med Biol Res** 1988;21(5):957-9

Determinations of serum and muscle magnesium in Cebus monkeys infected with different T. cruzi strains. Falasca CA, et al. **Medicina (B Aires)** 1988;48(2):156-60

Trypanosoma cruzi: advantages of isolating bloodstream trypomastigotes by the carboxy methyl cellulose method. da Silva AM, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):715-8

[The ABO system and anatomoclinical forms of chronic Chagas disease] Teixeira V de P, et al. **Rev Soc Bras Med Trop** 1987 Jul-Sep;20(3):163-7 (Eng. Abstr.) (Por)

CEREBROSPINAL FLUID

[Trypanosoma cruzi antibodies in the cerebrospinal fluid: a search using complement fixation and immunofluorescence reactions] Spina-França A, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):374-8 (Eng. Abstr.) (Por)

COMPLICATIONS

Effect of isosorbide dinitrate and atropine on the lower esophageal sphincter pressure in Chagasic patients. Dantas RO, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(2):151-8

Duodenogastric reflux in Chagas' disease. Troncon LE, et al. **Dig Dis Sci** 1988 Oct;33(10):1260-4

Trypanosoma cruzi infection in diabetic mice. Tanowitz HB, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):90-3

[American trypanosomiasis (Chagas disease) and the nervous system] Spina-Franca A. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):645-9 (29 ref.) (Eng. Abstr.) (Fre)

[Dilatation of the cardia in treating dysphagia in patients with chagasic megaesophagus] Esper FE, et al. **Arq Gastroenterol** 1988 Apr-Jun;25(2):69-74 (Eng. Abstr.) (Por)

[Chagas megaileum. Report of a case] Santos MR, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jul-Aug;30(4):293-6 (Eng. Abstr.) (Por)

[Hematogenic placentitis in chagasic mothers] Bittencourt AL, et al. **Rev Soc Bras Med Trop** 1986 Oct-Dec; 19(4):239-42 (Eng. Abstr.) (Por)

[Morbidity of Chagas disease in urban populations of the Paraíba sector] Pereira JB, et al. **Rev Soc Bras Med Trop** 1987 Apr-Jun;20(2):101-7 (Eng. Abstr.) (Por)

[Susceptibility of the gastric mucosa to the damaging action of a bile salt in chronic chagasic rats] Troncon LE, et al. **Rev Soc Bras Med Trop** 1987 Oct-Dec;20(4):199-204 (Eng. Abstr.) (Por)

CONGENITAL

[Congenital Chagas' infection of 2d generation] Schenone H, et al. **Bol Chil Parasitol** 1987 Jul-Dec;42(3-4):71-3 (Eng. Abstr.) (Spa)

DIAGNOSIS

Rapid determination of Trypanosoma cruzi urinary antigens in human chronic Chagas disease by agglutination test. Katzin AM, et al. **Exp Parasitol** 1989 Feb;68(2):208-15

Detection of Trypanosoma cruzi by DNA amplification using the polymerase chain reaction. Moser DR, et al. **J Clin Microbiol** 1989 Jul;27(7):1477-82

Evaluation of a competitive antibody enzyme immunoassay for specific diagnosis of Chagas' disease. Cuna WR, et al. **J Parasitol** 1989 Jun;75(3):357-9

A non-conventional solid phase for immunoradiometric assays of potential use in the diagnosis of Chagas' disease. Ferreira A, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:466-70

Evaluation of a monoclonal antibody affinity purified antigen for zymodeme specific serological diagnosis of Trypanosoma cruzi infection. Schechter M. **Mem Inst Oswaldo Cruz** 1987 Jan-Mar;82(1):81-5

Studies in search of a suitable experimental insect model for xenodiagnosis of hosts with Chagas' disease. 2 Attempts to upgrade the reliability and the efficacy of xenodiagnosis in chronic Chagas' disease. Szumlewicz AP, et al. **Mem Inst Oswaldo Cruz** 1987 Apr-Jun;82(2):259-72

Sensitive detection and schizodeme classification of Trypanosoma cruzi cells by amplification of kinetoplast minicircle DNA sequences: use in diagnosis of Chagas' disease. Sturm NR, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):205-14

Does a spontaneous cure for Chagas' disease exist? Zeledón R, et al. **Rev Soc Bras Med Trop** 1988 Jan-Mar;21(1):15-20

[In vitro xenodiagnosis. I. Choice of anticoagulants and membranes] Campos R, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Mar-Apr; 43(2):101-3 (Eng. Abstr.) (Por)

[In vitro xenodiagnosis. II. Comparison with in vivo xenodiagnosis] de Souza HB, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 May-Jun; 43(3):165-7 (Eng. Abstr.) (Por)

[ELISA immunoenzymatic assay in the pericardial fluid: a new method for the post-mortem diagnosis of Chagas disease] Rocha A, et al. **Rev Soc Bras Med Trop** 1987 Oct-Dec;20(4):213-6 (Eng. Abstr.) (Por)

DRUG THERAPY

Inhibition of ornithine or arginine decarboxylase as an experimental approach to African or American trypanosomiasis. McCann PP, et al. **Adv Exp Med Biol** 1988;250:727-35 (23 ref.)

Failure of ketoconazole to cure chronic murine Chagas' disease [letter] McCabe R. **J Infect Dis** 1988 Dec; 158(6):1408-9

Hypoxanthine and inosine analogues as chemotherapeutic agents in Chagas' disease. Marr JJ, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:301-7

Assessment of cytogenetic damage in chagasic children treated with benznidazole. Gorla NB, et al. **Mutat Res** 1988 Oct;206(2):217-20

Eflornithine. A new drug in the treatment of sleeping sickness. Van Bogaert I, et al. **Pharm Weekbl [Sci]** 1989 Jun 23;11(3):69-75 (40 ref.)

Protective effects of 3,6-bis-(2-piperidinoethoxyl) acridine trihydrochloride (CL-246738) in experimental acute Trypanosoma cruzi infection. Guimaraes L, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):579-80

Chemotherapy of trypanosomiasis: the potentiation of melarsoprol by concurrent difluoromethylornithine (DFMO) treatment. Jennings FW. **Trans R Soc Trop Med Hyg** 1988;82(4):572-3

[Evaluation of complement mediated lysis technic in patients with chronic Chagas' disease treated with trypanocidal drugs] Levy AM, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jan-Feb;30(1):32-9 (Eng. Abstr.) (Por)

[Ineffectiveness of allopurinol in patients in the acute phase of Chagas disease] Lauria-Pires L, et al. **Rev Soc Bras Med Trop** 1988 Apr-Jun;21(2):79 (Por)

[Chagas' disease: clastogenic effect of nifurtimox and benznidazole in children] Moya PR, et al. **Medicina (B Aires)** 1988;48(5):487-91 (Eng. Abstr.) (Spa)

ENZYMOLOGY

Creatine phosphokinase isoenzymes and Trypanosoma cruzi infections. Mercado TI, et al. **Comp Biochem Physiol [B]** 1979;64(1):11-5

EPIDEMIOLOGY

Trypanosoma cruzi isoenzyme pattern as an epidemiological tool. Romanha AJ, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:383-6 (30 ref.)

[Epidemiologic determinants of Chagas' disease in Brazil: the infection, the disease and its morbidity/mortality] Coura JR. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:392-402 (28 ref.) (Por)

[Prevalence of Chagas esophagopathy in the municipality of Mambaí, Goiás-Brazil] Castro C, et al. **Rev Soc Bras Med Trop** 1987 Jan-Mar;20(1):13-7 (Eng. Abstr.) (Por)

[Current status of Chagas disease in French Guiana] Esterre P, et al. **Rev Soc Bras Med Trop** 1987 Jul-Sep;20(3):139-42 (Eng. Abstr.) (Por)

GENETICS

[HLA antigens in patients with Chagas cardiomyopathy: evidence favoring genetic protection against this disease] Llop E, et al. **Rev Med Chil** 1988 Mar;116(3):211-4 (Eng. Abstr.) (Spa)

HISTORY

Darwin's illness. Adler D. **Isr J Med Sci** 1989 Apr; 25(4):218-21

Darwin, Chagas', mind, and body. Goldstein JH. **Perspect Biol Med** 1989 Summer;32(4):586-601

IMMUNOLOGY

Presence of antibodies to the major surface glycoprotein of Trypanosoma cruzi amastigotes in sera from Chagasic patients. Andrews NW, et al. **Am J Trop Med Hyg** 1989 Jan;40(1):46-9

Idiotypic/anti-idiotypic interactions in schistosomiasis and Chagas' disease. Gazzinelli RT, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):288-94

Antibody response and antigen recognition in human infection with Trypanosoma cruzi. Israelski DM, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):445-55

Relationship of route of infection to susceptibility and immune response of inbred mice to Y strain Trypanosoma cruzi. Murfin DJ, et al. **Am J Trop Med Hyg** 1989 Jul; 41(1):41-9

Parasitic load increases and myocardial inflammation decreases in Trypanosoma cruzi-infected mice after inactivation of helper T cells. Russo M, et al. **Ann Inst Pasteur Immunol** 1988 May-Jun;139(3):225-36

In vivo leukocyte chemotaxis during the development of acute experimental Trypanosoma cruzi infection. Abath FG, et al. **Braz J Med Biol Res** 1988;21(5):1013-4

Leishmania donovani donovani antigens recognized by kala-azar patient sera and identification of cross-reacting antigens to Chagas' disease. Andrade CR, et al. **Braz J Med Biol Res** 1988;21(3):511-5

Anti-alpha-galactosyl antibodies in chagasic patients. Possible biological significance. Milani SR, et al. **Braz J Med Biol Res** 1988;21(6):1275-86 (30 ref.)

Identification of anti-acetylcholinesterase and anti-idiotype antibodies in human and experimental Chagas' disease: pathological implications. Ouaissi A, et al. **Eur J Immunol** 1988 Dec;18(12):1889-94

Characterization of antibody isotype responsible for immune clearance in mice infected with Trypanosoma cruzi. Brodskyn CI, et al. **Immunol Lett** 1988 Aug;18(4):255-8

The early phase of the immune response of CBA mice infected with Trypanosoma cruzi. Camargo IJ, et al. **Immunol Lett** 1989 Feb;20(3):213-6

Elevated environmental temperature enhances immunity in experimental Chagas' disease. Anderson KJ, et al. **Infect Immun** 1989 Jan;57(1):13-7

Development of resistance to Trypanosoma cruzi in mice depends on a viable population of L3T4+ (CD4+) T lymphocytes. Araujo FG. **Infect Immun** 1989 Jul; 57(7):2246-8

Autoimmunity in Chagas' disease: specific inhibition of reactivity of CD4+ T cells against myosin in mice chronically infected with Trypanosoma cruzi. Rizzo LV, et al. **Infect Immun** 1989 Sep;57(9):2640-4

Experimental American leishmaniasis and Chagas' disease in the Brazilian squirrel monkey: cross immunity and electrocardiographic studies of monkeys infected with Leishmania braziliensis and Trypanosoma cruzi. Pung OJ, et al. **Int J Parasitol** 1988 Dec;18(8):1053-9

Idiotypic sensitization in utero of children born to mothers with schistosomiasis or Chagas' disease. Eloi-Santos SM, et al. **J Clin Invest** 1989 Sep;84(3):1028-31

Anti-Trypanosoma cruzi and anti-laminin antibodies in chagasic patients after specific treatment. Gazzinelli RT,

et al. **J Clin Microbiol** 1988 Sep;26(9):1795–800

Immune deficiency in chronic Trypanosoma cruzi infection. Recombinant IL-1 restores Th function for antibody production. Reed SG, et al. **J Immunol** 1989 Mar 15; 142(6):2067–71

Suppression of antibody dependent cytotoxicity to Trypanosoma cruzi in chronic chagasic mice after treatment with nifurtimox. Chambó JG, et al. **Medicina (B Aires)** 1988;48(1):49–53

Human Chagas' disease: evolution of the antibody response and recognition of antigens of Trypanosoma cruzi. Araujo FG, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:522–6

Immunosuppressor response triggers by the interaction of lymphocytes with chagasic IgG. Borda ES, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:280–3

Immunity versus immunobiology of infections: an outsider's view on lymphocyte repertoires, activities and organization in normal and infected mice. Coutinho A. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:236–9

Questions on self recognition and autoimmunity in chronic Chagas disease: an immunologic approach. dos Reis GA. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:347–55

Analysis of cloned Trypanosoma cruzi proteins that are antigenic during the acute and chronic phase of Chagas' disease. Frasch AC, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:345–6

Identification of Trypanosoma cruzi antigens recognized by T cells and immune sera from chagasic patients. Gazzinelli RT, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:272–9

Role of L3T4+ T cells in the immunopathology of chronic experimental Chagas' disease. Hontebeyrie-Joskowicz M, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:539–45

Detection of parasite antigens in different biological fluids. Katzin AM. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:478–81

Lymphocyte subpopulations and clonal repertoires participate in immune response to acute T. cruzi infection. Minoprio P, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:356–9

Autoimmunity in Chagas' disease: immunomodulation of autoimmune and T. cruzi-specific immune responses. Rizzo LV, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:360–2

Relationship of parasite specific antibodies and heart specific autoantibodies in mice infected with Trypanosoma cruzi. Rowland EC, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:367

Identification of a Trypanosoma cruzi antigen that is shed during the acute phase of Chagas' disease. Affranchino JL, et al. **Mol Biochem Parasitol** 1989 May 15;34(3):221–8

Susceptible mice present higher macrophage activation than resistant mice during infections with myotropic strains of Trypanosoma cruzi. Russo M, et al. **Parasite Immunol** 1989 Jul;11(4):385–95

A radiometric assay for diagnosing lytic antibodies in Trypanosoma cruzi infection. Cardoni RL, et al. **Parasitol Res** 1988;74(6):512–5

Lytic antibodies elicited by Trypanosoma cruzi infection recognize epitopes present on both bloodstream trypomastigote and epimastigote forms of parasite. Takehara HA, et al. **Rev Inst Med Trop Sao Paulo** 1988 Sep–Oct;30(5):351–6

Most B cells in acute Trypanosoma cruzi infection lack parasite specificity. Minoprio P, et al. **Scand J Immunol** 1988 Nov;28(5):553–61

Modulation of both interleukin 2 receptor expression and interleukin 2 production during experimental murine Trypanosoma cruzi infection. Rottenberg M, et al. **Scand J Immunol** 1989 Jul;30(1):65–72

Role of T helper/inducer cells as well as natural killer cells in resistance to Trypanosoma cruzi infection. Rottenberg M, et al. **Scand J Immunol** 1988 Nov;28(5):573–82

Cellular immunity to Trypanosoma cruzi is mediated by helper T cells (CD4+). Ben Younès-Chennoufi A, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):84–9

Persistence of Trypanosoma cruzi antigens in the inflammatory lesions of chronically infected mice. Ben Younès-Chennoufi A, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):77–83

Anti-laminin and specific antibodies in acute Chagas disease. Gazzinelli R, et al. **Trans R Soc Trop Med Hyg** 1988; 82(4):574–6

[Temporal variation of titers of serologic reactions in the chronic phase of Chagas disease and its possible clinical correlation] Arteaga-Fernández E, et al. **Arq Bras Cardiol** 1988 Aug;51(2):143–6 (Eng. Abstr.) (Por)

[Autoimmunity is not an impediment for vaccination against Chagas disease] Teixeira AR, et al. **Rev Soc Bras Med Trop** 1987 Apr–Jun;20(2):123–7 (28 ref.) (Por)

[Exoantigens of Trypanosoma cruzi. Epitopes reactive against immunoglobulins of patients with Chagas' disease] Gruppi A, et al. **Medicina (B Aires)** 1988;48(2):161–6 (Eng. Abstr.) (Spa)

METABOLISM

Tumour necrosis factor (cachectin) production during experimental Chagas' disease. Tarleton RL. **Clin Exp Immunol** 1988 Aug;73(2):186–90

Regulation of lymphokine production in experimental and human Chagas' disease. Tarleton RL. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:268–71

PARASITOLOGY

Trypanosoma cruzi: explant organ cultures from mice with chronic Chagas' disease. McCabe RE, et al. **Exp Parasitol** 1989 May;68(4):462–9

Evaluation of the rabbit as a model for Chagas' disease. I. Parasitological studies. Ramirez LE, et al. **Mem Inst Oswaldo Cruz** 1987 Oct–Dec;82(4):531–6

Carbohydrate epitopes (Galf——Manp) recognized by antibodies that inhibit trypomastigote interiorization into mammalian cells. Zingales B, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:240–2

Studies in search of a suitable experimental insect model for xenodiagnosis of hosts with Chagas' disease. 3—On the interaction of vector species and parasite strain in the reaction of bugs to infection by Trypanosoma cruzi. Perlowagora-Szumlewicz A, et al. **Rev Saude Publica** 1988 Oct;22(5):390–400

Trypanosoma cruzi antigens detected by immunoelectron microscopy in the spleen of mice serologically positive but parasitologically cured by chemotherapy. (Preliminary report). Andrade SG, et al. **Rev Soc Bras Med Trop** 1988 Jan–Mar;21(1):41–2

Quantification of Trypanosoma cruzi parasitaemia by direct micromethod. de Arias AR, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):248

[Characteristics of cells parasitized with Trypanosoma cruzi in the walls of the central vein of the suprarenal glands of chronic chagasic patients] Almeida H de O, et al. **Rev Soc Bras Med Trop** 1986 Oct–Dec;19(4):227–31 (Eng. Abstr.) (Por)

PATHOLOGY

Morphometric and histological analysis of the superior cervical ganglion in experimental Chagas' disease in rats. Camargos ER, et al. **Am J Trop Med Hyg** 1988 Nov; 39(5):456–62

Ultrastructural characteristics of different stages of human chagasic myocarditis. Palacios-Prü E, et al. **Am J Trop Med Hyg** 1989 Jul;41(1):29–40

Histopathology of the heart conducting system in experimental Chagas disease in mice. Molina HA, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):241–6

[Systematized anatomopathologic study of the encephalon in patients with chronic Chagas' disease with sudden death (letter)] Menezes AC, et al. **Rev Inst Med Trop Sao Paulo** 1988 Nov–Dec;30(6):441–2 (Por)

[Nuclear changes in cells parasitized by Trypanosoma cruzi in chronic Chagas disease patients] Almeida H de O, et al. **Rev Soc Bras Med Trop** 1987 Jul–Sep;20(3):147–51 (Eng. Abstr.) (Por)

[Post-mortem artificial xenodiagnosis in chronic chagasic patients] Lopes ER, et al. **Rev Soc Bras Med Trop** 1986 Oct–Dec;19(4):259–62 (Eng. Abstr.) (Por)

[Necroscopic study of a case of chronic form of Chagas disease with electrocardiogram and x-rays of normal thorax. Special reference to the excito-conductor system of the heart] Lopes ER, et al. **Rev Soc Bras Med Trop** 1988 Apr–Jun;21(2):67–70 (Eng. Abstr.) (Por)

PHYSIOPATHOLOGY

Esophageal motility in chagasic patients. Bilder CR, et al. **Medicina (B Aires)** 1988;48(3):273–8

Trypanosoma cruzi: mechanisms of cell-invasion and intracellular survival. Andrews NW, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:452–5

Depletion of L3T4+ T lymphocytes during acute Trypanosoma cruzi infection abolish macrophage and B lymphocyte activation but not tissue inflammatory reaction. Russo M, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:527–38

Esophageal manometry and vectorcardiography study of asymptomatic patients with Chagas' disease. Moraes-Filho JP, et al. **Rev Inst Med Trop Sao Paulo** 1988 Nov–Dec; 30(6):406–10

[Radionuclide angiocardiographic evaluation of the effect of isosorbide dinitrate in patients with Chagas' disease] Marin-Neto JA, et al. **Arq Bras Cardiol** 1988 Nov; 51(5):367–71 (Eng. Abstr.) (Por)

[Effect of isosorbide dinitrate on the lower esophageal sphincter pressure in patients with Chagas' disease] Dantas RO, et al. **Arq Gastroenterol** 1987 Apr–Jun;24(2):84–7 (Eng. Abstr.) (Por)

[The esophagus in Chagas' disease: physiologic, pharmacologic and clinical studies] Meneghelli UG. **Arq Gastroenterol** 1987 Jul–Dec;24(3–4):177–83 (15 ref.) (Eng. Abstr.) (Por)

[Peripheral denervation in the various clinical forms of Chagas' disease] DeFaria CR, et al. **Arq Neuropsiquiatr** 1988 Sep;46(3):225–37 (Eng. Abstr.) (Por)

[Functional evaluation of the exocrine pancreas in patients with chronic Chagas' disease] Mott C de B, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Nov–Dec; 43(6):279–87 (63 ref.) (Eng. Abstr.) (Por)

[The exocrine pancreas and Chagas' disease] Mott C de M, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jul–Aug; 43(4):177–9 (27 ref.) (Por)

[Dogs as experimental models for the study of the natural course of Chagas disease] Tafuri WL, et al. **Rev Soc Bras Med Trop** 1988 Apr–Jun;21(2):77 (Por)

PREVENTION & CONTROL

Metabolism and preservation of fresh and stored erythrocytes in blood treated with gentian violet. Moraes-Souza H, et al. **Braz J Med Biol Res** 1988;21(2):241–6

[Control of transmission of Chagas disease in Mambaí-Goias, Brazil (1982–1984)] Garcia-Zapata MT, et al. **Rev Soc Bras Med Trop** 1986 Oct–Dec;19(4):219–25 (Eng. Abstr.) (Por)

RADIONUCLIDE IMAGING

[Scintigraphic study of gallbladder emptying in chronic Chagas' disease] Troncon LE, et al. **Arq Gastroenterol** 1987 Jul–Dec;24(3–4):157–63 (Eng. Abstr.) (Por)

THERAPY

The effect of interleukin-2 on parasitemia and myocarditis in experimental Chagas' disease. Hulsebos LH, et al. **J Protozool** 1989 May–Jun;36(3):293–8

The use of non-specific immunopotentiators in experimental Trypanosoma cruzi infection. Abath FG, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):73–6

TRANSMISSION

Does influx from endemic areas mean more transfusion-associated Chagas' disease? [news] Skolnick A. **JAMA** 1989 Sep 15;262(11):1433

Evaluation of Chagas' disease transmission through breast-feeding. Bittencourt AL, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar;83(1):37–9

Metabolism and mode of action of gentian violet. Moreno SN. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:308–20 (14 ref.)

[Control of Chagas' disease vectors in Brazil and risk of domiciliary reinfestation by secondary vectors] Dias JC. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:387–91 (17 ref.) (Por)

[Post-transfusion Chagas' disease] Amato Neto V. **Rev Hosp Clin Fac Med Sao Paulo** 1988 May–Jun; 43(3):135–7 (Por)

[Experimental study on the transmission of Chagas' disease by milk] Campos R, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 May–Jun; 43(3):146–7 (Eng. Abstr.) (Por)

[Chagas' disease: registry of an acute transfusional case] Wanderley DM, et al. **Rev Inst Med Trop Sao Paulo** 1988 Nov–Dec;30(6):437–40 (Eng. Abstr.) (Por)

[The 1st indigenous case of South American trypanosomiasis in the State of Acre (Brazil) and its correlation with the strains isolated from human cases and from wild triatomines in the area] Barata JM, et al. **Rev Saude Publica** 1988 Oct; 22(5):401–10 (Eng. Abstr.) (Por)

[Potential risk of transfusion transmission of Chagas disease in Belo Horizonte (MG)] Bronfen E, et al. **Rev Soc Bras Med Trop** 1988 Jan–Mar;21(1):29–32 (Eng. Abstr.) (Por)

[Transmission of Trypanosoma cruzi in a case, during lactation, in a non-endemic area] Medina-Lopes M das D. **Rev Soc Bras Med Trop** 1988 Jul–Sep;21(3):151–3 (Eng. Abstr.) (Por)

[Chagasic granuloma of the brain in a patient with lymphoblastic leukemia] Corona S, et al. **Rev Med Chil** 1988 Jul;116(7):676–80 (Eng. Abstr.) (Spa)

[Chagas' disease in patients in chronic hemodialysis. Prevalence and risk of transmission by blood transfusion] Lorca M, et al. **Rev Med Chil** 1989 Jun;116(6):509–13 (Eng. Abstr.) (Spa)

[Prevalence of infection by Trypanosoma cruzi in patients with multiple blood transfusions] Lorca M, et al. **Rev Med Chil** 1988 Feb;116(2):112–6 (Eng. Abstr.) (Spa)

VETERINARY

Trypanosoma cruzi infection in a colony-born baboon. Gleiser CA, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1225–6

TRYPARSAMIDE

ADVERSE EFFECTS

Tryparsamide [letter] Thomson KD. **Lancet** 1989 Sep 2; 2(8662):573

TRYPSIN

Isolation of soybean trypsin inhibitors by affinity chromatography on anhydrotrypsin-Sepharose 4B. Pusztai A, et al. **Anal Biochem** 1988 Jul;172(1):108–12

Proteolytic generation of constitutive tyrosine kinase activity of the human insulin receptor. Hsuan JJ, et al. **Biochem J** 1989 Apr 15;259(2):519–27

Trypsin hydrolysis of X-phenyl hippurates. Selassie CD, et al. **Chem Biol Interact** 1988;68(1–2):13–25

The refined 2.0 A X-ray crystal structure of the complex formed between bovine beta-trypsin and CMTI-I, a trypsin inhibitor from squash seeds (Cucurbita maxima).

Topological similarity of the squash seed inhibitors with the carboxypeptidase A inhibitor from potatoes. Bode W, et al. **FEBS Lett** 1989 Jan 2;242(2):285–92

Glucan–binding domain of a glucosyltransferase from Streptococcus sobrinus: isolation of a 55–kilodalton peptide from a trypsin digest of glucosyltransferase prebound to insoluble glucan. Kobayashi S, et al. **Infect Immun** 1989 Jul;57(7):2210–3

Effects of somatostatin on acute pancreatitis induced in rats by injection of taurocholate and trypsin into a temporarily closed duodenal loop. De Rai P, et al. **Int J Pancreatol** 1988 Jul;3(5):367–73

Synthesis of somatostatin analogs resistant to the action of trypsin. Allen MC, et al. **Int J Pept Protein Res** 1988 Aug; 32(2):89–97

Functional domains of vaccinia virus mRNA capping enzyme. Analysis by limited tryptic digestion. Shuman S. **J Biol Chem** 1989 Jun 5;264(16):9690–5

Molecular organization of human plasma alpha 2–macroglobulin and its trypsin complexes. A small–angle x–ray scattering investigation. Sjöberg B, et al. **J Biol Chem** 1989 Sep 5;264(25):14686–90

Further inhibition studies on guanidinobenzoatase, a trypsin–like enzyme associated with tumour cells. Steven FS, et al. **J Enzym Inhib** 1987;1(3):187–201 (24 ref.)

Amino acid sequence similarity between Drosophila acetylcholinesterase and the active site region of trypsin [letter] Small DH. **Neurosci Lett** 1988 Nov 22;94(1–2):237–8

Trypsin digest of the iris. Mansour AM. **Ophthalmic Res** 1989;21(3):184–6

[Selective isolation of C–terminal peptides with immobilized anhydrotrypsin] Kumazaki T, et al. **Tanpakushitsu Kakusan Koso** 1989 Feb;34(2):168–76 **(Jpn)**

ADMINISTRATION & DOSAGE

[Dynamics of several biochemical indicators of blood in osmoenzymo–reflexotherapy of chronic osteomyelitis] Tevosiants AV, et al. **Ortop Travmatol Protez** 1988 Nov; (11):34–6 (Eng. Abstr.) **(Rus)**

[Intratracheal instillation of trypsin in bronchial obstruction] Nemerov EV. **Sov Med** 1989;(3):86–8 **(Rus)**

[Inhibition of the secretion of endogenous insulin and trypsin by exogenous insulin and trypsin in the complex treatment of acute pancreatitis] Sheverdin IuP. **Vestn Khir** 1989 Jan; 142(1):54–5 **(Rus)**

ANALYSIS

A radioactive method for the measurement of trypsin and trypsin–like activities. Fernández Murray P, et al. **Anal Biochem** 1989 May 15;179(1):56–9

Use of p–aminobenzamidine to monitor activation of trypsin–like serine proteases. Monroe DM, et al. **Anal Biochem** 1988 Aug 1;172(2):427–35

4–alkylidene oxazolones as substrates and inhibitors for sensitive assays of the normality of active sites and the catalytic properties of hydrolases. Baese HJ, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):113–21

X–ray analysis of a thrombin inhibitor–trypsin complex. Matsuzaki T, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):949–52

Detection of trypsin– and chymotrypsin–like proteases using p–nitroanilide substrates after sodium dodecyl sulphate polyacrylamide gel electrophoresis. Koivunen E. **J Chromatogr** 1989 May 26;470(2):401–6

Trypsin radioimmunoassay. Geokas MC, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):1–3 (40 ref.)

[The determination of trypsin activity in duodenal fluid with N alpha–(p–toluenesulfonyl)–L–arginine–p–nitranilide (L–TAPA)] Siegmund E, et al. **Z Med Lab Diagn** 1989; 30(4):219–27 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Measurement of pancreatic enzyme synthesis in humans. Problems in patients with calcific pancreatitis. O'Keefe SJ, et al. **Int J Pancreatol** 1989 Feb;4(1):13–27

BLOOD

Circulating concentrations of trypsin–like immunoreactivity and activities of lipase and amylase after pancreatic duct ligation in dogs. Simpson KW, et al. **Am J Vet Res** 1989 May;50(5):629–32

Serum immunoreactive trypsin in tropical pancreatic diabetes syndrome. Yajnik CS, et al. **Ann Clin Biochem** 1989 Jan; 26 (Pt 1):69–73

Quantitative determination of kinins released by trypsin using enzyme–linked immunosorbent assay (ELISA) and identification by high–performance liquid chromatography (HPLC). Anumula KR, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2421–7

Dried blood spot immunoreactive trypsin (IRT) values [letter] Pederzini F, et al. **Eur J Pediatr** 1988 Aug; 147(6):663

Renal involvement in chronic pancreatic disease: effects on trypsin and amylase plasma–urine transfer. Fabris C, et al. **Int J Pancreatol** 1988;3 Suppl 1:S59–65

Trypsin and elastase–1 in chronic pancreatic diseases. Vantini I, et al. **Int J Pancreatol** 1988;3 Suppl 1:S53–7 (9 ref.)

Sarcoidosis and the pancreas. McCormick PA, et al. **Ir J Med Sci** 1988 Jun;157(6):181–3

Questions choice of test for exocrine pancreatic function [letter] Childers HE. **J Am Vet Med Assoc** 1988 Oct 1; 193(7):759

Dipeptidylpeptidase IV and trypsin–like enzymatic degradation of human growth hormone–releasing hormone in plasma. Frohman LA, et al. **J Clin Invest** 1989 May; 83(5):1533–40

Serum immunoreactive anionic trypsin is diagnostic for rejection of vascularized pancreas allograft. Marks WH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2786–7

Pancreatic enzymes in serum and urine as indicators of pancreatic allograft rejection in the pig. Källén R, et al. **Transplantation** 1989 Sep;48(3):376–81

[Clinical usefulness of a trypsin radioimmunoassay kit] Kanamori I, et al. **Radioisotopes** 1988 Aug;37(8):460–3 (Eng. Abstr.) **(Jpn)**

[Effect of anticoagulants on the activity of trypsin–like proteinases in human blood plasma] Babil AV, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):177–9 (Eng. Abstr.) **(Rus)**

[Immunoreactive trypsin in the blood serum of patients with endogenous hypercorticism] German SV, et al. **Klin Med (Mosk)** 1989 Jun;67(6):36–40 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Immunohistochemistry of estrogen receptor protein in paraffin sections. Effects of enzymatic pretreatment and cobalt chloride intensification. Hiort O, et al. **Am J Clin Pathol** 1988 Nov;90(5):559–63

Modification of a trypsin–detergent method for DNA flow cytometry of human epidermis. Stough DB, et al. **Cytometry** 1989 Jan;10(1):90–3

GENETICS

Development of an efficient method for generating and screening active trypsin and trypsin variants. Evnin LB, et al. **Ann N Y Acad Sci** 1988;542:61–74

An expression system for trypsin. Vasquez JR, et al. **J Cell Biochem** 1989 Mar;39(3):265–76

IMMUNOLOGY

Immunoreactive trypsin in Shwachman's syndrome. Dossetor JF, et al. **Arch Dis Child** 1989 Mar;64(3):395–6

Trypsin–binding immunoglobulin G and associated antigen in cystic fibrosis. Blandin C, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):13–6

ISOLATION & PURIFICATION

Performance of enzyme separation and purification by improved simulated–moving–bed chromatography. Huang SY, et al. **Ann N Y Acad Sci** 1988;542:185–91

Purification and characterization of two trypsin–like enzymes from the digestive tract of anchovy Engraulis encrasicholus. Martínez A, et al. **Comp Biochem Physiol [B]** 1988;91(4):677–84

Purification and characterization of chymotrypsin, trypsin and elastase like proteinases from cod (Gadus morhua L.). Raae AJ, et al. **Comp Biochem Physiol [B]** 1989; 93(2):317–24

Purification and characterization of trypsin from the poikilotherm Gadus morhua. Asgeirsson B, et al. **Eur J Biochem** 1989 Mar 1;180(1):85–94

Human ovarian tumor–associated trypsin. Its purification and characterization from mucinous cyst fluid and identification as an activator of pro–urokinase. Koivunen E, et al. **J Biol Chem** 1989 Aug 25;264(24):14095–9

[Study on the kinetics of isolation of trypsin immobilized on dialdehyde cellulose during hydrolytic destruction] Ryl'tsev VV, et al. **Antibiot Khimioter** 1989 Mar; 34(3):202–5 (Eng. Abstr.) **(Rus)**

METABOLISM

Role of counter ions in trypsin acylation. NaCl effect. Vajda T, et al. **Acta Biochim Biophys Hung** 1988;23(2):195–202

Proteolysis of spectrin by trypsin and pronase in the presence of phospholipid suspensions. Sikorski AF, et al. **Acta Biochim Pol** 1988;35(2):71–81

Alpha 2 macroglobulin–proteinase complexes stimulate prostaglandin E2 synthesis by peritoneal macrophages. Hoffman M, et al. **Agents Actions** 1988 Dec;25(3–4):360–7

Feedback regulation by trypsin: evidence for intraluminal CCK–releasing peptide. Miyasaka K, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G175–81

Inactivation of human lipase by proteases. Thiruvengadam R, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G476–81

A conjugate of trypsin and chymotrypsin. Rajput YS, et al. **Appl Biochem Biotechnol** 1987 Sep–Dec;16:201–10

Substrate phosphorylation can inhibit proteolysis by trypsin–like enzymes. Benore–Parsons M, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):274–80

Degradation of human epidermal keratin by cod trypsin and extracts of fish intestines. Bjelland S, et al. **Arch Dermatol Res** 1989;280(8):469–73

Effects of prolonged duct ligation of the rat salivary glands on the activity of trypsin–like protease. Ikeno K, et al. **Arch Oral Biol** 1988;33(8):613–5

The degradation of type I collagen and human plasma fibronectin by the trypsin–like enzyme and extracellular membrane vesicles of Bacteroides gingivalis W50. Smalley JW, et al. **Arch Oral Biol** 1988;33(5):323–9

The glucose polymer of PC12 cells is susceptible to trypsinization. Rasilo ML, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):1–6

Salt stimulation of the activation of latent protein phosphatase, Fc.M, by Mn++ and by Mn/trypsin. Schuchard MD, et al. **Biochem Int** 1989 Apr;18(4):845–9

A 13C–n.m.r. investigation of the ionizations within an inhibitor—alpha–chymotrypsin complex. Evidence that both alpha–chymotrypsin and trypsin stabilize a hemiketal oxyanion by similar mechanisms. Finucane MD, et al. **Biochem J** 1989 Mar 15;258(3):853–9

Interpretation of rate profiles of the pH–dependent trypsin– and alpha–chymotrypsin–catalyzed hydrolysis of esters with a free alpha–amino group. del Castillo LM, et al. **Biochim Biophys Acta** 1971 May 12;235(2):358–69

Porcine muscle prolyl endopeptidase: limited proteolysis of tryptic peptides from hemoglobin beta–chains at prolyl and alanyl bonds. Moriyama A, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):151–5

A study to see whether phosphatidylserine, partial proteolysis and EGTA substitute for calmodulin during activation of the Ca2+–ATPase from red cell membranes by ATP. Rossi JP, et al. **Biochim Biophys Acta** 1989 Jul 6; 996(3):153–9

Conformation of delta–chymotrypsin during catalysis. Chemical reactivity of the isoleucine 16 amino group in the acyl–enzyme intermediate. Valenzuela P, et al. **Biochim Biophys Acta** 1971 May 12;235(2):411–3

Interactions in vitro and in vivo between anionic and cationic porcine trypsin and porcine plasma proteinase inhibitors. Hjelmqvist B, et al. **Biol Chem Hoppe Seyler** 1988 Dec; 369(12):1331–6

Enzymatic resynthesis of the "reactive site" bond in the modified aprotinin derivatives [seco–15/16]aprotinin and [Di–seco–15/16,39/40]aprotinin. Schnabel E, et al. **Biol Chem Hoppe Seyler** 1988 Jun;369(6):461–8

Trypsin uptake and trypsin–inhibitor complexes. Differences between suckling and adult rats. Levine JJ, et al. **Biol Neonate** 1989;56(1):40–7

Protein stabilization by blocking the native unfolding nucleus. Schellenberger A, et al. **Biomed Biochim Acta** 1989; 48(1):63–7

Uptake of alpha 2–macroglobulin–trypsin complex by human placenta is mediated by a microvillous membrane receptor. Eaton BM, et al. **Cell Biochem Funct** 1989 Jan;7(1):57–64

Generation of alpha– and beta–kallikreins from porcine pancreatic prokallikrein by the action of trypsin. Kamada M, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4891–9

Studies of specificity and catalysis in trypsin by structural analysis of site–directed mutants. Sprang SR, et al. **Crit Rev Biotechnol** 1988;8(3):225–36

Increase in pancreatic lipase and trypsin activity and their mRNA levels in streptozotocin–induced diabetic rats. Duan RD, et al. **Dig Dis Sci** 1989 Aug;34(8):1243–8

Effects of enterally– and parenterally–administered bombesin on intestinal luminal tryptic activity and protein in the suckling rat. Pollack PF, et al. **Experientia** 1989 Apr 15; 45(4):385–8

Cyanogen bromide cleavage of bovine secretory component and its tryptic fragments. Beale D. **Int J Biochem** 1988; 20(8):873–9

Tryptic digestion of bovine secretory IgA at elevated temperature and in urea. Isolation of SC domain 1 which is covalently bound to IgA dimer and binds non–covalently to IgM. Beale D. **Int J Biochem** 1989;21(5):549–54

Structural and functional integrity of specificity and catalytic sites of trypsin. Gráf L, et al. **Int J Pept Protein Res** 1988 Dec;32(6):512–8

Ionic strength–dependent proteolytic activation of protein kinase C by trypsin–like protease. Hashimoto E, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):934–8

Structural aspects of skeletal muscle F–actin as studied by tryptic digestion: evidence for a second nucleotide interacting site. Hozumi T. **J Biochem (Tokyo)** 1988 Aug; 104(2):285–8

Changes in trypsin–binding properties and conformation of rabbit alpha–2–macroglobulin on reaction with methylamine. Tamamizu S, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):898–904

The effect of actin and phosphorylation on the tryptic cleavage pattern of Acanthamoeba myosin IA. Brzeska H, et al. **J Biol Chem** 1989 Jun 15;264(17):10243–50

Dynamic conformational changes of 21 S dynein ATPase coupled with ATP hydrolysis revealed by proteolytic digestion. Inaba K, et al. **J Biol Chem** 1989 May 15; 264(14):8384–8

Functional differentiation of cyclooxygenase and peroxidase activities of prostaglandin synthase by trypsin treatment. Possible location of a prosthetic heme binding site. Marnett LJ, et al. **J Biol Chem** 1988 Nov 15;263(32):16532–5

Structural and functional correlation of the trypsin–digested Ca2+ release channel of skeletal muscle sarcoplasmic reticulum. Meissner G, et al. **J Biol Chem** 1989 Jan 25; 264(3):1715–22

Trypsin cleavage in the COOH terminus of the bacteriophage T4 gene 41 DNA helicase alters the primase–helicase activities of the T4 replication complex in vitro. Richardson RW, et al. **J Biol Chem** 1989 Mar 15;264(8):4732–9

The use of alpha 2–antiplasmin as a model for the demonstration of complex reversibility in serpins. Shieh BH, et al. **J Biol Chem** 1989 Aug 15;264(23):13420–3

Trypsin destruction of the high affinity ryanodine binding sites of the junctional sarcoplasmic reticulum. Shoshan-Barmatz V, et al. **J Biol Chem** 1988 Nov 15; 263(32):16772–9

Proteolysis of alcohol-treated soybean meal proteins by Bacteroides ruminicola, Bacteroides amylophilus, pepsin, trypsin, and in the rumen of steers. Lynch GL, et al. **J Dairy Sci** 1988 Sep;71(9):2416–27

Binding of the trypsin inhibitor from white mustard (Sinapis alba L.) seeds to bovine beta-trypsin: thermodynamic study. Menegatti E, et al. **J Enzym Inhib** 1987;2(1):67–71

Inhibition of guanidinobenzoatase by a substrate for trypsin-like enzymes. Steven FS, et al. **J Enzym Inhib** 1988; 2(3):209–14

Similarity between active and trypsin-activated inactive renin in dog plasma by means of renin inhibition: the dog as an animal model for studies of inactive renin. Tonolo G, et al. **J Hypertens** 1988 Dec;6(12):975–80

Use of selectively trypsinized nucleosome core particles to analyze the role of the histone "tails" in the stabilization of the nucleosome. Ausio J, et al. **J Mol Biol** 1989 Apr 5;206(3):451–63

Limited tryptic proteolysis of the benzodiazepine binding proteins in different species reveals structural homologies. Friedl W, et al. **J Neurochem** 1988 Dec;51(6):1877–81

Porcine thyroid peroxidase: relationship between the native enzyme and an active, highly purified tryptic fragment [published erratum appears in Mol Endocrinol 1988 Dec;2(12):1201] Yokoyama N, et al. **Mol Endocrinol** 1988 Sep;2(9):838–44

Effect of dietary sub-lethal doses of lima bean lectin on relative organ weights, pancreatic and intestinal trypsin (EC 3.4.21.4) and chymotrypsin (EC 3.4.21.1) in the rat. Aletor VA. **Nahrung** 1989;33(4):355–60

Serum acetylcholinesterase possesses trypsin-like and carboxypeptidase B-like activity. Small DH. **Neurosci Lett** 1988 Dec 19;95(1–3):307–12

Enzymes work by solvation substitution rather than by desolvation. Warshel A, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5820–4

Cleavage of Langerhans cell surface CD1a molecule by trypsin. Dezutter-Dambuyant C, et al. **Res Immunol** 1989 May;140(4):377–90

[Enzymatic cleavage of human neurophysin into 2 sub-domains containing 3 and 4 disulfides] Chauvet J, et al. **C R Acad Sci [III]** 1988;307(18):811–6 (Eng. Abstr.) **(Fre)**

[The pH dependence of lipase and trypsin activity] Gerber B, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(3–4):190–3 (Eng. Abstr.) **(Ger)**

[Trypsin-, chymotrypsin-like proteinases in fishes] Kolodzelskaia MV, et al. **Ukr Biokhim Zh** 1988 Jul-Aug; 60(4):103–17 (76 ref.) (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Unmasking of surface negativity on day 6 pregnant rat uterine epithelial cells by trypsin and pronase. Hosie MJ, et al. **Acta Histochem (Jena)** 1989;86(1):33–8

Differences in the solubility and susceptibility to proteolytic degradation of basement-membrane components in adult and embryonic mouse tissues. Dziadek M, et al. **Am J Anat** 1989 Apr;184(4):298–310

Trypsin activation of atrial muscarinic K+ channels. Kirsch GE, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H334–8

Trypsin treatment of bovine ova after in vitro exposure to vesicular stomatitis virus. Stringfellow DA, et al. **Am J Vet Res** 1989 Jun;50(6):990–2

The effect of trypsin on the growth in vitro of adenoviruses present in faeces. Antoine C, et al. **Ann Inst Pasteur Virol** 1988 Apr-Jun;139(2):233–8

Fertilization in trypsin-treated oocytes. Kiessling AA, et al. **Ann N Y Acad Sci** 1988;541:614–20

Structural proteins of bovine coronavirus strain L 9: effects of the host cell and trypsin treatment. St. Cyr-Coats KS, et al. **Arch Virol** 1988;103(1–2):35–45

Models of proteolysis of oligomeric enzymes and their applications to the trypsinolysis of citrate synthases. Else AJ, et al. **Biochem J** 1988 Sep 1;254(2):437–42

Characterization of C1q-binding material released from the membranes of Raji and U937 cells by limited proteolysis with trypsin. Erdei A, et al. **Biochem J** 1988 Oct 15; 255(2):493–9

Activation of rat liver microsomal glutathione transferase by limited proteolysis. Morgenstern R, et al. **Biochem J** 1989 Jun 1;260(2):577–82

Effect of trypsinization in cell culture on bradykinin receptors in vascular endothelial cells. Sung CP, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):696–9

N-methyl-D-aspartate (NMDA) receptors are inactivated by trypsin. Allen CN, et al. **Brain Res** 1988 Aug 16; 458(1):147–50

Trypsin affects basal and stimulated osmotic water permeability in isolated toad skin. Berman DM, et al. **Comp Biochem Physiol [A]** 1989;92(1):15–9

Replication of Xenopus erythrocyte nuclei in a homologous egg extract requires prior proteolytic treatment. Coppock DL, et al. **Dev Biol** 1989 Jan;131(1):102–10

Effect of proteases and other treatments on the proliferative assembly of tight junction strands in the rat prostate tissue. Meyer HW, et al. **Exp Pathol** 1988;34(4):237–44

Capacitation of bovine spermatozoa by lysophospholipids and trypsin. Wheeler MB, et al. **Gamete Res** 1989 Feb; 22(2):193–204

Modulation of chymase-mediated rat serosal mast cell degranulation by trypsin or diisopropyl fluorophosphate. Schick B, et al. **Immunology** 1989 Mar;66(3):434–8

Trypsin effect on water splitting site and its relation with electron transport in normal and salt-washed photosystem II preparation. Paliwal R, et al. **Indian J Biochem Biophys** 1988 Oct;25(5):397–403

Effects of trypsin, chymotrypsin, and uncoupling on survival of isolated acinar cells from rat pancreas. Letko G, et al. **Int J Pancreatol** 1989 May;4(4):431–41

A comparison of pancreatitis induced by high or low pressure injections of enzymes into the canine pancreatic duct. Schiller WR, et al. **Int J Pancreatol** 1989 Apr;4(3):281–90

Trypsinization and the radiosensitivity of mitotic and log phase Chinese hamster V79 cells exposed to 250 kVp X-rays. Reddy NM, et al. **Int J Radiat Biol** 1989 Jan; 55(1):105–17

Topological investigations. Study of the trypsin sensitivity of the N-acetylglucosaminyl and mannosyl-transferase activities located in the outer mitochondrial membrane. Levrat C, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):133–8

Tryptic cleavage as a probe of conformational differences between active and inactive forms of ornithine aminotransferase. Simmaco M, et al. **J Biol Chem** 1989 May 5;264(13):7473–6

Limited tryptic modification stimulates activation of Ca2+ release from isolated sarcoplasmic reticulum vesicles. Trimm JL, et al. **J Biol Chem** 1988 Nov 25; 263(33):17443–51

The kinetics of cell-substratum detachment mediated by trypsin: a comparison of normal and Duchenne fibroblasts. Simon LV, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):257–62

Trypsinization of bovine parathyroid cells abolishes Ca2+-regulated parathyroid hormone secretion. Muff R, et al. **J Endocrinol** 1989 Jul;122(1):213–8

Effect of K+, and other ligands on the thiol reactivity and tryptic cleavage pattern of scallop sarcoplasmic reticulum. Hardwicke PM, et al. **J Muscle Res Cell Motil** 1989 Jun; 10(3):229–44

Evidence for an intraluminal mediator in rat pancreatic enzyme secretion: reconstitution of the pancreatic response with dietary protein, trypsin and the monitor peptide. Fushiki T, et al. **J Nutr** 1989 Apr;119(4):622–7

Modification of L-type calcium current by intracellularly applied trypsin in guinea-pig ventricular myocytes. Hescheler J, et al. **J Physiol (Lond)** 1988 Oct;404:259–74

Thrombin and trypsin act at the same site to stimulate phosphoinositide hydrolysis and calcium mobilization. Jones LG, et al. **Mol Pharmacol** 1989 Jul;36(1):142–9

Transport and metabolism of glucose by dissociated brain cells: effects of trypsin. Roeder LM, et al. **Neurochem Res** 1988 Nov;13(11):1061–5

Trypsin-stimulated transformation of Trypanosoma brucei gambiense bloodstream forms to procyclic forms in vitro. Yabu Y, et al. **Parasitol Res** 1988;74(6):501–6

Effect of trypsin on the hormonal regulation of the fat-stimulated human exocrine pancreas. Olsen O, et al. **Scand J Gastroenterol** 1988 Sep;23(7):875–81

Trypsin does not reconstitute responsiveness to lipopolysaccharide in the strain C3H/HeJ, but is a B-cell mitogen-like lipopolysaccharide, stimulating a different subpopulation. Cardell S, et al. **Scand J Immunol** 1989 Feb; 29(2):143–9

Effect of trypsin in semen on in vivo fertilization and early embryonic development in superovulated heifers. Bielanski A. **Vet Res Commun** 1989;13(3):251–5

Trypsin sensitivity of several human rhinovirus serotypes in their low pH-induced conformation. Kowalski H, et al. **Virology** 1989 Aug;171(2):611–4

The cell attachment proteins of type 1 and type 3 reovirus are differentially susceptible to trypsin and chymotrypsin. Yeung MC, et al. **Virology** 1989 May;170(1):62–70

The influence of the host cell and trypsin treatment on bovine coronavirus infectivity. Cyr-Coats KS, et al. **Zentralbl Veterinarmed [B]** 1988 Dec;35(10):752–9

[Assessment of plasma inactive renin by trypsin and thermolysin treatment during open heart surgery] Amano Y, et al. **Kokyu To Junkan** 1989 Mar;37(3):301–5 (Eng. Abstr.) **(Jpn)**

[Isolation of a homogeneous functionally active beta-adrenergic receptor from bovine cerebellum using lauroyl sucrose. Effect of trypsin on receptor activity] Voelkov VL, et al. **Biokhimiia** 1988 Nov;53(11):1763–71 (Eng. Abstr.) **(Rus)**

[Inhibition of pancreatic secretion by trypsin and trypsinogen] Korot'ko GF, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1309–15 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Vasopressin is metabolized by a trypsinlike enzyme in guinea pig amniotic fluid. Uyehara CF, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E354–60

New trypsin-releasable spasmogenic substances in the plasma of spontaneously hypertensive rats. Beltramini-Sabbag LM, et al. **Braz J Med Biol Res** 1988;21(3):457–60

Effect of pancreatic juice and trypsin on oleic acid-stimulated pancreatic secretion and plasma secretin in dogs. Shiratori K, et al. **Gastroenterology** 1989 May;96(5 Pt 1):1330–6

[Protease-antiprotease balance in patients with invasive carcinoma of the cervix and uterus before and after radiotherapy] Benítez-Bribiesca L, et al. **Arch Invest Med (Mex)** 1989 Jan-Mar;20(1):9–21 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

[The action of gamma irradiation on trypsin immobilized on a modified polypropylene textile material] Ryltsev VV, et al. **Radiobiologiia** 1989 May-Jun;29(3):425–7 (Eng. Abstr.) **(Rus)**

SECRETION

Origins of chloride and bicarbonate secretory defects in the cystic fibrosis pancreas, as suggested by pancreatic function studies on control and CF subjects with preserved pancreatic function. Kopelman H, et al. **Clin Invest Med** 1989 Jun;12(3):207–11

Effects of CCK-8 in combination with natural or synthetic secretin on amylase, lipase, trypsin, and chymotrypsin secretion in rats. Rösch T, et al. **Int J Pancreatol** 1989 Oct;5(3):249–61

URINE

Pancreatic enzymes in serum and urine as indicators of pancreatic allograft rejection in the pig. Källén R, et al. **Transplantation** 1989 Sep;48(3):376–81

TRYPSIN INHIBITOR, ALPHA 1-ANTITRYPSIN see **ALPHA 1-ANTITRYPSIN**

TRYPSIN INHIBITOR, BOWMAN-BIRK SOYBEAN see under **TRYPSIN INHIBITORS**

TRYPSIN INHIBITOR, KAZAL PANCREATIC see under **TRYPSIN INHIBITORS**

TRYPSIN INHIBITOR, KUNITZ, PANCREATIC see **KALLIKREIN-TRYPSIN INACTIVATOR**

TRYPSIN INHIBITOR, KUNITZ SOYBEAN see under **TRYPSIN INHIBITORS**

TRYPSIN INHIBITORS

Design and chemical synthesis of a 32 residues chimeric microprotein inhibiting both trypsin and carboxypeptidase A. Le-Nguyen D, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1425–30

Reduced bovine pancreatic trypsin inhibitor has a compact structure. Amir D, et al. **Biochemistry** 1988 Dec 13; 27(25):8889–93

Folding of a peptide corresponding to the alpha-helix in bovine pancreatic trypsin inhibitor. Goodman EM, et al. **Biochemistry** 1989 May 16;28(10):4343–7

1H 2D NMR and distance geometry study of the folding of Ecballium elaterium trypsin inhibitor, a member of the squash inhibitors family. Heitz A, et al. **Biochemistry** 1989 Mar 21;28(6):2392–8

Amino acid sequence of a crystalline seed albumin (winged bean albumin-1) from Psophocarpus tetragonolobus (L.) DC. Sequence similarity with Kunitz-type seed inhibitors and 7S storage globulins. Kortt AA, et al. **Eur J Biochem** 1989 May 1;181(2):403–8

The refined 2.0 A X-ray crystal structure of the complex formed between bovine beta-trypsin and CMTI-I, a trypsin inhibitor from squash seeds (Cucurbita maxima). Topological similarity of the squash seed inhibitors with the carboxypeptidase A inhibitor from potatoes. Bode W, et al. **FEBS Lett** 1989 Jan 2;242(2):285–92

Primary structure of cathepsin D inhibitor from potatoes and its structure relationship to soybean trypsin inhibitor family. Marel M, et al. **FEBS Lett** 1989 Jul 17;251(1–2):94–8

Kunitz-type protease inhibitor found in rat mast cells. Purification, properties, and amino acid sequence. Kido H, et al. **J Biol Chem** 1988 Dec 5;263(34):18104–7

[trypsin inhibition by sheep haptoglobin] Belsembaeva RU, et al. **Biokhimiia** 1988 Jul;53(7):1082–5 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Studies on dressings for mucosa of oral cavity. Part 1: Influence of hydrophilizing substances on xerogel properties of dressings comprising Kunitz protease inhibitor. Kubis A, et al. **Pharmazie** 1988 Jul;43(7):486–8

Studies on dressings for treatment of mucous membranes of oral cavity. Part 2: Influence of hydrophilizing substances on properties of hydrogel dressings comprising Kunitz protease inhibitor. Malecka K, et al. **Pharmazie** 1988 Oct; 43(10):694–6

[Kallikrein-protease inhibitors (contrical, gordox) in the complex treatment of myocardial infarction] Leshchinskii LA, et al. **Kardiologiia** 1989 Feb;29(2):22–6 (Eng. Abstr.) **(Rus)**

[Treatment of patients with gonarthrosis by intra-articular administration of drugs] Popov VV, et al. **Klin Med (Mosk)** 1989 Apr;67(4):104–8 (Eng. Abstr.) **(Rus)**

ANALYSIS

Trypsin inhibition assay as related to limited hydrolysis of inhibitors. Liu KS, et al. **Anal Biochem** 1989 Apr; 178(1):159–65

Tumour markers in pancreatic cancer. Haglund C, et al. **Ann Chir Gynaecol** 1989;78(1):41–53 (114 ref.)
Tumour-associated trypsin inhibitor, TATI. Clinical use and biological function. Stenman UH, et al. **Ann Chir Gynaecol** 1989;78(1):77–82 (49 ref.)
An acrosin inhibitor from boar seminal vesicle fluid immunologically related to the trypsin-kallikrein inhibitor (Kunitz). Jonáková V, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:43–9
Distribution of acid stable trypsin inhibitor immunoreactivity in normal and malignant human tissues. Yoshida E, et al. **Cancer** 1989 Aug 15;64(4):860–9
A sensitive two-site enzyme immunoassay for human pancreatic secretory trypsin inhibitor (PSTI) using monoclonal antibodies. Kurobe M, et al. **Clin Chim Acta** 1988 Dec 15;178(2):205–14
Immunohistochemical demonstration of pancreatic secretory trypsin inhibitor in gynecologic tumors. Ueda G, et al. **Gynecol Oncol** 1989 Jan;32(1):37–40
Amino acid sequence of winged bean (Psophocarpus tetragonolobus (L.) DC.) chymotrypsin inhibitor, WCI-3. Shibata H, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):537–43
Use of California Mastitis Test, N-acetyl-beta-glucosaminidase, and antitrypsin to diagnose caprine subclinical mastitis. Maisi P, et al. **J Dairy Res** 1988 Aug;55(3):309–14
Effects of heat treatments and germination on trypsin inhibitor activity and polyphenols in jack bean (Canavalia ensiformis L. DC). Babar VS, et al. **Plant Foods Hum Nutr** 1988;38(4):319–24
Trypsin inhibitors and nutritive value in cereals. Soeulski FW, et al. **Plant Foods Hum Nutr** 1988;38(1):23–34
Sequential changes of IgG and antitrypsin in different compartments during the colostral-intestinal transfusion of immunity to the newborn foal. Saikku A, et al. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):391–6
[Comparison of the T.A.T.I. marker with CEA and Ca 19-9 in neoplasms of the gastrointestinal system. Preliminary data] Ricci E, et al. **Minerva Dietol Gastroenterol** 1988 Oct-Dec;34(4):217–20 (Eng. Abstr.) (Ita)
[The clinical value of determining the general antitrypsin activity of the blood and exudate in tuberculous pleurisy] Tiukhtin NS, et al. **Probl Tuberk** 1989;(6):37–40 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Human inter-alpha-trypsin inhibitor. Synthesis and maturation in hepatoma HepG2 cells. Bourguignon J, et al. **Biochem J** 1989 Jul 1;261(1):305–8
Possible lysosomal activation of pancreatic zymogens. Activation of both human trypsinogens by cathepsin B and spontaneous acid. Activation of human trypsinogen 1. Figarella C, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:293–8

BLOOD

Serum pancreatic secretory trypsin inhibitor (PSTI) in patients with inflammatory diseases. Ogawa M, et al. **Adv Exp Med Biol** 1988;240:505–8
Serum pancreatic secretory trypsin inhibitor (PSTI) in seriously injured and septic patients. Tanaka H, et al. **Adv Exp Med Biol** 1988;240:493–8
Concentrations of tumor-associated trypsin inhibitor and C-reactive protein in serum in acute pelvic inflammatory disease. Paavonen J, et al. **Clin Chem** 1989 May; 35(5):869–71
The measurement of serum immunoreactive pancreatic secretory trypsin inhibitor in gastrointestinal cancer and pancreatic disease. Satake K, et al. **Int J Pancreatol** 1988 Jul;3(5):323–31
Elevation of serum pancreatic secretory trypsin inhibitor following serious injury. Shibata T, et al. **Resuscitation** 1988 Jul;16(3):163–8
Pancreatic secretory trypsin inhibitor as a marker for early detection of rejection in canine pancreas allotransplantation. Suzuki Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2793–4
Pancreatic secretory trypsin inhibitor as a marker for early detection of rejection in canine pancreas allotransplantation. Kuroda Y, et al. **Transplantation** 1988 Oct;46(4):493–5
[Value of pancreatic secretory trypsin inhibitor by radioimmunoassay in diagnosis of pancreatic diseases] Chen BG. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):714–6, 780 (Eng. Abstr.) (Chi)
[Diagnostic value of serum pancreatic secretory trypsin inhibitor (PSTI) in acute pancreatitis] Chen BG. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):365–6, 384 (Eng. Abstr.) (Chi)
[Determination of tumor-associated trypsin inhibitor (TATI) in subjects with gastrointestinal diseases. Preliminary data] Piantino P, et al. **Minerva Med** 1989 Mar;80(3):199–203 (Eng. Abstr.) (Ita)
[Changes in serum pancreatic secretory trypsin inhibitor (PSTI) during and after heart surgery] Andoh T, et al. **Kokyu To Junkan** 1989 Jan;37(1):71–6 (Eng. Abstr.) (Jpn)
[Effects of urinastatin on the serum activities of granulocyte elastase, beta-glucuronidase and pancreatic secretory trypsin inhibitor in patients having open cardiac surgery] Doi H, et al. **Masui** 1988 Aug;37(8):975–80 (Eng. Abstr.) (Jpn)

CHEMICAL SYNTHESIS

Control of pharmaceutical properties of soybean trypsin inhibitor by conjugation with dextran. I: Synthesis and characterization. Takakura Y, et al. **J Pharm Sci** 1989 Feb; 78(2):117–21

DEFICIENCY

Comparative studies of the elastin content of normal and emphysematous human lungs with special regard to antitrypsin deficiency. Tarján E, et al. **Acta Med Hung** 1989;46(1):85–92

GENETICS

Active site chemical mutagenesis of Ecballium elaterium trypsin inhibitor II: new microproteins inhibiting elastase and chymotrypsin. Favel A, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):79–82
On the cDNA's for two types of rat pancreatic secretory trypsin inhibitor. Horii A, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):151–9
On the genomic organization of the human pancreatic secretory trypsin inhibitor. Tan F, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:51–4
Signal peptide homology between the sweet protein thaumatin II and unrelated cereal alpha-amylase/trypsin inhibitors. Lázaro A, et al. **FEBS Lett** 1988 Oct 24; 239(1):147–50
Expression and excretion of human pancreatic secretory trypsin inhibitor in lipoprotein-deletion mutant of Escherichia coli. Kanamori T, et al. **Gene** 1988 Jun 30; 66(2):295–300
Human pancreatic secretory trypsin inhibitor (PSTI) produced in active form and secreted from Escherichia coli. Maywald F, et al. **Gene** 1988 Sep 7;68(2):357–69
Sst I RFLP in the human inter-alpha-trypsin inhibitor heavy chain gene ITIH1. Léveillard T, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11852
An Apa I polymorphism for the human inter-alpha-trypsin inhibitor heavy chain gene ITIH1 on chromosome 3. Léveillard T, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2875
Two RFLPs in human inter-alpha-trypsin inhibitor heavy chain gene ITIH2 on chromosome 10. Léveillard T, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5418
Dra I polymorphism in the human inter-alpha-trypsin inhibitor heavy chain gene ITIH1. Léveillard T, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5419

ISOLATION & PURIFICATION

Isolation of soybean trypsin inhibitors by affinity chromatography on anhydrotrypsin-Sepharose 4B. Pusztai A, et al. **Anal Biochem** 1988 Jul;172(1):108–12
Purification, characterization and amino-acid sequencing of two pancreatic secretory trypsin inhibitors in rat pancreatic juice. Uda K, et al. **Biol Chem Hoppe Seyler** 1988 May; 369 Suppl:55–61
Strong activity of acid-stable trypsin inhibitor in bovine thrombin for clinical use. Sumi H, et al. **Clin Chim Acta** 1988 Sep 30;177(1):21–9
A barley flour inhibitor of insect alpha-amylase is a major allergen associated with baker's asthma disease. Barber D, et al. **FEBS Lett** 1989 May 8;248(1–2):119–22
Analysis of inter-alpha-trypsin inhibitor and a novel trypsin inhibitor, pre-alpha-trypsin inhibitor, from human plasma. Polypeptide chain stoichiometry and assembly by glycan. Enghild JJ, et al. **J Biol Chem** 1989 Sep 25;264(27):15975–81

METABOLISM

Immunoreactive pancreatic secretory trypsin inhibitor in gastrointestinal mucosa. Bohe M, et al. **Adv Exp Med Biol** 1988;240:101–5
Pancreatic secretory trypsin inhibitor in cancer. Ogawa M, et al. **Adv Exp Med Biol** 1988;240:547–53 (25 ref.)
Modification of the tandem reactive centres of human inter-alpha-trypsin inhibitor with butanedione and cis-dichlorodiammineplatinum(II). Swaim MW, et al. **Biochem J** 1988 Aug 15;254(1):171–8
Kinetics of trypsin inhibition by its specific inhibitors. Zhou JM, et al. **Biochemistry** 1989 Feb 7;28(3):1070–6
Binding of the bovine basic pancreatic trypsin inhibitor (Kunitz) to human alpha-, beta- and gamma-thrombin; a kinetic and thermodynamic study. Ascenzi P, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):156–61
A proteoglycan related to the urinary trypsin inhibitor (UTI) links the two heavy chains of inter-alpha-trypsin inhibitor. Balduyck M, et al. **Biol Chem Hoppe Seyler** 1989 Apr; 370(4):329–36
Synthesis of an elastase inhibitor by monosubstitution of arginine-5 with valine at the reactive site in a trypsin inhibitor from squash seeds (CMTI III). Rolka K, et al. **Biol Chem Hoppe Seyler** 1989 May;370(5):499–502
Trypsin uptake and trypsin-inhibitor complexes. Differences between suckling and adult rats. Levine JJ, et al. **Biol Neonate** 1989;56(1):40–7
Clearance and distribution of acid-stable trypsin inhibitor (ASTI). Sugiki M, et al. **Enzyme** 1989;42(1):31–8
The effects of aging and cataract formation on the trypsin inhibitor activity of human lens. Srivastava OP, et al. **Exp Eye Res** 1989 Jan;48(1):25–36
Binding of the trypsin inhibitor from white mustard (Sinapis alba L.) seeds to bovine beta-trypsin: thermodynamic study. Menegatti E, et al. **J Enzym Inhib** 1987;2(1):67–71
The pH dependence of the equilibrium constant KHyd for the hydrolysis of the Lys15–Ala16 reactive-site peptide bond in bovine pancreatic trypsin inhibitor (aprotinin). Siekmann J, et al. **J Protein Chem** 1988 Oct;7(5):633–40

PHARMACOKINETICS

Control of pharmaceutical properties of soybean trypsin inhibitor by conjugation with dextran. II: Biopharmaceutical and pharmacological properties. Takakura Y, et al. **J Pharm Sci** 1989 Mar;78(3):219–22

PHARMACOLOGY

Pancreatic digestive enzyme gene expression: effects of CCK and soybean trypsin inhibitor. Rosewicz S, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G733–8
Reaction of a tumour-associated trypsin inhibitor with serine proteinases associated with coagulation and tumour invasion. Turpeinen U, et al. **Biochem J** 1988 Sep 15; 254(3):911–4
Modulation by CR-1409 (lorglumide), a cholecystokinin receptor antagonist, of trypsin inhibitor-enhanced growth of azaserine-induced putative preneoplastic lesions in rat pancreas. Douglas BR, et al. **Cancer Res** 1989 May 1; 49(9):2438–41
Inhibition of rat and bovine trypsins and chymotrypsins by soybean, bovine basic pancreatic, and bovine colostrum trypsin inhibitors. Esparza I, et al. **Comp Biochem Physiol [B]** 1978;61(3):347–50
Inhibition of starfish oocyte maturation by leupeptin analogs, potent trypsin inhibitors. Sawada MT, et al. **Dev Biol** 1989 Jun;133(2):609–12
Trypsin inhibitors inhibit induction by interferon-gamma of HLA-DR antigen expression on human skin cells. Berman B, et al. **Exp Cell Res** 1989 Jul;183(1):215–28
Mechanisms of action of alcohol administration on the trophic effect of soybean trypsin inhibitor and cholecystokinin octapeptide in rat. Pap A, et al. **Int J Pancreatol** 1989 Oct;5(3):263–72
Inhibition of trypsin-like enzymes on cells with rhodamine-aprotinin. Steven FS, et al. **J Enzym Inhib** 1989; 2(4):295–303
Protection against neonatal rotavirus infection by breast milk antibodies and trypsin inhibitors. Jayashree S, et al. **J Med Virol** 1988 Nov;26(3):333–8
Stimulatory effect of monitor peptide and human pancreatic secretory trypsin inhibitor on pancreatic secretion and cholecystokinin release in conscious rats. Miyasaka K, et al. **Pancreas** 1989;4(2):139–44
The protective effect of the trypsin inhibitor urinastatin on cerulein-induced acute pancreatitis in rats. Tani S, et al. **Pancreas** 1988;3(4):471–6
[The influence of truncal vagotomy or surgical sympathectomy on the pancreatic trophic effect of trypsin inhibitor upon normal rats and major pancreatectomized rats] Aki T, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):586–97 (Eng. Abstr.) (Jpn)
[Pathophysiological mechanism of ischemic acute renal failure: protective effect of coenzyme Q10, Ca channel blocker, superoxide dismutase and protease inhibitor against ischemic acute renal failure] Higuchi C. **Nippon Jinzo Gakkai Shi** 1989 Jan;31(1):15–24 (Eng. Abstr.) (Jpn)
[Effects of ulinastatin on alpha-thrombin and the activation of protein C and factor XIII induced by thrombin] Fukutake K, et al. **Rinsho Byori** 1989 Apr;37(4):416–20 (Jpn)
[Inhibition of HIV reproduction in cultured cells using proteolysis inhibitors] Bukrinskaia AG, et al. **Vopr Virusol** 1989 Jan–Feb;34(1):53–5 (Eng. Abstr.) (Rus)
[The effect of trypsin inhibitor from vetch seeds on the growth of the rumen protozoan Entodinium simplex in vitro] Smutný J, et al. **Vet Med (Praha)** 1988 Oct; 33(10):625–31 (Eng. Abstr.) (Slo)

PHYSIOLOGY

Inter-alpha-trypsin inhibitor. Inhibition spectrum of native and derived forms. Potempa J, et al. **J Biol Chem** 1989 Sep 5;264(25):15109–14

SECRETION

Secretion of pancreatic secretory trypsin inhibitor by cultured human carcinoma cells. Ogawa M, et al. **J Med** 1988;19(1):13–9
Release of pancreatic secretory trypsin inhibitor from human hepatoblastoma cells on stimulation with cytokines. Murata A, et al. **Life Sci** 1988;43(15):1233–40

THERAPEUTIC USE

Combination therapy of trypsin inhibitor with ursodeoxycholic acid on cholesterol gallbladder stone. Tanno N, et al. **Gastroenterol Jpn** 1989 Jun;24(3):339
[Protective effects of ulinastatin on hepatic oxygen metabolism during halothane anesthesia in the presence of graded hypoxic hypoxemia] Matsumoto N, et al. **Masui** 1989 Apr;38(4):531–9 (Eng. Abstr.) (Jpn)

[Effects of ulinastatin on operative stress in major surgery] Ota K, et al. **Masui** 1989 Apr;38(4):540–5 (Eng. Abstr.) **(Jpn)**

[Protective effects of a protease inhibitor, urinastatin, on endotoxin shock and its scavenging effect on oxygen-derived free radicals] Yoshikawa T, et al. **Masui** 1988 Aug;37(8):969–74 (Eng. Abstr.) **(Jpn)**

TOXICITY

Hypertrophy and hyperplasia of the rat pancreas produced by short-term dietary administration of soya-derived protein and soybean trypsin inhibitor. Smith JC, et al. **J Appl Toxicol** 1989 Jun;9(3):175–9

The interactive effects of lima bean (Phaseolus lunatus) trypsin inhibitor, hemagglutinin and cyanide on some hepatic dehydrogenases, ornithine carbamoyltransferase and intestinal disaccharidases in weanling rats. Aletor VA, et al. **Vet Hum Toxicol** 1988 Dec;30(6):540–4

URINE

Analysis of chondroitin sulfates in human urinary trypsin inhibitor. Ochiai H, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3726–7

Enhanced urinary trypsin inhibitory activity in gentamicin-induced nephrotoxicity in rats. Smetana S, et al. **Clin Chim Acta** 1988 Sep 15;176(3):333–42

Measurement of urinary trypsin inhibitor in urine, plasma and cancer tissues of patients with stomach cancer. Nishino N, et al. **Haemostasis** 1989;19(2):112–9

[Antitrypsin activity of the urine and alpha 1 protease inhibitor] Loutfi H, et al. **Ann Biol Clin (Paris)** 1989; 47(5):261–7 (Eng. Abstr.) **(Fre)**

TRYPSINOGEN

ANALYSIS

Assessment of the role of pancreatic proteases in human abdominal aortic aneurysms and occlusive disease. Dubick MA, et al. **Clin Chim Acta** 1988 Sep 30;177(1):1–10

BIOSYNTHESIS

Synthesis and contents of pancreatic exportable enzymes. Effect of oleic acid intraduodenal administration. Calvo EL, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(2):145–50

BLOOD

Screening for cystic fibrosis: a four year regional experience. Roberts G, et al. **Arch Dis Child** 1988 Dec;63(12):1438–43

Immunoreactive trypsinogen screening for cystic fibrosis: characterization of infants with a false-positive screening test. Rock MJ, et al. **Pediatr Pulmonol** 1989;6(1):42–8

GENETICS

A fourth trypsinogen (P23) in the rat pancreas induced by CCK. Lütcke H, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6736

IMMUNOLOGY

Neonatal screening for cystic fibrosis in Wisconsin. Mischler E, et al. **Wis Med J** 1989 Mar;88(3):14–8

METABOLISM

Limited proteolyses in pancreatic chymotrypsinogens and trypsinogens. Rovery M. **Biochimie** 1988 Sep;70(9):1131–5 (32 ref.)

Possible lysosomal activation of pancreatic zymogens. Activation of both human trypsinogens by cathepsin B and spontaneous acid. Activation of human trypsinogen 1. Figarella C, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:293–8

Vitamin D deficiency, pancreatic and small intestinal enzyme development in rats. Jirapinyo P, et al. **Biol Neonate** 1988; 54(1):20–8

Discrepancy in the changes of pancreatic amylase and trypsinogen concentration after 70% hepatectomy in rats. Hirano T, et al. **Gastroenterol Jpn** 1989 Aug;24(4):449

PHARMACOLOGY

[Inhibition of pancreatic secretion by trypsin and trypsinogen] Korot'ko GF, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1309–15 (Eng. Abstr.) **(Rus)**

TRYPTAMINE RECEPTORS see **RECEPTORS, SEROTONIN**

TRYPTAMINES

Synthesis of N-nicotinoyl-tryptamine (tryptamide). Eckstein M, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec; 39(6):725–7

Molecular electrostatic potentials: a critical assessment in QSAR and a tryptamine binding model. Hadži D, et al. **Prog Clin Biol Res** 1989;291:259–63

ADMINISTRATION & DOSAGE

Improved delivery through biological membranes. Synthesis, distribution, and neurochemical effects of a tryptamine chemical delivery system. Bodor N, et al. **Drug Des Deliv** 1986 Aug;1(1):51–64

BIOSYNTHESIS

The biosynthesis of 5-methoxy-N,N-dimethyltryptamine in vitro. Mandel LR, et al. **Life Sci** 1974 Oct 15;15(8):1457–63

BLOOD

A spectrophotometric method for N-nicotinoyl-tryptamine (tryptamide) assay in the blood serum of rats. Danek L, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):773–7

CHEMICAL SYNTHESIS

N-benzhydryl-tryptamines and 1,1-dipbenyl-tetrahydro-beta-carbolines: synthesis, X-ray crystal structure and benzodiazepine receptor affinity. Balsamini C, et al. **Farmaco** 1989 Apr;44(4):399–413

Synthesis of N-nicotinoyl-tryptamine (tryptamide). Eckstein M, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec; 39(6):725–7

DIAGNOSTIC USE

Application of tryptamine as a derivatizing agent for airborne isocyanate determination. Part 2. Dual function of tryptamine for calibration and derivatisation of poly[methylene(polyphenyl isocyanate)] for quantification by high-performance liquid chromatography. Wu WS, et al. **Analyst** 1988 Aug;113(8):1209–12

METABOLISM

Biochemical characterization of [3H]tryptamine binding sites from rat brain. Brüning G, et al. **Biochem Int** 1989 Jan; 18(1):227–33

Tryptamine receptors: neurochemical and electrophysiological evidence for postsynaptic and functional binding sites. van Nguyen T, et al. **Brain Res** 1989 Jan 2;476(1):85–93

Lesion-induced reductions in trace amine accumulation: dependence on MAO inhibitor pretreatment. Nguyen TV, et al. **Brain Res Bull** 1989 Feb;22(2):197–200

Changes in brain biogenic amines under influence of an indigenous drug, geriforte, following immobilization stress. Upadhya L, et al. **Indian J Exp Biol** 1988 Nov;26(11):911–2

[3H]tryptamine binding sites are not identical to monoamine oxidase in rat brain. Perry DC, et al. **J Neurochem** 1988 Nov;51(5):1535–40

Serotonin and tryptamine metabolism in the acute hepatic failure model: changes in tryptophan and its metabolites in the liver, brain and kidney. Kodama C, et al. **Osaka City Med J** 1989 Jun;35(1):1–11

Functional interactions of 2-phenylethylamine and of tryptamine with brain catecholamines: implications for psychotherapeutic drug action. Greenshaw AJ. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):431–43 (47 ref.)

[Deamination of indolalkylamines in hyperthermia] Gureeva ZP. **Ukr Biokhim Zh** 1988 Sep–Oct;60(5):20–4 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Cerebral and peripheral demethylation of psychotomimetics measured by expired 14CO2. Sargent T 3d, et al. **Int J Rad Appl Instrum [B]** 1989;16(1):91–9

PHARMACOLOGY

Functional interactions between TRH and 5-hydroxytryptamine (5-HT) and proctolin in rat brain and spinal cord. Marsden CA, et al. **Ann N Y Acad Sci** 1989; 553:121–34

The hypoglycemic effects of tryptamine in mice: mediation by 5-HT receptors. Yamada J, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):299–301

Subsensitivity of serotonin and substance P receptors involved in nociception after repeated administration of a serotonin receptor agonist. Eide PK, et al. **J Neural Transm** 1989;77(1):1–10

Increased serotonin efflux by a partially oxidized serotonin: tryptamine-4,5-dione. Chen JC, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):141–8

Serotonergic dorsal raphe neurons: changes in spontaneous neuronal activity and responsiveness to 5-MeODMT following long-term amphetamine administration. Heidenreich BA, et al. **Neurosci Lett** 1989 Aug 14; 103(1):81–6

The electrophysiological effects of melatonin and a putative melatonin antagonist (N-acetyltryptamine) on rat suprachiasmatic neurones in vitro. Mason R, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):296–301

Tryptamine impairs the acquisition of a one-way active avoidance task. Fletcher PJ. **Pharmacol Biochem Behav** 1989 Jan;32(1):317–21

Both prenatal and postnatal factors contribute to the effects of maternal stress on offspring behavior and central 5-hydroxytryptamine receptors in the rat. Peters DA. **Pharmacol Biochem Behav** 1988 Jul;30(3):669–73

Pharmacological investigations on anti-inflammatory activity of tryptamide (3-nicotinoyl-tryptamine). Gieldanowski J, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):759–67

Basic pharmacological properties of a novel antiinflammatory drug tryptamide. Herman ZS, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):729–36

Some pharmacological properties and subacute and chronic toxicity of tryptamide. Kleinrok Z, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):737–47

A comparison of anti-inflammatory, analgesic and ulcerogenic action of tryptamide, ibuprofen and piroxicam. Kulig D, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec; 39(6):769–72

The anti-inflammatory and analgesic activity of N-3-pyridoyltryptamine (tryptamide). Maj J, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):749–58

[The action of serotonin and its analogs on the in vitro maturation of amphibian oocytes] Nikitina LA, et al. **Ontogenez** 1988 Sep–Oct;19(5):499–507 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[Tryptamine as an endogenous modulator of neuronal sensitivity to serotonin] Komissarov IV, et al. **Neirofiziologiia** 1989;21(3):352–7 (Eng. Abstr.) **(Rus)**

SECRETION

Release of some endogenous trace amines from rat striatal slices in the presence and absence of a monoamine oxidase inhibitor. Dyck LE. **Life Sci** 1989;44(17):1149–56

TOXICITY

Influence of N-3-pyridoyltryptamine (tryptamide) on fetal development in rats and mice. Dłużniewski A, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):779–86

URINE

High-performance liquid-chromatographic analysis for serotonin and tryptamine excreted in urine after oral loading with L-tryptophan. Tsuchiya H, et al. **Clin Chem** 1989 Jan;35(1):43–7

TRYPTOPHAN

Stopped-flow chemical modification with N-bromosuccinimide: a good probe for changes in the microenvironment of the Trp 62 residue of chicken egg white lysozyme. Ohnishi M, et al. **Arch Biochem Biophys** 1989 Jul;272(1):46–51

Nanosecond fluorometry of the single tryptophan in cytochrome P-450e (P450IIB2). Anzenbacher P, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):921–5

Characterization of lens alpha-crystallin tryptophan microenvironments by room temperature phosphorescence spectroscopy. Berger JW, et al. **Biochemistry** 1989 Jun 27; 28(13):5501–8

Pulse radiolytic measurement of redox potentials: the tyrosine and tryptophan radicals. DeFelippis MR, et al. **Biochemistry** 1989 May 30;28(11):4847–53

A type II DNA-binding protein genetically engineered for fluorescence spectroscopy: the "arm" of transcription factor 1 binds in the DNA grooves. Härd T, et al. **Biochemistry** 1989 Apr 4;28(7):2813–9

Effects of conversion of an invariant tryptophan residue to phenylalanine on the function of human dihydrofolate reductase. Huang SM, et al. **Biochemistry** 1989 Jan 24; 28(2):471–8

Rotational dynamics of the single tryptophan of porcine pancreatic phospholipase A2, its zymogen, and an enzyme/micelle complex. A steady-state and time-resolved anisotropy study. Ludescher RD, et al. **Biochemistry** 1988 Aug 23;27(17):6618–28

Structure and stability of gamma-crystallins: tryptophan, tyrosine, and cysteine accessibility. Mandal K, et al. **Biochemistry** 1988 Jun 14;27(12):4564–71

Activity and spectroscopic properties of bacterial D-amino acid transaminase after multiple site-directed mutagenesis of a single tryptophan residue. Martínez del Pozo A, et al. **Biochemistry** 1989 Jan 24;28(2):510–6

Tryptophan-191——phenylalanine, a proximal-side mutation in yeast cytochrome c peroxidase that strongly affects the kinetics of ferrocytochrome c oxidation. Mauro JM, et al. **Biochemistry** 1988 Aug 23;27(17):6243–56

Long-lived tryptophan fluorescence in phosphoglycerate mutase. Schauerte JA, et al. **Biochemistry** 1989 May 2; 28(9):3948–54

Involvement of tryptophan residues at the coenzyme A binding site of carbon monoxide dehydrogenase from Clostridium thermoaceticum. Shanmugasundaram T, et al. **Biochemistry** 1988 Aug 23;27(17):6499–503

Nanosecond dynamics of horse heart apocytochrome c in aqueous solution as studied by time-resolved fluorescence of the single tryptophan residue (Trp-59). Vincent M, et al. **Biochemistry** 1988 Nov 29;27(24):8752–61

Perturbation of tryptophan residues by point mutations in bacteriophage T4 lysozyme studied by optical detection of triplet-state magnetic resonance spectroscopy. Zang LH, et al. **Biochemistry** 1989 Mar 7;28(5):2245–51

Assignment of the heterogeneous static and time-resolved tryptophan fluorescence of 3-phosphoglycerate kinase. Dryden DT, et al. **Biochim Biophys Acta** 1989 Aug 31; 997(3):313–21

The spectroscopic analysis for binding of amphipathic and antimicrobial model peptides containing pyrenylalanine and tryptophan to lipid bilayer. Lee S, et al.

Biochim Biophys Acta 1989 Sep 4;984(2):174–82

Simultaneous analysis of single-photon timing data for the one-step determination of activation energies, frequency factors and quenching rate constants. Application to tryptophan photophysics. Boens N, et al. **Biophys Chem** 1989 Mar;33(1):77–90

Time-resolved emission spectra of hemoglobin on the picosecond time scale. Bucci E, et al. **Biophys Chem** 1988 Dec;32(2–3):187–98

Viscosity and transient solvent accessibility of Trp-63 in the native conformation of lysozyme. Somogyi B, et al. **Biophys Chem** 1988 Oct;32(1):1–13

Molecular dynamics of tryptophan in ribonuclease-T1. I. Simulation strategies and fluorescence anisotropy decay. Axelsen PH, et al. **Biophys J** 1988 Aug;54(2):249–58

Molecular dynamics of tryptophan in ribonuclease-T1. II. Correlations with fluorescence. Axelsen PH, et al. **Biophys J** 1989 Jul;56(1):43–66

Distance dependence of the tryptophan–disulfide interaction at the triplet level from pulsed phosphorescence studies on a model system. Li Z, et al. **Biophys J** 1989 Aug; 56(2):361–7

The effects of viscosity on gramicidin tryptophan rotational motion. Scarlata SF. **Biophys J** 1988 Dec;54(6):1149–57

Triplet state properties of tryptophan residues in complexes of mutated Escherichia coli single-stranded DNA binding proteins with single-stranded polynucleotides. Tsao DH, et al. **Biophys J** 1989 May;55(5):927–36

Red-edge-excitation fluorescence spectroscopy of single-tryptophan proteins. Demchenko AP. **Eur Biophys J** 1988;16(2):121–9

Two conserved tryptophan residues of tumor necrosis factor and lymphotoxin are not involved in the biological activity. Van Ostade X, et al. **FEBS Lett** 1988 Oct 10;238(2):347–52

Unpaired electron migration between aromatic and sulfur peptide units. Prütz WA, et al. **Free Radic Res Commun** 1986;2(1–2):69–75

Role of tryptophan in inducing polymorphic phase formation in lipid dispersions. Srivastava S, et al. **Indian J Biochem Biophys** 1988 Jun;25(3):283–6

Determination of the contributions of individual aromatic residues to the CD spectrum of IL-1 beta using site directed mutagenesis. Craig S, et al. **Int J Pept Protein Res** 1989 Apr;33(4):256–62

Synthesis and ionic channels of a linear gramicidin containing naphthylalanine instead of tryptophan. Ranjalahy-Rasoloarijao L, et al. **Int J Pept Protein Res** 1989 Apr;33(4):273–80

Site-directed mutagenesis of the tryptophan residues in yeast eukaryotic initiation factor 4E. Effects on cap binding activity. Altmann M, et al. **J Biol Chem** 1988 Nov 25; 263(33):17229–32

Investigation of the mechanism of calcium binding to calmodulin. Use of an isofunctional mutant with a tryptophan introduced by site-directed mutagenesis. Kilhoffer MC, et al. **J Biol Chem** 1988 Nov 15; 263(32):17023–9

Dynamical structure of glutamate dehydrogenase as monitored by tryptophan phosphorescence. Signal transmission following binding of allosteric effectors. Cioni P, et al. **J Mol Biol** 1989 May 5;207(1):237–47

L-tryptophan inhibits formation of mutagens during cooking of meat and in laboratory models. Jones RC, et al. **Mutat Res** 1988 Nov;206(3):343–9

Determination of the acrylamide quenching constant for protein and model indole triplets. Ghiron C, et al. **Photochem Photobiol** 1988 Oct;48(4):539–43

Biological activities of phythalocyanines—IV. Type II sensitized photooxidation of L-tryptophan and cholesterol by sulfonated metallo phthalocyanines. Langlois R, et al. **Photochem Photobiol** 1986 Aug 2;44(2):117–23

Tryptophan phosphorescence at room temperature as a tool to study protein structure and dynamics. Papp S, et al. **Photochem Photobiol** 1989 Jun;49(6):775–84 (76 ref.)

Photolysis of the single tryptophan residue of eel troponin C. Pigault C, et al. **Photochem Photobiol** 1988 Sep; 48(3):349–51

Acrylamide quenching of tryptophan photochemistry and photophysics. Tallmadge DH, et al. **Photochem Photobiol** 1989 Apr;49(4):381–6

Proton magnetic resonance studies of the binding of oligopeptides containing tryptophan to polyribonucleotides poly A, poly U and poly C. Barthwal R, et al. **Physiol Chem Phys Med NMR** 1988;20(2):145–57

Collisional spectroscopy in structural characterization of melanins: I. A first study on [C8H7ON](+.) ions originating from pyrolysis of biosynthetic and synthetic tryptophan melanins. Allegri G, et al. **Pigment Cell Res** 1987;1(2):87–93

Tryptophan fluorescence quenching as a monitor for the protein conformation changes occurring during the photocycle of bacteriorhodopsin under different perturbations. Jang DJ, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5815–9

Internal motion of a tryptophan residue in Streptomyces subtilisin inhibitor: deuterium nuclear magnetic resonance in solution. Akasaka K, et al. **Proteins** 1988;4(2):131–6

Identification by ENDOR of Trp191 as the free-radical site in cytochrome c peroxidase compound ES. Sivaraja M, et al. **Science** 1989 Aug 18;245(4919):738–40

ADMINISTRATION & DOSAGE

Kynurenine metabolism and xanthurenic acid formation in vitamin B6-deficient rat after tryptophan injection. Takeuchi F, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Apr; 35(2):111–22

Production performance of laying hens fed L-tryptophan. Ohtani H, et al. **Poult Sci** 1989 Feb;68(2):323–6

[Amino acid pattern in the bodies and several organs of broilers fed different provisions with tryptophan and neutral amino acids] Kirchgessner M, et al. **Arch Tierernahr** 1988 Oct;38(10):905–19 (Eng. Abstr.) **(Ger)**

[L-tryptophan in pre-delirium and delirium conditions] Hebenstreit GF, et al. **Infusionstherapie** 1989 Apr; 16(2):92–6 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Is L-tryptophan safe? [letter] During MJ, et al. **Aust N Z J Psychiatry** 1988 Dec;22(4):339

Tryptophan and bladder cancer [letter] Catterall WE. **Biol Psychiatry** 1988 Oct;24(6):733–4

Severe anorexia and possible psychosis or hypomania after trazodone–tryptophan treatment of aggression [letter] Patterson BD, et al. **Lancet** 1989 May 6;1(8645):1017

ANALOGS & DERIVATIVES

Detection and identification of transient intermediates in the reactions of tryptophan synthase with oxindolyl-L-alanine and 2,3-dihydro-L-tryptophan. Evidence for a tetrahedral (gem-diamine) intermediate. Roy M, et al. **Biochemistry** 1988 Nov 15;27(23):8661–9

Comparison of delayed imaging with Tc-99m PMT and Tc-99m DEIDA for visualization of hepatoma. Hasegawa Y, et al. **Clin Nucl Med** 1989 Jul;14(7):526–31

Comparison of delayed hepatobiliary imaging using 99mTc-Sn-N-pyridoxyl-5-methyltryptophan and 67Ga-citrate imaging for diagnosis of hepatocellular carcinoma. Hasegawa Y, et al. **Eur J Nucl Med** 1988; 14(7–8):414–8

Free radical reactions with alpha-tocopherol and N-stearoyl tryptophan methyl ester in micellar solutions. Bisby RH, et al. **Free Radic Res Commun** 1986;1(4):251–61

Diagnostic evaluation of hepatobiliary scintigraphy using 99mTc-N-pyridoxyl-5-methyltryptophan in acute cholecystitis. Takada T, et al. **Gastroenterol Jpn** 1988 Oct; 23(5):553–8

The use of Albuminar 5 as a medium supplement in clinical IVF. Ashwood-Smith MJ, et al. **Hum Reprod** 1989 Aug; 4(6):702–5

Adsorption chromatography on cellulose. IV. Separation of D- and L-tryptophan and D- and L-methyltryptophan on cellulose with aqueous solvents. Kuhn AO, et al. **J Chromatogr** 1989 May 19;469:253–60

Circumvention of defective neutral amino acid transport in Hartnup disease using tryptophan ethyl ester. Jonas AJ, et al. **J Clin Invest** 1989 Jul;84(1):200–4

Analysis of human plasma as an exposure level monitor for carcinogenic tryptophan pyrolysis products. Manabe S, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):33–8

Competition for sucrose-pellets in triads of male Wistar rats: effects of three serotonergic drugs. Gentsch C, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):639–51

Clinical significance of 99mTc-N-pyridoxyl-5-methyltryptophan (99mTc-PMT) in the diagnosis of intrahepatic masses. Oyamada H, et al. **Radioisotopes** 1989 May;38(5):244–51

[Delayed Tc-99m-PMT imaging in the specific diagnosis of hepatocellular carcinoma] Wu ZM. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):360–3 (Eng. Abstr.) **(Chi)**

[Comparative study of nuclear imaging with 99mTc-PMT, B ultrasound and CT in the diagnosis of hepatic tumors] Wu ZM. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Dec; 22(6):329–33 (Eng. Abstr.) **(Chi)**

[Azaindol derivatives I: Asymmetric synthesis of new alpha-amino acids] Gmeiner P, et al. **Arch Pharm (Weinheim)** 1988 Sep;321(9):505–7 (Eng. Abstr.) **(Ger)**

[Evaluation of N-acetyl-L-tryptophan in long-term intravenous administration in growing rats] Neuhäuser-Berthold M, et al. **Infusionstherapie** 1988 Aug; 15(4):164–8 (Eng. Abstr.) **(Ger)**

[Estimation of total liver uptake and liver uptake per unit of liver volume of Tc-99m(Sn)-N-pyridoxyl-5-methyltryptophan (Tc-99m-PMT) using SPECT] Nakamura K, et al. **Kaku Igaku** 1988 Dec;25(12):1363–9 (Eng. Abstr.) **(Jpn)**

[Three-dimensional functional imaging by deconvolution analysis in Tc-99m-PMT hepatobiliary dynamic SPECT imaging] Sakuma H, et al. **Kaku Igaku** 1988 Oct; 25(10):1061–71 (Eng. Abstr.) **(Jpn)**

[Diagnostic value of the reflux sign in cholescintigraphy after administration of a gallbladder contracting agent—a comparison with X-ray cholangiography] Itoh H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25; 49(1):66–72 (Eng. Abstr.) **(Jpn)**

[Measurement of effective hepatic blood flow using 99mTc-PMT SPECT and single blood sampling] Sakuma H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25;49(1):62–5 (Eng. Abstr.) **(Jpn)**

[The influence of ursodeoxycholic acid on hepatobiliary scintigraphy with 99mTc-N-pyridoxyl-5-methyltryptophan in chronic liver diseases] Hayakawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov; 85(11):2389–95 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Measurement of specific radioactivity by high-performance liquid chromatograph with a synchronized accumulating radioisotope detector: determination of turnover rate and pool size of tryptophan in rat. Baba S, et al. **Anal Biochem** 1988 Aug 15;173(1):196–200

Spectrophotometric determination of tryptophan in intact proteins by the acid ninhydrin method. Molnár-Perl I, et al. **Anal Biochem** 1989 Feb 15;177(1):16–9

Quantitative analysis of low molecular weight polar compounds by continuous flow liquid secondary ion tandem mass spectrometry. Wang TC, et al. **Anal Chem** 1989 May 1;61(9):1013–6

Effects of the beta 2-adrenoceptor agonist clenbuterol on tyrosine and tryptophan in plasma and brain of the rat. Edwards DJ, et al. **Biochem Pharmacol** 1989 Sep 15; 38(18):2957–65

Ionic strength dependence of cytochrome c structure and Trp-59 H/D exchange from ultraviolet resonance Raman spectroscopy. Liu GY, et al. **Biochemistry** 1989 Jun 13; 28(12):5046–50

Free and bound tryptophan in human milk during early lactation. Zanardo V, et al. **Biol Neonate** 1989;56(1):57–9

HPLC electrochemical fluorometric detection of amino acids including tryptophan using 4-fluoro-7-nitrobenzo-2-oxa-1,3-diazole. Watanabe N, et al. **Biomed Chromatogr** 1987;2(3):99–103

Studies on the tryptophan residues of soybean agglutinin. Involvement in saccharide binding. Swamy MJ, et al. **Biosci Rep** 1989 Apr;9(2):189–98

Interaction of theophylline with L-tryptophan. Study by proton nuclear magnetic resonance spectroscopy. Nishijo J, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):2735–41

Correlation between internal motion and emission kinetics of tryptophan residues in proteins. Kouyama T, et al. **Eur J Biochem** 1989 Jul 1;182(3):517–21

2-Hydroxy-5-nitrobenzyl bromide as a specific reagent for tryptophan residues in membrane proteins: bacteriorhodopsin as an example. Sabés M, et al. **J Biochem Biophys Methods** 1988 Sep;17(1):17–24

Tryptophans in myb proteins [letter] Anton IA, et al. **Nature** 1988 Dec 22–29;336(6201):719

Virus infection as a stressor: influenza virus elevates plasma concentrations of corticosterone, and brain concentrations of MHPG and tryptophan. Dunn AJ, et al. **Physiol Behav** 1989 Mar;45(3):591–4

Rat blood and brain amino acid pattern in short term experimental diabetes. Atienza G, et al. **Rev Esp Fisiol** 1989 Mar;45(1):15–20

Acute and chronic effects of the trichothecene mycotoxin T-2 on rat brain regional concentrations of serotonin, tryptophan, and tyrosine. Weekley LB, et al. **Vet Hum Toxicol** 1989 Jun;31(3):221–4

[Interactions of fats and proteins in meat. 3. Changes in tryptophan content and available forms of lysine, methionine and cystine] Janitz W. Z **Ernahrungswiss** 1988 Jun;27(2):109–18 (Eng. Abstr.) **(Ger)**

[Effect of temperature and pH on the environment of tryptophan residues in alpha-actinin] Permiakov EA, et al. **Biofizika** 1988 Sep–Oct;33(5):754–7 (Eng. Abstr.) **(Rus)**

[The role of tryptophan residues in the antigenic activity of carcinoembryonic antigen] Glazunov VP, et al. **Bioorg Khim** 1988 Sep;14(9):1166–70 (Eng. Abstr.) **(Rus)**

[Quantification of the total and available lysine and tryptophan in corn endosperm] Pereyra Alférez B, et al. **Rev Latinoam Microbiol** 1987 Oct–Dec;29(4):305–9 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

Regulation of basal level expression of the tryptophan operon of Escherichia coli. Roesser JR, et al. **J Biol Chem** 1989 Jul 25;264(21):12284–8

Ribosome release modulates basal level expression of the trp operon of Escherichia coli. Roesser JR, et al. **J Biol Chem** 1988 Oct 5;263(28):14251–5

Formation of heterodimers between wild type and mutant trp aporepressor polypeptides of Escherichia coli. Graddis TJ, et al. **Proteins** 1988;4(3):173–81

Tryptophan accumulation in Saccharomyces cerevisiae under the influence of an artificial yeast TRP gene cluster. Prasad R, et al. **Yeast** 1987 Jun;3(2):95–105

[Modelling of the regulatory system of tryptophan biosynthesis using generalized threshold models] Churaev RI, et al. **Genetika** 1989 Mar;25(3):535–44 (Eng. Abstr.) **(Rus)**

BLOOD

Measurement of specific radioactivity of tryptophan labeled with carbon-14 in plasma by high-performance liquid chromatography with a synchronized accumulating radioisotope detector. Baba S, et al. **Anal Biochem** 1988 Aug 15;173(1):190–5

Tryptophan degradation in patients infected by human

immunodeficiency virus. Werner ER, et al. **Biol Chem Hoppe Seyler** 1988 May;369(5):337–40

Free tryptophan decrease in jaundiced newborn infants during phototherapy. Zammarchi E, et al. **Biol Neonate** 1989;55(4–5):224–7

Effects of a suppression test dose of dexamethasone on tryptophan metabolism and disposition in the rat. Morgan CJ, et al. **Biol Psychiatry** 1989 Feb 1;25(3):359–62

Newborn humans and rats malnourished in utero: free plasma L–tryptophan, neutral amino acids and brain serotonin synthesis. Hernández J, et al. **Brain Res** 1989 May 29; 488(1–2):1–13

Altered tryptophan and neopterin metabolism in cancer patients treated with recombinant interleukin 2. Brown RR, et al. **Cancer Res** 1989 Sep 1;49(17):4941–4

Tryptophan availability in nephrotic syndrome. Fydryk J, et al. **Contrib Nephrol** 1988;67:103–6

Relationship between fasting serum tryptophan/large neutral amino acid ratio and reported hunger in subjects with diabetes. Wolever TM, et al. **Diabetes Res** 1988 Nov; 9(3):131–7

Decreased plasma tryptophan levels in major depression. Cowen PJ, et al. **J Affective Disord** 1989 Jan–Feb; 16(1):27–31

Congenital dyschromia with erythrocyte, platelet, and tryptophan metabolism abnormalities. Foldès C, et al. **J Am Acad Dermatol** 1988 Oct;19(4):642–55

Whole blood serotonin and tryptophan in autism: temporal stability and the effects of medication. Minderaa RB, et al. **J Autism Dev Disord** 1989 Mar;19(1):129–36

Determination of plasma 5–hydroxytryptophan, 5–hydroxytryptamine, 5–hydroxyindoleacetic acid, tryptophan and melatonin by high–performance liquid chromatography with electrochemical detection. Sagara Y, et al. **J Chromatogr** 1988 Sep 23;431(1):170–6

Indole amine deficiency in blood and cerebrospinal fluid from patients with human immunodeficiency virus infection. Larsson M, et al. **J Neurosci Res** 1989 Aug;23(4):441–6

Cord blood tryptophan concentrations and total cysteine concentrations [letter] Picone TA, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):106–7

Dose–response decrease in plasma tryptophan and in brain tryptophan and serotonin after tryptophan–free amino acid mixtures in rats. Moja EA, et al. **Life Sci** 1989;44(14):971–6

Evolution of red blood cell membrane transport and plasma level of L–tyrosine and L–tryptophan in depressed treated patients according to clinical improvement. Bovier P, et al. **Neuropsychobiology** 1988;19(3):125–34

Individuality and stability in the transport of precursors of monoamines across the erythrocyte membrane of mentally normal subjects. Schulz P, et al. **Neuropsychobiology** 1988; 19(1):12–6

Precursor amino acid concentrations in normal weight bulimics and normal controls. Lydiard RB, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):893–8

[Increased level of tryptophan fluorescence in the blood serum in generalized suppurative infection] Zaldenberg MA, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):51–4 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Tryptophan, 5–HTP, 5–HT and 5–HIAA in the cerebrospinal fluid and sexual behavior in male rats. Qureshi GA, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):227–31

Prostaglandins and vasoactive amines in cerebral vasospasm after aneurysmal subarachnoid hemorrhage. Chehrazi BB, et al. **Stroke** 1989 Feb;20(2):217–24

DEFICIENCY

The effect of altered tryptophan levels on mood and behavior in normal human males. Young SN, et al. **Clin Neuropharmacol** 1988;11 Suppl 1:S207–15 (21 ref.)

The effect of lowering plasma tryptophan on food selection in normal males. Young SN, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):149–52

DIAGNOSTIC USE

High–performance liquid–chromatographic analysis for serotonin and tryptamine excreted in urine after oral loading with L–tryptophan. Tsuchiya H, et al. **Clin Chem** 1989 Jan;35(1):43–7

Pancreatic secretory response to intravenous caerulein and intraduodenal tryptophan studies: before and after stepwise removal of the extrinsic nerves of the pancreas in dogs. Singer MV, et al. **Gastroenterology** 1989 Mar;96(3):925–34

Influences on cortisol and noradrenergic turnover of healthy controls and depressed patients during L–tryptophan loading. Maes M, et al. **J Affective Disord** 1989 Sep–Oct; 17(2):173–82

GENETICS

N.m.r. assignments and temperature–dependent conformational transitions of a mutant trp operator–promoter in solution. Lane AN. **Biochem J** 1989 May 1;259(3):715–24

Interpathway regulation of the TRP4 gene of yeast. Braus G, et al. **EMBO J** 1989 Mar;8(3):939–45

An IncY plasmid–encoded single–stranded DNA–binding protein from Escherichia coli shows the identical pattern of stacked tryptophan residues as the chromosomal ssb gene product. Casas–Finet JR, et al. **Eur J Biochem** 1988 Dec 1;178(1):101–7

Second–site revertants of Escherichia coli trp repressor mutants. Klig LS, et al. **Genetics** 1988 Nov;120(3):651–5

Molecular evolution of the Escherichia coli chromosome. I. Analysis of structure and natural variation in a previously uncharacterized region between trp and tonB. Stoltzfus A, et al. **Genetics** 1988 Oct;120(2):345–58

Apolipoprotein B–100 Hopkins (arginine4019——tryptophan). A new apolipoprotein B–100 variant in a family with premature atherosclerosis and hyperapobetalipoproteinemia. Ladias JA, et al. **JAMA** 1989 Oct 13;262(14):1980–8

Cloning of the trp genes from the archaebacterium Methanococcus voltae: nucleotide sequence of the trpBA genes. Sibold L, et al. **Mol Gen Genet** 1988 Nov; 214(3):439–50

ISOLATION & PURIFICATION

Amonabactin, a novel tryptophan– or phenylalanine–containing phenolate siderophore in Aeromonas hydrophila. Barghouthi S, et al. **J Bacteriol** 1989 Apr;171(4):1811–6

Adsorption chromatography on cellulose. IV. Separation of D– and L–tryptophan and D– and L–methyltryptophan on cellulose with aqueous solvents. Kuhn AO, et al. **J Chromatogr** 1989 May 19;469:253–60

METABOLISM

Menstrual cycle effects on the metabolism of tryptophan loads. Hrboticky N, et al. **Am J Clin Nutr** 1989 Jul; 50(1):46–52

The physiopathological role of quinolinic acid in the mammalian central nervous system. Lombardi G, et al. **Ann Ist Super Sanita** 1988;24(3):431–6

Cerebrospinal fluid quinolinic acid concentrations are increased in acquired immune deficiency syndrome. Heyes MP, et al. **Ann Neurol** 1989 Aug;26(2):275–7

Effects of pregnancy on tryptophan metabolism and disposition in the rat. Badawy AA. **Biochem J** 1988 Oct 1;255(1):369–72

Effects of alcohol on tryptophan metabolism. Badawy AA. **Biochem Soc Trans** 1988 Jun;16(3):254–6

Characteristics of interferon induced tryptophan metabolism in human cells in vitro. Werner–Felmayer G, et al. **Biochim Biophys Acta** 1989 Jul 11;1012(2):140–7

Application of rapid–scanning, stopped–flow spectroscopy to the characterization of intermediates formed in the reactions of L– and D–tryptophan and beta–mercaptoethanol with Escherichia coli tryptophan synthase. Drewe WF Jr, et al. **Biochimie** 1989 Apr; 71(4):509–19

Effects of a dietary excess of leucine and of the addition of leucine and 2–oxo–isocaproate on the metabolism of tryptophan and niacin in isolated rat liver cells. Bender DA. **Br J Nutr** 1989 May;61(3):629–40

Quinolinic acid concentrations in striatal extracellular fluid reach potentially neurotoxic levels following systemic L–tryptophan loading. During MJ, et al. **Brain Res** 1989 Jan 9;476(2):384–7

Systemic endotoxin increases L–tryptophan, 5–hydroxyindoleacetic acid, 3–hydroxykynurenine and quinolinic acid content of mouse cerebral cortex. Heyes MP, et al. **Brain Res** 1989 Jul 3;491(1):173–9

Differential actions of neurotrophic factors on lesion–induced damage of the serotonergic neurons projecting to the hippocampus. Lombardi G, et al. **Brain Res** 1988 Aug 23; 458(2):348–52

Effects of carbohydrate and protein administration on rat tryptophan and 5–hydroxytryptamine: differential effects on the brain, intestine, pineal, and pancreas. Teff KL, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):683–8

Circadian variation in the uptake of tryptophan by cortical synaptosomes of the rat brain. Loizou G, et al. **Chronobiol Int** 1988;5(4):331–6

Effects of lead and niacin on tryptophan and serotonin metabolism. Cupo MA, et al. **Drug Nutr Interact** 1988; 5(4):297–308

Neuroactive metabolites of L–tryptophan, serotonin and quinolinic acid, in striatal extracellular fluid. Effect of tryptophan loading. During MJ, et al. **FEBS Lett** 1989 Apr 24;247(2):438–44

Tryptophan metabolism in D–galactosamine–induced liver injury. Mizoguchi Y, et al. **Gastroenterol Jpn** 1988 Oct; 23(5):534–7

The effects of tritium on embryo development: the embryotoxic effects of [3H]tryptophan. Killen HM, et al. **Int J Radiat Biol** 1989 Aug;56(2):139–49

Tryptophan metabolism by the isolated rat liver cells—effects of leucine and its metabolites. Kiyohara Y, et al. **Int J Vitam Nutr Res** 1989;59(1):85–92

Inhibition of rat liver tryptophan pyrrolase activity and elevation of brain tryptophan concentration by administration of DL–alpha–amino–beta–pyridinepropanoic acid (pyridylalanine) analogs. Shimeno H, et al. **J Enzym Inhib** 1987;2(1):57–66

Tryptophan degradation in transplanted tumor cells undergoing rejection. Yoshida R, et al. **J Immunol** 1988 Oct 15;141(8):2819–23

Biosynthesis of staurosporine, 2. Incorporation of tryptophan. Meksuriyen D, et al. **J Nat Prod** 1988 Sep–Oct;51(5):893–9

Brain uptake of L–tryptophan and diazepam: the role of plasma protein binding. Fenerty CA, et al. **J Neurochem** 1989 Aug;53(2):416–22

Heme precursor 5–aminolevulinic acid alters brain tryptophan and serotonin levels without changing pineal serotonin and melatonin concentrations. Daya S, et al. **J Neurosci Res** 1989 Jul;23(3):304–9

Tryptophan, serotonin and carbohydrate appetite: will the real carbohydrate craver please stand up! Fernstrom JD. **J Nutr** 1988 Nov;118(11):1417–9

Involvement of the liver in the regulation of tryptophan availability. Possible role in the responses of liver and brain to starvation. Bloxam DL, et al. **Life Sci** 1974 Oct 15; 15(8):1443–55

Tryptophan metabolism in tsetse flies and the consequences of its derangement. Gooding RH, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:133–41

The effects of kynurenic acid, quinolinic acid and other metabolites of tryptophan on the development of the high pressure neurological syndrome in the rat. Wardley–Smith B, et al. **Neuropharmacology** 1989 Jan;28(1):43–7

Infant vitamin B6 deficiency and preconvulsant activity in brain. **Nutr Rev** 1988 Oct;46(10):358–60 (16 ref.)

Serotonin and tryptamine metabolism in the acute hepatic failure model: changes in tryptophan and its metabolites in the liver, brain and kidney. Kodama C, et al. **Osaka City Med J** 1989 Jun;35(1):1–11

Bioavailability of tryptophan in selected foods by rat growth assay. McDonough FE, et al. **Plant Foods Hum Nutr** 1989; 39(1):85–91

The use of Streptococcus zymogenes for estimating tryptophan and methionine bioavailability in 17 foods. Wells P, et al. **Plant Foods Hum Nutr** 1989;39(1):121–7

Estimation of the tryptophan requirement of male broiler chickens. Smith NK Jr, et al. **Poult Sci** 1988 Aug; 67(8):1174–7

Tryptophan availability, 5HT synthesis and 5HT function. Young SN, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):373–9 (19 ref.)

Growth of toxic shock syndrome toxin 1–producing, tryptophan–requiring strains of Staphylococcus aureus associated with the presence of Escherichia coli. Chu MC, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S101–3

Differential changes in rat brain tryptophan, serotonin and tyrosine levels following acute aflatoxin B1 treatment. Weekley LB, et al. **Toxicol Lett** 1989 May;47(2):173–7

[Changes in plasma and urinary tryptophan in chronic renal failure] Ma JM, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Mar;27(3):153–6, 197 (Eng. Abstr.) **(Chi)**

[Tryptophan metabolism by the indoleacrylic acid pathway] Marklová E. **Cesk Farm** 1988 Jul;37(6):275–80 (74 ref.) **(Cze)**

[Oxidation of the indole ring induced by the auto–oxidation of unsaturated lipids. Application to tryptophan residues of high and low density lipoproteins of human serum] Reyftmann JP, et al. **C R Acad Sci [III]** 1988;307(14):745–8 (Eng. Abstr.) **(Fre)**

[Structural studies on interaction of tryptophan with biologically important molecules] Ishida T. **Yakugaku Zasshi** 1988 Jun;108(6):506–27 (63 ref.) (Eng. Abstr.) **(Jpn)**

[The role of tryptophan in ergot alkaloid biosynthesis in Penicillium gorlenkoanum] Stefanova LN, et al. **Acta Microbiol Bulg** 1988;22:44–9 (Eng. Abstr.) **(Rus)**

[Intrauterine malnutrition. II. L–tryptophan, tryptophan–5–hydroxylase and serotonin in the brain of rats] Manjarrez–Gutiérrez G, et al. **Bol Med Hosp Infant Mex** 1988 Dec;45(12):808–16 (Eng. Abstr.) **(Spa)**

[Intrauterine malnutrition: I. L–tryptophan, serotonin and plasma amino acids in humans] Manjarrez–Gutiérrez G, et al. **Bol Med Hosp Infant Mex** 1988 Nov;45(11):729–44 (Eng. Abstr.) **(Spa)**

[Suloctidil decreases the serotonin concentration in the brain stem of rats with a portacaval shunt] Valenzuela Miranda C, et al. **Rev Esp Enferm Apar Dig** 1988 May;73(5 Pt 2):547–52 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

[Changes in the kinetics of erythrocyte membrane transport of tryptophan in depression] Jeanningros R, et al. **Encephale** 1989 Mar–Apr;15(2):251–4 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Dietary tryptophan reverses alcohol–induced impairment of facial recognition but not verbal recall. Westrick ER, et al. **Alcoholism (NY)** 1988 Aug;12(4):531–3

Neuroendocrine and mood responses to intravenous L–tryptophan in 3,4–methylenedioxymethamphetamine (MDMA) users. Preliminary observations. Price LH, et al. **Arch Gen Psychiatry** 1989 Jan;46(1):20–2

Effects of desipramine and fluvoxamine treatment on the prolactin response to tryptophan. Serotonergic function and the mechanism of antidepressant action. Price LH, et al. **Arch Gen Psychiatry** 1989 Jul;46(7):625–31

Inhibition of free radical processes by antioxidants—tryptophan and 5–hydroxytryptophan. Simic MG, et al. **Bibl Nutr Dieta** 1989;(43):288–96 (28 ref.)

Influence of interferon-gamma and extracellular tryptophan on indoleamine 2,3-dioxygenase activity in T24 cells as determined by a non-radiometric assay. Werner ER, et al. **Biochem J** 1988 Dec 1;256(2):537-41

Effect of norepinephrine, serotonin and tryptophan on the firing rate of sympathetic nerves. Sakaguchi T, et al. **Brain Res** 1989 Jul 17;492(1-2):271-80

Effect of chronic dietary treatment with L-tryptophan on the maintenance of hypertension in spontaneously hypertensive rats. Fregly MJ, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):656-62

Suppression of the modulatory effects of the antileukemic and anti-human immunodeficiency virus compound avarol on gene expression by tryptophan. Schröder HC, et al. **Cancer Res** 1989 Apr 15;49(8):2069-76

The influence of tryptophan on mobility of residues in the trp repressor of Escherichia coli. Lane AN. **Eur J Biochem** 1989 Jun 1;182(1):95-104

Effect of feeding a choline-deficient diet on the hepatic nuclear response to tryptophan in the rat. Sidransky H, et al. **Exp Mol Pathol** 1989 Aug;51(1):68-79

Short time action of antirheumatic substances on the liver of rat. Protective effect of tryptophan + methionine. Kröger H, et al. **Gen Pharmacol** 1989;20(2):211-2

Effect of L-tryptophan supplementation on exercise performance. Segura R, et al. **Int J Sports Med** 1988 Oct; 9(5):301-5

Mutational analysis of the catalytic and feedback sites of the tryptophan-sensitive 3-deoxy-D-arabino-heptulosonate-7-phosphate synthase of Escherichia coli. Ray JM, et al. **J Bacteriol** 1988 Dec; 170(12):5500-6

Effects of tryptophan and pH on the kinetics of superoxide radical binding to indoleamine 2,3-dioxygenase studied by pulse radiolysis. Kobayashi K, et al. **J Biol Chem** 1989 Sep 15;264(26):15280-3

Stereochemical effects of L-tryptophan and its analogues on trp repressor's affinity for operator-DNA. Marmorstein RQ, et al. **J Biol Chem** 1989 Jun 5;264(16):9149-54

Calcium-dependent, tetrodotoxin-sensitive stimulation of cortical serotonin release after a tryptophan load. Carboni E, et al. **J Neurochem** 1989 Sep;53(3):976-8

Morphologic and functional alterations in absorptive epithelial cells during L-tryptophan induced inhibition of net sodium and fluid absorption in the rat ileum. Teichberg S, et al. **Lab Invest** 1989 Jan;60(1):88-101

Effect of 5-hydroxytryptamine precursors on morphine analgesia in the formalin test. Abbott FV, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):855-60

Glycolic acid and tryptophan effects on feed intake and hypothalamic indoleamines in chicks. Pinchasov Y, et al. **Physiol Behav** 1989 Mar;45(3):585-9

The effect of L-tryptophan on daytime sleep latency in normals: correlation with blood levels. George CF, et al. **Sleep** 1989 Aug;12(4):345-53

PHYSIOLOGY

Indolpyruvic acid administration increases the brain content of kynurenic acid. Is this a new avenue to modulate excitatory amino acid receptors in vivo? Russi P, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2405-9

Role of tryptophan degradation in respiratory burst-independent antimicrobial activity of gamma interferon-stimulated human macrophages. Murray HW, et al. **Infect Immun** 1989 Mar;57(3):845-9

Structure-function studies on bacteriorhodopsin. IX. Substitutions of tryptophan residues affect protein-retinal interactions in bacteriorhodopsin. Mogi T, et al. **J Biol Chem** 1989 Aug 25;264(24):14197-201

Regulation of serotonin synthesis. Hamon M, et al. **Life Sci** 1974 Nov 1;15(9):1533-48 (63 ref.)

Biochemical aspects of tryptophan depletion in primates. Young SN, et al. **Psychopharmacology (Berlin)** 1989; 98(4):508-11

RADIATION EFFECTS

Orientation of the tryptophans responsible for the photoinactivation of nerve sodium channels. Conti F, et al. **Eur Biophys J** 1988;16(2):73-81

Two-step photoactivation of hematoporphyrin by excimer-pumped dye-laser pulses. Andreoni A. **J Photochem Photobiol [B]** 1987 Dec;1(2):181-93

THERAPEUTIC USE

Prevention of cutaneous phototoxicity in photodynamic therapy. McLear PW, et al. **Am J Otolaryngol** 1989 Mar-Apr;10(2):92-8

L-tryptophan in neuroleptic-induced tardive dyskinesia. Sandyk R, et al. **Int J Neurosci** 1988 Sep;42(1-2):127-30

L-tryptophan supplementation in Parkinson's disease. Sandyk R, et al. **Int J Neurosci** 1989 Apr;45(3-4):215-9

Use of L-tryptophan [letter] Shapira IL. **J Am Dent Assoc** 1989 Jun;118(6):682

The effect of L-tryptophan supplementation and dietary instruction on chronic myofascial pain. Stockstill JW, et al. **J Am Dent Assoc** 1989 Apr;118(4):457-60

Tryptophan antagonism of stimulant-induced tics [letter] Chandler ML, et al. **J Clin Psychopharmacol** 1989 Feb; 9(1):69-70

[Sleep-disordered patients—problem cases in practice. An interview with Prof. Dr. E. Rüther, Göttingen] Rüther E. **Fortschr Med** 1988 Jul 10;106(20):47 (Ger)

TOXICITY

Toxic effect of a photo-induced tryptophan-riboflavin adduct on F9 teratocarcinoma cells and preimplantation mouse embryos. Silva E, et al. **Int J Vitam Nutr Res** 1988; 58(4):394-401

URINE

Effect of the structure and density of chemically bonded C18 phase on the recovery of tryptophan and its metabolites from human urine. Buszewski B, et al. **J Chromatogr** 1989 Feb 17;464(1):73-81

TRYPTOPHAN HYDROXYLASE

ANALYSIS

Tryptophan hydroxylase activity and 5-hydroxytryptamine-immunoreactive cells in the superior cervical ganglion of hydrocortisone-treated neonatal rats. Päivärinta H, et al. **Neurosci Res** 1989 Feb;6(3):276-81

ANTAGONISTS & INHIBITORS

Acute inactivation of tryptophan hydroxylase by amphetamine analogs involves the oxidation of sulfhydryl sites. Stone DM, et al. **Eur J Pharmacol** 1989 Mar 7; 172(1):93-7

GENETICS

An efficient strategy for cloning 5' extremities of rare transcripts permits isolation of multiple 5'-untranslated regions of rat tryptophan hydroxylase mRNA. Delort J, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6439-48

IMMUNOLOGY

A monoclonal antibody to aromatic amino acid hydroxylases. Identification of the epitope. Cotton RG, et al. **Biochem J** 1988 Oct 1;255(1):193-6

METABOLISM

Increase in the activity of tryptophan hydroxylase from cortex and midbrain of male Fischer 344 rats in response to acute or repeated sound stress. Boadle-Biber MC, et al. **Brain Res** 1989 Mar 20;482(2):306-16

Effect of MK-801 on the decrease in tryptophan hydroxylase induced by methamphetamine and its methylenedioxy analog. Johnson M, et al. **Eur J Pharmacol** 1989 Jun 20; 165(2-3):315-8

Direct central effects of acute methylenedioxymethamphetamine on serotonergic neurons. Schmidt CJ, et al. **Eur J Pharmacol** 1988 Oct 26; 156(1):121-31

Tryptophan hydroxylase activity in brain slices. Sawada M, et al. **Int J Biochem** 1988;20(10):1033-8 (58 ref.)

Formal demonstration of the phosphorylation of rat brain tryptophan hydroxylase by Ca2+/calmodulin-dependent protein kinase. Ehret M, et al. **J Neurochem** 1989 Jun; 52(6):1886-91

Modulation of tryptophan hydroxylase activity by phospholipids: stimulation followed by inactivation. Imai Y, et al. **J Neurochem** 1989 Oct;53(4):1293-9

In vitro reactivation of rat cortical tryptophan hydroxylase following in vivo inactivation by methylenedioxymethamphetamine. Stone DM, et al. **J Neurochem** 1989 Aug;53(2):572-81

Measurement of tryptophan hydroxylase activity in rat pineal glands and pinealocytes using an HPLC assay with electrochemical detection. Sugden D, et al. **J Pineal Res** 1989;6(3):285-92

Regulation of tryptophan and tyrosine hydroxylase. Lovenberg W, et al. **Life Sci** 1974 Jun 16;14(12):2337-53 (55 ref.)

In vivo evidence for a greater brain tryptophan hydroxylase capacity in female than in male rats. Carlsson M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):345-9

Effects of disulfiram and coprine on rat brain tryptophan hydroxylation in vivo. Nilsson GE, et al. **Neurochem Res** 1989 Jun;14(6):537-40

Near-UV activation of enzymatic conversion of 5-hydroxytryptophan to serotonin. Fraikin GY, et al. **Photochem Photobiol** 1989 Apr;49(4):475-7

Molecular cloning of cDNA coding for brain-specific 14-3-3 protein, a protein kinase-dependent activator of tyrosine and tryptophan hydroxylases. Ichimura T, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7084-8

[Change in tryptophan hydroxylase activity in the brain of silver foxes and wild Norway rats in the course of selection according to behavior] Kulikov AV, et al. **Genetika** 1989 Feb;25(2):346-50 (Eng. Abstr.) (Rus)

[Intrauterine malnutrition. II. L-tryptophan, tryptophan-5-hydroxylase and serotonin in the brain of rats] Manjarrez-Gutiérrez G, et al. **Bol Med Hosp Infant Mex** 1988 Dec;45(12):808-16 (Eng. Abstr.) (Spa)

TRYPTOPHAN MONOOXYGENASE see TRYPTOPHAN HYDROXYLASE

TRYPTOPHAN OXYGENASE

ANTAGONISTS & INHIBITORS

In vivo studies on the effect of some insecticides on the hepatic activities of L-tryptophan 2,3-dioxygenase and pyridoxal phosphokinase of male mice. el-Toukhy MA, et al. **J Environ Sci Health [B]** 1989 Jun;24(3):265-76

Inhibition of rat liver tryptophan pyrrolase activity and elevation of brain tryptophan concentration by administration of DL-alpha-amino-beta-pyridinepropanoic acid (pyridylalanine) analogs. Shimeno H, et al. **J Enzym Inhib** 1987;2(1):57-66

BIOSYNTHESIS

Age-related differential induction of tryptophan pyrrolase by hydrocortisone in the liver of male rats. Patnaik SK, et al. **Biochem Int** 1989 Jun;18(6):1221-8

METABOLISM

Determination of serum kynurenine and hepatic tryptophan dioxygenase activity by high-performance liquid chromatography. Holmes EW. **Anal Biochem** 1988 Aug 1;172(2):518-25

Tryptophan 2,3-dioxygenase activity in rat skin. Naito J, et al. **Arch Biochem Biophys** 1989 Apr;270(1):236-41

Assessment of arsenic effects on cytosolic heme status using tryptophan pyrrolase as an index. Cebrián ME, et al. **J Biochem Toxicol** 1988 Summer;3:77-86

[Development and significance of estrogen-induced increase in the activity of several liver enzymes] Németh S. **Z Gesamte Inn Med** 1988 Aug 1;43(15):418-20 (Eng. Abstr.) (Ger)

[Tryptophan 2,3-dioxygenases and their reaction mechanisms] Makino R, et al. **Tanpakushitsu Kakusan Koso** 1987 May;32(6):752-6 (21 ref.) (Jpn)

TRYPTOPHAN PYRROLASE see TRYPTOPHAN OXYGENASE

TRYPTOPHAN SYNTHASE

Kinetics of appearance of an early immunoreactive species during the refolding of acid-denatured Escherichia coli tryptophan synthase beta 2 subunit. Murry-Brelier A, et al. **Biochemistry** 1988 Oct 4;27(20):7633-40

Three-dimensional structure of the tryptophan synthase alpha 2 beta 2 multienzyme complex from Salmonella typhimurium. Hyde CC, et al. **J Biol Chem** 1988 Nov 25; 263(33):17857-71

ANALYSIS

A physical-chemical and immunological comparison shows that native and renatured Escherichia coli tryptophan synthase beta 2 subunits are identical. Murry-Brelier A, et al. **Biochimie** 1989 Apr;71(4):533-43

GENETICS

DNA sequence of the tryptophan synthase genes of Pseudomonas putida. Crawford IP, et al. **Biochimie** 1989 Apr;71(4):521-31

Reversion of trpA nonsense mutations by deletion of the chain-termination codons. Tucker SD, et al. **Biochimie** 1989 Jun;71(6):721-8

Missense and nonsense suppressors can correct frameshift mutations. Tucker SD, et al. **Biochimie** 1989 Jun; 71(6):729-39

Sequence of the Pseudomonas aeruginosa trpI activator gene and relatedness of trpI to other procaryotic regulatory genes. Chang M, et al. **J Bacteriol** 1989 Jan;171(1):172-83

Nucleotide sequence of the Neurospora crassa trp-3 gene encoding tryptophan synthetase and comparison of the trp-3 polypeptide with its homologs in Saccharomyces cerevisiae and Escherichia coli. Burns DM, et al. **J Biol Chem** 1989 Mar 5;264(7):3840-8

Phylogeny of metabolic pathways: O-acetylserine sulphydrylase A is homologous to the tryptophan synthase beta subunit. Levy S, et al. **Mol Microbiol** 1988 Nov; 2(6):777-83

A gene encoding the tryptophan synthase beta subunit of Arabidopsis thaliana. Berlyn MB, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4604-8

Comparison of CD spectra in the aromatic region on a series of variant proteins substituted at a unique position of tryptophan synthase alpha-subunit. Ogasahara K, et al. **Proteins** 1989;5(3):211-7

Polypeptide-antibody binding mechanism: conformational adaptation investigated by equilibrium and kinetic analysis. Friguet B, et al. **Res Immunol** 1989 May;140(4):355-76

[Cloning and expression of tryptophan synthetase gene (TRP5) in yeast] Yun DF, et al. **Wei Sheng Wu Hsueh Pao** 1989 Jun;29(3):174-9 (Eng. Abstr.) (Chi)

HISTORY

Tryptophan synthetase of E. coli: a multifunctional, multicomponent enzyme; a commentary on 'A Second Reaction Catalyzed by the Tryptophan Synthetase of

Escherichia coli'. Yanofsky C. **Biochim Biophys Acta** 1989; 1000:133–7

A second reaction catalyzed by the tryptophan synthetase of Escherichia coli. 1959 [classical article] Yanofsky C. **Biochim Biophys Acta** 1989;1000:137–45

METABOLISM

Solubilization and renaturation of overexpressed aggregates of mutant tryptophan synthase alpha-subunits. Lim WK, et al. **Appl Environ Microbiol** 1989 May;55(5):1106–11

L-serine analogues form Schiff base and quinonoidal intermediates with Escherichia coli tryptophan synthase. Houben KF, et al. **Biochemistry** 1989 May 16;28(10):4140–7

Detection and identification of transient intermediates in the reactions of tryptophan synthase with oxindolyl-L-alanine and 2,3-dihydro-L-tryptophan. Evidence for a tetrahedral (gem-diamine) intermediate. Roy M, et al. **Biochemistry** 1988 Nov 15;27(23):8661–9

Stereoelectronic control of bond formation in Escherichia coli tryptophan synthase: substrate specificity and enzymatic synthesis of the novel amino acid dihydroisotryptophan. Roy M, et al. **Biochemistry** 1988 Sep 6;27(18):6698–704

Application of rapid-scanning, stopped-flow spectroscopy to the characterization of intermediates formed in the reactions of L- and D-tryptophan and beta-mercaptoethanol with Escherichia coli tryptophan synthase. Drewe WF Jr, et al. **Biochimie** 1989 Apr; 71(4):509–19

Renaturation of guanidine-unfolded tryptophan synthase by multi-mixing stopped-flow dilution in D2O. Blond-Elguindi S, et al. **FEBS Lett** 1988 Dec 5; 241(1-2):251–6

Microspectrophotometric studies on single crystals of the tryptophan synthase alpha 2 beta 2 complex demonstrate formation of enzyme-substrate intermediates. Mozzarelli A, et al. **J Biol Chem** 1989 Sep 25;264(27):15774–80

Correlation of surface properties with conformational stabilities of wild-type and six mutant tryptophan synthase alpha-subunits substituted at the same position. Kato A, et al. **Protein Eng** 1988 Jul;2(2):153–6

PHYSIOLOGY

The beta subunit of tryptophan synthase. Clarification of the roles of histidine 86, lysine 87, arginine 148, cysteine 170, and cysteine 230. Miles EW, et al. **J Biol Chem** 1989 Apr 15;264(11):6280–7

The alpha subunit of tryptophan synthase. Evidence that aspartic acid 60 is a catalytic residue and that the double alteration of residues 175 and 211 in a second-site revertant restores the proper geometry of the substrate binding site. Nagata S, et al. **J Biol Chem** 1989 Apr 15;264(11):6288–96

TRYPTOPHAN SYNTHETASE see **TRYPTOPHAN SYNTHASE**

TRYPTOPHANASE see under **LYASES**

TRYPTOPHANYL T RNA SYNTHETASE see under **AMINO ACYL T RNA SYNTHETASES**

TSETSE FLIES

The economics of trypanosomiasis control in western Zambia. Putt SN, et al. **Acta Vet Scand Suppl** 1988;84:394–7

Preliminary observations of tsetse flies fed on a pig dipped in deltamethrin. Van den Bossche P. **Ann Soc Belg Med Trop** 1988 Jun;68(2):159–60

The hosts of Glossina fuscipes fuscipes (Newstead) in Busoga, Uganda, and epidemiological implications for trypanosomiasis. Okoth JO, et al. **Ann Trop Med Parasitol** 1988 Oct;82(5):517–8

Effects of Flumethrin Pour-on against Glossina palpalis gambiensis (Diptera, Glossinidae). Bauer B, et al. **Trop Med Parasitol** 1988 Jun;39(2):151–2

[Use of traps and screens impregnated with insecticides for controlling animal trypanosomiasis] Mawuena K, et al. **Rev Elev Med Vet Pays Trop** 1988;41(1):93–6 (Eng. Abstr.) (Fre)

[A community battle against a tropical endemic disease: supernatural beliefs and tsetse fly traps in the Congo] Leygues M, et al. **Soc Sci Med** 1989;28(12):1255–67 (Eng. Abstr.) (Fre)

ANALYSIS

Purification and characterization of two fibrinolysins from the midgut of adult female Glossina morsitans centralis. Endege WO, et al. **Comp Biochem Physiol [B]** 1989; 92(1):25–34

Fluorescein conjugated lectins identify different carbohydrate residues on Glossina peritrophic membranes. Okolo CJ, et al. **Trop Med Parasitol** 1988 Sep;39(3):208–10

CLASSIFICATION

[The determination of the geographical boundaries between two subspecies of tsetse flies in the Ivory Coast: Glossina palpalis (Robineau-Desvoidy, 1830) and G.p.gambiensis (Vanderplank, 1949)] Nekpeni EB, et al. **Trop Med Parasitol** 1989 Mar;40(1):12–5 (Eng. Abstr.) (Fre)

DRUG EFFECTS

Effect of ivermectin and isometamidium chloride on Glossina palpalis palpalis (Diptera: Glossinidae). Van den Abbeele J, et al. **Ann Soc Belg Med Trop** 1988 Mar;68(1):53–9

Effect of Samorin administered to a bovine host on the survival and reproductive performance of female Glossina morsitans centralis. Moloo SK, et al. **Ann Trop Med Parasitol** 1987 Dec;81(6):743–4

GENETICS

Genetics of two populations of Glossina morsitans centralis (Diptera: Glossinidae) from Zambia. Gooding RH. **Acta Trop (Basel)** 1989 Jan;46(1):17–22

GROWTH & DEVELOPMENT

[Breeding of Glossina morsitans submorsitans Newstead, 1910 (Diptera-Glossinidae in the CRTA of Bobo-Dioulasso, Burkina Faso. I. Adaptation of a wild strain to the laboratory breeding conditions on feeding hosts] Filledier J, et al. **Rev Elev Med Vet Pays Trop** 1988;41(1):87–92 (Eng. Abstr.) (Fre)

IMMUNOLOGY

Detection of antigens common to salivary glands and other tissues of tsetse fly, Glossina palpalis palpalis (Diptera: Glossinidae). Matha V, et al. **Folia Parasitol (Praha)** 1988; 35(3):285–7

METABOLISM

Tryptophan metabolism in tsetse flies and the consequences of its derangement. Gooding RH, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:133–41

MICROBIOLOGY

Glossina morsitans morsitans: mortalities caused in adults by experimental infection with entomopathogenic fungi. Kaaya GP. **Acta Trop (Basel)** 1989 Mar;46(2):107–14

Virus-like particles in Glossina palpalis gambiensis (Diptera: Glossinidae). Stiles JK, et al. **Ann Soc Belg Med Trop** 1988 Jun;68(2):161–3

Mortality in adult tsetse, Glossina morsitans morsitans, caused by entomopathogenic bacteria. Kaaya GP, et al. **J Invertebr Pathol** 1989 Jul;54(1):32–8

Cloning of a repetitive DNA from the rickettsia-like organisms of tsetse flies (Glossina spp.). Welburn SC, et al. **Parasitology** 1989 Feb;98 (Pt 1):81–4

PARASITOLOGY

Isolation and cultivation in vitro to the infective, metacyclic stage of Trypanosoma (Nannomonas) simiae from Glossina morsitans submorsitans. Dukes P, et al. **Acta Trop (Basel)** 1989 May;46(3):191–203

Use of DNA probes to identify Trypanosoma congolense and T. simiae in tsetse flies from The Gambia. McNamara J, et al. **Acta Trop (Basel)** 1989 Jan;46(1):55–61

Rickettsial infections of midgut cells are not associated with susceptibility of Glossina morsitans centralis to Trypanosoma congolense infection. Moloo SK, et al. **Acta Trop (Basel)** 1989 Jul;46(4):223–7

New observations on cyclical development of Trypanosoma vivax in Glossina. Moloo SK, et al. **Acta Trop (Basel)** 1989 May;46(3):167–72

Some concepts of the interaction of Trypanosoma (Nannomonas) congolense and Glossina pallidipes. Kaddu JB, et al. **Ann Trop Med Parasitol** 1988 Jun;82(3):229–34

Biology of African trypanosomes in the tsetse fly. Vickerman K, et al. **Biol Cell** 1988;64(2):109–19 (30 ref.)

The timing and frequency of hybrid formation in African trypanosomes during cyclical transmission. Schweizer J, et al. **Parasitol Res** 1988;75(2):98–101

Loss of variable antigen during transformation of Trypanosoma brucei rhodesiense from bloodstream to procyclic forms in the tsetse fly. Turner CM, et al. **Parasitol Res** 1988;74(6):507–11

Species-specific DNA probes for the identification of African trypanosomes in tsetse flies. Gibson WC, et al. **Parasitology** 1988 Aug;97 (Pt 1):63–73

A general model for the African trypanosomiases. Rogers DJ. **Parasitology** 1988 Aug;97 (Pt 1):193–212

Comparative study on the susceptibility of different Glossina species to Trypanosoma brucei brucei infection. Moloo SK, et al. **Trop Med Parasitol** 1988 Sep;39(3):211–3

[The use of sentinel animals for the evaluation of the control of vectors of sleeping sickness: preliminary reports at a Congolese site] Gouteux JP, et al. **Acta Trop (Basel)** 1988 Dec;45(4):331–8 (Eng. Abstr.) (Fre)

[Localization of Trypanosoma (Nannomonas) congolense Broden, 1904 (Kinetoplastida, Trypanosomatidae) in the proboscis of Glossina morsitans morsitans Westwood, 1850 (Diptera, Glossinidae)] Ladikpo E, et al. **Ann Parasitol Hum Comp** 1988;63(3):193–6 (Eng. Abstr.) (Fre)

[Effects of sublethal doses of deltamethrin on the pair Glossina morsitans morsitans-Trypanosoma (Nannomonas) congolense] Nitcheman S, et al. **C R Acad Sci [III]** 1988; 307(7):423–6 (Eng. Abstr.) (Fre)

[Trypanosoma (Nannomonas) congolese Broden, 1904 (Kinetoplastida, Trypanosomatidae) in epithelial cells of the anterior segment of the midgut of Glossina morsitans morsitans Westwood, 1850 (Diptera, Glossinidae)] Ladikpo E, et al. **Rev Elev Med Vet Pays Trop** 1988;41(2):165–7 (Eng. Abstr.) (Fre)

PHYSIOLOGY

The feeding habits of the tsetse, Glossina pallidipes Austen on the south Kenya coast, in the context of its host range and trypanosome infection rates in other parts of east Africa. Snow WF, et al. **Acta Trop (Basel)** 1988 Dec; 45(4):339–49

The effects on longevity and fecundity of Glossina tachinoides after feeding on pigs treated with ivermectin. Van den Bossche P, et al. **Ann Soc Belg Med Trop** 1988 Jun;68(2):133–9

Preliminary observations of tsetse flies fed on a pig dipped in deltamethrin. Van den Bossche P. **Ann Soc Belg Med Trop** 1988 Jun;68(2):159–60

[Comparison of the attractive power of Zébu and Baoulé cattle for Glossina tachinoides Westwood, 1850 and Glossina morsitans submorsitans Newstead, 1910 in Sudano-Guinean savanna, Burkina Faso] Filledier J, et al. **Rev Elev Med Vet Pays Trop** 1988;41(2):191–6 (Eng. Abstr.) (Fre)

[Attractive property of chemical products isolated from animal odors for Glossina tachinoides] Merot P, et al. **Rev Elev Med Vet Pays Trop** 1988;41(1):79–85 (Eng. Abstr.) (Fre)

RADIATION EFFECTS

Effects of gamma irradiation on the midgut ultrastructure of Glossina palpalis subspecies. Stiles JK, et al. **Radiat Res** 1989 May;118(2):353–63

TSH see **THYROTROPIN**

TSH RECEPTORS see **RECEPTORS, THYROTROPIN**

TSUTSUGAMUSHI see **SCRUB TYPHUS**

TUBAL LIGATION see **STERILIZATION, TUBAL**

TUBE FEEDING see **ENTERAL FEEDING**

TUBE ILEOSTOMY see **ILEOSTOMY**

TUBER CINEREUM see under **HYPOTHALAMUS**

TUBERACTINOMYCIN B see **VIOMYCINS**

TUBERCIDIN see under **ANTIBIOTICS, AMINOGLYCOSIDE**

TUBERCULIN

Tuberculin substituted for terbutaline. No "tine" for error [letter] Barham B, et al. **Chest** 1988 Nov;94(5):1120–1

ADMINISTRATION & DOSAGE

T-cell response to purified protein derivative after removal of Langerhans' cells from epidermal cell suspensions containing keratinocytes expressing class II transplantation antigens. Tjernlund U, et al. **Scand J Immunol** 1988 Dec; 28(6):667–73

[Modified subcutaneous tuberculin test in the diagnosis of tuberculosis of the male genital organs] Shkuratov SI. **Probl Tuberk** 1989;(2):42–5 (Eng. Abstr.) (Rus)

[Pathogenetic agents in the complex treatment of patients with tuberculous pleurisy] Tsymbalar' GG, et al. **Probl Tuberk** 1989;(4):23–7 (Eng. Abstr.) (Rus)

[2 U of PPD RT-23: the suitable dose in the Mantoux test] Muñoz P, et al. **Med Clin (Barc)** 1988 Jun 4;91(2):77–8 (Spa)

ADVERSE EFFECTS

[Characteristics of tuberculin allergy in pulmonary tuberculosis in children] Kislitsyna NA, et al. **Pediatriia** 1988;(12):88 (Rus)

ANALYSIS

The chemical composition of immunoaffinity-purified Mycobacterium tuberculosis antigen 5 [letter] Daniel TM. **Am Rev Respir Dis** 1989 Jun;139(6):1566–7

ANTAGONISTS & INHIBITORS

[The effect of alpha-tocopherol on changes in external respiration and pulmonary hemodynamics caused by tuberculin] Grigaliunas AP, et al. **Sov Med** 1988;(11):68–70 (Rus)

DIAGNOSTIC USE

[Chemofluorometry in the differential diagnosis of pulmonary tuberculosis] Autenshlius AI, et al. **Probl Tuberk** 1988; (7):25–9 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Concentration dependent functional responsiveness to subcellular antigenic extracts of BCG and different mycobacterial PPDs, of tuberculin (Mtb-PPD) reactive human T-cell lines. Das PK, et al.

Acta Leprol (Geneve) 1989;7 Suppl 1:164–8

HLA-DR and tuberculin tests in rheumatoid arthritis and tuberculosis. Bahr GM, et al. Ann Rheum Dis 1989 Jan; 48(1):63–8

Relative cross reactivity of habanin, lepromin and tuberculin in guinea pigs sensitized with homologous and heterologous mycobacteria. Singh NB, et al. Indian J Lepr 1988 Jul; 60(3):407–12

The nature and kinetics of a delayed immune response to purified protein derivative of tuberculin in the skin of lepromatous leprosy patients. Kaplan G, et al. J Exp Med 1988 Nov 1;168(5):1811–24

Delayed hypersensitivity reactions by the mycobacterial antigen A60 and cutaneous testing in tuberculosis. Benoit C, et al. Med Microbiol Immunol (Berl) 1989;178(2):105–12

Depressed PPD and tetanus toxoid presentation by monocytes to T lymphocytes in patients with rheumatoid arthritis: restoration by interferon gamma. Seitz M, et al. Rheumatol Int 1988;8(5):189–96

Effects of purified protein derivative (PPD)-activated syngeneic epidermal cells on a PPD-specific rat T-helper cell line. Scheynius A, et al. Scand J Immunol 1989 Jun; 29(6):671–7

Studies on the efficiency of absorbed bovine PPD in tuberculin and serological tests. Hammam H, et al. Zentralbl Veterinarmed [B] 1989 May;36(3):175–9

[Flowcytometric analysis of lymphocytes proliferated in vitro by PPD] Harada Y, et al. Kekkaku 1989 Feb;64(2):79–84 (Eng. Abstr.) (Jpn)

[Fernandez and Mitsuda reactions in patients with leprosy and their contacts] Arruda MS, et al. Hansenol Int 1985; 10(1–2):23–31 (Eng. Abstr.) (Por)

[Morphologic changes of the nucleolar system of lymphocytes as the indicator of sensitivity to tuberculin and Toxoplasma antigen] Gavrilova LO, et al. Pediatriia 1989;(7):43–7 (Eng. Abstr.) (Rus)

[Tuberculin sensitivity in children with tuberculosis and a history of pneumonia] Mykolyshin LI. Probl Tuberk 1988; (9):6–8 (Eng. Abstr.) (Rus)

[Immunologic characteristics of children with varying sensitivity to tuberculin having recovered from pneumonia] Mykolyshin LI, et al. Probl Tuberk 1989;(2):23–5 (Eng. Abstr.) (Rus)

[Sensitivity to tuberculin in schoolchildren of different levels of physical development] Palziev RD. Probl Tuberk 1988; (6):6–9 (Eng. Abstr.) (Rus)

[The course of pulmonary tuberculosis in patients with hyperergic reactions to tuberculin] Roslik SM, et al. Probl Tuberk 1988;(8):17–8 (Eng. Abstr.) (Rus)

[Evaluation of four antigens for the detection of anti-Mycobacterium bovis antibodies by enzyme immunoassay] Ritacco V, et al. Rev Argent Microbiol 1988 Apr–Jun;20(2):97–101 (Eng. Abstr.) (Spa)

ISOLATION & PURIFICATION

Purified protein derivative (PPD). Lachmann PJ. Springer Semin Immunopathol 1988;10(4):301–4

PHARMACOLOGY

Suppression of purified protein derivative-induced interleukin-2 production by interaction of CD16 (Leu 11 reactive) lymphocytes and adherent mononuclear cells in tuberculosis. Toossi Z, et al. J Infect Dis 1989 Feb; 159(2):352–6

Purified protein derivative induced cytotoxicity in carcinomatous and tuberculous pleurisy. Okubo Y, et al. Jpn J Med 1988 Aug;27(3):255–60

STANDARDS

Diagnostic value of mammalian, avian and johnin PPD tuberculins in cattle herds infected by Mycobacterium paratuberculosis. Körmendy B. Acta Vet Hung 1988; 36(3–4):177–83

TUBERCULIN TEST

Histopathologic pattern analysis of human intracutaneous tuberculin reaction. Kuramoto Y, et al. Am J Dermatopathol 1989 Aug;11(4):329–37

Skin test responsiveness to Mycobacterium tuberculosis, HLA-DR4, and rheumatoid arthritis [letter] Markusse HM, et al. Ann Rheum Dis 1989 Feb;48(2):175–6

Heaf test results after neonatal BCG. Crawshaw PA, et al. Arch Dis Child 1988 Dec;63(12):1490–1

Tuberculin response after neonatal BCG vaccination. Ormerod LP, et al. Arch Dis Child 1988 Dec;63(12):1491–2

The nonutility of chest roentgenographic examination in asymptomatic patients with positive tuberculin test results. Gottridge JA, et al. Arch Intern Med 1989 Jul; 149(7):1660–2

Reading the tuberculin skin test. Who, when, and how? Howard TP, et al. Arch Intern Med 1988 Nov; 148(11):2457–9

Immunisation against infectious disease [letter] Citron KM, et al. BMJ 1988 Nov 26;297(6660):1406

Immunisation against infectious disease [letter] Festenstein F, et al. BMJ 1988 Oct 8;297(6653):916

Diversity in migration of CD4 and CD8 lymphocytes in different microanatomical compartments of the skin in the tuberculin reaction in man. Beck JS, et al. Br J Exp Pathol 1988 Dec;69(6):771–80

The past, the present and the future of the tuberculin test in tuberculosis control. Bleiker JH. Bull Int Union Tuberc Lung Dis 1989 Mar;64(1):33–4

Non-tuberculous mycobacterial infection—a major cause of tuberculin conversion in unvaccinated children in south Sweden. Bulow K, et al. Bull Int Union Tuberc Lung Dis 1988 Sep;63(3):10–1

Sensitivity to tuberculin and sensitins in Swedish children. Lind A, et al. Bull Int Union Tuberc Lung Dis 1988 Dec; 63(4):19–22

The role of genetics in the response to tuberculin and to other mycobacterial sensitins. Magnusson M, et al. Bull Int Union Tuberc Lung Dis 1988 Jun;63(2):13–5

Results of a study of tuberculin conversion rates in primary school children in Ireland. Horgan JM, et al. Ir J Med Sci 1988 Aug;157(8):252–5

Histometric studies on cellular infiltrates of tuberculin tests in patients with haemophilia. Lowe JG, et al. J Clin Pathol 1989 Feb;42(2):184–7

Transcutaneous measurement of PO2 and PCO2 in the dermis at the site of the tuberculin reaction in healthy human subjects. Spence VA, et al. J Pathol 1988 Aug; 155(4):289–93

Booster effect of tuberculin testing in healthy 6-year-old school children vaccinated with Bacillus Calmette-Guérin at birth in Santiago, Chile. Sepulveda RL, et al. Pediatr Infect Dis J 1988 Aug;7(8):578–81

Tuberculosis makes a comeback. Giving and interpreting the Mantoux test. Dickensheets DL. Postgrad Med 1989 Aug; 86(2):97–8, 103–5, 108 (12 ref.)

The relation between cutaneous blood flow and cell content in the tuberculin reaction. Swanson Beck J, et al. Scand J Immunol 1989 Jan;29(1):33–9

Case report 533: Tuberculosis of calcaneus and talus with negative tuberculin skin test. Nielsen FF, et al. Skeletal Radiol 1989;18(2):153–5

Skin test responsiveness to a series of new tuberculins of children living in three Vietnamese cities. Ly HM, et al. Tubercle 1989 Mar;70(1):27–36

[Determination of immunologic parameters in patients with lung tuberculoses of various stages with special reference to serum IgE concentration] Greinert U, et al. Pneumologie 1989 May;43(5):254–8 (Eng. Abstr.) (Ger)

[The tuberculin test in the clinic—dosage and evaluation] Simon K, et al. Prax Klin Pneumol 1988 Jun;42(6):423–6 (Eng. Abstr.) (Ger)

[Subcutaneous tuberculin tests at a geriatric tuberculosis clinic] Iashchenko BP, et al. Probl Tuberk 1988;(11):14–8 (Eng. Abstr.) (Rus)

[Phagocytic activity of neutrophils in children with positive reactions to tuberculin] Skliarov SD, et al. Probl Tuberk 1988;(10):69–70 (Rus)

[Tuberculosis surveys in Guerrero and new estimates of the magnitude of tuberculosis infection in Mexico] Cárdenas-Ayala VM, et al. Salud Publica Mex 1989 Jan–Feb;31(1):73–81 (Eng. Abstr.) (Spa)

METHODS

Two-step PPD testing for nursing home patients [letter] Lefton E. J Am Geriatr Soc 1989 Jul;37(7):666–7

[The value of the tuberculin tine test] Hofmann F, et al. Off Gesundheitswes 1989 Jul;51(7):359–61 (Eng. Abstr.) (Ger)

[Tuberculin intradermal test—comparative studies] Magdorf K. Off Gesundheitswes 1988 Aug–Sep;50(8–9):485–7 (Eng. Abstr.) (Ger)

STANDARDS

[2 U of PPD RT-23: the suitable dose in the Mantoux test] Muñoz P, et al. Med Clin (Barc) 1988 Jun 4;91(2):77–8 (Spa)

VETERINARY

Diagnostic value of mammalian, avian and johnin PPD tuberculins in cattle herds infected by Mycobacterium paratuberculosis. Körmendy B. Acta Vet Hung 1988; 36(3–4):177–83

Testing for tuberculosis in nonhuman primates [letter] Sadoff DA. J Am Vet Med Assoc 1989 Feb 1;194(3):325–6

Delayed cutaneous hypersensitivity response in tetanus toxoid sensitized rhesus monkeys: predictor of anergy and value in tuberculin skin testing. Davis JA, et al. Lab Anim Sci 1988 Aug;38(4):413–6

Misleading positive tuberculin reactions in a squirrel monkey colony. Pierce DL, et al. Lab Anim Sci 1988 Dec; 38(6):729–30

Alternative site for the single intradermal comparative tuberculin test in the llama (Llama glama). Simmons AG. Vet Rec 1989 Jan 7;124(1):17–8

Tuberculin testing deer [letter] Spencer JJ, et al. Vet Rec 1989 Jul 8;125(2):49

Studies on the efficiency of absorbed bovine PPD in tuberculin and serological tests. Hammam H, et al. Zentralbl Veterinarmed [B] 1989 May;36(3):175–9

TUBERCULIN-TYPE HYPERSENSITIVITY see HYPERSENSITIVITY, DELAYED

TUBERCULOID LEPROSY see LEPROSY, TUBERCULOID

TUBERCULOMA

COMPLICATIONS

Reversible multifocal encephalopathy following tuberculous infection. Provinciali L, et al. Ital J Neurol Sci 1989 Apr; 10(2):163–70

Association of tuberculoma with arterio-venous malformation (a case report). Pathare AV, et al. J Postgrad Med 1988 Jul;34(3):190–2 (11 ref.)

[Tuberculoma of the optic chiasm region. Apropos of 2 case reports] Hubault D, et al. Bull Soc Ophtalmol Fr 1988 Jan; 88(1):141–4 (Eng. Abstr.) (Fre)

[Multiple tuberculomas of the brain in a patient with tuberculous meningitis] Tarasova EF, et al. Probl Tuberk 1989;(2):74–5 (Rus)

DIAGNOSIS

Isolated hypophyseal tuberculoma: case report. Delsedime M, et al. Clin Neuropathol 1988 Nov–Dec;7(6):311–3

Intracranial tuberculoma. Evaluation and treatment. Bagga A, et al. Clin Pediatr (Phila) 1988 Oct;27(10):487–90

Intracranial tuberculoma in Thailand: report of a case and review of the literature. Phuenpathom N, et al. J Med Assoc Thai 1989 Jun;72(6):355–60 (28 ref.)

Intracranial tuberculoma in children: a new look at an old problem. O'Brien NC, et al. South Med J 1988 Oct; 81(10):1239–44 (20 ref.)

[Diagnosis and surgical treatment of mediastinal caseoma] Dakov I, et al. Khirurgiia (Sofiia) 1988;41(6):16–9 (Eng. Abstr.) (Bul)

[Confluent tuberculomas of the vermis cerebelli associated with an occipital localization. Report of a case and review of the literature] Vallee B, et al. Neurochirurgie 1989; 35(2):140–4 (32 ref.) (Eng. Abstr.) (Fre)

[Tuberculoma of the brain in a 14-month-old child] Akimov OV. Probl Tuberk 1989;(2):75 (Rus)

[Pulmonary carcinoid imitating tuberculoma in an adolescent] Shimko EP, et al. Probl Tuberk 1989;(3):72–3 (Rus)

[A coelomic cyst of the pericardium simulating a tuberculoma of the lung] Volkova KI, et al. Probl Tuberk 1988;(10):65–7 (Rus)

[Tuberculoma of the choroid simulating an intraocular tumor] Zakharova GP, et al. Vestn Oftalmol 1988 Nov–Dec; 104(6):69–71 (Rus)

DRUG THERAPY

Intracranial tuberculoma: paradoxical deterioration during chemotherapy. Javaid A, et al. JPMA 1988 Nov; 38(11):303–5

PATHOLOGY

Intradural extramedullary tuberculous spinal granulomas. Mathuriya SN, et al. Clin Neurol Neurosurg 1988; 90(2):155–8

Focal epilepsy in India [letter] Divate PG, et al. J Neurol Neurosurg Psychiatry 1988 Oct;51(10):1365–6

[Multiple cerebral tuberculomas: report of an autopsy case with 37 lesions] Pittella JE, et al. Arq Neuropsiquiatr 1988 Jun;46(2):176–81 (Eng. Abstr.) (Por)

PHYSIOPATHOLOGY

Brain-stem tuberculoma. An analysis of 11 patients. Talamás O, et al. Arch Neurol 1989 May;46(5):529–35

Tuberculosis of the nervous system. A clinical, radiological and pathological study of 39 consecutive cases in Riyadh, Saudi Arabia. Bahemuka M, et al. J Neurol Sci 1989 Mar; 90(1):67–76

[Respiratory activity of the lungs as a sign of exacerbation of a lung tuberculoma] Gudz EA. Radiol Diagn (Berl) 1989; 30(1):27–32 (Eng. Abstr.) (Ger)

RADIOGRAPHY

CT of intracranial tuberculomas with specific reference to the "target sign". van Dyk A. Neuroradiology 1988; 30(4):329–36

[Analysis of x-ray feature of selective bronchial arterography in 41 cases] Zhang W. Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Aug; 11(4):216–7, 255 (Eng. Abstr.) (Chi)

[X-ray manifestations and pathologic basis of lung and pleural adjacent to peripheral pulmonary masses] Yang XM. Chung Hua Fang She Hsueh Tsa Chih 1988 Apr; 22(2):89–92 (Eng. Abstr.) (Chi)

[An X-ray-pathologic correlation of the lung-nodule interface in peripheral lung cancer vs. pulmonary tuberculoma] Ma K. Chung Hua I Hsueh Tsa Chih 1988 Dec;68(12):682–4, 48 (Eng. Abstr.) (Chi)

[X-ray and anatomo-microbronchographic comparisons in tuberculomas of the lung] Gudz' EA. Probl Tuberk 1988; (10):31–4 (Eng. Abstr.) (Rus)

[X-ray morphologic analysis of spherical formations in the lungs] Smiltnieks EKh, et al. Probl Tuberk 1988;(8):21–3 (Eng. Abstr.) (Rus)

[Supplemental criteria of the differential x-ray diagnosis of peripheral cancer and tuberculoma of the lungs] Anastas'ev VS. Vestn Rentgenol Radiol 1988 Jul–Aug;(4):65–71 (Eng. Abstr.) (Rus)

SURGERY

[Tuberculoma of the posterior fossa with symptoms of a cerebellopontile angle tumor. Case report and review of the literature] Ruch-Trinkle J, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31 Suppl 1:199–201 (10 ref.) (Eng. Abstr.) (Ger)

[A method for the extracapsular removal of a pulmonary tuberculoma] Voloshin IaM. **Klin Khir** 1988;(10):67 (Rus)

TUBERCULOSIS

Tubercular abscess of the pancreas [letter] Aggarwal P, et al. **Am J Gastroenterol** 1989 Aug;84(8):985–6

Cyclosporin A in the treatment of severe aplastic anemia: description of a case complicated by the development of tubercular pericarditis during treatment. Pogliani EM, et al. **Am J Hematol** 1989 Apr;30(4):257–8

Tuberculosis control policies in major metropolitan health departments in the United States. IV. Standards in 1988. Leff DR, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1350–5

Tuberculosis of the middle ear in an infant. Davidson S, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):876–7 (15 ref.)

Tuberculous rheumatism (Poncet's disease) in a child. Southwood TR, et al. **Arthritis Rheum** 1988 Oct; 31(10):1311–3

Tuberculosis and leprosy. **Br Med Bull** 1988 Jul;44(3):523–820

Tuberculosis Symposium. Dubrovnik, 6–7 October 1988. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):11–40

Mycobacterial diseases. **Clin Chest Med** 1989 Sep; 10(3):297–467

Esophageal tuberculosis. Rosario MT, et al. **Dig Dis Sci** 1989 Aug;34(8):1281–4

Tuberculosis of the breast. Tan KK, et al. **Singapore Med J** 1988 Jun;29(3):271–5

[Continuation of tuberculosis research in the post-extinction era] Tala E. **Duodecim** 1988;104(6):392–8 (15 ref.) (Fin)

[Breast tuberculosis: apropos of a case] Bonnet P, et al. **Acta Chir Belg** 1987 Sep–Oct;87(5):304–6 (Eng. Abstr.) (Fre)

[Parotid tuberculosis. Apropos of 2 cases] Marrakchi R, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):297–9 (Eng. Abstr.) (Fre)

[Proceedings of the 19th annual meeting of the Austrian Society of Lung Diseases and Tuberculosis. Chronic respiratory tract diseases—tuberculosis—rehabilitation. Vienna, 28–31 May 1987] **Prax Klin Pneumol** 1988 Jul; 42(7):451–644 (Ger)

[Tuberculosis towards the nineties (editorial)] Eliraz A. **Harefuah** 1989 Apr 2;116(7):388–9 (Heb)

[Diagnosis and therapy of tuberculosis, today] Catena E, et al. **G Clin Med** 1988 Jun–Jul;69(6–7):403–9, 412–9 (16 ref.) (Ita)

[63d meeting of the Japanese Society for Tuberculosis. Sapporo, 2–3 June 1988. Abstracts] **Kekkaku** 1988 May; 63(5):273–414 (Jpn)

[64th meeting of the Japanese Society for Tuberculosis. 27–28 April 1989, Osaka. Abstracts] **Kekkaku** 1989 Mar; 64(3):141–304 (Jpn)

[Abdominal tuberculosis in children] Petrov H, et al. **Acta Chir Iugosl** 1987;34 Suppl 2:91–6 (Eng. Abstr.) (Mac)

[Status of bacteriological services in tuberculosis institutions of the RSFSR and prospects of their improvement] Dolzhanskiĭ VM. **Probl Tuberk** 1989;(5):19–22 (Eng. Abstr.) (Rus)

[Experience with the organization of research in phthisiopulmonology under present economic conditions] Eremicheva TI, et al. **Probl Tuberk** 1989;(5):12–5 (Eng. Abstr.) (Rus)

[Consultative work of a tuberculosis specialist in a therapeutic hospital] Ivanovskiĭ VB. **Probl Tuberk** 1988;(10):17–20 (Eng. Abstr.) (Rus)

[Development of severe generalized tuberculosis in pregnancy] Kalinichev GA, et al. **Probl Tuberk** 1988; (6):69–70 (Rus)

[The place of Soviet phthisiology research in the world literature] Priĭmak AA, et al. **Probl Tuberk** 1989;(2):69–72 (0 ref.) (Rus)

[Patent information service at the Moscow Research Institute of Tuberculosis] Smirnova LV. **Probl Tuberk** 1989;(5):16–8 (Eng. Abstr.) (Rus)

[Tuberculosis of the nasopharynx] Milojević L, et al. **Srp Arh Celok Lek** 1986 Mar;114(3):327–30 (Eng. Abstr.) (Scc)

BLOOD

Folate status in tuberculosis: a study in the Guinea Savanna of Nigeria. Knox-Macaulay H. **Eur J Clin Nutr** 1989 Jun; 43(6):411–20

The haematology of tuberculosis [editorial] Jacobs P. **S Afr Med J** 1989 Feb 4;75(3):98–9

CLASSIFICATION

[Problem of classification of extrapulmonary tuberculosis] Kalinichenko IaV. **Probl Tuberk** 1989;(4):64–5 (Rus)

[Pathogenesis and classification of extrapulmonary forms of tuberculosis] Repin IuM. **Probl Tuberk** 1989;(4):65–9 (Rus)

COMPLICATIONS

Characteristics of tuberculosis in HIV-infected patients: a case-control study. Soriano E, et al. **Aids** 1988 Dec; 2(6):429–32

ACET issues report on tuberculosis and HIV infection. Advisory Committee for Elimination of Tuberculosis. **Am Fam Physician** 1989 Jul;40(1):268–70

Tuberculosis of the bile duct: a rare cause of biliary stricture. Fan ST, et al. **Am J Gastroenterol** 1989 Apr;84(4):413–4

Tuberculous pancreatic abscess as a manifestation of AIDS [letter] Tetzeli JP, et al. **Am J Gastroenterol** 1989 May; 84(5):581–2

Cryptogenic tuberculosis as a preventable cause of end-stage renal failure. Benn JJ, et al. **Am J Nephrol** 1988;8(4):306–8

The role of vitamin D in tuberculosis [letter] Davies PD. **Am Rev Respir Dis** 1989 Jun;139(6):1571

Tuberculosis and AIDS. Statement on AIDS and tuberculosis. Geneva, March 1989. Global Programme on AIDS and Tuberculosis Programme, World Health Organization, in collaboration with the International Union Against Tuberculosis and Lung Disease. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):8–11 (5 ref.)

Joint Working Group on HIV Infection and Tuberculosis of the World Health Organization (WHO), Global Programme on AIDS (WHO/GPA), Tuberculosis Unit (WHO/TUB), and the International Union Against Tuberculosis and Lung Diseases (IUATLD). **Bull Int Union Tuberc Lung Dis** 1988 Sep;63(3):16–8

HIV infection—a new face of tuberculosis. Reichman LB. **Bull Int Union Tuberc Lung Dis** 1988 Sep;63(3):19–26

The effects of the AIDS epidemic on the tuberculosis problem and tuberculosis programmes. Slutkin G, et al. **Bull Int Union Tuberc Lung Dis** 1988 Jun;63(2):21–4

The potential impact of AIDS on the tuberculosis situation in developed and developing countries. Styblo K. **Bull Int Union Tuberc Lung Dis** 1988 Jun;63(2):25–8

An unusual presentation of tuberculosis—'injury TB'. Ferris BD, et al. **Injury** 1987 Sep;18(5):347–9

Breast tuberculosis and carcinoma. Rothman GM, et al. **Isr J Med Sci** 1989 Jun;25(6):339–40

Tuberculosis and human immunodeficiency virus infection. Chaisson RE, et al. **J Infect Dis** 1989 Jan;159(1):96–100 (15 ref.)

Drug abuse, HIV infection, and tuberculosis [letter] Brown LS Jr, et al. **JAMA** 1989 Aug 4;262(5):615–6

HIV infection and tuberculosis in Central Africa [letter] Mets T, et al. **N Engl J Med** 1989 Aug 24;321(8):542–3

The enigma of extrapulmonary tuberculosis. Weir MR. **N Y State J Med** 1989 May;89(5):251–2

Mycobacterium bovis sepsis in an infant with human immunodeficiency virus infection. Houde C, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):810–2

Interactions of the human immunodeficiency virus and tuberculosis and the implications for BCG vaccination. Quinn TC. **Rev Infect Dis** 1989 Mar-Apr;11 Suppl 2:S379–84 (42 ref.)

A review of peripheral tuberculous arthritis. Garrido G, et al. **Semin Arthritis Rheum** 1988 Nov;18(2):142–9

Tuberculous retropharyngeal abscess producing respiratory obstruction. Carroll N, et al. **Thorax** 1989 Jul;44(7):599–600

Tuberculosis of the pancreas: a case report. Crook LD, et al. **Tubercle** 1988 Jun;69(2):148–51

AIDS and tuberculosis. Goldman KP. **Tubercle** 1988 Mar; 69(1):71–2

An unusual manifestation of tuberculous hypersensitivity. Vermani A, et al. **Tubercle** 1989 Mar;70(1):65–7

Tuberculosis and HIV infection—new opportunities for an old pathogen [editorial] Chaisson RE. **West J Med** 1989 Jun;150(6):687–9

Tuberculosis in patients with human immunodeficiency virus infection. Review of current concepts. Theuer CP. **West J Med** 1989 Jun;150(6):700–4 (22 ref.)

[Tuberculosis in uremic patients] Leu ML, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1202–7 (Eng. Abstr.) (Chi)

[Tuberculosis and human immunodeficiency virus infection in the Central African Republic] Cathebras P, et al. **Med Trop (Mars)** 1988 Oct–Dec;48(4):401–7 (Eng. Abstr.) (Fre)

[Jaundice caused by tuberculous biliary stenosis. Percutaneous treatment (letter)] Bonnel D, et al. **Presse Med** 1988 Sep 17;17(31):1586 (Fre)

[Simultaneous detection of M. tuberculosis and M. avium-M. intracellulare. A contribution to the clinical aspects and diagnosis of mycobacterioses in AIDS] Ruf B, et al. **Internist (Berlin)** 1989 Jan;30(1):57–60 (Ger)

[Tuberculosis in the diagnosis and treatment of collagen disease] Takizawa H, et al. **Ryumachi** 1988 Jun;28(3):140–4 (Eng. Abstr.) (Jpn)

[Comparative ecology of tuberculosis and hanseniasis as they coincide endemically in tropical countries] Rabello FE, et al. **Med Cutan Ibero Lat Am** 1989;17(3):145–57 (66 ref.) (Eng. Abstr.) (Por)

[Serologic markers of hepatitis B in patients at a tuberculosis hospital] Asratian AA, et al. **Probl Tuberk** 1989;(4):36–8 (Rus)

[Infectious allergic myocarditis of tubercular etiology] Bobrovskaia MI, et al. **Probl Tuberk** 1989;(1):72–4 (Rus)

[Nonhemolytic reactions in tuberculosis patients and their prevention] Generalova RV, et al. **Probl Tuberk** 1988; (12):24–6 (Eng. Abstr.) (Rus)

[Multiple tuberculomas of the brain in a patient with tuberculous meningitis] Tarasova EF, et al. **Probl Tuberk** 1989;(2):74–5 (Rus)

[Tuberculosis and HIV infection: study of 50 cases] Laguna Cuesta F, et al. **Rev Clin Esp** 1989 Mar;184(5):230–3 (Eng. Abstr.) (Spa)

[AIDS-vasculitis, a chance association? (letter)] Larrañaga JR, et al. **Rev Clin Esp** 1988 Apr;182(7):395–6 (Spa)

[Tuberculosis, HIV and hepatitis medicamentosa (letter)] Santos González J, et al. **Rev Clin Esp** 1989 Mar;184(5):272 (Spa)

DIAGNOSIS

Identification of mycobacterial antigens for "ELISA" serology in the diagnosis of leprosy and tuberculosis. Das PK, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:117–20

Evaluation of a phenolglycolipid antigen (PGL-Tb 1) from M. tuberculosis in the serodiagnosis of tuberculosis: comparison with PPD antigen. Martín Casabona N, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:89–93

Evaluation of an enzyme-linked immunosorbent assay (ELISA) using an IgG antibody to Mycobacterium tuberculosis antigen 5 in the diagnosis of active tuberculosis in children. Alde SL, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):748–51

ELISA analysis of BACTEC bottles for the earlier diagnosis of tuberculosis. Friedman LN, et al. **Am Rev Respir Dis** 1989 Sep;140(3):668–71

Macrophage size determinations in the diagnosis of tuberculous effusions. Guzman J, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):371–4

Preliminary evaluation of a Mycobacterium tuberculosis phenolglycolipid antigen in the serologic diagnosis of tuberculosis. Torgal-Garcia J, et al. **Ann Inst Pasteur Microbiol** 1988 May-Jun;139(3):289–94

Serologic methods for diagnosing tuberculosis. Good RC. **Ann Intern Med** 1989 Jan 15;110(2):97–8 (19 ref.)

Tuberculosis: a surgical viewpoint [letter] **Ann R Coll Surg Engl** 1988 Sep;70(5):337

Immunodiagnosis of tuberculosis: a review. Leelarasamee A, et al. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):57–61 (37 ref.)

Tuberculosis case-finding and treatment programmes in the developing countries. Fox W. **Br Med Bull** 1988 Jul; 44(3):717–37 (17 ref.)

Immunodiagnostic assays for tuberculosis and leprosy. Ivanyi J, et al. **Br Med Bull** 1988 Jul;44(3):635–49 (58 ref.)

Sensitivity to tuberculin and sensitins in Swedish children. Lind A, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec; 63(4):19–22

The importance and evaluation of mycobacterial diseases as assessed by a mycobacteriological laboratory. Portaels F. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):13–6

Evaluation of the quality of bacteriologic methods used to diagnose tuberculosis in Argentina. Latini O, et al. **Bull Pan Am Health Organ** 1988;22(3):269–80

Adenosine deaminase in body fluids: a useful diagnostic tool in tuberculosis. Segura RM, et al. **Clin Biochem** 1989 Apr; 22(2):141–8

Serodiagnosis survey of tuberculosis by a new ELISA method. Gulletta E, et al. **Eur J Epidemiol** 1988 Sep; 4(3):331–4

Extensive necrosis in malignant lymphoma with granulomatous reaction mimicking tuberculosis. Hall PA, et al. **Histopathology** 1988 Sep;13(3):339–46

Learning clinical reasoning from examples. Kassirer JP, et al. **Hosp Pract [Off]** 1989 Mar 15;24(3):27, 32–4, 44–5

Diagnosis of nasopharyngeal tuberculosis by detection of tuberculostearic acid in formalin fixed, paraffin wax embedded tissue biopsy specimens. Arnold M, et al. **J Clin Pathol** 1988 Dec;41(12):1334–6

A multidot immunobinding assay for the serodiagnosis of tuberculosis. Comparison with an enzyme-linked immunosorbent assay. Van Vooren JP, et al. **J Immunol Methods** 1988 Oct 4;113(1):45–9

Antibody and antigen detection for the immunodiagnosis of tuberculosis: why not? What more is needed? Where do we stand today? Daniel TM. **J Infect Dis** 1988 Oct; 158(4):678–80 (14 ref.)

Primary nasal tuberculosis masquerading as a malignant tumour. Sim DW, et al. **J Laryngol Otol** 1988 Dec; 102(12):1150–2

Delayed hypersensitivity reactions by the mycobacterial antigen A60 and cutaneous testing in tuberculosis. Benoit C, et al. **Med Microbiol Immunol (Berl)** 1989;178(2):105–12

Serodiagnostic potentialities of enzyme-linked immunosorbent assay (ELISA) using mannophosphoinositides of Mycobacterium tuberculosis H37Rv. Mehta PK, et al. **Med Microbiol Immunol (Berl)** 1988;177(5):285–92

Mammary tuberculosis. McMeeking AA, et al. **N Y State J Med** 1989 May;89(5):288–9

Primary mediastinal tuberculous abscess: demonstration with MR. Gupta RK, et al. **Pediatr Radiol** 1989;19(5):330–2

Tuberculosis makes a comeback. Giving and interpreting the Mantoux test. Dickensheets DL. **Postgrad Med** 1989 Aug; 86(2):97–8, 103–5, 108 (12 ref.)

Rapid diagnosis of tuberculosis: laboratory techniques applicable in developing countries. Daniel TM. **Rev Infect Dis** 1989 Mar-Apr;11 Suppl 2:S471–8 (32 ref.)

Endobronchial tuberculosis. A report on 15 cases. Kalyoncu F, et al. **S Afr Med J** 1989 Apr 15;75(8):395–6

The rapid diagnosis of paucibacillary tuberculosis. Grange JM. **Tubercle** 1989 Mar;70(1):1–4 (22 ref.)
Tuberculous stenosis of the trachea. Watson JM, et al. **Tubercle** 1988 Sep;69(3):223–6
Community health guides in the fight against pulmonary tuberculosis [letter] Singh JV, et al. **World Health Forum** 1989;10(1):105
The Bactec-system in the diagnosis of tuberculosis. Comparison of a conventional and the radiometric method (Bactec) for culturing, differentiation and susceptibility testing of mycobacteria. Preslich J, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):487–91
[Tuberculosis, a continuing challenge] Veen J, et al. **Ned Tijdschr Geneeskd** 1989 Jan 14;133(2):61–5 (31 ref.) (Dut)
[Unusual manifestations of tuberculosis] Vaara J, et al. **Duodecim** 1989;105(8):778–83 (Fin)
[15th anniversary of the Mycobecteria Study Group] Schröder KH. **Pneumologie** 1989 May;43(5):262–4 (Eng. Abstr.) (Ger)
[Survey on tuberculosis disease in autopsies. Correlation between clinical and anatomopathologic diagnosis] Rossi S, et al. **Pathologica** 1988 Jul–Aug;80(1068):449–57 (Eng. Abstr.) (Ita)
[Tuberculosis of the breast. Report of a clinical case and review of the literature] Blasi A, et al. **Recenti Prog Med** 1989 May;80(5):249–51 (10 ref.) (Eng. Abstr.) (Ita)
[Isolated tuberculosis of the hepatobiliary system] Iablokov DD, et al. **Klin Med (Mosk)** 1988 Dec;66(12):26–32 (46 ref.) (Rus)
[Use of immunologic methods in the differential diagnosis of tuberculosis] Evdokimov VN. **Lab Delo** 1989;(5):65–6 (Eng. Abstr.) (Rus)
[Characteristics of the course of tuberculosis of the adrenal cortex] Trunchenkov ES, et al. **Probl Endokrinol (Mosk)** 1988 Jul–Aug;34(4):47–9 (Rus)
[Tuberculoma of the brain in a 14-month-old child] Akimov OV. **Probl Tuberk** 1989;(2):75 (Rus)
[Improvement in the organization of the detection of extrapulmonary tuberculosis in ambulatory care conditions] Chenskikh EP, et al. **Probl Tuberk** 1988;(10):15–7 (Eng. Abstr.) (Rus)
[Results of a discussion on extrapulmonary tuberculosis] Mochalova TP, et al. **Probl Tuberk** 1989;(4):62–3 (Rus)
[Tuberculosis of the breast] Polushkina EE, et al. **Probl Tuberk** 1989;(6):71–2 (Rus)
[Difficulties in the differential diagnosis of meningoencephalitis and encephalomyelitis of tuberculous and viral etiologies] Ponomareva EN, et al. **Probl Tuberk** 1988;(9):66–9 (Rus)
[Errors in the diagnosis of tuberculosis of the breast] Moroz GS, et al. **Vestn Khir** 1989 Mar;142(3):115 (Rus)
[Modified Fin-II medium for improving the bacteriological diagnosis of tuberculosis] Samillo GK, et al. **Voen Med Zh** 1988 Dec;(12):39 (Rus)
[Subcutaneous nodules: initial manifestation of disseminated hematogenous tuberculosis (letter)] Quirós J, et al. **Med Clin (Barc)** 1988 Jul 2;91(6):237 (Spa)
[Endobronchial tuberculosis] Hueto J, et al. **Rev Clin Esp** 1989 Mar;184(4):185–6 (Eng. Abstr.) (Spa)

DRUG THERAPY

Controversies in pulmonary medicine. All patients should receive directly observed therapy in tuberculosis. Bailey WC, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1075–6
Enhanced effect of liposome-encapsulated amikacin on Mycobacterium avium-M. intracellulare complex infection in beige mice. Düzgüneş N, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1404–11
In vivo activity of amikacin alone or in combination with clofazimine or rifabutin or both against acute experimental Mycobacterium avium complex infections in beige mice. Gangadharam PR, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1400–3
Tuberculosis and HIV infection in Africa [letter] Roberts DJ, et al. **BMJ** 1989 Mar 18;298(6675):751
Extra-pulmonary tuberculosis. Girling DJ, et al. **Br Med Bull** 1988 Jul;44(3):738–56 (42 ref.)
Relapses after stopping chemotherapy for experimental tuberculosis in genetically resistant and susceptible strains of mice. Lecoeur HF, et al. **Clin Exp Immunol** 1989 Jun; 76(3):458–62
Rationale and experimental data in support of the use of a fixed-triple combination of isoniazid, rifampicin and pyrazinamide in the chemotherapy of tuberculosis. Acocella G. **G Ital Chemioter** 1987 Jan–Dec;34(1–3):3–5
Anti-tuberculosis regimens of chemotherapy. Recommendations from the Committee on Treatment of the International Union against Tuberculosis and Lung Disease. Girling DJ, et al. **Indian J Chest Dis Allied Sci** 1988 Oct–Dec;30(4):296–304 (0 ref.)
Theoretical and experimental aspects of the host-parasite-drug relationship in tuberculosis chemotherapy. Kansi K, et al. **Jpn J Med Sci Biol** 1988 Jun;41(3):73–107 (149 ref.)
Psychosis and anti-tuberculosis therapy [letter] Upadhyaya MP, et al. **Lancet** 1989 Sep 23;2(8665):735–6
Venous thrombosis and rifampicin. White NW. **Lancet** 1989 Aug 19;2(8660):434–5
An unfortunate (start to a) leading article [letter; comment] McQueen EG. **N Z Med J** 1989 Jun 14;102(869):297. **Comment on:** N Z Med J 1989 May 10;102(867):214–5
Tolerability of pyrazinamide (PZA) in tubercular patients under hemodialysis. Eleven cases report. Galietti F, et al. **Panminerva Med** 1989 Jan–Mar;31(1):54–6
Drug-resistant tuberculosis. New threats from an old disease. Iseman MD. **Postgrad Med** 1989 Aug;86(2):109–10, 113–4 (8 ref.)
Present status of chemotherapy for tuberculosis. Grosset JH. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S347–52 (41 ref.)
New experimental drugs for the treatment of tuberculosis. Parenti F. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S479–83 (42 ref.)
The management of tuberculosis in refugees along the Thai–Kampuchean border. Mastro TD, et al. **Tubercle** 1988 Jun;69(2):93–103
Tuberculosis: a six-month cure. Chaulet P. **World Health Forum** 1989;10(1):116–22 (11 ref.)
[Therapeutic effect of DL-473 on experimental tuberculosis in mice] Yang DY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):34–5, 64 (Eng. Abstr.) (Chi)
[[Potential and limitations of the long-term treatment of bacilliferous tuberculosis in Maniema (Zaire)] De Caluwe P, et al. **Ann Soc Belg Med Trop** 1989 Mar;69(1):67–73 (Eng. Abstr.) (Fre)
[Antitubercular agents—recent developments in assessment and use] Ludwig H. **Internist (Berlin)** 1989 Jan;30(1):38–45 (22 ref.) (Ger)
[A study on drug regimens against Mycobacterium avium-intracellulare infection (3). The therapeutic effect of some antimicrobial agents to murine infection model] Sakurai N. **Kekkaku** 1988 Jun;63(6):447–60 (Eng. Abstr.) (Jpn)
[Studies on pyrazine derivatives. XXII. Synthesis and tuberculostatic activity of the products of reactions of pyrazinyl-1,3,4-oxadiazol-2-thione with amines] Pancechowska-Ksepko D, et al. **Acta Pol Pharm** 1988; 45(3):193–200 (Eng. Abstr.) (Pol)
[Short-term chemotherapy in tuberculosis] Ionescu C, et al. **Rev Med Chir Soc Med Nat Iasi** 1988;Suppl:35–41 (0 ref.) (Rum)
[Effectiveness of the combined use of antihypoxic agents and antioxidants in tuberculosis] Aleksandrova AE, et al. **Probl Tuberk** 1988;(6):62–5 (Rus)
[Tuberculosis of the breast treated with chemotherapeutic agents] Kunovskiĭ BV, et al. **Probl Tuberk** 1988;(6):70–2 (Rus)
[Accelerated growth of yeast-like fungi in patients with tuberculosis during the period of drug therapy] Samillo GK. **Probl Tuberk** 1989;(5):74 (Rus)
[Prevention of neurosensory hearing disorders in antibiotic-induced ototoxicosis] Dunaĭvitser BI, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):3–5 (Eng. Abstr.) (Rus)

ECONOMICS

The doctor's dilemma or the Three "Ms". Bleiker MA. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):34–5

EPIDEMIOLOGY

The epidemiology of tuberculosis in Alaska, 1987. Jones ME, et al. **Alaska Med** 1989 Jan–Feb;31(1):9–16
The incidence of active tuberculosis in a large urban area. Enarson DA, et al. **Am J Epidemiol** 1989 Jun; 129(6):1268–76
Tuberculosis and acquired immunodeficiency syndrome—Florida. Rieder HL, et al. **Arch Intern Med** 1989 Jun;149(6):1268–73
Childhood tuberculosis in Victoria, 1970–86. Mulholland EK, et al. **Aust Paediatr J** 1989 Feb;25(1):31–4
Notification of tuberculosis: can the pathologist help? Bradley BL, et al. **BMJ** 1988 Sep 3;297(6648):595
Problems with old diseases related to social and pharmaceutical industry situations. Neu HC. **Bull N Y Acad Med** 1988 Jul–Aug;64(6):456–61
Tuberculosis, final data—United States, 1986. **Can Dis Wkly Rep** 1988 Feb 20;14(7):28–30 (Eng, Fre)
Tuberculosis in Canada—1986. Gaudette LA. **Can Dis Wkly Rep** 1988 Feb 20;14(7):27–8 (Eng, Fre)
A neglected disease: tuberculosis. Church JM, et al. **Can J Public Health** 1989 Jan–Feb;80(1):73
The decline and persistence of tuberculosis in a Canadian Indian population: implications for control. Young TK, et al. **Can J Public Health** 1988 Sep–Oct;79(5):302–6
Tuberculosis in children and adolescents. Smith MH. **Clin Chest Med** 1989 Sep;10(3):381–95 (64 ref.)
Incidence and nature of human tuberculosis due to Mycobacterium africanum in South-East England: 1977–87. Grange JM, et al. **Epidemiol Infect** 1989 Aug; 103(1):127–32
Incidence and nature of human tuberculosis due to bovine tubercle bacilli in South-East England: 1977–1987. Yates MD, et al. **Epidemiol Infect** 1988 Oct;101(2):225–9
High prevalence of tuberculosis in AIDS patients in Spain. Bouza E, et al. **Eur J Clin Microbiol Infect Dis** 1988 Dec; 7(6):785–8
Is natural infection with M. tuberculosis protective against cancer? Fragoulia A, et al. **Eur J Epidemiol** 1989 Jun; 5(2):234–8
Extrapulmonary tuberculosis in a university hospital in Spain. García-Rodríguez JA, et al. **Eur J Epidemiol** 1989 Jun; 5(2):154–7
Survey on tuberculosis reports in a major Italian region. Salmaso S, et al. **Eur J Epidemiol** 1988 Sep;4(3):343–8
Occult endemic tuberculosis in a chronic care facility. Brennen C, et al. **Infect Control Hosp Epidemiol** 1988 Dec; 9(12):548–52
Tuberculosis epidemic among hospital personnel. Haley CE, et al. **Infect Control Hosp Epidemiol** 1989 May;10(5):204–10
Bacteriological status of notified tuberculosis cases in the Republic of Ireland 1982–85. O'Malley G, et al. **Ir J Med Sci** 1988 Oct;157(10):307–9
National tuberculosis survey (1986). Stinson J, et al. **Ir Med J** 1988 Nov;81(1):7–10
Tuberculosis in a family practice, 1984–86. Halperin M, et al. **Isr J Med Sci** 1989 Feb;25(2):111–3
On human tuberculosis due to M. bovis. A review. Kovalyov GK. **J Hyg Epidemiol Microbiol Immunol** 1989; 33(2):199–206 (50 ref.)
Mycobacterial species responsible for tuberculosis and mycobacteriosis cases in the Czech Socialist Republic, 1981–1985. Kubín M, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(4):419–23
Increasing incidence of tuberculosis in a prison inmate population. Association with HIV infection. Braun MM, et al. **JAMA** 1989 Jan 20;261(3):393–7
Tuberculosis among migrant farm workers [letter] Hibbs J, et al. **JAMA** 1989 Oct 6;262(13):1775
Tuberculosis in the United States. Rieder HL, et al. **JAMA** 1989 Jul 21;262(3):385–9 (29 ref.)
Tuberculosis in correctional institutions. Snider DE Jr, et al. **JAMA** 1989 Jan 20;261(3):436–7
Common diseases in Nepal. Klaassen-Witt GM. **Kans Med** 1989 Mar;90(3):80–1, 85
A lesson from the decline of tuberculosis around the world [letter] Kumar RP. **Lepr Rev** 1988 Sep;59(3):266–7
Tuberculosis in the world today. Gracey DR. **Mayo Clin Proc** 1988 Dec;63(12):1251–5
Tuberculosis control migrant study of 1988. Simmons JD, et al. **N C Med J** 1989 Jun;50(6):309–10
The pattern of infection of the nervous system in Riyadh: a review of 121 cases. Bahemuka M, et al. **Q J Med** 1988 Jul;68(255):517–24
Overview and epidemiologic assessment of the current global tuberculosis situation with an emphasis on control in developing countries. Styblo K. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S339–46 (8 ref.)
Tuberculosis in the Western Cape health region of South Africa. Yach D. **Soc Sci Med** 1988;27(7):683–9 (27 ref.)
Tuberculosis in Kenya 1984: a third national survey and a comparison with earlier surveys in 1964 and 1974. A Kenyan/British Medical Research Council Co-operative Investigation. **Tubercle** 1989 Mar;70(1):5–20
[Tuberculosis in The Netherlands in 1988] Sluiter HJ, et al. **Ned Tijdschr Geneeskd** 1989 Jan 14;133(2):59–60 (Dut)
[An unexpected epidemiologic event in the decline of tuberculosis: HIV infection] Chrétien J, et al. **Bull Acad Natl Med (Paris)** 1988 Oct;172(7):907–17 (Eng. Abstr.) (Fre)
[The extent of extrathoracic forms in the overall picture of tuberculosis] Haefliger E. **Schweiz Rundsch Med Prax** 1988 Oct 11;77(41):1104–9 (Eng. Abstr.) (Ger)
[Current clinico-epidemiological aspects of tuberculosis] Gallelli A, et al. **Arch Monaldi Mal Torace** 1987 Mar–Apr; 42(2):153–60 (Eng. Abstr.) (Ita)
[Epidemiology and diagnosis of tuberculosis] Gramiccioni E, et al. **Medicina (Firenze)** 1989 Jan–Mar;9(1):19–26 (Eng. Abstr.) (Ita)
[Tuberculosis epidemic in a technical center] Tsunekawa H, et al. **Kekkaku** 1989 Apr;64(4):329–32 (Eng. Abstr.) (Jpn)
[Current problems of tuberculosis] Smurova TF. **Klin Med (Mosk)** 1989 Apr;67(4):35–41 (35 ref.) (Rus)
[Epidemiologic hazard of various tuberculosis foci] Iakovlev NI. **Probl Tuberk** 1989;(4):3–6 (Eng. Abstr.) (Rus)
[Incidence of tuberculosis among children immunized with differentiated doses of BCG vaccine] Kshanovskiĭ SA, et al. **Probl Tuberk** 1988;(9):3–6 (Eng. Abstr.) (Rus)
[Epidemiology of tuberculosis in the RSFSR at present] Kucherov AL. **Probl Tuberk** 1989;(5):9–12 (Eng. Abstr.) (Rus)
[Solar activity and epidemiological indicators of tuberculosis] Podolinnyĭ GI, et al. **Probl Tuberk** 1988;(6):17–9 (Eng. Abstr.) (Rus)
[Tuberculosis morbidity in workers of industrial enterprises] Rodin LN. **Probl Tuberk** 1989;(3):67–70 (Rus)
[Tuberculin testing in a neighborhood with a gypsy population] Batalla Clavell J, et al. **Gac Sanit** 1987 Sep–Oct; 1(2):53–7 (Eng. Abstr.) (Spa)
[Tuberculosis and its epidemiological indicators (editorial)] Caylà Buqueras JA. **Gac Sanit** 1987 Nov–Dec;1(3):97–100 (Spa)
[Evaluation of the consumption of rifampicin as an indicator of the epidemiological situation concerning tuberculosis in the autonomous community of Murcia] Rodríguez Ruiz P, et al. **Gac Sanit** 1987 Nov–Dec;1(3):101–5 (Eng. Abstr.) (Spa)
[Tuberculosis in Spain. Autopsy study] Mallofré C, et al. **Med Clin (Barc)** 1988 May 7;90(18):735–8 (Eng. Abstr.) (Spa)
[Resurrection of tuberculosis (editorial)] Mallolas J, et al.

Med Clin (Barc) 1988 Jun 18;91(4):142–4 (Spa)
[Prevalence of tuberculous infection among health personnel] Puyuelo Lanao T, et al. Med Clin (Barc) 1989 Apr 22; 92(15):564–6 (Eng. Abstr.) (Spa)
[The decline of tuberculosis infection in schoolchildren of Barcelona] Villalbi JR, et al. Med Clin (Barc) 1988 Oct 1;91(10):371–4 (Eng. Abstr.) (Spa)
[Comments on the necessity to discontinue BCG vaccination in Spain (letter)] de March Ayuela P. Rev Clin Esp 1988 Nov;183(8):442–3 (Spa)
[Sudden outbreaks of tuberculosis: apropos of 10 school epidemics in Barcelona and its province] de March Ayuela P, et al. Rev Clin Esp 1988 Jun;183(1):24–9 (Eng. Abstr.) (Spa)
[Prevalence of tuberculosis infections among hospital staff (letter)] Olona M, et al. Rev Clin Esp 1989 Jun;185(1):44–5 (Spa)
[PPD screening in school children with and without BCG vaccination] Gültekin A, et al. Mikrobiyol Bul 1987 Oct; 21(4):257–61 (Eng. Abstr.) (Tur)

ETHNOLOGY

Migration, ethnic minorities and tuberculosis [editorial] Tala E. Eur Respir J 1989 Jun;2(6):492–3
Changes in tuberculosis notification rates in the white ethnic group in England and Wales between 1953 and 1983. Springett VH, et al. J Epidemiol Community Health 1988 Dec;42(4):370–6
Tuberculosis in the US Hispanic population [letter] Dowling PT. Mayo Clin Proc 1989 Feb;64(2):266–7

ETIOLOGY

Disseminated BCG in HIV infection. Ninane J, et al. Arch Dis Child 1988 Oct;63(10):1268–9
Height, weight and incidence of tuberculosis. Tverdal A. Bull Int Union Tubere Lung Dis 1988 Jun;63(2):16–8
Pancreatic tuberculous abscess. Meinke AK. Conn Med 1989 Mar;53(3):139–41 (19 ref.)
Systemic bacillus Calmette–Guérin infection, 'BCGitis', in patients treated by intravesical bacillus Calmette–Guérin therapy for bladder cancer. Steg A, et al. Eur Urol 1989; 16(3):161–4
From the Alcohol, Drug Abuse, and Mental Health Administration. Goodwin FK. JAMA 1989 Sep 15; 262(11):1439
Why hasn't BCG proved dangerous in HIV-infected patients? [letter] Reichman LB. JAMA 1989 Jun 9; 261(22):3246
Tuberculosis and human immunodeficiency virus infection: recommendations of the Advisory Committee for the Elimination of Tuberculosis (ACET). MMWR 1989 Apr 14;38(14):236–8, 243–50
A prospective study of the risk of tuberculosis among intravenous drug users with human immunodeficiency virus infection. Selwyn PA, et al. N Engl J Med 1989 Mar 2; 320(9):545–50
Systemic bacillus Calmette-Guerin infection in patients treated by intravesical BCG therapy for superficial bladder cancer. Steg A, et al. Prog Clin Biol Res 1989;310:325–34
Pathogenesis of tuberculosis: clinical and epidemiologic perspective. Stead WW. Rev Infect Dis 1989 Mar–Apr;11 Suppl 2:S366–8
[Current theories on the pathogenesis of tuberculosis (lecture)] Khomenko AG. Probl Tuberk 1988;(9):57–61 (Rus)
[Tuberculosis and HIV infection. Review of 48 cases] Cosin J, et al. Rev Clin Esp 1988 Jun;183(1):9–14 (47 ref.) (Eng. Abstr.) (Spa)
[Clinical study of tuberculosis in immunocompromised patients] Valencia ME, et al. Rev Clin Esp 1989 Apr; 184(7):352–6 (Eng. Abstr.) (Spa)

GENETICS

Genetic basis of host resistance and susceptibility to intracellular pathogens. Skamene E, et al. Adv Exp Med Biol 1988;239:23–37 (40 ref.)
Pleiotropic effects of the Bcg gene: III. Respiratory burst in Bcg-congenic macrophages. Denis M, et al. Clin Exp Immunol 1988 Sep;73(3):370–5
Pleiotropic effects of the Bcg gene. II. Genetic restriction of responses to mitogens and allogeneic targets. Denis M, et al. J Immunol 1988 Dec 1;141(11):3988–93
Genetic control of susceptibility to mycobacterial infections. Skamene E. Rev Infect Dis 1989 Mar–Apr;11 Suppl 2:S394–9 (27 ref.)
[Tuberculosis and genetics] Dai CQ. Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Jun; 11(3):172–5 (20 ref.) (Chi)
[HLA in pathogenesis of tuberculosis] Dai CQ. Chung Hua I Hsueh Tsa Chih 1988 Jul;68(7):383–6, 28 (Eng. Abstr.) (Chi)

HISTORY

Obsessive questions and faint answers: the French response to tuberculosis in the Belle Epoque. Mitchell A. Bull Hist Med 1988 Summer;62(2):215–35
History of tuberculosis among Aborigines [letter] Metcalf C, et al. Med J Aust 1989 Jul 17;151(2):116
An old disease ... with some new answers? Littlejohns P. Public Health 1988 Nov;102(6):525–9
The 100th anniversary of the foundation of the first antituberculosis clinic by Sir Robert Philip, Edinburgh, 1887. Petrescu G. Rev Ig [Pneumoftiziol] 1988 Jul–Sep; 37(3):287–8
[History of the Chair of Phthisiology at the Tomsk Medical Institute] Iablokov DD, et al. Probl Tuberk 1988;(10):73–4 (Rus)
[Anniversary of the Moscow Research Institute of Tuberculosis, Ministry of Public Health of the RSFSR] Tarasova EF. Probl Tuberk 1989;(5):4–9 (Rus)

IMMUNOLOGY

Immunological response to homologous and heterologous phenolic glycolipid antigens in tuberculosis and leprosy. Torgal-Garcia J, et al. Acta Leprol (Geneve) 1989;7 Suppl 1:102–6
Cell mediated and humoral immunity and light-chain proteinuria in rifampicin-treated tuberculous patients. Galal SH, et al. Allerg Immunol (Leipz) 1988;34(4):249–54
Research initiatives in the immunology of tuberculosis. American Thoracic Society Committee on Priorities for Tuberculosis Research. Am Rev Respir Dis 1988 Nov; 138(5):1327–9
Heaf test results after neonatal BCG. Crawshaw PA, et al. Arch Dis Child 1988 Dec;63(12):1490–1
Tuberculin response after neonatal BCG vaccination. Ormerod LP, et al. Arch Dis Child 1988 Dec;63(12):1491–2
Role of activated macrophages in the immunopathology of tuberculosis. Rook GA. Br Med Bull 1988 Jul;44(3):611–23 (51 ref.)
Immunocytochemical analysis of cellular responses to BCG. Nibbering PH, et al. Clin Exp Immunol 1989 Jan; 75(1):147–54
T cell responses to fractionated Mycobacterium leprae antigens in leprosy. The lepromatous nonresponder defect can be overcome in vitro by stimulation with fractionated M. leprae components. Ottenhoff TH, et al. Eur J Immunol 1989 Apr;19(4):707–13
Immunological consequences of innate resistance and susceptibility to BCG [published erratum appears in Immunol Lett 1989 Feb;20(3):247] Buschman E, et al. Immunol Lett 1988 Nov;19(3):199–209
Patterns of IL-2 production and utilization in mice heavily infected with Mycobacterium bovis BCG reflect the phase of protective immunity being expressed. Miller ES, et al. Immunology 1989 Jun;67(2):221–4
Vaccination and skin test studies on children living in villages with differing endemicity for leprosy and tuberculosis. Ghazi Saidi K, et al. Int J Lepr Other Mycobact Dis 1989 Mar;57(1):45–53
Results of a study of tuberculin conversion rates in primary school children in Ireland. Horgan JM, et al. Ir J Med Sci 1988 Aug;157(8):252–5
A comparative analysis of disease-associated changes in the galactosylation of serum IgG. Parekh R, et al. J Autoimmun 1989 Apr;2(2):101–14
Humoral immune response in human tuberculosis: immunoglobulins G, A, and M directed against the purified P32 protein antigen of Mycobacterium bovis bacillus Calmette-Guérin. Turneer M, et al. J Clin Microbiol 1988 Sep;26(9):1714–9
Association of tuberculosis and M. tuberculosis-specific antibody levels with HLA. Bothamley GH, et al. J Infect Dis 1989 Mar;159(3):549–55
Effect of breast-feeding on immune response to BCG vaccination. Pabst HF, et al. Lancet 1989 Feb 11; 1(8633):295–7
The role of cytokines in the immunopathology of tuberculosis, and the regulation of agalactosyl IgG. Rook GA, et al. Lymphokine Res 1989 Fall;8(3):323–8 (34 ref.)
An age-related loss of the isogeneic barrier to the successful passive cell transfer of antimicrobial immunity in mice. Orme IM. Mech Ageing Dev 1988 Dec;46(1–3):29–32
Immunologic aspects of mycobacterial infections. Ellner JJ, et al. Rev Infect Dis 1989 Mar–Apr;11 Suppl 2:S455–9 (12 ref.)
In vitro analysis of the cellular mechanisms involved in immunity to tuberculosis. Kaufmann SH. Rev Infect Dis 1989 Mar–Apr;11 Suppl 2:S448–54
Introduction to the immunology of tuberculosis. Piessens WF. Rev Infect Dis 1989 Mar–Apr;11 Suppl 2:S436–42 (30 ref.)
Immunology of mycobacterial disease. Springer Semin Immunopathol 1988;10(4):279–391
The role of T cell—macrophage interactions in tuberculosis. Kaufmann SH, et al. Springer Semin Immunopathol 1988; 10(4):337–58 (82 ref.)
Skin test responsiveness to a series of new tuberculins of children living in three Vietnamese cities. Ly HM, et al. Tubercle 1989 Mar;70(1):27–36
Recognition of a category of responders to group II, slow-grower associated antigens amongst Kuwaiti senior school children, using a statistical model. McManus IC, et al. Tubercle 1988 Dec;69(4):275–81
Immune status in tuberculosis and response to treatment. Onwubalili JK, et al. Tubercle 1988 Jun;69(2):81–94
Low doses of recombinant interleukin-2 enhance delayed type hypersensitivity to PPD in mice infected with Mycobacterium bovis-BCG and fed a diet supplemented with vitamin A acetate. Ferraro F, et al. Z Erkr Atmungsorgane 1988;171(1):45–9
[HLA antigens and tuberculosis] Dai CQ. Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Apr; 11(2):115–7 (20 ref.) (Chi)
[The immunology of tuberculosis] Tokunaga T. Kekkaku 1989 Feb;64(2):121–33 (24 ref.) (Eng. Abstr.) (Jpn)
[Immunology and immunogenetics of tuberculosis: current status and prospects of research development] Averbakh MM, et al. Probl Tuberk 1989;(2):65–8 (56 ref.) (Rus)
[Changes in the cyclic nucleotide system of T-lymphocytes in experimental tuberculosis in animals] Kostromin AP, et al. Probl Tuberk 1988;(11):50–4 (Eng. Abstr.) (Rus)
[Effect of the immunomodulator meitonium on the cyclic nucleotide system of T-lymphocytes in experimental tuberculosis] Kostromin AP, et al. Probl Tuberk 1988; (10):55–9 (Eng. Abstr.) (Rus)
[Radioimmunologic and immunoenzyme methods of analysis of anti-tuberculosis antibodies] Litvinov VI, et al. Probl Tuberk 1988;(7):71–4 (39 ref.) (Rus)
[Immunologic characteristics of children with varying sensitivity to tuberculin having recovered from pneumonia] Mykolyshin LI, et al. Probl Tuberk 1989;(2):23–5 (Eng. Abstr.) (Rus)
[Tuberculin sensitivity in children with tuberculosis and a history of pneumonia] Mykolyshin LI. Probl Tuberk 1988; (9):6–8 (Eng. Abstr.) (Rus)
[Sensitivity to tuberculin in schoolchildren of different levels of physical development] Palziev RD. Probl Tuberk 1988; (6):6–9 (Eng. Abstr.) (Rus)

METABOLISM

Vitamin D metabolism in tuberculosis. Production of 1,25(OH)2D3 by cells recovered by bronchoalveolar lavage and the role of this metabolite in calcium homeostasis. Cadranel J, et al. Am Rev Respir Dis 1988 Oct;138(4):984–9
Changes in phospholipid fatty acid composition and triacylglycerol content in mouse tissues after infection with bacille Calmette-Guérin. Jackson SK, et al. Br J Exp Pathol 1989 Aug;70(4):435–41
Single dose kinetics of rifampicin and isoniazid in well-nourished and malnourished patients of tuberculosis. Garg SK, et al. Int J Clin Pharmacol Ther Toxicol 1988 Aug;26(8):417–20
[Effect of acute tuberculous intoxication on the intensity of energy metabolism of the vascular walls in rabbits] Ataman AV, et al. Probl Tuberk 1989;(2):52–5 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Minimal inhibitory concentrations of isoniazid, rifampin, ethambutol, and streptomycin against Mycobacterium tuberculosis strains isolated before treatment of patients in Taiwan. Suo J, et al. Am Rev Respir Dis 1988 Oct; 138(4):999–1001
Mechanisms of recrudescence of Mycobacterium bovis BCG infection in mice. Cox JH, et al. Infect Immun 1989 Jun; 57(6):1719–24
Impact of protein malnutrition on exogenous reinfection with Mycobacterium tuberculosis. McMurray DN, et al. Infect Immun 1989 Jun;57(6):1746–9
Disseminated BCG infection—a case report. Murugasu B, et al. J Singapore Paediatr Soc 1988;30(3–4):139–41
Drug resistance of Mycobacterium tuberculosis isolated from treated patients in Pakistan. Aziz A, et al. Tubercle 1989 Mar;70(1):45–51

MORTALITY

[Causes of death of patients with tuberculosis] Zakopallo GG, et al. Probl Tuberk 1989;(3):11–4 (Eng. Abstr.) (Rus)
[Tuberculosis as the cause of death at the present stage of tuberculosis control] Mikhallova IuV. Ter Arkh 1988; 60(11):85–7 (Eng. Abstr.) (Rus)
[Tuberculosis and its sequelae as a cause of death of patients in a multi-profile hospital] Zhingel' IP, et al. Ter Arkh 1989;61(2):76–9 (Eng. Abstr.) (Rus)

PATHOLOGY

Tuberculosis of the parotid salivary gland—case report. Taher AA. Br J Oral Maxillofac Surg 1988 Dec;26(6):514–6
Histopathology of leprosy and tuberculosis—an overview. Lucas SB. Br Med Bull 1988 Jul;44(3):584–99 (33 ref.)
Primary tuberculosis of the tongue: report of a case. Hashimoto Y, et al. J Oral Maxillofac Surg 1989 Jul; 47(7):744–6
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 12–1989. A 24-year-old Haitian man with right flank pain and recent fever. N Engl J Med 1989 Mar 23;320(12):790–9
[Differential diagnostic problems in localized skin and bone tuberculosis with tuberculous changes in the cheek mucosa. Case report] Kern A, et al. Dermatol Monatsschr 1988; 174(12):748–52 (Eng. Abstr.) (Ger)
[Unusual healing of tendon sheath tuberculosis by intercurrent streptococcal phlegmon] Pfeiffer KM. Handchir Mikrochir Plast Chir 1988 Jul;20(4):218–9 (Eng. Abstr.) (Ger)
[Mycobacterioses in AIDS. Autopsy and clinical findings] Kehrein B, et al. Pathologe 1988 Jul;9(4):218–27 (Ger)
[Mammary tuberculosis: a report of 2 cases] Nazário AC, et al. Rev Paul Med 1988 Jan–Feb;106(1):6–8 (Eng. Abstr.) (Por)
[Isolated tuberculosis of the hepatobiliary system] Iarlimov

N, et al. **Khirurgiia (Sofiia)** 1988;41(3):21–3 (Eng. Abstr.) (Rus)

[Tuberculosis of the thyroid] Bochkovskiĭ FI, et al. **Probl Tuberk** 1988;(8):61–2 (Rus)

PHYSIOPATHOLOGY

Tonsillar and pharyngeal tuberculosis in a patient without HIV antibodies [letter] Pedrol E, et al. **J Infect Dis** 1989 Mar;159(3):598

Tenosynovitis of the hand: a forgotten manifestation of tuberculosis. Jackson RH, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):616–8

Adrenal function in patients with active tuberculosis. Barnes DJ, et al. **Thorax** 1989 May;44(5):422–4

PREVENTION & CONTROL

Strategy for the elimination of tuberculosis in Alaska. Section of Epidemiology, Division of Public Health. **Alaska Med** 1989 Jan–Feb;31(1):17–9

Tuberculosis surveillance in a state prison system. Spencer SS, et al. **Am J Public Health** 1989 Apr;79(4):507–9

Isoniazid for the tuberculin reactor: take it or leave it [letter] **Am Rev Respir Dis** 1988 Aug;138(2):489–91

Annual tuberculosis screening of hospital employees: an idea lacking supporting data [editorial] Aitken ML, et al. **Am Rev Respir Dis** 1988 Jul;138(1):3–4

Identification of an effective vaccine against tuberculosis. Comstock GW. **Am Rev Respir Dis** 1988 Aug;138(2):479–80

Isoniazid for the tuberculin reactor: take it or leave [letter] Enarson DA. **Am Rev Respir Dis** 1988 Jun;137(6):1513–4

Tuberculosis screening in alcoholics and drug addicts [letter] Friedman L. **Am Rev Respir Dis** 1988 Jul;138(1):239

The role of vitamin D in tuberculosis. Rook GA. **Am Rev Respir Dis** 1988 Oct;138(4):768–70

Decision analysis for isoniazid preventive therapy: take it or leave it? [letter] Tsevat J, et al. **Am Rev Respir Dis** 1988 May;137(5):1247–8

The National Tuberculosis Training Initiative. Reichman LB. **Ann Intern Med** 1989 Aug 1;111(3):197–8

Protective effect of BCG vaccination in infant Asians [letter] Singh KK. **Arch Dis Child** 1988 Nov;63(11):1417–8

A comparative study of Japanese and British BCG vaccine strains in newborn infants. Goh TE, et al. **Asia Pac J Public Health** 1989;3(1):32–40

Influence of BCG-induced immunity on the bactericidal activity of isoniazid and rifampicin in experimental tuberculosis of the mouse and guinea-pig. Dhillon J, et al. **Br J Exp Pathol** 1989 Feb;70(1):103–10

Control and prevention of tuberculosis in Britain. Citron KM. **Br Med Bull** 1988 Jul;44(3):704–16 (17 ref.)

BCG vaccination against tuberculosis and leprosy. Fine PE. **Br Med Bull** 1988 Jul;44(3):691–703 (51 ref.)

Epidemiological methods to evaluate vaccine efficacy. Smith PG. **Br Med Bull** 1988 Jul;44(3):679–90 (12 ref.)

Research into the control of tuberculosis and leprosy in the community. Sutherland I. **Br Med Bull** 1988 Jul; 44(3):665–78 (33 ref.)

Second IUATLD study on complications induced by intradermal BCG-vaccination. Lotte A, et al. **Bull Int Union Tubere Lung Dis** 1988 Jun;63(2):47–59 (77 ref.)

Overview and epidemiological assessment of the current global tuberculosis situation: with an emphasis on tuberculosis control in developing countries. Styblo K. **Bull Int Union Tubere Lung Dis** 1988 Jun;63(2):39–44

The immuno-stimulating effect of levamisole on BCG-conversion in newborn children. Nkanginieme KE, et al. **East Afr Med J** 1988 Nov;65(11):743–52

Immunization against tuberculosis: what kind of vaccine? Crowle AJ. **Infect Immun** 1988 Nov;56(11):2769–73 (77 ref.)

T-cell-mediated protection of mice against virulent Mycobacterium tuberculosis. Leveton C, et al. **Infect Immun** 1989 Feb;57(2):390–5

Evaluation of the effectiveness of BCG vaccination using the case-control method in Buenos Aires, Argentina. Miceli I, et al. **Int J Epidemiol** 1988 Sep;17(3):629–34

Tuberculosis. FitzGerald MX. **Ir J Med Sci** 1988 Aug; 157(8):251

Immunogenicity of ribonucleic acid-protein fraction of Mycobacterium tuberculosis encapsulated in liposomes. Pancholi P, et al. **J Med Microbiol** 1989 Jun;29(2):131–8

Tuberculosis control: the past, the present, the future. Leowski J. **J R Soc Health** 1988 Oct;108(5):188–90 (18 ref.)

Leads from the MMWR. A strategic plan for the elimination of tuberculosis in the United States. **JAMA** 1989 May 26; 261(20):2941–2

Leads from the MMWR. Use of BCG vaccines in the control of tuberculosis: a joint statement by the ACIP and the Advisory ACIP Committee for Elimination of Tuberculosis. **JAMA** 1988 Nov 25;260(20):2983–4, 2988, 2991

Microbiological safety cabinets and laboratory acquired infection [letter] **Lancet** 1988 Oct 8;2(8615):844–5

A strategic plan for the elimination of tuberculosis in the United States. **MMWR** 1989 Apr 28;38(16):269–72

Use of BCG vaccines in the control of tuberculosis: a joint statement by the ACIP and the Advisory Committee for Elimination of Tuberculosis. **MMWR** 1988 Nov 4; 37(43):663–4, 669–75

Prevention and control of tuberculosis in correctional institutions: recommendations of the Advisory Committee for the Elimination of Tuberculosis. **MMWR** 1989 May 12;38(18):313–20, 325

A strategic plan for the elimination of tuberculosis in the United States. Dowdle WR. **MMWR** 1989 Apr 21;38 Suppl 3:1–25

The BCG story: lessons from the past and implications for the future. Fine PE. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S353–9 (14 ref.)

Impact of present control methods on the problem of tuberculosis. Pio A. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S360–5 (21 ref.)

Evaluation of the protective potency of new tuberculosis vaccines. Wiegeshaus EH, et al. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S484–90 (19 ref.)

Molecular biology: new hopes and challenges. Grange JM. **Tubercle** 1988 Mar;69(1):1–4 (21 ref.)

Sensitisation by mycobacteria and the effects of BCG on children attending schools in the slums of Bombay. Stanford JL, et al. **Tubercle** 1988 Dec;69(4):293–8

Protective effect of BCG vaccination in Norway 1956–73. Tverdal A, et al. **Tubercle** 1988 Jun;69(2):119–23

The protective and allergenic potency of four BCG substrains in use in China determined in two animal models. Wang GZ, et al. **Tubercle** 1988 Dec;69(4):283–91

[Primary tubercular infection and BCG vaccination] Lindgren I. **Duodecim** 1988;104(7):554–6 (9 ref.) (Fin)

[Tuberculosis in 1989 (editorial)] Dautzenberg B, et al. **Rev Mal Respir** 1989;6(1):3–4 (Fre)

[The German Central Committee for Control of Tuberculosis. Recommendations for preventing infection in tuberculosis] Ferlinz R. **Pneumologie** 1989 Aug; 43(8):423–32 (Ger)

[Tuberculosis control programme in Japan] Shimao T. **Kekkaku** 1988 Oct;63(10):677–85 (Eng. Abstr.) (Jpn)

[World Tuberculosis Day] Anastasatu C. **Rev Ig [Pneumoftiziol]** 1988 Jan–Mar;37(1):1–4 (Rum)

[Prevention and early diagnosis of tuberculosis in children living in rural regions] **Probl Tuberk** 1988;(9):62–6 (Rus)

[Measures for intensifying antitubercular work in the Kazakh S.S.R.] Dzhunusbekov AD, et al. **Probl Tuberk** 1989; (6):15–8 (Eng. Abstr.) (Rus)

[Experience with mass screening of patients with tuberculosis and various risk groups] Goncharova EN, et al. **Probl Tuberk** 1988;(7):66–8 (Eng. Abstr.) (Rus)

[Results of expeditious screening of children for tuberculosis in regions with low population density] Kochkin AV. **Probl Tuberk** 1988;(6):3–5 (Eng. Abstr.) (Rus)

[Increasing the effectiveness of preventive measures in the tuberculosis foci] Korkina IV, et al. **Probl Tuberk** 1988; (7):68–70 (Eng. Abstr.) (Rus)

[Pharmacologic prevention of tuberculosis (instruction)] Matinskaia LA, et al. **Probl Tuberk** 1989;(4):54–8 (Rus)

[Ways of increasing the effectiveness of tuberculosis control] Punga VV. **Probl Tuberk** 1989;(2):3–6 (Eng. Abstr.) (Rus)

[Objectives of anti-tuberculosis propaganda] Sandler MV, et al. **Probl Tuberk** 1988;(6):67–9 (Rus)

[Phthisio-pulmonological tasks in an industrial region] Sokolov VA. **Probl Tuberk** 1988;(12):3–5 (Eng. Abstr.) (Rus)

[Role of comprehensive examination of the population in regard to tuberculosis in rural areas of Uzbekistan] Ubaidullaev AM, et al. **Probl Tuberk** 1989;(3):3–5 (Eng. Abstr.) (Rus)

[Prevention of tuberculosis in Slovenia] Fortič B. **Placne Bolesti** 1988 Jan–Jun;40(1–2):40–7 (Eng. Abstr.) (Ser)

[Efficacy of BCG vaccination evaluated by the case-control method in Buenos Aires, Argentina] Miceli I, et al. **Bol Of Sanit Panam** 1988 May;104(5):440–9 (Eng. Abstr.) (Spa)

[The Laboratorio Nacional de Referencia de Mycobacteria y Tuberculosis in the antituberculosis campaign in Cuba] Valdivia Alvarez JA, et al. **Rev Cubana Med Trop** 1988 May–Aug;40(2):51–66 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Patterns of calcifications and cholangiographic findings in hepatobiliary tuberculosis. Maglinte DD, et al. **Gastrointest Radiol** 1988 Oct;13(4):331–5

[Tuberculous encephalopathy. Presentation of a case and characteristics on brain computerized axial tomography] Alarcón Egas F, et al. **Arch Neurobiol (Madr)** 1988 Jul–Aug;51(4):213–5 (Eng. Abstr.) (Spa)

RADIONUCLIDE IMAGING

Abnormal gallium-67 citrate imaging in tuberculosis appearing like sarcoidosis. Sotomayor JL, et al. **Clin Nucl Med** 1989 Apr;14(4):294–5

SURGERY

Primary oesophageal tuberculosis. Sinha SN, et al. **Br J Clin Pract** 1988 Sep;42(9):391–4

Percutaneous drainage of tuberculous abscess of the psoas muscle. Clementsen P, et al. **Tubercle** 1988 Mar;69(1):63–5

[Surgical treatment of chest wall tuberculosis] Wang SX, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):172–3, 192 (Eng. Abstr.) (Chi)

[Current status of antitubercular chemotherapy of extrapulmonary tuberculoses in East Germany and current surgical indications] Köhler H, et al. **Z Arztl Fortbild (Jena)** 1989;83(6):313–8 (28 ref.) (Ger)

THERAPY

Aging and immunity to tuberculosis: prolonged survival of old mice infected with Mycobacterium tuberculosis by adoptive immunization with memory-immune T lymphocytes. Orme IM. **Cell Immunol** 1989 Jan; 118(1):229–33

The effect of gamma-interferon during Mycobacterium bovis (BCG) infection in athymic and euthymic mice. Banerjee DK, et al. **Microb Pathog** 1986 Apr;1(2):221–4

Utilizing former tuberculosis sanatoria as hospitals for the treatment of AIDS [letter] Pollak H. **N Y State J Med** 1988 Sep;88(9):502

Tuberculosis and its challenge to the public health [editorial] Garrett FN. **Public Health** 1988 Nov;102(6):516–7

[Pulmonary and extra-pulmonary forms of tuberculosis; clinical experiences in the 80s] Smelt AH, et al. **Ned Tijdschr Geneeskd** 1989 Jan 14;133(2):66–70 (Eng. Abstr.) (Dut)

[New construction of the Hornheide specialty clinic for tumors, tuberculosis and reconstructive surgery of the face and skin of the Westphalia Wilhelms University in Munster] Rauh WD. **Hautarzt** 1989 Apr;40(4):247 (Ger)

[Tuberculosis in immigrants from tropical countries in East Germany] Kupferschmidt HG, et al. **Z Arztl Fortbild (Jena)** 1988;82(12):587–90 (Ger)

[Improving the organization of work in the ophthalmic room of a tuberculosis clinic] Primakov FD. **Probl Tuberk** 1988; (11):63 (Rus)

TRANSMISSION

Social networks of disease spread in the lower Illinois valley: a simulation approach. McGrath JW. **Am J Phys Anthropol** 1988 Dec;77(4):483–96

Susceptibility of beige mice to Mycobacterium avium complex infections by different routes of challenge. Gangadharam PR, et al. **Am Rev Respir Dis** 1989 May; 139(5):1098–104

Mycobacterium tuberculosis transmission in a health clinic—Florida, 1988. **MMWR** 1989 Apr 21;38(15):256–8, 263–4

[The present significance of humans for the appearance of Mycobacterium bovis infections in cattle herds] Weber A, et al. **Berl Munch Tierarztl Wochenschr** 1988 Oct 1; 101(10):341–4 (Eng. Abstr.) (Ger)

[Mycobacterial zooanthroponoses] Jentgens H. **Pneumologie** 1989 Aug;43(8):433–9 (Ger)

[Early detection of tuberculosis by the evaluation of contacts] Ruiz Manzano J, et al. **Med Clin (Barc)** 1989 Apr 22; 92(15):561–3 (Eng. Abstr.) (Spa)

VETERINARY

Pathogenesis of Mycobacterium bovis infection in American bison. Thoen CO, et al. **Am J Vet Res** 1988 Nov; 49(11):1861–5

The role of host factors for the chemotherapy of BCG infection in inbred strains of mice. Cox JH, et al. **APMIS** 1988 Oct;96(10):927–32

An outbreak of Mycobacterium bovis infection in fallow deer (Dama dama). Robinson RC, et al. **Aust Vet J** 1989 Jul; 66(7):195–7

Environmental source of mycobacteriosis in a California swine herd. Gardner IA, et al. **Can J Vet Res** 1989 Jan; 53(1):33–7

The inducing role of tumor necrosis factor in the development of bactericidal granulomas during BCG infection. Kindler V, et al. **Cell** 1989 Mar 10;56(5):731–40

Avian mycobacteriosis in three horses. Buergelt CD, et al. **Cornell Vet** 1988 Oct;78(4):365–80

Tuberculosis: the disease and its epidemiology in the badger, a review. Cheeseman CL, et al. **Epidemiol Infect** 1989 Aug; 103(1):113–25 (19 ref.)

The haematological values of European badgers (Meles meles) in health and in the course of tuberculosis infection. Mahmood KH, et al. **Epidemiol Infect** 1988 Oct; 101(2):231–7

Regulation of host resistance to Mycobacterium intracellulare in vivo and in vitro by the Bcg gene. Goto Y, et al. **Immunogenetics** 1989;30(3):218–21

Two types of suppressor T cells that inhibit delayed-type hypersensitivity to Mycobacterium intracellulare in mice. Nakamura RM, et al. **Infect Immun** 1989 Mar;57(3):779–84

Testing for tuberculosis in nonhuman primates [letter] Sadoff DA. **J Am Vet Med Assoc** 1989 Feb 1;194(3):325–6

Tuberculosis. Thoen CO. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1045–8 (18 ref.)

Methods used to investigate a possible environmental source of Mycobacterium avium-intracellulare-scrofulaceum (MAIS) infection in farmed deer. Prosser BA. **J Appl Bacteriol** 1989 Mar;66(3):219–26

Misleading positive tuberculin reactions in a squirrel monkey colony. Pierce DL, et al. **Lab Anim Sci** 1988 Dec; 38(6):729–30

Bovine tuberculosis in deer [letter] Lehner RP, et al. **Vet Rec** 1989 Jan 14;124(2):46

Bovine tuberculosis in deer [lett;r] Meldrum KC, et al. **Vet Rec** 1988 Dec 17;123(25):656

Tuberculosis in deer [letter] Milligan WA. **Vet Rec** 1988 Nov 19;123(21):555–6

[The role of Mycobacterium avium–intracellulare in the development of infection in humans and animals] Zórawski C. **Przegl Epidemiol** 1988;42(4):354–9 (Eng. Abstr.) (Pol)

TUBERCULOSIS, AVIAN

PATHOLOGY

Effect of environmental–genetic interactions on Mycobacterium avium challenge infection. Gross WB, et al. **Avian Dis** 1989 Jul–Sep;33(3):411–5

Isolation of Mycobacterium avium from waterfowl with polycystic livers. Roffe TJ. **Avian Dis** 1989 Jan–Mar; 33(1):195–8

TUBERCULOSIS, BOVINE

COMPLICATIONS

Mycobacterium bovis as an occupational hazard in abattoir workers [letter] **Aust N Z J Med** 1989 Aug;19(4):409–10

DIAGNOSIS

Mycobacterium bovis as an occupational hazard in abattoir workers. Robinson P, et al. **Aust N Z J Med** 1988 Aug; 18(5):701–3

An ELISA for the detection of anergic tuberculous cattle. Plackett P, et al. **Aust Vet J** 1989 Jan;66(1):15–9

Purification of a major Mycobacterium bovis antigen for the diagnosis of bovine tuberculosis. Fifis T, et al. **Scand J Immunol** 1989 Jan;29(1):91–101

Studies on the efficiency of absorbed bovine PPD in tuberculin and serological tests. Hammam H, et al. **Zentralbl Veterinarmed [B]** 1989 May;36(3):175–9

EPIDEMIOLOGY

Epidemiology of bovine tuberculosis in northern Australia. Andrews LG, et al. **Acta Vet Scand Suppl** 1988;84:139–41

Prevalence of bovine tuberculosis among trade cattle in southern Nigeria. Wekhe SN, et al. **Trop Anim Health Prod** 1989 May;21(2):151–2

[The detection of Mycobacterium bovis reinfection in a cattle herd] Weber A, et al. **Berl Munch Tierarztl Wochenschr** 1988 Sep 1;101(9):302–7 (Eng. Abstr.) (Ger)

ETIOLOGY

[The present significance of humans for the appearance of Mycobacterium bovis infections in cattle herds] Weber A, et al. **Berl Munch Tierarztl Wochenschr** 1988 Oct 1; 101(10):341–4 (Eng. Abstr.) (Ger)

HISTORY

[20 years since the eradication of tuberculosis and brucellosis in cattle herds in Czechoslovakia] Kouba V. **Vet Med (Praha)** 1988 Sep;33(9):513–6 (Cze)

IMMUNOLOGY

Use of PPD and phosphatide antigens in an ELISA to detect the serological response in experimental bovine tuberculosis. Hanna J, et al. **Res Vet Sci** 1989 Jul;47(1):43–7

MICROBIOLOGY

Advantages of a new agar medium in the primary isolation of Mycobacterium bovis. Cousins DV, et al. **Vet Microbiol** 1989 May;20(1):89–95

Excretion of Mycobacterium bovis by experimentally infected cattle. Neill SD, et al. **Vet Rec** 1988 Sep 24; 123(13):340–3

[Biological activity of tubercule bacilli in an epizootic infectious process] Bokun AO. **Probl Tuberk** 1989;(1):51–4 (Eng. Abstr.) (Rus)

PATHOLOGY

The epithelial pathology of bovine genital tuberculosis. Biolatti B, et al. **J Comp Pathol** 1989 Feb;100(2):137–44

PREVENTION & CONTROL

A century of bovine tuberculosis 1888–1988: conquest and controversy. Pritchard DG. **J Comp Pathol** 1988 Nov; 99(4):357–99 (251 ref.)

TRANSMISSION

Interactions between cattle and badgers at pasture with reference to bovine tuberculosis transmission. Benham PF, et al. **Br Vet J** 1989 May–Jun;145(3):226–41

Transmission of tuberculosis from experimentally infected cattle to in–contact calves. Neill SD, et al. **Vet Rec** 1989 Mar 18;124(11):269–71

TUBERCULOSIS, CARDIOVASCULAR

COMPLICATIONS

Synchronous mycotic aneurysms secondary to tuberculosis. Ringswald M, et al. **J Ky Med Assoc** 1989 Jul;87(7):320–4

Tuberculosis on regular hemodialysis—a case of pericardial tamponade. Kudoh Y, et al. **Jpn Circ J** 1989 May; 53(5):416–9

Distal colonic tuberculosis with tuberculous enteritis, peritonitis, and pericarditis. Sciammarella JC Jr, et al. **N Y State J Med** 1989 May;89(5):286–8

DIAGNOSIS

[Clinical picture and diagnosis of tuberculous pericarditis] Plaushinene TA. **Probl Tuberk** 1988;(8):24–7 (Eng. Abstr.) (Rus)

[Purulent pericarditis, pleural effusion and acute arterial occlusion of a lower limb (clinical conference)] **Medicina (B Aires)** 1988;48(3):297–302 (Spa)

SURGERY

Surgical treatment of a tuberculous thoracoabdominal aneurysm. Bacourt F, et al. **Ann Vasc Surg** 1986 Nov; 1(3):378–81

Tuberculous pseudo–aneurysm of the descending thoracic aorta. Sandron D, et al. **Eur Respir J** 1988 Jun;1(6):565–7

[Surgical treatment of constrictive pericarditis and postoperative jaundice] Qiu NY. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):349–50, 383 (Eng. Abstr.) (Chi)

[A case of tuberculous pericarditis treated with pericardiectomy] Takiguchi Y, et al. **Kekkaku** 1988 Oct; 63(10):661–6 (Eng. Abstr.) (Jpn)

THERAPY

Tuberculous pericarditis: long–term outcome in patients who received medical therapy alone. Long R, et al. **Am Heart J** 1989 May;117(5):1133–9

TUBERCULOSIS, CUTANEOUS

Cutaneous tuberculosis. Kakakhel KU, et al. **Int J Dermatol** 1989 Jul–Aug;28(6):355–62 (53 ref.)

COMPLICATIONS

Tuberculous arthritis presenting as tophaceous gout. Hoppmann RA, et al. **J Rheumatol** 1989 May;16(5):700–2

Erythema induratum (of Bazin) in a patient with endometrial tuberculosis. De Silva HJ, et al. **Postgrad Med J** 1988 Mar; 64(749):242–4

DIAGNOSIS

[An unusual form of primary tuberculosis: skin tuberculosis (published erratum appears in Ned Tijdschr Geneeskd 1988 Nov 26;132(48):2224)] de Wind CM. **Ned Tijdschr Geneeskd** 1988 Sep 24;132(39):1806–8 (Eng. Abstr.) (Dut)

[A case of multi–lesion scrofuloderma] Bedello PG, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):197–8 (Ita)

[Tuberculosis of the perianal orifice (letter)] González Morán A, et al. **Rev Clin Esp** 1988 Jun;183(1):52–3 (Spa)

EPIDEMIOLOGY

Tuberculosis of the skin in Sri Lanka. Atukorala DN, et al. **Ceylon Med J** 1988 Sep;33(3):97–9

Changing pattern of cutaneous tuberculosis. A prospective study. Sehgal VN, et al. **Int J Dermatol** 1989 May; 28(4):231–6

[Apropos of 45 cases of cutaneous tuberculosis in Tlemcen (western Algeria)] Boudghene–Stambouli O, et al. **Bull Soc Pathol Exot Filiales** 1989;82(3):341–50 (Eng. Abstr.) (Fre)

ETIOLOGY

[Metastatic tuberculous abscesses] Mahé A, et al. **Ann Dermatol Venereol** 1989;116(2):127–8 (Fre)

MICROBIOLOGY

The clinical presentation, diagnosis, and therapy of cutaneous and pulmonary infections due to the rapidly growing mycobacteria, M. fortuitum and M. chelonae. Wallace RJ Jr. **Clin Chest Med** 1989 Sep;10(3):419–29 (27 ref.)

An HIV–infected man with a neck ulcer and a fever. Krumholz HM, et al. **Hosp Pract [Off]** 1989 Jun 15; 24(6):122, 124

[Isolated subcutaneous abscesses caused by tuberculosis] Elmstähl S, et al. **Lakartidningen** 1988 Dec 28;85(52):4644, 4646 (Eng. Abstr.) (Swe)

PATHOLOGY

Psoriasiform plaque on the buttock. Tuberculosis verrucosa cutis. Prendiville J, et al. **Arch Dermatol** 1989 Jan; 125(1):115, 118

Tuberculous ulcer of the skin. Lantos G, et al. **J Am Acad Dermatol** 1988 Dec;19(6):1067–72

Unusual clinical manifestations of cutaneous tuberculosis. Sehgal VN, et al. **J Dermatol (Tokyo)** 1988 Aug;15(4):334–8

Papulonecrotic tuberculid. Held JL, et al. **N Y State J Med** 1988 Sep;88(9):499–501

[Differential diagnostic problems in localized skin and bone tuberculosis with tuberculous changes in the cheek mucosa. Case report] Kern A, et al. **Dermatol Monatsschr** 1988; 174(12):748–52 (Eng. Abstr.) (Ger)

[An aged case of scrofuloderma and the transition of the predilection age] Kano T, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Aug;98(9):931–6 (41 ref.) (Eng. Abstr.) (Jpn)

SURGERY

[Surgical treatment of 423 cases of chest wall tuberculosis] Zhu DC. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec;11(6):362–4, 387 (Eng. Abstr.) (Chi)

THERAPY

Penis tuberculid (papulonecrotic tuberculid of the glans penis): treatment with a combination of rifampicin and an extract from tubercle bacilli (T.B. vaccine). Nakamura S, et al. **J Dermatol** 1989 Apr;16(2):150–3 (14 ref.)

TUBERCULOSIS, ENDOCRINE

COMPLICATIONS

Disseminated tuberculosis causing acute adrenal failure, C.T. findings with post mortem correlation. Osborne TM, et al. **Australas Radiol** 1988 Aug;32(3):394–7

Addisonian crisis induced by treatment with rifampicin. Wilkins EG, et al. **Tubercle** 1989 Mar;70(1):69–73

[Black adenoma secreting cortisol and tuberculosis in the same adrenal gland (letter)] de Pablos PL, et al. **Rev Clin Esp** 1988 Jul;183(3):157–8 (Spa)

DIAGNOSIS

Tuberculous adenitis of the thyroid mimicking subacute thyroiditis. Sachs MK, et al. **Am J Med** 1988 Oct; 85(4):573–5

[An unusual form of acute thyroiditis (letter)] Gómez–Balaguer M, et al. **Med Clin (Barc)** 1988 Jun 18; 91(4):158 (Spa)

PATHOLOGY

Tuberculosis of the thyroid gland: a case report. Cheah DS. **Med J Malaysia** 1987 Jun;42(2):127–8

TUBERCULOSIS, FEMALE GENITAL

COMPLICATIONS

Erythema induratum (of Bazin) in a patient with endometrial tuberculosis. De Silva HJ, et al. **Postgrad Med J** 1988 Mar; 64(749):242–4

DIAGNOSIS

Endoscopy in the diagnosis of genital tuberculosis. Merchant R. **J Reprod Med** 1989 Jul;34(7):468–74

[Significance of ultrasonic examination in the diagnosis of genital tuberculosis in women] Batashova MI, et al. **Probl Tuberk** 1989;(5):51–3 (Eng. Abstr.) (Rus)

[Importance of colposcopy in the diagnosis of female genital tuberculosis] Krainenko EV, et al. **Probl Tuberk** 1988; (12):51–3 (Rus)

[Cervix electrothermometry in determining the activity of genital tuberculosis in women] Rekel' IuI. **Probl Tuberk** 1988;(8):27–9 (Eng. Abstr.) (Rus)

DRUG THERAPY

[Use of antioxidants in the combined therapy of female genital tuberculosis] Kolachevskaia EN, et al. **Akush Ginekol (Mosk)** 1988 May;(5):43–5 (Eng. Abstr.) (Rus)

PATHOLOGY

Pseudotumoral tuberculosis of the uterine cervix. Cytologic presentation. Vuong PN, et al. **Acta Cytol** 1989 May–Jun; 33(3):305–8

[A case of isolated tuberculosis of the ovary] Milchev N, et al. **Akush Ginekol (Sofiia)** 1988;27(4):79–80 (Bul)

[Relation of genital tuberculosis and simple cysts of the ovary] Yildirim M, et al. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):193–6 (Eng. Abstr.) (Fre)

[State of the endometrium in patients with female genital tuberculosis according to biopsy data] Solov'eva IP. **Probl Tuberk** 1989;(5):53–6 (Eng. Abstr.) (Rus)

VETERINARY

The epithelial pathology of bovine genital tuberculosis. Biolatti B, et al. **J Comp Pathol** 1989 Feb;100(2):137–44

TUBERCULOSIS, GASTROINTESTINAL

Gastrointestinal tuberculosis: resurgence of an old pathogen. McGee GS, et al. **Am Surg** 1989 Jan;55(1):16–20 (38 ref.)

COMPLICATIONS

Diffuse papillomatosis of the gallbladder complicated with tuberculosis. Nakajo S, et al. **Acta Pathol Jpn** 1988 Nov; 38(11):1473–80

Filiform polyposis in tuberculosis of the colon. Peh WC. **Clin Radiol** 1988 Sep;39(5):534–6

Massive rectal bleeding due to colonic tuberculosis. Waghmare BG, et al. **J Assoc Physicians India** 1988 Jun; 36(6):392–3

Intestinal lymphangiectasia in intraabdominal tuberculosis. Ploddi A, et al. **J Med Assoc Thai** 1988 Sep;71(9):518–23

Distal colonic tuberculosis with tuberculous enteritis,

peritonitis, and pericarditis. Sciammarella JC Jr, et al. **N Y State J Med** 1989 May;89(5):286–8

[A case of peritonitis due to perforation of the small intestines of tubercular etiology. Review of the literature] Chazelet C, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Oct; 24(5):243–7 (15 ref.) (Eng. Abstr.) (Fre)

[Abdominal tuberculosis and open lung tuberculosis caused by mycobacterium bovis] Danuser H, et al. **Schweiz Med Wochenschr** 1989 Apr 15;119(15):467–72 (Eng. Abstr.) (Ger)

[Tubercular enteral fistulas] Ceccherini E, et al. **Minerva Chir** 1989 Apr 30;44(8):1293–5 (Eng. Abstr.) (Ita)

[A case of intestinal tuberculosis with a cystic dilatation inducing so-called "blind loop syndrome"] Kuroki Y, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1125–8 (Eng. Abstr.) (Jpn)

[Multiple perforating ulcers of the small intestine in a patient with secondary tuberculosis of the intestines] Ligonenko AV, et al. **Klin Khir** 1989;(2):60 (Rus)

DIAGNOSIS

The endoscopic diagnosis of colonic tuberculosis. Morgante PE, et al. **Gastrointest Endosc** 1989 Mar–Apr;35(2):115–8

Colorectal tuberculosis. Thapa BR, et al. **Indian Pediatr** 1988 Nov;25(11):1044–9

The role of colonoscopy in the diagnosis of tuberculosis. Kalvaria I, et al. **J Clin Gastroenterol** 1988 Oct;10(5):516–23 (39 ref.)

Abdominal tuberculosis: a disease poised for reappearance. Rohwedder JJ. **N Y State J Med** 1989 May;89(5):252–4

[Tuberculous appendicitis] Lyng KM. **Ugeskr Laeger** 1989 Jun 12;151(24):1554 (Eng. Abstr.) (Dan)

[Primary gastroduodenal tuberculosis. Problems posed apropos of a case] François GF, et al. **Chirurgie** 1988; 114(4):327–33 (25 ref.) (Eng. Abstr.) (Fre)

[Abdominal tuberculosis] López Sánchez C, et al. **An Esp Pediatr** 1988 Jun;28(6):569–72 (Eng. Abstr.) (Spa)

EPIDEMIOLOGY

Clinical features of abdominal tuberculosis. Jakubowski A, et al. **J Infect Dis** 1988 Oct;158(4):687–92

ETIOLOGY

Colonic tuberculosis due to atypical mycobacteria in a renal transplant recipient [letter] Kochhar R, et al. **Am J Gastroenterol** 1988 Dec;83(12):1435–6

GENETICS

HLA-B27 positive spondyloarthritis in a case of tuberculous rectal stricture. Choksi AP, et al. **J Assoc Physicians India** 1988 May;36(5):337–9

MICROBIOLOGY

[Three cases of mycobacteriosis with gastrointestinal localization] Nagy F, et al. **Orv Hetil** 1989 Apr 2; 130(14):717–21 (Eng. Abstr.) (Hun)

PATHOLOGY

[Massive gastrointestinal hemorrhage. Initial manifestation of acute intestinal tuberculosis with miliary involvement in an elderly patient] Weber JC, et al. **Internist (Berlin)** 1989 Jun;30(6):388–90 (Ger)

[Intestinal tuberculosis] Orozco-Sánchez J, et al. **Bol Med Hosp Infant Mex** 1988 Oct;45(10):686–91 (Eng. Abstr.) (Spa)

[Tuberculous stenosis of the cecum: a clinical case] Rubio Barbón S, et al. **Rev Esp Enferm Apar Dig** 1988 Dec; 74(6):676–8 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Radiology of abdominal tuberculosis. Kapoor VK, et al. **Australas Radiol** 1988 Aug;32(3):365–7

[Tuberculosis of the duodenum] Flückiger F, et al. **ROFO** 1989 Feb;150(2):219–20 (Ger)

[Ileocolonic tuberculosis: a diagnostic trap for Crohn's disease. A case report] Gussetti P, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):115–8 (Ita)

[Atypical locations of tuberculosis of the colon] Escape Díaz-Bonilla I, et al. **Rev Esp Enferm Apar Dig** 1989 Jun; 75(6 Pt 1):577–82 (Eng. Abstr.) (Spa)

[Colorectal tuberculosis] González Martín MA, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):712–6 (Eng. Abstr.) (Spa)

[Tuberculosis of the cecum. Presentation of a new case (letter)] Huarte MP, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):626–7 (Spa)

SURGERY

The surgical management of abdominal tuberculosis. Goldman M. **Surg Annu** 1989;21:363–72 (29 ref.)

VETERINARY

Mycobacterium avium infection through the alimentary tract in mice. Ueda K, et al. **Nippon Juigaku Zasshi** 1989 Jun; 51(3):505–14

TUBERCULOSIS, HEPATIC

COMPLICATIONS

Tuberculous (peri) hepatic abscesses. Desmidt P, et al. **Acta Clin Belg** 1988;43(5):378–80

Primary tuberculous liver abscess associated with the human immunodeficiency virus. Weinberg JJ, et al. **Tubercle** 1988 Jun;69(2):145–7

[A case of disseminated (hematogenic) tuberculosis predominantly affecting the liver and spleen] Lantsova NA, et al. **Probl Tuberk** 1989;(2):72–3 (Rus)

DIAGNOSIS

A case of solitary tuberculosis of the liver. Nagai H, et al. **Jpn J Med** 1989 Mar–Apr;28(2):251–5

[Isolated tuberculosis of the hepatobiliary system] Iablokov DD, et al. **Klin Med (Mosk)** 1988 Dec;66(12):26–32 (46 ref.) (Rus)

ETIOLOGY

[Hepatosplenic tuberculous abscess in acquired immunodeficiency syndrome. Apropos of 2 cases (letter)] Carlioz R, et al. **Ann Med Interne (Paris)** 1988;139(7):524–6 (14 ref.) (Fre)

[Leukocytoclastic vasculitis and hepatic tuberculosis disclosing hairy cell leukemia] Thorel JB, et al. **Rev Med Interne** 1988 Nov–Dec;9(5):530–3 (10 ref.) (Fre)

PATHOLOGY

[Isolated tuberculosis of the hepatobiliary system] Iarŭmov N, et al. **Khirurgiia (Sofiia)** 1988;41(3):21–3 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Hepatosplenic tuberculosis with hypersplenism: CT evaluation. Choi BI, et al. **Gastrointest Radiol** 1989 Summer;14(3):265–7

VETERINARY

Isolation of Mycobacterium avium from waterfowl with polycystic livers. Roffe TJ. **Avian Dis** 1989 Jan–Mar; 33(1):195–8

Diagnosis of avian tuberculosis in a horse by use of liver biopsy. Lofstedt J, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):260–2

TUBERCULOSIS IN CHILDHOOD

Tuberculosis in children and adolescents. Smith MH. **Clin Chest Med** 1989 Sep;10(3):381–95 (64 ref.)

[Tuberculosis in children in the early 90's] Battistini A, et al. **Pediatr Med Chir** 1989 Jan–Feb;11(1):1–11 (15 ref.) (Eng. Abstr.) (Ita)

COMPLICATIONS

TB and HIV [news] **Pediatr Infect Dis J** 1989 Aug;8(8):9

[Pneumocystis carinii pneumonia in children with tuberculosis of the respiratory organs] Borisova NK, et al. **Probl Tuberk** 1989;(2):20–3 (Eng. Abstr.) (Rus)

[State of the ORL organs in children and adolescents at a tuberculosis sanatorium] Sirenko IA, et al. **Probl Tuberk** 1989;(6):73–4 (Rus)

CONGENITAL

Congenital tuberculosis localised to the ear. Naranbhai RC, et al. **Arch Dis Child** 1989 May;64(5):738–40

DRUG THERAPY

Multiple drug therapy for pediatric tuberculosis. Engel NS. **MCN** 1989 May–Jun;14(3):169

[The late results (2 years and beyond) of short-duration (6 months) antituberculosis chemotherapy in children] Anastasatu C, et al. **Rev Ig [Pneumoftiziol]** 1988 Jul–Sep; 37(3):225–8 (Rum)

[Incidence and nature of adverse reactions to antitubercular drugs in children with primary intrathoracic tuberculosis] Kurmanova NK. **Probl Tuberk** 1988;(6):33–6 (Eng. Abstr.) (Rus)

[Lymphotropic therapy in the combined treatment of pulmonary tuberculosis in children and adolescents] Lebedeva LV, et al. **Probl Tuberk** 1989;(5):26–8 (Eng. Abstr.) (Rus)

[Antibacterial drugs and their tolerance in children with tuberculosis] Naubet'larova AI, et al. **Probl Tuberk** 1988; (12):21–3 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Childhood tuberculosis in Britain. Silverman M. **BMJ** 1988 Nov 5;297(6657):1147–8 (12 ref.)

Tuberculosis in the pediatric population of Houston, Texas. Starke JR, et al. **Pediatrics** 1989 Jul;84(1):28–35

[Evolution of the forms of tuberculosis in children within the context of socioeconomic factors] Udrea E, et al. **Rev Ig [Pneumoftiziol]** 1988 Jan–Mar;37(1):59–62 (Eng. Abstr.) (Rum)

[Effect of preventive and social factors on the morbidity of children with local forms of tuberculosis] Polushkina EE, et al. **Probl Tuberk** 1988;(11):3–4 (Eng. Abstr.) (Rus)

[The decline of tuberculous infection in schoolchildren of Barcelona (letter)] de March Ayuela P. **Med Clin (Barc)** 1989 May 13;92(18):717–8 (Spa)

[Primary tubercular infection in school children (letter)] Villalbí JR, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):37 (Spa)

[Tuberculosis in children] Lewinson D, et al. **Rev Chil Pediatr** 1988 Jul–Aug;59(4):250–3 (Eng. Abstr.) (Spa)

ETIOLOGY

[Epidemiological hazard of alcoholic patients with tuberculosis and the organizational measures to reduce it] Rudol NM. **Probl Tuberk** 1988;(7):6–9 (Eng. Abstr.) (Rus)

GENETICS

[Relation between tuberculosis infection in children and their parents] Ivan'kova VS, et al. **Probl Tuberk** 1988;(6):9–12 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Humoral response to defined epitopes of tubercle bacilli in adult pulmonary and child tuberculosis. Bothamley G, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):639–45

[Phagocytic activity of neutrophils in children with positive reactions to tuberculin] Skliarov SD, et al. **Probl Tuberk** 1988;(10):69–70 (Rus)

MICROBIOLOGY

The relationship between bacillary sources of infection and tuberculosis disease in children. Mihailescu P. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):17–9

PREVENTION & CONTROL

Duration of protection against tuberculosis conferred by BCG vaccination in infancy [letter] Packe GE, et al. **Arch Dis Child** 1989 Apr;64(4):634–5

Childhood tuberculosis in Britain [letter] Dunkley MP, et al. **BMJ** 1988 Dec 17;297(6663):1611–2

[Retrospective assessment of the effectiveness of BCG vaccination by multiple puncture method (Kuchiki's needle) in childhood tuberculosis] Kamigawara N. **Kekkaku** 1989 Apr;64(4):305–11 (Eng. Abstr.) (Jpn)

TRANSMISSION

[Epidemiologic danger of a meager and one time shedding of bacteria from newly detected cases of tuberculosis] Bobchenok AP. **Probl Tuberk** 1988;(11):8–10 (Eng. Abstr.) (Rus)

TUBERCULOSIS, LARYNGEAL

Subglottic tuberculosis: a case report. Stock CR, et al. **J Ky Med Assoc** 1989 Jan;87(1):21–2

COMPLICATIONS

[Three cases of pulmonary tuberculosis, complained of hoarseness and were diagnosed as being complicated with laryngeal tuberculosis] Yamagishi F, et al. **Kekkaku** 1988 Sep;63(9):611–5 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Paediatric laryngeal tuberculosis presenting with stridor. Rupa V, et al. **J Laryngol Otol** 1989 Aug;103(8):787–8

Tuberculous mastoiditis and laryngitis: a case report. Bryan PA, et al. **Med J Aust** 1989 Jan 2;150(1):41–3

Laryngeal tuberculosis in a child (a case report). Santoso FX, et al. **Paediatr Indones** 1988 Mar–Apr;28(3–4):60–6

[Laryngeal tuberculosis simulating epiglottitis—a case report] Chiang CY, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Feb; 5(2):122–5 (Eng. Abstr.) (Chi)

DRUG THERAPY

Tuberculous mastoiditis and laryngitis [letter] Mukerjee CM. **Med J Aust** 1989 Apr 17;150(8):468

EPIDEMIOLOGY

[Present-day status of tuberculosis of the larynx] Chumakov FI, et al. **Probl Tuberk** 1989;(4):58–60 (Rus)

PATHOLOGY

[Tuberculous laryngitis. Clinical description of 2 cases] Gil Tutor E. **An Otorrinolaringol Ibero Am** 1988;15(6):661–7 (Eng. Abstr.) (Spa)

TUBERCULOSIS, LYMPH NODE

Tuberculous lymphadenopathy: a collective review with a case report. Chen J, et al. **J Natl Med Assoc** 1988 Oct; 80(10):1083–8 (28 ref.)

Tuberculous lymphadenitis in Singapore. Tan KK. **Singapore Med J** 1988 Oct;29(5):441–4

Tuberculous lymphadenitis in Singapore. Tan TH, et al. **Singapore Med J** 1988 Oct;29(5):424–5

[Lymph node tuberculosis] Ennouri A, et al.

Rev Laryngol Otol Rhinol (Bord) 1989;110(2):179–81 (Eng. Abstr.) (Fre)

COMPLICATIONS

US and CT findings in biliary obstruction due to tuberculous adenitis in the periportal area. 2 cases [published erratum appears in Eur J Radiol 1989 May;9(2):127] Pombo F, et al. Eur J Radiol 1989 Feb;9(1):71–3

Airway obstruction secondary to tuberculosis lymph node erosion into the trachea: drainage via bronchoscopy. Schwartz MS, et al. Otolaryngol Head Neck Surg 1988 Dec; 99(6):604–6

Horner's syndrome and tuberculosis. A case report. Ismail MH, et al. S Afr Med J 1988 Dec 3;74(11):586–7

Psoas abscess due to retroperitoneal tuberculous lymphadenopathy. Perros P, et al. Tubercle 1988 Dec; 69(4):299–301

[Pseudotumoral lymph node tuberculosis of the hepatic pedicle complicated by a choledoco-lymph node fistula. Ultrasound and x-ray computed tomography study. Apropos of a case (letter)] Leborgne J, et al. J Chir (Paris) 1989 Jun–Jul;126(6–7):419–20 (Fre)

[Pneumocystis carinii pneumonia in children with tuberculosis of the respiratory organs] Borisova NK, et al. Probl Tuberk 1989;(2):20–3 (Eng. Abstr.) (Rus)

[Air embolism as a complication of tuberculous lymphadenitis] Figurnov VA, et al. Sud Med Ekspert 1988 Oct–Dec;31(4):54 (Rus)

[Analysis of endothoracic perforation of the lymph nodes in our patients over a 5-year-period] Milković D, et al. Plucne Bolesti 1988 Jan–Jun;40(1–2):63–4 (Eng. Abstr.) (Scr)

[Obstructive jaundice caused by tuberculous adenopathy (letter)] Souto Crespo JM, et al. Rev Clin Esp 1989 Mar; 184(4):217–8 (Spa)

[Tuberculous peritonitis with acute onset caused by lymph node rupture following abdominal trauma] Ferrer MT, et al. Rev Esp Enferm Apar Dig 1989 Jun;75(6 Pt 2):729–30 (Spa)

DIAGNOSIS

Granuloma inguinale of cervical lymph nodes simulating tuberculous lymphadenitis: two case reports and review of published reports. Freinkel AL. Genitourin Med 1988 Oct;64(5):339–43 (22 ref.)

[Diagnosis and surgical treatment of mediastinal caseoma] Dakov I, et al. Khirurgiia (Sofiia) 1988;41(6):16–9 (Eng. Abstr.) (Bul)

[A case of multi-lesion scrofuloderma] Bedello PG, et al. G Ital Dermatol Venereol 1988 Apr;123(4):197–8 (Ita)

[A case of eosinophylic lymphoid granuloma (Kimura's disease) being suspected as cervical tuberculosis] Hashimoto M. Kekkaku 1989 Apr;64(4):333–6 (Eng. Abstr.) (Jpn)

[Clinico-biochemical aspects of differential diagnosis of tuberculosis and sarcoidosis of the respiratory organs] Kostina ZI, et al. Probl Tuberk 1988;(7):21–5 (Eng. Abstr.) (Rus)

[A young man with pneumonia with a torpid course (clinical conference)] Rev Clin Esp 1989 Jun;185(2):91–6 (Spa)

DRUG THERAPY

Short course chemotherapy for lymph node tuberculosis: final report at 5 years. British Thoracic Society Research Committee. Br J Dis Chest 1988 Jul;82(3):282–4

A retrospective comparison of two drug regimens RHE2/RH10 and RHZ2/RH10 in the treatment of tuberculous mediastinal lymphadenopathy. Ormerod LP. Br J Dis Chest 1988 Jul;82(3):274–81

Mycobacterium tuberculosis cervical adenitis. Diagnosis and management. Talmi YP, et al. Clin Pediatr (Phila) 1989 Sep;28(9):408–11

Modern management of cervical scrofula. Deitel M, et al. Head Neck 1989 Jan–Feb;11(1):60–6

[A controlled survey comparing 2 short-term therapeutic regimes in lymph node tuberculosis] Amrane R, et al. Rev Mal Respir 1989;6(1):53–7 (Eng. Abstr.) (Fre)

[Effectiveness of intratracheal administration of contrykal in combined treatment of children with intrathoracic tuberculosis complicated by endobronchial pathology] Klevno NI, et al. Probl Tuberk 1989;(3):25–30 (Eng. Abstr.) (Rus)

[Lymphotropic therapy in the combined treatment of pulmonary tuberculosis in children and adolescents] Lebedeva LV, et al. Probl Tuberk 1989;(5):26–8 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Clinical features of abdominal tuberculosis. Jakubowski A, et al. J Infect Dis 1988 Oct;158(4):687–92

ETIOLOGY

[BCG osteitis] Szabó L, et al. Orv Hetil 1988 Oct 9; 129(41):2203–4 (Eng. Abstr.) (Hun)

GENETICS

[Characteristics of the reactivity of patients with tuberculosis in relation to genetic indicators] Frolova EIu. Probl Tuberk 1988;(9):53–4 (Eng. Abstr.) (Rus)

METABOLISM

Prolonged elevations of soluble interleukin-2 receptors in tuberculosis. Brown AE, et al. Am Rev Respir Dis 1989 Apr;139(4):1036–8

PATHOLOGY

Fine needle aspiration biopsy of tuberculous cervical lymphadenopathy. Lau SK, et al. Aust N Z J Surg 1988 Dec;58(12):947–50

Primary tuberculosis of the tongue: report of a case. Hashimoto Y, et al. J Oral Maxillofac Surg 1989 Jul; 47(7):744–6

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 23–1989. A 25-year-old woman with a right pulmonary density 14 months after a right upper lobectomy for an atypical carcinoid tumor. N Engl J Med 1989 Jun 8;320(23):1540–50

["Breast cancer" was tuberculosis] Lidbrink E, et al. Lakartidningen 1988 Nov 23;85(47):4077 (Swe)

PREVENTION & CONTROL

[Value of complex expeditions for taking intensive anti-tuberculosis actions among children and adolescents] Mazhitova AZh, et al. Probl Tuberk 1988;(9):8–11 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Adult tuberculous mediastinal lymphadentitis in Saudi Arabia. Maglad SA, et al. East Afr Med J 1986 Dec; 63(12):818–21

Tuberculous mediastinal lymphadenitis in an adult patient. Shiota Y, et al. Jpn J Med 1989 May–Jun;28(3):382–4

[Tuberculosis of bone and lymph nodes. A case (letter)] Wattiaux MJ, et al. Presse Med 1988 Nov 12;17(40):2142 (Fre)

[Diagnosis of uncommon mediastinal adenopathy] Lumbroso C, et al. Rev Pneumol Clin 1989;45(1):37–9 (Fre)

SURGERY

[Local bronchoscopic treatment and surgical drainage of lymph node abscesses in bronchial lymph node tuberculosis in childhood] Hofmann A. Prax Klin Pneumol 1988 Jul; 42(7):620–4 (Eng. Abstr.) (Ger)

[Indications for surgical removal of calcified lymph nodes from the abdominal cavity] Shcherba BV, et al. Probl Tuberk 1988;(7):74–5 (Rus)

[Surgical interventions in the diagnosis and therapy of tuberculosis of peripheral lymph nodes] Shcherba BV. Probl Tuberk 1988;(12):55–7 (Rus)

VETERINARY

Tuberculosis in deer [letter] Fleetwood AJ, et al. Vet Rec 1988 Sep 3;123(10):279–80

TUBERCULOSIS, MALE GENITAL

Tuberculous cavernositis of the penis: case report. Ramesh V, et al. Genitourin Med 1989 Jan;65(1):58–9

COMPLICATIONS

[Genito-urinary tuberculosis in acquired immunodeficiency syndrome] Jara Rascón J, et al. Actas Urol Esp 1989 Jan–Feb;13(1):75–7 (Eng. Abstr.) (Spa)

DIAGNOSIS

Tuberculosis of the penis presenting as a subcutaneous nodule. Baskin LS, et al. J Urol 1989 Jun;141(6):1430–1

[Modified subcutaneous tuberculin test in the diagnosis of tuberculosis of the male genital organs] Shkuratov SI. Probl Tuberk 1989;(2):42–5 (Eng. Abstr.) (Rus)

DRUG THERAPY

[Addison crisis following administration of rifampicin in a patient with tuberculosis] Wirtz JJ, et al. Ned Tijdschr Geneeskd 1988 Sep 10;132(37):1699–701 (Eng. Abstr.) (Dut)

ETIOLOGY

Tuberculous epididymitis occurring 35 years after renal tuberculosis. Almagro UA, et al. J Urol 1989 May; 141(5):1204–5

PATHOLOGY

Tuberculosis of the penis. Sofras F, et al. Acta Urol Belg 1988;56(3):475–6

TUBERCULOSIS, MENINGEAL

Dural scrofula. Glass JD, et al. Neurology 1989 Aug; 39(8):1123–4

CEREBROSPINAL FLUID

Cerebrospinal fluid concentrations of ethionamide in children with tuberculous meningitis. Donald PR, et al. J Pediatr 1989 Sep;115(3):483–6

COMPLICATIONS

Hydrocephalus and tuberculous meningitis in children. Report on 26 cases. Gelabert M, et al. Childs Nerv Syst 1988 Oct;4(5):268–70

A lethargic baby with altered consciousness. Hadjari M, et al. Hosp Pract [Off] 1989 Apr 15;24(4):58, 60

Subarachnoid haemorrhage in tubercular meningitis. Mohapatra AK, et al. J Assoc Physicians India 1988 Mar; 36(3):237

Tuberculous basal meningitis with multiple cranial nerve palsies and leprosy. Mahakul KC, et al. J Indian Med Assoc 1988 Sep;86(9):244–6

AIDS two months after primary human immunodeficiency virus infection. Isaksson B, et al. J Infect Dis 1988 Oct; 158(4):866–8

Disappearing CT lesions in epilepsy: is tuberculosis or cysticercosis the cause? [letter] Ahuja GK, et al. J Neurol Neurosurg Psychiatry 1989 Jul;52(7):915–6

Ocular complications in meningitis: "fifteen years study". Hanna LS, et al. Metab Pediatr Syst Ophthalmol 1988; 11(4):160–2

Disseminated candidosis following tuberculous meningitis. Schneller W, et al. Mycoses 1988;Suppl 1:59–62

Simultaneous occurrence of mumps meningoencephalitis and tuberculosis meningitis. Kalis NN, et al. Pediatr Infect Dis J 1989 Jul;8(7):476–7

Internuclear ophthalmoplegia in tuberculous meningitis. Teoh R, et al. Tubercle 1989 Mar;70(1):61–4

[Syringomyelia following tuberculous meningitis—report of three cases diagnosed by MR imaging] Tsuchiya K, et al. Rinsho Hoshasen 1988 Nov;33(12):1589–92 (Eng. Abstr.) (Jpn)

[Multiple tuberculomas of the brain in a patient with tuberculous meningitis] Tarasova EF, et al. Probl Tuberk 1989;(2):74–5 (Rus)

DIAGNOSIS

The use of PGL-Tb 1 from M. tuberculosis in the serological diagnosis of tuberculous meningitis: a preliminary report. Torgal-Garcia J, et al. Acta Leprol (Geneve) 1989;7 Suppl 1:136–7

Tuberculous meningitis in pregnancy. Kingdom JC, et al. Br J Obstet Gynaecol 1989 Feb;96(2):233–5

False positive bromide partition test in lymphomatous meningitis [letter] Smith GW. J Clin Pathol 1989 Jan; 42(1):113–4

Rapid diagnosis of tuberculous meningitis by ELISA to detect mycobacterial antigen and antibody in the cerebrospinal fluid [letter] Chandramuki A. J Infect Dis 1989 Aug;160(2):343–4

Adenosine deaminase activity in cerebrospinal fluid: a useful test for meningeal tuberculosis, even in patients with AIDS [letter] Ena J, et al. J Infect Dis 1988 Oct;158(4):896

Rapid diagnosis of tuberculous meningitis by using an enzyme-linked immunosorbent assay to detect mycobacterial antigen and antibody in cerebrospinal fluid. Watt G, et al. J Infect Dis 1988 Oct;158(4):681–6

A competition ELISA for the detection of mycobacterial antigen in tuberculosis exudates. Ramkisson A, et al. Tubercle 1988 Sep;69(3):209–12

Detection of mycobacterial antigens in cerebrospinal fluid by enzyme-linked immunosorbent assay. Wu CH, et al. Tubercle 1989 Mar;70(1):37–43

Tuberculous meningitis in childhood: clinical and computerized tomography scan manifestations. Gürses N, et al. Turk J Pediatr 1987 Oct–Dec;29(4):207–15

[Evaluation of CSF Mycobacterium tuberculosis antigen 5 and its antibody detection in the diagnosis of tuberculous meningitis] Ma MH. Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Oct; 11(5):260–2, 317 (Eng. Abstr.) (Chi)

[Current status of the laboratory diagnosis of tuberculous meningitis] Ma Y, et al. Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1989 Feb; 12(1):49–51 (27 ref.) (Chi)

[Cerebrospinal fluid lysozyme activity in the diagnosis of tuberculous meningitis] Wang J. Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Feb; 11(1):30–1, 63 (Eng. Abstr.) (Chi)

[Tuberculous meningitis] Olesen LL, et al. Ugeskr Laeger 1988 Oct 3;150(40):2403–5 (Eng. Abstr.) (Dan)

[Gas chromatography-mass spectroscopy detection of tuberculostearic acid in the cerebrospinal fluid as a diagnostic aid in the differential diagnosis of tuberculoid meningitis] Roelcke U, et al. Nervenarzt 1989 May; 60(5):288–90 (Ger)

[Tuberculous meningitis] Kaufman N, et al. Harefuah 1989 Feb 15;116(4):194–5 (Eng. Abstr.) (Heb)

[Diagnostic difficulties in a case of meningitis and the problem of therapy] Hasiec B, et al. Wiad Lek 1988 Jul 15;41(14):955–7 (Eng. Abstr.) (Pol)

[Difficulties in the differential diagnosis of meningoencephalitis and encephalomyelitis of tuberculous and viral etiologies] Ponomareva EN, et al. Probl Tuberk 1988;(9):66–9 (Rus)

[Reasons for an untimely diagnosis of tuberculous meningitis] Gasparian AA, et al. Sov Med 1988;(6):107–8 (Rus)

DRUG THERAPY

Cerebrospinal fluid and serum concentrations of rifampin in meningeal tuberculosis after intravenous administration.

Mikhail IA, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):309–10
The far cry of a TB brain. Report of a case of tuberculous meningitis, multiple tuberculomas and tuberculous abscess. Jain VK, et al. **Clin Neurol Neurosurg** 1989;91(2):171–6
Tuberculous meningitis in children: treatment with isoniazid and rifampicin for twelve months. Visudhiphan P, et al. **J Pediatr** 1989 May;114(5):875–9
Steroids for meningitis: tuberculous and bacterial [letter] Kendig EL Jr. **Pediatr Infect Dis J** 1989 Aug;8(8):541–2
Treatment of tuberculous meningitis in adults with a combination of isoniazid, rifampicin and streptomycin: a prospective study. Doğanay M, et al. **Scand J Infect Dis** 1989;21(1):81–5
[Tuberculous spinal arachnoiditis. Value of intrathecal corticosteroid therapy (letter)] Bricaire F, et al. **Presse Med** 1989 Apr 8;18(14):729 (Fre)

ENZYMOLOGY

[Measurement of adenosine deaminase activity (ADA) of the cerebrospinal fluid in patients with tuberculous meningitis] Wang BN. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct;11(5):263–4, 317 (Eng. Abstr.) (Chi)
[Value of determining the activity of adenosine deaminase in tuberculous meningitis (letter)] Burnat P, et al. **Presse Med** 1989 May 27;18(21):1077 (Fre)

EPIDEMIOLOGY

Reduction in the risk of tuberculous meningitis in children in France. Impact of BCG vaccination. Lotte A, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):52–6
The effects of systematic BCG vaccination of newborns on the incidence of postprimary tuberculosis meningitis in childhood. Wasz-Hockert O, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):49–51
[Preliminary analysis on the causes of prevalent tuberculous meningitis in Heilungjiang province] Guo CM. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):257–9, 317 (Eng. Abstr.) (Chi)

IMMUNOLOGY

Levels of antibody to defined antigens of Mycobacterium tuberculosis in tuberculous meningitis. Chandramuki A, et al. **J Clin Microbiol** 1989 May;27(5):821–5
[The detection of mycobacterial antigens in cerebrospinal fluid by the enzyme-linked immunosorbent assay] Hu ZY, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):695–7, 718 (Eng. Abstr.) (Chi)

METABOLISM

A study of the serum and cerebrospinal fluid immunoglobulin profile in pyogenic and tuberculous meningitis. Shanmugasundaram N, et al. **Indian J Pathol Microbiol** 1988 Apr;31(2):27–34
[The clinical observation on ceruloplasmin in cerebrospinal fluid and serum of tuberculous meningitis patients] Yan SM. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):228–30, 255–6 (Eng. Abstr.) (Chi)

PATHOLOGY

Focal epilepsy in India [letter] Divate PG, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1365–6
MR of childhood tuberculous meningitis. Schoeman J, et al. **Neuroradiology** 1988;30(6):473–7
[Clinico-pathological analysis of 68 cases of tuberculous meningitis] Ma HZ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Apr; 11(2):71–3, 126 (Eng. Abstr.) (Chi)
[Tuberculous neuritis (clinical conference)] **Harefuah** 1988 Nov 15;115(10):307–11 (Heb)

PHYSIOPATHOLOGY

Tuberculous meningitis: a retrospective survey of 22 cases. De Domenico P, et al. **Ital J Neurol Sci** 1988 Oct; 9(5):477–82
Tuberculosis of the nervous system. A clinical, radiological and pathological study of 39 consecutive cases in Riyadh, Saudi Arabia. Bahemuka M, et al. **J Neurol Sci** 1989 Mar; 90(1):67–76

RADIOGRAPHY

Computerized tomography in tuberculosis meningitis. Long J. **Chin Med J [Engl]** 1988 Jun;101(6):388–90
Clinical correlation of CT changes in 64 Chinese patients with tuberculous meningitis. Teoh R, et al. **J Neurol** 1989 Jan;236(1):48–51
CT of intracranial tuberculomas with specific reference to the "target sign". van Dyk A. **Neuroradiology** 1988; 30(4):329–36
[Computerized tomography in tuberculous meningitis] Long J, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Aug;27(8):489–91, 519 (Eng. Abstr.) (Chi)

RADIONUCLIDE IMAGING

The technetium-99m DTPA partition test in the diagnosis of tuberculous meningitis. von Wenzel KS, et al. **S Afr Med J** 1989 May 20;75(10):488–9

SURGERY

Prolonged therapeutic external ventricular drainage: a prospective study. Chan KH, et al. **Neurosurgery** 1988 Oct; 23(4):436–8

TUBERCULOSIS, MILIARY

COMPLICATIONS

Massive haemoptysis in the acquired immunodeficiency syndrome. Wasser L, et al. **Br J Dis Chest** 1988 Oct; 82(4):421–5
Hypercalcaemia in a child with miliary tuberculosis. Gerritsen J, et al. **Eur J Pediatr** 1989 Jun;148(7):650–1
A lethargic baby with altered consciousness. Hadjari M, et al. **Hosp Pract [Off]** 1989 Apr 15;24(4):58, 60
Miliary tuberculosis presenting as adult respiratory distress syndrome. Lintin SN, et al. **Intensive Care Med** 1988; 14(6):672–4
Branhamella catarrhalis as a cause of pneumonia in a patient with miliary tuberculosis. Nyong'o AO, et al. **J Am Osteopath Assoc** 1989 May;89(5):645–50
Miliary tuberculosis with acute respiratory failure: report of 4 cases. Chao TY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):1000–5
Recurrent pneumothoraces in miliary tuberculosis. Chandra KS, et al. **Trop Geogr Med** 1988 Oct;40(4):347–9
[The adult respiratory distress syndrome associated with miliary tuberculosis] Chen SW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb; 12(1):6–9, 60 (Eng. Abstr.) (Chi)
[Metastatic tuberculous abscesses] Mahé A, et al. **Ann Dermatol Venereol** 1989;116(2):127–8 (Fre)
[An autopsy case of pulmonary diffuse alveolar septal amyloidosis secondary to miliary tuberculosis] Higami Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):995–9 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Fiberbronchoscopy in smear-negative miliary tuberculosis. Pant K, et al. **Chest** 1989 May;95(5):1151–2
[Tuberculosis simulating cancer. An autopsy study of 12 cases presenting diagnostic difficulties in clinical practice] Chastonay P. **Schweiz Med Wochenschr** 1988 Nov 5; 118(44):1612–5 (Eng. Abstr.) (Fre)
[The AIDS patient with miliary tuberculosis, toxoplasmosis and herpes infection] Zaiss AW, et al. **Med Klin** 1988 Aug 12;83(16):528–31 (Ger)
[Isolated tuberculosis of the hepatobiliary system] Iablokov DD, et al. **Klin Med (Mosk)** 1988 Dec;66(12):26–32 (46 ref.) (Rus)

DRUG THERAPY

Prolonged use of intravenous isoniazid and rifampin. Koestner JA, et al. **DICP** 1989 Jan;23(1):48–50

EPIDEMIOLOGY

[Miliary tuberculosis. Current aspects] Ben Miled T, et al. **Tunis Med** 1988 Dec;66(12):857–61 (Eng. Abstr.) (Fre)

ETIOLOGY

Miliary tuberculosis due to intravesical bacillus Calmette–Guerin therapy. Gupta RC, et al. **Chest** 1988 Dec;94(6):1296–8
Tuberculosis in cadaveric renal allograft recipients. Report of 4 cases and review of the literature. Lenk S, et al. **Eur Urol** 1988;14(6):484–6 (6 ref.)

PATHOLOGY

Bronchoalveolar lavage (BAL) in miliary tuberculosis. Sharma SK, et al. **Tubercle** 1988 Sep;69(3):175–8
[Massive gastrointestinal hemorrhage. Initial manifestation of acute intestinal tuberculosis with miliary involvement in an elderly patient] Weber JC, et al. **Internist (Berlin)** 1989 Jun;30(6):388–90 (Ger)
[Kaposi's sarcoma combined with generalized miliary tuberculosis] Konstantinov GS. **Arkh Patol** 1988; 50(12):58–61 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Tuberculous mastoiditis and laryngitis: a case report. Bryan PA, et al. **Med J Aust** 1989 Jan 2;150(1):41–3

TRANSMISSION

Congenital tuberculosis localised to the ear. Naranbhai RC, et al. **Arch Dis Child** 1989 May;64(5):738–40

TUBERCULOSIS, OCULAR

COMPLICATIONS

Macular subretinal neovascularization in choroidal tuberculosis. Chung YM, et al. **Ann Ophthalmol** 1989 Jun; 21(6):225–9

DIAGNOSIS

[A case of sarcoid uveitis believed for a long time to be tuberculous] Ustinova EI, et al. **Oftalmol Zh** 1988;(4):254–6 (Rus)
[Tuberculoma of the choroid simulating an intraocular tumor] Zakharova GP, et al. **Vestn Oftalmol** 1988 Nov–Dec; 104(6):69–71 (Rus)

PATHOLOGY

Scleral tuberculosis. Saini JS, et al. **Trop Geogr Med** 1988 Oct;40(4):350–2
[Tuberculosis of the conjunctiva and eyelids] Grützner P, et al. **Klin Monatsbl Augenheilkd** 1989 Apr;194(4):270–2 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

[Current problems of phthisio-ophthalmology] Vyrenkova TE. **Probl Tuberk** 1988;(12):11–3 (Eng. Abstr.) (Rus)

TUBERCULOSIS, ORAL see under **TUBERCULOSIS**

TUBERCULOSIS, OSTEOARTICULAR

Tuberculous tenosynovitis [letter] Garcia Cebrian F. **Chest** 1988 Nov;94(5):1119
Spina ventosa: the forgotten diagnosis. Report of one case, review of literature. Rigauts H, et al. **J Belge Radiol** 1989 Feb;72(1):13–6
[Modern aspects of osteoarticular tuberculosis] Ercegan G, et al. **Med Pregl** 1988;41(9–10):362–8 (Eng. Abstr.) (Scr)

COMPLICATIONS

Tuberculous osteitis of the skull. Pelteret RM. **Ann Trop Paediatr** 1989 Mar;9(1):40–2
Unusual rib destruction in pleuropulmonary tuberculosis. Ip M, et al. **Chest** 1989 Jan;95(1):242–4
Simultaneous pneumococcal arthritis and osteoarticular tuberculosis. Klein MD, et al. **South Med J** 1989 May; 82(5):664–5
[Anatomo-clinical conference. Pitié-Salpêtrière Hospital. Case No. 2-1987. Fever and regressive sciatica in a Corsican woman] Vidailhet MJ, et al. **Ann Med Interne (Paris)** 1989;140(3):197–202 (Fre)

DIAGNOSIS

Sellar abscess associated with tuberculous osteomyelitis of the skull: MR findings. Gupta RK, et al. **AJNR** 1989 Mar–Apr;10(2):448
Tuberculosis: a surgical viewpoint [letter] Hodgson SP. **Ann R Coll Surg Engl** 1988 Nov;70(6):396
A sheep in wolf's clothing. Sinnott JT, et al. **Hosp Pract [Off]** 1989 Sep 15;24(9):153–6
Sternal involvement in disseminated tuberculosis [letter] Kalra OP, et al. **J Assoc Physicians India** 1988 Apr; 36(4):292–3
Chronic hip pain and limp in a 3-year-old girl [clinical conference] Salzman AL, et al. **Rev Infect Dis** 1989 Mar–Apr;11(2):341–8
Case report 528: Tuberculous dactylitis (right great toe). Abdelwahab IF, et al. **Skeletal Radiol** 1989;18(2):133–5
Case report 533: Tuberculosis of calcaneus and talus with negative tuberculin skin test. Nielsen FF, et al. **Skeletal Radiol** 1989;18(2):153–5
[Osteolytic foci: is it cancer or not? (letter)] **Ned Tijdschr Geneeskd** 1989 May 27;133(21):1094–5 (Dut)
[Osteolytic foci: cancer or not?] Brakenhoff JA, et al. **Ned Tijdschr Geneeskd** 1989 Feb 25;133(8):377–81 (Dut)
[Tuberculous monoarthritis] Huber HM, et al. **Schweiz Rundsch Med Prax** 1988 Aug 23;77(34):876–83 (Eng. Abstr.) (Ger)

DRUG THERAPY

Comparison of 3 chemotherapeutic regimens of short duration (6 months) in osteo-articular tuberculosis—results after 5 years. Working group on osteo-articular tuberculosis in Algeria. Hannachi MR. **Bull Int Union Tuberc Lung Dis** 1988 Sep;63(3):14–5
Tuberculous mastoiditis and laryngitis [letter] Mukerjee CM. **Med J Aust** 1989 Apr 17;150(8):468
Resolution of secondary amyloidosis 14 years after adequate chemotherapy for skeletal tuberculosis. Sunga MN Jr, et al. **South Med J** 1989 Jan;82(1):92–3

ETIOLOGY

Sternal abscess as a complication of BCG-revaccination. Simili S, et al. **Tubercle** 1988 Mar;69(1):67–9

HISTORY

[The 50th anniversary of the Chair of Extrapulmonary Tuberculosis] Marakusha IG. **Probl Tuberk** 1989;(2):76–8 (Rus)

PATHOLOGY

[Differential diagnostic problems in localized skin and bone tuberculosis with tuberculous changes in the cheek mucosa. Case report] Kern A, et al. **Dermatol Monatsschr** 1988; 174(12):748–52 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Clinical features of tuberculous arthritis. Deesomchok U, et al. **J Med Assoc Thai** 1988 Sep;71(9):496–500

RADIOGRAPHY

Case report 513: Tuberculosis of manubrium sterni. Rajah R. **Skeletal Radiol** 1989;17(8):601–2

Osteo–articular tuberculosis. A radiological study in a Malaysian hospital. Rathakrishnan V, et al. **Skeletal Radiol** 1989;18(4):267–72

[Various aspects of tuberculosis of the hand: apropos of a series of 45 cases] Benkeddache Y, et al. **Ann Chir Main** 1988;7(2):166–75 (Eng. Abstr.) (Fre)

[Tuberculosis of bone and lymph nodes. A case (letter)] Wattiaux MJ, et al. **Presse Med** 1988 Nov 12;17(40):2142 (Fre)

[Clinical and x-ray manifestations and differential diagnosis of tuberculous diseases of the joints] Bellendir EN, et al. **Revmatologiia (Moskva)** 1988 Jul–Sep;(3):64–70 (31 ref.) (Rus)

RADIONUCLIDE IMAGING

[Bone and spinal tuberculosis: rare cause of false negative diagnosis with technetium scintigraphy (letter)] Martin A, et al. **Presse Med** 1988 Sep 17;17(31):1587 (Fre)

SURGERY

Total Knee Arthroplasty for Tuberculous Arthritis [letter; comment] Cella JP. **J Bone Joint Surg [Am]** 1989 Jun; 71(5):789–90. **Comment on:** J Bone Joint Surg [Am] 1988 Oct;70(9):1322–30

Total knee arthroplasty for tuberculous arthritis [see comments] Kim YH. **J Bone Joint Surg [Am]** 1988 Oct; 70(9):1322–30. **Comment in:** J Bone Joint Surg [Am] 1989 Jun;71(5):789–90

Arthroplasty for old tuberculosis of the knee. Eskola A, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):767–9

Charnley low friction arthroplasty in tuberculosis of the hip. An eight to 13–year follow–up. Kim YY, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):756–60

[Surgical treatment of 423 cases of chest wall tuberculosis] Zhu DC. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec;11(6):362–4, 387 (Eng. Abstr.) (Chi)

[Non–free osteochondrous autoplasty in surgery of tuberculosis of the knee joint] Marakusha IG. **Probl Tuberk** 1989;(6):7–10 (Eng. Abstr.) (Rus)

[Surgical treatment of progressive destructive tuberculous arthritis] Sadovoĭ MIa. **Probl Tuberk** 1988;(11):35–9 (Eng. Abstr.) (Rus)

[Allogeneic osteoplasty in the surgical treatment of tuberculous trochanteritis] Tkach SP, et al. **Vestn Khir** 1988 May;140(5):71–2 (Rus)

THERAPY

[Electric stimulation of the muscles in hypokinesia in patients with osteoarticular tuberculosis] Zhukovskiĭ LI, et al. **Probl Tuberk** 1988;(11):39–42 (Eng. Abstr.) (Rus)

TUBERCULOSIS, PERITONEAL

Tuberculous peritonitis in pregnancy. A follow–up. Stirrat G, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):250

Clinical features of peritoneal tuberculosis [letter] Read RC, et al. **J Infect Dis** 1989 Aug;160(2):344–5

BLOOD

Serum–ascites albumin difference in tuberculous peritonitis. Marshall JB, et al. **Am J Gastroenterol** 1988 Nov; 83(11):1259–61

COMPLICATIONS

The place of laparoscopy in women with ascites. Sheth SS. **Br J Obstet Gynaecol** 1989 Jan;96(1):105–6

Omental tuberculosis causing acute intestinal obstruction [letter] Singla S, et al. **Indian J Gastroenterol** 1989 Jan; 8(1):58

Distal colonic tuberculosis with tuberculous enteritis, peritonitis, and pericarditis. Sciammarella JC Jr, et al. **N Y State J Med** 1989 May;89(5):286–8

[Surgical treatment and observation of the therapeutic results in 11 cases of tuberculous adherent intestinal obstruction] Yu Y. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb;12(1):18–9, 61 (Eng. Abstr.) (Chi)

[Ascites and carcinosis–like changes caused by Mycobacterium bovis] Ravn L, et al. **Ugeskr Laeger** 1989 May 8;151(19):1192–3 (Eng. Abstr.) (Dan)

[Umbilical fistula in a patient with asymptomatic course of tuberculous peritonitis] Shcherba BV, et al. **Probl Tuberk** 1988;(9):70 (Rus)

DIAGNOSIS

Tuberculous peritonitis: laparoscopic diagnosis of an uncommon disease in the United States. Reddy KR, et al. **Gastrointest Endosc** 1988 Sep–Oct;34(5):422–6

Tuberculous peritonitis in an adolescent male. Burgess GR, et al. **J Adolesc Health Care** 1988 Sep;9(5):418–20

Laparoscopy in the diagnosis of peritoneal tuberculosis [letter] Fitzgerald JM, et al. **J Infect Dis** 1989 May; 159(5):1007

Ultrasonic appearance of tuberculous peritonitis. Ozkan K, et al. **JCU** 1987 Jun;15(5):350–2

Sonographic features of turberculous omental cakes in peritoneal tuberculosis. Wu CC, et al. **JCU** 1988 Mar–Apr; 16(3):195–8

Diagnostic value of ascites adenosine deaminase in tuberculous peritonitis. Voigt MD, et al. **Lancet** 1989 Apr 8;1(8641):751–4

Case 35–1988 [letter] Cohen ME, et al. **N Engl J Med** 1989 Feb 9;320(6):402

Exploratory laparotomy for diagnosis of tuberculous peritonitis. Lisehora GE, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):299–302

[Immunohistochemical and serologic detection of Ca–125 in patients with peritoneal tuberculosis and ascites] Ronay G, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):61–3 (Eng. Abstr.) (Ger)

[Two cases of tuberculous peritonitis and clinical significance of serum CA–125] Takeshima F, et al. **Kekkaku** 1989 Jan; 64(1):25–30 (Eng. Abstr.) (Jpn)

DRUG THERAPY

Tuberculous peritonitis in a CAPD patient cured without catheter removal: case report, review of the literature, and guidelines for treatment and diagnosis. Mallat SG, et al. **Am J Kidney Dis** 1989 Feb;13(2):154–7 (15 ref.)

ENZYMOLOGY

Adenosine deaminase and tuberculous peritonitis [letter] **Lancet** 1989 Jun 3;1(8649):1260–1

EPIDEMIOLOGY

Clinical features of abdominal tuberculosis. Jakubowski A, et al. **J Infect Dis** 1988 Oct;158(4):687–92

[Diagnostic and therapeutic aspects of peritoneal tuberculosis in Morocco. Apropos of 300 cases] Bennani A, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Dec;24(7):347–54 (Eng. Abstr.) (Fre)

[Tuberculous peritonitis. A rare manifestation of tuberculosis] Hasle G, et al. **Tidsskr Nor Laegeforen** 1988 Nov 30; 108(33):3089–90 (Eng. Abstr.) (Nor)

ETIOLOGY

Peritoneal dialysis–associated tuberculous peritonitis in an intravenous drug user with acquired immunodeficiency syndrome. Baumgartner DD, et al. **Am J Kidney Dis** 1989 Aug;14(2):154–7

Tuberculous peritonitis complicating long–term peritoneal dialysis. Report of 5 cases and review of the literature. Cheng IK, et al. **Am J Nephrol** 1989;9(2):155–61 (25 ref.)

Quiz of the month. Peritonitis complicating continuous ambulatory peritoneal dialysis (CAPD). Norris SH. **Am J Nephrol** 1988;8(6):476, 513

Tuberculous peritonitis in a patient undergoing continuous ambulatory peritoneal dialysis. Yorioka N, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):93–5

[Tuberculous peritonitis with acute onset caused by lymph node rupture following abdominal trauma] Ferrer MT, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):729–30 (Spa)

PATHOLOGY

[A rare case of isolated exudative tuberculous peritonitis—the encapsulated ascitic form] Milchev N, et al. **Akush Ginekol (Sofiia)** 1989;28(1):95–6 (Bul)

[Malabsorption syndrome, fever and chronic renal insufficiency (clinical conference)] **Medicina (B Aires)** 1988; 48(4):409–15 (Spa)

RADIOGRAPHY

Radiology of abdominal tuberculosis. Kapoor VK, et al. **Australas Radiol** 1988 Aug;32(3):365–7

TUBERCULOSIS, PLEURAL

Tuberculous empyema with bronchopleural fistula revisited. Williams J, et al. **J Tenn Med Assoc** 1988 Oct;81(10):622–3

BLOOD

[Thyroid hormone levels in patients with infiltrative pulmonary tuberculosis] Maskoev KM, et al. **Probl Tuberk** 1988;(9):36–40 (Eng. Abstr.) (Rus)

CLASSIFICATION

[Classification of pleurisy] Isblokov DD. **Probl Tuberk** 1989; (4):19–23 (Eng. Abstr.) (Rus)

COMPLICATIONS

Unusual rib destruction in pleuropulmonary tuberculosis. Ip M, et al. **Chest** 1989 Jan;95(1):242–4

Recurrence of Henoch Schoenlein purpura nephritis associated with tuberculous pleuritis. Washio M, et al. **Nippon Jinzo Gakkai Shi** 1988 Sep;30(9):1087–9

[Diagnosis of tuberculous pleural effusion] Szüle P. **Pneumologie** 1989 Feb;43(2):66–8 (Eng. Abstr.) (Ger)

[Late complications of lung and pleural tuberculosis] Krieger HG, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:211–4 (Eng. Abstr.) (Ger)

[A case from practice (129). Patient: Mr. A.W., born 8–23–1933, electrician] Good DJ. **Schweiz Rundsch Med Prax** 1989 Jan 31;78(5):106–7 (Ger)

[Fever, cough, fatigue (clinical conference)] Steiner A, et al. **Schweiz Rundsch Med Prax** 1988 Oct 18;77(42):1144–6 (Eng. Abstr.) (Ger)

DIAGNOSIS

Adenosine deaminase, alpha 1 antitrypsin, alpha 1 acid glycoprotein, ceruloplasmin and protein in the diagnosis of tuberculous pleural effusion. Sulochana G, et al. **Indian J Chest Dis Allied Sci** 1988 Jan–Mar;30(1):15–8

Real–time ultrasound evaluation of tuberculous pleural effusions. Carazo Martínez O, et al. **JCU** 1989 Jul–Aug; 17(6):407–10

[Adenosine deaminase assay for the diagnosis of tuberculous pleural effusion] Yiin KT, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):201–4 (Eng. Abstr.) (Chi)

[Diagnostic value of determination of pleural and serum lysozyme activity in patients with pleural effusion of various causes] Moriwaki Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1274–8 (Eng. Abstr.) (Jpn)

[Means of improving the diagnosis of pleural exudates] Tiukhtin NS, et al. **Probl Tuberk** 1988;(11):18–20 (Eng. Abstr.) (Rus)

DRUG THERAPY

Corticosteroids in the treatment of tuberculous pleurisy. A double–blind, placebo–controlled, randomized study. Lee CH, et al. **Chest** 1988 Dec;94(6):1256–9 (10 ref.)

[Pathogenetic agents in the complex treatment of patients with tuberculous pleurisy] Tsymbalar' GG, et al. **Probl Tuberk** 1989;(4):23–7 (Eng. Abstr.) (Rus)

[Dynamics of respiratory functional disorders in patients with tubercular pleurisy during treatment with pathogenetic agents] Tsymbalar' GG, et al. **Probl Tuberk** 1988;(11):20–4 (Eng. Abstr.) (Rus)

ENZYMOLOGY

[The determination of adenosine deaminase activity in the diagnosis of tuberculous pleuritis (letter)] van Keimpema AR, et al. **Ned Tijdschr Geneeskd** 1988 Oct 22; 132(43):1990–1 (Dut)

[Analysis of adenosine deaminase and its subfractions as a diagnostic parameter in tuberculous pleural effusion] Blanco Vaca F, et al. **Rev Clin Esp** 1989 Jan;184(1):7–11 (33 ref.) (Eng. Abstr.) (Spa)

ETIOLOGY

[A forgotten cause of propneumothorax: tuberculosis (letter)] Catanese V, et al. **Rev Med Interne** 1989 May–Jun;10(3):279 (Fre)

IMMUNOLOGY

Compartmentalization of a CD4+ T lymphocyte subpopulation in tuberculous pleuritis. Barnes PF, et al. **J Immunol** 1989 Feb 15;142(4):1114–9

The immunology of tuberculous pleurisy. Ellner JJ, et al. **Semin Respir Infect** 1988 Dec;3(4):335–42 (56 ref.)

METABOLISM

Potentiation of the macrophage 25–hydroxyvitamin D–1–hydroxylation reaction by human tuberculous pleural effusion fluid. Adams JS, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):457–60

Transpleural gradient of 1,25–dihydroxyvitamin D in tuberculous pleuritis. Barnes PF, et al. **J Clin Invest** 1989 May;83(5):1527–32

Purified protein derivative induced cytotoxicity in carcinomatous and tuberculous pleurisy. Okubo Y, et al. **Jpn J Med** 1988 Aug;27(3):255–60

[The clinical value of determining the general antitrypsin activity of the blood and exudate in tuberculous pleurisy] Tiukhtin NS, et al. **Probl Tuberk** 1989;(6):37–40 (Eng. Abstr.) (Rus)

PATHOLOGY

Numerous mesothelial cells in tuberculous pleural effusions. Lau KY. **Chest** 1989 Aug;96(2):438–9

Tuberculous pleural effusions: lymphocyte phenotypes in comparison with other lymphocyte–rich effusions. Guzman J, et al. **Diagn Cytopathol** 1989;5(2):139–44

Biopsy–documented tuberculous pleural effusion in a patient with biopsy–proven coexisting sarcoidosis. Giotaki HA, et al. **Respiration** 1988;54(3):193–6

PHYSIOPATHOLOGY

Influence of a fibrothorax on the flow/volume curve. Bolliger CT, et al. **Respiration** 1988;54(3):197–200

RADIOGRAPHY

Discrete pleural masses without effusion in a young man: an unusual presentation of tuberculosis. Blunt SB, et al. **Thorax** 1989 May;44(5):436–7

SURGERY

Postoperative preservation of pulmonary function in patients with chronic empyema thoracis: a one–stage operation. Nakaoka K, et al. **Ann Thorac Surg** 1989 Jun;47(6):848–52

[Omental pedicle plombage in the treatment of chronic empyema and bronchial fistula] Ge BS.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Dec; 11(6):356–8, 386–7 (Eng. Abstr.) (Chi)

THERAPY

Computed tomographic appearance of an oleothorax. Deboisblanc BP, et al. Thorax 1988 Jul;43(7):572–3

TUBERCULOSIS, PULMONARY

see related
COLLAPSE THERAPY
MASS CHEST X-RAY
PNEUMONECTOMY

Tuberculosis update. Hamrick RM 3d, et al.
Am Fam Physician 1988 Oct;38(4):205–13 (22 ref.)
Tuberculous tenosynovitis [letter] Garcia Cebrian F.
Chest 1988 Nov;94(5):1119
The diagnosis and management of disease caused by M. avium complex, M. kansasii, and other mycobacteria. Davidson PT. Clin Chest Med 1989 Sep;10(3):431–43 (94 ref.)
Segmental consolidation and a pulmonary nodule in a young patient. Singh P, et al. Indian J Chest Dis Allied Sci 1988 Jan–Mar;30(1):41–5
Geriatric tuberculosis in Himachal Pradesh—a clinico-radiological profile. Arora VK, et al.
J Assoc Physicians India 1989 Mar;37(3):205–7
Pulmonary tuberculosis in the elderly. Report of a case discovered at death. Matthew–Thompson L, et al.
J Natl Med Assoc 1988 Sep;80(9):1023–6
Clinical features of pulmonary tuberculosis in young and elderly men. Umeki S. Jpn J Med 1989 May–Jun; 28(3):341–7
Abstracts of joint meeting of the British Thoracic and Tuberculosis Association and the Swedish Association for Lung Medicine. Uppsala, May 15th–17th 1975.
Scand J Respir Dis Suppl 1975;93:1–15
[Current aspects of pulmonary tuberculosis in the hospital milieu] Chrétien J, et al. Ann Med Interne (Paris) 1989; 140(4):285–7 (Fre)
[Tuberculosis in children in the early 90's] Battistini A, et al. Pediatr Med Chir 1989 Jan–Feb;11(1):1–11 (15 ref.) (Eng. Abstr.) (Ita)
[A method of evaluating the effectiveness of advanced training courses for phthisiologists] Borisova NK, et al. Probl Tuberk 1989;(4):13–5 (Eng. Abstr.) (Rus)
[Ways to integrate phthisiology and pulmonology] Gamperis IuL. Probl Tuberk 1988;(8):3–4 (Eng. Abstr.) (Rus)
[Speeding-up and improving the training of medical students in phthisiology] Kalinichev GA. Probl Tuberk 1989; (2):13–4 (Eng. Abstr.) (Rus)
[What type of curriculum in phthisiology should there be for medical students?] Kolomiets VM, et al.
Probl Tuberk 1989;(2):14–7 (Eng. Abstr.) (Rus)
[Problem of postgraduate training of phthisiologists] Kucher VA. Probl Tuberk 1989;(4):15–9 (Eng. Abstr.) (Rus)
[Sociomedical significance of chronic pulmonary tuberculosis] Radosavljević G, et al. Srp Arh Celok Lek 1988 Jun;116(6):531–7 (Eng. Abstr.) (Sec)

BLOOD

INH and streptomycin in Ethiopian children with tuberculosis and different nutritional status. Eriksson M, et al. Acta Paediatr Scand 1988 Nov;77(6):890–4
The role of cachectin/TNF in the pathogenesis of tuberculosis. Silva CL, et al. Braz J Med Biol Res 1988; 21(3):489–92
Functional variations in leucocytes in childhood pulmonary tuberculosis. Roy–Salam S, et al. Indian Pediatr 1988 Jul; 25(7):675–8
Serum levels of C-reactive protein in patients with pulmonary tuberculosis and malignant tumors of the chest. Massilta P, et al. Infection 1989 Jan–Feb;17(1):13–4
Rifampicin–aluminium antacid interaction. Gupta PR, et al.
J Assoc Physicians India 1988 Jun;36(6):363–4
[Determination and analysis of some serum trace elements of active pulmonary tuberculosis] Yu KJ.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1989 Feb; 12(1):10–1, 60 (Eng. Abstr.) (Chi)
[A method of determining allergic changes in leukocytes] Morozov VL, et al. Lab Delo 1989;(5):68–70 (Eng. Abstr.) (Rus)
[Changes in the antiproteolytic activity of the blood in tuberculosis] Ivaniuta OM, et al. Probl Tuberk 1988; (10):34–6 (Eng. Abstr.) (Rus)
[Thyroid hormone levels in patients with infiltrative pulmonary tuberculosis] Maskeev KM, et al.
Probl Tuberk 1988;(9):36–40 (Eng. Abstr.) (Rus)
[The interleukin system and the energy enzyme activity in lymphocytes of patients with newly detected pulmonary tuberculosis] Mishin VIu, et al. Probl Tuberk 1988;(6):55–9 (Eng. Abstr.) (Rus)
[Natural killer cells in the peripheral blood of patients with tuberculosis, pneumonia and cancer of the lungs] Savula MM, et al. Probl Tuberk 1988;(11):47–9 (Eng. Abstr.) (Rus)
[Antiproteolytic activity of the blood serum in adolescents with pulmonary tuberculosis] Il'nitskiĭ IG, et al.
Vrach Delo 1989 Jan;(1):72–4 (Eng. Abstr.) (Rus)
[Rifampicin pharmacokinetics in patients with destructive pulmonary tuberculosis] Karkishchenko NN, et al.
Vrach Delo 1988 Dec;(12):72–3 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

[Idiopathic fibrosing alveolitis complicated by steroidal tuberculosis] Kalinichev GA, et al. Ter Arkh 1989; 61(3):118–9 (Rus)

CLASSIFICATION

[Elaboration of the criteria for the forming of group VII for outpatient observation] Kuznetsova GG, et al.
Vrach Delo 1988 Sep;(9):120–1 (Rus)

COMPLICATIONS

Atypical mycobacterial infection of the lung in rheumatoid arthritis. Watkin SW, et al. Ann Rheum Dis 1989 Apr; 48(4):336–8
Surgical resection for complications of pulmonary tuberculosis. Reed CE, et al. Ann Thorac Surg 1989 Aug; 48(2):165–7
Tuberculous osteitis of the skull. Pelteret RM.
Ann Trop Paediatr 1989 Mar;9(1):40–2
Disseminated tuberculosis causing acute adrenal failure, C.T. findings with post mortem correlation. Osborne TM, et al. Australas Radiol 1988 Aug;32(3):394–7
Pulmonary tuberculosis in Behçet's syndrome. Efthimiou J, et al. Br J Dis Chest 1988 Jul;82(3):300–4
Unusual rib destruction in pleuropulmonary tuberculosis. Ip M, et al. Chest 1989 Jan;95(1):242–4
Endobronchial tuberculosis in the acquired immunodeficiency syndrome. Wasser LS, et al. Chest 1988 Dec;94(6):1240–4
Pulmonary tuberculosis associated with adult respiratory distress syndrome. Lee HJ, et al.
Chung Hua I Hsueh Tsa Chih 1987 Dec;40(6):569–76
Mycobacterial disease in patients infected with the human immunodeficiency virus. Sathe SS, et al.
Clin Chest Med 1989 Sep;10(3):445–63 (89 ref.)
Computed tomography of bronchiectasis in association with tuberculosis. Shin MS, et al. Clin Imaging 1989 Mar; 13(1):36–43
Unusual pattern of lung uptake of technetium-99m sulfur colloid seen on the liver scan of a patient with pulmonary tuberculosis. Stewart CA, et al. Clin Nucl Med 1989 Apr; 14(4):271–4
Renal involvement in chronic pulmonary tuberculosis. Somvanshi PP, et al. Indian J Med Sci 1989 Mar;43(3):55–8
Mycobacterial diseases. Tuberculosis and Mycobacterium avium complex. Jacobson MA.
Infect Dis Clin North Am 1988 Jun;2(2):465–74 (54 ref.)
Peliosis thymomis: association with tuberculosis [letter] Williams DJ, et al. J Clin Pathol 1989 Mar;42(3):331
Tuberculosis and human immunodeficiency virus infection. Chaisson RE, et al. J Infect Dis 1989 Jan;159(1):96–100 (15 ref.)
Symptomatic hypercalcemia pulmonary tuberculosis. Cipola L, et al. J Ky Med Assoc 1989 Jan;87(1):13–6
Synchronous mycotic aneurysms secondary to tuberculosis. Ringswald M, et al. J Ky Med Assoc 1989 Jul;87(7):320–4
Ultrasonic assisted permanent pacing in a patient with severe pulmonary tuberculosis. Lau CP, et al. PACE 1989 Jul;12(7 Pt 1):1131–6
Late complications of tuberculosis. Kreel L.
Postgrad Med J 1988 May;64(751):379–81
Poncet's disease: tuberculous rheumatism. Dall L, et al.
Rev Infect Dis 1989 Jan–Feb;11(1):105–7 (17 ref.)
Hyperthyroidism without elevated levels of thyroxine and triiodothyronine in a patient with pulmonary tuberculosis. Archambeaud–Mouveroux F, et al. South Med J 1989 Jul; 82(7):907–10
Increased incidence of pulmonary tuberculosis in chronic interstitial lung disease. Shachor Y, et al. Thorax 1989 Feb; 44(2):151–3
Melioidosis: a serological survey in a tuberculosis sanatorium in Hong Kong. So SY, et al.
Trans R Soc Trop Med Hyg 1987;81(6):1017–9
Tropical infections after renal transplantation. Gueco I, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2105–7
Is tuberculosis a contraindication for renal transplantation? Samhan M, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2036–8
Pulmonary tuberculosis complicated by bronchopleural fistula. van der Werf TS, et al. Trop Doct 1989 Jan; 19(1):31–3
Recurrent pneumothoraces in miliary tuberculosis. Chandra KS, et al. Trop Geogr Med 1988 Oct;40(4):347–9
Mycobacterium xenopi infection and aspergilloma. Johnston ID. Tubercle 1988 Jun;69(2):139–43 (7 ref.)
Susceptibility to tuberculosis in patients with coeliac disease. Williams AJ, et al. Tubercle 1988 Dec;69(4):267–74
[A case-control study of lung cancer and pulmonary tuberculosis] Zheng W.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Jun; 11(3):135–8, 190 (Eng. Abstr.) (Chi)
[Tuberculosis and anti-HIV seropositivity in Kinshasa, Zaire] Willame JC, et al. Ann Soc Belg Med Trop 1988 Jun; 68(2):165–7 (Fre)
[A case of Reiche's tuberculosis, acute tuberculosis with hematologic manifestations] Zegaya M, et al.
Rev Mal Respir 1988;5(6):655–7 (Eng. Abstr.) (Fre)
[A forgotten cause of pyopneumothorax: tuberculosis (letter)] Catanese V, et al. Rev Med Interne 1989 May–Jun;10(3):279 (Fre)
[Aspergilloma and tuberculous sequestration] Auregan G, et al. Rev Pneumol Clin 1988;44(4):190–1 (Eng. Abstr.) (Fre)
[Diagnosis of tuberculous pleural effusion] Sziile P.
Pneumologie 1989 Feb;43(2):66–8 (Eng. Abstr.) (Ger)
[The status of tuberculosis in West Germany in 1988 with reference to the possible relation to AIDS] Ferlinz R, et al. Prax Klin Pneumol 1988 Sep;42(9):693–700 (Eng. Abstr.) (Ger)
[Late complications of lung and pleural tuberculosis] Krieger HG, et al. Prax Klin Pneumol 1988 Jun;42 Suppl 1:211–4 (Eng. Abstr.) (Ger)
[Abdominal tuberculosis and open lung tuberculosis caused by mycobacterium bovis] Danuser H, et al.
Schweiz Med Wochenschr 1989 Apr 15;119(15):467–72 (Eng. Abstr.) (Ger)
[Primary left lower lobe tuberculosis and diabetes mellitus] Heinrich I, et al. Harefuah 1989 Apr 2;116(7):354–5 (Eng. Abstr.) (Heb)
[Pulmonary tuberculosis in patients with oral cancer] Hara H, et al. Gan No Rinsho 1988 Oct;34(12):1647–53 (Eng. Abstr.) (Jpn)
[Development and treatment of respiratory failure due to tuberculosis] Haga T. Kekkaku 1989 Feb;64(2):105–19 (4 ref.) (Eng. Abstr.) (Jpn)
[Pulmonary tuberculosis and mycotic infection—clinical and serological diagnosis] Iwata H, et al. Kekkaku 1989 Jan; 64(1):7–13 (Eng. Abstr.) (Jpn)
[A case of Mycobacterium scrofulaceum lung infection occurring in old lung tuberculosis lesion] Umeki S.
Kekkaku 1989 Jan;64(1):31–5 (Eng. Abstr.) (Jpn)
[Three cases of pulmonary tuberculosis, complained of hoarseness and were diagnosed as being complicated with laryngeal tuberculosis] Yamagishi F, et al. Kekkaku 1988 Sep;63(9):611–5 (Eng. Abstr.) (Jpn)
[Aspergilloma in tuberculous cavities] Iwata H, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Aug; 26(8):812–24 (Eng. Abstr.) (Jpn)
[A case report of intrapulmonary bronchogenic cyst with tuberculosis] Matsumura A, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Aug; 26(8):888–92 (16 ref.) (Eng. Abstr.) (Jpn)
[AIDS and tuberculosis] Anastasatu C.
Rev Ig [Pneumoftiziol] 1988 Apr–Jun;37(2):97–108 (60 ref.) (Rum)
[Clinical and isoenzymatic characteristics of hepatitis B in pulmonary tuberculosis] Andriutsa KA. Probl Tuberk 1988; (6):22–7 (Eng. Abstr.) (Rus)
[Intravital diagnosis of dissecting aortic aneurysm in a patient with pulmonary tuberculosis] Belen'kaia TIu, et al.
Probl Tuberk 1988;(9):72–3 (Rus)
[Pneumocystis carinii pneumonia in children with tuberculosis of the respiratory organs] Borisova NK, et al.
Probl Tuberk 1989;(2):20–3 (Eng. Abstr.) (Rus)
[AIDS and its manifestations in the form of tuberculosis and other pathology of the lungs] Erokhin VV, et al.
Probl Tuberk 1989;(1):67–71 (49 ref.) (Rus)
[Clinico-immunologic characteristics of patients with pulmonary tuberculosis, psychic diseases and a congenital glucose-6-phosphate dehydrogenase deficiency] Insanov AB, et al. Probl Tuberk 1989;(6):10–5 (Eng. Abstr.) (Rus)
[Multiple primary malignant tumors and pulmonary tuberculosis] Kalinichev GA, et al. Probl Tuberk 1988; (9):71–2 (Rus)
[A case of disseminated (hematogenic) tuberculosis predominantly affecting the liver and spleen] Lantsova NA, et al. Probl Tuberk 1989;(2):72–3 (Rus)
[The course of nonspecific odontogenic allergy in patients with pulmonary tuberculosis in relation to oral hygiene] Ovezov ES, et al. Probl Tuberk 1989;(3):18–22 (Eng. Abstr.) (Rus)
[Mechanism of the hypotensive effect of sodium oxybutyrate in pulmonary hypertension in experimental tuberculosis in dogs] Prilmak AA, et al. Probl Tuberk 1989;(5):46–50 (Eng. Abstr.) (Rus)
[Epidemiological hazard of alcoholic patients with tuberculosis and the organizational measures to reduce it] Rudoĭ NM. Probl Tuberk 1988;(7):6–9 (Eng. Abstr.) (Rus)
[Occurrence, clinical manifestations, course and outcomes of tuberculosis of the lungs in patients with mental diseases and alcoholism] Rudoĭ NM, et al. Probl Tuberk 1989; (1):61–4 (Rus)
[Bronchopulmonary local defense in nonspecific endobronchitis in patients with tuberculosis] Shesterina MV. Probl Tuberk 1989;(5):28–32 (Eng. Abstr.) (Rus)
[Diagnosis of disorders of the bile excretory system in patients with tuberculosis in association with chronic opisthorchiasis] Strelis AK, et al. Probl Tuberk 1989; (1):74–5 (Rus)
[Tuberculosis of the lungs complicated by opisthorchiasis under conditions of the extreme north] Vasil'ev AV, et al. Probl Tuberk 1989;(6):41–4 (Eng. Abstr.) (Rus)
[Diagnosis of cancer of the lung in patients with tuberculosis and subjects with post-tuberculosis changes of the lungs] Zhingel' IP, et al. Probl Tuberk 1989;(6):26–97 (Eng. Abstr.) (Rus)
[Use of nitrong in the treatment of chronic pulmonary heart

disease in pulmonary tuberculosis] Ershov AI, et al. **Sov Med** 1989;(5):76–9 (Rus)

[Tuberculosis and cancer of the lungs] Kogan EK, et al. **Sov Med** 1988;(10):18–20 (Eng. Abstr.) (Rus)

[Analysis of endothoracic perforation of the lymph nodes in our patients over a 5-year-period] Milković D, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):63–4 (Eng. Abstr.) (Scr)

[A 46-year-old man with treated pulmonary tuberculosis and later subacute neurological deterioration (clinical conference)] **Rev Clin Esp** 1988 Apr;182(7):379–87 (Spa)

[Adenocarcinoma and active pulmonary tuberculosis (letter)] Fernández de Sevilla T, et al. **Rev Clin Esp** 1988 Apr; 182(7):393 (Spa)

[Transcatheter embolization of bronchial arteries in the treatment of massive hemoptysis] Hernández Lezana A, et al. **Rev Clin Esp** 1988 Jul;183(3):120–3 (Eng. Abstr.) (Spa)

[Association of mucoviscidosis in an adult with pulmonary tuberculosis (letter)] Solano Reina S, et al. **Rev Clin Esp** 1988 Oct;183(5):281–2 (Spa)

DIAGNOSIS

An assessment of the lower limit of specificity of the clinical definition of AIDS in Africa [letter] Mamun KZ, et al. **Aids** 1989 May;3(5):323–4

Pulmonary disease caused by Mycobacterium chelonae in a heart–lung transplant recipient with obliterative bronchiolitis. Trulock EP, et al. **Am Rev Respir Dis** 1989 Sep;140(3):802–5

Unsuspected pulmonary tuberculosis in a community teaching hospital. Counsell SR, et al. **Arch Intern Med** 1989 Jun;149(6):1274–8

Efficacy of two mycobacterial antigen preparations in the serodiagnosis of tuberculosis by enzyme-linked immunosorbent assay. Stavri D, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jan–Mar;47(1):11–5

Non-tuberculous mycobacterial diseases of the lung in a pulmonology department. Papillon F, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):17–9

Endobronchial tuberculosis simulating foreign body aspiration. Caglayan S, et al. **Chest** 1989 May;95(5):1164

Clinical predictors of malignancy [letter] de Gracia J, et al. **Chest** 1989 Jan;95(1):251–2

Differentiation of sarcoidosis from tuberculosis using an enzyme-linked immunosorbent assay for the detection of antibodies against Mycobacterium tuberculosis. Levy H, et al. **Chest** 1988 Dec;94(6):1254–5

Detecting antimycobacterial antibodies [letter; comment] Van Vooren JP, et al. **Chest** 1989 Jul;96(1):223–4. **Comment on:** Chest 1988 Apr;93(4):762–6

The modern mycobacteriology laboratory. How it can help the clinician. Good RC, et al. **Clin Chest Med** 1989 Sep; 10(3):315–22 (53 ref.)

Evaluation of monoclonal antibodies in the serodiagnosis of tuberculosis: a preliminary study. Githui WA. **East Afr Med J** 1988 Oct;65(10):680–5

Fibreoptic bronchoscopy in smear-negative pulmonary tuberculosis. Chawla R, et al. **Eur Respir J** 1988 Oct; 1(9):804–6

Features in hospitalized patients with symptom-detected or radiologically-detected pulmonary tuberculosis. Herer B, et al. **Eur Respir J** 1989 Jan;2(1):3–6

Serodiagnosis of tuberculosis. Ridell M. **Eur Respir J** 1988 Jul;1(7):587–8

The humoral immune response after BCG vaccination in humans: consequences for the serodiagnosis of tuberculosis. Turneer M, et al. **Eur Respir J** 1988 Jul;1(7):589–93

Mycobacterial infection mimicking inflammatory 'pseudotumour' of the lung. Loo KT, et al. **Histopathology** 1989 Feb;14(2):217–9

A sheep in wolf's clothing. Sinnott JT, et al. **Hosp Pract [Off]** 1989 Sep 15;24(9):153–6

Monoclonal antibodies selectively directed against the cell wall surface of Mycobacterium tuberculosis. Mauch H, et al. **J Clin Microbiol** 1988 Sep;26(9):1691–4

Fiberoptic bronchoscopy in diagnosis of patients with suspected active pulmonary tuberculosis. Wongthim S, et al. **J Med Assoc Thai** 1989 Mar;72(3):154–9

Enzyme-linked immunosorbent assay for the differential diagnosis of pulmonary tuberculosis and pulmonary diseases due to Mycobacterium avium–intracellulare complex. Amano H, et al. **Jpn J Med** 1989 Mar–Apr; 28(2):196–201

The evaluation of ADA activity in pleural effusion for the diagnosis of tuberculous pleural effusion. Kao SJ, et al. **Kekkaku** 1988 Jun;63(6):441–6

Comparative evaluation of the diagnostic significance of circulating immune complexes and antibodies to phosphatidylinositomannosides in pulmonary tuberculosis by enzyme-linked immunosorbent assay. Mehta PK, et al. **Med Microbiol Immunol (Berl)** 1989;178(4):229–33

Infection with Mycobacterium avium complex in patients without predisposing conditions [see comments] Prince DS, et al. **N Engl J Med** 1989 Sep 28;321(13):863–8. **Comment in:** N Engl J Med 1989 Sep 28;321(13):896–8

Pneumonia and pulmonary tuberculosis in pregnancy. Maccato ML. **Obstet Gynecol Clin North Am** 1989 Jun; 16(2):417–30 (42 ref.)

Diagnosis and management of tuberculosis during pregnancy. Medchill MT, et al. **Obstet Gynecol Surv** 1989 Feb; 44(2):81–4 (24 ref.)

The diagnostic yield of prebronchoscopy sputa and bronchial washings in patients with biopsy-proven pulmonary tuberculosis. Levy H, et al. **S Afr Med J** 1989 Jun 3; 75(11):527–8

Comparative study of cold stain and Ziehl–Neelsen stain. Pathan AJ, et al. **Tubercle** 1988 Sep;69(3):227–9

Extension of pulmonary tuberculosis after fibreoptic bronchoscopy. Rimmer J, et al. **Tubercle** 1988 Mar; 69(1):57–61

Serious sequelae of delayed diagnosis of endobronchial tuberculosis. Tse CY, et al. **Tubercle** 1988 Sep;69(3):213–6

[Uses of determination on IgG-antibody against mycobacterial antigens for the diagnosis in pulmonary tuberculosis] **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):222–4, 255 (Eng. Abstr.) (Chi)

[Evaluation of fiberoptic bronchoscopy in the diagnosis of pulmonary tuberculosis] Chen RH, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Apr; 11(2):105–6 (15 ref.) (Chi)

[Diagnostic value of fiberoptic bronchoscopy examination in smear-negative pulmonary tuberculosis] Chen WB. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Apr; 11(2):65–8, 126 (Eng. Abstr.) (Chi)

[Preliminary study on the diagnosis of active tuberculosis by using the ABC-ELISA method] Wang X. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):32–3, 63–4 (Eng. Abstr.) (Chi)

[Case-finding in pulmonary tuberculosis in outpatients at a general hospital] Wang ZR. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):27–9, 63 (Eng. Abstr.) (Chi)

[Registration of diagnosis and treatment of bacteriologically confirmed lung tuberculosis in The Netherlands, 1973–1984] van Geuns HA, et al. **Ned Tijdschr Geneeskd** 1988 Sep 17;132(38):1754–7 (Eng. Abstr.) (Dut)

[Primary endobronchial tuberculosis (letter)] Tannous R, et al. **Rev Pneumol Clin** 1988;44(4):215 (Fre)

[Perfusion scintigraphy and x-ray diagnosis of pulmonary tuberculosis] Palsamarcuk VP, et al. **Radiobiol Radiother (Berl)** 1988;29(4):481–8 (Eng. Abstr.) (Ger)

[Fever, productive cough, night sweats (clinical conference)] Overlack A, et al. **Schweiz Rundsch Med Prax** 1989 Jun 27;78(26):751–3 (Eng. Abstr.) (Ger)

[Tuberculosis in a general hospital 1987] Abu-Shakra M, et al. **Harefuah** 1989 Apr 2;116(7):351–4 (Eng. Abstr.) (Heb)

[Exacerbation of pulmonary tuberculosis after diagnostic bronchoscopy and its preventive medication] Sakatani M, et al. **Kekkaku** 1988 Dec;63(12):773–7 (Eng. Abstr.) (Jpn)

[Diagnosis of tuberculosis—analysis of 399 cases of pulmonary tuberculosis diagnosed during the last 7 years] Sato H, et al. **Kekkaku** 1988 Jul;63(7):501–5 (Eng. Abstr.) (Jpn)

[Usefulness of bacteriologic examination of specimens obtained by fine-needle aspiration biopsy of the lungs in the diagnosis of tuberculosis] Sedlaczek A, et al. **Pneumonol Pol** 1988 Sep;56(9):406–10 (Eng. Abstr.) (Pol)

[Difficulties in the diagnosis of tuberculosis] Wiatr E, et al. **Pneumonol Pol** 1988 Sep;56(9):411–21 (Eng. Abstr.) (Pol)

[Value of bronchoscopic examination in the diagnosis of diseases of the respiratory system. I. Neoplasms of the respiratory tract and tuberculosis] Owsiński J. **Przegl Lek** 1988;45(5):432–7 (Eng. Abstr.) (Pol)

[Diagnostic difficulties in pulmonary tuberculosis following pulmonary abscess (3 clinical cases)] Dobre V, et al. **Rev Ig [Pneumoftiziol]** 1988 Apr–Jun;37(2):175–82 (Eng. Abstr.) (Rum)

[Changes in the spirographic values of patients with pulmonary tuberculosis hospitalized at the Phthisiology Section in Dej] Nicola DL. **Rev Ig [Pneumoftiziol]** 1988 Apr–Jun;37(2):161–72 (Eng. Abstr.) (Rum)

[Differential diagnosis of immunopathologic and bacterial pulmonary inflammation] Chumakova LP, et al. **Klin Med (Mosk)** 1988 Dec;66(12):44–8 (Eng. Abstr.) (Rus)

[Nonspecific (paratuberculous) reactions in the practice of an internist] Mukhin NA, et al. **Klin Med (Mosk)** 1989 Jun; 67(6):142–6 (Rus)

[Cytologic studies in the differential diagnosis of pulmonary tuberculosis and lung cancer] Piatnochka IT, et al. **Lab Delo** 1988;(12):47–9 (Eng. Abstr.) (Rus)

[Significance of the methods of detecting pulmonary tuberculosis in its diagnosis and treatment in people aged 60 and over living in rural districts] Akhtyrskii AI, et al. **Probl Tuberk** 1988;(10):13–5 (Eng. Abstr.) (Rus)

[Clinico-roentgenologic characteristics of patients with pulmonary tuberculosis and damage to segment VI and results of their treatment] Anastas'ev VS, et al. **Probl Tuberk** 1989;(6):33–7 (Eng. Abstr.) (Rus)

[Chemofluorometry in the differential diagnosis of pulmonary tuberculosis] Autenshlius AI, et al. **Probl Tuberk** 1988; (7):25–9 (Eng. Abstr.) (Rus)

[Increasing the effectiveness of microbiological diagnosis of limited nondestructive pulmonary tuberculosis] Gamzaeva NF, et al. **Probl Tuberk** 1989;(2):55–7 (Rus)

[Non-tuberculous diseases of the lungs in adolescents referred to tuberculosis hospitals] Ianchevskaia AA, et al. **Probl Tuberk** 1988;(9):21–3 (Eng. Abstr.) (Rus)

[Bronchial changes in chronic bronchitis in patients with tuberculosis of the respiratory organs] Iankunene NIu, et al. **Probl Tuberk** 1988;(7):63–6 (Rus)

[Subcutaneous tuberculin tests at a geriatric tuberculosis clinic] Iashchenko BP, et al. **Probl Tuberk** 1988;(11):14–8 (Eng. Abstr.) (Rus)

[Differential diagnosis of acute nonspecific diseases of the lungs and tuberculosis under the conditions at a rural tuberculosis hospital] Kalabukha AV, et al. **Probl Tuberk** 1989;(6):67–71 (Rus)

[Tuberculosis first detected in subjects over 70 years old] Koretskaia NM, et al. **Probl Tuberk** 1989;(1):21–3 (Eng. Abstr.) (Rus)

[Clinico-biochemical aspects of differential diagnosis of tuberculosis and sarcoidosis of the respiratory organs] Kostina ZI, et al. **Probl Tuberk** 1988;(7):21–5 (Eng. Abstr.) (Rus)

[Fluorescent properties of the blood serum of patients with infiltrative pulmonary tuberculosis and acute pneumonia] Malyshev VV, et al. **Probl Tuberk** 1988;(9):55–6 (Eng. Abstr.) (Rus)

[The prognosis of relapses of pulmonary tuberculosis] Nedlinskaia NN. **Probl Tuberk** 1988;(8):4–7 (Eng. Abstr.) (Rus)

[Characteristics of the diagnosis of bronchogenic carcinoma in patients with pulmonary tuberculosis] Piatnochka IT. **Probl Tuberk** 1988;(7):60–2 (Rus)

[Organization of the differential diagnosis of tuberculosis and other diseases of the lungs in patients with tuberculosis, suffering from psychic disorders] Shcherbatiuk AS, et al. **Probl Tuberk** 1989;(1):64–7 (Rus)

[Functions of a district phthisiologist in ambulatory practice] Shefer LB, et al. **Probl Tuberk** 1988;(6):12–7 (Eng. Abstr.) (Rus)

[Pulmonary carcinoid imitating tuberculoma in an adolescent] Shimko EP, et al. **Probl Tuberk** 1989;(3):72–3 (Rus)

[Detection of tuberculosis and nonspecific lung diseases in chemical industrial enterprises] Tolstykh SA. **Probl Tuberk** 1988;(10):8–13 (Eng. Abstr.) (Rus)

[A coelomic cyst of the pericardium simulating a tuberculoma of the lung] Volkova KI, et al. **Probl Tuberk** 1988;(10):65–7 (Rus)

[A rare case of generalized angiosarcomatosis, masked by pulmonary tuberculosis and systemic vasculitis] Bruk BB, et al. **Ter Arkh** 1989;61(5):137–8 (Rus)

[Errors in the diagnosis of tuberculosis of the respiratory organs in a pulmonological hospital and the possibilities of their prevention] Daniliak IG, et al. **Ter Arkh** 1988; 60(7):109–12 (Eng. Abstr.) (Rus)

[Clinical characteristics of pulmonary tuberculosis detected in groups at risk] Mirinov GB, et al. **Vrach Delo** 1989 Jan; (1):74–5 (Eng. Abstr.) (Rus)

[Significance of entropy of the blood serum protein fractions in the differential diagnosis of pulmonary tuberculosis and cancer] Piatnochka IT, et al. **Vrach Delo** 1988 Sep;(9):79–80 (Eng. Abstr.) (Rus)

[Phonopulmonography in examining the patient with pulmonary tuberculosis] Podlesnykh GA. **Vrach Delo** 1989 Apr;(4):86–7 (Eng. Abstr.) (Rus)

[Diagnostic errors in detecting open forms of pulmonary tuberculosis] Popova II, et al. **Vrach Delo** 1989 Feb;(2):45–7 (Eng. Abstr.) (Rus)

[Assessment of the activity of pulmonary tuberculosis detected in a migrating rural population] Shimko ZP. **Vrach Delo** 1989 Mar;(3):65–7 (Eng. Abstr.) (Rus)

[Determination of antibodies to mycobacterial antigens in tuberculosis by erythrocyte immunoadsorption with a rosette marker] Ptaskin DIu, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):79–82 (Eng. Abstr.) (Rus)

[The role of cytology in the early diagnosis of pulmonary tuberculosis] Agbaba-Primorac R, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):65–8 (Eng. Abstr.) (Scr)

[The role of broncho-alveolar lavage in the diagnosis of pulmonary diseases] Khomenko AG. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):22–5 (Eng. Abstr.) (Scr)

[News in the bacteriologic diagnosis of tuberculosis] Rus A. **Plucne Bolesti** 1988 Jul–Dec;40(3–4):163–5 (Eng. Abstr.) (Scr)

[A young man with pneumonia with a torpid course (clinical conference)] **Rev Clin Esp** 1989 Jun;183(2):91–6 (Spa)

[Bronchoalveolar lavage in the diagnosis of pulmonary tuberculosis (letter)] de Gracia J, et al. **Rev Clin Esp** 1989 May;184(9):500–1 (Spa)

[Bronchial aspirate in the diagnosis of pulmonary tuberculosis] Hernández Flix S, et al. **Rev Clin Esp** 1988 Oct;183(6):309–10 (Eng. Abstr.) (Spa)

DRUG THERAPY

Five-year follow-up of a clinical trial of three 6-month regimens of chemotherapy given intermittently in the continuation phase in the treatment of pulmonary tuberculosis. Singapore Tuberculosis Service/British Medical Research Council. **Am Rev Respir Dis** 1988 May; 137(5):1147–50

A controlled trial of 3-month, 4-month, and 6-month regimens of chemotherapy for sputum-smear-negative pulmonary tuberculosis. Results at 5 years. Hong Kong Chest Service/Tuberculosis Research Centre, Madras/British Medical Research Council.

Am Rev Respir Dis 1989 Apr;139(4):871–6
Pulmonary tuberculosis in South African gold miners. Cowie RL, et al. Am Rev Respir Dis 1989 May;139(5):1086–9
Smear- and culture-negative pulmonary tuberculosis: four-month short-course chemotherapy. Dutt AK, et al. Am Rev Respir Dis 1989 Apr;139(4):867–70
To treat or not to treat, that was the question [editorial] Sbarbaro J. Am Rev Respir Dis 1989 Apr;139(4):865–6
The results of 9-month isoniazid-rifampin therapy for pulmonary tuberculosis under program conditions in San Francisco. Slutkin G, et al. Am Rev Respir Dis 1988 Dec; 138(6):1622–4
Good tolerance of pyrazinamide in children with pulmonary tuberculosis [letter] le Bourgeois M, et al. Arch Dis Child 1989 Jan;64(1):177–8
Profiles of non-compliance with antituberculous therapy. Wardman AG, et al. Br J Dis Chest 1988 Jul;82(3):285–9
Antituberculosis regimens of chemotherapy. Recommendations from the Committee on Treatment of the International Union against Tuberculosis and Lung Disease. Bull Int Union Tuberc Lung Dis 1988 Jun; 63(2):60–4 (0 ref.)
Treatment of mycobacterial infections. Davidson PT. Bull Int Union Tuberc Lung Dis 1988 Dec;63(4):23–5
A model of fully supervised chemotherapy for pulmonary tuberculosis in the tuberculosis control programme in a rural area of China. Zhang LX, et al. Bull Int Union Tuberc Lung Dis 1989 Mar;64(1):20–1
Response to short-course chemotherapy of patients with initial resistance to antituberculosis drugs. Valenzuela P, et al. Bull Pan Am Health Organ 1988;22(2):175–83
Secondary mania in a patient receiving isonicotinic acid hydrazide and pyridoxine: case report [letter] Chaturvedi SK, et al. Can J Psychiatry 1988 Oct;33(7):675–6
Is thiacetazone necessary or useful in the intensive phase of anti-tuberculous chemotherapy? McLeod DT, et al. Cent Afr J Med 1989 Jan;35(1):313–6
The role of pyrazinamide in tuberculosis chemotherapy. Steele MA, et al. Chest 1988 Oct;94(4):845–50 (72 ref.)
Enhancing patient compliance with tuberculosis therapy. Cuneo WD, et al. Clin Chest Med 1989 Sep;10(3):375–80 (34 ref.)
New antimycobacterial agents. Cynamon MH, et al. Clin Chest Med 1989 Sep;10(3):355–64 (62 ref.)
Drug-resistant tuberculosis. Iseman MD, et al. Clin Chest Med 1989 Sep;10(3):341–53 (12 ref.)
Current tuberculosis treatment regimens. Choosing the right one for your patient. Pérez-Stable EJ, et al. Clin Chest Med 1989 Sep;10(3):323–39 (116 ref.)
Compliance with anti-tuberculous therapy: a field trial of a pill-box with a concealed electronic recording device. Cheung R, et al. Eur J Clin Pharmacol 1988;35(4):401–7
Glucose tolerance test during antituberculous drug therapy. Singh RP, et al. Indian J Chest Dis Allied Sci 1988 Jul–Sep; 30(3):183–8
Rifampicin–isoniazid and delayed elimination of theophylline: a case report. Dal Negro R, et al. Int J Clin Pharmacol Res 1988;8(4):275–7
Epidemiological model and cost-effectiveness analysis of tuberculosis treatment programmes in Indonesia. Joesoef MR, et al. Int J Epidemiol 1989 Mar;18(1):174–9
Short course chemotherapy for pulmonary tuberculosis. A randomised controlled trial of a six month versus a nine month oral regimen. Howell F, et al. Ir Med J 1989 Feb; 82(1):11–3
Adverse effects of antitubercular drugs and significance of measurement of the drug-stimulating lymphocyte transformation rate. Umeki S. Jpn J Med 1989 May–Jun; 28(3):335–40
An experimental model of chemotherapy on dormant tuberculous infection, with particular reference to rifampicin. Kondo E, et al. Jpn J Med Sci Biol 1988 Apr; 41(2):37–47
Tuberculosis and leprosy—provincial implementation of the new chemotherapies. Hudson BJ. P N G Med J 1989 Mar; 32(1):1–4
Present status of chemotherapy for tuberculosis. Grosset JH. Rev Infect Dis 1989 Mar–Apr;11 Suppl 2:S347–52 (41 ref.)
New experimental drugs for the treatment of tuberculosis. Parenti F. Rev Infect Dis 1989 Mar–Apr;11 Suppl 2:S479–83 (42 ref.)
Importance of rifampicin in combined daily/intermittent chemotherapy for tuberculosis. Felten MK. S Afr Med J 1989 Jun 3;75(11):524–6
Overestimation of tuberculosis cure rates [letter] Youngleson SM. S Afr Med J 1989 Mar 4;75(5):247
Management and outcome of pulmonary tuberculosis in adults notified in England and Wales in 1983. Medical Research Council Tuberculosis and Chest Diseases Unit. Thorax 1988 Aug;43(8):591–8
Treatment of pulmonary disease caused by opportunist mycobacteria. Banks J. Thorax 1989 Jun;44(6):449–54 (75 ref.)
Controlled clinical trial of a regimen of two durations for the treatment of isoniazid resistant pulmonary tuberculosis. Babu Swai O, et al. Tubercle 1988 Mar;69(1):5–14
Surveillance of diagnostic and treatment measures in Bavaria, 1974–1976. Results 2 and 5 years after the start of chemotherapy. Blaha H, et al. Tubercle 1988 Dec; 69(4):255–65
Comparison of a daily and three intermittent retreatment regimens for pulmonary tuberculosis administered under programme conditions. Hong YP, et al. Tubercle 1988 Dec; 69(4):241–53
Pyrazinamide induced thrombocytopenia. Jain VK, et al. Tubercle 1988 Sep;69(3):217–8
Amoebic disease precipitated by corticosteroids prescribed for tuberculous pleural effusions. Ratcliffe GE. Tubercle 1988 Sep;69(3):219–21
[A comparison of therapeutic effectiveness between rifamdin-regimen and rifampicin-regimen in pulmonary tuberculosis] Lu Q. Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Aug; 11(4):225–7, 255 (Eng. Abstr.) (Chi)
[A study of blood rifampin concentration in smoking and non-smoking healthy individuals and in patients with tuberculosis] Xie ZY. Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1989 Feb; 12(1):3–5, 60 (Eng. Abstr.) (Chi)
[Addison crisis following taking of rifampicin in a patient with tuberculosis (letter)] Ned Tijdschr Geneeskd 1988 Nov 12;132(46):2123–4 (Dut)
[New and future drugs in pulmonary tuberculosis] Grosset JH, et al. Prax Klin Pneumol 1988 Jun;42 Suppl 1:206–10 (Eng. Abstr.) (Fre)
[Therapeutic trial of a combination of isoniazid, rifampicin and pyrazinamide in the first 2 months of treatment of pulmonary tuberculosis] Bellabas M, et al. Rev Mal Respir 1989;6(1):59–64 (Eng. Abstr.) (Fre)
[Treatment of tuberculosis in renal insufficiency] Hachicha J, et al. Tunis Med 1988 Dec;66(12):813–6 (32 ref.) (Fre)
[The German Central Committee for the Control of Tuberculosis. Guidelines for chemotherapy of tuberculosis] Prax Klin Pneumol 1988 Nov;42(11):773–7 (Ger)
[The treatment of tuberculosis in pregnancy] Jauker J. Prax Klin Pneumol 1988 Jul;42(7):618–9 (Eng. Abstr.) (Ger)
[Atypical mycobacterioses—a discussion] Nödl N. Prax Klin Pneumol 1988 Jul;42(7):613–4 (Eng. Abstr.) (Ger)
[Chemotherapy of lung tuberculosis—principles, therapy studies, consequences for general practice] Radenbach D, et al. Prax Klin Pneumol 1988 Nov;42(11):778–86 (128 ref.) (Ger)
[Problems in relation to chemotherapy of mycobacterioses caused by so-called atypical Mycobacteria] Urbanczik R. Prax Klin Pneumol 1988 Jul;42(7):610–2 (Eng. Abstr.) (Ger)
[Treatment of alcoholic patients with tuberculosis] Wieser O, et al. Prax Klin Pneumol 1988 Jul;42(7):615–7 (Eng. Abstr.) (Ger)
[Short-term therapy of lung tuberculosis using a fixed combination of isoniazid, rifampicin and pyrazinamide. Results after 2 years] Brändli O, et al. Schweiz Med Wochenschr 1989 Mar 11;119(10):299–305 (Eng. Abstr.) (Ger)
[Therapeutic effect of Ofloxacin on intractable pulmonary tuberculosis. Chest disease cooperative study unit of National Sanatoriums in Kinki District] Matsumoto T, et al. Kekkaku 1988 Jun;63(6):469–74 (Jpn)
[Investigation of severe tuberculous pneumonia associated with irreversible exacerbation after intensive antitubercular chemotherapy—with regard to the etiology of initial reversible roentgenographic progression] Umeki S, et al. Kekkaku 1989 Feb;64(2):85–93 (Eng. Abstr.) (Jpn)
[A case of Mycobacterium kansasii lung infection developed after treatment of Mycobacterium gordonae lung infection] Umeki S, et al. Kekkaku 1988 Dec;63(12):785–90 (Eng. Abstr.) (Jpn)
[Evaluation of the results of the treatment of bacteriologically confirmed active tuberculosis in Poland. Report of the Central Tuberculosis Register 1986] Miller M, et al. Pneumonol Pol 1988 Jul;56(7):325–8 (Eng. Abstr.) (Pol)
[Problems in organizing intensive, short-term antituberculosis chemotherapy in a national program] Anastasatu C, et al. Rev Ig [Pneumoftiziol] 1988 Jan–Mar;37(1):5–13 (Rum)
[Effect of antitubercular chemotherapy on immune status within the first 3 months of the start of short-term treatment] Cioflec D, et al. Rev Ig [Pneumoftiziol] 1988 Apr–Jun;37(2):137–44 (Eng. Abstr.) (Rum)
[Opinion survey on the organization of outpatient chemotherapy in pulmonary tuberculosis] Cioflec D. Rev Ig [Pneumoftiziol] 1988 Jul–Sep;37(3):217–23 (Eng. Abstr.) (Rum)
[Antitubercular chemotherapy—its current status and outlook] Moisescu V. Rev Ig [Pneumoftiziol] 1988 Jan–Mar; 37(1):15–26 (76 ref.) (Rum)
[Results and aspects of the use of regimens of short-term antitubercular chemotherapy (3+3) in a program of the Cluj County region] Petrescu G, et al. Rev Ig [Pneumoftiziol] 1988 Jul–Sep;37(3):237–47 (Eng. Abstr.) (Rum)
[Organizational elements in the development of short-term antibacterial treatment in Bihor County] Porav I, et al. Rev Ig [Pneumoftiziol] 1988 Apr–Jun;37(2):189–91 (Rum)
[Rifampicin pharmacokinetics in patients with pulmonary tuberculosis with concomitant helminthiasis] Korablev VN, et al. Antibiot Khimioter 1989 Apr;34(4):287–8 (Eng. Abstr.) (Rus)
[Dynamics of the frequency of development of drug resistance in the causative agent of tuberculosis and its effect on the efficacy of treatment of patients with pulmonary tuberculosis] Abramovskaia AK, et al. Probl Tuberk 1988;(10):24–7 (Eng. Abstr.) (Rus)
[Mumie as a pathogenetic agent in the treatment of tuberculosis] Agzamov RA, et al. Probl Tuberk 1988; (7):49–52 (Eng. Abstr.) (Rus)
[Chemotherapy of experimental mycobacteriosis] Aleksandrova AE, et al. Probl Tuberk 1988;(9):47–52 (Eng. Abstr.) (Rus)
[Effect of glucocorticosteroid hormones on T lymphocytes in patients with pulmonary tuberculosis] Basov PV. Probl Tuberk 1989;(4):30–3 (Eng. Abstr.) (Rus)
[Use of ethambutol in higher and regular doses in the treatment of patients with chronic destructive forms of pulmonary tuberculosis] Bialik IB. Probl Tuberk 1988; (6):30–3 (Eng. Abstr.) (Rus)
[Efficacy of treating patients with disseminated forms of destructive pulmonary tuberculosis using chemical preparations and T-activin] Chukanov VI, et al. Probl Tuberk 1989;(6):30–3 (Eng. Abstr.) (Rus)
[Effectiveness of various chemotherapy schedules in patients with newly detected limited nondestructive pulmonary tuberculosis] Chukanov VI, et al. Probl Tuberk 1988; (7):57–60 (Rus)
[Use of 3H-thymidine to study the metabolism of Mycobacterium tuberculosis as changed during chemotherapy] Golyshevskaia VI, et al. Probl Tuberk 1988; (10):50–3 (Eng. Abstr.) (Rus)
[Treatment of patients with destructive pulmonary tuberculosis with chemotherapeutic preparations combined with sodium nucleinate] Kharakter ZhZ, et al. Probl Tuberk 1989;(4):27–30 (Eng. Abstr.) (Rus)
[Methods in the modern chemotherapy of tuberculosis (a lecture)] Khomenko AG. Probl Tuberk 1988;(8):53–7 (Rus)
[Effectiveness of intratracheal administration of contrykal in combined treatment of children with intrathoracic tuberculosis complicated by endobronchial pathology] Klevno NI, et al. Probl Tuberk 1989;(3):25–30 (Eng. Abstr.) (Rus)
[Lymphotropic therapy in the combined treatment of pulmonary tuberculosis in children and adolescents] Lebedeva LV, et al. Probl Tuberk 1989;(5):26–8 (Eng. Abstr.) (Rus)
[The effect of nitroglycerin on the external respiration function and central hemodynamics in patients with tuberculosis of the lungs] Mar'iandyshev AO, et al. Probl Tuberk 1989;(1):34–7 (Eng. Abstr.) (Rus)
[Use of dipromonium in the comprehensive treatment of patients with pulmonary tuberculosis] Markova EF, et al. Probl Tuberk 1988;(10):67–8 (Rus)
[Efficacy of intravenous chemotherapy of newly detected cases of destructive tuberculosis of the lungs] Omarov TO, et al. Probl Tuberk 1988;(11):28–30 (Eng. Abstr.) (Rus)
[Effectiveness of intermittent chemotherapy in the combined treatment of patients with recently diagnosed destructive tuberculosis of the lungs] Osiinskil IIu, et al. Probl Tuberk 1989;(5):56–9 (Rus)
[Improvement in the chemotherapy of pulmonary tuberculosis in adults and adolescents by the differential use of isoniazid] Panasiuk AV, et al. Probl Tuberk 1988; (11):58–60 (Rus)
[Methods of treating patients with tuberculosis complicated by chronic cor pulmonale and a pharmacokinetic study of antibacterial drugs] Pilipchuk NS, et al. Probl Tuberk 1988;(12):16–21 (Eng. Abstr.) (Rus)
[Treatment of hemoptysis and hemorrhage using pyrilen and temechin in patients with pulmonary tuberculosis] Pilipchuk NS, et al. Probl Tuberk 1988;(10):28–30 (Eng. Abstr.) (Rus)
[Experience with intensive short-term chemotherapy of patients with recently diagnosed destructive pulmonary tuberculosis] Porokhnia VV, et al. Probl Tuberk 1989; (3):64–7 (Rus)
[Chemotherapy of newly detected cases of pulmonary tuberculosis prior to the results of determining the drug sensitivity of Mycobacterium tuberculosis] Rudol' NM, et al. Probl Tuberk 1988;(11):24–8 (Eng. Abstr.) (Rus)
[Polychemotherapy of patients with chronic destructive forms of pulmonary tuberculosis in interregional tuberculosis hospitals] Shimko NP, et al. Probl Tuberk 1989; (3):60–4 (Rus)
[Intrapulmonary administration of streptomycin in the treatment of destructive lower-lobe pulmonary tuberculosis] Skobelev VV. Probl Tuberk 1988;(6):40–3 (Eng. Abstr.) (Rus)
[Inactivation of glucocorticoid hormones by rifampicin in the treatment of patients with pulmonary tuberculosis] Spesivtsev OG, et al. Probl Tuberk 1988;(12):27–8 (Eng. Abstr.) (Rus)
[Indications for the use of prednisolone in tuberculosis] Starostenko EV, et al. Probl Tuberk 1989;(1):44–7 (Eng. Abstr.) (Rus)
[Pathogenetic therapy in pulmonary tuberculosis] Starostenko EV. Probl Tuberk 1989;(5):22–6 (Eng. Abstr.) (Rus)
[Evaluation of various schedules of chemotherapy of newly detected cases of infiltrative pulmonary tuberculosis] Volosevich GV, et al. Probl Tuberk 1989;(4):70–1 (Rus)
[Chlorophyllypt in the combined treatment of pulmonary tuberculosis and chronic alcoholism] Pilipchuk NS, et al. Sov Med 1988;(12):115 (Rus)
[Terrilytin in the combined treatment of patients with pulmonary tuberculosis and chronic alcoholism] Mel'nik

VP, et al. **Vrach Delo** 1988 Nov;(11):74–5 (Eng. Abstr.) **(Rus)**

[Organic electrophoresis of chemical preparations in treating pulmonary tuberculosis] Norelko BV, et al. **Vrach Delo** 1988 Nov;(11):73–4 (Eng. Abstr.) **(Rus)**

[Treatment of patients with destructive pulmonary tuberculosis using intramuscular isoniazid administration] Panasiuk AV, et al. **Vrach Delo** 1988 Aug;(8):69–71 (Eng. Abstr.) **(Rus)**

[Treatment efficacy in destructive forms of pulmonary tuberculosis in relation to the methods of administering rifadin and isoniazid] Shevchenko RN, et al. **Vrach Delo** 1989 Jun;(6):76–8 (Eng. Abstr.) **(Rus)**

[Primary resistance to antitubercular drugs] Caminero Luna JA. **Med Clin (Barc)** 1989 Jun 3;93(1):30–6 (85 ref.) **(Spa)**

[Effects of pyrazinamide on the liver in patients with tuberculosis. An ultrastructural study] Pilheu JA, et al. **Medicina (B Aires)** 1985;45(1):15–9 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Enzyme levels in bronchoalveolar lavage fluid and serum of active pulmonary tuberculosis patients. Gupta N, et al. **Enzyme** 1989;41(2):108–11

Cholinesterase activity in pulmonary tuberculosis. Nag D, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):93–7

[A study of level of serum angiotensin I converting enzyme in patients with old and inactive pulmonary tuberculosis—in relation to pulmonary function (PO2,%VC,FEV1.0,%FEV1.0)] Morotomi Y, et al. **Kekkaku** 1988 Nov;63(11):701–6 (Eng. Abstr.) **(Jpn)**

[Proteolytic processes in the bronchial contents in pulmonary tuberculosis] Zaks OV, et al. **Vrach Delo** 1988 Oct;(10):41–2 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

The association of tuberculosis and HIV infection in Burundi. Standaert B, et al. **AIDS Res Hum Retroviruses** 1989 Apr; 5(2):247–51

Surveillance for tuberculosis in Alaska, 1986. Beller M, et al. **Alaska Med** 1989 Jan–Feb;31(1):4–8

An outbreak of tuberculosis in rural Delaware. Gross TP, et al. **Am J Epidemiol** 1989 Feb;129(2):362–71

HIV infection in patients with tuberculosis in Kinshasa, Zaire. Colebunders RL, et al. **Am Rev Respir Dis** 1989 May; 139(5):1082–5

The epidemiologic patterns of drug-resistant Mycobacterium tuberculosis infections: a community-based study. Riley LW, et al. **Am Rev Respir Dis** 1989 May;139(5):1282–5

Prevalence of HIV infection among patients with leprosy and tuberculosis in rural Zambia. Meeran K. **BMJ** 1989 Feb 11;298(6670):364–5

The tuberculosis surveillance system in Japan. Aoki M, et al. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):23–4

The tuberculosis surveillance system in Czechoslovakia. Dankova D, et al. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):15–6

Swedish experiences 12 years after the cessation of general BCG vaccination of newborns in 1975 [published erratum appears in Bull Int Union Tuberc Lung Dis 1989 Mar;64(1):60] Romanus V. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):34–8

The tuberculosis situation in east European countries. Schilling W, et al. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):27–9

Tuberculosis among refugees: study of a population screening at the Tuberculosis Clinic in Lausanne (Switzerland) between 1983 and 1988. Zellweger JP, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):29–31

Study on the epidemiological follow-up of tuberculosis in the municipality area of Wuhan (China). Zheng Y, et al. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):22–3

Prevalence of tuberculosis infection of 6,590 primary school children in Masvingo District [letter] Schoun RK, et al. **Cent Afr J Med** 1988 Aug;34(8):202–3

The epidemiology of tuberculosis in the United States. Implications for diagnosis and treatment. Bloch AB, et al. **Clin Chest Med** 1989 Sep;10(3):297–313 (48 ref.)

Tuberculosis in children and adolescents. Smith MH. **Clin Chest Med** 1989 Sep;10(3):381–95 (64 ref.)

Special problems in tuberculosis. Tuberculosis in the elderly and in residents of nursing homes, correctional facilities, long-term care hospitals, mental hospitals, shelters for the homeless, and jails. Stead WW. **Clin Chest Med** 1989 Sep; 10(3):397–405 (27 ref.)

Extrapulmonary tuberculosis in a university hospital in Spain. García-Rodríguez JA, et al. **Eur J Epidemiol** 1989 Jun; 5(2):154–7

The face of TB changes again. Bass JB Jr. **Hosp Pract [Off]** 1989 Apr 30;24(4A):81–5, 88, 93–5, passim

Tuberculosis remains a formidable adversary [editorial] Allen TW. **J Am Osteopath Assoc** 1989 May;89(5):617–8

TB in Gurkhas [letter] Johnston JH. **J R Army Med Corps** 1989 Jun;135(2):96

Incidence of pulmonary tuberculosis by occupation of hospital employees in the National Health Service in England and Wales 1980–84. Lunn JA, et al. **J Soc Occup Med** 1989 Spring;39(1):30–2

The acquired immunodeficiency syndrome and tuberculosis [letter] Cooper DA, et al. **Med J Aust** 1988 Dec 5–19; 149(11–12):714–5

Mycobacterium avium complex and the normal host: the other side of the coin [editorial; comment] Iseman MD. **N Engl J Med** 1989 Sep 28;321(13):896–8. **Comment on:** N Engl J Med 1989 Sep 28;321(13):863–8

High incidence of tuberculosis in chronic dialysis patients in developing countries. Hachicha J, et al. **Nephron** 1989; 52(2):189

Comparison of younger and elderly patients with pulmonary tuberculosis. Umeki S. **Respiration** 1989;55(2):75–83

Pulmonary tuberculosis in geriatric homes in Port Elizabeth [letter] Bradley AC. **S Afr Med J** 1989 Feb 18;75(4):197

Pulmonary tuberculosis in health service staff—is it still a problem? Capewell S, et al. **Tubercle** 1988 Jun;69(2):113–8

Tuberculosis in hospital doctors. Goldman KP. **Tubercle** 1988 Dec;69(4):237–40 (24 ref.)

Risk factors associated with the prevalence of pulmonary tuberculosis among sanitary workers in Shanghai. Yu GP, et al. **Tubercle** 1988 Jun;69(2):105–12

[Increase of cases of tuberculosis in 3 hospitals in Paris (letter)] **Presse Med** 1988 Oct 22;17(36):1859–60 **(Fre)**

[Tuberculosis and HIV infection in a general hospital in Brazzaville] M'Boussa J. **Rev Mal Respir** 1989;6(2):155–9 (Eng. Abstr.) **(Fre)**

[The epidemiologic significance of unrecognized lung tuberculosis in the present-day] Gronauer W. **Pneumologie** 1989 Jan;43(1):20–4 (Eng. Abstr.) **(Ger)**

[Lung diseases caused by non-tuberculous mycobacteria in East Germany and Hungary] Kalich R, et al. **Pneumologie** 1989 Mar;43(3):169–72 (Eng. Abstr.) **(Ger)**

[The extent of extrathoracic forms in the overall picture of tuberculosis] Haefliger E. **Schweiz Rundsch Med Prax** 1988 Oct 11;77(41):1104–9 (Eng. Abstr.) **(Ger)**

[The significance of tuberculosis today and its pathomorphism, demonstrated in postmortem material] Kühne W, et al. **Zentralbl Allg Pathol** 1988;134(7):665–9 (Eng. Abstr.) **(Ger)**

[Studies on the nontuberculous lung mycobacteriosis in Japan (report of the study in the year 1986 of the Mycobacteriosis Research Group of the Japanese National Chest Hospitals)—the prevalence rate of nontuberculous lung mycobacteriosis in Japan is gradually increasing since 1984—the Mycobacteriosis Research Group of the Japanese National Chest Hospitals] Tsukamura M, et al. **Kekkaku** 1988 Jul;63(7):493–9 **(Jpn)**

[Evaluation of the weight of predictive criteria in the evolution of pulmonary tuberculosis] Ciofiec D, et al. **Rev Ig [Pneumoftiziol]** 1988 Oct–Dec;37(4):319–26 (Eng. Abstr.) **(Rum)**

[The structure of the incidence of tuberculosis by occupation in the last 3 years in Constanta County] Didilescu C, et al. **Rev Ig [Pneumoftiziol]** 1988 Jan–Mar;37(1):53–8 (Eng. Abstr.) **(Rum)**

[The value of an epidemiologic study in detecting sources of tuberculosis infection] Blagodarnyi IaA, et al. **Probl Tuberk** 1988;(10):3–5 (Eng. Abstr.) **(Rus)**

[Evolution of tuberculosis morbidity and the factors governing it at different stages of the anti-tuberculosis campaign] Dvoirin MS, et al. **Probl Tuberk** 1989;(1):5–7 (Eng. Abstr.) **(Rus)**

[Present-day characteristics of tuberculosis] Kibardina ZA, et al. **Probl Tuberk** 1988;(7):9–11 (Eng. Abstr.) **(Rus)**

[Bacteriological method of examination in the diagnosis of reactivation of the tuberculous process among contingents in ambulatory care group VII] Krivtsova AE, et al. **Probl Tuberk** 1989;(1):12–4 (Eng. Abstr.) **(Rus)**

[Relation of the infection incidence among children to the epidemiologic hazard of foci of tuberculosis infection] Nadyrshina RK, et al. **Probl Tuberk** 1988;(8):11–3 (Eng. Abstr.) **(Rus)**

[Detection, clinical course and chemotherapy of tuberculosis in adolescents] Kshanovskiĭ SA, et al. **Vrach Delo** 1988 Jul;(7):15–7 (Eng. Abstr.) **(Rus)**

[The status of tuberculosis in central Dalmatia] Giunio N, et al. **Placne Bolesti** 1988 Jan–Jun;40(1–2):36–9 (Eng. Abstr.) **(Scr)**

[Tuberculosis mycoepidemics in schools. Apropos of 13 cases detected in Barcelona] Boque Genovard MA, et al. **An Esp Pediatr** 1989 Apr;30(4):261–4 (Eng. Abstr.) **(Spa)**

[Tuberculosis surveys in Guerrero and new estimates of the magnitude of tuberculosis infection in Mexico] Cárdenas-Ayala VM, et al. **Salud Publica Mex** 1989 Jan–Feb;31(1):73–81 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Tuberculosis in living related donor renal transplant recipients. Suleiman AB, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):454–6

Mycobacterium bovis as an occupational hazard in abattoir workers [letter] **Aust N Z J Med** 1989 Aug;19(4):409–10

Miliary tuberculosis due to intravesical bacillus Calmette-Guerin therapy. Gupta RC, et al. **Chest** 1988 Dec;94(6):1296–8

Undernutrition in lepromatous leprosy. V. Severe nutritional deficit in lepromatous patients co-infected with pulmonary tuberculosis. Saha K, et al. **Eur J Clin Nutr** 1989 Feb; 43(2):117–28

Tuberculosis in cadaveric renal allograft recipients. Report of 4 cases and review of the literature. Lenk S, et al. **Eur Urol** 1988;14(6):484–6 (6 ref.)

Immune mechanisms in the pathogenesis of pulmonary tuberculosis. Dannenberg AM Jr. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S369–78 (31 ref.)

What animal models can teach us about the pathogenesis of tuberculosis in humans. Smith DW, et al. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S385–93 (24 ref.)

Tuberculosis and human immunodeficiency virus infection. Hopewell PC. **Semin Respir Infect** 1989 Jun;4(2):111–22 (47 ref.)

[Present status of infection and development of tuberculosis in Japan. Some results mainly obtained at the occasions of tuberculosis epidemics] **Kekkaku** 1988 Dec; 63(12):791–812 (Eng. Abstr.) **(Jpn)**

[Mycobacterium scrofulaceum pulmonary infection following aspiration of a denture bridge into the bronchus] Fujino T, et al. **Kekkaku** 1988 Sep;63(9):617–23 (Eng. Abstr.) **(Jpn)**

[The role of psychological factors in the etiopathogenesis of pulmonary tuberculosis] Pecyna MB, et al. **Pol Tyg Lek** 1988 Jun 27;43(26):850–3 **(Pol)**

[Tuberculosis and the natural human environment in psychosociometric studies] Pecyna MB. **Wiad Lek** 1988 Aug 1;41(15):984–90 (Eng. Abstr.) **(Pol)**

[Corticosteroid tuberculosis] Saksonov SI, et al. **Klin Med (Mosk)** 1988 Dec;66(12):93–6 **(Rus)**

[The role of socio-psychological factors in the causative interrelations of alcoholism and tuberculosis] Aliev NA. **Probl Tuberk** 1989;(2):9–13 (Eng. Abstr.) **(Rus)**

[Risk factors and the detection of pulmonary tuberculosis in young people at the present stage] Bubochkin BP, et al. **Probl Tuberk** 1988;(11):5–8 (Eng. Abstr.) **(Rus)**

[Tracheobronchomegaly and pulmonary tuberculosis] Krasitskiĭ IV, et al. **Probl Tuberk** 1989;(4):71–4 **(Rus)**

[Factors responsible for increased risk of tuberculosis] Kucherov AL, et al. **Probl Tuberk** 1988;(12):57–61 (74 ref.) **(Rus)**

[Alcoholism and pulmonary tuberculosis] Khomenko AG, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):50–8 (Eng. Abstr.) **(Rus)**

GENETICS

[Characteristics of the reactivity of patients with tuberculosis in relation to genetic indicators] Frolova EIu. **Probl Tuberk** 1988;(9):53–4 (Eng. Abstr.) **(Rus)**

[Relation between tuberculosis infection in children and their parents] Ivan'kova VS, et al. **Probl Tuberk** 1988;(6):9–12 (Eng. Abstr.) **(Rus)**

[Interrelations of genetic markers (HLA antigens and haptoglobin variants) and the course of fibrous-cavernous pulmonary tuberculosis] Sadykov AS, et al. **Ter Arkh** 1988; 60(11):97–100 (Eng. Abstr.) **(Rus)**

HISTORY

The olden days of surgery for tuberculosis [editorial] Newman MM. **Ann Thorac Surg** 1989 Aug;48(2):161–2

[A most malignant lung tuberculosis in Ruigezand] Knol E. **Ned Tijdschr Geneeskd** 1989 Jan 14;133(2):80–2 **(Dut)**

[The so-called Koch postulates] Grafe A. **Gesnerus** 1988;45 Pt 3–4:411–8 (Eng. Abstr.) **(Ger)**

[Active therapy of lung tuberculosis in the pre-chemotherapy era] Forschbach G. **Prax Klin Pneumol** 1988 Dec; 42(12):878–82 **(Ger)**

[The 60th anniversary of Soviet medical encyclopedias (problems of phthisiology in Soviet encyclopedic publications)] Averbakh MM, et al. **Probl Tuberk** 1988; (9):75–8 **(Rus)**

[The study of the history of the disease of Lesia Ukrainka] Ermolaeva IV, et al. **Vrach Delo** 1988 Aug;(8):116–9 **(Rus)**

IMMUNOLOGY

Immunoregulation in human tuberculosis. Ellner JJ. **Adv Exp Med Biol** 1988;239:287–95 (12 ref.)

HLA typing in the Hong Kong Chest Service/British Medical Research Council study of factors associated with the breakdown to active tuberculosis of inactive pulmonary lesions. Hawkins BR, et al. **Am Rev Respir Dis** 1988 Dec; 138(6):1616–21

HLA typing in the Hong Kong Chest Service/British Medical Research Council Study of factors associated with the breakdown to active tuberculosis of inactive pulmonary lesions [letter] Zervas J, et al. **Am Rev Respir Dis** 1989 Sep;140(3):854

HLA-DR and tuberculin tests in rheumatoid arthritis and tuberculosis. Bahr GM, et al. **Ann Rheum Dis** 1989 Jan; 48(1):63–8

HLA antigen profiles in Thai tuberculosis patients. Chandanayingyong D, et al. **Asian Pac J Allergy Immunol** 1988 Dec;6(2):77–80

The 45 kilodalton molecule of Mycobacterium tuberculosis identified by immunoblotting and monoclonal antibodies as antigenic in patients with tuberculosis. Coates AR, et al. **Br J Exp Pathol** 1989 Apr;70(2):215–25

Humoral response to defined epitopes of tubercle bacilli in adult pulmonary and child tuberculosis. Bothamley G, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):639–45

Vaccination with Mycobacterium bovis BCG affects the distribution of Fc receptor-bearing T lymphocytes in experimental pulmonary tuberculosis. Bartow RA, et al. **Infect Immun** 1989 May;57(5):1374–9

Dietary protein deficiency and Mycobacterium bovis BCG affect interleukin-2 activity in experimental pulmonary tuberculosis. McMurray DN, et al. **Infect Immun** 1989 Sep;

57(9):2606–11
Serum immunoglobulin levels in Jewish patients with active pulmonary tuberculosis [letter] Rubinstein I, et al. **Infection** 1988 Jul–Aug;16(4):253
Antibodies to HIV–1 in sera from patients with mycobacterial infections. ShivRaj L, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):546–51
Specificity of antibodies to immunodominant mycobacterial antigens in pulmonary tuberculosis. Jackett PS, et al. **J Clin Microbiol** 1988 Nov;26(11):2313–8
Immunogenetic analysis of human tuberculosis. Cox RA, et al. **J Infect Dis** 1988 Dec;158(6):1302–8
Suppression of purified protein derivative–induced interleukin–2 production by interaction of CD16 (Leu 11 reactive) lymphocytes and adherent mononuclear cells in tuberculosis. Tocesi Z, et al. **J Infect Dis** 1989 Feb; 159(2):352–6
Enhanced natural killer cell activity in patients with pulmonary tuberculosis. Morikawa F, et al. **Jpn J Med** 1989 May–Jun;28(3):316–22
Limiting dilution analysis of T cell unresponsiveness to mycobacteria in advanced disseminated tuberculosis. Gilardini Montani MS, et al. **Med Microbiol Immunol (Berl)** 1989;178(5):235–44
Protective immunity to experimental tuberculosis by mannophosphoinositides of mycobacteria. Mehta PK, et al. **Med Microbiol Immunol (Berl)** 1988;177(5):265–84
Tuberculosis and breast cancer: case report and review. Goldberg A. **Mt Sinai J Med (NY)** 1988 Oct;55(5):421–7 (28 ref.)
Study of lymphocyte subpopulations in a group of patients with tuberculosis unresponsive to antibiotic treatment. Giorgis GE, et al. **Panminerva Med** 1988 Apr–Jun; 30(2):96–8
Immunologic aspects of mycobacterial infections. Ellner JJ, et al. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S455–9 (12 ref.)
Circulating immune complexes in patients with advanced pulmonary tuberculosis detected by a polyethylene glycol precipitation–complement consuming test (PEG–CC test). Rojas–Espinosa O, et al. **Rev Latinoam Microbiol** 1988 Jan–Mar;30(1):25–9
Factors influencing the cellular response in bronchoalveolar lavage and peripheral blood of patients with pulmonary tuberculosis. Dhand R, et al. **Tubercle** 1988 Sep; 69(3):161–73
[Observation of immune function in 115 elderly patients with pulmonary tuberculosis] Li JW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb; 12(1):12–4, 60–1 (Eng. Abstr.) (Chi)
[The clinical significance of the detection of circulating immune complexes in tuberculosis] Yang PZ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Jun; 11(3):132–4, 190 (Eng. Abstr.) (Chi)
[Circulating immune complexes in patients with pulmonary tuberculosis] Chang ML, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Sep;87(9):898–903 (Eng. Abstr.) (Chi)
[Determination of immunologic parameters in patients with lung tuberculoses of various stages with special reference to serum IgE concentration] Greinert U, et al. **Pneumologie** 1989 May;43(5):254–8 (Eng. Abstr.) (Ger)
[Immunological studies of pulmonary infection with atypical mycobacteria I. Enumeration of lymphocyte subsets in the peripheral blood] Harada Y, et al. **Kekkaku** 1988 Aug; 63(8):555–61 (Eng. Abstr.) (Jpn)
[Soluble interleukin–2 receptor levels in patients with pulmonary tuberculosis] Ito M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan;27(1):25–8 (Eng. Abstr.) (Jpn)
[Current concerns in the field of tuberculosis immunology] Algeorge G. **Rev Ig [Pneumoftiziol]** 1988 Oct–Dec; 37(4):299–308 (30 ref.) (Rum)
[Characteristics of tuberculin allergy in pulmonary tuberculosis in children] Kislitsyna NA, et al. **Pediatriia** 1988;(12):88 (Rus)
[T–suppressors and their functional activity in tuberculosis in middle–aged and elderly subjects] Adambekov DA, et al. **Probl Tuberk** 1989;(1):32–4 (Eng. Abstr.) (Rus)
[Circulating immune complexes in active forms of tuberculosis] Butenko GE, et al. **Probl Tuberk** 1988; (8):48–50 (Eng. Abstr.) (Rus)
[Indicators of antibody formation in patients with pulmonary tuberculosis and drug–resistant Mycobacteria] Evdokimov VN. **Probl Tuberk** 1988;(9):44–7 (Eng. Abstr.) (Rus)
[NK cells in patients during complex therapy of destructive pulmonary tuberculosis] Gogebashvili NV, et al. **Probl Tuberk** 1989;(4):43–5 (Eng. Abstr.) (Rus)
[Class I and II antigens and levels of IgG antibodies in patients with infiltrative tuberculosis of the lungs] Nikolaian LT, et al. **Probl Tuberk** 1989;(3):49–51 (Eng. Abstr.) (Rus)
[The course of pulmonary tuberculosis in patients with hyperergic reactions to tuberculin] Roslik SM, et al. **Probl Tuberk** 1988;(8):17–8 (Eng. Abstr.) (Rus)
[Diagnostic significance of determining specific antibodies of various isotypes in patients with pulmonary tuberculosis] Titanian AS, et al. **Probl Tuberk** 1989;(5):40–3 (Eng. Abstr.) (Rus)
[The specific sensitization of patients with fibrous–cavernous pulmonary tuberculosis] Butenko GE. **Vrach Delo** 1989 Mar;(3):63–4 (Eng. Abstr.) (Rus)
[Immune reactivity of patients with pulmonary tuberculosis suffering from chronic alcoholism] Mel'nik VP. **Vrach Delo** 1989 Apr;(4):82–5 (Eng. Abstr.) (Rus)
[Production of and response to interleukin–2 by peripheral mononuclear cells of patients infected with Mycobacterium tuberculosis] Montaño LF, et al. **Rev Latinoam Microbiol** 1988 Apr–Jun;30(2):125–31 (Eng. Abstr.) (Spa)

METABOLISM

Prolonged elevations of soluble interleukin–2 receptors in tuberculosis. Brown AE, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1036–8
Hydrogen peroxide producing potential of alveolar macrophages & blood monocytes in pulmonary tuberculosis. Selvaraj P, et al. **Indian J Med Res** 1988 Aug; 88:124–9
[A preliminary study for cellular, albumin and immunoglobulin components of bronchoalveolar lavage fluid in normal control, pulmonary T.B. and malignant lung diseases] Lin CC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 May;21(2):110–6 (Eng. Abstr.) (Chi)
[Interrelation of the development of bronchial obstruction syndrome and accumulation of biologically active substances in the bronchoalveolar content of patients with pulmonary tuberculosis] Kaminskaia GO, et al. **Probl Tuberk** 1988;(9):31–6 (Eng. Abstr.) (Rus)
[Characteristics of the fatty acid composition of surfactant phospholipids in the condensate of the expired breath of patient with pulmonary tuberculosis] Protsiuk RG, et al. **Vrach Delo** 1988 Sep;(9):77–9 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Detection of mycobacteria in infected tissue. Besra GS, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:59–60
The relationship between bacillary sources of infection and tuberculosis disease in children. Mihailescu P. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):17–9
Use of mycobacterial smears in the diagnosis of pulmonary tuberculosis in AIDS/ARC patients. Klein NC, et al. **Chest** 1989 Jun;95(6):1190–2
A reevaluation of sputum microscopy and culture in the diagnosis of pulmonary tuberculosis. Levy H, et al. **Chest** 1989 Jun;95(6):1193–7
The clinical presentation, diagnosis, and therapy of cutaneous and pulmonary infections due to the rapidly growing mycobacteria, M. fortuitum and M. chelonae. Wallace RJ Jr. **Clin Chest Med** 1989 Sep;10(3):419–29 (27 ref.)
Primary pulmonary infection caused by Mycobacterium terrae complex. Krisher KK, et al. **Diagn Microbiol Infect Dis** 1988 Nov;11(3):171–5
Bacteriological studies of tuberculosis in Sidamo Regional Hospital. Lemma E, et al. **Ethiop Med J** 1989 Jul; 27(3):147–9
Granulomatous pulmonary reactions after instillation of Mycobacterium gordonae. Light and electron microscopic investigations on the rat model. Fasske E, et al. **Med Microbiol Immunol (Berl)** 1989;178(3):149–61
The reliability of acid fast stained smears of gastric aspirate specimens. Berean K, et al. **Tubercle** 1988 Sep;69(3):205–8
[Some aspects of refractory pulmonary tuberculosis] Liu HB. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):249–51 (22 ref.) (Chi)
[Studies on the virulence in the guinea pig of tuberculosis bacilli isolated from patients with pulmonary tuberculosis before treatment in Shanghai] Yang DY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb; 12(1):15–7, 61 (Eng. Abstr.) (Chi)
[Secondary multiple resistance during treatment of tuberculosis] Hansen M, et al. **Ugeskr Laeger** 1989 Apr 17;151(16):1002–3 (Eng. Abstr.) (Dan)
[Patients hospitalized with pulmonary tuberculosis presenting Koch's bacillus in direct sputum examination. Clinical, radiologic and bacteriologic characteristics] Kuaban C, et al. **Ann Med Interne (Paris)** 1989;140(4):269–73 (Eng. Abstr.) (Fre)
[Diseases caused by "atypical" Mycobacteria (mycobacterioses): diagnosis] Petersen KF. **Prax Klin Pneumol** 1988 Jul;42(7):606–9 (16 ref.) (Eng. Abstr.) (Ger)
[The BACTEC 460 system. 4. Comparison of BACTEC 460 and an animal experiment for the detection of tuberculosis bacteria] Schröder KH, et al. **Prax Klin Pneumol** 1988 Sep; 42(9):711–4 (Eng. Abstr.) (Ger)
[Results of bacteriologic follow–up in the ambulatory treatment of tuberculosis in Timiş County] Jemna I, et al. **Rev Ig [Pneumoftiziol]** 1988 Apr–Jun;37(2):117–22 (Eng. Abstr.) (Rum)
[Comparative study of 2 staining methods in the follow–up of negative sputums in pulmonary tuberculosis] Petreanu V, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):703–6 (Eng. Abstr.) (Rum)
[Isolation of mycobacteria L forms as a prognostic criterion of recurrence and aggravation of tuberculosis in patients with extended residual tuberculous lesions of the lungs] Dorozhkova IR, et al. **Probl Tuberk** 1989;(3):14–8 (Eng. Abstr.) (Rus)
[Isolation of non–spore–forming anaerobic bacteria from patients with tuberculosis of the lungs and other diseases of the respiratory organs] Kazarova TA, et al. **Probl Tuberk** 1989;(1):48–51 (Eng. Abstr.) (Rus)
[The nature of bacterial shedding and its effect on treatment outcome in newly detected patients with destructive pulmonary tuberculosis] Omarov TO, et al. **Probl Tuberk** 1988;(8):19–20 (Eng. Abstr.) (Rus)
[Methods of improving bacteriological confirmation in tuberculosis of the respiratory organs] Vasil'ev MI, et al. **Probl Tuberk** 1989;(3):55–7 (Rus)
[Microbiological characteristics of residual pulmonary caverns] Vorozhtsova MP, et al. **Probl Tuberk** 1989; (3):70–2 (Rus)
[Evaluation of the extent of massive bacterial elimination in newly detected patients with destructive pulmonary tuberculosis] Roslik SM, et al. **Vrach Delo** 1988 Oct; (10):39–40 (Eng. Abstr.) (Rus)
[Evaluation of BK positivity and resistance of Mycobacterium tuberculosis 1983–1986 in areas of Bosnia and Herzegovina] Vinik LK, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):32–5 (Eng. Abstr.) (Scr)

MORTALITY

[20 years tuberculosis in Salzburg (1966–1985)] Huber W. **Prax Klin Pneumol** 1988 Jul;42(7):551–2 (Eng. Abstr.) (Ger)
[Thanatologic analysis of long–term outcomes of pulmonary tuberculosis] Goriuk IaD, et al. **Probl Tuberk** 1988;(10):20–4 (Eng. Abstr.) (Rus)
[Causes of death of patients with tuberculosis in the first year after its detection] Kalinichev GA, et al. **Probl Tuberk** 1989; (6):23–6 (Eng. Abstr.) (Rus)
[Causes of death in tuberculosis: role of disseminated intravascular coagulation (letter)] Díaz Lobato S, et al. **Rev Clin Esp** 1989 May;184(8):446 (Spa)

PATHOLOGY

Cellular composition of bronchoalveolar lavage fluid in patients with pulmonary tuberculosis. Dhand R, et al. **Indian J Med Res** 1988 Jun;87:555–60
Macrophages in bronchoalveolar lavage fluid are not representative of macrophages in granulomas of the lungs of BCG–infected mice. Nibbering PH, et al. **J Pathol** 1989 Mar;157(3):253–61
AIDS. Case for diagnosis series, 1988. Macher AM, et al. **Milit Med** 1988 Nov;153(11):M73–80
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 17–1989. A 58–year–old man with cavitary lung disease. **N Engl J Med** 1989 Apr 27;320(17):1130–9
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 23–1989. A 25–year–old woman with a right pulmonary density 14 months after a right upper lobectomy for an atypical carcinoid tumor. **N Engl J Med** 1989 Jun 8;320(23):1540–50
[Endobronchial tuberculosis] Wishnitzer R, et al. **Harefuah** 1989 Apr 2;116(7):356–8 (Eng. Abstr.) (Heb)
[A clinical study on pulmonary tuberculosis as terminal pneumonia] Mochizuki Y, et al. **Kekkaku** 1988 Aug; 63(8):569–75 (Eng. Abstr.) (Jpn)
[Characteristics of lung ultrastructure and variability mutability , mutation of the causative agent in experimental tuberculosis] Dzis' EI, et al. **Probl Tuberk** 1988;(12):42–5 (Eng. Abstr.) (Rus)
[Bronchoalveolar lavage in assessing the structural integrity of surfactant in pulmonary tuberculosis] Erokhin VV, et al. **Probl Tuberk** 1988;(8):38–41 (Eng. Abstr.) (Rus)
[Changes in the human epiphysis in fibrocavernous tuberculosis of the lungs] Rozum VM. **Probl Tuberk** 1989; (6):59–62 (Eng. Abstr.) (Rus)
[Clinical forms of tuberculosis with minimal destruction of pulmonary tissue] Smirnov GA, et al. **Probl Tuberk** 1989; (1):24–7 (Eng. Abstr.) (Rus)
[Pulmonary tuberculosis in a basal location] Mrda V, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):29–31 (Eng. Abstr.) (Scr)
[Tuberculous laryngitis. Clinical description of 2 cases] Gil Tutor E. **An Otorrinolaringol Ibero Am** 1988;15(6):661–7 (Eng. Abstr.) (Spa)
[9 cases of endobronchial tuberculosis (letter)] Marco Jordán L, et al. **Med Clin (Barc)** 1988 Nov 5;91(15):598 (Spa)
[Tuberculous pneumonia and respiratory insufficiency (clinical conference)] **Medicina (B Aires)** 1988;48(2):189–93 (Spa)

PHYSIOPATHOLOGY

Nutrition in pulmonary tuberculosis: a comparison of African patients from Malawi and Nigeria. Nkhoma WA, et al. **East Afr Med J** 1987 Oct;64(10):643–7
Exercise responses in patients treated for pulmonary tuberculosis by thoracoplasty. Phillips MS, et al. **Thorax** 1989 Apr;44(4):268–74
[Respiratory activity of the lungs as a sign of exacerbation of a lung tuberculoma] Gudz EA. **Radiol Diagn (Berl)** 1989; 30(1):27–32 (Eng. Abstr.) (Ger)
[Characteristics of the course of the postoperative period in patients with disseminated forms of tuberculosis and nonspecific lung diseases] Radionov BV, et al. **Klin Khir** 1988;(10):5–7 (Eng. Abstr.) (Rus)
[Determination of indices of the functional state of the pneumocardial system in patients with tuberculosis of the lungs] **Probl Tuberk** 1989;(6):62–7 (Rus)
[Types of the course of tuberculosis as the manifestation of

various adaptive reactions of the body] Gur'eva IG, et al. **Probl Tuberk** 1988;(7):17–21 (Eng. Abstr.) **(Rus)**

[Myocardial involvement in pulmonary tuberculosis patients suffering from alcoholism] Mel'nik VP. **Vrach Delo** 1989 Mar;(3):60–3 (Eng. Abstr.) **(Rus)**

[Functional characteristics of the bronchial lesion in patients with newly detected destructive pulmonary tuberculosis] Shal'min AS. **Vrach Delo** 1989 Mar;(3):64–5 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Identification of an effective vaccine against tuberculosis [letter] Snider DE Jr. **Am Rev Respir Dis** 1989 May; 139(5):1304

Inner city tuberculosis and immunization policy [letter] Vickers D. **Arch Dis Child** 1989 Mar;64(3):424

The nonutility of chest roentgenographic examination in asymptomatic patients with positive tuberculin test results. Gottridge JA, et al. **Arch Intern Med** 1989 Jul; 149(7):1660–2

The past, the present and the future of the tuberculin test in tuberculosis control. Bleiker JH. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):33–4

BCG vaccination and AIDS. Bregere P. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):40–1

Antituberculosis measures for displaced persons. Eriki P. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):31–2

Antituberculous measures for displaced persons in the Federal Republic of Germany. Ferlinz R. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):27–8

Reduction in the risk of tuberculous meningitis in children in France. Impact of BCG vaccination. Lotte A, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):52–6

Reorientation of tuberculosis control programmes in the USA. Snider DE. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):25–6

First experience with the project of discontinuation of BCG primovaccination in newborns in Czechoslovakia. Trnka L, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):39

Tuberculosis control in the eradication phase in The Netherlands. van Geuns HA. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):31–2

A few comments on migrants in The Netherlands. Van Geuns HA. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):32–3

The effects of systematic BCG vaccination of newborns on the incidence of postprimary tuberculosis meningitis in childhood. Wasz-Hockert O, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):49–51

The physician's role in tuberculosis prevention. Glassroth J. **Clin Chest Med** 1989 Sep;10(3):365–74 (28 ref.)

The outcome of chemoprophylaxis on tuberculosis prevention in the Canadian Plains Indian. Wobeser W, et al. **Clin Invest Med** 1989 Jun;12(3):149–53

Pyrazinamide and pyrazinoic acid pharmacokinetics in patients with chronic renal failure. Stamatakis G, et al. **Clin Nephrol** 1988 Oct;30(4):230–4

Three models of social work intervention with tuberculosis patients. Andrews AB, et al. **Health Soc Work** 1988 Fall; 13(4):288–95

BCG vaccination. Sethi GR, et al. **Indian Pediatr** 1988 Mar; 25(3):272–8 (22 ref.)

The organization of laboratory services for a "Tuberculosis Control Programme". Fadda G, et al. **JPMA** 1988 Jul; 38(7):187–93 (23 ref.)

Booster effect of tuberculin testing in healthy 6-year-old school children vaccinated with Bacillus Calmette-Guérin at birth in Santiago, Chile. Sepulveda RL, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):578–81

Research towards global control and prevention of tuberculosis with an emphasis on vaccine development. A Fogarty International Center Workshop, Bethesda, Maryland, 3–5 November 1987. Proceedings. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S335–490

Antibiotic prophylaxis after exposure to antibiotic-resistant Mycobacterium tuberculosis [clinical conference] Steinberg JL, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1208–19

The control of chronic infectious patients with pulmonary tuberculosis in a rural area of China. Zhang LX, et al. **Tubercle** 1989 Mar;70(1):21–5

Influence of T-2 toxin on BCG vaccine efficacy against murine pulmonary tuberculosis. Ziprin RL, et al. **Vet Hum Toxicol** 1989 Jun;31(3):213–7

[International Union against Tuberculosis and Lung Disease] Pallisgaard G. **Ugeskr Laeger** 1989 Feb 20;151(8):511–2 **(Dan)**

[The development of mass chest x-ray units in West Germany—report of their status and future perspectives] Arens FJ, et al. **Off Gesundheitswes** 1988 Aug–Sep; 50(8–9):510–5 (Eng. Abstr.) **(Ger)**

[The value of the tuberculin tine test] Hofmann F, et al. **Off Gesundheitswes** 1989 Jul;51(7):359–61 (Eng. Abstr.) **(Ger)**

[Tuberculosis in West Germany—prevention, control and monitoring by the public health service] Jantzen G. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):494–502 (Eng. Abstr.) **(Ger)**

[Tuberculin intradermal test—comparative studies] Magdorf K. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):485–7 (Eng. Abstr.) **(Ger)**

[More on mass roentgen examination] Neumann G. **Prax Klin Pneumol** 1988 Jun;42(6):434 **(Ger)**

[The tuberculin test in the clinic—dosage and evaluation] Simon K, et al. **Prax Klin Pneumol** 1988 Jun;42(6):423–6 (Eng. Abstr.) **(Ger)**

[Prevention of development of intractable tuberculosis] **Kekkaku** 1988 Nov;63(11):719–41 (Eng. Abstr.) **(Jpn)**

[A study of a mass screening for both lung tuberculosis and cancer in Yaizu city—mass screening system and its results] Hida K. **Kekkaku** 1988 Jun;63(6):461–8 **(Jpn)**

[Extraordinary examinations in tuberculous prevalence areas and family contact examinations] Yamagishi F, et al. **Kekkaku** 1989 Feb;64(2):99–104 (Eng. Abstr.) **(Jpn)**

[Importance of preventive fluorography in the early diagnosis of pulmonary tuberculosis in rural population] Abashev IM, et al. **Probl Tuberk** 1988;(12):6–8 (Eng. Abstr.) **(Rus)**

[Improvement in the ambulatory care of patients with tuberculosis and subjects with a high risk of contracting tuberculosis using a computer] Grishina TA. **Probl Tuberk** 1988;(10):5–8 (Eng. Abstr.) **(Rus)**

[Experience with detecting patients with aspecific bronchopulmonary diseases at tuberculosis dispensaries] Korovkin VS, et al. **Probl Tuberk** 1988;(12):13–6 (Eng. Abstr.) **(Rus)**

[Status and prospects of the development of anti-tuberculosis services in the RSFSR] Kucherov AL. **Probl Tuberk** 1988; (7):3–5 (Eng. Abstr.) **(Rus)**

[Value of complex expeditions for taking intensive anti-tuberculosis actions among children and adolescents] Mazhitova AZh, et al. **Probl Tuberk** 1988;(9):8–11 (Eng. Abstr.) **(Rus)**

[Experience in the work of detecting tuberculosis in Northern nationalities] Rozenfel'd NIa, et al. **Probl Tuberk** 1988; (10):60–1 **(Rus)**

[Prevention of tuberculosis in the migrant rural population and means of improving its effectiveness] Shimko EP. **Probl Tuberk** 1989;(1):14–6 (Eng. Abstr.) **(Rus)**

[Organization of phthisiological and pulmonological services at industrial plants] Smirnova LA, et al. **Probl Tuberk** 1989; (4):6–9 (Eng. Abstr.) **(Rus)**

[Experience with the organization of work on tuberculosis prevention in industrial enterprises] Tubalets NI, et al. **Probl Tuberk** 1989;(1):59–61 **(Rus)**

[Problems in controlling relapses in pulmonary tuberculosis] Ursov IG, et al. **Sov Med** 1988;(12):64–7 **(Rus)**

[Control of tuberculosis in Mexico] Pacheco CR, et al. **Bol Of Sanit Panam** 1988 Jul;105(1):34–44 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

[Characteristics of the mental state of patients with newly detected tuberculosis during antibacterial therapy] Shul'gina ZL, et al. **Probl Tuberk** 1988;(6):27–30 (Eng. Abstr.) **(Rus)**

[Characteristics of the nature and dynamics of neuropsychic disorders in patients with newly detected pulmonary tuberculosis undergoing intensive chemotherapy] Immerman KL, et al. **Zh Nevropatol Psikhiatr** 1988; 88(6):109–13 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Radiological features of pulmonary tuberculosis in elderly patients. Van den Brande P, et al. **Age Ageing** 1989 May; 18(3):205–7

Presumptive diagnosis and treatment of pulmonary tuberculosis based on radiographic findings. Gordin FM, et al. **Am Rev Respir Dis** 1989 May;139(5):1090–3

Breast cancer after multiple chest fluoroscopies: second follow-up of Massachusetts women with tuberculosis. Hrubec Z, et al. **Cancer Res** 1989 Jan 1;49(1):229–34

Still screening for pulmonary tuberculosis? [editorial] Tala E, et al. **Eur Respir J** 1989 May;2(5):397–8

Right paracardiac mass in association with left fibrocavitary disease. Bhagi RP, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):120–4

Pulmonary tuberculosis in Gurkhas in Hong Kong in the period 1984–1987 and the role played by routine radiology in case detection. Fairley IM, et al. **J R Army Med Corps** 1989 Feb;135(1):31–2

The solitary pulmonary nodule. **J Tenn Med Assoc** 1989 Jan; 82(1):24–5

[Analysis of x-ray feature of selective bronchial arterography in 41 cases] Zhang W. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):216–7, 255 (Eng. Abstr.) **(Chi)**

[Open pulmonary tuberculosis in the 80s] Steensma JT, et al. **Ned Tijdschr Geneeskd** 1989 Jan 14;133(2):49–51 **(Dut)**

[Primary pulmonary tuberculosis: more than a 'little flu'] Steensma JT, et al. **Ned Tijdschr Geneeskd** 1989 Jan 14; 133(2):52–3 **(Dut)**

[Pneumocystis carinii pneumonia radiologically simulating tuberculosis] Melloni B, et al. **Rev Pneumol Clin** 1988; 44(6):300–3 (Eng. Abstr.) **(Fre)**

[Experiences with the use of x-ray pneumopolygraphy in the diagnosis of functional disorders of the respiratory organs in patients with infiltrative tuberculosis] Gaponko GA, et al. **Radiol Diagn (Berl)** 1989;30(2):119–25 (Eng. Abstr.) **(Ger)**

[Image diagnosis of pulmonary tuberculosis] **Kekkaku** 1989 Jan;64(1):45–76 **(Jpn)**

[Tracheobronchial tuberculosis observed from the chest X-ray findings and its pathogenesis] Hirata S. **Kekkaku** 1989 Apr;64(4):319–27 (Eng. Abstr.) **(Jpn)**

[Evaluation of CT images in pulmonary tuberculosis] Katagiri S, et al. **Rinsho Hoshasen** 1989 Jan;34(1):91–8 (Eng. Abstr.) **(Jpn)**

[Clinical x-ray characteristics of patients with caseous pneumonia and their treatment results] Anastas'ev VS, et al. **Probl Tuberk** 1988;(8):58–61 **(Rus)**

[X-ray and anatomo-microbronchographic comparisons in tuberculomas of the lung] Gudz' EA. **Probl Tuberk** 1988; (10):31–4 (Eng. Abstr.) **(Rus)**

[X-ray characteristics of cirrhotic tuberculosis of the lungs (based on data from ambulatory care observations)] Il'ina TIa, et al. **Probl Tuberk** 1989;(1):28–31 **(Rus)**

[Differential x-ray diagnosis of disseminated tuberculosis and sarcoidosis of the lungs] Khomenko AG, et al. **Probl Tuberk** 1989;(1):16–21 (Eng. Abstr.) **(Rus)**

[Detection of pulmonary tuberculosis risk groups in a polyclinic] Khudushina TA, et al. **Probl Tuberk** 1988; (7):11–4 (Eng. Abstr.) **(Rus)**

[Retrospective analysis of fluorograms of patients with newly detected tuberculosis and cancer of the lungs] Nechaeva OB. **Probl Tuberk** 1988;(9):15–8 (Eng. Abstr.) **(Rus)**

[X-ray morphologic analysis of spherical formations in the lungs] Smiltnieks EKh, et al. **Probl Tuberk** 1988;(8):21–3 (Eng. Abstr.) **(Rus)**

[Supplemental criteria of the differential x-ray diagnosis of peripheral cancer and tuberculoma of the lungs] Anastas'ev VS. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):65–71 (Eng. Abstr.) **(Rus)**

[Stereobronchography in the diagnosis of lesions of the segmental and subsegmental bronchi in tuberculosis of the lungs] Repik VI. **Vestn Rentgenol Radiol** 1988 May–Jun; (3):23–9 (Eng. Abstr.) **(Rus)**

[Evaluation of the efficacy of measures for the early active detection of patients with respiratory organ tuberculosis] Viazitskiĭ PO, et al. **Voen Med Zh** 1989 Apr;(4):47–8 **(Rus)**

RADIONUCLIDE IMAGING

Unusual ventilation-perfusion patterns in primary lung tuberculosis. Chanoine JP, et al. **Pediatr Pulmonol** 1988; 5(1):51–4

RADIOTHERAPY

[Radiation cataract following injection of radium 224] Stefani FH, et al. **Fortschr Ophthalmol** 1989;86(1):32–7 (Eng. Abstr.) **(Ger)**

REHABILITATION

[Social and vocational rehabilitation in the complex treatment of newly registered patients with active tuberculosis of the respiratory organs] Kunitskiĭ EM. **Probl Tuberk** 1988; (9):11–5 (Eng. Abstr.) **(Rus)**

SURGERY

Post-surgical outcome of 57 patients with Mycobacterium xenopi pulmonary infection. Parrot RG, et al. **Tubercle** 1988 Mar;69(1):47–55

[Analysis of 57 cases of unilateral diseased lungs treated by pleuropneumonectomy] Wei CK, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):25–6, 60 (Eng. Abstr.) **(Chi)**

[Local bronchoscopic treatment and surgical drainage of lymph node abscesses in bronchial lymph node tuberculosis in childhood] Hofmann A. **Prax Klin Pneumol** 1988 Jul; 42(7):620–4 (Eng. Abstr.) **(Ger)**

[A case of Chilaiditi's syndrome appeared in drug-resistant pulmonary tuberculosis following lobectomy] Umeki S, et al. **Kekkaku** 1988 Aug;63(8):587–91 (Eng. Abstr.) **(Jpn)**

[The place of surgical treatment in resolving pulmonary tuberculosis in the context of ineffective chemotherapy] Coman C, et al. **Rev Ig [Pneumoftiziol]** 1988 Apr–Jun; 37(2):123–30 (Eng. Abstr.) **(Rum)**

[Outcome in lung resection and pulmonectomy in disseminated forms of tuberculosis] Kariev TM, et al. **Grudn Khir** 1988 May–Jun;(3):45–8 (Eng. Abstr.) **(Rus)**

[Causes of fatal outcome and their prevention in patients with tuberculosis of the lungs subjected to surgical interventions] Prilmak AA, et al. **Grudn Khir** 1988 Nov–Dec;(6):62–6 (Eng. Abstr.) **(Rus)**

[Changes in pulmonary ventilation and central hemodynamics in the postoperative period in patients with disseminated forms of tuberculosis and nonspecific lung diseases] Radionov BV, et al. **Grudn Khir** 1988 Jul–Aug; (4):54–6 (Eng. Abstr.) **(Rus)**

[A method for the extracapsular removal of a pulmonary tuberculoma] Voloshin IaM. **Klin Khir** 1988;(10):67 **(Rus)**

[Surgical interventions in diffuse pulmonary tuberculosis in undisciplined patients] Cherkasov VA, et al. **Probl Tuberk** 1989;(2):34–6 (Eng. Abstr.) **(Rus)**

[Dynamics of roentgeno-functional indices of the respiratory organs in patients with destructive tuberculosis in relation to the nature of the surgical intervention] Gapon'ko GA, et al. **Probl Tuberk** 1988;(11):30–3 (Eng. Abstr.) **(Rus)**

[Organization of a tuberculosis surgical service for patients in Western Siberia] Gorbunov GM, et al. **Probl Tuberk** 1989;(6):21–3 (Eng. Abstr.) **(Rus)**

[Treatment of residual pleural cavity and clotted hemothorax in patients operated on in pulmonary tuberculosis] Kabanov AN, et al. **Probl Tuberk** 1988;(11):34–5 (Eng. Abstr.) **(Rus)**

[Long-term results of the use of osteoplastic thoracoplasty in the treatment of destructive tuberculosis of the lungs in patients with antisocial behavior] Krasnov VA, et al. **Probl Tuberk** 1989;(1):41–4 (Eng. Abstr.) (Rus)

[Cavernotomy in patients with solitary lung] Krasnov VA, et al. **Probl Tuberk** 1989;(2):32–4 (Eng. Abstr.) (Rus)

[Resection of superior and lower lobes of the right lung in a female patient with fibro-cavernous tuberculosis and congenital defect] Ladnyĭ AIa, et al. **Probl Tuberk** 1988; (12):53–5 (Rus)

[Use of carbon dioxide laser in the treatment of tuberculosis of the bronchi and trachea in children and adolescents] Lebedev KM, et al. **Probl Tuberk** 1989;(3):30–3 (Eng. Abstr.) (Rus)

[Immunological approaches to the prevention of suppurative postoperative complications in patients with pulmonary tuberculosis] Morozov VL, et al. **Probl Tuberk** 1988; (7):37–9 (Eng. Abstr.) (Rus)

[Immunoallergic criteria in the prognosis of suppurative postoperative complications in patients with pulmonary tuberculosis] Morozov VL, et al. **Probl Tuberk** 1988; (10):36–9 (Eng. Abstr.) (Rus)

[Surgical treatment of destructive pulmonary tuberculosis in patients with diabetes mellitus] Nazarov Ch, et al. **Probl Tuberk** 1988;(6):43–6 (Eng. Abstr.) (Rus)

[Use of therapeutic pneumothorax in patients with progressive destructive tuberculosis of the lungs] Repnitskaia ZD, et al. **Probl Tuberk** 1989;(5):59–61 (Rus)

[Anesthesiologic and resuscitation support for surgical interventions on the single lung in tuberculosis patients] Zhilin IuN, et al. **Probl Tuberk** 1988;(8):30–5 (Eng. Abstr.) (Rus)

[Resection of the lung in tuberculosis with predominant involvement of the lower lobe] Kariev TM, et al. **Vestn Khir** 1988 May;140(5):56–7 (Rus)

[The current status of patients with extrapleural pneumolysis and plombage] Dangubić V, et al. **Plucne Bolesti** 1988 Jan-Jun;40(1-2):49–52 (Eng. Abstr.) (Ser)

THERAPY

Recent advances in the immunotherapy of tuberculosis. Stanford JL. **Bull Int Union Tuberc Lung Dis** 1989 Mar; 64(1):12–3

[The cured tuberculosis patient and his problems (a study of 374 cases)] Zaïbi M, et al. **Tunis Med** 1989 Apr; 67(4):257–61 (Eng. Abstr.) (Fre)

[The patient of the pneumologist in 4 decades. Epidemiologic and socioeconomic viewpoints] Bum A. **Prax Klin Pneumol** 1988 Jul;42(7):537–9 (Eng. Abstr.) (Ger)

[Reflections on the treatment of pulmonary tuberculosis] Moskwa Z. **Wiad Lek** 1988 May 1;41(9):609–12 (Eng. Abstr.) (Pol)

[The current role of sanatoria in combatting tuberculosis] Anastasatu C, et al. **Rev Ig [Pneumoftiziol]** 1988 Oct-Dec; 37(4):289–98 (18 ref.) (Rum)

[Organization and efficacy of treating newly detected cases of destructive forms of pulmonary tuberculosis] Bokhonok VS, et al. **Probl Tuberk** 1988;(10):61–3 (Rus)

[Immediate and long-term results of the combined treatment of patients with extensive destructive tuberculosis of the lungs] Gel'berg IS, et al. **Probl Tuberk** 1989;(3):33–6 (Eng. Abstr.) (Rus)

[Experimental validation of the expediency of the use of ultra-high frequency therapy in combination with antibacterial drugs in infiltrative tuberculosis of the lungs] Lomachenkov VD, et al. **Probl Tuberk** 1989;(3):52–5 (Eng. Abstr.) (Rus)

[Ways of increasing the quality of the advanced training of therapists in phthisiology] Savula MM, et al. **Probl Tuberk** 1989;(2):17–9 (Eng. Abstr.) (Rus)

[Autologous macrophages in combined therapy of patients with tuberculosis complicated by nonspecific bronchitis] Shesterina MV, et al. **Probl Tuberk** 1989;(3):22–5 (Eng. Abstr.) (Rus)

[Optimization of the work of the pediatric and adolescent departments at tuberculosis dispensaries] Sirenko IA, et al. **Probl Tuberk** 1988;(8):8–10 (Eng. Abstr.) (Rus)

[Integration of phthisiology and pulmonology in rural areas] Starchak AV. **Probl Tuberk** 1989;(2):58–60 (Rus)

[Recurrences of pulmonary tuberculosis and factors contributing to their occurrence] Topchiev ShR, et al. **Probl Tuberk** 1988;(11):60–2 (Rus)

[Immediate and late results of the surgical treatment of patients with post-tuberculosis cavities] Vorozhtsova MP. **Probl Tuberk** 1989;(2):37–9 (Eng. Abstr.) (Rus)

[Skin oxygen tension and pulmonary artery systolic pressure in patients with pulmonary tuberculosis during oxygen therapy] Zuev VS, et al. **Probl Tuberk** 1989;(3):46–9 (Rus)

[Dispensary observation of middle-aged and elderly patients with pulmonary tuberculosis and diabetes mellitus] Iashchenko BP, et al. **Vrach Delo** 1988 Dec;(12):69–71 (Eng. Abstr.) (Rus)

TRANSMISSION

An outbreak of tuberculosis in a family day care home. Leggiadro RJ, et al. **Pediatr Infect Dis J** 1989 Jan;8(1):52–4

[Follow-up studies of persons who during childhood and adolescence had family and social contacts with tuberculosis patients] Kasarda VV. **Probl Tuberk** 1988; (12):8–11 (Eng. Abstr.) (Rus)

TUBERCULOSIS, RENAL

[Tuberculosis of the kidney and pregnancy] Ristić D. **Med Pregl** 1988;41(1-2):44–6 (Eng. Abstr.) (Ser)

COMPLICATIONS

Tuberculous epididymitis occurring 35 years after renal tuberculosis. Almagro UA, et al. **J Urol** 1989 May; 141(5):1204–5

[Association of tuberculosis and cancer of the kidney] Neĭmark AI, et al. **Probl Tuberk** 1989;(2):60–1 (Rus)

[Calcified tuberculous kidney] Strelis AK, et al. **Urol Nefrol (Mosk)** 1988 Jul-Aug;(4):56–7 (Rus)

DIAGNOSIS

Ultrasonography of the advanced tuberculous kidney. Scott RF, et al. **S Afr Med J** 1989 Apr 15;75(8):371–2

[Diagnosis of renal tuberculosis by gray-scale ultrasonography] Wang ZB. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):353–5, 386 (Eng. Abstr.) (Chi)

[Cystoscopy and endovesical biopsy in renal tuberculosis] Shapiro AL, et al. **Urol Nefrol (Mosk)** 1989 Jan-Feb; (1):12–5 (Eng. Abstr.) (Rus)

DRUG THERAPY

[Biochemical bases of adverse reactions to antibacterial preparations used in renal tuberculosis and means of their prevention] Kazakov KS, et al. **Probl Tuberk** 1989;(6):52–5 (Eng. Abstr.) (Rus)

ETIOLOGY

Tuberculosis in living related donor renal transplant recipients. Suleiman AB, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):454–6

Tuberculosis in cadaveric renal allograft recipients. Report of 4 cases and review of the literature. Lenk S, et al. **Eur Urol** 1988;14(6):484–6 (6 ref.)

PHYSIOPATHOLOGY

[Changes in intraorganic hemomicrocirculation in renal tuberculosis in the light of experimental morphofunctional studies] Bellendir EN, et al. **Probl Tuberk** 1989;(2):46–50 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Filling defects of the kidney pelvis. Press HC Jr, et al. **J Natl Med Assoc** 1988 Nov;80(11):1237–8

REHABILITATION

[Ways of improving physician's work disability evaluation and social-vocational rehabilitation of patients with urologic tuberculosis and a single kidney] Solovel' BV. **Probl Tuberk** 1989;(5):65–8 (Rus)

SURGERY

[Perestroika in the surgery of renal tuberculosis and its scientific substantiation] Shapkin AG. **Vestn Khir** 1988 Oct; 141(10):3–7 (Eng. Abstr.) (Rus)

TUBERCULOSIS SOCIETIES see under **VOLUNTARY HEALTH AGENCIES**

TUBERCULOSIS, SPINAL

[Vertebral tuberculosis in Gabon. Anatomo-clinical aspects, diagnostic and therapeutic problems, 107 cases from 1976 to 1986] Loembe PM, et al. **Neurochirurgie** 1988; 34(6):420–7 (39 ref.) (Eng. Abstr.) (Fre)

COMPLICATIONS

Cryptococcus meningitis following vertebral tuberculosis. Stempka R, et al. **Mycoses** 1988;Suppl 1:93–5

Tuberculous paraplegia during pregnancy. A report of 4 cases. Govender S, et al. **S Afr Med J** 1989 Feb 18; 75(4):190–2

Addisonian crisis induced by treatment with rifampicin. Wilkins EG, et al. **Tubercle** 1989 Mar;70(1):69–73

[Substantiation of the use of terrilytin in the treatment of spinal cord disorders in tuberculous spondylitis] Bellendir EN, et al. **Probl Tuberk** 1989;(4):46–50 (Eng. Abstr.) (Rus)

[Spinal cord disorders in tuberculosis and osteomyelitis of the spine and their surgical treatment] Tikhodeev SA. **Probl Tuberk** 1988;(12):39–42 (Eng. Abstr.) (Rus)

[ORL manifestations of tuberculous spondylitis in a colored immigrant] Roura i Moreno J. **An Otorrinolaringol Ibero Am** 1988;15(5):503–11 (Eng. Abstr.) (Spa)

DIAGNOSIS

MR imaging characteristics of tuberculous spondylitis vs vertebral osteomyelitis. Smith AS, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):399–405

Pott's disease masquerading as vertebral lymphoma. Stockdale AD, et al. **Br J Clin Pract** 1988 Sep;42(9):389–91

Pott's disease in Kentucky: diagnosis and treatment. Roy TM, et al. **J Ky Med Assoc** 1988 Sep;86(9):499–502

Brucellar and tuberculous spondylitis: comparative imaging features. Sharif HS, et al. **Radiology** 1989 May; 171(2):419–25

[Osteolytic foci: is it cancer or not? (letter)] **Ned Tijdschr Geneeskd** 1989 May 27;133(21):1094–5 (Dut)

[MR imaging of tuberculous spondylitis] Ohgi K, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1079–86 (Eng. Abstr.) (Jpn)

[Radiological diagnosis of spinal tuberculosis—CT differentiation from metastatic spinal tumors] Shinzato J, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1543–8 (Eng. Abstr.) (Jpn)

ETIOLOGY

Epidural spinal infection in intravenous drug abusers. Koppel BS, et al. **Arch Neurol** 1988 Dec;45(12):1331–7 (14 ref.)

METABOLISM

[Changes in the content and composition of phospholipids in various portions of the spinal cord in patients with tuberculosis of the spine] Kruglova EE, et al. **Probl Tuberk** 1989;(6):55–9 (Eng. Abstr.) (Rus)

PATHOLOGY

Intradural extramedullary tuberculous spinal granulomas. Mathuriya SN, et al. **Clin Neurol Neurosurg** 1988; 90(2):155–8

[Comparative study of Pott's disease and non-tuberculous spondylodiscitis (letter)] Gómez Rodríguez N, et al. **Rev Clin Esp** 1989 Mar;184(4):210 (Spa)

PHYSIOPATHOLOGY

Tuberculosis of the nervous system. A clinical, radiological and pathological study of 39 consecutive cases in Riyadh, Saudi Arabia. Bahemuka M, et al. **J Neurol Sci** 1989 Mar; 90(1):67–76

[Pathology of respiration and blood circulation in patients with tuberculous spondylitis after surgical treatment] Ivanova TN. **Probl Tuberk** 1988;(7):32–6 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Radiology/case of the month. Posterior mediastinal mass in a black patient with back pain. Bosch X, et al. **JAMA** 1989 Sep 8;262(10):1373–4

Computed tomography of spinal tuberculosis. Suh JS, et al. **Yonsei Med J** 1988;29(3):252–8

Computed tomography of a tuberculous paravertebral abscess. Smevik B, et al. **Z Kinderchir** 1988 Dec;43(6):430–2

[Early diagnosis of atlanto-axial tuberculosis] Shi DY. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):78–9, 124 (Eng. Abstr.) (Chi)

[Differential x-ray diagnosis of tuberculosis and osteomyelitis of the spine in adults] Sovetova NA, et al. **Ortop Travmatol Protez** 1988 Nov;(11):27–34 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

[Bone and spinal tuberculosis: rare cause of false negative diagnosis with technetium scintigraphy (letter)] Martin A, et al. **Presse Med** 1988 Sep 17;17(31):1587 (Fre)

SURGERY

Anterior spinal tuberculosis: paraplegia following laminectomy. Rand C, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):105–9

Anterior spinal tuberculosis: paraplegia following laminectomy [letter] Statham P, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4):273

Pott's disease. A resurgent challenge to the thoracic surgeon. Omari B, et al. **Chest** 1989 Jan;95(1):145–50

[Somatosensory evoked potentials monitoring during operation of the spinal cord] Tong B. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):402–5, 445 (Eng. Abstr.) (Chi)

[The importance of adequate intra-focal exposure during focal debridement of spinal tuberculosis] Wang YD. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):603–5, 637 (Eng. Abstr.) (Chi)

[External instrumental fixation of the spine in the treatment of spinal diseases and injuries] Lavrov VN, et al. **Sov Med** 1989;(4):35–8 (Eng. Abstr.) (Rus)

[Experimental substantiation and clinical evaluation of posterior spinal fusion using acryloxide] Bellendir EN, et al. **Vestn Khir** 1987 Dec;139(12):69–73 (Eng. Abstr.) (Rus)

THERAPY

[Results of the conservative treatment of 171 cases of Pott's disease without neurologic involvement] Ouahes M, et al. **Rev Chir Orthop** 1988;74(6):563–8 (Eng. Abstr.) (Fre)

TUBERCULOSIS, SPLENIC

COMPLICATIONS

[A case of disseminated (hematogenic) tuberculosis predominantly affecting the liver and spleen] Lantsova NA, et al. **Probl Tuberk** 1989;(2):72–3 **(Rus)**

DRUG THERAPY

An experimental model of chemotherapy on dormant tuberculous infection, with particular reference to rifampicin. Kondo E, et al. **Jpn J Med Sci Biol** 1988 Apr; 41(2):37–47

ETIOLOGY

[Hepatosplenic tuberculous abscess in acquired immunodeficiency syndrome. Apropos of 2 cases (letter)] Carlioz R, et al. **Ann Med Interne (Paris)** 1988;139(7):524–6 (14 ref.) **(Fre)**

RADIOGRAPHY

Hepatosplenic tuberculosis with hypersplenism: CT evaluation. Choi BI, et al. **Gastrointest Radiol** 1989 Summer;14(3):265–7

TUBERCULOSIS, UROGENITAL

COMPLICATIONS

Tuberculous vesicovaginal fistula in a child. Singh A, et al. **Br J Urol** 1988 Dec;62(6):615

[A successful physioenzymotherapy using terrilytin in the treatment of a patient with cicatricial changes in the urethra of tubercular origin] Iagafarova RK, et al. **Probl Tuberk** 1988;(10):70–1 **(Rus)**

DIAGNOSIS

ELISA–an aid in rapid diagnosis of genito–urinary tract tuberculosis. Maniar P, et al. **J Postgrad Med** 1988 Jul; 34(3):158–64

[Diagnostic potential of immunological indices in urogenital tuberculosis] Slavov Ch, et al. **Khirurgiia (Sofiia)** 1988; 41(3):17–9 (Eng. Abstr.) **(Rus)**

[Determination of antibodies to mycobacterial antigens in tuberculosis by erythrocyte immunoadsorption with a rosette marker] Plaskin DIu, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):79–82 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[Changes in the treatment of urogenital tuberculosis] Lipsky H, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):573–6 (Eng. Abstr.) **(Ger)**

[Direct endolymphatic administration of antitubercular drugs in patients with inflammatory diseases of the urogenital organs] Mochalova TP, et al. **Probl Tuberk** 1989;(2):40–2 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

[Concomitant superinfection by non–specific bacteria in urogenital tuberculosis] Maganto Pavón E, et al. **Actas Urol Esp** 1988 Jul–Aug;12(4):315–20 (Eng. Abstr.) **(Spa)**

URINE

[The diagnostic value of transamidinase activity in the urine in urologic tuberculosis] Titarenko OT, et al. **Lab Delo** 1988;(8):25–7 (Eng. Abstr.) **(Rus)**

TUBERCULOSIS VACCINES see BCG VACCINE

TUBERCULOSTATIC AGENTS see ANTITUBERCULAR AGENTS

TUBEROUS SCLEROSIS

Diagnosis of tuberous sclerosis. Osborne JP. **Arch Dis Child** 1988 Dec;63(12):1423–5 (22 ref.)

Giant angiofibroma without accompanying tuberous sclerosis. Stough DB, et al. **Cutis** 1988 Nov;42(5):429–32

Bourneville's disease. A review and case report of tuberous sclerosis. Saeva JT, et al. **J Am Podiatr Med Assoc** 1988 Nov;78(11):590–2

[General anesthesia of a patient with tuberous sclerosis (letter)] Martín ML, et al. **Rev Esp Anestesiol Reanim** 1988 May–Jun;35(3):169 **(Spa)**

COMPLICATIONS

Renal involvement in tuberous sclerosis. Dossi F, et al. **Adv Exp Med Biol** 1989;252:65–71

Picture of the month. Tuberous sclerosis. Arens R, et al. **Am J Dis Child** 1988 Oct;142(10):1083–4

Cardiac rhabdomyomata in tuberous sclerosis: their course and diagnostic value. Smith HC, et al. **Arch Dis Child** 1989 Feb;64(2):196–200

The radiological diagnosis and management of angiomylipoma of tuberous sclerosis. Kreel L, et al. **Australas Radiol** 1989 May;33(2):176–81

Tuberous sclerosis and psychosis [letter] Collacott RA. **Br J Psychiatry** 1987 Dec;151:860–1

The natural history of renal cysts in an infant with tuberous sclerosis: evaluation with ultrasound. Moss JG, et al. **Br J Radiol** 1988 Nov;61(731):1074–6

Strokes in tuberous sclerosis: are rhabdomyomas a cause? Gomez MR. **Brain Dev** 1989;11(1):14–9 (32 ref.)

Tuberous sclerosis with unusual rib deformity and abdominal aortic aneurysm—a case report. Chao TY, et al. **Chang Keng I Hsueh** 1988 Jun;11(2):145–51 (10 ref.)

Subependymal giant–cell astrocytoma associated with tuberous sclerosis. Do subependymal nodules grow? Fujiwara S, et al. **Childs Nerv Syst** 1989 Feb;5(1):43–4

End stage renal disease in tuberous sclerosis: a case report and review of the literature. Eze CJ. **East Afr Med J** 1988 Jun;65(6):411–5 (8 ref.)

Cardiac tumour in a neonate with tuberous sclerosis: echocardiographic demonstration and magnetic resonance imaging. Shiraishi H, et al. **Eur J Pediatr** 1988 Oct; 148(1):50–2

Renal angiolipomas combined with renal cystic disease in tuberous sclerosis. Henze E, et al. **Eur J Radiol** 1989 May; 9(2):125–6

Pachyonychia congenita with tuberous sclerosis. Sharma VK, et al. **Int J Dermatol** 1989 Jun;28(5):332–3

Hepatic angiomyolipoma in a tuberous sclerosis patient. Kristal H, et al. **Isr J Med Sci** 1989 Jul;25(7):412–4

Olfactory hamartomas in tuberous sclerosis. de León GA, et al. **J Neurol Sci** 1988 Nov;87(2–3):187–94

Renal angiomyolipoma associated with lymph node involvement and renal cell carcinoma in patients with tuberous sclerosis. Taylor RS, et al. **J Urol** 1989 Apr; 141(4):930–2

Trial of a minimum doses of L–dopa (0.5 mg/kg/day) on intractable epilepsy associated with tuberous sclerosis. Uchiyama A, et al. **Jpn J Psychiatry Neurol** 1988 Sep; 42(3):584–5

Tumor embolism in tuberous sclerosis [letter] Kandt RS. **Pediatr Neurol** 1986 Sep–Oct;2(5):316

Cerebral embolism resulting from an intracardiac tumor in tuberous sclerosis. Konkol RJ, et al. **Pediatr Neurol** 1986 Mar–Apr;2(2):108–10

Diagnosis and management of neurocutaneous syndromes. Roach ES. **Semin Neurol** 1988 Spring;8(1):83–96 (141 ref.)

[Association of angiolipoma and renal adenocarcinoma in a patient with Bourneville's tuberous sclerosis] Biquet P, et al. **Acta Urol Belg** 1988;56(3):447–52 (Eng. Abstr.) **(Fre)**

[Tuberous sclerosis and trigonoaeptal tumors] Bret P, et al. **Neurochirurgie** 1988;34(4):235–41 (Eng. Abstr.) **(Fre)**

[Unexplained sudden death of an infant with Bourneville's tuberous sclerosis (letter)] Netter JC, et al. **Presse Med** 1989 May 20;18(20):1030 **(Fre)**

[Giant bleeding angiomyolipoma of the kidney in tuberous sclerosis] Brandt H, et al. **ROFO** 1989 May;150(5):606–8 **(Ger)**

[Echocardiographic study of heart rhabdomyoma in tuberous sclerosis] Manetti A, et al. **G Ital Cardiol** 1989 Apr; 19(4):319–23 (Eng. Abstr.) **(Ita)**

[Cardiac rhabdomyoma in a newborn infant with tuberous sclerosis. Value of 2–dimensional and Doppler echocardiography] Neri G, et al. **G Ital Cardiol** 1988 Dec; 18(12):1028–30 (Eng. Abstr.) **(Ita)**

[Immunocytochemistry of subependymal giant cell astrocytoma associated with tuberous sclerosis] Tanaka J, et al. **No To Hattatsu** 1989 May;21(3):222–6 (Eng. Abstr.) **(Jpn)**

[Tuberous sclerosis associated with cystic kidney] Aoki K, et al. **Rinsho Hoshasen** 1988 Dec;33(13):1697–8 **(Jpn)**

CONGENITAL

Neonatal tuberous sclerosis. US, CT, and MR diagnosis of brain and cardiac lesions. Christophe C, et al. **Pediatr Radiol** 1989;19(6–7):446–8

DIAGNOSIS

Tuberous sclerosis: increased MR detection using gradient echo techniques. Berns DH, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):896–8

Magnetic resonance images of tuberous sclerosis. Further observations and clinical correlations. Inoue Y, et al. **Neuroradiology** 1988;30(5):379–84

Role of prenatal detection of cardiac tumours in the diagnosis of tuberous sclerosis—report of two cases. Chitayat D, et al. **Prenat Diagn** 1988 Oct;8(8):577–84

Cerebral tuberous sclerosis: MR imaging. Nixon JR, et al. **Radiology** 1989 Mar;170(3 Pt 1):869–73

[Bourneville's tuberous sclerosis. Prenatal diagnosis of a case] Monnier JC, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(4):495–9 (Eng. Abstr.) **(Fre)**

[Magnetic resonance imaging in Bourneville's disease: relation to the EEG] Curatolo P, et al. **Neurophysiol Clin** 1988 Sep;18(5):459–67 (Eng. Abstr.) **(Fre)**

[Description of a case of tuberous sclerosis in a 2–month–old girl] Oggero R, et al. **Pediatr Med Chir** 1989 Mar–Apr; 11(2):229–30 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

Pulmonary tuberous sclerosis responds to progesterone treatment. Murray DP, et al. **Ir J Med Sci** 1988 Jun; 157(6):196–7

EPIDEMIOLOGY

Tuberous sclerosis: prevalence in the Grampian region of Scotland. Umapathy D, et al. **J Ment Defic Res** 1989 Aug; 33 (Pt 4):349–55

GENETICS

Tuberous sclerosis and the relation with renal angiomyolipoma. A genetic study on the clinical aspects. van Baal JG, et al. **Clin Genet** 1989 Mar;35(3):167–73

Absence of linkage of ABO blood group locus to familial tuberous sclerosis [published erratum appears in Exp Neurol 1989 Sep;105(3):320] Kandt RS, et al. **Exp Neurol** 1989 Jun;104(3):223–8

An unusual case of tuberous sclerosis with family study. Chakravarty A, et al. **J Assoc Physicians India** 1988 Feb; 36(2):173–5

Evidence for genetic heterogeneity in tuberous sclerosis. Sampson JR, et al. **J Med Genet** 1989 Aug;26(8):511–6

Genetic aspects of tuberous sclerosis in the west of Scotland. Sampson JR, et al. **J Med Genet** 1989 Jan;26(1):28–31

Radiation–induced chromosome aberrations and sister chromatid exchanges in lymphocytes from patients with tuberous sclerosis. Iijima S, et al. **Jinrui Idengaku Zasshi** 1988 Sep;33(3):349–53

Renal angiomyolipoma in a family with tuberous sclerosis. Ang PT, et al. **Singapore Med J** 1988 Oct;29(5):521–3

Pulmonary manifestations of tuberous sclerosis in first degree relatives. Slingerland JM, et al. **Thorax** 1989 Mar; 44(3):212–4

[Hereditary brain tumor and associated phakoanatoses] Shitara N. **No To Shinkei** 1988 Sep;40(9):825–32 **(Jpn)**

METABOLISM

Tuberous sclerosis: aberrant proline sensitivity of skin fibroblasts. Hayashi A, et al. **Brain Dev** 1989;11(3):161–3

PATHOLOGY

Dermatology diagnosis. Tuberous sclerosis. Ross S, et al. **Bol Asoc Med P R** 1988 Dec;80(12):452–4

Atypical cysts and carcinomas of the kidneys in the phacomatoses. A quantitative DNA study using static and flow cytometry. Ibrahim RE, et al. **Cancer** 1989 Jan 1; 63(1):148–57

Severe pulmonary hypertension with diffuse smooth muscle proliferation of the lungs. Pulmonary tuberous sclerosis? Wagener OE, et al. **Chest** 1989 Jan;95(1):234–7

Tuberous sclerosis in the premature infant: a report of a case with immunohistochemistry on the CNS. Chou TM, et al. **Clin Neuropathol** 1989 Jan–Feb;8(1):45–52

Unilateral cystic disease of the neonatal kidney: a rare presentation of tuberous sclerosis. Miller ID, et al. **Histopathology** 1989 May;14(5):529–32

Cluster growths in adenoma sebaceum associated with tuberous sclerosis. Park YK, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):918–20

Cerebral tuberous sclerosis: postmortem magnetic resonance imaging and pathologic anatomy. Nixon JR, et al. **Mayo Clin Proc** 1989 Mar;64(3):305–11

Tuberous sclerosis—another success for magnetic resonance imaging [editorial] Richardson EP Jr. **Mayo Clin Proc** 1989 Mar;64(3):371–3

Immunocytochemical studies on a fetal brain of tuberous sclerosis. Nishimura M, et al. **Pediatr Neurol** 1985 Jul–Aug; 1(4):245–8

Hyperdense cerebral lesion in childhood tuberous sclerosis: computed tomographic demonstration and neuropathologic analysis. Pinto–Lord MC, et al. **Pediatr Neurol** 1986 Jul–Aug;2(4):245–8

[A case of tuberous sclerosis: anatomo–pathologic description] Fontanini G, et al. **Pathologica** 1989 Mar–Apr; 81(1072):195–202 (Eng. Abstr.) **(Ita)**

[Pringle's adenoma of the sebaceous glands combined with vitiligo and logoneurosis] Alziatulov RF. **Vestn Dermatol Venerol** 1989;(4):69–70 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

[High–resolution computed tomography of the thorax in lymphangioleiomyomatosis and tuberous sclerosis] Kullnig P, et al. **ROFO** 1989 Jul;151(1):32–5 (Eng. Abstr.) **(Ger)**

[Symptoms of tuberous sclerosis of the brain in computerized tomography] Bem Z, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jul–Oct;52(4–5):201–4 (Eng. Abstr.) **(Pol)**

SURGERY

Shaving and dermabrasion of the facial lesions in tuberous sclerosis. A case report. Widgerow AD. **S Afr Med J** 1989 Aug 19;76(4):169–70

TUBOCURARINE

Use of atracurium or vecuronium to prolong the action of tubocurarine. Middleton CM, et al. **Br J Anaesth** 1989 Jun; 62(6):659–63

ADMINISTRATION & DOSAGE

In vitro investigation of the priming principle for rapid neuromuscular block. Storella RJ, et al. **Br J Anaesth** 1989

May;62(5):478–82
Not always on the level [letter] Crocker MC. **Can Med Assoc J** 1989 Jan 1;140(1):13

ADVERSE EFFECTS

D-tubocurarine and upper airway obstruction: a historical perspective [letter] Knill RL. **Anesthesiology** 1989 Sep; 71(3):480–1

ANALOGS & DERIVATIVES

The dose–effect relationship of metocurine: EMG versus MMG [letter] Eisenkraft JB. **Anesthesiology** 1988 Nov; 69(5):807–8
Exercise produces sensitivity to metocurine. Gronert GA, et al. **Anesthesiology** 1989 Jun;70(6):973–7
The effect of maintenance dose vecuronium on pre-established metocurine- or vecuronium-induced neuromuscular blockade. Ornstein E, et al. **Anesthesiology** 1988 Dec;69(6):954–5

ANTAGONISTS & INHIBITORS

[Antagonistic effect of 4-aminopyridine derivatives on dTc induced block] Amaki Y, et al. **Masui** 1989 May;38(5):661–5 (Eng. Abstr.) (Jpa)

PHARMACOLOGY

Train-of-four fade during onset of neuromuscular block with nondepolarising neuromuscular blocking agents. Gibson FM, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):204–6
Arterial blood pressure at the onset of dynamic exercise in partially curarized man. Secher NH, et al. **Acta Physiol Scand** 1988 Jun;133(2):233–7
Intravenous administration of d-tubocurarine and pancuronium in fetal limbs. Chestnut DH, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):510–3
Ketamine potentiates nondepolarizing neuromuscular relaxants in a primate. Tsai SK, et al. **Anesth Analg** 1989 Jan;68(1):5–8
Inhibition of mobilization of acetylcholine: the weak link in neuromuscular transmission during partial neuromuscular block with d-tubocurarine. Foldes FF, et al. **Anesthesiology** 1989 Aug;71(2):218–23
The effect of resting muscle tension on the dose-effect relationship of d-tubocurarine: does preload influence the evoked EMG? Kopman AF. **Anesthesiology** 1988 Dec; 69(6):1003–5
Pancuronium, gallamine, and d-tubocurarine compared: is speed of onset inversely related to drug potency? Kopman AF. **Anesthesiology** 1989 Jun;70(6):915–20
Recovery of airway protection compared with ventilation in humans after paralysis with curare. Pavlin EG, et al. **Anesthesiology** 1989 Mar;70(3):381–5
Renal effects of d-tubocurarine and pancuronium in the newborn rabbit. Gouyon JB, et al. **Biol Neonate** 1988; 54(4):218–23
Priming with alcuronium and tubocurarine accelerates the onset of neuromuscular block. Pollard BJ. **Br J Anaesth** 1989 Jul;63(1):7–11
Antagonism by tubocurarine and verapamil of the regenerative acetylcholine release from mouse motor nerve. Hong SJ, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):11–7
Responsiveness of normal and dystrophic avian muscle to acetylcholine, carbamylcholine and d-tubocurarine. Howlett SE, et al. **Gen Pharmacol** 1988;19(5):697–701
Cell death of motoneurons in the chick embryo spinal cord. X. Synapse formation on motoneurons following the reduction of cell death by neuromuscular blockade. Oksda A, et al. **J Neurobiol** 1989 Jun;20(4):219–33
Intraperitoneal endotoxin but not protein malnutrition shifts d-tubocurarine dose-response curves in mouse gastrocnemius muscle. Tomera JF, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):216–20
The nature of the presynaptic effects of (+)-tubocurarine at the mouse neuromuscular junction. Ferry CB, et al. **J Physiol (Lond)** 1988 Sep;403:425–37
Effects of d-tubocurarine on rat cardiac muscarinic receptors: a comparison with gallamine. Waelbroeck M, et al. **J Recept Res** 1988;8(6):787–808
Myotonic mice: effects of tubocurarine on muscle contractility [letter] Entrikin RK, et al. **Muscle Nerve** 1989 Feb;12(2):161–3
Prejunctional action of tubocurarine-like fade [letter] Bradley RJ. **Trends Pharmacol Sci** 1988 Jun;9(6):200–1
[Post- and presynaptic mechanisms of restoring nerve-muscle transmission with tubocurarine after the effect of an organophosphorous inhibitor of acetylcholinesterase] Krivol II, et al. **Dokl Akad Nauk SSSR** 1989;306(2):499–502 (Rus)
[Effect of liposome-incorporated tubocurarine on the EEG of experimental animals] Aliautdin RN, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):20–3 (Eng. Abstr.) (Rus)
[Presynaptic action of tubocurarine during frequent stimulation of a motor nerve] Grigor'ev VM, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):28–32 (Eng. Abstr.) (Rus)
[Quantitative patterns of tubocurarine action on the synaptic potentials of frog muscle] Grigor'ev VM, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1228–34 (Eng. Abstr.) (Rus)
[Effect of tubocurarine on the quantum release of acetylcholine during the infrequent stimulation of a motor nerve] Grigor'ev VM, et al. **Fiziol Zh SSSR** 1988 Oct; 74(10):1377–82 (Eng. Abstr.) (Rus)
[Action of tubocurarine on non-activated nicotinic cholinoreceptors of neurons of sympathetic ganglia in the rat] Kurennyi DE. **Neirofiziologiia** 1989;21(1):130–3 (Eng. Abstr.) (Rus)
[Mechanism of action of tubocurarine on nicotinic cholinoreceptors of neurons of the sympathetic ganglia of rats] Selianko AA, et al. **Neirofiziologiia** 1988;20(5):672–80 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

"Statistical power" and interpretation of small studies: does atracurium pretreatment reduce the incidence of succinylcholine fasciculations? [letter] Burton P, et al. **Anesth Analg** 1989 Aug;69(2):263

TUBULIN

Structure and utilization of tubulin isotypes. Sullivan KF. **Annu Rev Cell Biol** 1988;4:687–716 (152 ref.)
Selection of a nucleation-promoting element following chemical modification of tubulin. Sioussat TM, et al. **Biochemistry** 1989 May 16;28(10):4435–43
Preferential covalent binding of acetaldehyde to the alpha-chain of purified rat liver tubulin. Jennett RB, et al. **Hepatology** 1989 Jan;9(1):57–62
The influence of high dietary aluminum on brain microtubule polymerization in mice. Oteiza PI, et al. **Toxicol Lett** 1989 Jun;47(3):279–85

ANALOGS & DERIVATIVES

Distribution of tyrosinated and detyrosinated alpha-tubulin revealed by mouse anti-peptide polyclonal antibodies. Viklický V, et al. **Folia Biol (Praha)** 1988;34(6):380–9

ANALYSIS

Localization of microfilaments and microtubules during dental development in the rat. Diekwisch T. **Acta Histochem Suppl (Jena)** 1989;37:209–12
Myosin, tubulin and laminin immunoreactivity in the ectoderm of the growing area opaca of the chick embryo. Monnet-Tschudi F, et al. **Anat Embryol (Berl)** 1988; 179(2):157–64
The aminoterminal domain of alpha-tubulin probed by monoclonal antibodies. Recognition of a rarely exposed epitope by the monoclonal antibody 111 B52 C2. Wolff A, et al. **Biol Cell** 1988;63(3):319–26
Use of electrophoretic techniques and specific antibodies to analyse tubulin isotypes in rabbit testis and spermatozoa. Casale A. **Cell Biol Int Rep** 1989 Jun;13(6):537–46
Establishment of a stable, acetylated microtubule bundle during neuronal commitment. Falconer MM, et al. **Cell Motil Cytoskeleton** 1989;12(3):169–80
Differential localisation of tyrosinated, detyrosinated, and acetylated alpha-tubulins in neurites and growth cones of dorsal root ganglion neurons. Robson SJ, et al. **Cell Motil Cytoskeleton** 1989;12(4):273–82
Localization of acetylated alpha-tubulin in Tritrichomonas foetus and Trichomonas vaginalis. Batista CM, et al. **Cell Struct Funct** 1988 Oct;13(5):445–53
Tubulin isotype usage in vivo: a unique spatial distribution of the minor neuronal-specific beta-tubulin isotype in pheochromocytoma cells. Asai DJ, et al. **Dev Biol** 1989 Apr;132(2):398–409
Analysis of tubulin proteins and peptides in neuronal and non-neuronal tissues using immobilized pH gradients. Field DJ, et al. **Electrophoresis** 1988 Sep;9(9):555–62
Differential distribution of beta-tubulin isotypes in cerebellum. Burgoyne RD, et al. **EMBO J** 1988 Aug; 7(8):2311–9
Tubulin oligomers and microtubule oscillations. Antagonistic role of microtubule stabilizers and destabilizers. Lange G, et al. **Eur J Biochem** 1988 Dec 1;178(1):61–9
Distribution of tyrosinated and detyrosinated alpha-tubulin revealed by mouse anti-peptide polyclonal antibodies. Viklický V, et al. **Folia Biol (Praha)** 1988;34(6):380–9
Tubulin and actin topology during zygote formation of Saccharomyces cerevisiae. Hašek J, et al. **J Gen Microbiol** 1987 Dec;133 (Pt 12):3355–63
Subcellular localization of functionally differentiated microtubules in squid neurons: regional distribution of microtubule-associated proteins and beta-tubulin isotypes. Arai T, et al. **J Neurochem** 1988 Dec;51(6):1825–38
Denervation induces long-lasting changes in the distribution of microtubule proteins in hippocampal neurons. Kwak S, et al. **J Neurocytol** 1988 Apr;17(2):189–95
Immunohistochemistry of a spontaneous murine ovarian teratoma with neuroepithelial differentiation. Neuron-associated beta-tubulin as a marker for primitive neuroepithelium. Caccamo D, et al. **Lab Invest** 1989 Mar; 60(3):390–8
Characterization of tubulin from Brugia malayi and Brugia pahangi. Tang L, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):145–52
NH2-terminal acidic region of the phosphoprotein of vesicular stomatitis virus can be functionally replaced by tubulin. Chattopadhyay D, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7977–81

ANTAGONISTS & INHIBITORS

Tubulin-dependent hydrolysis of guanosine triphosphate as a screening test to identify new antitubulin compounds with potential as antimitotic agents: application to carbamates of aromatic amines. Chi DM, et al. **Cancer Res** 1989 Mar 15;49(6):1344–8
Isolation and structure of the strong cell growth and tubulin inhibitor combretastatin A-4 [published erratum appears in Experientia 1989 Jul 15;45(7):680] Pettit GR, et al. **Experientia** 1989 Feb 15;45(2):209–11
Acetaldehyde substoichiometrically inhibits bovine neurotubulin polymerization. Smith SL, et al. **J Clin Invest** 1989 Jul;84(1):337–41

BIOSYNTHESIS

Posttranslational modifications of tubulin in cultured mouse brain neurons and astroglia. Eddé B, et al. **Biol Cell** 1989; 65(2):109–17
Visualization of detyrosination along single microtubules reveals novel mechanisms of assembly during cytoskeletal duplication in trypanosomes. Sherwin T, et al. **Cell** 1989 Apr 21;57(2):211–21
Protein synthesis and mitosis. 1. Influence of anti-tubulins on protein synthetic activity in synchronous M-phase and asynchronous populations of HeLa S-3 cells. Wheatley DN, et al. **Cytobios** 1988;55(220):41–50
Characterization of an inducible expression system in Aspergillus nidulans using alcA and tubulin-coding genes. Waring RB, et al. **Gene** 1989 Jun 30;79(1):119–30
High ammonia levels in brain induce tubulin in cerebrum but not in cerebellum. Miñana MD, et al. **J Neurochem** 1988 Dec;51(6):1839–42
The influence of temperature and serum deprivation on the synthesis of heat-shock proteins and alpha and beta tubulin in promastigotes of Leishmania major. Toye P, et al. **Mol Biochem Parasitol** 1989 Jun 1;35(1):1–10
The in vitro porcine brain tubulin assembly assay: effects of a genotoxic carcinogen (aflatoxin B1), eight tumor promoters and nine miscellaneous substances. Albertini S, et al. **Mutat Res** 1988 Oct;201(2):283–92
Aprotic polar solvents that affect porcine brain tubulin aggregation in vitro induce aneuploidy in yeast cells growing at low temperatures. Zimmermann FK, et al. **Mutat Res** 1988 Oct;201(2):431–42
The interaction of triethyl lead with tubulin and microtubules. Zimmermann HP, et al. **Mutat Res** 1988 Oct; 201(2):293–302

BLOOD

Time resolved analysis of tubulin phosphorylation during platelet activation. Berry S, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):170–6
Tyrosination-detyrosination of tubulin and microtubules during the development of chick erythrocytes. Beltramo DM, et al. **Mol Cell Biochem** 1989 Aug 15;89(1):47–56

GENETICS

Growth hormone-induced alteration of morphology and tubulin expression in 3T3 preadipose cells. Guller S, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):895–901
Amino acid composition and proteolytic generated domains of higher plant tubulin. Picquot P, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):304–11
Primary structure of the carboxy-terminal region of a higher plant beta-tubulin. Okamura S, et al. **Biochem Int** 1988 Jun; 16(6):1103–9
Tubulin expression in trypanosomes. Gallo JM, et al. **Biol Cell** 1988;64(2):137–43 (46 ref.)
Distinct roles of neurofilament and tubulin gene expression in axonal growth. Hoffman PN. **Ciba Found Symp** 1988; 138:192–204 (36 ref.)
Comparative analysis of tubulin sequences. Little M, et al. **Comp Biochem Physiol [B]** 1988;90(4):655–70 (117 ref.)
Multiple levels of regulation of tubulin gene expression during sea urchin embryogenesis. Gong ZY, et al. **Dev Biol** 1988 Nov;130(1):144–53
A variant beta-tubulin isoform of Drosophila melanogaster (beta 3) is expressed primarily in tissues of mesodermal origin in embryos and pupae, and is utilized in populations of transient microtubules. Kimble M, et al. **Dev Biol** 1989 Feb;131(2):415–29
A 14 bp promoter element directs the testis specificity of the Drosophila beta 2 tubulin gene. Michiels F, et al. **EMBO J** 1989 May;8(5):1559–65
Photomorphogenesis in Physarum polycephalum. Temporal expression pattern of actin, alpha- and beta-tubulin. Poetsch B, et al. **Eur J Biochem** 1989 Jan 15;179(1):141–6
Structure and expression of an alpha-tubulin gene of Physarum polycephalum. Walden PD, et al. **Eur J Biochem** 1989 May 15;181(3):583–92
Alpha- and beta-tubulin mRNAs of Trypanosoma cruzi originate from a single multicistronic transcript. Soares CM, et al. **FEBS Lett** 1989 Jul 3;250(2):497–502
Identification of EcoRV fragments spanning the N alpha-tubulin gene of Physarum. Watts DI, et al. **FEBS Lett** 1988 Dec 5;241(1–2):229–33
Actin, tubulin and H4 histone genes in three species of hypotrichous ciliated protozoa. Harper DS, et al. **Gene** 1989 Jan 30;75(1):93–107
Specific inhibition of beta-tubulin synthesis in Xenopus

oocytes using anti-sense oligodeoxyribonucleotides. Jessus C, et al. **Gene** 1988 Dec 10;72(1-2):311-2
The inhibition of neurite outgrowth in PC12 cells by tubulin antisense oligodeoxyribonucleotides. Teichman-Weinberg A, et al. **Gene** 1988 Dec 10;72(1-2):297-307
mec-7 is a beta-tubulin gene required for the production of 15-protofilament microtubules in Caenorhabditis elegans. Savage C, et al. **Genes Dev** 1989 Jun;3(6):870-81
Isolation and characterization of conditional-lethal mutations in the TUB1 alpha-tubulin gene of the yeast Saccharomyces cerevisiae. Schatz PJ, et al. **Genetics** 1988 Nov;120(3):681-95
Quantitation of specific mRNA by RNA-RNA hybridization kinetics with single-stranded riboprobes. Tsuda M, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):595-9
Mutations affecting assembly of beta-tubulin localize to a region near the carboxyl terminus. Boggs BA, et al. **J Biol Chem** 1988 Oct 5;263(28):14566-73
Studies of signal transduction in the respiratory burst-associated stimulation of fMet-Leu-Phe-induced tubulin tyrosinolation and phorbol 12-myristate 13-acetate-induced posttranslational incorporation of tyrosine into multiple proteins in activated neutrophils and HL-60 cells. Nath J, et al. **J Biol Chem** 1989 Jan 15; 264(2):848-55
Expression and function of beta-tubulin isotypes in Chinese hamster ovary cells. Sawada T, et al. **J Biol Chem** 1989 Feb 15;264(5):3013-20
Translation of beta-tubulin mRNA in vitro generates multiple molecular forms. Yaffe MB, et al. **J Biol Chem** 1988 Nov 5;263(31):16023-31
Tubulin gene expression in the Chlamydomonas reinhardtii cell cycle: elimination of environmentally induced artifacts and the measurement of tubulin mRNA levels. Nicholl DS, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):397-403
Activation of a beta-tubulin gene during early development of the plasmodium in Physarum polycephalum. Solnica-Krezel L, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1323-31
Sequence of one alpha- and two beta-tubulin genes of Tetrahymena pyriformis. Structural and functional relationships with other eukaryotic tubulin genes. Barahona I, et al. **J Mol Biol** 1988 Aug 5;202(3):365-82
Rapid induction of the major embryonic alpha-tubulin mRNA, T alpha 1, during nerve regeneration in adult rats. Miller FD, et al. **J Neurosci** 1989 Apr;9(4):1452-63
Thermal and developmental regulation of gene expression in Trypanosoma cruzi. Soares CM, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:337-44
Molecular clones of alpha-tubulin genes of Plasmodium yoelii reveal an unusual feature of the carboxy terminus. Akella R, et al. **Mol Biochem Parasitol** 1988 Aug; 30(2):165-74
Characterization of tubulin genes in Trypanosoma rangeli. Esquenazi D, et al. **Mol Biochem Parasitol** 1989 May 15; 34(3):253-9
Beta tubulin gene of the parasitic protozoan Leishmania mexicana. Fong D, et al. **Mol Biochem Parasitol** 1988 Oct; 31(1):97-106
Dominant effects of tubulin overexpression in Saccharomyces cerevisiae. Burke D, et al. **Mol Cell Biol** 1989 Mar; 9(3):1049-59
Stabilization of tubulin mRNA by inhibition of protein synthesis in sea urchin embryos. Gong ZY, et al. **Mol Cell Biol** 1988 Aug;8(8):3518-25
Expression of alpha- and beta-tubulin genes during dimorphic-phase transitions of Histoplasma capsulatum. Harris GS, et al. **Mol Cell Biol** 1989 May;9(5):2042-9
Interacting proteins identified by genetic interactions: a missense mutation in alpha-tubulin fails to complement alleles of the testis-specific beta-tubulin gene of Drosophila melanogaster. Hays TS, et al. **Mol Cell Biol** 1989 Mar; 9(3):875-84
Polycistronic transcripts in trypanosomes and their accumulation during heat shock: evidence for a precursor role in mRNA synthesis. Muhich ML, et al. **Mol Cell Biol** 1988 Sep;8(9):3837-46
Novel control elements in the alpha-1 tubulin gene promoter from Chlamydomonas reinhardii. Bandziulis RJ, et al. **Mol Gen Genet** 1988 Oct;214(2):204-12
Organization and structure of Volvox beta-tubulin genes. Harper JF, et al. **Mol Gen Genet** 1988 Aug;213(2-3):315-24
Organization and structure of Volvox alpha-tubulin genes. Mages W, et al. **Mol Gen Genet** 1988 Aug;213(2-3):449-58
Identification of gamma-tubulin, a new member of the tubulin superfamily encoded by mipA gene of Aspergillus nidulans. Oakley CE, et al. **Nature** 1989 Apr 20;338(6217):662-4
Nucleotide sequence of a full length cDNA clone encoding for beta-tubulin of the sea urchin Paracentrotus lividus. Di Bernardo MG, et al. **Nucleic Acids Res** 1989 Jul 25; 17(14):5851
An oocyte-expressed alpha-tubulin gene in Xenopus laevis; sequences required for the initiation of transcription. Middleton KM, et al. **Nucleic Acids Res** 1989 Jul 11; 17(13):5041-55
Sequence of a cDNA clone encoding beta tubulin from Euglena gracilis. Schantz ML, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6727
Quantitation of beta-tubulin mRNA in mouse brain by RNA-RNA hybridization kinetics with single-stranded riboprobes. Nagao Y, et al. **Nucleic Acids Symp Ser** 1988; (19):89-92
Tubulin genes and the diversity of microtubule function. Cowan NJ. **Oxf Surv Eukaryot Genes** 1984;1:36-60 (36 ref.)
Intron and upstream sequences regulate expression of the Drosophila beta 3-tubulin gene in the visceral and somatic musculature, respectively. Gasch A, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3215-8
Autoregulatory control of beta-tubulin mRNA stability is linked to translation elongation. Gay DA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5763-7
[Isolation and structural characteristics of cDNA coding for alpha-tubulin from the squid lens] Zinov'eva RD, et al. **Dokl Akad Nauk SSSR** 1988;302(2):463-7 **(Rus)**

IMMUNOLOGY

Tubulin structure probed with antibodies to synthetic peptides. Mapping of three major types of limited proteolysis fragments. de la Viña S, et al. **Biochemistry** 1988 Jul 12;27(14):5352-65
Heterogeneity of tubulin epitopes in mouse fetal tissues. Dräber P, et al. **Histochemistry** 1988;89(5):485-92
Development of the peripheral trigeminal system in the chick revealed by an isotype-specific anti-beta-tubulin monoclonal antibody. Moody SA, et al. **J Comp Neurol** 1989 Jan 22;279(4):567-80
Antitubulin antibodies. II. Natural autoantibodies and induced antibodies recognize different epitopes on the tubulin molecule. Matthes T, et al. **J Immunol** 1988 Nov 1;141(9):3135-41
Anti-tubulin monoclonal antibodies that bind to specific neurons in Caenorhabditis elegans. Siddiqui SS, et al. **J Neurosci** 1989 Aug;9(8):2963-72
Anti-tubulin antibodies in rabbits before and after immunization with pig tubulin. Payelle-Brogard B, et al. **Mol Immunol** 1989 Feb;26(2):121-8

ISOLATION & PURIFICATION

Small zone gel chromatography of interacting systems: theoretical and experimental evaluation of elution profiles for kinetically controlled macromolecule-ligand reactions. Cann JR, et al. **Anal Biochem** 1988 Dec;175(2):462-73
A basic protein from bovine brain that co-precipitates with tubulin in vitro. Ohmori H, et al. **Experientia** 1989 Feb 15;45(2):163-5
The characterization of phospholipids associated with microtubules, purified tubulin and microtubule associated proteins in vitro. Hargreaves AJ, et al. **Int J Biochem** 1988; 20(10):1133-8
Preparation of tubulin from Caulerpa, a marine green alga, using casein as a protective agent against proteolytic degradation. Ishizaki Y, et al. **J Biochem (Tokyo)** 1988 Sep; 104(3):329-32
Separation of tubulin subunits by reversed-phase high-performance liquid chromatography. Stephens RE. **J Chromatogr** 1988 Sep 16;448(3):371-86
Preparation and characterization of des-C-terminal tubulin. Kanazawa K, et al. **J Protein Chem** 1989 Feb;8(1):131-47
[Biochemical aspect of microtubule protein from higher plants] Mizuno K. **Tanpakushitsu Kakusan Koso** 1987 Jul; (30 Suppl):92-101 (33 ref.) **(Jpn)**

METABOLISM

Detection of tubulin-binding proteins by an overlay assay. Kremer L, et al. **Anal Biochem** 1988 Nov 15;175(1):91-5
Identification of zinc-binding sites of proteins: zinc binds to the amino-terminal region of tubulin. Serrano L, et al. **Anal Biochem** 1988 Jul;172(1):210-8
Aberrant guanosine triphosphate-beta-tubulin interaction in Alzheimer's disease. Khatoon S, et al. **Ann Neurol** 1989 Aug;26(2):210-5
Influence of the guanine nucleotide phosphorylation state and of Mg2+ ions on the interaction of vinzolidine/tubulin 6 S: a fluorescence quenching study. Codaccioni F, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):236-44
The interaction of phomopsin A with bovine brain tubulin. Luduena RF, et al. **Arch Biochem Biophys** 1989 Jul; 272(1):32-8
Association of thiocolchicine with tubulin. Chabin RM, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):544-50
Agonist but not phorbol ester induced desensitization of human lymphocyte prostaglandin receptor is dependent on tubulin polymerization. Nordstedt C, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1046-50
A role for repeated 18-amino-acid stretches in the sequence of synapsin I in tubulin binding? [letter] Baines AJ. **Biochem J** 1989 May 15;260(1):311-2
Erythrocyte protein 4.1 associates with tubulin. Correas I, et al. **Biochem J** 1988 Oct 1;255(1):217-21
Phenylazoxycyanide damages microtubular protein more than its reference antibiotic, calvatic acid. Gadoni E, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1121-4
Identification of the cysteine residue of beta-tubulin alkylated by the antimitotic agent 2,4-dichlorobenzyl thiocyanate, facilitated by separation of the protein subunits of tubulin by hydrophobic column chromatography. Bai RL, et al. **Biochemistry** 1989 Jun 27;28(13):5606-12
Mechanism of GTP hydrolysis in tubulin polymerization: characterization of the kinetic intermediate microtubule-GDP-Pi using phosphate analogues. Carlier MF, et al. **Biochemistry** 1989 Feb 21;28(4):1783-91
Dynamics of Antarctic fish microtubules at low temperatures. Himes RH, et al. **Biochemistry** 1989 Jun 13;28(12):5089-95
A synchrotron X-ray scattering characterization of purified tubulin and of its expansion induced by mild detergent binding. Manuel Andreu J, et al. **Biochemistry** 1989 May 2;28(9):4036-40
Roles of colchicine rings B and C in the binding process to tubulin. Medrano FJ, et al. **Biochemistry** 1989 Jun 27; 28(13):5589-99
Assembly of pure tubulin in the absence of free GTP: effect of magnesium, glycerol, ATP, and the nonhydrolyzable GTP analogues. O'Brien ET, et al. **Biochemistry** 1989 Feb 7;28(3):1413-22
Stereoselectivity of the guanyl-exchangeable nucleotide-binding site of tubulin probed by guanosine 5'-O-(2-thiotriphosphate) diastereoisomers. Roychowdhury S, et al. **Biochemistry** 1988 Oct 4; 27(20):7799-805
Tubulin dimer dissociation and proteolytic accessibility. Sackett DL, et al. **Biochemistry** 1989 Mar 21;28(6):2662-7
Biochemical dissection of the role of the one-kilodalton carboxyl-terminal moiety of tubulin in its assembly into microtubules. Vera JC, et al. **Biochemistry** 1989 Jan 10; 28(1):333-9
Mechanism of action of the antimitotic drug 2,4-dichlorobenzyl thiocyanate: alkylation of sulfhydryl group(s) of beta-tubulin. Bai R, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):12-20
Stimulation of microtubule assembly by recombinant human interferon-alpha and interferon-gamma. Ward LD, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):317-9
Post-translational modifications of tubulin and the dynamics of microtubules in mouse oocytes and zygotes. de Pennart H, et al. **Biol Cell** 1988;64(3):375-8
Subcellular localization of iodinated thyroid tubulin. Hargreaves AJ, et al. **Biosci Rep** 1989 Jun;9(3):375-82
Interaction of the novel agent amphethinile with tubulin. McGown AT, et al. **Br J Cancer** 1989 Jun;59(6):865-8
Differential turnover of tubulin and neurofilament proteins in central nervous system neuron terminals. Garner JA. **Brain Res** 1988 Aug 23;458(2):309-18
Cycloheximide-sensitive [35S]methionine labeling of proteins in goldfish retinal ganglion cell axons in vitro. Koenig E. **Brain Res** 1989 Feb 27;481(1):119-23
Tubulin messenger RNA: in situ hybridization reveals bilateral increases in hypoglossal and facial nuclei following nerve transection. Pearson RC, et al. **Brain Res** 1988 Nov 1;463(2):245-9
Neurofilament and tubulin transport slows along the course of mature motor axons. Watson DF, et al. **Brain Res** 1989 Jan 16;477(1-2):225-32
Spatial reorganization of actin, tubulin and histone mRNAs during meiotic maturation and fertilization in Xenopus oocytes. Perry BA, et al. **Cell Differ Dev** 1988 Nov; 25(2):99-108
Tubulin tyrosination in Crithidia: modifying enzymes and modification states of tubulin. Chang SL, et al. **Cell Motil Cytoskeleton** 1988;10(3):400-9
A comparative study of the distribution of fluorescently labeled calmodulin and tubulin in the meiotic apparatus of the mouse oocyte. Hamaguchi Y, et al. **Cell Struct Funct** 1989 Apr;14(2):241-8
Localization of actin and tubulin in developing and adult mammalian photoreceptors. Woodford BJ, et al. **Cell Tissue Res** 1989 Jun;256(3):495-505
In vitro aging of articular chondrocytes identified by analysis of DNA and tubulin content and relationship to cell size and protein content. Roeot X, et al. **Cytometry** 1988 Sep; 9(5):436-40
Acetylated alpha-tubulin in microtubules during mouse fertilization and early development. Schatten G, et al. **Dev Biol** 1988 Nov;130(1):74-86
Oscillations in microtubule polymerization: the rate of GTP regeneration on tubulin controls the period. Melki R, et al. **EMBO J** 1988 Sep;7(9):2653-9
Relationship between the tyrosination state of tubulin and the activities of tubulin:tyrosine ligase and tubulin carboxypeptidase in rat muscle during development. Alonso AC, et al. **Eur J Biochem** 1988 Nov 15; 177(3):517-22
Initiation of DNA synthesis by microtubule disruption in quiescent rat 3Y1 cells. Shinohara Y, et al. **Eur J Biochem** 1989 Aug 1;183(2):275-80
Organization of the vimentin system and its spatial relationship to the microtubule complex during the division of mammalian cells growing attached and in suspension. Paulin-Levasseur M, et al. **Eur J Cell Biol** 1989 Jun; 49(1):189-95
Covalent binding of acetaldehyde to liver tubulin: a step in the right direction [editorial] Israel Y. **Hepatology** 1989 Jan; 9(1):161-2 (22 ref.)
Role of B-ring of colchicine in its binding to tubulin. Maity SN, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):585-9
Role of neuronal and glial tubulin on rat brain development. Saha S, et al. **Indian J Biochem Biophys** 1988 Dec; 25(6):618-24
The SH-SS exchange reaction between the Ellman's reagent and protein containing SH groups as a method for determining conformational states: tubulin. Di Simplicio P, et al. **Ital J Biochem** 1989 Mar-Apr;38(2):83-90
Legionella micdadei protein kinase catalyzes phosphorylation of tubulin and phosphatidylinositol. Saha AK, et al. **J Bacteriol** 1989 Sep;171(9):5103-10

Use of micelles in studying drug–binding sites: simulation of the tubulin–bound fluorescence of colchicine. Shobha J, et al. **J Biochem Biophys Methods** 1989 Jun;18(4):287–95

Ca2+/calmodulin–dependent phosphorylation of ciliary beta–tubulin in Tetrahymena. Hirano–Ohnishi J, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):858–60

A novel tubulin–dependent protein kinase forming a paired helical filament epitope on tau. Ishiguro K, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):319–21

Two separate 18–amino acid domains of tau promote the polymerization of tubulin. Ennulat DJ, et al. **J Biol Chem** 1989 Apr 5;264(10):5327–30

The binding of isocolchicine to tubulin. Mechanisms of ligand association with tubulin. Hastie SB, et al. **J Biol Chem** 1989 Apr 25;264(12):6682–8

The GTP–binding peptide of beta–tubulin. Localization by direct photoaffinity labeling and comparison with nucleotide–binding proteins. Linse K, et al. **J Biol Chem** 1988 Oct 15;263(29):15205–10

A thermodynamic study of the interaction of tubulin with colchicine site ligands. Menéndez M, et al. **J Biol Chem** 1989 Oct 5;264(28):16367–71

The effect of podophyllotoxin on microtubule dynamics. Schilstra MJ, et al. **J Biol Chem** 1989 May 25; 264(15):8827–34

Differential axonal transport of isotubulins in the motor axons of the rat sciatic nerve. Denoulet P, et al. **J Cell Biol** 1989 Mar;108(3):965–71

Microtubule dynamics investigated by microinjection of Paramecium axonemal tubulin: lack of nucleation but proximal assembly of microtubules at the kinetochore during prometaphase. Geuens G, et al. **J Cell Biol** 1989 Mar;108(3):939–53

Posttranslational modification of distinct microtubule subpopulations during cell polarization and differentiation in the mouse preimplantation embryo. Houliston E, et al. **J Cell Biol** 1989 Feb;108(2):543–51

Differential utilization of beta–tubulin isotypes in differentiating neurites. Joshi HC, et al. **J Cell Biol** 1989 Aug;109(2):663–73

Tubulin post–translational modifications and the construction of microtubular organelles in Trypanosoma brucei. Sasse R, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):577–89

Evidence that tubulin forms an integral membrane skeleton in molluscan gill cilia. Stephens RE, et al. **J Cell Sci** 1987 Nov;88 (Pt 4):527–35

Microtubules are acetylated in domains that turn over slowly. Webster DR, et al. **J Cell Sci** 1989 Jan;92 (Pt 1):57–65

Synthesis, tubulin binding, antineoplastic evaluation, and structure–activity relationship of oncodazole analogues. Kruse LI, et al. **J Med Chem** 1989 Feb;32(2):409–17

Accelerated poly(A) loss on alpha–tubulin mRNAs during protein synthesis inhibition in Chlamydomonas. Baker EJ, et al. **J Mol Biol** 1989 Jun 20;207(4):771–81

Tyrosination state of tubulin and the activity of tubulin:tyrosine ligase and tubulin carboxypeptidase in the developing retina of the chick. Arregui C, et al. **J Neurochem** 1989 Jun;52(6):1708–13

Phosphorylation of tubulin by casein kinase II regulates its binding to a neuronal protein (NP 185) associated with brain coated vesicles. Kohtz DS, et al. **J Neurochem** 1989 Jan;52(1):285–95

Dynamics of alpha–tubulin deacetylation in intact neurons. Black MM, et al. **J Neurosci** 1989 Jan;9(1):358–68

Stable and metastable cytoskeletal polymers carried by slow axonal transport. Filliatreau G, et al. **J Neurosci** 1988 Jul; 8(7):2227–33

Expression of GAP–43, a rapidly transported growth–associated protein, and class II beta tubulin, a slowly transported cytoskeletal protein, are coordinated in regenerating neurons. Hoffman PN. **J Neurosci** 1989 Mar; 9(3):893–7

Postembedding immunogold electron microscopy for S100, tubulin, and cytoskeletal proteins in an amelanotic malignant melanoma. Hearn SA, et al. **Mod Pathol** 1989 Jan;2(1):46–54

Evidence that the 90–kilodalton heat shock protein is associated with tubulin–containing complexes in L cell cytosol and in intact PtK cells. Sanchez ER, et al. **Mol Endocrinol** 1988 Aug;2(8):756–60

Podophyllotoxin analogs: effects on DNA topoisomerase II, tubulin polymerization, human tumor KB cells, and their VP–16–resistant variants. Liu SY, et al. **Mol Pharmacol** 1989 Jul;36(1):78–82

Binding of vinblastine to stabilized microtubules. Singer WD, et al. **Mol Pharmacol** 1989 Sep;36(3):366–70

Assembly and disassembly of brain tubulin is affected by high ammonia levels. Miñana MD, et al. **Neurochem Res** 1989 Mar;14(3):235–8

Compartmentation of alpha–tubulin in neurons: identification of a somatodendritic–specific variant of alpha–tubulin. Baas PW, et al. **Neuroscience** 1989;30(3):795–803

Co–localization of glutamate and tubulin in putative excitatory neurons of the hippocampus and amygdala: an immunohistochemical study using monoclonal antibodies. McDonald AJ, et al. **Neuroscience** 1989;30(2):405–21

Direct measurement of tubulin and bulk message distributions on polysomes of growing, starved and deciliated Tetrahymena using RNA gel blots of sucrose gradients containing acrylamide. Calzone FJ, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9597–609

Analysis of methyl mercury binding sites on tubulin subunits and microtubules. Vogel DG, et al. **Pharmacol Toxicol** 1989 Feb;64(2):196–201

Biochemical effects of Navelbine on tubulin and associated proteins. Fellous A, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):9–14

PHARMACOLOGY

Tubulin and MAP2 regulate the PCSL phosphatase activity. A possible new role for microtubular proteins. Jessus C, et al. **Eur J Biochem** 1989 Mar 1;180(1):15–22

PHYSIOLOGY

The integrity of tubulin molecule is not required for the activity of tubulin carboxypeptidase. Weizetfel JC, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):770–6

Pressure sensitivity of tubulin expression in Tetrahymena. Tahir SK, et al. **Cell Biol Int Rep** 1988 Dec;12(12):1005–9

Developmental distribution of RNA and protein products of the Drosophila alpha–tubulin gene family. Matthews KA, et al. **Dev Biol** 1989 Mar;132(1):45–61

The role of the cytoskeletal protein, tubulin, in the mode of action and mechanism of drug resistance to benzimidazoles [published erratum appears in Int J Parasitol 1989 May;19(3):359] Lacey E. **Int J Parasitol** 1988 Nov; 18(7):885–936 (282 ref.)

Progressive and spatially differentiated stability of microtubules in developing neuronal cells. Lim SS, et al. **J Cell Biol** 1989 Jul;109(1):253–63

Truncation of the carboxy–terminal domain of yeast beta–tubulin causes temperature–sensitive growth and hypersensitivity to antimitotic drugs [published erratum appears in J Cell Biol 1989 Feb;108(2):747] Matsuzaki F, et al. **J Cell Biol** 1988 Oct;107(4):1427–35

Dynamic instability of individual microtubules analyzed by video light microscopy: rate constants and transition frequencies. Walker RA, et al. **J Cell Biol** 1988 Oct; 107(4):1437–48

Alteration of microtubule physiology in hepatocytes by insulin. Caron JM. **J Cell Physiol** 1989 Mar;138(3):603–10

Colchicine analogues that bind reversibly to tubulin define microtubular requirements for newly synthesized protein secretion in rat lacrimal gland. Herman G, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4515–9

Autoregulated instability of tubulin mRNAs: a novel eukaryotic regulatory mechanism. Cleveland DW. **Trends Biochem Sci** 1988 Sep;13(9):339–43 (22 ref.)

ULTRASTRUCTURE

Secondary structure analysis of tubulin and microtubules with Raman spectroscopy. Audenaert R, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1–2):110–5

Reversible inhibition of mammalian tubulin assembly in vitro and effects in Saccharomyces cerevisiae D61.M by mitomycin C. Albertini S, et al. **Mutagenesis** 1989 Jan; 4(1):39–44

TUBULOINTERSTITIAL NEPHRITIS see **NEPHRITIS, INTERSTITIAL**

TUFTSIN

Drug targeting in Leishmania donovani infections using tuftsin–bearing liposomes as drug vehicles. Guru PY, et al. **FEBS Lett** 1989 Mar 13;245(1–2):204–8

ANALOGS & DERIVATIVES

[Effect of tuftsin and its analog on learning, memory and exploratory behavior in rats] Semenova TP, et al. **Zh Vysh Nerv Deiat** 1988 Nov–Dec;38(6):1033–40 (Eng. Abstr.) (Rus)

BLOOD

Specific translocation of tuftsin (Thr–Lys–Pro–Arg), a natural immunomodulating peptide, into the nuclei of human monocytes. Wagle JR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1147–53

IMMUNOLOGY

The lack of antigenicity of tuftsin: a naturally occurring phagocytosis stimulating tetrapeptide. Naim JO, et al. **Immunol Invest** 1989 Jul;18(6):817–24

METABOLISM

Covalent peptide transfer to cell membrane proteins (peptidyl transferase). Najjar VA, et al. **FEBS Lett** 1989 Aug 14; 253(1–2):129–31

PHARMACOLOGY

Nonimmune–mediated phagocytosis by "premedullary" lung macrophages: effects of concanavalin A, tuftsin, and macrophage–inhibitory peptide. Sorokin SP, et al. **Anat Rec** 1989 Jan;223(1):55–61

Effect of the N–terminal tetrapeptide of substance P SP (1–4) and tuftsin on the pre– and postsynaptic transmitter outflow in rat adrenal gland slices. Nieber K, et al. **Biomed Biochim Acta** 1988;47(7):663–6

Human peritoneal macrophage activity is increased by tuftsin. Kain Z, et al. **Immunol Lett** 1989 Jun 1;21(3):257–61

Antigen–tuftsin conjugate signals interleukin–1 synthesis and secretion. Dagan S, et al. **J Biol Response Mod** 1988 Dec; 7(6):546–58

Tuftsin stimulates IL–1 production by human mononuclear cells, human spleen cells and mouse spleen cells in vitro. Spirer Z, et al. **J Clin Lab Immunol** 1989 Jan;28(1):27–31

Substance P augmentation of CSF–1–stimulated in vitro myelopoiesis. A two–signal progenitor restricted, tuftsin–like effect. Moore RN, et al. **J Immunol** 1988 Oct 15;141(8):2699–703

[Effect of tuftsin on the orientation–exploratory behavior of normal white rats and against a background of pharmacologically induced disorders of the brain biogenic amine system] Sarycheva NIu, et al. **Biol Nauki** 1989; (3):70–5 (Eng. Abstr.) (Rus)

[Effect of tuftsin on the leucyl aminopeptidase activity of the subcellular components in cerebral cortical formations] Kamysheva AS. **Biull Eksp Biol Med** 1989 Feb; 107(2):209–11 (Eng. Abstr.) (Rus)

[The action of tuftsin on the reaction of macrophage–suppressor formation in vitro and in vivo] Voevodin DA. **Biull Eksp Biol Med** 1988 Nov; 106(11):559–61 (Eng. Abstr.) (Rus)

[Effect of tuftsin and its analog on learning, memory and exploratory behavior in rats] Semenova TP, et al. **Zh Vysh Nerv Deiat** 1988 Nov–Dec;38(6):1033–40 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Tuftsin: its chemistry, biology, and clinical potential. Fridkin M, et al. **Crit Rev Biochem Mol Biol** 1989;24(1):1–40 (193 ref.)

Modulation of phagocytic activity in cultured Sertoli cells. Filippini A, et al. **Gamete Res** 1989 Aug;23(4):367–75

[Effects of the spleen and tuftsin on the growth and metastasis of murine ascitic hepatoma] Chen S. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;68(11):615–8, 42 (Eng. Abstr.) (Chi)

THERAPEUTIC USE

Combined immunotherapy and chemotherapy with tuftsin plus cyclophosphamide in the treatment of non–small–cell carcinoma of the lung. Warner E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):706–8

TULAREMIA

Tularemia. A review. Finley CR, et al. **Mo Med** 1986 Nov; 83(11):741–3 (19 ref.)

COMPLICATIONS

Guillain–Barré syndrome and tularemia pleuritis with high adenosine deaminase activity in pleural fluid. Syrjälä H, et al. **Infection** 1989 May–Jun;17(3):152–3

Tularemia and atypical lymphocytosis. Gelfand MS, et al. **J Tenn Med Assoc** 1989 Aug;82(8):417–8

[Tularemia in Switzerland. Observation of 3 cases] Meier FP, et al. **Rev Med Suisse Romande** 1988 Aug;108(8):671–6 (Fre)

DIAGNOSIS

Isolation of Francisella tularensis biovar palaearctica from human blood. Trnvik A, et al. **Eur J Clin Microbiol Infect Dis** 1989 Feb;8(2):146–50

Competitive enzyme immunoassay for antibodies to a 43,000–molecular–weight Francisella tularensis outer membrane protein for the diagnosis of tularemia. Bevanger L, et al. **J Clin Microbiol** 1989 May;27(5):922–6

[Clinical characteristics of tularemia in children] Simovan'lan EN, et al. **Pediatriia** 1988;(10):93 (Rus)

[Detection of tularemia pathogens in patients with the use of an immunofluorescence reaction] Ananova EV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):46–9 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

[Haemaphysalis concinna ticks and tularemia natural foci in the Pavlodar region (north east of Kazakhstan)] Pakizh VI, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):77–9 (Eng. Abstr.) (Rus)

[Registration of natural tularemia foci] Shuliarenko SV, et al. **Vrach Delo** 1988 Dec;(12):94–5 (Eng. Abstr.) (Rus)

ETIOLOGY

Italian epidemic of waterborne tularaemia [letter] Mignani E, et al. **Lancet** 1988 Dec 17;2(8625):1423

IMMUNOLOGY

Experimental murine tularemia caused by Francisella tularensis, live vaccine strain: a model of acquired cellular resistance. Anthony LS, et al. **Microb Pathog** 1987 Jan; 2(1):3–14

Nature of protective immunity to Francisella tularensis. Tärnvik A. **Rev Infect Dis** 1989 May–Jun;11(3):440–51 (149 ref.)

[Delayed type hypersensitivity reaction in the pathogenesis and formation of immunity in tularemia infections in mice] Gordeeva MS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):86–92 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Enhancing recovery of Francisella tularensis from blood. Reary BW, et al. **Diagn Microbiol Infect Dis** 1988 Oct; 11(2):117–9

Typhoidal tularemia presenting as enteritis with leukopenia. Hoyt RE. **Va Med** 1988 Aug;115(8):388–9

PATHOLOGY

Tularemia. Rohrbach BW. **J Am Vet Med Assoc** 1988 Aug 15;193(4):428–32

[A rare case of tularemia] Georgievskiĭ EP. **Klin Med (Mosk)** 1988 Aug;56(8):136–7 (Rus)

TRANSMISSION

Tularemia transmitted by a squirrel bite. Magee JS, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):123–5

[Ixodid ticks of Pavlodar Province and their participation in the circulation of tularemia infection] Amirova NA, et al. **Parazitologiia** 1989 May–Jun;23(3):267–74 (Eng. Abstr.) (Rus)

VETERINARY

[Various mechanisms of formation of chronic tularemia in highly-sensitive animal species (Microtus rossiae-meridionalis)] Shlygina KN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):17–22 (Eng. Abstr.) (Rus)

TUMESCENCE, PENILE see **PENILE ERECTION**

TUMOR ANTIBODIES see **ANTIBODIES, NEOPLASM**

TUMOR ANTIGENS see **ANTIGENS, NEOPLASM**

TUMOR ANTIGENS, VIRAL see **ANTIGENS, VIRAL, TUMOR**

TUMOR-ASSOCIATED CARBOHYDRATE ANTIGENS see **ANTIGENS, TUMOR-ASSOCIATED, CARBOHYDRATE**

TUMOR CELLS, CULTURED

see related
DRUG SCREENING ASSAYS, ANTITUMOR

Myelomonocytic myeloma cell line (LB 84-1). Durie BG, et al. **Blood** 1989 Feb 15;73(3):770–6

Establishment and characterization of a childhood T-cell acute lymphoblastic leukemia cell line, PER-255, with chromosome abnormalities involving 7q32–34 in association with T-cell receptor-beta gene rearrangement. Kees UR, et al. **Blood** 1989 Jul;74(1):369–73

Characterization of a new non-Hodgkin's lymphoma cell line (NCEB-1) with a chromosomal (11:14) translocation [t(11:14)(q13;q32)] Saltman DL, et al. **Blood** 1988 Dec; 72(6):2026–30

Cultivation of human breast carcinoma in soft agar. Experience with 237 fresh tumour specimens. Ottestad L, et al. **Br J Cancer** 1988 Jul;58(1):8–12

Cross-contamination of human cell lines [letter] Thornley AL, et al. **Br J Cancer** 1988 Nov;58(5):687

A tumour spheroid model for antibody-targeted therapy of micrometastases. Walker KA, et al. **Br J Cancer** 1988 Jul; 58(1):13–6

Establishment and characterization of a new human Burkitt's lymphoma cell line (WSU-BL). Mohamed AN, et al. **Cancer** 1989 Sep 1;64(5):1041–8

Establishment of a human cell line (HCC-T) from a patient with hepatoma bearing no evidence of hepatitis B or A virus infection. Saito H, et al. **Cancer** 1989 Sep 1; 64(5):1054–60

Neuronal membrane depolarization and the control of cholinergic muscarinic receptors: selective effect on different neuronal cell types. Simantov R, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):87–94

Morphological and biochemical evidence showing neuronal properties in AtT-20 cells and their growth cones. Tooze J, et al. **Eur J Cell Biol** 1989 Aug;49(2):259–73

Characterization of human ovarian and endometrial carcinoma cell lines established on extracellular matrix. Crickard K, et al. **Gynecol Oncol** 1989 Feb;32(2):163–73

Cushing's syndrome due to bilateral adrenal macronodular hyperplasia with undetectable ACTH: cell culture of adenoma cells on extracellular matrix. Cheitlin RA, et al. **Horm Res** 1988;29(4):162–7

A new human pancreatic carcinoma cell line developed for adoptive immunotherapy studies with lymphokine-activated killer cells in nude mice. Drucker BJ, et al. **In Vitro Cell Dev Biol** 1988 Dec;24(12):1179–87

A new human cholangiocellular carcinoma cell line (HuCC-T1) producing carbohydrate antigen 19/9 in serum-free medium. Miyagiwa M, et al. **In Vitro Cell Dev Biol** 1989 Jun;25(6):503–10

Establishment of two cell lines from hamster buccal pouch tumors induced by topical 7,12-dimethylbenz(a)anthracene and topical DMBA in conjunction with herpes simplex virus infection. Park NH, et al. **In Vitro Cell Dev Biol** 1988 Dec;24(12):1173–8

Mechanisms of platelet activation by cultured human cancer cells and cells freshly isolated from tumor tissues. Grignani G, et al. **Invasion Metastasis** 1989;9(5):298–309

Establishment of two interleukin 6 (B cell stimulatory factor 2/interferon beta 2)-dependent human bone marrow-derived myeloma cell lines. Shimizu S, et al. **J Exp Med** 1989 Jan 1;169(1):339–44

Isolated soluble fractions from spleen cell culture supernatants induce tumor enhancement. Eiján AM, et al. **J Surg Oncol** 1989 Jun;41(2):134–8

Use of deoxyribonucleic acid probes in the identification of cell origin and detection of cellular contamination in human lymphoblastoid cell lines. Nacim F, et al. **Lab Invest** 1989 Mar;60(3):347–52

Establishment and characterization of a human lymphoma cell line (WSU-NHL) with 14;18 translocation. Mohamed AN, et al. **Leuk Res** 1988;12(10):833–43

Radiation and thermal characteristics of mouse lymphoma cells and their radiation-sensitive mutant. Baba Y, et al. **Radiat Med** 1988 Sep–Oct;6(5):232–9

Failure to induce neoplasia in nude mice by injection of disrupted cells from continuous cell lines. Wood GW, et al. **Res Vet Sci** 1989 Mar;46(2):286–7

Correction: RuGli cell line not of human origin [letter] Gehlsen K, et al. **Science** 1989 Jul 28;245(4916):342–3

The in vitro effect of electromagnetically generated shock waves (Lithostar) on the Dunning R3327 PAT-2 rat prostatic cancer cell-line. A potentiating effect on the in vitro cytotoxicity of vinblastin. Oosterhof GO, et al. **Urol Res** 1989;17(1):13–9

[Production of the strain transplantable to nude mice and rats from a HOS cell line of human osteogenic sarcoma] Rebazova ES, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):471–2 (Rus)

ANALYSIS

Correlation of DNA ploidy and morphological features of human glioma cell cultures with the establishment of cell lines. Onda K, et al. **Acta Neuropathol (Berl)** 1988; 76(5):433–40

Separation of transforming growth factors TGF alpha and TGF beta during chromatographic purification of extracts from mouse C-234 tumors. Popik W. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):839–51

Intracellular localization of nerve growth factor in PC12 cells. An immuno-gold electron microscopic approach. Corvaja N, et al. **Arch Ital Biol** 1988 Jun;126(3):165–78

Metabolic and structural evidence for the existence of a third species of polyphosphoinositide in cells: D-phosphatidyl-myo-inositol 3-phosphate. Stephens L, et al. **Biochem J** 1989 Apr 1;259(1):267–76

Nonhematopoietic tumor cells express functional GM-CSF receptors. Baldwin GC, et al. **Blood** 1989 Mar;73(4):1033–7

Cytoplasmic factors involved in erythroid differentiation in mouse erythroleukemia (MEL) cells. Watanabe T, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:105–9 (10 ref.)

Differences in the flow and absorption cytometric DNA distributions of mouse hepatocytes and tumor cells. Bose KK, et al. **Cytometry** 1989 Jul;10(4):388–93

A rapid and sensitive flow cytometric method for the detection of multidrug-resistant cells. Herweijer H, et al. **Cytometry** 1989 Jul;10(4):463–8

Flow cytofluorimetric determination of protein distribution throughout the cell cycle. Khochbin S, et al. **Cytometry** 1989 Jul;10(4):484–9

Limitations in the measurement of c-myc oncoprotein and other nuclear antigens by flow cytometry. Lincoln ST, et al. **Cytometry** 1989 Jul;10(4):456–62

Improvement of flow-cytometric detection of multidrug-resistant cells by cell-volume normalization of intracellular daunorubicin content. Ross DD, et al. **Cytometry** 1989 Mar;10(2):185–91

Subdivision of S-phase by analysis of nuclear 5-bromodeoxyuridine staining patterns. van Dierendonck JH, et al. **Cytometry** 1989 Mar;10(2):143–50

Flow cytometric studies of the nuclear matrix. Wright WD, et al. **Cytometry** 1989 May;10(3):303–11

Differential sensitivity of vimentin and nuclear lamins from Ehrlich ascites tumor cells toward Ca2+ -activated neutral thiol proteinase. Traub P, et al. **Eur J Cell Biol** 1988 Aug; 46(3):478–90

Investigation of inorganic deposits in selected organic matrices. Cichocki T, et al. **Folia Histochem Cytobiol** 1988; 26(4):187–92

Limitations of the quantitative cytochemical assay of catechol oxidase in melanoma cells. Croce AC, et al. **Histochem J** 1988 Nov;20(11):595–602

Rapid selection of cultured cells with increased expression of a membrane marker (secretory component). Kvale D, et al. **Int J Cancer** 1988 Oct 15;42(4):638–41

Co-isolation of heat stress and cytoskeletal proteins with plasma membrane proteins. Tomasovic SP, et al. **Int J Hyperthermia** 1989 Mar-Apr;5(2):173–90

Identification of the calcitonin receptor by chemical cross-linking and photoaffinity labeling in human cancer cell lines. Moseley JM, et al. **J Bone Miner Res** 1986 Jun; 1(3):293–7

Comparison of western blot analysis and immunocytochemical detection of P-glycoprotein in multidrug resistant cells. Friedlander ML, et al. **J Clin Pathol** 1989 Jul;42(7):719–22

Characterization of muscarinic receptors: type M2 (subtype B) on neuro-2A neuroblastoma cells. Edwards A, et al. **J Recept Res** 1989;9(3):259–70

Flow cytometric DNA analysis of colon adenocarcinomas: a comparative study of preparatory techniques. Crissman JD, et al. **Mod Pathol** 1988 May;1(3):198–204

An autocrine growth factor constitutively produced by a human lymphoblastoid B-cell line is serologically related to lymphotoxin (TNF-beta). Seregina TM, et al. **Mol Immunol** 1989 Mar;26(3):339–42

Microspectrofluorometric evaluation of single- and double-stranded DNA in short-term cultured human glioma cells. Itoh Y, et al. **Neurol Res** 1989 Mar;11(1):14–6

Flow cytometric analysis of cellular DNA content in human astrocytomas and oligodendrogliomas. Ahyai A. **Neurosurg Rev** 1988;11(2):177–87

Monoclonal antibody defining tax protein of human T-cell leukemia virus type-I. Lee B, et al. **Tohoku J Exp Med** 1989 Jan;157(1):1–11

[Immunocytochemical localization of epidermal growth factor receptors on plasma membrane of A-431 cells] Sorokin AB, et al. **Dokl Akad Nauk SSSR** 1988; 300(4):974–6 (Rus)

CLASSIFICATION

Quantitative description of classic and variant small cell lung cancer cell lines by nuclear image cytometry. Broers JL, et al. **Cytometry** 1988 Sep;9(5):426–31

CYTOLOGY

Inhibitory effect of calcium channel blockers on proliferation of human glioma cells in vitro. Kunert-Radek J, et al. **Acta Neurol Scand** 1989 Feb;79(2):166–9

Mechanisms for cisplatin-FUra synergism and cisplatin resistance in human ovarian carcinoma cells both in vitro and in vivo. Scanlon KJ, et al. **Adv Exp Med Biol** 1988; 244:127–35

Interrelationship among morphology, metabolism, and proliferation of tumor cells in monolayer and spheroid culture. Walenta S, et al. **Adv Exp Med Biol** 1989; 248:847–53

Effect of pyridoxine and pyridoxal on the in vitro growth of human malignant melanoma. Shultz TD, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1313–8

Culturing and xenografting of primary colorectal carcinoma cells: comparison of in vitro, and in vivo model and primary tumor. Verstijnen CP, et al. **Anticancer Res** 1988 Nov-Dec; 8(6):1193–200

GM-CSF enhances sensitivity of leukemic clonogenic cells to long-term low dose cytosine arabinoside with sparing of the normal clonogenic cells. De Witte T, et al. **Behring Inst Mitt** 1988 Aug;(83):301–7

ADP-ribosylatable content of elongation factor-2 changes during cell cycle of normal and cancerous human cells. Riis B, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1141–6

Initial single-strand DNA damage and cellular pharmacokinetics of bleomycin A2. Lazo JS, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2207–13

Selective cytotoxicity of a phenolic melanin precursor, 4-S-cysteaminylphenol, on in vitro melanoma cells. Yamada K, et al. **Biochem Pharmacol** 1989 Jul 1; 38(13):2217–21

A growth-promoting ribosome extract (GPRE) from mouse L-929 cells stimulates growth of the HL-60 human promyelocytic leukemia cell line. Olsen LC, et al. **Biofactors** 1988 Jul;1(2):167–70

In vitro differentiated HT 29-D4 clonal cell line generates leakproof and electrically active monolayers when cultured in porous-bottom culture dishes. Fantini J, et al. **Biol Cell** 1989;65(2):163–9

Cell cycle-specific variation of intracellular plasminogen activator activity in cultured human alveolar epithelial carcinoma and rat hepatoma cells. Orfanoudakis G, et al. **Biol Cell** 1989;65(3):297–300

In vitro growth properties and PCR ras gene analysis of a murine embryonal carcinoma cell line harboring an amplified c-Ki-ras gene. Vilette D, et al. **Biol Cell** 1989; 65(3):215–9

Growth and differentiation of a human megakaryoblastic cell line, CMK. Komatsu N, et al. **Blood** 1989 Jul;74(1):42–8

Endogenous opioid systems regulate growth of neural tumor cells in culture. Zagon IS, et al. **Brain Res** 1989 Jun 19; 490(1):14–25

Morphological and biochemical differentiation of the human medulloblastoma cell line TE671. Siegel HN, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):269–80

Morphologic plasticity of rapid-onset neurites in NG108-15 cells stimulated by substratum-bound laminin. Smalheiser NR. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):39–47

TPA-induced neurite formation in a neuroblastoma cell line (SH-SY5Y) is associated with increased IGF-I receptor mRNA and binding. Ota A, et al. **Brain Res Mol Brain Res** 1989 Jul;6(1):69–76

Interrelationship between sodium cyanate and pH in the regulation of tumor cell division. Hu JJ, et al. **Cancer Biochem Biophys** 1989 May;10(3):269–74

Biochemical pharmacology of 2-chlorodeoxyadenosine in malignant human hematopoietic cell lines and therapeutic effects of 2-bromodeoxyadenosine in drug combinations in mice. Avery TL, et al. **Cancer Res** 1989 Sep 15; 49(18):4972–8

Effect of docosahexaenoic acid on rate of differentiation of HL-60 human leukemia. Burns CP, et al. **Cancer Res** 1989

Jun 15;49(12):3252–8
Proliferation and responsiveness to estrogen of human endometrial cancer cells under serum-free culture conditions. Holinka CF, et al. **Cancer Res** 1989 Jun 15; 49(12):3297–301
Role of 2'-5'-oligoadenylate synthetase in gamma-interferon-mediated growth inhibition of A431 cells. Kumar R, et al. **Cancer Res** 1989 Sep 15;49(18):5180–4
Differential effects of long-chain (sphingoid) bases on the monocytic differentiation of human leukemia (HL-60) cells induced by phorbol esters, 1 alpha, 25-dihydroxyvitamin D3, or ganglioside GM3. Stevens VL, et al. **Cancer Res** 1989 Jun 15;49(12):3229–34
Establishment of a clonal human chondrosarcoma cell line with cartilage phenotypes. Takigawa M, et al. **Cancer Res** 1989 Jul 15;49(14):3996–4002
An in vitro and in vivo study of antitumor effects of gossypol on human SW-13 adrenocortical carcinoma. Wu YW, et al. **Cancer Res** 1989 Jul 15;49(14):3754–8
Modulation of growth and epidermal growth factor receptor activity by retinoic acid in human glioma cells. Yung WK, et al. **Cancer Res** 1989 Feb 15;49(4):1014–9
The HuT series of 'carcinogen-transformed' human fibroblast cell lines are derived from the human fibrosarcoma cell line 8387. McCormick JJ, et al. **Carcinogenesis** 1988 Nov; 9(11):2073–9
Regulation of cell proliferation by beta-adrenergic receptors in a human lung adenocarcinoma cell line. Schuller HM, et al. **Carcinogenesis** 1989 Sep;10(9):1753–5
Characterization of the human cell line TE671. Stratton MR, et al. **Carcinogenesis** 1989 May;10(5):899–905
Nuclear granules recognized by some monoclonal antibodies against intermediate filament protein locate on chromosomes during mitosis. Kamei H. **Cell Biol Int Rep** 1989 Mar;13(3):291–300
Bovine colostric transforming growth factor-beta-like peptide that induces growth inhibition and changes in morphology of human osteogenic sarcoma cells (MG-63). Tokuyama H, et al. **Cell Biol Int Rep** 1989 Mar;13(3):251–8
5-Aza-2'-deoxycytidine as inducer of differentiation and growth inhibition in mouse neuroblastoma cells. Bartolucci S, et al. **Cell Differ Dev** 1989 Jun;27(1):47–55
Specific adhesion between pheochromocytoma (PC12) cells and adrenal medullary endothelial cells in co-culture. Mizrachi Y, et al. **Cell Tissue Res** 1989;256(2):365–72
Ultradian mitotic rhythms in culture of human sarcomatous bone cells originating from the patient before and after chemotherapy. Petrovic A, et al. **Chronobiol Int** 1989; 6(2):173–83
Cell-cycle studies by multiparametric automatic scanning of topographically preserved cells in culture. Colomb E, et al. **Cytometry** 1989 May;10(3):263–72
A simple electronic volume cell sorter for clonogenicity assays. Freyer JP, et al. **Cytometry** 1989 May;10(3):273–81
Application of bromodeoxyuridine incorporation measurements to the determination of cell distribution within the S phase of the cell cycle. Khochbin S, et al. **Cytometry** 1988 Sep;9(5):499–503
Differentiation of mitotic melanoma cells from G2 cells and their isolation by use of 5-bromo-2'-deoxyuridine and propidium iodide. Trinkle LS, et al. **Cytometry** 1988 Sep; 9(5):432–5
Analysis of cell-differentiation lineage in human teratomas using new monoclonal antibodies to cytostructural antigens of embryonal carcinoma cells. Pera MF, et al. **Differentiation** 1988 Dec;39(2):139–49
Establishment and characterization of osteogenic cell lines from a spontaneous murine osteosarcoma. Schmidt J, et al. **Differentiation** 1988 Dec;39(3):151–60
Phenotypic and molecular characterization of inducible human neuroblastoma cell lines. Yeger H, et al. **Differentiation** 1988 Dec;39(3):216–27
Human neuroblastoma cell lines as models for the in vitro study of neoplastic and neuronal cell differentiation. Abemayor E, et al. **Environ Health Perspect** 1989 Mar; 80:3–15 (147 ref.)
Mechanisms of differentiation in melanoma cells and melanocytes. Bennett DC. **Environ Health Perspect** 1989 Mar;80:49–59 (119 ref.)
Regulation of the differentiation of PC12 pheochromocytoma cells. Fujita K, et al. **Environ Health Perspect** 1989 Mar; 80:127–42 (249 ref.)
c-myc protooncogene expression in mouse erythroleukemia cells. Lachman HM. **Environ Health Perspect** 1989 Mar; 80:161–72 (93 ref.)
Induced differentiation of erythroleukemia cells by hexamethylene bisacetamide: a model for cytodifferentiation of transformed cells. Marks PA, et al. **Environ Health Perspect** 1989 Mar;80:181–8 (92 ref.)
TPA-induced differentiation and adhesion of U937 cells: changes in ultrastructure, cytoskeletal organization and expression of cell surface antigens. Hass R, et al. **Eur J Cell Biol** 1989 Apr;48(2):282–93
Long-term culturing of TPA-induced differentiated HL-60 cells results in increased levels of lytic enzymes. Ackerman JJ, et al. **Exp Cell Res** 1989 Aug;183(2):353–60
Effects of low- and high-density lipoproteins on the proliferation of human breast cancer cells in vitro: differences between hormone-dependent and hormone-independent cell lines. Rotheneder M, et al. **Int J Cancer** 1989 May 15;43(5):875–9
Capillary cloning of primary human tumor cells: assay miniaturization for drug efficacy testing. Peng XE, et al. **Int J Cell Cloning** 1989 Sep;7(5):322–9
The effect of exogenous human ras and myc oncogenes in morphological differentiation of the rat pheochromocytoma PC12 cells. Spandidos DA. **Int J Dev Neurosci** 1989;7(1):1–4
Device for intracellular increase of oxygen free radicals and inhibition of MethA tumour cell proliferation: in vitro and in vivo studies. Mashiba H, et al. **Int J Tissue React** 1988; 10(5):273–80
Effect of medroxyprogesterone acetate on secondary spreading of endometrial cancer. Fujimoto J, et al. **Invasion Metastasis** 1989;9(4):209–15
A new folate antimetabolite, 5,10-dideaza-5,6,7,8-tetrahydrofolate is a potent inhibitor of de novo purine synthesis. Beardsley GP, et al. **J Biol Chem** 1989 Jan 5;264(1):328–33
Human myelogenous leukemia cell line HL-60 cells resistant to differentiation induction by retinoic acid. Decreased content of glycosphingolipids and granulocytic differentiation by neolacto series gangliosides. Kitagawa S, et al. **J Biol Chem** 1989 Sep 25;264(27):16149–54
Differential inhibitory effects of TGF-beta on EGF-, PDGF-, and HBGF-1-stimulated MG63 human osteosarcoma cell growth: possible involvement of growth factor interactions at the receptor and postreceptor levels. Mioh H, et al. **J Cell Physiol** 1989 Jun;139(3):509–16
Lack of relationship between in vitro tumor cell growth and prognosis in extensive-stage small-cell lung cancer. Stevenson HC, et al. **J Clin Oncol** 1989 Jul;7(7):923–31
Tumor necrosis factor alpha stimulates the growth of the clonogenic cells of acute myeloblastic leukemia in synergy with granulocyte/macrophage colony-stimulating factor. Hoang T, et al. **J Exp Med** 1989 Jul 1;170(1):15–26
Prolongation of G1 phase in cultured glioma cells by cis-dichlorodiammineplatinum (II) (CDDP): analysis using bromodeoxyuridine (BrdU)-Hoechst technique. Morimura T. **J Neurooncol** 1989 May;7(1):71–9
Flow cytometric identification and purification of cells by ligand-induced changes in intracellular calcium. Schieren I, et al. **J Neurosci Methods** 1988 Nov;26(1):35–44
Neurotrophic activity of monomeric glucophosphoisomerase was blocked by human immunodeficiency virus (HIV-1) and peptides from HIV-1 envelope glycoprotein. Mizrachi Y. **J Neurosci Res** 1989 Jun;23(2):217–24
Induction of morphological differentiation of human neuroblastoma cells is accompanied by induction of tissue-type plasminogen activator. Neuman T, et al. **J Neurosci Res** 1989 Jul;23(3):274–81
Growth-stimulatory effects of androgen, high concentration of glucocorticoid or fibroblast growth factors on a cloned cell line from Shionogi carcinoma 115 cells in a serum-free medium. Nakamura N, et al. **J Steroid Biochem** 1989 Jul; 33(1):13–8
Cell attachment activity of the 44 kilodalton bone phosphoprotein is not restricted to bone cells. Somerman MJ, et al. **Matrix** 1989 Jan;9(1):49–54
Synapse-competence of LA-N-2 human neuroblastoma cells in coculture with rat striated muscle cells. Yeh HH, et al. **Neuroscience** 1988 Oct;27(1):309–15
Enhancement of growth of primary metastatic fresh human tumors of the nervous system by epidermal growth factor in serum-free short term culture. Frappaz D, et al. **Neurosurgery** 1988 Sep;23(3):355–9
Effects of cytokines on cultured microvascular endothelial cells derived from gerbil brain. Yoshida S, et al. **Neurosurgery** 1989 Sep;25(3):373–7
Retinoblastoma cells in tissue culture. Campbell M, et al. **Ophthalmic Paediatr Genet** 1988 Nov;9(3):171–99 (103 ref.)
Characterization of clones of a human pancreatic adenocarcinoma cell line representing different stages of differentiation. Kim YW, et al. **Pancreas** 1989;4(3):353–62
In vitro studies of human pituitary adenomas. Asa SL. **Pathol Res Pract** 1988 Sep;183(5):561–4
Photosensitization with derivatives of chlorophyll. Kessel D, et al. **Photochem Photobiol** 1989 Feb;49(2):157–60
Distinctive traits of normal and tumor-derived human mammary epithelial cells expressed in a medium that supports long-term growth of both cell types. Band V, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1249–53
Rate of internalization of an immunotoxin correlates with cytotoxic activity against human tumor cells. Wargalla UC, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5146–50
Establishment and characterization of a cell line from a human cholangiocellular carcinoma. Kusaka Y, et al. **Res Exp Med (Berl)** 1988;188(5):367–75
AIDS-Kaposi's sarcoma-derived cells express cytokines with autocrine and paracrine growth effects. Ensoli B, et al. **Science** 1989 Jan 13;243(4888):223–6
Cytostatic activity of aeroplysinin-1 against lymphoma and epithelioma cells. Kreuter MH, et al. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):680–8
[Changes in cell differentiation in vitro by inducing drug resistance] Arps H, et al. **Verh Dtsch Ges Pathol** 1988; 72:223–6 (Eng. Abstr.) (Ger)
[Three dimensional cell culture in vitro for the analysis of proliferation and differentiation of urinary bladder carcinoma] Knüchel R, et al. **Verh Dtsch Ges Pathol** 1988; 72:227–8 (Eng. Abstr.) (Ger)
[Characterization of human stomach cancer cell lines] Müller J, et al. **Verh Dtsch Ges Pathol** 1988;72:214–7 (Eng. Abstr.) (Ger)

DRUG EFFECTS

Effects of dexamethasone and insulin on the acute phase response of Morris hepatoma cells and of rat hepatocytes in culture. Magielska-Zero D, et al. **Acta Biochim Pol** 1988; 35(4):287–95
Indomethacin stimulation of macrophage cytostasis against MOPC-315 tumor cells is enhanced by endogenous metabolites of lipoxygenase and counteracted by prostaglandin E2. Bonta IL, et al. **Agents Actions** 1989 Jan; 26(1-2):167–9
Prostaglandin E2 and leukotrienE C4 modulate interleukin-1 inhibition of WEHI-3B tumor cell growth in vitro. Elliott GR, et al. **Agents Actions** 1989 Jan;26(1-2):165–6
Characterization of the morphological, growth, and steroidogenic effect of TPA on mouse Y-1 adrenal cortical tumor cells in culture. Murray SA, et al. **Am J Anat** 1988 Oct;183(2):166–77
Bombesin: a potent mitogen for small cell lung cancer. Carney DN, et al. **Ann N Y Acad Sci** 1988;547:303–9
The role of plasmacytoma growth factor in the in vitro responses of murine plasmacytoma cells. Nordan RP, et al. **Ann N Y Acad Sci** 1989;557:200–5
A correlation of bombesin-responsiveness with myc-family gene expression in small cell lung carcinoma cell lines. Sausville EA, et al. **Ann N Y Acad Sci** 1988;547:310–21
C-12-substituted indolo[2,1-a]isoquinolines as estrogen receptor affinic cytostatic agents. Ambros R, et al. **Arch Pharm (Weinheim)** 1988 Oct;321(10):743–7
Influence of carbohydrates on the cytotoxicity of an aqueous mistletoe drug and of purified mistletoe lectins tested on human T-leukemia cells. Doser C, et al. **Arzneimittelforschung** 1989 Jun;39(6):647–51
A carboranyl porphyrin for boron neutron capture therapy of brain tumors. Kahl SB, et al. **Basic Life Sci** 1989; 50:193–203
Human tumor cells resistant to verapamil. Huber KR, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1312–8
Eicosapentaenoic acid reduces the invasive and metastatic activities of malignant tumor cells. Reich R, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):559–64
Identification of a glutathione S-transferase associated with microsomes of tumor cells resistant to nitrogen mustards. Clapper ML, et al. **Biochem Pharmacol** 1989 Jun 15; 38(12):1915–21
Homocysteine potentiates the antiviral and cytostatic activity of those nucleoside analogues that are targeted at S-adenosylhomocysteine hydrolase. De Clercq E, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1771–8
Topoisomerase II-mediated DNA cleavage activity induced by ellipticines on the human tumor cell line N417. Multon E, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2077–86
Temozolomide induced differentiation of K562 leukemia cells is not mediated by gene hypomethylation. Zucchetti M, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2069–75
Resistance of cultured hepatoma cells to copper toxicity. Purification and characterization of the hepatoma metallothionein. Freedman JH, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):145–54
Intensification of rheological destruction of rat fibrosarcoma KMT 17 cells by elimination of divalent cations. Koyama T, et al. **Biorheology** 1987;24(6):775–82
Various human hematopoietic growth factors (interleukin-3, GM-CSF, G-CSF) stimulate clonal growth of nonhematopoietic tumor cells. Berdel WE, et al. **Blood** 1989 Jan;73(1):80–3
Inhibition of leukemic HL60 cell growth by transferrin-gallium: effects on ribonucleotide reductase and demonstration of drug synergy with hydroxyurea. Chitambar CR, et al. **Blood** 1988 Dec;72(6):1930–6
P-glycoprotein expression in plasma-cell myeloma is associated with resistance to VAD. Epstein J, et al. **Blood** 1989 Aug 15;74(3):913–7
Effect of transferrin-gallium on leukemic cells [letter] Kaplinsky C. **Blood** 1989 Aug 1;74(2):887–8
Growth factors influence the sensitivity of leukemic stem cells to cytosine arabinoside in culture. Miyauchi J, et al. **Blood** 1989 Apr;73(5):1272–8
Experimental basis of antileukaemic chemotherapy. Messner HA. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:20–5 (66 ref.)
Effect of calcium antagonists on the chemosensitivity of two multidrug-resistant human tumour cell lines which do not overexpress P-glycoprotein. Cole SP, et al. **Br J Cancer** 1989 Jan;59(1):42–6
Biological properties of ten human ovarian carcinoma cell lines: calibration in vitro against four platinum complexes. Hills CA, et al. **Br J Cancer** 1989 Apr;59(4):527–34
In vitro antagonism between cisplatin and vinca alkaloids. Lee K, et al. **Br J Cancer** 1989 Jan;59(1):36–41
Inherent adriamycin resistance in a murine tumour line: circumvention with verapamil and norverapamil. Merry S, et al. **Br J Cancer** 1989 Jun;59(6):895–7
Specific targeting and toxicity of sulphonated aluminium phthalocyanine photosensitised liposomes directed to cells by monoclonal antibody in vitro. Morgan J, et al. **Br J Cancer** 1989 Mar;59(3):366–70
Size-dependent resistance of human tumour spheroids to photodynamic treatment. West CM. **Br J Cancer** 1989 Apr; 59(4):510–4
Enhanced cytostatic activity of the sesquiterpene lactone eupatoriopicrin by glutathione depletion. Woerdenbag HJ, et al. **Br J Cancer** 1989 Jan;59(1):68–75

Testing the chemosensitivity of renal carcinoma in vitro. Lai T, et al. **Br J Urol** 1989 Jul;64(1):25–9

A convenient bioassay for NGF using a new subline of PC12 pheochromocytoma cells (PC12D). Sano M, et al. **Brain Res** 1988 Sep 6;459(2):404–6

Effects of sodium ascorbate (vitamin C) and 2–methyl–1,4–naphthoquinone (vitamin K3) treatment on human tumor cell growth in vitro. I. Synergism of combined vitamin C and K3 action. Noto V, et al. **Cancer** 1989 Mar 1;63(5):901–6

Effects of the anticancer agent VM–26 on hexose uptake in Ehrlich cells. Wright SE, et al. **Cancer Biochem Biophys** 1989 May;10(3):185–96

Comparative effectiveness of mitoxantrone and doxorubicin in overcoming experimentally induced drug resistance in murine and human tumour cell lines in vitro. Hill BT, et al. **Cancer Chemother Pharmacol** 1989;23(3):140–4

Evaluation of an amsacrine analog in a human tumor cloning system. Lathan B, et al. **Cancer Chemother Pharmacol** 1989; 24(4):230–2

The relative effectiveness of analogues of cisplatin in the experimental chemotherapy of human non–small–cell lung cancer and neuroblastoma grown as multicellular spheroids. Russell J, et al. **Cancer Chemother Pharmacol** 1989;23(2):111–4

Synergistic enhancement of the antitumor activity of recombinant human TNF–alpha by recombinant human IFN–gamma. Taguchi T, et al. **Cancer Detect Prev** 1988; 12(1–6):105–14

Drug–related chromosomal changes in chemoresistant human ovarian carcinoma cells. Teyssier JR, et al. **Cancer Genet Cytogenet** 1989 May;39(1):35–43

Inhibition of murine hepatic tumor growth by liposomes containing a lipophilic muramyl dipeptide. Brodt P, et al. **Cancer Immunol Immunother** 1989;28(1):54–8

Prostaglandin E2 enhances, and leukotriene C4 inhibits, interleukin–1 inhibition of WEHI–3B cell growth. Elliott GR, et al. **Cancer Immunol Immunother** 1989;28(1):74–6

Human tumor cloning assays: applications in clinical oncology and new antineoplastic agent development. von Hoff DD. **Cancer Metastasis Rev** 1988 Dec;7(4):357–71 (93 ref.)

Mr 85,000 membrane protein specifically expressed in adriamycin–resistant human tumor cells. Hamada H, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7082–7

Sensitivities of monolayers and spheroids of the human bladder cancer cell line MGH–U1 to the drugs used for intravesical chemotherapy. Knuchel R, et al. **Cancer Res** 1989 Mar 15;49(6):1397–401

Characteristics of bleomycin–resistant phenotypes of human cell sublines and circumvention of bleomycin resistance by liblomycin. Lazo JS, et al. **Cancer Res** 1989 Jan 1; 49(1):185–90

Comparison of the mechanism of action of busulfan with hepsulfam, a new antileukemic agent, in the L1210 cell line. Pacheco DY, et al. **Cancer Res** 1989 Sep 15; 49(18):5108–10

Enhancement of the activity of immunotoxins by analogues of verapamil. Pirker R, et al. **Cancer Res** 1989 Sep 1; 49(17):4791–5

Protection by cycloheximide against cytotoxicity induced by vincristine, colchicine, or delta 12–prostaglandin J2 on human osteosarcoma cells. Sakai T, et al. **Cancer Res** 1989 Mar 1;49(5):1193–6

Rhodamine dyes as potential agents for photochemotherapy of cancer in human bladder carcinoma cells. Shea CR, et al. **Cancer Res** 1989 Jul 15;49(14):3961–5

Immunotoxin–mediated inhibition of chronic lymphocytic leukemia cell proliferation in humans. Siena S, et al. **Cancer Res** 1989 Jun 15;49(12):3328–32

Response of cultured human cell lines from rhabdomyosarcoma xenografts to treatment with chloroethylnitrosoureas. Smith DG, et al. **Cancer Res** 1989 Feb 15;49(4):883–6

In vitro activity of bleomycin, tallysomycin S10b, and liblomycin against fresh human tumor cells. Tueni EA, et al. **Cancer Res** 1989 Mar 1;49(5):1099–102

Intracellular hydroxyl radical production induced by recombinant human tumor necrosis factor and its implication in the killing of tumor cells in vitro. Yamauchi N, et al. **Cancer Res** 1989 Apr 1;49(7):1671–5

Oxidative damage in murine tumor cells treated in vitro by recombinant human tumor necrosis factor. Zimmerman RJ, et al. **Cancer Res** 1989 Apr 1;49(7):1644–8

Enhancement of DNA synthesis of human epithelial carcinoma cells by acidic fibroblast growth factor. Takahashi K, et al. **Cell Struct Funct** 1989 Feb;14(1):121–8

Sparsomycin analogs. VI. Synthesis and antitumor activity of octylsparsomycin analogs. Kanatomo S, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):688–91

14–Fluoroanthracyclines. Novel syntheses and antitumor activity. Matsumoto T, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):3793–804

Doxorubicin activity on MS2 fibrosarcoma evaluated by classic chemosensitivity tests and alkaline elution assay. Favoni R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):682–3

In vitro chemosensitivity testing to predict outcome of therapy in acute leukemia. Prischl F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):679–81

Modulation of estrogen receptor and cell proliferation in human breast cancer cells by interferons. Sica G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):692–3

The effect of folic acid and 5–formyltetrahydrofolic acid on folate–deficient HEp 2 cells in culture. Leeming RJ, et al. **Clin Chim Acta** 1989 Apr 14;180(3):241–4

Inhibition of 'in vitro' tumor cell growth by aromatic polyamidines exhibiting antiproteinase activity. Nastruzzi C, et al. **Clin Exp Metastasis** 1989 Jan–Feb;7(1):25–39

The potential use of microcalorimetry in predictive tests of the action of antineoplastic drugs on mammalian cells. Schön A, et al. **Cytobios** 1988;55(220):33–9

Synthesis and cytotoxic activity of tetrahydropyridylidene–2– and –4–sulfonamides. Ho LK, et al. **Drug Des Deliv** 1989 Jan;4(1):35–43

The effect of substituted aminoalkylamincanthraquinones on eukaryotic cells. Katzhendler J, et al. **Drug Des Deliv** 1989 Jun;4(4):289–94

Arginine 2–mercaptoethane sulfonate and sodium 2–mercaptoethane sulfonate: a comparative study of their effects upon tumour cells. Magnolfi Zipoli G, et al. **Drugs Exp Clin Res** 1988;14(7):473–8

Mutagenicity of some alkyl nitrites used as recreational drugs. Dunkel VC, et al. **Environ Mol Mutagen** 1989;14(2):115–22

Effect of human G–CSF on clonogenic cells in acute myeloblastic leukemia. Asano Y, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1285–7

Tumour spheroid technology in cancer therapy research. Carlsson J, et al. **Eur J Cancer Clin Oncol** 1989 Aug; 25(8):1127–33 (59 ref.)

Enhancement of in vitro cytotoxicity of mouse peritoneal exudate cells by flavone acetic acid (NSC 347512). Ching LM, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1521–5

In vitro chemosensitivity of four new carcinoma of the cervix cell lines: relationship to radiosensitivity. Kelland LR, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1211–8

The pyrimido–pyrimidine derivatives RA233 and RX–RA85 affect cell cycle distribution of two murine tumour cell lines. Lichtner RB, et al. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):945–51

Species–specificity of estradiol regulated growth factors in breast cancer. Manni A, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1349–54

In vitro and in vivo responses of a panel of murine colon tumours to TCNU: a positive correlation. Phillips RM, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1365–71

Immunotoxins containing saporin 6 and monoclonal antibodies recognizing plasma cell–associated antigens: effects on target cells and on normal myeloid precursors (CFU–GM). Barbieri L, et al. **Eur J Haematol** 1989 Mar; 42(3):238–45

Growth factor effects on small cell lung cancer cells using a colorimetric assay: can a transferrin–like factor mediate autocrine growth? Nakanishi Y, et al. **Exp Cell Biol** 1988; 56(1–2):74–85

Clonal variation in the impact of ethyl methanesulfonate and 5–azacytidine on the metastatic phenotype of human prostatic tumor cells in athymic nude mice. Ware JL. **Exp Cell Biol** 1988;56(5):270–6

Differential activity of saporin 6 on normal and leukemic hemopoietic cells. Gasperi–Campani A, et al. **Exp Hematol** 1989 Aug;17(7):755–9

The use of 5–fluorocytosine and ketoconazole in the culture of the erythrocytic stages of Plasmodium falciparum and some tumor cell lines. Roth EF Jr, et al. **Experientia** 1989 May 15;45(5):478–80

Site–selective 8–Cl–cAMP which causes growth inhibition and differentiation increases DNA (CRE)–binding activity in cancer cells. Mednieks MI, et al. **FEBS Lett** 1989 Aug 28;254(1–2):83–8

Restricted amino acid nutrition induces attachment to glass and spreading of Ehrlich ascites tumour cells. Kajstura J, et al. **Folia Histochem Cytobiol** 1988;26(2):83–9

The improvement of polyethylene glycol–induced cell fusion by incubation of cells in a medium with increased NaCl concentration. Kajstura J, et al. **Folia Histochem Cytobiol** 1988;26(2):77–82

In vitro chemosensitivity testing of leukemic cells: development of a semiautomated colorimetric assay. Bernabei PA, et al. **Hematol Oncol** 1989 May–Jun; 7(3):243–53

In vitro chemosensitivity testing of leukemic cells: prediction of response to chemotherapy in patients with acute non–lymphocytic leukemia. Santini V, et al. **Hematol Oncol** 1989 Jul–Aug;7(4):287–93

Induction of EL4 cell resistance to syngeneic macrophage–mediated lysis by protein kinase C ligands; effects of cultured TPA–treated target cell and protein phosphorylation. Essani N, et al. **Immunology** 1988 Oct; 65(2):165–70

Changes of immunological patterns of human cancer cells treated in vitro with a triazene compound. D'Atri S, et al. **Immunopharmacol Immunotoxicol** 1989;11(1):101–18

Rat pituitary tumor cells in serum–free culture. I. Selection of thyroid hormone–responsive and autonomous cells. Riss TL, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):127–35

Rat pituitary tumor cells in serum–free culture. II. Serum factor and thyroid hormone requirements for estrogen–responsive growth. Riss TL, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):136–42

Growth of rat mammary tumor line 64–24 in liposome–supplemented defined medium. I. Effect of liposome B components on colony growth. van der Haegen BA, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):151–7

Growth of rat mammary tumor line 64–24 in liposome–supplemented defined medium. II. Effect of liposome B and prolactin on colony forming efficiency. van der Haegen BA, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):158–62

A carcinoembryonic antigen–directed immunotoxin built by linking a monoclonal antibody to a hemolytic toxin. Avila AD, et al. **Int J Cancer** 1989 May 15;43(5):926–9

A derivative of staurosporine (CGP 41 251) shows selectivity for protein kinase C inhibition and in vitro anti–proliferative as well as in vivo anti–tumor activity. Meyer T, et al. **Int J Cancer** 1989 May 15;43(5):851–6

Epidermal growth factor effect on serum–free growth of primary and metastatic human tumors. Singletary SE, et al. **Int J Cell Cloning** 1989 Jan;7(1):59–66

Hydralazine–induced enhancement of hyperthermic damage in a C3H mammary carcinoma in vivo. Horsman MR, et al. **Int J Hyperthermia** 1989 Mar–Apr;5(2):123–36

Enhancement of nitrocaphane cytotoxicity by hyperthermia in vitro. Li LG, et al. **Int J Hyperthermia** 1989 Jul–Aug; 5(4):525–33

Effect of hyperthermia on intracellular drug accumulation and chemosensitivity in drug–sensitive and drug–resistant P388 leukaemia cell lines. Toffoli G, et al. **Int J Hyperthermia** 1989 Mar–Apr;5(2):163–72

Enhancement of prolactin (PRL)–stimulated mitogenesis of Nb2 rat lymphoma cell cultures by insulin–like growth factor I (IGF–I). Russell DH, et al. **Int J Immunopharmacol** 1989;11(4):359–66

Evaluation of nitroimidazole hypoxic cell radiosensitizers in a human tumor cell line high in intracellular glutathione. DeGraff WG, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1021–4

In vitro activity of amonafide against primary human tumors compared with the activity of standard agents. Ajani JA, et al. **Invest New Drugs** 1988 Jun;6(2):79–85

Successful chemoimmunotherapy of murine L1210 lymphatic leukemia with cyclophosphamide and mafosfamide–treated leukemia cells. Kawalec M, et al. **Invest New Drugs** 1988 Sep;6(3):169–72

Effect of dicarboxylic acids (C6 and C9) on human choroidal melanoma in cell culture. Breathnach AS, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):491–8

Nigexine, a phospholipase A2 from cobra venom with cytotoxic properties not related to esterase activity. Purification, amino acid sequence, and biological properties. Chwetzoff S, et al. **J Biol Chem** 1989 Aug 5; 264(22):13289–97

Studies on the intoxication pathway of tetanus toxin in the rat pheochromocytoma (PC12) cell line. Binding, internalization, and inhibition of acetylcholine release. Sandberg K, et al. **J Biol Chem** 1989 Apr 5;264(10):5679–86

Phorbol ester induces increased expression, altered glycosylation, and reduced adhesion of K562 erythroleukemia cell fibronectin receptors. Symington BE, et al. **J Biol Chem** 1989 Aug 5;264(22):13258–66

Characterization of an amsacrine–resistant line of human leukemia cells. Evidence for a drug–resistant form of topoisomerase II. Zwelling LA, et al. **J Biol Chem** 1989 Oct 5;264(28):16411–20

Generation and characterization of cytotoxic activity against tumor cell lines in human peripheral blood mononuclear cells stimulated "in vitro" by a glucomannan–protein preparation of Candida albicans. Ausiello CM, et al. **J Biol Regul Homeost Agents** 1987 Apr–Jun;1(2):59–68

Differential expression of c–myc and c–fos oncogenes during the differentiation of human leukemic cells by Ara–C. Chomienne C, et al. **J Biol Regul Homeost Agents** 1987 Apr–Jun;1(2):69–72

Induction of megakaryocytic characteristics in human leukemic cell line K562: polyploidy, inducers, and secretion of mitogenic activity. Leary JF, et al. **J Biol Regul Homeost Agents** 1987 Apr–Jun;1(2):73–80

Heterogeneous response of human colon cancer cells to the cytostatic and cytotoxic effects of recombinant human cytokines: interferon–alpha, interferon–gamma, tumor necrosis factor, and interleukin–1. Morikawa K, et al. **J Biol Response Mod** 1989 Apr;8(2):206–18

The comparative effects of tumor necrosis factor on tumor cells growing anchorage dependently and independently. Tsao MS, et al. **J Biol Response Mod** 1989 Jun;8(3):297–304

Enhanced messenger RNA stability and differentiation of HL 60 cells treated with 1,25–dihydroxyvitamin D3 and cordycepin. Mathew PA, et al. **J Cell Physiol** 1989 Aug; 140(2):212–8

Insulin–like growth factors and the multiplication of Tera–2, a human teratoma–derived cell line. Biddle C, et al. **J Cell Sci** 1988 Jul;90 (Pt 3):475–84

Resistance of tumor cells to tumor necrosis factor. Shepard HM, et al. **J Clin Immunol** 1988 Sep;8(5):333–41 (55 ref.)

Studies on the differing effects of tumor necrosis factor and lymphotoxin on the growth of several human tumor lines. Browning J, et al. **J Immunol** 1989 Sep 15;143(6):1859–67

The addition of exogenous gangliosides to cultured human cells results in the cell type–specific expression of novel surface antigens by a biosynthetic process. Furukawa K, et al. **J Immunol** 1989 Feb 1;142(3):848–54

Syntheses and spectroscopic studies of potential antitumor copper(II) complexes with 5–phenylazo–3–methoxy salicylidene thiosemicarbazone and N4 substituted thiosemicarbazones. Patil BG, et al. **J Inorg Biochem** 1989 Jun;36(2):107–13

Mechanism of action of the antitumour effect of K18. Fujii

T, et al. **J Int Med Res** 1989 Mar-Apr;17(2):132-40

Effects of inducers of differentiation on protein kinase C and CMP-N-acetylneuraminic acid:lactosylceramide sialyltransferase activities of HL-60 leukemia cells [published erratum appears in J Lipid Res 1989 Apr;30(4):631] Xia XJ, et al. **J Lipid Res** 1989 Feb; 30(2):181-8

Correlation between the synergistic effect of liposomes and endotoxins on the activation of macrophage tumoricidal activity and the effect of liposomes on the rough endoplasmic reticulum of macrophages. Jeannin JF, et al. **J Membr Biol** 1988 Sep;104(2):107-18

Preparation and in vitro evaluation of polylactic acid-mitomycin C microcapsules. Tsai DC, et al. **J Microencapsul** 1986 Jul-Sep;3(3):181-93

A rapid and sensitive bioassay involving cultured rat glioma cells to screen for substances capable of elevating intracellular cyclic AMP concentration. Swanson SM, et al. **J Nat Prod** 1988 Sep-Oct;51(5):929-36

Cross-resistance to the lipid-soluble antifolate trimetrexate in human carcinoma cells with the multidrug-resistant phenotype. Assaraf YG, et al. **J Natl Cancer Inst** 1989 Feb 15;81(4):290-4

Site-selective 8-chloro-cyclic adenosine 3',5'-monophosphate as a biologic modulator of cancer: restoration of normal control mechanisms. Cho-Chung YS. **J Natl Cancer Inst** 1989 Jul 5;81(13):982-7 (52 ref.)

Display and analysis of patterns of differential activity of drugs against human tumor cell lines: development of mean graph and COMPARE algorithm. Paull KD, et al. **J Natl Cancer Inst** 1989 Jul 19;81(14):1088-92

DNA lability induced by nimustine and ramustine in rat glioma cells. Mineura K, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1391-4

Potential pitfalls in in vitro antitumor activity testing of free and liposome-entrapped doxorubicin. Storm G, et al. **J Pharm Sci** 1988 Oct;77(10):823-30

Cytotoxicity and antitumor activities of fungal bis(naphtho-gamma-pyrone) derivatives. Koyama K, et al. **J Pharmacobiodyn** 1988 Sep;11(9):630-5

Neocarzinostatin induces neuronal morphology of mouse neuroblastoma in culture. Schor NF. **J Pharmacol Exp Ther** 1989 Jun;249(3):906-10

Growth inhibitory effect of 4-hydroxy-tamoxifen on the BT-20 mammary cancer cell line. Chouvet C, et al. **J Steroid Biochem** 1988 Oct;31(4B):655-63

Tumor tissue is more sensitive to mitomycin C, carboquone, and aclacinomycin A than is adjacent normal tissue in vitro. Maehara Y, et al. **J Surg Oncol** 1989 Jan;40(1):4-7

Inhibition of human renal cancer by methotrexate linked to a monoclonal antibody. Singh M, et al. **J Urol** 1989 Feb; 141(2):428-31

Increased sensitivity of tumor cells to immune defense cells following treatment with antineoplastic agents in vitro. Ujiie T. **Jpn J Exp Med** 1989 Feb;59(1):17-26

Differential sensitivity to (dl)-5-methyltetrahydrofolate of normal CFU-GM and HL-60 cells. Gattei V, et al. **Leuk Res** 1989;13(7):595-8

Antagonistic interactions of hexamethylene bisacetamide in combination with 1-beta-D-arabinofuranosylcytosine, adriamycin and harringtonine on the growth and differentiation of HL-60 cells in vitro. Kong XB, et al. **Leuk Res** 1988;12(10):853-9

Maturation induction in freshly isolated human myeloid leukemic cells, 1.25 (OH)2 vitamin D3 being the most potent inducer. Ossenkoppele GJ, et al. **Leuk Res** 1989; 13(7):609-14

Inhibition of proliferation of human promyelocytic leukaemia HL60 cells by S-D-lactoylglutathione in vitro. Thornalley PJ, et al. **Leuk Res** 1988;12(11-12):897-904

Verification of NB2 lymphoma cell bioassay for the measurement of plasma and pituitary prolactin in the Mongolian gerbil (Meriones unguiculatus). Murphy PR, et al. **Life Sci** 1989;45(4):303-10

A rapid drug sensitivity assay for neoplasmatic cells. Beksac M, et al. **Med Oncol Tumor Pharmacother** 1988;5(4):253-7

Release of a votile factor from solutions of oxazaphosphorines which damage normal and malignant cells. Blomgren H, et al. **Methods Find Exp Clin Pharmacol** 1989 Jun; 11(6):391-7

Adrenal precursor C19 steroids are potent stimulators of growth of androgen-sensitive mouse mammary carcinoma Shionogi cells in vitro. Bégin D, et al. **Mol Cell Endocrinol** 1988 Aug;58(2-3):213-9

Glucocorticoids stimulate the growth of mouse mammary carcinoma Shionogi cells in culture. Labrie F, et al. **Mol Cell Endocrinol** 1988 Aug;58(2-3):207-11

An analogue of creatine increases TRH-stimulated prolactin secretion and phosphoinositide hydrolysis in rat pituitary tumor cells. Prysor-Jones RA, et al. **Mol Cell Endocrinol** 1988 Aug;58(2-3):175-81

Mechanism of L-triiodothyronine (T3) uptake by glial C6 cells: regulation by butyrate. Yusta B, et al. **Mol Cell Endocrinol** 1988 Aug;58(2-3):191-8

Blockade of the epidermal growth factor receptor inhibits transforming growth factor alpha-induced but not estrogen-induced growth of hormone-dependent human breast cancer. Arteaga CL, et al. **Mol Endocrinol** 1988 Nov; 2(11):1064-9

Regulation of the estrogen receptor in MCF-7 cells by estradiol. Saceda M, et al. **Mol Endocrinol** 1988 Dec; 2(12):1157-62

A multidrug-resistant MCF-7 human breast cancer cell line which exhibits cross-resistance to antiestrogens and hormone-independent tumor growth in vivo. Vickers PJ, et al. **Mol Endocrinol** 1988 Oct;2(10):886-92

H4IIEC3 rat hepatoma cells activate N-nitrosodimethylamine but are resistant to the genotoxic products. Roscher E, et al. **Mutagenesis** 1989 Jul;4(4):292-6

Effect of uremic toxins--guanidino compounds and creatinine--on proliferation of HL60 and K562 cell lines. Nathan I, et al. **Nephron** 1989;52(3):251-2

Insulin and insulin-like growth factor I in brain tumors: binding and in vitro effects. Glick RP, et al. **Neurosurgery** 1989 Jun;24(6):791-7

Preservation of brain tumor specimens for drug sensitivity testing. Kapp JP, et al. **Neurosurgery** 1989 Jun;24(6):810-3

Mechanism of development of tolerance and dependence to opioids in neuroblastoma x glioma hybrid cells and mice. Sharma SK, et al. **NIDA Res Monogr** 1988;87:157-66

Calcium ionophore A23187 induces differentiation of HL-60 cells into macrophage-like cells. Toyokawa Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Jul;51(4):746-51

Substance P analogues function as bombesin receptor antagonists and inhibit small cell lung cancer clonal growth. Bepler G, et al. **Peptides** 1988 Nov-Dec;9(6):1367-72

Synthesis and biological evaluation of ether-linked derivatives of phosphatidylinositol. Ishaq KS, et al. **Pharm Res** 1989 Mar;6(3):216-24

Inhibitory properties of tin(iv) diethyldithiocarbamates on tumoral cells growth. Carrara M, et al. **Pharmacol Res Commun** 1988 Jul;20(7):611-2

Evaluation of some azines of aminomethylacetophenones and related quaternary ammonium compounds versus the EMT6 tumour. Dimmock JR, et al. **Pharmazie** 1988 Sep; 43(9):614-6

Cytotoxic and mutagenic effects of the photodynamic action of chloroaluminum phthalocyanine and visible light in L5178Y cells. Evans HH, et al. **Photochem Photobiol** 1989 Jan;49(1):43-7

Oxygen limitation of direct tumor cell kill during photodynamic treatment of a murine tumor model. Henderson BW, et al. **Photochem Photobiol** 1989 Mar; 49(3):299-304

Synthesis and antineoplastic effects of furo[3,4-d]pyrimidine derivatives. Machoń Z, et al. **Pol J Pharmacol Pharm** 1988 Mar-Apr;40(2):201-8

Interleukin 1 as an autocrine growth factor for acute myeloid leukemia cells. Cozzolino F, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2369-73

Inhibition of growth of human mammary tumor cells by potent antagonists of luteinizing hormone-releasing hormone. Sharoni Y, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1648-51

1,25-Dihydroxyvitamin D3 and the regulation of human cancer cell replication. Eisman JA, et al. **Proc Soc Exp Biol Med** 1989 Jul;191(3):221-6

Regulation of the expression of the rat alcohol dehydrogenase gene by glucocorticoids. Qulali M, et al. **Prog Clin Biol Res** 1989;290:143-53

Development of human tumor cell line panels for use in disease-oriented drug screening. Shoemaker RH, et al. **Prog Clin Biol Res** 1988;276:265-86 (67 ref.)

Structure requirements for antiproliferative and cytotoxic activities of marine coral prostanoids from the Japanese stolonifer Clavularia viridis against human myeloid leukemia cells in culture. Honda A, et al. **Prostaglandins** 1988 Nov;36(5):621-30

Aberrant response in vitro of hormone-responsive prostate cancer cells to antiandrogens. Wilding G, et al. **Prostate** 1989;14(2):103-15

Radiosensitization of human colorectal tumor cells by 4-nitro-5-sulfonatoimidazoles. Fitzpatrick DA, et al. **Radiat Res** 1989 Jan;117(1):47-58

Misonidazole chemosensitization of EMT6 spheroids to melphalan. Horsman MR, et al. **Radiother Oncol** 1989 May; 15(1):103-14

Effects of steroids and their antagonists on breast cancer cells: therapeutic implications. Darbre PD, et al. **Recent Results Cancer Res** 1989;113:16-28

Therapeutic potential of natural human tumor necrosis factor-alpha in combination with natural human interferon-alpha or -gamma on human cancer cells. Shiiki S, et al. **Res Commun Chem Pathol Pharmacol** 1988 Sep; 61(3):345-51

Increased susceptibility of periodate-treated tumour cells to human but not to mouse or rat natural killer cells. Axberg I. **Scand J Immunol** 1988 Dec;28(6):697-704

Resistance to multiple chemotherapeutic agents in human cancer cells. Gottesman MM, et al. **Trends Pharmacol Sci** 1988 Feb;9(2):54-8 (35 ref.)

Different effects of vitamin E on the growth and morphological differentiation of 4 murine neuroblastoma cell lines in vitro. Sué K, et al. **Z Kinderchir** 1988 Dec; 43(6):398-401

[Cytotoxic effect of hyperthermia and nitrocaphane on malignant HEp-2 cells] Li LG. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):31-3 (Eng. Abstr.) (Chi)

[The specific photodynamic effect of monoclonal antibodies conjugated with hematoporphyrin derivative on gastric cancer in vitro and in vivo] Lin K. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;69(1):24-7, 4 (Eng. Abstr.) (Chi)

[Potentiated antitumor effect of methotrexate by dipyridamole] Cao SS. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Feb; 11(1):7-12 (Eng. Abstr.) (Chi)

[Effect of tumor-promoting phorbol esters on retrovirus-infected human cells: scanning electron microscopy studies] Rudolph M, et al. **Biomed Biochim Acta** 1989;48(1):129-36 (Eng. Abstr.) (Ger)

[Hormone dependence of malignant ovarian tumors--an in vitro model] Schieder K, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):437-41 (Eng. Abstr.) (Ger)

[Ovarian cancer cells and interferon: aspects of a biological network] Marth C, et al. **Gynakol Rundsch** 1988;28 Suppl 2:199-200 (Ger)

[Growth inhibition of melanoma cells by interferons in vitro. Similar antiproliferative effects of 100-1000 times lower concentrations of nIFN-beta in comparison with rIFN-alpha-2a] Zouboulis C, et al. **Hautarzt** 1989 Feb; 40(2):65-9 (Eng. Abstr.) (Ger)

[Laser light-induced cytotoxicity of cultivated squamous cell cancer cells of the head and neck following photosensitization] Wustrow TP, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):44-50 (Eng. Abstr.) (Ger)

[Photodynamic destruction of in vitro cultivated squamous cell carcinoma cells of the head and neck area] Wustrow TP, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct; 67(10):532-8 (Eng. Abstr.) (Ger)

[Cytostatic drugs. 2: Bleomycins, antimetabolites, mitotic spindle poisons, L-asparaginase and anti-hormones] Bauch HJ. **Med Monatsschr Pharm** 1989 Feb;12(2):34-45 (15 ref.) (Ger)

[Clinical model concept of the evolution of malignant tumors: implication for hormone therapy of breast cancer] Nagel GA, et al. **Onkologie** 1989 Apr;12(2):69-80 (107 ref.) (Eng. Abstr.) (Ger)

[Mechanism of resistance to tumor necrosis factor] Pfreundschuh M, et al. **Onkologie** 1989 Jun;12(3):128-30 (Eng. Abstr.) (Ger)

[Mechanism of action of interferon-alpha 2 in hairy cells and lymphoblastoid cell lines: the significance of type I interferon receptors and RNA synthesis] Schwabe M, et al. **Onkologie** 1988 Aug;11(4):155-8 (Eng. Abstr.) (Ger)

[In vivo antitumor activity of 5-hydroxy 3,4-dihydro naphthalene 1,8-carbolactone and its derivatives] Berlion M, et al. **Pharmazie** 1988 Jul;43(7):515-6 (Ger)

[In vitro study of estradiol-linked nitrosourea in breast cancers in the mouse, rat and human: interspecies comparison] Petru E, et al. **Wien Klin Wochenschr** 1989 Feb 17;101(4):130-4 (Eng. Abstr.) (Ger)

[Gastrointestinal hormones and cancers of the gastrointestinal tract] Schusdziarra V. **Z Gastroenterol** 1989 Apr;27(4):233 (Ger)

[Experimental study on combination chemotherapy with platinum compounds and 5-fluorouracil] Furukawa S, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):419-22 (Jpn)

[Effects of recombinant human colony stimulating factor (rh-CSFs) on colony formation of lung cancer cell lines] Ohsaki Y, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):431-3 (Jpn)

[Comparison of the antitumor activity of newly developed platinum analogs in lung cancer using the colony assay] Yonei T, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):427-30 (Jpn)

[Effects of photodynamic therapy on cell kinetics of cultured human cancer cells in reference to its cytocidal effects] Tsuji T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):1034-44 (Eng. Abstr.) (Jpn)

[Effects of hematoporphyrin derivative (HpD) and laser photoradiation on cultured cells] Kanai T, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Nov;98(12):1165-76 (Eng. Abstr.) (Jpn)

[Features of ultrastructural changes of tumor cells in tissue culture under the effect of energy metabolism inhibitors] Leĭkina MI, et al. **Tsitol Genet** 1989 Jan-Feb;23(1):7-8 (Eng. Abstr.) (Rus)

[The effect of estramustine phosphate on carcinoma cell proliferation depends on the estrogen receptor status in the cytosol] Zgradić I. **God Vojnomed Akad** 1987;29:77-81 (Eng. Abstr.) (Ser)

[Control of the proliferation of normal and tumor cells by the regulation of endogenous levels of polyamines] Medrano EE, et al. **Medicina (B Aires)** 1985;45(1):35-41 (Eng. Abstr.) (Spa)

ENZYMOLOGY

The role of thymidylate synthase in the response to fluoropyrimidine-folinic acid combinations. Berger SH, et al. **Adv Exp Med Biol** 1988;244:59-69

Structure, amplification and methylation of ornithine decarboxylase genes in human malignant cells. Jänne J, et al. **Adv Exp Med Biol** 1988;250:253-60 (12 ref.)

Tumor cell responses to inhibition of thymidylate synthase. Moran RG, et al. **Adv Exp Med Biol** 1988;244:71-83

Polyamine recycling enzymes in human cancer cells. Wallace HM, et al. **Adv Exp Med Biol** 1988;250:331-44 (29 ref.)

A tyrosine protein kinase activated by bombesin in normal fibroblasts and small cell carcinomas. Gaudino G, et al. **Ann N Y Acad Sci** 1988;547:293-302

Superoxide dismutase in cultured benign and malignant tumors of the colon. Nelson RL. **Basic Life Sci** 1988; 49:699–702

Characterization of difluoromethylornithine–resistant mouse and human tumour cell lines. Hirvonen A, et al. **Biochem J** 1989 Mar 15;258(3):709–13

Altered catalytic activity of and DNA cleavage by DNA topoisomerase II from human leukemic cells selected for resistance to VM–26. Danks MK, et al. **Biochemistry** 1988 Nov 29;27(24):8861–9

Isolation and purification of protein kinase C from human leukemia ML–1 cells phosphorylation of human leukemia RNA polymerase II in vitro. Chuang LF, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):87–95

Degradation of intact basement membranes by human and murine tumor enzymes. Karakiulakis G, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):163–75

Identification of a metalloproteinase co–purifying with rat tumour collagenase and the characteristics of fragments of both enzymes. Nethery A, et al. **Biochim Biophys Acta** 1989 Feb 2;994(2):149–60

Activities of enzymes of lipid metabolism in Morris hepatoma 7800 C1 cells. Spydevold O, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):80–3

Regulation and secretion of plasminogen activators and their inhibitors in a human leukemic cell line (K562). Oliver LJ, et al. **Blood** 1989 Sep;74(4):1321–7

Intracellular localisation of a subunit of human DNA polymerase alpha affecting primase activity recognised by monoclonal antibody (HDR–854–E4) and its application to distinction between proliferative and non–proliferative lesions. Sugawara I, et al. **Br J Cancer** 1989 Aug; 60(2):176–81

Structure of the met protein and variation of met protein kinase activity among human tumour cell lines. Tempest PR, et al. **Br J Cancer** 1988 Jul;58(1):3–7

Stimulation of choline acetyltransferase activity by retinoic acid and sodium butyrate in a cultured human neuroblastoma. Casper D, et al. **Brain Res** 1989 Jan 23; 478(1):74–84

Mechanism of activation of choline acetyltransferase in a human neuroblastoma cell line. Casper D, et al. **Brain Res** 1989 Jan 23;478(1):85–94

Changes in expression of tyrosine hydroxylase immunoreactivity in human SMS–KCNR neuroblastoma following retinoic acid or phorbol ester–induced differentiation. Pennypacker KR, et al. **Brain Res Mol Brain Res** 1989 Jun;5(4):251–8

Differential induction of spermidine/spermine N1–acetyltransferase in human lung cancer cells by the bis(ethyl)polyamine analogues. Casero RA Jr, et al. **Cancer Res** 1989 Jul 15;49(14):3829–33

Analysis of Aprt deficient mutants of Friend erythroleukaemia cells. O'Neill R, et al. **Cell Biol Int Rep** 1989 Jun;13(6):493–8

Enhancement of interferon–induced 2–5 oligoadenylate synthetase activity by retinoic acid in human histiocytic lymphoma U937 cells and WISH cells. Ho CK, et al. **Differentiation** 1989 Mar;40(1):70–5

Characteristics of cyclic AMP enhancement of retinoic acid induction of increased transglutaminase activity in HL60 cells. Maddox AM, et al. **Exp Cell Biol** 1988;56(1–2):49–59

Effect of human serum on alkaline phosphatase induction in cultured human tumor cells. Herz F. **Experientia** 1989 Aug 15;45(8):753–5

Immunoenzymatic method for detection of terminal deoxynucleotidyl transferase by light and electron microscopy. Di Primio R, et al. **Hematol Pathol** 1987; 1(3):173–81

Acetylcholinesterase in neuroblastoma and neuroblastoma x glioma hybrid cells: cellular localization and molecular forms. Melone MA, et al. **Int J Dev Neurosci** 1987; 5(5–6):417–28

Biosynthesis and posttranslational modifications of protein kinase C in human breast cancer cells. Borner C, et al. **J Biol Chem** 1989 Aug 15;264(23):13902–9

A functional protein kinase C is required for induction of 2–5A synthetase by recombinant interferon–alpha A in Daudi cells. Faltynek CR, et al. **J Biol Chem** 1989 Aug 25;264(24):14305–11

Human deoxycytidine kinase. Sequence of cDNA clones and analysis of expression in cell lines with and without enzyme activity. Huang SH, et al. **J Biol Chem** 1989 Sep 5; 264(25):14762–8

Studies on the regulation, biosynthesis, and activation of 5–lipoxygenase in differentiated HL60 cells. Kargman S, et al. **J Biol Chem** 1989 Aug 5;264(22):13313–20

An alpha–N–acetylgalactosaminylation at the threonine residue of a defined peptide sequence creates the oncofetal peptide epitope in human fibronectin. Matsuura H, et al. **J Biol Chem** 1989 Jun 25;264(18):10472–6

Isolation and electron microscopic characterization of the high molecular mass aminoacyl–tRNA synthetase complex from murine erythroleukemia cells. Norcum MT. **J Biol Chem** 1989 Sep 5;264(25):15043–51

Activation of pro–urokinase and plasminogen on human sarcoma cells: a proteolytic system with surface–bound reactants. Stephens RW, et al. **J Cell Biol** 1989 May; 108(5):1987–95

Isolation, characterization, and application of monoclonal antibodies to rat tyrosine hydroxylase. Kwan SW, et al. **J Neurosci Res** 1989 Jul;23(3):316–25

The collagenase produced by neoplastic rat epithelial cells: modulation of secretion, molecular weight characteristics, and purification. Lyons JG, et al. **Matrix** 1989 Jan;9(1):7–16

Activation of 2',5'–oligoadenylate synthetase activity on induction of HL–60 leukemia cell differentiation. Schwartz EL, et al. **Mol Cell Biol** 1989 Sep;9(9):3897–903

Na+, K+–ATPase activity in cultured C6 glioma cells. Folbergrova J, et al. **Neurochem Res** 1989 May;14(5):391–7

Reduction of aromatic L–amino acid decarboxylase activity in clonal pheochromocytoma PC12h cells by culture in the presence of N–methyl–4–phenylpyridinium ion (MPP+). Naoi M, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):229–35

Phosphorylation of tyrosine hydroxylase in protein kinase C–deficient PC12 cells. Cahill AL, et al. **Neuroscience** 1989; 30(3):811–8

Mutants of human colon adenocarcinoma, selected for thymidylate synthase deficiency. Houghton PJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1377–81

Functional inhibition of endogenously produced urokinase decreases cell proliferation in a human melanoma cell line. Kirchheimer JC, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5424–8

[Characterization of an analog enzyme to cathepsin L produced by tumor cells] Yamaguchi N, et al. **C R Soc Biol (Paris)** 1989;183(1):79–84 (Eng. Abstr.) **(Fre)**

[Fluorescent formazans in flow cytometry. Studies of their oxygen sensitivity] Kuhlmann U, et al. **Acta Histochem Suppl (Jena)** 1989;37:221–30 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Lambert–Eaton myasthenic syndrome: immunoglobulin G inhibition of Ca2+ flux in tumor cells correlates with disease severity. Lang B, et al. **Ann Neurol** 1989 Mar; 25(3):265–71

Modulation of growth–stimulating and antitumor activity of macrophages by BCG and cyclophosphamide. Okulov VB, et al. **APMIS Suppl** 1988;2:130–5

Immunogenicity of cyclophosphamide–treated tumor cells. Kawalec M, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(3):345–50

The anti–tumor effect of in vitro tumor–stimulated autologous peripheral blood lymphocytes measured by the subrenal capsule assay. Kürten C, et al. **Arch Otorhinolaryngol** 1989;246(2):105–8

Re–expression of major histocompatibility complex (MHC) class I molecules on malignant tumor cells and its effect on host–tumor interaction. Hui KM. **Bioessays** 1989 Jul; 11(1):22–6 (30 ref.)

Cytokines regulate the ability of human LAK–cells to kill human tumour cells in vitro. Gallagher G, et al. **Br J Cancer** 1989 Jun;59(6):919–21

The anticancer drug, cisplatin, increases the naturally occurring cell–mediated lysis of tumor cells. Collins JL, et al. **Cancer Immunol Immunother** 1989;29(1):17–22

Inhibition of lymphokine–activated killer cell generation by cultured tumor cell lines in vitro. Guillou PJ, et al. **Cancer Immunol Immunother** 1989;28(1):43–53

Lysis by interleukin 2–stimulated tumor–infiltrating lymphocytes of autologous and allogeneic tumor target cells. Radrizzani M, et al. **Cancer Immunol Immunother** 1989;28(1):67–73

In vivo efficacy of monoclonal antibody–drug conjugates of three different subisotypes which bind the human tumor–associated antigen defined by the KS1/4 monoclonal antibody. Starling JJ, et al. **Cancer Immunol Immunother** 1989;28(3):171–8

Auto–tumor recognition following in vitro induction of MHC antigen expression on solid human tumors: stimulation of lymphocytes and generation of cytotoxicity against the original MHC–antigen–negative tumor cells. Vánky F, et al. **Cancer Immunol Immunother** 1989;28(1):17–21

Cytotoxicity against human tumor cells mediated by the conjugate of anti–epidermal growth factor receptor monoclonal antibody to recombinant ricin A chain. Masui H, et al. **Cancer Res** 1989 Jul 1;49(13):3482–8

Tumor cell lysis by T cells distinct from NK cells and alloantigen–specific cytotoxic T cells. Thiele DL, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):405–23

Ultrastructural analysis of leucocyte interaction with tumour targets in a teleost, Cyprinus carpio L. Bielek E. **Dev Comp Immunol** 1988 Fall;12(4):809–21

Human bronchial epithelial cells with integrated SV40 virus T antigen genes retain the ability to undergo squamous differentiation. Ke Y, et al. **Differentiation** 1988 Jun; 38(1):60–6

Control of the antitumoral activity of human macrophages produced in large amounts in view of adoptive transfer. Dumont S, et al. **Eur J Cancer Clin Oncol** 1988 Nov; 24(11):1691–8

Interaction between cisplatin–treated macrophages and Dalton's lymphoma cells in vitro. Singh SM, et al. **Exp Cell Biol** 1988;56(1–2):1–11

Human monoclonal antibodies directed against ovarian carcinoma. Werner M, et al. **Gynecol Oncol** 1989 Aug; 34(2):148–54

Interleukin 2–activated large granular lymphocytes: cytotoxic efficiency and mechanism of killing of tumor cell lines. Savary CA, et al. **Immunol Lett** 1989 May; 21(2):145–51

An in–vitro model for tumor immunotherapy with antibody heteroconjugates. Jung G, et al. **Immunol Today** 1988 Sep; 9(9):257–60 (55 ref.)

Ganglioside GM2 expression on human melanoma cells correlates with sensitivity to lymphokine–activated killer cells. Hoon DS, et al. **Int J Cancer** 1989 May 15; 43(5):857–62

Generation and partial characterization of melanoma sublines resistant to lymphokine activated killer (LAK) cells. Relevance to doxorubicin resistance. Rivoltini L, et al. **Int J Cancer** 1989 May 15;43(5):880–5

Identification of a human epithelial cell surface protein sharing an epitope with the C3d/Epstein–Barr virus receptor molecule of B lymphocytes. Young LS, et al. **Int J Cancer** 1989 May 15;43(5):786–94

Immune mechanisms studied with tumor models. **Int Rev Immunol** 1986 Jul;1(3–4):213–348

Developmental aspects of immunoglobulin gene expression using tumor cells as models. Mather EL. **Int Rev Immunol** 1986 Jul;1(3–4):215–35 (81 ref.)

Class II MHC antigen induction on rat insulinoma (RINm5F) and colon carcinoma (TS) cells by co–culture with diabetic and normal xenogenic lymphocytes. Maugendre D, et al. **J Autoimmun** 1989 Jun;2(3):229–40

Hyperthermic modulation of tumor necrosis factor–dependent monocyte/macrophage tumor cytotoxicity in vitro. Klostergaard J, et al. **J Biol Response Mod** 1989 Jun;8(3):262–77

Effects of granulocytes on human neuroblastoma cells measured by chemiluminescence and chromium–51 release assay. Bruchelt G, et al. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):93–6

Lung derived surface active material (SAM) inhibits natural killer cell tumor cytotoxicity. Baughman RP, et al. **J Clin Lab Immunol** 1989 Feb;28(2):51–4

Effect of liposome encapsulation on antigen presentation in vitro. Comparison of presentation by peritoneal macrophages and B cell tumors. Dal Monte P, et al. **J Immunol** 1989 Mar 1;142(5):1437–43

Enhancement of mixed leukocyte reaction and cytotoxic antitumor responses by heparin. Dziarski R. **J Immunol** 1989 Jul 1;143(1):356–65

Effect of LAK cells against three–dimensional tumor tissue. In vitro study using multi–cellular human glioma spheroids as targets. Jääskeläinen J, et al. **J Immunol** 1989 Feb 1; 142(3):1036–45

Cytokines alter target cell susceptibility to lysis. II. Evaluation of tumor infiltrating lymphocytes. Stötter H, et al. **J Immunol** 1989 Mar 1;142(5):1767–73

Formalin–fixed macrophages bind tumor targets similarly to viable macrophages. Chapes SK. **J Leukoc Biol** 1989 Apr; 45(4):322–8

The T–cell receptor gene rearrangements in T–lineage tumors without OKT–3,4,6,8 markers. Miwa H, et al. **J Mol Cell Immunol** 1987;3(1):37–42

Possible role of human natural anti–Gal antibodies in the natural antitumor defense system. Castronovo V, et al. **J Natl Cancer Inst** 1989 Feb 1;81(3):212–6

Five novel cell surface antigens of CNS neoplasms. Jennings MT, et al. **J Neurol Sci** 1989 Jan;89(1):63–78

Cultured brain endothelium inhibits the cytocidal action of natural killer cells on glioma. Rozental JM, et al. **J Neurooncol** 1989 May;7(1):65–9

Vaccinia virus–infected C–C36 colon tumor cell lysates stimulate cellular responses in vitro and protect syngeneic Balb/c mice from tumor cell challenge. Iwaki H, et al. **J Surg Oncol** 1989 Feb;40(2):90–6

Myeloid antigen expression on common acute lymphatic leukaemia blasts after culture. Lawlor E, et al. **Leuk Res** 1988;12(7):575–82

Induction of monokine production by tumor cells. Männel DN, et al. **Lymphokine Res** 1989 Fall;8(3):257–61

Immunomodulation of HLA class I and II expression on a human tumor derived cell line by 5–azacytidine, bacterial lipopolysaccharide, gamma interferon and a phorbol ester. Santamaría M, et al. **Methods Find Exp Clin Pharmacol** 1989 Apr;11(4):269–72

Some immunological properties of high and low tumorigenic cellular variants of c–H–ras transformed 3T3 cells. Gonen B, et al. **Nat Immun Cell Growth Regul** 1988;7(3):144–54

Lowered susceptibility of K–562 cells treated with gamma interferon in serum–free medium to natural killer cell–mediated cytolysis. Ichiki AT, et al. **Nat Immun Cell Growth Regul** 1988;7(5–6):297–304

A mechanism by which human breast carcinoma cells escape the host immune system. Hakim AA. **Neoplasma** 1988; 35(6):691–705

Natural defense systems of fasting rats against tumor cells. Malter M, et al. **Nutr Cancer** 1989;12(2):127–34

Virus modified tumor cell vaccines for active specific immunotherapy of micrometastases: expansion and activation of tumor–specific T cells. Schirrmacher V, et al. **Prog Clin Biol Res** 1989;288:391–9

N–alpha–benzyloxycarbonyl–L–lysine thiobenzyl ester (BLT) serine esterase in human cytolytic effector cells and cell line targets. Somersalo K, et al. **Scand J Immunol** 1989 Apr;29(4):459–67

Development of antitumor reactivity in regional draining lymph nodes from tumor–immunized and tumor–bearing murine hosts. Stephenson KR, et al. **Surgery** 1989 Apr; 105(4):523–8

[Human natural killer activity in selected test systems and

tissue compartments: natural killer cell modulation by biological response modifiers] Klappacher G. **Wien Klin Wochenschr** 1988 Nov 18;100(22):743–6 (Eng. Abstr.) (Ger)

[Conditions for antitumor cytotoxic T-lymphocyte formation and inhibition of their activity by T-suppressors in mixed culture of human lymphocytes and tumor cells] Abronina IF, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):473–6 (Eng. Abstr.) (Rus)

[Selective cytotoxicity of antibody–ricin-A-chain conjugate for human tumor B cells. II. Comparison of activity of immunotoxins conjugated with poly- and monoclonal antibodies] Tonevitskii AG, et al. **Mol Biol (Mosk)** 1988 Jul–Aug;22(4):911–6 (Eng. Abstr.) (Rus)

METABOLISM

Growth effects of epidermal growth factor (EGF) and a monoclonal antibody against the EGF receptor on four glioma cell lines. Werner MH, et al. **Acta Neuropathol (Berl)** 1988;77(2):196–201

Production of beta-human chorionic gonadotropin by germ cell tumors in vivo and in vitro. Motoyama T, et al. **Acta Pathol Jpn** 1988 May;38(5):577–90

Contribution of diffusion to the oxygen dependence of energy metabolism in human neuroblastoma cells. Rumsey WL, et al. **Adv Exp Med Biol** 1989;248:829–33

Oxygen diffusion and mitochondrial respiration in neuroblastoma cells. Robiolio M, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1207–13

Comparison of lipid content, surface membrane fluidity, and temperature dependence of cis-diamminedichloroplatinum(II) accumulation in sensitive and resistant human ovarian carcinoma cells. Mann SC, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1211–5

Interferon effects upon fluorouracil metabolism by HL–60 cells. Elias L, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):867–74

A novel calcium signalling response in the breast cancer cell line MDA–468. Kremer S, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1290–6

Agonist-induced phosphorylation of an immunologically ras-related protein in human erythroleukemia cells. Lazarowski ER, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):972–8

Bromoconduritol treatment delays intracellular transport of secretory glycoproteins in human hepatoma cell cultures. Yeo KT, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1013–9

Presence of insulin receptors in cultured glial C6 cells. Regulation by butyrate. Montiel F, et al. **Biochem J** 1989 Feb 15;258(1):147–55

Characteristics and adaptive regulation of glycine transport in cultured glial cells. Zafra F, et al. **Biochem J** 1989 Mar 1;258(2):403–8

Enhancement of colloid uptake by tumor cell surface electrical charge modification. Anghileri LJ, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):307–8

Study on ATP-generating system and related hexokinase activity in mitochondria isolated from undifferentiated or differentiated HT29 adenocarcinoma cells. Gauthier T, et al. **Biochim Biophys Acta** 1989 Jul 13;975(2):231–8

Induction of an endothermic transition in the Arrhenius plot of fatty acid uptake by lipid-depleted ascites tumor cells. Haeffner EW, et al. **Biochim Biophys Acta** 1989 Sep 11; 1005(1):27–33

HT 29, a model cell line: stimulation by the vasoactive intestinal peptide (VIP); VIP receptor structure and metabolism. Marchis-Mouren G, et al. **Biochimie** 1988 May;70(5):663–71 (39 ref.)

F9 teratocarcinoma aggregates express villin upon differentiation into visceral endoderm-like cells. Buc-Caron MH, et al. **Biol Cell** 1989;65(2):195–8

Cytokeratin analysis of breast and leukemia tumor cell lines by flow cytometry. Ferrero M, et al. **Biol Cell** 1989; 65(3):305–8

Pharmacokinetic and -dynamic investigations on HL60 cells with a new protoporphyrin dimethyl ester hematoporphyrin dimer. Häberlein H, et al. **Biol Chem Hoppe Seyler** 1989 Apr;370(4):337–41

Release of soluble transferrin receptor from the surface of human leukemic HL60 cells. Chitambar CR, et al. **Blood** 1989 Aug 1;74(2):602–8

Production of growth factors by malignant lymphoma cell lines. Tweeddale M, et al. **Blood** 1989 Aug 1;74(2):572–8

A possible autocrine role for interleukin-6 in two lymphoma cell lines. Yee C, et al. **Blood** 1989 Aug 1;74(2):798–804

Suppression of the generation of lymphokine-activated killer (LAK) cells by serum-free supernatants of in vitro maintained tumour cell lines. Guillou PJ, et al. **Br J Cancer** 1989 Apr;59(4):515–21

Reducing the hypoxic fraction of a tumour model by growth in low glucose. Hlatky L, et al. **Br J Cancer** 1989 Mar; 59(3):375–80

Tumour cell products inhibit both functional and immunoreactive interleukin 2 production by human blood lymphocytes. Nelson M, et al. **Br J Cancer** 1989 Aug; 60(2):161–3

PC12 phaeochromocytoma cells contain an atypical muscarinic receptor binding site. Michel AD, et al. **Br J Pharmacol** 1989 Jul;97(3):914–20

Effect of tunicamycin, an inhibitor of protein glycosylation, on the high-affinity transport of acidic amino acid neurotransmitters in C6 glioma cells. Deas J, et al. **Brain Res** 1989 Mar 27;483(1):84–90

Transplantation of B16/C3 melanoma cells into the brains of rats and mice. Freed WJ, et al. **Brain Res** 1989 Apr 24;485(2):349–62

Arachidonic acid metabolism in cultured astrocytes from rat embryo and in C6 glioma cells. Ishizaki Y, et al. **Brain Res** 1989 Aug 7;494(1):138–42

Receptor-mediated uptake of beta-glucuronidase into primary astrocytes and C6 glioma cells from rat brain. Jenkins HG, et al. **Brain Res** 1988 Oct 18;462(2):265–74

Functional substance P receptors on a human astrocytoma cell line (U-373 MG). Lee CM, et al. **Brain Res** 1989 May 29;488(1–2):328–31

Interaction of insecticides of the pyrethroid family with specific binding sites on the voltage-dependent sodium channel from mammalian brain. Lombet A, et al. **Brain Res** 1988 Aug 30;459(1):44–53

Electrophysiological and biochemical characterization of a continuous human astrocytoma cell line with many properties of well-differentiated astrocytes. Lomneth R, et al. **Brain Res** 1989 May 1;486(1):95–107

The anticonvulsant sodium valproate specifically induces the expression of a rat glial heat shock protein which is identified as the collagen type IV receptor. Martin ML, et al. **Brain Res** 1988 Aug 30;459(1):131–7

Biochemical properties of monoamine-rich human neuroblastoma cells. Mena MA, et al. **Brain Res** 1989 May 8;486(2):286–96

Identification and characterization of D1 and D2 dopamine receptors in cultured neuroblastoma and retinoblastoma clonal cell lines. Monsma FJ Jr, et al. **Brain Res** 1989 Jul 17;492(1–2):314–24

Prolonged exposure of human neuroblastoma SH-SY5Y cell line to morphine and oxotremorine modulates signal transduction in adenylate cyclase system. Olasmaa M, et al. **Brain Res** 1988 Dec 20;475(2):291–6

Substance P and serotonin act synergistically to activate a cation permeability in a neuronal cell line. Reiser G, et al. **Brain Res** 1989 Feb 6;479(1):40–8

Acetylcholine synthesis and secretion by LA-N-2 human neuroblastoma cells. Richardson UI, et al. **Brain Res** 1989 Jan 9;476(2):323–31

Aluminum salts induce the accumulation of neurofilaments in perikarya of NB2a/d1 neuroblastoma. Shea TB, et al. **Brain Res** 1989 Jul 17;492(1–2):53–64

Inhibition of cyclic AMP formation in N1E-115 neuroblastoma cells is mediated by a non-cardiac M2 muscarinic receptor subtype. Surichamorn W, et al. **Brain Res** 1989 Jul 31;493(2):320–5

Characterization of zeta (zeta): a new opioid receptor involved in growth. Zagon IS, et al. **Brain Res** 1989 Mar 20;482(2):297–305

Modulation of proenkephalin A gene expression by cyclic AMP. Folkesson R, et al. **Brain Res Mol Brain Res** 1989 May;5(3):211–7

Elevation of intracellular calcium ion by prostaglandin E1 and its inhibition by protein kinase C in a human megakaryocyte leukemia cell line. Adachi M, et al. **Cancer Res** 1989 Jul 15;49(14):3805–8

Production of interleukin 1 activity by cultured human melanoma cells. Bennicelli JL, et al. **Cancer Res** 1989 Feb 15;49(4):930–5

Evidence for prostanoid biosynthesis as a biochemical feature of certain subclasses of non-small cell carcinomas of the lung as determined in established cell lines derived from human lung tumors. Hubbard WC, et al. **Cancer Res** 1989 Feb 15;49(4):826–32

Biochemical analysis of the role of transmethylation in the methionine dependence of tumor cells. Judde JG, et al. **Cancer Res** 1989 Sep 1;49(17):4859–65

Mechanism of transport and intracellular binding of porfiromycin in HCT 116 human colon carcinoma cells. Pan SS, et al. **Cancer Res** 1989 Sep 15;49(18):5048–53

Modulation of prostaglandin biosynthesis in hypoxic murine mammary adenocarcinoma cells by misonidazole. Shalinsky DR, et al. **Cancer Res** 1989 Jul 15;49(14):3853–6

Adriamycin activation and oxygen free radical formation in human breast tumor cells: protective role of glutathione peroxidase in adriamycin resistance. Sinha BK, et al. **Cancer Res** 1989 Jul 15;49(14):3844–8

Induction of plasminogen activator by N-methyl-N'-nitro-N-nitrosoguanidine in mer+ and mer- human tumour cell strains. Brdar B, et al. **Carcinogenesis** 1988 Dec;9(12):2191–5

The role of plasminogen in cell-mediated collagen degradation. Gavrilovic J, et al. **Cell Biol Int Rep** 1989 Apr;13(4):367–75

Insulin imprinting of neuroblastoma cells. Kovacs P, et al. **Cell Biol Int Rep** 1989 Jun;13(6):563–7

Collagen biosynthesis by a breast carcinoma cell strain and biopsy fragments of the primary tumour. Minafra S, et al. **Cell Biol Int Rep** 1988 Oct;12(10):895–905

Stimulatory effects of protein synthesis inhibitors on the spreading rate of 3T3 cells. Verger C, et al. **Cell Biol Int Rep** 1989 Mar;13(3):231–5

Measurement of cytoplasmic calcium concentration in cell suspensions: correction for extracellular Fura-2 through use of Mn2+ and probenecid. McDonough PM, et al. **Cell Calcium** 1989 Apr;10(3):171–80

Exogenous delta-crystallin gene expression as probe for differentiation of teratocarcinoma stem cells. Goto K, et al. **Cell Differ** 1988 Jul;24(2):139–47

Maternal and embryonic transcripts of Drosophila proto-oncogenes are expressed in Schneider 2 culture cells but not in l(2)gl transformed neuroblasts. Kimchie Z, et al. **Cell Differ Dev** 1989 Mar;26(2):79–86

Selective suppression of endogenous beta-globin gene expression by transferred beta-globin/TK chimeric gene in murine erythroleukemia cells. Takada S, et al. **Cell Differ Dev** 1989 Jun;27(1):9–18

Characterization of thrombospondin synthesis, secretion and cell surface expression by human tumor cells. Varani J, et al. **Clin Exp Metastasis** 1989 May-Jun;7(3):265–76

Degradation of rat chondrosarcoma proteoglycans by a neutral metalloprotease from rabbit chondrocytes. Caputo CB, et al. **Connect Tissue Res** 1988;18(3):191–203

Fluorescein isothiocyanate staining intensity as a probe of hyperthermia-induced changes in chromatin conformation. Dyson JE, et al. **Cytometry** 1989 Mar;10(2):174–84

Neuroblastoma cell–oligodendrocyte interaction is mediated by neural cell adhesion molecules. Bhat S, et al. **Dev Neurosci** 1988;10(4):231–5

Regulation of choline acetyltransferase activity by cell density in a cultured human neuroblastoma cell line. Casper D, et al. **Dev Neurosci** 1988;10(4):245–55

Efficient one-step selection of hepatoma cell variants of a variety of phenotypes by use of aflatoxin B1. Corcos L, et al. **Differentiation** 1988 Jul;38(2):134–9

A mouse minialbumin gene is specifically expressed in differentiated hepatoma cells but not in transgenic mice. Lorès P, et al. **Differentiation** 1988 Jun;38(1):35–41

Density-dependent modulation of synthesis of keratins 1 and 10 in the human keratinocyte line HACAT and in ras-transfected tumorigenic clones. Ryle CM, et al. **Differentiation** 1989 Mar;40(1):42–54

Production and characterization of monoclonal antibodies recognizing head activator in precursor form and immunocytochemical localization of head activator precursor and head activator peptide in the neural cell line NH15-CA2 and in hydra. Schawaller M, et al. **Differentiation** 1988 Sep;38(3):149–60

Conditions required for activation of the mouse albumin or alpha-fetoprotein gene in hybrids between mouse lymphoblastoma and rat hepatoma cells. Sellem CH, et al. **Differentiation** 1988 Nov;39(1):66–77

Differentially regulated production of platelet-derived growth factor and of transforming growth factor beta by a human teratocarcinoma cell line. Weima SM, et al. **Differentiation** 1988 Sep;38(3):203–10

A human melanoma-derived cell line (IGR39) with a very high number of vasoactive-intestinal-peptide (VIP) receptors. 1. Molecular characterization of the binding site. Luis J, et al. **Eur J Biochem** 1989 Mar 15;180(2):429–33

A human melanoma-derived cell line (IGR39) with a very high number of vasoactive-intestinal-peptide (VIP) receptors. 2. Effect of VIP on cAMP production and on cell-surface VIP-binding sites. Martin JM, et al. **Eur J Biochem** 1989 Mar 15;180(2):435–9

Transferrin iron interactions with cultured hepatocellular carcinoma cells (PLC/PRF/5). Baynes R, et al. **Eur J Cell Biol** 1988 Jun;46(2):282–8

Restricted localization of functional vasoactive intestinal peptide (VIP) receptors in in vitro differentiated human colonic adenocarcinoma cells (HT29-D4). Fantini J, et al. **Eur J Cell Biol** 1988 Aug;46(3):458–65

Effect of protein synthesis inhibitors on formation and degradation of tight junctions in HT 29 adenocarcinoma cells. Ophir I, et al. **Eur J Cell Biol** 1989 Jun;49(1):116–22

Effects of medium amino acids on ouabain-sensitive 86Rb+ -uptake and membrane-potential dependent [3H]tetraphenylphosphonium accumulation in Friend erythroleukemia cells. Schaefer A, et al. **Eur J Cell Biol** 1988 Aug;46(3):453–7

Differential effect on inositol-phospholipid hydrolysis, cytosolic-free Ca2+ concentration, protein kinase C activity and protein phosphorylation of 1-oleoyl-2-acetyl-sn-glycerol growth-stimulated ascites tumor cells. Seibicke S, et al. **Eur J Cell Biol** 1988 Aug; 46(3):403–10

Interleukin-1 and tumor necrosis factor production in acute non-lymphoid leukemia. Erroi A, et al. **Eur J Haematol** 1989 Jan;42(1):16–23

Serotonin raises the cyclic GMP level in a neuronal cell line via 5-HT3 receptors. Reiser G, et al. **Eur J Pharmacol** 1989 May 11;172(2):195–8

Rodent and primate adrenal medullary cells in vitro: phenotypic plasticity in response to coculture with C6 glioma cells or NGF. Notter MF, et al. **Exp Brain Res** 1989;76(1):38–46

Expression of membrane glycoproteins in normal keratinocytes and squamous carcinoma cell lines. Rayter Z, et al. **Exp Cell Res** 1989 Aug;183(2):443–52

Spontaneous and 5-azacytidine-induced revertants of methionine-dependent tumor-derived and H-ras-1-transformed cells. Vanhamme L, et al. **Exp Cell Res** 1989 Mar;181(1):159–68

Arachidonic acid metabolism in normal and transformed rat tracheal epithelial cells and its possible role in the regulation of cell proliferation. Duniec ZM, et al. **Exp Lung Res** 1989 May;15(3):391–408

Cationic control of gene transcription in tumour cells. Kaz'min SD, et al. **Folia Biol (Praha)** 1989;35(3):143–51

A new cell line, GS, derived from a human renal cell

carcinoma. Vydra J, et al. **Folia Biol (Praha)** 1988; 34(5):308–15

Characterization of the human colon carcinoma cell line (Caco–2) as a model system for intestinal epithelial permeability. Hidalgo IJ, et al. **Gastroenterology** 1989 Mar; 96(3):736–49

Construction of an EBNA–producing line of well–differentiated human hepatoma cells and of appropriate Epstein–Barr virus–based shuttle vectors. Lutfalla G, et al. **Gene** 1989 Mar 15;76(1):27–39

Vimentin cDNA clones covering the complete intermediate–filament protein are found in an EHS tumor cDNA library. Wood L, et al. **Gene** 1989 Mar 15; 76(1):171–5

Flow cytometric analysis of experimental parameters for the immunofluorescent labeling of BrdUrd in various tumour cell lines. Bakker PJ, et al. **Histochemistry** 1989;91(5):425–9

Inhibition of cell–mediated immunity by tumour cell products: depression of interleukin–2 production and responses to interleukin–2 by mouse spleen cells. Nelson M, et al. **Immunol Cell Biol** 1988 Apr;66 (Pt 2):97–104

Oxidative modification of low density lipoprotein (LDL) by activated human monocytes and the cell lines U937 and HL60. Cathcart MK, et al. **In Vitro Cell Dev Biol** 1988 Oct;24(10):1001–8

Production of platelet–derived growth factorlike protein(s) by a human carcinoma cell line. O'Donnell KA, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):381–4

Biosynthesis of tumour–related glycosphingolipids. Basu M, et al. **Indian J Biochem Biophys** 1988 Feb–Apr; 25(1–2):112–8

Messenger RNAs of beta–amyloid precursor protein and prion protein are regulated by nerve growth factor in PC12 cells. Wion D, et al. **Int J Dev Neurosci** 1988;6(4):387–93

Temporal dependence of hyperthermic augmentation of macrophage–TNF production and tumor cell–TNF sensitization. Tomasovic SP, et al. **Int J Hyperthermia** 1989 Sep–Oct;5(5):625–39

Comparative studies of radiotracer citrates in oncological models—2. 153Sm–citrate and 67Ga–citrate. Tse JW, et al. **Int J Radiat Appl Instrum [B]** 1989;16(1):17–23

Comparison of 3H–misonidazole binding between CHO and 9L cells using the sandwich system. Hlatky L, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):943–7

Tumor cell permeability to peplomycin. Kuramochi H, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1163–70

Characterization and partial purification of a non–interferon macrophage activating factor produced by human leukemic T cell line. Kutsukake H, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):661–6

Binding of activated macrophages to tumor cells through a macrophage lectin and its role in macrophage tumoricidal activity. Oda S, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):1040–3

Partial characterization of a glucocorticoid suppressible mitogenic activity secreted from a rat hepatoma cell line hypersensitive to the antiproliferative effects of glucocorticoids. Cook PW, et al. **J Biol Chem** 1989 Aug 25;264(24):14151–8

Kinetic pulse–chase labeling study of the glucocorticoid receptor in mouse lymphoma cells. Effect of glucocorticoid and antiglucocorticoid hormones on intracellular receptor half–life. Distelhorst CW, et al. **J Biol Chem** 1989 Aug 5;264(22):13080–5

Presence of unsulfated heparan chains on the heparan sulfate proteoglycan of human colon carcinoma cells. Implications for heparan sulfate proteoglycan biosynthesis. Iozzo RV. **J Biol Chem** 1989 Feb 15;264(5):2690–9

Proteoglycan biosynthesis in murine monocytic leukemic (M1) cells before and after differentiation. McQuillan DJ, et al. **J Biol Chem** 1989 Aug 5;264(22):13245–51

Down–regulation of plasmin receptors on human sarcoma cells by glucocorticoids. Pöllänen J. **J Biol Chem** 1989 Apr 5;264(10):5628–32

The receptor for alpha–melanotropin of mouse and human melanoma cells. Application of a potent alpha–melanotropin photoaffinity label. Solca F, et al. **J Biol Chem** 1989 Aug 25;264(24):14277–81

Accumulation of cAMP and calcium in S49 mouse lymphoma cells following hyposmotic swelling. Watson PA. **J Biol Chem** 1989 Sep 5;264(25):14735–40

Effects of alpha, beta and gamma recombinant interferons on CEA production from HT–29 human colon adenocarcinoma cell line. Bombardieri E, et al. **J Biol Regul Homeost Agents** 1987 Jul–Sep;1(3):133–42

Effect of prostaglandin F2 alpha on human parathyroid adenomas: evidence for uncoupling of parathyroid hormone secretion and cAMP accumulation. Fitzpatrick LA, et al. **J Bone Miner Res** 1988 Feb;3(1):81–6

Down–regulation of proteolytic activity in 12–O–tetradecanoyl–phorbol–13–acetate–induced K562 leukemia cell cultures: depletion of active urokinase by excess type 1 plasminogen activator inhibitor. Alitalo R, et al. **J Cell Physiol** 1989 Jul;140(1):119–30

Expression of two insulin–like growth factor–binding proteins in a human endometrial cancer cell line: structural, immunological, and genetic characterization. Lamson G, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):852–9

Thyroxine uptake by human hepatoma cells from serum of patients submitted to long–term thyroxine suppressive therapy. Bartalena L, et al. **J Endocrinol Invest** 1988 Oct; 11(9):629–35

Imaging liposomes at electron microscopic level: encapsulated colloidal iron as an electrondense marker for liposome–cell interactions. Foldvari M, et al. **J Microencapsul** 1988 Jul–Sep;5(3):231–41

Presence of pro–vasopressin mRNA, neurophysin and arginine vasopressin in mouse anterior pituitary cells and the AtT–20 corticotrophic tumour cell line. Loh YP, et al. **J Mol Endocrinol** 1988 Jul;1(1):39–48

Antigenic phenotypes of cultured malignant astrocytomas: identification of lineage–consistent, lineage–independent and putative tumor–restricted antigenic expression. Jennings MT, et al. **J Neurol Sci** 1989 Jan;89(1):79–92

Oncogene–related growth factors and growth factor receptors in human malignant glioma–derived cell lines. Harsh GR 4th, et al. **J Neurooncol** 1989 May;7(1):47–56

Type beta transforming growth factor and epidermal growth factor suppress the plasminogen activator activity in a human glioblastoma cell line. Helseth E, et al. **J Neurooncol** 1988 Nov;6(3):277–83

Overexpression of the epidermal growth factor receptor gene in a human carcinoma cell line, derived from a brain metastasis. Helseth E, et al. **J Neurooncol** 1989 May; 7(1):81–8

The effects of type beta transforming growth factor on proliferation and epidermal growth factor receptor expression in a human glioblastoma cell line. Helseth E, et al. **J Neurooncol** 1988 Nov;6(3):269–76

Effect of lonidamine on human malignant gliomas: biochemical studies. Paggi MG, et al. **J Neurooncol** 1988 Nov;6(3):203–9

Nerve growth factor rapidly stimulates arachidonate metabolism in PC12 cells: potential involvement in nerve fiber growth. DeGeorge JJ, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):323–32

Growth cone migration across extracellular matrix components depends on integrin, but migration across glioma cells does not. Letourneau PC, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):286–97

Identification of a human glial fibrillary acidic protein cDNA: a tool for the molecular analysis of reactive gliosis in the mammalian central nervous system. Rataboul P, et al. **J Neurosci Res** 1988;20(2):165–75

Decreased levels of nerve growth factor receptor on dexamethasone–treated PC12 cells. Tocco MD, et al. **J Neurosci Res** 1988 Aug;20(4):411–9

Mechanism of gallium–67 accumulation in tumors [letter] Tsan MF, et al. **J Nucl Med** 1988 Dec;29(12):2019–20

Biosynthesis of a novel form of vitamin B–6 by tumor cells. Bishop RE, et al. **J Nutr** 1989 Feb;119(2):189–95

Specific binding of interferon–gamma and –alpha 2a to tumor cells and their antitumor activities. Ishii Y, et al. **J Pharmacobiodyn** 1988 Jul;11(7):465–71

Hematoporphyrin derivative photosensitization and cellular fluorescent photoproduct formation. Cao EH, et al. **J Photochem Photobiol [B]** 1988 Dec;2(4):503–13

Photoproducts formed from photofrin II in cells. Moan J, et al. **J Photochem Photobiol –B–** 1988 May;1(4):429–36

125I–ligand for progesterone receptor: 17 alpha–(6'–iodohex–1'–ynyl)–19–nortestosterone. Salman M, et al. **J Steroid Biochem** 1989 Jul;33(1):25–31

Effect of cobalamin inactivation on folate metabolism of leukemic cells. Ermens AA, et al. **Leuk Res** 1988; 12(11–12):905–10

Alteration of intracellular actin levels induced by phorboldiester in human HL–60 leukemia cells susceptible or resistant to differentiation, and the effects of protein kinase inhibitors. Uemura Y, et al. **Leuk Res** 1989; 13(7):545–52

Adult T cell leukemia cell lines that originated from primary leukemic clones also had a defect of expression of CD3–T cell receptor complex. Shirono K, et al. **Leukemia** 1988 Nov;2(11):728–33

Glucose metabolism in human gliomas: correspondence of in situ and in vitro metabolic rates and altered energy metabolism. Galarraga J, et al. **Metab Brain Dis** 1986 Dec; 1(4):279–91

Gangliosides in SV–40–transformed cells derived from Tay–Sachs disease fetal brain. Hoffman LM, et al. **Metab Brain Dis** 1989 Jun;4(2):87–93

Unusual levels of heat shock element–binding activity in embryonal carcinoma cells. Mezger V, et al. **Mol Cell Biol** 1989 Sep;9(9):3888–96

Metabolic fate of estradiol in human mammary cancer cells in culture: estrogen sulfate formation and cooperativity exhibited by estrogen sulfotransferase. Adams JB, et al. **Mol Cell Endocrinol** 1988 Aug;58(2–3):231–42

Vasopressin induces breakdown of phosphoinositides in adrenal tumor Y–1 cells without a steroidogenic effect. Langlois D, et al. **Mol Cell Endocrinol** 1988 Aug; 58(2–3):199–205

Study of metabolism and growth limitation of human leukemia cell lines. Horáková K, et al. **Neoplasma** 1989; 36(3):287–95

Dideoxycytidine, an anti–HIV drug, selectively inhibits growth but not phosphatidylcholine metabolism in neuroblastoma and glioma cells. Cook HW, et al. **Neurochem Res** 1989 Mar;14(3):279–84

Sodium channel activation does not alter lipid metabolism in cultured neuroblastoma cells. Glanville TN, et al. **Neurochem Res** 1988 Nov;13(11):1015–21

Translational regulation in growing clonal human astrocytoma cells in culture. Tewari S, et al. **Neurochem Res** 1988 Aug;13(8):749–60

Oestrogen and progesterone sensitivity in cultured meningioma cells. Maiuri F, et al. **Neurol Res** 1989 Mar; 11(1):9–13

Factors controlling the expression of the NGF receptor in PC12 cells. Doherty P, et al. **Neurosci Lett** 1988 Oct 5; 92(2):222–7

Brain basic fibroblast growth factor stimulates the release of plasminogen activators by newborn rat cultured astroglial cells. Rogister B, et al. **Neurosci Lett** 1988 Sep 12;91(3):321–6

Soluble, phosphorylated forms of the high molecular weight neurofilament protein in perikarya of cultured neuronal cells. Shea TB, et al. **Neurosci Lett** 1988 Oct 17;92(3):291–7

Adenosine receptors linked to adenylate cyclase activity in human neuroblastoma cells: modulation during cell differentiation. Abbracchio MP, et al. **Neuroscience** 1989; 30(3):819–25

Changes in lipid composition of neuroblastoma C1300 N18 cell during differentiation. Gulaya NM, et al. **Neuroscience** 1989;30(1):153–64

Properties of neuronal type acetylcholine receptors in voltage clamped mouse neuroblastoma cells. Oortgiesen M, et al. **Neuroscience** 1989;31(1):169–79

In vivo metabolism of radiolabeled putrescine in gliomas: implications for positron emission tomography of brain tumors. Warnick RE, et al. **Neurosurgery** 1988 Oct; 23(4):464–9

Exposure to lindane and two other hexachlorocyclohexane isomers increases free intracellular calcium levels in neurohybridoma cells. Joy RM, et al. **Neurotoxicology** 1988 Winter;9(4):637–43

Kinetic study of platelet glycoproteins and PPO activity in TPA–induced k562 cells. Adachi M, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Sep;51(6):1069–79

Identification and characterization of muscarinic receptors in cultured human pancreatic carcinoma cells. Ackerman MS, et al. **Pancreas** 1989;4(3):363–70

Direct measurement of interstitial convection and diffusion of albumin in normal and neoplastic tissues by fluorescence photobleaching. Chary SR, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5385–9

Transcription of thrombomodulin mRNA in mouse hemangioma cells is increased by cycloheximide and thrombin. Dittman WA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7179–82

Early estrogen–induced metabolic changes and their inhibition by actinomycin D and cycloheximide in human breast cancer cells: 31P and 13C NMR studies. Neeman M, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5585–9

Identification of a vitamin D–responsive protein on the surface of human osteosarcoma cells. Shull S, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5405–9

Identification of monocyte chemotactic activity produced by malignant cells. Graves DT, et al. **Science** 1989 Sep 29; 245(4925):1490–3

Monoclonal antibodies to tissue–type plasminogen activator which prolong its clearance in vivo. Reilly TM, et al. **Thromb Haemost** 1989 Apr 25;61(2):259–61

Androgen receptor–mediated growth and epidermal growth factor receptor induction in the human prostate cell line LNCaP. Schuurmans AL, et al. **Urol Int** 1989;44(2):71–6

[Anthracycline transport in sensitive and resistant leukemia cells] Erttmann R, et al. **Klin Padiatr** 1989 Jan–Feb; 201(1):40–5 (Eng. Abstr.) **(Ger)**

[Changes of protein and RNA content in accumulated G1 cells by delta12–PGJ2] Ishikawa H, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):405–10 (Eng. Abstr.) **(Jpn)**

[Binding of K–18 on the surface of tumor cells—flowcytometrical analysis in vitro] Kato H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2627–31 (Eng. Abstr.) **(Jpn)**

[Interaction of alkylating oligonucleotide derivatives with mammalian cells. A study of the uptake mechanism of derivative cells] Vlasov VV, et al. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):93–100 (Eng. Abstr.) **(Rus)**

[Combined effect of heat shock and glucocorticoid hormones on cultured mammalian cells] Zatsepina OG, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):813–21 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Infection of a human leukemia K–562 cell line with Semliki Forest virus. King DD, et al. **Arch Virol** 1988; 102(1–2):49–61

Eradication of Mycoplasma contamination from cell lines of different origin by the 5–bromouracil–fluorochrome procedure. Calorini L, et al. **Cancer Lett** 1989 Jul 15; 46(2):107–12

Secretion of parathyroid hormone–like activity from human T–cell lymphotropic virus type I–infected lymphocytes. Fukumoto S, et al. **Cancer Res** 1989 Jul 15;49(14):3849–52

Two colour DNA in situ hybridization for the detection of two viral genomes using non–radioactive probes. Mullink H, et al. **Histochemistry** 1989;91(3):195–8

Adhesion to and invasion of HEp–2 cells by Campylobacter spp. Konkel ME, et al. **Infect Immun** 1989 Oct; 57(10):2984–90

Infection of rats with bovine leukaemia virus: establishment of a virus–producing rat cell line. Altanerova V, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1929–32

Persistent replication of herpes simplex virus type 1 in JOK-1 cells. Thiele K, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1907-11
Glucocorticoids stimulate the release of a viral tumor marker (MMTV gp52) while inhibiting tumor cell growth. Ritzi EM, et al. **J Steroid Biochem** 1989 Apr;32(4):499-505
Regulation of viral persistence in human glioblastoma and rhabdomyosarcoma cells infected with coronavirus OC43. Collins AR, et al. **Microb Pathog** 1986 Dec;1(6):573-82
Interaction of herpes simplex virus type 2 with a rat glioma cell line. Sakihama K, et al. **Microbiol Immunol** 1988; 32(9):933-47

PATHOLOGY

Ph positive CML cell lines. Keating A.
Baillieres Clin Haematol 1987 Dec;1(4):1021-9 (39 ref.)
Growth rate determines activity of porphobilinogen deaminase both in nonmalignant and malignant cell lines. Schoenfeld N, et al. **Biochem Med Metab Biol** 1988 Oct; 40(2):213-7
Cell cycle-related proteins: a flow cytofluorometric study in human tumors. Danova M, et al. **Biol Cell** 1988; 64(1):23-8
CML-T1: a cell line derived from T-lymphocyte acute phase of chronic myelogenous leukemia. Kuriyama K, et al. **Blood** 1989 Sep;74(4):1381-7
KU 812: a pluripotent human cell line with spontaneous erythroid terminal maturation. Nakazawa M, et al. **Blood** 1989 May 15;73(7):2003-13
Long-term growth of malignant thymocytes in vitro. Smith SD, et al. **Blood** 1989 Jun;73(8):2182-7
Detection of malignant cells in histologically normal bone marrow using culture techniques. Joshi SS, et al. **Bone Marrow Transplant** 1987 Feb;1(3):303-10
A new cell line (8701-BC) from primary ductal infiltrating carcinoma of human breast. Minafra S, et al. **Br J Cancer** 1989 Aug;60(2):185-92
Characterisation of a tamoxifen-resistant variant of the ZR-75-1 human breast cancer cell line (ZR-75-9a1) and ability of the resistant phenotype. van den Berg HW, et al. **Br J Cancer** 1989 Apr;59(4):522-6
Reduced tumorigenicity of rodent tumour cells and tumour explants following infection with wild type and mutant herpes simplex virus, bovine mammillitis virus and encephalomyocarditis virus. Skinner GR, et al. **Br J Exp Pathol** 1988 Aug;69(4):495-504
Time-dependent subpopulation induction in heterogeneous tumors. Gyori I, et al. **Bull Math Biol** 1988;50(6):681-96
Human monocytes selectively bind to cells expressing the tumorigenic phenotype. Shimizu H, et al. **Cancer Immunol Immunother** 1989;28(3):185-92
Altered responsiveness of metastatic versus non-metastatic fibroblasts to heparin-binding growth factors. Schwarz LC, et al. **Cancer Lett** 1988 Nov;42(3):193-7
Slowing of cell cycle traverse for cells in exponential monolayer cultures placed into plateau-fed and starved medium. Allison DC, et al. **Cancer Res** 1989 Mar 15; 49(6):1456-64
Involvement of platelet membrane glycoprotein Ib and glycoprotein IIb/IIIa complex in thrombin-dependent and -independent platelet aggregations induced by tumor cells. Kitagawa H, et al. **Cancer Res** 1989 Feb 1;49(3):537-41
Cytotoxicity of bacterial proteases in various tumor cells mediated through alpha 2-macroglobulin receptor. Maeda H, et al. **Cancer Res** 1989 Feb 1;49(3):660-4
Directed migration of murine and human tumor cells to collagenases and other proteases. Terranova VP, et al. **Cancer Res** 1989 Sep 1;49(17):4835-41
The effect of phorbol esters on tumor cell sensitivity to macrophage-mediated cytostasis. Nycum LM, et al. **Cell Immunol** 1989 Jan;118(1):147-56
In vitro study of effects of 1,25 dihydroxyvitamin D3 on the morphology of human breast cancer cell line BT.20. Frappart L, et al. **Differentiation** 1989 Mar;40(1):63-9
Effect of flavone acetic acid (NSC 347,512) on splenic cytotoxic effector cells and their role in tumour necrosis. Ching LM, et al. **Eur J Cancer Clin Oncol** 1989 May; 25(5):821-8
Inhibitory action of androstenedione on the proliferation and cell cycle kinetics of aromatase-free MXT and MCF-7 mammary tumour cell lines. Kiss R, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):837-43
The production of differentiation autoinducing activity by WEHI-3B D+ leukemia cells. Kajigaya Y, et al. **Exp Hematol** 1989 May;17(4):368-73
Novel functions and cellular interaction of human lymphoid stromal cells with lymphoid cell lines in vitro. Ohkawa H, et al. **Exp Hematol** 1989 Jan;17(1):30-3
Bromodeoxyuridine for cell kinetic investigations in humans. Riccardi A, et al. **Haematologica (Pavia)** 1988 Sep-Oct; 73(5):423-30 (73 ref.)
A collagen matrix microassay for use in tumour-stromal cell co-cultures. Agrez MV. **Immunol Cell Biol** 1989 Apr;67 (Pt 2):101-5
Inhibition of plasminogen activators and the growth of cultured human tumour cells. Scott GK. **Int J Biochem** 1988;20(8):817-22
Methods of simultaneous visualization of cytoplasmic enzyme reactivity and cell surface antigens (by cytochemistry combined with immunocytochemistry) in individual hematopoietic and lymphoid cells. Gloghini A, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):221-32 (29 ref.)
Rabbit blastocoelic fluid regulation of tumor-cell proliferation in vitro. Lambert RD, et al. **Int J Cancer** 1989 Sep 15;44(3):524-8
Thermal dose : comments on papers presented at the NAHG workshop [letter] Hall EJ. **Int J Hyperthermia** 1989 Mar-Apr;5(2):277-80
Effect of the pulse length of ultrasound on cell membrane damage in vitro. Kober LO, et al. **J Acoust Soc Am** 1989 Jul;86(1):6-7
Effects of cholesterol and alfa-2-recombinant interferon on cell growth and cell antigen production in the HT 29 cells, an established cell line of human colon adenocarcinoma. Esposito G, et al. **J Biol Regul Homeost Agents** 1987 Oct-Dec;1(4):166-72
Regrowth kinetics of cells from different regions of multicellular spheroids of four cell lines. Freyer JP, et al. **J Cell Physiol** 1989 Feb;138(2):384-92
Inhibition of tumor cell growth by interferon-gamma is mediated by two distinct mechanisms dependent upon oxygen tension: induction of tryptophan degradation and depletion of intracellular nicotinamide adenine dinucleotide. Aune TM, et al. **J Clin Invest** 1989 Sep; 84(3):863-75
Autonomous growth of a human neuroblastoma cell line is mediated by insulin-like growth factor II. el-Badry OM, et al. **J Clin Invest** 1989 Sep;84(3):829-39
Interleukin 1 promotes tumor cell adhesion to cultured human endothelial cells. Dejana E, et al. **J Clin Invest** 1988 Oct;82(4):1466-70
Establishment of a leukemic cell model for studying human pre-B to B cell differentiation. Wörmann B, et al. **J Immunol** 1989 Jan 1;142(1):110-7
Re-examination and further development of a precise and rapid dye method for measuring cell growth/cell kill. Hansen MB, et al. **J Immunol Methods** 1989 May 12; 119(2):203-10
Differential effects of interleukin-1 and formylmethionylleucylphenylalanine on chemotaxis and human endothelium adhesivity for A549 tumor cells. Lauri D, et al. **Lab Invest** 1989 Jan;60(1):161-4
Sustained viability of acute myelogenous leukemia cells in liquid suspension culture correlates with occurrence of differentiation. Baer MR, et al. **Leuk Res** 1988;12(8):647-50
Quantitative morphological aspects of granulocytic differentiation induced in HL-60 cells by dimethylsulfoxide and retinoic acid. Dufer J, et al. **Leuk Res** 1989;13(7):621-7
Graded increase in probability of eosinophilic differentiation of HL-60 promyelocytic leukemia cells induced by culture under alkaline conditions. Fischkoff SA. **Leuk Res** 1988; 12(8):679-86
Human acute lymphoblastic leukemia cell lines with characteristics of intraclonal variation in B-cell differentiation stage. Hirata T, et al. **Leuk Res** 1989; 13(3):203-12
In-vivo and in-vitro association between leukemic cells and marrow stromal cells: a murine model. Juneja HS, et al. **Leuk Res** 1988;12(8):631-6
An attempt to select pseudonormal revertants of Friend erythroleukaemia cells using cytochalasin B. Neill R, et al. **Leuk Res** 1989;13(7):629-32
Phytohemagglutinin-stimulated leukocyte-conditioned medium induces differentiation in acute promyelocytic leukemia cells in vitro. Selypes A, et al. **Leuk Res** 1988; 12(11-12):951-3
PC12 cell aggregation and dopamine production on EHS-derived extracellular matrix. Bethea CL, et al. **Mol Cell Endocrinol** 1988 Aug;58(2-3):113-28
Clinical implications of CLL cell proliferation in vitro. Juliusson G, et al. **Nouv Rev Fr Hematol** 1988; 30(5-6):399-401
High c-myc amplification level contributes to the tumorigenic phenotype of the human breast carcinoma cell line SW 613-S. Lavialle C, et al. **Oncogene** 1988 Sep; 3(3):335-9
Conversion of Lewis lung carcinoma into ascitic form. Sato T, et al. **Oncology** 1989;46(3):188-92
Hepatocytes enhance Kupffer cell-mediated tumor cell cytostasis in vitro. Curran RD, et al. **Surgery** 1989 Aug; 106(2):126-32
Antiproliferative effect of Hu-interferon-gamma in 674V and J82 bladder carcinoma cell lines. Jakse G, et al. **Urol Res** 1988;16(6):403-5
The in vitro and in vivo effects of extracorporeal shock waves on malignant cells. Randazzo RF, et al. **Urol Res** 1988;16(6):419-26
Primary cultures of human thymic epithelial tumors. Morphological and immunocytochemical characterization. Papadopoulos T, et al. **Virchows Arch [B]** 1989;56(6):363-70
Relationship between melanogenicity and malignancy in malignant melanoma cells. Kim HI, et al. **Yonsei Med J** 1988;29(4):357-66

PHYSIOLOGY

CSF-1 and C-FMS gene expression in human carcinoma cell lines. Horiguchi J, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):395-401
Fusion of lipid vesicles with ascites tumor cells and their lipid-depleted variants. Studies with radioactive- and fluorescent-labeled vesicles. Seibicke S, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):487-96
Inward rectifying potassium channels in human malignant glioma cells. Brismar T, et al. **Brain Res** 1989 Feb 20; 480(1-2):249-58
Potassium and sodium channels in human malignant glioma cells. Brismar T, et al. **Brain Res** 1989 Feb 20; 480(1-2):259-67
Galanin inhibits dopamine secretion and activates a potassium channel in pheochromocytoma cells. de Weille JR, et al. **Brain Res** 1989 Apr 17;485(1):199-203
Psychotropic drugs block voltage-gated ion channels in neuroblastoma cells. Ogata N, et al. **Brain Res** 1989 Jan 2;476(1):140-4
Analysis of slow-onset neurite formation in NG108-15 cells: implications for a unified model of neurite elongation. Smalheiser NR. **Brain Res Dev Brain Res** 1989 Jan 1; 45(1):49-57
Signalling pathway of tumor necrosis factor in normal and tumor cells. Watanabe N, et al. **Cancer Immunol Immunother** 1989;28(3):157-63
Induction of process outgrowth in vertebrate and invertebrate cell lines by a 2-pyridinyl thiosemicarbazone. Carrow GM, et al. **Differentiation** 1988 Nov;39(1):22-7
Altered growth factor requirements and cell cycle control in rat hepatoma cells versus adult rat hepatocytes in culture. Paul D, et al. **Eur J Cell Biol** 1988 Jun;46(2):270-4
A serum factor inducing neurite retraction of morphologically differentiated neuroblastoma x glioma NG108-15 cells. Ghahary A, et al. **J Cell Sci** 1989 Feb; 92 (Pt 2):251-6
Hepatoma G2 conditioned medium facilitates early outgrowth of endothelial cells from isolated glomeruli. Elliot S, et al. **Kidney Int** 1989 May;35(5):1245-8
Interleukin-6 and its receptor during homeostasis, inflammation, and tumor growth. Bauer J. **Klin Wochenschr** 1989 Jul 17;67(14):697-706 (128 ref.)
Cholesterol and cancer: comparative biochemistry and selective toxicity. Paola F. **Med Hypotheses** 1989 Feb; 28(2):115-20
Characterization of nicotinic acetylcholine receptor channels of the TE671 human medulloblastoma clonal line. Oswald RE, et al. **Neurosci Lett** 1989 Jan 16;96(2):207-12
Substances released during tetanic stimulation of rabbit neocortex induce neurite growth in PC-12 cells and long-term potentiation in guinea pig hippocampus. Sastry BR, et al. **Neurosci Lett** 1988 Aug 15;91(1):101-5
Molecular analysis of expression of parental cell properties in hybrids between monocytes and a myeloma cell line. Setoguchi M, et al. **Somat Cell Mol Genet** 1988 Sep; 14(5):427-38
Sensitivity of tumour cells to heat and ways of modifying the response. Yatvin MB, et al. **Symp Soc Exp Biol** 1987; 41:235-67 (127 ref.)

PHYSIOPATHOLOGY

Establishment and characterization of an Epstein-Barr virus transformed cell line with strong phagocytic activity. von den Driesch P, et al. **Blood** 1989 Jul;74(1):430-6
Multiple and alternative adhesive responses on defined substrata of an immortalized dorsal root neuron hybrid cell line. Mugnai G, et al. **Eur J Cell Biol** 1988 Jun;46(2):352-61
Unlinked regulation of the sensitivity of primary glucocorticoid-inducible responses in mouse mammary tumor virus infected Fu5-5 rat hepatoma cells. Wasner G, et al. **Mol Endocrinol** 1988 Nov;2(11):1009-17

RADIATION EFFECTS

Relationship between in vitro and in vivo radiosensitivity of lymphocytes in chronic lymphocytic leukemia. Schrek R, et al. **Acta Haematol (Basel)** 1988;80(3):129-33
Multicellular aggregates from human tumor cell lines for radiation studies. Schwachöfer JH, et al. **Anticancer Res** 1989 Mar-Apr;9(2):441-8
Elimination of clonogenic tumor cells from HL-60, Daudi, and U-937 cell lines by laser photoradiation therapy: implications for autologous bone marrow purging. Gulliya KS, et al. **Blood** 1989 Mar;73(4):1059-65
Heterogeneity in radiation sensitivity within human primary tumour cell cultures as detected by the SCE assay. Tofilon PJ, et al. **Br J Cancer** 1989 Jan;59(1):54-60
Effects of inhibition of intercellular communication on repair of damage induced by ionizing radiation. Madhoo J, et al. **Br J Radiol** 1989 Mar;62(735):281-2
Association among DNA/chromosome break rejoining rates, chromatin structure alterations, and radiation sensitivity in human tumor cell lines. Schwartz JL, et al. **Cancer Res** 1989 Sep 15;49(18):5054-7
Defective repair of UV-damaged DNA in human tumor and SV40-transformed human cells but not in adenovirus-transformed human cells. Rainbow AJ. **Carcinogenesis** 1989 Jun;10(6):1073-7
Radiosensitive human tumour cell lines may not be recovery deficient. Peacock JH, et al. **Int J Radiat Biol** 1988 Dec; 54(6):945-53
Studies of the UVC-sensitivity of non-tumorigenic and tumorigenic human cell hybrids (HeLa x skin fibroblasts). Redpath JL, et al. **Int J Radiat Biol** 1989 Jun;55(6):1023-31
Repair of DNA single- and double-strand breaks in proliferating and quiescent murine tumor cells. Sweigert SE, et al. **Int J Radiat Biol** 1989 Sep;56(3):253-64
Response of human tumor cell lines in vitro to fractionated irradiation. Matthews JH, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):133-8
Repair of sublethal damage in two human tumor cell lines grown as multicellular spheroids. Schwachöfer JH, et al.

Int J Radiat Oncol Biol Phys 1989 Sep;17(3):591–5
Radioresistant pseudo-colony formation in the PHA-leukocyte feeder colony assay. Kluin-Nelemans JC, et al. **Leuk Res** 1988;12(11–12):917–22
Different mutations responsible for the elevated sister-chromatid exchange frequencies in Bloom syndrome and X-irradiated B-lymphoblastoid cell lines originating from acute leukemia. Shiraishi Y, et al. **Mutat Res** 1989 Apr;211(2):273–8
Effect of radiation on the expression of carcinoembryonic antigen on the membranes of human gastric adenocarcinoma cells—immunological study using monoclonal antibodies. Hareyama M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25; 48(12):1572–4
Resistance of human and mouse myeloid leukemia cells to UV radiation. Poljak-Blaži M, et al. **Photochem Photobiol** 1989 Jul;50(1):85–9
Responses of synchronous L5178Y S/S cells to heavy ions and their significance for radiobiological theory. Lett JT, et al. **Proc R Soc Lond [Biol]** 1989 Jun 22;237(1286):27–42
Inhibition and recovery of DNA synthesis in human tumor cell lines following radiation exposure. Chen A, et al. **Radiat Res** 1989 May;118(2):375–80
Inhibition of recovery from damage induced by ionizing radiation in mammalian cells. Kelland LR, et al. **Radiother Oncol** 1988 Dec;13(4):285–99 (110 ref.)
Recovery kinetics deduced from continuous low dose-rate experiments. Steel GG. **Radiother Oncol** 1989 Apr; 14(4):337–43
Effect of antisense c-raf-1 on tumorigenicity and radiation sensitivity of a human squamous carcinoma. Kasid U, et al. **Science** 1989 Mar 10;243(4896):1354–6
[The radiosensitivities of human neuroblastoma in vitro—a comparison of three cell lines] Ito H, et al. **Gan No Rinsho** 1988 Dec;34(15):2031–5 (Eng. Abstr.) **(Jpn)**
[Effect of radiation on the expression of tumor-associated antigens of human lung adenocarcinoma cells—an immunologic study using monoclonal antibodies] Hareyama M. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25;48(12):1553–62 (Eng. Abstr.) **(Jpn)**
[Effect of combined treatment of HeLa S3 cells with radiation and etoposide on cell survival] Kubota N, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25; 48(10):1276–82 (Eng. Abstr.) **(Jpn)**

SECRETION

Stimulation of human neuronectin secretion by brain-derived growth factors. Rettig WJ, et al. **Brain Res** 1989 May 15; 487(1):171–7
Serum-free culture of insulin-secreting clonal cells from a hamster insulinoma. Kumamoto S, et al. **Diabetes Res Clin Pract** 1989 Jan 3;6(1):1–7
Coupled induction of exocrine proteins and intracellular compartments involved in the secretory pathway in AR4-2J cells by glucocorticoids. Swarovsky B, et al. **Eur J Cell Biol** 1988 Oct;47(1):101–11
Regulation of growth hormone secretion and messenger ribonucleic acid accumulation in human somatotropinoma cells in vitro. Davis JR, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):704–8
Role of voltage-dependent calcium channels in secretion of calcitonin from human medullary thyroid carcinoma cells. Raue F, et al. **Klin Wochenschr** 1989 Jun 15;67(12):635–9

TRANSPLANTATION

Transplantation of B16/C3 melanoma cells into the brains of rats and mice. Freed WJ, et al. **Brain Res** 1989 Apr 24;485(2):349–62
In vivo and in vitro synergistic antitumor effect of interleukin-2-cultured tumor-bearer spleen cells and immune fresh spleen cells. Kan N, et al. **Cancer Immunol Immunother** 1989;28(4):260–6
Lymphocytes generated by in vivo priming and in vitro sensitization demonstrate therapeutic efficacy against a murine tumor that lacks apparent immunogenicity. Shu SY, et al. **J Immunol** 1989 Jul 15;143(2):740–8
Immunotherapy in acute myelogeneous leukemia (AML)—a tool for maintaining remission? Laursen ML. **Med Hypotheses** 1988 Aug;26(4):221–5 (24 ref.)
The influence of nerve growth factor treatment and endogenous growth factors on the survival of PC12 cells grafted to adult rat brain. Allen YS. **Prog Brain Res** 1988; 78:637–41
Implantation of catecholamine-secreting cell lines into the rat and mouse brain. Geller HM, et al. **Prog Brain Res** 1988;78:643–6

ULTRASTRUCTURE

Actin cytoskeletal lesions in differentiated human colon carcinoma Caco-2 cells after exposure to soybean agglutinin. Draaijer M, et al. **Biol Cell** 1989;65(1):29–35
Differentiation of a clone isolated from the HT29 cell line: polarized distribution of histocompatibility antigens (HLA) and of transferrin receptors. Godefroy O, et al. **Biol Cell** 1988;63(1):41–55
Endogenous opioid systems and neural cancer: transmission and scanning electron microscopic studies of murine neuroblastoma in tissue culture. Zagon IS. **Brain Res Bull** 1988 Nov;21(5):777–84
Ultrastructural descriptions of interactions between tumor-infiltrating lymphocytes and tumor cells in an in vitro model of culture in serum-free medium. Halpern JN, et al. **Cancer Detect Prev** 1988;13(3–4):213–23
The effect of modifying the culture medium on cell polarity in a human colon carcinoma cell line. Polak-Charcon S, et al. **Cell Differ Dev** 1989 Mar;26(2):119–29
Involvement of cytoplasmic membranes in the non-lytic infection of K-562 cells by Semliki Forest virus. Brady BE, et al. **Eur J Cell Biol** 1989 Apr;48(2):203–11
Calcium-related structural organization of glial cells cytoskeleton in vitro. Kaluža J, et al. **Folia Histochem Cytobiol** 1988;26(2):71–5
Detection of chromosome aberrations in metaphase and interphase tumor cells by in situ hybridization using chromosome-specific library probes. Cremer T, et al. **Hum Genet** 1988 Nov;80(3):235–46
Centromeric association and non-random distribution of centromeres in human tumour cells. Haaf T, et al. **Hum Genet** 1989 Jan;81(2):137–43
Cellular events and intracellular survival of Campylobacter jejuni during infection of HEp-2 cells. De Melo MA, et al. **Infect Immun** 1989 Jul;57(7):2214–22
Induction of cytoskeletal alterations in C6 glioma by glia maturation factor. Ryken TC, et al. **Int J Dev Neurosci** 1987;5(3):215–25
Microtubule assembly in Friend erythroleukemia cells spread on fibronectin- and lectin-coated substrates. Benedetto A, et al. **J Biol Regul Homeost Agents** 1987 Apr–Jun;1(2):53–8
The influence of bromocriptine on the ultrastructure of cultured T47D (human breast cancer) cells. Polyzonis M, et al. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):59–62
A comparative fine structure study on myofibroblasts from a cultured human and an in-situ rat tumor source. Reger JF, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):501–8
Down-regulation of calcitonin receptors in T47D cells by internalization of calcitonin-receptor complexes. Schneider HG, et al. **Mol Cell Endocrinol** 1988 Jul;58(1):9–15
Studies on esophageal cancer cells in vitro. Pan QQ. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(1):52–7 (28 ref.)
[Transmission electron microscopy of in vitro cultivated squamous cell carcinoma cell lines] Wustrow TP, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep;67(9):469–74 (Eng. Abstr.) **(Ger)**
[Possible determination of cell cycle parameters by Feulgen-DNA cytophotometry from cell nuclei isolated from paraffin-embedded tumor tissue] Szentirmay Z, et al. **Morphol Igazsagugyi Orv Sz** 1988 Jul;28(3):216–24 (Eng. Abstr.) **(Hun)**

TUMOR CELLS, EMBOLIC see **NEOPLASM CIRCULATING CELLS**

TUMOR INITIATORS see **CARCINOGENS**

TUMOR LYSIS SYNDROME

see related
TUMOR NECROSIS FACTOR

Uptake of Tc-99m MDP in soft tissue calcific deposits due to the tumor lysis syndrome. Fig LM, et al. **Clin Nucl Med** 1988 Oct;13(10):765–7

BLOOD

Calcitriol in prolonged hypocalcemia due to the tumor lysis syndrome. Dunlay RW, et al. **Ann Intern Med** 1989 Jan 15;110(2):162–4
[Extreme hyperphosphatemia with hypocalcemia within the scope of cell lysis syndrome in a child with T-ALL] Kabisch H, et al. **Onkologie** 1989 Apr;12(2):64–8 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Prevention of urate nephropathy in the tumour lysis syndrome. O'Connor NT, et al. **Clin Lab Haematol** 1989; 11(2):97–100
Acute renal failure at onset of therapy for advanced stage Burkitt lymphoma and B cell acute lymphoblastic lymphoma. Stapleton FB, et al. **Pediatrics** 1988 Dec; 82(6):863–9

ETIOLOGY

Acute tumor lysis syndrome in non-Hodgkin lymphoma induced by dexamethasone. Dhingra K, et al. **Am J Hematol** 1988 Oct;29(2):115–6
Tumor lysis syndrome in nonhematopoietic neoplasms. Barton JC. **Cancer** 1989 Aug 1;64(3):738–40
[Acute monoblastic leukemia complicated by fatal splenic rupture following initiation of chemotherapy] Borgeat A, et al. **Schweiz Med Wochenschr** 1989 Feb 18;119(7):227–9 (Eng. Abstr.) **(Ger)**
[Acute tumor lysis syndrome (ATLS) during remission induction treatment of Burkitt's lymphoma: study of 26 patients] Bernacer M, et al. **An Esp Pediatr** 1988 Oct;29 Suppl 34:109–12 **(Spa)**

PREVENTION & CONTROL

The tumour lysis syndrome. Intensive care aspects of paediatric oncology. Stokes DN. **Anaesthesia** 1989 Feb; 44(2):133–6

RADIOGRAPHY

A pyrrhic victory in small cell lung cancer. Russchen GH, et al. **Chest** 1989 Jun;95(6):1331–2

VETERINARY

Acute tumor lysis syndrome. Page RL. **Semin Vet Med Surg (Small Anim)** 1986 Feb;1(1):58–60 (31 ref.)

TUMOR MARKERS, BIOCHEMICAL see **TUMOR MARKERS, BIOLOGICAL**

TUMOR MARKERS, BIOLOGICAL

Tumor markers for ovarian cancer. A comparative immunohistochemical and immunocytochemical study of two commercial monoclonal antibodies (OV632 and OC125). Koelma IA, et al. **Am J Clin Pathol** 1988 Oct; 90(4):391–6
Hairy cell leukemia and anti-leukocyte common antigen. Martin JM, et al. **Am J Clin Pathol** 1988 Oct;90(4):412–20
Blood group antigen expression in frozen sections of presenting bladder cancer: 3-year prospective follow-up of prognostic value. Abel PD, et al. **Br J Urol** 1989 Feb; 63(2):171–5
Absence of peripheral-type benzodiazepine binding sites in renal carcinoma: a potential biochemical marker. Katz Y, et al. **Br J Urol** 1989 Feb;63(2):124–7
Decrease of serum buffering capacity associated with malignant neoplasms. Nakamura K, et al. **Cancer Detect Prev** 1988;13(3–4):175–87
Synthesis of a dimeric Lewis X hexasaccharide derivative corresponding to a tumor-associated glycolipid. Nilsson M, et al. **Carbohydr Res** 1988 Nov 15;183(1):71–82
Ulex Europaeus-I: a marker for differentiation of (pre)cancerous lesions induced in the rat pancreas by azaserine. Takiyama Y, et al. **Carcinogenesis** 1988 Nov; 9(11):2087–92
Lung cancer and autocrine growth factors. Yamaguchi K, et al. **Chest** 1989 Jul;96(1 Suppl):29S–31S (13 ref.)
Marker discrepancy as a diagnostic criterion for lymphoid neoplasms. Sun T, et al. **Diagn Clin Immunol** 1988; 5(6):393–9
Pyruvate kinase inhibited by L-cysteine as a marker of tumorigenic human urothelial cell lines. Gumińska M, et al. **Experientia** 1989 Jun 15;45(6):571–4
Biochemical and other markers of colon cancer. Ho SB, et al. **Gastroenterol Clin North Am** 1988 Dec;17(4):811–36 (124 ref.)
Biochemical markers in colorectal cancer: diagnostic and therapeutic implications. Luk GD, et al. **Gastroenterol Clin North Am** 1988 Dec;17(4):931–40 (52 ref.)
Oncogenes: molecular probes for clinical application in malignant diseases. Ascione R, et al. **Gene Amplif Anal** 1986;4:253–77 (117 ref.)
Marker profile of mesothelial cells versus ovarian carcinoma cells. van Niekerk CC, et al. **Int J Cancer** 1989 Jun 15; 43(6):1065–71
Tissue CEA as prognostic indicator in a series of 31 cases of gastric cancer. Barillari P, et al. **Ital J Surg Sci** 1988; 18(3):237–41
Searching for the face of neoplasia. Boland CR. **J Clin Gastroenterol** 1988 Dec;10(6):599–604
Use of basement membrane markers in tumour diagnosis. d'Ardenne AJ. **J Clin Pathol** 1989 May;42(5):449–57 (113 ref.)
This month in Investigative Urology: prostate-specific antigen. Williams RD. **J Urol** 1988 Nov;140(5):1030–1
The clinical relevance of lymphocyte marker studies in the diagnosis of lymphoma. Harris NL. **Keio J Med** 1989 Jun; 38(2):152–66 (30 ref.)
TdT+/nonlymphoid antigen+ acute leukemias: immunologic and karyotypic monitoring during therapy and at relapse suggests the transformation of a bipotential stem cell. Paietta E, et al. **Leukemia** 1989 Jul;3(7):485–91
Multiple primer pairs for the detection of HTLV-I by PCR. De BK, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2142
Tumour markers: a review. Kelly WM. **Radiography** 1988 Jan–Feb;54(613):14–7 (13 ref.)
Prostate-specific antigen as a marker of adenocarcinoma of prostate. Kellokumpu-Lehtinen P, et al. **Urol Res** 1989; 17(4):245–9
Significance of lipid-associated sialic acid and CA 19-9 as tumor markers for renal cell carcinoma. Echenique JE, et al. **Urology** 1988 Nov;32(5):397–400
[Pretumor markers in experimental liver cancer and its biological significance] Yiao JL, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):306–8 (11 ref.) **(Chi)**
[Experimental verification of the reliability of biochemical diagnostic methods during tumor growth. I. Changes in proteins and glycoproteins in the blood of rats] Polívková J, et al. **Sb Lek** 1988 Sep;90(8–9):234–43 (Eng. Abstr.) **(Cze)**
[Experimental verification of the reliability of biochemical diagnostic methods during tumor growth. II. Changes in the activity of lactate dehydrogenase and nonspecific esterase in the blood of rats] Polívková J, et al. **Sb Lek**

1988 Sep;90(8–9):244–51 (Eng. Abstr.) (Cze)
[Usefulness of tumor markers in hepatogastroenterology] Rougier P, et al. **Gastroenterol Clin Biol** 1989;13(2 Pt 3):T1–5 (25 ref.) (Fre)
[Serum CA 125 and TPA determination in malignant neoplasms of the uterus] Gadducci A, et al. **Ann Ostet Ginecol Med Perinat** 1988 May–Jun;109(3):151–5 (Eng. Abstr.) (Ita)
[Biological tumor markers] Gattoni A, et al. **Clin Ter** 1989 Feb 15;128(3):191–205 (60 ref.) (Eng. Abstr.) (Ita)
[Preliminary results of tumor marker monitoring in patients with colorectal carcinoma] Caramanico L, et al. **Minerva Chir** 1989 Apr 15;44(7):1135–8 (Eng. Abstr.) (Ita)
[Synthetic approaches to tumor-associated glycosphingolipids] Ito Y, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):683–701 (22 ref.) (Eng. Abstr.) (Jpn)
[Function of carbohydrate chains serving as tumor-markers and differentiation markers] Muramatsu T. **Rinsho Byori** 1988 Nov;Spec No 79:27–36 (Jpn)
[Tumor markers: perspectives] Brentani MM. **AMB Rev Assoc Med Bras** 1988 Sep–Oct;34(5):149 (Por)
[Enzymes as the markers of differentiation of malignant neoplasms] Golubev AM, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):58–62 (Eng. Abstr.) (Rus)
[Usefulness of nonspecific tumor markers (letter)] **Med Clin (Barc)** 1988 Sep 17;91(8):317 (Spa)
[Many good reasons for Sweden to have an interest in tumor markers] Björklund B. **Lakartidningen** 1988 Sep 7; 85(36):2837–8 (Swe)

ANALYSIS

Melanin-related metabolites in urine of B16 melanoma-bearing mice. Wakamatsu K, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):385–9
Surgery of brain neoplasms using 32-P tumour marker. Reinhardt H. **Acta Neurochir (Wien)** 1989;97(3–4):89–94
Amylase activity and fast-migrating amylase isoenzymes in serum and cyst fluid from patients with ovarian neoplasms. Henriksen R, et al. **Acta Obstet Gynecol Scand** 1988; 67(1):65–70
Tumour markers in broncho-alveolar lavage. Alvarez-Sala R, et al. **Acta Oncol** 1989;28(2):290–1
Chromogranins—new sensitive markers for neuroendocrine tumors. Eriksson B, et al. **Acta Oncol** 1989;28(3):325–9
Enzyme immunoassay of progesterone receptor in breast cancer biopsy samples. A comparison with the dextran coated charcoal method. Fernö M, et al. **Acta Oncol** 1989; 28(1):19–22
Regulatory peptides as tumour markers. Theodorsson E. **Acta Oncol** 1989;28(3):319–24 (26 ref.)
The Danish Breast Cancer Group (DBCG) biochemical tumor marker program. Winkel P. **Acta Oncol** 1988; 27(6A):611–5
Myelin basic protein as a possible marker for oligodendroglioma. Tanaka J, et al. **Acta Pathol Jpn** 1988 Oct;38(10):1297–303
Diagnostic significance of serum proteinase activity ("cathepsin B-like" activity) testing by amino acid derivatives of 7-amino-4-methylcoumarine. Kolář Z, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:161–72
Glutathione transferases as markers of preneoplasia and neoplasia. Sato K. **Adv Cancer Res** 1989;52:205–55 (367 ref.)
Immunochemical studies of human placental alkaline phosphatase in normal and neoplastic tissues. Vengerov YuYu, et al. **Adv Enzyme Regul** 1988;27:345–54
Alpha 1-antitrypsin and alpha 1-antichymotrypsin serum level in relation to staging and postoperative clinical course of human colorectal cancer. Kuryliszyn-Moskal A, et al. **Adv Exp Med Biol** 1988;240:561–4
Significance of PSA and PAP in patients with or without prostatic cancer. Caty A, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S63–4
The usefulness of prostate-specific antigen and prostatic acid phosphatase in clinical practice. Daver A, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S53–60
Is prostate-specific antigen the most useful marker for screening in prostate cancer? Delaere KP, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S65–7
Systematic association of PAP and PSA determinations to bone scintigraphy in prostatic cancer. Fincker F, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S68–70
Prostate-specific antigen (PSA) in the management of 500 prostatic patients. Guillet J, et al. **Am J Clin Oncol** 1988; 11 Suppl 2:S61–2
Evaluation of prostate-specific antigen in prostate cancer. Pons-Anicet D, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S71–4
Carcinoma of the prostate. Objective criteria of response. Robinson MR. **Am J Clin Oncol** 1988;11 Suppl 2:S48–52 (30 ref.)
Ovarian small cell carcinoma. Histogenetic considerations based on immunohistochemical and other findings. Aguirre P, et al. **Am J Clin Pathol** 1989 Aug;92(2):140–9
Neuroendocrine differentiation in endocrine and nonendocrine lung carcinomas. Linnoila RI, et al. **Am J Clin Pathol** 1988 Dec;90(6):641–52
Prostatic carcinosarcomas. Clinical, histologic, and immunohistochemical data on two cases, with a review of the literature. Wick MR, et al. **Am J Clin Pathol** 1989 Aug;92(2):131–9 (42 ref.)
Heterogenous expression of endothelial cell markers in infantile hemangioendothelioma. Immunohistochemical study of two solitary cases and one multiple one. Yasunaga C, et al. **Am J Clin Pathol** 1989 Jun;91(6):673–81
Immunohistochemical differentiation of clear-cell carcinoma of the female genital tract and endodermal sinus tumor with the use of alpha-fetoprotein and Leu-M1. Zirker TA, et al. **Am J Clin Pathol** 1989 May;91(5):511–4
Immunohistochemistry of gross cystic disease fluid protein (GCDFP-15) in 65 benign sweat gland tumors of the skin. Mazoujian G, et al. **Am J Dermatopathol** 1988 Feb; 10(1):28–35
Nonspecific esterase of acute promyelocytic leukemia (M3). Matsuo T, et al. **Am J Hematol** 1988 Nov;29(3):148–51
Medullary thyroid carcinomas express chromogranin A and a novel neuroendocrine protein recognized by monoclonal antibody HISL-19. Deftos LJ, et al. **Am J Med** 1988 Dec; 85(6):780–4
Pulmonary metastases in patients with low-grade endometrial stromal sarcoma. Clinicopathologic findings with immunohistochemical characterization. Abrams J, et al. **Am J Surg Pathol** 1989 Feb;13(2):133–40
Intermediate filament expression in astrocytic neoplasms. Cosgrove M, et al. **Am J Surg Pathol** 1989 Feb;13(2):141–5
Immunohistochemical spectrum of rhabdomyosarcoma and rhabdomyosarcoma-like tumors. Expression of cytokeratin and the 68-kD neurofilament protein. Miettinen M, et al. **Am J Surg Pathol** 1989 Feb;13(2):120–32
Occurrence and expression of cytokeratins in carcinoid tumours of the gastrointestinal tract and their probable precursor cells. Raju GC. **Ann Acad Med Singapore** 1989 May;18(3):298–301
Clinical value of tumor markers. **Ann Chir Gynaecol** 1989; 78(1):6–82
Tumour markers in pancreatic cancer. Haglund C, et al. **Ann Chir Gynaecol** 1989;78(1):41–53 (114 ref.)
Tumour markers in gastric cancer. Roberts PJ, et al. **Ann Chir Gynaecol** 1989;78(1):38–40 (22 ref.)
Tumour markers in breast cancer. van Dalen A. **Ann Chir Gynaecol** 1989;78(1):54–64 (18 ref.)
Expression of monoclonal antibody-defined tumor markers in four carcinomas. Wu JT. **Ann Clin Lab Sci** 1989 Jan–Feb; 19(1):17–26
Relationship between PRL levels and steroid receptors in breast cancer. Marugo M, et al. **Anticancer Res** 1988 Jul–Aug;8(4):819–23
Visualization of time-dependent inactivation of human tumor cathepsin B isozymes by a peptidyl fluoromethyl ketone using a fluorescent print technique. Smith RE, et al. **Anticancer Res** 1988 Jul–Aug;8(4):525–9
Immunocytochemical detection of a resistance-associated glycoprotein in tissue culture cells, ascites tumors and human tumor xenografts by Mab 265/F4. Volm M, et al. **Anticancer Res** 1988 Jul–Aug;8(4):531–5
Prostatic secretory products as markers of prostatic neoplasms. Purvis K, et al. **APMIS Suppl** 1988;2:224–37
Malignant peripheral nerve sheath tumors and spindle cell sarcomas: an immunohistochemical analysis of multiple markers. Giangaspero F, et al. **Appl Pathol** 1989;7(2):134–44
Tumor markers in bladder cancer. Newling DW. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):11–7 (25 ref.)
Expression of pan-neuroendocrine proteins in 53 neuroblastic tumors. An immunohistochemical study with neuron-specific enolase, chromogranin, and synaptophysin. Hachitanda Y, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):381–4
The determination of CA-50 antigen in women with cervical cancer. Dodd JK, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):343–6
Tumor markers for early diagnosis of cholangiocarcinoma. Sirisinha S. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):1–3
Serum thymidine kinase as a marker of disease activity in patients with multiple myeloma. Brown RD, et al. **Aust N Z J Med** 1989 Jun;19(3):226–32
Relationship between the antioxidant enzyme DT-diaphorase and tumor response to mitomycin C treatment. Pritsos CA, et al. **Basic Life Sci** 1988;49:713–6
Composition of phospholipid molecular species from mammary tumors. Ishinaga M, et al. **Biochem Cell Biol** 1988 Nov;66(11):1163–8
Phenotypic analysis of human myeloma cell lines. Duperray C, et al. **Blood** 1989 Feb;73(2):566–72
Identification of a cellular polypeptide that distinguishes between acute lymphoblastic leukemia in infants and in older children. Hanash SM, et al. **Blood** 1989 Feb; 73(2):527–32
Immunocytochemical identification of meningeal leukemia and lymphoma: poly-L-lysine-coated slides permit multimarker analysis even with minute cerebrospinal fluid cell specimens. Kranz BR, et al. **Blood** 1989 May 15; 73(7):1942–50
Identification of a leukocyte alloantigen with a high-frequency expression in leukemia patients. O'Connor R, et al. **Blood** 1989 Feb;73(2):553–8
A novel leukemia cell line, MR-87, with positive Philadelphia chromosome and negative breakpoint cluster region rearrangement coexpressing myeloid and early B-cell markers. Okamura J, et al. **Blood** 1988 Oct; 72(4):1261–8
Routine immunophenotyping of acute leukaemias. Drexler HG, et al. **Blut** 1988 Dec;57(6):327–39 (91 ref.)
Myoglobin: an evaluation of its role as a marker of rhabdomyosarcomas. Leader M, et al. **Br J Cancer** 1989 Jan;59(1):106–9
CA125 in ovarian tumour tissue at second laparotomy. Maughan TS, et al. **Br J Cancer** 1989 Feb;59(2):259–60
The association of mammary serum antigen (MSA) with the histopathological findings in localised breast cancer. Tjandra JJ, et al. **Br J Cancer** 1988 Dec;58(6):815–7
Application of mammary serum antigen assay in the management of breast cancer: a preliminary report. Tjandra JJ, et al. **Br J Surg** 1988 Aug;75(8):811–7
The effects of transurethral prostatectomy on serum prostate specific antigen. Vesey SG, et al. **Br J Urol** 1988 Oct; 62(4):347–51
Circulating CA 15-3 levels in the postsurgical follow-up of breast cancer patients and in non-malignant diseases. Colomer R, et al. **Breast Cancer Res Treat** 1989 Mar; 13(2):123–33
Markers in breast cancer: does CEA add to the detection by CA 15.3? Delarue JC, et al. **Breast Cancer Res Treat** 1988 Jul;11(3):273–6
Tests for detecting recurrent disease in the follow-up of patients with breast cancer. Mansi JL, et al. **Breast Cancer Res Treat** 1988 Jul;11(3):249–54
Prognostic value of nuclear DNA content in breast cancer in relation to tumor size, nodal status, and estrogen receptor content. von Rosen A, et al. **Breast Cancer Res Treat** 1989 Jan;13(1):23–32
Ultrastructural diagnostic markers of the urinary bladder precancer. Romanenko AM. **Bull Assoc Anat (Nancy)** 1989 Mar;73(220):31–5
The monitoring of minimal residual disease in patients with malignant tumors. Reizenstein P. **Bull Soc Sci Med Grand Duche Luxemb** 1989 Mar–Apr; 126(1):5–15 (48 ref.)
Nuclear reactivity for estrogen. A possible diagnostic tool in differentiating colon cancer metastases in the ovary from primary mucinous ovarian tumors. Darwish SA, et al. **Cancer** 1988 Nov 15;62(10):2203–6
Histologic markers in primary and metastatic tumors of the liver. Ganjei P, et al. **Cancer** 1988 Nov 1;62(9):1994–8
Correlations between acute lymphoid leukemia (ALL) immunophenotype and clinical and laboratory data at presentation. A study of 350 patients. Garand R, et al. **Cancer** 1989 Oct 1;64(7):1437–46
An immunocytochemical study on the distribution of ferritin and other markers in 36 cases of malignant histiocytosis. Ji YY, et al. **Cancer** 1989 Sep 15;64(6):1281–9
Coexistence of cytoplasmic and nuclear estrogen receptors. A histochemical study on human mammary cancer and rabbit uterus. Lee SH. **Cancer** 1989 Oct 1;64(7):1461–6
Expression of GCDFP-15 in breast carcinomas. Relationship to pathologic and clinical factors. Mazoujian G, et al. **Cancer** 1989 Jun 1;63(11):2156–61
Utility of combining antigranulocyte with antileukocyte antibodies in differentiating Hodgkin's disease from non-Hodgkin's lymphoma. Medeiros LJ, et al. **Cancer** 1988 Dec 15;62(12):2475–81
Diagnostic significance of histiocyte-related markers in malignant histiocytosis and true histiocytic lymphoma. Nemes Z, et al. **Cancer** 1988 Nov 1;62(9):1970–80
Immunoreactivity of granular cell lesions of skin, mucosa, and jaw. Regezi JA, et al. **Cancer** 1989 Oct 1;64(7):1455–60
Preoperative prediction of outcome in patients with rectal and rectosigmoid cancer. Ståhle E, et al. **Cancer** 1989 May 1;63(9):1831–7
Metaplastic carcinomas of the breast. III. Carcinosarcoma. Wargotz ES, et al. **Cancer** 1989 Oct 1;64(7):1490–9
Immunological analysis and characterization of lymphocyte subsets in specimens of human hepatocellular carcinomas and metastatic liver cancers. Yuh K, et al. **Cancer Immunol Immunother** 1989;28(1):1–8
Comparison of GST-P versus GGT as markers of hepatocellular lineage during analyses of initiation of carcinogenesis. Cameron RG. **Cancer Invest** 1988; 6(6):725–34
Structural analysis of the DF3 human breast carcinoma-associated protein. Abe M, et al. **Cancer Res** 1989 Jun 1;49(11):2834–9
Effects of retinoic acid on morphological features and biological markers of a neoplastic human salivary intercalated duct cell line in culture. Azuma M, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7219–25
Association of low nm23 RNA levels in human primary infiltrating ductal breast carcinomas with lymph node involvement and other histopathological indicators of high metastatic potential. Bevilacqua G, et al. **Cancer Res** 1989 Sep 15;49(18):5185–90
Expression of epithelial-like markers and class I major histocompatibility antigens by a murine carcinoma growing in the mammary gland and in metastases: orthotopic site effects. Elliott BE, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7237–45
Simultaneous measurement of progesterone receptors and DNA indices by flow cytometry: characterization of an assay in breast cancer cell lines. Graham ML 2d, et al. **Cancer Res** 1989 Jul 15;49(14):3934–42
Simultaneous measurement of progesterone receptors and DNA indices by flow cytometry: analysis of breast cancer cell mixtures and genetic instability of the T47D line. Graham ML 2d, et al. **Cancer Res** 1989 Jul 15;49(14):3943–9

Comparative study of plasminogen activators in cancers and normal mucosae of human urinary bladder. Hasui Y, et al. **Cancer Res** 1989 Feb 15;49(4):1067–70

A Mr 58,000 glycoprotein specifically expressed in developing hamster pancreas and reexpressed in hamster and human pancreatic carcinomas. Heredia A, et al. **Cancer Res** 1988 Dec 1;48(23):6906–11

Monoclonal antiidiotypic antibodies related to the p97 human melanoma antigen. Kahn M, et al. **Cancer Res** 1989 Jun 15;49(12):3157–62

Immunocytochemical analysis of estrogen receptors as a predictor of prognosis in breast cancer patients: comparison with quantitative biochemical methods. Kinsel LB, et al. **Cancer Res** 1989 Feb 15;49(4):1052–6

Detection of a circulating tumor-associated antigen with a murine monoclonal antibody, LISA 101, selected by reversed indirect enzyme-linked immunosorbent assay. Kohno N, et al. **Cancer Res** 1989 Jun 15;49(12):3412–9

Immunoreactive gastrin-releasing peptide as a specific tumor marker in patients with small cell lung carcinoma. Maruno K, et al. **Cancer Res** 1989 Feb 1;49(3):629–32

Elevated protein kinase C expression in human breast tumor biopsies relative to normal breast tissue. O'Brian C, et al. **Cancer Res** 1989 Jun 15;49(12):3215–7

A novel marker for basal (stem) cells of mammalian stratified squamous epithelia and squamous cell carcinomas. Samuel J, et al. **Cancer Res** 1989 May 1;49(9):2465–70

Elevation of the placental glutathione S-transferase form (GST-pi) in tumor tissues and the levels in sera of patients with cancer. Tsuchida S, et al. **Cancer Res** 1989 Sep 15; 49(18):5225–9

Relationship of cytosolic estrogen and progesterone receptor content and the growth fraction in human mammary carcinomas. Vollmer G, et al. **Cancer Res** 1989 Jul 15; 49(14):4011–4

Monoclonal antibody against human colonic sulfomucin: immunochemical detection of its binding sites in colonic mucosa, colorectal primary carcinoma, and metastases. Yamori T, et al. **Cancer Res** 1989 Feb 15;49(4):887–94

Peptidase-associated antigens as markers of differentiation in human kidney and renal adenocarcinoma. Wolf GB, et al. **Cell Mol Biol** 1988;34(3):311–21

Plasma protein fractions and alpha 1-acidglycoprotein as tumor markers in acute lymphoblastic leukemia. Abdalla A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):743–4

Immunocytology in malignant pleural mesothelioma. Expression of tumor markers and distribution of lymphocyte subsets. Guzman J, et al. **Chest** 1989 Mar; 95(3):590–5

Concentration of hyaluronic acid in pleural fluid as a diagnostic aid for malignant mesothelioma. Pettersson T, et al. **Chest** 1988 Nov;94(5):1037–9

Diagnostic value of serum to pleural fluid zinc ratios in pleural effusions [letter] Shepherd KE. **Chest** 1989 Mar; 95(3):707

Usefulness of S-100 protein in the histological diagnosis of soft tissue tumors. Feng BC, et al. **Chin Med J [Engl]** 1988 Jan;101(1):52–4

Identification of features of metaplastic cells in sputum for the detection of squamous-cell carcinoma of the lung. Swank PR, et al. **Diagn Cytopathol** 1989;5(1):98–103

Elevated serum levels of tumor marker CA19-9 in acute cholangitis. Albert MB, et al. **Dig Dis Sci** 1988 Oct; 33(10):1223–5

Des-gamma-carboxyprothrombin in hepatocellular carcinoma after vitamin K1 injection. Buffet C, et al. **Dig Dis Sci** 1989 Jun;34(6):963–4

The application of leukocyte adherence inhibition assay to patients with colorectal cancer. Comparison with serum level of carcinoembryonic antigen and sialic acid. Liu HP, et al. **Dis Colon Rectum** 1989 Mar;32(3):210–3

Phenotypic markers for a spectrum of colonic polyps and cancers. The malignancy potential ratio. Lundy J, et al. **Dis Colon Rectum** 1988 Nov;31(11):857–63

Quantitative analysis of a new marker for common acute lymphoblastic leukemia detected by two-dimensional electrophoresis. Hanash SM, et al. **Dis Markers** 1988 Oct-Dec;6(4):209–20

Tumor antigen TA-4: an aid in detecting post-operative recurrences of esophageal carcinoma. Sugimachi K, et al. **Dis Markers** 1987 Jun;5(2):67–73

The tumor markers CEA, TPA and CA 19-9 in gastric cancer. Putzki H, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(3–4):145–8

High molecular weight epithelial mucins as markers in breast cancer. Price MR. **Eur J Cancer Clin Oncol** 1988 Dec; 24(12):1799–804 (53 ref.)

Marked heterogeneity of aromatase activity in human malignant melanoma tissue. Santen RJ, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1811–6

Comparison of mammary serum antigen (MSA) with beta 2-microglobulin (beta 2M) and carcinoembryonic antigen (CEA) assays in patients with breast cancer. Tjandra JJ, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1633–40

New biological markers as tools for the diagnosis, prognosis, and follow-up of the gynaecological cancers. Collette J, et al. **Eur J Gynaecol Oncol** 1989;10(3):169–77 (95 ref.)

The role of anti-herpes specific serum IgA levels as a marker in cervical oncogenesis. Corbino N, et al. **Eur J Gynaecol Oncol** 1989;10(2):103–8

DNA profile and steroid receptor content of human ovarian cancer. Jakobsen A, et al. **Eur J Gynaecol Oncol** 1988; 9(6):461–3

A cytoplasmatic estrogen receptor related protein (ER-D5 Ag) in breast cancer. Nardelli GB, et al. **Eur J Gynaecol Oncol** 1989;10(2):141–3

Analysis of peroxidase-negative acute unclassifiable leukemias by monoclonal antibodies. 1. Acute myelogenous leukemia and acute myelomonocytic leukemia. Imamura N, et al. **Eur J Haematol** 1988 Nov;41(5):420–8

The incidence and significance of serum hCG and CEA in patients with gastrointestinal malignant tumors. Birkenfeld S, et al. **Eur J Surg Oncol** 1989 Apr;15(2):103–8

Neuron-specific enolase in the diagnosis of small-cell lung cancer with pleural effusion: a negative report. Pettersson T, et al. **Eur Respir J** 1988 Aug;1(8):698–700

Evaluation of prostate-specific antigen in untreated prostatic carcinoma. Oosterom R, et al. **Eur Urol** 1989;16(4):253–7

Tumor-specific antigen for human renal cell carcinoma. Ultrastructural localization of the antigen by immunoelectron microscopy. Schärfe T, et al. **Eur Urol** 1988;14(6):464–9

Definition of the human renal cell carcinoma phenotype using monoclonal and polyclonal antibodies: a tumor marker study. Blouin P, et al. **Exp Pathol** 1989;36(3):147–63

Human chorionic gonadotropin levels in various compartments in disturbed early pregnancy. Dericks-Tan JS, et al. **Fertil Steril** 1989 Feb;51(2):351–3

The expression of CD 15 antigen on myeloid leukaemia cells—a new prognostic index for complete remission and for survival. Holowiecki J, et al. **Folia Haematol (Leipz)** 1989;116(2):289–95

Binding of lectins to human leukaemic cells. Slesak B, et al. **Folia Haematol (Leipz)** 1989;116(2):251–9

Recognition of cervical neoplasia by the estimation of a free-radical reaction product (octadeca-9,11-dienoic acid) in exfoliated cells. Tay SK, et al. **Free Radic Res Commun** 1987;3(1–5):27–31

Immunohistochemical study of carbohydrate antigen expression in gastric carcinoma. Dohi T, et al. **Gastroenterol Jpn** 1989 Jun;24(3):239–45

A case of gallbladder carcinoma producing both alpha-fetoprotein (AFP) and carcinoembryonic antigen (CEA). Sugaya Y, et al. **Gastroenterol Jpn** 1989 Jun; 24(3):325–31

Cell lineage markers in premalignant and malignant colonic mucosa. Ho SB, et al. **Gastroenterology** 1989 Aug; 97(2):392–404

Immunological markers in a coexisting chronic lymphocytic leukemia and Hodgkin's disease. Ojeda E, et al. **Haematologia (Budap)** 1988;21(3):163–7

Acute promyelocytic leukemia with T-cell markers and particular response to treatment. Report of a case. Berceanu S, et al. **Haematologica (Pavia)** 1989 Jan-Feb;74(1):75–9

The usefulness of routine immunological monitoring during the remission phase in acute lymphoblastic leukemias. Bontadini A, et al. **Haematologica (Pavia)** 1988 Sep-Oct; 73(5):359–64

Double-stranded RNA excess in hematologic diseases: clinical implications. Musso M, et al. **Haematologica (Pavia)** 1989 Jan-Feb;74(1):5–9

Relevance of ultrastructural immunocytochemistry in the characterization of unclassifiable leukemias: correlation with phenotypic and genic studies. Polli N, et al. **Haematologica (Pavia)** 1989 Mar-Apr;74(2):129–36

Correlation between histology and immunophenotype in a series of 322 cases of non-Hodgkin's lymphoma. Smith JL, et al. **Hematol Oncol** 1989 Jan-Feb;7(1):37–48

Leu-9 (CD 7) positivity in acute leukemias: a marker of T-cell lineage? Ben-Ezra J, et al. **Hematol Pathol** 1987; 1(3):147–56

Leu-M1 antigen as a marker of acute nonlymphoid leukemia. Chan J, et al. **Hematol Pathol** 1987;1(4):209–15

The use of monoclonal antibodies in the characterization of myeloid leukemias. Griffin JD. **Hematol Pathol** 1987; 1(2):81–91 (72 ref.)

Thyroglobulin immunostaining in follicular thyroid carcinoma: relationship to the degree of differentiation and cell type. Harach HR, et al. **Histopathology** 1988 Jul; 13(1):43–54

Reactivity of CO17-1A and B72.3 in benign and malignant pancreatic diseases. Takiyama Y, et al. **Hum Pathol** 1989 Sep;20(9):832–8

Gross cystic disease fluid protein-15 as a marker for breast cancer: immunohistochemical analysis of 690 human neoplasms and comparison with alpha-lactalbumin. Wick MR, et al. **Hum Pathol** 1989 Mar;20(3):281–7

Clinical and phenotypic heterogeneity in L3-acute lymphoblastic leukaemia. Advani SH, et al. **Indian J Cancer** 1988 Jun;25(2):108–13

Evaluation of carcinoembryonic antigen test in human mammary carcinoma. Batabyal SK, et al. **Indian J Pathol Microbiol** 1987 Oct;30(4):407–12

Natural killer cells in chronic leukemia. Function and markers. Sørskaar D, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):159–64

Analysis of the human immune repertoire using human monoclonal antibodies. Cote RJ. **Int J Biol Markers** 1989 Apr-Jun;4(2):59–64 (36 ref.)

Biochemical parameters in the cytosol of breast cancer. Dittadi R, et al. **Int J Biol Markers** 1988 Jan-Mar;3(1):70

Methods of simultaneous visualization of cytoplasmic enzyme reactivity and cell surface antigens (by cytochemistry combined with immunocytochemistry) in individual hematopoietic and lymphoid cells. Gloghini A, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):221–32 (29 ref.)

Soluble interleukin-2 receptor levels in Hodgkin's disease: preliminary considerations about their prognostic significance [letter] Lissoni P, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):273–4

Tumor markers, liver function tests and symptoms in 115 patients with isolated colorectal liver metastases. Lorenz M, et al. **Int J Biol Markers** 1989 Jan-Mar;4(1):18–26

Sialic acid, ferritin and CEA levels in peripheral blood and blood draining from the tumor in breast cancer. Monti M, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):243–8

Clinical utility of prostatic specific antigen and prostatic acid phosphatase serum levels in monitoring prostate cancer. Morote J, et al. **Int J Biol Markers** 1988 Jan-Mar;3(1):23–8

Clinical behaviour of prostatic specific antigen and prostatic acid phosphatase: a comparative study. Morote Robles J, et al. **Int J Biol Markers** 1989 Apr-Jun;4(2):87–94

Molecular profile, tissue distribution and prognostic evaluation of a human melanoma-carcinoma antigen recognized by the murine monoclonal antibody B1.1. Natali PG, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):211–20

Serum and salivary CEA and GICA levels in oral cavity tumours. Negri L, et al. **Int J Biol Markers** 1988 Apr-Jun; 3(2):107–12

Tumour markers and POMB/ACE chemotherapy in the management of ovarian germ cell tumours (GCTs). Newlands ES, et al. **Int J Biol Markers** 1988 Jul-Sep; 3(3):185–92

The monoclonal antibody-defined CAR-3 antigen is a serological marker associated with pancreatic carcinoma. Prat M, et al. **Int J Biol Markers** 1988 Jan-Mar;3(1):29–35

Clinical assay of serum SCC-Ag in urothelial cancers. Takahashi Y, et al. **Int J Biol Markers** 1988 Jan-Mar; 3(1):15–8

Correlation of an estrogen receptor-related phosphoprotein with histopathological features in breast cancer. Tomasino RM, et al. **Int J Biol Markers** 1989 Apr-Jun;4(2):95–102

Never say 100 percent [letter] van Dalen A, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):275

Human papillomavirus 16 DNA in cervical cancers and in lymph nodes of cervical cancer patients: a diagnostic marker for early metastases? Fuchs PG, et al. **Int J Cancer** 1989 Jan 15;43(1):41–4

Correlative study on neuro-endocrine differentiation and presence of somatostatin receptors in breast carcinomas. Papotti M, et al. **Int J Cancer** 1989 Mar 15;43(3):365–9

Cultured, AIDS-related Kaposi's sarcoma cells express endothelial cell markers and are weakly malignant in vitro. Roth WK, et al. **Int J Cancer** 1988 Nov 15;42(5):767–73

The use of a monoclonal antibody against a proliferating cell nuclear matrix antigen in the study of solid human tumors. Yankulov KY, et al. **Int J Cancer** 1989 May 15;43(5):800–4

Serum CA 125 as a marker for patients with external endometriosis. Takahashi K, et al. **Int J Fertil** 1989 Mar-Apr;34(2):143–8

Comparison between tissue and serum content of CA 125, CA 19-9, and carcinoembryonic antigen in ovarian tumors. Breitenecker G, et al. **Int J Gynecol Pathol** 1989;8(2):97–102

The nucleolar organizer regions associated protein (Ag-NORs) in salivary gland tumors. Matsumura K, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):76–8

CA 19-9 in serum and pancreatic juice: its role in the differential diagnosis of resectable pancreatic cancer from chronic pancreatitis. Malesci A, et al. **Int J Pancreatol** 1988; 3 Suppl 1:S119–23

Human chorionic gonadotropin in gastric carcinoma. A useful marker for bone metastasis. Yonemura Y, et al. **Int Surg** 1989 Apr-Jun;74(2):84–7

Shedding of virus-free MMTV gp52 by nonproducer mammary tumor cells: a source of tumor marker in the presence and absence of dexamethasone. Ritzi EM, et al. **Intervirology** 1989;30(2):102–10

Clinical application of transrectal ultrasonography and prostate specific antigen in the search for prostate cancer. Cooner WH. **Invest Radiol** 1989 Mar;24(3):257–9

Alpha-fetoprotein, tissue polypeptide antigen and ferritin in diagnosing primary hepatocellular carcinoma in patients with liver cirrhosis. Leandro G, et al. **J Cancer Res Clin Oncol** 1989;115(3):276–8

Quantitative determination of oestradiol-17 beta hydroxysteroid dehydrogenase: increased sensitivity by HPLC separation of the hormones permits the measurement of enzyme activity in cryostat sections. Vollmer G, et al. **J Clin Chem Clin Biochem** 1988 Jul; 26(7):453–8

Detection of a tumor-associated glycoprotein antigen in serum and urine of melanoma patients by murine monoclonal antibody (AD1-40F4) in enzyme immunoassay. Euhus DM, et al. **J Clin Lab Anal** 1989; 3(3):184–90

Comparison of phenotyping and genotyping of lymphoid neoplasms. Sun T, et al. **J Clin Lab Anal** 1989;3(3):156–62

The use of neuroendocrine immunoperoxidase markers to predict chemotherapy response in patients with non-small-cell lung cancer. Graziano SL, et al. **J Clin Oncol** 1989 Oct;7(10):1398–406

HER-2/neu oncogene protein and prognosis in breast cancer. Tandon AK, et al. **J Clin Oncol** 1989 Aug;7(8):1120–8

Tumour marker immunoreactivity in adenocarcinoma. Ellis IO, et al. **J Clin Pathol** 1988 Oct;41(10):1064–7

Two prostate-specific antigens, gamma-seminoprotein and

beta-microseminoprotein. Hara M, et al. **J Lab Clin Med** 1989 May;113(5):541–8 (74 ref.)

Expression of endothelial cell markers PAL-E and EN-4 and Ia-antigens in Ksposi's sarcoma. Nadimi H, et al. **J Oral Pathol** 1988 Sep;17(8):416–20

Immunohistochemical and fluorescent microscopic study of histogenesis of salivary mucoepidermoid carcinoma. Hassanin MB, et al. **J Oral Pathol Med** 1989 May; 18(5):291–8

Vimentin—a new prognostic parameter in breast carcinoma? Raymond WA, et al. **J Pathol** 1989 Jun;158(2):107–14

Characterization of p29, an estrogen-receptor associated tumor marker. Coffer AI, et al. **J Steroid Biochem** 1988 Nov;31(5):745–50

Application of the immunoperoxidase method for rapid intraoperative pathological diagnosis of pancreatic cancer. Ichihara T, et al. **J Surg Oncol** 1989 Jan;40(1):8–16

Women at risk for ovarian cancer [letter] Taher MA. **J Ultrasound Med** 1988 Dec;7(12):696–7

Prostatic specific antigen: immunoreactivity in urachal remnants. Golz R, et al. **J Urol** 1989 Jun;141(6):1480–2

Blood group isoantigen deletion and chromosomal abnormalities in bladder cancer. Pauwels RP, et al. **J Urol** 1988 Nov;140(5):959–63

Lactate dehydrogenase isoenzyme-1 in the mediastinal yolk sac tumor. Ito M, et al. **Jpn J Surg** 1988 Jul;18(4):419–22

Oncofetal and oncoplacental antigens as tumor markers. Yamauchi S, et al. **Kitasato Arch Exp Med** 1988 Sep; 61(2–3):95–109 (100 ref.)

Monoclonal antibody (HML-1) labelling of T-cell lymphomas [letter] **Lancet** 1989 Jan 28;1(8631):223–4

Vitamin D and breast cancer [letter] Eisman JA, et al. **Lancet** 1989 Mar 11;1(8637):549–50

SCC-RIA in the diagnosis of squamous cell carcinoma of the head and neck. Eibling DE, et al. **Laryngoscope** 1989 Feb;99(2):117–24

A new cell line of murine myeloid leukemia with A-type phosphoglycerate kinase as marker isoenzyme. Kawai N, et al. **Leuk Res** 1988;12(11–12):911–6

Characterization of cell markers in type B retroviral-induced thymic lymphomas—I. Surface antigen phenotype and karyotype in developing and primary lymphomas. Mueller RE, et al. **Leuk Res** 1989;13(7):553–9

Characterization of cell markers in type B retroviral-induced thymic lymphomas—II. Surface antigen phenotype, karyotype and proviral integration pattern in cultured lymphoma cells and cloned lines. Mueller RE, et al. **Leuk Res** 1989;13(7):561–71

Cell cycle-related expression of surface antigens on myelomonocytic leukemia cells. Takase K, et al. **Leuk Res** 1988;12(7):583–90

Cellular RNA content, a feature correlated with cell kinetics and tumor prognosis. Darzynkiewicz Z. **Leukemia** 1988 Dec;2(12):777–87 (91 ref.)

HLA-A11 is associated with poor prognosis in childhood acute lymphoblastic leukemia (ALL). Orgad S, et al. **Leukemia** 1988 Dec;2(12 Suppl):79S–87S

Monoclonal antibody M195: a diagnostic marker for acute myelogenous leukemia. Scheinberg DA, et al. **Leukemia** 1989 Jun;3(6):440–5

Heterogeneity of childhood acute lymphoblastic leukemia (ALL): monoclonal antibodies phenotyping and induction of differentiation in vitro. Umiel T, et al. **Leukemia** 1988 Dec;2(12 Suppl):88S–96S

Comparison of mammary serum antigen assay with mammography in patients with breast cancer. Hare WS, et al. **Med J Aust** 1988 Oct 17;149(8):402–6

Clinical applications of tumour markers. Newlands ES. **Med Lab Sci** 1987 Oct;44(4):361–70 (28 ref.)

CA 125 and CA 19-9 in peritoneal, cyst and amniotic fluids. Inaudi P, et al. **Med Oncol Tumor Pharmacother** 1988; 5(4):233–8

Intratubular malignant germ cells in testicular biopsies: clinical course and identification by staining for placental alkaline phosphatase. Burke AP, et al. **Mod Pathol** 1988 Nov;1(6):475–9

Mucosal thickening adjacent to gastric malignancy: association with epidermal growth factor. Lee EY, et al. **Mod Pathol** 1989 Jul;2(4):397–402

Cutaneous neuroendocrine (Merkel cell) carcinoma: an immunophenotypic, clinicopathologic, and flow cytometric study. Visscher D, et al. **Mod Pathol** 1989 Jul;2(4):331–8

Genetic tagging of tumor cells with retrovirus vectors: clonal analysis of tumor growth and metastasis in vivo. Korczak B, et al. **Mol Cell Biol** 1988 Aug;8(8):3143–9

Melanoma markers: biological and diagnostic considerations. Cochran AJ. **Monogr Pathol** 1988;(30):35–49 (52 ref.)

Haptoglobin-related protein (Hpr) epitopes in breast cancer as a predictor of recurrence of the disease. Kuhajda FP, et al. **N Engl J Med** 1989 Sep 7;321(10):636–41

Hormone-negative, chromogranin A-positive endocrine tumors. Sobol RE, et al. **N Engl J Med** 1989 Feb 16; 320(7):444–7

Neu-protein overexpression in breast cancer. Association with comedo-type ductal carcinoma in situ and limited prognostic value in stage II breast cancer. van de Vijver MJ, et al. **N Engl J Med** 1988 Nov 10;319(19):1239–45

The "hook effect": high concentrations of prostate-specific antigen giving artifactually low values on one-step immunoassay [letter] Wolf BA, et al. **N Engl J Med** 1989 Jun 29;320(26):1755–6

Thomsen-Friedenreich (T)-active glycoproteins and a blood group N antigen precursor with T activity from human liver metastatic carcinomas. Otsuka K, et al. **Naturwissenschaften** 1988 Aug;75(8):407–9

Occurrence of a human tumor marker (Ca 72-4) in animal seminal plasma. Uhlenbruck G, et al. **Naturwissenschaften** 1988 Jul;75(7):359–60

Correlation of steroid receptors with histopathologic characteristics in breast carcinoma. Bhatavdekar JM, et al. **Neoplasma** 1988;35(4):413–23

Clinical usefulness of sialyl SSEA-1 antigen as tumor marker for ovarian cancer as compared with CA125, CA19-9, TPA, IAP, CEA and ferritin. Yabushita H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):217–24

Immunologic analysis of a thousand cases of acute leukemia. French Groupe d'Etude Immunologique des Leucémies (GEIL). Béné MC, et al. **Nouv Rev Fr Hematol** 1989; 31(2):133–6

Common chronic lymphatic leukemia antigen (cCLLa); distribution, fate and clinical applications. Faguet GB. **Nouv Rev Fr Hematol** 1988;30(5–6):305–10

The usefulness of phenotypic and genotypic studies in malignant lymphoma and related disorders. Henni T, et al. **Nouv Rev Fr Hematol** 1989;31(2):143–4

DU-PAN-2 levels in serum and pancreatic ductal fluids of patients with benign and malignant pancreatic disease. Mahvi DM, et al. **Pancreas** 1988;3(4):488–93

Expression of neuroendocrine markers (neuronaspecific enolase, synaptophysin and bombesin) in carcinoma of the lung. Kayser K, et al. **Pathol Res Pract** 1988 Aug; 183(4):412–7

Is the profile of binding of a panel of neoglycoproteins useful as a diagnostic marker in human lung cancer? Kayser K, et al. **Pathol Res Pract** 1989 Jun;184(6):621–9

Tissue evaluation of epithelial and functional markers of cell differentiation and mucins in colonic malignancy: assessment of diagnostic and prognostic value. Lapertosa G, et al. **Pathologica** 1988 Mar-Apr;80(1066):145–57

Comparison of AFP and beta-hCG levels in infiltrating duct mammary carcinoma at different stages of malignancy. Loganath A, et al. **Pathology** 1988 Jul;20(3):275–8

Immunoperoxidase staining in the detection of lymph node metastases in stage I breast cancer. Raymond WA, et al. **Pathology** 1989 Jan;21(1):11–5

Monoclonal antibody MB2: a potential marker for Ewing's sarcoma and primitive neuroectodermal tumor. Kahn HJ, et al. **Pediatr Pathol** 1989;9(2):153–62

Two new techniques for evaluating prostate cancer. The role of prostate-specific antigen and transrectal ultrasound. Hardeman SW, et al. **Postgrad Med** 1989 Aug;86(2):197–8, 201, 204 passim (14 ref.)

Production and characterization of monoclonal antibodies identifying breast tumor-associated antigens. Keydar I, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1362–6

Expression of haptoglobin-related protein and its potential role as a tumor antigen. Kuhajda FP, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1188–92

Antigens associated with epithelial ovarian carcinomas. Bast RC Jr. **Prog Clin Biol Res** 1989;288:73–83

Breast cancer screening-individualized risk assessment and application of new research technology: non-protein bound estradiol and chromosome analysis. Jackson GL, et al. **Prog Clin Biol Res** 1989;293:271–8

Ornithine decarboxylase as a marker for colorectal polyps and cancer. Luk GD, et al. **Prog Clin Biol Res** 1988; 279:227–39 (35 ref.)

The value of prostate-specific antigen in the management of localized prostatic cancer. Walsh PC, et al. **Prog Clin Biol Res** 1989;303:27–33

Search for useful biomarkers of pre- or early malignant colonic tumors. Zamcheck N, et al. **Prog Clin Biol Res** 1988;279:251–75 (139 ref.)

Significance of the isoenzyme BB of creatine kinase (CK-BB) in various neoplastic pathologies. Brianzoni E, et al. **Quad Sclavo Diagn** 1987 Sep;23(3):257–61

Tumour markers in colorectal cancer. Roberts PJ. **Scand J Gastroenterol Suppl** 1988;149:50–8

Serum lipid-bound sialic acid as a tumoral marker in minimal residual tumors. Musset M, et al. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:17–20

The monitoring of minimal residual disease in patients with malignant tumors. Reizenstein P. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:5–15 (48 ref.)

Diagnostic and prognostic importance of tumor markers in lung cancer. Ulsperger E, et al. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:21–31 (74 ref.)

Tumor markers for the diagnosis, prognosis, treatment and follow-up of gynaecological tumors. Ulsperger E, et al. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:33–43 (57 ref.)

Immunochemical characterization of the antigen recognized by the murine monoclonal antibody A7 against human colorectal cancer. Kitamura K, et al. **Tohoku J Exp Med** 1989 Feb;157(2):83–93

TA 4-SCC versus CEA sensitivity for lung cancer. Pecchio F, et al. **Tumori** 1988 Aug 31;74(4):393–5

Assay of GCDFP-15 by ELISA: an available method for in vitro studies of functional differentiation in human breast cancer. Revillion-Carette F, et al. **Tumori** 1988 Dec 31; 74(6):669–74

Plasma and tissue CEA and TPA markers in operable breast cancer. Preliminary results. Saccani Jotti G, et al. **Tumori** 1988 Dec 31;74(6):681–8

Pretreatment concentrations of breast carcinoma antigen (CA 15.3) and mucin-like carcinoma-associated antigen in patients with carcinoma of the breast. Góźdź SS, et al. **Tumour Biol** 1989;10(2):103–8

Pancreatic oncofetal antigen and carcinoembryonic antigen in breast and colon carcinoma. Kithier K, et al. **Tumour Biol** 1988;9(6):307–14

Expression of placental alkaline phosphatase in epithelial ovarian tumours. Stendahl U, et al. **Tumour Biol** 1989; 10(3):126–32

Enolase isoenzymes in human cerebral metastasis. van den Doel EM, et al. **Tumour Biol** 1989;10(3):164–72

Tumor volume, CT scan, lymphography, sonography, intravenous pyelography, and tumor markers in testis tumors. Wilbert DM, et al. **Urol Int** 1989;44(1):15–9

New techniques in diagnosing malignancy: morphology and beyond. Kornstein MJ. **Va Med** 1989 Jun;116(6):274–7 (12 ref.)

Comparative study of seven neuroendocrine markers in pancreatic endocrine tumours. Bordi C, et al. **Virchows Arch [A]** 1988;413(5):387–98

Immunohistochemistry of ovarian granulosa cell tumours. The value of tissue specific proteins and tumour markers. Chadha S, et al. **Virchows Arch [A]** 1989;414(5):439–45

Epithelial markers in synovial sarcoma. An immunohistochemical study on paraffin embedded tissues. Wrba F, et al. **Virchows Arch [A]** 1989;415(3):253–8

(Neo)glycoproteins as tools in neuropathology: histochemical patterns of the extent of expression of endogenous carbohydrate-binding receptors, like lectins, in meningiomas. Bardosi A, et al. **Virchows Arch [B]** 1988; 56(1):35–43

Immunohistochemical studies in human thymomas. Localization of thymosin and various cell marker. Hirokawa K, et al. **Virchows Arch [B]** 1988;55(6):371–80

Renal oncocytoma. I. Cytochrome c oxidase in normal and neoplastic renal tissue as detected by immunohistochemistry—a valuable aid to distinguish oncocytomas from renal cell carcinomas. Ortmann M, et al. **Virchows Arch [B]** 1988;56(3):165–73

Evaluation of polysialic acid in the diagnosis of Wilms' tumor. A comparative study on urinary tract tumors and non-neuroendocrine tumors. Roth J, et al. **Virchows Arch [B]** 1988;56(2):95–102

Current status of tumor markers in large bowel cancer. Moore M, et al. **World J Surg** 1989 Jan-Feb;13(1):52–9 (83 ref.)

[Immunohistochemical study of alpha-1-antichymotrypsin and GFAP in glioma] Li Q. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):427–9 (Eng. Abstr.) (Chi)

[The diagnostic value of carcinoembryonic antigen (CEA) and tissue polypeptide antigen (TPA) in pleural effusion] Chen TM, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct; 40(4):375–82 (Eng. Abstr.) (Chi)

[Study of CEA as a marker of cancer and its surrounding tissue in 145 cases of lung carcinoma] Jia XS. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):173–5 (Eng. Abstr.) (Chi)

[Immunohistochemical detection of prostate carcinoma] Ma WX, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Mar; 18(1):37–9 (Eng. Abstr.) (Chi)

[Immunocytologic study of light cell lines established in vitro from Ewing's sarcoma. Identification of neural markers] Lizard-Nacol S, et al. **C R Soc Biol (Paris)** 1988; 182(1):118–25 (Eng. Abstr.) (Fre)

[Hormone receptors and tumor markers in cancer of the endometrium] Hustin J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):748–50 (Fre)

[Recent advances in the clinical use of biological markers] Bellet D, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):122–4 (13 ref.) (Fre)

[Biochemical markers of the tumor origin of ascites] Romette J, et al. **Pathol Biol (Paris)** 1989 Jun;37(6):720–4 (Eng. Abstr.) (Fre)

[Specificity of CA 125 tumor marker. A study of 328 cases of internal medicine] Le Thi Huong Du, et al. **Presse Med** 1988 Dec 3;17(43):2287–91 (Eng. Abstr.) (Fre)

[The place of tumor markers in breast and gynecologic neoplasms] Gosselin P, et al. **Rev Fr Gynecol Obstet** 1988 Jul-Sep;83(7–9):535–40 (41 ref.) (Eng. Abstr.) (Fre)

[Experience and results with a lactate dehydrogenase marker in vaginal secretions of women at high risk for endometrial cancer] Osorio MT, et al. **Rev Fr Gynecol Obstet** 1989 Jan; 84(1):1–4 (Eng. Abstr.) (Fre)

[Diagnostic applications of immunohistochemical methods in tumor pathology] Dellagi K, et al. **Tunis Med** 1988 Oct; 66(10):655–62 (34 ref.) (Eng. Abstr.) (Fre)

[Tumor markers] el May M, et al. **Tunis Med** 1989 Jan; 67(1):3–9 (28 ref.) (Fre)

[The immunogold-silver technic in detecting cellular nucleic acids and antigens in squamous epithelial cancers] Henke RP, et al. **Acta Histochem Suppl (Jena)** 1989;37:73–8 (Ger)

[Determination of N-acetylneuraminic acid for the differential diagnosis of cystic ovarian tumors] Donat H, et al. **Arch Geschwulstforsch** 1989;59(2):113–20 (Eng. Abstr.) (Ger)

[Re-expression of the sheep red blood cell receptor—a diagnostic marker of cutaneous T-cell lymphomas?] Westphal HJ, et al. **Dermatol Monatsschr** 1989;175(2):87–94 (Eng. Abstr.) (Ger)

[The importance of the SCC antigen in the diagnosis and follow-up of cervix carcinoma. A cooperative study of the Gynecologic Tumor Marker Group (GTMG)] Crombach G, et al. **Dtsch Med Wochenschr** 1989 May 5; 114(18):700–5 (Eng. Abstr.) (Ger)

[Tumor markers in the diagnosis and follow-up assessment of bronchial carcinoma] Fischbach W. **Dtsch Med Wochenschr** 1989 May 19;114(20):800–5 (71 ref.) (Ger)

[Malignant mixed Müllerian tumors of the uterus. Clinical, morphologic and immunohistochemical findings] Falk S, et al. **Geburtshilfe Frauenheilkd** 1989 Jul;49(7):630–4 (Eng. Abstr.) (Ger)

[Mucoid carcinoma antigen—a new tumor marker] Bieglmayer C, et al. **Gynakol Rundsch** 1988;28 Suppl 2:203–5 (Ger)

[Squamous cell carcinoma antigen—a useful tumor marker for gynecologic squamous cell cancers?] Neunteufel W, et al. **Gynakol Rundsch** 1988;28 Suppl 2:201–2 (Ger)

[General and specific laboratory parameters within the scope of tumor after-care in gynecologic malignancies and breast cancer] Kreienberg R. **Gynakologe** 1989 Feb;22(1):55–62 (30 ref.) (Ger)

[Skin metastases in prostatic cancer. Immunohistologic indications of the primary tumor] Schoel J, et al. **Hautarzt** 1989 Jan;40(1):34–6 (Eng. Abstr.) (Ger)

[Eccrine sweat gland nevus—immunohistochemical demonstration of MAM-3 and MAM-6 antigens] Wätzig V, et al. **Hautarzt** 1989 Mar;40(3):164–6 (Eng. Abstr.) (Ger)

[Prostate-specific antigen as a prognostic parameter of treated prostate carcinoma—a reliable tumor marker?] Knönagel H, et al. **Helv Chir Acta** 1988 Jul;55(3):333–5 (Eng. Abstr.) (Ger)

[Immunologically defined tumor-associated antigens: the possibilities and limitations of their use in gastroenterology] Schmiegel W. **Immun Infekt** 1988 Dec;16(6):213–9 (90 ref.) (Eng. Abstr.) (Ger)

[Retrospective marker analyses performed with blood and bone marrow smears using an immunoenzyme procedure (alkaline phosphatase-anti-alkaline phosphatase technic)] Ebener U, et al. **Klin Padiatr** 1989 Jul-Aug;201(4):242–6 (Eng. Abstr.) (Ger)

[Protease inhibitors as tumor-associated growth factors] Hochstrasser K, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):51–6 (Eng. Abstr.) (Ger)

[Synaptophysin, chromogranin A and neuron-specific enolase as tumor markers in neuroendocrine tumors of the gastrointestinal tract and lung. An immunohistochemical study] Eberlein-Gonska M, et al. **Pathologe** 1989 Jul; 10(4):228–33 (Ger)

[Immunohistologic studies of 2 sarcomatoid differentiated renal cell cancers. A contribution to differential diagnosis] Krech RH, et al. **Pathologe** 1988 Sep;9(5):288–94 (Ger)

[Hemangiopericytoma. Morphologic and immunohistochemical findings in 9 patients and review of the literature] Leu HJ, et al. **Pathologe** 1988 Sep;9(5):276–84 (27 ref.) (Ger)

[Immunohistochemistry in malignant mesothelioma (letter)] Mezger J. **Pathologe** 1989 May;10(3):197 (Ger)

[Lymph node metastasis of a "squamous cell carcinoma" as a manifestation of occult breast cancer] Ronay G, et al. **Pathologe** 1988 Sep;9(5):309–12 (Ger)

[Immunohistochemical classification of stromal tumors of the stomach] Sinn HP, et al. **Pathologe** 1989 Jul;10(4):244–51 (Ger)

[Circulating antineuronal antibodies—use of a paraneoplastic phenomenon as tumor marker in small cell bronchial carcinoma] Popp W, et al. **Prax Klin Pneumol** 1988 Aug; 42(8):665–7 (Eng. Abstr.) (Ger)

[Immunohistochemical tumor diagnosis in breast cancer—use for assessing the stage and biology of so-called "small breast cancer"] Schauer A, et al. **Rontgenblatter** 1988 Aug; 41(8):340–4 (23 ref.) (Eng. Abstr.) (Ger)

[Tumor markers and immunomodulator substances in ascites—their value as screening and diagnosis parameters] Satz N, et al. **Schweiz Med Wochenschr** 1989 May 27; 119(21):762–5 (Eng. Abstr.) (Ger)

[Comparative studies on the value of acute phase proteins and CA-125 for monitoring patients with ovarian cancer] Kölbl H, et al. **Strahlenther Onkol** 1988 Dec;164(12):724–8 (Eng. Abstr.) (Ger)

[The status of tumor markers in the early detection of gastrointestinal tumors] Klapdor R. **Verh Dtsch Ges Inn Med** 1988;94:29–40 (41 ref.) (Ger)

[Tumor markers] Schmiegel WH. **Verh Dtsch Ges Inn Med** 1988;94:77–9 (Ger)

[Tumor markers in gynecology] Fuith LC, et al. **Wien Klin Wochenschr** 1989 Jul 14;101(14):489–91 (30 ref.) (Eng. Abstr.) (Ger)

[Tumor markers in bronchus cancer] Gasser RW, et al. **Wien Klin Wochenschr** 1989 Jul 14;101(14):476–9 (17 ref.) (Eng. Abstr.) (Ger)

[Future prospects for the use of tumor markers] Grunicke H. **Wien Klin Wochenschr** 1989 Jul 14;101(14):472–5 (24 ref.) (Eng. Abstr.) (Ger)

[Clinical relevance of tumor markers] Lamerz R. **Wien Klin Wochenschr** 1989 Jul 14;101(14):464–72 (113 ref.) (Eng. Abstr.) (Ger)

[Tumor markers in the upper intestinal tract—stomach and pancreas] Pointner R, et al. **Wien Klin Wochenschr** 1989 Jul 14;101(14):482–4 (Eng. Abstr.) (Ger)

[Malignant and benign lymphomas: histologic classification and immunomorphologic studies. Results of 838 cases] Radaszkiewicz T. **Wien Klin Wochenschr** 1980 Dec 5; 92(23):819–33 (Eng. Abstr.) (Ger)

[Tumor markers in internal medicine hepatology] Vogel W, et al. **Wien Klin Wochenschr** 1989 Jul 14;101(14):484–9 (28 ref.) (Eng. Abstr.) (Ger)

[What are tumor markers, and what is their value?] von Kleist S. **Wien Klin Wochenschr** 1989 Jul 14;101(14):459–63 (33 ref.) (Eng. Abstr.) (Ger)

[Immunohistochemical studies of the histogenesis of dermatofibrosarcoma protuberans] Lautier R, et al. **Z Hautkr** 1988 Aug 15;63(8):645–50 (Eng. Abstr.) (Ger)

[The value of CA 125 determination in the serum of patients with ovarian cancer] Bartel U, et al. **Zentralbl Gynakol** 1989;111(5):301–9 (Eng. Abstr.) (Ger)

[Detection and significance of tissue polypeptide antigen (TPA) in breast cancer patients] Meissner J, et al. **Zentralbl Gynakol** 1989;111(1):29–32 (Eng. Abstr.) (Ger)

[Use of immunohistochemical markers in the diagnosis of carcinoma of the breast] Bussolati G. **Minerva Chir** 1988 Sep 30;43(18 Suppl):5–7 (Ita)

[Concepts on dynamic staging of neoplasms of the colon and rectum] Di Paola M, et al. **Minerva Chir** 1989 Jan 31; 44(1-2):75–8 (Ita)

[Tumor markers in the diagnosis of pancreatic carcinoma] Lemma F, et al. **Minerva Med** 1989 Jul;80(7):645–9 (Ita)

[Relations between markers and immunological status in surgical patients. Tumor markers and immunity in surgery] Nano M, et al. **Minerva Med** 1988 Nov;79(11):943–6 (Eng. Abstr.) (Ita)

[Tissue polypeptide antigen. A new serum marker in pulmonary carcinoma] Purello D'Ambrosio F, et al. **Minerva Med** 1989 Jul;80(7):687–8 (Ita)

[Preoperative determination of CEA and GICA in gastric neoplasms] Sanlorenzo M, et al. **Minerva Med** 1989 Mar; 80(3):255–9 (Eng. Abstr.) (Ita)

[An immunohistological study of metastatic adenocarcinoma of the lymph node: is it useful in diagnosing a primary tumor?] Hamaya K, et al. **Gan No Rinsho** 1988 Nov; 34(14):1956–60 (Eng. Abstr.) (Jpn)

[Clinical evaluation of various tumor markers in pleural effusion and in the serum] Jibiki K, et al. **Gan No Rinsho** 1989 Aug;35(9):991–8 (Eng. Abstr.) (Jpn)

[Immunologic diagnosis of cancer—tumor markers] Kawai T. **Gan No Rinsho** 1989 Jan;Spec No:13–8 (Jpn)

[A study of an immunosuppressive acidic protein (IAP) in patients with a bone tumor] Mori O, et al. **Gan No Rinsho** 1988 Oct;34(12):1690–2 (Eng. Abstr.) (Jpn)

[Clinical evaluation of radioimmunoscintigraphy using a I-131 anti CEA and CA 19-9 monoclonal antibodies cocktail (IMACIS-1)] Takahashi T, et al. **Gan No Rinsho** 1989 Jun;35(7):828–33 (Eng. Abstr.) (Jpn)

[New technology of diagnosis of ovarian cancer] Terashima Y. **Gan No Rinsho** 1988 Aug;34(10):1427–31 (Eng. Abstr.) (Jpn)

[Serodiagnosis: tumor marker] Yoneshima M, et al. **Gan No Rinsho** 1988 Aug;34(10):1209–15 (Eng. Abstr.) (Jpn)

[Determination of various tumor markers, with special reference to sialyl SSEA-1 antigen in lung cancer] Satoh H, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2917–22 (Eng. Abstr.) (Jpn)

[Analysis of DNA aneuploidy as a tumor marker] Takamoto S. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2329–37 (Eng. Abstr.) (Jpn)

[Changes in tumor markers following cryosurgery of prostate carcinoma] Higaki Y, et al. **Hiayokika Kiyo** 1989 Feb; 35(2):265–70 (Eng. Abstr.) (Jpn)

[Clinical evaluation of serum gamma-seminoprotein in patients with prostatic cancer] Ishihara Y, et al. **Hinyokika Kiyo** 1989 Mar;35(3):409–13 (Eng. Abstr.) (Jpn)

[Clinical study of tumor markers in prostatic carcinoma—an investigation on the simultaneous measurement of prostatic acid phosphatase (PAP), prostatic antigen (PA) and gamma-seminoprotein (gamma-Sm)] Tsukamoto T, et al. **Hinyokika Kiyo** 1988 Jun;34(6):987–95 (Eng. Abstr.) (Jpn)

[Fundamental studies of a pancreatic oncofetal antigen immunoradiometric assay kit] Nagata A, et al. **Kaku Igaku** 1988 Dec;25(12):1445–55 (Jpn)

[Fundamental study and clinical evaluation on SCC RIABEAD using monoclonal antibody] Nasu K, et al. **Kaku Igaku** 1988 Dec;25(12):1437–44 (Eng. Abstr.) (Jpn)

[Clinical value of thymidine kinase activities in sera and tumor tissues of patients with colorectal cancer] Sakamoto S, et al. **Kaku Igaku** 1988 Oct;25(10):1089–94 (Eng. Abstr.) (Jpn)

[Recent advances in tumor markers] Schlom J. **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):983–5 (Jpn)

[Clinical evaluation of serum basic fetoprotein—comparative study of serum immunosuppressive acid protein] Gohji K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May; 80(5):711–8 (Eng. Abstr.) (Jpn)

[The clinical evaluation of prostatic specific antigen in prostatic cancer] Hiromoto Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):606–12 (Eng. Abstr.) (Jpn)

[Carcinoembryonic antigen in tumor tissue and urine in cases with primary bladder cancer—a study by immunogold-silver staining and radioimmunoassay] Kawano S. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar; 79(3):469–74 (Eng. Abstr.) (Jpn)

[Evaluation of tumor specific antigens in bladder cancer using anti Thomsen-Friedenreich monoclonal antibody and soybean agglutinin] Oda H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):713–8 (Eng. Abstr.) (Jpn)

[Clinical studies on tumor markers in prostate cancer; the evaluation of PA (prostate specific antigen) and comparison with PAP and gamma-Sm] Shinoda I, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):635–42 (Eng. Abstr.) (Jpn)

[Immunohistochemical study on the therapeutic effects on prostatic carcinoma using monoclonal and polyclonal antibodies for prostatic acid phosphatase] Taniguchi J, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):316–20 (Eng. Abstr.) (Jpn)

[A clinical evaluation of the versatility of various tumor markers in diagnosing the primary carcinoma of the lung] Shimabukuro Z. **Nippon Ika Daigaku Zasshi** 1989 Jun; 56(3):281–93 (Eng. Abstr.) (Jpn)

[Diagnostic value of pleural effusion carcinoembryonic antigen, squamous cell carcinoma related antigen and neuron-specific-enolase in patients with lung cancer] Fujii M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):519–23 (Eng. Abstr.) (Jpn)

[A clinical study on squamous cell carcinoma-related antigen in pleural effusion] Suzuki K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):923–30 (Eng. Abstr.) (Jpn)

[Symposium on diagnosis and treatment of cancer. Recent progress. I. Diagnosis. 1. Tumor marker. (1) Main topics on tumor markers] Hattori N. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1638–42 (0 ref.) (Jpn)

[A case of alpha fetoprotein-producing primary lung adenocarcinoma-analysis of lectin binding with AFP] Kurimoto I, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan; 78(1):83–4 (Jpn)

[Cytochemical and immunohistological markers of macrophages] Kamesaki H. **Nippon Rinsho** 1989 Mar; 47(3):560–3 (Jpn)

[Recent advances in the diagnosis of early cancers by tumor marker analysis] Ohkura H, et al. **Nippon Rinsho** 1989 May; 47(5):1072–8 (Jpn)

[Definition, diagnosis and treatment of ovarian cancers at an early stage] Terashima Y, et al. **Nippon Rinsho** 1989 May;47(5):1165–71 (Jpn)

[The clinical usefulness of serum CA72-4 analysis in patients with ovarian cancer] Kobayashi H. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May;41(5):585–9 (Eng. Abstr.) (Jpn)

[Gonadotropin, as a tumor marker, in body fluid and tumor tissues of germ cell tumors] Kurisaka M, et al. **No To Shinkei** 1989 Apr;41(4):353–9 (Eng. Abstr.) (Jpn)

[Evaluation of usefulness of tumor markers in the management of lung cancer] Ariyoshi Y. **Rinsho Byori** 1989 Feb;37(2):113–7 (Jpn)

[Oncogens and tumor makers in thyroid cancer] Hashimoto T, et al. **Rinsho Byori** 1989 Feb;37(2):122–30 (Jpn)

[Clinical evaluation of a new tumor marker, BCA 225, in breast cancer] Ishi K, et al. **Rinsho Byori** 1989 Mar; 37(3):301–5 (Jpn)

[Usefulness of tumor markers of glycoprotein] Ishii M. **Rinsho Byori** 1988 Nov;Spec No 79:69–77 (Jpn)

[Evaluation of biochemical examination and image procedures in mass screening survey for liver cancer] Kojima J, et al. **Rinsho Byori** 1988 Jul;36(7):759–66 (Jpn)

[Hematological malignancies from the point of view of cell surface antigens. Comparison of single color with two color analysis and a proposal of a flow chart to diagnose hematological malignancies with cell surface markers] Nakahara K, et al. **Rinsho Byori** 1988 Dec;36(12):1369–78 (Jpn)

[Fundamental and clinical evaluation of immunoradiometric assay (IRMA) for serum pancreatic oncofetal antigen (POA)] Ohba N, et al. **Rinsho Byori** 1989 Feb;37(2):153–8 (Jpn)

[Clinical evaluation of PIVKA-II in patients with hepatocellular carcinoma. Detection of PIVKA-II by EIA using anti-PIVKA-II monoclonal antibody] Ohtani M, et al. **Rinsho Byori** 1989 Apr;37(4):405–9 (Jpn)

[Fundamental studies, reference values, and clinical evaluation of abnormal prothrombin PIVKA-II assay using monoclonal antibody (E-1023)] Sakurabayashi I, et al. **Rinsho Byori** 1988 Dec;36(12):1407–12 (Jpn)

[Cancer-associated carbohydrate antigens in digestive cancers] Sawabu N, et al. **Rinsho Byori** 1989 May; 37(5):509–16 (Jpn)

[Role of laboratory tests and imagings on the screening of pancreatic cancer] Yamamoto M, et al. **Rinsho Byori** 1988

Jul;36(7):767-74 (Jpn)
[Des-gamma-carboxy prothrombin in patients with hepatocellular carcinoma] Yamashiki M, et al.
Rinsho Byori 1989 Feb;37(2):118-21 (Jpn)
[Biochemical markers of neoplasms of the female genital organs. I. Tissue polypeptide antigen (TPA)] Kamiński K.
Ginekol Pol 1988 Dec;59(12):739-43 (42 ref.) (Eng. Abstr.) (Pol)
[Biochemical indicators of neoplasms of the female genital organs] Kamiński K. Ginekol Pol 1988 Jun;59(6):376-80 (19 ref.) (Eng. Abstr.) (Pol)
[Lectin receptors--markers of colorectal adenomatous dysplasia] Dejica D, et al.
Rev Med Interna [Med Interna] 1988 May-Jun;40(3):245-52 (Eng. Abstr.) (Rum)
[Tumor markers in pancreatic cancer] Lencu M, et al.
Rev Med Interna [Med Interna] 1988 May-Jun;40(3):203-10 (27 ref.) (Rum)
[Nonspecific tumor markers in hepatocellular carcinoma] Stanciu L, et al. Rev Med Interna [Med Interna] 1988 Sep-Oct;40(5):443-9 (Eng. Abstr.) (Rum)
[Lectin receptors--histochemical markers in the study of leukemias and lymphomas] Gluzman DF, et al.
Eksp Onkol 1988;10(6):9-16 (52 ref.) (Eng. Abstr.) (Rus)
[Immunomorphological identification of an antigen associated with squamous cell carcinoma of the cervix uteri] Ievleva ES, et al. Eksp Onkol 1988;10(5):33-5 (Eng. Abstr.) (Rus)
[Markers of malignant transformation in mouse cell lines] Reznik LG, et al. Eksp Onkol 1988;10(5):26-30 (Eng. Abstr.) (Rus)
[Changes in the composition of the human oral fluid in malignant neoplasms] Kharchenko SV, et al.
Izv Akad Nauk SSSR [Biol] 1988 Jul-Aug;(4):524-30 (Eng. Abstr.) (Rus)
[Blood serum galactosyltransferase in oncologic diseases] Mikhallov AD, et al. Med Radiol (Mosk) 1989 Mar; 34(3):31-4 (Eng. Abstr.) (Rus)
[Study of the characteristics of various hematologic diseases using monoclonal antibodies LT1, LT2 and LT7] Filatov AV, et al. Ter Arkh 1989;61(2):104-8 (Eng. Abstr.) (Rus)
[The diagnostic and prognostic value of tumor markers in nonseminomatous stage-III to -IV testicular tumors] Sakalo VS, et al. Urol Nefrol (Mosk) 1989 May-Jun; (3):42-6 (Eng. Abstr.) (Rus)
[Placental alkaline phosphatase as a marker of malignant neoplasms] Pashintseva LP, et al. Vopr Med Khim 1989 May-Jun;35(3):68-71 (Eng. Abstr.) (Rus)
[Embryonic prealbumin as a tumor marker] Tatarinov IuS. Vopr Onkol 1989;35(3):259-63 (31 ref.) (Rus)
[Neuron specific enolase (ESA) as a marker of medullary carcinoma of the thyroid gland] Dasović-Knežević M, et al. Med Pregl 1988;41(5-6):212-4 (Eng. Abstr.) (Scr)
[Carcinoembryonic antigen in pleural effusion. Diagnostic value] Plavec G, et al. Vojnosanit Pregl 1988 May-Jun; 45(3):183-7 (Eng. Abstr.) (Scr)
[Radioimmunoanalysis in oncology] Kaušitz J.
Bratisl Lek Listy 1988 Jul;89(7):528-41 (Eng. Abstr.) (Slo)
[Use of radioimmunoanalysis for tumor markers in the diagnosis of carcinoma of the testes and prostate] Kaušitz J. Bratisl Lek Listy 1988 Oct;89(10):715-24 (Eng. Abstr.) (Slo)
[Fine-needle aspiration puncture of abdominal masses using echographic monitoring. Cytological diagnosis and experience with biological markers] Carrascosa JM, et al. Acta Gastroenterol Latinoam 1987;17(3):193-205 (Eng. Abstr.) (Spa)
[Lectins in the urothelium and its tumors: locations of staining, types and distribution] Sánchez Fernández de Sevilla MC, et al. Arch Esp Urol 1988 May;41(4):268-70 (Eng. Abstr.) (Spa)
[Serum TAG-72 in women with breast cancer: an example of serum/tissue discrepancy of a tumor marker (letter)] Ruibal A, et al. Med Clin (Barc) 1989 Jan 14;92(1):39 (Spa)
[CA 15.3, a marker of breast cancer] Ruibal A.
Med Clin (Barc) 1988 Sep 24;91(9):341-3 (Spa)
[The Cu/Zn index in cutaneous tumors with X-ray microanalysis] Alonso Molina MA, et al.
Med Cutan Ibero Lat Am 1988;16(4):309-13 (Eng. Abstr.) (Spa)
[Tumor markers in cervical carcinoma] Asins E, et al.
Rev Esp Oncol 1985;32(4):687-90 (Eng. Abstr.) (Spa)

BIOSYNTHESIS

In vitro production of beta 2 microglobulin by human myeloma cells. Bataille R, et al. Cancer Invest 1988; 6(3):271-7
Expression of the tumor-specific and calcium-binding protein oncomodulin during chemical transformation of rat fibroblasts. Sommer EW, et al. Cancer Res 1989 Feb 15; 49(4):899-905
Establishment of a new cell line derived from human gastric adenocarcinoma, producing tumor markers. Terano A, et al. Gastroenterol Jpn 1989 Apr;24(2):219
Expression of p64c-myc and neuroendocrine properties define three subclasses of small cell lung cancer. Bepler G, et al. Oncogene 1989 Jan;4(1):45-50

BLOOD

The importance of polyamine determination in monitoring malignant gynaecological tumours. Szarka G, et al.
Acta Chir Hung 1988;29(4):365-72
Beta-2-microglobulin is a reliable tumor marker in chronic lymphocytic leukemia. Di Giovanni S, et al.
Acta Haematol (Basel) 1989;81(4):181-5
Changes of serum proteinase "cathepsin B-like" activity in patients with lung cancer and plasmocytoma after therapy. Vodvářka P, et al. Acta Univ Palacki Olomuc Fac Med 1988;119:173-9
Prostate-specific antigen in prostatic cancer. Baron JC, et al. Am J Clin Oncol 1988;11 Suppl 2:S75-6
Aspects on reference values for tumor markers in human prostatic carcinoma. Ekman P, et al. Am J Clin Oncol 1988; 11 Suppl 2:S80-2
Serum osteocalcin concentration in patients with prostatic cancer. Francini G, et al. Am J Clin Oncol 1988;11 Suppl 2:S83-7
Comparison of prostate-specific antigen and prostatic acid phosphatase in the management of prostatic cancer. Turkes A, et al. Am J Clin Oncol 1988;11 Suppl 2:S77-9
Increased levels of soluble interleukin-2 receptor in non-Hodgkin's lymphomas. Relationship with clinical, histologic, and phenotypic features. Chilosi M, et al.
Am J Clin Pathol 1989 Aug;92(2):186-91
Elevated tumor markers in hemodialysis patients. Walz G, et al. Am J Nephrol 1988;8(3):187-9
Clinical use of gynaecologic tumour markers. Halila H, et al. Ann Chir Gynaecol 1989;78(1):65-70 (64 ref.)
The clinical use of human tumour markers. Neville AM.
Ann Chir Gynaecol 1989;78(1):7-12 (19 ref.)
Tumour markers in testicular and prostatic cancer. van Erps P, et al. Ann Chir Gynaecol 1989;78(1):71-6 (17 ref.)
Induction of interferon-beta 2/interleukin-6 (IL-6) by cytokine administration and detection of circulating interleukin-6 in the tumor-bearing state. Jablons DM, et al. Ann N Y Acad Sci 1989;557:157-60; discussion 160-1
A new tumor marker MCA in breast cancer diagnosis. Eskelinen M, et al. Anticancer Res 1988 Jul-Aug;8(4):665-8
Serum levels of CA-50, CA-19.9, CA-125, CA-15.3, enolase and carcino-embryonic antigen in non neoplastic diseases of the lung. Marechal F, et al. Anticancer Res 1988 Jul-Aug;8(4):677-80
Measurement of a monoclonal-antibody-defined antigen (90K) in the sera of patients with ovarian cancer. Scambia G, et al. Anticancer Res 1988 Jul-Aug;8(4):761-4
Cross-comparison of PSA and PAP values in a wide spectrum of prostate cancer conditions. Tarle M.
Anticancer Res 1988 Jul-Aug;8(4):569-72
Ectopic production of the beta-subunit of human chorionic gonadotropin in osteosarcoma. Ordóñez NG, et al.
Arch Pathol Lab Med 1989 Apr;113(4):416-9
Elevated lactate dehydrogenase isoenzyme 1 as a tumour marker in patients with germ cell testicular tumours. Winkle DC, et al. Aust N Z J Surg 1988 Sep;58(9):737-41
A tumour-marker combination versus second-look surgery in ovarian cancer. I. Clinical experience. Lahousen M, et al. Baillieres Clin Obstet Gynaecol 1989 Mar;3(1):201-8 (5 ref.)
A tumour-marker combination versus second-look surgery in ovarian cancer. II. Mathematical model. Stettner H.
Baillieres Clin Obstet Gynaecol 1989 Mar;3(1):209-12
Tumor size-dependent elevations of serum gangliosides in patients with head and neck carcinomas. Portoukalian J, et al. Biochem Int 1989 Apr;18(4):759-65
Serum zinc and angiotensin-converting enzyme levels in patients with lung cancer. Bakan N, et al. Biofactors 1988 Jul;1(2):177-8
Determination of serum catecholamine metabolites in neuroblastoma by high performance liquid chromatography with electrochemical detection. Tang QM, et al.
Biomed Chromatogr 1986 Feb;1(1):7-11
On the quest for lineage specific markers for the diagnosis of megakaryoblastic leukemia. Berridge MV, et al.
Blood Cells 1989;15(1):278-83
Limits of phenotypic markers for the diagnosis of megakaryoblastic leukemia. Breton-Gorius J, et al.
Blood Cells 1989;15(1):259-77
An endocrine marker for pancreatic cancer. Tulassay Z, et al. BMJ 1988 Dec 3;297(6661):1447-8
Inhibin: a new circulating marker of hydatidiform mole? Yohkaichiya T, et al. BMJ 1989 Jun 24;298(6689):1684-6
Alpha-L-fucosidase as a serum marker of hepatocellular carcinoma in southern African blacks. Bukofzer S, et al.
Br J Cancer 1989 Mar;59(3):417-20
An evaluation of mucin-like carcinoma associated antigen (MCA) in breast cancer. Cooper EH, et al.
Br J Cancer 1989 May;59(5):797-800
The value of tumour markers in lung cancer. Gomm SA, et al. Br J Cancer 1988 Dec;58(6):797-804
Double antibody radioimmunoassay for monitoring metastatic breast cancer. Schecter RL, et al.
Br J Cancer 1988 Sep;58(3):362-7
Fucosylated forms of alpha-1-antitrypsin that predict unresponsiveness to chemotherapy in ovarian cancer. Thompson S, et al. Br J Cancer 1988 Nov;58(5):589-93
The value of the measurement of serum prostate specific antigen in patients with benign prostatic hyperplasia and untreated prostate cancer. Armitage TG, et al.
Br J Urol 1988 Dec;62(6):584-9
Comparative study of the clinical usefulness of prostate specific antigen and prostatic acid phosphatase in prostatic disease. Buamah PK, et al. Br J Urol 1988 Dec;62(6):581-3
Serum lactate dehydrogenase and human choriogonadotrophin in seminoma. Fossá A, et al.
Br J Urol 1989 Apr;63(4):408-15
Serum lipid-bound sialic acid as a tumoral marker in minimal residual tumors. Musset M, et al.
Bull Soc Sci Med Grand Duche Luxemb 1989 Mar-Apr; 126(1):17-20
Diagnostic and prognostic importance of tumor markers in lung cancer. Ulsperger E, et al.
Bull Soc Sci Med Grand Duche Luxemb 1989 Mar-Apr; 126(1):21-31 (74 ref.)
Tumor markers for the diagnosis, prognosis, treatment and follow-up of gynaecological tumors. Ulsperger E, et al.
Bull Soc Sci Med Grand Duche Luxemb 1989 Mar-Apr; 126(1):33-43 (57 ref.)
A longitudinal study of the hyaluronan level in the serum of patients with malignant mesothelioma under treatment. Hyaluronan as an indicator of progressive disease. Dahl IM, et al. Cancer 1989 Jul 1;64(1):68-73
The use of serum TA-4 in monitoring patients with malignant transformation of ovarian mature cystic teratoma. Kimura T, et al. Cancer 1989 Jul 15;64(2):480-3
Serum C-reactive protein as a serum marker for the diagnosis of hepatocellular carcinoma. Lee FY, et al. Cancer 1989 Apr 15;63(8):1567-71
Changes in prostate-specific markers under chronic gonadotrophin-releasing hormone analogue treatment of state D prostatic cancer. Matzkin H, et al. Cancer 1989 Apr 1;63(7):1287-91
Serum glutathione-S-transferase-pi as a tumor marker for gastrointestinal malignancies. Niitsu Y, et al. Cancer 1989 Jan 15;63(2):317-23
Serum levels of tumor markers and presence of human antimouse antibodies: implications for diagnosis and treatment with radiolabeled monoclonal antibodies. Bouvier JF, et al. Cancer Detect Prev 1988;13(3-4):251-62
A simple mathematical model applied to describing tumour marker data. Carl J, et al. Cancer Detect Prev 1989; 13(5-6):293-9
Characterization of two similar differential tumor markers based on phosphofructokinase activity arising from the influence of cancer patient serum. Nakamura K, et al.
Cancer Detect Prev 1988;13(3-4):239-50
Clinical utility of the combined use of plurime tumor markers in human breast cancer. Neri B, et al.
Cancer Detect Prev 1988;13(2):115-21
Classification of lung cancer patients and controls by chromatography of modified nucleosides in serum. McEntire JE, et al. Cancer Res 1989 Feb 15;49(4):1057-62
The measurement of cisplatin-DNA adduct levels in testicular cancer patients. Reed E, et al. Carcinogenesis 1988 Oct;9(10):1909-11
Immunoglobulin A and alpha 2-macroglobulin as tumor markers in bladder cancer. Khalifa A, et al.
Chemioterapia 1987 Jun;6(2 Suppl):736-7
Beta-hCG vs intact hCG assays in the detection of trophoblastic disease. Rinker AD, et al. Clin Chem 1989 Aug;35(8):1799-800
Serum pseudouridine as a biochemical marker in patients with hepatocellular carcinoma. Amuro Y, et al.
Clin Chim Acta 1988 Dec 15;178(2):151-8
Serum CK-BB as a tumor marker in patients with carcinoma confirmed histologically. Arenas J, et al.
Clin Chim Acta 1989 Jun 30;182(2):183-93
Metastatic papillary thyroid carcinoma with normal serum thyroglobulin level. Miller JH, et al. Clin Nucl Med 1988 Sep;13(9):652-3
Alpha-1-antitrypsin (PI) and vitamin-D binding globulin (GC) phenotypes in rheumatoid arthritis: absence of an association. Kahl LE, et al. Dis Markers 1989 Apr-Jun; 7(2):71-8
Elevated serum alpha fetoprotein levels in postmenopausal women with primary breast carcinoma. Sarcione EJ, et al. Dis Markers 1987 Jun;5(2):75-9
The use and potential of serum tumour markers, new and old. Bates SE. Drugs 1989 Jul;38(1):9-18 (83 ref.)
Detection of tumours with nuclear magnetic resonance spectroscopy of plasma. Berger S, et al.
Eur J Cancer Clin Oncol 1989 Mar;25(3):535-43
Combined measurements of plasma aromatic L-amino acid decarboxylase and DOPA as tumour markers in diagnosis and follow-up of neuroblastoma. Boomsma F, et al.
Eur J Cancer Clin Oncol 1989 Jul;25(7):1045-52
Neuron-specific enolase: how useful as a cancer marker? Carney DN, et al. Eur J Cancer Clin Oncol 1988 May; 24(5):825-8 (14 ref.)
Elevation of a novel pituitary protein (7B2) in the plasma in small cell carcinoma of the lung. Iguchi H, et al.
Eur J Cancer Clin Oncol 1989 Aug;25(8):1225-32
Neopterin and alpha-interferon in patients affected by Kaposi's sarcoma from Africa. Marfella A, et al.
Eur J Cancer Clin Oncol 1989 Aug;25(8):1145-50
Diagnostic value of mucin-like carcinoma-associated antigen (MCA) in breast cancer. Rasoul-Rockenschaub S, et al.
Eur J Cancer Clin Oncol 1989 Jul;25(7):1067-72
Treatment of metastatic lipid cell tumor of the ovary with BV-CAP and VAC chemotherapy, using serum testosterone and dihydrotestosterone as tumor markers. Patsner B, et al. Eur J Gynaecol Oncol 1988;9(6):441-4
Immunological recovery and dose evaluation in IFN-alpha

treatment of hairy cell leukemia: analysis of leukocyte differentiation antigens, NK and 2',5'-oligoadenylate synthetase activity. Nielsen B, et al. **Eur J Haematol** 1989 Jan;42(1):50–9

Plasma urokinase-type plasminogen activator correlates to bone scintigraphy in prostatic carcinoma. Hienert G, et al. **Eur Urol** 1988;15(3–4):256–8

Clinical behavior of prostatic specific antigen and prostatic acid phosphatase: a comparative study. Morote Robles J, et al. **Eur Urol** 1988;14(5):360–6

Immunologically measured serum markers and their role in the management of prostate cancer. Powell P, et al. **Eur Urol** 1988;15(1–2):48–53

Plasma fibronectin prepared from patients with metastatic breast cancer shows in vitro aggregation property. Vuillard L, et al. **FEBS Lett** 1988 Sep 26;238(1):5–8

Prognostic value of adenosine deaminase activity in children with acute lymphoblastic leukaemia. Lastowska MA. **Folia Haematol (Leipz)** 1989;116(2):261–7

Terminal deoxynucleotidyl transferase in diagnosis of lymphomas. Rudzka E, et al. **Folia Haematol (Leipz)** 1989; 116(2):245–50

Measurement of CEA, TPA, neopterin, CA125, CA153 and CA199 in sera of pregnant women, umbilical cord blood and amniotic fluid. Lellé RJ, et al. **Gynecol Obstet Invest** 1989;27(3):137–42

Multiple serum markers in patients with endometrial cancer. Panici PB, et al. **Gynecol Obstet Invest** 1989;27(4):208–12

Serum lactic dehydrogenase and primary carcinoma of the ovary. Younis JS, et al. **Gynecol Obstet Invest** 1989; 28(1):47–50

Cervical carcinoma: a comparison of four potential biochemical tumor markers. Dodd JK, et al. **Gynecol Oncol** 1989 Feb;32(2):248–52

Neuron-specific enolase as a serum marker for immature teratoma and dysgerminoma. Kawata M, et al. **Gynecol Oncol** 1989 Feb;32(2):191–7

Management of patients with gynecologic cancer by serum sialic acid determination. Shimizu Y, et al. **Gynecol Oncol** 1989 May;33(2):231–6

Serum lactate dehydrogenase is an important risk determinant in acute lymphocytic leukemia. Fanin R, et al. **Haematologica (Pavia)** 1989 Mar–Apr;74(2):161–5

Thymidine kinase in neoplastic haematological diseases: confirmations, doubts and new findings [letter] Musto P, et al. **Haematologica (Pavia)** 1988 Nov–Dec;73(6):545–6

Serum markers in testicular germ-cell neoplasms. Rowland RG. **Hematol Oncol Clin North Am** 1988 Sep;2(3):485–9 (5 ref.)

Alterations in circulating neurotransmitters & cortisol with severity of breast cancer. Banu N, et al. **Indian J Med Res** 1988 May;87:479–53

Efficacy of serum sialoglycoproteins as a biomarker of the disease activity & treatment monitoring in patients with base tongue malignancy. Joshi BH, et al. **Indian J Med Res** 1989 Feb;90:17–21

CA 19–9 assay in patients with extrahepatic cholestatic jaundice. Barone D, et al. **Int J Biol Markers** 1988 Apr–Jun; 3(2):95–100

Tumor antigen NB/70K and CA 125 levels in the blood of preoperative ovarian cancer patients and controls: a preliminary report of the use of the NB12123 and CA 125 radioimmunoassays alone and in combination. Knauf S, et al. **Int J Biol Markers** 1988 Apr–Jun;3(2):75–81

ROC analysis of diagnostic performance utilizing serum antiproteases in cancer patients. Millán J, et al. **Int J Biol Markers** 1988 Jul–Sep;3(3):203–5

Creatine kinase isoenzyme BB: a lung cancer associated marker. Neri B, et al. **Int J Biol Markers** 1988 Jan–Mar; 3(1):19–22

Preoperative and longitudinal serum levels of CA 125 and CA 15.3 in patients with breast cancer. Omar YT, et al. **Int J Biol Markers** 1989 Apr–Jun;4(2):81–6

The clinical relevance of tumor marker CEA, CA 19–9 in regional chemotherapy of hepatic metastases of colorectal carcinoma. Safi F, et al. **Int J Biol Markers** 1988 Apr–Jun; 3(2):101–6

Phosphohexose isomerase and carcinoembryonic antigen in the sera of patients with primary lung cancer. Santabárbara P, et al. **Int J Biol Markers** 1988 Apr–Jun;3(2):113–22

Squamous cell carcinoma antigen for monitoring cervical cancer. Schmidt-Rhode P, et al. **Int J Biol Markers** 1988 Apr–Jun;3(2):87–94

The contribution of prostatic acid phosphatase and prostatic specific antigen in the diagnosis of prostatic cancer. van Dalen A, et al. **Int J Biol Markers** 1988 Apr–Jun;3(2):123–6

Serum neopterin levels in lung and breast cancer patients undergoing radiotherapy and/or chemotherapy. von Ingersleben G, et al. **Int J Biol Markers** 1988 Apr–Jun; 3(2):135–9

Diagnosis of bone and liver metastases in breast cancer comparing tumor markers and imaging techniques. Zanco P, et al. **Int J Biol Markers** 1989 Apr–Jun;4(2):103–5

TAG-72 serum determination in early and advanced gastric cancer [letter] Farinati F, et al. **Int J Cancer** 1989 Aug 15;44(2):378–9

Sera of children with renal tumours contain low-molecular-mass hyaluronic acid. Kumar S, et al. **Int J Cancer** 1989 Sep 15;44(3):445–8

Tissue polypeptide antigen, galactosyltransferase isoenzyme II and pancreatic oncofetal antigen serum determination: role in pancreatic cancer diagnosis. Basso D, et al. **Int J Pancreatol** 1988;3 Suppl 1:S95–100

Ribonucleases and deoxyribonucleases in pancreatic cancer: clinical value and pathophysiological interrelationships. Del Favero G, et al. **Int J Pancreatol** 1988;3 Suppl 1:S107–12

Limits of CEA and ferritin in the diagnosis of pancreatic cancer. Plebani M, et al. **Int J Pancreatol** 1988;3 Suppl 1:S113–7

Circulating levels of CSF-1 (M-CSF) a lymphohemastopoietic cytokine may be a useful marker of disease status in patients with malignant ovarian neoplasms. Kacinski BM, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):159–64

Seminoma testis with elevated serum beta-HCG—a category of germ-cell cancer between seminoma and nonseminoma. Dieckmann KP, et al. **Int Urol Nephrol** 1989;21(2):175–84 (48 ref.)

Plasma 5-S-cysteinyldopa differentiates patients with primary and metastatic melanoma from patients with dysplastic nevus syndrome and normal subjects. Peterson LL, et al. **J Am Acad Dermatol** 1988 Sep;19(3):509–15

Altered glycosylation of serum transferrin of patients with hepatocellular carcinoma. Yamashita K, et al. **J Biol Chem** 1989 Feb 15;264(5):2415–23

Neuron-specific enolase can be used as the sole guide to treat small-cell lung cancer patients in common clinical practice. Splinter TA, et al. **J Cancer Res Clin Oncol** 1989; 115(4):400–1

Plasma neuropeptide Y concentrations in patients with neuroendocrine tumors. Grouzmann E, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):808–13

A new biomarker in monitoring breast cancer: CA 549. Beveridge RA, et al. **J Clin Oncol** 1988 Dec;6(12):1815–21

Significance of serum leucine aminopeptidase in tumours of female genital tract. Gupta SK, et al. **J Indian Med Assoc** 1989 Mar;87(3):68–70

Evaluation of prostate-specific antigen as a marker for adenocarcinoma of the prostate. Barak M, et al. **J Lab Clin Med** 1989 May;113(5):598–603

Plasma sialic acid alterations in neoplastic diseases. Dwivedi C, et al. **J Med** 1987;18(5–6):323–32

Early diagnosis and monitoring of transplanted human malignant mesothelioma by serum hyaluronic acid. Roboz J, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):924–8

The serum concentrations of TAG-72 antigen measured with CA 72-4 IRMA in patients with ovarian carcinoma. Preliminary data. Gadducci A, et al. **J Nucl Med Allied Sci** 1989 Jan–Mar;33(1):32–6

The trend of serum CA125 levels during the first three courses of chemotherapy as a predictor of second-look findings in patients with ovarian carcinoma. Gadducci A, et al. **J Nucl Med Allied Sci** 1989 Jul–Sep;33(3):243–6

Assessment of serial carcinoembryonic antigen: determinations to monitor the therapeutic progress and prognosis of metastatic liver disease treated by regional chemotherapy. Quentmeier A, et al. **J Surg Oncol** 1989 Feb;40(2):112–8

Leukocyte alkaline phosphatase and carcinoembryonic antigen in breast cancer patients: clinical correlation with the markers. Walach N, et al. **J Surg Oncol** 1989 Feb; 40(2):85–7

Comparative experimental study of the serum prostate specific antigen and prostatic acid phosphatase in serially transplantable human prostatic carcinoma lines in nude mice. Csapo Z, et al. **J Urol** 1988 Nov;140(5):1032–8

The value of serum prostate specific antigen determinations before and after radical prostatectomy. Lange PH, et al. **J Urol** 1989 Apr;141(4):873–9

The role of prostate specific antigen as a tumor marker in men with advanced adenocarcinoma of the prostate. Maatman TJ. **J Urol** 1989 Jun;141(6):1378–80

Prostate specific antigen in the diagnosis and treatment of adenocarcinoma of the prostate. I. Untreated patients. Stamey TA, et al. **J Urol** 1989 May;141(5):1070–5

Prostate specific antigen in the diagnosis and treatment of adenocarcinoma of the prostate. II. Radical prostatectomy treated patients. Stamey TA, et al. **J Urol** 1989 May; 141(5):1076–83

Prostate specific antigen in the diagnosis and treatment of adenocarcinoma of the prostate. III. Radiation treated patients. Stamey TA, et al. **J Urol** 1989 May;141(5):1084–7

Prostate specific antigen in the diagnosis and treatment of adenocarcinoma of the prostate. IV. Anti-androgen treated patients. Stamey TA, et al. **J Urol** 1989 May;141(5):1088–90

Evaluation of gamma-enolase as a tumor marker for renal cell carcinoma. Takashi M, et al. **J Urol** 1989 Apr; 141(4):830–4

Serum lactate dehydrogenase isoenzyme 1 as a marker of testicular germ cell tumor. von Eyben FE, et al. **J Urol** 1988 Nov;140(5):986–90

Abnormal plasma prothrombin (PIVKA-II) levels in hepatocellular carcinoma. Kawaguchi Y. **Jpn J Surg** 1989 May;19(3):296–300

Specificity of tumor markers (CEA, GICA, TPA, alpha-FP, FpA, gamma-GT) for the diagnosis of hepatic metastases from large bowel cancers. Abbasciano V, et al. **Med Oncol Tumor Pharmacother** 1989;6(2):129–32

Plasma spermidine and putrescine as markers of cancer management. Driessen O, et al. **Methods Find Exp Clin Pharmacol** 1989 Jan;11(1):11–6

Serum lactate dehydrogenase in small-cell lung cancer [letter] Van den Brande P, et al. **N Engl J Med** 1989 Jan 5;320(1):61

Diagnosis and analysis of the clinical course of T-phenotype acute lymphoblastic leukemia. Babuliková O, et al. **Neoplasma** 1988;35(6):683–90

Serum sialic acid forms as markers for head and neck malignancies. Bhatavdekar JM, et al. **Neoplasma** 1988; 35(4):425–34

A comparative study of mucin-like carcinoma-associated antigen (MCA), CA 125, CA 19–9 and CEA in patients with ovarian cancer. Koelbl H, et al. **Neoplasma** 1989; 36(4):473–8

Significance of serum sialoglycoproteins in patients with lung cancer. Patel PS, et al. **Neoplasma** 1989;36(1):53–9

Bone alkaline phosphatase isoenzyme and urinary hydroxyproline in healthy subjects, patients with osteolytic metastases, and patients with primary hyperparathyroidism. Stěpán JJ, et al. **Neoplasma** 1989;36(4):495–501

Serum prealbumin, transferrin and alpha-1-acid glycoprotein in patients with gynecological carcinomas. Tolner J, et al. **Neoplasma** 1988;35(4):403–11

Prediction of clinical course and recurrence of human ovarian cancer by several serum tumor markers. Kikuchi Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):69–76

Prognostic significance of plasma cell morphology in multiple myeloma. Paule B, et al. **Nouv Rev Fr Hematol** 1988; 30(4):209–12

Tumor markers CA 125, squamous cell carcinoma antigen, and carcinoembryonic antigen in patients with adenocarcinoma of the uterine cervix. Duk JM, et al. **Obstet Gynecol** 1989 Apr;73(4):661–8

Sialyl Lewis-Xi antigen in patients with gynecologic tumors. Inoue M, et al. **Obstet Gynecol** 1989 Jan;73(1):79–83

CA 125, NB/70K, and lipid-associated sialic acid in monitoring uterine papillary serous carcinoma. Tseng PC, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):384–7

Plasma lipid-associated sialic acid and serum CA 125 as indicators of disease status with advanced ovarian cancer. Vardi JR, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):379–83

Evaluation of the ovarian cancer antigen, Ca-125, as a tumor marker. Onetto M, et al. **Oncology** 1989;46(2):117–22

Serum immunoreactive elastase: is it useful for the diagnosis of pancreatic cancer? Gullo L, et al. **Pancreas** 1989; 4(3):335–8

Cancer-associated antigen CA 15-3 in the diagnostics of breast tumours. Eskelinen M, et al. **Scand J Clin Lab Invest** 1988 Nov;48(7):653–8

Application of des-gamma-carboxy prothrombin as a complementary tumor marker with alpha-fetoprotein in the diagnosis of hepatocellular carcinoma. Ho CH, et al. **Scand J Gastroenterol** 1989 Jan;24(1):47–52

On reference values for tumor markers in prostatic carcinoma. Lewenhaupt A, et al. **Scand J Urol Nephrol Suppl** 1988;110:119–23

The role of tumor markers in the early detection of cancer. Humphrey PA. **Semin Surg Oncol** 1989;5(3):186–93 (71 ref.)

Coagulation assays as diagnostic markers of hepatocellular carcinoma. Lefrère JJ, et al. **Thromb Haemost** 1988 Dec 22;60(3):468–70

Serum lactate dehydrogenase (LDH) as a tumor marker in Ewing's sarcoma. Bacci G, et al. **Tumori** 1988 Dec 31; 74(6):649–55

Circulating tumor markers in cervical cancer. Benedetti Panici P, et al. **Tumour Biol** 1989;10(2):109–16

Correlation between serum tumor marker levels and tumor proliferation in small cell lung cancer. Lehtinen M, et al. **Tumour Biol** 1988;9(6):287–92

Establishment and evaluation of a radioimmunoassay for neuron-specific enolase. A marker for small cell lung cancer. Paus E, et al. **Tumour Biol** 1989;10(1):23–30

Multiple marker evaluation in prostatic cancer using prostatic specific antigen, gamma-seminoprotein and prostatic acid phosphatase. Arai Y, et al. **Urol Int** 1989;44(3):135–40

Prostate-specific antigen in management of prostatic carcinoma. Brawer MK, et al. **Urology** 1989 May;33(5 Suppl):11–6 (29 ref.)

High-dose intravenous estrogen therapy in advanced prostatic carcinoma. Use of serum prostate-specific antigen to monitor response. Ferro MA, et al. **Urology** 1989 Sep; 34(3):134–8

Serum prostate-specific antigen: its use in diagnosis and management of prostate cancer. Lange PH, et al. **Urology** 1989 Jun;33(6 Suppl):13–7 (58 ref.)

[Application of monoclonal antibody OC 125 in gynecological oncology] Wu AR, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):132–6 (Eng. Abstr.) (Chi)

[The serum levels of human calcitonin (hCT) and salmon calcitonin (sCT) in lung cancer patients] Yin KT, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Dec;40(6):517–22 (Eng. Abstr.) (Chi)

[Checkout of cancer-specific proteins and application in diagnosis of lung cancer] Zhang QH, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Sep;27(9):541–3, 586–7 (Eng. Abstr.) (Chi)

[Neuron specific enolase in small cell lung cancer] Lee HJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):465–71 (Eng. Abstr.) (Chi)

[Disclosing bone metastases. Value of the systematic study of various tumor markers (letter)] Euller-Ziegler L, et al. **Presse Med** 1989 Jan 28;18(3):127 (Fre)

[Systematic study of various tumoral markers in prevalent bone metastasis] Euller-Ziegler L, et al.

Rev Rhum Mal Osteoartic 1989 Jun;56(7):523–6 (Eng. Abstr.) (Fre)

[NMR research on blood plasma for tumor detection—a method for mass screening?] Fritzsche H, et al. **Arch Geschwulstforsch** 1989;59(2):129–33 (Eng. Abstr.) (Ger)

[Neuron-specific enolase as a tumor marker in small cell bronchial carcinoma] Gasser RW, et al. **Dtsch Med Wochenschr** 1988 Nov 4;113(44):1708–13 (Eng. Abstr.) (Ger)

[SCC (squamous cell carcinoma) antigen as a tumor marker in cervix cancers] Geyer H, et al. **Geburtshilfe Frauenheilkd** 1989 Mar;49(3):266–71 (Eng. Abstr.) (Ger)

[Experiences with the squamous cell carcinoma antigen, a new tumor marker for cancer of the uterine cervix] Meier W, et al. **Geburtshilfe Frauenheilkd** 1989 Jul;49(7):625–9 (Eng. Abstr.) (Ger)

[HCG and SP-1 as markers in trophoblast tumors. The HCG/SP-1 ratio] Than GN, et al. **Gynakol Rundsch** 1988; 28(3):157–65 (Eng. Abstr.) (Ger)

[Squamous cell carcinoma antigen. Current clinical value of a new tumor marker in head and neck cancer; preliminary results of a prospective study after 12 months] Clasen B, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug;67(8):420–5 (Eng. Abstr.) (Ger)

[The value of tumor markers in colorectal cancer] Peters KM, et al. **Leber Magen Darm** 1989 Jan;19(1):18–25 (Eng. Abstr.) (Ger)

[Tumor markers in dialysis-dependent renal failure. A comparison of the mucin-like carcinoma antigen, CA 15-3, CA 125, CA 19-9 and CEA antigens] Ammon A, et al. **Onkologie** 1988 Dec;11(6):260–2 (Eng. Abstr.) (Ger)

[Tumor markers in endocrinology (without gynecology and urology)] Riccabona G. **Wien Klin Wochenschr** 1989 Jul 14;101(14):479–82 (Eng. Abstr.) (Ger)

[Tumor markers—serologic parameters for monitoring and therapeutic control of cancer patients] Birkmayer J. **Wien Med Wochenschr** 1988 Jun 30;138(11–12):276–8 (Eng. Abstr.) (Ger)

[Experiences with the cancer marker CA 125 in gynecologic diseases] Pilgrim G, et al. **Z Gesamte Inn Med** 1989 Apr 15;44(8):251–4 (Eng. Abstr.) (Ger)

[CEA studies in endometrial cancer] Kunze M, et al. **Zentralbl Gynakol** 1989;111(8):524–9 (Eng. Abstr.) (Ger)

[Comparison of serum determinations of CA125, CA15-3 and CA50 in the preoperative evaluation of adnexal tumors] Gadducci A, et al. **Ann Ostet Ginecol Med Perinat** 1988 Jul–Aug;109(4):199–204 (Eng. Abstr.) (Ita)

[Prostate-specific antigen (PSA): diagnostic and prognostic implications in the evaluation of carcinoma of the prostate] Lo Cigno M, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar; 61(1):29–36 (Eng. Abstr.) (Ita)

[Usefulness of tumor markers in the diagnosis of squamous carcinoma of the esophagus] Pecchio F, et al. **Minerva Chir** 1988 Sep 30;43(18):1469–71 (Eng. Abstr.) (Ita)

[Significance of serum determination of beta-HCG in patients with breast cancer] Tolino A, et al. **Minerva Ginecol** 1988 Nov;40(11):629–33 (Eng. Abstr.) (Ita)

[A comparative evaluation of tumor markers (TPA and CEA) in various malignant neoplasms at an advanced stage] Meregalli M, et al. **Minerva Med** 1989 Apr;80(4):345–7 (Eng. Abstr.) (Ita)

[Determination of serum neuron-specific enolase in bronchial tumors of neuroendocrine origin] Rapellino M, et al. **Minerva Med** 1988 Dec;79(12):1051–2 (Eng. Abstr.) (Ita)

[Tumor markers in the early diagnosis of thyroid neoplasms] Re M, et al. **Minerva Med** 1989 Apr;80(4):341–3 (Eng. Abstr.) (Ita)

[Role of prostate-specific antigen in prostatic carcinoma. Validity of an integrated methodologic approach and morpho-biological correlations] Tomasino RM, et al. **Pathologica** 1989 Mar–Apr;81(1072):109–26 (Eng. Abstr.) (Ita)

[Acute phase protein (alpha 1 AT) as a tumor marker in patients with ovarian cancer (OC)] Kawai M, et al. **Gan No Rinsho** 1989 Jun;35(7):799–803 (Eng. Abstr.) (Jpn)

[Evaluation of sialylated LewisX as a tumor-associated carbohydrate antigen in the sera of patients with gastric cancer] Nakagoe T, et al. **Gan No Rinsho** 1989 Mar; 35(4):455–61 (Eng. Abstr.) (Jpn)

[Clinical evaluation of a combination assay of CEA, CA-19-9 and TPA in patients with colorectal cancer] Nishida O, et al. **Gan No Rinsho** 1988 Aug;34(9):1096–100 (Eng. Abstr.) (Jpn)

[Evaluation of plasma PIVKA-II as a new marker for hepatocellular carcinoma] Tada H, et al. **Gan No Rinsho** 1989 Apr;35(5):564–70 (Eng. Abstr.) (Jpn)

[The accuracy of CT and tumor markers in the detection of a recurrent ovarian carcinoma] Wakabayashi Y, et al. **Gan No Rinsho** 1989 Sep;35(10):1127–31 (Eng. Abstr.) (Jpn)

[Clinical evaluation of PIVKA-II as a marker of hepatocellular carcinoma] Arima K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3049–52 (Eng. Abstr.) (Jpn)

[Clinical usefulness of plasma PIVKA-II assay and its limitations in patients with hepatocellular carcinoma] Fujiyama S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1129–38 (Eng. Abstr.) (Jpn)

[Basic and clinical evaluation of an immunoradiometric competitive inhibition assay for sialyl Tn antigen: (1). Evaluation of assay conditions and normal values. STN Study Group] Imura H, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3213–9 (Eng. Abstr.) (Jpn)

[Basic and clinical evaluation of an immunoradiometric competitive inhibition assay for 2——6 sialyl Lewis a antigen—2. Evaluation of clinical significance] Imura H, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2203–12 (Eng. Abstr.) (Jpn)

[Basic and clinical evaluation of an immunoradiometric competitive inhibition assay for sialyl TN antigen: (2). Evaluation of clinical significance. STN Study Group] Imura H, et al. **Gan To Kagaku Ryoho** 1989 Sep; 16(9):3221–30 (Eng. Abstr.) (Jpn)

[Clinical application of cancer-associated carbohydrate antigens in the diagnosis and therapy of human cancers] Kannagi R, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1157–66 (24 ref.) (Eng. Abstr.) (Jpn)

[Serum pepsinogen I level in patients with stomach cancer—its value and limitation in clinical use] Miki K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1122–8 (Eng. Abstr.) (Jpn)

[Sialyl Lewis(x)-I (SLX) as a tumor-associated carbohydrate antigen in sera in patients with gastric and colorectal cancer—evaluation according to clinico-pathological factors] Nakagoe T, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 1):819–25 (Eng. Abstr.) (Jpn)

[The usefulness and limitation of sugar antigen in ovarian cancers—with special reference to a new tumor marker, CA54/61] Nozawa S. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1147–51 (Eng. Abstr.) (Jpn)

[Diagnostic usefulness and limitation of measuring pancreatic cancer associate antigen, SPan-1, in patients with pancreatic cancer] Satake K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1139–46 (Eng. Abstr.) (Jpn)

[Clinical significance of serum NCC-ST 439 as a tumor marker for colorectal cancer] Yamaguchi A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2645–50 (Eng. Abstr.) (Jpn)

[Comparison of 3 assay kits of prostate specific antigen in serum of prostatic cancer] Akimoto S, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2143–8 (Eng. Abstr.) (Jpn)

[Prostatic acid phosphatase (PAP), gamma-seminoprotein (gamma-Sm) and prostate specific antigen (PA) in prostatic cancer] Akimoto S, et al. **Hinyokika Kiyo** 1988 Aug; 34(8):1389–96 (Eng. Abstr.) (Jpn)

[Clinical evaluation of gamma-seminoprotein as a serum marker of prostate carcinoma] Sugimura Y, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2129–34 (Eng. Abstr.) (Jpn)

[Role of gamma-seminoprotein (gamma-SM) and prostatic acid phosphatase (PAP) as tumor markers of prostatic cancer] Watanabe M, et al. **Hinyokika Kiyo** 1988 Dec; 34(12):2135–41 (Eng. Abstr.) (Jpn)

[Studies on the clinical significance of serum type III procollagen peptide levels as a tumor marker in patients with gynecologic tumors] Mori T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2732–42 (Eng. Abstr.) (Jpn)

[Studies on the clinical significance of type III procollagen peptide in sera as a tumor marker in patients with ovarian tumors] Mori T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):974–89 (Eng. Abstr.) (Jpn)

[Evaluation of sialyl SSEA-1 antigen in patients with lung cancer] Shiota T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):1067–73 (Eng. Abstr.) (Jpn)

[Correlation of microangiographic findings of colorectal carcinoma with the level of various tumor markers in portal blood] Shimoyama T, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1624–31 (Eng. Abstr.) (Jpn)

[Serum levels of IAP, CEA and CA19-9 in patients with urological malignancies] Iizumi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1448–52 (Eng. Abstr.) (Jpn)

[Serum gamma-enolase as a marker for renal cell carcinoma] Takashi M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):220–6 (Eng. Abstr.) (Jpn)

[Clinical usefulness of serum sialyl Le(x)-i measurement in patients with ovarian cancer] Kobayashi H. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):15–9 (Eng. Abstr.) (Jpn)

[Clinical evaluation of serum CA125 in patients with hepatocellular carcinoma] Ohgi N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2239–42 (Eng. Abstr.) (Jpn)

[A new determination method of type IV collagen in sera and its clinical application for liver metastasis in gastrointestinal cancer] Suzuki M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2696 (Jpn)

[Hypercalcemia of malignancy] Tomita A. **Rinsho Byori** 1989 Feb;37(2):138–42 (Jpn)

[A clinical study on CA 15-3, CEA, SCC-Ag in patients with squamous cell carcinoma of the lung] Moriya H, et al. **Rinsho Hoshasen** 1989 Jan;34(1):63–6 (Eng. Abstr.) (Jpn)

[Serum ferritin level in patients with breast cancer] Rusinowska Z, et al. **Pol Tyg Lek** 1988 May 30;43(22):706–8 (Eng. Abstr.) (Pol)

[CA 19-9 and CA 125 antigens in the sera of patients with cancer of the large intestine in relation to its clinical progress] Bukowski J, et al. **Wiad Lek** 1989 Jan 1;42(1):30–4 (Eng. Abstr.) (Pol)

[Serum levels of alpha fetoprotein (AFP), B-chorionic gonadotropin (BHCG), ferritin and prostatic acid phosphatase (PAP) in patients with cancer of the stomach] Bukowski J, et al. **Wiad Lek** 1988 Jul 15;41(14):915–20 (Eng. Abstr.) (Pol)

[Neoplasms, enzymes and enzymatic markers] Rokicki M, et al. **Wiad Lek** 1988 Sep 15;41(18):1218–23 (81 ref.) (Pol)

[Serum level of tumor markers (antigen Ca 19-9, CEA, ferritin) in digestive tumors. Their diagnostic usefulness] Jovin G, et al. **Rev Med Interna [Med Interna]** 1988 May-Jun;40(3):223–9 (Rum)

[Taxonomic analysis of the distribution of peripheral blood indicators in workers in chemical plants and automobile transport] Chinchaladze TsV, et al. **Gematol Transfuziol** 1989 May;34(5):33–9 (Eng. Abstr.) (Rus)

[Acute phase proteins and their significance in clinical oncology] Aleshkin VA, et al. **Sov Med** 1988;(7):51–5 (45 ref.) (Rus)

[Tumor markers in primary and metastatic liver cancer and cancer of the pancreas] Moroz GS, et al. **Sov Med** 1988; (12):116–7 (Rus)

[The content of the carcinoembryonic antigen in the blood serum of patients with bladder tumors at various stages of combined treatment in relation to the disease stage] Makhlin NV, et al. **Urol Nefrol (Mosk)** 1989 Jan-Feb; (1):49–51 (Eng. Abstr.) (Rus)

[Comparative immunoenzyme analysis of the fertility alpha2-microglobulin in healthy donors and in patients with gynecological malignancies] Shcherbakova LA, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):23–5 (Eng. Abstr.) (Rus)

[Increase in serum mucin-like carcinoma-associated antigen (MCA) in patients with chronic liver diseases (letter)] Soriano A, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):675 (Spa)

[Usefulness of sialic acid as a tumor marker] Feliú J, et al. **Rev Clin Esp** 1989 May;184(8):401–3 (Eng. Abstr.) (Spa)

CEREBROSPINAL FLUID

Malignancy markers in the cerebrospinal fluid. Koskiniemi M. **Eur J Pediatr** 1988 Oct;148(1):3–8 (96 ref.)

HMFG1 antigen: a new marker for carcinomatous meningitis. Moseley RP, et al. **Int J Cancer** 1989 Sep 15;44(3):440–4

[Clinical significance of sialic acid in the CSF; in relation to the malignancy and leptomeningeal dissemination] Moroki K, et al. **No To Shinkei** 1989 Mar;41(3):305–7 (Eng. Abstr.) (Jpn)

GENETICS

Development of murine skin neoplasia studied with enzymes used as cell markers. Reddy AL, et al. **Carcinog Compr Surv** 1989;11:213–26 (27 ref.)

Acquisition of tumorigenic potential in the human myoepithelial HBL100 cell line is associated with decreased expression of HLA class I, class II and integrin beta 3 and increased expression of c-myc. Krief P, et al. **Int J Cancer** 1989 Apr 15;43(4):658–64

Isolation and characterization of a cDNA encoding the KS1/4 epithelial carcinoma marker. Perez MS, et al. **J Immunol** 1989 May 15;142(10):3662–7

Theoretical mechanisms for synthesis of carcinogen-induced embryonic proteins: XX. Embryonic gene perturbations expressed in terms of matrix algebra. Hancock RL. **Med Hypotheses** 1988 Sep;27(1):15–8

Modal DNA as prognostic indicator in untreated prostatic cancer. Hedlund PO, et al. **Scand J Urol Nephrol Suppl** 1988;110:125–9

[Is DNA aneuploidy a marker of malignant growth?] Klemi PJ, et al. **Duodecim** 1988;104(7):504–9 (38 ref.) (Fin)

IMMUNOLOGY

Leu-22: a preferential marker for T-lymphocytes in paraffin sections. Staining profile in T- and B-cell lymphomas, Hodgkin's disease, other lymphoproliferative disorders, myeloproliferative diseases, and various neoplastic processes. Said JW, et al. **Am J Clin Pathol** 1989 May; 91(5):542–9

New immunologic markers for monitoring of cancer. Virji MA, et al. **Ann Chir Gynaecol** 1989;78(1):13–26 (54 ref.)

Comparison by leukocyte adherence inhibition of human immune response to cancer-associated immunogens, Thomsen-Friedenreich (T) and Tn, myelin basic protein, and organ-specific cancer neoantigens. Thomson DM, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):231–41

Immunostaining of tissue sections previously stained with hematoxylin and eosin. Paul E, et al. **Dis Markers** 1988 Oct-Dec;6(4):231–6

Immunophenotyping of leukaemias by flow cytometry and APAAP: a two-year comparative analysis in hospital practice [published erratum appears in Dis Markers 1989 Apr-Jun;7(2):following 137] Sewell HF, et al. **Dis Markers** 1988 Oct-Dec;6(4):221–9

Serological markers in the diagnosis of histopathological types of nasopharyngeal carcinoma. Sam CK, et al.

Eur J Surg Oncol 1989 Aug;15(4):357–60

Diagnosis of acute myeloid leukaemia with the use of monoclonal anti–neutrophil elastase (NP57) reactive with routinely processed biopsy samples. Ralfkiaer E, et al. **Histopathology** 1989 Jun;14(6):637–43

Characterization of the human tumor and normal tissue reactivity of the KS1/4 monoclonal antibody. Bumol TF, et al. **Hybridoma** 1988 Aug;7(4):407–15

Hyaluronectin: detection with monoclonal antibodies in human tumors. Girard N, et al. **Hybridoma** 1988 Aug; 7(4):333–40

Short–term effects of i.v. injected murine 99MTc–F(ab')2 fragments of an anti–melanoma antibody (HMW–MAA 225.28 S) on haemato–immunological parameters in patients with melanoma. Castello G, et al. **Int J Biol Markers** 1988 Apr–Jun;3(2):140–4

Antibody to Epstein–Barr virus–specific DNase as a marker for field survey of patients with nasopharyngeal carcinoma in Taiwan. Chen JY, et al. **J Med Virol** 1989 Apr; 27(4):269–73

Immunohistochemical identification of exocrine and neuroendocrine subsets of large cell lung carcinomas. Piehl MR, et al. **Pathol Res Pract** 1988 Nov;183(6):675–82

A monoclonal antibody (B72.3) to adenocarcinoma of the colon and related tumors. Schlom J, et al. **Prog Clin Biol Res** 1989;288:63–72

Monoclonal antibody that defines the prostate specific antigen. Donn F, et al. **Prostate** 1989;14(3):237–49

Development of monoclonal antibody imaging of metastatic prostatic carcinoma. Meyers FJ, et al. **Prostate** 1989; 14(3):209–20

[Anti–cytoskeleton antibodies and their value in cutaneous histopathology] Kanitakis J. **Ann Dermatol Venereol** 1989; 116(5):431–6 (24 ref.) **(Fre)**

[Radiopharmacokinetics of 131I–antibodies against colon cancer used in immunoscintigraphy in animal experiments] Alexander SK, et al. **Radiobiol Radiother (Berl)** 1988; 29(4):489–95 (Eng. Abstr.) **(Ger)**

[The use of biological markers in the differential diagnosis in the staging of ovarian neoplasms] Nigro G, et al. **Minerva Ginecol** 1988 Apr;40(4):227–9 (Eng. Abstr.) **(Ita)**

[Ki67 as histochemical marker of cellular proliferative activity in breast cancer] Marzullo F, et al. **Pathologica** 1988 May–Jun;80(1067):279–85 (Eng. Abstr.) **(Ita)**

[Radioimmunoscintigraphy] Izumi M, et al. **Rinsho Hoshasen** 1988 Jun;33(6):635–42 (Eng. Abstr.) **(Jpn)**

ISOLATION & PURIFICATION

Purification and biochemical characterisation of a novel breast carcinoma associated mucin–like glycoprotein defined by antibody 3E1.2. Stacker SA, et al. **Br J Cancer** 1989 Apr;59(4):544–53

Purification and composition of the human tumor–associated glycoprotein (TAG–72) defined by monoclonal antibodies CC49 and B72.3. Sheer DG, et al. **Cancer Res** 1988 Dec 1;48(23):6811–8

Purification and partial characterization of a malignancy–associated glycoprotein. Taddei–Peters WC, et al. **Carbohydr Res** 1988 Oct 15;182(1):135–47

Concomitant purification of prostatic carcinoma tumor markers from human seminal fluid under nondenaturing conditions. Rusciano D, et al. **Clin Chem** 1988 Dec; 34(12):2528–32

Clinical significance of mucin–like high molecular weight glycoprotein originated from lung cancer as tumor marker. Imokawa M, et al. **Clin Chim Acta** 1989 Mar 15; 180(1):45–58

High resolution of human lactate dehydrogenase: new multiple forms and potential tumor markers. Romero–Saravia O, et al. **Electrophoresis** 1988 Dec; 9(12):816–9

Expression of a leukemia–associated antigen (CAMAL) in four myeloid leukemia cell lines. Shipman RC, et al. **Leuk Res** 1988;12(7):537–43

Intracellular distribution of pancreatic tumor antigen purified from BHP–induced adenocarcinomas in Syrian hamsters. Matsuzaki M, et al. **Pancreas** 1989;4(4):429–35

Estrogen–induced mitogens in breast cancer and their prognostic value. Vignon F, et al. **Recent Results Cancer Res** 1989;113:29–31 (23 ref.)

Related glycoproteins from normal secretory and malignant breast cells. Purification and initial comparative characterizations. Ishida M, et al. **Tumour Biol** 1989; 10(1):12–22

[Purification of prostatic acid phosphatase and prostate specific antigen from human seminal plasma] Aoki T, et al. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):963–70 (Eng. Abstr.) **(Jpn)**

METABOLISM

Sclerosing hemangioma of the lung. An immunohistochemical study of intermediate filaments and endothelial markers. Alvarez–Fernandez E, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):121–4

Fibronectin is unsuitable as a tumor marker in pleural effusions. Delpuech P, et al. **Clin Chem** 1989 Jan; 35(1):166–8

Correlation between tissular levels of prostatic acid phosphatase and prostate–specific antigen and hormonal response of metastatic prostatic cancer. Algaba F, et al. **Eur Urol** 1988;14(6):470–3

Chain–fluorinated polyamines as tumor markers—IV. Comparison of 2–fluoroputrescine and 2,2–difluoroputrescine as substrates of spermidine synthase in vitro and in vivo. Dezeure F, et al. **Int J Biochem** 1988; 20(11):1299–312

Differentiation markers as an aid in the histological diagnosis of small–cell carcinoma of the lung: synopsis of intermediate filament protein and synaptophysin expression. Leube RE, et al. **Klin Wochenschr** 1988;66 Suppl 11:80–6 (77 ref.)

[Cooperative Ewing's Sarcoma Studies 81/86: pathologico–anatomic and immunohistochemical findings and differential diagnosis of Ewing sarcoma] Schmidt D, et al. **Klin Padiatr** 1988 May–Jun;200(3):236–42 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

CRGF: an autocrine growth factor associated with colorectal carcinomas. Pommier G, et al. **Ann N Y Acad Sci** 1988; 551:382–4

SECRETION

Effects of cytotoxic drugs on tumor marker secretion of gastrointestinal/pancreatic carcinomas—comparison of studies in nude mice and in patients. Klapdor U, et al. **Strahlenther Onkol** 1989 Jul;165(7):550–2

[EGF receptor and effects of EGF on growth and tumor marker secretion in uterine cervical cancer cells] Ueda M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1700–6 (Eng. Abstr.) **(Jpn)**

URINE

The significance of neopterin determination as a tumour marker in ovarian cancer. Szarka G, et al. **Acta Chir Hung** 1988;29(4):359–64

Multiple marker validity of urinary hexosaminidase and polyamines in haematopoietic malignancy. Venkatanarayanan S, et al. **Biochem Int** 1989 Feb; 18(2):301–9

Purification of a high molecular weight form of epidermal growth factor from urine of breast cancer patients. Eckert K, et al. **Biomed Biochim Acta** 1989;48(1):111–20

Urinary interleukins in patients receiving intravesical Bacillus Calmette–Guerin therapy for superficial bladder cancer. Fleischmann JD, et al. **Cancer** 1989 Oct 1;64(7):1447–54

Urinary excretion of N1–acetylspermidine and other acetylated and free polyamines in the 1,2–dimethylhydrazine model of experimental rat colon cancer. Halline AG, et al. **Cancer Res** 1989 Sep 1; 49(17):4721–3

The diagnostic value of urinary transferrin compared to serum prostatic specific antigen (PSA) and prostatic acid phosphatase (PAP) in patients with prostatic cancer. van Dieijen–Visser MP, et al. **Clin Chim Acta** 1988 Sep 30; 177(1):77–80

Flow cytometry of urine. Landay AL, et al. **Clin Lab Med** 1988 Sep;8(3):541–53 (37 ref.)

Feasibility study for neonatal neuroblastoma screening in the United States. Tuchman M, et al. **Med Pediatr Oncol** 1989; 17(4):258–64

Prognostic significance of urinary neopterin levels in patients with hepatocellular carcinoma. Kawasaki H, et al. **Tohoku J Exp Med** 1988 Aug;155(4):311–8

[The clinical significance of pseudouridine determination of the urine in children and adolescents] Graf N, et al. **Klin Padiatr** 1989 May–Jun;201(3):154–62 (Eng. Abstr.) **(Ger)**

[The clinical value of urinary polyamine analysis in urological disease] Matsuda M, et al. **Hinyokika Kiyo** 1988 Oct; 34(10):1703–10 (Eng. Abstr.) **(Jpn)**

[Clinical studies on the measurement of urinary tissue polypeptide antigen (TPA) levels using Prolifigen TPA kit "Daiichi"–II in urothelial cancers] Ohmori H, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2101–10 (Eng. Abstr.) **(Jpn)**

[Clinical studies on urinary tissue polypeptide antigen (TPA): problems and improvement in determination] Yoshida M, et al. **Hinyokika Kiyo** 1989 Feb;35(2):217–23 (Eng. Abstr.) **(Jpn)**

[A study of urinary TPA in bladder cancer] Akagi T. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1337–47 (Eng. Abstr.) **(Jpn)**

[Improvement of the determination of urinary tissue polypeptide antigen (TPA) and the clinical study in bladder cancer patients] Morimoto S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec;79(12):1954–61 (Eng. Abstr.) **(Jpn)**

[The role of tests for polyenuria in mass screening of the population] Gritsman Iulia, et al. **Sov Med** 1988;(5):49–51 **(Rus)**

TUMOR METABOLITE MARKERS see **TUMOR MARKERS, BIOLOGICAL**

TUMOR NECROSIS FACTOR

Lack of effect of pertussis toxin on TNF–alpha–induced formation of reactive oxygen intermediates by human neutrophils. Meurer R, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):763–9

Mechanism of the hypertriglyceridemia induced by tumor necrosis factor administration to rats. Chajek–Shaul T, et al. **Biochim Biophys Acta** 1989 Feb 20;1001(3):316–24

Central effects of TNF alpha on thermogenesis and fever in the rat. Rothwell NJ. **Biosci Rep** 1988 Aug;8(4):345–52

Tumor necrosis factor alpha: a multifaceted peptide hormone. Rosenblum MG, et al. **CRC Crit Rev Immunol** 1989; 9(1):21–44 (182 ref.)

Binding and biological effects of tumor necrosis factor alpha on cultured human neonatal foreskin keratinocytes. Pillai S, et al. **J Clin Invest** 1989 Mar;83(3):816–21

Endotoxin and tumor necrosis factor challenges in dogs simulate the cardiovascular profile of human septic shock. Natanson C, et al. **J Exp Med** 1989 Mar 1;169(3):823–32

Tumor necrosis factor/cachectin. Induction of hemorrhagic necrosis in normal tissue requires the fifth component of complement (C5). Rothstein JL, et al. **J Exp Med** 1988 Dec 1;168(6):2007–21

Modulation of IL–1, tumor necrosis factor, and C5a–mediated murine neutrophil migration by alpha–melanocyte–stimulating hormone. Mason MJ, et al. **J Immunol** 1989 Mar 1;142(5):1646–51

Cachectin/tumour necrosis factor. Tracey KJ, et al. **Lancet** 1989 May 20;1(8647):1122–6 (40 ref.)

Structure of tumour necrosis factor. Jones EY, et al. **Nature** 1989 Mar 16;338(6212):225–8

Tumour necrosis factor. van der Merwe PA. **S Afr Med J** 1988 Oct 15;74(8):411–7 (88 ref.)

Tumor necrosis factor. Old LJ. **Sci Am** 1988 May; 258(5):59–60, 69–75 (0 ref.)

Failure of tumor necrosis factor to produce hypotensive shock in the absence of endotoxin. Neilson IR, et al. **Surgery** 1989 Aug;106(2):439–43

[Tumor necrosis factor–alpha (cachectin)] Solís Herruzo JA. **Rev Clin Esp** 1989 Mar;184(4):193–8 (112 ref.) (Eng. Abstr.) **(Spa)**

ADMINISTRATION & DOSAGE

Effect of tumor necrosis factor on growth of Trypanosoma musculi in vivo and in vitro. Kongshavn PA, et al. **Adv Exp Med Biol** 1988;239:257–62

Recombinant human tumor necrosis factor alone and with chemotherapeutic agents. Effect on nude mouse–supported human bladder cancer heterografts. Das AK, et al. **Arch Surg** 1989 Jan;124(1):107–10

Changes in rat liver mRNA for alpha–1–acid–glycoprotein, apolipoprotein E, apolipoprotein B and beta–actin after mouse recombinant tumor necrosis factor injection. Delers F, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):81–8

Inositol lipid metabolism in vasopressin stimulated hepatocytes from rats infused with tumor necrosis factor. Spitzer JA, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):197–203

Chronic exposure to tumor necrosis factor in vivo preferentially inhibits erythropoiesis in nude mice. Johnson RA, et al. **Blood** 1989 Jul;74(1):130–8

Hepatic arterial infusion of human recombinant tumor necrosis factor–alpha. An experimental study in dogs. Ohkawa S, et al. **Cancer** 1989 Jun 1;63(11):2096–102

Recombinant human tumor necrosis factor mediates regression of a murine sarcoma in vivo via Lyt–2+ cells. Asher AL, et al. **Cancer Immunol Immunother** 1989; 28(2):153–6

Combination cytokine immunotherapy with tumor necrosis factor alpha, interleukin 2, and alpha–interferon and its synergistic antitumor effects in mice. McIntosh JK, et al. **Cancer Res** 1989 Mar 15;49(6):1408–14

Intralesional application of recombinant human tumor necrosis factor alpha induces local tumor regression in patients with advanced malignancies. Bartsch HH, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):287–91

Phase I study of intratumoral application of recombinant human tumor necrosis factor. Pfreundschuh MG, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):379–88

Interleukin 1 (IL–1) and tumour necrosis factor synergise in the induction of IL–1 synthesis by human vascular endothelial cells. Howells GL, et al. **Immunol Lett** 1988 Oct;19(2):169–73

Phase–I trial of intravenous continuous infusion of tumor necrosis factor in advanced metastatic carcinomas. Wiedenmann B, et al. **J Cancer Res Clin Oncol** 1989; 115(2):189–92

Infusion of tumor necrosis factor/cachectin promotes muscle catabolism in the rat. A synergistic effect with interleukin 1. Flores EA, et al. **J Clin Invest** 1989 May;83(5):1614–22

Tumor necrosis factor and the acute metabolic response to tissue injury in man. Starnes HF Jr, et al. **J Clin Invest** 1988 Oct;82(4):1321–5

Phase I trial of intramuscularly administered tumor necrosis factor in patients with advanced cancer. Jakubowski AA, et al. **J Clin Oncol** 1989 Mar;7(3):298–303

Circulating interleukin 6 during a continuous infusion of tumor necrosis factor and interferon gamma. Brouckaert P, et al. **J Exp Med** 1989 Jun 1;169(6):2257–62

Pretreatment with recombinant murine tumor necrosis factor alpha/cachectin and murine interleukin 1 alpha protects mice from lethal bacterial infection. Cross AS, et al. **J Exp Med** 1989 Jun 1;169(6):2021–7

Inflammatory properties of recombinant tumor necrosis factor in rabbit skin in vivo. Rampart M, et al.

J Exp Med 1989 Jun 1;169(6):2227–32
Tumor necrosis factor inhibits the development of viral meningitis or induces rapid death depending on the severity of inflammation at time of administration. Doherty PC, et al. J Immunol 1989 May 15;142(10):3576–80
IL-6/IFN-beta-2 as a circulating hormone. Induction by cytokine administration in humans. Jablons DM, et al. J Immunol 1989 Mar 1;142(5):1542–7
Tumor necrosis factor-alpha and tumor necrosis factor-beta (lymphotoxin) stimulate the production of granulocyte-macrophage colony-stimulating factor, macrophage colony-stimulating factor, and IL-1 in vivo. Kaushansky K, et al. J Immunol 1988 Nov 15; 141(10):3410–5
Effect of recombinant murine tumor necrosis factor on hemopoietic reconstitution in sublethally irradiated mice. Sjøvdal L, et al. J Immunol 1989 Feb 1;142(3):833–5
The role of oxidant injury in tumor cell sensitivity to recombinant human tumor necrosis factor in vivo. Implications for mechanisms of action. Zimmerman RJ, et al. J Immunol 1989 Feb 15;142(4):1405–9
Mechanisms of tumor necrosis factor alpha-induced lymphopenia, neutropenia, and biphasic neutrophilia: a study of lymphocyte recirculation and hematologic interactions of TNF alpha with endogenous mediators of leukocyte trafficking. Ulich TR, et al. J Leukoc Biol 1989 Feb;45(2):155–67
Sequence dependence of administration of human recombinant tumor necrosis factor and interleukin-2 in murine tumor therapy. Zimmerman RJ, et al. J Natl Cancer Inst 1989 Feb 1;81(3):227–31
Successful whole body hyperthermia for cancer. Rosen P. Med Hypotheses 1989 May;29(1):45–6
Effects of tumor necrosis factor-alpha on tumor blood flow and hyperthermic treatment. Kallinowski F, et al. Onkologie 1989 Jun;12(3):131–5
Therapeutic potential of natural human tumor necrosis factor-alpha in combination with natural human interferon-alpha or -gamma on human cancer cells. Shiiki S, et al. Res Commun Chem Pathol Pharmacol 1988 Sep; 61(3):345–51
Effect of alpha- and gamma-interferon and tumor necrosis factor on colony formation of two human renal tumor xenografts in vitro. Beniers AJ, et al. Semin Surg Oncol 1988;4(3):195–8
In vitro antiproliferative efficacy of interferon-alpha, -gamma and tumor necrosis factor on two human renal tumor xenografts. Beniers AJ, et al. Urol Res 1988; 16(4):309–14
[Systemic versus local therapy with recombinant tumor necrosis factor-alpha (r-TNF-alpha) in patients with advanced tumors] Bartsch HH, et al. Onkologie 1989 Jun; 12(3):136–41 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Tumor necrosis factor causes increased pulmonary permeability and edema [letter] Stoklosa JC, et al. Am Rev Respir Dis 1988 Nov;138(5):1359–60
Chronic TNF infusion causes anorexia but not accelerated nitrogen loss. Michie HR, et al. Ann Surg 1989 Jan; 209(1):19–24
A phase I clinical trial of recombinant human tumor necrosis factor given daily for five days. Creaven PJ, et al. Cancer Chemother Pharmacol 1989;23(3):186–91
Pulmonary toxicity of recombinant human tumor necrosis factor. Kuei JH, et al. Chest 1989 Aug;96(2):334–8
Multiple organ damage caused by tumor necrosis factor and prevented by prior neutrophil depletion. Mallick AA, et al. Chest 1989 May;95(5):1114–20
Central nervous system toxicity of interferons and other cytokines. Bocci V. J Biol Regul Homeost Agents 1988 Jul–Sep;2(3):107–18 (157 ref.)
Induction of circulating tumor necrosis factor (TNF alpha) as the mechanism for the febrile response to interleukin-2 (IL-2) in cancer patients. Mier JW, et al. J Clin Immunol 1988 Nov;8(6):426–36
Cachetin/TNF: a macrophage protein that induces cachexia and shock. Fong Y, et al. JPEN J Parenter Enteral Nutr 1988 Nov–Dec;12(6 Suppl):72S–77S (71 ref.)
Evidence of involvement of tumor necrosis factor in adverse reactions during treatment of kidney allograft rejection with antithymocyte globulin. Debets JM, et al. Transplantation 1989 Mar;47(3):487–92

ANALYSIS

Elevated serum levels of tumor necrosis factor are associated with progressive encephalopathy in children with acquired immunodeficiency syndrome. Mintz M, et al. Am J Dis Child 1989 Jul;143(7):771–4
Infection and labor. IV. Cachectin-tumor necrosis factor in the amniotic fluid of women with intraamniotic infection and preterm labor. Romero R, et al. Am J Obstet Gynecol 1989 Aug;161(2):336–41
Immunohistochemical demonstration of cytoplasmic and membrane-associated tumor necrosis factor in murine macrophages. Chensue SW, et al. Am J Pathol 1988 Dec; 133(3):564–72
In vivo immunohistochemical identification of tumor necrosis factor/cachectin in human lymphoid tissue. McCall JL, et al. Am J Pathol 1989 Sep;135(3):421–5
Tumour necrosis factor in synovial exudates. Di Giovine FS, et al. Ann Rheum Dis 1988 Sep;47(9):768–72
Tumor necrosis, cachexia, shock, and inflammation: a common mediator. Beutler B, et al. Annu Rev Biochem 1988;57:505–18 (118 ref.)
Tumor necrosis factor in middle ear effusions. Ophir D, et al. Arch Otolaryngol Head Neck Surg 1988 Nov; 114(11):1256–8
Cachectin activity in the serum of cachectic, tumor-bearing rats. Stovroff MC, et al. Arch Surg 1989 Jan;124(1):94–9
Tumor necrosis factor in the serum of patients with systemic lupus erythematosus. Maury CP, et al. Arthritis Rheum 1989 Feb;32(2):146–50
Molecular weight of tumor necrosis factor determined by gel permeation chromatography alone or in combination with low-angle laser light scattering. Yoshimura T, et al. Biochem Int 1988 Dec;17(6):1157–63
Tumour necrosis factor in B chronic lymphocytic leukaemia [letter] Hahn T, et al. Br J Haematol 1989 Feb;71(2):299
Detection of circulating tumour necrosis factor in systemic histiocytosis. Maury CP, et al. Br J Haematol 1989 Feb; 71(2):293–5
Temporal response of lipoprotein lipase-suppressing mediator and tumor necrosis factor in lipopolysaccharide -injected and -infused rats. Bagby GJ, et al. Circ Shock 1989 Aug; 28(4):385–94
Nonspecific reaction in the sandwich immunoassay for human tumor necrosis factor-alpha (hTNF-alpha). Abe Y, et al. Clin Chim Acta 1989 May 15;181(2):223–9
Cytokines in synovial fluid: II. The presence of tumour necrosis factor and interferon. Hopkins SJ, et al. Clin Exp Immunol 1988 Jul;73(1):88–92
Tumor necrosis factor [editorial] Abraham E. Crit Care Med 1989 Jun;17(6):590–1
Plasma tumor necrosis factor and mortality in critically ill septic patients. Debets JM, et al. Crit Care Med 1989 Jun; 17(6):489–94
Tumour necrosis factor in neonatal listeriosis: a case report. Girardin E, et al. Eur J Pediatr 1989 Jun;148(7):644–5
Tumor necrosis factor in peritoneal fluid of women undergoing laparoscopic surgery. Eisermann J, et al. Fertil Steril 1988 Oct;50(4):573–9
Tumor necrosis factor and HIV P24 antigen levels in serum of HIV-infected populations. Reddy MM, et al. J Acquir Immune Defic Syndr 1988;1(5):436–40
Transforming growth factor-beta 1: histochemical localization with antibodies to different epitopes. Flanders KC, et al. J Cell Biol 1989 Feb;108(2):653–60
Expression of transforming growth factor-beta 1 in specific cells and tissues of adult and neonatal mice. Thompson NL, et al. J Cell Biol 1989 Feb;108(2):661–9
Reversible subunit dissociation of tumor necrosis factor during hydrophobic interaction chromatography. Kunitani MG, et al. J Chromatogr 1988 Jun 29;443:205–20
Tumor necrosis factor identified in multiple sclerosis brain. Hofman FM, et al. J Exp Med 1989 Aug 1;170(2):607–12
A quick and simple method for the quantitation of lactate dehydrogenase release in measurements of cellular cytotoxicity and tumor necrosis factor (TNF) activity. Decker T, et al. J Immunol Methods 1988 Nov 25; 115(1):61–9
Assays for tumour necrosis factor and related cytokines. Meager A, et al. J Immunol Methods 1989 Jan 6;116(1):1–17 (119 ref.)
Tumor necrosis factor in leprosy patients. Silva CL, et al. J Infect Dis 1989 Apr;159(4):787–90
Circulating tumour necrosis factor-alpha (cachectin) in myocardial infarction. Maury CP, et al. J Intern Med 1989 May;225(5):333–6
Plasma tumor necrosis factor levels in patients with presumed sepsis. Results in those treated with antilipid A antibody vs placebo. de Groote MA, et al. JAMA 1989 Jul 14; 262(2):249–51
Cytolytic heterogeneity of polymorphonuclear leukocytes in killing of murine tumor cells. Yamazaki M, et al. Jpn J Cancer Res 1988 Nov;79(11):1217–23
Tumour necrosis factor in bronchopulmonary secretions of patients with adult respiratory distress syndrome. Millar AB, et al. Lancet 1989 Sep 23;2(8665):712–4
Monocyte TNF production in gastrointestinal cancer [letter] Zembala M, et al. Lancet 1988 Nov 26;2(8622):1262
Endogenous pyrogens. Dinarello CA. Methods Enzymol 1988;163:495–510
Systemic reaction to the anti-T-cell monoclonal antibody OKT3 in relation to serum levels of tumor necrosis factor and interferon-gamma [corrected] [letter] [published erratum appears in N Engl J Med 1989 Jul 6;321(1):63] Chatenoud L, et al. N Engl J Med 1989 May 25; 320(21):1420–1
Tumor necrosis factor and disease severity in children with falciparum malaria. Grau GE, et al. N Engl J Med 1989 Jun 15;320(24):1586–91
Characterization of the tumour necrosis factor receptor in human placenta. Eades DK, et al. Placenta 1988 May–Jun; 9(3):247–51
Identification and characterization of a membrane-bound cytotoxin of murine cytolytic lymphocytes that is related to tumor necrosis factor/cachectin. Liu CC, et al. Proc Natl Acad Sci U S A 1989 May;86(9):3286–90
The role of tumor necrosis factor/cachectin in septic shock. Debets JM, et al. Prog Clin Biol Res 1989;308:463–6
Serum proteins and cytokines for prediction of sepsis? Hammerle AF, et al. Prog Clin Biol Res 1989;308:715–8
[Tumor necrosis factor-alpha, interleukin 2 and IgG-BF III (CD 16). Evaluation of serum levels in gynecologic cancer (letter)] De Jaco PA, et al. Presse Med 1989 Jun 10; 18(23):1167–8 (Fre)

ANTAGONISTS & INHIBITORS

The effects of tumor necrosis factor and their selective inhibition by ibuprofen. Evans DA, et al. Ann Surg 1989 Mar;209(3):312–21
Protective effect of SK&F 86002, a novel dual inhibitor of arachidonic acid metabolism, in murine models of endotoxin shock: inhibition of tumor necrosis factor as a possible mechanism of action. Badger AM, et al. Circ Shock 1989 Jan;27(1):51–61
Involvement of a serine protease in tumour-necrosis-factor-mediated cytotoxicity. Suffys P, et al. Eur J Biochem 1988 Dec 1;178(1):257–65
Diphosphoryl lipid A from Rhodopseudomonas sphaeroides ATCC 17023 blocks induction of cachectin in macrophages by lipopolysaccharide. Takayama K, et al. Infect Immun 1989 Apr;57(4):1336–8
Purification and biologic characterization of a specific tumor necrosis factor alpha inhibitor. Seckinger P, et al. J Biol Chem 1989 Jul 15;264(20):11966–73
Differential inhibition of IL-1 and TNF-alpha mRNA expression by agents which block second messenger pathways in murine macrophages. Kovacs EJ, et al. J Immunol 1988 Nov 1;141(9):3101–5
Monoclonal antibody against interferon gamma can prevent experimental cerebral malaria and its associated overproduction of tumor necrosis factor. Grau GE, et al. Proc Natl Acad Sci U S A 1989 Jul;86(14):5572–4

BIOSYNTHESIS

Increased production of interferon gamma and tumor necrosis factor precedes clinical manifestation in multiple sclerosis: do cytokines trigger off exacerbations? Beck J, et al. Acta Neurol Scand 1988 Oct;78(4):318–23
Pharmacologic modulation of TNF production by endotoxin stimulated macrophages: in vitro and in vivo effects of auranofin and other chrysotherapeutic compounds. Evans GF, et al. Agents Actions 1989 Mar;26(3–4):329–34
Leukotrienes and macrophage activation: augmented cytotoxic activity and enhanced interleukin 1, tumor necrosis factor and hydrogen peroxide production. Gagnon L, et al. Agents Actions 1989 Jan;26(1–2):141–7
Tumor necrosis factor production during starvation. Vaisman N, et al. Am J Med 1989 Jul;87(1):115
Glomerular basement membrane-containing immune complexes stimulate tumor necrosis factor and interleukin-1 production by human monocytes. Vissers MC, et al. Am J Pathol 1989 Jan;134(1):1–6
Asbestos fibers and silica particles stimulate rat alveolar macrophages to release tumor necrosis factor. Autoregulatory role of leukotriene B4. Dubois CM, et al. Am Rev Respir Dis 1989 May;139(5):1257–64
Dyscoordinate expression of tumor necrosis factor-alpha by human blood monocytes and alveolar macrophages. Rich EA, et al. Am Rev Respir Dis 1989 Apr;139(4):1010–6
Multiple facets of induction of tumour necrosis. Bloksma N, et al. Ann Inst Pasteur Immunol 1988 May–Jun;139(3):294–9 (32 ref.)
Cachectin/TNF production in experimental burns and Pseudomonas infection. Marano MA, et al. Arch Surg 1988 Nov;123(11):1383–8
Cyclosporine A inhibits TNF production without decreasing TNF mRNA levels. Remick DG, et al. Biochem Biophys Res Commun 1989 Jun 15;161(2):551–5
Lipoxygenase inhibitors suppress formation of tumor necrosis factor in vitro and in vivo. Schade UF, et al. Biochem Biophys Res Commun 1989 Mar 15;159(2):748–54
Cellular and molecular regulation of tumor necrosis factor-alpha production by pentoxifylline. Strieter RM, et al. Biochem Biophys Res Commun 1988 Sep 30; 155(3):1230–6
Transforming growth factor-beta (TGF beta) is chemotactic for human monocytes and induces their expression of angiogenic activity. Wiseman DM, et al. Biochem Biophys Res Commun 1988 Dec 15;157(2):793–800
Production in Escherichia coli of human thymosin beta 4 as chimeric protein with human tumor necrosis factor. Tsuji Y, et al. Biochem Int 1989 Mar;18(3):501–8
High-level expression, purification, and characterization of recombinant human tumor necrosis factor synthesized in the methylotrophic yeast Pichia pastoris. Sreekrishna K, et al. Biochemistry 1989 May 2;28(9):4117–25
In vivo induction of gamma interferon and tumor necrosis factor by interleukin-2 infusion following intensive chemotherapy or autologous marrow transplantation. Heslop HE, et al. Blood 1989 Sep;74(4):1374–80
Production of interleukin-1 alpha, interleukin-1 beta and tumor necrosis factor by human mononuclear cells stimulated with granulocyte-macrophage colony-stimulating factor. Sisson SD, et al. Blood 1988 Oct; 72(4):1368–74
Induction of an endogenous tumor necrosis factor in mice by murine recombinant interferon-gamma combined with a lipid A subunit analog (GLA-60) of low toxicity. Saiki I, et al. Cancer Immunol Immunother 1989;29(2):101–8
Production of tumor necrosis factor in nude mice by muramyl

peptides associated with bacterial vaccines. Noso Y, et al. **Cancer Res** 1988 Oct 15;48(20):5766–9

Immunoregulation and production of tumor necrosis factor alpha by human thymocytes. Reem GH, et al. **Cancer Res** 1989 Jul 1;49(13):3568–73

Induction of interleukin-1 and tumor necrosis factor by 12-O-tetradecanoylphorbol-13-acetate in phorbol ester-sensitive (SENCAR) and resistant (B6C3F1) mice. Updyke LW, et al. **Carcinogenesis** 1989 Jun;10(6):1107–11

Tumor necrosis factor as a mediator of Mycoplasma orale-induced tumor cell lysis by macrophages. Gallily R, et al. **Cell Immunol** 1989 Jun;121(1):146–53

A flow cytometric and immunofluorescence microscopic study of tumor necrosis factor production and localization in human monocytes. Hofsli E, et al. **Cell Immunol** 1989 Sep;122(2):405–15

Characteristics of tumor necrosis factor production in rheumatoid arthritis. Yocum DE, et al. **Cell Immunol** 1989 Aug;122(1):131–45

Lipoarabinomannan from Mycobacterium tuberculosis induces the production of tumour necrosis factor from human and murine macrophages. Moreno C, et al. **Clin Exp Immunol** 1989 May;76(2):240–5

Production of tumour necrosis factor and interleukin 1 by monocytes of patients with previous Yersinia arthritis. Repo H, et al. **Clin Exp Immunol** 1988 Jun;72(3):410–4

Tumour necrosis factor (cachectin) production during experimental Chagas' disease. Tarleton RL. **Clin Exp Immunol** 1988 Aug;73(2):186–90

Measurement of immunoreactive interleukin-1 beta from human mononuclear cells: optimization of recovery, intrasubject consistency, and comparison with interleukin-1 alpha and tumor necrosis factor. Endres S, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):424–38

Purified blood monocytes from HIV 1-infected patients produce high levels of TNF alpha and IL-1. Roux-Lombard P, et al. **Clin Immunol Immunopathol** 1989 Mar;50(3):374–84

Mechaniams that regulate the production and effects of tumor necrosis factor-alpha. Kunkel SL, et al. **Crit Rev Immunol** 1989;9(2):93–117 (123 ref.)

Expression of tumor necrosis factor at a specific developmental stage of mouse embryos. Ohsawa T, et al. **Dev Biol** 1989 Oct;135(2):459–61

Assay of pyrogenic contamination in pharmaceuticals by cytokine release from monocytes. Poole S, et al. **Dev Biol Stand** 1988;69:121–3

Tumors producing human tumor necrosis factor induced hypercalcemia and osteoclastic bone resorption in nude mice. Johnson RA, et al. **Endocrinology** 1989 Mar; 124(3):1424–7

Tumor necrosis factor in experimental cancer regression with alphatocopherol, beta-carotene, canthaxanthin and algae extract. Shklar G, et al. **Eur J Cancer Clin Oncol** 1988 May;24(5):839–50

Monocytic production and plasma bioactivities of interleukin-1 and tumour necrosis factor in human cancer. Moldawer LL, et al. **Eur J Clin Invest** 1988 Oct; 18(5):486–92

Interleukin-1 and tumor necrosis factor production in acute non-lymphoid leukemia. Erroi A, et al. **Eur J Haematol** 1989 Jan;42(1):16–23

Human interleukin 6 and tumor necrosis factor alpha production studied at a single-cell level. Andersson U, et al. **Eur J Immunol** 1989 Jun;19(6):1157–60

Differential regulation of lipopolysaccharide-induced interleukin 1 and tumor necrosis factor synthesis: effects of endogenous and exogenous glucocorticoids and the role of the pituitary-adrenal axis. Zuckerman SH, et al. **Eur J Immunol** 1989 Feb;19(2):301–5

Increased tumor necrosis factor production by monocytes in alcoholic hepatitis. McClain CJ, et al. **Hepatology** 1989 Mar;9(3):349–51

Induction of tumor necrosis factor synthesis in human monocytes treated by transcriptional inhibitors. Voitenok NN, et al. **Immunol Lett** 1989 Jan 15;20(1):77–82

Control by IFN-gamma and PGE2 of TNF alpha and IL-1 production by human monocytes. Hart PH, et al. **Immunology** 1989 Mar;66(3):376–83

Regulation of tumour necrosis factor production by mouse peritoneal macrophages: the role of cellular cyclic AMP. Katakami Y, et al. **Immunology** 1988 Aug;64(4):719–24

Mechaniam of induction of endogenous tumor necrosis factor in ascites of ovarian cancer patients by OK-432, a streptococcal preparation. Mori H, et al. **Immunopharmacol Immunotoxicol** 1989;11(1):33–53

Toxic shock syndrome-associated staphylococcal and streptococcal pyrogenic toxins are potent inducers of tumor necrosis factor production. Fast DJ, et al. **Infect Immun** 1989 Jan;57(1):291–4

Optimal induction of tumor necrosis factor production in human monocytes requires complete S-form lipopolysaccharide. Männel DN, et al. **Infect Immun** 1989 Jul;57(7):1953–8

Production of interleukin-1 but not tumor necrosis factor by human monocytes stimulated with pneumococcal cell surface components. Riesenfeld-Orn I, et al. **Infect Immun** 1989 Jul;57(7):1890–3

Induction of tumor necrosis factor alpha by spherules of Coccidioides immitis. Slagle DC, et al. **Infect Immun** 1989 Jul;57(7):1916–21

Expression of tumor necrosis factor in vitro by human mononuclear phagocytes stimulated with whole Mycobacterium bovis BCG and mycobacterial antigens. Valone SE, et al. **Infect Immun** 1988 Dec;56(12):3313–5

Tumor necrosis factor alpha is a cytotoxin induced by murine Chlamydia trachomatis infection. Williams DM, et al. **Infect Immun** 1989 May;57(5):1351–5

Effect of platelet-activating factor on monocyte activation and production of tumor necrosis factor. Bonavida B, et al. **Int Arch Allergy Appl Immunol** 1989;88(1-2):157–60

Interleukin-1 and tumor necrosis factor production by tumor-associated mononuclear leukocytes and peripheral mononuclear leukocytes in cancer patients. Economou JS, et al. **Int J Cancer** 1988 Nov 15;42(5):712–4

Evidence for the tumor necrosis factor/cachectin production in cancer. Fine RM. **Int J Dermatol** 1988 Jul-Aug; 27(6):379–80

Temporal dependence of hyperthermic augmentation of macrophage-TNF production and tumor cell-TNF sensitization. Tomasovic SP, et al. **Int J Hyperthermia** 1989 Sep-Oct;5(5):625–39

High level expression of heterologous proteins in methylotrophic yeast Pichia pastoris. Sreekrishna K, et al. **J Basic Microbiol** 1988;28(4):265–78

Hyperthermic modulation of tumor necrosis factor-dependent monocyte/macrophage tumor cytotoxicity in vitro. Klostergaard J, et al. **J Biol Response Mod** 1989 Jun;8(3):262–77

Cachectin/tumor necrosis factor-alpha formation in human decidua. Potential role of cytokines in infection-induced preterm labor. Casey ML, et al. **J Clin Invest** 1989 Feb; 83(2):430–6

Endotoxin induction of tumor necrosis factor is enhanced by acid-labile interferon-alpha in acquired immunodeficiency syndrome. Lau AS, et al. **J Clin Invest** 1989 Sep;84(3):738–43

Production of tumor necrosis factor alpha and interleukin 1 beta by monocytic cells infected with human immunodeficiency virus. Molina JM, et al. **J Clin Invest** 1989 Sep;84(3):733–7

Production of tumor necrosis factor (TNF) by monocytes from cancer patients and healthy subjects induced by OK-432 in vitro, and its augmentation by human interferon gamma. Sekimoto M, et al. **J Clin Lab Immunol** 1988 Nov; 27(3):115–20

Glucocorticoid-mediated inhibition of endotoxin-induced intratumor tumor necrosis factor production and tumor hemorrhagic necrosis and regression. North RJ, et al. **J Exp Med** 1989 Sep 1;170(3):703–10

Production of tumor necrosis factor/cachectin by human B cell lines and tonsillar B cells. Sung SS, et al. **J Exp Med** 1988 Nov 1;168(5):1539–51

Modulation of cytokine production by transforming growth factor-beta. Chantry D, et al. **J Immunol** 1989 Jun 15; 142(12):4295–300

Reactive oxygen species facilitate the in vitro and in vivo lipopolysaccharide-induced release of tumor necrosis factor. Chaudhri G, et al. **J Immunol** 1989 Aug 15; 143(4):1290–4

Monokine production by hypersensitivity (Schistosoma mansoni egg) and foreign body (Sephadex bead)-type granuloma macrophages. Evidence for sequential production of IL-1 and tumor necrosis factor. Chensue SW, et al. **J Immunol** 1989 Feb 15;142(4):1281–6

Tumor targets stimulate IL-2 activated killer cells to produce interferon-gamma and tumor necrosis factor. Chong AS, et al. **J Immunol** 1989 Mar 15;142(6):2133–9

Tumor necrosis factor induction by Candida albicans from human natural killer cells and monocytes. Djeu JY, et al. **J Immunol** 1988 Dec 1;141(11):4047–52

Platelet-activating factor (PAF) enhances tumor necrosis factor production by alveolar macrophages. Prevention by PAF receptor antagonists and lipoxygenase inhibitors. Dubois C, et al. **J Immunol** 1989 Aug 1;143(3):964–70

Production of tumor necrosis factor by rIFN-gamma-primed C3H/HeJ (Lpsd) macrophages requires the presence of lipid A-associated proteins. Hogan MM, et al. **J Immunol** 1988 Dec 15;141(12):4196–202

Initial characterization of a lymphokine pathway for the immunologic induction of tumor necrosis factor-alpha release from human peripheral blood mononuclear cells. Kornbluth RS, et al. **J Immunol** 1988 Sep 15;141(6):2006–15

Limiting dilution analysis of TNF producing cells in C3H/HeJ mice. Lattime EC, et al. **J Immunol** 1988 Nov 15;141(10):3422–8

Tumor necrosis factor and lymphotoxin secretion by human natural killer cells leads to antiviral cytotoxicity. Paya CV, et al. **J Immunol** 1988 Sep 15;141(6):1989–95

Involvement of class II MHC molecules in the LPS-induction of IL-1/TNF secretions by human monocytes. Quantitative differences at the polymorphic level. Santamaria P, et al. **J Immunol** 1989 Aug 1; 143(3):913–22

Suppression of human leukocyte tumor necrosis factor secretion by the serine protease inhibitor p-toluenesulfonyl-L-arginine methyl ester (TAME). Scuderi P. **J Immunol** 1989 Jul 1;143(1):168–73

Demonstration of a novel tumor-killing factor secreted from human macrophage-monocyte hybridomas. Taniyama T, et al. **J Immunol** 1988 Dec 1;141(11):4061–6

A method for removing interleukin-1- and tumor necrosis factor-inducing substances from bacterial cultures by ultrafiltration with polysulfone. Schindler R, et al. **J Immunol Methods** 1989 Jan 17;116(2):159–65

Lipopolysaccharide (LPS)-reactive monoclonal antibodies fail to inhibit LPS-induced tumor necrosis factor secretion by mouse-derived macrophages. Chia JK, et al. **J Infect Dis** 1989 May;159(5):872–80

Amphotericin B induces tumor necrosis factor production by murine macrophages. Chia JK, et al. **J Infect Dis** 1989 Jan;159(1):113–6

Induction by toxic-shock-syndrome toxin-1 of a circulating tumor necrosis factor-like substance in rabbits and of immunoreactive tumor necrosis factor and interleukin-1 from human mononuclear cells. Ikejima T, et al. **J Infect Dis** 1988 Nov;158(5):1017–25

Production of tumor necrosis factor by human monocytes in response to toxic-shock-syndrome toxin-1. Parsonnet J, et al. **J Infect Dis** 1988 Nov;158(5):1026–33

Polymyxin B prevents lipopolysaccharide-induced release of tumor necrosis factor-alpha from alveolar macrophages. Stokes DC, et al. **J Infect Dis** 1989 Jul;160(1):52–7

Differential production of tumor necrosis factor, macrophage colony stimulating factor, and interleukin 1 by human alveolar macrophages. Becker S, et al. **J Leukoc Biol** 1989 Apr;45(4):353–61

Comparative study of cytotoxicity, tumor necrosis factor, and prostaglandin release after stimulation of rat Kupffer cells, murine Kupffer cells, and murine inflammatory liver macrophages. Decker T, et al. **J Leukoc Biol** 1989 Feb; 45(2):139–46

Downregulation of tumor necrosis factor expression in the human Mono-Mac-6 cell line by lipopolysaccharide. Haas JG, et al. **J Leukoc Biol** 1989 Jul;46(1):11–4

Activated Langerhans cells release tumor necrosis factor. Larrick JW, et al. **J Leukoc Biol** 1989 May;45(5):429–33

Newcastle disease virus as an antineoplastic agent: induction of tumor necrosis factor-alpha and augmentation of its cytotoxicity. Lorence RM, et al. **J Natl Cancer Inst** 1988 Oct 19;80(16):1305–12

Cachectin/tumor necrosis factor production by fetal and newborn rat hepatic macrophages. Silen ML, et al. **J Pediatr Surg** 1989 Jan;24(1):34–8; Discussion 38

Actinobacillus actinomycetemcomitans and Bacteroides gingivalis activate human peripheral monocytes to produce interleukin-1 and tumor necrosis factor. Lindemann RA, et al. **J Periodontol** 1988 Nov;59(11):728–30

Local induction of a tumor necrosis factor (TNF)-like cytotoxic factor in murine tissues with tumorous and nontumorous inflammation after systemic administration of antitumor polysaccharides. Takahashi K, et al. **J Pharmacobiodyn** 1988 Jul;11(7):472–8

Interleukin-1 and tumor necrosis factor alpha can be induced from mononuclear phagocytes by human immunodeficiency virus type 1 binding to the CD4 receptor. Merrill JE, et al. **J Virol** 1989 Oct;63(10):4404–8

Production of tumor necrosis factor by rat mesangial cells in response to bacterial lipopolysaccharide. Baud L, et al. **Kidney Int** 1989 May;35(5):1111–8

Production of human tumor necrosis factor from whole blood ex vivo. Desch CE, et al. **Lymphokine Res** 1989 Summer; 8(2):141–6

Interleukin 1 and tumor necrosis factor: studies on the induction by lipopolysaccharide partial structures. Flad HD, et al. **Lymphokine Res** 1989 Fall;8(3):235–8

Lipoxygenase inhibitors suppress formation of tumor necrosis factor in vitro and in vivo. Schade UF, et al. **Lymphokine Res** 1989 Fall;8(3):245–50

n-3 polyunsaturated fatty acids, interleukin-1, and tumor necrosis factor [letter; comment] **N Engl J Med** 1989 Jul 6;321(1):55–6, **Comment on:** N Engl J Med 1989 Feb 2;320(5):265–71

The effect of dietary supplementation with n-3 polyunsaturated fatty acids on the synthesis of interleukin-1 and tumor necrosis factor by mononuclear cells. Endres S, et al. **N Engl J Med** 1989 Feb 2;320(5):265–71

Autocrine or paracrine models of cytokine production and utilization in B-cell chronic lymphocytic leukaemia. Foa R, et al. **Nouv Rev Fr Hematol** 1988;30(5-6):339–41 (10 ref.)

Potential antiinflammatory effects of interleukin 4: suppression of human monocyte tumor necrosis factor alpha, interleukin 1, and prostaglandin E2. Hart PH, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3803–7

Production of tumor necrosis factor and other cytokines by astrocytes stimulated with lipopolysaccharide or a neurotropic virus. Lieberman AP, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6348–52

Identity of human B-cell line cytotoxic lymphokine with tumor necrosis factor type beta. Yamanaka HI, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1343–7

Production of a factor (CIF) from normal fibroblast cells inhibiting tumor necrosis factor/cachectin production. Gifford GE, et al. **Proc Soc Exp Biol Med** 1989 Sep; 191(4):391–5

Peroxidases enhance macrophage-mediated cytotoxicity via induction of tumor necrosis factor. Lefkowitz DL, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):144–9

The involvement of platelet-activating factor (PAF)-induced monocyte activation and tumor necrosis factor (TNF) production in shock. Bonavida B, et al. **Prog Clin Biol Res** 1989;308:485–9

Tumor necrosis factor release by pulmonary alveolar macrophages. Spatafora M, et al. **Respiration** 1988;54 Suppl 1:73–7

Association between HLA-DR2 and production of tumour necrosis factor alpha and interleukin I by mononuclear cells activated by lipopolysaccharide. Bendtzen K, et al. **Scand J Immunol** 1988 Nov;28(5):599–606

Evidence that tumour necrosis factor (TNF) is not constitutively present in vivo. The association of TNF with freshly isolated monocytes reflects a rapid in vitro production. Hofsli E, et al. **Scand J Immunol** 1988 Oct; 28(4):435–41

Defective phagocytosis, decreased tumour necrosis factor-alpha production, and lymphocyte hyporesponsiveness predispose patients with systemic lupus erythematosus to infections. Yu CL, et al. **Scand J Rheumatol** 1989;18(2):97–105

The production of tumor necrosis factor-alpha by rat basophilic leukemia cells with triggering IgE receptor. Ohno I, et al. **Tohoku J Exp Med** 1988 Oct;156(2):209–10

Assessment of production of tumor necrosis factor alpha under the influence of immunosuppressive drugs. Dupont E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):70–1

[Transcatheter arterial embolization with hepatic arterial induction of endogenous TNF in hepatocellular carcinoma] Takekoshi H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2845–8 (Eng. Abstr.) **(Jpn)**

[Spontaneous and induced production of the tumor necrosis factor by the blood cells of newborn infants] Van'ko LV, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):222–3 (Eng. Abstr.) **(Rus)**

[The use of retrovirus vectors for the expression of chromosomal genes within introns: synthesis of biologically active tumor necrosis factor—human beta (lymphotoxin)] Prasolov VS, et al. **Dokl Akad Nauk SSSR** 1988; 300(6):1498–502 **(Rus)**

BLOOD

Acute alcohol infusion suppresses endotoxin-induced serum tumor necrosis factor. D'Souza NB, et al. **Alcoholism (NY)** 1989 Apr;13(2):295–8

Extensive bone marrow necrosis in patients with cancer and tumor necrosis factor activity in plasma. Knupp C, et al. **Am J Hematol** 1988 Dec;29(4):215–21

Elevated tumor necrosis factor alpha and interleukin-6 serum levels as markers for complicated Plasmodium falciparum malaria. Kern P, et al. **Am J Med** 1989 Aug;87(2):139–43

Tumor necrosis factor and obesity [letter] Chollet-Martin S, et al. **Ann Intern Med** 1989 Apr 15;110(8):666–7

The role of cachectin/TNF in the pathogenesis of tuberculosis. Silva CL, et al. **Braz J Med Biol Res** 1988; 21(3):489–92

Influence of blood-collecting systems on concentrations of tumor necrosis factor in serum and plasma. Leroux-Roels G, et al. **Clin Chem** 1988 Nov;34(11):2373–4

Enzyme-linked immunosorbent assay (ELISA) for human tumor necrosis factor (hTNF). Abe Y, et al. **Clin Chim Acta** 1988 Aug 31;176(2):213–7

Effect of chemical modification at C1 of the glucosamine backbone of lipid A-subunit analog GLA-27 on manifestation of immunopharmacological activity. Kumazawa Y, et al. **FEBS Lett** 1988 Oct 24;239(1):117–20

Regulation of serum tumor necrosis factor in glucocorticoid-sensitive and -resistant rodent endotoxin shock models. Zuckerman SH, et al. **Infect Immun** 1989 Oct;57(10):3009–13

The complex pattern of cytokines in serum from patients with meningococcal septic shock. Association between interleukin 6, interleukin 1, and fatal outcome. Waage A, et al. **J Exp Med** 1989 Jan 1;169(1):333–8

Elevated circulating tumor necrosis factor-alpha in patients with Kawasaki disease. Maury CP, et al. **J Lab Clin Med** 1989 May;113(5):651–4

Release of tumor necrosis factor, interleukin-2, and gamma-interferon in serum after injection of OKT3 monoclonal antibody in kidney transplant recipients. Abramowicz D, et al. **Transplantation** 1989 Apr;47(4):606–8

CEREBROSPINAL FLUID

Tumor necrosis factor alpha (TNF alpha) and neurological diseases. Failure in detecting TNF alpha in the cerebrospinal fluid from patients with multiple sclerosis, AIDS dementia complex, and brain tumours. Gallo P, et al. **J Neuroimmunol** 1989 Jun;23(1):41–4

Correlation of interleukin-1 beta and cachectin concentrations in cerebrospinal fluid and outcome from bacterial meningitis. Mustafa MM, et al. **J Pediatr** 1989 Aug;115(2):208–13

Cerebrospinal fluid interleukin 1-beta and tumor necrosis factor concentrations and outcome from neonatal gram-negative enteric bacillary meningitis. McCracken GH Jr, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):155–9

DRUG EFFECTS

Interleukin-2-induced tumor necrosis factor-alpha (TNF-alpha) gene expression in human alveolar macrophages and blood monocytes. Strieter RM, et al. **Am Rev Respir Dis** 1989 Feb;139(2):335–42

GENETICS

Endotoxin-induced cytokine gene expression in vivo. I. Expression of tumor necrosis factor mRNA in visceral organs under physiologic conditions and during endotoxemia. Ulich TR, et al. **Am J Pathol** 1989 Jan; 134(1):11–4

Differential expression of the tumor necrosis factor/cachectin gene by blood and lung mononuclear phagocytes. Martinet Y, et al. **Am Rev Respir Dis** 1988 Sep;138(3):659–65

Regulation of tumor necrosis factor expression in a macrophage-like cell line by lipopolysaccharide and cyclic AMP. Taffet SM, et al. **Cell Immunol** 1989 May; 120(2):291–300

Interleukin-1 and tumour necrosis factor mRNA expression in rheumatoid arthritis: prolonged production of IL-1 alpha. Buchan G, et al. **Clin Exp Immunol** 1988 Sep; 73(3):449–55

Interferon-gamma activates multiple pathways to regulate the expression of the genes for major histocompatibility class II I-A beta, tumor necrosis factor and complement component C3 in mouse macrophages. Celada A, et al. **Eur J Immunol** 1989 Jun;19(6):1103–9

Molecular control of tissue-specific expression at the mouse TNF locus. Jongeneel CV, et al. **Eur J Immunol** 1989 Mar; 19(3):549–52

The abnormal T lymphocytes in lpr mice transcribe interferon-gamma and tumor necrosis factor-alpha genes spontaneously in vivo. Murray L, et al. **Eur J Immunol** 1989 Mar;19(3):563–5

Dynamics of dibutyryl cyclic AMP- and prostaglandin E2-mediated suppression of lipopolysaccharide-induced tumor necrosis factor alpha gene expression. Spengler RN, et al. **Infect Immun** 1989 Sep;57(9):2837–41

Alternative cleavage of the cachectin/tumor necrosis factor propeptide results in a larger, inactive form of secreted protein. Cseh K, et al. **J Biol Chem** 1989 Sep 25; 264(27):16256–60

Genetic analysis of the human tumor necrosis factor alpha/cachectin promoter region in a macrophage cell line. Economou JS, et al. **J Exp Med** 1989 Jul 1;170(1):321–6

Increased tumor necrosis factor and IL-1 beta gene expression in the kidneys of mice with lupus nephritis. Boswell JM, et al. **J Immunol** 1988 Nov 1;141(9):3050–4

IL-4 down-regulates IL-1 and TNF gene expression in human monocytes. Essner R, et al. **J Immunol** 1989 Jun 1;142(11):3857–61

Modulation of tumor necrosis factor-alpha gene expression. Desensitization of prostaglandin E2-induced suppression. Spengler RN, et al. **J Immunol** 1989 Jun 15;142(12):4346–50

Genes for IFN-beta-2 (IL-6), tumor necrosis factor, and IL-1 are expressed at high levels in the organs of normal individuals. Tovey MG, et al. **J Immunol** 1988 Nov 1; 141(9):3106–10

Induction of interferon-gamma and tumor necrosis factor by Legionella pneumophila: augmentation of human neutrophil bactericidal activity. Blanchard DK, et al. **J Leukoc Biol** 1989 Jun;45(6):538–45

Pneumopathies of the graft-versus-host reaction. Alveolitis associated with an increased level of tumor necrosis factor mRNA and chronic interstitial pneumonitis. Piguet PF, et al. **Lab Invest** 1989 Jul;61(1):37–45

In vivo dynamics of murine tumor necrosis factor-alpha gene expression. Kinetics of dexamethasone-induced suppression. Remick DG, et al. **Lab Invest** 1989 Jun; 60(6):766–71

In situ hybridization analysis of macrophage-derived tumor necrosis factor and interleukin-1 mRNA. Remick DG, et al. **Lab Invest** 1988 Dec;59(6):809–16

Enhanced transcription of TNF in systemic vasculitis [letter] Deguchi Y, et al. **Lancet** 1989 Sep 23;2(8665):745–6

Detection of tumor necrosis factor gene expression at a cellular level in human acute myeloid leukemias. Wakamiya N, et al. **Leukemia** 1989 Jan;3(1):51–6

PMA-responsive 5' flanking sequences of the human TNF gene. Hensel G, et al. **Lymphokine Res** 1989 Fall; 8(3):347–51

Cloning of genomic DNA for tumor necrosis factor and efficient expression in CHO cells. Korn JH, et al. **Lymphokine Res** 1988 Winter;7(4):349–58

Role of arachidonic acid metabolism in transcriptional induction of tumor necrosis factor gene expression by phorbol ester. Horiguchi J, et al. **Mol Cell Biol** 1989 Jan; 9(1):252–8

Induction of tumor necrosis factor-alpha and -beta and interferon-gamma mRNA by interleukin 2 in murine lymphocytic cell lines. Weil D, et al. **Oncogene Res** 1988; 3(4):409–14

Regulation of tumor necrosis factor gene expression in colorectal adenocarcinoma: in vivo analysis by in situ hybridization. Beissert S, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5064–8

Coordinate viral induction of tumor necrosis factor alpha and interferon beta in human B cells and monocytes. Goldfeld AE, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1490–4

Chemical synthesis, expression and product assessment of a gene coding for biologically active human tumour necrosis factor alpha. Ashman K, et al. **Protein Eng** 1989 Jan; 2(5):387–91

Histidine-15: an important role in the cytotoxic activity of human tumor necrosis factor. Yamamoto R, et al. **Protein Eng** 1989 May;2(7):553–8

NcoI restriction fragment length polymorphism (RFLP) of the tumour necrosis factor (TNF alpha) region in primary biliary cirrhosis and in healthy Danes. Fugger L, et al. **Scand J Immunol** 1989 Aug;30(2):185–9

Low degree of DNA polymorphism in the HLA-linked lymphotoxin (tumour necrosis factor beta) gene. Partanen J, et al. **Scand J Immunol** 1988 Sep;28(3):313–6

Mapping of prolactin and tumor necrosis factor-beta genes on human chromosome 6p using lymphoblastoid cell deletion mutants. Evans AM, et al. **Somat Cell Mol Genet** 1989 May;15(3):203–13

[Expression in Escherichia coli of DNA coding for human tumor necrosis factor] Dobrynin VN, et al. **Bioorg Khim** 1988 Nov;14(11):1530–7 (Eng. Abstr.) **(Rus)**

HISTORY

Journal of the National Cancer Institute, Vol. 29, 1962: Action of bacterial polysaccharide on tumors. II. Damage of sarcoma 37 by serum of mice treated with Serratia marcescens polysaccharide, and induced tolerance [classical article] O'Malley WE, et al. **Nutr Rev** 1988 Nov; 46(11):389–91

IMMUNOLOGY

Relationship between interleukin 1 (IL1), tumor necrosis factor (TNF) and a neutrophil attracting peptide (NAP-1). Oppenheim JJ, et al. **Agents Actions** 1989 Jan; 26(1-2):134–40

Protein synthesis dependent and independent mechanisms of neutrophil emigration. Different mechanisms of inflammation in rabbits induced by interleukin-1, tumor necrosis factor alpha or endotoxin versus leukocyte chemoattractants. Cybulsky MI, et al. **Am J Pathol** 1989 Jul;135(1):227–37

Warner-Lambert/Parke-Davis award lecture. Cytokine-mediated activation of vascular endothelium. Physiology and pathology. Pober JS. **Am J Pathol** 1988 Dec;133(3):426–33 (36 ref.)

Immune mediators increase adherence of T-lymphocytes to human lung fibroblasts. Hampson F, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C336–40

The balance of useful and harmful effects of TNF, with special reference to malaria. Clark IA, et al. **Ann Inst Pasteur Immunol** 1988 May-Jun;139(3):305–6

The presence of antibodies to lymphotoxin and tumor necrosis factor in normal serum. Jeffes EW 3d, et al. **Arthritis Rheum** 1989 Sep;32(9):1148–52

Tumour necrosis factor and bacterial sepsis. Michie HR, et al. **Br J Surg** 1989 Jul;76(7):670–1 (23 ref.)

Tumor necrosis factor-mediated cytotoxicity by tumor-associated macrophages. Wilson KM, et al. **Cell Immunol** 1989 Oct 1;123(1):158–65

The involvement of tumor necrosis factor-alpha (TNF-alpha) in immunomodulation and in septic shock. Espevik T, et al. **Dev Biol Stand** 1988;69:139–42

Anticachectin/tumor necrosis factor-alpha antibodies attenuate development of cachexia in tumor models. Sherry BA, et al. **FASEB J** 1989 Jun;3(8):1956–62

Interleukin 1, interleukin 6 and tumor necrosis factor in infection, inflammation and immunity. Bendtzen K. **Immunol Lett** 1988 Nov;19(3):183–91 (38 ref.)

Analysis of endotoxin fever in rabbits by using a monoclonal antibody to tumor necrosis factor (cachectin). Kawasaki H, et al. **Infect Immun** 1989 Oct;57(10):3131–5

Passive immunization against tumor necrosis factor partially abrogates interleukin 2 toxicity. Fraker DL, et al. **J Exp Med** 1989 Sep 1;170(3):1015–20

Liposome-associated tumor necrosis factor retains bioactivity in the presence of neutralizing anti-tumor necrosis factor antibodies. Debs RJ, et al. **J Immunol** 1989 Aug 15; 143(4):1192–7

Generation and characterization of hamster monoclonal antibodies that neutralize murine tumor necrosis factors. Sheehan KC, et al. **J Immunol** 1989 Jun 1;142(11):3884–93

The TNF receptor in TNF-mediated cytotoxicity. Kull FC Jr. **Nat Immun Cell Growth Regul** 1988;7(5-6):254–65 (49 ref.)

Involvement of tumor necrosis factor in cytotoxicity mediated by human monocytes. Nissen-Meyer J, et al. **Nat Immun Cell Growth Regul** 1988;7(5–6):266–79

Tumor necrosis factor in human monocyte-mediated antitumor cytotoxicity. Ziegler-Heitbrock HW, et al. **Nat Immun Cell Growth Regul** 1988;7(5–6):280–6

Auto-antibodies to tumour necrosis factor alpha in healthy humans and patients with inflammatory diseases and gram-negative bacterial infections. Fomsgaard A, et al. **Scand J Immunol** 1989 Aug;30(2):219–23

The mediators of inflammation (interleukin 1, interferon-tau, and tumor necrosis factor) and their relevance to rejection. Halloran PF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):26–30 (43 ref.)

Time-dependent regulation of MHC class II antigens on capillary endothelium by TNF. Leeuwenberg JF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):78–9

Prevention of the graft-versus-host reaction in newborn mice by antibodies to tumor necrosis factor-alpha. Shalaby MR, et al. **Transplantation** 1989 Jun;47(6):1057–61

[Use of neutralizing antibodies against tumor necrosis factor for determining the activity of colony-stimulating hematopoietic factors in cultures containing macrophages] Paniutich AV, et al. **Gematol Transfuziol** 1988 Dec; 33(12):21–5 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Purification of guinea pig tumor necrosis factor (TNF): comparison of its antiproliferative and differentiative activities for myeloid leukemic cell lines with those of recombinant human TNF. Tamatani T, et al. **J Biochem (Tokyo)** 1989 Jan;105(1):55–60

METABOLISM

Tumor necrosis factor in malaria–induced abortion. Clark IA, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):246–9

Spontaneous and stimulated release of tumor necrosis factor–alpha (TNF) from blood monocytes of miners with coal workers' pneumoconiosis. Borm PJ, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1589–94

Recombinant human tumor necrosis factor increases granulocyte cell–surface complement receptor number. Reed D, et al. **Arch Surg** 1988 Nov;123(11):1333–6

Differential biologic effects resulting from bimodal binding of recombinant human tumor necrosis factor to myeloid leukemia cells. Ishikura H, et al. **Blood** 1989 Feb; 73(2):419–24

Tumour necrosis factor activity in joint fluids from rheumatoid arthritis patients. Neale ML, et al. **Br J Rheumatol** 1989 Apr;28(2):104–8

Production of tumor necrosis factor–alpha by microglia and astrocytes in culture. Sawada M, et al. **Brain Res** 1989 Jul 10;491(2):394–7

Lung compartmentalization of increased TNF releasing ability by mononuclear phagocytes in pulmonary sarcoidosis. Spatafora M, et al. **Chest** 1989 Sep;96(3):542–9

Interleukin–2 and interferon–gamma recruit different subsets of human peripheral blood monocytes to secrete interleukin–1 beta and tumour necrosis factor–alpha. Herrmann F, et al. **Clin Exp Immunol** 1989 Jul;77(1):97–100

Isolation and characterization of a tumor necrosis factor binding protein from urine. Olsson I, et al. **Eur J Haematol** 1989 Mar;42(3):270–5

A tumor necrosis factor binding protein is present in human biological fluids. Peetre C, et al. **Eur J Haematol** 1988 Nov; 41(5):414–9

Bradykinin stimulates tumor necrosis factor and interleukin–1 release from macrophages. Tiffany CW, et al. **FEBS Lett** 1989 Apr 24;247(2):189–92

Potential role of tumor necrosis factor (TNF) in an experimental model of massive liver necrosis. Ohnishi H, et al. **Gastroenterol Jpn** 1989 Feb;24(1):83

Bile acids inhibit endotoxin–induced release of tumor necrosis factor by monocytes: an in vitro study. Greve JW, et al. **Hepatology** 1989 Oct;10(4):454–8

Selective inhibition of interleukin 2 but not of interferon–gamma, tumour necrosis factor–alpha or granulocyte/macrophage colony stimulating factor secretion by human helper T cell clones after antigen–driven tolerisation. Pawelec G, et al. **Immunol Lett** 1989 Feb;20(3):187–91

Soluble malarial antigens are toxic and induce the production of tumour necrosis factor in vivo. Bate CA, et al. **Immunology** 1989 Apr;66(4):600–5

Tumour necrosis factor production by IL–2–activated macrophages in vitro and in vivo. Economou JS, et al. **Immunology** 1989 Aug;67(4):514–9

Natural cytotoxic activity is not necessarily mediated by the release of tumour necrosis factor. Patek PQ, et al. **Immunology** 1989 Aug;67(4):509–13

Presence of tumour necrosis factor or a related factor in human basophil/mast cells. Steffen M, et al. **Immunology** 1989 Mar;66(3):445–50

Synovial localization of tumor necrosis factor in patients with rheumatoid arthritis. Husby G, et al. **J Autoimmun** 1988 Aug;1(4):363–71

Selective degradation of tumor necrosis factor in sensitive cells, and production of membrane–active substance. Ohsawa F, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):730–4

Binding, internalization, and intracellular processing of proteins interacting with recycling receptors. A kinetic analysis. Bajzer Z, et al. **J Biol Chem** 1989 Aug 15; 264(23):13623–31

Alternative cleavage of the cachectin/tumor necrosis factor propeptide results in a larger, inactive form of secreted protein. Cseh K, et al. **J Biol Chem** 1989 Sep 25; 264(27):16256–60

Macrophages rapidly internalize their tumor necrosis factor receptors in response to bacterial lipopolysaccharide. Ding AH, et al. **J Biol Chem** 1989 Mar 5;264(7):3924–9

Two different cell types have different major receptors for human tumor necrosis factor (TNF alpha). Hohmann HP, et al. **J Biol Chem** 1989 Sep 5;264(25):14927–34

Multimeric structure of the tumor necrosis factor receptor of HeLa cells. Smith RA, et al. **J Biol Chem** 1989 Sep 5;264(25):14646–52

Characterization and affinity cross–linking of receptors for human recombinant lymphotoxin (tumor necrosis factor–beta) on a human histiocytic lymphoma cell line, U–937. Stauber GB, et al. **J Biol Chem** 1989 Feb 25; 264(6):3573–6

Antagonistic control of tumor necrosis factor receptors by protein kinases A and C. Enhancement of TNF receptor synthesis by protein kinase A and transmodulation of receptors by protein kinase C. Scheurich P, et al. **J Exp Med** 1989 Sep 1;170(3):947–58

Macrophage activation by granulocyte/macrophage colony–stimulating factor. Priming for enhanced release of tumor necrosis factor–alpha and prostaglandin E2. Heidenreich S, et al. **J Immunol** 1989 Aug 15; 143(4):1198–205

Endocytic pathway of recombinant murine tumor necrosis factor in L–929 cells. Mosselmans R, et al. **J Immunol** 1988 Nov 1;141(9):3096–100

Regulation of IL–1 and TNF–alpha expression during the differentiation of bone marrow derived macrophage. Myers MJ, et al. **J Immunol** 1989 Jan 1;142(1):153–60

Regulation of lymphocyte tumor necrosis factor receptors by IL–2. Owen–Schaub LB, et al. **J Immunol** 1989 Oct 1;143(7):2236–41

Release of tumor necrosis factor–alpha from macrophages. Enhancement and suppression are dose–dependently regulated by prostaglandin E2 and cyclic nucleotides. Renz H, et al. **J Immunol** 1988 Oct 1;141(7):2388–93

Endotoxin–macrophage interaction: post–translational regulation of tumor necrosis factor expression. Zuckerman SH, et al. **J Immunol** 1989 Aug 15;143(4):1223–7

The effects of acute and chronic alcoholism on tumor necrosis factor and the inflammatory response. Nelson S, et al. **J Infect Dis** 1989 Sep;160(3):422–9

Regulation of monokine gene expression: prostaglandin E2 suppresses tumor necrosis factor but not interleukin–1 alpha or beta–mRNA and cell–associated bioactivity. Scales WE, et al. **J Leukoc Biol** 1989 May;45(5):416–21

Hematologic interactions of endotoxin, tumor necrosis factor alpha (TNF alpha), interleukin 1, and adrenal hormones and the hematologic effects of TNF alpha in Corynebacterium parvum–primed rats. Ulich TR, et al. **J Leukoc Biol** 1989 Jun;45(6):546–57

Altered macrophage activity and tumor necrosis factor: tumor necrosis and host cachexia. Stovroff MC, et al. **J Surg Res** 1989 May;46(5):462–9

Invited comment: monokine metabolism in the septic syndrome. Long CL. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):78S–81S (14 ref.)

Alcohol suppresses lipopolysaccharide–induced tumor necrosis factor activity in serum and lung. Nelson S, et al. **Life Sci** 1989;44(10):673–6

The relationship of receptor occupancy to the kinetics of cell death mediated by tumor necrosis factor. Coffman FD, et al. **Lymphokine Res** 1988 Winter;7(4):371–83

Production of lymphotoxin and tumor necrosis factor by human neonatal mononuclear cells. English BK, et al. **Pediatr Res** 1988 Dec;24(6):717–22

Possible roles for oxidants, through tumor necrosis factor, in malarial anemia. Clark IA, et al. **Prog Clin Biol Res** 1989;313:73–82

Production of tumour necrosis factor–alpha, interferon–gamma and interleukin–2 by peripheral blood mononuclear cells of subjects suffering from rheumatoid arthritis. Franchimont P, et al. **Scand J Rheumatol** 1988; 17(3):203–12

[Peripheral blood monocyte/macrophages among mononuclear cells and serum tumor necrosis factor in patients with Kawasaki disease] Matsubara T. **Arerugi** 1988 Jul;37(7):454–60 (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

Tumor necrosis factor–enhanced leukotriene B4 generation and chemotaxis in human neutrophils. Meyer JD, et al. **Arch Surg** 1988 Dec;123(12):1454–8

Renal catabolism of interferons, interleukins 1 and 2 and tumor necrosis factor. Bocci V. **Contrib Nephrol** 1988; 68:53–7

Tumor necrosis factor and human hematopoiesis: I. Kinetics and diversity of human bone marrow cell response to recombinant tumor necrosis factor alpha in short–term suspension cultures in vitro. Beran M, et al. **Hematol Pathol** 1988;2(1):31–42

Tumor necrosis factor alpha and interleukin–1 stimulate bone resorption in vivo as measured by urinary [3H]tetracycline excretion from prelabeled mice. König A, et al. **J Bone Miner Res** 1988 Dec;3(6):621–7

Effect of tumor necrosis factor (TNF) on lipid metabolism in the diabetic rat. Evidence that inhibition of adipose tissue lipoprotein lipase activity is not required for TNF–induced hyperlipidemia. Feingold KR, et al. **J Clin Invest** 1989 Apr; 83(4):1116–21

Lymphatic transport of recombinant human tumor necrosis factor in rats. Kojima K, et al. **J Pharmacobiodyn** 1988 Oct;11(10):700–6

PHARMACOLOGY

Interleukin–1 induced impairment in pancreatic islet oxidative metabolism of glucose is potentiated by tumor necrosis factor. Eizirik DL. **Acta Endocrinol (Copenh)** 1988 Nov; 119(3):321–5

Antitumor effect of natural human tumor necrosis factor–beta against Lewis lung carcinoma in mice and its synergistic potentiation by interferon. Nishiyama Y, et al. **Acta Med Okayama** 1989 Feb;43(1):17–27

Enhancement of HIV replication and giant cell formation by tumor necrosis factor. Matsuyama T, et al. **AIDS Res Hum Retroviruses** 1989 Apr;5(2):139–46

Augmentation of human immunodeficiency virus type 1 gene expression by tumor necrosis factor alpha. Okamoto T, et al. **AIDS Res Hum Retroviruses** 1989 Apr;5(2):131–8

Tumor necrosis factor induces glomerular damage in the rabbit. Bertani T, et al. **Am J Pathol** 1989 Feb;134(2):419–30

Endothelial cell activation induced by tumor necrosis factor and lymphotoxin. Cavender DE, et al. **Am J Pathol** 1989 Mar;134(3):551–60

Tumor necrosis factor and interferon–gamma induce distinct patterns of endothelial activation and associated leukocyte accumulation in skin of Papio anubis. Munro JM, et al. **Am J Pathol** 1989 Jul;135(1):121–33

Ocular inflammatory effects of intravitreally–injected tumor necrosis factor. Rosenbaum JT, et al. **Am J Pathol** 1988 Oct;133(1):47–53

Interleukin–1 alpha and tumor necrosis factor alpha cause placental injury in the rat. Silen ML, et al. **Am J Pathol** 1989 Aug;135(2):239–44

The hematologic effects of chronic administration of the monokines tumor necrosis factor, interleukin–1, and granulocyte–colony stimulating factor on bone marrow and circulation. Ulich TR, et al. **Am J Pathol** 1989 Jan; 134(1):149–59

Modulation of fibronectin production in normal human melanocytes and malignant melanoma cells by interferon–gamma and tumor necrosis factor–alpha. Varani J, et al. **Am J Pathol** 1989 Apr;134(4):827–36

Anti–EDRF effect of tumor necrosis factor in isolated, perfused cat carotid arteries. Aoki N, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1509–12

Characteristics of fever and acute–phase response induced in rabbits by IL–1 and TNF. Morimoto A, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R35–41

Role of interleukin 1 and tumor necrosis factor on energy metabolism in rabbits. Tredget EE, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E760–8

Tumor necrosis factor interacts with interleukin–1 and interferons to inhibit fibroblast proliferation via fibroblast prostaglandin–dependent and –independent mechanisms. Elias JA. **Am Rev Respir Dis** 1988 Sep;138(3):652–8

Tumor necrosis factor causes increased pulmonary permeability and edema. Comparison to septic acute lung injury. Stephens KE, et al. **Am Rev Respir Dis** 1988 Jun; 137(6):1364–70

Gastric effects of cytokines [letter] Evans RD. **Anaesthesia** 1989 Jun;44(6):518

Necrotizing activity of tumour necrosis factor and its mechanism. Haranaka K, et al. **Ann Inst Pasteur Immunol** 1988 May–Jun;139(3):288–94 (15 ref.)

The anti–cancer activity of tumour necrosis factor. Malik S, et al. **Ann Inst Pasteur Immunol** 1988 May–Jun; 139(3):285–8 (23 ref.)

In vivo anti–tumour activity of recombinant human tumour necrosis factor–alpha against Meth–A sarcoma requires L3T4–positive T cells. Palladino MA, et al. **Ann Inst Pasteur Immunol** 1988 May–Jun;139(3):299–301

Effects of TNF in bacterial infections. Parant M. **Ann Inst Pasteur Immunol** 1988 May–Jun;139(3):301–4 (16 ref.)

TNF as an activator of vascular endothelium. Pober JS. **Ann Inst Pasteur Immunol** 1988 May–Jun;139(3):317–23 (34 ref.)

Mechanisms and significance of the mitogenic and antiviral actions of TNF. Vilcek J, et al. **Ann Inst Pasteur Immunol** 1988 May–Jun;139(3):307–11 (31 ref.)

Sensitizing effects and mechanisms of desensitization in regulation of the in vivo response to TNF. Wallach D, et al. **Ann Inst Pasteur Immunol** 1988 May–Jun;139(3):323–7 (26 ref.)

Tumor necrosis factor induces expression of MHC class I antigens on mouse astrocytes. Lavi E, et al. **Ann N Y Acad Sci** 1988;540:488–90

Synergism of prostaglandin E2 plus TNF in induction of differentiation of human monocytoid leukemic U–937 cells. Hosoi T, et al. **Anticancer Res** 1989 May–Jun;9(3):615–8

TNF in combination with interferon–gamma is cytotoxic to normal, untransformed mouse and rat embryo fibroblast–like cells. Suffys P, et al. **Anticancer Res** 1989 Jan–Feb;9(1):167–71

Activities of amikacin, roxithromycin, and azithromycin alone or in combination with tumor necrosis factor against Mycobacterium avium complex. Bermudez LE, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1149–53

Studies on the in vitro biological activities of recombinant bovine tumor necrosis factor (rBoTNF) alpha. I. Synergistic antiviral efficacy of rBoTNF alpha, recombinant bovine interferon gamma (rBoIFN gamma) and their combination. Campos M, et al. **Antiviral Res** 1988 Nov;10(1–3):71–81

Synergy of antiviral actions of TNF and IFN–gamma: evidence for a major role of TNF–induced IFN–beta. Hughes TK, et al. **Antiviral Res** 1988 Nov;10(1–3):1–9

The in vitro antiviral activity of tumor necrosis factor (TNF) in WISH cells is mediated by IFN–beta induction. Ruggiero V, et al. **Antiviral Res** 1989 Mar;11(2):77–88

Effects of interferon–gamma and tumor necrosis factor–alpha on clonogenic growth of cell lines and primary cultures from human gliomas and brain metastases. Helseth E, et al. **APMIS** 1989 Jun;97(6):569–74

Recombinant human tumor necrosis factor produces hemodynamic changes characteristic of sepsis and endotoxemia. Schirmer WJ, et al. **Arch Surg** 1989 Apr; 124(4):445–8

The effect of tumor necrosis factor alpha and

gamma-interferon on the resorption of human articular cartilage and on the production of prostaglandin E and of caseinase activity by human articular chondrocytes. Bunning RA, et al. **Arthritis Rheum** 1989 Jun;32(6):780–4
Stimulation of the hyaluronic acid levels of human synovial fibroblasts by recombinant human tumor necrosis factor alpha, tumor necrosis factor beta (lymphotoxin), interleukin-1 alpha, and interleukin-1 beta. Butler DM, et al. **Arthritis Rheum** 1988 Oct;31(10):1281–9
Actions of recombinant human gamma-interferon and tumor necrosis factor alpha on the proliferation and osteoblastic characteristics of human trabecular bone cells in vitro. Gowen M, et al. **Arthritis Rheum** 1988 Dec;31(12):1500–7
Induction of manganese superoxide dismutase by tumor necrosis factor in human breast cancer MCF-7 cell line and its TNF-resistant variant. Asoh K, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):794–801
Tumor necrosis factor-alpha inhibits follicle-stimulating hormone-induced differentiation in cultured rat granulosa cells. Darbon JM, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1038–46
Tumor necrosis factor induced DNA fragmentation of HL-60 cells. Elias L, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):963–9
Additive effects of IL-1 and TNF on induction of prostacyclin synthesis in human vascular endothelial cells. Endo H, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):1007–14
Tumor necrosis factor enhances replication of human immunodeficiency virus (HIV) in vitro. Ito M, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):307–12
Induction of differentiation of human monoblastic and myeloblastic leukemia cell lines by TNF muteins [published erratum appears in Biochem Biophys Res Commun 1989 Jun 30;161(3):1348] Kamijo R, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):820–7
Suppression of TNF-stimulated proliferation of diploid fibroblasts and TNF-induced cytotoxicity against transformed fibroblasts by TGF-beta. Kamijo R, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):155–62
Production of monocyte chemotactic and activating factor (MCAF) by human dermal fibroblasts in response to interleukin 1 or tumor necrosis factor. Larsen CG, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1403–8
Cachectin/TNF stimulation of ATP synthesis in 30A-5 preadipocytes. Lee KH, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1015–20
Interleukin 1 and tumor necrosis factor synergistically stimulate prostaglandin synthesis and phospholipase A2 release from rat renal mesangial cells. Pfeilschifter J, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):385–94
Tumor necrosis factor-alpha induces the phosphorylation of 28kDa stress proteins in endothelial cells: possible role in protection against cytotoxicity? Robaye B, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):301–8
Stimulation of tumor necrosis factor-induced human myelogenous leukemic cell differentiation by high molecular weight PSK subfraction. Sakagami H, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):597–603
Monocyte chemotactic protein gene expression by cytokine-treated human fibroblasts and endothelial cells. Strieter RM, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):694–700
Comparative effects of tumour necrosis factor-alpha (cachectin), interleukin-1-beta and tumour growth on amino acid metabolism in the rat in vivo. Absorption and tissue uptake of alpha-amino[1-14C]isobutyrate. Argilés JM, et al. **Biochem J** 1989 Jul 15;261(2):357–62
Effect of recombinant human tumour necrosis factor alpha on protein synthesis in liver, skeletal muscle and skin of rats. Charters Y, et al. **Biochem J** 1989 Mar 1;258(2):493–7
Tumour necrosis factor alpha (cachectin) mimics some of the effects of tumour growth on the disposal of a [14C]lipid load in virgin, lactating and litter-removed rats. Evans RD, et al. **Biochem J** 1988 Dec 15;256(3):1055–8
Inflammatory cytokines induce synthesis and secretion of gro protein and a neutrophil chemotactic factor but not beta 2-microglobulin in human synovial cells and fibroblasts. Golds EE, et al. **Biochem J** 1989 Apr 15;259(2):585–8
Insulin-like growth factor I can decrease degradation and promote synthesis of proteoglycan in cartilage exposed to cytokines. Tyler JA. **Biochem J** 1989 Jun 1;260(2):543–8
Induction of histidine and ornithine decarboxylase activities in mouse tissues by recombinant interleukin-1 and tumor necrosis factor. Endo Y. **Biochem Pharmacol** 1989 Apr 15; 38(8):1287–92
Regulation of collagen gene expression in 3T3-L1 cells. Effects of adipocyte differentiation and tumor necrosis factor alpha. Weiner FR, et al. **Biochemistry** 1989 May 2;28(9):4094–9
Modulation of lipoprotein lipase activity in mouse peritoneal macrophages by recombinant human tumor necrosis factor. Friedman G, et al. **Biochim Biophys Acta** 1988 Nov 25; 963(2):201–7
Tumor necrosis factor infusions have a procoagulant effect on the hemostatic mechanism of humans. Bauer KA, et al. **Blood** 1989 Jul;74(1):165–72
Synergistic stimulation of macrophage proliferation by the monokines tumor necrosis factor-alpha and colony-stimulating factor 1. Branch DR, et al. **Blood** 1989 Jan;73(1):307–11
Tumor necrosis factor induces proliferation of neoplastic B cells from chronic lymphocytic leukemia. Digel W, et al. **Blood** 1989 Apr;73(5):1242–6
In vivo hematopoietic effects of tumor necrosis factor-alpha in normal and erythroleukemic mice: characterization and therapeutic applications. Johnson CS, et al. **Blood** 1988 Dec;72(6):1875–83
Tumor necrosis factor leads to the internalization and degradation of thrombomodulin from the surface of bovine aortic endothelial cells in culture. Moore KL, et al. **Blood** 1989 Jan;73(1):159–65
Interleukin-1, tumor necrosis factor, and the production of colony-stimulating factors by cultured mesenchymal cells. Sieff CA, et al. **Blood** 1988 Oct;72(4):1316–23
Tumor necrosis factor increases the production of plasminogen activator inhibitor in human endothelial cells in vitro and in rats in vivo. van Hinsbergh VW, et al. **Blood** 1988 Nov;72(5):1467–73
Inhibition of hemopoiesis in murine marrow cell cultures by recombinant murine tumor necrosis factor alpha: evidence for long-term effects on stromal cells. Eliason JF, et al. **Blood Cells** 1988;14(2-3):339–54
Inhibition by tumor necrosis factor of induction of ectopic bone formation by osteosarcoma-derived bone-inducing substance. Yoshikawa H, et al. **Bone** 1988;9(6):391–6
Induction of weight loss and metabolic alterations by human recombinant tumour necrosis factor. Mahony SM, et al. **Br J Cancer** 1988 Sep;58(3):345–9
Tumour necrosis factor-alpha enhances the cytolytic and cytostatic capacity of interleukin-2 activated killer cells. Matossian-Rogers A, et al. **Br J Cancer** 1989 Apr; 59(4):573–7
Relationship between tumour cell morphology, gap junctions and susceptibility to cytolysis by tumour necrosis factor. Matthews N, et al. **Br J Cancer** 1989 Feb;59(2):189–93
Tumour necrosis factor may contribute to the anaemia of malaria by causing dyserythropoiesis and erythrophagocytosis. Clark IA, et al. **Br J Haematol** 1988 Sep;70(1):99–103
2'-5' oligo-A-synthetase activity in bovine peripheral blood leukocytes and alveolar macrophages exposed to recombinant interferons and tumor necrosis factor-alpha. Ohmann HB, et al. **Can J Vet Res** 1989 Apr;53(2):161–6
Reversal of weight loss induced by tumour necrosis factor-alpha. Mahony SM, et al. **Cancer Lett** 1989 Jun; 45(3):167–72
Differentiation-inducing effect of recombinant human tumor necrosis factor alpha and gamma-interferon in vitro on blast cells from patients with acute myeloid leukemia and myeloid blast crisis of chronic myeloid leukemia. Geissler K, et al. **Cancer Res** 1989 Jun 1;49(11):3057–62
Persistence of the hypertriglyceridemic effect of tumor necrosis factor despite development of tachyphylaxis to its anorectic/cachectic effects in rats. Grunfeld C, et al. **Cancer Res** 1989 May 15;49(10):2554–60
Role of tumor necrosis factor and interleukin 1 in gamma-interferon-promoted activation of mouse tumoricidal macrophages. Hori K, et al. **Cancer Res** 1989 May 15;49(10):2606–14
Association of lysosomal activity with sensitivity and resistance to tumor necrosis factor in murine L929 cells. Liddil JD, et al. **Cancer Res** 1989 May 15;49(10):2722–8
Correlation between the anticellular and DNA fragmenting activities of tumor necrosis factor. Rubin BY, et al. **Cancer Res** 1988 Nov 1;48(21):6006–10
Early metabolic response to tumor necrosis factor in mouse sarcoma: a phosphorus-31 nuclear magnetic resonance study. Shine N, et al. **Cancer Res** 1989 Apr 15;49(8):2123–7
Immune regulation of the L5178Y murine tumor-dormant state: induction of cell- and soluble factor-mediated inhibition of tumor cell growth by tumor necrosis factor and gamma-interferon. Suzuki Y, et al. **Cancer Res** 1989 Apr 15;49(8):2028–33
Intracellular hydroxyl radical production induced by recombinant human tumor necrosis factor and its implication in the killing of tumor cells in vitro. Yamauchi N, et al. **Cancer Res** 1989 Apr 1;49(7):1671–5
Oxidative damage in murine tumor cells treated in vitro by recombinant human tumor necrosis factor. Zimmerman RJ, et al. **Cancer Res** 1989 Apr 1;49(7):1644–8
Lymphokine (IL-2 and TNF-alpha) mediated cytolytic activity against glioma cells in vitro. Herrmann HD, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:21–7
Combined treatment with interferon (IFN)-gamma and tumor necrosis factor (TNF)-alpha up-regulates the expression of HLA class I determinants in Burkitt lymphoma lines. Avila-Carino J, et al. **Cell Immunol** 1988 Dec;117(2):303–11
Stimulation of lymphocyte migration by endotoxin, tumor necrosis factor, and interferon. Issekutz TB, et al. **Cell Immunol** 1989 Apr 15;120(1):165–73
Comparison of the effects of IL-1 alpha and TNF-alpha on phagocyte accumulation and murine antibacterial immunity. Kurlander RJ, et al. **Cell Immunol** 1989 Oct 1; 123(1):9–22
Augmentation of the generation of cytotoxic T lymphocytes against syngeneic tumor cells by recombinant human tumor necrosis factor. Nakano K, et al. **Cell Immunol** 1989 Apr 15;120(1):154–64
Human endothelial cell response to lipopolysaccharide, interleukin-1, and tumor necrosis factor is regulated by protein synthesis. Pohlman TH, et al. **Cell Immunol** 1989 Mar;119(1):41–52
Effects of tumor necrosis factor on cell growth and expression of transferrin receptors in human fibroblasts. Hori T, et al. **Cell Struct Funct** 1988 Oct;13(5):425–33
Cardiovascular and pulmonary effects of human recombinant tumor necrosis factor in the conscious rat. Turner CR, et al. **Circ Shock** 1989 Aug;28(4):369–84
Modulation of human neutrophilic granulocyte functions by recombinant human tumor necrosis factor and recombinant human lymphotoxin. Promotion of adherence, inhibition of chemotactic migration and superoxide anion release from adherent cells. Kownatzki E, et al. **Clin Exp Immunol** 1988 Oct;74(1):143–8
TNF-alpha mediated selection of macrophage-resistant gene-regulatory tumor variants. Remels L, et al. **Clin Exp Metastasis** 1989 Sep-Oct;7(5):493–506
Effect of lymphotoxin and tumor necrosis factor on endothelial and connective tissue cell growth and function. Kahaleh MB, et al. **Clin Immunol Immunopathol** 1988 Nov; 49(2):261–72
TNF: its potential as an antitumour agent. Fiers W, et al. **Dev Biol Stand** 1988;69:143–51
Tumor necrosis factor stimulates hepatic lipid synthesis and secretion. Feingold KR, et al. **Endocrinology** 1989 May; 124(5):2336–42
Inhibitory effects of tumor necrosis factor-alpha and interferon-gamma on deoxyribonucleic acid and collagen synthesis by rat osteosarcoma cells (ROS 17/2.8). Nanes MS, et al. **Endocrinology** 1989 Jan;124(1):339–45
Impairment of hypothalamic-pituitary-thyroid function in rats treated with human recombinant tumor necrosis factor-alpha (cachectin). Pang XP, et al. **Endocrinology** 1989 Jul;125(1):76–84
Tumor necrosis factor alpha alters follicular steroidogenesis in vitro. Roby KF, et al. **Endocrinology** 1988 Dec; 123(6):2952–4
Tumor necrosis factor-alpha is a potent ACTH secretagogue: comparison to interleukin-1 beta. Sharp BM, et al. **Endocrinology** 1989 Jun;124(6):3131–3
Tumor necrosis factor-alpha inhibits growth hormone secretion from cultured anterior pituitary cells. Walton PE, et al. **Endocrinology** 1989 Aug;125(2):925–9
Influence of cytokines on growth and differentiated function of FRTL5 cells. Zakarija M, et al. **Endocrinology** 1989 Sep; 125(3):1260–5
Tumor necrosis factor stimulates human neutrophils to release leukotriene B4 and platelet-activating factor. Induction of phospholipase A2 and acetyl-CoA:1-alkyl-sn-glycero-3-phosphocholine O2-acetyltransferase activity and inhibition by antiproteinase. Camussi G, et al. **Eur J Biochem** 1989 Jul 1;182(3):661–6
Development of tumour cell resistance to tumour necrosis factor does not confer resistance to cytotoxic drugs. Neale ML, et al. **Eur J Cancer Clin Oncol** 1989 Jan;25(1):133–7
Mechanism of immune complex-mediated damage: induction of interleukin 1 by immune complexes and synergy with interferon-gamma and tumor necrosis factor-alpha. Chantry D, et al. **Eur J Immunol** 1989 Jan;19(1):189–92
Interferon-gamma and tumor necrosis factor induce the L-arginine-dependent cytotoxic effector mechanism in murine macrophages. Drapier JC, et al. **Eur J Immunol** 1988 Oct;18(10):1587–92
Tumor necrosis factor alpha stimulates leukotriene production in vivo. Huber M, et al. **Eur J Immunol** 1988 Dec;18(12):2085–8
Schwann cells co-cultured with stimulated T cells and antigen express major histocompatibility complex (MHC) class II determinants without interferon-gamma pretreatment: synergistic effects of interferon-gamma and tumor necrosis factor on MHC class II induction. Kingston AE, et al. **Eur J Immunol** 1989 Jan;19(1):177–83
Effects of tumor necrosis factor on the interferon-gamma-induced major histocompatibility complex class II antigen expression by human endothelial cells. Leeuwenberg JF, et al. **Eur J Immunol** 1988 Sep; 18(9):1469–72
Cooperative effect of interferon-gamma and tumor necrosis factor-alpha on the induction of the class II antigen-associated invariant chain expression. Pessara U, et al. **Eur J Immunol** 1988 Nov;18(11):1719–26
Interleukin 1 and tumor necrosis factor enhance transcription from the SV40 early promoter in a T cell line. Plaetinck G, et al. **Eur J Immunol** 1989 May;19(5):897–904
Interleukin 1 and tumor necrosis factor-alpha additively increase the levels of granulocyte-macrophage and granulocyte colony-stimulating factor (CSF) mRNA in human fibroblasts. Seelentag W, et al. **Eur J Immunol** 1989 Jan;19(1):209–12
Synergistic effect of natural human tumor necrosis factors alpha and beta in the clonogenic assay. Miyake M, et al. **Exp Cell Biol** 1988;56(6):297–302
Tumor necrosis factor-induced expression of platelet-derived growth factor A-chain messenger RNA in fibroblasts. Paulsson Y, et al. **Exp Cell Res** 1989 Feb;180(2):490–6
Synergistic effect of tumor necrosis factor-alpha and interferon-gamma on collagen synthesis of human skin fibroblasts in vitro. Scharffetter K, et al. **Exp Cell Res** 1989 Apr;181(2):409–19
Suppressive biological activity of a synthetic pentapeptide on highly enriched human and murine marrow hematopoietic progenitors: synergism with recombinant

human tumor necrosis factor-alpha and interferon-gamma. Lu L, et al. **Exp Hematol** 1989 Oct;17(9):935-41

Synergistic enhancement of class I major histocompatibility complex antigen expression in K562 cells induced by recombinant human interferon-gamma and tumor necrosis factor in combination. Takemura Y, et al. **Exp Hematol** 1989 Aug;17(7):795-9

Cachectin/tumor necrosis factor-alpha alters red blood cell kinetics and induces anemia in vivo. Moldawer LL, et al. **FASEB J** 1989 Mar;3(5):1637-43

Tumor necrosis factor stimulates prostaglandin production and cyclic AMP levels in rat cultured mesangial cells. Baud L, et al. **FEBS Lett** 1988 Oct 24;239(1):50-4

Inhibition of target cell mitochondrial electron transfer by tumor necrosis factor. Lancaster JR Jr, et al. **FEBS Lett** 1989 May 8;248(1-2):169-74

In vitro analysis of the anticancer potential of tumor necrosis factor in combination with cisplatin. Mutch DG, et al. **Gynecol Oncol** 1989 Sep;34(3):328-33

Synergistic activity of tumor necrosis factor and interferon in a nude mouse model of human ovarian cancer. Rubin SC, et al. **Gynecol Oncol** 1989 Sep;34(3):353-6

Modulation of leukemic cell proliferation by tumor necrosis factor alpha. Kerim S, et al. **Haematologica (Pavia)** 1988 Sep-Oct;73(5):383-6

Tumor necrosis factor and human hematopoiesis: II. Inhibition and mode of action on normal and chronic myelogenous leukemia-derived granulocyte-macrophage progenitor cells. Beran M, et al. **Hematol Pathol** 1988; 2(2):65-71

Modulation of human neutrophil and monocyte chemotaxis and superoxide responses by recombinant TNF-alpha and GM-CSF. Kharazmi A, et al. **Immunobiology** 1988 Sep; 177(4-5):363-70

Comparative study on the antiviral activity of tumor necrosis factor (TNF)-alpha, lymphotoxin/TNF-beta, and IL-1 in WISH cells. Ruggiero V, et al. **Immunol Lett** 1989 May; 21(2):165-9

Interaction of tumor necrosis factor and lymphotoxin with model lipid membranes. Young JD. **Immunol Lett** 1988 Dec;19(4):287-91

Tumour necrosis factors modulate the affinity state of the leukotriene B4 receptor on human neutrophils. Brom J, et al. **Immunology** 1988 Dec;65(4):647-9

Characteristics of human synovial fibroblast activation by IL-1 beta and TNF alpha. Gitter BD, et al. **Immunology** 1989 Feb;66(2):196-200

Chemotactic activity of lymphotoxin and tumour necrosis factor alpha for human neutrophils. Newman I, et al. **Immunology** 1989 Feb;66(2):318-20

Effect of recombinant human tumour necrosis factor beta (TNF beta) on activation, proliferation and differentiation of human B lymphocytes. Zola H, et al. **Immunology** 1989 Jun;67(2):231-6

Self-induction of defense against tumor necrosis factor cytotoxicity in tumor cells and normal cells. Watanabe N, et al. **Immunopharmacol Immunotoxicol** 1988;10(4):479-99

Augmentation of the neutrophil response to Naegleria fowleri by tumor necrosis factor alpha. Ferrante A. **Infect Immun** 1989 Oct;57(10):3110-5

Tumor necrosis factor alpha and the anemia associated with murine malaria. Miller KL, et al. **Infect Immun** 1989 May; 57(5):1542-6

Killing of blood-stage Plasmodium falciparum by lipid peroxides from tumor necrosis serum. Rockett KA, et al. **Infect Immun** 1988 Dec;56(12):3180-3

Effect of recombinant DNA-produced tumor necrosis factor on various parameters of neutrophil function. Ozaki Y, et al. **Inflammation** 1988 Aug;12(4):297-309

Modulation of human peripheral blood eosinophil function by tumor necrosis factor-alpha. Whitcomb EA, et al. **Int Arch Allergy Appl Immunol** 1989;89(2-3):250-5

Interleukin-1 beta induces tumor necrosis and early morphologic and metabolic changes in transplantable mouse tumors. Similarities with the anti-tumor effects of tumor necrosis factor alpha or beta. Belardelli F, et al. **Int J Cancer** 1989 Jul 15;44(1):116-23

Zn++ inhibits both tumor necrosis factor-mediated DNA fragmentation and cytolysis. Flieger D, et al. **Int J Cancer** 1989 Aug 15;44(2):315-9

Effect of erythromycin and tumour necrosis factor on the drug resistance of multidrug-resistant cells: reversal of drug resistance by erythromycin. Hofsli E, et al. **Int J Cancer** 1989 Mar 15;43(3):520-5

Differential modulation by tumor necrosis factor and immune interferon of HLA class-II antigens expressed by melanoma cells. Maio M, et al. **Int J Cancer** 1989 Sep 15;44(3):554-9

Tumor necrosis factor alpha induces early morphologic and metabolic alterations in Friend leukemia cell tumors and fibrosarcomas in mice. Proietti E, et al. **Int J Cancer** 1988 Oct 15;42(4):582-91

Effects of recombinant human tumor necrosis factor-alpha on the surface phenotype and the growth of human malignant glioma cell lines. Zuber P, et al. **Int J Cancer** 1988 Nov 15;42(5):780-6

Characterization of intercellular adhesion molecule-1 and HLA-DR expression in normal and inflamed skin: modulation by recombinant gamma interferon and tumor necrosis factor. Griffiths CE, et al. **J Am Acad Dermatol** 1989 Apr;20(4):617-29

The effect of tumor necrosis factor on human sperm motility in vitro. Eisermann J, et al. **J Androl** 1989 Jul-Aug; 10(4):270-4

Sera from pigs infected with Sarcocystis suicanis and cachectin decrease preadipocyte differentiation in primary cell culture. Jewell DE, et al. **J Anim Sci** 1988 Nov; 66(11):2992-9

Tumor necrosis factor alpha inhibits gonadotropin hormonal action in nontransformed ovarian granulosa cells. A modulatory noncytotoxic property. Adashi EY, et al. **J Biol Chem** 1989 Jul 15;264(20):11591-7

The antimitogenic action of tumor necrosis factor is associated with increased AP-1/c-jun proto-oncogene transcription. Dixit VM, et al. **J Biol Chem** 1989 Oct 5; 264(28):16905-9

Evidence for two mechanisms by which tumor necrosis factor kills cells. Reid TR, et al. **J Biol Chem** 1989 Mar 15;264(8):4583-9

Tumor necrosis factor acts synergistically with autocrine interferon-beta and increases interferon-beta mRNA levels in human fibroblasts. Reis LF, et al. **J Biol Chem** 1989 Oct 5;264(28):16351-4

Regulation of type 1 plasminogen activator inhibitor gene expression in cultured bovine aortic endothelial cells. Induction by transforming growth factor-beta, lipopolysaccharide, and tumor necrosis factor-alpha. Sawdey M, et al. **J Biol Chem** 1989 Jun 25; 264(18):10396-401

Monokine-induced neutrophil chemotactic factor gene expression in human fibroblasts. Strieter RM, et al. **J Biol Chem** 1989 Jun 25;264(18):10621-6

In vitro treatment of HEp-2 cells with human tumor necrosis factor-alpha and human interferons reduces invasiveness of Salmonella typhimurium. Degré M, et al. **J Biol Regul Homeost Agents** 1989 Jan-Mar;3(1):1-7

The antiviral activity of tumor necrosis factor in HeLa cells is not mediated by interferons. Studies with TNF-resistant variants. Gessani S, et al. **J Biol Regul Homeost Agents** 1988 Jul-Sep;2(3):139-44

Tumor necrosis factor induces acute phase proteins in rats. Gresser I, et al. **J Biol Regul Homeost Agents** 1987 Oct-Dec;1(4):173-6

Human recombinant alpha- and gamma-interferons enhance the cytotoxic properties of tumor necrosis factor on human melanoma. Bregman MD, et al. **J Biol Response Mod** 1988 Aug;7(4):384-9

Oncogene expression and cytotoxic activity of tumor necrosis factor against human cancer cells. Dhingra K, et al. **J Biol Response Mod** 1989 Aug;8(4):337-43

Recombinant tumor necrosis factor reduces hepatic drug metabolism in vivo in the rat. Duan L, et al. **J Biol Response Mod** 1988 Aug;7(4):365-70

Differences in the bioactivity of recombinant human TNF, LT, and T-cell-derived LT-3 on transformed cells in vitro and the Meth A tumor growing in BALB/c mice. Granger GA, et al. **J Biol Response Mod** 1988 Oct;7(5):488-97

Heterogeneous response of human colon cancer cells to the cytostatic and cytotoxic effects of recombinant human cytokines: interferon-alpha, interferon-gamma, tumor necrosis factor, and interleukin-1. Morikawa K, et al. **J Biol Response Mod** 1989 Apr;8(2):206-18

Enhancement of human natural killer cell function by the combined effects of tumor necrosis factor alpha or interleukin-1 and interferon-alpha or interleukin-2. Ostensen ME, et al. **J Biol Response Mod** 1989 Feb; 8(1):53-61

The comparative effects of tumor necrosis factor on tumor cells growing anchorage dependently and independently. Tsao MS, et al. **J Biol Response Mod** 1989 Jun;8(3):297-304

Interleukin-1 and tumor necrosis factor stimulate the formation of human osteoclastlike cells in vitro. Pfeilschifter J, et al. **J Bone Miner Res** 1989 Feb;4(1):113-8

Viruses and cytokines: evidence for multiple roles in pancreatic beta cell destruction in type 1 insulin-dependent diabetes mellitus. Campbell IL, et al. **J Cell Biochem** 1989 May;40(1):57-66

Transforming growth factor-beta 1 enhances the suppression of human hematopoiesis by tumor necrosis factor-alpha or recombinant interferon-alpha. Sing GK, et al. **J Cell Biochem** 1989 Feb;39(2):107-15

Modulation of adipocyte differentiation by tumor necrosis factor and transforming growth factor beta. Torti FM, et al. **J Cell Biol** 1989 Mar;108(3):1105-13

Tumor necrosis factor causes amplification of arachidonic acid metabolism in response to interleukin 1, bradykinin, and other agonists. Burch RM, et al. **J Cell Physiol** 1989 Oct;141(1):85-9

Differentiation-inducing and cytotoxic effects of tumor necrosis factor and interferon-gamma in myeloblastic ML-1 cells. Craig RW, et al. **J Cell Physiol** 1989 Oct; 141(1):46-52

Tumor necrosis factor inhibits the terminal event in mesenchymal stem cell differentiation. Filipak M, et al. **J Cell Physiol** 1988 Nov;137(2):367-73

Cachectin/TNF kills or inhibits the differentiation of 3T3-L1 cells according to developmental stage. Kawakami M, et al. **J Cell Physiol** 1989 Jan;138(1):1-7

Influence of tumor necrosis factor-alpha on the modulation by interferon-gamma of HLA class II molecules in human thyroid cells and its effect on interferon-gamma binding. Buscema M, et al. **J Clin Endocrinol Metab** 1989 Aug; 69(2):433-9

Increased peripheral blood leukocyte cytotoxic activity in cancer patients during the continuous intravenous administration of recombinant human tumor necrosis factor. Charnetsky PS, et al. **J Clin Immunol** 1989 Jan; 9(1):34-8

Effects of interferon-gamma (IFN-gamma) and tumor necrosis factor-alpha (TNF-alpha) on the expression of LFA-1 in the moderate phenotype of leukocyte adhesion deficiency (LAD). Dimanche-Boitrel MT, et al. **J Clin Immunol** 1989 May;9(3):200-7

Resistance of tumor cells to tumor necrosis factor. Shepard HM, et al. **J Clin Immunol** 1988 Sep;8(5):333-41 (55 ref.)

Tumor necrosis factor and immune interferon synergistically induce cytochrome b-245 heavy-chain gene expression and nicotinamide-adenine dinucleotide phosphate hydrogenase oxidase in human leukemic myeloid cells. Casatella MA, et al. **J Clin Invest** 1989 May;83(5):1570-9

Interleukin 1 and tumor necrosis factor stimulate human vascular endothelial cells to promote transendothelial neutrophil passage. Moser R, et al. **J Clin Invest** 1989 Feb; 83(2):444-55

Cultured human endothelial cells stimulated with cytokines or endotoxin produce an inhibitor of leukocyte adhesion. Wheeler ME, et al. **J Clin Invest** 1988 Oct;82(4):1211-8

Tumor necrosis factor/cachectin increases permeability of endothelial cell monolayers by a mechanism involving regulatory G proteins. Brett J, et al. **J Exp Med** 1989 Jun 1;169(6):1977-91

Enhanced responsiveness of endothelium in the growing/motile state to tumor necrosis factor/cachectin. Gerlach H, et al. **J Exp Med** 1989 Sep 1;170(3):913-31

Tumor necrosis factor alpha stimulates the growth of the clonogenic cells of acute myeloblastic leukemia in synergy with granulocyte/macrophage colony-stimulating factor. Hoang T, et al. **J Exp Med** 1989 Jul 1;170(1):15-26

Effect of interferon-alpha, interferon-gamma and tumour necrosis factor on African swine fever virus replication in porcine monocytes and macrophages. Esparza I, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):2973-80

Antiviral activity of tumour necrosis factor. Synergism with interferons and induction of oligo-2',5'-adenylate synthetase. Mestan J, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3113-20

IL-1 and TNF transmodulate epidermal growth factor receptors by a protein kinase C-independent mechanism. Bird TA, et al. **J Immunol** 1989 Jan 1;142(1):126-33

Studies on the differing effects of tumor necrosis factor and lymphotoxin on the growth of several human tumor lines. Browning J, et al. **J Immunol** 1989 Sep 15;143(6):1859-67

Inhibition by IL-1 of endothelial cell activation induced by tumor necrosis factor or lymphotoxin. Cavender DE, et al. **J Immunol** 1988 Nov 1;141(9):3111-6

Role of ornithine decarboxylase in the regulation of cell growth by IL-1 and tumor necrosis factor. Endo Y, et al. **J Immunol** 1988 Oct 1;141(7):2342-8

Expression of a binding structure for sialic acid-containing glycoconjugates on rat bone marrow-derived macrophages and its modulation by IFN, TNF-alpha, and dexamethasone. Gessl A, et al. **J Immunol** 1989 Jun 15; 142(12):4372-7

Calcium-independent pathway of tumor necrosis factor-mediated lysis of target cells. Hasegawa Y, et al. **J Immunol** 1989 Apr 15;142(8):2670-6

IL-1 and tumor necrosis factor. Similarities and differences in stimulation of expression of alternative pathway of complement and IFN-beta 2/IL-6 genes in human fibroblasts. Katz Y, et al. **J Immunol** 1989 Jun 1; 142(11):3862-7

IFN-gamma, tumor necrosis factor-alpha, and urokinase regulate the expression of urokinase receptors on human monocytes. Kirchheimer JC, et al. **J Immunol** 1988 Dec 15;141(12):4229-34

Tumor necrosis factor-alpha activation of the IL-2 receptor-alpha gene involves the induction of kappa B-specific DNA binding proteins. Lowenthal JW, et al. **J Immunol** 1989 May 1;142(9):3121-8

Tumor necrosis factor synergistically acts with IFN-gamma to regulate Ly-6A/E expression in T lymphocytes, thymocytes and bone marrow cells. Malek TR, et al. **J Immunol** 1989 Mar 15;142(6):1929-36

Effects of tumor necrosis factor and epidermal growth factor on cell morphology, cell surface receptors, and the production of tissue inhibitor of metalloproteinases and IL-6 in human microvascular endothelial cells. Mawatari M, et al. **J Immunol** 1989 Sep 1;143(5):1619-27

IL-4-responsive human helper T cell clones are resistant to growth inhibition by tumor necrosis factor-alpha. Pawelec GP, et al. **J Immunol** 1989 Aug 1;143(3):902-6

Tumor necrosis factor-alpha as a proliferative signal for an IL-2-dependent T cell line: strict species specificity of action. Ranges GE, et al. **J Immunol** 1989 Feb 15; 142(4):1203-8

Effect of tumor necrosis factor and granulocyte/macrophage colony-stimulating factor on neutrophil degranulation. Richter J, et al. **J Immunol** 1989 May 1;142(9):3199-205

Liposomes can function as targets for natural killer cytotoxic factor but not for tumor necrosis factor. Roozemond RC, et al. **J Immunol** 1989 Feb 15;142(4):1209-16

Tumor necrosis factor-alpha affects LTR-controlled oncogene expression in transformed mouse fibroblasts at the post-transcriptional level. Seliger B, et al. **J Immunol** 1988 Sep 15;141(6):2138-44

Prostaglandin E2 production is synergistically increased in cultured human glomerular mesangial cells by

combinations of IL-1 and tumor necrosis factor-alpha 1. Topley N, et al. **J Immunol** 1989 Sep 15;143(6):1989–95
Biphasic platelet-activating factor synthesis by human monocytes stimulated with IL-1-beta, tumor necrosis factor, or IFN-gamma. Valone FH, et al. **J Immunol** 1988 Dec 1;141(11):3945–50
Human vascular smooth muscle cells. Target for and source of tumor necrosis factor. Warner SJ, et al. **J Immunol** 1989 Jan 1;142(1):100–9
Tumor necrosis factor as an activator of human granulocytes. Potentiation of the metabolisms triggered by the Ca2+-mobilizing agonists. Yuo A, et al. **J Immunol** 1989 Mar 1;142(5):1678–84
Enhancement of simian varicella virus infection in African green monkeys by recombinant human tumor necrosis factor alpha. Soike KF, et al. **J Infect Dis** 1989 Feb; 159(2):331–5
Enhanced serum levels of beta-2-microglobulin, neopterin, and interferon-gamma in patients treated with recombinant tumor necrosis factor-alpha. Aulitzky WE, et al. **J Interferon Res** 1988 Oct;8(5):655–64
Interleukin-1 can inhibit interferon-beta synthesis and its antiviral action: comparison with tumor necrosis factor. Kohase M, et al. **J Interferon Res** 1988 Aug;8(4):559–70
Induction of MHC class II antigens on bovine cells of nonlymphoid origin by recombinant bovine interferon-gamma and tumor necrosis factor-alpha. Ohmann HB, et al. **J Interferon Res** 1988 Aug;8(4):451–62
Effects of interferon-gamma and tumor necrosis factor-alpha on macrophage enzyme levels. Pierangeli SS, et al. **J Interferon Res** 1989 Feb;9(1):1–9
Differential regulation of collagen, glycosaminoglycan, fibronectin, and collagenase activity production in cultured human adult dermal fibroblasts by interleukin 1-alpha and beta and tumor necrosis factor-alpha and beta. Duncan MR, et al. **J Invest Dermatol** 1989 May;92(5):699–706
Human tumor necrosis factor is a potent activator of the oxidative metabolism in human polymorphonuclear neutrophilic granulocytes: comparison with human lymphotoxin. Kapp A, et al. **J Invest Dermatol** 1989 Mar; 92(3):348–54
Lymphotoxin, tumor necrosis factor, and gamma interferon are cytostatic for normal human keratinocytes. Symington FW. **J Invest Dermatol** 1989 Jun;92(6):798–805
Biochemical mechanisms involved in the priming of neutrophils by tumor necrosis factor. Berkow RL, et al. **J Leukoc Biol** 1988 Nov;44(5):345–52
Human neutrophils activated by interferon-gamma and tumour necrosis factor-alpha kill Entamoeba histolytica trophozoites in vitro. Denis M, et al. **J Leukoc Biol** 1989 Sep;46(3):270–4
In vivo neutrophil emigration in response to interleukin-1 and tumor necrosis factor-alpha. Mason MJ, et al. **J Leukoc Biol** 1989 Jan;45(1):62–8
Membrane oxidative metabolism of human eosinophilic cell line EoL-1 in response to phorbol diester and formyl peptide: synergistic augmentation by interferon-gamma and tumor necrosis factor. Yoshie O, et al. **J Leukoc Biol** 1989 Jan;45(1):10–20
Effect of tumor necrosis factor administration in vivo on lipoprotein lipase activity in various tissues of the rat. Grunfeld C, et al. **J Lipid Res** 1989 Apr;30(4):579–85
Mechanisms by which tumor necrosis factor stimulates hepatic fatty acid synthesis in vivo. Grunfeld C, et al. **J Lipid Res** 1988 Oct;29(10):1327–35
Bacterial lipopolysaccharide reduces macrophage lipoprotein lipase levels: an effect that is independent of tumor necrosis factor. White JR, et al. **J Lipid Res** 1988 Oct;29(10):1379–85
Retinoic acid and tumour necrosis factor-alpha act in concert to control the level of alkaline phosphatase mRNA. Ng KW, et al. **J Mol Endocrinol** 1989 Jul;3(1):57–64
Tumor necrosis factor-mediated hypoalbuminemia in rabbits. Hennig B, et al. **J Nutr** 1988 Dec;118(12):1586–90
Gingival fibroblasts degrade type I collagen films when stimulated with tumor necrosis factor and interleukin 1: evidence that breakdown is mediated by metalloproteinases. Meikle MC, et al. **J Periodont Res** 1989 May;24(3):207–13
Stimulation of human synovial fibroblast DNA synthesis by recombinant human cytokines. Butler DM, et al. **J Rheumatol** 1988 Oct;15(10):1463–70
The effect of tumor necrosis factor-alpha and interferon-gamma on neutrophil function. Livingston DH, et al. **J Surg Res** 1989 Apr;46(4):322–6
Effect of tumor necrosis factor and interferon gamma on human renal carcinoma cell line growth. Kavoussi LR, et al. **J Urol** 1989 Sep;142(3):875–8
Human gamma interferon and tumor necrosis factor exert a synergistic blockade on the replication of herpes simplex virus. Feduchi E, et al. **J Virol** 1989 Mar;63(3):1354–9
Cytocidal effect of tumor necrosis factor on cells chronically infected with human immunodeficiency virus (HIV): enhancement of HIV replication. Matsuyama T, et al. **J Virol** 1989 Jun;63(6):2504–9
A technique for catheterization and cystoscopic evaluation of cynomolgus monkey urinary bladders. Bahnson RR, et al. **Lab Anim Sci** 1988 Dec;38(6):731–3
Induction of hypoferremia and modulation of macrophage iron metabolism by tumor necrosis factor. Alvarez-Hernández X, et al. **Lab Invest** 1989 Sep; 61(3):319–22
Cytotoxicity of tumor necrosis factor-alpha for human umbilical vein endothelial cells. Schuger L, et al. **Lab Invest** 1989 Jul;61(1):62–8
Tumour necrosis factor and HIV: a note of caution [letter] Matsuyama T, et al. **Lancet** 1988 Dec 10;2(8624):1364
Augmentation of in-vitro HIV replication in peripheral blood mononuclear cells of AIDS and ARC patients by tumour necrosis factor [letter] Michihiko S, et al. **Lancet** 1989 May 27;1(8648):1206–7
Effects of recombinant human tumor necrosis factor on the self-renewal capacity of leukemia blast progenitors in acute myeloblastic leukemia. Nagata K, et al. **Leukemia** 1989 Sep; 3(9):626–30
Suppression of c-myc and c-myb expression in myeloid cell lines treated with recombinant tumor necrosis factor-alpha. Schachner J, et al. **Leukemia** 1988 Nov;2(11):749–53
Effect of interferon alpha, gamma, and tumor necrosis factor alpha on the HLA-A, B, C expression of cell lines derived from human liver. Yoshioka K, et al. **Liver** 1989 Feb; 9(1):14–9
A role for interleukin 1 in the in vivo actions of tumor necrosis factor. Brouckaert PG, et al. **Lymphokine Res** 1989 Fall;8(3):269–74
Interferon-gamma is cytotoxic for normal mouse fibroblasts: enhancement by tumor necrosis factor and interleukin 1. Dijkmans R, et al. **Lymphokine Res** 1989 Spring;8(1):25–34
Modulation of mitogenic activity of tumor necrosis factor by interferons and dexamethasone. Tsujimoto M, et al. **Lymphokine Res** 1989 Summer;8(2):99–106
Mechanisms which take part in regulation of the response to tumor necrosis factor. Wallach D, et al. **Lymphokine Res** 1989 Fall;8(3):359–63 (23 ref.)
Tumor necrosis factor suppresses transcription of the thrombomodulin gene in endothelial cells. Conway EM, et al. **Mol Cell Biol** 1988 Dec;8(12):5588–92
p185HER2 monoclonal antibody has antiproliferative effects in vitro and sensitizes human breast tumor cells to tumor necrosis factor. Hudziak RM, et al. **Mol Cell Biol** 1989 Mar;9(3):1165–72
Transcriptional and posttranscriptional modulation of myeloid colony-stimulating factor expression by tumor necrosis factor and other agents. Koeffler HP, et al. **Mol Cell Biol** 1988 Aug;8(8):3432–8
Transcriptional regulation of acetyl coenzyme A carboxylase gene expression by tumor necrosis factor in 30A-5 preadipocytes. Pape ME, et al. **Mol Cell Biol** 1989 Mar; 9(3):974–82
Tumor necrosis factor-alpha regulates mRNA for urokinase-type plasminogen activator and type-1 plasminogen activator inhibitor in human neoplastic cell lines. Georg B, et al. **Mol Cell Endocrinol** 1989 Jan; 61(1):87–96
Effects of gamma-interferon and tumor necrosis factor alpha on thyroid cells: induction of class II antigen and inhibition of growth stimulation. Zakarija M, et al. **Mol Cell Endocrinol** 1988 Aug;58(2-3):129–36
Induction of macrophage-like differentiation of HL-60 leukemia cells by tumor necrosis factor-alpha: potential role of fos expression. Squinto SP, et al. **Mol Endocrinol** 1989 Feb;3(2):409–19
Natural cytotoxic activity in a cloned natural killer cell line is mediated by tumor necrosis factor. Richards AL, et al. **Nat Immun Cell Growth Regul** 1989;8(2):76–88
Prolonged activation of jun and collagenase genes by tumour necrosis factor-alpha. Brenner DA, et al. **Nature** 1989 Feb 16;337(6208):661–3
Human recombinant interleukin-1 beta and -alpha, but not recombinant tumor necrosis factor alpha stimulate ACTH release from rat anterior pituitary cells in vitro in a prostaglandin E2 and cAMP independent manner. Kehrer P, et al. **Neuroendocrinology** 1988 Aug;48(2):160–6
Effects of tumour necrosis factor and alpha interferon on chronic B cell malignancies. Bianchi AC, et al. **Nouv Rev Fr Hematol** 1988;30(5–6):317–9
Enhancing and suppressive effects of tumour necrosis factor/cachectin on growth of Trypanosoma musculi. Kongshavn PA, et al. **Parasite Immunol** 1988 Sep; 10(5):581–8
Role of cytokines in radioprotection. Neta R. **Pharmacol Ther** 1988;39(1-3):261–6 (28 ref.)
Recombinant tumor necrosis factor alpha and interleukin 1 alpha increase expression of c-abl protooncogene mRNA in cultured human marrow stromal cells. Andrews DF 3d, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6788–92
Intercellular adhesion molecule 1 is induced on isolated endocrine islet cells by cytokines but not by reovirus infection. Campbell IL, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4282–6
Tumor necrosis factor alpha activates human immunodeficiency virus type 1 through induction of nuclear factor binding to the NF-kappa B sites in the long terminal repeat. Duh EJ, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5974–8
Fibroblast interleukin 1 beta: synergistic stimulation by recombinant interleukin 1 and tumor necrosis factor and posttranscriptional regulation. Elias JA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6171–5
Tumor necrosis factor alpha induces expression of human immunodeficiency virus in a chronically infected T-cell clone. Folks TM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2365–8
Interleukin 1 and tumor necrosis factor inhibit cardiac myocyte beta-adrenergic responsiveness. Gulick T, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6753–7
Recombinant tumor necrosis factor increases pulmonary vascular permeability independent of neutrophils. Horvath CJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9219–23
Tumor necrosis factor alpha induces proteins that bind specifically to kappa B-like enhancer elements and regulate interleukin 2 receptor alpha-chain gene expression in primary human T lymphocytes. Lowenthal JW, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2331–5
Cachectin alters anterior pituitary hormone release by a direct action in vitro. Milenkovic L, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2418–22
Tumor necrosis factor alpha and interleukin 1 stimulate the human immunodeficiency virus enhancer by activation of the nuclear factor kappa B. Osborn L, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2336–40
Cytolysis by tumor necrosis factor is preceded by a rapid and specific dissolution of microfilaments [published erratum appears in Proc Natl Acad Sci U S A 1989 May;86(10):3664] Scanlon M, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):182–6
Cell lines cultured at high density are resistant to lysis by tumor necrosis factor and natural cytotoxic cells. Patek PQ, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):234–9
Enhancement of cell-mediated cytotoxicity by recombinant tumor necrosis factor (TNF alpha). Shimamoto Y, et al. **Proc Soc Exp Biol Med** 1988 Dec;189(3):310–6
Effect of a new and specific PAF-antagonist, WEB 2086, on PAF and endotoxin/tumor necrosis factor induced changes in mortality and intestinal transit velocity. Heuer H. **Prog Clin Biol Res** 1989;308:919–24
Role of monokines in altering receptor and non-receptor mediated vascular contraction in sepsis. McKenna TM, et al. **Prog Clin Biol Res** 1989;286:279–303
Endotoxin modulation: metabolism to monoclonals. Napolitano LM, et al. **Prog Clin Biol Res** 1989;299:115–21
TNF-induced organ changes in a chronic ovine model—possible role of leukocytes. Redl H, et al. **Prog Clin Biol Res** 1989;308:467–83
Neutral red uptake and clonogenic survival assays of the hyperthermic sensitization of tumor cells to tumor necrosis factor. Tomasovic SP, et al. **Radiat Res** 1989 Aug; 119(2):325–37
Synergistic antitumor effects of natural human tumor necrosis factor-alpha and natural human interferon-alpha or -gamma on human cancer cell lines. Shiiki S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr;64(1):87–97
Tumour necrosis factor-beta modulates human neutrophil-mediated cartilage damage. Kowanko IC, et al. **Scand J Immunol** 1988 Nov;28(5):591–8
Up-regulation of the expression of secretory component and HLA molecules in a human colonic cell line by tumour necrosis factor-alpha and gamma interferon. Kvale D, et al. **Scand J Immunol** 1988 Sep;28(3):351–7
Recombinant human tumour necrosis factor beta (lymphotoxin) lacks chemotactic activity for human peripheral blood neutrophils, monocytes, and T cells. Mrowietz U, et al. **Scand J Immunol** 1989 Sep;30(3):373–7
Synergistic growth-inhibitory activity of tumour necrosis factor and alpha interferon. Contribution to the monocyte-derived cytostatic activity towards human leukaemia K562 cells. Nissen-Meyer J, et al. **Scand J Immunol** 1988 Nov;28(5):627–37
Recombinant interleukin 1 and tumor necrosis factor acting in synergy to release thromboxane, 6-KETO-PGF1 alpha and PGE2 by human neutrophils. Conti P, et al. **Scand J Rheumatol Suppl** 1988;75:318–24
Endothelial cell gene expression of a neutrophil chemotactic factor by TNF-alpha, LPS, and IL-1 beta. Strieter RM, et al. **Science** 1989 Mar 17;243(4897):1467–9
Induction of manganous superoxide dismutase by tumor necrosis factor: possible protective mechanism. Wong GH, et al. **Science** 1988 Nov 11;242(4880):941–4
Interleukin 1, tumor necrosis factor, and interleukin 6 as mediators of cartilage destruction. Shinmei M, et al. **Semin Arthritis Rheum** 1989 Feb;18(3 Suppl 1):27–32
Protein kinase C: a potential pathway of endothelial cell activation by endotoxin, tumor necrosis factor, and interleukin-1. Magnuson DK, et al. **Surgery** 1989 Aug; 106(2):216–22; discussion 222–3
Selective effects of tumor necrosis factor-alpha on wound healing in rats. Steenfos HH, et al. **Surgery** 1989 Aug; 106(2):171–5; discussion 175–6
Tumor necrosis factor enhances expression of tissue factor mRNA in endothelial cells. Conway EM, et al. **Thromb Res** 1989 Feb 1;53(3):231–41
Interleukin-1, endotoxin or tumor necrosis factor/cachectin enhance the level of plasminogen activator inhibitor messenger RNA in bovine aortic endothelial cells. Medina R, et al. **Thromb Res** 1989 Apr 1;54(1):41–52
Tumor necrosis factor (TNF) stimulates plasminogen activator inhibitor (PAI) production by endothelial cells and decreases blood fibrinolytic activity in the rat. Dosne AM, et al. **Thromb Res Suppl** 1988;8:115–22
Evaluation of recombinant human tumor necrosis factor by scheduled intratumoral administration in mice bearing transplantable tumors. Tamura K, et al. **Tohoku J Exp Med** 1989 Feb;157(2):107–18
Recombinant human tumour necrosis factor is not inhibitory to Plasmodium falciparum in vitro. Hviid L, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):48–9

Immunologic control of vascular cell growth in arterial response to injury and atherosclerosis. Stemme S, et al. **Transplant Proc** 1989 Aug;21(4):3697–9

[Current developments in the field of sepsis: tumor necrosis factor (cachectin)] van Deventer SJ, et al. **Ned Tijdschr Geneeskd** 1989 Jan 7;133(1):17–9 (41 ref.) **(Dut)**

[Mechanism of resistance to tumor necrosis factor] Pfreundschuh M, et al. **Onkologie** 1989 Jun;12(3):128–30 (Eng. Abstr.) **(Ger)**

[Effect of tumor necrosis factor on human hematopoietic precursor cells] Völkers B, et al. **Onkologie** 1989 Jun; 12(3):109–15 (Eng. Abstr.) **(Ger)**

[Implication of hydroxyl radical production in the killing of tumor cells by recombinant human tumor necrosis factor] Kuriyama H, et al. **Gan To Kagaku Ryoho** 1988 Oct; 15(10):2967–74 (Eng. Abstr.) **(Jpn)**

[Low sensitivity of choriocarcinoma cell lines to tumor necrosis factor (TNF)-alpha] Kameda T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):653–9 (Eng. Abstr.) **(Jpn)**

[The modifying action of tumor necrosis factor on angiogenesis] Lisniak IA, et al. **Eksp Onkol** 1989;11(3):50–2 (Eng. Abstr.) **(Rus)**

[Tumor necrotic factor as an inhibitor of angiogenesis] Sopotsinskaia EB, et al. **Patol Fiziol Eksp Ter** 1988 Sep-Oct;(5):62–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effects of interferon and tumour necrosis factor on development of intracellular bacterial infections. Degré M, et al. **Acta Microbiol Hung** 1988;35(4):405–10

Application of anti-TNF to Plasmodium vinckei-infected mice is followed by an increase of parasitaemia. Neifer S, et al. **Acta Trop (Basel)** 1989 Jul;46(4):273–5

Stimulation of human neutrophilic granulocytes by two monocyte-derived cytokines. Kownatzki E, et al. **Agents Actions** 1989 Jan;26(1–2):180–2

Different pro-inflammatory profiles of interleukin 1 (IL 1) and tumor necrosis factor (TNF) in an in vivo model of inflammation. Rampart M, et al. **Agents Actions** 1989 Jan; 26(1–2):186–8

Human alveolar macrophage and blood monocyte inhibition of fibroblast proliferation. Evidence for synergy between interleukin-1 and tumor necrosis factor. Elias JA, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1595–603

Granulocyte depletion prevents tumor necrosis factor-mediated acute lung injury in guinea pigs. Stephens KE, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1300–7

Cachetin/TNF-alpha in septic shock and septic adult respiratory distress syndrome. Tracey KJ, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1377–9 (33 ref.)

22nd forum in immunology. The multiple roles of tumour necrosis factor. **Ann Inst Pasteur Immunol** 1988 May–Jun; 139(3):279–340

The pathophysiologic role of cachectin/TNF in septic shock and cachexia. Tracey KJ, et al. **Ann Inst Pasteur Immunol** 1988 May–Jun;139(3):311–7 (26 ref.)

The biology of cachectin/TNF—a primary mediator of the host response. Beutler B, et al. **Annu Rev Immunol** 1989; 7:625–55 (230 ref.)

Cachectin: its impact on metabolism and nutritional status. Moldawer LL, et al. **Annu Rev Nutr** 1988;8:585–609 (136 ref.)

Epidermal tumour necrosis factor alpha and interleukin 6-like activities in AIDS-related Kaposi's sarcoma. An immunohistological study. Oxholm A, et al. **APMIS** 1989 Jun;97(6):533–8

The regulation of fatty acid and branched-chain amino acid oxidation in cancer cachectic rats: a proposed role for a cytokine, eicosanoid, and hormone trilogy. Siddiqui RA, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):71–86

The history, properties, and biological effects of cachectin. Beutler B, et al. **Biochemistry** 1988 Oct 4;27(20):7575–82 (119 ref.)

Cachectin/tumor necrosis factor and interleukin-1 show different modes of combined effect on lipoprotein lipase activity and intracellular lipolysis in 3T3-L1 cells. Ogawa H, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):131–5

The inducing role of tumor necrosis factor in the development of bactericidal granulomas during BCG infection. Kindler V, et al. **Cell** 1989 Mar 10;56(5):731–40

Cell surface tumor necrosis factor (TNF) accounts for monocyte- and lymphocyte-mediated killing of TNF-resistant target cells. Peck R, et al. **Cell Immunol** 1989 Aug;122(1):1–10

Tumor necrosis factor-alpha. A multifaceted mediator of inflammation. Lynch JP 3d, et al. **Chest** 1989 Sep; 96(3):457–9

The role of monokines in granuloma formation in mice: the ability of interleukin 1 and tumor necrosis factor-alpha to induce lung granulomas. Kasahara K, et al. **Clin Immunol Immunopathol** 1989 Jun;51(3):419–25

Role of tumor necrosis factor in sepsis and acute lung injury. Simpson SQ, et al. **Crit Care Clin** 1989 Jan;5(1):27–47 (40 ref.)

Cytokines: their relevance to nutrition. Grimble RF. **Eur J Clin Nutr** 1989 Apr;43(4):217–30 (117 ref.)

Interleukin 1 and tumour necrosis factor increase phosphorylation of fibroblast proteins. Kaur P, et al. **FEBS Lett** 1988 Dec 5;241(1–2):6–10

Two conserved tryptophan residues of tumor necrosis factor and lymphotoxin are not involved in the biological activity. Van Ostade X, et al. **FEBS Lett** 1988 Oct 10;238(2):347–52

Tumor necrosis factor in alcoholic hepatitis. Sweeting J. **Gastroenterology** 1989 Oct;97(4):1056–7

Tumor necrosis factor, the acute phase response and the pathogenesis of alcoholic liver disease. Thiele DL. **Hepatology** 1989 Mar;9(3):497–9

The role of cachectin/TNF in endotoxic shock and cachexia. Cerami A, et al. **Immunol Today** 1988 Jan;9(1):28–31 (40 ref.)

Tumor necrosis factor (cachectin) mediates induction of cachexia by cord factor from mycobacteria. Silva CL, et al. **Infect Immun** 1988 Dec;56(12):3067–71

Pulmonary inflammation and fibrosis in a murine model of asbestosis and silicosis. Possible role of tumor necrosis factor. Bissonnette E, et al. **Inflammation** 1989 Jun; 13(3):329–39

Involvement of tumour necrosis factor and other cytokines in immune-mediated vascular pathology. Grau GE, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):34–9 (44 ref.)

Tumor necrosis factor signal transduction. Tissue-specific serine phosphorylation of a 26-kDa cytosolic protein. Schütze S, et al. **J Biol Chem** 1989 Feb 25;264(6):3562–7

Distinct mechanisms of interferon-gamma and tumor necrosis factor-alpha action in oncogene-transformed mouse fibroblasts. Seliger B, et al. **J Cell Biochem** 1988 Nov; 38(3):205–12

Cachectin/tumor necrosis factor exerts endocrine, paracrine, and autocrine control of inflammatory responses. Sherry B, et al. **J Cell Biol** 1988 Oct;107(4):1269–77 (130 ref.)

Participation of the cytokines interleukin 6, tumor necrosis factor-alpha, and interleukin 1-beta secreted by acute myelogenous leukemia blasts in autocrine and paracrine leukemia growth control. Oster W, et al. **J Clin Invest** 1989 Aug;84(2):451–7

Binding and biological effects of tumor necrosis factor alpha on cultured human neonatal foreskin keratinocytes. Pillai S, et al. **J Clin Invest** 1989 Mar;83(3):816–21

Tumor necrosis factor/cachectin plays a key role in bleomycin-induced pneumopathy and fibrosis. Piguet PF, et al. **J Exp Med** 1989 Sep 1;170(3):655–63

Expression of IL-1 and tumor necrosis factor by endothelial cells: role in stimulating fibroblast PGE2 synthesis. Shanahan WR Jr, et al. **J Exp Pathol** 1989;4(1):17–27

Involvement of tumor necrosis factor in endotoxin-triggered neutrophil adherence to sinusoidal endothelial cells of mouse liver and its modulation in acute phase. Schlayer HJ, et al. **J Hepatol** 1988 Oct;7(2):239–49

Tumor necrosis factor is involved in the T cell-independent pathway of macrophage activation in acid mice. Bancroft GJ, et al. **J Immunol** 1989 Jul 1;143(1):127–30

Role of tumor necrosis factor-alpha in E1A oncogene-induced susceptibility of neoplastic cells to lysis by natural killer cells and activated macrophages. Cook JL, et al. **J Immunol** 1989 Jun 15;142(12):4527–34

Products of lipopolysaccharide-activated macrophages (tumor necrosis factor-alpha, transforming growth factor-beta) but not lipopolysaccharide modify DNA synthesis by rat trophoblast cells exhibiting the 80-kDa lipopolysaccharide-binding protein. Hunt JS, et al. **J Immunol** 1989 Sep 1;143(5):1606–13

Natural cytotoxic cell-specific cytotoxic factor produced by IL-3-dependent basophilic/mast cells. Relationship to TNF. Richards AL, et al. **J Immunol** 1988 Nov 1; 141(9):3061–6

Compartmentalization of intraalveolar and systemic lipopolysaccharide-induced tumor necrosis factor and the pulmonary inflammatory response. Nelson S, et al. **J Infect Dis** 1989 Feb;159(2):189–94

Dexamethasone modulation of in vivo effects of endotoxin, tumor necrosis factor, and interleukin-1 on liver cytochrome P-450, plasma fibrinogen, and serum iron. Bertini R, et al. **J Leukoc Biol** 1989 Sep;46(3):254–62

Are there more tumor necrosis factors? Palladino MA. **J Natl Cancer Inst** 1989 Apr 5;81(7):474–5 (24 ref.)

Cachectin in hemorrhagic shock and encephalopathy syndrome [letter] Leclerc F, et al. **J Pediatr** 1989 Sep; 115(3):500–1

Inhibitory effect of TNF alpha antibodies on synovial cell interleukin-1 production in rheumatoid arthritis. Brennan FM, et al. **Lancet** 1989 Jul 29;2(8657):244–7

Distinct regulatory effects of IL-4 and TNF-alpha during CD3-dependent and CD3-independent initiation of human T-cell activation. Damle NK, et al. **Lymphokine Res** 1989 Summer;8(2):85–97

Does tumor necrosis factor play a role in the pathogenesis of fulminant hepatitis? Aderka D, et al. **Med Hypotheses** 1988 Nov;27(3):193–6

Tumor necrosis factor: a plurifunctional mediator of acute inflammation. Warren JS, et al. **Mod Pathol** 1988 May; 1(3):242–7 (75 ref.)

Beta interferon subtype 1 induction by tumor necrosis factor. Jacobsen H, et al. **Mol Cell Biol** 1989 Jul;9(7):3037–42

Is circulating tumor necrosis factor bioactive? [letter] Duncombe AS, et al. **N Engl J Med** 1988 Nov 3; 319(18):1227–8

Effects of cytokines on cultured microvascular endothelial cells derived from gerbil brain. Yoshida S, et al. **Neurosurgery** 1989 Sep;25(3):373–7

Chemokinetic agents for monocytes in human milk: possible role of tumor necrosis factor-alpha. Mushtaha AA, et al. **Pediatr Res** 1989 Jun;25(6):629–33

The role of tumor necrosis factor and interleukin 1 in the immunoinflammatory response. Larrick JW, et al. **Pharm Res** 1988 Mar;5(3):129–39 (176 ref.)

Orchestration of septic shock by cytokines: the role of cachectin (tumor necrosis factor). Beutler BA. **Prog Clin Biol Res** 1989;286:219–35 (45 ref.)

In vivo, interleukin 1 and tumor necrosis factor alpha are essential cytokines involved in the induction of rat alpha 1-acid glycoprotein. Chauveiot-Moachon L, et al. **Prog Clin Biol Res** 1989;300:267–70

Mechanisms of macrophage-mediated tumor cell lysis: role for the monokines tumor necrosis factor and interleukin 1. Fidler IJ, et al. **Prog Clin Biol Res** 1989;288:169–81

Role of cytokines in rheumatoid synovitis. Ziff M. **Recenti Prog Med** 1988 Jul–Aug;79(7–8):318–22

[Tumor necrosis factor alpha (cachectin). Biological properties and role in physiopathology] Blay JY, et al. **Presse Med** 1989 May 13;18(19):975–9 (Eng. Abstr.) **(Fre)**

[Experimental studies on the pathogenesis of fulminant hepatitis with respect to tumor necrosis factor (TNF)] Ryu P, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec; 85(12):2697 **(Jpn)**

SECRETION

Reduction of macrophage-mediated tumor cytotoxicity by pretreatment with GM-CSF. Heidenreich S, et al. **Behring Inst Mitt** 1988 Aug;(83):274–7

High-level secretion of tumor necrosis factor-alpha contributes to hematopoietic failure in hairy cell leukemia. Lindemann A, et al. **Blood** 1989 Mar;73(4):880–4

Recombinant human granulocyte/macrophage colony-stimulating factor enhances monocyte cytotoxicity and secretion of tumor necrosis factor alpha and interferon in cancer patients. Wing EJ, et al. **Blood** 1989 Feb 15; 73(3):643–6

Spontaneous secretion of tumor necrosis factor-beta by human myeloma cell lines. Bataille R, et al. **Cancer** 1989 Mar 1;63(5):877–80

Reduced release of TNF and PCA from macrophages of tolerant mice. Haslberger A, et al. **Circ Shock** 1988 Oct; 26(2):185–92

Differential secretion of tumor necrosis factor-alpha and granulocyte/macrophage colony-stimulating factors but not interferon-gamma from CD4+ compared to CD8+ human T cell clones. Pawelec G, et al. **Eur J Immunol** 1989 Jan;19(1):197–200

Alpha-globulins suppress human leukocyte tumor necrosis factor secretion. Scuderi P, et al. **Eur J Immunol** 1989 May; 19(5):939–42

Monocytes enhance gamma-interferon-induced inhibition of myeloid progenitor cell growth through secretion of tumor necrosis factor. Cannistra SA, et al. **Exp Hematol** 1988 Nov; 16(10):865–70

Cytokines produced in lymph follicles. Tsunoda R, et al. **Immunol Lett** 1989 Aug;22(2):129–34

Effect of mycoplasmas on natural cytotoxic activity and release of tumor necrosis factor alpha by spleen cells. Lin Y, et al. **Infect Immun** 1988 Dec;56(12):3072–5

The release of tumor necrosis factor from endotoxin-stimulated rat Kupffer cells is regulated by prostaglandin E2 and dexamethasone. Karck U, et al. **J Hepatol** 1988 Dec;7(3):352–61

Human sera and culture supernatants from human tumors and diploid fetal fibroblasts suppress tumor necrosis factor secretion in vitro. Scuderi P, et al. **J Leukoc Biol** 1989 Jul;46(1):34–40

Temporally different stimulation of TNF-alpha and PGE2 release from GM-CSF-primed macrophages. Heidenreich S, et al. **Lymphokine Res** 1989 Fall;8(3):353–7

Induction of TNF in vitro as a model for the identification of toxic malaria antigens. Taverne J, et al. **Lymphokine Res** 1989 Fall;8(3):317–22

Altered lymphocyte proliferation and cytokine release in hepatosplenic schistosomiasis mansoni in Brazil. Zwingenberger K, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:273–6

Effects of botulinum toxin type D on secretion of tumor necrosis factor from human monocytes. Imamura K, et al. **Mol Cell Biol** 1989 May;9(5):2239–43

Tumor necrosis factor/cachectin and interleukin-1 secretion by cord blood monocytes from premature and term neonates. Weatherstone KB, et al. **Pediatr Res** 1989 Apr; 25(4):342–6

Fc-receptors regulate secretion of tumor necrosis factor by human monocytes. Debets JM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):84

STANDARDS

Parameters for the evaluation of long-term stability of tumour necrosis factor preparations. Geigert J, et al. **Dev Biol Stand** 1988;69:129–38

THERAPEUTIC USE

Therapeutic potential of cytokines. Talmadge JE, et al. **Adv Exp Med Biol** 1988;233:395–403

Treatment of colon cancer in rats with rMuTNF and the interferon-inducer bropirimine. Marquet RL, et al. **Agents Actions** 1989 Jan;26(1–2):151–2

Endogenous and exogenous TNF therapy (EET therapy):

conceptual and experimental grounds. Mizuno D, et al. **Ann Inst Pasteur Immunol** 1988 May-Jun;139(3):282-5 (25 ref.)

Effects of biological response modifiers on ovarian carcinoma cell lines. Marth C, et al. **Anticancer Res** 1989 Mar-Apr; 9(2):461-7

Merkel cell carcinoma. A successful treatment with tumor necrosis factor. Ito Y, et al. **Arch Dermatol** 1989 Aug; 125(8):1093-5

Intralesional tumour necrosis factor combined with interferon gamma in metastatic melanoma. Retsas S, et al. **BMJ** 1989 May 13;298(6683):1290-1

The response of human myeloid leukaemia xenografts to human recombinant tumour necrosis factor. Clutterbuck RD, et al. **Br J Cancer** 1989 Jun;59(6):841-3

Effect of human recombinant tumour necrosis factor and rat gamma interferon on nitrosomethylurea-induced mammary tumours. Shah P, et al. **Br J Cancer** 1989 Feb;59(2):206-9

Lack of effect of treatment with human recombinant-tumour necrosis factor (HrTNF) on the binding of quinidine to alpha 1-acid glycoprotein (AGP). Barnett JA, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):257-61

A phase I clinical trial of recombinant human tumor necrosis factor. Creagan ET, et al. **Cancer** 1988 Dec 15; 62(12):2467-71

Biological response modifiers in cancer therapeutics: potentialities and limitations. Mihich E. **Cancer Detect Prev** 1988;12(1-6):531-5 (13 ref.)

Phase I study of recombinant human tumor necrosis factor (rHu-TNF:PT-050). Taguchi T. **Cancer Detect Prev** 1988; 12(1-6):561-72

Synergistic enhancement of the antitumor activity of recombinant human TNF-alpha by recombinant human IFN-gamma. Taguchi T, et al. **Cancer Detect Prev** 1988; 12(1-6):105-14

Phase I study of recombinant human tumor necrosis factor alpha in advanced malignant disease. Moritz T, et al. **Cancer Immunol Immunother** 1989;29(2):144-50

Sensitivity of fresh and cultured ovarian tumor cells to tumor necrosis factor, interferon-alpha 2, and OK-432. Nio Y, et al. **Cancer Immunol Immunother** 1988;27(3):246-54

Induction of lymphokine-activated killer cytotoxicity with interleukin-2 and tumor necrosis factor-alpha against primary lung cancer targets. Yang SC, et al. **Cancer Immunol Immunother** 1989;29(3):193-8

Phase I trial of recombinant human gamma-interferon and recombinant human tumor necrosis factor in patients with advanced gastrointestinal cancer. Abbruzzese JL, et al. **Cancer Res** 1989 Jul 15;49(14):4057-61

Augmentation of antitumor efficacy by the combination of recombinant tumor necrosis factor and chemotherapeutic agents in vivo. Krosnick JA, et al. **Cancer Res** 1989 Jul 15;49(14):3729-33

Chronic therapy with recombinant tumor necrosis factor-alpha in autoimmune NZB/NZW F1 mice. Gordon C, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):421-34

Comparison of the effects of flavone acetic acid, fostriecin, homoharringtonine and tumour necrosis factor alpha on colon 38 tumours in mice. Baguley BC, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):263-9

Therapeutic effect of recombinant human tumor necrosis factor in ovarian carcinoma xenograft in nude mice. Manetta A, et al. **Gynecol Oncol** 1989 Sep;34(3):360-4

Protection of mice against Listeria monocytogenes infection by recombinant human tumor necrosis factor alpha. Desiderio JV, et al. **Infect Immun** 1989 May;57(5):1615-7

Anti-tumor effect of recombinant murine TNF-alpha (rMuTNFa) given by continuous i.v. infusion as compared to repeated i.v. injections in a rat liver metastasis model. Scheringa M, et al. **Int J Cancer** 1989 May 15;43(5):905-9

Cytokines and pancreatic cancer. Sensitivity of xenotransplants of predominantly pancreatic carcinomas to rIFN-gamma and rTFN-alpha in nude mice. Kühl JS, et al. **Int J Pancreatol** 1989 Apr;4(3):303-19

Intravenous recombinant tumor necrosis factor in the treatment of AIDS-related Kaposi's sarcoma. Aboulafia D, et al. **J Acquir Immune Defic Syndr** 1989;2(1):54-8

Intralesional recombinant tumor necrosis factor-alpha for AIDS-associated Kaposi's sarcoma: a randomized, double-blind trial. Kahn JO, et al. **J Acquir Immune Defic Syndr** 1989;2(3):217-23

Antitumor effect of systemic administration of novel recombinant tumor necrosis factor (rTNF-S) with less toxicity than conventional rTNF-alpha in vivo. Gatanaga T, et al. **J Biol Response Mod** 1989 Jun;8(3):278-86

Tumor necrosis factor: how to improve the antitumor activity and decrease accompanying side effects for therapeutic application. Haranaka K. **J Biol Response Mod** 1988 Dec; 7(6):525-34

TNF induces endogenous TNF in vivo: the basis of EET therapy as a combination of rTNF together with endogenous TNF. Inagawa H, et al. **J Biol Response Mod** 1988 Dec;7(6):596-607

Biological activities of novel recombinant tumor necrosis factor having N-terminal amino acid sequences derived from cytotoxic factors produced by THP-1 cells. Soma G, et al. **J Biol Response Mod** 1988 Dec;7(6):587-95

Phase I study of 24-hour continuous intravenous infusion of recombinant human tumor necrosis factor. Steinmetz T, et al. **J Biol Response Mod** 1988 Oct;7(5):417-23

A phase I trial of recombinant human tumor necrosis factor and interferon-gamma: effects of combination cytokine administration in vivo. Demetri GD, et al. **J Clin Oncol** 1989 Oct;7(10):1545-53

Increased toxicity of tumor necrosis factor/gamma interferon in patients with leukocytosis [letter] Fiedler W, et al. **J Clin Oncol** 1988 Nov;6(11):1787-8

Tumor necrosis factor: still a promising agent. Frei E 3d, et al. **J Clin Oncol** 1989 Mar;7(3):291-4 (44 ref.)

Macroscopic and microscopic early effects of tumour necrosis factor on murine Meth A sarcoma, and relation to curative activity. Van de Wiel PA, et al. **J Pathol** 1989 Jan;157(1):65-73

Immune enhancement by tumor necrosis factor-alpha improves antibiotic efficacy after hemorrhagic shock. Livingston DH, et al. **J Trauma** 1989 Jul;29(7):967-70; discussion 970-1

Enhanced anti-tumor effects of recombinant human tumor necrosis factor plus VP-16 on metastatic renal cell carcinoma in a xenograft model. Burgers JK, et al. **J Urol** 1989 Jul;142(1):160-4

Immunochemotherapy for murine bladder tumor with a new human recombinant tumor necrosis factor (rTNF-S), VP-16 and hyperthermia. Iizumi T, et al. **J Urol** 1989 Aug; 142(2):386-9

Hyperthermic enhancement of the antitumor effect of natural human tumor necrosis factor-alpha and -beta: an in vitro and in vivo study. Maeda T, et al. **Jpn J Cancer Res** 1988 Sep;79(9):1054-61

Preventive and antiproliferative effects of tumor necrosis factor against experimental hepatic metastases of mouse colon-26 tumor. Nishiyama Y, et al. **Jpn J Cancer Res** 1989 Apr;80(4):366-72

Studies on in vitro mechanisms of anti-tumor activity of the tumor necrosis factor alpha against human renal carcinoma cell line (KU-2). Shibayama T. **Keio J Med** 1989 Mar; 38(1):13-26

Tumor necrosis factor and interferon gamma inhibit the development of radiation-induced thymic lymphomas in C57BL/Ka mice. Boniver J, et al. **Leukemia** 1989 Aug; 3(8):611-3

Combined therapy of xenografts of human pancreatic carcinomas with rTNF-alpha and mitomycin C. Klapdor R, et al. **Onkologie** 1989 Jun;12(3):143-7

Therapeutic and toxic activity of tumor necrosis factor is synergistic with gamma interferon. Talmadge JE, et al. **Pathol Immunopathol Res** 1989;8(1):21-34

Effects of MAb BW 494/32 and rTNF-a/rIFN-g alone and in combination in nude mice bearing xenografts of human gastrointestinal/pancreatic carcinomas. Klapdor R, et al. **Strahlenther Onkol** 1989 Jul;165(7):549-50

Response of human colon carcinoma xenografts to recombinant human tumor necrosis factor (TNF). Osieka R, et al. **Strahlenther Onkol** 1989 Jul;165(7):552-4

Tumor necrosis factor--a new therapeutic approach. Preclinical studies in nude mice. Stuben G, et al. **Strahlenther Onkol** 1989 Jul;165(7):554-6

Biologic response modifiers and urologic malignancies. Fleischmann J. **Surg Clin North Am** 1988 Oct;68(5):1125-45 (62 ref.)

Prevention and treatment of endotoxin and sepsis lethality with recombinant human tumor necrosis factor. Sheppard BC, et al. **Surgery** 1989 Aug;106(2):156-61; discussion 161-2

[The effect of recombinant human tumor necrosis factor alpha on malignant tumors in vivo. Physiopathologic basis for clinical oncology] Kallinowski F, et al. **Arzneimittelforschung** 1989 Mar;39(3):410-4 (Eng. Abstr.) **(Ger)**

[Tumor necrosis factor] Herrmann F, et al. **Dtsch Med Wochenschr** 1989 Feb 24;114(8):312-6 (43 ref.) **(Ger)**

[Biological response modifiers and cancer treatment] Urushizaki I. **Gan No Rinsho** 1989 Jan;Spec No:25-33 **(Jpn)**

[The significance and outlook of cytokines in cancer therapy] **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):907-15 **(Jpn)**

[Anti-tumor effect of human recombinant tumor necrosis factor on the human renal cell carcinoma serially transplanted into nude mice] Honda N, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1613-21 (Eng. Abstr.) **(Jpn)**

TOXICITY

Tumor necrosis factor-induced bowel necrosis: the role of platelet-activating factor. Hsueh W, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:363-6

Species specificity and involvement of other cytokines in endotoxic shock action of recombinant tumour necrosis factor in mice. Brouckaert PG, et al. **Agents Actions** 1989 Jan;26(1-2):196-8

Cachectin/TNF or IL-1 alpha induces cachexia with redistribution of body proteins. Fong Y, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R659-65

Reversal of the toxic effects of cachectin by concurrent insulin administration. Fraker DL, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E725-31

Pentoxifylline prevents tumor necrosis factor-induced lung injury. Lilly CM, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1361-8

Tumor necrosis factor mediates myelin damage in organotypic cultures of nervous tissue. Selmaj K, et al. **Ann N Y Acad Sci** 1988;540:568-70

The effects of tumor necrosis factor and their selective inhibition by ibuprofen. Evans DA, et al. **Ann Surg** 1989 Mar;209(3):312-21

Four different interleukin-1 species sensitize to the lethal action of tumour necrosis factor. Everaerdt B, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):378-85

Tumor necrosis factor is a terminal mediator in galactosamine/endotoxin-induced hepatitis in mice. Tiegs G, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):627-31

Exacerbation of toxic effects by endotoxin contamination of recombinant human tumor necrosis factor. Ozaki Y, et al. **Cancer Chemother Pharmacol** 1989;23(4):231-7

Synergic action between tumor necrosis factor and endotoxins or poly(A.U) on cultured bovine endothelial cells. van de Wiel PA, et al. **Cancer Immunol Immunother** 1989;29(1):23-8

Signalling pathway of tumor necrosis factor in normal and tumor cells. Watanabe N, et al. **Cancer Immunol Immunother** 1989;28(3):157-63

Manganous superoxide dismutase is essential for cellular resistance to cytotoxicity of tumor necrosis factor. Wong GH, et al. **Cell** 1989 Sep 8;58(5):923-31

Lethal shock in partially hepatectomized rats administered tumor necrosis serum. Fukushima H, et al. **Circ Shock** 1988 Sep;26(1):1-14

Arthritogenic actions of recombinant IL-1 and tumour necrosis factor alpha in the rabbit: evidence for synergistic interactions between cytokines in vivo. Henderson B, et al. **Clin Exp Immunol** 1989 Feb;75(2):306-10

Heat shock protects WEHI-164 target cells from the cytolysis by tumor necrosis factors alpha and beta. Jäättelä M, et al. **Eur J Immunol** 1989 Aug;19(8):1413-7

Tumor necrosis factor alpha potentiates neutrophil antimicrobial activity: increased fungicidal activity against Torulopsis glabrata and Candida albicans and associated increases in oxygen radical production and lysosomal enzyme release. Ferrante A. **Infect Immun** 1989 Jul; 57(7):2115-22

Tumor necrosis factor alpha-induced pulmonary vascular endothelial injury. Goldblum SE, et al. **Infect Immun** 1989 Apr;57(4):1218-26

Human recombinant tumor necrosis factor alpha infusion mimics endotoxemia in awake sheep. Johnson J, et al. **J Appl Physiol** 1989 Mar;66(3):1448-54

A tumor necrosis factor-binding protein purified to homogeneity from human urine protects cells from tumor necrosis factor toxicity. Engelmann H, et al. **J Biol Chem** 1989 Jul 15;264(20):11974-80

Schedule-dependent enhanced lethality with combined administration of actinomycin D and tumor necrosis factor in mice. Buckley NJ, et al. **J Biol Response Mod** 1989 Jun; 8(3):287-96

Cytotoxicity mediated by tumor necrosis factor in variant subclones of the ME-180 cervical carcinoma line: modulation by specific inhibitors of DNA topoisomerase II. Coffman FD, et al. **J Cell Biochem** 1989 Feb; 39(2):95-105

Capacity of tumor necrosis factor to bind and penetrate membranes is pH-dependent. Baldwin RL, et al. **J Immunol** 1988 Oct 1;141(7):2352-7

IFN-gamma and tumor necrosis factor-alpha. Cytotoxicity to murine islets of Langerhans. Campbell IL, et al. **J Immunol** 1988 Oct 1;141(7):2325-9

Tumor necrosis factor can induce both apoptic and necrotic forms of cell lysis. Laster SM, et al. **J Immunol** 1988 Oct 15;141(8):2629-34

Modulation of antibody-mediated glomerular injury in vivo by bacterial lipopolysaccharide, tumor necrosis factor, and IL-1. Tomosugi NI, et al. **J Immunol** 1989 May 1; 142(9):3083-90

Induction of dermal and subcutaneous inflammation by recombinant cachectin/tumor necrosis factor (TNF alpha) in the mouse [published erratum appears in J Invest Dermatol 1989 Jan;92(1):135] Sharpe RJ, et al. **J Invest Dermatol** 1988 Oct;91(4):353-7

Toxic effects of cytokines in vivo. Remick DG, et al. **Lab Invest** 1989 Mar;60(3):317-9 (37 ref.)

Interleukin-1 induces a shock-like state in rabbits: synergism with tumor necrosis factor and the effect of ibuprofen. Dinarello CA, et al. **Prog Clin Biol Res** 1989;299:203-15

Interleukin-1 induces a shock-like state in rabbits: synergism with tumor necrosis factor and the effect of cyclooxygenase inhibition. Dinarello CA, et al. **Prog Clin Biol Res** 1989; 286:243-63

Recombinant tumour necrosis factor (TNF) fixed to cell monolayers retains its cytotoxic and growth-stimulatory activity. Evidence that internalization of TNF is not necessary for induction of biological effects. Hofsli E, et al. **Scand J Immunol** 1989 Jan;29(1):57-63

TUMOR NECROSIS FACTOR-ALPHA see **TUMOR NECROSIS FACTOR**

TUMOR NECROSIS FACTOR-BETA see **TUMOR NECROSIS FACTOR**

TUMOR PROMOTERS see **CARCINOGENS**

TUMOR STAGING see **NEOPLASM STAGING**

TUMOR STEM CELL ASSAY see under **COLONY-FORMING UNITS ASSAY**

TUMOR STEM CELLS

Selective depletion of human myeloma clonogenic stem cells from bone marrow cell preparations by a plasma-cell reactive antibody and complement. Stone MJ, et al. **Cancer Detect Prev** 1988;12(1-6):621-35

Clonogenic myeloma cells and chemotherapy [letter] [published erratum appears in Lancet 1989 Feb 4;1(8632):288] Peest D, et al. **Lancet** 1989 Jan 7;1(8628):51

ANALYSIS

Flow cytometric measurements of cytosolic [Ca2+] in normal and leukemic progenitor cells. Cowen DS, et al. **Ann N Y Acad Sci** 1988;551:273-6

Murine embryonal carcinoma cell-surface sialyl LeX is present on a novel glycoprotein and on high-molecular-weight lactosaminoglycan. Rosenman SJ, et al. **Exp Cell Res** 1989 Feb;180(2):326-40

The protein composition of the nuclear matrix of murine P19 embryonal carcinoma cells is differentiation-stage dependent. Stuurman N, et al. **Exp Cell Res** 1989 Feb; 180(2):460-6

Specific interaction between Lex and Lex determinants. A possible basis for cell recognition in preimplantation embryos and in embryonal carcinoma cells. Eggens I, et al. **J Biol Chem** 1989 Jun 5;264(16):9476-84

In situ staining of bromodeoxyuridine positive cells in normal and neoplastic colony-forming units grown on plasma clots. Tazzari PL, et al. **J Immunol Methods** 1988 Oct 26; 113(2):215-9

The use of clone-specific anti-VJ junction oligonucleotides to identify minor clonal lymphoid populations. d'Auriol L, et al. **Nouv Rev Fr Hematol** 1989;31(2):125-8

Nuclear and cytoplasmic distribution of cellular myb protein in human haematopoietic cells evidenced by monoclonal antibody. Bading H, et al. **Oncogene** 1988 Sep;3(3):257-65

CLASSIFICATION

Prethymic phenotype and genotype of pre-T (CD7+/ER-)-cell leukemia and its clinical significance within adult acute lymphoblastic leukemia. Thiel E, et al. **Blood** 1989 Apr;73(5):1247-58

The effect of recombinant cytokines on the proliferative potential and phenotype of cells of the human myelomonocytic leukaemia line, RC-2A. Lyons AB, et al. **Leuk Res** 1988;12(8):659-66

Heterogeneity in protein patterns of cells from terminal blast crisis in chronic granulocytic leukemia: discrimination between lymphatic and myeloid lineages. Doxiadis I, et al. **Leukemia** 1988 Dec;2(12 Suppl):57S-62S

CYTOLOGY

Flow cytometric enumeration of colonies for in vitro chemotherapeutic drug evaluation. Thornthwaite JT, et al. **Cytometry** 1989 Jan;10(1):98-102

Regulation and patterns of endogenous and exogenous gene expression during differentiation of embryonal carcinoma cells. Astigiano S, et al. **Environ Health Perspect** 1989 Mar; 80:25-38 (148 ref.)

Changes in c-onc expression during embryonal carcinoma cell differentiation. Sejersen T, et al. **Environ Health Perspect** 1989 Mar;80:247-56 (70 ref.)

Growth factors and hormones which affect survival, growth, and differentiation of the MCF-7 stem cells and their descendants. Resnicoff M, et al. **Exp Cell Res** 1989 Mar; 181(1):116-25

The proportion of stem cells in murine tumors. Hill RP, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):513-8

Integrin phosphorylation is modulated during the differentiation of F-9 teratocarcinoma stem cells. Dahl SC, et al. **J Cell Biol** 1989 Jan;108(1):183-90

Stem cells in neoplasia. **Lancet** 1989 Apr 1;1(8640):701-2

Effects of desferrioxamine on normal and leukemic human hematopoietic cell growth: in vitro and in vivo studies. Dezza L, et al. **Leukemia** 1989 Feb;3(2):104-7

Cell surface and Golgi pools of beta-1,4-galactosyltransferase are differentially regulated during embryonal carcinoma cell differentiation. Lopez LC, et al. **Mol Cell Biol** 1989 Jun;9(6):2370-7

DRUG EFFECTS

Triple combination of retinoic acid+aclacinomycin A+ dimethylformamide induces differentiation of human acute myeloid leukaemic blasts in primary culture. Hassan HT, et al. **Anticancer Res** 1989 May-Jun;9(3):647-51

Various human hematopoietic growth factors (interleukin-3, GM-CSF, G-CSF) stimulate clonal growth of nonhematopoietic tumor cells. Berdel WE, et al. **Blood** 1989 Jan;73(1):80-3

Synergistic antiproliferative effect of recombinant interferon-gamma with recombinant interferon-alpha on chronic myelogenous leukemia hematopoietic progenitor cells (CFU-GEMM, CFU-Mk, BFU-E, and CFU-GM). Carlo-Stella C, et al. **Blood** 1988 Oct;72(4):1293-9

Growth regulation of human acute myeloid leukemia: effects of five recombinant hematopoietic factors in a serum-free culture system. Delwel R, et al. **Blood** 1988 Dec; 72(6):1944-9

Ricin binding and protein synthesis inhibition in human hematopoietic cell lines. Leonard JE, et al. **Blood** 1988 Oct; 72(4):1357-63

Growth factors influence the sensitivity of leukemic stem cells to cytosine arabinoside in culture. Miyauchi J, et al. **Blood** 1989 Apr;73(5):1272-8

Purging by dye-mediated photosensitization. Porcellini A, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:188-9

Combination effects of human recombinant interferon (alpha-2-arg, gamma) and cytotoxic agents on colony formation of human melanoma and hypernephroma cell lines. Nachbaur DM, et al. **Cancer Lett** 1989 Jan;44(1):49-53

The effects of methylmercury on the cytoskeleton of murine embryonal carcinoma cells. Wasteneys GO, et al. **Cell Biol Toxicol** 1988 Mar;4(1):41-60

Treatment of human clonogenic tumor cells and bone marrow progenitor cells with bleomycin and peplomycin under 40.5 degrees C hyperthermia in vitro. Neumann HA, et al. **Eur J Cancer Clin Oncol** 1989 Jan;25(1):99-104

Effect of estradiol and tamoxifen on the anchorage-independent growth of the subpopulations derived from MCF-7 breast carcinoma cells: cytogenetic analysis of the stem cell subpopulation. Podhajcer OL, et al. **Exp Cell Res** 1988 Nov;179(1):58-64

Presumptive neurons derived by differentiation of a human embryonal carcinoma cell line exhibit tetrodotoxin-sensitive sodium currents and the capacity for regenerative responses. Rendt J, et al. **Exp Cell Res** 1989 Feb;180(2):580-4

Comparison of in vitro inhibition of etoposide (VP16) on leukemic and normal myeloid, erythroid clonogenic cells. Lagneaux L, et al. **Exp Hematol** 1989 Aug;17(7):843-6

Effect of recombinant GM-CSF and recombinant G-CSF on colony formation of blast progenitors in acute myeloblastic leukemia. Motoji T, et al. **Exp Hematol** 1989 Jan;17(1):56-60

Antiproliferative effects of lipoxygenase inhibitors on malignant human hematopoietic cell lines. Snyder DS, et al. **Exp Hematol** 1989 Jan;17(1):6-9

In vitro pharmacological purging of human bone marrow is enhanced by the use of lonidamine. De Fabritiis P, et al. **Exp Mol Pathol** 1989 Apr;50(2):210-9

Influence of medicinal herbs decocted with different utensils on colony formation of gastric carcinoma cells. Qiu JX, et al. **J Tradit Chin Med** 1989 Jun;9(2):125-7

Use of the MTT assay for rapid determination of chemosensitivity of human leukemic blast cells. Campling BG, et al. **Leuk Res** 1988;12(10):823-31

Effect of recombinant GM-CSF on the metabolism of cytosine arabinoside in normal and leukemic human bone marrow cells. Bhalla K, et al. **Leukemia** 1988 Dec; 2(12):810-3

Control of in vivo differentiation of myeloid leukemic cells. Lotem J, et al. **Leukemia** 1988 Dec;2(12 Suppl):24S-37S

Clonal suppression of HL60 and U937 cells by recombinant human leukemia inhibitory factor in combination with GM-CSF or G-CSF. Maekawa T, et al. **Leukemia** 1989 Apr;3(4):270-6

Inhibition of the in vitro growth of blast progenitors from acute myeloblastic leukemia patients by transforming growth factor-beta (TGF-beta). Nara N, et al. **Leukemia** 1989 Aug;3(8):572-7

Development of drug resistance in cultured clonogenic leukemic blast cells during the clinical course of myeloblastic leukemia. Asano Y, et al. **Oncology** 1989; 46(5):339-42

[Effect of cytosine arabinoside on the differentiation of granulocyte-monocyte progenitors (CFU-GM) and myeloid leukemia blasts (CFU-L) in vitro] Wächter M, et al. **Folia Haematol (Leipz)** 1988;115(6):927-34 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

Plasminogen activator activity in clonogenic cell populations separated from a murine fibrosarcoma. Nagy B, et al. **Clin Exp Metastasis** 1989 Mar-Apr;7(2):243-50

IMMUNOLOGY

Interaction of tumor cells and immune system in the metastatic process. Gorelik E, et al. **Biochem Cell Biol** 1988 Jun;66(6):617-25 (85 ref.)

Vim-2, candidate monoclonal antibody for purging autologous marrow grafts in acute myeloblastic leukaemia. Delwel R, et al. **Bone Marrow Transplant** 1987 Aug; 2(2):149-54

Clonal analysis of untreated non-Hodgkin's lymphoma utilizing immunoglobulin gene rearrangement and immunophenotype. Rudders RA, et al. **Cancer Res** 1988 Nov 15;48(22):6272-7

Lymphokine-activated killer (LAK) cells inhibit the clonogenic growth of human leukemic stem cells. Lista P, et al. **Eur J Haematol** 1989 May;42(5):425-30

Normal hematopoietic progenitor cells and malignant lymphohematopoietic cells show different susceptibility to direct cell-mediated MHC-non-restricted lysis by T cell receptor-/CD3-, T cell receptor gamma delta+/CD3+ and T cell receptor-alpha beta+/CD3+ lymphocytes. Voogt PJ, et al. **J Immunol** 1989 Mar 1;142(5):1774-80

Analysis of the individual and combined reactivities of monoclonal antibodies H25, H366, and MY9 with normal progenitor cells and blast cells from patients with acute myeloblastic leukemia. Wisniewski D, et al. **Leukemia** 1989 Jun;3(6):446-52

[The surface glycolipid antigen specific for the internal cell mass of the mouse blastocyst and of the stem cells of murine teratocarcinoma F9] Anfimova ML, et al. **Ontogenez** 1989 Mar-Apr;20(2):158-63 (Eng. Abstr.) **(Rus)**

METABOLISM

Undifferentiated F9 embryonal carcinoma cells produce a short-chain collagen molecule. Smith BD, et al. **Biochem J** 1988 Oct 1;255(1):85-9

Leukemic B-cell precursors express functional receptors for human interleukin-3. Uckun FM, et al. **Blood** 1989 Feb; 73(2):533-42

Leukemic B-cell precursors constitutively express functional receptors for human interleukin-1. Uckun FM, et al. **Blood** 1989 Aug 1;74(2):761-76

Identification and characterization of polypeptide growth factors secreted by murine embryonal carcinoma cells. van Zoelen EJ, et al. **Dev Biol** 1989 May;133(1):272-83

Dominance and independent segregation of metabolic cooperation-competence and pluripotency in an embryonal carcinoma cell hybrid. Smith J, et al. **Exp Cell Res** 1989 Mar;181(1):40-50

A new bioassay for human granulocyte colony-stimulating factor (hG-CSF) using murine myeloblastic NFS-60 cells as targets and estimation of its levels in sera from normal healthy persons and patients with infectious and hematological disorders. Shirafuji N, et al. **Exp Hematol** 1989 Feb;17(2):116-9

Production of growth factors related to fibroblast growth factor and platelet-derived growth factor by human embryonal carcinoma cells. Tiesman J, et al. **In Vitro Cell Dev Biol** 1988 Dec;24(12):1209-16

The capacity for differentiation and production of human chorionic gonadotropin and alpha-fetoprotein in human embryonal carcinoma cell lines. Sekiya S, et al. **Int J Gynecol Pathol** 1988;7(4):373-83

Cloning of murine gelsolin and its regulation during differentiation of embryonal carcinoma cells. Dieffenbach CW, et al. **J Biol Chem** 1989 Aug 5;264(22):13281-8

Treatment with recombinant IFN-gamma decreases cell surface CD4 levels on peripheral blood monocytes and on myelomonocyte cell lines. Faltynek CR, et al. **J Immunol** 1989 Jan 15;142(2):500-8

Specific binding of radioiodinated human GM-CSF to the blast cells of acute myeloblastic leukemia. Murohashi I, et al. **Leuk Res** 1989;13(7):599-604

The regulation of SV40 early gene expression in embryonal carcinoma stem cells—faithful transcriptional regulation in vitro. La Thangue NB, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11417-30

The int-1 proto-oncogene is transcriptionally activated during neuroectodermal differentiation of P19 mouse embryonal carcinoma cells. St-Arnaud R, et al. **Oncogene** 1989 Sep;4(9):1077-80

Expression of the K-fgf protooncogene is repressed during differentiation of F9 cells. Velcich A, et al. **Oncogene Res** 1989;5(1):31-7

Repression of the IgH enhancer in teratocarcinoma cells associated with a novel octamer factor. Lenardo MJ, et al. **Science** 1989 Jan 27;243(4890):544-6

MICROBIOLOGY

Negative regulation of retrovirus expression in embryonal carcinoma cells mediated by an intragenic domain. Loh TP, et al. **J Virol** 1988 Nov;62(11):4086-95

Deletions in a recombinant retrovirus genome associated with its expression in embryonal carcinoma cells. Taketo M, et al. **J Virol** 1989 Oct;63(10):4431-3

PATHOLOGY

Evidence for the stem cell origin of hepatocellular carcinoma and cholangiocarcinoma. Sell S, et al. **Am J Pathol** 1989 Jun;134(6):1347-63 (87 ref.)

Characterization of a new megakaryocytic cell line: the Dami cell. Greenberg SM, et al. **Blood** 1988 Dec;72(6):1968-77

Detection of leukemic clone maturation in vivo by premature chromosome condensation. Hittelman WN, et al. **Blood** 1988 Dec;72(6):1950-60

Enhanced expression of the granulocyte-macrophage colony stimulating factor gene in acute myelocytic leukemia cells following in vitro blast cell enrichment. Kaufman DC, et al. **Blood** 1988 Oct;72(4):1329-32

Elimination of myeloma cells from bone marrow by using monoclonal antibodies and magnetic immunobeads. Shimazaki C, et al. **Blood** 1988 Oct;72(4):1248-54

Clonal expansion after bone marrow transplantation in a patient with chronic myelogenous leukemia. Macera MJ, et al. **Blut** 1988 Nov;57(5):303-6

Clonal development of the acute leukemias. Fialkow PJ, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:76-8 (22 ref.)

Mixed chimerism after allogeneic marrow transplantation. Frassoni F, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:241-3 (12 ref.)

Clonal state of human hepatocellular carcinoma and non-tumorous hepatocytes. Esumi M, et al. **Cancer Chemother Pharmacol** 1989;23 Suppl:S1-3

Production of growth potentiating factor(s) for autologous blast cells by acute myeloblastic leukemia cells. Murohashi I, et al. **Cancer Res** 1988 Nov 15;48(22):6424-8

Production of insulin-like growth factors, platelet-derived growth factor, and transforming growth factors and their

role in the density-dependent growth regulation of a differentiated embryonal carcinoma cell line. van Zoelen EJ, et al. **Endocrinology** 1989 Apr;124(4):2029-41
Natural killer cell-mediated inhibition of growth of myeloid and lymphoid clonogenic leukemias. Savary CA, et al. **Exp Hematol** 1989 Feb;17(2):183-7
Leukemic colony formation from patients with acute leukemia: evidence of the identity in karyotype of the colonies from patients with cytogenetic abnormalities. Ishibashi T. **Fukushima J Med Sci** 1987 Dec;33(2):71-83
Detection of occult leukemic cells in the autologous bone marrow graft of a patient with T-cell acute lymphoblastic leukemia by a highly specific and sensitive assay. Bregni M, et al. **Haematologica (Pavia)** 1989 Jan-Feb;74(1):11-4
Improvement of human myeloma stem cell growth in a liquid culture system supplemented with phytohemagglutinin. Visani G, et al. **Int J Cell Cloning** 1988 Sep;6(5):313-23
Growth requirements, growth factor responsiveness, and growth factor secretion of three human embryonal carcinoma cell lines. Verbeek W, et al. **J Cancer Res Clin Oncol** 1988;114(6):553-8
Participation of the cytokines interleukin 6, tumor necrosis factor-alpha, and interleukin 1-beta secreted by acute myelogenous leukemia blasts in autocrine and paracrine leukemia growth control. Oster W, et al. **J Clin Invest** 1989 Aug;84(2):451-7
Clonogenic myeloma cells and chemotherapy [letter] [published erratum appears in Lancet 1989 Feb 4;1(8632):288] Peest D, et al. **Lancet** 1989 Jan 7;1(8628):51
Multilineage cell involvement in Ph1-negative, bcr-negative chronic myeloid leukemia. Callea V, et al. **Leuk Res** 1988; 12(8):637-45
Differentiation induction therapy of myelodysplastic syndromes. Hassan HT, et al. **Leuk Res** 1989;13(7):633-7 (81 ref.)
Leukemic stem cells and the curability of leukemias [editorial] Jasmin C. **Leuk Res** 1988;12(9):703-5
Erythromyeloid lineage fidelity is conserved in erythroleukaemia. Outram S, et al. **Leuk Res** 1988; 12(8):651-7
Origin of near-haploidy in malignant hematopoietic cells. Verma RS, et al. **Leuk Res** 1988;12(11-12):941-50
Phenotyping of acute myelocytic leukemia (AML) progenitors: an approach for tracing minimal numbers of AML cells among normal bone marrow. Delwel R, et al. **Leukemia** 1988 Dec;2(12):814-9
Early effects of G- and GM-CSF upon HL-60 proliferation and differentiation. Elias L, et al. **Leukemia** 1988 Nov; 2(11):763-5
Cryopreservation of autologous marrow grafts in acute leukemia: survival of in vivo clonogenic leukemic cells and normal hemopoietic stem cells. Hagenbeek A, et al. **Leukemia** 1989 Jul;3(7):535-7
Heterogeneity in acute myeloblastic leukemia. McCulloch EA, et al. **Leukemia** 1988 Dec;2(12 Suppl):38S-49S
Recombinant hematopoietic growth factors fail to induce a proliferative response in precursor B acute lymphoblastic leukemia. Touw I, et al. **Leukemia** 1989 May;3(5):356-62
Proliferative effect of interleukin-3 on normal and leukemic human B cell precursors. Wörmann B, et al. **Leukemia** 1989 Jun;3(6):399-404
Preleukemic cells induced by RadLV are of an oligoclonal nature. Yefenof E, et al. **Leukemia** 1988 Dec;2(12 Suppl):97S-101S
Possible role of tumour stem-end cell cooperation in metastasis. Rak J. **Med Hypotheses** 1989 May;29(1):17-9
Association between the secondary colony-plating efficiency of blast progenitors and the remission induction outcome of acute myeloblastic leukemia patients. Nara N. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1624-9
[Effects of recombinant human G -and GM-CSF on the proliferation of leukemic blast progenitors from acute myeloblastic leukemia patients] Piao YF, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Nov;51(7):1115-21 (Eng. Abstr.) (Jpn)
[In vitro culture of megakaryoblastic progenitors and its clinical application] Nagasawa T, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1170-8 (Eng. Abstr.) (Jpn)
[Morphology of Morris hepatoma 5123 cells cultured in vitro] Chyczewski L, et al. **Patol Pol** 1988 Jul-Sep;39(3):204-9 (Eng. Abstr.) (Pol)
[Which cells during the process of differentiation give rise to chronic B-cell lymphocytic leukemia? I.] Rupniewska ZM, et al. **Postepy Hig Med Dosw** 1988 Mar-Apr; 42(2):198-223 (205 ref.) (Eng. Abstr.) (Pol)

PHYSIOLOGY

The molecular regulators of normal and leukemic hematopoietic cells. Sachs L. **Leukemia** 1988 Dec;2(12 Suppl):8S
Pleiotropic derepression of developmentally regulated cellular and viral genes by c-myc protooncogene products in undifferentiated embryonal carcinoma cells. Onclercq R, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):735-53

RADIATION EFFECTS

[Comparative radiosensitivity of clonogenic tumor cells of the transplantable Ehrlich carcinoma in the ascitic and solid forms of growth] Konopliannikov AG, et al. **Radiobiologiia** 1988 Sep-Oct;28(5):623-5 (Eng. Abstr.) (Rus)

TRANSPLANTATION

Peripheral blood stem cell collection and use in Hodgkin's disease. Comparison with marrow in autologous transplantation. Lasky LC, et al. **Transfusion** 1989 May; 29(4):323-7

ULTRASTRUCTURE

Detection of surface differences between closely related cell populations by partitioning. Cultured K-562 cell sublines. Walter H, et al. **Cell Biophys** 1988 Dec;13(3):173-87
Acute promyelocytic leukemia with T-cell markers and particular response to treatment. Report of a case. Berceanu S, et al. **Haematologica (Pavia)** 1989 Jan-Feb;74(1):75-9
Relevance of ultrastructural immunocytochemistry in the characterization of unclassifiable leukemias: correlation with phenotypic and genic studies. Polli N, et al. **Haematologica (Pavia)** 1989 Mar-Apr;74(2):129-36

TUMOR VIRUS INFECTIONS

Papillomavirus. Effects upon mother and child. Steinberg BM. **Ann N Y Acad Sci** 1988;549:118-28 (42 ref.)
Pathogenesis and treatment of human genital papillomavirus infections: a review. Reichman RC, et al. **Antiviral Res** 1989 Apr;11(3):109-18 (37 ref.)
Human papillomavirus. Current concepts. Androphy EJ. **Arch Dermatol** 1989 May;125(5):683-5 (20 ref.)
Papilloma viruses in cancers and papillomas of the aerodigestive tract. de Villiers EM. **Biomed Pharmacother** 1989;43(1):31-6 (51 ref.)
Are sexually transmitted papilloma viruses exclusive, necessary and sufficient causative factors of genital organ invasive or in situ neoplasia? Mathé G. **Biomed Pharmacother** 1989;43(3):153-5
Does HPV cause cervical cancer? Kitchener HC. **Br J Obstet Gynaecol** 1988 Nov;95(11):1089-91 (13 ref.)
Constitutive expression of HLA class II antigens on EBV positive malignant cells from nasopharyngeal carcinoma: possible involvement in T cell infiltration. Busson P, et al. **Cancer Detect Prev** 1988;12(1-6):363-8
Constitutive and steroid hormone regulated transcriptional enhancer elements in the genome of the human papilloma virus type 16, which is associated with neoplasia of the cervix. Klock G, et al. **Cancer Detect Prev** 1988; 12(1-6):23-9
Papillomaviruses in anogenital cancer as a model to understand the role of viruses in human cancers. zur Hausen H. **Cancer Res** 1989 Sep 1;49(17):4677-81 (56 ref.)
The natural history of early cervical neoplasia and cervical human papillomavirus infection. Hollingworth T, et al. **Cancer Surv** 1988;7(3):519-27 (29 ref.)
Human papillomavirus (HPV) infections in the aetiology of cervical cancer. McCance DJ. **Cancer Surv** 1988; 7(3):499-506 (30 ref.)
Epstein-Barr virus and epithelial cells: a possible role for the virus in the development of cervical carcinoma. Young LS, et al. **Cancer Surv** 1988;7(3):507-18 (49 ref.)
Association of HPV with human genital tumors. Gissmann L, et al. **Clin Dermatol** 1985 Oct-Dec;3(4):124-9
Shope rabbit papilloma--carcinoma complex. A model system of HPV infections. Kreider JW, et al. **Clin Dermatol** 1985 Oct-Dec;3(4):20-6
Papillomaviruses. Lowy DR, et al. **Clin Dermatol** 1985 Oct-Dec;3(4):1-7
Genital human papillomavirus infection. **Clin Obstet Gynecol** 1989 Mar;32(1):105-6
HPV-associated lesions in pregnancy and their clinical implications. Ferenczy A. **Clin Obstet Gynecol** 1989 Mar; 32(1):191-9 (45 ref.)
Genital HPV infections in men. Krebs HB. **Clin Obstet Gynecol** 1989 Mar;32(1):180-90 (27 ref.)
Type IV collagen in the basal membrane of human papillomavirus associated premalignant and malignant squamous cell lesions of the uterine cervix. Sorvari T, et al. **Gynecol Obstet Invest** 1988;26(4):324-31
Human papillomavirus and cervical cancer. **IARC Sci Publ** 1989;(94):1-155
Human papillomavirus infection. Beutner KR. **J Am Acad Dermatol** 1989 Jan;20(1):114-23
Glucocorticoid responsiveness of mouse mammary tumor virus (MMTV) promoters in a down-transcription hepatoma tissue culture (HTC) variant. John NJ, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):57-68
Cervical cancer. News on papillomaviruses [news] McCance DJ. **Nature** 1988 Oct 27;335(6193):765-6
Restoration of immune response by levamisole in B-77 virus induced tumor-bearing rats. Kalafut F, et al. **Neoplasma** 1988;35(4):369-78
Epstein-Barr-virus-associated lymphoproliferation arising in a renal allograft. Maher ER, et al. **Nephron** 1989; 51(4):581-2
C-myc activation in an unusual retrovirus-induced avian T-lymphoma resembling Marek's disease: proviral insertion 5' of exon one enhances the expression of an intron promoter. Isfort R, et al. **Oncogene Res** 1987;2(1):81-94
The role of papillomaviruses in human and animal epithelial neoplasia. Ostrow RS, et al. **Prog Clin Biol Res** 1989; 298:35-42
Human papillomavirus and anogenital neoplasia: a fresh look at the association. Campion MJ, et al. **South Med J** 1989 Jan;82(1):35-46 (79 ref.)
Human fibroblast interferon adjuvant to CO2 laser in the treatment of recurrent juvenile laryngeal papillomatosis: experience with 7 cases. Chiesa F, et al. **Tumori** 1989 Jun 30;75(3):259-62
The biology and significance of human papillomavirus infections in the genital tract. Reid R, et al. **Yale J Biol Med** 1988 Jul-Aug;61(4):307-25 (77 ref.)
[Papillomaviruses and cervix cancer] Tsunokawa Y, et al. **Nippon Rinsho** 1988 Nov;46(11):2541-50 (20 ref.) (Jpn)
[Detection of papilloma virus infection in the human uterine cervix by dot blot (Vira Pap) method in comparison with Southern blot method] Ishi K, et al. **Rinsho Byori** 1989 Jan;37(1):73-8 (Jpn)
[Histopathological study on human papilloma virus (HPV) infection of the uterine cervix] Ishi K, et al. **Rinsho Byori** 1989 Apr;37(4):375-80 (Jpn)
[New human papovaviruses: JC and BK] Cataltepe O, et al. **Mikrobiyol Bul** 1988;22(3):260-5 (Eng. Abstr.) (Tur)

ANALYSIS

In situ hybridization and immunohistochemical study of human papillomavirus infection in adult laryngeal papillomas. Tsutsumi K, et al. **Laryngoscope** 1989 Jan; 99(1):80-5

BLOOD

Epstein-Barr virus-positive recipient type B-cells survive in a "complete chimera" after allogeneic bone-marrow transplantation. Gerhartz HH, et al. **Int J Cancer** 1988 Nov 15;42(5):672-6
Serum fatty acid proportions are altered during the year following acute Epstein-Barr virus infection. Williams LL, et al. **Lipids** 1988 Oct;23(10):981-8

COMPLICATIONS

Genital warts should be monitored as a potential cancer threat [news] **Am Fam Physician** 1989 Jan;39(1):320, 322
Re: "Condyloma and Intraepithelial Neoplasia of the Uterine Cervix: a Case-Control Study" [letter; comment] Grubb GS, et al. **Am J Epidemiol** 1989 Aug;130(2):427-9. **Comment on:** Am J Epidemiol 1988 Aug;128(2):337-42
Cervical dysplasia and human papillomavirus. Carmichael JA, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):916-8
Association of human immunodeficiency virus-induced immunosuppression with human papillomavirus infection and cervical intraepithelial neoplasia. Henry MJ, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):352-3
Progressive multifocal leukoencephalopathy and retroviral encephalitis in acquired immunodeficiency syndrome. Rhodes RH, et al. **Arch Pathol Lab Med** 1988 Dec; 112(12):1207-13
Mechanisms of tumor induction by human retroviruses. Ferdinand FJ. **Arzneimittelforschung** 1989 Jun;39(6):737-40 (44 ref.)
Factors associated with progression of cervical human papillomavirus (HPV) infections into carcinoma in situ during a long-term prospective follow-up. Syrjänen K, et al. **Br J Obstet Gynaecol** 1988 Nov;95(11):1096-102
Genital papillomavirus infection after treatment for cervical intraepithelial neoplasia (CIN) III. Bistoletti P, et al. **Cancer** 1988 Nov 1;62(9):2056-9
Cervical intraepithelial neoplasia among women with papillomavirus infection compared to women with Trichomonas infection. Boyle CA, et al. **Cancer** 1989 Jul 1;64(1):168-72
Development of lymphoma in the thymus of AKR mice treated with the lymphomagenic virus SL 3-3. Hays EF, et al. **Cancer Res** 1989 Aug 1;49(15):4225-30
Linking HPV to cancer. Gissmann L. **Clin Obstet Gynecol** 1989 Mar;32(1):141-7 (58 ref.)
Human papilloma virus infection and its relationship to skin cancer in a group of renal allograft recipients. Benton EC, et al. **Curr Probl Dermatol** 1989;18:168-77
Anal cancer in women [letter] Palmer JG, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):553
Human papillomavirus infection of morphologically normal cervical epithelium adjacent to squamous dysplasia and invasive carcinoma. Colgan TJ, et al. **Hum Pathol** 1989 Apr;20(4):316-9
Reproductive and sexual risk factors and human papilloma virus infection in cervical cancer among Hong Kong Chinese. Donnan SP, et al. **Int J Epidemiol** 1989 Mar; 18(1):32-6
Papillomavirus and cervical cancer: a clinical and laboratory study. Zhang WH, et al. **J Med Virol** 1988 Oct;26(2):163-74
Establishment of an association between a virus and a human cancer [editorial] Henderson BE. **J Natl Cancer Inst** 1989 Mar 1;81(5):320-1
Epidemiologic correlates of cervical neoplasia and risk of human papillomavirus infection in asymptomatic women in Brazil. Villa LL, et al. **J Natl Cancer Inst** 1989 Mar 1;81(5):332-40
Human papilloma virus infection and skin cancer in renal allograft recipients. Barr BB, et al. **Lancet** 1989 Jan 21; 1(8630):124-9
Papillomavirus infection and skin cancer in renal allograft recipients [letter] Rüdlinger R, et al. **Lancet** 1989 May 20; 1(8647):1132-3
Relation between infection with a subtype of HPV16 and cervical neoplasia. Tidy JA, et al. **Lancet** 1989 Jun 3; 1(8649):1225-7

Pills, partners and preventive prospects: in-situ cancer of the cervix. McMichael AJ, et al. **Med J Aust** 1989 Feb 6;150(3):114–6 (27 ref.)

Human papillomavirus infection and cervical cancer in Latin America. Reeves WC, et al. **N Engl J Med** 1989 Jun 1; 320(22):1437–41

Human papillomaviruses and cervical neoplasia: a review. Chang AR. **N Z Med J** 1989 Feb 8;102(861):47–50 (50 ref.)

The multicentric nature of disease related to human papillomavirus infection of the female lower genital tract [letter] Amstey MS. **Obstet Gynecol** 1989 Ju[illegible];74(1):141–2

Head and neck squamous cell carcinomas associated with human papillomaviruses and an increased incidence of cervical pathology. Lee NK, et al.
Otolaryngol Head Neck Surg 1988 Sep;99(3):296–301

[Atypical cervical cancer hyperplasia and human papilloma virus] Tao S. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Mar; 23(2):102–4, 128 (Eng. Abstr.) **(Chi)**

[Papillomavirus and carcinoma of the uterine cervix] ter Schegget J. **Ned Tijdschr Geneeskd** 1989 May 13; 133(19):967–71 (28 ref.) **(Dut)**

[Condylomata acuminata and vulvar intraepithelial neoplasms (VIN)] Barbero M, et al. **Minerva Ginecol** 1988 Dec; 40(12):743–7 (38 ref.) (Eng. Abstr.) **(Ita)**

[Intralesional therapy using recombinant interferon alpha 2 B in lesions of the uterine cervix caused by human papilloma virus] Germano A, et al. **Minerva Ginecol** 1989 Jun;41(6):277–81 (Eng. Abstr.) **(Ita)**

[A case of Epstein–Barr virus encephalitis presenting as status epilepticus] Kubota F, et al. **Rinsho Shinkeigaku** 1988 Jul; 28(7):751–5 (Eng. Abstr.) **(Jpn)**

[Papillomaviruses and neoplasms of the genital organs and the rectal area] Kędzia H, et al. **Ginekol Pol** 1988 Aug; 59(8):457–61 (Eng. Abstr.) **(Pol)**

[The role of oncogenes in carcinogenesis] Ratajczak MZ, et al. **Pol Tyg Lek** 1988 Nov 21;43(47):1519–23 (39 ref.) (Eng. Abstr.) **(Pol)**

[Papillomavirus infection and cancer of the cervix uteri] Tsukerman BG, et al. **Sov Med** 1988;(8):33–7 (61 ref.) **(Rus)**

DIAGNOSIS

Cervical dyskeratotic cells as predictors of condylomatous changes on biopsy. Boras VF, et al. **Acta Cytol** 1989 Mar–Apr;33(2):223–7

Sensitivity of urethral cytologic diagnosis of human papillomavirus infection in men [letter] Iossa A, et al.
Acta Cytol 1989 Sep–Oct;33(5):686–7

Comparison of filter in situ deoxyribonucleic acid hybridization with cytologic, colposcopic, and histopathologic examination for detection of human papillomavirus infection in women with cervical intraepithelial neoplasia. McNicol PJ, et al.
Am J Obstet Gynecol 1989 Jan;160(1):265–70

Occult human papillomavirus infection of the uterine cervix in postmenopausal women. Nuovo GJ, et al.
Am J Obstet Gynecol 1989 Feb;160(2):340–4

Detection of human papillomavirus deoxyribonucleic acid in exfoliated cervicovaginal cells as a predictor of cervical neoplasia in a high-risk population. Ritter DB, et al.
Am J Obstet Gynecol 1988 Dec;159(6):1517–25

Molecular diagnosis of genital human papillomavirus infection: comparison of two methods used to collect exfoliated cervical cells. Vermund SH, et al.
Am J Obstet Gynecol 1989 Feb;160(2):304–8

Human papillomavirus in cervical smears taken from women wearing an intrauterine contraceptive device. Czeglédy J, et al. **Arch Gynecol Obstet** 1989;244(2):87–9

Association of papillomavirus with cancers of the head and neck. Brandsma JL, et al.
Arch Otolaryngol Head Neck Surg 1989 May;115(5):621–5

Anogenital warts in childhood. Hanson RM, et al.
Child Abuse Negl 1989;13(2):225–33

Cytologic and colposcopic examination in the diagnosis of penile HPV infection. Torrisi A, et al.
Clin Exp Obstet Gynecol 1989;16(1):36–43

Epstein–Barr virus and human diseases: recent advances in diagnosis. Okano M, et al. **Clin Microbiol Rev** 1988 Jul; 1(3):300–12 (106 ref.)

Diagnosis of HPV infection by recombinant DNA technology. Schneider A, et al. **Clin Obstet Gynecol** 1989 Mar;32(1):127–40

Cytological screening to detect subclinical anal human papillomavirus (HPV) infection in homosexual men attending genitourinary medicine clinic. Haye KR, et al.
Genitourin Med 1988 Dec;64(6):378–82

Incidence, prevalence and time trends of genital HPV infection determined by clinical examination and cytology. Kjaer SK, et al. **IARC Sci Publ** 1989;(94):113–24 (37 ref.)

Diagnosis of HPV by DNA hybridization techniques. Lancaster WD, et al. **IARC Sci Publ** 1989;(94):87–103 (55 ref.)

The human papillomavirus: an epidemic [editorial] Barclay DL. **J Arkansas Med Soc** 1989 Apr;85(11):485–6

Characteristics of different solid-phase immunoassay formats for the measurement of BK virus immunoglobulin M in sera of patients on renal dialysis or with kidney allografts. Mahony J, et al. **J Clin Microbiol** 1989 Jul;27(7):1626–30

Optimization of human papillomavirus genotype detection in cervical scrapes by a modified filter in situ hybridization test. Melchers WJ, et al. **J Clin Microbiol** 1989 Jan; 27(1):106–10

Detection of human papillomavirus deoxyribonucleic acid by filter in situ hybridization during pregnancy. Czeglédy J, et al. **J Med Virol** 1989 Aug;28(4):250–4

Nucleic acid spot hybridization with nonradioactive labeled probes in screening for human papillomavirus DNA sequences. Melki R, et al. **J Med Virol** 1988 Oct; 26(2):137–43

Human papilloma virus infection in the pediatric and adolescent patient. Davis AJ, et al. **J Pediatr** 1989 Jul; 115(1):1–9 (54 ref.)

Subclinical human papillomavirus infections in male sexual partners of female carriers. Schneider A, et al. **J Urol** 1988 Dec;140(6):1431–4

Detection of human papillomavirus in normal and dysplastic tissue by the polymerase chain reaction. Shibata D, et al. **Lab Invest** 1988 Oct;59(4):555–9

Papillomavirus screening of cervical lavages by polymerase chain reaction [letter] Morris BJ, et al. **Lancet** 1988 Dec 10;2(8624):1368

High rate of human papillomavirus type 16 infection in cytologically normal cervices [letter] Tidy JA, et al.
Lancet 1989 Feb 25;1(8635):434

Colposcopy of condylomatous men. Blythe JG, et al.
Mo Med 1989 Jan;86(1):31–4

Neoplasia, preneoplasia, and pseudoneoplasia of the lower female genital tract: selected topics. Crum CP.
Mod Pathol 1988 Sep;1(5):391–8 (38 ref.)

Sandwich hybridization in solution: a rapid method to screen HPV 16 DNA in cervical scrapes. Parkkinen S, et al.
Mol Cell Probes 1989 Mar;3(1):1–11

The impact of EBV hybridization in clinical and biological medicine. Morinet F. **Nouv Rev Fr Hematol** 1989; 31(2):155–8 (18 ref.)

Human papillomavirus DNA in glandular dysplasia and microglandular hyperplasia: presumed precursors of adenocarcinoma of the uterine cervix. Tase T, et al.
Obstet Gynecol 1989 Jun;73(6):1005–8

A new and sensitive method of screening for human papillomavirus infection. Tidy JA, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):410–4

Oral lesions mimicking hairy leukoplakia: a diagnostic dilemma. Green TL, et al.
Oral Surg Oral Med Oral Pathol 1989 Apr;67(4):422–6

Oral hairy leukoplakia: diagnosis and management. Greenspan JS, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):396–403 (38 ref.)

Sexually transmitted papillomaviral infections: IV. The white scrotum. Rosemberg SK. **Urology** 1989 Jun;33(6):462–4

[Molecular hybridization methods for the diagnosis of papillomavirus infections] Mincheva A.
Akush Ginekol (Sofiia) 1988;27(5):63–8 (46 ref.) **(Bul)**

[Anogenital HPV infections in children and sexual child abuse (letter)] Lindeberg H. **Ugeskr Laeger** 1989 May 15; 151(20):1258 **(Dan)**

[The biological significance of DNA diagnosis and gynecologic papillomavirus infections] Syrjänen K, et al.
Duodecim 1988;104(22):1864–73 (33 ref.) **(Fin)**

[Detection of human papillomavirus types 16 and 18 DNA sequences in the screening of the cells related with carcinoma in situ of the uterine cervix—application of in situ hybridization for cytologic diagnosis] Nagai N, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1988 Sep;40(9):1393–9 (Eng. Abstr.) **(Jpn)**

[Fundamental and clinical studies on human papillomavirus infection in the uterine cervix especially by Vira Pap (dot blot) method] Utsuno H.
Nippon Sanka Fujinka Gakkai Zasshi 1989 Jun;41(6):744–50 (Eng. Abstr.) **(Jpn)**

[Detection of papilloma virus infection in the human uterine cervix by dot blot (Vira Pap) method. Comparison with smear diagnosis] Ishi K, et al. **Rinsho Byori** 1988 Sep; 36(9):1074–8 **(Jpn)**

[Herpetic and papillomavirus infections of the genitalia] Bodiazhina VI. **Akush Ginekol (Mosk)** 1988 May;(5):67–72 **(Rus)**

DRUG THERAPY

Biodistribution of indium 111-labeled dihematoporphyrin ether in papillomas and body tissues. Relevance to photodynamic therapy. Shikowitz MJ, et al.
Arch Otolaryngol Head Neck Surg 1989 Jul;115(7):845–7

Transdermal delivery of salicylic acid in the treatment of viral papillomas. Mottaz JH, et al. **Int J Dermatol** 1988 Oct;27(8):596–600

Interferon therapy for condylomatous vulvitis. Horowitz BJ.
Obstet Gynecol 1989 Mar;73(3 Pt 1):446–8

EPIDEMIOLOGY

The frequency of human papillomavirus infections, with or without associated cervical intraepithelial neoplasia, in cervicovaginal smears [letter] Alasio L, et al.
Acta Cytol 1989 May–Jun;33(3):413–4

Human papillomavirus infection. Frequency and association with cervical neoplasia in a young population. Sadeghi SB, et al. **Acta Cytol** 1989 May–Jun;33(3):319–23

The common occurrence of human papillomavirus infection and intraepithelial neoplasia in women infected by HIV. Byrne MA, et al. **Aids** 1989 Jun;3(6):379–82

Human papillomavirus infection and cervical intraepithelial neoplasia in women with renal allografts. Alloub MI, et al. **BMJ** 1989 Jan 21;298(6667):153–6

Report on a national workshop on human papillomaviruses. Le Saux N. **Can Dis Wkly Rep** 1988 Dec 10;14(49):223–4 **(Eng, Fre)**

The epidemiology of human papillomavirus infection in relation to cervical cancer. Meanwell CA. **Cancer Surv** 1988;7(3):481–97 (56 ref.)

A distinct difference in the prevalence of papillomavirus infection in cytologically normal and neoplastic cells of the uterine cervix. Choo KB, et al.
Chung Hua I Hsueh Tsa Chih 1988 Jul;42(1):1–6

Epidemiology of HPV infections. Laurent R, et al.
Clin Dermatol 1985 Oct–Dec;3(4):64–70

Epidemiologic aspects of genital HPV infection. Stone KM.
Clin Obstet Gynecol 1989 Mar;32(1):112–6

Epidemiology of genital human papillomavirus infection. Koutsky LA, et al. **Epidemiol Rev** 1988;10:122–63 (279 ref.)

HPV incidence in the Republic of Panama in 1985. Garrido JL. **Eur J Gynaecol Oncol** 1988;9(5):390–5

The viral lesion (HPV) of the lower genital tract in teen agers: clinical and therapeutic aspects. Villani C, et al.
Eur J Gynaecol Oncol 1989;10(4):267–71

Measurement error in epidemiological studies of human papillomavirus and cancer. Kaldor JM. **IARC Sci Publ** 1989;(94):125–33 (12 ref.)

Inter-laboratory variation as an explanation for varying prevalence estimates of human papillomavirus infection. Brandsma J, et al. **Int J Cancer** 1989 Feb 15;43(2):260–2

Prevalence of genital papillomavirus infection among women attending a college student health clinic or a sexually transmitted disease clinic. Kiviat NB, et al. **J Infect Dis** 1989 Feb;159(2):293–302

Human papillomavirus coinfections of the vulva and uterine cervix. Kulski JK, et al. **J Med Virol** 1989 Mar;27(3):244–51

Papillomavirus infection of the uterine cervix. Nuovo G, et al. **Microb Pathog** 1987 Aug;3(2):71–8 (34 ref.)

The relationship of risk factors for cervical cancer and HPV in college women. McQuiston CM. **Nurse Pract** 1989 Apr; 14(4):18, 23, 26

The significance of atypical cervical cytology in an older population. Kaminski PF, et al. **Obstet Gynecol** 1989 Jan; 73(1):13–5

High prevalence of genital tract papillomavirus infection in female adolescents. Martinez J, et al. **Pediatrics** 1988 Oct; 82(4):604–8

Epidemiology of genital papillomaviruses and cervical cancer. Reeves WC, et al. **Rev Infect Dis** 1989 May–Jun; 11(3):426–39 (131 ref.)

Prevalence of anti BK virus antibody in Portugal and Norway. Flaegstad T, et al. **Scand J Infect Dis** 1989; 21(2):145–7

Epstein–Barr virus DNA in nasopharyngeal biopsies. Zhang HY, et al. **Virus Res** 1989 Jan;12(1):53–9

[The investigation of BK virus infection among pregnant women in Beijing] Xiao J.
Chung Hua Liu Hsing Ping Hsueh Tsa Chih 1988 Dec; 9(6):358–9 (Eng. Abstr.) **(Chi)**

[Cervicovaginal and vulvar papillomavirus lesions: epidemiology in HIV seropositive women. A preliminary study on a continuous series] Caubel P, et al.
Presse Med 1989 Jun 24;18(25):1239–42 (Eng. Abstr.) **(Fre)**

ETIOLOGY

Age at first pregnancy and the viral etiology of cervical neoplasia. Burger MP, et al. **Acta Obstet Gynecol Scand** 1988;67(8):689–94

Prolonged remission of Epstein–Barr virus associated lymphoma secondary to T cell-depleted bone marrow transplantation. Lyttelton MP, et al.
Bone Marrow Transplant 1988 Nov;3(6):641–6

Histopathology of skin lesions in renal allograft recipients—an assessment of viral features and dysplasia. Blessing K, et al. **Histopathology** 1989 Feb;14(2):129–39

Oral hairy leukoplakia in an HIV-negative renal transplant recipient. Greenspan D, et al. **J Oral Pathol Med** 1989 Jan; 18(1):32–4

Oral hairy leukoplakia is not a specific sign of HIV-infection but related to immunosuppression in general. Syrjänen S, et al. **J Oral Pathol Med** 1989 Jan;18(1):28–31

Cell-heritable stages of tumor progression in transgenic mice harboring the bovine papillomavirus type 1 genome. Sippola-Thiele M, et al. **Mol Cell Biol** 1989 Mar; 9(3):925–34

[The role of Epstein–Barr virus in the etiology of nasopharyngeal cancer] Wilke J, et al. **Otolaryngol Pol** 1988;42(3):151–7 (Eng. Abstr.) **(Pol)**

[Epidermodysplasia verruciformis caused by HPV 12 virus] Misiewicz J, et al. **Przegl Dermatol** 1988 Jul–Aug; 75(4):286–92 (Eng. Abstr.) **(Pol)**

[Human papillomatosis viruses and cervical cancer] Vasil'ev MIu. **Eksp Onkol** 1989;11(2):8–12 (42 ref.) (Eng. Abstr.) **(Rus)**

GENETICS

Fatal Hodgkin and non-Hodgkin lymphoma associated with persistent Epstein–Barr virus in four brothers. Donhuijsen-Ant R, et al. **Ann Intern Med** 1988 Dec 15; 109(12):946–52

Human papillomaviruses in oncogenesis. Lazo PA.
Bioessays 1988 Nov;9(5):158–62 (31 ref.)

Demonstration of monoclonal EBV genomes in Hodgkin's

disease and Ki-1-positive anaplastic large cell lymphoma by combined Southern blot and in situ hybridization. Anagnostopoulos I, et al. **Blood** 1989 Aug 1;74(2):810–6

Viral and cellular oncogenes in papillomavirus-associated cancers. Campo MS. **Br J Cancer Suppl** 1988 Dec;9:80–4 (59 ref.)

Tumorigenicity, invasiveness and metastatic capability of FR3T3 rat cells before and after transfection with bovine papilloma virus type 1 DNA. Coopman P, et al. **Clin Exp Metastasis** 1989 Jan–Feb;7(1):69–84

Human papillomavirus infection and anal cancer. Beckmann AM, et al. **Int J Cancer** 1989 Jun 15;43(6):1042–9

Quantity of nuclear DNA in malignancies and benign lymphadenopathies associated with Epstein–Barr virus. Lehtinen T, et al. **J Clin Pathol** 1989 Jul;42(7):699–704

Immortalization and malignant transformation of hepatocytes by transforming genes of polyoma virus and of SV40 virus in vitro and in vivo. Paul D, et al. **Klin Wochenschr** 1988; 66 Suppl 11:134–9 (54 ref.)

Common sites of viral integration in lymphomas arising in AKXD recombinant inbred mouse strains. Mucenski ML, et al. **Oncogene Res** 1987;2(1):33–48

[What is the significance of the multi-hit theory of the viral origin of malignant tumors?] Wunderlich V. **Zentralbl Gynakol** 1988;110(18):1179–80 (Ger)

[Detection of human papillomavirus sequences in uterine cervix lesions in Venezuela] Azócar J, et al. **Acta Cient Venez** 1988;39(2):171–4 (Eng. Abstr.) (Spa)

HISTORY

Milestones in HPV research. Krebs HB. **Clin Obstet Gynecol** 1989 Mar;32(1):107–11

IMMUNOLOGY

Immunosuppression in men with bowenoid papulosis. Feldman SB, et al. **Arch Dermatol** 1989 May;125(5):651–4

Immunological responses to Epstein–Barr virus infection and the pathogenesis of EBV-induced diseases. Thorley-Lawson DA. **Biochim Biophys Acta** 1989 Feb; 948(3):263–86 (186 ref.)

Langerhans' cells and subtypes of human papillomavirus in cervical intraepithelial neoplasia. Hawthorn RJ, et al. **BMJ** 1988 Sep 10;297(6649):643–6

Cell-mediated immunity to human papillomavirus. Chardonnet Y, et al. **Clin Dermatol** 1985 Oct–Dec; 3(4):156–64

Papillomavirus lesions in immunodepression and immunosuppression. Lutzner MA. **Clin Dermatol** 1985 Oct–Dec;3(4):165–9

Immune response to papillomavirus infections. Gissmann L, et al. **Curr Probl Dermatol** 1989;18:162–7 (31 ref.)

Cytotoxic T lymphocytes in reticuloendotheliosis virus-infected chickens. Weinstock D, et al. **Eur J Immunol** 1989 Feb;19(2):267–72

Stimulation of clones specific for dsDNA or idiotypes of anti-dsDNA as a consequence of BK virus inoculation. Rekvig OP, et al. **Immunol Invest** 1989 Jun;18(5):657–69

Unusual precipitins in pathological human sera. Kim DS, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):188–90

Bearing certain tumors may result in autoimmunity. Witz IP, et al. **Isr J Med Sci** 1988 Dec;24(12):744–6

Vero cell-expressed Epstein–Barr virus (EBV) gp350/220 protects marmosets from EBV challenge. Emini EA, et al. **J Med Virol** 1989 Feb;27(2):120–3

Papillomavirus infection and an allergic response to Candida in women with recurrent vaginitis [letter] Witkin SS, et al. **JAMA** 1989 Mar 17;261(11):1584

Comparison of an enzyme-linked immunosorbent assay, an immunofluorescence assay and a hemagglutination inhibition assay for detection of antibodies to K-papovavirus in mice. Groen J, et al. **Lab Anim Sci** 1989 Jan;39(1):21–4

[EBV-specific antibodies in patients with nasopharyngeal cancer and tonsillar cancer. Follow-up of over 4 years] Oberender H, et al. **Laryngorhinootologie** 1989 Mar; 68(3):181–5 (Eng. Abstr.) (Ger)

[Cervical intraepithelial neoplasia caused by human papillomavirus infection. Cytomorphologic, colposcopic and immunohistochemical correlations] Preti M, et al. **Minerva Ginecol** 1988 Oct;40(10):603–6 (35 ref.) (Eng. Abstr.) (Ita)

METABOLISM

Correlation of DNA content, p53, T antigen, and V antigen in simian virus 40-infected human diploid cells. Laffin J, et al. **Cytometry** 1989 Mar;10(2):205–13

Cytokeratin expression in cervical epithelium: an immunohistological study of normal, wart virus-infected and neoplastic tissue. Whittaker JR, et al. **Histopathology** 1989 Feb;14(2):151–60

MICROBIOLOGY

Clinical characteristics of papillomavirus-vulvovaginitis. A new entity with oncogenic potential. Bodén E, et al. **Acta Obstet Gynecol Scand** 1988;67(2):147–51

In situ demonstration of Epstein–Barr viral genomes in viral-associated B cell lymphoproliferations. Weiss LM, et al. **Am J Pathol** 1989 Mar;134(3):651–9

Human papillomavirus-16 DNA in a cutaneous invasive cancer. Ostrow RS, et al. **Arch Dermatol** 1989 May; 125(5):666–9

The polymerase chain reaction: a new epidemiological tool for investigating cervical human papillomavirus infection. Young LS, et al. **BMJ** 1989 Jan 7;298(6665):14–8

Detection of papillomavirus common antigens in lesions of skin and mucosa. Jenson AB, et al. **Clin Dermatol** 1985 Oct–Dec;3(4):56–63

Human papillomaviruses: are we ready to type? Roman A, et al. **Clin Microbiol Rev** 1989 Apr;2(2):166–90 (226 ref.)

HPV-associated lesions of the cervix: biology and colposcopic features. Reid R, et al. **Clin Obstet Gynecol** 1989 Mar;32(1):157–79 (35 ref.)

Microscopic diagnosis of HPV infection. Schneider V. **Clin Obstet Gynecol** 1989 Mar;32(1):148–56

Human papilloma virus (HPV) and carcinomas of the head and neck. Lindeberg H, et al. **Clin Otolaryngol** 1988 Dec; 13(6):447–54 (54 ref.)

Detection of a human papilloma virus type 5 DNA in a renal allograft patient from Scotland. Rüdlinger R, et al. **Dermatologica** 1988;177(5):280–6

Human papillomavirus and cervical cancer. Summary report. **IARC Sci Publ** 1989;(94):1–8

Human cervical papillomavirus infection: a clinical perspective. Campion MJ. **IARC Sci Publ** 1989;(94):41–65 (73 ref.)

Increased formation of unintegrated viral DNA in skin fibroblasts from patients with familial polyposis coli shortly after infection with Kirsten murine sarcoma virus. Miyaki M, et al. **Int J Cancer** 1988 Nov 15;42(5):739–43

Detection of BK virus and JC virus in urine and brain tissue by the polymerase chain reaction. Arthur RR, et al. **J Clin Microbiol** 1989 Jun;27(6):1174–9

Detection of human papillomaviruses in exfoliated cervicovaginal cells by in situ DNA hybridization analysis. Pao CC, et al. **J Clin Microbiol** 1989 Jan;27(1):168–73

A novel deletion within the upstream regulatory region of episomal human papillomavirus type 16. Tidy J, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):999–1004

Human papillomavirus type 31 infection of the uterine cervix in England. Gibson PE, et al. **J Infect** 1989 May;18(3):265–7

Detection of human papillomavirus DNA in cell scrapes and formalin-fixed, paraffin-embedded tissue of the uterine cervix by filter in situ hybridisation. Demeter T, et al. **J Med Virol** 1988 Dec;26(4):397–409

Transformation of human cells by oncogenic viruses supports permissiveness for parvovirus H-1 propagation. Faisst S, et al. **J Virol** 1989 May;63(5):2152–8

Papillomavirus infection and skin cancer in renal allograft recipients [letter] Barr BB, et al. **Lancet** 1989 Jul 22; 2(8656):224–5

Oncogenic viruses and cervical cancer [letter] Bevan IS, et al. **Lancet** 1989 Apr 22;1(8643):907–8

Human papillomavirus in dysplasia and carcinoma of the cervix in Singapore. Lim-Tan SK, et al. **Pathology** 1988 Oct;20(4):317–9

Human papilloma virus type 11 in a fatal case of esophageal and bronchial papillomatosis. Hørding M, et al. **Scand J Infect Dis** 1989;21(2):229–31

Penile/anal condylomas and squamous cell cancer. A HPV DNA hybridization study. Löning T, et al. **Virchows Arch [A]** 1988;413(6):491–8

The middle T proteins of high and low tumor strains of polyomavirus function equivalently in tumor induction. Freund R, et al. **Virology** 1988 Dec;167(2):657–9

A single peptide derived from the sequence common to polyoma small and middle T-antigen induces immunity against polyoma tumors. Ramqvist T, et al. **Virology** 1989 Sep;172(1):359–62

Heterogeneity in mRNA of human papillomavirus type-6 subtypes in respiratory tract lesions. Ward P, et al. **Virology** 1989 Jan;168(1):1–12

[Epstein–Barr virus infections. New pathogenic and clinical aspects] Wilmes E, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):36–43 (55 ref.) (Eng. Abstr.) (Ger)

[Detection of Papillomavirus DNA in the lower female genital tract] Czeglédy J, et al. **Orv Hetil** 1988 Jul 31; 129(31):1637–40 (31 ref.) (Eng. Abstr.) (Hun)

PATHOLOGY

Cytologic and ultrastructural findings of a peculiar alteration in cervical cells from patients with human papillomavirus infections. de Borges RJ, et al. **Acta Cytol** 1989 May–Jun; 33(3):314–8

Cervical koilocytotic atypia and human papillomavirus infection [letter] Meiseis A. **Acta Cytol** 1989 Sep–Oct; 33(5):686

Morphological and immunohistochemical studies of the central nervous system involvement in papovavirus K infection in mice. Ikeda K, et al. **Acta Neuropathol (Berl)** 1988;77(2):175–81

The clinical spectrum, pathology, and clonal analysis of Epstein–Barr virus-associated lymphoproliferative disorders in heart–lung transplant recipients. Randhawa PS, et al. **Am J Clin Pathol** 1989 Aug;92(2):177–85

Human papillomavirus (HPV) infection in seborrheic keratosis. Zhao YK, et al. **Am J Dermatopathol** 1989 Jun; 11(3):209–12

Condylomatous lesion (HPV infection) of uterine cervix. A clinical, colposcopic, cyto, histomorphological and immunohistochemical study. Luthra UK, et al. **Ann Biol Clin (Paris)** 1989;47(5):283–6

Morphometric assessment of the biological potential of human papillomavirus infections in the uterine cervix. Tosi P, et al. **Appl Pathol** 1988;6(4):247–57

Human papillomavirus-35-positive bowenoid papulosis of the anogenital area and concurrent human papillomavirus-35-positive verruca with bowenoid dysplasia of the periungual area. Rüdlinger R, et al. **Arch Dermatol** 1989 May;125(5):655–9

Cervical human papilloma virus infection and colposcopy [letter] Chanen W. **Aust N Z J Obstet Gynaecol** 1988 Feb; 28(1):76–7

Human papilloma virus induced epidermal proliferations of the anogenital region. Heenan PJ. **Australas J Dermatol** 1988 Apr;29(1):17–23 (34 ref.)

Papillomavirus-induced diseases of the oral mucosa. Lutzner MA. **Clin Dermatol** 1985 Oct–Dec;3(4):139–43

Prospective follow-up of cervical HPV infections: life table analysis of histopathological, cytological and colposcopic data. Kataja V, et al. **Eur J Epidemiol** 1989 Mar;5(1):1–7

Intraepithelial neoplasia, human papilloma virus infection and argyrophilic nucleoprotein in cervical epithelium. Egan M, et al. **Histopathology** 1988 Nov;13(5):561–7

Squamous papillary neoplasia of the adult upper aerodigestive tract. Crissman JD, et al. **Hum Pathol** 1988 Dec; 19(12):1387–96

Study of multiple human papillomavirus-related lesions of the lower female genital tract by in situ hybridization. Pilotti S, et al. **Hum Pathol** 1989 Feb;20(2):118–23

Human papillomavirus-related changes in the genital tract. Meisels A, et al. **IARC Sci Publ** 1989;(94):67–85 (20 ref.)

The identification of cells containing JC papovavirus DNA in progressive multifocal leukoencephalopathy by combined in situ hybridization and immunocytochemistry. Ironside JW, et al. **J Pathol** 1989 Apr;157(4):291–7

Anal and cervical intraepithelial neoplasia: possible parallel. Scholefield JH, et al. **Lancet** 1989 Sep 30;2(8666):765–9

Male partners of women with genital human papillomavirus infection. An assessment of colposcopic abnormalities by histological examination and human papillomavirus hybridization. Selvey L, et al. **Med J Aust** 1989 May 1; 150(9):479–80, 482

Histologic correlates of papillomavirus infection of the vagina. Nuovo GJ, et al. **Obstet Gynecol** 1988 Nov; 72(5):770–4

The multicentric nature of disease related to human papillomavirus infection of the female lower genital tract. Spitzer M, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):303–7

Abrogation of factor-dependence in two IL-3-dependent cell lines can occur by two distinct mechanisms. McCubrey J, et al. **Oncogene Res** 1989;4(2):97–109

Oral hairy leukoplakia with extensive oral mucosal involvement. Report of two cases. Kabani S, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):411–5

Virus-associated dysplasia (bowenoid papulosis?) of the oral cavity. Kratochvil FJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):312–6

Hairy leukoplakia: an AIDS-associated opportunistic infection. Sciubba J, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):404–10

Does neoplasia in-situ develop due to the interaction of Epstein–Barr virus or herpes simplex virus-2 with Langerhans cells in the epithelium? Becker Y. **Virus Genes** 1988 Jul;1(4):385–97 (94 ref.)

[Pseudo-condylomatous cytological aspects of smears in menopause. Study of 100 cases and review of the literature] Gestin E, et al. **Arch Anat Cytol Pathol** 1988;36(3):85–92 (15 ref.) (Eng. Abstr.) (Fre)

[HPV infections in tumors of the upper respiratory and digestive tract. In situ hybridization and dot-blot hybridization with biotinylated DNA probes] Milde-Langosch KM, et al. **Acta Histochem Suppl (Jena)** 1989;37:103–8 (Ger)

[Detection of viral nucleic acid sequences in paraffin and cryostat sections of clinical study samples using in situ hybridization] Neumann R, et al. **Acta Histochem Suppl (Jena)** 1989;37:109–12 (Ger)

[Detection of human papilloma virus (HPV) DNA in vulvar cancers] Ikenberg H, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):776–80 (Eng. Abstr.) (Ger)

[Clinical relevance of nucleic acid detection of human papillomaviruses (HPV) in cells from smears of the cervix uteri] Neumann R, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):11–6 (Eng. Abstr.) (Ger)

[The so-called lung adenomatosis of sheep—an interesting pneumopathy from the comparative pathologic view] Johannsen U. **Zentralbl Allg Pathol** 1988;134(7):691–700 (44 ref.) (Eng. Abstr.) (Ger)

[Detection of human papillomavirus in a cervix precancerous condition. Initial report] Kiwitt A, et al. **Zentralbl Gynakol** 1988;110(18):1166–9 (Eng. Abstr.) (Ger)

[Data on the role of the human papillomavirus in the carcinogenesis of the uterine cervix] Nemes J, et al. **Orv Hetil** 1988 Oct 30;129(44):2347–51 (27 ref.) (Eng. Abstr.) (Hun)

[Bowenoid papulosis of the genitals] Bencini PL, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):161–3 (Eng. Abstr.) (Ita)

[Cytology in human papilloma virus (HPV) infections: is it possible to fix cytologic standards to determine the timing of activation?] Zarcone R, et al. **G Ital Oncol** 1987 Apr–Sep;7(2–3):95–7 (Eng. Abstr.) (Ita)

[Presence of koilocytes and viral infection in the epithelium

of the uterine cervix. Immunohistochemical study] Laureti E, et al. **Minerva Ginecol** 1988 Sep;40(9):547–9 (Eng. Abstr.) **(Ita)**

[Papillomavirus infection of the epithelium of the vaginal vault. A prospective study of morphological aspects] Liverani CA, et al. **Minerva Ginecol** 1988 Jun;40(6):351–6 (Eng. Abstr.) **(Ita)**

[Another viral inclusion wart different from myrmecia] Egawa K. **Nippon Hifuka Gakkai Zasshi** 1988 Oct; 98(11):1105–12 (Eng. Abstr.) **(Jpn)**

[Studies of epithelial dysplasia of the cervix uteri and the features of human papilloma virus infection based on the data from the Department of Pathological Anatomy, the Lódź Medical Academy] Danilewicz M, et al. **Ginekol Pol** 1988 Mar;59(3):151–6 (Eng. Abstr.) **(Pol)**

PHYSIOPATHOLOGY

Rhinosporidium seeberi and papovavirus infection of the conjunctiva: a clinical and ultrastructural study. Noor Sunba MS, et al. **APMIS Suppl** 1988;3:91–3

PREVENTION & CONTROL

Vaccines against tumor antigens. Arlinghaus RB. **Adv Vet Sci Comp Med** 1989;33:377–95 (70 ref.)

Cytological screening for cervical cancer and human papillomavirus in general practice. Hiscock E, et al. **BMJ** 1988 Sep 17;297(6650):724–6

A prototype vaccine to prevent Epstein–Barr virus–associated cancers. Epstein M. **Chemioterapia** 1987 Jun;6(2 Suppl):655–8 (39 ref.)

Applications of biotechnology to human–papillomavirus–induced diseases. Faras AJ, et al. **Clin Dermatol** 1985 Oct–Dec;3(4):200–3

Effects of acyclovir on herpes simplex virus type 1 infection in mice treated with 12–O–tetradecanoylphorbol 13–acetate. Larsson PA, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1773–8

Sexually transmitted papillomaviral infections: V. Prophylactic use of topical 5–fluorouracil in refractory infection in the male. Rosemberg SK. **Urology** 1989 Aug; 34(2):86–8

SURGERY

Survival of a Patient With an Infected Right Atrial Myxoma Following Surgery [letter] Chow WH. **Eur Heart J** 1989 Jan;10(1):97

Managing women with human papillomavirus changes in cervical cytology. Winceslaus SJ, et al. **Genitourin Med** 1988 Aug;64(4):259–62

Extended carbon dioxide laser vaporization in the treatment of subclinical papillomavirus infection of the lower genital tract [letter] Richart RM, et al. **Obstet Gynecol** 1989 Jun; 73(6):1051–3

[Laser CO2 treatment of cervical intraepithelial neoplasm associated with viral cytopathogenic effect] Garozzo G, et al. **G Ital Oncol** 1988 Jan–Mar;8(1):37–9 (Eng. Abstr.) **(Ita)**

THERAPY

Pathogenesis and treatment of human genital papillomavirus infections: a review. Reichman RC, et al. **Antiviral Res** 1989 Apr;11(3):109–18 (37 ref.)

Genital human papillomavirus infection. Management strategies. Krebs HB. **Clin Obstet Gynecol** 1989 Mar; 32(1):200–13 (36 ref.)

Cervical human papilloma virus infection: is treatment possible? Benrubi GI, et al. **J Fla Med Assoc** 1988 Dec; 75(12):799–800

Cervical papilloma virus treatment [letter] Hooley JS. **J Fla Med Assoc** 1989 Feb;76(2):241

Management of human papillomavirus–associated genital lesions in men. Krebs HB. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):312–6

TRANSMISSION

Mechanism for human papillomavirus transmission at birth. Sedlacek TV, et al. **Am J Obstet Gynecol** 1989 Jul; 161(1):55–9

B virus (Herpesvirus simiae) and human infection. Benson PM, et al. **Arch Dermatol** 1989 Sep;125(9):1247–8

Sexually transmitted cancers and viruses. Macnab JC, et al. **Biomed Pharmacother** 1989;43(3):167–72

Sexually transmitted diseases including genital papillomavirus infection in male sexual partners of women treated for cervical intraepithelial neoplasia III by conization [letter] Griffiths M. **Br J Obstet Gynaecol** 1988 Dec;95(12):1338–9

Transmissibility and treatment failures of different types of human papillomavirus. Gal D, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):308–11

Penile human papillomavirus infection in consorts of women with genital human papillomavirus infection. A pilot study. Hudson S, et al. **S Afr Med J** 1988 Nov 19;74(10):511–2

Persistence and transfer of Epstein–Barr virus after allogeneic bone marrow transplantation. Gratama JW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3097–8

Transmission of Epstein–Barr virus by a transplanted kidney, with activation by OKT3 antibody. Denning DW, et al. **Transplantation** 1989 Jul;48(1):141–4

[Viral infections and neoplasms of the uterine cervix] Penna C, et al. **Minerva Ginecol** 1989 Jan;41(1):9–15 (96 ref.) **(Ita)**

ULTRASTRUCTURE

Histopathological and ultrastructural observations of some human tumor xenografts passaged in athymic nude mice. I. Human osteosarcoma xenograft with features of viral (oncorna A and C type retrovirus) involvement. Kodousek R, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 119:199–214

VETERINARY

Isolation and characterization of reticuloendotheliosis virus from turkeys. Drén CN, et al. **Acta Vet Hung** 1988; 36(3–4):265–82

Papilloma of the ears of calves following tattooing. Studdert MJ, et al. **Aust Vet J** 1988 Dec;65(12):399

Vertical transmission of reticuloendotheliosis virus in breeder turkeys. Witter RL, et al. **Avian Dis** 1989 Apr–Jun; 33(2):226–35

Bovine papillomaviruses. Jarrett WF. **Clin Dermatol** 1985 Oct–Dec;3(4):8–19

Demonstration in vitro of cell mediated immunity to Epstein–Barr virus in cotton–top tamarins. Finerty S, et al. **Clin Exp Immunol** 1988 Aug;73(2):181–5

Studies of animal oncology with relevance to biomedical advances. Theilen GH. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1124–30 (72 ref.)

Histomoniasis and reticuloendotheliosis in a wild turkey (Meleagris gallopavo) in North Carolina. Ley DH, et al. **J Wildl Dis** 1989 Apr;25(2):262–5

Surface antigens on equine sarcoid cells and normal dermal fibroblasts as assessed by xenogeneic antisera. Brostroöm H, et al. **Res Vet Sci** 1989 Mar;46(2):172–9

Cutaneous bovine papillomatosis in the Sudan: detection of the group–specific virus antigen in warts from affected cattle. Abu Elzein EM, et al. **Rev Elev Med Vet Pays Trop** 1988;41(1):41–3

Papillomas and carcinomas associated with a papillomavirus in European harvest mice (Micromys minutus). Sundberg JP, et al. **Vet Pathol** 1988 Sep;25(5):356–61

Immediate split–thickness autogenous skin grafts in the horse. Case reports on the treatment of equine sarcoids in 3 horses. Wilson DG, et al. **Vet Surg** 1987 Mar–Apr;16(2):167–71

TUMOR VIRUSES see ONCOGENIC VIRUSES

TUMOR XENOGRAFT ASSAY see SUBRENAL CAPSULE ASSAY

TUMORIGENICITY TESTS see CARCINOGENICITY TESTS

TUMORS see NEOPLASMS

TUNA see under FISHES

TUNGSTEN

Cobalt exposure and lung disease in tungsten carbide production. A cross–sectional study of current workers. Sprince NL, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1220–6

A simple device for the reliable production of varnish–insulated, high–impedance tungsten microelectrodes. Ciancone MT, et al. **J Neurosci Methods** 1989 Feb;27(1):77–9

A simple glass–coated, fire–polished tungsten electrode with conductance adjustment using hydrofluoridic acid. Wörgötter F, et al. **J Neurosci Methods** 1988 Sep; 25(2):135–8

Transfer copings made from acrylic resin with an opaquing agent. Lewinstein I, et al. **J Prosthet Dent** 1988 Nov; 60(5):548–9

Micrographic and profilometric evaluation of the finish produced by diamond and tungsten carbide finishing burs on enamel and dentin. Price RB, et al. **J Prosthet Dent** 1988 Sep;60(3):311–6

Film–screen mammography x–ray tube anodes: molybdenum versus tungsten. Kimme–Smith C, et al. **Med Phys** 1989 Mar–Apr;16(2):279–83

[Genetic transformation of cultured animal cells using the high–velocity mechanical DNA poration] Kolesnikov VA, et al. **Dokl Akad Nauk SSSR** 1988;302(5):1236–8 **(Rus)**

ANALYSIS

Indirect determination of tungstate in rat tissues by atomic absorption spectrometry. Chakraborty D, et al. **Analyst** 1989 Jan;114(1):67–9

METABOLISM

Effects of dietary iron deficiency and tungsten supplementation on 59Fe absorption and gastric retention from 59Fe compounds in rats. Shears GE, et al. **Br J Nutr** 1989 May;61(3):573–81

PHARMACOKINETICS

Behavior of [185W]thiotungstates injected into sheep and the influence of copper: their fate and the effect of the compounds upon plasma copper. Mason J, et al. **J Inorg Biochem** 1989 Feb;35(2):115–26

PHARMACOLOGY

Effects of suramin, HPA–23 and 3'–azidothymidine triphosphate on the reverse transcriptase of bovine leukaemia virus. Reimer K, et al. **Acta Virol (Praha)** 1989 Jan;33(1):43–9

Inhibitory effects of sulphur compounds, copper and tungsten on nitrate reduction by mixed rumen micro–organisms. Takahashi J, et al. **Br J Nutr** 1989 May;61(3):741–8

Cellular and molecular mechanisms of antiretroviral effects of HPA23. Dormont D, et al. **Cancer Detect Prev** 1988; 12(1–6):181–94

THERAPEUTIC USE

Clinical trial of tolerance of HPA–23 in patients with acquired immune deficiency syndrome. Moskovitz BL. **Antimicrob Agents Chemother** 1988 Sep;32(9):1300–3

Therapeutic trials with HPA23, alpha–IFN and ribavirin in AIDS patients. Moroni M, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):639–41

TUNICAMYCIN

[Tunicamycin retinal degeneration in animal experimentation] Zhuang S. **Chung Hua Yen Ko Tsa Chih** 1988 May; 24(3):164–7 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

Effect of tunicamycin C2 on the induction of crystal induced chemotactic factor in human neutrophils. Bhatt AK, et al. **Agents Actions** 1988 Jul;24(3–4):303–12

Effects of lectins and tunicamycin on cAMP response to parathyroid hormone. Rizzoli R, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E80–6

Evidence of gene amplification in tunicamycin–resistant Chinese hamster ovary cells. Scocca JR, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1063–9

The role of N–linked glycosylation in the regulation of activity of 3–hydroxy–3–methylglutaryl–coenzyme A reductase and proliferation of SV40–transformed 3T3 cells. Larsson O, et al. **Biochem J** 1989 Jun 1;260(2):597–600

In vivo effect of tunicamycin on the expression of rat small intestinal brush border membrane glycoproteins and glycoenzymes. Miura S, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4081–8

Effect of tunicamycin, an inhibitor of protein glycosylation, on the high–affinity transport of acidic amino acid neurotransmitters in C6 glioma cells. Deas J, et al. **Brain Res** 1989 Mar 27;483(1):84–90

Effect of tunicamycin on the expression of functional brain neurotransmitter receptors and voltage–operated channels in Xenopus oocytes. Sumikawa K, et al. **Brain Res** 1988 Nov;464(3):191–9

Developmental changes in the open time and conductance of acetylcholine receptors in aneural cultured Xenopus myocytes treated with cycloheximide or tunicamycin. Carlson CG, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):61–8

Effect of tunicamycin on glycogen accumulation in the stratum intermedium and odontoblasts of rat incisor. Chardin H, et al. **Cell Tissue Res** 1989 Jun;256(3):519–27

The effects of concanavalin A, cerulenin, hydroxyurea and tunicamycin on the incorporation of amino acids and glucosamine in Tetrahymena pyriformis. Richmond JE. **Comp Biochem Physiol [B]** 1979;64(2):161–5

Inhibition of N–linked glycosylation in Dictyostelium discoideum: effects of aggregate formation. Sadeghi H, et al. **Differentiation** 1988 Jul;38(2):99–103

Effects of tunicamycin and N–linked oligosaccharide–processing inhibitors on the morphology of cultured porcine thyroid cells. Giraud A, et al. **Eur J Cell Biol** 1989 Feb;48(1):128–34

The transforming growth factor–beta receptor type III is a membrane proteoglycan. Domain structure of the receptor. Cheifetz S, et al. **J Biol Chem** 1988 Nov 15; 263(32):16984–91

Amplification and molecular cloning of the hamster tunicamycin–sensitive N–acetylglucosamine–1–phosphate transferase gene. The hamster and yeast enzymes share a common peptide sequence. Lehrman MA, et al. **J Biol Chem** 1988 Dec 25;263(36):19796–803

The effects of glycosylation inhibitors on the proliferation of a spontaneously transformed cell line (3T6) in vitro. Engström W, et al. **J Cell Sci** 1988 Jul;90 (Pt 3):447–55

Visualization of glycoproteins after tunicamycin and monensin treatment of herpes simplex virus infected cells. Lopez–Iglesias C, et al. **J Ultrastruct Mol Struct Res** 1988 Oct;101(1):75–91

Effects of lectins and tunicamycin on IL–1 binding to YT cells. Speziale SC, et al. **Lymphokine Res** 1989 Spring; 8(1):1–8

Tunicamycin modulates binding of 125I–erythropoietin to Friend erythroleukemia cells. Fukamachi H, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):1–6

Concerted hexose transport curb by tunicamycin is rendered irreversible by glucose or allose in medium containing L–glutamine. Ullrey DB, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4350–1

Effects of tunicamycin on the cellular expression and structural arrangement of Na K–ATPase. Zamofing D, et al. **Prog Clin Biol Res** 1988;268B:163–8

TUNICATA see UROCHORDATA

TUPAIA see under TUPAIIDAE

TUPAIIDAE

ANATOMY & HISTOLOGY

Mammalian frontal diploic vein and the human foramen caecum. Thewissen JG. **Anat Rec** 1989 Feb;223(2):242–4

Callosal projections between areas 17 in the adult tree shrew (Tupaia belangeri). Pritzel M, et al. **Exp Brain Res** 1988; 72(3):481–93

Histaminergic system in the tree shrew brain. Airaksinen MS, et al. **J Comp Neurol** 1989 Aug 15;286(3):289–310

New view of the organization of the pulvinar nucleus in Tupaia as revealed by tectopulvinar and pulvinar–cortical projections. Luppino G, et al. **J Comp Neurol** 1988 Jul 1;273(1):67–86

Anatomy of the adrenergic system in the medulla oblongata of the tree shrew: PNMT immunoreactive structures within the nucleus tractus solitarii. Mittendorf A, et al. **J Comp Neurol** 1988 Aug 8;274(2):178–89

Topography of cones and rods in the tree shrew retina. Müller B, et al. **J Comp Neurol** 1989 Apr 22;282(4):581–94

GROWTH & DEVELOPMENT

Development of acetylcholinesterase activity in the lateral geniculate nucleus. Hutchins JB, et al. **J Comp Neurol** 1988 Sep 8;275(2):241–53

METABOLISM

The corticosterone receptive system in the brain of Tupaia belangeri visualized by in vivo autoradiography. Flügge G, et al. **Exp Brain Res** 1988;72(2):417–24

Vimentin: changes in distribution during brain development. Hutchins JB, et al. **GLIA** 1989;2(1):55–66

Characterization of prostaglandin E2 binding to uterine membranes from baboon, rabbit and tree shrew (Tupaia belangeri). Hodam JR, et al. **J Mol Endocrinol** 1989 Jul; 3(1):33–42

PARASITOLOGY

Otacariasis in tree shrews (Tupaia belangeri) caused by Criokeron quintus. Brack M, et al. **Lab Anim Sci** 1989 Jan; 39(1):79–80

PHYSIOLOGY

Effects of bicuculline on signal detectability in lateral geniculate nucleus relay cells. Holdefer RN, et al. **Brain Res** 1989 May 29;488(1–2):341–7

Effects of bicuculline on receptive field center sensitivity of relay cells in the lateral geniculate nucleus. Norton TT, et al. **Brain Res** 1989 May 29;488(1–2):348–52

Locomotor activity registration by passive infrared detection in saddle back tamarins and tree shrews. Lerchl A, et al. **Physiol Behav** 1988;44(2):281–4

[Measuring the spontaneous activity of tree shrews (Tupaia belangeri) with passive infrared detectors] Kurre J, et al. **Z Versuchstierkd** 1988;31(3):105–10 (Eng. Abstr.) **(Ger)**

URINE

Urinary immunoreactive androgen levels during sexual development in the male tree-shrew (Tupaia belangeri). Collins PM, et al. **Comp Biochem Physiol [A]** 1989; 92(4):489–94

TUPAIINAE see TUPAIIDAE

TURBATRIX see NEMATODA

TURBELLARIA

A method for dispensing planaria (Dugesia dorotocephala) for mosquito control. Darby WM, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):545–6

Effects of selected insect growth regulators and pesticides on Dugesia dorotocephala and Dugesia tigrina (Tricladida: Turbellaria). Nelson FR, et al. **J Am Mosq Control Assoc** 1988 Jun;4(2):184–6

ANATOMY & HISTOLOGY

Studies of a new land planarian, Bipalium chhatarpurensis sp. nov. Chaurasia ON. **Folia Morphol (Praha)** 1988; 36(4):403–7

GROWTH & DEVELOPMENT

Production and maintenance of large numbers of Dugesia tigrina (Turbellaria: Tricladida) for the control of mosquitoes in the field. Callahan JL, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):10–4

PHYSIOLOGY

Chemoreception in Turbellaria. Ferrero EA, et al. **Exp Biol** 1989;48(3):141–8 (49 ref.)

Observations on planarian epithelization after wounding. Hori I. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):307–15

RADIATION EFFECTS

Responses of the planarian Dugesia dorotocephala to ultraviolet radiation or photosensitized treatments. Lytle CD, et al. **Photochem Photobiol** 1988 Oct;48(4):457–9

ULTRASTRUCTURE

Meiosis in Mesostoma ehrenbergii ehrenbergii. IV. Recombination nodules in spermatocytes and a test of the correspondence of late recombination nodules and chiasmata. Croft JA, et al. **Genetics** 1989 Feb;121(2):255–62

TURBIDIMETRY see NEPHELOMETRY AND TURBIDIMETRY

TURBINATES

Visual loss following intranasal corticosteroid injection. Johns KJ, et al. **JAMA** 1989 Apr 28;261(16):2413

The pathogenesis of turbinate atrophy in pigs caused by Bordetella bronchiseptica. Magyar T, et al. **Vet Microbiol** 1988 Oct;18(2):135–46

ANATOMY & HISTOLOGY

[The hiatus semilunaris, the infundibulum and the ostium of the sinus maxillaris, the anterior attached zone of the concha nasalis and its distance to the landmarks of the outer and inner nose] Lang J, et al. **Gegenbaurs Morphol Jahrb** 1988;134(5):637–46 (Eng. Abstr.) **(Ger)**

CYTOLOGY

Mast cell distribution and morphology in human nasal turbinates following decalcification. Trotter CM, et al. **Rhinology** 1989 Jun;27(2):81–9

DRUG EFFECTS

[Chemosurgery to inferior turbinates—trichloroacetic acid application] Yao K, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jul;91(7):1031–41 (Eng. Abstr.) **(Jpn)**

EMBRYOLOGY

[Peculiar aspects in the differentiation of the ethmoidal capsule in human fetuses] Ortolani F, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):691–8 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

Preliminary studies on rat olfactory tissue: effects of odorants on NA+–K+ atpase activity. Koch RB, et al. **Life Sci** 1974 Sep 1;15(5):1005–16

IMMUNOLOGY

Release of high-molecular-weight neutrophil chemotactic activity from resected human nasal turbinate after antigen challenge. Nagakura T, et al. **J Allergy Clin Immunol** 1989 Mar;83(3):656–62

INJURIES

Bloodless turbinectomy following blind nasal intubation [letter] Cooper R. **Anesthesiology** 1989 Sep;71(3):469

Restoration of the rat nasal septum and turbinates after damage by intranasal electrocoagulation. Immel HR, et al. **Z Versuchstierkd** 1988;31(5):233–40

METABOLISM

Metabolism of arachidonic acid by human nasal and bronchial epithelial cells. Henke D, et al. **Arch Biochem Biophys** 1988 Dec;267(2):426–36

Covalent binding of [14C]-2,6-dimethylaniline to DNA of rat liver and ethmoid turbinate. Short CR, et al. **J Toxicol Environ Health** 1989;27(1):85–94

Identification of B2 bradykinin binding sites in the guinea pig nasal turbinate. Fujiwara Y, et al. **Peptides** 1989 May–Jun;10(3):701–3

PATHOLOGY

Turbinate perimeter ratio as an indicator of conchal atrophy for diagnosis of atrophic rhinitis in pigs. Collins MT, et al. **Am J Vet Res** 1989 Mar;50(3):421–4

[Atrophic rhinitis: assessment of the longitudinal section of the head of pigs in the slaughter line for the determination of incidence and extent of concha atrophy] Visser IJ, et al. **Tijdschr Diergeneeskd** 1988 Dec 15;113(24):1345–55 (Eng. Abstr.) **(Dut)**

[Surgical treatment of nasal obstruction. Turbinoplasty] Kukwa A, et al. **Otolaryngol Pol** 1988;42(1–2):86–91 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Expression of G-protein alpha subunits in rat olfactory neuroepithelium: candidates for olfactory signal transduction. Jones DT, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:349–53

PHYSIOPATHOLOGY

Activation of an apical Cl– conductance by Ca2+ ionophores in cystic fibrosis airway epithelia. Willumsen NJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C226–33

RADIOGRAPHY

Concha bullosa: CT evaluation. Zinreich SJ, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):778–84

SURGERY

Secure endoscopic sinus surgery as an adjunct to functional nasal surgery. Toffel PH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):822–5

Predicting the outcome of submucosal diathermy to the inferior turbinates. Jones AS, et al. **Clin Otolaryngol** 1989 Feb;14(1):41–4

Incidence of nasolacrimal injury and turbinectomy—associated atrophic rhinitis with Le Fort I osteotomies. Demas PN, et al. **J Craniomaxillofac Surg** 1989 Apr;17(3):116–8

Surgical reduction of the inferior turbinate in children: extended follow-up. Thompson AC. **J Laryngol Otol** 1989 Jun;103(6):577–9

Nasal cryosurgery and cautery: should the septum be treated and is a diagnosis relevant? Haight JS, et al. **J Otolaryngol** 1989 Jun;18(4):144–50

The management of hypertrophied inferior turbinates [letter] **Plast Reconstr Surg** 1989 Mar;83(3):571–3

Resection of the inferior turbinate [letter] Fry HJ. **Plast Reconstr Surg** 1988 Dec;82(6):1103

The treatment of chronic sinusitis in six cats by ethmoid conchal curettage and autogenous fat graft sinus ablation. Anderson GI. **Vet Surg** 1987 Mar–Apr;16(2):131–4

[Submucosal resection of the inferior nasal turbinates] Rivière F, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(5):297–303 (13 ref.) (Eng. Abstr.) **(Fre)**

[Infraction of the middle turbinate in the treatment of sinusitis. A general practice report] Walterscheid F. **HNO** 1989 Jun;37(6):231–5 (Eng. Abstr.) **(Ger)**

[Functional microsurgery of the ethmoid sinus using an endonasal approach and preserving the middle turbinate] Balbi F. **An Otorrinolaringol Ibero Am** 1989;16(2):165–78 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

An ultrastructural study of the mucosal surface of the human inferior concha. I. Normal appearances. Davis AE, et al. **J Anat** 1988 Dec;161:61–71

TURBOT see FLATFISHES

TURKEYS

Isolation and characterization of reticuloendotheliosis virus from turkeys. Drén CN, et al. **Acta Vet Hung** 1988; 36(3–4):265–82

Narasin poisoning in turkeys. Sályi G, et al. **Acta Vet Hung** 1988;36(1–2):107–15

The California Turkey Project. Hird DW, et al. **Acta Vet Scand Suppl** 1988;84:218–20

Protection of turkey poults from Bordetella avium infection and disease by pili and bacterins. Akeila MA, et al. **Avian Dis** 1988 Oct–Dec;32(4):641–9

Cataracts and optic nerve hypoplasia in turkey poults. Barr BC, et al. **Avian Dis** 1988 Jul–Sep;32(3):469–77

Furazolidone toxicity in neomycin-treated turkey poults. Czarnecki CM. **Avian Dis** 1989 Jul–Sep;33(3):466–72

An outbreak of influenza (H1N1) in turkey breeder hens. Ficken MD, et al. **Avian Dis** 1989 Apr–Jun;33(2):370–4

Monensin toxicity in turkey breeder hens. Ficken MD, et al. **Avian Dis** 1989 Jan–Mar;33(1):186–90

Poliomyelomalacia, pancreatic necrosis, and cerebellar malacia in turkey poults. Frank RK, et al. **Avian Dis** 1988 Jul–Sep;32(3):574–82

Inclusion-body hepatitis in day-old turkeys. Guy JS, et al. **Avian Dis** 1988 Jul–Sep;32(3):587–90

Characteristics of fowl cholera outbreaks in turkeys in Georgia in 1986. Morris MP, et al. **Avian Dis** 1989 Apr–Jun; 33(2):213–8

Disease prevalence in Georgia turkey flocks in 1986. Morris MP, et al. **Avian Dis** 1988 Jul–Sep;32(3):404–6

Studies on feasibility of producing Salmonella-free turkeys. Pomeroy BS, et al. **Avian Dis** 1989 Jan–Mar;33(1):1–7

Skeletal muscle lesions in turkeys associated with the feeding of monensin. Wages DP, et al. **Avian Dis** 1988 Jul–Sep; 32(3):583–6

Cryptosporidiosis and turkey viral hepatitis in turkeys. Wages DP, et al. **Avian Dis** 1989 Jan–Mar;33(1):191–4

Toxicity of excess dicalcium phosphate in the diet of turkey poults. Wallner-Pendleton EA, et al. **Avian Dis** 1989 Apr–Jun;33(2):375–8

Vertical transmission of reticuloendotheliosis virus in breeder turkeys. Witter RL, et al. **Avian Dis** 1989 Apr–Jun; 33(2):226–35

Caldesmon structure and function: sequence analysis of a 35 kilodalton actin- and calmodulin-binding fragment from the C-terminus of the turkey gizzard protein. Leszyk J, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1371–8

Incidence of microscopically detectable degenerative characteristics in skeletal muscle of turkey. Sosnicki A, et al. **Br Poult Sci** 1989 Mar;30(1):69–80

Toxicity of 2-hydrazinoethanol in turkey poults. Czarnecki

CM. **Comp Biochem Physiol [C]** 1988;91(2):607–11
Estimation of product yield and numbers of portions of turkey rolls in a convection oven. Hsieh JH, et al. **J Am Diet Assoc** 1989 Mar;89(3):409–11
Molecular cloning of an oncogenic replication–competent virus that causes lymphoproliferative disease in turkeys. Gak E, et al. **J Virol** 1989 Jun;63(6):2877–80
Histomoniasis and reticuloendotheliosis in a wild turkey (Meleagris gallopavo) in North Carolina. Ley DH, et al. **J Wildl Dis** 1989 Apr;25(2):262–5
Diagnostic exercise: bird with cutaneous nodules on the feet. Pletcher JM. **Lab Anim Sci** 1989 May;39(3):247–8
The isolation and attenuation of a virus causing rhinotracheitis in turkeys in South Africa. Buys SB, et al. **Onderstepoort J Vet Res** 1989 Jun;56(2):87–98
Toxicity of 1,2–diethylhydrazine fed to turkey poults. Czarnecki CM. **Res Commun Chem Pathol Pharmacol** 1989 Feb;63(2):293–6
Acute fibrinopurulent blepharitis and conjunctivitis associated with Staphylococcus hyicus, Escherichia coli, and Streptococcus sp. in chickens and turkeys. Cheville NF, et al. **Vet Pathol** 1988 Sep;25(5):369–75
Acute airsacculitis in turkeys inoculated with Pasteurella multocida. Ficken MD, et al. **Vet Pathol** 1989 May; 26(3):231–7
Conjunctiva–associated lymphoid tissue (CALT) in normal and Bordetella avium–infected turkeys. Fix AS, et al. **Vet Pathol** 1989 May;26(3):222–30
Prevalence of avain nephritis virus in England. Nicholas RA, et al. **Vet Rec** 1988 Oct 8;123(15):398
Multiple drug–resistant strains of Salmonella typhimurium in poultry. Threlfall EJ, et al. **Vet Rec** 1989 May 20; 124(20):538

ANATOMY & HISTOLOGY

Atherosclerosis in coronary, aortic, and sciatic arteries from wild male turkeys (Meleagris gallopavo silvestris). Krista LM, et al. **Am J Vet Res** 1988 Sep;49(9):1582–8
The turkey myogenic satellite cell: optimization of in vitro proliferation and differentiation. McFarland DC, et al. **Tissue Cell** 1988;20(6):899–908

BLOOD

Hemagglutination and hemagglutination inhibition of turkey red blood cells with Mycoplasma hyopneumoniae. Young TF, et al. **Am J Vet Res** 1989 Jul;50(7):1052–5
Determination of chicken and turkey plasma and serum protein concentrations by refractometry and the biuret method. Andreasen CB, et al. **Avian Dis** 1989 Jan–Mar; 33(1):93–6
Effect of cyclophosphamide on selected hematologic parameters of the turkey. Ficken MD, et al. **Avian Dis** 1988 Oct–Dec;32(4):812–7
Separation of turkey heterophils from blood using two–step Ficoll–Hypaque discontinuous gradients. Latimer KS, et al. **Avian Dis** 1989 Jul–Sep;33(3):571–3
Effects of poults on plasma concentrations of prolactin in turkey hens incubating without eggs or a nest. Opel H, et al. **Br Poult Sci** 1988 Dec;29(4):791–800
Blood plasma catecholamine concentration of poult embryos during the transition from diffusive to convective respiration. Christensen VL, et al. **Comp Biochem Physiol [B]** 1989;92(3):549–53
Chemical characterization of ligand binding site fragments from turkey beta–adrenergic receptor. Eshdat Y, et al. **FEBS Lett** 1989 Mar 27;246(1–2):166–70
The absence of sex and age effects on the corticosterone response of turkey poults to adrenocorticotropic hormone and temperature stressors. Davis GS, et al. **Poult Sci** 1989 Jun;68(6):846–9
Ontogeny of daily rhythmicity in plasma corticosterone and variation in sensitivity of the corticosterone response in turkey poults. Davis GS, et al. **Poult Sci** 1989 Mar; 68(3):423–7
5–azacytidine–induced increase in plasma prolactin levels of immature turkeys. Fehrer SC, et al. **Poult Sci** 1988 Dec; 67(12):1794–6
Daily changes in plasma prolactin, corticosterone, and luteinizing hormone in the unrestrained, ovariectomized turkey hen. Proudman JA, et al. **Poult Sci** 1989 Jan; 68(1):177–84

EMBRYOLOGY

Differences between chick and turkey embryos in sensitivity to 3,3',4,4'–tetrachloro–biphenyl and in concentration/affinity of the hepatic receptor for 2,3,7,8–tetrachlorodibenzo–p–dioxin. Brunström B, et al. **Comp Biochem Physiol [C]** 1988;91(2):507–12
Genetic effects on embryonic growth in domestic turkeys. Bielfelt SW, et al. **Poult Sci** 1989 Feb;68(2):315–8

GENETICS

DNA fingerprints of poultry. Hillel J, et al. **Anim Genet** 1989; 20(2):145–55
DNA content of spermatozoa in different genetic lines of turkeys. Lamošová D, et al. **Gamete Res** 1988 Apr; 19(4):417–21
Estimates of genetic parameters in turkeys. 1. Body weight and skeletal characteristics. Havenstein GB, et al. **Poult Sci** 1988 Oct;67(10):1378–87
Estimates of genetic parameters in turkeys. 2. Body weight and carcass characteristics. Havenstein GB, et al. **Poult Sci** 1988 Oct;67(10):1388–99

GROWTH & DEVELOPMENT

Effects of dietary protein and added fat on turkeys varying in strain, sex, and age. 1. Live characteristics. Blair ME, et al. **Poult Sci** 1989 Feb;68(2):278–86
Effects of varying fat and protein in diets of growing large white turkeys. 1. Body weights and feed efficiencies. Blair ME, et al. **Poult Sci** 1988 Sep;67(9):1281–9
Effects of dietary protein and added fat on turkeys varying in strain, sex, and age. 2. Carcass characteristics. Blair ME, et al. **Poult Sci** 1989 Feb;68(2):287–96
Relationship between plasma corticosterone levels and poult mortality and the effects of feeding corticosterone on poult performance. Davis GS, et al. **Poult Sci** 1989 Jul; 68(7):880–4
Restricted water access time as a means of growth control in turkey tom breeder candidates. Leeson S, et al. **Poult Sci** 1988 Aug;67(8):1236–7
Effects of photoperiod and filtered light on growth, reproduction, and mating behavior of turkeys. 1. Growth performance of two lines of males and females. Levenick CK, et al. **Poult Sci** 1988 Nov;67(11):1505–13
Effects of posthatch glucose on poults fed and fasted during yolk sac depletion. Moran ET Jr. **Poult Sci** 1989 Aug; 68(8):1141–7
Lysine requirements of growing turkeys in various temperature environments. Noll SL, et al. **Poult Sci** 1989 Jun;68(6):781–94
Early protein undernutrition and subsequent realimentation in turkeys. 1. Effect of performance and body composition. Oju EM, et al. **Poult Sci** 1988 Dec;67(12):1750–9
Early protein undernutrition and subsequent realimentation in turkeys. 2. Effect on weights and proportions of organs and tissues. Oju EM, et al. **Poult Sci** 1988 Dec; 67(12):1760–9

IMMUNOLOGY

Interaction of turkey complement with Escherichia coli isolated from turkeys. Ellis MG, et al. **Am J Vet Res** 1989 Aug;50(8):1285–9
Evaluation of relationship among three purified antigens from Pasteurella multocida strain P–1059 and of their protective capacities in turkeys. Tsuji M, et al. **Am J Vet Res** 1988 Sep;49(9):1516–21
Comparative serological evaluation of avian influenza vaccine in turkeys. Abraham A, et al. **Avian Dis** 1988 Oct–Dec;32(4):659–62
Passive immunization versus adhesion of Bordetella avium to the tracheal mucosa of turkeys. Arp LH, et al. **Avian Dis** 1988 Jul–Sep;32(3):494–500
Eimeria adenoeides and E. meleagrimitis: effect of poult age on susceptibility to infection and development of immunity. Augustine PC. **Avian Dis** 1988 Oct–Dec;32(4):798–802
Use of a live oral vaccine to immunize turkeys against erysipelas. Bricker JM, et al. **Avian Dis** 1988 Oct–Dec; 32(4):668–73
Evaluation of Pasteurella multocida mutants of low virulence. I. Development and pathogenicity. Hofacre CL, et al. **Avian Dis** 1989 Apr–Jun;33(2):270–4
Evaluation of Pasteurella multocida mutants of low virulence. II. Immunologic response of turkeys. Hofacre CL, et al. **Avian Dis** 1989 Apr–Jun;33(2):275–8
Solubilization of membrane–associated cross–protection factor(s) of Pasteurella multocida. Rimler RB, et al. **Avian Dis** 1989 Apr–Jun;33(2):258–63
Relationship between anti–Pasteurella multocida antibody titers after CU vaccination and survival after challenge. Schlink GT, et al. **Avian Dis** 1989 Jul–Sep;33(3):506–10
Ontogeny of antibody response to Brucella abortus in turkeys. McCorkle FM, et al. **Dev Comp Immunol** 1988 Summer; 12(3):621–7
Serologic response of Rio Grande wild turkeys to experimental infections of Mycoplasma gallisepticum. Rocke TE, et al. **J Wildl Dis** 1988 Oct;24(4):668–71
Characterization of complement activity in turkeys: evidence for classical and alternative complement pathways. Ellis MG, et al. **Poult Sci** 1989 May;68(5):646–50
Antibody response to Newcastle disease virus and Pasteurella multocida of two strains of turkeys. Sharaf MM, et al. **Poult Sci** 1988 Oct;67(10):1372–7

INJURIES

The effects of stray voltage on turkey poults. Halvorson DA, et al. **Avian Dis** 1989 Jul–Sep;33(3):582–5

METABOLISM

Pharmacokinetics of oxytetracycline in the turkey: evaluation of biliary and urinary excretion. Dyer DC. **Am J Vet Res** 1989 Apr;50(4):522–4
Tissue sulfonamide concentration and correlation in turkeys. Epstein RL, et al. **Am J Vet Res** 1989 Jun;50(6):926–8
Fatty acid requirements of breeding turkeys. Whitehead CC, et al. **Br Poult Sci** 1988 Dec;29(4):761–8
Crystal–collagen relationships in calcified turkey leg tendons visualized by selected–area dark field electron microscopy. Arsenault AL. **Calcif Tissue Int** 1988 Oct;43(4):202–12
Reduced lipid peroxidation in dilated hearts of cardiomyopathic turkeys. Lax D, et al. **Cardiovasc Res** 1988 Nov;22(11):826–32
Radiorespirometric studies of carbohydrate metabolism by washed spermatozoa of various species. Kraft LA, et al. **Comp Biochem Physiol [B]** 1978;60(3):233–8
Lactate dehydrogenase isozymes in the spermatozoa of the domestic fowl, Gallus domesticus and turkey, Meleagris gallopavo. McIndoe WM, et al. **Comp Biochem Physiol [B]** 1978;61(3):433–7
Comparison of hepatic drug metabolizing enzyme activities in several agricultural species. Short CR, et al. **Comp Biochem Physiol [C]** 1988;91(2):419–24
Steroidogenic properties of isolated turkey adrenocortical cells. Kocsis JF, et al. **Domest Anim Endocrinol** 1989 Apr; 6(2):121–31
Differential steroid production between theca interna and theca externa cells: a three–cell model for follicular steroidogenesis in avian species. Porter TE, et al. **Endocrinology** 1989 Jul;125(1):109–16
Gonadal steroid modulation of basal and vasoactive intestinal polypeptide–stimulated prolactin release by turkey anterior pituitary cells. Knapp TR, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):226–36
Covalent structure of a low–molecular–mass protein, meleagrin, present in a turkey (Meleagris gallopavo) ovomucoid preparation. Odani S, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):660–3
Refined crystal structure of troponin C from turkey skeletal muscle at 2.0 A resolution. Herzberg O, et al. **J Mol Biol** 1988 Oct 5;203(3):761–79
Pharmacokinetics of single doses of gentamicin given intravenously and intramuscularly to turkeys. Pedersoli WM, et al. **J Vet Pharmacol Ther** 1989 Jun;12(2):124–32
The elimination of fenbendazole and its metabolites in the chicken, turkey and duck. Short CR, et al. **J Vet Pharmacol Ther** 1988 Jun;11(2):204–9
Development of lipase activity in yolk membrane and pancreas of young turkeys. Escribano F, et al. **Poult Sci** 1988 Jul;67(7):1089–97
Biotin bioavailability of protein supplements and cereal grains for starting turkey poults. Misir R, et al. **Poult Sci** 1988 Sep;67(9):1274–80
Intestinal disaccharidases of young turkeys: temporal development and influence of diet composition. Sell JL, et al. **Poult Sci** 1989 Feb;68(2):265–77

MICROBIOLOGY

An outbreak of psittacosis in Minnesota turkey industry workers: implications for modes of transmission and control. Hedberg K, et al. **Am J Epidemiol** 1989 Sep; 130(3):569–77
Characterization of outer membrane protein–enriched extracts from Pasteurella multocida isolated from turkeys. Choi KH, et al. **Am J Vet Res** 1989 May;50(5):676–83
Isolation and trypsin–enhanced propagation of turkey enteric (bluecomb) coronaviruses in a continuous human rectal adenocarcinoma cell line. Dea S, et al. **Am J Vet Res** 1989 Aug;50(8):1310–8
Serum resistance and virulence of Escherichia coli isolated from turkeys. Ellis MG, et al. **Am J Vet Res** 1988 Dec; 49(12):2034–7
Resistance to antimicrobial agents and prevalence of R plasmids in Pasteurella multocida from turkeys. Hirsh DC, et al. **Antimicrob Agents Chemother** 1989 May;33(5):670–3
Pasteurella multocida recovered from live turkeys: prevalence and virulence in turkeys. Carpenter TE, et al. **Avian Dis** 1989 Jan–Mar;33(1):12–7
Comparison of Pasteurella multocida serotype 3,4 isolates from turkeys with fowl cholera. Lee MD, et al. **Avian Dis** 1988 Jul–Sep;32(3):501–8
Colonization of the intestine of turkey embryos exposed to Mycoplasma iowae. Mirsalimi SM, et al. **Avian Dis** 1989 Apr–Jun;33(2):310–5
Estimate of economic impact of fowl cholera in turkeys in Georgia in 1986. Morris MP, et al. **Avian Dis** 1988 Oct–Dec;32(4):718–21
Pathogenesis of fowl cholera: influence of encapsulation on the fate of Pasteurella multocida after intravenous inoculation into turkeys. Tsuji M, et al. **Avian Dis** 1989 Apr–Jun;33(2):238–47
Characterization of group II avian adenoviruses with a panel of monoclonal antibodies. van den Hurk JV, et al. **Can J Vet Res** 1988 Oct;52(4):458–67
Use of an rRNA probe and restriction endonuclease analysis to fingerprint Pasteurella multocida isolated from turkeys and wildlife. Snipes KP, et al. **J Clin Microbiol** 1989 Aug; 27(8):1847–53
Prevalence and identity of coccidia in pen–raised wild turkeys. Ruff MD, et al. **J Wildl Dis** 1988 Oct;24(4):711–4
Effect of product form on the microbiological growth support characteristics of turkey meat products. Denton JH, et al. **Poult Sci** 1988 Sep;67(9):1269–73
Response of two lines of turkeys to challenge with Pasteurella multocida. Sharaf MM, et al. **Poult Sci** 1988 Dec; 67(12):1807–9

PARASITOLOGY

Intestinal and bursal cryptosporidiosis in turkeys following inoculation with Cryptosporidium sp. isolated from commercial poults. Bermudez AJ, et al. **Avian Dis** 1988 Jul–Sep;32(3):445–50

The ultrastructural effect of amprolium medication on development of Eimeria adenoeides in turkeys. Danforth HD, et al. **Avian Dis** 1989 Apr–Jun;33(2):303–9

Efficacy of diclazuril against turkey coccidiosis in a floor–pen experiment. Vanparija O, et al. **Avian Dis** 1989 Jul–Sep; 33(3):479–81

Efficacy of diclazuril against turkey coccidiosis in dose–titration studies. Vanparija O, et al. **Avian Dis** 1989 Jul–Sep;33(3):422–4

A pathologic study of wild turkeys in Connecticut. Sasseville VG, et al. **Cornell Vet** 1988 Oct;78(4):353–64

Susceptibility of Culex nigripalpus to several isolates of Plasmodium hermani from wild turkeys in Florida. Nayar JK, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):253–5

Molecular interactions of cultured turkey kidney cells with specific antigens of Eimeria adenoeides sporozoites. Augustine PC. **Proc Soc Exp Biol Med** 1989 May; 191(1):30–6

PHYSIOLOGY

Plasma prolactin levels in incubating turkey hens during pipping of the eggs and after introduction of poults into the nest. Opel H, et al. **Biol Reprod** 1989 May;40(5):981–7

Oviducal storage of spermatozoa in the turkey: its relevance to artificial insemination technology. Bakst MR. **Br Poult Sci** 1989 Jun;30(2):423–9 (30 ref.)

Effects of poults on plasma concentrations of prolactin in turkey hens incubating without eggs or a nest. Opel H, et al. **Br Poult Sci** 1988 Dec;29(4):791–800

Characteristics of oviposition patterns of turkey hens and the influence of different wavelengths of light. Pyrzak R, et al. **Br Poult Sci** 1989 Mar;30(1):151–60

Current role of semen storage and artificial insemination in the turkey industry. van Wambeke F, et al. **Br Poult Sci** 1989 Jun;30(2):461–9

Influence of egg production on zinc, copper and iron metabolism in the turkey hen (Meleagris gallopavo). Richards MP. **Comp Biochem Physiol [A]** 1989;93(4):811–7

Involvement of serotonin in prolactin release induced by electrical stimulation of the hypothalamus of the turkey (Meleagris gallopavo). el Halawani ME, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):323–8

Enhanced progesterone and testosterone secretion and depressed estradiol secretion in vitro from small white follicle cells of incubating turkey hens. Porter TE, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):400–5

Pineal and ocular influences on male and female turkeys: plasma luteinizing hormone and prolactin levels during gonadal development. Siopes TD, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):284–92

Duration of fertility of turkeys inseminated at different times after the onset of photostimulation. Bakst MR. **J Reprod Fertil** 1988 Nov;84(2):531–7

Effects of CGA–72662 (Larvadex) in turkeys during rearing and reproduction. Brake J, et al. **Poult Sci** 1989 Jun; 68(6):731–8

Testosterone concentrations in blood and seminal plasma of turkeys classified as high or low semen producers. Cecil HC, et al. **Poult Sci** 1988 Oct;67(10):1461–4

Efficacy of fertilization in artificially inseminated turkey hens. Christensen VL, et al. **Poult Sci** 1989 May;68(5):724–9

Effect of severity of early protein restriction on large turkey toms. 1. Performance characteristics and leg weakness. Ferket PR, et al. **Poult Sci** 1989 May;68(5):676–86

Effect of severity of early protein restriction on large turkey toms. 2. Carcass characteristics. Ferket PR, et al. **Poult Sci** 1989 May;68(5):687–97

Effects of light environment and population density on growth performance of male turkeys: 2. Physiological changes. Gill DJ, et al. **Poult Sci** 1988 Nov;67(11):1518–24

Effects of thyroidectomy on egg production, molt, and plasma thyroid hormone concentrations of turkey hens. Lien RJ, et al. **Poult Sci** 1989 Aug;68(8):1126–32

Effect of antemortem electrical stunning on functional properties of turkey muscle. Murphy BD, et al. **Poult Sci** 1988 Jul;67(7):1062–8

Effects on turkey mortality and body weight of type of beak trimming, age at trimming, and injection of poults with vitamin and electrolytes solution at hatching. Renner PA, et al. **Poult Sci** 1989 Mar;68(3):369–73

Riboflavin requirement of turkey poults fed a corn–soybean meal diet from 1 to 21 days of age. Ruiz N, et al. **Poult Sci** 1989 May;68(5):715–8

Influence of damaged spermatozoa on the fertility of turkey semen stored 24 hours at 5 C. Sexton TJ. **Poult Sci** 1988 Oct;67(10):1483–5

Effect of dietary phosphorus levels on performance of turkey breeder hens. Slaugh BT, et al. **Poult Sci** 1989 Feb; 68(2):319–22

TURNER–KIESER SYNDROME see NAIL–PATELLA SYNDROME

TURNER'S SYNDROME

Turner syndrome in a neonate [letter] Ghosh JB. **Indian Pediatr** 1988 Jan;25(1):104

[Monozygotic twins discordant for sex] Arizawa M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1479–82 **(Jpn)**

COMPLICATIONS

Turner's syndrome with agenesis of the corpus callosum, Hashimoto's thyroiditis and horseshoe kidney. Araki K, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):622–6

Cutis verticis gyrata and chromosomal abnormalities [letter] [published erratum appears in Am J Dis Child 1989 May;143(5):592] Marini R, et al. **Am J Dis Child** 1989 Mar; 143(3):269–70

Turner's syndrome and inflammatory bowel disease: a case report with immunologic studies. Manzione NC, et al. **Am J Gastroenterol** 1988 Nov;83(11):1294–7 (28 ref.)

Turner's syndrome and cardiovascular anomalies: a case report and review of the literature. Subramaniam PN. **Am J Med Sci** 1989 Apr;297(4):260–2 (12 ref.)

Anorexia nervosa and Turner's syndrome. Fieldsend B. **Br J Psychiatry** 1988 Feb;152:270–1

Dysgerminoma in 45,X Turner syndrome: report of a case. Sinisi AA, et al. **Clin Endocrinol (Oxf)** 1988 Feb; 28(2):187–93 (33 ref.)

Hashimoto's disease in Turner's syndrome. Fleming S, et al. **Clin Invest Med** 1988 Aug;11(4):243–6

Mitral valve prolapse in Turner syndrome. Bastianon V, et al. **Eur J Pediatr** 1989 Apr;148(6):533–4

Coincidence of gonadal dysgenesis and hyperprolactinemia. Rudolf K, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):363–5

Heart disease in Turner's syndrome. Mazzanti L, et al. **Helv Paediatr Acta** 1988 Aug;43(1–2):25–31

X–ring Turner's syndrome with combined immunodeficiency and selective gonadotropin defect. Donti E, et al. **J Endocrinol Invest** 1989 Apr;12(4):257–63

Pheochromocytoma and sudden death as a result of cerebral infarction in Turner's syndrome: report of a case. Knisely AS, et al. **J Forensic Sci** 1988 Nov;33(6):1497–502

Otological disease in Turner's syndrome. Watkin PM. **J Laryngol Otol** 1989 Aug;103(8):731–8

Retroperitoneal fibrosis in a patient with Turner's syndrome. Hernández–Siverio N, et al. **J Pediatr Surg** 1989 Feb; 24(2):225–6

Spontaneous resolution of fetal cystic hygroma and hydrops in Turner syndrome. Mostello DJ, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):862–5

Renal malformations in patients with Turner syndrome: imaging in 141 patients. Lippe B, et al. **Pediatrics** 1988 Dec; 82(6):852–6

Renal cell carcinoma in horseshoe kidney associated with Turner syndrome and caval extension. Hellström P, et al. **Urology** 1989 Jul;34(1):46–8 (16 ref.)

[Thyroiditis and Turner's syndrome] Lecornu M, et al. **Arch Fr Pediatr** 1988 Jun–Jul;45(6):411–2 (Eng. Abstr.) **(Fre)**

[Fertility in Turner's syndrome and the risk for offspring] Battin J. **Bull Acad Natl Med (Paris)** 1988 May;172(5):723–9 (Eng. Abstr.) **(Fre)**

[Association of Turner's syndrome–hypoparathyroidism and insulin–dependent diabetes (letter)] Levesque H, et al. **Presse Med** 1989 Jun 10;18(23):1166–7 **(Fre)**

[Turner's syndrome and pregnancy] Pasqualini–Adamo J. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):717–21 (6 ref.) (Eng. Abstr.) **(Fre)**

[Ullrich–Turner syndrome and anorexia nervosa—an association?] Mix VM, et al. **Kinderarztl Prax** 1989 May; 57(5):235–8 (Eng. Abstr.) **(Ger)**

[A case of Turner syndrome with dilated cardiomyopathy] Carmo I, et al. **Acta Med Port** 1988 May–Jun;1(3):223–6 (20 ref.) (Eng. Abstr.) **(Por)**

[Turner's syndrome associated with myxoid degeneration of the mitral and aortic valve, long Q–T and hypothyroidism] Lacambra I, et al. **Rev Esp Cardiol** 1988 Oct;41(8):501–3 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Y chromosome specific DNA probe in the diagnosis of a patient with mos 45,X/46,XYnf. Yorifuji T, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Feb;31(1):85–9

Unilateral microscopic gonadoblastoma in a prepubertal Turner mosaic with Y chromosome material identified by restriction fragment analysis [published erratum appears in Am J Clin Pathol 1989 Feb;91(2):240] Shah KD, et al. **Am J Clin Pathol** 1988 Nov;90(5):622–7

Prenatal diagnosis of 45,X/46,XX mosaicism in the fetus. Should the pregnancy be terminated? Kulkarni R, et al. **Prenat Diagn** 1989 Jun;9(6):439–41

[Turner's syndrome in the fetus] Vergara R. **Bull Acad Natl Med (Paris)** 1988 Nov;172(8):1191–3 **(Fre)**

[Otologic signs and early diagnosis of Turner syndrome. Reevaluation of 30 cases] Leheup BP, et al. **J Genet Hum** 1988 Aug;36(4):315–21 (Eng. Abstr.) **(Fre)**

[Ullrich–Turner syndrome in adolescence and adulthood. Endocrinologic studies] Tuschy U. **Z Gesamte Inn Med** 1988 Nov 1;43(21):605–9 (Eng. Abstr.) **(Ger)**

[Diagnostic problems in a case of Turner's syndrome] Rusconi R. **Minerva Pediatr** 1988 Oct;40(10):605–7 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

Turner's syndrome: treatment of 203 patients with recombinant human growth hormone for one year. A multicentre study. Takano K, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):559–68

Turner syndrome: effect of hormone therapies on height velocity and adult height. Lenko HL, et al. **Acta Paediatr Scand** 1988 Sep;77(5):699–704

Anabolic steroids in girls with Turner's syndrome. Joss EE. **Acta Paediatr Scand Suppl** 1988;343:38–42 (12 ref.)

Oestrogen therapy in Turner's syndrome. Kastrup KW. **Acta Paediatr Scand Suppl** 1988;343:43–6

Treatment of Turner's syndrome with recombinant human growth hormone (somatrem). Lippe B, et al. **Acta Paediatr Scand Suppl** 1988;343:47–52

Methionyl human growth hormone in Turner's syndrome. Rongen–Westerlaken C, et al. **Arch Dis Child** 1988 Oct; 63(10):1211–7

Factors attenuating growth promoting effect of growth hormone therapy for Turner's syndrome. Sato T, et al. **Endocrinol Jpn** 1988 Oct;35(5):725–31

Treatment of 80 patients with Turner's syndrome with recombinant human growth hormone (YM–17798) for one year: the results of a multicentric study in Japan. Committee for the Treatment of Turner's Syndrome. Takano K, et al. **Endocrinol Jpn** 1989 Apr;36(2):253–60

Bone demineralization, biochemical indices of bone remodeling, and estrogen replacement therapy in adults with Turner's syndrome. Stěpán JJ, et al. **J Bone Miner Res** 1989 Apr;4(2):193–8

[Stature after 18 months of treatment with synthetic growth hormone in 12 patients with Turner's syndrome] Leheup B, et al. **J Genet Hum** 1989 Jan;37(1):55–60 (Eng. Abstr.) **(Fre)**

[Biosynthetic growth hormone: current therapeutic status and perspectives] Chatelain P, et al. **Pediatrie** 1989;44(3):175–82 (23 ref.) (Eng. Abstr.) **(Fre)**

[Endometrial findings in long–term treatment with synthetic sex steroids in Turner syndrome] Rudolf K, et al. **Zentralbl Gynakol** 1989;111(1):39–42 (Eng. Abstr.) **(Ger)**

ETIOLOGY

An aetiological study of isochromosome–X Turner's syndrome. Carothers AD, et al. **Clin Genet** 1989 Jul; 36(1):53–8

[Etiologic diagnosis of Turner's syndrome by radiography of the hand (letter)] Arribas JM, et al. **Rev Clin Esp** 1988 Jul;183(3):154–5 **(Spa)**

GENETICS

Association of double NOR variant with Turner syndrome. Jones C, et al. **Am J Med Genet** 1988 Jul;30(3):725–32

45 X Turner's syndrome in association with polycystic ovaries. Case report. Hague WM, et al. **Br J Obstet Gynaecol** 1989 May;96(5):613–8

A fertile woman with non–mosaic Turner's syndrome. Case report and review of the literature. Swapp GH, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):876–80 (28 ref.)

X chromosome instability associated with familial Turner syndrome. Tyrkus M, et al. **Clin Genet** 1989 Feb; 35(2):111–5

Physical mapping of the human pseudo–autosomal region; comparison with genetic linkage map. Petit C, et al. **EMBO J** 1988 Aug;7(8):2369–76

45,XO/46,X,dic(Yq) mosaicism in Turner's phenotype with endodermal sinus tumor of the ovary. Ono T, et al. **Gynecol Obstet Invest** 1989;27(1):45–7

A case of 45,X/46,X,dic(X)(qter——p22::p22——qter) with Turner's phenotype in a Japanese girl. Takenaka M, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):51–5

A mosaic 45,X/46,X,r(?) karyotype investigated with X and Y centromere–specific probes using a non–autoradiographic in situ hybridization technique. Crolla JA, et al. **Hum Genet** 1988 Dec;81(1):81–4

Tissue–specific 45,X0/47,XY,+13 mosaicism in an 18–year–old woman. Eiben B, et al. **Hum Genet** 1989 Jul; 82(4):391–2

[Dysgerminoma and gonadoblastoma in a phenotypic female with 45, X/47, XYY mosaicism] Tanaka S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):769–72 **(Jpn)**

[Study of isochromosomes of the long arms of the X chromosome] Borrego S, et al. **An Esp Pediatr** 1988 Aug; 29(2):117–21 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Defective polymorphonuclear chemotaxis in patients with Turner's syndrome (45,X). López–Osuna M, et al. **Clin Genet** 1988 Sep;34(3):165–71

METABOLISM

Differences in carbohydrate tolerance in Turner syndrome depending on age and karyotype. Cicognani A, et al. **Eur J Pediatr** 1988 Oct;148(1):64–8

PATHOLOGY

Partial abnormal pulmonary venous return in Turner syndrome. van Wassenaer AG, et al. **Eur J Pediatr** 1988 Nov;148(2):101–3 (8 ref.)

Ovarian ultrasound appearances in Turner syndrome. Massarano AA, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):568–73

[Anomalous drainage of the pulmonary vein in the Shereshevskii–Turner syndrome] Chertishchev OA, et al. **Pediatriia** 1988;(10):92 **(Rus)**

PHYSIOPATHOLOGY

Influence of estrogen administration on growth hormone response to GHRH and L-Dopa in patients with Turner's syndrome. Schober E, et al. **Acta Endocrinol (Copenh)** 1989 Apr;120(4):442–6

Spontaneous growth in Turner's syndrome. Ranke MB, et al. **Acta Paediatr Scand Suppl** 1988;343:22–30

Hormonal changes during development in Turner's syndrome. Van Vliet G. **Acta Paediatr Scand Suppl** 1988; 343:31–7 (28 ref.)

Growth hormone secretion in Turner's syndrome and influence of oxandrolone and ethinyl oestradiol. Massarano AA, et al. **Arch Dis Child** 1989 Apr;64(4):587–92

Cross-sectional growth study in patients with Turner's syndrome. Takano K, et al. **Endocrinol Jpn** 1988 Aug; 35(4):631–8

Ovarian function in the non-mosaic Turner syndrome; a case report. Jacquemyn Y, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):187–91

New aspects of oestrogen/gestagen-induced growth and endocrine changes in individuals with Turner syndrome [letter] Pelz L. **Eur J Pediatr** 1988 Aug;147(6):663–4

Gross and fine motor development in 45,X and 47,XXX girls. Salbenblatt JA, et al. **Pediatrics** 1989 Oct;84(4):678–82

Periodontal health in 45,X women (Turner's syndrome). Väisänen P, et al. **Proc Finn Dent Soc** 1989;85(1):35–40

[Estimate of prospective body height of patients with Ullrich-Turner syndrome] Rauch HL, et al. **Monatsschr Kinderheilkd** 1988 Oct;136(10):703–5 (Eng. Abstr.) (Ger)

PSYCHOLOGY

Psychopathology and social functioning in women with Turner syndrome. Downey J, et al. **J Nerv Ment Dis** 1989 Apr;177(4):191–201

THERAPY

[The current treatment concept of Turner syndrome] Blümel P, et al. **Padiatr Padol** 1989;24(1):81–9 (36 ref.) (Eng. Abstr.) (Ger)

TURNER'S SYNDROME, MALE see NOONAN SYNDROME

TURPENTINE

Effect of turpentine-induced inflammation on the disposition kinetics of propranolol, metoprolol, and antipyrine in the rat. Belpaire FM, et al. **Fundam Clin Pharmacol** 1989; 3(2):79–88

ADVERSE EFFECTS

[Contact dermatitis in Krosno] Stroiński J, et al. **Przegl Dermatol** 1986 Jul–Aug;73(4):297–300 (Eng. Abstr.) (Pol)

TURTLES

Turtle flesh poisoning. Ariyananda PL, et al. **Ceylon Med J** 1987 Dec;32(4):213–5

Hyalohyphomycosis caused by Paecilomyces lilacinus in an Aldabra tortoise. Heard DJ, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1143–5

Conjunctivitis, tracheitis, and pneumonia associated with herpesvirus infection in green sea turtles. Jacobson ER, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1020–3

[Comparative study on pharmacological function of back-shell and plastron of tortoise] Yang MX. **Chung Hsi I Chieh Ho Tsa Chih** 1988 May;8(5):279–81, 262 (Eng. Abstr.) (Chi)

ANATOMY & HISTOLOGY

Histology and functional morphology of the female reproductive tract of the tortoise Gopherus polyphemus. Palmer BD, et al. **Am J Anat** 1988 Nov;183(3):200–11

Ultrastructural peculiarities of the supraoptic nucleus of Mauremys caspica (turtle): its evolutionary interest in reptiles. Paz Doel R, et al. **Anat Anz** 1988;167(1):35–8

Planar relations of semicircular canals in awake, resting turtles, Pseudemys scripta. Brichta AM, et al. **Brain Behav Evol** 1988;32(4):236–45

Turtle urinary bladder epithelial cell line. Arruda JA, et al. **Comp Biochem Physiol [A]** 1989;92(1):21–9

Chemical and electrical synapses between photoreceptors in the retina of the turtle, Chelydra serpentina. Owen WG. **J Comp Neurol** 1985 Oct 22;240(4):423–33

Auditory receptor of the red-eared turtle: II. Afferent and efferent synapses and innervation patterns. Sneary MG. **J Comp Neurol** 1988 Oct 22;276(4):588–606

Auditory receptor of the red-eared turtle: I. General ultrastructure. Sneary MG. **J Comp Neurol** 1988 Oct 22; 276(4):573–87

Organization of retinogeniculate projections in turtles of the genera Pseudemys and Chrysemys. Ulinski PS, et al. **J Comp Neurol** 1988 Oct 1;276(1):92–112

Distribution of Müller cells in the turtle retina: an immunocytochemical study. Gaur VP, et al. **J Neurocytol** 1988 Oct;17(5):683–92

Centriolar length variability in testicular cells from side-necked turtles. Hale DW, et al. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):211–4

Mesencephalic innervation of the turtle retina by a single serotonin-containing neuron. Schütte M, et al. **Neurosci Lett** 1988 Sep 12;91(3):289–94

Modification of diurnal changes in the ultrastructure of synaptic ribbons of the turtle. Abe H, et al. **Tohoku J Exp Med** 1988 Dec;156(4):381–93

[Identification and partial comparison of the chemical components of the tortoise-plastron of Testudo impressa (Guenther) and Chinemys reevesii (Gray)] Wang JY, et al. **Chung Yao Tung Pao** 1988 Jul;13(7):6–7, 61 (Eng. Abstr.) (Chi)

BLOOD

Oxygen transfer kinetics of red blood cells of the turtle Pseudemys scripta elegans. Yamaguchi K, et al. **Respir Physiol** 1989 Mar;75(3):371–84

EMBRYOLOGY

Temperature-dependent gonadal differentiation in the turtle Emys orbicularis: concordance between sexual phenotype and serological H-Y antigen expression at threshold temperature. Zaborski P, et al. **Differentiation** 1988 Jun; 38(1):17–20

Sensitive periods during embryogeny for hormonally induced sex determination in turtles. Gutzke WH, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):265–7

GENETICS

Flow cytometric analysis of the effects of low-level radiation exposure on natural populations of slider turtles (Pseudemys scripta). Bickham JW, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):837–41

GROWTH & DEVELOPMENT

Carapace growth of the turtle Chrysemys scripta: a longitudinal study of shape using Fourier analysis. Lestrel PE, et al. **Anat Anz** 1989;168(2):135–43

IMMUNOLOGY

Surface immunoglobulin on lymphocytes of the tortoise Agrionemys horsfieldii. Andreas EM, et al. **Dev Comp Immunol** 1989 Spring;13(2):167–75

METABOLISM

Acetazolamide inhibits acidification by the turtle bladder independent of cell pH. Graber M, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F923–31

Organ-specific control of glycolysis in anoxic turtles. Kelly DA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R774–9

Lateralization of opioid receptors in turtle visual cortex. Bakalkin GYa, et al. **Brain Res** 1989 Feb 20;480(1–2):268–76

pH regulation of calcium efflux by turtle liver mitochondria. Arruda JA, et al. **Comp Biochem Physiol [B]** 1989; 93(3):539–42

Some comparative aspects of the organ distribution of superoxide dismutase activity in the freshwater turtle, Pseudemys scripta elegans. Simon LM, et al. **Comp Biochem Physiol [B]** 1977;58(4):377–9

Effects of sustained oxygen depletion on tissue pyruvate kinase activities in the freshwater turtle, Pseudemys scripta elegans. Simon LM, et al. **Comp Biochem Physiol [B]** 1979; 63(2):283–5

The hormonogenic sites of turtle thyroglobulin and their homology with those of mammals. Roe MT, et al. **Endocrinology** 1989 Mar;124(3):1327–32

Effect of ambient temperature on serotonin, norepinephrine, and epinephrine contents in the pineal-paraphyseal complex of the soft-shelled turtle (Lissemys punctata punctata). Mahapatra MS, et al. **Gen Comp Endocrinol** 1989 May;74(2):215–20

The complete amino acid sequence of growth hormone from the sea turtle (Chelonia mydas). Yasuda A, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):242–51

Synaptic analysis of amacrine cells with neuropeptide Y-like immunoreactivity in turtle retina. Isayama T, et al. **J Comp Neurol** 1988 Sep 15;275(3):452–9

Amacrine and ganglion cells with corticotropin-releasing-factor-like immunoreactivity in the turtle retina. Williamson DE, et al. **J Comp Neurol** 1989 Feb 15;280(3):424–35

Histochemical classification of neck and limb muscle fibers in a turtle, Pseudemys scripta: a study using microphotometry and cluster analysis techniques. Callister RJ, et al. **J Morphol** 1989 Mar;199(3):269–86

Two progesterone receptors in the oviduct of the freshwater turtle Chrysemys picta: possible homology to mammalian and avian progesterone receptor systems. Reese JC, et al. **J Steroid Biochem** 1989 Aug;33(2):297–310

Polymerization of turtle alpha-macroglobulin through newly exposed sulfhydryls reveals the location of ex-thiolester bonds. Osada T, et al. **J Ultrastruct Mol Struct Res** 1988 Oct;101(1):62–74

Preliminary pharmacokinetics of ketoconazole in gopher tortoises (Gopherus polyphemus). Page CD, et al. **J Vet Pharmacol Ther** 1988 Dec;11(4):397–401

Localization of transport compartments in turtle urinary bladder. Buchinger P, et al. **Pflugers Arch** 1989 Jun; 414(2):208–15

N-oxidation, N-demethylation, and excretion of pefloxacin by the turtle Pseudemys scripta elegans. Vree TB, et al. **Vet Q** 1988 Oct;10(4):277–80

N-oxidation, O-demethylation, and excretion of trimethoprim by the turtle Pseudemys scripta elegans. Vree TB, et al. **Vet Q** 1989 Apr;11(2):125–8

Excretion and metabolism of a series of xanthines by the turtle Pseudemys scripta elegans. Vree TB, et al. **Vet Q** 1989 Jan;11(1):58–60

O-demethylation and N4-acetylation of sulphadimethoxine by the turtle Pseudemys scripta elegans. Vree TB, et al. **Vet Q** 1989 Jul;11(3):138–43

Oxidation and O-dealkylation of sulphamonomethoxine by the turtle Pseudemys scripta elegans. Vree TB, et al. **Vet Q** 1989 Jul;11(3):186–90

A monoclonal antibody that binds to photoreceptors in the turtle retina. Gaur VP, et al. **Vision Res** 1988;28(7):765–76

MICROBIOLOGY

Herpes-like virus particles in necrotic stomatitis of tortoises. Cooper JE, et al. **Vet Rec** 1988 Nov 19;123(21):544

PARASITOLOGY

Population structure and seasonal intra-burrow movement of Ornithodoros turicata (Acari: Argasidae) in gopher tortoise burrows. Adeyeye OA, et al. **J Med Entomol** 1989 Jul;26(4):279–83

The treatment of ticks on tortoises using amitraz. Petney TN, et al. **J S Afr Vet Assoc** 1988 Dec;59(4):206

The diet and gastrodermal ultrastructure of polystomatid monogeneans infecting chelonians. Allen KM, et al. **Parasitology** 1989 Apr;98 Pt 2:265–73

PHYSIOLOGY

Motor mechanisms in the turtle spinal cord. Stein PS. **Acta Biol Hung** 1988;39(2–3):155–60 (36 ref.)

Relationship between respiratory state and intracardiac shunts in turtles. White FN, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 2):R240–7

Spinal cord circuits for motor pattern selection in the turtle. Stein PS. **Ann N Y Acad Sci** 1989;563:1–10 (43 ref.)

GABAergic inhibition and epileptiform discharges in the turtle hippocampus in vitro. Larson-Prior LJ, et al. **Brain Res** 1988 Sep 20;460(2):369–75

Quisqualate, kainate and NMDA can initiate spreading depression in the turtle cerebellum. Lauritzen M, et al. **Brain Res** 1988 Dec 20;475(2):317–27

N-methyl-D-aspartate antagonist applied to the spinal cord hindlimb enlargement reduces the amplitude of flexion reflex in the turtle. Stein PS, et al. **Brain Res** 1989 Feb 13;479(2):379–83

Ultrastructural changes in the thymus of the turtle Mauremys caspica in relation to the seasonal cycle. Leceta J, et al. **Cell Tissue Res** 1989 Apr;256(1):213–9

The annual testicular cycle in the turtle, Chrysemys picta: a histochemical and electron microscopic study. Dubois W, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):191–204

Increased levels of arginine vasotocin and neurophysin during nesting in sea turtles. Figler RA, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):223–32

The effects of adrenocorticotropin hormone and angiotensin II on adrenal corticosteroid secretions in the freshwater turtle Pseudemys scripta. Sanford B, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):107–14

Predominance of vagal bradycardia mechanism in the brain stem of turtles. Hsieh JH, et al. **J Exp Biol** 1988 Nov; 140:405–20

Effect of temperature upon carbon dioxide stores in the snake Coluber constrictor and the turtle Chrysemys scripta. Stinner JN, et al. **J Exp Biol** 1988 Jul;137:529–48

Spermiogenesis in the red-ear turtle (Pseudemys scripta) and the domestic fowl (Gallus domesticus): a study of cytoplasmic events including cell volume changes and cytoplasmic elimination. Sprando RL, et al. **J Morphol** 1988 Oct;198(1):95–118

Analysis of vertebrate eye movements following intravitreal drug injections. III. Spontaneous nystagmus is modulated by the GABAa receptor. Ariel M. **J Neurophysiol** 1989 Aug;62(2):469–80

Electrical activation of the pocket scratch central pattern generator in the turtle. Currie SN, et al. **J Neurophysiol** 1988 Dec;60(6):2122–37

Spinal cord segments containing key elements of the central pattern generators for three forms of scratch reflex in the turtle. Mortin LI, et al. **J Neurosci** 1989 Jul;9(7):2285–96

An eyecup slice preparation for intracellular recording in vertebrate retinas. Burkhardt DA, et al. **J Neurosci Methods** 1989 Jun;28(3):179–87

Prolonged depolarization in turtle cones evoked by current injection and stimulation of the receptive field surround. Burkhardt DA, et al. **J Physiol (Lond)** 1988 Dec;407:329–48

The response of chelonian muscle spindles to mechanical stimulation. Naeije M, et al. **Life Sci** 1974 Jul 1;15(1):131–6

Lateralization of opioid receptors and their putative ligands in the visual cortex of the tortoise. Pivovarov AS, et al. **Neurosci Behav Physiol** 1989 Jan–Feb;19(1):33–40

MK801-induced antagonism of NMDA-preferring excitatory amino acid receptors in horizontal cells of the turtle retina. Anderton PJ, et al. **Neurosci Lett** 1989 Jul 3;101(3):331–6

An in vitro preparation for studying motor pattern generation in the cerebellorubrospinal circuit of the turtle. Keifer J,

et al. Neurosci Lett 1989 Feb 13;97(1-2):123-8
The development of bicuculline-induced epileptiform discharges in embryonic turtle cortex. Shen JM, et al. Neurosci Lett 1989 Mar 27;98(2):184-8
Pineal 5-methoxytryptophol rhythms in the box turtle: effect of photoperiod and environmental temperature. Skene DJ, et al. Neurosci Lett 1989 Mar 13;98(1):69-73
Different appearance of actions of excitatory amino acids on turtle horizontal cells in different preparations; eyecup and isolated retina. Miyachi E. Neurosci Res Suppl 1988; 8:S211-5
Differences in glutamate-induced response properties between photoreceptors and horizontal cells. Tachibana M, et al. Neurosci Res Suppl 1988;8:S59-67 (26 ref.)
Stimulus-induced extracellular pH transients in the in vitro turtle cerebellum. Chesler M, et al. Neuroscience 1988 Dec; 27(3):941-8
Sleep patterns in a chelonian reptile (Gopherus flavomarginatus). Ayala-Guerrero F, et al. Physiol Behav 1988;44(3):333-7
Hatchling turtles survive freezing during winter hibernation. Storey KB, et al. Proc Natl Acad Sci U S A 1988 Nov; 85(21):8350-4
Respiratory mechanics of the loggerhead sea turtle, Caretta caretta. Lutcavage ME, et al. Respir Physiol 1989 Apr; 76(1):13-24
Factors terminating nonventilatory periods in the turtle, Chelydra serpentina. West NH, et al. Respir Physiol 1989 Sep;77(3):337-49
Psychophysically derived visual mechanisms in turtle. I—Spectral properties. Granda AM, et al. Vision Res 1989; 29(1):93-105
Coexistence of NMDA and non-NMDA receptors on turtle horizontal cells revealed using isolated retina preparations. Miyachi E, et al. Vision Res 1989;29(4):385-8
Psychophysically derived visual mechanisms in turtle. II—Spatial properties. Sisson DF, et al. Vision Res 1989; 29(1):107-14
[The radioprotective action of long-term anoxia on the membrane lipids in irradiated turtles] Ivanov VI, et al. Radiobiologiia 1989 Mar-Apr;29(2):215-20 (Eng. Abstr.) (Rus)
[Participation of the dorsal cortex of the forebrain in the solving by turtles of an extrapolation task during its first and multiple presentations] Ochinskaia EI, et al. Zh Vysh Nerv Deiat 1988 May-Jun;38(3):475-80 (Eng. Abstr.) (Rus)

TWEENS see **POLYSORBATES**

TWENTY-FOUR HOUR RHYTHM see **CIRCADIAN RHYTHM**

TWIN TRANSFUSION see **FETOFETAL TRANSFUSION**

TWIN TRANSFUSION SYNDROME see **FETOFETAL TRANSFUSION**

TWINS

see related
DISEASES IN TWINS
Twin research. Acta Genet Med Gemellol (Roma) 1988; 37(1):1-109
U.S. regional changes in twinning rates. Allen G. Acta Genet Med Gemellol (Roma) 1988;37(3-4):307-11
Demographic parameters and twinning: a study in Catalonia, Spain. Bertrampetit J, et al. Acta Genet Med Gemellol (Roma) 1988;37(2):127-35
Multiple regression analysis of twin data: etiology of deviant scores versus individual differences. DeFries JC, et al. Acta Genet Med Gemellol (Roma) 1988;37(3-4):205-16
Fertility, fecundity and twinning: a comparison of the trends in births and twinning in Australia from 1854 to 1982. Doherty JD. Acta Genet Med Gemellol (Roma) 1988; 37(2):119-25
Perinatal mortality in twins, Australia, 1973-1980: I. Doherty JD. Acta Genet Med Gemellol (Roma) 1988;37(3-4):313-9
Perinatal mortality in twins, Australia, 1973-1980: II. Maternal age, lethal congenital malformations and sex. Doherty JD. Acta Genet Med Gemellol (Roma) 1988; 37(3-4):321-9
Comments on the paper "The Monozygotic Twinning Rate: Is it Really Constant?" [letter] Fellman J. Acta Genet Med Gemellol (Roma) 1988;37(2):201-4
Twinning in Greece. Kataki A, et al. Acta Genet Med Gemellol (Roma) 1988;37(2):147-50
Human twinning rate in Inið in the south-west of Finland. Kroneld R. Acta Genet Med Gemellol (Roma) 1988; 37(2):143-6
Essential nonmedical perinatal services for multiple birth families. Malmstrom PE, et al. Acta Genet Med Gemellol (Roma) 1988;37(2):193-8
Dermatoglyphics available for study at the Kloepfer Genetics Archives [letter] Maxey-Conley JE, et al. Acta Genet Med Gemellol (Roma) 1988;37(2):199-200
Twin study: relationship between birth weight, zygosity, placentation, and pathologic placental changes. Ramos-Arroyo MA, et al. Acta Genet Med Gemellol (Roma) 1988;37(3-4):229-38
Temperament and neonatal risk in full-term and preterm combined vaginal/cesarean section twin pairs. Riese ML. Acta Genet Med Gemellol (Roma) 1988;37(3-4):239-48
Mother-twin interaction during early childhood. Robin M, et al. Acta Genet Med Gemellol (Roma) 1988;37(2):151-9
The effect of twins on family relationships. Sandbank AC. Acta Genet Med Gemellol (Roma) 1988;37(2):161-71
Early developmental progress of preterm twins discordant for birthweight and risk. Stauffer A, et al. Acta Genet Med Gemellol (Roma) 1988;37(1):81-7
The validity of Weinberg's rule in the East Flanders Prospective Twin Survey (EFPTS). Vlietinck R, et al. Acta Genet Med Gemellol (Roma) 1988;37(2):137-41
Tobacco smoking and twinning. Olsen J, et al. Acta Med Scand 1988;224(5):491-4
Is cesarean section justified for delivery of the second twin? Pachera H, et al. Acta Obstet Gynecol Scand 1988; 67(4):381-2
Twin pregnancy and the effects of prophylactic leave of absence on pregnancy duration and birth weight. Rydhström H. Acta Obstet Gynecol Scand 1988;67(1):81-4
Probability of paternity: deceased accused man or mother; twins. Lenhart K, et al. Acta Univ Palacki Olomuc Fac Med 1988;120:137-52
Type-specific concordance in young diabetic monozygotic twins. Kumar D, et al. Adv Exp Med Biol 1988;246:259-67
Development of diabetes in identical twins. Pyke DA. Adv Exp Med Biol 1988;246:255-8
Genetic factors in the electrocardiogram and heart rate of twins reared apart and together. Hanson B, et al. Am J Cardiol 1989 Mar 1;63(9):606-9
Correlates of high density lipoprotein cholesterol in women studied by the method of co-twin control. Cohn BA, et al. Am J Epidemiol 1989 May;129(5):988-99
Genetic heritability and common environmental components of resting and stressed blood pressures, lipids, and body mass index in Utah pedigrees and twins. Hunt SC, et al. Am J Epidemiol 1989 Mar;129(3):625-38
Genotypic and phenotypic similarities in pulmonary function among family members of adult monozygotic and dizygotic twins. Redline S, et al. Am J Epidemiol 1989 Apr; 129(4):827-36
The fallacy of the simultaneous sudden infant death syndrome in twins. Bass M. Am J Forensic Med Pathol 1989 Sep; 10(3):200-5
Heritability of bone mass: a longitudinal study in aging male twins. Christian JC, et al. Am J Hum Genet 1989 Mar; 44(3):429-33
The probability of dizygosity of phenotypically concordant twins. Meulepas E, et al. Am J Hum Genet 1988 Dec; 43(6):817-26
Duchenne muscular dystrophy in monozygotic twins: deletion of 5' fragments of the gene. Ionasescu VV, et al. Am J Med Genet 1989 May;33(1):113-6
Genetic and environmental components of serum creatine kinase (CK) and pyruvate kinase (PK) in normal twins: implication for genetic risks estimates in Duchenne muscular dystrophy carriers. Rapaport D, et al. Am J Med Genet 1988 Oct;31(2):291-8
Investigation of the twinning rate in families with the fragile X syndrome. Sherman SL, et al. Am J Med Genet 1988 May-Jun;30(1-2):625-31
Spontaneous resolution of hypofibrinogenemia associated with death of a twin in utero: a case report. Chescheir NC, et al. Am J Obstet Gynecol 1988 Nov;159(5):1183-4
The ultrasonographic prediction of chorionicity in twin gestation. D'Alton ME, et al. Am J Obstet Gynecol 1989 Mar;160(3):557-61
Management of the nonvertex second twin: primary cesarean section, external version, or primary breech extraction. Gocke SE, et al. Am J Obstet Gynecol 1989 Jul; 161(1):111-4
Twin with hydramnios: treating premature labor at source. Lange IR, et al. Am J Obstet Gynecol 1989 Mar; 160(3):552-7
Diagnosis of trisomy 18 in monozygotic twins by cordocentesis. Shah DM, et al. Am J Obstet Gynecol 1989 Jan;160(1):214-5
Individual growth curve standards in twins: prediction of third-trimester growth and birth characteristics. Stefos T, et al. Am J Obstet Gynecol 1989 Jul;161(1):179-83
Vaginal birth after cesarean delivery in the twin gestation. Strong TH Jr, et al. Am J Obstet Gynecol 1989 Jul; 161(1):29-32
Twin pregnancy in premature ovarian failure after estrogen treatment: a case report. Tang L, et al. Am J Obstet Gynecol 1989 Jul;161(1):172-3
Similarities and differences in a set of 7-year-old triplets, two of whom are monozygotic. Rosner J, et al. Am J Optom Physiol Opt 1988 Nov;65(11):890-2
Consanguinity, twinning and secondary sex ratio in the population of Karnataka, south India. Bittles AH, et al. Ann Hum Biol 1988 Nov-Dec;15(6):455-60
Magnetic resonance imaging morphology of the corpus callosum in monozygotic twins. Oppenheim JS, et al. Ann Neurol 1989 Jul;26(1):100-4
Twinning rates and social class in Great Britain. Murphy M, et al. Arch Dis Child 1989 Feb;64(2):272-4
Limitations of the ratio of concordance rates in monozygotic and dizygotic twins [letter] Kendler KS. Arch Gen Psychiatry 1989 May;46(5):477-8
Placental characteristics in twin transfusion syndrome. Sala MA, et al. Arch Gynecol Obstet 1989;246(1):51-6
Bacterial agglutinin activity in the saliva of human identical and fraternal twins. Malamud D, et al. Arch Oral Biol 1988; 33(11):801-5
Birth from replacement of frozen-thawed embryos after failure of gamete intra-fallopian transfer: a successful pregnancy case. Wong PC, et al. Asia Oceania J Obstet Gynaecol 1989 Mar;15(1):7-10
Genetic analysis of twin and family data: structural modeling using LISREL. Papers delivered at the International Workshop on Twin Methodology. Leuven, Belgium, August 24-29, 1987. Behav Genet 1989 Jan;19(1):1-160
Resemblances of parents and twins in sports participation and heart rate. Boomsma DI, et al. Behav Genet 1989 Jan; 19(1):123-41
LISREL analysis of twin data with structured means. Dolan CV, et al. Behav Genet 1989 Jan;19(1):51-62
The effects of social homogamy and cultural inheritance on the covariances of twins and their parents: a LISREL model. Eaves LJ, et al. Behav Genet 1989 Jan;19(1):113-22
Testing structural equation models for twin data using LISREL. Heath AC, et al. Behav Genet 1989 Jan;19(1):9-35
Partitioned twin analysis: a power study. Nance WE, et al. Behav Genet 1989 Jan;19(1):143-50
Fitting genetic models with LISREL: hypothesis testing. Neale MC, et al. Behav Genet 1989 Jan;19(1):37-49
Genetic and environmental variation in the birth weight of twins. Vlietinck R, et al. Behav Genet 1989 Jan;19(1):151-61
Management of perinatal loss of a twin [letter] Davis JA. BMJ 1988 Dec 17;297(6663):1613
Vasoactive and atherogenic effects of cigarette smoking: a study of monozygotic twins discordant for smoking [published erratum appears in BMJ 1988 Dec 3;297(6661):1449] Lassila R, et al. BMJ 1988 Oct 15; 297(6654):955-7
Management of perinatal loss of a twin [letter] Lewis E, et al. BMJ 1989 Jan 21;298(6667):184
Chronic beryllium disease in identical twins. McConnochie K, et al. Br J Dis Chest 1988 Oct;82(4):431-5
The influence of postmenstrual age estimation on the scatter of brainstem auditory evoked potential latencies. Vles J, et al. Brain Dev 1989;11(1):40-2
Coincidences in twins [letter] Can Med Assoc J 1989 Aug 1;141(3):192
Unusual karyotypic evolution in subacute myelomonocytic leukemia in two monozygotic twins. Massaad L, et al. Cancer Genet Cytogenet 1989 Apr;38(2):205-13
Decreased beta-adrenergic receptor density and catecholamine response in male cigarette smokers. A study of monozygotic twin pairs discordant for smoking. Laustiola KE, et al. Circulation 1988 Nov;78(5 Pt 1):1234-40
Eyelid myoclonia with absences (EMA) in two monovular twins. DeMarco P. Clin Electroencephalogr 1989 Jul; 20(3):193-5
Sleep spindles in twins. Hori A, et al. Clin Electroencephalogr 1989 Apr;20(2):121-7
Determining zygosity in the Vietnam Era Twin Registry: an approach using questionnaires. Eisen S, et al. Clin Genet 1989 Jun;35(6):423-32
Normal DNA polymorphism at the low density lipoprotein receptor (LDLR) locus associated with serum cholesterol level. Pedersen JC, et al. Clin Genet 1988 Nov;34(5):306-12
Enhanced activation of the renin-angiotensin-aldosterone system in chronic cigarette smokers: a study of monozygotic twin pairs discordant for smoking. Laustiola KE, et al. Clin Pharmacol Ther 1988 Oct;44(4):426-30
Alterations in T-lymphocyte subpopulations in type I diabetes. Exploration of genetic influence in identical twins. Johnston C, et al. Diabetes 1988 Nov;37(11):1484-8
The significance of the concordance rate for type 1 (insulin-dependent) diabetes in identical twins. Olmos P, et al. Diabetologia 1988 Oct;31(10):747-50
On the unpredictable development of congenital cytomegalovirus infection. A study in twins. Ahlfors K, et al. Early Hum Dev 1988 Dec;18(2-3):125-35 (36 ref.)
Neurological outcome of twins dissimilar in size at birth. Ylitalo V, et al. Early Hum Dev 1988 Aug-Sep; 17(2-3):245-55
The frequency of multiple births in Gondar Hospital northwestern Ethiopia. Zein AZ. Ethiop Med J 1989 Jan; 27(1):21-6
The within-pair EEG similarity of twins reared apart. Stassen HH, et al. Eur Arch Psychiatry Neurol Sci 1988; 237(4):244-52
Production of identical twins by separating two-cell rat embryos. Matsumoto K, et al. Gamete Res 1989 Mar; 22(3):257-63
Microsurgical bisection of porcine morulae and blastocysts to produce monozygotic twin pregnancy. Nagashima H, et al. Gamete Res 1989 May;23(1):1-9
Alcohol effects on the percentage of beta waves in the electroencephalograms of twins. Christian JC, et al. Genet Epidemiol 1988;5(4):217-24
Lifestyle factors in monozygotic and dizygotic twins. Heller RF, et al. Genet Epidemiol 1988;5(5):311-21
Relationship between body mass index, cigarette smoking, and plasma sex steroids in normal male twins. Meikle AW, et al. Genet Epidemiol 1989;6(3):399-412
Twin study of genetic and environmental effects on lipid levels. O'Connell DL, et al. Genet Epidemiol 1988; 5(5):323-41
Lifestyle and blood pressure levels in male twins in Utah. Slattery ML, et al. Genet Epidemiol 1988;5(4):277-87

Dermatoglyphic fluctuating asymmetry in twins and singletons. Markow TA, et al. **Hereditas** 1989;110(3):211–5
Evidence of genetic influence on central body fat in middle-aged twins. Selby JV, et al. **Hum Biol** 1989 Apr; 61(2):179–94
Genetic determination of the human EEG. Survey of recent results on twins reared together and apart. Stassen HH, et al. **Hum Genet** 1988 Oct;80(2):165–76
Aminophylline as diazepam antagonist in a preterm infant [letter] Rathi SK. **Indian Pediatr** 1988 Aug;25(8):803–4
Ultrasonic prediction of growth discordancy by intertwin difference in abdominal circumference. Blickstein I, et al. **Int J Gynaecol Obstet** 1989 Jun;29(2):121–4
Breech births in twin pregnancy: an analysis of Apgar score and perinatal mortality from a Nigerian sample. Fakeye O. **Int J Gynaecol Obstet** 1988 Aug;27(1):11–6
Affect attunement, attachment, temperament, and zygosity: a twin study. Szajnberg NM, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):249–53
Effectiveness of isotretinoin in preventing the appearance of basal cell carcinomas in basal cell nevus syndrome. Goldberg LH, et al. **J Am Acad Dermatol** 1989 Jul; 21(1):144–5
The recognition and significance of the vanishing twin. Jackson J, et al. **J Am Board Fam Pract** 1989 Jan–Mar; 2(1):58–63
Nutrient intake and blood pressure: families of adult identical twins. Miller JZ, et al. **J Am Coll Nutr** 1988 Dec; 7(6):509–18
Weight gain patterns during twin gestation. Pederson AL, et al. **J Am Diet Assoc** 1989 May;89(5):642–6
Menstrual characteristics of mothers of twins. Bønnelykke B. **J Biosoc Sci** 1989 Jul;21(3):329–34
Delta 4–3–oxosteroid 5 beta-reductase deficiency described in identical twins with neonatal hepatitis. A new inborn error in bile acid synthesis. Setchell KD, et al. **J Clin Invest** 1988 Dec;82(6):2148–57
Thanatophoric dysplasia in identical twins. Young ID, et al. **J Med Genet** 1989 Apr;26(4):276–9
Concordant Gilles de la Tourette's syndrome in monozygotic twins: a clinical, neurophysiological and CT study. Vieregge P, et al. **J Neurol** 1988 Jul;235(6):366–7
Oral squamous cell carcinoma in identical twins: report of a case. Bhaskar PB, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1096–8
Fetus in fetu: a case report and review of the literature. Eng HL, et al. **J Pediatr Surg** 1989 Mar;24(3):296–9
Discordant Hirschsprung's disease in monozygotic twins: a clue to pathogenesis? Hannon RJ, et al. **J Pediatr Surg** 1988 Nov;23(11):1034–5
Fetal internal carotid artery flow velocity time waveforms in twin pregnancies. Degani S, et al. **J Perinat Med** 1988; 16(5–6):405–9
Perinatal mortality in twin pregnancy: an analysis of birth weight-specific mortality rates and adjusted mortality rates for birth weight distributions. Fabre E, et al. **J Perinat Med** 1988;16(2):85–91
Simultaneous recording of fetal breathing movements and body movements in twin pregnancy. Zimmer EZ, et al. **J Perinat Med** 1988;16(2):109–12
The Yoruba contribution to our understanding of the twinning process. Creinin M, et al. **J Reprod Med** 1989 Jun;34(6):379–87 (34 ref.)
Placenta previa in twin gestations. Strong TH Jr, et al. **J Reprod Med** 1989 Jun;34(6):415–6
Sonography of nonconjoined monoamniotic twin pregnancies. Townsend RR, et al. **J Ultrasound Med** 1988 Dec;7(12):665–70
Doppler demonstration of reversed umbilical blood flow in an acardiac twin. Benson CB, et al. **JCU** 1989 May; 17(4):291–5
Prenatally diagnosed gastroschisis in monozygotic twins. Gorczyca DP, et al. **JCU** 1989 Mar–Apr;17(3):216–8
Serial plasma and urinary aluminum levels and tissue loading in preterm twins. Bozynski ME, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):428–31
Congenital hypothyroidism and monoamniotic twins [letter] de Zegher F, et al. **Lancet** 1989 Jul 15;2(8655):169–70
Routine ultrasound scanning in twin pregnancies [letter] Smith AP, et al. **Lancet** 1988 Oct 29;2(8618):1029
The morphology of the nasal septum in identical twins. Grymer LF, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):642–6
Monozygotic twins concordant for the narcoleptic syndrome [see comments] Douglass AB, et al. **Neurology** 1989 Jan; 39(1):140–1, **Comment in:** Neurology 1989 Jul;39(7):1005–6
Neuropsychological effects of irradiation and chemotherapy treatments upon children with acute lymphoblastic leukemia: a case study of monozygotic twins. Prince MT, et al. **Neurotoxicology** 1988 Fall;9(3):341–9
Classification of twins and neonatal morbidity. Bronsteen R, et al. **Obstet Gynecol** 1989 Jul;74(1):98–101
Survival of twins after acute fetal hemorrhage from ruptured vasa previa. Duenhoelter JH. **Obstet Gynecol** 1989 May; 73(5 Pt 2):866–7 (6 ref.)
Molecular genetic prenatal determination of twin zygosity. Kovacs B, et al. **Obstet Gynecol** 1988 Dec;72(6):954–6
The effect of mode of delivery on the risk of intraventricular hemorrhage in nondiscordant twin gestations under 1500 g. Morales WJ, et al. **Obstet Gynecol** 1989 Jan;73(1):107–10
Atriopeptin in the twin transfusion syndrome. Nageotte MP, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):867–70
The growth discordant twin. Blickstein I, et al. **Obstet Gynecol Surv** 1988 Sep;43(9):509–15 (48 ref.)
Counseling families with twins: birth to 3 years of age. Becker PG. **Pediatr Rev** 1986 Sep;8(3):81–6
The discrimination of human odour by the dog. Hepper PG. **Perception** 1988;17(4):549–54
Pharmacogenetic perspectives gained from twin and family studies. Vesell ES. **Pharmacol Ther** 1989;41(3):535–52 (123 ref.)
Resorbed co–twin as an explanation for discrepant chorionic villus results: non–mosaic 47,XX,+16 in villi (direct and culture) with normal (46,XX) amniotic fluid and neonatal blood. Tharapel AT, et al. **Prenat Diagn** 1989 Jul; 9(7):467–72
The breathing patterns of identical twins. Shea SA, et al. **Respir Physiol** 1989 Feb;75(2):211–23
Concurrent anaplastic bronchial cancer in identical twin brothers. Nores JM, et al. **Respiration** 1989;55(1):56–9
Dental age and asymmetry in the formation of mandibular teeth in twins concordant or discordant for oral clefts. Nyström M, et al. **Scand J Dent Res** 1988 Oct;96(5):393–8
Selection intensities in mothers of twins and in mothers of singletons. Philippe P. **Soc Biol** 1988 Fall–Winter; 35(3–4):285–92
Comments on Schwaibold's "Sirenomelia and Anencephaly in One of Dizygotic Twins" [letter] Pfeiffer RA, et al. **Teratology** 1988 Nov;38(5):497–8
Physical exercise provokes platelet desensitization in men who smoke cigarettes—involvement of sympathoadrenergic mechanisms—a study of monozygotic twin pairs discordant for smoking. Lassila R, et al. **Thromb Res** 1988 Jul 15;51(2):145–55
The platelet alpha 2–adrenoceptor and prostacyclin sensitivity are not altered by cigarette smoking—a study of monozygotic twin pairs discordant for smoking. Lassila R. **Thromb Res** 1989 May 15;54(4):339–48
Molecular analysis of the HLA–D region and the T–cell antigen receptor beta–chain genes in monozygotic twins discordant for rheumatoid arthritis. Singal DP, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):632–4
Combined intrauterine and extrauterine pregnancy in a consistent twin producer. van Geldermalsen AA. **Trop Geogr Med** 1989 Apr;41(2):167–8
Posterior urethral valves in siblings. Thomalla JV, et al. **Urology** 1989 Apr;33(4):291–4 (14 ref.)
Isolated hypogonadotropic hypogonadism in male identical twins. Geola F, et al. **West J Med** 1989 Jan;150(1):84–7
[Genetic study of human adenosine deaminase] Song WH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec; 19(4):434–6 (Eng. Abstr.) (Chi)
[The coincidence of ocular diseases in monozygotic twins] Zeng LH, et al. **Yen Ko Hsueh Pao** 1988 Jun;4(2):90–4, 89 (Eng. Abstr.) (Chi)
[An unusual case of eliminating a man as the father of twins] Májský A, et al. **Cas Lek Cesk** 1989 Jun 2;128(23):729 (Eng. Abstr.) (Cze)
[Summary of the results of a study of heredity of intelligence in a sample of the Czechoslovak population. II. Longitudinal and genealogical studies of twins and their families] Drábková H. **Cesk Psychiatr** 1988 Dec; 84(6):365–73 (Eng. Abstr.) (Cze)
[Problems in ultrasonic biometry of twins] Hanousek L, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(1):111–8 (Eng. Abstr.) (Cze)
[Amniotic band syndrome associated with an acardiac malformation in a twin pregnancy. Apropos of a case] Draeger A, et al. **Ann Pathol** 1988;8(4–5):317–20 (Eng. Abstr.) (Fre)
[From failure to success? A case of reduction of the number of embryos in a septuplet pregnancy] Favrin S, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(4):543–6 (Eng. Abstr.) (Fre)
[Anatomo–clinical aspects of papyraceus fetus syndrome] Jauniaux E, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):653–9 (30 ref.) (Eng. Abstr.) (Fre)
[Congenital scoliosis in homozygote twins. Apropos of a case report] Bergoin M, et al. **Rev Chir Orthop** 1988;74 Suppl 2:115–8 (17 ref.) (Fre)
[Twins burned post–partum in a boiler—a rare forensic medicine case] Stellwag C, et al. **Gynakol Rundsch** 1988; 28 Suppl 2:226–7 (Ger)
[Delivery of the second twin by cesarean section] Berthold A, et al. **Zentralbl Gynakol** 1988;110(15):957–9 (Eng. Abstr.) (Ger)
[The East German Twin Study 1984/85. Report of selected aspects] Koepcke E, et al. **Zentralbl Gynakol** 1988; 110(13):809–15 (Eng. Abstr.) (Ger)
[Comparative study of the consumption of cariogenic food in monozygotic and same–sex dizygotic twins] Pados R, et al. **Orv Hetil** 1989 Mar 5;130(10):503–6, 509 (26 ref.) (Eng. Abstr.) (Hun)
[Gemellological study on genetic and environmental factors affecting serum concentrations of lipids and electrolytes in adult twins] Hayakawa K. **Nippon Eiseigaku Zasshi** 1988 Aug;43(3):763–77 (Eng. Abstr.) (Jpn)
[A pair of identical twin sisters concordant for systemic lupus erythematosus] Oura T, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):408–9 (Jpn)
[Monozygotic twins discordant for sex] Arizawa M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1479–82 (Jpn)
[Perinatal mortality for single births and twins in 1967–1984] Magnus P, et al. **Tidsskr Nor Laegeforen** 1988 Sep 10; 108(25):2006–8 (Eng. Abstr.) (Nor)
[Twins in the biological and medical aspects] Hankiewicz J, et al. **Wiad Lek** 1988 Oct 1;41(19):1297–301 (26 ref.) (Pol)
[A micro–computer program for statistical analysis of data from twin studies] Kurashvili GB, et al. **Piziol Zh** 1989 Jan–Feb;35(1):87–90 (Eng. Abstr.) (Rus)
[Characteristics of dimensions, shape and position of the heart in twins and singletons during adolescence] Kukhar ID, et al. **Pediatriia** 1988;(12):19–21 (Eng. Abstr.) (Rus)
[Determining factors in the intrauterine development of twins: possible effect of gestational age, sex and type of twins] Ramos–Arroyo MA, et al. **An Esp Pediatr** 1988 Aug; 29(2):127–31 (Eng. Abstr.) (Spa)
[Congenital malaria in a twin] Salazar–Hernández AC. **Bol Med Hosp Infant Mex** 1989 Mar;46(3):195–7 (Eng. Abstr.) (Spa)

PSYCHOLOGY

The bereaved twin. Woodward J. **Acta Genet Med Gemellol (Roma)** 1988;37(2):173–80
Psychic vulnerability as a sequel to perinatal morbidity. A longitudinal twin study with special reference to psychiatric morbidity and inter–twin dependency. Moilanen I. **Acta Paediatr Scand Suppl** 1988;344:95–105
The twinship: a paradigm towards separation and integration. von Broembsen F. **Am J Psychoanal** 1988 Winter; 48(4):355–65
Genetic and environmental determinants of musical ability in twins. Coon H, et al. **Behav Genet** 1989 Mar;19(2):183–93
Direct and indirect IQ heritability estimates: a puzzle. Plomin R, et al. **Behav Genet** 1989 May;19(3):331–42 (26 ref.)
Frequency of social contact and intrapair resemblance of adult monozygotic cotwins—or does shared experience influence personality after all? Rose RJ, et al. **Behav Genet** 1988 May;18(3):309–28
Twins' responses to pleasant, unpleasant, and life events. Wierzbicki M. **J Genet Psychol** 1989 Jun;150(2):135–45
Individual differences in locus of control during the second half of the life span for identical and fraternal twins reared apart and reared together. Pedersen NL, et al. **J Gerontol** 1989 Jul;44(4):P100–5
Size for gestational age and neonatal temperament in full–term and preterm AGA–SGA twin pairs. Riese ML. **J Pediatr Psychol** 1988 Dec;13(4):521–30
Children's behavioral inhibition over age and across situations: genetic similarity for a trait during change. Matheny AP Jr. **J Pers** 1989 Jun;57(2):215–35
Rater bias in the EASI temperament scales: a twin study [published erratum appears in J Pers Soc Psychol 1989 May;56(5):845] Neale MC, et al. **J Pers Soc Psychol** 1989 Mar;56(3):446–55
Neuroticism, extraversion, and related traits in adult twins reared apart and reared together. Pedersen NL, et al. **J Pers Soc Psychol** 1988 Dec;55(6):950–7
Genetic and environmental variance in content dimensions of the MMPI. Rose RJ. **J Pers Soc Psychol** 1988 Aug; 55(2):302–11
Origins and implications of handedness and relative birth weight for IQ in monozygotic twin pairs. Segal NL. **Neuropsychologia** 1989;27(4):549–61
The psychological and behavioral considerations of orthognathic surgery on identical (monozygotic) twins. Hudson JW, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):259–63
The mental health advantages of twinship. Anderson ML. **Perspect Psychiatr Care** 1985;23(3):114–6
Factorial and criterion validities of telephone–assessed cognitive ability measures. Age and gender comparisons in adult twins. Nesselroade JR, et al. **Res Aging** 1988 Jun; 10(2):220–34
Stability of genetic determination from age 2 to age 9: a longitudinal twin study. Lytton H, et al. **Soc Biol** 1988 Spring–Summer;35(1–2):62–73
[Genetic studies on certain behavior traits of human beings with the twin method] Hu JZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):196–9 (Eng. Abstr.) (Chi)
[Relation of the individual specificity of emotional autoregulation controlled by EEG feedback to the influence of a genetic factor as revealed by a twin study] Suvorov NF, et al. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb; 39(1):28–36 (Eng. Abstr.) (Rus)

TWINS, CONJOINED

Conjoined twins in Japan, 1979–1985. Imaizumi Y. **Acta Genet Med Gemellol (Roma)** 1988;37(3–4):339–45
Cardiovascular malformations in lecanosomatopagus conjoined twins: a cardiologic curiosity. Antonelli D, et al. **Cardiology** 1989;76(1):67–70
Management of hydrocephalus in ilio–omphalopagus conjoined twins. Mawk JR, et al. **Childs Nerv Syst** 1988 Dec;4(6):367–9
Prenatal diagnosis of conjoined twins with real–time ultrasound. A case report. Gao J, et al. **Chin Med J [Engl]** 1988 Jan;101(1):58–60
Prolapse of four legs in an undiagnosed conjoined thoracoomphalopagus twins: an uncommon presentation. Adetoro OO, et al. **East Afr Med J** 1986 Dec;63(12):822–5
Omphalopagus twins and twin transfusion syndrome.

Rajadurai VS, et al. **Indian J Pediatr** 1988 Sep-Oct; 55(5):811-6

Deterioration of renal function in a conjoined twin: lack of compensatory renal hypertrophy. Snow BW, et al. **J Pediatr Surg** 1988 Sep;23(9):857-8

Antenatal diagnosis of a set of conjoined twins presenting with unusual ultrasound findings. Hurren AJ, et al. **JCU** 1988 Nov-Dec;16(9):672-4

Craniopagus parasiticus. Everard Home's Two-Headed Boy of Bengal and some other cases. Bondeson J, et al. **Surg Neurol** 1989 Jun;31(6):426-34

Fetus amorphus or placental teratoma? Stephens TD, et al. **Teratology** 1989 Jul;40(1):1-10 (65 ref.)

[Cephalothoracopagus in the CT picture] Bruna J, et al. **Cesk Radiol** 1988 Aug;42(4):237-41 (Eng. Abstr.) **(Cze)**

DIAGNOSIS

Prenatal diagnosis of dicephalous conjoined twins in a triplet pregnancy. Apuzzio JJ, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1214-5

EPIDEMIOLOGY

The epidemiology of conjoined twins in Latin America. Castilla EE, et al. **Acta Genet Med Gemellol (Roma)** 1988; 37(2):111-8

HISTORY

Historical documents concerning craniopagi and conjoined twins. Schumacher GH, et al. **Gegenbaurs Morphol Jahrb** 1988;134(4):541-55

PATHOLOGY

Laterality defects in conjoined twins: implications for normal asymmetry in human embryogenesis. Cunniff C, et al. **Am J Med Genet** 1988 Nov;31(3):669-77

Antenatal diagnosis of cephalothoracopagus twins in a triplet pregnancy. A case report. Sakala EP, et al. **J Reprod Med** 1989 May;34(5):365-8 (22 ref.)

Parasitic conjoined twins with omphalocele and tetralogy of Fallot. Husain AN, et al. **Pediatr Pathol** 1989;9(3):321-8

Acephalus acardius cervico-thorachophagus conjoined twin--a case report. Thavarasah AS, et al. **Singapore Med J** 1988 Oct;29(5):528-9

[Thoracopagus fetus. Ultrasonic diagnosis at 16 weeks] Grutter F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(3):355-9 (Eng. Abstr.) **(Fre)**

[Ultrasonographic diagnosis of conjoined twins in the 19th week of pregnancy] Preis K, et al. **Ginekol Pol** 1988 Aug; 59(8):512-5 (Eng. Abstr.) **(Pol)**

SURGERY

Separation of conjoined twins using chest wall prosthesis. Hisano K, et al. **J Pediatr Surg** 1989 Sep;24(9):928-9

Successful separation of a conjoined biliary tract in a set of omphalopagus twins. Lobe TE, et al. **J Pediatr Surg** 1989 Sep;24(9):930-2

Use of magnetic resonance imaging in planning the separation of omphalopagus conjoined twins. Richardson RJ, et al. **J Pediatr Surg** 1989 Jul;24(7):683-4; discussion 684-5

Continent urinary reconstruction in ischiopagus tripus conjoined twins. Holcomb GW 3d, et al. **J Urol** 1989 Jan; 141(1):100-2

[Emergency separation of a neonatal xypho-omphalopagus twin] Ure BM, et al. **Z Kinderchir** 1989 Jun;44(3):176-80 (Eng. Abstr.) **(Ger)**

[A case of siamese omphalopagous twins. Successful separation] Agra Cadarso B, et al. **An Esp Pediatr** 1988 Dec;29(6):463-6 (Eng. Abstr.) **(Spa)**

TWINS, DIZYGOTIC see under **TWINS**

TWINS, MONOZYGOTIC see under **TWINS**

TYLENCHOIDEA see under **NEMATODA**

TYLOSINS see **LEUCOMYCINS**

TYMPANIC CAVITY see **EAR, MIDDLE**

TYMPANIC MEMBRANE

Modified radical mastoidectomies as gas pockets. Sadé J, et al. **Acta Otolaryngol (Stockh)** 1989 May-Jun;107(5-6):456-9

Evaluation of a tympanic membrane thermometer in an outpatient clinical setting. Ros SP. **Ann Emerg Med** 1989 Sep;18(9):1004-6

Polarity order of biphasic square pulse electric current stimulation of human cochlear nerve: observations with transtympanic electrodes. Game CJ, et al. **J Neurol Sci** 1989 May;90(3):291-8

[Latency changes in auditory brainstem response correlated with tympanic membrane temperature] Soutsu M. **No To Shinkei** 1988 Oct;40(10):939-45 (Eng. Abstr.) **(Jpa)**

BLOOD SUPPLY

Microvascular networks in tympanic membrane, malleus periosteum, and annulus perichondrium of neonatal mongrel dog: a vasculoanatomic model for surgical considerations. Maher WP. **Am J Anat** 1988 Dec; 183(4):294-302

CYTOLOGY

Development of the stratified squamous epithelium of the human tympanic membrane and external canal: the origin of auditory epithelial migration. Michaels L, et al. **Am J Anat** 1989 Apr;184(4):334-44

DRUG EFFECTS

Structural effects of the topical lidocaine-prilocaine anesthetic Emla on the tympanic membrane. Schmidt SH, et al. **Arch Otorhinolaryngol** 1988;245(3):136-41

[A lidocaine base for surface anesthesia of the tympanic membrane] Strutz J, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):340-2 (Eng. Abstr.) **(Ger)**

EMBRYOLOGY

The pars flaccida as a possible vestigial remnant [letter] Nayar RC. **Ear Nose Throat J** 1988 Oct;67(10):780

GROWTH & DEVELOPMENT

[Stimulation of the growth of cicatricial tympanic membranes] Bystrenin AV. **Vestn Otorinolaringol** 1989 May-Jun;(3):62-4 (Eng. Abstr.) **(Rus)**

INJURIES

Effects of blast overpressure on the ear. **Ann Otol Rhinol Laryngol Suppl** 1989 May;140:1-60

Treatment of blast injury to the ear. Casler JD, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 May;140:13-6

Blast injury of the ear: historical perspective. Chait RH, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 May;140:9-12

Middle ear injury in animals exposed to complex blast waves inside an armored vehicle. Phillips YY, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 May;140:17-22

Blast injuries of the ear in military operations. Phillips YY, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 May;140:3-4

Physical correlates of eardrum rupture. Richmond DR, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 May;140:35-41 (9 ref.)

Damage of the auditory system associated with acute blast trauma. Roberto M, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 May;140:23-34 (16 ref.)

Use of modeling in predicting tympanic membrane rupture. Stuhmiller JH. **Ann Otol Rhinol Laryngol Suppl** 1989 May; 140:53-60

Otolaryngic health service support in the airland battle. Zajtchuk JT. **Ann Otol Rhinol Laryngol Suppl** 1989 May; 140:5-8

Primary blast injury after a bomb explosion in a civilian bus. Katz E, et al. **Ann Surg** 1989 Apr;209(4):484-8

Hyaluronan improves the healing of experimental tympanic membrane perforations. A comparison of preparations with different rheologic properties. Laurent C, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec; 114(12):1435-41

Repair of tympanic membrane perforations using hyaluronic acid: an alternative to myringoplasty. Stenfors LE. **J Laryngol Otol** 1989 Jan;103(1):39-40

Repair of the wounded guinea pig tympanic membrane: organization of filamentous actin and spatial cellular reorganization. Weinberger JM, et al. **J Otolaryngol** 1988 Dec;17(7):352-8

[Traumatic perforations of the tympanic membrane--its therapeutic resolution] Andrei V, et al. **Rev Chir [Otorinolaringol]** 1988 Apr-Jun;33(2):115-7 (Eng. Abstr.) **(Rum)**

INNERVATION

Encapsulated nerve corpuscles in the human tympanic membrane. Nagai T, et al. **Arch Otorhinolaryngol** 1989; 246(3):169-72

[Impedance audiometry and the sonomotor reflex in post-traumatic lesions of the facial nerve] Pawelczyk M. **Otolaryngol Pol** 1988;42(1-2):131-5 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Experimental cholesteatoma. Epidermal ingrowth through tympanic membrane following middle ear application of propylene glycol. Masaki M, et al. **Acta Otolaryngol (Stockh)** 1989 Jul-Aug;108(1-2):113-21

Hearing loss in tympanosclerosis caused by grommets. Tos M, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug; 115(8):931-5

The clinical features and pathogenesis of myringitis granulosa. Makino K, et al. **Arch Otorhinolaryngol** 1988; 245(4):224-9

The prevention of tympanic membrane perforation following the removal of long-term Paparella type II ventilation tubes [letter] Bingham BJ, et al. **Clin Otolaryngol** 1988 Dec; 13(6):501

An evalustion of tympanometry, otoscopy and palpation for assessment of the canine tympanic membrane. Little CJ, et al. **Vet Rec** 1989 Jan 7;124(1):5-8

[Otogenic complications with a normal, intact tympanic membrane] von Scheel J. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):78-80 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Three-dimensional laser Doppler interferometric display of human tympanic membrane vibrations at two different frequencies and sound pressure levels. Konrádsson KS, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:183-6

Laser Doppler scanning of the vibrating tympanic membrane. Toremalm NG. **Acta Otolaryngol Suppl (Stockh)** 1988; 458:52-5

Concomitant changes in the acoustic impedance and the cochlear microphonic potentials during twitch contractions of the middle ear muscles in cats. Freeman S, et al. **Arch Otorhinolaryngol** 1988;245(5):311-5

Interferometric measurement of the amplitude and phase of tympanic membrane vibrations in cat. Decraemer WF, et al. **Hear Res** 1989 Mar;38(1-2):1-17

Sound propagation in the ear canal and coupling to the eardrum, with measurements on model systems. Stinson MR, et al. **J Acoust Soc Am** 1989 Jun;85(6):2481-91

[A new method of using a flexible acoustic tube for measuring sound pressure in human tympanic membrane] Marmynov AI, et al. **Fiziol Cheloveka** 1988 Jul-Aug;14(4):711-3 **(Rus)**

PHYSIOPATHOLOGY

The mechanics of the middle-ear at static air pressures: the role of the ossicular joints, the function of the middle-ear muscles and the behaviour of stapedial prostheses. Hüttenbrink KB. **Acta Otolaryngol Suppl (Stockh)** 1988; 451:1-35

Are 'hot' ears really hot? [letter] Weir MR, et al. **Am J Dis Child** 1989 Jul;143(7):763-4

Mean intracranial pressure monitoring by a non-invasive audiological technique: a pilot study. Reid A, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):610-2

Facial nerve antidromic recordings in patients with Bell's palsy. Herzon GD, et al. **Otolaryngol Head Neck Surg** 1988 Dec;99(6):584-9

Comparison of tympanic membrane to promontory electrode recordings of electrocochleographic responses in patients with Menière's disease. Ruth RA, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):546-52

Test-retest differences and assistive function in detecting conductive hearing loss of impedance audiometry. Park IY, et al. **Yonsei Med J** 1988;29(2):124-8

[A method and clinical value of the promontorial test in deafness] Ablaeva IE. **Vestn Otorinolaringol** 1988 May-Jun; (3):22-6 (Eng. Abstr.) **(Rus)**

SURGERY

Treatment of early recurrences of acute purulent otitis media; value of myringotomy. Lidén M, et al. **Acta Otolaryngol (Stockh)** 1988 Nov-Dec;106(5-6):441-7

Thermal myringotomy versus grommets in the management of secretory otitis media. Kent SE. **Int J Pediatr Otorhinolaryngol** 1989 Feb;17(1):31-5

Randomised study of myringotomy, amoxycillin/clavulanate, or both for acute otitis media in infants. Engelhard D, et al. **Lancet** 1989 Jul 15;2(8655):141-3

TRANSPLANTATION

Can acquired immunodeficiency syndrome and Creutzfeldt-Jakob disease be transmitted via otologic homografts? Glasscock ME 3d, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1252-5

[Prevention of the recurrence of cholesteatoma in tympanoplasty, by tympanic reconstruction using tympano-ossicular homografts or temporal fascia. Apropos of 260 cases] Paiva A, et al. **An Otorrinolaringol Ibero Am** 1988;15(3):299-305 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Short-term effects of iontophoresis on the structure of the guinea pig tympanic membrane. Cho YB, et al. **Acta Otolaryngol (Stockh)** 1988 Sep-Oct;106(3-4):161-70

Tympanic membrane structure during a Staphylococcus aureus-induced middle ear infection. A study in the rat middle ear. Grote JJ, et al. **Acta Otolaryngol (Stockh)** 1989 Mar-Apr;107(3-4):225-34

Stratum corneum morphology in the human tympanic membrane and external auditory meatus. Youngs R, et al. **J Otolaryngol** 1988 Dec;17(7):346-51

TYMPANOMETRY see **ACOUSTIC IMPEDANCE TESTS**

TYMPANOPLASTY

Tympanoplasty and ossicular reconstruction: an update. Crabtree JA, et al. **Am J Otol** 1988 Jul;9(4):334-9 (106 ref.)

Biocompatible implants in tympanoplasty. Emmett JR. **Am J Otol** 1989 May;10(3):215-9

Eustachian tube function in tympanoplasty. Farrior JB. **Am J Otol** 1989 May;10(3):234-6

Implosion of a suction apparatus. Cozanitis DA, et al. **Anaesthesiol Reanim** 1988;13(4):243-4

Tensa retraction cholesteatoma: treatment and long-term results. Lau T, et al. **J Laryngol Otol** 1989 Feb; 103(2):149-57

Intact canal wall tympanoplasty with mastoidectomy for cholesteatoma: long-term follow-up. Kinney SE. **Laryngoscope** 1988 Nov;98(11):1190–4
Stability of tympanoplasty in children. Tos M, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):15–28
Nocardia asteroides brain abscess following mastoidectomy. Cox F, et al. **Pediatr Neurol** 1986 May–Jun;2(3):183–4
[Personal experience with the use of auditory ossicle transplantation in tympanoplasty] Rodin VI. **Cesk Otolaryngol** 1989 Jan;38(1):8–10 (Eng. Abstr.) (Cze)
[The striking hammer] Lacher G, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(3):245–7 (Eng. Abstr.) (Fre)
[Follow-up treatment and after care following operations to improve hearing] Kley W. **HNO** 1988 May;36(5):175–80 (20 ref.) (Eng. Abstr.) (Ger)
[Excluding a recurrence of cholesteatoma using high resolution computerized tomography. Can one dispense with the second-look operation?] Oberascher G, et al. **HNO** 1988 May;36(5):181–7 (Eng. Abstr.) (Ger)
[Evaluation of hearing results of tympanoplasty] Yagi T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug;91(8):1244–9 (Eng. Abstr.) (Jpn)
[Prevention of the recurrence of cholesteatoma in tympanoplasty, by tympanic reconstruction using tympano-ossicular homografts or temporal fascia. Apropos of 260 cases] Paiva A, et al. **An Otorrinolaringol Ibero Am** 1988;15(3):299–305 (Eng. Abstr.) (Spa)

METHODS

Tympanoplasty: a 5-year review of results using the a la demanda (AAD) technique. Olaizola F. **Am J Otol** 1988 Jul;9(4):318–22
Cholesteatoma surgery: open vs closed tympanoplasty. Quaranta A, et al. **Am J Otol** 1988 May;9(3):229–31
Surgical treatment of cholesteatoma: the role of staging in closed operations. Smyth GD. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):667–9
Anatomical and functional reconstruction of old radical mastoidectomy cavities by obliteration tympanoplasty. Charachon R, et al. **Clin Otolaryngol** 1989 Apr;14(2):121–6
Sandwich graft tympanoplasty: experience, results, and complications. Farrior JB. **Laryngoscope** 1989 Feb; 99(2):213–7
Results of tympanoplasty for congenital aural atresia and stenosis, with special reference to fascia and homograft as the graft material of the tympanic membrane. Minatogawa T, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):632–8
The flexible/intact-bridge tympanomastoidectomy technique [published erratum appears in Otolaryngol Clin North Am 1989 Apr;22(2):ix] Alleva M, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):41–9
Techniques of tympanomastoidectomy. Portmann M, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):29–40
[Experimental studies of static stress on the footplate in the reconstruction of the sound conduction system] Pau HW, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):331–4 (Eng. Abstr.) (Ger)
[Surgery of chronic suppurative otitis media in childhood] Hildmann H. **Laryngorhinootologie** 1989 Apr;68(4):193–200 (66 ref.) (Eng. Abstr.) (Ger)
[Closed or open tympanoplasty in cholesteatoma of the ear] Gołąbek W. **Otolaryngol Pol** 1988;42(1–2):74–9 (Eng. Abstr.) (Pol)

TYMPANOSTOMY TUBE INSERTION see **MIDDLE EAR VENTILATION**

TYMPANUM see **EAR, MIDDLE**

TYPE A PERSONALITY

Cardiovascular reactivity and smoking in coronary prone (type A) and non-coronary prone (type B) subjects. Cinciripini PM, et al. **Addict Behav** 1989;14(1):83–90
Type A behavior and coronary heart disease: an update. Abbott AV, et al. **Am Fam Physician** 1988 Nov; 38(5):105–10
Type A behavior [letter] **Am Heart J** 1988 Dec;116(6 Pt 1):1653–7
Type A behavior and survival: a follow-up study of 1,467 patients with coronary artery disease. Barefoot JC, et al. **Am J Cardiol** 1989 Sep 1;64(8):427–32
Frequency of uncomplicated angina pectoris in type A compared with type B persons (the Framingham Study). Eaker ED, et al. **Am J Cardiol** 1989 May 1;63(15):1042–5
Type A behavior: its diagnosis, cardiovascular relation and the effect of its modification on recurrence of coronary artery disease. Friedman M. **Am J Cardiol** 1989 Aug 2; 64(6):12C–19C
Effects of type A behavioral counseling and severity of prior acute myocardial infarction on survival. Powell LH, et al. **Am J Cardiol** 1988 Dec 1;62(17):1159–63
Re: "Coronary Heart Disease Mortality in the Western Collaborative Group Study: Follow-Up Experience of 22 Years" [letter; comment] Gallacher JE. **Am J Epidemiol** 1989 Aug;130(2):429–30. **Comment on:** Am J Epidemiol 1988 Mar;127(3):462–75
Type A behaviour, eating pattern and nutrient intake: the Caerphilly Study. Gallacher JE, et al. **Appetite** 1988 Oct; 11(2):129–36
Behavior patterns of coronary heart disease patients and healthy controls in China. Lang BY. **Behav Med** 1988 Winter;14(4):156–9
Type A and social support. Lynch DJ, et al. **Behav Med** 1989 Summer;15(2):72–4
Effects of gender on type A assessment with the Matthews Youth Test for Health (MYTH). Mittelmark MB, et al. **Behav Med** 1988 Fall;14(3):134–40
The type A behavior pattern, hostility, and interpersonal skill. Watkins PL, et al. **Behav Modif** 1988 Jul;12(3):315–34
Type A behaviour, borderline hyperventilation and psychological, psychosomatic and neuroendocrine responses to mental task load. Odink J, et al. **Biol Psychol** 1987 Oct;25(2):107–18
Type A behaviour and the authoritarian personality. Byrne DG, et al. **Br J Med Psychol** 1989 Jun;62 (Pt 2):163–72
The Type A behaviour pattern and self-evaluation. Henley S, et al. **Br J Med Psychol** 1989 Mar;62 (Pt 1):51–9
Type A behaviour and life-events. Järvikoski A, et al. **Br J Med Psychol** 1988 Dec;61 (Pt 4):353–63
Control theory and type A behaviour. Perloff LS, et al. **Br J Med Psychol** 1988 Dec;61 (Pt 4):365–8
Risk factors for myocardial infarction: the importance of relaxation. Wielgosz AT, et al. **Br J Med Psychol** 1988 Sep;61 (Pt 3):209–17
Meta-analyses of the reliability of Type A behaviour measures. Yarnold PR, et al. **Br J Med Psychol** 1989 Mar; 62 (Pt 1):43–50
Correlation between type A behavior and coronary angiographic findings in 100 cases of coronary heart disease. Yang JX, et al. **Chin Med J [Engl]** 1988 Jun; 101(6):419–22
Psychological health and squash play. Robertson K, et al. **Ergonomics** 1988 Nov;31(11):1567–72
Research links between psychiatry and cardiology. Hypertension, type A behavior, sudden death, and the physiology of emotional arousal. Dimsdale JE. **Gen Hosp Psychiatry** 1988 Sep;10(5):328–38 (76 ref.)
Physiological responses to catecholamine infusions in type A and type B men. Muranaka M, et al. **Health Psychol** 1988;7 Suppl:145–63
Interactive effects of type A personality and psychological and physical stressors on human cardiovascular functions. Albright GL, et al. **Int J Psychophysiol** 1988 Nov; 6(4):315–26
Coping with competing demands: interruption and the type A pattern. Kirmeyer SL. **J Appl Psychol** 1988 Nov; 73(4):621–9
A non-coronary prone man [letter] Mittal SR. **J Assoc Physicians India** 1988 Feb;36(2):179–80
Cigarette smoking, alcohol, and oral contraceptive use by type A adolescent—the Bogalusa Heart Study. Johnson CC, et al. **J Behav Med** 1989 Feb;12(1):13–24
Type A behavior pattern and symptom reports: a prospective investigation. Offutt C, et al. **J Behav Med** 1988 Jun; 11(3):227–37
Neuroticism, symptom reports, and type A behavior: interpretive cautions for the Framingham Scale. Smith TW, et al. **J Behav Med** 1989 Feb;12(1):1–11
Type A behavior as a general risk factor for physical disorder. Suls J, et al. **J Behav Med** 1988 Jun;11(3):201–26 (91 ref.)
A biopsychosocial model of medical student distress. Vitaliano PP, et al. **J Behav Med** 1988 Aug;11(4):311–31
Validation of the survey of work styles: a profile measure of the type A behaviour pattern. Gray A, et al. **J Clin Epidemiol** 1989;42(3):209–16
Disease based spectrum bias in referred samples and the relationship between type A behavior and coronary artery disease. Miller TQ, et al. **J Clin Epidemiol** 1988; 41(12):1139–49
Physical symptom reporting in type A and type B children. Leikin L, et al. **J Consult Clin Psychol** 1988 Oct;56(5):721–6
Inability to predict cardiovascular disease from hostility scores or MMPI items related to type A behavior. Leon GR, et al. **J Consult Clin Psychol** 1988 Aug;56(4):597–600
Exploration of the type A behavior pattern in chronic headaches sufferers. Rappaport NB, et al. **J Consult Clin Psychol** 1988 Aug;56(4):621–3
Type A behaviour and prevalent heart disease in the Caerphilly study: increase in risk or symptom reporting? Gallacher JE, et al. **J Epidemiol Community Health** 1988 Sep;42(3):226–31
Type A behavior and the social production of cardiovascular disease. Dressler WW. **J Nerv Ment Dis** 1989 Apr; 177(4):181–90 (82 ref.)
Type A personality, self-control, and vulnerability to stress. Heilbrun AB Jr, et al. **J Pers Assess** 1988 Fall;52(3):420–33
Personality correlates of type A coronary-prone behavior. Lobel TE. **J Pers Assess** 1988 Fall;52(3):434–40
A note on measurement issues in type A research: let's not throw out the baby with the bath water. Yarnold PR, et al. **J Pers Assess** 1988 Fall;52(3):410–9 (43 ref.)
Preference for situations involving effort, time pressure, and feedback in relation to type A behavior, locus of control, and test anxiety. Feather NT, et al. **J Pers Soc Psychol** 1988 Aug;55(2):266–71
Goal utility, task satisfaction, and the self-appraisal hypothesis of type A behavior. Freedman SM, et al. **J Pers Soc Psychol** 1989 Mar;56(3):465–70
The relation between type A behavior and chronic emotional distress: a meta-analysis. Suls J, et al. **J Pers Soc Psychol** 1989 Sep;57(3):503–12
Type A behavior, coping mechanisms and emotions related to somatic risk factors of coronary heart disease in adolescents. Keltikangas-Järvinen L, et al. **J Psychosom Res** 1989;33(1):17–27
Type A, amicability and injury: a prospective study of air traffic controllers. Lee DJ, et al. **J Psychosom Res** 1989; 33(2):177–86
Distrust, rage may be 'toxic core' that puts type A person at risk [news] Raymond C. **JAMA** 1989 Feb 10;261(6):813
Type A behavior and mortality from coronary disease in the Framingham study [letter] Eaker ED, et al. **N Engl J Med** 1988 Dec 1;319(22):1480–1
Type A behavior and outcome of coronary disease [letter] Ragland DR. **N Engl J Med** 1989 Aug 10;321(6):394
Genetics or environment? Type A behavior and cardiovascular risk factors in twin children. Meininger JC, et al. **Nurs Res** 1988 Nov–Dec;37(6):341–6
Effects of parental styles on anxiety and type A behavior pattern. Easau CA, et al. **Percept Mot Skills** 1988 Aug; 67(1):333–4
Allocation of attention and physiological responsivity in the type A coronary-prone individual. Lawler KA, et al. **Percept Mot Skills** 1988 Aug;67(1):103–13
Physiological correlates of the coronary-prone behavior pattern in women during examination stress. Lawler KA, et al. **Physiol Behav** 1989 Apr;45(4):777–9
Validity of the type A construct: a reprise. Friedman HS, et al. **Psychol Bull** 1988 Nov;104(3):381–4
Coronary heart disease and type A behaviors: update on and alternative to the Booth-Kewley and Friedman (1987) quantitative review. Matthews KA. **Psychol Bull** 1988 Nov; 104(3):373–80 (35 ref.)
The assessment of type A behaviour pattern: results from a spouse-report approach [published erratum appears in Psychol Med 1989 May;19(2):following 547] Condon JT. **Psychol Med** 1988 Aug;18(3):747–55
Type A behaviour pattern among Indian children. Agrawal R, et al. **Psychol Rep** 1989 Aug;65(1):346
Type A behavior, occupational and life demands, satisfaction, and well-being. Burke RJ. **Psychol Rep** 1988 Oct; 63(2):451–8
Relations among four individual difference measures associated with cardiovascular dysfunction and anger coping style. Croyle RT, et al. **Psychol Rep** 1988 Dec; 63(3):779–86
Biofeedback and effects of set and sex with type A and type B college students: an exploratory study. Drennen WT, et al. **Psychol Rep** 1988 Dec;63(3):787–90
Type A, locus of control, and stress: another case in point. Heilbrun AB Jr. **Psychol Rep** 1989 Apr;64(2):524–6
A revised strategy of type A research. Heilbrun AB Jr. **Psychol Rep** 1988 Dec;63(3):979–83 (12 ref.)
Academic locus of control, type A behavior, and college absenteeism. Trice AD, et al. **Psychol Rep** 1989 Aug; 65(1):337–8
The relationship between the type A behavior pattern and physiological responsivity: a quantitative review. Harbin TJ. **Psychophysiology** 1989 Jan;26(1):110–9
Influences of potential for hostility, type A behavior, and parental history of hypertension on adolescents' cardiovascular responses during stress. McCann BS, et al. **Psychophysiology** 1988 Sep;25(5):503–11
Psychophysiologic stress responsivity in type A and B female college students and community women. Morell MA. **Psychophysiology** 1989 May;26(3):359–68
Components of type A behavior and task-induced cardiovascular activation. Ohman A, et al. **Psychophysiology** 1989 Jan;26(1):81–8
Aerobic exercise or strength and flexibility training was associated with both reduced overt behavioral manifestations of the type A behavior pattern and self-reported type A traits [letter; comment] Abbott AV, et al. **Psychosom Med** 1989 Mar–Apr;51(2):218–21. **Comment on:** Psychosom Med 1988 Jul–Aug;50(4):418–33
The Cook-Medley hostility scale: item content and ability to predict survival. Barefoot JC, et al. **Psychosom Med** 1989 Jan–Feb;51(1):46–57
Self-reference and coronary heart disease incidence in the Western Collaborative Group Study. Graham LE 2d, et al. **Psychosom Med** 1989 Mar–Apr;51(2):137–44
The association of peripheral arterial disease with hostility in a young, healthy veteran population. Joesoef MR, et al. **Psychosom Med** 1989 May–Jun;51(3):285–9
Comparative effects of two beta-blockers on cardiovascular reactivity and type A behavior in hypertensives. Krantz DS, et al. **Psychosom Med** 1988 Nov–Dec;50(6):615–26
Genetic and environmental influences for type A-like measures and related traits: a study of twins reared apart and twins reared together. Pedersen NL, et al. **Psychosom Med** 1989 Jul–Aug;51(4):428–40
Ambulatory blood pressure monitoring and laboratory reactivity in type A behavior and components. Schneider RH, et al. **Psychosom Med** 1989 May–Jun;51(3):290–305
Hostility and cardiovascular reactivity to stress in women and men. Weidner G, et al. **Psychosom Med** 1989 Jan–Feb; 51(1):36–45
Psychological correlates of two measures of coronary-prone hostility. Swan GE, et al. **Psychosomatics** 1989 Summer; 30(3):270–8
Type A behaviour, attention, and the report of subjective

arousal. Roldan FH. **Psychother Psychosom** 1987; 47(3–4):219–26

Psychogenic pain and psychological variables: a psychometric study. Valdés M, et al. **Psychother Psychosom** 1988;50(1):15–21

Type A behavior pattern and illness other than coronary heart disease. Wrześniewski K, et al. **Soc Sci Med** 1988; 27(6):623–6

The Japanese characteristic of type A behavior pattern. Hosaka T, et al. **Tokai J Exp Clin Med** 1987 Dec; 12(5–6):287–303

Type A behavior pattern and catecholamine excretion during cardiac catheterization. Hirsch AM. **West J Nurs Res** 1988 Jun;10(3):307–16

[The relation of type A behavior pattern and coronary artery disease] Liu ZH, et al. **Chung Hua Hu Li Tsa Chih** 1989 Apr;24(4):196–7 **(Chi)**

[Behavior pattern analysis in recurrent aphthae] Xie H. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan;24(1):55–7 **(Chi)**

[Type A personality and its relations: the significance of hostility, neuroticism and verbal behavior for coronary heart diseases] Siegman AW. **Z Klin Psychol Psychopathol Psychother** 1988;36(1):3–24 (86 ref.) (Eng. Abstr.) **(Ger)**

[Type A personality and risk of post-infarction coronary events] De Leo D, et al. **G Ital Cardiol** 1988 Nov; 18(11):938–41 (Eng. Abstr.) **(Ita)**

[Type A behavior and psychological characteristics of hypertensive patients undergoing antihypertensive treatment] Zotti AM, et al. **G Ital Cardiol** 1989 Feb; 19(2):136–44 (Eng. Abstr.) **(Ita)**

[Type A personality: risk of coronary events or risk of bias? (editorial)] Zotti AM. **G Ital Cardiol** 1988 Nov;18(11):942–4 **(Ita)**

[Psychometric study of the measurement of predisposing behavior to coronary disease (type A) in working populations. I. Bortner's scale] Cesana GC, et al. **Med Lav** 1988 Mar–Apr;79(2):110–9 (Eng. Abstr.) **(Ita)**

[Psychometric study of assessment of coronary prone behavior (type A) in working population. II. Jenkins activity survey: N form] Cesana GC, et al. **Med Lav** 1988 May–Jun;79(3):194–204 (Eng. Abstr.) **(Ita)**

[Type A behavior and reinfarction: a 4-year longitudinal evaluation] De Leo D, et al. **Minerva Cardioangiol** 1988 Jul–Aug;36(7–8):339–46 (Eng. Abstr.) **(Ita)**

[Type A behavior and cardiovascular reactivity. Preliminary findings] Taccola A, et al. **Minerva Cardioangiol** 1989 Apr; 37(4):155–9 (Eng. Abstr.) **(Ita)**

[Relation between behavioral risk factors of ischemic heart disease and various somatic indicators in men aged 25–64 years living in Novosibirsk] Gagulin IV, et al. **Kardiologiia** 1988 Dec;28(12):80–3 (Eng. Abstr.) **(Rus)**

[Status of lipid metabolism in patients with ischemic heart disease and its behavioral risk factor] Polozhentsev SD, et al. **Kardiologiia** 1988 Dec;28(12):101–2 **(Rus)**

[Principles of the correction of pathogenic forms of behavior in secondary prevention of ischemic heart disease] Zaitsev VP, et al. **Kardiologiia** 1989 Mar;29(3):113–6 **(Rus)**

[Type A behavior in children in relation to changes in primary risk factors for ischemic heart disease] Skorodenský M, et al. **Cesk Pediatr** 1988 Sep;43(9):518–21 (Eng. Abstr.) **(Slo)**

PHYSIOLOGY

Neuroendocrine responses of type A individuals to exercise. McMurray RG, et al. **Behav Med** 1989 Summer;15(2):84–92

Personality, effort perception and cardiovascular reactivity. De Meersman RE. **Neuropsychobiology** 1988;19(4):192–4

Type A behavior in healthy males and females as related to physiological reactivity and blood lipids. Lundberg U, et al. **Psychosom Med** 1989 Mar–Apr;51(2):113–22

TYPE I RESTRICTION ENZYMES see **DEOXYRIBONUCLEASES, TYPE I, SITE-SPECIFIC**

TYPE II RESTRICTION ENZYMES see **DEOXYRIBONUCLEASES, TYPE II, SITE-SPECIFIC**

TYPHOID

Typhoid nephritis. Chowdhury KL, et al. **J Assoc Physicians India** 1988 Jul;36(7):447–8

A case of typhoid fever. Morrow JD, et al. **J Tenn Med Assoc** 1988 Oct;81(10):635

[Recurrent thoracic abscess due to Salmonella typhi] Takenaka A, et al. **Kansenshogaku Zasshi** 1989 Feb; 63(2):166–9 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Pancreatitis and typhoid fever. Hearne SE, et al. **Am J Med** 1989 Apr;86(4):471–3

Perforated typhoid enteritis: operative experience with 108 cases. Meier DE, et al. **Am J Surg** 1989 Apr;157(4):423–7

The value of C-reactive protein in the diagnosis of intestinal perforation in typhoid fever. Olubuyide IO, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):246–8

Typhoid fever. Unusual hepatic manifestations. Kumar A, et al. **Clin Pediatr (Phila)** 1989 Feb;28(2):99–100

Endoscopic diagnosis of ileal ulceration in typhoid fever [letter] Kang JY. **Gastrointest Endosc** 1988 Sep–Oct; 34(5):442–3

Catatonic syndrome associated with enteric fever. A case report. Srinivasan K, et al. **Gen Hosp Psychiatry** 1989 Jan; 11(1):71–2

Acute cerebellar ataxia—a rare complication of enteric fever [letter] Chand G, et al. **J Assoc Physicians India** 1988 Dec; 36(12):741

Enteric fever complicated by myocarditis, hepatitis and shock. Kovoor P, et al. **J Assoc Physicians India** 1988 May; 36(5):353

Typhoid glomerulonephritis. Sarma PS. **J Assoc Physicians India** 1988 Dec;36(12):733–4

Severe reversible myopathy due to typhoid. Mody GM, et al. **J Trop Med Hyg** 1989 Apr;92(2):102–3

Surgical treatment of typhoid ileal perforations—choice of operation. Iqbal M, et al. **JPMA** 1988 Dec;38(12):316–9

Acute acalculous cholecystitis in salmonella infection. Roca M, et al. **Pediatr Radiol** 1988;18(5):421–3

Tubulo–interstitial nephritis: an unusual complication of typhoid fever. Abu–Romeh SH, et al. **Trop Doct** 1988 Oct; 18(4):153–4

[Splenic abscess caused by Salmonella typhi in a child (letter)] Nores JM, et al. **Presse Med** 1989 Apr 8;18(14):728–9 **(Fre)**

[Typhoid fevers complicated by acute renal failure, by rhabdomyolysis and by acute pancreatitis (letter)] Ginsburg C, et al. **Rev Med Interne** 1989 May–Jun;10(3):279–80 **(Fre)**

[Association of salmonella with other etiologic agents in acute enteritis in children] Musso A, et al. **Minerva Pediatr** 1988 Sep;40(9):527–34 (Eng. Abstr.) **(Ita)**

[Diagnosis and treatment of typhoid-related perforations of the small intestine] Tyniankin NA, et al. **Voen Med Zh** 1989 Mar;(3):24–7 **(Rus)**

[Intestinal perforation caused by typhoid fever in children] Escarcega–Fujigaki P, et al. **Bol Med Hosp Infant Mex** 1988 Aug;45(8):523–8 (41 ref.) (Eng. Abstr.) **(Spa)**

[Intestinal perforation in typhoid fever (letter)] Gil–Barbosa M, et al. **Bol Med Hosp Infant Mex** 1989 Mar;46(3):203–4 **(Spa)**

[Effect of danazol on heterozygous c protein coagulation deficiency exacerbated by Salmonella typhi sepsis] Lobato–Mendizábal E, et al. **Bol Med Hosp Infant Mex** 1989 May;46(5):343–5 (Eng. Abstr.) **(Spa)**

[Late recurrent osteomyelitis caused by Salmonella typhi (letter)] Botet Pont C, et al. **Med Clin (Barc)** 1988 Oct 22;91(13):518 **(Spa)**

[Bacteremia caused by Salmonella non-typhi in patients infected with HIV] González Lahoz JM, et al. **Rev Clin Esp** 1989 Jun;185(1):6–8 (30 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Typhoid fever diagnosed by isolation of S. typhi from gastric aspirate. Khourieh M, et al. **Acta Paediatr Scand** 1989 Jul; 78(4):653–5

Typhoid fever: diagnosis by using sonography. Puylaert JB, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):745–6

A 14-year-old boy with persistent abdominal pain [clinical conference] Levine M, et al. **Ann Emerg Med** 1988 Oct; 17(10):1063–8

Typhoid fever in Hong Kong children. Chow CB, et al. **Aust Paediatr J** 1989 Jun;25(3):147–50

Normal agglutinins against enteric group of organisms in healthy subjects. Joshi PJ, et al. **Indian J Med Sci** 1988 Oct;42(10):231–4

Comparison of rapid serodiagnostic tests for antigen detection in typhoid fever. Kaur I, et al. **Indian J Pathol Microbiol** 1988 Jul;31(3):245–7

Detection with monoclonal antibody of Salmonella typhi antigen 9 in specimens from patients. Chaicumpa W, et al. **J Clin Microbiol** 1988 Sep;26(9):1824–30

Citrobacter freundii bacteraemia presenting as typhoid fever. Flegg PJ, et al. **J Infect** 1989 Mar;18(2):171–3

Clinical experience with enteric fever in The Gambia, West Africa 1981–1986. Weeramanthri TS, et al. **J Trop Med Hyg** 1989 Aug;92(4):272–5

A patient of vivax malaria and enteric fever presenting as a case of jaundice with leukaemoid reaction. Gandapur AS, et al. **JPMA** 1988 May;38(5):148–9

Salmonellosis, possibly paratyphoid A—problems with the Widal test [letter] van der Heiden MJ, et al. **S Afr Med J** 1989 May 20;75(10):505–6

Haemoglobinuric renal failure and typhoid fever. Onwubalili JK. **Trans R Soc Trop Med Hyg** 1988;82(3):482–4

Serodiagnosis of typhoid fever in paediatric patients by anti-LPS ELISA. Sippel JE, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):1022–6

Diagnostic usefulness of Vi-indirect fluorescent antibody test(Vi-IFAT) for typhoid fever—a prospective study. Kim JM, et al. **Yonsei Med J** 1989;30(1):65–71

[A case of typhoid with the clinical appearance of acute ischemic myocardiopathy] Sforza E, et al. **G Clin Med** 1988 May;69(5):353–8 (Eng. Abstr.) **(Ita)**

[Diagnostic importance of various methods of determining infectious O-antigenemia in patients with typhoid and paratyphoid fevers A and B] Cherkasov VL, et al. **Ter Arkh** 1988;60(11):35–8 (Eng. Abstr.) **(Rus)**

[Latent persistence of specific antigens of the causative agent in the composition of circulating immune complexes in typhoid fever] Belaia OF, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):41–4 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Aztreonam in the treatment of enteric fevers. Farid Z, et al. **Ann Trop Med Parasitol** 1987 Dec;81(6):725–6

Trimethoprim in enteric fever. Gargalianos P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):486–7

Ciprofloxacin in enteric fever. Mandal B, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):492–3

In vitro and clinical evaluation of ofloxacin in urinary tract infection and enteric fever. Tanphaichitra D, et al. **Drugs Exp Clin Res** 1988;14(8):529–31

Clinical experience with pefloxacin in the therapy of typhoid fever. Cristiano P, et al. **Infection** 1989 Mar–Apr;17(2):86–7

Treatment of typhoid fever with ofloxacin. Wang F, et al. **J Antimicrob Chemother** 1989 May;23(5):785–8

Co-prescribing chloramphenicol and cotrimoxazole [letter] Agarwal BD. **J Assoc Physicians India** 1988 Mar;36(3):236

Salmonella susceptibility to chloramphenicol and clinical response in enteric fever [published erratum appears in J Assoc Physicians India 1989 Mar;37(3):246] Antani DU, et al. **J Assoc Physicians India** 1988 Nov;36(11):649–50

Chloramphenicol and preleukaemia/leukaemia [letter] Shah BM. **J Assoc Physicians India** 1988 May;36(5):351

Randomized treatment of patients with typhoid fever by using ceftriaxone or chloramphenicol. Islam A, et al. **J Infect Dis** 1988 Oct;158(4):742–7

Ceftriaxone treatment of Salmonella enteric fever. Meloni T, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):734–5

Treatment of severe typhoid fever in children with high dose dexamethasone. Punjabi NH, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):598–600

Norfloxacin in the treatment of infections caused by Salmonella typhi. Velmonte MA, et al. **Scand J Infect Dis Suppl** 1988;56:46–8

EPIDEMIOLOGY

Typhoid fever in hospitalized children in Kelantan, Malaysia. Choo KE, et al. **Ann Trop Paediatr** 1988 Dec;8(4):207–12

Research opportunities in typhoid fever: epidemiology and molecular biology. Calva E, et al. **Bioessays** 1988 Nov; 9(5):173–7 (31 ref.)

Community-wide epidemiological investigation of a typhoid outbreak in a rural township in Taiwan, Republic of China. King CC, et al. **Int J Epidemiol** 1989 Mar;18(1):254–60

An outbreak of typhoid fever due to contamination of the municipal water supply in northern Israel. Egoz N, et al. **Isr J Med Sci** 1988 Nov;24(11):640–3

Salmonellosis and enteric fever: still a problem for children in London's East End. Elliott EJ, et al. **Practitioner** 1988 Apr 8;232(1446):370, 373

Salmonella typhi infections in the United States, 1975–1984: increasing role of foreign travel. Ryan CA, et al. **Rev Infect Dis** 1989 Jan–Feb;11(1):1–8

[A waterborne outbreak of typhoid fever associated with a small drinking water supply system in Fuji city] Nishina T, et al. **Kansenshogaku Zasshi** 1989 Mar;63(3):240–7 (Eng. Abstr.) **(Jpn)**

[Typhoid and paratyphoid fevers 1986] Goners E. **Przegl Epidemiol** 1988;42(1):44–8 **(Pol)**

[Prognosis of typhoid morbidity in a region of northern new construction projects] Mefod'ev VV. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):81–4 (Eng. Abstr.) **(Rus)**

[Simultaneous infection by various species of Salmonella in a family group] Palomino C, et al. **Rev Med Chil** 1988 Mar; 116(3):268–71 (Eng. Abstr.) **(Spa)**

[Typhoid and paratyphoid fevers in the province of Talca, Chile (letter)] Palomo I, et al. **Rev Med Chil** 1988 Feb; 116(2):180–3 **(Spa)**

ETIOLOGY

Typhoid fever and acute non-A non-B hepatitis after shellfish consumption [letter] Torné J, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):581–2

Rose spots associated with enteric fever secondary to Shigella sonnei. Belilos E, et al. **Int J Dermatol** 1988 Jul–Aug; 27(6):402–3

IMMUNOLOGY

Immune response of infants and preschool children to typhoid vaccine given intradermally or subcutaneously. Mohandas V, et al. **BMJ** 1989 Jan 21;298(6667):162–3

Immunity to Salmonella typhi: considerations relevant to measurement of cellular immunity in typhoid-endemic regions. Murphy JR, et al. **Clin Exp Immunol** 1989 Feb; 75(2):228–33

Humoral and cellular immune responses to Salmonella typhi in patients with typhoid fever. Mastroianni CM, et al. **J Clin Lab Anal** 1989;3(3):191–5

Immunoblot detection of class-specific humoral immune response to outer membrane proteins isolated from Salmonella typhi in humans with typhoid fever. Ortiz V, et al. **J Clin Microbiol** 1989 Jul;27(7):1640–5

Indirect immunoglobulin G (IgG) and IgM enzyme-linked immunosorbent assays (ELISAs) and IgM capture ELISA for detection of antibodies to lipopolysaccharide in adult typhoid fever patients in Pakistan. Sippel J, et al. **J Clin Microbiol** 1989 Jun;27(6):1298–302

A simple adherence test for detection of IgM antibodies in typhoid. Ong LY, et al. **J Med Microbiol** 1989 Jul; 29(3):195–8

[Effect of an Opisthorchis infestation on the clinical course of typhoid and its outcome. 2. The effect of an Opisthorchis infestation on changes in lymphocyte blast transformation in typhoid infection] Lepekhin AV, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):26–9 (Eng. Abstr.) (Rus)

[The effect of Opisthorchis invasion on the clinical course and outcome of abdominal typhoid. Indicators of non-specific resistance and phagocytosis in patients with abdominal typhoid combined with chronic opisthorchiasis] Lepekhin AV. **Med Parazitol (Mosk)** 1989 Mar–Apr; (2):33–8 (Eng. Abstr.) (Rus)

[Characteristics of the immunity in typhoid infection associated with opisthorchiasis] Obgol'ts AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):75–9 (Eng. Abstr.) (Rus)

[The neutrophil receptor apparatus in typhoid fever] Rashidova RA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):60–5 (Eng. Abstr.) (Rus)

[Serology of typhoid fever in children. I. Capillary flocculation- agglutination. Its specificity in an asymptomatic population and its utility at a pediatric emergency service] Alvarado-Alemán F, et al. **Bol Med Hosp Infant Mex** 1989 Jan;46(1):5–10 (Eng. Abstr.) (Spa)

[Comparative serology in typhoid fever in children. II. Comparison of a microhemagglutination plate technic with Ruiz-Castañeda surface fixation] Alvarado-Alemán F, et al. **Bol Med Hosp Infant Mex** 1989 Feb;46(2):83–8 (Eng. Abstr.) (Spa)

METABOLISM

[The relation of the acetylation phenotype to the predisposition to typhoid fever and its clinical course] Musabaev EI. **Ter Arkh** 1988;60(11):38–40 (Eng. Abstr.) (Rus)

MICROBIOLOGY

A study of Salmonella typhi isolated in Suez Canal area. Biotyping, phage typing and colicinogenic property. Shoeb S, et al. **Bull Soc Pathol Exot Filiales** 1989;82(3):332–40

Occurrence of H-antigen Z66 of R phase in cultures of Salmonella serovar typhi originated from Indonesia. Tamura K, et al. **Epidemiol Infect** 1988 Oct;101(2):311–4

Bacteriophage types of Salmonella typhi in Haryana. A 11 years study. Sabherwal U, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):298–302

Cerebral abscess due to Salmonella typhi. Nagaraja D, et al. **J Assoc Physicians India** 1988 Apr;36(4):285–6

Use of a DNA probe to detect Salmonella typhi in the blood of patients with typhoid fever. Rubin FA, et al. **J Clin Microbiol** 1989 May;27(5):1112–4

Generalized suppurative lymphadenitis with typhoidal salmonellosis. Naqvi SH, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):882–3

Streptokinase clot culture compared with whole blood culture for isolation of Salmonella typhi and S. paratyphi A from patients with enteric fever. Simanjuntak CH, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):340–1

[Genetics of the abdominal typhoid pathogen] Riabchenko LE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr; (4):88–95 (44 ref.) (Rus)

PATHOLOGY

[Ultrastructural pathology of the liver in abdominal typhoid] Erman BA, et al. **Arkh Patol** 1989;51(4):28–34 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Protection against Salmonella typhi infection in mice after immunization with outer membrane proteins isolated from Salmonella typhi 9,12,d, Vi. Isibasi A, et al. **Infect Immun** 1988 Nov;56(11):2953–9

Comparative efficacy of two, three, or four doses of TY21a live oral typhoid vaccine in enteric-coated capsules: a field trial in an endemic area. Ferreccio C, et al. **J Infect Dis** 1989 Apr;159(4):766–9

Typhoid-fever-like syndrome after Ty21a live oral vaccine [letter] Beishuizen A, et al. **Lancet** 1988 Oct 8;2(8615):855–6

Progress in vaccines against typhoid fever. Levine MM, et al. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S552–67 (94 ref.)

The development of a bivalent vaccine against diarrhoeal disease. Forrest BD. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):449–57 (26 ref.)

The current status of typhoid vaccine development and clinical trials with typhoid vaccines. Levine MM, et al. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):459–69

Clinical experience with typhoid vaccine in Thailand. Sarasombath S. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):471–4

[The role of sanitary and bacteriologic examination of water in the prevention of acute intestinal infections in the Estonian S.S.R] Birk KF. **Gig Sanit** 1989 Jan;(1):19–21 (Eng. Abstr.) (Rus)

[A promising new vaccine against typhoid fever] Jertborn M. **Lakartidningen** 1989 Feb 22;86(8):631–2 (Swe)

RADIONUCLIDE IMAGING

Gallium detection of Salmonella costochondritis. Caruana V, et al. **J Nucl Med** 1988 Dec;29(12):2004–7

TRANSMISSION

Salmonella infections [editorial] **East Afr Med J** 1988 Aug; 65(8):505–6

TYPHOID-PARATYPHOID VACCINES

Typhoid vaccines come of age. Levine MM, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):374–81 (69 ref.)

Progress in vaccines against typhoid fever. Levine MM, et al. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S552–67 (94 ref.)

ADMINISTRATION & DOSAGE

Behaviour of the typhoid vaccine intradermally administered in association with tetanus unadsorbed vaccine and soluble antigens of vaccinia virus. Croitoru M, et al. **Arch Roum Pathol Exp Microbiol** 1988 Apr–Jun; 47(2):139–43

Immune response of infants and preschool children to typhoid vaccine given intradermally or subcutaneously. Mohandas V, et al. **BMJ** 1989 Jan 21;298(6667):162–3

Effect of a purA mutation on efficacy of Salmonella live-vaccine vectors. Sigwart DF, et al. **Infect Immun** 1989 Jun;57(6):1858–61

Comparative efficacy of two, three, or four doses of TY21a live oral typhoid vaccine in enteric-coated capsules: a field trial in an endemic area. Ferreccio C, et al. **J Infect Dis** 1989 Apr;159(4):766–9

Clinical experience with typhoid vaccine in Thailand. Sarasombath S. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):471–4

ADVERSE EFFECTS

Reiter's syndrome precipitated by a typhoid vaccination [letter] Keane A, et al. **Br J Rheumatol** 1988 Dec; 27(6):496–7

Palisading granuloma after typhoid-paratyphoid immunization [letter] Dereure O, et al. **Int J Dermatol** 1989 May;28(4):272–3

IMMUNOLOGY

Immunogenicity of a candidate live oral typhoid/cholera hybrid vaccine in humans [letter] Forrest BD, et al. **J Infect Dis** 1989 Jan;159(1):145–6

Persistence of antibody titres three years after vaccination with Vi polysaccharide vaccine against typhoid fever. Tacket CO, et al. **Vaccine** 1988 Aug;6(4):307–8

ISOLATION & PURIFICATION

The current status of typhoid vaccine development and clinical trials with typhoid vaccines. Levine MM, et al. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):459–69

THERAPEUTIC USE

Selected immunological parameters in patients suffering from uveitis subjected to different treatment. Wieczorek E, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):367–76

[A promising new vaccine against typhoid fever] Jertborn M. **Lakartidningen** 1989 Feb 22;86(8):631–2 (Swe)

TYPHUS see TYPHUS, EPIDEMIC LOUSE-BORNE

TYPHUS, ENDEMIC FLEA-BORNE

Imported rickettsial disease: clinical and epidemiologic features. McDonald JC, et al. **Am J Med** 1988 Dec; 85(6):799–805

Delayed neurologic display in murine typhus. Report of two cases. Samra Y, et al. **Arch Intern Med** 1989 Apr; 149(4):949–51

Murine typhus and spotted fever in Israel in the eighties: retrospective analysis. Shaked Y, et al. **Infection** 1988 Sep–Oct;16(5):283–7

COMPLICATIONS

Murine typhus infection complicated by dengue haemorrhagic fever. Kueh YK, et al. **Ann Acad Med Singapore** 1988 Oct;17(4):595–9

[Severe and uncommon form of murine typhus (letter)] Guerin JM, et al. **Presse Med** 1988 Oct 29;17(38):2037 (Fre)

DIAGNOSIS

Histopathology and immunohistologic demonstration of the distribution of Rickettsia typhi in fatal murine typhus. Walker DH, et al. **Am J Clin Pathol** 1989 Jun;91(6):720–4

Murine typhus acquired during short-term urban travel. Wilson ME, et al. **Am J Med** 1989 Aug;87(2):233–4

DRUG THERAPY

Relapse of rickettsial Mediterranean spotted fever and murine typhus after treatment with chloramphenicol. Shaked Y, et al. **J Infect** 1989 Jan;18(1):35–7

Ciprofloxacin treatment of typhus [letter] Eaton M, et al. **JAMA** 1989 Aug 11;262(6):772–3

MICROBIOLOGY

Role of natural killer cells in the early clearance of Rickettsia typhi in mice. Rollwagen FM. **Adv Exp Med Biol** 1988; 239:163–8

VETERINARY

Newborn rats in the murine typhus enzootic infection cycle: studies on transplacental infection and passively acquired maternal antirickettsial antibodies. Arango-Jaramillo S, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):391–7

TYPHUS, EPIDEMIC LOUSE-BORNE

COMPLICATIONS

Cardiovascular and pulmonary complications of epidemic typhus. Diab SM, et al. **Trop Geogr Med** 1989 Jan; 41(1):76–9

DIAGNOSIS

Typhus fever in South India—a case report. Maniya R, et al. **J Assoc Physicians India** 1988 Sep;36(9):563–4

Rickettsial infection presenting as culture-negative meningitis. Woo ML, et al. **Postgrad Med J** 1988 Aug; 64(754):614–6

EPIDEMIOLOGY

[Analytic study of typhoid fever in southern Tunisia 1982–1985. Apropos of 119 cases] Ben Hamed S, et al. **Tunis Med** 1987 May;65(5):327–30 (Eng. Abstr.) (Fre)

HISTORY

Urban famine or urban crisis? Typhus in the Victorian city. Hardy A. **Med Hist** 1988 Oct;32(4):401–25

IMMUNOLOGY

[Studies on the possibility of immunoprophylaxis of carcinoma] Denk W, et al. **Osterr Z Erforsch Bekampf Krebskr** 1970;25(1):30–9 (Eng. Abstr.) (Ger)

METABOLISM

Decreased oxygen utilization in epidemic typhus infection: case report with sequential hemodynamic studies. Flugelman MY, et al. **Am J Med** 1988 Oct;85(4):581–2

TYPHUS, MURINE see TYPHUS, ENDEMIC FLEA-BORNE

TYPHUS, SCRUB see SCRUB TYPHUS

TYPING, BACTERIAL see BACTERIAL TYPING TECHNICS

TYPING, BACTERIOPHAGE see BACTERIOPHAGE TYPING

TYPOLOGY see SOMATOTYPES

TYRAMINE

ADVERSE EFFECTS

Interaction between moclobemide and oral tyramine in depressed patients. Burgess CD, et al. **Fundam Clin Pharmacol** 1989;3(1):47–52

The monoamine oxidase inhibitor-tyramine interaction. Brown C, et al. **J Clin Pharmacol** 1989 Jun;29(6):529–32 (20 ref.)

ANALOGS & DERIVATIVES

N-iodoacetyltyramine: preparation and use in 125I labeling by alkylation of sulfhydryl groups. Lin CM, et al. **Anal Biochem** 1989 Jun;179(2):389–95

Inactivation of dopamine beta-hydroxylase by beta-ethynyltyramine: kinetic characterization and covalent modification of an active site peptide. DeWolf WE Jr, et al. **Biochemistry** 1989 May 2;28(9):3833–42

Inulin-125I-tyramine, an improved residualizing label for studies on sites of catabolism of circulating proteins. Maxwell JL, et al. **J Biol Chem** 1988 Oct 5;263(28):14122–7

Conformationally restricted and conformationally defined tyramine analogues as inhibitors of phenylethanolamine N-methyltransferase. Ye QH, et al. **J Med Chem** 1989 Feb; 32(2):478–86

Augmenting effect of a nonmutagenic fraction in soy sauce on mutagenicity of 3-diazotyramine produced in the nitrite-treated sauce. Higashimoto M, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1284–92

Selective inhibition by 4,alpha-dimethyl-m-tyramine (H77/77) and 4-methyl-alpha-ethyl-m-tyramine (H75/12) of the monoamine oxidase within serotonergic and

noradrenergic neurons in the rat brain. Fagervall I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):143–7

Phenolic cyclization of epinephrine, metaproterenol, metaraminol, phenylephrine, and terbutaline with formaldehyde. Chafetz L, et al. **Pharm Res** 1987 Apr; 4(2):158–61

ANALYSIS

Analysis of commercially available cheeses for the migraine inducer tyramine by thin-layer chromatography and spectrophotometry. Evans CS, et al. **Analyst** 1988 Oct; 113(10):1605–6

A radioenzymatic assay for para-tyramine and para-octopamine. Van Huysse JW, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):50–60

DIAGNOSTIC USE

Synthesis and radioiodination of tyramine cellobiose for labeling monoclonal antibodies. Ali SA, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):557–61

Oral tyramine pressor test and the safety of monoamine oxidase inhibitor drugs: comparison of brofaromine and tranylcypromine in healthy subjects. Bieck PR, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):237–45

[Pressor response to tyramine infusion in hypertensive patients and normotensive subjects with or without parental hypertension] Sarti F, et al. **G Clin Med** 1988 Nov; 69(11):661–4 (Eng. Abstr.) (Ita)

METABOLISM

Tyramine conjugation test for prediction of treatment response in depressed patients. Hale AS, et al. **Lancet** 1989 Feb 4;1(8632):234–6

The release of 3H-noradrenaline by p- and m-tyramines and -octopamines, and the effect of deuterium substitution in alpha-position. Schönfeld CL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):433–40

PHARMACOLOGY

Determination and comparison of the pressor effect of tyramine during long-term moclobemide and tranylcypromine treatment in healthy volunteers. Berlin I, et al. **Clin Pharmacol Ther** 1989 Sep;46(3):344–51

Changes in sensitivity of rat heart to norepinephrine and isoproterenol during pre- and postnatal development and its relation to sympathetic innervation. Shigenobu K, et al. **Dev Pharmacol Ther** 1988;11(4):226–36

Electronic pupillometry in healthy controls. Response to sympathicomimetics. Antonaci F, et al. **Funct Neurol** 1989 Jan-Mar;4(1):91–103

Pre- and postsynaptic effects of p-tyramine and p-octopamine in the prostatic portion of the rat vas deferens. Celuch SM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):39–46

Catecholamine mediated actions of the veratrum alkaloids on the isovolumic canine heart. Blomquist TM, et al. **Proc West Pharmacol Soc** 1988;31:109–11

Enhanced pressor sensitivity to oral tyramine challenge following high dose selegiline treatment. Prasad A, et al. **Psychopharmacology (Berlin)** 1988;95(4):540–3

[Adrenergic regulation of the level of enkephalins in the myocardium] Maslov LN, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):26–9 (Eng. Abstr.) (Rus)

SECRETION

Release of some endogenous trace amines from rat striatal slices in the presence and absence of a monoamine oxidase inhibitor. Dyck LE. **Life Sci** 1989;44(17):1149–56

URINE

Tyramine conjugation and antidepressants [letter] Naylor GJ. **Lancet** 1989 Apr 22;1(8643):904

Biosynthesis and excretion of meta and para tyramine in the rat. Boulton AA, et al. **Life Sci** 1974 Jun 16;14(12):2497–506

Tyramine sulfate excretion may be a better predictor of antidepressant response than monoamine oxidase activity. Stewart JW, et al. **Psychiatry Res** 1988 Aug;25(2):195–201

TYROCIDINES see under **TYROTHRICIN**

TYROPANOATE see under **IODOBENZENES**

TYROSINASE see under **DIPHENOL OXIDASES**

TYROSINE

Inhibition of Na+-dependent phosphate transport by group-specific covalent reagents in rat kidney brush border membrane vesicles. Evidence for the involvement of tyrosine and sulfhydryl groups on the interior of the membrane. Pratt RD, et al. **Arch Biochem Biophys** 1989 Jan;268(1):9–19

Studies on the biotin-binding sites of avidin and streptavidin. A chemically induced dynamic nuclear polarization investigation of the status of tyrosine residues. Gitlin G, et al. **Biochem J** 1989 Apr 15;259(2):493–8

Resonance Raman spectroscopy of ribonucleotide reductase. Evidence for a deprotonated tyrosyl radical and photochemistry of the binuclear iron center. Backes G, et al. **Biochemistry** 1989 Feb 21;28(4):1923–9

Pulse radiolytic measurement of redox potentials: the tyrosine and tryptophan radicals. DeFelippis MR, et al. **Biochemistry** 1989 May 30;28(11):4847–53

Structure of a single amino acid mutant of aspartate carbamoyltransferase at 2.5-A resolution: implications for the cooperative mechanism. Gouaux JE, et al. **Biochemistry** 1989 Feb 21;28(4):1798–803

Tyrosine hydrogen-bonding and environmental effects in proteins probed by ultraviolet resonance Raman spectroscopy. Hildebrandt PG, et al. **Biochemistry** 1988 Jul 26;27(15):5426–33

Location and magnetic relaxation properties of the stable tyrosine radical in photosystem II. Innes JB, et al. **Biochemistry** 1989 Feb 7;28(3):1116–25

Structure and stability of gamma-crystallins: tryptophan, tyrosine, and cysteine accessibility. Mandal K, et al. **Biochemistry** 1988 Jun 14;27(12):4564–71

Structure of a hydroxyl radical induced cross-link of thymine and tyrosine. Margolis SA, et al. **Biochemistry** 1988 Aug 23;27(17):6353–9

Characteristics in tyrosine coordinations of four hemoglobins M probed by resonance Raman spectroscopy. Nagai M, et al. **Biochemistry** 1989 Mar 21;28(6):2418–22

The F1F0-ATPase of Escherichia coli. The substitution of alanine by tyrosine at position 25 in the c-subunit affects function but not assembly. Fimmel AL, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):299–304

Random tyrosine and glutamic acid-containing polymers are very powerful inhibitors of casein kinase-2. Meggio F, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):128–30

Characterization of the interleukin-1-induced tyrosine phosphorylation of a 41-kDa plasma membrane protein of the human tumor cell line K 562. Martin M, et al. **Eur J Biochem** 1989 Mar 15;180(2):343–50

Effect of site-specific mutagenesis of tyrosine-55, methionine-110 and histidine-217 in porcine kidney D-amino acid oxidase on its catalytic function. Watanabe F, et al. **FEBS Lett** 1988 Oct 10;238(2):269–72

The effect of oxygen, antioxidants, and superoxide radical on tyrosine phenoxyl radical dimerization. Hunter EP, et al. **Free Radic Biol Med** 1989;6(6):581–5

Stability and reactivation of tyrosine radicals from ribonucleotide reductase in tumor cells studied by ESR. Lassmann G, et al. **Free Radic Biol Med** 1989;6(1):9–14

Unpaired electron migration between aromatic and sulfur peptide units. Prütz WA, et al. **Free Radic Res Commun** 1986;2(1-2):69–75

Rectification of two Escherichia coli heat-stable enterotoxin allele sequences and lack of biological effect of changing the carboxy-terminal tyrosine to histidine. Guzman-Verduzco LM, et al. **Infect Immun** 1989 Feb; 57(2):645–8

Determination of the contributions of individual aromatic residues to the CD spectrum of IL-1 beta using site directed mutagenesis. Craig S, et al. **Int J Pept Protein Res** 1989 Apr;33(4):256–62

Chemical modifications of histidyl and tyrosyl residues of inorganic pyrophosphatase from Escherichia coli. Samejima T, et al. **J Biochem (Tokyo)** 1988 May; 103(5):766–72

An analog of lophotoxin reacts covalently with Tyr190 in the alpha-subunit of the nicotinic acetylcholine receptor. Abramson SN, et al. **J Biol Chem** 1989 Jul 25; 264(21):12666–72

Purification of yolk protein 2 of Drosophila melanogaster and identification of its site of tyrosine sulfation. Baeuerle PA, et al. **J Biol Chem** 1988 Oct 15;263(29):14925–9

The T cell antigen receptor zeta chain is tyrosine phosphorylated upon activation. Baniyash M, et al. **J Biol Chem** 1988 Dec 5;263(34):18225–30

2-[(4-Bromo-2,3-dioxobutyl)thio]-1,N6-ethenoadenosine 5'-diphosphate. A new fluorescent affinity label of a tyrosyl residue in the active site of rabbit muscle pyruvate kinase. DeCamp DL, et al. **J Biol Chem** 1989 May 15; 264(14):8430–41

Mapping of the active site tyrosine of eukaryotic DNA topoisomerase I. Eng WK, et al. **J Biol Chem** 1989 Aug 15;264(23):13373–6

Biosynthesis of bacterial glycogen. Use of site-directed mutagenesis to probe the role of tyrosine 114 in the catalytic mechanism of ADP-glucose synthetase from Escherichia coli. Kumar A, et al. **J Biol Chem** 1988 Oct 15;263(29):14634–9

Radical formation in the dimeric small subunit of ribonucleotide reductase requires only one tyrosine 122. Larsson A, et al. **J Biol Chem** 1988 Nov 25;263(33):17780–4

Studies of signal transduction in the respiratory burst-associated stimulation of fMet-Leu-Phe-induced tubulin tyrosinolation and phorbol 12-myristate 13-acetate-induced posttranslational incorporation of tyrosine into multiple proteins in activated neutrophils and HL-60 cells. Nath J, et al. **J Biol Chem** 1989 Jan 15; 264(2):848–55

Tyrosine phosphorylation of phospholipase C-II in vitro by the epidermal growth factor receptor. Nishibe S, et al. **J Biol Chem** 1989 Jun 25;264(18):10335–8

The myoglobin protein radical. Coupling of Tyr-103 to Tyr-151 in the H2O2-mediated cross-linking of sperm whale myoglobin. Tew D, et al. **J Biol Chem** 1988 Nov 25;263(33):17880–6

Cellular responses to Pyrularia thionin are mediated by Ca2+ influx and phospholipase A2 activation and are inhibited by thionin tyrosine iodination. Evans J, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5849–53

Tyrosine-specific protein phosphorylation is regulated by glycoprotein IIb-IIIa in platelets. Ferrell JE Jr, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2234–8

Disease tropism of c-erbB: effects of carboxyl-terminal tyrosine and internal mutations on tissue-specific transformation. Pelley RJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7164–8

Muscarinic agonists and phorbol esters increase tyrosine phosphorylation of a 40-kilodalton protein in hippocampal slices. Stratton KR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2498–501

ADMINISTRATION & DOSAGE

Increased neurotransmitter biosynthesis in phenylketonuria induced by phenylalanine restriction or by supplementation of unrestricted diet with large amounts of tyrosine. Lykkelund C, et al. **Eur J Pediatr** 1988 Dec;148(3):238–45

Prolactin stimulation by protein is mediated by amino acids in humans. Carlson HE. **J Clin Endocrinol Metab** 1989 Jul; 69(1):7–14

ANALOGS & DERIVATIVES

Thin-layer chromatography can resolve phosphotyrosine, phosphoserine, and phosphothreonine in a protein hydrolyzate. Neufeld E, et al. **Anal Biochem** 1989 Feb 15; 177(1):138–43

Antibodies for phosphotyrosine: analytical and preparative tool for tyrosyl-phosphorylated proteins. Wang JY. **Anal Biochem** 1988 Jul;172(1):1–7 (46 ref.)

Formation of tyrosine O-sulfate by mitochondria and chloroplasts of Euglena. Saidha T, et al. **Arch Biochem Biophys** 1989 Jul;272(1):237–44

Metabolism and excretion of 14C-tiropramide after single intravenous or peroral administration to the rat. Setnikar I, et al. **Arzneimittelforschung** 1989 Mar;39(3):328–34

Tiropramide and metabolites in blood and plasma after intravenous or peroral administration of 14C-tiropramide to the rat. Setnikar I, et al. **Arzneimittelforschung** 1988 Dec; 38(12):1815–9

Distribution of tiropramide and metabolites after single intravenous or peroral administration of 14C-tiropramide to the rat. Setnikar I, et al. **Arzneimittelforschung** 1989 May; 39(5):579–86

Tyrosine phosphorylation in human neutrophil. Gomez-Cambronero J, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1478–85

In the absence of antibody IgGsorb precipitates human placenta phosphotyrosine-containing proteins. Goren HJ, et al. **Biochem Biophys Res Commun** 1989 Feb 28; 159(1):332–6

Identification of a protein cross-reacting with anti-phosphotyrosine antibodies in yeast insoluble cytoplasmic matrices. Grandori R, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):887–96

Serine and tyrosine phosphorylation of 28- and 35-kDa proteins of human T lymphocytes stimulated by streptococcal M protein. Kotb M, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):803–10

Isolation and characterization of a bovine liver tyrosine-O-sulfate-binding protein--a putative receptor molecular for tyrosine-sulfated proteins? Liu MC, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):964–9

Tyrosine O-sulfate ester in proteoglycans. Rauch U, et al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):595–600

Two new fluorophore pairs, tyrosine-4'-aminophenylalanine and tyrosine-4'-dimethylaminophenylalanine, in the determination of molecular dimensions in peptides. Jankowski A, et al. **Biophys Chem** 1988 Aug;31(1-2):147–53

Mechanism of reversion of Rous sarcoma virus transformation by herbimycin A: reduction of total phosphotyrosine levels due to reduced kinase activity and increased turnover of p60v-src1. Uehara Y, et al. **Cancer Res** 1989 Feb 15;49(4):780–5

Levodopa and 3-O-methyldopa plasma levels in parkinsonian patients with stable and fluctuating motor response. Luquin MR, et al. **Clin Neuropharmacol** 1989 Feb; 12(1):46–54

The insulin-like effect of vanadate on lipolysis in rat adipocytes is not accompanied by an insulin-like effect on tyrosine phosphorylation. Mooney RA, et al. **Endocrinology** 1989 Jan;124(1):422–9

Characterization and partial purification of a high-molecular-mass, calmodulin-binding, tyrosyl-phosphorylated protein from lymphocyte plasma membranes. Kostka G. **Exp Cell Res** 1989 Mar;181(1):85–93

Inhibition of mushroom tyrosinase by 3-amino-L-tyrosine: molecular probing of the active site of the enzyme. Maddaluno JF, et al. **Experientia** 1988 Oct 15;44(10):885–7

Interleukin 3 and phorbol ester stimulate tyrosine phosphorylation of overlapping substrate proteins. Ferris DK, et al. **FEBS Lett** 1989 Mar 27;246(1-2):153–8

Presence of tyrosine-O-sulfate in sheep pituitary prolactin. Kohli R, et al. **FEBS Lett** 1988 Dec 19;242(1):139–43

Pyruvate kinase type M2 is phosphorylated at tyrosine residues in cells transformed by Rous sarcoma virus. Presek P, et al. **FEBS Lett** 1988 Dec 19;242(1):194–8

The effect of oxygen, antioxidents, and superoxide radical on tyrosine phenoxyl radical dimerization. Hunter EP, et al. **Free Radic Biol Med** 1989;6(6):581–5
Nitro–tyrosine as promoter of free radical damage in a DNA model system. Prütz WA. **Free Radic Res Commun** 1986; 2(1–2):77–83
Pharmacological properties of tiropramide, an antispasmodic drug. Takayanagi I, et al. **Gen Pharmacol** 1989;20(3):335–9
Nucleotidylation, not phosphorylation, is the major source of the phosphotyrosine detected in enteric bacteria. Foster R, et al. **J Bacteriol** 1989 Jan;171(1):272–9
Reversibility of the epidermal growth factor receptor self–phosphorylation reaction. Evidence for formation of a high energy phosphotyrosine bond. Hubler L, et al. **J Biol Chem** 1989 Jan 25;264(3):1558–64
Phosphotyrosyl–protein phosphatases. I. Separation of multiple forms from bovine brain and purification of the major form to near homogeneity. Jones SW, et al. **J Biol Chem** 1989 May 5;264(13):7747–53
Tyrphostins inhibit epidermal growth factor (EGF)–receptor tyrosine kinase activity in living cells and EGF–stimulated cell proliferation. Lyall RM, et al. **J Biol Chem** 1989 Aug 25;264(24):14503–9
Tyrosine phosphorylation of pp185 by insulin receptor kinase in a cell–free system. Tashiro–Hashimoto Y, et al. **J Biol Chem** 1989 Apr 25;264(12):6879–85
Heat shock induces protein tyrosine phosphorylation in cultured cells. Maher PA, et al. **J Cell Biol** 1989 Jun; 108(6):2029–35
Effects of vanadate on tyrosine phosphorylation and the pattern of glycosaminoglycan synthesis in rabbit chondrocytes in culture. Owada MK, et al. **J Cell Physiol** 1989 Mar;138(3):484–92
Arsonate–specific murine T cell clones. V. Antigen presentation by L cells transfected with normal and mutant class II genes. Norton FL, et al. **J Immunol** 1989 Jul 15; 143(2):446–51
CD15 monoclonal antibodies react with a phosphotyrosine–containing protein on the surface of human neutrophils. Skubitz KM, et al. **J Immunol** 1988 Dec 15;141(12):4318–23
Immunoaffinity purification of tyrosine–phosphorylated cellular proteins. Kanner SB, et al. **J Immunol Methods** 1989 Jun 2;120(1):115–24
2–O–alkyltyrosine derivatives of 1–deamino–arginine–vasopressin: highly specific and potent antidiuretic agonists. Lammek B, et al. **J Med Chem** 1989 Jan;32(1):244–7
Structure of tyrosyl–tRNA synthetase refined at 2.3 A resolution. Interaction of the enzyme with the tyrosyl adenylate intermediate. Brick P, et al. **J Mol Biol** 1989 Jul 5;208(1):83–98
Inhibition of monoamine oxidase within monoaminergic neurons in the rat brain by (E)–beta–fluoromethylene–m–tyrosine (MDL 72394). Fagervall I, et al. **J Neurochem** 1989 Feb;52(2):467–71
4–[18F]fluoro–L–m–tyrosine: an L–3,4–dihydroxyphenylalanine analog for probing presynaptic dopaminergic function with positron emission tomography. Melega WP, et al. **J Neurochem** 1989 Jul; 53(1):311–4
Developmental regulation of protein tyrosine phosphorylation in rat brain. Aubry M, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):473–9
Cerebral metabolism of L–[2–18F]fluorotyrosine, a new PET tracer of protein synthesis. Coenen HH, et al. **J Nucl Med** 1989 Aug;30(8):1367–72
Phosphotyrosine phosphatase activity prevents the detection of P210bcr/abl protein in mature cells in chronic myelogenous leukemia even by an immunoblotting technique. Shibata K, et al. **Leukemia** 1989 Sep;3(9):615–9
Phosphorylation of cellular proteins in Rous sarcoma virus–infected cells: analysis by use of anti–phosphotyrosine antibodies. Hamaguchi M, et al. **Mol Cell Biol** 1988 Aug; 8(8):3035–42
Novel tyrosine kinase identified by phosphotyrosine antibody screening of cDNA libraries. Kornbluth S, et al. **Mol Cell Biol** 1988 Dec;8(12):5541–4
Transformation–specific tyrosine phosphorylation of a novel cellular protein in chicken cells expressing oncogenic variants of the avian cellular src gene. Reynolds AB, et al. **Mol Cell Biol** 1989 Feb;9(2):629–38
Mode of antigen presentation required for triggering of T cell response: analysis by use of azobenzenearsonate–tyrosine derivatives as antigens and L cells transfected with I–Ak genes as antigen presenting cells. Saito S, et al. **Mol Immunol** 1988 Jun;25(6):569–75
The murine T–lymphocyte response to tyrosine–azobenzenearsonate. Characteristics of a low responder haplotype T–cell clone. Spragg J, et al. **Mol Immunol** 1988 Nov;25(11):1223–9
The effects of chronic treatment with amitriptyline and MDL 72394 on the control of 5–HT release in vivo. Sleight AJ, et al. **Neuropharmacology** 1989 May;28(5):477–80
Novel tyrosine phosphorylations accompany the activation of pp60c–src during chemical carcinogenesis. Kanner SB, et al. **Oncogene** 1989 Mar;4(3):295–300
Evidence that a phosphotyrosine–containing 120,000 Da protein from Rous sarcoma virus–infected cells is phosphorylated by pp60v–src. Lau AF. **Oncogene Res** 1989; 4(3):185–94
Tyrosine phosphorylation of the insulin receptor is not required for receptor internalization: studies in 2,4–dinitrophenol–treated cells. Backer JM, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3209–13
Identification of a developmentally regulated protein–tyrosine kinase by using anti–phosphotyrosine antibodies to screen a cDNA expression library. Pasquale EB, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5449–53
Characterization of an amyloid beta precursor protein that binds heparin and contains tyrosine sulfate. Schubert D, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2066–9
[Holter's ECG monitoring in esophagogastroduodenoscopy. Premedication with tiropramide. Preliminary notes] Cosentino F, et al. **Minerva Dietol Gastroenterol** 1989 Jan–Mar;35(1):31–4 (Eng. Abstr.) **(Ita)**
[Tiropramide hydrochloride in the premedication of diagnostic and therapeutic proctosigmoidocolonoscopy (endoscopic polypectomy) and the treatment of colonic diverticulosis] De Masi E. **Minerva Med** 1989 Jun; 80(6):587–90 (Eng. Abstr.) **(Ita)**

ANALYSIS

Hydrogen–1 nuclear magnetic resonance studies of staphylococcal nuclease variant H124L: pH dependence of histidines and tyrosines. Chinami M, et al. **Arch Biochem Biophys** 1989 Apr;270(1):126–36
Tyrosine and tyrosinate fluorescence of S–100b. A time–resolved nanosecond fluorescence study. The effect of pH, Ca(II), and Zn(II). Turner RJ, et al. **Biochem Cell Biol** 1989 Apr–May;67(4–5):179–86
Effects of the beta 2–adrenoceptor agonist clenbuterol on tyrosine and tryptophan in plasma and brain of the rat. Edwards DJ, et al. **Biochem Pharmacol** 1989 Sep 15; 38(18):2957–65
Differential localisation of tyrosinated, detyrosinated, and acetylated alpha–tubulins in neurites and growth cones of dorsal root ganglion neurons. Robson SJ, et al. **Cell Motil Cytoskeleton** 1989;12(4):273–82
Investigations into lactoperoxidase–catalysed bromination of tyrosine and thyroglobulin. Buchberger W. **J Chromatogr** 1988 Nov 18;432:57–63
Tyrosylation and purification of peptides for radioiodination. Gether U, et al. **J Chromatogr** 1988 Aug 26;447(2):341–9
Automated high–performance liquid chromatographic method for the determination of iodotyrosines and iodothyronines. Koostra PR, et al. **J Chromatogr** 1988 Dec 23;458:175–83
Role of brain tyrosine availability in mediating differences in ethanol sensitivity in long–sleep and short–sleep mice. French TA, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):556–64
Replacement of insulin receptor tyrosine residues 1162 and 1163 does not alter the mitogenic effect of the hormone. Debant A, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8032–6
Acute and chronic effects of the trichothecene mycotoxin T–2 on rat brain regional concentrations of serotonin, tryptophan, and tyrosine. Weekley LB, et al. **Vet Hum Toxicol** 1989 Jun;31(3):221–4
[Spectroscopy of intermolecular interactions of a tyrosine chromophore. III. Classification of the state of tyrosine residues in proteins based on their electron spectra] Krapunov SN, et al. **Biofizika** 1989 May–Jun;34(3):357–63 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Terminal phenylalanine and tyrosine biosynthesis of Microtetraspora glauca. Speth AR, et al. **Biol Chem Hoppe Seyler** 1989 Jun;370(6):591–9
The biochemical basis for growth inhibition by L–phenylalanine in Neisseria gonorrhoeae. Bhatnagar RK, et al. **Mol Microbiol** 1989 Mar;3(3):429–35

BLOOD

Outcome of therapy of hereditary tyrosinemia. Halvorsen S, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug; 30(4):425–8 (9 ref.)
Early diagnosis of tyrosinemia type II. Heidemann DG, et al. **Am J Ophthalmol** 1989 May 15;107(5):559–60
Determination of branched–chain amino acids and tyrosine in serum of patients with various hepatic diseases, and its clinical usefulness. Azuma Y, et al. **Clin Chem** 1989 Jul; 35(7):1399–403
Tyrosinaemia type II (Richner–Hanhart syndrome)—report of two cases treated with etretinate. Fraser NG, et al. **Clin Exp Dermatol** 1987 Nov;12(6):440–3
Hereditary tyrosinemia: unusual imaging distribution of gallium–67 citrate. Malinoff HL, et al. **Clin Nucl Med** 1989 Mar;14(3):229
Hereditary tyrosinemia type I (chronic form): pathologic findings in the liver. Dehner LP, et al. **Hum Pathol** 1989 Feb;20(2):149–58
Transient neonatal tyrosinaemia. Rice DN, et al. **J Inherited Metab Dis** 1989;12(1):13–22
Daily profiles of plasma phenylalanine and tyrosine in patients with osteogenic sarcoma during treatment with high–dose methotrexate–citrovorum rescue. Hilton MA, et al. **Med Pediatr Oncol** 1989;17(4):265–70
Tyrosination–detyrosination of tubulin and microtubules during the development of chick erythrocytes. Beltramo DM, et al. **Mol Cell Biochem** 1989 Aug 15;89(1):47–56
Evolution of red blood cell membrane transport and plasma level of L–tyrosine and L–tryptophan in depressed treated patients according to clinical improvement. Bovier P, et al. **Neuropsychobiology** 1988;19(3):125–34
Individuality and stability in the transport of precursors of monoamines across the erythrocyte membrane of mentally normal subjects. Schulz P, et al. **Neuropsychobiology** 1988; 19(1):12–6
Clinical picture and problems of keratoplasty in Richner–Hanhart syndrome (tyrosinemia type II). Sayar RB, et al. **Ophthalmologica** 1988;197(1):1–6
Tyrosine platelet levels in normal subjects [letter] D'Andrea G, et al. **Thromb Res** 1989 Jan 1;53(1):85–7
[2 cases of type II tyrosinosis (Richner–Hanhart syndrome)] Roussat B, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul; 88(6–7):751–7 (Eng. Abstr.) **(Fre)**
[Plasma amino acid in patients with alcoholic liver diseases—with special reference to the reduce of tyrosine] Ishii M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul; 85(7):1381–9 (Eng. Abstr.) **(Jpn)**
[A method of detecting modifications of tyrosine residues in serum albumin] Borisenko SN, et al. **Lab Delo** 1988; (5):53–4 (Eng. Abstr.) **(Rus)**
[Reference levels for phenylalanine and tyrosine in discs impregnated with blood during analysis by HPLC] Cortés Castell E, et al. **An Esp Pediatr** 1988 May;28(5):405–8 (Eng. Abstr.) **(Spa)**
[Sepsis, as the presenting form of hereditary tyrosinemia type I] Iglesias Niubo J, et al. **An Esp Pediatr** 1988 Sep; 29(3):235–8 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Increased concentrations of tyrosine and phenylalanine in the cerebrospinal fluid as a possible reflection of related changes of the brain tissue in newborns with intra–uterine growth retardation. Ratzmann GW, et al. **Biomed Biochim Acta** 1988;47(12):1037–41

GENETICS

Rho–dependent transcription termination in the tyrT operon of Escherichia coli. Madden KA, et al. **Gene** 1989; 76(2):271–80

ISOLATION & PURIFICATION

Complete separation of tyrosinated, detyrosinated, and nontyrosinatable brain tubulin subpopulations using affinity chromatography. Paturle L, et al. **Biochemistry** 1989 Mar 21;28(6):2698–704

METABOLISM

Effects of cytoskeleton–disrupting agents on tyrosine transport into cultured bovine adrenal chromaffin cells. Morita K, et al. **Biochem Int** 1989 May;18(5):991–8
Tyrosine sulphation is not required for microvillar expression of intestinal aminopeptidase N. Danielsen EM. **Biochem J** 1988 Aug 15;254(1):219–22
Comparison of the role of tyrosine residues in human IgG and rabbit IgG in binding of complement subcomponent C1q. McCall MN, et al. **Biochem J** 1989 Feb 1; 257(3):845–51
Guanine nucleotides induce tyrosine phosphorylation and activation of the respiratory burst in neutrophils. Nasmith PE, et al. **Biochem J** 1989 Feb 1;257(3):893–7
Staphylococcal nuclease active–site amino acids: pH dependence of tyrosines and arginines by 13C NMR and correlation with kinetic studies. Grissom CB, et al. **Biochemistry** 1989 Mar 7;28(5):2116–24
Complete separation of tyrosinated, detyrosinated, and nontyrosinatable brain tubulin subpopulations using affinity chromatography. Paturle L, et al. **Biochemistry** 1989 Mar 21;28(6):2698–704
Effects of spermine and magnesium ions on the aminoacylation of yeast tRNA(Tyr). Plohl M, et al. **Biochimie** 1988 May;70(5):637–44
Tyrosine availability and brain noradrenaline synthesis in the fetus: control by maternal tyrosine ingestion. Garabal MV, et al. **Brain Res** 1988 Aug 9;457(2):330–7
The anxiogenic beta–carboline FG–7142 increases in vivo and in vitro tyrosine hydroxylation in the prefrontal cortex. Knorr AM, et al. **Brain Res** 1989 Aug 28;495(2):355–61
Utilization of 14C–tyrosine in brain and peripheral tissues of developmentally protein malnourished rats. Miller M, et al. **Brain Res Bull** 1978 Nov–Dec;3(6):681–6
Tyrosine phosphorylation of a Mr 63,000 protein induced by an endogenous mitogen in human colon carcinoma cells, but not in normal colonocytes. Marian B, et al. **Cancer Res** 1989 Aug 1;49(15):4231–6
Visualization of detyrosination along single microtubules reveals novel mechanisms of assembly during cytoskeletal duplication in trypanosomes. Sherwin T, et al. **Cell** 1989 Apr 21;57(2):211–21
Protein tyrosine sulfation in guinea–pig uterus: estradiol and progesterone effects. Thiard MC, et al. **Cell Mol Biol** 1989; 35(2):199–205
Tubulin tyrosination in Crithidia: modifying enzymes and modification states of tubulin. Chang SL, et al. **Cell Motil Cytoskeleton** 1988;10(3):400–9
Egf binding to its receptor triggers a rapid tyrosine phosphorylation of the erbB–2 protein in the mammary tumor cell line SK–BR–3. King CR, et al. **EMBO J** 1988 Jun;7(6):1647–51

Isolation and structural analysis of a peptide containing the novel tyrosyl-glucose linkage in glycogenin. Smythe C, et al. **EMBO J** 1988 Sep;7(9):2681–6

Relationship between the tyrosination state of tubulin and the activities of tubulin:tyrosine ligase and tubulin carboxypeptidase in rat muscle during development. Alonso AC, et al. **Eur J Biochem** 1988 Nov 15; 177(3):517–22

Generation of O2- and tyrosine cation-mediated chemiluminescence during the fertilization of sea urchin eggs. Takahashi A, et al. **FEBS Lett** 1989 Mar 27; 246(1–2):117–9

L-tyrosine is the precursor of PQQ biosynthesis in Hyphomicrobium X. van Kleef MA, et al. **FEBS Lett** 1988 Sep 12;237(1–2):91–7

Effect of chemical modification of histidine and tyrosine residues in toxic shock syndrome toxin 1 on the serologic and mitogenic activities of the toxin. Kokan-Moore NP, et al. **Infect Immun** 1989 Jul;57(7):1901–5

DNA sequence of the gene (tyrP) encoding the tyrosine-specific transport system of Escherichia coli. Wookey PJ, et al. **J Bacteriol** 1988 Oct;170(10):4946–9

Tyrosine phosphorylation of the insulin receptor during insulin-stimulated internalization in rat hepatoma cells. Backer JM, et al. **J Biol Chem** 1989 Jan 25;264(3):1694–701

Binding of D-phenylalanine and D-tyrosine to carboxypeptidase A. Christianson DW, et al. **J Biol Chem** 1989 Aug 5;264(22):12849–53

Evidence for the formation of the 4a-carbinolamine during the tyrosine-dependent oxidation of tetrahydrobiopterin by rat liver phenylalanine hydroxylase. Davis MD, et al. **J Biol Chem** 1989 May 25;264(15):8585–96

Studies on the mechanism of the iodination of tyrosine by lactoperoxidase. Huber RE, et al. **J Biol Chem** 1989 Jan 25;264(3):1381–6

Stimulation of factor-dependent myeloid cell lines with interleukin 3 induces tyrosine phosphorylation of several cellular substrates. Isfort R, et al. **J Biol Chem** 1988 Dec 15;263(35):19203–9

Nonenzymatic phosphorylation of tyrosine and serine by ATP is catalyzed by manganese but not magnesium. Schieven G, et al. **J Biol Chem** 1988 Oct 25;263(30):15590–3

Comparative spectral analysis of mammalian, fungal, and bacterial catalases. Resonance Raman evidence for iron-tyrosinate coordination. Sharma KD, et al. **J Biol Chem** 1989 Aug 5;264(22):12772–9

Comparative study of the tyrosine phosphorylation of proteins in Swiss 3T3 fibroblasts stimulated by a variety of mitogenic agents. Pasquale EB, et al. **J Cell Physiol** 1988 Oct;137(1):146–56

Autoantibodies to the insulin receptor (B-10) can stimulate tyrosine phosphorylation of the beta-subunit of the insulin receptor and a 185,000 molecular weight protein in rat hepatoma cells. Takayama-Hasumi S, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):787–95

Tyrosine phosphorylation in the postnatal rat brain: a developmental, immunohistochemical study. Tillotson ML, et al. **J Comp Neurol** 1989 Apr 1;282(1):133–41

A monoclonal antibody with IL-3-like activity blocks IL-3 binding and stimulates tyrosine phosphorylation. Schreurs J, et al. **J Immunol** 1989 Feb 1;142(3):819–25

Structure-function studies of interferons-alpha: amino acid substitutions at the conserved residue tyrosine 123 in human interferon-alpha 1. McInnes B, et al. **J Interferon Res** 1989 Jun;9(3):305–14

Tyrosination state of tubulin and the activity of tubulin:tyrosine ligase and tubulin carboxypeptidase in the developing retina of the chick. Arregui C, et al. **J Neurochem** 1989 Jun;52(6):1708–13

Na+ dependence of tyrosine transport across the synaptosomal membrane reflects changes in the morphology of synaptosomes. Diez-Guerra FJ, et al. **J Neurochem** 1989 May;52(5):1366–74

Effects of chronic nicotine pretreatment on (+)-amphetamine and nicotine-induced synthesis and release of [3H]dopamine from [3H]tyrosine in rat nucleus accumbens. Fung YK. **J Pharm Pharmacol** 1989 Jan; 41(1):66–8

Comparative analysis of IL-2 and IL-3 induced tyrosine phosphorylation. Ferris DK, et al. **Lymphokine Res** 1989 Fall;8(3):215–24

Phosphorylation of tyrosine enhances its electron transfer capability: a model of redox modulation as oncogene expression? Peterson DA, et al. **Med Hypotheses** 1988 Aug; 26(4):271–3

Infusion of dipeptides as nutritional substrates for glutamine, tyrosine, and branched-chain amino acids in patients with acute pancreatitis. Steininger R, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):78–81

Related proteins are phosphorylated at tyrosine in response to mitogenic stimuli and at meiosis. Cooper JA. **Mol Cell Biol** 1989 Jul;9(7):3143–7

Heparin-binding growth factor 1 stimulates tyrosine phosphorylation in NIH 3T3 cells. Friesel R, et al. **Mol Cell Biol** 1989 May;9(5):1857–65

Effect of vitamin B-6 nutrition on the levels of dopamine, dopamine metabolites, dopa decarboxylase activity, tyrosine, and GABA in the developing rat corpus striatum. Guilarte TR. **Neurochem Res** 1989 Jun;14(6):571–8

Ligand-independent tyrosine phosphorylation of EGF receptor and the erbB-2/neu proto-oncogene product is induced by hyperosmotic shock. King CR, et al. **Oncogene** 1989 Jan;4(1):13–8

Growth plate: roentgenologic findings in a case of tyrosinosis. Morrison S, et al. **Pediatrics** 1989 Apr;83(4):599–600

Identification and subcellular localization of proteins that are rapidly phosphorylated in tyrosine in response to colony-stimulating factor 1. Sengupta A, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8062–6

Evidence for the involvement of tyrosine-69 in the control of stereospecificity of porcine pancreatic phospholipase A2. Kuipers OP, et al. **Protein Eng** 1989 Mar;2(6):467–71

[3H]tyrosine binding to plasma membrane preparation of rat corpora lutea. Gao EW, et al. **Sci Sin [B]** 1988 Dec; 31(12):1454–66

Some factors affecting [3H]tyrosine binding to plasma membrane preparation of rat corpora lutea in vitro. Gao EW, et al. **Sci Sin [B]** 1988 Dec;31(12):1467–73

Differential changes in rat brain tryptophan, serotonin and tyrosine levels following acute aflatoxin B1 treatment. Weekley LB, et al. **Toxicol Lett** 1989 May;47(2):173–7

Liver transplantation for hereditary tyrosinemia in the presence of hepatocellular carcinoma. Esquivel CO, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2445–6

Tyrosine-rich crystalloids in pleomorphic adenoma: SEM findings and partial biochemical characterization. Valente PT, et al. **Ultrastruct Pathol** 1988 Nov-Dec;12(6):613–20

[[3H]tyrosine binding to the corpus luteal cells of the rat in vitro] Gao EW, et al. **Sheng Li Hsueh Pao** 1988 Aug; 40(4):406–9 (Eng. Abstr.) (Chi)

[The content of tyrosine in rat luteal cell and the changes caused by hCG, cAMP and progesterone] Zhang Q, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):70–5 (Eng. Abstr.) (Chi)

[Plasma-cerebrospinal fluid distribution of phenylalanine and tyrosine in children] Ratzmann GW, et al. **Padiatr Grenzgeb** 1988;27(3):211–20 (39 ref.) (Eng. Abstr.) (Ger)

[Effect of carbidopa and dimethyl sulfoxide on the permeability of the hemato-encephalic barrier for 14C-tyrosine and 14C-DOPA in rats] Borisenko SA. **Biull Eksp Biol Med** 1988 Dec;106(12):686–8 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Potential radiopharmaceuticals for the detection of ocular melanoma. Part III. A study with 14C and 11C labelled tyrosine and dihydroxyphenylalanine. van Langevelde A, et al. **Eur J Nucl Med** 1988;14(7–8):382–7

A protein-free diet changes synaptosomal membrane fluidity and tyrosine and glutamate transport. Felipo V, et al. **Neurochem Res** 1989 May;14(5):431–5

PHARMACOLOGY

Modulation of the actions of tyrosine by alpha 2-adrenoceptor blockade. Al-Damluji S, et al. **Br J Pharmacol** 1988 Oct;95(2):405–12

N,N-diallyl-tyrosyl substitution confers antagonist properties on the kappa-selective opioid peptide [D-Pro10]dynorphin A(1–11). Gairin JE, et al. **Br J Pharmacol** 1988 Dec; 95(4):1023–30

Tyrosine: effects on catecholamine release. Acworth IN, et al. **Brain Res Bull** 1988 Sep;21(3):473–7

Relationship between dietary tyrosine and plasma cholesterol in the rat. Jacques H, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1023–7

Cardiovascular effects of L-tyrosine: influence of blockade of tyrosine metabolism. Ekholm S, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):209–17

The tyrosine-dependent oxidation of tetrahydropterins by lysolecithin-activated rat liver phenylalanine hydroxylase. Davis MD, et al. **J Biol Chem** 1988 Nov 25;263(33):17312–6

Thyroid hormones inhibit platelet function and myosin light chain kinase. Mamiya S, et al. **J Biol Chem** 1989 May 25; 264(15):8575–9

Dopamine release in rat striatum: physiological coupling to tyrosine supply. During MJ, et al. **J Neurochem** 1989 May; 52(5):1449–54

A comparison of the antioxidant requirements of proteins with those of synthetic polymers suggests an antioxidant function for clusters of aromatic and bivalent sulphur-containing amino acid residues. Grant D, et al. **Med Hypotheses** 1989 Apr;28(4):245–53 (86 ref.)

[Effect of tyrosine on progesterone and hCG production by human trophoblast cells in vitro] Yang XS, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):209–14 (Eng. Abstr.) (Chi)

[Phenotypic correction of the immune response by L-tyrosine in mice reacting oppositely to sheep erythrocytes] Lebedev VV, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):583–5 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Roles of tyrosine residue of enkephalin in opiate receptor recognition. Shimohigashi Y, et al. **Biochem Int** 1989 Jun; 18(6):1107–10

Irreversible inhibition by tyrosine-directed alkylating reagents of muscarinic cholinergic receptors in membranes from rat forebrain and heart. Wang JX, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3787–90

Comparative studies on the accessibility and functional importance of tyrosine residues in cytochrome P-450 isozymes. Jänig GR, et al. **Biomed Biochim Acta** 1988; 47(7):565–79

Inhibition of tyrosine sulfation in the trans-Golgi retards the transport of a constitutively secreted protein to the cell surface. Friederich E, et al. **J Cell Biol** 1988 Nov; 107(5):1655–67

Positive regulation of melanin pigmentation by two key substrates of the melanogenic pathway, L-tyrosine and L-dopa. Slominski A, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):287–96

L-tyrosine, L-dopa, and tyrosinase as positive regulators of the subcellular apparatus of melanogenesis in Bomirski Ab amelanotic melanoma cells. Slominski A, et al. **Pigment Cell Res** 1989 Mar-Apr;2(2):109–16

[Effect of twenty-one kinds of amino acids on progesterone production of rat luteal cells induced by hCG] Zhang Q, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):299–302 (Eng. Abstr.) (Chi)

THERAPEUTIC USE

Alpha 2-adrenergic receptor sensitivity in depressed patients: relation between 3H-yohimbine binding to platelet membranes and clonidine-induced hypotension. Wolfe N, et al. **Biol Psychiatry** 1989 Feb 15;25(4):382–92

Treatment with tyrosine, a neurotransmitter precursor, reduces environmental stress in humans. Banderet LE, et al. **Brain Res Bull** 1989 Apr;22(4):759–62

The beneficial effect of ketoacids on serum phosphate and parathyroid hormone in patients with chronic uremia. Schaefer K, et al. **Clin Nephrol** 1988 Aug;30(2):93–6

Treatment of narcolepsy with L-tyrosine. Mouret J, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1458–9

Dietary tyrosine as an aid to stress resistance among troops. Salter CA. **Milit Med** 1989 Mar;154(3):144–6

[L-tyrosine: a long term treatment of Parkinson's disease] Lemoine P, et al. **C R Acad Sci [III]** 1989;309(2):43–7 (Eng. Abstr.) (Fre)

URINE

High-performance liquid chromatographic determination of m-tyrosine and o-tyrosine in rat urine. Ishimitsu S, et al. **J Chromatogr** 1989 Apr 14;489(2):377–83

TYROSINE AMINOTRANSFERASE

Structural and immunochemical properties of rat liver tyrosine aminotransferase. Dietrich JB, et al. **Biochimie** 1988 May;70(5):673–9

ANTAGONISTS & INHIBITORS

Persulfide generated from L-cysteine inactivates tyrosine aminotransferase. Requirement for a protein with cysteine oxidase activity and gamma-cystathionase. Hargrove JL. **J Biol Chem** 1988 Nov 25;263(33):17262–9

Experimental diabetes increases the formation of sulfane by transsulfuration and inactivation of tyrosine aminotransferase in cytosols from rat liver. Hargrove JL, et al. **Metabolism** 1989 Jul;38(7):666–72

BIOSYNTHESIS

The increase in hepatic tyrosine aminotransferase activity by ethanol administration involves an acceleration of enzyme synthesis. Donohue TM Jr, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1471–7

Comparison of the effects of dexamethasone 21-acetate and corticosterone on glucocorticoid cytosol receptor depletion and induction of TAT in rat liver. Alexandrová M, et al. **Endocrinol Exp (Bratisl)** 1988 Sep;22(3):171–9

Insulin antagonism of dexamethasone induction of tyrosine aminotransferase in cultured fetal hepatocytes. A correlation between enzyme activity, synthesis, level of messenger RNA and transcription. Cake MH, et al. **Eur J Biochem** 1989 Jun 15;182(2):429–35

Down-regulation of glucocorticoid receptor and its relationship to the induction of rat liver tyrosine aminotransferase. Yang YL, et al. **J Steroid Biochem** 1989 Jan;32(1A):99–104

GENETICS

Differential modulation of gene induction by glucocorticoids and antiglucocorticoids in rat hepatoma tissue culture cells. Simons SS Jr, et al. **Cancer Res** 1989 Apr 15;49(8 Suppl):2244s–2252s

Increased turnover of the messenger RNA encoding tyrosine aminotransferase can account for the desensitization and de-induction of tyrosine aminotransferase by 8-bromo-cyclic AMP treatment and removal. Smith JD, et al. **EMBO J** 1988 Dec 1;7(12):3711–6

A tyrosine aminotransferase glucocorticoid response element also mediates androgen enhancement of gene expression. Denison SH, et al. **Endocrinology** 1989 Feb;124(2):1091–3

Positive and negative regulation of a transfected chimeric tyrosine aminotransferase gene: effect of copy number. Grange T, et al. **Exp Cell Res** 1989 Jan;180(1):220–33

A liver-specific nuclear protein that binds to the distal promoter element of the rat tyrosine aminotransferase gene. Lobanenkov VV, et al. **FEBS Lett** 1989 Jan 30; 243(2):318–22

Hormonal regulation of TSE1-repressed genes: evidence for multiple genetic controls in extinction. Thayer MJ, et al. **Mol Cell Biol** 1989 Jul;9(7):2837–46

A steroid response element can function in the absence of a distal promoter. Bradshaw MS, et al. **Mol Endocrinol** 1988 Dec;2(12):1286–93

A BAM HI RFLP at the human tyrosine aminotransferase (TAT) gene locus at 16q. Wullich B, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3331

Coordinate regulation of two genes encoding gluconeogenic enzymes by the trans-dominant locus Tse-1. Lem J, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7302–6

METABOLISM

Effect of nutritional factors and cortisol on tyrosine aminotransferase activity in liver of brook trout, Salvelinus fontinalis Mitchill. Whiting SJ, et al. **Comp Biochem Physiol [B]** 1977;58(2):189–93

Temperature compensation in an ultradian rhythm of tyrosine aminotransferase activity in Euglena gracilis Klebs. Balzer I, et al. **Experientia** 1989 May 15;45(5):476–7

The structure of tyrosine aminotransferase. Evidence for domains involved in catalysis and enzyme turnover. Hargrove JL, et al. **J Biol Chem** 1989 Jan 5;264(1):45–53

Daily rhythms in tyrosine transaminase and other hepatic enzymes that metabolize amino acids: mechanisms and possible consequences. Wurtman RJ. **Life Sci** 1974 Sep 1; 15(5):827–47 (59 ref.)

[The fermentation diagnosis and histologic studies in blood and the liver of surviving rats after 1 and 2 administrations of a median toxic dose of parathion methyl. 2. Tyrosine aminotransferase and pathologico-morphological findings in the liver] Sonnenschein P, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):9–15 (Eng. Abstr.) **(Ger)**

[Development and significance of estrogen-induced increase in the activity of several liver enzymes] Németh S. **Z Gesamte Inn Med** 1988 Aug 1;43(15):418–20 (Eng. Abstr.) **(Ger)**

TYROSINE HYDROXYLASE

ANALYSIS

Esthesioneuroblastoma: a nasal catecholamine-producing tumor of neural crest origin. Demonstration of tyrosine hydroxylase-immunoreactive tumor cells. Takahashi H, et al. **Acta Neuropathol (Berl)** 1988;76(5):522–7

Neuropeptide Y-containing neurons in the rat striatum: ultrastructure and cellular relations with tyrosine hydroxylase- containing terminals and with astrocytes. Aoki C, et al. **Brain Res** 1988 Sep 6;459(2):205–25

Tyrosine hydroxylase-immunoreactive somata within the primate subfornical organ: species specificity. Kordower JH, et al. **Brain Res** 1988 Oct 4;461(2):221–9

Tyrosine hydroxylase-containing neurons in the supraoptic and paraventricular nuclei of the adult human. Li YW, et al. **Brain Res** 1988 Sep 27;461(1):75–86

The origin of tyrosine hydroxylase-immunoreactive fibers in the regions of the nucleus basalis magnocellularis of the rat. Martinez-Murillo R, et al. **Brain Res** 1988 Jun 7; 451(1-2):227–36

Postnatal development of tyrosine-hydroxylase-immunoreactive cells in the rat retina. Morphology and distribution. Martin-Martinelli E, et al. **Dev Neurosci** 1989;11(1):11–25

Differential distribution of biogenic amines in the hypoglossal nucleus of the rat. Aldes LD, et al. **Exp Brain Res** 1988; 73(2):305–14

Reinnervation of dopamine neurons by regenerating serotonin axons in the rat medial zona incerta. A combined radioautographic and immunocytochemical ultrastructural study. Frankfurt M, et al. **Exp Brain Res** 1988;72(3):473–80

Localization of adrenergic and neuropeptide tyrosine-containing nerves in the mammalian liver. Burt AD, et al. **Hepatology** 1989 Jun;9(6):839–45

Localization of bombesin-, neuropeptide Y-, enkephalin- and tyrosine hydroxylase-like immunoreactivities in rat coeliac-superior mesenteric ganglion. Järvi R. **Histochemistry** 1989;92(3):231–6

Adrenal and vascular tyrosine hydroxylase activity in Goldblatt hypertension. Rauch AL, et al. **Hypertension** 1988 Oct;12(4):434–42

Neurochemical development of the striatum in a precocial (guinea pig) and an altricial (rat) species. Kalaria RN, et al. **Int J Dev Neurosci** 1988;6(2):161–6

Neuropeptide Y-, tyrosine hydroxylase- and vasoactive intestinal polypeptide-immunoreactive nerves in bone and surrounding tissues. Bjurholm A, et al. **J Auton Nerv Syst** 1988 Dec;25(2-3):119–25

Two types of tyrosine hydroxylase-immunoreactive amacrine cell in the rhesus monkey retina. Mariani AP, et al. **J Comp Neurol** 1988 Oct 1;276(1):81–91

Ultrastructural localization of tyrosine hydroxylase-like immunoreactivity in the rat hippocampal formation. Milner TA, et al. **J Comp Neurol** 1989 Mar 15;281(3):479–95

A monoclonal antibody directed against quail tyrosine hydroxylase: description and use in immunocytochemical studies on differentiating neural crest cells. Fauquet M, et al. **J Histochem Cytochem** 1989 Aug;37(8):1197–205

Subcellular distribution of tyrosine hydroxylase in some catecholaminergic rat brain areas determined by a quantitative immunoblot assay. Gillon JY, et al. **J Neurochem** 1989 Mar;52(3):677–83

Direct transfer into nitrocellulose and quantitative radioautographic anatomical determination of brain tyrosine hydroxylase protein concentration. Weissmann D, et al. **J Neurochem** 1989 Sep;53(3):793–9

Synaptic connectivity of tyrosine hydroxylase immunoreactive nerve terminals in the striatum of normal, heterozygous and homozygous weaver mutant mice. Triarhou LC, et al. **J Neurocytol** 1988 Apr;17(2):221–32

Reinstatement of synaptic connectivity in the striatum of weaver mutant mice following transplantation of ventral mesencephalic anlagen. Triarhou LC, et al. **J Neurocytol** 1988 Apr;17(2):233–43

Selective expression of high-affinity nerve growth factor receptors on tyrosine hydroxylase-containing neuron-like cells in neural crest cultures. Bernd P. **J Neurosci** 1988 Oct;8(10):3549–55

Quantification of the mass of tyrosine monooxygenase in the median eminence and superior cervical ganglion. Porter JC, et al. **Methods Enzymol** 1989;168:371–85

Immunohistochemical demonstration of tyrosine hydroxylase (TH)-positive but dopamine beta-hydroxylase (DBH)-negative neuron-like cells in the pineal gland of golden hamsters. Jin KL, et al. **Neurosci Lett** 1988 Oct 31;93(1):28–31

Co-localization of tyrosine hydroxylase (TH)- and serotonin (5-HT)-immunoreactive innervation in the rat pituitary gland. Saland LC, et al. **Neurosci Lett** 1988 Nov 22; 94(1-2):39–45

Topographic immunocytochemical mapping of monoamine oxidase-A, monoamine oxidase-B and tyrosine hydroxylase in human post mortem brain stem. Konradi C, et al. **Neuroscience** 1988 Sep;26(3):791–802

Antiserum raised against residues 159–168 of the guanine nucleotide-binding protein Gi3-alpha reacts with ependymal cells and some neurons in the rat brain containing cholecystokinin- or cholecystokinin- and tyrosine 3-hydroxylase-like immunoreactivities. Cortés R, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9351–5

[Electron microscopy study of relations between prolongations of dopaminergic amacrine cells and blood vessels in the rat retina] Favard C, et al. **C R Acad Sci [III]** 1988;307(6):363–8 (Eng. Abstr.) **(Fre)**

[The occurrence of tyrosine hydroxylase-immunoreactive neurons in a parietal lobe ganglioglioma] Wakabayashi K, et al. **No To Shinkei** 1989 Feb;41(2):165–70 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Catecholamine depletion produces irrepressible saccadic eye movements in normal humans. Tychsen L, et al. **Ann Neurol** 1989 May;25(5):444–9

Perinatal anti-androgen treatment and genotype affect the mesotelencephalic dopamine system and behavior in mice. Vadász C, et al. **Horm Behav** 1988 Dec;22(4):528–39

Resonance Raman studies on the blue-green-colored bovine adrenal tyrosine 3-monooxygenase (tyrosine hydroxylase). Evidence that the feedback inhibitors adrenaline and noradrenaline are coordinated to iron. Andersson KK, et al. **J Biol Chem** 1988 Dec 15;263(35):18621–6

The pH dependence of binding of inhibitors to bovine adrenal tyrosine hydroxylase [published erratum appears in J Biol Chem 1989 Mar 25;264(9):5313] Fitzpatrick PF. **J Biol Chem** 1988 Nov 5;263(31):16058–62

Absence of spare autoreceptors regulating dopamine agonist inhibition of tyrosine hydroxylation in slices of rat striatum. Bohmaker K, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):97–103

BIOSYNTHESIS

Influence of hypothyroidism on the ontogenic development of tyrosine hydroxylase induction in the adrenal glands of the rat. Chami N, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):79–85

Continuous amphetamine administration induces tyrosine hydroxylase immunoreactive patches in the adult rat neostriatum. Ryan LJ, et al. **Brain Res Bull** 1988 Jul; 21(1):133–7

Postmitotic, postmigrational expression of tyrosine hydroxylase in olfactory bulb dopaminergic neurons. McLean JH, et al. **J Neurosci** 1988 Oct;8(10):3658–69

Combined in situ hybridization and immunocytochemistry in the assay of pharmacological effects on tyrosine hydroxylase mRNA concentration. Pasinetti GM, et al. **Pharmacol Res** 1989 May-Jun;21(3):299–311

Effect of vasopressin on the induction of adrenal tyrosine hydroxylase and phenylethanolamine N-methyltransferase. Regunathan S, et al. **Regul Pept** 1988 Nov;23(2):217–26

GENETICS

Characterization of rat and human tyrosine hydroxylase genes: functional expression of both promoters in neuronal and non-neuronal cell types. Coker GT 3d, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1341–7

Population frequencies of tyrosine hydroxylase restriction fragment length polymorphisms in bipolar affective disorder. Todd RD, et al. **Biol Psychiatry** 1989 Mar 1; 25(5):626–30

Transcriptional control of adrenal catecholamine and opiate peptide transmitter genes. La Gamma EF, et al. **Brain Res Mol Brain Res** 1989 Jan;5(1):17–22

Chronic lesions differentially decrease tyrosine hydroxylase messenger RNA in dopaminergic neurons of the substantia nigra. Pasinetti GM, et al. **Brain Res Mol Brain Res** 1989 May;5(3):203–9

Differences in the effects of membrane depolarization on levels of preprosomatostatin mRNA and tyrosine hydroxylase mRNA in rat sympathetic neurons in vivo and in culture. Spiegel K, et al. **Brain Res Mol Brain Res** 1989 Jan;5(1):23–9

Expression of four types of human tyrosine hydroxylase in COS cells. Kobayashi K, et al. **FEBS Lett** 1988 Oct 10; 238(2):431–4

Tyrosine hydroxylase maps to the short arm of chromosome 11 proximal to the insulin and HRAS1 loci. Xue F, et al. **Genomics** 1988 May;2(4):288–93

Structure of the human tyrosine hydroxylase gene: alternative splicing from a single gene accounts for generation of four mRNA types. Kobayashi K, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):907–12

Differential steroid hormone and neural influences on peptide mRNA levels in CRH cells of the paraventricular nucleus: a hybridization histochemical study in the rat. Swanson LW, et al. **J Comp Neurol** 1989 Jul 22;285(4):413–35

Regulation of tyrosine hydroxylase mRNA in catecholaminergic cells of embryonic rat: analysis by in situ hybridization. Jonakait GM, et al. **J Histochem Cytochem** 1989 Jan;37(1):1–5

Synthesis of L-3,4-dihydroxyphenylalanine by tyrosine hydroxylase cDNA-transfected C6 cells: application for intracerebral grafting. Uchida K, et al. **J Neurochem** 1989 Sep;53(3):728–32

Tyrosine hydroxylase and levodopa responsive dystonia. Fletcher NA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):112–4

Isolation and structural characterization of the bovine tyrosine hydroxylase gene. D'Mello SR, et al. **J Neurosci Res** 1989 May;23(1):31–40

Further RFLPs at the human tyrosine hydroxylase locus. Körner J, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9078

DraI and PstI RFLPs in the tyrosine hydroxylase (TH) and insulin gene (INS) region of chromosome 11. Sten-Linder M, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5873

DraI and ScaI RFLPs at human tyrosine hydroxylase (TH) gene locus. Tinklenberg KJ, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10948

Retroviral transfer of a human tyrosine hydroxylase cDNA in various cell lines: regulated release of dopamine in mouse anterior pituitary AtT-20 cells. Horellou P, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7233–7

Rapid increase in enzyme and peptide mRNA in sympathetic ganglia after electrical stimulation in humans. Schalling M, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4302–5

Coexistence and gene expression of phenylethanolamine N-methyltransferase, tyrosine hydroxylase, and neuropeptide tyrosine in the rat and bovine adrenal gland: effects of reserpine. Schalling M, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8306–10

Access to a messenger RNA sequence or its protein product is not limited by tissue or species specificity. Sarkar G, et al. **Science** 1989 Apr 21;244(4902):331–4

IMMUNOLOGY

A monoclonal antibody to aromatic amino acid hydroxylases. Identification of the epitope. Cotton RG, et al. **Biochem J** 1988 Oct 1;255(1):193–6

Alteration in the histochemical presence of tyrosine hydroxylase and CGRP-immunoreactivities in the eye following chronic sympathetic or sensory denervation. Unger WG, et al. **Curr Eye Res** 1988 Aug;7(8):761–9

Isolation, characterization, and application of monoclonal antibodies to rat tyrosine hydroxylase. Kwan SW, et al. **J Neurosci Res** 1989 Jul;23(3):316–25

ISOLATION & PURIFICATION

[Biochemistry of Parkinson's disease] Nagatsu T. **Seikagaku** 1988 May;60(5):358–66 (16 ref.) **(Jpn)**

METABOLISM

Nerve fibers showing immunoreactivities for thyrosine hydroxylase and dopamine-beta-hydroxylase re-appear in the guinea pig uvea after sympathectomy. Lehtosalo J, et al. **Acta Ophthalmol (Copenh)** 1988 Aug;66(4):419–26

Acute regulation of tyrosine hydroxylase by nerve activity and by neurotransmitters via phosphorylation. Zigmond RE, et al. **Annu Rev Neurosci** 1989;12:415–61 (306 ref.)

The metal requirement of rat tyrosine hydroxylase. Fitzpatrick PF. **Biochem Biophys Res Commun** 1989 May 30;161(1):211–5

Reduction of enzyme activity of tyrosine hydroxylase and aromatic L-aminoacid decarboxylase in clonal pheochromocytoma PC12h cells by carcinogenic heterocyclic amines. Naoi M, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):494–9

Changes in the cofactor binding domain of bovine striatal tyrosine hydroxylase at physiological pH upon cAMP-dependent phosphorylation mapped with tetrahydrobiopterin analogues. Bailey SW, et al. **Biochemistry** 1989 Jan 24;28(2):494–504

Changes of norepinephrine levels, tyrosine hydroxylase and dopamine-beta-hydroxylase activities after castration and testosterone treatment in vas deferens of adult rats. Bustamante D, et al. **Biol Reprod** 1989 Mar;40(3):541–8

Putative interaction of presynaptic dopamine and serotonin receptors modulating synaptosomal tyrosine hydroxylase activity in the nucleus accumbens of rats. Hetey L. **Biomed Biochim Acta** 1988;47(12):1089–92

Catecholaminergic innervation of the spinal cord in the North American opossum, Didelphis virginiana. Pindzola RR, et al. **Brain Behav Evol** 1988;32(5):281–92

Cytoplasmic loop of beta-adrenergic receptors: synaptic and intracellular localization and relation to catecholaminergic neurons in the nuclei of the solitary tracts. Aoki C, et al. **Brain Res** 1989 Jul 31;493(2):331–47

Tyrosine hydroxylase phosphorylation in rat brain striatal synaptosomes. Colby KA, et al. **Brain Res** 1989 Jan 23; 478(1):103–11

Spatial relationship of the striatonigral and mesostriatal pathways: double-label immunocytochemistry for DARPP-32 and tyrosine hydroxylase. Gustafson EL, et al. **Brain Res** 1989 Jul 10;491(2):297–306

A new group of tyrosine hydroxylase-immunoreactive neurons in the cat thalamus. Kitahama K, et al. **Brain Res** 1989 Jan 23;478(1):156–60

Organizational role of testosterone on the biochemical and morphological development of the hypogastric ganglion. Melvin JE, et al. **Brain Res** 1989 Apr 17;485(1):1–10

Hypogastric ganglion perinatal development: evidence for androgen specificity via androgen receptors. Melvin JE, et al. **Brain Res** 1989 Apr 17;485(1):11–9

Difference in recovery patterns of striatal dopamine content, tyrosine hydroxylase activity and total biopterin content after 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) administration: a comparison of young and older mice. Niahi K, et al. **Brain Res** 1989 Jun 5;489(1):157–62

Evidence that adenosine A2 and dopamine autoreceptors antagonistically regulate tyrosine hydroxylase activity in rat striatal synaptosomes. Onali P, et al. **Brain Res** 1988 Jul 26;456(2):302–9

Direct synaptic contacts of catecholamine fibers on neuropeptide Y-containing neurons of the rat cerebral cortex. Tsuchiyama M, et al. **Brain Res** 1989 Aug 7; 494(1):168–71

MPTP produces a pattern of nigrostriatal degeneration which coincides with the mosaic organization of the caudate nucleus. Turner BH, et al. **Brain Res** 1988 Nov 8; 473(1):60–4

Developmental regulation of tyrosine hydroxylase in the mediobasal hypothalamus. Friedman WJ, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):177–85

The early development of major projections to the dorsal striatum in the North American opossum. Martin GF, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):161–70

Distribution and morphology of tyrosine hydroxylase-immunoreactive neurons in the developing mouse retina. Wulle I, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):59–72

Changes in expression of tyrosine hydroxylase immunoreactivity in human SMS-KCNR neuroblastoma following retinoic acid or phorbol ester-induced differentiation. Pennypacker KR, et al. **Brain Res Mol Brain Res** 1989 Jun;5(4):251–8

Differentiation of noradrenergic traits in the principal neurons and small intensely fluorescent cells of the parasympathetic sphenopalatine ganglion of the rat. Leblanc GG, et al. **Dev Biol** 1989 Jan;131(1):44–59

Tissue effects on the expression of serotonin, tyrosine hydroxylase and GABA in cultures of neurogenic cells from the neuraxis and branchial arches. Mackey HM, et al. **Development** 1988 Oct;104(2):205–17

Tyrosine hydroxylase activity in sympathetic nervous system of rats with streptozocin-induced diabetes. Schmidt RE, et al. **Diabetes** 1989 Aug;38(8):959–68

Tyrosine hydroxylase in the stalk-median eminence and posterior pituitary is inactivated only during the plateau phase of the preovulatory prolactin surge. Arbogast LA, et al. **Endocrinology** 1989 Aug;125(2):667–74

Hormonal control of tyrosine hydroxylase in the median eminence: demonstration of a central role for the pituitary gland. Gonzalez HA, et al. **Endocrinology** 1989 May; 124(5):2122–7

Morphology of tyrosine hydroxylase-immunoreactive neurons in the human cerebral cortex. Hornung JP, et al. **Exp Brain Res** 1989;76(1):12–20

Cholecystokinin and tyrosine hydroxylase messenger RNAs in neurons of rat mesencephalon: peptide/monoamine coexistence studies using in situ hybridization combined with immunocytochemistry. Seroogy K, et al. **Exp Brain Res** 1989;74(1):149–62

Survival and function of aggregate cultures of rat fetal dopamine neurons grafted in a rat model of Parkinson's disease. Strecker RE, et al. **Exp Brain Res** 1989; 76(2):315–22

Identification of protein phosphatase 2A as the major tyrosine hydroxylase phosphatase in adrenal medulla and corpus striatum: evidence from the effects of okadaic acid. Haavik J, et al. **FEBS Lett** 1989 Jul 17;251(1-2):36–42

Regulation of human tyrosine hydroxylase activity. Effects of cyclic AMP-dependent protein kinase, calmodulin-dependent protein kinase II and polyanion. Okuno S, et al. **FEBS Lett** 1989 Aug 14;253(1-2):52–4

Immunohistochemical demonstration of neurotensin and tyrosine hydroxylase in iris nerves of the rabbit eye. Hernandez DE, et al. **Histochemistry** 1989;92(3):261–4

Immunocytochemical localization of L-glutamate decarboxylase and catecholamine-synthesizing enzymes in the retroperitoneal sympathetic tissue of the newborn rat. Ahonen M, et al. **J Auton Nerv Syst** 1989 Mar;26(2):89–96

Ciliary neurotrophic factor induces cholinergic differentiation of rat sympathetic neurons in culture. Saadat S, et al. **J Cell Biol** 1989 May;108(5):1807–16

Catecholamine innervation of the human cerebral cortex as revealed by comparative immunohistochemistry of tyrosine hydroxylase and dopamine-beta-hydroxylase. Gaspar P, et al. **J Comp Neurol** 1989 Jan 8;279(2):249–71

Distribution of monoamine-synthesizing neurons in the human medulla oblongata. Halliday GM, et al. **J Comp Neurol** 1988 Jul 15;273(3):301–17

Ventral mesencephalic neurons containing both cholecystokinin- and tyrosine hydroxylase-like immunoreactivities project to forebrain regions. Seroogy KB, et al. **J Comp Neurol** 1989 Jan 15;279(3):397–414

Synthesis of catecholamines in the hypothalamus and brainstem in one-kidney, one clip and two-kidney, one clip hypertension in rabbits. Rauch AL, et al. **J Hypertens** 1988 Jul;6(7):537–41

In vitro phosphorylation of bovine adrenal chromaffin cell tyrosine hydroxylase by endogenous protein kinases. George RJ, et al. **J Neurochem** 1989 Jan;52(1):274–84

Long-term effects of RU24722 on tyrosine hydroxylase of the rat brain. Labatut R, et al. **J Neurochem** 1988 Nov; 51(5):1367–74

Antibodies to a synthetic peptide corresponding to a Ser-40-containing segment of tyrosine hydroxylase: activation and immunohistochemical localization of tyrosine hydroxylase. Lee KY, et al. **J Neurochem** 1989 Oct;53(4):1238–44

Dopamine autoreceptors modulate the phosphorylation of tyrosine hydroxylase in rat striatal slices. Salah RS, et al. **J Neurochem** 1989 May;52(5):1517–22

Tyrosine hydroxylase content of residual striatal dopamine nerve terminals following 6-hydroxydopamine administration: a flow cytometric study. Wolf ME, et al. **J Neurochem** 1989 Sep;53(3):879–85

Presynaptic transmitters and depolarizing influences regulate development of the substantia nigra in culture. Friedman WJ, et al. **J Neurosci** 1988 Oct;8(10):3616–23

Secretin and vasoactive intestinal peptide activate tyrosine hydroxylase in sympathetic nerve endings. Schwarzschild MA, et al. **J Neurosci** 1989 Jan;9(1):160–6

Double antigen localization of two catecholamine enzymes and GABA in amacrine cells of the rat retina in semi-thin sections. Simon A, et al. **J Neurosci Methods** 1989 Apr; 27(3):181–9

Tyrosine hydroxylase and serotonin containing cells in embryonic rat rhombencephalon: a whole-mount immunocytochemical study. König N, et al. **J Neurosci Res** 1988;20(2):212–23

Effect of sodium dodecyl sulfate on the kinetic properties and molecular weight of rat striatal tyrosine hydroxylase. Kuczenski R. **Life Sci** 1974 Jun 16;14(12):2379–84

Regulation of tryptophan and tyrosine hydroxylase. Lovenberg W, et al. **Life Sci** 1974 Jun 16;14(12):2337–53 (55 ref.)

Veratridine-induced phosphorylation and activation of tyrosine hydroxylase, and synthesis of catecholamines in cultured bovine adrenal medullary cells. Uezono Y, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):653–9

Mass and activity of tyrosine hydroxylase in tuberoinfundibular dopaminergic neurons of the aged brain. Control by prolactin and ovarian hormones. Gonzalez HA, et al. **Neuroendocrinology** 1988 Dec;48(6):663–7

Mass and in situ molar activity of tyrosine hydroxylase in the median eminence. Effect of thyroidectomy and thyroid hormone replacement. Wang PS, et al. **Neuroendocrinology** 1989 Jun;49(6):659–63

Central regulation of adrenal tyrosine hydroxylase: interaction between dopamine and GABA systems. Gabor R, et al. **Neuropharmacology** 1989 May;28(5):521–7

Reproductive hormones control striatal tyrosine hydroxylase activity in the male rat. Abreu P, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):213–7

Ontogeny of tyrosine hydroxylase-positive but dopamine beta-hydroxylase-negative neuron-like cells in the pineal gland of golden hamsters. Jin KL, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):41–5

Abnormal expression of tyrosine hydroxylase-like immunoreactivity in intraocular transplants of rat caudate nucleus. Mahalik TJ, et al. **Neurosci Lett** 1989 Jan 30; 96(3):253–8

Comparative topography of dopamine- and tyrosine hydroxylase-immunoreactive neurons in the rat arcuate nucleus. Okamura H, et al. **Neurosci Lett** 1988 Dec 19; 95(1-3):347–53

Involvement of adenylate cyclase inhibition in dopamine autoreceptor regulation of tyrosine hydroxylase in rat nucleus accumbens. Onali P, et al. **Neurosci Lett** 1989 Jul 17;102(1):91–6

Tyrosine hydroxylase-like immunoreactive neurons in the striatum of the rat. Tashiro Y, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):6–10

Evidence for the existence of a population of arcuate neurons costoring choline acetyltransferase and tyrosine hydroxylase immunoreactivities in the male rat. Tinner B, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):44–9

Dopaminergic dorsal raphe neurons in cats and monkeys are sensitive to the toxic effects of MPTP. Unguez GA, et al. **Neurosci Lett** 1988 Nov 22;94(1-2):218–23

Tyrosine hydroxylase-immunoreactive intrinsic neurons in the Auerbach's and Meissner's plexuses of humans. Wakabayashi K, et al. **Neurosci Lett** 1989 Jan 30; 96(3):259–63

MPTP-induced ventral mesencephalic cell loss in the cat. Williams JL, et al. **Neurosci Lett** 1989 Jul 3;101(3):258–62

Morphometrical evidence for a complex organization of tyrosine hydroxylase-, enkephalin- and DARPP-32-like immunoreactive patches and their codistribution at three rostrocaudal levels in the rat neostriatum. Agnati LF, et al. **Neuroscience** 1988 Dec;27(3):785–97

Phosphorylation of tyrosine hydroxylase in protein kinase C-deficient PC12 cells. Cahill AL, et al. **Neuroscience** 1989; 30(3):811–8

Tyrosine hydroxylase-like and dopamine beta-hydroxylase-like immunoreactivity in the gustatory zone of the nucleus of the solitary tract in the hamster: light- and electron-microscopic studies. Davis BJ, et al. **Neuroscience** 1988 Dec;27(3):949–64

cis-unsaturated fatty acids stimulate catecholamine secretion, tyrosine hydroxylase and protein kinase C in adrenal medullary cells. Koda Y, et al. **Neuroscience** 1989; 29(2):495–502

The colocalization of cholecystokinin and tyrosine hydroxylase mRNAs in mesencephalic dopaminergic neurons in the rat brain examined by in situ hybridization. Savasta M, et al. **Neuroscience** 1989;29(2):363–9

Activation of ganglionic tyrosine hydroxylase by peptides of the secretin-glucagon family: structure-function studies. Schwarzschild MA, et al. **Neuroscience** 1989;31(1):159–67

Ontogenesis of tyrosine hydroxylase-immunopositive structures in the rat hypothalamus. An atlas of neuronal cell bodies. Ugrumov MV, et al. **Neuroscience** 1989; 29(1):135–56

Ontogenesis of tyrosine hydroxylase-immunopositive structures in the rat hypothalamus. Fiber pathways and terminal fields. Ugrumov MV, et al. **Neuroscience** 1989; 29(1):157–66

Receptor-mediated activation of tyrosine hydroxylase by corticotropin-releasing factor in striatal synaptosomes. Olianas MC, et al. **Pharmacol Res Commun** 1988 Dec; 20(12):1097–8

Molecular cloning of cDNA coding for brain-specific 14-3-3 protein, a protein kinase-dependent activator of tyrosine and tryptophan hydroxylases. Ichimura T, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7084–8

Transplant improves hemiparkinsonian syndrome in nonhuman primate: intracerebral injection, rotometry, tyrosine hydroxylase immunohistochemistry. Dubach M, et al. **Prog Brain Res** 1988;78:491–6

Human ventral mesencephalic xenografts to the catecholamine-depleted striata of athymic rats: ultrastructure and immunocytochemistry. Mahalik TJ, et al. **Synapse** 1989;4(1):19–29

Direct demonstration of interactions between substance P immunoreactive terminals and tyrosine hydroxylase immunoreactive neurons in the substantia nigra of the rat: an ultrastructural study. Mahalik TJ. **Synapse** 1988; 2(5):508–15

[Hydrocortisone modification during intrauterine development of the activity of brain tyrosine hydroxylase in adult white rats] Dygalo NN, et al. **Ontogenez** 1988 May-Jun;19(3):319–22 (Eng. Abstr.) **(Rus)**

[Regulation of tyrosine hydroxylase activity in the rat hypothalamus with gamma-aminobutyric acid] Tovmasian AKh, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):38–44 (Eng. Abstr.) **(Rus)**

[Brain tyrosine hydroxylase activity in behavior-selected silver foxes] Dygalo NN, et al. **Zh Evol Biokhim Fiziol** 1988 Jul-Aug;24(4):503–8 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effects of maternal phenylalanine or tyrosine hydroxylase inhibition on postnatal maturation of catecholamine and amino acid metabolism in rats. Sato T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):56–62

PHYSIOLOGY

GAD-like and TH-like immunoreactivity in ground squirrel retina. Lugo-Garcia N, et al. **P R Health Sci J** 1988 Aug; 7(2):178–80

TYROSINE PHENOL-LYASE see under **LYASES**

TYROSINE PROTEIN KINASE see **PROTEIN-TYROSINE KINASE**

TYROSINE SPECIFIC PROTEIN KINASE see **PROTEIN-TYROSINE KINASE**

TYROSYL T RNA SYNTHETASE see under **AMINO ACYL T RNA SYNTHETASES**

TYROTHRICIN

ADMINISTRATION & DOSAGE

Salivary levels of gramicidin after use of a tyrothricin-containing gargle/mouth-wash and tyrothricin

lozenges. Matula C, et al. **Int J Clin Pharmacol Res** 1988; 8(4):259–61

ANALYSIS

Structure of tyrocidine micelles in isotropic aqueous solution. Paradies HH. **J Pharm Sci** 1989 Mar;78(3):230–4

TY1 TRANSPOSON see **DNA INSERTION ELEMENTS**

T3 RECEPTORS see **RECEPTORS, THYROID HORMONE**

T4 RECEPTORS see **RECEPTORS, THYROID HORMONE**

U1 SMALL NUCLEAR RNA see **RNA, SMALL NUCLEAR**

UBIQUINOL-CYTOCHROME C REDUCTASE

Subunit arrangement in beef heart complex III. González-Halphen D, et al. **Biochemistry** 1988 Sep 6; 27(18):7021–31

ANALYSIS

Cloning and sequence analysis of a cDNA encoding the Rieske iron–sulfur protein of rat mitochondrial cytochrome bc1 complex. Nishikimi M, et al.
Biochem Biophys Res Commun 1989 Feb 28;159(1):19–25

The Rhodospirillum rubrum cytochrome bc1 complex: peptide composition, prosthetic group content and quinone binding. Kriauciunas A, et al. **Biochim Biophys Acta** 1989 Aug 17;976(1):70–6

Circular dichroic spectroscopy of membrane haemoproteins. The molecular determinants of the dichroic properties of the b cytochromes in various ubiquinol:cytochrome c reductases. Degli Esposti M, et al. **Eur J Biochem** 1989 Jun 1;182(1):27–36

Effect of papain digestion on polypeptide subunits and electron–transfer pathways in mitochondrial b–c1 complex. Lorusso M, et al. **Eur J Biochem** 1989 Feb 15;179(3):535–40

ANTAGONISTS & INHIBITORS

Molecular basis for resistance to myxothiazol, mucidin (strobilurin A), and stigmatellin. Cytochrome b inhibitors acting at the center o of the mitochondrial ubiquinol–cytochrome c reductase in Saccharomyces cerevisiae. di Rago JP, et al. **J Biol Chem** 1989 Aug 25; 264(24):14543–8

A ubiquinone derivative that inhibits mitochondrial cytochrome b–c1 complex but not chloroplast cytochrome b6–f complex activity. Gu LQ, et al. **J Biol Chem** 1989 Mar 15;264(8):4506–12

The nature of the inhibition of 4,7–dioxobenzothiazole derivatives on mitochondrial ubiquinol–cytochrome c reductase. Yang FD, et al. **J Biol Chem** 1989 Jan 15; 264(2):891–8

BLOOD

Myxothiazol resistance in human mitochondria. Parker WD Jr, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):133–8

DEFICIENCY

Human mitochondrial respiratory chain deficiencies. Morgan–Hughes JA, et al. **Aust Paediatr J** 1988;24 Suppl 1:55–7 (28 ref.)

Fatal lactic acidosis in infancy with a defect of complex III of the respiratory chain. Birch–Machin MA, et al.
Pediatr Res 1989 May;25(5):553–9

GENETICS

The effect of deletion of the genes encoding the 40 kDa subunit II or the 17 kDa subunit VI on the steady–state kinetics of yeast ubiquinol–cytochrome–c oxidoreductase. Schoppink PJ, et al. **Biochim Biophys Acta** 1989 May 8; 974(2):192–201

An unusual gene cluster for the cytochrome bc1 complex in Bradyrhizobium japonicum and its requirement for effective root nodule symbiosis. Thöny–Meyer L, et al. **Cell** 1989 May 19;57(4):683–97

Inactivation of the gene encoding the 14–kDa subunit VII of yeast ubiquinol. Cytochrome c oxidoreductase and analysis of the resulting mutant. Schoppink PJ, et al.
Eur J Biochem 1989 May 1;181(2):475–83

Assembly of the mitochondrial membrane system. Analysis of structural mutants of the yeast coenzyme QH2–cytochrome c reductase complex. Crivellone MD, et al. **J Biol Chem** 1988 Oct 5;263(28):14323–33

Complementary DNA encoding core protein II of human mitochondrial cytochrome bc1 complex. Substantial diversity in deduced primary structure from its yeast counterpart. Hosokawa Y, et al. **J Biol Chem** 1989 Aug 15;264(23):13483–8

Identification and characterization of a new gene (CBP3) required for the expression of yeast coenzyme QH2–cytochrome c reductase. Wu M, et al.
J Biol Chem 1989 Jul 5;264(19):11122–30

ISOLATION & PURIFICATION

EXAFS studies of the isolated bovine heart Rieske [2Fe–2S]1+(1+,2+) cluster. Powers L, et al.
Biochim Biophys Acta 1989 Jul 13;975(2):293–8

The pathway of the quinol/quinone transhydrogenation reaction in ubiquinol: cytochrome–c reductase of Neurospora mitochondria. Zweck A, et al.
Eur J Biochem 1989 Jul 15;183(1):199–203

METABOLISM

Diffusional effects in the steady state kinetics of ubiquinol cytochrome c reductase in bovine heart submitochondrial particles. Fato R, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1145–53

Isolation of a single nuclear gene encoding human ubiquinone–binding protein in complex III of mitochondrial respiratory chain. Suzuki H, et al.
Biochem Biophys Res Commun 1989 May 30;161(1):371–8

Role of specific lysine residues in the reaction of Rhodobacter sphaeroides cytochrome c2 with the cytochrome bc1 complex. Hall J, et al. **Biochemistry** 1989 Mar 21; 28(6):2568–71

The nature and magnitude of the charge–separation reactions of ubiquinol cytochrome c2 oxidoreductase. Robertson DE, et al. **Biochim Biophys Acta** 1988 Oct 5;935(3):273–91

Impairment of the respiratory chain in the b–c1 region as early functional event during Fe2+/ascorbate induced peroxidation in rat liver mitochondria. Trümper L, et al. **Biomed Biochim Acta** 1988;47(12):933–9

An atypical heme–binding structure of cytochrome c1 of Euglena gracilis mitochondrial complex III. Mukai K, et al. **Eur J Biochem** 1989 Jan 2;178(3):649–56

The C–terminal half of the 11–kDa subunit VIII is not necessary for the enzymic activity of yeast ubiquinol:cytochrome–c oxidoreductase. Schoppink PJ, et al. **Eur J Biochem** 1989 May 15;181(3):681–7

Enzymatic properties of ubiquinol:cytochrome c2 oxidoreductase in situ in Rhodopseudomonas palustris membranes. Takamiya K. **J Biochem (Tokyo)** 1988 May; 103(5):755–8

Electron transfer through center o of the cytochrome b–c1 complex of yeast mitochondria involves subunit VII, the ubiquinone–binding protein. Japa S, et al. **J Biol Chem** 1989 Aug 25;264(24):13994–7

Spatial organization of redox active centers in the bovine heart ubiquinol–cytochrome c oxidoreductase. Ohnishi T, et al. **J Biol Chem** 1989 Jan 15;264(2):735–44

Thermodynamic and spectroscopic characteristics of the cytochrome bc1 complex. Role of quinone in the behavior of cytochrome b562. Salerno JC, et al. **J Biol Chem** 1989 Sep 15;264(26):15398–403

UBIQUINONE

[Ubiquinone (Q). Distribution, regulation of biosynthesis and methods of isolation] Donchenko GV, et al.
Ukr Biokhim Zh 1988 Sep–Oct;60(5):104–19 (100 ref.) (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Pharmacokinetics of coenzyme Q10 in recovery of acute sensorineural hearing loss due to hypoxia. Sato K.
Acta Otolaryngol Suppl (Stockh) 1988;458:95–102

Myocardial infarction in rats: effects of metabolic and pharmacologic interventions. Zimmer HG, et al.
Basic Res Cardiol 1989 May–Jun;84(3):332–43

Significance of biological parameters of human blood levels of CoQ10. Komorowski J, et al. **Biofactors** 1988 Jan; 1(1):67–9

A superior analysis of coenzyme Q10 in blood of humans, rabbits and rats for research. Muratsu K, et al.
Biofactors 1988 Jul;1(2):157–9

A modified determination of coenzyme Q10 in human blood and CoQ10 blood levels in diverse patients with allergies. Ye CQ, et al. **Biofactors** 1988 Dec;1(4):303–6

Plasma and tissue concentrations of coenzyme Q10 in the rat after intravenous administration by a microsphere delivery system or in a new type of solution. Alessandri MG, et al. **Int J Tissue React** 1988;10(2):99–102

Skin penetration of CoQ10 in the rat. Giovannini L, et al. **Int J Tissue React** 1988;10(2):103–5

Plasma and tissue concentrations of coenzyme Q10 in the rat after its oral administration. Scalori V, et al.
Int J Tissue React 1988;10(2):95–7

A ubiquinone derivative that inhibits mitochondrial cytochrome b–c1 complex but not chloroplast cytochrome b6–f complex activity. Gu LQ, et al. **J Biol Chem** 1989 Mar 15;264(8):4506–12

Effect of coenzyme Q10 on hemodynamic response to ocular timolol. Takahashi N, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):462–8

Structure and function of the mitochondrial bc1 complex. A mutational analysis of the yeast Rieske iron–sulfur protein. Gatti DL, et al. **J Mol Biol** 1989 Jan 20; 205(2):421–35

Effective and safe therapy with coenzyme Q10 for cardiomyopathy. Langsjoen PH, et al. **Klin Wochenschr** 1988 Jul 1;66(13):583–90

Coenzyme Q10 and key enzyme activities in papillary muscle related to left ventricle function in mitral valve disease. Karlsson J, et al. **Mol Cell Biochem** 1988 Nov;84(1):59–64

Changes in the levels of endogenous antioxidants in the liver of mice with experimental endotoxemia and the protective effects of the antioxidants. Sugino K, et al. **Surgery** 1989 Feb;105(2 Pt 1):200–6

[Synthesis and biochemical actions of idebenone and related compounds. Ubiquinone and related compounds. XL] Morimoto H. **Naturwissenschaften** 1989 May;76(5):200–5 (16 ref.) (Eng. Abstr.) **(Ger)**

[Effects of coenzyme Q10 on the contractility and fibrillation threshold of isolated rabbit heart during ischemia and reperfusion] Caldarera CM, et al. **Cardiologia** 1988 Nov; 33(11):1083–8 (Eng. Abstr.) **(Ita)**

[Effects of coenzyme Q10 on physical exercise tolerance and cardiac performance in normal untrained subjects] Cinquegrana G, et al. **Clin Ter** 1987 Oct 15;123(1):15–20 (Eng. Abstr.) **(Ita)**

[Early use of ubidecarenone in patients with cardiopathies without signs of decompensation. Metabolic and polygraphic evaluation] Dragagna G, et al.
Minerva Cardioangiol 1988 Jun;36(6):311–7 (Eng. Abstr.) **(Ita)**

[Efficacy of ubidecarenone in the treatment of patients with c. disc insufficiency] Topi PL, et al.
Minerva Cardioangiol 1989 May;37(5):255–8 (Eng. Abstr.) **(Ita)**

[The chronic effect of coenzyme Q10 in dilated cardiomyopathy: echocardiographic assessment] Nakanishi M, et al. **Kokyu To Junkan** 1988 Jun;36(6):653–60 (Eng. Abstr.) **(Jpn)**

[The protective action of coenzyme Q10 on the cerebral metabolic change during hypoxic hypoxia in rabbits] Kobayashi Y. **Masui** 1988 Aug;37(8):961–8 (Eng. Abstr.) **(Jpn)**

[Experimental studies on mechanisms and prevention of radiation pneumonitis] Hashimura T, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1989 Mar 25; 49(3):335–43 (Eng. Abstr.) **(Jpn)**

[Pathophysiological mechanism of ischemic acute renal failure: protective effect of coenzyme Q10, Ca channel blocker, superoxide dismutase and protease inhibitor against ischemic acute renal failure] Higuchi C.
Nippon Jinzo Gakkai Shi 1989 Jan;31(1):15–24 (Eng. Abstr.) **(Jpn)**

[The action of a homologous series of ubiquinols on lipid peroxidation in brain mitochondrial and synaptosomal membranes] Kagan VE, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):420–2 (Eng. Abstr.) **(Rus)**

ANALYSIS

Conditions for quantitation of dolichyl phosphate, dolichol, ubiquinone and cholesterol by HPLC. Elmberger PG, et al. **Biomed Chromatogr** 1989 Jan;3(1):20–8

Polyisoprenoid, cholesterol and ubiquinone levels in human hepatocellular carcinomas. Eggens I, et al.
Br J Exp Pathol 1989 Feb;70(1):83–92

Ubiquinone analyses in fish tissues and in some marine invertebrates. Farbu T, et al.
Comp Biochem Physiol [B] 1979;63(3):395–7

Determination of reduced and total ubiquinones in biological materials by liquid chromatography with electrochemical detection. Okamoto T, et al. **J Chromatogr** 1988 Aug 19; 430(1):11–9

Cellular fatty acid compositions and isoprenoid quinone contents of 23 Legionella species. Lambert MA, et al.
J Clin Microbiol 1989 Mar;27(3):465–73

Regional distribution of ubiquinones and tocopherols in the mouse brain: lowest content of ubiquinols in the substantia nigra. Fariello RG, et al. **Neuropharmacology** 1988 Oct; 27(10):1077–80

Quantification of ubiquinone output in bile after interruption of enterohepatic recirculation. Pronzato MA, et al.
Pathologica 1988 Mar–Apr;80(1066):201–5

Biochemical analysis in the yeast genus Candida. Montrocher R, et al. **Yeast** 1989 Apr;5 Spec No:S385–6

[Identification of Legionella by gas phase chromatography of fatty acids and high performance liquid chromatography of ubiquinones] Marmet D, et al. **Ann Biol Clin (Paris)** 1988; 46(6):371–5 (Eng. Abstr.) **(Fre)**

BIOSYNTHESIS

Identification of regulatory sites in the biosynthesis of ubiquinone in the perfused rat heart. Yamamoto T, et al.
Arch Biochem Biophys 1989 Feb 15;269(1):86–92

An Escherichia coli mutant resistant to phleomycin, bleomycin, and heat inactivation is defective in ubiquinone synthesis. Collis CM, et al. **J Bacteriol** 1989 Sep; 171(9):4792–8

CHEMICAL SYNTHESIS

[Synthesis and biochemical actions of idebenone and related compounds. Ubiquinone and related compounds. XL] Morimoto H. **Naturwissenschaften** 1989 May;76(5):200–5 (16 ref.) (Eng. Abstr.) **(Ger)**

DEFICIENCY

Muscle coenzyme Q deficiency in familial mitochondrial encephalomyopathy. Ogasahara S, et al.
Proc Natl Acad Sci U S A 1989 Apr;86(7):2379–82

HISTORY

Comments on the discovery of coenzyme Q: a commentary on Isolation of a Quinone from Beef Heart Mitochondria'. Crane FL. **Biochim Biophys Acta** 1989;1000:358–61

METABOLISM

The interaction of coenzyme Q and vitamin E with multibilayer liposomes. Gomez–Fernandez JC, et al. **Adv Exp Med Biol** 1988;238:127–39

Isolation of a single nuclear gene encoding human ubiquinone–binding protein in complex III of mitochondrial respiratory chain. Suzuki H, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):371–8

Synthesis, location, and lateral mobility of fluorescently labeled ubiquinone 10 in mitochondrial and artificial membranes. Rajarathnam K, et al. **Biochemistry** 1989 Apr 18;28(8):3168–76

Mechanism of O2– generation in reduction and oxidation cycle of ubiquinones in a model of mitochondrial electron transport systems. Sugioka K, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):377–85

Inhibition by coenzyme Q of ethanol– and carbon tetrachloride–stimulated lipid peroxidation in vivo and catalyzed by microsomal and mitochondrial systems. Beyer RE. **Free Radic Biol Med** 1988;5(5–6):297–303

Antioxidant behaviour of ubiquinone and beta–carotene incorporated in model membranes. Cabrini L, et al. **Free Radic Res Commun** 1986;2(1–2):85–92

Reactivity with ubiquinone of quinoprotein D–glucose dehydrogenase from Gluconobacter suboxydans. Matsushita K, et al. **J Biochem (Tokyo)** 1989 Apr; 105(4):633–7

Electron transfer through center o of the cytochrome b–c1 complex of yeast mitochondria involves subunit VII, the ubiquinone–binding protein. Japa S, et al. **J Biol Chem** 1989 Aug 25;264(24):13994–7

Coenzyme Q in serum and muscle of 5 patients with Kearns–Sayre syndrome and 12 patients with ophthalmoplegia plus. Zierz S, et al. **J Neurol** 1989 Feb; 236(2):97–101

[The role of ubiquinones in regulating lipid metabolism in rat thymocytes] Novoselova EG. **Biokhimiia** 1989 Jan; 54(1):27–32 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

The role of ubiquinones in the regulation of lipid metabolism in rat thymocytes. Novoselova EG. **FEBS Lett** 1989 Jun 5;249(2):371–4

The influence of ubiquinone (Co Q10) on the metabolic response to work. Zuliani U, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):57–62 (42 ref.)

PHYSIOLOGY

Lateral diffusion as a rate–limiting step in ubiquinone–mediated mitochondrial electron transport. Chazotte B, et al. **J Biol Chem** 1989 Mar 25;264(9):4978–85

THERAPEUTIC USE

Mitochondrial encephalomyopathy (MELAS): pathological study and successful therapy with coenzyme Q10 and idebenone. Ihara Y, et al. **J Neurol Sci** 1989 May; 90(3):263–71

Long–term coenzyme Q10 therapy for a mitochondrial encephalomyopathy with cytochrome c oxidase deficiency: a 31P NMR study. Nishikawa Y, et al. **Neurology** 1989 Mar;39(3):399–403

[Lack of effectiveness of coenzyme Q10 (ubiquinone) in long–term treatment of dilated cardiomyopathy] Permanetter B, et al. **Z Kardiol** 1989 Jun;78(6):360–5 (Eng. Abstr.) **(Ger)**

[Clinical pharmacology of coenzyme Q10] Drzewoski J, et al. **Przegl Lek** 1988;45(9):680–3 (30 ref.) **(Pol)**

[Antioxidant activity of ubiquinone–9 and its combinations with vitamin E and sodium selenite in toxic lesions of the liver] Vinogradova LF, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):53–6 (Eng. Abstr.) **(Rus)**

UBIQUITIN

Polypeptide composition of paired helical filaments. Ihara Y, et al. **Ann Med** 1989;21(2):121–5 (34 ref.)

ANALYSIS

Selective presence of ubiquitin in intracellular inclusions. Manetto V, et al. **Am J Pathol** 1989 Mar;134(3):505–13

Ubiquitin—a common denominator in intermediate filament pathology of brain and liver? Denk H, et al. **Hepatology** 1989 Oct;10(4):514–5

Immunochemical properties of ubiquitin conjugates in the paired helical filaments of Alzheimer disease. Perry G, et al. **J Neurochem** 1989 May;52(5):1523–8

Ubiquitin is present on the cytokeratin intermediate filaments and Mallory bodies of hepatocytes. Ohta M, et al. **Lab Invest** 1988 Dec;59(6):848–56

Rosenthal fibres are based on the ubiquitination of glial filaments. Lowe J, et al. **Neuropathol Appl Neurobiol** 1989 Jan–Feb;15(1):45–53

Ubiquitin deposits in anterior horn cells in motor neurone disease. Leigh PN, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):197–203

Ubiquitin is a component of neurofibrillary tangles in a variety of neurodegenerative diseases. Lennox G, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):211–7

A filamentous inclusion body within anterior horn neurones in motor neurone disease defined by immunocytochemical localisation of ubiquitin. Lowe J, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):203–10

[Alzheimer's disease. Biochemistry of paired helical filaments (PHF)] Ihara Y. **Nippon Ronen Igakkai Zasshi** 1988 Jul; 25(4):364–7 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Inhibition of ubiquitin–dependent proteolysis by des–Gly–Gly–ubiquitin: implications for the mechanism of polyubiquitin synthesis. Bamezai S, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):89–94

BLOOD

A novel, arsenite–sensitive E2 of the ubiquitin pathway: purification and properties. Klemperer NS, et al. **Biochemistry** 1989 Jul 11;28(14):6035–41

Multiple ubiquitination of vertebrate calmodulin by reticulocyte lysate and inhibition of calmodulin conjugation by phosphorylase kinase. Ziegenhagen R, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1317–24

GENETICS

Unequal crossover generates variation in ubiquitin coding unit number at the human UbC polyubiquitin locus. Baker RT, et al. **Am J Hum Genet** 1989 Apr;44(4):534–42

Molecular organization of developmentally regulated Dictyostelium discoideum ubiquitin cDNAs. Ohmachi T, et al. **Biochemistry** 1989 Jun 13;28(12):5226–31

Analysis of hsp 30, hsp 70 and ubiquitin gene expression in Xenopus laevis tadpoles. Krone PH, et al. **Development** 1988 May;103(1):59–67

Ubiquitin genes in Tetrahymena pyriformis and their expression during heat shock. Neves AM, et al. **Gene** 1988 Dec 15;73(1):87–96

Ubiquitin–metallothionein fusion protein expression in yeast. A genetic approach for analysis of ubiquitin functions. Butt TR, et al. **J Biol Chem** 1988 Nov 5;263(31):16364–71

Ubiquitin function studied by disulfide engineering. Ecker DJ, et al. **J Biol Chem** 1989 Jan 25;264(3):1887–93

Increasing gene expression in yeast by fusion to ubiquitin. Ecker DJ, et al. **J Biol Chem** 1989 May 5;264(13):7715–9

Gene synthesis, expression, and processing of human ubiquitin carboxyl extension proteins. Monia BP, et al. **J Biol Chem** 1989 Mar 5;264(7):4093–103

An extended ubiquitin of Dictyostelium is located in the small ribosomal subunit. Müller–Taubenberger A, et al. **J Biol Chem** 1989 Apr 5;264(10):5319–22

Ubiquitin gene expression in Dictyostelium is induced by heat and cold shock, cadmium, and inhibitors of protein synthesis. Müller–Taubenberger A, et al. **J Cell Sci** 1988 May;90 (Pt 1):51–8

UbiA, the major polyubiquitin locus in Caenorhabditis elegans, has unusual structural features and is constitutively expressed. Graham RW, et al. **Mol Cell Biol** 1989 Jan; 9(1):268–77

Structure and expression of ubiquitin genes of Drosophila melanogaster. Lee HS, et al. **Mol Cell Biol** 1988 Nov; 8(11):4727–35

Characterization of a polyubiquitin gene from Arabidopsis thaliana. Burke TJ, et al. **Mol Gen Genet** 1988 Aug; 213(2–3):435–43

The tails of ubiquitin precursors are ribosomal proteins whose fusion to ubiquitin facilitates ribosome biogenesis. Finley D, et al. **Nature** 1989 Mar 30;338(6214):394–401

Identification of the long ubiquitin extension as ribosomal protein S27a. Redman KL, et al. **Nature** 1989 Mar 30; 338(6214):438–40

Ubiquitin. A marriage of convenience or necessity? [news] Warner JR. **Nature** 1989 Mar 30;338(6214):379

The primary structure of sunflower (Helianthus annuus) ubiquitin. Binet MN, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2119

Ubiquitin mRNA is a major stress–induced transcript in mammalian cells. Fornace AJ Jr, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1215–30

cDNA encoding a chicken ubiquitin–fusion protein identical to the corresponding human protein. Mezquita J, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11838

Chromosomal mapping of the ubiquitin gene family in Saccharomyces cerevisiae by pulsed field gel electrophoresis. Monia BP, et al. **Nucleic Acids Res** 1989 May 11;17(9):3611–2

Ubiquitin expression in Neurospora crassa: cloning and sequencing of a polyubiquitin gene. Taccioli GE, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6153–65

Ubiquitin genes. Schlesinger MJ, et al. **Oxf Surv Eukaryot Genes** 1987;4:77–91 (49 ref.)

IMMUNOLOGY

A branched, synthetic octapeptide of ubiquitinated histone H2A as target of autoantibodies. Plaué S, et al. **J Exp Med** 1989 May 1;169(5):1607–17

Anti–ubiquitin immunocytochemistry is more sensitive than conventional techniques in the detection of diffuse Lewy body disease. Lennox G, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):67–71

Presence of antibodies to ubiquitin during the autoimmune response associated with systemic lupus erythematosus. Muller S, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8176–80

ISOLATION & PURIFICATION

Structure of polyubiquitinated histone H2A. Nickel BE, et al. **Biochemistry** 1989 Feb 7;28(3):964–8

Isolation and characterization of ATP–dependent proteolytically active ubiquitin in cock testis. Sun NE, et al. **Comp Biochem Physiol [B]** 1988;91(4):777–81

The primary structure of soybean (Glycine max) ubiquitin is identical to other plant ubiquitins. Fortin MG, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11377

METABOLISM

Detection, resolution, and nomenclature of multiple ubiquitin carboxyl–terminal esterases from bovine calf thymus. Mayer AN, et al. **Biochemistry** 1989 Jan 10;28(1):166–72

Residual structure in large fragments of staphylococcal nuclease: effects of amino acid substitutions. Shortle D, et al. **Biochemistry** 1989 Feb 7;28(3):936–44

An enzyme related to the high molecular weight multicatalytic proteinase, macropain, participates in a ubiquitin–mediated, ATP–stimulated proteolytic pathway in soluble extracts of BHK 21/C13 fibroblasts. McGuire MJ, et al. **Biochim Biophys Acta** 1988 Nov 17; 967(2):195–203

Ubiquitin–calmodulin conjugating activity from cardiac muscle. Jennissen HP, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1325–30

Binding of protein uH2A and histone H2A to DNA. Kirdar B, et al. **Cell Biophys** 1989 Feb;14(1):43–51

Properties of the ubiquitin conjugation system from bovine eye lens. Murakami K, et al. **Curr Eye Res** 1988 Aug; 7(8):831–5

Immunoelectron microscopic localization of ubiquitin in hepatoma cells. Schwartz AL, et al. **EMBO J** 1988 Oct; 7(10):2961–6

Covalent conjugation of mammalian calmodulin with ubiquitin. Ziegenhagen R, et al. **FEBS Lett** 1988 Sep 12; 237(1–2):103–7

The RAD6 protein of Saccharomyces cerevisiae polyubiquitinates histones, and its acidic domain mediates this activity. Sung P, et al. **Genes Dev** 1988 Nov; 2(11):1476–85

Recognition of modified forms of ribonuclease A by the ubiquitin system. Dunten RL, et al. **J Biol Chem** 1989 Oct 5;264(28):16739–47

Ubiquitin–mediated protein degradation. Hershko A. **J Biol Chem** 1988 Oct 25;263(30):15237–40 (75 ref.)

Ubiquitin–phytochrome conjugates. Pool dynamics during in vivo phytochrome degradation. Jabben M, et al. **J Biol Chem** 1989 Mar 25;264(9):4998–5005

Ubiquitin carrier protein–catalyzed ubiquitin transfer to histones. Mechanism and specificity. Pickart CM, et al. **J Biol Chem** 1988 Oct 15;263(29):15076–82

Proteolysis in heat–stressed HeLa cells. Stabilization of ubiquitin correlates with the loss of proline endopeptidase. Pratt G, et al. **J Biol Chem** 1989 Jul 25;264(21):12526–32

An antigenic profile of Lewy bodies: immunocytochemical indication for protein phosphorylation and ubiquitination. Bancher C, et al. **J Neuropathol Exp Neurol** 1989 Jan; 48(1):81–93

Ubiquitin and dementia [letter] Mayer RJ, et al. **Nature** 1989 Jul 20;340(6230):193

A study of infantile motor neuron disease with neurofilament and ubiquitin immunocytochemistry. Lee S, et al. **Neuropediatrics** 1989 May;20(2):107–11

Impairment of protein ubiquitination may cause delayed neuronal death. Magnusson K, et al. **Neurosci Lett** 1989 Jan 30;96(3):264–70

A multiubiquitin chain is confined to specific lysine in a targeted short–lived protein. Chau V, et al. **Science** 1989 Mar 24;243(4898):1576–83

Degradation of proteins with acetylated amino termini by the ubiquitin system. Mayer A, et al. **Science** 1989 Jun 23; 244(4911):1480–3

PHARMACOLOGY

Murine erythroleukemia cells possess an active ubiquitin– and ATP–dependent proteolytic pathway. Pickart CM, et al. **Arch Biochem Biophys** 1989 Jul;272(1):114–21

Degradation of ornithine decarboxylase in reticulocyte lysate is ATP–dependent but ubiquitin–independent. Bercovich Z, et al. **J Biol Chem** 1989 Sep 25;264(27):15949–52

Skeletal muscle proteasome can degrade proteins in an ATP–dependent process that does not require ubiquitin. Driscoll J, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):787–91

PHYSIOLOGY

Ubiquitin: a review on a ubiquitous biofactor in eukaryotic cells. Cook J, et al. **Biofactors** 1988 Jul;1(2):133–46 (158 ref.)

Ubiquitin is involved in the in vitro insertion of monoamine oxidase B into mitochondrial outer membranes. Zhaung ZP, et al. **J Biol Chem** 1989 Sep 5;264(25):14594–6

Ubiquitin fusion augments the yield of cloned gene products

in Escherichia coli. Butt TR, et al.
Proc Natl Acad Sci U S A 1989 Apr;86(8):2540–4
The tails of ubiquitin. Kinoshita J. **Sci Am** 1989 Jun; 260(6):33–4

UDDER see MAMMAE

UDP GLUCURONOSYLTRANSFERASE

ANALYSIS

Subcellular localization of UDP–glucuronyltransferase by differential centrifugation. Changes produced by pretreatment of rats with secretin, glucagon, vasoactive intestinal polypeptide and phenobarbitone. Ricci GL, et al. **Enzyme** 1989;41(2):75–86
Glutathione S–transferase, cytochrome P450, and uridine 5'–diphosphate–glucuronosyltransferase in human small intestine and liver. Peters WH, et al. **Gastroenterology** 1989 Mar;96(3):783–9
Heterogeneous alterations of UDP–glucuronosyltransferases in mouse hepatic foci. Bock KW, et al.
J Cancer Res Clin Oncol 1989;115(3):285–9
Assay method for product formation in in vitro enzyme kinetic studies of uridine diphosphate glucuronyltransferases: 2–arylpropionic acid enantiomers. Spahn H. **J Chromatogr** 1988 Sep 9;430(2):368–75
Examination of the substrate specificity of cloned rat kidney phenol UDP–glucuronyltransferase expressed in COS–7 cells. Jackson MR, et al. **Mol Pharmacol** 1988 Nov; 34(5):638–42
[Hyaluronic acid synthetase in newborn mouse epidermis] Hatakenaka K, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Jul;98(8):817–24 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Elevation of sex steroids and inhibition of UDP–glucuronyltransferase are out of phase during gonadal maturation in the common carp. Sikoki FD, et al. **Comp Biochem Physiol [C]** 1989;92(2):267–72

BIOSYNTHESIS

Additive effect of combined spironolactone and phenobarbital treatment on hepatic bilirubin UDP–glucuronyltransferase. Mottino AD, et al.
Biochem Pharmacol 1989 Mar 1;38(5):851–3
A baculovirus blocks insect molting by producing ecdysteroid UDP–glucosyl transferase. O'Reilly DR, et al. **Science** 1989 Sep 8;245(4922):1110–2
Species comparison of steroid UDP–glucuronyl transferase: correlation to TCDD sensitivity. Umbreit TH, et al. **Toxicol Lett** 1989 Jul;48(1):29–34
[Disulfiram and butylhydroxyanisole induction of glutathione–S– and UDP glucuronosyltransferase activities in the liver and its role in preventing the toxic action of diethylnitrosamine in rats] Kalinina EV, et al.
Farmakol Toksikol 1988 Sep–Oct;51(5):89–92 (Eng. Abstr.) **(Rus)**

BLOOD

[Fluorimetric determination of UDP–glucuronyltransferase and sulfotransferase activity in human blood cells] Khripach LV, et al. **Vopr Med Khim** 1988 Jul–Aug; 34(4):126–9 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Intraperitoneal transplantation of microcarrier–attached enterocytes in rats. Arnaout WS, et al. **Am J Surg** 1989 Jan;157(1):89–92
Phenol UDP–glucuronosyltransferase deficiency in Gunn rats: mRNA levels are considerably reduced. Harding D, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):1013–7
Glucuronyl transferase deficiency and mild hereditary spherocytosis: effect of splenectomy. Eber SW, et al. **Eur J Pediatr** 1988 Aug;147(6):639–42
Auxiliary liver transplantation in jaundiced rats with UDP–glucuronyltransferase deficiency and defective hepatobiliary transport. Jansen PL, et al. **J Hepatol** 1989 Mar;8(2):192–200
Deficiency in bilirubin UDP–glucuronyl transferase as a genetic determinant of acetaminophen toxicity. de Morais SM, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):323–31

GENETICS

Characterization and regulation of rat liver UDP glucuronosyltransferases. Mackenzie PI, et al.
Clin Exp Pharmacol Physiol 1989 Jun;16(6):501–4 (13 ref.)
Expression of a human liver cDNA encoding a UDP–glucuronosyltransferase catalysing the glucuronidation of hyodeoxycholic acid in cell culture. Fournel–Gigleux S, et al. **FEBS Lett** 1989 Jan 30; 243(2):119–22
Cloning and substrate specificity of a human phenol UDP–glucuronosyltransferase expressed in COS–7 cells. Harding D, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8381–5

ISOLATION & PURIFICATION

Purification and characterization of an ethanol–induced UDP–glucuronosyltransferase. Hutabarat RM, et al.
Arch Biochem Biophys 1989 Aug 15;273(1):16–25
Separation and purification of uridine diphosphate–glucuronosyltransferases by chromatofocusing on a high–performance liquid chromatograph. Takanashi H, et al.
Chem Pharm Bull (Tokyo) 1989 Jun;37(6):1583–6
Purification and properties of 5–hydroxytryptamine UDP–glucuronyltransferase from rat liver microsomes. Abe N, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):421–6
Purification and properties of a form of UDP–glucuronyltransferase from liver microsomes of 3–methylcholanthrene–treated rats. Yokota H, et al.
J Biochem (Tokyo) 1988 Oct;104(4):531–6
Solubilization and partial purification of hyaluronate synthetase from oligodendroglioma cells. Ng KF, et al. **J Biol Chem** 1989 Jul 15;264(20):11776–83

METABOLISM

Effects of chronic ethanol consumption on carcinogen activating and detoxifying systems in rat upper alimentary tract tissue. Farinati F, et al. **Alcoholism (N Y)** 1989 Jun; 13(3):357–60
N–glycosylation of purified rat and rabbit hepatic UDP–glucuronosyltransferases. Green MD, et al.
Arch Biochem Biophys 1989 Aug 15;273(1):72–8
Synthesis of glucuronides of propafenone and 5–hydroxypropafenone by Sepharose–bound uridine 5'–diphosphoglucuronyltransferase. Neidlein R, et al.
Arzneimittelforschung 1988 Sep;38(9):1257–62
The interaction of xylosyltransferase and glucuronyltransferase involved in glucuronoxylan synthesis in pea (Pisum sativum) epicotyls. Baydoun EA, et al.
Biochem J 1989 Feb 1;257(3):853–8
The influence of fatty acid unsaturation and physical properties of microsomal membrane phospholipids on UDP–glucuronyltransferase activity. Castuma CE, et al.
Biochem J 1989 Mar 15;258(3):723–31
Mixed function oxidase and UDP–glucuronyltransferase activities in the human Hep G2 hepatoma cell line. Grant MH, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4111–6
Characterization of distinct forms of cytochromes P–450, epoxide metabolizing enzymes and UDP–glucuronosyltransferases in rat skin. Pham MA, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2187–94
Interaction of uridine 5'–diphosphoglucuronic acid with microsomal UDP–glucuronosyltransferase in primate liver: the facilitating role of uridine 5'–diphospho–N–acetylglucosamine. Hauser SC, et al.
Biochim Biophys Acta 1988 Nov 17;967(2):141–8
A membrane transporter mediates access of uridine 5'–diphosphoglucuronic acid from the cytosol into the endoplasmic reticulum of rat hepatocytes: implications for glucuronidation reactions. Hauser SC, et al.
Biochim Biophys Acta 1988 Nov 17;967(2):149–57
Enzymatic synthesis and chromatographic purification of lignan glucuronides. Brunner G, et al.
Biomed Chromatogr 1986 Apr;1(2):89–92
Human liver morphine UDP–glucuronyl transferase enantioselectivity and inhibition by opioid congeners and oxazepam. Wahlström A, et al. **Br J Pharmacol** 1988 Jul; 94(3):864–70
A marked increase in latency of fetal rat liver UDP–glucuronosyltransferase accompanies the fluidization of the microsomal membrane in the perinatal period. Kapitulnik J, et al. **Dev Pharmacol Ther** 1989;12(1):30–4
Substrate specificity and enantioselectivity of arylcarboxylic acid glucuronidation. Fournel–Gigleux S, et al.
Drug Metab Dispos 1988 Jul–Aug;16(4):627–34
Ascorbic acid deficiency and hepatic UDP–glucuronyltransferase. Neumann CM, et al.
Drug Metab Dispos 1988 Jul–Aug;16(4):551–6
The influence of culture medium composition on drug metabolising enzyme activities of the human liver derived Hep G2 cell line. Doostdar H, et al. **FEBS Lett** 1988 Dec 5;241(1–2):15–8
The activities of aminopyrine N–demethylase, aniline 4–hydroxylase and UDP–glucuronyltransferase in tissues of camels, desert sheep and Nubian goats. el Sheikh HA, et al. **Gen Pharmacol** 1988;19(5):713–7
Comparison of hepatic, renal and intestinal bilirubin UDP–glucuronyl transferase activities in rat microsomes. Mottino AD, et al. **Int J Biochem** 1988;20(10):1113–6
Altered activation/detoxication enzymology following neonatal diethylstilbestrol treatment. Lamartiniere CA, et al. **J Biochem Toxicol** 1988 Summer;3:87–103
Regulation of UDP–glucuronosyltransferase by lipid–protein interactions. Comparison of the thermotropic properties of pure reconstituted enzyme with microsomal enzyme. Dannenberg A, et al. **J Biol Chem** 1989 Jan 5;264(1):238–42
Reconstitution of membrane proteins. Spontaneous incorporation of integral membrane proteins into preformed bilayers of pure phospholipid. Scotto AW, et al.
J Biol Chem 1988 Dec 5;263(34):18500–6
Membrane association of the hyaluronate stimulatory factor from LX–1 human lung carcinoma cells. Knudson W, et al. **J Cell Biochem** 1988 Nov;38(3):165–77
The inadequacy of perinatal glucuronidation: immunoblot analysis of the developmental expression of individual UDP–glucuronosyltransferase isoenzymes in rat and human liver microsomes. Coughtrie MW, et al. **Mol Pharmacol** 1988 Dec;34(6):729–35
The sensitivity to noxious heat in relation to brain and liver opioid glucuronidation in inbred strains of mice. Wahlström A, et al. **Pain** 1989 Jul;38(1):71–5
UDP–glucuronosyltransferases. Burchell B, et al.
Pharmacol Ther 1989;43(2):261–89 (164 ref.)
Age– and sex–related changes in epoxide hydrolase, UDP–glucuronosyl transferase, glutathione S–transferase, and PAPS sulphotransferase in Sprague–Dawley rats. Chengelis CP. **Xenobiotica** 1988 Nov;18(11):1225–37
Effects of the fungicide prochloraz on xenobiotic metabolism in rainbow trout: inhibition in vitro and time course of induction in vivo. Snegaroff J, et al. **Xenobiotica** 1989 Mar; 19(3):255–67
Endogenous substrates for UDP–glucuronosyltransferases. Tephly T, et al. **Xenobiotica** 1988 Nov;18(11):1201–10 (39 ref.)
[Ingestion of soybean epoxide oil. Effects on monooxygenases, epoxide hydrolase and activities of UDP glucuronosyltransferases in hepatic microsomes of the rat] Mounié J, et al. **C R Soc Biol (Paris)** 1988;182(1):105–17 (Eng. Abstr.) **(Fre)**
[The role of UDP glucuronosyl– and sulfotransferases in the butylhydroxytoluene suppression of the mutagenic action of carcinogenic nitroso compounds and cyclophosphane] Kalinina EV, et al. **Vopr Onkol** 1989;35(2):220–5 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

In situ structural analysis of microsomal UDP–glucuronyltransferases by radiation inactivation. Vessey DA, et al. **J Biol Chem** 1989 Apr 15;264(11):6334–8

UDP SUGARS see URIDINE DIPHOSPHATE SUGARS

ULCER

see related
CORNEAL ULCER
PEPTIC ULCER
SKIN ULCER

CHEMICALLY INDUCED

Sclerotherapy–associated esophageal ulcers: lessons from a double–blind, randomized comparison of sucralfate suspension versus placebo. Tabibian N, et al.
Gastrointest Endosc 1989 Jul–Aug;35(4):312–5

DRUG THERAPY

Potential therapeutic mechanisms of stable prostacyclin (PGI2)–mimetics in severe peripheral vascular disease. Müller B, et al. **Biomed Biochim Acta** 1988;47(10–11):S40–4
Antiulcerogenic and antisecretory effects of a novel diphenylmethane derivative and antiestrogen binding site ligand. Glavin GB, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1139–43
Influence of an epidermal cell extract on skin healing and scar formation. Silver IA, et al. **Int J Tissue React** 1988; 10(6):381–5
[Experimental research on promoting granulation effect of No. 5 qufu shengji san] Li JX.
Chung Hsi I Chieh Ho Tsa Chih 1988 Jun;8(6):355, 326 (Eng. Abstr.) **(Chi)**

ETIOLOGY

[Intestinal ulceration in celiac disease in the adult. Value of peroperative enteroscopy (letter)] Mesnard B, et al.
Presse Med 1989 Apr 22;18(16):847 **(Fre)**

MICROBIOLOGY

Detection of human immunodeficiency virus–1 by 35S–RNA in situ hybridization in solitary esophageal ulcers in two patients with the acquired immune deficiency syndrome. Kotler DP, et al. **Am J Gastroenterol** 1989 Mar;84(3):313–7

PATHOLOGY

Solitary ulcer syndrome of the rectum in children. Figueroa–Colon R, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr;8(3):408–12 (21 ref.)
[Ulcerative defect formation following subepicardial myocardial infarct] Pollak S, et al. **Beitr Gerichtl Med** 1988; 46:417–21 (Eng. Abstr.) **(Ger)**
[Primary clinical, endoscopic and histologic findings in solitary rectal ulcer] Schneider A, et al.
Dtsch Z Verdau Stoffwechselkr 1988;48(3–4):183–9 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Stress ulcer prophylaxis in medical patients: who, what, and how much? Wilcox CM, et al. **Am J Gastroenterol** 1988 Nov;83(11):1199–211 (106 ref.)
Effect of immunization with prostaglandin metabolites on gastrointestinal ulceration. Redfern JS, et al.
Am J Physiol 1988 Dec;255(6 Pt 1):G723–30
[Prevention of acute erosions and ulcers of the esophagus, stomach and duodenum after surgery] Khokholia VP, et al. **Vestn Khir** 1988 Dec;141(12):10–7 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Intramural diverticulosis simulating aphthous ulceration of

the colon. Fisher JK. Mo Med 1986 Oct;83(10):687-9

ULCER, APHTHOUS see STOMATITIS, APHTHOUS

ULNA

Detailed anatomy of the articular disc of the distal radioulnar joint. Mikić ZD. Clin Orthop 1989 Aug;(245):123-32

Orthovoltage radiotherapy of primary lymphoma of bone in a dog. Giger U, et al. J Am Vet Med Assoc 1989 Sep 1;195(5):627-30

Primary intraosseous fibrosarcoma in a cat. Levitt L, et al. J Am Vet Med Assoc 1989 Jun 1;194(11):1601-3

Stress distribution in the ulna following a hinged elbow arthroplasty. A finite element analysis. Goel VK, et al. J Arthroplasty 1989;4(2):163-71

Post-traumatic proximal radio-ulnar synostosis. Results of surgical treatment. Failla JM, et al. J Bone Joint Surg [Am] 1989 Sep;71(8):1208-13

Case report 551: Intraosseous ganglion of olecranon with vacuum phenomenon. Ehara S, et al. Skeletal Radiol 1989; 18(4):329-30

Case report 472: Heretical giant cell tumor in the diaphysis of the ulna in a 7-month-old boy. Visscher DW, et al. Skeletal Radiol 1988;17(4):285-8

Case report 494: Hemangioma of surface of ulna with prominent sclerosis. Yao L, et al. Skeletal Radiol 1988; 17(5):378-81

[Operations for lengthening the upper limbs in children and adolescents] Bronfen C, et al. Chir Pediatr 1989; 30(2):109-16 (Eng. Abstr.) (Fre)

[Progressive lengthening of the ulna in children using Wagner's technic. Apropos of 14 cases] Caton J, et al. Rev Chir Orthop 1988;74 Suppl 2:124-9 (Fre)

[CT diagnosis of malalignment following distal radius fracture] Frahm R, et al. Radiologe 1989 Feb;29(2):68-72 (Eng. Abstr.) (Ger)

[Surgical treatment of the recurrent anterior luxation of the distal epiphysis of the ulna. Presentation of a case] Bazzocchi P, et al. Chir Organi Mov 1988 Oct-Dec; 73(4):399-403 (Eng. Abstr.) (Ita)

ABNORMALITIES

Humero-radial synostosis with ulnar defects in sibs. Ramer JC, et al. Am J Med Genet 1989 Jun;33(2):176-9 (24 ref.)

Lethal form of fibuloulnar A/hypoplasia with renal abnormalities. Saito N, et al. Am J Med Genet 1989 Apr; 32(4):452-6

Two sporadic cases of amelia/phocomelia with similar phenotype: rare and unusually symmetrical form of FFU dysostosis or separate entity? Kardon NB, et al. Am J Med Genet Suppl 1986;2:239-45

Ulnar ray a/hypoplasia: evidence for a developmental field defect on the basis of genetic heterogeneity. Report of three Brazilian families. Richieri-Costa A, et al. Am J Med Genet Suppl 1986;2:195-206

Bilateral absence of the ulna in twins as a manifestation of the split hand--split foot deformity. Beck RB, et al. Am J Perinatol 1989 Jan;6(1):1-3

Late onset bone marrow failure associated with proximal fusion of radius and ulna: a new syndrome. Dokal I, et al. Br J Haematol 1989 Feb;71(2):277-80

Clinical and experimental studies on ulnar ray deficiency. Ogino T, et al. Handchir Mikrochir Plast Chir 1988 Nov; 20(6):330-7

Congenital pseudarthrosis of the forearm [letter] Ostrowski DM. J Hand Surg [Am] 1989 Mar;14(2 Pt 1):318

Congenital radioulnar synostosis. Radiological characteristics and hand function: case reports. Bauer M, et al. Scand J Plast Reconstr Surg Hand Surg 1988;22(3):251-5

Some radiographic and clinical aspects of ununited anconeal process. Guthrie S. Vet Rec 1989 Jun 24;124(25):661-2

[Contribution to the treatment of congenital radio-ulnar synostosis] Zwierzchowska D, et al. Chir Narzadow Ruchu Ortop Pol 1988;53(5):409-11 (Eng. Abstr.) (Pol)

[Congenital radio-ulnar synostosis in a boy with Williams-Beuren syndrome] Bzdúch V, et al. Acta Chir Orthop Traumatol Cech 1988 Oct;55(5):473-6 (Eng. Abstr.) (Slo)

ANALYSIS

Mineral density of bone in the forearm in premenopausal women with fractured wrists. Horowitz M, et al. BMJ 1988 Nov 19;297(6659):1314-5

Bone mineral content of the forearm in healthy Dutch women. Barentsen R, et al. Maturitas 1988 Oct; 10(3):231-41

ANATOMY & HISTOLOGY

Fossil platyrrhine forelimb bones from the early miocene of Argentina. Anapol F, et al. Am J Phys Anthropol 1988 Aug;76(4):417-28

Determination of length of human long bones of hands from their fragments. Rao KV, et al. Forensic Sci Int 1989 Mar; 40(3):279-84

Measuring ulnar variance: a comparison of techniques. Steyers CM, et al. J Hand Surg [Am] 1989 Jul;14(4):607-12

Morphological study of the carpal tunnel and the ulnar canal. Fukuhara T, et al. Nippon Geka Hokan 1988 Jul 1; 57(4):267-75

[Functional importance of the m. extensor carpi ulnaris for distal radioulnar articulation] Lengsfeld M, et al. Handchir Mikrochir Plast Chir 1988 Sep;20(5):275-8 (Eng. Abstr.) (Ger)

BLOOD SUPPLY

Post-operative Doppler evaluation of 48 arterial reconstructions at the wrist. Bellan N, et al. Ann Chir Main 1989;8(1):22-9 (Eng, Fre)

PORCH test [letter] Wong W. Can J Anaesth 1989 Jul; 36(4):483-5

Doppler mapping in hypothenar syndrome: an alternative to angiography. DiBenedetto MR, et al. J Hand Surg [Am] 1989 Mar;14(2 Pt 1):244-6

INJURIES

Dislocation of the pisiform treated by primary resection. A case report. McCarron RF, et al. Clin Orthop 1989 Apr; (241):231-3

The effects of motion on the healing of cancellous bone. Schatzker J, et al. Clin Orthop 1989 Aug;(245):282-7

Bilateral separation of the olecranon and proximal epiphysis from the ulnar diaphysis in a snow leopard cub. Mainka SA. J Am Vet Med Assoc 1986 Nov 1;189(9):1204-5

[Traumatic luxation of the distal radio-ulnar joint] Kuur E, et al. Ugeskr Laeger 1988 Oct 31;150(44):2662-3 (Eng. Abstr.) (Dan)

[Fractures of the inner epicondyle of the humerus associated with dislocation of the forearm bones in children and adolescents] Ter-Egiazarov GM, et al. Ortop Travmatol Protez 1989 Jan;(1):16-9 (Eng. Abstr.) (Rus)

[Dislocation of both forearm bones complicated by rupture of the internal epicondyle with its incarceration in the articular cavity in children] Bairov GA, et al. Vestn Khir 1988 Aug;141(8):79-82 (Eng. Abstr.) (Rus)

[Surgical treatment of rupture of the epicondyle in dislocation of both forearm bones in children] Bairov GA, et al. Vestn Khir 1988 May;140(5):77-80 (Eng. Abstr.) (Rus)

[Dislocations of the forearm bones with fracture of the internal epicondyle of the humerus in children] Ter-Egiazarov GM, et al. Vestn Khir 1988 Jun;140(6):89-93 (Eng. Abstr.) (Rus)

PATHOLOGY

Multiple ruptures of flexor tendons due to hypertrophic change at the distal radio-ulnar joint. A case report. Minami A, et al. J Bone Joint Surg [Am] 1989 Feb; 71(2):300-2

Antenatal ultrasound diagnosis of the femur-fibula-ulna syndrome. Hirose K, et al. JCU 1988 Mar-Apr; 16(3):199-203

Congenital radio-ulnar synostosis. Results of eight cases and review. Hardin GT, et al. Mo Med 1986 Oct;83(10):684-6, 690 (11 ref.)

[Anatomical variations of the trochlear notch in elbow dislocations] Wadström J, et al. Z Unfallchir Versicherungsmed Berufskr 1988;81(1):68-9 (Ger)

PHYSIOLOGY

Bone strength of the radius and ulna in the non-human primate. Mennen U. Orthopedics 1989 Jan;12(1):173-80

RADIOGRAPHY

Forearm bone loss in hemiplegia: a model for the study of immobilization osteoporosis. Prince RL, et al. J Bone Miner Res 1988 Jun;3(3):305-10

Prominent transverse (Bowdler) bone spurs as a diagnostic clue in a case of neonatal hypophosphatasia without metaphyseal irregularity. Oestreich AE, et al. Pediatr Radiol 1989;19(5):341-2

SURGERY

Autogeneic cancellous bone grafts in extensive segmental ulnar defects in dogs. Effects of xenogeneic bovine bone morphogenetic protein without and with interposition of soft tissues and interruption of blood supply. Johnson EE, et al. Clin Orthop 1989 Jun;(243):254-65

Correction of angular forelimb deformity in a nilgai: periosteal transection and elevation of the radius and partial ulnectomy. Gardner HM, et al. J Am Vet Med Assoc 1986 Nov 1;189(9):1176-8

Radial reconstruction in segmental defects of both forearm bones. Kumar VP, et al. J Bone Joint Surg [Br] 1988 Nov; 70(5):815-7

Extensor carpi ulnaris and flexor carpi ulnaris tenodesis of the unstable distal ulna. Breen TF, et al. J Hand Surg [Am] 1989 Jul;14(4):612-7

Ulnar impingement syndrome after Darrach procedure: treatment by advancement lengthening osteotomy of the ulna. Watson HK, et al. J Hand Surg [Am] 1989 Mar;14(2 Pt 1):302-6

Centralisation of the radial club hand by gradual distraction. Kessler I. J Hand Surg [Br] 1989 Feb;14(1):37-42

A study of the mechanical strength of long bone defects treated with various bone autograft substitutes: an experimental investigation in the rabbit. Hopp SG, et al. J Orthop Res 1989;7(4):579-84

Pressures in the distal radioulnar joint: effect of surgical procedures used for Kienbock's disease. Werner FW, et al. J Orthop Res 1989;7(3):445-50

Surgical techniques of a radioulnar transposition. Freeland AE, et al. Orthopedics 1989 Jan;12(1):187-91

Capsulotomy of the distal radio ulnar joint. af Ekenstam FW. Scand J Plast Reconstr Surg Hand Surg 1988;22(2):169-71

Treatment of humeroulnar subluxation with a dynamic proximal ulnar osteotomy. A review of 13 cases. Gilson SD, et al. Vet Surg 1989 Mar-Apr;18(2):114-22

A combined tension band and lag screw technique for fixation of olecranon osteotomies. Palmer RH, et al. Vet Surg 1988 Nov-Dec;17(6):328-32

[The Ilizarov method for lengthening and correction of the ulna in radial club hand] Mesaina A. Ann Chir Main 1988; 7(3):238-46 (Eng. Abstr.) (Fre)

[The treatment of old dislocations of the radial head in children by osteotomy of the upper end of the ulna. Apropos of 15 cases] Bouyala JM, et al. Rev Chir Orthop 1988;74(2):173-82 (Eng. Abstr.) (Fre)

[Osteotomy of the 2 bones of the forearm in children] Verneret C, et al. Rev Chir Orthop 1988;74 Suppl 2:336-9 (Fre)

[Roentgenologic evaluation of postoperative carpal collapse and ulnar translocation in patients with chronic polyarthritis] Schmidt A, et al. Handchir Mikrochir Plast Chir 1989 May;21(3):134-7 (Eng. Abstr.) (Ger)

[Use of pro-ulna radius in resection of proximal ulna] Toni A, et al. Chir Organi Mov 1988 Jul-Sep;73(3):277-80 (Eng. Abstr.) (Ita)

[Clinical and experimental study of shortening osteotomy of forearm bone(s) in Kienböck's disease] Shibata M. Nippon Seikeigeka Gakkai Zasshi 1989 Apr;63(4):245-61 (Eng. Abstr.) (Jpn)

ULNA FRACTURES

COMPLICATIONS

Pitfalls and complications of fractures of the distal radius and ulna in childhood. Crawford AH. Hand Clin 1988 Aug; 4(3):403-13 (31 ref.)

Greenstick fracture of the forearm with median nerve entrapment. Genelin F, et al. J Emerg Med 1988 Sep-Oct; 6(5):381-5

Unusual combination of Monteggia, Colles', and navicular fractures. Nyska M, et al. J Orthop Trauma 1987;1(3):233-5

Intraarticular entrapment of a displaced olecranon fracture. A case report. An HS, et al. Orthopedics 1989 Feb; 12(2):289-91

Post-traumatic cysts and cyst-like lesions of bone. Moore TE, et al. Skeletal Radiol 1989;18(2):93-7

[Old post-traumatic dislocations of the radial head in children] Verneret C, et al. Rev Chir Orthop 1988;74 Suppl 2:134-6 (Fre)

[Old post-traumatic dislocation of the radial head in children] Verneret C, et al. Rev Chir Orthop 1989;75(2):77-89 (35 ref.) (Eng. Abstr.) (Fre)

[Characteristics of multiple fractures of the long bones of the upper limbs and their treatment] Levitskii FA, et al. Ortop Travmatol Protez 1989 Apr;(4):42-5 (Eng. Abstr.) (Rus)

DIAGNOSIS

Fractures and dislocations of the distal radioulnar joint. Buterbaugh GA, et al. Hand Clin 1988 Aug;4(3):361-75 (37 ref.)

EPIDEMIOLOGY

Epidemiology of distal forearm fractures in Danish children. Kramhøft M, et al. Acta Orthop Scand 1988 Oct;59(5):557-9

ETIOLOGY

Bilateral stress fractures of the ulna. McGoldrick F, et al. Injury 1988 Sep;19(5):360-1

PATHOLOGY

[Morphology of fractures of long tubular bones in children upon trauma due to solid blunt objects] Filippov MP. Sud Med Ekspert 1989 Apr-Jun;32(2):11-2 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Isolated fractures of the olecranon in children. Papavasiliou VA, et al. Injury 1987 Mar;18(2):100-2

The pronator quadratus sign: its classification and diagnostic usefulness for injury and inflammation of the wrist. Sasaki Y, et al. J Hand Surg [Br] 1989 Feb;14(1):80-3

Painful arm after fall. Swischuk LE. Pediatr Emerg Care 1988 Dec;4(4):273-5

[The supinator fat pad in fractures of the elbow joint] Schunk K, et al. ROFO 1989 Mar;150(3):294-6 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

Skeletal uptake of indium 111-labeled white blood cells. Abreu SH. Semin Nucl Med 1989 Apr;19(2):152-5

SURGERY

Anatomical results after distal forearm fractures. Kaukonen JP, et al. **Ann Chir Gynaecol** 1988;77(1):21–6

Functional recovery after fractures of the distal forearm. Analysis of radiographic and other factors affecting the outcome. Kaukonen JP, et al. **Ann Chir Gynaecol** 1988; 77(1):27–31

The use of a flexor carpi ulnaris muscle flap in the treatment of an infected nonunion of the proximal ulna. A case report. Meals RA. **Clin Orthop** 1989 Mar;(240):168–72

Fatigue fracture of a forearm plate within a long–arm cast [letter] Teitge RA. **Clin Orthop** 1989 Jul;(244):310–1

Reconstruction of post–traumatic deformity of the distal radius and ulna. Jupiter JB, et al. **Hand Clin** 1988 Aug; 4(3):377–90 (64 ref.)

Intra–articular flap fracture of the olecranon in a child. A case report. Blasier RD. **J Bone Joint Surg [Am]** 1989 Jul; 71(6):945–7

Compression–plate fixation of acute fractures of the diaphyses of the radius and ulna. Chapman MW, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):159–69

Refracture of bones of the forearm after the removal of compression plates. Deluca PA, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1372–6

Radial head reduction after a missed Monteggia fracture: brief report. Freedman L, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):846–7

Fracture of the coronoid process of the ulna requiring reduction in extension. Tanzman M, et al. **J Hand Surg [Am]** 1988 Sep;13(5):741–2

The small AO external fixator in the treatment of unstable distal forearm fractures. Prince H, et al. **J Hand Surg [Br]** 1988 Aug;13(3):294–7

Open reduction and internal fixation of radial head fractures associated with olecranon fracture or dislocation. Perry CR, et al. **J Orthop Trauma** 1987;1(1):36–42

Resection arthroplasty for comminuted olecranon fractures. Compton R, et al. **Orthop Rev** 1989 Feb;18(2):189–92

Tips of the trade #13. Tension band wiring of olecranon fractures. France MP. **Orthop Rev** 1989 Jun;18(6):713–5

Small bone grafts of an ulna nonunion. Myers WJ 3d, et al. **Orthop Rev** 1987 Dec;16(12):930–2

Small bone grafts of an ulna nonunion [letter] Stern RE. **Orthop Rev** 1989 Feb;18(2):266

The use of a clamp–on plate for forearm fractures. Mennen U. **Orthopedics** 1989 Jan;12(1):39–43

Olecranon fracture and tension band wiring. Low CK, et al. **Singapore Med J** 1988 Oct;29(5):480–4

[Repeat fractures of the 2 forearm bones in children] Lascombes P, et al. **Rev Chir Orthop** 1988;74 Suppl 2:137–9 **(Fre)**

[Monteggia fracture in childhood] Vinz H. **Beitr Orthop Traumatol** 1989 Apr;36(4):153–68 (Eng. Abstr.) **(Ger)**

[Management of complicated fractures of the forearm. External fixation and early changes in procedures] Knopp W, et al. **Unfallchirurg** 1988 Dec;91(12):539–44 (Eng. Abstr.) **(Ger)**

[Surgical treatment of forearm shaft fracture] Zirknitzer J, et al. **Unfallchirurgie** 1989 Jun;15(3):122–8 (Eng. Abstr.) **(Ger)**

[Treatment of Monteggia fractures in the adult] Scharf R. **Z Arztl Fortbild (Jena)** 1988;82(11):491–3 **(Ger)**

[Late results of the surgical treatment of fractures of the olecranon] Pomianowski S. **Chir Narzadow Ruchu Ortop Pol** 1988;53(5):402–8 (Eng. Abstr.) **(Pol)**

[Use of joined plates in osteosynthesis by the Zespol method] Ramotowski W, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):301–6 (Eng. Abstr.) **(Pol)**

[Osteoplastic correction of defects of the forearm bones] Afaunov AI. **Ortop Travmatol Protez** 1989 Feb;(2):16–20 (Eng. Abstr.) **(Rus)**

[Osteosynthesis in various types of fractures using pins made of corundum ceramics] Gruntovskii GKh, et al. **Ortop Travmatol Protez** 1988 Dec;(12):33–4 (Eng. Abstr.) **(Rus)**

[Treatment of compound fractures of the distal meta–epiphyses of the forearm bones using a traction device] Prokin BM, et al. **Ortop Travmatol Protez** 1988 Aug;(8):60 **(Rus)**

[A method of osteosynthesis of the olecranon] Romanov MF. **Ortop Travmatol Protez** 1988 Dec;(12):38 **(Rus)**

[Intraosseous osteosynthesis of closed diaphyseal fractures of the forearm bones] Zverev EV. **Ortop Travmatol Protez** 1989 Feb;(2):20–3 (Eng. Abstr.) **(Rus)**

THERAPY

Ulnar–shaft fracture needs no treatment. A pilot study of 10 cases. de Jong T, et al. **Acta Orthop Scand** 1989 Jun; 60(3):263–4

Early mobilization of isolated ulnar–shaft fractures. Ekelund AL, et al. **Acta Orthop Scand** 1989 Jun;60(3):261–2

Rotational stability of diaphyseal fractures of the radius and ulna fixed with Rush pins and/or fracture bracing. Ono M, et al. **Clin Orthop** 1989 Mar;(240):236–43

The Chinese traditional method for the treatment of forearm fractures. Sung HW. **J Orthop Trauma** 1988;2(1):43–4

Monteggia and equivalent lesions in childhood. Olney BW, et al. **J Pediatr Orthop** 1989 Mar–Apr;9(2):219–23 (17 ref.)

A 'wee stirrup' to ease a little problem [letter] James MR. **J R Coll Surg Edinb** 1988 Jun;33(3):170

Two–bone fractures of the forearm and the dilemma of closed treatment. Connolly JF, et al. **Nebr Med J** 1988 Oct; 73(10):310–2

[Fixation of the forearm in a neutral position in the treatment of Monteggia's fracture in adults—a report of 77 cases] Su BH. **Chung Hsi I Chieh Ho Tsa Chih** 1989 May; 9(5):274–7, 260 (Eng. Abstr.) **(Chi)**

[Treatment of isolated ulnar shaft fractures using Sarmiento's method] van Raay JJ, et al. **Ned Tijdschr Geneeskd** 1989 Mar 11;133(10):507–9 (Eng. Abstr.) **(Dut)**

[Stable flexible nailing of fractures of both bones of the forearm in children] Ponet M, et al. **Chir Pediatr** 1989; 30(2):117–20 (Eng. Abstr.) **(Fre)**

["Stable" fracture of the ulna shaft. Biomechanics and therapeutic consequences] Ekkernkamp A, et al. **Unfallchirurg** 1988 Dec;91(12):551–6 (Eng. Abstr.) **(Ger)**

[Problems of the treatment of fractures of the bones that form the elbow joint and the prevention of complications] Kondrashova AN, et al. **Ortop Travmatol Protez** 1988 Aug; (8):23–6 (Eng. Abstr.) **(Rus)**

VETERINARY

Pulmonary micro–embolism following orthopaedic surgery in a Thoroughbred gelding. Jones RS, et al. **Equine Vet J** 1988 Sep;20(5):382–4

Repair of fracture of the proximal portion of the radius and ulna in a llama. St. Jean G, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1309–11

The effects of fixation of the ulna to the radius in young foals. Clem MF, et al. **Vet Surg** 1988 Nov–Dec;17(6):338–45

ULNAR NERVE

Ulnar nerve palsy of unusual etiology [letter] Lee EM, et al. **Anesth Analg** 1988 Nov;67(11):1131

Ulnar nerve entrapment at the elbow localized by short segment stimulation. Kanakamedala RV, et al. **Arch Phys Med Rehabil** 1988 Nov;69(11):959–63

"Think nerve" in upper extremity reconstruction. Dellon AL. **Clin Plast Surg** 1989 Jul;16(3):617–27 (20 ref.)

Two neuropathies of the upper extremities. Stabile MJ, et al. **Hosp Pract [Off]** 1989 Sep 30;24(9A):62, 65–6

Lipofibromatous hamartoma of the ulnar nerve at the elbow: brief report. Gouldesbrough DR, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):331–2

Intraneural leiomyoma: brief report. Trail IA, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):140

Review of treatment results for ulnar nerve entrapment at the elbow. Dellon AL. **J Hand Surg [Am]** 1989 Jul; 14(4):688–700 (67 ref.)

Ulnar compression neuropathy secondary to the anconeus epitrochlearis muscle. Masear VR, et al. **J Hand Surg [Am]** 1988 Sep;13(5):720–4

Peri–triquetral–lunate dislocation associated with ulnar nerve palsy. Bollen SR. **J Hand Surg [Br]** 1988 Nov;13(4):456–7

Ulnar nerve compression caused by a reversed palmaris longus muscle. Regan PJ, et al. **J Hand Surg [Br]** 1988 Nov;13(4):406–7

Anterior interosseous nerve paralysis: cubital tunnel (kiloh–nevin) syndrome [letter] Cramer SR. **J Manipulative Physiol Ther** 1988 Dec;11(6):517

Anxiety–induced ulnar paralysis—a case report [letter] Antony P. **Lepr Rev** 1989 Jun;60(2):162

AAEE case report #18: Ulnar neuropathy in the distal forearm. Campbell WW. **Muscle Nerve** 1989 May; 12(5):347–52

AAEE minimonograph #31: the electrodiagnosis of ulnar neuropathy at the elbow. Kincaid JC. **Muscle Nerve** 1988 Oct;11(10):1005–15

AAEE case report #15: ulnar neuropathy at or distal to the wrist. Olney RK, et al. **Muscle Nerve** 1988 Aug; 11(8):828–32

Examination of the palmaris brevis [letter] Saadeh PB. **Muscle Nerve** 1989 May;12(5):425–6

Vegas neuropathy [letter] Jarrell HR. **N Engl J Med** 1988 Dec 1;319(22):1487

Claw hand in a ropemaker—an occupational overuse syndrome [letter] Chew CK. **N Z Med J** 1988 Sep 28; 101(854):617

Dimple sign in mail carrier's ulnar neuropathy. Massey EW. **Neurology** 1989 Aug;39(8):1132

Evaluation of thermography in the diagnosis of selected entrapment neuropathies [see comments] So YT, et al. **Neurology** 1989 Jan;39(1):1–5. **Comment in:** Neurology 1989 Jul;39(7):1003–5

Ulnar tunnel syndrome caused by an accessory palmaris muscle. Robinson D, et al. **Orthop Rev** 1989 Mar; 18(3):345–7

[Compression of the ulnar nerve at the wrist and hand] Van Roy J, et al. **Acta Belg Med Phys** 1989 Jan–Mar;12(1):23–7 **(Dut)**

[Peripheral neuropathy caused by incongruous posture in shoe manufacture workers] Perbellini L, et al. **Med Lav** 1989 Mar–Apr;80(2):140–7 (Eng. Abstr.) **(Ita)**

ABNORMALITIES

Electrophysiologic study of the Riche–Cannieu anomaly. Dumitru D, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):27–31

Anomalous intrinsic hand muscle innervation in median and ulnar nerve lesions: an electrophysiological study. Uncini A, et al. **Ital J Neurol Sci** 1988 Oct;9(5):497–503

Palmar wrist pain caused by ulnar nerve entrapment in the flexor carpi ulnaris tendon. Zook EG, et al. **J Hand Surg [Am]** 1988 Sep;13(5):732–5

[Anatomic variants as a rare cause of distal ulnar nerve compression] Starke W, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):347–8 (Eng. Abstr.) **(Ger)**

ANALYSIS

Location of forelimb motoneurons in the Japanese toad (Bufo japonicus): a horseradish peroxidase study. Oka Y, et al. **J Comp Neurol** 1989 Aug 15;286(3):376–83

ANATOMY & HISTOLOGY

[The lateral root of the ulnar nerve.] Fuss FK. **Acta Anat (Basel)** 1989;134(3):199–205 (Eng. Abstr.) **(Ger)**

[Kaplan's anastomosis in the little finger] Wulle C. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):285–7 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

[Onset and duration of action times for the new muscle relaxants vecuronium and atracurium. Comparison with pancuronium] Melloni C, et al. **Minerva Anestesiol** 1988 Jun;54(6):233–48 (Eng. Abstr.) **(Ita)**

[Clinico–electroneuromyographic characteristics of occupational polyneuropathies of toxico–allergic origin] Krasheninnikova ON. **Gig Tr Prof Zabol** 1989;(4):54–5 **(Rus)**

GROWTH & DEVELOPMENT

Changes of the ratio between myelin thickness and axon diameter in human developing sural, femoral, ulnar, facial, and trochlear nerves. Schröder JM, et al. **Acta Neuropathol (Berl)** 1988;76(5):471–83

INJURIES

Perioperative nerve injuries [letter] Martens PR. **Anaesthesia** 1988 Oct;43(10):899

Injection–related ulnar neuropathy. Geiringer SR, et al. **Arch Phys Med Rehabil** 1989 Sep;70(9):705–6

Handcuff neuropathy revisited. Scott TF, et al. **Muscle Nerve** 1989 Mar;12(3):219–20

[A method of diagnosis of injuries of the ulnar nerve] Andruson MV, et al. **Ortop Travmatol Protez** 1988 Dec; (12):38–40 **(Rus)**

[Dynamics of restoration of the motor and sensory functions of the upper extremity after suturing] Kankava DM, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):26–8 (Eng. Abstr.) **(Rus)**

[A symptom of ulnar nerve injury] Andruson MV, et al. **Zh Vopr Neirokhir** 1989 Mar–Apr;(2):57–8 **(Rus)**

[Neurovascular autoregulation of the regeneration of nerves in the upper extremities] Krupatkin AI. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):35–9 (Eng. Abstr.) **(Rus)**

[Neurotization with autoplasty of the ulnar nerve in simultaneous injuries of the brachial plexus and ulnar nerve] Stashkevich A. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):56–7 **(Rus)**

PATHOLOGY

Calcification of ulnar nerve in leprosy—a case report. Arora SK, et al. **Indian J Lepr** 1989 Jan;61(1):111–2

Calcification of ulnar nerve in a patient with tuberculoid leprosy—a case report. Siddappa K, et al. **Indian J Lepr** 1989 Jan;61(1):107–10

Ulnar neuropathy caused by fat necrosis with cystic myxoid degeneration at the upper forearm: case report. Segal R, et al. **Neurosurgery** 1988 Nov;23(5):669–71

[Peripheral nerve lesions of experimental leprosy in monkeys. IV. Relationship between progress of histopathological findings and anatomical location of peripheral nerves] Fukunishi Y, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul–Sep; 56(3):148–56 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Cortical somatosensory–evoked potentials in the horse. Strain GM, et al. **Am J Vet Res** 1988 Nov;49(11):1869–72

Ulnar train–of–four stimulation in predicting face movement during intracranial facial nerve stimulation. Ho LC, et al. **Anesth Analg** 1989 Aug;69(2):242–4

Effect of surface electrode positioning on the compound action potential evoked by ulnar nerve stimulation in anaesthetized infants and children. Kalli I. **Br J Anaesth** 1989 Feb;62(2):188–93

Evidence for two types of potassium channel in human motor axons in vivo. Bostock H, et al. **Brain Res** 1988 Oct 18; 462(2):354–8

Multichannel detection of magnetic compound action fields of median and ulnar nerves. Hari R, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar; 72(3):277–80

The minimum F–response latency: results from 10,000 stimuli of normal ulnar nerves. Barron SA, et al.

Electromyogr Clin Neurophysiol 1987 Dec;27(8):499–501
Comparison of the distal motor latency of the first dorsal interosseous with abductor pollicis brevis. Report of 200 cases. Seror P. Electromyogr Clin Neurophysiol 1988 Aug–Oct;28(6):341–5
Sensory and mixed action potentials in ulnar nerve. Sumra RS. Electromyogr Clin Neurophysiol 1988 May;28(4):205–8
Assessment of peripheral nerve crush injury with cortical somatosensory evoked potentials in the cat. Kawakami Y, et al. Exp Neurol 1989 Feb;103(2):146–53
Evidence for non-monosynaptic Ia excitation of human wrist flexor motoneurones, possibly via propriospinal neurones. Malmgren K, et al. J Physiol (Lond) 1988 Nov;405:747–64
Inhibition of neurones transmitting non-monosynaptic Ia excitation to human wrist flexor motoneurones. Malmgren K, et al. J Physiol (Lond) 1988 Nov;405:765–83
Roth technique—a new approach for measuring sensory neural conduction in the median and ulnar nerves: suggestion from the field. Greathouse DG, et al. Phys Ther 1989 Sep;69(9):777–9

PHYSIOPATHOLOGY

Peripheral nerve function during hyperglycemic clamping in healthy subjects. Sindrup SH, et al. Acta Neurol Scand 1988 Aug;78(2):141–5
Ulnar nerve entrapment [letter] Bilbao A. Arch Phys Med Rehabil 1989 Jun;70(6):495
Across-elbow ulnar nerve sensory conduction technique. Felsenthal G, et al. Arch Phys Med Rehabil 1989 Sep; 70(9):668–72
Idiopathic brachial plexus lesion with conduction block of the ulnar nerve. Krarup C, et al. Electroencephalogr Clin Neurophysiol 1989 Mar; 72(3):259–67
Compressive mononeuropathy of the deep palmar branch of the ulnar nerve in cyclists. Hankey GJ, et al. J Neurol Neurosurg Psychiatry 1988 Dec;51(12):1588–90
Field detection of early neuritis in leprosy [letter] Harris JR. Lepr Rev 1988 Jun;59(2):184
Maximal and minimal motor nerve conduction velocities in amyotrophic lateral sclerosis. Nakanishi T, et al. Neurology 1989 Apr;39(4):580–3
Compression neuropathies. Shuman S, et al. Semin Neurol 1987 Mar;7(1):76–87 (56 ref.)
[Involvement of the ulnar nerve in idiopathic carpal tunnel syndrome] Dijs H, et al. Acta Belg Med Phys 1988 Jul–Sep; 11(3):107–9 (Eng. Abstr.) (Dut)
[Electrophysiological analysis of the phenomenon of "blocked" neuromuscular synapses in patients with myasthenia gravis] Gekht BM, et al. Zh Nevropatol Psikhiatr 1989;89(3):96–102 (Eng. Abstr.) (Rus)

RADIOGRAPHY

[Computerized tomography of the elbow in ulnar sulcus syndrome] Kessler C, et al. Nervenarzt 1989 Jul; 60(7):448–50 (Ger)

SURGERY

Fascicular tubulization: a comparison of experimental nerve repair techniques in the cat. Rosen JM, et al. Ann Plast Surg 1989 Jun;22(6):467–78
Submuscular transposition of the ulnar nerve. Janes PC, et al. Clin Orthop 1989 Jan;(238):225–32
Ulnar neuropathy at the elbow: results of medial epicondylectomy. Goldberg BJ, et al. J Hand Surg [Am] 1989 Mar;14(2 Pt 1):182–8
St. Clair Strange procedure: indications, technique, and long-term evaluation. Greenberg BM, et al. J Hand Surg [Am] 1988 Nov;13(6):928–35
A comparison of nerve regeneration across a sural nerve graft and a vascularized pseudosheath. Mackinnon SE, et al. J Hand Surg [Am] 1988 Nov;13(6):935–42
Surgery for ulnar nerve entrapment at the elbow. Bernhardt M, et al. Kans Med 1988 Sep;89(9):233–8
Complications from silicon-polymer intubulation of nerves. Merle M, et al. Microsurgery 1989;10(2):130–3
Pitfalls in the management of cubital tunnel syndrome. Jones JA. Orthop Rev 1989 Jan;18(1):36–44 (24 ref.)
An alternative to the classical nerve graft for the management of the short nerve gap. Dellon AL, et al. Plast Reconstr Surg 1988 Nov;82(5):849–56
A surgical approach to the motor branch of the ulnar nerve. Ollstein RN, et al. Plast Reconstr Surg 1989 Sep;84(3):526–8
[Intraneural ganglion of the ulnar nerve. A case report] Hansis M, et al. Unfallchirurg 1988 Sep;91(9):405–7 (Eng. Abstr.) (Ger)
[Experimental and clinical studies of the vascularized anterior transposition of the ulnar nerve for cubital tunnel syndrome] Sugawara M. Nippon Seikeigeka Gakkai Zasshi 1988 Aug;62(8):755–66 (Eng. Abstr.) (Jpn)
[Evaluation of the results of secondary reconstruction of the median and ulnar nerves by nerve transplantation] Pisarek W, et al. Pol Tyg Lek 1988 Nov 14;43(46):1463–6 (Eng. Abstr.) (Pol)
[Compression injury to the ulnar nerve in the wrist area and its surgical treatment] Dumbere RT. Zh Vopr Neirokhir 1989 Jan–Feb;(1):39–45 (Eng. Abstr.) (Rus)
[Surgical treatment of tunnel lesions of the nerves of the arm] Dumbere RT, et al. Zh Vopr Neirokhir 1988 Jul–Aug; (4):53–6 (51 ref.) (Rus)

TRANSPLANTATION

Experience with the free vascularized ulnar nerve graft in repair of supraclavicular lesions of the brachial plexus. Birch R, et al. Clin Orthop 1988 Dec;(237):96–104

ULTRASTRUCTURE

The immunohistochemical demonstration of early perineurial change in the development of localized hypertrophic neuropathy. Stanton C, et al. Hum Pathol 1988 Dec; 19(12):1455–7

ULTIMOBRANCHIAL BODY

see related
CALCITONIN

ANALYSIS

Demonstration of sugar residues in the ultimobranchial tubule and thyroid C-cells of the rat using peroxidase labelled lectins. Moreno AM, et al. Anat Histol Embryol 1989 Jun; 18(2):114–21
Immunohistochemical and morphometric analysis of calcitonin distribution in anuran ultimobranchial glands. Robertson DR. Gen Comp Endocrinol 1988 Aug; 71(2):349–58

ANATOMY & HISTOLOGY

The ultimobranchial remnant and its hyperplasia or adenoma in equine thyroid gland. Tateyama S, et al. Nippon Juigaku Zasshi 1988 Jun;50(3):714–22

INNERVATION

Innervation of the C cells of chicken ultimobranchial glands studied by immunohistochemistry, fluorescence microscopy, and electron microscopy. Kameda Y, et al. Am J Anat 1988 Aug;182(4):353–68

ULTRACENTRIFUGATION

Analytical centrifugation with preparative ultracentrifuges. Minton AP. Anal Biochem 1989 Feb 1;176(2):209–16 (24 ref.)
The molecular weight and oligomerization of rabbit thrombomodulin as assessed by sedimentation equilibrium. Winnard PT, et al. Arch Biochem Biophys 1989 Feb 15; 269(1):339–44
An unusual band that binds hemoglobin after ultracentrifugation of hemolyzed plasma for lipoprotein separation. Davignon J, et al. Clin Chem 1989 Mar;35(3):495
FUGE: an analytical ultracentrifuge simulation for teaching purposes. Mynett A. Comput Appl Biosci 1988 Apr; 4(2):249–52
Visualization of reversible macromolecular reactions in an analytical ultracentrifuge. Chernyak VY, et al. Eur J Biochem 1988 Dec 15;178(2):465–9
[The value of centrifugation for the study of cytoplasmic changes related to the maturation and fertilization of mammalian oocytes] Mulnard J, et al. Bull Mem Acad R Med Belg 1987;142(11–12):507–16 (Eng. Abstr.) (Fre)

INSTRUMENTATION

Comparison of experimental and theoretical fractionating power for exponential field decay sedimentation field-flow fractionation. Williams PS, et al. Analyst 1988 Aug; 113(8):1253–9

METHODS

A parameterized overspeeding method for the rapid attainment of low-speed sedimentation equilibrium. Chatelier RC. Anal Biochem 1988 Nov 15;175(1):114–9
Low-density lipoprotein preparation by combined diafiltration and ultracentrifugation. Pritchard KA Jr, et al. Anal Biochem 1988 Oct;174(1):121–7

ULTRAFILTRATION

see related
MICROPORE FILTERS

Does the ultrafiltration coefficient play a key role in regulating glomerular filtration in the rat. Oken DE. Am J Physiol 1989 Apr;256(4 Pt 2):F505–15 (43 ref.)
Virus removal or inactivation in hemoglobin solutions by ultrafiltration or detergent/solvent treatment. Bechtel MK, et al. Biomater Artif Cells Artif Organs 1988;16(1–3):123–8
6th annual meeting of the International Society of Blood Purification. June 22–24, 1988, Vicenza (Italy). Blood Purif 1988;6(6):343–84
Cardiovascular function and arterial blood gases during isolated ultrafiltration in healthy man. Freyschuss U, et al. Blood Purif 1988;6(4):213–26
CAPD with preservation of ultrafiltration capacity in infants and young children during the first 18 months of treatment. van Beek R, et al. Helv Paediatr Acta 1988 Aug; 43(1–2):33–40
Removal of cephalosporins by continuous arteriovenous ultrafiltration (CAVU) and hemofiltration (CAVH). Lau AH, et al. Int J Artif Organs 1989 Jun;12(6):379–83
Effect of ultrafiltration on plasma colloid oncotic pressure and red cell volume during cardiopulmonary bypass. Zhou JL, et al. J Cardiovasc Surg (Torino) 1989 Jan–Feb; 30(1):40–1
Clinical significance of renal hemodynamics in severe congestive heart failure: responsiveness to ultrafiltration therapies. Akiba T, et al. Jpn Circ J 1989 Feb;53(2):191–6
Effluent treatment by membrane technology—opportunities and challenges. Chakravorty B. Prog Clin Biol Res 1989; 292:169–80
Extractive ultrafiltration. Watters JC, et al. Prog Clin Biol Res 1989;292:181–91
Physiological effects of hemodialysis and ultrafiltration in healthy man. Danielsson A. Scand J Urol Nephrol Suppl 1988;115:1–69

INSTRUMENTATION

Tangential flow filtration. Shiloach J, et al. Adv Biotechnol Processes 1988;8:97–125
A U-shaped flat membrane bio-artificial pancreas. Application of the ultrafiltration-based model to its design. Reach G, et al. Life Support Syst 1983;1 Suppl 1:49–52
Comparative evaluation of microultrafiltration devices for determination of protein binding. Ohshima T, et al. Ther Drug Monit 1988;10(3):310–5
[Problems in the development of methods for extracorporeal detoxication] Vyrenkov IuE, et al. Sov Med 1988;(6):3–6 (Eng. Abstr.) (Rus)

METHODS

Preparation of human cord sera for enzymatic triglyceride assays: removal of free glycerol by ultrafiltration. Khan IM, et al. Anal Biochem 1988 Nov 1;174(2):496–500
Technical and clinical evaluation of a new system for ultrafiltration control during hemodialysis. Ronco C, et al. ASAIO Trans 1988 Jul–Sep;34(3):613–6
Hemodiafiltration with separate convection and diffusion: paired filtration dialysis. Ghezzi PM, et al. Contrib Nephrol 1989;69:141–61; discussion 162–7 (67 ref.)
Hemodiafiltration. Vanholder R, et al. Contrib Nephrol 1989; 69:131–40; discussion 162–7
A method for removing interleukin-1- and tumor necrosis factor-inducing substances from bacterial cultures by ultrafiltration with polysulfone. Schindler R, et al. J Immunol Methods 1989 Jan 17;116(2):159–65
Ultrafiltration: an efficient second step for hepatitis A virus and poliovirus concentration. Divizia M, et al. J Virol Methods 1989 Jan;23(1):55–62
[Blood purification technics in the treatment of heart failure in uremia] Dai FX, et al. Chung Hua Nei Ko Tsa Chih 1988 Feb;27(2):92–5, 135 (Eng. Abstr.) (Chi)
[Experiences with ultrafiltration membranes made from cellulose acetate] Schlesier B. Z Med Lab Diagn 1988; 29(5):295–6 (Ger)
[Ultrafiltration in the treatment of refractory congestive heart failure] Bergerone S, et al. Cardiologia 1989 May; 34(5):399–406 (37 ref.) (Ita)
[Removal of human immunodeficiency virus by filtration with microporous regenerated cellulose membrane and by fractionation with polyethylene glycol] Hamamoto Y, et al. Nippon Rinsho 1989 Jan;47(1):161–7 (Jpn)
[Parallel ultrafiltration in cardiac surgery] Sant'Anna JR, et al. Arq Bras Cardiol 1988 Aug;51(2):161–5 (Eng. Abstr.) (Por)
[Isolated ultrafiltration in refractory cardiac insufficiency] Zaruba AIu, et al. Sov Med 1989;(1):21–4 (Eng. Abstr.) (Rus)
[Purification of infectious influenza virus by microfiltration] Luk'ianova EG, et al. Vopr Virusol 1989 Mar–Apr; 34(2):240–3 (Rus)

STANDARDS

Backfiltration: does it occur in membrane plasma separation? Smolik G, et al. ASAIO Trans 1988 Jul–Sep;34(3):594–7

ULTRASONIC DIAGNOSIS

Non-invasive assessment of blood vessels. Jonnart LE. Acta Cardiol 1989;44(1):1–6
The detection and follow-up of fetal diseases: contributions of ultrasound. Avni EF, et al. Acta Chir Belg 1989 Jan–Feb; 89(1):34–6
Evaluation of flow in nodular tumors of the breast by Doppler and duplex scanning. Belcaro G, et al. Acta Chir Belg 1988 Sep–Oct;88(5):323–7
Ultrasonography and parameters of inflammation in acute appendicitis. A comparison with clinical findings. Amland PF, et al. Acta Chir Scand 1989 Mar;155(3):185–9
Differential diagnosis of malignant intrahepatic tumors by ultrasonically guided fine needle aspiration biopsy and by laparoscopic/intraoperative biopsy. A comparative study. Prior C, et al. Acta Cytol 1988 Nov–Dec;32(6):892–5
Ultrasonography related to clinical and laboratory findings in lymphocytic thyroiditis. Gutekunst R, et al. Acta Endocrinol (Copenh) 1989 Jul;121(1):129–35
Combined use of serial serum human chorionic gonadotropin testing, ultrasound and panoramic diagnostic microhysteroscopy in the early diagnosis of ectopic pregnancy. La Sala GB. Acta Eur Fertil 1988 Mar–Apr; 19(2):83–7

Haemodynamic effectiveness of nimodipine on spastic brain vessels after subarachnoid haemorrhage evaluated by the transcranial Doppler method. A review of clinical studies. Harders A, et al. **Acta Neurochir Suppl (Wien)** 1988;45:21–8 (39 ref.)

The microvascular Doppler—an intraoperative tool for the treatment of large and giant aneurysms. Laborde G, et al. **Acta Neurochir Suppl (Wien)** 1988;42:75–80

Cerebral vasospasm after subarachnoid haemorrhage investigated by means of transcranial Doppler ultrasound. Lindegaard KF, et al. **Acta Neurochir Suppl (Wien)** 1988; 42:81–4

Non-invasive follow-up of patients with intracranial arteriovenous malformations after proton-beam radiation therapy. Mehdorn HM, et al. **Acta Neurochir Suppl (Wien)** 1988;42:98–102

Intraoperative use of laser Doppler in the study of cerebral microvascular circulation. Fasano VA, et al. **Acta Neurochir (Wien)** 1988;95(1–2):40–8

Indications for extra–intracranial bypass surgery. New orientation after the Toronto Bypass Study based on angiographic and non-invasive ultrasound flow measurements. Jaksche H, et al. **Acta Neurochir (Wien)** 1988;95(1–2):34–9

Intraoperative ultrasound imaging in lumbar disc herniation surgery. Koivukangas J, et al. **Acta Neurochir (Wien)** 1989; 98(1–2):47–54

Diagnosis of brain death. Transcranial Doppler sonography as an additional method. Van Velthoven V, et al. **Acta Neurochir (Wien)** 1988;95(1–2):57–60

Sex differences in cerebrovascular disease and its association with carotid obstruction. Retrospective evaluation of 1003 patients by Doppler examination. Iuliano G, et al. **Acta Neurol (Napoli)** 1988 Jun;10(3):200–5 (13 ref.)

Seventeen week pregnancy in a rudimentary uterine horn revealed at routine ultrasonography. Andolf E, et al. **Acta Obstet Gynecol Scand** 1988;67(4):379–80

Re: "Sinusoidal-like fetal heart-rate pattern". Real-time ultrasound may help in differential diagnosis [letter] Arulkumaran S, et al. **Acta Obstet Gynecol Scand** 1988; 67(6):573

Rapid karyotyping in fetuses with abnormal sonogram. Hsieh FJ, et al. **Acta Obstet Gynecol Scand** 1988;67(7):621–5

Ovarian pregnancy—ultrasonographic diagnosis. Malinger G, et al. **Acta Obstet Gynecol Scand** 1988;67(6):561–3

Umbilical cord compression diagnosed by means of ultrasound. Selbing A. **Acta Obstet Gynecol Scand** 1988; 67(6):565–7

Fetal duodenal obstruction. A high risk indicator for Down's syndrome. Yagel S, et al. **Acta Obstet Gynecol Scand** 1988; 67(5):465–6

Immersion versus contact technique in the measurement of axial length by ultrasound. Olsen T, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):101–2

The accuracy of ultrasonic determination of axial length in pseudophakic eyes. Olsen T. **Acta Ophthalmol (Copenh)** 1989 Apr;67(2):141–4

Sonography in soft-tissue trauma of the shoulder. Lind T, et al. **Acta Orthop Scand** 1989 Feb;60(1):49–53

Observations on cochlear blood flow using the laser Doppler method in guinea pigs. Yokoyama K, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct;106(3–4):192–9

Laser Doppler scanning of the vibrating tympanic membrane. Toremalm NG. **Acta Otolaryngol Suppl (Stockh)** 1988; 458:52–5

A premature infant with a bilateral thalamostriatal hemorrhage: brain imaging and pathology. Hokazono Y, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Dec;29(6):867–71

Chest sonography. Differentiation of pulmonary consolidation from pleural disease. Acunas B, et al. **Acta Radiol** 1989 May–Jun;30(3):273–5

Ultrasonography in lesions of the rotator cuff and biceps tendon. Ahovuo J, et al. **Acta Radiol** 1989 May–Jun; 30(3):253–5

Femoral anteversion measured by ultrasonography and radiography. An anatomic investigation. Anda S, et al. **Acta Radiol** 1988 Nov–Dec;29(6):695–9

Mucinous cystadenocarcinoma of the pancreas. Ultrasonographic findings in 5 cases. Bastid C, et al. **Acta Radiol** 1989 Jan–Feb;30(1):45–7

Pitfalls in ultrasonography of hip joint synovitis in the child. Egund N, et al. **Acta Radiol** 1989 Jul–Aug;30(4):375–9

Reliability of ultrasound-guided fine-needle biopsy of pancreatic masses. Ekberg O, et al. **Acta Radiol** 1988 Sep–Oct;29(5):535–9

Hypoechoic lesions without halo in echogenic liver. A frequent sonographic dilemma. Hess CF, et al. **Acta Radiol** 1988 Sep–Oct;29(5):541–5

Computed tomography and ultrasonography in parotid tumors. Isaza M, et al. **Acta Radiol** 1989 Jan–Feb;30(1):11–5

Preoperative ultrasound assessment of choledochal cysts. Report of three cases. Jones SN, et al. **Acta Radiol** 1989 Jan–Feb;30(1):35–7

A-mode ultrasonic detection of slow flow velocities in vitro. Kallio T, et al. **Acta Radiol** 1989 Jan–Feb;30(1):103–5

Ultrasonically guided subclavian vein catheterization. Nolsøe C, et al. **Acta Radiol** 1989 Jan–Feb;30(1):108–9

Nine pheochromocytomas in the same patient. Final mapping with ultrasound and angiography. Nolsøe CP, et al. **Acta Radiol** 1988 Sep–Oct;29(5):515–8

Renal medullary cystic disease. Findings at urography and ultrasonography. Olsen A, et al. **Acta Radiol** 1988 Sep–Oct; 29(5):527–9

Duplex sonography of normal renal allografts. Schwaighofer B, et al. **Acta Radiol** 1989 Jan–Feb;30(1):53–6

Ultrasonography of the gallbladder in acute pancreatitis. Soiva M. **Acta Radiol** 1989 Jul–Aug;30(4):403–6

Evaluation of intrahepatic tumour extent and prediction of resection size in liver tumours by computed tomography, ultrasonography and angiography. Tidebrant G, et al. **Acta Radiol** 1989 Jul–Aug;30(4):395–9

Angiomyolipoma of the kidney. Comparison between magnetic resonance imaging, computed tomography, and ultrasonography for diagnosis. Uhlenbrock D, et al. **Acta Radiol** 1988 Sep–Oct;29(5):523–6

Ultrasound in renal pyogenic infection. Imaging and intervention. Vehmas T, et al. **Acta Radiol** 1988 Nov–Dec; 29(6):675–8

Noninvasive ultrasound investigation of cerebral vessels in the case of vertigo and dizziness. Widder B, et al. **Adv Otorhinolaryngol** 1988;41:231–4

Ultrasonic foetal abdominal circumference as a means of assessing gestational age in Nigerians. Osinusi BO, et al. **Afr J Med Med Sci** 1989 Jun;18(2):101–4

Ultrasound measurement of foetal head to abdomen circumference ratio in pregnant Nigerians. Osinusi BO. **Afr J Med Med Sci** 1989 Mar;18(1):39–41

Intracerebral biopsy hemorrhage: monitoring and intervention guided by intraoperative sonography. Reich J, et al. **AJNR** 1988 Nov–Dec;9(6):1240–1

Tongue cancer: correlation of MR imaging and sonography with pathology. Takashima S, et al. **AJNR** 1989 Mar–Apr; 10(2):419–24

Cystitis mimicking bladder cancer on sonography [letter] Afroz S, et al. **AJR** 1988 Dec;151(6):1252–3

Angiomyolipoma of the kidney extending into the inferior vena cava: sonographic and CT findings. Arenson AM, et al. **AJR** 1988 Dec;151(6):1159–61

Fetal aortic and pulmonary artery diameters: sonographic measurements in growth-retarded fetuses. Cartier MS, et al. **AJR** 1988 Nov;151(5):991–3

Fibromatosis colli of infancy: CT and sonographic findings. Crawford SC, et al. **AJR** 1988 Dec;151(6):1183–4

The three lines: origin of sonographic landmarks of the fetal head [letter] de Crespigny LC, et al. **AJR** 1989 Feb; 152(2):432–3

Fetal choroid plexus cysts: prevalence, clinical significance, and sonographic appearance. DeRoo TR, et al. **AJR** 1988 Dec;151(6):1179–81

Pregnancies in septate uteri: outcome in relation to site of uterine implantation as determined by sonography. Fedele L, et al. **AJR** 1989 Apr;152(4):781–4

The usefulness of diagnostic tests [letter] Franken EH Jr, et al. **AJR** 1988 Nov;151(5):1053–4

Sonography in patients with suspected acute appendicitis: value in establishing alternative diagnoses. Gaensler EH, et al. **AJR** 1989 Jan;152(1):49–51

Duplex Doppler sonography of renal transplants: lack of sensitivity and specificity in establishing pathologic diagnosis. Genkins SM, et al. **AJR** 1989 Mar;152(3):535–9

Clinical Doppler imaging. Grant EG, et al. **AJR** 1989 Apr; 152(4):707–17 (76 ref.)

Sonography of the prostate: in vitro correlation of sonographic and anatomic findings in normal glands. Hardt NS, et al. **AJR** 1988 Nov;151(5):955–9

Hepatic lymphoma in cyclosporine-treated transplant recipients: sonographic and CT findings. Honda H, et al. **AJR** 1989 Mar;152(3):501–3

Changes in the epididymis after vasectomy: sonographic findings. Jarvis LJ, et al. **AJR** 1989 Mar;152(3):531–4

Cystic pancreatic tumors: CT and sonographic assessment. Johnson CD, et al. **AJR** 1988 Dec;151(6):1133–8

CT and sonographic features of pseudomyxoma peritonei [letter] Lawate PS, et al. **AJR** 1989 Feb;152(2):429

Clonorchiasis: sonographic findings in 59 proved cases. Lim JH, et al. **AJR** 1989 Apr;152(4):761–4

Perfluorooctylbromide: a new contrast agent for CT, sonography, and MR imaging. Mattrey RF. **AJR** 1989 Feb; 152(2):247–52 (36 ref.)

Color Doppler sonography of hemodialysis vascular access: comparison with angiography. Middleton WD, et al. **AJR** 1989 Mar;152(3):633–9

Sonography of the painful hip in children: 500 consecutive cases. Miralles M, et al. **AJR** 1989 Mar;152(3):579–82

Myelolipoma of the adrenal gland: sonographic and CT features. Musante F, et al. **AJR** 1988 Nov;151(5):961–4

Cholangiocarcinoma: diagnosis and evaluation of resectability by CT and sonography as procedures complementary to cholangiography. Nesbit GM, et al. **AJR** 1988 Nov;151(5):933–8

Duplex sonography of the portal venous system: pitfalls and limitations. Parvey HR, et al. **AJR** 1989 Apr;152(4):765–70

Second-trimester sonographic diagnosis of Down syndrome: role of femur-length shortening and nuchal-fold thickening. Perrella R, et al. **AJR** 1988 Nov;151(5):981–5

Heterotopic gastric mucosa in the gallbladder [letter] Pradines P, et al. **AJR** 1989 Feb;152(2):432

Sonographic evaluation of the fetal stomach: significance of nonvisualization. Pretorius DH, et al. **AJR** 1988 Nov; 151(5):987–9

Diagnostic criteria for carotid duplex sonography. Robinson ML, et al. **AJR** 1988 Nov;151(5):1045–9

Malignant mixed germ cell tumor of the testis mimicking a hematocele [letter] Sanders LM, et al. **AJR** 1988 Dec; 151(6):1253

Increased prevalence of cholelithiasis in patients with abdominal aortic aneurysm: sonographic evaluation. Schuster JJ, et al. **AJR** 1989 Mar;152(3):509–11

Ectopic ureterocele without ureteral and calyceal dilatation (ureterocele disproportion): findings on urography and sonography. Share JC, et al. **AJR** 1989 Mar;152(3):567–71

Sonography of the postoperative shoulder [letter] van Holsbeeck M, et al. **AJR** 1989 Jan;152(1):202

Pseudoaneurysm of the vertebral artery: appearance on color-flow Doppler sonography. Wilkinson DL, et al. **AJR** 1988 Nov;151(5):1051–2

Mediastinal bronchogenic cyst: prenatal sonographic diagnosis. Young G, et al. **AJR** 1989 Jan;152(1):125–7

Inability of sonography to detect imminent ovulation. Zandt-Stastny D, et al. **AJR** 1989 Jan;152(1):91–5

The role of sonography and transhepatic cholangiography in the diagnosis of biliary complications after liver transplantation. Zemel G, et al. **AJR** 1988 Nov;151(5):943–6

Pelvic arteriovenous malformation diagnosed by color flow Doppler imaging. Abu Musa A, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1311–2

Brain abnormalities in infants on extracorporeal membrane oxygenation: sonographic and CT findings. Babcock DS, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):571–6

Transabdominal and transvaginal sonography in early pregnancy [letter] Bartrum RJ Jr. **AJR Am J Roentgenol** 1989 May;152(5):1132

Sonography of the male genital tract. Benson CB, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):705–13 (60 ref.)

Testicular epidermoid cyst: sonographic and MR findings [letter] Brenner JS, et al. **AJR Am J Roentgenol** 1989 Jun; 152(6):1344

Routine sonographic techniques fail to quantify gallstone size and number: a retrospective study of 111 surgically proved cases. Brink JA, et al. **AJR Am J Roentgenol** 1989 Sep; 153(3):503–6

Sonographic diagnosis of omphalocele during 10th week of gestation. Brown DL, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):825–6

Congenital cardiac anomalies: prenatal sonographic diagnosis. Brown DL, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):109–14

Intrauterine shelves in pregnancy: sonographic observations. Brown DL, et al. **AJR Am J Roentgenol** 1989 Oct; 153(4):821–4

Sonographic appearance of aortic saddle embolus [letter] Cooper SG. **AJR Am J Roentgenol** 1989 Jun;152(6):1348

Stenosis of the internal carotid artery: assessment using color Doppler imaging compared with angiography. Erickson SJ, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1299–305

The hypoechoic band: a normal finding on testicular sonography. Fakhry J, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):321–3

Identification of a patent paraumbilical vein by using Doppler sonography: importance in the diagnosis of portal hypertension. Gibson RN, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):513–6

Sonography of the salivary glands. Gritzmann N. **AJR Am J Roentgenol** 1989 Jul;153(1):161–6

IV injection of air-filled human albumin microspheres to enhance arterial Doppler signal: a preliminary study in rabbits. Hilpert PL, et al. **AJR Am J Roentgenol** 1989 Sep; 153(3):613–6

Absolute intracranial blood-flow velocities evaluated by duplex Doppler sonography in asymptomatic preterm and term neonates. Horgan JG, et al. **AJR Am J Roentgenol** 1989 May;152(5):1059–64

Acute appendicitis in children: sonographic findings. Kao SC, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):375–9

Sonography of placental abnormalities and oligohydramnios in women with elevated alpha-fetoprotein levels: comparison with control subjects. Kelly RB, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):815–9

Biliary cystadenoma and cystadenocarcinoma: CT and sonographic findings. Korobkin M, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):507–11

Doppler demonstration of in situ vein bypass tributary fistula and its spontaneous closure [letter] Kotval PS, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):192–3

Doppler and M-mode sonography of mobile carotid plaque [letter] Kotval PS, et al. **AJR Am J Roentgenol** 1989 Aug; 153(2):433–4

Sonographic findings in torsion of a Meckel diverticulum [letter] Larson J, et al. **AJR Am J Roentgenol** 1989 May; 152(5):1130

1989 ARRS President's Award. The validity and utility of sonography in the diagnosis of appendicitis in the community setting. Larson JM, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):687–91

Pediatric radiology case of the day. Congenital hepatic fibrosis with saccular dilatation of the intrahepatic bile ducts and infantile polycystic kidneys. McAlister WH, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1329–30

Sonography case of the day. Allantoic cyst of the umbilical cord. Middleton MA, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1324–5

Sonography case of the day. Postbiopsy renal transplant arteriovenous fistula. Middleton WD. **AJR Am J Roentgenol** 1989 Jun;152(6):1323–4

Sonography case of the day. Pseudosubcapsular splenic hematoma due to elongation of left hepatic lobe. Middleton

WD. AJR Am J Roentgenol 1989 Jun;152(6):1325–6
Sonography case of the day. Focal hepatic fatty infiltration adjacent to falciform ligament. Middleton WD. AJR Am J Roentgenol 1989 Jun;152(6):1326–7
Prenatal sonographic diagnosis of harlequin ichthyosis. Mihalko M, et al. AJR Am J Roentgenol 1989 Oct; 153(4):827–8
Imaging studies for screening native kidneys in long–term dialysis patients. Mindell HJ. AJR Am J Roentgenol 1989 Oct;153(4):768–9
Cine MR imaging in mitral regurgitation: comparison with color Doppler flow imaging. Nishimura T, et al. AJR Am J Roentgenol 1989 Oct;153(4):721–4
High–resolution carotid sonography: past, present, and future. O'Leary DH, et al. AJR Am J Roentgenol 1989 Oct;153(4):699–704 (42 ref.)
Typhoid fever: diagnosis by using sonography. Puylaert JB, et al. AJR Am J Roentgenol 1989 Oct;153(4):745–6
Sonographically guided percutaneous injection of ethanol for treatment of hepatocellular carcinoma: value of Gelfoam to mark the lesion [letter] Shiina S, et al. AJR Am J Roentgenol 1989 Aug;153(2):430
Gastric fluid detected by sonography in fasting patients: relation to duodenal ulcer disease and gastric–outlet obstruction. Smithuis RH, et al. AJR Am J Roentgenol 1989 Oct;153(4):731–3
Nuclear cystography and renal sonography: findings in girls with urinary tract infection. Strife JL, et al. AJR Am J Roentgenol 1989 Jul;153(1):115–9
Renal imaging in long–term dialysis patients: a comparison of CT and sonography. Taylor AJ, et al. AJR Am J Roentgenol 1989 Oct;153(4):765–7
Cerebrovascular accidents in neonates treated with extracorporeal membrane oxygenation: sonographic–pathologic correlation. Taylor GA, et al. AJR Am J Roentgenol 1989 Aug;153(2):355–61
Cyst of the kidney or spontaneous splenorenal shunt? Differentiation by pulsed Doppler sonography [letter] Testa S, et al. AJR Am J Roentgenol 1989 Aug;153(2):431
Cecal diverticulitis differentiated from appendicitis using graded–compression sonography. Townsend RR, et al. AJR Am J Roentgenol 1989 Jun;152(6):1229–30
Color Doppler imaging of intracranial vessels in the neonate. Wong WS, et al. AJR Am J Roentgenol 1989 May; 152(5):1065–70
Burkitt lymphoma involving the epididymis and spermatic cord: sonographic and CT findings. Zwanger–Mendelsohn S, et al. AJR Am J Roentgenol 1989 Jul;153(1):85–6
Sonography in newborns with cutaneous manifestations of spinal abnormalities. Nelson MD Jr, et al. Am Fam Physician 1989 Aug;40(2):198–203
Regional hemodynamic effects of slow–release nicardipine in elderly patients with hypertension: evaluation by a new ultrasound technique. Carretta R, et al. Am Heart J 1989 Jan;117(1):229–35
In utero diagnosis of interrupted aortic arch with transposition of the great arteries and tricuspid atresia. Johnson BL, et al. Am Heart J 1989 Mar;117(3):690–2
Hemodynamic response to treadmill exercise in normal volunteers: an assessment by Doppler ultrasonic measurement of ascending aortic blood velocity and acceleration. Mehta N, et al. Am Heart J 1988 Nov;116(5 Pt 1):1298–307
Nongeometric Doppler stroke volume determination. Spodick DH, et al. Am J Cardiol 1989 Apr 1;63(12):883–4
Diagnosis of constrictive pericarditis by pulsed Doppler echocardiography of the hepatic vein. von Bibra H, et al. Am J Cardiol 1989 Feb 15;63(7):483–8
Thyroid scanning, ultrasound, and serum thyroglobulin in determining the origin of congenital hypothyroidism [letter] Farriaux JP, et al. Am J Dis Child 1988 Oct; 142(10):1023–4
Emergency department use of hand–held Doppler ultrasonography. Turnbull TJ, et al. Am J Emerg Med 1989 Mar;7(2):209–15 (72 ref.)
Intraoperative ultrasonography and ultrasonic dissection in liver surgery. de Jong KP, et al. Am J Gastroenterol 1989 Aug;84(8):933–6
Effects of posture on normal and hypertensive portal vein: a quantitative ultrasonic assessment and its clinical implications [letter] Goyal AK, et al. Am J Gastroenterol 1988 Dec;83(12):1436–7
Sonographic screening of patients with portal hypertension can avoid esophagoscopies [letter] Goyal AK, et al. Am J Gastroenterol 1988 Nov;83(11):1316–7
Analysis of hepatofugal flow in portal venous system using ultrasonic Doppler duplex system. Kawasaki T, et al. Am J Gastroenterol 1989 Aug;84(8):937–41
Evaluation of the use of ultrasonography in the study of liquid gastric emptying. Marzio L, et al. Am J Gastroenterol 1989 May;84(5):496–500
Detection and monitoring of asymptomatic atherosclerosis in clinical trials. Bond MG, et al. Am J Med 1989 Apr 17;86(4A):33–6
Value of parathyroid sonography in secondary hyperparathyroidism [letter] Pavlović D, et al. Am J Med 1989 Jun;86(6 Pt 1):641–2
Ultrasonographic prenatal diagnosis and fetal pathology of Langer mesomelic dwarfism. Evans MI, et al. Am J Med Genet 1988 Dec;31(4):915–20
The role of parathyroid ultrasonography in the management of primary hyperparathyroidism. Mallette LE, et al. Am J Med Sci 1989 Jul;298(1):51–8
Comparison between lateral and axial ultrasonic measurements of the fetal femur. Abramowicz J, et al. Am J Obstet Gynecol 1988 Oct;159(4):921–2
Prenatal ultrasonographic recognition of Goldenhar's syndrome. Benacerraf BR, et al. Am J Obstet Gynecol 1988 Oct;159(4):950–2
Doppler velocimetry and placental disease. Bracero LA, et al. Am J Obstet Gynecol 1989 Aug;161(2):388–93
A comparative study of fetal umbilical velocimetry with continuous– and pulsed–wave Doppler ultrasonography in high–risk pregnancies: relationship to outcome. Brar HS, et al. Am J Obstet Gynecol 1989 Feb;160(2):375–8
First–trimester and early second–trimester diagnosis of nuchal cystic hygroma by transvaginal sonography: diverse prognosis of the septated from the nonseptated lesion. Bronshtein M, et al. Am J Obstet Gynecol 1989 Jul; 161(1):78–82
Preoperative sonographic evaluation of endometrial cancer. Cacciatore B, et al. Am J Obstet Gynecol 1989 Jan; 160(1):133–7
Macrosomia in the postdate pregnancy: is routine ultrasonographic screening indicated? Chervenak JL, et al. Am J Obstet Gynecol 1989 Sep;161(3):753–6
Ultrasonographic assessment of early fetal growth in insulin–treated diabetic pregnancies. Cousins L, et al. Am J Obstet Gynecol 1988 Nov;159(5):1186–90
The ultrasonographic prediction of chorionicity in twin gestation. D'Alton ME, et al. Am J Obstet Gynecol 1989 Mar;160(3):557–61
Discordant twins—a prospective study of the diagnostic value of real–time ultrasonography combined with umbilical artery velocimetry. Divon MY, et al. Am J Obstet Gynecol 1989 Sep;161(3):757–60
Screening with Doppler velocimetry in labor. Feinkind L, et al. Am J Obstet Gynecol 1989 Sep;161(3):765–70
Vaginosonographic examination—routine procedure? [letter] Furness ME. Am J Obstet Gynecol 1989 Aug;161(2):499
Prematurity, postdates, and growth retardation: the influence of use of ultrasonography on reported gestational age. Goldenberg RL, et al. Am J Obstet Gynecol 1989 Feb; 160(2):462–70
Sonographic appearance of the fetal heel ossification centers and foot length measurements provide independent markers for gestational age estimation. Goldstein I, et al. Am J Obstet Gynecol 1988 Oct;159(4):923–6
Comparison of ultrasound and lateral chain urethrocystography in the determination of bladder neck descent. Gordon D, et al. Am J Obstet Gynecol 1989 Jan; 160(1):182–5
Doppler umbilical artery waveform indices—normal values from fourteen to forty–two weeks. Hendricks SK, et al. Am J Obstet Gynecol 1989 Sep;161(3):761–5
The role of ultrasonography and amniocentesis in the evaluation of pregnancies at risk for neural tube defects. Hogge WA, et al. Am J Obstet Gynecol 1989 Sep; 161(3):520–3; discussion 523–4
Transvaginal ultrasonography–guided aspiration of gestational sacs for selective abortion in multiple pregnancy. Itskovitz J, et al. Am J Obstet Gynecol 1989 Jan;160(1):215–7
Sonographic evaluation of fetal abdominal growth: predictor of the large–for–gestational–age infant in pregnancies complicated by diabetes mellitus. Landon MB, et al. Am J Obstet Gynecol 1989 Jan;160(1):115–21
Antenatal ultrasonographic diagnosis of fetal seizure activity. Landy HJ, et al. Am J Obstet Gynecol 1989 Aug;161(2):308
The accuracy of urinary luteinizing hormone testing in predicting ovulation. Lloyd R, et al. Am J Obstet Gynecol 1989 Jun;160(6):1370–2; discussion 1373–5
Doppler assessment of the pulsatility index in the cerebral circulation of the human fetus. Mari G, et al. Am J Obstet Gynecol 1989 Mar;160(3):698–703
Components of variability of umbilical arterial Doppler velocimetry—a prospective analysis. Maulik D, et al. Am J Obstet Gynecol 1989 Jun;160(6):1406–9; discussion 1409–12
Perinatal diagnosis of congenital defects of anterior abdominal wall [letter] Meizner I. Am J Obstet Gynecol 1989 Jun;160(6):1537–8
Ultrasonographic identification of the macrosomic fetus. Miller JM Jr, et al. Am J Obstet Gynecol 1988 Nov; 159(5):1110–4
Ultrasonic growth parameters in fetuses of mothers with primary addiction to cocaine. Mitchell M, et al. Am J Obstet Gynecol 1988 Nov;159(5):1104–9
The efficacy of fetal sonographic biometry in Down syndrome screening. Peters MT, et al. Am J Obstet Gynecol 1989 Aug;161(2):297–300
Ultrasonographically determined thyroid size in pregnancy and post partum: the goitrogenic effect of pregnancy. Rasmussen NG, et al. Am J Obstet Gynecol 1989 May;160(5 Pt 1):1216–20
Reassessment of the utility of fetal umbilical vein diameter in the management of isoimmunization. Reece EA, et al. Am J Obstet Gynecol 1988 Oct;159(4):937–8
Prognostic significance of the human yolk sac assessed by ultrasonography. Reece EA, et al. Am J Obstet Gynecol 1988 Nov;159(5):1191–4
The use of transvaginal sonography for evaluation of postmenopausal ovarian size and morphology. Rodriguez MH, et al. Am J Obstet Gynecol 1988 Oct;159(4):810–4
The importance of ultrasonography in infertile women with "forgotten" intrauterine contraceptive devices. Ron–El R, et al. Am J Obstet Gynecol 1989 Jul;161(1):211–2
Sonographic determination of fetal weights in diabetic pregnancies [letter] Roversi GD, et al. Am J Obstet Gynecol 1989 Jun;160(6):1534–5
Dandy–Walker syndrome: a review of fifteen cases evaluated by prenatal sonography. Russ PD, et al. Am J Obstet Gynecol 1989 Aug;161(2):401–6
Estimation of birth weight by use of ultrasonographic formulas targeted to large–, appropriate–, and small–for–gestational–age fetuses. Sabbagha RE, et al. Am J Obstet Gynecol 1989 Apr;160(4):854–60; discussion 860–2
Pregnancy surveillance with Doppler velocimetry of uterine and umbilical arteries. Schulman H, et al. Am J Obstet Gynecol 1989 Jan;160(1):192–6
A modified scheme for biophysical profile scoring. Shah DM, et al. Am J Obstet Gynecol 1989 Mar;160(3):586–91
Fetal pericardial effusion. Shenker L, et al. Am J Obstet Gynecol 1989 Jun;160(6):1505–7; discussion 1507–8
Birth weight prediction from remote ultrasonographic examination. Spinnato JA, et al. Am J Obstet Gynecol 1989 Sep;161(3):742–7
Early ultrasonic appearance of fetal bladder outlet obstruction. Stiller RJ. Am J Obstet Gynecol 1989 Mar; 160(3):584–5
Enlarged cisterna magna in trisomy 18: prenatal ultrasonographic diagnosis. Thurmond AS, et al. Am J Obstet Gynecol 1989 Jul;161(1):83–5
Renal artery flow–velocity waveforms in normal and hypoxemic fetuses. Vyas S, et al. Am J Obstet Gynecol 1989 Jul;161(1):168–72
Absence of end–diastolic umbilical artery blood flow predicts poor fetal outcome despite normal blood gases. Warren W, et al. Am J Obstet Gynecol 1989 Jan;160(1):197
Dating the early pregnancy by sequential appearance of embryonic structures. Warren WB, et al. Am J Obstet Gynecol 1989 Sep;161(3):747–53
Down syndrome and femur length [letter] Winston YE, et al. Am J Obstet Gynecol 1988 Oct;159(4):1018
Second–trimester placental volume measurement by ultrasound: prediction of fetal outcome. Wolf H, et al. Am J Obstet Gynecol 1989 Jan;160(1):121–6
Accurate ultrasonic biometry in pseudophakia. Holladay JT, et al. Am J Ophthalmol 1989 Feb 15;107(2):189–90
Incidence of spontaneous abortion after amniocentesis: influence of placental localization and past obstetric and gynecologic history. Andreasen E, et al. Am J Perinatol 1989 Apr;6(2):268–73
Prenatal ultrasound diagnosis of intestinal obstruction: a case report. Bahgat O, et al. Am J Perinatol 1989 Jul;6(3):324–5
Plasma volume, umbilical artery Doppler [editorial] Farmakides G. Am J Perinatol 1989 Jul;6(3):371
Prenatal diagnostic criteria for body stalk anomaly. Goldstein I, et al. Am J Perinatol 1989 Jan;6(1):84–5
Thigh circumference in the detection of intrauterine growth retardation. Hill LM, et al. Am J Perinatol 1989 Jul; 6(3):349–52
Role of the perinatal autopsy in evaluating unusual sonographic findings of intrauterine fetal death. Hill LM, et al. Am J Perinatol 1989 Jul;6(3):331–3
Neonatal survival rates based on estimated fetal weights in extremely premature infants. Hovick TJ Jr, et al. Am J Perinatol 1989 Jul;6(3):329–30
Shoulder soft tissue width as a predictor of macrosomia in diabetic pregnancies. Mintz MC, et al. Am J Perinatol 1989 Apr;6(2):240–3
Dystocia in late labor: determining fetal position by clinical and ultrasonic techniques. Rayburn WF, et al. Am J Perinatol 1989 Jul;6(3):316–9
Accuracy of ultrasound in the prenatal diagnosis of spinal anomalies. Romero R, et al. Am J Perinatol 1989 Jul; 6(3):320–3
First trimester diagnosis of a partial mole with the combined use of ultrasound and chorionic villous sampling. Romero R, et al. Am J Perinatol 1989 Jul;6(3):314–5
Plasma volume, umbilical artery Doppler flow, and antepartum fetal heart testing in high–risk pregnancies. Villar MA, et al. Am J Perinatol 1989 Jul;6(3):341–6
Ultrasonography of discoid adrenals in Potter's syndrome: report of three cases. Volberg FM, et al. Am J Perinatol 1989 Jul;6(3):326–8
Pulsed Doppler sonography of the hepatoduodenal ligament: efficacy and ease of performance. Henley DS, et al. Am J Physiol Imaging 1989;4(2):50–4
Duplex imaging of in situ saphenous vein bypass grafts and late failure reduction. Bartlett ST, et al. Am J Surg 1988 Dec;156(6):484–7
Noninvasive imaging for deep venous thrombosis. Borozan PG, et al. Am J Surg 1988 Dec;156(6):474–6
Prediction of below–knee amputation wound healing using noninvasive laser Doppler velocimetry. Kram HB, et al. Am J Surg 1989 Jul;158(1):29–31
Intraoperative ultrasonography in resection of small hepatocellular carcinoma associated with cirrhosis. Nagasue N, et al. Am J Surg 1989 Jul;158(1):40–2
An in vivo feasibility study of intravascular ultrasound imaging. Neville RF, et al. Am J Surg 1989 Aug; 158(2):142–5

Color flow duplex screening of infrainguinal grafts combining low- and high-velocity criteria. Sladen JG, et al. **Am J Surg** 1989 Aug;158(2):107–12

Heated laser Doppler flow measurements to determine depth of burn injury. Waxman K, et al. **Am J Surg** 1989 Jun; 157(6):541–3

Characteristic sonographic pattern of schistosomal hepatic fibrosis. Abdel-Wahab MF, et al. **Am J Trop Med Hyg** 1989 Jan;40(1):72–6

Sonomorphological abnormalities in Sudanese children with Schistosoma mansoni infection: a proposed staging-system for field diagnosis of periportal fibrosis. Doehring-Schwerdtfeger E, et al. **Am J Trop Med Hyg** 1989 Jul;41(1):63–9

Resolution of liver abscesses: comparison of pyogenic and amebic liver abscesses. Sheen IS, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):384–9

Ultrasonically guided needle biopsy in the diagnosis of mediastinal masses. Saito T, et al. **Am Rev Respir Dis** 1988 Sep;138(3):679–84

Agenesis of the gallbladder. A cause of false-positive ultrasonography. Jackson RJ, et al. **Am Surg** 1989 Jan; 55(1):36–40 (13 ref.)

Real-time ultrasound imaging aids jugular venipuncture [letter] Bond DM, et al. **Anesth Analg** 1989 May;68(5):700–1

Accuracy of laser Doppler capillary flow measurements for predicting blood loss from skin incisions in pigs. Carpenter RL, et al. **Anesth Analg** 1989 Mar;68(3):308–11

Sonography of vertebral arteries in De Kleyn's position in subjects and in patients with vertebrobasilar transient ischemic attacks. Arnetoli G, et al. **Angiology** 1989 Aug; 40(8):716–20

Assessment of captopril and nicardipine effects on chronic occlusive arterial disease of the lower extremity using Doppler ultrasound. Bernardi D, et al. **Angiology** 1988 Nov; 39(11):942–52

Noninvasive surveillance of allografted kidneys by ultrasonic duplex scanning. de Gaetano AM, et al. **Angiology** 1989 Aug;40(8):705–15

Primary arteriovenous fistula between common iliac vessels: ultrasound, computer tomographic, and angiographic findings—a case report. Walstra BR, et al. **Angiology** 1989 Mar;40(3):222–6

Influence of local and environmental temperatures on cutaneous circulation with use of laser Doppler flowmetry. Winsor T, et al. **Angiology** 1989 May;40(5):421–8

Strategy for early diagnosis of hepatocellular carcinoma (HCC). Ebara M, et al. **Ann Acad Med Singapore** 1989 Jan; 18(1):83–9

Endo-ultrasonography for preoperative staging of rectal cancer. Salo JO, et al. **Ann Chir Gynaecol** 1988;77(2):57–60

Post-operative Doppler evaluation of 48 arterial reconstructions at the wrist. Bellan N, et al. **Ann Chir Main** 1989;8(1):22–9 (Eng, Fre)

The evaluation of suspected renal colic: ultrasound scan versus excretory urography. Sinclair D, et al. **Ann Emerg Med** 1989 May;18(5):556–9

Ultrasound examination in the patient with ascites. Black M, et al. **Ann Intern Med** 1989 Feb 15;110(4):253–5

Diagnosing gallbladder disease [letter] Krishnamurthy GT. **Ann Intern Med** 1989 Mar 15;110(6):493–4

Four years of experience with ultrasound-guided follicle aspiration. Feichtinger W, et al. **Ann N Y Acad Sci** 1988; 541:138–42

New aspects of vaginal ultrasound in an in vitro fertilization program. Feichtinger W, et al. **Ann N Y Acad Sci** 1988; 541:125–33

Vascular dizziness and transcranial Doppler ultrasonography. Rock EH. **Ann Otol Rhinol Laryngol Suppl** 1989 Jul; 141:1–24

Ultrasound mammography in prosthesis-related breast augmentation complications. van Wingerden JJ, et al. **Ann Plast Surg** 1989 Jan;22(1):32–5

Ultrasonographic assessment of the regression of bladder and renal lesions due to Schistosoma haematobium after treatment with praziquantel. Devidas A, et al. **Ann Soc Belg Med Trop** 1989 Mar;69(1):57–65

Preferred imaging techniques for the diagnosis of cholecystitis and cholelithiasis. Carroll BA. **Ann Surg** 1989 Jul;210(1):1–12 (54 ref.)

Segmental liver resection using ultrasound-guided selective portal venous occlusion. Castaing D, et al. **Ann Surg** 1989 Jul;210(1):20–3

Intraoperative ultrasonic imaging of the ascending aorta. Marshall WG Jr, et al. **Ann Thorac Surg** 1989 Sep; 48(3):339–44

Serological evaluation of ultrasound examination for chronic schistosomiasis japonica in a previously endemic area—the Chikugo River Basin, Japan. Hirata M, et al. **Ann Trop Med Parasitol** 1988 Oct;82(5):475–80

Carotid plaque morphology: correlation of duplex sonography with histology. Bendick PJ, et al. **Ann Vasc Surg** 1988 Jan;2(1):6–13

The influence of duplex scanning on early patency rates of in situ bypass to the tibial vessels. Cullen PJ, et al. **Ann Vasc Surg** 1986 Nov;1(3):340–6

Ultrasound structure of the human nail plate. Jemec GB, et al. **Arch Dermatol** 1989 May;125(5):643–6

Diagnosis of brain death by transcranial Doppler sonography. Bode H, et al. **Arch Dis Child** 1988 Dec;63(12):1474–8

Neonatal urological ultrasound: diagnostic inaccuracies and pitfalls. Clarke NW, et al. **Arch Dis Child** 1989 Apr; 64(4):578–80

Outcome after antenatal diagnosis of upper urinary tract dilatation by ultrasonography [letter] Cottrell AJ, et al. **Arch Dis Child** 1989 May;64(5):762–3

Outcome after antenatal diagnosis of upper urinary tract dilatation by ultrasonography. Gunn TR, et al. **Arch Dis Child** 1988 Oct;63(10):1240–3

Renal parenchymal volume during and after acute pyelonephritis measured by ultrasonography. Johansson B, et al. **Arch Dis Child** 1988 Nov;63(11):1309–14

Cranial ultrasound assessment of gestational age in low birthweight infants. Murphy NP, et al. **Arch Dis Child** 1989 Apr;64(4):569–72

Value of ultrasound in differentiating causes of persistent vomiting in infants [letter] Shaw D. **Arch Dis Child** 1989 Jun;64(6):889

Examination of previous caesarean section scars by ultrasound. Fukuda M, et al. **Arch Gynecol Obstet** 1988; 243(4):221–4

Real-time ultrasonography for the diagnosis of lower extremity deep venous thrombosis. The wave of the future? Becker DM, et al. **Arch Intern Med** 1989 Aug;149(8):1731–4

High-resistance Doppler flow pattern in extracranial carotid dissection. Hennerici M, et al. **Arch Neurol** 1989 Jun; 46(6):670–2

Documentation of suprachoroidal hemorrhage during B-scan ultrasonography. Case report. Dannemann AF, et al. **Arch Ophthalmol** 1989 Jul;107(7):960

Standardized echography in the diagnosis of lacrimal drainage dysfunction. Dutton JJ. **Arch Ophthalmol** 1989 Jul;107(7):1010–2

Echographic verification of radioactive plaque position in the treatment of melanomas. Williams DF, et al. **Arch Ophthalmol** 1988 Nov;106(11):1623–4

Metastatic neck disease. Palpation vs ultrasound examination. Baatenburg de Jong RJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):689–90

Ultrasound imaging of residual limbs: new use for an old technique. Hurvitz EA, et al. **Arch Phys Med Rehabil** 1989 Jul;70(7):556–8

Sonation of lumbar nerve roots as a diagnostic procedure in patients with sciatica. Reid DC, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):25–7

Duplex venous scanning for the prospective surveillance of perioperative venous thrombosis. Flinn WR, et al. **Arch Surg** 1989 Aug;124(8):901–5

Quantitative ultrasound pulsation study in human carotid artery disease. Barth JD, et al. **Arteriosclerosis** 1988 Nov-Dec;8(6):778–81

Reproducibility of non-invasive vascular diagnosis in patients with diabetes mellitus. Faccenda F, et al. **Artery** 1989; 16(4):189–207

Recurrent tetra-amelia: ultrasonographic diagnosis in early pregnancy. Miyakawa I, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun;14(2):181–4

Meconium peritonitis due to meconium ileus presenting as fetal ascites: a case report. Rachagan SP, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):117–20

Clinical presentation, hormonal profiles and ultrasonic ovarian morphology in women with suspected polycystic ovarian disease. Rojanasakul A, et al. **Asia Oceania J Obstet Gynaecol** 1989 Mar;15(1):59–65

Ultrasonography of achilles tendons in primary hypercholesterolemia. Comparison with computed tomography. Steinmetz A, et al. **Atherosclerosis** 1988 Dec; 74(3):231–9

What are the ultrasound and biochemical features of impending ovulation? Eden JA, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):225–7

The antenatal diagnosis of vasa praevia: the role of ultrasound. Hurley VA. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):177–9

A radio translucent intraorbital foreign body [letter] Walker TD. **Aust N Z J Ophthalmol** 1989 May;17(2):199–200

Hepatic resection: value of operative ultrasound and ultrasonic dissection. Hardy KJ, et al. **Aust N Z J Surg** 1989 Aug;59(8):621–3

Carotid artery atheroma: ultrasound appearance in symptomatic and asymptomatic vessels. Steffen CM, et al. **Aust N Z J Surg** 1989 Jul;59(7):529–34

Neonatal cranial ultrasonography as predictor of 2 year outcome of very low birthweight infants. Tudehope DI, et al. **Aust Paediatr J** 1989 Apr;25(2):66–71

Fibre optic laser Doppler measurement of intravascular velocity. Kilpatrick D, et al. **Australas Phys Eng Sci Med** 1988 Jan-Mar;11(1):5–14 (35 ref.)

Laser Doppler velocimetry in the measurement of neurovascular function. Westerman RA, et al. **Australas Phys Eng Sci Med** 1988 Apr-Jun;11(2):53–66

Laser Doppler velocimetry in the measurement of neurovascular function. Westerman RA, et al. **Australas Phys Eng Sci Med** 1988 Apr-Jun;11(2):53–66

Type 1 choledochal cysts: preoperative evaluation by ultrasound. Abdul Samad S, et al. **Australas Radiol** 1989 May;33(2):160–2

Choledocholithiasis—an ultrasonic study with comparative evaluation with ERCP/PTC. Bhargava S, et al. **Australas Radiol** 1988 May;32(2):220–6

Neonatal posterior fossa haemorrhage: a difficult ultrasound diagnosis. de Campo M. **Australas Radiol** 1989 May; 33(2):150–3

Ultrasound in chest disease: 1. Pleura. Fataar S. **Australas Radiol** 1988 Aug;32(3):295–301

Ultrasound in chest disease: 2. Lung and mediastinum. Fataar S. **Australas Radiol** 1988 Aug;32(3):302–8

Some red herrings in obstetric ultrasound. Furness ME. **Australas Radiol** 1989 Feb;33(1):69–76

Abnormal fetal cardiovisceral situs. A clue to the presence of developmental cardiac abnormalities in antenatal ultrasound examinations. Mok PM. **Australas Radiol** 1988 Nov;32(4):506–9

CT and sonographic diagnosis of thymolipoma. A case report. Nuruddin R, et al. **Australas Radiol** 1988 Nov; 32(4):497–9

Analgesic nephropathy: ultrasonic features. Puvaneswary M, et al. **Australas Radiol** 1988 May;32(2):247–50

M-mode ultrasonic detection of microbubbles following saturation diving: a case report and proposal for a new grading system. Ikeda T, et al. **Aviat Space Environ Med** 1989 Feb;60(2):166–9

Non-invasive evaluation of iliac and carotid atherosclerosis in familial hypercholesterolemia. Rubba P, et al. **Beitr Infusionther** 1988;23:33–8

Ovarian follicular dynamics during the estrous cycle in heifers monitored by real-time ultrasonography. Sirois J, et al. **Biol Reprod** 1988 Sep;39(2):308–17

Ultrasonographic study of ovaries of 19 women with weight loss-related hypothalamic oligo-amenorrhea. Futterweit W, et al. **Biomed Pharmacother** 1988;42(4):279–83

Antenatal screening with umbilical artery Doppler ultrasonography [letter] **BMJ** 1989 Apr 22; 298(6680):1097–8

Antenatal screening for intrauterine growth retardation with umbilical artery Doppler ultrasonography. Beattie RB, et al. **BMJ** 1989 Mar 11;298(6674):631–5

Importance of scrotal ultrasonography in gynaecomastia. Conway GS, et al. **BMJ** 1988 Nov 5;297(6657):1176–7

Pancreatitis associated with Campylobacter jejuni infection: diagnosis by ultrasonography. de Bois MH, et al. **BMJ** 1989 Apr 15;298(6679):1004

Value of antenatal diagnosis of abnormalities of the urinary tract. Greig JD, et al. **BMJ** 1989 May 27;298(6685):1417–9

Studying the gall bladder. Irving HC. **BMJ** 1989 Apr 15; 298(6679):977–8

Antenatal ultrasonography to detect fetal renal abnormalities: a prospective screening programme. Livera LN, et al. **BMJ** 1989 May 27;298(6685):1421–3

Monitoring of renal transplants with ultrasound. Nicholson ML, et al. **BMJ** 1989 Feb 4;298(6669):296

Ultrasonography for diagnosing appendicitis [letter] Puylaert JB. **BMJ** 1988 Sep 17;297(6650):740

Examination of the placental circulation by Doppler ultrasound. Redman CW. **BMJ** 1989 Mar 11; 298(6674):621–2 (13 ref.)

Optimisation of positive and expiratory pressure for maximal delivery of oxygen to tissues using oesophageal Doppler ultrasonography. Singer M, et al. **BMJ** 1989 May 20; 298(6684):1350–3

Ultrasonography for diagnosing appendicitis [letter] Wells PN. **BMJ** 1988 Oct 29;297(6656):1129

In vitro comparison of quantitative computed tomography and broadband ultrasonic attenuation of trabecular bone. McKelvie ML, et al. **Bone** 1989;10(2):101–4

Transmitral velocities measured by pulsed Doppler in healthy volunteers: effects of acute changes in blood pressure and heart rate. Smith SA, et al. **Br Heart J** 1989 Apr;61(4):344–7

Percutaneous anterior approach to the coeliac plexus using ultrasound. Montero Matamala A, et al. **Br J Anaesth** 1989 Jun;62(6):637–40

Vascularity in cutaneous melanoma detected by Doppler sonography and histology: correlation with tumour behaviour. Srivastava A, et al. **Br J Cancer** 1989 Jan; 59(1):89–91

Assessment of left ventricular function and prognosis in survivors of acute myocardial infarction using Doppler ultrasound: a comparison with radionuclide ventriculography. Singer M, et al. **Br J Clin Pract** 1987 Oct;41(10):963–6

Defining the role of prostatic ultrasound [letter] Gingell JC, et al. **Br J Hosp Med** 1988 Jul;40(1):80

Transvaginal pulsed Doppler ultrasound assessment of blood flow to the corpus luteum in IVF patients following embryo transfer. Baber RJ, et al. **Br J Obstet Gynaecol** 1988 Dec;95(12):1226–30

The use of ultrasound examinations, intrapartum fetal heart rate monitoring and beta-mimetic drugs in France. Blondel B, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):44–51

A comparison of fetal abdominal circumference measurements and Doppler ultrasound in the prediction of small-for-dates babies and fetal compromise. Chambers SE, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):803–8

Reference ranges and sources of variation for indices of pulsed Doppler flow velocity waveforms from the uteroplacental and fetal circulation [letter] Fogarty PP. **Br J Obstet Gynaecol** 1988 Sep;95(9):954–6

Ovarian size in postmenopausal women. Goswamy RK, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):795–801

Cystic uterine fibroid: an unusual ultrasonic appearance. Case report. Grech P, et al. **Br J Obstet Gynaecol** 1989 Aug; 96(8):992–3

Doppler time velocity waveform studies of the uterine artery and uterus. Long MG, et al. **Br J Obstet Gynaecol** 1989 May;96(5):588–93

Vaginal ultrasound for ruling out placenta praevia. Case report [letter] Neale EJ, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):881–2

The validity of screening for small-for-gestational-age and low-weight-for-length infants by Doppler ultrasound. Sijmons EA, et al. **Br J Obstet Gynaecol** 1989 May; 96(5):557–61

Can ultrasound reliably diagnose ectopic pregnancy? Stabile I, et al. **Br J Obstet Gynaecol** 1988 Dec;95(12):1247–52

Postpartum pleural effusion. Udeshi UL, et al. **Br J Obstet Gynaecol** 1988 Sep;95(9):894–7

Cerebral Doppler ultrasound of the human fetus. van den Wijngaard JA, et al. **Br J Obstet Gynaecol** 1989 Jul; 96(7):845–9

Experimental and clinical monitoring of free jejunal transfers using an implantable ultrasonic Doppler probe. Jones NF, et al. **Br J Plast Surg** 1989 May;42(3):274–80

Proceedings of the British Medical Ultrasound Society, twentieth annual meeting. Glasgow, December 6–8, 1988. Abstracts. **Br J Radiol** 1989 Jul;62(739):636–74

The renal rind sign: a new ultrasound indication of inflammatory disease in the abdomen. Belli AM, et al. **Br J Radiol** 1988 Sep;61(729):806–10

Endoscopic correction of vesico-ureteric reflux by subureteric Teflon injection: follow-up ultrasound and voiding cystography. Blake NS, et al. **Br J Radiol** 1989 May;62(737):443–6

Polyorchidism diagnosed by ultrasound. Cadigan P. **Br J Radiol** 1989 Jan;62(733):82–3

The prevalence and characterization of simple hepatic cysts by ultrasound examination. Gaines PA, et al. **Br J Radiol** 1989 Apr;62(736):335–7

The use of real-time orbital ultrasound in Graves' ophthalmopathy: a comparison with computed tomography. Given-Wilson R, et al. **Br J Radiol** 1989 Aug; 62(740):705–9

Aneurysm of the inferior pancreaticoduodenal artery diagnosed by real-time ultrasound and pulsed Doppler. Grech P, et al. **Br J Radiol** 1989 Aug;62(740):753–5

The unseen radiation hazards of ultrasound [letter] Havard AC. **Br J Radiol** 1989 Mar;62(735):295–6

Ultrasound diagnosis of gallbladder perforation in a case of xanthogranulomatous cholecystitis. Houston JP, et al. **Br J Radiol** 1989 Mar;62(735):273–4

Ultrasound diagnosis of cholangiocarcinoma at the confluence of the hepatic ducts (Klatskin tumours). Karstrup S. **Br J Radiol** 1988 Nov;61(731):987–90

Kock pouch urinary diversion: follow-up by ultrasound. Kruyt RH, et al. **Br J Radiol** 1988 Sep;61(729):811–6

Acute rhabdomyolysis: evaluation with magnetic resonance imaging compared with computed tomography and ultrasonography. Lamminen AE, et al. **Br J Radiol** 1989 Apr;62(736):326–30

The natural history of renal cysts in an infant with tuberous sclerosis: evaluation with ultrasound. Moss JG, et al. **Br J Radiol** 1988 Nov;61(731):1074–6

The effects of angiotensin II on Doppler signals from a soft-tissue tumour. Taylor PM, et al. **Br J Radiol** 1989 Apr;62(736):331–4

Doppler ultrasound in medical diagnosis. Wells PN. **Br J Radiol** 1989 May;62(737):399–420 (128 ref.)

Pulsed Doppler in the diagnosis of small liver tumours. Yasuhara K, et al. **Br J Radiol** 1988 Oct;61(730):898–902

The ultrasonographic appearances of hilar cholangiocarcinoma (Klatskin tumours). Yeung EY, et al. **Br J Radiol** 1988 Nov;61(731):991–5

Spinal segmentation anomalies: in utero diagnosis by ultrasound. Zalcman M, et al. **Br J Radiol** 1988 Sep; 61(729):847–9

Preoperative assessment of mesorectal lymph node involvement in rectal cancer. Beynon J, et al. **Br J Surg** 1989 Mar;76(3):276–9

Doppler ultrasonography in the diagnosis of acute scrotal pain [letter] Dixon JM. **Br J Surg** 1988 Dec;75(12):1277

Endoluminal ultrasound and computed tomography in the staging of rectal cancer. Holdsworth PJ, et al. **Br J Surg** 1988 Oct;75(10):1019–22

Role of B-mode venous mapping in infrainguinal in situ vein-arterial bypasses. Leopold PW, et al. **Br J Surg** 1989 Mar;76(3):305–7

Role of Doppler ultrasound flowmetry in the diagnosis of breast lumps. Srivastava A, et al. **Br J Surg** 1988 Sep; 75(9):851–3

Ultrasound scanning by the urologist in outpatient clinics. Vesey SG, et al. **Br J Surg** 1988 Sep;75(9):921–2

Transrectal ultrasound versus cystography in the evaluation of anatomical stress urinary incontinence. Bergman A, et al. **Br J Urol** 1988 Sep;62(3):228–34

Serial residual volumes in men with prostatic hypertrophy. Birch NC, et al. **Br J Urol** 1988 Dec;62(6):571–5

The value of ultrasound screening of the upper urinary tract in hypospadias. Davenport M, et al. **Br J Urol** 1988 Dec; 62(6):595–6

Emphysematous pyelonephritis: diagnosis by ultrasound. Donovan MG, et al. **Br J Urol** 1989 Feb;63(2):213–4

The value of intravesical echography combined with double-surface coil magnetic resonance imaging in staging bladder cancer. Hendrikx AJ, et al. **Br J Urol** 1989 May; 63(5):469–75

Clinical value of scrotal ultrasound in the investigation of scrotal pathology. Howe D, et al. **Br J Urol** 1988 Sep; 62(3):263–6

Prospective study of routine scrotal ultrasonography in urological practice. London NJ, et al. **Br J Urol** 1989 Apr; 63(4):416–9

Percutaneous drainage of uricular cyst under ultrasound guidance. Migliari R, et al. **Br J Urol** 1988 Oct;62(4):385–6

Duplex scanning in suspected vasculogenic impotence: a worthwhile exercise? Robinson LQ, et al. **Br J Urol** 1989 Apr;63(4):432–6

Intracranial vessels with color Doppler echoencephalography in infants. Tatsuno M, et al. **Brain Dev** 1989;11(2):125–30

Ultrasound attenuation of the os calcis in women with osteoporosis and hip fractures. Baran DT, et al. **Calcif Tissue Int** 1988 Sep;43(3):138–42

Ultrasonography in acute appendicitis. Bilbey JH, et al. **Can Assoc Radiol J** 1989 Feb;40(1):22–4

Sonography of the gallbladder, biliary tree, and pancreas in adults with cystic fibrosis. Dobeon RL, et al. **Can Assoc Radiol J** 1988 Dec;39(4):257–9

Ultrasonography of splenic variants. Hine AL, et al. **Can Assoc Radiol J** 1989 Feb;40(1):25–7

Leiomyoma of the testis: sonographic and pathologic findings. Nino-Murcia M, et al. **Can Assoc Radiol J** 1989 Jun;40(3):178–9

Sonographic diagnosis of isolated gallbladder trauma. Thibodeau M, et al. **Can Assoc Radiol J** 1988 Dec; 39(4):280–1

Hepatic portal venous gas in adults: importance of ultrasonography in early diagnosis and survival. McFadden S, et al. **Can J Surg** 1989 Jul;32(4):297–8

Recent advances in ultrasonographic diagnosis of hepatocellular carcinoma. Tanaka S, et al. **Cancer** 1989 Apr 1;63(7):1313–7

Echo Doppler assessment of stenotic valvular areas. Iliceto S, et al. **Cardiologia** 1988 Nov;33(11):1013–6

Diagnostic accuracy of Doppler ultrasound technique of the penile arteries in correlation to selective arteriography. Gall H, et al. **Cardiovasc Intervent Radiol** 1988 Aug;11(4):225–31

Assessment of myocardial perfusion in the empty beating porcine heart with laser Doppler flowmetry. Ahn HC, et al. **Cardiovasc Res** 1988 Oct;22(10):719–25

Assessment of coronary artery bypass graft flow by intraoperative Doppler ultrasound technique. Simpson IA, et al. **Cardiovasc Res** 1988 Jul;22(7):484–8

Color Doppler features of left ventricular pseudoaneurysm. Alam M, et al. **Chest** 1989 Jan;95(1):231–2

Chest wall and lung surface viewing with ultrasound. Birnholz J. **Chest** 1988 Dec;94(6):1275–6

Ultrasound in obstetrics and gynecology. Keller JM. **Chic Med Sch Q** 1971;30(2–4):86–94

Prenatal diagnosis of conjoined twins with real-time ultrasound. A case report. Gao J, et al. **Chin Med J [Engl]** 1988 Jan;101(1):58–60

Ultrasonography of gastric neoplasm. Li JF, et al. **Chin Med J [Engl]** 1988 Nov;101(11):847–52

Umbilical artery waveforms analysis in normal and intrauterine growth-retarded fetuses: a comparison between the pulsatility index (PI) and the relative flow index (R). Hung JH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;42(5):345–52

Day to day reproducibility of Doppler sonographic measurements in patients with valvular aortic stenosis. Siostrzonek P, et al. **Clin Cardiol** 1988 Nov;11(11):748–50

Weight gain and reproductive function: ultrasonographic and endocrine features in anorexia nervosa. Treasure JL, et al. **Clin Endocrinol (Oxf)** 1988 Dec;29(6):607–16

Sonographic evaluation of ovarian volume in postmenopausal women: a screening test for ovarian cancer? Millo R, et al. **Clin Exp Obstet Gynaecol** 1989;16(2–3):72–8

Ganglion cyst of the quadriceps tendon—an uncommon cause of knee pain revealed by ultrasounds [letter] Trabucchi L, et al. **Clin Exp Rheumatol** 1989 May-Jun;7(3):335–6

Diagnosis of left renal vein entrapment syndrome [letter] Felip A, et al. **Clin Nephrol** 1988 Jul;30(1):56

Nonobstructive symptomatic plaques of the carotid bifurcation: echotomographic-angiographic correlations. Maiuri F, et al. **Clin Neurol Neurosurg** 1988;90(3):215–9

The complementary value of Doppler-ultrasonography and ocular pneumoplethysmography according to Gee (OPG-Gee) in carotid obstructions. Strik F. **Clin Neurol Neurosurg** 1988;90(3):227–33

Doppler and duplex sonography of the cervical arteries and correlations with other examinations. A field study in a population over forty years. Vogl G, et al. **Clin Neurol Neurosurg** 1989;91(3):243–6

Diagnosis of salivary gland disease using ultrasound and sialography: a comparison. Zbaren P, et al. **Clin Otolaryngol** 1989 Jun;14(3):189–97

Sonographic observations in a patient with typhlitis. Merine D, et al. **Clin Pediatr (Phila)** 1989 Aug;28(8):377–9

Doppler ultrasound fetal velocimetry and its role in obstetrics. Morrow R, et al. **Clin Perinatol** 1989 Sep; 16(3):771–8 (27 ref.)

Commission of the European Communities COMAC-BME report following a workshop on ultrasound in the diagnosis and management of cerebro-vascular disease. Rome, December 1987. **Clin Phys Physiol Meas** 1989 Feb;10 Suppl A:1–57

Doppler assessment of the intracerebral circulation of the fetus. Arbeille P, et al. **Clin Phys Physiol Meas** 1989 Feb; 10 Suppl A:51–7

Duplex ultrasound in carotid artery disease: some diagnostic considerations. FitzGerald DE. **Clin Phys Physiol Meas** 1989 Feb;10 Suppl A:37–43

A simple quantitative screening test for the detection of extracranial carotid artery disease. Sherriff SB, et al. **Clin Phys Physiol Meas** 1989 Feb;10 Suppl A:23–32

Ultrasound scanning of post-operative wounds [letter] **Clin Radiol** 1988 Nov;39(6):690–1

The sonographic features and implications of fetal pleural effusions. Adams H, et al. **Clin Radiol** 1988 Jul; 39(4):398–401 (24 ref.)

Ultrasound in the diagnosis and management of spinal and sacral tumours. Ashford NS, et al. **Clin Radiol** 1988 Nov; 39(6):646–50

Assessment of gallbladder function by ultrasound: implications for dissolution therapy. Bellamy PR, et al. **Clin Radiol** 1988 Sep;39(5):511–2

Are multiple examinations of the gall-bladder helpful? Birch PD, et al. **Clin Radiol** 1989 May;40(3):262–3

Ultrasound changes in the transplant kidney [letter] Chalmers N. **Clin Radiol** 1989 Jul;40(4):437

Ultrasonographic features of hepatocellular pseudotumour in the cirrhotic liver. Chang YC, et al. **Clin Radiol** 1988 Nov;39(6):635–8

Ultrasound changes in the transplant kidney. Cochlin DL, et al. **Clin Radiol** 1988 Jul;39(4):373–6

Extensive cystic leucomalacia: correlation of cranial ultrasound, magnetic resonance imaging and clinical findings in sequential studies. de Vries LS, et al. **Clin Radiol** 1989 Mar;40(2):158–66

Ultrasound diagnosis of adenomyomatosis of the gall-bladder: ultrasonic and pathological correlation. Fowler RC, et al. **Clin Radiol** 1988 Jul;39(4):402–6

Controversies in radiology: Doppler of the carotid arteries. Hartnell GG. **Clin Radiol** 1989 Mar;40(2):117–8 (18 ref.)

The stilette sign: the appearance of dilated bile ducts in the fatty liver. Ingram C, et al. **Clin Radiol** 1989 May; 40(3):257–8

Ultrasound demonstration of gas in hepatic veins. James PN, et al. **Clin Radiol** 1989 Jul;40(4):429–30

Early myositis ossificans: a new echographic sign. Peck RJ, et al. **Clin Radiol** 1988 Nov;39(6):586–8

Assessment of portal vein patency: comparison of arterial portography and ultrasound scanning. Raby N, et al. **Clin Radiol** 1988 Jul;39(4):381–5

The role of ultrasound scanning in management after liver transplantation. Raby N, et al. **Clin Radiol** 1988 Sep; 39(5):507–10

Ultrasound detection of oesophageal varices—comparison with endoscopy. Saverymuttu SH, et al. **Clin Radiol** 1988 Sep;39(5):513–5

A protocol for the investigation of infants and children with urinary tract infection [letter] Shah KJ. **Clin Radiol** 1989 Jul;40(4):434–5

The role of ultrasound in the management of ovarian masses in children. Thind CR, et al. **Clin Radiol** 1989 Mar; 40(2):180–2

Ultrasound-guided fine-needle histological biopsies in the abdomen. Tudway DC, et al. **Clin Radiol** 1988 Jul; 39(4):377–80

Ultrasonic imaging of soft tissues. Wilson DJ. **Clin Radiol** 1989 Jul;40(4):341–2 (16 ref.)

Diastematomyelia: prenatal ultrasonic appearances. Winter RK, et al. **Clin Radiol** 1989 May;40(3):291–4

Diagnostic ultrasound for assessment of joint and extremity pathology. Rothschild B, et al. **Compr Ther** 1989 Jan; 15(1):37–46 (33 ref.)

Isodense splenic mass: hamartoma, a case report. Norowitz DG, et al. **Comput Med Imaging Graph** 1989 Jul-Aug; 13(4):347–50

Ultrasound-guided renal biopsy. Ferrario F, et al. **Contrib Nephrol** 1989;69:75–80

Ultrasonically guided fine-needle interventional procedures on parathyroid glands. Giangrande A, et al. **Contrib Nephrol** 1989;69:95–100

Role of imaging in the postnatal period following antenatal diagnosis. Gordon I. **Contrib Nephrol** 1988;67:175–82 (0 ref.)

Bladder diseases and imaging methods. Lamki N, et al. **CRC Crit Rev Diagn Imaging** 1989;29(1):13–101 (61 ref.)

Parathyroid ultrasonography in patients with primary hyperparathyroidism. Karstrup S, et al. **Dan Med Bull** 1988 Dec;35(6):583–5

In vivo cross-sectional ultrasonic imaging of human skin. Querleux B, et al. **Dermatologica** 1988;177(6):332–7

Advances in contact ophthalmic ultrasonography: ocular trauma and intraocular foreign body patients. Fisher YL. **Dev Ophthalmol** 1989;18:69–74

Impaired response of main pancreatic duct to secretin stimulation in early chronic pancreatitis. Bolondi L, et al. **Dig Dis Sci** 1989 Jun;34(6):834–40

Ultrasonography in the detection of Crohn's disease and in the differential diagnosis of inflammatory bowel disease. Pera A, et al. **Digestion** 1988;41(3):180–4

Evolution of periventricular leukomalacia during the neonatal period and infancy: correlation of imaging and postmortem findings. De Vries LS, et al. **Early Hum Dev** 1988 Aug-Sep;17(2–3):205–19

The uterine artery blood flow velocity waveform in pathological pregnancy. Mulders LG, et al. **Early Hum Dev** 1988 Nov;18(1):45–57

Umbilical artery blood velocimetry: a prospective longitudinal study in search of the intrauterine

growth-retarded fetus. van Vugt JM, et al. **Early Hum Dev** 1988 Nov;18(1):59-71

Audit of ultrasound scanning: antenatal diagnosis of congenital abnormalities in Harare, Zimbabwe. Munjanja SP, et al. **East Afr Med J** 1987 Sep;64(9):601-5

Ultrasonographic demonstration of intussusception in the acute abdomen in a Zambian infant. Tshibwabwa-Tumba E, et al. **East Afr Med J** 1989 Feb;66(2):148-51

Brain-stem auditory evoked responses as indicators of early brain insult. Karmel BZ, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov-Dec; 71(6):429-42

Functioning parathyroid lipoadenoma--report of four cases: clinicopathological and ultrasonographic features. Obara T, et al. **Endocrinol Jpn** 1989 Feb;36(1):135-45

Clinicopathologic analysis of endoscopic ultrasonograms in pancreatic mass lesions. Hayashi Y, et al. **Endoscopy** 1989 May;21(3):121-5

Measurements of response to chemotherapy using ultrasound in metastatic liver involvement. Bleiberg H, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):857-9

Inter and intra-observer variation in ultrasonographic detection of gallstones: the Multicenter Italian study on epidemiology of cholelithiasis (M.I.COL.). Festi D, et al. **Eur J Epidemiol** 1989 Mar;5(1):51-7

The association of ultrasonography and CA-125 test in the preoperative evaluation of ovarian carcinoma. Gadducci A, et al. **Eur J Gynaecol Oncol** 1988;9(5):373-6

The evaluation by means of ultrasounds of the bladder residue after gynaecological operations. Mangano U, et al. **Eur J Gynaecol Oncol** 1989;10(1):21-6

Echographic aspects of the mixed müllerian tumor of the endometrium. Mastrantonio P, et al. **Eur J Gynaecol Oncol** 1989;10(1):43-8

Functional hyposplenia after allogeneic bone marrow transplantation is detected by epinephrine stimulation test and splenic ultrasonography. Knecht H, et al. **Eur J Haematol** 1988 Oct;41(4):382-7

Fetal cerebral circulation assessment by Doppler ultrasound in normal and pathological pregnancies. Arbeille P, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Dec;29(4):261-73

Feto-placental haemodynamics in growth retardation: a pulsed Doppler study. Bogatti P, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun;31(3):213-9

Fetal umbilical artery flow velocity waveforms: prediction of small for gestational age infants and late decelerations in labour. Dempster J, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Sep;29(1):21-5

Anatomic correlates of ultrasound prenatal diagnosis of urinary tract abnormalities. D'Ottavio G, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):79-87

Torsion of the pregnant uterus with a change in placental localization on ultrasound; a case report. Kremer JA, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun;31(3):273-5

Direct measurements of fetal cerebral blood-flow velocity with duplex Doppler ultrasound. Lang GD, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Sep;29(1):15-9

The sonographic imaging of fetal adrenal neuroblastoma; a case report. Pley EA, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Apr;31(1):95-9

Doppler ultrasound of the uteroplacental circulation as a screening test for severe pre-eclampsia with intra-uterine growth retardation. Steel SA, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Aug;28(4):279-87

The accuracy of ultrasonic measurement of fetal crown-rump length. Vollebergh JH, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Mar;30(3):253-6

Sonography of subependymal cysts in congenital rubella syndrome. Beltinger C, et al. **Eur J Pediatr** 1988 Dec; 148(3):206-7

Transient stenoses and occlusions of main cerebral arteries in children--diagnosis and control of therapy by transcranial Doppler sonography. Bode H, et al. **Eur J Pediatr** 1989 Feb;148(5):406-11

Abnormal blood flow patterns in renal arteries of small preterm infants with patent ductus arteriosus detected by Doppler ultrasonography. Bömelburg T, et al. **Eur J Pediatr** 1989 Jun;148(7):660-4

Ultrasound measurement of the subarachnoid space in infants. Govaert P, et al. **Eur J Pediatr** 1989 Feb;148(5):412-3

Serial ultrasonic examination to differentiate biliary atresia from neonatal hepatitis--special reference to changes in size of the gallbladder. Ikeda S, et al. **Eur J Pediatr** 1989 Feb;148(5):396-400

Evaluation of vein of Galen arteriovenous malformation in newborns by two dimensional ultrasound, pulsed and colour Doppler method. Vaksmann G, et al. **Eur J Pediatr** 1989 Apr;148(6):510-2

Ultrasonography of the tendons of the shoulder. Ahovuo J, et al. **Eur J Radiol** 1989 Feb;9(1):17-21

Hepatic artery aneurysm: diagnosis by duplex-Doppler ultrasound. Case report. Ayuso JR, et al. **Eur J Radiol** 1988 Nov;8(4):263-5

Pulsatile flow index for qualitative measurements of blood flow with duplex ultrasound. An experimental study. Cazenave CR, et al. **Eur J Radiol** 1989 Feb;9(1):42-3

Clinical examination, CT and US in tongue cancer staging. Fruehwald FX. **Eur J Radiol** 1988 Nov;8(4):236-41

Echography of pulmonary sequestration. Gudinchet F, et al. **Eur J Radiol** 1989 May;9(2):93-5

Chronic granulomatous disease of childhood. Report of two cases with unusual involvement of the gastric antrum and spleen. Orduña M, et al. **Eur J Radiol** 1989 Feb;9(1):67-70

Ultrasound in the detection of adrenal tumours. Päivänsalo M, et al. **Eur J Radiol** 1988 Aug;8(3):183-7

US and CT findings in biliary obstruction due to tuberculous adenitis in the periportal area. 2 cases [published erratum appears in Eur J Radiol 1989 May;9(2):127] Pombo F, et al. **Eur J Radiol** 1989 Feb;9(1):71-3

Ultrasound guided puncture of pleural fluid collections and superficial thoracic masses. Rasmussen OS, et al. **Eur J Radiol** 1989 May;9(2):91-2

US-guided prostatic biopsy in 63 cases. Veneziano S, et al. **Eur J Radiol** 1989 Feb;9(1):64-6

Venous thrombosis in the neck. The role of real time ultrasound. Williams CE, et al. **Eur J Radiol** 1989 Feb; 9(1):32-6

Ultrasound detection of axillary lymph node metastases in breast cancer. Tate JJ, et al. **Eur J Surg Oncol** 1989 Apr; 15(2):139-41

Ultrasonic duplex scanning of the prevertebral segment of the vertebral artery in patients with cerebral atherosclerosis. Ackerstaff RG, et al. **Eur J Vasc Surg** 1988 Dec;2(6):387-93

Skin blood flow: a comparison of transcutaneous oximetry and laser Doppler flowmetry. Allen PI, et al. **Eur J Vasc Surg** 1987 Oct;1(5):315-8

Quantitative assesment of vasospasm by Doppler spectrum analysis in patients with primary Raynaud's phenomenon. Arntz IE, et al. **Eur J Vasc Surg** 1987 Feb;1(1):19-28

Real time B-mode mapping of the greater saphenous vein. Bagi P, et al. **Eur J Vasc Surg** 1989 Apr;3(2):103-5

Quantitative Doppler ultrasound evaluation of occlusive arterial disease in the lower limb. Bagi P, et al. **Eur J Vasc Surg** 1988 Dec;2(6):409-15

The use of duplex scanning to monitor the efficacy of support hose. Chant AD, et al. **Eur J Vasc Surg** 1988 Feb;2(1):47-8

Duplex ultrasound monitoring of arterial grafts [letter] Grigg M, et al. **Eur J Vasc Surg** 1988 Aug;2(4):275

Assessment of aortoiliac stenosis by femoral artery pressure measurement and Doppler waveform analysis. Kitslaar PJ, et al. **Eur J Vasc Surg** 1988 Feb;2(1):35-40

Reproducibility of skin blood flow, perfusion pressure and oxygen tension measurements in advanced lower limb ischaemia. Lukkari-Rautiarinen E, et al. **Eur J Vasc Surg** 1989 Aug;3(4):345-50

Duplex ultrasound monitoring of arterial grafts: prospective evaluation in conjunction with ankle pressure indices after femorodistal bypass. McShane MD, et al. **Eur J Vasc Surg** 1987 Dec;1(6):385-90

Duplex ultrasound assessment of femorodistal grafts: correlation with angiography. McShane MD, et al. **Eur J Vasc Surg** 1987 Dec;1(6):409-14

The assessment of primary varicose veins by Doppler ultrasound--the role of sapheno-popliteal incompetence and the short saphenous systems in calf varicosities. Mitchell DC, et al. **Eur J Vasc Surg** 1987 Apr;1(2):113-5

Outcome of TIAs of unknown aetiology following non-invasive evaluation. Rogers PN, et al. **Eur J Vasc Surg** 1989 Apr;3(2):107-11

Postpartum cerebral angiopathy: reversible vasoconstriction assessed by transcranial Doppler ultrasounds. Bogousslavsky J, et al. **Eur Neurol** 1989;29(2):102-5

How prenatal ultrasound can affect the treatment of ureterocele in neonates and children. Caione P, et al. **Eur Urol** 1989;16(3):195-9

Chronic prostatitis and prostatodynia: ultrasonographic alterations of the prostate, bladder neck, seminal vesicles and periprostatic venous plexus. Di Trapani D, et al. **Eur Urol** 1988;15(3-4):230-4

Bladder tumor staging by transurethral ultrasonic scanning. Holm HH, et al. **Eur Urol** 1988;15(1-2):31-3

Impact of sonography on diagnosis of scrotal diseases: a multicenter study. Kratzik C, et al. **Eur Urol** 1988; 14(4):270-5

Sonographic appearance of benign intratesticular lesions. Kratzik C, et al. **Eur Urol** 1988;15(3-4):196-9

Digital examination and transrectal ultrasonography in the diagnosis of prostatic cancer. Naito S, et al. **Eur Urol** 1988; 14(5):356-9

Incidental finding of renal cell carcinoma with histological regressive aspects in a pregnant woman. Selli C, et al. **Eur Urol** 1988;15(3-4):287-9

Comparison of the efficacy of digital rectal examination and transrectal ultrasonography in the diagnosis of prostatic cancer. Vallancien G, et al. **Eur Urol** 1989;16(5):321-4

Treatment validation of ultrasound-defined abnormal follicular dynamics as a cause of infertility. Daly DC. **Fertil Steril** 1989 Jan;51(1):51-7

Follicle size by ultrasound versus cervical mucus quality: normal and abnormal patterns in spontaneous cycles. Daly DC, et al. **Fertil Steril** 1989 Apr;51(4):598-603

Ultrasound-guided fallopian tube catheterization per vaginum: a feasibility study with the use of laparoscopic control. Hughes EG, et al. **Fertil Steril** 1988 Dec; 50(6):986-9

Heterotopic pregnancy associated with in vitro fertilization and embryo transfer: a possible role for routine vaginal ultrasound. Rein MS, et al. **Fertil Steril** 1989 Jun; 51(6):1057-8

Transvaginal ultrasonographic detection of primary ovarian pregnancy with laparoscopic removal: a case report. Russell JB, et al. **Fertil Steril** 1989 Jun;51(6):1055-6

Prenatal diagnosis of fetal brain tumors. Alvarez M, et al. **Fetal Ther** 1987;2(4):203-8

Differential diagnosis of small-for-gestational age fetuses by Doppler ultrasound. Arduini D, et al. **Fetal Ther** 1988; 3(1-2):31-6

Cordocentesis in the assessment of the small-for-gestational age fetus. Bilardo CM, et al. **Fetal Ther** 1988;3(1-2):24-30

Interest of biology in the management of pregnancies where a fetal malformation has been detected by ultrasonography. Boue A, et al. **Fetal Ther** 1988;3(1-2):14-23

Ultrasonography in antenatal management: should it be a routine procedure? Bracken MB. **Fetal Ther** 1987;2(1):2-6

Ultrasonic assessment of fetal colon by comparing ratios of colon circumference to abdominal circumference in normal pregnancy and two abnormal cases. A preliminary study. Tepper R, et al. **Fetal Ther** 1987;2(2):123-8

Ultrasound diagnosis of intrauterine growth retardation. Warsof SL, et al. **Fetal Ther** 1987;2(1):31-6

Gastrointestinal imaging in AIDS--abdominal computed tomography and ultrasound. Jeffrey RB Jr. **Gastroenterol Clin North Am** 1988 Sep;17(3):507-21 (39 ref.)

Ultrasonography in portal hypertension: a sensitive noninvasive test to demonstrate portal-vascular anatomy. Nagabhusan G, et al. **Gastroenterol Jpn** 1989 Aug; 24(4):442-5

Portal vein blood flow measurements using pulsed Doppler and electromagnetic flowmetry in dogs: a comparative study. Dauzat M, et al. **Gastroenterology** 1989 Mar; 96(3):913-9

Endoscopic ultrasonography in achalasia. Devière J, et al. **Gastroenterology** 1989 Apr;96(4):1210-3

Ultrasonography in chronic liver disease [letter] Giorgio A, et al. **Gastroenterology** 1988 Dec;95(6):1697-8

Histologic correlates of gastrointestinal ultrasound images. Kimmey MB, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):433-41

Duplex ultrasound measurement of postprandial intestinal blood flow: effect of meal composition. Moneta GL, et al. **Gastroenterology** 1988 Nov;95(5):1294-301

Ultrasonography in the diagnosis of acute appendicitis: a prospective study. Schwerk WB, et al. **Gastroenterology** 1989 Sep;97(3):630-9

Endosonography and computed tomography of esophageal carcinoma. Preoperative classification compared to the new (1987) TNM system. Tio TL, et al. **Gastroenterology** 1989 Jun;96(6):1478-86

Endoscopic ultrasonography in esophageal diseases. Dancygier H, et al. **Gastrointest Endosc** 1989 May-Jun; 35(3):220-5

Endoscopic ultrasonography in the differential diagnosis of pancreatic disease. Kaufman AR, et al. **Gastrointest Endosc** 1989 May-Jun;35(3):214-9

Psoas muscle pancreatic pseudocyst: CT--US diagnosis and percutaneous drainage. Alvarez-Castells A, et al. **Gastrointest Radiol** 1989 Summer;14(3):229-32

Duodenal duplication cyst with enteroliths: computed tomography and ultrasound diagnosis. Bar-Ziv J, et al. **Gastrointest Radiol** 1989 Summer;14(3):220-2

Appendiceal involvement in cecal carcinoma: demonstration by ultrasound. Becking WB, et al. **Gastrointest Radiol** 1989 Spring;14(2):170-2

Sonographic characteristics of small hepatocellular carcinoma. Choi BI, et al. **Gastrointest Radiol** 1989 Summer;14(3):255-61

Sonographic diagnosis of cholangitis in AIDS patients. Defalque D, et al. **Gastrointest Radiol** 1989 Spring; 14(2):143-7

Inflammatory pseudotumor of the spleen: ultrasound and computed tomographic findings. Franquet T, et al. **Gastrointest Radiol** 1989 Spring;14(2):181-3

Echo-guided percutaneous puncture: a safe and valuable therapeutic tool for amebic liver abscess. Giorgio A, et al. **Gastrointest Radiol** 1988 Oct;13(4):336-40

Effects of a meal on normal and hypertensive portal venous system: a quantitative ultrasonographic assessment. Goyal AK, et al. **Gastrointest Radiol** 1989 Spring;14(2):164-6

Intraperitoneal splenosis: diagnosis by ultrasound and computed tomography. Maillard JC, et al. **Gastrointest Radiol** 1989 Spring;14(2):179-80

Uneven lipomatosis: a pitfall in pancreatic sonography. Marchal G, et al. **Gastrointest Radiol** 1989 Summer; 14(3):233-7

Hepatic hemangioma in the presence of fatty infiltration: an atypical sonographic appearance. Marsh JI, et al. **Gastrointest Radiol** 1989 Summer;14(3):262-4

Lipoma of the liver: US, CT, and MRI appearance. Martí-Bonmatí L, et al. **Gastrointest Radiol** 1989 Spring; 14(2):155-7

Ultrasonic patterns observed in hepatic metastases from breast carcinoma: diagnosis and evolution. Martínez A, et al. **Gastrointest Radiol** 1989 Winter;14(1):49-54

Ultrasound evaluation of cholelithiasis in the morbidly obese. Silidker MS, et al. **Gastrointest Radiol** 1988 Oct;13(4):345-6

Giant Meckel diverticulum containing enteroliths diagnosed by computed tomography and sonography. Torii Y, et al. **Gastrointest Radiol** 1989 Spring;14(2):167-9

Ultrasound diagnosis of evolving pyloric stenosis. Weiskittel DA, et al. **Gastrointest Radiol** 1989 Winter;14(1):22-4

The glaucoma suspect: differentiation of the future glaucomatous eye from the non-glaucomatous suspect eye. I. Ultrasonic measurements and eye-wall stress. Chisholm IA, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;

227(1):17-20
In vivo thickness of the human detached retina by ultrasonic signal processing. Wu G, et al.
Graefes Arch Clin Exp Ophthalmol 1989;227(1):21-5
Measurement of normal portal venous blood flow by Doppler ultrasound. Brown HS, et al. **Gut** 1989 Apr;30(4):503-9
Prevalence of biliary tract disease in India: a sonographic study in adult population in Kashmir. Khuroo MS, et al. **Gut** 1989 Feb;30(2):201-5
Role of ultrasound in bile duct obstruction [letter] Lindsell D. **Gut** 1988 Oct;29(10):1426
Ultrasound or computed tomography for the initial investigation of biliary obstruction [letter] Martin DF. **Gut** 1988 Nov;29(11):1618
Inadequate luteal phase usually indicates ovulatory dysfunction: observations from serial hormone and ultrasound monitoring of 115 cycles. Petaos P, et al. **Gynecol Endocrinol** 1987 Mar;1(1):37-45
Doppler color flow mapping of an invasive mole. Aoki S, et al. **Gynecol Obstet Invest** 1989;27(1):52-4
Ultrasonic prediction of stress urinary incontinence development in surgery for severe pelvic relaxation. Bergman A, et al. **Gynecol Obstet Invest** 1988;26(1):66-72
Endometrial cyst, dermoid cyst and mucinous cystadenoma sonographically evidenced in the same ovary. Hata K, et al. **Gynecol Obstet Invest** 1989;27(3):160-3
Ultrasonographic evaluation of adrenal involution during antenatal and neonatal periods. Hata K, et al. **Gynecol Obstet Invest** 1988;26(1):29-32
Ultrasonographic identification and measurement of the normal ovary in postmenopausal Japanese women. Hata K, et al. **Gynecol Obstet Invest** 1989;27(2):99-101
Antenatal diagnosis of congenital heart disease and fetal arrhythmia by ultrasound: prospective study. Hata T, et al. **Gynecol Obstet Invest** 1988;26(2):118-25
Ultrasonographic evidence of ileus. Murao F, et al. **Gynecol Obstet Invest** 1988;26(4):318-23
Comparison of transabdominal and transvaginal pelvic ultrasonography for ovarian follicle assessment in in vitro fertilisation. O Shea RT, et al. **Gynecol Obstet Invest** 1988; 26(1):52-5
Hepatic venous thrombosis in paroxysmal nocturnal hemoglobinuria: usefulness of ultrasonic scanning monitoring. Olivieri O, et al. **Haematologica (Pavia)** 1988 Sep-Oct;73(5):393-6
Cochlear blood flow increases after systemic hemodilution: comparison of simultaneous laser Doppler flowmetry and radioactive microsphere measurements. Nuttall AL, et al. **Hear Res** 1988 Aug;34(3):215-23
Pulmonary blood velocity profile variability in open-chest dogs: influence of acutely altered hemodynamic states on profiles, and influence of profiles on the accuracy of techniques for cardiac output determination. Lucas CL, et al. **Heart Vessels** 1988;4(2):65-78
Ultrasonically-guided percutaneous transcholecystic cholangiography—an alternative approach in cases of biliary obstruction and failure of percutaneous transhepatic cholangiography. Giorgio A, et al. **Hepatogastroenterology** 1988 Dec;35(6):268-70
Preoperative TNM classification of gastric carcinoma by endosonography in comparison with the pathological TNM system: a prospective study of 72 cases. Tio TL, et al. **Hepatogastroenterology** 1989 Apr;36(2):51-6
Assessment of portal vein patency: pitfalls and problems in diagnostic comparative studies. Taylor CR. **Hepatology** 1989 Jul;10(1):117-8
Doppler techniques for lower extremity arterial diagnosis. Zierler RE. **Herz** 1989 Apr;14(2):126-33 (23 ref.)
Ultrasonographic manifestations of liver abscesses; an experimental study. Ito K, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):63-9
Transvaginal hysterosalpingo-contrast-sonography (Hy-Co-Sy) compared with conventional tubal diagnostics. Deichert U, et al. **Hum Reprod** 1989 May; 4(4):418-24
Principal component analysis of multiple noninvasive blood flow derived signals. Panerai RB, et al. **IEEE Trans Biomed Eng** 1988 Jul;35(7):533-8
Ultrasonographic appearance in a case of hydatid disease [published erratum appears in Indian J Chest Dis Allied Sci 1988 Oct-Dec;30(4):295] Dusaj IS, et al. **Indian J Chest Dis Allied Sci** 1988 Jul-Sep;30(3):205-9
Radiologic approach to choledochal cysts. Aggarwal S, et al. **Indian J Gastroenterol** 1989 Apr;8(2):107-8
Can sonography replace splenoportovenography in evaluation of patients with portal hypertension? Goyal AK, et al. **Indian J Gastroenterol** 1989 Jul;8(3):157-9
Ultrasound documentation of diaphragmatic rent in hepatic hydrothorax. Raju EP, et al. **Indian J Gastroenterol** 1989 Apr;8(2):111-2
Ultrasonic measurement of foetal parameters in normal pregnancy & in intrauterine growth retardation. Sood M, et al. **Indian J Med Res** 1988 May;87:453-8
Ultrasonography in ocular trauma. Das T, et al. **Indian J Ophthalmol** 1987 May-Jun;35(3):121-5
Ultrasonography in aetiological diagnosis of leucocoria. Ghose S. **Indian J Ophthalmol** 1987;35(5-6):442-4
Roper Hall F.B. locator and ultrasonic evaluation of intra ocular foreign bodies. Jain RK, et al. **Indian J Ophthalmol** 1987;35(5-6):404-5
Percutaneous intrauterine fetal transfusion with real time ultrasound guidance. Buckshee K. **Indian J Pediatr** 1988 May-Jun;55(3):436-9
Intracranial hemorrhage in the neonate—a clinical and ultrasonographic study. Chaudhari S, et al. **Indian Pediatr** 1988 Jun;25(6):538-43
Antenatal sonographic diagnosis of pelvi-ureteric junction obstruction [letter] Kapoor R, et al. **Indian Pediatr** 1988 Jul;25(7):702-3
Ultrasonic demonstration of thanatophoric dwarfism in utero. Kapoor R, et al. **Indian Pediatr** 1988 Oct;25(10):1009-11
Hyperechoic kidneys: sonographic-histological correlations. Patel PJ, et al. **Indian Pediatr** 1988 Jun;25(6):576-8
Use of ultrasound scanning in diagnosis and conservative management of rupture of the spleen. Diamond T, et al. **Injury** 1987 Nov;18(6):411-2
Diagnosis of vascular injury in children with supracondylar fractures of the humerus. Vasli LR. **Injury** 1988 Jan; 19(1):11-3
Renovascular hypertension: a non-invasive Duplex scanning screening. Ferretti G, et al. **Int Angiol** 1988 Jul-Sep; 7(3):219-23
Experience with Doppler investigations in vibration syndrome. Mackiewicz Z, et al. **Int Angiol** 1988 Oct-Dec; 7(4):305-8
Diagnosis of arterial occlusive disease of the lower extremities by laser Doppler flowmetry. Van den Brande P, et al. **Int Angiol** 1988 Jul-Sep;7(3):224-30
Intravascular ultrasound. Techniques, developments, clinical perspectives. **Int J Card Imaging** 1989;4(2-4):79-216
Ultrasound imaging and atherogenesis. Becker AE. **Int J Card Imaging** 1989;4(2-4):99-104 (6 ref.)
Intravascular echographic assessment of vessel wall characteristics: a correlation with histology. Gussenhoven WJ, et al. **Int J Card Imaging** 1989;4(2-4):105-16
Limitations of Doppler ultrasound in the diagnosis of neonatal coarctation of the aorta. Wilson N, et al. **Int J Cardiol** 1989 Apr;23(1):87-9
Leiomyoma of the bladder: case report and review of the literature. Teran AZ, et al. **Int J Fertil** 1989 Jul-Aug; 34(4):289-92 (18 ref.)
Importance of echographic and endocrine monitoring for the assessment of ovulation by follicle stimulating hormone in polycystic ovarian disease. Caruso A, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):163-9
Ovarian development of the female child and adolescent: I. Morphology. Giorlandino C, et al. **Int J Gynaecol Obstet** 1989 May;29(1):57-63
Umbilical artery velocity waveforms are not valid indices for assessing growth retardation in utero. Hata K, et al. **Int J Gynaecol Obstet** 1989 May;29(1):25-9
Fetal foot length—a new parameter for assessment of gestational age. Mhaskar R, et al. **Int J Gynaecol Obstet** 1989 May;29(1):35-8
Ultrasound measurement of fetal abdominal circumference and the ratio of biparietal diameter to transverse abdominal diameter in a mixed Nigerian population. Okonofua FE, et al. **Int J Gynaecol Obstet** 1988 Aug;27(1):1-6
Accuracy of prediction of gestational age by ultrasound measurement of biparietal diameter in Nigerian women. Okonofua FE, et al. **Int J Gynaecol Obstet** 1989 Mar; 28(3):217-9
Vaginal sonographic visualisation of a cervical carcinoma. Osmers R, et al. **Int J Gynaecol Obstet** 1989 Mar; 28(3):283-5
Uterine myoma in pregnancy: ultrasound study. Rosati P, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):109-17
Sonographic study of the endometrial responses to ovarian hormones in patients receiving ovarian stimulation. Sakamoto C, et al. **Int J Gynaecol Obstet** 1988 Dec; 27(3):407-14
Ultrasonic assessment of ovulation in cyclofenil induced ovulatory cycles. Varma TR, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):231-8
The relationship of increased amniotic fluid volume to perinatal outcome. Varma TR, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):327-33
Ultrasound evaluation of amniotic fluid: outcome of pregnancies with severe oligohydramnios. Varma TR, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):185-92
Dating sonographic endometrial images in the normal ovulatory cycle. Yoshimitsu K, et al. **Int J Gynaecol Obstet** 1989 Jan;28(1):33-9
Laser Doppler flowmetry in experimental mesenteric vascular occlusion. Johansson K, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):183-90
Vasomotion in human skin before and after local heating recorded with laser Doppler flowmetry. A method for induction of vasomotion. Kastrup J, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):205-15
Analysis of flow motion by the laser Doppler technique in patients with peripheral arterial occlusive disease. Seifert H, et al. **Int J Microcirc Clin Exp** 1988 Aug;7(3):223-36
Use of ultrasound in detection of sinus disease in children. Reilly JS, et al. **Int J Pediatr Otorhinolaryngol** 1989 Jul; 17(3):225-30
Ultrasonography in the diagnosis of congenital hip dysplasia in the newborn. Motta F. **Int Orthop** 1989;13(1):29-31
Percutaneous nephrostomy under ultrasonographic control—experience from a 2-year material. Kovács A, et al. **Int Urol Nephrol** 1989;21(2):131-7
Ultrasonographic test of subcutaneous arteriovenous Cimino fistula. Lőcsey L, et al. **Int Urol Nephrol** 1988;20(6):691-6
Evaluation of Doppler examination for diagnosis of catheter-related deep vein thrombosis. Bonnet F, et al. **Intensive Care Med** 1989;15(4):238-40
Needle tip echogenicity. A study with real time ultrasound. Bondestam S, et al. **Invest Radiol** 1989 Jul;24(7):555-60
Clinical application of transrectal ultrasonography and prostate specific antigen in the search for prostate cancer. Cooner WH. **Invest Radiol** 1989 Mar;24(3):257-9
Preclinical and clinical results with an ultrasonic contrast agent. Fritzsch T, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S302-5
Quantitative ultrasonic detection and classification of diffuse liver disease. Comparison with human observer performance. Garra BS, et al. **Invest Radiol** 1989 Mar; 24(3):196-203
Percutaneous ablation of canine prostate using transrectal ultrasound guidance. Absolute ethanol and Nd:YAG laser. Littrup PJ, et al. **Invest Radiol** 1988 Oct;23(10):734-9
Extraneous factors affecting resistive index. Pozniak MA, et al. **Invest Radiol** 1988 Dec;23(12):899-904
Particulate suspensions as ultrasonic contrast agents for liver and spleen. Violante MR, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S294-7
Ultrasound findings in carcinoma of the gallbladder. O'Keeffe F, et al. **Ir J Med Sci** 1989 Feb;158(2):48-9
Role of Doppler ultrasound flow studies in the diagnosis of temporal arteritis. Friedman G, et al. **Isr J Med Sci** 1988 Nov;24(11):686-7
Prenatal ultrasonic diagnosis of cystic hygroma associated with fetal hydrops—report of two cases. Meizner I, et al. **Isr J Med Sci** 1989 Jan;25(1):51-3
Ultrasonic evaluation of residual urine volume after vaginal surgery. Rojansky N, et al. **Isr J Med Sci** 1989 May; 25(5):282-4
Predictive value of cervical bruit for the detection of obstructive lesions of the internal carotid artery. Data from 2000 patients. Floriani M, et al. **Ital J Neurol Sci** 1989 Jun; 10(3):321-7
Doppler C.W. study of the lower limb venous hemodynamics during pregnancy and prevention of thrombotic complications. Irace L, et al. **Ital J Surg Sci** 1988; 18(2):167-9
Ultrasonographic diagnosis of obstructive jaundice. Minutolo V, et al. **Ital J Surg Sci** 1989;19(1):19-22
Spectral power determinations of compressibility and density variations in model media and calf liver using ultrasound. Waag RC, et al. **J Acoust Soc Am** 1989 Jan;85(1):423-31
Estimates of wave front distortion from measurements of scattering by model random media and calf liver. Waag RC, et al. **J Acoust Soc Am** 1989 Jan;85(1):406-15
Pseudo-three-dimensional reconstruction of ultrasonic images of the tongue. Watkin KL, et al. **J Acoust Soc Am** 1989 Jan;85(1):496-9
Differentiation between acutely ischemic myocardium and zones of completed infarction in dogs on the basis of frequency-dependent backscatter. Wear KA, et al. **J Acoust Soc Am** 1989 Jun;85(6):2634-41
Ultrasonic backscatter from flowing whole blood. II: Dependence on frequency and fibrinogen concentration. Yuan YW, et al. **J Acoust Soc Am** 1988 Oct;84(4):1195-200
Ultrasound examination of adolescent females with lower abdominal pain. Risser WL, et al. **J Adolesc Health Care** 1988 Sep;9(5):407-10
Doppler characterization of left ventricular diastolic function in cardiac amyloidosis. Klein AL, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1017-26
Echocardiographic and Doppler evaluation of the aortic arch and brachiocephalic vessels in cerebral and systemic arteriovenous fistulas. Musewe NN, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1529-35
Doppler color flow mapping of simulated in vitro regurgitant jets: evaluation of the effects of orifice size and hemodynamic variables. Simpson IA, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1195-207
Ultrasound tissue characterization: can the state of the myocardium be assessed directly yet noninvasively? Skorton DJ. **J Am Coll Cardiol** 1989 Jan;13(1):92-4
Morphologic and dynamic changes of atherosclerotic plaque at the carotid artery bifurcation: sequential imaging by real time B-mode ultrasonography. Weinberger J, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1515-21
Color Doppler imaging: an overview. Igidbashian VN, et al. **J Am Osteopath Assoc** 1988 Oct;88(10):1273-6, 1279 (16 ref.)
A new method using medical ultrasound for measuring femoral anteversion (torsion): technique and reliability. An intra-observer and inter-observer study on dried bones from human adults. Upadhyay SS, et al. **J Anat** 1987 Dec; 155:119-32
Doppler examination in varicocele. A standard method of evaluation. Annoni F, et al. **J Androl** 1988 Jul-Aug; 9(4):248-52
Ultrasonography in the management of renal transplant recipients. Acharya SJ, et al. **J Assoc Physicians India** 1988 Aug;36(8):497-500
Doppler evaluation in carotid disease. Nagaraja D, et al. **J Assoc Physicians India** 1988 May;36(5):311-3
Abdominal ultrasound as a diagnostic tool to the clinicians. Sharma MP, et al. **J Assoc Physicians India** 1988 Sep; 36(9):560-2
Ultrasound guided kidney biopsy. Tiwari SC, et al. **J Assoc Physicians India** 1988 May;36(5):327-8
Ultrasonic demonstration of urinary tract candidiasis in an

infant. Avni EF. **J Belge Radiol** 1988;71(6):714–5
Ultrasonography of a splenic abscess due to Listeria monocytogenes. Corthouts B, et al. **J Belge Radiol** 1988; 71(3):375–6
Imaging of cartilaginous tissue by ultrasound. Laine HR. **J Belge Radiol** 1988;71(6):671–5
Ultrasonography of the hip joint in skeletal dysplasias and chromosomal aberrations. Langer R, et al. **J Belge Radiol** 1988;71(6):665–9
Ultrasonic diagnosis of extrauterine pregnancy. Passenier W. **J Belge Radiol** 1988;71(6):738–9
Duplex-sonography of the cervical carotid artery. Part II: Confrontation with angiography. Criteria for flow-restrictive stenosis. Roussel L, et al. **J Belge Radiol** 1988;71(5):589–600
Ultrasound of the chest. Verschakelen J, et al. **J Belge Radiol** 1988;71(5):615–21 (17 ref.)
Optical verification of a technique for in situ ultrasonic measurement of articular cartilage thickness. Modest VE, et al. **J Biomech** 1989;22(2):171–6
Measurement of soft tissue thickness over the sacrum of elderly hospital patients using B-mode ultrasound. Clark M, et al. **J Biomed Eng** 1989 May;11(3):200–2
Compression ultrasonography for the detection of deep venous thrombosis in patients who have a fracture of the hip. A prospective study. Froehlich JA, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):249–56
Ultrasound screening of hips at risk for CDH. Failure to reduce the incidence of late cases. Clarke NM, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):9–12
Ultrasonic imaging of the lateral artery of the capital femoral epiphysis: brief report. Dias JJ, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):322
Ultrasonic diagnosis of neonatal separation of the distal humeral epiphysis. Dias JJ, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):825–8 (18 ref.)
Ultrasound measurement of vertebral rotation in idiopathic scoliosis. Suzuki S, et al. **J Bone Joint Surg [Br]** 1989 Mar; 71(2):252–5
Laser Doppler flowmetry evaluation of burn wound depth. O'Reilly TJ, et al. **J Burn Care Rehabil** 1989 Jan–Feb; 10(1):1–6
Carotid artery atheroma: comparison of preoperative B-mode ultrasound appearance with carotid endarterectomy specimen pathology. Gray-Weale AC, et al. **J Cardiovasc Surg (Torino)** 1988 Nov–Dec;29(6):676–81
Pulsatile flow pattern in cerebral arteries during cardiopulmonary bypass. An evaluation based on transcranial Doppler ultrasound. Kaps M, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):16–9
Laser Doppler flowmetry in evaluation of skin post-ischaemic reactive hyperaemia. A study in healthy volunteers and atherosclerotic patients. Kvernebo K, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):70–5
Non-invasive assessment of carotid arteries: a comparison of techniques used in two laboratories. Mashiah A, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):155–7
Intraoperative ultrasonic imaging of coronary artery and saphenous vein grafts in coronary bypass surgery. Suma H, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr; 30(2):257–61
Continuous measurement of cerebral cortical blood flow by laser-Doppler flowmetry in a rat stroke model. Dirnagl U, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):589–96
Joubert syndrome: early diagnosis by recognition of the behavioral phenotype and confirmation by cranial sonography. Edwards BO Jr, et al. **J Child Neurol** 1988 Oct;3(4):247–9
Transcranial Doppler and real-time cranial sonography in neonatal hydrocephalus. Fischer AQ, et al. **J Child Neurol** 1989 Jan;4(1):64–9
Cruveilhier-Baumgarten syndrome without esophageal varices: ultrasonographic diagnosis and echo-Doppler study. Caturelli E, et al. **J Clin Gastroenterol** 1989 Jun; 11(3):357–61
The ultrasonographic "common channel" sign: a characteristic feature of malignant obstruction of the lower end of common bile duct. Dwivedi M, et al. **J Clin Gastroenterol** 1989 Apr;11(2):233–5
Radiologic and ultrasonographic diagnosis of gallstones. Ferrucci JT. **J Clin Gastroenterol** 1988;10 Suppl 2:S22–4
An ultrasonic pearl [letter] Gore RM, et al. **J Clin Gastroenterol** 1988 Oct;10(5):590–1
Porcelain gallbladder: relation between its type by ultrasound and incidence of cancer. Shimizu M, et al. **J Clin Gastroenterol** 1989 Aug;11(4):471–6 (20 ref.)
Echographic correlation of optic nerve sheath size and cerebrospinal fluid pressure. Galetta S, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):79–82
Closed-loop obstruction of the small bowel: CT and sonographic appearance. Cho KC, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):256–8
Ultrasound and CT findings in two cases of hemangioma of the adrenal gland. Derchi LE, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):659–61
Quantitative assessment of average velocity in inferior vena cava by phase-display MR imaging: pulsed Doppler correlation. Didier D, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):94–100
Neonatal craniopharyngioma: CT and ultrasonographic features. Hurst RW, et al. **J Comput Assist Tomogr** 1988 Sep-Oct;12(5):858–61
Perirenal hemangioendothelioma in a newborn: sonograph and MR findings. Koci TM, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):145–7
Thrombus calcification of renal vein in neonate: ultrasound and CT diagnosis. Starinsky R, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):545–6
Evaluation of gingival microcirculation by a laser-Doppler flowmeter. Preliminary results. Boutault F, et al. **J Craniomaxillofac Surg** 1989 Apr;17(3):105–9
B-scan sonography in maxillo-facial surgery. Hell B. **J Craniomaxillofac Surg** 1989 Jan;17(1):39–45
Arterial blood pressure regulation of pulpal blood flow as determined by laser Doppler. Sasano T, et al. **J Dent Res** 1989 May;68(5):791–5
Echographic studies of superficial lymphadenopathies. Miyauchi S, et al. **J Dermatol (Tokyo)** 1988 Jun;15(3):263–7
Is ultrasound of the prostate indicated for screening purposes? An opposing view. Ansell JS. **J Fam Pract** 1988 Nov; 27(5):525–8
Is ultrasound of the prostate indicated for screening purposes? An affirmative view. Lee F, et al. **J Fam Pract** 1988 Nov; 27(5):521–4
Doppler mapping in hypothenar syndrome: an alternative to angiography. DiBenedetto MR, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):244–6
Noninvasive assessment of microvessels with the duplex scanner. Dooley TW, et al. **J Hand Surg [Am]** 1989 Jul; 14(4):670–3
Use of sonography in the early detection of suppurative flexor tenosynovitis. Schecter WP, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):307–10
Liver biopsy complications monitored by ultrasound. Hederström E, et al. **J Hepatol** 1989 Jan;8(1):94–8
A-mode type ultrasonic and caliper measurements of subcutaneous adipose tissue thickness in women. Ohnuma M, et al. **J Hum Ergol (Tokyo)** 1988 Sep;17(1):97–100
Early arterial modifications in young patients with borderline hypertension. Girerd X, et al. **J Hypertens Suppl** 1989 Feb; 7(1):S45–7
Prevalence of severe internal carotid artery disease in hypertensive elderly patients. Lewis RR, et al. **J Hypertens Suppl** 1988 Nov;6(1):S33–6
The local regulation of blood flow evaluated simultaneously by 133-xenon washout and laser Doppler flowmetry. Engelhart M, et al. **J Invest Dermatol** 1988 Nov;91(5):451–3
Duplex venous scanning: a case report. Harkrider WW Jr, et al. **J La State Med Soc** 1989 Apr;141(4):41–5
Pre-operative diagnosis of renal angiomyolipoma. Chongchitnant P, et al. **J Med Assoc Thai** 1989 Feb; 72(2):117–21
Diagnosis of deep vein thrombosis with an ultrasonic Doppler technique: a study of 64 cases. Phornphibulaya P. **J Med Assoc Thai** 1989 Jan;72(1):7–10
Ultrasound diagnosis of Dandy-Walker cyst. Tritrakarn A, et al. **J Med Assoc Thai** 1989 Jan;72(1):52–5
Blood flow in obstetrics using Doppler ultrasound. Griffin D, et al. **J Med Eng Technol** 1988 May-Jun;12(3):97–105 (61 ref.)
Ultrasound in the perinatal necropsy. Furness ME, et al. **J Med Genet** 1989 Jun;26(6):368–72
Sonography in acute appendicitis. Sampson-Stroman V, et al. **J Natl Med Assoc** 1989 Apr;81(4):396–8
Transcranial Doppler study of intracranial circulatory arrest. Hassler W, et al. **J Neurosurg** 1989 Aug;71(2):195–201
Transcranial Doppler sonography within 12 hours after subarachnoid hemorrhage. Romner B, et al. **J Neurosurg** 1989 May;70(5):732–6
Scintigraphic and ultrasound features of giant hemangiomas of the liver. Lisbona R, et al. **J Nucl Med** 1989 Feb; 30(2):181–6
Ultrasonic guidance for internal mammary lymphoscintigraphy [letter] Neils EW, et al. **J Nucl Med** 1988 Oct;29(10):1744–5
Actual questions of the ultrasound diagnostic. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):137–220
An adaptive Kalman filter for speckle reduction in ultrasound images. Castellini G, et al. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):208–13
Modelling of ultrasound scattering by blood. Cobet U. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):188–95
Methods of decomposition of superpositions of Rice and Kritskii-Menkel probability density functions. Dozio M. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):199–203
Influence of speckles on the B-scan picture and problems of its removal. Hein HJ, et al. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):218–20
Measurement of attenuation and mean scatterers' spacing by ultrasound spectroscopy. Jenderka KV. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):196–8
On-line ultrasonic integrated backscatter: in vitro validation of a new electronic device. Landini L, et al. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):214–7
Quantitative ultrasonic characterization of the mitral valve: in vitro and in vivo findings. Lattanzi F, et al. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):158–65
Ultrasound spectroscopy: a completion of the B-scan-sonography. Millner R. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):186–7
Ultrasonic tissue characterization of atherosclerosis: state of the art 1988. Picano E, et al. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):174–85
Evaluation of atherosclerosis with B-mode ultrasound imaging. Pignoli P, et al. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):166–73 (36 ref.)
Changes of probability density of speckle signals caused by the nonlinearity of the transmission channel. Vollstädt R, et al. **J Nucl Med Allied Sci** 1988 Jul–Sep;32(3):204–7
Sonographic examination of sialolithiasis. Yoshimura Y, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):907–12
The evaluation of bone remodeling about orthopaedic implants with ultrasound. Zimmerman MC, et al. **J Orthop Res** 1989;7(4):607–11
Adjunctive use of laser Doppler flowmetry for debridement of osteomyelitis. Swiontkowski MF, et al. **J Orthop Trauma** 1989;3(1):1–5
Laser Doppler flowmetry in evaluation of lower limb atherosclerosis. Kvernebo K. **J Oslo City Hosp** 1988 Nov-Dec;38(11-12):127–36 (25 ref.)
Endoscopic laser Doppler flowmetry in evaluation of human gastric blood flow. Lunde OC. **J Oslo City Hosp** 1988 Nov-Dec;38(11-12):113–26 (64 ref.)
Screening of the carotid arteries with Doppler ultrasound in patients with coronary artery disease. Rostad H, et al. **J Oslo City Hosp** 1988 Aug-Sep;38(8–9):93–5
Extracardiac chest ultrasonography in infants and children: radiographic and clinical implications. Glasier CM, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):540–4
Ovarian ultrasound appearances in Turner syndrome. Massarano AA, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):568–73
Circle of Willis blood flow patterns in healthy newborn infants. Raju TN, et al. **J Pediatr** 1989 Mar;114(3):455–8
High-output cardiac failure in fetuses with large sacrococcygeal teratoma: diagnosis by echocardiography and Doppler ultrasound. Schmidt KG, et al. **J Pediatr** 1989 Jun;114(6):1023–8
Intestinal duplication in a patient with neurofibromatosis: aid of ultrasound and CT scan in diagnosis. Berezin S, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec;7(6):922–5
Intussusception: the sonographic diagnosis and its clinical value. Lee HC, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr;8(3):343–7
Ultrasound screening for congenital dysplasia of the hip in newborns: its value. Castelein RM, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):666–70
Ultrasound screening for hip dysplasia in neonates. Exner GU. **J Pediatr Orthop** 1988 Nov–Dec;8(6):656–60
Fetal diaphragmatic hernia: ultrasound diagnosis and clinical outcome in 38 cases. Adzick NS, et al. **J Pediatr Surg** 1989 Jul;24(7):654–7; discussion 657–8
Ultrasound of the distal pouch in infants with imperforate anus. Donaldson JS, et al. **J Pediatr Surg** 1989 May; 24(5):465–8
Antenatal diagnosis of choledochal cyst at 15 weeks' gestation: etiologic implications and management. Schroeder D, et al. **J Pediatr Surg** 1989 Sep;24(9):936–8
Use of intraoperative ultrasound during hepatic resection in pediatric patients. Thomas BL, et al. **J Pediatr Surg** 1989 Jul;24(7):690–2; discussion 692–3
Enema reduction of intussusception by hydrostatic pressure under ultrasound guidance: a report of 377 cases. Wang GD, et al. **J Pediatr Surg** 1988 Sep;23(9):814–8
Fetal Ovarian Cysts. A Report of Five Cases [letter] Weintraub Z. **J Pediatr Surg** 1988 Dec;23(12):1228
Three years' experience with large ovarian cysts diagnosed in utero. Zachariou Z, et al. **J Pediatr Surg** 1989 May; 24(5):478–82
Fetal internal carotid artery flow velocity time waveforms in twin pregnancies. Degani S, et al. **J Perinat Med** 1988; 16(5–6):405–9
Iniencephaly: prenatal ultrasonographic diagnosis—a case report. Shoham Z, et al. **J Perinat Med** 1988;16(2):139–43
Topics in perinatal ultrasonography. Caudal regression syndrome. Bronsteen RA, et al. **J Perinatol** 1987 Summer; 7(3):264–6
Prolapsing amniotic membranes: detection, sonographic appearance, and management. McGahan JP, et al. **J Perinatol** 1987 Summer;7(3):204–9
Perinatal ultrasound casebook. In utero diagnosis of fetal ovarian cyst. Sarno AP Jr, et al. **J Perinatol** 1989 Mar; 9(1):98–9
Stiffness changes in frog skeletal muscle during contraction recorded using ultrasonic waves. Hatta I, et al. **J Physiol (Lond)** 1988 Sep;403:193–209
Primary retro-peritoneal hydatid cyst (a case report). Shukla NK, et al. **J Postgrad Med** 1988 Oct;34(4):242–3
The ultrasonographic features in anorexia nervosa and bulimia nervosa: a simplified method of monitoring hormonal states during weight gain. Treasure JL. **J Psychosom Res** 1988;32(6):623–34
General practitioner access to pelvic ultrasound [letter] Manns R. **J R Coll Gen Pract** 1988 Oct;38(315):470
Localization of insulinoma by intraoperative ultrasonography [letter] Jacquet N, et al. **J R Soc Med** 1989 May;82(5):317
Localization of an occult impalpable insulinoma by intraoperative ultrasonography. London NJ, et al. **J R Soc Med** 1988 Nov;81(11):663–4
Pelvic ultrasound—should it be used routinely in the diagnosis and screening of postmenopausal bleeding? Discussion paper. Ross LD. **J R Soc Med** 1988 Dec; 81(12):723–4
Vascular patency of fibular free graft: assessment by Doppler color-flow imager: a case report. Stevenson TR, et al. **J Reconstr Microsurg** 1988 Oct;4(5):409–13
Ultrasonographic diagnosis of incompetent cervix. A case

report. Acker DB, et al. J Reprod Med 1988 Dec; 33(12):966–8
First-trimester diagnosis of fetal abnormalities. A report of three cases. Benacerraf BR, et al. J Reprod Med 1988 Sep; 33(9):777–80
Fetal umbilical velocimetry for the surveillance of pregnancies complicated by placenta previa. Brar HS, et al. J Reprod Med 1988 Sep;33(9):741–4
Experience with ultrasound. March CM. J Reprod Med 1989 Jan;34(1 Suppl):100–3
Diagnosis of adrenal ganglioneuroma in pregnancy with magnetic resonance imaging and ultrasonography. A case report. Marks F, et al. J Reprod Med 1989 Jan;34(1):59–61
Antenatal diagnosis of cephalothoracopagus twins in a triplet pregnancy. A case report. Sakala EP, et al. J Reprod Med 1989 May;34(5):365–8 (22 ref.)
Reliability of ultrasound in predicting uterine leiomyoma volume. Sauer MV, et al. J Reprod Med 1988 Jul; 33(7):612–4
Ultrasound and infertility. Shapiro BS, et al. J Reprod Med 1989 Feb;34(2):151–5 (38 ref.)
Ultrasonography and computer tomography of the salivary glands in the evaluation of Sjögren's syndrome. Comparison with parotid sialography. de Clerck LS, et al. J Rheumatol 1988 Dec;15(12):1777–81
Axillar ultrasound of the glenohumeral joint. Koski JM. J Rheumatol 1989 May;16(5):664–7
Use of transrectal ultrasound in detection of prostatic carcinoma: a preliminary report. Drago JR, et al. J Surg Oncol 1989 Aug;41(4):274–7
Incidental detection of carcinoma of the prostate while staging carcinoma of the rectum with transrectal ultrasound. Ragde H. J Surg Oncol 1988 Oct;39(2):129–32
Otocephaly: report of a case with ultrasound findings. Dao AH, et al. J Tenn Med Assoc 1988 Dec;81(12):736–7
Hepatic resection under the guidance of B-mode ultrasonography. Chen XP, et al. J Tongji Med Univ 1989; 9(1):18–21
Sonography versus peritoneal lavage in blunt abdominal trauma. Grüessner R, et al. J Trauma 1989 Feb;29(2):242–4
Bioeffects considerations for the safety of diagnostic ultrasound. American Institute of Ultrasound in Medicine. Bioeffects Committee. J Ultrasound Med 1988 Sep;7(9 Suppl):S1–38
Official proceedings, 1988 World Federation for Ultrasound in Medicine and Biology meeting. J Ultrasound Med 1988 Oct;7(10 Suppl):S39–283
A prospective comparison of clinical ultrasound and operative examination of the female pelvis. Andolf E, et al. J Ultrasound Med 1988 Nov;7(11):617–20
The "washing machine" sign [letter] Andrew WK. J Ultrasound Med 1989 Jan;8(6):340
The spectrum of sonographic findings in endometriomas. Athey PA, et al. J Ultrasound Med 1989 Sep;8(9):487–91
Vitelline duct cyst or double yolk sac. Barzilai M, et al. J Ultrasound Med 1989 Sep;8(9):523–6
The prenatal sonographic features of Noonan's syndrome. Benacerraf BR, et al. J Ultrasound Med 1989 Feb; 8(2):59–63
Doppler criteria for intrauterine growth retardation: predictive values. Benson CB, et al. J Ultrasound Med 1988 Dec;7(12):655–9
Doppler color flow imaging of carotid artery dissection. Bluth EI, et al. J Ultrasound Med 1989 Mar;8(3):149–53
Placental vascular resistance using umbilical velocimetry in patients undergoing cesarean section for fetal distress. Brar HS, et al. J Ultrasound Med 1989 Apr;8(4):211–4
Cerebral, umbilical, and uterine resistance using Doppler velocimetry in postterm pregnancy. Brar HS, et al. J Ultrasound Med 1989 Apr;8(4):187–91
Ultrasound findings in the adreno-genital syndrome (congenital adrenal hyperplasia). Bryan PJ, et al. J Ultrasound Med 1988 Dec;7(12):675–9
Sonographic diagnosis of an obstructing urethral calculus. Bundy AL, et al. J Ultrasound Med 1988 Sep;7(9):523–4
The effects of placental site on the arcuate artery flow velocity waveform. Chambers SE, et al. J Ultrasound Med 1988 Dec;7(12):671–3
Ethics in obstetric ultrasound. Chervenak FA, et al. J Ultrasound Med 1989 Sep;8(9):493–7
Unknown case 1: sonography of the Laminaria tent. Cohen HL, et al. J Ultrasound Med 1988 Nov;7(11):646
First trimester growth retardation [letter] Crade M. J Ultrasound Med 1989 Jan;8(1):56
Intra-amniotic hemorrhage secondary to placenta circumvallate. Cutillo DP, et al. J Ultrasound Med 1989 Jul;8(7):399–401
Routine intraoperative ultrasonography for second trimester abortion reduces incidence of uterine perforation. Darney PD, et al. J Ultrasound Med 1989 Feb;8(2):71–5
Ultrasonic detection of subdiaphragmatic pulmonary sequestration in utero and postnatal diagnosis by fine-needle aspiration biopsy. Davies RP, et al. J Ultrasound Med 1989 Jan;8(1):47–9
Sonographic appearances of hemangiomas of skeletal muscle. Derchi LE, et al. J Ultrasound Med 1989 May;8(5):263–7
Sonographic appearance of primary retroperitoneal cysts. Derchi LE, et al. J Ultrasound Med 1989 Jul;8(7):381–4
Intrahepatic arterial calcification mimicking pneumobilia. A potential pitfall in the ultrasound evaluation of biliary tract disease. Desai RK, et al. J Ultrasound Med 1989 Jun; 8(6):333–5
Prenatal sonographic diagnosis of a vesico-allantoic abdominal wall defect. Donnenfeld AE, et al. J Ultrasound Med 1989 Jan;8(1):43–5
Spontaneous resolution of fetal hydrocephalus. Dreazen E, et al. J Ultrasound Med 1989 Mar;8(3):155–7
Fetal heart rates [letter; comment] DuBose TJ, et al. J Ultrasound Med 1989 Jul;8(7):407–8. Comment on: J Ultrasound Med 1988 Oct;7(10):573–5
Prenatal sonographic diagnosis of hip dislocation. Emerson DS, et al. J Ultrasound Med 1988 Dec;7(12):687–9
The sagittal sign. An early second trimester sonographic indicator of fetal gender. Emerson DS, et al. J Ultrasound Med 1989 Jun;8(6):293–7
Sonography of autonomous follicular ovarian cysts in precocious pseudopuberty. Fakhry J, et al. J Ultrasound Med 1988 Nov;7(11):597–603
Doppler ultrasound in the nonpregnant pelvis. Farquhar CM, et al. J Ultrasound Med 1989 Aug;8(8):451–7
Radiology residency training in diagnostic sonography [editorial] Filly RA. J Ultrasound Med 1989 Sep;8(9):475
Magnetic resonance imaging as an adjunct to ultrasound in oligohydramnios. Detection of sirenomelia. Fitzmorris-Glass R, et al. J Ultrasound Med 1989 Mar; 8(3):159–62
Duplex Doppler sonography of renal transplants. Correlation with histopathology. Fleischer AC, et al. J Ultrasound Med 1989 Feb;8(2):89–94
Sonographic diagnosis of myositis ossificans. Fornage BD, et al. J Ultrasound Med 1989 Aug;8(8):463–6
Transrectal sonographic monitoring of balloon dilatation of the prostatic urethra. Fornage BD, et al. J Ultrasound Med 1989 Jan;8(1):53–5
Sonographic detection and fine-needle aspiration biopsy of nonpalpable recurrent or metastatic melanoma in subcutaneous tissues. Fornage BD, et al. J Ultrasound Med 1989 Aug;8(8):421–4
Antenatal diagnosis of restriction of the foramen ovale. Fraser WD, et al. J Ultrasound Med 1989 May;8(5):281–3
Ultrasonographic diagnosis of portal vein cavernous transformation in children. Frider B, et al. J Ultrasound Med 1989 Aug;8(8):445–9
Umbilical artery Doppler blood velocity waveforms in normal and abnormal gestations. Friedman DM, et al. J Ultrasound Med 1989 Jul;8(7):375–80
Sonographic findings in double gallbladder with cholelithiasis of both lobes. Garfield HD, et al. J Ultrasound Med 1988 Oct;7(10):589–91
The ultrasound appearance of radiation-induced hepatic injury. Correlation with computed tomography and magnetic resonance imaging. Garra BS, et al. J Ultrasound Med 1988 Nov;7(11):605–9
Endovaginal? [letter] [published erratum appears in J Ultrasound Med 1989 Jun;8(6):339] Garret W. J Ultrasound Med 1989 Apr;8(4):222
Prenatal diagnosis of pentalogy of Cantrell. Ghidini A, et al. J Ultrasound Med 1988 Oct;7(10):567–72
Comparison of umbilical artery flow velocity waveform indices as measured by continuous wave Doppler ultrasound. Gilbert WM, et al. J Ultrasound Med 1988 Oct; 7(10):549–51
Doppler sonography findings of the umbilical arteries in eight cases of twin transfusion syndrome [letter] Giles WB, et al. J Ultrasound Med 1989 Sep;8(9):531–2
Morphologic and motility changes of the gallbladder in response to acute liver injury. A prospective real-time sonographic study in 255 patients with acute viral hepatitis. Giorgio A, et al. J Ultrasound Med 1989 Sep;8(9):499–506
Sonography of Candida albicans cystitis. Gooding GA. J Ultrasound Med 1989 Mar;8(3):121–4
Sonographic appearance of normal intramammary lymph nodes. Gordon PB, et al. J Ultrasound Med 1988 Oct; 7(10):545–8
Rectosigmoid endometriosis. Diagnosis using endovaginal sonography. Gorell HA, et al. J Ultrasound Med 1989 Aug; 8(8):459–61
Computed tomographic, ultrasound, and plain film appearance of phleboliths in varicoceles. Gottlieb RH, et al. J Ultrasound Med 1989 Jun;8(6):329–31
Ultrasound demonstration of a superficial femoral artery leiomyosarcoma. Gramith F, et al. J Ultrasound Med 1989 May;8(5):269–72
Differential diagnosis of first trimester ventral wall defect. Gray DL, et al. J Ultrasound Med 1989 May;8(5):255–8
Sonographic diagnosis of enlarged prostatic utricle. Gregg DC, et al. J Ultrasound Med 1989 Jan;8(1):51–2
Hepatic and biliary tract abnormalities in patients with AIDS. Sonographic-pathologic correlation. Grumbach K, et al. J Ultrasound Med 1989 May;8(5):247–54
Doppler ultrasound assessment of tumor vascularity in gynecologic disorders. Hata T, et al. J Ultrasound Med 1989 Jun;8(6):309–14
Intraoperative sonography in low-grade gliomas. Hatfield MK, et al. J Ultrasound Med 1989 Mar;8(3):131–4
Evaluation of traumatic groin arteriovenous fistulas with duplex Doppler sonography. Helvie MA, et al. J Ultrasound Med 1989 Jan;8(1):21–4
Sonographic diagnosis of intramural duodenal hematoma. Hernanz-Schulman M, et al. J Ultrasound Med 1989 May; 8(5):273–6
First trimester fetal cardiac activity. Sonographic documentation of a progressive early rise in heart rate [see comments] Hertzberg BS, et al. J Ultrasound Med 1988 Oct;7(10):573–5. Comment in: J Ultrasound Med 1989 Jul;8(7):407–8
Fetal choroid plexus lesions. Relationship of antenatal sonographic appearance to clinical outcome. Hertzberg BS, et al. J Ultrasound Med 1989 Feb;8(2):77–82
Sonographic definition of the empty follicle syndrome. Hilgers TW, et al. J Ultrasound Med 1989 Aug;8(8):411–6
Percutaneous ultrasound-guided esophagostomy. Jones GR, et al. J Ultrasound Med 1988 Nov;7(11):643–5
Nonuniformity of fetal umbilical systolic/diastolic ratios as determined with duplex Doppler sonography. Kay HH, et al. J Ultrasound Med 1989 Aug;8(8):417–20
Prenatal diagnosis of the ectrodactyly, ectodermal dysplasia, cleft palate (EEC) syndrome. Köhler R, et al. J Ultrasound Med 1989 Jun;8(6):337–9
Doppler waveform parvus and tardus. A sign of proximal flow obstruction. Kotval PS. J Ultrasound Med 1989 Aug; 8(8):435–40
Doppler diagnosis of intermittent subclavian steal during systole caused by axillary-axillary bypass graft. Kotval PS, et al. J Ultrasound Med 1988 Oct;7(10):593–5
High-frequency ultrasonography of skeletal muscle in children with neuromuscular disease. Lamminen A, et al. J Ultrasound Med 1988 Sep;7(9):505–9
Sonography of the puerperal uterus. Lavery JP, et al. J Ultrasound Med 1989 Sep;8(9):481–6
Sonographic features of focal orchitis. Lentini JF, et al. J Ultrasound Med 1989 Jul;8(7):361–5
Prenatal ultrasonic diagnosis of splenic cyst. Lichman JP, et al. J Ultrasound Med 1988 Nov;7(11):637–8
Prediction of cesarean section scars with ultrasound imaging during pregnancy. Lonky NM, et al. J Ultrasound Med 1989 Jan;8(1):15–9
Sonography of the simple and complicated ipsilateral fused kidney. Lubat E, et al. J Ultrasound Med 1989 Mar; 8(3):109–14
Regression of nuchal cystic hygroma in utero. Macken MB, et al. J Ultrasound Med 1989 Feb;8(2):101–3
Role of sonography in trichobezoars. Malpani A, et al. J Ultrasound Med 1988 Dec;7(12):661–3
Sonography of abdominal desmoid tumors in adolescents. Mantello MT, et al. J Ultrasound Med 1989 Aug; 8(8):467–70
Spondylothoracic dysplasia. Clinical and sonographic diagnosis. Marks F, et al. J Ultrasound Med 1989 Jan; 8(1):1–5
Hemodynamic validation of Doppler assessment of fetoplacental circulation in a sheep model system. Maulik D, et al. J Ultrasound Med 1989 Apr;8(4):177–81
Umbilical and uterine artery flow velocity waveforms. Effect of the sampling site on Doppler ratios. Mehalek KE, et al. J Ultrasound Med 1989 Apr;8(4):171–6
Fetal overgrowth. Diabetic versus nondiabetic. Miller JM Jr, et al. J Ultrasound Med 1988 Oct;7(10):577–9
Ultrasound examination in ovarian cancer patients. A comparison with second look laparotomy. Murolo C, et al. J Ultrasound Med 1989 Aug;8(8):441–3
Endoscopic ultrasonography of gastric myogenic tumor. A comparative study between histology and ultrasonography. Nakazawa S, et al. J Ultrasound Med 1989 Jul;8(7):353–9
Simultaneous use of Doppler ultrasound and electromagnetic flow probes in fetal flow assessment. Nimrod C, et al. J Ultrasound Med 1989 Apr;8(4):201–5
Chromosomal abnormalities in fetuses with omphalocele. Significance of omphalocele contents. Nyberg DA, et al. J Ultrasound Med 1989 Jun;8(6):299–308
Relationship of cerebral blood flow regulation to acute mountain sickness. Otis SM, et al. J Ultrasound Med 1989 Mar;8(3):143–8
Real-time ultrasound, axillary mammography, and clinical examination in the detection of axillary lymph node metastases in breast cancer patients. Pamilo M, et al. J Ultrasound Med 1989 Mar;8(3):115–20
Sonography of the distal cystic duct. Parulekar SG. J Ultrasound Med 1989 Jul;8(7):367–73
Dynamic incompetent cervix uteri. Sonographic observations. Parulekar SG, et al. J Ultrasound Med 1988 Sep;7(9):481–5
Ultrasound findings in pregnancies complicated by fetal triploidy. Pircon RA, et al. J Ultrasound Med 1989 Sep; 8(9):507–11
Hemangioma of the umbilical cord. Sonographic appearance. Pollack MS, et al. J Ultrasound Med 1989 Mar;8(3):163–6
Prenatal diagnosis of fetal liver calcifications. Richards DS, et al. J Ultrasound Med 1988 Dec;7(12):691–4
Prenatal cerebral Doppler ultrasonography and neonatal neurologic outcome. Rizzo G, et al. J Ultrasound Med 1989 May;8(5):237–40
Vertebral artery compression as an adjunct to transcutaneous Doppler ultrasound examination. Rossmann ME, et al. J Ultrasound Med 1988 Oct;7(10):541–4
Bladder puncture from Fletcher-Suit tandem applicator. Diagnosis by pelvic ultrasound. Rossmann MD, et al. J Ultrasound Med 1989 Jul;8(7):403–5
Femoral arterial injury following catheterization. Duplex evaluation. Sacks D, et al. J Ultrasound Med 1989 May; 8(5):241–6
Reliability of sonographic measurement of the fetal foot. Shalev E, et al. J Ultrasound Med 1989 May;8(5):259–62
The persistent vitelline vein segment. Embryologic and ultrasound features. Shawker TH, et al. J Ultrasound Med 1988 Dec;7(12):681–5

Ultrasonographic diagnosis and assisted surgical management of hematotrachelos and hematometra due to uterine cervical atresia with associated vaginal agenesis. Sherer DM, et al. J Ultrasound Med 1989 Jun;8(6):321–3

Color flow Doppler of carotid body paraganglioma. Shulak JM, et al. J Ultrasound Med 1989 Sep;8(9):519–21

Prenatal sonographic diagnosis of bronchopulmonary foregut malformation. Siffring PA, et al. J Ultrasound Med 1989 May;8(5):277–80

Prenatal diagnosis of sirenomelia. Sirtori M, et al. J Ultrasound Med 1989 Feb;8(2):83–8

Focal areas of increased echogenicity within the brain. Slovis TL, et al. J Ultrasound Med 1989 Jan;8(1):31–7

Early detection of intrauterine pregnancy with ultrasound [letter] Smeltzer JS. J Ultrasound Med 1988 Dec; 7(12):695–6

Gallbladder contraction [letter] Taher MA. J Ultrasound Med 1989 Apr;8(4):222

Sonographic demonstration of salpingitis. Potential confusion with appendicitis. Terry J, et al. J Ultrasound Med 1989 Jan;8(1):39–41

Ultrasonography of benign gastric ulcers. Characteristic features and sequential follow-ups. Tomooka Y, et al. J Ultrasound Med 1989 Sep;8(9):513–7

Sonography of nonconjoined monoamniotic twin pregnancies. Townsend RR, et al. J Ultrasound Med 1988 Dec;7(12):665–70

Blood flow velocity pattern of the anterior cerebral arteries. Before and after drainage of posthemorrhagic hydrocephalus in the newborn. Van Bel F, et al. J Ultrasound Med 1988 Oct;7(10):553–9

Staging and follow-up of rheumatoid arthritis of the knee. Comparison of sonography, thermography, and clinical assessment. van Holsbeeck M, et al. J Ultrasound Med 1988 Oct;7(10):561–6

Wall defect as a sign of urinary bladder rupture in sonography. Wan YL, et al. J Ultrasound Med 1988 Sep; 7(9):511–3

Post-biopsy arterial pseudoaneurysm in a renal allograft. Detection by duplex sonography. Weissman J, et al. J Ultrasound Med 1988 Sep;7(9):515–8

Pulmonary sequestration. Diagnosis by ultrasound. West MS, et al. J Ultrasound Med 1989 Mar;8(3):125–9

Mycotic aneurysm of the abdominal aorta. Diagnosis by duplex sonography. Willing SJ, et al. J Ultrasound Med 1989 Sep;8(9):527–9

Renal blood flow pattern by noninvasive Doppler ultrasound in normal children and acute renal failure patients. Wong SN, et al. J Ultrasound Med 1989 Mar;8(3):135–41

Effect of fetal heart rate on umbilical arterial Doppler indices. Yarlagadda P, et al. J Ultrasound Med 1989 Apr;8(4):215–8

Echoicity of whole blood. Yuan YW, et al. J Ultrasound Med 1989 Aug;8(8):425–34

Re: The Diagnosis of Neoplasia in Patients with Asymptomatic Microscopic Hematuria: A Decision Analysis [letter; comment] Britton JP. J Urol 1989 Jul; 142(1):141. **Comment on:** J Urol 1988 May;139(5):1002–6

Intraoperative ultrasound in the conservative resection of testicular neoplasms. Buckspan MB, et al. J Urol 1989 Feb; 141(2):326–7

The fate of infant kidneys with fetal hydronephrosis but initially normal postnatal sonography. Dejter SW Jr, et al. J Urol 1989 Aug;142(2 Pt 2):661–2; discussion 667–8

Sonographic evaluation and conservative management of newborns with myelomeningocele and hydronephrosis. Erickson D, et al. J Urol 1989 Aug;142(2 Pt 2):592–4; discussion 603–5

Treatment of hemospermia caused by dilated seminal vesicles by direct drug injection guided by ultrasonography. Fuse H, et al. J Urol 1988 Nov;140(5):991–2

Granulosa cell tumor of the adult testis: ultrastructural and ultrasonographic characteristics. Gaylis FD, et al. J Urol 1989 Jan;141(1):126–7

Adrenal hemorrhage in the newborn with evidence of bleeding in utero. Gotoh T, et al. J Urol 1989 May; 141(5):1145–7

Ultrasound guided transrectal core biopsies of the palpably abnormal prostate. Hodge KK, et al. J Urol 1989 Jul; 142(1):66–70

Identification of residual cancer in the prostate following radiation therapy: role of transrectal ultrasound guided biopsy and prostate specific antigen. Kabalin JN, et al. J Urol 1989 Aug;142(2):326–31

Residual urine in children with acute cystitis and in healthy children: assessment by sonography. Lidefelt KJ, et al. J Urol 1989 Apr;141(4):916–7

Value of sonography in true complete diphallia. Marti-Bonmati L, et al. J Urol 1989 Aug;142(2):356–7

Determination of erectile penile volume by ultrasonography. Nelson RP, et al. J Urol 1989 May;141(5):1123–6

Meconium hydrocele: an unusual etiology of a scrotal mass in the newborn. Ring KS, et al. J Urol 1989 May; 141(5):1172–3

The role of transrectal ultrasonography in the diagnosis and management of prostatic and seminal vesicle cysts. Shabsigh R, et al. J Urol 1989 May;141(5):1206–9

The use of transrectal prostatic ultrasonography in the evaluation of patients with prostatic carcinoma. Waterhouse RL, et al. J Urol 1989 Feb;141(2):233–9 (68 ref.)

Accuracy of duplex scanning in the detection of stenosis after carotid endarterectomy. Bandyk DF, et al. J Vasc Surg 1988 Dec;8(6):696–702

Perioperative asymptomatic venous thrombosis: role of duplex scanning versus venography. Barnes RW, et al. J Vasc Surg 1989 Feb;9(2):251–60

Prevalence of asymptomatic carotid disease: results of duplex scanning in 348 unselected volunteers. Colgan MP, et al. J Vasc Surg 1988 Dec;8(6):674–8

Postoperative follow-up of renal artery reconstruction with duplex ultrasound. Eidt JF, et al. J Vasc Surg 1988 Dec; 8(6):667–73

Postoperative carotid duplex scan and ocular pneumoplethysmography [letter] Gee W. J Vasc Surg 1989 Mar;9(3):508

Is duplex scanning sufficient evaluation before carotid endarterectomy? Geuder JW, et al. J Vasc Surg 1989 Feb; 9(2):193–201

Detection and grading of femorodistal vein graft stenoses: duplex velocity measurements compared with angiography. Grigg MJ, et al. J Vasc Surg 1988 Dec;8(6):661–6

Patency of femorofemoral venous crossover grafts assessed by duplex scanning and phlebography. Harris JP, et al. J Vasc Surg 1988 Dec;8(6):679–82

Duplex sonography accurately assesses portacaval shunt patency. Helton WS, et al. J Vasc Surg 1988 Dec; 8(6):657–60

The role of plaque morphology and diameter reduction in the development of new symptoms in asymptomatic carotid arteries. Langsfeld M, et al. J Vasc Surg 1989 Apr; 9(4):548–57

Duplex ultrasonography and selection of patients for carotid endarterectomy: plaque morphology or luminal narrowing? Leahy AL, et al. J Vasc Surg 1988 Nov;8(5):558–62

Duplex ultrasound measurement of changes in mesenteric flow velocity with pharmacologic and physiologic alteration of intestinal blood flow in man. Lilly MP, et al. J Vasc Surg 1989 Jan;9(1):18–25

Potential limitations of center-line pulsed Doppler recordings: an in vitro flow visualization study. Ojha M, et al. J Vasc Surg 1989 Apr;9(4):515–20

The fate of unrepaired minor technical defects detected by intraoperative ultrasonography during carotid endarterectomy. Sawchuk AP, et al. J Vasc Surg 1989 May; 9(5):671–5; discussion 675–6

Follow-up of renal artery stenosis by duplex ultrasound. Taylor DC, et al. J Vasc Surg 1989 Mar;9(3):410–5

Duplex ultrasound scanning in the assessment of arteriovenous fistulas created for hemodialysis access: comparison with digital subtraction angiography. Tordoir JH, et al. J Vasc Surg 1989 Aug;10(2):122–8

Osteoporotic bone fragility. Detection by ultrasound transmission velocity. Heaney RP, et al. JAMA 1989 May 26;261(20):2986–90

Ultrasonography in the assessment of diffuse liver disease [letter] Székely G, et al. JAMA 1988 Dec 23–30; 260(24):3588–9

The sonographic appearance of extramedullary hematopoiesis in the liver. Abbitt PL, et al. JCU 1989 May; 17(4):280–2

High-resolution hip ultrasound in the limping child. Alexander JE, et al. JCU 1989 Jan;17(1):19–24

Ultrasonographic pattern of congenital nephrotic syndrome of Finnish type. Alkrinawi S, et al. JCU 1989 Jul–Aug; 17(6):443–4

Sonographic demonstration of echogenic hemobilia. Allen KS, et al. JCU 1988 Nov–Dec;16(9):681–3

Pitfalls in the diagnosis of intussusception. Alzen G, et al. JCU 1989 Sep;17(7):481–8

Carcinoma of pancreas metastasizing to the tunica vaginalis testis. Aquino NM, et al. JCU 1989 May;17(4):287–90

Use of ultrasound and magnetic resonance imaging in the diagnosis of cervical pregnancy. Bader-Armstrong B, et al. JCU 1989 May;17(4):283–6

Mucocele of the appendix presenting as an adnexal mass. Bahia JO, et al. JCU 1989 Jan;17(1):62–6

Autonomous ovarian cyst in isosexual precocious pseudopuberty. Baran GW, et al. JCU 1988 Jan;16(1):58–60

Doppler demonstration of reversed umbilical blood flow in an acardiac twin. Benson CB, et al. JCU 1989 May; 17(4):291–5

Sonographic demonstration of thickened renal pelvic mucosa/submucosa in mixed candida infection. Bick RJ, et al. JCU 1987 Jun;15(5):333–6

The ultrasound spectrum of emphysematous cholecystitis. Bloom RA, et al. JCU 1989 May;17(4):251–6

Ultrasonography of the peroneal nerve muscle group in normal subjects and patients with peroneal paresis. Boonstra AM, et al. JCU 1988 Jan;16(1):17–24

Ultrasonography of the thyroid during pregnancy. Brander A, et al. JCU 1989 Jul–Aug;17(6):403–6

Semilobar holoprosencephaly with associated Arnold-Chiari variant. Britton CA. JCU 1989 Jun;17(5):374–8

Transvaginal ultrasound diagnosis of fetal clubfeet at 13 weeks, menstrual age. Bronshtein M, et al. JCU 1989 Sep; 17(7):518–20

Double uterus associated with unilateral vaginal obstruction and ipsilateral renal agenesis: ultrasonographic diagnosis. Burgos FJ, et al. JCU 1989 May;17(4):296–8

Real-time ultrasound evaluation of tuberculous pleural effusions. Carazo Martínez O, et al. JCU 1989 Jul–Aug; 17(6):407–10

Emphysematous pyelitis in a cushinoid patient mimicking a subphrenic abscess: diagnosis by sonography. Carrington BM, et al. JCU 1989 Jul–Aug;17(6):453–5

Infected duplication cyst of ileum masquerading as an adnexal abscess—ultrasonographic features. Caspi B, et al. JCU 1989 Jul–Aug;17(6):431–3

Sonographic demonstration of an intrauterine device perforating a uterine myoma. Caspi B, et al. JCU 1989 Sep; 17(7):535–7

Scrotal cup for testicular ultrasound. Cazenave CR, et al. JCU 1987 Jun;15(5):357–9

"Bullet"-shaped head in fetuses with spina bifida: a pointer to the spinal lesion. Chambers SE, et al. JCU 1988 Jan; 16(1):25–8

Sonographic demonstration of free air in perforated peptic ulcers: comparison of sonography with radiography. Chang-Chien CS, et al. JCU 1989 Feb;17(2):95–100

Real-time ultrasound diagnosis of intramural intestinal hematoma. Chau WK, et al. JCU 1989 Jun;17(5):382–4

Ultrasonic demonstration of an intraluminal pseudomembrane in the gallbladder: a definitive sign of acute cholecystitis? Cheong LL, et al. JCU 1989 Jul–Aug;17(6):449–52

A post-appendectomy fecalith detected by ultrasound. Coughlin WF, et al. JCU 1989 Mar–Apr;17(3):197–9

Splenic abscesses in cat scratch disease: sonographic diagnosis and follow-up. Cox F, et al. JCU 1989 Sep;17(7):511–4

Clinical significance of sonographic findings in the abnormal but intact rotator cuff: a preliminary report. Crass JR, et al. JCU 1988 Nov–Dec;16(9):625–34

Predicting the birth characteristics of normal fetuses 14 weeks before delivery. Deter RL, et al. JCU 1989 Feb;17(2):89–93

Longitudinal studies of femur growth in normal fetuses. Deter RL, et al. JCU 1987 Jun;15(5):299–305

Development of individual growth standards for estimated fetal weight: II. Weight prediction during the third trimester and at birth. Deter RL, et al. JCU 1989 Feb; 17(2):83–8

Sonographic findings in glomus tumor of the stomach. Dupuy DE, et al. JCU 1989 Mar–Apr;17(3):219–21

Diagnosis of hepatic artery aneurysm with portal vein fistula using image-directed Doppler ultrasound. Endress C, et al. JCU 1989 Mar–Apr;17(3):206–8

Sonographic appearance of the reservoir of an inflatable penile prosthesis. Epstein S, et al. JCU 1987 Jun;15(5):353–6

Sonography of fetal intracranial hemorrhage: unusual causes and a review of the literature. Fogarty K, et al. JCU 1989 Jun;17(5):366–70 (22 ref.)

Ultrasonographic detection of epididymal sarcoidosis. Forte MD, et al. JCU 1988 Mar–Apr;16(3):191–4

Pena-Shokeir type I syndrome: in utero sonographic appearance. Genkins SM, et al. JCU 1989 Jan;17(1):56–61

Diagnosis of abdominal aortic dissection by image-directed Doppler sonography. Giyanani VL, et al. JCU 1989 Jul–Aug;17(6):445–8

Use of ultrasound for localization of a foreign object in the heart. Giyanani VL, et al. JCU 1989 Jun;17(5):379–81

Sonography of anencephaly: pitfalls in early diagnosis. Goldstein RB, et al. JCU 1989 Jul–Aug;17(6):397–402

Prenatally diagnosed gastroschisis in monozygotic twins. Gorczyca DP, et al. JCU 1989 Mar–Apr;17(3):216–8

Arthrogryposis multiplex congenita: prenatal ultrasonographic diagnosis. Gorczyca DP, et al. JCU 1989 Jan;17(1):40–4

Ultrasound-guided puncture of cystic tumors in the lower pelvis of young women. Granberg S, et al. JCU 1989 Feb; 17(2):107–11

Measurement of quadriceps muscle thickness and subcutaneous tissue thickness in normal children by real-time ultrasound imaging. Heckmatt JZ, et al. JCU 1988 Mar–Apr;16(3):171–6

Assessment of quadriceps femoris muscle atrophy and hypertrophy in neuromuscular disease in children. Heckmatt JZ, et al. JCU 1988 Mar–Apr;16(3):177–81

Ovarian torsion: sonographic evaluation. Helvie MA, et al. JCU 1989 Jun;17(5):327–32

Sonographic detection of the fetal pancreas. Hill LM, et al. JCU 1989 Sep;17(7):475–9

Antenatal ultrasound diagnosis of the femur-fibula-ulna syndrome. Hirose K, et al. JCU 1988 Mar–Apr; 16(3):199–203

Mesothelial cyst of the gallbladder. Hoffman CJ, et al. JCU 1989 Jan;17(1):50–2

Antenatal diagnosis of sirenomelia (sympus apus). Honda N, et al. JCU 1988 Nov–Dec;16(9):675–7

Utility of sonographic gallbladder wall patterns in differentiating malignant from cirrhotic ascites. Huang YS, et al. JCU 1989 Mar–Apr;17(3):187–92

Antenatal diagnosis of a set of conjoined twins presenting with unusual ultrasound findings. Hurren AJ, et al. JCU 1988 Nov–Dec;16(9):672–4

Differentiation of mononucleosis from hepatitis by sonographic measurement of spleen size. Ishibashi H, et al. JCU 1987 Jun;15(5):313–6

Ultrasound assessment of local complications of percutaneous renal stone removal. Ivory CM, et al. JCU 1989 Jun; 17(5):345–51

Ultrasound in the diagnosis of lymphoma: a review. Jackson FI, et al. JCU 1989 Mar–Apr;17(3):145–71 (25 ref.)

Ultrasound demonstration of nephrocalcinosis in William's syndrome. Jantarasami T, et al. JCU 1989 Sep;17(7):533–4

Ultrasonographic diagnosis and morphological study of placenta circumvallate. Jauniaux E, et al. JCU 1989 Feb; 17(2):126–31

Antenatal sonographic detection of Wolffian duct cyst.

Kapoor R, et al. JCU 1989 Sep;17(7):515–7
Ultrasonography of calculi in ureteroceles. Khan AN, et al. JCU 1989 Jul–Aug;17(6):439–42
Mucinous cystadenoma simulating renal transplant lymphocele. Kliewer MA, et al. JCU 1989 Feb; 17(2):119–22
Diagnosis of ectopia cordis in the second trimester. Klingensmith WC 3d, et al. JCU 1988 Mar–Apr;16(3):204–6
Ultrasound of hemobilia: a clinical and experimental study. Laffey PA, et al. JCU 1988 Mar–Apr;16(3):167–70
Ultrasound demonstration of xanthogranulomatous cholecystitis. Lichtman JB, et al. JCU 1987 Jun;15(5):342–5
Diagnosis of acute ulcerative colitis and colonic Crohn's disease by colonic sonography. Limberg B. JCU 1989 Jan; 17(1):25–31
Peroperative monitoring of distal transluminal dilatation. McShane MD, et al. JCU 1988 Nov–Dec;16(9):659–62
The intrauterine hematoma: diagnostic and clinical aspects. Mandruzzato GP, et al. JCU 1989 Sep;17(7):503–10
Sonographic relationship between gallbladder wall thickness and the etiology of ascites. Marti-Bonmati L, et al. JCU 1989 Sep;17(7):497–501
Heterotopic pregnancy diagnosed by endovaginal scanning. Mattox JH, et al. JCU 1989 Sep;17(7):523–6
Assessment of utero-placental blood flow velocity wave forms in a pregnant patient with systemic lupus erythematosus. Meizner I, et al. JCU 1988 Jan;16(1):55–7
Fetal anthropometry at term: effect of menstrual age and relative fetal size. Miller JM Jr, et al. JCU 1989 Mar–Apr; 17(3):193–6
In utero growth of the large-for-menstrual-age fetus. Miller JM Jr, et al. JCU 1989 Jan;17(1):15–7
Sonography of normal lower ureters. Mirk P, et al. JCU 1988 Nov–Dec;16(9):635–42
Ultrasonographic findings in gastric cancer: in vitro and in vivo studies. Miyamoto Y, et al. JCU 1989 Jun;17(5):309–18
Ultrasonographic findings in duodenum caused by Schönlein–Henoch purpura. Miyamoto Y, et al. JCU 1989 May;17(4):299–303
Sonographic features of biliary clonorchiasis. Morikawa P, et al. JCU 1988 Nov–Dec;16(9):655–8
A prospective study of the efficacy of B-scan sonography in the detection of deep venous thrombosis in the lower extremities. O'Leary DH, et al. JCU 1988 Jan;16(1):1–8
Ultrasonic appearance of tuberculous peritonitis. Ozkan K, et al. JCU 1987 Jun;15(5):350–2
Ultrasonographic detection of plastic materials in various organs of the human body. Pery M, et al. JCU 1989 Sep; 17(7):489–95
Sonographic appearance of occipital fetal hair. Petrikovsky BM, et al. JCU 1989 Jul–Aug;17(6):425–7
Ultrasound manifestation of metastatic perihepatic calcifications from ovarian carcinoma [letter] Pombo F, et al. JCU 1989 May;17(4):304–6
Primary hepatocellular adenoma in men. Pulpeiro JR, et al. JCU 1989 May;17(4):269–74
Sonographic first-trimester diagnosis of umbilical cord cyst. Rempen A. JCU 1989 Jan;17(1):53–5
Delayed diagnosis of advanced combined pregnancy. Reuss ML. JCU 1988 Mar–Apr;16(3):187–90
Ultrasonographic and computed tomographic features of renal sinus lymphoma. Ruchman RB, et al. JCU 1988 Jan; 16(1):35–40
Trauma-induced testicular torsion: ultrasonographic features and pathologic correlation. Sanders LM, et al. JCU 1989 Sep;17(7):538–41
Sonographic findings in traumatic hemobilia: report of two cases and review of the literature. Sax SL, et al. JCU 1988 Jan;16(1):29–34 (20 ref.)
Pulmonary hydatid seeding mimicking hematogenous metastases: sonographic diagnosis of hydatid rupture into the inferior vena cava. Segura JM, et al. JCU 1989 Feb; 17(2):112–4
A different sonographic "pseudokidney" appearance detected with intestinal lymphoma: "hydronephrotic-pseudokidney". Sener RN, et al. JCU 1989 Mar–Apr;17(3):209–12
Ultrasound-guided selective feticide of hydrocephalic fetus in triplet pregnancy. Shalev E, et al. JCU 1988 Jan; 16(1):41–3
Hyponatremia as the result of preparation for abdominal ultrasound examination. Shapira I, et al. JCU 1988 Jan; 16(1):61–2
Sonographic diagnosis of unilateral fetal renal duplication with associated ectopic ureterocele. Sherer DM, et al. JCU 1989 Jun;17(5):371–3
Endoscopic ultrasonography of esophageal tumors and compressions. Silva SA, et al. JCU 1988 Mar–Apr; 16(3):149–57
Prediction of normal fetal growth by the Rossavik growth model using two scans before 27 weeks, menstrual age. Simon NV, et al. JCU 1989 May;17(4):237–43
Influence of the interval between time points on individual fetal growth curve standards derived from Rossavik models and two ultrasound scans before 26 weeks, menstrual age. Simon NV, et al. JCU 1989 May;17(4):245–50
Intracardiac tumor (rhabdomyoma) diagnosed by in utero ultrasound: a case report. Stanford W, et al. JCU 1987 Jun; 15(5):337–41
Individual growth curve standards for fetal head and abdominal circumferences: effect of the type of measurement on growth prediction. Stefos T, et al. JCU 1989 Jan;17(1):33–6
Effect of timing of initial scan and interval between scans on Rossavik growth model specification. Stefos T, et al. JCU 1989 Jun;17(5):319–25
Sonography of cyclophosphamide hemorrhagic cystitis: a report of two cases. Suzuki T, et al. JCU 1988 Mar–Apr; 16(3):183–6
Growth of fetuses of diabetic mothers. Todros T, et al. JCU 1989 Jun;17(5):333–7
Ultrasonographic evaluation of cervical lymph node metastases in esophageal cancer with special reference to the relationship between the short to long axis ratio (S/L) and the cancer content. Tohnosu N, et al. JCU 1989 Feb; 17(2):101–6
High-resolution computerized color transformation of real-time gray scale ultrasound images. Toma SK, et al. JCU 1989 Jun;17(5):353–8
Mycotic aneurysm of the abdominal aorta in the neonate. Tran-Minh VA, et al. JCU 1989 Jan;17(1):37–9
Idiopathic macroorchidism. Truwit CL, et al. JCU 1989 Mar–Apr;17(3):200–5
Sonographic measurement of the pancreas in children. Ueda D. JCU 1989 Jul–Aug;17(6):417–23
Application of ultrasound in the diagnosis of heterotopic pregnancy—a review of the literature. van Dam PA, et al. JCU 1988 Mar–Apr;16(3):159–65 (70 ref.)
The impact of routine admission abdominal sonography on patient care. Verbanck JJ, et al. JCU 1988 Nov–Dec; 16(9):651–4
Sonographic appearance of the diaphragm: a cadaver study. Verschakelen JA, et al. JCU 1989 Mar–Apr;17(3):222–7
Ultrasonographic diagnosis of ectasia of the umbilical vein. Vesce F, et al. JCU 1987 Jun;15(5):346–9
Effect of cholecystectomy on common bile duct diameters: a longitudinal prospective ultrasonographic study. Wedmann B, et al. JCU 1988 Nov–Dec;16(9):619–24
Gallbladder wall thickening: a frequent finding in various nonbiliary disorders—a prospective ultrasonographic study. Wegener M, et al. JCU 1987 Jun;15(5):307–12
An unusual case of intracerebral hematoma caused by an indriven fragment of bone: ultrasound evaluation with CT correlation. Weinberg B, et al. JCU 1988 Jan;16(1):52–4
Gas-containing splenic infarct masquerading as gastric bezoar: ultrasound elucidation. Williamson SL, et al. JCU 1988 Nov–Dec;16(9):678–80
An ultrasonic hepatic pseudomass due to colonic interposition. Wong AD, et al. JCU 1988 Nov–Dec; 16(9):669–71
Ultrasonic examination of the wall of the fluid-filled stomach. Worlicek H, et al. JCU 1989 Jan;17(1):5–14
Sonographic findings of generalized meconium peritonitis presenting as neonatal ascites. Wu CC. JCU 1988 Jan; 16(1):48–51
Sonographic spectrum of neonatal adrenal hemorrhage: report of a case simulating solid tumor. Wu CC. JCU 1989 Jan;17(1):45–9
Sonographic features of turberculous omental cakes in peritoneal tuberculosis. Wu CC, et al. JCU 1988 Mar–Apr; 16(3):195–8
Torsion of the gallbladder: the ultrasonographic features. Yeh HC, et al. JCU 1989 Feb;17(2):123–5
The curvilinear relationship between aortic regurgitant volumes and color flow jets. Intraoperative two-dimensional Doppler and electromagnetic flowmeter correlation. Matsumura M, et al. **Jpn Heart J** 1988 Sep; 29(5):677–87
Preoperative ultrasonography screening for liver metastases of patients with colorectal cancer. Yoshida T, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):112–5
Three cases of afferent loop obstruction—the role of ultrasonography in the diagnosis. Matsusue S, et al. **Jpn J Surg** 1988 Nov;18(6):709–13
B-scan ultrasound examination of the carotid arteries within a representative population (MONICA Project Augsburg). Gostomzyk JG, et al. **Klin Wochenschr** 1988;66 Suppl 11:58–65
Thyroid volume of East Slovakian adolescents determined by ultrasound 40 years after the introduction of iodized salt. Tajtáková M, et al. **Klin Wochenschr** 1988 Sep 1; 66(17):749–51
Doppler sonographic examination of reactive hyperemia in the diagnosis of peripheral vascular disease. Vogelberg KH, et al. **Klin Wochenschr** 1988 Oct 3;66(19):970–5
Imaging procedures in the perinatal necropsy [editorial] **Lancet** 1989 Aug 26;2(8661):484–5
Booking scan dates discrepancy and repeat scanning [letter] Banfield G, et al. **Lancet** 1989 Jun 24;1(8652):1445
Sonography in diagnosis of fascioliasis [letter] Bassily S, et al. **Lancet** 1989 Jun 3;1(8649):1270–1
Ultrasonography and non-quantitative chorionic gonadotropin assay in diagnosis of subacute ectopic pregnancy [letter] Byrne P, et al. **Lancet** 1989 Feb 18; 1(8634):386–7
Vaginal endosonography in endometrial cancer [letter] Cruickshank DJ, et al. **Lancet** 1989 Feb 25;1(8635):445–6
Ultrasound-guided core biopsy. Jennings PE, et al. **Lancet** 1989 Jun 17;1(8651):1369–71
Duplex Doppler analysis of renal vasculature [letter] Kong KL, et al. **Lancet** 1989 Mar 11;1(8637):553
Biliary pseudolithiasis and drugs [letter] Lee SP. **Lancet** 1989 Feb 18;1(8634):386
Ultrasound screening for fetal malformations [letter] Levi S, et al. **Lancet** 1989 Mar 25;1(8639):678
Incidence and sonographic diagnosis of bacterial ileocaecitis masquerading as appendicitis. Puylaert JB, et al. **Lancet** 1989 Jul 8;2(8654):84–6
Non-invasive management of fetal obstructive uropathy. Reuss A, et al. **Lancet** 1988 Oct 22;2(8617):949–51
Measurement of cardiac output [letter] Skidmore R, et al. **Lancet** 1988 Oct 8;2(8615):854
Routine ultrasound scanning in twin pregnancies [letter] Smith AP, et al. **Lancet** 1988 Oct 29;2(8618):1029
Practical use of duplex Doppler analysis of the renal vasculature in critically ill patients. Stevens PE, et al. **Lancet** 1989 Feb 4;1(8632):240–2
A rapid method for the in vivo measurement of liver volume. Zoli M, et al. **Liver** 1989 Jun;9(3):159–63
Physical principles of ultrasonic imaging and Doppler blood flow analysis. Kleinman CS. **Mead Johnson Symp Perinat Dev Med** 1987;(25):26–31
Spectral analysis of Doppler signals and computation of the normalised first moment in real time using a digital signal processor. Schlindwein FS, et al. **Med Biol Eng Comput** 1988 Mar;26(2):228–32
Effects of Doppler ultrasound beam width on the spectral broadening index [letter] Wijn PF, et al. **Med Biol Eng Comput** 1988 Jul;26(4):460
Doppler diagnosis in cases of acute stroke. Chambers BR, et al. **Med J Aust** 1989 Apr 3;150(7):382–4
Accuracy of mammography in an Australian community setting. Cregan PC, et al. **Med J Aust** 1988 Oct 17; 149(8):408, 410
Ultrasonographic findings of liver abscess. Sakijan AS. **Med J Malaysia** 1988 Dec;43(4):332–7
Choledocholithiasis: diagnosis by ultrasound. Sakijan AS, et al. **Med J Malaysia** 1987 Jun;42(2):115–8
Ultrasound in the diagnosis of splenic abscess. Case report. Sivalingam S. **Med J Malaysia** 1988 Dec;43(4):338–9
Obstetrical sonography. Some significant implications in antepartum management. Youngblood JP, et al. **Mo Med** 1986 Feb;83(2):93–8
Doppler ultrasound evaluation for lower extremity deep venous thrombosis in a community hospital. Archie JP Jr, et al. **N C Med J** 1989 Aug;50(8):457–60
Detection of deep-vein thrombosis by B-mode ultrasonography [letter] **N Engl J Med** 1989 Aug 31; 321(9):613–4
Detection of deep-vein thrombosis by real-time B-mode ultrasonography. Lensing AW, et al. **N Engl J Med** 1989 Feb 9;320(6):342–5
Omphalocele at 15 weeks [letter] Ratner MH. **N Y State J Med** 1989 Jul;89(7):424
Omphalocele: sonographic detection at 15 weeks' gestation. Romano KR, et al. **N Y State J Med** 1988 Nov;88(11):596–7
Omphalocele at 15 weeks. Smerud MJ. **N Y State J Med** 1988 Nov;88(11):569–70
Neonatal jaundice. Halls A, et al. **Nebr Med J** 1989 Apr; 74(4):83–4
Use of 3'HVR genomic probe for presymptomatic diagnosis of adult polycystic kidney disease in northern Italy: comparison of DNA analysis and renal ultrasonographic data. del Senno L, et al. **Nephrol Dial Transplant** 1988; 3(6):752–5
Parathyroid sonography in secondary hyperparathyroidism: correlation with clinical findings. Tomić Brzac H, et al. **Nephrol Dial Transplant** 1989;4(1):45–50
Microvascular and transcranial Doppler sonographic evaluation of cerebral aneurysm flow pattern. Gilsbach JM, et al. **Neurol Res** 1989 Mar;11(1):41–8
Haemodynamic changes in arteriovenous malformations induced by superselective embolization: transcranial Doppler evaluation. Harders A, et al. **Neurol Res** 1988 Dec; 10(4):239–45
Transcranial Doppler in acute brain stem infarction. Shepard DL, et al. **Neurol Res** 1989 Mar;11(1):49–50
Comparison of angiosonographic colour coded technique and angiography in the investigation of the neck segments of carotid arteries. Zurak N, et al. **Neurologija** 1988; 37(1–2):77–87
Serial magnetic resonance and carotid duplex examinations in the management of carotid dissection. Rothrock JF, et al. **Neurology** 1989 May;39(5):686–92
Ultrasonography in hereditary degenerative diseases of the cerebral white matter in infancy. Bošnjak V, et al. **Neuropediatrics** 1988 Nov;19(4):208–11
The sonographic signs of the peritoneal pseudocyst obstructing the ventriculo-peritoneal shunt in children. Grunebaum M, et al. **Neuroradiology** 1988;30(5):433–8
Changes in the lateral ventricle with the head position: ultrasonographic observation. Koeda T, et al. **Neuroradiology** 1988;30(4):315–8
Fetal intracranial anatomy in the first trimester of pregnancy: transvaginal ultrasonographic evaluation. Kushnir U, et al. **Neuroradiology** 1989;31(3):222–5
Cerebral ultrasound images in prenatal cytomegalovirus infection. Tomà P, et al. **Neuroradiology** 1989;31(3):278–9
Modulation of the functional state of the brain with the aid of focused ultrasonic action. Velling VA, et al. **Neurosci Behav Physiol** 1988 Sep–Oct;18(5):369–75
Intraoperative measurement of cerebral and tumor blood flow with laser-Doppler flowmetry. Arbit E, et al. **Neurosurgery** 1989 Feb;24(2):166–70
Hemodynamic assessment of the spinal cord arteriovenous malformation with intraoperative microvascular Doppler

ultrasound: case report. Giller CA, et al. **Neurosurgery** 1989 Aug;25(2):270–5

Evaluation of brain death using transcranial Doppler. Newell DW, et al. **Neurosurgery** 1989 Apr;24(4):509–13

Outcome of aneurysmal subarachnoid hemorrhage in a hospital population: a prospective study including early operation, intravenous nimodipine, and transcranial Doppler ultrasound. Seiler RW, et al. **Neurosurgery** 1988 Nov;23(5):598–604

Ultrasonographic measurement of prenatal fetal liver. Murao F, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Oct; 40(10):1550–4

Value of hepatobiliary scintigraphy and ultrasonography in the differential diagnosis of jaundice. Picozzi R, et al. **Nucl Med Commun** 1985 Feb;6(2):97–108

Effect of fetal movement, ultrasound scans, and amniocentesis on maternal–fetal attachment. Heidrich SM, et al. **Nurs Res** 1989 Mar–Apr;38(2):81–4

Elevated maternal serum alpha-fetoprotein and hydrops fetalis in association with fetal parvovirus B-19 infection. Bernstein IM, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):456–7

Doppler recording of fetal movement: clinical correlation with real-time ultrasound. Besinger RE, et al. **Obstet Gynecol** 1989 Aug;74(2):277–80

Term interstitial pregnancy with uterine torsion: sonographic, pathologic, and clinical findings. Bond AL, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):857–9

Fetal umbilical blood flow velocity waveforms using Doppler ultrasonography in patients with late decelerations. Brar HS, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):363–6

Sonographic measurements and ratios in fetuses with Down syndrome. Brumfield CG, et al. **Obstet Gynecol** 1989 Apr; 73(4):644–6

A sonographic and karyotypic study of second-trimester fetal choroid plexus cysts. Chan L, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):703–6

Antenatal diagnosis of giant cystic cavernous hemangioma by Doppler velocimetry [letter] Degani S. **Obstet Gynecol** 1989 Jun;73(6):1051

Sonographic diagnosis of partial hydatidiform mole. Fine C, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):414–8

The postmenopausal cystic adnexal mass: the potential role of ultrasound in conservative management. Goldstein SR, et al. **Obstet Gynecol** 1989 Jan;73(1):8–10

Prenatal sonographic diagnosis of hepatic hemangioendothelioma with secondary nonimmune hydrops fetalis. Gonen R, et al. **Obstet Gynecol** 1989 Mar; 73(3 Pt 2):485–7

Exencephaly—clinical and ultrasonic correlation to anencephaly. Hendricks SK, et al. **Obstet Gynecol** 1988 Dec;72(6):898–901

The fetal femur/foot length ratio: a new parameter to assess dysplastic limb reduction [letter; comment] Hershey DW. **Obstet Gynecol** 1989 Apr;73(4):682. **Comment on:** Obstet Gynecol 1988 Aug;72(2):181–4

A combined historic and sonographic score for the detection of intrauterine growth retardation. Hill LM, et al. **Obstet Gynecol** 1989 Feb;73(2):291–6

Use of ultrasonography in the difficult postmenopausal dilation and curettage. Hunter RE, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):813–6

Cervical score and onset of spontaneous labor in prolonged pregnancy dated by second-trimester ultrasonic scan. Ingemarsson I, et al. **Obstet Gynecol** 1989 Jul;74(1):102–5

Biophysical profile scoring in the management of the diabetic pregnancy. Johnson JM, et al. **Obstet Gynecol** 1988 Dec; 72(6):841–6

Cystosonography: a diagnostic adjunct for the staging of advanced gynecologic malignancies. Koelbl H, et al. **Obstet Gynecol** 1988 Dec;72(6):951–4

Doppler umbilical artery velocimetry in pregnancy complicated by insulin-dependent diabetes mellitus. Landon MB, et al. **Obstet Gynecol** 1989 Jun;73(6):961–5

Umbilical artery velocimetry as a predictor of adverse outcome in pregnancies complicated by oligohydramnios. Lombardi SJ, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):338–41

Ultrasound detection of Down syndrome: is it really possible? Lynch L, et al. **Obstet Gynecol** 1989 Feb;73(2):267–70

Ultrasound surveillance of the cervix during pregnancy in diethylstilbestrol-exposed offspring. Michaels WH, et al. **Obstet Gynecol** 1989 Feb;73(2):230–9

The reliability and predictive value of an amniotic fluid scoring system in severe second-trimester oligohydramnios. Moore TR, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):739–42

Sonographic evaluation of the normal developmental anatomy of the fetal cerebral ventricles: II. The atria. Pilu G, et al. **Obstet Gynecol** 1989 Feb;73(2):250–6

Ultrasonography versus amniotic fluid spectral analysis: are they sensitive enough to predict neonatal complications associated with isoimmunization? Reece EA, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):357–60

Antenatal detection of congenital malformations by routine ultrasonography. Rosendahl H, et al. **Obstet Gynecol** 1989 Jun;73(6):947–51

Conceptional age, menstrual age, and ultrasound age: a second-trimester comparison of pregnancies of known conception date with pregnancies dated from the last menstrual period. Rossavik IK, et al. **Obstet Gynecol** 1989 Feb;73(2):243–9

Sonographic evaluation of hydrops fetalis. Saltzman DH, et al. **Obstet Gynecol** 1989 Jul;74(1):106–11

Echogenic venous turbulence is a critical feature of successful intravascular intrauterine transfusion. Seeds JW, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):488–90

Prenatal sonographic diagnosis, Doppler velocimetric umbilical cord studies, and subsequent management of an acardiac twin pregnancy. Sherer DM, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):472–5

Prenatal prediction of lethal pulmonary hypoplasia using ultrasonic fetal chest circumference. Songster GS, et al. **Obstet Gynecol** 1989 Feb;73(2):261–6

The relationship of obstetric ultrasound to parent and infant behavior. Sparling JW, et al. **Obstet Gynecol** 1988 Dec; 72(6):902–7

Ultrasound-guided intrauterine removal of intrauterine contraceptive devices in pregnancy. Stubblefield PG, et al. **Obstet Gynecol** 1988 Dec;72(6):961–4

Sonographic detection of fetal duodenal atresia [letter] Stubbs TM, et al. **Obstet Gynecol** 1989 Jan;73(1):146

Umbilical artery Doppler velocimetry as a predictor of fetal hypoxia and acidosis at birth. Tyrrell S, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):332–7

Antenatal sonographic findings in a case of intra-abdominal pulmonary sequestration. Weinbaum PJ, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):860–2

The use of Doppler waveform analysis in the evaluation of the high-risk fetus. Arias F, et al. **Obstet Gynecol Clin North Am** 1988 Jun;15(2):265–81

Detection and management of anatomic congenital anomalies. A new obstetric challenge. Romero R, et al. **Obstet Gynecol Clin North Am** 1988 Jun;15(2):215–36 (86 ref.)

Antenatal detection of cystic hygroma. Cohen MM, et al. **Obstet Gynecol Surv** 1989 Jun;44(6):481–90 (65 ref.)

Orbital myositis involving the oblique muscles. An echographic study. Wan WL, et al. **Ophthalmology** 1988 Nov;95(11):1522–8

An evaluation of the clinical applications of diagnostic ultrasonography in oral surgery. Wilson IR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):242–8 (19 ref.)

Pediatric update #4. Familial congenital short femur: intrauterine detection and follow-up by ultrasound. A case report. Keret D, et al. **Orthop Rev** 1988 May;17(5):500–4

Arthroscopy update #3. Chronic impingement syndrome. The role of ultrasonography and arthroscopic anterior acromioplasty. Seitz WH Jr, et al. **Orthop Rev** 1989 Mar; 18(3):364–75

Interobserver variability in neonatal cranial ultrasonography. Pinto J, et al. **Paediatr Perinat Epidemiol** 1988 Jan; 2(1):43–58

Ultrasonography in obstetrics. Stone P. **Paediatr Perinat Epidemiol** 1987 Sep;1(2):135–6

Evaluation of cerebral blood flow in premature newborns by duplex scanning using a high resolution probe. Belcaro G, et al. **Panminerva Med** 1989 Jan–Mar;31(1):8–10

Emergency ultrasound in the evaluation of acute-onset abdominal pain in children. See CC, et al. **Pediatr Emerg Care** 1988 Sep;4(3):169–71

Lesion mistaken for hemorrhage in a premature infant: lipoma of corpus callosum. Imaizumi SO, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):313–6

Changes in blood flow of the middle cerebral artery during absence seizures. Sanada S, et al. **Pediatr Neurol** 1988 May–Jun;4(3):158–61

Antenatal ultrasound for fetal anomalies: importance of perinatal autopsy. Shen-Schwarz S, et al. **Pediatr Pathol** 1989;9(1):1–9

Ileocolic intussusception with enterogenous cyst: ultrasonic diagnosis. Adamsbaum C, et al. **Pediatr Radiol** 1989; 19(5):325

Hypothesis: reduced renal mass with glomerular hyperfiltration, a cause of renal hyperechogenicity in children. Avni EF, et al. **Pediatr Radiol** 1989;19(2):108–10

Increased renal medullary echogenicity in patients with Williams syndrome. Cote G, et al. **Pediatr Radiol** 1989; 19(6–7):481–3

Ultrasound of primary hepatic tumours in childhood. de Campo M, et al. **Pediatr Radiol** 1988;19(1):19–24

Dopplersonographic diagnosis of subclavian steal in infants with coarctation of the aorta and interrupted aortic arch. Deeg KH, et al. **Pediatr Radiol** 1989;19(3):163–6

Pulsed Doppler sonographic measurement of normal values for the flow velocities in the intracranial arteries of healthy newborns. Deeg KH, et al. **Pediatr Radiol** 1989;19(2):71–8

Ultrasonography of the painful hip. Prospective studies in 204 patients. Dörr U, et al. **Pediatr Radiol** 1988;19(1):36–40

Hyperechogenic renal hypertrophy in glomerulosclerosis. Enriquez G, et al. **Pediatr Radiol** 1989;19(6–7):441

Accuracy of ultrasonic assessment of residual urine in children. Erasmie U, et al. **Pediatr Radiol** 1989; 19(6–7):388–90

Lipoma of the corpus callosum: diagnosis by ultrasound and magnetic resonance. Fisher RM, et al. **Pediatr Radiol** 1988; 18(5):409–10

Glomerulocystic renal disease: ultrasound appearances. Fredericks BJ, et al. **Pediatr Radiol** 1989;19(3):184–6

Fetal sonography. I. Neural tube defects. Garel L, et al. **Pediatr Radiol** 1989;19(3):157–62

Sonographic detection of occult bone fractures. Graif M, et al. **Pediatr Radiol** 1988;18(5):383–5

Diagnosis and management of neonatal adrenal haemorrhage. Heij HA, et al. **Pediatr Radiol** 1989;19(6–7):391–4

Renal ultrasound and excretory urography in infants and young children with urinary tract infection. Kenda R, et al. **Pediatr Radiol** 1989;19(5):299–301

Pulsed Doppler ultrasound blood flow measurements in the superior mesenteric artery of the newborn. Leidig E. **Pediatr Radiol** 1989;19(3):169–72

Thymic hemorrhage: a cause of acute symptomatic mediastinal widening in an infant with late haemorrhagic disease. Sonographic findings. Lemaitre L, et al. **Pediatr Radiol** 1989;19(2):128–9

Sonographic evaluation of superior mesenteric vascular relationship in malrotation. Loyer E, et al. **Pediatr Radiol** 1989;19(3):173–5

Acute renal infarction: diagnosis by Doppler ultrasound. Martin KW, et al. **Pediatr Radiol** 1988;18(5):373–6

Pulmonary sequestration with histologic changes of cystic adenomatoid malformation. Morin C, et al. **Pediatr Radiol** 1989;19(2):130–2

Unusual sonographic appearance of a perforated appendiceal abscess. Ngo C, et al. **Pediatr Radiol** 1989;19(5):335–6

Sonographic pattern of gallbladder disease in children with sickle cell anaemia. Nzeh DA, et al. **Pediatr Radiol** 1989; 19(5):290–2

Ultrasonic features of pyogenic and amoebic hepatic abscesses. Oleszczuk-Raszke K, et al. **Pediatr Radiol** 1989; 19(4):230–3 (21 ref.)

Prenatal renal ultrasound of Laurence–Moon–Biedl syndrome. Ritchie G, et al. **Pediatr Radiol** 1988;19(1):65–6

Ultrasound demonstration of prenatal renal vein thrombosis. Sanders LD, et al. **Pediatr Radiol** 1989;19(2):133–5

Ultrasound diagnosis of adrenal hemorrhage in meningococcemia. Sarnaik AP, et al. **Pediatr Radiol** 1988; 18(5):427–8

Pyonephrosis in childhood—is ultrasound sufficient for diagnosis? Schneider K, et al. **Pediatr Radiol** 1989; 19(5):302–7

High resolution ultrasonography of the parotid gland in children. Part II. Seibert RW, et al. **Pediatr Radiol** 1988; 19(1):13–8

Sonographic hepatic arterialisation in newborns receiving parenteral nutrition. Sellier N, et al. **Pediatr Radiol** 1988; 18(6):471–3

Ultrasound diagnosis of gallbladder papilloma in childhood. Sirinelli D, et al. **Pediatr Radiol** 1989;19(3):203

Renal oxypurine deposition in Lesch–Nyhan syndrome: sonographic evaluation. Stevens SK, et al. **Pediatr Radiol** 1989;19(6–7):479–80

Duplex Doppler sonography for renal artery stenosis in the post-transplant pediatric patient. Stringer DA, et al. **Pediatr Radiol** 1989;19(3):187–92

Ultrasonic demonstration of a common bile duct calculus associated with congenital bile duct dilatation. Tomooka Y, et al. **Pediatr Radiol** 1988;18(6):499–500

Duplex Doppler ultrasound evaluation of calcified inferior vena cava thrombosis. Uglietta JP, et al. **Pediatr Radiol** 1989;19(4):250–2

Acute renal transplant rejection in children: assessment by Duplex Doppler sonography. Vergesslich KA, et al. **Pediatr Radiol** 1988;18(6):474–8

Portal venous blood flow in cystic fibrosis: assessment by Duplex Doppler sonography. Vergesslich KA, et al. **Pediatr Radiol** 1989;19(6–7):371–4

The echobright kidney in primary polycythaemia. Wagner U, et al. **Pediatr Radiol** 1989;19(6–7):440

Duplex-scanning of the deep venous drainage in the evaluation of blood flow velocity of the cerebral vascular system in infants. Winkler P, et al. **Pediatr Radiol** 1989; 19(2):79–90

Intracranial arterial blood flow velocity and brain blood flow during hypocarbia and hypercarbia in newborn lambs: a validation of range-gated Doppler ultrasound flow velocimetry. Sonesson SE, et al. **Pediatr Res** 1988 Oct; 24(4):423–6

Circle of Willis blood velocity and flow direction after common carotid artery ligation for neonatal extracorporeal membrane oxygenation. Raju TN, et al. **Pediatrics** 1989 Mar;83(3):343–7

Ultrasound screening of healthy infants for urinary tract abnormalities. Steinhart JM, et al. **Pediatrics** 1988 Oct; 82(4):609–14

Evaluation of the effects of elastic compression in patients with postphlebitic limbs by laser-Doppler flowmetry. Belcaro G, et al. **Phlebologie** 1988 Nov–Dec;41(4):797–802

Laser-Doppler velocimetry and photoplethysmography in the diagnosis of abnormal venous reflux. Lucarotti ME, et al. **Phlebologie** 1988 Nov–Dec;41(4):735–9

Can pre-operative duplex scanning replace pre-operative short saphenous venography as an aid to localizing the sapheno-popliteal junction? Sugrue M, et al. **Phlebologie** 1988 Nov–Dec;41(4):722–5

Weak reflection of a wave by a one-dimensional array of randomly spaced elements, with reference to the scattering of ultrasound by blood. Gough W, et al. **Phys Med Biol** 1988 Jul;33(7):793–804

Doppler blood flow in pregnancy. McParland P, et al. **Placenta** 1988 Jul–Aug;9(4):427–50 (70 ref.)

Pyogenic liver abscess with two normal ultrasound scans. Bunney RG. **Postgrad Med J** 1988 May;64(751):373–4

Giant hamartoma of liver mimicking malignancy. Narasimharao KL, et al. **Postgrad Med J** 1988 May;

64(751):398–400
Use of exercise Doppler for non-invasive haemodynamic optimization of dose and identification of poor responders to an oral anti-anginal agent. A double-blind dose-finding study of nisoldipine. Singer M, et al. **Postgrad Med J** 1988 Oct;64(756):755–60
Radiological investigation of the female genital tract. Bury R. **Practitioner** 1987 Oct 8;231(1436):1307–10
Ultrasound in pregnancy. Rodeck CH, et al. **Practitioner** 1988 Oct 22;232(1456 (Pt 2)):1157–60
Role of prenatal detection of cardiac tumours in the diagnosis of tuberous sclerosis—report of two cases. Chitayat D, et al. **Prenat Diagn** 1988 Oct;8(8):577–84
Chromosomal prenatal diagnosis: study of 936 cases of intrauterine abnormalities after ultrasound assessment. Eydoux P, et al. **Prenat Diagn** 1989 Apr;9(4):255–69
Diastrophic dysplasia: a specific prenatal diagnosis by ultrasound. Gembruch U, et al. **Prenat Diagn** 1988 Sep; 8(7):539–45
Prenatal diagnosis of Schwartz-Jampel syndrome with early manifestation. Hunziker UA, et al. **Prenat Diagn** 1989 Feb; 9(2):127–31
Gelatin embedding and diagnostic ultrasound in the examination of the fetal and neonatal brain. Knowles S, et al. **Prenat Diagn** 1989 Jan;9(1):73–5
Prenatal ultrasound diagnosis of fetal scoliosis: spondylothoracic/spondylocostal dysplasia? [letter] Lin AE. **Prenat Diagn** 1989 Jun;9(6):449
Prenatal diagnosis of a rare heteropagus. Lituania M, et al. **Prenat Diagn** 1988 Sep;8(7):547–51
Severe bilateral renal disease: correlation of antenatal and autopsy findings. Murphy JL, et al. **Prenat Diagn** 1989 Feb; 9(2):119–25
Antenatal diagnosis and palliative treatment of non-immune hydrops fetalis secondary to fetal parvovirus B19 infection. Naides SJ, et al. **Prenat Diagn** 1989 Feb;9(2):105–14
Visualization of fetal intra-abdominal organs in second-trimester severe oligohydramnios by intraperitoneal infusion. Nicolini U, et al. **Prenat Diagn** 1989 Mar;9(3):191–4
Meckel-Gruber syndrome: ultrasonographic diagnosis at 13 weeks' gestational age in an at-risk case. Pachi A, et al. **Prenat Diagn** 1989 Mar;9(3):187–90
Prenatal diagnosis and management of fetal ovarian cysts. Rizzo N, et al. **Prenat Diagn** 1989 Feb;9(2):97–103
Achondrogenesis type II (Langer-Saldino) in association with jugular lymphatic obstruction sequence. Wenstrom KD, et al. **Prenat Diagn** 1989 Jul;9(7):527–32
Diaphragmatic hernia presenting in utero as a unilateral hydrothorax. Whittle MJ, et al. **Prenat Diagn** 1989 Feb; 9(2):115–8
Cardiac and extra-cardiac anomalies as indicators for trisomies 13 and 18: a prenatal ultrasound study. Wladimiroff JW, et al. **Prenat Diagn** 1989 Jul;9(7):515–20
Umbilical cord pseudocyst in trisomy 13 [letter] Zelante L, et al. **Prenat Diagn** 1989 Jun;9(6):448–9
Investigation of the mechanical properties of bone using ultrasound. Gill PJ, et al. **Proc Inst Mech Eng [H]** 1989; 203(H1):61–3
Prenatal diagnosis of urinary tract abnormalities—ultrasound and laboratory assessment to predict fetal outcome. Antsaklis AJ, et al. **Prog Clin Biol Res** 1989;305:19–23
Prostatic cancer diagnosis with ultrasonically guided prostatic biopsy: results in 226 cases. Devonec M, et al. **Prog Clin Biol Res** 1989;303:35–40
Transrectal ultrasound-guided transperineal biopsy: a histologic and cytologic comparison for the diagnosis of prostate cancer. Lee F, et al. **Prog Clin Biol Res** 1989; 303:11–7
Prenatal diagnosis of renal tract anomalies by ultrasound. Reuss A, et al. **Prog Clin Biol Res** 1989;305:13–8
Comparison of the efficacy of digital rectal examination and transrectal ultrasonography in the diagnosis of prostatic cancer. Vallancien G, et al. **Prog Clin Biol Res** 1989;303:1–9
Value of ultrasound in the treatment of solitary kidneys in infancy and childhood. Beyer HJ, et al. **Prog Pediatr Surg** 1989;23:3–17
Effectiveness of ultrasound in the preoperative evaluation of patients with prostatism. Hendrikx AJ, et al. **Prostate** 1988;13(3):199–208
Determination of canine prostatic size in situ: comparison of direct caliper measurement with radiologic and transrectal ultrasonographic measurements. Juniewicz PE, et al. **Prostate** 1989;14(1):55–64
Hepatic haemangioma: a critical review of diagnosis and management. Reading NG, et al. **Q J Med** 1988 May; 67(253):431–45 (35 ref.)
Ultrasonically guided 19-gauge Surecut needle biopsy of apical and superior mediastinal tumors. Takeuchi K, et al. **Radiat Med** 1988 Nov-Dec;6(6):272–5
Ultrasonography of the rotator cuff. Crass JR, et al. **Radiographics** 1985 Nov;5(6):941–53
Ultrasound case of the day. Poorly differentiated mucinous adenocarcinoma of the sigmoid colon, metastatic to the tunica vaginalis of the left hemiscrotum. Dahnert WF, et al. **Radiographics** 1989 May;9(3):554–8
Color Doppler evaluation of arterial stenoses and occlusions involving the neck and thoracic inlet. Erickson SJ, et al. **Radiographics** 1989 May;9(3):389–406
Seminal vesicle imaging. King BF, et al. **Radiographics** 1989 Jul;9(4):653–76
Ultrasound case of the day. Cystic neuroblastoma with metastatic disease of the liver. Kurtz AB, et al. **Radiographics** 1989 Mar;9(2):361–4
Well defined masses in the breast. Marsteller LP, et al. **Radiographics** 1989 Jan;9(1):13–37
Ultrasound case of the day. Pedunculated retroperitoneal liver hemangioma. Needleman L, et al. **Radiographics** 1989 Jul;9(4):769–73
Ultrasound case of the day. Portal vein thrombosis. Sandler MA, et al. **Radiographics** 1988 Nov;8(6):1216–20
Sonographic pitfalls in imaging of the antropyloric region in infants. Swischuk LE, et al. **Radiographics** 1989 May; 9(3):437–47
Interventional radiology in the gallbladder. vanSonnenberg E, et al. **Radiographics** 1989 Jan;9(1):39–49
Ultrasound appearances of renal cell carcinoma: a case study. Buckley M. **Radiography** 1988 May-Jun;54(615):113–4
Hydranencephaly. Dixon A. **Radiography** 1988 Jan-Feb; 54(613):12–3
Sonography of chronic pancreatitis. Bolondi L, et al. **Radiol Clin North Am** 1989 Jul;27(4):815–33 (82 ref.)
Ultrasonography of post-traumatic soft-tissue lesions. Kaplan PA, et al. **Radiol Clin North Am** 1989 Sep;27(5):973–82
Vasospasm after head injury studied by transcranial Doppler sonography. Rózsa L, et al. **Radiol Diagn (Berl)** 1989; 30(2):151–7
Bronchogenic cyst diagnosed by ultrasonography in a neonate. Rudas G, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):488–9
Value of ultrasonography in the diagnosis of gallstone ileus. Pedersen PR, et al. **Radiologe** 1988 Oct;28(10):479–80
Osteomyelitis: detection with US. Abiri MM, et al. **Radiology** 1989 Aug;172(2):509–11
Palpable prostatic nodules: comparison of US and digital guidance for fine-needle aspiration biopsy. Ajzen SA, et al. **Radiology** 1989 May;171(2):521–3
Renal allografts: prospective analysis of Doppler sonography. Allen KS, et al. **Radiology** 1988 Nov;169(2):371–6
Acute radiation effects on cutaneous microvasculature: evaluation with a laser Doppler perfusion monitor. Amols HI, et al. **Radiology** 1988 Nov;169(2):557–60
Fournier gangrene: diagnosis with scrotal US. Begley MG, et al. **Radiology** 1988 Nov;169(2):387–9
Abnormal US appearance of the cerebellum (banana sign): indirect sign of spina bifida. Benacerraf BR, et al. **Radiology** 1989 Apr;171(1):151–3
Fetal hydrocephalus: diagnosis and significance [editorial] Benacerraf BR. **Radiology** 1988 Dec;169(3):858–9
Parotid gland: US findings in Sjögren syndrome. Work in progress. Bradus RJ, et al. **Radiology** 1988 Dec; 169(3):749–51
Twin-twin transfusion syndrome: sonographic findings. Brown DL, et al. **Radiology** 1989 Jan;170(1 Pt 1):61–3
Degree of cervical carotid artery stenosis and hemispheric stroke: duplex US findings. Brown PB, et al. **Radiology** 1989 Feb;170(2):541–3
Exclusion of fetal ventriculomegaly with a single measurement: the width of the lateral ventricular atrium. Cardoza JD, et al. **Radiology** 1988 Dec;169(3):711–4
US of the gastrointestinal tract. Carroll BA. **Radiology** 1989 Sep;172(3):605–8 (56 ref.)
Biliary cystadenoma and cystadenocarcinoma: CT and sonographic findings. Choi BI, et al. **Radiology** 1989 Apr; 171(1):57–61
Hilar cholangiocarcinoma: comparative study with sonography and CT. Choi BI, et al. **Radiology** 1989 Sep; 172(3):689–92
Renal calculi after shock wave lithotripsy: US evaluation with an in vitro phantom. Choyke PL, et al. **Radiology** 1989 Jan;170(1 Pt 1):39–44
Cirrhosis: diagnosis with sonographic study of the liver surface. Di Lelio A, et al. **Radiology** 1989 Aug; 172(2):389–92
Level I, level 2, level 3 obstetric sonography: I'll see your level and raise you one [editorial] Filly RA. **Radiology** 1989 Aug;172(2):312
Detection of fetal central nervous system anomalies: a practical level of effort for a routine sonogram [see comments] Filly RA, et al. **Radiology** 1989 Aug; 172(2):403–8. **Comment in:** Radiology 1989 Aug;172(2):309–311
Radiology residency training in diagnostic sonography: recommendations of the Society of Radiologists in Ultrasound [letter] Filly RA. **Radiology** 1989 Aug; 172(2):577
Wheel-within-a-wheel patterns in hepatosplenic infections [letter] Fletcher BD, et al. **Radiology** 1988 Nov; 169(2):578–9
Fibroadenoma of the breast: sonographic appearance. Fornage BD, et al. **Radiology** 1989 Sep;172(3):671–5
Brain death in infants: evaluation with Doppler US. Glasier CM, et al. **Radiology** 1989 Aug;172(2):377–80
Effacement of the fetal cisterna magna in association with myelomeningocele [see comments] Goldstein RB, et al. **Radiology** 1989 Aug;172(2):409–13. **Comment in:** Radiology 1989 Aug;172(2):309–311
Malignant carotid artery invasion: sonographic detection. Gooding GA, et al. **Radiology** 1989 May;171(2):435–8
Advanced laryngeal cancer: sonographic assessment. Gritzmann N, et al. **Radiology** 1989 Apr;171(1):171–5
Normal thymus in infancy: sonographic characteristics. Han BK, et al. **Radiology** 1989 Feb;170(2):471–4
Normal sonographic appearance of the fetal neck late in the first trimester: the pseudomembrane. Hertzberg BS, et al. **Radiology** 1989 May;171(2):427–9
Diagnosis of liver cirrhosis with US: receiver-operating characteristic analysis of multidimensional caudate lobe indexes. Hess CF, et al. **Radiology** 1989 May;171(2):349–51
Rotator cuff tears: correlation of sonographic and surgical findings. Hodler J, et al. **Radiology** 1988 Dec;169(3):791–4
Imaging prostate carcinoma. Hricak H. **Radiology** 1988 Nov; 169(2):569–71 (36 ref.)
Biliary tract dilatation in chronic pancreatitis: CT and sonographic findings. Huntington DK, et al. **Radiology** 1989 Jul;172(1):47–50
Amniocentesis needle with improved sonographic visibility. Hurwitz SR, et al. **Radiology** 1989 May;171(2):576–7
Percutaneous US needle localization of occult breast lesions [letter] Jackson FI, et al. **Radiology** 1989 Apr;171(1):286–7
Breast neoplasms: duplex sonographic imaging as an adjunct in diagnosis [letter] Jackson VP. **Radiology** 1989 Feb; 170(2):578
Obstruction and the minimally dilated renal collecting system: US evaluation. Kamholtz RG, et al. **Radiology** 1989 Jan;170(1 Pt 1):51–3
Renal Doppler sonography in infants and children. Keller MS. **Radiology** 1989 Sep;172(3):603–4
Pseudoportal Doppler signal in the partially obstructed inferior vena cava. Keller MS, et al. **Radiology** 1989 Feb; 170(2):475–7
Normal instability of the hip in the neonate: US standards. Keller MS, et al. **Radiology** 1988 Dec;169(3):733–6
Juvenile papillomatosis of the breast: sonographic appearance. Kerschot EA, et al. **Radiology** 1988 Dec; 169(3):631–3
Renal masses: differential diagnosis with pulsed Doppler US. Kuijpers D, et al. **Radiology** 1989 Jan;170(1 Pt 1):59–60
Transrectal ultrasound in the diagnosis and staging of prostatic carcinoma. Lee F, et al. **Radiology** 1989 Mar;170(3 Pt 1):609–15
Hypoechoic lesions of the prostate: clinical relevance of tumor size, digital rectal examination, and prostate-specific antigen. Lee F, et al. **Radiology** 1989 Jan;170(1 Pt 1):29–32
Acute allograft rejection in liver transplant recipients: lack of correlation with loss of hepatic artery diastolic flow. Longley DG, et al. **Radiology** 1988 Nov;169(2):417–20
Mild idiopathic lateral cerebral ventricular dilatation in utero: sonographic evaluation. Mahony BS, et al. **Radiology** 1988 Dec;169(3):715–21
Human abdominal aorta: comparative measurements of blood flow with MR imaging and multigated Doppler US. Maier SE, et al. **Radiology** 1989 May;171(2):487–92
Liver transplant rejection: value of the resistive index in Doppler US of hepatic arteries. Marder DM, et al. **Radiology** 1989 Oct;173(1):127–9
Medullary carcinoma of the breast: mammographic and US appearance. Meyer JE, et al. **Radiology** 1989 Jan;170(1 Pt 1):79–82
Perivascular color artifact: pathologic significance and appearance on color Doppler US images. Middleton WD, et al. **Radiology** 1989 Jun;171(3):647–52
Circle of Willis in newborns: color Doppler imaging of 53 healthy full-term infants. Mitchell DG, et al. **Radiology** 1989 Jul;172(1):201–5
Exophytic spread of hepatobiliary disease via perihepatic ligaments: demonstration with CT and US. Mori H, et al. **Radiology** 1989 Jul;172(1):41–6
Hemodynamic significance of the paraumbilical vein in portal hypertension: assessment with duplex US. Mostbeck GH, et al. **Radiology** 1989 Feb;170(2):339–42
Spinal cord central echo complex: histoanatomic correlation. Nelson MD Jr, et al. **Radiology** 1989 Feb;170(2):479–81
Recommendations for obstetric sonography in the evaluation of the fetal cranium [editorial; comment] Nyberg DA. **Radiology** 1989 Aug;172(2):309–11. **Comment on:. Comment on:** Radiology 1989 Aug;172(2):403–8 Radiology 1989 Aug;172(2):409–13
Pancreatic transplant rejection: assessment with duplex US. Patel B, et al. **Radiology** 1989 Oct;173(1):131–5
Hemolytic-uremic syndrome: intrarenal arterial Doppler patterns as a useful guide to therapy. Patriquin HB, et al. **Radiology** 1989 Sep;172(3):625–8
Disparity of amniotic fluid volume and fetal size: problem of the stuck twin—US studies. Patten RM, et al. **Radiology** 1989 Jul;172(1):153–7
Breast immobilization for occult mass aspiration [letter] Pennes DR. **Radiology** 1989 Apr;171(1):286
Duplex Doppler US of the kidney: differentiation of obstructive from nonobstructive dilatation. Platt JF, et al. **Radiology** 1989 May;171(2):515–7
Pulsatile masses surrounding vascular prostheses: real-time US color flow imaging. Polak JF, et al. **Radiology** 1989 Feb;170(2):363–6
Deep veins of the calf: assessment with color Doppler flow imaging. Polak JF, et al. **Radiology** 1989 May;171(2):481–5
Spinal infection: evaluation with MR imaging and intraoperative US. Post MJ, et al. **Radiology** 1988 Dec; 169(3):765–71
Morton neuroma: sonographic evaluation. Redd RA, et al. **Radiology** 1989 May;171(2):415–7
Septate versus bicornuate uteri: errors in imaging diagnosis. Reuter KL, et al. **Radiology** 1989 Sep;172(3):749–52
Acute renal vein thrombosis in renal allografts: detection with duplex Doppler US. Reuther G, et al. **Radiology** 1989 Feb;170(2):557–8

Echogenicity of prostate cancer correlated with histologic grade and stromal fibrosis: endorectal US studies. Rifkin MD, et al. **Radiology** 1989 Feb;170(2):549–52

Staging of rectal carcinoma: prospective comparison of endorectal US and CT. Rifkin MD, et al. **Radiology** 1989 Feb;170(2):319–22

Lethal fetal anomalies: sonographic demonstration. Sanders RC, et al. **Radiology** 1989 Jul;172(1):1–6 (38 ref.)

Invasive papillary breast carcinoma: mammographic and sonographic appearance. Schneider JA. **Radiology** 1989 May;171(2):377–9

US location of the adductor canal hiatus: morphologic study. Scholten FG, et al. **Radiology** 1989 Jul;172(1):75–8

Grade I hydronephrosis: pulsed Doppler US evaluation. Scola FH, et al. **Radiology** 1989 May;171(2):519–20

Hernias of the inferior lumbar space: diagnosis with US. Siffring PA, et al. **Radiology** 1989 Jan;170(1 Pt 1):190

Recurrence of ovarian and uterine neoplasms: diagnosis with transrectal US. Squillaci E, et al. **Radiology** 1988 Nov; 169(2):355–8

Thyroid gland: US in patients with Hodgkin disease treated with radiation therapy in childhood. Stewart RR, et al. **Radiology** 1989 Jul;172(1):159–63

Intraabdominal adhesions: intraoperative US. Suslavich FJ, et al. **Radiology** 1989 Aug;172(2):387–8

Pericholecystic abscess: classification of US findings to determine the proper therapy. Takada T, et al. **Radiology** 1989 Sep;172(3):693–7

Primary thyroid lymphoma: comparison of CT and US assessment. Takashima S, et al. **Radiology** 1989 May; 171(2):439–43

Ectopic pregnancy: duplex Doppler evaluation. Taylor KJ, et al. **Radiology** 1989 Oct;173(1):93–7

Echogenic vasculature in the basal ganglia of neonates: a sonographic sign of vasculopathy. Teele RL, et al. **Radiology** 1988 Nov;169(2):423–7

Abdominal lymphoma in AIDS: evaluation with US. Townsend RR, et al. **Radiology** 1989 Jun;171(3):719–24

Mediastinal tumors: biopsy under US guidance. Wernecke K, et al. **Radiology** 1989 Aug;172(2):473–6

Hypertrophic pyloric stenosis: use of the pyloric volume measurement in early US diagnosis. Westra SJ, et al. **Radiology** 1989 Sep;172(3):615–9

Adult Wilms' tumor: US and CT features. Bighi S, et al. **Rays** 1988 Sep–Dec;13(3):71–5

Radiological and ultrasonographical diagnosis of inflammatory breast cancer. Bock E, et al. **Rays** 1988 May–Aug;13(2):53–7

Ultrasonographic measurement of ovarian volume in women of child–bearing age. Fischetti SG, et al. **Rays** 1988 May–Aug;13(2):65–8

Extracoronary atherosclerosis in patients with ischemic heart disease. Evaluation by continuous wave Doppler 123. Possati F, et al. **Rays** 1988 Jan–Apr;13(1):35–41

A case of appendiceal mucocele diagnosed by ultrasound. Zocchi M, et al. **Rays** 1988 Sep–Dec;13(3):93–5

Renal candida infections. Diagnosis by ultrasonography. Nielsen NS, et al. **ROFO** 1988 Oct;149(4):417–9

Ultrasonography in the diagnosis of gallbladder carcinoma. Nilsson P, et al. **ROFO** 1989 Feb;150(2):171–5

Role of ultrasonography in the differential diagnostics of neck masses. Gönczi J, et al. **Rontgenblatter** 1988 Nov; 41(11):452–7

Ultrasonographic appearance of a simple ureterocele following surgical treatment. Teisen H, et al. **Rontgenblatter** 1988 Sep;41(9):380–1

Sonographic diagnosis and follow–up in a patient with pancreatic roundworms. A case report. Schulman A. **S Afr Med J** 1989 Feb 18;75(4):184–5

Ultrasonography of the advanced tuberculous kidney. Scott RF, et al. **S Afr Med J** 1989 Apr 15;75(8):371–2

Ultrasonography should replace intravenous urography in the pre–operative evaluation of prostatism. Solomon DJ, et al. **S Afr Med J** 1988 Oct 15;74(8):407–8

Hyperechoic pattern in breast cancer—its bio–acoustical genesis and tissue characterization. Kobayashi T, et al. **Sangyo Ika Daigaku Zasshi** 1989 Jun 1;11(2):181–7 (13 ref.)

Comparison of X–ray and ultrasound in detection of the fetal ossification centres. Jirouš J, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1988;31(1):85–91

Evaluation of endoscopic laser Doppler flowmetry for measurement of human gastric blood flow. Methodologic aspects. Lunde OC, et al. **Scand J Gastroenterol** 1988 Nov; 23(9):1072–8

Modern radiological diagnostics in colorectal cancer. Göthlin JH. **Scand J Gastroenterol Suppl** 1988;149:59–61

Ultrasonography of the adult hip joint. Koski JM, et al. **Scand J Rheumatol** 1989;18(2):113–7

Ultrasonographic evidence of hip synovitis in patients with rheumatoid arthritis. Koski JM. **Scand J Rheumatol** 1989; 18(3):127–31

Laser Doppler flowmetry estimating myocardial perfusion after internal mammary artery grafting. von Ahn HC, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):281–4

Abdominal ultrasound versus intravenous urography in the evaluation of infravesically obstructed males. Juul N, et al. **Scand J Urol Nephrol** 1989;23(2):89–92

Ultrasonography for diagnosis of obstructing ureteral calculus. Kuuliala IK, et al. **Scand J Urol Nephrol** 1988; 22(4):275–7

Polyorchidism with normal spermatogenesis, diagnosed preoperatively by ultrasound. A case report. Tammela TL, et al. **Scand J Urol Nephrol** 1989;23(1):71–3

Noninvasive evaluation of the enlarged prostate preliminary results. Ogreid P, et al. **Scand J Urol Nephrol Suppl** 1988; 110:319–28

Hepatic ultrasound. Igidbashian VN, et al. **Semin Liver Dis** 1989 Feb;9(1):16–31 (139 ref.)

Correlative imaging in abdominal infection: an algorithmic approach using nuclear medicine, ultrasound, and computed tomography. Gagliardi PD, et al. **Semin Nucl Med** 1988 Oct;18(4):320–34

Ultrasonography of the adrenals. Yeh HC. **Semin Roentgenol** 1988 Oct;23(4):250–8 (30 ref.)

The role of ultrasound in diagnosis and staging of testicular cancer. Benson CB. **Semin Urol** 1988 Aug;6(3):189–202

Ultrasonic diagnosis of Osgood–Schlatter and Sinding–Larsen–Johansson diseases of the knee. De Flaviis L, et al. **Skeletal Radiol** 1989;18(3):193–7

Limited sensitivity of ultrasound for the detection of rotator cuff tears. Miller CL, et al. **Skeletal Radiol** 1989; 18(3):179–83

Carcinoma of the colon diagnosed by ultrasonography [letter] Abbitt PL, et al. **South Med J** 1989 Apr;82(4):532–3

Pelvic abscess: examination and transvaginal drainage guided by real–time ultrasonography. Loy RA, et al. **South Med J** 1989 Jun;82(6):788–90

Computerized ultrasonic digitization in the measurement of spinal curvature. Letts M, et al. **Spine** 1988 Oct; 13(10):1106–10

Intraoperative ultrasonography for reduction of thoracolumbar burst fractures. Vincent KA, et al. **Spine** 1989 Apr;14(4):387–90

Transcranial Doppler measurements of the middle cerebral artery. Effect of hemstocrit. Brass LM, et al. **Stroke** 1988 Dec;19(12):1466–9

Clinical correlates of Doppler/ultrasound errors in the detection of internal carotid artery occlusion. Bridgers SL. **Stroke** 1989 May;20(5):612–5

A transcranial Doppler study of blood flow velocity in the middle cerebral arteries performed at rest and during mental activities. Droste DW, et al. **Stroke** 1989 Aug; 20(8):1005–11

Recanalization of intracranial carotid occlusion detected by duplex carotid sonography. Hoshino H, et al. **Stroke** 1989 May;20(5):680–6

Ocular bruits in ischemic cerebrovascular disease. Hu HH, et al. **Stroke** 1988 Oct;19(10):1229–33

Three–dimensional transcranial Doppler blood flow mapping in patients with cerebrovascular disorders. Niederkorn K, et al. **Stroke** 1988 Nov;19(11):1335–44

Pulsed Doppler assessment of arterial obstructive disease [letter] Perron RC. **Stroke** 1989 Aug;20(8):1116–7

Pulsed Doppler assessment of innominate artery obstructive diseases. Rautenberg W, et al. **Stroke** 1988 Dec; 19(12):1514–20

Doppler ophthalmic blood pressure measurement in the hemodynamic evaluation of occlusive carotid artery disease. Strauss AL, et al. **Stroke** 1989 Aug;20(8):1012–5

Ultrasonic screening for the detection of abdominal sortic aneurysms. Quill DS, et al. **Surg Clin North Am** 1989 Aug; 69(4):713–20 (51 ref.)

Determination of a hepatic volumetric index by ultrasonic scanning. Boscaini M, et al. **Surg Endosc** 1987;1(2):103–7

Morphological appearance of low–level echoes in the gallbladder. Interpretation with microscopic biliary analysis and clinical correlation. Boscaini M, et al. **Surg Endosc** 1987;1(1):41–9

Sonographic evaluation of the portal venous system after elective endoscopic sclerotherapy of esophageal varices. Caletti GC, et al. **Surg Endosc** 1987;1(3):165–7

Number and size of lymph nodes and node metastases in rectal carcinomas. Dworák O. **Surg Endosc** 1989;3(2):96–9

Acute abdominal pain. Actual surgical aspects of sonography. Gai H. **Surg Endosc** 1988;2(1):28–35

Endoscopic management of carcinoma of the esophagus [letter] Himal HS. **Surg Endosc** 1987;1(3):181–2

Intermittent incomplete intestinal obstruction: a frequently mistaken entity. Ultrasonographic diagnosis and management. Meiser G, et al. **Surg Endosc** 1989;3(1):46–50

Intraoperative echotomographic diagnosis in abdominal and neurosurgery. el Mousaouy A. **Surg Endosc** 1987; 1(2):109–12

Endoscopic ultrasonography of the upper gastrointestinal tract. Murata Y, et al. **Surg Endosc** 1988;2(3):180–3

Early detection and differentiation of periprosthetic fluid accumulation after vascular reconstructive surgery. Paes E, et al. **Surg Endosc** 1988;2(4):256–60

Real–time ultrasound guided renal biopsy in diffuse renal disease: 114 consecutive cases. Rapaccini GL, et al. **Surg Endosc** 1989;3(1):42–5

Endoscopic ultrasonography in leiomyoma of gastric cardia. Silva SA, et al. **Surg Endosc** 1989;3(2):109–11

Efficacy of peroperative liver function tests and ultrasound in detecting hepatic metastasis in carcinoma of the breast. Clark CP 3d, et al. **Surg Gynecol Obstet** 1988 Dec; 167(6):510–4

Cranial Doppler ultrasonography correlates with criteria for ventriculoperitoneal shunting. Chadduck WM, et al. **Surg Neurol** 1989 Feb;31(2):122–8

A clinical evaluation of ultrasonography in the diagnosis of acute appendicitis. Kang WM, et al. **Surgery** 1989 Feb;105(2 Pt 1):154–9

Ultrasonography: an alternative to x–ray–guided needle localization of nonpalpable breast masses. Schwartz GF, et al. **Surgery** 1988 Nov;104(5):870–3

Ultrasonographic features of carotid plaque and the risk of subsequent neurologic deficits. Sterpetti AV, et al. **Surgery** 1988 Oct;104(4):652–60

Parathyroid ultrasonography in primary and secondary hyperparathyroidism. Chen JH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):445–51

Percutaneous ultrasound–guided fetal blood sampling: experience in the first 100 cases. Hsieh FJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):137–42

Anomalous pulmonary venous drainage shown by duplex sonography, computed tomography, and plain radiography. Huebsch P, et al. **Thorax** 1989 Jan;44(1):63–5

Accuracy of digital palpation for size assessment of the prostate evaluated by transrectal sonography. Ohe H, et al. **Tohoku J Exp Med** 1988 Apr;154(4):323–8

Ultrasonic technique for penile tumescence measurement in rat sleep. Seno H, et al. **Tokushima J Exp Med** 1988 Dec; 35(3–4):101–5

Ultrasound detection of changes in the vitreous humor of onchocerciasis patients from Guatemala. Reyna O, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):606

Duplex–Doppler ultrasonography in monitoring clinical pancreas transplantation. Gilabert R, et al. **Transpl Int** 1988 Oct;1(3):172–7

Ultrasonographic prospective pretransplant screening in 100 patients for acquired renal cysts and renal cell carcinoma. Bretan PN Jr, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1974–5

Duplex Doppler in the postoperative monitoring of liver transplant recipients. De Gaetano AM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2319–21

Duplex Doppler studies in acute renal transplant rejection. Evans C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1897–8

Doppler assessment in renal transplantation. Harris DC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1895–6

Duplex imaging of the renal transplant. Leichtman AB, et al. **Transplant Proc** 1989 Aug;21(4):3607–10

Duplex Doppler evaluation of renal allograft dysfunction. Marchal G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1893–4

Evaluation of the renal allograft by quantitative duplex sonography and radioisotope renogram. Oh HK, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1917–8

Use of duplex ultrasound scanning in renal transplantation. Soper WD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1903–4

Early detection of lung rejection by measurement of bronchial mucosal blood flow using laser Doppler flowmeter. Tanabe H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2590–1

Usefulness and limitations of Doppler ultrasonography in the evaluation of postoperative renal allograft dysfunction. Waltzer WC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1901–2

The use of duplex scanning in evaluation of the posttransplant kidney. Ward RE, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1912–6

The in vitro determination of the visual resolution in onchocercal nodules of bovine and human origin by a portable ophthalmologic ultrasound scanner. Poltera AA, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:349–55

Computation of local directivity, speed of sound and attenuation from ultrasonic reflection tomography data. Bartelt H. **Ultrason Imaging** 1988 Apr;10(2):110–20

Instrument–independent acoustic backscatter coefficient imaging. Boote EJ, et al. **Ultrason Imaging** 1988 Apr; 10(2):121–38

Statistical relationship between ultrasound echo envelope and envelope peak. He P. **Ultrason Imaging** 1988 Oct; 10(4):265–74

Ultrasound attenuation estimation in soft tissue using the entropy difference of pulsed echoes between two adjacent envelope segments. Jang HS, et al. **Ultrason Imaging** 1988 Oct;10(4):248–64

Modeling of Doppler signal considering sample volume and field distribution. Kim YM, et al. **Ultrason Imaging** 1989 Jul;11(3):175–96

Modeling and computer simulation of ultrasound imaging systems and human tissues. Lee BS, et al. **Ultrason Imaging** 1988 Oct;10(4):229–47

Elimination of diffraction error in acoustic attenuation estimation via axial beam translation. Ophir J, et al. **Ultrason Imaging** 1988 Apr;10(2):139–52

Estimate of attenuation coefficient for ultrasonic tissue characterization using time–varying state–space model. Shih LY, et al. **Ultrason Imaging** 1988 Apr;10(2):90–109

Deviations from Rayleigh statistics in ultrasonic speckle. Tuthill TA, et al. **Ultrason Imaging** 1988 Apr;10(2):81–9

Bias and variance in the estimate of the Doppler frequency induced by a wall motion filter. Willemetz JC, et al. **Ultrason Imaging** 1989 Jul;11(3):215–25

Proceedings of the Fifth International Congress on the Ultrasonic Examination of the Breast. October 4–5, 1987, New Orleans, Louisiana, U.S.A. **Ultrasound Med Biol** 1988; 14 Suppl 1:1–247

Bibliography of biomedical ultrasound. 1985. **Ultrasound Med Biol** 1988;14(9):769–947

Ultrasound in Medicine and Biology Clinical Prize. **Ultrasound Med Biol** 1989;15(2):91–2

Quantitative evaluation of real-time ultrasound features of the breast. Bamber JC, et al. **Ultrasound Med Biol** 1988; 14 Suppl 1:81–7

Ultrasound observation on pulsation in human carotid artery lesions. Blankenhorn DH, et al. **Ultrasound Med Biol** 1988; 14(7):583–7

Hemodynamic effects of innominate artery occlusive disease. Evaluation by Doppler ultrasound. Brunhölzl C, et al. **Ultrasound Med Biol** 1989;15(3):201–6

Constant soft tissue distance model in pregnancy. Carson PL, et al. **Ultrasound Med Biol** 1989;15 Suppl 1:27–9

NCRP/AIUM uniform absorption models. Carstensen EL. **Ultrasound Med Biol** 1989;15 Suppl 1:31–4

Flexible software for the processing of obstetric ultrasound scan and related information. Clarkson DM, et al. **Ultrasound Med Biol** 1988;14(7):611–6

In vivo acoustic attenuation in liver: correlations with blood tests and histology. Duerinckx A, et al. **Ultrasound Med Biol** 1988;14(5):405–13

The relationship between time averaged intensity weighted mean velocity, and time averaged maximum velocity in neonatal cerebral arteries. Evans DH, et al. **Ultrasound Med Biol** 1989;15(5):429–35

Derivation of haemodynamic information from ultrasonic recordings of aortic diameter changes. Gustafsson D, et al. **Ultrasound Med Biol** 1989;15(3):189–99

Fine needle aspiration biopsy of the breast using ultrasound techniques—superficial localization and direct visualization. Harper AP. **Ultrasound Med Biol** 1988;14 Suppl 1:5–11

The role of ultrasound-guided needle aspiration of breast masses. Hogg JP, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:13–21

Determination of the presence of fetal apnoea using umbilical artery and umbilical vein Doppler waveforms. Hoskins PR, et al. **Ultrasound Med Biol** 1988;14(7):589–92

Effect of tissue perfusion on temperature elevation. Hynynen K. **Ultrasound Med Biol** 1989;15 Suppl 1:41–3; discussion 45–6

Combining imaging and vascularity assessment of breast lesions. Jellins J. **Ultrasound Med Biol** 1988;14 Suppl 1:121–30

Can microcalcifications located within breast carcinomas be detected by ultrasound imaging? Kasumi F. **Ultrasound Med Biol** 1988;14 Suppl 1:175–82

Ultrasound artifacts affecting the diagnosis of breast masses. Kimme-Smith C, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:203–10

Chromaticity-coded Doppler blood velocity sonagrams: preliminary observations. Kontis S, et al. **Ultrasound Med Biol** 1988;14(6):473–7

Causes of shadowing in breast sonography. Kossoff G. **Ultrasound Med Biol** 1988;14 Suppl 1:211–5

On the design and evaluation of a steady flow model for Doppler ultrasound studies. Law YF, et al. **Ultrasound Med Biol** 1989;15(5):505–16

Sonographic findings following conservative surgery and irradiation for breast carcinoma. Leucht WJ, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:27–41

Diagnostic value of different interpretative criteria in real-time sonography of the breast. Leucht WJ, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:59–73

Representative breast ultrasound images. Lex AM. **Ultrasound Med Biol** 1988;14 Suppl 1:243–5

Correlation of ultrasonic attenuation with pathologic fat and fibrosis in liver disease. Lin T, et al. **Ultrasound Med Biol** 1988;14(8):729–34 (20 ref.)

Comparison of theoretical scattering results and ultrasonic data from clinical liver examinations. Lizzi FL, et al. **Ultrasound Med Biol** 1988;14(5):377–85

Anthropomorphic phantoms for assessing systems used in ultrasound imaging of the compressed breast. Madsen EL, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:183–201

An evaluation of the use of texture measurements for the tissue characterisation of ultrasonic images of in vivo human placentae. Morris DT. **Ultrasound Med Biol** 1988; 14(5):387–95

Size of breast cancer on ultrasonography, cut-surface of resected specimen, and palpation. Nishimura S, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:139–42

NCRP-AIUM models for temperature calculations. Nyborg WL. **Ultrasound Med Biol** 1989;15 Suppl 1:37–40

Carbondioxide reactivity of the blood flow in human basilar artery estimated by the transcranial Doppler method in normal men: a comparison with that of the middle cerebral artery. Ogawa S, et al. **Ultrasound Med Biol** 1988; 14(6):479–83

Transfontanelle pulsed Doppler measurement of blood flow velocity in the internal jugular vein, straight sinus, and internal cerebral vein in preterm and term neonates. Pfannschmidt J, et al. **Ultrasound Med Biol** 1989;15(1):9–12

In vivo ultrasound backscattering estimation for tumour diagnosis: an animal study. Romijn RL, et al. **Ultrasound Med Biol** 1989;15(5):471–9

Ultrasound breast examination of asymptomatic patients with normal but radiodense mammograms. Rothschild P, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:113–9

Anisotropic ultrasonic backscatter from the renal cortex. Rubin JM, et al. **Ultrasound Med Biol** 1988;14(6):507–11

Assessment of ultrasonic computed tomography in symptomatic breast patients by discriminant analysis. Scherzinger AL, et al. **Ultrasound Med Biol** 1989;15(1):21–8

A real-time autoregressive spectrum analyzer for Doppler ultrasound signals. Schlindwein FS, et al. **Ultrasound Med Biol** 1989;15(3):263–72

Ultrasonographic localization of non-palpable breast masses. Schwartz GF, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:23–5

On estimating the number density of random scatterers from backscattered acoustic signals. Sleefe GE, et al. **Ultrasound Med Biol** 1988;14(8):709–27

New contrast-detail phantoms for improved precision in lesion detection measurements. Smith SW, et al. **Ultrasound Med Biol** 1989;15(4):383–93

An experimental investigation of streaming in pulsed diagnostic ultrasound beams. Starritt HC, et al. **Ultrasound Med Biol** 1989;15(4):363–73

FDA model for regulatory purposes. Stratmeyer ME. **Ultrasound Med Biol** 1989;15 Suppl 1:35–6

Tissue characterisation. Taylor KJ, et al. **Ultrasound Med Biol** 1989;15(5):421–8 (50 ref.)

Ultrasonic characterization of selected renal tissues. Turnbull DH, et al. **Ultrasound Med Biol** 1989;15(3):241–53

The relationship between fetal heart rate and Doppler blood flow velocity waveforms. Van Den Wijngaard JA, et al. **Ultrasound Med Biol** 1988;14(7):593–7

The diagnosis of minor to moderate atherosclerotic lesions in the carotid artery bifurcation by means of spectral broadening combined with the direct detection of flow disturbances using a multi-gate pulsed Doppler system. van Merode T, et al. **Ultrasound Med Biol** 1988;14(6):459–64

Carotid artery wall properties in normotensive and borderline hypertensive subjects of various ages. Van Merode T, et al. **Ultrasound Med Biol** 1988;14(7):563–9

Differences in carotid artery wall properties between presumed-healthy men and women. Van Merode T, et al. **Ultrasound Med Biol** 1988;14(7):571–4

Velocity profiles in the normal human abdominal aorta: a comparison between ultrasound and magnetic resonance data. Vieli A, et al. **Ultrasound Med Biol** 1989;15(2):113–9

Transcranial pulsed Doppler measurements of blood velocity in the middle cerebral artery: reference values at rest and during hyperventilation in healthy volunteers in relation to age and sex. Vriens EM, et al. **Ultrasound Med Biol** 1989;15(1):1–8

Bibliography of biomedical ultrasound. No. 75. White E, et al. **Ultrasound Med Biol** 1988;14(5):431–50

Bibliography of biomedical ultrasound. No.81. White E, et al. **Ultrasound Med Biol** 1989;15(3):291–7

Bibliography of biomedical ultrasound. No. 82. White E, et al. **Ultrasound Med Biol** 1989;15(4):403–9

Bibliography of biomedical ultrasound. No. 78. White E, et al. **Ultrasound Med Biol** 1988;14(8):747–62

Bibliography of biomedical ultrasound. No. 77. White E, et al. **Ultrasound Med Biol** 1988;14(7):617–32

Bibliography of biomedical ultrasound. No. 79. White E, et al. **Ultrasound Med Biol** 1989;15(1):77–82

Bibliography of biomedical ultrasound. No. 80. White E, et al. **Ultrasound Med Biol** 1989;15(2):149–53

The role of ultrasound in the early diagnosis of fetal structural defects following maternal anticonvulsant therapy. Wladimiroff JW, et al. **Ultrasound Med Biol** 1988; 14(8):657–60

Epidemiology of human exposure to ultrasound [letter] Ziskin MC, et al. **Ultrasound Med Biol** 1988;14(5):429

Office urologic ultrasound. Acino S, et al. **Urol Clin North Am** 1988 Nov;15(4):577–88 (34 ref.)

Scrotal ultrasonography and the management of testicular trauma. Fournier GR Jr, et al. **Urol Clin North Am** 1989 May;16(2):377–85 (18 ref.)

Office urologic ultrasound in pediatric patients. Zaontz MR, et al. **Urol Clin North Am** 1988 Nov;15(4):589–99 (16 ref.)

Evaluation of the T stage of carcinoma of the bladder by transurethral ultrasonography. Grups JW, et al. **Urol Int** 1989;44(3):132–4

Ultrasonic determination of the residual bladder volume. Hendrikx AJ, et al. **Urol Int** 1989;44(2):96–102

Polyorchidism: preoperative diagnosis by ultrasonography. Yoshida T, et al. **Urol Int** 1989;44(1):47–9

Ultrasonographic evaluation of Peyronie's disease. Balconi G, et al. **Urol Radiol** 1988;10(2):85–8

Segmental infarction of the renal allograft: ultrasound/MRI observations. Becker JA, et al. **Urol Radiol** 1989; 11(2):109–12

Sonographic diagnosis and follow-up of abdominal neuroblastoma. Dershaw DD, et al. **Urol Radiol** 1988; 10(2):80–4

Doppler studies of the penile circulation. Forsberg L, et al. **Urol Radiol** 1988;10(3):129–31

Sonography of small renal masses with indeterminant density characteristics on computed tomography. Foster WL Jr, et al. **Urol Radiol** 1988;10(2):59–67

Carcinoma of the fallopian tube. Hinton A, et al. **Urol Radiol** 1988;10(2):113–5

The role of ultrasound in prostatic imaging. Symposium. June 2, 1988, Boston, Massachusetts. **Urology** 1989 Jun;33(6 Suppl):1–32

Ultrasonography and diagnosis of pediatric genitourinary rhabdomyosarcoma. Bahnson RR, et al. **Urology** 1989 Jan; 33(1):64–8

Role of ultrasound in urinary incontinence evaluation. Bergman A, et al. **Urology** 1989 May;33(5):443–4

Impalpable testicular tumors diagnosed by scrotal ultrasonography. Csapo Z, et al. **Urology** 1988 Dec; 32(6):549–52

Doppler-assisted nerve-sparing radical prostatectomy. Drew JB, et al. **Urology** 1989 Mar;33(3):228–9

Transrectal ultrasound in early detection of clinical stage A prostate cancer. Gluck R, et al. **Urology** 1989 Jul; 34(1):58–61

Diuretic ultrasound: technique for assessment of obstructed renal unit. Goldberg SD, et al. **Urology** 1988 Dec; 32(6):546–8

Determination of prostatic volume by ultrasonography. A useful procedure in patients with prostatism? Hendrikx AJ, et al. **Urology** 1989 Apr;33(4):336–9

Ultrasonic determination of prostatic volume: a cadaver study. Hendrikx AJ, et al. **Urology** 1989 Sep;34(3):123–5

Transrectal ultrasound study of prostate. Kenny GM, et al. **Urology** 1988 Nov;32(5):401–2

Use of transrectal ultrasound in diagnosis, guided biopsy, staging, and screening of prostate cancer. Lee F, et al. **Urology** 1989 Jun;33(6 Suppl):7–12 (15 ref.)

Transrectal ultrasound: diagnosis and staging of prostatic carcinoma. Lee F. **Urology** 1989 May;33(5 Suppl):5–10

Histopathology of prostate cancer: prediction of malignant behavior and correlation with ultrasonography. Miller GJ. **Urology** 1989 Jun;33(6 Suppl):18–26 (80 ref.)

Inducing diuresis by ultrasound [letter] Mosli HA, et al. **Urology** 1989 May;33(5):449

Transrectal ultrasonography. Early experience with use as prostate cancer detection tool. Nesbitt JA, et al. **Urology** 1989 Sep;34(3):120–2

Comparing clinical staging plus transrectal ultrasound with surgical-pathologic staging of prostate cancer. Perrapato SD, et al. **Urology** 1989 Feb;33(2):103–5

Ultrasound-guided prostate biopsy. Biopty gun superior to aspiration. Ragde H, et al. **Urology** 1988 Dec;32(6):503–6

Transrectal ultrasound in management of prostate cancer. Scardino PT. **Urology** 1989 Jun;33(6 Suppl):27–31 (14 ref.)

Venous sonography for pregnancy-related thrombosis: case report. Abbitt PL, et al. **Va Med** 1989 Jun;116(6):277–8

Skin flow and swelling in post-phlebitic limbs. Belcaro G, et al. **Vasa** 1989;18(2):136–9

Evaluation of the microcirculatory effects of Venoruton in patients with chronic venous hypertension by laserdoppler flowmetry, transcutaneous PO2 and PCO2 measurements, leg volumetry and ambulatory venous pressure measurements. Belcaro G, et al. **Vasa** 1989;18(2):146–51

Use of a high frequency transducer with real time B-mode ultrasound scanning to identify early pregnancy in cows. Boyd JS, et al. **Vet Rec** 1988 Jul 2;123(1):8–11

Ultrasonic demonstration of portal vein occlusion. Khan O, et al. **West Indian Med J** 1988 Jun;37(2):123–6

Prospective comparison of radionuclide, ultrasound, and computed tomography in the preoperative localization of parathyroid glands. Carmalt HL, et al. **World J Surg** 1988 Dec;12(6):830–4

Late spontaneous disappearance of fetal ascites of unknown origin. Defoort P, et al. **Z Geburtshilfe Perinatol** 1989 Jan–Feb;193(1):47–8

A survey of neural tube defect pregnancies in north-west England. Bernard SH, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:15–6

[The ultrasonic demonstration of gas in the endometrial cavity—an aid for the diagnosis of puerperal endometritis] Piek PC, et al. **S Afr Med J** 1989 Sep 2;76(5):203–5 (Eng. Abstr.) (Afr)

[Prenatal diagnosis of encephalocele with the echograph] Angelov Iu, et al. **Akush Ginekol (Sofiia)** 1988;27(6):30–5 (Eng. Abstr.) (Bul)

[The potential for error in the ultrasonic diagnosis of gynecologic diseases] Mateeva E, et al. **Akush Ginekol (Sofiia)** 1988;27(4):49–52 (Eng. Abstr.) (Bul)

[Use of echography in the diagnosis of ovarian tumors] Mateeva E, et al. **Akush Ginekol (Sofiia)** 1988;27(3):61–6 (Eng. Abstr.) (Bul)

[Doppler study of the blood flow rate in the umbilical artery as an index of fetal status] Pelev Zh, et al. **Akush Ginekol (Sofiia)** 1988;27(4):83–5 (Bul)

[Changes in the size of fetal kidneys determined by ultrasonics in advanced pregnancy] Ruseva R, et al. **Akush Ginekol (Sofiia)** 1988;27(3):27–30 (Eng. Abstr.) (Bul)

[Echographic and hormonal parameters in fetal growth retardation] Ruseva R. **Akush Ginekol (Sofiia)** 1988; 27(5):15–8 (Eng. Abstr.) (Bul)

[Echographic criteria for predicting the pregnancy outcome after intrauterine transfusions in rhesus incompatibility] Vasileva Iu. **Akush Ginekol (Sofiia)** 1988;27(6):35–8 (Eng. Abstr.) (Bul)

[Guided puncture biopsy of the kidney under echographic control] Draganov V, et al. **Khirurgiia (Sofiia)** 1988; 41(6):84–7 (Bul)

[A method for the local application of cytostatics under ultrasonic control in patients with inoperable liver metastases] Nedeva A, et al. **Khirurgiia (Sofiia)** 1989; 42(2):95–8 (Bul)

[Echographic diagnosis of diffuse kidney diseases] Dzerasi R, et al. **Vutr Boles** 1988;27(4):40–4 (Eng. Abstr.) (Bul)

[The place of echography in the clinical diagnosis of hepatic hemangioma] Grigovrov N, et al. **Vutr Boles** 1989; 28(1):78–82 (Eng. Abstr.) (Bul)

[Correlation of the cytologic, endoscopic and echographic findings in the diagnosis of pancreatic cancer] Ivanova S.

Vutr Boles 1988;27(4):47–9 (Eng. Abstr.) (Bul)

[The chologon-sorbitol functional test under ultrasonic control in pathology of the gallbladder and biliary tract] Konstantinov K, et al. Vutr Boles 1989;28(2):72–7 (Eng. Abstr.) (Bul)

[Sonographic appearance of adenomyomatosis of the gallbladder—a case report] Chang-Chien CS, et al. Chang Keng I Hsueh 1988 Jun;11(2):139–44 (Eng. Abstr.) (Chi)

[Clinical application of a decoction of "fast-developing liquid for gastrointestinal ultrasound"] Wei PK. Chung Hsi I Chieh Ho Tsa Chih 1989 Apr;9(4):210–2, 196 (Eng. Abstr.) (Chi)

[Diagnosis of renal tuberculosis by gray-scale ultrasonography] Wang ZB. Chung Hua Chieh Ho He Hu Hsi Tsa Chih 1988 Dec; 11(6):353–5, 386 (Eng. Abstr.) (Chi)

[Diagnosis of neonatal intracranial hemorrhage using B-mode ultrasound] Chen HP. Chung Hua Fu Chan Ko Tsa Chih 1988 Nov;23(6):345–7, 387 (Eng. Abstr.) (Chi)

[Clinical analysis of 363 cases of post-term pregnancy] Chen WZ. Chung Hua Fu Chan Ko Tsa Chih 1988 Jul; 23(4):198–201, 252 (Eng. Abstr.) (Chi)

[Ultrasonic monitoring of intrauterine fetal growth retardation] Gao SH. Chung Hua Fu Chan Ko Tsa Chih 1988 May;23(3):142–4, 188 (Eng. Abstr.) (Chi)

[Research on the progress of the fetal head in the occipito-posterior position] Hou JR. Chung Hua Fu Chan Ko Tsa Chih 1989 Jan;24(1):15–8, 57–8 (Eng. Abstr.) (Chi)

[Urinary LH as determined by enzyme-immunoassay combined with real-time ultrasound in the prediction of ovulation and its clinical application] Liu P. Chung Hua Fu Chan Ko Tsa Chih 1988 Mar;23(2):65–8, 126 (Eng. Abstr.) (Chi)

[Multivariate quantitative determination of cephalic position by ultrasound] Shi YS. Chung Hua Fu Chan Ko Tsa Chih 1988 Sep;23(5):268–70, 316 (Eng. Abstr.) (Chi)

[Ultrasound monitoring of follicle development, ovulation and corpus luteum formation in infertile women] Zhu Q. Chung Hua Fu Chan Ko Tsa Chih 1988 Mar;23(2):69–71, 126 (Eng. Abstr.) (Chi)

[Correct selection of cesarean section for breech presentation by B-ultrasonography: an analysis of 125 cases] Zou L. Chung Hua Fu Chan Ko Tsa Chih 1988 Mar;23(2):79–81, 127 (Eng. Abstr.) (Chi)

[A preliminary study on the diagnostic imaging of parotid masses] Yu GY. Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Nov; 23(6):342–4, 385 (Eng. Abstr.) (Chi)

[Percutaneous transhepatic portography: a modified technique and its uses] Jin JX, et al. Chung Hua Nei Ko Tsa Chih 1988 Apr;27(4):214–5, 260 (Eng. Abstr.) (Chi)

[Diagnostic value of B-mode ultrasonography in acute suppurative hip joint] Ma HF. Chung Hua Wai Ko Tsa Chih 1988 Sep;26(9):547–9, 574 (Eng. Abstr.) (Chi)

[The ultrasonograph of choroidal melanoma and its histopathological correlation] Hu SM. Chung Hua Yen Ko Tsa Chih 1988 Jul;24(4):203–5 (Eng. Abstr.) (Chi)

[A- and B-scan in diagnosis of retinoblastoma—a preliminary analysis of ultrasonic examination in 113 patients] Wu ZY, et al. Yen Ko Hsueh Pao 1985 Sep;1(1):59–63 (Eng. Abstr.) (Chi)

[Verification of invasion of a hepatoma into the portal circulation using thin-needle aspiration biopsy under ultrasonic control] Hořejšlová M, et al. Cas Lek Cesk 1986 Oct 31;125(44):1361–2 (Eng. Abstr.) (Cze)

[Nephrolithotomy using Doppler and dynamic sonography] Kočí K, et al. Cas Lek Cesk 1989 Mar 3;128(10):303–5 (Eng. Abstr.) (Cze)

[Ultrasound in the detection of residua after labor, abortion and induced abortion] Burnog T, et al. Cesk Gynekol 1988 Jul;53(6):438–9 (Cze)

[Contribution of ultrasonography and laparoscopy in the diagnosis of interstitial pregnancy] Holub Z, et al. Cesk Gynekol 1988 Aug;53(7):508–10 (Cze)

[Ultrasonic biometry in the 3d trimester of pregnancy] Karásková I. Cesk Gynekol 1988 Nov;53(9):686–91 (Cze)

[Possible use of interventional echography in pregnancy] Malý Z, et al. Cesk Gynekol 1988 Aug;53(7):511–3 (Cze)

[Vaginal sonography—new horizons in diagnosis] Malý Z, et al. Cesk Gynekol 1988 May;53(4):282–4 (Cze)

[Transvaginal aspiration of follicular fluid using a sonographic vaginal probe in an in vitro fertilization and embryo transfer program] Ventruba P, et al. Cesk Gynekol 1988 May;53(4):267–74 (Eng. Abstr.) (Cze)

[Experimental models of ultrasonic diagnosis of intra-ocular foreign bodies] Preisová J, et al. Cesk Oftalmol 1988 Nov; 44(6):400–8 (Eng. Abstr.) (Cze)

[Imaging of pathologic masses based on type A ultrasonography in ophthalmology] Preisová J, et al. Cesk Oftalmol 1988 Jul;44(4):247–50 (Eng. Abstr.) (Cze)

[Thanatophoric dysplasia and possibilities of prenatal diagnosis] Santavá A, et al. Cesk Pediatr 1989 Jan; 44(1):19–21 (Cze)

[Measurement of blood flow velocity in the cerebral vessels of neonates: a method for continual doppler ultrasound detection] Zoban P, et al. Cesk Pediatr 1989 Jun; 44(6):327–30 (Eng. Abstr.) (Cze)

[Ultrasonographic detection of concretions in the choledochal cyst diagnosed in Caroli's disease in infants] Chudáček Z, et al. Cesk Radiol 1989 Jan;43(1):62–6 (Eng. Abstr.) (Cze)

[Ultrasonic examination of the thyroid gland] Girl J, et al. Cesk Radiol 1988 Nov;42(6):402–11 (Eng. Abstr.) (Cze)

[The importance of percutaneous transhepatic cholangiography and sonography in the diagnosis of postoperative complications involving the bile ducts] Hledík E, et al. Cesk Radiol 1988 Aug;42(4):259–68 (Eng. Abstr.) (Cze)

[Variability of the ultrasonic picture in carcinoma of the breast] Vyhnánek L, et al. Cesk Radiol 1989 May; 43(3):154–60 (Eng. Abstr.) (Cze)

[Sonography in tumors of the rectum] Fischer J, et al. Rozhl Chir 1989 Jun;68(6):421–3 (Eng. Abstr.) (Cze)

[The importance of transabdominal ultrasonography in determining the mass of prostatic adenomas] Hyrtl L, et al. Rozhl Chir 1988 Oct;67(10):637–44 (Eng. Abstr.) (Cze)

[Evaluation of the value of ultrasonic examination in screening for diseases of the urinary tract and abdominal cavity organs] Kladenský J, et al. Rozhl Chir 1988 Oct; 67(10):671–4 (Eng. Abstr.) (Cze)

[Personal experience with the use of sonography in the diagnosis of acute pancreatitis] Sváb J, et al. Rozhl Chir 1989 Feb;68(2):110–2 (Eng. Abstr.) (Cze)

[Problems in ultrasonic diagnosis of fetal hypotrophy] Hanousek L, et al. Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1988;31(1):101–10 (Eng. Abstr.) (Cze)

[Problems in ultrasonic biometry of twins] Hanousek L, et al. Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1988;31(1):111–8 (Eng. Abstr.) (Cze)

[Correlation of the diagnostic contribution of ultrasound and radioimmunologic tests in threatened pregnancy in the 1st trimester] Jirous J, et al. Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1987;30(5):637–54 (Eng. Abstr.) (Cze)

[Clinical experience with the use of the echo-Doppler method in lesions in the carotid vascular bed] Spaček M, et al. Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1987;30(2):265–70 (Eng. Abstr.) (Cze)

[Doppler determination of the degree of internal carotid artery stenosis] Nevrtal M, et al. Vnitr Lek 1988 Nov; 34(11):1041–50 (Eng. Abstr.) (Cze)

[Ultrasonic scanning of the abdominal aorta following implantation of a bifurcation prosthesis] Bak S, et al. Ugeskr Laeger 1988 Sep 5;150(36):2124–5 (Eng. Abstr.) (Dan)

[Ultrasonic diagnosis of deep venous thrombosis (letter)] Borris LC, et al. Ugeskr Laeger 1989 Jul 31;151(31):1993 (Dan)

[Intraoperative ultrasonic scanning (editorial)] Burcharth F. Ugeskr Laeger 1989 Jul 10;151(28):1797 (Dan)

[Quality of images from ultrasound equipment. Possibility of better control with the use of phantoms] Fredfeldt KE. Ugeskr Laeger 1989 Jan 2;151(1):3–5 (Eng. Abstr.) (Dan)

[Determination of the level of lower limb amputation using Doppler laser flowmetry] Gebuhr P, et al. Ugeskr Laeger 1988 Dec 12;150(50):3116–8 (Eng. Abstr.) (Dan)

[Intraoperative ultrasonic scanning during hepatic, biliary and pancreatic surgery] Karstrup S. Ugeskr Laeger 1989 Jul 10;151(28):1798–80 (Eng. Abstr.) (Dan)

[Usefulness of ultrasonic scanning in the diagnosis of infantile hypertrophic pyloric stenosis (letter)] Kofoed PE, et al. Ugeskr Laeger 1989 Mar 6;151(10):644–5 (Dan)

[Isodense and isoechoic liver metastases] Lorentzen T, et al. Ugeskr Laeger 1989 Apr 10;151(15):951–2 (Eng. Abstr.) (Dan)

[Diagnosis of femoropopliteal venous thrombosis. Comparison of dynamic ultrasonic scanning and phlebography] Mantoni M. Ugeskr Laeger 1989 Apr 24; 151(17):1051–3 (Eng. Abstr.) (Dan)

[Employment of ultrasonic scanning in the diagnosis of infantile hypertrophic pyloric stenosis] Olesen T, et al. Ugeskr Laeger 1988 Dec 5;150(49):3041–4 (Eng. Abstr.) (Dan)

[Ultrasonic scanning, is it an alternative to phlebography in deep thrombophlebitis of the leg?] Olsen AD, et al. Ugeskr Laeger 1989 Apr 24;151(17):1053–5 (Eng. Abstr.) (Dan)

[Ultrasound examination of the scrotum] Olsen JB, et al. Ugeskr Laeger 1989 Mar 27;151(13):836–8 (Eng. Abstr.) (Dan)

[Liver scintigraphy as a diagnostic adjuvant to ultrasonic examination in cases of hepatic focal processes] Poulsen L, et al. Ugeskr Laeger 1989 Jul 3;151(27):1751–3 (Eng. Abstr.) (Dan)

[Intraoperative ultrasonic scanning in surgery of the liver, biliary tract and pancreas (letter)] Rokkjaer M. Ugeskr Laeger 1989 Aug 21;151(34):2153–4 (Dan)

[Acute appendicitis, echographic findings] Baeyaert M. J Belge Radiol 1989 Feb;72(1):25–9 (Eng. Abstr.) (Dut)

[Echography in the infertility clinic] Goes E, et al. J Belge Radiol 1988;71(3):347–51 (Eng. Abstr.) (Dut)

[Echography and CT in mediastinal teratoma] Roelandt W, et al. J Belge Radiol 1988;71(5):611–4 (Eng. Abstr.) (Dut)

[Echography in the diagnosis of deep venous thrombosis] Appelman PT, et al. Ned Tijdschr Geneeskd 1988 Nov 19; 132(47):2154–7 (Eng. Abstr.) (Dut)

[Echography of the painful hip in children] Sanders FB, et al. Ned Tijdschr Geneeskd 1988 Dec 10;132(50):2286–9 (Eng. Abstr.) (Dut)

[An echographic study of the prevalence of gallstone disease in Maastricht and the surrounding area] Thijs CT, et al. Ned Tijdschr Geneeskd 1989 Jan 21;133(3):110–4 (Eng. Abstr.) (Dut)

[Echography in the diagnosis of deep venous thrombosis (letter)] Veldhuyzen van Zanten GO, et al. Ned Tijdschr Geneeskd 1989 Feb 11;133(6):313–4 (Dut)

[Pregnancy and antiepileptic agents; the value of prenatal ultrasonography studies for the detection of congenital malformations] Wladimiroff JW, et al. Ned Tijdschr Geneeskd 1988 Aug 6;132(32):1486–9 (Eng. Abstr.) (Dut)

[Obstructive disorders of the urinary tract in the unborn child] Brus F, et al. Tijdschr Kindergeneeskd 1989 Feb; 57(1):24–9 (39 ref.) (Eng. Abstr.) (Dut)

[Echography of the hip in children] Castelein RM, et al. Tijdschr Kindergeneeskd 1988 Dec;56(6):231–6 (Eng. Abstr.) (Dut)

[Ultrasonic confirmation of vesico-ureteral reflux] Bergius AR, et al. Duodecim 1988;104(14):1047–52 (Fin)

[Ultrasonic confirmation of scrotal pathology] Mattila S, et al. Duodecim 1989;105(10):901–8 (Fin)

[Direct ultrasonic diagnosis of salivary gland neoplasms] Siniluoto T, et al. Duodecim 1988;104(11):832–41 (Fin)

[What is the contribution of echography in Crohn disease?] Schmutz G. Acta Chir Belg 1989 Mar-Apr;89(2):101–5 (Eng. Abstr.) (Fre)

[The value of echography in Crohn's disease] Schmutz G, et al. Acta Gastroenterol Belg 1987 Sep-Oct;50(5):532–7 (Eng. Abstr.) (Fre)

[Echography in the diagnosis of urothelial tumors] Kharrat F, et al. Acta Univ Palacki Olomuc Fac Med 1988; 119:415–21 (Fre)

[Carcinoid cardiopathy: value of ultrasonography and MRI. Apropos of a case related to bronchial tumor. Review of the literature] Ebagosti A, et al. Ann Cardiol Angeiol (Paris) 1989 Feb;38(2):91–5 (27 ref.) (Eng. Abstr.) (Fre)

[The role of abdominopelvic ultrasonography in surgical emergencies. Systematic study with 200 consecutive tests] Dargent J, et al. Ann Chir 1988;42(6):409–12 (Eng. Abstr.) (Fre)

[Endorectal echography in the staging of cancer of the rectum. Apropos of 26 surgically treated cases] Prévost F, et al. Ann Chir 1988;42(9):652–5 (23 ref.) (Eng. Abstr.) (Fre)

[Echography in studying the hyothyroepiglottic space. Normal image. Pathologic aspects. Histologic correlations] Clavier A, et al. Ann Otolaryngol Chir Cervicofac 1989; 106(5):309–17 (Eng. Abstr.) (Fre)

[Echography and early diagnosis of congenital dislocation of the hip] Bocquet A, et al. Ann Pediatr (Paris) 1988 Dec; 35(10):719–25 (Eng. Abstr.) (Fre)

[An unusual echographic evolution of an adrenal hematoma in a newborn infant] Chevallier B, et al. Ann Pediatr (Paris) 1989 Apr;36(4):262–4 (Eng. Abstr.) (Fre)

[Hepatic injuries in children. Apropos of 23 case reports] Scheye T, et al. Ann Pediatr (Paris) 1988 Dec;35(10):731–5 (Eng. Abstr.) (Fre)

[Spontaneous dissection of the hepatic artery: ultrasonographic and angiographic aspects apropos of a case] Derhy S, et al. Ann Radiol (Paris) 1988;31(5):301–4 (12 ref.) (Eng. Abstr.) (Fre)

[Direct visualization by echography of a tumor of the common bile duct. Apropos of 2 cases] Judet O, et al. Ann Radiol (Paris) 1988;31(6):363–6 (8 ref.) (Eng. Abstr.) (Fre)

[Echography in urinary bilharziosis. Apropos of 304 studies in Niger] Lamothe F, et al. Ann Radiol (Paris) 1988; 31(5):297–300 (Eng. Abstr.) (Fre)

[Echographic study of gallbladder contraction: normal and pathologic aspects. Apropos of 115 patients] Legmann P, et al. Ann Radiol (Paris) 1989;32(2):103–6 (Eng. Abstr.) (Fre)

[Scrotal echography in the diagnosis of cancer of the testis: misleading images and echographic patterns] Martin B, et al. Ann Radiol (Paris) 1989;32(2):91–6 (Eng. Abstr.) (Fre)

[Conflicting factors in calculating prostatic weight by echography] Benassayag E, et al. Ann Urol (Paris) 1989; 23(3):236 (Fre)

[From scrotal ultrasonography to unnecessary castration (editorial)] Timbal Y. Ann Urol (Paris) 1989;23(1):7 (Fre)

[Respective indications for echography, scanning and MRI in diseases of the intra-cranial optic pathways] Cabanis EA, et al. Annee Ther Clin Ophtalmol 1987;38:299–318 (Fre)

[Respective indications for echography, scanning and MRI in diseases of the eye and orbit] Catros A, et al. Annee Ther Clin Ophtalmol 1987;38:283–98 (Fre)

[Contributions of echography in obstetrics. Consensus conference. Paris, 2-3 December 1987] Arnold-Richez F, et al. **Arch Fr Pediatr** 1989 Apr;46(4):307-9 (0 ref.) (Fre)

[Role of ultrasound in studying the first urinary infection in children] Boudailliez B, et al. **Arch Fr Pediatr** 1989 Feb; 46(2):113-5 (18 ref.) (Eng. Abstr.) (Fre)

[Radiologic case of the month. Septic granulomatosis: the contribution of hepatic echography] Monfort-Gouraud M, et al. **Arch Fr Pediatr** 1989 Jan;46(1):51-2 (Fre)

[Breast echography in addition to mammography] Anderegg A, et al. **Arch Gynecol Obstet** 1988;244 Suppl:S24-9 (Fre)

[Evaluation by Doppler ultrasound of the severity of aortic stenoses. Application of the continuity equation] Choquet D, et al. **Arch Mal Coeur** 1988 Aug;81(8):973-81 (Eng. Abstr.) (Fre)

[Non-invasive measurement by Doppler pulse of cardiac output and maximal aortic acceleration in essential arterial hypertension] Lacolley P, et al. **Arch Mal Coeur** 1988 Jun; 81 Spec No:35-8 (Eng. Abstr.) (Fre)

[Criteria for brain death: cessation of cerebral circulation demonstrated by Doppler ultrasonography of the carotid arteries] Payen D, et al. **Bull Acad Natl Med** 1989 Feb; 173(2):149-55; discussion 155-6 (Eng. Abstr.) (Fre)

[Turner's syndrome in the fetus] Vergara R. **Bull Acad Natl Med (Paris)** 1988 Nov;172(8):1191-3 (Fre)

[Comparison of echography and x-ray computed tomography in cancer of the ovary] Normand F, et al. **Bull Cancer (Paris)** 1988;75(9):889-93 (Eng. Abstr.) (Fre)

[Painful Claude Bernard-Horner syndrome disclosing spontaneous dissection of the internal carotid artery. Value of cervical ultrasonic evaluation. Apropos of 2 cases] Benrabah R, et al. **Bull Soc Ophtalmol Fr** 1988 Jun-Jul; 88(6-7):763-8, 770 (Fre)

[Characteristics of the ultrasonic test after the use of long-lasting gas in surgery of retinal detachment. Experimental and clinical study] Flament J, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1183-6, 1188 (Eng. Abstr.) (Fre)

[Measurement of cerebral blood flow by transcranial Doppler ultrasonography in children presenting with autistic behavior. Preliminary results] Bruneau N, et al. **C R Acad Sci [III]** 1989;308(9):255-60 (Eng. Abstr.) (Fre)

[Echographic aspect of a hepatic artery aneurysm simulating a neoplastic mass of the porta hepatis] Chhem RK, et al. **Can Assoc Radiol J** 1989 Aug;40(4):222-3 (Eng. Abstr.) (Fre)

[Lithotripsy of biliary calculi: evaluation of ultrasonography as a method to guide treatment by extracorporeal shock waves] Dion YM, et al. **Can J Surg** 1989 Sep;32(5):345-8 (Eng. Abstr.) (Fre)

[Ureteropelvic junction syndromes: antenatal diagnosis] Audry G, et al. **Chir Pediatr** 1988;29(4):165-9 (Eng. Abstr.) (Fre)

[Ureteropelvic junction syndrome. Apropos of 59 cases diagnosed with fetal echography] Ravasse P, et al. **Chir Pediatr** 1988;29(5):253-8 (Eng. Abstr.) (Fre)

[Performance of endorectal echography in tumors of the rectum] Detry R, et al. **Gastroenterol Clin Biol** 1988 Nov; 12(11):810-3 (20 ref.) (Eng. Abstr.) (Fre)

[Diagnostic quality control of hepatobiliary echography by autopsy correlation] Frouge C, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):285-90 (Eng. Abstr.) (Fre)

[Peroperative echography in 14 cases of pancreatic insulinoma and gastrinoma] Marotel M, et al. **Gastroenterol Clin Biol** 1988 Oct;12(10):713-20 (38 ref.) (Eng. Abstr.) (Fre)

[Echographic detection of hepatocellular carcinoma in patients hospitalized for cirrhosis] Roget L, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):827-32 (Eng. Abstr.) (Fre)

[Absence of liver hematoma after transcutaneous hepatic puncture biopsy in 181 patients: echographic study (letter)] Sbolli G, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):969 (8 ref.) (Fre)

[A new technic of hepatectomy using peroperative echography and intraparenchymatous guide needles. The geometer technic] Hasegawa H, et al. **J Chir (Paris)** 1988 Oct;125(10):593-6 (Eng. Abstr.) (Fre)

[Nul telediastolic flux. Prognostic value] Baton C, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):615-23 (Eng. Abstr.) (Fre)

[Pharyngeal epignathus teratoma. Echographic and prognostic study] Crimail P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(8):1069-74 (Eng. Abstr.) (Fre)

[The contribution of umbilical Doppler velocimetry in suspected echographic IUGR] de Rochambeau B, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(8):1021-30 (Eng. Abstr.) (Fre)

[Thoracopagus fetus. Ultrasonic diagnosis at 16 weeks] Grutter P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(3):355-9 (Eng. Abstr.) (Fre)

[Ultrasonic study of the single umbilical artery syndrome. A series of 80 cases] Jauniaux E, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(3):341-7 (34 ref.) (Eng. Abstr.) (Fre)

[Bourneville's tuberous sclerosis. Prenatal diagnosis of a case] Monnier JC, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(4):495-9 (Eng. Abstr.) (Fre)

[The obstetrical ultrasonographer and the law. Toward a medical consensus in prenatal diagnosis] Nisand I, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):23-31 (Eng. Abstr.) (Fre)

[Echography in comparing the fetal growth of infants of African and European mothers] Vialet R, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(8):1003-10 (Eng. Abstr.) (Fre)

[Doppler ultrasound and sexual impotence] Battino J. **J Mal Vasc** 1989;14(2):138-9 (Fre)

[Non-invasive methods for vascular studies in the diagnosis of deep venous thrombosis] Dauzat M, et al. **J Mal Vasc** 1988;13(3):280-5 (Eng. Abstr.) (Fre)

[Transcranial Doppler ultrasonic examination in vertebro-basilar circulatory pathology] De Bray JM, et al. **J Mal Vasc** 1989;14(3):202-5 (Eng. Abstr.) (Fre)

[Ultrasonic examination of impotence] Kercret G, et al. **J Mal Vasc** 1989;14(2):139-40 (Fre)

[Evaluation of the diagnostic reliability of combination plethysmography-Doppler. Evaluated on the basis of a prospective study of 176 patients with suspected thrombophlebitis of the limbs including 60 phlebographic correlations (letter)] Planchon B, et al. **J Mal Vasc** 1988; 13(3):290 (Fre)

[Clinical and paraclinical identification by various imaging technics of congenital anomalies of the inferior vena cava (apropos of 4 cases)] Rettori R, et al. **J Mal Vasc** 1989; 14(3):191-201 (Eng. Abstr.) (Fre)

[Pitfalls of echo-Doppler in recent venous thromboses] Sentou Y. **J Mal Vasc** 1989;14 Suppl B:56-9 (Fre)

[In vitro determination of the pressure-diameter relationship and velocity profiles by ultrasonic technics. In vivo application] Rieu R, et al. **J Physiol (Paris)** 1987; 82(3):175-82 (Eng. Abstr.) (Fre)

[Testicular echography in torsion and epididymitis. Apropos of 2 cases] Abadou H, et al. **J Radiol** 1988 Oct;69(10):603-6 (Eng. Abstr.) (Fre)

[Echographic aspects of cerebral sulci in the ante- and perinatal period] Bernard C, et al. **J Radiol** 1988 Aug-Sep; 69(8-9):521-32 (29 ref.) (Eng. Abstr.) (Fre)

[Echography in pyelocaliceal tumors] Bioncourt J, et al. **J Radiol** 1989 Feb;70(2):79-84 (Eng. Abstr.) (Fre)

[Ultrasound-guided cytopuncture and hepatic microbiopsy in focal lesions of the liver. Apropos of 160 cases] Brauner M, et al. **J Radiol** 1988 Oct;69(10):567-9 (Eng. Abstr.) (Fre)

[Vesico-ureteral reflux. Ultrasonographic aspect of endoscopic treatment (excluding follow-up)] Coche G, et al. **J Radiol** 1988 Oct;69(10):577-9 (Eng. Abstr.) (Fre)

[The value of echography in the early diagnosis of renal lesions in the Laurence-Moon-Bardet-Biedl syndrome. Apropos of a case] Colin D, et al. **J Radiol** 1989 Jan; 70(1):61-4 (Eng. Abstr.) (Fre)

[Hepatic Kaposi's sarcoma and AIDS. Ultrasonographic and x-ray computed tomographic aspects] Defalque D, et al. **J Radiol** 1988 Oct;69(10):617-20 (Eng. Abstr.) (Fre)

[Hemorrhagic hepatic complications of hepatic puncture-biopsies. Role of echography] Jousse D, et al. **J Radiol** 1988 Dec;69(12):759-62 (7 ref.) (Eng. Abstr.) (Fre)

[Value of ultrasound-guided cytopuncture in the diagnosis of hepatocellular carcinoma] Roget L, et al. **J Radiol** 1989 Feb;70(2):75-8 (Eng. Abstr.) (Fre)

[Focal infectious lesions of the renal parenchyma. Comparative contribution of echography and x-ray computed tomography] You K, et al. **J Radiol** 1988 Aug-Sep;69(8-9):509-16 (29 ref.) (Eng. Abstr.) (Fre)

[Does echography contribute to the diagnosis and treatment of acute unknown, tied or bilateral torsion of testis?] Bertrand P, et al. **J Urol (Paris)** 1988;94(9-10):455-7 (Eng. Abstr.) (Fre)

[Comparison of prostatic biopsy guided or not guided by echography] Cosciani Cunico S, et al. **J Urol (Paris)** 1989; 95(3):149-51 (Eng. Abstr.) (Fre)

[Echography and scrotal masses. Apropos of 28 verified cases] el Ouakdi M, et al. **J Urol (Paris)** 1988; 94(9-10):459-63 (14 ref.) (Eng. Abstr.) (Fre)

[Mass screening or early detection of cancer of the prostate by echography] Perrin P, et al. **J Urol (Paris)** 1988; 94(9-10):449-53 (Eng. Abstr.) (Fre)

[Prenatal echographic diagnosis of spina bifida] Coicaud C. **Neurochirurgie** 1988;34 Suppl 1:35-9 (Fre)

[Prenatal diagnosis of fetal nephro-uropathies] Cordier MP. **Pediatrie** 1988;43(7):589-95 (Eng. Abstr.) (Fre)

[Echographic aspects of midgut malrotation with volvulus in the newborn infant] Pracros JP, et al. **Pediatrie** 1988; 43(6):525-9 (Eng. Abstr.) (Fre)

[Is the focal echographic lesion of the liver in patients with cirrhosis always correlated with hepatocellular carcinoma? 217 cases] Buffet C, et al. **Presse Med** 1988 Sep 24; 17(32):1629-32 (22 ref.) (Eng. Abstr.) (Fre)

[Hepatic biopsy ultrasonically guided with an "Ingenor" thick needle in the histologic diagnosis of focal hepatic lesions (letter)] Giovannini M, et al. **Presse Med** 1988 Nov 12;17(40):2141-2 (Fre)

[Accidental discovery of renal cancer by ultrasonography] Michel F, et al. **Presse Med** 1989 Apr 1;18(13):671-4 (Eng. Abstr.) (Fre)

[Splenic iconography in Wegener's granulomatosis (letter)] Ruel M, et al. **Presse Med** 1989 Apr 8;18(14):725 (Fre)

[Echography of the flexor tendons of the fingers] Souissi M, et al. **Presse Med** 1989 Mar 4;18(9):463-6 (Eng. Abstr.) (Fre)

[Periarthritis of the shoulder. The value of echography in trophic lesions of the rotary cuff of the shoulder] Augereau B, et al. **Rev Chir Orthop** 1988;74(4):287-8 (Fre)

[The value of echography in the screening for hip dislocation] Bensahel H, et al. **Rev Chir Orthop** 1988;74 Suppl 2:105-6 (Fre)

[Contribution of echography in the course and treatment of acute osteomyelitis] Dargouth M, et al. **Rev Chir Orthop** 1989;75(4):252-8 (Eng. Abstr.) (Fre)

[Echography and extra-uterine pregnancy. Images and their pitfalls] Le Gac MP, et al. **Rev Fr Gynecol Obstet** 1988 Dec;83(12):753-819 (Fre)

[The role of ultrasonics in the diagnosis of extrauterine pregnancy] Zhiri MA. **Rev Fr Gynecol Obstet** 1989 May; 84(5):437-41 (Eng. Abstr.) (Fre)

[Ellis-Van Creveld syndrome. Apropos of a case diagnosed in utero] Frikiche A, et al. **Rev Med Liege** 1989 Jan 15; 44(2):68-72 (Fre)

[Possibilities and limitations of measuring blood flow of deep abdominal vessels using Doppler echography] Barbey F, et al. **Rev Med Suisse Romande** 1988 Sep;108(9):745-52 (Fre)

[Spectrum analysis and conventional Doppler studies in the functional evaluation of aorto-iliac stenosis] Buchheim G, et al. **Rev Med Suisse Romande** 1988 Sep;108(9):731-9 (Fre)

[Quantitative hemodynamic studies of synthetic arterial prostheses using Doppler echography] Meuli RA, et al. **Rev Med Suisse Romande** 1988 Sep;108(9):741-4 (Fre)

[Long-term study of 20 cases of proximal stenosis of the middle cerebral artery. Role of transcranial Doppler ultrasound] de Bray JM, et al. **Rev Neurol (Paris)** 1989; 145(2):117-26 (Eng. Abstr.) (Fre)

[The value of comparison of echography and sialo-tomography in the preoperative evaluation of parotid tumors] Assa A, et al. **Rev Stomatol Chir Maxillofac** 1988; 89(3):135-41 (Eng. Abstr.) (Fre)

[Echography of the soft tissues of the neck] Anderegg A. **Ther Umsch** 1989 Mar;46(3):178-84 (Eng. Abstr.) (Fre)

[Echography of the musculo-tendinous system] de Gautard R, et al. **Ther Umsch** 1989 Mar;46(3):152-7 (Eng. Abstr.) (Fre)

[The contribution of scrotal and abdominal computerized tomography in assessing malignant tumor of the testis] Jichlinski P, et al. **Ther Umsch** 1989 Mar;46(3):171-7 (Eng. Abstr.) (Fre)

[The role of ultrasonography in the study of tumors of the salivary glands] Daghfous MH, et al. **Tunis Med** 1987 Aug-Sep;65(8-9):495-8 (Eng. Abstr.) (Fre)

[Preoperative diagnosis of parathyroid adenoma using ultrasonography] Hendaoui L, et al. **Tunis Med** 1987 Feb; 65(2):115-20 (20 ref.) (Eng. Abstr.) (Fre)

[Surgically treated hydatid cyst of the liver: value of echographic control] Naija K, et al. **Tunis Med** 1987 Aug-Sep;65(8-9):499-509 (Eng. Abstr.) (Fre)

[A new diagnosis in polyneuropathy syndromes: hyperthermal laser Doppler flowmetry] Költringer P. **Acta Med Austriaca** 1988;15(3):87-91 (Eng. Abstr.) (Ger)

[Thyroid gland volumes of healthy adults in an area with endemic goiter] Oberhofer R, et al. **Acta Med Austriaca** 1989;16(2):38-41 (Eng. Abstr.) (Ger)

[Significance of ultrasound studies in the diagnosis and treatment of rupture of the Achilles tendon] Synder M, et al. **Beitr Orthop Traumatol** 1988 Oct;35(10):500-2 (Eng. Abstr.) (Ger)

[Basic abdominal ultrasound diagnosis course] **Bildgebung** 1987-89;56 Suppl 1:1-64 (Ger)

[Thromboembolus of the right heart. Sonographic detection over 6 hours] Feil A, et al. **Bildgebung** 1987-89;56(1):23-5 (Eng. Abstr.) (Ger)

[Growth curves of abdominal aortic aneurysms] Kremer H, et al. **Bildgebung** 1987-89;56(2):64-7 (Eng. Abstr.) (Ger)

[A patient with cystic adventitia degeneration and entrapment syndrome of the popliteal artery] Stapff M, et al. **Bildgebung** 1987-89;56(2):77-80 (Eng. Abstr.) (Ger)

[Sonography of the small and large intestine--differential diagnosis of wall thickening] Worlicek H. **Bildgebung** 1987-89;56(1):27-34 (Eng. Abstr.) (Ger)

[Sonography and endoscopy] **Chirurg** 1989 May;60(5):suppl 80 (Ger)

[Sonography in the diagnosis of acute colonic diverticulitis] Federmann G. **Chirurg** 1989 Jun;60(6):415-8 (Eng. Abstr.) (Ger)

[Sonographic imaging and staging of colonic tumors] Federmann G. **Chirurg** 1988 Aug;59(8):541-6 (Eng. Abstr.) (Ger)

[Intraoperative sonography of the bile ducts] Rückert K, et al. **Chirurg** 1988 Jun;59(6):407-9 (Eng. Abstr.) (Ger)

[Transesophageal ultrasonography of the spinal canal] Funck M, et al. **Dtsch Med Wochenschr** 1989 Apr 7;114(14):529-33 (Eng. Abstr.) (Ger)

[Sonographic findings in silicone-induced granulomas and lymphadenopathy following mammaplastic surgery] Herzog P, et al. **Dtsch Med Wochenschr** 1989 Jul 28; 114(30):1157-60 (Eng. Abstr.) (Ger)

[Diagnosis of kidney transplant rejection. The value of

scintigraphy, sonography and NMR tomography] Kaiser WA, et al. **Dtsch Med Wochenschr** 1988 Nov 25; 113(47):1830–6 (Eng. Abstr.) (Ger)

[Normal values of thyroid gland volume. Ultrasound measurements in schoolchildren 7 to 20 years of age] Müller–Leisse C, et al. **Dtsch Med Wochenschr** 1988 Dec 2;113(48):1872–5 (Eng. Abstr.) (Ger)

[Diagnosis of deep venous thrombosis of the legs using real–time ultrasonography (letter)] Rudofsky G. **Dtsch Med Wochenschr** 1988 Nov 4;113(44):1738–9 (Ger)

[Clinical application of 3–dimensional ultrasound display. Initial results] Sohn C, et al. **Dtsch Med Wochenschr** 1989 Apr 7;114(14):534–7 (Eng. Abstr.) (Ger)

[Three–dimensional imaging in ultrasonic diagnosis. Initial results] Sohn C, et al. **Dtsch Med Wochenschr** 1988 Nov 11;113(45):1743–7 (Eng. Abstr.) (Ger)

[Regression of fatty liver] Thaler H. **Dtsch Med Wochenschr** 1989 Aug 4;114(31–32):1224 (Ger)

[Ultrasound studies of the knee joint. Current diagnostic value] Flock K, et al. **Fortschr Med** 1988 Oct 20; 106(30):604–6 (Eng. Abstr.) (Ger)

[Ultrasound imaging of the shoulder. Diagnostic value and therapeutic consequences] Keyl W, et al. **Fortschr Med** 1988 Aug 30;106(25):511–5 (12 ref.) (Eng. Abstr.) (Ger)

[Ultrasound diagnosis following blunt abdominal trauma. Sonography in acute and follow–up diagnosis] Kohlberger EJ, et al. **Fortschr Med** 1989 Apr 10;107(11):244–7 (17 ref.) (Eng. Abstr.) (Ger)

[The prospective value of Doppler blood flow measurement in uteroplacental and fetal blood vessels—a comparative study of multiple parameters] Arabin B, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):457–62 (Eng. Abstr.) (Ger)

[Interstitial and intramural pregnancy—definition and sonographic references] Krone S, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):195–7 (Eng. Abstr.) (Ger)

[Changes in the diagnosis and therapy of extra–uterine pregnancy] Lübke F, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):172–8 (Eng. Abstr.) (Ger)

[Sonographic diagnosis of extrauterine pregnancy] Menton M, et al. **Geburtshilfe Frauenheilkd** 1988 Oct;48(10):715–9 (Eng. Abstr.) (Ger)

[The embryonal yolk sac in disordered early pregnancy] Rempen A. **Geburtshilfe Frauenheilkd** 1988 Nov; 48(11):804–8 (Eng. Abstr.) (Ger)

[Doppler flow studies (duplex sonography). Differential diagnostic assessment of intrauterine growth retardation and uncertain gestational age] Schmidt W, et al. **Geburtshilfe Frauenheilkd** 1988 Jul;48(7):512–5 (Eng. Abstr.) (Ger)

[The value of fetal blood flow measurements in intrauterine growth retardation in comparison with E3 and human placental lactogen determinations] Spernol R, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):463–5 (Eng. Abstr.) (Ger)

[Ultrasound diagnosis of thrombosis of the inferior vena cava in the puerperium] Troester U, et al. **Geburtshilfe Frauenheilkd** 1988 Dec;48(12):902–3 (Eng. Abstr.) (Ger)

[Prenatal diagnosis and prognosis of oligo–anhydramnia] Voigt HJ, et al. **Geburtshilfe Frauenheilkd** 1989 Apr; 49(4):350–6 (Eng. Abstr.) (Ger)

[Doppler sonography of the umbilical artery: differential diagnosis in intrauterine growth retardation] Weiss E, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):466–71 (Eng. Abstr.) (Ger)

[The value of hormonal and sonographic parameters in the diagnosis of disordered and normal early pregnancy] Wiedemann R, et al. **Geburtshilfe Frauenheilkd** 1989 Mar; 49(3):237–42 (Eng. Abstr.) (Ger)

[Simultaneous intra– and extrauterine pregnancy] Wittmann A. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):601–2 (Eng. Abstr.) (Ger)

[Simultaneous intra– and extrauterine pregnancy] Wittmann M. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):659–60 (Eng. Abstr.) (Ger)

[Intrauterine cerebral hemorrhage as a cause of hydrocephalus] Wunsch M, et al. **Geburtshilfe Frauenheilkd** 1989 Apr;49(4):394–5 (Eng. Abstr.) (Ger)

[Prenatal diagnosis and obstetric management in association of hydramnios and homozygosity] Zienert A, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):595–6 (Eng. Abstr.) (Ger)

[The value of ultrasound control of the positioning of intrauterine devices. Results of 654 patients] Busch G, et al. **Gynakol Rundsch** 1988;28 Suppl 2:216–20 (Ger)

[Sonographic cervix measurement in the diagnosis of cervix insufficiency] Eppel W, et al. **Gynakol Rundsch** 1988;28 Suppl 2:159–62 (Ger)

[Mammography and ultrasound in the diagnosis of clinically occult breast cancer] Gyr T, et al. **Gynakol Rundsch** 1989; 29(2):65–8 (Eng. Abstr.) (Ger)

[Prenatal diagnosis of complex vitium cordis in routine ultrasound screening] Kronich W, et al. **Gynakol Rundsch** 1988;28 Suppl 2:172–4 (Ger)

[Relation of Doppler ultrasound curves and birth weight] Rammer E, et al. **Gynakol Rundsch** 1988;28 Suppl 2:166–9 (Ger)

[Integration of pulsed Doppler ultrasound into prenatal diagnosis] Skodler W, et al. **Gynakol Rundsch** 1988;28 Suppl 2:163–5 (Ger)

[Interstitial pregnancy: ultrasound before rupture] Tamussino K, et al. **Gynakol Rundsch** 1988;28 Suppl 2:220–1 (Ger)

[Abdominal pregnancy] Weinberger W. **Gynakol Rundsch** 1988;28 Suppl 2:249–51 (Ger)

[Cervix insufficiency. Diagnosis by ultrasound and therapeutic consequences] Berg D. **Gynakologe** 1989 Jun; 22(3):150–5 (Ger)

[Ultrasound diagnosis in disordered early pregnancy] Teninde R, et al. **Gynakologe** 1988 Sep;21(3):210–9 (43 ref.) (Ger)

[Laser Doppler flowmetry in vital bone transplantation. Experimental and clinical results] Kircher H, et al. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):266–70 (Eng. Abstr.) (Ger)

[Lymph node sonography in the after care of malignant melanoma] Stutte H, et al. **Hautarzt** 1989 Jun;40(6):344–9 (Eng. Abstr.) (Ger)

[Madelung's lipomatosis of the neck—a sonographic diagnosis?] Drockur M, et al. **HNO** 1989 Mar;37(3):117–9 (Eng. Abstr.) (Ger)

[The value of sonography in salivary gland tumors] Klein K, et al. **HNO** 1989 Feb;37(2):71–5 (Eng. Abstr.) (Ger)

[The relevance of sonographic diagnosis of cervical lymph nodes in tumors of the head and neck] Koch T, et al. **HNO** 1989 Apr;37(4):144–7 (Eng. Abstr.) (Ger)

[Sonography of the neck—indications and value] Tiedjen KU, et al. **HNO** 1988 Jul;36(7):267–76 (Eng. Abstr.) (Ger)

[Changes in ultrasonic findings in the liver in relation to parenteral nutrition with long chain triglyceride and medium chain triglyceride/long chain triglyceride lipid solutions] Baldermann H, et al. **Infusionstherapie** 1988 Aug; 15(4):140–3 (Eng. Abstr.) (Ger)

[Sonography and controlled fine needle puncture of the thyroid gland] Pfannenstiel P. **Internist (Berlin)** 1988 Aug; 29(8):545–9 (30 ref.) (Ger)

[Chronic increased cholestasis parameters and sonographic echogenic round liver lesions in a clinically healthy male] Spengler U, et al. **Internist (Berlin)** 1989 Apr;30(4):265–8 (Ger)

[Sonography in the diagnosis of Hodgkin's disease in childhood and adolescence] Lemmer A, et al. **Kinderarztl Prax** 1989 May;57(5):229–34 (Eng. Abstr.) (Ger)

[Clinical contribution to the sonographic diagnosis and perinatal treatment of fetal ovarian cysts] Sander I, et al. **Kinderarztl Prax** 1988 Aug;56(8):395–9 (Eng. Abstr.) (Ger)

[Accessory spleen torsion. Clinical picture, sonographic diagnosis and differential diagnosis] Müller H, et al. **Klin Padiatr** 1988 Sep–Oct;200(5):419–21 (Eng. Abstr.) (Ger)

[Sonographic visualization and size determination of the abdominal organs in healthy newborn infants] Peters H, et al. **Klin Padiatr** 1988 Sep–Oct;200(5):393–8 (Eng. Abstr.) (Ger)

[Ultrasound study of congenital mesoblastic nephroma] Zeilinger G, et al. **Klin Padiatr** 1988 Jul–Aug;200(4):321–3 (Eng. Abstr.) (Ger)

[Diagnosis of very early arteriosclerosis vascular changes using Duplex sonography] Ludwig M, et al. **Klin Wochenschr** 1989 Apr 17;67(8):442–6 (Eng. Abstr.) (Ger)

[Experimental ultrasonic study of imaging of vascular implants] Langer M, et al. **Langenbecks Arch Chir** 1988; 373(4):235–9 (Eng. Abstr.) (Ger)

[Ultrasound control of spongiosa transplant—support of radiologic diagnosis] Reith HB, et al. **Langenbecks Arch Chir** 1989;374(1):39–45 (Eng. Abstr.) (Ger)

[The value of sonography in assessing bone transplants—an experimental study] Reith HB, et al. **Langenbecks Arch Chir** 1989;374(3):146–9 (Eng. Abstr.) (Ger)

[The value of ultrasound diagnosis in blunt abdominal and thoracic injuries] Strittmatter B, et al. **Langenbecks Arch Chir** 1988;373(4):202–5 (Eng. Abstr.) (Ger)

[Echo laryngography. A contribution to the method of ultrasonic diagnosis of the larynx] Böhme G. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):551–8 (Eng. Abstr.) (Ger)

[Detection and assessment of cervical lymph node metastases in head–neck tumors. A comparison of methods] Heppt W, et al. **Laryngorhinootologie** 1989 Jun;68(6):327–32 (Eng. Abstr.) (Ger)

[Ultrasound controlled fine needle cytology and fine needle histology in circumscribed pancreatic processes] Fröhlich E, et al. **Leber Magen Darm** 1988 Sep;18(5):236, 239–44 (Eng. Abstr.) (Ger)

[Inhomogeneous enlargement of the spleen] Frölich E. **Leber Magen Darm** 1989 Mar;19(2):81, 100 (Ger)

[Sonographic diagnosis of the gastrointestinal tract] Becher HJ, et al. **Med Klin** 1989 Feb 15;84(2):103–9, 120 (65 ref.) (Ger)

[Comparison of sonographic and roentgenologic findings in the paranasal sinuses in children] Hussein A, et al. **Monatsschr Kinderheilkd** 1988 Oct;136(10):686–9 (Eng. Abstr.) (Ger)

[Differential "adrenal gland tumor–adrenal gland hemorrhage" diagnosis. A sonographic follow–up] Kellnar S, et al. **Monatsschr Kinderheilkd** 1989 Jun;137(6):347–9 (Eng. Abstr.) (Ger)

[The pathogenesis of stroke in patients with negative Doppler sonographic findings] Weiller C, et al. **Nervenarzt** 1989 Mar;60(3):149–53 (Ger)

[Sonographic volume determination of the thyroid in newborn infants] Einenkel D. **Padiatr Grenzgeb** 1989; 28(2):79–83 (Eng. Abstr.) (Ger)

[New non–invasive possibilities for assessing the function of the utero– and fetoplacental unit: Doppler sonography flow characteristics of selected arteries in normal pregnancy] Mager R, et al. **Padiatr Grenzgeb** 1989;28(3):131–8 (Eng. Abstr.) (Ger)

[Sonographic demonstration of intracranial changes in congenital toxoplasmosis] Schwalbe J. **Padiatr Grenzgeb** 1988;27(4):239–44 (Eng. Abstr.) (Ger)

[Xanthogranulomatous pyelonephritis in early childhood] Emhofer J, et al. **Padiatr Padol** 1989;24(2):141–7 (Eng. Abstr.) (Ger)

[You make the diagnosis. Acute postinfectious glomerulonephritis. Grade IV left and grade III right vesico–ureteral reflux. Bilateral high–grade reflux nephropathy with left atrophic kidney and right focal parenchymal scar] Ring E, et al. **Padiatr Padol** 1989; 24(1):77–80 (Ger)

[The combination of scintigraphy and sonography in the diagnosis of an autonomous adenoma of the thyroid gland. Determination of the impulse–thickness–quotient] Klaus M, et al. **Radiobiol Radiother (Berl)** 1988;29(4):469–74 (Eng. Abstr.) (Ger)

[Ultrasonic tomography in the diagnosis of recurrences of rectal cancer] Balter SA, et al. **Radiol Diagn (Berl)** 1989; 30(1):21–6 (Eng. Abstr.) (Ger)

[Experimental (in vivo and in vitro) ultrasonography of Vx2 renal carcinoma] Baranyai T, et al. **Radiol Diagn (Berl)** 1988;29(6):835–44 (Eng. Abstr.) (Ger)

[Diagnostic possibilities of ultrasonography of diseases of the parotid gland] Boroń Z. **Radiol Diagn (Berl)** 1988; 29(6):845–8 (Eng. Abstr.) (Ger)

[Value of ultrasonography in the diagnosis of pleural diseases in children] Boroń Z, et al. **Radiol Diagn (Berl)** 1988; 29(6):849–56 (Eng. Abstr.) (Ger)

[Ultrasonic tomography—a noninvasive, imaging study method in lumbar canal diagnosis] Hagen A, et al. **Radiol Diagn (Berl)** 1988;29(5):719–27 (Eng. Abstr.) (Ger)

[Sonographic and endoscopic diagnosis of bladder tumors in children] Herrmann E, et al. **Radiol Diagn (Berl)** 1988; 29(3):431–6 (Eng. Abstr.) (Ger)

[Study of the lymph nodes in the mandibulofacial region and the neck using ultrasonic tomography] Saratschev E, et al. **Radiol Diagn (Berl)** 1988;29(4):625–7 (Eng. Abstr.) (Ger)

[Interpretation of sonographic findings of space–occupying processes of the kidneys] Stobbe G, et al. **Radiol Diagn (Berl)** 1988;29(5):707–12 (Eng. Abstr.) (Ger)

[Angionephroscintigraphy and sonography in the diagnosis of kidney tumors] Zubovski GA, et al. **Radiol Diagn (Berl)** 1988;29(5):797–804 (Eng. Abstr.) (Ger)

[Ultrasound versus abdominal visualization of a problem abdomen in a young patient? An unusual cause of epigastric pain] Beck A, et al. **Radiologe** 1989 Feb;29(2):89–91 (Eng. Abstr.) (Ger)

[Perthes' disease. Accuracy potentials and the value of sonography] Dörr U, et al. **Radiologe** 1989 Apr;29(4):182–6 (Eng. Abstr.) (Ger)

[Differential sonographic diagnosis of focal liver lesions] Görich J, et al. **Radiologe** 1988 Aug;28(8):349–55 (53 ref.) (Ger)

[Predictive value of magnetic resonance tomography in comparison with sonography and computed tomography in the diagnosis of focal liver lesions] Hauenstein KH, et al. **Radiologe** 1988 Aug;28(8):362–9 (Eng. Abstr.) (Ger)

[Echographic localization diagnosis of enlarged parathyroid glands] Lorenz D, et al. **Radiologe** 1989 Jan;29(1):18–22 (Eng. Abstr.) (Ger)

[Coxitis fugax. The sonographic and radiologic picture in 65 cases] Meradji M, et al. **Radiologe** 1988 Oct;28(10):473–8 (Eng. Abstr.) (Ger)

[Detection of superior mesenteric vein thrombosis following splenectomy using real–time and Doppler sonography] Mildenberger P, et al. **Radiologe** 1988 Aug;28(8):395–8 (Eng. Abstr.) (Ger)

[The value of computer–assisted sonographic tissue characterization in focal lesions of the thyroid] Müller MJ, et al. **Radiologe** 1989 Mar;29(3):132–6 (Eng. Abstr.) (Ger)

[Invagination. The present status of diagnostic imaging and therapy] Müller–Leisse C, et al. **Radiologe** 1988 Oct; 28(10):466–72 (57 ref.) (Eng. Abstr.) (Ger)

[Sonography of the thyroid gland] Sciuk J, et al. **Radiologe** 1989 Mar;29(3):95–102 (38 ref.) (Eng. Abstr.) (Ger)

[How has conventional radiology of children been changed by sonography? (editorial)] Tröger J. **Radiologe** 1988 Oct; 28(10):457–9 (Ger)

[Mediastinal sonography in childhood. Results of 310 studies] von Lengerke HJ, et al. **Radiologe** 1988 Oct;28(10):460–5

(Eng. Abstr.) (Ger)
[Ultrasound-guided fine-needle puncture of the thyroid] Wiedemann W, et al. **Radiologe** 1989 Mar;29(3):109–18 (12 ref.) (Eng. Abstr.) (Ger)
[Sonography of experimental hypovascularized kidney tumors] Baranyai T, et al. **ROFO** 1988 Dec;149(6):654–9 (Eng. Abstr.) (Ger)
[Ultrasonic diagnosis following liver transplantation] Barton P, et al. **ROFO** 1989 Aug;151(2):145–53 (Eng. Abstr.) (Ger)
[Laryngeal and hypopharyngeal carcinoma—the limits and advantages of sonography] Braun U, et al. **ROFO** 1989 Jul;151(1):23–6 (Eng. Abstr.) (Ger)
[Sonography of gallbladder carcinoma. Correlation with surgical findings in 60 cases] Frank W, et al. **ROFO** 1989 May;150(5):556–61 (Eng. Abstr.) (Ger)
[Diagnosis of liver trauma: ultrasound versus computed tomography] Grabenwöger F, et al. **ROFO** 1989 Feb; 150(2):163–6 (16 ref.) (Eng. Abstr.) (Ger)
[Experimental studies on the earliest echographic manifestations of incipient pancreatitis and pancreatic necrosis] Maier W. **ROFO** 1988 Nov;149(5):522–5 (Eng. Abstr.) (Ger)
[Sonographic evaluation of the rotator cuff following reconstruction of complete ruptures] Meizer C, et al. **ROFO** 1988 Oct;149(4):408–13 (Eng. Abstr.) (Ger)
[The value of sonography in the differential diagnosis of soft tissue tumors] Merk H, et al. **ROFO** 1989 Feb;150(2):183–6 (Eng. Abstr.) (Ger)
[Sonographic staging of pancreatic cancer. Report of 100 cases] Pichler W, et al. **ROFO** 1989 Mar;150(3):241–5 (Eng. Abstr.) (Ger)
[Sonography and cytology of cold thyroid nodules] Pristautz H, et al. **ROFO** 1989 Mar;150(3):250–4 (Eng. Abstr.) (Ger)
[Sonographic differential diagnosis of extrahepatic cholestasis] Schilling T, et al. **ROFO** 1989 Jul;151(1):10–4 (Eng. Abstr.) (Ger)
[Hip joint sonography in skeletal dysplasias with metaphyseal involvement. Possibilities of erroneous assessments] Schumacher R, et al. **ROFO** 1988 Oct;149(4):414–6 (Eng. Abstr.) (Ger)
[Doppler color sonography of a pseudoaneurysm of the femoral artery] Siewert B, et al. **ROFO** 1989 Apr; 150(4):475–6 (Ger)
[Comparison of raster mammography and real time sonography with histology in carcinoma of the breast] Stauch G, et al. **ROFO** 1988 Oct;149(4):402–7 (Eng. Abstr.) (Ger)
[Endorectal sonography in rectal cancer] Strunk H, et al. **ROFO** 1988 Oct;149(4):420–2 (Eng. Abstr.) (Ger)
[Angiodynography of idiopathic varicocele compared to conventional methods] Thomas C, et al. **ROFO** 1989 May; 150(5):573–6 (Eng. Abstr.) (Ger)
[Sonographic diagnosis of pneumothorax] Wernecke K, et al. **ROFO** 1989 Jan;150(1):84–5 (Eng. Abstr.) (Ger)
[The effects of sonography on breast diagnosis—a 10-year retrospective (1977–1987)] Duda V. **Rontgenblatter** 1989 Mar;42(3):130–3 (Eng. Abstr.) (Ger)
[Typical sonographic findings in hemihepatectomized or partially hepatectomized patients] Helzel MV. **Rontgenblatter** 1988 Sep;41(9):374–9 (Eng. Abstr.) (Ger)
[Sonographic leg length measurement] Holst A, et al. **Rontgenblatter** 1989 Mar;42(3):134–8 (Eng. Abstr.) (Ger)
[Abdominal sonographic findings in patients with AIDS] Langer R, et al. **Rontgenblatter** 1989 Mar;42(3):121–5 (Eng. Abstr.) (Ger)
[Palpation and sonography of lymph node metastasis of the neck] Leicher-Düber A, et al. **Rontgenblatter** 1989 May; 42(5):195–8 (Eng. Abstr.) (Ger)
[Sonographic diagnosis of head and neck tumors in association with therapy] Mende U, et al. **Rontgenblatter** 1989 Jan;42(1):19–23 (Eng. Abstr.) (Ger)
[Interventional measures under sonographic control for diagnosis and therapy] Otto RC. **Rontgenblatter** 1988 Oct; 41(10):419–25 (30 ref.) (Eng. Abstr.) (Ger)
[Color-coded Doppler sonography in pregnancy] Schwaighofer B, et al. **Rontgenblatter** 1989 Mar;42(3):126–9 (Eng. Abstr.) (Ger)
[Bone metastases diagnosed by ultrasound] Stellamor K, et al. **Rontgenblatter** 1989 Feb;42(2):73–6 (Eng. Abstr.) (Ger)
[Scrotal changes in the 3.5 MHz ultrasound image] Wakat JP, et al. **Rontgenblatter** 1988 Jul;41(7):304–9 (Eng. Abstr.) (Ger)
[A comparison of the quantified determination of the echogeneity of the liver by ultrasound and the density of the liver by CT] Zendel W, et al. **Rontgenblatter** 1989 Mar; 42(3):114–7 (Eng. Abstr.) (Ger)
[Sonographic diagnosis of focal changes of the liver] Pirschel J. **Rontgenpraxis** 1989 Aug;42(8):278–84 (24 ref.) (Ger)
[Sonoanatomy, sonopathology and diagnostic possibilities of knee joint sonography] Reimer P, et al. **Rontgenpraxis** 1989 Jan;42(1):11–6 (Ger)
[The value of fine-needle biopsy under ultrasonic control in the diagnosis of kidney tumors] Landolt-Weber U, et al. **Schweiz Rundsch Med Prax** 1989 Jan 24;78(4):66–9 (Eng. Abstr.) (Ger)
[A case from practice (120). Female patient: M. B., born 9-24-1967] Meili R. **Schweiz Rundsch Med Prax** 1988 Nov 22;77(47):1302–3 (Ger)
[Sonography of Achilles tendon changes in athletes] Gondolph-Zink B, et al. **Sportverletz Sportschaden** 1987 Jun;1(2):96–9 (Eng. Abstr.) (Ger)
[Real time sonography in sports specific tendon injuries] Hannesschläger G, et al. **Sportverletz Sportschaden** 1988 Dec;2(4):133–46 (Eng. Abstr.) (Ger)
[High resolution real time sonography in sports specific muscle injuries. Sonomorphologic-anatomic correlation and diagnostic criteria] Hannesschläger G, et al. **Sportverletz Sportschaden** 1988 Jun;2(2):45–54 (Eng. Abstr.) (Ger)
[Possibilities for using sonography in sports injuries of the shoulder joint] Jerosch VJ, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):74–80 (35 ref.) (Eng. Abstr.) (Ger)
[Excessive stress damage of the lower extremity caused by sports. The value of sonographic diagnosis in stress damage of the lower extremity] Löffler L, et al. **Sportverletz Sportschaden** 1988 Dec;2(4):147–52 (Eng. Abstr.) (Ger)
[Experimental and clinical results of ultrasound imaging in sports orthopedic soft tissue diseases] Pfister A. **Sportverletz Sportschaden** 1987 Sep;1(3):130–41 (Eng. Abstr.) (Ger)
[Ultrasound diagnosis of soft tissue injuries of the locomotor system] Pfister A, et al. **Sportverletz Sportschaden** 1987 Jun; 1(2):91–5 (Eng. Abstr.) (Ger)
[Ultrasonics in the diagnosis and follow-up of tumors of the inner nose and paranasal sinuses] Hamann KF. **Strahlenther Onkol** 1989 Jun;165(6):452–4 (Eng. Abstr.) (Ger)
[Sonography of the shoulder] Hodler J, et al. **Ther Umsch** 1989 Mar;46(3):158–63 (Eng. Abstr.) (Ger)
[Prenatal sonographic diagnosis of abnormalities] Neuenschv ander E. **Ther Umsch** 1988 Oct;45(10):688–95 (Eng. Abstr.) (Ger)
[Ultrasonic study of the breast: examination technic—criteria for diagnosis] Otto R. **Ther Umsch** 1989 Mar;46(3):185–93 (Eng. Abstr.) (Ger)
[Sonography of the hip in infants] Tschäppeler H. **Ther Umsch** 1989 Mar;46(3):164–70 (Eng. Abstr.) (Ger)
[On the 60th birthday of Prof. G. Rettenmaier] **Ultraschall Med** 1989 Jun;10(3):105–89 (Ger)
[Phlegmonous inflammation of the large intestine: a sonographic diagnosis?] Appel W, et al. **Ultraschall Med** 1988 Aug;9(4):189–90 (Eng. Abstr.) (Ger)
[Sonographic changes in the size of the kidneys in type I diabetes as a method of early detection of diabetic nephropathy] Banholzer P, et al. **Ultraschall Med** 1988 Dec; 9(6):255–9 (Eng. Abstr.) (Ger)
[Circulation studies and transcranial Doppler sonography in orthostatic regulation disorders] Briebach T, et al. **Ultraschall Med** 1988 Oct;9(5):223–6 (Eng. Abstr.) (Ger)
[Doppler sonography findings in arteritis temporalis] Brunhölzl C, et al. **Ultraschall Med** 1988 Oct;9(5):232–6 (Eng. Abstr.) (Ger)
[Flow measurements in extracranial carotid arteries by means of duplex sonography. Results in normal subjects] Donis J, et al. **Ultraschall Med** 1988 Oct;9(5):216–22 (38 ref.) (Eng. Abstr.) (Ger)
[Voiding urethrosonography. An alternative to roentgen urethrography] Dörnberger V, et al. **Ultraschall Med** 1988 Dec;9(6):279–85 (Eng. Abstr.) (Ger)
[Sonographic detection of hygroma colli in the fetus] Friese K, et al. **Ultraschall Med** 1989 Feb;10(1):25–8 (Eng. Abstr.) (Ger)
[Doppler sonographic characterization of vessels of the posterior cranial fossa using a suboccipital paramedian approach] Fritz W, et al. **Ultraschall Med** 1988 Oct; 9(5):229–31 (Eng. Abstr.) (Ger)
[Sonographic diagnosis of acute intestinal ischemia] Gebhardt J. **Ultraschall Med** 1989 Jun;10(3):158–63 (Eng. Abstr.) (Ger)
[Sonography of the diaphragmatic pleura in tumor patients] Görg C, et al. **Ultraschall Med** 1988 Dec;9(6):274–8 (Eng. Abstr.) (Ger)
[Ultrasonography in the primary diagnosis and follow up of ovarian tumors] Grischke EM, et al. **Ultraschall Med** 1988 Oct;9(5):204–11 (Eng. Abstr.) (Ger)
[Sonography in cystoid cervical space occupying lesions] Gritzmann N. **Ultraschall Med** 1988 Aug;9(4):148–54 (Eng. Abstr.) (Ger)
[Differential diagnostic importance of sonographically detected lymph node enlargement of the liver hilum in non-malignant liver diseases] Kathrein H, et al. **Ultraschall Med** 1989 Jun;10(3):127–31 (Eng. Abstr.) (Ger)
[Ultrasound as a medium of communication] Langer M. **Ultraschall Med** 1989 Feb;10(1):7–9 (Eng. Abstr.) (Ger)
[Sonography of adrenal gland diseases in the newborn infant] Leidig E. **Ultraschall Med** 1988 Aug;9(4):155–62 (Eng. Abstr.) (Ger)
[Sonographic volumetry of pleural effusions] Lorenz J, et al. **Ultraschall Med** 1988 Oct;9(5):212–5 (Eng. Abstr.) (Ger)
[Image quality of various venous catheters in ultrasound under standardized conditions] Möllmann M, et al. **Ultraschall Med** 1989 Feb;10(1):44–6 (Eng. Abstr.) (Ger)
[Ultrasound in terminal renal failure—etiologic conclusions?] Mostbeck G, et al. **Ultraschall Med** 1988 Dec;9(6):250–4 (Eng. Abstr.) (Ger)
[Sonographic detection of fasciculations] Reimers CD, et al. **Ultraschall Med** 1988 Oct;9(5):237–9 (Eng. Abstr.) (Ger)
[Sonographic diagnosis of hepatocellular carcinoma. Results of a retrospective study 1983–1989] Reuss J, et al. **Ultraschall Med** 1989 Jun;10(3):111–4 (Eng. Abstr.) (Ger)
[The effect of body position on uterine blood flow in the 3d trimester of pregnancy] Sohn C, et al. **Ultraschall Med** 1989 Feb;10(1):10–4 (Eng. Abstr.) (Ger)
[Sonography as a screening examination method of the venous system in pregnancy. Comparative studies of the arm and leg vein system] Sohn C, et al. **Ultraschall Med** 1988 Aug;9(4):191–5 (Eng. Abstr.) (Ger)
[Changes in renal echogenicity in pediatric obstructive uropathies] Vergesslich KA, et al. **Ultraschall Med** 1988 Aug;9(4):163–8 (Eng. Abstr.) (Ger)
[Highly differentiated primary liver cell carcinoma. 2 case reports] von Klinggräff G. **Ultraschall Med** 1989 Jun; 10(3):115–8 (Eng. Abstr.) (Ger)
[Size relations of the spleen and lymph nodes in normal and pathologic processes] Watzinger F, et al. **Ultraschall Med** 1989 Feb;10(1):29–32 (Eng. Abstr.) (Ger)
[Sonographic diagnosis of choledochus cysts] Weishorn HD, et al. **Ultraschall Med** 1989 Jun;10(3):132–5 (Eng. Abstr.) (Ger)
[Psychological effect of ultrasound examination on patients, relatives and the technician] Wittmann BK, et al. **Ultraschall Med** 1989 Feb;10(1):2–6 (Eng. Abstr.) (Ger)
[Ultrasound sonography in the diagnosis and follow-up of Achilles tendon rupture] Thermann H, et al. **Unfallchirurg** 1989 Jun;92(6):266–73 (Eng. Abstr.) (Ger)
[Does sonographic kidney morphology and morphometry provide evidence of pediatric kidney function?] Egghart G, et al. **Urologe [A]** 1988 Jul;27(4):198–203 (Eng. Abstr.) (Ger)
[Hydatid torsion as a cause of acute scrotum—clinical, sonographic and anatomic aspects] Kuber W, et al. **Urologe [A]** 1989 Jan;28(1):40–4 (Eng. Abstr.) (Ger)
[Diagnosis of a venous fistula as a cause of erection disorders. Experimental principles and practical conclusions] Stief CG, et al. **Urologe [A]** 1989 May;28(3):172–6 (Eng. Abstr.) (Ger)
[Assessing the age of the thrombus in venous thrombosis using sonographic and phlebographic criteria] De la Hammette D, et al. **Vasa Suppl** 1988;26:123–6 (Ger)
[Assessment of umbilical vein transplants using digital subtraction angiography, duplex sonography and color-coded Doppler sonography] Gritzmann N, et al. **Vasa Suppl** 1988;26:30–2 (Ger)
[Duplex sonography of aortic and bifurcation prostheses] Gritzmann N, et al. **Vasa Suppl** 1988;26:33–7 (Ger)
[The value of high resolution ultrasound in the assessment of tumorous vascular infiltrations of the large cervical vessels] Helmer M, et al. **Vasa Suppl** 1988;26:22–4 (Ger)
[Noninvasive assessment of Cimino-Brescia fistulas and polytetrafluoroethylene shunts with duplex sonography] Kathrein H, et al. **Vasa Suppl** 1988;26:39–41 (Ger)
[Diagnosis of symptomatic plaque of the carotid arteries in patients with neurologic ischemic symptoms] Rüthlein VM, et al. **Vasa Suppl** 1988;23:202–5 (Ger)
[Noninvasive, quantitative flow measurement of the femoral artery: significance for the diagnosis and therapy of peripheral arterial occlusive disease] Scheffler P, et al. **Vasa Suppl** 1988;23:103–7 (Ger)
[Pre- and postoperative quantitative flow measurements (electromagnetic and sonographic) in the assessment of surgical results in carotid stenoses] Walter P, et al. **Vasa Suppl** 1988;23:238–40 (Ger)
[Duplex sonographic follow-up after carotid thrombendarterectomy and patch-plasty] Zwicker C, et al. **Vasa Suppl** 1988;26:15–7 (Ger)
[Intra-arterial digital subtraction angiography and duplex sonography of hemodialysis shunts] Zwicker C, et al. **Vasa Suppl** 1988;26:42–4 (Ger)
[Sonographic diagnosis of the pancreas] Braun B. **Verh Dtsch Ges Inn Med** 1988;94:554–9 (Ger)
[Ultrasound imaging of the pancreas] Dancygier H. **Verh Dtsch Ges Inn Med** 1988;94:79–89 (28 ref.) (Ger)
[Ultrasound in internal medicine. The gallbladder and bile ducts] Gebhardt J. **Verh Dtsch Ges Inn Med** 1988;94:549–54 (11 ref.) (Ger)
[Ultrasound in internal medicine. The spleen and lymph nodes] Kremer H, et al. **Verh Dtsch Ges Inn Med** 1988; 94:576–81 (Ger)
[Indications and significance of percutaneous abdominal sonography in comparison with computerized tomography] Otto RC. **Verh Dtsch Ges Inn Med** 1988;94:637–44 (17 ref.) (Ger)
[Sonography of the thyroid gland] Utech C. **Verh Dtsch Ges Inn Med** 1988;94:581–6 (5 ref.) (Ger)
[Focal and diffuse liver changes] von Klinggräff G. **Verh Dtsch Ges Inn Med** 1988;94:543–8 (13 ref.) (Ger)
[Ultrasound in internal medicine. The kidney and urinary tract] Weiss H. **Verh Dtsch Ges Inn Med** 1988;94:568–76 (40 ref.) (Ger)
[The value of prenatal ultrasound screening exemplified by abnormalities of the urogenital system. Data from the Styrian malformation register 1985 to 1987] Häusler M, et al. **Wien Klin Wochenschr** 1989 May 12;101(10):346–50 (Eng. Abstr.) (Ger)
[Ultrasound screening in pregnancy—a critical analysis of

the literature] Köck C. **Wien Klin Wochenschr** 1989 May 12;101(10):341–5 (20 ref.) (Eng. Abstr.) (Ger)

[Benign prostatic hyperplasia] Bauer HW, et al. **Wien Med Wochenschr** 1989 May 31;139(10):229–34 (30 ref.) (Eng. Abstr.) (Ger)

[Ultrasonic evaluation of the upper abdomen in cystic fibrosis] Wiemann D, et al. **Z Erkr Atmungsorgane** 1988; 171(2):163–7 (Eng. Abstr.) (Ger)

[Sonography in the diagnosis of appendicitis—a prospective study] Blank W, et al. **Z Gastroenterol** 1988 Nov; 26(11):708–14 (Eng. Abstr.) (Ger)

[Sonographic diagnosis of bile duct cancers] Schulz M, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:207–10 (Ger)

[Delayed bone growth as a sonographic sign in the early detection of Smith–Lemli–Opitz syndrome] Degenhardt F, et al. **Z Geburtshilfe Perinatol** 1988 Jul–Aug;192(4):169–72 (Eng. Abstr.) (Ger)

[Doppler ultrasound studies before and following short–term maternal stress in late pregnancy] Drack G, et al. **Z Geburtshilfe Perinatol** 1988 Jul–Aug;192(4):173–7 (Eng. Abstr.) (Ger)

[Prune belly syndrome. Prenatal diagnosis and obstetric procedure] Gnirs J, et al. **Z Geburtshilfe Perinatol** 1988 May–Jun;192(3):114–21 (Eng. Abstr.) (Ger)

[Histologic placenta findings in prolonged pregnancy: correlation of placental retarded maturation, fetal outcome and Doppler sonographic findings in the umbilical artery] Hitschold T, et al. **Z Geburtshilfe Perinatol** 1989 Jan–Feb; 193(1):42–6 (Eng. Abstr.) (Ger)

[Doppler sonography of the umbilical artery, mode of delivery and perinatal morbidity in prolonged pregnancy] Hitschold T, et al. **Z Geburtshilfe Perinatol** 1988 Sep–Oct; 192(5):197–202 (Eng. Abstr.) (Ger)

[Tubal pregnancies: early pregnancy factor, progesterone, beta–HCG and vaginal sonography as differential diagnostic parameters] Mesrogli M, et al. **Z Geburtshilfe Perinatol** 1988 May–Jun;192(3):130–2 (Eng. Abstr.) (Ger)

[Involution–induced changes in arterial uterine blood flow] Sohn C, et al. **Z Geburtshilfe Perinatol** 1988 Sep–Oct; 192(5):203–9 (Eng. Abstr.) (Ger)

[An enlarged neck fold: a sonographic marker of Down's syndrome] Weisner D, et al. **Z Geburtshilfe Perinatol** 1988 May–Jun;192(3):142–4 (Eng. Abstr.) (Ger)

[Changes of the gallbladder wall in the sonogram] Adolph W, et al. **Z Gesamte Inn Med** 1989 Jun 15;44(12):367–9 (25 ref.) (Eng. Abstr.) (Ger)

[Incidence and significance of renal cell carcinoma as an incidental sonographic finding] Helke H, et al. **Z Gesamte Inn Med** 1989 May 1;44(9):281–2 (Eng. Abstr.) (Ger)

[In which sonographic thyroid gland findings is scintigraphy unnecessary?] Köthe A, et al. **Z Gesamte Inn Med** 1989 Mar 1;44(5):157–8 (Eng. Abstr.) (Ger)

[Ultrasonic diagnosis of gallstone diseases] Wermke W. **Z Gesamte Inn Med** 1989 Jul 1;44(13):377–82 (13 ref.) (Eng. Abstr.) (Ger)

[Doppler sonographic diagnosis of secondary popliteal and femoral vein insufficiency] Stranzenbach W. **Z Hautkr** 1989 Jan 15;64(1):7 (Ger)

[Intraoperative sonography for the localization of kidney calculi in children] Kellnar S, et al. **Z Kinderchir** 1988 Oct; 43(5):347–9 (Eng. Abstr.) (Ger)

[Sonography of the thyroid gland in children] Klingmüller V, et al. **Z Kinderchir** 1989 Jun;44(3):135–8 (Eng. Abstr.) (Ger)

[Sonographic assessment of typical lesions in shoulder dislocation] Hinzmann J, et al. **Z Orthop** 1988 Sep–Oct; 126(5):570–3 (Eng. Abstr.) (Ger)

[Comment on the contribution: "Hip screening in newborn infants" by M. Pauer et al. Z. Orthop. 126 (1988) 260–265] Melzer C. **Z Orthop** 1989 Mar–Apr;127(2):265–7 (Ger)

[Clinical and sonographic study of the infant hip. A prospective study] Pfeil J, et al. **Z Orthop** 1988 Dec; 126(6):629–36 (Eng. Abstr.) (Ger)

[Comment on the publication "Sonographic follow–up of hip dysplasia with expanding trouser therapy" (letter)] van Moppes FI, et al. **Z Orthop** 1988 Jul–Aug;126(4):461–4 (Eng. Abstr.) (Ger)

[Status of sonography in the diagnosis of the pathologic shoulder] Weinstabl R, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(3):157–64 (Ger)

[Dynamic cavernosonography in the diagnosis of vascular–induced impotence] Darewicz J, et al. **Z Urol Nephrol** 1989 Jan;82(1):35–7 (Eng. Abstr.) (Ger)

[Diagnosis of perforation of the kidney pelvis using sonography] Krauss M. **Z Urol Nephrol** 1988 Nov; 81(11):693–6 (Eng. Abstr.) (Ger)

[Sonographic studies in odontogenic maxillary sinus diseases] Nitzschke M, et al. **Zahn Mund Kieferheilkd** 1989; 77(1):29–33 (Eng. Abstr.) (Ger)

[Neuropathology and prenatal medicine (editorial)] Jänisch W. **Zentralbl Allg Pathol** 1989;135(1):3–4 (Ger)

[Doppler ultrasound procedures in the diagnosis of occlusive processes of the supra–aortic arteries] Kornotzki M, et al. **Zentralbl Chir** 1988;113(20):1315–9 (Eng. Abstr.) (Ger)

[Soft tissue diagnosis of the shoulder joint using sonography, computerized tomography and magnetic resonance tomography (MRT)] Mellerowicz H, et al. **Zentralbl Chir** 1989;114(4):209–21 (15 ref.) (Eng. Abstr.) (Ger)

[The effectiveness of sonography in preoperative thyroid diagnosis] Strittmatter B, et al. **Zentralbl Chir** 1989; 114(9):597–602 (Eng. Abstr.) (Ger)

[Comment on the article "Non–immunologic fetal ascites—case report"] Brühwiler H. **Zentralbl Gynakol** 1989;111(12):841–4 (Ger)

[Possibilities for the use of ultrasonography in the puerperium] Demečko D, et al. **Zentralbl Gynakol** 1989; 111(4):211–6 (Eng. Abstr.) (Ger)

[Is a quantitatively exact prediction of expected birth weight possible using the sonographically determined parameters of biparietal diameter, thoracic diameter and length of the humerus? A prospective study of 285 pregnant patients] Göttlicher S, et al. **Zentralbl Gynakol** 1988;110(19):1206–12 (Eng. Abstr.) (Ger)

[Sonography of fetal growth behavior in maternal diabetes mellitus] Hielscher K, et al. **Zentralbl Gynakol** 1989; 111(3):148–54 (Eng. Abstr.) (Ger)

[A space–occupying lesion of the placenta in the 3d trimester with progressive placental insufficiency] Meinen K, et al. **Zentralbl Gynakol** 1988;110(19):1243–6 (Eng. Abstr.) (Ger)

[Ultrasonic detection of a tumor of the posterior cranial fossa in an infant] Barta M, et al. **Orv Hetil** 1989 Aug 20; 130(34):1829–31 (29 ref.) (Eng. Abstr.) (Hun)

[Detection of increased intracranial pressure by transcranial Doppler sonography in infants] György I, et al. **Orv Hetil** 1989 Aug 6;130(32):1703–6 (Eng. Abstr.) (Hun)

[Transvaginal ultrasonic studies] Jakab Z, et al. **Orv Hetil** 1989 Sep 3;130(36):1933–6 (Eng. Abstr.) (Hun)

[Significance of ultrasonic studies in urologic diagnosis] Romics I. **Orv Hetil** 1989 Jan 15;130(3):129–32 (Eng. Abstr.) (Hun)

[Neonatal bronchogenic cyst diagnosed by ultrasound] Rudas G, et al. **Orv Hetil** 1989 Jan 15;130(3):133–5 (Eng. Abstr.) (Hun)

[Vaginal ultrasonography: a new testing method in obstetrics and gynecology] Timor–Tritsch IE, et al. **Orv Hetil** 1989 Jun 4;130(23):1203–7 (Eng. Abstr.) (Hun)

[Ultrasonic diagnosis of agenesis of the corpus callosum] Váradi V, et al. **Orv Hetil** 1989 Jul 2;130(27):1437–40 (Eng. Abstr.) (Hun)

[Ultrasonic image and differential diagnosis of partial fatty liver] Weszelits V, et al. **Orv Hetil** 1988 Jul 3; 129(27):1427–30 (Eng. Abstr.) (Hun)

[The role of intraoperative ultrasonic studies in abdominal surgery] Winternitz T, et al. **Orv Hetil** 1989 Jun 25; 130(26):1377–8, 1381–2 (27 ref.) (Eng. Abstr.) (Hun)

[The contribution of the Doppler method in the diagnosis of Raynaud's syndrome] Bourneles N, et al. **Acta Biomed Ateneo Parmense** 1988;59(5–6):229–32 (Eng. Abstr.) (Ita)

[Transcranial pulsed Doppler in the diagnosis of cerebrovascular pathology: methodology, indications and limitations] Tecchio T, et al. **Acta Biomed Ateneo Parmense** 1988;59(3–4):123–9 (Eng. Abstr.) (Ita)

[Role fo ultrasound in the study of latero–cervical metastases] Casolino D, et al. **Acta Otorhinolaryngol Ital** 1989 Jan–Feb; 9(1):33–40 (Eng. Abstr.) (Ita)

[Ultrasound N staging in head and neck neoplasms: is an "umbilicate" image a sign of benignity?] Lunghi F, et al. **Acta Otorhinolaryngol Ital** 1986 Sep–Oct;6(5):479–85 (Eng. Abstr.) (Ita)

[Study of nodular lesions of the thyroid using high–resolution echography and echo–guided biopsy] Gidaro GS. **Ann Ital Chir** 1987;59(1–6):123–6 (Eng. Abstr.) (Ita)

[Intraoperative echography as an aid in the surgery of renal lithiasis] Marinucci R, et al. **Ann Ital Chir** 1987; 59(1–6):201–4 (Eng. Abstr.) (Ita)

[Endoluminal echography in the preoperative evaluation of the patient with cancer of the rectum and early diagnosis of local recurrence] Mascagni D, et al. **Ann Ital Chir** 1987; 59(1–6):223–31 (Ita)

[Echography in the study of expansive processes of the parotid] Panzironi G, et al. **Ann Ital Chir** 1987; 59(1–6):335–41 (Eng. Abstr.) (Ita)

[Breast echography] **Ann Ostet Ginecol Med Perinat** 1989; Spec No:1–113 (Ita)

[Echo–guided biopsy] Belli I. **Ann Ostet Ginecol Med Perinat** 1989;Spec No:92–4 (22 ref.) (Ita)

[Breast echography: the first approach in breast examination] Dambrosio F. **Ann Ostet Ginecol Med Perinat** 1989;Spec No:17–31 (13 ref.) (Ita)

[Palpation, echography and echopalpation of the breast: results of a comparison] Dambrosio F. **Ann Ostet Ginecol Med Perinat** 1989;Spec No:32–43 (Ita)

[Doppler velocimetry: differential diagnosis of small fetus and intrauterine growth retardation] Ferrazzi E, et al. **Ann Ostet Ginecol Med Perinat** 1988 Mar–Apr;109(2):90–8 (Eng. Abstr.) (Ita)

[Follow–up of carcinoma of the breast: ultrasonic diagnosis in post–operative locoregional control] Poma S, et al. **Ann Ostet Ginecol Med Perinat** 1989;Spec No:95–100 (Ita)

[Reproducibility of the echographic biometry of the uterus] Zorzoli A, et al. **Ann Ostet Ginecol Med Perinat** 1988 Jul–Aug;109(4):229–32 (Eng. Abstr.) (Ita)

[Ultrasound–guided fetal intravascular blood transfusion] Zuliani G, et al. **Ann Ostet Ginecol Med Perinat** 1988 May–Jun;109(3):169–78 (Eng. Abstr.) (Ita)

[Echographic evaluation of single renal cysts] Scardavi M, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):485–8 (Eng. Abstr.) (Ita)

[Echography in patients with chronic renal insufficiency] Scardavi M, et al. **Boll Soc Ital Biol Sper** 1988 Apr; 64(4):349–52 (Eng. Abstr.) (Ita)

[Diagnostic usefulness of Doppler sonography in the study of cerebrovascular pathology] Guzzetti A, et al. **Chir Ital** 1988 Apr;40(2):156–8 (Eng. Abstr.) (Ita)

[Usefulness of Doppler echography in the diagnosis of upper thoracic outlet syndrome] Guzzetti A, et al. **Chir Ital** 1988 Apr;40(2):152–5 (Eng. Abstr.) (Ita)

[Surgical and echographic comparison in Morton's neuroma] Caruso S, et al. **Chir Organi Mov** 1988 Apr–Jun;73(2):145–7 (Eng. Abstr.) (Ita)

[Leg lengthening: the value of echography in the evaluation of various phases of bone regeneration] Peretti G, et al. **Chir Organi Mov** 1988 Jan–Mar;73(1):53–8 (Eng. Abstr.) (Ita)

[Cysts of the popliteal cavity: use of echographic examination] Tricarico A, et al. **Chir Organi Mov** 1988 Jan–Mar;73(1):59–63 (Eng. Abstr.) (Ita)

[Diagnostic imaging in the evaluation of abdominal masses in childhood] Gualdi GF, et al. **Clin Ter** 1988 Feb 15; 124(3):227–31 (Ita)

[Cases of nonvisualized gallbladder by echography] Marotta F, et al. **G Clin Med** 1988 Dec;69(12):751–2, 754 (Eng. Abstr.) (Ita)

[Collateral circulation of the portal vein: evaluation and comparative study using conventional radiography of the esophagus, digestive endoscopy and abdominal echotomography] Salvioni D, et al. **G Clin Med** 1988 Apr; 69(4):265–9 (Eng. Abstr.) (Ita)

[Cruveilhier–Baumgarten souffle] Salmi A, et al. **Medicina (Firenze)** 1988 Jul–Sep;8(3):302–4 (Eng. Abstr.) (Ita)

[Importance of endoscopic and ultrasound evaluation in the study of liver cirrhosis] Salmi A, et al. **Medicina (Firenze)** 1988 Jul–Sep;8(3):304–6 (Eng. Abstr.) (Ita)

[Computerized ultrasonic angiography. Current applications and comparison with other noninvasive and invasive methods] Belcaro G, et al. **Minerva Cardioangiol** 1988 Apr; 36(4):189–92 (Eng. Abstr.) (Ita)

[Clinical indications for performing Doppler ultrasonography of the extracranial carotid vessels. A series of 805 subjects] Manetti CF, et al. **Minerva Cardioangiol** 1989 Apr; 37(4):193–200 (Eng. Abstr.) (Ita)

[Carotid echography using a Duplex scanner: therapeutic planning] Mascoli F, et al. **Minerva Cardioangiol** 1988 Jul–Aug;36(7–8):381–3 (Eng. Abstr.) (Ita)

[Usefulness of the duplex scan in the pathogenetic interpretation of episodes of amaurosis fugax] Pignocchino P, et al. **Minerva Cardioangiol** 1988 May;36(5):227–30 (15 ref.) (Eng. Abstr.) (Ita)

[Evaluation of the efficacy of a phlebotropic drug by the Doppler method] Severin E, et al. **Minerva Cardioangiol** 1988 Jul–Aug;36(7–8):375–6 (Eng. Abstr.) (Ita)

[Intra–operative echographic exploration of the hepatobiliopancreatic system] Ciulli A, et al. **Minerva Chir** 1989 Feb 28;44(4):555–9 (0 ref.) (Ita)

[Echography of the breast. Indications, criteria and diagnostic possibilities] Durante E, et al. **Minerva Chir** 1989 Feb 15;44(3):405–17 (18 ref.) (Ita)

[Doppler in peripheral arterial and venous pathology] Gioffrè L, et al. **Minerva Chir** 1989 Feb 28;44(4):693–7 (17 ref.) (Ita)

[Role of echography in the diagnosis of visceral ischemic syndrome] Sartini G, et al. **Minerva Chir** 1989 Apr 30; 44(8):1249–51 (Eng. Abstr.) (Ita)

[Imaging in senology] Tetti C. **Minerva Chir** 1988 Sep 30; 43(18 Suppl):9–11 (Ita)

[Ultrasonic diagnosis of fetal ovarian cysts] Fiaschetti D, et al. **Minerva Ginecol** 1989 Jan;41(1):35–7 (Eng. Abstr.) (Ita)

[Role of the ultrasonic examination in the diagnosis of pelvic pathology] Pagano G, et al. **Minerva Ginecol** 1989 Feb; 41(2):79–84 (Eng. Abstr.) (Ita)

[Prenatal diagnosis of cystic duplication of the intestine. Clinical contribution] Pizzo V, et al. **Minerva Ginecol** 1988 Dec;40(12):737–41 (Eng. Abstr.) (Ita)

[Prenatal diagnosis of some cases of malformative fetal diseases] Rocco V, et al. **Minerva Ginecol** 1988 Nov; 40(11):661–4 (Eng. Abstr.) (Ita)

[Echography in the prenatal diagnosis of congenital diaphragmatic hernia] Suma V, et al. **Minerva Ginecol** 1988 Aug;40(8):493–6 (Ita)

[Ultrasonic criteria for the evaluation of placentation in twin pregnancies] Uccello N, et al. **Minerva Ginecol** 1989 Feb; 41(2):75–7 (Eng. Abstr.) (Ita)

[The efficacy of echography in the diagnosis of gallbladder carcinoma] Benelli B, et al. **Minerva Med** 1989 Mar; 80(3):237–9 (Eng. Abstr.) (Ita)

[The clinical prognostic importance of routine study of the aorta during abdominal echotomography in the elderly patient] Borrè A, et al. **Minerva Med** 1989 Feb;80(2):123–7 (Eng. Abstr.) (Ita)

[Comparison of high–resolution arterial echography and angiography in the diagnosis of atheromatous lesions of the external carotid] Caneschi S, et al. **Minerva Med** 1989

Feb;80(2):101–4 (Eng. Abstr.) (Ita)
[Partial rupture of biliary cyst of large dimensions. Clinical description and ultrasonic diagnosis] Farinelli F, et al. **Minerva Med** 1988 Oct;79(10):903–6 (Eng. Abstr.) (Ita)
[A preliminary communication on the possibility of the differential diagnosis of breast nodules by Doppler ultrasonography] Gallo E, et al. **Minerva Med** 1989 May; 80(5):439–41 (Eng. Abstr.) (Ita)
[Hemobilia. The echographic findings in a dialyzed patient] Karakaci F, et al. **Minerva Med** 1989 May;80(5):497–500 (Eng. Abstr.) (Ita)
[Echotomography in abdominal emergencies. Apropos of 16 controlled clinical cases. (A description of some of them)] Monaci R, et al. **Minerva Med** 1989 Feb;80(2):117–21 (Eng. Abstr.) (Ita)
[Ultrasonographic diagnosis of the retroperitoneal space. A case history series and some selected clinical cases] Monaci R, et al. **Minerva Med** 1989 Apr;80(4):349–55 (Eng. Abstr.) (Ita)
[Ultrasonic diagnosis of 22 gastric tumors] Monaci R, et al. **Minerva Med** 1988 Oct;79(10):897–901 (Eng. Abstr.) (Ita)
[Clinical evaluation of phlebopathies of the lower limbs using Doppler ultrasonography] Scagno C, et al. **Minerva Med** 1988 Dec;79(12):1079–83 (Eng. Abstr.) (Ita)
[Echographic assessment of residual thyroid in incomplete excisional interventions. Comments on 38 patients] Tambussi U, et al. **Minerva Med** 1989 Jul;80(7):759–61 (Ita)
[Pelvic echography in the differential diagnosis of isolated precocious thelarche and true precocious puberty] Arrigo T, et al. **Minerva Pediatr** 1988 May;40(5):269–72 (Eng. Abstr.) (Ita)
[Echographic diagnosis and follow-up of suprarenal hematoma in neonates] Bona G, et al. **Minerva Pediatr** 1988 Sep;40(9):551–5 (Eng. Abstr.) (Ita)
[Comparative evaluation of echography and C.A.T. in diagnosing retinoblastoma] Nucci P, et al. **Minerva Pediatr** 1989 Mar;41(3):129–31 (Eng. Abstr.) (Ita)
[Acquired renal cysts in hemodialysis patients: ultrasonic assessment] Perino GC, et al. **Minerva Urol Nefrol** 1988 Oct–Dec;40(4):317–22 (Ita)
[Prenatal diagnostic approach to the fetus with short limbs] Barbieri GL, et al. **Pathologica** 1988 Sep–Oct; 80(1069):577–81 (Eng. Abstr.) (Ita)
[Cytodiagnosis using ultrasound-guided transcutaneous aspiration with fine needle of focal liver masses] Fregonese D, et al. **Pathologica** 1988 Sep–Oct;80(1069):573–6 (Eng. Abstr.) (Ita)
[Echographic examination in the screening of hip dysplasia in newborn infants and infants] Barbolini G, et al. **Pediatr Med Chir** 1989 Mar–Apr;11(2):185–9 (Eng. Abstr.) (Ita)
[Hematocolpos from an imperforate hymen in children. Clinical and ultrasonic aspects] Bolesani C, et al. **Pediatr Med Chir** 1988 Sep–Oct;10(5):517–9 (Eng. Abstr.) (Ita)
[Ultrasonic diagnosis and clinical medicine. Inaugural address from the President of the Italian Society of Ultrasonics in Medicine and Biology at the MEDI–ECO Congress. Palermo, 28–30 April 1989] **Radiol Med (Torino)** 1989 May; 77(5):447–50 (Ita)
[Ultrasonic diagnosis and other techniques of forming an image. Inaugural address presented at the MEDI–ECO Congress. Palermo, 28–30 April 1989] **Radiol Med (Torino)** 1989 May;77(5):445–6 (Ita)
[Pseudotumorous "skip area" in subtotal hepatic steatosis. Echographic and computed tomographic aspects] Alessi V, et al. **Radiol Med (Torino)** 1988 Oct;76(4):280–3 (Eng. Abstr.) (Ita)
[Renal parenchymal neoplasm as a chance finding during hepatobiliary echography] Angelini F, et al. **Radiol Med (Torino)** 1989 Mar;77(3):214–6 (Eng. Abstr.) (Ita)
[Candidiasis of the kidney pelvis: importance of the urography/echography correlation] Bagnolesi P, et al. **Radiol Med (Torino)** 1988 Dec;76(6):649–52 (Ita)
[Renal amyloidosis. An echographic study of 7 cases] Bagnolesi P, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):434–7 (Eng. Abstr.) (Ita)
[Tumors of the testis. Correlations between echographic, macroscopic and histological features in 48 cases] Barozzi L, et al. **Radiol Med (Torino)** 1989 Jun;77(6):663–7 (Eng. Abstr.) (Ita)
[Echographic and radiographic aspects of a case of Burkitt's lymphoma] Barozzi L, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):499–501 (Ita)
[Testicular feminization syndrome. An echographic study of one family] Barozzi L, et al. **Radiol Med (Torino)** 1988 Oct; 76(4):360–2 (Ita)
[Simple or orthotopic ureterocele. Echographic study of an unusual case] Bartoli E, et al. **Radiol Med (Torino)** 1989 Mar;77(3):278–80 (Ita)
[The role of echography in the diagnosis of neonatal clavicular fractures] Bartoli E, et al. **Radiol Med (Torino)** 1989 May;77(5):466–9 (Eng. Abstr.) (Ita)
[Echographic aspect of 2 rare soft-tissue neoplasms: chordoid sarcoma and neurotekeoma] Battaglia S, et al. **Radiol Med (Torino)** 1988 Nov;76(5):502–4 (Ita)
[Doppler echo in evaluating arteriovenous fistulae for dialysis] Belli L, et al. **Radiol Med (Torino)** 1989 Apr; 77(4):391–4 (Eng. Abstr.) (Ita)
[Peyronie's disease. Ultrasonic evaluation] Bock E, et al. **Radiol Med (Torino)** 1988 Dec;76(6):601–3 (Eng. Abstr.) (Ita)
[Diagnostic contribution of echography in a case of schistosomiasis] Borzio F, et al. **Radiol Med (Torino)** 1989 Jun;77(6):709–10 (Ita)
[Meniscal injuries of the knee: arthrographic and echographic study] Corbetti F, et al. **Radiol Med (Torino)** 1989 Mar; 77(3):187–94 (Eng. Abstr.) (Ita)
[Diagnostic imaging of renal tumors of small dimensions] Dalla Palma L, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):590–6 (Eng. Abstr.) (Ita)
[Echography compared with conventional radiology in Osgood–Schlatter disease] Delle Monache C, et al. **Radiol Med (Torino)** 1989 Jun;77(6):631–4 (Eng. Abstr.) (Ita)
[Potentials of the echographic documentation of hip epiphysiolysis] De Pellegrin M, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):70–2 (Eng. Abstr.) (Ita)
[Congenital hip dislocation. The clinico–echographic correlations] Di Giandomenico V, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):38–43 (Eng. Abstr.) (Ita)
[Differential diagnostic problems in the echographic study of adrenal metastases] Ferrari F, et al. **Radiol Med (Torino)** 1989 Apr;77(4):369–72 (Eng. Abstr.) (Ita)
[Hemorrhagic lymph node metastasis from testicular carcinoma. The echo–CT–MR correlations] Ferrozzi F, et al. **Radiol Med (Torino)** 1989 Mar;77(3):283–5 (Ita)
[Evaluation of the usefulness of ultrasonics in the diagnosis of cancerous cirrhosis. Comparison with CT] Garretti L, et al. **Radiol Med (Torino)** 1988 Sep;76(3):187–92 (Eng. Abstr.) (Ita)
[Echo–guided renal biopsy in patients with a medical nephropathy] Goddi A, et al. **Radiol Med (Torino)** 1989 Mar;77(3):235–8 (Eng. Abstr.) (Ita)
[Cysts of the seminal vesicles associated with homolateral renal agenesis. Echotomographic verification] Gremo L, et al. **Radiol Med (Torino)** 1989 Mar;77(3):281–2 (Ita)
[Role of CT and US in the diagnosis of myelolipoma of the adrenal glands] Lamorgese B. **Radiol Med (Torino)** 1989 Jun;77(6):668–71 (Eng. Abstr.) (Ita)
[Traumatic hematomas of the adrenal glands: CT and US findings in 3 cases] Liessi G, et al. **Radiol Med (Torino)** 1988 Dec;76(6):610–3 (Eng. Abstr.) (Ita)
[The impact of echo–guided percutaneous biopsy in the diagnosis of focal hepatic lesions] Lorenzoni A, et al. **Radiol Med (Torino)** 1989 Mar;77(3):230–4 (Eng. Abstr.) (Ita)
[Echographic diagnosis of biliary ileus. A case discussion] Mancuso S, et al. **Radiol Med (Torino)** 1989 Jul–Aug; 78(1–2):121–2 (Ita)
[Evolution of the echographic picture in primary liver tumor associated with cirrhosis] Mazzola G, et al. **Radiol Med (Torino)** 1989 May;77(5):488–92 (Eng. Abstr.) (Ita)
[Malignant hemangioendothelioma.The CT and ultrasonographic aspects of a case located retroperitoneally] Nardi P, et al. **Radiol Med (Torino)** 1989 Mar;77(3):287–9 (Ita)
[Subhepatic infected bile collection: scintigraphic diagnosis and the the echotomographic contribution in a clinical case] Palagi B, et al. **Radiol Med (Torino)** 1989 Jul–Aug; 78(1–2):123–5 (Ita)
[Echographic aspects of a case of primary leiomyosarcoma of the rectum] Pavlica P, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):139–41 (Ita)
[Abdominal aortic aneurysms. Comparison of magnetic resonance, ultrasound, CT x-ray and angiography] Pavone P, et al. **Radiol Med (Torino)** 1988 Sep;76(3):168–73 (Eng. Abstr.) (Ita)
[The effect of age and sex on gallbladder motor dynamics. An echographic study] Pazzi P, et al. **Radiol Med (Torino)** 1989 Apr;77(4):365–8 (Eng. Abstr.) (Ita)
[Gastric lymphomas. The role of echotomography] Potente G, et al. **Radiol Med (Torino)** 1989 May;77(5):478–81 (Eng. Abstr.) (Ita)
[Echographic diagnosis of Peyronie's disease] Principalle M, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):74–8 (Eng. Abstr.) (Ita)
[A case of hydrometrocolpos observed prenatally by echography] Riboni G, et al. **Radiol Med (Torino)** 1989 Mar;77(3):285–7 (Ita)
[Ultrasonography in abdominal emergencies] Risi D, et al. **Radiol Med (Torino)** 1989 May;77(5):485–7 (Eng. Abstr.) (Ita)
[Pancreatic cystic neoplasms. Echographic–CT aspects and differential diagnosis] Rossi A, et al. **Radiol Med (Torino)** 1988 Nov;76(5):425–33 (Eng. Abstr.) (Ita)
[The current importance of thyroid echography in the clinical definition of "hot" scintigraphic nodules. Apropos of a case of thyroid ectopia simulating Plummer's adenoma] Santaniello B, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):504–6 (Ita)
[ERCP in the diagnosis of bilio–pancreatic pathology. Comparison with echography and CT] Scarabino T, et al. **Radiol Med (Torino)** 1989 Jun;77(6):650–4 (Eng. Abstr.) (Ita)
[Transvaginal echography: initial experiences in oncologic gynecology] Squillaci E, et al. **Radiol Med (Torino)** 1989 Jun;77(6):658–62 (Eng. Abstr.) (Ita)
[Echography in renal parenchymal tumors in the adult] Stasi G, et al. **Radiol Med (Torino)** 1989 Mar;77(3):250–66 (79 ref.) (Ita)
[Echotomographic diagnosis of a case of schwannoma of the median nerve] Tabasso MD. **Radiol Med (Torino)** 1989 May;77(5):569–72 (Ita)
[Medullary sponge kidney in childhood: the diagnostic contribution of echography] Talenti E, et al. **Radiol Med (Torino)** 1989 Mar;77(3):290–2 (Ita)
[Reliability of intrarectal echography in the staging of the T parameter in carcinoma of the medial and inferior third of the rectum] Vallone G, et al. **Radiol Med (Torino)** 1988 Dec;76(6):580–3 (Eng. Abstr.) (Ita)
[Course of acquired renal cystic disease. An ultrasonic follow–up study] Veneziano S, et al. **Radiol Med (Torino)** 1989 Jun;77(6):655–7 (Eng. Abstr.) (Ita)
[Papillary nephrocarcinoma: radiographic and echographic aspects] Veneziano S, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):584–9 (Eng. Abstr.) (Ita)
[Echotomography and hyperechoic angiomas of the liver. The structural aspects in 297 cases] Volterrani L, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):57–60 (Eng. Abstr.) (Ita)
[Hemorrhagic aneurysm of the celiac trunk. Diagnosis by ultrasound, CT and angiography] Ziviello M, et al. **Radiol Med (Torino)** 1988 Oct;76(4):274–9 (Eng. Abstr.) (Ita)
[Importance of echography in the study of urinary tract infections in childhood] Zocchi M, et al. **Radiol Med (Torino)** 1988 Dec;76(6):597–600 (Eng. Abstr.) (Ita)
[Transcranial Doppler in cerebrovascular diseases] Borgatti E. **Recenti Prog Med** 1988 Sep;79(9):379–81 (Eng. Abstr.) (Ita)
[Routine abdominal ultrasonography in hospitalized patients? (letter)] Lovati R, et al. **Recenti Prog Med** 1989 Mar; 80(3):176 (Ita)
[Therapy with L-thyroxine in thyroid struma. Study with ultrasonic evaluation] Peta M, et al. **Recenti Prog Med** 1989 Jun;80(6):320–5 (Eng. Abstr.) (Ita)
[Studies on mechanism and clinical significance of ultrasonographical gallbladder wall thickening in liver diseases] Haraguchi Y. **Fukuoka Igaku Zasshi** 1988 Aug; 79(8):615–35 (Eng. Abstr.) (Jpn)
[Diagnostic imaging of small liver tumors] Honda, et al. **Gan No Rinsho** 1988 Aug;34(10):1478–83 (Eng. Abstr.) (Jpn)
[Ultrasonic examination of the breast lesions] Kasumi F, et al. **Gan No Rinsho** 1988 Aug;34(10):1388–96 (Eng. Abstr.) (Jpn)
[Non-vascular interventional radiology—percutaneous ethanol injection (PEI) in hepatocellular carcinoma smaller than 3 cm in diameter] Ebara M, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3311–8 (Eng. Abstr.) (Jpn)
[Utility of endoscopic ultrasonography of malignant tumors of the gastrointestinal tract] Nakazawa S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1188–93 (Eng. Abstr.) (Jpn)
[2 cases of intermittent hydronephrosis—usefulness of ultrasonography] Futamura M, et al. **Hinyokika Kiyo** 1989 Apr;35(4):647–52 (Eng. Abstr.) (Jpn)
[Adrenal tumors discovered incidentally on ultrasonography: three case reports] Honda M, et al. **Hinyokika Kiyo** 1989 Apr;35(4):631–5 (Eng. Abstr.) (Jpn)
[Severity of aortic stenosis assessed by Doppler techniques] Nakamura K, et al. **J Cardiol** 1987 Dec;17(4):807–16 (Eng. Abstr.) (Jpn)
[Detection of mural thrombi and analysis of blood flow velocities in the left atrial appendage using transesophageal two-dimensional echocardiography and pulsed Doppler flowmetry] Suetsugu M, et al. **J Cardiol** 1988 Jun; 18(2):385–94 (Eng. Abstr.) (Jpn)
[Pregnancy diagnosis by the ultrasonographical device and observation of fetal growth in the squirrel monkey (Saimiri sciureus)] Narita H, et al. **Jikken Dobutsu** 1988 Oct; 37(4):393–7 (Eng. Abstr.) (Jpn)
[Diagnosis of fetal structural heart disease, using ultrasonics] Chiba Y. **Kokyu To Junkan** 1989 Jun;37(6):639–45 (Jpn)
[Correlations between serum ANF concentration and cardiac functional indices assessed by two-dimensional echocardiography and pulse Doppler method in various cardiac diseases] Liang H, et al. **Kokyu To Junkan** 1988 Oct;36(10):1089–94 (Eng. Abstr.) (Jpn)
[Pulmonary arteriovenous fistula (PAVF) diagnosed by two-dimensional Doppler echography] Suda H, et al. **Kyobu Geka** 1989 Mar;42(3):226–8 (Eng. Abstr.) (Jpn)
[Analysis of ultrasound B-mode histogram in thyroid tumors] Morifuji H. **Nippon Geka Gakkai Zasshi** 1989 Feb; 90(2):210–21 (Eng. Abstr.) (Jpn)
[Ultrasonographic findings of adhesion ileus—with special reference to surgical indications] Ogata M, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1641–6 (Eng. Abstr.) (Jpn)
[Lymph node metastases in the thoraco-cervical transitional

region in thoracic esophageal cancer—with ultrasonic detection and a comment on the guide lines] Yoshinaka H, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):496–503 (Eng. Abstr.) **(Jpn)**

[Comparison of digital examination and transrectal sonography in the assessment of prostatic diseases] Itakura Y. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug; 79(8):1328–36 (Eng. Abstr.) **(Jpn)**

[Evaluation of the long-term effect of anti-androgen therapy by sonometrics in patients with benign prostatic hypertrophy] Kimura A, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1697–702 (Eng. Abstr.) **(Jpn)**

[Usefulness of ultrasonography in follow-up of postoperative pelviureteric dilatation in children] Kotoh S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):387–95 (Eng. Abstr.) **(Jpn)**

[An application of 2D-Doppler color flow mapping to the prostate] Miyashita H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):235–8 (Eng. Abstr.) **(Jpn)**

[Relationship between subjective symptom and presumed circle area ratio (PCAR) in benign prostatic hypertrophy] Ohnishi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):424–30 (Eng. Abstr.) **(Jpn)**

[Evaluation of clinical efficacy of transrectal sonography and computed tomography for prostatic diseases] Watanabe H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul; 79(7):1202–9 (Eng. Abstr.) **(Jpn)**

[Divergence in the evaluation of the ultrasonogram of a liver tumor] Higashi Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25; 48(12):1497–502 (Eng. Abstr.) **(Jpn)**

[High-resolution ultrasound of the thyroid in patients with Graves' disease] Iwasawa T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):249–52 (Eng. Abstr.) **(Jpn)**

[Analysis of the poor visualization of the pancreas on ultrasonography] Kanazawa S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):680–6 (Eng. Abstr.) **(Jpn)**

[Ultrasonographic diagnosis of mild fatty infiltration of the liver with the difference between liver and kidney echolevels] Kojima K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Feb 25; 49(2):153–62 (Eng. Abstr.) **(Jpn)**

[Ultrasonically guided splenic biopsy in patients with malignant lymphoma] Suzuki T. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):982–7 (Eng. Abstr.) **(Jpn)**

[Ultrasonography of mucoceles of paranasal sinuses—a secondary report] Shiono H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jul;91(7):1042–8 (Eng. Abstr.) **(Jpn)**

[Hydronephrosis due to obstruction of the urinary tract detected by fetal echography and also detected soon after birth] Iitaka K, et al. **Nippon Jinzo Gakkai Shi** 1988 Nov; 30(11):1283–92 (Eng. Abstr.) **(Jpn)**

[Ultrasound Doppler as a technic for assessing total renal function] Yura T, et al. **Nippon Jinzo Gakkai Shi** 1988 Oct; 30(10):1253–8 (Eng. Abstr.) **(Jpn)**

[Ultrasound Doppler as a technic for assessing split renal function] Yura T, et al. **Nippon Jinzo Gakkai Shi** 1988 Oct; 30(10):1259–63 (Eng. Abstr.) **(Jpn)**

[Diagnostic determination of the extent of esophageal cancer by operative ultrasonography—assessment of aortic invasion] Machi J, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1228–37 (Eng. Abstr.) **(Jpn)**

[Estimation of pulmonary artery pressure by measuring the size of the right pulmonary artery with transesophageal ultrasonographic endoscopy] Kobayashi J, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):512–8 (Eng. Abstr.) **(Jpn)**

[A case of esophageal leiomyoma diagnosed by transesophageal ultrasonic endoscopy] Oka M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):536–40 (Eng. Abstr.) **(Jpn)**

[Ultrasonically guided aspiration needle biopsy in the diagnosis of intrapulmonary lesions] Saito T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep;26(9):970–4 (Eng. Abstr.) **(Jpn)**

[Symposium on diagnosis and treatment of cancer. Recent progress. I. Diagnosis 2. Imaging diagnosis. (1) Ultrasonography and computed tomography] Fukuda M. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1646–50 (19 ref.) **(Jpn)**

[Visceral larva migrans by Toxocara cati with multiple nodules in liver] Mitsugi K, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1742–3 **(Jpn)**

[Diagnosis of pulmonary hypertension in patients with systemic lupus erythematosus with special reference to pulsed Doppler technique] Shimizu M, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):700–1 **(Jpn)**

[Diagnostic ability of ultrasonography for very small cancer] Kitamura T, et al. **Nippon Rinsho** 1989 May;47(5):1031–6 **(Jpn)**

[A case of congenital chylous ascites] Asada M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):231–3 **(Jpn)**

[Development of a system for ultrasonic three-dimensional reconstruction of fetus] Baba K. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Apr; 41(4):419–26 (Eng. Abstr.) **(Jpn)**

[Early diagnosis of the cervical incompetency by the ultrasonography] Hirano H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May;41(5):571–6 (Eng. Abstr.) **(Jpn)**

[Computer processing of the ultrasonic Doppler actographic fetal movement signals] Nagata N. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):203–9 (Eng. Abstr.) **(Jpn)**

[Intrauterine intravascular fetal transfusion under ultrasonic guide in Rh isoimmunization: a case report] Tanigawara S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May; 41(5):621–4 **(Jpn)**

[Evaluation of the new method with saline injection in endoscopic ultrasonography] Bando T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1629–43 (Eng. Abstr.) **(Jpn)**

[Ultrasonic determination of the common carotid and brachial artery blood flow in patients with acute hepatic failure—with special reference to a decrease in common carotid artery blood flow and its relationship with brain edema] Komori H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):764–72 (Eng. Abstr.) **(Jpn)**

[Diagnosis of hepatocellular carcinoma using tumor Doppler signals] Nakamura T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1649–55 (Eng. Abstr.) **(Jpn)**

[Ultrasound imaging of the muscle in muscular dystrophy] Nishimura M, et al. **No To Hattatsu** 1989 May;21(3):234–8 (Eng. Abstr.) **(Jpn)**

[Cerebral lesions of congenital viral infection detected by cranial ultrasound] Yamashita Y, et al. **No To Hattatsu** 1988 Nov;20(6):509–11 **(Jpn)**

[Diagnosis of the infiltrating depth of the colonic cancer by endoscopic ultrasonography (EUS)] Aibe T, et al. **Rinsho Hoshasen** 1989 May;34(5):555–61 (Eng. Abstr.) **(Jpn)**

[Ultrasound and radiological diagnosis of primary splenic tumors] Iwasaki M, et al. **Rinsho Hoshasen** 1988 Jun; 33(6):673–8 (Eng. Abstr.) **(Jpn)**

[Ultrasonic evaluation of two cases of primary lymphoma of the intestine] Matsumoto K, et al. **Rinsho Hoshasen** 1989 May;34(5):625–8 (Eng. Abstr.) **(Jpn)**

[A case of hyperechoic regenerative nodule in liver cirrhosis] Niizawa M, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1031–3 (Eng. Abstr.) **(Jpn)**

[Ultrasonography in acute appendicitis. A prospective study of 129 patients with clinically suspected acute appendicitis] Ludvigsen TC, et al. **Tidsskr Nor Laegeforen** 1988 Oct 20; 108(29):2479–81 (Eng. Abstr.) **(Nor)**

[Ultrasonic diagnosis of hip joints in newborn infants] Markestad T. **Tidsskr Nor Laegeforen** 1988 Oct 10; 108(28):2349–51 **(Nor)**

[Cerebral ultrasonic examination of newborn infants] Meberg A. **Tidsskr Nor Laegeforen** 1988 Sep 30;108(27):2250–3 (Eng. Abstr.) **(Nor)**

[Ultrasonics in testicular torsion] Roald HE, et al. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1071 (Eng. Abstr.) **(Nor)**

[Prolonged pregnancies. A comparison before and after introduction of ultrasonics] Sviggum O, et al. **Tidsskr Nor Laegeforen** 1989 Jan 10;109(1):41–4 (Eng. Abstr.) **(Nor)**

[Ultrasonic examination of hip joints in newborn infants] Terjesen T, et al. **Tidsskr Nor Laegeforen** 1988 Oct 10; 108(28):2359–63 (Eng. Abstr.) **(Nor)**

[Value of ultrasonic examination in the evaluation of morphological changes in the thyroid gland] Woźniak-Stolarska B, et al. **Endokrynol Pol** 1988; 39(4):197–206 (Eng. Abstr.) **(Pol)**

[Ultrasonographic evaluation of the development of the fetal kidneys (as on of the morphometric parameters)] Sawicki W, et al. **Ginekol Pol** 1988 Nov;59(11):672–5 (Eng. Abstr.) **(Pol)**

[Usefulness of ultrasonic evaluation of the ophthalmic artery branches by the Doppler method in the diagnosis of marked stenosis and occlusion of the internal carotid artery] Rozenfeld A, et al. **Neurol Neurochir Pol** 1988 Sep-Oct; 22(5):377–82 (Eng. Abstr.) **(Pol)**

[Value of ultrasonic examination in the differential diagnosis of kidney diseases. I. Clinical studies] Bażko E, et al. **Pol Przegl Radiol (Warszawa)** 1987 Sep-Oct;51(5):255–62 (Eng. Abstr.) **(Pol)**

[Value of ultrasonic examination in the differential diagnosis of kidney diseases. II—Statistical evaluation] Bażko E, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jan-Feb;52(1):29–32 (Eng. Abstr.) **(Pol)**

[Possibilities and place of USG in the diagnosis of pleural diseases] Boroń Z. **Pol Przegl Radiol (Warszawa)** 1988 May-Jun;52(3):131–4 (Eng. Abstr.) **(Pol)**

[Evaluation of ultrasonic examination in the diagnosis of acute abdominal diseases] Borowik M, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jan-Feb;52(1):23–8 (Eng. Abstr.) **(Pol)**

[Value of ultrasonography and computerized tomography in the diagnosis of Budd-Chiari syndrome] Elwertowski M, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jul-Oct; 52(4-5):209–15 (Eng. Abstr.) **(Pol)**

[Bibliography of Polish publications on ultrasonic diagnosis 1980-1986] Jakubowski W, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov-Dec;51(6):331–6, 299, 309 passim **(Pol)**

[Changes in the renal echostructure in children in relation to age] Kobryń A. **Pol Przegl Radiol (Warszawa)** 1988 Jul-Oct;52(4-5):224–6 (Eng. Abstr.) **(Pol)**

[Comparison of the diagnostic effectiveness of USG and CT in evaluating the degree of progression of cancer of the kidneys] Studniarek M, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jul-Oct;52(4-5):219–23 (Eng. Abstr.) **(Pol)**

[Value of ultrasonographic examination in monitoring the treatment of advanced cancer of the stomach] Wojnar J, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jul-Oct; 52(4-5):216–8 (Eng. Abstr.) **(Pol)**

[Value of ultrasonography in the diagnosis of congenital hip dysplasia in children] Czyżewska-Stefaniak E, et al. **Pol Tyg Lek** 1988 Nov 14;43(46):1459–62 **(Pol)**

[Value of ultrasonic examination in the diagnosis and evaluation of the course of acute pancreatitis] Kalina Z. **Wiad Lek** 1988 Nov 15;41(22):1496–9 **(Pol)**

[Ultrasound study of pancreatic masses] Lacerda A, et al. **Acta Med Port** 1988 Mar-Apr;1(2):133–6 (Eng. Abstr.) **(Por)**

[The role of ultrasonography in the implantation of an artificial crystalline lens] Fodor F. **Rev Chir [Oftalmol]** 1988 Apr-Jun;32(2):115–8 (Eng. Abstr.) **(Rum)**

[Doppler cerebrovascular neurosonography] Pendefunda L. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr-Jun;92(2):385–90 **(Rum)**

[Bone scintigraphy and echography in the diagnosis of rheumatic diseases] Suteanu S, et al. **Rev Med Interna [Med Interna]** 1988 Sep-Oct;40(5):385–93 (27 ref.) **(Rum)**

[Comparative evaluation of ultrasound technics in the determination of prenatal fetal mass] Bychkov PA. **Akush Ginekol (Mosk)** 1989 Jan;(1):68–9 **(Rus)**

[Ultrasonic diagnosis of developmental anomalies of the fetal anterior abdominal wall and diaphragm] Demidov VN, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):31–4 (Eng. Abstr.) **(Rus)**

[Echographic characteristics of endometrial cancer] Demidov VN, et al. **Akush Ginekol (Mosk)** 1988 May; (5):21–3 (Eng. Abstr.) **(Rus)**

[Ultrasound structure of the placenta in acute maternal infection] Griban' AN, et al. **Akush Ginekol (Mosk)** 1989 Jan;(1):60–1 **(Rus)**

[Role of ultrasonic craniography in the diagnosis of intracranial hemorrhage and its sequelae in newborn infants] Kudashov NI, et al. **Akush Ginekol (Mosk)** 1989 Jan;(1):6–9 (45 ref.) **(Rus)**

[Relationship between the functional status of the fetus and placental maturity assessed by ultrasound studies] Lebedeva EG, et al. **Akush Ginekol (Mosk)** 1989 Jan;(1):61–3 **(Rus)**

[Prenatal ultrasonic diagnosis of fetal lung maturity] Okhapkin MB, et al. **Akush Ginekol (Mosk)** 1989 Jan; (1):21–3 (Eng. Abstr.) **(Rus)**

[Clinical value of echography in the diagnosis of ectopic pregnancy] Ozerova OE, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):62–3 **(Rus)**

[Echographic criteria of placental development] Sidorova IS, et al. **Akush Ginekol (Mosk)** 1989 Jan;(1):77–80 **(Rus)**

[Clinical value of echographic examination of the bones of the fetal extremities] Strizhakov AN, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):6–10 (64 ref.) **(Rus)**

[Echographic diagnosis of inflammatory diseases of the adnexa uteri] Strizhakov AN, et al. **Akush Ginekol (Mosk)** 1988 May;(5):40–3 (Eng. Abstr.) **(Rus)**

[Ultrasonic diagnosis of nonimmune hydrops fetalis] Strizhakov AN, et al. **Akush Ginekol (Mosk)** 1989 Jan; (1):23–6 (Eng. Abstr.) **(Rus)**

[Value of echography in the diagnosis of postoperative complications] Stygar AM, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):39–43 (Eng. Abstr.) **(Rus)**

[Echographic research on the joints of children from the age point of view] Stepanov PF, et al. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):98–102 **(Rus)**

[Reflection of ultrasound from intertissue boundaries] Lipovko PO. **Biofizika** 1988 Jul-Aug;33(4):686–91 (Eng. Abstr.) **(Rus)**

[Possibilities of Doppler ultrasonography in the diagnosis of aorto-iliac occlusive diseases] Bul'in VI, et al. **Kardiologiia** 1989 Mar;29(3):96–8 **(Rus)**

[Quantitative evaluation of ultrasonic Doppler signals of blood flow rate in normal conditions and in diseases of the peripheral vessels] Agadzhanova LP. **Khirurgiia (Mosk)** 1988 Oct;(10):103–11 (Eng. Abstr.) **(Rus)**

[Dopplerographic control of the efficacy of the surgical treatment of the postthrombotic syndrome of the lower extremities] Bogachev VIu, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):93–6 (Eng. Abstr.) **(Rus)**

[Laparoscopic ultrasonic Dopplerography in the diagnosis of disorders of the intramural blood circulation of the abdominal organs] Dalgat DM, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):104–6 **(Rus)**

[Treatment of pancreatic cysts using percutaneous punctures and drainage under ultrasonic control] Gal'perin EI, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):65–8 (Eng. Abstr.) **(Rus)**

[The value of ultrasonic and x-ray endoscopic methods in the diagnosis of acute surgical diseases of the abdominal organs] Minushkin ON, et al. **Khirurgiia (Mosk)** 1989 Feb; (2):28–32 (Eng. Abstr.) (Rus)

[Ultrasonic studies in the diagnosis of diseases of the organs of the abdominal cavity] Portnol LM, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):77–81 (Eng. Abstr.) (Rus)

[Ultrasonic study of the bile ducts in patients after cholecystectomy] Portnol LM, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):56–9 (Eng. Abstr.) (Rus)

[Percutaneous nephrostomy under ultrasonic control] Mladenov D, et al. **Khirurgiia (Sofiia)** 1988;41(3):3–7 (Eng. Abstr.) (Rus)

[Anterograde pyelography under ultrasonic control] Mladenov D, et al. **Khirurgiia (Sofiia)** 1988;41(3):24–7 (Eng. Abstr.) (Rus)

[Potentialities of ultrasonic diagnosis of tumors of the stomach] Tarasiuk BA, et al. **Klin Khir** 1989;(5):35–6 (Eng. Abstr.) (Rus)

[Diagnosis and puncture therapy of solitary cysts of the kidney under ultrasonic guided control] Vozianov AF. **Klin Khir** 1988;(12):39–40 (Eng. Abstr.) (Rus)

[Clinico-echographic diagnosis of aneurysms of the thoracic aorta] Burtsev VI, et al. **Klin Med (Mosk)** 1988 Jul; 66(7):38–41 (Eng. Abstr.) (Rus)

[Ultrasonic study of the intestines] Lemeshko ZA, et al. **Klin Med (Mosk)** 1988 Jun;66(6):140–5 (Rus)

[Ultrasonic scanning of the kidneys in patients with hemorrhagic fever with renal syndrome and its complications] Petrichko MI, et al. **Klin Med (Mosk)** 1988 Nov;66(11):105–7 (Eng. Abstr.) (Rus)

[The importance of ultrasonography in detecting pathology of the kidneys during ambulatory observation of patients with hemorrhagic fever with renal syndrome] Sirotin BZ, et al. **Klin Med (Mosk)** 1988 Nov;66(11):107–10 (Eng. Abstr.) (Rus)

[The role of endoscopy and ultrasonic study in determining the procedure for managing patients with peptic ulcer] Sokolov LK, et al. **Klin Med (Mosk)** 1988 Jun;66(6):80–3 (Eng. Abstr.) (Rus)

[Ultrasonic disintegration of immune complexes for the detection of Shigella antigens in the urine of patients with dysentery] Remneva TV, et al. **Lab Delo** 1988;(9):64–6 (Eng. Abstr.) (Rus)

[Ultrasonic scanning in chronic renal insufficiency] Agaev MM, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):27–31 (Eng. Abstr.) (Rus)

[A comparative evaluation of radionuclide and ultrasonic studies of the thyroid] Epshtein EV, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):9–13 (Eng. Abstr.) (Rus)

[Ultrasonic diagnosis of nodular lesions of the thyroid] Kasatkin IuN, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):14–9 (Eng. Abstr.) (Rus)

[Ultrasonic scanning in the diagnosis of rheumatoid lesions of the knee joints] Krylov VV, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):31–5 (Eng. Abstr.) (Rus)

[Ultrasonic scanning in planning radiation therapy of cancer of the uterine cervix stump] Nazarova IS, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):48–51 (Rus)

[Ultrasonic diagnosis of thyroid diseases] Prikhod'ko AG, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):72–4 (Rus)

[Ultrasonic evaluation of the state of the abdominal vessels in cholelithiasis and chronic acalculous cholecystitis] Shurandina NV. **Med Radiol (Mosk)** 1989 Jun;34(6):18–21 (Eng. Abstr.) (Rus)

[Ultrasonic study of the large vessels of the peritoneal cavity and the retroperitoneal space in diseases of the liver] Shurandina NV. **Med Radiol (Mosk)** 1988 Oct;33(10):74–9 (61 ref.) (Rus)

[Ultrasonic scanning in the diagnosis of hepatic alveococcosis] Zubovskiĭ GA, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):14–8 (Eng. Abstr.) (Rus)

[The synovial medium of the joint in Perthes disease (echographic research)] Dol'nitskiĭ OV, et al. **Ortop Travmatol Protez** 1988 Oct;(10):1–6 (Eng. Abstr.) (Rus)

[Ultrasonic diagnosis of disorders of systemic and cerebral blood flow in newborn infants with patent ductus arteriosus] Efimov MS, et al. **Pediatriia** 1988;(8):29–35 (Eng. Abstr.) (Rus)

[Age-related changes in the echographic dimensions and shape of the pancreas in children] Sapozhnikov VG. **Pediatriia** 1988;(11):109–10 (Rus)

[Value of the ultrasonic method of examining children under 1 year of age with pyelonephritis] Vereshchagina TG, et al. **Pediatriia** 1989;(5):35–8 (Eng. Abstr.) (Rus)

[Assessment of the effectiveness of conservative therapy of autoimmune thyroiditis using echographic study of the thyroid] Fedoseeva GI, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):40–2 (Eng. Abstr.) (Rus)

[Significance of ultrasonic examination in the diagnosis of genital tuberculosis in women] Batashova MI, et al. **Probl Tuberk** 1989;(5):51–3 (Eng. Abstr.) (Rus)

[Ultrasonic diagnosis of calculosis of the gallbladder] Boger MM, et al. **Sov Med** 1988;(6):103–7 (Rus)

[Ultrasonic diagnosis of pathologic development of the fetal head] Demidov VN, et al. **Sov Med** 1988;(11):108–13 (Rus)

[Echography in suppurative mastitis] Nauryzbaeva BU, et al. **Sov Med** 1988;(8):83–7 (Rus)

[Ultrasonic diagnosis of tumors] Pletnev SD, et al. **Sov Med** 1989;(3):31–4 (Eng. Abstr.) (Rus)

[Diagnosis of lesions of the brachiocephalic artery by ultrasound dopplerography before and after roentgeno-endovascular dilatation] Rabkin IKh, et al. **Sov Med** 1989;(3):44–7 (Eng. Abstr.) (Rus)

[Possibilities of echography in the differential diagnosis of surgical diseases of the liver] Tolua FI, et al. **Sov Med** 1989;(4):90–3 (Rus)

[Ultrasonic examination of the thyroid gland in mass screening of the population] Tsyb AF, et al. **Sov Med** 1988; (5):77–9 (Rus)

[Ultrasonic diagnosis of salivary gland diseases] Fazylov AA, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):43–5 (Eng. Abstr.) (Rus)

[Current possibilities of functional and ultrasonic diagnosis of diseases of the cardiovascular system] At'kov OIu, et al. **Ter Arkh** 1989;61(4):6–13 (Rus)

[Roentgenoradiological and ultrasonic diagnosis of liver and spleen involvement in patients with Hodgkin's disease] Balashov AT, et al. **Ter Arkh** 1988;60(9):73–6 (Eng. Abstr.) (Rus)

[Value of echography in the differential diagnosis of benign and malignant corticosteromas] Demidov VN, et al. **Ter Arkh** 1988;60(7):96–8 (Eng. Abstr.) (Rus)

[Echomorphological comparisons in chronic diseases of the liver] Iakhontova OI, et al. **Ter Arkh** 1989;61(2):52–5 (Eng. Abstr.) (Rus)

[Possibilities of the ultrasonic method of examination in identifying large lesions of the abdominal cavity and small pelvis organs] Kotliarov PM, et al. **Ter Arkh** 1989; 61(4):117–9 (Eng. Abstr.) (Rus)

[Development and experience in the use of unified records of findings with respect to results of ultrasonic studies of the liver and bile ducts] Nikogosian GA, et al. **Ter Arkh** 1989;61(4):31–3 (Rus)

[Methodologic aspects of the organization of functiono-diagnostic and ultrasonic examination of patients with diseases of the cardiovascular system] Sobol' IuS, et al. **Ter Arkh** 1989;61(4):14–7 (Rus)

[Ultrasonic biometry of the organs and vessels of the peritoneal cavity and the retroperitoneal space] Tsyb AF, et al. **Ter Arkh** 1989;61(4):150–4 (88 ref.) (Rus)

[Ultrasonic diagnosis of paraprostatitis] Borulia LV. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):15–8 (Eng. Abstr.) (Rus)

[The role of outpatient ultrasonic study in the detection and differential diagnosis of benign kidney tumors] Lopatkin NA, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):3–6 (Eng. Abstr.) (Rus)

[The role of ultrasonic monitoring and fine-needle aspiration biopsy in assessing the function of a kidney transplant] Pilotovich VS, et al. **Urol Nefrol (Mosk)** 1988 Sep–Oct; (5):10–4 (Eng. Abstr.) (Rus)

[Ultrasonic diagnosis of ureterocele] Urenkov SB, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):31–4 (Eng. Abstr.) (Rus)

[Diagnostic possibilities of an ultrasonic method of determining the size of a prostatic adenoma] Zakhmatov IuM, et al. **Urol Nefrol (Mosk)** 1988 Jul–Aug;(4):38–41 (Eng. Abstr.) (Rus)

[Ultrasonic monitoring of the efficacy of conservative therapy in Peyronie's disease] Novak GIa, et al. **Vestn Dermatol Venerol** 1988;(11):35 (Eng. Abstr.) (Rus)

[Preoperative evaluation of the local spread of rectal tumors using ultrasonography] Orlova LP, et al. **Vestn Khir** 1989 Feb;142(2):33–7 (Eng. Abstr.) (Rus)

[Gamma resonance velocimetry of the eye] Astakhov IuS, et al. **Vestn Oftalmol** 1989 May–Jun;105(3):59–62 (Eng. Abstr.) (Rus)

[Comparative analysis of the results of echography and radiography of pleurisy and pneumonia in children] Dvorinakovskiĭ IV, et al. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):52–7 (Eng. Abstr.) (Rus)

[Ultrasonic diagnosis of pleurisy] Kirsanov ON. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):69–73 (Eng. Abstr.) (Rus)

[A case of a true splenic cyst] Nestaĭko OV, et al. **Vestn Rentgenol Radiol** 1989 Mar–Apr;(2):84–5 (Rus)

[Differential x-ray and ultrasonic diagnosis of filling defects of the calyceal-pelvic systems of the kidneys] Perel'man VM, et al. **Vestn Rentgenol Radiol** 1989 Mar–Apr;(2):49–55 (Eng. Abstr.) (Rus)

[Use of a choleretic probe in the ultrasonic study of the bile ducts in patients subjected to cholecystectomy] Roslov AL, et al. **Vestn Rentgenol Radiol** 1988 Sep–Oct;(5):40–5 (Eng. Abstr.) (Rus)

[Comparative evaluation of ultrasonic and x-ray study methods in the diagnosis of ureterocele] Roslov AL, et al. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):36–41 (Eng. Abstr.) (Rus)

[Ultrasound tomography of soft tissues and venous vessels in secondary edema of the upper limbs] Tsyb AF, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):52–7 (Eng. Abstr.) (Rus)

[Clinical laboratory and echographic criteria of the change to chronicity of acute viral hepatitis] Dorofeev GI, et al. **Voen Med Zh** 1988 Nov;(11):55–7 (Rus)

[The role of endorectal echography for determining the extent of an operation] Accarpio G, et al. **Vopr Onkol** 1989; 35(3):339–42 (Eng. Abstr.) (Rus)

[The differential diagnostic potentials of echography in oncology] Lipovko PO. **Vopr Onkol** 1989;35(3):270–9 (70 ref.) (Rus)

[Echographic semeiotics of metastatic lesions of the liver] Vesnin AG, et al. **Vopr Onkol** 1988;34(11):1335–9 (Eng. Abstr.) (Rus)

[Echo-controlled puncture biopsy of the liver] Babak Ola, et al. **Vrach Delo** 1989 Jan;(1):89–90 (Eng. Abstr.) (Rus)

[Echo scanning—a method for detecting the chronicity of the process in primary hepatitis] Bondarev LS, et al. **Vrach Delo** 1988 Dec;(12):98–100 (Eng. Abstr.) (Rus)

[The importance of echography in the diagnosis of hepatic hemangioma] Medvedev VE, et al. **Vrach Delo** 1988 Aug; (8):16–8 (Eng. Abstr.) (Rus)

[Echoscopic diagnosis of the heterozygote carrier state in Duchenne's muscular dystrophy] Krasil'nikov VV, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):18–9 (Eng. Abstr.) (Rus)

[Possibilities of ultrasound in the study of endometrial changes in cycle stimulation in the fertilization in vitro and embryo transfer programs] Stanojević D, et al. **Srp Arh Celok Lek** 1988 Nov–Dec;116(11–12):977–86 (Eng. Abstr.) (Scc)

[Sonographic evaluation of the operability of liver tumors] Fučkar Z, et al. **Acta Chir Iugosl** 1988;35(2):283–95 (Eng. Abstr.) (Scr)

[Possibilities of endoscopic and interventional ultrasound] Mehmet S. **Acta Chir Iugosl** 1988;35(2):275–81 (Eng. Abstr.) (Scr)

[Ultrasound and peritoneal lavage in the diagnosis of blunt injuries of the abdomen] Bakula B, et al. **Acta Med Iugosl** 1988;42(3):187–200 (Eng. Abstr.) (Scr)

[Computerized tomography and ultrasound in the early diagnosis of brain damage] Bešenski N, et al. **Acta Med Iugosl** 1989;43(1):27–45 (Eng. Abstr.) (Scr)

[Ultrasonic diagnosis of expansive lesions of the kidneys] Lilanin L. **God Vojnomed Akad** 1987;29:26–9 (Eng. Abstr.) (Scr)

[Doppler measurement of fetal blood flow. I. Normal values in the umbilical artery] Alfirević Z, et al. **Jugosl Ginekol Perinatol** 1989 Jan–Apr;29(1–2):9–14 (Eng. Abstr.) (Scr)

[Evaluation of fetal maturity using ultrasonography of the placenta in comparison with analysis of amniotic fluid] Hodek B, et al. **Jugosl Ginekol Perinatol** 1988 Sep–Dec; 28(5–6):107–11 (Eng. Abstr.) (Scr)

[Ultrasonic diagnosis in the prevention of shock in placenta praevia] Hodek B, et al. **Jugosl Ginekol Perinatol** 1988 May–Aug;28(3–4):99–101 (Eng. Abstr.) (Scr)

[The role of beta HCG determination and ultrasonic examination in the early diagnosis of extrauterine pregnancy] Poljak B, et al. **Jugosl Ginekol Perinatol** 1988 Sep–Dec;28(5–6):150–2 (Eng. Abstr.) (Scr)

[Suprapubic sector real-time sonography of the prostato-vesicular segment and the vas deferens] Fučkar Z. **Lijec Vjesn** 1988 Aug;110(8):274–9 (Eng. Abstr.) (Scr)

[Prenatal diagnosis of hereditary epidermolysis bullosa using ultrasonically guided biopsy of the fetal skin] Jurković D, et al. **Lijec Vjesn** 1989 Mar;111(3):60–3 (Eng. Abstr.) (Scr)

[Echosonographic diagnosis of the afunctional kidney] Karapavlović M, et al. **Med Pregl** 1988;41(7–8):329–31 (Eng. Abstr.) (Scr)

[Case report of ultrasonic diagnosis of hydronephrosis of the kidney in a fetus] Ogrizović M, et al. **Med Pregl** 1988; 41(7–8):300 (Eng. Abstr.) (Scr)

[The role of ultrasound in the diagnosis of congenital hip dysplasia] Vrdoljak J, et al. **Med Pregl** 1988;41(1–2):16–21 (Eng. Abstr.) (Scr)

[Ultrasonically guided biopsy of intra-abdominal changes. Report of the results of a 5-year study] Buljevac M, et al. **Vojnosanit Pregl** 1989 Jan–Feb;46(1):15–7 (Eng. Abstr.) (Scr)

[Ultrasound-guided fine needle biopsy of the abdominal organs and structures] Hrušovský Š, et al. **Bratisl Lek Listy** 1988 Jul;89(7):524–7 (Eng. Abstr.) (Slo)

[Ultrasound screening—the road to decreasing perinatal mortality] Danko J, et al. **Cesk Gynekol** 1989 Apr; 54(3):185–7 (Slo)

[Transabdominal amniocentesis during continuous ultrasonic monitoring] Mlynček M, et al. **Cesk Gynekol** 1988 Jul; 53(6):442–5 (Slo)

[Diseases of the digestive tract in the ultrasonographic picture] Antalík J, et al. **Cesk Radiol** 1988 Oct;42(5):306–18 (Eng. Abstr.) (Slo)

[Directed ultrasonography in the examination of the breast] Antalík J. **Cesk Radiol** 1989 May;43(3):198–211 (Slo)

[An ultrasonographic picture of a growing pseudotumor in the abdominal cavity] Bielik J. **Cesk Radiol** 1989 May; 43(3):161–5 (Eng. Abstr.) (Slo)

[Ultrasonographic values of carotid arteries] Fagula J, et al. **Cesk Radiol** 1988 Oct;42(5):319–23 (Eng. Abstr.) (Slo)

[Peroperative use of two-dimensional ultrasonic imaging in neurosurgery] Santa M, et al. **Cesk Radiol** 1989 May; 43(3):146–53 (Eng. Abstr.) (Slo)

[Ultrasonography in emergency abdominal surgery] Antalík J, et al. **Rozhl Chir** 1989 May;68(5):351–9 (Eng. Abstr.) (Slo)

[The value of ultrasonographic examination of scrotal contents in patients with suspected testicular tumors] Polák

V, et al. **Rozhl Chir** 1988 Oct;67(10):682–7 (Eng. Abstr.) (Slo)

[Cholecystolithiasis and ultrasonography. Is "technologism" possible in medicine?] Bielik J. **Vnitr Lek** 1989 Feb; 35(2):164–7 (Eng. Abstr.) (Slo)

[Duplex ultrasonic examination of arteries of the lower extremities—comparison with angiography] Demeš M, et al. **Vnitr Lek** 1989 Apr;35(4):358–62 (Eng. Abstr.) (Slo)

[Cystic changes in the liver in our 5-year ultrasonographic study] Krišlo V, et al. **Vnitr Lek** 1989 Mar;35(3):278–82 (Eng. Abstr.) (Slo)

[Non-cystic diseases of the liver in a 5-year ultrasonographic study] Sorf M, et al. **Vnitr Lek** 1989 Mar;35(3):283–7 (Eng. Abstr.) (Slo)

[Initial experience with thin-needle biopsy under ultrasonic control in diffuse liver diseases] Sorf M, et al. **Vnitr Lek** 1989 Mar;35(3):288–91 (Eng. Abstr.) (Slo)

[Fine-needle aspiration puncture of abdominal masses using echographic monitoring. Cytological diagnosis and experience with biological markers] Carrascosa JM, et al. **Acta Gastroenterol Latinoam** 1987;17(3):193–205 (Eng. Abstr.) (Spa)

[Ultrasonic diagnosis of prostatic adenocarcinoma. Prospective study of a sample of 159 patients] Benitez J, et al. **Actas Urol Esp** 1989 Mar-Apr;13(2):103–5 (Eng. Abstr.) (Spa)

[Transabdominal ultrasonography and urinary cytology in the follow-up of superficial bladder tumors] Miján Ortiz JL, et al. **Actas Urol Esp** 1988 Sep-Oct;12(5):411–4 (Eng. Abstr.) (Spa)

[New protocol in the follow-up of superficial bladder carcinoma] Oliver F, et al. **Actas Urol Esp** 1988 Sep-Oct; 12(5):415–8 (Eng. Abstr.) (Spa)

[Updating in diagnostic imaging] **An Esp Pediatr** 1988 Sep; 29 Suppl 33:114–7 (Spa)

[Trisomy 13 by translocation. Possible prenatal ultrasonic diagnosis] Asencio Marchante MJ, et al. **An Esp Pediatr** 1988 Jun;28(6):585–7 (Spa)

[Echography in unusual pathology of the pelvis] Aso Puértolas C. **An Esp Pediatr** 1988 Sep;29 Suppl 33:110–2 (0 ref.) (Spa)

[Echographic study of hepatic and pancreatic pathology in children] Enríquez G. **An Esp Pediatr** 1988 Sep;29 Suppl 33:112–3 (5 ref.) (Spa)

[Usefulness of echography in the diagnosis of intestinal intussusception] García Merino F, et al. **An Esp Pediatr** 1988 Sep;29(3):208–10 (Eng. Abstr.) (Spa)

[Abdominal echography in recurrent abdominal pain: study in 100 cases] Rubio Quiñones F, et al. **An Esp Pediatr** 1988 Sep;29(3):217–9 (Eng. Abstr.) (Spa)

[Biliary lithiasis in childhood: apropos of 10 cases] Serrano Gómez ML, et al. **An Esp Pediatr** 1988 Jun;28(6):537–9 (Eng. Abstr.) (Spa)

[Validation of ultrasonic flowmetry and occlusion plethysmography in venous thromboses] Vega Gómez ME, et al. **Angiologia** 1988 Jul-Aug;40(4):129–32 (Eng. Abstr.) (Spa)

[Modification of the echographic pattern of carcinoma of the prostate treated with Lh-rh agonists] Broseta E, et al. **Arch Esp Urol** 1989 Mar;42(2):125–8 (7 ref.) (Eng. Abstr.) (Spa)

[Erectile dysfunction of venous origin: diagnosis by means of cavernometry] Marín Lafuente JC, et al. **Arch Esp Urol** 1989 May;42(4):363–4 (Eng. Abstr.) (Spa)

[Obstructive uropathies: prenatal diagnosis and management] Salamanca Ballesteros A, et al. **Arch Esp Urol** 1988 May; 41(4):297–301 (Eng. Abstr.) (Spa)

[Comparison of computed tomography and ultrasonic studies of the brain in newborns and infants. Correlation in 40 cases] Robledo AE, et al. **Bol Med Hosp Infant Mex** 1989 Feb;46(2):106–12 (Eng. Abstr.) (Spa)

[Ultrasonography of the gastrointestinal tract] Ledezma G, et al. **GEN** 1987 Jan-Mar;41(1):12–8 (Eng. Abstr.) (Spa)

[Detection of subcutaneous nodules with ultrasound in onchocerciasis (letter)] Ares Vidal J, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):316 (Spa)

[Ovarian cancer and pregnancy] Vásquez R, et al. **Rev Chil Obstet Ginecol** 1986;51(2):143–8 (Eng. Abstr.) (Spa)

[Acute lobar nephritis: usefulness of ultrasonics for diagnosis (letter)] Iglesias Estevan F, et al. **Rev Clin Esp** 1989 Apr; 184(6):332 (Spa)

[Ultrasonic demonstration of gallbladder varices in a patient with hepatocarcinoma and portal thrombosis] Celorio Peinado C, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):467–9 (Eng. Abstr.) (Spa)

[Ultrasonics in the diagnosis of acute appendicitis (editorial) (published erratum appears in Rev Esp Enferm Apar Dig 1988 Oct;74(4 Pt 1):404)] De Arzua Zulaica E. **Rev Esp Enferm Apar Dig** 1988 Jul;74(1):57–8 (Spa)

[Peritoneal pseudomyxoma (letter)] Fernández Fernández L, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):191–2 (Spa)

[Gastric emptying of liquids measured by ultrasonography in idiopathic functional dyspepsia and gastroduodenal ulcer] Varas MJ, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):318–22 (Eng. Abstr.) (Spa)

[Evaluation of ultrasound and computerized tomography in jaundice. Prospective study of 68 patients] Stoopen ME, et al. **Rev Gastroenterol Mex** 1988 Oct-Dec;53(4):243–50 (Eng. Abstr.) (Spa)

[Current views on prenatal diagnosis and fetal medicine] Axelsson O, et al. **Lakartidningen** 1988 Nov 30; 85(48):4217–9 (Swe)

[Ultrasound: a promising aid in the diagnosis of acute appendicitis (editorial)] Bengmark S, et al. **Lakartidningen** 1988 Sep 14;85(37):2935 (Swe)

[Increased use of ultrasound in the diagnosis of eye and orbital diseases] Landau IM. **Lakartidningen** 1989 Apr 26; 86(17):1592–5 (Swe)

[Ultrasonics as the first choice in the diagnosis of pericardial effusion] Müller-Suur R, et al. **Lakartidningen** 1988 Dec 14;85(50):4407 (Swe)

ADVERSE EFFECTS

Bioeffects of sonography [letter] Margolies L, et al. **AJR** 1988 Nov;151(5):1057–8

Intermittent fetal bradycardia induced by midpregnancy fetal ultrasonographic study. Mendoza GJ, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1038–40

Carbamazepine-induced hyponatremia after transabdominal follicular ultrasound examination. Scoccia B, et al. **Fertil Steril** 1988 Dec;50(6):984–5

Occurrence of transient cavitation in pulsed sawtooth ultrasonic fields. Aymé EJ, et al. **J Acoust Soc Am** 1988 Nov;84(5):1598–605

Effect of the pulse length of ultrasound on cell membrane damage in vitro. Kober LO, et al. **J Acoust Soc Am** 1989 Jul;86(1):6–7

Complications of imaging procedures in six elderly patients. Scott D, et al. **Postgrad Med** 1989 Mar;85(4):145–8

In utero exposure to diagnostic US [letter; comment] Kankam MK, et al. **Radiology** 1989 Feb;170(2):572–4. **Comment on:** Radiology 1988 Mar;166(3):687–90

Evaluation of the bioeffects of prenatal ultrasound exposure in the cynomolgus macaque (Macaca fascicularis): I. Neonatal/infant observations. Tarantal AF, et al. **Teratology** 1989 Feb;39(2):137–47

Evaluation of the bioeffects of prenatal ultrasound exposure in the cynomolgus macaque (Macaca fascicularis): II. Growth and behavior during the first year. Tarantal AF, et al. **Teratology** 1989 Feb;39(2):149–62

A test of I2t as a dose parameter for fetal weight reduction from exposure to ultrasound. Child SZ, et al. **Ultrasound Med Biol** 1989;15(1):39–44

Murine ovulatory response to ultrasound exposure and its gynecological relevance. Gates AH, et al. **Ultrasound Med Biol** 1988;14(6):485–91

Iatrogenic forniceal rupture. Donahue LA, et al. **Urology** 1988 Dec;32(6):544–5

[A commentary on the safety of ultrasonic diagnosis] Chernev T. **Akush Ginekol (Sofiia)** 1989;28(2):73–5 (Bul)

[Physical and biological effects of ultrasound in diagnostic conditions—a review] Stapff M, et al. **Digitale Bildtech** 1989 Jun;9(2):83–8 (33 ref.) (Eng. Abstr.) (Ger)

[Current views on the safety of using ultrasonics in the diagnosis] Kalina Z, et al. **Pol Tyg Lek** 1988 Sep 19; 43(38):1237–40 (50 ref.) (Pol)

ECONOMICS

Cost effectiveness of ultrasound in primary parathyroid surgery. Kairaluoma MI, et al. **Br J Surg** 1989 Jun; 76(6):596–7

Ultrasonography versus excretory urography: value in urological disease. Aslaksen A, et al. **Eur J Radiol** 1988 Aug;8(3):179–80

Calculation of internal costs in a department of diagnostic radiology. Geitung JT, et al. **Eur J Radiol** 1988 Aug; 8(3):181–2

Accuracy and cost-effectiveness of preoperative isotope and ultrasound imaging in primary hyperparathyroidism. Summers GW, et al. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):210–7

Early prostate cancer: diagnostic costs of screening transrectal US and digital rectal examination. Torp-Pedersen ST, et al. **Radiology** 1988 Nov;169(2):351–4

International trends in the economics of breast examination. Kobayashi T. **Ultrasound Med Biol** 1988;14 Suppl 1:217–29

Ultrasonographic screening for abdominal aortic aneurysm: analysis of surgical decisions for cost-effectiveness. Bengtsson H, et al. **World J Surg** 1989 May-Jun; 13(3):266–71

HISTORY

Neurosonology pioneers. White DN. **Ultrasound Med Biol** 1988;14(7):541–61

INSTRUMENTATION

Utility of Doppler color flow imaging for identification of femoral arterial complications of cardiac catheterization. Sheikh KH, et al. **Am Heart J** 1989 Mar;117(3):623–8

Phasic coronary artery flow velocity determined by Doppler flowmeter catheter in aortic stenosis and aortic regurgitation. Matsuo S, et al. **Am J Cardiol** 1988 Nov 1; 62(13):917–22

Universal 35-mm camera mount for ophthalmic ultrasound units. Whitacre MM, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):763–4

Left ventricular performance indices by transesophageal Doppler. Thys DM, et al. **Anesthesiology** 1988 Nov; 69(5):728–37

The use of a vaginal probe in the diagnosis of ectopic pregnancy. Funk A, et al. **Arch Gynecol Obstet** 1989; 244(3):163–8

Use of the triplex scanner in diagnosis of deep venous thrombosis. Persson AV, et al. **Arch Surg** 1989 May; 124(5):593–6

Design for an ultrasound-based instrument for measurement of tissue blood flow. Burns SM, et al. **Biomater Artif Cells Artif Organs** 1989;17(1):61–8

Digital signal processing of ultrasonic signals for blood flow measurement. Smith DR, et al. **Biomed Sci Instrum** 1989; 25:101–5

Comparison of ultrasound baseband signal processors for use with an implantable controller. Valenta HL Jr. **Biomed Sci Instrum** 1989;25:93–100

Microcomputer-based analyzer for the assessment of Doppler ultrasound blood velocity waveforms. Waite LR, et al. **Biomed Sci Instrum** 1989;25:113–8

A miniaturized ultrasonic flowmeter and telemetry transmitter for chronic animal blood flow measurements. Yonezawa Y, et al. **Biomed Sci Instrum** 1989;25:107–11

Clinical evaluation of a digital signal-processing device for real-time speckle suppression in medical ultrasonics. Loupas T, et al. **Br J Radiol** 1989 Aug;62(740):761–4

Anal endosonography in the evaluation of perianal sepsis and fistula in ano. Law PJ, et al. **Br J Surg** 1989 Jul;76(7):752–5

Simultaneous measurement of velocity, diameter, flow and pressure in the ascending aorta of cats. Evaluation of an extractable Doppler ultrasound probe for continuous monitoring of aortic blood flow. Matre K, et al. **Cardiovasc Res** 1988 Dec;22(12):855–63

Continuous hemodynamic monitoring by esophageal Doppler. Singer M, et al. **Crit Care Med** 1989 May; 17(5):447–52

A standard method for repeated recording of skin blood flow using laser Doppler flowmetry. de Boer EM, et al. **Derm Beruf Umwelt** 1989 Mar-Apr;37(2):58–62

Diagnostic ultrasound equipment. Safety and dosimetry. Thijssen JM, et al. **Eur J Radiol** 1989 Feb;9(1):51–5 (23 ref.)

Experimental evaluation of an endoscopic ultrasound probe: in vitro and in vivo canine studies. Silverstein FE, et al. **Gastroenterology** 1989 Apr;96(4):1058–62

Ultrasound guided drainage of pleural fluid. Ng J, et al. **Indiana Med** 1989 Apr;82(4):282–4

Early and recent intraluminal ultrasound devices. Bom N, et al. **Int J Card Imaging** 1989;4(2-4):79–88 (32 ref.)

Laser ablation and the need for intra-arterial imaging. Borst C, et al. **Int J Card Imaging** 1989;4(2-4):127–33

Optimized ultrasound imaging catheters for use in the vascular system. Crowley RJ, et al. **Int J Card Imaging** 1989;4(2-4):145–51

3-D visualization of arterial structures using ultrasound and Voxel modelling. Kitney RI, et al. **Int J Card Imaging** 1989; 4(2-4):135–43

Analysis of backscattered ultrasound from normal and diseased arterial wall. Linker DT, et al. **Int J Card Imaging** 1989;4(2-4):177–85 (26 ref.)

Intraluminal real-time ultrasonic imaging: clinical perspectives. Roelandt J, et al. **Int J Card Imaging** 1989; 4(2-4):89–97 (60 ref.)

Imaging artifacts in mechanically driven ultrasound catheters. ten Hoff H, et al. **Int J Card Imaging** 1989;4(2-4):195–9

Clinical applications of intravascular ultrasound imaging in atherectomy. Yock PG, et al. **Int J Card Imaging** 1989; 4(2-4):117–25

Clinical efficacy of Kitecko ultrasonic conductor. Pozniak MA, et al. **Invest Radiol** 1989 Feb;24(2):128–32

Radiology in developing countries. A one-year experience in Rwanda with the Basic Radiologic System equipped with a panel-type image intensifier and linear echography. Van Tiggelen R, et al. **J Belge Radiol** 1988;71(5):623–6

Ultrasound imaging. Wells PN. **J Biomed Eng** 1988 Nov; 10(6):548–54 (62 ref.)

Measurement in vivo of masticatory mucosal thickness with 20 MHz B-mode ultrasonic diagnostic equipment. Uchida H, et al. **J Dent Res** 1989 Feb;68(2):95–100

Ultrasonography in developmental displacement of the hip: a critical analysis of our results. Bialik V, et al. **J Pediatr Orthop** 1989 Mar-Apr;9(2):154–6

An investigation of the anatomic position of the posterior palatal seal by ultrasound. Narvekar RM, et al. **J Prosthet Dent** 1989 Mar;61(3):331–6

Water balloon-aided ultrasonography—application in the diagnosis of rectal cancer. Qu D, et al. **J Tongji Med Univ** 1988;8(1):46–50

Doppler study of umbilical artery blood flow waveform. Should we use an instrument-adapted nomogram? Abramowicz JS, et al. **J Ultrasound Med** 1989 Apr; 8(4):183–5

Linear array test tool. Goldstein A, et al. **J Ultrasound Med** 1989 Jul;8(7):385–97

Pulsed Doppler on a vaginal probe. Necessity, convenience, or luxury? Schaaps JP, et al. **J Ultrasound Med** 1989 Jun; 8(6):315–20

Preparation of a homemade ultrasound biopsy phantom. McNamara MP Jr, et al. **JCU** 1989 Jul-Aug;17(6):456–8

The diagnosis and follow-up of pediatric sinusitis: Water's view radiography versus ultrasonography. Revonta M, et al. **Laryngoscope** 1989 Mar;99(3):321–4

Design of a continuous-wave Doppler ultrasonic flowmeter for perivascular application. Part 2. Signal processing

system. Cowan D, et al. **Med Biol Eng Comput** 1988 Mar; 26(2):153–60

The implantable Doppler probe [letter] Lineaweaver WC. **Plast Reconstr Surg** 1988 Dec;82(6):1099–100

Comparison of electromechanical measures and observer ratings of tardive dyskinesia. Bartzokis G, et al. **Psychiatry Res** 1989 Feb;27(2):193–8

Frequency measurements in real-time US equipment: variations from expected values. Kimme-Smith C, et al. **Radiology** 1989 Aug;172(2):449–52

Endoscopic ultrasonography of tumours of the oesophagus and the stomach. Heyder N. **Surg Endosc** 1987;1(1):17–23

Use of transanal intubation in Doppler ultrasonic assessment of blood flow of the rectal wall. Iwai T, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):263–4

A concave annular array design, based on phasor summation—Part I: Design methodology. Yuan WQ, et al. **Ultrason Imaging** 1988 Oct;10(4):275–86

A concave annular array design, based on phasor summation—Part II: Beam profiles and resultant images by B-scan and synthetic focus methods. Yuan WQ, et al. **Ultrason Imaging** 1988 Oct;10(4):287–97

Medical ultrasound imager based on time delay spectrometry. Heyser RC, et al. **Ultrasonics** 1989 Jan;27(1):31–8

Waveguides in medical ultrasonics: an experimental study of mode propagation. Nicholson NC, et al. **Ultrasonics** 1989 Mar;27(2):101–6

Second World Federation of Ultrasound in Medicine and Biology Symposium on Safety and Standardization in Medical Ultrasound. 22–23 October 1988, Airlie, Virginia, U.S.A. Proceedings. **Ultrasound Med Biol** 1989;15 Suppl 1:1–115

Very high frequency pulsed Doppler apparatus. Berson M, et al. **Ultrasound Med Biol** 1989;15(2):121–31

Sound velocity choice for modeling and measurement. Carpenter DA. **Ultrasound Med Biol** 1989;15 Suppl 1:23–5

Manufacturer's viewpoint. Dellinger J. **Ultrasound Med Biol** 1989;15 Suppl 1:71–2; discussion 73

Output data from European studies. Duck FA. **Ultrasound Med Biol** 1989;15 Suppl 1:61–4; discussion 65

Parameters recommended by organizations to characterize acoustic output of diagnostic equipment. Overview. Hill CR. **Ultrasound Med Biol** 1989;15 Suppl 1:15–8; discussion 19–20

Acoustic data of Japanese ultrasonic diagnostic equipment. Ide M. **Ultrasound Med Biol** 1989;15 Suppl 1:49–53

Clinical benefit of higher acoustic output levels. Kremkau FW. **Ultrasound Med Biol** 1989;15 Suppl 1:69–70

Recent progress on standards and bioeffects in Japan. Maeda K. **Ultrasound Med Biol** 1989;15 Suppl 1:99–100

AIUM/CDRH (FDA) regulatory discussion. Merritt CR, et al. **Ultrasound Med Biol** 1989;15 Suppl 1:105–8

In vivo and in vitro ultrasound beam distortion measurements of a large aperture and a conventional aperture focussed transducer. Moshfeghi M, et al. **Ultrasound Med Biol** 1988; 14(5):415–28

Statements, recommendations and guidelines for diagnostic equipment. Overview. Nyborg WL. **Ultrasound Med Biol** 1989;15 Suppl 1:85–6

Review of current IEC activities in acoustic output standardization of medical ultrasonic equipment. Preston RC. **Ultrasound Med Biol** 1989;15 Suppl 1:101–3

Special Doppler ultrasound transducers for recording vertebral artery blood flow in rabbits. Stürm RP, et al. **Ultrasound Med Biol** 1989;15(5):499–503

Maximum likelihood frequency tracking of the audio pulsed Doppler ultrasound signal using a Kalman filter. Talhami HE, et al. **Ultrasound Med Biol** 1988;14(7):599–609

Special considerations in choosing parameters to characterize acoustic output of diagnostic equipment. Wells PN. **Ultrasound Med Biol** 1989;15 Suppl 1:7–11; discussion 13

Acoustic output of ultrasound equipment. Summary of data reported to the AIUM. Zagzebski JA. **Ultrasound Med Biol** 1989;15 Suppl 1:55–9

Acoustic models for tissue. Overview. Ziskin MC. **Ultrasound Med Biol** 1989;15 Suppl 1:21–2

[The Ophthascan B ultrasonoscope in clinical practice] Vlková E, et al. **Cesk Oftalmol** 1988 Jul;44(4):251–8 (Eng. Abstr.) (Cze)

[Measuring fetal ischemia using multichannel pulsed Doppler sonography of the aorta and umbilical vein. Preliminary results in normal pregnancy] Gasser B, et al. **Gynakol Rundsch** 1989;29(1):22–31 (Eng. Abstr.) (Fre)

[Quantitative measure of the output of the deep abdominal vessels with a new device Duplex. Preliminary results] Buchheim G, et al. **Helv Chir Acta** 1989 Jun;56(1–2):267–72 (Eng. Abstr.) (Fre)

[Ultrasound and the gynecologist: technical uses] Zweifel HJ. **Arch Gynecol Obstet** 1988;244 Suppl:S38–45 (Ger)

[Ultrasonic diagnosis] Mann W. **Arch Otorhinolaryngol Suppl** 1989;1:71–98 (Ger)

[Basic abdominal ultrasound diagnosis course. Physical and technical principles] Stapff M. **Bildgebung** 1987–89;56 Suppl 1:5–9 (Ger)

["Visible" is not necessarily "pathologic". New criteria for lymph nodes—ultrasonic diagnosis is even more precise (interview)] Bönhof JA. **Fortschr Med** 1989 Aug 10; 107(23):25–6 (Ger)

[Duplex sonography of the portal vein. Procedure in healthy probands and patients with portal hypertension] Lotz R, et al. **Fortschr Med** 1989 May 20;107(15):330–4 (Eng. Abstr.) (Ger)

[Phlebologic indications for duplex sonography] Marshall M. **Fortschr Med** 1989 May 20;107(15):325–9 (Eng. Abstr.) (Ger)

[3-dimensional organ representation with ultrasound. Experimental studies—computer simulation] Sohn C, et al. **Fortschr Med** 1989 Apr 30;107(13):281–4 (Eng. Abstr.) (Ger)

[Automatic biometry and keratometry in comparison with the manual technic] Knorz MC, et al. **Fortschr Ophthalmol** 1989;86(2):157–8 (Eng. Abstr.) (Ger)

[Transvaginal contrast hysterosonography. A new diagnostic procedure for the differentiation of intrauterine and myometrial findings] Deichert U, et al. **Geburtshilfe Frauenheilkd** 1988 Dec;48(12):835–44 (Eng. Abstr.) (Ger)

[Transvaginal pulsed Doppler measurement of flow velocities in pelvic vessels following cycle stimulation] Deutinger J, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):33–6 (Eng. Abstr.) (Ger)

[Doppler diagnosis in peripheral arterial occlusive disease] Marshall M. **Herz** 1988 Dec;13(6):358–71 (6 ref.) (Eng. Abstr.) (Ger)

[The status of laser Doppler examination in patients with arterial occlusive disease] Ranft J. **Herz** 1988 Dec; 13(6):382–91 (63 ref.) (Eng. Abstr.) (Ger)

[Comparative studies of the width of the anterior chamber angle using echography and gonioscopy] Makabe R. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):6–9 (Eng. Abstr.) (Ger)

[Sonography of the larynx in childhood: new perspectives due to the use of computerized sonography. 1: Anatomy and method] Grunert D, et al. **Klin Padiatr** 1989 May–Jun; 201(3):202–5 (Eng. Abstr.) (Ger)

[Sonography of the larynx in children. New perspectives due to the use of computerized sonography: 2: Sonographic findings in a case of laryngeal papillomatosis] Grunert D, et al. **Klin Padiatr** 1989 May–Jun;201(3):206–8 (Eng. Abstr.) (Ger)

[Ultrasound diagnosis of the larynx with the aid of computerized sonography] Grunert D, et al. **Laryngorhinootologie** 1989 Apr;68(4):236–8 (Eng. Abstr.) (Ger)

[Doppler-ophthalmomanometry in patients with obstruction of the carotid arteries] Strauss AL, et al. **Med Klin** 1989 Apr 15;84(4):188–91 (Eng. Abstr.) (Ger)

[Measuring leg length and leg length difference with the method of real time sonography] Holst A, et al. **Sportverletz Sportschaden** 1988 Jun;2(2):55–60 (Eng. Abstr.) (Ger)

[The development of standards for ophthalmologic ultrasound diagnosis] Buschmann W, et al. **Ultraschall Med** 1988 Aug;9(4):172–5 (Eng. Abstr.) (Ger)

[Endoscopic sonography of the upper digestive tract] Dancygier H. **Ultraschall Med** 1989 Jun;10(3):164–9 (16 ref.) (Eng. Abstr.) (Ger)

[Synthetic ultrasound blocks and contact gels in sonography: hygienically satisfactory?] Kainberger F, et al. **Ultraschall Med** 1988 Aug;9(4):180–4 (Eng. Abstr.) (Ger)

[A probe holder for improving duplex sonography] Müller HR, et al. **Ultraschall Med** 1989 Apr;10(2):77–9 (Eng. Abstr.) (Ger)

[Ultrasound controlled kidney cyst puncture: significance for diagnosis and therapy] Schramek P, et al. **Ultraschall Med** 1988 Aug;9(4):169–71 (Eng. Abstr.) (Ger)

[Clinical use of duplex sonography of the abdomen] Seitz K. **Ultraschall Med** 1989 Jun;10(3):182–9 (4 ref.) (Eng. Abstr.) (Ger)

[Metastases caused by fine needle puncture?] Weiss H. **Ultraschall Med** 1989 Jun;10(3):147–51 (47 ref.) (Eng. Abstr.) (Ger)

[Ultrasound in internal medicine. Angiology] Neuerburg-Heusler D. **Verh Dtsch Ges Inn Med** 1988; 94:593–604 (12 ref.) (Ger)

[Ultrasound diagnosis—a health problem?] Christoph W. **Z Arztl Fortbild (Jena)** 1989;83(10):533–5 (Ger)

[Ultrasound attenuation as a function of frequency in formalin fixed testicular tissue] Heynemann H, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(3):184–9 (Eng. Abstr.) (Ger)

[Indications and significance of color Doppler sonography for gastroenterologic diagnosis] Gebel M. **Z Gastroenterol [Verh]** 1989 Jul;24:219–22 (Ger)

[Sonographically controlled percutaneous pancreo-gastric pseudocyst drainage] Heyder N, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:217–8 (Ger)

[Sonography for determining indications and monitoring shockwave lithotripsy of gallbladder calculi] Jakobeit C, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:211–2 (Ger)

[Colorectal endosonography of perianorectal lesions] Tio TL, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:47–9 (Ger)

[Initial studies of 3-dimensional imaging using ultrasound] Sohn C, et al. **Z Geburtshilfe Perinatol** 1988 Nov–Dec; 192(6):241–8 (Eng. Abstr.) (Ger)

[Ultrasound microscopy of skin sections] Buhles N, et al. **Z Hautkr** 1988 Nov 15;63(11):926–34 (Eng. Abstr.) (Ger)

[Characterization of intraurethral relations of urine flow in childhood using the Doppler ultrasound technic] Nentwich HJ, et al. **Z Urol Nephrol** 1988 Sep;81(9):555–69 (34 ref.) (Eng. Abstr.) (Ger)

[Transrectal longitudinal sonography of the prostate in prostatic cancer] Solga M, et al. **Z Urol Nephrol** 1988 Sep; 81(9):547–54 (Eng. Abstr.) (Ger)

[Possibilities for using emergency abdominal ultrasound study and its significance in acute diseases of the abdominal cavity] Baricza S, et al. **Zentralbl Chir** 1988;113(13):860–8 (Eng. Abstr.) (Ger)

[Initial experiences with transvaginal vagino-sonographically controlled follicle aspiration in an in vitro fertilization program] Sydow P, et al. **Zentralbl Gynakol** 1988; 110(20):1272–6 (Eng. Abstr.) (Ger)

[Experience with echoendoscopy in the study of tumors of the upper gastroenteral system] Castagnone D, et al. **Minerva Chir** 1989 Feb 28;44(4):699–702 (11 ref.) (Ita)

[Echography with portable equipment. Its possibilities and limits in the hepatobiliary area] Angelini F, et al. **Radiol Med (Torino)** 1988 Oct;76(4):337–9 (Eng. Abstr.) (Ita)

[Diagnosis and treatment of impotence with administration of chemical prosthesis using real-time mechanical sector duplex scanner—with special reference to diabetic patients] Nakajima Y, et al. **Hinyokika Kiyo** 1989 Apr;35(4):623–30 (Eng. Abstr.) (Jpn)

[Sonographic diagnosis of breast carcinoma by a 7.5 MHz high-resolution electronic linear array transducer] Ishikawa T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25; 49(1):15–22 (Eng. Abstr.) (Jpn)

[A study of the cardiotocograms recorded by a separated 1MHz ultrasound transducer] Sawazumi K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1833–6 (Eng. Abstr.) (Jpn)

[A system of ultrasonic guidance for use in studying the brain (studies on models)] Akhutin VM, et al. **Med Tekh** 1988 Sep–Oct;(5):3–10 (Eng. Abstr.) (Rus)

[Use of microprocessor controllers for the analysis of Doppler signals of blood flow velocity] Beketova IV, et al. **Med Tekh** 1989 May–Jun;(3):34–9 (Eng. Abstr.) (Rus)

METHODS

Correlation of duplex scanning and two plane angiography in patients with symptomatic carotid stenosis. Belcaro G, et al. **Acta Chir Belg** 1988 May–Jun;88(3):159–61

Prenatal diagnosis by ultrasound of midface defects associated with holoprosencephaly. Tóth Z, et al. **Acta Chir Hung** 1988;29(3):215–21

Transvaginal ultrasound or laparoscopy for oocyte retrieval (experiences in the Ljubljana IVF program). Tomažević T, et al. **Acta Eur Fertil** 1988 Jul–Aug;19(4):209–11

Oral cholecystography or ultrasonography in the diagnosis of calculous gallbladder disease. Michielsen P, et al. **Acta Gastroenterol Belg** 1988 May–Jun;51(3):215–22 (29 ref.)

A new ultrasound-guided brain biopsy technique through a burr hole. Technical note. Tsutsumi Y, et al. **Acta Neurochir (Wien)** 1989;96(1–2):72–5

Ultrasonography in oncology. A review. Dalia Palma L, et al. **Acta Oncol** 1989;28(2):157–62 (52 ref.)

Relative attenuation measurements of ultrasound in the liver using the zerocrossing method. Fredfeldt KE. **Acta Radiol** 1989 May–Jun;30(3):299–303

Multiple real time parallel section scans. A new sonographic principle. Jorulf H, et al. **Acta Radiol** 1988 Nov–Dec; 29(6):750–1

Sonographic evaluation of experimental hydrocephalus in kittens. Wolfson BJ, et al. **AJNR** 1989 Sep–Oct; 10(5):1065–7

Color Doppler ultrasound imaging of lower-extremity venous disease. Foley WD, et al. **AJR** 1989 Feb; 152(2):371–6

Budd–Chiari syndrome: the results of duplex and color Doppler imaging. Grant EG, et al. **AJR** 1989 Feb; 152(2):377–81

Comparison of transvaginal and transabdominal sonography in the detection of early pregnancy and its complications. Jain KA, et al. **AJR** 1988 Dec;151(6):1139–43

Color Doppler ultrasound of the normal testis. Middleton WD, et al. **AJR** 1989 Feb;152(2):293–7

The use of color Doppler sonography to distinguish dilated intrahepatic ducts from vascular structures. Ralls PW, et al. **AJR** 1989 Feb;152(2):291–2

The sonographic diagnosis of acute gangrenous cholecystitis: importance of the Murphy sign. Simeone JF, et al. **AJR** 1989 Feb;152(2):289–90

Transvaginal sonography in the evaluation of normal early pregnancy: correlation with HCG level. Bree RL, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):75–9

Characterization of splenic structure in Hodgkin disease by using narrow-band filtration of backscattered ultrasound. Friedman PA, et al. **AJR Am J Roentgenol** 1989 Jun; 152(6):1197–203

Color-flow Doppler and conventional duplex scanning of the carotid bifurcation: prospective, double-blind, correlative study. Hallam MJ, et al. **AJR Am J Roentgenol** 1989 May;152(5):1101–5

Percutaneous procedures guided by color-flow Doppler sonography. McNamara MP Jr. **AJR Am J Roentgenol** 1989 May;152(5):1123–5

Aorto-left renal vein fistula: diagnosis by duplex sonography.

Mansour MA, et al. **AJR Am J Roentgenol** 1989 May; 152(5):1107–8

Testicular ischemia: color Doppler sonographic findings in five patients. Middleton WD, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1237–9

Fatty–meal sonography for diagnosis of obstruction of common bile duct [letter] Pascual E, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1341–2

Endovaginal sonographic diagnosis of dilated fallopian tubes. Tessler FN, et al. **AJR Am J Roentgenol** 1989 Sep; 153(3):523–5

Noninvasive assessment of peripheral vascular disease by color flow Doppler/two–dimensional ultrasound. Rosenfield K, et al. **Am J Cardiol** 1989 Jul 15;64(3):247–51

Quantitative assessment of coarctation in infancy by Doppler spectral analysis. van Son JA, et al. **Am J Cardiol** 1989 May 15;63(17):1282–5

Effects of propranolol and nitroglycerin on cephalad collateral venous flow in patients with cirrhosis: evaluation using transesophageal real–time two–dimensional Doppler echography. Sukigara M, et al. **Am J Gastroenterol** 1988 Nov;83(11):1248–54

First–trimester and early second–trimester diagnosis of nuchal cystic hygroma by transvaginal sonography: diverse prognosis of the septated from the nonseptated lesion. Bronshtein M, et al. **Am J Obstet Gynecol** 1989 Jul; 161(1):78–82

Pulsed Doppler flow–velocity waveforms in the prediction of fetal hematocrit of the severely isoimmunized pregnancy. Copel JA, et al. **Am J Obstet Gynecol** 1989 Aug; 161(2):341–4

Vaginosonographic velocimetry of both main uterine arteries by visual vessel recognition and pulsed Doppler method during pregnancy. Deutinger J, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1072–6

Accuracy of total bladder volume and residual urine measurements: comparison between real–time ultrasonography and catheterization. Mainprize TC, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):1013–6

Assessment of experienced pain associated with transvaginal ultrasonography–guided oocyte recovery in in vitro fertilization patients. Shatford LA, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):1002–6

Apical four–chamber ultrasonography as screen for congenital heart disease [letter] Silverman NH. **Am J Obstet Gynecol** 1989 Apr;160(4):1017–8

First–trimester midgut herniation: a high–frequency transvaginal sonographic study. Timor–Tritsch IE, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):831–3

The use of transvaginal ultrasonography in the diagnosis of ectopic pregnancy. Timor–Tritsch IE, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):157–61

Comparison of six different ultrasonographic methods for predicting lethal fetal pulmonary hypoplasia. Vintzileos AM, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):606–12

Continuous cardiac output determination using transtracheal Doppler: initial results in humans. Abrams JH, et al. **Anesthesiology** 1989 Jul;71(1):11–5

Transtracheal Doppler: a new procedure for continuous cardiac output measurement. Abrams JH, et al. **Anesthesiology** 1989 Jan;70(1):134–8

New ultrasonic femoropopliteal and tibiofemoral tests in the study of patency of the deep venous system. Barták JV. **Angiology** 1989 Aug;40(8):701–4

Real–time ultrasound for diagnosis of symptomatic venous thrombosis and for screening of patients at risk: correlation with ascending conventional venography. Monreal M, et al. **Angiology** 1989 Jun;40(6):527–33

Diagnosis of deep–vein thrombosis using duplex ultrasound. White RH, et al. **Ann Intern Med** 1989 Aug 15; 111(4):297–304

Routine use of laser Doppler flowmetry for monitoring autologous tissue transplants. Jenkins S, et al. **Ann Plast Surg** 1988 Nov;21(5):423–6

An evaluation of the role of rectal endosonography in rectal cancer. Beynon J. **Ann R Coll Surg Engl** 1989 Mar; 71(2):131–9 (62 ref.)

Intraoperative ultrasound of the liver affects operative decision making. Parker GA, et al. **Ann Surg** 1989 May; 209(5):569–76; discussion 576–7

Reproducibility of transcutaneous continuous–wave Doppler testing of the carotid arteries. Hayes AC, et al. **Ann Vasc Surg** 1987 May;1(4):469–73

Duplex scanning for noninvasive assessment of both carotid luminal diameter and atheromatous plaque morphology. Leahy AL, et al. **Ann Vasc Surg** 1987 May;1(4):465–8

Noninvasive assessment of cerebrovascular disease. Moneta GL, et al. **Ann Vasc Surg** 1987 May;1(4):489–501 (91 ref.)

Detection of stenoses in the internal carotid artery by waveform analysis of continuous wave ultrasound signals (II). Tait WF, et al. **Ann Vasc Surg** 1986 May;1(1):105–11

Detection of stenoses in the internal carotid artery by waveform analysis of continuous wave ultrasound signals (I). Tait WF, et al. **Ann Vasc Surg** 1986 May;1(1):98–104

Transvaginal pulsed Doppler velocimetry in fetal arteries. Deutinger J, et al. **Arch Gynecol Obstet** 1989;246(1):57–60

Blood flow velocity waveforms at late pregnancy and during labor. Kirkinen P, et al. **Arch Gynecol Obstet** 1988;244 Suppl:S19–23

A comparative study of perineal ultrasound scanning and urethrocystography in patients with genuine stress incontinence. Kölbl H, et al. **Arch Gynecol Obstet** 1988; 244(1):39–45

Duplex ultrasound and ocular pneumoplethysmography concordance in detecting severe carotid stenosis. Castaldo JE, et al. **Arch Neurol** 1989 May;46(5):518–22

Ultrasonography of the hip for Perthes' disease. Linnenbaum FJ, et al. **Arch Orthop Trauma Surg** 1989;108(3):166–72

Use of sequential B–mode ultrasonography to manage abdominal aortic aneurysms. Littooy FN, et al. **Arch Surg** 1989 Apr;124(4):419–21

Prenatal diagnosis of exstrophy of the cloaca with ectopia cordis. Nishi T, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun;14(2):213–7

Intrauterine diagnosis of epignathus using ultrasonic tomography. Shouno H, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun;14(2):199–205

Ultrasound directed oocyte recovery in an IVF program. Wong PC, et al. **Asia Oceania J Obstet Gynaecol** 1988 Dec; 14(4):433–5

Which is the best test to detect the polycystic ovary? Eden JA. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):221–4

A new concept in breast investigation: echo–histological acino–ductal analysis or analytic echography. Teboul M. **Biomed Pharmacother** 1988;42(4):289–95

Demonstration of ectopic pregnancy by transvaginal ultrasound. de Crespigny LC. **Br J Obstet Gynaecol** 1988 Dec;95(12):1253–6

Vaginal ultrasound for ruling out placenta praevia. Case report. Farine D, et al. **Br J Obstet Gynaecol** 1989 Jan; 96(1):117–9

Transvaginal ultrasonic assessment of endometrial growth in spontaneous and hyperstimulated menstrual cycles. Randall JM, et al. **Br J Obstet Gynaecol** 1989 Aug; 96(8):954–9

Direct method of measuring venous ulcers. Coleridge Smith PD, et al. **Br J Surg** 1989 Jul;76(7):689

Transvaginal ultrasound in the assessment of bladder volumes in women. Preliminary report. Haylen BT, et al. **Br J Urol** 1989 Feb;63(2):149–51

Transvaginal endosonography: a new method to study the anatomy of the lower urinary tract in urinary stress incontinence. Quinn MJ, et al. **Br J Urol** 1988 Nov; 62(5):414–8

Vaginal endosonography in the post–operative assessment of colposuspension. Quinn MJ, et al. **Br J Urol** 1989 Mar; 63(3):295–300

Clinical application of transrectal ultrasound for the investigation of the incontinent patient. Richmond DH, et al. **Br J Urol** 1989 Jun;63(6):605–9

Combined transrectal ultrasonography and urodynamics in the evaluation of detrusor–sphincter dyssynergia. Shabsigh R, et al. **Br J Urol** 1988 Oct;62(4):326–30

Cutaneous 10 MHz ultrasound B scan allows the quantitative assessment of burn depth. Bauer JA, et al. **Burns Incl Therm Inj** 1989 Feb;15(1):49–51

Comparison of two laser Doppler flowmetry systems for bone blood flow analysis. Swiontkowski MF, et al. **Calcif Tissue Int** 1988 Aug;43(2):103–7

Duplex ultrasonography of the fetal aorta, umbilical artery, and placental arcuate artery throughout normal human pregnancy. Cameron A, et al. **Can Assoc Radiol J** 1989 Jun;40(3):145–9

The value of carotid Doppler ultrasound in asymptomatic extracranial arterial disease. Bornstein NM, et al. **Can J Neurol Sci** 1988 Nov;15(4):378–83

Transrectal ultrasound. A case report related to the natural history of prostate cancer. Lee A, et al. **Cancer** 1989 Apr 15;63(8):1548–51

M–mode echovenography: a new technique for the evaluation of venous wall and valve motion. Jäger K, et al. **Cardiovasc Res** 1989 Jan;23(1):25–30

Ultrasonographic approach to diagnosing chest wall tumors. Saito T, et al. **Chest** 1988 Dec;94(6):1271–5

Downhill azygos vein secondary to occlusion of the superior vena cava in Behçet's disease. Sukigara M, et al. **Chest** 1988 Dec;94(6):1308–9

Avoidance of embolic complications by ultrasonic characterization of the ascending aorta. Barzilai B, et al. **Circulation** 1989 Sep;80(3 Pt 1):1275–9

Diagnosis of deep venous thrombosis. A prospective study comparing duplex scanning to contrast venography. Killewich LA, et al. **Circulation** 1989 Apr;79(4):810–4

Choriogonadotropin discriminatory zone and ultrasonography [letter] Askew G, et al. **Clin Chem** 1989 Sep;35(9):2019

Percutaneous renal biopsy well–visualized by orthogonal ultrasound application using linear scanning. Yoshimoto M, et al. **Clin Nephrol** 1988 Aug;30(2):106–10

A pulse–foot–seeking algorithm for Doppler ultrasound waveforms. Evans DH. **Clin Phys Physiol Meas** 1988 Aug; 9(3):267–71

Characterisation of the atheromatous plaque in the carotid arteries. Woodcock JP. **Clin Phys Physiol Meas** 1989 Feb; 10 Suppl A:45–9

Instrumentation for the investigation of the extracranial carotid circulation. Woodcock JP. **Clin Phys Physiol Meas** 1989 Feb;10 Suppl A:5–14

The current status of transrectal ultrasonography in the diagnosis and management of prostatic cancer. Griffiths GJ, et al. **Clin Radiol** 1989 Jul;40(4):337–40 (35 ref.)

The role of transvaginal ultrasound in the assessment of the female pelvis. Guy RL, et al. **Clin Radiol** 1988 Nov; 39(6):669–72

The use of endoscopic ultrasonography in the diagnosis and staging of carcinoma of the papilla of Vater. Yasuda K, et al. **Endoscopy** 1988 Aug;20 Suppl 1:218–22

Appearance of thyroid diseases using colour–coded duplex sonography. Fobbe F, et al. **Eur J Radiol** 1989 Feb; 9(1):29–31

Duplex scanning and plaque histology in cerebral ischaemia. Aldoori MI, et al. **Eur J Vasc Surg** 1987 Jun;1(3):159–64

Early detection of stenosis of femoro–distal grafts. A surveillance study using colour–duplex scanning. Disselhoff B, et al. **Eur J Vasc Surg** 1989 Feb;3(1):43–8

Duplex scanning in cerebral, abdominal and peripheral arterial disease. Legemate DA, et al. **Eur J Vasc Surg** 1989 Aug;3(4):287–95 (123 ref.)

The potential of duplex scanning to replace aorto–iliac and femoro–popliteal angiography. Legemate DA, et al. **Eur J Vasc Surg** 1989 Feb;3(1):49–54

Failure of duplex scanning to demonstrate an anomalous branch of the internal carotid artery. McShane MD, et al. **Eur J Vasc Surg** 1987 Jun;1(3):213–4

Carotid stump syndrome: a colour–coded Doppler flow study. Quill DS, et al. **Eur J Vasc Surg** 1989 Feb;3(1):79–83

Reproducibility of measurement of prostatic volume by ultrasound. Comparison of transrectal and transabdominal methods. Styles RA, et al. **Eur Urol** 1988;14(4):266–9

Imaging of the optic nerve with standardised echography. Atta HR. **Eye** 1988;2 (Pt 4):358–66

Transvaginal pulsed Doppler measurement of blood flow velocity in the ovarian arteries during cycle stimulation and after follicle puncture. Deutinger J, et al. **Fertil Steril** 1989 Mar;51(3):466–70

Transvaginal ultrasound for ectopics [letter] Kadar N. **Fertil Steril** 1989 May;51(5):909–10

The diagnosis of submucosal tumors of the stomach by endoscopic ultrasonography. Yasuda K, et al. **Gastrointest Endosc** 1989 Jan–Feb;35(1):10–5

Quantitative analysis of fetal behavioural patterns with real–time sonography and the actocardiograph. Arabin B, et al. **Gynecol Obstet Invest** 1988;26(3):211–8

Umbilical artery Doppler waveform in pregnancies with uncomplicated intra–uterine growth retardation. Haddad NG, et al. **Gynecol Obstet Invest** 1988;26(3):206–10

Transvaginal sonography as a screening method for ovarian cancer. Higgins RV, et al. **Gynecol Oncol** 1989 Sep; 34(3):402–6

Duplex scanning for diagnosis of peripheral arterial disease. Strandness DE Jr. **Herz** 1988 Dec;13(6):372–7

Renal transplant blood flow evaluation by ultrasonic duplex scanning. Akiyama T, et al. **Hinyokika Kiyo** 1988 Oct; 34(10):1733–9

Comparison of techniques for in vivo attenuation measurements. Parker KJ, et al. **IEEE Trans Biomed Eng** 1988 Dec;35(12):1064–8

Local tissue attenuation images based on pulsed–echo ultrasound scans. Walach E, et al. **IEEE Trans Biomed Eng** 1989 Feb;36(2):211–21

Pulsed Doppler derived indices in predicting noninvasively, pulmonary arterial pressures. Vijan VM, et al. **Indian Heart J** 1989 Mar–Apr;41(2):108–13

The usefulness of Doppler time interval histogram analysis in arterial occlusion. Wesolowski J, et al. **Int Angiol** 1988 Oct–Dec;7(4):309–11

Transrectal ultrasound in the diagnosis and staging of local disease after I125 seed implantation for prostate cancer. Lee F, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec; 15(6):1453–9

High–resolution ultrasound in the preoperative and postoperative assessment of distal metatarsal osteotomy. Preliminary report. Graf PM, et al. **Invest Radiol** 1988 Nov; 23(11):827–31

A new ultrasonic technique for quantifying blood echogenicity. Kallio T, et al. **Invest Radiol** 1988 Nov; 23(11):832–5

Endorectal prostate ultrasonography. A definitive technique? [editorial] Rifkin MD. **Invest Radiol** 1988 Oct;23(10):740–1

The application of a fractal model to the scattering of ultrasound in biological media. Javanaud C. **J Acoust Soc Am** 1989 Aug;86(2):493–6

Doppler color flow mapping in the evaluation of prosthetic mitral and aortic valve function. Kapur KK, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1561–71

Ultrasound integrated backscatter tissue characterization of remote myocardial infarction in human subjects. Vered Z, et al. **J Am Coll Cardiol** 1989 Jan;13(1):84–91

Duplex sonography of the cervical carotid artery. Part I: Physical principles and technique. Normal and pathological findings. Roussel L, et al. **J Belge Radiol** 1988;71(5):577–88 (51 ref.)

Shear–layer detection in poststenotic flow by spectrum analysis of Doppler signals. Tamura T, et al. **J Biomech Eng** 1988 Nov;110(4):320–5

Recording and processing aneurysmal vibration signals in dogs. Sun M, et al. **J Biomed Eng** 1988 Jul;10(4):336–42

Risk factors for site specific extracranial carotid artery plaque distribution as measured by B–mode ultrasound. Tell GS, et al. **J Clin Epidemiol** 1989;42(6):551–9

Ultrasonic B–scans of the facial/oral periodontium in pigs. Löst C, et al. **J Clin Periodontol** 1989 Sep;16(8):534–8

Determination of the facial/oral alveolar crest using RF–echograms. An in vitro study on the periodontium of pigs. Löst C, et al. **J Clin Periodontol** 1989 Sep;16(8):539–44

Ultrasonic studies of unblemished and artificially

demineralized enamel in extracted human teeth: a new method for detecting early caries. Ng SY, et al. **J Dent** 1988 Oct;16(5):201–9

Active and inactive edges of psoriatic plaques: identification by tracing and investigation by laser—Doppler flowmetry and immunocytochemical techniques. Hull SM, et al. **J Invest Dermatol** 1989 Jun;92(6):782–5

Ultrasound with graded compression in the evaluation of acute appendicitis. Sim KT, et al. **J Natl Med Assoc** 1989 Sep;81(9):954–7 (14 ref.)

Color flow mapping to document normal pulmonary venous return in neonates with persistent pulmonary hypertension being considered for extracorporeal membrane oxygenation. Kimball TR, et al. **J Pediatr** 1989 Mar; 114(3):433–7

Development of an ultrasonic system for three-dimensional reconstruction of the fetus. Baba K, et al. **J Perinat Med** 1989;17(1):19–24

Determination of the minimum number of cardiac cycles necessary to ensure representative blood flow velocity measurements. Kurmanavichius J, et al. **J Perinat Med** 1989;17(1):33–9

Periodontal ultrasonic diagnosis: experiments on thin bony platelets and on a simulated periodontal ligament space. Löst C, et al. **J Periodont Res** 1988 Nov;23(6):347–51

Diagnosis of ectopic pregnancy using transvaginal ultrasound scanning. Neiger R, et al. **J Reprod Med** 1989 Jan; 34(1):52–4

Transvaginal sonography. Steinkampf MP. **J Reprod Med** 1988 Dec;33(12):931–8

Doppler analysis of the umbilical artery. The importance of choosing the placental end of the cord. Abramowicz JS, et al. **J Ultrasound Med** 1989 Apr;8(4):219–21

Transvaginal sonographic imaging of the low fetal head in the second trimester. Benacerraf BR, et al. **J Ultrasound Med** 1989 Jun;8(6):325–8

Usefulness of duplex ultrasound in evaluating vertebral arteries. Bluth EI, et al. **J Ultrasound Med** 1989 May; 8(5):229–35

Transcranial Doppler evaluation of middle cerebral artery stenosis. de Bray JM, et al. **J Ultrasound Med** 1988 Nov; 7(11):611–6

High-resolution real-time ultrasonography. Diagnosis and follow-up of jugular and subclavian vein thrombosis. Gaitini D, et al. **J Ultrasound Med** 1988 Nov;7(11):621–7

Slice thickness measurements. Goldstein A. **J Ultrasound Med** 1988 Sep;7(9):487–98

Correlation of experimental rCBF determinations in goats with flow measurements from a Doppler-modified carotid artery shunt. Loftus CM, et al. **J Ultrasound Med** 1989 Jan;8(1):7–13

Vertebral artery compression as an adjunct to transcutaneous Doppler ultrasound examination. Rossman ME, et al. **J Ultrasound Med** 1988 Oct;7(10):541–4

Hand-held and automated sonomammography. Clinical role relative to X-ray mammography. Vilaro MM, et al. **J Ultrasound Med** 1989 Feb;8(2):95–100

Sonographic urethrogram: comparison to roentgenographic techniques in 22 patients. Gluck CD, et al. **J Urol** 1988 Dec;140(6):1404–8

Random systematic versus directed ultrasound guided transrectal core biopsies of the prostate. Hodge KK, et al. **J Urol** 1989 Jul;142(1):71–4; discussion 74–5

Sonography of the distal male urethra—a new diagnostic procedure for urethral strictures: results of a retrospective study. Merkle W, et al. **J Urol** 1988 Dec;140(6):1409–11

The appearance of prostate cancer on transrectal ultrasonography: correlation of imaging and pathological examinations. Shinohara K, et al. **J Urol** 1989 Jul; 142(1):76–82

Accuracy of bladder volume determinations in children using a suprapubic ultrasonic bi-planar technique. Williot P, et al. **J Urol** 1989 Apr;141(4):900–2

Puncture of the seminal vesicles guided by a transrectal real-time linear scanner. Abe M, et al. **JCU** 1989 Mar–Apr; 17(3):173–8

Ultrasound volumetry in hematometrocolpos. Ali GM, et al. **JCU** 1989 May;17(4):257–9

Abdominal ultrasonography versus transvaginal scanning: accuracy in follicular development evaluation and prediction for oocyte retrieval in stimulated cycles. Bonilla-Musoles F, et al. **JCU** 1989 Sep;17(7):469–73

A case of female infertility investigated by contrast-enhanced echo-gynecography. Davison GB, et al. **JCU** 1988 Jan; 16(1):44–7

Human skin histology using high-resolution echography. Murakami S, et al. **JCU** 1989 Feb;17(2):77–82

Quantitative measurement of abdominal arterial blood flow using image-directed Doppler ultrasonography: superior mesenteric, splenic, and common hepatic arterial blood flow in normal adults. Nakamura T, et al. **JCU** 1989 May; 17(4):261–8

Transvaginal ultrasound. **Lancet** 1989 Jul 1;2(8653):19–20 (25 ref.)

Transoesophageal ultrasound imaging of spinal canal and cord [letter] Daniel WG, et al. **Lancet** 1989 Apr 15; 1(8642):849–50

First trimester transvaginal sonographic diagnosis of fetal anomalies [letter] Lim BH, et al. **Lancet** 1989 Feb 25; 1(8635):444

Vaginal ultrasound [letter] Luesley D. **Lancet** 1989 Apr 15; 1(8642):843

Intrauterine ultrasonography and endometrial cancer [letter] Rosenberg P, et al. **Lancet** 1989 Apr 15;1(8642):842–3

Transvaginal ultrasonography for diagnosis of placenta praevia [letter] Rotten S, et al. **Lancet** 1989 Feb 25; 1(8635):444–5

Arteriovenous fistula after biopsy of renal transplant: detection and monitoring with color flow and duplex ultrasonography. Morton MJ, et al. **Mayo Clin Proc** 1989 May;64(5):531–4

Order selection in Doppler blood flow signal spectral analysis using autoregressive modelling. Kaluzynski K. **Med Biol Eng Comput** 1989 Jan;27(1):89–92

New possibilities in colour echotomography (computer-aided colour echotomography). Pop T, et al. **Med Interne** 1982 Apr–Jun;20(2):95–9 (6 ref.)

Transvaginal ultrasonography to ascertain the position of an IUD [letter] Parsons J, et al. **N Engl J Med** 1989 Aug 24;321(8):546–7

Colour flow imaging of the great intracranial arteries in infants. Deeg KH. **Neuroradiology** 1989;31(1):40–3

Ovarian vein thrombosis with atypical presentation: role of sonography and duplex Doppler. Baka JJ, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):887–9

Comparison of abdominal and vaginal sonography in suspected ectopic pregnancy. Cacciatore B, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):770–4

An evaluation of the time of discovery of fetal malformations by an indication-based system for ordering obstetric ultrasound. Hegge FN, et al. **Obstet Gynecol** 1989 Jul; 74(1):21–4

A new method for sonographic urethrocystography and simultaneous pressure-flow measurements. Koelbl H, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):417–22

Transrectal ultrasound used in office practice to aid in the diagnosis of carcinoma of the prostate. Riemenschneider HW, et al. **Ohio Med** 1989 Apr;85(4):296–8

Two new techniques for evaluating prostate cancer. The role of prostate-specific antigen and transrectal ultrasound. Hardeman SW, et al. **Postgrad Med** 1989 Aug;86(2):197–8, 201, 204 passim (14 ref.)

Ultrasound mammography: effects of focal zone placement. Kimme-Smith C, et al. **Radiographics** 1985 Nov;5(6):955–69

Current applications of color Doppler imaging in the abdomen and extremities. Lewis BD, et al. **Radiographics** 1989 Jul;9(4):599–631

Sonography in acute pancreatitis. Jeffrey RB Jr. **Radiol Clin North Am** 1989 Jan;27(1):5–17 (24 ref.)

Recurrent deep venous thrombosis: limitations of US. Cronan JJ, et al. **Radiology** 1989 Mar;170(3 Pt 1):739–42

Duplex Doppler US of renal allografts: causes of elevated resistive index. Don S, et al. **Radiology** 1989 Jun; 171(3):709–12

Color-flow US imaging through the analysis of speckle motion. Gardiner WM, et al. **Radiology** 1989 Sep; 172(3):866–8

Hepatic venous outflow obstruction: evaluation with pulsed duplex sonography. Hosoki T, et al. **Radiology** 1989 Mar; 170(3 Pt 1):733–7

Iatrogenic femoral arteriovenous fistula: diagnosis with color Doppler imaging. Igidbashian VN, et al. **Radiology** 1989 Mar;170(3 Pt 1):749–52

Postbiopsy renal transplant arteriovenous fistulas: color Doppler US characteristics. Middleton WD, et al. **Radiology** 1989 Apr;171(1):253–7

Intracerebral arteriovenous malformations: intraoperative color Doppler flow imaging. Rubin JM, et al. **Radiology** 1989 Jan;170(1 Pt 1):219–22

Parasternal sonography of the internal mammary vessels: technique, normal anatomy, and lymphadenopathy. Scatarige JC, et al. **Radiology** 1989 Aug;172(2):453–7

Duplex pulsed Doppler US versus intracranial pressure in the neonate: clinical and experimental studies. Seibert JJ, et al. **Radiology** 1989 Apr;171(1):155–9

Transplant renal artery stenosis: evaluation with duplex sonography. Snider JF, et al. **Radiology** 1989 Sep;172(3 Pt 2):1027–30

Transabdominal versus endovaginal pelvic sonography: prospective study. Tessler FN, et al. **Radiology** 1989 Feb; 170(2):553–6

Transrectal biopsy of the prostate guided with transrectal US: longitudinal and multiplanar scanning. Torp-Pedersen S, et al. **Radiology** 1989 Jan;170(1 Pt 1):23–7

Unusual causes of increased vascular impedance in renal transplants: duplex Doppler evaluation. Warshauer DM, et al. **Radiology** 1988 Nov;169(2):367–70

Echography in the study of varicocele: evaluation of reliability versus Doppler method. Bock E, et al. **Rays** 1988 Sep–Dec;13(3):97–9

Transcranial Doppler in cerebrovascular disease. Tang KF, et al. **Singapore Med J** 1988 Oct;29(5):489–97

Ultrasonic measurement of lumbar canal diameter: a screening tool for low back disorders? Chovil AC, et al. **South Med J** 1989 Aug;82(8):977–80 (25 ref.)

Transabdominal ultrasound measurement of the lumbar spinal canal. Its value for evaluation of lumbar spinal stenosis. Tervonen O, et al. **Spine** 1989 Feb;14(2):232–5

Comparison of cerebral angiography and transcranial Doppler sonography in acute stroke. Zanette EM, et al. **Stroke** 1989 Jul;20(7):899–903

Lower gastrointestinal endoultrasound. Boscaini M. **Surg Endosc** 1989;3(1):29–32

Laparoscopic ultrasonography in the study of liver diseases. Preliminary results. Fornari F, et al. **Surg Endosc** 1989; 3(1):33–7

Duplex ultrasonography in portal vein thrombosis. Harkányi Z, et al. **Surg Endosc** 1989;3(2):79–82

Endoluminal ultrasonic examination of sessile polyps and early carcinomas of the rectum. Heintz A, et al. **Surg Endosc** 1989;3(2):92–5

Endoscopic ultrasonography in the diagnosis of esophageal carcinoma. Murata Y, et al. **Surg Endosc** 1987;1(1):11–6

Doppler echography for hemodynamic studies of the azygos vein. Sukigara M, et al. **Surg Endosc** 1989;3(1):21–8

Compression ultrasonography as an aid in the differential diagnosis of appendicitis. Fa EM, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):290–8

The use of preoperative localization of adenomas of the parathyroid glands by thallium–technetium subtraction scintigraphy, high-resolution ultrasonography and computed tomography. Roses DF, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):99–106

Transrectal ultrasonography in the evaluation of rectal and extrarectal disease. Zainea GG, et al. **Surg Gynecol Obstet** 1989 Aug;169(2):153–6

Transrectal ultrasonography of the prostate. Chang SC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1065–73

Prenatal sonographic diagnosis and proper management of congenital gastrointestinal obstruction: report of 5 cases. Hsieh FJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr; 87(4):484–9

Role of oral cholecystography. Bova JG, et al. **Tex Med** 1988 Nov;84(11):52–4

A computerized analysis of platelet aggregation detected by ultrasound. Mahony C, et al. **Thromb Res** 1989 Aug 1; 55(3):351–60

Real-time ultrasonic diagnosis of ovarian tumors. Khan NS, et al. **Tokushima J Exp Med** 1987 Dec;34(3–4):53–60

Adapting parametric acoustic arrays for tomographic imaging. Cai A, et al. **Ultrason Imaging** 1988 Jul; 10(3):196–203

Numerical study of higher-order diffraction tomography via the sinc basis moment method. Cavicchi TJ, et al. **Ultrason Imaging** 1989 Jan;11(1):42–74

Synthetic B-scan images by numerical solution of a wave equation. Finette S. **Ultrason Imaging** 1988 Jul;10(3):220–8

High-resolution, reflection mode tomographic imaging. Part I: Principles and methods. Herment A, et al. **Ultrason Imaging** 1989 Jan;11(1):1–21 (31 ref.)

High-resolution, reflection mode tomographic imaging. Part II: Application to echography. Herment A, et al. **Ultrason Imaging** 1989 Jan;11(1):22–41 (22 ref.)

A ray tracing method for calculating the speed of sound in a nonparallel layered model using pulse echo ultrasound. Lockwood GR, et al. **Ultrason Imaging** 1989 Apr; 11(2):106–18

Phase-derivative imaging. II: Effects of beam diffraction and scatterer density. Oosterveld BJ, et al. **Ultrason Imaging** 1989 Jul;11(3):153–74

Diffraction tomography by a method of image projections. Rouseff D, et al. **Ultrason Imaging** 1988 Jul;10(3):204–19

The Maltese cross processor: speckle reduction for circular transducers. Smith SW, et al. **Ultrason Imaging** 1988 Jul; 10(3):153–70

Optimum focusing in an ultrasonic annular array imaging system using a nonspherical lens. Song TK, et al. **Ultrason Imaging** 1989 Jul;11(3):197–214

Gray level transforms and lesion detectability in echographic images. Thijssen JM, et al. **Ultrason Imaging** 1988 Jul; 10(3):171–95

Ultrasonic non-destructive measurements of cortical bone thickness in human cadaver femur. Singh S. **Ultrasonics** 1989 Mar;27(2):107–13

Ultrasonic studies of gall-bladder stones. Singh VR, et al. **Ultrasonics** 1989 Mar;27(2):114–5

LaPlace transform analysis of femoral artery Doppler signals: the state of the art. Baker JD, et al. **Ultrasound Med Biol** 1989;15(1):13–20

Measurement-based ophthalmic ultrasonography. Buschmann W, et al. **Ultrasound Med Biol** 1989;15(3):161–8

Automated calculation of stenosis diameters from the width of the velocity jet with the use of a multi-gate pulsed Doppler system. de Knecht S, et al. **Ultrasound Med Biol** 1988;14(7):575–81

The importance of resolution in the clinical application of breast sonography. Dempsey PJ. **Ultrasound Med Biol** 1988;14 Suppl 1:43–8 (17 ref.)

A new approach to the noninvasive measurement of cardiac output using an annular array Doppler technique—I. Theoretical considerations and ultrasonic fields. Evans JM, et al. **Ultrasound Med Biol** 1989;15(3):169–78

A new approach to the noninvasive measurement of cardiac output using an annular array Doppler technique—II. Practical implementation and results. Evans JM, et al. **Ultrasound Med Biol** 1989;15(3):179–87

Dynamic morpho-cyto-echography and the echographic galactoscopy endo-ductal sample. Intrinsic and extrinsic markers in the detection of breast cancers. Feige C. **Ultrasound Med Biol** 1988;14 Suppl 1:97–108

Direct-contact B-scan sonomammography—an aid to X-ray mammography. Guyer PB. **Ultrasound Med Biol** 1988;14 Suppl 1:49–52

Benefits of bi-plane scanning. Hensley L, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:231–4

The choice of index for umbilical artery Doppler waveforms.

Hoskins PR, et al. **Ultrasound Med Biol** 1989;15(2):107–11

Heartrate variation of umbilical artery Doppler waveforms. Hoskins PR, et al. **Ultrasound Med Biol** 1989;15(2):101–5

Duplex sonography of the breast. Jackson VP. **Ultrasound Med Biol** 1988;14 Suppl 1:131–7

Variation of transducer frequency output and receiver band–pass characteristics for improved detection and image characterization of solid breast masses. Kelly–Fry E, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:143–61

A new method of encoding and displaying audio Doppler–shift signals: the chromagram. Kontis S. **Ultrasound Med Biol** 1988;14(6):465–71

A sonographic technique to reduce beam distortion by curved interfaces. Kossoff G, et al. **Ultrasound Med Biol** 1989;15(4):375–82

In vitro estimation and imaging of attenuation coefficients and instantaneous frequency for breast tissue characterization. Kubota M, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:163–74 (25 ref.)

Conventional and color Doppler in the assessment of fetal and maternal circulation. Kurjak A, et al. **Ultrasound Med Biol** 1988;14(5):337–54 (119 ref.)

Contact B–scan ultrasound of the breast. Lalani Z, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:235–42

Role of direct contact, real–time breast ultrasound: one year's experience. Lee ME, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:109–12

A 20–MHz ultrasound system for imaging the intestinal wall. Martin RW, et al. **Ultrasound Med Biol** 1989;15(3):273–80

A transmission line modelling approach to the interpretation of uterine Doppler waveforms. Mo LY, et al. **Ultrasound Med Biol** 1988;14(5):365–76

Contrast agents in diagnostic ultrasound. Ophir J, et al. **Ultrasound Med Biol** 1989;15(4):319–33 (69 ref.)

Should results of ultrasound Doppler studies be reported in units of frequency or velocity? Phillips DJ, et al. **Ultrasound Med Biol** 1989;15(3):205–12

Quantitative assessment of carotid artery disease by continuous wave and pulsed multigated Doppler—prospective comparison with angiography. Sillesen H, et al. **Ultrasound Med Biol** 1988;14(8):641–8

Changes in Doppler waveforms can predict pressure reduction across internal carotid artery stenoses. Sillesen H, et al. **Ultrasound Med Biol** 1988;14(8):649–55

Echo–histological "Acino–Ductal Analysis". Preliminary results. Teboul M. **Ultrasound Med Biol** 1988;14 Suppl 1:89–95

Application of Fourier analysis to clinical study of patterns of tissue movement. Tristam M, et al. **Ultrasound Med Biol** 1988;14(8):695–707

Dynamic tests in real–time breast echography. Ueno E, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:53–7

A comparative study and assessment of Doppler ultrasound spectral estimation techniques. Part I: Estimation methods. Vaitkus PJ, et al. **Ultrasound Med Biol** 1988;14(8):661–72

A comparative study and assessment of Doppler ultrasound spectral estimation techniques. Part II: Methods and results. Vaitkus PJ, et al. **Ultrasound Med Biol** 1988;14(8):673–88

Texture analysis—a new method of differentiating prostatic carcinoma from prostatic hypertrophy. Kratzik C, et al. **Urol Res** 1988;16(5):395–7

The role of ultrasound in prostatic imaging. Introduction and overview. Crawford ED. **Urology** 1989 Jun;33(6 Suppl):2–6 (52 ref.)

Value of transrectal ultrasonography for diagnosis and treatment of prostatic abscess. Cytron S, et al. **Urology** 1988 Nov;32(5):454–8

A simple technique for sonographic estimation of liver volume. Gladisch R, et al. **Z Gastroenterol** 1988 Nov; 26(11):694–8

[Evaluation of interventional ultrasonography in the diagnosis of renal and perirenal diseases] Wang JR. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Jun;22(3):133–5 (Eng. Abstr.) (Chi)

[I.V. administration of Mendiaxon in ultrasonography of the gallbladder and bile ducts] Dvořák M, et al. **Sb Lek** 1989 Mar;91(2–3):40–4 (Eng. Abstr.) (Cze)

[A prospective evaluation of transvaginal ultrasonic scanning in the initial assessment of suspected pelvic masses] Holm J, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2082–4 (Eng. Abstr.) (Dan)

[Screening for aneurysm of the abdominal aorta] van Vroonhoven TJ. **Ned Tijdschr Geneeskd** 1989 May 27; 133(21):1061–2 (Dut)

[The contribution of peroperative echography in surgery of biliary lithiasis. Preliminary results] Gigot JF, et al. **Acta Gastroenterol Belg** 1988 May–Jun;51(3):260–75 (40 ref.) (Eng. Abstr.) (Fre)

[Prenatal diagnosis of fetal diseases of the lower urinary tract] Avni EF, et al. **Acta Urol Belg** 1989;57(2):417–22 (Fre)

[Doppler and pregnancy. Introduction (the importance of Doppler)] Béguin F. **Arch Gynecol Obstet** 1988;244 Suppl:S1–3 (Fre)

[Contribution of vaginal echography in urinary incontinence] Leroy B, et al. **Arch Gynecol Obstet** 1988;244 Suppl:S30–7 (Fre)

[Doppler study of the cervico–placental circulatory equilibrium in the fetus] Tranquart F, et al. **Arch Gynecol Obstet** 1988;244 Suppl:S4–8 (Fre)

[Compared validity of the criteria of quantification of aortic insufficiency using pulsed and continuous Doppler] Avinee P, et al. **Arch Mal Coeur** 1988 Jul;81(7):895–901 (Eng. Abstr.) (Fre)

[Transvaginal echography. An application in the diagnosis of cervical incompetence] Balde MD, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):629–33 (Eng. Abstr.) (Fre)

[Comparison of the results of umbilical artery velocimetry obtained by pulsed Doppler and continuous Doppler] Gaucherand P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):609–14 (Eng. Abstr.) (Fre)

[A comparative study of pulsed Doppler versus continuous Doppler technic without spectral analysis in obstetrics] Hamel–Desnos C, et al. **J Mal Vasc** 1989;14(1):32–8 (Eng. Abstr.) (Fre)

[Basal Doppler ultrasonography of the penis. Standardization of the method] Meazza A, et al. **J Urol (Paris)** 1989; 95(3):155–60 (Eng. Abstr.) (Fre)

[Intrarectal echography in the evaluation of locoregional extension of female genital cancers (letter)] Giovannini M, et al. **Presse Med** 1989 Jan 28;18(3):128–9 (Fre)

[Early diagnosis of cancer of the prostate. Hypothetic role of transrectal echography] Perrin P, et al. **Presse Med** 1989 Jul 1;18(26):1289–92 (Eng. Abstr.) (Fre)

[Use of Doppler pulse in the qualitative and quantitative diagnosis of aortic, mitral and tricuspid valve insufficiency. Angiographic comparison of the results] Mouelhi E, et al. **Tunis Med** 1987 Mar;65(3):175–81 (Eng. Abstr.) (Fre)

[Doppler blood flow measurement in the mother and fetus in normal pregnancy] Baumann H. **Arch Gynecol Obstet** 1988;244 Suppl:S9–11 (Ger)

[The significance of Doppler blood flow measurement in recognizing placental insufficiency] Vetter K. **Arch Gynecol Obstet** 1988;244 Suppl:S12–8 (Ger)

[Sonographic kidney diagnosis. Normal kidneys, normal variants, anomalies, nephrolithiasis, hydronephrosis] Füessl HS. **Bildgebung** 1987–89;56 Suppl 1:48–54 (Ger)

[Indications and value of sonography in medical diagnosis] Füessl HS, et al. **Bildgebung** 1987–89;56 Suppl 1:14–6 (Ger)

[Basic abdominal ultrasound diagnosis course. Nomenclature and description of findings] Gresser U. **Bildgebung** 1987–89; 56 Suppl 1:10–3 (Ger)

[Basic abdominal ultrasound diagnosis course. The pancreas] Gresser U. **Bildgebung** 1987–89;56 Suppl 1:44–7 (Ger)

[Basic abdominal ultrasound diagnosis course. The normal spleen] Kellner H. **Bildgebung** 1987–89;56 Suppl 1:55–8 (Ger)

[Basic abdominal ultrasound diagnosis course. The gallbladder and bile ducts. I] Kellner H. **Bildgebung** 1987–89;56 Suppl 1:32–6 (Ger)

[Basic abdominal ultrasound diagnosis course. The gallbladder and bile ducts. II] Kellner H. **Bildgebung** 1987–89;56 Suppl 1:37–43 (Ger)

[The value of Duplex sonography in the diagnosis of deep leg and pelvic vein thrombosis] Stapff M, et al. **Bildgebung** 1987–89;56(2):52–6 (Eng. Abstr.) (Ger)

[Basic abdominal ultrasound diagnosis course. Liver—normal findings and diffuse liver diseases] Weigold B. **Bildgebung** 1987–89;56 Suppl 1:17–23 (Ger)

[Basic abdominal ultrasound diagnosis course. Retroperitoneal blood vessels] Weigold B. **Bildgebung** 1987–89;56 Suppl 1:59–64 (Ger)

[Basic abdominal ultrasound diagnosis course. Circumscribed liver changes] Zoller WG. **Bildgebung** 1987–89;56 Suppl 1:25–31 (Ger)

[Diagnostic possibilities of abdominal Duplex sonography] Zoller WG, et al. **Bildgebung** 1987–89;56(2):82–8 (17 ref.) (Eng. Abstr.) (Ger)

[Experimental ultrasound analysis of the appendix. Contribution to improving the diagnosis of acute inflammation in routine clinical practice] Meiser G, et al. **Chirurg** 1989 Mar;60(3):172–7 (Eng. Abstr.) (Ger)

[ECG–triggered magnetic resonance tomographic measurement of blood flow velocity in the carotid arteries: comparison with duplex sonography] Seiderer M, et al. **Digitale Bilddiagn** 1988 Sep;8(3):110–4 (Eng. Abstr.) (Ger)

[Angiodynography: initial experiences with a new sonographic method] Thomas C, et al. **Digitale Bilddiagn** 1988 Dec;8(4):152–7 (Eng. Abstr.) (Ger)

[Sonography versus phlebography. New variants of the color–coded duplex ultrasound technic—controversy: diagnostic accuracy] Schwing C. **Fortschr Med** 1989 Jun 30;107(19):63–4 (Ger)

[Doppler sonographic findings in intraocular tumors] Guthoff R, et al. **Fortschr Ophthalmol** 1989;86(3):239–41 (Eng. Abstr.) (Ger)

[Comparison of Doppler flow measurements of the arcuate artery and uterine artery in fetal growth retardation (published erratum appears in Geburtshilfe Frauenheilkd 1989 Mar;49(3):312)] Deutinger J, et al. **Geburtshilfe Frauenheilkd** 1988 Dec;48(12):863–8 (Eng. Abstr.) (Ger)

[Transvaginal, ultrasound–controlled follicle puncture] Gembruch U, et al. **Geburtshilfe Frauenheilkd** 1988 Sep; 48(9):617–24 (Eng. Abstr.) (Ger)

[Selective abortion under sonographic control in multiple pregnancy] Gigon U, et al. **Geburtshilfe Frauenheilkd** 1989 Mar;49(3):252–3 (Eng. Abstr.) (Ger)

[Comparison of the clinical value of 2 frequently used indices of fetal blood flow analysis (pulsatility index PI and resistance index RI)] Hecher K, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):809–13 (Eng. Abstr.) (Ger)

[Perineal sonographic procedures in gynecologic diagnosis of incontinence] Kölbl H, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):498–501 (Eng. Abstr.) (Ger)

[Vaginosonographic measurement of the postmenopausal endometrium in the early detection of endometrial cancer] Osmers R, et al. **Geburtshilfe Frauenheilkd** 1989 Mar; 49(3):262–5 (Eng. Abstr.) (Ger)

[Early diagnosis of tubal pregnancy with vaginal sonography] Schurz B, et al. **Geburtshilfe Frauenheilkd** 1989 Jul; 49(7):649–52 (Eng. Abstr.) (Ger)

[Endosonography in gynecology—especially in the climacteric and in endometrial cancer] Schurz B, et al. **Gynakol Rundsch** 1988;28 Suppl 2:214–5 (Ger)

[Combined use of Doppler ultrasound sonography and duplex sonography in the assessment of the carotid artery] Hehrlein C, et al. **Helv Chir Acta** 1988 Nov;55(4):439–43 (Eng. Abstr.) (Ger)

[The value of transrectal sonography and computerized tomography in the diagnosis of rectal cancer] Ruf G, et al. **Helv Chir Acta** 1989 Jan;55(5):667–72 (Eng. Abstr.) (Ger)

[Color Doppler sonography (angiodynography) in the assessment of the arterial vascular bed of the lower extremities] Rüthlein VM, et al. **Herz** 1988 Dec; 13(6):378–81 (9 ref.) (Eng. Abstr.) (Ger)

[Preoperative staging of rectal cancer: endosonography versus computerized tomography] Ruf G, et al. **Langenbecks Arch Chir** 1989;374(3):164–8 (Eng. Abstr.) (Ger)

[Ultrasound diagnosis of the phoniatric performance of laryngectomized patients] Böhme G. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):651–6 (Eng. Abstr.) (Ger)

[Sonography of the locomotor system. Indications, possibilities, limits and perspectives] Graf R. **Orthopade** 1989 Feb;18(1):2–11 (55 ref.) (Eng. Abstr.) (Ger)

[Early recognition of hip development disorders and luxation in newborn infants using targeted application of ultrasonic diagnosis] Piotraschke A, et al. **Radiol Diagn (Berl)** 1988; 29(5):775–81 (Eng. Abstr.) (Ger)

[DSA and duplex sonography of aortic prostheses] Gritzmann N, et al. **Radiologe** 1989 Jul;29(7):343–8 (Eng. Abstr.) (Ger)

[Prerequisites for the clinical application of 3–dimensional ultrasonic imaging] Sohn C, et al. **Radiologe** 1989 Jun; 29(6):303–7 (Eng. Abstr.) (Ger)

[Comparison of angiography and continuous–wave Doppler sonography in the diagnosis of subclavian stenoses and of the subclavian steal syndrome] Ackermann H, et al. **ROFO** 1989 Feb;150(2):187–91 (Eng. Abstr.) (Ger)

[The importance of quantitative grey–scale analysis of the sonogram in "diffuse" thyroid diseases] Becker W, et al. **ROFO** 1989 Jan;150(1):66–71 (Eng. Abstr.) (Ger)

[Improvement in the diagnosis of scrotal diseases using color–coded duplex sonography] Fobbe F, et al. **ROFO** 1989 Jun;150(6):629–34 (Eng. Abstr.) (Ger)

[Follow–up monitoring of kidney transplants with color–coded duplex sonography] Fobbe F, et al. **ROFO** 1989 Jan;150(1):76–9 (Eng. Abstr.) (Ger)

[Diagnosis of arterial vascular diseases of the lower extremities with color–coded duplex sonography] Koennecke HC, et al. **ROFO** 1989 Jul;151(1):42–6 (Eng. Abstr.) (Ger)

[In vitro measurement of intravascular blood flow with color Doppler sonography] Landwehr P, et al. **ROFO** 1989 Feb; 150(2):192–7 (Eng. Abstr.) (Ger)

[Duplex sonography after femoro–distal vascular reconstruction using umbilical veins] Schurawitzki H, et al. **ROFO** 1989 Jan;150(1):80–3 (Eng. Abstr.) (Ger)

[Diagnostic value of angiodynography in pulsating space–occupying lesions] Thomas C, et al. **ROFO** 1989 Apr;150(4):454–7 (Eng. Abstr.) (Ger)

[The examination technic and indications for mediastinal sonography] Wernecke K. **ROFO** 1989 May;150(5):501–8 (Eng. Abstr.) (Ger)

[Meniscus sonography—basis for equipment and study technics] Heuchemer T, et al. **Rontgenpraxis** 1989 Jun; 42(6):205–10 (Ger)

[Vaginal sonography in early pregnancy] Hugentobler W, et al. **Ther Umsch** 1988 Oct;45(10):704–7 (Eng. Abstr.) (Ger)

[Diagnosis using ultrasound in peripheral arterial disorders: possibilities and limitations] Jäger K, et al. **Ther Umsch** 1989 Mar;46(3):204–12 (Eng. Abstr.) (Ger)

[Ultrasound diagnosis: principles, possibilities and limits] Meyer B. **Ther Umsch** 1988 Aug;45(8):535–41 (7 ref.) (Eng. Abstr.) (Ger)

[Doppler ultrasonic studies in obstetrics] Vetter K, et al. **Ther Umsch** 1988 Oct;45(10):708–22 (80 ref.) (Eng. Abstr.) (Ger)

[Duplex and transcranial sonography in cerebrovascular diseases] Zurbrügg HR, et al. **Ther Umsch** 1989 Mar; 46(3):194–203 (Eng. Abstr.) (Ger)

[The value and limits of endorectal sonography in the preoperative stage classification of rectal cancer] Badea R, et al. **Ultraschall Med** 1988 Dec;9(6):265–9 (Eng. Abstr.) (Ger)

[Routine sonography in suspected appendicitis. A trial of

24-hour screening at a general hospital] Bloching H, et al. **Ultraschall Med** 1989 Jun;10(3):177-81 (Eng. Abstr.) (Ger)

[Vaginal sonography as a method of study in the evaluation of cervix insufficiency. A useful complement to vaginal palpation?] Böhmer S, et al. **Ultraschall Med** 1989 Feb; 10(1):19-24 (Eng. Abstr.) (Ger)

[Ultrasonic diagnosis of acute appendicitis] Braun B, et al. **Ultraschall Med** 1989 Jun;10(3):170-6 (Eng. Abstr.) (Ger)

[Comparison of transvaginal and transabdominal Doppler flow measurements in uterine vessels in the normal course of pregnancy] Deutinger J, et al. **Ultraschall Med** 1989 Feb; 10(1):15-8 (Eng. Abstr.) (Ger)

[What does ultrasound study contribute in acute appendicitis (using dosed compression)?] Doringer E, et al. **Ultraschall Med** 1988 Aug;9(4):185-8 (Eng. Abstr.) (Ger)

[Transabdominal lumbal ultrasonic tomometry—sonographic measurement of the lumbar spine] Hagen A, et al. **Ultraschall Med** 1988 Oct;9(5):240-5 (Eng. Abstr.) (Ger)

[B-mode and color-coded Doppler sonography in irradiation planning in klippel-Trenaunay syndrome with Kasabach-Merritt symptoms] Handl-Zeller L, et al. **Ultraschall Med** 1989 Feb;10(1):41-3 (Eng. Abstr.) (Ger)

[Non-invasive morphologic and functional assessment of arteriovenous fistula in dialysis patients with duplex sonography] Kathrein H, et al. **Ultraschall Med** 1989 Feb; 10(1):33-40 (Eng. Abstr.) (Ger)

[Sonographic structure of the intestinal wall—significance for the diagnosis of inflammatory intestinal diseases] Meckler U, et al. **Ultraschall Med** 1989 Jun;10(3):152-7 (15 ref.) (Eng. Abstr.) (Ger)

[Reproducibility of sonographic measurements in the follow-up of liver size] Mergelsberg M, et al. **Ultraschall Med** 1988 Dec;9(6):293-8 (Eng. Abstr.) (Ger)

[Evaluating 2 simple procedures for ultrasound assessment of gastric emptying] Sauer W, et al. **Ultraschall Med** 1988 Dec;9(6):299-302 (Eng. Abstr.) (Ger)

[Sonographic-controlled puncture and its effect on further diagnosis and therapy] Schneider H, et al. **Ultraschall Med** 1989 Jun;10(3):143-6 (Eng. Abstr.) (Ger)

[Vaginosonography in gynecology] Schurz B, et al. **Ultraschall Med** 1989 Apr;10(2):90-7 (Eng. Abstr.) (Ger)

[Angiodynography: technical principles and clinical uses] Schwaighofer B, et al. **Ultraschall Med** 1988 Aug; 9(4):176-9 (Eng. Abstr.) (Ger)

[Duplex sonography of the internal jugular vein] Steinke W, et al. **Ultraschall Med** 1989 Apr;10(2):72-6 (Eng. Abstr.) (Ger)

[Endosonographic tumor staging of gastrointestinal tumors] Striegel K, et al. **Ultraschall Med** 1988 Dec;9(6):260-4 (Eng. Abstr.) (Ger)

[Sonography of the liver in Wilson's disease. Sonographic studies of the liver in Wilson's disease—significance for assessing prognosis?] Vogel W, et al. **Ultraschall Med** 1988 Dec;9(6):270-3 (Eng. Abstr.) (Ger)

[Duplex sonography in carotid-cavernous sinus fistula] Zisch R, et al. **Ultraschall Med** 1988 Oct;9(5):227-8 (Eng. Abstr.) (Ger)

[Diagnosis of venous insufficiency in erectile dysfunction: comparative studies of cavernosonography and Doppler sonography] Gall H, et al. **Urologe [A]** 1989 Jan;28(1):48-53 (Eng. Abstr.) (Ger)

[High-resolution sonography in cryptorchism] Gritzmann N, et al. **Urologe [A]** 1988 Sep;27(5):279-82 (Eng. Abstr.) (Ger)

[Color coded Doppler sonography of the arterial vessels] Hübsch P, et al. **Vasa Suppl** 1988;26:26-7 (Ger)

[Color-coded Doppler sonography of the pelvic-leg arteries: assessment of the value of the method in comparison with angiography] Metz V, et al. **Vasa Suppl** 1988;26:28-9 (Ger)

[The value of color flow imaging in stenoses of the femoral artery and extracranial carotid arteries—initial clinical results. Comparison with duplex sonography] Mörz B, et al. **Vasa Suppl** 1988;26:25 (Ger)

[Ultrasound endoscopy] Heyder N. **Verh Dtsch Ges Inn Med** 1988;94:604-9 (12 ref.) (Ger)

[Duplex sonographic findings in the portal system] Seitz K. **Verh Dtsch Ges Inn Med** 1988;94:560-8 (Ger)

[Value of sonographically controlled ascites puncture in patients with advanced ovarian cancers] Giers H, et al. **Z Arztl Fortbild (Jena)** 1989;83(9):459-61 (Ger)

[Significance of intraoperative duplex sonography for vascular surgery interventions] Simanowski JH, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:213-6 (Ger)

[Vaginal sonography versus vaginal palpation: initial experiences in 120 pregnant patients with suspected cervix insufficiency] Böhmer S, et al. **Z Geburtshilfe Perinatol** 1989 May-Jun;193(3):115-23 (Eng. Abstr.) (Ger)

[Transvaginal ultrasound biometry of crown-rump length in the 1st trimester] Degenhardt F, et al. **Z Geburtshilfe Perinatol** 1988 Nov-Dec;192(6):249-52 (Eng. Abstr.) (Ger)

[Vaginal sonographic assessment of a cross section of the amniotic sac in early pregnancy] Degenhardt F, et al. **Z Geburtshilfe Perinatol** 1989 Mar-Apr;193(2):68-71 (Eng. Abstr.) (Ger)

[Examination of the reduction of umbilical circulation in fetuses with variable decelerations of heart rate using Doppler sonography of the umbilical artery] Weiss E, et al. **Z Geburtshilfe Perinatol** 1989 Mar-Apr;193(2):60-7 (Eng. Abstr.) (Ger)

[Methodologic aspects and criteria for evaluating extracranial carotid Doppler sonography] Podhaisky H, et al. **Z Gesamte Inn Med** 1989 Feb 1;44(3):88-91 (Eng. Abstr.) (Ger)

[The value of sonography and intravenous urography in the preoperative diagnosis before prostate adenoma operations] Hübner W, et al. **Z Urol Nephrol** 1989 May;82(5):247-51 (Eng. Abstr.) (Ger)

[Results of invasive and pharmacosonographic studies in pregnancy (I)] Bollmann R, et al. **Zentralbl Gynakol** 1988; 110(14):857-63 (Eng. Abstr.) (Ger)

[The exact prenatal diagnosis of abnormalities of the kidneys and efferent urinary system—a possibility for further decreasing perinatal morbidity and mortality] Bollmann R, et al. **Zentralbl Gynakol** 1989;111(10):669-77 (Eng. Abstr.) (Ger)

[Vaginal sonography in the diagnosis of early pregnancy] Sydow P, et al. **Zentralbl Gynakol** 1989;111(7):453-60 (Eng. Abstr.) (Ger)

[Vaginal sonography in the diagnosis of premature rupture of fetal membranes] Sydow P, et al. **Zentralbl Gynakol** 1989;111(10):692-5 (Eng. Abstr.) (Ger)

[Comparison of transabdominal and intrarectal ultrasonic studies in prostatic diseases] Kovács A, et al. **Orv Hetil** 1989 May 28;130(22):1163-6 (Eng. Abstr.) (Hun)

[The role of real-time sonography in the differential diagnosis of acute appendicitis and in the detection of post-appendectomy complications] Regöly-Mérei J, et al. **Orv Hetil** 1989 Apr 16;130(16):827-31 (25 ref.) (Eng. Abstr.) (Hun)

[Thermo-echo-clinical examination of the breast: a new diagnostic method for first level examination. Experience acquired at the L. Mangiagalli Gynecology and Obstetrics Institute in Milan during the period January 1985-August 1988] Dambrosio F. **Ann Ostet Ginecol Med Perinat** 1989; Spec No:65-89 (12 ref.) (Ita)

[Echography of the knee in the hemophiliac] Bagnolesi P, et al. **Radiol Med (Torino)** 1988 Nov;76(5):405-8 (Eng. Abstr.) (Ita)

[Calcifications of the prostate: a transrectal echographic study] Bock E, et al. **Radiol Med (Torino)** 1989 May; 77(5):301-3 (Eng. Abstr.) (Ita)

[The pulsed Doppler echo of the internal mammary artery] Giuseppetti GM, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):414-9 (Eng. Abstr.) (Ita)

[Potentials of echography in the diagnosis of gallbladder carcinoma] Marenzi C, et al. **Radiol Med (Torino)** 1988 Nov;76(5):420-4 (Eng. Abstr.) (Ita)

[Echotomographic evaluation of the anterior urethra] Perini L, et al. **Radiol Med (Torino)** 1989 Apr;77(4):378-81 (Eng. Abstr.) (Ita)

[Duplex Doppler study of the transplanted kidney] Zompatori M, et al. **Radiol Med (Torino)** 1989 Jul-Aug; 78(1-2):61-8 (Eng. Abstr.) (Ita)

[Ultrasonic diagnosis of early cancer] Fukuda M. **Gan No Rinsho** 1988 Aug;34(10):1525-33 (Jpn)

[Measurement of coronary flow velocity] Yaginuma T, et al. **Kokyu To Junkan** 1988 Jul;36(7):703-6 (10 ref.) (Jpn)

[Renal transplant blood flow evaluation by color Doppler echography] Akiyama T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep;79(9):1574-81 (Eng. Abstr.) (Jpn)

[Assessment of pelvi-ureteric junction stenosis using diuresis ultrasonotomography] Fujisue H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):693-9 (Eng. Abstr.) (Jpn)

[Ultrasonic tissue characterization of the prostate] Niizuma M. **Nippon Hinyokika Gakkai Zasshi** 1988 May; 79(5):814-23 (Eng. Abstr.) (Jpn)

[Evaluation of transrectal longitudinal ultrasonography of chronic non-bacterial prostatitis] Tanaka S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jan;80(1):35-8 (Eng. Abstr.) (Jpn)

[Transesophageal endoscopic ultrasonography in lung cancer involving mediastinal organs in the assessment of resectability] Sakio H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):650-7 (Eng. Abstr.) (Jpn)

[Quantitative estimation of the liver parenchymal echo pattern using acoustic intensive histogram (echo-histogram) analysis in diffuse liver diseases] Kimura S. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):331-7 (Jpn)

[Ultrasonic diagnosis of undescended testes. Methods and possibilities] Johansen TE, et al. **Tidsskr Nor Laegeforen** 1989 Feb 20;109(5):595-8 (Eng. Abstr.) (Nor)

[New possibilities of evaluating retinal and choroidal circulation by the Doppler focused pulsating ultrasonographic method] Augustyniak E, et al. **Klin Oczna** 1988 Nov;90(11):384-6 (Eng. Abstr.) (Pol)

[Modification of the ultrasonometric method of measurement of the length of the eyeball] Prost M, et al. **Klin Oczna** 1988 Oct;90(10):348-50 (Pol)

[Possibilities of neurosonography in the diagnosis of intracranial injuries in newborn infants] Burkova AS, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):5-8 (56 ref.) (Rus)

[Possibilities of transvaginal echography in the examination of the uterus and ovaries] Griaznova IM, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):17-21 (Eng. Abstr.) (Rus)

[Comparative evaluation of transabdominal and transvaginal echography in the diagnosis of acute inflammatory diseases of the adnexa uteri] Strizhakov AN, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):19-22 (Eng. Abstr.) (Rus)

[Use of endoscopic echography in diseases of the upper digestive tract] Burkov SG, et al. **Klin Med (Mosk)** 1988 Jun;66(6):70-2 (Eng. Abstr.) (Rus)

[Ultrasonic irrigoscopy] Lemeshko ZA. **Klin Med (Mosk)** 1989 Jun;67(6):133-6 (Rus)

[Ultrasonic diagnosis of ectopic pregnancy using a method of contrasting the uterine tubes] Bulgach MA, et al. **Sov Med** 1988;(9):35-7 (Eng. Abstr.) (Rus)

[A method for the ultrasonic osteometry of the facial skeleton] Dusmuratov AM, et al. **Stomatologiia (Mosk)** 1988 Nov-Dec;67(6):36-8 (Eng. Abstr.) (Rus)

[Ultrasonography in the clinical diagnosis of internal diseases: the past, present time and the future] Alekse RO. **Ter Arkh** 1989;61(2):132-5 (25 ref.) (Rus)

[Transvaginal longitudinal ultrasonic study in the diagnosis of bladder cancer] Komarevtsev VN, et al. **Vopr Onkol** 1988;34(9):1111-4 (Eng. Abstr.) (Rus)

[Technics for the morphologic study of leiomyoma of the bladder surface in women] Fernández Fernández A, et al. **Actas Urol Esp** 1989 May-Jun;13(3):213-6 (Eng. Abstr.) (Spa)

[Intracerebellar hemorrhage in full-term newborns. Importance of transfontanellar echography. Apropos of a case] Moretones Suñol MG, et al. **An Esp Pediatr** 1989 May;30(5):407-9 (Spa)

[Usefulness of echography with pancreatic stimulation in the evaluation of acute pancreatitis associated with pancreas divisum] García Coma M, et al. **Rev Esp Enferm Apar Dig** 1989 Jan;75(1):87-90 (Eng. Abstr.) (Spa)

[Usefulness of real-time sonography in the evaluation of a pathology of the pancreas] Rodriguez R, et al. **Rev Med Panama** 1988 May;13(2):92-9 (Eng. Abstr.) (Spa)

PSYCHOLOGY

Psychological aspects of ultrasound imaging during pregnancy. Villeneuve C, et al. **Can J Psychiatry** 1988 Aug; 33(6):530-6

Psychological reactions to ultrasound. Examination during pregnancy. Michelacci L, et al. **Psychother Psychosom** 1988;50(1):1-4

STANDARDS

Sonographically estimated fetal weights: accuracy and limitation. Benacerraf BR, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1118-21

Placental volume measurement by ultrasonography: evaluation of the method [letter] Veersema D, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1304-5

Combined non-invasive diagnostics of deep vein thrombosis of the lower extremities. Ovcharenko KI, et al. **Cor Vasa** 1989;31(1):42-50

Diagnosis of frontal sinusitis: one-dimensional ultrasonography versus radiography. Suonpää J, et al. **J Laryngol Otol** 1989 Aug;103(8):765-7

Clinical value of screening for fetal growth retardation by Doppler ultrasound. Bruinse HW, et al. **J Ultrasound Med** 1989 Apr;8(4):207-9

Intraobserver variation in Doppler ultrasound indices of placental perfusion derived from different numbers of waveforms. Spencer JA, et al. **J Ultrasound Med** 1989 Apr; 8(4):197-9

Doppler ultrasound and early pregnancy failure [letter] Stabile I, et al. **Lancet** 1989 Apr 22;1(8643):910-1

Comparison of accuracy of ultrasonography and oral cholecystography in the diagnosis of cholelithiasis. Tan JS, et al. **Singapore Med J** 1988 Oct;29(5):485-8

Transcranial Doppler ultrasonography and hyperostosis of the skull [letter] **Stroke** 1988 Nov;19(11):1445-6

[Standardized sonographic measurement of the width of the extrahepatic bile ducts] Schwaighofer B, et al. **ROFO** 1989 Feb;150(2):176-8 (Eng. Abstr.) (Ger)

[Quality assurance in sonography] Gmeinwieser J, et al. **Rontgenpraxis** 1988 Aug;41(8):279-82 (24 ref.) (Ger)

[Selection of bedside tests. Ultrasonic diagnosis] Kobayashi T. **Rinsho Byori** 1987 Jul;Spec No 72:101-12 (Jpn)

STATISTICS & NUMERICAL DATA

Evaluation of routine ultrasound examination for the prenatal diagnosis of malformation. Lys F, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):101-9

The use of obstetric ultrasonography: the first 1,000 examinations at Ramathibodi Hospital. Jirapinyo M, et al. **J Med Assoc Thai** 1988 Jul;71 Suppl 2:35-8

TRENDS

Ultrasound imaging of the skin: how and which future in practice? Piérard GE. **Dermatologica** 1988;177(6):329-31

Ultrasound opens windows. Souhrada L. **Hospitals** 1988 Nov 5;62(21):52, 54

Present indications and future expectations of ultrasound in

surgery. Röthlin M, et al. **Surg Endosc** 1988;2(3):176–9
[The 10th anniversary of obstetric Doppler sonography—development and perspectives] Schneider KT, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):407–15 (92 ref.) (Eng. Abstr.) (Ger)
[Evaluating ultrasound] Rothmund M, et al. **Langenbecks Arch Chir** 1988;Suppl 2:377–84 (23 ref.) (Eng. Abstr.) (Ger)
[20th anniversary of sonographic diagnosis of the pancreas] Lutz H. **Ultraschall Med** 1989 Jun;10(3):136–42 (37 ref.) (Eng. Abstr.) (Ger)
[Modern advent of imaging diagnostics] Nakano H. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Aug; 40(8):1063–5 (Eng. Abstr.) (Jpn)

UTILIZATION

[Ambulatory sonography in clinical and general practice. Incidence and accuracy of findings and consequences] Becher H, et al. **Med Klin** 1989 Apr 15;84(4):173–7 (Eng. Abstr.) (Ger)

VETERINARY

Early renal ultrasonographic findings in dogs with experimentally induced ethylene glycol nephrosis. Adams WH, et al. **Am J Vet Res** 1989 Aug;50(8):1370–6
Ultrasonographic evaluation of induced testicular lesions in male goats. Eilts BE, et al. **Am J Vet Res** 1989 Aug; 50(8):1361–4
Ultrasonography of umbilical structures in clinically normal foals. Reef VB, et al. **Am J Vet Res** 1988 Dec;49(12):2143–6
Characterization of prenatal growth and development in the crab-eating macaque (Macaca fascicularis) by ultrasound. Tarantal AF, et al. **Anat Rec** 1988 Oct;222(2):177–84
Aorto-iliac thrombosis in two horses: clinical course of the disease and use of real-time ultrasonography to confirm diagnosis. Edwards GB, et al. **Equine Vet J** 1988 Sep; 20(5):384–7
Ultrasonic identification of an orbital tumour in a horse. Freestone JF, et al. **Equine Vet J** 1989 Mar;21(2):135–6
Ultrasonographic diagnosis of small-intestinal intussusception in three foals. Bernard WV, et al. **J Am Vet Med Assoc** 1989 Feb 1;194(3):395–7
Removal of a retropharyngeal foreign body in a horse, with the aid of ultrasonography during surgery. French DA, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1315–6
Fate of conceptus and corpus luteum after induced embryonic loss in heifers. Kastelic JP, et al. **J Am Vet Med Assoc** 1989 Apr 1;194(7):922–8
Ultrasonography as a diagnostic aid in horses with anaerobic bacterial pleuropneumonia and/or pulmonary abscessation: 27 cases (1984–1986). Reimer JM, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):278–82
Transrectal ultrasonography of the caudal portion of abdominal and pelvic cavities in horses. Schmidt AR. **J Am Vet Med Assoc** 1989 Feb 1;194(3):365–71
Use of the partial farm budget technique to predict the economic impact of the flock management decision to use B-mode ultrasonographic pregnancy diagnosis. Sprecher DJ, et al. **J Am Vet Med Assoc** 1989 Jul 15;195(2):199–204
Ultrasonography of noncardiac thoracic diseases in small animals. Stowater JL, et al. **J Am Vet Med Assoc** 1989 Aug 15;195(4):514–20 (30 ref.)
Ultrasonographic features of splenic lymphosarcoma in dogs: 12 cases (1980–1986). Wrigley RH, et al. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1565–8
Using ultrasound technology to predict pork carcass composition. Terry CA, et al. **J Anim Sci** 1989 May; 67(5):1279–84
Diagnosis of early pregnancy by ultrasound in Macaca fascicularis. Conrad SH, et al. **J Med Primatol** 1989; 18(2):143–54
Real-time ultrasonic evaluation of the baboon pregnancy: biometric measurements. Farine D, et al. **J Med Primatol** 1988;17(4):215–21
Transrectal ultrasonography as a method to monitor canine prostatic size in situ: measurements following endocrine manipulation and ejaculation. Juniewicz PE, et al. **Prostate** 1989;14(3):265–77
Application of ultrasound in the diagnosis and treatment of empyema and mediastinal abscess in a dog [letter] Osler GE, et al. **S Afr Med J** 1989 Aug 19;76(4):174–5
Diagnostic ultrasound. **Semin Vet Med Surg (Small Anim)** 1989 Feb;4(1):1–104
Canine prostatic ultrasonography—1989. Feeney DA, et al. **Semin Vet Med Surg (Small Anim)** 1989 Feb;4(1):44–57 (51 ref.)
Abdominal ultrasonography—1989: general interpretation and masses. Feeney DA, et al. **Semin Vet Med Surg (Small Anim)** 1989 Feb;4(1):77–94 (104 ref.)
Physics, facts, and artifacts of diagnostic ultrasound. Herring DS, et al. **Semin Vet Med Surg (Small Anim)** 1989 Feb; 4(1):2–12 (5 ref.)
Ultrasound in emergency veterinary medicine. Kaplan PM, et al. **Semin Vet Med Surg (Small Anim)** 1988 Aug; 3(3):245–54 (17 ref.)
Renal sonography. Konde LJ. **Semin Vet Med Surg (Small Anim)** 1989 Feb;4(1):32–43 (16 ref.)
Sonography of the liver, gallbladder, and spleen. Nyland TG, et al. **Semin Vet Med Surg (Small Anim)** 1989 Feb; 4(1):13–31 (44 ref.)
Ultrasound-guided biopsy. Smith S. **Semin Vet Med Surg (Small Anim)** 1989 Feb;4(1):95–104 (31 ref.)
Ultrasound as an aid to Coenurus cerebralis cyst localisation in a lamb. Doherty ML, et al. **Vet Rec** 1989 Jun 3; 124(22):591
Practical uses of ultrasound in early pregnancy in cattle. Hughes EA, et al. **Vet Rec** 1989 Apr 29;124(17):456–8
Sonographic diagnosis of a mucometra in a cat. van Haaften B, et al. **Vet Rec** 1989 Apr 1;124(13):346–7
Diagnosis of pregnancy and prediction of fetal age in red deer by real-time ultrasonic scanning. White IR, et al. **Vet Rec** 1989 Apr 15;124(15):395–7
Prediction of calving date in beef cows by real-time ultrasonic scanning. Wright IA, et al. **Vet Rec** 1988 Aug 27;123(9):228–9
Use of intraoperative ultrasonography to identify a cervical foreign body. A case report. Adams R, et al. **Vet Surg** 1987 Sep–Oct;16(5):384–8
[Sonographic studies of the preovulatory follicle development in the mare (published erratum appears in DTW 1989 Jan;96(1):31)] Will K, et al. **DTW** 1988 Oct; 95(9):362–5 (Eng. Abstr.) (Ger)
[Abdominal sonography in small animals. I. Physical fundamentals, apparatus technic] Lohss E. **Tierarztl Prax** 1988;16(4):423–6 (12 ref.) (Eng. Abstr.) (Ger)
[Artifacts in ultrasonic diagnosis] Meier H. **Tierarztl Prax** 1989;Suppl 4:36–46 (15 ref.) (Eng. Abstr.) (Ger)
[Diagnostic sonography of the limb of the horse] van Schie HT. **Tierarztl Prax** 1989;Suppl 4:47–55 (19 ref.) (Eng. Abstr.) (Ger)

ULTRASONIC LITHOTRIPSY see **LITHOTRIPSY**

ULTRASONIC THERAPY

Ultrasonic treatment of Menière's disease. Stahle J. **Acta Otolaryngol Suppl (Stockh)** 1988;449:11–2
Ultrasonic treatment of varicose veins. Schultz-Haakh H, et al. **Angiology** 1989 Feb;40(2):129–37
The use of ultrasound for the removal of the smear layer. The effect of sodium hypochlorite concentration; SEM study. Cameron JA. **Aust Dent J** 1988 Jun;33(3):193–200
Ultrasound physiotherapy treatment and calibration measurements in simulated tissue. Bydder EL, et al. **Australas Phys Eng Sci Med** 1989 Mar;12(1):24–32
Ultrasonic debonding of composite-retained restorations. Walmsley AD, et al. **Br Dent J** 1989 Apr 22;166(8):290–4
Ultrasound and pulsed electromagnetic energy treatment for perineal trauma. A randomized placebo-controlled trial. Grant A, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):434–9
Use of the ultrasonic aspirator in splenic preservation. Nnochiri CP, et al. **Br J Surg** 1989 Apr;76(4):408
An evaluation of clinical endosonics. Chenail BL. **Can Dent Assoc J** 1989 Apr;55(4):293–5
Ultrasonic plaque ablation. A new method for recanalization of partially or totally occluded arteries. Siegel RJ, et al. **Circulation** 1988 Dec;78(6):1443–8
Commission of the European Communities COMAC-BME report following a workshop on ultrasound in the diagnosis and management of cerebro-vascular disease. Rome, December 1987. **Clin Phys Physiol Meas** 1989 Feb;10 Suppl A:1–57
The effects of ultrasonic scaling with oral hygiene education on the distribution of pathological pockets using CPITN diagnostic standards. Takahashi Y, et al. **Community Dent Health** 1989 Mar;6(1):31–7
The cytocidal effect of high energy shock waves on human prostatic tumour cell lines. van Dongen JW, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1173–9
The effect of therapeutic ultrasound on the average of multiple intraocular pressures throughout the day in therapy-resistant glaucoma. Sterk CC, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):36–8
Scanned focussed ultrasound hyperthermia: initial clinical results. Shimm DS, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1203–8
Treatment of glaucoma with high intensity focused ultrasound. Valtot F, et al. **Int Ophthalmol** 1989 Jan; 13(1–2):167–70
Ultrasound guided percutaneous biopsy or operative biopsy in patients with renal impairment? Bach D, et al. **Int Urol Nephrol** 1988;20(5):519–23
The effects of ultrasonically induced hyperthermia on experimental tumors in the rabbit eye. Braakman R, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):835–44
Bimodal capsular bag phacoemulsification: a serial cutting and suction ultrasonic nuclear dissection technique. Davison JA. **J Cataract Refract Surg** 1989 May; 15(3):272–82
The effect of ultrasonic cleaning and air polishing on the marginal integrity of radicular amalgam and composite resin restorations. An in vitro study. Gorfil C, et al. **J Clin Periodontol** 1989 Mar;16(3):137–9
Evaluation of high-intensity therapeutic ultrasound irradiation in the treatment of experimental hepatoma. Moore WE, et al. **J Pediatr Surg** 1989 Jan;24(1):30–3; discussion 33
Cytotoxicity of high energy shock waves: methodologic considerations. Laudone VP, et al. **J Urol** 1989 Apr; 141(4):965–8
Hematoporphyrin as a sensitizer of cell-damaging effect of ultrasound. Yumita N, et al. **Jpn J Cancer Res** 1989 Mar; 80(3):219–22
Clinical observations of the effects of nonsurgical periodontal therapy on human periodontal disease. II. Ultrasonic scaling and root planing for 6 months. Hou GL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Feb; 5(2):72–86
Ultrasound/PEME for perineal pain [editorial] **Lancet** 1989 Jul 1;2(8653):22–3
Temperature measurements during ultrasound hyperthermia. Hynynen K, et al. **Med Phys** 1989 Jul–Aug;16(4):618–26
Intraocular pressure following ECCE, phacoemulsification, and PC-IOL implantation. Kooner KS, et al. **Ophthalmic Surg** 1988 Sep;19(9):643–6
Histopathologic effects of ultrasonically induced hyperthermia in intraocular malignant melanoma. Coleman DJ, et al. **Ophthalmology** 1988 Jul;95(7):970–81
The role of ultrasound in the management of retinopathy of prematurity. de Juan E Jr, et al. **Ophthalmology** 1988 Jul;95(7):884–8
Trial of ultrasonic therapy for acute herpes zoster. Jones RJ, et al. **Practitioner** 1987 Oct 8;231(1436):1336–40
The effect of pulsed ultrasound on myofacial pain. A placebo controlled study. Taube S, et al. **Proc Finn Dent Soc** 1988; 84(4):241–6
A comparative study of continuous ultrasound, placebo ultrasound and rest in epicondylalgia. Lundeberg T, et al. **Scand J Rehabil Med** 1988;20(3):99–101
Effect of hyperthermia on some metabolites in human melanoma cells and their xenografts on nude mice. Mirtsch S, et al. **Strahlenther Onkol** 1989 Jul;165(7):568–9
The effect of therapeutic ultrasound on electrophysiological parameters of frog skin. Dinno MA, et al. **Ultrasound Med Biol** 1989;15(5):461–70
Ultrasonically induced disruption and hemolysis of vitreous hemorrhages. Lucas BC, et al. **Ultrasound Med Biol** 1989; 15(1):29–37
The effect of therapeutic ultrasound on calcium uptake in fibroblasts. Mortimer AJ, et al. **Ultrasound Med Biol** 1988; 14(6):499–506
High energy shock waves do not affect either primary tumor growth or metastasis of prostate carcinoma, R3327-MatLyLu. Geldof AA, et al. **Urol Res** 1989; 17(1):9–12
[Thermal effect of ultrasound therapy on deep tissue] Chou CL, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Sep; 40(3):317–22 (Eng. Abstr.) (Chi)
[Acceleration of the chemolysis of kidney stones using ultrasound. Experimental study in vitro] Kočí K, et al. **Cas Lek Cesk** 1989 Feb 24;128(9):270–2 (Eng. Abstr.) (Cze)
[Treatment of ocular hypertension with ultrasonics (Sonocare). Preliminary results] Haut J, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):311–4 (Eng. Abstr.) (Fre)
[Gd-DTPA-supported magnetic resonance tomographic perfusion follow-up of shockwave-treated tumors] Naegele M, et al. **ROFO** 1989 May;150(5):602–5 (Eng. Abstr.) (Ger)
[Increase in the generation of superoxide radicals and in the inhibitory effect on Yoshida sarcoma of anthracycline antitumor agents by ultrasound] Yumita N, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):63–8 (Eng. Abstr.) (Jpn)
[Ultrasonic therapy in ophthalmology] Sobecki R. **Klin Oczna** 1988 Mar;90(3):115–6 (Eng. Abstr.) (Pol)
[Value of mamilloscopy in the treatment and prevention of nipple cracks in puerperants] Chernukha EA, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):51–3 (Rus)
[Effects of low-frequency ultrasound on tumors cells in experimental animals] Biriukov IuV, et al. **Grudn Khir** 1989 May-Jun;(3):64–9 (Eng. Abstr.) (Rus)
[Low-frequency ultrasonics in the surgical treatment of pulmonary echinococcosis] Biriukov IuV, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):61–7 (Eng. Abstr.) (Rus)
[Use of ultrasonics in the destruction of gallstones] Nikonenko AS, et al. **Klin Khir** 1988;(9):20–1 (Eng. Abstr.) (Rus)
[Experience with using ultrasonics and methyluracil in the complex treatment of children with non-obstructive pyelonephritis] Bozhenov IuA, et al. **Pediatriia** 1989; (2):94–5 (Rus)
[Complex therapy of suppurative wounds with jet-aerosol ultrasonic treatment and transcutaneous electro-neurostimulation] Bashirov EB, et al. **Sov Med** 1988;(7):99–102 (Rus)
[Combined treatment of odontogenic inflammatory processes using ultrasound and wide-spectrum laser radiation] Bazhanov NN, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb; 68(1):39–41 (Eng. Abstr.) (Rus)
[Results of horizontal and vertical transposition of teeth in children as affected by the action of ultrasonics on the bony tissue of the lower jaw] Chumakov AN, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):69–70 (Eng. Abstr.) (Rus)
[Removal of dental calculus using ultrasound and its effect on gingival function] Začek D. **Stomatologija (Mosk)** 1989 Jan–Feb;68(1):30–2 (Eng. Abstr.) (Rus)
[Ultrasonic correction of glaucoma surgery] Dolzhin GI. **Vestn Oftalmol** 1988 Nov-Dec;104(6):13–6 (Eng. Abstr.)

(Rus)
[Treatment of exudative maxillary sinusitis with low frequency ultrasound] Dainiak LB, et al. **Vestn Otorinolaringol** 1989 May-Jun;(3):27-32 (Eng. Abstr.) (Rus)
[Phonophoretic properties of low-frequency ultrasonics in the treatment of patients with chronic tonsillitis] Mishen'kin NV, et al. **Vestn Otorinolaringol** 1988 Sep-Oct;(5):25-7 (Eng. Abstr.) (Rus)
[Clinical and functional results of the treatment of chronic rhinitis using ultrasound] Muratov NI, et al. **Vestn Otorinolaringol** 1988 Nov-Dec;(6):74 (Rus)
[Our experience with the treatment of hypertrophic rhinitis in children] Pekli FF, et al. **Vestn Otorinolaringol** 1989 May-Jun;(3):72-3 (Rus)
[Use of ultrasound in the combined treatment of patients with calculi in the lower third of the ureters] Li AA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov-Dec;(6):40-3 (Eng. Abstr.) (Rus)
[Successive use of ultrasonics and lysozyme electrophoresis in the treatment of patients with chronic bronchitis] Vashkevich DL, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May-Jun;(3):18-22 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Increased radicular pain due to therapeutic ultrasound applied to the back. Gnatz SM. **Arch Phys Med Rehabil** 1989 Jun;70(6):493-4
Differing effects of ultrasound-irradiation on suspension and monolayer cultured HeLa cells, investigated by scanning electron microscopy. Kerr CL, et al. **Ultrasound Med Biol** 1989;15(4):397-401

INSTRUMENTATION

Ultrasound spatula. Hara T, et al. **Arch Ophthalmol** 1989 May;107(5):767-8
Use of Cavitron Ultrasonic Surgical Aspirator (CUSA) for palliative resection of recurrent gynecologic malignancies involving the vagina. Deppe G, et al. **Eur J Gynaecol Oncol** 1989;10(1):1-2
Improved coupling of ultrasound hyperthermia applicators to patients. Oleson JR, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):609-12
Wound healing of skin incisions produced by ultrasonically vibrating knife, scalpel, electrosurgery, and carbon dioxide laser. Hambley R, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1213-7
The effectiveness of two sonic and two ultrasonic scaler tips in furcations. Patterson M, et al. **J Periodontol** 1989 Jun;60(6):325-9
Periodontal hearing after treatment with either the Titan-S sonic scaler or hand instruments. Laurell L, et al. **Swed Dent J** 1988;12(5):187-92
Review of current IEC activities in acoustic output standardization of medical ultrasonic equipment. Preston RC. **Ultrasound Med Biol** 1989;15 Suppl 1:101-3
[Removal of lens epithelial cells by ultrasound in endocapsular cataract surgery] Nishi O. **Fortschr Ophthalmol** 1988;85(5):489-91 (Eng. Abstr.) (Ger)
[Experimental validation of the use of an ultrasonic surgical instrument in neurophysiology] Ramazanov RKh, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):539-42 (Eng. Abstr.) (Rus)
[Ultrasonic capsulotomy] Skitsiuk SV, et al. **Oftalmol Zh** 1988;(6):380 (Rus)

METHODS

Ultrasound: effectiveness of treatments given under water. Forrest G, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):28-9
The effect of blood perfusion rate on the temperature distributions induced by multiple, scanned and focused ultrasonic beams in dogs' kidneys in vivo. Hynynen K, et al. **Int J Hyperthermia** 1989 Jul-Aug;5(4):485-97
Dental plaque removal by cavitational activity during ultrasonic scaling. Walmsley AD, et al. **J Clin Periodontol** 1988 Oct;15(9):539-43
Viscodissection as an adjunct to phacoemulsification [letter] deLuise VP. **Ophthalmic Surg** 1988 Sep;19(9):682
Therapeutic ultrasound for refractory glaucoma: a three-center study. Maskin SL, et al. **Ophthalmic Surg** 1989 Mar;20(3):186-92
Advanced ultrasonic techniques for local tumor hyperthermia. Lele PP. **Radiol Clin North Am** 1989 May;27(3):559-75 (22 ref.)
[Development of an ultrasonic system for the recanalization of coronary arteries] Drobinski G, et al. **Arch Mal Coeur** 1989 Mar;82(3):377-80 (Eng. Abstr.) (Fre)
[Treatment of ocular hypertonia with ultrasonics (Sonocare): principles and application] Haut J, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):307-10 (Eng. Abstr.) (Fre)
[Effect of low- and moderate-frequency ultrasonic waves on the course of suppurative wound process] Pavlov IuI. **Khirurgiia (Mosk)** 1989 Jun;(6):62-5 (Eng. Abstr.) (Rus)
[Resonance stimulation of regional ventilation of the lungs by sound vibration in the prevention of acute respiratory insufficiency] Bentsianov AD, et al. **Probl Tuberk** 1989;(2):61-5 (Rus)
[Ultrasonic disintegration of laryngeal papilloma in children] Vinitskiĭ ME, et al. **Vestn Otorinolaringol** 1989 Mar-Apr;(2):47-51 (Eng. Abstr.) (Rus)

ULTRASONICS

see related
ECHOCARDIOGRAPHY
ECHOENCEPHALOGRAPHY

Non-invasive assessment of blood vessels. Jonnart LE. **Acta Cardiol** 1989;44(1):1-6
The development of an efficient ambulatory in vitro fertilization (IVF) and embryo transfer (ET) program using ultrasonically guided oocyte retrieval. Barak Y, et al. **Acta Obstet Gynecol Scand** 1988;67(7):585-8
Ultrasound-guided percutaneous nephrostomy in the treatment of advanced gynecologic malignancy. Pedersen H, et al. **Acta Obstet Gynecol Scand** 1988;67(3):199-201
Doppler measurements of changes in human mammary and uterine blood flow during pregnancy and lactation. Thoresen M, et al. **Acta Obstet Gynecol Scand** 1988;67(8):741-5
Intravascular fetal blood transfusion under ultrasonic guidance in a case of severe Rh isoimmunization. Westgren M, et al. **Acta Obstet Gynecol Scand** 1988;67(8):747-9
Low flip angle gradient echo magnetic resonance imaging of the cervical spine at 0.3 tesla. Holtås S, et al. **Acta Radiol** 1989 Jul-Aug;30(4):343-8
Radial artery cannulation guided by Doppler ultrasound. Maher JJ, et al. **Am J Emerg Med** 1989 May;7(3):260-2
Intraoperative ultrasonography and ultrasonic dissection in liver surgery. de Jong KP, et al. **Am J Gastroenterol** 1989 Aug;84(8):933-6
Antepartum improvement of abnormal umbilical artery velocimetry: does it occur? Brar HS, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):36-9
Real time multivariable laser Doppler analysis of arterial and venous compromise. Phillips JG, et al. **Am J Otolaryngol** 1989 Jan-Feb;10(1):26-31
Laser-Doppler assessment of brain microcirculation: effect of local alterations. Haberl RL, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1255-60
Laser-Doppler assessment of brain microcirculation: effect of systemic alterations. Haberl RL, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1247-54
An approach to measuring cardiac output with Doppler flow probes in conscious rats. Veelken R, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1206-10
Effect of shear stress and free radicals induced by ultrasound on erythrocytes. Kondo T, et al. **Arch Biochem Biophys** 1989 Mar;269(2):381-9
Ultrasound Doppler evaluation of uteroplacental and fetoplacental circulation in pre-eclampsia. Gudmundsson S, et al. **Arch Gynecol Obstet** 1988;243(4):199-206
Sonochemistry of nucleic acid constituents in aqueous solution: a spin-trapping study. Kondo T, et al. **Basic Life Sci** 1988;49:433-6
A comparative study of rodent ultrasonic vocalizations during copulation. Pierce JD Jr, et al. **Behav Neural Biol** 1989 Mar;51(2):211-21
The effects of 2H2O on the phase transition of large unilamellar vesicle (LUV) suspensions as detected by ultrasound spectroscopy and electron spin resonance. Ma LD, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):283-92
Influence of ultrasound on the electroretinogram and ultrastructure of the frog retina. Czepita D, et al. **Biomed Biochim Acta** 1988;47(12):1043-8
Dual-fiber laser Doppler velocimeter and its application to the measurements of coronary blood velocity. Kajiya F, et al. **Biorheology** 1988;25(1-2):227-35
The use of ultrasound in infertility. Hecht BR, et al. **Clin Obstet Gynecol** 1989 Sep;32(3):541-9
Technetium-99m DTPA does not break down during ultrasound nebulization. Groth S, et al. **Clin Physiol** 1989 Apr;9(2):151-9
A comparison of the transabdominal and transvaginal methods of ultrasound-guided aspiration of pre-ovulatory oocytes for in vitro fertilisation. Mao KR, et al. **Clin Reprod Fertil** 1987 Dec;5(6):373-7
In vitro fertilization treatment using ultrasonic guided puncture. Lenz S. **Dan Med Bull** 1989 Jun;36(3):223-35 (83 ref.)
Ultrasonic measurement of forearm subcutaneous adipose tissue thickness suitable for monitoring of subcutaneous glucose concentration? [letter] Bolinder J, et al. **Diabetes Care** 1989 Apr;12(4):305-6
Effects of sonication and centrifugation of clinical specimens on the recovery of herpes simplex virus. Arens M, et al. **Diagn Microbiol Infect Dis** 1988 Nov;11(3):137-43
The physics and mechanics of lithotripters. Lubock P. **Dig Dis Sci** 1989 Jul;34(7):999-1005 (14 ref.)
The stability of 99mTc-DTPA and 99mTc-HIDA following ultrasonic nebulisation. Durovic N, et al. **Eur J Nucl Med** 1988;14(7-8):400-2
Fetal umbilical cord catheterization under ultrasound guidance. Lémery D, et al. **Fetal Ther** 1988;3(1-2):37-43
Morphometry of the second trimester fetal brain. Comparison of ultrasonographic and post-mortem findings. Tzannatos CA, et al. **Fetal Ther** 1987;2(1):37-50
Measurement of the fetal urine production rate using real-time ultrasound in fetuses with bilateral hydronephrosis. Yamaguchi Y, et al. **Fetal Ther** 1987;2(4):197-202
Sonochemistry of nitrone spin traps in aqueous solutions. Evidence for pyrolysis radicals from spin traps. Kondo T, et al. **Free Radic Biol Med** 1989;7(3):259-68
Free radical generation by ultrasound in aqueous solutions of DNA constituents. Kondo T, et al. **Free Radic Res Commun** 1989;6(2-3):109-10
Effects of ultrasound on ovulation in the mouse. Heyner S, et al. **Gamete Res** 1989 Mar;22(3):333-8
Follicular fluid pH changes following intraperitoneal exposure of Graafian follicles to carbon dioxide: a comparative study with follicles exposed to ultrasound. Daya S. **Hum Reprod** 1988 Aug;3(6):727-30
Ultrasonic assessment of the endometrium as a predictor of oestrogen status in amenorrhoeic patients. Shulman A, et al. **Hum Reprod** 1989 Aug;4(6):616-9
Theory of ultrasound Doppler-spectra velocimetry for arbitrary beam and flow configurations. Censor D, et al. **IEEE Trans Biomed Eng** 1988 Sep;35(9):740-51
Three-dimensional Doppler velocimetry of flow jets. Fox MD, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):834-41
Fast Hartley transforms for spectral analysis of ultrasound Doppler signals. Paik CH, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):885-8
Biochemical and acoustical parameters of normal canine skin. Riederer-Henderson MA, et al. **IEEE Trans Biomed Eng** 1988 Nov;35(11):967-72
Free radical formation and cell lysis induced by ultrasound in the presence of different rare gases. Kondo T, et al. **Int J Radiat Biol** 1988 Dec;54(6):955-62
Ultrasonic reflection mode imaging of the nonlinear parameter B/A. II: Signal processing. Cain CA, et al. **J Acoust Soc Am** 1989 Jul;86(1):28-34
A theoretical study of cavitation generated by an extracorporeal shock wave lithotripter. Church CC. **J Acoust Soc Am** 1989 Jul;86(1):215-27
Erratum: transient pulsations of small gas bubbles in water [J. Acoust. Soc. Am. 84, 985-998 (1988)] [corrected and republished] Flynn HG, et al. **J Acoust Soc Am** 1988 Nov;84(5):1863-76
Determination of the acoustic nonlinearity parameter in biological media using FAIS and ITD methods. Gong XF, et al. **J Acoust Soc Am** 1989 Jul;86(1):1-5
Effect of the pulse length of ultrasound on cell membrane damage in vitro. Kober LO, et al. **J Acoust Soc Am** 1989 Jul;86(1):6-7
Particle gathering and microstreaming near ultrasonically activated gas-filled micropores. Miller DL. **J Acoust Soc Am** 1988 Oct;84(4):1378-87
Estimates of wave front distortion from measurements of scattering by model random media and calf liver. Waag RC, et al. **J Acoust Soc Am** 1989 Jan;85(1):406-15
Tests of ultrasonic emissions on mosquito attraction to hosts in a flight chamber. Foster WA, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):199-202
Effective cooling allows sonication to be used for liberation of beta-lactamases from gram negative bacteria [letter] Bush K, et al. **J Antimicrob Chemother** 1989 Jul;24(1):82-4
Ultrasonic disintegration of bacteria may lead to irreversible inactivation of beta-lactamase. Mett H, et al. **J Antimicrob Chemother** 1988 Sep;22(3):293-8
Sonication can reduce beta-lactamase activity [letter] Nichols WW, et al. **J Antimicrob Chemother** 1989 Jul;24(1):81-2
US-guided percutaneous fine-needle biopsy of parauterine pelvic tumors. Verbanck JJ, et al. **J Belge Radiol** 1988;71(6):683-6
Pulsed Doppler ultrasound system for the measurement of velocity distributions and flow disturbances in arterial prostheses. Black RA, et al. **J Biomed Eng** 1989 Jan;11(1):35-42
Ultrasound driven synthesis of reversed-phase stationary phases for liquid chromatography using 4-dimethyl-aminopyridine as acid-acceptor. Sentell KB, et al. **J Chromatogr** 1988 Nov 25;455:95-104
Effect of ultrasound on transdermal drug delivery to rats and guinea pigs. Levy D, et al. **J Clin Invest** 1989 Jun;83(6):2074-8
Kinematic and aerodynamic aspects of ultrasound-induced negative phonotaxis inflying Australian field crickets (Teleogryllus oceanicus). May ML, et al. **J Comp Physiol [A]** 1988 Dec;164(2):243-9
Circadian rhythm of cat flea (Siphonaptera: Pulicidae) locomotion unaffected by ultrasound. Koehler PG, et al. **J Econ Entomol** 1989 Apr;82(2):516-8
Comparison of blood flow parameters measured by Doppler ultrasound and radionuclide techniques in the baboon (Papio ursinus). Bosman H, et al. **J Med Primatol** 1988;17(4):223-31
Laser Doppler flowmetry for bone blood flow measurements: helium-neon laser light attenuation and depth of perfusion assessment. Nötzli HP, et al. **J Orthop Res** 1989;7(3):413-24
The ultrasonic Doppler fetal actocardiogram and its computer processing. Maeda K, et al. **J Perinat Med** 1988;16(4):327-31
This month in Investigative Urology: effects of shock waves on cells and tissues—critical factors in the conduct of research. Drach GW. **J Urol** 1989 Apr;141(4):964
Cytotoxicity of high energy shock waves: methodologic considerations. Laudone VP, et al. **J Urol** 1989 Apr;141(4):965-8
Effects of shock waves on the rat ovary. McCullough DL,

et al. J Urol 1989 Mar;141(3):666-9
The intraprostatic spiral: a new device for insertion with the patient under local anesthesia and with ultrasonic guidance with 3 months of followup. Nordling J, et al. J Urol 1989 Sep;142(3):756-8
Assessment of fetal renal reserve in low level obstructive uropathy [letter] Grannum PA, et al. Lancet 1989 Feb 4; 1(8632):281-2
One-dimensional computer simulation of a wave incident on randomly distributed inhomogeneities with reference to the scattering of ultrasound by blood. Routh HF, et al. Med Biol Eng Comput 1987 Nov;25(6):667-71
Utilization of hydrocortisone phonophoresis in United States Army Physical Therapy Clinics. Pottenger FJ, et al. Milit Med 1989 Jul;154(7):355-8
Assessment of blood flow velocity in intracranial cerebral arteries by transcranial Doppler ultrasound. Sipos C, et al. Neurol Psychiatr (Bucur) 1988 Oct-Dec;26(4):209-21
The recording of brain evoked potentials resulting from intra-articular focused ultrasonic stimulation: a new experimental model for investigating joint pain in humans. Wright A, et al. Neurosci Lett 1989 Feb 13;97(1-2):145-50
Evaluation and follow-up of carotid-cavernous fistulas by transcranial Doppler sonography: illustrative case. Gomez CR, et al. Neurosurgery 1989 May;24(5):749-53
Experience with the ultrasonic surgical aspirator in a cavernous hemangioma of the cavernous sinus. Kudo T, et al. Neurosurgery 1989 Apr;24(4):628-31
Acoustical investigation of poly(dA).poly(dT), poly[d(A-T)], poly(A).poly(U) and DNA hydration in dilute aqueous solutions. Buckin VA, et al. Nucleic Acids Res 1989 Jun 12;17(11):4189-203
Ultrasound effects on fetal auditory brain stem responses. Siddiqi TA, et al. Obstet Gynecol 1988 Nov;72(5):752-6
Effect of indomethacin and prednisolone on the disruption of the blood-aqueous barrier after hyperthermia on the rabbit eye by focused ultrasound. van Hees CL, et al. Ophthalmic Res 1989;21(1):44-8
Ultrasound determination of the relationship of radioactive plaques to the base of choroidal melanomas. Pavlin CJ, et al. Ophthalmology 1989 Apr;96(4):538-42
Use of the CUSA in removal of a recurrent intraorbital mucocele. Gillespie RP, et al. Otolaryngol Head Neck Surg 1988 Jul;99(1):71-2
Electrically stimulated increases in cochlear blood flow: I. Frequency and intensity effects. Sillman JS, et al. Otolaryngol Head Neck Surg 1989 Apr;100(4):308-16 (41 ref.)
Properties of ultrasonically marked leads. Breyer B, et al. PACE 1989 Aug;12(8):1369-80 (25 ref.)
Laser-Doppler flowmetry evaluation of the effects of elastic compression in patients with venous ulcerations. Belcaro G, et al. Panminerva Med 1988 Oct-Dec;30(4):208-12
Noninvasive assessment of artery wall properties in children aged 4-19 years. van Merode T, et al. Pediatr Res 1989 Jan;25(1):94-6
Validation of fiber-optic Doppler anemometry (FODA) for characterizing the droplet size of emulsions. Floy BJ, et al. Pharm Res 1987 Aug;4(4):301-4
Drug delivery by phonophoresis. Tyle P, et al. Pharm Res 1989 May;6(5):355-61 (65 ref.)
Comparison of free radicals produced by laser and ultrasound ablation of cardiovascular tissue. Clarke RH, et al. Photochem Photobiol 1988 Aug;48(2):205-8
Use of ultrasound to enhance percutaneous absorption of benzydamine. Benson HA, et al. Phys Ther 1989 Feb; 69(2):113-8
Distribution and deposition of tritiated cortisol using phonophoresis. Davick JP, et al. Phys Ther 1988 Nov; 68(11):1672-5
Microdissection by ultrasonication for scanning electron microscopy. Low FN. Prog Clin Biol Res 1989;295:571-80
Sonolysis of concentrated aqueous solutions of nonvolatile solutes: spin-trapping evidence for free radicals formed by pyrolysis. Kondo T, et al. Radiat Res 1989 May; 118(2):211-29
Sonolysis, radiolysis, and hydrogen peroxide photolysis of pyrimidine derivatives in aqueous solutions: a spin-trapping study. Kondo T, et al. Radiat Res 1988 Oct;116(1):56-73
New class of pulsed Doppler US ambiguity at short ranges. Gill RW, et al. Radiology 1989 Oct;173(1):272-5
Validity of laser Doppler flowmetry for measuring the effect of the tissue expander pressure on skin circulation. Simultaneous measurement of tissue pressure and laser Doppler flowmetry. Pietilä JP, et al. Scand J Plast Reconstr Surg Hand Surg 1988;22(2):135-9
Physics, facts, and artifacts of diagnostic ultrasound. Herring DS, et al. Semin Vet Med Surg (Small Anim) 1989 Feb; 4(1):2-12 (5 ref.)
Transgenic mouse production: pipette cleaning for pronuclear microinjection. Carnwath JW, et al. Trends Genet 1988 Jun;4(6):152
Modeling of Doppler signal considering sample volume and field distribution. Kim YM, et al. Ultrason Imaging 1989 Jul;11(3):175-96
Bias and variance in the estimate of the Doppler frequency induced by a wall motion filter. Willemetz JC, et al. Ultrason Imaging 1989 Jul;11(3):215-25
Ultrasound-enhanced diffusion through isolated frog skin. Mortimer AJ, et al. Ultrasonics 1988 Nov;26(6):348-51
Ultrasound in Medicine and Biology Prize. Ultrasound Med Biol 1989;15(2):89-90
Prediction of in situ exposure to ultrasound: an improved method. Bacon DR. Ultrasound Med Biol 1989; 15(4):355-61
Parameters for bioeffects experiment. Overview. Barnett SB. Ultrasound Med Biol 1989;15 Suppl 1:75-7
Increased sister chromatid exchanges in Chinese hamster ovary cells exposed to high intensity pulsed ultrasound. Barnett SB, et al. Ultrasound Med Biol 1988;14(5):397-403
AIUM's position on reporting parameters of bioeffects experiments. Edmonds PD. Ultrasound Med Biol 1989;15 Suppl 1:79-80
Effects of ultrasound exposure in vitro on neuroblastoma cell membranes. Fahnestock M, et al. Ultrasound Med Biol 1989;15(2):133-44
Losses in tissue associated with finite amplitude ultrasound transmission. Fry FJ, et al. Ultrasound Med Biol 1989; 15(5):481-97
Sister chromatid exchanges in Chinese hamster ovary cells exposed to high intensity pulsed ultrasound: inability to confirm previous positive results. Miller MW, et al. Ultrasound Med Biol 1989;15(3):255-62
An explanation for the decrease in cell lysis in a rotating tube with increasing ultrasound intensity. Miller MW, et al. Ultrasound Med Biol 1989;15(1):67-72
Theoretical criterion for acoustic aggregation. Nyborg WL. Ultrasound Med Biol 1989;15(2):93-9
Correlation artifacts in speed of sound estimation in scattering media. Ophir J, et al. Ultrasound Med Biol 1989; 15(4):341-53
EFSUMB position. Williams AR. Ultrasound Med Biol 1989; 15 Suppl 1:81; discussion 83-4
The in vitro effect of electromagnetically generated shock waves (Lithostar) on the Dunning R3327 PAT-2 rat prostatic cancer cell-line. A potentiating effect on the in vitro cytotoxicity of vinblastin. Oosterhof GO, et al. Urol Res 1989;17(1):13-9
[Sonication of echocontrast media for transpulmonary administration] Feuereisl R, et al. Cas Lek Cesk 1988 Jul 1;127(27):850-3 (Eng. Abstr.) (Cze)
[Ultrasound-guided puncture. A modern treatment of liver abscess] Pelissier G, et al. Ann Chir 1989;43(1):37-9 (Eng. Abstr.) (Fre)
[Decalcification of bone specimens by ultrasound in histopathology] Tortel MC, et al. Arch Anat Cytol Pathol 1988;36(4):178-80 (Eng. Abstr.) (Fre)
[Comparison of the radiological image with ultrasonography of the normal breast] Dagnelie J, et al. J Belge Radiol 1988; 71(5):571-6 (Eng. Abstr.) (Fre)
[Ultrasonic analysis of the influence of position on dimensions of the bend of the external saphenous veins] Guex JJ. Phlebologie 1989 Apr-Jun;42(2):181-3; discussion 184-5 (Fre)
[The use of ultrasound-treated amd complete Bordetella bronchiseptica antigens in an indirect enzyme immunoassay] Schilow WF, et al. Arch Exp Veterinarmed 1988 May;42(3):324-7 (Eng. Abstr.) (Ger)
[Significance of ultrasonic-guided pleural punctures/thoracic drainage after abdominal procedures and blunt abdominal/thoracic trauma] Kohlberger EJ, et al. Helv Chir Acta 1989 Jun;56(1-2):155-7 (Eng. Abstr.) (Ger)
[Direct biophysical effects of ultrasonic stimulation on the living rabbit lower limb] Schultze M, et al. Z Exp Chir Transplant Kunstliche Organe 1988;21(4):227-33 (Eng. Abstr.) (Ger)
[Ultrasonic evaluation of gallbladder volume and diameter in a group of young subjects: epidemiologic study carried out in Bari] Baldassarre G, et al. Boll Soc Ital Biol Sper 1988 Aug;64(8):723-30 (Eng. Abstr.) (Ita)
[Effect of ultrasound stimulation on ventricular function in isolated perfused rat heart--effect of ultrasound in ischemic whole hearts] Mizuno A. Nippon Kyobu Geka Gakkai Zasshi 1988 Nov; 36(11):2341-52 (Eng. Abstr.) (Jpn)
[The evaluation of ultrasonic oocyte collection techniques for IVF-ET--comparing the transabdominal and transvaginal methods] Mio Y, et al. Nippon Sanka Fujinka Gakkai Zasshi 1989 Feb;41(2):129-36 (Eng. Abstr.) (Jpn)
[Effect of ultrasonics on the electroretinogram of the isolated frog retina] Czepita D. Klin Oczna 1988 Jun;90(6):207-8 (Eng. Abstr.) (Pol)
[Study of antibody-hapten interaction by measuring velocity of ultrasound propagation] Shil'nikov GV, et al. Biofizika 1988 Jul-Aug;33(4):572-5 (Eng. Abstr.) (Rus)
[The action of ultrasound on the contraction strength and action potential of the papillary muscle of the rat heart] Zakharov SI, et al. Biull Eksp Biol Med 1989 Apr; 107(4):423-6 (Eng. Abstr.) (Rus)
[Use of ultrasonics in the prevention and treatment of suppurative surgical infection (review of the literature)] Gorfinkel' IV, et al. Khirurgiia (Mosk) 1988 Dec;(12):151-6 (54 ref.) (Rus)
[The action of low-frequency ultrasound on gram-positive and gram-negative pyogenic microflora in vitro] Ukhov AIa, et al. Mikrobiol Zh 1987 Jul-Aug;49(4):59-62 (Eng. Abstr.) (Rus)
[Assessment of the efficacy of electrophonophoresis in treating chronic periodontitis] Mamedova FM, et al. Stomatologiia (Mosk) 1989 Mar-Apr;68(2):73-4 (Rus)
[Effect of the conditions of ultrasonic treatment on the characteristics of forming liposomes] Lebed' OI, et al. Ukr Biokhim Zh 1989 May-Jun;61(3):96-101 (Eng. Abstr.) (Rus)
[Study of biologically active currents of the external ear in endaural pharmacophysical intervention] Aslamazova VI, et al. Vestn Otorinolaringol 1989 Mar-Apr;(2):17-20 (Eng. Abstr.) (Rus)
[Changes in the morphofunctional indices of the stomach in patients with chronic gastritis and an acid-forming deficiency under the influence of hydrocortisone ultraphonophoresis] Kapanadze GT. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Mar-Apr; (2):57-60 (Rus)
[Ultraphonophoresis of a heparin ointment in the therapy of postinjection and postoperative infiltrates] Naryshev IT. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Mar-Apr;(2):60 (Rus)
[General principles of elaboration of methods of drug ultraphonophoresis and their violation in clinical practice] Ulashchik VS. Vopr Kurortol Fizioter Lech Fiz Kult 1988 May-Jun;(3):1-7 (Rus)
[Postoperative ultrasonics of the prostatic "hiatus": expanded prostate] Espuela Orgaz R, et al. Arch Esp Urol 1988 Nov-Dec;41(9):831-8 (Eng. Abstr.) (Spa)
[New ultrasonic images in patients with lithiasis after undergoing extracorporeal shock wave lithotripsy] Ruiz Marcellán FJ, et al. Arch Esp Urol 1989 May;42(4):357-62 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

The effect of ultrasonically induced cavitation on articular cartilage. Watson P, et al. Clin Orthop 1989 Aug; (245):288-96
Effects of shock waves on the structure and growth of the immature rat epiphysis. Yeaman LD, et al. J Urol 1989 Mar;141(3):670-4
Environmental ultrasound in laboratories and animal houses: a possible cause for concern in the welfare and use of laboratory animals. Sales GD, et al. Lab Anim 1988 Oct; 22(4):369-75
Temperature elevation in the rat fetus due to ultrasound exposure. Abraham V, et al. Ultrasound Med Biol 1989; 15(5):443-9
Cavitation induced by asymmetric, distorted pulses of ultrasound: a biological test. Aymé EJ, et al. Ultrasound Med Biol 1989;15(1):61-6
Testing for the teratogenicity of pulsed ultrasound in mice. Child SZ, et al. Ultrasound Med Biol 1988;14(6):493-8
Ultrasound irradiation of pregnant mice [letter] Fry FJ. Ultrasound Med Biol 1989;15(5):519-21
Continuous-wave ultrasound and neoplastic transformation in vitro. Harrison GH, et al. Ultrasound Med Biol 1989; 15(4):335-40
Ultrasound-induced damage of veins in pig ears, as revealed by scanning electron microscopy. Kerr CL, et al. Ultrasound Med Biol 1989;15(1):45-52
Exposure levels for ultrasonic cavitation in the mouse neonate. Lee CS, et al. Ultrasound Med Biol 1988; 14(8):735-42
[Current views on the safety of using ultrasonics in the diagnosis] Kalina Z, et al. Pol Tyg Lek 1988 Sep 19; 43(38):1237-40 (50 ref.) (Pol)
[Electrophysiologic research on the central and peripheral nervous systems of workers in contact with ultrasound] Ginzburg DA, et al. Gig Tr Prof Zabol 1988 Jul;(7):45-6 (Rus)
[Formation of reactive peritoneal structures as affected by low-frequency ultrasound] Kotliarov VS. Vrach Delo 1988 Jul;(7):56-7 (Eng. Abstr.) (Rus)

EDUCATION

Radiology residency training in diagnostic sonography [editorial] Filly RA. J Ultrasound Med 1989 Sep;8(9):475

INSTRUMENTATION

Can blind infants and children use sonar sensory aids? Humphrey GK, et al. Can J Psychol 1988 Jun;42(2):94-119 (74 ref.)
Another measurement of cardiac output: is it truly needed? Nishimura RA. J Am Coll Cardiol 1989 May;13(6):1393-4
Instantaneous and continuous cardiac output obtained with a Doppler pulmonary artery catheter. Segal J, et al. J Am Coll Cardiol 1989 May;13(6):1382-92
Technical note: a mains drop-out simulator. Norwood HM. J Med Eng Technol 1988 Sep-Oct;12(5):224-5
BVI 2000: a non-invasive technique to assess bladder function. Chadwick AT. J Neurosci Nurs 1989 Aug; 21(4):256-7
Combined 2.25 MHz ultrasound velocity and bone mineral density measurements in the equine metacarpus and their in vivo applications. McCartney RN, et al. Med Biol Eng Comput 1987 Nov;25(6):620-6
Ultrasound attenuation in biological tissues using a bone transducer. Ray S, et al. Med Biol Eng Comput 1987 Nov; 25(6):689-92
An ultrasonic cleaning bath in general practice. Brown JS. Practitioner 1988 Apr 8;232(1446):377
Use of Cavitron surgical aspirator for debulking of diaphragmatic metastases in patients with advanced

carcinoma of the ovaries. Deppe G, et al. **Surg Gynecol Obstet** 1989 May;168(5):455–6

The design and fabrication of high frequency poly(vinylidene fluoride) transducers. Sherar MD, et al. **Ultrason Imaging** 1989 Apr;11(2):75–94

A 100 MHz B-scan ultrasound backscatter microscope. Sherar MD, et al. **Ultrason Imaging** 1989 Apr;11(2):95–105

High power optical fibre delivery system for the laser generation of ultrasound. Dewhurst RJ, et al. **Ultrasonics** 1988 Nov;26(6):307–10

Recent progress on standards and bioeffects in Japan. Maeda K. **Ultrasound Med Biol** 1989;15 Suppl 1:99–100

[An electronic sensory substitute for young blind children] Sampaio E, et al. **J Fr Ophtalmol** 1988;11(2):161–7 (Eng. Abstr.) **(Fre)**

[Ultrasound hemolysis] Leitgeb N, et al. **Biomed Tech (Berlin)** 1989 Jan-Feb;34(1–2):14–6 (Eng. Abstr.) **(Ger)**

[Experience with the ultrasonic aspirator in surgery of benign goiter] Jung D, et al. **Helv Chir Acta** 1989 Jun; 56(1–2):147–50 (Eng. Abstr.) **(Ger)**

[Experience in the use of an ultrasonic scalpel in the ambulatory practice of a dental surgeon] Bolko VZ. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):74 **(Rus)**

[Tracheotomy using an ultrasonic scalpel] Ferkel'man LA, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):32–4 (Eng. Abstr.) **(Rus)**

[Study of blood flow through the renal arteries by an ultrasonic Dopplerography device] Gadzhiev MM, et al. **Voen Med Zh** 1989 May;(5):29–31 **(Rus)**

[The removal of brain tumors using an ultrasonic aspirator] Schöche J, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):56–7 **(Rus)**

METHODS

Transabdominal versus transvaginal ultrasound scanning of ovarian follicles: are they comparable? Gonzalez CJ, et al. **Fertil Steril** 1988 Oct;50(4):657–9

Transvaginal Doppler color flow mapping. Hata T, et al. **Gynecol Obstet Invest** 1989;27(4):217–8

Vaginal intratubal insemination (VITI) and vaginal GIFT, endosonographic technique: early experience. Lucena E, et al. **Hum Reprod** 1989 Aug;4(6):658–62

A tracking FFT processor for pulsed Doppler analysis beyond the Nyquist limit. Tortoli P. **IEEE Trans Biomed Eng** 1989 Feb;36(2):232–7

Phase aberration correction in medical ultrasound using speckle brightness as a quality factor. Nock L, et al. **J Acoust Soc Am** 1989 May;85(5):1819–33

Microbubbles show promise for enhancing ultrasound signal, image, other applications [news] Kirn TF. **JAMA** 1989 Mar 17;261(11):1542

Percutaneous ultrasonic angioplasty:initial clinical experience. Siegel RJ, et al. **Lancet** 1989 Sep 30; 2(8666):772–4

A ray tracing method for calculating the speed of sound in a nonparallel layered model using pulse echo ultrasound. Lockwood GR, et al. **Ultrason Imaging** 1989 Apr; 11(2):106–18

Comparison of four digital maximum frequency estimators for Doppler ultrasound. Mo LY, et al. **Ultrasound Med Biol** 1988;14(5):355–63

[Three-dimensional imaging in ultrasonic diagnosis. Initial results] Sohn C, et al. **Dtsch Med Wochenschr** 1988 Nov 11;113(45):1743–7 (Eng. Abstr.) **(Ger)**

[Quantification of Doppler blood flow using phasedarray sector probe in renal allografts] Arima M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):534–8 (Eng. Abstr.) **(Jpn)**

[Treatment of cochlear neuritis of vascular etiology by endaural phonophoresis and phonoelectrophoresis] Pal'chun VT, et al. **Vestn Otorinolaringol** 1989 May–Jun; (3):46–50 (Eng. Abstr.) **(Rus)**

ULTRASONOGRAPHY see **ULTRASONIC DIAGNOSIS**

ULTRAVIOLET RAYS

Systemic effect of ultraviolet irradiation on non-immunologic immediate contact reactions to benzoic acid and methyl nicotinate. Larmi E. **Acta Derm Venereol (Stockh)** 1989; 69(4):296–301

UV irradiation and topical vitamin A modulate retinol esterification in hairless mouse epidermis. Törmä H, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):291–9

Inhibited repair of DNA synthesis in UV-irradiated cultured fibroblasts of a boy with Cockayne's syndrome. Wieczorek E, et al. **Acta Med Pol** 1988;29(1–2):77–9

Changes in colour temperature characteristic of cholesteric temperature indicators provoked by UV radiation. Pospíšil E, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:23–30

Variables associated with ultraviolet transmittance measurements of intraocular lenses [letter; comment] Bruce AS. **Am J Ophthalmol** 1989 Mar 15;107(3):307–8. **Comment on:** Am J Ophthalmol 1988 Sep 15;106(3):256–60

Clearing the air. The theory and application of ultraviolet air disinfection. Riley RL, et al. **Am Rev Respir Dis** 1989 May;139(5):1286–94 (64 ref.)

Ultraviolet shadowing nucleic acids on nylon membranes. Thurston SJ, et al. **Anal Biochem** 1989 Apr;178(1):41–2

Cellular and genetic characterization of UV sensitive Chinese hamster mutants. Stefanini M, et al. **Ann Ist Super Sanita** 1989;25(1):123–9

To tan or not to tan. A burning question [editorial] Morison WL. **Arch Dermatol** 1989 Sep;125(9):1258–60

Ultraviolet light inhibits nonimmunologic immediate contact reactions to benzoic acid. Larmi E, et al. **Arch Dermatol Res** 1988;280(7):420–3

Membrane responses of B-16 melanoma cells to single exposure to ultraviolet light. Ogura R, et al. **Arch Dermatol Res** 1989;280(8):481–6

The carcinogenic risks of modern tanning equipment: is UV-A safer than UV-B? van Weelden H, et al. **Arch Dermatol Res** 1988;280(5):300–7

A promising genomic transfectant into Xeroderma pigmentosum group A with highly amplified mouse DNA and intermediate UV resistance turns revertant. Blum M, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):647–55

Effects of 8-methoxypsoralen and ultraviolet light A on EGF receptor (HER-1) expression. Yang XY, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):590–6

In situ enzymology of DNA replication and ultraviolet-induced DNA repair synthesis in permeable human cells. Dresler SL, et al. **Biochemistry** 1988 Sep 20; 27(19):7247–54

Involvement of DNA polymerase delta in DNA repair synthesis in human fibroblasts at late times after ultraviolet irradiation. Dresler SL, et al. **Biochemistry** 1988 Aug 23; 27(17):6379–83

UV-induced pyrimidine dimers and trimethylpsoralen cross-links do not alter chromatin folding in vitro. Gale JM, et al. **Biochemistry** 1988 Sep 20;27(19):7197–205

Light-induced permeabilization and merocyanine 540 staining of mouse spleen cells. Szabo G Jr, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):365–70

Ultraviolet B light inactivates bone marrow T lymphocytes but spares hematopoietic precursor cells. Deeg HJ, et al. **Blood** 1989 Feb;73(2):369–71

Loss of antibiotic activity caused by photodegradation: in vivo studies [letter] Ferguson J, et al. **Br J Dermatol** 1988 Oct;119(4):550–1

A study of the photodegradation of leukotriene B4 by ultraviolet irradiation (UVB, UVA). Millar B, et al. **Br J Dermatol** 1989 Feb;120(2):145–52

UV-induced growth inhibition in the trypanosomatid Crithidia fasciculata. Barros AM, et al. **Braz J Med Biol Res** 1988;21(3):493–7

DNA damage and repair in normal, xeroderma pigmentosum and XP revertant cells analyzed by gel electrophoresis: excision of cyclobutane dimers from the whole genome is not necessary for cell survival. Cleaver JE. **Carcinogenesis** 1989 Sep;10(9):1691–6

Repair of 8-methoxypsoralen + UVA-induced damage in specific sequences in chromosomal and episomal DNA in human cells. Dean SW. **Carcinogenesis** 1989 Jul; 10(7):1253–6

Photoactivation of mutagens. De Flora S, et al. **Carcinogenesis** 1989 Jun;10(6):1089–97

UVB-induced (6-4) photoproducts in hairless mouse epidermis studied by quantitative immunohistochemistry. Olsen WM, et al. **Carcinogenesis** 1989 Sep;10(9):1669–73

Defective repair of UV-damaged DNA in human tumor and SV40-transformed human cells but not in adenovirus-transformed human cells. Rainbow AJ. **Carcinogenesis** 1989 Jun;10(6):1073–7

UVC-induced expression of a tumor-associated antigen in human cell hybrids (HeLa X skin fibroblasts): repair of potentially lethal and potentially transforming damage. Redpath JL, et al. **Carcinogenesis** 1989 Apr;10(4):723–6

Ultraviolet irradiation produces cytotoxic synergy and increased DNA interstrand crosslinking with cis- and trans-diamminedichloroplatinum(II). Swinnen LJ, et al. **Carcinogenesis** 1989 Aug;10(8):1465–70

Ultraviolet light and dental caries in children. Hargreaves JA, et al. **Caries Res** 1989;23(5):389–92

The role of suppressor factors in the regulation of immune responses by ultraviolet radiation-induced suppressor T lymphocytes. I. Activity of suppressor cell culture supernatants. Yee GK, et al. **Cell Immunol** 1989 Jun; 121(1):74–87

The role of suppressor factors in the regulation of immune responses by ultraviolet radiation-induced suppressor T lymphocytes. II. Activity of suppressor cell culture sonicates. Yee GK, et al. **Cell Immunol** 1989 Jun; 121(1):88–98

Pulsed ultraviolet laser irradiation produces endothelium-independent relaxation of vascular smooth muscle. Steg PG, et al. **Circulation** 1989 Jul;80(1):189–97

The UV erythema action spectra of three coal tar preparations. Berne B, et al. **Clin Exp Dermatol** 1987 Nov; 12(6):400–2

In vivo PUVA and UVB sensitivity of various human epidermal Langerhans cell markers (ATPase, HLA-DR and T6)—dose-response and time-sequence studies. Koulu L, et al. **Clin Exp Dermatol** 1988 May;13(3):173–6

UVC irradiation of human epidermal Langerhans cells decreases the alloactivating and antigen presenting capacity. Mørk NJ, et al. **Clin Exp Dermatol** 1988 Nov; 13(6):371–5

Susceptible cytotoxicity to ultraviolet B light in fibroblasts and keratinocytes cultured from autoimmune-prone MRL/Mp-lpr/lpr mice. Furukawa F, et al. **Clin Immunol Immunopathol** 1989 Sep;52(3):460–72

Photoreactivating enzyme in the blind cave fish, Anoptichthys jordani. Woodhead AD, et al. **Comp Biochem Physiol [B]** 1979;63(1):73–6

UV sunlight and patch test reactions in humans. Dooms-Goossens A, et al. **Contact Dermatitis** 1988 Jul; 19(1):36–42

Age-dependent effect of UV light in abnormal alpha neoprotein formation in the lens. Hibino K, et al. **Curr Eye Res** 1988 Nov;7(11):1113–24

Inactivation of viruses by ultraviolet light. Kallenbach NR, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):70–82

Inactivation of hepatitis viruses and HIV in plasma and plasma derivatives by treatment with beta-propiolactone/UV irradiation. Stephan W. **Curr Stud Hematol Blood Transfus** 1989;(56):122–7 (19 ref.)

Photobiology of natural populations of zooxanthellae from the sea anemone Aiptasia pallida: assessment of the host's role in protection against ultraviolet radiation. Lesser MP. **Cytometry** 1989 Sep;10(5):653–8

Enhanced rabbit skin plasmin activity by UV irradiation. Ichikawa K, et al. **Dermatologica** 1989;179 Suppl 1:132

Induction of plasminogen activator by UV light in mouse keratinocyte-derived cell line, Pam 212. Takashima A, et al. **Dermatologica** 1989;179 Suppl 1:133

Endogenous, cutaneous vitamin D synthesis stimulation as an effective way of improving the vitamin D status in children with hepatobiliary malfunctions. Lukaszkiewicz J, et al. **Digestion** 1989;42(3):158–62

Ultraviolet mutagenesis and the SOS response in Escherichia coli: a personal perspective. Witkin EM. **Environ Mol Mutagen** 1989;14 Suppl 16:30–4

Mutagenic activity of ultraviolet-irradiated mixtures of nitrogen dioxide and propene or butadiene. Victorin K, et al. **Environ Res** 1989 Aug;49(2):271–82

Orientation of the tryptophans responsible for the photoinactivation of nerve sodium channels. Conti F, et al. **Eur Biophys J** 1988;16(2):73–81

Vanadate-mediated photocleavage of rabbit skeletal myosin. Mocz G. **Eur J Biochem** 1989 Feb 1;179(2):373–8

Sideband transmission in interference filters and its implications for measurements of spectral sensitivity. Hawryshyn CW. **Exp Biol** 1989;48(2):123–6

Ultrastructural changes in nucleoli and fibrillar centers under the effect of local ultraviolet microbeam irradiation of interphase culture cells. Zatsepina OV, et al. **Exp Cell Res** 1989 Mar;181(1):94–104

Glucose concentration profiles of normal and ultraviolet radiation-exposed rabbit corneas. Lattimore MR Jr. **Exp Eye Res** 1988 Nov;47(5):699–704

Light scattering and photocrosslinking in the calf lens crystallins gamma-II, III and IV. Walker ML, et al. **Exp Eye Res** 1989 Mar;48(3):375–83

Electron transfer reactions in photosystem I following vitamin K1 depletion by ultraviolet irradiation. Biggins J, et al. **FEBS Lett** 1989 Jul 3;250(2):271–4

UV-induced cross-linking of proteins to plasmid pBR322 containing 8-azidoadenine 2'-deoxyribonucleotides. Meffert R, et al. **FEBS Lett** 1988 Nov 7;239(2):190–4

Radicals involved in photoallergen/protein interactions. Delahanty JN, et al. **Free Radic Biol Med** 1989;7(3):231–6

UV-absorbing intraocular lenses: safety, efficacy, and consequences for the cataract patient. Werner JS, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):248–56 (90 ref.)

Proposed change to the IRPA 1985 guidelines on limits of exposure to ultraviolet radiation. International Non-ionizing Radiation Committee of the International Radiation Protection Association. **Health Phys** 1989 Jun; 56(6):971–2

Morphology of UV and IR irradiated lens. Rawal UM, et al. **Indian J Ophthalmol** 1987;35(5–6):204–9

Induction and removal of DNA interstrand cross-links in V-79 Chinese hamster cells measured by hydroxylapatite chromatography after treatments with bifunctional furocoumarins. Dardalhon M, et al. **Int J Radiat Biol** 1988 Dec;54(6):1007–20

Studies of the UVC-sensitivity of non-tumorigenic and tumorigenic human cell hybrids (HeLa x skin fibroblasts). Redpath JL, et al. **Int J Radiat Biol** 1989 Jun;55(6):1023–31

Inhibition and recovery of semiconservative DNA synthesis in normal and solar UV sensitive ICR 2A frog cell lines following the induction of non-dimer DNA damage by sunlamp UV greater than 315 nm. Rosenstein BS. **Int J Radiat Biol** 1989 Aug;56(2):131–8

Post-ultraviolet DNA synthesis in the absence of repair: role of the single-strand DNA-binding protein. Trgovčević Z, et al. **Int J Radiat Biol** 1989 May;55(5):739–45

Generation of oxidants in the near-UV photooxidation of human lens alpha-crystallin. Andley UP, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):706–13

Temporal sequence of changes to the gray squirrel retina after near-UV exposure. Collier RJ, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):631–7

Near-ultraviolet circular dichroism of bovine high molecular weight alpha-crystallin. Liang J, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2065–8

Providing vitamin D to confined sheep by oral supplementation vs ultraviolet irradiation. Hidiroglou M, et al. **J Anim Sci** 1989 Mar;67(3):794–802

Effect of degradative plasmid CAM-OCT on responses of Pseudomonas bacteria to UV light. McBeth DL. **J Bacteriol** 1989 Feb;171(2):975–82

An in vivo complex with DNA photolyase blocks UV mutagenesis targeted at a thymine–cytosine dimer in Escherichia coli. Ruiz-Rubio M, et al. **J Bacteriol** 1988 Nov;170(11):5371–4

Reduced formation of bipyrimidine photoproducts in DNA UV irradiated at high intensity. Masnyk TW, et al. **J Biol Chem** 1989 Feb 15;264(5):2482–8

The beta subunit modulates bypass and termination at UV lesions during in vitro replication with DNA polymerase III holoenzyme of Escherichia coli. Shavitt O, et al. **J Biol Chem** 1989 Jul 5;264(19):11275–81

Shortwave ultraviolet radiation in operating rooms. Berg M, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):483–5

Metabolism of U6 RNA species in nonirradiated and UV-irradiated mammalian cells. Choudhury K, et al. **J Cell Physiol** 1988 Dec;137(3):529–36

Effect of ultraviolet light on the expression of genes for human U1 RNA. Thirunavukkarasu C, et al. **J Cell Physiol** 1988 Oct;137(1):55–64

Ultraviolet microbeam irradiation of microtubules in vitro. The action spectrum for local depolymerization of marginal band microtubules in vitro matches that for reducing birefringence of chromosomal spindle fibres in vivo. Hughes K, et al. **J Cell Sci** 1988 Dec;91 (Pt 4):469–78

Caffeine induces uncoordinated expression of cell cycle functions after ultraviolet irradiation. Accelerated cycle transit, sister chromatid exchanges and premature chromosome condensation in a transformed Indian muntjac cell line. Musk SR, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):591–9

Ultraviolet microbeam irradiation of chromosomal spindle fibres shears microtubules and permits study of the new free ends in vivo. Wilson PJ, et al. **J Cell Sci** 1988 Dec; 91 (Pt 4):455–68

The mechanism of the inhibitory effects of antimalarials on UV-induced skin inflammation in mice. Yoshioka A, et al. **J Dermatol (Tokyo)** 1988 Apr;15(2):111–5

Relative attractiveness of paired BL and BLB fluorescent bulbs for house and stable flies (Diptera: Muscidae). Pickens LG. **J Econ Entomol** 1989 Apr;82(2):535–8

Rapid recovery of Langerhans cell alloreactivity, without induction of autoreactivity, after in vivo ultraviolet A, but not ultraviolet B exposure of human skin. Baadsgaard O, et al. **J Immunol** 1989 Jun 15;142(12):4213–8

UVB-induced melanogenesis may be mediated through the MSH–receptor system. Bolognia J, et al. **J Invest Dermatol** 1989 May;92(5):651–6

Cyclobuta-dithymidine induction by solar-simulating UV radiation in human skin: II. Individual responses. Bruze M, et al. **J Invest Dermatol** 1989 Sep;93(3):341–4

Encapsulation of the UV-DNA repair enzyme T4 endonuclease V in liposomes and delivery to human cells. Ceccoli J, et al. **J Invest Dermatol** 1989 Aug;93(2):190–4

Disparate effects of in vitro low-dose UVB irradiation on intravenous immunization with purified epidermal cell subpopulations for the induction of contact hypersensitivity. Cruz PD Jr, et al. **J Invest Dermatol** 1989 Feb;92(2):160–5

Perturbation of experimental ultraviolet light–induced erythema by passive transfer of serum from subacute cutaneous lupus erythematosus patients. Davis TL, et al. **J Invest Dermatol** 1989 Apr;92(4):573–7

Trans–cis isomerization of urocanic acid in response to ultraviolet light [letter] Everett MA. **J Invest Dermatol** 1988 Dec;91(6):607

Ultraviolet radiation–induced suppression of contact hypersensitivity in relation to padimate O and oxybenzone. Fisher MS, et al. **J Invest Dermatol** 1989 Mar;92(3):337–41

Modification of sunburn cell production in 8-MOP sensitized mouse epidermis: a method of assessing UVA sunscreen efficacy. Garmyn M, et al. **J Invest Dermatol** 1989 Apr; 92(4):642–5

Transiently increased insulin–like growth factor. I. Immunoreactivity in UVB–irradiated mouse skin. Hansson HA, et al. **J Invest Dermatol** 1988 Oct;91(4):328–32

Cytometric analysis of the proliferative capacity of HUT 102 lymphoblasts exposed to long–wave UV light and psoralen. Hornicek FJ, et al. **J Invest Dermatol** 1989 Jul;93(1):96–9

Effect of ultraviolet irradiation on the activity of rat skin prostaglandin D synthetase. Ikai K, et al. **J Invest Dermatol** 1989 Sep;93(3):345–8

A possible role of prostaglandins in PUVA–induced inflammation: implication by organ cultured skin. Imokawa G, et al. **J Invest Dermatol** 1989 Feb;92(2):296–300

Collagen metabolism in ultraviolet irradiated hairless mouse skin and its correlation to histochemical observations. Kligman LH, et al. **J Invest Dermatol** 1989 Aug;93(2):210–4

Ultraviolet–B (290–320 nm)–irradiation inhibits epidermal growth–factor binding to mammalian cells. Matsui MS, et al. **J Invest Dermatol** 1989 Apr;92(4):617–22

Alterations in dermal collagen in ultraviolet irradiated hairless mice. Schwartz E, et al. **J Invest Dermatol** 1989 Jul;93(1):142–6

Detection of a specific inhibitor of interleukin 1 in sera of UVB–treated mice. Schwarz T, et al. **J Invest Dermatol** 1988 Dec;91(6):536–40

UVB irradiation induces melanocyte increase in both exposed and shielded human skin. Stierner U, et al. **J Invest Dermatol** 1989 Apr;92(4):561–4

Urinary excretion of 5–S–cysteinyldopa in relation to skin type, UVB–induced erythema, and melanocyte proliferation in human skin. Stierner U, et al. **J Invest Dermatol** 1988 Nov;91(5):506–10

In vivo threshold for cutaneous synthesis of vitamin D3. Matsuoka LY, et al. **J Lab Clin Med** 1989 Sep;114(3):301–5

UmuC function is not essential for the production of all targeted lacI mutations induced by ultraviolet light. Christensen JR, et al. **J Mol Biol** 1988 Oct 5;203(3):635–41

Comparison of ultraviolet irradiation–induced mutagenesis of the lacI gene in Escherichia coli and in human 293 cells. Hsia HC, et al. **J Mol Biol** 1989 Jan 5;205(1):103–13

Effect of photoreactivation on mutagenesis of lambda phage by ultraviolet light. Hutchinson F, et al. **J Mol Biol** 1988 Aug 5;202(3):593–601

Ultraviolet light induces different spectra of lacI sequence changes in vegetative and conjugating cells of Escherichia coli. LeClerc JE, et al. **J Mol Biol** 1988 Oct 5;203(3):619–33

Bone mineral content, serum vitamin D metabolite concentrations, and ultraviolet B light exposure in infants fed human milk with and without vitamin D2 supplements. Greer FR, et al. **J Pediatr** 1989 Feb;114(2):204–12

UV excitable fluorescence of lumirubin. Bacci M, et al. **J Photochem Photobiol [B]** 1989 Jun;3(3):419–27

UVA–induced binding of 8–methoxypsoralen to cells of Saccharomyces cerevisiae: separation and characterization of DNA photoadducts. Bankmann M, et al. **J Photochem Photobiol [B]** 1989 Feb;3(1):33–52

Effect of UV irradiation at defined wavelengths on the tertiary structure of double–stranded covalently closed circular DNA. Boullard A, et al. **J Photochem Photobiol [B]** 1988 Dec;2(4):491–501

Photoaddition of angelicin to linolenic acid methyl ester. Caffieri S, et al. **J Photochem Photobiol [B]** 1988 Dec; 2(4):515–21

Photodimerization of 4,6,4'-trimethylangelicin and 6,5–dimethylangelicin. Caffieri S, et al. **J Photochem Photobiol [B]** 1987 Dec;1(2):213–21

Partial tRNA deacylation specifically triggers Escherichia coli cell volume reduction. Caldeira de Araujo A, et al. **J Photochem Photobiol [B]** 1987 Sep;1(1):13–31

Molecular mechanism of naproxen photosensitization in red blood cells. Costanzo LL, et al. **J Photochem Photobiol [B]** 1989 Apr;3(2):223–35

Excision–repair capacity of UV–irradiated strains of Escherichia coli and Streptococcus pneumoniae, estimated by plasmid recovery. Estevenon AM, et al. **J Photochem Photobiol [B]** 1989 Apr;3(2):185–92

The photoreaction of vacuum–dried rhodopsin at low temperature: evidence for charge stabilization by water. Ganter UM, et al. **J Photochem Photobiol [B]** 1988 Dec; 2(4):417–26

Pyrrolocoumarin derivatives: DNA–binding properties. Gia O, et al. **J Photochem Photobiol [B]** 1988 Dec;2(4):435–42

Photophysical, photochemical and photobiological properties of pyrrolocoumarins; a new class of photoactive compounds. Gibbs NK, et al. **J Photochem Photobiol –B–** 1988 Jul;2(1):109–22

UV–induced unscheduled DNA synthesis in human skin: dose response, correlation with erythema, time course and split dose exposure in vivo. Hönigsmann H, et al. **J Photochem Photobiol [B]** 1987 Sep;1(1):33–43

Determination of base specificity in 6,4,4'-trimethylangelicin photobinding to single–stranded DNA. Miolo G, et al. **J Photochem Photobiol [B]** 1989 Feb;3(1):123–7

Extent of formation of a dimeric adenine photoproduct in polynucleotides and DNA. Sharma ND, et al. **J Photochem Photobiol [B]** 1989 Apr;3(2):247–58

Photoreactivation in phr mutants of Escherichia coli K–12: cloning from the gal–att lambda interval increases the photoreactivable response in phrA strains. Smith AW, et al. **J Photochem Photobiol –B–** 1988 Jul;2(1):21–32

recA–dependent DNA repair in UV–irradiated Escherichia coli. Smith KC, et al. **J Photochem Photobiol [B]** 1987 Sep; 1(1):1–11 (55 ref.)

Tetrahydrobenzo–4,6–dimethylangelicin: a new angular furocoumarin forming inter–strand photo–cross–links. Vedaldi D, et al. **J Photochem Photobiol [B]** 1987 Sep; 1(1):123–6

Replication of simian virus 40 DNA after UV irradiation: evidence of growing fork blockage and single–stranded gaps in daughter strands. Mezzina M, et al. **J Virol** 1988 Nov;62(11):4249–58

UV exposure alters the membrane lipid composition and cell membrane fluidity of intact cultured B–16 melanoma cells. Sakanashi T, et al. **Kurume Med J** 1988;35(4):159–69

UVA filters in sunscreen preparations [letter] Diffey BL, et al. **Lancet** 1989 Jul 15;2(8655):170

UVA filters in sunscreen preparations [letter; comment] Summers B, et al. **Lancet** 1989 Jun 17;1(8651):1387. **Comment on:** Lancet 1989 Feb 25;1(8635):429–31

Ultraviolet light for sterilisation [letter] Watts GT. **Lancet** 1988 Oct 15;2(8616):912

Pulsed Er:YAG– and 308 nm UV–excimer laser: an in vitro and in vivo study of skin–ablative effects. Kaufmann R, et al. **Lasers Surg Med** 1989;9(2):132–40

Excimer ablation of human intervertebral disc at 308 nanometers. Wolgin M, et al. **Lasers Surg Med** 1989; 9(2):124–31

Ablation of bone and polymethylmethacrylate by an XeCl (308 nm) excimer laser. Yow L, et al. **Lasers Surg Med** 1989;9(2):141–7

Effect of UV–irradiation on some aspects of metabolic activities in Aspergillus flavus and Penicillium notatum. Osman M, et al. **Microbios** 1988;56(227):79–87

Coordinate induction of metallothioneins I and II in rodent cells by UV irradiation. Fornace AJ Jr, et al. **Mol Cell Biol** 1988 Nov;8(11):4716–20

Determination of the spectrum of mutations induced by defined–wavelength solar UVB (313–nm) radiation in mammalian cells by use of a shuttle vector. Keyse SM, et al. **Mol Cell Biol** 1988 Dec;8(12):5425–31

RAD1, an excision repair gene of Saccharomyces cerevisiae, is also involved in recombination. Schiestl RH, et al. **Mol Cell Biol** 1988 Sep;8(9):3619–26

Anti–mutagenic effect of ultraviolet light on spontaneous tyrosine tRNA ochre suppressor mutations in Escherichia coli. Bockrath R, et al. **Mol Gen Genet** 1988 Oct; 214(2):361–4

Bacteriophage T4 DNA polymerase determines the amount and specificity of ultraviolet mutagenesis. Drake JW. **Mol Gen Genet** 1988 Nov;214(3):547–52

Temperature dependent survival of UV–irradiated Escherichia coli K12. Ganesan AK, et al. **Mol Gen Genet** 1988 Oct;214(2):198–203

The base–alteration spectrum of spontaneous and ultraviolet radiation–induced forward mutations in the URA3 locus of Saccharomyces cerevisiae. Lee GS, et al. **Mol Gen Genet** 1988 Nov;214(3):396–404

Delayed expression of enhanced reactivation and decreased mutagenesis of UV–irradiated adenovirus in UV–irradiated ataxia telangiectasia fibroblasts. Bennett CB, et al. **Mutagenesis** 1988 Sep;3(5):389–95

Mutagenic DNA repair in Escherichia coli. XII. Ultraviolet mutagenesis in excision–proficient umuC and lexA (ind–) bacteria as revealed by delayed photoreversal. Bridges BA, et al. **Mutagenesis** 1986 Mar;1(2):111–7

UV–mediated toxic bioactivity of harmine in the meristematic cells of Allium cepa. Hazen MJ, et al. **Mutagenesis** 1988 Jul;3(4):333–5

Poly(ADP–ribose) catabolism in mammalian cells exposed to DNA–damaging agents. Alvarez–Gonzalez R, et al. **Mutat Res** 1989 Sep;218(2):67–74

Nicotinamide adenosine dinucleotide level in dimethylsulfate–treated or UV–irradiated mouse epidermis. Balard B, et al. **Mutat Res** 1989 Jan;219(1):71–9

Hyperthermia–induced modulation of killing and mutation by UV and N–methyl–N'–nitro–N–nitrosoguanidine in V79 cells. Banerjee S, et al. **Mutat Res** 1989 May;226(1):69–73

Heat shock mRNA in mouse epidermis after UV irradiation. Brunet S, et al. **Mutat Res** 1989 Jul;219(4):217–24

Ultraviolet mutagenesis of radiation–sensitive (rad) mutants of the nematode Caenorhabditis elegans. Coohill T, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):99–106

Effects of UV light on DNA chain growth and replicon initiation in human cells. Griffiths TD, et al. **Mutat Res** 1989 Sep;218(2):87–94

Modulation of mutagenesis involving precise excision of transposon Tn10. Hafner LM, et al. **Mutat Res** 1989 Apr; 211(2):291–9

Solar and UVC–induced mutation in human cells and inhibition by deoxynucleosides. Musk P, et al. **Mutat Res** 1989 Sep;227(1):25–30

Mitomycin C–induced postmitotic fibroblasts retain the capacity to repair pyrimidine photodimers formed after UV–irradiation. Niggli HJ, et al. **Mutat Res** 1989 Jul; 219(4):231–40

Ultra–violet–sensitive cones in the color–coding systems of cyprinid retinas. Hashimoto Y, et al. **Neurosci Res Suppl** 1988;8:S81–95

Protein–DNA conjugates produced by UV irradiation and their use as probes for hybridization. Czichos J, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1563–72

Nuclear matrix associated DNA is preferentially repaired in normal human fibroblasts, exposed to a low dose of ultraviolet light but not in Cockayne's syndrome fibroblasts. Mullenders LH, et al. **Nucleic Acids Res** 1988 Nov 25; 16(22):10607–22

The degree of ultraviolet light damage to DNA containing iododeoxyuridine or bromodeoxyuridine is dependent on the DNA sequence. Murray V, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2675–91

Increased recombinational efficiency in insect cells irradiated with short wavelength ultra–violet light. Peakman T, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5403

A novel photoproduct of 2'-deoxyguanosine induced by acetone photosensitization: 8–(2,3,4–trihydroxybutyl)guanine. Sharma ND, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):955–67

Differential repair of UV damage in Saccharomyces cerevisiae. Terleth C, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4433–9

An acute light and electron microscopic study of ultraviolet 193–nm excimer laser corneal incisions. Berns MW, et al. **Ophthalmology** 1988 Oct;95(10):1422–33

Effects of ultraviolet radiation on the oxygen uptake rate of the rabbit cornea. Lattimore MR Jr. **Optom Vis Sci** 1989 Feb;66(2):117–22

Morphological change and Raman spectrum of rabbit lens irradiated with ultraviolet laser beam. Takise S, et al. **Osaka City Med J** 1989 Jun;35(1):29–37

The role of ultraviolet radiation–induced cross–reactive tumor antigens in tumor immunity. Seilstad KH, et al. **Pathol Immunopathol Res** 1987;6(5–6):400–18 (98 ref.)

The effects of near–UV radiation on human lens beta–crystallins: protein structural changes and the production of O2– and H2O2. Andley UP, et al.

Photochem Photobiol 1989 Jul;50(1):97–105
Solar UVB–albedo of various surfaces. Blumthaler M, et al. Photochem Photobiol 1988 Jul;48(1):85–8
UV mutagenic photoproducts in Escherichia coli and human cells: a molecular genetics perspective on human skin cancer. Brash DE. Photochem Photobiol 1988 Jul; 48(1):59–66
Irreversible binding of nitrofurantoin to skin and to plasma proteins of UV–A exposed rats. Busker RW, et al. Photochem Photobiol 1988 Nov;48(5):683–8
The relative biological importance of cyclobutane and (6–4) pyrimidine–pyrimidone dimer photoproducts in human cells: evidence from a xeroderma pigmentosum revertant. Cleaver JE, et al. Photochem Photobiol 1988 Jul;48(1):41–9
8–Methoxypsoralen–photoinduced DNA cross–links as determined in yeast by alkaline step elution under different reirradiation conditions. Relation with genetic effects. Cundari E, et al. Photochem Photobiol 1988 Sep; 48(3):315–20
Photoisomerization of retinoic acid and its photoprotection in physiologic–like solutions. Curley RW Jr, et al. Photochem Photobiol 1988 Jun;47(6):831–5
Biological UV–doses and the effect of an ozone layer depletion. Dahlback A, et al. Photochem Photobiol 1989 May;49(5):621–5
The interpretation of the electron spin resonance spectrum obtained by ultraviolet irradiation of the photoallergen bithionol. Delahanty JN, et al. Photochem Photobiol 1988 Aug;48(2):223–4
Production of malonaldehyde from squalene, a major skin surface lipid, during UV–irradiation. Dennis KJ, et al. Photochem Photobiol 1989 May;49(5):711–6
Photochemical reduction of 5–bromouracil by cysteine derivatives and coupling of 5–bromouracil to cystine derivatives. Dietz TM, et al. Photochem Photobiol 1989 Feb;49(2):121–9
UV laser induced RNA–protein crosslinks and RNA chain breaks in tobacco mosaic virus RNA in situ. Dobrov EN, et al. Photochem Photobiol 1989 May;49(5):595–8
Long–term effects of a single dose of ultraviolet–B on albino rabbit cornea—I. in vivo analyses. Doughty MJ, et al. Photochem Photobiol 1989 Feb;49(2):185–96
Purine photoproducts. Duker NJ, et al. Photochem Photobiol 1988 Jul;48(1):35–9
Near–UV activation of enzymatic conversion of 5–hydroxytryptophan to serotonin. Fraikin GY, et al. Photochem Photobiol 1989 Apr;49(4):475–7
The effect of temperature and wavelength on production and photolysis of a UV–induced photosensitive DNA lesion which is not repaired in xeroderma pigmentosum variant cells. Francis AA, et al. Photochem Photobiol 1988 Jul; 48(1):67–71
Wavelength dependence of DNA incision by a human ultraviolet endonuclease. Gallagher PE, et al. Photochem Photobiol 1989 Mar;49(3):363–7
Ultraviolet radiation induces a change in cell membrane potential in vitro: a possible signal for ultraviolet radiation induced alteration in cell activity. Gallo RL, et al. Photochem Photobiol 1989 May;49(5):655–62
Immunoassay of DNA damage. Gasparro FP, et al. Photochem Photobiol 1988 Sep;48(3):321–8
Solar spectral irradiance in the visible and infrared regions. Green AE, et al. Photochem Photobiol 1988 Oct; 48(4):477–86
Impaired repair of UVC–induced DNA damage in L5178Y–R cells: sedimentation studies with the use of 5'–bromodeoxyuridine photolysis. Hagan MP, et al. Photochem Photobiol 1988 Jun;47(6):815–21
Long wave ultraviolet radiation stimulates arachidonic acid release and cyclooxygenase activity in mammalian cells in culture. Hanson DL, et al. Photochem Photobiol 1989 Apr; 49(4):423–30
Electron spin resonance study of the relationship of UV irradiation to nitroxide radical formation in desferrioxamine (Desferal) and related hydroxamate and hydroxylamine derivatives. Hinojosa O, et al. Photochem Photobiol 1989 Jan;49(1):1–5
Photo– and thermal–activation of bovine liver urocanase. Hug DH, et al. Photochem Photobiol 1988 Dec;48(6):763–6
Photoreactivation of killing in E. coli K–12 phr– cells is not caused by pyrimidine dimer reversal. Husain I, et al. Photochem Photobiol 1988 Aug;48(2):233–4
Degradation of oligonucleotides by vacuum–UV radiation in solid: roles of the phosphate group and bases [published erratum appears in Photochem Photobiol 1989 Jun;49(6):845] Ito T, et al. Photochem Photobiol 1988 Nov; 48(5):567–72
Standards for UV instruments and risk of existing devices. Kaase H, et al. Photochem Photobiol 1988 Oct;48(4):439–43
Enhancement of UV–induced skin carcinogenesis by azathioprine: role of photochemical sensitisation. Kelly GE, et al. Photochem Photobiol 1989 Jan;49(1):59–65
Recent studies on mechanisms in photoimmunology. Krutmann J, et al. Photochem Photobiol 1988 Dec; 48(6):787–98 (112 ref.)
Weigle–reactivation in a cyanobacterium (Synechococcus PCC7934) is induced by UV but not by mitomycin–C or nalidixic acid. Lanham PG, et al. Photochem Photobiol 1988 Oct;48(4):473–5
Effect of ultraviolet radiation on the energy metabolism of the corneal epithelium of the rabbit. Lattimore MR Jr. Photochem Photobiol 1989 Feb;49(2):175–80
Overproduction of SSB protein enhances the capacity for photorepair in Escherichia coli recA cells. Lers N, et al. Photochem Photobiol 1989 Feb;49(2):225–7
Responses of the planarian Dugesia dorotocephala to ultraviolet radiation or photosensitized treatments. Lytle CD, et al. Photochem Photobiol 1988 Oct;48(4):457–9
Induction of lambda prophage near the site of focused UV laser radiation. Matchette LS, et al. Photochem Photobiol 1989 Feb;49(2):161–7
The relative cytotoxicity of (6–4) photoproducts and cyclobutane dimers in mammalian cells. Mitchell DL. Photochem Photobiol 1988 Jul;48(1):51–7
Urocanic acid photobiology. Photooxidation and superoxide formation. Morrison H, et al. Photochem Photobiol 1988 Aug;48(2):153–6
3–Carbethoxypsoralen–DNA photolesions: identification and quantitative detection in yeast and mammalian cells of the two cis–syn diastereoisomers formed with thymidine. Moysan A, et al. Photochem Photobiol 1988 Jun;47(6):803–8
Sunlight–induced pyrimidine dimers in human skin fibroblasts in comparison with dimerization after artificial UV–irradiation. Niggli HJ, et al. Photochem Photobiol 1988 Sep;48(3):353–6
Influence of dietary menhaden oil upon carcinogenesis and various cutaneous responses to ultraviolet radiation. Orengo IF, et al. Photochem Photobiol 1989 Jan;49(1):71–7
Photosensitized inactivation of DNA by monochromatic 334–nm radiation in the presence of 2–thiouracil: genetic activity and backbone breaks. Peak MJ, et al. Photochem Photobiol 1988 Jun;47(6):809–13
Photochemistry of 4–thiouridine and thymine. Peak MJ, et al. Photochem Photobiol 1988 Aug;48(2):229–32
The direct observation of a psoralen–thymine UVA induced solid–state cycloaddition reaction product by single–crystal x–ray diffractometry. Pfluger CE, et al. Photochem Photobiol 1989 Apr;49(4):375–9
Monoclonal antibody with specific affinity for pyrimidine dimers in RNA. Phillips RG, et al. Photochem Photobiol 1988 Jul;48(1):77–83
Resistance of human and mouse myeloid leukemia cells to UV radiation. Poljak–Blazi M, et al. Photochem Photobiol 1989 Jul;50(1):85–9
Effect of dietary lipid on UV light carcinogenesis in the hairless mouse. Reeve VE, et al. Photochem Photobiol 1988 Nov;48(5):689–96
Detection of cyclobutane thymine dimers in DNA of human cells with monoclonal antibodies raised against a thymine dimer–containing tetranucleotide. Roza L, et al. Photochem Photobiol 1988 Nov;48(5):627–33
Recovery of viral capacity in irradiated exponentially growing cells. Sayed NI, et al. Photochem Photobiol 1989 Jul;50(1):153–6
Prevention of UV irradiation induced suppression of monocyte functions by retinoids and carotenoids in vitro. Schoen DJ, et al. Photochem Photobiol 1988 Nov; 48(5):659–63
Photobinding of chlorpromazine and its sulfoxide in vitro and in vivo. Schoonderwoerd SA, et al. Photochem Photobiol 1988 Nov;48(5):621–6
The photochemistry of 2–alkoxycytosines in phosphate buffer and its link to cytosine photochemistry in alcoholic solution. Shaw AA, et al. Photochem Photobiol 1989 Mar; 49(3):273–7
Ring–opening photoreactions of cytosine and 5–methylcytosine with aliphatic alcohols. Shaw AA, et al. Photochem Photobiol 1989 Mar;49(3):267–71
Photochemical reactions of cytosine and 5–methylcytosine with methylamine and n–butylamine. Shetlar MD, et al. Photochem Photobiol 1988 Jun;47(6):779–86
Impaired repair of UVC–induced DNA damage in L5178Y–R cells: DNA unwinding studies with the use of 1–beta–D–arabinofuranosyl cytosine. Szumiel I, et al. Photochem Photobiol 1988 Aug;48(2):201–4
Stimulation of Escherichia coli division by low–intensity monochromatic visible light. Tiphlova O, et al. Photochem Photobiol 1988 Oct;48(4):467–71
Thymidine uptake, incorporation and DNA polymerase activity in murine bladder tumor cell, MBT–2, exposed to UV activated dihematoporphyrin ether. Tseng MT, et al. Photochem Photobiol 1988 Nov;48(5):647–51
Singlet oxygen involvement in the inactivation of cultured human fibroblasts by UVA (334 nm, 365 nm) and near–visible (405 nm) radiations. Tyrrell RM, et al. Photochem Photobiol 1989 Apr;49(4):407–12
Transient intermediates in intramolecularly photosensitized pyrimidine dimer splitting by indole derivatives. Young T, et al. Photochem Photobiol 1988 Nov;48(5):635–41
The low–dose model of UVB–induced immunosuppression. Cruz PD Jr, et al. Photodermatol 1988 Aug;5(4):151–61 (90 ref.)
Ambient ultraviolet radiation and skin cancer incidence. Diffey BL, et al. Photodermatol 1988 Aug;5(4):175–8
Comparison of croton oil and benzoyl peroxide on DNA synthesis in ultraviolet–irradiated skin. Epstein JH. Photodermatol 1988 Oct;5(5):224–6
Effects of single doses of UVA, UVB, and UVC on skin blood flow, water content, and barrier function measured by laser–Doppler flowmetry, optothermal infrared spectrometry, and evaporimetry. Frödin T, et al. Photodermatol 1988 Aug;5(4):187–95
Ultraviolet radiation at high latitudes and the risk of skin cancer. Henriksen K, et al. Photodermatol 1989 Jun; 6(3):110–7
Solar urticaria induced by visible light and inhibited by UVA. Leenutaphong V, et al. Photodermatol 1988 Aug;5(4):170–4
Effect of ultraviolet radiation and PUVA on mediator release from purified mast cells. Mandel MJ, et al. Photodermatol 1988 Oct;5(5):211–7
Quantification of urocanic acid isomers in murine skin during development and after irradiation with UVB light. Norval M, et al. Photodermatol 1988 Aug;5(4):179–86
UVB–induced melanocyte proliferation and 5–S–cysteinyldopa excretion in dysplastic nevus syndrome. Stierner U, et al. Photodermatol 1988 Oct;5(5):218–23
A tuneable, narrow–band, high–intensity UV source. Wulf HC, et al. Photodermatol 1989 Feb;6(1):37–43
Ultrastructural changes produced in Ehrlich ascites carcinoma cells by ultraviolet–visible radiation in the presence of melanins. Lea PJ, et al. Pigment Cell Res 1988; 1(6):402–9
Ultraviolet radiation acts as an independent mitogen for normal human melanocytes in culture. Libow LF, et al. Pigment Cell Res 1988;1(6):397–401
Inhibition of UV radiation–induced DNA damage by a 5–methoxypsoralen tan in human skin. Young AR, et al. Pigment Cell Res 1988;1(5):350–4
Inhibition of transient gene expression in Chinese hamster ovary cells by cyclobutane dimers and (6–4) photoproducts in transfected ultraviolet–irradiated plasmid DNA. Mitchell DL, et al. Plasmid 1989 Jan;21(1):21–30
Molecular cloning and characterization of a mammalian excision repair gene that partially restores UV resistance to xeroderma pigmentosum complementation group D cells. Arrand JE, et al. Proc Natl Acad Sci U S A 1989 Sep;86(18):6997–7001
Genomic footprinting in mammalian cells with ultraviolet light. Becker MM, et al. Proc Natl Acad Sci U S A 1989 Jul;86(14):5315–9
Rapid detection of ultraviolet–induced reversion of an amber mutation in mouse L cells. Eccles SJ, et al. Proc Natl Acad Sci U S A 1989 Feb;86(4):1297–301
Wavelength dependence of pyrimidine dimer formation in DNA of human skin irradiated in situ with ultraviolet light. Freeman SE, et al. Proc Natl Acad Sci U S A 1989 Jul; 86(14):5605–9
UV–induced DNA–binding proteins in human cells. Glazer PM, et al. Proc Natl Acad Sci U S A 1989 Feb;86(4):1163–7
Separate photosensitizers mediate degradation of the 32–kDa photosystem II reaction center protein in the visible and UV spectral regions. Greenberg BM, et al. Proc Natl Acad Sci U S A 1989 Sep;86(17):6617–20
Biological photocathodes. Griffith OH, et al. Proc Natl Acad Sci U S A 1989 Mar;86(6):1826–30
Heme oxygenase is the major 32–kDa stress protein induced in human skin fibroblasts by UVA radiation, hydrogen peroxide, and sodium arsenite. Keyse SM, et al. Proc Natl Acad Sci U S A 1989 Jan;86(1):99–103
UV induction of coliphage 186: prophage induction as an SOS function. Lamont I, et al. Proc Natl Acad Sci U S A 1989 Jul;86(14):5492–6
Incision by UvrABC excinuclease is a step in the path to mutagenesis by psoralen crosslinks in Escherichia coli. Sladek FM, et al. Proc Natl Acad Sci U S A 1989 Jun; 86(11):3982–6
Polynucleotide–protein cross–links induced by ultraviolet light and their use for structural investigation of nucleoproteins. Budowsky EI, et al. Prog Nucleic Acid Res Mol Biol 1989;37:1–65 (216 ref.)
Effect of UV–B irradiation on release of arachidonic acid from B–16 melanoma cells. Suematsu T, et al. Prostaglandins Leukot Essent Fatty Acids 1989 Mar; 35(3):153–6
UV–A induced lipid peroxidation in liposomal membrane. Bose B, et al. Radiat Environ Biophys 1989;28(1):59–65
Mutation induction in haploid yeast after split–dose radiation–exposure. I. Fractionated UV–irradiation. Schenk K, et al. Radiat Environ Biophys 1989;28(2):101–11
Reactions of the intracellular NADpool in the yeast S. cerevisiae after UV–C– or X–ray irradiation. Winckler K, et al. Radiat Environ Biophys 1988;27(4):287–93
Heritable hypersensitivity to induced mutagenesis in the progeny of cell populations exposed to UVC (254 nm). D'Arpa P, et al. Radiat Res 1989 Jan;117(1):163–9
An attempt to stimulate cell division in Saccharomyces cerevisiae with weak ultraviolet light. Quickenden TI, et al. Radiat Res 1989 Jan;117(1):145–57
The effect of bromodeoxyuridine and ultraviolet light on 9L rat brain tumor cells. Raffel C, et al. Radiat Res 1989 Jun; 118(3):409–19
The induction of DNA strand breaks in normal human skin fibroblasts exposed to solar ultraviolet radiation. Rosenstein BS. Radiat Res 1988 Nov;116(2):313–9
Influence of cellular differentiation on repair of ultraviolet–induced DNA damage in murine proadipocytes. Tofilon PJ, et al. Radiat Res 1988 Nov;116(2):217–27
The effects of daily exposure to UV–A light on phenylalanine ammonia–lyase activity during the growth of barley plants. Baztan J, et al. Rev Esp Fisiol 1988 Mar;44(1):73–9
An ultraviolet–sensitive RNA structural element in a viroid–like domain of the hepatitis delta virus. Branch AD, et al. Science 1989 Feb 3;243(4891):649–52
Global stratospheric ozone and UVB radiation [letter] Grant WB. Science 1988 Nov 25;242(4882):1111–2
Sun–powered pollution clean up [news] Pool R. Science 1989

Jul 14;245(4914):130

Benzamide prevention of ultraviolet radiation-induced transformation as measured by anchorage-independent growth and the absence of correlation with thymidine dimer formation and DNA repair. Milo GE, et al. **Teratogenesis Carcinog Mutagen** 1989;9(3):167-76

Formation of methemoglobin by photoactivation of nitrofurantoin or of 5-nitrofurfural in rats exposed to UV-A light. Busker RW, et al. **Toxicology** 1988 Oct; 51(2-3):255-66

Human excimer laser corneal surgery: preliminary report. L'Esperance FA Jr, et al. **Trans Am Ophthalmol Soc** 1989; 86:208-70; discussion 270-5

UV-irradiated platelets: ready to use? [editorial] Brand A, et al. **Transfusion** 1989 Jun;29(5):377-8

Transfusions with a tan. Prevention of allosensitization by ultraviolet irradiation. Deeg HJ. **Transfusion** 1989 Jun; 29(5):450-5 (53 ref.)

Applications of ultraviolet light in the preparation of platelet concentrates. Pamphilon DH, et al. **Transfusion** 1989 Jun; 29(5):379-83

Alteration of in vivo allogeneic functions by ultraviolet B. Carmichael PG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1137-8

The effect of UV treated allogeneic cells upon host reactivity in MECLR. McWatters A, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):273-5

Functional and phenotypic characteristics of suppressor T-cells in unresponsive rats pretreated with UV-B irradiated donor lymphocytes combined with peritransplant cyclosporine. Oluwole SF, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):484-6

Differential sensitivity of human leukocyte subpopulations to ultraviolet light. Spielberg H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):180-1

Suppression of the DTH response in miniature swine by pretreatment with ultraviolet light-irradiated blood lymphocytes. Taura Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):261-2

Pretreatment of donor corneal endothelium with ultraviolet-B irradiation. Young E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3145-6

Relationship between inducible H-2 expression and the immunogenicity of murine skin neoplasms. I. Evidence that the immunogenicity of ultraviolet radiation-chemically induced tumors is associated with their susceptibility to gamma-interferon-mediated enhancement of H-2Kk expression. Burnham DK, et al. **Transplantation** 1989 Mar; 47(3):533-42

Suppression of the elicitation of the immune response to alloantigen by ultraviolet radiation. Magee MJ, et al. **Transplantation** 1989 Jun;47(6):1008-13

Characteristics and function of suppressor T lymphocytes in immunologically unresponsive rats following pretreatment with UV-B-irradiated donor leukocytes and peritransplant cyclosporine. Oluwole SF, et al. **Transplantation** 1989 Jun;47(6):1001-7

Fluorescence anisotropy of UV-irradiated viruses. Hörer OL. **Virologie** 1989 Apr-Jun;40(2):115-8

[The intensity and the effective factors of ultraviolet in Shenyang] Wang BX. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Sep;22(5):274-6 (Eng. Abstr.) (Chi)

[Is accurate UVA dosimetry in photobiology and photodermatology an illusion?] Roelandts R, et al. **Ann Dermatol Venereol** 1988;115(12):1261-4 (Eng. Abstr.) (Fre)

[The effect of UV rays on parasitic arthropods. 3. In vitro and in vivo studies of the effect of a fractionated UV irradiation on the development stages of Psoroptes cuniculi (Acaridida: Psoroptidae)] Hiepe T, et al. **Arch Exp Veterinarmed** 1989 May;43(3):367-77 (Eng. Abstr.) (Ger)

[The effect of excessive artificial UV radiation on the measurement of blood parameters and phagocytosis in calves] Brouček J, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(6):318-20 (Eng. Abstr.) (Ger)

[Photo-degradation of plant-protecting agents] Goedicke HJ. **Z Gesamte Hyg** 1989 Jan;35(1):5-8 (56 ref.) (Eng. Abstr.) (Ger)

[Interactions of DNA topoisomerase inhibitors novobiocin and nalidixic acid with some cytotoxic agents. In vitro investigations in rat thymic and splenic cells] Tempel K. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):673-9 (Eng. Abstr.) (Ger)

[Use of UV rays for the disinfection of water. II. Microbiological studies of surface water] Martiny H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):344-59 (Eng. Abstr.) (Ger)

[Ultraviolet-sensitive photoreceptor in cyprinid fishes] Hashimoto Y. **Tanpakushitsu Kakusan Koso** 1989 May; 34(5):614-21 (Jpn)

[Generation of singlet oxygen and oxy-radicals via photosensitization processes] Ito A, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2795-802 (Jpn)

[Mechanism of photodynamic cytotoxicity of mammalian cells] Utsumi H. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):3109-15 (Jpn)

[Changes in T lymphocyte functions after UV irradiation] Orlicz-Welcz B, et al. **Med Dosw Mikrobiol** 1988; 40(2):103-8 (Eng. Abstr.) (Pol)

[Inhibition of UV-induced accumulation of lipid peroxides by melanins and ommochromes] Pustynnikov MG, et al. **Biokhimiia** 1988 Jul;53(7):1117-20 (Eng. Abstr.) (Rus)

[Effect of radioprotectors on lipid peroxidation in liver microsomes induced by ultraviolet irradiation of the skin in rats] Gorodovikova EN, et al. **Biol Nauki** 1989;(4):15-8 (Eng. Abstr.) (Rus)

[Mutants of the phototrophic bacteria Rhodobacter sphaeroides sensitive to the mutagenic action of long-wave ultraviolet light] Rodina NE, et al. **Biol Nauki** 1988;(5):83-8 (Eng. Abstr.) (Rus)

[Effect of ultraviolet radiation on microbial contamination of the human skin] Panferova NE, et al. **Gig Sanit** 1988 Sep;(9):19-21 (Rus)

[Hygienic characteristics of various methods of ultraviolet irradiation] Rakhmanov RS, et al. **Gig Sanit** 1988 Jul; (7):88-9 (Rus)

[Quantitative and qualitative characteristics of the combined effects of furadane, high temperature, ultraviolet radiation and low humidity of the air in an acute experiment] Sapegin DI, et al. **Gig Tr Prof Zabol** 1989;(3):44-5 (Rus)

[Photogeneration of the superoxide anion oxygen radical and its role in the inactivation of yeast cells by long-wave UV light] Pospelov ME, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Mar-Apr;(2):308-11 (Eng. Abstr.) (Rus)

[Prevention of ultraviolet insufficiency after a long stay by humans in an isolation chamber] Panferova NE, et al. **Kosm Biol Aviakosm Med** 1989 Mar-Apr;23(2):59-63 (Eng. Abstr.) (Rus)

[Effect of ultraviolet irradiation on the biosynthesis of exogenous beta-galactosidase by a Penicillium canescens Sopp. culture] Gomarteli MM, et al. **Mikrobiol Zh** 1988 May-Jun;50(3):37-41 (Eng. Abstr.) (Rus)

[The nature of the uvs mutations of Streptomyces olivaceus VKX strain 22c supersensitive to UV light] Lavrenchuk VIa. **Mikrobiol Zh** 1988 Mar-Apr;50(2):3-6 (Eng. Abstr.) (Rus)

[Isolation of auxotrophic mutants under the action of N-methyl-N'-nitro-N-nitrosoguanidine and UV radiation and the mapping of new loci on the Streptomyces griseus chromosome by protoplast fusion] Serdechnaia AI, et al. **Mikrobiol Zh** 1987 Sep-Oct;49(5):3-8 (Eng. Abstr.) (Rus)

[UV-induced formation of filamentous forms in bacteria of Erwinia genus] Prokulevich VA, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep;(9):46-8 (Eng. Abstr.) (Rus)

[The modifying action of methylmethane sulfonate on unscheduled DNA synthesis in the UV irradiation of human peripheral blood lymphocytes] Genter EI, et al. **Radiobiologiia** 1989 Jul-Aug;29(4):562-4 (Eng. Abstr.) (Rus)

[The recombination capacity of Uvs mutants of Streptomyces olivaceus VKX] Lavrenchuk VIa, et al. **Tsitol Genet** 1988 Nov-Dec;22(6):34-9 (Eng. Abstr.) (Rus)

[UV-induced unscheduled DNA synthesis in differentiated and dedifferentiated lymphocytes from human peripheral blood under the action of DNA-repair and -replication inhibitors] Genter EI, et al. **Tsitologiia** 1989 Feb;31(2):215-9 (Eng. Abstr.) (Rus)

[Silver staining of the nucleoli of pig embryonic kidney cells during the hyperactivation and inhibition of the synthesis of nucleolar RNA by UV microirradiation] Sakharov VN, et al. **Tsitologiia** 1988 Aug;30(8):949-55 (Eng. Abstr.) (Rus)

[Ultrastructure of the interphase nucleoli of pig embryonic kidney cells during their compensatory hypertrophy and degradation due to local UV microirradiation] Zatsepina OV, et al. **Tsitologiia** 1988 Jul;30(7):787-94 (Eng. Abstr.) (Rus)

[Autotransfusion of UV-irradiated blood and the morphofunctional status of mononuclear cells in neurodermitis patients] Finkel'shtein BB, et al. **Vestn Dermatol Venerol** 1989;(2):43-6 (Eng. Abstr.) (Rus)

[First experience of using autotransfusions of UV-irradiated oxygenated blood in patients with various allergic dermatoses] Udzhukhu VIu, et al. **Vestn Dermatol Venerol** 1989;(2):47-50 (Eng. Abstr.) (Rus)

[Effectiveness of autotransfusion of ultraviolet ray irradiated blood in the rehabilitation of children with tonsillogenic lesions of the heart] Morenko VM. **Vestn Otorinolaringol** 1989 May-Jun;(3):56-8 (Eng. Abstr.) (Rus)

[Syndrome of lipid hyperperoxidation in burn patients and its correction using autotransfusion of UV-irradiated blood] Osipovich VK, et al. **Vopr Med Khim** 1988 Sep-Oct; 34(5):62-6 (Eng. Abstr.) (Rus)

[Evaluation of the protection factor (PF) against UV-A in vivo] Lecha M. **Med Cutan Ibero Lat Am** 1988;16(6):507-10 (Eng. Abstr.) (Spa)

[Effects of UV-A on pig skin] Ortega Resinas M, et al. **Med Cutan Ibero Lat Am** 1988;16(2):155-60 (Eng. Abstr.) (Spa)

[Lethal effect of polychromatic light of near ultraviolet light (325-400 nm) on Haemophilus influenzae Rd and its mutants uvr1 and rec1] Macías-Martínez V, et al. **Rev Latinoam Microbiol** 1988 Oct-Dec;30(4):375-9 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

UVB erythema inhibited by topically applied substances. Väänänen A, et al. **Acta Derm Venereol (Stockh)** 1989; 69(1):12-7

NIH conference covers UVR and the skin. **Am Fam Physician** 1989 Sep;40(3):297-8, 302-3 (0 ref.)

Characterization of a dermal derived malignant mesenchymal tumor arising in ultraviolet irradiated mice. Phelps RG, et al. **Am J Pathol** 1989 Jul;135(1):149-59

A comparison of the effect of UVB and sodium lauryl sulphate on skin water vapour loss. Goh CL. **Ann Acad Med Singapore** 1988 Oct;17(4):495-7

Ultraviolet radiation, Langerhans' cells, and skin cancer. Conspiracy and failure. Cruz PD Jr, et al. **Arch Dermatol** 1989 Jul;125(7):975-9 (54 ref.)

Porphyrialike bullous dermatosis after chronic intense tanning bed and/or sunlight exposure. Poh-Fitzpatrick MB, et al. **Arch Dermatol** 1989 Sep;125(9):1236-8

Ultraviolet light exposure and risk of posterior subcapsular cataracts. Bochow TW, et al. **Arch Ophthalmol** 1989 Mar; 107(3):369-72

Exposure to sunlight and other risk factors for age-related macular degeneration. West SK, et al. **Arch Ophthalmol** 1989 Jun;107(6):875-9

Quantitative measurement of ultraviolet-induced damage in cellular DNA by an enzyme immunodot assay. Wakizaka A, et al. **Biotechnol Appl Biochem** 1989 Feb;11(1):11-7

Sunlamps and the risk of melanoma [letter] **BMJ** 1988 Nov 5;297(6657):1193-4

Health and the ozone layer [letter] Elwood JM. **BMJ** 1988 Dec 17;297(6663):1612-3

Fluorescent lights, ultraviolet lamps, and cutaneous melanoma [letter] Griffiths AP, et al. **BMJ** 1988 Oct 22; 297(6655):1041

Fluorescent lights, ultraviolet lamps, and risk of cutaneous melanoma [published erratum appears in BMJ 1988 Nov 5;297(6657):1172] Swerdlow AJ, et al. **BMJ** 1988 Sep 10; 297(6649):647-50

Chlorpromazine reduces UV-induced squamous cell carcinogenesis in hairless mice and enhances UV-induced DNA damage in cultured cells. Peak MJ, et al. **Br J Cancer** 1989 Aug;60(2):220-2

PUVA and UVB inhibit the intra-epidermal accumulation of polymorphonuclear leukocytes. Chang A, et al. **Br J Dermatol** 1988 Sep;119(3):281-7

Sunbed-induced pseudoporphyria. Murphy GM, et al. **Br J Dermatol** 1989 Apr;120(4):555-62

UVA sunbeds: tanning, photoprotection, acute adverse effects and immunological changes. Rivers JK, et al. **Br J Dermatol** 1989 Jun;120(6):767-77

Actinic reticuloid: immunohistochemical analysis of the cutaneous infiltrate in 13 patients. Toonstra J, et al. **Br J Dermatol** 1989 Jun;120(6):779-86

Ultraviolet-induced formation of micronuclei and sister chromatid exchange in cultured fibroblasts of patients with cutaneous malignant melanoma. Roser M, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):129-37

Epidemiology of human malignant skin tumors with special reference to natural and artificial ultraviolet radiation exposures. Elwood JM, et al. **Carcinog Compr Surv** 1989; 11:55-84 (94 ref.)

Ultraviolet radiation-induced skin cancer. Fry RJ, et al. **Carcinog Compr Surv** 1989;11:321-37 (67 ref.)

Photoaging. Manifestations, prevention, and treatment. Kligman LH. **Clin Geriatr Med** 1989 Feb;5(1):235-51 (43 ref.)

The effect of ultraviolet B radiation treatments on calcium excretion and vitamin D metabolites in kidney stone formers. Varghese M, et al. **Clin Nephrol** 1989 May; 31(5):225-31

Laser abrasion for cosmetic and medical treatment of facial actinic damage. David LM, et al. **Cutis** 1989 Jun; 43(6):583-7

Variations for susceptibilities to ultraviolet induced cellular inactivation and gene segregation among protoplast fusion hybrids of Candida albicans. Sarachek A, et al. **Cytobios** 1988;55(222-223):171-84

Ultraviolet light (UVL) and epidermal cytotoxicity: perspectives on three different ways that UVL may influence cytotoxic damage. Norris DA, et al. **Dermatologica** 1989;179 Suppl 1:138-9

DNA strand breakage in normal and solar ultraviolet-sensitive ICR 2A frog cell lines exposed to solar ultraviolet wavelengths. Rosenstein BS. **Environ Mol Mutagen** 1989;13(1):50-3

Solar ultraviolet radiation and regional peculiarities in skin malignant melanoma incidence. Guslitser LN. **Geogr Med** 1989;19:77-8

Incidence of salivary gland cancer in the United States relative to ultraviolet radiation exposure. Spitz MR, et al. **Head Neck Surg** 1988 May-Jun;10(5):305-8

Radiation and cutaneous neoplasms [letter] Kaczmarek RG. **Health Phys** 1989 Jul;57(1):206-7

Damage thresholds of skin irradiated by ultraviolet lasers. Li ZZ, et al. **Health Phys** 1989 May;56(5):683-6

Ultraviolet-induced photochemical damage in ocular tissues. Zuclich JA. **Health Phys** 1989 May;56(5):671-82 (26 ref.)

Actinic prurigo at sea level in Colombia. Duran de Rueda MM, et al. **Int J Dermatol** 1989 May;28(4):228-9

Photokeratitis: laboratory versus solar exposure [letter] Pitts DG. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1759-60

Assessment by mouse model of the ultraviolet A protective

effect of topical sunscreens. Furukawa RD, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1031–7

Topical tretinoin therapy: its use in photoaged skin. Goldfarb MT, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 2):645–50 (26 ref.)

Guidelines for the use of topical tretinoin (Retin-A) for photoaged skin. Kligman AM. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 2):650–4

The ultraviolet-irradiated hairless mouse: a model for photoaging. Kligman LH. **J Am Acad Dermatol** 1989 Sep; 21(3 Pt 2):623–31

Treatment of photodamaged facial skin with topical tretinoin. Leyden JJ, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 2):638–44

Evaluating the UVA protection of sunscreens. Roelandts R, et al. **J Am Acad Dermatol** 1989 Jul;21(1):56–62

Possible ultraviolet A-induced lentigines: a side effect of chronic tanning salon usage. Roth DE, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):950–4

Disseminated superficial actinic porokeratosis: a clinical study. Shumack SP, et al. **J Am Acad Dermatol** 1989 Jun; 20(6):1015–22

Ultraviolet A sunscreen evaluations in normal subjects. Stanfield JW, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):744–8

Molecular mechanisms of cutaneous aging. Age-associated connective tissue alterations in the dermis. Uitto J, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 2):614–22 (49 ref.)

Ultraviolet light-induced confluent and reticulated papillomatosis. Vassileva S, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):413–4

The UV problem: have the rules changed? Pitts DG, et al. **J Am Optom Assoc** 1989 Jun;60(6):420–4

Ultraviolet radiation alters choline phospholipid metabolism in human keratinocytes. DeLeo V, et al. **J Invest Dermatol** 1988 Oct;91(4):303–8

The time course of UVB and UVC erythema. Farr PM, et al. **J Invest Dermatol** 1988 Nov;91(5):454–7

Biochemical and chemical assays for monitoring the formation of DNA base photolesions. Cadet J, et al. **J Photochem Photobiol [B]** 1988 Sep;2(2):282–6

Photoimmunology: the mechanisms involved in immune modulation by UV radiation. Roberts LK, et al. **J Photochem Photobiol [B]** 1988 Sep;2(2):149–77 (148 ref.)

Analysis of a photosensitive lesion induced by sunlamp UV greater than 315 nm exposure of 254-nm-irradiated human cells. Rosenstein BS. **J Photochem Photobiol -B-** 1988 Nov; 2(3):381–7

UVA hazards in skin associated with the use of tanning equipment. Re'ta L, et al. **J Photochem Photobiol [B]** 1989 Apr;3(2):281–7

The dose-response relationship for tumourigenesis by UV radiation in the region 311–312 nm. Sterenborg HJ, et al. **J Photochem Photobiol [B]** 1988 Sep;2(2):179–94

Induction and repair of cyclobuta-dithymidine photoproducts in hamster skin by solar-simulated UV radiation. Strickland PT, et al. **J Photochem Photobiol [B]** 1989 Feb;3(1):17–24

Effect of in vitro ultraviolet radiation on the binding capacity of anti-DNA and DNA in systemic lupus erythematosus. Becker NJ, et al. **J Rheumatol** 1989 Jun;16(6):773–6

Harmful effects of ultraviolet radiation. Council on Scientific Affairs. **JAMA** 1989 Jul 21;262(3):380–4 (30 ref.)

Leads from the MMWR. Injuries associated with ultraviolet tanning devices—Wisconsin. **JAMA** 1989 Jun 23–30; 261(24):3519–20

Increased outdoor recreation, diminished ozone layer pose ultraviolet radiation threat to eye [news] Olson CM. **JAMA** 1989 Feb 24;261(8):1102–3

Protect eyes from ultraviolet light to prevent cataract rather than retinal damage [letter] Taylor HR. **JAMA** 1989 Jun 23–30;261(24):3550

Adverse effects of sunscreens in photosensitive patients [see comments] Farr PM, et al. **Lancet** 1989 Feb 25; 1(8635):429–31. **Comment in:** Lancet 1989 Jun 17;1(8651):1387

Personal risk-factor chart for cutaneous melanoma. MacKie RM, et al. **Lancet** 1989 Aug 26;2(8661):487–90

The removal of UV-induced pyrimidine dimers from DNA of rat skin cells in vitro and in vivo in relation to aging. Mullaart E, et al. **Mech Ageing Dev** 1989 Mar;47(3):253–64

Internal ultraviolet luminescence—internal carcinomas. Illingworth JE. **Med Hypotheses** 1988 Dec;27(4):313–6

Skin cancers and ultraviolet radiation [letter] Lee JA, et al. **Med J Aust** 1989 May 1;150(9):540

Hats: design and protection from ultraviolet radiation. Keeling JH, et al. **Milit Med** 1989 May;154(5):250–5

Injuries associated with ultraviolet tanning devices—Wisconsin. **MMWR** 1989 May 19;38(19):333–5

"The healthy tan": a modern misnomer [editorial] Thomas JR. **Mo Med** 1989 Jun;86(6):327–8

N-ras mutations in human cutaneous melanoma from sun-exposed body sites. van 't Veer LJ, et al. **Mol Cell Biol** 1989 Jul;9(7):3114–6

The effect of deoxynucleosides on repair of DNA breaks in UVC-irradiated human lymphocytes. Holmberg M. **Mutat Res** 1989 Jul;218(1):33–9

Base-pair substitutions alter the site-specific mutagenicity of UV and MNNG in the SUP4-o gene of yeast. Kunz BA, et al. **Mutat Res** 1989 Aug;226(4):273–8

Ethanol and acetaldehyde potentiate the clastogenicity of ultraviolet light, methyl methanesulfonate, mitomycin C and bleomycin in Chinese hamster ovary cells. Lin YC, et al. **Mutat Res** 1989 Apr;216(2):93–9

Non-mutability by ultraviolet light in uvrD recB derivatives of Escherichia coli WP2 uvrA is due to inhibition of RecA protein activation. Woodgate R, et al. **Mutat Res** 1989 Jul; 226(3):141–4

DNA photolyase in E. coli: effects on UV mutagenesis by plasmids expressing the phr gene. Yamamoto K, et al. **Mutat Res** 1989 Aug;226(4):259–62

Ultraviolet radiation and formation of cataracts [letter] **N Engl J Med** 1989 May 11;320(19):1285–6

Ocular phototoxicity [editorial] Lerman S. **N Engl J Med** 1988 Dec 1;319(22):1475–7

Effect of ultraviolet radiation on cataract formation. Taylor HR, et al. **N Engl J Med** 1988 Dec 1;319(22):1429–33

The influence of contact lens wear on the corneal response to ultraviolet radiation. Ahmedbhai N, et al. **Ophthalmic Physiol Opt** 1988;8(2):183–9

Long-term visual health risks from solar ultraviolet radiation. Proposals for ocular protection. Waxler M. **Ophthalmic Res** 1988;20(3):179–82

Contact lenses and acute exposure to ultraviolet radiation. Cullen AP, et al. **Optom Vis Sci** 1989 Jun;66(6):407–11

The characterization of squamous cell carcinoma induced by ultraviolet irradiation in hairless mice. Canfield PJ, et al. **Pathology** 1988 Apr;20(2):109–17

Photoreactivation of lethal damage and damage leading to chromatid deletions induced in G1 phase hamster x Xenopus hybrid cells by UV. Kulp SQ, et al. **Photochem Photobiol** 1989 Aug;50(2):185–91

Ultraviolet radiation—induced malignant melanoma in Monodelphis domestica. Ley RD, et al. **Photochem Photobiol** 1989 Jul;50(1):1–5

Inhibition of the immune response to alloantigen in the rat by exposure to ultraviolet radiation. Magee MJ, et al. **Photochem Photobiol** 1989 Aug;50(2):193–9

The biology of the (6-4) photoproduct. Mitchell DL, et al. **Photochem Photobiol** 1989 Jun;49(6):805–19 (107 ref.)

Near UV-induced free radicals in ocular lens, studied by ESR and spin trapping. Murakami J, et al. **Photochem Photobiol** 1989 Apr;49(4):465–73

Urocanic acid and immunosuppression. Norval M, et al. **Photochem Photobiol** 1989 Aug;50(2):267–75 (92 ref.)

Relative repair of adenovirus damaged by sunlamp, UV and gamma-irradiation in Cockayne syndrome fibroblasts is different from that in xeroderma pigmentosum fibroblasts. Rainbow AJ. **Photochem Photobiol** 1989 Aug;50(2):201–7

Topical urocanic acid enhances UV-induced tumour yield and malignancy in the hairless mouse. Reeve VE, et al. **Photochem Photobiol** 1989 Apr;49(4):459–64

Meclofenomate inhibition of UV-induced erythema—a randomized, placebo-controlled, double-blind study. Anderson TF, et al. **Photodermatol** 1989 Apr;6(2):63–8

Reaction to UV-induced erythema in young patients with basal cell carcinoma. Aubin F, et al. **Photodermatol** 1989 Jun;6(3):118–23

Visual assessment of facial elastosis using photographs as a measure of cumulative ultraviolet exposure. Cameron LL, et al. **Photodermatol** 1988 Dec;5(6):277–82

High-protection sunscreen formulation prevents UVB-induced sunburn cell formation. Césarini JP, et al. **Photodermatol** 1989 Feb;6(1):20–3

Corneocyte changes after acute UV irradiation and chronic solar exposure. Corcuff P, et al. **Photodermatol** 1988 Jun; 5(3):110–5

Local effects of UV radiation on immunization with contact sensitizers. I. Down-regulation of contact hypersensitivity by application of TNCB to UV-irradiated skin. Cruz PD Jr, et al. **Photodermatol** 1988 Jun;5(3):126–32

Sunscreen protection against UV-induced pyrimidine dimers in DNA of human skin in situ. Freeman SE, et al. **Photodermatol** 1988 Dec;5(6):243–7

Phototoxic properties of quinine and quinidine: two quinoline methanol isomers. Ljunggren B, et al. **Photodermatol** 1988 Jun;5(3):133–8

Different sensitivities to ultraviolet light-induced cytotoxicity and sister chromatid exchanges in xeroderma pigmentosum and Bloom's syndrome fibroblasts. Mamada A, et al. **Photodermatol** 1989 Jun;6(3):124–30

Reciprocity of ultraviolet erythema in human skin. Meanwell EF, et al. **Photodermatol** 1989 Jun;6(3):146–8

Reduction of UV-induced erythema in normal subjects by applying methimazole. Moseley H, et al. **Photodermatol** 1989 Feb;6(1):32–6

A biochemical and immunohistochemical study of collagen in sun-exposed and protected skin. Oikarinen A, et al. **Photodermatol** 1989 Feb;6(1):24–31

Solar-ultraviolet-induced damage to DNA. Peak MJ, et al. **Photodermatol** 1989 Feb;6(1):1–15 (134 ref.)

UVB irradiation and distribution of arachidonic acid (20:4) and stearic acid (18:0) in human keratinocytes. Punnonen K, et al. **Photodermatol** 1989 Apr;6(2):85–8

Cyclobuta-dithymidine induction by solar-simulating UV radiation in human skin. I. Protection by constitutive pigmentation. Strickland PT, et al. **Photodermatol** 1988 Aug;5(4):166–9

Action spectrum for UV erythema and reproduction of the skin lesions in hydroa vacciniforme. Sunohara A, et al. **Photodermatol** 1988 Jun;5(3):139–45

Narrow-band UV radiation and induction of dermal elastosis and skin cancer. Wulf HC, et al. **Photodermatol** 1989 Feb; 6(1):44–51

Effect of hypoxia on sunburn cell formation and inflammation induced by ultraviolet radiation. Youn JI, et al. **Photodermatol** 1988 Dec;5(6):252–6

Skin temperature changes after irradiation with UVB or UVC: implications for the mechanism underlying ultraviolet erythema. Kelfkens G, et al. **Phys Med Biol** 1989 May;34(5):599–608

Ozone and ultraviolet light act as additive cocarcinogens to induce in vitro neoplastic transformation. Borek C, et al. **Teratogenesis Carcinog Mutagen** 1989;9(2):71–4

[Photobiologic aspects of malignant melanoma (clinical studies)] Ettler K. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):419–25 (Eng. Abstr.) (Cze)

[Solaria] Binet O, et al. **Ann Dermatol Venereol** 1989; 116(1):59–62 (Fre)

[Experimental contribution to the lens-damaging effect of ultraviolet irradiation] Schmidt J, et al. **Fortschr Ophthalmol** 1988;85(6):689–94 (Eng. Abstr.) (Ger)

[The significance of epidermal cytokines in UV-induced immune suppression] Schwarz T. **Hautarzt** 1988 Oct; 39(10):642–6 (0 ref.) (Eng. Abstr.) (Ger)

[Characteristics of polymorphous light dermatosis—results of a prospective survey and study of 302 affected patients] Diepgen TL, et al. **Z Hautkr** 1989 Apr 15;64(4):279–80, 283–5 (Eng. Abstr.) (Ger)

[Relationships between the immune system, ultraviolet light and skin cancer] Alcalary J, et al. **Harefuah** 1989 Mar 1; 116(5):287–9 (Heb)

[Phototoxic effect and plasma levels of 8-MOP] Monfrecola G, et al. **G Ital Dermatol Venereol** 1988 Sep;123(9):393–6 (Eng. Abstr.) (Ita)

[Erythema action spectrum in xeroderma pigmentosum group A patients] Mitoh Y. **Nippon Hifuka Gakkai Zasshi** 1989 Jan;99(1):9–14 (Eng. Abstr.) (Jpn)

[Ozone depletion, ultraviolet rays and skin cancer] Moan J, et al. **Tidsskr Nor Laegeforen** 1988 Nov 10;108(31):2838–40 (Eng. Abstr.) (Nor)

[Cataract and ultraviolet radiation] Naess K. **Tidsskr Nor Laegeforen** 1989 Jun 30;109(19–21):2035–6 (Nor)

[Experimental effect of ultraviolet laser radiation on lung, tracheal and bronchial tissues] Vladimirtseva AL, et al. **Biull Eksp Biol Med** 1989 May;107(5):566–8 (Eng. Abstr.) (Rus)

[Dependence of the degree of synergism in the simultaneous action of UV light and hyperthermia on yeast cells on the intensity of the UV light] Zhurakovskaia GP, et al. **Tsitologiia** 1988 Oct;30(10):1276–80 (Eng. Abstr.) (Rus)

[A case of actinic reticuloid] Belov AS, et al. **Vestn Dermatol Venerol** 1988;(9):60–4 (Eng. Abstr.) (Rus)

[Ultraviolet rays are not cytotoxic] Berg M. **Lakartidningen** 1989 Mar 8;86(10):842 (Swe)

DIAGNOSTIC USE

The normal range in diagnostic phototesting. Diffey BL, et al. **Br J Dermatol** 1989 Apr;120(4):517–24

Phototests in patients with various forms of lupus erythematosus. Wolska H, et al. **Int J Dermatol** 1989 Mar; 28(2):98–103

[Assessment of the antiphlogistic effect of naftifin-HCl in the UV-B erythema test] Kecskes A, et al. **Hautarzt** 1989 Mar;40(3):158–60 (Eng. Abstr.) (Ger)

[Cockayne syndrome: siblings with different ultraviolet sensitivity and early onset of manifestations] Okamoto N, et al. **No To Hattatsu** 1989 May;21(3):265–70 (Eng. Abstr.) (Jpn)

[An adult case of Cockayne syndrome with protracted clinical course—a study of ultraviolet irradiation test using cultured skin fibroblasts] Yoshida K, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):609–15 (Eng. Abstr.) (Jpn)

INSTRUMENTATION

UV disinfecting experiments with E.coli and actinometric determination of the irradiation intensity. Zemke V, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):380–4

ULTRAVIOLET THERAPY

see related
PHOTOCHEMOTHERAPY

311 nm UVB lamps in the treatment of psoriasis with the Ingram regimen. Karvonen J, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):82–5

Epidermal Langerhans' cells in chronic eczematous dermatitis of the palms treated with PUVA and UVB. Rosén K, et al. **Acta Derm Venereol (Stockh)** 1989; 69(3):200–5

Is the effect of phototherapy in psoriasis partly due to an impact on vitamin D metabolism? Staberg B, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):436–9

Ultraviolet irradiation for hepatic rickets. Kooh SW, et al. **Arch Dis Child** 1989 Apr;64(4):617–9

The short-term benefit and long-term failure of ultraviolet light in the treatment of venous leg ulcers. Dodd HJ, et al. **Br J Dermatol** 1989 Jun;120(6):809–18

311 nm UVB phototherapy—an effective treatment for psoriasis. Green C, et al. **Br J Dermatol** 1988 Dec;

119(6):691–6
Double-blind, placebo-controlled study to evaluate the efficacy of fish oil and low-dose UVB in the treatment of psoriasis. Gupta AK, et al. **Br J Dermatol** 1989 Jun; 120(6):801–7
Combined treatment of psoriasis with acitretin and UVB phototherapy compared with acitretin alone and UVB alone. Iest J, et al. **Br J Dermatol** 1989 May;120(5):665–70
UVB phototherapy of atopic dermatitis. Jekler J, et al. **Br J Dermatol** 1988 Dec;119(6):697–705
Anthralin and tar with UVB increase epidermal cell proliferation in asebia mice. Brown WR, et al. **Clin Exp Dermatol** 1988 Jul;13(4):248–51
UVB phototherapy for psoriasis of skin type V. Selim MM, et al. **Clin Exp Dermatol** 1988 May;13(3):168–72
Antigenic stimulation during ultraviolet therapy in man does not result in immunological tolerance. Friedmann PS, et al. **Clin Exp Immunol** 1989 Apr;76(1):68–72
Enhancing effect of whole-body ultraviolet light irradiation on Candida albicans activity of human polymorphonuclear leukocytes. Hunyadi J, et al. **Dermatol Monatsschr** 1989; 175(6):326–32
Are topical corticosteroids useful in phototherapy for psoriasis? Dover JS, et al. **J Am Acad Dermatol** 1989 May; 20(5 Pt 1):748–54
Marked increase of liver transaminases after khellin and UVA therapy [letter] Duschet P, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):592–4
Elevated plasma interleukin-1 levels in humans following ultraviolet light therapy for psoriasis. Konnikov N, et al. **J Invest Dermatol** 1989 Feb;92(2):235–9
Tin-protoporphyrin and long wave length ultraviolet light in treatment of psoriasis. Emtestam L, et al. **Lancet** 1989 Jun 3;1(8649):1231–3
Exposure of mice to UV-B radiation suppresses delayed hypersensitivity to Candida albicans. Denkins Y, et al. **Photochem Photobiol** 1989 May;49(5):615–9
UVB reduces the cutaneous cellular infiltrate of atopic eczema: a preliminary study. Britton FC, et al. **Photodermatol** 1988 Oct;5(5):232–4
[The rheologic effects of ultraviolet irradiation of autologous blood with and without lymphocytes] Belgrad D, et al. **Z Gesamte Inn Med** 1989 May 1;44(9):284–6 (Eng. Abstr.) (Ger)
[Serial infrared and ultraviolet whole body irradiation and placebo and ultraviolet irradiation of autologous venous blood in peripheral arterial occlusive disease. 1. Treadmill ergometry, metabolic, rheologic and hemodynamic parameters] Scherf HP, et al. **Z Gesamte Inn Med** 1989 Apr 1;44(7):201–7 (Eng. Abstr.) (Ger)
[Local pigment stimulation by alpha-melanocyte stimulating hormone in the human: intracutaneous injections without and with ultraviolet irradiation] Remy W, et al. **Z Hautkr** 1989 Jun 15;64(6):459–60 (Eng. Abstr.) (Ger)
[Phototherapy and uremic pruritus] Bencini PL, et al. **G Ital Dermatol Venereol** 1988 May;123(5):249–51 (Eng. Abstr.) (Ita)
[Effect of long-term irradiation of the skin on calcium-phosphate metabolism and the 25-OH-D level in patients with chronic diseases of the digestive system] Marcinowska-Suchowierska E, et al. **Przegl Lek** 1988; 45(8):614–9 (Eng. Abstr.) (Pol)
[Etiopathogenesis of increased calciuria in patients with chronic diseases of the digestive system and vitamin D deficiency during ultraviolet therapy] Marcinowska-Suchowierska E, et al. **Przegl Lek** 1988; 45(4):378–82 (Eng. Abstr.) (Pol)
[Experience with laparoscopic ultraviolet laser therapy in the treatment of acute inflammatory diseases of the adnexa uteri] Dalgat DM, et al. **Akush Ginekol (Mosk)** 1989 Feb; (2):66–7 (Rus)
[Effect of flow-type ultraviolet irradiation of the blood on its gas level in patients with chronic renal failure complicated by suppurative infections] Cherniakov VL, et al. **Anesteziol Reanimatol** 1988 May-Jun;(3):57–60 (Eng. Abstr.) (Rus)
[Treatment of occlusive vascular diseases of the lower extremities using the method of autologous transfusion of UV-irradiated blood] Krotovskiĭ GS, et al. **Kardiologiia** 1988 Sep;28(9):77–82 (Eng. Abstr.) (Rus)
[Ultraviolet irradiation of the blood in the complex treatment of suppurative-inflammatory diseases] Butylin LP, et al. **Klin Khir** 1989;(1):27–9 (Eng. Abstr.) (Rus)
[Increased viscosity of the blood in chronic arterial insufficiency of the extremities and its correction by the method of infusing the patient's own blood irradiated by ultraviolet rays] Petukhov EB, et al. **Klin Khir** 1988;(7):26–9 (Eng. Abstr.) (Rus)
[Acid-base equilibrium of the blood during treatment using plasma UV-irradiation of chronic diseases of the liver and bile ducts with cholestasis] Apollonova LA, et al. **Klin Med (Mosk)** 1989 May;67(5):100–4 (Eng. Abstr.) (Rus)
[Experience with extracorporeal ultraviolet irradiation of autologous blood in children with suppurative-septic diseases] Kurapov EP, et al. **Pediatriia** 1989;(4):59–61 (Rus)
[Experience in the use of ultraviolet irradiation of autologous blood in the treatment of intestinal infections in young children] Lakotsenina OO, et al. **Pediatriia** 1989;(6):91–2 (Rus)
[Quantum hemotherapy in ischemic heart disease] Ternovoi KS, et al. **Sov Med** 1989;(3):70–3 (Rus)
[Structural-functional characteristics of the surface of the blood mononucleocytes in children suffering from chronic dermatoses. I. The correction of the glycocalyx structure by UV irradiation of the blood and in the course of treatment with an autotransfusion of UV-irradiated blood] Finkel'shtein BB, et al. **Tsitologiia** 1988 May;30(5):639–43 (Eng. Abstr.) (Rus)
[Functional and structural changes in the surface of human erythrocytes after UV irradiation with rays of various wavelengths. IV. Changes in the physicochemical properties of autotransfused UV-irradiated blood] Gromov AE, et al. **Tsitologiia** 1988 Dec;30(12):1442–8 (Eng. Abstr.) (Rus)
[A method of UV irradiation of the blood in the combination therapy of neurodermatitis] Gromov VV, et al. **Vestn Dermatol Venerol** 1988;(12):30–3 (Eng. Abstr.) (Rus)
[Ultraviolet irradiation of lymphoplasma in combination with lymphocytapheresis in the treatment of patients with diseases of the blood system] Archvadze VG, et al. **Vestn Khir** 1989 Feb;142(2):87–90 (Eng. Abstr.) (Rus)
[Photomodification of autologous blood and hemosorption in suppurative and septic diseases] Chalenko VV, et al. **Vestn Khir** 1989 Mar;142(3):75–6 (Eng. Abstr.) (Rus)
[Effect of the complex treatment including RUVIB on the immunologic status of patients with odontogenic phlegmons] Karandashov VI, et al. **Vestn Khir** 1988 Aug; 141(8):102–6 (Eng. Abstr.) (Rus)
[Pathogenetic substantiation of photomodification of autologous blood in the prevention and treatment of complications of closed chest trauma] Kutushev FKh, et al. **Vestn Khir** 1988 Dec;141(12):63–71 (Eng. Abstr.) (Rus)
[Value of dosimetric control of ultraviolet irradiation of autologous blood in surgical practice] Marchenko AV, et al. **Vestn Khir** 1988 Aug;141(8):99–101 (Eng. Abstr.) (Rus)
[Ambulatory treatment of peptic ulcer by autologous transfusion of photo-modified blood] Marchenko AV, et al. **Vestn Khir** 1988 Jun;140(6):117–9 (Eng. Abstr.) (Rus)
[Ultraviolet irradiation of the blood and hemosorption in the complex therapy of acute pancreatitis] Marusanov VE, et al. **Vestn Khir** 1989 Mar;142(3):76–9 (Eng. Abstr.) (Rus)
[Autotransfusion of ultraviolet-irradiated blood: the problems and outlook] Ivanov EM. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov-Dec; (6):66–9 (22 ref.) (Rus)
[Effect of the UV irradiation of autologous blood on the humoral link in the immune response of patients with chronic inflammatory processes] Ivanov EM, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan-Feb;(1):45–7 (Eng. Abstr.) (Rus)
[Experience with the use of ultraviolet irradiation of the blood in patients with suppurative meningitis] Chepkiĭ LP, et al. **Vrach Delo** 1988 Oct;(10):112–5 (Rus)

ADVERSE EFFECTS

Cancer risk associated with therapeutic irradiation of skin. Burns FJ. **Arch Dermatol** 1989 Jul;125(7):979–81 (20 ref.)
Epidemiology of human malignant skin tumors with special reference to natural and artificial ultraviolet radiation exposures. Elwood JM, et al. **Carcinog Compr Surv** 1989; 11:55–84 (94 ref.)
The risk of skin cancer from occupational exposure to ultraviolet radiation in hospitals. Diffey BL. **Phys Med Biol** 1988 Oct;33(10):1187–93

INSTRUMENTATION

Treatment of psoriasis with a new UVB-lamp. Larkö O. **Acta Derm Venereol (Stockh)** 1989;69(4):357–9
[References for the operating behavior of ultraviolet fluorescence tubes in phototherapy equipment] Knuschke P, et al. **Dermatol Monatsschr** 1989;175(3):155–62 (Eng. Abstr.) (Ger)
[An actinometric method for comparing the parameters of equipment for the ultraviolet irradiation of the blood] Ternovoi KS, et al. **Med Tekh** 1988 Jul-Aug;(4):16–9 (Eng. Abstr.) (Rus)
[Tubular fitting for binasal UV irradiation and a set of ear funnels for endaural UV irradiation for the OKUF-5.6 apparatus] Lygun AN, et al. **Voen Med Zh** 1988 Dec;(12):52 (Rus)

METHODS

A double-blind study of ultraviolet phototherapy in the prophylaxis of chilblains. Langtry JA, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):320–2
[Acquired reactive collagen disease in the adult: successful treatment with UV-B light] Vion B, et al. **Hautarzt** 1989 Jul;40(7):448–50 (Eng. Abstr.) (Ger)
[Positions on the article "Studies of the effectiveness of ultraviolet irradiation of blood of patients with arterial occlusive disease" by F. Richard and R. Zabel-Langhennig] Wiesner S, et al. **Z Arztl Fortbild (Jena)** 1988;82(10):473–7 (Ger)
[Therapeutic use of ultraviolet irradiation in medicine—scientific principles and clinical results] Sönnichsen N, et al. **Z Gesamte Inn Med** 1988 Nov 15; 43(22):634–8 (20 ref.) (Eng. Abstr.) (Ger)
[A method and the clinical effect of quantum ultraviolet autohemotherapy in resuscitation of children] Kurapov EP, et al. **Anesteziol Reanimatol** 1989 Jan-Feb;(1):31–4 (Eng. Abstr.) (Rus)
[A method of ultraviolet irradiation of the blood] Sukhorukov VP, et al. **Klin Khir** 1989;(5):70–2 (Rus)
[A method of reinfusing UV-irradiated autologous blood in the treatment of peptic ulcer] Murashko VV, et al. **Klin Med (Mosk)** 1989 Mar;67(3):106–8 (Eng. Abstr.) (Rus)
[Treatment of inflammatory salivary gland diseases by using intraductal UV irradiation] Afanas'ev VV, et al. **Stomatologiia (Mosk)** 1989 Mar-Apr;68(2):35–6 (Eng. Abstr.) (Rus)
[Extracorporeal ultraviolet irradiation of autologous blood in the treatment of urological patients with renal failure] Cherniakov VL, et al. **Urol Nefrol (Mosk)** 1988 Jul-Aug; (4):12–7 (Eng. Abstr.) (Rus)
[Extracorporeal ultraviolet irradiation of autologous blood in the treatment of urological patients with acute inflammatory diseases] Kozlov VA, et al. **Urol Nefrol (Mosk)** 1988 Jul-Aug;(4):7–12 (Eng. Abstr.) (Rus)
[Various problems of the methodology of autologous transfusion of photomodified blood] Krylenkov VA, et al. **Vestn Khir** 1989 Feb;142(2):129–32 (35 ref.) (Rus)
[A method of ultraviolet irradiation of the blood] Korzh VN, et al. **Voen Med Zh** 1989 Feb;(2):28–9 (Rus)

VETERINARY

[Effect of UV radiation and the autotransfusion of UV-irradiated blood on the content of cationic proteins in the neutrophilic granulocytes of calves] Skorina IA, et al. **Tsitologiia** 1988 May;30(5):616–22 (Eng. Abstr.) (Rus)

UMBELLIFERONES

The scopoletin assay for hydrogen peroxide. A review and a better method. Corbett JT. **J Biochem Biophys Methods** 1989 Jun;18(4):297–307 (18 ref.)
Detection of sialidase (neuraminidase) activity in Actinomyces species by using 2'-(4-methylumbelliferyl)alpha-D-N-acetylneuraminic acid in a filter paper spot test. Moncla BJ, et al. **J Clin Microbiol** 1989 Jan;27(1):182–4
Rapid fluorogenic assay for differentiation of the Candida parapsilosis group from other Candida spp. Smitka CM, et al. **J Clin Microbiol** 1989 Jan;27(1):203–6

ADMINISTRATION & DOSAGE

[I.V. administration of Mendiaxon in ultrasonography of the gallbladder and bile ducts] Dvořák M, et al. **Sb Lek** 1989 Mar;91(2-3):40–4 (Eng. Abstr.) (Cze)

ANALOGS & DERIVATIVES

[Use of methylumbelliferylglucuronide (MUG) for the rapid identification of E. coli in food microbiology] Soncini G. **Boll Chim Farm** 1988 May;127(5):99–100 (Eng. Abstr.) (Ita)

BLOOD

Characteristics of leukocyte and plasma methylumbelliferyl-alpha-L-iduronide iduronidase. Den Tandt WR, et al. **Biochem Med Metab Biol** 1989 Feb; 41(1):18–24

DIAGNOSTIC USE

[A study of various properties of beta-galactocerebrosidase from human chorion using synthetic fluorescent substrates] Petushkova NA, et al. **Biokhimiia** 1988 Sep;53(9):1539–45 (Eng. Abstr.) (Rus)

METABOLISM

Rapid detection of total and fecal coliforms in water by enzymatic hydrolysis of 4-methylumbelliferone-beta-D-galactoside. Berg JD, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2118–22
The conjugative metabolism of 4-methylumbelliferone and deconjugation to the parent drug examined by isolated perfused liver and in vitro liver homogenate of rats. Miyauchi S, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb; 37(2):475–80
Degradation of 4'-methylumbelliferyl 4-guanidinobenzoate catalyzed by human serum albumin. Ohta N, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2152–7
Membrane-limited hepatic transport of the conjugative metabolites of 4-methylumbelliferone in rats. Miyauchi S, et al. **J Pharm Sci** 1988 Aug;77(8):688–92

PHARMACOKINETICS

Pharmacokinetics of coumarin and 7-hydroxycoumarin in the rhesus monkey after intravenous and peroral administration. Ritschel WA, et al. **Arzneimittelforschung** 1988 Nov;38(11):1619–23

PHARMACOLOGY

Esculetin inhibits T cell activation without suppressing IL-2 production or IL-2 receptor expression. Kabelitz D, et al.

Immunol Lett 1989 Feb;20(3):241–5
Effects of esculetin (6,7–dihydroxycoumarin) on guinea–pig tracheal chains in vitro. Ragazzi E, et al.
Pharmacol Res 1989 Mar–Apr;21(2):183–92
Anti–inflammatory and peripheral analgesic activity of esculetin in vivo. Tubaro A, et al.
Pharmacol Res Commun 1988 Dec;20 Suppl 5:83–5

THERAPEUTIC USE

Coumarin and 7–hydroxycoumarin treatment of canine obstructive lymphoedema. Knight KR, et al. **Clin Sci** 1989 Jul;77(1):69–76
Anti–inflammatory activity of benzopyrones that are inhibitors of cyclo– and lipo–oxygenase. Della Loggia R, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:91–4
[Hymecromone in the treatment of symptoms following surgery of the bile ducts] Camarri E, et al.
Recenti Prog Med 1988 May;79(5):198–202 (Eng. Abstr.) (Ita)

TOXICITY

Toxicity of coumarin (1,2–benzopyrone) on human peripheral blood mononuclear cells and human and murine bone marrow progenitor stem cells. Gallicchio VS, et al.
J Biol Response Mod 1989 Apr;8(2):116–21

UMBILICAL ARTERIES

Plasma volume, umbilical artery Doppler [editorial] Farmakides G. **Am J Perinatol** 1989 Jul;6(3):371
Plasma volume, umbilical artery Doppler flow, and antepartum fetal heart testing in high–risk pregnancies. Villar MA, et al. **Am J Perinatol** 1989 Jul;6(3):341–6
A quicker simpler method of pre–determination of the length of umbilical artery catheter insertion in Asian babies. Lin MS, et al. **J Singapore Paediatr Soc** 1989;31(1–2):79–81
Sequential development of multiple aortic aneurysms in a neonate post umbilical arterial catheter insertion. Kirpekar M, et al. **Pediatr Radiol** 1989;19(6–7):452–3
Neonatal aortic thrombosis complicating umbilical artery catheterization: successful treatment with retroperitoneal aortic thrombectomy. Martin JE Jr, et al. **Surgery** 1989 Jun;105(6):793–6 (14 ref.)
[The contribution of umbilical Doppler velocimetry in suspected echographic IUGR] de Rochambeau B, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(8):1021–30 (Eng. Abstr.) (Fre)
[A comparative study of pulsed Doppler versus continuous Doppler technic without spectral analysis in obstetrics] Hamel–Desnos C, et al. **J Mal Vasc** 1989;14(1):32–8 (Eng. Abstr.) (Fre)
[Complications in the use of the umbilical vessels for infusions in newborn infants] Grigovich IN, et al.
Khirurgiia (Mosk) 1988 Jul;(7):116–20 (33 ref.) (Rus)
[Atheroma of the umbilicus associated with umbilical hernia in a child] Muratov ID. **Vestn Khir** 1989 Feb;142(2):76 (Rus)

ABNORMALITIES

Single umbilical artery. A report of 159 cases. Leung AK, et al. **Am J Dis Child** 1989 Jan;143(1):108–11
Prenatal identification of twin reversed arterial perfusion syndrome in the first trimester. Stiller RJ, et al.
Am J Obstet Gynecol 1989 May;160(5 Pt 1):1194–6
[Ultrasonic study of the single umbilical artery syndrome. A series of 80 cases] Jauniaux E, et al.
J Gynecol Obstet Biol Reprod (Paris) 1989;18(3):341–7 (34 ref.) (Eng. Abstr.) (Fre)

ANALYSIS

Fatty acid composition of umbilical arteries and veins: possible implications for the fetal EFA–status. Hornstra G, et al. **Lipids** 1989 Jun;24(6):511–7

ANATOMY & HISTOLOGY

Ultrasonography of umbilical structures in clinically normal foals. Reef VB, et al. **Am J Vet Res** 1988 Dec;49(12):2143–6
[The role of adaptive structures in the umbilical arteries in regulating the blood flow in the internal iliac artery system] Tikhonova LV, et al. **Arkh Anat Gistol Embriol** 1988 Sep; 95(9):35–9 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Pharmacodynamic study of maturation and closure of human umbilical arteries. White RP. **Am J Obstet Gynecol** 1989 Jan;160(1):229–37
Biphasic contraction induced by ouabain in human umbilical arteries. Sato K, et al. **Eur J Pharmacol** 1988 Dec 13; 158(3):299–302
On rats' umbilical blood vessels ultrastructure following administration of progesterone during pregnancy. Hristova M, et al. **Folia Med (Plovdiv)** 1987;29(2):34–40
Effects of vasoactive agents on isolated human umbilical arteries in preeclamptic women treated with magnesium sulfate: a preliminary report. Handwerker SM, et al.
Magnesium 1989;8(1):1–10
Effects of vasoactive intestinal polypeptide and substance P on human intramyometrial arteries and stem villous arteries in term pregnancy. Hansen V, et al. **Placenta** 1988 Sep–Oct; 9(5):501–6

EMBRYOLOGY

Fetal internal carotid and umbilical artery blood flow velocity waveforms as a measure of fetal well–being in intrauterine growth retardation. Wladimiroff JW, et al.
Pediatr Res 1988 Nov;24(5):609–12

INJURIES

Pathologic aspects of the umbilical cord after percutaneous umbilical blood sampling. Jauniaux E, et al.
Obstet Gynecol 1989 Feb;73(2):215–8

PATHOLOGY

Vasa praevia: another cause for concern in in vitro fertilization pregnancies. Burton G, et al.
Aust N Z J Obstet Gynaecol 1988 Aug;28(3):180–1
The antenatal diagnosis of vasa praevia: the role of ultrasound. Hurley VA. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):177–9
Midline omphalovesical anomalies in children: contribution of ultrasound imaging. Avni EF, et al. **Urol Radiol** 1988; 10(4):189–94

PHYSIOLOGY

Relationship of systolic/diastolic ratios from umbilical velocimetry to fetal heart rate. Brar HS, et al.
Am J Obstet Gynecol 1989 Jan;160(1):188–91
Discordant twins—a prospective study of the diagnostic value of real–time ultrasonography combined with umbilical artery velocimetry. Divon MY, et al.
Am J Obstet Gynecol 1989 Sep;161(3):757–60
Screening with Doppler velocimetry in labor. Feinkind L, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):765–70
Doppler umbilical artery waveform indices—normal values from fourteen to forty–two weeks. Hendricks SK, et al.
Am J Obstet Gynecol 1989 Sep;161(3):761–5
Relationship between fetal heart rate and umbilical blood flow velocity in term human fetuses during labor. Mansouri H, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):1007–12
Components of variability of umbilical arterial Doppler velocimetry—a prospective analysis. Maulik D, et al.
Am J Obstet Gynecol 1989 Jun;160(6):1406–9; discussion 1409–12
The influence of spontaneous accelerations of fetal heart rate on umbilical artery velocity waveforms. Morrow RJ, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):995–7
Vasomotor responses of the umbilical circulation in fetal sheep. Adamson SL, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1056–62
Effect of umbilical blood flow on transplacental diffusion of ethanol and oxygen. Wilkening RB, et al.
Am J Physiol 1989 Mar;256(3 Pt 2):H813–20
Umbilical artery flow velocity waveforms in labour. Fairlie FM, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):151–7
Duplex ultrasonography of the fetal aorta, umbilical artery, and placental arcuate artery throughout normal human pregnancy. Cameron A, et al. **Can Assoc Radiol J** 1989 Jun;40(3):145–9
Doppler ultrasound fetal velocimetry and its role in obstetrics. Morrow R, et al. **Clin Perinatol** 1989 Sep; 16(3):771–8 (27 ref.)
Fetal umbilical artery flow velocity waveforms: prediction of small for gestational age infants and late decelerations in labour. Dempster J, et al.
Eur J Obstet Gynecol Reprod Biol 1988 Sep;29(1):21–5
Simultaneous assessment of blood flow velocity waveforms in uteroplacental vessels, the umbilical artery, the fetal aorta and the fetal common carotid artery. Arabin B, et al. **Fetal Ther** 1987;2(1):17–26
Effect of amnioinfusion on the umbilical Doppler flow velocity waveform: a case report. van den Wijngaard JA, et al. **Fetal Ther** 1987;2(1):27–30
Are blood flow velocity waveforms related to umbilical cord acid–base status in the human fetus? Arduini D, et al.
Gynecol Obstet Invest 1989;27(4):183–7
Umbilical artery blood flow velocity waveforms and associations with fetal abnormality. Hata K, et al.
Gynecol Obstet Invest 1989;27(4):179–82
Estriol reduces the reactivity of the human umbilical artery to mechanical stimuli. Silva de Sá MF, et al.
Gynecol Obstet Invest 1989;27(4):188–92
Pulsatility index and its relationship to placental vascular resistance during partial umbilical venous occlusion: a study in fetal lambs. van Vugt JM, et al.
Gynecol Obstet Invest 1988;26(1):1–7
Umbilical artery velocity waveforms are not valid indices for assessing growth retardation in utero. Hata K, et al.
Int J Gynaecol Obstet 1989 May;29(1):25–9
Doppler study of umbilical artery blood flow waveform. Should we use an instrument–adapted nomogram? Abramowicz JS, et al. **J Ultrasound Med** 1989 Apr; 8(4):183–5
Doppler analysis of the umbilical artery. The importance of choosing the placental end of the cord. Abramowicz JS, et al. **J Ultrasound Med** 1989 Apr;8(4):219–21
Umbilical artery Doppler blood velocity waveforms in normal and abnormal gestations. Friedman DM, et al.
J Ultrasound Med 1989 Jul;8(7):375–80
Comparison of umbilical artery flow velocity waveform indices as measured by continuous wave Doppler ultrasound. Gilbert WM, et al. **J Ultrasound Med** 1988 Oct; 7(10):549–51
Nonuniformity of fetal umbilical systolic/diastolic ratios as determined with duplex Doppler sonography. Kay HH, et al. **J Ultrasound Med** 1989 Aug;8(8):417–20
Hemodynamic validation of Doppler assessment of fetoplacental circulation in a sheep model system. Maulik D, et al. **J Ultrasound Med** 1989 Apr;8(4):177–81
Umbilical and uterine artery flow velocity waveforms. Effect of the sampling site on Doppler ratios. Mehalek KE, et al. **J Ultrasound Med** 1989 Apr;8(4):171–6
Effect of fetal heart rate on umbilical arterial Doppler indices. Yarlagadda P, et al. **J Ultrasound Med** 1989 Apr;8(4):215–8
Absent end–diastolic flow in first trimester umbilical artery [letter] Fisk NM, et al. **Lancet** 1988 Nov 26;2(8622):1256–7
Umbilical artery flow velocity waveforms and twin pregnancy outcome. Giles WB, et al. **Obstet Gynecol** 1988 Dec;72(6):894–7
Doppler umbilical artery velocimetry in pregnancy complicated by insulin–dependent diabetes mellitus. Landon MB, et al. **Obstet Gynecol** 1989 Jun;73(6):961–5
Human umbilical artery flow velocity waveforms before and after regional anesthesia for cesarean section. Veille JC, et al. **Obstet Gynecol** 1988 Dec;72(6):890–3
Umbilical artery waveform during bicycle exercise in normal pregnancy. Veille JC, et al. **Obstet Gynecol** 1989 Jun; 73(6):957–60
The acute effect of cordocentesis with or without fetal curarization and of intravascular transfusion upon umbilical artery waveform indices. Weiner CP, et al.
Obstet Gynecol 1989 Feb;73(2):219–24
Comparison of the effects of oxygen, 5–hydroxytryptamine, bradykinin and adrenaline in isolated human umbilical artery smooth muscle. McGrath JC, et al.
Q J Exp Physiol 1988 Jul;73(4):547–59
The choice of index for umbilical artery Doppler waveforms. Hoskins PR, et al. **Ultrasound Med Biol** 1989;15(2):107–11
Determination of the presence of fetal apnoea using umbilical artery and umbilical vein Doppler waveforms. Hoskins PR, et al. **Ultrasound Med Biol** 1988;14(7):589–92
Heartrate variation of umbilical artery Doppler waveforms. Hoskins PR, et al. **Ultrasound Med Biol** 1989;15(2):101–5
[Doppler study of the blood flow rate in the umbilical artery as an index of fetal status] Pelev Zh, et al.
Akush Ginekol (Sofiia) 1988;27(4):83–5 (Bul)
[Comparison of the results of umbilical artery velocimetry obtained by pulsed Doppler and continuous Doppler] Gaucherand P, et al.
J Gynecol Obstet Biol Reprod (Paris) 1988;17(5):609–14 (Eng. Abstr.) (Fre)
[Beta–mimetics and Pourcelot's index] Mourey C, et al.
Rev Fr Gynecol Obstet 1988 Nov;83(11):713–5 (Eng. Abstr.) (Fre)
[Features of blood flow in fetal aorta and umbilical artery during 2d trimester of pregnancy] Medvedev MV, et al.
Akush Ginekol (Mosk) 1989 Jan;(1):17–21 (Eng. Abstr.) (Rus)
[Doppler measurement of fetal blood flow. I. Normal values in the umbilical artery] Alfirević Z, et al.
Jugosl Ginekol Perinatol 1989 Jan–Apr;29(1–2):9–14 (Eng. Abstr.) (Scr)

PHYSIOPATHOLOGY

Antepartum improvement of abnormal umbilical artery velocimetry: does it occur? Brar HS, et al.
Am J Obstet Gynecol 1989 Jan;160(1):36–9
A comparative study of fetal umbilical velocimetry with continuous– and pulsed–wave Doppler ultrasonography in high–risk pregnancies: relationship to outcome. Brar HS, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):375–8
Antenatal screening for intrauterine growth retardation with umbilical artery Doppler ultrasonography. Beattie RB, et al. **BMJ** 1989 Mar 11;298(6674):631–5
Absence of end diastolic frequencies in umbilical artery: a sign of fetal hypoxia and acidosis. Nicolaides KH, et al. **BMJ** 1988 Oct 22;297(6655):1026–7
Uteroplacental and umbilical artery blood velocity waveforms in placental abruption assessed by Doppler ultrasound [letter; comment] Defoort P, et al.
Br J Obstet Gynaecol 1989 Feb;96(2):254–5. **Comment on:** Br J Obstet Gynaecol 1988 Jul;95(7):723–4
Umbilical artery flow velocity waveforms in fetuses dying with congenital anomalies [letter] Furness ME, et al.
Br J Obstet Gynaecol 1989 Mar;96(3):369–70
The effect of intravascular transfusion for rhesus haemolytic disease on umbilical artery Doppler flow velocity waveforms. Hanretty KP, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):960–3
Umbilical artery waveforms analysis in normal and intrauterine growth–retarded fetuses: a comparison between the pulsatility index (PI) and the relative flow index (R). Hung JH, et al.
Chung Hua I Hsueh Tsa Chih 1988 Nov;42(5):345–52
Umbilical artery Doppler flow velocity waveform: the outcome of pregnancies with absent end diastolic flow. Johnstone FD, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Jul;28(3):171–8
Uterine and umbilical artery blood flow velocity waveforms and their validity in the prediction of fetal compromise. Mulders LG, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):143–54
Umbilical artery waveform analysis and biophysical profile. A comparison of two methods to identify compromised

fetuses. Nordström UL, et al.
Eur J Obstet Gynecol Reprod Biol 1989 Mar;30(3):245–51
Umbilical artery Doppler waveform in pregnancies with uncomplicated intra-uterine growth retardation. Haddad NG, et al. **Gynecol Obstet Invest** 1988;26(3):206–10
Significance of umbilical and uterine artery velocimetry in the well-controlled pregnant diabetic. Bracero LA, et al. **J Reprod Med** 1989 Apr;34(4):273–6
Fetal umbilical velocimetry for the surveillance of pregnancies complicated by placenta previa. Brar HS, et al. **J Reprod Med** 1988 Sep;33(9):741–4
Placental vascular resistance using umbilical velocimetry in patients undergoing cesarean section for fetal distress. Brar HS, et al. **J Ultrasound Med** 1989 Apr;8(4):211–4
Doppler demonstration of reversed umbilical blood flow in an acardiac twin. Benson CB, et al. **JCU** 1989 May; 17(4):291–5
Fetal umbilical blood flow velocity wavetorms using Doppler ultrasonography in patients with late decelerations. Brar HS, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):363–6
Umbilical artery velocimetry as a predictor of adverse outcome in pregnancies complicated by oligohydramnios. Lombardi SJ, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):338–41
Umbilical artery Doppler velocimetry as a predictor of fetal hypoxia and acidosis at birth. Tyrrell S, et al.
Obstet Gynecol 1989 Sep;74(3 Pt 1):332–7

ULTRASTRUCTURE

Scanning electron microscopic investigations of the human umbilical artery intima. A new conception on postnatal arterial closure mechanism. Röckelein G, et al.
Virchows Arch [A] 1988;413(6):555–61

UMBILICAL CORD

Antepartum looping of the umbilical cord. Hansen HS, et al. **Acta Obstet Gynecol Scand** 1988;67(5):475–6
Umbilical cord compression diagnosed by means of ultrasound. Selbing A. **Acta Obstet Gynecol Scand** 1988; 67(6):565–7
Angiomyxoma of the umbilical cord with massive cystic degeneration of Wharton's jelly. Yavner DL, et al.
Arch Pathol Lab Med 1989 Aug;113(8):935–7
Fetal umbilical cord catheterization under ultrasound guidance. Lémery D, et al. **Fetal Ther** 1988;3(1–2):37–43
Intravascular intrauterine transfusion for severe erythroblastosis fetalis using different techniques. Orsini LF, et al. **Fetal Ther** 1988;3(1–2):50–9
Nuchal cord [letter] Yawn BP. **J Am Board Fam Pract** 1988 Oct–Dec;1(4):296
Umbilical cord prolapse in the emergency department [editorial] Anderson GV Jr, et al. **J Emerg Med** 1989 Mar–Apr;7(2):207
Umbilical cord prolapse: a true obstetrical emergency. Barnett WM. **J Emerg Med** 1989 Mar–Apr;7(2):149–52 (13 ref.)
Cord prolapse: a challenge to the obstetrician. Nandi AK, et al. **J Indian Med Assoc** 1988 Aug;86(8):206–8
Prolapse of the umbilical cord: a 5 year review in Ramathibodi Hospital. Israngura Na Ayudhya N, et al.
J Med Assoc Thai 1988 Jul;71 Suppl 2:21–5
Umbilical cord care and neonatal tetanus [letter] Oudealuys-Murphy AM. **Lancet** 1989 Apr 15;1(8642):843
Ghee applications to the umbilical cord: a risk factor for neonatal tetanus [see comments] Traverso HP, et al.
Lancet 1989 Mar 4;1(8636):486–8. **Comment in:** Lancet 1989 Jul 8;2(8654):109–10
Hasty clamping of the umbilical cord may initiate neonatal intraventricular hemorrhage. Hofmeyr GJ, et al.
Med Hypotheses 1989 May;29(1):5–6
A new funipuncture technique: two-needle ultrasound- and needle biopsy-guided procedure. Bovicelli L, et al.
Obstet Gynecol 1989 Mar;73(3 Pt 1):428–31
Survival of twins after acute fetal hemorrhage from ruptured vasa previa. Duenhoelter JH. **Obstet Gynecol** 1989 May; 73(5 Pt 2):866–7 (6 ref.)
Cordocentesis. Weiner CP.
Obstet Gynecol Clin North Am 1988 Jun;15(2):283–301
Povidone-iodine cord care [letter] Ramsey KP, et al.
Pediatrics 1988 Dec;82(6):951
The fetal intrahepatic umbilical vein as an alternative to cord needling for prenatal diagnosis and therapy. Nicolini U, et al. **Prenat Diagn** 1988 Nov;8(9):665–71
[The history of the drop. Prolapse of the umbilical cord] Duchatel F, et al. **Rev Fr Gynecol Obstet** 1988 Jul–Sep; 83(7–9):561–7 (Eng. Abstr.) **(Fre)**
[History of a fall. Prolapse of the umbilical cord (letter)] Dumont M. **Rev Fr Gynecol Obstet** 1989 Jan;84(1):52 **(Fre)**
[Capillary hemangioma of the umbilical cord as a cause of polyhydramnios] Heep J, et al.
Geburtshilfe Frauenheilkd 1988 Nov;48(11):819–21 (Eng. Abstr.) **(Ger)**
[Study of umbilical cord coiling and variable deceleration] Kitagawa M. **Nippon Ika Daigaku Zasshi** 1989 Feb; 56(1):22–30 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Umbilical cord circumference at birth [letter] Patel D, et al. **Am J Dis Child** 1989 Jun;143(6):638–9
Effect of amniotic fluid volume on umbilical cord length. Ogita S, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun; 15(2):203–8
Umbilical cord knots and encirclements. McLennan H, et al. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):116–9
Embryonic remnants of the umbilical cord: morphologic and clinical aspects. Jauniaux E, et al. **Hum Pathol** 1989 May; 20(5):458–62

BLOOD SUPPLY

The correlation of biochemical monitoring versus umbilical flow velocity measurements of the human fetus. Ferrazzi E, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1081–7
Correcting umbilical artery flow velocity waveforms for fetal heart rate is unnecessary. Kofinas AD, et al.
Am J Obstet Gynecol 1989 Mar;160(3):704–7
Maternal cigarette smoking: the effects on umbilical and uterine blood flow velocity. Morrow RJ, et al.
Am J Obstet Gynecol 1988 Nov;159(5):1069–71
MRI in pregnancy: the diagnosis of vasa previa by magnetic resonance imaging. Nimmo MJ, et al.
Bristol Med Chir J 1988 May;103(2):12

CYTOLOGY

Low level expression of cytokeratins 8, 18 and 19 in vascular smooth muscle cells of human umbilical cord and in cultured cells derived therefrom, with an analysis of the chromosomal locus containing the cytokeratin 19 gene. Bader BL, et al. **Eur J Cell Biol** 1988 Dec;47(2):300–19

DRUG EFFECTS

Time of separation of the umbilical cord: a comparative study of treatment with alcohol and Rikospray. Naor N, et al.
Eur J Obstet Gynecol Reprod Biol 1989 Aug;32(2):89–93

INNERVATION

Presence of nerve fibers in the human umbilical cord—an electron microscopical histochemical proof. Matsubara S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1775–6

METABOLISM

Umbilical cord is the major source of prostaglandin E2 in the gestational sac during term labor. McCoshen JA, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):973–8

PATHOLOGY

The amniotic adhesion malformation complex associated with short or absent umbilical cord. Draeger A, et al.
Eur J Obstet Gynecol Reprod Biol 1988 Sep;29(1):51–60
Fetal heart rate accelerations in second-stage labour; two case reports. Murphy KW, et al.
Eur J Obstet Gynecol Reprod Biol 1989 Aug;32(2):163–8
"Tango of the Sharks" [letter] Sandmire HF. **J Perinatol** 1988 Winter;8(1):77–8
Hemangioma of the umbilical cord. Sonographic appearance. Pollack MS, et al. **J Ultrasound Med** 1989 Mar;8(3):163–6
Sonography of nonconjoined monoamniotic twin pregnancies. Townsend RR, et al. **J Ultrasound Med** 1988 Dec;7(12):665–70
Congenital syphilis and necrotizing funisitis [letter] Benirschke K. **JAMA** 1989 Aug 18;262(7):904
Congenital syphilis and necrotizing funisitis. Fojaco RM, et al. **JAMA** 1989 Mar 24–31;261(12):1788–90
Pathologic aspects of the umbilical cord after percutaneous umbilical blood sampling. Jauniaux E, et al.
Obstet Gynecol 1989 Feb;73(2):215–8
Echogenic venous turbulence is a critical feature of successful intravascular intrauterine transfusion. Seeds JW, et al.
Obstet Gynecol 1989 Mar;73(3 Pt 2):488–90
Umbilical cord pseudocyst in trisomy 18. Jauniaux E, et al.
Prenat Diagn 1988 Oct;8(8):557–63

PHYSIOLOGY

Relationship between placental shape, cord insertion, lobes and gestational outcome. Nordenvall M, et al.
Acta Obstet Gynecol Scand 1988;67(7):611–6
Perinatal factors and separation time of the umbilical cord [letter] Oudesluys-Murphy AM, et al. **Am J Dis Child** 1988 Dec;142(12):1274–5
Use of povidone-iodine in umbilical cord care [letter] Newman NM. **Clin Pediatr (Phila)** 1989 Jan;28(1):37
Use of fetal streptozotocin injection to determine the role of normal levels of fetal insulin in regulating uteroplacental and umbilical glucose exchange. Hay WW Jr, et al.
Pediatr Res 1988 Sep;24(3):312–7
Effect of acute umbilical cord compression on hepatic carbohydrate metabolism in the fetal lamb. Rudolph CD, et al. **Pediatr Res** 1989 Mar;25(3):228–33

PHYSIOPATHOLOGY

Umbilical cord knots and encirclements [letter] Vear CS.
Aust N Z J Obstet Gynaecol 1988 Nov;28(4):327
Umbilical cord hematoma secondary to in utero intravascular transfusion for Rh isoimmunization. Moise KJ Jr, et al.
Fetal Ther 1987;2(2):65–70
Nuchal cord: an unusual manifestation. Grimm TW, et al.
J Am Board Fam Pract 1988 Jul–Sep;1(3):218–9
Documentation of paradoxical umbilical blood supply of an acardiac twin in the antepartum state. Kirkinen P, et al.
J Perinat Med 1989;17(1):63–5
[Double true knot of the umbilical cord and the course of labor] Hönigl W, et al. **Gynakol Rundsch** 1988;28 Suppl 2:155–7 **(Ger)**

ULTRASTRUCTURE

Maternal sex chromosome mosaicism diagnosed by amniocentesis and percutaneous umbilical cord sampling. Hunter AG, et al. **Prenat Diagn** 1988 Nov;8(9):673–5

UMBILICAL CORD BLOOD see **FETAL BLOOD**

UMBILICAL CYST see **URACHAL CYST**

UMBILICAL HERNIA see **HERNIA, UMBILICAL**

UMBILICAL VEINS

Factors influencing hemostasis after umbilical vein puncture in vitro. Ney JA, et al. **Am J Obstet Gynecol** 1989 Feb; 160(2):424–6
Intravascular intrauterine transfusion for severe erythroblastosis fetalis using different techniques. Orsini LF, et al. **Fetal Ther** 1988;3(1–2):50–9
Aneurysm of a paraumbilical collateral vein. Stuck KJ, et al. **J Ultrasound Med** 1988 Nov;7(11):639–42
Control of life-threatening bleeding from caput medusae by umbilical vein embolisation [letter] Bell R, et al. **Lancet** 1989 Apr 1;1(8640):736
Fetal death as a complication of intrauterine intravascular transfusion. Seeds JW, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):461–3
Umbilical and portal vein calcification following umbilical vein catheterization. Schneider K, et al. **Pediatr Radiol** 1989;19(6–7):468–70
The fetal intrahepatic umbilical vein as an alternative to cord needling for prenatal diagnosis and therapy. Nicolini U, et al. **Prenat Diagn** 1988 Nov;8(9):665–71
Intrauterine transfusion via umbilical vein in severe Rh isoimmunization. Dacus JV, et al. **South Med J** 1989 Jun; 82(6):791–2
[Aneurysmatic dilatation of a recanalized umbilical vein] Görich J, et al. **ROFO** 1989 Jan;150(1):98–9 **(Ger)**
[Complications in the use of the umbilical vessels for infusions in newborn infants] Grigovich IN, et al.
Khirurgiia (Mosk) 1988 Jul;(7):116–20 (33 ref.) **(Rus)**

ABNORMALITIES

Cruveilhier-Baumgarten (C-B) disease. Bisseru B, et al.
Gut 1989 Jan;30(1):136–7

ANALYSIS

Fatty acid composition of umbilical arteries and veins: possible implications for the fetal EFA-status. Hornstra G, et al. **Lipids** 1989 Jun;24(6):511–7

ANATOMY & HISTOLOGY

Identification of a patent paraumbilical vein by using Doppler sonography: importance in the diagnosis of portal hypertension. Gibson RN, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):513–6
Ultrasonography of umbilical structures in clinically normal foals. Reef VB, et al. **Am J Vet Res** 1988 Dec;49(12):2143–6
The importance of variant insertions of the ligamentum teres hepatis in the Cruveilhier-Baumgarten syndrome. Friedrich K, et al. **Endoscopy** 1988 Sep;20(5):254–9

CYTOLOGY

Cytotoxicity of tumor necrosis factor-alpha for human umbilical vein endothelial cells. Schuger L, et al.
Lab Invest 1989 Jul;61(1):62–8
[Culture and morphologic study of endothelial cells of the human umbilical vein] Yang XP.
Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1988 Oct; 16(5):298–300 **(Chi)**

DRUG EFFECTS

On rats' umbilical blood vessels ultrastructure following administration of progesterone during pregnancy. Hristova M, et al. **Folia Med (Plovdiv)** 1987;29(2):34–40

INJURIES

Pathologic aspects of the umbilical cord after percutaneous umbilical blood sampling. Jauniaux E, et al.
Obstet Gynecol 1989 Feb;73(2):215–8

METABOLISM

Inositol phosphate production and Ca2+ mobilization in human umbilical-vein endothelial cells stimulated by thrombin and histamine. Pollock WK, et al. **Biochem J** 1988 Dec 1;256(2):371–6
Prostacyclin production by human umbilical vein endothelium in response to serum from patients with systemic sclerosis. Holt CM, et al. **Br J Rheumatol** 1989 Jun;28(3):216–20
Variability in messenger RNA levels in human umbilical vein endothelial cells of different lineage and time in culture. Dichek D, et al. **In Vitro Cell Dev Biol** 1989 Mar;25(3 Pt

1):289–92
Prostacyclin synthesis by endothelial cells from human umbilical veins: effect of cumulative population doublings. Ingerman-Wojenski CM, et al. **Prostaglandins** 1988 Aug; 36(2):127–37
Human alpha-thrombin induces phosphoinositide turnover and Ca2+ movements in cultured human umbilical vein endothelial cells. Lampugnani MG, et al. **Thromb Res** 1989 Apr 1;54(1):75–87
[Effect of antithrombin III on the binding of heparin and its low molecular weight fraction CY 216 with endothelium in vitro] Puuja P. **Acta Haematol Pol** 1988 Jul-Dec; 19(3–4):143–9 (Eng. Abstr.) (Pol)

PATHOLOGY

Reassessment of the utility of fetal umbilical vein diameter in the management of isoimmunization. Reece EA, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):937–8
Vasa praevia: another cause for concern in in vitro fertilization pregnancies. Burton G, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):180–1
The antenatal diagnosis of vasa praevia: the role of ultrasound. Hurley VA. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):177–9
Perfusion of human umbilical veins. A new approach to study the interactions of circulating malignant cells with vascular wall and their modulations. Castronovo V, et al. **Invasion Metastasis** 1988;8(6):332–50
Ultrasonographic diagnosis of ectasia of the umbilical vein. Vesce F, et al. **JCU** 1987 Jun;15(5):346–9

PHYSIOLOGY

Normal values for human umbilical venous and amniotic fluid pressures and their alteration by fetal disease. Weiner CP, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):714–7
Vasomotor responses of the umbilical circulation in fetal sheep. Adamson SL, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1056–62
Effect of umbilical blood flow on transplacental diffusion of ethanol and oxygen. Wilkening RB, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H813–20
Pulsatility index and its relationship to placental vascular resistance during partial umbilical venous occlusion: a study in fetal lambs. van Vugt JM, et al. **Gynecol Obstet Invest** 1988;26(1):1–7
Echogenic venous turbulence is a critical feature of successful intravascular intrauterine transfusion. Seeds JW, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):488–90
Changes in ovine hepatic circulation and oxygen consumption at birth. Townsend SF, et al. **Pediatr Res** 1989 Mar;25(3):300–4
Determination of the presence of fetal apnoea using umbilical artery and umbilical vein Doppler waveforms. Hoskins PR, et al. **Ultrasound Med Biol** 1988;14(7):589–92
[Blood flow in the umbilical vein measured by the ultrasonographic method using the Doppler attachment (preliminary report)] Marianowski L, et al. **Ginekol Pol** 1988 Jan;59(1):41–4 (Eng. Abstr.) (Pol)

PHYSIOPATHOLOGY

Doppler demonstration of reversed umbilical blood flow in an acardiac twin. Benson CB, et al. **JCU** 1989 May; 17(4):291–5
A model of bacterially induced umbilical vein spasm, relevant to fetal hypoperfusion. Hyde S, et al. **Obstet Gynecol** 1989 Jun;73(6):966–70
Hemodynamic significance of the paraumbilical vein in portal hypertension: assessment with duplex US. Mostbeck GH, et al. **Radiology** 1989 Feb;170(2):339–42

RADIONUCLIDE IMAGING

Visualization of a recanalized umbilical vein on Tc-99m disofenin cholescintigraphy. Warshauer D, et al. **Clin Nucl Med** 1988 Aug;13(8):621–2

SURGERY

Treatment of chronic hepatic encephalopathy by the progressive suppression of a spontaneous portacaval shunt via the umbilical vein. Bismuth H, et al. **Br J Surg** 1989 Apr;76(4):409
Umbilical-jugular vein shunt for variceal bleeding: a 16-year follow-up. Hans SS, et al. **J Vasc Surg** 1989 May;9(5):747–9

TRANSPLANTATION

Biologic and structural evaluation of 80 surgically excised human umbilical vein grafts. Julien S, et al. **Can J Surg** 1989 Mar;32(2):101–7
"Femoro-distal bypass—a worthwhile procedure?" Harling H, et al. **Eur J Vasc Surg** 1987 Apr;1(2):133–5
Femoropopliteal bypass using autogenous vein and modified human umbilical vein. A comparative study. Parker HJ, et al. **J Cardiovasc Surg (Torino)** 1988 Nov-Dec; 29(6):727–32
Improving microgratt patency. Nichter LS, et al. **Microsurgery** 1988;9(4):235–41
[An experimental study on the use of the umbilical vein in blood vessel transplantation and its clinical application] Sun JX. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):114–5, 127 (Eng. Abstr.) (Chi)
[Duplex sonography after femoro-distal vascular reconstruction using umbilical veins] Schurawitzki H, et al. **ROFO** 1989 Jan;150(1):80–3 (Eng. Abstr.) (Ger)
[Endothelization of vascular prostheses using human cultured endothelial cells] Abzianidze GA, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):124–8 (Rus)
[Use of Soviet-made bioprostheses from the human umbilical vein in hemodialysis] Filiptsev PIa, et al. **Vestn Khir** 1988 Sep;141(9):98–103 (Eng. Abstr.) (Rus)
[The human umbilical cord vein in the surgical treatment of acute arterial thrombosis] Isaev AF, et al. **Vestn Khir** 1988 Jun;140(6):105–10 (Eng. Abstr.) (Rus)

UMBILICUS

Primary umbilical adenocarcinoma. A case report and review of literature. Ross JE, et al. **Arch Pathol** 1975 Jun; 99(6):327–9
Sister Mary Joseph's nodule: a study of the incidence of biopsied umbilical secondary tumours in a defined population. Heatley MK, et al. **Br J Surg** 1989 Jul; 76(7):728–9
Bowen's disease of the umbilicus simulating psoriasis vulgaris. Kolbusz RV, et al. **Cutis** 1988 Oct;42(4):321–2
Spontaneous umbilical fistula in Crohn's disease. Report of a case. Burchell MC. **Dis Colon Rectum** 1989 Jul; 32(7):621–3
Sister Mary Joseph's nodule. Cooper JP, et al. **Int J Dermatol** 1988 Nov;27(9):652–3
Dermatoses of the umbilicus [letter] Gharpuray MB, et al. **Int J Dermatol** 1989 Sep;28(7):482–3
Spontaneous umbilical fistula in Crohn's disease. Veloso FT, et al. **J Clin Gastroenterol** 1989 Apr;11(2):197–200 (13 ref.)
Acute umbilical sepsis and pilonidal disease. Botelho RJ. **J Fam Pract** 1989 Aug;29(2):205, 209
The abdominal wall defect "almost always" lies to the right of the umbilicus [letter] Blair GK, et al. **J Pediatr Surg** 1988 Oct;23(10):989
Neonatal fistula from the appendix to the umbilicus. Kadzombe E, et al. **J Pediatr Surg** 1988 Nov;23(11):1059–60
Unusual presentation of patent vitello intestinal duct with round worms emerging from the umbilicus. Surendran N, et al. **J Pediatr Surg** 1988 Nov;23(11):1061–2
Omphalitis in the newborn infant. Mason WH, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):521–5
Periumbilical pain secondary to persistent urachal band. Knoll LD, et al. **Urology** 1988 Dec;32(6):526–8
[Observing the navel in oncology: remember Sister Mary Joseph] Wereldsma JC, et al. **Ned Tijdschr Geneeskd** 1989 Apr 29;133(17):857–9 (Dut)
[A case of omphalith in a patient with seborrheic keratosis of the umbilicus] Imaizumi T. **Ann Dermatol Venereol** 1989; 116(1):27–8 (Fre)
[Dermatological aspects of umbilical pathology] Verret JL, et al. **Ann Dermatol Venereol** 1988;115(5):621–6 (31 ref.) (Fre)
[A case of small intestinal Crohn's disease with spontaneous umbilical fistula] Okawa K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1398–402 (Jpn)
[Umbilical fistula in a patient with asymptomatic course of tuberculous peritonitis] Shcherba BV, et al. **Probl Tuberk** 1988;(9):70 (Rus)

ABNORMALITIES

Successful separation of a conjoined biliary tract in a set of omphalopagus twins. Lobe TE, et al. **J Pediatr Surg** 1989 Sep;24(9):930–2
Meckel's diverticulum and related umbilical abnormalities: review of 26 cases. Chen CJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan;88(1):23–6
Pregastroschisis. Bulut M, et al. **Z Kinderchir** 1989 Feb; 44(1):58–9

ANATOMY & HISTOLOGY

A simple technique for locating the umbilicus in abdominoplasty. Hoffman S. **Plast Reconstr Surg** 1989 Mar; 83(3):537–8

BLOOD SUPPLY

Caput Medusae in medicine and art. Park RH, et al. **BMJ** 1988 Dec 24–31;297(6664):1677–9
[Clinical significance of umbilical varicose veins] Utkin VM, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):65–6 (Rus)
[Atheroma of the umbilicus associated with umbilical hernia in a child] Muratov ID. **Vestn Khir** 1989 Feb;142(2):76 (Rus)

PATHOLOGY

["Sister Joseph's module"—umbilical metastases of internal tumors] Holzki G, et al. **Hautarzt** 1989 May;40(5):312–5 (Eng. Abstr.) (Ger)

SURGERY

Umbilical sepsis. Sroujieh AS, et al. **Br J Surg** 1989 Jul; 76(7):687–8
[Umbilical hernia and appendectomy] Amar A, et al. **J Chir (Paris)** 1988 Jun-Jul;125(6–7):416–8 (Eng. Abstr.) (Fre)
[The H technic in omphaloplasty] Viterbo F. **Rev Paul Med** 1988 Mar-Apr;106(2):85–8 (Eng. Abstr.) (Por)

UMBRA see SALMONIDAE

UNCINARIA AMERICANA see NECATOR

UNCINARIA DUODENALE see ANCYLOSTOMA

UNCINARIA STENOCEPHALA see ANCYLOSTOMATOIDEA

UNCONSCIOUS (PSYCHOLOGY)

The psychology of stress: run silent, run deep. Jewell DS, et al. **Adv Exp Med Biol** 1988;245:489–505
An indirect method of discovering primary traumatic experiences: two case examples. Cheek DB. **Am J Clin Hypn** 1989 Jul;32(1):41–7
A cognitive unconscious? Rendon M. **Am J Psychoanal** 1988 Winter;48(4):291–3
Psychoanalysis: a creed in decline [letter] **Aust N Z J Psychiatry** 1989 Jun;23(2):155–61
Non-conscious face recognition in patients with face agnosia. Tranel D, et al. **Behav Brain Res** 1988 Oct;30(3):235–49
A computer model for unconscious spread of anxiety-linked inhibition in cognitive networks. Blum GS. **Behav Sci** 1989 Jan;34(1):16–45
Nonconscious control of autonomic responses: a role for Pavlovian conditioning? Ohman A. **Biol Psychol** 1988 Oct; 27(2):113–35 (80 ref.)
The role of unconscious guilt in psychopathology and psychotherapy. Bush M. **Bull Menninger Clin** 1989 Mar; 53(2):97–107
Critique of a new view of unconscious guilt. Horwitz L. **Bull Menninger Clin** 1989 Mar;53(2):123–48
Crisis intervention through early interpretation of unconscious guilt. Nichols NH. **Bull Menninger Clin** 1989 Mar;53(2):115–22
Unconscious guilt as a cause of sexualized relationships. Weatherford SG. **Bull Menninger Clin** 1989 Mar; 53(2):108–14
Distinguishing conscious from unconscious perceptual processes. Cheesman J, et al. **Can J Psychol** 1986 Dec; 40(4):343–67
Some sources for a slip in a translation by Freud. Grossman WI. **J Am Psychoanal Assoc** 1988;36(3):729–39
On the status of nonconscious processes in human cognition: comment on Reber. Lewicki P, et al. **J Exp Psychol [Gen]** 1989 Sep;118(3):239–41
More thoughts on the unconscious: reply to Brody and to Lewicki and Hill. Reber AS. **J Exp Psychol [Gen]** 1989 Sep;118(3):242–4
An empirical investigation of the latent content of suicide notes. Mc Lister B, et al. **Psychol Rep** 1988 Aug;63(1):238
[On the spot questioning of the theories on the unconscious in medicolegal expert testimony] Prigent Y, et al. **Ann Med Psychol (Paris)** 1989 Jan;147(1):125–8 (Fre)
[Unconscious insecurity before and after breast examination in senology patients without pathologic findings] Brauchli B, et al. **Geburtshilfe Frauenheilkd** 1988 Jul;48(7):520–3 (Eng. Abstr.) (Ger)
[The use of dreams in the management of criminals] Strunz F. **Off Gesundheitswes** 1989 Jan;51(1):37–9 (Eng. Abstr.) (Ger)
[Unconscious fantasy and the development of myths in psychoanalytic theories on the differences between the sexes] Rohde-Dachser C. **Psyche (Stuttg)** 1989 Mar; 43(3):193–218 (59 ref.) (Eng. Abstr.) (Ger)
[The anthropological phenomenon of strangeness in psychotherapy] Stüttgen T. **Z Klin Psychol Psychopathol Psychother** 1989;37(1):74–84 (Eng. Abstr.) (Ger)
[Decoupling or ultra-short therapy of torticollis] Drees A, et al. **Z Psychosom Med Psychoanal** 1989;35(1):38–47 (Eng. Abstr.) (Ger)

UNCONSCIOUSNESS

see related
SYNCOPE

Brief loss of consciousness in bilateral carotid occlusive disease. Yanagihara T, et al. **Arch Neurol** 1989 Aug; 46(8):858–61
No elimination of aspiration pneumonia in neurologically disabled patients with feeding gastrostomy. Hassett JM, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):383–8
[Short loss of consciousness: etiology and diagnostic approach. Results of a prospective study] Blanc JJ, et al. **Presse Med** 1989 May 6;18(18):923–6 (Eng. Abstr.) (Fre)

CHEMICALLY INDUCED

An unusual reaction to etoposide [letter] Donegan S. **DICP** 1989 Feb;23(2):177
[Drugs and short losses of consciousness in the elderly. A case/control study] Cherin P, et al. **Ann Med Interne (Paris)** 1989;140(4):258–62 (Eng. Abstr.) (Fre)

DIAGNOSIS

G-induced loss of consciousness [letter] Morey WA. **Aviat Space Environ Med** 1989 Apr;60(4):377

ETIOLOGY

G-induced loss of consciousness [letter] Cramer FS. **Aviat Space Environ Med** 1988 Oct;59(10):996
G-induced loss of consciousness [letter] van Patten RE. **Aviat Space Environ Med** 1988 Aug;59(8):787
Defining risk in aerospace medical unconsciousness research. Whinnery JE. **Aviat Space Environ Med** 1989 Jul; 60(7):688–94 (30 ref.)
Observations on the neurophysiologic theory of acceleration (+Gz) induced loss of consciousness. Whinnery JE. **Aviat Space Environ Med** 1989 Jun;60(6):589–93
Basilar migraine with loss of consciousness in pregnancy. Case report. Jacobson SL, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):494–5
Pre-pubertal depressive stupor: a case report. Powell JC, et al. **Br J Psychiatry** 1988 Nov;153:689–92
A lethargic baby with altered consciousness. Hadjari M, et al. **Hosp Pract [Off]** 1989 Apr 15;24(4):58, 60
[Report of a case of renal tubular acidosis complicated by CO2 narcosis] Takada M, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):587–8 **(Jpn)**

PHYSIOPATHOLOGY

Methods for describing and quantifying +Gz-induced loss of consciousness. Whinnery JE. **Aviat Space Environ Med** 1989 Aug;60(8):798–802 (11 ref.)
Pancreatic exocrine function in unconscious rats treated with submaximal, maximal, and supramaximal doses of bombesin tetradecapeptide. Wisner JR Jr, et al. **Pancreas** 1989; 4(1):83–9

PSYCHOLOGY

Stimulus processing during apparent unconsciousness in anesthetized volunteers. Bonke B, et al. **Percept Mot Skills** 1986 Apr;62(2):587–91

UNCOUPLING AGENTS

Nature of proton cycling during gramicidin uncoupling of oxidative phosphorylation. Luvisetto S, et al. **Biochemistry** 1989 Feb 7;28(3):1100–8
Effects of trypsin, chymotrypsin, and uncoupling on survival of isolated acinar cells from rat pancreas. Letko G, et al. **Int J Pancreatol** 1989 May;4(4):431–41

ANALYSIS

Sequential changes in the expression of mitochondrial protein mRNA during the development of brown adipose tissue in bovine and ovine species. Sudden occurrence of uncoupling protein mRNA during embryogenesis and its disappearance after birth. Casteilla L, et al. **Biochem J** 1989 Feb 1;257(3):665–71
Sulfhydryl groups of the uncoupling protein of brown adipose tissue mitochondria. Distinction between sulfhydryl groups of the H+ channel and the nucleotide binding site. Ježek P, et al. **Eur J Biochem** 1989 Jul 15; 183(1):89–95
Liquid chromatographic method for quantitation of glyphosate and metabolite residues in organic and mineral soils, stream sediments, and hardwood foliage. Thompson DG, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr; 72(2):355–60

GENETICS

Rabbit brown adipose tissue uncoupling protein MRNA: use of only one of two polyadenylation signals in its processing. Balogh AG, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):156–61

METABOLISM

Uncoupling protein and its mRNA in brown adipose tissue of newborn rabbits. Rozon DK, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):54–8

PHARMACOLOGY

Molecular events in coupling and uncoupling of oxidative phosphorylation. Azzone GF, et al. **Ann N Y Acad Sci** 1988;550:277–88
Reactivity of mitochondrial sulfhydryl groups toward dithionitrobenzoic acid and bromobimanes under oligomycin-inhibited and uncoupling conditions. Freisleben HJ, et al. **Arch Biochem Biophys** 1988 Oct; 266(1):89–97
Mitochondrial sulfhydryl groups under oligomycin-inhibited, aging, and uncoupling conditions: beneficial influence of cardioprotective drugs. Fuchs J, et al. **Arch Biochem Biophys** 1988 Oct;266(1):83–8
Uncoupling of oxidative phosphorylation: different effects of lipophilic weak acids and electrogenic ionophores on the kinetics of ATP synthesis. Matsuno-Yagi A, et al. **Biochemistry** 1989 May 16;28(10):4367–74
Mechanism of uncoupling of oxidative phosphorylation by gramicidin. Rottenberg H, et al. **Biochemistry** 1989 May 16;28(10):4355–60
Structural requirements of salicylanilides for uncoupling activity in mitochondria: quantitative analysis of structure-uncoupling relationships. Terada H, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):504–12
Effects of cyanide and uncouplers on chemoreceptor activity and ATP content of the cat carotid body. Obeso A, et al. **Brain Res** 1989 Mar 6;481(2):250–7
Effects of cellular uncoupling on conduction in anisotropic canine ventricular myocardium. Balke CW, et al. **Circ Res** 1988 Nov;63(5):879–92
QSAR studies of hydrazone uncouplers of oxidative phosphorylation. Winkler DA, et al. **Drug Des Deliv** 1988 Jul;3(2):191–207
The ATP/ADP-antiporter is involved in the uncoupling effect of fatty acids on mitochondria. Andreyev AYu, et al. **Eur J Biochem** 1989 Jul 1;182(3):585–92
Uncoupling of the calcium-induced terminal differentiation and the activation of membrane-associated transglutaminase in murine keratinocytes by type-beta transforming growth factor. Reiss M, et al. **Exp Cell Res** 1989 Jul;183(1):101–11
Carnitine cycle in brown adipose tissue mitochondria as a tool for studying the regulatory role of fatty acids in the uncoupling protein function. Ježek P, et al. **FEBS Lett** 1989 Jan 16;243(1):37–40
Uncoupling of intracellular cyclic AMP and dome formation in cultured canine kidney epithelial cells: effects of gangliosides and vasopressin. Rodrig N, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):215–9
Effect of uncoupling treatments on FSH-induced hyperpolarization of immature rat Sertoli cells from Sertoli cell-enriched cultures. Roche A, et al. **J Reprod Fertil** 1989 Mar;85(2):343–54
[Features of ultrastructural changes of tumor cells in tissue culture under the effect of energy metabolism inhibitors] Lelkina MI, et al. **Tsitol Genet** 1989 Jan-Feb;23(1):7–8 (Eng. Abstr.) **(Rus)**

UNDERACHIEVEMENT

Vulnerable child syndrome and its variants. Green M. **Pediatr Rev** 1986 Sep;8(3):75–80 (30 ref.)
Sibling rivalry as an important factor in academic under-achievement: a cross-cultural contribution. Ilechukwu ST. **Psychiatr J Univ Ottawa** 1988 Sep; 13(3):136–9

UNDERTAKING see MORTUARY PRACTICE

UNDULANT FEVER see BRUCELLOSIS

UNEMPLOYMENT

Family unemployment and its impact on adolescent personality development. Israelowitz RE. **Adolescence** 1989 Spring;24(93):47–52
Business recession, alcohol consumption, drinking and driving laws: impact on Oklahoma motor vehicle fatalities and fatal crashes. Muller A. **Am J Public Health** 1989 Oct; 79(10):1366–70
Husbands' layoff and wives' mental health. A prospective analysis. Penkower L, et al. **Arch Gen Psychiatry** 1988 Nov; 45(11):994–1000
Unemployment and patterns of consultation with the general practitioner [letter] Beale N, et al. **BMJ** 1989 Jun 17; 298(6688):1644
Trends in suicide and unemployment in Scotland, 1976–86 [see comments] Crombie IK. **BMJ** 1989 Mar 25; 298(6676):782–4. **Comment in:** BMJ 1989 Apr 29;298(6681):1180
Suicide and unemployment [letter; comment] Renvoize E, et al. **BMJ** 1989 Apr 29;298(6681):1180. **Comment on:** BMJ 1989 Mar 25;298(6676):782–4
Unemployment and patterns of consultation with the general practitioner. Yuen P, et al. **BMJ** 1989 May 6; 298(6682):1212–4
Unemployment and reproductive outcome. An Australian study. Najman JM, et al. **Br J Obstet Gynaecol** 1989 Mar; 96(3):308–13
Female unemployment and attempted suicide. Hawton K, et al. **Br J Psychiatry** 1988 May;152:632–7
Reported illness after a CGE closure. Grayson JP. **Can J Public Health** 1989 Jan-Feb;80(1):16–9
Influence of ethnicity and unemployment on the perceived health of a sample of general practice attenders. Ahmad WI, et al. **Community Med** 1989 May;11(2):148–56
Optional early retirement as an alternative to involuntary layoffs: some observations on the Israeli experience. Jacobson D. **Compr Gerontol [B]** 1987 Dec;1(3):100–4
Unemployment and ill-health: is the question going away? [editorial] Porter AM. **Fam Pract** 1989 Mar;6(1):1–2
Social networks and health status of the unemployed. Auslander GK. **Health Soc Work** 1988 Summer; 13(3):191–200
Unemployment, alcohol and injury in west Belfast. Kerr MH, et al. **Injury** 1987 Sep;18(5):313–4
Long-term effects of a factory closure: unemployment and disability during ten years' follow-up. Westin S, et al. **J Clin Epidemiol** 1989;42(5):435–41
Participation in a follow up study of health among unemployed and employed people after a company closedown: drop outs and selection bias. Iversen L, et al. **J Epidemiol Community Health** 1988 Dec;42(4):396–401
Deriving relative risks from aggregate data. 2. An application to the relationship between unemployment and suicide. Norström T. **J Epidemiol Community Health** 1988 Dec; 42(4):336–40
Recent changes in mortality and labor force behavior among older Americans: consequences for nonworking life expectancy. Hayward MD, et al. **J Gerontol** 1988 Nov; 43(6):S194–9
The impact of worker age on unemployment and earnings after plant closings. Love DO, et al. **J Gerontol** 1989 Sep; 44(5):S190–5
Stress and the workplace. Paul DW. **J Okla State Med Assoc** 1989 Feb;82(2):59–61
The nature of unemployment morbidity. 1. Recognition. Beale N, et al. **J R Coll Gen Pract** 1988 May;38(310):197–9
The nature of unemployment morbidity. 2. Description. Beale N, et al. **J R Coll Gen Pract** 1988 May;38(310):200–2
Ameliorating the effects of unemployment. Layton C. **J R Soc Health** 1988 Dec;108(6):222–5 (57 ref.)
Sexual dysfunction and the unemployed male professional. May JL, et al. **J Sex Marital Ther** 1988 Winter;14(4):253–62
Unemployment, homelessness and health [editorial] Radford AJ. **Med J Aust** 1988 Nov 21;149(10):513–4
Unemployment and doctors: an uneasy relationship [letter] Smith R. **Med J Aust** 1988 Nov 21;149(10):543–4
Financing health insurance for displaced workers [letter] Vaughan RJ, et al. **N Engl J Med** 1988 Nov 10;319(19):1291
Redundancy and health. Beale N. **Practitioner** 1988 Oct 8; 232(1456 (Pt 1)):1103–4
Unemployment, drug use, and health in late adolescence. Winefield HR, et al. **Psychother Psychosom** 1987; 47(3–4):204–10
Autopsy statistics on the relative frequency of acute myocardial infarction in the Japanese mental workers and the unemployed during the two oil-crises periods. Chang NC, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:106–19
Unemployment, mental health and the psychological functions of work in male welfare clients in Stockholm. Isaksson K. **Scand J Soc Med** 1989;17(2):165–9
Unemployment, re-employment and mental well-being. A panel survey of industrial jobseekers in Finland. Lahelma E. **Scand J Soc Med Suppl** 1989;43:1–170 (203 ref.)
Psychological concomitants of satisfactory employment and unemployment in young people. Winefield AH, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Jul;23(3):149–57
Shame among unemployed men. Eales MJ. **Soc Sci Med** 1989; 28(8):783–9
Unemployment and psychiatric distress: social resources and coping. Ensminger ME, et al. **Soc Sci Med** 1988; 27(3):239–47
Depression in unemployed Swedish women. Hall EM, et al. **Soc Sci Med** 1988;27(12):1349–55
[The consequences of unemployment on sickness insurance] Mottin J. **Cah Sociol Demogr Med** 1988 Oct–Dec; 28(4):295–308 **(Fre)**
[Does unemployment cause illness? A review of the status of knowledge of the correlation between unemployment, physical and psychological health risks] Häfner H. **Fortschr Neurol Psychiatr** 1988 Oct;56(10):326–43 (128 ref.) (Eng. Abstr.) **(Ger)**
[Vocational activity and unemployment of females and pregnancy outcome] Elkeles T, et al. **Off Gesundheitswes** 1989 Jun;51(6):269–77 (Eng. Abstr.) **(Ger)**
[Unemployment and utilization of the public health system] Studnicka MJ, et al. **Off Gesundheitswes** 1988 Dec; 50(12):688–93 (Eng. Abstr.) **(Ger)**
[Mortality and occupational status in the Turinese longitudinal study] Costa G, et al. **Epidemiol Prev** 1988 Sep;10(36):48–57 (Eng. Abstr.) **(Ita)**
[Unemployment and health: what Italian statistics show] Figà-Talamanca I, et al. **Epidemiol Prev** 1988 Mar; 10(34):50–3 (Eng. Abstr.) **(Ita)**
[Underemployment and unemployment among physicians in urban areas of Mexico] Frenk J, et al. **Salud Publica Mex** 1988 Sep–Oct;30(5):691–9 (Eng. Abstr.) **(Spa)**

UNESCO see UNITED NATIONS

UNICEF see UNITED NATIONS

UNIPOLAR DEPRESSION see DEPRESSIVE DISORDER

UNIT DOSE DRUG DISTRIBUTION SYSTEMS see MEDICATION SYSTEMS

UNITED NATIONS

UNESCO chemical arms conference opens in Paris [news] Coles P. **Nature** 1989 Jan 12;337(6203):103
[At the midpoint of the United Nations Decade of the Handicapped 1983–1992] Niemi V. **Rehabilitation (Stuttg)** 1988 Aug;27(3):131–4 **(Ger)**

LEGISLATION & JURISPRUDENCE

How the UN is defending human rights. **Int Nurs Rev** 1988 Nov–Dec;35(6):175–8

ORGANIZATION & ADMINISTRATION

The nutritionist in food aid. Proja FR. **Food Nutr (Roma)** 1987;13(2):2–11

UNITED STATES ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION

The NIMH Depression Awareness, Recognition, and Treatment Program: structure, aims, and scientific basis. Regier DA, et al. Am J Psychiatry 1988 Nov; 145(11):1351–7

Reports from research centres—16. The National Institute on Drug Abuse (NIDA). Schuster CR. Br J Addict 1989 Jan;84(1):19–28

Premenstrual syndrome research: using the NIMH guidelines. Anderson M, et al. J Clin Psychiatry 1988 Dec;49(12):484–6

NIDA's role in war on drugs [letter] Science 1988 Oct 7; 242(4875):15–6

Conflict over conflict of interest [news] Palca J. Science 1989 Sep 29;245(4925):1440

Molecular neurobiology—a conference sponsored by the NIMH [news] Scheller RH, et al. Science 1988 Oct 7; 242(4875):13–4

ORGANIZATION & ADMINISTRATION

Office of scientific integrity [letter; comment] Mason JO. Science 1989 May 26;244(4907):903–4. Comment on: Science 1989 Mar 24;243(4898):1545

UNITED STATES CENTERS FOR DISEASE CONTROL see **CENTERS FOR DISEASE CONTROL (U.S.)**

UNITED STATES DEPARTMENT OF HEALTH AND HUMAN SERVICES see **UNITED STATES DEPT. OF HEALTH AND HUMAN SERVICES**

UNITED STATES DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE see **UNITED STATES DEPT. OF HEALTH AND HUMAN SERVICES**

UNITED STATES DEPT. OF HEALTH AND HUMAN SERVICES

Fools and their money ... but Congress is no fool [editorial] Gardner KD Jr. Am J Kidney Dis 1989 Sep;14(3):239–40

HCFA mandates preapproval for cataract surgery [editorial] Foreman J. Arch Ophthalmol 1988 Oct;106(10):1358

HCFA establishes "special reasonable charge" allowances for physician services. Gigax JH. Colo Med 1989 May 1; 86(9):554–5

Title X and family planning services for men. Danielson R, et al. Fam Plann Perspect 1988 Sep–Oct;20(5):234–7

HHS sued over preadmission screening [news] Geriatr Nurs (New York) 1989 Jul–Aug;10(4):174

Physician payment research efforts at HCFA. Schieber GJ, et al. Health Aff (Millwood) 1989 Spring;8(1):214–8

HCFA's public-use files: a wealth of data. Nero J. Hospitals 1989 May 5;63(9):72

Medicare litigation: rewards for perseverance. Sutter R. Hospitals 1989 Apr 20;63(8):96

Nursing home regulations released by HCFA. J Am Diet Assoc 1989 Mar;89(3):348

Bone mineral densitometry: SNM/ACNP opposes HCFA's intention to deny Medicare coverage [news] Tilyou S. J Nucl Med 1989 Feb;30(2):139–40

Comments by the American Association of Public Health Dentistry on dental activities of the Department of Health and Human Services. Niessen LC. J Public Health Dent 1989 Spring;49(2):90–1

HCFA's plan for implementation of the Medicare second opinion program. Akhter MN, et al. Mo Med 1987 Feb; 84(2):79–82, 84

Clarification of HCFA goals [letter] Lyon C. Ophthalmology 1988 Apr;95(4):559

No to prescription limitations. Fisher GR. Pa Med 1989 Jun; 92(6):74–5

Indications for pacemaker implantation [editorial] Furman S. PACE 1988 Nov;11(11 Pt 1):1503

The rating game [editorial] Goldwyn RM. Plast Reconstr Surg 1989 Mar;83(3):518–9

IARC and HHS lists of carcinogens: regulatory use based on misunderstanding of the scope and purpose of the lists. Barnard RC, et al. Regul Toxicol Pharmacol 1989 Feb; 9(1):81–97

Fraud and the "glare of the TV camera" [news] Byrne G. Science 1989 Jun 2;244(4908):1038

New rules on misconduct [news] Holden C. Science 1989 Aug 11;245(4918):593

Animal research and government policy [letter] Langer GA. Science 1989 Mar 3;243(4895):1126

Hospitals and HCFA—a terminal situation? Barton HM. Tex Med 1988 Sep;84(9):77–9

RBRVS: ensuring fairness requires a united front [editorial] Mullooly JP. Wis Med J 1988 Aug;87(8):5

ORGANIZATION & ADMINISTRATION

Shaping the future of American medicine. Roper WL. Ala J Med Sci 1988 Oct;25(4):470–4

HCFA's surprise surveys can be costly. Holthaus D. Hospitals 1989 Jul 20;63(14):50, 52

Altman tapped to be new HCFA administrator. Robinson ML. Hospitals 1989 Jun 20;63(12):19–20

Power politics decides who writes Medicare policy. Robinson ML. Hospitals 1989 Aug 5;63(15):18, 21, 23

Cut excess capacity, improve efficiency [interview by Jeff Finn] Sullivan L. Hospitals 1989 Sep 20;63(18):79–80, 83

DHHS Office of Inspector General: an overview. Hsia D. R I Med J 1989 Feb;72(2):47–55

Bush makes some science appointments [news] Culliton BJ, et al. Science 1989 Jan 6;243(4887):24

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY see under **GOVERNMENT AGENCIES**

UNITED STATES FEDERAL TRADE COMMISSION see under **GOVERNMENT AGENCIES**

UNITED STATES FOOD AND DRUG ADMINISTRATION

FDA studies AIDS home test kits [news] Am Fam Physician 1989 Apr;39(4):18

Significant FDA approvals in 1988. Nightingale SL. Am Fam Physician 1989 Jun;39(6):315–6

Food and Drug Administration's Gastrointestinal Drugs Advisory Committee. September 15–16, 1988. The ACG Committee on FDA-related matters. American College of Gastroenterology. Stern WR. Am J Gastroenterol 1989 Apr;84(4):351–4

FDA reconsiders ban on home kits for HIV antibody testing. Appler WD, et al. Am Pharm 1989 Jul;NS29(7):15–7

It's time to take the next step. Work DR. Am Pharm 1989 Jan;NS29(1):22–3

Medical or surgical complications related to the Nucleus Multichannel Cochlear Implant [letter] Cohen NL. Ann Otol Rhinol Laryngol 1989 Sep;98(9):754

Medical or surgical complications related to the nucleus multichannel cochlear implant [letter] Yurawecz J. Ann Otol Rhinol Laryngol 1989 Jul;98(7 Pt 1):574

FDA recalls: how do pacemaker manufacturers compare? Tyers GF. Ann Thorac Surg 1989 Sep;48(3):390–6

Medical device reporting. A pilot study of nurses. George VD, et al. AORN J 1989 Mar;49(3):815–9, 822–4, 826–7

How exposed are we? Is there a better way? [editorial] Olson RJ. Arch Ophthalmol 1989 Aug;107(8):1131

The Food and Drug Administration is requesting manufacturers of cosmetic extended-wear soft contact lenses to indicate a recommended wearing time in the product labeling [news] Villforth JC. Arch Ophthalmol 1989 Jul;107(7):969

The FDA's regulation of biotechnology: an activist approach. Miller HI, et al. Bioessays 1988 Nov;9(5):178–9

The use (and abuse) of governmental databases [editorial] Rosenbaum SH, et al. Chest 1988 Dec;94(6):1125

Complications associated with central venous catheters. A survey. Scott WL. Chest 1988 Dec;94(6):1221–4

CLAO, contact lens reclassification and the FDA: who is the patient's advocate? Cavanagh HD. CLAO J 1988 Jul–Sep;14(3):120, 122

The politics of homemade saline [editorial] Cohen EJ. CLAO J 1989 Apr–Jun;15(2):99

FDA approves marketing of diclofenac [news] Clin Pharm 1988 Nov;7(11):785

Clinical trial that led to FDA approval of zidovudine is published [news] Clin Pharm 1987 Oct;6(10):752

FDA announces new procedures to speed drug availability for life-threatening and severely debilitating conditions [news] Clin Pharm 1989 Jan;8(1):4

FDA approves marketing of octreotide [news] Clin Pharm 1989 Jan;8(1):4

The role of the Food and Drug Administration in development and standardization of tests for HIV and HTLV-I. Epstein JS. Infect Control Hosp Epidemiol 1988 Aug;9(8):362

FDA alert on evening primrose oil [letter] McCollum JR. J Am Diet Assoc 1989 May;89(5):622

Disappearing food animal drugs [news] J Am Vet Med Assoc 1989 Apr 1;194(7):875

Equine drug use: protecting your license [news] Gloyd JS. J Am Vet Med Assoc 1989 Mar 15;194(6):748–9

Death or resurrection for bulk drugs? [news] Gloyd JS. J Am Vet Med Assoc 1989 Jan 1;194(1):16

FDA's treatment investigational new drug rule: one year later. Appler WD. J Clin Psychopharmacol 1988 Aug; 8(4):286–7

Regulatory response to the problem of pathogenic bacteria in the dairy industry. Kozak JJ. J Dairy Sci 1988 Oct; 71(10):2817–9

Cancer and AIDS groups push for changes in drug approval process [news] Anderson LF. J Natl Cancer Inst 1989 Jun 7;81(11):829–31

Proposed FDA rule: will it speed new drugs to patients? [news] McIntosh H. J Natl Cancer Inst 1988 Dec 7; 80(19):1514–5

Parenteral Drug Association response to the FDA compliance policy guide, #7132a.13, entitled, "Parametric release—terminally heat sterilized drug products". J Parenter Sci Technol 1988 Jul–Aug;42(4):105

PDA's response to FDA's "Guideline on sterile drug products produced by aseptic processing". Akers JE, et al. J Parenter Sci Technol 1988 Jul–Aug;42(4):114–7

Regulating biotechnology licensed products. Hill DE. J Parenter Sci Technol 1989 May–Jun;43(3):139–41

Aluminum in parenteral products: overview of chemistry concerns and regulatory actions. Hoiberg CP. J Parenter Sci Technol 1989 May–Jun;43(3):127–31

Regulatory requirements for supplemental applications: the "grey" area. Personeus GR. J Parenter Sci Technol 1989 May–Jun;43(3):114–6

Validation of computerized membrane integrity test systems. Wolber P, et al. J Parenter Sci Technol 1988 Jul–Aug; 42(4):106–10

Public statement on advancing biomedical technology. Young FE. J Parenter Sci Technol 1989 Jul–Aug; 43(4):194–6

Somethin' he et, no doubt [editorial] Thomison JB. J Tenn Med Assoc 1989 Aug;82(8):442–4

Drug regulation: quo vadis? [editorial] Goyan JE. JAMA 1988 Nov 25;260(20):3052–3

Nontherapeutic problems of generic drugs lead to call for FDA, legislative diagnosis and cure [news] Marwick C. JAMA 1989 Sep 22–29;262(12):1566–7

FDA seeks swifter approval of drugs for some life-threatening or debilitating diseases [news] Marwick C. JAMA 1988 Nov 25;260(20):2976

The role of data audits in detecting scientific misconduct. Results of the FDA program. Shapiro MF, et al. JAMA 1989 May 5;261(17):2505–11

Invited comment: toxicity and regulatory approval. Valicente A. JPEN J Parenter Enteral Nutr 1988 Nov–Dec;12(6 Suppl):133S–135S

Government viewpoint of clinical trials of cardiovascular drugs. Temple R. Med Clin North Am 1989 Mar; 73(2):495–509

Danthron alarm, FDA response: crucial OTC drug control [editorial] Gilbertson WE, et al. Milit Med 1988 Sep; 153(9):487–8

The FDA rhesus breeding colony at La Parguera, Puerto Rico. Phoebus EC, et al. P R Health Sci J 1989 Apr; 8(1):157–8

Health department warns of in-home AIDS testing kit [news] Pa Med 1988 Oct;91(10):14

New drugs of 1987. Hussar DA. Pa Med 1988 Sep;91(9):52–6

FDA approval to export reprocessed pacemakers [letter] Elsholz JF. PACE 1989 Jun;12(6):1008–9

Congress, the FDA, and new drug development: before and after 1962. Lasagna L. Perspect Biol Med 1989 Spring; 32(3):322–43

FDA procedures and policies to estimate risks of injury to the male reproductive system. Flamm WG, et al. Prog Clin Biol Res 1989;302:21–9; discussion 30–2

Monitoring adverse reactions to food additives in the U.S. Food and Drug Administration. Tollefson L. Regul Toxicol Pharmacol 1988 Dec;8(4):438–46

New drug approvals in 1988. Beary JF 3d. South Med J 1989 Aug;82(8):995–8

Kudos to the Food and Drug Administration: reversal of the package insert warning for birth defects for oral contraceptives [editorial] Brent RL. Teratology 1989 Jan; 39(1):93–4

Food and Drug Administration: approach to evaluating neurotoxicity. Sobotka TJ. Toxicol Ind Health 1989 Mar; 5(2):157–64

AIUM/CDRH (FDA) regulatory discussion. Merritt CR, et al. Ultrasound Med Biol 1989;15 Suppl 1:105–8

FDA model for regulatory purposes. Stratmeyer ME. Ultrasound Med Biol 1989;15 Suppl 1:35–6

Feminism and regulation collide: the Food and Drug Administration's approval of the cervical cap. Gallagher DM, et al. Women Health 1989;15(2):87–97

HISTORY

The short happy life of the first pharmacology division of the FDA: 1935–1936. Farrar GE Jr. Clin Ther 1989; 11(1):183–4

FDA reorganization. Weissinger J. J Parenter Sci Technol 1988 Jul–Aug;42(4):122–6

Aflatoxin control—how a regulatory agency managed risk from an unavoidable natural toxicant in food and feed. Park DL, et al. Regul Toxicol Pharmacol 1989 Apr;9(2):109–30

LEGISLATION & JURISPRUDENCE

A proposal concerning products liability. Nusbaum NJ. N Y State J Med 1989 Jul;89(7):396–9

ORGANIZATION & ADMINISTRATION

The drug approval process at the Food and Drug Administration. New biotechnology as a paradigm of a science-based activist approach. Miller HI, et al. Arch Intern Med 1989 Mar;149(3):655–7

Mitoxantrone and the new drug approval process [editorial] Abeloff MD. J Clin Oncol 1989 May;7(5):551–3

The TPA controversy and the drug approval process. The view of the Cardiovascular and Renal Drugs Advisory Committee. Kowey PR, et al. JAMA 1988 Oct 21; 260(15):2250–2 (20 ref.)

Risk assessment and the credibility of federal regulatory policy: an FDA perspective. Lowe MF. Regul Toxicol Pharmacol 1989 Apr;9(2):131–40

UNITED STATES HEALTH CARE FINANCING ADMINISTRATION see under **UNITED STATES DEPT. OF HEALTH AND HUMAN SERVICES**

UNITED STATES HEALTH RESOURCES ADMINISTRATION see **UNITED STATES HEALTH**

RESOURCES AND SERVICES ADMINISTRATION

UNITED STATES HEALTH RESOURCES AND SERVICES ADMINISTRATION

Projections of physician supply and demand: a summary of HRSA and AMA studies. Singer AM. **Acad Med** 1989 May; 64(5):235–40

HRSA AIDS curriculum conferences assist primary care health professionals. Matheny SC, et al. **Public Health Rep** 1988 Sep–Oct;103(5):553–6

UNITED STATES HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION see **UNITED STATES ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION**

UNITED STATES NATIONAL HEALTH INSURANCE see **NATIONAL HEALTH INSURANCE, UNITED STATES**

UNITED STATES NATIONAL INSTITUTES OF HEALTH see **NATIONAL INSTITUTES OF HEALTH (U.S.)**

UNITED STATES NATIONAL LIBRARY OF MEDICINE see **NATIONAL LIBRARY OF MEDICINE (U.S.)**

UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

Washington letter. Swankin D. **Am Ind Hyg Assoc J** 1988 Dec;49(12):A768

Controversy in the regulation of formaldehyde [editorial] Landrigan PJ, et al. **Am J Ind Med** 1988;14(4):375–7

OSHA's new standard for hospitals' chemical hazards [news] Griffith M. **Am J Nurs** 1989 Jan;89(1):12–3

Development of the Occupational Safety and Health Administration's proposed standard to protect workers from contracting bloodborne diseases in the workplace. Sandler BH, et al. **J Public Health Dent** 1989 Spring; 49(2):87–9

Occupational safety and health legislative agenda, 1989. Council on Occupational and Environmental Health, National Association for Public Health Policy. **J Public Health Policy** 1988 Winter;9(4):544–55

Worker training and education. Luskin J, et al. **J Public Health Policy** 1988 Autumn;9(3):342–5

Universal precautions [letter] Van Wagenen P. **N Y State J Med** 1989 Jun;89(6):362–3

Outraged. Leary MM. **Occup Health Saf** 1988 Dec; 57(13):15–6, 19

HISTORY

Disorder and early sorrow in the OSHA program. Mintz BW. **Am Ind Hyg Assoc J** 1989 Feb;50(2):A96–108

ORGANIZATION & ADMINISTRATION

OSHA inspection policy: a fresh start. Boden LI. **J Public Health Policy** 1988 Autumn;9(3):321–6

Strengthening Occupational Safety and Health enforcement. Punnett L, et al. **J Public Health Policy** 1988 Autumn; 9(3):327–80

Bring back the General Duty Clause. Robbins A. **J Public Health Policy** 1988 Autumn;9(3):331–4

Hazard surveillance: a proposal. Wegman DH, et al. **J Public Health Policy** 1988 Autumn;9(3):335–8

A new OSHA: the tasks for the first 100 days. Wegman DH, et al. **J Public Health Policy** 1988 Autumn;9(3):319–20

UNITED STATES OFFICE OF TECHNOLOGY ASSESSMENT

Total parenteral nutrition and tube feeding for elderly patients: findings of an OTA study. Maslow K. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):425–32

ORGANIZATION & ADMINISTRATION

The congressional Office of Technology Assessment [editorial] Herdman RC. **JAMA** 1989 Jul 28;262(4):550

UNITED STATES PUBLIC HEALTH SERVICE

Matching fatal accident reporting system cases with National Center for Health Statistics motor vehicle deaths. Fife D. **Accid Anal Prev** 1989 Feb;21(1):79–83

Status of human retrovirus testing in state and territorial public health laboratories: summary of survey no. 6. Hausler WJ Jr. **Infect Control Hosp Epidemiol** 1989 Aug; 10(8):345–9

Report of the Fourth Consensus Conference on HIV Testing sponsored by the Association of State and Territorial Public Health Laboratory Directors (ASTPHLD). Hausler WJ Jr, et al. **Infect Control Hosp Epidemiol** 1989 Aug; 10(8):354–67 (0 ref.)

Developing standards in animal research review. Dresser R. **J Am Vet Med Assoc** 1989 May 1;194(9):1184–91

US Public Health Service training and career development opportunities for veterinarians. Whitney RA. **J Am Vet Med Assoc** 1988 Aug 15;193(4):422–7

Overweight and obesity in black women: a review of published data from the National Center for Health Statistics. Gillum RF. **J Natl Med Assoc** 1987 Aug; 79(8):865–71

Health promotion with geriatric medications in the United States. Moore SR. **J R Soc Health** 1989 Feb;109(1):23–5, 29

From the Centers for Disease Control. Year 2000 national health objectives. **JAMA** 1989 Oct 13;262(14):1919, 1923

Another tobacco report proposed [news] Marwick C. **JAMA** 1988 Nov 4;260(17):2481

Coast Guard turns to Public Health Service, civilian physicians to meet medical needs [news] Marwick C. **JAMA** 1989 May 19;261(19):2784

Year 2000 national health objectives. **MMWR** 1989 Sep 22; 38(37):629–33

Year 2000 health objectives for the nation. McFarlane J. **Public Health Nurs** 1989 Jun;6(2):51–4

Public acceptance of the Surgeon General's brochure on AIDS. Gerbert B, et al. **Public Health Rep** 1989 Mar–Apr; 104(2):130–3

National Center for Health Statistics data line. Wolfson F. **Public Health Rep** 1989 Jan–Feb;104(1):99–100

Economic welfare versus social justice. Windom RE. **South Med J** 1989 Jul;82(7):818–21

Data systems of the National Center for Health Statistics. Kovar MG. **Vital Health Stat [1]** 1989 Mar;(23):1–21

HISTORY

American physicians and tobacco use: two Surgeons General, 1929 and 1964. Burnham JC. **Bull Hist Med** 1989 Spring; 63(1):1–31

ORGANIZATION & ADMINISTRATION

Social workers celebrate the centennial of the U.S. Public Health Service. **Health Soc Work** 1989 Aug;14(3):153–6

The revitalization of the Public Health Service Commissioned Corps. Koop CE, et al. **Public Health Rep** 1989 Mar–Apr;104(2):105–10

Koop resigns in a huff [news] Norman C. **Science** 1989 May 12;244(4905):649

TRENDS

New year and still on course—developing goals for the year 2000 [editorial] Windom RE. **Public Health Rep** 1989 Jan–Feb;104(1):1

UNITED STATES VETERANS ADMINISTRATION

The VA's affiliation with academic medicine: an emergency post–war strategy becomes a permanent partnership. Gronvall JA. **Acad Med** 1989 Feb;64(2):61–6

New perspectives in psychiatry in the Veterans Administration. Baker JJ. **Am J Psychiatry** 1975 Jan; 132(1):70–3

VA and APhA—common concerns [letter] Ogden JE. **Am Pharm** 1988 Dec;ns28(12):6, 8

The Veterans Administration and surgical education in the United States [editorial] Guernsey JM. **Arch Surg** 1989 Apr; 124(4):407

Utilization, attitudes, and experiences of Vietnam Era veterans with Veterans Administration health facilities: the American Legion experience. Stellman JM, et al. **Environ Res** 1988 Dec;47(2):193–209

Some comments concerning the status of research activities of clinical psychologists in the Veterans Administration [editorial] Butters N. **J Clin Psychol** 1988 Jul;44(4):623–4

VA—medical school affiliations: an unfair partnership [letter] Norstrand IF. **JAMA** 1989 Jul 7;262(1):31

UNITHIOL see under **DIMERCAPROL**

UNIVERSITIES

Health for All leadership and the role of the university in intersectoral development. Michael JM. **Asia Pac J Public Health** 1988;2(3):159–62

The impingement of biochemistry on chemical engineering. Street G. **Biochem Soc Trans** 1988 Aug;16(4):516–7

Chronobiology courses at the University of São Paulo/Brazil: a four–year experience. Marques N, et al. **Chronobiologia** 1988 Jul–Sep;15(3):235–41

Mandatory retirement has an uncertain future. Harnden L. **Dimens Health Serv** 1989 Mar;66(2):30, 34

American College Health Association. Statement on tobacco use on college and university campuses May 1988. **J Am Coll Health** 1988 Jul;37(1):45

Hepatitis B—the latest sexually transmitted disease. Collins M. **J Am Coll Health** 1989 May;37(6):297–8

Peer educators reach college students with nutrition information. Gates G, et al. **J Am Coll Health** 1989 Sep; 38(2):95–6

Smokeless tobacco use among American college students. Glover ED, et al. **J Am Coll Health** 1989 Sep;38(2):81–5

Patterns of smokeless tobacco use among university athletes. Levenson–Gingiss P, et al. **J Am Coll Health** 1989 Sep; 38(2):87–90

Susceptibility to AIDS: what college students do and don't believe. Manning D, et al. **J Am Coll Health** 1989 Sep; 38(2):67–73

College student suicide in the United States: incidence data and prospects for demonstrating the efficacy of preventative programs. Schwartz AJ, et al. **J Am Coll Health** 1988 Sep;37(2):53–9 (10 ref.)

Knowledge about AIDS and reported risk behaviors among black college students. Thomas SB, et al. **J Am Coll Health** 1989 Sep;38(2):61–6

A research model for relating job characteristics to job satisfaction of university foodservice employees. Duke KM, et al. **J Am Diet Assoc** 1989 Aug;89(8):1087–91

Nutrition promotion in a university foodservice: reduced fat, sodium, and energy content of menus. Kubena KS, et al. **J Am Diet Assoc** 1988 Nov;88(11):1412–6

Managerial functions of college and university foodservice managers. Sulternelier PM, et al. **J Am Diet Assoc** 1989 Jul;89(7):924–8

Autism resources at the higher education level in Indiana [letter] Dalrymple NJ, et al. **J Autism Dev Disord** 1989 Mar;19(1):173–5

New alliances and partnerships in American science and engineering. Phillips DI. **J Dent Res** 1988 Oct; 67(10):1356–9

Industry/academia relations: are the problems a barrier to cooperation? Ross NM. **J Dent Res** 1988 Oct;67(10):1353–5

Duke University Primate Center. Izard MK. **J Med Primatol** 1989;18(2):85–98

Interinstitutional collaboration for nursing excellence: Part 2. Testing the model. Baker CM, et al. **J Nurs Adm** 1989 Mar;19(3):8–13

Successful grantsmanship: the cascade effect. Felton G. **J Prof Nurs** 1986 Sep–Oct;2(5):271

Crime on campus: is it a policy issue? Scearse PD. **J Prof Nurs** 1989 Mar–Apr;5(2):59, 112

Frances Payne Bolton School of Nursing's new paradigm for international health: think globally and act locally. Segall ME. **J Prof Nurs** 1989 Mar–Apr;5(2):62, 112–3

Sabbatical. Reuler JB. **JAMA** 1989 Jan 20;261(3):408–10

Joint US–Sweden workshop: the role of university research in the future development of the biomedical industry. Nerem RM, et al. **Med Biol Eng Comput** 1988 Sep; 26(5):547–51

The Australian Tobacco Research Foundation [letter] **Med J Aust** 1988 Oct 3;149(7):394

Lamarck, Dr. Steele and plagiarism [editorial] **Nature** 1989 Jan 12;337(6203):101–2

AAU issues guidelines on dealing with scientific fraud [news] Anderson A. **Nature** 1989 Jan 19;337(6204):196

UK cell biology [letter] Bard J. **Nature** 1989 Jun 1; 339(6223):330

Activists infiltrate Stanford [news] Barinaga M. **Nature** 1989 Apr 6;338(6215):449

NIH restricts university links with industry [news] McGourty C. **Nature** 1989 Sep 21;341(6239):173

NIH guidance is rejected [news] McGourty C. **Nature** 1989 Jul 6;340(6228):7

Harvard fights first battle [news] Shulman S. **Nature** 1989 Aug 10;340(6233):418

National Institutes of Health stop Harvard researchers' grants [news] Shulman S. **Nature** 1988 Dec 8;336(6199):506

Defence/research. Microbiologist butt of protests [news] Shulman S. **Nature** 1989 May 4;339(6219):6

Nursing's image on the university campus. Lippman DT, et al. **Nurs Outlook** 1989 Jan–Feb;37(1):24–7

Managing potential conflicts of interest in university–industrial partnerships. Schwartz MA. **Pharm Res** 1987 Apr;4(2):83–5

...and grant–getters [news] Byrne G. **Science** 1988 Nov 11; 242(4880):869

American parallel for Oxford research [news] Dickson D. **Science** 1988 Oct 7;242(4875):20–1

Court ruling rekindles controversy over SATs [news] Holden C. **Science** 1989 Feb 17;243(4893):885–7

Universities fight animal activists [news] Holden C. **Science** 1989 Jan 6;243(4887):17–9

A Kellogg–supported program at the University of Iowa. Merchant J. **Toxicol Ind Health** 1989 Jul;5(4):61–77; discussion 79–84

[Importance of the university library for scientific research and teaching] Romano G. **Minerva Med** 1988 Sep; 79(9):797–8 (Eng. Abstr.) **(Ita)**

[Possibilities and problems in post–graduate psychiatric education viewed from experience at public and private universities] Yamanouchi T, et al. **Seishin Shinkeigaku Zasshi** 1988;90(11):1034–40 **(Jpn)**

[Pathologic anatomy in Japan (exemplified by the University of the City of Hirosaki] Nagai K, et al. **Arkh Patol** 1988; 50(7):77–9 **(Rus)**

[The physiology of higher nervous activity (the neurobiological bases of behavior). A draft program for university biology departments and for examinations on the candidate degree minimum qualification in the specialty] Batuev AS. **Zh Vysh Nerv Delat** 1988 Nov–Dec; 38(6):1174–8 **(Rus)**

[To think the University] Larraín JD. **Rev Med Chil** 1988 Jan;116(1):64–5 (Eng. Abstr.) **(Spa)**

ECONOMICS

[Analysis of the economic situation of the University of Chile and its means of solution. The University Council of the University of Chile] **Rev Med Chil** 1987 Nov;

115(11):1088–91 (Spa)

HISTORY

Recollections from a pioneer. Van Riper C. ASHA 1989 Jun–Jul;31(6–7):72–3
The Banting and Best Department of Medical Research at the University of Toronto. Fritz IB. Bioessays 1988 Aug–Sep;9(2–3):92–7
Brunonianism under the bed: an alternative to University Medicine in Edinburgh in the 1780s. Barfoot M. Med Hist Suppl 1988;8:22–45
Vitamin B–12, megaloblastic madness, and the founding of Duke University. Newbold HL. Med Hypotheses 1988 Nov;27(3):231–40
Medicine in the university. Greer DS. Perspect Biol Med 1988 Autumn;32(1):73–9
[History of the academic costume] Mayer G. Rev Med Brux 1988 Oct;9(7–8):401–3 (Eng. Abstr.) (Fre)
[The university pharmacy and the university pharmacist in history] Friedrich C. Pharmazie 1988 Jun;43(6):428–31 (Eng. Abstr.) (Ger)
[Virologic research at the Institute of Medical Microbiology at the Greifswald Ernst–Moritz–Arndt University] Döhner L. Z Gesamte Hyg 1989 Apr;35(4):184–6 (Eng. Abstr.) (Ger)
[100th anniversary of the Institute of Public Health at the Greifswald University] Schneck P. Z Gesamte Hyg 1989 Apr;35(4):179–84 (Eng. Abstr.) (Ger)
[History of the Department of Pharmacology of Tartu University] Allikmets LKh. Farmakol Toksikol 1988 Nov–Dec;51(6):97–102 (Rus)
[Development of studies on the physiology of the neuroendocrine system at Kiev University] Gordienko VM, et al. Fiziol Zh 1989 Jan–Feb;35(1):112–9 (Eng. Abstr.) (Rus)
[250 years of the teaching of physiology at the Petersburg–Leningrad University] Nozdrachev AD, et al. Fiziol Zh SSSR 1988 Jun;74(6):886–900 (Rus)
[The contribution of the Tomsk State Medical institute to the formation and development of medicine in Siberia (on the centenary of the Tomsk State University)] Zhatkin OA, et al. Voen Med Zh 1988 Nov;(11):63–5 (Rus)

ORGANIZATION & ADMINISTRATION

New AIDS Prevention Research Center to be established at Columbia University [news] Am J Public Health 1989 Apr;79(4):466
Tenure for a new age. Ideas for the turn of the century [editorial] Racy JC, et al. Arch Intern Med 1989 May;149(5):1001
Tenure and the university reward structure. Moore MN. Nurs Res 1989 Mar–Apr;38(2):111–6
Baltimore to succeed Lederberg? [news] Culliton BJ. Science 1989 Sep 29;245(4925):1441
British biologists learn small is not beautiful [news] Dickson D. Science 1989 May 19;244(4906):766–7
[Activities of the People's "Health" University for students of special secondary schools] Nesteruk AV, et al. Gig Sanit 1988 Jun;(6):68–9 (Rus)
[Conflict at the University of Chile] Cousiño Mac–Iver L. Rev Med Chil 1987 Dec;115(12):1193–4 (Spa)

STANDARDS

[Evaluation by U.E.R. of health sciences: medicine, pharmacy and odontology] Schwartz L, et al. Bull Acad Natl Med (Paris) 1988 May;172(5):705–10 (Eng. Abstr.) (Fre)

UNIVERSITY HEALTH SERVICES see STUDENT HEALTH SERVICES

UNIVERSITY MEDICAL CENTERS see ACADEMIC MEDICAL CENTERS

UNKNOWN PRIMARY TUMORS see NEOPLASMS, UNKNOWN PRIMARY

UNSATURATED DIETARY FATS see DIETARY FATS, UNSATURATED

UNSATURATED FATS see FATS, UNSATURATED

UNSATURATED OILS see FATS, UNSATURATED

UPHILL TRANSPORT see BIOLOGICAL TRANSPORT, ACTIVE

UPPER EXTREMITY see ARM

UPPER RESPIRATORY INFECTIONS see RESPIRATORY TRACT INFECTIONS

UPTAKE INHIBITORS, NEUROTRANSMITTER see TRANSMITTER UPTAKE INHIBITORS, NEURONAL

URACHAL CYST

COMPLICATIONS

[Urachal cyst infection caused by Haemophilus influenzae] Pinon G, et al. Arch Fr Pediatr 1988 Jun–Jul;45(6):409–10 (Eng. Abstr.) (Fre)
[A combination of acute appendicitis with suppuration of a urachal cyst] Levina VP, et al. Khirurgiia (Mosk) 1989 Feb;(2):123 (Rus)

DIAGNOSIS

Sonography case of the day. Allantoic cyst of the umbilical cord. Middleton MA, et al. AJR Am J Roentgenol 1989 Jun;152(6):1324–5
Sonographic first–trimester diagnosis of umbilical cord cyst. Rempen A. JCU 1989 Jan;17(1):53–5
Umbilical cord pseudocyst in trisomy 13 [letter] Zelante L, et al. Prenat Diagn 1989 Jun;9(6):448–9

PATHOLOGY

[Pathology of the urachus: diagnosis and therapy] Schaefer M, et al. Z Urol Nephrol 1988 Aug;81(8):487–92 (Eng. Abstr.) (Ger)

SURGERY

[Urachus cancer—a rare malignant form of urachus abnormality] Laqua D, et al. Chirurg 1989 May;60(5):368–70 (Ger)

URACHUS

Peritonitis following diagnostic laparoscopy due to injury to a vesicourachal diverticulum. Case report. Yong EL, et al. Br J Obstet Gynaecol 1989 Mar;96(3):365–8
Clinical, ultrasonographic, and surgical findings in foals with umbilical remnant infections. Reef VB, et al. J Am Vet Med Assoc 1989 Jul 1;195(1):69–72
Actinomycosis of urachal remnants. Gotoh S, et al. J Urol 1988 Dec;140(6):1534–5
Urachal carcinoma: CT findings. Brick SH, et al. Radiology 1988 Nov;169(2):377–81
Vesical dome tumors: significance of extravesical extension on CT. Narumi Y, et al. Radiology 1988 Nov;169(2):383–5
Endovesical ultrasonography of urachal carcinoma. Wishnow KI. Urol Radiol 1989;11(1):53–4
Periumbilical pain secondary to persistent urachal band. Knoll LD, et al. Urology 1988 Dec;32(6):526–8
[Iconographic rubric. Diverticulum of the urachus] Sanyas P, et al. Arch Fr Pediatr 1988 Aug–Sep;45(7):497–8 (Fre)
[Two cases of urachal carcinoma] Matsuo Y, et al. Hinyokika Kiyo 1988 Jul;34(7):1227–9 (Eng. Abstr.) (Jpn)
[Urachal carcinoma accompanied with calcification: report of a case] Morozumi M, et al. Hinyokika Kiyo 1988 Sep;34(9):1657–60 (9 ref.) (Eng. Abstr.) (Jpn)

METABOLISM

Prostatic specific antigen: immunoreactivity in urachal remnants. Golz R, et al. J Urol 1989 Jun;141(6):1480–2

PATHOLOGY

Midline omphalovesical anomalies in children: contribution of ultrasound imaging. Avni EF, et al. Urol Radiol 1988;10(4):189–94
[Carcinoma of the urachus] Schrøder M, et al. Ugeskr Laeger 1989 Feb 27;151(9):566–8 (Eng. Abstr.) (Dan)
[Pathology of the urachus: diagnosis and therapy] Schaefer M, et al. Z Urol Nephrol 1988 Aug;81(8):487–92 (Eng. Abstr.) (Ger)
[Urachal transitional cell carcinoma invading the sigmoid colon] Saito K, et al. Hinyokika Kiyo 1988 Jun;34(6):1039–42 (10 ref.) (Eng. Abstr.) (Jpn)
[Complications of the urachus in adults] Kutushev FKh, et al. Vestn Khir 1988 Oct;141(10):131–4 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Computed tomography of urachal carcinoma. Korobkin M, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):981–7 (17 ref.)

SURGERY

Treatment of patent urachus associated with a congenital imperforate urethra in a calf. Hunt RJ, et al. Cornell Vet 1989 Apr;79(2):157–60

URACIL

Methylation of thymine and uracil with free methyl cations formed due to beta–decay of tritiated methane: possible implication in mutagenesis and carcinogenesis. Korsakov MV, et al. Biochimie 1989 May;71(5):633–7
Infrared data indicate U.U mispairs in rat liver 5S RNA. Fabian H, et al. Biomed Biochim Acta 1989;48(1):95–102
Cell proliferation induced by uracil–calculi and subsequent development of reversible papillomatosis in the rat urinary bladder. Shirai T, et al. Cancer Res 1989 Jan 15;49(2):378–83
Electrostatic potential mapping of adenine, uracil and the A–U base pair. Kumar A, et al. Indian J Biochem Biophys 1988 Oct;25(5):392–6
(Butylthio)carbonyl group: a new protecting group for the guanine and uracil residues in oligoribonucleotide synthesis. Yamakage S, et al. Nucleic Acids Symp Ser 1988;(19):9–12

ADMINISTRATION & DOSAGE

Report on nationwide pooled data and cohort investigation in UFT phase II study. Ota K, et al. Cancer Chemother Pharmacol 1988;22(4):333–8

ANALOGS & DERIVATIVES

A preliminary study of effects of 5–mercaptomethyluracil and some its derivatives on postirradiation lethality of mice. Orzeszko G, et al. Acta Pol Pharm 1988;45(4):359–61
Dynamic properties of interaction between nucleic acid bases and models of amino acids. Yu BS, et al. Biochem Int 1989 Jan;18(1):189–95
Antihypoxic effects of AWD 23–15 in mice and rats. Morgenstern E, et al. Biomed Biochim Acta 1989;48(2–3):S247–50
C–H ... O hydrogen bonding in solutions of methylated nucleic acid base analogs as revealed by NMR. Bruskov VI, et al. Biopolymers 1989 Feb;28(2):589–604
Effects of 5–hydroxymethyluracil and 3–aminobenzamide on the repair and toxicity of 5–hydroxymethyl–2'–deoxyuridine in mammalian cells. Boorstein RJ, et al. Cancer Res 1989 Mar 15;49(6):1509–14
Acridine derivatives. III. Preparation and antitumor activity of the novel acridinyl–substituted uracils. Kimura M, et al. Chem Pharm Bull (Tokyo) 1989 Mar;37(3):697–701
A new selective antagonist of vascular serotonin receptors lowers blood pressure in spontaneously hypertensive rats. Salvati P, et al. Drugs 1988;36 Suppl 1:105–9
Preparation and physicochemical properties of uracil derivatives with potential biological activity. Pecorari P, et al. Farmaco [Sci] 1988 Apr;43(4):311–8
The SO4– –induced oxidation of 1,3,6–trimethyluracil and 1,3–dimethylthymine by potassium peroxodisulphate and oxygen in aqueous solution: an interesting contrast. von Sonntag C, et al. Free Radic Res Commun 1989;6(2–3):111–2
Combination therapy (monomycine and methyluracil) in leishmaniasis cutis. Hossain MZ. Int J Dermatol 1988 Dec;27(10):720–2
Purification and characterization of 5–hydroxymethyluracil–DNA glycosylase from calf thymus. Its possible role in the maintenance of methylated cytosine residues. Cannon–Carlson SV, et al. J Biol Chem 1989 Aug 5;264(22):13306–12
Ester and related derivatives of ring N–pentafluorobenzylated 5–hydroxymethyluracil. Hydrolytic stability, mass spectral properties, and trace detection by gas chromatography–electron–capture detection, gas chromatography–electron–capture negative ion mass spectrometry, and moving–belt liquid chromatography–electron–capture negative ion mass spectrometry. Kresbach GM, et al. J Chromatogr 1989 Aug 4;476:423–38
Acetylator phenotypes of Saudi Arabians by a simplified caffeine metabolites test. el–Yazigi A, et al. J Clin Pharmacol 1989 Mar;29(3):246–50
Potentiation of the antitumor effect of 5–fluoro–2'–deoxyuridine esters in combination with acyclothymidine esters on L1210 in mice via oral administration. Kawaguchi T, et al. J Pharm Sci 1988 Nov;77(11):939–43
Study on the renal and cardiovascular activities of aminouracil derivatives. Mustafa AA, et al. Pharm Res 1989 May;6(5):394–8
Effects of N1,N3–diallyluracil and N1,N3–diallylthymine on hepatic drug–metabolizing enzymes of mice. Tateoka Y, et al. Res Commun Chem Pathol Pharmacol 1989 Apr;64(1):135–43
Mutagenicity of antiviral substances of nucleobase analogue type in Salmonella typhimurium employing metabolic activation by mouse liver homogenate or cell–free plant extracts. el–Tarras A, et al. Zentralbl Mikrobiol 1989;144(3):191–6
[Use of multicomponent ointments on a hydrophilic base in the prevention and treatment of postpartum endometritis] Isaeva AD, et al. Akush Ginekol (Mosk) 1989 Mar;(3):58–61 (Eng. Abstr.) (Rus)
[Hydration of complementary 9–methyladenine.1–methyluracil pairs at low temperatures according to data from field mass spectrometry] Sukhodub LF, et al. Biofizika 1989 Mar–Apr;34(2):181–6 (Eng. Abstr.) (Rus)
[The effect of oxymethacil on the level of membrane–bound calcium in the cerebral cortex under the action of corazol] Samollov MO, et al. Dokl Akad Nauk SSSR 1989;304(5):1269–71 (Rus)
[Experience with using ultrasonics and methyluracil in the complex treatment of children with non–obstructive pyelonephritis] Bozhenov IuA, et al. Pediatriia 1989;(2):94–5 (Rus)
[Use of multiple–component ointments on a hydrophilic base for treating suppurative inflammatory processes of the oral cavity] Kirsanov PV, et al. Stomatologiia (Mosk) 1988 Nov–Dec;67(6):11–2 (Eng. Abstr.) (Rus)
[Diucifon and dimocifon in the combined therapy of leprosy (14–year observation)] Goloshchapov NM, et al. Vestn Dermatol Venerol 1988;(7):18–22 (Eng. Abstr.) (Rus)

ANALYSIS

[Blood and tumor levels of tegafur, 5-fluorouracil, and uracil] Takeshita T, et al. **Gan To Kagaku Ryoho** 1988 Nov; 15(11):3053–8 (Eng. Abstr.) (Jpn)

METABOLISM

Interactions of Escherichia coli SO–187 tRNA(IVal) with Bacillus stearothermophilus valine-tRNA synthetase studied by 13C-NMR. Schweizer MP, et al. **Biochim Biophys Acta** 1989 Aug 14;1008(3):293–300

Conjugal transfer of penicillin resistance plasmids to proline–citrulline–uracil dependent strains of Neisseria gonorrhoeae. Mavrommati L, et al. **J Antimicrob Chemother** 1989 Mar;23(3):335–9

Selection and characterization of ura5 mutants of Histoplasma capsulatum. Worsham PL, et al. **Mol Gen Genet** 1988 Oct;214(2):348–52

PHARMACOKINETICS

[Pre- and post-operative adjuvant chemotherapy of colorectal cancer. Part 1. Drug concentration in tissues following UFT administration] Tomita M, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3239–43 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

[Effect of uracil on the both reactions, 5-fluorouracil degradation into 2-fluoro-beta-alanine and 5-fluorouracil splitting from tegafur in human tumor] Kono A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2663–5 (Jpn)

RADIATION EFFECTS

Radiation-induced release of undamaged uracil from polyuridylic acid and the formation of phosphomonoester end groups in irradiated polynucleotides. Deeble DJ, et al. **Free Radic Res Commun** 1989;6(2–3):133–5

TOXICITY

Summation effect of uracil on the two-stage and multistage models of urinary bladder carcinogenesis in F344 rats initiated by N-butyl-N-(4-hydroxybutyl)nitrosamine. Masui T, et al. **Carcinogenesis** 1988 Nov;9(11):1981–5

Strong promoting activity by uracil on urinary bladder carcinogenesis and a possible inhibitory effect on thyroid tumorigenesis in rats initiated with N-methyl-N-nitrosourea. Masui T, et al. **Carcinogenesis** 1989 Aug;10(8):1471–4

URACIL NUCLEOTIDES

AraUTP-Affi-Gel 10: a novel affinity absorbent for the specific purification of DNA polymerase alpha-primase. Izuta S, et al. **Anal Biochem** 1988 Oct;174(1):318–24

Synthesis and characterization of 5-[(4-Azidophenacyl)thio]uridine 5'-triphosphate, a cleavable photo-cross-linking nucleotide analogue. Hanna MM, et al. **Biochemistry** 1989 Jul 11;28(14):5814–20

ANALOGS & DERIVATIVES

Structure determination of the UDP-disaccharide fragment of cytoplasmic cofactor isolated from Methanobacterium thermoautotrophicum. Marsden BJ, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1404–10

Synthesis and characterization of 5-[(4-Azidophenacyl)thio]uridine 5'-triphosphate, a cleavable photo-cross-linking nucleotide analogue. Hanna MM, et al. **Biochemistry** 1989 Jul 11;28(14):5814–20

Binding interactions between yeast tRNA ligase and a precursor transfer ribonucleic acid containing two photoreactive uridine analogues. Tanner NK, et al. **Biochemistry** 1988 Nov 29;27(24):8852–61

ANALYSIS

Identification of 6-azauridine triphosphate in L1210 cells and its possible relevance to cytotoxicity. Wotring LL, et al. **Cancer Res** 1989 Jan 15;49(2):289–94

BIOSYNTHESIS

Glomerular uracil nucleotide synthesis. Cortes P, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F635–46

Glomerular uracil nucleotide synthesis: effects of diabetes and protein intake. Cortes P, et al. **Am J Physiol** 1988 Oct; 255(4 Pt 2):F647–55

CHEMICAL SYNTHESIS

1-beta-D-arabinofuranosyl-5-(E)-(4-azidostyryl)-uracil 5'-triphosphate: synthesis and utilization as a photoaffinity labeling reagent for DNA polymerase alpha from cherry salmon, Oncorhynchus masou. Izuta S, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):514–9

ISOLATION & PURIFICATION

[Preparation of homologs of oligoribouridylic acid by selective partial hydrolysis of RNA] Schott H. **J Chromatogr** 1988 Jul 8;445(1):155–74 (Eng. Abstr.) (Ger)

METABOLISM

Uracil ribonucleotide metabolism in rat and human glomerular epithelial and mesangial cells. Dumler F, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C712–8

Experimental charge measurement at leaving oxygen in the bovine ribonuclease A catalyzed cyclization of uridine 3'-phosphate aryl esters. Davis AM, et al. **Biochemistry** 1988 Dec 13;27(25):9042–7

Interaction of cytidine 3'-monophosphate and uridine 3'-monophosphate with ribonuclease a at the denaturation temperature. Schwarz FP. **Biochemistry** 1988 Nov 1; 27(22):8429–36

Spectroscopic studies on the mode of binding of ATP, UTP and alpha-amanitin with yeast RNA polymerase II. Bhargava P, et al. **FEBS Lett** 1988 Dec 5;241(1–2):33–7

[Display of 8-hydroxy-GTP substrate properties of UTP in the reaction of polynucleotide synthesis catalyzed by RNA-polymerase from Escherichia coli in the presence of poly[d(AT).d(AT)] template] Bruskov VI, et al. **Mol Biol (Mosk)** 1988 May-Jun;22(3):726–30 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

The transport and metabolism of the uridine mononucleotides by rat jejunum in vitro. Bronk JR, et al. **J Physiol (Lond)** 1989;408:129–35

PHARMACOLOGY

Activation of NADPH oxidase by purine and pyrimidine nucleotides involves G proteins and is potentiated by chemotactic peptides. Seifert R, et al. **Biochem J** 1989 May 1;259(3):813–9

Stimulation of thromboxane release by extracellular UTP and ATP from perfused rat liver. Role of icosanoids in mediating the nucleotide responses. Häussinger D, et al. **Eur J Biochem** 1988 Dec 1;178(1):249–56

In the presence of CTP, UTP becomes an allosteric inhibitor of aspartate transcarbamoylase. Wild JR, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):46–50

PHYSIOLOGY

Enhancement of intracellular calcium concentration by extracellular ATP and UTP in Madin Darby Canine Kidney cells. Paulmichl M, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1139–43

URACIL POLYNUCLEOTIDES see POLY U

URAGOGA see IPECAC

URALENIC ACID see GLYCYRRHETINIC ACID

URANIUM

Reduction of airborne radioactive dust by means of a charged water spray. Bigu J, et al. **Am Ind Hyg Assoc J** 1989 Jul; 50(7):336–45

Relationship of 220Rn and 222Rn progeny levels in Canadian underground U mines. Bigu J. **Health Phys** 1988 Sep; 55(3):525–32

Plant/soil concentration ratios of 226Ra for contrasting sites around an active U mine-mill. Ibrahim SA, et al. **Health Phys** 1988 Dec;55(6):903–10

Comments on Bigu's 'Relationship of 220Rn and 222Rn Progeny Levels in Canadian Underground U Mines' [letter] Johnson JR. **Health Phys** 1989 Jul;57(1):210

Health implications of radionuclide levels in cattle raised near U mining and milling facilities in Ambrosia Lake, New Mexico. Lapham SC, et al. **Health Phys** 1989 Mar; 56(3):327–40

Effects of vegetation, a clay cap and environmental variables on 222Rn fluence rate from reclaimed U mill tailings. Morris RC, et al. **Health Phys** 1989 Apr;56(4):431–40

Radon progeny exposure and lung cancer risk in New Mexico U miners: a case-control study. Samet JM, et al. **Health Phys** 1989 Apr;56(4):415–21

Bias in United States U miners' exposure data. Schiager KJ. **Health Phys** 1989 Jul;57(1):169–70

Lung cancer mortality among nonsmoking uranium miners exposed to radon daughters. Roscoe RJ, et al. **JAMA** 1989 Aug 4;262(5):629–33

ADMINISTRATION & DOSAGE

Behaviour of spherical and irregular (U,Pu)O2 particles after inhalation or intratracheal instillation in rat lung and during in vitro culture with bovine alveolar macrophages. Müller HL, et al. **Int J Radiat Biol** 1989 May;55(5):829–42

ADVERSE EFFECTS

Uranium effects—an "enlightening" exchange [letter] Lieben J. **J Occup Med** 1981 Mar;23(3):156

Mortality among men employed between 1943 and 1947 at a uranium-processing plant. Polednak AP, et al. **J Occup Med** 1981 Mar;23(3):169–78

ANALYSIS

Determination of U in human tissues by delayed neutron activation analysis. Gonzales ER, et al. **Health Phys** 1988 Dec;55(6):927–32

Concentrations of U and Po in animal feed supplements, in poultry meat and in eggs. Izak-Biran T, et al. **Health Phys** 1989 Mar;56(3):315–9

Uranium in the tissues of an occupationally exposed individual. Kathren RL, et al. **Health Phys** 1989 Jul; 57(1):17–21

Utilization of femoral head for estimating the skeletal burden of U and Pu in humans. Singh NP, et al. **Health Phys** 1989 Mar;56(3):341–3

Differences in cancer mortality rates in Ohio communities with respect to uraniferous geology. Dzik AJ. **Ohio Med** 1989 Jul;85(7):566–8

The simultaneous imaging of boronated tissue sections and the location of fissionable actinide particles in CR-39 solid state track detector, utilising a neutron-induced autoradiographic technique. Morris KJ, et al. **Phys Med Biol** 1988 Oct;33(10):1195–203

[A method of determining the levels of uranium, thorium and radium in biological specimens] Shalaeva MP, et al. **Gig Tr Prof Zabol** 1989;(3):49–51 (Rus)

METABOLISM

Tetracycline in uranyl nitrate intoxication: its action on renal damage and U retention in bone. Guglielmotti MB, et al. **Health Phys** 1989 Sep;57(3):403–5

The effects of repeated parenteral administration of chelating agents on the distribution and excretion of uranium. Domingo JL, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr;64(1):161–4

PHARMACOKINETICS

Linearity of the accumulation of various dosages of uranium in the major organs of mature male Japanese quail. Effect of various doses of estradiol-17 beta. Kupah CC, et al. **Comp Biochem Physiol [C]** 1989;92(1):55–9

A review of parameter values used to assess the transport of plutonium, uranium, and thorium in terrestrial food chains. Garten CT Jr. **Environ Res** 1978 Dec;17(3):437–52 (44 ref.)

Lung dissolution of uranium tetrafluoride in rats and baboons. Comparison with dissolution by alveolar macrophages in culture and chemical dissolution. André S, et al. **Hum Toxicol** 1989 Mar;8(2):111–9

Studies of alveolar cell morphometry and mass clearance in the rat lung following inhalation of an enriched uranium dioxide aerosol. Morris KJ, et al. **Radiat Environ Biophys** 1989;28(2):141–54

[Levels of internal irradiation of the population of the RSFSR by natural alpha emitters] Ponikarova TM, et al. **Gig Sanit** 1989 Apr;(4):22–5 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Relationship between kidney burden and radiation dose from chronic ingestion of U: implications for radiation standards for the public. Kocher DC. **Health Phys** 1989 Jul;57(1):9–15 (27 ref.)

Uranyl nitrate-induced acute renal failure in rats: effect of atrial natriuretic peptide on renal function. Heidbreder E, et al. **Kidney Int Suppl** 1988 Sep;25:S79–82

Presynaptic action of uranyl nitrate on the phrenic nerve-diaphragm preparation of the mouse. Lin RH, et al. **Neuropharmacology** 1988 Aug;27(8):857–63

POISONING

The behavior and chemical toxicity of U in the kidney: a reassessment. Leggett RW. **Health Phys** 1989 Sep; 57(3):365–83 (164 ref.)

Clinico-biochemical studies on acute toxic nephropathy in goats due to uranyl nitrate. Dash PK, et al. **Vet Hum Toxicol** 1989 Feb;31(1):5–9

TOXICITY

Evaluation of the oral toxicity of uranium in a 4-week drinking-water study in rats. Ortega A, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):935–41

The effects of uranium on reproduction, gestation, and postnatal survival in mice. Paternain JL, et al. **Ecotoxicol Environ Safety** 1989 Jun;17(3):291–6

Reversible uranyl fluoride nephrotoxicity in the Long Evans rat. Diamond GL, et al. **Fundam Appl Toxicol** 1989 Jul; 13(1):65–78

Tetracycline in uranyl nitrate intoxication: its action on renal damage and U retention in bone. Guglielmotti MB, et al. **Health Phys** 1989 Sep;57(3):403–5

The mechanism of the transient depression of the erythropoietic rate induced in the rat by a single injection of uranyl nitrate. Giglio MJ, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):260–5

The developmental toxicity of uranium in mice. Domingo JL, et al. **Toxicology** 1989 Apr;55(1–2):143–52

[Quantitative assessment of inhalation exposure to various transuranium radionuclide compounds by integral nonstochastic criteria] Kalmykova ZI, et al. **Radiobiologia** 1989 Jul-Aug;29(4):515–9 (Eng. Abstr.) (Rus)

URINE

Correlation between airborne U exposure and U urinalysis results at Bear Creek Uranium. Chase GR. **Health Phys** 1989 Feb;56(2):195–9

Determination of U in urine: comparison of ICP–mass spectrometry and delayed neutron assay. Gladney ES, et al. **Health Phys** 1989 Jul;57(1):171–5

URANYL NITRATE see under **URANIUM**

URATE OXIDASE

ANALYSIS

Immunocytochemical localization of liver-specific proteins in pancreatic hepatocytes of rat. Usuda N, et al. **Eur J Cell Biol** 1988 Jun;46(2):299–306

BLOOD

A radiochemical–high-performance liquid chromatographic assay for urate oxidase in human plasma. Greenberg ML, et al. **Anal Biochem** 1989 Feb 1;176(2):290–3

GENETICS

The nucleotide sequence of a full length cDNA clone encoding rat liver urate oxidase. Alvares K, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):991–5

A human genomic sequence highly homologous to the 3'-untranslated region of rat uricase mRNA. Motojima K, et al. **Biochem Biophys Res Commun** 1988 Sep 30; 155(3):1266–70

Cloning of rabbit uricase cDNA reveals a conserved carboxy-terminal tripeptide in three species. Motojima K, et al. **Biochim Biophys Acta** 1989 Jun 1;1008(1):116–8

Cloning and sequence analysis of cDNA for rat liver uricase. Motojima K, et al. **J Biol Chem** 1988 Nov 15; 263(32):16677–81

Isolation and sequence determination of a cDNA clone for rat peroxisomal urate oxidase: liver-specific expression in the rat. Reddy PG, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9081–5

IMMUNOLOGY

Comparative immunology of mammalian uricase using anti-hog liver uricase. Htay HH, et al. **Comp Biochem Physiol [B]** 1989;92(3):583–6

Uricase protein sequences: conserved during vertebrate evolution but absent in humans. Varela-Echavarría A, et al. **FASEB J** 1988 Dec;2(15):3092–6

METABOLISM

On the compartmentalization of catalase, fatty acyl-CoA oxidase and urate oxidase in mammalian livers, and the influence of clofibrate treatment on this microlocalization. Hemsley A, et al. **Mol Cell Biochem** 1988 Oct;83(2):187–94

URBAN DEVELOPMENT see **URBAN RENEWAL**

URBAN HEALTH see under **HEALTH**

URBAN PLANNING see **CITY PLANNING**

URBAN POPULATION

Comparison of the attack rates of acute myocardial infarction in two Belgian towns. Berghmans L, et al. **Acta Med Scand Suppl** 1988;728:90–4

Cardiovascular risk factor profile and mortality in two Scottish cities. Smith WC, et al. **Acta Med Scand Suppl** 1988;728:113–8

An epidemiological survey of age-related dementia in an urban area of Beijing. Li G, et al. **Acta Psychiatr Scand** 1989 Jun;79(6):557–63

Distribution of major mental disorders in an US metropolis. Escobar JI, et al. **Acta Psychiatr Scand Suppl** 1988; 344:45–53

Evaluation of a drug abuse prevention program: a field experiment. LoSciuto L, et al. **Addict Behav** 1988; 13(4):337–51

Coming of age on the city streets in 19th-century America. Teeter R. **Adolescence** 1988 Winter;23(92):909–12

Inner-city substance abuse patterns: a study of psychiatric inpatients. Fernandez-Pol B, et al. **Am J Drug Alcohol Abuse** 1988;14(1):41–50

Estimating population prevalence of human immunodeficiency virus infection in urban areas with high rates of intravenous drug use: a model of the Bronx in 1988. Drucker E, et al. **Am J Epidemiol** 1989 Jul; 130(1):133–42

The incidence of active tuberculosis in a large urban area. Enarson DA, et al. **Am J Epidemiol** 1989 Jun; 129(6):1268–76

HIV infection in patients with tuberculosis in Kinshasa, Zaire. Colebunders RL, et al. **Am Rev Respir Dis** 1989 May; 139(5):1082–5

Lymphadenopathy in an inner-city population consisting principally of intravenous drug abusers with suspected acquired immunodeficiency syndrome. Hewlett D Jr, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1275–9

Financial analysis of an inner-city helicopter service: charges versus collections. Saywell RM Jr, et al. **Ann Emerg Med** 1989 Jan;18(1):21–5

Osmolalities of bottle- and breast-milk fed to poor urban Brazilian infants. Dorea JG, et al. **Ann Trop Paediatr** 1988 Sep;8(3):181–3

Comparison of fecal microflora of elderly persons in rural and urban areas of Japan. Benno Y, et al. **Appl Environ Microbiol** 1989 May;55(5):1100–5

The prevalence of specific psychiatric disorders among homeless individuals in the inner city of Los Angeles. Koegel P, et al. **Arch Gen Psychiatry** 1988 Dec; 45(12):1085–92

Bulimia: symptoms and syndromes in an urban population. Ben-Tovim DI, et al. **Aust N Z J Psychiatry** 1989 Mar; 23(1):73–80

Giardia carriage in aboriginal and non-aboriginal children attending urban day-care centres in South Australia. Grimmond TR, et al. **Aust Paediatr J** 1988 Oct;24(5):304–5

Breast feeding patterns of working women in the Dhaka metropolitan area. Nessa F, et al. **Bangladesh Med Res Counc Bull** 1988 Jun;14(1):1–8

High prevalence of diabetes in an urban population in south India. Ramachandran A, et al. **BMJ** 1988 Sep 3; 297(6648):587–90

Cervical screening in an inner city area: response to a call system in general practice. Shroff KJ, et al. **BMJ** 1988 Nov 19;297(6659):1317–8

Exercise levels and resting pulse rate in the community. Laird GD, et al. **Br J Sports Med** 1988 Dec;22(4):148–52

Study on the epidemiological follow-up of tuberculosis in the municipality area of Wuhan (China). Zheng Y, et al. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):22–3

Urban pedestrian safety. Retting RA. **Bull N Y Acad Med** 1988 Sep–Oct;64(7):810–5

Lung cancer and air pollution in an industrial city—a geographical analysis. Shannon HS, et al. **Can J Public Health** 1988 Jul–Aug;79(4):255–9

Prevalence and severity of coronary atherosclerosis in males living in Mexico City: the Mexico City project. Cueto-García L, et al. **Cardiology** 1988;75(5):387–92

The geographic distribution of child abuse in an inner city borough. Cotterill AM. **Child Abuse Negl** 1988;12(4):461–7

Dental caries in urban and rural areas in Mozambique. Olsson B, et al. **Community Dent Health** 1989 Jun;6(2):139–45

Health status and medical consumption of rural and urban elderly. Perenboom RJ, et al. **Compr Gerontol [B]** 1988 Dec;2(3):124–8

Breastfeeding pattern and the duration of lactational amenorrhea in urban Chilean women. Díaz S, et al. **Contraception** 1988 Jul;38(1):37–51

Stability and change in an urban homeless population. Lee BA. **Demography** 1989 May;26(2):323–34

Components of change in migration and destination-propensity rates for metropolitan and nonmetropolitan areas: 1935–1980. Wilson FD. **Demography** 1988 Feb;25(1):129–39

A comparison of alcohol and drug use patterns of homosexual and heterosexual men: the San Francisco Men's Health Study. Stall R, et al. **Drug Alcohol Depend** 1988 Oct; 22(1–2):63–73

An evaluation of organophosphate poisoning cases in an urban setting in Zimbabwe. Nhachi CF. **East Afr Med J** 1988 Sep;65(9):588–92

Road traffic accidents in Kaduna metropolis: a-3 month survey. Obembe A, et al. **East Afr Med J** 1988 Sep; 65(9):572–7

Ventilatory lung function and chronic chest symptoms among the inhabitants of urban areas with various levels of acid aerosols: prospective study in Cracow. Jedrychowski W, et al. **Environ Health Perspect** 1989 Feb; 79:101–7

Hepatitis B virus infection among health care workers at an urban teaching hospital in southern Italy: a low occupational hazard? Antoniello S, et al. **Eur J Epidemiol** 1989 Jun;5(2):228–33

Electron microscopic analysis of asbestos body cores from the Belgian urban population. Moulin E, et al. **Eur Respir J** 1988 Oct;1(9):818–22

Community scavenger hunts. Osborn EH, et al. **Fam Med** 1989 May–Jun;21(3):222

Beliefs about contraceptive sterilization among low-income urban women. Cushman LF, et al. **Fam Plann Perspect** 1988 Sep–Oct;20(5):218–21, 233

Sterilization regret among women in metropolitan Montreal. Marcil-Gratton N. **Fam Plann Perspect** 1988 Sep–Oct; 20(5):222–7

The Baltimore pregnancy prevention program for urban teenagers. I. How did it work? Zabin LS, et al. **Fam Plann Perspect** 1988 Jul–Aug;20(4):182–7

The Baltimore pregnancy prevention program for urban teenagers. II. What did it cost? Zabin LS, et al. **Fam Plann Perspect** 1988 Jul–Aug;20(4):188–92

Geographic differences in digoxin inactivation, a metabolic activity of the human anaerobic gut flora. Mathan VI, et al. **Gut** 1989 Jul;30(7):971–7

Community adjustment of chronic schizophrenic patients in urban and rural settings. Davies MA, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):824–30

HLA antigens in the Uitoto Indians and an urban population of Colombia. Bernal JE, et al. **Hum Hered** 1988; 38(6):337–40

An epidemiological study of malignant melanoma in greater Bombay. Jussawalla DJ, et al. **Indian J Cancer** 1988 Jun; 25(2):70–6

Childhood leprosy in Bombay: a clinico-epidemiological study. Nadkarni NJ, et al. **Indian J Lepr** 1988 Apr; 60(2):173–88

Leprosy survey in industries in Bombay. Revankar CR, et al. **Indian J Lepr** 1989 Jul;61(3):367–72

Multidrug therapy in multibacillary leprosy cases in an urban context—a study in Bombay. Sheela GR, et al. **Indian J Lepr** 1989 Apr;61(2):190–5

Cancer among New York men at risk of acquired immunodeficiency syndrome. Biggar RJ, et al. **Int J Cancer** 1989 Jun 15;43(6):979–85

Diet and nasopharyngeal carcinoma: a case-control study in Guangzhou, China. Yu MC, et al. **Int J Cancer** 1989 Jun 15;43(6):1077–82

Group psychotherapy with preadolescent sexual abuse victims: literature review and description of an inner-city group. Kitchur M, et al. **Int J Group Psychother** 1989 Jul; 39(3):285–310 (42 ref.)

Geographical variation in the seasonality of suicide. Micciolo R, et al. **J Affective Disord** 1988 Sep–Oct;15(2):163–8

Influence of site of obstetric care and delivery on pregnancy management and outcome. Chaska BW, et al. **J Am Board Fam Pract** 1988 Jul–Sep;1(3):152–63

Health services utilization patterns of two urban communities in Abha, Saudi Arabia. Abu-Zeid HA. **J Community Health** 1989 Summer;14(2):65–77

Height and weight of Thai children: high socioeconomic group of the some selected urban population. Chavalittamrong B, et al. **J Med Assoc Thai** 1989 Apr; 72(4):185–92

Urban-suburban differences in the incidence of low birthweight in a metropolitan black population. Ahmed F. **J Natl Med Assoc** 1989 Aug;81(8):849–55

Cardiovascular care in the urban melting pot. Peniston RL. **J Natl Med Assoc** 1989 Jun;81(6):637–42

Preventable pediatric trauma deaths in a metropolitan region. Dykes EH, et al. **J Pediatr Surg** 1989 Jan;24(1):107–10; discussion 110–1

Efficiency and the supply of hospital beds in metropolitan areas. Rohrer JE. **J Public Health Policy** 1988 Autumn; 9(3):393–402

Norfolk general practice: a comparison of rural and urban doctors. Fearn RM. **J R Coll Gen Pract** 1988 Jun; 38(311):270–3

Predictors of reduction and cessation of drinking in community-dwelling men: results from the normative aging study. Hermos JA, et al. **J Stud Alcohol** 1988 Jul; 49(4):363–8

Drinking-related locus of control and the drinking status of urban Native Americans. Mariano AJ, et al. **J Stud Alcohol** 1989 Jul;50(4):331–8

An analysis of 1,423 facial fractures in 788 patients at an urban trauma center. Scherer M, et al. **J Trauma** 1989 Mar; 29(3):388–90 (15 ref.)

A profile of urban adult pedestrian trauma. Vestrup JA, et al. **J Trauma** 1989 Jun;29(6):741–5

Nutritional anaemia in the urban poor: a community-based study of under fives in an Indian slum. Malin AS, et al. **J Trop Pediatr** 1988 Oct;34(5):257–9

The impact of migration on air quality dose-response functions: a case study of Jacksonville, Florida. Erfani G, et al. **JAPCA** 1988 Jul;38(7):917–20

Noise levels and the sources of noise pollution in Karachi. Zaidi SH. **JPMA** 1989 Mar;39(3):62–5

Case detection; are the present survey methods effective? A review of leprosy surveys in Bombay. Bhatki WS. **Lepr Rev** 1988 Sep;59(3):239–44

Leprosy control in a Bombay slum—a general assessment. Goyder EC. **Lepr Rev** 1988 Sep;59(3):245–53

The Bucharest multifactorial prevention trial of coronary heart disease. General methodology and risk factor correction after five year follow-up (1971–1977). Steinbach M, et al. **Med Interne** 1982 Apr–Jun;20(2):117–36

Coronary risk factors among Malaysian male executives in two urban areas. Teo PH, et al. **Med J Malaysia** 1988 Jun; 43(2):125–33

Comparative study of sister-chromatid exchanges and chromosomal aberrations induced by airborne particulates from an urban and a highly industrialized location in human lymphocyte cultures. Hadnagy W, et al. **Mutat Res** 1989 Jan–Feb;225(1–2):27–32

Tajikstan struck by earthquake [news] Rich V. **Nature** 1989 Jan 26;337(6205):293

Midsummer days and tropical nights in Tokyo [news] Swinbanks D. **Nature** 1989 May 25;339(6222):242

Use of smokeless tobacco by age, race, and gender in ten standard metropolitan statistical areas of the southeast United States. Bauman KE, et al. **NCI Monogr** 1989; (8):35–7

Effects of cultural background and education on handedness. Ardila A, et al. **Neuropsychologia** 1989;27(6):893–7

Serving the chronically mentally ill in an urban setting. The Massachusetts Mental Health Center experience. **New Dir Ment Health Serv** 1988 Fall;(39):1–107

Factors affecting prescribed medication compliance of the urban homeless adult. Nyamathi A, et al. **Nurse Pract** 1989 Aug;14(8):47–8, 51–2, 54

A modernity score for individuals in Melanesian society. King H, et al. **P N G Med J** 1989 Mar;32(1):11–22

Violent death in the pediatric age group: rural and urban differences. Gausche M, et al. **Pediatr Emerg Care** 1989 Mar;5(1):64–7

Demographic factors influencing the initiation of breast-feeding in an Israeli urban population. Birenbaum E, et al. **Pediatrics** 1989 Apr;83(4):519–23

Acquired immunodeficiency syndrome and adolescents: knowledge, attitudes, beliefs, and behaviors in a New York City adolescent minority population. Goodman E, et al. **Pediatrics** 1989 Jul;84(1):36–42

Tuberculosis in the pediatric population of Houston, Texas. Starke JR, et al. **Pediatrics** 1989 Jul;84(1):28–35

Development of a nutrition education program for a blue collar community. Balshem M, et al. **Prog Clin Biol Res** 1988;278:65–76

Differences between community and geographically distant breast cancer patients treated at an urban medical center. Timony D, et al. **Prog Clin Biol Res** 1989;293:373–8

Expectancies of rural and urban parents applying for children's services at community mental health centers. Munger RL. **Psychol Rep** 1988 Dec;63(3):729–30

Somatization symptoms in the community: a rural/urban comparison. Swartz M, et al. **Psychosomatics** 1989 Winter; 30(1):44–53

Program for the elimination of urban rabies in Latin America. Escobar Cifuentes E. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S689–92

Some characteristics of the morbidity indices of the population of Budapest. Greff L, et al. **Sante Publique (Bucur)** 1988 Jul–Sep;31(3):231–6

Reproductive behaviour of two groups of young women (Arroyo Naranjo municipality, city of Havana, Cuba, 1981). Rojo N, et al. **Sante Publique (Bucur)** 1988 Oct–Dec; 31(4):303–13

Mutagenic activity in drinking water prepared from groundwater: a survey of ten cities in The Netherlands. Kool HJ, et al. **Sci Total Environ** 1988 Nov 1;77(1):51–60

Blood lead levels of the general populations of three Chinese cities. Qu JB, et al. **Sci Total Environ** 1988 Nov 1; 77(1):35–44

Heavy metal concentrations in urban snow as an indicator of air pollution. Sakai H, et al. **Sci Total Environ** 1988 Dec; 77(2–3):163–74

Size distribution of atmospheric aerosols in urban sites in India. Tripathi RM, et al. **Sci Total Environ** 1988 Dec; 77(2–3):237–44

The stability of the ecological distribution of the incidence of treated mental disorders in the city of Mannheim. Weyerer S, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Mar;24(2):57–62

Penetrating thoracic aortic injuries: rare but potentially salvageable sequelae of urban warfare. Timberlake GA, et al. **South Med J** 1989 Aug;82(8):970–2 (18 ref.)

Population growth of large metropolitan areas. **Stat Bull Metrop Insur Co** 1989 Apr–Jun;70(2):32–5

Urban–rural difference in the acceptance of mass health examination in north–eastern Japan. Ikeda M, et al. **Tohoku J Exp Med** 1989 May;158(1):57–72

Riboflavin, folate and vitamin C status of Gambian women during pregnancy: a comparison between urban and rural communities. Reddy VA, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):1033–7

Epidemiologic features of influenza in a large urban centre (B.) in Romania, in 1987. Măgureanu E, et al. **Virologie** 1988 Jul–Sep;39(3):173–83

Patterns of substance use and abuse in inner–city adolescent medical patients. Earls F, et al. **Yale J Biol Med** 1988 May–Jun;61(3):233–42

[Effect of various factors on total serum cholesterol based on the data from an epidemiologic study in 4 large communities of Bulgaria] Merdzhanov Ch, et al. **Vutr Boles** 1988;27(6):70–9 (Eng. Abstr.) **(Bul)**

[The survival and treatment of patients with systemic connective tissue diseases (research based on data from the II Internal Medicine Department of the Main Community Hospital in Stara Zagora for 1976–1986)] Mineva S, et al. **Vutr Boles** 1988;27(6):66–9 (Eng. Abstr.) **(Bul)**

[Comparison of the utilization of therapeutic and preventive care in men and women over 60 years of age living in a large city] Zavázalova H. **Cesk Zdrav** 1989 May; 37(5):215–23 (Eng. Abstr.) **(Cze)**

[Psychiatric admissions among city bus drivers. A prospective study] Netterstrøm B, et al. **Ugeskr Laeger** 1989 Jan 30;151(5):302–5 (Eng. Abstr.) **(Dan)**

[Epidemiologic survey of orodental health in Fada N'Gourma (Burkina Faso)] Abellard J, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jan; 32(1):31–8 (Eng. Abstr.) **(Fre)**

[A panorama of urban exposure to lead. Temporal development of domestic sources and auto Pb and polarization of risk according to age and habitat] Steenhout A. **J Toxicol Clin Exp** 1988 May–Jun;8(3):175–91 (40 ref.) (Eng. Abstr.) **(Fre)**

[Malaria morbidity in rural and urban areas in Senegal] Gaye O, et al. **Med Trop (Mars)** 1989 Jan–Mar;49(1):59–62 (Eng. Abstr.) **(Fre)**

[Incidence of cerebrovascular accidents in a medium–sized French town] Giroud M, et al. **Rev Epidemiol Sante Publique** 1988;36(4–5):360–8 (Eng. Abstr.) **(Fre)**

[Urinary excretion of fluorides in schoolchildren of Lausanne and Geneva in relation to salt fluoridation] Menghini G, et al. **Schweiz Monatsschr Zahnmed** 1989;99(3):292–8 (Eng. Abstr.) **(Fre)**

[Sector related inner city distribution of total cancer mortality in Hamburg] Thiele W. **Off Gesundheitswes** 1988 Oct; 50(10):584–8 (Eng. Abstr.) **(Ger)**

[Late results with hybrid dentures in low–income patients. An investigation at the Cantonal Public Dental Clinic of Zurich] Brunner T, et al. **Schweiz Monatsschr Zahnmed** 1989;99(2):166–73 (Eng. Abstr.) **(Ger)**

[Reduced incidence of gingivitis in Zurich schoolchildren] Curilović Z, et al. **Schweiz Monatsschr Zahnmed** 1989; 99(4):419–23 (Eng. Abstr.) **(Ger)**

[Dental status and treatment needs of 66–year–old inhabitants of the city of Zurich] Imfeld T, et al. **Schweiz Monatsschr Zahnmed** 1988;98(12):1328–35 (Eng. Abstr.) **(Ger)**

[Proliferative retinopathies in diabetes mellitus—cross sectional study in the Erfurd city and rural district] Pissarek D, et al. **Z Gesamte Inn Med** 1988 Dec 1;43(23):662–6 (Eng. Abstr.) **(Ger)**

[Sugar intake of adults and children in Erfurt] Heinrich R, et al. **Zahn Mund Kieferheilkd** 1988;76(6):605–6 **(Ger)**

[Evaluation of the vaccinal coverage of 1– to 3–year–old children in district 3 of the city of Bucharest by the EVP/WHO method of random sampling] Ion–Nedelcu N, et al. **Rev Ig [Bacteriol]** 1988 Oct–Dec;33(4):327–40 (Eng. Abstr.) **(Rum)**

[An economic evaluation of measles vaccination in District 3 of the city of Bucharest] Ion–Nedelcu N, et al. **Rev Ig [Bacteriol]** 1989 Apr–Jun;34(2):163–8 (Eng. Abstr.) **(Rum)**

[Evaluation on the basis of the rates of secondary attack of whooping cough in families of the vaccination and prophylactic efficacy of pertussis vaccine in 2 districts of the city of Bucharest] Ion–Nedelcu N, et al. **Rev Ig [Bacteriol]** 1988 Oct–Dec;33(4):319–26 (Eng. Abstr.) **(Rum)**

[The risks of transmitting viral hepatitis in a section of the city of Bucharest] Ion–Nedelcu N, et al. **Rev Ig [Bacteriol]** 1989 Apr–Jun;34(2):155–62 (Eng. Abstr.) **(Rum)**

[Sociomedical characteristics of population groups differing in the frequency of alcohol consumption (population research)] Britov AN, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):89–92 (Eng. Abstr.) **(Rus)**

[The demand for the main cardiovascular preparations in the city of Frunze] Golubeva IV, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):93–6 (Eng. Abstr.) **(Rus)**

[Detection of groups at risk for carrying the hemochromatosis gene among unpaid donors in Moscow] Settarova DA, et al. **Gematol Transfuziol** 1988 Oct; 33(10):47–50 **(Rus)**

[Hereditary pathology of the nervous system in the urban population of the Kazakh SSR] Dadali EL, et al. **Genetika** 1988 Aug;24(8):1508–11 (Eng. Abstr.) **(Rus)**

[Medico–genetic study of the population of Kostroma Province. VII. Approaches to the study of the hereditary pathology load in the population of Kostroma] Petrin AN, et al. **Genetika** 1988 Aug;24(8):1462–9 (Eng. Abstr.) **(Rus)**

[Demographic genetic characteristics of the population of a large multiethnic city (the example of Alma–Ata). An analysis of assortative mating and migrations] Sviatova GS, et al. **Genetika** 1988 Jul;24(7):1269–75 (Eng. Abstr.) **(Rus)**

[The effect of economic activities on the fauna and population count of malarial mosquitoes in an industrial city] Zarechnaia SN, et al. **Med Parazitol (Mosk)** 1989 May–Jun; (3):71–2 (Eng. Abstr.) **(Rus)**

[A model of municipal automated screening centers] Bogdanov EV, et al. **Med Tekh** 1988 Nov–Dec;(6):7–16 **(Rus)**

[Comparative evaluation of the pulmonary vital capacity of schoolchildren in the cities of Tyumen and Vladimir] Anchugin BA. **Pediatriia** 1988;(11):109 **(Rus)**

[Cases of heterozygous beta–thalassemia in children living in Moscow] Kuberger MB, et al. **Pediatriia** 1988;(8):88–90 **(Rus)**

[Organization of fluorographic examinations of the population in large cities] Loviagin EV, et al. **Probl Tuberk** 1989;(1):7–12 (Eng. Abstr.) **(Rus)**

[Incidence of joint diseases among an urban juvenile population based on data of an epidemiologic study in various regions of the USSR] Mitchenko AF, et al. **Revmatologiia (Moskva)** 1988 Jul–Sep;(3):16–20 (Eng. Abstr.) **(Rus)**

[The periodontal status of city schoolchildren of the USSR and Finland] Borovskiĭ EV, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):65–8 **(Rus)**

[Effectiveness of outpatient dental care for the schoolchildren of Arkhangelsk] Zakrevskaia SF. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):62–3 **(Rus)**

[The prevalence of ischemic heart disease among an organized population of Novosibirsk] Gafarov VV, et al. **Ter Arkh** 1988;60(12):44–7 (Eng. Abstr.) **(Rus)**

[Morbidity from allergic dermatoses and pruritus in Blagoveshchensk] Mashkillelson AL, et al. **Vestn Dermatol Venerol** 1989;(4):42–4 (Eng. Abstr.) **(Rus)**

[The structure and dynamics of ophthalmic pathology based on office visit data in the city of Kineshma] Kozlova LP, et al. **Vestn Oftalmol** 1988 Nov–Dec;104(6):65–7 **(Rus)**

[The content of food fiber in student diets in Tbilisi] Grigorashvili GZ, et al. **Vopr Pitan** 1988 Sep–Oct;(5):69–70 **(Rus)**

[Experience with the organization of child nutrition in an industrial city] Kharitonova AV, et al. **Vopr Pitan** 1988 Sep–Oct;(5):72–3 **(Rus)**

[Epidemiologic characteristics of hepatitis A morbidity among children from one of the districts of Moscow in 1982–1986] Fedorova GI, et al. **Vopr Virusol** 1988 Nov–Dec;33(6):686–90 (Eng. Abstr.) **(Rus)**

[The frequency of detection of markers of hepatitis virus B infection among the inhabitants of Rustavi, the Georgian SSR] Chubinishvili OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):78–81 (Eng. Abstr.) **(Rus)**

[An outbreak of Legionella infection in Armavir] Pokrovskiĭ VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct; (10):24–7 (Eng. Abstr.) **(Rus)**

[Data on the study of the epidemiology of rotavirus infection in Leningrad] Vashukova SS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):41–5 (Eng. Abstr.) **(Rus)**

[The results of population–based psychopathologic research of paranoid schizophrenia] Alimkhanov ZhA. **Zh Nevropatol Psikhiatr** 1988;88(10):70–6 (Eng. Abstr.) **(Rus)**

[Social and public health data on the living conditions of mental patients in rural and urban localities (prior to illness and in the first illness)] Kosenko VG. **Zh Nevropatol Psikhiatr** 1989;89(1):117–20 (Eng. Abstr.) **(Rus)**

[Study of beta–thalassemia minor in a community of a metropolitan area of Barcelona (letter) (published erratum appears in Rev Clin Esp 1989 Mar;184(4):221)] Buil P, et al. **Rev Clin Esp** 1988 Oct;183(5):283 **(Spa)**

[Underemployment and unemployment among physicians in urban areas of Mexico] Frenk J, et al. **Salud Publica Mex** 1988 Sep–Oct;30(5):691–9 (Eng. Abstr.) **(Spa)**

URBAN RENEWAL

see related
HOUSING

Children in cities—Seattle's KidsPlace program. Aldrich RA. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):84–90

URBANIZATION

Monitoring the metropolitanization process. Fuguitt GV, et al. **Demography** 1988 Feb;25(1):115–28

Importance of construction sites as foci for urban Culex in northern Illinois. Baumgartner DL. **J Am Mosq Control Assoc** 1987 Mar;3(1):26–34

Regional and urbanization differentials in coronary heart disease mortality in the United States, 1968–85. Ingram DD, et al. **J Clin Epidemiol** 1989;42(9):857–68

Changes in China since 1983. Bowen E. **J R Soc Health** 1989 Jun;109(3):89

China—first impressions. Widdicombe E. **J R Soc Health** 1989 Jun;109(3):90–1

The elderly Samoan. Shimamoto Y, et al. **Public Health Nurs** 1988 Dec;5(4):219–21

Urbanisation in South Africa—consequences for health [editorial] Yach D. **S Afr Med J** 1988 Nov 19;74(10):479–80

[Hygiene research in solving the health aspects of urban development] Efremov E, et al. **Probl Khig** 1988;13:3–8 (Eng. Abstr.) **(Bul)**

[Epidemiological surveillance of natural foci of tick–borne encephalitis in the recreational area of a large city (the methodology and results)] Vershinskiĭ BV, et al. **Med Parazitol (Mosk)** 1988 May–Jun;(3):12–7 (Eng. Abstr.) **(Rus)**

HISTORY

Urbanization, occupation and disease in the United States, 1870–1920: the case of New York City. Rosen G. **J Hist Med Allied Sci** 1988 Oct;43(4):391–425

UREA

see related
BLOOD UREA NITROGEN

Apoptotic hepatocytes become insoluble in detergents and chaotropic agents as a result of transglutaminase action. Fesus L, et al. **FEBS Lett** 1989 Mar 13;245(1–2):150–4

Permeability of PEUU membranes: their modification towards blood compatibility. Jayasree G, et al. **J Biomater Appl** 1989 Jan;3(3):405–26

Synthesis and biological activity of isodithiobiurets, dithiobiurets, and dithiazoles. Pandeya SN, et al. **Pharm Res** 1987 Aug;4(4):321–6

ADMINISTRATION & DOSAGE

Effects of urea on the in vitro production of prostaglandins and on urinary excretion in Brattleboro rats. Bojesen E, et al. **Acta Endocrinol (Copenh)** 1989 Apr;120(4):459–65

In vitro effect of protein–free diet on protein nitrogen production in ruminal fluid of Egyptian camel. Mostafa MA, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):618–21

[Therapy of "dry skin" with creams containing urea] Wohlrab W. **Z Hautkr** 1988;63 Suppl 3:20–3 (14 ref.) **(Ger)**

ADVERSE EFFECTS

Occupational irritant contact dermatitis from fibreboard containing urea–formaldehyde resin. Vale PT, et al. **Contact Dermatitis** 1988 Jul;19(1):62

ANALOGS & DERIVATIVES

Inhibition of urea transport in inner medullary collecting duct by phloretin and urea analogues. Chou CL, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F359–65

Iodo–Gen–mediated radioiodination of nucleic acids. Pistyszek MA, et al. **Anal Biochem** 1988 Aug 1;172(2):356–9

Contact sensitivity to diazolidinyl urea (Germall II). Perret CM, et al. **Arch Dermatol Res** 1989;281(1):57–9

Synthesis and biological evaluation of some 1–substituted 3–(2–perimidyl)ureas. Liu KC, et al. **Arch Pharm (Weinheim)** 1988 Jul;321(7):425–6

Stereoselectivity in the urinary excretion of the mercapturates of (R–) and (S–) alpha–bromoisovalerylurea in man. te Koppele JM, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):151–4

Tremorogenesis by LON–954 [N–carbamoyl–2–(2,6–dichlorophenyl) acetamidine hydrochloride]: evidence for the involvement of 5–hydroxytryptamine. Mohanakumar KP, et al. **Brain Res Bull** 1989 Feb;22(2):191–5

Tumor promoting activities of ethylphenylacetylurea and diethylacetylurea, the ring hydrolysis products of barbiturate tumor promoters phenobarbital and barbital, in rat liver and kidney initiated by N–nitrosodiethylamine. Diwan BA, et al. **Carcinogenesis** 1989 Jan;10(1):189–94

Discovery of methoxyacetylcarbamide in the urine of normal adults and phenylketonuric children. Antoshechkin AG, et al. **Clin Chim Acta** 1988 Oct 31;177(3):239–44

Studies on the specificity of the inhibitory action of N,N–diisopropyl–N'–isoamyl–N'–diethylaminoethylurea (P–286 on adrenal catecholamine release in the anaesthetized rat. Malta E, et al. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):815–25

Dose–response sensitization experiments with imidazolidinyl urea. Ziegler V, et al. **Contact Dermatitis** 1988 Sep; 19(3):236–7

Chemotherapy of antimonial compounds in kala–azar infection. Part IV. Further observations on the therapeutic values of urea stibamine. By U.N. Brahmachari, 1922 [classical article] Brahmachari UN. **Indian J Med Res** 1989 Jan;89:393–404

Hemoglobin radiolabeling: in vitro and in vivo comparison of iodine labeling with iodogen and a new method for technetium labeling. Bleeker WK, et al. **Int J Rad Appl Instrum [B]** 1989;16(4):365–9

Conditions of radioiodination with iodogen as oxidizing agent. Saha GB, et al. **Int J Rad Appl Instrum [B]** 1989; 16(4):431–3

Comparison of the iodogen and the microelectrochemical techniques for the radioiodination of monoclonal antibody 140.240. Wong ZM, et al. **Int J Rad Appl Instrum [B]** 1988; 15(5):505–9

Platelet adhesion onto protein–coated and uncoated polyetherurethaneurea having tertiary amino groups in the substituents and its derivatives. Ito Y, et al. **J Biomed Mater Res** 1989 Feb;23(2):191–206

Stereoselectivity of glutathione conjugation: blood elimination of alpha–bromoisovalerylurea enantiomers and biliary excretion of the conjugates in unanesthetized normal or congenitally jaundiced rats. Polhuijs M, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):874–8

Use of Iodogen and sulfosuccinimidobiotin to identify and isolate cuticular proteins of the filarial parasite Brugia malayi. Alvarez RM, et al. **Mol Biochem Parasitol** 1989 Mar 1;33(2):183–9

The use of phenacemide for intractable partial complex epilepsy in children. Coker SB. **Pediatr Neurol** 1986 Jul–Aug;2(4):230–2

Inhibitory activity of 2–benzimidazolylurea on gastric acid secretion in rats. Trivulzio S. **Pharmacol Res Commun** 1988 Dec;20(12):1035–46

Ureide catabolism in nitrogen–fixing legumes. Winkler RG, et al. **Trends Biochem Sci** 1988 Mar;13(3):97–100

Discontinuation of redwater treatments [letter] Cooper PE, et al. **Vet Rec** 1989 Jun 17;124(24):643

[Pharmacodynamic study of ortho–chlorophenyl ethyl allophanate (SCS 100). Psychotropic properties] Foussard–Blanpin O, et al. **Ann Pharm Fr** 1988;46(1):59–67 (Eng. Abstr.) **(Fre)**

[Synthesis, antisecretory, and anti–ulcer activity of new 5–arylidene–2–ureidoalkyl–3–pyridazinones] Rubat C, et al. **Farmaco [Sci]** 1988 Dec;43(12):1035–44 (Eng. Abstr.) **(Fre)**

[Granulomatous dermatitis caused by surfen in diabetics treated with Insulin–depot–S–Richter] Jermendy G, et al. **Orv Hetil** 1989 Aug 20;130(34):1825–8 (Eng. Abstr.) **(Hun)**

[Synthesis and evaluation of the antifungal activity of a new series of N–acylureas] Baraldi PG, et al. **Farmaco** 1989 Apr; 44(4):391–8 (Eng. Abstr.) **(Ita)**

[Synthesis of derivatives of N–(1–adamantyl)–N'–urea with potential antiviral activity] Skwarski D, et al. **Acta Pol Pharm** 1988;45(5):391–4 (Eng. Abstr.) **(Pol)**

ANALYSIS

Blood–dialysate equilibration during continuous arteriovenous hemodialysis. Pallone TL, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):512–4

Comparison of steady–state fluorescence polarization and urea permeability of phosphatidylcholine and phosphatidylsulfocholine liposomes as a function of sterol structure. Pugh EL, et al. **Chem Phys Lipids** 1989 Apr; 50(1):43–50

Assay of stable isotope labelled urea in biological fluids by selected ion monitoring. Nelson JE, et al. **Clin Chim Acta** 1988 Jun 30;175(1):59–65

Analysis of post mortem aqueous humour chemistry in the horse, with particular reference to urea nitrogen and creatinine. Cantor GH, et al. **Equine Vet J** 1989 Jul; 21(4):288–91

14C–urea breath test as a method to detect Campylobacter pylori colonization. Rauws EA, et al. **Gastroenterol Clin Biol** 1989;13(1 Pt 1):42B–43B

Improved turbidimetric assay of tylosin in premix and animal feeds not containing urea. Coleman MR. **J Assoc Off Anal Chem** 1989 May–Jun;72(3):454–6

Quantitative analysis of hydroxyurea and urea by proton nuclear magnetic resonance (NMR) spectroscopy. Main KB, et al. **Pharm Res** 1987 Oct;4(5):412–5

[Estimation of body water in the lactating goat by injection of urea] Bas P, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:185–6 (Eng. Abstr.) **(Fre)**

[Utilization of urea as a marker for body water in the cow, in comparison with heavy water] Doreau M, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:183–4 (Eng. Abstr.) **(Fre)**

[The determination of the urea content in cow's milk with the help of the dry chemical system Reflotron] Staudacher G. **Tierarztl Prax** 1989;17(1):105–8 (Eng. Abstr.) **(Ger)**

[Analytic calculation of total urea mass in a single–pass dialysate during hemodialysis] De Paoli Vitali E, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):83–4 **(Ita)**

ANTAGONISTS & INHIBITORS

N–acetyl–beta–D–glucosaminidase assay in urine: urea inhibition. Mueller PW, et al. **J Anal Toxicol** 1989 May–Jun;13(3):188–90

BIOSYNTHESIS

Attempts to investigate the molecular basis of urea cycle disorders. Matsuda I, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):505–9

Cognitive development in children with inborn errors of urea synthesis. Msall M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):435–41 (16 ref.)

In vivo metabolism of nitrogen precursors for urea synthesis in the postprandial rat. Jahoor F, et al. **Ann Nutr Metab** 1988;32(4):240–4

Determinants of urea nitrogen production in sepsis. Muscle catabolism, total parenteral nutrition, and hepatic clearance of amino acids. Pittiruti M, et al. **Arch Surg** 1989 Mar; 124(3):362–72

2–Ethylhexanoic acid inhibits urea synthesis and stimulates carnitine acetyltransferase activity in rat liver mitochondria. Manninen A, et al. **Arch Toxicol** 1989; 63(2):160–1

Effect of caffeine on urea biosynthesis and some related processes, ketone bodies, ATP and liver amino acids. Jordá A, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2727–32

Inhibition of ureogenesis by two hypouricemic drugs (probenecid and benzbromarone). Comparison with allopurinol. Sanchez–Beltran MJ, et al. **Cell Mol Biol** 1988; 34(6):649–54

Control by pH of ureogenesis in isolated hepatocytes. Meijer AJ, et al. **Contrib Nephrol** 1988;63:167–70

Effect of thyroid hormones on urea biosynthesis and related processes in rat liver. Marti J, et al. **Endocrinology** 1988 Nov;123(5):2167–74

Dynamic relationship between urea and glutamine synthesis in the mechanism of ammonia detoxication: a tracer study using 15NH4Cl in fulminant hepatic failure rats. Morimoto Y, et al. **Gastroenterol Jpn** 1988 Oct;23(5):538–45

Effects of adrenalectomy on urea synthesis in rats. Wanscher B, et al. **Horm Metab Res** 1989 Jun;21(6):313–6

Channeling of urea cycle intermediates in situ in permeabilized hepatocytes. Cheung CW, et al. **J Biol Chem** 1989 Mar 5;264(7):4038–44

A possible role of inorganic phosphate as a regulator of oxidative phosphorylation in combined urea synthesis and gluconeogenesis in perfused rat liver. A phosphorus magnetic resonance spectroscopy study. Tanaka A, et al. **J Biol Chem** 1989 Jun 15;264(17):10034–40

Biosynthesis of hippurate, urea and pyrimidines in the fatty liver: studies with rats fed orotic acid or a diet deficient in choline and inositol, and with genetically obese (Zucker) rats. Maswoswe SM, et al. **J Nutr** 1989 Feb;119(2):273–9

Urea synthesis, nitrogen balance, and glucose turnover in growth–hormone–deficient children before and after growth hormone administration. Dahms WT, et al. **Metabolism** 1989 Mar;38(3):197–203

Regulation of urea cycle enzymes. **Nutr Rev** 1988 Sep; 46(9):326–7 (12 ref.)

Inhibitory effects of cadmium on rat ornithine carbamoyltransferase and urea synthesis in the rat liver parenchymal cells. Aoki Y, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):411–22

Evolution of urea synthesis in vertebrates: the piscine connection. Mommsen TP, et al. **Science** 1989 Jan 6; 243(4887):72–5

BLOOD

Changes in blood urea and glucose and their association with energy–containing nutrients in men on hypocaloric diets during Ramadan fasting. Nomani MZ, et al. **Am J Clin Nutr** 1989 Jun;49(6):1141–5

Evidence for functional immaturity of the ornithine–urea cycle in very–low–birth–weight infants. Boehm G, et al. **Biol Neonate** 1988;54(3):121–5

Effects of guar gum on plasma urea, insulin and glucose in the growing pig. Malmlöf K, et al. **Br J Nutr** 1989 Jan; 61(1):67–73

Low serum urea level in dehydrated patients with central diabetes insipidus. Comtois R, et al. **Can Med Assoc J** 1988 Nov 15;139(10):965–9

Fructosamine and urea concentrations in serum [letter] Abu–Farsakh FA, et al. **Clin Chem** 1988 Oct;34(10):2181

Enzymic urea assay: a new colorimetric method based on hydrogen peroxide measurement. Lespinas F, et al. **Clin Chem** 1989 Apr;35(4):654–8

Effect of streptozotocin on transaminases, creatinine and urea in serum of rats. Voss C, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):37–42

Blood biochemical changes induced by insect repellent N,N–diethylphenylacetamide in rats. Rao SS, et al. **Indian J Med Res** 1988 Jul;88:76–84

Postmortem changes of blood urea, creatinine, non–protein nitrogen, uric acid & ammonia levels in rabbit. Usmani JA, et al. **Indian J Med Res** 1988 Dec;88:545–9

A simplified procedure to compute dialysis time and frequency by means of urea kinetics. Ahrenholz P, et al. **Int J Artif Organs** 1988 Sep;11(5):366–72

Measuring Kt/V [letter] Basile C. **Int J Artif Organs** 1988 Sep;11(5):407–8

Urea kinetic modelling by partial dialysate collection. Garred LJ, et al. **Int J Artif Organs** 1989 Feb;12(2):96–102

Procedural and mathematical considerations in urea dilution estimation of body composition in lambs. Bartle SJ, et al. **J Anim Sci** 1988 Aug;66(8):1920–7

A chemiluminometric method for the determination of urea in serum using a three–enzyme bioreactor. Tabata M, et al. **J Biolumin Chemilumin** 1988 Apr–Jun;2(2):63–7

Specific effects of fermentable carbohydrates on blood urea flux and ammonia absorption in the rat cecum. Rémésy C, et al. **J Nutr** 1989 Apr;119(4):560–5

Influence of peripheral arterial occlusive disease on muscular metabolism. Part 2: Changes in pyruvate, alanine, and urea concentration in femoral blood. Rexroth W, et al. **Klin Wochenschr** 1989 Jun 15;67(12):616–20

New biological method for determination of the desintoxication rate of human plasma after dialysis. Kovatchev D, et al. **Life Support Syst** 1983;1 Suppl 1:191–4

Plasma urea, an unreliable indicator of renal function in hepatic failure [letter] Somers SS, et al. **Postgrad Med J** 1988 Dec;64(758):975–6

[A discordance between urea and creatinine figures. Apropos of several patients] Ben Ammar S, et al. **Tunis Med** 1987 Nov;65(11):697–9 (Eng. Abstr.) **(Fre)**

[Creatinine, urea and mineral levels during the first week of life in healthy premature calves and calves with a delayed asphyxia syndrome] Pickel M, et al. **Zentralbl Veterinarmed [A]** 1989 Feb;36(2):132–41 (Eng. Abstr.) **(Ger)**

[Application of the urea kinetic model to evaluate the adequacy of hemodialysis] Lobo J, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):83–8 (Eng. Abstr.) **(Ita)**

[Diagnosis of the bleeding site in gastrointestinal hemorrhage by the determination of the serum urea and creatinine ratios] Urasima S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):731–5 (Eng. Abstr.) **(Jpn)**

[A rapid analyzer for determining blood urea] Laurinavichius VA, et al. **Lab Delo** 1989;(4):25–7 (Eng. Abstr.) **(Rus)**

[Urea balance in the treatment of acute renal failure by hemofiltration] Kulakov GP, et al. **Ter Arkh** 1988; 60(8):91–6 (Eng. Abstr.) **(Rus)**

[Biochemical tests in the diagnosis of nephrotoxicity: assessment of the significance] Pashintseva LP, et al. **Ter Arkh** 1989;61(4):124–7 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Heparinizable segmented polyurethanes containing poly–amidoamine blocks. Tanzi MC, et al. **J Biomed Mater Res** 1989 Aug;23(8):863–81

DIAGNOSTIC USE

14C–urea breath test in C pylori gastritis. Rauws EA, et al. **Gut** 1989 Jun;30(6):798–803

ISOLATION & PURIFICATION

[Use of hydrogen peroxide and lead oxide for purification of urea–contaminated water] Vasilenko II, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):73–5 **(Rus)**

METABOLISM

A hypothesis: the protein catabolic rate is dependent upon the type and amount of treatment in dialyzed uremic patients. Lindsay RM, et al. **Am J Kidney Dis** 1989 May; 13(5):382–9

Inhibition of urea transport in inner medullary collecting duct by phloretin and urea analogues. Chou CL, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F359–65

Independence of urea and water transport in rat inner medullary collecting duct. Knepper MA, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F610–21

Active urea transport in toad skin is coupled to H+ gradients. Rapoport J, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F830–5

Electrolyte, urea, and water transport in a two–nephron central core model of the renal medulla. Stephenson JL, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F399–413

Changes in urea cycle–related metabolites in the mouse after combined administration of valproic acid and an amino acid load. Alonso E, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):267–73

Abundance of mRNAs encoding urea cycle enzymes in fetal and neonatal mouse liver. Morris SM Jr, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):175–80

The source of variation in ureolysis in artificial plaques cultured from human salivary bacteria. Sissons CH, et al. **Arch Oral Biol** 1988;33(10):721–6

pH changes during simultaneous metabolism of urea and carbohydrate by human salivary bacteria in vitro. Sissons CH, et al. **Arch Oral Biol** 1988;33(8):579–87

The bacteria responsible for ureolysis in artificial dental plaque. Sissons CH, et al. **Arch Oral Biol** 1988; 33(10):727–33

Arginolytic and ureolytic activities of pure cultures of human oral bacteria and their effects on the pH response of salivary sediment and dental plaque in vitro. Wijeyeweera RL, et al. **Arch Oral Biol** 1989;34(1):43–53

Studies on in vitro degradation and in vivo digestion of a slow ammonia releasing urea product. Virk AS, et al. **Arch Tierernahr** 1989 Jan–Feb;39(1–2):167–76

Urea, creatinine, uric acid, and phosphate spaces and their relationship to total body water during chronic hemodialysis. Ericsson F, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):346–50

A simplified approach to monitoring in vivo therapy prescription. Keshaviah PR, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):620–2

Effects of deletions in mouse chromosome 7 on expression of genes encoding the urea-cycle enzymes and phosphoenolpyruvate carboxykinase (GTP) in liver, kidney, and intestine. Morris SM Jr, et al. **Biochem Genet** 1988 Dec;26(11–12):769–81

Potentiation of benzoate toxicity by glyoxylate. Inhibition of pyruvate carboxylase and the urea cycle. Cyr DM, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2919–23

A method to distinguish between pore and carrier kinetics applied to urea transport across the erythrocyte membrane. Yousef LW, et al. **Biochim Biophys Acta** 1989 Sep 18; 984(3):281–8

Evolutionary aspects of urea cycle enzyme genes. Takiguchi M, et al. **Bioessays** 1989 May;10(5):163–6 (30 ref.)

Difference in saliva/plasma concentration ratio of endogenous urea between mandibular and parotid glands in dogs. Mizuno S, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4921–6

Renal excretion of urea in a small east African antelope, the dik–dik (Rhynchotragus kirkii). Rugangazi BM, et al. **Comp Biochem Physiol [A]** 1988;91(3):437–44

Evaluation of dialysis adequacy. Gotch FA. **Contrib Nephrol** 1989;69:101–8; discussion 162–7 (20 ref.)

Exogenous hyperglucagonaemia in insulin controlled diabetic rats increases urea excretion and nitrogen loss from organs. Almdal TP, et al. **Diabetologia** 1988 Nov;31(11):836–41

Effects of arginine–free diet on urea cycle enzymes in young and adult ferrets. Deshmukh DR, et al. **Enzyme** 1989; 41(3):168–74

Long–term ingestion of ammonium increases acetylglutamate and urea levels without affecting the amount of carbamoyl–phosphate synthase. Felipo V, et al. **Eur J Biochem** 1988 Oct 1;176(3):567–71

Urea cycle enzyme activities are normal and inducible by a high–protein diet in CCl4 cirrhosis of rats. Snodgrass PJ. **Hepatology** 1989 Mar;9(3):373–9

Hydrodynamic permeability measurements of aqueous solutions of carbohydrates and their mixtures and various nonelectrolyte solutions across urinary bladder membranes of goat. Shukla PC, et al. **Indian J Exp Biol** 1988 Oct; 26(10):759–63

Effect of dietary protein level on nitrogen metabolism in the growing bovine: II. Diffusion into and utilization of endogenous urea nitrogen in the rumen. Bunting LD, et al. **J Anim Sci** 1989 Mar;67(3):820–6

Optimization of a medium for the rapid urease test for detection of Campylobacter pylori in gastric antral biopsies. Goldie J, et al. **J Clin Microbiol** 1989 Sep;27(9):2080–2

Urea kinetic modelling: comparison of three methods. Vanholder R, et al. **J Med Eng Technol** 1989 Jan–Apr; 13(1–2):87–9

Effect of vitamin A deficiency on nitrogen balance and hepatic urea cycle enzymes and intermediates in rats. John A, et al. **J Nutr** 1989 Jan;119(1):29–35

Causes, kinetics and clinical implications of post–hemodialysis urea rebound. Pedrini LA, et al. **Kidney Int** 1988 Dec;34(6):817–24

Urea excretion as a strategy for survival in a fish living in a very alkaline environment. Randall DJ, et al. **Nature** 1989 Jan 12;337(6203):165–6

Direct calculation of KT/V. A simplified approach to monitoring of hemodialysis. Barth RH. **Nephron** 1988; 50(3):191–5

Effect of dietary energy intake on tubular reabsorption of urea in sheep. Faix S, et al. **Physiol Bohemoslov** 1988; 37(6):493–501

Changes in endogenous urea recycling and the handling of renal urea in pregnant and lactating Sardi sheep kept on a constant feeding level. Benlamlih S, et al. **Reprod Nutr Dev** 1989;29(2):129–37

[Prenatal diagnosis of enzymopathies of the urea cycle] Chadefaux B, et al. **Ann Biol Clin (Paris)** 1988;46(7):471–6 (36 ref.) (Eng. Abstr.) (Fre)

[A comparative approach to models of urea kinetics in hemodialysis treatment] Fellay G, et al. **Nephrologie** 1988; 9(5):233–6 (Eng. Abstr.) (Fre)

[Augmentation of the urea retention capacity of the kidney in protein–deficient sheep: role of the kidney pelvis] Cirio A, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:167–8 (Eng. Abstr.) (Fre)

[Studies on nitrogen metabolism in the large intestine of ruminants. 5. Metabolism of intra–cecally infused 15N–urea without and with fermentable material in heifers] Bergner H, et al. **Arch Tierernahr** 1989 Apr–May;39(4–5):443–54 (Eng. Abstr.) (Ger)

[Urea utilization in growing lambs. 7. NPN– and pure protein–N–utilization at various ages] Ulbrich M. **Arch Tierernahr** 1989 Apr–May;39(4–5):455–62 (Eng. Abstr.) (Ger)

[Characterization of adherent ureolytic and amylolytic rumen bacteria] Laukova A, et al. **Vet Med (Praha)** 1988 Nov; 33(11):699–704 (Eng. Abstr.) (Slo)

PHARMACOKINETICS

Energy–dependent uptake of urea by Bacillus megaterium. Jahns T, et al. **FEMS Microbiol Lett** 1989 Jan 1;48(1):13–7

Factors affecting urea clearance during continuous hemodiafiltration in the canine model. Hiyama DT, et al. **J Pediatr Surg** 1989 Aug;24(8):756–9

The effect of 2 molar urea on Jk (a–b–) red cells. Edwards–Moulds J, et al. **Vox Sang** 1988;55(3):181–5

[Kidney retention of urea in sheep on a hypoprotein diet: study by retrograde perfusion of urea in the kidney pelvis] Cirio A, et al. **J Physiol (Paris)** 1988–89;83(2):64–73 (Eng. Abstr.) (Fre)

PHARMACOLOGY

Cell swelling induced by the permeant molecules urea or glycerol induces immediate high amplitude thyrotropin and prolactin secretion by perifused adenohypophyseal cells. Wang X, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):471–5

A probable mechanism of inactivation by urea of goat spleen cathepsin B. Unfolding and refolding studies. Agarwal SK, et al. **Biochem J** 1988 Dec 1;256(2):609–13

Urea dependence of thiol–disulfide equilibria in thioredoxin: confirmation of the linkage relationship and a sensitive assay for structure. Lin TY, et al. **Biochemistry** 1989 Jun 13;28(12):5282–7

Correlation of structure and function in the Ca2+–ATPase of sarcoplasmic reticulum: a Fourier transform infrared spectroscopy (FTIR) study on the effects of dimethyl sulfoxide and urea. Buchet R, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):167–78

Secondary structural changes of non–reduced and reduced ribonuclease A in solutions of urea, guanidine hydrochloride and sodium dodecyl sulfate. Takeda K, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):340–4

Local phenomena and distribution of molecular species during the unfolding of heme–free myoglobin in the presence of GdnHCl and urea as seen by time–resolved fluorescence spectroscopy. Fronticelli C, et al. **Biophys Chem** 1989 May;33(2):143–51

Depression of myocardial force development after urea treatment. Abaurre PF, et al. **Braz J Med Biol Res** 1988; 21(5):1049–52

Subcellular changes in the endolymphatic sac after administration of hyperosmolar substances. Erwall C, et al. **Hear Res** 1988 Sep 1;35(1):109–18

Effect of urea, guanidine hydrochloride and sodium dodecyl sulphate on the isolated major protein fraction, lupinin, from lupin seed (Lupinus angustifolius). Kim CS, et al. **Indian J Biochem Biophys** 1988 Jun;25(3):292–301

Calcium oxalate crystal growth studies in polyacrylamide gels: Part I—Influence of urea and amino acids on crystal aggregation. Rao MV, et al. **Indian J Exp Biol** 1988 Jul; 26(7):549–52

The non–flavin redox center of the streptococcal NADH peroxidase. I. Thiol reactivity and redox behavior in the presence of urea. Poole LB, et al. **J Biol Chem** 1989 Jul 25;264(21):12322–9

Nutritive value of high moisture alfalfa hay preserved with urea. Alhadhrami G, et al. **J Dairy Sci** 1989 Apr;72(4):972–9

Effects of acute hyperosmolar NaCl or urea on brain H2O, Na+, K+, carbohydrate, and amino acid metabolism in weanling mice: NaCl induces insulin secretion and hypoglycemia. Thurston JH, et al. **Metab Brain Dis** 1986 Jun;1(2):129–46

Structural changes in the rat brain after carotid infusions of hyperosmolar solutions: a light microscopic and immunohistochemical study. Salahuddin TS, et al. **Neuropathol Appl Neurobiol** 1988 Nov–Dec;14(6):467–82

Thermoregulatory responses in mice following acute administration of principal nitrogenous excretory substances. Gordon CJ. **Pharmacol Biochem Behav** 1988 Nov;31(3):699–703

Denaturation of globular proteins by urea: breakdown of hydrogen or hydrophobic bonds? Kamoun PP. **Trends Biochem Sci** 1988 Nov;13(11):424–5

[Effect of urea on the water binding capacity of the human stratum corneum] Wohlrab W. **Dermatol Monatsschr** 1988; 174(10):622–7 (Eng. Abstr.) (Ger)

[Effect of urea and uric acid on the hemolytic activity of Sendai virus] Trybala E, et al. **Med Dosw Mikrobiol** 1989; 41(1):43–6 (Eng. Abstr.) (Pol)

[Structural organization of a hexamer of glutamate dehydrogenase. 3. Effect of the coenzyme and substrate on the urea–induced dissociation and inactivation of the hexamer] Karabashian LV, et al. **Bioorg Khim** 1989 Jan; 15(1):32–9 (Eng. Abstr.) (Rus)

[Structural organization of glutamate dehydrogenase. 2. Inactivation and dissociation of immobilized hexamer induced by urea] Karabashian LV, et al. **Bioorg Khim** 1988 Nov;14(11):1502–8 (Eng. Abstr.) (Rus)

[Furosemide–induced changes in the inhibiting action of urea and lactate dehydrogenase isoenzyme] Lebedev AA, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):43–6 (Eng. Abstr.) (Rus)

[Effects of various aqueous substitutes on the state of the posterior epithelium of the cornea in animal experiments] Samedova IB, et al. **Vestn Oftalmol** 1988 May–Jun; 104(3):39–43 (Eng. Abstr.) (Rus)

[Interferon–inducing activity and sensitivity to urea of Machupo virus variants] Trofimov NM, et al. **Vopr Virusol** 1989 Mar–Apr;34(2):234–6 (Rus)

THERAPEUTIC USE

Hearing in patients with Ménière's disease after exposure to low ambient pressure and after ingestion of glycerol and urea. Larsen HC, et al. **Adv Otorhinolaryngol** 1988;42:144–7

The topical treatment of onychomycosis using a new combined urea/imidazole preparation. Hay RJ, et al. **Clin Exp Dermatol** 1988 May;13(3):164–7

Tattoo removal with minimal scarring: the chemo–laser technique. Ruiz–Esparza J, et al. **J Dermatol Surg Oncol** 1988 Dec;14(12):1372–6

Administration of intravenous urea and normal saline for the treatment of hyponatremia in neurosurgical patients. Reeder RF, et al. **J Neurosurg** 1989 Feb;70(2):201–6

Intravenous urea and saline for hyponatremia [letter] Wise BL. **J Neurosurg** 1989 Aug;71(2):304–5

[Comparative efficacy of endoscopic sclerosis of esophageal varices by intravariceal injection of polidocanol and perivariceal injection of quinine–urea] Bourbon P, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):894–8 (27 ref.) (Eng. Abstr.) (Fre)

TOXICITY

Visits to physicians before and after exposure to urea formaldehyde foam insulation. L'Abbé KA, et al. **Am J Public Health** 1988 Nov;78(11):1489–91

General effects of hyperosmolar agents on the endolymphatic sac. Erwall C. **Hear Res** 1988 Nov;36(2–3):277–86

[External respiratory function in foundry shop workers exposed to synthetic resin destruction products] Shestakov NM, et al. **Gig Sanit** 1989 Feb;(2):89–90 (Rus)

URINE

Automated determination of urinary Na+, K+, chloride, inorganic phosphate, urea, and creatinine without sample dilution, with the "RA–XT". Fesus PD, et al. **Clin Chem** 1989 Mar;35(3):481–3

Pyrochemiluminescence: real–time, cost–effective method for determining total urinary nitrogen in clinical nitrogen–balance studies. Konstantinides FN, et al. **Clin Chem** 1988 Dec;34(12):2518–20

Two methods for urinary urea compared. McIntosh JP, et al. **Clin Chem** 1988 Oct;34(10):2166

Validity of urinary urea nitrogen as a measure of total urinary nitrogen in adult patients requiring parenteral nutrition. Loder PB, et al. **Crit Care Med** 1989 Apr;17(4):309–12

Comparison of urinary urea nitrogen excretion and measured energy expenditure in spinal cord injury and nonsteroid–treated severe head trauma patients. Kolpek JH, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun; 13(3):277–80

Twenty four–hour urinary excretion of sodium, potassium and urea in Japanese children. Moriyama M, et al. **Tohoku J Exp Med** 1988 Apr;154(4):381–8

[15N] ammonium test for liver function diagnosis. Jung K, et al. **Z Med Lab Diagn** 1989;30(3):169–74

[The effect of intra–renal infusion of iodoacetate on urea excretion in sheep] Faix S, et al. **Vet Med (Praha)** 1988 Nov;33(11):667–74 (Eng. Abstr.) (Slo)

UREAPLASMA

Ureaplasma urealyticum. Overview with emphasis on fetal and maternal infections. Shepard MC.
Ann N Y Acad Sci 1988;549:48–55 (61 ref.)

Bacteriologic and serologic findings in experimental pyelonephritis caused by Ureaplasma urealyticum. Pickering WJ, et al. **Infect Immun** 1989 Apr;57(4):1235–9

Role of Ureaplasma urealyticum in bronchopulmonary dysplasia. Holtzman RB, et al. **J Pediatr** 1989 Jun; 114(6):1061–3

Is genital colonization with Mycoplasma hominis or Ureaplasma urealyticum associated with prematurity/low birth weight? Romero R, et al. **Obstet Gynecol** 1989 Mar; 73(3 Pt 2):532–6 (25 ref.)

[Characteristics of the clinical course of Reiter's disease in relation to the causative agent] Bratanova MZ.
Vestn Akad Med Nauk SSSR 1989;(6):79–82 (Eng. Abstr.) (Rus)

CLASSIFICATION

Serotype 8– and serocluster–specific surface–expressed antigens of Ureaplasma urealyticum. Thirkell D, et al.
Infect Immun 1989 Jun;57(6):1697–701

DRUG EFFECTS

Susceptibilities of genital mycoplasmas to the newer quinolones as determined by the agar dilution method. Kenny GE, et al. **Antimicrob Agents Chemother** 1989 Jan; 33(1):103–7

In vitro susceptibilities of mycoplasmas and ureaplasmas to new macrolides and aryl–fluoroquinolones. Waites KB, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1500–2

Detection of tetracycline–resistant strains of Ureaplasma urealyticum by hybridization assays. Brunet B, et al.
Eur J Clin Microbiol Infect Dis 1989 Jul;8(7):636–8

Mechanisms of macrolide resistance in Ureaplasma urealyticum: a study on collection and clinical strains. Palù G, et al. **Eur J Epidemiol** 1989 Jun;5(2):146–53

Factors influencing the in–vitro sensitivity of Ureaplasma urealyticum to tetracyclines. Jalil N, et al.
J Antimicrob Chemother 1989 Mar;23(3):341–5

Susceptibility of Ureaplasma urealyticum to ten chemotherapeutic agents. Sobetzko R, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Aug; 269(2):245–50

[Biological properties of Ureaplasma urealyticum and Mycoplasma hominis isolated from patients with urethritis. V. Sensitivity of U. urealyticum to selected chemotherapeutic agents] Jagielski M.
Med Dosw Mikrobiol 1988;40(1):18–37 (Eng. Abstr.) (Pol)

ENZYMOLOGY

Purification and characterization of urease from Ureaplasma urealyticum. Saada AB, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Aug; 269(2):160–7

GENETICS

A physical map of the genome of Ureaplasma urealyticum 960T with ribosomal RNA loci. Cocks BG, et al.
Nucleic Acids Res 1989 Aug 25;17(16):6713–9

IMMUNOLOGY

Detection of antibodies to Ureaplasma urealyticum in pregnant women by enzyme–linked immunosorbent assay using membrane antigen and investigation of the significance of the antibodies. Liepmann MF, et al.
J Clin Microbiol 1988 Oct;26(10):2157–60

Neonatal serologic response at term to the genital mycoplasmas. Dinsmoor MJ, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):487–91

Protein antigens of genital mycoplasmas. Cassell GH, et al.
Rev Infect Dis 1988 Jul–Aug;10 Suppl 2:S391–8 (42 ref.)

ISOLATION & PURIFICATION

Ureaplasma urealyticum and male infertility: an animal model. I. Artificial infection, breeding experiments and histological preparation of organs. Engel S, et al.
Andrologia 1988 Nov–Dec;20(6):467–71

Protein A gold identification of ureaplasmas on the bovine zona pellucida. Britton AP, et al. **Can J Vet Res** 1989 Apr; 53(2):172–5

Affinity of microorganisms of the genus ureaplasma to the reproductive organs of cattle. Pilaszek J, et al.
Comp Immunol Microbiol Infect Dis 1988;11(3–4):177–80

Detection of Chlamydia trachomatis, Mycoplasma hominis and Ureaplasma urealyticum in pregnant Dutch women. Vonsée HJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):149–56

Infection of the epididymis by Ureaplasma urealyticum. Jalil N, et al. **Genitourin Med** 1988 Dec;64(6):367–8

Isolation of Ureaplasma urealyticum from urological out patients. Kawamura N, et al. **Hinyokika Kiyo** 1988 Oct; 34(10):1747–9

Comparison of ELISA with metabolism inhibition test for detection of Ureaplasma urealyticum antibodies in nongonococcal urethritis. Deodhar L, et al.
Indian J Med Res 1988 Jul;88:20–2

The establishment and persistence of Ureaplasma urealyticum in oestradiol–treated female mice. Farr PM, et al.
J Med Microbiol 1989 Jun;29(2):111–4

Ureaplasmal pneumonia and sepsis associated with persistent pulmonary hypertension of the newborn. Waites KB, et al. **Pediatrics** 1989 Jan;83(1):79–85

[Ureaplasma urealyticum and chorioamnionitis]
Jacob–Cormier B, et al. **Rev Fr Gynecol Obstet** 1989 Jan; 84(1):25–8 (Eng. Abstr.) (Fre)

[The role of Chlamydia trachomatis and Ureaplasma urealyticum in patients with acute epididymitis] Ito Y.
Kansenshogaku Zasshi 1989 Apr;63(4):293–304 (Eng. Abstr.) (Jpn)

[Mycoplasma and rheumatoid arthritis in children] Vul'fovich IuV, et al. **Vestn Akad Med Nauk SSSR** 1989; (6):82–4 (Eng. Abstr.) (Rus)

PATHOGENICITY

Ureaplasma urealyticum pneumonia: experimental production and demonstration of age–related susceptibility. Rudd PT, et al. **Infect Immun** 1989 Mar;57(3):918–25

Ureaplasma urealyticum upper urinary tract infection: persistence and pathogenicity in a canine model. Krieger JN, et al. **J Urol** 1989 Jun;141(6):1437–43

This month in Investigative Urology: host parasite interaction in pyelonephritis. Roberts JA. **J Urol** 1989 Jun;141(6):1436

ULTRASTRUCTURE

[Ultrastructural analysis of the interrelation of the causative agents of urogenital infections with the cells of the macro–organism in syphilis patients] Delektorskiĭ VV, et al. **Vestn Dermatol Venerol** 1988;(8):26–9 (Eng. Abstr.) (Rus)

UREASE

The ELISA–U: an enzyme–linked immunosorbent assay using urease as the enzyme marker for rapid detection of Plasmodium falciparum antibody in human serum. Lee M, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):421–6

An assessment of urease–based enzyme–linked immunosorbent assay. Lo CY, et al.
J Immunol Methods 1988 Nov 10;114(1–2):127–37

Gel artificial cells as enzyme carrier. Arca E, et al.
Life Support Syst 1983;1 Suppl 1:262–5

[Production of immobilized urease adsorbed on polystyrene granules] Ernst B.
Z Exp Chir Transplant Kunstliche Organe 1988;21(4):194–8 (Eng. Abstr.) (Ger)

ANALYSIS

Selective silver staining of urease activity in polyacrylamide gels. Martín de Llano JJ, et al. **Anal Biochem** 1989 Feb 15;177(1):37–40

Detection of Campylobacter pylori by the biopsy urease test: an assessment in 1445 patients. McNulty CA, et al. **Gut** 1989 Aug;30(8):1058–62

Optimization of a medium for the rapid urease test for detection of Campylobacter pylori in gastric antral biopsies. Goldie J, et al. **J Clin Microbiol** 1989 Sep;27(9):2080–2

Disseminated infection caused by urease–negative Cryptococcus neoformans. Ruane PJ, et al.
J Clin Microbiol 1988 Oct;26(10):2224–5

Ultrastructural localisation of urease in outer membrane and periplasm of Campylobacter pylori [letter] Bode G, et al.
J Clin Pathol 1989 Jul;42(7):778–9

Tightly spiral shaped bacteria in gastric antrum: are they urease positive? [letter] Morris A, et al. **J Clin Pathol** 1989 Feb;42(2):216

The urease enzymes of Campylobacter pylori and a related bacterium. Ferrero RL, et al. **J Med Microbiol** 1988 Sep; 27(1):33–40

Rapid urease test provides specific identification of Campylobacter pylori in antral mucosal biopsies. Szeto ML, et al. **Postgrad Med J** 1988 Dec;64(758):935–6

[Urease activity of bacteria in urine] Arai Y, et al.
Hinyokika Kiyo 1989 Feb;35(2):277–81 (Eng. Abstr.) (Jpn)

ANTAGONISTS & INHIBITORS

Competitive inhibitors of Klebsiella aerogenes urease. Mechanisms of interaction with the nickel active site. Todd MJ, et al. **J Biol Chem** 1989 Sep 25;264(27):15835–42

DIAGNOSTIC USE

How specific is the rapid urease test for diagnosing Campylobacter pylori? [letter; comment] Bhasin D, et al.
J Clin Pathol 1989 Jun;42(6):671. **Comment on:** J Clin Pathol 1988 Jul;41(7):812–3

[The urease test for detecting Campylobacter pylori: which reactive milieu to choose? At what temperature? (letter)] Riard P, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):436–7 (Fre)

GENETICS

Cloning and expression of Staphylococcus saprophyticus urease gene sequences in Staphylococcus carnosus and contribution of the enzyme to virulence. Gatermann S, et al. **Infect Immun** 1989 Oct;57(10):2998–3002

ISOLATION & PURIFICATION

One–step affinity purification of urease from jack beans. Mendes MJ, et al. **Biochimie** 1988 Oct;70(10):1369–72

Urease from a sea urchin Lytechinus variegatus: partial purification and kinetics. Loest RA.
Comp Biochem Physiol [B] 1979;63(1):103–7

Isoelectric focusing of ureases from Campylobacter pylori and related organisms. Tompkins DS, et al.
J Clin Microbiol 1988 Dec;26(12):2678–9

Purification and characterization of urease from Ureaplasma urealyticum. Saada AB, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Aug; 269(2):160–7

METABOLISM

Usefulness of culture, histology, and urease testing in the detection of Campylobacter pylori. Schnell GA, et al.
Am J Gastroenterol 1989 Feb;84(2):133–7

Urease tests for Campylobacter pylori detection [letter] Vaira D, et al. **Am J Gastroenterol** 1989 Jul;84(7):836–7

Carbonic anhydrase and urease: an investigation in vitro on the possibility of a synergic action. Botré C, et al.
Biochim Biophys Acta 1989 Jul 27;997(1–2):111–4

The ecology and pathogenicity of urease–producing bacteria in the urinary tract. McLean RJ, et al.
CRC Crit Rev Microbiol 1988;16(1):37–79 (315 ref.)

Staphylococcus saprophyticus urease: characterization and contribution to uropathogenicity in unobstructed urinary tract infection of rats. Gatermann S, et al.
Infect Immun 1989 Jan;57(1):110–6

The enzyme coupling process in urease immobilization on O–alkylated nylon tubes. Onyezili FN.
J Biochem Biophys Methods 1988 Aug;16(4):255–62

Microbial ureases: significance, regulation, and molecular characterization. Mobley HL, et al. **Microbiol Rev** 1989 Mar;53(1):85–108 (249 ref.)

The effect of compactional pressure on urease activity. Teng CL, et al. **Pharm Res** 1988 Dec;5(12):776–80

[Campylobacter pylori: diagnostic value of the urease test during endoscopy] Riard P, et al.
Gastroenterol Clin Biol 1989 Jan;13(1):8–13 (25 ref.) (Eng. Abstr.) (Fre)

PHARMACOLOGY

The influence of zinc and citrate on urease–induced urine crystallisation. Hedelin H, et al. **Urol Res** 1989;17(3):177–80

PHYSIOLOGY

Effect of ammonia on the gastric mucosa in rats: pathophysiological importance of urease in gastric ulcer disease. Murakami M, et al. **Jpn J Pharmacol** 1988 Jul; 47(3):330–2

URECHOLINE see **BETHANECHOL COMPOUNDS**

UREMIA

Infants of azotemic mothers: a report of three live births. Brem AS, et al. **Am J Kidney Dis** 1988 Oct;12(4):299–303

BLOOD

Serum prolactin in uraemia: correlations between bioactivity and activity in two immunoassays. Smith CR, et al.
Acta Endocrinol (Copenh) 1989 Mar;120(3):295–300

Effects of canrenone on Na+,K+ ATPase activity, arterial pressure and plasma potassium concentration in uremic hemodialyzed patients. Quarello F, et al.
Adv Exp Med Biol 1989;252:371–6

Subcutaneous desmopressin (DDAVP) shortens the bleeding time in uremia. Viganò GL, et al. **Am J Hematol** 1989 May;31(1):32–5

The effect of renal transplantation on a major endogenous ligand retained in uremic serum. Mabuchi H, et al.
Am J Kidney Dis 1989 Jan;13(1):49–54

Benign azotemia of long–term hemodialysis: increase in blood urea nitrogen and serum creatinine concentrations after the initiation of dialysis. Abuelo JG. **Am J Med** 1989 Jun;86(6 Pt 1):738–9

Plasma and platelet von Willebrand factor defects in uremia. Gralnick HR, et al. **Am J Med** 1988 Dec;85(6):806–10

Serum fructosamine in uraemia, myeloma and acute inflammatory disorders—relationship to serum glucose and albumin levels. McCance DR, et al. **Ann Clin Biochem** 1989 Jan;26 (Pt 1):63–8

Itraconazole pharmacokinetics in patients with renal dysfunction. Boelaert J, et al.
Antimicrob Agents Chemother 1988 Oct;32(10):1595–7

Anomalies in composition of uremic lipoproteins isolated by gradient ultracentrifugation: relative enrichment of HDL in apolipoprotein C–III at the expense of apolipoprotein A–I. Atger V, et al. **Atherosclerosis** 1988 Nov;74(1–2):75–83

Phosphorus–31 and water proton relaxation in living erythrocytes. Application to uremia. Monti JP, et al.
Biochim Biophys Acta 1989 Feb 9;1010(2):210–7

Abnormalities of cytoplasmic Ca2+ in platelets from patients with uremia. Ware JA, et al. **Blood** 1989 Jan;73(1):172–6

Adenylate cyclase and alpha–2–adrenoceptors in thrombocytes of chronic uremic patients. Lübbecke F, et al. **Blood Purif** 1988;6(5):269–75

Synthesis of [Glu34]human splenin (hSP) and examination

of its immunological effect on the reduced B-lymphocytes of uremic patients. Abiko T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):391–6

Plasma vitamin E levels in uremic children and adolescents. Drukker A, et al. **Child Nephrol Urol** 1988–89;9(4):208–10

23Na nuclear magnetic resonance study of Na+–K+ pump inhibition by a fraction from uremic toxins [published erratum appears in 1989 Apr;35(4):670] Gallice P, et al. **Clin Chem** 1988 Oct;34(10):2044–7

Measuring creatine kinase MB isoenzyme in a maintenance hemodialysis population: chemiluminometric immunoassay and electrophoresis compared. Latner BP, et al. **Clin Chem** 1989 Sep;35(9):1965–8

Accumulation of indoxyl sulfate, an inhibitor of drug-binding, in uremic serum as demonstrated by internal-surface reversed-phase liquid chromatography. Niwa T, et al. **Clin Chem** 1988 Nov;34(11):2264–7

Increase of erythrocyte resistance to hemolysis and modification of membrane lipids induced by hemodialysis. Peuchant E, et al. **Clin Chim Acta** 1988 Dec 30; 178(3):271–82

Effects of changes in intravascular volume on atrial size and plasma levels of immunoreactive atrial natriuretic peptide in uremic man. Cannella G, et al. **Clin Nephrol** 1988 Oct; 30(4):187–92

The beneficial effect of ketoacids on serum phosphate and parathyroid hormone in patients with chronic uremia. Schaefer K, et al. **Clin Nephrol** 1988 Aug;30(2):93–6

Carcinogenic glutamic acid pyrolysis product in the dialysate of uremic patients treated by continuous ambulatory peritoneal dialysis. Yanagisawa H, et al. **Clin Nephrol** 1988 Aug;30(2):73–8

Endogenous digoxin-like immunoreactivity and erythrocyte sodium transport in uraemic patients undergoing dialysis. Bosch RJ, et al. **Clin Sci** 1989 Feb;76(2):157–63

Stimulation by uraemic plasma of frusemide-sensitive sodium efflux in erythrocytes from normal women. Corry DB, et al. **Clin Sci** 1989 May;76(5):559–63

Different cation transport inhibitor in malignant renal hypertension and in uraemia. Simon G. **Clin Sci** 1989 Mar; 76(3):329–33

Serum levels of calcitonin in uremic patients in the predialytic phase and on regular dialytic treatment. Di Landro D, et al. **Contrib Nephrol** 1988;65:101–6

In vitro protein binding of propafenone in normal and uraemic human sera. Chan GL, et al. **Eur J Clin Pharmacol** 1989;36(5):495–9

Superoxide anion generation, erythrocytes superoxide dismutase activity, and lipid peroxidation during hemoperfusion and hemodialysis in chronic uremic patients. Trznadel K, et al. **Free Radic Biol Med** 1989;6(4):393–7

Glucose metabolism, lipidic pattern, apolipoprotein A and B during hemodialysis with cuprophan and hemodialysis-hemoperfusion. Allegra V, et al. **Int J Artif Organs** 1989 Jan;12(1):31–5

Red blood cell volume distribution width (RDW) in uraemic patients on chronic haemodialysis. Docci D, et al. **Int J Artif Organs** 1989 Mar;12(3):170–4

Plasma vasoactive intestinal peptide in uremic patients [letter] Viron B, et al. **Int J Artif Organs** 1989 Apr;12(4):276

Is parathormone a cardiac toxin in uremia? Himelman RB, et al. **Int J Card Imaging** 1988–89;3(4):209–15

Rapid assay for indoxyl sulphate in uremic serum by internal-surface reversed-phase high-performance liquid chromatography. Takeda N, et al. **J Chromatogr** 1988 Oct 14;431(2):418–23

Reversible modulation of erythrocyte Ca2+ homeostasis: a possible role for dialyzable plasma factors derived from patients with end-stage renal disease [editorial] Dubyak GR. **J Lab Clin Med** 1989 Sep;114(3):211–2 (6 ref.)

Uremic plasma after infusion of desmopressin (DDAVP) improves the interaction of normal platelets with vessel subendothelium. Escolar G, et al. **J Lab Clin Med** 1989 Jul;114(1):36–42

Red blood cell calcium homeostasis in patients with end-stage renal disease. Gafter U, et al. **J Lab Clin Med** 1989 Sep;114(3):222–31

Dose-effect and pharmacokinetics of estrogens given to correct bleeding time in uremia. Viganò G, et al. **Kidney Int** 1988 Dec;34(6):853–8

Plasma endothelin levels in patients with uraemia. Koyama H, et al. **Lancet** 1989 May 6;1(8645):991–2

von Willebrand factor abnormalities in two patients with uraemia [letter] Rodeghiero F, et al. **Lancet** 1988 Oct 29; 2(8618):1016–7

Plasma immunoreactive endothelin in uraemia [letter] Webb DJ, et al. **Lancet** 1989 May 27;1(8648):1211

Hemofiltration with dialysis-regeneration of ultrafiltrate (HF-DR). Bosticardo GM, et al. **Life Support Syst** 1983; 1 Suppl 1:297–300

Membrane and chromatography separation techniques for the preparative isolation of uremic toxins. Brunner H, et al. **Life Support Syst** 1983;1 Suppl 1:199–206

Peak 7c and creatinine weekly clearances in various dialytic procedures. Icardi A, et al. **Life Support Syst** 1983;1 Suppl 1:162–5

Control of serum phosphorus in uremia [editorial] Coburn JW, et al. **N Engl J Med** 1989 Apr 27;320(17):1140–2

Effect of direction and rate of change of calcium on parathyroid hormone secretion in uraemia. Cunningham J, et al. **Nephrol Dial Transplant** 1989;4(5):339–44

Effect of fibronectin on C3b and Fc receptor-mediated phagocytosis by peripheral blood monocytes in uraemic patients. Pertosa G, et al. **Nephrol Dial Transplant** 1989; 4(1):15–20

1-Deamino-8-D-arginine vasopressin lowers protein C activity in uremics. Aunsholt NA, et al. **Nephron** 1989; 53(1):6–8

Free and sulfoconjugated catecholamines in normotensive uremic patients: effects of hemodialysis. Musso NR, et al. **Nephron** 1989;51(3):344–9

Clinical availability of serum fructosamine measurement in diabetic patients with uremia. Use as a glycemic index in uremic diabetes. Shoji T, et al. **Nephron** 1989;51(3):338–43

Significant increase of IQ-type heterocyclic amines, dietary carcinogens in the plasma of patients with uremia just before induction of hemodialysis treatment. Yanagisawa H, et al. **Nephron** 1989;52(1):6–10

Ultrastructural immunolocalization and morphometric quantification of platelet membrane GPIb and GPIIb-IIIa in uremic patients. Escolar G, et al. **Prog Clin Biol Res** 1988;283:197–201

Rapid and inexpensive microdetermination of serum fructosamine results in diabetics, uraemics, diabetics with uraemia and healthy subjects. Boye N, et al. **Scand J Clin Lab Invest** 1988 Dec;48(8):779–83

Temperature dependence of phenytoin-protein binding in serum: effects of uremia and hypoalbuminemia. Allison TB, et al. **Ther Drug Monit** 1988;10(4):376–81

Displacement by anionic drugs of endogenous ligands bound to albumin in uremic serum [published erratum appears in Ther Drug Monit 1989;11(1):119] Mabuchi H, et al. **Ther Drug Monit** 1988;10(3):261–4

Protein C assays in uremia. Sørensen PJ, et al. **Thromb Res** 1989 May 15;54(4):301–10

[Behavior of basal and stimulated serum levels of prolactin, growth hormone and gonadotropins in females with chronic uremia] Rudolf K, et al. **Z Gesamte Inn Med** 1988 Oct 1;43(19):542–4 (Eng. Abstr.) (Ger)

[Behavior of the basal and stimulated serum level of thyroid stimulating hormone and determination of thyroxine, thyroxine- binding capacity and free thyroxine index in females with chronic uremia] Rudolf K, et al. **Z Gesamte Inn Med** 1988 Oct 15;43(20):590–2 (Eng. Abstr.) (Ger)

[Effect of human uremic serum on the survival of fetal rat hepatocytes] Otting U, et al. **Z Urol Nephrol** 1988 Sep; 81(9):581–8 (Eng. Abstr.) (Ger)

[Blood levels of osteocalcin in hemodialysis patients. Significance and relations with uremic osteodystrophy] Bongiorno P, et al. **Minerva Urol Nefrol** 1988 Oct–Dec; 40(4):323–6 (Eng. Abstr.) (Ita)

[Study of middle molecular weight fraction in the plasma of patients with uremia using high performance liquid chromatography and thin layer chromatography] Kovalishin IaF, et al. **Vopr Med Khim** 1988 Nov–Dec; 34(6):23–6 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Acute interstitial nephritis associated with vancomycin therapy. Bergman MM, et al. **Arch Intern Med** 1988 Oct; 148(10):2139–40

COMPLICATIONS

Stratum corneum hydration in patients undergoing maintenance hemodialysis. Ståhle-Bäckdahl M. **Acta Derm Venereol (Stockh)** 1988;68(6):531–4

Uremic pruritus. Clinical and experimental studies. Ståhle-Bäckdahl M. **Acta Derm Venereol Suppl (Stockh)** 1989;145:1–38

Role of growth hormone in growth failure of uraemia—perspectives for application of recombinant growth hormone. Mehls O, et al. **Acta Paediatr Scand Suppl** 1988;343:118–26

Bleeding disorders in uremia: pathophysiology and treatment. Remuzzi G. **Adv Nephrol** 1989;18:171–86 (103 ref.)

Severity of acquired renal cysts in native kidneys and renal allograft with long-standing poor function. Ishikawa I, et al. **Am J Kidney Dis** 1989 Jul;14(1):18–24

Prolonged hypernatremia associated with azotemia and hyponatriuria. Leehey DJ, et al. **Am J Med** 1989 Apr; 86(4):494–6

Optic neuropathy in uremia. Hamed LM, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):30–5

Parasympathetic denervation of the iris in uremia [letter] [published erratum appears in Ann Intern Med 1989 Apr 1;110(7):578] Idiaquez JC, et al. **Ann Intern Med** 1988 Dec 1;109(11):929

Hepatic calcification in proliferated bile ductules in a uremic patient. Kurumaya H, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):411–3

Synthesis of deacetylthymosin beta 11 and its effect on the impaired T-lymphocytes of a uremic patient with common variable immunodeficiency. Abiko T, et al. **Biotechnol Appl Biochem** 1988 Dec;10(6):576–88

The natural history of uremic neuropathy. Albertazzi A, et al. **Contrib Nephrol** 1988;65:130–7

Neurologic abnormalities of uremia. Albertazzi A, et al. **Contrib Nephrol** 1989;70:188–93 (10 ref.)

Effect of erythropoietin administration in uremia. Gurland HJ, et al. **Contrib Nephrol** 1989;70:172–7 (11 ref.)

Disturbed growth in uremia: are hormonal factors responsible? Mehls O, et al. **Contrib Nephrol** 1988;64:34–42 (39 ref.)

Growth in uremic children. Tazzari R, et al. **Contrib Nephrol** 1989;70:194–201

Bleeding complications in the uremic patient. Vogler TA, et al. **J Foot Surg** 1989 Jan–Feb;28(1):7–12

Pathogenesis of arterial hypertension in chronic uraemia: the role of reduced Na,K-ATPase activity. Boero R, et al. **J Hypertens Suppl** 1988 Dec;6(4):S363–5

Experimental and immunohistochemical studies on the possible role of parathyroid hormone in uraemic pruritus. Ståhle-Bäckdahl M, et al. **J Intern Med** 1989 Jun; 225(6):411–5

Oral calcitriol and calcium: efficient therapy for uremic hyperparathyroidism. Quarles LD, et al. **Kidney Int** 1988 Dec;34(6):840–4

Uremic acidosis [clinical conference] Warnock DG. **Kidney Int** 1988 Aug;34(2):278–87 (72 ref.)

Orthostatic hypotension: idiopathic and uremic. Campese VM. **Kidney Int Suppl** 1988 Sep;25:S152–5 (37 ref.)

Pathogenetic aspects of uremic cardiomyopathy. Coratelli P, et al. **Miner Electrolyte Metab** 1989;15(4):246–53

Does uraemic autonomic neuropathy increase the risk of sudden cardiac death? [letter] Krivoshiev S, et al. **Nephrol Dial Transplant** 1989;4(1):75

Acute aluminum encephalopathy in an uremic patient. Campistol JM, et al. **Nephron** 1989;51(1):103–6

Campylobacter pylori in uremic dialyzed patients [letter] Conz P, et al. **Nephron** 1989;53(1):90

Bleeding tendency of chronic uremia improved by vascular factor. Di Paolo N, et al. **Nephron** 1989;52(3):268–72

Neurologic complications of renal disease. Lockwood AH. **Neurol Clin** 1989 Aug;7(3):617–27 (56 ref.)

Upper extremity ischemic monomelic neuropathy: a complication of vascular access procedures in uremic diabetic patients. Riggs JE, et al. **Neurology** 1989 Jul; 39(7):997–8

The use of human recombinant growth hormone for treatment of growth failure in uremia. Mehls O, et al. **Semin Nephrol** 1989 Mar;9(1):43–8 (48 ref.)

Reiter's syndrome in uremia: report of a case. Chen KS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):179–82

[Blood purification technics in the treatment of heart failure in uremia] Dai FX, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Feb;27(2):92–5, 135 (Eng. Abstr.) (Chi)

[Tuberculosis in uremic patients] Leu ML, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1202–7 (Eng. Abstr.) (Chi)

[Phototherapy and uremic pruritus] Bencini PL, et al. **G Ital Dermatol Venereol** 1988 May;123(5):249–51 (Eng. Abstr.) (Ita)

[Severe hyperparathyroidism in 2 uremic patients. Diagnostic and therapeutic difficulties] Basile C, et al. **Minerva Med** 1989 Mar;80(3):289–93 (Eng. Abstr.) (Ita)

[Treatment of hemorrhagic diathesis in patients with chronic uremia] Malyszko J, et al. **Przegl Lek** 1989;46(3):369–73 (70 ref.) (Pol)

[Efferent methods of detoxication in the treatment of patients with prostatic adenoma complicated by suppurative-septic toxemia with renal failure] Lopatkin NA, et al. **Urol Nefrol (Mosk)** 1988 May-Jun;(3):3–7 (Eng. Abstr.) (Rus)

DIAGNOSIS

Uremic optic neuropathy. Saini JS, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):131–3; discussion 134–5

[Cardiothoracic ratio and roentgenologic heart size as the indices of body fluid retention in uremics under hemodialysis] Harasawa H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Feb 25; 49(2):191–8 (Eng. Abstr.) (Jpn)

[Echocardiographic indices of uremia patients being treated by hemodiafiltration] Vinogradova TS, et al. **Sov Med** 1988; (12):103–6 (Rus)

DIET THERAPY

Protein-restricted diets and progression of renal failure. Druml W, et al. **Blood Purif** 1988;6(5):285–98 (62 ref.)

The assessment of nutritional status in chronically uremic patients. Guarnieri G, et al. **Contrib Nephrol** 1989;72:73–103 (157 ref.)

[Current problems of diet therapy of nephropathy] Ratner Mia. **Ter Arkh** 1988;60(6):116–20 (Rus)

DRUG THERAPY

Treatment of uremic hyperphosphatemia—is there still a need for aluminum salts? Schaefer K, et al. **Am J Nephrol** 1988; 8(3):173–8 (33 ref.)

Calcium carbonate and magnesium hydroxide in the prevention of renal osteodystrophy or the demise of aluminum toxicity in uremia. Analysis of 5 years experience. Morinière P, et al. **Contrib Nephrol** 1988; 64:58–73 (39 ref.)

Early functional effects of various antihypertensive drugs in chronically uremic rats. Teschner M, et al. **Kidney Int Suppl** 1988 Sep;25:S156–9

The metabolic consequences of the correction of acidosis in uraemia. Jenkins D, et al. **Nephrol Dial Transplant** 1989; 4(2):92–5

Tissue calcium in uraemia. Krog M, et al. **Scand J Urol Nephrol** 1989;23(2):141–4

ENZYMOLOGY

Protease histochemistry in normal and uremic rats. Gosrau R, et al. **Adv Exp Med Biol** 1988;240:351–60

A simple, rapid assay for plasma oxalate in uraemic patients using oxalate oxidase, which is free from vitamin C interference. Rolton HA, et al. **Clin Chim Acta** 1989 Jul 14;182(3):247–54

Degranulation of peripheral blood neutrophils during haemoperfusion in chronic uraemics. Trznadel K, et al. **Int Urol Nephrol** 1988;20(6):685–90

Intraepidermal neuron–specific enolase (NSE)–immunoreactive nerve fibres: evidence for sprouting in uremic patients on maintenance hemodialysis. Johansson O, et al. **Neurosci Lett** 1989 May 8;99(3):281–6

ETIOLOGY

Acute metabolic alkalosis with hypokalemia and azotemia following massive upper gastrointestinal hemorrhage in a 54–year–old alcoholic man with cirrhosis [letter] De Marchi S, et al. **Am J Nephrol** 1988;8(5):433–4

Causes of uraemia in the elderly. An evaluation of biochemical parameters. Iyer RP, et al. **Br J Clin Pract** 1988 Mar;42(3):97–100

Metabolic and renal effects of interleukin–2 immunotherapy for metastatic cancer. Webb DE, et al. **Clin Nephrol** 1988 Sep;30(3):141–5

The cause of uremia in obstructed kidneys. Awazu M, et al. **J Pediatr** 1989 Feb;114(2):179–86 (45 ref.)

Uremia as a complication to urinary retention due to hypothyreosis. Case report. Hansen MV, et al. **Scand J Urol Nephrol** 1988;22(4):351–3

[Nephroangiosclerosis as a cause of uremia] Goia F, et al. **Minerva Urol Nefrol** 1988 Jul–Sep;40(3):219–22 (Ita)

[Oligo–elements and uremic encephalopathy: speculations and reality] Balestri PL. **Recenti Prog Med** 1989 Jan; 80(1):33–6 (26 ref.) (Ita)

GENETICS

Sister chromatid exchange and chromosome abnormalities in uremic patients. Cengiz K, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):55–67

HISTORY

[Uremia and hypertensive encephalopathy in nephritis and essential hypertension. 1939 (classical article)] Fernós Isern A. **Bol Asoc Med P R** 1989 May;81(5):183–7 (Spa)

IMMUNOLOGY

Cell–mediated immunity in healthy and uremic adults assessed by in vivo and in vitro techniques. Validation of delayed hypersensitivity skin testing. López M, et al. **Allergol Immunopathol (Madr)** 1989 Jan–Feb;17(1):21–8

Serial cell–mediated immunological changes in terminal uremic patients on continuous ambulatory peritoneal dialysis therapy. Lin CY, et al. **Am J Nephrol** 1988; 8(5):355–62

Effect of hemodialysis on T lymphocyte subsets, con–A–activated suppressor cell activity, and interleukin–2 receptor expression on lymphocytes in chronic uremic patients. Tchórzewski H, et al. **Artif Organs** 1989 Jun; 13(3):185–9

Synthesis of human thymopoietin (hTP) and examination of its immunological effect on the impaired blastogenic response of T–lymphocytes of uremic patients. Abiko T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2506–16

The effect of random blood transfusions on immunoglobulin production by peripheral blood mononuclear cells from uraemic patients. Degiannis D, et al. **Clin Exp Immunol** 1988 Jul;73(1):155–9

The immune status of the uremic patient: hemodialysis vs CAPD. Schollmeyer P, et al. **Clin Nephrol** 1988;30 Suppl 1:S37–40 (30 ref.)

Immunological studies in uremic and kidney transplanted patients. Langhoff E. **Dan Med Bull** 1989 Apr;36(2):160–75 (259 ref.)

Effect of monophosphoryl lipid A on the in vitro function of peritoneal leukocytes from uremic patients on continuous ambulatory peritoneal dialysis. Carozzi S, et al. **J Clin Microbiol** 1989 Aug;27(8):1748–53

Lectin–mediated, nonopsonic phagocytosis of type 1 Escherichia coli by human peritoneal macrophages of uremic patients treated by peritoneal dialysis. Boner G, et al. **J Leukoc Biol** 1989 Sep;46(3):239–45

Polymorphonuclear leukocyte activation during hemodialysis: a chemiluminescence study. Mori R, et al. **Life Support Syst** 1983;1 Suppl 1:154–7

METABOLISM

Mechanisms for activation of proteolysis in uremia. Mitch WE. **Adv Exp Med Biol** 1988;240:315–21 (25 ref.)

Hormonal regulation of muscle protein catabolism in acutely uremic rats: effect of adrenalectomy and parathyroidectomy. Schaefer RM, et al. **Adv Exp Med Biol** 1988;240:257–66

Evidence for the role of proteinases in uremic catabolism. Schaefer RM, et al. **Adv Exp Med Biol** 1988;240:323–9

Eglin C fails to reduce catabolism in acutely uremic rats. Teschner M, et al. **Adv Exp Med Biol** 1988;240:331–7

A hypothesis: the protein catabolic rate is dependent upon the type and amount of treatment in dialyzed uremic patients. Lindsay RM, et al. **Am J Kidney Dis** 1989 May; 13(5):382–9

Alterations of glucose transporter systems in insulin–resistant uremic rats. Jacobs DB, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E193–7

The influence of early parathyroidectomy on aluminum–induced rickets in growing uremic rats. Vukičević S, et al. **Bone Miner** 1989 May;6(2):125–39

Effect of haemodialysis on metoclopramide kinetics in patients with severe renal failure. Wright MR, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):474–7

The effect of vitamin D treatment on decreased levels of ATP and energy charge in the thoracic aorta of uraemic rats. Krog M, et al. **Br J Exp Pathol** 1989 Apr;70(2):193–8

Glucose intolerance in uremic patients: the relative contributions of impaired beta–cell function and insulin resistance. Alvestrand A, et al. **Clin Nephrol** 1989 Apr; 31(4):175–83

Influence of hyperglycemia on glucose uptake and hepatic glucose production in non–dialyzed uremic patients. Schmitz O, et al. **Clin Nephrol** 1988 Jul;30(1):27–34

Alteration in carnitine metabolism in uremic children. Bulla M, et al. **Contrib Nephrol** 1988;67:86–94

Nutritional requirements and energy expenditure by indirect calorimetry in uremic patients during conservative management. Di Paolo N, et al. **Contrib Nephrol** 1988; 65:60–71

Uremic acidosis. Garella S. **Contrib Nephrol** 1989;69:39–54 (34 ref.)

Nutrient absorption in uremic patients. Sterner G. **Contrib Nephrol** 1989;72:42–8 (21 ref.)

Aluminium accumulates on inactive bone surfaces after parathyroidectomy in uremic rats. Vukičević S, et al. **Horm Metab Res** 1989 Jan;21(1):15–7

Clinico–biochemical aspects of guanidine compounds in uraemic toxicity. Kishore BK, et al. **Int Urol Nephrol** 1989; 21(2):223–32 (26 ref.)

Amino acid metabolism in uremia. Fürst P. **J Am Coll Nutr** 1989 Aug;8(4):310–23 (105 ref.)

Review: mechanisms for abnormal protein metabolism in uremia. Mitch WE, et al. **J Am Coll Nutr** 1989 Aug; 8(4):305–9 (29 ref.)

Inhibition of glucose utilization in uremia by hippurate: liquid chromatographic isolation and mass spectrometric and nuclear magnetic resonance spectroscopic identification. Spustová V, et al. **J Chromatogr** 1989 May 5;490(1):186–92

Influence of demographic factors on cyclosporine pharmacokinetics in adult uremic patients. Grevel J, et al. **J Clin Pharmacol** 1989 Mar;29(3):261–6

Insulin action and insulin therapy in uremic insulin–dependent diabetic patients. Schmitz O. **J Diabetic Complications** 1989 Jan–Mar;3(1):49–55 (39 ref.)

Erythrocyte Na,K pump activity and arterial hypertension in uremic dialyzed patients. Boero R, et al. **Kidney Int** 1988 Nov;34(5):691–6

1,25–(OH)2D receptors are decreased in parathyroid glands from chronically uremic dogs. Brown AJ, et al. **Kidney Int** 1989 Jan;35(1):19–23

Renal cortical mitochondrial transport of calcium in chronic uremia. Conforty A, et al. **Kidney Int** 1988 Sep;34(3):327–32

Metabolic clearance rate and production rate of calcitriol in uremia. Dusso A, et al. **Kidney Int** 1989 Mar;35(3):860–4

Hemodialysis and red cell cation transport in uremia: role of membrane free fatty acids. Kelly RA, et al. **Kidney Int** 1989 Feb;35(2):595–603

Causes, kinetics and clinical implications of post–hemodialysis urea rebound. Pedrini LA, et al. **Kidney Int** 1988 Dec;34(6):817–24

Insulin resistance in uremia: an in vivo and in vitro study. Stein PP, et al. **Metabolism** 1989 Jun;38(6):562–7

Reduction of muscle protein degradation by leupeptin in acutely uremic rats. Schaefer RM, et al. **Miner Electrolyte Metab** 1988;14(5):308–12

Enhanced gastrointestinal absorption of aluminium in uraemia: time course and effect of vitamin D. Ittel TH, et al. **Nephrol Dial Transplant** 1988;3(5):617–23

Glycosylated and carbamylated haemoglobin in uraemia. Smith WG, et al. **Nephrol Dial Transplant** 1989;4(2):96–100

Reduced metabolic rate in acute uremic rats: interrelations between bilateral nephrectomy and anesthesia. Raneburger J, et al. **Nephron** 1989;51(4):569–70

Catabolic effects of ethanol in chronically uremic rats. Schaefer RM, et al. **Nephron** 1989;51(1):67–72

Vitamin D, desferrioxamine and aluminum–induced bone disease in uremic rats. Verbeelen D, et al. **Nephron** 1989; 53(1):54–60

The effects of aluminium on brain gangliosides in uraemic rats treated with 24R,25–dihydroxyvitamin D3. Vukičević S, et al. **Neuropathol Appl Neurobiol** 1989 Jan–Feb; 15(1):55–62

Effect of experimental azotemia on intestinal transport of butyric acid. Vaziri ND, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):150–4

Effect of 1,25–dihydroxyvitamin D3 on intestinal glucose absorption in uremic rats. Inagaki O, et al. **Ren Fail** 1989; 11(1):17–21

The effect of obesity on cyclosporine pharmacokinetics in uremic patients. Flechner SM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1446–8

[Renal handling of pyruvate in normal subjects and uremic patients] Chen SM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Feb;41(2):97–102 (Eng. Abstr.) (Chi)

[Pharmacokinetics of trometamol–fosfomycin in patients with renal insufficiency] Fillastre JP, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):728–30 (Eng. Abstr.) (Fre)

[Cutaneous divalent ions and uremic pruritus] Bencini PL, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):143–5 (Eng. Abstr.) (Ita)

[Changes in membrane sodium transport and arterial hypertension in uremic patients under dialysis] Quarello F, et al. **Minerva Urol Nefrol** 1988 Jul–Sep;40(3):207–10 (Ita)

[Surface active compounds present in the dialysate from patients with uremia] Cichocki T, et al. **Przegl Lek** 1988; 45(7):549–54 (Eng. Abstr.) (Pol)

[Uremic toxicity] Djukanović L, et al. **Srp Arh Celok Lek** 1986 Mar;114(3):331–9 (Eng. Abstr.) (Scc)

[Disorders of calcium and phosphate metabolism regulation in an experimental model of acute uremia] Ivić M, et al. **Srp Arh Celok Lek** 1988 Apr;116(4):371–82 (Eng. Abstr.) (Scc)

PATHOLOGY

Uraemic and 1–alpha–hydroxycholecalciferol induced aortic lesions. Krog M, et al. **Exp Pathol** 1988;35(2):101–14

1,25(OH)2 vitamin D3 inhibits parathyroid cell proliferation in experimental uremia. Szabo A, et al. **Kidney Int** 1989 Apr;35(4):1049–56

Effect of converting enzyme inhibitors on cardiac changes in experimental uremia. Rambausek M, et al. **Kidney Int Suppl** 1988 Sep;25:S201–3

[Interstitial myocardial fibrosis in chronic uremia—the cause of chronic diastolic malfunction in dialysis patients?] Mall G, et al. **Pathologe** 1989 Jul;10(4):200–5 (Ger)

[Cutaneous histopathological changes in uremic patients. Preliminary report] Bencini PL, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):173–6 (Eng. Abstr.) (Ita)

PHYSIOPATHOLOGY

Effects of physiologic and supraphysiologic hyperglycemia on early and late–phase insulin secretion in chronically dialyzed uremic patients. Schmitz O. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):251–8

Erythropoietic action of dexamethasone on the anemia associated with an experimental chronic renal failure. Malgor LA, et al. **Acta Physiol Pharmacol Latinoam** 1987; 37(3):365–76

The effects of experimental uremia in rats on duodenal VIP levels and the interaction of VIP with duodenal epithelial cells. Fernández–Moreno MD, et al. **Biosci Rep** 1989 Apr; 9(2):207–12

Postprandial alterations in arterial pressure control during hemodialysis in uremic patients. Zoccali C, et al. **Clin Nephrol** 1989 Jun;31(6):323–6

Comparative analysis of autonomic and somatic dysfunction in chronic uraemia. Vita G, et al. **Eur Neurol** 1988; 28(6):335–40

Gonadotropin secretion in azotemic male rats—effect of opioid blockade. Elias AN, et al. **Horm Res** 1988; 30(1):39–43

Motor action potential (M.A.P.) in the evaluation of uremic peripheral neurone damage: influence of middle molecules (M.M.). Coratelli P, et al. **Life Support Syst** 1983;1 Suppl 1:129–32

Densitometric and electrophysiological changes in uraemic encephalopathy. Di Paolo B, et al. **Life Support Syst** 1983; 1 Suppl 1:151–3

Pancreatic beta–cell function in CAPD. Smith WG, et al. **Nephrol Dial Transplant** 1988;3(4):448–52

Neuropathy of uremia: evaluation by nerve conduction velocity versus neurospecific current perception threshold. Weseley SA, et al. **Nephron** 1989;52(4):317–22

Functional changes in the inner ear in renal insufficiency. An experimental study in the rat. Anniko M, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(2):103–7

[Effect of autonomic pathology in uremia on the blood pressure during hemodialysis] Koteva A, et al. **Vutr Boles** 1989;28(3):82–5 (Eng. Abstr.) (Bul)

[The sinostrial nodal function in uremic patients. A preliminary report] Chern TH, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Sep;40(3):289–94 (Eng. Abstr.) (Chi)

[Significance of the H–index in the early diagnosis of uremic polyneuropathy] Sperschneider H, et al. **Z Urol Nephrol** 1988 Jun;81(6):387–93 (Eng. Abstr.) (Ger)

[The physiopathologic bases of the neurotoxicity of phosphorus chelating agents containing soluble aluminum salts in patients with renal insufficiency] Savazzi GM, et al. **Recenti Prog Med** 1989 Apr;80(4):227–32 (39 ref.) (Eng. Abstr.) (Ita)

[Abnormal response to the Valsalva's maneuver in non–dialysed patients with uremia] Idiáquez J, et al. **Rev Med Chil** 1988 Jul;116(7):659–61 (Eng. Abstr.) (Spa)

PSYCHOLOGY

Hyperprolactinemia and psychological distress in women undergoing chronic hemodialysis. Fava M, et al. **Psychother Psychosom** 1988;49(1):6–9

RADIONUCLIDE IMAGING

Diuresis renography in patients with reduced renal function. Hjortsø E, et al. **Dan Med Bull** 1988 Jun;35(3):294–5

REHABILITATION

Demographics, diabetes type, and degree of rehabilitation in diabetic patients on maintenance hemodialysis in Brooklyn. Lowder GM, et al. **J Diabetic Complications** 1988 Oct–Dec;2(4):218–26

SURGERY

Transplantation in diabetic patients. Najarian JS, et al. **Contrib Nephrol** 1989;70:56–63

Is pancreas transplantation in nonuremic patients a viable option? [letter] Ramirez LC, et al. **Diabetes Care** 1989 Jul–Aug;12(7):511–2

Ureteral replacement using ileum in compromised renal function. Waters WB, et al. **J Urol** 1989 Feb;141(2):432–6

[Acute hepatitis in an uremic patient following isoflurane anesthesia] Cherng CH, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):239–42 (Eng. Abstr.) (Chi)

[Renal transplantation in children, in France] Beurton D. **Chirurgie** 1988;114(4):280–3 (Eng. Abstr.) (Fre)

THERAPY

Perfusion of uremic blood ultrafiltrate on uncoated charcoal. Politi L, et al. **Artif Organs** 1989 Jun;13(3):246–51

Clinical experience with a new hemodiafiltration (HDF) system. Rindi P, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):765–8

Magnesium free dialysis for uraemic pruritus. Carmichael AJ, et al. **BMJ** 1988 Dec 17;297(6663):1584–5

Purification of blood ultrafiltrate on uncoated charcoal. Politi L, et al. **Clin Med J [Engl]** 1988 Jun;101(6):438–43

Prevention and treatment of aluminum overload in uremic patients: long–term results. Canavese C, et al. **Clin Nephrol** 1989 Apr;31(4):169–74

Beta–2–microglobulin amyloidosis in uremic dialyzed patients. Brancaccio D, et al. **Contrib Nephrol** 1989; 70:202–7 (23 ref.)

Hemodiafiltration with separate convection and diffusion: paired filtration dialysis. Ghezzi PM, et al. **Contrib Nephrol** 1989;69:141–61; discussion 162–7 (67 ref.)

Long–term application of 1,25–dihydroxyvitamin D3. Effect on its serum level in dialysis patients and on the calcium content of various organs in experimental uremia. Saupe J, et al. **Contrib Nephrol** 1988;65:115–22

Uraemic toxins and blood purification strategies. Válek A, et al. **Contrib Nephrol** 1989;70:178–87

Hemodiafiltration. Vanholder R, et al. **Contrib Nephrol** 1989; 69:131–40; discussion 162–7

A non–invasive method in the assessment of surgically created arteriovenous fistulae for uraemia. Redmond HP, et al. **Eur J Vasc Surg** 1987 Oct;1(5):311–4

Changes and correlations of antioxidant enzymes, lipid peroxidation and serum neutral lipids due to haemodialysis treatment in chronic uraemic patients. Matkovics B, et al. **Int Urol Nephrol** 1988;20(5):559–64

Dental management of the uremic diabetic. Berger JR. **J Diabetic Complications** 1989 Jan–Mar;3(1):56–8

Preserving feet in the uremic diabetic: the physician's role. Rausher H, et al. **J Diabetic Complications** 1988 Jul–Sep; 2(3):145–9

One–hour and half, high–surface–area haemodiafiltration: a feasibility study. Basile C, et al. **Life Support Syst** 1983;1 Suppl 1:435–8

Requirement of hemofiltration (HF) in uremic patients. Civati G, et al. **Life Support Syst** 1983;1 Suppl 1:282–8

Theoretical model and first clinical results of the paired filtration–dialysis (PFD). Ghezzi PM, et al. **Life Support Syst** 1983;1 Suppl 1:271–4

Experience with 351 prosthetic vascular accesses for chronic dialysis. Mangiarotti G, et al. **Life Support Syst** 1983;1 Suppl 1:375–8

Hemofiltration in patients with symptoms no removed by hemodialysis. Rindi P, et al. **Life Support Syst** 1983;1 Suppl 1:279–81

PTFE graft for AV fistulas: 3mm vs. 6mm prosthesis. Results and long survival example. Squerzanti R, et al. **Life Support Syst** 1983;1 Suppl 1:390–3

Is CAPD competitive with haemodialysis for long–term treatment of uraemic patients? Maiorca R, et al. **Nephrol Dial Transplant** 1989;4(4):244–53 (74 ref.)

Magnesium hydroxide as a complementary aluminium–free phosphate binder to moderate doses of oral calcium in uraemic patients on chronic haemodialysis: lack of deleterious effect on bone mineralisation. Morinière P, et al. **Nephrol Dial Transplant** 1988;3(5):651–6

Erosive osteoarthropathy associated with beta 2–microglobulin amyloidosis in a uraemic patient treated exclusively by long–term haemofiltration with biocompatible membranes. Renaud H, et al. **Nephrol Dial Transplant** 1988;3(6):820–2

Controlled trial of thymopentin in hemodialysis patients who fail to respond to hepatitis B vaccination. Donati D, et al. **Nephron** 1988;50(2):133–6

Aluminum removal with hemodialysis, hemofiltration and charcoal hemoperfusion in uremic patients after desferrioxamine infusion. A comparison of efficiency. Weiss LG, et al. **Nephron** 1989;51(3):325–9

[Hemodialysis of uremic patients with a high risk of bleeding] Qu SL, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Mar; 69(3):131–3, 10 (Eng. Abstr.) (Chi)

[Occurrence of uremia and dialysis therapy in children in the East Bohemia Region] Pellantová Z. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(2):233–9 (Eng. Abstr.) (Cze)

[Treatment of terminal uremia by iterative hemodialysis: 25 years of change, the experience at the Free University of Brussels] Vanherweghem JL. **Rev Med Brux** 1988 Nov; Spec No:13–26 (117 ref.) (Eng. Abstr.) (Fre)

[Removal of middle molecule peptides from the blood during hemodialysis] Bakaev VV, et al. **Lab Delo** 1989;(1):64 (Rus)

[Urea balance in the treatment of acute renal failure by hemofiltration] Kulakov GP, et al. **Ter Arkh** 1988; 60(8):91–6 (Eng. Abstr.) (Rus)

URINE

Effect of a low–protein diet on urinary albumin excretion in uremic patients. Aparicio M, et al. **Nephron** 1988; 50(4):288–91

Effects of furosemide therapy on free–water excretion in uremic patients. Conte G, et al. **Nephron** 1988;50(4):299–305

Urinary diagnostic indices in the management of leptospirosis. Selection of patients for dialysis therapy [published erratum appears in West Indian Med J 1989 Jun;38(2):87] Nicholson GD, et al. **West Indian Med J** 1989 Mar;38(1):33–8

VETERINARY

Percutaneous nephrostomy in short–term management of ureterolithiasis and renal dysfunction in a filly. Byars TD, et al. **J Am Vet Med Assoc** 1989 Aug 15;195(4):499–501

UREOHYDROLASES

Crystal structure determination, refinement and molecular model of creatine amidinohydrolase from Pseudomonas putida. Hoeffken HW, et al. **J Mol Biol** 1988 Nov 20; 204(2):417–33

METABOLISM

Degradation of uric acid in fish liver peroxisomes. Intraperoxisomal localization of hepatic allantoicase and purification of its peroxisomal membrane–bound form. Hayashi S, et al. **J Biol Chem** 1989 Feb 25;264(6):3211–5

URETER

Ureteroscopic removal of a retained "T" tube fragment. Anderson JH, et al. **Br J Urol** 1989 Jul;64(1):105

Removal of ureteric stents under local anaesthesia. Upsdell SM. **Br J Urol** 1988 Sep;62(3):280

Lateralized lumbar pain during sexual intercourse. Early clinical sign of single ectopic ureter? Cisternino A, et al. **Eur Urol** 1988;14(6):490–2

Bilateral single ectopic ureter. Passerini Glazel G, et al. **Eur Urol** 1988;14(6):454–7

Semirigid ureteroscopy: a new genre. Dretler SP, et al. **J Urol** 1989 Jun;141(6):1314–6

Pressure–controlled hydraulic dilation of the ureter: "one–step" ureteroscopy. Eshghi M. **J Urol** 1988 Nov; 140(5):950–3

Balloon dilation of the ureter for ureteroscopy. Huffman JL, et al. **J Urol** 1988 Nov;140(5):954–6

Giant hydronephrosis of a duplex system associated with ureteral ectopia. Whitmore RB 3d, et al. **J Urol** 1989 May; 141(5):1186–8

Anastomosed ureters: fluoroscopically guided transconduit retrograde catheterization. Banner MP, et al. **Radiology** 1989 Jan;170(1 Pt 1):45–9

Simple instrument occlusion of the anterior visceral branches of the aorta during en bloc renal allograft procurement. Maley WR, et al. **Surg Gynecol Obstet** 1988 Nov; 167(5):442–4

[Clinical use of ureteroscopy in treating stones in the ureter] Patrashkov T, et al. **Khirurgiia (Sofiia)** 1988;41(6):71–6 (Eng. Abstr.) (Bul)

[Transrenal ureteral occlusion using detachable balloons. An alternative to cutaneous ureterostomy in the treatment of vesicovaginal fistula] Boudghène F, et al. **Ann Urol (Paris)** 1988;22(6):425–7 (Eng. Abstr.) (Fre)

ABNORMALITIES

Kabuki makeup syndrome associated with megaureter. Iwama Y, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Feb; 29(1):182–5

Transcaval ureter with hydronephrosis: radiologic demonstration. Rosen MP, et al. **AJR** 1989 Apr; 152(4):793–4

Embryogenesis of ureteral anomalies: a unifying theory. Weiss JP. **Aust N Z J Surg** 1988 Aug;58(8):631–8

Duplication of the upper and lower urinary tract. Gyrtrup HJ, et al. **Br J Urol** 1989 Feb;63(2):217–8

Ectopic ureter managed by unilateral nephrectomy in two female horses. Sullins KE, et al. **Equine Vet J** 1988 Nov; 20(6):463–6

Trifid pelvis and controlateral bifid ureter with bilateral ureteropelvic junction obstruction. Sapin E, et al. **Eur Urol** 1988;15(1–2):144–5

Congenital hemihypertrophy, contralateral benign nephromegaly and duplex ureter [letter] Agarwal RK, et al. **Indian Pediatr** 1988 Sep;25(9):902–3

Complications of ureteric pigtail stents. MacDermott JP, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):387–9

Vesicoureteral reflux in complete ureteral duplication: surgical options. Ahmed S, et al. **J Urol** 1988 Nov;140(5 Pt 2):1092–4

Comparison of 2 different tapering techniques in megaureters. Bakker HH, et al. **J Urol** 1988 Nov;140(5 Pt 2):1237–9

Thoracic ureter. Garat JM, et al. **J Urol** 1988 Dec; 140(6):1519–20

Bilateral ureteral triplication with crossed ectopic fused kidneys associated with the VACTERL syndrome. Golomb J, et al. **J Urol** 1989 Jun;141(6):1398–9 (9 ref.)

Retroiliac ureter in a male newborn with multiple genitourinary anomalies: case report and review of the literature. Nguyen DH, et al. **J Urol** 1989 Jun;141(6):1400–3 (25 ref.)

Surgery for duplex kidneys with ectopic ureters: ipsilateral ureteroureterostomy versus polar nephrectomy. Smith FL, et al. **J Urol** 1989 Aug;142(2 Pt 2):532–4; discussion 542–3

Surgical treatment of a bifid blind–ending ureter: report of two cases. Witjes JA, et al. **Neth J Surg** 1989 Feb;41(1):21–3

The natural history of reflux in the lower pole of duplicated collecting systems: a controlled study. Ben–Ami T, et al. **Pediatr Radiol** 1989;19(5):308–10

Ureteral valves: report of a case diagnosed by antegrade pyelography. Tlili–Graies K, et al. **Pediatr Radiol** 1988; 19(1):67–9

Double ureter in children: surgical management. Kheradpir MH, et al. **Prog Pediatr Surg** 1989;23:86–95

Pediatric case of the day. Complete ureteral triplication. Fernbach SK, et al. **Radiographics** 1989 Mar;9(2):359–60, 364

Inverted Y–ureteral duplication with an uterine ectopy as cause of ureteric enuresis. Ecke M, et al. **Urol Int** 1989; 44(2):116–8

Lithiasis inside a blind–ending branch of a trifid ureter. Baró PR, et al. **Urol Radiol** 1989;11(1):42–4

Transverse fusion of the renal pelvis and single ureter. Currarino G, et al. **Urol Radiol** 1989;11(2):88–91 (10 ref.)

Bilateral duplex ectopic ureters terminating in the seminal vesicles: sonographic and CT diagnosis. Hernanz–Schulman M, et al. **Urol Radiol** 1989;11(1):49–52

Neonatal ascites and ureteral valves. Reha WC, et al. **Urology** 1989 Jun;33(6):468–71

[Computer tomography in the diagnosis and classification of retrocaval ureters] Pink J, et al. **Rozhl Chir** 1989 Mar; 68(3):202–6 (Eng. Abstr.) (Cze)

[Results of early surgery of obstructive uropathies diagnosed prenatally: apropos of 56 cases] Averous M. **Acta Urol Belg** 1989;57(2):423–30 (Fre)

[The Whitaker test. Its reliability and place in the study of congenital malformative uropathies] Bouchot O, et al. **Ann Urol (Paris)** 1989;23(1):58–64 (Eng. Abstr.) (Fre)

[Renal autotransplantation. An exceptional solution for salvage of the kidney following failure of surgery of bilateral megaureter] Ferrière JM, et al. **Ann Urol (Paris)** 1989;23(3):251–2 (Eng. Abstr.) (Fre)

[The association of a dysplastic kidney with a single vaginal ectopic ureter and a homolateral genital abnormality in a girl. Comments based on 3 case reports] Bondonny JM, et al. **Chir Pediatr** 1988;29(5):273–80 (Eng. Abstr.) (Fre)

[2 cases of exception to the law of Weigert and Meyer] Valla JS, et al. **Chir Pediatr** 1989;30(2):83–7 (Eng. Abstr.) (Fre)

[Stress urinary incontinence associated with an ectopic ureteral junction. Apropos of 1 case (letter)] Lechartier AM, et al. **J Chir (Paris)** 1989 Jan;126(1):54–5 (Fre)

[Primary obstructive megaureter in infants: medical or surgical treatment? Apropos of 24 cases] Vidal V, et al. **J Urol (Paris)** 1988;94(5–6):279–83 (15 ref.) (Eng. Abstr.) (Fre)

[Treatment of hydronephrosis caused by obstruction of the pyeloureteral junction diagnosed before birth] Mollard P, et al. **Pediatrie** 1988;43(9):757–62 (11 ref.) (Eng. Abstr.) (Fre)

[Abnormalities of the kidney and efferent urinary tract] Baczako K, et al. **Monatsschr Kinderheilkd** 1989 Jan; 137(1):13–7 (9 ref.) (Eng. Abstr.) (Ger)

[Ureter triplication with contralateral ureter duplication] Prantl M, et al. **Z Kinderchir** 1988 Oct;43(5):350–2 (Eng. Abstr.) (Ger)

[Ureteral ectopia in cysts of the seminal vesicle and renal agenesis. Description of a case] Pretti G, et al. **Minerva Urol Nefrol** 1988 Jul–Sep;40(3):171–3 (Eng. Abstr.) (Ita)

[Ectopic ureter. Description of a clinical case with appearance of stress urinary incontinence] Saltutti C, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):17–22 (Eng. Abstr.) (Ita)

[Retrotendinous ureter. An exceptional cause of obstruction in the upper urinary tract] Guarise P, et al. **Pediatr Med Chir** 1989 Jan–Feb;11(1):85–8 (Eng. Abstr.) (Ita)

[Ectopic ureter] Musi L, et al. **Pediatr Med Chir** 1989 Mar–Apr;11(2):129–35 (Eng. Abstr.) (Ita)

[Blind–ending bifid ureter: 3 case reports] Takemoto Y, et al. **Hinyokika Kiyo** 1989 Jan;35(1):115–9 (8 ref.) (Eng. Abstr.) (Jpn)

[Unusual duplication of renal collecting system mimicking

supernumerary kidney—a case report] Kaneoya F, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):270–3 (Eng. Abstr.) (Jpn)

[Radiological evaluation of a retrocaval ureter] Imai Y, et al. **Rinsho Houkoku** 1988 Jun;33(6):679–84 (Eng. Abstr.) (Jpn)

[Ectopic ureter, case report] Georgiev M, et al. **Acta Chir Iugosl** 1987;34(1):97–102 (Eng. Abstr.) (Mac)

[A case of retrocaval location of the ureter in bilateral nephroptosis] Zhila VV, et al. **Klin Khir** 1988;(12):53–4 (Rus)

[Treatment of bilateral megaureter in children with posterior urethral valves] Cheskis AL, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):31–6 (Eng. Abstr.) (Rus)

[A method of surgery in bilateral vesico–ureteral reflux in children with a double ureter] Fryczkowski M, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):29–31 (Eng. Abstr.) (Rus)

[Clinico–morphological characteristics of the state of the kidneys and ureters in developmental anomalies of the upper urinary tract in children] Stepanov EA, et al. **Urol Nefrol (Mosk)** 1988 Jul–Aug;(4):31–5 (Eng. Abstr.) (Rus)

[Results of surgery for an ectopic ureterocele in children] Tereshchenko AV, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):28–31 (Eng. Abstr.) (Rus)

[Epididymal melanosis: presentation of a case associated with ureteral ectopy in the seminal vesicle] Ripa Saldias LM, et al. **Actas Urol Esp** 1988 May–Jun;12(3):299–303 (Eng. Abstr.) (Spa)

[Ureteropyelostomy in the treatment of ureteral duplication with reflux] Arango Toro O, et al. **Arch Esp Urol** 1988 Sep;41(7):507–10 (Eng. Abstr.) (Spa)

[Syndrome of duplicated pyeloureteral junction; a rare entity. Apropos of 5 cases] Estorneli Moragues F, et al. **Arch Esp Urol** 1988 Oct;41(8):585–9 (Eng. Abstr.) (Spa)

[Diagnostic and surgical aspect of retrocaval ureter] Fernández Madrigal F, et al. **Arch Esp Urol** 1988 Sep; 41(7):489–92 (Eng. Abstr.) (Spa)

[Valves at the pyelo–ureteral junction. Descriptive study in the rat] Rodriguez–Miralles J, et al. **Arch Esp Urol** 1988 May;41(4):251–4 (Eng. Abstr.) (Spa)

ANALYSIS

Localization of a renal kallikrein immunoreactive–like substance in rat ureter. Orfila C, et al. **J Histochem Cytochem** 1988 Dec;36(12):1463–9

ANATOMY & HISTOLOGY

Ureteroscopy and renoscopy: a preliminary report. Bush IM, et al. **Chic Med Sch Q** 1970;30(1):46–9

Influence of hip flexion on the course of the ureter. Ureteroscopic implications. Angus DG, et al. **Eur Urol** 1988;14(4):287–90

Variations in shape and position of human renal pelvis. Kosiński H. **Folia Morphol (Warsz)** 1987;46(3–4):207–12

Sonography of normal lower ureters. Mirk P, et al. **JCU** 1988 Nov–Dec;16(9):635–42

[Stereo–morphometric study on the muscular architecture of normal ureteral wall at the ureteropelvic junction] Kaneto H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1040–8 (Eng. Abstr.) (Jpn)

[Endoscopy of the ureter and renal calyco–pelvic system] Lisitsin KM, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec; (6):24–7 (Eng. Abstr.) (Rus)

CYTOLOGY

The effects of urine on mast cells and smooth muscle of the human ureter. Ugaily–Thulesius L, et al. **Urol Res** 1988; 16(6):441–7

DRUG EFFECTS

Stimulation of voltage–dependent contractions by calcium channel activator Bay K 8644 in the human upper urinary tract in vitro. Hertle L, et al. **J Urol** 1989 Apr;141(4):1014–8

[The possibility of stimulating the ureters with hexoprenaline following radical abdominal surgery of cervix cancer] Gitsch G, et al. **Zentralbl Gynakol** 1988;110(16):1030–3 (Eng. Abstr.) (Ger)

[Action of calcium antagonists on ureteral dynamics] Salman S, et al. **Actas Urol Esp** 1989 Mar–Apr;13(2):150–2 (Eng. Abstr.) (Spa)

EMBRYOLOGY

Development of elastic fibres in the upper urinary tract. Escala JM, et al. **J Urol** 1989 Apr;141(4):969–73

ENZYMOLOGY

Insulin activation of cyclic AMP phosphodiesterase in intact ureteral segments. Weiss RM, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):630–4

INJURIES

Blunt renal and ureteral trauma in childhood: CT patterns of fluid collections. Siegel MJ, et al. **AJR Am J Roentgenol** 1989 May;152(5):1043–7

Ureteric injury during laminectomy for a prolapsed disc. Bec A. **Br J Urol** 1989 May;63(5):552–3

Radioscintigraphic demonstration of unsuspected urine extravasation. Bocchini T, et al. **Clin Nucl Med** 1989 Jun; 14(6):421–7

Traumatic avulsion of the ureter: computed tomography correlation. Templeton PA, et al. **J Comput Tomogr** 1988 Apr;12(2):159–60

Endourologic management of ureteroscopic complications. Culkin DJ, et al. **J La State Med Soc** 1989 Jul;141(7):27–32

Ureteral and renal pelvic injuries from external trauma: diagnosis and management. Presti JC Jr, et al. **J Trauma** 1989 Mar;29(3):370–4

Delayed intraperitoneal ureteric rupture following blunt abdominal trauma: case report. Wilkinson S, et al. **J Trauma** 1989 Sep;29(9):1292–4

Management of iatrogenic ureteral strictures after urological procedures. Smith AD. **J Urol** 1988 Dec;140(6):1372–4

Ureteral injuries complicating vascular surgery: is repair indicated? Spirnak JP, et al. **J Urol** 1989 Jan;141(1):13–4

Ureteral injury. Guerriero WG. **Urol Clin North Am** 1989 May;16(2):237–48

Fibrin glue in renal and ureteral trauma. Kram HB, et al. **Urology** 1989 Mar;33(3):215–8

[Prevention and management of a total tearing rupture of the pyeloureter] Wang LL. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):750–1, 783 (Eng. Abstr.) (Chi)

[Penetrating injuries of the upper urinary tract: experience of the Lebanon war] Chaiban R, et al. **Ann Chir** 1988; 42(7):456–62 (17 ref.) (Eng. Abstr.) (Fre)

[Intra–operative imaging of the ureter with sodium fluorescein] Udahmadahuridze NS, et al. **Z Urol Nephrol** 1988 Oct;81(10):635–9 (Eng. Abstr.) (Ger)

[Injury of the ureter during appendectomy] Kubel VI, et al. **Klin Khir** 1989;(4):58–9 (Rus)

[Surgical trauma of the ureters] Shapkin AG. **Vestn Khir** 1988 Sep;141(9):129–33 (Rus)

[Acute ureteral obstruction caused by firearm pellet] Cavelier LE. **Arch Esp Urol** 1989 Mar;42(2):161–2 (Eng. Abstr.) (Spa)

[Complications and treatment of 431 ureterorenoscopies] Massarra J, et al. **Arch Esp Urol** 1988 Sep;41(7):527–32 (26 ref.) (Eng. Abstr.) (Spa)

INNERVATION

Ureteric ganglia in the guinea pig. Beatty J, et al. **Acta Anat (Basel)** 1988;133(3):255–9

Afferent innervation of the guinea–pig's ureter. Sann H, et al. **Agents Actions** 1988 Dec;25(3–4):243–5

Adrenergic innervation of the ureters, urinary bladder, and urethra in pigs. Lakomy M, et al. **Gegenbaurs Morphol Jahrb** 1989;135(2):347–55

Stimulation of afferent fibres of the guinea–pig ureter evokes potentials in inferior mesenteric ganglion neurones. Amann R, et al. **J Physiol (Lond)** 1988 Aug;402:543–53

Species–related differences in the capsaicin–sensitive innervation of the rat and guinea–pig ureter. Amann R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):407–10

The effect of tachykinins and CGRP on the obstructed ureter—a study on capsaicin–sensitive sensory nerves in the guinea–pig. Kinn AC, et al. **Scand J Urol Nephrol Suppl** 1988;110:291–7

[Electric stimulation of the ureterovesical anastomosis in the treatment of hyperreflexia of the urinary bladder] Derzhavin VM, et al. **Pediatriia** 1989;(5):53–7 (Rus)

METABOLISM

Bradykinin receptors localized by quantitative autoradiography in kidney, ureter, and bladder. Manning DC, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F909–15

PATHOLOGY

Ectopic ureterocele without ureteral and calyceal dilatation (ureterocele disproportion): findings on urography and sonography. Share JC, et al. **AJR** 1989 Mar;152(3):567–71

Irrigation and acute ureteric dilatation—as for ureteroscopy. Boddy SA, et al. **Br J Urol** 1989 Jan;63(1):11–3

Cytologic detection of amyloid in duodenal and ureteral brushings. Korat O, et al. **Diagn Cytopathol** 1988;4(2):133–6

Inverted urothelial papilloma: a lesion with malignant potential. Risio M, et al. **Eur Urol** 1988;14(4):333–8

Extracorporeal shock wave lithotripsy of stones in the ureter. Patrashkov T, et al. **Int Urol Nephrol** 1988;20(6):577–83

Influence of bacterial adhesion on ureteral width in children with acute pyelonephritis. Mårild S, et al. **J Pediatr** 1989 Aug;115(2):265–8

Ureteropelvic junction obstruction associated with ureteral hypoplasia. Allen TD, et al. **J Urol** 1989 Aug;142(2):353–5

Carcinoma of the ureter: a clinicopathologic study of 49 cases. Anderström C, et al. **J Urol** 1989 Aug;142(2):280–3

Bilateral ureteral necrosis and obliteration secondary to pancreatic pseudocyst. Meller S, et al. **J Urol** 1988 Dec; 140(6):1523–5

A new technique for retrograde stone displacement in the tortuous ureter before extracorporeal shock wave lithotripsy. Pryor JL, et al. **J Urol** 1989 Sep;142(3):778–9

Mast cells in ureters from rejected allografts. Greenstein SM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):286–8

Inflammatory cell infiltrate in distal ureteral segments from patients with reflux. Josifidis HT, et al. **Urology** 1989 Sep; 34(3):131–3

[Tissue effects of pulsed–dye laser lithotripsy. Experimental study on the ureter in dogs] Zerbib M, et al. **Ann Urol (Paris)** 1988;22(6):395–9 (Eng. Abstr.) (Fre)

[Pyelocystostomy in ureteral necrosis in a transplanted kidney] Rezníček J, et al. **Rozhl Chir** 1988 Oct;67(10):675–7 (Eng. Abstr.) (Slo)

PHYSIOLOGY

Effects of ureteral occlusion and ethacrynic acid infusion on renal prostaglandin degradation in the dog. Bugge JF, et al. **Acta Physiol Scand** 1988 Aug;133(4):469–75

Morphological dynamics of ureteral transport. I. Shape and volume of constituent urine fractions. Ohlson L. **Am J Physiol** 1989 Jan;256(1 Pt 2):R19–28

Morphological dynamics of ureteral transport. II. Peristaltic patterns in relation to flow rate. Ohlson L. **Am J Physiol** 1989 Jan;256(1 Pt 2):R29–34

Effect of ureteral excision on inner medullary solute concentration in rats. Pallone TL, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1225–9

K transfer in ureter ligated dogs loaded with KCl. Hiatt N, et al. **Biomed Biochim Acta** 1988;47(4–5):395–400

Active antireflux mechanism induced by micturition. Experimental study in awake sheep. Moriel E, et al. **Eur Urol** 1989;16(3):226–8

Flow of urine through the ureter: a collapsible, muscular tube undergoing peristalsis. Griffiths DJ. **J Biomech Eng** 1989 Aug;111(3):206–11

Urinary peristalsis investigated by radionuclide and X–ray methods: a comparison. Müller–Suur R, et al. **Scand J Urol Nephrol Suppl** 1988;110:285–90

The influence of pyeloureteral peristalsis on pelvic pressure during increase in flow rate. Mortensen J, et al. **Urol Res** 1988;16(4):295–7

[Effect of partial nephrectomy on calyceal and pelvic peristalsis in the isolated pig kidney] Ichikawa S. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):329–36 (Eng. Abstr.) (Jpn)

[Bioelectric activity of various parts of the upper urinary tract] Kviatkovskaia TA. **Fiziol Zh** 1989 Mar–Apr; 35(2):42–6 (Eng. Abstr.) (Rus)

[Regulation of the phases of slow–wave ureteral activity by sodium and calcium ions] Kazarian KV, et al. **Fiziol Zh SSSR** 1989 Mar;75(3):391–6 (Eng. Abstr.) (Rus)

[The information value of rheography and loading tests in the functional assessment of the ureter (experimental research)] Mudraia IS, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):20–7 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Double–lumen needle for percutaneous ureteral pressure–flow studies. Epstein DH, et al. **Radiology** 1989 Aug;172(2):569–70

[Ureteral compliance of dilated ureters in dogs] Kigure T. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):691–9 (Eng. Abstr.) (Jpn)

[Functional status of the kidneys and upper urinary tract after anti–reflux operations in children] Abdullaev KI, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):10–3 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Functional changes in the irradiated rat ureter: assessment by transit–time renography. Knowles JF, et al. **Br J Radiol** 1989 Jan;62(733):87–90

Ureteral injury following experimental intraoperative radiation. Gillette SL, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):791–8

[Problems in surgical repair of ureteral injuries in the irradiated pelvis] Cosciani Cunico S, et al. **Arch Ital Urol Nefrol Androl** 1988 Dec;60(4):387–406 (Eng. Abstr.) (Ita)

[Ureteral obstruction after radiotherapy in patients with cancer] Kan IaD, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr; (2):31–4 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Fluoroscopically guided pyeloureteral interventions by using a perurethral transvesical approach. Amendola MA, et al. **AJR** 1989 Jan;152(1):97–102

Self–displacement of a ureter containing a stone. Di Tonno F, et al. **Br J Urol** 1989 May;63(5):551–2

Air pyelo–ureterogram in obstetric vesico–vaginal fistula. Dahniya MH, et al. **Cent Afr J Med** 1988 Oct;34(10):251–2

Extracorporeal shock wave lithotripsy and stents: fluoroscopic observations and a hypothesis on the mechanisms of stent function. Fine H, et al. **Urol Radiol** 1989;11(1):37–41

RADIONUCLIDE IMAGING

Radionuclide imaging of ureteric peristalsis. Lewis CA, et al. **Br J Urol** 1989 Feb;63(2):144–8

SURGERY

Iatrogenic lesions following ureteric dilatation. An experimental study. Ricci Barbini V, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):73–6

Minimally invasive surgery for the retrieval of complex fractured double J stents. Chapple CR, et al. **Br J Surg**

1989 Jul;76(7):680

Ureteric meatotomy guided by antegrade insertion of a double J splint. Cooksey G, et al. **Br J Urol** 1989 Jan; 63(1):106

Preliminary nephrostomy and total ileal replacement of both ureters in advanced bilharzial obstructive uropathy. Elem B. **Br J Urol** 1989 May;63(5):853–6

Stalactites and stalagmites: crystal formation on ureteric double-J stents. Gordon NS. **Br J Urol** 1989 Aug; 64(2):195–7

Anterior transperitoneal approach to the upper urinary tract with one-stage bilateral procedure. Jain AB, et al. **Br J Urol** 1989 Mar;63(3):239–42

Autotransplantation of the vermiform appendix following ureteroscopic damage to the right ureter. Lloyd SN, et al. **Br J Urol** 1989 Feb;63(2):216–7

Use of the cobra stent for insertion of a ureteric stent. Puppo P. **Br J Urol** 1989 Jun;63(6):652–3

Ureteric stents caveat. Rhind JR. **Br J Urol** 1989 Jun; 63(6):644–5

Undiversion in patients with meningomyelocele. Stewart D, et al. **Can J Surg** 1989 May;32(3):214–7

En bloc excision of lower ureter and internal iliac vessels for locally advanced upper rectal and rectosigmoid cancer. Use of ileal segment for ureteral repair. Moriya Y, et al. **Dis Colon Rectum** 1988 Nov;31(11):872–8

Advanced ovarian cancer: urinary tract resection as a part of cytoreductive surgery. Malviya VK, et al. **Eur J Gynaecol Oncol** 1989;10(2):69–72

Reconstructive microsurgery of the upper urinary tract. Oesterwitz H, et al. **Int Urol Nephrol** 1988;20(5):453–9

Open versus endoscopic surgery in the treatment of vesicoureteral reflux. Brown S. **J Urol** 1989 Aug;142(2 Pt 2):499–500; discussion 501

A technique for ureteral stump ablation. Ehrlich RM, et al. **J Urol** 1988 Nov;140(5 Pt 2):1240–1

Nonintubated Anderson-Hynes repair of ureteropelvic junction obstruction in 60 patients. Nguyen DH, et al. **J Urol** 1989 Sep;142(3):704–6

Prevention of cancer at the urothelial enteric anastomotic site. Shands C 3d, et al. **J Urol** 1989 Jan;141(1):178–81

The split-cuff ureteral nipple reimplantation technique: reliable reflux prevention from bowel segments. Stone AR, et al. **J Urol** 1989 Sep;142(3):707–9

Ureteral replacement using ileum in compromised renal function. Waters WB, et al. **J Urol** 1989 Feb;141(2):432–6

The versatility of the posterior lumbotomy approach in infants. Wise WR, et al. **J Urol** 1989 May;141(5):1148–50

Functional and histological restitution in the urinary tract after Nd:YAG laser coagulation. Pensel J, et al. **Lasers Surg Med** 1988;8(4):371–6

Effects of maternal bilateral ureteral ligation on the development of fetal kidney in rats: histometrical study. Okada T, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):985–9

Infants with posterior urethral valves: a retrospective study and consequences for therapy. Mildenberger H, et al. **Prog Pediatr Surg** 1989;23:104–12

Endoluminal radio-frequency electrocautery for permanent ureteral occlusion in swine. Kopecky KK, et al. **Radiology** 1989 Mar;170(3 Pt 2):1043–6

Percutaneous transrenal endoureteral radio-frequency electrocautery for occlusion: case report. Kopecky KK, et al. **Radiology** 1989 Mar;170(3 Pt 2):1047–8

Complications of "one stitch" extravesical ureteric implantation in renal transplants in the cyclosporine and precyclosporine eras. Sumrani NB, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1957–9

Cyclosporine A impairs wound healing of ureterocystoneostomy in rats. Scanning electron microscopic examination. Recker F, et al. **Urol Res** 1989; 17(1):21–6

Ureteral crossover method: animal experiment for correction of reflux. Kondo A, et al. **Urology** 1988 Nov;32(5):438–41

[Our experiences using ureteral stripping in nephro-ureterectomy] Coulange C, et al. **Ann Urol (Paris)** 1988;22(5):355–6 (Eng. Abstr.) (Fre)

[A new technic of exclusion of the remaining, refluxing ureteral stump in cases of ectopic ureteral implantation] Ehrlich RM, et al. **J Urol (Paris)** 1988;94(7):329–31 (Eng. Abstr.) (Fre)

[Surgical treatment of vesico-ureteral reflux using the Gil Vernet technic. Apropos of 30 cases in children] Ravasse P, et al. **J Urol (Paris)** 1989;95(3):153–4 (Eng. Abstr.) (Fre)

[Transureteroureteroanastomosis in children. Indications and results] Campobasso P, et al. **Pediatr Med Chir** 1989 Mar–Apr;11(2):149–53 (Eng. Abstr.) (Ita)

[Clinical evaluation of vesicoureteroneostomy. I. Efficacy of surgery in 65 cases (100 ureters) of primary vesicoureteral reflux] Saito S, et al. **Hinyokika Kiyo** 1988 May; 34(5):797–804 (Eng. Abstr.) (Jpn)

[Clinical evaluation of vesicoureteroneostomy. II. Efficacy of surgery by Boari's method in eight and the psoas-hitch method in eight cases] Saito S, et al. **Hinyokika Kiyo** 1988 May;34(5):805–10 (Eng. Abstr.) (Jpn)

[An experimental study of the influence of dilatation and incision to vesicoureteral junction in rabbits] Hirose H. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):428–35 (Eng. Abstr.) (Jpn)

[Surveillance colonoscopy in patients with ureterocolonic anastomoses] Takeuchi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec;79(12):1991–5 (Eng. Abstr.) (Jpn)

[Interpelvic anastomosis in double renal pelvis and segmental hypoplasia of the normal peripelvic ureter] Derevianko IM. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):66–7 (Rus)

[Surgical treatment of vesico-ureteral reflux by a modified Gil-Vernet method in children] Dvorzhachek Ia, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):14–6 (Eng. Abstr.) (Rus)

[Ways of improving the surgical treatment of hydronephrosis] Karpenko VS. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):8–11 (Eng. Abstr.) (Rus)

[Immediate and late results of anti-reflux surgery in children] Dzhavad-Zade MD, et al. **Vestn Khir** 1988 Aug;141(8):72–6 (Eng. Abstr.) (Rus)

[Use of suspended catheters (stents) during surgery of hydronephrosis in children] Erokhin AP, et al. **Vestn Khir** 1988 Aug;141(8):76–9 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Mast cells and histamine responses of the ureter, ultrastructural features of cell-to-cell associations and functional implications. Ugaily-Thulesius L, et al. **Urol Res** 1988;16(4):287–93

[Observation of the ultrastructure of smooth-muscle cells in the narrow segment of the ureter in children with congenital hydronephrosis] Zhao GG. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):112–3, 126–7 (Eng. Abstr.) (Chi)

URETERAL CALCULI

ANALYSIS

Composition and structure of renal and ureteral calculi in patients under covalitin therapy. Schubert G, et al. **Int Urol Nephrol** 1988;20(5):475–9

The kidney–ureter stone sexual paradox: a possible explanation. Gault MH, et al. **J Urol** 1989 May; 141(5):1104–6

2,8-Dihydroxyadenine urolithiasis: report of a case in a woman in the United States. Lamontagne AE Jr. **J Urol** 1989 Aug;142(2):369–70

COMPLICATIONS

Near-fatal urinary peritonitis secondary to ureteric calculus. Paraskevaides EC, et al. **Br J Urol** 1989 Apr;63(4):437–8

Vesicoureteric reflux and urinary calculi in children. Roberts JP, et al. **Br J Urol** 1989 Jul;64(1):10–2

Leucocytosis and severe pain due to ureteral calculi. Toyoda Y, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1357–61

Radiolucent seed calculi in an orthotopic ureterocele. Wong WS, et al. **J Urol** 1988 Dec;140(6):1521–2

Pain from renal/ureteral calculosis: evaluation of sensory thresholds in the lumbar area. Vecchiet L, et al. **Pain** 1989 Mar;36(3):289–95

General case of the day. Sulfonamide crystallization in nonalkalinized urine. Neal MP Jr. **Radiographics** 1988 Sep; 8(5):993–6

[Obstructive anuria and lithiasis] Ballanger P. **J Urol (Paris)** 1989;95(1):56–7 (Fre)

[Endoscopic and percutaneous treatment of purulent retention caused by obstructive calculi of the upper urinary tract. Observations apropos of 6 case reports] Viville C, et al. **J Urol (Paris)** 1988;94(7):317–8 (Eng. Abstr.) (Fre)

[Severity of reno-ureteral lithiasis in children (apropos of 100 cases] Mhiri MN, et al. **Tunis Med** 1989 Mar; 67(3):159–65 (Eng. Abstr.) (Fre)

[Calculi-induced anuria. Apropos of 31 cases] Mhiri N, et al. **Tunis Med** 1987 Jun–Jul;65(6–7):433–8 (Eng. Abstr.) (Fre)

[A case of primary ureteral squamous cell carcinoma associated with calculus] Koh E, et al. **Hinyokika Kiyo** 1989 Jan;35(1):105–9 (19 ref.) (Eng. Abstr.) (Jpn)

DIAGNOSIS

The evaluation of suspected renal colic: ultrasound scan versus excretory urography. Sinclair D, et al. **Ann Emerg Med** 1989 May;18(5):556–9

Symptomatic abdominal aortic aneurysm misdiagnosed as nephroureterolithiasis. Borrero E, et al. **Ann Vasc Surg** 1988 Apr;2(2):145–9

Semirigid ureteroscopy: a new genre. Dretler SP, et al. **J Urol** 1989 Jun;141(6):1314–6

Ultrasonography of calculi in ureteroceles. Khan AN, et al. **JCU** 1989 Jul–Aug;17(6):439–42

Ultrasonography for diagnosis of obstructing ureteral calculus. Kuuliala IK, et al. **Scand J Urol Nephrol** 1988; 22(4):275–7

Ureteroenoscopy (URS) in pregnancy. Bakke A, et al. **Scand J Urol Nephrol Suppl** 1988;110:243–4

[Two cases of ectopic ureterocele in female adults diagnosed by the growth of stones in the cele] Hayashida H, et al. **Hinyokika Kiyo** 1989 Feb;35(2):329–32 (Eng. Abstr.) (Jpn)

DRUG THERAPY

[Local chemolysis of occluding uric acid calculi] Breuel F, et al. **Z Urol Nephrol** 1988 Oct;81(10):613–22 (Eng. Abstr.) (Ger)

[Citrate (CG-120) therapy for urolithiasis. 1. Clinical effects] Ohkawa T, et al. **Hinyokika Kiyo** 1988 May;34(5):905–17 (Eng. Abstr.) (Jpn)

ENZYMOLOGY

Ureterolithiasis and creatine kinase [letter] Kachel RG. **Ann Intern Med** 1989 Jun 15;110(12):1036

ETIOLOGY

The development of steinstrassen after ESWL: frequency, natural history, and radiologic management. Fedullo LM, et al. **AJR** 1988 Dec;151(6):1145–7

Influence of the weather on ureteral stone colic. Fujita K. **Nippon Jinzo Gakkai Shi** 1988 Mar;30(3):297–304

[Recurrence of upper urinary tract calculi] Mitsuhashi S, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1549–55 (Eng. Abstr.) (Jpn)

[Early calculogenesis caused by ureolytic infection of the double-J ureteral catheter] Prats López J, et al. **Arch Esp Urol** 1989 Jan–Feb;42(1):47–8 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Nifedipine for the relief of renal colic: a double-blind, placebo-controlled clinical trial. Caravati EM, et al. **Ann Emerg Med** 1989 Apr;18(4):352–4

RADIOGRAPHY

CT scanning in the diagnosis and management of radiolucent urinary calculi. Dean TE, et al. **Br J Urol** 1988 Nov; 62(5):405–8

Self-displacement of a ureter containing a stone. Di Tonno F, et al. **Br J Urol** 1989 May;63(5):551–2

Lithiasis inside a blind-ending branch of a trifid ureter. Baró PR, et al. **Urol Radiol** 1989;11(1):42–4

SURGERY

Primary endoscopic surgery for ureteric stones. Tolley DA. **Br J Urol** 1989 Aug;64(2):130–3

The role of open stone surgery since extracorporeal shock wave lithotripsy. Asimos DG, et al. **J Urol** 1989 Aug;142(2):263–7

The role of percutaneous surgery in renal and ureteral stone removal. Segura JW. **J Urol** 1989 Mar;141(3 Pt 2):780–1

Bilateral renal autotransplantation with pyelovesicostomy: a surgical treatment of refractory enteric hyperoxaluria. Salvatierra O Jr, et al. **Surgery** 1989 Mar;105(3):430–5

Rigid ureteroscopy: pitfalls and remedies. Thomas R. **Urology** 1988 Oct;32(4):328–34

[Ureteral lithiasis. Development of the therapeutic strategy and the place of endoscopic treatment] Jorion JL, et al. **Ann Urol (Paris)** 1989;23(1):17–22 (Eng. Abstr.) (Fre)

[Value of the continuous guide in endoscopic operations on the upper urinary tract] Viville C, et al. **J Urol (Paris)** 1988;94(5–6):269–71 (Eng. Abstr.) (Fre)

[Perioperative management of patients with dilated cardiomyopathy] Kawamoto M, et al. **Masui** 1989 Mar; 38(3):371–5 (Eng. Abstr.) (Jpn)

[A clinical study on localized renal damage from percutaneous nephroureterolithotomy] Chiba Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov;79(11):1751–60 (Eng. Abstr.) (Jpn)

[Prevention of infectious-inflammatory complications of percutaneous treatment of nephroureterolithiasis] Martov AG, et al. **Urol Nefrol (Mosk)** 1988 Jul–Aug;(4):21–5 (Eng. Abstr.) (Rus)

[Our experience in the endoscopic treatment of ureteral lithiasis. 120 cases of transurethral ureterorenoscopy] Ibarluzea G, et al. **Actas Urol Esp** 1989 May–Jun; 13(3):190–2 (Eng. Abstr.) (Spa)

THERAPY

Antegrade ureteroscopy and ultrasonic lithotripsy in the treatment of difficult upper and middle ureteric stones. Tan EC, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):55–8

Ureteral stone management: our experience. Mandressi A, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):29–35

Ureteral "steinstrasse" after ESWL. Zanetti G, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):37–40

Is extracorporeal shockwave lithotripsy suitable treatment for lower ureteric stones? Cole RS, et al. **Br J Urol** 1988 Dec;62(6):525–30

Lithotripsy—a new treatment for the impacted Dormia basket. Cole RS, et al. **Br J Urol** 1989 Mar;63(3):331

1500 cases of renal and ureteric calculi treated in an integrated stone centre. Das G, et al. **Br J Urol** 1988 Oct; 62(4):301–5

Ureterolithotripsy: report of 1000 cases. Kostakopoulos A, et al. **Br J Urol** 1989 Mar;63(3):243–4

Radiologic contribution to the management of patients undergoing extracorporeal shock wave lithotripsy. Dyer RB, et al. **CRC Crit Rev Diagn Imaging** 1988;28(4):295–330 (35 ref.)

Percutaneous upper urinary stone surgery. Mkony CA. **East Afr Med J** 1989 Jan;66(1):21–6

Risk factors in outpatient extracorporeal shock wave lithotripsy. Ackaert KS, et al. **Eur Urol** 1989;16(5):349–53

Two years clinical experiences with extracorporeal shock-wave lithotripsy and transurethral ureterolithotripsy for ureteral stones at Osaka City University Hospital. Kishimoto T, et al. **Eur Urol** 1989;16(5):343–8

Painless extracorporeal shock wave lithotripsy for outpatients: a new option. Puppo P, et al. **Eur Urol** 1989; 16(1):12–4

Extracorporeal shock wave lithotripsy in the prone position for stones situated anteriorly. Puppo P, et al. **Eur Urol** 1988; 15(1–2):113–7

Wolf Piezolith 2200 versus the modified Dornier HM3. Efficacy and range of indications. Rassweiler J, et al. **Eur Urol** 1989;16(1):1–6

Extracorporeal shock wave lithotripsy for urinary stone disease: clinical experience with the electromagnetic lithotriptor 'Lithostar'. Simon J, et al. **Eur Urol** 1989; 16(1):7–11

Ureteral stone extraction with the Steffens lasso loop. A neglected procedure. Steffens J, et al. **Eur Urol** 1988; 15(3–4):223–6

Local shock-wave lithotripsy of distal ureteral calculi. Voges GE, et al. **Eur Urol** 1988;14(4):261–5

Treatment of distal ureteral calculi with extracorporeal shock wave lithotripsy. Experience with 264 cases. Zehntner C, et al. **Eur Urol** 1989;16(4):250–2

Extracorporeal shock wave lithotripsy of stones in the ureter. Patrashkov T, et al. **Int Urol Nephrol** 1988;20(6):577–83

Acoustic and plasma guided lasertripsy (APGL) of urinary calculi. Bhatta KM, et al. **J Urol** 1989 Aug;142(2):433–7

Clinical experience using the Wolf Piezolith device at 2 British stone centers. Bowsher WG, et al. **J Urol** 1989 Sep; 142(3):679–82

Colonic mucosal ecchymoses after extracorporeal shock wave lithotripsy for upper ureteral calculus. Cass AS, et al. **J Urol** 1988 Nov;140(5):1012–3

Semirigid ureteroscopy: a new genre. Dretler SP, et al. **J Urol** 1989 Jun;141(6):1314–6

Short-term changes of laboratory values after extracorporeal shock wave lithotripsy: a comparative study. Haupt G, et al. **J Urol** 1989 Aug;142(2):259–62

First clinical experience with a Q-switched neodymium:YAG laser for urinary calculi. Hofmann R, et al. **J Urol** 1989 Feb;141(2):275–9

Ureteral stones: the results of primary in situ extracorporeal shock wave lithotripsy. Holden D, et al. **J Urol** 1989 Jul; 142(1):37–9

Extracorporeal shock wave lithotripsy monotherapy: experience with piezoelectric second generation lithotriptor in 642 patients. Kim SC, et al. **J Urol** 1989 Sep;142(3):674–8

Treatment options for proximal ureteral urolithiasis: review and recommendations. Liong ML, et al. **J Urol** 1989 Mar; 141(3):504–9

Piezoelectric extracorporeal shock wave lithotripsy in children. Marberger M, et al. **J Urol** 1989 Aug;142(2):349–52

Long-term results of extracorporeal shock wave lithotripsy in children. Nijman RJ, et al. **J Urol** 1989 Aug;142(2 Pt 2):609–11; discussion 619

A new technique for retrograde stone displacement in the tortuous ureter before extracorporeal shock wave lithotripsy. Pryor JL, et al. **J Urol** 1989 Sep;142(3):778–9

Extracorporeal shock wave lithotripsy of stones in the mid ureter. Tiselius HG, et al. **J Urol** 1989 Feb;141(2):280–2

Safety and efficacy of electrohydraulic lithotripsy by ureteroscopy. Willscher MK, et al. **J Urol** 1988 Nov; 140(5):957–8

The pulsed dye laser versus the Q-switched Nd:YAG laser in laser-induced shock-wave lithotripsy. Thomas S, et al. **Lasers Surg Med** 1988;8(4):363–70

Endourology new vistas in the management of urinary tract disease. Mahamooth Z. **Med J Malaysia** 1987 Sep; 42(3):191–5

Extracorporeal shock wave lithotripsy in paediatric patients. Böhle A, et al. **Scand J Urol Nephrol** 1989;23(2):137–40

Ureteroscopic stone manipulation in the upper third of ureter and the pelvicaliceal system. Pedersen FM, et al. **Scand J Urol Nephrol** 1988;22(3):179–82

Extracorporeal shock wave lithotripsy: first choice therapy for ureteral stones. Rigatti P, et al. **Scand J Urol Nephrol** 1989;23(1):67–9

Extracorporeal shock wave lithotripsy of renal and ureteral stones—studies on indications, methods and results. Pettersson B. **Scand J Urol Nephrol Suppl** 1989;120:1–80 (137 ref.)

What do our patients have to endure in order to get their stones removed? Pettersson B, et al. **Scand J Urol Nephrol Suppl** 1989;122:29–33

"Lithostar" lithotripsy—Manchester experience. Sandhu DP, et al. **Scand J Urol Nephrol Suppl** 1989;122:21–4

Treatment of large staghorn stones and ureteral stones without anesthesia. Tiselius HG. **Scand J Urol Nephrol Suppl** 1989;122:25–8

Second-generation lithotripsy: a safe, noninvasive, ambulatory procedure. Baert L, et al. **Urol Int** 1989; 44(1):38–40

Effects of extracorporeal shock wave lithotripsy on urinary excretion of N-acetyl-beta-D-glucosamidase. Kitada S, et al. **Urol Int** 1989;44(1):35–7

Ureterorenoscopy in the management of renal and ureteric calculi. Olsen JB, et al. **Urol Int** 1989;44(1):32–4

ESWL treatment of urinary calculi. Drago JR, et al. **Urology** 1989 May;33(5):400–3

Reverse lithotomy: modified prone position for simultaneous nephroscopic and ureteroscopic procedures in women. Lehman T, et al. **Urology** 1988 Dec;32(6):529–31

Ureteroscopic diagnosis and treatment of urinary calculi during pregnancy. Rittenberg MH, et al. **Urology** 1988 Nov; 32(5):427–8

Ureteral calculi in children: review of 50 consecutive cases. Turnock RR, et al. **Urology** 1989 Mar;33(3):211–4

[The current treatment of calculi of the upper urinary tract] Lediuk A, et al. **Khirurgiia (Sofiia)** 1989;42(2):65–9 **(Bul)**

[Clinical use of ureteroscopy in treating stones in the ureter] Patrashkov T, et al. **Khirurgiia (Sofiia)** 1988;41(6):71–6 (Eng. Abstr.) **(Bul)**

[Prone position in the treatment of ureteral calculi with extracorporeal shock wave lithotripsy] Guo YL. **Chung Hua Wai Ko Tsa Chih** 1988 May;26(5):285–6, 318 (Eng. Abstr.) **(Chi)**

[Treatment of upper urinary calculi using a non-immersed extracorporeal shock wave lithotriptor] Guo ZH. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):39–41, 62 (Eng. Abstr.) **(Chi)**

[Management of upper urinary calculi: non-invasive removal versus open surgery] Xue ZY. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):194–6, 253 (Eng. Abstr.) **(Chi)**

[Percutaneous antegrade endoscopy in the removal of ureteral stones] Zhang JL. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):197–8, 253 (Eng. Abstr.) **(Chi)**

[Initial experience with lithotripsy using extracorporeal shock waves] Poch J, et al. **Rozhl Chir** 1988 Oct;67(10):654–8 (Eng. Abstr.) **(Cze)**

[The role of ureterorenoscopy in the treatment of lithiasis in 1988] Braeckman J, et al. **Acta Urol Belg** 1988; 56(3):408–12 (Eng. Abstr.) **(Fre)**

[Treatment of urinary lithiasis using extracorporeal shock waves. Experience with the "Lithostar" electromagnetic lithotripser] Simon J, et al. **Acta Urol Belg** 1988;56(3):413–9 (Eng. Abstr.) **(Fre)**

[Ureteral lithiasis. Development of the therapeutic strategy and the place of endoscopic treatment] Jorion JL, et al. **Ann Urol (Paris)** 1989;23(1):17–22 (Eng. Abstr.) **(Fre)**

[Ureteral flushing] Vallancien G, et al. **Ann Urol (Paris)** 1989; 23(2):137–9 (Eng. Abstr.) **(Fre)**

[Flushing of obstructive ureteral calculi] Robein JA. **J Urol (Paris)** 1989;95(3):175–6 (Eng. Abstr.) **(Fre)**

[Extracorporeal shockwave lithotripsy. Current status in treatment of kidney calculus disease] Rassweiler J, et al. **Fortschr Med** 1989 Aug 10;107(23):499–501 (3 ref.) (Eng. Abstr.) **(Ger)**

[The management of ureter stones in the age of ESWL] Alund G, et al. **Helv Chir Acta** 1988 Jul;55(3):317–9 (Eng. Abstr.) **(Ger)**

[Ureteral calculus—change in therapy at the Urology Department of the Vienna General Polyclinic (1982–1986)] Hübner W. **Urologe [A]** 1988 Jul;27(4):230–3 (Eng. Abstr.) **(Ger)**

[Long-term experiences following extracorporeal shockwave lithotripsy in patients with urinary calculi] Jocham D, et al. **Urologe [A]** 1989 May;28(3):134–7 (Eng. Abstr.) **(Ger)**

[Current therapy of ureteral calculus] Miller K, et al. **Urologe [A]** 1989 May;28(3):148–51 (Eng. Abstr.) **(Ger)**

[Treatment of distal ureteral calculi with extracorporeal shockwave lithotripsy: experiences with 310 cases] Zehntner C, et al. **Z Urol Nephrol** 1989 Jul;82(7):363–8 (Eng. Abstr.) **(Ger)**

[Extracorporeal lithotripsy with low pressure shockwaves using a modified Dornier HM3 lithotriptor: preliminary results] Zanetti G, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):23–7 (Eng. Abstr.) **(Ita)**

[Current status of the treatment of kidney calculi: extracorporeal shockwave lithotripsy, percutaneous lithotripsy and traditional surgery] Pisani E, et al. **Minerva Chir** 1989 Feb 28;44(4):759–65 (27 ref.) **(Ita)**

[Extracorporeal shockwave lithotripsy: treatment of choice in ureteral calculi] Rigatti P, et al. **Minerva Chir** 1989 May 15;44(9):1361–3 (Eng. Abstr.) **(Ita)**

[Clinical study of extracorporeal shock-wave lithotripsy (ESWL) for renal and ureteral stones. The first report: end-results of 1,000 cases] Higashi Y. **Hinyokika Kiyo** 1988 Dec;34(12):2073–81 (Eng. Abstr.) **(Jpn)**

[A case of stone former with pacemaker treated by extracorporeal shock wave lithotripsy] Kanazawa T, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1415–9 (Eng. Abstr.) **(Jpn)**

[Electrohydraulic lithotripsy of upper urinary tract calculi] Kinukawa T, et al. **Hinyokika Kiyo** 1988 May;34(5):777–81 (Eng. Abstr.) **(Jpn)**

[Transurethral ureterolithotripsy under hydraulic ureteral dilatation] Mori Y, et al. **Hinyokika Kiyo** 1989 Jan; 35(1):7–11 (Eng. Abstr.) **(Jpn)**

[Clinical study of extracorporeal shock wave lithotripsy] Onishi N, et al. **Hinyokika Kiyo** 1988 May;34(5):765–9 (Eng. Abstr.) **(Jpn)**

[Clinical experiences of renal and ureteral stones by extracorporeal shock-wave lithotripsy (ESWL). IV: 3-year clinical experience of cases treated with ESWL] Tanda H, et al. **Hinyokika Kiyo** 1988 May;34(5):770–6 (Eng. Abstr.) **(Jpn)**

[243 cases of percutaneous nephrolithotomy—result of 5 years] Tsuboi N, et al. **Hinyokika Kiyo** 1989 Apr; 35(4):559–63 (Eng. Abstr.) **(Jpn)**

[Extracorporeal shock-wave lithotripsy for children] Wakabayashi A, et al. **Hinyokika Kiyo** 1988 Jun;34(6):963–6 (Eng. Abstr.) **(Jpn)**

[The treatment of extracorporeal shock wave lithotripsy for middle and lower ureter stones] Gohji K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):297–301 (Eng. Abstr.) **(Jpn)**

[Clinical application of Sonolith 2000 on Extracorporeal Shock Wave Lithotripsy for renal and ureteral calculi] Hirao Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr; 80(4):507–16 (Eng. Abstr.) **(Jpn)**

[Clinical experience of extracorporeal piezoelectric lithotripsy (EPL)] Ihara H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov;79(11):1790–7 (Eng. Abstr.) **(Jpn)**

[Extracorporeal shock wave lithotripsy using microexplosion (mESWL). Clinical experience on 198 cases in Tohoku University] Kambe K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1011–8 (Eng. Abstr.) **(Jpn)**

[Transurethral ureterolithotripsy (TUL) for outpatients] Kuwahara M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov;79(11):1739–44 (Eng. Abstr.) **(Jpn)**

[Endourological treatment of renal and ureteral calculi] Jeromin L, et al. **Pol Tyg Lek** 1988 Aug 1–8; 43(31–32):1005–10 (Eng. Abstr.) **(Pol)**

[Report on a training trip to the urologic department of the Rudolf Foundation Hospital in Vienna] Kuzaka B. **Wiad Lek** 1988 Oct 15;41(20):1405–7 **(Pol)**

[Diagnostic and therapeutic tactics in calculous pyelonephritis in pregnancy] Petrichko MI. **Akush Ginekol (Mosk)** 1988 Jun;(6):60–1 **(Rus)**

[Extracorporeal lithotripsy of ureteral calculi using shock waves] Mikhallov P, et al. **Khirurgiia (Sofiia)** 1988; 41(3):7–11 (Eng. Abstr.) **(Rus)**

[Vibration as a therapeutic factor and its use in urology] Bykovskii IaA. **Urol Nefrol (Mosk)** 1989 Mar–Apr; (2):57–64 (143 ref.) **(Rus)**

[Remote lithotripsy using the "URAT-11" device] Lopatkin NA, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):3–8 (Eng. Abstr.) **(Rus)**

[Treatment of kidney and ureter stones with extracorporeal shock waves] Patrashkov T, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):9–13 (Eng. Abstr.) **(Rus)**

[Hazards and complications of endoscopic transurethral ureterolithotripsy and lithoextraction and means of prevention] Simonov VIa, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):36–9 (Eng. Abstr.) **(Rus)**

[Use of ultrasound in the combined treatment of patients with calculi in the lower third of the ureters] Li AA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec; (6):40–3 (Eng. Abstr.) **(Rus)**

[In situ treatment of distal ureteral calculi using extracorporeal shockwave lithotripsy] Serrate Aguilera RG, et al. **Actas Urol Esp** 1988 May–Jun;12(3):238–41 (Eng. Abstr.) **(Spa)**

[Ureterorenoscopy combined with extracorporeal shockwave lithotripsy] González Cabrera LA, et al. **Arch Esp Urol** 1989 Jan–Feb;42(1):49–52 (Eng. Abstr.) **(Spa)**

[Uretero-renoscopy. Our 1st experience in the child] González Cabrera LA, et al. **Arch Esp Urol** 1988 May; 41(4):302–4 (Eng. Abstr.) **(Spa)**

URINE

The excretion of glycosaminoglycans in the urine of stone formers. Teotia M, et al. **J Assoc Physicians India** 1988 Nov;36(11):640–2

[Citrate (CG–120) therapy in urolithiasis. 2. Effect on urinary and serum biochemistry] Ohkawa T, et al. **Hinyokika Kiyo** 1988 May;34(5):918–31 (Eng. Abstr.) **(Jpn)**

VETERINARY

Nephrolithiasis resulting in intermittent ureteral obstruction in a cow. Divers TJ, et al. **Cornell Vet** 1989 Apr;79(2):143–9

Nephrolithiasis and ureterolithiasis in horses and their association with renal disease and failure [editorial] Divers TJ. **Equine Vet J** 1989 May;21(3):161–2

Chronic renal failure associated with bilateral nephroliths and ureteroliths in a two-year-old Thoroughbred colt. Hope WD, et al. **Equine Vet J** 1989 May;21(3):228–31

Percutaneous nephrostomy in short-term management of ureterolithiasis and renal dysfunction in a filly. Byars TD, et al. **J Am Vet Med Assoc** 1989 Aug 15;195(4):499–501

URETERAL DISEASES

Papers presented at annual meeting of the Section of Urology, American Academy of Pediatrics, New Orleans, Louisiana, October 30–November 2, 1987. **J Urol** 1988 Nov;140(5 Pt 2):1089–324

Malacoplakia: a 25-year experience with a review of the literature. Long JP Jr, et al. **J Urol** 1989 Jun;141(6):1328–31 (26 ref.)

Scrotal incarceration of the ureter with crossed renal ectopia: case report and literature review. Rocklin MS, et al. **J Urol** 1989 Aug;142(2):366–8 (17 ref.)

[Ureteral and vesical malacoplakia. Description of 2 cases] Losinno F, et al. **Radiol Med (Torino)** 1988 Sep;76(3):223–5 **(Ita)**

[Ureteritis cystica: a case report] Nakatani T, et al. **Hinyokika Kiyo** 1988 May;34(5):870–3 (8 ref.) (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Infected renal stones and defects of ureteral peristalsis. Zanetti G, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec; 59(2):71–4

Glucagon in the acute management of ureteral colic. Ros SP, et al. **Pediatr Emerg Care** 1988 Dec;4(4):251–2

Multiple ureteral diverticula: a possible radiographically demonstrable risk factor in development of transitional cell carcinoma. Parker MD, et al. **Urol Radiol** 1989;11(1):45–8

[Rare etiologies of obstructive anuria] Dumas JP. **J Urol (Paris)** 1989;95(1):57–8 (Fre)

[Xanthogranulomatous pyelonephritis coexisting with fistula between ureter and sigmoid colon: a case report] Chang PK, et al. **Hinyokika Kiyo** 1989 Jan;35(1):95–8 (Eng. Abstr.) (Jpn)

[Early calculogenesis caused by ureolytic infection of the double-J ureteral catheter] Prats López J, et al. **Arch Esp Urol** 1989 Jan–Feb;42(1):47–8 (Eng. Abstr.) (Spa)

CONGENITAL

Congenital ureteric diverticula in children and adults: classification, radiological and clinical features. Sarajlić M, et al. **Br J Radiol** 1989 Jun;62(738):551–3

Congenital obstructed megaureters in early infancy: diagnosis and treatment. Peters CA, et al. **J Urol** 1989 Aug;142(2 Pt 2):641–5; discussion 667–8

[Congenital stenosis of the mid ureter] Beseghi U, et al. **Acta Biomed Ateneo Parmense** 1988;59(1–2):29–34 (Eng. Abstr.) (Ita)

DIAGNOSIS

Use of the Cytobrush in the diagnosis of male urethral herpesvirus infection [letter] Luzzatto R, et al. **Acta Cytol** 1989 May–Jun;33(3):417–8

[Giant hydroureteronephrosis. Description of a case and review of the literature] Sandro Z, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):95–8 (14 ref.) (Eng. Abstr.) (Ita)

[Usefulness of ultrasonography in follow-up of postoperative pelviureteric dilatation in children] Kotoh S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):387–95 (Eng. Abstr.) (Jpn)

[Uretero-renoscopy. Our initial experience] Hem E, et al. **Tidsskr Nor Laegeforen** 1988 Aug 30;108(24):1898–901 (Eng. Abstr.) (Nor)

[Ureteroscopy: technical considerations, indications and results] Arrabal Martín M, et al. **Arch Esp Urol** 1988 Nov–Dec;41(9):853–60 (Eng. Abstr.) (Spa)

DRUG THERAPY

Metoclopramide and ureteric colic. Hedenbro JL, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):439–40

Analgesic effect and tolerance of Voltaren and Ketogan in acute renal or ureteric colic. Sommer P, et al. **Br J Urol** 1989 Jan;63(1):4–6

[Tramadol versus metimazole in alleviating pain in ureteral colic] Primus G, et al. **Urologe [A]** 1989 Mar;28(2):103–5 (Eng. Abstr.) (Ger)

EMBRYOLOGY

Embryogenesis of ureteral anomalies: a unifying theory. Weiss JP. **Aust N Z J Surg** 1988 Aug;58(8):631–8

ETIOLOGY

Complications of extracorporeal shock wave lithotripsy. Tillotson CL, et al. **Am Fam Physician** 1988 Dec; 38(6):161–3

Uretero-arterial fistula. Shetty SD, et al. **Br J Urol** 1988 Oct;62(4):382–3

Causes of urinary tract dilatation [letter] Hellstrom M, et al. **Clin Radiol** 1989 Jul;40(4):434

Late ureteric stenosis after kidney transplantation: a possible consequence of rejection. Faenza A, et al. **Contrib Nephrol** 1989;70:75–80

Acquired intravesical ureteral diverticulum: an unusual late complication of ureteroneocystostomy. Aragona F, et al. **J Urol** 1989 Jun;141(6):1420–1

Transient ureteral dilatation associated with infantile infectious sacroiliitis. Dejter SW, et al. **J Urol** 1989 May; 141(5):1154–5

[Ureterovaginal fistulae after obstetrical-gynecological operations] Kumanov Kh, et al. **Khirurgiia (Sofiia)** 1988; 41(4):1–5 (Bul)

[Ureteral stenosis of a kidney transplant: a rare cause. Percutaneous nephroscopy of the transplant: an uncommon indication] Heritier P, et al. **J Urol (Paris)** 1988; 94(9–10):471–3 (6 ref.) (Eng. Abstr.) (Fre)

[Uretero-hydronephroses disclosing infection of aortic prosthesis (letter)] Daune B, et al. **Presse Med** 1988 Oct 22;17(36):1860 (Fre)

[Churg-Strauss syndrome with ureteral involvement. Description of a case] Manganelli P, et al. **G Clin Med** 1988 Oct;69(10):585, 587–8 (Eng. Abstr.) (Ita)

[A case of stenosing ureteritis in Schoenlein-Henoch purpura] Grasso E, et al. **Pediatr Med Chir** 1988 May–Jun; 10(3):319–21 (Eng. Abstr.) (Ita)

[The foreign body granuloma after pyeloplasty: report of a case] Ishida A, et al. **Hinyokika Kiyo** 1989 Mar;35(3):485–8 (Eng. Abstr.) (Jpn)

[Ureteral stenosis associated with late-onset hemorrhagic cystitis due to adenovirus type 11 after bone marrow transplantation: report of two cases] Hanada R, et al. **Rinsho Ketsueki** 1988 Dec;29(12):2379–83 (Eng. Abstr.) (Jpn)

[Pyeloureteral stenosis secondary to Schoenlein-Henoch purpura] García Mérida M, et al. **Actas Urol Esp** 1989 Mar–Apr;13(2):118–20 (Eng. Abstr.) (Spa)

[Rosai-Dorfman disease: an unusual cause of secondary ureterohydronephrosis] Isa Kroon WA, et al. **Actas Urol Esp** 1988 Sep–Oct;12(5):484–7 (Eng. Abstr.) (Spa)

[Spontaneous extravasations of urine] Díaz Alférez FJ, et al. **Arch Esp Urol** 1988 Sep;41(7):501–6 (30 ref.) (Eng. Abstr.) (Spa)

[Ureterorenoscopy in renal transplantation. Presentation of a case] González Cabrera LA, et al. **Arch Esp Urol** 1988 Oct;41(8):599–600 (Eng. Abstr.) (Spa)

MICROBIOLOGY

In vitro adherence of type 1-fimbriated uropathogenic Escherichia coli to human ureteral mucosa. Fujita K, et al. **Infect Immun** 1989 Aug;57(8):2574–9

[Cytologic test on male ureteral smears for the detection of Chlamydia trachomatis. Comparison of 2 methods] Borella T, et al. **Minerva Urol Nefrol** 1988 Jul–Sep;40(3):181–3 (Eng. Abstr.) (Ita)

PATHOLOGY

[A case of ureteral and vesical malacoplakia] Mizunaga M, et al. **Hinyokika Kiyo** 1989 Mar;35(3):501–4 (Eng. Abstr.) (Jpn)

[Ureteritis glandularis: a case report] Takahashi Y, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1031–4 (Eng. Abstr.) (Jpn)

PREVENTION & CONTROL

Indomethacin as prophylaxis against ureteral colic following extracorporeal shock wave lithotripsy. Cole RS, et al. **J Urol** 1989 Jan;141(1):9–12

RADIOGRAPHY

Emphysematous pyelonephritis, ureteritis, and cystitis: report of a case. Ginsberg PC, et al. **J Am Osteopath Assoc** 1988 Jul;88(7):895–8

Venous intravasation of barium into the inferior mesenteric vein mimicking a coloureteral fistula: a case report and literature review. Baer HM, et al. **J Urol** 1989 Jan; 141(1):117–9 (19 ref.)

RADIONUCLIDE IMAGING

Radionuclide imaging of ureteric peristalsis. Lewis CA, et al. **Br J Urol** 1989 Feb;63(2):144–8

Spontaneous perforation of the ureter diagnosed on technetium 99m DTPA excretory urography. Barasch E, et al. **Urol Radiol** 1988;10(2):107–9

SURGERY

Bladder shrinkage as a complication of long-term supravesical urinary diversion in children with solitary kidneys. Gharib M, et al. **Prog Pediatr Surg** 1989;23:69–80

[Extra-anatomical pyelocystotomy and treatment of ureteral fistula after palliative colonic surgery. Apropos of an original observation] Notari F, et al. **Ann Radiol (Paris)** 1988;31(6):375–8 (Eng. Abstr.) (Fre)

[Transrenal percutaneous treatment of urinary fistula. Apropos of 19 cases] Billebaud T, et al. **Ann Urol (Paris)** 1988;22(4):287–90 (Eng. Abstr.) (Fre)

[Management of endourological technics with upper urinary tract diseases except urolithiasis] Fujisawa M, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1569–74 (Eng. Abstr.) (Jpn)

[The endourological management of primary ureteropelvic junction stenosis] Fujisawa M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):994–1001 (Eng. Abstr.) (Jpn)

[A case of localized amyloidosis of the ureter treated by renal autotransplantation] Usami T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec;79(12):2031–6 (22 ref.) (Eng. Abstr.) (Jpn)

[Social aspects of the late results of treatment in ureteral fistulae] Saldakova NA, et al. **Vrach Delo** 1988 Jul;(7):120–1 (Rus)

[Renal autotransplant as a technic of ureteral substitution] Pertusa Peña C, et al. **Arch Esp Urol** 1988 Jul–Aug; 41(6):467–9 (Eng. Abstr.) (Spa)

THERAPY

Endoscopic treatment of refluxing ureteric stump following nephrectomy with Tissucol and teflon injection. Carini M, et al. **Eur Urol** 1989;16(4):312–4

Changing concepts in management of primary obstructive megaureter. Keating MA, et al. **J Urol** 1989 Aug;142(2 Pt 2):636–40; discussion 667–8

Nephrectomy in situ: treatment of ureteral fistula due to progressive malignancy. Ebisuno S, et al. **Urol Radiol** 1989; 11(2):102–5

[Colic of the ureter] Staehler G. **Interalist (Berlin)** 1989 Feb; 30(2):110–3 (26 ref.) (Ger)

[Renoscopy and ureteroscopy] Knönagel H. **Schweiz Med Wochenschr** 1989 Jun 17;119(24):872–4 (Eng. Abstr.) (Ger)

[Percutaneous endoureteral manipulation in the resolution of ureteral fistula complications following Bricker's urinary diversion: clinical case] Martina G, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):81–5 (Eng. Abstr.) (Ita)

VETERINARY

Bilateral pyelonephritis and hydroureter associated with metastatic adenocarcinoma in a dog. Jergens AE, et al. **J Am Vet Med Assoc** 1988 Oct 15;193(8):961–3

URETERAL NEOPLASMS

Angiosarcoma of the ureter. Coup AJ. **Br J Urol** 1988 Sep; 62(3):275–6

Leiomyosarcoma of the ureter. Madgar I, et al. **Eur Urol** 1988;14(6):487–9 (10 ref.)

[Fibrous polyp of the ureter. Diagnostic and therapeutic considerations on 6 cases] Prencipe MG, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2):105–8 (Eng. Abstr.) (Ita)

[Report of two cases of long ureteral polyps and review of literature] Takamura S, et al. **Hinyokika Kiyo** 1989 Feb; 35(2):323–8 (9 ref.) (Eng. Abstr.) (Jpn)

[A clinical study of 33 cases of renal pelvic and ureteral tumors] Yamaguchi S, et al. **Hinyokika Kiyo** 1988 Sep; 34(9):1579–87 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Ureteral tumor with multiple Bowen's disease forty-two years after exposure to arsenic. Koh E, et al. **Eur Urol** 1989;16(5):398–400

Evidence for cyclophosphamide-induced transitional cell carcinoma in a renal transplant patient. Tuttle TM, et al. **J Urol** 1988 Nov;140(5):1009–11

COMPLICATIONS

Ureteral obstruction caused by endometriosis. Rosenbeck J, et al. **Acta Obstet Gynecol Scand** 1988;67(5):411–2

Carcinoma of the ureter with isolated lower-extremity swelling. Ehrenpreis MD. **Mt Sinai J Med (NY)** 1988 Sep; 55(4):321–3

[Fibrous epithelial polyps of the pyelo-ureteral junction in children. Presentation of 3 cases and review of the literature (33 cases)] Galifer RB, et al. **Chir Pediatr** 1988;29(6):318–24 (43 ref.) (Eng. Abstr.) (Fre)

[Ureteral invagination secondary to papilloma: an unusual cause of urinary tract obstruction] Del Boca C, et al. **Arch Ital Urol Nefrol Androl** 1988 Sep;60(3):301–6 (Eng. Abstr.) (Ita)

[A case of primary ureteral squamous cell carcinoma associated with calculus] Koh E, et al. **Hinyokika Kiyo** 1989 Jan;35(1):105–9 (19 ref.) (Eng. Abstr.) (Jpn)

[Primary adenocarcinoma of the ureter associated with hypocalcemia: report of a case] Sugao H, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1645–9 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Fluoroscopically guided retrograde brush biopsy in the diagnosis of transitional cell carcinoma of the upper urinary tract: results in 45 patients. Sheline M, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):313–6

Transitional cell tumours of renal pelvis and ureter—diagnostic considerations. Mufti GR, et al. **Indian J Cancer** 1988 Dec;25(4):191–6

Impact of endourology on diagnosis and management of upper urinary tract urothelial cancer. Blute ML, et al. **J Urol** 1989 Jun;141(6):1298–301

Diagnosis easily missed—upper urothelial tumour. Mufti GR, et al. **Postgrad Med J** 1988 Sep;64(755):676–7

[Cancer of the gallbladder manifesting itself as kidney disease] Monastyrev IuP, et al. **Klin Med (Mosk)** 1989 Apr; 67(4):127–8 (Rus)

[Ureterorenoscopy in the diagnosis and treatment of ureteral tumors] Mancebo Gómez JM, et al. **Arch Esp Urol** 1988 Jun;41(5):383–6 (Eng. Abstr.) (Spa)

[Ureterorenoscopy in the diagnosis and treatment of urothelial tumors of the upper urinary tract] Rodríguez JV, et al. **Arch Esp Urol** 1988 Jun;41(5):369–72 (Eng. Abstr.) (Spa)

[Current criteria for the diagnosis and treatment of transitional cell carcinomas of the upper urinary tract] Rodríguez Vela L, et al. **Arch Esp Urol** 1988 Jun; 41(5):349–61 (76 ref.) (Eng. Abstr.) (Spa)

DRUG THERAPY

M-VAC (methotrexate, vinblastine, doxorubicin and cisplatin) chemotherapy for transitional cell carcinoma: the Princess Margaret Hospital experience. Tannock I, et al. **J Urol** 1989 Aug;142(2):289–92

[M-VAC (methotrexate, vinblastine, adriamycin and cisplatin) chemotherapy in advanced renal pelvic and ureteral carcinoma] Igawa M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2577–82 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

Inverted papilloma of upper urinary tract. Four case reports. Aubert J, et al. **Eur Urol** 1988;15(1-2):150-2

[A clinical study on renal pelvic and ureteral tumors] Ueda H, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1161-71 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Analgesics, cigarette smoking, and other risk factors for cancer of the renal pelvis and ureter. Ross RK, et al. **Cancer Res** 1989 Feb 15;49(4):1045-8

Multiple ureteral diverticula: a possible radiographically demonstrable risk factor in development of transitional cell carcinoma. Parker MD, et al. **Urol Radiol** 1989;11(1):45-8

PATHOLOGY

Tumor grade and stage as prognostic variables in upper tract urothelial tumors. Huben RP, et al. **Cancer** 1988 Nov 1; 62(9):2016-20

Multiple simultaneous inverted papillomas of the upper urinary tract. A case report with a review of ureteral and renal pelvic inverted papillomas. Kyriakos M, et al. **Cancer** 1989 Jan 15;63(2):368-80 (50 ref.)

Inverted urothelial papilloma: a lesion with malignant potential. Risio M, et al. **Eur Urol** 1988;14(4):333-8

Urothelial and ovarian carcinomas of identical cell types: problems in interpretation. A report of three cases and review of the literature. Young RH, et al. **Int J Gynecol Pathol** 1988;7(3):197-211 (33 ref.)

Carcinoma of the ureter: a clinicopathologic study of 49 cases. Anderström C, et al. **J Urol** 1989 Aug;142(2):280-3

Ectopic vas deferens, imperforate anus and hypospadias: a new triad. Hicks CM, et al. **J Urol** 1989 Mar;141(3):586-8

Transitional cell carcinoma of upper urinary tract: some prognostic indicators. Gawley WF, et al. **Urology** 1989 Jun; 33(6):459-61

Are frozen-section examinations of ureteral margins required for all patients undergoing radical cystectomy for bladder cancer? Johnson DE, et al. **Urology** 1989 Jun;33(6):451-4

Spermatic cord metastasis from ureteral carcinoma. Komeda Y, et al. **Urology** 1988 Nov;32(5):449-50

[A rare case of benign ureteral tumor] Hoffmann L, et al. **Z Urol Nephrol** 1988 Sep;81(9):595-8 (Eng. Abstr.) **(Ger)**

[Value of urinary cytology in the diagnosis of urothelial carcinoma of the pelvis and ureter] Piscioli F, et al. **Minerva Urol Nefrol** 1988 Jul-Sep;40(3):189-95 (15 ref.) (Eng. Abstr.) **(Ita)**

[A mucin-producing cystadenoma, borderline malignancy, of the renal pelvis and ureter: a case report] Arakawa M, et al. **Gan No Rinsho** 1989 Mar;35(4):499-504 (7 ref.) (Eng. Abstr.) **(Jpn)**

[Synchronously occurring transitional cell carcinoma of the ureter with adrenocortical carcinoma] Hikichi Y, et al. **Hinyokika Kiyo** 1988 Nov;34(11):2025-30 (18 ref.) (Eng. Abstr.) **(Jpn)**

[A clinical survey of renal pelvic and ureteral tumors associated with bladder tumor] Matsuki H, et al. **Hinyokika Kiyo** 1989 Feb;35(2):239-46 (Eng. Abstr.) **(Jpn)**

[Is the bladder localization of urothelial transitional carcinoma a nosologic entity different from tumors appearing in the upper urinary tract?] Escudero Barrilero A, et al. **Arch Esp Urol** 1989 Jan-Feb;42(1):33-8 (24 ref.) (Eng. Abstr.) **(Spa)**

[Fibroepithelial polyp of the ureter] Malossini G, et al. **Arch Esp Urol** 1988 Nov-Dec;41(9):845-9 (Eng. Abstr.) **(Spa)**

[Urothelial tumors of the upper urinary tract. Anatomoclinical correlation] Zuluaga Gómez A, et al. **Arch Esp Urol** 1988 Jun;41(5):341-8 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Inverted papilloma of the ureter. Kostakopoulos A, et al. **Acta Urol Belg** 1988;56(3):471-4

[Upper urothelial tumors. Retrospective study] Gil Salom M, et al. **Actas Urol Esp** 1988 Sep-Oct;12(5):432-8 (Eng. Abstr.) **(Spa)**

SECONDARY

Implantation of colon cancer cells onto renal pelvic mucosa. A case report. Shiraishi T, et al. **APMIS** 1989 Feb; 97(2):181-4

Metastatic carcinoma of the cervix in a patient with dermatomyositis. Callen JP. **Cutis** 1989 Feb;43(2):137-9

Unsuspected bilateral ureteral transitional carcinoma. Culkin DJ, et al. **IMJ** 1988 Aug;174(2):95-7

Carcinoma of the renal pelvis and ureter following bladder carcinoma: frequency, risk factors and clinicopathological findings. Oldbring J, et al. **J Urol** 1989 Jun;141(6):1311-3

[Cancers of the sigmoid and upper rectum extending to the bladder or ureter, treated by monobloc resection. Apropos of 13 cases] Carabalona B, et al. **Ann Chir** 1989;43(4):279-81 (Eng. Abstr.) **(Fre)**

[Secondary tumor of the ureter. Metastasis of breast carcinoma] Rigondet G, et al. **Ann Urol (Paris)** 1988; 22(4):301-2 (Eng. Abstr.) **(Fre)**

[Metastasis from a breast tumor causing ureteral obstruction in a male] Császár L, et al. **Orv Hetil** 1989 May 7; 130(19):1005-7 (Eng. Abstr.) **(Hun)**

[Four cases of upper urinary tract transitional cell carcinoma after radical cystectomy in bladder cancer] Nishio Y, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1593-9 (Eng. Abstr.) **(Jpn)**

[Ureteral metastasis of prostatic adenocarcinoma. Review of the literature] Cortadellas R, et al. **Arch Esp Urol** 1989 Jan-Feb;42(1):19-22 (26 ref.) (Eng. Abstr.) **(Spa)**

SURGERY

Transitional cell carcinoma of the renal pelvis and ureter. Mufti GR, et al. **Br J Urol** 1989 Feb;63(2):135-40

Impact of endourology on diagnosis and management of upper urinary tract urothelial cancer. Blute ML, et al. **J Urol** 1989 Jun;141(6):1298-301

Laser treatment of ureteral tumors. Schmeller NT, et al. **J Urol** 1989 Apr;141(4):840-3

Role of ureteroscopy in the management of urothelial tumors of the ureter and renal pelvis. Bagley DH. **Prog Clin Biol Res** 1988;277:93-104 (20 ref.)

[Vermiform appendix used as a segment of the ureter] Jeppesen LJ, et al. **Ugeskr Laeger** 1989 Jul 3;151(27):1763 (Eng. Abstr.) **(Dan)**

[Tumors of the upper excretory tract. Cases contribution and review of the literature] Morbidelli A, et al. **Minerva Chir** 1989 Mar 15;44(5):883-94 (20 ref.) (Eng. Abstr.) **(Ita)**

[A case of ureteral polyp in a young man with renal autotransplantation] Sugiyama T, et al. **Hinyokika Kiyo** 1989 Jan;35(1):111-4 (9 ref.) (Eng. Abstr.) **(Jpn)**

[Transurethral and percutaneous treatment of ureteropyelocaliceal tumors with electrocoagulation, resection and lasers] Franch L, et al. **Arch Esp Urol** 1988 Jun;41(5):373-6 (Eng. Abstr.) **(Spa)**

THERAPY

Percutaneous BCG perfusion of the upper urinary tract for carcinoma in situ. Studer UE, et al. **Prog Clin Biol Res** 1989;310:207-12

[Two cases of ureteral endometriosis] Watanabe T, et al. **Hinyokika Kiyo** 1989 Feb;35(2):315-21 (33 ref.) (Eng. Abstr.) **(Jpn)**

[Treatment of 46 cases of renal pelvic and ureteral tumors] Aso Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jan; 80(1):69-73 (Eng. Abstr.) **(Jpn)**

[Treatment of upper urinary tract tumors (retrospective analysis)] Matveev BP, et al. **Urol Nefrol (Mosk)** 1988 Nov-Dec;(6):41-4 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Multicentric papillary adenocarcinoma of the renal pelvis and ureter. Report of a case with ultrastructural study. Kim YI, et al. **Cancer** 1988 Dec 1;62(11):2402-7

URETERAL OBSTRUCTION

[Diagnosis and therapy of pyeloureteral stenoses in infancy] Danelilen D, et al. **Acta Chir Iugosl** 1989;36(1):159-67 (Eng. Abstr.) **(Ser)**

BLOOD

Atrial natriuretic peptide in patients with obstructive uropathy. Gulmi FA, et al. **J Urol** 1989 Aug;142(2):268-72

COMPLICATIONS

Bilateral pelviureteric junction obstruction causing renal failure in two elderly patients. Kerr PG, et al. **Am J Nephrol** 1989;9(1):47-50

Pelviureteric junction obstruction and recurrent abdominal pain in childhood. Ward HC, et al. **Br J Surg** 1989 Aug; 76(8):818-9

Radioscintigraphic demonstration of unsuspected urine extravasation. Bocchini T, et al. **Clin Nucl Med** 1989 Jun; 14(6):421-7

Obstruction in the refluxing urinary tract--a common phenomenon. Leighton DM, et al. **Clin Radiol** 1989 May; 40(3):271-3

Development of fetal lamb lung and kidney in obstructive uropathy: a preliminary report. Pringle KC, et al. **Fetal Ther** 1988;3(1-2):118-28

Extravasation from the upper urinary tract: three case reports. Elliott JP, et al. **J Miss State Med Assoc** 1988 Sep;29(9):269-71

The cause of uremia in obstructed kidneys. Awazu M, et al. **J Pediatr** 1989 Feb;114(2):179-86 (45 ref.)

Delayed management of neonatal hydronephrosis. Dejter SW Jr, et al. **J Urol** 1988 Nov;140(5 Pt 2):1305-9

Coexisting ureteropelvic junction obstruction and vesicoureteral reflux: diagnostic and therapeutic implications. Hollowell JG, et al. **J Urol** 1989 Aug;142(2 Pt 2):490-3; discussion 501

A new test to predict reversibility of hydronephrotic atrophy after stable partial unilateral ureteral obstruction. Huland H, et al. **J Urol** 1988 Dec;140(6):1591-4

Renal injury and recovery in partial ureteric obstruction. Leahy AL, et al. **J Urol** 1989 Jul;142(1):199-203

Glomerulosclerosis in obstructive uropathy. Steinhardt GF, et al. **J Urol** 1988 Nov;140(5 Pt 2):1316-8

Giant pelviureteric hydronephrosis in a child. Dahniya MH, et al. **Pediatr Radiol** 1988;18(6):501-2 (7 ref.)

Haemorrhage due to rupture of the kidney with intraparenchymal calculi, chronic pyelonephritis and acute obstructive uropathy. A case report. Klevansky AB, et al. **S Afr Med J** 1988 Nov 19;74(10):527-8

[Obstructive anuria: the modern approach] Ballanger P. **J Urol (Paris)** 1989;95(1):53-4 **(Fre)**

[Perirenal urinoma secondary to ureteral obstruction caused by bladder carcinoma] Gil Salom M, et al. **Actas Urol Esp** 1988 Nov-Dec;12(6):558-62 (Eng. Abstr.) **(Spa)**

[Urothelial carcinoma of the upper urinary tract associated with hydronephrosis caused by stenosis of the pyeloureteral juncture, in a patient with a single functioning kidney. Apropos of a case. Review of the literature] Pérez Garnelo MJ, et al. **Actas Urol Esp** 1988 May-Jun;12(3):263-70 (46 ref.) (Eng. Abstr.) **(Spa)**

[Pseudohypoaldosteronism and obstructive uropathy] Obando Santaella I, et al. **An Esp Pediatr** 1988 Aug; 29(2):181-2 (5 ref.) **(Spa)**

CONGENITAL

Management of ureteropelvic junction obstruction in infants and neonates. Aliabadi H, et al. **Eur Urol** 1988; 15(1-2):103-7

Congenital obstructed megaureters in early infancy: diagnosis and treatment. Peters CA, et al. **J Urol** 1989 Aug;142(2 Pt 2):641-5; discussion 667-8

Obstructive nephropathy in early development. Chevalier RL. **Semin Nephrol** 1989 Mar;9(1):5-9 (43 ref.)

Neonatal ascites and ureteral valves. Reha WC, et al. **Urology** 1989 Jun;33(6):468-71

[The experimental model of congenital urinary tract obstruction] Taguchi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1348-54 (Eng. Abstr.) **(Jpn)**

[Hydronephrosis due to obstruction of the urinary tract detected by fetal echography and also detected soon after birth] Iitaka K, et al. **Nippon Jinzo Gakkai Shi** 1988 Nov; 30(11):1283-92 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Antenatally diagnosed obstructive uropathy--kidney imaging vs kidney function. de Jong TP, et al. **Acta Urol Belg** 1989; 57(2):413-6

The incidence of ureteral obstruction secondary to aorto-femoral bypass surgery. A prospective study. Henriksen LO, et al. **Eur J Vasc Surg** 1988 Dec;2(6):417-8

Antenatal sonographic diagnosis of pelvi-ureteric junction obstruction [letter] Kapoor R, et al. **Indian Pediatr** 1988 Jul;25(7):702-3

Noncontrast and contrast enhanced MR imaging in the evaluation of partial ureteral obstruction: an experimental study in the micropig. Thurnher S, et al. **Invest Radiol** 1989 Jul;24(7):544-54

Rapid, contrast-enhanced, diuretic magnetic resonance imaging of unilateral partial ureteral obstruction. An experimental study in micropigs. Tzika AA, et al. **Invest Radiol** 1989 Jan;24(1):37-46

The Whitaker test: experimental analysis in a canine model of partial ureteric obstruction. Ryan PC, et al. **J Urol** 1989 Feb;141(2):387-90

Constant pressure perfusion: a method to determine obstruction in the upper urinary tract. Woodbury PW, et al. **J Urol** 1989 Aug;142(2 Pt 2):632-5; discussion 667-8

P-31 nuclear magnetic resonance spectral changes in obstructed or dehydrated kidney. Shapiro JI, et al. **Kidney Int** 1989 Mar;35(3):830-5

Parapelvic renal cyst causing UPJ obstruction. Investigation by IVP, ultrasound and CT. Patel K, et al. **Pediatr Radiol** 1988;19(1):2-5

Duplex Doppler US of the kidney: differentiation of obstructive from nonobstructive dilatation. Platt JF, et al. **Radiology** 1989 May;171(2):515-7

Ultrasonography for diagnosis of obstructing ureteral calculus. Kuuliala IK, et al. **Scand J Urol Nephrol** 1988; 22(4):275-7

Diuretic ultrasound: technique for assessment of obstructed renal unit. Goldberg SD, et al. **Urology** 1988 Dec; 32(6):546-8

[Obstructive uropathy--comparative studies of obstruction of the upper and lower urinary tracts] Murshed G, et al. **Khirurgiia (Sofiia)** 1988;41(4):84-90 (Eng. Abstr.) **(Bul)**

[Ureteropelvic junction syndromes: antenatal diagnosis] Audry G, et al. **Chir Pediatr** 1988;29(4):165-9 (Eng. Abstr.) **(Fre)**

[Ureteropelvic junction syndrome. Apropos of 59 cases diagnosed with fetal echography] Ravasse P, et al. **Chir Pediatr** 1988;29(5):253-8 (Eng. Abstr.) **(Fre)**

[Assessment of pelvi-ureteric junction stenosis using diuresis ultrasonotomography] Fujisue H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):693-9 (Eng. Abstr.) **(Jpn)**

[Puncture of urinary tract for the diagnosis of its obstruction. Review of 60 cases] Salinas Sánchez AS, et al. **Arch Esp Urol** 1989 Jan-Feb;42(1):43-6 (24 ref.) (Eng. Abstr.) **(Spa)**

DRUG THERAPY

[Local chemolysis of occluding uric acid calculi] Breuel F, et al. **Z Urol Nephrol** 1988 Oct;81(10):613-22 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Ureteral obstruction caused by endometriosis. Rosenbeck J, et al. **Acta Obstet Gynecol Scand** 1988;67(5):411–2

Bilateral ureteral obstruction: an unusual complication of pancreatitis. Stone MM, et al. **Am J Gastroenterol** 1989 Jan;84(1):49–51

Volume related configurational changes in the aetiology of pelvi-ureteric junction obstruction. De Campo J, et al. **Australas Radiol** 1989 Feb;33(1):60–3

Ureteric obstruction after allogeneic bone marrow transplantation: an unusual complication. Hiraoka A, et al. **Bone Marrow Transplant** 1989 Jul;4(4):449–51

Inflammatory abdominal aortic aneurysm: a cause of urinary obstruction and acute renal failure. Bartlett P, et al. **Can Assoc Radiol J** 1989 Jun;40(3):164–6

Carcinoma of the fallopian tube presenting as renal failure: case report. Zalev AH, et al. **Can Assoc Radiol J** 1989 Apr;40(2):112–3

Obstructive uropathy from endometriosis after hysterectomy and oophorectomy; two case reports. Manyonda IT, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):195–8

Survival of a premature neonate with obstructive anuria due to Candida: the role of early sonographic diagnosis and antimycotic treatment. Yadin O, et al. **Eur J Pediatr** 1988 Aug;147(6):653–5

Obstructive ureteropathy following radiation therapy for carcinoma of the cervix. Parliament M, et al. **Gynecol Oncol** 1989 May;33(2):237–40

Ureteral stenosis secondary to common iliac aneurysm: a case report and review of the literature in Japan. Gohji K, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1799–803 (17 ref.)

Bilateral ureteral obstruction secondary to condylomata acuminata of the urinary bladder. Ginsberg PC, et al. **J Am Osteopath Assoc** 1989 Jan;89(1):69–72 (19 ref.)

Obstructive urinary syndrome. Lambert M, et al. **J Belge Radiol** 1988;71(6):734–5

Ureteral obstruction and hydronephrosis as a complication of tuboovarian abscess. A case report. Nguyen HN, et al. **J Reprod Med** 1988 Oct;33(10):835–7

Symptomatic urogenital manifestations of polyarteritis nodosa and Churg–Strauss angiitis: analysis of 8 of 165 patients. Azar N, et al. **J Urol** 1989 Jul;142(1):136–8

Ureteral obstruction caused by vasculitis. Baskin L, et al. **J Urol** 1989 Apr;141(4):933–5

Bilateral complete ureteral obstruction and renal insufficiency secondary to granulomatous disease. Casale AJ, et al. **J Urol** 1989 Sep;142(3):812–4

Ureteral involvement in the Churg–Strauss syndrome: a case report. Cortellini P, et al. **J Urol** 1988 Nov;140(5):1016–8 (13 ref.)

The fate of infant kidneys with fetal hydronephrosis but initially normal postnatal sonography. Dejter SW Jr, et al. **J Urol** 1989 Aug;142(2 Pt 2):661–2; discussion 667–8

Bilateral ureteral stricture from polyarteritis nodosa. Hefty TR, et al. **J Urol** 1989 Mar;141(3):600–1

Lower pole ureteropelvic junction obstruction and incomplete renal duplication. Joseph DB, et al. **J Urol** 1989 Apr;141(4):896–9

Bilateral ureteral necrosis and obliteration secondary to pancreatic pseudocyst. Meller S, et al. **J Urol** 1988 Dec; 140(6):1523–5

Ureteral leak around an aortic bifurcation graft: complication of ureteral stenting. Sacks D, et al. **J Urol** 1988 Dec; 140(6):1526–8

Management of iatrogenic ureteral strictures after urological procedures. Smith AD. **J Urol** 1988 Dec;140(6):1372–4

Ureteral obstruction secondary to a vena caval clip. Wrenn JJ, et al. **J Urol** 1988 Nov;140(5):1014–5

Ureteral valves: report of a case diagnosed by antegrade pyelography. Tlili-Graies K, et al. **Pediatr Radiol** 1988; 19(1):67–9

Treatment of urinary tract obstruction by cancer of the prostate. Vicente J, et al. **Prog Clin Biol Res** 1989; 303:287–97 (30 ref.)

General case of the day. Sulfonamide crystallization in nonalkalinized urine. Neal MP Jr. **Radiographics** 1988 Sep; 8(5):993–6

Adenocarcinoma from endometriosis causing urinary tract obstruction in a patient on oestrogen replacement therapy after hysterectomy. A case report. Frohlich EP, et al. **S Afr Med J** 1988 Dec 17;74(12):638–9

The continuing challenge of bilharzial ureteric stricture. Sharfi AR, et al. **Scand J Urol Nephrol** 1989;23(2):123–6

Percutaneous nephrostomy in an unusual case of ureteric obstruction. Deans GT, et al. **Ulster Med J** 1988 Oct; 57(2):212–4 (10 ref.)

Perirenal urinary extravasation complicating Burch colposuspension. Delaere KP, et al. **Urol Int** 1989; 44(2):119–20

Acute renal failure due to bilateral ureteral obstruction by the pregnant uterus. Eika B, et al. **Urol Int** 1988;43(3):315–7

Ureteral obstruction secondary to sigmoid diverticulitis. Kubota Y, et al. **Urol Int** 1988;43(6):359–61

Extracorporeal shock wave lithotripsy and stents: fluoroscopic observations and a hypothesis on the mechanisms of stent function. Fine H, et al. **Urol Radiol** 1989;11(1):37–41

Chronic vasculitis causing unilateral ureteral stenosis. Goodman GR, et al. **Urology** 1988 Oct;32(4):354–6

Lumbar ureteral shunt—an unusual cause of ureteral obstruction. Kelly JH, et al. **Urology** 1989 Apr;33(4):309–10

Neonatal multicystic kidney with associated respiratory distress, obstruction of contralateral ureter, and gastric compromise. Middleton AW Jr, et al. **Urology** 1989 Jul; 34(1):36–8 (9 ref.)

[Ureteral stenosis following radiotherapy of uterine cervix cancer] Glavind K. **Ugeskr Laeger** 1989 Jan 2;151(1):7–9 (Eng. Abstr.) (Dan)

[Ureter obstruction due to a polypous colon tumor following ureterosigmoidostomy] Verburg GP, et al. **Ned Tijdschr Geneeskd** 1988 Oct 22;132(43):1979–81 (Eng. Abstr.) (Dut)

[Fibrous epithelial polyps of the pyelo-ureteral junction in children. Presentation of 3 cases and review of the literature (33 cases)] Galifer RB, et al. **Chir Pediatr** 1988;29(6):318–24 (43 ref.) (Eng. Abstr.) (Fre)

[Endometriosis and ureteral stenosis. Apropos of 4 cases] Amar A, et al. **J Chir (Paris)** 1989 May;126(5):301–6 (19 ref.) (Eng. Abstr.) (Fre)

[Ureteral stenosis following colpocystopexy of urinary stress incontinence. Apropos of 5 cases] Heritier P, et al. **J Urol (Paris)** 1988;94(7):349–51 (Eng. Abstr.) (Fre)

[Ovarian vein syndrome] Montagnac R, et al. **Rev Fr Gynecol Obstet** 1989 Jan;84(1):11–4 (14 ref.) (Eng. Abstr.) (Fre)

[Metastasis from a breast tumor causing ureteral obstruction in a male] Császár L, et al. **Orv Hetil** 1989 May 7; 130(19):1005–7 (Eng. Abstr.) (Hun)

[Ureteral invagination secondary to papilloma: an unusual cause of urinary tract obstruction] Del Boca C, et al. **Arch Ital Urol Nefrol Androl** 1988 Sep;60(3):301–6 (Eng. Abstr.) (Ita)

[Retrotendinous ureter. An exceptional cause of obstruction in the upper urinary tract] Guarise P, et al. **Pediatr Med Chir** 1989 Jan–Feb;11(1):85–8 (Eng. Abstr.) (Ita)

[Anuria caused by ligation of both ureters during cesarean section] Budner M, et al. **Ginekol Pol** 1988 Jan;59(1):59–62 (Eng. Abstr.) (Pol)

[Ectopy of the accessory third testicle in the posterior urethra] Dutov VV, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):56 (Rus)

[Ureteral obstruction after radiotherapy in patients with cancer] Kan IaD, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr; (2):31–4 (Eng. Abstr.) (Rus)

[Lesions of the kidneys and urinary tract in lymphogranulomatosis] Korytova LI, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):71–4 (39 ref.) (Rus)

[Causes of ureteral obstruction immediately after surgery for retroperitoneal fibrosis] Fernández Fernández A, et al. **Actas Urol Esp** 1988 Nov–Dec;12(6):529–34 (Eng. Abstr.) (Spa)

[Acute ureteral obstruction caused by firearm pellet] Cavelier LE. **Arch Esp Urol** 1989 Mar;42(2):161–2 (Eng. Abstr.) (Spa)

[Syndrome of duplicated pyeloureteral junction; a rare entity. Apropos of 5 cases] Estornell Moragues F, et al. **Arch Esp Urol** 1988 Oct;41(8):585–9 (Eng. Abstr.) (Spa)

[Syndrome of the right ovarian vein. Presentation of a new case] Llarena Ibarguren R, et al. **Arch Esp Urol** 1988 Sep; 41(7):543–5 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Immunological aspects of acute ureteral obstruction: immune cell infiltrate in the kidney. Schreiner GF, et al. **Kidney Int** 1988 Oct;34(4):487–93

METABOLISM

Gene expression in response to acute unilateral ureteral obstruction. Sawczuk IS, et al. **Kidney Int** 1989 Jun; 35(6):1315–9

Radioisotopic transit parameters in obstruction of pelviureteral junction. Verboven M, et al. **Urology** 1988 Oct;32(4):370–4

[Contractile proteins in the kidney. II. Functional role of contractile proteins in the kidney and its response to short term obstruction] Sakagami Y. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):332–8 (Eng. Abstr.) (Jpn)

PATHOLOGY

Effects of unilateral ureteric occlusion on renal necrosis occurring in rats fed a methyl-deficient diet. Roberti MF, et al. **Br J Exp Pathol** 1988 Aug;69(4):449–56

Trifid pelvis and controlateral bifid ureter with bilateral ureteropelvic junction obstruction. Sapin E, et al. **Eur Urol** 1988;15(1–2):144–5

Differentiation in vivo of the sequential blood cell invasion following ureter obstruction of the rabbit kidney. Mathias CJ, et al. **Int J Rad Appl Instrum [B]** 1989;16(1):25–32

Induced renal dysplasia in the young pouch opossum. Steinhardt GF, et al. **J Pediatr Surg** 1988 Dec; 23(12):1127–30

Ureteropelvic junction obstruction associated with ureteral hypoplasia. Allen TD, et al. **J Urol** 1989 Aug;142(2):353–5

Vascular alterations in the canine kidney following obstruction of the urinary tract. A SEM investigation of corrosion casts. Amselgruber W, et al. **Urol Res** 1989; 17(3):199–202

PHYSIOPATHOLOGY

Response of the renin–angiotensin system to relief of neonatal ureteral obstruction. Chevalier RL, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1070–7

Role of atrial peptide in the natriuresis and diuresis that follows relief of obstruction in rat. Purkerson ML, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F583–9

Two-needle modification of the Whitaker test. Wentzell PG, et al. **Br J Urol** 1988 Oct;62(4):388

Urinary obstruction reduces glomerulogenesis in the developing kidney: a model in the rabbit. McVary KT, et al. **J Urol** 1989 Aug;142(2 Pt 2):646–51; discussion 667–8

Serial renal function in an ovine model of unilateral fetal urinary tract obstruction. Ward RM, et al. **J Urol** 1989 Aug;142(2 Pt 2):652–6; discussion 667–8

Effect of leukocyte depletion on the function of the postobstructed kidney in the rat. Harris KP, et al. **Kidney Int** 1989 Aug;36(2):210–5

Prior inhibition of vasoconstrictors normalizes GFR in postobstructed kidneys. Purkerson ML, et al. **Kidney Int** 1989 Jun;35(6):1305–14

Site of the acidification defect in the perfused postobstructed collecting tubule. Laski ME, et al. **Miner Electrolyte Metab** 1989;15(4):195–200

Pyeloureteral dynamics. Pelvic pressure and kidney function in partial long-term ureteric obstruction. Mortensen J, et al. **Scand J Urol Nephrol** 1989;23(1):25–9

Long-term follow-up of separate glomerular filtration rate in partially obstructed kidneys. Experimental study. Piepsz A, et al. **Scand J Urol Nephrol** 1988;22(4):327–33

Pressure and flow measurements in the partially obstructed ureter of the rat. Stenberg A, et al. **Scand J Urol Nephrol** 1988;22(4):279–88

The effect of tachykinins and CGRP on the obstructed ureter—a study on capsaicin-sensitive sensory nerves in the guinea-pig. Kinn AC, et al. **Scand J Urol Nephrol Suppl** 1988;110:291–7

[Ureteral compliance of dilated ureters in dogs] Kigure T. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):691–9 (Eng. Abstr.) (Jpn)

[Glomerular and proximal tubular functions after release of complete unilateral ureteral obstruction in the rat] Suzuki S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr; 79(4):654–9 (Eng. Abstr.) (Jpn)

[Renal function before and after release of complete unilateral ureteral obstruction in young rats. Comparison with adult rats] Suzuki S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):660–5 (Eng. Abstr.) (Jpn)

[Diuresis renography in the postoperative course of pyeloureteral stenosis] Rivilla Parra P, et al. **An Esp Pediatr** 1989 Mar;30(3):175–7 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Bilateral duplex ectopic ureters terminating in the seminal vesicles: sonographic and CT diagnosis. Hernanz-Schulman M, et al. **Urol Radiol** 1989;11(1):49–52

Technique for more rapid localization of distal ureteral obstruction with excretory urography. Marshall S, et al. **Urology** 1989 Feb;33(2):146–7

[Percutaneous descending pyelography under ultrasonographic control] Gomuła A, et al. **Pol Przegl Radiol (Warszawa)** 1988 Mar–Apr;52(2):87–91 (Eng. Abstr.) (Pol)

RADIONUCLIDE IMAGING

Incidental detection of obstructive uropathy during scrotal imaging. Elgazzar AH, et al. **Clin Nucl Med** 1988 Nov; 13(11):823–5

Detection of obstructive uropathy by bone scintigraphy. Haden HT, et al. **J Nucl Med** 1988 Nov;29(11):1781–5

Vanishing "ureterohydronephrosis" on technetium-99m-MDP bone scanning. De Geeter F, et al. **J Nucl Med Allied Sci** 1989 Jan–Mar;33(1):42–4

Extrarenal pelvis mimicking obstructive uropathy in nine years of serial bone scintigraphies. Shih WJ, et al. **Radiat Med** 1988 Nov–Dec;6(6):253–5

Renal parenchymal damage on DMSA-scintigraphy in pelviureteric obstruction. Kullendorff CM, et al. **Scand J Urol Nephrol** 1989;23(2):127–30

SURGERY

Bilateral renal tumours with reference to the reoperation of a solitary kidney resected for tumour. Zana J, et al. **Acta Chir Hung** 1988;29(2):187–95

Ultrasound-guided percutaneous nephrostomy in the treatment of advanced gynecologic malignancy. Pedersen H, et al. **Acta Obstet Gynecol Scand** 1988;67(3):199–201

Evaluation of surgical procedures for bilharzial strictures of the ureter. Awad EM, et al. **Br J Urol** 1989 Aug; 64(2):134–7

Preliminary nephrostomy and total ileal replacement of both ureters in advanced bilharzial obstructive uropathy. Elem B. **Br J Urol** 1989 May;63(5):453–6

Combined percutaneous and transurethral approach to stenoses of the ureteral meatus after transurethral resection for bladder tumor. Janetschek G, et al. **Eur Urol** 1989; 16(1):31–5

Percutaneous nephrostomy under ultrasonographic control—experience from a 2-year material. Kovács A, et

al. Int Urol Nephrol 1989;21(2):131–7
Reconstructive microsurgery of the upper urinary tract. Oesterwitz H, et al. Int Urol Nephrol 1988;20(5):453–9
Urological complications in 454 renal transplants. Hickey DP, et al. Ir J Med Sci 1988 Jul;157(7):222–5
Pediatric pyeloplasty: 50 patients with 59 hydronephrotic kidneys. Saing H, et al. J Pediatr Surg 1989 Apr;24(4):346–9
Complication of ureteric pigtail stents. MacDermott JP, et al. J R Coll Surg Edinb 1988 Dec;33(6):338–9
Ureteropelvic junction obstruction in the neonate. Bernstein GT, et al. J Urol 1988 Nov;140(5 Pt 2):1216–21
Ureteropelvic junction obstruction: the effect of pyeloplasty on renal function. Dowling KJ, et al. J Urol 1988 Nov; 140(5 Pt 2):1227–30
Controversies about indications for transurethral resection of the prostate. Graversen PH, et al. J Urol 1989 Mar; 141(3):475–81 (86 ref.)
Innovative surgical management of idiopathic retroperitoneal fibrosis. Mikkelsen D, et al. J Urol 1989 May;141(5):1192–6
Nonintubated Anderson–Hynes repair of ureteropelvic junction obstruction in 60 patients. Nguyen DH, et al. J Urol 1989 Sep;142(3):704–6
Functional outcome of pyeloplasty for ureteropelvic junction obstruction: prospective study in 30 consecutive cases. O'Reilly PH. J Urol 1989 Aug;142(2):273–6
Endoureteropyelotomy: percutaneous treatment of ureteropelvic junction obstruction. Van Cangh PJ, et al. J Urol 1989 Jun;141(6):1317–21; discussion 1321–2
Priorities in urinary diversion following pyeloplasty. Wollin M, et al. J Urol 1989 Aug;142(2 Pt 2):576–8; discussion 603–5
Pyeloplasty in the young infant. Wolpert JJ, et al. J Urol 1989 Aug;142(2 Pt 2):573–5; discussion 603–5
Problems in severe bilateral urinary tract anomalies. Nielsen OH, et al. Prog Pediatr Surg 1989;23:81–5
Surgical treatment of ureteric obstruction in idiopathic retroperitoneal fibrosis. Lindell OI, et al. Scand J Urol Nephrol Suppl 1988;110:299–302
Acute ureteral obstruction from candidal cystitis requiring bilateral percutaneous nephrostomies. Gerridzen RG, et al. Urology 1988 Nov;32(5):444–6
Simultaneous repair of bilateral ureteropelvic junction obstruction. Provet JA, et al. Urology 1989 May; 33(5):390–4
[Results of early surgery of obstructive uropathies diagnosed prenatally: apropos of 56 cases] Averous M. Acta Urol Belg 1989;57(2):423–30 (Fre)
[Failures observed after repair of the pyeloureteral junction in children. Apropos of 13 cases] Grapin C, et al. Ann Urol (Paris) 1989;23(2):142–5 (Eng. Abstr.) (Fre)
[The posterior approach in the treatment of hydronephrosis in children. Apropos of 65 cases] Aubert D, et al. Chir Pediatr 1988;29(5):259–63 (Eng. Abstr.) (Fre)
[Intrarenal percutaneous surgery in calyceal stones, infundibular stones, calyceal diverticuli and stenosis of the ureteropelvic junction] Janetschek G. Urologe [A] 1988 Sep;27(5):256–62 (Eng. Abstr.) (Ger)
[Laser-assisted transurethral resection of ureteral occlusions] Bockhorn V, et al. Z Urol Nephrol 1989 Jul;82(7):361–2 (Eng. Abstr.) (Ger)
[Reconstructive operations in stenosis of the pelvi-ureteral segment of the horseshoe kidney] Pytel' IuA, et al. Urol Nefrol (Mosk) 1988 May–Jun;(3):26–31 (Eng. Abstr.) (Rus)
[Substitution of the ureter with ileum in renal transplantation] Morote J, et al. Actas Urol Esp 1988 May–Jun;12(3):271–4 (Eng. Abstr.) (Spa)
[Endoureteropyelotomy in impassable stenosis of the pyeloureteral junction: instrumental conversion of the stenosis into an intrapelvic ureterocele] Santiago González de Garibay AM, et al. Actas Urol Esp 1989 Mar–Apr; 13(2):134–6 (Eng. Abstr.) (Spa)

THERAPY

A new low-speed, rotational atherolytic device for ureteral recanalization. Uflacker R, et al. AJR 1988 Dec; 151(6):1157–8
168 double J (pigtail) ureteric catheter insertions: a retrospective review. Smedley FH, et al. Ann R Coll Surg Engl 1988 Nov;70(6):377–9
Pelviureteric obstruction in children treated by retrograde ureteroplasty. Doraiswamy NV, et al. Br J Urol 1989 Feb; 63(2):141–3
Percutaneous antegrade dilatation of distal ureteral strictures and obstructions. Göthlin JH, et al. Eur J Radiol 1988 Nov; 8(4):217–20
High failure rate of indwelling ureteral stents in patients with extrinsic obstruction: experience at 2 institutions. Docimo SG, et al. J Urol 1989 Aug;142(2):277–9
Management of benign ureteral structures: open surgical repair or endoscopic dilation? Kramolowsky EV, et al. J Urol 1989 Feb;141(2):285–6
Dilation of benign ureteral strictures. Beckmann CF, et al. Radiology 1989 Aug;172(2):437–41
Ureteropelvic junction obstruction: treatment with percutaneous endopyelotomy. Bush WH, et al. Radiology 1989 May;171(2):535–8
Prospective management of neonates with pelviureteric junction stenosis. Therapeutic strategy based on 99m Tc-DPTA studies. Piepsz A, et al. Scand J Urol Nephrol 1989;23(1):31–6
Endourologic balloon dilatation of strictures in the upper urinary tract. Jörgensen K, et al. Scand J Urol Nephrol Suppl 1988;110:245–8
Value of antegrade ureteral dilation for late ureter obstruction in renal transplants. Benoit G, et al. Transpl Int 1989 Apr;2(1):33–5
Percutaneous access for the correction of ureteral strictures after renal transplantation. Dreikorn K. Transpl Int 1989 Apr;2(1):40
Antegrade percutaneous dilation of ureteral strictures after kidney transplantation. Oosterhof GO, et al. Transpl Int 1989 Apr;2(1):36–9
[Anterograde ureteral dilatation in kidney transplantation] Benoit G, et al. Ann Urol (Paris) 1988;22(4):239–41 (Eng. Abstr.) (Fre)
[Primary obstructive megaureter in infants: medical or surgical treatment? Apropos of 24 cases] Vidal V, et al. J Urol (Paris) 1988;94(5–6):279–83 (15 ref.) (Eng. Abstr.) (Fre)
[Percutaneous catheter dilatation of benign ureteral stenoses: indications, technic, results] Thiel U, et al. Z Urol Nephrol 1988 Aug;81(8):499–508 (Eng. Abstr.) (Ger)
[Stents in current urologic practice. Critical review] Cocimano V, et al. Minerva Urol Nefrol 1988 Jul–Sep; 40(3):185–7 (Eng. Abstr.) (Ita)

URINE

Renal excretion of prostanoids and cyclic AMP in chronic partial ureteral obstruction of the rabbit. Kekomäki M, et al. J Urol 1989 Feb;141(2):395–7
[Obstructive nephropathy; kidney function and renal excretion of prostaglandin (E)2 and Thromboxane B(2) following percutaneous decompression nephropyelostomy] Weber T, et al. Urologe [A] 1988 Sep;27(5):269–74 (Eng. Abstr.) (Ger)
[An experiment to estimate creatinine clearance of chronic unilateral and completely obstructed kidney] Masaki T. Nippon Hinyokika Gakkai Zasshi 1988 Jun;79(6):1019–24 (Eng. Abstr.) (Jpn)

VETERINARY

Nephrolithiasis resulting in intermittent ureteral obstruction in a cow. Divers TJ, et al. Cornell Vet 1989 Apr;79(2):143–9

URETEROCELE

COMPLICATIONS

Radiolucent seed calculi in an orthotopic ureterocele. Wong WS, et al. J Urol 1988 Dec;140(6):1521–2
Ultrasonography of calculi in ureteroceles. Khan AN, et al. JCU 1989 Jul–Aug;17(6):439–42
Forniceal rupture secondary to ureterocele and increased urine flow. Moore NR, et al. Urol Radiol 1989;11(2):106–8

DIAGNOSIS

Female wide urethra masquerading as a urethral diverticulum in association with ectopic ureterocele. Konami T, et al. Hinyokika Kiyo 1988 Aug;34(8):1437–41
Sonographic diagnosis of unilateral fetal renal duplication with associated ectopic ureterocele. Sherer DM, et al. JCU 1989 Jun;17(5):371–3
[Simple or orthotopic ureterocele. Echographic study of an unusual case] Bartoli E, et al. Radiol Med (Torino) 1989 Mar;77(3):278–80 (Ita)
[Two cases of ectopic ureterocele in female adults diagnosed by the growth of stones in the cele] Hayashida H, et al. Hinyokika Kiyo 1989 Feb;35(2):329–32 (Eng. Abstr.) (Jpn)
[Ultrasonic diagnosis of ureterocele] Urenkov SB, et al. Urol Nefrol (Mosk) 1989 Jan–Feb;(1):31–4 (Eng. Abstr.) (Rus)
[Comparative evaluation of ultrasonic and x-ray study methods in the diagnosis of ureterocele] Roslov AL, et al. Vestn Rentgenol Radiol 1988 Jul–Aug;(4):36–41 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

[Kidney function of patients operated on for ureterocele] Mil'ko VI, et al. Vrach Delo 1988 Oct;(10):73–5 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Ectopic ureterocele without ureteral and calyceal dilatation (ureterocele disproportion): findings on urography and sonography. Share JC, et al. AJR 1989 Mar;152(3):567–71

SURGERY

Single system ureteroceles in childhood. Sen S, et al. Aust N Z J Surg 1988 Nov;58(11):903–7
How prenatal ultrasound can affect the treatment of ureterocele in neonates and children. Caione P, et al. Eur Urol 1989;16(3):195–9
Individualized treatment of ureteroceles. Decter RM, et al. J Urol 1989 Aug;142(2 Pt 2):535–7; discussion 542–3
Ectopic ureteroceles: surgical management with preservation of continence—review of 60 cases. Scherz HC, et al. J Urol 1989 Aug;142(2 Pt 2):538–41; discussion 542–3
Ultrasonographic appearance of a simple ureterocele following surgical treatment. Teisen H, et al. Rontgenblatter 1988 Sep;41(9):380–1
Initiation of vesicoureteral reflux after heminephrectomy for ureterocele. Uehling DT, et al. Urology 1989 Apr; 33(4):302–4
[Experience with transurethral incision of ureteroceles. Endoscopic intervention revisited] Gotoh T, et al. Nippon Hinyokika Gakkai Zasshi 1988 Sep;79(9):1535–43 (Eng. Abstr.) (Jpn)
[Results of surgery for an ectopic ureterocele in children] Tereshchenko AV, et al. Urol Nefrol (Mosk) 1988 Nov–Dec;(6):28–31 (Eng. Abstr.) (Rus)
[Endoureteropyelotomy in impassable stenosis of the pyeloureteral junction: instrumental conversion of the stenosis into an intrapelvic ureterocele] Santiago González de Garibay AM, et al. Actas Urol Esp 1989 Mar–Apr; 13(2):134–6 (Eng. Abstr.) (Spa)
[Ureteropyelostomy in the treatment of ureteral duplication with reflux] Arango Toro O, et al. Arch Esp Urol 1988 Sep;41(7):507–10 (Eng. Abstr.) (Spa)

URETEROLITHIASIS see URETERAL CALCULI

URETEROSTOMY

Surgery for duplex kidneys with ectopic ureters: ipsilateral ureteroureterostomy versus polar nephrectomy. Smith FL, et al. J Urol 1989 Aug;142(2 Pt 2):532–4; discussion 542–3

ADVERSE EFFECTS

Acquired intravesical ureteral diverticulum: an unusual late complication of ureteroneocystostomy. Aragona F, et al. J Urol 1989 Jun;141(6):1420–1
Acute ammonia intoxication 37 years after ureterosigmoidostomy. Gilbert GJ. South Med J 1988 Nov; 81(11):1443–5
Morphological changes of urothelial and intestinal mucosa after ureterosigmoidostomy during experimental urogenic carcinogenesis. Deutz FJ, et al. Urol Res 1989;17(4):223–7
[Natural history of tumors in carcinogenesis after ureterosigmoidostomy. I—Clinical approach] Daher N, et al. J Urol (Paris) 1989;95(2):97–102 (93 ref.) (Eng. Abstr.) (Fre)

INSTRUMENTATION

Clinical experience with an alloplastic stoma prosthesis (Biocarbon) for urinary conduits and cutaneous ureterostomy. Månsson W, et al. Scand J Urol Nephrol 1988;22(3):223–6

METHODS

Terminal loop cutaneous ureterostomy in cadaveric kidney transplantation. Garrison RN, et al. Arch Surg 1989 Apr; 124(4):467–9
Primary vesicoureteric reflux treated by antireflux ureterocystostomy at the vertex of the bladder. A 12-year follow-up and analysis of operative failure. Bradić I, et al. Br J Urol 1988 Dec;62(6):531–6
Evaluation of extravesical and Leadbetter–Politano ureteroneocystostomy in renal transplantation. Shah S, et al. Br J Urol 1988 Nov;62(5):412–3
Improved technique of tubeless cutaneous ureterostomy and results of permanent urinary diversion. Hirokawa M, et al. Eur Urol 1989;16(2):125–32
Successful use of transureteroureterostomy to salvage ureterosigmoidostomy after anastomotic failure. Boyd SD, et al. Urology 1989 Apr;33(4):271–3
[Direct cutaneous ureterostomy with myoplasty using a pedicled flap of the rectus abdominis] Grise P, et al. Ann Urol (Paris) 1988;22(4):291–5 (Eng. Abstr.) (Fre)
[Experience of 154 uretero-neo-cystostomies] Barkia A, et al. Tunis Med 1987 Dec;65(12):773–5 (10 ref.) (Eng. Abstr.) (Fre)
[Technical comparison: uretero-ureterocutaneostomy with Y and ileal shunt after radical cystectomy] D'Ottavio G, et al. Ann Ital Chir 1987;59(1–6):95–102 (Ita)

URETHANE

see related
POLYURETHANES

Temporary liver support using a new type of sorbent. A urethane sheet embedded with powdered charcoal. Kawanishi H, et al. ASAIO Trans 1988 Jul–Sep;34(3):250–4
Modification of the sponge allograft model to study the immune response to bone marrow cells. Moen RC, et al. Bone Marrow Transplant 1987 Apr;1(4):389–96
Enhanced malignant phenotype of urethane-induced lung adenoma associated with sialoadenectomy in BALB/c mice. Smith GJ, et al. Carcinogenesis 1989 Jul;10(7):1169–73
Survival rates and reasons for failure of posterior composite restorations in multicentre clinical trial. Letzel H. J Dent 1989;17 Suppl 1:S10–7; discussion S26–8
A five year study of the clinical performance of a posterior composite resin restorative material. Rowe AH. J Dent 1989;17 Suppl 1:S6–9; discussion S26–8
Effects of urethane, ambient temperature and injection route on rat body temperature and metabolism due to endotoxins. Bibby DC, et al. J Physiol (Lond) 1988 Nov;405:547–62
Activation of the cellular Harvey ras gene in mouse skin tumors initiated with urethane. Bonham K, et al. Mol Carcinog 1989;2(1):34–9

Effects of chloralose–urethane anesthesia on single–axon reciprocal Ia IPSPs in the cat. Yuan CS, et al. **Neurosci Lett** 1988 Dec 5;94(3):291–6

Dust emission during cutting of polyurethane–impregnated bandages. Wytch R, et al. **Prosthet Orthot Int** 1988 Dec; 12(3):155–60

Brain sulfide levels in anaesthesia: a comparison with hydrogen sulfide intoxication. Warenycia MW, et al. **Toxicol Lett** 1989 Jun;47(3):221–4

[Comparative animal experiments of different tissue adhesives. I. Tensile strength studies. II. Histologic and morphometric studies] Stephan E, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(4):221–34 (Eng. Abstr.) (Ger)

ADMINISTRATION & DOSAGE

Urethane as a sole general anaesthetic in cats used for electroretinogram studies. Millar TJ, et al. **Neurosci Lett** 1989 Aug 14;103(1):108–12

ADVERSE EFFECTS

Hazards of urethane (ethyl carbamate): a review of the literature. Field KJ, et al. **Lab Anim** 1988 Jul;22(3):255–62 (46 ref.)

ANALOGS & DERIVATIVES

Effect of exogenous surfactant instillation on experimental acute lung injury. Harris JD, et al. **J Appl Physiol** 1989 Apr;66(4):1846–51

ANALYSIS

Contamination of alcoholic products by trace quantities of ethyl carbamate (urethane). Clegg BS, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):832–7

Investigation of ethyl carbamate levels in some fermented foods and alcoholic beverages. Dennis MJ, et al. **Food Addit Contam** 1989 Jul–Sep;6(3):383–9

ANTAGONISTS & INHIBITORS

Chemopreventive effect of antineoplaston A–10 on urethane–induced pulmonary neoplasm in mice. Eriguchi N, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20; 23(7):1560–5

Chemopreventive effect of N–homocysteine thiolactonyl retinamido cobalamin on carcinogenesis by ethyl carbamate in mice. McCully KS, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):346–51

METABOLISM

Alkylation of protein and DNA in mice treated with urethane. Svensson K. **Carcinogenesis** 1988 Dec; 9(12):2197–201

Comparative metabolism and disposition of ethyl carbamate (urethane) in male Fischer 344 rats and male B6C3F1 mice. Nomeir AA, et al. **Toxicol Appl Pharmacol** 1989 Feb; 97(2):203–15

In vitro formation of organ–specific ultimate carcinogens of 4–dimethylaminoazobenzene and urethan by microsomes. Gupta R, et al. **Toxicol Lett** 1989 Jan;45(1):49–54

PHARMACOLOGY

A mechanistic approach to the effect of anaesthetic agents on the centripetal transfer of sensory information. Angel A. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):395–404

Effects of althesin and urethan–chloralose on neurohumoral cardiovascular regulation. Faber JE. **Am J Physiol** 1989 Mar;256(3 Pt 2):R757–65

Anesthetic effects on tonic and reflex renal sympathetic nerve activity in awake cats. Matsukawa K, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R371–8

Stimulation of the hypothalamic–pituitary–adrenal axis and inhibition of growth hormone release via increased central noradrenaline neuronal activity by urethane anaesthesia in the rat: blockade by clonidine. Smythe GA, et al. **Aust J Biol Sci** 1987;40(1):91–6

Failure of urethane anesthetic to block induction of pineal serotonin N–acetyltransferase activity in the rat. Shivers BD. **Brain Res Bull** 1978 Nov–Dec;3(6):579–81

Possible hemodynamic basis to urethane anesthesia–induced reductions in renal clearance. Gumbleton M, et al. **Drug Metab Dispos** 1988 Jul–Aug;16(4):640–4

Intralitter variation in murine fetal sister chromatid exchange responses to the transplacental carcinogen ethyl carbamate. Neeper–Bradley TL, et al. **Environ Mol Mutagen** 1989; 14(2):90–7

Effect of yohimbine on urethane–induced hyperglycemia in rats. Aisaka K, et al. **Jpn J Pharmacol** 1989 Apr;49(4):523–7

An effective combination of anaesthetics for 6–h experimentation in the golden Syrian hamster. Reid WD, et al. **Lab Anim** 1989 Apr;23(2):156–62

Urethane anesthesia blocks the development and expression of kindled seizures. Cain DP, et al. **Life Sci** 1989; 44(17):1201–6

Excitation of striatal neurons by dexamphetamine is not abolished by either chloral hydrate or urethane anaesthesia. Warenycia MW, et al. **Neuropharmacology** 1988 Dec; 27(12):1309–12

Effects of urethane administration on somatostatin receptors in rat cerebral cortex and pituitary. Iwahana H, et al. **Tokushima J Exp Med** 1988 Dec;35(3–4):69–77

[Oxygen consumption and RQ–values in rats anesthesized with urethane and pentobarbital during continuous infusion of noradrenaline with and without glucose load] Ankermann H. **Biomed Biochim Acta** 1988;47(7):647–53 (Eng. Abstr.) (Ger)

[Indicators of systemic and regional hemodynamics in alert rats or rats anesthetized with nembutal or urethane] Medvedev OS, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):143–6 (Rus)

TOXICITY

The renin–angiotensin system and intraperitoneal toxicity: possible basis to urethane anaesthesia–induced reductions in renal clearance in the rat. Gumbleton M, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:7–32

Urethane–induced lung adenomas in the first–generation progeny of irradiated male mice. Vorobtsova IE, et al. **Carcinogenesis** 1988 Nov;9(11):1931–4

Individual and strain differences in patterns of long–term persistence of urethane–induced sister chromatid exchanges (SCEs) in mouse lymphocytes and their relation to carcinogen susceptibility. Endo A, et al. **Environ Mol Mutagen** 1988;12(4):375–83

The changes of glycosaminoglycan in the growth of urethane–induced mouse mammary tumors. Yamamoto H, et al. **Kitasato Arch Exp Med** 1989 Apr;62(1):29–37

URETHRA

Biocompatible copolymer ureteral stent: maintenance of patency beyond 6 months. Rackson ME, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):783–4

"Short–term" prophylaxis by aztreonam in prevention of post–operative infections in patients undergoing transurethral surgery. Giannoni R, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):77–80

Calculus in urethral diverticulum formed upon a nylon suture. Frydenberg M, et al. **Br J Urol** 1988 Dec;62(6):614

Ambulatory treatment by extracorporeal shock wave lithotripsy for an urethral stone in a hypospadic boy. Giordano DR, et al. **Child Nephrol Urol** 1988–89; 9(4):239–40

Infections of genitourinary prostheses. Blum MD. **Infect Dis Clin North Am** 1989 Jun;3(2):259–74 (43 ref.)

The urethral syndrome. Bashi SA. **Int Urol Nephrol** 1988; 20(4):367–74

A new treatment for urethral strictures: a permanently implanted urethral stent. Milroy EJ, et al. **J Urol** 1989 May; 141(5):1120–2

Cocaine and lidocaine as topical urethral anesthetics. Pliskin MJ, et al. **J Urol** 1989 May;141(5):1117–9

Treatment of urinary incontinence by the periurethral implantation of glutaraldehyde cross–linked collagen. Shortliffe LM, et al. **J Urol** 1989 Mar;141(3):538–41

Surgical success with AMS M800 GU sphincter for male incontinence. Malloy TR, et al. **Urology** 1989 Apr; 33(4):274–6

Urethral profilometry in Scott artificial urinary sphincter [letter] Scherz HC. **Urology** 1989 Jan;33(1):83

Endoscopy for removal of unusual foreign bodies in urethra and bladder. Schnall RI, et al. **Urology** 1989 Jul;34(1):33–5

["Traumatic" urethrorragias in young boys: can they be of an unusual etiology?] Cotton JB, et al. **Pediatrie** 1988; 43(7):613–5 (12 ref.) (Eng. Abstr.) (Fre)

[Treatment and prophylaxis for urogenital infections occurring after urethrocystoscopy] Ohishi Y, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1601–5 (Eng. Abstr.) (Jpn)

[Complications caused by long–term presence of a foreign body in the bladder] Shpize'l S, et al. **Sov Med** 1989; (4):119–21 (Rus)

[Urethral foreign body] Vigués Julia F, et al. **Actas Urol Esp** 1989 Mar–Apr;13(2):140–1 (Eng. Abstr.) (Spa)

ABNORMALITIES

Posterior urethral valves. Churchill BM, et al. **Acta Urol Belg** 1989;57(2):435–49 (24 ref.)

Continent urinary diversion in a patient with prune belly syndrome and urethral atresia. Barker A, et al. **Aust N Z J Surg** 1989 Mar;59(3):283–6

An unusual case of complete urethral duplication in a female child. Liu KW, et al. **Aust N Z J Surg** 1988 Jul;58(7):587–8

An unusual case of complete urethral duplication in a female child. Liu KW, et al. **Aust N Z J Surg** 1988 Jul;58(7):587–8

Diathermy hook ablation of posterior urethral valves in neonates and infants. Deane AM, et al. **Br J Urol** 1988 Dec;62(6):593–4

Duplication of the upper and lower urinary tract. Gyrtrup HJ, et al. **Br J Urol** 1989 Feb;63(2):217–8

Late presentation of congenital posterior urethral valves. Heaton ND, et al. **Br J Urol** 1989 Jul;64(1):98

Treatment of patent urachus associated with a congenital imperforate urethra in a calf. Hunt RJ, et al. **Cornell Vet** 1989 Apr;79(2):157–60

Unusual urethral duplication. Sharma RN, et al. **Ear Urol** 1988;15(3–4):311–2

Incomplete duplication of urethra (accessory urethra) in a male child [letter] Kapoor R, et al. **Indian Pediatr** 1989 Jan;26(1):89–90

Aspects concerning posterior urethral valves. Melekos MD, et al. **Int Urol Nephrol** 1989;21(1):57–62

The surgical management of persistent cloaca: results in 54 patients treated with a posterior sagittal approach. Peña A. **J Pediatr Surg** 1989 Jun;24(6):590–8

Congenital glanular sinus: possible variant of blind accessory urethral channel. Choudhury SR, et al. **J Urol** 1989 Apr; 141(4):944–5

The P.A.D.U.A. (progressive augmentation by dilating the urethra anterior) procedure for the treatment of severe urethral hypoplasis. Passerini–Glazel G, et al. **J Urol** 1988 Nov;140(5 Pt 2):1247–9

Protective factors in posterior urethral valves. Rittenberg MH, et al. **J Urol** 1988 Nov;140(5):993–6

Sexual function and fertility in patients treated for posterior urethral valves. Woodhouse CR, et al. **J Urol** 1989 Aug; 142(2 Pt 2):586–8; discussion 603–5

Primary vesicoureteral reflux in blacks with posterior urethral valves: does it occur? Nancarrow PA, et al. **Pediatr Radiol** 1988;19(1):31–5

Posterior urethral valves with polydactyly: case report of a six year old boy. Oliveira JP, et al. **Prog Clin Biol Res** 1989;305:25–6

Infants with posterior urethral valves: a retrospective study and consequences for therapy. Mildenberger H, et al. **Prog Pediatr Surg** 1989;23:104–12

Sonographic diagnosis of posterior urethral valves: report of a case. Wu CC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1117–20

Duplicated urethra communicating with the seminal vesicle. Linsenmeyer TA, et al. **Urol Radiol** 1988;10(4):210–2

Posterior urethral valves. Role of temporary and permanent urinary diversion. Mininberg DT, et al. **Urology** 1989 Mar; 33(3):205–8

Posterior urethral valves in siblings. Thomalla JV, et al. **Urology** 1989 Apr;33(4):291–4 (14 ref.)

Neonatal hydrometrocolpos. Simmer K, et al. **Z Kinderchir** 1989 Apr;44(2):124–5

[Duplication of the urethra in boys] Utíkalová A, et al. **Rozhl Chir** 1989 Mar;68(3):190–3 (Eng. Abstr.) (Cze)

[Treatment of urethral valves] de Leval J. **Acta Urol Belg** 1989;57(2):451–6 (Fre)

[Lacuna magna: diverticulum of the anterior urethra in childhood] Schäfer J, et al. **Urologe [A]** 1988 Jul;27(4):214–6 (Eng. Abstr.) (Ger)

[Complete duplication of the lower urinary tract and external genitalia: a case report] Ulrich HJ, et al. **Urologe [A]** 1988 Sep;27(5):263–5 (Eng. Abstr.) (Ger)

[Developmental abnormalities of the lower segment of the urinary tract as a cause of hydronephrosis in infants] Drews E, et al. **Pediatr Pol** 1988 Oct;63(10):609–15 (Eng. Abstr.) (Pol)

[Roentgenological evaluation of the condition of the urinary tract in children with urethral valve] Gruchalska E. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec;51(6):315–20 (Eng. Abstr.) (Pol)

[Treatment of bilateral megaureter in children with posterior urethral valves] Cheskis AL, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):31–6 (Eng. Abstr.) (Rus)

[Ectopy of the accessory third testicle in the posterior urethra] Dutov VV, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):56 (Rus)

ANALYSIS

[Experimental studies on urinary incontinence. II. Function and distribution of alpha 1– and alpha 2–adrenoceptors in male and female rabbit urethral smooth muscle] Morita T. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):416–23 (Eng. Abstr.) (Jpn)

[Biochemical analysis of human external urethral sphincter] Tokunaka S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):539–46 (Eng. Abstr.) (Jpn)

BLOOD SUPPLY

Urethral varices as an unusual cause of third–trimester bleeding. A case report. Prater JM, et al. **J Reprod Med** 1988 Jul;33(7):664–6

CYTOLOGY

Detection of sexually transmitted diseases by urethral cytology, the ignored male counterpart of cervical cytology. Giacomini G, et al. **Acta Cytol** 1989 Jan–Feb; 33(1):11–5

DRUG EFFECTS

Different effects of neuropeptide Y on electrically induced contractions in the longitudinal and circular smooth muscle layers of the female rabbit urethra. Sjögren C, et al. **Acta Physiol Scand** 1988 Jun;133(2):177–81

Effects of estrogen on urethral function in women with urinary incontinence. Bhatia NN, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):176–81

In vivo experiments for the evaluation of alpha 1–adrenoceptor antagonistic effects of SGB–1534 on canine urethra. Imagawa J, et al. **Eur J Pharmacol** 1989 Aug 11; 167(1):167–72

Lowering of maximum urethral pressure by (D–Met2, Pro5)–enkephalinamide in patients with neurogenic vesicourethral dysfunction due to spinal cord injury. Vaidyanathan S, et al.

Int J Clin Pharmacol Ther Toxicol 1989 Feb;27(2):92–5
Stimulation of postjunctional alpha-1 and alpha-2 adrenoreceptors increases proximal urethral perfusion pressure in the pithed rat. Willette RN, et al.
J Auton Pharmacol 1989 Feb;9(1):63–70
Selective inhibitory effects of ethylketocyclazocine on reflex pathways to the external urethral sphincter of the cat. Thor KB, et al. J Pharmacol Exp Ther 1989 Mar;248(3):1018–25
Effect of adrenergic agents on urethral pressure and urethral compliance measurements in dog proximal urethra. Harada T, et al. J Urol 1989 Jul;142(1):189–92
[Effect of midodrin on the tonus of the proximal urethra. Urodynamic findings and clinical prospectives] Rinnovati A, et al. Minerva Urol Nefrol 1988 Apr–Jun;40(2):93–6 (Eng. Abstr.) (Ita)
[Effect of oxybutynin on lower urinary tract function] Nishizawa O, et al. Hinyokika Kiyo 1988 Aug;34(8):1383–7 (Eng. Abstr.) (Jpn)
[A study on the effect of adrenergic drugs upon the urethral compliance in dogs] Kumazaki T.
Nippon Hinyokika Gakkai Zasshi 1988 Feb;79(2):254–64 (Eng. Abstr.) (Jpn)

EMBRYOLOGY

Pathogenesis of hypospadias—more questions than answers. Kluth D, et al. J Pediatr Surg 1988 Dec;23(12):1095–101

INJURIES

Traumatic rupture of the posterior urethra [letter] Beasley SW, et al. Aust Paediatr J 1989 Jun;25(3):178
Initial management of acute urethral injuries. Lim PH, et al. Br J Urol 1989 Aug;64(2):165–8
Bladder and urethral injuries associated with fractures of the pelvis in Zaria, Nigeria. Muhammad I, et al. Injury 1988 Sep;19(5):357–9
The place of abdominal safety line in the treatment of posterior urethral injury. Murshidi MS.
Int Urol Nephrol 1988;20(6):623–9
Traumatic urethral avulsion at the preputial fornix in a cat. Goldman AL, et al. J Am Vet Med Assoc 1989 Jan 1; 194(1):88–90
Surgical repair of urethral transection in a horse. Todhunter RJ, et al. J Am Vet Med Assoc 1988 Nov 1;193(9):1085–6
Surgical management of post-traumatic prostatomembranous urethral strictures: a ten year experience. Redman JF.
J Arkansas Med Soc 1988 Jun;85(1):45–7
A technique for immediate realignment and catheterization of the disrupted prostatomembranous urethra. Gelbard MK, et al. J Urol 1989 Jul;142(1):52–5
Pelvic fracture and injury to the lower urinary tract. Spirnak JP. Surg Clin North Am 1988 Oct;68(5):1057–69 (60 ref.)
Visual urethrotomy in the management of the obliterated membranous urethra. Barry JM. Urol Clin North Am 1989 May;16(2):319–24
Primary realignment of the disrupted prostatomembranous urethra. Devine CJ Jr, et al. Urol Clin North Am 1989 May;16(2):291–5
Endoscopic reconstruction of traumatic urethral transections. Marshall FF. Urol Clin North Am 1989 May;16(2):313–8
Disruptions of the anterior urethra. Pierce JM Jr.
Urol Clin North Am 1989 May;16(2):329–34 (13 ref.)
Urethrography in the diagnosis of acute urethral injuries. Sandler CM, et al. Urol Clin North Am 1989 May; 16(2):283–9 (13 ref.)
Prevention of complications resulting from pelvic fracture urethral injuries—and from their surgical management. Turner-Warwick R. Urol Clin North Am 1989 May; 16(2):335–58 (14 ref.)
"Faux pas du coit" with associated rupture of corpora cavernosa and urethra. Bitker MO, et al. Urology 1988 Nov; 32(5):447–8
[Urethral injuries: analysis of 24 cases] Tan LB, et al.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1989 Feb; 5(2):87–90 (Eng. Abstr.) (Chi)
[Injuries of the posterior urethra. Apropos of 57 patients excluding iatrogenic injuries] Bouchot O, et al.
Ann Urol (Paris) 1989;23(3):220–6 (Eng. Abstr.) (Fre)
[Early endoscopic treatment of a complete traumatic rupture of the membranous urethra] Delmas V, et al.
Ann Urol (Paris) 1989;23(2):131–3 (Eng. Abstr.) (Fre)
[Complete rupture of the urethra and bilateral fracture of the corpus cavernosum penis] Pavard D, et al.
Ann Urol (Paris) 1988;22(6):428–30 (Eng. Abstr.) (Fre)
[Injuries of the bladder and urethra in children. Commentary apropos of a multicenter study of 187 cases] Dodat H, et al. Chir Pediatr 1988;29(2–3):101–13 (109 ref.) (Eng. Abstr.) (Fre)
[Fractures of the pelvis and associated bladder-urethral rupture] Lascombes P, et al. Chir Pediatr 1988; 29(2–3):114–9 (Eng. Abstr.) (Fre)
[Rupture of the urethra (apropos of 17 cases)] Mosbah A, et al. Tunis Med 1987 Feb;65(2):127–32 (Eng. Abstr.) (Fre)
[So-called nephrogenic adenoma (adenomatous metaplasia). A rare tumorous adenopapillary lesion of the urothelium in the urinary bladder in a 6-year-old boy following injury] Johannes A, et al. Urologe [A] 1988 Jul;27(4):204–6 (Eng. Abstr.) (Ger)
[Surgical management of post-traumatic strictures of the membranous portion of the urethra] Kondás J, et al.
Orv Hetil 1989 Aug 13;130(33):1765–7 (Eng. Abstr.) (Hun)
[Total traumatic urethrovaginal detachment. Functional evaluation some time after repair] Cocimano V, et al.
Minerva Urol Nefrol 1988 Apr–Jun;40(2):121–3 (Eng. Abstr.) (Ita)
[Surgical repair of traumatic urethral stricture] Inoue T, et al. Nippon Hinyokika Gakkai Zasshi 1988 Apr;79(4):678–83 (Eng. Abstr.) (Jpn)
[Isolated trauma of the urethra during sexual intercourse] Stepanov AK, et al. Urol Nefrol (Mosk) 1988 Nov–Dec; (6):68–9 (Rus)

INNERVATION

Neurons in Onuf's nucleus [letter] Swift TR. Arch Neurol 1989 Jun;46(6):606–7
Convergence of serotonin-, enkephalin- and substance P-like immunoreactive afferent fibers on single pudendal motoneurons in Onuf's nucleus of the cat: a light microscope study combining the triple immunocytochemical staining technique with the retrograde HRP-tracing method. Tashiro T, et al.
Brain Res 1989 Mar 6;481(2):392–8
Neurogenic urethra: clinical relevance of isolated neuropathic dysfunction of the urethra, and the denervation supersensitivity of the urethra revisited. Koyanagi T, et al. Eur Urol 1988;15(1–2):77–83
Adrenergic innervation of the ureters, urinary bladder, and urethra in pigs. Lakomy M, et al.
Gegenbaurs Morphol Jahrb 1989;135(2):347–55
Functional studies on the cholinergic and sympathetic innervation of the rat proximal urethra: effect of pelvic ganglionectomy or experimental diabetes. Maggi CA, et al. J Auton Pharmacol 1989 Aug;9(4):231–41
Individual motor unit analysis in the diagnosis of urethral sphincter innervation [letter] Vodušek DB.
J Neurol Neurosurg Psychiatry 1989 Jun;52(6):812–3
Spinal cord lesions at different levels affect either the adrenergic or vasoactive intestinal polypeptide-immunoreactive nerves in the human urethra. Crowe R, et al. J Urol 1988 Dec;140(6):1412–4
A histochemical and immunohistochemical study of the autonomic innervation of the lower urinary tract of the female pig. Is the pig a good model for the human bladder and urethra? Crowe R, et al. J Urol 1989 Feb;141(2):414–22
Adrenergic innervation of the striated muscle of the intrinsic external urethral sphincter from patients with lower motor spinal cord lesion. Crowe R, et al. J Urol 1989 Jan; 141(1):47–9
Sensory thresholds in the male urethra measured by electrical stimulation. Brekkan E, et al.
Scand J Urol Nephrol Suppl 1988;114:87–90
Ipsilaterality of motor innervation of canine urethral sphincter. Morita T, et al. Urol Int 1988;43(3):149–56
Neurofibromatosis presenting as perineal pain and urethral burning. Batta AG, et al. Urology 1989 Feb;33(2):138–40
[Neurotransmission and the lower urinary tract] Jurascheck F. Ann Urol (Paris) 1988;22(5):309–20 (180 ref.) (Eng. Abstr.) (Fre)
[The innervation of the external urethral sphincter muscle] Olszewski J, et al. Anat Anz 1988;166(1–5):239–44 (Eng. Abstr.) (Ger)
[Effects of amygdaloid stimulation on efferent activities of the vesical branch of the pelvic nerve and the urethral branch of the pudendal nerve in dogs] Koyama K.
Nippon Hinyokika Gakkai Zasshi 1989 Feb;80(2):236–44 (Eng. Abstr.) (Jpn)
[Noradrenaline denervation supersensitivity of the urethra in patients with neurogenic bladder] Yamashiro Y, et al. Nippon Hinyokika Gakkai Zasshi 1988 Apr;79(4):673–7 (Eng. Abstr.) (Jpn)

METABOLISM

Tissue specific effects of progesterone on progesterone and estrogen receptors in the female urogenital tract. Batra S, et al. J Steroid Biochem 1989 Jan;32(1A):35–9

MICROBIOLOGY

Clinical and laboratory considerations of culture vs antigen assays for detection of Chlamydia trachomatis from genital specimens. Kellogg JA. Arch Pathol Lab Med 1989 May; 113(5):453–60 (10 ref.)
Comparison of dot blot with in-situ hybridization for the detection of Neisseria gonorrhoeae in urethral exudate. Schoone GJ, et al. J Appl Bacteriol 1989 May;66(5):401–5
Evaluation of a method for rapid detection of penicillinase-producing Neisseria gonorrhoeae in urethral exudates. Herve VM, et al. J Clin Microbiol 1989 Jan; 27(1):227–8
Comparison of HeLa 229 and McCoy cell cultures for detection of Chlamydia trachomatis in clinical specimens. Thewessen EA, et al. J Clin Microbiol 1989 Jun; 27(6):1399–400
Urethral and prostatic colonization and infection in patients undergoing prostatectomy. Morgan MG, et al.
J Hosp Infect 1988 Oct;12(3):199–206
Comparison of genital and respiratory carriage of Haemophilus parainfluenzae in men. Houang E, et al.
J Med Microbiol 1989 Feb;28(2):119–23
Genital mucosal transmission of simian immunodeficiency virus: animal model for heterosexual transmission of human immunodeficiency virus. Miller CJ, et al. J Virol 1989 Oct; 63(10):4277–84
Gardnerella vaginalis is associated with other sexually transmittable microorganisms in the male urethra. Elsner P, et al. Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Jul; 269(1):56–63
Susceptibility of Ureaplasma urealyticum to ten chemotherapeutic agents. Sobetzko R, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Aug; 269(2):245–50
[Detection of Chlamydia trachomatis in urethra of patients with urogenital infection] Kuroda K, et al.
Hinyokika Kiyo 1989 Mar;35(3):453–6 (Eng. Abstr.) (Jpn)
[Detection of Chlamydia trachomatis in urethrae of patients with urogenital infections and changes in antibody titers in their clinical courses] Amano M, et al.
Nippon Hinyokika Gakkai Zasshi 1988 Mar;79(3):487–94 (Eng. Abstr.) (Jpn)

PATHOLOGY

Prostatic epithelial polyp of the prostatic urethra. Satoh S, et al. Eur Urol 1989;16(2):92–6
Urethral caruncle in an unusual location occurring in prepubertal girl. Türkeri L, et al. Eur Urol 1989;16(2):153–4
Characteristics of inflammatory cells in urethral smears from men with non-gonococcal urethritis. Shahmanesh M.
Genitourin Med 1989 Jan;65(1):18–21
Intestinal metaplasia and dysplasia of prostatic urethra secondary to stricture. Maung R, et al. Urology 1988 Oct; 32(4):361–3
[Surgical treatment of female stress urinary incontinence. Determination of the location of the vesico-urethral junction] Mouchel J. Presse Med 1988 Oct 29; 17(38):2029–31 (Eng. Abstr.) (Fre)
[Urinary continence in the female—a morphologic study] Dorschner W, et al. Z Urol Nephrol 1989 Apr;82(4):201–8 (Eng. Abstr.) (Ger)
[Echotomographic evaluation of the anterior urethra] Perini L, et al. Radiol Med (Torino) 1989 Apr;77(4):378–81 (Eng. Abstr.) (Ita)

PHYSIOLOGY

Urethral responses to sacral stimulation in chronic spinal dog. Walter JS, et al. Am J Physiol 1989 Aug;257(2 Pt 2):R284–91
The G spot and female ejaculation. A reply to Zaviačič [letter] Alzate H, et al. J Sex Marital Ther 1988 Winter; 14(4):299–301
Qualitative analysis of the four-channel, high-resolution urethral pressure profile of the female dog. De Haas D, et al. J Urol 1989 Sep;142(3):855–9
Simultaneous' urethral pressure profilometry in the bitch: methodology and reproducibility of the technique. Holt PE. Res Vet Sci 1989 Jul;47(1):110–6
Simultaneous' urethral pressure profilometry: variations in intravesical pressure with respiration. Holt PE.
Res Vet Sci 1989 Jul;47(1):117–8
Urethral pressure variations in females with and without neurourological symptoms. Kulseng-Hanssen S, et al.
Scand J Urol Nephrol Suppl 1988;114:48–52
Classical urethral resistance compared with Schäfer concept. Lindblad P, et al. Scand J Urol Nephrol Suppl 1988; 110:225–9
Computer assisted pantropic urethral pressure profile. Cornelissen M, et al. Urol Res 1989;17(3):185–9
Urethral pressure variations in healthy male volunteers. Kirkeby HJ, et al. Urol Res 1989;17(3):191–5
Six-microtransducer catheter connected to computer in evaluation of urethral closure function of women. Kauppila A, et al. Urology 1989 Feb;33(2):159–64
[Study of the central and peripheral motor pathways of the periurethral striated muscles using motor evoked potentials] Opsomer RJ, et al. Acta Urol Belg 1988;56(3):443–6 (Eng. Abstr.) (Fre)
[Studies on urethrodetrusor facilitative reflex—characteristics of bladder response and neuroreceptor mechanism] Fukuya Y. Nippon Hinyokika Gakkai Zasshi 1988 May;79(5):765–71 (Eng. Abstr.) (Jpn)
[Experimental studies on sympathetic innervation of lower urinary tract. Quantitation of nerve terminals and urethral pressure response after hypogastric denervation] Park YC, et al. Nippon Hinyokika Gakkai Zasshi 1989 Apr; 80(4):569–73 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Successful colposuspension in stress urinary incontinence reduces bladder neck mobility and increases pressure transmission to the urethra. Penttinen J, et al.
Arch Gynecol Obstet 1989;244(4):233–8
Abnormal electromyographic activity of the urethral sphincter, voiding dysfunction, and polycystic ovaries: a new syndrome? Fowler CJ, et al. BMJ 1988 Dec 3; 297(6661):1436–8
Combined transrectal ultrasonography and urodynamics in the evaluation of detrusor-sphincter dyssynergia. Shabsigh R, et al. Br J Urol 1988 Oct;62(4):326–30
Neurophysiological assessment of the central motor pathway to the external urethral sphincter in man. Thiry AJ, et al. Br J Urol 1989 May;63(5):515–9
Continence mechanisms following transphincteric urethroplasty. Reid RE, et al. Eur Urol 1988;15(1–2):66–8
Urethral closure function after total and subtotal

hysterectomy measured by urethrocystometry. Kujansuu E, et al. **Gynecol Obstet Invest** 1989;27(2):105–6

Dynamic urethral pressure profilometry pressure transmission ratio determinations after continence surgery: understanding the mechanism of success, failure, and complications. Bump RC, et al. **Obstet Gynecol** 1988 Dec; 72(6):870–4

The unstable urethra in the female. Low JA, et al. **Obstet Gynecol** 1989 Jul;74(1):69–74

[Diagnostic value of retrograde sphincterometry in stress urinary incontinence] Doganov N, et al. **Akush Ginekol (Sofiia)** 1988;27(5):44–7 (Eng. Abstr.) (Bul)

[Evaluation of 4% xylocaine anesthesia for the urethral pressure profile measurement and cystometry] Liu SC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;41(5):339–42 (Eng. Abstr.) (Chi)

[Enuresis and urethral instability] Abid I, et al. **Acta Urol Belg** 1988;56(4):527–33 (Eng. Abstr.) (Fre)

[The so-called resting pressure quotient—the urodynamic equivalent of clinical pelvic floor insufficiency] Behr J, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):559–61 (Eng. Abstr.) (Ger)

[Relation of the static urethral pressure profile and symptoms of urinary urgency in the female] Voigt R, et al. **Z Urol Nephrol** 1988 Jun;81(6):345–9 (Eng. Abstr.) (Ger)

[Urinary incontinence in the female over 60 years of age—urodynamic findings] Hajdu K, et al. **Zentralbl Gynakol** 1989;111(12):824–30 (Eng. Abstr.) (Ger)

[Bladder–urethral dysfunction in childhood] De Grazia E, et al. **Minerva Pediatr** 1988 Jul;40(7):425–8 (Eng. Abstr.) (Ita)

[Urodynamic evaluation of patients undergoing radical prostatectomy. A preliminary report] Ando M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec;79(12):2012–20 (Eng. Abstr.) (Jpn)

[Studies on the urophonography (1)—Basic investigation with the model of lower urinary tract] Koiso K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):353–8 (Eng. Abstr.) (Jpn)

[Experimental study on the development of bladder and urethral dysfunction following suprasacral spinal cord transection in the cat] Nakamura H. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1032–9 (Eng. Abstr.) (Jpn)

[Functional status of the bladder and urethral sphincter systems after correction of urethrovaginal fistula] Kan LV, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):67–9 (Rus)

[Neurologic and urodynamic characteristics of patients with Guillain–Barré syndrome] Grbavac Z, et al. **Lijec Vjesn** 1989 Jan–Feb;111(1–2):17–20 (Eng. Abstr.) (Scr)

[Excretory tract in patients on chronic dialysis] Pena Outeiriño JM, et al. **Arch Esp Urol** 1988 Sep;41(7):516–21 (Eng. Abstr.) (Spa)

[Neurophysiologic examination in vesicourethral disorders of neurogenic origin] Franco C, et al. **Arch Neurobiol (Madr)** 1988 Jul–Aug;51(4):207–12 (Eng. Abstr.) (Spa)

RADIATION EFFECTS

[Functional bladder–urethral injuries in the irradiated pelvis] Simeone C, et al. **Arch Ital Urol Nefrol Androl** 1988 Dec; 60(4):357–65 (Eng. Abstr.) (Ita)

RADIOGRAPHY

Voiding cystourethrography as a predictor of reflux nephropathy in children with urinary-tract infection. Hellström M, et al. **AJR** 1989 Apr;152(4):801–4

Reliability of voiding cystourethrography to detect reflux. Jequier S, et al. **AJR Am J Roentgenol** 1989 Oct; 153(4):807–10

A comparative study of perineal ultrasound scanning and urethrocystography in patients with genuine stress incontinence. Kölbl H, et al. **Arch Gynecol Obstet** 1988; 244(1):39–45

Digital subtraction radiography in voiding cystourethrography. Perri G, et al. **Eur J Radiol** 1988 Aug; 8(3):175–8

Radiographic assessment of the vesicourethral anastomosis directing early decatheterization following nerve-sparing radical retropubic prostatectomy. Dalton DP, et al. **J Urol** 1989 Jan;141(1):79–81

Sonographic urethrogram: comparison to roentgenographic techniques in 22 patients. Gluck CD, et al. **J Urol** 1988 Dec;140(6):1404–8

Detection of missing vesicoureteral reflux with bethanechol chloride–aided voiding cystourethrography. Koyanagi T, et al. **J Urol** 1989 Mar;141(3):580–2

[Radiologic demonstration of the valves of the posterior urethra] Claus D, et al. **Acta Urol Belg** 1989;57(2):431–3 (Fre)

[Radio–urodynamic evaluation of stress urinary incontinence in women] Baldelli S, et al. **Radiol Med (Torino)** 1988 Sep; 76(3):201–5 (Eng. Abstr.) (Ita)

[Descending urethrography in men with low urine flow] Savin VF, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):27–8 (Eng. Abstr.) (Rus)

SURGERY

Anaesthesia for reconstructive urethral surgery. Moulaert P, et al. **Acta Urol Belg** 1988;56(4):589–93

Unsuccessful Burch retropubic urethropexy: a case–controlled urodynamic study. Bowen LW, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):452–8

Correction of penile curvatures caused by unsuccessful hypospadias repair using the scrotal septum pedicled skin tube principle combined with corporoplasty and a modified meatoglanuloplasty. Yachia D. **Ann Plast Surg** 1989 Sep; 23(3):269–73

Surgical implantation of the artificial urinary sphincter. Gregory JG, et al. **ASAIO Trans** 1988 Oct–Dec; 34(4):1002–3

The artificial urinary sphincter. Porter CH. **ASAIO Trans** 1988 Oct–Dec;34(4):1000–1

A clinical and urodynamic study comparing the Stamey bladder neck suspension and suburethral sling procedures in the treatment of genuine stress incontinence. Hilton P. **Br J Obstet Gynaecol** 1989 Feb;96(2):213–20

A manoeuvre to locate the distal urethral opening at the tip of the glans in the final stage of Cecil–Culp urethroplasty. Thatte RL. **Br J Plast Surg** 1989 Jan; 42(1):70–3

Bladder replacement by ileocaeco–urethrostomy or ileo–urethrostomy with a reservoir after cystoprostato–vesiculectomy for bladder cancer. A functional evaluation. Alcini E, et al. **Br J Urol** 1989 Jan; 63(1):36–42

One–stage pedicle scrotal flap urethroplasty. De Carvalho HA, et al. **Br J Urol** 1988 Sep;62(3):279

Urethral strictures in childhood. Frank JD, et al. **Br J Urol** 1988 Dec;62(6):590–2

Urethral salvage following erosion of an artificial sphincter cuff in female patients. Gillon G, et al. **Br J Urol** 1989 May;63(5):555–6

Optical urethrotomy—experience in Oman. John J, et al. **Br J Urol** 1989 Jun;63(6):639–40

Optical internal urethrotomy as the treatment of choice for primary stricture of the urethra. Mohanty NK, et al. **Br J Urol** 1988 Sep;62(3):261–2

Urethral substitution in women. Mundy AR. **Br J Urol** 1989 Jan;63(1):80–3

A technique for total substitution of the lower urinary tract without the use of a prosthesis. Mundy AR. **Br J Urol** 1988 Oct;62(4):334–8

Effect of suprapubic operation on urethral closure. Evaluation by single cough urethrocystometry. Penttinen J, et al. **Br J Urol** 1989 Apr;63(4):389–91

Three years' experience with an ileal low pressure bladder substitute. Studer UE, et al. **Br J Urol** 1989 Jan;63(1):43–52

Re: One–stage pedicle scrotal flap urethroplasty [letter] Yaxley RP. **Br J Urol** 1989 Apr;63(4):444–5

Endourethral urethroplasty with prepuce graft for long posterior urethral stricture. Zhang JL, et al. **Chin Med J [Engl]** 1989 Mar;102(3):165–8

Does internal urethrotomy prevent urethral stricture after transurethral prostatectomy. Early and late results. Nielsen KK, et al. **Eur Urol** 1989;16(4):258–61

Comparison of the Stamey bladder neck suspension procedure with a modified endoscopic suspension for the treatment of stress urinary incontinence. Rodrigues Netto N Jr, et al. **Eur Urol** 1988;15(1–2):62–5

Retropubic urethrocystopexy with fibrin sealant: a long–term follow–up. Larsson B, et al. **Gynecol Obstet Invest** 1988; 26(3):257–61

Urethral placement through a bilateral myocutaneous gracilis flap neovagina. Wheelock JB, et al. **Gynecol Oncol** 1989 Jan;32(1):88–90

Preservation of striated–muscle urethral sphincter function with use of a surgical technique for perineal urethrostomy in cats. Griffin DW, et al. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1057–60

Total penile and urethral reconstruction with an expanded sensate lateral arm flap: case report. Shenaq SM, et al. **J Reconstr Microsurg** 1989 Jul;5(3):245–8

Benefits of posturethropexy bladder conditioning. Fact or fiction? Harlass FE, et al. **J Reprod Med** 1988 Dec; 33(12):961–3

The physiologic basis of the TUR syndrome. Bernstein GT, et al. **J Surg Res** 1989 Feb;46(2):135–41

Experience with the Kropp anti–incontinence procedure. Belman AB, et al. **J Urol** 1989 May;141(5):1160–2

Vaginal flap urethral reconstruction: an alternative to the bladder flap neourethra. Blaivas JG. **J Urol** 1989 Mar; 141(3):542–5

Inflatable penile prostheses in patients undergoing cystoprostatectomy with urethrectomy. Boyd SD, et al. **J Urol** 1989 Jan;141(1):60–2

Technical challenge of the megameatus intact prepuce hypospadias variant: the pyramid procedure. Duckett JW, et al. **J Urol** 1989 Jun;141(6):1407–9

Complications of bladder mucosal graft. Ehrlich RM, et al. **J Urol** 1989 Aug;142(2 Pt 2):626–7; discussion 631

Use of dermal graft and free urethral graft in penile reconstruction. Hendren WH, et al. **J Urol** 1988 Nov;140(5 Pt 2):1265–9

Repair of proximal hypospadias using a preputial free graft for neourethral construction and a preputial pedicle flap for ventral skin coverage. Kaplan GW. **J Urol** 1988 Nov; 140(5 Pt 2):1270–2

Urethral replacement with tunica vaginalis: a pilot study. Khoury AE, et al. **J Urol** 1989 Aug;142(2 Pt 2):628–30; discussion 631

Open catheter drainage after urethral surgery. Montagnino BA, et al. **J Urol** 1988 Nov;140(5 Pt 2):1250–2

Internal urethrotomy as a complementary method after urethroplasties for posterior urethral stenosis. Netto Júnior NR, et al. **J Urol** 1989 Jan;141(1):50–1

Combined implantation of artificial sphincter and penile prosthesis. Parulkar BG, et al. **J Urol** 1989 Sep;142(3):732–5

Vaginal wall sling [published erratum appears in J Urol 1989 May;141(5):1214] Raz S, et al. **J Urol** 1989 Jan;141(1):43–6

Four–corner bladder and urethral suspension for moderate cystocele. Raz S, et al. **J Urol** 1989 Sep;142(3):712–5

Re: Bladder irrigation with chlorhexidine for the prevention of urinary infection after transurethral operations: a prospective controlled study [letter] Saha SK. **J Urol** 1989 Sep;142(3):829–30

Modified meatal advancement and glanuloplasty (Arap hypospadias repair): experience in 31 patients. Scherz HC, et al. **J Urol** 1989 Aug;142(2 Pt 2):620–2; discussion 631

Prevention of urethral stricture formation after transurethral resection of the prostate: a controlled randomized study of Otis urethrotomy versus urethral dilation and the use of the polytetrafluoroethylene coated versus the uninsulated metal sheath. Schultz A, et al. **J Urol** 1989 Jan;141(1):73–5

The Groningen method of urethra reconstruction in hypospadias. Roldaan BA, et al. **Neth J Surg** 1989 Apr; 41(2):38–41

Management of the urethra in patients undergoing radical cystectomy for bladder carcinoma. Baron JC, et al. **Prog Clin Biol Res** 1989;303:591–6

Treatment of urinary incontinence with an implantable prosthesis. Lukkarinen OA, et al. **Scand J Urol Nephrol** 1989;23(2):85–8

Transvaginal–distal urethroplasty. A multipurpose operation. Mizrahi S, et al. **Scand J Urol Nephrol** 1989;23(1):7–9

Infections in genitourinary prostheses. Carson CC. **Urol Clin North Am** 1989 Feb;16(1):139–47

Role of urethral reconstruction and artificial sphincter in complicated salvage radical prostatectomy. Boyd SD. **Urology** 1988 Oct;32(4):304–8

Urinary prophylaxis and postoperative care of children at home with an indwelling catheter after hypospadias repair. Sugar EC, et al. **Urology** 1988 Nov;32(5):418–20

Video transurethral resection [letter] Yip YL. **Urology** 1989 Apr;33(4):352

Proximal urethral reconstruction using a distally based ventral bladder tube flap. An experimental study. Fowler JD, et al. **Vet Surg** 1987 Mar–Apr;16(2):139–45

Intrapelvic urethral anastomosis. A comparison of three techniques. Layton CE, et al. **Vet Surg** 1987 Mar–Apr; 16(2):175–82

Urethral extension for correction of urovagina in cattle. A review of 14 cases. St. Jean G, et al. **Vet Surg** 1988 Sep–Oct; 17(5):258–62

[One–stage urethroplasty using an island skin tube from the perineum and scrotum in the treatment of complex stricture of the posterior urethra] Wang LL. **Chung Hua Wai Ko Tsa Chih** 1988 Sep;26(9):565–7, 575 (Eng. Abstr.) (Chi)

[Treatment of stenoses of the urethra. 2] Hermanowicz M, et al. **J Urol (Paris)** 1989;95(2):81–7 (Eng. Abstr.) (Fre)

[Surgical anatomy of the bladder neck sphincter and its significance for vaginal surgery of stress incontinence] Richter K. **Geburtshilfe Frauenheilkd** 1988 Aug; 48(8):541–50 (47 ref.) (Eng. Abstr.) (Ger)

[Urethral tumor recurrence following radical cystoprostatectomy—an indication for primary cystoprostato–urethrectomy?] Gökcebay E, et al. **Urologe [A]** 1989 Jul;28(4):199–203 (Eng. Abstr.) (Ger)

[Mobilization of the urethra in the treatment of anterior hypospadias. Notes on surgical technic (published erratum appears in Minerva Pediatr 1988 Aug;40(8):503)] Gesmundo R, et al. **Minerva Pediatr** 1988 Apr;40(4):219–21 (Eng. Abstr.) (Ita)

[Bladder exstrophy: a neonatal emergency. I: Functional reconstruction] Belloli G, et al. **Pediatr Med Chir** 1989 Mar–Apr;11(2):105–10 (Eng. Abstr.) (Ita)

[Transurethral resection of bladder outlet obstruction from carcinoma of the prostate] Fukuoka H, et al. **Hinyokika Kiyo** 1989 Apr;35(4):609–14 (Eng. Abstr.) (Jpn)

[Indications for urethrectomy in male patients undergoing radical cystectomy in bladder carcinoma] Hasuo K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20;23(10):2520–4 (Eng. Abstr.) (Jpn)

[Surgical repair of urethral stricture. Posterior urethroplasty by the Michalowski method] Inoue T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):475–80 (Eng. Abstr.) (Jpn)

[Treatment of congenital urethral stenosis (urethral ring) in children. Optic internal urethrotomy in the congenital bulbar urethral stenosis in boys] Mori Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):704–10 (Eng. Abstr.) (Jpn)

[Implanted devices for the treatment of urinary incontinence] Erokhin AP, et al. **Urol Nefrol (Mosk)** 1988 May–Jun; (3):66–71 (71 ref.) (Rus)

[Creation of a vesico–urethral segment during prostatic adenomectomy preceded by applying removable sutures on the adenoma capsule] Gorilovskiĭ LM, et al.

Urol Nefrol (Mosk) 1988 Jul-Aug;(4):35-8 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Ultrastructure of human male urethra. Orlandini SZ, et al. Arch Androl 1989;23(1):51-9 (11 ref.)
The human male urethra as observed with SEM. Orlandini SZ, et al. Prog Clin Biol Res 1989;296:221-5
Scanning electron microscopic observation on the distal part of the male urethra of the mouse. Nakano T, et al. Z Mikrosk Anat Forsch 1989;103(1):28-35

URETHRAL DISEASES

Amyloidosis of the urethra. Stillwell TJ, et al. J Urol 1989 Jan;141(1):52-3
The urethral syndrome. Bodner DR. Urol Clin North Am 1988 Nov;15(4):699-704 (37 ref.)
Paraurethral cyst. Malatinský E. Urol Int 1989; 44(3):187-8
[Female urethral diverticulum--a case report] Ai HM, et al. Chung Hua I Hsueh Tsa Chih 1988 Mar;41(3):247-50 (Eng. Abstr.) (Chi)
[Female urethrocele. Difficult diagnosis and therapy. Apropos of 10 cases] Sachot JL, et al. Ann Urol (Paris) 1989;23(2):156-7 (Eng. Abstr.) (Fre)

COMPLICATIONS

Nephrogenic adenoma arising in urethral diverticula. A report of five cases. Medeiros LJ, et al. Arch Pathol Lab Med 1989 Feb;113(2):125-8
Calculus in urethral diverticulum formed upon a nylon suture. Frydenberg M, et al. Br J Urol 1988 Dec;62(6):614
Paraurethral cyst as an unusual cause of acute urinary retention. A case report. Stovall TG, et al. J Reprod Med 1989 Jun;34(6):423-5
Diverticulum of the male urethra with a giant stone and multiple calculi. Melekos MD, et al. Urol Int 1989; 44(3):184-6
[A case of female urethral diverticulum calculi] Ehara H, et al. Hinyokika Kiyo 1988 Jul;34(7):1235-8 (14 ref.) (Eng. Abstr.) (Jpn)

CONGENITAL

Unusual urethral diverticulum lined by colonic epithelium with Paneth cell metaplasia. Niemiec TR, et al. Am J Obstet Gynecol 1989 Jan;160(1):186-8
Calculus in a congenital recto-urethral fistula: a late presentation [letter] Ward HC, et al. J R Soc Med 1988 Nov;81(11):676
Congenital urethral diverticulum in the male. Sen SE, et al. Urology 1989 Sep;34(3):129-30
[Congenital anterior urethral diverticulum: report of a case] Ueda H, et al. Hinyokika Kiyo 1988 Aug;34(8):1455-9 (4 ref.) (Eng. Abstr.) (Jpn)

DIAGNOSIS

Urethral calculi. Shah, et al. Arch Ital Urol Nefrol Androl 1988 Sep;60(3):259-64
Female wide urethra masquerading as a urethral diverticulum in association with ectopic ureterocele. Konami T, et al. Hinyokika Kiyo 1988 Aug;34(8):1437-41
Localized amyloidosis of the urethra: diagnostic implications and management. Brown RD, et al. J Urol 1988 Dec; 140(6):1536-8
Primary amyloidosis of urethra. Provet JA, et al. Urology 1989 Aug;34(2):106-8
[Diffuse acute periurethritis (urinary phlegmon)] Solis WA. Ann Urol (Paris) 1989;23(3):227-31 (Eng. Abstr.) (Fre)

DRUG THERAPY

Roxithromycin compared with erythromycin against genitourinary chlamydial infections. Worm AM, et al. Genitourin Med 1989 Jan;65(1):35-8
Vaginal rings for continuous low-dose release of oestradiol in the treatment of urogenital atrophy. Holmgren PA, et al. Maturitas 1989 Mar;11(1):55-63
[A successful physioenzymotherapy using terrilytin in the treatment of a patient with cicatricial changes in the urethra of tubercular origin] Iagafarova RK, et al. Probl Tuberk 1988;(10):70-1 (Rus)
[Urethral prolapse in childhood: report of a case treated by drugs] Gómez Fraile A, et al. An Esp Pediatr 1989 Apr; 30(4):313-4 (Spa)

ETIOLOGY

Interstitial cystitis and the urethral syndrome: a possible answer. Wilkins EG, et al. Br J Urol 1989 Jul;64(1):39-44
Postradiation segmental myoclonus selectively inhibited by REM sleep (sleep-wake myoclonus). Askenasy JJ, et al. Eur Neurol 1988;28(6):317-20
Sexually transmitted diseases in women with urethral syndrome. Vitoratos N, et al. Int J Gynaecol Obstet 1988 Oct;27(2):177-80
Cystic dilatation of Cowper's gland duct--an overlooked cause of urethral symptoms? Månsson W, et al. Scand J Urol Nephrol 1989;23(1):3-5
Vesicourethral dysfunction in spinal cord injury and its management. Fam B, et al. Semin Neurol 1988 Summer; 8(2):150-5 (31 ref.)
Giant vesico-prostatic and prostatic calculi. Hemal AK, et al. Trop Geogr Med 1989 Apr;41(2):164-6
[Urethral fistula following reconstructive surgery of hypospadias. Apropos of 34 cases] Audry G, et al. Ann Urol (Paris) 1989;23(3):257-60 (Eng. Abstr.) (Fre)
["Traumatic" urethrorragias in young boys: can they be of an unusual etiology?] Cotton JB, et al. Pediatrie 1988; 43(7):613-5 (12 ref.) (Eng. Abstr.) (Fre)
[Pathogenetic synopsis of diverticular disease of the female urethra] Hessdörfer E, et al. Urologe [A] 1988 Nov; 27(6):343-7 (18 ref.) (Eng. Abstr.) (Ger)
[Profuse urethrorrhagia as a complication of gonorrheal cavernitis] Datuashvili TD. Vestn Dermatol Venerol 1988; (10):62-3 (Eng. Abstr.) (Rus)
[Urethral diverticulum. Complication in males with spinal cord lesions] Conejero Sugrañes J, et al. Arch Esp Urol 1989 Mar;42(2):132-7 (Eng. Abstr.) (Spa)

PATHOLOGY

[Malacoplakia of the urethra] Hausmann H, et al. Z Urol Nephrol 1989 Mar;82(3):155-8 (Eng. Abstr.) (Ger)
[Adenocarcinoma arising in diverticulum of female urethra--a case report and review of the literature] Yamagiwa K, et al. Hinyokika Kiyo 1988 Jul;34(7):1239-43 (24 ref.) (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Neurogenic urethra: clinical relevance of isolated neuropathic dysfunction of the urethra, and the denervation supersensitivity of the urethra revisited. Koyanagi T, et al. Eur Urol 1988;15(1-2):77-83

RADIOGRAPHY

Urethral diverticuli in women: an update with a case presentation. Steinberg JB, et al. Milit Med 1988 Aug; 153(8):424-6
Technique to visualize urethral diverticula in female patients. Ward JN. Surg Gynecol Obstet 1989 Mar;168(3):278-9

SURGERY

A policy in the management of urethral fistula. Mahfouz EH, et al. Br J Plast Surg 1989 Mar;42(2):184-6
Treatment of urethrovaginal fistula. Krogh J, et al. Br J Urol 1989 May;63(5):555
Prolapse of urethral mucosa in female children. Gordon PR. Cent Afr J Med 1987 Nov;33(11):272-3
Proposed management of low urethral pressure type of genuine stress urinary incontinence. Bergman A, et al. Gynecol Obstet Invest 1989;27(3):155-9
Modification of the anterior perineal transanorectal approach for complicated prostatic urethrorectal fistula repair. Venable DD. J Urol 1989 Aug;142(2):381-4
A new surgical procedure for the removal of the wide mouthed urethral diverticulum in females. Mueller EJ, et al. Surg Gynecol Obstet 1989 Mar;168(3):269-70
Surgical correction of anterior urethral diverticula after hypospadias repair in children. Zaontz MR, et al. Urology 1989 Jan;33(1):40-2
[The Wise technic in the repair of urethro-cutaneous fistula] Nouri A, et al. Tunis Med 1988 Aug-Sep;66(8-9):605-8 (Eng. Abstr.) (Fre)
[A case of urethrorectal fistula] Murayama K, et al. Hinyokika Kiyo 1989 Jan;35(1):127-9 (Eng. Abstr.) (Jpn)
[Functional status of the bladder and urethral sphincter systems after correction of urethrovaginal fistula] Kan LV, et al. Akush Ginekol (Mosk) 1988 Nov;(11):67-9 (Rus)

THERAPY

Ultrasonic fragmentation in the treatment of male urethral calculi. Durazi MH, et al. Br J Urol 1988 Nov;62(5):443-4
Transvaginal, periurethral injection of polytetrafluoroethylene (polytef) in the treatment of urethral diverticula. Mizrahi S, et al. Br J Urol 1988 Sep; 62(3):280
Urethral syndrome. A comparison of different treatment modalities. Bergman A, et al. J Reprod Med 1989 Feb; 34(2):157-60
Urethral dilatation. Talati J. JPMA 1989 Mar;39(3):79-83 (15 ref.)
Ureteroscope in managing difficult urethral problems. Munch LC, et al. Urology 1988 Nov;32(5):451

TRANSMISSION

Neonatal group B streptococcal colonization and maternal urogenital or anorectal carriage. Gökalp A, et al. Turk J Pediatr 1988 Jan-Mar;30(1):17-23

VETERINARY

Ulceration in the proximal portion of the urethra as a cause of hematuria in horses: four cases (1978-1985). Lloyd KC, et al. J Am Vet Med Assoc 1989 May 1;194(9):1324-6
Urethrorectal fistulectomy in a dog, using a perineal approach. Whitney WO, et al. J Am Vet Med Assoc 1988 Sep 1;193(5):568-9

URETHRAL NEOPLASMS

Paraurethral leiomyoma in women. Di Cello V, et al. Eur Urol 1988;15(3-4):290-3
Prostatic epithelial polyp of the prostatic urethra. Satoh S, et al. Eur Urol 1989;16(2):92-6
Clear-cell adenocarcinoma of the female urethra. Kazama T, et al. Urol Int 1988;43(4):239-41 (17 ref.)
[Primary carcinoma of the male urethra: report of two cases] Sakurai M, et al. Hinyokika Kiyo 1988 Oct;34(10):1819-21 (Eng. Abstr.) (Jpn)
[Two cases of urethral leiomyoma] Thosaka A, et al. Hinyokika Kiyo 1988 Nov;34(11):2041-6 (28 ref.) (Eng. Abstr.) (Jpn)

COMPLICATIONS

Urethral cancer presenting with scrotal abscess formation. A differential diagnosis of acute epididymitis. Møller-Nielsen C, et al. Urol Int 1988;43(6):364-5

CONGENITAL

[Congenital urethral polyps. A rare cause of obstructive uropathy in childhood] Schäfer J, et al. Urologe [A] 1989 Mar;28(2):80-3 (Eng. Abstr.) (Ger)

DIAGNOSIS

Urological applications of human papillomavirus typing using deoxyribonucleic acid probes for the diagnosis and treatment of genital condyloma. Zderic SA, et al. J Urol 1989 Jan;141(1):63-5
Case profile: prostatic adenoma masquerading as primary urethral neoplasm. Donahue LA, et al. Urology 1988 Oct; 32(4):364-5
[Urethral carcinoma in men--a difficult diagnostic problem] Tammela T, et al. Duodecim 1989;105(9):851-5 (Fin)
[Leukoplakia of the urethra] Komiakov VK, et al. Urol Nefrol (Mosk) 1989 Jan-Feb;(1):66-7 (Rus)

DRUG THERAPY

Capillary hemangioma of the vagina and urethra in a child: response to short-term steroid therapy. Cook CL, et al. Obstet Gynecol 1989 May;73(5 Pt 2):883-5 (14 ref.)

ETIOLOGY

Nephrogenic adenoma arising in urethral diverticula. A report of five cases. Medeiros LJ, et al. Arch Pathol Lab Med 1989 Feb;113(2):125-8
Intestinal metaplasia and dysplasia of prostatic urethra secondary to stricture. Maung R, et al. Urology 1988 Oct; 32(4):361-3

MORTALITY

[Tumors of the upper urinary tract. Long-term survival and local resection] Kristiansen VB, et al. Ugeskr Laeger 1988 Oct 10;150(41):2457-9 (Eng. Abstr.) (Dan)

PATHOLOGY

Multicentric neoplasia of the lower female genital tract--a case report of neoplastic change at an unusual site. Ngan HY, et al. Aust N Z J Obstet Gynaecol 1988 Aug; 28(3):236-8
Squamous intra-epithelial neoplasia presenting as a urethral caruncle. Neilson D, et al. Br J Urol 1989 Aug;64(2):200-1
Urethral caruncle in an unusual location occurring in prepubertal girl. Türkeri L, et al. Eur Urol 1989;16(2):153-4
Leiomyoma of the female urethra--a clinical curiosity. Dasan JC, et al. Int J Gynaecol Obstet 1989 Apr;28(4):381-3
Effects of indwelling catheters on the urethral mucosa (polypoid urethritis). Norlén LJ, et al. Scand J Urol Nephrol 1988;22(2):81-6
[Prostatic type papillary tumor of the urethra with endocrine cells. Immunohistochemical study] Fetissof F, et al. Ann Pathol 1989;9(3):209-13 (Eng. Abstr.) (Fre)
[Adenocarcinoma arising in diverticulum of female urethra--a case report and review of the literature] Yamagiwa K, et al. Hinyokika Kiyo 1988 Jul;34(7):1239-43 (24 ref.) (Eng. Abstr.) (Jpn)
[Malignant melanoma of male urethra: a case report] Yamamoto N, et al. Hinyokika Kiyo 1989 Jan;35(1):121-6 (14 ref.) (Eng. Abstr.) (Jpn)
[Melanoma of female distal urethra: apropos of a case] Sanz Velez JI, et al. Actas Urol Esp 1989 Jan-Feb;13(1):63-4 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Urethral hemangioma--a case report. Gupta SK, et al. Australas Radiol 1988 Aug;32(3):405-7

RADIOTHERAPY

[Carcinoma of the female urethra. A clinical case report] Pizzi G, et al. Radiol Med (Torino) 1988 Oct;76(4):358-60 (Ita)
[Female urethral carcinoma: results of irradiation in 2 patients] Saitoh M, et al. Hinyokika Kiyo 1988 Jul; 34(7):1231-4 (Eng. Abstr.) (Jpn)

SECONDARY

Anterior spread of gynaecological neoplasias: reliability

between some diagnostic procedures. Fabris F, et al. **Eur J Gynaecol Oncol** 1989;10(1):35–8
Management of the urethra in patients undergoing radical cystectomy for bladder carcinoma. Baron JC, et al. **Eur Urol** 1989;16(4):283–5
Tumor recurrence in prostatic urethra following simultaneous resection of bladder tumor and prostate. Vicente J, et al. **Eur Urol** 1988;15(1–2):40–2
Management of the urethra in patients undergoing radical cystectomy for bladder carcinoma. Baron JC, et al. **Prog Clin Biol Res** 1989;303:591–6
Urethral recurrence after cystoprostatectomy for bladder carcinoma. Nurmi M, et al. **Scand J Urol Nephrol** 1989; 23(1):1–2
[Penile metastasis disclosing cancer of the rectum. Apropos of a case] Doré B, et al. **Ann Urol (Paris)** 1989;23(2):158–60 (15 ref.) (Eng. Abstr.) **(Fre)**
[The recurrence of bladder cancer in the glans and fossa navicularis of urethra following cystectomy] Nagata Y, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1043–6 (11 ref.) (Eng. Abstr.) **(Jpn)**

SURGERY

Transitional cell carcinoma of the male anterior urethra. Maltby CC, et al. **Br J Urol** 1988 Nov;62(5):489
Bilateral single ectopic ureter. Passerini Glazel G, et al. **Eur Urol** 1988;14(6):454–7
Phallic reconstruction during exenterative surgery for invasive urethral carcinoma. McDougal WS, et al. **J Urol** 1989 May;141(5):1201–3
Effective outpatient treatment of Kaposi's sarcoma of the urethral meatus using the neodymium:YAG laser. Wahnow KI, et al. **Lasers Surg Med** 1988;8(4):428–32
[Urethral tumor recurrence following radical cystoprostatectomy—an indication for primary cystoprostato-urethrectomy?] Gökcebay E, et al. **Urologe [A]** 1989 Jul;28(4):199–203 (Eng. Abstr.) **(Ger)**
[Urethral angioma in the male. Report of a new case] Luque Arana JI, et al. **Arch Esp Urol** 1988 Oct;41(8):605–6 (Eng. Abstr.) **(Spa)**

THERAPY

Intravesical bacillus Calmette-Guerin therapy for in situ transitional cell carcinoma involving the prostatic urethra. Bretton PR, et al. **J Urol** 1989 Apr;141(4):853–6
Low dose combined chemotherapy/radiotherapy in the management of locally advanced urethral squamous cell carcinoma. Johnson DW, et al. **J Urol** 1989 Mar; 141(3):615–6

URINE

Human papillomavirus detection in urine samples from male patients by the polymerase chain reaction. Melchers WJ, et al. **J Clin Microbiol** 1989 Aug;27(8):1711–4

VETERINARY

Ureterocolonic anastomosis in ten dogs with transitional cell carcinoma. Stone EA, et al. **Vet Surg** 1988 May–Jun; 17(3):147–53
Intraoperative irradiation of 16 spontaneously occurring canine neoplasms. Withrow SJ, et al. **Vet Surg** 1989 Jan–Feb;18(1):7–11

URETHRAL OBSTRUCTION

COMPLICATIONS

Late renal failure due to prostatic outflow obstruction: a preventable disease. Sacks SH, et al. **BMJ** 1989 Jan 21; 298(6667):156–9
Glomerulosclerosis in obstructive uropathy. Steinhardt GF, et al. **J Urol** 1988 Nov;140(5 Pt 2):1316–8
Pseudotumor cerebri associated with obstructive nephropathy. Noetzel MJ, et al. **Pediatr Neurol** 1986 Jul–Aug;2(4):238–40
Intestinal metaplasia and dysplasia of prostatic urethra secondary to stricture. Maung R, et al. **Urology** 1988 Oct; 32(4):361–3

CONGENITAL

[Congenital urethral polyps. A rare cause of obstructive uropathy in childhood] Schäfer J, et al. **Urologe [A]** 1989 Mar;28(2):80–3 (Eng. Abstr.) **(Ger)**
[The experimental model of congenital urinary tract obstruction] Taguchi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1348–54 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Abdominal ultrasound versus intravenous urography in the evaluation of infravesically obstructed males. Juul N, et al. **Scand J Urol Nephrol** 1989;23(2):89–92
Classical urethral resistance compared with Schäfer concept. Lindblad P, et al. **Scand J Urol Nephrol Suppl** 1988; 110:225–9
[Obstructive uropathy—comparative studies of obstruction of the upper and lower urinary tracts] Murshed G, et al. **Khirurgiia (Sofiia)** 1988;41(4):84–90 (Eng. Abstr.) **(Bul)**

ETHNOLOGY

Primary vesicoureteral reflux in blacks with posterior urethral valves: does it occur? Nancarrow PA, et al. **Pediatr Radiol** 1988;19(1):31–5

ETIOLOGY

Sonographic diagnosis of an obstructing urethral calculus. Bundy AL, et al. **J Ultrasound Med** 1988 Sep;7(9):523–4
Complete urinary obstruction following periurethral polytetrafluoroethylene injection for urinary incontinence. Boykin W, et al. **J Urol** 1989 May;141(5):1199–200
Fetal obstructive uropathy [corrected] [letter] [published erratum appears in Lancet 1988 Dec 17;2(8625):1436] Degani S, et al. **Lancet** 1988 Dec 10;2(8624):1363
The aetiology and treatment of benign prostatic obstruction. Milroy E, et al. **Practitioner** 1988 Oct 22;232(1456 (Pt 2)):1141–5 (5 ref.)
[Double-blind study on the effects of mepartricin (SPA-S-160) versus placebo in the treatment of obstruction caused by adenoma of the prostate] Rizzo M, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):21–2 **(Ita)**
[Clinical use of mepartricin: effects on obstruction due to chronic inflammation of the prostate] Tosto A, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):65–6 **(Ita)**
[Endo-prostatic prosthesis: palliative treatment of benign prostatic hyperplasia] Pereiro M, et al. **Actas Urol Esp** 1988 Nov–Dec;12(6):566–8 (Eng. Abstr.) **(Spa)**

GENETICS

Posterior urethral valves with polydactyly: case report of a six year old boy. Oliveira JP, et al. **Prog Clin Biol Res** 1989;305:25–6

PHYSIOPATHOLOGY

Urodynamics in children with myelomeningocele: early assessment of obstruction and incontinence. Van Gool JD, et al. **Acta Urol Belg** 1989;57(2):497–501
Infravesical outflow obstruction in rats: a comparison of two models. Maggi CA, et al. **Gen Pharmacol** 1989;20(3):345–9
Computerised analysis of urological parameters. Sanchez-Doblado F, et al. **Med Biol Eng Comput** 1988 May;26(3):325–7
[Combined urodynamic insufficiency in patients with an infravesical obstruction] Panikratov KD, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):41–6 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Intra-uterine cystography for evaluation of prenatal obstructive uropathy. Stoutenbeek P, et al. **Pediatr Radiol** 1989;19(4):247–9
[Roentgenological evaluation of the condition of the urinary tract in children with urethral valve] Gruchalska E. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec;51(6):315–20 (Eng. Abstr.) **(Pol)**

SURGERY

Use of stents for treating obstruction of urinary outflow [letter] **BMJ** 1989 Jul 8;299(6691):119–20
Controlled trial of intravesical noxythiolin in the prevention of infection following outflow tract surgery. Jones MA, et al. **Br J Urol** 1988 Oct;62(4):311–4
Closed prostatic commissurotomy. An endoscopic technique for the treatment of benign prostatic hypertrophy. Shafik A. **Br J Urol** 1988 Nov;62(5):431–3
[Bladder diverticula and obstruction of the lower urinary tract] Panchev P, et al. **Khirurgiia (Sofiia)** 1988;41(4):39–41 (Eng. Abstr.) **(Bul)**
[The development of autonomic bladder innervation following release of urethral obstruction. Experimental study] Canon E, et al. **Acta Urol Belg** 1988;56(4):553–8 (Eng. Abstr.) **(Fre)**
[Surgical treatment of complicated urethral stenosis (54 case reports)] Dumurgier C, et al. **Med Trop (Mars)** 1989 Jan–Mar;49(1):41–6 (Eng. Abstr.) **(Fre)**

THERAPY

Treatment of obstruction of urinary outflow [letter] Buckley JF, et al. **BMJ** 1989 Jul 15;299(6692):181
Use of stents for treating obstruction of urinary outflow in patients unfit for surgery. Williams G, et al. **BMJ** 1989 May 27;298(6685):1429
Transrectal sonographic monitoring of balloon dilatation of the prostatic urethra. Fornage BD, et al. **J Ultrasound Med** 1989 Jan;8(1):53–5
Balloon dilatation for prostatic obstruction. Long-term follow-up. Klein LA, et al. **Urology** 1989 Mar; 33(3):198–201
Balloon dilatation of urethral strictures [letter] Mohammed SH. **Urology** 1988 Oct;32(4):388–9
[Fabian's spiral endoprostatic prosthesis] Garbit JL, et al. **J Urol (Paris)** 1988;94(5–6):265–7 (Eng. Abstr.) **(Fre)**
[The urologic spirale: a therapeutic possibility in the treatment of prostatic carcinoma] Roth S, et al. **J Urol (Paris)** 1988;94(5–6):261–3 (Eng. Abstr.) **(Fre)**
[Pneumatic dilatation of urethral stenosis] Rosa Arias J, et al. **Arch Esp Urol** 1989 Mar;42(2):147–51 (Eng. Abstr.) **(Spa)**

VETERINARY

Treatment of patent urachus associated with a congenital imperforate urethra in a calf. Hunt RJ, et al. **Cornell Vet** 1989 Apr;79(2):157–60
Relationship of nutritional factors to the cause, dissolution, and prevention of feline uroliths and urethral plugs. Osborne CA, et al. **Vet Clin North Am Small Anim Pract** 1989 May; 19(3):561–81 (49 ref.)

URETHRAL STRICTURE

COMPLICATIONS

Pleomorphic rhabdomyosarcoma of the urinary bladder in association with recurrent urinary-tract infection. Goble M, et al. **Eur J Surg Oncol** 1989 Apr;15(2):155–7
[Urethral stricture as the cause of retrograde ejaculation and infertility] Bjerklund Johansen TE. **Tidsskr Nor Laegeforen** 1989 Apr 30;109(12):1300 **(Nor)**
[Developmental abnormalities of the lower segment of the urinary tract as a cause of hydronephrosis in infants] Drews E, et al. **Pediatr Pol** 1988 Oct;63(10):609–15 (Eng. Abstr.) **(Pol)**
[X-ray diagnosis of complicated urethral strictures] Rusakov VI, et al. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):29–36 (Eng. Abstr.) **(Rus)**

CONGENITAL

Congenital bulbar urethral stricture occurring in two brothers. Jones DJ. **Urol Int** 1988;43(6):366–7

DIAGNOSIS

Sonographic urethrogram: comparison to roentgenographic techniques in 22 patients. Gluck CD, et al. **J Urol** 1988 Dec;140(6):1404–8
Sonography of the distal male urethra—a new diagnostic procedure for urethral strictures: results of a retrospective study. Merkle W, et al. **J Urol** 1988 Dec;140(6):1409–11
[Voiding urethrosonography. An alternative to roentgen urethrography] Dörnberger V, et al. **Ultraschall Med** 1988 Dec;9(6):279–85 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Urethral stricture following aortic graft surgery. Ferrie BG, et al. **Br J Urol** 1989 Aug;64(2):162–4
Urethral strictures following transurethral resection of the prostate. The role of the catheter. Hammarsten J, et al. **Br J Urol** 1989 Apr;63(4):397–400
Appendicovesical fistula presenting as urethral stricture. Wadhwa SN, et al. **Br J Urol** 1989 Mar;63(3):325
Electrical resistance of appliances as a cause of urethral stricture following transurethral resection of prostate. Morishita H, et al. **Eur Urol** 1989;16(5):340–2
Endoscopic management of urethrovesical anastomotic obliteration following radical retropubic prostatectomy. Appel RA, et al. **J Urol** 1989 Sep;142(3):818–20
Urethral strictures after hypospadias repair. Scherz HC, et al. **J Urol (Paris)** 1989;95(1):23–6
Urethral strictures after transurethral bladder tumor resection. Nielsen KT, et al. **Scand J Urol : 'ephrol** 1989; 23(2):81–3
[Iatrogenic urethral stenosis. Apropos of 100 cases] Boujnah H, et al. **J Chir (Paris)** 1989 Mar;126(3):163–8 (14 ref.) (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

Does internal urethrotomy prevent urethral stricture after transurethral prostatectomy. Early and late results. Nielsen KK, et al. **Eur Urol** 1989;16(4):258–61
Prevention of urethral stricture formation after transurethral resection of the prostate: a controlled randomized study of Otis urethrotomy versus urethral dilation and the use of the polytetrafluoroethylene coated versus the uninsulated metal sheath. Schultz A, et al. **J Urol** 1989 Jan;141(1):73–5

SURGERY

The hypospadias silicone loop: a method to treat strictures of the distal reconstructed urethra. Kaufman T, et al. **Ann Plast Surg** 1988 Oct;21(4):392–3
Urethral strictures in childhood. Frank JD, et al. **Br J Urol** 1988 Dec;62(6):590–2
Optical urethrotomy—experience in Oman. John J, et al. **Br J Urol** 1989 Jun;63(6):639–40
A new stent for the treatment of urethral strictures. Preliminary report. Milroy EJ, et al. **Br J Urol** 1989 Apr; 63(4):392–6
Optical internal urethrotomy as the treatment of choice for primary stricture of the urethra. Mohanty NK, et al. **Br J Urol** 1988 Sep;62(3):261–2
Endourethral urethroplasty with prepuce graft for long posterior urethral stricture. Zhang JL, et al. **Chin Med J [Engl]** 1989 Mar;102(3):165–8
Continence mechanisms following transphincteric urethroplasty. Reid RE, et al. **Eur Urol** 1988;15(1–2):66–8
On the transurethral treatment of urethrostenosis in males. Jeromin L, et al. **Int Urol Nephrol** 1988;20(5):501–3
Surgical management of post-traumatic prostatomembranous urethral strictures: a ten year experience. Redman JF.

J Arkansas Med Soc 1988 Jun;85(1):45–7
Adjunctive endourological technique for transurethral resection in patients with urethral stricture. Chiou RK, et al. J Urol 1989 Jun;141(6):1388–9
Internal urethrotomy using a ureteral resectoscope. Fujita K. J Urol 1989 Apr;141(4):894
Vascular complications of transurethral incision of post-traumatic urethral strictures. Gary R, et al. J Urol 1988 Dec;140(6):1539–40
Internal urethrotomy as a complementary method after urethroplasties for posterior urethral stenosis. Netto Júnior NR, et al. J Urol 1989 Jan;141(1):50–1
Sachse optical urethrotomy, a modified technique: 6 years of experience. Sandozi S, et al. J Urol 1988 Nov; 140(5):968–9
The Mitrofanoff principle: an alternative form of continent urinary diversion. Weingarten JL, et al. J Urol 1988 Dec; 140(6):1529–31
Argon laser treatment of urethral stricture and vesical neck contracture. Adkins WC. Lasers Surg Med 1988;8(6):600–3
Pediatric office procedures. Clair DL, et al. Urol Clin North Am 1988 Nov;15(4):715–23 (38 ref.)
Pubectomy in repair of membranous urethral stricture. McAninch JW. Urol Clin North Am 1989 May; 16(2):297–302
Current indications and technique of two-stage repair for membranous urethral strictures. Morehouse DD. Urol Clin North Am 1989 May;16(2):325–8
Perineal repair of membranous urethral stricture. Webster GD. Urol Clin North Am 1989 May;16(2):303–12 (10 ref.)
K.T.P. 532 laser in treatment of urethral strictures. Shanberg A, et al. Urology 1988 Dec;32(6):517–20
[One-stage urethroplasty using an island skin tube from the perineum and scrotum in the treatment of complex stricture of the posterior urethra] Wang LL. Chung Hua Wai Ko Tsa Chih 1988 Sep;26(9):565–7, 575 (Eng. Abstr.) (Chi)
[Use of a self-design directional multifunction intraurethral scar resector] Yang TS. Chung Hua Wai Ko Tsa Chih 1988 Apr;26(4):206–7, 253–4 (Eng. Abstr.) (Chi)
[Treatment of stenoses of the urethra. 2] Hermanowicz M, et al. J Urol (Paris) 1989;95(2):81–7 (Eng. Abstr.) (Fre)
[Endoscopic resection of urethral stricture (apropos of 49 controlled cases)] Chelbi M, et al. Tunis Med 1987 Mar; 65(3):207–10 (Eng. Abstr.) (Fre)
[Surgical management of post-traumatic strictures of the membranous portion of the urethra] Kondás J, et al. Orv Hetil 1989 Aug 13;130(33):1765–7 (Eng. Abstr.) (Hun)
[Surgical repair of urethral stricture. Posterior urethroplasty by the Michalowski method] Inoue T, et al. Nippon Hinyokika Gakkai Zasshi 1988 Mar;79(3):475–80 (Eng. Abstr.) (Jpn)
[Surgical repair of traumatic urethral stricture] Inoue T, et al. Nippon Hinyokika Gakkai Zasshi 1988 Apr;79(4):678–83 (Eng. Abstr.) (Jpn)
[Treatment of congenital urethral stenosis (urethral ring) in children. Optic internal urethrotomy in the congenital bulbar urethral stenosis in boys] Mori Y, et al. Nippon Hinyokika Gakkai Zasshi 1989 May;80(5):704–10 (Eng. Abstr.) (Jpn)
[Low internal urethrotomy under direct vision (Sachse technic)] Luzuriaga Graf J, et al. Arch Esp Urol 1988 Nov–Dec;41(9):861–4 (Eng. Abstr.) (Spa)
[Reconstructive plastic surgery of urethral stenosis: urethroplasty with lyophilized dura mater] Villavicencio H. Arch Esp Urol 1989 May;42(4):309–12 (Eng. Abstr.) (Spa)

THERAPY

Catheters: a knotty problem! Jones DJ, et al. Br J Urol 1989 Aug;64(2):198–9
Balloon dilatation of iatrogenic urethral strictures. Acunas B, et al. Eur J Radiol 1988 Nov;8(4):214–6
A new treatment for urethral strictures: a permanently implanted urethral stent. Milroy EJ, et al. J Urol 1989 May; 141(5):1120–2
Post-hypospadias repair urethral strictures: a review of 30 cases. Scherz HC, et al. J Urol 1988 Nov;140(5 Pt 2):1253–5
Retrograde balloon dilation of urethra [letter] Daughtry JD, et al. Urology 1989 Mar;33(3):257
[Clinical experience of treatment of urethral stricture] Tan LE, et al. Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1989 Apr;5(4):201–5 (Eng. Abstr.) (Chi)
[Treatment of urethral stenosis using Olbert's balloon dilatation angioplasty. Re-evaluation of the results] Billebaud T, et al. Ann Urol (Paris) 1989;23(2):109–11 (Eng. Abstr.) (Fre)
[Endoscopically "impassable" urethral stenosis. Catheterization under fluoroscopic guidance. Apropos of 11 cases] Sibert A, et al. Ann Urol (Paris) 1989;23(1):39–42 (Eng. Abstr.) (Fre)
[Treatment of urethral stenoses in children using a balloon catheter] D'Agostino S, et al. Pediatr Med Chir 1989 Mar–Apr;11(2):155–9 (Eng. Abstr.) (Ita)
[Treatment of short urethral strictures in children using magnets] Stepanov EA, et al. Urol Nefrol (Mosk) 1989 May–Jun;(3):8–11 (Eng. Abstr.) (Rus)
[Treatment of strictures of the urethra in men] Trapeznikova MF, et al. Urol Nefrol (Mosk) 1989 Jan–Feb;(1):34–7 (Eng. Abstr.) (Rus)

URETHRITIS

Sexually transmitted diseases. Urethritis in men. Hooton TM, et al. Infect Dis Clin North Am 1987 Mar;1(1):165–78 (73 ref.)
[Management of male urethritis] de Beauchamp F, et al. Ann Dermatol Venereol 1988;115(9):951–6 (73 ref.) (Fre)

COMPLICATIONS

Chlamydia trachomatis urethritis presenting as hematuria in an adolescent male. Taube OM. J Adolesc Health Care 1988 Nov;9(6):505–6
Prevalence of chlamydial infection in patients with gonococcal urethritis. Charuwichitratrana S, et al. J Med Assoc Thai 1989 May;72(5):280–3
Chlamydia trachomatis infection in sexually active women with no known sexual contacts with urethritis. Harrison N, et al. Scott Med J 1989 Jun;34(3):464–6
Dual infection of the conjunctiva with herpes simplex virus and Chlamydia trachomatis. Mantell J, et al. Sex Transm Dis 1988 Jul–Sep;15(3):167–8
[Localized Sweet syndrome in urethro-prostatitis caused by Ureaplasma] Stieler W, et al. Hautarzt 1988 Oct; 39(10):658–61 (25 ref.) (Eng. Abstr.) (Ger)
[Gonococcus-associated arthritis] Bodmer K. Ther Umsch 1989 Apr;46(4):245–9 (Eng. Abstr.) (Ger)

DIAGNOSIS

Sensitivity of urethral cytologic diagnosis of human papillomavirus infection in men [letter] Iossa A, et al. Acta Cytol 1989 Sep–Oct;33(5):686–7
Comparative study of culture, direct immunofluorescent antibody test and enzyme immunoassay for the diagnosis of urogenital infections caused by Chlamydia trachomatis. Dhar R, et al. APMIS Suppl 1988;3:35–9
Simple transport medium for Bacteroides ureolyticus [letter] Akhtar N, et al. Eur J Clin Microbiol Infect Dis 1989 Apr; 8(4):321–2
Comparison of ELISA with metabolism inhibition test for detection of Ureaplasma urealyticum antibodies in nongonococcal urethritis. Deodhar L, et al. Indian J Med Res 1988 Jul;88:20–2
Serologic diagnosis of Chlamydia trachomatis infections. Hossain A. Int J Gynaecol Obstet 1988 Dec;27(3):377–80
Non specific genital infections: their diagnosis and clinical relevance. O'Mahony C, et al. Ir J Med Sci 1988 Oct; 157(10):326–7
Diagnosis of Chlamydia trachomatis genital infections by cell culture and two enzyme immunoassays detecting different chlamydial antigens. Mahony J, et al. J Clin Microbiol 1989 Sep;27(9):1934–8
Gonococcal urethritis diagnosed from enzyme immunoassay of urine sediment. Roongpisuthipong A, et al. Sex Transm Dis 1988 Oct–Dec;15(4):192–5
[Detection of Chlamydia trachomatis in routine clinical practice: increased sensitivity of cell culture in comparison with the microimmunofluorescence test] Sterzik K, et al. Geburtshilfe Frauenheilkd 1988 Dec;48(12):881–3 (Eng. Abstr.) (Ger)
[Diagnosis of urethritis in general practice. Methods and possibilities] Mensing H. Z Hautkr 1988 Jul 15;63(7):553–6 (20 ref.) (Eng. Abstr.) (Ger)
[Detection of Chlamydia trachomatis in urethra of patients with urogenital infection] Kuroda K, et al. Hinyokika Kiyo 1989 Mar;35(3):453–6 (Eng. Abstr.) (Jpn)
[The role of serum IgG antibody of Chlamydia trachomatis in urogenital tract diseases] Uchijima Y, et al. Hinyokika Kiyo 1989 Mar;35(3):447–51 (Eng. Abstr.) (Jpn)
[Study of Chlamydia trachomatis in non gonococcal urethritis. Detection of IgA antibody in sera by ELISA technique] Jodai A. Nippon Hinyokika Gakkai Zasshi 1988 Oct;79(10):1605–12 (Eng. Abstr.) (Jpn)
[Immunoenzyme tests Gonozyme and Chlamydiazyme as new methods of the screening studies of Neisseria gonorrhoeae and Chlamydia trachomatis infections] Zaba R, et al. Pol Tyg Lek 1988 Jul 18;43(29):948–51 (Eng. Abstr.) (Pol)
[Laboratory diagnosis of urethritis] Tkach IuI. Lab Delo 1988; (7):21–5 (13 ref.) (Eng. Abstr.) (Rus)
[Immunofluorescence determination of antibodies in men with chlamydial urethritis] Stefánik M, et al. Cesk Epidemiol Mikrobiol Imunol 1988 Jul;37(4):239–44 (Eng. Abstr.) (Slo)

DRUG THERAPY

Clinical trial of norfloxacin in the treatment of uncomplicated gonococcal urethritis: preliminary report. Cristiano P. Drugs Exp Clin Res 1989;15(1):33–5
Clinical efficacy of ciprofloxacin versus doxycycline in the treatment of non-gonococcal urethritis in males. van der Willigen AH, et al. Eur J Clin Microbiol Infect Dis 1988 Oct;7(5):658–61
Measuring treatment compliance of men with non-gonococcal urethritis receiving oxytetracycline combined with low dose phenobarbitone. Bignell CJ, et al. Genitourin Med 1988 Oct;64(5):312–5
Bacampicillin to treat non-gonococcal urethritis in men: pilot study. Lee CT, et al. Genitourin Med 1989 Jan;65(1):32–4
Fleroxacin versus standard therapy in gonococcal urethritis. Lassus A, et al. J Antimicrob Chemother 1988 Oct;22 Suppl D:223–5
Efficacy of ofloxacin in the treatment of non-gonococcal urethritis in men and genital infections caused by Chlamydia trachomatis in men and women. Nayagam AT, et al. J Antimicrob Chemother 1988 Sep;22 Suppl C:155–8
Clinical efficacy and tolerance of fleroxacin in patients with urethritis caused by Chlamydia trachomatis. Pust RA, et al. J Antimicrob Chemother 1988 Oct;22 Suppl D:227–30
The efficacy and safety of spiramycin in the treatment of nongonococcal urethritis in men. Segev S, et al. J Antimicrob Chemother 1988 Jul;22 Suppl B:183–7
Treatment of uncomplicated gonococcal urethritis with cefoxitin: comparison with penicillin. Siegel MS, et al. Rev Infect Dis 1979 Jan–Feb;1(1):183–8
Ciprofloxacin versus doxycycline in the treatment of uncomplicated urogenital Chlamydia trachomatis infections. A double-blind comparative study. Jeskanen L, et al. Scand J Infect Dis Suppl 1989;60:62–5
A prospective randomized trial of ofloxacin vs. doxycycline in the treatment of uncomplicated male urethritis. Boslego JW, et al. Sex Transm Dis 1988 Oct–Dec;15(4):186–91
Treatment of nongonococcal urethritis: comparison of ofloxacin and erythromycin. Ibsen HH, et al. Sex Transm Dis 1989 Jan–Mar;16(1):32–5
Clinical efficacy of new quinolones for therapy of nongonococcal urethritis. Perea EJ, et al. Sex Transm Dis 1989 Jan–Mar;16(1):7–10
[Acute gonorrheal urethritis: report of 30 cases] Gu TH. Chung Hua Wai Ko Tsa Chih 1988 Feb;26(2):107–8, 126 (Eng. Abstr.) (Chi)
[Therapy of chlamydial urethritis] Gelzer D, et al. Dtsch Med Wochenschr 1989 Jan 13;114(2):64–5 (7 ref.) (Ger)
[In vitro sensitivity of Neisseria gonorrhoeae to 10 antibiotics and response of gonococcal urethritis to rifampicin] Alessi E, et al. G Ital Dermatol Venereol 1988 Oct;123(10):505–7 (Eng. Abstr.) (Ita)
[Treatment of chlamydial urethritis—studies on clinical effects of ofloxacin] Asano H, et al. Hinyokika Kiyo 1989 Jan;35(1):191–7 (Eng. Abstr.) (Jpn)
[Treatment of gonococcal urethritis with norfloxacin] Mitsuya H, et al. Hinyokika Kiyo 1989 Apr;35(4):705–9 (Eng. Abstr.) (Jpn)
[Ofloxacin for the treatment of chlamydial urethritis] Yuri K, et al. Hinyokika Kiyo 1988 Sep;34(9):1687–90 (Eng. Abstr.) (Jpn)
[In vitro activity of minocycline against Chlamydia trachomatis clinical isolates and clinical efficacy of minocycline to C. trachomatis associated nongonococcal urethritis] Kato N, et al. Jpn J Antibiot 1988 Oct; 41(10):1550–6 (Eng. Abstr.) (Jpn)
[Efficacy of ofloxacin in sexually transmitted male urethritis and cervicitis] Kumamoto Y, et al. Jpn J Antibiot 1988 Oct;41(10):1445–79 (Eng. Abstr.) (Jpn)
[Tetracycline and oxytetracycline in the treatment of non-gonococcal urethritis in men] Dajek Z, et al. Przegl Dermatol 1988 May–Jun;75(3):210–4 (Eng. Abstr.) (Pol)
[Predicting the effectiveness of antibiotic therapy in the treatment of gonorrhea] Stepanenko VI, et al. Mikrobiol Zh 1989 Mar–Apr;51(2):103–6 (Eng. Abstr.) (Rus)
[The level of penicillin in the blood serum during treatment of gonococcal infection with various doses of bicillin-3 and its combination with etamid] Budiev AIu, et al. Vestn Dermatol Venerol 1989;(3):74–5 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Screening adolescent male detainees [letter; comment] Braslow CA, et al. Am J Public Health 1989 Jul;79(7):902–3
. Comment on: Am J Public Health 1988 Dec;78(12):1583–4
Recent reduction in male urethritis in France [letter] Massari V, et al. Am J Public Health 1989 May;79(5):655
Chlamydia trachomatis genital infections in Tahiti. Chungue E, et al. Eur J Clin Microbiol Infect Dis 1988 Oct;7(5):635–8
The incidence of urogenital Chlamydia trachomatis infections among patients in Kumasi, Ghana. Drescher C, et al. Int J Gynaecol Obstet 1988 Dec;27(3):381–3
[Occurrence of gonorrhea, Chlamydia infection and urethritis in permanent partners of women with acute salpingitis] Johansson E, et al. Lakartidningen 1988 Sep 14; 85(37):2974–6 (Swe)

ETIOLOGY

Trichomonas infections in men. Saultz JW, et al. Am Fam Physician 1989 Feb;39(2):177–80
Severity of urethritis in Reiter's disease [letter] Fisk P. Genitourin Med 1989 Jun;65(3):198–9
Oral sex is not safe sex [letter] Baral J. J Am Acad Dermatol 1989 Feb;20(2 Pt 1):296
Poison oak urethritis [letter] Watts WJ. N Engl J Med 1989 Jul 20;321(3):194
Cystitis and urethritis. Parrott TS. Pediatr Rev 1989 Jan; 10(7):217–22 (0 ref.)
Urethritis caused by Neisseria meningitidis group B: a case report. Hartmann AA, et al. Sex Transm Dis 1988 Jul–Sep; 15(3):150–1
[Chlamydia trachomatis infections of the urogenital system

in women] Zdrodowska-Stefanow B, et al. **Ginekol Pol** 1988 Jan;59(1):29–34 (Eng. Abstr.) (Pol)

[Contraceptive devices as a cause of urethritis] Dajek Z. **Przegl Dermatol** 1988 Sep-Oct;75(5):386–91 (Eng. Abstr.) (Pol)

[Gonorrhea, Chlamydia infection, Trichomonas vaginitis and candidiasis in drug addicts. Second report] Stapiński A, et al. **Przegl Dermatol** 1988 Sep-Oct;75(5):381–5 (Eng. Abstr.) (Pol)

IMMUNOLOGY

[Immunologic changes in women and their sexual partners with urogenital Trichomonas infection] Cvetkova A, et al. **Wiad Parazytol** 1988;34(2):191–6 (Eng. Abstr.) (Pol)

MICROBIOLOGY

Genital mycoplasmas and chlamydiae in men urethritis. Crăcea E, et al. **Arch Roum Pathol Exp Microbiol** 1983 Jan-Mar;42(1):25–30

Detecting Chlamydia trachomatis in men with urethritis: serology v isolation in cell culture. Hagay ZJ, et al. **Genitourin Med** 1989 Jun;65(3):166–70

Rising incidence of penicillinase producing Neisseria gonorrhoeae in Paris, France, in 1985–7 [letter] Lassau F, et al. **Genitourin Med** 1989 Jan;65(1):60

Acute urethritis due to Neisseria meningitidis group A acquired by orogenital contact: case report. Wilson AP, et al. **Genitourin Med** 1989 Apr;65(2):122–3

Isolation of Ureaplasma urealyticum from urological out patients. Kawamura N, et al. **Hinyokika Kiyo** 1988 Oct; 34(10):1747–9

CDC group HB-5 as a cause of genitourinary infections in adults. Baddour LM, et al. **J Clin Microbiol** 1989 May; 27(5):801–5

Correlation of infecting serovar and local inflammation in genital chlamydial infections. Batteiger BE, et al. **J Infect Dis** 1989 Aug;160(2):332–6

Clinical and microbiological features of persistent or recurrent nongonococcal urethritis in men. Wong ES, et al. **J Infect Dis** 1988 Nov;158(5):1098–101

A comparison of Bacteroides ureolyticus isolates from different clinical sources. Duerden BI, et al. **J Med Microbiol** 1989 May;29(1):63–73

Gardnerella vaginalis is associated with other sexually transmittable microorganisms in the male urethra. Elsner P, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jul; 269(1):56–63

[Bacteriology of the ejaculate—a useful study?] Eijsten A, et al. **Urologe [A]** 1988 Nov;27(6):340–2 (Eng. Abstr.) (Ger)

[Non-gonococcal urethritis and cervicitis from Chlamydia trachomatis: evaluation by means of chlamydiazine and serology] Vena GA, et al. **Boll Ist Sieroter Milan** 1988; 67(1):66–71 (Eng. Abstr.) (Ita)

[Clinical studies of Chlamydia trachomatis in male urethritis] Watanabe H, et al. **Hinyokika Kiyo** 1989 Jan;35(1):77–81 (Eng. Abstr.) (Jpn)

[Vaginal biocenosis and the microbiologic status of the bladder and urethra in women with stress-induced urinary incontinence] Lotocki W, et al. **Ginekol Pol** 1988 Jun; 59(6):367–70 (Eng. Abstr.) (Pol)

[Biological properties of Ureaplasma urealyticum and Mycoplasma hominis isolated from patients with urethritis. V. Sensitivity of U. urealyticum to selected chemotherapeutic agents] Jagielski M. **Med Dosw Mikrobiol** 1988;40(1):18–37 (Eng. Abstr.) (Pol)

[Biological properties of Ureaplasma urealyticum and Mycoplasma hominis isolated from patients with urethritis. VI. Sensitivity of M. hominis to selected chemotherapeutic agents] Jagielski M. **Med Dosw Mikrobiol** 1988;40(1):38–49 (Eng. Abstr.) (Pol)

[Detection of Chlamydia trachomatis in human semen] Ruczkowska J, et al. **Przegl Dermatol** 1988 Sep-Oct; 75(5):376–80 (Eng. Abstr.) (Pol)

[The spectrum of the causative agents in nongonococcal urethritis] Schmidt U, et al. **Vestn Dermatol Venerol** 1988; (10):32–4 (Eng. Abstr.) (Rus)

PATHOLOGY

Characteristics of inflammatory cells in urethral smears from men with non-gonococcal urethritis. Shahmanesh M. **Genitourin Med** 1989 Jan;65(1):18–21

Effects of indwelling catheters on the urethral mucosa (polypoid urethritis). Norlén LJ, et al. **Scand J Urol Nephrol** 1988;22(2):81–6

PREVENTION & CONTROL

Chlamydia trachomatis infection in a male college student population. Kaplan JE, et al. **J Am Coll Health** 1989 Jan; 37(4):159–61

THERAPY

[Treatment of unusually resistant prostato-urethritis] Kočvara S. **Rozhl Chir** 1989 Jun;68(6):439–43 (Eng. Abstr.) (Cze)

URINE

Use of a leukocyte esterase dipstick to detect Chlamydia trachomatis and Neisseria gonorrhoeae urethritis in asymptomatic adolescent male detainees [see comments] O'Brien SF, et al. **Am J Public Health** 1988 Dec; 78(12):1583–4, **Comment in:** Am J Public Health 1989 Jul;79(7):902–3

Diagnosing Chlamydia trachomatis urethritis by first-catch urine enzyme immunoassay in adolescent males. Getts AG. **J Adolesc Health Care** 1989 May;10(3):209–11

Non-invasive sampling method for detecting Chlamydia trachomatis [letter] **Lancet** 1989 Jan 14;1(8629):96–7

URIC ACID

On-line electrochemistry/thermospray/tandem mass spectrometry as a new approach to the study of redox reactions: the oxidation of uric acid. Volk KJ, et al. **Anal Chem** 1989 Aug 1;61(15):1709–17

The stability of uric acid in ammonium hydroxide. Ellerbe P, et al. **Clin Chem** 1988 Nov;34(11):2280–2

Detergent enhances interference of urate in determinations of fructosamine [letter] Kallner A. **Clin Chem** 1989 Aug; 35(8):1803–4

Action of uric acid, allopurinol and oxypurinol on the myeloperoxidase-derived oxidant hypochlorous acid. Grootveld M, et al. **Free Radic Res Commun** 1987; 4(2):69–76

A study of the incorporation of urinary macromolecules onto crystals of different mineral compositions. Morse RM, et al. **J Urol** 1989 Mar;141(3):641–4

A structural approach to pathological crystallizations. Gout: the possible role of albumin in sodium urate crystallization. Perl-Treves D, et al. **Proc R Soc Lond [Biol]** 1988 Nov 22;235(1279):145–59

Clinical aspects of monosodium urate monohydrate crystal deposition disease (gout). Becker MA. **Rheum Dis Clin North Am** 1988 Aug;14(2):377–94 (93 ref.)

ANALOGS & DERIVATIVES

Pharmacokinetics of 6-thiouric acid and 6-mercaptopurine in renal allograft recipients after oral administration of azathioprine. Chan GL, et al. **Eur J Clin Pharmacol** 1989; 36(3):265–71

ANALYSIS

Triple crystal disease: monosodium urate monohydrate, calcium pyrophosphate dihydrate, and basic calcium phosphate in a single joint. Halverson PB, et al. **Ann Rheum Dis** 1988 Oct;47(10):864–5

Nonenzymatic stopped-flow fluorimetric method for direct determination of uric acid in serum and urine. Pérez-Bendito D, et al. **Clin Chem** 1989 Feb;35(2):230–3

Salivary concentrations of glucose, urate, cholesterol and triacylglycerols. Weber C. **J Clin Chem Clin Biochem** 1989 Apr;27(4):239–41

Ocular hyperuricosis in the rabbit following hyperuricemia and topical epinephrine. Bonney CH, et al. **J Ocul Pharmacol** 1986 Winter;2(1):55–8

Visceral urate deposits in chicks inoculated with avian nephritis virus. Shirai J, et al. **Vet Rec** 1989 Jun 24; 124(25):658–61

[Are urate calculi always urates?] Usenius JP, et al. **Duodecim** 1988;104(20):1630–4 (Fin)

[The troublesome influences on enzymatic-amperometric glucose determination and amperometric uric acid determination] Honymus G. **Z Med Lab Diagn** 1988; 29(8):443–9 (Eng. Abstr.) (Ger)

[Local chemolysis of occluding uric acid calculi] Breuel F, et al. **Z Urol Nephrol** 1988 Oct;81(10):613–22 (Eng. Abstr.) (Ger)

[Uric acid] Gava R, et al. **G Clin Med** 1988 Aug-Sep; 69(8–9):551–4 (Ita)

[An architectural study of mixed uric acid and calcium oxalate stones by polarized light microscopy of thin section] Takeuchi H, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1529–35 (Eng. Abstr.) (Jpn)

BLOOD

Hyperuricaemia and risk of cardiovascular disease and overall death. A 12-year follow-up of participants in the population study of women in Gothenburg, Sweden. Bengtsson C, et al. **Acta Med Scand** 1988;224(6):549–55

Blood lipids, lipoproteins, apoproteins, and uric acid in men fed diets containing fructose or high-amylose cornstarch. Reiser S, et al. **Am J Clin Nutr** 1989 May;49(5):832–9

Hyperuricemia, gout, and autosomal dominant polycystic kidney disease. Mejías E, et al. **Am J Med Sci** 1989 Mar; 297(3):145–8

Hyperuricemia after renal transplantation. Gores PF, et al. **Am J Surg** 1988 Nov;156(5):397–400

Analytical reviews in clinical biochemistry: the measurement of urate. Price CP, et al. **Ann Clin Biochem** 1988 Sep;25 (Pt 5):484–98 (104 ref.)

Improved uric acid assay in the Paramax. Leary ET, et al. **Clin Chem** 1988 Dec;34(12):2581

Improved rapid assay of uric acid in serum by liquid chromatography. Tanaka M, et al. **Clin Chem** 1988 Dec; 34(12):2567–8

Hemolytic uremic syndrome: urate nephropathy superimposed on an acute glomerulopathy? An hypothesis. O'Regan S, et al. **Clin Nephrol** 1988 Oct;30(4):207–10

Hypouricemia in NIDDM patients. Ishihara M, et al. **Diabetes Care** 1988 Nov-Dec;11(10):796–7

Co-occurrence of hypercalciuria and hypouricaemia in type 2 diabetic patients. Ishihara M, et al. **Diabetic Med** 1989 Jul;6(5):406–11

Antiepileptic drugs reduce serum uric acid. Krause KH, et al. **Epilepsy Res** 1987 Sep;1(5):306–7

Serum urate, complement 3 and pre-eclampsia in patients with systemic lupus erythematosus. Lao TT, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Sep;29(1):7–13

Postmortem changes of blood urea, creatinine, non-protein nitrogen, uric acid & ammonia levels in rabbit. Usmani JA, et al. **Indian J Med Res** 1988 Dec;88:545–9

A candidate reference method for the determination of uric acid in serum based on high performance liquid chromatography, compared with an isotope dilution-gas chromatography-mass spectrometer method. Kock R, et al. **J Clin Chem Clin Biochem** 1989 Mar;27(3):157–62

Serum uric acid and 11.5-year mortality of middle-aged women: findings of the Chicago Heart Association Detection Project in Industry. Levine W, et al. **J Clin Epidemiol** 1989;42(3):257–67

Effects of traxanox sodium on blood pressure and serum uric acid in hypertensive patients: a preliminary study. Fujimura A, et al. **J Clin Pharmacol** 1989 Apr;29(4):327–30

Hyperuricemia in the diagnosis of gout. Wallace SL. **J Gen Intern Med** 1989 Mar-Apr;4(2):178–9

Changes in plasma lipids and uric acid with sodium loading and sodium depletion in patients with essential hypertension. Masugi F, et al. **J Hum Hypertens** 1988 Mar; 1(4):293–8

Uric acid levels: a useful index of the severity of preeclampsia and perinatal prognosis. Voto LS, et al. **J Perinat Med** 1988;16(2):123–6

The role of metabolic factors and blood pressure in the association of obesity with osteoarthritis of the knee. Davis MA, et al. **J Rheumatol** 1988 Dec;15(12):1827–32

A new uricosuric substance 5-[(1H-imidazol-1-yl)phenylmethyl]-2-methyl-1H-benzimidazole (C18H16N4). Gresser U, et al. **Klin Wochenschr** 1989 Jun 15;67(12):645

Non-responsiveness to allopurinol in renal hypouricaemia. Löffler W, et al. **Klin Wochenschr** 1989 Jan 4;67(1):47

Motor action potential (M.A.P.) in the evaluation of uremic peripheral neurone damage: influence of middle molecules (M.M.). Coratelli P, et al. **Life Support Syst** 1983;1 Suppl 1:129–32

Serum urate level and cancer. Lickl E, et al. **Med Hypotheses** 1989 Mar;28(3):193–5

Relationship between hypertriglyceridemia and uric acid production in primary gout. Matsubara K, et al. **Metabolism** 1989 Jul;38(7):698–701

Induction of profound hypouricemia by a non-sedating thiobarbiturate. Warrell RP Jr, et al. **Metabolism** 1989 Jun; 38(6):550–4

Cyclosporine-induced hyperuricemia and gout. Lin HY, et al. **N Engl J Med** 1989 Aug 3;321(5):287–92

Cause of persistent hypouricemia in outpatients. Hisatome I, et al. **Nephron** 1989;51(1):13–6

Mechanism of hypouricemia in Hodgkin's disease. Isolated defect in postsecretory reabsorption of uric acid. Tykarski A. **Nephron** 1988;50(3):217–9

Uric acid serum concentrations in CF-children after pancreatic enzyme supplementation. Wiersbitzky S, et al. **Padiatr Grenzgeb** 1989;28(3):171–3

Clinical correlations in partial hypoxanthine guanine phosphoribosyltransferase deficiency. Hersh JH, et al. **Pediatr Neurol** 1986 Sep-Oct;2(5):302–4

Isolation and identification of prostaglandin I 2 stimulating factor from human plasma. Ohkuchi M, et al. **Prostaglandins** 1988 Dec;36(6):787–95

Diuretics and hyperuricemia in the elderly. Takala J, et al. **Scand J Rheumatol** 1988;17(3):155–60

[A recommended method for determination of uric acid in serum] Baltassat P, et al. **Ann Biol Clin (Paris)** 1989; 47(6):328–35 (Eng. Abstr.) (Fre)

[Acute fatty liver of pregnancy. Diagnostic value of hyperuricemia in the pre-jaundice stage] Hsiung R, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(7):901–5 (Eng. Abstr.) (Fre)

[Hyponatremia with hypouricemia in corticotropin deficiency (letter)] Harle JR, et al. **Presse Med** 1989 Mar 25;18(12):636 (Fre)

[Pyrazinamide, hyperuricemia and gouty arthritis (letter)] Auvergne B, et al. **Rev Rhum Mal Osteoartic** 1988 Oct; 55(10):797 (Fre)

[Is asymptomatic hyperuricemia in kidney-failure patients in need of therapy?] Stiefel M, et al. **Dtsch Med Wochenschr** 1989 Jun 16;114(24):964–8 (44 ref.) (Ger)

[Dietary change aids in hyperuricemia. Kidney damage—denial of alcohol—allopurinol] Vollmer H. **Fortschr Med** 1989 Jul 20;107(21):50 (Ger)

[Differential indications for uricosuric drugs and allopurinol] Gröbner W, et al. **Klin Wochenschr** 1989 Mar 1;67(5):313–5 (Ger)

[Common sense and nonsense in diet therapy. Hyperuricemia and gout] Wolfram G. **Verh Dtsch Ges Inn Med** 1988; 94:389–96 (40 ref.) (Ger)

[Effects of crenotherapy with a salso-bromo-iodine mineral water in hyperuricemic patients] Grassi M, et al. **Clin Ter** 1987 Sep 30;122(6):459–64 (Eng. Abstr.) (Ita)

[Blood uric acid levels and overweight: correlations in clinical cases of diabetic patients] Sinagra D, et al.

Medicina (Firenze) 1988 Jan-Mar;8(1):77-8 (Eng. Abstr.) (Ita)

[Evaluation of hyperuricemia caused by fructose in a status of altered uric acid metabolism] Menghini S, et al. **Quad Sclavo Diagn** 1987 Dec;23(4):441-6 (Eng. Abstr.) (Ita)

[Effect of angiotensin converting enzyme inhibitors on lipid, purine and glucose metabolism] Buemi M, et al. **Recenti Prog Med** 1989 Feb;80(2):78-82 (24 ref.) (Eng. Abstr.) (Ita)

[Effect of obesity on blood pressure, serum lipid, liver function, blood sugar and uric acid] Saito Y, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):962-8 (Eng. Abstr.) (Jpn)

[A case of partial deficiency of hypoxanthine-guanine phosphoribosyltransferase] Fujita K, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):717-21 (Jpn)

[Hyperuricemia in various diseases in children] Prandota J, et al. **Pol Tyg Lek** 1988 Sep 26;43(39):1251-5 (Eng. Abstr.) (Pol)

[Morphological characteristics of hyperuricemic variant of chronic latent glomerulonephritis] Pal'tsev MA, et al. **Arkh Patol** 1988;50(6):8-15 (Eng. Abstr.) (Rus)

[Hyperuricemia in the joint syndrome in children] Chernyshev VM, et al. **Pediatriia** 1988;(6):111 (Rus)

[Mechanisms of hyperuricemia and its clinical significance] Loginova TK, et al. **Revmatologiia (Moskva)** 1988 Jul-Sep;(3):51-7 (109 ref.) (Rus)

[Prevalence of excess blood uric acid and gout in a sample of a rural Castillian population 40-50 years of age] González Buitrago JM, et al. **Rev Clin Esp** 1988 May; 182(9):454-8 (Eng. Abstr.) (Spa)

CEREBROSPINAL FLUID

Adenosine, inosine, hypoxanthine, xanthine and uric acid concentrations in the cerebrospinal fluid of unanaesthetized rats [letter] Polasek PM, et al. **J Pharm Pharmacol** 1989 Mar;41(3):216

Hypoxanthine, xanthine, urate and creatinine concentration gradients in cerebrospinal fluid. Niklasson F, et al. **Ups J Med Sci** 1988;93(3):225-32

METABOLISM

Uric acid and kidney. Fuiano G, et al. **Adv Exp Med Biol** 1989;252:107-17 (35 ref.)

Development of the gout tophus. An hypothesis. Palmer DG, et al. **Am J Clin Pathol** 1989 Feb;91(2):190-5

Red blood cell sodium-lithium countertransport, blood pressure, and uric acid metabolism in untreated healthy men. Strazzullo P, et al. **Am J Hypertens** 1989 Aug; 2(8):634-6

A study of the hypouricaemic effect of tiaprofenic acid. Lyfar V, et al. **Ann Clin Biochem** 1988 Nov;25 (Pt 6):595-600

Urate-mediated inflammation in nodal osteoarthritis: clinical and roentgenographic correlations. Lally EV, et al. **Arthritis Rheum** 1989 Jan;32(1):86-90

Urea, creatinine, uric acid, and phosphate spaces and their relationship to total body water during chronic hemodialysis. Ericsson F, et al. **ASAIO Trans** 1988 Jul-Sep; 34(3):346-50

Urate metabolism and gout--a perspective. Emmerson BT. **Aust N Z J Med** 1988 May;18(3):319-26 (62 ref.)

Allopurinol dosage selection: relationships between dose and plasma oxipurinol and urate concentrations and urinary urate excretion. Day RO, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):423-8

Progesterone increases glomerular filtration rate, urinary kallikrein excretion and uric acid clearance in normal women. Atallah AN, et al. **Braz J Med Biol Res** 1988; 21(1):71-4

Prevention of urate nephropathy in the tumour lysis syndrome. O'Connor NT, et al. **Clin Lab Haematol** 1989; 11(2):97-100

A case of multiple urate deposition, without gouty attacks, in a patient with systemic lupus erythematosus. Kurita Y, et al. **Cutis** 1989 Mar;43(3):273-5

Degradation of uric acid in fish liver peroxisomes. Intraperoxisomal localization of hepatic allantoicase and purification of its peroxisomal membrane-bound form. Hayashi S, et al. **J Biol Chem** 1989 Feb 25;264(6):3211-5

Metabolic effects of calcium antagonists in humans, with emphasis on carbohydrate, lipid, potassium, and uric acid homeostases. Trost BN, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 6:S86-92 (73 ref.)

An enzymic assay for uric acid in serum and urine compared with HPLC. Dubois H, et al. **J Clin Chem Clin Biochem** 1989 Mar;27(3):151-6

Xanthine and uric acid levels in rat brain following focal ischemia. Kanemitsu H, et al. **J Neurochem** 1988 Dec; 51(6):1882-5

Calcium pyrophosphate and monosodium urate crystal interactions with neutrophils: effect of crystal size and lipoprotein binding to crystals. Burt HM, et al. **J Rheumatol** 1989 Jun;16(6):809-17

Allopurinol hypersensitivity in a patient with coexistent systemic lupus erythematosus and tophaceous gout. McDonald J, et al. **J Rheumatol** 1988;15(5):865-8

Effects of diltiazem on plasma uric acid level and renal uric acid excretion in rats. Sugino H, et al. **Jpn J Pharmacol** 1989 Jun;50(2):239-42

Acute renal failure due to uric acid nephropathy in a patient with renal hypouricemia. Erley CM, et al. **Klin Wochenschr** 1989 Mar 1;67(5):308-12

Modulation of myoglobin-H2O2-mediated peroxidation reactions by sulfhydryl compounds. Mitsos SE, et al. **Lab Invest** 1988 Dec;59(6):824-30

Interpretation of pharmacologic manipulation of urate transport in man. Diamond HS. **Nephron** 1989;51(1):1-5

Effect of deafferentation on the levels of uric acid in the spinal cord of the rat. Weil-Fugazza J, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):181-6

Effects of Smilax macrophylla Vers. in normal or hyperuricemic and hyperuricosuric rats. Giachetti D, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:59-62

Effects of Trema guineense decoction on some metabolic activities in the rat. Trovato A, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:63-5

Effect of diuretics on the renal handling of urate. Kahn AM. **Semin Nephrol** 1988 Sep;8(3):305-14 (82 ref.)

[Purine metabolism in human tumors] Vannoni D, et al. **Medicina (Firenze)** 1989 Jan-Mar;9(1):51-4 (Eng. Abstr.) (Ita)

[Uric acid clearance in preeclampsia] Ideura T, et al. **Nippon Jinzo Gakkai Shi** 1988 Jul;30(7):855-60 (Eng. Abstr.) (Jpn)

[Uric acid metabolism disorders associated with alcoholism] Nishioka K. **Nippon Rinsho** 1988 Aug;46(8):1764-8 (Jpn)

[Changes in xanthine and uric acid in rat brain after middle cerebral artery occlusion] Kanemitsu H, et al. **No To Shinkei** 1989 Feb;41(2):157-63 (Eng. Abstr.) (Jpn)

[Early changes of oxypurines in rat brain following focal cerebral ischemia] Nihei H. **No To Shinkei** 1988 Aug; 40(8):713-9 (Eng. Abstr.) (Jpn)

[Phosphorus-calcium metabolism in urate nephropathies in childhood] Ketova TG. **Pediatriia** 1988;(5):33-8 (Eng. Abstr.) (Rus)

[Disorders of purine metabolism as an etiological factor in renal pathology] Balkarov IM, et al. **Ter Arkh** 1988; 60(6):37-9 (Eng. Abstr.) (Rus)

[Hemodialysis in the combined treatment of patients with uric acid nephrolithiasis complicated by kidney failure] Dzhavad-Zade MD, et al. **Urol Nefrol (Mosk)** 1988 Sep-Oct;(5):3-6 (Eng. Abstr.) (Rus)

[Effects of low density lipoproteins on uric acid crystals] Muniain Ezcurra MA, et al. **Rev Clin Esp** 1988 Oct; 183(5):232-4 (Eng. Abstr.) (Spa)

PHARMACOKINETICS

Complex formation between metronidazole and sodium urate: effect on photodegradation of metronidazole. Habib MJ, et al. **Pharm Res** 1989 Jan;6(1):58-61

PHARMACOLOGY

Hydroxyapatite and urate crystal induced cytokine release by macrophages. Alwan WH, et al. **Ann Rheum Dis** 1989 Jun;48(6):476-82

Inactivation of alpha 1-antiproteinase by hydroxyl radicals. The effect of uric acid. Aruoma OI, et al. **FEBS Lett** 1989 Feb 13;244(1):76-80

Monosodium urate monohydrate crystal induced changes in membrane fluidity: a fluorescence polarization study. Burt HM, et al. **J Rheumatol** 1988 Jul;15(7):1144-51

Immunoglobulin G coating on crystals and ceramics enhances polymorphonuclear cell superoxide production: correlation with immunoglobulin G adsorbed. Nagase M, et al. **J Rheumatol** 1989 Jul;16(7):971-6

Crystal-induced chemotactic factor. Spilberg I, et al. **Methods Enzymol** 1988;162:193-7

Interleukin-1 production from monocyte induced by urate crystals. Chang DM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jul;87(7):707-11

[Effect of urea and uric acid on the hemolytic activity of Sendai virus] Trybala E, et al. **Med Dosw Mikrobiol** 1989; 41(1):43-6 (Eng. Abstr.) (Pol)

PHYSIOLOGY

The inflammatory reaction to crystals. Terkeltaub RA, et al. **Rheum Dis Clin North Am** 1988 Aug;14(2):353-64 (60 ref.)

[Scavenging of active oxygen by uric acid] Matsushita S. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3000-4 (Jpn)

URINE

Hypouricemia and urate excretion in small cell lung carcinoma patients with syndrome of inappropriate antidiuresis. Sørensen JB, et al. **Acta Oncol** 1988;27(4):351-5

Hyperuricosuria and microhematuria in childhood [letter] Sánchez Bayle M, et al. **Am J Dis Child** 1989 Aug; 143(8):878-9

Antihypertensive and hypouricaemic effects of nitrendipine in chronic renal failure. Weidmann P, et al. **Eur J Clin Pharmacol** 1989;36(3):223-7

Impact of allopurinol treatment on the prevention of hyperuricosuric calcium oxalate lithiasis. Hofbauer J, et al. **Eur Urol** 1988;15(3-4):227-9

Effect of diclofenac-Na on 24-hour urinary excretion of creatinine, calcium, uric acid and glycosaminoglycans in adult patients with recurrent calcium oxalate nephrolithiasis. Hemal AK, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jan;27(1):44-6

The effect of glucose intake on urine saturation with calcium oxalate, calcium phosphate, uric acid and sodium urate. Głuszek J. **Int Urol Nephrol** 1988;20(6):657-64

Hepatic metabolites and uric acid excretion in fructose-1,6-diphosphatase deficiency. Velázquez A, et al. **J Inherited Metab Dis** 1988;11(3):303-4

Does hyperuricosuria play a role in calcium oxalate lithiasis? Ettinger B. **J Urol** 1989 Mar;141(3 Pt 2):738-41 (49 ref.)

Uric acid and its relationship with glycosaminoglycans in normal and stone-former subjects. Conte A, et al. **Nephron** 1989;52(2):162-5

[Neonatal oliguria associated with hyperuricemia] García Nieto V, et al. **An Esp Pediatr** 1988 Jul;29(1):37-40 (34 ref.) (Eng. Abstr.) (Spa)

[Urinary excretion of calcium, magnesium, uric acid and oxalic acid in normal children] Hernández Marco R, et al. **An Esp Pediatr** 1988 Aug;29(2):99-104 (Eng. Abstr.) (Spa)

[Degradation of purine nucleotides in patients with chronic obstruction to airflow] Mateos Antón F, et al. **Med Clin (Barc)** 1989 Mar 11;92(9):328-30 (Eng. Abstr.) (Spa)

URICASE see URATE OXIDASE

URICOSURIC AGENTS

PHARMACOLOGY

Inhibition of ureogenesis by two hypouricemic drugs (probenecid and benzbromarone). Comparison with allopurinol. Sanchez-Beltran MJ, et al. **Cell Mol Biol** 1988; 34(6):649-54

Effect of S-8666 on urinary Ca++ excretion in rats. Shimizu T, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):654-8

Additive diuretic effect of S-8666 during furosemide-induced diuresis in rats. Shimizu T, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):659-66

A new uricosuric substance 5-[(1H-imidazol-1-yl)phenylmethyl]-2-methyl-1H-benzimidazole (C18H16N4). Gresser U, et al. **Klin Wochenschr** 1989 Jun 15;67(12):645

Interpretation of pharmacologic manipulation of urate transport in man. Diamond HS. **Nephron** 1989;51(1):1-5

The effects of furosemide, piretanide and MK-196 on volume sensitive solute transport in fish erythrocytes. Wolowyk MW, et al. **Proc West Pharmacol Soc** 1989;32:309-11

THERAPEUTIC USE

A survey of current prescribing practices of antiinflammatory and urate lowering drugs in gouty arthritis in the province of Ontario. Bellamy N, et al. **J Rheumatol** 1988 Dec; 15(12):1841-7

Antithrombotic effect of thiopurinol. Srivastava R, et al. **Thromb Res** 1989 Jun 15;54(6):741-9

[Differential indications for uricosuric drugs and allopurinol] Gröbner W, et al. **Klin Wochenschr** 1989 Mar 1;67(5):313-5 (Ger)

TOXICITY

Toxicity of uricosuric diuretics in rat hepatocyte culture. Tolman KG, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1181-4

URIDINE

Pseudouridine modification in the tRNA(Tyr) anticodon is dependent on the presence, but independent of the size and sequence, of the intron in eucaryotic tRNA(Tyr) genes. Choffat Y, et al. **Mol Cell Biol** 1988 Aug;8(8):3332-7

ADMINISTRATION & DOSAGE

Reversal of 5-fluorouracil-induced myelosuppression by prolonged administration of high-dose uridine. van Groeningen CJ, et al. **J Natl Cancer Inst** 1989 Jan 18; 81(2):157-62

Enhancement of the antitumor activity of 5-fluorouracil by uridine rescue. Klubes P, et al. **Pharmacol Ther** 1989; 41(1-2):289-302 (98 ref.)

ANALOGS & DERIVATIVES

Isolation and characterization of fluoropyrimidine-resistant mutants in two Candida species. Fasoli M, et al. **Ann N Y Acad Sci** 1988;544:260-3

Modulation of 5-fluorouracil and 5-fluorouridine toxicity by membrane transport inhibitors in normal tissues of rats with liver adenocarcinoma. Jakobsson B, et al. **Anticancer Res** 1989 Mar-Apr;9(2):285-90

Mode of action of a new type of UDP-glucose analog against herpesvirus replication. Alarcón B, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1257-61

Activity of P536, a UDP-glucose analog, against Trypanosoma cruzi. Alcina A, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1412-5

Comparison of two bromovinyl nucleoside analogs, 1-beta-D-arabinofuranosyl-E-5-(2-bromovinyl)uracil and E-5-(2-bromovinyl)-2'-deoxyuridine, with acyclovir in inhibition of Epstein-Barr virus replication. Lin JC, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1068-72

Effects of various nucleosides on antiviral activity and metabolism of 1-beta-D-arabinofuranosyl-E-5-(2-bromovinyl)uracil against herpes simplex virus types 1 and 2. Suzutani T, et al. **Antimicrob Agents Chemother** 1988 Oct; 32(10):1547-51

RNA polymerase II transcripts as targets for 5-fluorouridine cytotoxicity: antagonism of 5-fluorouridine actions by alpha-amanitin. Heimer R, et al. **Cancer Chemother Pharmacol** 1989;24(2):80-6

Modulation of the metabolism and pharmacokinetics of 1-beta-D-arabinofuranosylcytosine by 1-beta-D-arabinofuranosyluracil in leukemic mice. Chandrasekaran B, et al. **Cancer Res** 1989 Jun 15; 49(12):3259-66

Dual effects of pyrazofurin and 3-deazauridine upon pyrimidine and purine biosynthesis in mouse L1210 leukemia. Sant ME, et al. **Cancer Res** 1989 May 15; 49(10):2645-50

Liquid-chromatographic monitoring of cytosine arabinoside and its metabolite, uracil arabinoside, in serum. Wermeling JR, et al. **Clin Chem** 1989 Jun;35(6):1011-5

Serum pseudouridine as a biochemical marker in patients with hepatocellular carcinoma. Amuro Y, et al. **Clin Chim Acta** 1988 Dec 15;178(2):151-8

Detection of elevated amounts of urinary pseudouridine in cancer patients by use of a monoclonal antibody. Itoh K, et al. **Clin Chim Acta** 1989 May 31;181(3):305-15

Selection of therapeutic agents for intraocular proliferative disease 3. Effects of fluoropyrimidines on cell-mediated contraction of human fibroblasts. Hartzer MK, et al. **Exp Eye Res** 1989 Mar;48(3):321-8

Selective radiosensitization and cytotoxicity of human melanoma cells using halogenated deoxycytidines and tetrahydrouridine. Lawrence TS, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1243-6

3-Methylpseudouridine as a fermentation product. Nielsen JB, et al. **J Antibiot (Tokyo)** 1989 Aug;42(8):1248-52

Chemical structure of a new modified nucleoside located in the anticodon of Bombyx mori glycine tRNA2. Kawakami M, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):108-11

Determination of the age dependency of the creatinine-related pseudouridine excretion in children's urine by high-performance liquid chromatography. Assmann B, et al. **J Chromatogr** 1988 Dec 29;434(1):202-8

Simultaneous determination of pseudouridine and creatinine in untreated urine by ion-pair liquid chromatography with diode-array ultraviolet detection. Palmisano F, et al. **J Chromatogr** 1989 Aug 25;493(1):35-43

Mechanism of selective inhibition of varicella zoster virus replication by 1-beta-D-arabinofuranosyl-E-5-(2-bromovinyl)uracil. Yokota T, et al. **Mol Pharmacol** 1989 Aug;36(2):312-6

Efficacy of 5-vinyl-1-beta-D-arabinofuranosyluracil (VaraU) against herpes simplex virus type 2 strains in cell cultures and against experimental herpes encephalitis in mice: comparison with acyclovir and foscarnet. Reefschläger J, et al. **Pharm Res** 1987 Jun;4(3):200-6

Targeting of an inducible toxic phenotype in animal cells. Borrelli E, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(20):7572-6

[The clinical significance of pseudouridine determination of the urine in children and adolescents] Graf N, et al. **Klin Padiatr** 1989 May-Jun;201(3):154-62 (Eng. Abstr.) (Ger)

ANALYSIS

15N-labeled 5S RNA. Identification of uridine base pairs in Escherichia coli 5S RNA by 1H-15N multiple quantum NMR. Davis DR, et al. **Biochemistry** 1989 May 2; 28(9):4105-8

Comparison of tetrazolium colorimetric and [3H]-uridine assays for in vitro chemosensitivity testing. Ford CH, et al. **Cancer Chemother Pharmacol** 1989;24(5):295-301

Hypoxanthine, xanthine and uridine in body fluids, indicators of ATP depletion. Harkness RA. **J Chromatogr** 1988 Jul 29;429:255-78 (87 ref.)

BLOOD

Effects of intraperitoneally applied D-galactosamine on uridine and cytidine plasma content and brain activity of uridine kinase in the rat. Staak S, et al. **Biomed Biochim Acta** 1989;48(4):325-31

CEREBROSPINAL FLUID

Cerebrospinal fluid nucleotide metabolites following short febrile convulsions. Livingston JH, et al. **Dev Med Child Neurol** 1989 Apr;31(2):161-7

Cerebrospinal fluid nucleotide metabolites following non-convulsive status epilepticus. Livingston JH, et al. **Dev Med Child Neurol** 1989 Apr;31(2):168-73

GENETICS

Trypanosomatids: mitochondrial RNA editing. Stuart K. **Exp Parasitol** 1989 May;68(4):486-90 (21 ref.)

[Natural UAG suppressor glutamine tRNA in retrovirus infected cells] Kuchino Y. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):522-9 (15 ref.) (Eng. Abstr.) (Jpn)

METABOLISM

Pyridoxal phosphate annuls acetaldehyde inhibition of uridine uptake by hepatocytes. Kakuma S, et al. **Alcohol Alcohol** 1989;24(1):31-4

Nucleoside transport in activated macrophages. Busolo F, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):354-61

Characterization of sodium-dependent nucleoside transport in rabbit intestinal brush-border membrane vesicles. Jarvis SM. **Biochim Biophys Acta** 1989 Feb 13;979(1):132-8

Na+-dependent and -independent transport of uridine and its phosphorylation in mouse spleen cells. Plagemann PG, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):315-25

The effect of MPTP on uridine uptake in murine nerve cells. Pakkenberg H, et al. **Brain Res** 1988 Sep 13;460(1):146-9

Transcripts from the frameshifted MURF3 gene from Crithidia fasciculata are edited by U insertion at multiple sites. van der Spek H, et al. **EMBO J** 1988 Aug; 7(8):2509-14

Uridylation of U6 RNA in a nuclear extract in Ehrlich ascites tumor cells. Hirai H, et al. **J Biochem (Tokyo)** 1988 Dec; 104(6):991-4

Insulin binding to human astrocytoma cells and its effect on uridine incorporation into nucleic acid. Kum W, et al. **J Neurochem** 1989 Jan;52(1):242-7

Age-related changes in the proliferative kinetics of phytohemagglutinin-stimulated lymphocytes. Analysis by uptake of tritiated precursors of DNA, RNA and proteins, and by flow cytometry. Lucivero G, et al. **Mech Ageing Dev** 1988 Jun;43(3):259-67

Sequence of a cDNA for the ND1 gene from Leishmania major: potential uridine addition in the polyadenosine tail. Campbell DA, et al. **Mol Biochem Parasitol** 1989 Sep; 36(2):197-9

Enhancement of fluorouracil therapy by the manipulation of tissue uridine pools. Darnowski JW, et al. **Pharmacol Ther** 1989;41(1-2):381-92 (114 ref.)

The flavonoid silymarin increases the permeability of rat bone marrow cells to (3H)-uridine. Garrido A, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug;61(2):273-6

[3H-thymidine and 3H-uridine incorporation into the heart cells of the freshwater crayfish Astacus astacus and the swimming crab Portunus holsatus] Martynova MG. **Tsitologiia** 1988 Oct;30(10):1251-4 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Increased 3H-uridine levels in osteocytes following a single short period of dynamic bone loading in vivo. Pead MJ, et al. **Calcif Tissue Int** 1988 Aug;43(2):92-6

PHARMACOLOGY

Chronic uridine treatment reduces the level of [3H]spiperone-labelled dopamine receptors and enhances their turnover rate in striatum of young rats: relationship to dopamine-dependent behaviours. Farabegoli C, et al. **Acta Physiol Scand** 1988 Feb;132(2):209-16

Uridine reverses the toxicity of 3'-azido-3'-deoxythymidine in normal human granulocyte-macrophage progenitor cells in vitro without impairment of antiretroviral activity. Sommadossi JP, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):997-1001

Sialic acid, galactose and fucose on the surface of Ehrlich ascites tumor cells grown in glucose-free medium in the presence of uridine. Wenzel A, et al. **Biol Chem Hoppe Seyler** 1989 Mar;370(3):205-9

Effect of uridine on hepatic galactose-1-phosphate uridyltransferase. Rogers S, et al. **Enzyme** 1989;42(1):53-60

Preclinical and clinical biochemical modulation of 5-fluorouracil by leucovorin and uridine. Peters GJ. **Sci Rep Res Inst Tohoku Univ [Med]** 1988 Dec;35(1-4):15-7 (8 ref.)

THERAPEUTIC USE

Use of oral uridine as a substitute for parenteral uridine rescue of 5-fluorouracil therapy, with and without the uridine phosphorylase inhibitor 5-benzylacyclouridine. Martin DS, et al. **Cancer Chemother Pharmacol** 1989;24(1):9-14

URIDINE DIPHOSPHATE see under **URACIL NUCLEOTIDES**

URIDINE DIPHOSPHATE N-ACETYLGALACTOSAMINE see under **URIDINE DIPHOSPHATE SUGARS**

URIDINE DIPHOSPHATE N-ACETYLGLUCOSAMINE see under **URIDINE DIPHOSPHATE SUGARS**

URIDINE DIPHOSPHATE N-ACETYLMURAMIC ACID see under **URIDINE DIPHOSPHATE SUGARS**

URIDINE DIPHOSPHATE GALACTOSE see under **URIDINE DIPHOSPHATE SUGARS**

URIDINE DIPHOSPHATE GLUCOSE see under **URIDINE DIPHOSPHATE SUGARS**

URIDINE DIPHOSPHATE GLUCOSE DEHYDROGENASE see under **CARBOHYDRATE DEHYDROGENASES**

URIDINE DIPHOSPHATE GLUCOSE EPIMERASE see under **CARBOHYDRATE ISOMERASES**

URIDINE DIPHOSPHATE GLUCURONIC ACID see under **URIDINE DIPHOSPHATE SUGARS**

URIDINE DIPHOSPHATE SUGARS

ANALYSIS

A radioassay of enzymes catalyzing the glucosylation and sulfation steps of glucosinolate biosynthesis in Brassica species. Jain JC, et al. **Anal Biochem** 1989 Apr; 178(1):137-40

BLOOD

Milk produced by mothers with galactosemia [letter; comment] Ng WG, et al. **J Pediatr** 1989 Jul;115(1):166-7 **Comment on:** J Pediatr 1988 Jul;113(1 pt 1):90-1

CHEMICAL SYNTHESIS

Synthesis of uridine 5'-(2-acetamido-2,4-dideoxy-4-fluoro-alpha-D-galactopyranosyl) diphosphate and uridine 5'-(2-acetamido-2,6-dideoxy-6-fluoro-alpha-D-glucopyranosyl) diphosphate. Thomas RL, et al. **Carbohydr Res** 1988 Dec 31;184:77-85

Synthesis and rapid purification of UDP-[6-3H]galactose. Fudem-Goldin B, et al. **J Biochem Biophys Methods** 1988 Nov;17(3):199-202

Synthesis and properties of 5-azido-UDP-glucose. Development of photoaffinity probes for nucleotide diphosphate sugar binding sites. Drake RR Jr, et al. **J Biol Chem** 1989 Jul 15;264(20):11928-33

DEFICIENCY

Effect of galactosamine-induced hepatic UDP-glucuronic acid depletion on acetaminophen elimination in rats. Dispositional differences between hepatically and extrahepatically formed glucuronides of acetaminophen and other chemicals. Gregus Z, et al. **Drug Metab Dispos** 1988 Jul-Aug;16(4):527-33

ISOLATION & PURIFICATION

Production of a streptomycin-Park nucleotide complex by Streptomyces griseus. Szabó I, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):58-62

METABOLISM

Glycogenolysis--and not gluconeogenesis--is the source of UDP-glucuronic acid for glucuronidation. Bánhegyi G, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):429-35

Interaction of uridine 5'-diphosphoglucuronic acid with microsomal UDP-glucuronosyltransferase in primate liver: the facilitating role of uridine 5'-diphospho-N-acetylglucosamine. Hauser SC, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):141-8

UDPgalactose:ceramide galactosyltransferase in cultured oligodendrocytes: an enzymological and immunological study. Neskovic NM, et al. **Int J Dev Neurosci** 1988; 6(6):535-46

Variations in UDP-N-acetylglucosamine and UDP-N-acetylmuramyl-pentapeptide pools in Escherichia coli after inhibition of protein synthesis. Mengin-Lecreulx D, et al. **J Bacteriol** 1989 Jun;171(6):3282-7

Biosynthesis of linkage units for teichoic acids in gram-positive bacteria: distribution of related enzymes and their specificities for UDP-sugars and lipid-linked intermediates. Yokoyama K, et al. **J Bacteriol** 1989 Feb; 171(2):940-6

A polarized epithelial cell mutant deficient in translocation of UDP-galactose into the Golgi complex. Brändli AW, et al. **J Biol Chem** 1988 Nov 5;263(31):16283-90

PHARMACOKINETICS

A membrane transporter mediates access of uridine 5'-diphosphoglucuronic acid from the cytosol into the endoplasmic reticulum of rat hepatocytes: implications for glucuronidation reactions. Hauser SC, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):149-57

PHARMACOLOGY

Effect of a uridine 5'-diphosphate glucose analogue on herpes simplex keratitis in rabbits and vaginal infection in guinea pigs. Vilas P, et al. **Chemotherapy** 1989;35(1):58-63

URIDINE DIPHOSPHATE XYLOSE see under **URIDINE DIPHOSPHATE SUGARS**

URIDINE KINASE see under **PHOSPHOTRANSFERASES, ATP**

URIDINE MONOPHOSPHATE see under **URACIL NUCLEOTIDES**

URIDINE PHOSPHATES see **URACIL NUCLEOTIDES**

URIDINE PHOSPHORYLASE see under **PENTOSYLTRANSFERASES**

URIDINE TRIPHOSPHATE see under URACIL NUCLEOTIDES

URINARY CALCULI

Diagnosis and management of urolithiasis [clinical conference] Fox GN, et al. **J Fam Pract** 1989 Aug; 29(2):139–41, 145–6

National Institutes of Health Consensus Development Conference on Prevention and Treatment of Kidney Stones. Bethesda, Maryland, March 28–30, 1988. **J Urol** 1989 Mar;141(3 Pt 2):705–808 (0 ref.)

The medical aspects of urolithiasis: an overview. Smith LH. **J Urol** 1989 Mar;141(3 Pt 2):707–10 (30 ref.)

[Urolithiasis. Review of present knowledge of epidemiology, pathogenesis, metaphylaxis and treatment] Hradec E. **Cas Lek Cesk** 1989 Feb 24;128(9):257–61 (32 ref.) (Eng. Abstr.) (Cze)

ANALYSIS

Analysis of magnesium and trace elements in urinary calculi by atomic absorption spectrophotometry. Durak I, et al. **Br J Urol** 1988 Sep;62(3):203–5

Adenine phosphoribosyltransferase deficiency: 2,8–dihydroxyadenine urolithiasis in a 48–year–old woman. Usenius JP, et al. **Br J Urol** 1988 Dec;62(6):521–4

Influence of calcium content in mineral water on chemistry and crystallization conditions in urine of calcium stone formers. Ackermann D, et al. **Eur Urol** 1988;14(4):305–8

Relationship between urinary stone formers age and chemical composition of urinary calculi. Raju RV, et al. **Indian J Exp Biol** 1988 Nov;26(11):915–6

A study of the incorporation of urinary macromolecules onto crystals of different mineral compositions. Morse RM, et al. **J Urol** 1989 Mar;141(3):641–4

Chronological variation in chemical composition of urinary calculi between 1965–68 and 1982–86 in north western India. Thind SK, et al. **Trop Geogr Med** 1988 Oct; 40(4):338–41

Comparison of chemical compositions of multiple or recurrent urinary stones. Takasaki E. **Urol Int** 1989; 44(3):160–5

Determination of fluoride in urinary calculi using a quantitative microdiffusion method. Wandt MA, et al. **Urol Res** 1988;16(6):431–6

[Analysis of urinary stones. Present status in Czechoslovakia] Louženský G. **Cas Lek Cesk** 1989 Feb 24;128(9):262–5 (Eng. Abstr.) (Cze)

[Are urate calculi always urates?] Usenius JP, et al. **Duodecim** 1988;104(20):1630–4 (Fin)

[A critique of chemical methods of analyzing urinary calculi] Fallah H, et al. **Tunis Med** 1989 Jan;67(1):53–6 (Eng. Abstr.) (Fre)

[Analysis of calculi with infrared spectroscopy] Heil W, et al. **Internist (Berlin)** 1988 Dec;29(12):818–23 (Ger)

[Urolithiasis. Importance of calculus and urine analysis. 3d seminar. 18 March 1988. Abstracts] **J Clin Chem Clin Biochem** 1988 Dec;26(12):837–56 (Ger)

[Study of calcium oxalate crystalluria by infrared analysis] Tozuka K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1669–72 (Eng. Abstr.) (Jpn)

[Incidence and characteristics of hypocitraturic calcium oxalate lithiasis] Grant del Río C, et al. **Actas Urol Esp** 1988 May–Jun;12(3):254–8 (Eng. Abstr.) (Spa)

[Changes in the prevalence of clinical forms of urolithiasis comparing the method of study (chemical analysis versus infrared spectroscopy)] Conte Visus A, et al. **Arch Esp Urol** 1988 Jul–Aug;41(6):415–9 (Eng. Abstr.) (Spa)

CHEMICALLY INDUCED

Cell proliferation induced by uracil–calculi and subsequent development of reversible papillomatosis in the rat urinary bladder. Shirai T, et al. **Cancer Res** 1989 Jan 15; 49(2):378–83

[13 cases of drug–induced calculi] Teillac P, et al. **Ann Urol (Paris)** 1988;22(4):278–81 (Eng. Abstr.) (Fre)

COMPLICATIONS

Corynebacterium group D2 and urolithiasis in a boy with megacalycosis. Nadal D, et al. **Infection** 1988 Jul–Aug; 16(4):245–7

Amyloid urinary–tract calculi in patients on chronic dialysis. Watanabe K, et al. **Nephron** 1989;52(4):334–7

Diverticulum of the male urethra with a giant stone and multiple calculi. Melekos MD, et al. **Urol Int** 1989; 44(3):184–6

[Incidence of obesity in childhood urolithiasis] Nečasová D, et al. **Cesk Pediatr** 1989 Jun;44(6):362–4 (Cze)

[Urinary lithiasis and infection. Apropos of 372 cases] Daghfous MS, et al. **Tunis Med** 1988 Oct;66(10):681–8 (Eng. Abstr.) (Fre)

[A case of female urethral diverticulum calculi] Ehara H, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1235–8 (14 ref.) (Eng. Abstr.) (Jpn)

[Hematuria in urolithiasis] Skadberg JE, et al. **Tidsskr Nor Laegeforen** 1988 Oct 20;108(29):2483–4 (Eng. Abstr.) (Nor)

[Indicators of blood coagulation and fibrinolytic activity of the urine in children with calculous pyelonephritis] Kanatbaeva AB, et al. **Pediatriia** 1989;(5):22–6 (Eng. Abstr.) (Rus)

[Anuria caused by obstructive lithiasis] Barajas de Frutos D, et al. **An Esp Pediatr** 1989 Jan;30(1):59–60 (Spa)

DIAGNOSIS

Urethral calculi. Shah, et al. **Arch Ital Urol Nefrol Androl** 1988 Sep;60(3):259–64

Sonographic diagnosis of an obstructing urethral calculus. Bundy AL, et al. **J Ultrasound Med** 1988 Sep;7(9):523–4

DIET THERAPY

Effect of high–calcium diet on urinary oxalate excretion in urinary stone formers. Nakada T, et al. **Eur Urol** 1988; 15(3–4):264–70

[Clinical studies of the recurrence of urolithiasis (3). Influence of sodium intake on urinary excretion of calcium, uric acid, oxalate, phosphate and magnesium] Murayama T, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1537–41 (Eng. Abstr.) (Jpn)

DRUG THERAPY

Variations in the activity of urinary inhibitors in calcium oxalate urolithiasis. Grases F, et al. **Br J Urol** 1988 Dec; 62(6):515–20

[Metaphylaxis of urolithiasis, methods and results] Kočvara R, et al. **Cas Lek Cesk** 1989 Feb 24;128(9):266–9 (Eng. Abstr.) (Cze)

[Basic studies of citrate therapy on urolithiasis—the effect of citrate on solubility of calcium oxalate crystal and on calcium deposition of murine kidney in experimental oxalate stone] Yasukawa S. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):613–9 (Eng. Abstr.) (Jpn)

[Clinical studies of citrate therapy on urolithiasis—estimations of urinary citrate excretion in patients with urolithiasis and the results of treatment with sodium–potassium citrate] Yasukawa S. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr; 79(4):620–8 (Eng. Abstr.) (Jpn)

ENZYMOLOGY

Urinary angiotensin–I–converting enzyme activity as a marker of tubulo–interstitial involvement in kidney diseases. Baggio B, et al. **Contrib Nephrol** 1989;70:208–12

EPIDEMIOLOGY

Urinary calculi in children in Western Australia: 1972–86. Jones TW, et al. **Aust Paediatr J** 1989 Apr;25(2):93–5

Pattern of urolithiasis in a general hospital. A prospective study. Khalifa MS, et al. **Int Urol Nephrol** 1989;21(1):17–24

Re: Distribution of patients with 2,8–dihydroxyadenine urolithiasis and adenine phosphoribosyltransferase deficiency in Japan [letter] Gleeson MJ, et al. **J Urol** 1989 Sep;142(3):834

Distribution of patients with 2,8–dihydroxyadenine urolithiasis and adenine phosphoribosyltransferase deficiency in Japan. Kamatani N, et al. **J Urol** 1988 Dec; 140(6):1470–2

Prevalence of urolithiasis in a Finnish district. An epidemiologic study of adults in Tampere. Nikkilä MT, et al. **Scand J Urol Nephrol** 1988;22(4):293–7

[Statistical and clinical observations of 826 stone patients] Aso Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct; 79(10):1639–45 (Eng. Abstr.) (Jpn)

[Urinary calculi in childhood] Jiménez Alvarez C, et al. **Arch Esp Urol** 1988 Nov–Dec;41(9):850–2 (Eng. Abstr.) (Spa)

ETHNOLOGY

Urolithiasis in the aboriginal—a comment. Bateson EM. **Australas Radiol** 1989 Feb;33(1):64–5

Pattern of urolithiasis in Benin City, Nigeria. Monu JU. **J Natl Med Assoc** 1989 Jun;81(6):695–8

ETIOLOGY

Role of vitamins in urolithiasis. Khanam A, et al. **Biomed Pharmacother** 1988;42(9):609–13 (25 ref.)

Calculus in urethral diverticulum formed upon a nylon suture. Frydenberg M, et al. **Br J Urol** 1988 Dec;62(6):614

The ecology and pathogenicity of urease–producing bacteria in the urinary tract. McLean RJ, et al. **CRC Crit Rev Microbiol** 1988;16(1):37–79 (315 ref.)

Cholelithiasis and urolithiasis in ileostomy patients. Giunchi F, et al. **Ital J Surg Sci** 1989;19(1):37–40

Penile encrustation due to a condom catheter. Ragi G, et al. **J Am Geriatr Soc** 1989 Feb;37(2):160–2

Hereditary xanthinuria with severe urolithiasis occurring in infancy as renal tubular acidosis and hypercalciuria. Fildes RD. **J Pediatr** 1989 Aug;115(2):277–80

The incidence of symptomatic urolithiasis in Royal Naval submariners comparison with personnel of the surface fleet. Raffaelli PI. **J R Nav Med Serv** 1988 Summer;74(2):86–94

Etiological factors in pediatric stone recurrence. Diamond DA, et al. **J Urol** 1989 Aug;142(2 Pt 2):606–8; discussion 619

Management of acute hydronephrosis of pregnancy by ureteral stenting: risk of stone formation. Goldfarb RA, et al. **J Urol** 1989 Apr;141(4):921–2

Sclerosing cholangitis and oxalate urolithiasis in ulcerative colitis. Mann NS, et al. **Tex Med** 1989 Mar;85(3):39–41

Urolithiasis after renal transplantation. Hayes JM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1960–1

Giant vesico–prostatic and prostatic calculi. Hemal AK, et al. **Trop Geogr Med** 1989 Apr;41(2):164–6

[Relative risk periods for calcium oxalate stone formation: the circadian rhythm of formation in urine] Deng YL. **Chung Hua Wai Ke Tsa Chih** 1988 Sep;26(9):555–8, 574 (Eng. Abstr.) (Chi)

[Detection of metabolic disorders as a cause of urolithiasis in clinical practice] Kočvara R, et al. **Cas Lek Cesk** 1989 Mar 3;128(10):295–8 (Eng. Abstr.) (Cze)

[Urinary calculi in children. Etiologic survey] Naoumis A, et al. **Arch Fr Pediatr** 1989 May;46(5):347–9 (Eng. Abstr.) (Fre)

[Urinary calculi in children] Morawska Z, et al. **Wiad Lek** 1988 Sep 1;41(17):1147–50 (Eng. Abstr.) (Pol)

[Prevalence of metabolic disorders in 500 urolithiasis patients in the Argentinian littoral] Ferretti JL, et al. **Arch Esp Urol** 1988 Jul–Aug;41(6):434–40 (Eng. Abstr.) (Spa)

GENETICS

[HLA in children with urinary calculi and metabolic nephropathy in an endemic region] Osmanov IM, et al. **Pediatriia** 1988;(12):89–90 (Rus)

METABOLISM

The effect of glucose intake on urine saturation with calcium oxalate, calcium phosphate, uric acid and sodium urate. Gluszek J. **Int Urol Nephrol** 1988;20(6):657–64

Amino acids in urine and plasma of urolithiasis patients. Kohri K, et al. **Int Urol Nephrol** 1989;21(1):9–16

Stone composition is no guide to strength: changing the direction of research? [letter] Ison KT, et al. **J Urol** 1989 Sep;142(3):833–4

Urinary enzymes and calcium oxalste urolithiasis. Khan SR, et al. **J Urol** 1989 Sep;142(3):846–9

[Adverse effects of drug metaphylaxis of urolithiasis] Tuíková J, et al. **Cas Lek Cesk** 1989 Mar 3;128(10):299–302 (Eng. Abstr.) (Cze)

[Clinical studies on the recurrence of urolithiasis (5). Diurnal variation in urinary pH and stone compositions] Murayama T, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1711–5 (Eng. Abstr.) (Jpn)

[The influence of dinner intake on the formation of renal stones] Iguchi M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):481–6 (Eng. Abstr.) (Jpn)

[A study of bone mineral content in patients with calcium urolithiasis by microdensitometry] Sakamoto W, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):495–500 (Eng. Abstr.) (Jpn)

[Acid–base balance of the blood and possible renal mechanisms of its imbalance in children with oxalate–phosphate stones of the urinary tract] Gontmakher VM, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):33–6 (Eng. Abstr.) (Rus)

MICROBIOLOGY

[Study on the relationship between bacteria within stones and postoperative urinary tract infection in percutaneous nephrolithotomy] Niahimura T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):283–6 (Eng. Abstr.) (Jpn)

PATHOLOGY

Infection–induced struvite urolithiasis in rats. Olson ME, et al. **Am J Pathol** 1989 Sep;135(3):581–3

[An architectural study of mixed uric acid and calcium oxalate stones by polarized light microscopy of thin section] Takeuchi H, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1529–35 (Eng. Abstr.) (Jpn)

[How to read medical journals. 3. To learn about the clinical course and prognosis of the disease] **Rev Gastroenterol Mex** 1989 Jan–Mar;54(1):61–6 (Spa)

PHYSIOPATHOLOGY

Promotive effect of urine from patients with primary hyperparathyroidism on calcium oxalate crystal aggregation in an in vitro whole urine system. Koide T, et al. **J Urol** 1988 Dec;140(6):1571–4

Urinary volume in children with urolithiasis. Miller LA, et al. **J Urol** 1989 Apr;141(4):918–20

[The influence of percutaneous nephrolithotomy on renal function evaluated by 99m–Tc–DTPA renoscintigram] Tsuboi N, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1717–21 (Eng. Abstr.) (Jpn)

[A clinical study of the influence of percutaneous nephroureterolithotomy on renal function using 99mTc–DMSA renal scintigraphy] Chiba Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep;79(9):1479–87 (Eng. Abstr.) (Jpn)

PREVENTION & CONTROL

A urinary detergent and urolithiasis. Charlton CA. **Br J Urol** 1989 Jun;63(6):561–4 (21 ref.)

Impact of allopurinol treatment on the prevention of hyperuricosuric calcium oxalate lithiasis. Hofbauer J, et al. **Eur Urol** 1988;15(3–4):227–9

Effect of magnesium and pyridoxine supplementation on glycolate induced hyperoxaluria in male albino rats. Gulati S, et al. **Indian J Exp Biol** 1988 Jul;26(7):525–7

Methionine hydroxy analog (free acid) reduces avian kidney damage and urolithiasis induced by excess dietary calcium. Wideman RF Jr, et al. **J Nutr** 1989 May;119(5):818–28

Urolithiasis inhibitors and calculus nucleation. Grases F, et al. **Urol Res** 1989;17(3):163–6

[Is it necessary to systematically reduce dietary calcium intake in lithiasic patients?] Fuss M, et al. **Acta Urol Belg** 1988;56(4):511–5 (Eng. Abstr.) (Fre)

SURGERY

Surgical overview of urolithiasis. Drach GW. **J Urol** 1989 Mar;141(3 Pt 2):711–3 (12 ref.)

Overview of surgical treatment of urolithiasis with special reference to lithotripsy. Finlayson B, et al. **J Urol** 1989 Mar;141(3 Pt 2):778–9

Urinary stones in Kelantan, Malaysia—a two year review. Lim KG, et al. **Singapore Med J** 1988 Aug;29(4):353–6

Changing surgical aspects of urinary stone disease. Brown RD, et al. **Surg Clin North Am** 1988 Oct;68(5):1085–104 (73 ref.)

[The current status and place of open surgery in treating urolithiasis] Fabricius PG, et al. **Khirurgiia (Sofiia)** 1989; 42(1):1–7 (Eng. Abstr.) (Bul)

THERAPY

Ultrasonic fragmentation in the treatment of male urethral calculi. Durazi MH, et al. **Br J Urol** 1988 Nov;62(5):443–4

Extracorporeal shockwave lithotripsy using ultrasonic imaging: urologists' experience. Kiely EA, et al. **Br J Urol** 1989 Jul;64(1):1–4

Ambulatory treatment by extracorporeal shock wave lithotripsy for an urethral stone in a hypospadic boy. Giordano DR, et al. **Child Nephrol Urol** 1988–89; 9(4):239–40

Management of upper urinary tract calculi with extracorporeal shock-wave lithotripsy. Newman DM, et al. **Compr Ther** 1989 Aug;15(8):35–40 (27 ref.)

Electrohydraulic lithotripsy for stones in Kock pouch. Chen KK, et al. **Eur Urol** 1989;16(2):110–3

Technical considerations using a pulsed neodym-YAG laser for endoscopic shock wave lithotripsy. Rassweiler J, et al. **Eur Urol** 1989;16(5):374–7

Endoscopic treatment of urinary tract calculi. Ryan PC, et al. **Ir J Med Sci** 1989 Jun;158(6):141–3

Supra-malleolar acupuncture substituting for pethidine in appeasement of renal colic. Zhang XT, et al. **J Tradit Chin Med** 1988 Dec;8(4):260–2

Current state and future developments of noninvasive treatment of human urinary stones with extracorporeal shock wave lithotripsy. Chaussy CG, et al. **J Urol** 1989 Mar;141(3 Pt 2):782–9 (121 ref.)

Flexible ultrasonic lithotriptor and fiberoptic ureterorenoscope: a new approach to ureteral calculi. Higashihara E, et al. **J Urol** 1989 Jul;142(1):40–2

Laser lithotripsy: a review of 20 years of research and clinical applications. Dretler SP. **Lasers Surg Med** 1988;8(4):341–56 (24 ref.)

A universal lithotripter for interdisciplinary use: the Siemens "Lithostar Plus". Folberth W. **Scand J Urol Nephrol Suppl** 1989;122:86–94

Second generation extracorporeal shock wave lithotripsy for treatment of urolithiasis. Tanikawa K, et al. **Tokai J Exp Clin Med** 1988 Jun;13(2):121–7

Mechanism of fragmentation of urinary stones by underwater shock wave. Kambe K, et al. **Urol Int** 1988;43(5):275–81

Morphological changes following ESWL in the rat kidney. Recker F, et al. **Urol Res** 1989;17(4):229–33

Comparison of extracorporeal shock-wave lithotripsy and surgical lithotomy regarding patient satisfaction. Bashkoff E, et al. **Urology** 1989 May;33(5):371–9

Urinary calculus: high-tech changes a urology practice. Kramolowsky EV, et al. **Va Med** 1989 Sep;116(9):368–70

[Experimental study and clinical use of extracorporeal shock wave lithotriptor with water sac] Huang ZC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):519–21 (Chi)

[Extracorporeal shock-wave lithotripsy] Hradec E, et al. **Cas Lek Cesk** 1989 Feb 24;128(9):273–80 (Eng. Abstr.) (Cze)

[Development of the treatment of urinary calculi in Belgium from 1978 to 1986] Verbaeys A. **Acta Urol Belg** 1988; 56(3):371–5 (Eng. Abstr.) (Fre)

[Cystine lithiasis and extracorporeal lithotripsy] Conort P, et al. **Ann Urol (Paris)** 1989;23(3):253–4 (Eng. Abstr.) (Fre)

[What happened at the VIth International Congress on Endourology and Extracorporeal Lithotripsy?] Le Duc A. **Ann Urol (Paris)** 1989;23(1):47–8 (Fre)

[Infection-induced urinary calculi in children; current therapeutic schedule and prevention of recurrence] Bach D, et al. **Klin Padiatr** 1988 Nov-Dec;200(6):429–33 (9 ref.) (Eng. Abstr.) (Ger)

[A new era in research and therapy of urolithiasis] Frang D. **Orv Hetil** 1988 Jul 24;129(30):1571–6 (40 ref.) (Eng. Abstr.) (Hun)

[Urolithiasis; methods and results of endoscopic lithotripsy] Reuter HJ. **Arch Ital Urol Nefrol Androl** 1988 Sep; 60(3):215–9 (28 ref.) (Eng. Abstr.) (Ita)

[Clinical application of extracorporeal microexplosive lithotripsy] Honda M, et al. **Hinyokika Kiyo** 1989 Mar; 35(3):385–92 (Eng. Abstr.) (Jpn)

[Percutaneous nephro-ureterolithotripsy in patients after urinary diversion or reconstruction using the intestine: report of 5 cases] Onishi N, et al. **Hinyokika Kiyo** 1989 Mar;35(3):393–6 (Eng. Abstr.) (Jpn)

[Clinical results of endourologic technique for upper urinary calculi] Yagishita T, et al. **Hinyokika Kiyo** 1989 Apr; 35(4):565–9 (Eng. Abstr.) (Jpn)

[An experiment for lithotripsy with an expansive splitter capsule] Kawauchi A, et al. **Iyodenshi To Seitai Kogaku** 1988 Jun;26(2):126–8 (Eng. Abstr.) (Jpn)

[Extracorporeal shock wave lithotripsy for upper urinary tract stone using piezoelectric lithotripter (Piezolith 2200)] Asakage Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):582–90 (Eng. Abstr.) (Jpn)

[Clinical experiences in the treatment of upper urinary tract stones by second generation extracorporeal shock wave lithotriptor (EDAP LT-01)] Machida T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):214–9 (Eng. Abstr.) (Jpn)

[Clinical application of third generation extracorporeal shock wave lithotriptor (TRIPTER X-1) to upper urinary tract stones] Nishimura T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):151–7 (Eng. Abstr.) (Jpn)

[Urinary calculous disease—a saga of urological field in Japan] Ohkawa T. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):311–20 (92 ref.) (Eng. Abstr.) (Jpn)

[Percutaneous nephrolithotripsy] Ohshima S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):864–7 (Eng. Abstr.) (Jpn)

[Combined treatment of a lithiasis patient by litholysis and extracorporeal lithotripsy of urinary calculi] Banchev A, et al. **Khirurgiia (Sofiia)** 1988;41(3):20–1 (Eng. Abstr.) (Rus)

[Telelithotripsy—a new trend in the treatment of urolithiasis] Lopatkin NA, et al. **Klin Med (Mosk)** 1988 Aug;66(8):3–7 (16 ref.) (Rus)

[New ultrasonic images in patients with lithiasis after undergoing extracorporeal shock wave lithotripsy] Ruiz Marcellán FJ, et al. **Arch Esp Urol** 1989 May;42(4):357–62 (Eng. Abstr.) (Spa)

[Shock wave lithotripsy—a conservative method for treatment of urinary tract calculi] Tiselius HG. **Lakartidningen** 1988 Oct 12;85(41):3366–7 (Swe)

ULTRASTRUCTURE

Fracture behavior of urinary stones under compression. Ebrahimi F, et al. **J Biomed Mater Res** 1989 May; 23(5):507–21

[Contribution of x-ray microanalysis to the study of the growth of a urinary calculus] Fakhfakh Z, et al. **Ann Urol (Paris)** 1989;23(3):183–7 (Eng. Abstr.) (Fre)

[On the role of the organic matrix in the architecture of urinary stones] Iwata H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec;79(12):1969–75 (Eng. Abstr.) (Jpn)

URINE

A correlation and path coefficient analysis of components of calciuria in normal subjects and idiopathic stone formers. Puche RC, et al. **Bone Miner** 1987 Aug;2(5):405–11

Effect of animal and vegetable protein intake on oxalate excretion in idiopathic calcium stone disease. Marangella M, et al. **Br J Urol** 1989 Apr;63(4):348–51

Stone formation and urine composition in calcium stone formers without medical treatment. Bek-Jensen H, et al. **Eur Urol** 1989;16(2):144–50

Urinary citrate excretion in patients with urolithiasis and normal subjects. Nikkilä M, et al. **Eur Urol** 1989;16(5):382–5

Oxalate measurement in the picomol range by ion chromatography: values in fasting plasma and urine of controls and patients with idiopathic calcium urolithiasis. Schwille PO, et al. **J Clin Chem Clin Biochem** 1989 Feb; 27(2):87–96

Does hyperuricosuria play a role in calcium oxalate lithiasis? Ettinger B. **J Urol** 1989 Mar;141(3 Pt 2):738–41 (49 ref.)

Re: Specific gravity test strips used in monitoring urine concentrations of urolithiasis patients [letter] Haddad FS. **J Urol** 1989 May;141(5):1213

Uric acid and its relationship with glycosaminoglycans in normal and stone-former subjects. Conte A, et al. **Nephron** 1989;52(2):162–5

Urinary glycosaminoglycan excretion in normal and stone-forming subjects: significant disturbance in recurrent stone formers. Nikkilä MT. **Urol Int** 1989;44(3):157–9

Problems related to the measurement of crystallization conditions in whole urine. Report from a workshop. November 25, 1988, Basle. **Urol Res** 1989;17(3):143–51

Measurement of urinary supersaturation, creation of standard supersaturations. Ackermann D, et al. **Urol Res** 1989; 17(3):144–6

The importance of crystallization processes in understanding of stone formation [editorial] Baumann JM. **Urol Res** 1989; 17(3):141

Studies of urinary calcium oxalate crystallization in clinical research. Baumann JM. **Urol Res** 1989;17(3):143–4

The relation between orthophosphate and pyrophosphate in normal subjects and in patients with urolithiasis. Conte A, et al. **Urol Res** 1989;17(3):173–5

Some methods to monitor crystallization in full-concentration urine. Tiselius HG. **Urol Res** 1989; 17(3):146–7

Problems with kinetic crystallization tests in whole urine. Tiselius HG. **Urol Res** 1989;17(3):148–9

[Clinical studies of the recurrence of urolithiasis (4). Crystal formation in urine and stone recurrence] Murayama T, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1543–7 (Eng. Abstr.) (Jpn)

[Study on metastable limit of calcium oxalate in whole urine using an aggregometer] Ebisuno S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1646–52 (Eng. Abstr.) (Jpn)

[Evaluation of fasting spot urine collected from 7A.M. to 11A.M. in patients with urolithiasis] Katoh Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):547–51 (Eng. Abstr.) (Jpn)

[Urinary calcium and phosphorus excretion and their relationship in calcium-containing urinary stone formers] Kitamura T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):197–203 (Eng. Abstr.) (Jpn)

[Clinical significance of phosphaturia] Tozuka K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):700–3 (Eng. Abstr.) (Jpn)

[Urine saturation with calcium oxalate in urolithiasis] Bogado CE, et al. **Medicina (B Aires)** 1988;48(1):39–44 (Eng. Abstr.) (Spa)

VETERINARY

Influence of dietary mineral imbalance on the incidence of urolithiasis in Egyptian calves. Ahmed AS, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):73–7

An outbreak of urolithiasis in single-comb white Leghorn pullets. Fitz-Coy SH, et al. **Avian Dis** 1988 Jul-Sep; 32(3):563–6

Struvite urolithiasis in cats [letter] Buffington T. **J Am Vet Med Assoc** 1989 Jan 1;194(1):7–8

Effect of dietary acidification and alkalinization on urolith formation and renal function in Single Comb White Leghorn laying hens. Glahn RP, et al. **Poult Sci** 1988 Dec; 67(12):1694–701

Surgical management of urolithiasis. DeBowes RM. **Vet Clin North Am [Equine Pract]** 1988 Dec;4(3):461–71 (26 ref.)

Relationship of nutritional factors to the cause, dissolution, and prevention of feline uroliths and urethral plugs. Osborne CA, et al. **Vet Clin North Am Small Anim Pract** 1989 May; 19(3):561–81 (49 ref.)

Relationship of nutritional factors to the cause, dissolution, and prevention of canine uroliths. Osborne CA, et al. **Vet Clin North Am Small Anim Pract** 1989 May; 19(3):583–619 (88 ref.)

Urate urolithiasis in bulldogs [letter] Davies M. **Vet Rec** 1989 Jul 1;125(1):26

URINARY CATHETERIZATION

Biocompatible copolymer ureteral stent: maintenance of patency beyond 6 months. Rackson ME, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):783–4

Catheter malposition during cystography: a cause of diagnostic errors. Zerin JM, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):363–7

Urine sampling in ambulatory women: midstream clean-catch versus catheterization. Walter FG, et al. **Ann Emerg Med** 1989 Feb;18(2):166–72

Acute urinary retention: which catheter? [letter] Payne-James J, et al. **Ann R Coll Surg Engl** 1989 Mar; 71(2):145

168 double J (pigtail) ureteric catheter insertions: a retrospective review. Smedley FH, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):377–9

Intermittent catheterisation for neuropathic urinary incontinence. de la Hunt MN, et al. **Arch Dis Child** 1989 Jun;64(6):821–4

Pyuria: its relationship to bacteriuria in spinal cord injured patients on intermittent catheterization. Gribble MJ, et al. **Arch Phys Med Rehabil** 1989 May;70(5):376–9

The use of biofeedback in a behavioral program designed to teach an anxious child self-catheterization. Gil KM, et al. **Biofeedback Self Regul** 1988 Dec;13(4):347–55

The accuracy of measurement of residual urine in women by urethral catheterisation. Haylen BT, et al. **Br J Urol** 1989 Feb;63(2):152–4

Trial without catheter following acute retention of urine. Taube M, et al. **Br J Urol** 1989 Feb;63(2):180–2

Methods for deflating retained urinary catheters. Garrett JP. **Clin Radiol** 1989 May;40(3):319

Evaluation of diagnostic criteria for bacteriuria in acutely spinal cord injured patients undergoing intermittent catheterization. Gribble MJ, et al. **Diagn Microbiol Infect Dis** 1988 Apr;9(4):197–206

Genitourinary imaging and procedures by the emergency physician. Neuwirth H, et al. **Emerg Med Clin North Am** 1989 Feb;7(1):1–28 (23 ref.)

Postoperative prophylaxis with norfloxacin in patients requiring bladder catheters. Verbrugh HA, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):490–4

Study of information given by nurses for catheter care to patients and their carers. Roe BH. **J Adv Nurs** 1989 Mar;

14(3):203–10

Enzymatic degradation of urinary indoxyl sulfate by Providencia stuartii and Klebsiella pneumoniae causes the purple urine bag syndrome. Dealler SF, et al. **J Clin Microbiol** 1988 Oct;26(10):2152–6

Calcium environment in encrusting deposits from urinary catheters investigated by interpretation of EXAFS spectra. Hukins DW, et al. **J Inorg Biochem** 1989 Jun;36(2):141–8

Re: Effect of silver oxide/trichloroisocyanuric acid antimicrobial urinary drainage system on catheter-associated bacteriuria [letter] Burke HB. **J Urol** 1989 May;141(5):1213

Intermittent difficulty with catheterization of Indiana continent urinary reservoir: use of flexible ureteroscope. Chin JL, et al. **J Urol** 1989 Aug;142(2):371

Radiographic assessment of the vesicourethral anastomosis directing early decatheterization following nerve-sparing radical retropubic prostatectomy. Dalton DP, et al. **J Urol** 1989 Jan;141(1):79–81

Potential pitfalls in the obstructive renal scan in patients with double-pigtail ureteral catheters. Greenstein A, et al. **J Urol** 1989 Feb;141(2):283–4

Re: Suppression and treatment of urinary tract infection in patients with an intermittently catheterized neurogenic bladder [letter] Kilbourn JP. **J Urol** 1988 Dec;140(6):1558

Ureteral stenting during extracorporeal shock wave lithotripsy: help or hindrance? Preminger GM, et al. **J Urol** 1989 Jul;142(1):32–6

The accuracy of a catheterized residual urine. Stoller ML, et al. **J Urol** 1989 Jan;141(1):15–6

Priorities in urinary diversion following pyeloplasty. Wollin M, et al. **J Urol** 1989 Aug;142(2 Pt 2):576–8; discussion 603–5

Penile prosthesis as an adjunct to intermittent self-catheterization in patients with neuropathic bladders [letter] Weinberg JJ, et al. **N Y State J Med** 1989 Jun; 89(6):363

An appraisal of antibiotic policies for urinary tract infections in patients with spinal cord injuries undergoing long-term intermittent catheterisation. Stickler DJ, et al. **Paraplegia** 1988 Aug;26(4):215–25 (44 ref.)

Intermittent catheterisation versus percutaneous suprapubic cystostomy in the early management of traumatic spinal cord lesions [letter] Wyndaele JJ. **Paraplegia** 1988 Oct; 26(5):359–62

Clean, intermittent catheterization of infants with neurogenic bladder. Joseph DB, et al. **Pediatrics** 1989 Jul;84(1):78–82

Teaching catheterization to children. Hannigan K, et al. **Urol Clin North Am** 1988 Nov;15(4):653–60 (14 ref.)

Incidental extraction of double pigtail catheter during nephrostomy removal. Greenstein A, et al. **Urol Radiol** 1989;11(2):121–2

Spontaneous versus intubated flow in male patients. Lose G, et al. **Urology** 1988 Dec;32(6):553–6

Method of temporary leg restraint to prevent catheter manipulation following transurethral prostatectomy. Redman JF, et al. **Urology** 1988 Dec;32(6):543

[The patient with a long-term indwelling catheter] Cools HJ. **Tijdschr Gerontol Geriatr** 1989 Feb;20(1):29–31 (Eng. Abstr.) **(Dut)**

[Technical problems raised by renal puncture in the percutaneous extraction of coralliform calculi] Cornud F, et al. **Ann Urol (Paris)** 1989;23(1):65–73 (Eng. Abstr.) **(Fre)**

[Experience with non-aseptic intermittent self-catheterization] Hirano A, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1751–6 (Eng. Abstr.) **(Jpn)**

[Bacterial and clinical studies of disinfectants for self-catheterization] Esa A, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1663–8 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Polyvinilpyrrolidone-iodine (P.V.P.-I) bladder irrigation for prevention of catheter-associated urinary infections in patients treated by T.U.R. Giannoni R, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):63–7

A technique for the removal of retained balloon bladder catheters [letter] Bisset R. **Br J Radiol** 1988 Oct; 61(730):977–8

Minimally invasive surgery for the retrieval of complex fractured double J stents. Chapple CR, et al. **Br J Surg** 1989 Jul;76(7):680

Ureteroscopic removal of a retained "T" tube fragment. Anderson JH, et al. **Br J Urol** 1989 Jul;64(1):105

Urethral stricture following aortic graft surgery. Ferrie BG, et al. **Br J Urol** 1989 Aug;64(2):162–4

Histological changes in the urinary bladder secondary to urethral catheterisation. Goble NM, et al. **Br J Urol** 1989 Apr;63(4):354–7

Urethral strictures following transurethral resection of the prostate. The role of the catheter. Hammarsten J, et al. **Br J Urol** 1989 Apr;63(4):397–400

Incidence and importance of bacteriuria in postoperative, short-term urinary catheterization. Nickel JC, et al. **Can J Surg** 1989 Mar;32(2):131–2

Urinary retention due to catheter occlusion by worms. Ginesin Y, et al. **Eur Urol** 1989;16(4):306–7

Bladder catheter knotting: a case report. Goetting MG. **Henry Ford Hosp Med J** 1988;36(4):191–2

Catheter-associated urinary tract infections. Warren JW. **Infect Dis Clin North Am** 1987 Dec;1(4):823–54 (202 ref.)

Penile encrustation due to a condom catheter. Ragi G, et al. **J Am Geriatr Soc** 1989 Feb;37(2):160–2

Prevention of catheter-associated gram-negative bacilluria with norfloxacin by selective decontamination of the bowel and high urinary concentration. Vollaard EJ, et al. **J Antimicrob Chemother** 1989 Jun;23(6):915–22

The role of antiseptics in the management of patients with long-term indwelling catheters. Seal DV, et al. **J Hosp Infect** 1988 Nov;12(4):334–8

Antibiotic prophylaxis in transurethral resection of the prostate with reference to the influence of preoperative catheterization. Taylor EW, et al. **J Hosp Infect** 1988 Aug; 12(2):75–83

Amdinocillin treatment of catheter-associated bacteriuria in rabbits. Olson ME, et al. **J Infect Dis** 1989 Jun; 159(6):1065–72

Acute pyelonephritis associated with bacteriuria during long-term catheterization: a prospective clinicopathological study. Warren JW, et al. **J Infect Dis** 1988 Dec;158(6):1341–6

Morbidity associated with indwelling internal ureteral stents after shock wave lithotripsy. Bregg K, et al. **J Urol** 1989 Mar;141(3):510–2

High failure rate of indwelling ureteral stents in patients with extrinsic obstruction: experience at 2 institutions. Docimo SG, et al. **J Urol** 1989 Aug;142(2):277–9

Perforation of the augmented bladder in patients undergoing clean intermittent catheterization. Elder JS, et al. **J Urol** 1988 Nov;140(5 Pt 2):1159–62

Vascular complications of transurethral incision of post-traumatic urethral strictures. Gary R, et al. **J Urol** 1988 Dec;140(6):1539–40

Erosion of penile prostheses: a complication of urethral catheterization. Steidle CP, et al. **J Urol** 1989 Sep; 142(3):736–9

Candidal antigenemia: a prognostic determinant. Suits T, et al. **J Urol** 1989 Jun;141(6):1381–4

Penile necrosis caused by condom catheter. Rehman M, et al. **JPMA** 1988 Jul;38(7):193–4

Urinary catheters after total joint replacement surgery [letter] Musher DM. **N Engl J Med** 1988 Dec 15;319(24):1612

Short term urethral catheterization. Bakke A. **Scand J Urol Nephrol Suppl** 1988;110:303–6

Renal calculi in spinal cord-injured patient: association with reflux, bladder stones, and foley catheter drainage. Hall MK, et al. **Urology** 1989 Sep;34(3):126–8

[Tissue toxicity of urinary catheters] Talja M, et al. **Duodecim** 1989;105(13–14):1252–9 (32 ref.) **(Fin)**

[Bladder infection due to long-term indwelling catheters] Seiler WO, et al. **Ther Umsch** 1989 Jan;46(1):35–42 (81 ref.) (Eng. Abstr.) **(Ger)**

[Prospective study for the evaluation and prophylaxis of urinary tract infections, secondary to the intravesicular instillation of cytostatics] Ojea A, et al. **Actas Urol Esp** 1989 May-Jun;13(3):204–6 (Eng. Abstr.) **(Spa)**

[Kidney pelvis calcification around a double-J ureteral catheter which was impossible to extract. Apropos of a case] Picurelli L, et al. **Actas Urol Esp** 1989 Mar-Apr; 13(2):142–3 (Eng. Abstr.) **(Spa)**

HISTORY

Therapeutic milestones. The Foley catheter. Ellis H. **Br J Clin Pract** 1988 Jun;42(6):248–9

INSTRUMENTATION

Does urinary catheter temperature reflect core temperature during cardiac surgery? Horrow JC, et al. **Anesthesiology** 1988 Dec;69(6):986–9

Determination of intra-abdominal pressure using a transurethral bladder catheter: clinical validation of the technique. Iberti TJ, et al. **Anesthesiology** 1989 Jan; 70(1):47–50

Acute urinary retention: which catheter? Allardice JT, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):366–8

168 double J (pigtail) ureteric catheter insertions: a retrospective review [letter] Kirkali Z. **Ann R Coll Surg Engl** 1989 Mar;71(2):146

Hydrogel coating of urinary catheters [letter] Haindl, et al. **Biomaterials** 1989 Apr;10(3):215

Difficulty in removing a suprapubic catheter. Divers MJ, et al. **Br J Urol** 1989 Jul;64(1):105–6

Biocompatibility of urinary catheters. Effect on complement activation. Garred P, et al. **Br J Urol** 1989 Apr;63(4):367–71

Volatile N-nitrosamines in urinary catheters. Heenan MP, et al. **Br J Urol** 1989 Jan;63(1):72–5

Catheters: a knotty problem! Jones DJ, et al. **Br J Urol** 1989 Aug;64(2):198–9

Evaluation of the retrograde contamination guard in a bacteriologically challenged rabbit model. Khoury AE, et al. **Br J Urol** 1989 Apr;63(4):384–8

Bladder catheters and zinc contamination of urine. de Haan KE, et al. **Clin Chem** 1989 May;35(5):888

Ureteral stone extraction with the Steffens lasso loop. A neglected procedure. Steffens J, et al. **Eur Urol** 1988; 15(3–4):223–6

Urethral closure function after total and subtotal hysterectomy measured by urethrocystometry. Kujansuu E, et al. **Gynecol Obstet Invest** 1989;27(2):105–6

A handy mirror for self-catheterization in female patients. Yokoyama M, et al. **Hinyokika Kiyo** 1989 Mar;35(3):397–8

Blockage of urinary catheters: role of microorganisms and constituents of the urine on formation of encrustations. Kunin CM. **J Clin Epidemiol** 1989;42(9):835–42

Purple urine bags. Dealler SF, et al. **J Urol** 1989 Sep; 142(3):769–70

The use of the Magnetip double-J ureteral stent in urological practice. Macaluso JN Jr, et al. **J Urol** 1989 Sep; 142(3):701–3

Experience with a new self-retaining intraurethral catheter in patients with urinary retention: a preliminary report. Nissenkorn I. **J Urol** 1989 Jul;142(1):92–4

Re: Spontaneous rupture of the renal collecting system during pregnancy: successful management with a temporary ureteral catheter [letter] Papoff PM. **J Urol** 1989 Sep; 142(3):829

Microwave sterilization: a method for home sterilization of urinary catheters. Silbar EC, et al. **J Urol** 1989 Jan; 141(1):88–90

Double-J ureteral catheters in gynecologic surgery. Pettit PD. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):536–40

Knotting of a bladder catheter. Kanengiser S, et al. **Pediatr Emerg Care** 1989 Mar;5(1):37–9

Influence of drainage conditions on mucosal bladder damage by indwelling catheters. I. Pressure study. Glahn BE. **Scand J Urol Nephrol** 1988;22(2):87–92

Influence of drainage conditions on mucosal bladder damage by indwelling catheters. II. Histological study. Glahn BE, et al. **Scand J Urol Nephrol** 1988;22(2):93–9

Effects of indwelling catheters on the urethral mucosa (polypoid urethritis). Norlén LJ, et al. **Scand J Urol Nephrol** 1988;22(2):81–6

Use of urethral drainage tube and dressings in hypospadias repair. Cabral BH, et al. **Urology** 1989 Apr;33(4):327–8

New apparatus to reduce urinary drainage associated with urinary tract infections. al-Juburi AZ, et al. **Urology** 1989 Feb;33(2):97–101

Six-microtransducer catheter connected to computer in evaluation of urethral closure function of women. Kauppila A, et al. **Urology** 1989 Feb;33(2):159–64

Suprapubic cystotomy: a new device. Lyon RP. **Urology** 1988 Oct;32(4):350–1

Variation on Water-Pik technique for treatment of steinstrasse after ESWL. Rubenstein MA, et al. **Urology** 1988 Nov;32(5):429–30

A new antegrade ureteral stent. Seidmon EJ. **Urology** 1989 Sep;34(3):162–3

Design and use of externally-draining ureteral stent. Towers RJ. **Urology** 1988 Dec;32(6):532–4

Use of retrograde lavage catheter during ESWL treatments. Whelan JP, et al. **Urology** 1989 Jan;33(1):31–6

[Fabian's spiral endoprostatic prosthesis] Garbit JL, et al. **J Urol (Paris)** 1988;94(5–6):265–7 (Eng. Abstr.) **(Fre)**

[The urologic spirale: a therapeutic possibility in the treatment of prostatic carcinoma] Roth S, et al. **J Urol (Paris)** 1988;94(5–6):261–3 (Eng. Abstr.) **(Fre)**

[The status of intermittent self catheterization in the long-term management of paraplegic patients] Göcking K, et al. **Z Urol Nephrol** 1988 Sep;81(9):575–80 (Eng. Abstr.) **(Ger)**

[Double-J catheter: spontaneous rupture] Martínez Bengoechea J, et al. **Actas Urol Esp** 1989 Jan-Feb; 13(1):56–9 (Eng. Abstr.) **(Spa)**

[Early calculogenesis caused by ureolytic infection of the double-J ureteral catheter] Prats López J, et al. **Arch Esp Urol** 1989 Jan-Feb;42(1):47–8 (Eng. Abstr.) **(Spa)**

METHODS

Clean intermittent catheterization in congenital neurogenic bladder. Opsomer RJ, et al. **Acta Urol Belg** 1989; 57(2):537–43

Bladder irrigation. Rao GG, et al. **Age Ageing** 1988 Nov; 17(6):374–8 (51 ref.)

Percutaneous, large-bore, suprapubic cystostomy: technique and results. Papanicolaou N, et al. **AJR** 1989 Feb; 152(2):303–6

A new technique for complete temporary occlusion of the ureter. Castañeda F, et al. **AJR Am J Roentgenol** 1989 Jul; 153(1):81–2

The mythical danger of rapid urinary drainage. Bristoll SL, et al. **Am J Nurs** 1989 Mar;89(3):344–5

Accuracy of total bladder volume and residual urine measurements: comparison between real-time ultrasonography and catheterization. Mainprize TC, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):1013–6

Flexible urethroscopy: use in difficult male catheterisation. Krikler SJ. **Ann R Coll Surg Engl** 1989 Jan;71(1):3

Once-daily irrigation of long-term urethral catheters with normal saline. Lack of benefit. Muncie HL Jr, et al. **Arch Intern Med** 1989 Feb;149(2):441–3

Bladder drainage: a survey of practices among gynaecologists in the British Isles. Hilton P. **Br J Obstet Gynaecol** 1988 Nov;95(11):1178–89

Tethered ureteric stents—a clinical assessment. Birch BR, et al. **Br J Urol** 1988 Nov;62(5):409–11

Antiseptics in the long-term urological management of patients by intermittent catheterisation. Chawla JC, et al. **Br J Urol** 1988 Oct;62(4):289–94 (42 ref.)

Suprapubic catheterisation. Lawrence WT, et al. **Br J Urol** 1989 Apr;63(4):443

Preoperative intermittent catheterization in patients with prostatic hypertrophy. Furuhata A, et al. **Clin Ther** 1988; 10 Spec No:47–51

Percutaneous antegrade dilatation of distal ureteral strictures and obstructions. Göthlin JH, et al. **Eur J Radiol** 1988 Nov; 8(4):217–20

Method for securing a single-lumen urethral catheter in the female. Kaver I, et al. **Eur Urol** 1989;16(4):304–5

Intermittent urethral catheterization in the elderly. Terpenning MS, et al. **J Am Geriatr Soc** 1989 May; 37(5):411–6

Guidelines on urethral catheterization. The Hospital Infection Control Group of Thailand. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:70–1

Intermittent clean self-catheterization in clients with neurogenic bladder resulting from multiple sclerosis. Henderson JS. **J Neurosci Nurs** 1989 Jun;21(3):160–4

Re: A Serious Complication of Vesical Ether Instillation: Ether Cystitis [letter; comment] Aragona F, et al. **J Urol** 1989 Jul;142(1):141. **Comment on:** J Urol 1988 Feb;139(2):357–8

A technique for immediate realignment and catheterization of the disrupted prostatomembranous urethra. Gelbard MK, et al. **J Urol** 1989 Jul;142(1):52–5

Open catheter drainage after urethral surgery. Montagnino BA, et al. **J Urol** 1988 Nov;140(5 Pt 2):1250–2

Use of the external condom catheter to secure a temporary balloonless urethral catheter. Strub MD, et al. **J Urol** 1989 Mar;141(3):579

Supra-pubic catheterization. Tariq S, et al. **JPMA** 1989 Feb; 39(2):56–8

Urinary tract catheterization protocols following total joint arthroplasty. Ritter MA, et al. **Orthopedics** 1989 Aug; 12(8):1085–7

A swing to intermittent clean self-catheterisation as a preferred mode of management of the neuropathic bladder for the dextrous spinal cord patient. Hill VB, et al. **Paraplegia** 1988 Dec;26(6):405–12

Anastomosed ureters: fluoroscopically guided transconduit retrograde catheterization. Banner MP, et al. **Radiology** 1989 Jan;170(1 Pt 1):45–9

[Endoscopically "impassable" urethral stenosis. Catheterization under fluoroscopic guidance. Apropos of 11 cases] Sibert A, et al. **Ann Urol (Paris)** 1989;23(1):39–42 (Eng. Abstr.) **(Fre)**

[Ureteral flushing] Vallancien G, et al. **Ann Urol (Paris)** 1989; 23(2):137–9 (Eng. Abstr.) **(Fre)**

[10 years' experience with intermittent catheterization in neurogenic bladder in children and adolescents: study of 165 cases] Gounot E, et al. **Pediatrie** 1988;43(5):441–5 (Eng. Abstr.) **(Fre)**

[Intermittent catheterization in children with neurogenic bladder] Pilling L. **Padiatr Grenzgeb** 1989;28(3):157–62 (Eng. Abstr.) **(Ger)**

[Our experience with suprapubic urinary drainage using Bonanno's catheter in the correction of hypospadias] Gesmundo R, et al. **Minerva Pediatr** 1988 May;40(5):277–8 (Eng. Abstr.) **(Ita)**

[Endourethral drainage of the bladder in patients with prostatic adenoma] Lopatkin NA, et al. **Urol Nefrol (Mosk)** 1989 May-Jun;(3):5–7 (Eng. Abstr.) **(Rus)**

[Endoureteropyelotomy in impassable stenosis of the pyeloureteral junction: instrumental conversion of the stenosis into an intrapelvic ureterocele] Santiago González de Garibay AM, et al. **Actas Urol Esp** 1989 Mar-Apr; 13(2):134–6 (Eng. Abstr.) **(Spa)**

NURSING

Indwelling catheterization and related nursing practice. Crow R, et al. **J Adv Nurs** 1988 Jul;13(4):489–95

PSYCHOLOGY

[Don't neglect physical and psychological integrity during urinary catheterization of children and adolescents] Soback S, et al. **Lakartidningen** 1989 Apr 12;86(15):1361–2 **(Swe)**

UTILIZATION

The prevalence of urethral catheterization in Maryland nursing homes. Warren JW, et al. **Arch Intern Med** 1989 Jul;149(7):1535–7

VETERINARY

A technique for catheterization and cystoscopic evaluation of cynomolgus monkey urinary bladders. Bahnson RR, et al. **Lab Anim Sci** 1988 Dec;38(6):731–3

Long-term catheterization of the rat ureter. Oz MC, et al. **Lab Anim Sci** 1989 Jul;39(4):349–50

URINARY DIVERSION

Voiding pattern, urinary volume, composition and bacterial contamination in patients with urinary diversion via a continent ileal reservoir. Akerlund S, et al. **Br J Urol** 1989 Jun;63(6):619–23

Bladder replacement by ileocaeco-urethrostomy or ileo-urethrostomy with a reservoir after cystoprostato-vesiculectomy for bladder cancer. A functional evaluation. Alcini E, et al. **Br J Urol** 1989 Jan; 63(1):36–42

Lack of effect of cholinergic blocking and alpha-adrenergic stimulation on nocturnal incontinence after ileocaecal bladder replacement. A controlled randomised study. Jakobsen H, et al. **Br J Urol** 1989 Apr;63(4):379–83

Effect of atropine and terbutaline on motor activity of the continent caecal reservoir for urine. Månsson W, et al. **Br J Urol** 1989 Apr;63(4):375–8

Three years' experience with an ileal low pressure bladder substitute. Studer UE, et al. **Br J Urol** 1989 Jan;63(1):43–52

Undiversion in patients with meningomyelocele. Stewart D, et al. **Can J Surg** 1989 May;32(3):214–7

Transitional cell carcinoma in an ileal conduit. Rosvanis TK, et al. **Cancer** 1989 Mar 15;63(6):1233–6 (8 ref.)

Urinary diversion. A continuing challenge [editorial] Whitmore WF Jr. **Cleve Clin J Med** 1989 Jan-Feb; 56(1):53–4

Ileocoecal augmentation and orthotopic bladder replacement in the management of urinary bladder injury following multiple trauma. Mráz Z, et al. **Casch Med** 1989;12(1):22–9

Radical cystectomy for transitional cell carcinoma of the bladder. Long-term survival in high risk patients. Burnett AL, et al. **Eur Urol** 1988;15(3–4):171–5

Electrohydraulic lithotripsy for stones in Kock pouch. Chen KK, et al. **Eur Urol** 1989;16(2):110–3

Improved technique of tubeless cutaneous ureterostomy and results of permanent urinary diversion. Hirokawa M, et al. **Eur Urol** 1989;16(2):125–32

Urinary diversion in gynecologic malignancies. Janetschek G, et al. **Eur Urol** 1988;14(5):371–6

Urine from continent caecal reservoirs. Studies on chemical composition and bacterial growth. Månsson W, et al. **Eur Urol** 1989;16(1):18–22

Single-stage salvage cystectomy: results and complications in 20 patients. Nurmi M, et al. **Eur Urol** 1989;16(2):89–91

Prognosis of bladder cancer. III. The value of radical cystectomy in the management of invasive bladder cancer. Pagano F, et al. **Eur Urol** 1988;15(3–4):166–70

Histological and histochemical changes in the colon mucosa after ureterosigmoidostomy or colonic conduit. Tomasino RM, et al. **Eur Urol** 1988;15(3–4):248–51

Adenocarcinoma in exstrophy and defunctional ureterosigmoidostomy. Krishnamsetty RM, et al. **J Ky Med Assoc** 1988 Aug;86(8):409–14 (27 ref.)

Nutritional consequences of bowel segments in the lower urinary tract. Canning DA, et al. **J Urol** 1989 Aug;142(2 Pt 2):509–11; discussion 520–1

Intermittent difficulty with catheterization of Indiana continent urinary reservoir: use of flexible ureteroscope. Chin JL, et al. **J Urol** 1989 Aug;142(2):371

Functional and pharmacological effects of ureteral diversion. Chun AL, et al. **J Urol** 1989 Feb;141(2):403–7

Strictures in the ileal portion of ileocecal conduits in children and young adults. Horton CE Jr, et al. **J Urol** 1989 Jan; 141(1):120–2

A comparison of renal function in the exstrophy patient treated with staged reconstruction versus urinary diversion. Husmann DA, et al. **J Urol** 1988 Nov;140(5 Pt 2):1204–6

Replacement of the bladder by the urethral Kock pouch: functional results, urodynamics and radiological features. Kock NG, et al. **J Urol** 1989 May;141(5):1111–6

Comparison of muscarinic cholinergic and alpha adrenergic receptors in canine ileum, colon, intestinal urinary reservoirs and bladder. Lepor H, et al. **J Urol** 1989 Jul; 142(1):204–8

Urodynamic studies in patients undergoing bladder replacement surgery. Lytton B, et al. **J Urol** 1989 Jun; 141(6):1394–7

The split-cuff ureteral nipple reimplantation technique: reliable reflux prevention from bowel segments. Stone AR, et al. **J Urol** 1989 Sep;142(3):707–9

Renal transplantation into the reconstructed bladder. Thomalla JV, et al. **J Urol** 1989 Feb;141(2):265–8

The management of chronic interstitial cystitis by substitution cystoplasty. Webster GD, et al. **J Urol** 1989 Feb; 141(2):287–91

Effect of sulfate on calcium and magnesium homeostasis following urinary diversion. McDougal WS, et al. **Kidney Int** 1989 Jan;35(1):105–15

Continent urinary diversion for improved quality of life. Javadpour N. **Md Med J** 1989 Apr;38(4):295

A functional evaluation of ileocaecourethrostomy and ileourethrostomy with a reservoir after a total cystectomy for cancer. Alcini E, et al. **Prog Clin Biol Res** 1989; 303:815–20

Dissection of the prostatic apex for radical cystectomy and detubed ileocystoplasty. Camey M, et al. **Prog Clin Biol Res** 1989;303:799–802

Bladder replacement by detubed ileo-caecal graft after radical cystectomy. Le Guillou M, et al. **Prog Clin Biol Res** 1989;303:811

Bladder substitution with an ileal low-pressure reservoir. Studer UE. **Prog Clin Biol Res** 1989;303:803–9

Role of the Kock pouch in adolescent urology. Cumming J, et al. **Prog Pediatr Surg** 1989;23:126–34

Anastomosed ureters: fluoroscopically guided transconduit retrograde catheterization. Banner MP, et al. **Radiology** 1989 Jan;170(1 Pt 1):45–9

Transrenal ureteral occlusion with Gianturco coils and gelatin sponge. Gaylord GM, et al. **Radiology** 1989 Sep; 172(3 Pt 2):1047–8

Mucins obtained from patients with enterocutaneous urinary diversions. Mårtensson S, et al. **Scand J Clin Lab Invest** 1988 Nov;48(7):633–40

Continent urinary reservoirs. Rowland RG. **Surg Clin North Am** 1988 Oct;68(5):891–907 (17 ref.)

Surgical management of urinary incontinence in children. Snyder HM 3d. **Surg Clin North Am** 1988 Oct;68(5):909–43 (109 ref.)

Revision of urinary diversion and renal transplantation. Chin JL, et al. **Transplant Proc** 1989 Apr;21(2):3321–2

Migrating suture masquerading as a renal pelvic carcinoma: an unusual complication of the Kock pouch. Klotz LH, et al. **Urol Radiol** 1989;11(2):100–1

Absorption of L-phenylalanine in human ileal reservoirs exposed to urine. Akerlund S, et al. **Urol Res** 1988; 16(4):321–3

Prospective study of metabolic abnormalities in patient with continent Kock pouch urinary diversion. Boyd SD, et al. **Urology** 1989 Feb;33(2):85–8

Intravenous papaverine in constructing continent urinary reservoir. Malkowicz SB, et al. **Urology** 1989 May; 33(5):431–2

Posterior urethral valves. Role of temporary and permanent urinary diversion. Mininberg DT, et al. **Urology** 1989 Mar; 33(3):205–8

Ileal conduit in era of systemic chemotherapy. Wishnow KI, et al. **Urology** 1989 May;33(5):358–60

Is there a safe intravesical use of 10% formalin? Zimmern PE, et al. **Urology** 1989 Jul;34(1):50

Has vesicostomy a role in the neuropathic bladder? Connolly B, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:17–8

[Diffuse urothelial tumor. Treatment by bilateral nephro-ureterectomy, cystoprostatectomy, renal autotransplantation with cutaneous trans-ileal pyelostomy. Results after 6 years] Boudjema K, et al. **Ann Urol (Paris)** 1989;23(1):35–8 (Eng. Abstr.) **(Fre)**

[Bladder substitute realized by means of an ileal segment] Studer UE, et al. **J Urol (Paris)** 1988;94(5–6):273–7 (25 ref.) (Eng. Abstr.) **(Fre)**

[A variant of continent cystostomy according to Mitrofanoff of the neurogenic bladder] Bono AV, et al. **Arch Ital Urol Nefrol Androl** 1988 Sep;60(3):307–11 (Eng. Abstr.) **(Ita)**

[Problems in surgical repair of ureteral injuries in the irradiated pelvis] Cosciani Cunico S, et al. **Arch Ital Urol Nefrol Androl** 1988 Dec;60(4):387–406 (Eng. Abstr.) **(Ita)**

[Bladder exstrophy: a neonatal emergency. II: Urinary diversion] Belloli G, et al. **Pediatr Med Chir** 1989 Mar-Apr; 11(2):113–8 (Eng. Abstr.) **(Ita)**

[Colon bladder replacement after total cystectomy] Yamanaka N, et al. **Hinyokika Kiyo** 1989 Apr;35(4):587–91 (Eng. Abstr.) **(Jpn)**

[Treatment of bilateral megaureter in children with posterior urethral valves] Cheskis AL, et al. **Urol Nefrol (Mosk)** 1988 Nov-Dec;(6):31–6 (Eng. Abstr.) **(Rus)**

[Value of radical cystectomy in the treatment of infiltrating bladder cancer] Pons R, et al. **Actas Urol Esp** 1988 Nov-Dec;12(6):540–3 (Eng. Abstr.) **(Spa)**

[Ureteral replacement by the ileum. Report of our experience] Burgos FJ, et al. **Arch Esp Urol** 1988 May;41(4):271–7 (Eng. Abstr.) **(Spa)**

[Low-pressure enterocystoplasty in bladder cancer. Preliminary results with a new technical modification] Romero Maroto J, et al. **Arch Esp Urol** 1988 Nov-Dec; 41(9):839–44 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Adenocarcinoma in a substitution caecocystoplasty. Kadow C, et al. **Br J Urol** 1989 Jun;63(6):649–50

The risk of radical cystectomy. Montie JE, et al. **Br J Urol** 1989 May;63(5):483–6

Metabolic complications of cystoplasty. Nurse DE, et al. **Br J Urol** 1989 Feb;63(2):165–70

Stomal complications of intestinal conduit urinary diversion. Klein EA, et al. **Cleve Clin J Med** 1989 Jan-Feb;56(1):48–52

Ureterosigmoidostomy complicated by polyp formation. Report of two cases. Ferguson CJ, et al. **Dis Colon Rectum** 1988 Dec;31(12):961–4

An investigation of colon cancer associated with urinary diversion. Kusama K, et al. **Dis Colon Rectum** 1989 Aug; 32(8):694–7

Adenocarcinoma developing in a rectosigmoid conduit used for urinary diversion. Report of a case. Metzger PP. **Dis Colon Rectum** 1989 Mar;32(3):247–51

Inside-out kidney: unilateral herniation. Complication of cutaneous pyelostomy. Garat JM, et al. **Eur Urol** 1989; 16(2):158–60

Evaluation of 144 cases of ileal conduits in adults. Nurmi M, et al. **Eur Urol** 1988;15(1–2):89–93

Classification of peristomal skin changes in patients with urostomy. Borglund E, et al. **J Am Acad Dermatol** 1988 Oct;19(4):623–8 (28 ref.)

Malignancy associated with ureterosigmoidostomy: detection by mucosa ornithine decarboxylase. Weber TR, et al. **J Pediatr Surg** 1988 Dec;23(12):1091–4

Urodynamic investigation of the ileal conduit: upper tract dilatation and the effects of revision of the conduit. Neal DE. **J Urol** 1989 Jul;142(1):97–100

Prevention of cancer at the urothelial enteric anastomotic site. Shands C 3d, et al. **J Urol** 1989 Jan;141(1):178–81

Periodic hyperammonemic encephalopathy associated with a ureterosigmoidostomy. Cascino GD, et al. **Mayo Clin Proc** 1989 Jun;64(6):653–6

Bladder shrinkage as a complication of long-term supravesical urinary diversion in children with solitary kidneys. Gharib M, et al. **Prog Pediatr Surg** 1989;23:69–80

Office management of urinary stomas. Wood DP Jr, et al. **Urol Clin North Am** 1988 Nov;15(4):753–67 (30 ref.)
A new microsurgical model for the study of carcinogenesis in colonic urinary diversion in rats. Miersch WD. **Urol Int** 1988;43(5):269–71
Adenomatous polyp in defunctionalized colonic segment used as a urinary bladder. Stillwell TJ, et al. **Urology** 1988 Dec; 32(6):538–40
[Ureter obstruction due to a polypous colon tumor following ureterosigmoidostomy] Verburg GP, et al. **Ned Tijdschr Geneeskd** 1988 Oct 22;132(43):1979–81 (Eng. Abstr.) (Dut)
[Uro-colonic tumors. Etiopathogenic data and practical implications] Daher N, et al. **Ann Urol (Paris)** 1989; 23(3):212–6 (72 ref.) (Eng. Abstr.) (Fre)
[The natural history of tumors in oncogenesis after ureterosigmoidostomy. II—Experimental approach] Daher N, et al. **J Urol (Paris)** 1989;95(3):139–41 (46 ref.) (Fre)
[Algodystrophy indicative of osteomalacia due to metabolic acidosis resulting from an intestinal neo-bladder. Apropos of 2 cases] Fortier-Beaulieu M, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):409–12 (Fre)
[Percutaneous nephro-ureterolithotripsy in patients after urinary diversion or reconstruction using the intestine: report of 5 cases] Onishi N, et al. **Hinyokika Kiyo** 1989 Mar;35(3):393–6 (Eng. Abstr.) (Jpn)
[Colonic neoplasms: a complication of ureterosigmoidostomy] Castiñeiras J, et al. **Actas Urol Esp** 1988 Jul-Aug;12(4):308–14 (28 ref.) (Eng. Abstr.) (Spa)
[Cystectomy and ileal diversion: mortality and complications] Chéchile G, et al. **Actas Urol Esp** 1988 Nov-Dec; 12(6):535–9 (Eng. Abstr.) (Spa)
[Trans-sigmoid urinary diversion and dediversion and cancer: experimental study] Ramos Fernández de Soria R, et al. **Arch Esp Urol** 1989 Mar;42(2):105–8 (Eng. Abstr.) (Spa)

INSTRUMENTATION

Clinical experience with an alloplastic stoma prosthesis (Biocarbon) for urinary conduits and cutaneous ureterostomy. Månsson W, et al. **Scand J Urol Nephrol** 1988;22(3):223–6
Biocarbon ureterostomy device for urinary diversion. Multicenter clinical trial. Chancellor M, et al. **Urology** 1989 Jul;34(1):18–21
[JJ-catheters for internal urinary diversion] Glavind K, et al. **Ugeskr Laeger** 1989 Mar 27;151(13):834–6 (Eng. Abstr.) (Dan)
[The "double J" prosthesis as a method of urinary diversion of the renal drainage system] Pasini J, et al. **Lijec Vjesn** 1988 Sep-Oct;110(9–10):343–5 (Eng. Abstr.) (Ser)

METHODS

Continent urinary diversion in a patient with prune belly syndrome and urethral atresia. Barker A, et al. **Aust N Z J Surg** 1989 Mar;59(3):283–6
Kock pouch urinary diversion: follow-up by ultrasound. Kruyt RH, et al. **Br J Radiol** 1988 Sep;61(729):811–6
Quality of life after cystectomy. Comparison between patients with conduit and those with continent caecal reservoir urinary diversion. Månsson A, et al. **Br J Urol** 1988 Sep; 62(3):240–5
Urethral substitution in women. Mundy AR. **Br J Urol** 1989 Jan;63(1):80–3
The Mitrofanoff principle for continent urinary diversion. Woodhouse CR, et al. **Br J Urol** 1989 Jan;63(1):53–7
Radical cystectomy with ileocystoplasty: 30 year experience. Camey M. **Eur Urol** 1988;14 Suppl 1:27–9
Ileal neobladder. Principles of function and continence. Frohneberg D, et al. **Eur Urol** 1989;16(4):241–9
Mainz pouch for augmentation bladder substitution or continent urinary diversion. Schärfe T, et al. **Eur Urol** 1988; 14 Suppl 1:32–5
Undiversion with ileocecal segment following high transureteroureterostomy. Selli C, et al. **Eur Urol** 1989; 16(4):315–6
Bladder substitution with an ileal low-pressure reservoir. Studer UE, et al. **Eur Urol** 1988;14 Suppl 1:36–40
Continent urinary diversion in gynecologic oncology. Penalver MA, et al. **Gynecol Oncol** 1989 Sep;34(3):274–88
Pelvi-uretero-cutaneostomy en-Y as a temporary diversion in children. Soroka experience. Kaneti J, et al. **Int Urol Nephrol** 1988;20(5):471–4
Appendicovesicostomy: a new technique for bladder diversion during reconstruction of cloacal exstrophy. Longaker MT, et al. **J Pediatr Surg** 1989 Jul;24(7):639–40; discussion 640–1
Continent urostomy with hydraulic ileal valve in 136 patients: 13 years of experience. Benchekroun A, et al. **J Urol** 1989 Jul;142(1):46–51
Creation of a transverse colon—gastric composite reservoir: a new technique. Bihrle R, et al. **J Urol** 1989 May; 141(5):1217–20
Simultaneous diversion of the urinary and fecal streams utilizing a single abdominal stoma: the double-barreled wet colostomy. Carter MF, et al. **J Urol** 1989 May; 141(5):1189–91
Urodynamic and clinical outcome of Kock pouch continent urinary diversion. Chen KK, et al. **J Urol** 1989 Jan; 141(1):94–7
Renal transplantation and Kock pouch: a case report. Heritier P, et al. **J Urol** 1989 Mar;141(3):595–6
This month in Investigative Urology: urinary reservoirs and pelvic malignancy. Hinman F Jr. **J Urol** 1989 May; 141(5):1216
Continent urinary reconstruction in ischiopagus tripus conjoined twins. Holcomb GW 3d, et al. **J Urol** 1989 Jan; 141(1):100–2
A new technique of using the in situ appendix as a catheterizable stoma in continent urinary reservoirs. Issa MM, et al. **J Urol** 1989 Jun;141(6):1385–7
Ileocecal ureterosigmoidostomy: an alternative to conventional ureterosigmoidostomy. Kim KS, et al. **J Urol** 1988 Dec;140(6):1494–8
Urinary diversion to the augmented and valved rectum: preliminary results with a novel surgical procedure. Kock NG, et al. **J Urol** 1988 Dec;140(6):1375–9
Clinical and urodynamic features of a new intestinal urinary sphincter for continent urinary diversion. Koff SA, et al. **J Urol** 1989 Aug;142(2):293–6
Continent urinary diversion. Skinner DG, et al. **J Urol** 1989 Jun;141(6):1323–7
The hemi-Kock augmentation ileocystoplasty: a low pressure anti-refluxing system. Weinberg AC, et al. **J Urol** 1988 Dec;140(6):1380–4
The Mitrofanoff principle: an alternative form of continent urinary diversion. Weingarten JL, et al. **J Urol** 1988 Dec; 140(6):1529–31
Continent urinary diversion Maryland pouch. Javadpour N. **Prog Clin Biol Res** 1988;277:39–43
Role of the Kock pouch in adolescent urology. Cumming J, et al. **Prog Pediatr Surg** 1989;23:126–34
Advances in the diagnosis and treatment of bladder cancer. Stein BS. **R I Med J** 1989 Aug;72(8):289–93 (10 ref.)
Radiography of cutaneous urinary diversions. Long BW. **Radiol Technol** 1988 Nov-Dec;60(2):109–20 (28 ref.)
Urinary diversion to the augmented and valved rectum. An experimental study in dogs. Kock NG, et al. **Scand J Urol Nephrol** 1988;22(3):227–33
Antireflux ureteroileal anastomosis in ileal conduit urinary diversion and in ileocystoplasty following cystoprostatectomy. Nurmi M, et al. **Scand J Urol Nephrol** 1988;22(4):271–3
Urinary diversion via the continent ileal reservoir. Functional characteristics and long-term outcome. Akerlund S. **Scand J Urol Nephrol Suppl** 1989;121:1–36
Cystectomy: ureteroileal anastomosis without stenting. Haukaas S, et al. **Scand J Urol Nephrol Suppl** 1988; 110:191–3
Continent bladder replacement: the Mayo pouch. Lindell O, et al. **Scand J Urol Nephrol Suppl** 1988;110:329–33
Ileocystoplasty at cystectomy for carcinoma of the bladder. Criteria for patient selection. Nyman CR, et al. **Scand J Urol Nephrol Suppl** 1988;110:195–9
Stable formation of the nipple valve in Kock pouch for diversion of the urinary tract. Okada Y, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):315–8 (11 ref.)
Bladder replacement after radical cystectomy using detubularized right colonic segment. Levy OM, et al. **Urology** 1988 Dec;32(6):492–7
Double pigtail (D-P) stent catheter with tether in Kock pouch ileal reservoir. Tazaki H, et al. **Urology** 1989 Mar; 33(3):227
[A modified Goodwin ureterosigmoidostomy and our experience] Hájek J, et al. **Rozhl Chir** 1989 Apr;68(4):261–7 (Eng. Abstr.) (Cze)
[The continent ileocecal pouch (Mainz Pouch)] Jarolím L. **Rozhl Chir** 1988 Oct;67(10):625–32 (Eng. Abstr.) (Cze)
[The surgical treatment of incontinence in neurogenic bladder in children] De Backer E. **Acta Urol Belg** 1989;57(2):553–5 (Fre)
[The value of preoperative perineal rehabilitation in radical prostatectomy and replacement entero-cystoplasty. Preliminary results] Barre C, et al. **Ann Urol (Paris)** 1988; 22(4):298–300 (Eng. Abstr.) (Fre)
[The continent urostomy. 12 years' experience with the continent ileocecal bladder] Benchekroun A, et al. **Ann Urol (Paris)** 1989;23(3):188–96 (Eng. Abstr.) (Fre)
[Continent urinary diversion and total bladder replacement] Schilling A, et al. **Med Klin** 1988 Jun 17;83(13–14):444–8 (Ger)
[The Kock continent urinary diversion] Boyd SD, et al. **Urologe [A]** 1989 Jul;28(4):183–92 (Eng. Abstr.) (Ger)
[Urinary diversion 1989] Hautmann R. **Urologe [A]** 1989 Jul; 28(4):177–82 (27 ref.) (Eng. Abstr.) (Ger)
[Ileocystoplasty and enteropathies] Roth S, et al. **Urologe [A]** 1989 Jul;28(4):193–8 (Eng. Abstr.) (Ger)
[3 years' experience with the ileum neobladder—the first 108 patients] Wenderoth UK, et al. **Urologe [A]** 1989 Jul; 28(4):204–8 (Eng. Abstr.) (Ger)
[Ureterotransversopyelostomy and unilateral nephrostomy as supravesical urinary diversion in vesico-vagino-rectal fistula and incurable bladder cancers] Hoffmann L, et al. **Z Urol Nephrol** 1988 Nov;81(11):689–92 (Eng. Abstr.) (Ger)
[Experiences with continent ileostomy (Kock pouch) as bladder substitute in a general hospital] Wiedemann A, et al. **Z Urol Nephrol** 1988 Dec;81(12):705–10 (Eng. Abstr.) (Ger)
[Replacement of bladder with detubularized right colonic segment] Ramon J, et al. **Harefuah** 1988 Dec 15; 115(12):363–9 (Eng. Abstr.) (Heb)
[Technical comparison: uretero-ureterocutaneostomy with Y and ileal shunt after radical cystectomy] D'Ottavio G, et al. **Ann Ital Chir** 1987;59(1–6):95–102 (Ita)
[Use of the colonic shunt in urology] Loreto N, et al. **Ann Ital Chir** 1987;59(1–6):149–51 (Ita)
[Percutaneous endoureteral manipulation in the resolution of ureteral fistula complications following Bricker's urinary diversion: clinical case] Martina G, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):81–5 (Eng. Abstr.) (Ita)
[Urinary diversion with Kock pouch: clinical results in 75 cases focusing on late complications] Okada Y, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1179–84 (Eng. Abstr.) (Jpn)
[Colon bladder replacement after total cystectomy] Yamanaka N, et al. **Hinyokika Kiyo** 1989 Apr;35(4):587–91 (Eng. Abstr.) (Jpn)
[An ileal conduit and associated operative procedures] Ariyoshi A. **Nippon Hinyokika Gakkai Zasshi** 1987 Dec; 78(13):2259–61 (0 ref.) (Jpn)
[Continent urinary reservoir for supravesical diversion. Stabilization of intussuscepted nipple valve without using metal staples] Hagiwara M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep;79(9):1587–91 (Eng. Abstr.) (Jpn)
[Continent urinary reservoir (CUR) for supravesical diversion—creation of the colonic CUR] Hagiwara M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug; 79(8):1418–26 (Eng. Abstr.) (Jpn)
[Total replacement of the urinary bladder using an ileal pouch bladder] Suzuki T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):555–61 (Eng. Abstr.) (Jpn)
[Bladder replacement by enterocystoplasty after total cystectomy] Tobisu K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):256–63 (Eng. Abstr.) (Jpn)
[Clinical studies on the continent ileocecocolonic reservoir] Tsukamoto T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):719–27 (Eng. Abstr.) (Jpn)
[Intestinal plastic surgery in interstitial cystitis with a shrinking bladder] Dovlatian AA. **Urol Nefrol (Mosk)** 1988 May-Jun;(3):60–2 (Rus)
[A method of surgery in bilateral vesico-ureteral reflux in children with a double ureter] Fryczkowski M, et al. **Urol Nefrol (Mosk)** 1989 Jan-Feb;(1):29–31 (Eng. Abstr.) (Rus)
[Cohen's operation in the treatment of vesico-ureteral reflux in children] Pugachev AG, et al. **Urol Nefrol (Mosk)** 1989 Jan-Feb;(1):26–9 (Eng. Abstr.) (Rus)
[Functioning of the artificial bladder after fistuloplasty by the transvaginal approach] Tiurin RB, et al. **Urol Nefrol (Mosk)** 1989 Jan-Feb;(1):67–9 (Rus)
[Pyelocystostomy in ureteral necrosis in a transplanted kidney] Rezníček J, et al. **Rozhl Chir** 1988 Oct;67(10):675–7 (Eng. Abstr.) (Slo)

MORTALITY

[Total cystectomy and transileal urinary diversion (Bricker type). Value of locoregional anesthesia. Apropos of 50 cases] Tauzin-Fin P, et al. **Agressologie** 1988 Mar; 29(3):181–5 (Eng. Abstr.) (Fre)

PSYCHOLOGY

[Life after urostomy. A retrospective study] Klussmann R, et al. **Urologe [A]** 1989 Jul;28(4):209–12 (Eng. Abstr.) (Ger)

VETERINARY

Preservation of striated-muscle urethral sphincter function with use of a surgical technique for perineal urethrostomy in cats. Griffin DW, et al. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1057–60

URINARY FISTULA

COMPLICATIONS

[Xanthogranulomatous pyelonephritis coexisting with fistula between ureter and sigmoid colon: a case report] Chang PK, et al. **Hinyokika Kiyo** 1989 Jan;35(1):95–8 (Eng. Abstr.) (Jpn)

CONGENITAL

Congenital pyelolymphatic fistula in a child with chyluria. Greig JD, et al. **Br J Urol** 1989 May;63(5):550–1

DIAGNOSIS

Diagnosis of renal transplant urinary fistulas. Bretan PN Jr, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1962–6

EMBRYOLOGY

Duplication and vesicointestinal fissure. Smith ED, et al. **Birth Defects** 1988;24(4):551–80 (94 ref.)

ETIOLOGY

Nephrocutaneous fistula following extracorporeal shock wave lithotripsy and percutaneous nephrolithotomy.

Cecchi M, et al. **Acta Urol Belg** 1988;56(3):439–42
Uretero–arterial fistula. Shetty SD, et al. **Br J Urol** 1988 Oct;62(4):382–3
Endourologic management of ureteroscopic complications. Culkin DJ, et al. **J La State Med Soc** 1989 Jul;141(7):27–32
Nephrocolic fistula complicating percutaneous nephrostolithotomy. Appel R, et al. **J Urol** 1988 Nov; 140(5):1007–8
[Urologic complications after gynecologic and obstetrical operations] Kohoutek M, et al. **Cesk Gynekol** 1988 Jul; 53(6):433–6 (Cze)
[Urethral fistula following reconstructive surgery of hypospadias. Apropos of 34 cases] Audry G, et al. **Ann Urol (Paris)** 1989;23(3):257–60 (Eng. Abstr.) (Fre)
[Renopleural fistula secondary to xanthogranulomatous pyelonephritis] Fernández García JS, et al. **Actas Urol Esp** 1989 Jan–Feb;13(1):45–8 (Eng. Abstr.) (Spa)
[Upper urinary tract fistulas in renal transplantation] Rodríguez Luna JM, et al. **Actas Urol Esp** 1989 May–Jun; 13(3):193–4 (Eng. Abstr.) (Spa)

MORTALITY

[The effect of early urologic complications on the prognosis of kidney transplantation] Konert J, et al. **Z Urol Nephrol** 1989 Jul;82(7):355–60 (Eng. Abstr.) (Ger)

RADIOGRAPHY

Pyeloduodenal fistulae. A report of two cases and review of the literature. Desmond JM, et al. **Clin Radiol** 1989 May; 40(3):267–70 (18 ref.)
Venous intravasation of barium into the inferior mesenteric vein mimicking a colloureteral fistula: a case report and literature review. Baer HM, et al. **J Urol** 1989 Jan; 141(1):117–9 (19 ref.)
Nephrocutaneous fistula diagnosed by computed tomography. Cooper SG, et al. **Urol Radiol** 1989;11(1):33–6

SURGERY

A policy in the management of urethral fistula. Mahfouz EH, et al. **Br J Plast Surg** 1989 Mar;42(2):184–6
Treatment of urethrovaginal fistula. Krogh J, et al. **Br J Urol** 1989 May;63(5):555
Urological complications in 454 renal transplants. Hickey DP, et al. **Ir J Med Sci** 1988 Jul;157(7):222–5
Modification of the anterior perineal transanorectal approach for complicated prostatic urethrorectal fistula repair. Venable DD. **J Urol** 1989 Aug;142(2):381–4
[Transrenal percutaneous treatment of urinary fistula. Apropos of 19 cases] Billebaud T, et al. **Ann Urol (Paris)** 1988;22(4):287–90 (Eng. Abstr.) (Fre)
[The Wise technic in the repair of urethro–cutaneous fistula] Nouri A, et al. **Tunis Med** 1988 Aug–Sep;66(8–9):605–8 (Eng. Abstr.) (Fre)
[A case of urethrorectal fistula] Murayama K, et al. **Hinyokika Kiyo** 1989 Jan;35(1):127–9 (Eng. Abstr.) (Jpn)
[Functional status of the bladder and urethral sphincter systems after correction of urethrovaginal fistula] Kan LV, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):67–9 (Rus)
[Social aspects of the late results of treatment in ureteral fistulae] Saldakova NA, et al. **Vrach Delo** 1988 Jul;(7):120–1 (Rus)

THERAPY

A new technique for complete temporary occlusion of the ureter. Castañeda F, et al. **AJR Am J Roentgenol** 1989 Jul; 153(1):81–2
Treatment of urinary fistulas after resection of horseshoe kidneys by selective arterial embolization. Stefani P, et al. **Cardiovasc Intervent Radiol** 1989 Jan–Feb;12(1):18–21
Nephrectomy in situ: treatment of ureteral fistula due to progressive malignancy. Ebisuno S, et al. **Urol Radiol** 1989; 11(2):102–5
Ureteroscope in managing difficult urethral problems. Munch LC, et al. **Urology** 1988 Nov;32(5):451
[Percutaneous endoureteral manipulation in the resolution of ureteral fistula complications following Bricker's urinary diversion: clinical case] Martina G, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):81–5 (Eng. Abstr.) (Ita)

VETERINARY

Urethrorectal fistulectomy in a dog, using a perineal approach. Whitney WO, et al. **J Am Vet Med Assoc** 1988 Sep 1;193(5):568–9

URINARY INCONTINENCE

Female urinary incontinence. Dwyer PL. **Aust Fam Physician** 1989 Aug;18(8):937, 939, 942 passim (8 ref.)
Taking the 'in' out of incontinence [editorial] Fonda D. **Aust Fam Physician** 1989 Aug;18(8):893
Incontinence aids in perspective. Waddell R, et al. **Aust Fam Physician** 1989 Aug;18(8):930–1, 934–5 (3 ref.)
Consensus conference. Urinary incontinence in adults. National Institutes of Health. **Conn Med** 1989 Jan; 53(1):27–33
Urinary incontinence: current overview of a prevalent problem. Turpie ID, et al. **Geriatrics** 1989 Sep;44(9):32–8 (11 ref.)
Urinary incontinence in the elderly. McGuire EJ. **J Arkansas Med Soc** 1985 May;81(12):640–2
A microbiological study of absorbent pads. Sprott MS, et al. **J Hosp Infect** 1988 Aug;12(2):125–9
Female urinary incontinence. Cardozo L. **J R Soc Health** 1989 Apr;109(2):42–6 (12 ref.)
Consensus conference. Urinary incontinence in adults. **JAMA** 1989 May 12;261(18):2685–90 (0 ref.)
Urinary incontinence: out of the closet. Ouslander JG. **JAMA** 1989 May 12;261(18):2695–6 (17 ref.)
Health maintenance issues of the elderly. Incontinence. Ouslander J. **Md Med J** 1989 Feb;38(2):130–2 (23 ref.)
Urinary incontinence in adults. **Natl Inst Health Consensus Dev Conf Consensus Statement** 1988 Oct 3–5;7(5):1–11 (0 ref.)
Urinary incontinence in the elderly. Vernon MS. **Prim Care** 1989 Jun;16(2):515–28 (30 ref.)
Urinary incontinence in adults. Parulkar BG, et al. **Surg Clin North Am** 1988 Oct;68(5):945–63 (36 ref.)

CHEMICALLY INDUCED

Relationship between drug use and urinary incontinence in elderly women. Shimp LA, et al. **Drug Intell Clin Pharm** 1988 Oct;22(10):786–7
[Urinary incontinence induced by neuroleptics—a little known complication] Böhler A, et al. **Schweiz Rundsch Med Prax** 1988 Nov 8;77(45):1231–4 (22 ref.) (Eng. Abstr.) (Ger)

COMPLICATIONS

Asymptomatic bacteriuria and incontinence [letter] Ouslander JG. **J Am Geriatr Soc** 1989 Feb;37(2):197–8
[Urinary incontinence and senile dementia. The relationship between the severity of dementia and the potential for treatment of the urinary incontinence] de Fockert JA. **Tijdschr Gerontol Geriatr** 1989 Jun;20(3):101–6 (Eng. Abstr.) (Dut)

CONGENITAL

The artificial sphincter AS800 in congenital urinary incontinence. Gonzalez R, et al. **J Urol** 1989 Aug;142(2 Pt 2):512–5; discussion 520–1

DIAGNOSIS

The predictive values of single and combined urodynamic parameters. Riss PA, et al. **Acta Obstet Gynecol Scand** 1988; 67(6):505–11
The severity of urinary incontinence in women. Comparison of subjective and objective tests. Frazer MI, et al. **Br J Urol** 1989 Jan;63(1):14–5
Evaluation of the home pad test for quantifying incontinence. Wilson PD, et al. **Br J Urol** 1989 Aug;64(2):155–7
Correlation between history and urodynamics in neurologically normal incontinent women. Maes D, et al. **Eur Urol** 1988;14(5):377–80
Bacteriuria and urinary incontinence in aged female nursing home residents. Whippo CC, et al. **J Adv Nurs** 1989 Mar; 14(3):217–25
Prospective evaluation of an assessment strategy for geriatric urinary incontinence. Ouslander J, et al. **J Am Geriatr Soc** 1989 Aug;37(8):715–24
Simplified tests of lower urinary tract function in the evaluation of geriatric urinary incontinence. Ouslander JG, et al. **J Am Geriatr Soc** 1989 Aug;37(8):706–14
Stress incontinence in women. A practical method of evaluation. Fine PM, et al. **J Reprod Med** 1988 Sep; 33(9):749–56
Trigonal sensitivity testing in women. Frazer MI, et al. **J Urol** 1989 Feb;141(2):356–8
Diagnosing urinary incontinence in adults. Ruff CC, et al. **Nurse Pract** 1989 Jun;14(6):8–10, 12–4, 16–8 (20 ref.)
Urinary incontinence in women. Evaluation in the primary–care office. Sloane B, et al. **Postgrad Med** 1988 Oct;84(5):251–9, 262
Practical approach to the diagnosis of urinary incontinence. Kaplan SA, et al. **Semin Neurol** 1988 Summer;8(2):131–6 (29 ref.)
Adult aqueductal stenosis presenting as double incontinence: a case report with magnetic resonance imaging. Vertosick F Jr, et al. **Surg Neurol** 1989 May;31(5):387–9
Discrepancies between clinical and urodynamical findings: which are true? Vereecken RL, et al. **Urol Int** 1988; 43(5):282–5
[Diagnosis of urinary incontinence] Slovák K, et al. **Cesk Gynekol** 1988 Jul;53(6):437–8 (Cze)
[Contribution of vaginal echography in urinary incontinence] Leroy B, et al. **Arch Gynecol Obstet** 1988;244 Suppl:S30–7 (Fre)
[Clinical approach to the incontinent woman. Stages of the diagnostic procedure] Pregazzi R, et al. **Minerva Ginecol** 1988 Dec;40(12):681–5 (69 ref.) (Eng. Abstr.) (Ita)
[Symptoms of urinary and fecal incontinence in the clinical picture of pediatric borderline psychiatry] Buianov MI. **Zh Nevropatol Psikhiatr** 1988;88(8):93–7 (Eng. Abstr.) (Rus)

DRUG THERAPY

Oxybutynin chloride for geriatric urinary dysfunction: a double–blind placebo–controlled study. Zorzitto ML, et al. **Age Ageing** 1989 May;18(3):195–200 (28 ref.)
Terodiline in the treatment of children with unstable bladders. Hellström AL, et al. **Br J Urol** 1989 Apr; 63(4):358–62
Lack of effect of cholinergic blocking and alpha–adrenergic stimulation on nocturnal incontinence after ileocaecal bladder replacement. A controlled randomised study. Jakobsen H, et al. **Br J Urol** 1989 Apr;63(4):379–83
Transvesical phenol injection of pelvic nerve plexuses in females with refractory urge incontinence. Wall LL, et al. **Br J Urol** 1989 May;63(5):465–8
Tolerability and steady–state pharmacokinetics of terodiline and its main metabolites in elderly patients with urinary incontinence. Hallén B, et al. **Eur J Clin Pharmacol** 1989; 36(5):487–93
A review of flavoxate hydrochloride in the treatment of urge incontinence. Ruffmann R. **J Int Med Res** 1988 Sep–Oct; 16(5):317–30 (69 ref.)
Topical oxybutynin chloride for relaxation of dysfunctional bladders. Brendler CB, et al. **J Urol** 1989 Jun;141(6):1350–2
[Effectiveness of intravesical administration of lidocaine gel in females with urge and urge incontinence] Gassner K, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):562–6 (Eng. Abstr.) (Ger)
[Comparative studies of the effect of mictonorm (propiverin hydrochloride) and Spasuret (flavoxate hydrochloride) on the bladder detrusor muscle] Wehnert J, et al. **Z Urol Nephrol** 1989 May;82(5):259–63 (Eng. Abstr.) (Ger)

ECONOMICS

Costs of incontinence. Townsend J. **Community Med** 1988 Aug;10(3):235–9

EPIDEMIOLOGY

A prospective study of the incidence of urinary incontinence in an acute care teaching hospital and its implications on future service development. Fonda D, et al. **Aust Clin Rev** 1988 Sep;8(30):102–7
Prevalence of urinary incontinence in patients receiving home care services. Mohide EA, et al. **Can Med Assoc J** 1988 Nov 15;139(10):953–6
The frequency of urinary incontinence in Pakistani women. Shershah S, et al. **JPMA** 1989 Jan;39(1):16–7
Urinary incontinence among elderly persons [letter] **N Engl J Med** 1989 May 25;320(21):1421–2
The prevalence of female urinary incontinence and reasons for not seeking treatment. Holst K, et al. **N Z Med J** 1988 Nov 9;101(857):756–8
[Urinary incontinence. A study of occurrence in the municipality of Sund] Spigset O, et al. **Tidsskr Nor Laegeforen** 1989 Aug 20;109(23):2303–4 (Eng. Abstr.) (Nor)
[Occurrence of urinary incontinence. A literature review with special attention to factors which contribute to differences in occurrence] Spigset O. **Tidsskr Nor Laegeforen** 1989 Aug 20;109(23):2305–8 (14 ref.) (Eng. Abstr.) (Nor)

ETIOLOGY

Micturition symptoms and urinary incontinence after non–radical hysterectomy. Vervest HA, et al. **Acta Obstet Gynecol Scand** 1988;67(2):141–6
Neurological examination of elderly women under investigation for urinary incontinence. Molander U, et al. **Arch Gerontol Geriatr** 1989 Jul;9(1):77–85
Incontinence associated with bilateral lesions of putamen. Klutzow FW, et al. **Arch Neurol** 1989 Feb;46(2):168–72
Urological problems and quality of life after treatment in early cervical cancer. Valente S. **Eur J Gynaecol Oncol** 1988;9(5):424–7
Urinary tract infections and diurnal incontinence in girls. Sørensen K, et al. **Eur J Pediatr** 1988 Nov;148(2):146–7
Bilateral single ectopic ureter. Passerini Glazel G, et al. **Eur Urol** 1988;14(6):454–7
Involuntary urine loss: dispelling the myths. Reich M. **J Am Osteopath Assoc** 1988 Sep;88(9):1153–6
Extradural arachnoid cyst. Ticket L, et al. **J Belge Radiol** 1988;71(6):740–1
The late occurrence of urinary tract damage in patients successfully treated by radiotherapy for cervical carcinoma. Zoubek J, et al. **J Urol** 1989 Jun;141(6):1347–9
The pathophysiology of urinary incontinence among institutionalized elderly persons. Resnick NM, et al. **N Engl J Med** 1989 Jan 5;320(1):1–7
Urodynamics in radical retropubic prostatectomy. Hellström P, et al. **Scand J Urol Nephrol** 1989;23(1):21–4
Inverted Y–ureteral duplication with an uterine ectopy as cause of ureteric enuresis. Ecke M, et al. **Urol Int** 1989; 44(2):116–8
Radical prostatectomy in cases of prostatic carcinoma: the problem of postoperative urinary incontinence. Hauri D, et al. **Urol Int** 1988;43(5):257–64
Urinary incontinence in female Parkinson disease patients. Pitfalls of diagnosis. Khan Z, et al. **Urology** 1989 Jun; 33(6):486–9
Urinary incontinence after transurethral resection of prostate

in myasthenia gravis patients. Khan Z, et al. **Urology** 1989 Sep;34(3):168–9
[The significance of urodynamic and roentgenologic studies in the assessment of incontinence] Anderl P. **Gynakol Rundsch** 1988;28 Suppl 2:15–9 (Ger)
[Urodynamic studies in gynecology] Petri E. **Gynakologe** 1988 Sep;21(3):185–7 (5 ref.) (Ger)
[Urogynecologic findings in patients following abdominal radical operation for cervix cancer] Halaška M, et al. **Zentralbl Gynakol** 1988;110(18):1117–23 (Eng. Abstr.) (Ger)
[Disorders of bladder emptying following abdominal radical operation of cervix cancer] Ralph G, et al. **Zentralbl Gynakol** 1988;110(18):1124–31 (Eng. Abstr.) (Ger)
[Urinary incontinence caused by unstable bladder] Niccoli V. **Clin Ter** 1988 Jul 31;126(2):141–5 (Ita)
[Urinary incontinence in children: etiopathogenesis and clinical aspects] Caione P, et al. **Minerva Ginecol** 1989 Feb; 41(2):89–94 (Eng. Abstr.) (Ita)
[A rare cause of occult neuropathic bladder in children: the tethered cord syndrome] Campobasso P, et al. **Pediatr Med Chir** 1988 Nov–Dec;10(6):641–5 (Eng. Abstr.) (Ita)

HISTORY

History of the prosthetic treatment of urinary incontinence. Siegel SW. **Urol Clin North Am** 1989 Feb;16(1):99–104

NURSING

Incontinence. The role of the domiciliary nurse. Wellings C. **Aust Fam Physician** 1989 Aug;18(8):965–9 (12 ref.)
Fifty six continence advisers, one peripatetic teacher. Hall C, et al. **BMJ** 1988 Nov 5;297(6657):1181–2
Incontinence products: which is best? Hu TW, et al. **Geriatr Nurs (New York)** 1989 Jul–Aug;10(4):184–6
Continence through nursing care. Pearson BD, et al. **Geriatr Nurs (New York)** 1988 Nov–Dec;9(6):347–9
Incontinence pads: clinical performance, design and technical properties. Cottenden AM. **J Biomed Eng** 1988 Nov; 10(6):506–14
Clinical evaluation of an external urine collection device for nonambulatory incontinent women. Johnson DE, et al. **J Urol** 1989 Mar;141(3):535–7
Continence issues in acute care. Lincoln R, et al. **Nurs Clin North Am** 1989 Sep;24(3):741–54

PATHOLOGY

[Urinary continence in the female—a morphologic study] Dorschner W, et al. **Z Urol Nephrol** 1989 Apr;82(4):201–8 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Urodynamics in children with myelomeningocele: early assessment of obstruction and incontinence. Van Gool JD, et al. **Acta Urol Belg** 1989;57(2):497–501
Quantification of urinary incontinence in elderly women with the 48-hour pad test. Ekelund P, et al. **Arch Gerontol Geriatr** 1988 Dec;7(4):281–7
Incontinence. The pelvic floor function. Chiarelli PE. **Aust Fam Physician** 1989 Aug;18(8):949, 953–4, 956–7 (2 ref.)
Urinary incontinence. Malone-Lee J. **Baillieres Clin Obstet Gynaecol** 1988 Jun;2(2):341–53 (20 ref.)
Bladder neck electrical conductivity in female urinary urgency and urge incontinence. Holmes DM, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):816–20
Diuretic response to fluid load in women with urinary incontinence: optimum duration of pad test. Haylen BT, et al. **Br J Urol** 1988 Oct;62(4):331–3
Provisional study to quantify and compare parameters of urine leakage in stress and instability incontinence. James ED, et al. **Br J Urol** 1988 Sep;62(3):223–7
Neurophysiological assessment of the central motor pathway to the external urethral sphincter in man. Thiry AJ, et al. **Br J Urol** 1989 May;63(5):515–9
Results and relevance of urodynamic studies in the management of urinary incontinence in women over eighty. Gillon G, et al. **Isr J Med Sci** 1989 Jan;25(1):25–7
Development and application of simple expert systems in obstetrics and gynecology. Riss PA, et al. **J Perinat Med** 1988;16(4):283–7
Simple versus multichannel cystometry in the evaluation of bladder function in an incontinent geriatric population. Oualander J, et al. **J Urol** 1988 Dec;140(6):1482–6
A new method for sonographic urethrocystography and simultaneous pressure-flow measurements. Koelbl H, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):417–22
The unstable urethra in the female. Low JA, et al. **Obstet Gynecol** 1989 Jul;74(1):69–74
Urethral pressure variations in females with and without neurourological symptoms. Kulseng-Hanssen S, et al. **Scand J Urol Nephrol Suppl** 1988;114:48–52
Neural stimulation for bladder control. Tanagho EA. **Semin Neurol** 1988 Summer;8(2):170–3 (12 ref.)
[Urinary and fecal incontinence in adults: neurophysiological aspects] Herbaut AG. **Rev Med Brux** 1988 Sep;9(6):346–52 (Eng. Abstr.) (Fre)
[Anatomic and functional aspects of the female pelvic floor] Riss P, et al. **Gynakol Rundsch** 1988;28 Suppl 2:20–5 (Ger)
[Urinary continence in the female—aspects of function] Höfner K, et al. **Z Urol Nephrol** 1989 Apr;82(4):195–9 (Eng. Abstr.) (Ger)
[Urinary incontinence in the female over 60 years of age—urodynamic findings] Hajdu K, et al. **Zentralbl Gynakol** 1989;111(12):824–30 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

What can be done to control incontinence associated with the irritable bowel syndrome? Drossman DA. **Am J Gastroenterol** 1989 Apr;84(4):355–7
The control of incontinence in spina bifida. Wishart GC, et al. **Br J Urol** 1989 Aug;64(2):204
Clinical use of penile clamp with automatic electronic alarm. Huaijin C. **Eur Urol** 1988;15(3–4):237–8
Behavioral training for post-prostatectomy urinary incontinence. Burgio KL, et al. **J Urol** 1989 Feb; 141(2):303–6
Closure of the exstrophic bladder: an evaluation of the factors leading to its success and its importance on urinary continence. Husmann DA, et al. **J Urol** 1989 Aug;142(2 Pt 2):522–4; discussion 542–3
The artificial urinary sphincter: review and progress. Scott FB. **Med Instrum** 1988 Aug;22(4):174–81 (6 ref.)
Continent urinary diversion Maryland pouch. Javadpour N. **Prog Clin Biol Res** 1988;277:39–43
Teflon injections in post-prostatectomy incontinence. Osther PJ, et al. **Scand J Urol Nephrol** 1988;22(3):171–4
Stable formation of the nipple valve in Kock pouch for diversion of the urinary tract. Okada Y, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):315–8 (11 ref.)
[Prevention and conservative treatment of involuntary and difficult urination] Walter S. **Ugeskr Laeger** 1989 Jan 30; 151(5):279 (Dan)
[The value of preoperative perineal rehabilitation in radical prostatectomy and replacement entero-cystoplasty. Preliminary results] Barre C, et al. **Ann Urol (Paris)** 1988; 22(4):298–300 (Eng. Abstr.) (Fre)
[Continent urinary diversion and total bladder replacement] Schilling A, et al. **Med Klin** 1988 Jun 17;83(13–14):444–8 (Ger)

PSYCHOLOGY

Distress and delay associated with urinary incontinence, frequency, and urgency in women. Norton PA, et al. **BMJ** 1988 Nov 5;297(6657):1187–9
The incontinency taboo. Tulloch GJ. **Geriatr Nurs (New York)** 1989 Jan–Feb;10(1):19

REHABILITATION

Continence after stroke: useful predictor or goal of therapy? Barer DH. **Age Ageing** 1989 May;18(3):183–91
Long-term follow-up of habit retraining for bladder instability in elderly patients. Snape J, et al. **Age Ageing** 1989 May;18(3):192–4
[Training of patients with urinary incontinence] Klarskov OP. **Ugeskr Laeger** 1989 Jan 30;151(5):290–3 (Eng. Abstr.) (Dan)
[The AMS sphincter prosthesis; experiences in adults and children] Weisglas MG, et al. **Ned Tijdschr Geneeskd** 1988 Aug 20;132(34):1580–3 (Eng. Abstr.) (Dut)
[The role of retraining in urinary incontinence in women] Leriche A, et al. **J Urol (Paris)** 1988;94(5–6):285–8 (Eng. Abstr.) (Fre)
[The value of retraining in female urinary incontinence] Schurch B, et al. **Ther Umsch** 1988 Jul;45(7):474–83 (33 ref.) (Eng. Abstr.) (Fre)

SURGERY

Urinary incontinence. An introduction. Denes B. **ASAIO Trans** 1988 Oct–Dec;34(4):998–9
Surgical implantation of the artificial urinary sphincter. Gregory JG, et al. **ASAIO Trans** 1988 Oct–Dec; 34(4):1002–3
The artificial urinary sphincter. Porter CH. **ASAIO Trans** 1988 Oct–Dec;34(4):1000–1
The use of rectus fascia to manage urinary incontinence. Bauer SB, et al. **J Urol** 1989 Aug;142(2 Pt 2):516–9; discussion 520–1
Experience with the Kropp anti-incontinence procedure. Belman AB, et al. **J Urol** 1989 May;141(5):1160–2
Vaginal flap urethral reconstruction: an alternative to the bladder flap neourethra. Blaivas JG. **J Urol** 1989 Mar; 141(3):542–5
Experience with the artificial urinary sphincter model AS800 in 148 patients. Fishman IJ, et al. **J Urol** 1989 Feb; 141(2):307–10
Suprapubic bladder neck suspension for the management of urinary incontinence in the myelodysplastic girl. Gearhart JP, et al. **J Urol** 1988 Nov;140(5 Pt 2):1296–8
Compatibility of enterocystoplasty and the artificial urinary sphincter. Gonzalez R, et al. **J Urol** 1989 Aug;142(2 Pt 2):502–4; discussion 520–1
Quantifying thread tension is of clinical use in Stamey bladder neck suspension: analysis of clinical parameters. Kondo A, et al. **J Urol** 1989 Jan;141(1):38–42
Management of urinary incontinence after prostatectomy with the artificial urinary sphincter. Marks JL, et al. **J Urol** 1989 Aug;142(2):302–4
Combined implantation of artificial sphincter and penile prosthesis. Parulkar BG, et al. **J Urol** 1989 Sep;142(3):732–5
Epispadias and incontinence: the challenge of the small bladder. Peters CA, et al. **J Urol** 1988 Nov;140(5 Pt 2):1199–201
Splitting the pubis for exposure in difficult reconstructions for incontinence. Peters CA, et al. **J Urol** 1989 Aug;142(2 Pt 2):527–31; discussion 542–3
Vaginal wall sling [published erratum appears in J Urol 1989 May;141(5):1214] Raz S, et al. **J Urol** 1989 Jan;141(1):43–6
Augmentation cystoplasty and the artificial genitourinary sphincter. Strawbridge LR, et al. **J Urol** 1989 Aug;142(2):297–301
A new simplified artificial sphincter. Martelli A, et al. **Life Support Syst** 1983;1 Suppl 1:451–3
Urethral diverticuli in women: an update with a case presentation. Steinberg JB, et al. **Milit Med** 1988 Aug; 153(8):424–6
The Marshall–Marchetti–Krantz procedure: a critical review. Mainprize TC, et al. **Obstet Gynecol Surv** 1988 Dec; 43(12):724–9 (65 ref.)
The Ferrier lecture, 1986. The actions of parasympathetic and sympathetic nerves in human micturition, erection and seminal emission, and their restoration in paraplegic patients by implanted electrical stimulators. Brindley GS. **Proc R Soc Lond [Biol]** 1988 Nov 22;235(1279):111–20 (21 ref.)
Treatment of urinary incontinence with an implantable prosthesis. Lukkarinen OA, et al. **Scand J Urol Nephrol** 1989;23(2):85–8
Surgical management of urinary incontinence in children. Snyder HM 3d. **Surg Clin North Am** 1988 Oct;68(5):909–43 (109 ref.)
The artificial sphincter (AS–800). Experience in children and young adults. Barrett DM, et al. **Urol Clin North Am** 1989 Feb;16(1):119–32
The artificial urinary sphincter. Experience in adults. Scott FB. **Urol Clin North Am** 1989 Feb;16(1):105–17
Role of urethral reconstruction and artificial sphincter in complicated salvage radical prostatectomy. Boyd SD. **Urology** 1988 Oct;32(4):304–8
Urethral profilometry in Scott artificial urinary sphincter [letter] Scherz HC. **Urology** 1989 Jan;33(1):83
[Bladder neck reconstruction in complete urinary incontinence] Xu YM. **Chung Hua Wai Ko Tsa Chih** 1988 Sep;26(9):559–60, 575 (Eng. Abstr.) (Chi)
[Management of urinary incontinence by an internal prosthesis] Kontturi M, et al. **Duodecim** 1988; 104(23–24):1955–9 (Fin)
[Prostaglandin management of urine retention after surgery for incon- tinence] Tammela T, et al. **Duodecim** 1988; 104(20):1621–4 (27 ref.) (Fin)
[Urinary incontinence] Dapunt O. **Gynakol Rundsch** 1988;28 Suppl 2:9–14 (Ger)
[Comparison of clinical and urodynamic parameters before and following a sling operation for recurrent incontinence] Enzelsberger H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:26–8 (Ger)
[Recurrent incontinence following diaphragm-plasty: the value of urodynamic studies] Kölbl H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:28–30 (Ger)
[The concept of surgical treatment of incontinence at the Feldkirch District Hospital] Schurz AR, et al. **Gynakol Rundsch** 1988;28 Suppl 2:38–9 (Ger)
[Ileocystoplasty and enteropathies] Roth S, et al. **Urologe [A]** 1989 Jul;28(4):193–8 (Eng. Abstr.) (Ger)
[Surgical treatment possibilities of severe urinary incontinence in women] Schmidbauer CP, et al. **Urologe [A]** 1988 Sep;27(5):291–6 (Eng. Abstr.) (Ger)
[Are operations for urinary incontinence using colposuspension contraindicated in low urethral closing pressure?] Fischer W, et al. **Z Urol Nephrol** 1988 Sep; 81(9):571–4 (Eng. Abstr.) (Ger)
[Bulbocavernosus fatty tissue flap–plasty] Wandschneider G, et al. **Z Urol Nephrol** 1988 Nov;81(11):685–8 (Eng. Abstr.) (Ger)
[Usefulness of the modification of Pfannenstiel's incision by the Cherney method] Jakowicki J, et al. **Ginekol Pol** 1988 Sep;59(9):552–6 (Eng. Abstr.) (Pol)
[Surgical and conservative treatment of urinary incontinence in women. II. Surgical treatment] Stanek J. **Ginekol Pol** 1988 Apr;59(4):215–22 (Eng. Abstr.) (Pol)
[Implanted devices for the treatment of urinary incontinence] Erokhin AP, et al. **Urol Nefrol (Mosk)** 1988 May–Jun; (3):66–71 (71 ref.) (Rus)
[Endoscopic suspension of the bladder neck in urinary incontinence. Modification of the Stamey technic] Fernández del Busto E, et al. **Arch Esp Urol** 1988 Nov–Dec;41(9):985–8 (Eng. Abstr.) (Spa)
[Implantable artificial sphincter as an aid for patients with severe incontinence] Windahl T, et al. **Lakartidningen** 1989 Jul 12;86(28–29):2525–7 (Swe)

THERAPY

Neuroprostheses in the management of incontinence in children. Schmidt RA, et al. **Acta Urol Belg** 1989; 57(2):557–8
Advances in urinary incontinence management in the elderly. Wyman JF, et al. **Adv Clin Rehabil** 1988;2:82–107 (50 ref.)
Intermittent catheterisation for neuropathic urinary

incontinence. de la Hunt MN, et al. **Arch Dis Child** 1989 Jun;64(6):821–4

Once-daily irrigation of long-term urethral catheters with normal saline. Lack of benefit. Muncie HL Jr, et al. **Arch Intern Med** 1989 Feb;149(2):441–3

Management of the incontinent elderly patient. Fonda D. **Aust Fam Physician** 1988 Aug;17(8):627–30 (7 ref.)

Incontinence of urine. Fonda D, et al. **Aust Fam Physician** 1988 Aug;17(8):657

Management of incontinence: a urological approach. Millard RJ. **Aust Fam Physician** 1989 Aug;18(8):958–63 (8 ref.)

Urinary incontinence. Treating the elderly. Whishaw M. **Aust Fam Physician** 1989 Aug;18(8):921–2, 924–6, 928 (8 ref.)

Biofeedback in treatment of urinary incontinence in stroke patients. Middaugh SJ, et al. **Biofeedback Self Regul** 1989 Mar;14(1):3–19

Bladder neck electrical conductivity in the treatment of detrusor instability with biofeedback. Holmes DM, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):821–6

Experience with the Brindley anterior sacral root stimulator. Robinson LQ, et al. **Br J Urol** 1988 Dec;62(6):553–7

Reaching a consensus on incontinence. **Geriatr Nurs (New York)** 1989 Mar–Apr;10(2):78–80 (0 ref.)

Managing urinary incontinence in community-residing elderly persons. Baigis-Smith J, et al. **Gerontologist** 1989 Apr;29(2):229–33

Home work. Eubanks P. **Hospitals** 1989 Jan 5;63(1):45–6

Interferential therapy for the treatment of stress and urge incontinence. Switzer D, et al. **Ir Med J** 1988 Nov; 81(1):30–1

Prompted voiding therapy for urinary incontinence in aged female nursing home residents. Creason NS, et al. **J Adv Nurs** 1989 Feb;14(2):120–6

A nursing trial of urinary sheath systems on male hospitalized patients. Watson R. **J Adv Nurs** 1989 Jun;14(6):467–70

Methods used to manage urinary incontinence by older adults in the community. Herzog AR, et al. **J Am Geriatr Soc** 1989 Apr;37(4):339–47

Evaluation and treatment of urinary incontinence in long term care. Pannill FC 3d, et al. **J Am Geriatr Soc** 1988 Oct;36(10):902–10

Conservative care of urinary incontinence in the elderly. Keating JC Jr, et al. **J Manipulative Physiol Ther** 1988 Aug;11(4):300–8 (60 ref.)

Pulmonary migration following periurethral polytetrafluoroethylene injection for urinary incontinence. Claes H, et al. **J Urol** 1989 Sep;142(3):821–2

Treatment of urinary incontinence by the periurethral implantation of glutaraldehyde cross-linked collagen. Shortliffe LM, et al. **J Urol** 1989 Mar;141(3):538–41

Neural stimulation for control of voiding dysfunction: a preliminary report in 22 patients with serious neuropathic voiding disorders. Tanagho EA, et al. **J Urol** 1989 Aug; 142(2):340–5

A clinical trial of a behavioral therapy to reduce urinary incontinence in nursing homes. Outcome and implications. Hu TW, et al. **JAMA** 1989 May 12;261(18):2656–62

Endoscopic periurethral Teflon injection. Khalid MA. **JPMA** 1988 Sep;38(9):231–4

The treatment of recurrent urinary incontinence. Kralj B. **Life Support Syst** 1983;1 Suppl 1:421–3

Miniaturised device for long-term intravaginal electrical stimulation for the treatment of urinary incontinence. Ohlsson BL, et al. **Med Biol Eng Comput** 1988 Sep; 26(5):509–15

Effects of some different pulse parameters on the perception of intravaginal and intra-anal electrical stimulation. Ohlsson BL. **Med Biol Eng Comput** 1988 Sep;26(5):503–8

The treatment of urinary incontinence in adults. Newman DK. **Nurse Pract** 1989 Jun;14(6):21–4, 26–8, 31–2 (15 ref.)

Management of coexistent stress and urge urinary incontinence. Karram MM, et al. **Obstet Gynecol** 1989 Jan; 73(1):4–7

Urinary incontinence in the elderly. Wells TJ, et al. **Semin Neurol** 1989 Mar;9(1):60–7

Surgical success with AMS M800 GU sphincter for male incontinence. Malloy TR, et al. **Urology** 1989 Apr; 33(4):274–6

[Submucosal urethral injection of teflon in the treatment of urinary incontinence] Chair SC, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Sep;40(3):295–300 (Eng. Abstr.) **(Chi)**

[Current trends in the therapy of bladder instability in women] Pregazzi R. **Minerva Ginecol** 1989 Jan;41(1):1–5 (69 ref.) (Eng. Abstr.) **(Ita)**

[Functional electric stimulation in the treatment of bladder instability and urethral instability] Frea B, et al. **Minerva Urol Nefrol** 1988 Jan–Mar;40(1):19–24 (Eng. Abstr.) **(Ita)**

[Use of artificial sphincters in the treatment of urinary incontinence] Ronzoni G, et al. **Minerva Urol Nefrol** 1988 Jan–Mar;40(1):13–8 (Eng. Abstr.) **(Ita)**

[Management of urinary incontinence] **Nippon Hinyokika Gakkai Zasshi** 1987 Dec;78(13):2280–6 **(Jpn)**

[Experience with endourethral submucosal teflon injection] Terakawa T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1070–7 (Eng. Abstr.) **(Jpn)**

[Transperineal polytetrafluoroethylene injection in post-prostatectomy urinary incontinence. A case report] Yamaguchi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1708–11 (Eng. Abstr.) **(Jpn)**

[Surgical and conservative treatment of urinary incontinence in women. I. Diagnosis and conservative treatment] Stanek J. **Ginekol Pol** 1988 Apr;59(4):207–14 (Eng. Abstr.) **(Pol)**

[Personal experience in the treatment of urinary incontinence with maximum electrostimulation] Licitar D, et al. **Reumatizam** 1987;34(1–6):24–6 (Eng. Abstr.) **(Scr)**

[Teflon injection in the treatment of urinary incontinence] Fernández del Busto E, et al. **Arch Esp Urol** 1988 Sep; 41(7):522–5 (Eng. Abstr.) **(Spa)**

[The needs of incontinent patients. A care program for elderly women in Gothenburg] **Lakartidningen** 1988 Sep 14;85(37):2977–8 **(Swe)**

URINE

Blockage of urinary catheters: role of microorganisms and constituents of the urine on formation of encrustations. Kunin CM. **J Clin Epidemiol** 1989;42(9):835–42

VETERINARY

Ectopic ureter managed by unilateral nephrectomy in two female horses. Sullins KE, et al. **Equine Vet J** 1988 Nov; 20(6):463–6

Urodynamic alterations after prostatectomy in dogs without clinical prostatic disease. Basinger RR, et al. **Vet Surg** 1987 Nov–Dec;16(6):405–10

[Urinary incontinence in spayed female dogs: frequency and breed disposition] Arnold S, et al. **Schweiz Arch Tierheilkd** 1989;131(5):259–63 (Eng. Abstr.) **(Ger)**

URINARY INCONTINENCE, STRESS

Combined detrusor instability and stress urinary incontinence: where is the primary pathology? Koonings P, et al. **Gynecol Obstet Invest** 1988;26(3):250–6

Prevalence and outcome of surgery for female incontinence. Diokno AC, et al. **Urology** 1989 Apr;33(4):285–90

COMPLICATIONS

Proposed management of low urethral pressure type of genuine stress urinary incontinence. Bergman A, et al. **Gynecol Obstet Invest** 1989;27(3):155–9

[Perineal sonographic procedures in gynecologic diagnosis of incontinence] Kölbl H, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):498–501 (Eng. Abstr.) **(Ger)**

CONGENITAL

[Continent reconstruction of an extreme urogenital sinus—case report of a so-called high vesicovaginal confluence] Schott G, et al. **Urologe [A]** 1988 Jul; 27(4):193–7 (10 ref.) (Eng. Abstr.) **(Ger)**

DIAGNOSIS

The urge syndrome in children. Van Gool JD, et al. **Acta Urol Belg** 1989;57(2):559–62

A comparative study of perineal ultrasound scanning and urethrocystography in patients with genuine stress incontinence. Kölbl H, et al. **Arch Gynecol Obstet** 1988; 244(1):39–45

Transrectal ultrasound versus cystography in the evaluation of anatomical stress urinary incontinence. Bergman A, et al. **Br J Urol** 1988 Sep;62(3):228–34

Are urodynamics necessary in female patients presenting with stress incontinence? Hastie KJ, et al. **Br J Urol** 1989 Feb; 63(2):155–6

Is the investigation of most stress incontinence really necessary? Haylen BT, et al. **Br J Urol** 1989 Aug; 64(2):147–9

Transvaginal endosonography: a new method to study the anatomy of the lower urinary tract in urinary stress incontinence. Quinn MJ, et al. **Br J Urol** 1988 Nov; 62(5):414–8

Clinical application of transrectal ultrasound for the investigation of the incontinent patient. Richmond DH, et al. **Br J Urol** 1989 Jun;63(6):605–9

Correlation between history and urodynamics in neurologically normal incontinent women. Maes D, et al. **Eur Urol** 1988;14(5):377–80

Combined detrusor instability and stress urinary incontinence: where is the primary pathology? Koonings P, et al. **Gynecol Obstet Invest** 1988;26(3):250–6

The GP's role in the management of female urinary incontinence. Brown AD. **Practitioner** 1988 Jul; 232(1452):768–9

Role of ultrasound in urinary incontinence evaluation. Bergman A, et al. **Urology** 1989 May;33(5):443–4

Six-microtransducer catheter connected to computer in evaluation of urethral closure function of women. Kauppila A, et al. **Urology** 1989 Feb;33(2):159–64

[Diagnostic value of retrograde sphincterometry in stress urinary incontinence] Doganov N, et al. **Akush Ginekol (Sofiia)** 1988;27(5):44–7 (Eng. Abstr.) **(Bul)**

DRUG THERAPY

Effects of estrogen on urethral function in women with urinary incontinence. Bhatia NN, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):176–81

Norfenefrine in the treatment of female urinary stress incontinence assessed by one-hour pad weighing test. Diernaes E, et al. **Urol Int** 1989;44(1):28–31

Does medical therapy cure female stress incontinence? Lose G, et al. **Urol Int** 1989;44(1):25–7

[Effect of midodrin on the tonus of the proximal urethra. Urodynamic findings and clinical prospectives] Rinnovati A, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2):93–6 (Eng. Abstr.) **(Ita)**

[Clinical effect of hotyuekkito (buzhongyiqitang) on symptoms due to renal ptosis and stress incontinence] Murakami Y. **Hinyokika Kiyo** 1988 Oct;34(10):1841–3 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

[Involuntary urinary incontinence in association with pregnancy and childbirth] Krahulec P, et al. **Cesk Gynekol** 1989 Feb;54(1):7–10 (Eng. Abstr.) **(Cze)**

[Stress urinary incontinence in women. Epidemiologic inquiry. Apropos of 500 cases] Keskes J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(4):453–60 (Eng. Abstr.) **(Fre)**

ETIOLOGY

The pathogenesis of genitourinary prolapse and stress incontinence of urine. A histological and histochemical study. Gilpin SA, et al. **Br J Obstet Gynaecol** 1989 Jan; 96(1):15–23

The role of partial denervation of the pelvic floor in the aetiology of genitourinary prolapse and stress incontinence of urine. A neurophysiological study. Smith AR, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):24–8

The role of pudendal nerve damage in the aetiology of genuine stress incontinence in women. Smith AR, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):29–32

Ultrasonic prediction of stress urinary incontinence development in surgery for severe pelvic relaxation. Bergman A, et al. **Gynecol Obstet Invest** 1988;26(1):66–72

[Stress urinary incontinence associated with an ectopic ureteral junction. Apropos of 1 case (letter)] Lechartier AM, et al. **J Chir (Paris)** 1989 Jan;126(1):54–5 **(Fre)**

[Ectopic ureter. Description of a clinical case with appearance of stress urinary incontinence] Saltutti C, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):17–22 (Eng. Abstr.) **(Ita)**

MICROBIOLOGY

[Vaginal biocenosis and the microbiologic status of the bladder and urethra in women with stress-induced urinary incontinence] Lotocki W, et al. **Ginekol Pol** 1988 Jun; 59(6):367–70 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Comparison of ultrasound and lateral chain urethrocystography in the determination of bladder neck descent. Gordon D, et al. **Am J Obstet Gynecol** 1989 Jan; 160(1):182–5

[Estrogen and progesterone receptors in mesenchymal structures of the female urogenital tract] Methfessel HD, et al. **Zentralbl Gynakol** 1989;111(8):503–6 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Urethral closure function after total and subtotal hysterectomy measured by urethrocystometry. Kujansuu E, et al. **Gynecol Obstet Invest** 1989;27(2):105–6

A digital test for pelvic muscle strength in older women with urinary incontinence. Brink CA, et al. **Nurs Res** 1989 Jul–Aug;38(4):196–9

[Age, gynecologic status and urinary stress incontinence] Delarue T, et al. **Rev Fr Gynecol Obstet** 1989 Jan;84(1):5–9 (Eng. Abstr.) **(Fre)**

[The so-called resting pressure quotient—the urodynamic equivalent of clinical pelvic floor insufficiency] Behr J, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):559–61 (Eng. Abstr.) **(Ger)**

[Anatomic and functional aspects of the female pelvic floor] Riss P, et al. **Gynakol Rundsch** 1988;28 Suppl 2:20–5 **(Ger)**

[Relation of the static urethral pressure profile and symptoms of urinary urgency in the female] Voigt R, et al. **Z Urol Nephrol** 1988 Jun;81(6):345–9 (Eng. Abstr.) **(Ger)**

[Results of sphincterocystometric examination before and after surgical treatment of stress-induced urinary incontinence in women] Lotocki W, et al. **Ginekol Pol** 1988 Jul;59(7):440–5 (Eng. Abstr.) **(Pol)**

[Cystometry in the study of urinary incontinence] Arteche G, et al. **Rev Chil Obstet Ginecol** 1986;51(2):157–62 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

Female incontinence: 'the Basingstoke project'. Bayliss V. **J R Soc Health** 1988 Dec;108(6):207–8

RADIOGRAPHY

Reliability of voiding colpo-cysto-urethrography in female urinary stress incontinence before and after treatment.

Klarskov P, et al. **Acta Radiol** 1988 Nov-Dec;29(6):685-8
[Radio-urodynamic evaluation of stress urinary incontinence in women] Baldelli S, et al. **Radiol Med (Torino)** 1988 Sep; 76(3):201-5 (Eng. Abstr.) (Ita)

SURGERY

Influence of operations for stress incontinence and/or genital descensus on sexual life. Haase P, et al.
Acta Obstet Gynecol Scand 1988;67(7):659-61

Primary stress urinary incontinence and pelvic relaxation: prospective randomized comparison of three different operations. Bergman A, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):97-101

Comparison of three different surgical procedures for genuine stress incontinence: prospective randomized study. Bergman A, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1102-6

Unsuccessful Burch retropubic urethropexy: a case-controlled urodynamic study. Bowen LW, et al.
Am J Obstet Gynecol 1989 Feb;160(2):452-8

A six-year experience with paravaginal defect repair for stress urinary incontinence. Shull BL, et al.
Am J Obstet Gynecol 1989 Jun;160(6):1432-9; discussion 1439-40

Successful colposuspension in stress urinary incontinence reduces bladder neck mobility and increases pressure transmission to the urethra. Penttinen J, et al.
Arch Gynecol Obstet 1989;244(4):233-8

Colposuspension in treatment of genuine stress incontinence. Rizvi JH, et al. **Asia Oceania J Obstet Gynaecol** 1988 Dec; 14(4):427-31

The urodynamic effect of colposuspension immediately after surgery for genuine stress incontinence. Wang AC, et al.
Asia Oceania J Obstet Gynaecol 1988 Sep;14(3):335-8

A clinical and urodynamic study comparing the Stamey bladder neck suspension and suburethral sling procedures in the treatment of genuine stress incontinence. Hilton P.
Br J Obstet Gynaecol 1989 Feb;96(2):213-20

The Stamey operation for correction of genuine stress incontinence in the elderly woman. Peattie AB, et al.
Br J Obstet Gynaecol 1989 Aug;96(8):983-6

Videourodynamic assessment of the Stamey procedure for stress incontinence. English PJ, et al. **Br J Urol** 1988 Dec; 62(6):550-2

Elevation of the vagina during colposuspension: the use of a Deaver retractor. Haylen BT, et al. **Br J Urol** 1989 Feb; 63(2):220

Modified Stamey procedure for bladder neck suspension. Jones DJ, et al. **Br J Urol** 1989 Feb;63(2):157-61

Assessment of the results of Stamey bladder neck suspension. Kirby RS, et al. **Br J Urol** 1989 Jan;63(1):21-3

Effect of suprapubic operation on urethral closure. Evaluation by single cough urethrocystometry. Penttinen J, et al. **Br J Urol** 1989 Apr;63(4):389-91

Vaginal endosonography in the post-operative assessment of colposuspension. Quinn MJ, et al. **Br J Urol** 1989 Mar; 63(3):295-300

Stamey needle suspension for stress urinary incontinence. A prospective study of 40 patients. Wujanto R, et al.
Br J Urol 1989 Feb;63(2):162-4

Colposuspension in patients with combined stress incontinence and detrusor instability. Langer R, et al.
Eur Urol 1988;14(6):437-9

Endoscopic control during colposuspension procedure for the treatment of stress urinary incontinence. Lindner A, et al. **Eur Urol** 1989;16(5):372-3

Comparison of the Stamey bladder neck suspension procedure with a modified endoscopic suspension for the treatment of stress urinary incontinence. Rodrigues Netto N Jr, et al. **Eur Urol** 1988;15(1-2):62-5

Retropubic urethrocystopexy with fibrin sealant: a long-term follow-up. Larsson B, et al. **Gynecol Obstet Invest** 1988; 26(3):257-61

Negative Q-tip test as a risk factor for failed incontinence surgery in women. Bergman A, et al. **J Reprod Med** 1989 Mar;34(3):193-7

Benefits of posturethropexy bladder conditioning. Fact or fiction? Harlass FE, et al. **J Reprod Med** 1988 Dec; 33(12):961-3

Colpovesical neck suspension for the correction of female stress urinary incontinence. Abbassian A. **J Urol** 1989 Jul; 142(1):95-6

The fascia lata sling procedure for treating recurrent genuine stress incontinence of urine. Beck RP, et al.
Obstet Gynecol 1988 Nov;72(5):699-703

Surgical treatment of stress urinary incontinence: a comparison of the Kelly plication, Marshall-Marchetti-Krantz, and Pereyra procedures [letter] Brubaker LT, et al. **Obstet Gynecol** 1988 Nov; 72(5):820-1

Dynamic urethral pressure profilometry pressure transmission ratio determinations after continence surgery: understanding the mechanism of success, failure, and complications. Bump RC, et al. **Obstet Gynecol** 1988 Dec; 72(6):870-4

Transvaginal needle bladder neck suspension procedures for stress urinary incontinence: a comprehensive review. Karram MM, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):906-14 (57 ref.)

The value of simultaneous hysterectomy during Burch colposuspension for urinary stress incontinence. Langer R, et al. **Obstet Gynecol** 1988 Dec;72(6):866-9

Transvaginal-distal urethroplasty. A multipurpose operation. Mizrahi S, et al. **Scand J Urol Nephrol** 1989;23(1):7-9

Intravesically instilled prostaglandin F2-alpha for the promotion of bladder emptying after surgery for female stress incontinence. Tammela T, et al.
Scand J Urol Nephrol Suppl 1988;110:231-4

Uterine preservation in the surgical management of genuine stress urinary incontinence associated with uterovaginal prolapse. Nesbitt RE Jr. **Surg Gynecol Obstet** 1989 Feb; 168(2):143-7

Bone fixation technique for transvaginal needle suspension. Leach GE, et al. **Urol Clin North Am** 1989 Feb;16(1):175-82

Perirenal urinary extravasation complicating Burch colposuspension. Delaere KP, et al. **Urol Int** 1989; 44(2):119-20

Sexual function after colpo-urethrocystopexy in middle-aged women. Iosif CS. **Urol Int** 1988;43(4):231-3

[Initial experience with the Burch colpopexy in the treatment of urinary stress incontinence] Halaška M, et al.
Cesk Gynekol 1988 Nov;53(9):644-9 (Cze)

[Personal experience with the Barnett-Mack anterior plasty operation in the treatment of urinary incontinence] Halaška M, et al. **Cesk Gynekol** 1988 Jul;53(6):425-8 (Eng. Abstr.) (Cze)

[The treatment of stress urinary incontinence associated with genital prolapse using the Bologna technic (115 cases): indications in elderly patients] Crépin G, et al.
Bull Acad Natl Med (Paris) 1988 Oct;172(7):987-93 (Eng. Abstr.) (Fre)

[Treatment and prevention of urinary stress incontinence by the Bologna procedure in prolapse with large cystocele. Surgical technic] Allier-Pinto S, et al. **J Chir (Paris)** 1988 Dec;125(12):737-43 (Eng. Abstr.) (Fre)

[Clinical and urodynamic results of the Burch colposuspension operation in the treatment of female urinary stress incontinence. A study apropos of 370 cases] Pigné A, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988; 17(7):922-30 (Eng. Abstr.) (Fre)

[Ureteral stenosis following colpocystopexy of urinary stress incontinence. Apropos of 5 cases] Heritier P, et al.
J Urol (Paris) 1988;94(7):349-51 (Eng. Abstr.) (Fre)

[Surgical treatment of female stress urinary incontinence. Determination of the location of the vesico-urethral junction] Mouchel J. **Presse Med** 1988 Oct 29; 17(38):2029-31 (Eng. Abstr.) (Fre)

[Clinical and radiologic findings before and following sling operation for recurrent incontinence] Enzelsberger H, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):45-8 (Eng. Abstr.) (Ger)

[Surgical anatomy of the bladder neck sphincter and its significance for vaginal surgery of stress incontinence] Richter K. **Geburtshilfe Frauenheilkd** 1988 Aug; 48(8):541-50 (47 ref.) (Eng. Abstr.) (Ger)

[Postoperative disorder of bladder emptying in gynecology: pathophysiology and possibilities for treatment] Schüsaler B. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):551-8 (60 ref.) (Eng. Abstr.) (Ger)

[Marshall-Marchetti-Krantz operation with fibrin gluing. Results after 2 years] Stolz W, et al.
Geburtshilfe Frauenheilkd 1989 Jun;49(6):564-7 (Eng. Abstr.) (Ger)

[Urodynamic and viscerographic results following short-arm slingplasty] Fabsits M, et al. **Gynakol Rundsch** 1988;28 Suppl 2:30-2 (Ger)

[Colposuspension in the therapy of female urinary incontinence] Guba H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:35-7 (Ger)

[The significance of bladder neck optics in the surgical therapy of incontinence] Lahodny J, et al.
Gynakol Rundsch 1988;28 Suppl 2:39-41 (Ger)

[The value of anterior colporrhaphy and colpoperineoplasty in therapy of stress incontinence] Ralph G, et al.
Gynakol Rundsch 1988;28 Suppl 2:33-4 (Ger)

[Urodynamic and clinical results 1 year following Stamey endoscopic bladder neck suspension] Tamussino K, et al.
Gynakol Rundsch 1988;28 Suppl 2:41-2 (Ger)

[The urethral pressure profile at rest and in stress following diaphragmplasty] Kölbl H, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):592-7 (Eng. Abstr.) (Ger)

[Assessment of urination before and following operations for stress incontinence] Fischer W, et al. **Zentralbl Gynakol** 1988;110(18):1153-60 (Eng. Abstr.) (Ger)

[Urodynamic results following surgery of incontinence] Ralph G, et al. **Zentralbl Gynakol** 1989;111(4):235-42 (Eng. Abstr.) (Ger)

[Construction of a decision tree for preoperative diagnosis in urinary incontinence] Riss P. **Zentralbl Gynakol** 1989; 111(8):494-502 (Eng. Abstr.) (Ger)

[Surgical colpo-suspension (Burch's method) in the management of female stress incontinence] Antal H, et al.
Orv Hetil 1989 Apr 9;130(15):781-2 (Eng. Abstr.) (Hun)

[Surgical therapy of stress urinary incontinence and detrusor instability] Frigerio L, et al.
Arch Ital Urol Nefrol Androl 1988 Sep;60(3):279-83 (Eng. Abstr.) (Ita)

[Urinary stress incontinence in women. Current treatment] Pregazzi R. **Minerva Ginecol** 1988 Nov;40(11):643-7 (69 ref.) (Eng. Abstr.) (Ita)

[Analysis of the results of surgical treatment of stress-related urinary incontinence by the Marshall-Marchetti-Krantz method in our practice] Banaś B, et al. **Ginekol Pol** 1988 Apr;59(4):202-6 (Eng. Abstr.) (Pol)

[Fixation of the vagina to the rectus abdominis muscle in the treatment of stress-induced urinary incontinence in women] Sprogis J, et al. **Ginekol Pol** 1988 Jul;59(7):446-9 (Eng. Abstr.) (Pol)

[Surgical treatment of vaginal and uterine prolapse associated with elongation of the cervix uteri and stress-induced urinary incontinence] Susloparov LA, et al.
Akush Ginekol (Mosk) 1989 Apr;(4):61-2 (Rus)

[Treatment of female urinary stress incontinence by the Marshall-Marchetti-Krantz technic: review of our experience] Tremps Velázquez E, et al. **Actas Urol Esp** 1988 Nov-Dec;12(6):507-11 (Eng. Abstr.) (Spa)

[Evaluation of urinary stress incontinence and it correction by abdominal surgery] Mackenna Iñiguez A, et al.
Rev Chil Obstet Ginecol 1986;51(2):133-42 (Eng. Abstr.) (Spa)

THERAPY

The effect of pelvic floor exercises in the treatment of genuine urinary stress incontinence in women at two hospitals [letter] Hare DM, et al. **Br J Obstet Gynaecol** 1988 Nov; 95(11):1213

Vaginal cones: a conservative method of treating genuine stress incontinence. Peattie AB, et al.
Br J Obstet Gynaecol 1988 Oct;95(10):1049-53

Interferential therapy for the treatment of stress and urge incontinence. Switzer D, et al. **Ir Med J** 1988 Nov; 81(1):30-1

Complete urinary obstruction following periurethral polytetrafluoroethylene injection for urinary incontinence. Boykin W, et al. **J Urol** 1989 May;141(5):1199-200

Artificial urinary sphincter implantation after pubectomy for bone tumor. Nielsen KT, et al. **J Urol** 1989 Feb; 141(2):372-3

Management of coexistent stress and urge urinary incontinence. Karram MM, et al. **Obstet Gynecol** 1989 Jan; 73(1):4-7

Long-term electrostimulation of the pelvic floor: primary therapy in female stress incontinence? Eriksen BC, et al.
Urol Int 1989;44(2):90-5

[Stress urinary incontinence in women: what therapy?] Niccoli V. **Clin Ter** 1989 Mar 15;128(5):351-5 (Ita)

[Modification of secondary urodynamics by endoscopic (Politef) treatment of urinary stress incontinence] Giannotti P, et al. **Minerva Ginecol** 1988 May;40(5):303-5 (Eng. Abstr.) (Ita)

[Endoscopic injection of autologous adipose tissue in the treatment of female incontinence] Santiago González de Garibay AM, et al. **Arch Esp Urol** 1989 Mar;42(2):143-6 (Eng. Abstr.) (Spa)

URINARY TRACT

AUA eighty-fourth annual meeting. American Urological Association, Inc. May 7-11, 1989, Dallas. Abstracts.
J Urol 1989 Apr;141(4 Pt 2):1A-605A

[The experience of the Armenian Republic Endoscopic Center in the active detection of tumors of the urinary system] Mkrtchian LN, et al. **Vopr Onkol** 1989;35(6):709-11 (Eng. Abstr.) (Rus)

ABNORMALITIES

Influence of vesicoureteral reflux and urinary tract infection on renal growth in children with upper urinary tract duplication. Hannerz L, et al. **Acta Radiol** 1989 Jul-Aug; 30(4):391-4

Urinary tract abnormalities in hand-foot-genital syndrome [letter] Verp MS. **Am J Med Genet** 1989 Apr;32(4):555

Neonatal urological ultrasound: diagnostic inaccuracies and pitfalls. Clarke NW, et al. **Arch Dis Child** 1989 Apr; 64(4):578-80

Outcome after antenatal diagnosis of upper urinary tract dilatation by ultrasonography [letter] Cottrell AJ, et al.
Arch Dis Child 1989 May;64(5):762-3

Bilateral fetal uropathy: what is the outlook? Arthur RJ, et al. **BMJ** 1989 May 27;298(6685):1419-20

Value of antenatal diagnosis of abnormalities of the urinary tract. Greig JD, et al. **BMJ** 1989 May 27;298(6685):1417-9

The value of ultrasound screening of the upper urinary tract in hypospadias. Davenport M, et al. **Br J Urol** 1988 Dec; 62(6):595-6

Urine microscopy and culture in the selection of patients for urinary tract investigation. Maskell R. **Br J Urol** 1989 Jan;63(1):7-10

Antenatal diagnosis of congenital abnormalities in the urinary tract. Results from the Northern Region Fetal Abnormality Survey. Scott JE, et al. **Br J Urol** 1988 Oct;62(4):295-300

Anatomic correlates of ultrasound prenatal diagnosis of urinary tract abnormalities. D'Ottavio G, et al.
Eur J Obstet Gynecol Reprod Biol 1989 Aug;32(2):79-87

Abdominal wall defects and obstructive uropathies. Aetiology and management. Pringle KC. **Fetal Ther** 1988; 3(1-2):67-83 (53 ref.)

Assessment of the indication for intrauterine treatment of urinary tract malformations. Defoort P, et al.
J Perinat Med 1988;16(3):175-81

Continent urinary reconstruction in ischiopagus tripus conjoined twins. Holcomb GW 3d, et al. **J Urol** 1989 Jan; 141(1):100-2

Non-invasive management of fetal obstructive uropathy. Reuss A, et al. **Lancet** 1988 Oct 22;2(8617):949-51

Ultrasound screening of healthy infants for urinary tract abnormalities. Steinhart JM, et al. **Pediatrics** 1988 Oct; 82(4):609–14

Prenatal diagnosis of urinary tract abnormalities—ultrasound and laboratory assessment to predict fetal outcome. Antsaklis AJ, et al. **Prog Clin Biol Res** 1989;305:19–23

Prenatal diagnosis of renal tract anomalies by ultrasound. Reuss A, et al. **Prog Clin Biol Res** 1989;305:13–8

Problems in severe bilateral urinary tract anomalies. Nielsen OH, et al. **Prog Pediatr Surg** 1989;23:81–5

Evaluation of renal and urinary tract abnormalities observed during bone scintigraphy. Salvatori M, et al. **Rays** 1988 Sep–Dec;13(3):101–6

Antenatal diagnosis of renal abnormalities: a review of the state of the art. Barakat AY, et al. **South Med J** 1989 Feb; 82(2):229–34 (61 ref.)

[Obstructive disorders of the urinary tract in the unborn child] Brus F, et al. **Tijdschr Kindergeneeskd** 1989 Feb; 57(1):24–9 (39 ref.) (Eng. Abstr.) (Dut)

[Prenatal diagnosis of fetal diseases of the lower urinary tract] Avni EF, et al. **Acta Urol Belg** 1989;57(2):417–22 (Fre)

[Sexual ambiguity: urologic aspects] Lorge F, et al. **Acta Urol Belg** 1989;57(2):647–61 (Eng. Abstr.) (Fre)

[Anuria revealing an obstructive lesion of the superior excretory route in children] Beurton D. **J Urol (Paris)** 1989; 95(1):60 (Fre)

[Prenatal diagnosis of fetal nephro–uropathies] Cordier MP. **Pediatrie** 1988;43(7):589–95 (Eng. Abstr.) (Fre)

[The exact prenatal diagnosis of abnormalities of the kidneys and efferent urinary system—a possibility for further decreasing perinatal morbidity and mortality] Bollmann R, et al. **Zentralbl Gynakol** 1989;111(10):669–77 (Eng. Abstr.) (Ger)

[Incidence of major developmental anomalies of the urinary tract in neonates] Pintér A, et al. **Orv Hetil** 1988 Nov 27; 129(48):2581–4 (Eng. Abstr.) (Hun)

[Obstructive uropathies: prenatal diagnosis and management] Salamanca Ballesteros A, et al. **Arch Esp Urol** 1988 May; 41(4):297–301 (Eng. Abstr.) (Spa)

ANALYSIS

Distribution of rabbit mucosal glycoprotein throughout urinary tract. Walker SR, et al. **Urology** 1989 Feb; 33(2):127–30

[Lectins in the urothelium and its tumors: locations of staining, types and distribution] Sánchez Fernández de Sevilla MC, et al. **Arch Esp Urol** 1988 May;41(4):268–70 (Eng. Abstr.) (Spa)

ANATOMY & HISTOLOGY

[The anatomy of the lymph nodes in the walls of the human urinary tract] Sapin MR, et al. **Urol Nefrol (Mosk)** 1988 Sep–Oct;(5):47–50 (Eng. Abstr.) (Rus)

BLOOD SUPPLY

Effects of tachykinins and selective tachykinin receptor agonists on vascular permeability in the rat lower urinary tract: evidence for the involvement of NK-1 receptors. Abelli L, et al. **J Auton Pharmacol** 1989 Aug;9(4):253–63

DRUG EFFECTS

Sex hormones and the female urinary tract. Miodrag A, et al. **Drugs** 1988 Oct;36(4):491–504 (120 ref.)

INJURIES

Ureteroscopic injuries to the upper urinary tract. Huffman JL. **Urol Clin North Am** 1989 May;16(2):249–54 (26 ref.)

The role of interventional radiology in the management of genitourinary trauma. Kantor A, et al. **Urol Clin North Am** 1989 May;16(2):255–65 (37 ref.)

[Fundamentals of care of urinary tract injury during gynecologic surgery] Hanuš J. **Cesk Gynekol** 1988 Aug; 53(7):517–22 (Cze)

[Urologic complications after gynecologic and obstetrical operations] Kohoutek M, et al. **Cesk Gynekol** 1988 Jul; 53(6):433–6 (Cze)

[Injuries of the urinary tract in gynecologic surgery: diagnosis, therapy and prevention] Kliment J, et al. **Cesk Gynekol** 1989 Apr;54(3):187–92 (Slo)

INNERVATION

Chronic urinary retention—a sensory problem? Parys BT, et al. **Br J Urol** 1988 Dec;62(6):546–9

[Relation of innervation and function of the lower urinary tract] Nishizawa O. **Nippon Hinyokika Gakkai Zasshi** 1987 Dec;78(13):2262–5 (10 ref.) (Jpn)

[Experimental studies on sympathetic innervation of lower urinary tract. Quantitation of nerve terminals and urethral pressure response after hypogastric denervation] Park YC, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr; 80(4):569–73 (Eng. Abstr.) (Jpn)

[Efferent and primary afferent neural pathways innervating the lower urinary tract of the cat. Part I. Efferent neural pathways] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):868–79 (Eng. Abstr.) (Jpn)

[Efferent and primary afferent neural pathways innervating the lower urinary tract of the cat. Part II. Primary afferent neural pathways] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):880–7 (Eng. Abstr.) (Jpn)

METABOLISM

Distribution of cytokeratin polypeptides in epithelia of the adult human urinary tract. Schaafsma HE, et al. **Histochemistry** 1989;91(2):151–9

MICROBIOLOGY

Tissue interactions of Escherichia coli adhesins. Korhonen TK, et al. **Antonie Van Leeuwenhoek** 1988;54(5):411–20 (28 ref.)

Consequences of bacterial attachment in the urinary tract. Svanborg Edén C, et al. **Biochem Soc Trans** 1989 Jun; 17(3):464–6

The ecology and pathogenicity of urease-producing bacteria in the urinary tract. McLean RJ, et al. **CRC Crit Rev Microbiol** 1988;16(1):37–79 (315 ref.)

Effect of subinhibitory concentration of gentamicin on adherence of Klebsiella aerogenes to uroepithelial cells in vitro. Panhotra BR, et al. **Indian J Med Res** 1988 Aug; 88:130–3

Differential effect of Tamm–Horsfall protein on adherence of Escherichia coli to transitional epithelial cells. Duncan JL. **J Infect Dis** 1988 Dec;158(6):1379–82

Antibacterial activity of norfloxacin against bacterial isolates from the urinary tract. Qadri SM, et al. **J Natl Med Assoc** 1989 Apr;81(4):382–5

The O75X adhesin of uropathogenic Escherichia coli: receptor-active domains in the canine urinary tract and in-vitro interaction with laminin. Westerlund B, et al. **Microb Pathog** 1987 Aug;3(2):117–27

[The adherence of Escherichia coli to uroepithelial cells] Ishihara T, et al. **Kansenshogaku Zasshi** 1988 Mar; 62(3):242–5 (Eng. Abstr.) (Jpn)

PATHOLOGY

Urinary tract morbidity in schistosomiasis haematobia: associations with age and intensity of infection in an endemic area of Coast Province, Kenya. King CH, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):361–8

Transvaginal endosonography: a new method to study the anatomy of the lower urinary tract in urinary stress incontinence. Quinn MJ, et al. **Br J Urol** 1988 Nov; 62(5):414–8

[Total necrosis of the urinary system as a result of drug therapy] Al'berton VM, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):65–6 (Rus)

PHYSIOLOGY

Immunohistochemical investigation of inter-alpha-trypsin inhibitor in the urinary tract. Odum L. **APMIS** 1989 Apr; 97(4):357–60

Neuropeptides in urology. Scultéty S. **Int Urol Nephrol** 1989; 21(1):39–45 (33 ref.)

Urodynamics of the lower urinary tract. Nielsen KT, et al. **Urol Res** 1988;16(4):271–6 (54 ref.)

[76th annual meeting of the Japanese Urological Association. Abstracts] **Nippon Hinyokika Gakkai Zasshi** 1988 Dec; 79(13 Suppl):2081–257 (Jpn)

[1st meeting of the Japanese Pediatric Urology Section. Abstracts] **Nippon Hinyokika Gakkai Zasshi** 1988 Dec; 79(13 Suppl):2258–73 (Jpn)

PHYSIOPATHOLOGY

Neurogenic bladder. A clinical approach based on fundamental biohydraulics. Churchill BM, et al. **Acta Urol Belg** 1989;57(2):475–95

Neurological defects of the voiding reflex arcs in chronic urinary retention and their relation to spina bifida occulta. Fidas A, et al. **Br J Urol** 1989 Jan;63(1):16–20

Motor abnormalities of digestive and urinary tracts in patients on ventilator for acute exacerbation of chronic obstructive pulmonary disease. Bonmarchand G, et al. **Dig Dis Sci** 1989 Aug;34(8):1231–7

Extravasation from the upper urinary tract: three case reports. Elliott JP, et al. **J Miss State Med Assoc** 1988 Sep;29(9):269–71

Ambulatory monitoring of bladder and detrusor pressure during natural filling. Griffiths CJ, et al. **J Urol** 1989 Sep; 142(3):780–4

[Urinary function in women with uterine myoma] Ketskarova S, et al. **Akush Ginekol (Sofiia)** 1989;28(1):67–9 (Bul)

[Combination radiodiagnosis of the functional state of the urinary tract in cancer of the kidney] Gabuniia RI, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):21–7 (Eng. Abstr.) (Rus)

[Function of the kidneys and upper urinary tract in chronic prostatitis] Shabad AL, et al. **Sov Med** 1988;(8):111–4 (Rus)

[Urodynamics of the lower urinary tract in patients with prostatic adenoma and cancer before and after transurethral surgery] Caravia Pubillones I, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):46–8 (Eng. Abstr.) (Rus)

[Combined urodynamic insufficiency in patients with an infravesical obstruction] Panikratov KD, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):41–6 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

[Various anatomic and functional characteristics of the urinary system in patients with a history of adnexitis] Dzhabrailova SSh, et al. **Akush Ginekol (Mosk)** 1989 Apr; (4):49–52 (Eng. Abstr.) (Rus)

[A complex of mathematical models in the radionuclide diagnosis of the status of the urinary system] Gabuniia RI, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):37–42 (Eng. Abstr.) (Rus)

SURGERY

Urinary tract reconstruction in children. McMullin ND. **Aust N Z J Surg** 1988 Aug;58(8):619–29

The in-vitro assessment of a collagen/vicryl (polyglactin) composite film together with candidate suture materials for potential use in urinary tract surgery. III. Adherence of bacteria to the material surface. Gemmell CG, et al. **Urol Res** 1988;16(5):381–4

Integrated cystoscope: first rigid multipurpose operating cystoscope for local anesthetic endoscopy. Miller RA, et al. **Urology** 1989 Mar;33(3):193–7

[Preventive antibiotic therapy and endoscopic resection. A randomized study of 52 patients] Chatelain C, et al. **Ann Urol (Paris)** 1988;22(6):407–9 (Eng. Abstr.) (Fre)

[Urinary tract reconstruction] Sato S. **Nippon Hinyokika Gakkai Zasshi** 1987 Dec;78(13):2241–2 (3 ref.) (Jpn)

[Clinical observations on the cost-effectiveness relationship in endoscopic surgery on the lower urinary tract] Proca E, et al. **Rev Chir [Chir]** 1988 May–Jun;37(3):161–72 (Eng. Abstr.) (Rum)

[Use of stent-aided internal drainage in obstructive uropathy in children] Erokhin AP, et al. **Klin Khir** 1988;(6):51–3 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Scanning electron microscopy of the upper urinary tract in transitional cell carcinoma of the renal pelvis. Newman J, et al. **Br J Exp Pathol** 1988 Aug;69(4):525–36

URINARY TRACT INFECTIONS

Urinary tract infections in the elderly. Zilkoski MW, et al. **Am Fam Physician** 1989 May;39(5):125–34 (41 ref.)

Urinary tract infections in men. Gower PE. **BMJ** 1989 Jun 17;298(6688):1595–6 (14 ref.)

Urinary tract infections in men [letter] Maskell R. **BMJ** 1989 Jul 8;299(6691):122

Urinary tract infections in primary care obstetrics and gynecology. Fihn SD. **Clin Obstet Gynecol** 1988 Dec; 31(4):1003–18 (38 ref.)

Causes, diagnosis, and treatment of bacterial infections of the urinary tract. Iravani A. **Compr Ther** 1988 Nov; 14(11):49–53 (8 ref.)

Urinary tract infections. **Infect Dis Clin North Am** 1987 Dec; 1(4):713–964

Symposium on Genitourinary and Gastrointestinal Infections. 9th annual National Pediatric Infectious Disease Seminar. Washington, DC, March 30 to April 1, 1989. **Pediatr Infect Dis J** 1989 Aug;8(8):547–82

Nosocomial urinary tract infections. Carson CC 3d. **Surg Clin North Am** 1988 Oct;68(5):1147–55 (29 ref.)

[Urinary tract infection in children: clinical analysis and investigation] Lin HY, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Feb;43(2):125–30 (Eng. Abstr.) (Chi)

[Urinary tract infections, etiology, diagnosis and treatment with effective antibiotics] Eriksen NH, et al. **Nord Med** 1989;104(2):35–8 (Eng. Abstr.) (Dan)

[Urinary tract infections during pregnancy] Orvieto R, et al. **Harefuah** 1989 Mar 1;116(5):266–70 (29 ref.) (Heb)

[Recurrent urinary tract infections] Tataranni G, et al. **G Clin Med** 1988 Nov;69(11):689–94 (Ita)

[Urinary tract infections in children. Practical aspects] Gutteberg TJ. **Tidsskr Nor Laegeforen** 1988 Aug 30; 108(24):1895–7 (Eng. Abstr.) (Nor)

[Urinary infection and vesico-ureteral reflux: protocol of diagnosis, treatment and control] Heras M, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:119–23 (9 ref.) (Spa)

BLOOD

The incidence of erythrocyte P1 antigen retention in children with urinary tract infection. Takano K, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):117–20

COMPLICATIONS

Influence of vesicoureteral reflux and urinary tract infection on renal growth in children with upper urinary tract duplication. Hannerz L, et al. **Acta Radiol** 1989 Jul–Aug; 30(4):391–4

Voiding cystourethrography as a predictor of reflux nephropathy in children with urinary-tract infection. Hellström M, et al. **AJR** 1989 Apr;152(4):801–4

Cholestatic jaundice with urinary tract infection in a child with acute lymphoblastic leukaemia. Mallouh AA. **Ann Trop Paediatr** 1988 Sep;8(3):162–4 (17 ref.)

Bacterial and host determinants of renal scarring. Lomberg H, et al. **APMIS** 1989 Mar;97(3):193–9 (47 ref.)

Infection induced renal stones: etiopathological remarks. Mandressi A, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec; 59(2):75–7

Urinary tract infections in men [letter] Welch I, et al.

BMJ 1989 Jul 15;299(6692):184
Salmonella anatum: an unusual urinary pathogen in a patient with nephrolithiasis. Hamdy FC, et al. Br J Urol 1988 Dec; 62(6):615–6
Emphysematous pyelonephritis. Complicated urinary tract infection in diabetes. Cook DJ, et al. Diabetes Care 1989 Mar;12(3):229–32
Urinary tract infections and diurnal incontinence in girls. Sørensen K, et al. Eur J Pediatr 1988 Nov;148(2):146–7
Pleomorphic rhabdomyosarcoma of the urinary bladder in association with recurrent urinary-tract infection. Goble M, et al. Eur J Surg Oncol 1989 Apr;15(2):155–7
Chlamydia trachomatis: a major threat to reproduction. Paavonen J, et al. Hum Reprod 1989 Feb;4(2):111–24 (134 ref.)
Urinary tract infections associated with otitis media in infants and children. Torrijos E, et al. J Natl Med Assoc 1989 Jun;81(6):677–9
Complications of pregnancy in women after reimplantation for vesicoureteral reflux. Austenfeld MS, et al. J Urol 1988 Nov;140(5 Pt 2):1103–6
Infection stones. Lerner SP, et al. J Urol 1989 Mar;141(3 Pt 2):753–8 (90 ref.)
Urinary tract infection and vesicoureteral reflux. Edelmann CM Jr. Pediatr Ann 1988 Sep;17(9):568, 570–80, 582
Fever, bacteriuria and concomitant disease in children with urinary tract infection. Mårild S, et al. Pediatr Infect Dis J 1989 Jan;8(1):36–41
The relation between urinary tract infections and stone composition in renal stone formers. Holmgren K, et al. Scand J Urol Nephrol 1989;23(2):131–6
[Positive urine cultures in malnourished children (letter)] Schoeman EM, et al. S Afr Med J 1989 Mar 4;75(5):249 (Afr)
[Urogenital infection and male fertility] Auroux M. J Gynecol Obstet Biol Reprod (Paris) 1988;17(7):869–75 (46 ref.) (Eng. Abstr.) (Fre)
[Obstructive anuria and lithiasis] Ballanger P. J Urol (Paris) 1989;95(1):56–7 (Fre)
[Infection-induced urinary calculi in children; current therapeutic schedule and prevention of recurrence] Bach D, et al. Klin Padiatr 1988 Nov–Dec;200(6):429–33 (9 ref.) (Eng. Abstr.) (Ger)
[You make the diagnosis. Acute postinfectious glomerulonephritis. Grade IV left and grade III right vesico-ureteral reflux. Bilateral high-grade reflux nephropathy with left atrophic kidney and right focal parenchymal scar] Ring E, et al. Padiatr Padol 1989; 24(1):77–80 (Ger)
[Differentiation of hematuria by phase contrast microscopy studies of urine erythrocytes] Müller V, et al. Z Urol Nephrol 1989 May;82(5):277–83 (Eng. Abstr.) (Ger)
[Today's prognosis of urolithiasis caused by infection calculi in the young child] Otto-Unger G, et al. Z Urol Nephrol 1989 Apr;82(4):187–93 (Eng. Abstr.) (Ger)
[Etiopathogenetic interpretation of urinary tract infections associated with pelvic inflammatory disease and a clinico-therapeutic study of the effects of norfloxacin] Surico N, et al. Minerva Ginecol 1988 Mar;40(3):183–92 (Eng. Abstr.) (Ita)
[A retroperitoneal urinary phlegmon with abscess formation and rupture into the abdominal cavity, development of local peritonitis and secondary appendicitis] Kozlov VG, et al. Klin Khir 1988;(12):54 (Rus)
[Gonorrheal ophthalmia in a woman with specific involvement of the urogenital tract] Tsveer VL, et al. Vestn Dermatol Venerol 1988;(5):61–2 (Rus)
[Acupuncture in the complex treatment of patients with reactive arthritis] Kapinos EN. Vopr Kurortol Fizioter Lech Fiz Kult 1988 May–Jun; (3):47–50 (Eng. Abstr.) (Rus)
[Inflammation of the urinary tract in a neonate infected with Chlamydia trachomatis. Case report] Prekop R, et al. Cesk Pediatr 1989 Jan;44(1):48–9 (Slo)
[Salt-losing tubulopathy secondary to urinary infection: a form of transitory pseudohypoaldosteronism] Escribano Burgos C, et al. An Esp Pediatr 1989 May;30(5):404–6 (Spa)

DIAGNOSIS

Pediatric urinary tract infections [letter] Scherger JE. Am Fam Physician 1989 Feb;39(2):39–41
A clinical model for diagnosis of urinary tract infection in young women. Leibovici L, et al. Arch Intern Med 1989 Sep;149(9):2048–50
Nosocomial urinary tract infections in neoplastic and non-neoplastic diseases. Giongo F, et al. Chemioterapia 1987 Jun;6(2 Suppl):503–4
Survey among general practitioners in the Suez Canal area on urinary tract infections. Refaat A. Chemioterapia 1987 Jun;6(2 Suppl):499
Implications of probability analysis for interpreting results of leukocyte esterase and nitrite test strips. Bolann BJ, et al. Clin Chem 1989 Aug;35(8):1663–8
Detection of urinary tract infections by rapid methods. Pezzlo M. Clin Microbiol Rev 1988 Jul;1(3):268–80 (100 ref.)
A protocol for the investigation of infants and children with urinary tract infection [letter] Shah KJ. Clin Radiol 1989 Jul;40(4):434–5
A modified nitrite test as a screening test for significant bacteriuria. Tahirović H, et al. Eur J Pediatr 1988 Aug; 147(6):632–3
Diagnosis and treatment of acute urinary tract infections. Johnson JR, et al. Infect Dis Clin North Am 1987 Dec; 1(4):773–91 (50 ref.)
Recurrent urinary tract infection in adult women: diagnosis and treatment. Nicolle LE, et al. Infect Dis Clin North Am 1987 Dec;1(4):793–806 (73 ref.)
The role of dipsticks in the diagnosis of urinary tract infection. Murphy LC, et al. Ir Med J 1989 Jun;82(2):74–6
Ultrasonic demonstration of urinary tract candidiasis in an infant. Avni EF. J Belge Radiol 1988;71(6):714–5
Evaluation of the modified Bac-T-Screen and FiltraCheck-UTI urine screening systems for detection of clinically significant bacteriuria. Murray PR, et al. J Clin Microbiol 1988 Nov;26(11):2347–50
Sonographic demonstration of thickened renal pelvic mucosa/submucosa in mixed candida infection. Bick RJ, et al. JCU 1987 Jun;15(5):333–6
Urinary tract infections in older adults. Millette-Petit JM. Nurse Pract 1988 Dec;13(12):21–4, 29 (29 ref.)
Urinary tract infections in the pediatric patient. Wilson D, et al. Nurse Pract 1989 Jul;14(7):38, 41–2 (12 ref.)
Renal ultrasound and excretory urography in infants and young children with urinary tract infection. Kenda R, et al. Pediatr Radiol 1989;19(5):299–301
Intravenous pyelography in children with urinary tract infection and vesicoureteral reflux. Alon U, et al. Pediatrics 1989 Mar;83(3):332–6
Recurrent urinary tract infections. Stamey TA. West J Med 1988 Dec;149(6):764–5
[Role of ultrasound in studying the first urinary infection in children] Boudailliez B, et al. Arch Fr Pediatr 1989 Feb; 46(2):113–5 (18 ref.) (Eng. Abstr.) (Fre)
[Importance of echography in the study of urinary tract infections in childhood] Zocchi M, et al. Radiol Med (Torino) 1988 Dec;76(6):597–600 (Eng. Abstr.) (Ita)
[A clinical study and the diagnosis in magnetic resonance imaging of renal scarring] Tsugaya M, et al. Nippon Hinyokika Gakkai Zasshi 1989 Apr;80(4):532–9 (Eng. Abstr.) (Jpn)
[Studies on diagnosis of infection caused by Chlamydia trachomatis. 2. Studies on isolation and identification of Chlamydia trachomatis] Ono K, et al. Rinsho Byori 1989 Jan;37(1):93–6 (Jpn)
[Experience with the comprehensive examination and treatment of patients with reactive urogenous arthritis] Ashmarin Iula, et al. Vestn Dermatol Venerol 1989; (1):57–60 (Eng. Abstr.) (Rus)
[Experience with the use of an immunoenzyme analysis method in the diagnosis and removal from the rolls of patients with urogenital gonorrhea] Vladimirov VV, et al. Vestn Dermatol Venerol 1989;(5):50–1 (Eng. Abstr.) (Rus)
[Use of olivomycin for the diagnosis of Ureaplasma infection of the sperm] Karpenko AE. Vrach Delo 1988 Jul; (7):109–11 (Eng. Abstr.) (Rus)
[Predictive value of 6 urinary parameters in determining the presence of urinary infection] el-Banna N, et al. Arch Esp Urol 1988 Oct;41(8):569–72 (Eng. Abstr.) (Spa)
[Rapid diagnostic methods as predictors of urinary infection in primary health care] Pallarés J, et al. Med Clin (Barc) 1988 Dec 10;91(20):775–8 (Eng. Abstr.) (Spa)
[Urinary tract infections in the elderly: hemagglutinating properties and susceptibility to antibacterial agents of the uropathogenic strains] Padilla C, et al. Rev Med Chil 1988 Mar;116(3):222–8 (Eng. Abstr.) (Spa)

DRUG THERAPY

Randomized, double-blind comparison of ciprofloxacin and trimethoprim-sulfamethoxazole for complicated urinary tract infections. Allais JM, et al. Antimicrob Agents Chemother 1988 Sep;32(9):1327–30
Single-dose enoxacin compared with 3-day treatment for urinary tract infection. Backhouse CI, et al. Antimicrob Agents Chemother 1989 Jun;33(6):877–80
Carumonam versus ceftazidime for urinary tract infections. Edelstein H, et al. Antimicrob Agents Chemother 1988 Jul; 32(7):1031–3
Double-blind, randomized comparison of 24 weeks of norfloxacin and 12 weeks of norfloxacin followed by 12 weeks of placebo in the therapy of complicated urinary tract infection. Sheehan GJ, et al. Antimicrob Agents Chemother 1988 Aug;32(8):1292–3
Sultamicillin in the treatment of urinary tract infections. Kawada Y. APMIS Suppl 1989;5:63–7
Sultamicillin versus trimethoprim/sulfamethoxazole in the treatment of urinary tract infections. Naber KG, et al. APMIS Suppl 1989;5:57–62
Single dose trimethoprim for urinary tract infection. Nolan T, et al. Arch Dis Child 1989 Apr;64(4):581–6
The paradox of using a 7 day antibacterial course to treat urinary tract infections in the community. Cheung R, et al. Br J Clin Pharmacol 1988 Oct;26(4):391–8
Cefotetan in the treatment of post-operative infections following obstetric and gynecological surgery. Cianci A, et al. Chemioterapia 1987 Jun;6(2 Suppl):537–8
Therapeutic evaluation of the ticarcillin-clavulanic acid combination in severe nephrourologic infections. Dalet F, et al. Chemioterapia 1987 Jun;6(2 Suppl):512–3
Bacteriological and clinical experiences with ofloxacin in urinary tract infections. Fröhlich G, et al. Chemioterapia 1987 Jun;6(2 Suppl):525–6
Piperacillin therapy for complicated urinary tract infections caused by enterococci alone and in association with multi-drug resistant pathogens. Gesu GP, et al. Chemioterapia 1987 Jun;6(2 Suppl):508–10
Ciprofloxacin (BAY 09867): clinical evaluation in urinary tract infections due to Pseudomonas aeruginosa. Guibert JM, et al. Chemioterapia 1987 Jun;6(2 Suppl):524–5
Comparative study of Ro 17-2301 (AMA-1080) and amikacin in complicated urinary tract infections. Hahn LB, et al. Chemioterapia 1987 Jun;6(2 Suppl):519–21
Carumonam in the treatment of severe and complicated urinary tract infections. Kotilainen P, et al. Chemioterapia 1987 Jun;6(2 Suppl):514–5
Pharmacokinetics of intravenous mezlocillin in elderly patients. Mounier M, et al. Chemioterapia 1987 Jun;6(2 Suppl):254–5
Carumonam versus ceftazidime: in vitro activity, pharmacokinetics in elderly patients, safety and therapeutic efficacy in the treatment of complicated urinary tract infections. Naber K, et al. Chemioterapia 1987 Jun;6(2 Suppl):517–8
Ciprofloxacin in the treatment of complicated urinary tract infections. Naber K, et al. Chemioterapia 1987 Jun;6(2 Suppl):522–3
Imipenem in the treatment of complicated urinary tract infection. Naber K, et al. Chemioterapia 1987 Jun;6(2 Suppl):511–2
Cefotetan in the treatment of internal medicine infections in diabetic patients. Romanelli G, et al. Chemioterapia 1987 Jun;6(2 Suppl):375–7
Clinical evaluation of sulbactam + ampicillin in the treatment of pediatric urinary tract infections. Solbiati M, et al. Chemioterapia 1988 Dec;7(6):393–5
Patient compliance and efficacy of low-dose, long-term prophylaxis in patients with recurrent urinary tract infection. Westenfelder M, et al. Chemioterapia 1987 Jun; 6(2 Suppl):530–2
Carumonam and cefotiam in the treatment of complicated urinary tract infection (UTI): a randomized study. Westenfelder M, et al. Chemioterapia 1987 Jun;6(2 Suppl):515–6
Multicenter comparative study of aztreonam and gentamicin in the treatment of renal and urinary tract infections. Albertazzi A, et al. Chemotherapy 1989;35 Suppl 1:77–80
Aztreonam in the treatment of urinary tract infections: a multicenter trial. Martelli A, et al. Chemotherapy 1989;35 Suppl 1:8–14
The clinical use of aztreonam. Schönwald S, et al. Chemotherapy 1989;35 Suppl 1:45–8
Trimethoprim in pediatric urinary tract infection. Rajkumar S, et al. Child Nephrol Urol 1988–89;9(1–2):77–81
Netilmicin. Laboratory and clinical studies. Wang F, et al. Chin Med J [Engl] 1988 Oct;101(10):776–80
Outpatient antibiotic therapy for urinary tract infections in women. Keys TF. Cleve Clin J Med 1989 Jul–Aug; 56(5):478–80
Current experience with quinolones in the treatment of urinary tract infection. Nicolle LE. Clin Invest Med 1989 Feb;12(1):35–8
Tissue penetration and clinical efficacy of enoxacin in urinary tract infections. Childs SJ. Clin Pharmacokinet 1989;16 Suppl 1:32–7 (15 ref.)
Cefaclor in the treatment of skin, soft tissue, and urinary tract infections: a review. Verhoef J. Clin Ther 1988;11 Suppl A:71–82 (38 ref.)
Treatment of bacterial infections of the urinary tract. Montgomerie JZ. Compr Ther 1989 Aug;15(8):41–6 (27 ref.)
Enoxacin. A review of its antibacterial activity, pharmacokinetic properties and therapeutic use. Henwood JM, et al. Drugs 1988 Jul;36(1):32–66 (153 ref.)
Therapeutic efficacy of ofloxacin, ciprofloxacin and NY-198 in experimentally infected normal and alloxan-induced diabetic mice. Obana Y, et al. Drugs Exp Clin Res 1988; 14(5):327–31
In vitro and clinical evaluation of ofloxacin in urinary tract infection and enteric fever. Tanphaichitra D, et al. Drugs Exp Clin Res 1988;14(8):529–31
Ceftriaxone in chemoprophylaxis and therapy of urinary tract infections. Pisani E, et al. Eur Surg Res 1989;21 Suppl 1:36–42 (19 ref.)
Treating genitourinary and pharyngeal gonorrhoea with single dose ceftriaxone. Christophersen J, et al. Genitourin Med 1989 Jan;65(1):14–7
Single-dose therapy of uncomplicated urinary tract infections in females—treatment of choice? Naber KG. Infection 1989 May-Jun;17(3):119–20
Clinical experience with ciprofloxacin in the treatment of urinary tract infections: a review. van Poppel H, et al. Infection 1988;16(6):337–44 (38 ref.)
A comparison of cefmetazole, and cefoxitin for the treatment of patients hospitalized with acute urinary tract infections. Burke BM, et al. J Antimicrob Chemother 1989 Apr;23 Suppl D:35–8
In-vitro activity of fleroxacin against urinary tract and genital tract pathogens. Dubois J, et al. J Antimicrob Chemother 1988 Oct;22 Suppl D:31–4
Fleroxacin in single dose oral therapy of uncomplicated lower urinary tract infection. Kosmidis J, et al.

J Antimicrob Chemother 1988 Oct;22 Suppl D:219–21
Ofloxacin compared with ciprofloxacin in the treatment of complicated lower urinary tract infections.
Kromann-Andersen B, et al. J Antimicrob Chemother 1988 Sep;22 Suppl C:143–7
Trimethoprim resistance in urinary tract pathogens in two Nigerian hospitals. Lamikanra A, et al.
J Antimicrob Chemother 1989 Jan;23(1):151–4
Treatment of acute uncomplicated urinary tract infections with single daily doses of cefuroxime axetil. Leigh DA, et al. J Antimicrob Chemother 1989 Feb;23(2):267–73
The pharmacokinetics of norfloxacin in the aged. MacGowan AP, et al. J Antimicrob Chemother 1988 Nov;22(5):721–7
In-vitro activity of fleroxacin against isolates causing complicated urinary tract infections and concentrations in seminal and prostatic fluid and in prostatic adenoma tissue. Naber KG, et al. J Antimicrob Chemother 1988 Oct;22 Suppl D:199–207
Single low-dose ofloxacin for the treatment of uncomplicated urinary tract infection in young women. Raz R, et al.
J Antimicrob Chemother 1988 Dec;22(6):945–9
Initial management of serious urinary tract infection: epidemiologic guidelines. Dolan JG, et al.
J Gen Intern Med 1989 May–Jun;4(3):190–4
Amoxycillin and clavulanic acid in the treatment of urinary tract infections in children. Ruberto U, et al.
J Int Med Res 1989 Mar–Apr;17(2):168–71
Minimum effective dose of trimethoprim for urinary tract infection. Blackstone V, et al. J R Coll Gen Pract 1988 Jul;38(312):320
Ciprofloxacin as treatment for genitourinary tract infection. Childs SJ, et al. J Urol 1989 Jan;141(1):1–5 (50 ref.)
A multicenter, double-blind, trimethoprim–sulfamethoxazole controlled study of enoxacin in the treatment of patients with complicated urinary tract infections. Cox CE, et al. J Urol 1989 Mar;141(3):575–8
Aztreonam: critical evaluation of the first monobactam antibiotic in treatment of urinary tract infections. Madsen PO, et al. J Urol 1988 Nov;140(5):925–32 (76 ref.)
Nitrofurantoin: an update. Cunha BA.
Obstet Gynecol Surv 1989 May;44(5):399–406 (95 ref.)
An appraisal of antibiotic policies for urinary tract infections in patients with spinal cord injuries undergoing long-term intermittent catheterisation. Stickler DJ, et al.
Paraplegia 1988 Aug;26(4):215–25 (44 ref.)
Management of urinary tract infections [clinical conference] Belman AB, et al. Pediatr Infect Dis J 1989 Aug;8(8):560–3
Options in antimicrobial management of urinary tract infections in infants and children. McCracken GH Jr.
Pediatr Infect Dis J 1989 Aug;8(8):552–5
Single dose antibiotic treatment of urinary tract infections in children [letter] Roscelli JD. Pediatr Infect Dis J 1988 Nov;7(11):821–3
Choice of antibiotic for lower urinary tract infections in men. Manson AL. Postgrad Med 1989 Feb 1;85(2):224, 226
Intramuscular cefoxitin. McCloskey RV. Rev Infect Dis 1979 Jan–Feb;1(1):224–7
Use of quinolones in urinary tract infections and prostatitis. Naber KG. Rev Infect Dis 1989 Jul–Aug;11 Suppl 5:S1321–37 (159 ref.)
Clinical evaluation of cefoxitin in treatment of infections in 47 orthopedic patients. Schurman DJ, et al.
Rev Infect Dis 1979 Jan–Feb;1(1):206–9
Double-blind comparison of 3-day versus 7-day treatment with norfloxacin in symptomatic urinary tract infections. The Inter-Nordic Urinary Tract Infection Study Group. Scand J Infect Dis 1988;20(6):619–24
Clinical and bacteriological effects of therapy of urinary tract infection in primary health care: relation to in vitro sensitivity testing. Ferry S, et al. Scand J Infect Dis 1988; 20(5):535–44
Ciprofloxacin in urinary tract infections. Høiby N.
Scand J Infect Dis Suppl 1989;60:54–7 (20 ref.)
Norfloxacin versus co-trimoxazole for the treatment of upper urinary tract infections: a double blind trial. Tungsanga K, et al. Scand J Infect Dis Suppl 1988;56:28–34
Treatment of urinary tract infections in Hong Kong: a comparative study of norfloxacin and co-trimoxazole. Wong WT, et al. Scand J Infect Dis Suppl 1988;56:22–7
Suppressive therapy with norfloxacin in patients with recurrent and/or complicated urinary tract infection. Falck L, et al. Scand J Urol Nephrol Suppl 1988;110:307–11
A psychosocial perspective in the explanation of patients' drug-taking behavior. Ried LD, et al. Soc Sci Med 1988; 27(3):277–85
Effective prophylaxis of early post-transplant urinary tract infections (UTI) in the cyclosporine (CSA) era. Maddux MS, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2108–9
Quinolones in urology. Nielsen KT, et al. Urol Res 1989; 17(2):117–24 (70 ref.)
Nosocomial urinary tract infection [letter] Childs SJ.
Urology 1989 Jan;33(1):83
Massive hemothorax and Groshong catheters. Gonzales C, et al. W V Med J 1989 Sep;85(9):381–2
[Clinical trial of ofloxacin (Tarivid R)] Belovezhdov N, et al. Vutr Boles 1988;27(3):67–71 (Eng. Abstr.) (Bul)
[10 cases of L-form bacteria urinary tract infection treated with replenishing qi, tonifying kidney and relieving stranguria] Ding PZ, et al.
Chung Hsi I Chieh Ho Tsa Chih 1988 May;8(5):271–2, 260 (Eng. Abstr.) (Chi)
[Therapeutic effect and experimental study of yupingfeng powder in the treatment of chronic renal failure with infection] Shen ZL, et al.
Chung Hsi I Chieh Ho Tsa Chih 1988 May;8(5):268–70, 260 (Eng. Abstr.) (Chi)
[3-day therapy of uncomplicated lower urinary tract infections using low-dose ciprofloxacin] Prát V, et al.
Cas Lek Cesk 1988 Nov 25;127(48):1492–3 (Eng. Abstr.) (Cze)
[Use of single and short-term therapy of uncomplicated infections of the urinary tract] Ošlovský Z, et al.
Rozhl Chir 1988 Oct;67(10):688–93 (Eng. Abstr.) (Cze)
[Antibiotic resistance and antibiotic use in urinary tract infections in 11 family practices in Maastricht (letter)] Degener JE. Ned Tijdschr Geneeskd 1988 Dec 10; 132(50):2296 (Dut)
[Antibiotic resistance and antibiotic utilization in urinary tract infections in 11 family practices in Maastricht] Stobberingh EE, et al. Ned Tijdschr Geneeskd 1988 Sep 24; 132(39):1793–7 (Eng. Abstr.) (Dut)
[Frequency of germ isolation from urinary infections in community practice; their sensitivity to 7 antibiotics including a combination of amoxicillin and clavulanic acid. Evaluation on 1611 samples] De Moüy D, et al.
Pathol Biol (Paris) 1989 May;37(5):402–5 (Eng. Abstr.) (Fre)
[Medical treatment of urinary infections in children] Sayed S, et al. Tunis Med 1987 Oct;65(10):585–9 (Fre)
[Therapy of urinary tract infection from the internal medicine viewpoint] Lison AE, et al. Urologe [A] 1988 Nov; 27(6):321–4 (15 ref.) (Eng. Abstr.) (Ger)
[Pathogens of urinary tract infections in ambulatory care—resistance status and pathogen spectrum] Fille M, et al. Wien Klin Wochenschr 1989 Mar 31;101(7):219–21 (Eng. Abstr.) (Ger)
[Preventive use of nitrofurantoin in recurrent urinary tract infections] Kraatz G, et al. Z Urol Nephrol 1988 Oct; 81(10):641–5 (Eng. Abstr.) (Ger)
[New perspectives on the use of Pygeum Africanum in prostato-bladder pathology] Menchini-Fabris GF, et al. Arch Ital Urol Nefrol Androl 1988 Sep;60(3):313–22 (Eng. Abstr.) (Ita)
[Treatment of postoperative urinary infections in obstetrics and gynecology with cinoxacin] Bardi M, et al.
Clin Ter 1988 Nov 15;127(3):183–8 (Eng. Abstr.) (Ita)
[Aztreonam and aminoglycosides in the therapy of urinary infections associated with renal calculosis] Coen G, et al. Clin Ter 1989 Feb 28;128(4):243–9 (Eng. Abstr.) (Ita)
[Cefotetan vs ceftriaxone: clinical and bacteriological efficacy in complicated forms of urinary tract infection] D'Amato C, et al. Clin Ter 1989 Mar 15;128(5):347–50 (Eng. Abstr.) (Ita)
[Cotrimazine in the treatment of urinary tract infections in infants] Dore A, et al. Clin Ter 1988 Feb 15;124(3):187–92 (Eng. Abstr.) (Ita)
[Use of bacampicillin in the treatment of infections at diverse localizations] Giani M, et al. Clin Ter 1988 Sep 15; 126(5):345–51 (Eng. Abstr.) (Ita)
[An Italian multicenter study on the efficacy and tolerability of aztreonam in the treatment of urinary tract infections] Martelli A, et al. Clin Ter 1988 May 15;125(3):191–201 (Eng. Abstr.) (Ita)
[Aztreonam vs norfloxacin: a comparative study of the treatment of urinary tract infections in ambulatory and hospitalized patients] Puppo P, et al. Clin Ter 1989 Apr 30;129(2):113–21 (Eng. Abstr.) (Ita)
[Ciprofloxacin in the treatment of chronic urinary tract infections] Sozzo E, et al. Clin Ter 1988 Mar 15; 124(5):363–8 (Eng. Abstr.) (Ita)
[Enoxacin in the treatment of bacterial infections of the urinary tract] Tocci G, et al. Clin Ter 1989 Jan 15; 128(1):13–20 (Eng. Abstr.) (Ita)
[Comparative evaluation of norfloxacin and cinoxacin in the therapy of complicated infections of the urinary tract] Cristiano P, et al. Minerva Med 1989 Apr;80(4):393–5 (Eng. Abstr.) (Ita)
[Multicenter research on cefoperazone efficacy and tolerance in the therapy of urinary and respiratory infections] Paradisi F, et al. Minerva Med 1989 Jan;80(1):43–51 (Eng. Abstr.) (Ita)
[Clinical experience with a new synthetic monobactam in urinary infections] Pucciarini LG, et al.
Minerva Urol Nefrol 1988 Oct–Dec;40(4):267–73 (Eng. Abstr.) (Ita)
[Therapy of lower urinary tract infections in children] Principi N, et al. Pediatr Med Chir 1988 Sep–Oct;10(5):465 (Eng. Abstr.) (Ita)
[Norfloxacin in chronic renal insufficiency] Di Veroli C, et al. Riv Eur Sci Med Farmacol 1987 Mar;9(1):95–9 (Eng. Abstr.) (Ita)
[Clinical study of ofloxacin in complicated urinary tract infection] Akazawa N, et al. Hinyokika Kiyo 1988 Jul; 34(7):1279–82 (Eng. Abstr.) (Jpn)
[Microorganisms isolated from urinary tract infection and their beta-lactamase production and evaluation of clinical efficacy of sulperazone] Kawamura J, et al.
Hinyokika Kiyo 1988 Aug;34(8):1503–14 (Eng. Abstr.) (Jpn)
[Clinical reevaluation of aztreonam (AZT) on urinary tract infections] Kohri K, et al. Hinyokika Kiyo 1989 Apr; 35(4):711–6 (Eng. Abstr.) (Jpn)
[Clinical studies on enoxacin in urinary tract infection] Nagai N, et al. Hinyokika Kiyo 1988 Jul;34(7):1283–91 (Eng. Abstr.) (Jpn)
[A clinical evaluation of CS-807 in patients with urinary tract infections] Nakajima K, et al. Hinyokika Kiyo 1988 Aug; 34(8):1515–8 (Eng. Abstr.) (Jpn)
[Clinical and fundamental studies on ceftriaxone (CTRX) against urinary tract infections] Nishio S, et al.
Hinyokika Kiyo 1988 May;34(5):937–42 (Eng. Abstr.) (Jpn)
[Clinical efficacy of T-3262, a new quinolone compound, on urinary tract infection in 1988] Suzuki K, et al.
Hinyokika Kiyo 1989 Apr;35(4):717–26 (Eng. Abstr.) (Jpn)
[Clinical experience of enoxacin complicated urinary tract infection] Togashi M, et al. Hinyokika Kiyo 1988 Dec; 34(12):2233–6 (Eng. Abstr.) (Jpn)
[Reevaluation of clinical efficacy of piperacillin against complicated urinary tract infections] Ueno M, et al.
Hinyokika Kiyo 1988 Sep;34(9):1675–8 (Eng. Abstr.) (Jpn)
[Clinical studies on ceftriaxone in complicated urinary tract infections] Yamakawa K, et al. Hinyokika Kiyo 1989 Feb; 35(2):377–82 (Eng. Abstr.) (Jpn)
[Clinical efficacy of flucytosine on urinary candidiasis] Yasumoto R, et al. Hinyokika Kiyo 1988 Sep;34(9):1679–82 (Eng. Abstr.) (Jpn)
[Clinical efficacy of aztreonam in patients with complicated urinary tract infections] Yoshida K, et al.
Hinyokika Kiyo 1988 Dec;34(12):2225–32 (Eng. Abstr.) (Jpn)
[Clinical studies on sultamicillin fine granules in the urological field] Arakawa S, et al. Jpn J Antibiot 1988 Dec; 41(12):2044–58 (Eng. Abstr.) (Jpn)
[Pharmacokinetic and clinical studies on cefodizime in the pediatric field. Pediatric Study Group of Cefodizime] Fujii R, et al. Jpn J Antibiot 1989 May;42(5):1173–93 (Eng. Abstr.) (Jpn)
[Clinical efficacy of fluconazole in urinary tract fungal infections] Nito H. Jpn J Antibiot 1989 Jan;42(1):171–8 (Eng. Abstr.) (Jpn)
[Clinical and pharmacokinetic studies of gentamicin in intravenous drip infusion to children] Sakata H, et al.
Jpn J Antibiot 1988 May;41(5):549–56 (Eng. Abstr.) (Jpn)
[Clinical studies on sultamicillin in pediatrics] Sekiguchi T, et al. Jpn J Antibiot 1988 Dec;41(12):1959–64 (Eng. Abstr.) (Jpn)
[Antibacterial therapy of urinary tract infections] Ukhin AV.
Antibiot Khimioter 1989 Apr;34(4):299–304 (51 ref.) (Rus)
[A rapid test of urine microflora sensitivity to antibacterial drugs in the treatment of children with nonspecific inflammatory diseases of the kidney and urinary tract] Rodoman VE, et al. Pediatriia 1989;(6):57–61 (Eng. Abstr.) (Rus)
[The combined therapy of gonorrhea and gonorrheal-chlamydial infection in patients who abuse alcohol] Khil'kevich ND, et al. Vestn Dermatol Venerol 1988;(11):59–63 (Eng. Abstr.) (Rus)
[Combined treatment of urogenital chlamydiosis with streptokinase preparations] Miltin'kh AP, et al.
Vestn Dermatol Venerol 1988;(8):66–9 (Eng. Abstr.) (Rus)
[Clinical trial of cefobid-cefoperazone in the treatment of urinary infections] Manojlović D, et al.
Srp Arh Celok Lek 1988 Jun;116(6):509–13 (Eng. Abstr.) (Scc)
[Frequency of recurrence after 3 days of therapy of the first infection of the lower urinary tract segment in children] Horanský V, et al. Cesk Pediatr 1988 Nov;43(11):684–5 (Slo)
[A single dose of sulfamethoxazole-trimethoprim vs. a 7-day course of nitrofurantoin in the treatment of acute non-complicated urinary tract infection in women] Abadi T, et al. Rev Med Chil 1987 Dec;115(12):1166–9 (Eng. Abstr.) (Spa)
[Urinary tract infections, 30 years later] Katz E.
Rev Med Chil 1988 Mar;116(3):258–9 (Eng. Abstr.) (Spa)
[Treatment of acute urinary infection with the usual regimen and a single dose of antibiotic (letter)] Sánchez MI.
Rev Med Chil 1988 Feb;116(2):184–6 (Spa)
[Effectiveness and tolerance of norfloxacin compared with trimethoprim-sulfamethoxazole in the treatment of uncomplicated urinary tract infections] Ballesteros JJ, et al. Rev Med Univ Navarra 1988 Jul–Sep;32(3):135–7 (Eng. Abstr.) (Spa)
[The role of ofloxacin (Tarivid) therapy in respiratory and urinary tract infections] Hasçelik G. Mikrobiyol Bul 1987 Jul;21(3):165–71 (Eng. Abstr.) (Tur)

ECONOMICS

Prevention of catheter-associated urinary tract infection: a cost-benefit analysis. Platt R, et al.
Infect Control Hosp Epidemiol 1989 Feb;10(2):60–4
$5 per prescription for the treatment of simple, uncomplicated urinary tract infections [letter] Bailey RR. N Z Med J 1988 Nov 23;101(858):805

ENZYMOLOGY

Urinary alanine-aminopeptidase (AAP) excretion in patients with urinary tract infection treated with ceftazidime (CAZ)

or cefotaxime (CTX) plus tobramycin (TOB). Więcek A, et al. **Int Urol Nephrol** 1988;20(5):461–70

EPIDEMIOLOGY

Urinary tract infections and circumcision. A case–control study. Herzog LW. **Am J Dis Child** 1989 Mar;143(3):348–50

Urinary tract infections in men. Epidemiology, pathophysiology, diagnosis, and treatment. Lipsky BA. **Ann Intern Med** 1989 Jan 15;110(2):138–50 (107 ref.)

Clinical review of urinary tract infections and wound infections. Hogarth HJ, et al. **Aust Clin Rev** 1988 Jun; 8(29):83–4

Epidemiology of symptomatic infections of the urinary tract in children. Uhari M, et al. **BMJ** 1988 Aug 13; 297(6646):450–2

Urinary tract infections in patients undergoing transurethral prostatectomy. Fujita K, et al. **Clin Ther** 1988;10 Spec No:22–6

Pneumococcosuria in children. Miller MA, et al. **J Clin Microbiol** 1989 Jan;27(1):99–101

A preliminary survey of parasitic infections and nutritional status among school children in Riyadh, Saudi Arabia. Ahmed MM, et al. **J Egypt Soc Parasitol** 1989 Jun; 19(1):101–5

Infection following caesarean section. Parrott T, et al. **J Hosp Infect** 1989 May;13(4):349–54

Urinary morbidity of vesicoureteral reflux patients without surgical correction prior to renal transplantation [letter] Morales JM, et al. **Nephron** 1989;51(4):571–2

Urinary tract catheterization protocols following total joint arthroplasty. Ritter MA, et al. **Orthopedics** 1989 Aug; 12(8):1085–7

[Evaluation of a screening test for urinary infection] Audurier A, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):921–4 (Eng. Abstr.) (Fre)

[Urinary Corynebacterium group D2 infections. A hospital epidemic and antibiotic sensitivity] Fosse T, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):742–5 (Eng. Abstr.) (Fre)

[Genital infections caused by Chlamydia trachomatis: diagnostic aspects and clinico–etiological correlations] Greco M, et al. **Nuovi Ann Ig Microbiol** 1987 May–Aug; 38(3–4):235–49 (Eng. Abstr.) (Ita)

[Mixed urogenital infections in patients with syphilis] Borisenko KK, et al. **Vestn Dermatol Venerol** 1988;(5):32–5 (Eng. Abstr.) (Rus)

ETIOLOGY

Recto–vaginal colonization and urinary tract infection by group B Streptococcus in the pregnant diabetic patient. Matorras R, et al. **Acta Obstet Gynecol Scand** 1988; 67(7):617–20

Bladder perforation: uncommon complication with a misplaced IUD. Kiilholma P, et al. **Adv Contracept** 1989 Mar;5(1):47–9

Nuclear cystography and renal sonography: findings in girls with urinary tract infection. Strife JL, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):115–9

Association between bacterial vaginosis and acute cystitis in women using diaphragms. Hooton TM, et al. **Arch Intern Med** 1989 Sep;149(9):1932–6

Infected renal stones and defects of ureteral peristalsis. Zanetti G, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec; 59(2):71–4

Urinary tract infection in spinal cord injury. Stover SL, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):47–54 (50 ref.)

Urine microscopy and culture in the selection of patients for urinary tract investigation. Maskell R. **Br J Urol** 1989 Jan;63(1):7–10

Post–instrumentation urinary tract infection. Omar A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):505–6

The ecology and pathogenicity of urease–producing bacteria in the urinary tract. McLean RJ, et al. **CRC Crit Rev Microbiol** 1988;16(1):37–79 (315 ref.)

Long–term follow–up of children with surgically treated vesicorenal reflux: postoperative incidence of urinary tract infections, renal scars and arterial hypertension. Beetz R, et al. **Eur Urol** 1989;16(5):366–71

Urinary tract infections in the elderly. File TM Jr, et al. **Geriatrics** 1989 Aug;44 Suppl A:15–9

Urinary tract infection following instrumentation for urodynamic testing. Hamill RJ, et al. **Infect Control Hosp Epidemiol** 1989 Jan;10(1):26–32

Pseudoepidemic of urinary tract infections due to Trichosporon beigelii. Stone J, et al. **Infect Control Hosp Epidemiol** 1989 Jul;10(7):312–5 (17 ref.)

Infections of genitourinary prostheses. Blum MD. **Infect Dis Clin North Am** 1989 Jun;3(2):259–74 (43 ref.)

Pathogenesis of urinary tract infections. Host defenses. Sobel JD. **Infect Dis Clin North Am** 1987 Dec;1(4):751–72 (99 ref.)

Catheter–associated urinary tract infections. Warren JW. **Infect Dis Clin North Am** 1987 Dec;1(4):823–54 (202 ref.)

Role of adherence in pathogenesis of Enterococcus faecalis urinary tract infection and endocarditis. Guzmàn CA, et al. **Infect Immun** 1989 Jun;57(6):1834–8

Urinary tract infection by Aeromonas hydrophila in a neonate [letter] Bartolomé RM, et al. **Infection** 1989 May–Jun;17(3):172–3

Pathogenesis of urinary tract infections—amoxicillin induces genital Escherichia coli colonization. Herthelius BM, et al. **Infection** 1988 Sep–Oct;16(5):263–6

Risk factors for recurrence of symptomatic urinary tract infection in young women. Leibovici L, et al. **Isr J Med Sci** 1989 Feb;25(2):110–1

Corynebacterium aquaticum urinary tract infection in a neonate, and concepts regarding the role of the organism as a neonatal pathogen. Tendler C, et al. **J Clin Microbiol** 1989 Feb;27(2):343–5

Urinary tract infections: from pathogenesis to treatment. Stamm WE, et al. **J Infect Dis** 1989 Mar;159(3):400–6 (40 ref.)

Genitourinary tract anomalies in Thai children with urinary tract infection. Tapaneya–Olarn C, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:47–51

The foreskin and urinary tract infections. Lohr JA. **J Pediatr** 1989 Mar;114(3):502–4

Postoperative Pseudomonas urinary tract infections as a source of bacterial contamination of an autogenous vein graft. Campbell DR, et al. **J Vasc Surg** 1987 Mar;5(3):492–4

Association of the Lewis blood–group phenotype with recurrent urinary tract infections in women. Sheinfeld J, et al. **N Engl J Med** 1989 Mar 23;320(12):773–7

Hospital–acquired urinary tract infection. Lohr JA, et al. **Pediatrics** 1989 Feb;83(2):193–9

Chronic urinary tract infection and renal stones. Hugosson J, et al. **Scand J Urol Nephrol** 1989;23(1):61–6

Short term urethral catheterizatio... Bakke A. **Scand J Urol Nephrol Suppl** 1988;110:303–6

Urinary tract infection after renal transplantation under conventional therapy and cyclosporine. Stuby U, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2110–1

Study on pathogenesis of Enterococcus faecalis in urinary tract. Hirose T, et al. **Urol Res** 1989;17(2):125–9

[Infections of the urinary tract in outflow nephrolithiasis] Prát V, et al. **Vnitr Lek** 1988 Jul;34(7):709–13 (Eng. Abstr.) (Cze)

[Urinary tract infection and surgical disorders of the lower urinary tract] Carpentier JP, et al. **Med Trop (Mars)** 1989 Jan–Mar;49(1):47–50 (18 ref.) (Eng. Abstr.) (Fre)

[Urinary lithiasis and infection. Apropos of 372 cases] Daghfous MS, et al. **Tunis Med** 1988 Oct;66(10):681–8 (Eng. Abstr.) (Fre)

[Urinary tract infections in childhood] Leumann EP. **Ther Umsch** 1988 Dec;45(12):865–71 (Eng. Abstr.) (Ger)

[Epidemiology of nosocomial infections in urology. 1: Nature and incidence of nosocomial infections in urologic patients] Friedrich M, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):145–8 (Ger)

[Epidemiology of nosocomial infections in urology. 2: Risk of nosocomial infection in urologic patients caused by dispositional influences] Friedrich M, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):149–53 (Ger)

[Bacterial agents responsible for urinary tract infections. III. A clinico–statistical contribution] Roscioni C, et al. **Clin Ter** 1988 Aug 15;126(3):207–15 (Eng. Abstr.) (Ita)

[Risk factors and sensitivity to certain antibiotics in hospital urinary infections] Belloni L, et al. **Minerva Med** 1989 Jun; 80(6):591–4 (Eng. Abstr.) (Ita)

[A rare cause of occult neuropathic bladder in children: the tethered cord syndrome] Campobasso P, et al. **Pediatr Med Chir** 1988 Nov–Dec;10(6):641–5 (Eng. Abstr.) (Ita)

[Importance of Streptococci and in particular of the Enterococci in urinary tract infections] Savarino A, et al. **Quad Selavo Diagn** 1987 Sep;23(3):312–7 (Eng. Abstr.) (Ita)

[Study on the relationship between bacteria within stones and postoperative urinary tract infection in percutaneous nephrolithotomy] Nishimura T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):283–6 (Eng. Abstr.) (Jpn)

[Urinary tract infection in kidney transplant recipients treated with ciclosporin] Tanabe K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):246–53 (Eng. Abstr.) (Jpn)

[The role of fungal flora in urinary tract infections in children] Szajner–Milart I, et al. **Pol Tyg Lek** 1988 Dec 5;43(49):1584–7 (Pol)

[Herpes simplex viruses and their role in infections of the urogenital system] Zgórniak–Nowosielska I. **Pol Tyg Lek** 1988 Aug 1–8;43(31–32):995–1000 (Eng. Abstr.) (Pol)

[Uropathogenicity of E. coli] Brăila MG. **Rev Ig [Bacteriol]** 1989 Jan–Mar;34(1):43–8 (10 ref.) (Rum)

[Current findings in the pathogenesis and treatment of urinary infections] Fica V, et al. **Rev Med Interna [Med Interna]** 1988 May–Jun; 40(3):193–202 (18 ref.) (Eng. Abstr.) (Rum)

[Characteristics of sources and means of spread of Pseudomonas aeruginosa infections in urology wards] Zueva LP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):61–4 (Eng. Abstr.) (Rus)

[Should systematic correction of vesicoureteral reflux be performed before renal transplantation?] Morales JM, et al. **Actas Urol Esp** 1988 May–Jun;12(3):259–62 (Eng. Abstr.) (Spa)

[Prospective study for the evaluation and prophylaxis of urinary tract infections, secondary to the intravesicular instillation of cytostatics] Ojea A, et al. **Actas Urol Esp** 1989 May–Jun;13(3):204–6 (Eng. Abstr.) (Spa)

[Urinary tract infection and its probable relation to the deviation of the urine toward the vagina during micturition (letter)] García–Alvarez R, et al. **Bol Med Hosp Infant Mex** 1988 Nov;45(11):792–4 (Spa)

GENETICS

Molecular analysis and epidemiology of the Dr hemagglutinin of uropathogenic Escherichia coli. Nowicki B, et al. **Infect Immun** 1989 Feb;57(2):446–51

IMMUNOLOGY

Detection of antigens from gram–negative bacilli in urine of children with urinary tract infections. I. Common antigen of Enterobacteriaceae. Kim DS, et al. **Int Arch Allergy Appl Immunol** 1989;88(4):420–6

Detection of antigens from gram–negative bacilli in urine of children with urinary tract infections. II. Thermostable bacterial proteins. Kim DS, et al. **Int Arch Allergy Appl Immunol** 1989;88(4):427–33

Immunoblot analysis of serologic response to outer membrane proteins of Escherichia coli in elderly individuals with urinary tract infections. Nicolle LE, et al. **J Clin Microbiol** 1988 Oct;26(10):2087–91

[Evaluation of Candida HA titer in patients with urinary tract infections] Nishio S, et al. **Hinyokika Kiyo** 1988 Jul; 34(7):1141–4 (Eng. Abstr.) (Jpn)

[Synergism between defence mechanisms and chemotherapy] Machida T, et al. **Nippon Saikingaku Zasshi** 1988 Nov; 43(6):971–80 (43 ref.) (Jpn)

METABOLISM

Pharmacokinetics of cefonicid in children. Furlanut M, et al. **Eur J Clin Pharmacol** 1989;36(1):79–82

Urologic pharmacology in the office setting. Reed MD, et al. **Urol Clin North Am** 1988 Nov;15(4):737–51 (78 ref.)

[The pharmacokinetics of azlocillin after single and multiple intravenous injections during the third trimester] Voigt R, et al. **Zentralbl Gynakol** 1988;110(15):944–8 (15 ref.) (Eng. Abstr.) (Ger)

MICROBIOLOGY

Comparison of some adhesive properties of Pseudomonas aeruginosa strains isolated from respiratory and urinary tract infections. Izdebska–Szymona K, et al. **Acta Microbiol Pol** 1988;37(3–4):281–93

Presence of the Dr receptor in normal human tissues and its possible role in the pathogenesis of ascending urinary tract infection. Nowicki B, et al. **Am J Pathol** 1988 Oct; 133(1):1–4

Detection by molecular hybridization of pap, afa, and sfa adherence systems in Escherichia coli strains associated with urinary and enteral infections. Archambaud M, et al. **Ann Inst Pasteur Microbiol** 1988 Sep–Oct;139(5):575–88

Influence of fluoroquinolones on expression and function of P fimbriae in uropathogenic Escherichia coli. Kovarik JM, et al. **Antimicrob Agents Chemother** 1989 May;33(5):684–8

Tissue interactions of Escherichia coli adhesins. Korhonen TK, et al. **Antonie Van Leeuwenhoek** 1988;54(5):411–20 (28 ref.)

Biogenesis of pili adhesins associated with urinary tract infectious Escherichia coli. Normark S, et al. **Antonie Van Leeuwenhoek** 1988;54(5):405–9

Aerococcus–like organism—an unnoticed urinary tract pathogen. Christensen JJ, et al. **APMIS** 1989 Jun; 97(6):539–46

Consequences of bacterial attachment in the urinary tract. Svanborg Edén C, et al. **Biochem Soc Trans** 1989 Jun; 17(3):464–6

Managing urinary tract infections in children [letter] Maskell R. **BMJ** 1989 Jan 28;298(6668):253–4

Minimum inhibitory concentrations of some newly developed antimicrobials against common urinary and blood pathogens. el–Baz W, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):40–2

Retrospective two–year study of urinary tract infection in the Ismailia area of Egypt. Khalifa K, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):500–2

In vitro susceptibility of urinary pathogens to quinolones compared to other antimicrobial agents. Osman LM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):147–8

Present–day susceptibility of urinary pathogens. Sabbour M. **Chemioterapia** 1987 Jun;6(2 Suppl):37–9

Coxsackie virus and urogenital pathology. Scalia G, et al. **Clin Exp Obstet Gynecol** 1989;16(2–3):55–8

Absence of factors associated with significant urinary tract infections caused by coagulase–negative staphylococci. Rimland D, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):123–7

Diversity of plasmids in Staphylococcus saprophyticus isolated from urinary tract infections in women. Cristino JA, et al. **Epidemiol Infect** 1989 Jun;102(3):413–9

Correlation between electrophoretic types B1 and B2 of carboxylesterase B and sex of patients in Escherichia coli urinary tract infections. Picard B, et al. **Epidemiol Infect** 1989 Aug;103(1):97–103

Genetic relationships among Escherichia coli isolates causing urinary tract infections in humans and animals. Whittam TS, et al. **Epidemiol Infect** 1989 Feb;102(1):37–46

Incidence of aerobactin–positive Escherichia coli strains in patients with symptomatic urinary tract infection. Jacobson SH, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;

7(5):630–4
Characterisation of Escherichia coli adhesins in patients with symptomatic urinary tract infections. Conventi L, et al. **Genitourin Med** 1989 Jun;65(3):183–6
Prevalence & clinical significance of non–fermentative bacteria in urinary tract infection in a Delhi hospital. Bal A, et al. **Indian J Med Res** 1988 Jun;87:573–8
Citrobacter as a frequent urinary pathogen in hospitalised patients. Ramani A, et al. **Indian J Med Res** 1988 Jul; 88:23–5
Bacterial virulence in urinary tract infection. Svanborg Edén C, et al. **Infect Dis Clin North Am** 1987 Dec;1(4):731–50 (114 ref.)
Structure and copy number of gene clusters related to the pap P–adhesin operon of uropathogenic Escherichia coli. Arthur M, et al. **Infect Immun** 1989 Feb;57(2):314–21
Molecular epidemiology of adhesin and hemolysin virulence factors among uropathogenic Escherichia coli. Arthur M, et al. **Infect Immun** 1989 Feb;57(2):303–13
Staphylococcus saprophyticus urease: characterization and contribution to uropathogenicity in unobstructed urinary tract infection of rats. Gatermann S, et al. **Infect Immun** 1989 Jan;57(1):110–6
In vivo expression and variation of Escherichia coli type 1 and P pili in the urine of adults with acute urinary tract infections. Kisielius PV, et al. **Infect Immun** 1989 Jun; 57(6):1656–62
Distribution of the P–associated–pilus (pap) region among Escherichia coli from natural sources: evidence for horizontal gene transfer. Plos K, et al. **Infect Immun** 1989 May;57(5):1604–11
Long–term colonization of spinal cord injury patients with Klebsiella pneumoniae. Montgomerie JZ, et al. **J Clin Microbiol** 1989 Jul;27(7):1613–6
Virulence of Escherichia coli in relation to host factors in women with symptomatic urinary tract infection. Sandberg T, et al. **J Clin Microbiol** 1988 Aug;26(8):1471–6
Bacteremia and urinary tract infection associated with CDC group Vd biovar 2. Van Horn KG, et al. **J Clin Microbiol** 1989 Jan;27(1):201–2
Gardnerella vaginalis in infections of the urinary tract. Sturm AW. **J Infect** 1989 Jan;18(1):45–9
Properties of Escherichia coli isolates from urinary tract infections in boys. Westerlund B, et al. **J Infect Dis** 1988 Nov;158(5):996–1002
Fimbrial serotypes of Escherichia coli strains isolated from extra–intestinal infections. De Ree JM, et al. **J Med Microbiol** 1989 Jun;29(2):95–9
Bacteriology of a rural practice [letter] **J R Coll Gen Pract** 1988 Jun;38(311):278
In vivo transfer of an R–plasmid in a urinary tract infection model. Neal DE Jr, et al. **J Urol** 1989 Jun;141(6):1460–2
Comparison of virulence factors and antibiotic resistance profiles of Escherichia coli strains from humans and dogs with urinary tract infections [letter] Lewis LD. **J Vet Intern Med** 1988 Jan–Mar;2(1):54
Comparison of virulence factors and antibiotic resistance profiles of Escherichia coli strains from humans and dogs with urinary tract infections. Nolan LK, et al. **J Vet Intern Med** 1987 Oct–Dec;1(4):152–7
Urinary tract infection. Farooqui BJ, et al. **JPMA** 1989 May; 39(5):129–31
What makes microbes stick? [editorial] **Lancet** 1988 Dec 10; 2(8624):1343–4
New type of adhesive specificity revealed by oligosaccharide probes in Escherichia coli from patients with urinary tract infection. Rosenstein IJ, et al. **Lancet** 1988 Dec 10; 2(8624):1327–30
ColV increases the virulence of Escherichia coli K1 strains in animal models of neonatal meningitis and urinary infection. Aguero ME, et al. **Med Microbiol Immunol (Berl)** 1989;178(4):211–6
Assessment of biological and colony hybridization assays for detection of the aerobactin system in Escherichia coli from urinary tract infections. Orskov I, et al. **Med Microbiol Immunol (Berl)** 1989;178(3):143–8
Chromosomal deletions and rearrangements cause coordinate loss of haemolysis, fimbriation and serum resistance in a uropathogenic strain of Escherichia coli. Hughes C, et al. **Microb Pathog** 1987 Mar;2(3):227–30
Role of S– and common–type I–fimbriae of Escherichia coli in experimental upper and lower urinary tract infection. Marre R, et al. **Microb Pathog** 1987 Mar;2(3):223–6
An examination of the anti–adherence activity of cranberry juice on urinary and nonurinary bacterial isolates. Schmidt DR, et al. **Microbios** 1988;55(224–225):173–81
Urinary tract infection caused by Hansenula anomala. Qadri SM, et al. **Mycopathologia** 1988 Nov;104(2):99–101
How Escherichia coli infects the urinary tract [editorial] Schoolrik GK. **N Engl J Med** 1989 Mar 23;320(12):804–5
In vitro sensitivities of urinary tract pathogens to lomefloxacin and five other antimicrobial agents [letter] Peddie BA. **N Z Med J** 1989 Jun 14;102(869):298
Urinary infection may invalidate the double–sugar test of intestinal permeability. Milnes JP, et al. **Scand J Gastroenterol** 1988 Sep;23(7):885–90
In–vitro sensitivity of organisms causing urinary tract infections to four common oral antibiotics and to pivmecillinam. Bansal AS. **West Indian Med J** 1988 Dec; 37(4):201–4
[The frequency of isolating urinary infection germs at a community practice and their sensitivity to various antibiotics] de Mouy D, et al. **Pathol Biol (Paris)** 1988 Oct; 36(8):1011–5 (Eng. Abstr.) (Fre)
[Aztreonam: monocenter microbiological study with prevention experience in surgery] Malcangi A, et al. **G Batteriol Virol Immunol** 1987 Jan–Dec;80(1–12):237–51 (Eng. Abstr.) (Ita)
[Antimicrobial activity of sultamicillin against clinical isolates from upper respiratory tract infections II] Deguchi K, et al. **Jpn J Antibiot** 1988 Dec;41(12):2065–74 (Eng. Abstr.) (Jpn)
[Experimental urinary tract infection in mice to evaluate the pathogenicity of Escherichia coli isolated from newborn infants and their mothers] Kakuno Y, et al. **Kansenshogaku Zasshi** 1988 Dec;62(12):1138–42 (Eng. Abstr.) (Jpn)
[Detection of Chlamydia trachomatis in urethrae of patients with urogenital infections and changes in antibody titers in their clinical courses] Amano M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):487–94 (Eng. Abstr.) (Jpn)
[Pilus type, hemagglutination titer and hemolysin production of Escherichia coli isolated from urogenital infections] Goto T. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep; 79(9):1582–6 (Eng. Abstr.) (Jpn)
[P–fimbriated Escherichia coli and serum antibody responses to P–fimbriae in pregnant women with urinary tract infections and their children] Miyazawa H, et al. **Nippon Jinzo Gakkai Shi** 1989 Mar;31(3):293–9 (Eng. Abstr.) (Jpn)
[Ultrastructural analysis of the interrelation of the causative agents of urogenital infections with the cells of the macro–organism in syphilis patients] Delektorskii VV, et al. **Vestn Dermatol Venerol** 1988;(8):26–9 (Eng. Abstr.) (Rus)
[Type 1 fimbriae, P fimbriae and X adhesins in Escherichia strains causing pyelonephritis, cystitis and recurrent urinary infections] Andreu A, et al. **Med Clin (Barc)** 1989 Mar 25; 92(11):409–12 (Eng. Abstr.) (Spa)
[Bacteriology of nonhospital urinary infections (letter)] Guarga A, et al. **Med Clin (Barc)** 1988 Oct 15;91(12):478–9 (Spa)
[Causative agents of urinary tract infections and sensitivity to antibiotics] Ayhan N, et al. **Mikrobiyol Bul** 1988; 22(3):215–21 (Eng. Abstr.) (Tur)
[Antibiotic susceptibility of gram negative bacteria isolated from urinary tract infections] Durupinar B, et al. **Mikrobiyol Bul** 1988;22(4):332–8 (Eng. Abstr.) (Tur)
[Antibiotic–resistant microorganisms isolated from the urine of patients with suspected urinary tract infections] Tuncer I, et al. **Mikrobiyol Bul** 1988;22(4):296–302 (Eng. Abstr.) (Tur)
[The in vitro activity of ofloxacin, pefloxacin and ciprofloxacin against various gram negative bacteria isolated from urinary tract infections] Tunçkanat F, et al. **Mikrobiyol Bul** 1988;22(3):187–92 (Eng. Abstr.) (Tur)

PATHOLOGY

Bilateral renal malakoplakia in infancy. Wiggelinkhuizen J, et al. **Child Nephrol Urol** 1988–89;9(1–2):101–5
Observations of the ultrastructure of infected kidney stones. McLean RJ, et al. **J Med Microbiol** 1989 May;29(1):1–7

PHYSIOPATHOLOGY

Functional vesico–urethral pathology and the influence on the urinary tract in children. Van Kerrebroeck PE, et al. **Acta Urol Belg** 1989;57(2):585–91
Bacterial urinary tract infection in cyclosporine–A immunosuppressed renal transplant recipients. Hansen BL, et al. **Scand J Infect Dis** 1988;20(4):425–7
[Lower urinary infections of functional origin in young girls] Averous M. **Acta Urol Belg** 1989;57(2):369–83 (27 ref.) (Fre)

PREVENTION & CONTROL

Bladder irrigation. Rao GG, et al. **Age Ageing** 1988 Nov; 17(6):374–8 (51 ref.)
Prospective, randomized, placebo–controlled trial of norfloxacin for the prophylaxis of recurrent urinary tract infection in women. Nicolle LE, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1032–5
"Short–term" prophylaxis by aztreonam in prevention of post–operative infections in patients undergoing transurethral surgery. Giannoni R, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):77–80
Polyvinilpyrrolidone–iodine (P.V.P.–I) bladder irrigation for prevention of catheter–associated urinary infections in patients treated by T.U.R. Giannoni R, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):63–7
Antiseptics in the long–term urological management of patients by intermittent catheterisation. Chawla JC, et al. **Br J Urol** 1988 Oct;62(4):289–94 (42 ref.)
Study of appropriate antibiotic therapy in transurethral prostatectomy. Kiely EA, et al. **Br J Urol** 1989 Jul; 64(1):61–5
Single dose, oral antibiotic cover for transurethral prostatectomy. Shearman CP, et al. **Br J Urol** 1988 Nov; 62(5):434–8
Low–dose norfloxacin versus placebo for long–term prophylaxis of recurrent uncomplicated urinary tract infection. Rugendorff E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):533–5
A four–day course of cephalosporins in transurethral prostatectomy. Fujita K. **Clin Ther** 1988;10 Spec No:36–42
Cefotaxime in transurethral prostatectomy. Fujita K, et al. **Clin Ther** 1988;10 Spec No:43–6
Cinoxacin vs trimethoprim—safety and efficacy in the prophylaxis of uncomplicated urinary tract infections. Seppänen J. **Drugs Exp Clin Res** 1988;14(10):669–71
Low dosage treatment with propiono–hydroxamic acid in paraplegic patients. Tizzani A, et al. **Eur Urol** 1989; 16(1):36–40
Infection control in the long–term healthcare facility. Smith PW. **Geriatrics** 1989 Aug;44 Suppl A:11–4
A single prophylactic dose of ceftriaxone as total antibiotic therapy in transurethral surgery. Finkelstein LH. **J Am Osteopath Assoc** 1989 Feb;89(2):169–70
Lowered prevalence of infection with lactulose therapy in patients in long–term hospital care. McCutcheon J, et al. **J Hosp Infect** 1989 Jan;13(1):81–6
The role of antiseptics in the management of patients with long–term indwelling catheters. Seal DV, et al. **J Hosp Infect** 1988 Nov;12(4):334–8
Antibiotic prophylaxis in transurethral resection of the prostate with reference to the influence of preoperative catheterization. Taylor EW, et al. **J Hosp Infect** 1988 Aug; 12(2):75–83
Adherence of bacteria to human foreskins. Fussell EN, et al. **J Urol** 1988 Nov;140(5):997–1001
Perioperative antibiotic prophylaxis for transurethral resection of the prostate: is it justifiable? Houle AM, et al. **J Urol** 1989 Aug;142(2):317–9
Re: Suppression and treatment of urinary tract infection in patients with an intermittently catheterized neurogenic bladder [letter] Kilbourn JP. **J Urol** 1988 Dec;140(6):1558
Re: Bladder irrigation with chlorhexidine for the prevention of urinary infection after transurethral operations: a prospective controlled study [letter] Saha SK. **J Urol** 1989 Sep;142(3):829–30
The prepuce: a mistake of nature? Winberg J, et al. **Lancet** 1989 Mar 18;1(8638):598–9
Urinary catheters after total joint replacement surgery [letter] Musher DM. **N Engl J Med** 1988 Dec 15;319(24):1612
Prevention of recurrent urinary tract infections in postmenopausal women. Privette M, et al. **Nephron** 1988; 50(1):24–7
Trimethoprim–sulphadiazine prophylaxis in children with vesico–ureteric reflux. Hanson E, et al. **Scand J Infect Dis** 1989;21(2):201–4
Pivmecillinam in long–term prophylaxis to girls with recurrent urinary tract infection. Jodal U, et al. **Scand J Infect Dis** 1989;21(3):299–302
Manipulation of the oropharyngeal and intestinal microflora by norfloxacin: microbiological and clinical aspects. Edlund C, et al. **Scand J Infect Dis Suppl** 1988;56:14–21 (23 ref.)
Use of ciprofloxacin in patients undergoing transurethral prostatic surgery. Hellsten S, et al. **Scand J Infect Dis Suppl** 1989;60:104–7
Transvaginal–distal urethroplasty. A multipurpose operation. Mizrahi S, et al. **Scand J Urol Nephrol** 1989;23(1):7–9
New apparatus to reduce urinary drainage associated with urinary tract infections. al–Juburi AZ, et al. **Urology** 1989 Feb;33(2):97–101
Urinary prophylaxis and postoperative care of children at home with an indwelling catheter after hypospadias repair. Sugar EC, et al. **Urology** 1988 Nov;32(5):418–20
[VUFB trimethoprim in the prevention of urinary infections] Horčičková M, et al. **Cas Lek Cesk** 1988 Nov 11; 127(46):1434–6 (Eng. Abstr.) (Cze)
[The patient with a long–term indwelling catheter] Cools HJ. **Tijdschr Gerontol Geriatr** 1989 Feb;20(1):29–31 (Eng. Abstr.) (Dut)
[Prevention of urinary tract infection—cause and course in children and adults] Huttunen K, et al. **Duodecim** 1989; 105(8):788–91 (15 ref.) (Fin)
[Prevention of infectious complications after cesarean section by the use of cefotetan] Cormier P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(3):388–92 (Eng. Abstr.) (Fre)
[The epidemiology of nosocomial infections in urology. 4: On the effectiveness of hygienic measures in preventing nosocomial infections] Friedrich M, et al. **Z Arztl Fortbild (Jena)** 1989;83(5):251–5 (Ger)
[Monodose aztreonam in the prevention of infection after extracorporeal shockwave lithotripsy. Theoretical premises] Puppo P, et al. **Minerva Urol Nefrol** 1989 Apr–Jun;41(2):109–13 (Eng. Abstr.) (Ita)
[Treatment and prophylaxis for urogenital infections occurring after urethrocystoscopy] Ohishi Y, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1601–5 (Eng. Abstr.) (Jpn)
[Prevention and treatment of urinary infection in neurogenic disorders of urination] Lavrienko VS. **Sov Med** 1988; (8):118–20 (Rus)
[Detection of nephro–urologic changes in infants using reactive strips. Experience at a puericulture practice] Bonilla Miera C, et al. **An Esp Pediatr** 1988 Sep;29(3):244–7 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Imaging of children with urinary tract infection: a tailored approach. Ben–Ami T, et al. **Clin Radiol** 1989 Jan; 40(1):64–7

The changing scene of radiology: value of urography as initial examination in infectious and hypertensive disease, hematuria and malignant disease. Göthlin JH, et al. **Eur J Radiol** 1988 Aug;8(3):135–9

RADIONUCLIDE IMAGING

Evaluation of renal function and morphology in children by 99mTc-DTPA gamma camera renography. Rehling M, et al. **Acta Paediatr Scand** 1989 Jul;78(4):601–7

99mTC dimercaptosuccinic acid (DMSA) scan in urinary tract infection [letter] Murphy AV, et al. **Arch Dis Child** 1989 May;64(5):760

99mTc dimercaptosuccinic acid (DMSA) scan as first investigation of urinary tract infection. Verber IG, et al. **Arch Dis Child** 1988 Nov;63(11):1320–5

The role of scintigraphy in urinary tract infection. Conway JJ. **Semin Nucl Med** 1988 Oct;18(4):308–19 (37 ref.)

REHABILITATION

[Training of patients with residual urine and/or recurrent urinary tract infections] Klarskov OP. **Ugeskr Laeger** 1989 Jan 30;151(5):293–5 (Eng. Abstr.) (Dan)

THERAPY

Urinary tract infection. Henning PH, et al. **Aust Fam Physician** 1989 Mar;18(3):225, 227 (3 ref.)

E. coli infections of the lower urinary tract and their treatment by immunomodulation or combined immunomodulation and antigen therapy. Mathieu D, et al. **Biomed Pharmacother** 1988;42(4):271–7

Current practice in managing urinary tract infections in children. Smyth RL, et al. **BMJ** 1988 Dec 10; 297(6662):1516–7

Managing diabetes-related infections in the elderly. Gleckman RA, et al. **Geriatrics** 1989 Aug;44(8):37–9, 43–4, 46 (18 ref.)

The upper urinary tract [letter] Remis RE. **Hosp Pract [Off]** 1989 Jan 30;24(1A):18

[Extracorporeal detoxication via plasmapheresis and plasmasorption in the treatment of suppurative-septic urologic diseases and acute kidney failure] Kozlov VA. **Khirurgiia (Sofiia)** 1988;41(6):28–32 (Bul)

[Urinary infections in children] Fischbach M, et al. **Pediatrie** 1988;43(3):191–5 (Eng. Abstr.) (Fre)

[Asymptomatic urinary hospital infections: choice of treatment with drinking water] Borzone A, et al. **Clin Ter** 1988 Feb 15;124(3):183–6 (Eng. Abstr.) (Ita)

[Extracorporeal use of a donor spleen in the treatment of patients with urinary tract infection] Serniak PS, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):15–7 (Eng. Abstr.) (Rus)

TRANSMISSION

[The epidemiology of nosocomial infections in urology. 3: Risk of nosocomial infections caused by diagnostic and therapeutic exposure] Friedrich M, et al. **Z Arztl Fortbild (Jena)** 1989;83(5):247–50 (Ger)

URINE

Urine sampling in ambulatory women: midstream clean-catch versus catheterization. Walter FG, et al. **Ann Emerg Med** 1989 Feb;18(2):166–72

Microbial influences on urinary polyamine excretion. Satink HP, et al. **Clin Chim Acta** 1989 Feb 22;179(3):305–14

Urinalysis in the diagnosis of urinary tract infections. Fang LS. **Clin Lab Med** 1988 Sep;8(3):567–76 (40 ref.)

Urogenital myiasis caused by Megaselia scalaris (Diptera: Phoridae): a case report. Singh TS, et al. **J Med Entomol** 1989 May;26(3):228–9

UTI: a new approach to its diagnosis. Hafiz S, et al. **JPMA** 1989 May;39(5):126–9

Variable expression of P fimbriae in Escherichia coli urinary tract infection. Lichodziejewska M, et al. **Lancet** 1989 Jun 24;1(8652):1414–8

Urinary nitrite in Japanese patients with urinary tract infections. Mizutani T, et al. **Sci Total Environ** 1989 May 15;80(2–3):161–5

[Clinical significance of phosphaturia] Tozuka K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):700–3 (Eng. Abstr.) (Jpn)

VETERINARY

Escherichia coli infection or contamination? [letter] Biberstein EL, et al. **Am J Vet Res** 1988 Sep;49(9):1645

Pyelonephritis in cows: 15 cases (1982–1986). Rebhun WC, et al. **J Am Vet Med Assoc** 1989 Apr 1;194(7):953–5

URINATION

Age related flow rate nomograms in a normal pediatric population. Gaum LD, et al. **Acta Urol Belg** 1989; 57(2):457–66

Body surface related flow rate nomograms in a normal pediatric population. Wese FX, et al. **Acta Urol Belg** 1989; 57(2):467–74

Electrophysiological study of micturition reflexes in rats. Mallory B, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R410–21

Postmicturition residual bladder volumes in healthy babies. Roberts DS, et al. **Arch Dis Child** 1989 Jun;64(6):825–8

Voiding pattern, urinary volume, composition and bacterial contamination in patients with urinary diversion via a continent ileal reservoir. Akerlund S, et al. **Br J Urol** 1989 Jun;63(6):619–23

Maximum and average urine flow rates in normal male and female populations—the Liverpool nomograms. Haylen BT, et al. **Br J Urol** 1989 Jul;64(1):30–8

Excitatory and inhibitory influences on bladder activity elicited by electrical stimulation in the pontine micturition center in the rat. Noto H, et al. **Brain Res** 1989 Jul 17; 492(1–2):99–115

Behavioral analysis of the postnatal development of micturition in kittens. Thor KB, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):137–44

Uterine positions and schedules of urination: correlates of differential maternal anogenital stimulation. Clark MM, et al. **Dev Psychobiol** 1989 May;22(4):389–400

Male rat pups are more hesitant to urinate in response to anogenital stimulation than are their female sibs. Clark MM, et al. **Dev Psychobiol** 1989 Jan;22(1):81–5

Active antireflux mechanism induced by micturition. Experimental study in awake sheep. Moriel E, et al. **Eur Urol** 1989;16(3):226–8

Continence mechanisms following transphincteric urethroplasty. Reid RE, et al. **Eur Urol** 1988;15(1–2):66–8

Restoration of micturition using microelectric current in experimentally induced spastic urinary bladder in rabbits. Karoutas G, et al. **Exp Neurol** 1988 Dec;102(3):333–9

Cystometric evidence that capsaicin-sensitive nerves modulate the afferent branch of micturition reflex in humans. Maggi CA, et al. **J Urol** 1989 Jul;142(1):150–4

Simple aid for upright voiding after partial penectomy. Manson AL. **J Urol** 1989 Apr;141(4):895

A study of functional recovery for urination and defecation in patients with myelodysplasia: a modified seromuscular ileal flap fixation to the bladder. Shiomi T, et al. **J Urol** 1989 Feb;141(2):292–6

Glycosaminoglycans and urine flow rate. Hotz P, et al. **Nephron** 1989;51(2):271–3

The effects of lumbosacral deafferentation on pontine micturition centre–evoked voiding in the decerebrate cat. Shefchyk SJ. **Neurosci Lett** 1989 Apr 24;99(1–2):175–80

Digital measurement of pelvic muscle strength in childbearing women. Sampselle CM, et al. **Nurs Res** 1989 May–Jun;38(3):134–8

Posturination time and specific gravity in infants' diapers. Stebor AD. **Nurs Res** 1989 Jul–Aug;38(4):244–5

Urinary problems in decompression sickness [letter] Dounis A, et al. **Paraplegia** 1989 Feb;27(1):76

The Ferrier lecture, 1986. The actions of parasympathetic and sympathetic nerves in human micturition, erection and seminal emission, and their restoration in paraplegic patients by implanted electrical stimulators. Brindley GS. **Proc R Soc Lond [Biol]** 1988 Nov 22;235(1279):111–20 (21 ref.)

The standardisation of terminology of lower urinary tract function. The International Continence Society Committee on Standardisation of Terminology. Abrams P, et al. **Scand J Urol Nephrol Suppl** 1988;114:5–19

Sensory thresholds in the male urethra measured by electrical stimulation. Brekkan E, et al. **Scand J Urol Nephrol Suppl** 1988;114:87–90

Urodynamics in normal infants and children. Hjälmås K. **Scand J Urol Nephrol Suppl** 1988;114:20–7

Micturition patterns in a healthy female population, studied with a frequency/volume chart. Larsson G, et al. **Scand J Urol Nephrol Suppl** 1988;114:53–7

Urinary peristalsis investigated by radionuclide and X-ray methods: a comparison. Müller-Suur R, et al. **Scand J Urol Nephrol Suppl** 1988;110:285–90

Home-monitoring of uroflow in normal male adolescents. Relation between flow-curve, voided volume and time of day. Poulsen EU, et al. **Scand J Urol Nephrol Suppl** 1988; 114:58–62

Office urodynamics [published erratum appears in Urol Clin North Am 1989 May;16(2):xii] Wein AJ, et al. **Urol Clin North Am** 1988 Nov;15(4):609–23 (19 ref.)

Effect of cerebellectomy on reflex micturition in the decerebrate dog as determined by urodynamic evaluation. Nishizawa O, et al. **Urol Int** 1989;44(3):152–6

Spontaneous versus intubated flow in male patients. Lose G, et al. **Urology** 1988 Dec;32(6):553–6

[Urinary continence in patients undergoing nerve sparing radical prostatectomy] Arai Y, et al. **Hinyokika Kiyo** 1989 Jan;35(1):51–5 (Eng. Abstr.) (Jpn)

[Studies on urethrodetrusor facilitative reflex—characteristics of bladder response and neuroreceptor mechanism] Fukaya Y. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):765–71 (Eng. Abstr.) (Jpn)

[Studies on the urophonography (3)—Clinical investigation on prostatic cancer] Koiso K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):371–8 (Eng. Abstr.) (Jpn)

[Studies on the urophonography (1)—Basic investigation with the model of lower urinary tract] Koiso K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):353–8 (Eng. Abstr.) (Jpn)

[Studies on the urophonography (2)—Clinical investigation on normal human subjects and patients with benign prostatic hypertrophy] Koiso K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):359–70 (Eng. Abstr.) (Jpn)

[Effects of amygdaloid stimulation on efferent activities of the vesical branch of the pelvic nerve and the urethral branch of the pudendal nerve in dogs] Koyama K. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):236–44 (Eng. Abstr.) (Jpn)

[Input and output neuronal structures of the pontine micturition center. Part I. Mainly input neuronal structures] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul;79(7):1210–8 (Eng. Abstr.) (Jpn)

[Input and output neuronal structures of the pontine micturition center. Part II. Mainly output neuronal structures] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul;79(7):1219–27 (Eng. Abstr.) (Jpn)

[Bladder replacement by enterocystoplasty after total cystectomy] Tobisu K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):256–63 (Eng. Abstr.) (Jpn)

[Scintigraphic study of gallbladder emptying in chronic Chagas' disease] Troncon LE, et al. **Arq Gastroenterol** 1987 Jul–Dec;24(3–4):157–63 (Eng. Abstr.) (Por)

[Urinary tract infection and its probable relation to the deviation of the urine toward the vagina during micturition (letter)] García-Alvarez R, et al. **Bol Med Hosp Infant Mex** 1988 Nov;45(11):792–4 (Spa)

DRUG EFFECTS

Micturition in the unanesthetized rat: effects of intrathecal capsaicin, N-vanillylnonanamide, 6-hydroxydopamine and 5,6-dihydroxytryptamine. Durant PA, et al. **Brain Res** 1988 Jun 7;451(1–2):301–8

Action of clonidine on micturitional reflexes in decerebrate cats. Galeano C, et al. **Brain Res** 1989 Jul 3;491(1):45–56

Opioid-like action of eseroline on micturition reflex in rats. Maggi CA, et al. **Gen Pharmacol** 1989;20(1):17–22

Effect of naloxone & catecholamines on renal function & survival in haemorrhagic shock in dogs. Reghunandanan R, et al. **Indian J Med Res** 1988 May;87:516–20

Dermorphin inhibits micturition reflex in rats at a central site of action. Maggi CA, et al. **J Auton Nerv Syst** 1989 Feb;26(1):11–6

Hormone studies in Myxine glutinosa: effects of the eicosanoids arachidonic acid, prostaglandin E1, E2, A2, F2 alpha, thromboxane B2 and of indomethacin on plasma cortisol, blood pressure, urine flow and electrolyte balance. Wales NA. **J Comp Physiol [B]** 1988;158(5):621–6

Effect of acute or chronic administration of imipramine on spinal and supraspinal micturition reflexes in rats. Maggi CA, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):278–85

A comparative study of diuretic effects of Tinospora cordifolia and hydrochlorothiazide in rats and a preliminary phase I study in human volunteers. Nayampalli SS, et al. **J Postgrad Med** 1988 Oct;34(4):233–6

Phenoxybenzamine in benign prostatic obstruction [letter] Staub WR, et al. **JAMA** 1988 Oct 21;260(15):2220

Nifedipine and nocturia [letter] Mignot G, et al. **Lancet** 1988 Oct 8;2(8615):857

Effect of colchicine on micturition reflex in rats. Zanoli P, et al. **Neurotoxicol Teratol** 1988 Nov–Dec;10(6):579–84

A comparative study of Atropa belladonna and atropine on an animal model of urinary retention. Tita B, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:55–8

Four-hour atrial natriuretic peptide infusion in conscious rats: effects on urinary volume, sodium, and cyclic GMP. Campbell HT, et al. **Proc Soc Exp Biol Med** 1988 Dec; 189(3):317–24

[Effect of oxybutynin on lower urinary tract function] Nishizawa O, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1383–7 (Eng. Abstr.) (Jpn)

[The effects of chemical stimulations of the pontine micturition center in decerebrate cats] Sugaya K. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1364–71 (Eng. Abstr.) (Jpn)

[Effect of propiverine hydrochloride on the function of the bladder in dogs] Kaneko S, et al. **Nippon Yakurigaku Zasshi** 1989 Feb;93(2):55–60 (Eng. Abstr.) (Jpn)

URINATION DISORDERS

Disorders of micturition in the aging patient. Ouslander JG, et al. **Adv Intern Med** 1989;34:165–90 (100 ref.)

The standardisation of terminology of lower urinary tract function. The International Continence Society Committee on Standardisation of Terminology. Abrams P, et al. **Scand J Urol Nephrol Suppl** 1988;114:5–19

The urethral syndrome. Bodner DR. **Urol Clin North Am** 1988 Nov;15(4):699–704 (37 ref.)

CHEMICALLY INDUCED

Intraspinal analgesia and urinary bladder dysfunction. Philippe AC, et al. **Acta Anaesthesiol Belg** 1988;39(3):163–7 (24 ref.)

Acute changes in renal function associated with deferoxamine therapy. Koren G, et al. **Am J Dis Child** 1989 Sep; 143(9):1077–80

Drug-induced acute urinary retention [letter] Napolez A, et al. **Ann Emerg Med** 1988 Dec;17(12):1367

Nifedipine and prostatism [letter] Evans MJ. **J R Coll Gen Pract** 1988 Jan;38(306):34

Urological complications of cyclophosphamide. Levine LA,

et al. J Urol 1989 May;141(5):1063–9 (120 ref.)
A study of morphine-induced urinary retention in anesthetized rats capable of micturition. Kontani H, et al. Jpn J Pharmacol 1988 Sep;48(1):31–6
Urinary retention in the course of neuroleptic therapy with haloperidol. Ulmar G, et al. Pharmacopsychiatry 1988 Jul; 21(4):208–9
[Severe hypopotassemia and rhabdomyolysis in a normotensive subject after use of a nasal spray containing 9-alpha-fluoroprednisolone] Wu SC, et al. Recenti Prog Med 1989 Apr;80(4):195–6 (Eng. Abstr.) (Ita)

COMPLICATIONS

Prevalence of spina bifida occulta in patients with functional disorders of the lower urinary tract and its relation to urodynamic and neurophysiological measurements. Fidas A, et al. BMJ 1989 Feb 11;298(6670):357–9
Unrecognised high pressure chronic retention of urine presenting with systemic arterial hypertension. Ghose RR, et al. BMJ 1989 Jun 17;298(6688):1626–8
Vesicoureteral reflux and voiding dysfunction: a prospective study. Seruca H. J Urol 1989 Aug;142(2 Pt 2):494–8; discussion 501
Uremia as a complication to urinary retention due to hypothyreosis. Case report. Hansen MV, et al. Scand J Urol Nephrol 1988;22(4):351–3
[The uretheral syndrome in men or prostatodynia] Bitker MO, et al. Ann Urol (Paris) 1988;22(5):373–5 (Eng. Abstr.) (Fre)
[Prevention and treatment of urinary infection in neurogenic disorders of urination] Lavrienko VS. Sov Med 1988; (8):118–20 (Rus)

DIAGNOSIS

The evaluation by means of ultrasounds of the bladder residue after gynaecological operations. Mangano U, et al. Eur J Gynaecol Oncol 1989;10(1):21–6
Accuracy of ultrasonic assessment of residual urine in children. Erasmie U, et al. Pediatr Radiol 1989; 19(6–7):388–90
Idiopathic voiding dysfunction: a urodynamic basis of differential diagnosis. Kuo HC, et al. Taiwan I Hsueh Hui Tsa Chih 1988 Nov;87(11):1055–64
[Characterization of intraurethral relations of urine flow in childhood using the Doppler ultrasound technic] Nentwich HJ, et al. Z Urol Nephrol 1988 Sep;81(9):555–69 (34 ref.) (Eng. Abstr.) (Ger)
[Diagnosis and treatment of voiding dysfunction in the elderly on out-clinic basis] Gotoh M, et al. Nippon Hinyokika Gakkai Zasshi 1988 Jul;79(7):1153–61 (Eng. Abstr.) (Jpn)

DRUG THERAPY

Oxybutinin versus propantheline in the management of detrusor instability. A patient-regulated variable dose trial. Holmes DM, et al. Br J Obstet Gynaecol 1989 May; 96(5):607–12
Role of subcutaneous apomorphine in parkinsonian voiding dysfunction. Christmas TJ, et al. Lancet 1988 Dec 24–31; 2(8626–8627):1451–3
Beneficial effects of maprotiline on irritative urinary symptoms in multiple sclerosis [letter] Feuerstein TJ. Lancet 1988 Dec 10;2(8624):1369
Coping with prostatic symptoms. Practitioner 1988 Jun 8; 232(1450):644
The effect of a serotonin antagonist ketanserin on acute urinary retention. Hørby J, et al. Scand J Urol Nephrol 1989;23(2):121–2
Management of urinary retention due to benign prostatic hyperplasia using luteinizing hormone-releasing hormone agonist. Schlegel PN, et al. Urology 1989 Aug;34(2):69–72
[The potential for a favorable effect in certain forms of neurogenic urination disorders using the preparation dibenziran] Tachev S, et al. Khirurgiia (Sofiia) 1988; 41(4):25–7 (Bul)
[Urinate more, with less alpha blockaders (letter)] Buzelin J, et al. Ann Urol (Paris) 1988;22(5):307–8 (Fre)
[Efficacy of an alpha-blocker, alfuzosin, on urinary disorders in men with prostatic adenoma. Intermediate results of a European multicenter study] Jardin A. Ann Urol (Paris) 1988;22(5):333–40 (Eng. Abstr.) (Fre)
[Clinical evaluation of chorei-to and chorei-to-go-shimotsu-to in patients with lower urinary tract symptoms] Horii A, et al. Hinyokika Kiyo 1988 Dec; 34(12):2237–41 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

The prevalence of urinary symptoms in patients with chronic neurological disease. Thomas TM, et al. Community Med 1988 May;10(2):124–9

ETIOLOGY

Micturition symptoms and urinary incontinence after non-radical hysterectomy. Vervest HA, et al. Acta Obstet Gynecol Scand 1988;67(2):141–6
Ameboma presenting as acute urinary retention [published erratum appears in Am J Gastroenterol 1989 Aug;84(8):993] Schattner A, et al. Am J Gastroenterol 1989 Apr; 84(4):439–41
Urinary and sexual dysfunction after rectosigmoid surgery. Hellström P. Ann Chir Gynaecol 1988;77(2):51–6
Bladder emptying assessment in stroke patients. Garrett VE, et al. Arch Phys Med Rehabil 1989 Jan;70(1):41–3
Postoperative urological complications after radical surgery for cervical cancer. Kindermann G, et al. Baillieres Clin Obstet Gynaecol 1988 Dec;2(4):933–41
Urological complications after radical abdominal hysterectomy for cervical cancer. Ralph G, et al. Baillieres Clin Obstet Gynaecol 1988 Dec;2(4):943–52
Daytime urinary frequency in children [letter] Leung AK, et al. BMJ 1988 Oct 22;297(6655):1047
Late renal failure due to prostatic outflow obstruction [letter] Neal DE, et al. BMJ 1989 Mar 4;298(6673):602
Daytime urinary frequency in children. Walker J, et al. BMJ 1988 Aug 13;297(6646):455
Postoperative urinary retention in general surgical patients. Stallard S, et al. Br J Surg 1988 Nov;75(11):1141–3
Late presentation of congenital posterior urethral valves. Heaton ND, et al. Br J Urol 1989 Jul;64(1):98
Detrusor instability. Mundy AR. Br J Urol 1988 Nov; 62(5):393–7 (16 ref.)
Risk factors for developing voiding dysfunction after abdominoperineal resection for adenocarcinoma of the rectum. Burgos FJ, et al. Dis Colon Rectum 1988 Sep; 31(9):682–5
An analysis of survival and voiding, sexual function after wide iliopelvic lymphadenectomy in patients with carcinoma of the rectum, compared with conventional lymphadenectomy. Hojo K, et al. Dis Colon Rectum 1989 Feb;32(2):128–33
Micturitional dysfunction after anterior resection for rectal cancer. Rehabilitative treatment. Zanolla R, et al. Dis Colon Rectum 1988 Sep;31(9):707–9
Urological problems and quality of life after treatment in early cervical cancer. Valente S. Eur J Gynaecol Oncol 1988;9(5):424–7
Urinary retention due to catheter occlusion by worms. Ginesin Y, et al. Eur Urol 1989;16(4):306–7
Acute urine retention in a child due to fibromatosis of the prostate. Scholtmeijer RJ, et al. Eur Urol 1988;14(5):412–3
Sexually transmitted diseases in women with urethral syndrome. Vitoratos N, et al. Int J Gynaecol Obstet 1988 Oct;27(2):177–80
Diabetic cystopathy. Kaplan SA, et al. J Diabetic Complications 1988 Jul–Sep;2(3):133–9 (46 ref.)
Extravasation from the upper urinary tract: three case reports. Elliott JP, et al. J Miss State Med Assoc 1988 Sep;29(9):269–71
Acute urinary retention due to didelphys uterus associated with an obstructed hemivagina in a 5-month-old infant. Pansini L, et al. J Pediatr Surg 1988 Oct;23(10):984–5
Paraurethral cyst as an unusual cause of acute urinary retention. A case report. Stovall TG, et al. J Reprod Med 1989 Jun;34(6):423–5
Morbidity associated with indwelling internal ureteral stents after shock wave lithotripsy. Bregg K, et al. J Urol 1989 Mar;141(3):510–2
Voiding dysfunction secondary to penetrating bony fragment 20 years after pelvic fracture. Cohen ES, et al. J Urol 1989 Mar;141(3):606–7
Actinomycosis of urachal remnants. Gotoh S, et al. J Urol 1988 Dec;140(6):1534–5
Acute urinary retention associated with prostatic carcinoma. Moul JW, et al. J Urol 1989 Jun;141(6):1375–7
Obstructive uropathy in patients with benign prostatic hyperplasia. Sarmina I, et al. J Urol 1989 Apr;141(4):866–9
Vaginal myxoma presenting as acute urinary retention. Egley CC, et al. Obstet Gynecol 1989 May;73(5 Pt 2):882–3
The effect of total abdominal hysterectomy on bladder function in asymptomatic women. Langer R, et al. Obstet Gynecol 1989 Aug;74(2):205–7
Voiding dysfunction in patients with human T-lymphotropic virus type-1-associated myelopathy (HAM). Komine S, et al. Paraplegia 1989 Jun;27(3):217–21
Disturbances of micturition in patients with a spinal arteriovenous malformation. Murayama N, et al. Paraplegia 1989 Jun;27(3):212–6
Sacral chordoma and rehabilitative treatment of urinary disorders. Torelli T, et al. Tumori 1988 Aug 31;74(4):475–8
[Neurogenic urination disorders following radical surgical interventions in rectal carcinoma] Patrashkov T, et al. Khirurgiia (Sofiia) 1989;42(2):34–8 (Eng. Abstr.) (Bul)
[Urinary complications following radical hysterectomy for 621 patients with cancer of uterine cervix] Chen DX. Chung Hua Chung Liu Tsa Chih 1989 Jan;11(1):67–70 (Eng. Abstr.) (Chi)
[Postoperative urinary retention] Skovdal J, et al. Ugeskr Laeger 1988 Nov 28;150(48):2976–8 (Eng. Abstr.) (Dan)
[The role of varicocele in dysuria] Henry JC. Acta Urol Belg 1988;56(4):563–70 (Eng. Abstr.) (Fre)
[Functional urinary pathology and anorectal disorders] Schick E, et al. Acta Urol Belg 1989;57(2):563–8 (Fre)
[Dysuria] Rabillard C, et al. Ther Umsch 1988 Dec; 45(12):857–64 (15 ref.) (Eng. Abstr.) (Ger)
[Functional bladder-urethral injuries in the irradiated pelvis] Simeone C, et al. Arch Ital Urol Nefrol Androl 1988 Dec; 60(4):357–65 (Eng. Abstr.) (Ita)
[Urinary and sexual changes after Miles' operation for cancer of the rectum] Cunsolo A, et al. Minerva Chir 1988 Jun 30;43(12):1019–25 (Eng. Abstr.) (Ita)
[Urination disorders, endocrine features and sexual activity in patients with benign prostatic hypertrophy under treatment with mepartricin] Scarpa RM, et al. Minerva Urol Nefrol 1988 Apr–Jun;40(2 Suppl):18–20 (Ita)
[Psychogenic urinary retention: report of two cases] Kitami K, et al. Hinyokika Kiyo 1989 Mar;35(3):509–12 (10 ref.) (Eng. Abstr.) (Jpn)
[Clinical study on female patients with bladder irritability—analysis of bacteriuria, pyuria and subjective symptoms] Hirose T, et al. Kansenshogaku Zasshi 1988 Dec; 62(12):1143–51 (Eng. Abstr.) (Jpn)
[Respiratory and dysuric disorders in hiatal hernia] Gubergrits AIa, et al. Ter Arkh 1988;60(10):31–3 (Eng. Abstr.) (Rus)

HISTORY

Disorders of voiding and bladder function presented in textbooks published during the nineteenth century. Derežić D. Eur Urol 1988;14(6):482–3

METABOLISM

Urologic pharmacology in the office setting. Reed MD, et al. Urol Clin North Am 1988 Nov;15(4):737–51 (78 ref.)

MICROBIOLOGY

Daytime urinary frequency in children [letter] Crowther P, et al. BMJ 1988 Oct 1;297(6652):855

NURSING

The mythical danger of rapid urinary drainage. Bristoll SL, et al. Am J Nurs 1989 Mar;89(3):344–5

PHYSIOPATHOLOGY

Abnormal electromyographic activity of the urethral sphincter, voiding dysfunction, and polycystic ovaries: a new syndrome? Fowler CJ, et al. BMJ 1988 Dec 3; 297(6661):1436–8
Neurological defects of the voiding reflex arcs in chronic urinary retention and their relation to spina bifida occulta. Fidas A, et al. Br J Urol 1989 Jan;63(1):16–20
Association between symptomatology and uroflowmetry in benign prostatic hypertrophy. Herbison AE, et al. Br J Urol 1988 Nov;62(5):427–30
Chronic urinary retention—a sensory problem? Parys BT, et al. Br J Urol 1988 Dec;62(6):546–9
The daytime urinary frequency syndrome of childhood. Koff SA, et al. J Urol 1988 Nov;140(5 Pt 2):1280–1
Intraspinalcord injection of colchicine as a tool to study micturition disturbances. Implication of endogenous opioid peptides. Zanoli P, et al. Pharmacol Res Commun 1988 Jul; 20(7):607–8
Office urodynamics [published erratum appears in Urol Clin North Am 1989 May;16(2):xii] Wein AJ, et al. Urol Clin North Am 1988 Nov;15(4):609–23 (19 ref.)
[Urologic findings after spinal injuries] Hanuš T, et al. Rozhl Chir 1988 Oct;67(10):645–53 (Eng. Abstr.) (Cze)
[Postoperative disorder of bladder emptying in gynecology: pathophysiology and possibilities for treatment] Schüssler B. Geburtshilfe Frauenheilkd 1988 Aug;48(8):551–8 (60 ref.) (Eng. Abstr.) (Ger)
[Urodynamic studies in childhood] Nentwich HJ. Z Arztl Fortbild (Jena) 1988;82(11):523–7 (Ger)
[Bladder-urethral dysfunction in childhood] De Grazia E, et al. Minerva Pediatr 1988 Jul;40(7):425–8 (Eng. Abstr.) (Ita)
[Clinical evaluation for voiding dysfunction in patients with cerebral-palsy] Yokoyama O, et al. Nippon Hinyokika Gakkai Zasshi 1989 Apr;80(4):591–5 (Eng. Abstr.) (Jpn)

PSYCHOLOGY

A transference resistance in male patients with inhibition of urination in public places. Myers WA. Psychoanal Q 1989 Apr;58(2):245–50
[Psychosomatic aspects of urination disorders] Bitzer J, et al. Gynakologe 1989 Apr;22(2):77–82 (33 ref.) (Ger)

RADIOGRAPHY

Intravenous urography after acute urinary retention. Gajraj HA, et al. Ann R Coll Surg Engl 1989 Mar;71(2):79–80
Re-evaluation of pre-prostatectomy excretory urography at the University of Calabar Teaching Hospital, (UCTH), Calabar, Nigeria. Ekwere PD. Cent Afr J Med 1988 May; 34(5):102–6
[Descending urethrography in men with low urine flow] Savin VF, et al. Urol Nefrol (Mosk) 1989 May–Jun;(3):27–8 (Eng. Abstr.) (Rus)

REHABILITATION

[Training of patients with residual urine and/or recurrent urinary tract infections] Klarskov OP. Ugeskr Laeger 1989 Jan 30;151(5):293–5 (Eng. Abstr.) (Dan)

SURGERY

Results and complications of percutaneous nephrostomy. Vehmas T, et al. Ann Clin Res 1988;20(6):423–7
Urinary tract reconstruction in children. McMullin ND.

Aust N Z J Surg 1988 Aug;58(8):619–29
Bladder autoaugmentation: early clinical experience. Cartwright PC, et al. J Urol 1989 Aug;142(2 Pt 2):505–8; discussion 520–1
[Transurethral resection of bladder outlet obstruction from carcinoma of the prostate] Fukuoka H, et al. Hinyokika Kiyo 1989 Apr;35(4):609–14 (Eng. Abstr.) (Jpn)
[Use of stent-aided internal drainage in obstructive uropathy in children] Erokhin AP, et al. Klin Khir 1988;(6):51–3 (Eng. Abstr.) (Rus)

THERAPY

Acute urinary retention: which catheter? Allardice JT, et al. Ann R Coll Surg Engl 1988 Nov;70(6):366–8
Acute urinary retention: which catheter? [letter] Payne-James J, et al. Ann R Coll Surg Engl 1989 Mar; 71(2):145
Trial without catheter following acute retention of urine. Taube M, et al. Br J Urol 1989 Feb;63(2):180–2
Preoperative intermittent catheterization in patients with prostatic hypertrophy. Furuhata A, et al. Clin Ther 1988; 10 Spec No:47–51
Urethral syndrome. A comparison of different treatment modalities. Bergman A, et al. J Reprod Med 1989 Feb; 34(2):157–60
Experience with a new self-retaining intraurethral catheter in patients with urinary retention: a preliminary report. Nissenkorn I. J Urol 1989 Jul;142(1):92–4
The intraprostatic spiral: a new device for insertion with the patient under local anesthesia and with ultrasonic guidance with 3 months of followup. Nordling J, et al. J Urol 1989 Sep;142(3):756–8
Evaluation and management of voiding disorders in children. Koff SA. Urol Clin North Am 1988 Nov;15(4):769–75 (37 ref.)
[Treatment of bladder-urethral dysfunction in childhood] De Grazia E, et al. Minerva Pediatr 1988 Aug;40(8):477–80 (Eng. Abstr.) (Ita)
[Transurethral microwave coagulation in patients with dysuria caused by prostatic cancer] Kigure T, et al. Nippon Hinyokika Gakkai Zasshi 1988 Oct;79(10):1686–91 (Eng. Abstr.) (Jpn)
[Therapeutic physical exercise in the combined therapy of patients with disorders of urination and of the urodynamics of the urinary tract] Iunusov FA. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Jan–Feb;(1):66–8 (Rus)

URINE

Daytime urinary frequency in children [letter] Whitaker RH, et al. BMJ 1988 Dec 3;297(6661):1468

VETERINARY

Surgical management of urovagina and associated infertility in a cow. Gilbert RO, et al. J Am Vet Med Assoc 1989 Apr 1;194(7):931–2
Diagnosis and treatment of vesicovaginal reflux in the mare. Easley KJ. Vet Clin North Am [Equine Pract] 1988 Dec; 4(3):407–16 (17 ref.)
Urodynamic alterations after prostatectomy in dogs without clinical prostatic disease. Basinger RR, et al. Vet Surg 1987 Nov–Dec;16(6):405–10
Urethral extension for correction of urovagina in cattle. A review of 14 cases. St. Jean G, et al. Vet Surg 1988 Sep–Oct; 17(5):258–62

URINE

see related
ALBUMINURIA
ALKAPTONURIA
AMINOACIDURIA, RENAL
ANURIA
BACTERIURIA
CYSTINURIA
GLYCOSURIA
HEMATURIA
HEMOGLOBINURIA
MAPLE SYRUP URINE DISEASE
PHENYLKETONURIA
POLYURIA
PROTEINURIA
PYURIA

Back-leak of pelvic urine to the bloodstream. Stenberg A, et al. Acta Physiol Scand 1988 Oct;134(2):223–34
Morphological dynamics of ureteral transport. II. Peristaltic patterns in relation to flow rate. Ohlson L. Am J Physiol 1989 Jan;256(1 Pt 2):R29–34
Morphological dynamics of ureteral transport. I. Shape and volume of constituent urine fractions. Ohlson L. Am J Physiol 1989 Jan;256(1 Pt 2):R19–28
Water excretion and plasma vasopressin in psychotic disorders. Emsley R, et al. Am J Psychiatry 1989 Feb; 146(2):250–3
Asparagus and malodorous urine [letter] Mitchell SC. Br J Clin Pharmacol 1989 May;27(5):641–2
Odorous urine in man after asparagus [letter] Richer C, et al. Br J Clin Pharmacol 1989 May;27(5):640–1
The accuracy of measurement of residual urine in women by urethral catheterisation. Haylen BT, et al. Br J Urol 1989 Feb;63(2):152–4
Spontaneous extravasation and urinoma formation secondary to cervical carcinoma. McClinton S, et al. Br J Urol 1989 Jul;64(1):100–1
Near-fatal urinary peritonitis secondary to ureteric calculus. Paraskevaides EC, et al. Br J Urol 1989 Apr;63(4):437–8
The "plain film" bladder shadow in outflow obstruction: as accurate a discriminant of residual urine as ultrasound. Timoney AG, et al. Br J Urol 1989 Apr;63(4):363–6
Changes in urinary pH following bicarbonate loading. McKenzie DC. Can J Sport Sci 1988 Dec;13(4):254–6
Pisse prophecy: a brief history of urinalysis. Haber MH. Clin Lab Med 1988 Sep;8(3):415–30
Renal and bladder function recovery after prostatectomy in patients with a chronic residual urine of above 1,000 ml. Nissenkorn I, et al. Eur Urol 1988;14(6):434–6
Effectiveness of products in eliminating cat urine odors from carpet. Beaver BV, et al. J Am Vet Med Assoc 1989 Jun 1;194(11):1589–91
Urine odor eliminators [letter] Price PM. J Am Vet Med Assoc 1989 Aug 15;195(4):424
Urethral and urachal urine output to the amniotic and allantoic sacs in fetal sheep. Wlodek ME, et al. J Dev Physiol 1988 Aug;10(4):309–19
Endourologic management of ureteroscopic complications. Culkin DJ, et al. J La State Med Soc 1989 Jul;141(7):27–32
High altitude changes in mountaineers. Part A: Over-night urinary volume and some serum values in mountaineers during active expedition. Usha, et al. J Sports Med Phys Fitness 1988 Sep;28(3):253–6
Clinical evaluation of an external urine collection device for nonambulatory incontinent women. Johnson DE, et al. J Urol 1989 Mar;141(3):535–7
A study of the incorporation of urinary macromolecules onto crystals of different mineral compositions. Morse RM, et al. J Urol 1989 Mar;141(3):641–4
The accuracy of a catheterized residual urine. Stoller ML, et al. J Urol 1989 Jan;141(1):15–6
Theory of urine formation and uroscopic diagnosis in the Medical School of Salerno. Dal Canton A, et al. Kidney Int 1988 Aug;34(2):273–7
Simple metabolic bed for paediatric use [letter] Puntis JW, et al. Lancet 1989 Apr 1;1(8640):722–3
The stability of pH, PCO2, and calculated [HCO3] of urine samples collected under oil. Oster JR, et al. Nephron 1988; 50(4):320–4
Posturination time and specific gravity in infants' diapers. Stebor AD. Nurs Res 1989 Jul–Aug;38(4):244–5
Accuracy of ultrasonic assessment of residual urine in children. Erasmie U, et al. Pediatr Radiol 1989; 19(6–7):388–90
Fictitious crystalluria [letter] Abu-Arafeh IA, et al. Pediatrics 1989 Apr;83(4 Pt 2):655–6
Vomeronasal organ and social factors affect urine marking by male mice. Labov JB, et al. Physiol Behav 1989 Feb; 45(2):443–7
Mouse pup urine as an infant signal. Londei T, et al. Physiol Behav 1989 Mar;45(3):579–83
A new method for collecting urine directly from the ureter in conscious unrestrained rats. Horst PJ, et al. Renal Physiol Biochem 1988 Nov–Dec;11(6):325–31
Scanning electron microscopy of human urine and purified Tamm-Horsfall's glycoprotein. Bjugn R, et al. Scand J Urol Nephrol 1988;22(4):313–5
The use of technetium diethylenetriaminepentaacetate for detecting posttransplantation urinary extravasation. Petronis J, et al. Transplantation 1988 Dec;46(6):910–2
Circumferential perirenal urinoma mimicking nephromegaly on urography. Tien R, et al. Urol Radiol 1989;11(2):92–6
The effects of urine on mast cells and smooth muscle of the human ureter. Ugaily-Thulesius L, et al. Urol Res 1988; 16(6):441–7
[Scheduled urine collection using disposable diapers with an acoustic signal emitter] Ballauff A, et al. Klin Padiatr 1988 Sep–Oct;200(5):414–8 (Eng. Abstr.) (Ger)
[Urinary sediment revisited: new aspects of an old test] Bogetic J, et al. Arch Ital Urol Nefrol Androl 1988 Sep; 60(3):273–8 (Eng. Abstr.) (Ita)
[Urinary sedimentation in the diagnosis of renal diseases] Piccoli G, et al. G Clin Med 1988 Oct;69(10):595–9 (Ita)
[Primary chyluria] Pontuch P, et al. Vnitr Lek 1988 Dec; 34(12):1184–8 (Eng. Abstr.) (Slo)
[Massive pleural effusion secondary to hydronephrosis] Javaloyas M, et al. Rev Clin Esp 1989 Jun;185(1):19–20 (Eng. Abstr.) (Spa)

ANALYSIS

Eliminating unnecessary urine microscopy. Results and performance characteristics of an algorithm based on chemical reagent strip testing. Wenz B, et al. Am J Clin Pathol 1989 Jul;92(1):78–81
Pseudocrystalluria and pseudolipiduria. Kirkpatrick WG, et al. Am J Med 1989 Aug;87(2):242
Back to basics: the urinalysis: a selected national survey and review. Cushner HM, et al. Am J Med Sci 1989 Mar; 297(3):193–6 (17 ref.)
Reference values for analytes of 24-h urine collections known to be complete. Bingham SA, et al. Ann Clin Biochem 1988 Nov;25 (Pt 6):610–9
Reliability of a urine dipstick in emergency department patients. Propp DA, et al. Ann Emerg Med 1989 May; 18(5):560–3
The urine chemistry survey—series 2. 5 years' experience with an interlaboratory comparison program. Weaver DK, et al. Arch Pathol Lab Med 1989 Jul;113(7):713–22
Is routine urine testing in outpatient clinics useful? Morgan AG. BMJ 1988 Nov 5;297(6657):1173
Voiding pattern, urinary volume, composition and bacterial contamination in patients with urinary diversion via a continent ileal reservoir. Akerlund S, et al. Br J Urol 1989 Jun;63(6):619–23
The dissolution of urinary mucus after cystoplasty. Gillon G, et al. Br J Urol 1989 Apr;63(4):372–4
Routine screening of blood and urine for severe reactions to anticonvulsant drugs in asymptomatic patients is of doubtful value. Camfield P, et al. Can Med Assoc J 1989 Jun 1;140(11):1303–5 (15 ref.)
Levels of mutagens in the urine of smokers of black and blond tobacco correlate with their risk of bladder cancer. Malaveille C, et al. Carcinogenesis 1989 Mar;10(3):577–86
Urinalysis. Clin Lab Med 1988 Sep;8(3):415–621
Automated urinalysis. Carlson DA, et al. Clin Lab Med 1988 Sep;8(3):449–61
Quality assurance in urinalysis. Haber MH. Clin Lab Med 1988 Sep;8(3):431–47 (29 ref.)
Automation and work-simplification in the urinalysis laboratory. A pilgrim's progress. Patterson PP. Clin Lab Med 1988 Sep;8(3):585–99
Comparative yields of mutagens from cigarette smokers' urine obtained by using solid-phase extraction techniques. Williams RW, et al. Environ Mol Mutagen 1989;14(1):20–6
Urine from continent caecal reservoirs. Studies on chemical composition and bacterial growth. Månsson W, et al. Eur Urol 1989;16(1):18–22
Recombinant and native human urinary colony-stimulating factor directly augments granulocytic and granulocyte-macrophage colony-stimulating factor production of human peripheral blood monocytes. Motoyoshi K, et al. Exp Hematol 1989 Jan;17(1):68–71
Purification of human urine colony-stimulating factor by affinity chromatography. Waheed A, et al. Exp Hematol 1989 Jan;17(1):61–5
Problems in monitoring mutagenicity of human urine. Hayatsu H, et al. IARC Sci Publ 1988;(89):401–4
An improved standardized procedure for urine mutagenicity testing. Rannug A, et al. IARC Sci Publ 1988;(89):396–400
Laboratory aspects of drug testing in athletics. George WJ, et al. J Am Coll Health 1989 Jul;38(1):46–7
Evaluation of the ETS and ADx urine drug screening immunoassay analyzers. Edinboro LE, et al. J Anal Toxicol 1989 Jul–Aug;13(4):232–4
CO production by feces and urine. Levitt MD, et al. J Lab Clin Med 1989 Feb;113(2):241–7
Comparison of urine specific gravity values from total-solids refractometry and reagent strip method. Chatasingh S, et al. J Med Assoc Thai 1989 Jan;72 Suppl 1:39–41
Urine: anomalies observed during laboratory analysis [letter] Warwick RJ. J R Soc Health 1989 Jun;109(3):114
Drug testing of athletes: test the team's pooled urine [letter] Dixon FR. JAMA 1989 Sep 1;262(9):1183
Simplifying urine collection from infants and children without losing accuracy. Suri S. MCN 1988 Nov–Dec; 13(6):438–41
The place of routine urine testing on admission to hospital. Del Mar C, et al. Med J Aust 1989 Aug 7;151(3):151–3
The use of rat urine extracted on XAD-2 resin and assayed in a microsuspension-modified Ames test as an in vivo indicator of genotoxic exposure. Doolittle DJ, et al. Mutat Res 1988 Oct;206(2):141–8
Inhibition of phytoagglutinin potency of Korean vicia unijuga by human urine. Moon GJ, et al. Nippon Hoigaku Zasshi 1989 Feb;43(1):16–9
Tetraedric and sand-glass crystals in the urine. Baumert S, et al. Pathol Res Pract 1989 Mar;184(3):349–53
Changes in urine composition, bladder epithelial morphology, and DNA synthesis in male F344 rats in response to ingestion of bladder tumor promoters. Shibata MA, et al. Toxicol Appl Pharmacol 1989 Jun 1;99(1):37–49
Analysis of mutagenic activity in human urine after concentration on different resins and high-performance liquid chromatography. Salvadori M, et al. Toxicol Lett 1989 Feb;45(2–3):241–9
Monitoring urinary amylase and pH in pancreas transplantation with urinary drainage in rats. Schang T, et al. Transplantation 1988 Dec;46(6):806–12
Use of the computer program EQUIL to estimate pH in model solutions and human urine. Ackermann D, et al. Urol Res 1989;17(3):157–61
[Is urinalysis necessary in physical examinations?] Kunnamo I. Duodecim 1988;104(21):1736–7 (Fin)
[Use of an expert system as a tool to carry out urinary cyto-bacteriologic tests] Comby S, et al. Ann Biol Clin (Paris) 1988;46(8):669–72 (Eng. Abstr.) (Fre)
[Evaluation of an automatic measuring device for determining certain constituents of the urinary status] Todaro S, et al. Rev Med Suisse Romande 1988 Dec; 108(12):1067–73 (Fre)
[Urinalysis in the physician's office: methods and interpretation] de Torrenté A. Ther Umsch 1988 Aug; 45(8):528–34 (20 ref.) (Eng. Abstr.) (Fre)
["Der kwe harem". Cow urine—a treatise on a pregnancy test from the 15th century] Keil G. DTW 1988 Nov–Dec;

95(10):433–4 (Eng. Abstr.) (Ger)
[Urolithiasis. Importance of calculus and urine analysis. 3d seminar. 18 March 1988. Abstracts] **J Clin Chem Clin Biochem** 1988 Dec;26(12):837–56 (Ger)
[Urine analysis in the diagnosis of Isaak Judaeus, Gilles de Corbeil and Ortolf von Baierland. Observations on the processing technic] Riha O, et al. **Sudhoffs Arch** 1988; 72(2):212–24 (Eng. Abstr.) (Ger)
[Rational utilization of the urine multi-test strips hepta-PHAN (Lachema, CSSR)] Neymeyer HG, et al. **Z Med Lab Diagn** 1988;29(4):223–6 (Eng. Abstr.) (Ger)
[Urinary alterations induced by physical effort] Ponce P, et al. **Acta Med Port** 1988 May–Jun;1(3):209–11 (Eng. Abstr.) (Por)
[Effectiveness of urine-preserving agents used in water reclamation systems] Lebedeva TE, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):70–4 (Eng. Abstr.) (Rus)
[Use of hydrogen peroxide and lead oxide for purification of urea-contaminated water] Vasilenko II, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):73–5 (Rus)
[Crystallographic research method in the differential diagnosis of rheumatic and nonrheumatic carditis in children] Chebotareva VD, et al. **Pediatriia** 1988;(6):61–5 (Rus)
[Precision chromatographic–mass spectrometric analysis of urinary composition] Dmitriev MT, et al. **Urol Nefrol (Mosk)** 1988 Jul–Aug;(4):41–6 (Eng. Abstr.) (Rus)

CYTOLOGY

Cytodiagnostic urinalysis. Three years experience with a new laboratory test. Eggensperger DL, et al. **Am J Clin Pathol** 1989 Feb;91(2):202–6
A selective mapping algorithm for computer analysis of voided urine cell images. Wong EK, et al. **Anal Quant Cytol Histol** 1989 Jun;11(3):203–10
Early diagnosis of genito-urinary tumours by urinary cytology. Legramandi C, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):43–6
A simple spectrophotometric assay for urinary leukocyte esterase activity. Murthy VV, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):260–8
Urocytogram, an index of maturity in premature infants. Robine N, et al. **Biol Neonate** 1988;54(2):93–9
Karyotyping urine sediment cells confirms trisomy 12 mosaicism detected at amniocentesis. Leschot NJ, et al. **Clin Genet** 1988 Aug;34(2):135–9 (13 ref.)
Flow cytometry of urine. Landay AL, et al. **Clin Lab Med** 1988 Sep;8(3):541–53 (37 ref.)
Urinary sediment analysis: a useful tool? Piccoli G, et al. **Contrib Nephrol** 1989;70:157–62
Cytologic features of prostatic adenocarcinoma in urine: a clinicopathologic and immunocytochemical study. Varma VA, et al. **Diagn Cytopathol** 1988;4(4):300–5
FUO and eosinophiluria in a diabetic with arthritis. McCue JD, et al. **Hosp Pract [Off]** 1989 Aug 15;24(8):71–2
Flow cytometry and cytology as response indicators to M-VAC (methotrexate, vinblastine, doxorubicin and cisplatin). Hermansen DK, et al. **J Urol** 1988 Dec; 140(6):1394–6
Amplification of DNA from epithelial cells in urine [letter] Gasparini P, et al. **N Engl J Med** 1989 Mar 23;320(12):809
Chromosome analyses from urinary sediment: postnatal confirmation of a prenatally diagnosed trisomy 20 mosaicism [letter] Miny P, et al. **N Engl J Med** 1989 Mar 23;320(12):809
Detection of glomerular bleeding by urinary-red-cell-size distribution. Docci D, et al. **Nephron** 1988;50(4):380–2
Immunocytology of urinary sediments in renal transplant patients with deteriorating graft function. Dooper PM, et al. **Transplant Proc** 1989 Aug;21(4):3596–7
Immunocytology of urinary sediments in the diagnosis of rejection of renal allografts. Dooper PM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1873
Urine cytology in a case of B-cell lymphoma in a transplanted kidney. Gupta R, et al. **Transplant Proc** 1989 Aug;21(4):3585–7
Urine sediment cytology in the management of renal allograft recipients. Madras PN, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1842–3
Monoclonal antibody identification of nucleated cells in urine: diagnosis of allograft rejection. Segasothy M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1878–9
Cytologic examination of urinary sediment in renal allograft recipients. Simpson MA, et al. **Transplant Proc** 1989 Aug; 21(4):3578–80
Urine cytologic profile in renal allograft recipients determined by monoclonal antibodies. Diagnosis of allograft rejection. Segasothy M, et al. **Transplantation** 1989 Mar;47(3):482–7
Sequential determinations of urinary cytology and plasma and urinary lymphokines in the management of renal allograft recipients. Simpson MA, et al. **Transplantation** 1989 Feb;47(2):218–23
[The value of active T-rosette-forming cells in urine in diagnosis of acute reject reaction] Xiao XR. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):367–9, 384 (Eng. Abstr.) (Chi)
[Improved urinary sediment diagnosis due to differentiation in erythrocyte morphology] Sandoz P. **Ther Umsch** 1988 Dec;45(12):851–6 (19 ref.) (Eng. Abstr.) (Ger)
[Value of urinary cytology in the diagnosis of urothelial carcinoma of the pelvis and ureter] Piscioli F, et al. **Minerva Urol Nefrol** 1988 Jul–Sep;40(3):189–95 (15 ref.) (Eng. Abstr.) (Ita)
[A study of dysplasia associated with bladder cancer—histopathological findings of bladder giant sections and related urinary cytology] Sekine H. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):545–54 (Eng. Abstr.) (Jpn)
[Clinical value of cytoimmunologic studies of cellular sediment in the urine of children suffering from nonobstructive pyelonephritis] Bozhenov IuA, et al. **Lab Delo** 1988;(12):50–3 (Eng. Abstr.) (Rus)
[Cytology in urine obtained by spontaneous miction. Its usefulness in follow-up of tumors of the bladder] Cervell Ferron JM, et al. **Actas Urol Esp** 1989 Jan–Feb;13(1):32–5 (48 ref.) (Eng. Abstr.) (Spa)

DRUG EFFECTS

Effects of subpicomolar changes in vasopressin on urinary concentration. Baerwolff M, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):R940–5
Hazards of urinary alkalizing agents [letter] Beard TC, et al. **Med J Aust** 1988 Dec 5–19;149(11–12):723
The influence of zinc and citrate on urease-induced urine crystallisation. Hedelin H, et al. **Urol Res** 1989;17(3):177–80

METABOLISM

Contained neonatal urinoma: management and functional results. Connor JP, et al. **J Urol** 1988 Nov;140(5 Pt 2):1319–22
Surface studies of calcium oxalate dihydrate single crystals during dissolution in the presence of stone-formers' urine. Akbarieh M, et al. **Scanning Microsc** 1989 Mar;3(1):139–45; discussion 145–6

MICROBIOLOGY

Managing urinary tract infections in children [letter] Maskell R. **BMJ** 1989 Jan 28;298(6668):253–4
Urine microscopy and culture in the selection of patients for urinary tract investigation. Maskell R. **Br J Urol** 1989 Jan;63(1):7–10
In vivo expression and variation of Escherichia coli type 1 and P pili in the urine of adults with acute urinary tract infections. Kisielius PV, et al. **Infect Immun** 1989 Jun; 57(6):1656–62
Visual and clinical analysis of Bac-T-Screen urine screen results. Baron EJ, et al. **J Clin Microbiol** 1988 Nov; 26(11):2382–6
Rapid detection of Escherichia coli in urine samples by a new chromogenic beta-glucuronidase assay. Delisle GJ, et al. **J Clin Microbiol** 1989 Apr;27(4):778–9
Effect of age of shell vial monolayers on detection of cytomegalovirus from urine specimens. Fedorko DP, et al. **J Clin Microbiol** 1989 Sep;27(9):2107–9
Rapid bioluminescence method for bacteriuria screening. Pezzlo MT, et al. **J Clin Microbiol** 1989 Apr;27(4):716–20
Boric acid converts urine into an effective bacteriostatic transport medium. Lum KT, et al. **J Infect** 1989 Jan; 18(1):51–8
Detection of cytomegalovirus in urine from newborns by using polymerase chain reaction DNA amplification. Demmler GJ, et al. **J Infect Dis** 1988 Dec;158(6):1177–84
Bacterial contamination rates in voided urine collections in girls. Lohr JA, et al. **J Pediatr** 1989 Jan;114(1):91–3
Bacterial contamination rates for non-clean-catch and clean-catch midstream urine collections in uncircumcised boys. Saez-Llorens X, et al. **J Pediatr** 1989 Jan;114(1):93–5
Temperature-sensitive gel for virus concentration from urine. Maheshkumar S, et al. **J Virol Methods** 1989 Jan;23(1):41–6
Evaluation of four screening tests for bacteriuria in elderly people [see comments] Flanagan PG, et al. **Lancet** 1989 May 20;1(8647):1117–9. **Comment in:** Lancet 1989 Jun 17;1(8651):1393–4
An evaluation of a new commercial urine transport system. Matthews SC. **Med Lab Sci** 1987 Oct;44(4):341–4
Urinary mutagenicity tests in lead-exposed workers. Apostoli P, et al. **Mutat Res** 1989 Mar;222(3):245–51
BK virus (BKV) detection in urine specimens of immunocompromised patients: comparison between the DNA-DNA hybridization assay, the immunofluorescence test and the dot enzyme immunoassay. Marrero M, et al. **Res Virol** 1989 Jul–Aug;140(4):293–301
[Mid-stream versus bladder puncture urine in the diagnosis of urinary tract infection in pregnant patients] Retzke U, et al. **Zentralbl Gynakol** 1988;110(24):1567–73 (Eng. Abstr.) (Ger)
[Urease activity of bacteria in urine] Arai Y, et al. **Hinyokika Kiyo** 1989 Feb;35(2):277–81 (Eng. Abstr.) (Jpn)
[A rapid test of urine microflora sensitivity to antibacterial drugs in the treatment of children with nonspecific inflammatory diseases of the kidney and urinary tract] Rodoman VE, et al. **Pediatriia** 1989;(6):57–61 (Eng. Abstr.) (Rus)
[Bacteriuria as a pathogenic concept and as a laboratory examination] Vivaldi E, et al. **Rev Med Chil** 1988 Mar; 116(3):272–7 (Eng. Abstr.) (Spa)

PARASITOLOGY

Field diagnosis of urinary schistosomiasis by multiple use of nuclepore urine filters. Mahinda H, et al. **J Parasitol** 1989 Jun;75(3):476–8

PATHOLOGY

Immunocytologic dissection of the urine sediment using monoclonal antibodies. Segasothy M, et al. **Am J Clin Pathol** 1988 Dec;90(6):691–6
Predictive value of DNA measurements in bladder washings. Comparison of flow cytometry, image cytophotometry, and cytology in patients with a past history of urothelial tumors. Koss LG, et al. **Cancer** 1989 Aug 15;64(4):916–24

PHYSIOLOGY

Stimulation of HCO3- excretion in frog skin by urinary and adrenal cortical extracts. Vanatta JC. **Comp Biochem Physiol [A]** 1989;93(4):717–20
In vitro evidence that urine composition affects the fraction of active furosemide in the nephrotic syndrome. Voelker JR, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):772–8
Selective damage of neuron perikarya in the medial septum of the rat forebrain: effects on food and water intake, urine output and body weight. Iovino M, et al. **Neurosci Res** 1988 Oct;6(1):76–82
Effects of Na saccharin feeding and urine on barrier properties of excised rat urinary bladder. Gatzy JT, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):424–39

URINE CONCENTRATING ABILITY see **KIDNEY CONCENTRATING ABILITY**

UROBILINOGEN

URINE

Failure of prediction of liver function test abnormalities with the urine urobilinogen and urine bilirubin assays. Binder L, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):73–6
Abnormalities of urine urobilinogen and urine bilirubin assays and their relation to abnormal results of serum liver function tests. Binder L, et al. **South Med J** 1988 Oct; 81(10):1229–32

UROCANASE see under **HYDRO-LYASES**

UROCANIC ACID see under **IMIDAZOLES**

UROCHORDATA

Polarity of sperm entry in the ascidian egg. Speksnijder JE, et al. **Dev Biol** 1989 May;133(1):180–4
Bistramide A, a new toxin from the urochordata Lissoclinum bistratum Sluiter: isolation and preliminary characterization. Gouiffes D, et al. **Toxicon** 1988; 26(12):1129–36

ANALYSIS

Sugar specific cellular lectins of Phallusia mamillata hemocytes: purification, characterization and evidence for cell surface localization. Parrinello N, et al. **Dev Comp Immunol** 1989 Spring;13(2):113–21
Distribution of tunichrome and vanadium in sea squirt blood cells sorted by flow cytometry. Oltz EM, et al. **Experientia** 1989 Feb 15;45(2):186–90
Structural heterogeneity among unique sulfated L-galactans from different species of ascidians (tunicates). Pavão MS, et al. **J Biol Chem** 1989 Jun 15;264(17):9972–9
New cyclic peptides with cytotoxic activity from the ascidian Lissoclinum patella. Degnan BM, et al. **J Med Chem** 1989 Jun;32(6):1349–54
Novel cytotoxic compounds from the ascidian Lissoclinum bistratum. Degnan BM, et al. **J Med Chem** 1989 Jun; 32(6):1354–9

DRUG EFFECTS

Sodium nitrilotriacetate (NTA) influences the larval development and metamorphosis of marine invertebrates. Brunetti R, et al. **Bull Environ Contam Toxicol** 1989 Feb; 42(2):234–40

EMBRYOLOGY

Polarization of ooplasmic segregation and dorsal-ventral axis determination in ascidian embryos. Bates WR, et al. **Dev Biol** 1988 Nov;130(1):98–107
Cell differentiation features in embryos resulting from interphylum nuclear transplantation: echinoderm nucleus to ascidian zygote cytoplasm. Crowther RJ, et al. **Dev Biol** 1988 Dec;130(2):443–53
Development of the central nervous system of the larva of the ascidian, Ciona intestinalis L. I. The early lineages of the neural plate. Nicol D, et al. **Dev Biol** 1988 Dec; 130(2):721–36
Development of the central nervous system of the larva of the ascidian, Ciona intestinalis L. II. Neural plate morphogenesis and cell lineages during neurulation. Nicol D, et al. **Dev Biol** 1988 Dec;130(2):737–66
Determination and regulation in the pigment cell lineage of the ascidian embryo. Nishida H, et al. **Dev Biol** 1989 Apr; 132(2):355–67

Effects of cytoskeletal inhibitors on cytoplasmic segregation and microtubule organization during fertilization and early development in the ascidian Molgula occidentalis. Sawada T, et al. **Dev Biol** 1989 Apr;132(2):331–42

Two histospecific enzyme expressions in the same cleavage-arrested one-celled ascidian embryos. Whittaker JR, et al. **J Exp Zool** 1989 May;250(2):168–75

Lineage-specific development of calcium currents during embryogenesis. Simoncini L, et al. **Science** 1988 Dec 16; 242(4885):1572–5

ENZYMOLOGY

Sodium dodecyl sulfate-induced conformational and enzymatic changes of multicatalytic proteinase. Saitoh Y, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):334–9

Involvement of prolyl endopeptidase in ascidian fertilization. Yokosawa H, et al. **Experientia** 1989 Apr 15;45(4):381–3

GENETICS

Genome analysis of Amphioxus and speculation as to the origin of contrasting vertebrate genome organization patterns. Schmidtke J, et al. **Comp Biochem Physiol [B]** 1979;63(4):455–8

Chimeras and histocompatibility in the colonial ascidian Botryllus schlosseri. Sabbadin A, et al. **Dev Comp Immunol** 1988 Fall;12(4):737–47

Cloning of a major repeat DNA sequence from Pyura stolonifera. Kumar S, et al. **DNA** 1988 Jul–Aug;7(6):433–9

GROWTH & DEVELOPMENT

Autoreactive blood cells and programmed cell death in growth and development of protochordates. Harp JA, et al. **J Exp Zool** 1988 Sep;247(3):257–62

IMMUNOLOGY

Characterization of interleukin-1 activity in tunicates. Beck G, et al. **Comp Biochem Physiol [B]** 1989;92(1):93–8

D-galactose binding lectins from the tunicate Ascidia malaca: subunit characterization and hemocyte surface distribution. Parrinello N, et al. **Dev Comp Immunol** 1988 Summer; 12(3):495–507

Therapeutic effect and titers of the specific IgE and IgG antibodies in patients with sea squirt allergy (Hoya asthma) under a long-term hyposensitization with three sea squirt antigens. Jyo T, et al. **J Allergy Clin Immunol** 1989 Feb; 83(2 Pt 1):386–93

METABOLISM

Arachidonic acid metabolism in Ascidia cerastodes eggs: role of lipid peroxidation. Perry G, et al. **Comp Biochem Physiol [B]** 1988;90(4):785–9

Vanadium biochemistry: the unknown role of vanadium-containing cells in ascidians (sea squirts). Smith MJ. **Experientia** 1989 May 15;45(5):452–7 (65 ref.)

Purification and characterization of multicatalytic proteinase from eggs of the ascidian Halocynthia roretzi. Saitoh Y, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):254–60

A nonselective cation channel activated by membrane deformation in oocytes of the ascidian Boltenia villosa. Moody WJ, et al. **J Membr Biol** 1989 Feb;107(2):179–88

PHYSIOLOGY

Free calcium pulses following fertilization in the ascidian egg. Speksnijder JE, et al. **Dev Biol** 1989 Sep;135(1):182–90

Distribution of ion channels in ascidian eggs and zygotes. Dale B, et al. **Exp Cell Res** 1989 Mar;181(1):238–44

Ascidian sperm penetration and the translocation of a cell surface glycosidase. Lambert CC. **J Exp Zool** 1989 Mar; 249(3):308–15

[The electrolyte content of the body of insects, ascidians, fishes, amphibians and mammals and its dynamics in ontogeny] Natochin IuV, et al. **Zh Evol Biokhim Fiziol** 1988 Nov–Dec;24(6):822–8 (Eng. Abstr.) **(Rus)**

URODELA

ANATOMY & HISTOLOGY

Ultrastructure of Amphiuma distal nephron: evidence for cellular heterogeneity. Biemesderfer D, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C849–57

Cytochemical study of larval skin in Amphibia: occurrence of ruthenium red positive cells in cutaneous gland anlagen. Delfino G, et al. **Gegenbaurs Morphol Jahrb** 1988; 134(6):885–901

Topography and cytoarchitecture of the motor nuclei in the brainstem of salamanders. Roth G, et al. **J Comp Neurol** 1988 Dec 8;278(2):181–94

Organization of the motor nuclei in the cervical spinal cord of salamanders. Wake DB, et al. **J Comp Neurol** 1988 Dec 8;278(2):195–208

Electron microscopic studies of the external gill epithelium of the salamander, Hynobius dunni Tago, followed throughout larval life. Kato S, et al. **Okajimas Folia Anat Jpn** 1988 Oct;65(4):177–201

[Asymmetry of the habenular nuclei during ontogenesis in Pleurodeles waltl (Amphibia, Urodela)] Timmel JF. **J Hirnforsch** 1989;30(2):249–56 (Eng. Abstr.) **(Fre)**

GENETICS

Patterns of ribosomal RNA evolution in salamanders. Larson A, et al. **Mol Biol Evol** 1989 Mar;6(2):131–54

Miniaturization, genome size and the origin of functional constraints in the visual system of salamanders. Roth G, et al. **Naturwissenschaften** 1988 Jun;75(6):297–304

IMMUNOLOGY

Autoimmunity and central nervous system regeneration in urodele amphibians. Margotta V, et al. **J Hirnforsch** 1989; 30(1):99–106

METABOLISM

Characteristics of chloride ion influx in Amphiuma small intestine. White JF. **Am J Physiol** 1989 Jan;256(1 Pt 1):G166–77

Astroglial cells in a salamander brain (Salamandra salamandra) as compared to mammals: a glial fibrillary acidic protein immunohistochemistry study. Naujoks-Manteuffel C, et al. **Brain Res** 1989 May 22; 487(2):397–401

Peptidergic regulation of secretory activity in amphibian olfactory mucosa: immunohistochemistry, neural stimulation, and pharmacology. Getchell ML, et al. **Cell Tissue Res** 1989;256(2):381–9

Localization of putative GABAergic neurons in the larval tiger salamander retina by immunocytochemical and autoradiographic methods. Yang CY, et al. **J Comp Neurol** 1988 Nov 1;277(1):96–108

Colocalization of GABA and glycine immunoreactivities in a subset of retinal neurons in tiger salamander. Yazulla S, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):37–41

Calcium-activated K-channels of Amphiuma early distal tubule: inhibition by ATP. Hunter M, et al. **Pflugers Arch** 1988 Aug;412(3):331–3

PHYSIOLOGY

Ultrastructural characteristics of sustentacular cells in control and odorant-treated olfactory mucosae of the salamander. Zielinski BS, et al. **Anat Rec** 1988 Jul;221(3):769–79

Behavioral evidence and supporting electrophysiological observations for electroreception in the blind cave salamander, Proteus anguinus (Urodela). Roth A, et al. **Brain Behav Evol** 1988;32(5):277–80

Evidence that the voltage-dependent component in the fertilization process is contributed by the sperm. Iwao Y, et al. **Dev Biol** 1989 Aug;134(2):446–51

An electrically mediated block to polyspermy in the primitive urodele Hynobius nebulosus and phylogenetic comparison with other amphibians. Iwao Y. **Dev Biol** 1989 Aug; 134(2):438–45

Bulbospinal and intraspinal connections in normal and regenerated salamander spinal cord. Davis BM, et al. **Exp Neurol** 1989 Jan;103(1):41–51

A comparison of the discriminatory ability and sensitivity of the trigeminal and olfactory systems to chemical stimuli in the tiger salamander. Silver WL, et al. **J Comp Physiol [A]** 1988 Nov;164(1):55–66

Voltage dependence of the basolateral membrane conductance in the Amphiuma collecting tubule. Horisberger JD, et al. **J Membr Biol** 1988 Nov; 105(3):257–63

A theoretical and experimental study of the effects of non-uniform membrane resistance on the shape of single-cell charging curves. Winslow RL, et al. **Neuroscience** 1989;29(3):761–71

URODYNAMICS

The predictive values of single and combined urodynamic parameters. Riss PA, et al. **Acta Obstet Gynecol Scand** 1988; 67(6):505–11

Neurogenic bladder. A clinical approach based on fundamental biohydraulics. Churchill BM, et al. **Acta Urol Belg** 1989;57(2):475–95

Age related flow rate nomograms in a normal pediatric population. Gaum LD, et al. **Acta Urol Belg** 1989; 57(2):457–66

Urodynamics in children with myelomeningocele: early assessment of obstruction and incontinence. Van Gool JD, et al. **Acta Urol Belg** 1989;57(2):497–501

The urge syndrome in children. Van Gool JD, et al. **Acta Urol Belg** 1989;57(2):559–62

Body surface related flow rate nomograms in a normal pediatric population. Wese FX, et al. **Acta Urol Belg** 1989; 57(2):467–74

Hypothesis: posture is one of the determinants of the circadian rhythm of urine flow and electrolyte excretion in elderly female patients. Guite HF, et al. **Age Ageing** 1988 Jul;17(4):241–8

Physiological considerations in radionuclide urodynamic studies. Chaudhuri TK, et al. **Am J Physiol Imaging** 1989; 4(2):70–4 (39 ref.)

Urodynamic evaluation of calcified bilharzial bladders. Sabha M, et al. **APMIS Suppl** 1988;3:50–3

Urodynamics following radical abdominal hysterectomy for cervical cancer. Ralph G, et al. **Arch Gynecol Obstet** 1988; 243(4):215–20

Carbon dioxide cystometry and postural changes in patients with multiple sclerosis. Weinstein MS, et al. **Arch Phys Med Rehabil** 1988 Nov;69(11):923–7

The urodynamic effect of colposuspension immediately after surgery for genuine stress incontinence. Wang AC, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):335–8

A clinical and urodynamic study comparing the Stamey bladder neck suspension and suburethral sling procedures in the treatment of genuine stress incontinence. Hilton P. **Br J Obstet Gynaecol** 1989 Feb;96(2):213–20

Videourodynamic assessment of the Stamey procedure for stress incontinence. English PJ, et al. **Br J Urol** 1988 Dec; 62(6):550–2

Are urodynamics necessary in female patients presenting with stress incontinence? Hastie KJ, et al. **Br J Urol** 1989 Feb; 63(2):155–6

Association between symptomatology and uroflowmetry in benign prostatic hypertrophy. Herbison AE, et al. **Br J Urol** 1988 Nov;62(5):427–30

Effect of suprapubic operation on urethral closure. Evaluation by single cough urethrocystometry. Penttinen J, et al. **Br J Urol** 1989 Apr;63(4):389–91

A urine flow clinic. Lucarotti ME, et al. **Bristol Med Chir J** 1988 Feb;103(1):17–9

Prospective urodynamic study before and after radical hysterectomy. Chen KK, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;41(5):333–8

Urodynamic studies in primary nocturnal enuresis. Wu HH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Mar;41(3):227–32

Neurogenic urethra: clinical relevance of isolated neuropathic dysfunction of the urethra, and the denervation supersensitivity of the urethra revisited. Koyanagi T, et al. **Eur Urol** 1988;15(1–2):77–83

Preoperative prediction of results of prostatectomy by a symptom score and radionuclide uroflowmetry. Lidgi S, et al. **Eur Urol** 1989;16(2):97–100

Correlation between history and urodynamics in neurologically normal incontinent women. Maes D, et al. **Eur Urol** 1988;14(5):377–80

Symptomatic and urodynamic evaluation of patients undergoing prostatectomy. O'Donohoe MK, et al. **Ir J Med Sci** 1988 Aug;157(8):265–6

Results and relevance of urodynamic studies in the management of urinary incontinence in women over eighty. Gillon G, et al. **Isr J Med Sci** 1989 Jan;25(1):25–7

Flow of urine through the ureter: a collapsible, muscular tube undergoing peristalsis. Griffiths DJ. **J Biomech Eng** 1989 Aug;111(3):206–11

Treatment of benign prostatic hyperplasia by androgen deprivation: effects on prostate size and urodynamic parameters. Bosch RJ, et al. **J Urol** 1989 Jan;141(1):68–72

Urodynamic and clinical outcome of Kock pouch continent urinary diversion. Chen KK, et al. **J Urol** 1989 Jan; 141(1):94–7

Urodynamic and histological correlates of benign prostatic hyperplasia. Dörflinger T, et al. **J Urol** 1988 Dec; 140(6):1487–90

Trigonal sensitivity testing in women. Frazer MI, et al. **J Urol** 1989 Feb;141(2):356–8

Bladder compliance in meningomyelocele children. Ghoniem GM, et al. **J Urol** 1989 Jun;141(6):1404–6

Bladder hypocompliance in the spinal cord injury population. Hackler RH, et al. **J Urol** 1989 Jun;141(6):1390–3

Replacement of the bladder by the urethral Kock pouch: functional results, urodynamics and radiological features. Kock NG, et al. **J Urol** 1989 May;141(5):1111–6

Urodynamic studies in patients undergoing bladder replacement surgery. Lytton B, et al. **J Urol** 1989 Jun; 141(6):1394–7

The effects of transurethral resection on the urodynamics of prostatism. Meyhoff HH, et al. **J Urol** 1989 Sep; 142(3):785–9

Urodynamic investigation of the ileal conduit: upper tract dilatation and the effects of revision of the conduit. Neal DE. **J Urol** 1989 Jul;142(1):97–100

Simple versus multichannel cystometry in the evaluation of bladder function in an incontinent geriatric population. Ouslander J, et al. **J Urol** 1988 Dec;140(6):1482–6

Surface stimulation techniques for bladder management in the spinal dog. Walter JS, et al. **J Urol** 1989 Jan; 141(1):161–5

Microbiological look at urodynamic studies. Payne SR, et al. **Lancet** 1988 Nov 12;2(8620):1123–6 (20 ref.)

Hydrodynamic model of the urinary bladder derived from stepwise cystometry in the rat. Anderson S, et al. **Med Biol Eng Comput** 1988 May;26(3):267–70

Computerised analysis of urological parameters. Sanchez-Doblado F, et al. **Med Biol Eng Comput** 1988 May;26(3):325–7

Graphical data compression for small memory microcomputers. Small DR, et al. **Med Biol Eng Comput** 1988 Nov;26(6):665–6

The unstable urethra in the female. Low JA, et al. **Obstet Gynecol** 1989 Jul;74(1):69–74

Influence of drainage conditions on mucosal bladder damage by indwelling catheters. I. Pressure study. Glahn BE. **Scand J Urol Nephrol** 1988;22(2):87–92

Influence of drainage conditions on mucosal bladder damage by indwelling catheters. II. Histological study. Glahn BE, et al. **Scand J Urol Nephrol** 1988;22(2):93–9

Urodynamics in radical retropubic prostatectomy. Hellström P, et al. **Scand J Urol Nephrol** 1989;23(1):21–4

Urodynamics in prostatism. I. Prognostic value of uroflowmetry. Jensen KM, et al. **Scand J Urol Nephrol** 1988;22(2):109–17

Pressure and flow measurements in the partially obstructed ureter of the rat. Stenberg A, et al. **Scand J Urol Nephrol** 1988;22(4):279–88

The standardisation of terminology of lower urinary tract function. The International Continence Society Committee on Standardisation of Terminology. Abrams P, et al. **Scand J Urol Nephrol Suppl** 1988;114:5–19

Sensory thresholds in the male urethra measured by electrical stimulation. Brekkan E, et al. **Scand J Urol Nephrol Suppl** 1988;114:87–90

Urodynamics in normal infants and children. Hjälmås K. **Scand J Urol Nephrol Suppl** 1988;114:20–7

Urodynamics in prostatism. I. Prognostic value of uroflowmetry. Jensen KM, et al. **Scand J Urol Nephrol Suppl** 1988;114:63–71

Urodynamics in prostatism. IV. Search for prognostic patterns as evaluated by linear discriminant analysis. Jensen KM, et al. **Scand J Urol Nephrol Suppl** 1988;114:84–6

Urodynamics in prostatism. II. Prognostic value of pressure–flow study combined with stop–flow test. Jensen KM, et al. **Scand J Urol Nephrol Suppl** 1988;114:72–7

Urodynamics in prostatism. III. Prognostic value of medium–fill water cystometry. Jensen KM, et al. **Scand J Urol Nephrol Suppl** 1988;114:78–83

Urethral pressure variations in females with and without neurourological symptoms. Kulseng-Hanssen S, et al. **Scand J Urol Nephrol Suppl** 1988;114:48–52

Classical urethral resistance compared with Schäfer concept. Lindblad P, et al. **Scand J Urol Nephrol Suppl** 1988; 110:225–9

Urinary peristalsis investigated by radionuclide and X-ray methods: a comparison. Müller-Suur R, et al. **Scand J Urol Nephrol Suppl** 1988;110:285–90

Home-monitoring of uroflow in normal male adolescents. Relation between flow-curve, voided volume and time of day. Poulsen EU, et al. **Scand J Urol Nephrol Suppl** 1988; 114:58–62

Long term reproducibility of urodynamic investigations in healthy fertile females. Sørensen S, et al. **Scand J Urol Nephrol Suppl** 1988;114:35–41

Urodynamic investigations and their reproducibility in healthy postmenopausal females. Sørensen S. **Scand J Urol Nephrol Suppl** 1988;114:42–7

Urodynamic investigations in healthy fertile females during the menstrual cycle. Sørensen S, et al. **Scand J Urol Nephrol Suppl** 1988;114:28–34

A proposal for a classification system of enuresis based on overnight simultaneous monitoring of electroencephalography and cystometry. Watanabe H, et al. **Sleep** 1989 Jun;12(3):257–64

Idiopathic voiding dysfunction: a urodynamic basis of differential diagnosis. Kuo HC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1055–64

Office urodynamics [published erratum appears in Urol Clin North Am 1989 May;16(2):xii] Wein AJ, et al. **Urol Clin North Am** 1988 Nov;15(4):609–23 (19 ref.)

Discrepancies between clinical and urodynamical findings: which are true? Vereecken RL, et al. **Urol Int** 1988; 43(5):282–5

Computer assisted pantropic urethral pressure profile. Cornelissen M, et al. **Urol Res** 1989;17(3):185–9

Urethral pressure variations in healthy male volunteers. Kirkeby HJ, et al. **Urol Res** 1989;17(3):191–5

The influence of pyeloureteral peristalsis on pelvic pressure during increase in flow rate. Mortensen J, et al. **Urol Res** 1988;16(4):295–7

Urodynamics of the lower urinary tract. Nielsen KT, et al. **Urol Res** 1988;16(4):271–6 (54 ref.)

Short- and long-term reproducibility of cystometry. Poulsen EU, et al. **Urol Res** 1989;17(3):197–8

Efficient storage of urodynamic signals by computer: application of FAN adaptive sampling. van Mastrigt R, et al. **Urol Res** 1989;17(1):57–62

Pathophysiology and differential diagnosis of benign prostatic hypertrophy. Blaivas JG. **Urology** 1988 Dec;32(6 Suppl):5–11 (46 ref.)

Six-microtransducer catheter connected to computer in evaluation of urethral closure function of women. Kauppila A, et al. **Urology** 1989 Feb;33(2):159–64

Spontaneous versus intubated flow in male patients. Lose G, et al. **Urology** 1988 Dec;32(6):553–6

Urodynamic evaluation of patients with spinal stenosis. Smith AY, et al. **Urology** 1988 Nov;32(5):474–7

Urodynamic alterations after prostatectomy in dogs without clinical prostatic disease. Basinger RR, et al. **Vet Surg** 1987 Nov–Dec;16(6):405–10

[Initial experience with the Urodyn 5000 urodynamics examination system] Blovský J, et al. **Cesk Gynekol** 1989 May;54(4):279–83 **(Cze)**

[Enuresis and urethral instability] Abid I, et al. **Acta Urol Belg** 1988;56(4):527–33 (Eng. Abstr.) **(Fre)**

[Urodynamic and electrophysiologic studies in evaluating congenital neurogenic bladder] Opsomer RJ, et al. **Acta Urol Belg** 1989;57(2):525–35 (Eng. Abstr.) **(Fre)**

[The so-called resting pressure quotient—the urodynamic equivalent of clinical pelvic floor insufficiency] Behr J, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):559–61 (Eng. Abstr.) **(Ger)**

[The significance of urodynamic and roentgenologic studies in the assessment of incontinence] Anderl P. **Gynakol Rundsch** 1988;28 Suppl 2:15–9 **(Ger)**

[Comparison of clinical and urodynamic parameters before and following a sling operation for recurrent incontinence] Enzelsberger H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:26–8 **(Ger)**

[Urodynamic and viscerographic results following short-arm slingplasty] Fabsits M, et al. **Gynakol Rundsch** 1988;28 Suppl 2:30–2 **(Ger)**

[Recurrent incontinence following diaphragm-plasty: the value of urodynamic studies] Kölbl H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:28–30 **(Ger)**

[Anatomic and functional aspects of the female pelvic floor] Riss P, et al. **Gynakol Rundsch** 1988;28 Suppl 2:20–5 **(Ger)**

[Urodynamic and clinical results 1 year following Stamey endoscopic bladder neck suspension] Tamussino K, et al. **Gynakol Rundsch** 1988;28 Suppl 2:41–2 **(Ger)**

[Urodynamic studies in gynecology] Petri E. **Gynakologe** 1988 Sep;21(3):185–7 (5 ref.) **(Ger)**

[Urodynamic findings in vegetative urogenital syndrome] Weckermann D, et al. **Helv Chir Acta** 1988 Jul;55(3):297–9 (Eng. Abstr.) **(Ger)**

[Combined urodynamic-electromyography study in patients with multiple sclerosis and bladder disorders] Venetz U, et al. **Nervenarzt** 1989 Mar;60(3):163–7 **(Ger)**

[Voiding urethrosonography. An alternative to roentgen urethrography] Dörnberger V, et al. **Ultraschall Med** 1988 Dec;9(6):279–85 (Eng. Abstr.) **(Ger)**

[The urethral pressure profile at rest and in stress following diaphragmplasty] Kölbl H, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):592–7 (Eng. Abstr.) **(Ger)**

[Excretory urography: comparison of the ionic contrast medium amidotrezoic acid with the non-ionic contrast medium iohexol] Grabenwöger F, et al. **Wien Med Wochenschr** 1989 Feb 15;139(3):48–50 (Eng. Abstr.) **(Ger)**

[Urodynamic studies in childhood] Nentwich HJ. **Z Arztl Fortbild (Jena)** 1988;82(11):523–7 **(Ger)**

[Non-medicamentous prevention of calcium oxalate urinary calculi] Brundig P, et al. **Z Urol Nephrol** 1989 Jun; 82(6):307–15 (Eng. Abstr.) **(Ger)**

[Are operations for urinary incontinence using colposuspension contraindicated in low urethral closing pressure?] Fischer W, et al. **Z Urol Nephrol** 1988 Sep; 81(9):571–4 (Eng. Abstr.) **(Ger)**

[Development and course of functional urinary retention in paraplegic patients] Gebhardt K, et al. **Z Urol Nephrol** 1988 Jun;81(6):351–7 (Eng. Abstr.) **(Ger)**

[Urinary continence in the female—aspects of function] Höfner K, et al. **Z Urol Nephrol** 1989 Apr;82(4):195–9 (Eng. Abstr.) **(Ger)**

[Characterization of intraurethral relations of urine flow in childhood using the Doppler ultrasound technic] Nentwich HJ, et al. **Z Urol Nephrol** 1988 Sep;81(9):555–69 (34 ref.) (Eng. Abstr.) **(Ger)**

[Relation of the static urethral pressure profile and symptoms of urinary urgency in the female] Voigt R, et al. **Z Urol Nephrol** 1988 Jun;81(6):345–9 (Eng. Abstr.) **(Ger)**

[Assessment of urination before and following operations for stress incontinence] Fischer W, et al. **Zentralbl Gynakol** 1988;110(18):1153–60 (Eng. Abstr.) **(Ger)**

[Urinary incontinence in the female over 60 years of age—urodynamic findings] Hajdu K, et al. **Zentralbl Gynakol** 1989;111(12):824–30 (Eng. Abstr.) **(Ger)**

[Urodynamic results following surgery of incontinence] Ralph G, et al. **Zentralbl Gynakol** 1989;111(4):235–42 (Eng. Abstr.) **(Ger)**

[Disorders of bladder emptying following abdominal radical operation of cervix cancer] Ralph G, et al. **Zentralbl Gynakol** 1988;110(18):1124–31 (Eng. Abstr.) **(Ger)**

[Dynamics of the lower urinary tract after a rapid bolus intake of Fabia water] Micali F, et al. **Clin Ter** 1987 Sep 15;122(5):373–7 (Eng. Abstr.) **(Ita)**

[The computer in urodynamics] Carone R, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2):97–9 (Eng. Abstr.) **(Ita)**

[Effect of midodrin on the tonus of the proximal urethra. Urodynamic findings and clinical prospectives] Rinnovati A, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2):93–6 (Eng. Abstr.) **(Ita)**

[Radio-urodynamic evaluation of stress urinary incontinence in women] Baldelli S, et al. **Radiol Med (Torino)** 1988 Sep; 76(3):201–5 (Eng. Abstr.) **(Ita)**

[Studies of the new parameter based on the urinary flow rate curve in benign prostatic hypertrophy] Haraguchi C. **Hinyokika Kiyo** 1989 Jan;35(1):43–9 (Eng. Abstr.) **(Jpn)**

[Urodynamic evaluation of patients undergoing radical prostatectomy. A preliminary report] Ando M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec;79(12):2012–20 (Eng. Abstr.) **(Jpn)**

[Studies on the urophonography (2)—Clinical investigation on normal human subjects and patients with benign prostatic hypertrophy] Koiso K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):359–70 (Eng. Abstr.) **(Jpn)**

[Studies on the urophonography (1)—Basic investigation with the model of lower urinary tract] Koiso K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):353–8 (Eng. Abstr.) **(Jpn)**

[Studies on the urophonography (3)—Clinical investigation on prostatic cancer] Koiso K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):371–8 (Eng. Abstr.) **(Jpn)**

[Contractile proteins in the kidney. 1. Intrarenal localization of actin and possibility of intrarenal urodynamics] Yamaguchi O, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):326–31 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation for voiding dysfunction in patients with cerebral-palsy] Yokoyama O, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):591–5 (Eng. Abstr.) **(Jpn)**

[Neurologic and urodynamic characteristics of patients with Guillain-Barré syndrome] Grbavac Z, et al. **Lijec Vjesn** 1989 Jan–Feb;111(1–2):17–20 (Eng. Abstr.) **(Ser)**

[Clinical and urodynamic study of enuresis in a juvenile male population] Virseda M, et al. **Actas Urol Esp** 1989 Mar–Apr;13(2):90–3 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Urodynamic studies after intrathecal fentanyl and buprenorphine in the dog. Drenger B, et al. **Anesth Analg** 1989 Sep;69(3):348–53

Urodynamic and clinical effect of alpha-adrenergic blocker (phenoxybenzamine) in patients with benign prostatic hyperplasia. Chen KK, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Feb;41(2):127–30

Effect of arginine vasopressin on urine formation and plasma atrial natriuretic peptide level in conscious dogs. Hellebrekers LJ, et al. **Eur J Pharmacol** 1989 May 2; 164(1):55–62

Infravesical outflow obstruction in rats: a comparison of two models. Maggi CA, et al. **Gen Pharmacol** 1989;20(3):345–9

Effects of opioid agonists on urine production in neonatal rats. Jackson HC, et al. **J Pharm Pharmacol** 1989 Apr; 41(4):281–3

Urodynamic studies after intrathecal administration of baclofen and morphine in dogs. Magora F, et al. **J Urol** 1989 Jan;141(1):143–7

Effects of atrial natriuretic peptide on regional renal blood flow measured by a thermal diffusion technique. Tsuchiya K, et al. **Jpn J Exp Med** 1989 Feb;59(1):27–35

Urodynamic changes following hormonal replacement therapy in women with premature ovarian failure. Karram MM, et al. **Obstet Gynecol** 1989 Aug;74(2):208–11

Urodynamic effect of acute alpha-receptor blockade in patients with bladder neck dysfunction. Poulsen EU, et al. **Scand J Urol Nephrol** 1989;23(1):15–20

[The effect of beta-stimulation and beta-1-blockade on the motility of the upper urinary tract] Hettenbach A, et al. **Z Geburtshilfe Perinatol** 1988 Nov–Dec;192(6):273–7 (Eng. Abstr.) **(Ger)**

[The possibility of stimulating the ureters with hexoprenaline following radical abdominal surgery of cervix cancer] Gitsch G, et al. **Zentralbl Gynakol** 1988;110(16):1030–3 (Eng. Abstr.) **(Ger)**

[Urodynamic evaluation of the effects of metoclopramide on the function of the detrusor muscle] Cecchi M, et al. **Minerva Urol Nefrol** 1988 Oct–Dec;40(4):257–9 (Eng. Abstr.) **(Ita)**

[Action of calcium antagonists on ureteral dynamics] Salman S, et al. **Actas Urol Esp** 1989 Mar–Apr;13(2):150–2 (Eng. Abstr.) **(Spa)**

UROGASTRONE see **EPIDERMAL GROWTH FACTOR–UROGASTRONE**

UROGASTRONE RECEPTORS see **RECEPTORS, EPIDERMAL GROWTH FACTOR–UROGASTRONE**

UROGENITAL NEOPLASMS

Papers presented at annual meeting of the Section of Urology, American Academy of Pediatrics. New Orleans, Louisiana, October 30–November 2, 1987. **J Urol** 1988 Nov;140(5 Pt 2):1089–324

Advances in urologic oncology. Proceedings of a symposium. Baltimore, Maryland, April 3–4, 1987. **Prog Clin Biol Res** 1988;277:1–150

Scandinavian Association of Urology. Proceedings of the XVIth congress. Uppsala, May 21–23, 1987. **Scand J Urol Nephrol Suppl** 1988;110:1–336

[Urogenital cancer] Koiso K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):971–7 (31 ref.) (Eng. Abstr.) **(Jpn)**

[Surgical resection of pulmonary metastasis from genitourinary cancers] Nakagawa S, et al. **Hinyokika Kiyo** 1989 Feb;35(2):225–9 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Sensitive detection of nucleic acids and protein of human papillomavirus type 6 in respiratory and genital tract papillomata. Wu TC, et al. **J Virol Methods** 1989 Jul; 25(1):31–47

CLASSIFICATION

TNM classification of genitourinary tumours 1987—position of the EORTC Genitourinary Group. Schröder FH, et al. **Br J Urol** 1988 Dec;62(6):502–10

COMPLICATIONS

[Urogenital tumors and HIV-1 infection] Adjiman S, et al.

Ann Urol (Paris) 1989;23(3):179–81 (Eng. Abstr.) (Fre)

DIAGNOSIS

Condylomata acuminata (venereal warts). Enterline JA, et al. Nurse Pract 1989 Apr;14(4):8–16 (21 ref.)

Differential diagnosis of genitourinary tumors using monoclonal antibodies to intermediate filament proteins. Lofton SA, et al. Urology 1989 May;33(5):433–9

[Early detection of urogenital cancers: kidney, bladder, prostatic and testicular cancers] Kawai T, et al. Gan No Rinsho 1988 Aug;34(10):1403–7 (Eng. Abstr.) (Jpn)

DRUG THERAPY

Drug therapy of genitourinary cancer. Loening S, et al. Iowa Med 1988 Oct;78(10):495–8 (20 ref.)

Phase I study of granulocyte colony-stimulating factor in patients with transitional cell carcinoma of the urothelium. Gabrilove JL, et al. J Clin Invest 1988 Oct;82(4):1454–61

The role of cisplatin-based chemotherapy in advanced urothelial tract cancer. Yagoda A. Semin Oncol 1989 Aug; 16(4 Suppl 6):98–104 (26 ref.)

[Experimental evaluation of cisplatin analogous in urogenital cancer] Machida T, et al. Gan To Kagaku Ryoho 1989 Apr; 16(4 Pt 2–2):1386–92 (Eng. Abstr.) (Jpn)

[Clinical evaluation of chemotherapy in urologic cancer] Miki T, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2–2):1349–57 (Eng. Abstr.) (Jpn)

[Results of drug sensitivity test of UFT, doxorubicin and cisplatin using human urogenital cancers transplanted subcutaneously into nude mice] Murahashi I, et al. Gan To Kagaku Ryoho 1988 Nov;15(11):3059–65 (Eng. Abstr.) (Jpn)

[Clinical study on the effect of CSF-HU (colony stimulating factor human urine) on leukopenia and granulocytopenia induced by cancer chemotherapy—a double-blind study in patients with genito-urinary cancer] Niijima T, et al. Hinyokika Kiyo 1988 Aug;34(8):1483–92 (Eng. Abstr.) (Jpn)

[Restorative effect of muroctasin; MDP-Lys (L18) [DJ-7041] on leukopenia in urogenital cancer patients treated with chemotherapy] Oishi K, et al. Hinyokika Kiyo 1989 Mar; 35(3):527–36 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

Referral pattern of urological malignancy in Indonesia. Sugandi S. Br J Urol 1989 Jan;63(1):1–3

Multiple primary malignant neoplasms in the genitourinary tract: occurrence and etiology. Matzkin H, et al. J Urol 1989 Jul;142(1):1–12 (246 ref.)

ETIOLOGY

[Urologic manifestations of AIDS] Boccon-Gibod L, et al. Ann Urol (Paris) 1989;23(3):173–7 (Eng. Abstr.) (Fre)

GENETICS

Reconstitution of the malignant phenotype of genitourinary cancer in gradient culture. Leighton J. In Vitro Cell Dev Biol 1989 May;25(5):466–70

Oncogenes and urological malignancies: implications for the future. Schalken JA, et al. Urol Res 1988;16(5):333–9 (77 ref.)

IMMUNOLOGY

Lymphocyte-induced angiogenesis assay—in cutaneous malignancies and cutaneous and genital warts. Szmurlo A, et al. Arch Immunol Ther Exp (Warsz) 1988;36(1):85–7

[Natural killer (NK) activity of peripheral blood and regional lymph nodes in patients with genitourinary malignant tumors. 2. NK activity and T-lymphocyte subsets in peripheral blood and regional lymph nodes] Yamashita M, et al. Nippon Hinyokika Gakkai Zasshi 1989 May; 80(5):666–73 (Eng. Abstr.) (Jpn)

[Natural killer (NK) activity of peripheral blood and regional lymph nodes in patients with genitourinary malignant tumors. 1. NK activity of peripheral blood in patients with genitourinary malignant tumors] Yamashita M, et al. Nippon Hinyokika Gakkai Zasshi 1989 May;80(5):659–65 (Eng. Abstr.) (Jpn)

PATHOLOGY

Early diagnosis of genito-urinary tumours by urinary cytology. Legramandi C, et al. Arch Ital Urol Nefrol Androl 1989 Mar;61(1):43–6

Pelvic cancers: staging of 139 cases with lymphography and fine-needle aspiration biopsy. Chagnon S, et al. Radiology 1989 Oct;173(1):103–6

[Review of 43 autopsy cases of urogenital malignant tumors] Yuasa M, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2–3):1947–53 (Eng. Abstr.) (Jpn)

[Chemosensitivity studies of urological malignancies] Uchibayashi T, et al. Hinyokika Kiyo 1988 Nov; 34(11):1873–8 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

[Clinical application of intra-arterial digital subtraction angiography to abdominopelvic neoplasms] Maehara Y, et al. Rinsho Hoshasen 1988 Aug;33(8):889–94 (Eng. Abstr.) (Jpn)

SURGERY

Extent of surgery in rhabdomyosarcoma of urogenital structures. Bürger RA, et al. Eur Urol 1989;16(2):114–22

[Life after urostomy. A retrospective study] Klussmann R, et al. Urologe [A] 1989 Jul;28(4):209–12 (Eng. Abstr.) (Ger)

[Involvement of the urogenital system in non-Hodgkin lymphoma (primary and secondary involvement)] Lehmann HD. Urologe [A] 1988 Jul;27(4):234–9 (Eng. Abstr.) (Ger)

THERAPY

Wilms' tumour and genitourinary rhabdomyosarcoma. Gough DC. Br J Urol 1989 Feb;63(2):109–16 (28 ref.)

Genitourinary rhabdomyosarcoma in children. Loughlin KR, et al. Cancer 1989 Apr 15;63(8):1600–6

How expert physicians would wish to be treated if they had genitourinary cancer. Moore MJ, et al. J Clin Oncol 1988 Nov;6(11):1736–45

Sarcomas of the retroperitoneum and genitourinary tract. Zhang G, et al. J Urol 1989 May;141(5):1107–10

The value of regional lymph node dissection in genitourinary cancer. Skinner DG. Semin Surg Oncol 1989;5(4):235–9

New concepts in the treatment of genitourinary cancer in childhood. Walker RD. Semin Surg Oncol 1989;5(4):227–34 (25 ref.)

[Evaluation of plasmapheresis in terminal stage patients with urogenital malignant tumors] Ogawa Y, et al. Nippon Hinyokika Gakkai Zasshi 1988 Oct;79(10):1673–9 (Eng. Abstr.) (Jpn)

[Cooperation between specialists necessary in urologic oncology] Bröte L. Lakartidningen 1988 Oct 5; 85(40):3274–5 (Swe)

VETERINARY

Polyp in the urogenital canal of an African elephant. Munson L, et al. J Am Vet Med Assoc 1986 Nov 1;189(9):1190–1 (Rus)

UROGENITAL SYSTEM

AUA eighty-fourth annual meeting. American Urological Association, Inc. May 7–11, 1989, Dallas. Abstracts. J Urol 1989 Apr;141(4 Pt 2):1A–605A

ABNORMALITIES

A deletion map of the WAGR region on chromosome 11. Gessler M, et al. Am J Hum Genet 1989 Apr;44(4):486–95

The hand-foot-genital (hand-foot-uterus) syndrome: family report and update. Halal F. Am J Med Genet 1988 Jul; 30(3):793–803

Autosomal recessive acro-fronto-facio-nasal dysostosis associated with genitourinary anomalies. Richieri-Costa A, et al. Am J Med Genet 1989 May;33(1):121–4

Prenatal diagnosis of urological abnormalities. Barratt TM, et al. Contrib Nephrol 1988;67:171–4

Molecular definition of de novo and genetically transmitted WAGR-associated rearrangements of 11p13. Lavedan C, et al. Cytogenet Cell Genet 1989;50(2–3):70–4

Molecular mapping and cloning of the breakpoints of a chromosome 11p14.1–p13 deletion associated with the AGR syndrome. Gessler M, et al. Genomics 1988 Aug; 3(2):117–23

Genitourinary tract anomalies in Thai children with urinary tract infection. Tapaneya-Olarn C, et al. J Med Assoc Thai 1989 Jan;72 Suppl 1:47–51

Duplication of the colon and genito-urinary tracts: management of a case and review of embryogenesis. Magbool G, et al. J R Coll Surg Edinb 1988 Jun; 33(3):159–61

Urogenital tract abnormalities associated with esophageal atresia and tracheoesophageal fistula. Berkhoff WB, et al. J Urol 1989 Feb;141(2):362–3 (13 ref.)

Retroiliac ureter in a male newborn with multiple genitourinary anomalies: case report and review of the literature. Nguyen DH, et al. J Urol 1989 Jun;141(6):1400–3 (25 ref.)

Maternal cocaine use during early pregnancy as a risk factor for congenital urogenital anomalies. Chávez GF, et al. JAMA 1989 Aug 11;262(6):795–8

Urogenital anomalies in the offspring of women using cocaine during early pregnancy—Atlanta, 1968–1980. MMWR 1989 Aug 11;38(31):536, 541–2

Surgery in solitary kidney and correction of urinary transport disturbances. Prog Pediatr Surg 1989;23:1–205

Management of cloacal exstrophy. Sugar EC, et al. Urology 1988 Oct;32(4):320–2

Surgical management of congenital and perinatal abnormalities of the urogenital tract. Robertson JT, et al. Vet Clin North Am [Equine Pract] 1988 Dec;4(3):359–79 (17 ref.)

Renal dysplasia with multiple urogenital and large intestinal anomalies in a calf. Dunham BM, et al. Vet Pathol 1989 Jan;26(1):94–6

[Anomalies of the urogenital system associated with anorectal malformations. Apropos of 99 cases] Clapuyt P, et al. Acta Urol Belg 1989;57(2):675–80 (Fre)

[Basic and clinical studies on malformations of the genito-urinary tract] Nippon Hinyokika Gakkai Zasshi 1987 Dec;78(13):2294–5 (Jpn)

[A rare developmental defect of the urogenital system in a newborn infant] Astashkina KV, et al. Klin Khir 1989;(6):76

ANALYSIS

Localization of lactoferrin in the male reproductive tract. Wichmann L, et al. Int J Androl 1989 Jun;12(3):179–86

ANATOMY & HISTOLOGY

Diagnostic and prognostic relevance of morphometric structural analyses of the organs of the urogenital tract. Nafe R, et al. Urol Int 1989;44(2):66–70

[Pathology of the lower urogenital tract in children] Opsomer RJ, et al. Acta Urol Belg 1989;57(2):249–410 (517 ref.) (Fre)

CYTOLOGY

Use of exfoliated cells to study tissue-specific levels of beta-carotene in humans. Cameron LM, et al. Cancer Lett 1989 Jun;45(3):203–7

DRUG EFFECTS

Effect of prenatal ethanol administration on the urogenital system of mice. Boggan WO, et al. Alcoholism (NY) 1989 Apr;13(2):206–8

EMBRYOLOGY

Sexual differentiation of the gonads and of the reproductive tract. Wilson JD. Biol Neonate 1989;55(6):322–30 (26 ref.)

Prostatic growth effects of rat urogenital sinus and human prostatic tissue in the rat. Jarow JP, et al. Prostate 1989; 14(4):301–8

IMMUNOLOGY

Immunohistochemical localization of secretory component and immunoglobulin A in the urogenital tract of the male rodent. Parr MB, et al. J Reprod Fertil 1989 Jan; 85(1):115–24

INJURIES

Genitourinary imaging and procedures by the emergency physician. Neuwirth H, et al. Emerg Med Clin North Am 1989 Feb;7(1):1–28 (23 ref.)

Chitosan: effects on wound healing in urogenital tissue: preliminary report. Bartone FF, et al. J Urol 1988 Nov; 140(5 Pt 2):1134–7

Malpractice claims for urogenital injuries. Morey AF, et al. J Urol 1988 Dec;140(6):1475–8

Urogenital trauma. Urol Clin North Am 1989 May; 16(2):187–416

Displacements, malpositions, and miscellaneous injuries of the mare's urogenital tract. Pascoe JR, et al. Vet Clin North Am [Equine Pract] 1988 Dec;4(3):439–50 (26 ref.)

INNERVATION

Neurophysiological evaluation of central-peripheral sensory and motor pudendal fibres. Opsomer RJ, et al. Electroencephalogr Clin Neurophysiol 1989 Jul–Aug; 74(4):260–70

Release of calcitonin gene-related peptide-like immunoreactivity (CGRP-LI) from organs of the genitourinary tract in rats. Santicioli P, et al. Neurosci Lett 1988 Oct 5;92(2):197–201

METABOLISM

Urogenital muscarinic receptors and drug effects. Andersson KE, et al. Ann Clin Res 1988;20(5):356–66

Immunofluorescent localization of tenascin during development of the mouse urogenital sinus: possible involvement in genital duct morphogenesis. Takeda H, et al. Differentiation 1988 Dec;39(2):131–8

[Tissue concentration of aztreonam in organs of the urogenital system] Trucchi E, et al. Clin Ter 1988 Jan 31; 124(2):99–102 (Eng. Abstr.) (Ita)

MICROBIOLOGY

Detection of different Chlamydia trachomatis serovars of urogenital origin by enzyme-immunoassay [letter] Wagenvoort JH, et al. Eur J Clin Microbiol Infect Dis 1989 Apr;8(4):319–20

Detection of Chlamydia trachomatis in culture and urogenital smears by in situ DNA hybridization using a biotinylated DNA probe. Meddens MJ, et al. Mol Cell Probes 1988 Dec;2(4):261–9

Incidence of yeasts in pregnant and non-pregnant women in Nigeria. Gugnani HC, et al. Mycoses 1989 Mar; 32(3):131–5

Use of the membrane filtration technique and Staib agar for the detection of Cryptococcus neoformans in the urine of AIDS patients—a contribution to diagnosis, therapy and pathogenesis of cryptococcosis. Staib F, et al. Mycoses 1989 Feb;32(2):63–72

Failure of direct fluorescent antibody staining to detect Chlamydia trachomatis from genital tract sites of prepubertal children at risk for sexual abuse. Hauger SB, et al. Pediatr Infect Dis J 1988 Sep;7(9):660–2

[The virulence factor of E. coli in genitourinary tract infections. 3. Fimbrial specificity to genitourinary organs] Nasu Y. Nippon Hinyokika Gakkai Zasshi 1988 Jul;

79(7):1177–86 (Eng. Abstr.) (Jpn)

PATHOLOGY

Age-related genito-urinary changes. Warrell D. **Bailliere's Clin Obstet Gynaecol** 1988 Jun;2(2):261–7 (15 ref.)

Vaginal rings for continuous low-dose release of oestradiol in the treatment of urogenital atrophy. Holmgren PA, et al. **Maturitas** 1989 Mar;11(1):55–63

Sonographic and urographic correlation in Bardet-Biedl syndrome (formerly Laurence-Moon-Biedl syndrome). Cramer B, et al. **Urol Radiol** 1988;10(4):176–80

Adjunctive methods of examination of the urogenital tract. Traub-Dargatz JL, et al. **Vet Clin North Am [Equine Pract]** 1988 Dec;4(3):339–58 (29 ref.)

PHYSIOLOGY

Regulatory peptides in the mammalian urogenital system. Fahrenkrug J, et al. **Experientia Suppl** 1989;56:362–81 (145 ref.)

Intrathecal baclofen administration—insights into the regulation of genitourinary function and therapy. Steers WD. **J Urol** 1989 Jan;141(1):142

[Pathology of the lower urogenital tract in children. Papers presented at the 54th congress of the Belgian Society of Urology. Brussels, 27-2 May 1989] **Acta Urol Belg** 1989; 57(2):249–680 (Fre)

SURGERY

Ceftriaxone in chemoprophylaxis and therapy of urinary tract infections. Pisani E, et al. **Eur Surg Res** 1989;21 Suppl 1:36–42 (19 ref.)

Urologic surgery. **Surg Clin North Am** 1988 Oct; 68(5):891–1184

Genitourinary prostheses. **Urol Clin North Am** 1989 Feb; 16(1):1–174

[Midazolam used for intramuscular premedication in locoregional anesthesia in urology. Usefulness of late premedication] Pennarguear A, et al. **Cah Anesthesiol** 1988 Sep;36(5):353–7 (Eng. Abstr.) (Fre)

TRANSPLANTATION

Characterization of fetal urogenital sinus-induced prostatic hyperplasia in the mouse: time course, hormonal requirement, age dependency, and responsiveness of various adult organs to growth induction by fetal urogenital sinus tissues. Chung LW, et al. **Biol Reprod** 1988 Aug; 39(1):50–7

UROGRAPHY

Ectopic ureterocele without ureteral and calyceal dilatation (ureterocele disproportion): findings on urography and sonography. Share JC, et al. **AJR** 1989 Mar;152(3):567–71

Microscopic hematuria after blunt trauma. Is pyelography necessary? Thomason RB, et al. **Am Surg** 1989 Mar; 55(3):145–50

The evaluation of suspected renal colic: ultrasound scan versus excretory urography. Sinclair D, et al. **Ann Emerg Med** 1989 May;18(5):556–9

Common uses of intravenous pyelography in adults. American College of Physicians. **Ann Intern Med** 1989 Jul 1;111(1):83–4

Intravenous pyelography: the case against its routine use. Mushlin AI, et al. **Ann Intern Med** 1989 Jul 1;111(1):58–70

Intravenous pyelography before hysterectomy [letter] Simel DL, et al. **Ann Intern Med** 1989 Sep 15;111(6):541

Intravenous urography after acute urinary retention. Gajraj HA, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):79–80

The intravenous pyelogram in acute pyelonephritis. Kanel KT, et al. **Arch Intern Med** 1988 Oct;148(10):2144–8

A new look at intravenous urography. Dawson P. **Australas Radiol** 1988 Aug;32(3):309–12

The effect of nonionic radiographic contrast medium on serum electrolytes and proteins during intravenous urography. Brunet WG, et al. **Can Assoc Radiol J** 1989 Jun;40(3):139–41

Myths and misconceptions in uroradiology. Saxton H. **Clin Radiol** 1988 Jul;39(4):361–2

Ventilatory function during urography: a comparison of iopamidol and sodium iothalamate. Wilson AR, et al. **Clin Radiol** 1988 Sep;39(5):490–3

Genitourinary imaging and procedures by the emergency physician. Neuwirth H, et al. **Emerg Med Clin North Am** 1989 Feb;7(1):1–28 (23 ref.)

The changing scene of radiology: value of urography as initial examination in infectious and hypertensive disease, hematuria and malignant disease. Göthlin JH, et al. **Eur J Radiol** 1988 Aug;8(3):135–9

Evaluation of contrast dose reduction for excretory urography using computed radiography. Strautman PR, et al. **Eur J Radiol** 1989 Feb;9(1):60–3

Pretreatment regimen for high-risk patients receiving urographic contrast media. Moskovitz B, et al. **Eur Urol** 1988;15(1-2):94–5

Renal excretion and computed tomography enhancement of iotrolan and iopamidol in dogs. Benness G, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:88–90

Clinical experience with iohexol versus iopromide in excretory urography. Bischoff W. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:108–10

Iopromide dosage and urographic image quality: is there an optimal dose? Dominik R, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:111–5

Pharmacokinetics of iohexol, iopamidol, iopromide, and iosimide compared with meglumine diatrizoate. Hartwig P, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:220–3

Influence of contrast media osmolality on intravenous urographic quality. Lovett I, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:105–7

Experimental urography in dogs: diagnostic quality and pharmacokinetic behavior of iotrolan in comparison to nonionic and ionic, monomeric contrast media. Nauert C, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:82–7

Urography with monomeric and dimeric nonionic contrast media: comparative, randomized, double-blind study of iotrolan 280 and iopromide 300. Taenzer V, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:116–8

Comparison of oral, written and audio-visually based information as preparation for intravenous pyelography. Hjelm-Karlsson K. **Int J Nurs Stud** 1989;26(1):53–68

Pelvic fused kidneys: magnetic resonance imaging and intravenous pyelogram correlation. Masih S, et al. **J Natl Med Assoc** 1988 Aug;80(8):925–7

99mtechnetium-dimercapto-succinic acid renal scanning and excretory urography in diagnosis of renal scars in children. McLorie GA, et al. **J Urol** 1989 Sep;142(3):790–2

Selective use of excretory urography in women with acute pyelonephritis. Sandberg T, et al. **J Urol** 1989 Jun; 141(6):1290–4

Acute focal bacterial nephritis: radiographic evaluation in children [letter] Traisman ES, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):890–1

Renal ultrasound and excretory urography in infants and young children with urinary tract infection. Kenda R, et al. **Pediatr Radiol** 1989;19(5):299–301

Intravenous urography using reduced amount of iodine. Rodenberg JC. **Radiol Diagn (Berl)** 1988;29(5):735–9

Pharmacokinetics of iopamidol 370 in infants and children during ivp. Beluffi G, et al. **Radiol Med (Torino)** 1989 May; 77(5):493–5

Evaluation of a quadtree-based compression algorithm with digitized urograms. Halpern EJ, et al. **Radiology** 1989 Apr; 171(1):259–63

Comparison between 99mTc-DTPA renal scan and excretory urography in the clinical staging of invasive cancer of the uterine cervix. Rodari A, et al. **Rays** 1988 May-Aug;13(2):33–8

Ultrasonography should replace intravenous urography in the pre-operative evaluation of prostatism. Solomon DJ, et al. **S Afr Med J** 1988 Oct 15;74(8):407–8

Abdominal ultrasound versus intravenous urography in the evaluation of infravesically obstructed males. Juul N, et al. **Scand J Urol Nephrol** 1989;23(2):89–92

Image quality, diagnostic certainty, and accuracy: comparison of conventional and digital urograms. Fajardo LL, et al. **Urol Radiol** 1988;10(2):72–4

[Radiation burden in children during roentgenographic and radionuclide examinations of the urinary system] Hulík V, et al. **Cesk Pediatr** 1988 Sep;43(9):513–5 (Eng. Abstr.) (Cze)

[Clinical and radiologic findings before and following sling operation for recurrent incontinence] Enzelsberger H, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):45–8 (Eng. Abstr.) (Ger)

[The significance of urodynamic and roentgenologic studies in the assessment of incontinence] Anderl P. **Gynakol Rundsch** 1988;28 Suppl 2:15–9 (Ger)

[Urothelial carcinoma of the kidney pelvis 51 years after retrograde ureteropyelography with Thorotrast. An autoradiography study] Bachor R, et al. **Med Klin** 1988 Oct 4;83(19):652–4 (Ger)

[Xanthogranulomatous pyelonephritis in early childhood] Emhofer J, et al. **Padiatr Padol** 1989;24(2):141–7 (Eng. Abstr.) (Ger)

[Enzymuria following administration of contrast media in hypertensive rats] Wrigge P, et al. **Rontgenblatter** 1988 Aug;41(8):332–5 (Eng. Abstr.) (Ger)

[Voiding urethrosonography. An alternative to roentgen urethrography] Dörnberger V, et al. **Ultraschall Med** 1988 Dec;9(6):279–85 (Eng. Abstr.) (Ger)

[Aspects of roentgen ray burden in endourologic surgery] Andersen C, et al. **Z Urol Nephrol** 1989 Jun;82(6):301–6 (Eng. Abstr.) (Ger)

[Recurrent excessive dilatation of the efferent urinary tract in pregnancy. Case report] Kindt J, et al. **Zentralbl Gynakol** 1988;110(24):1583–8 (Eng. Abstr.) (Ger)

[Candidiasis of the kidney pelvis: importance of the urography/echography correlation] Bagnolesi P, et al. **Radiol Med (Torino)** 1988 Dec;76(6):649–52 (Ita)

[Diagnostic imaging of renal tumors of small dimensions] Dalla Palma L, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):590–6 (Eng. Abstr.) (Ita)

[Non-vascular interventional radiology nonvascular interventional radiology of the urinary tract] Miki M. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2671–8 (13 ref.) (Eng. Abstr.) (Jpn)

[A study of iopamidol (Iopamiron 370) in intravenous urography in the patients with previous adverse reactions to contrast media and history of allergy] Kondo K, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1845–51 (Eng. Abstr.) (Jpn)

[Intravenous urography with a nonionic low osmolality contrast medium (iopamidol) in elderly patients] Tanaka H, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2219–23 (Eng. Abstr.) (Jpn)

[Combination radiodiagnosis of the functional state of the urinary tract in cancer of the kidney] Gabuniia RI, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):21–7 (Eng. Abstr.) (Rus)

[Comparative evaluation of ultrasonic and x-ray study methods in the diagnosis of ureterocele] Roslov AL, et al. **Vestn Rentgenol Radiol** 1988 Jul-Aug;(4):36–41 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Acute pulmonary oedema during intravenous urography. Sakijan AS, et al. **Med J Malaysia** 1988 Sep;43(3):252–4

[Prevention of iodinated contrast media nephrotoxicity in patients with renal insufficiency] Teruel JL, et al. **Med Clin (Barc)** 1988 Sep 17;91(8):281–2 (Eng. Abstr.) (Spa)

ECONOMICS

Low dose low osmolar [corrected] intravenous urography [letter] [published erratum appears in Clin Radiol 1989 Jul;40(4):437] Eyes B, et al. **Clin Radiol** 1989 May;40(3):325

Ultrasonography versus excretory urography: value in urological disease. Aslaksen A, et al. **Eur J Radiol** 1988 Aug;8(3):179–80

Calculation of internal costs in a department of diagnostic radiology. Geitung JT, et al. **Eur J Radiol** 1988 Aug; 8(3):181–2

INSTRUMENTATION

A comparison of two different T-grain films in rare-earth screens with a standard film-screen combination for intravenous pyelography and bone examinations. Logan H, et al. **Br J Radiol** 1989 Mar;62(735):237–40

[Digital radiography in urography] Salvini E, et al. **Radiol Med (Torino)** 1989 Jan-Feb;77(1-2):44–50 (Eng. Abstr.) (Ita)

METHODS

Routine intravenous pyelograms before hysterectomy in cases of benign disease: possibly effective, definitely expensive. Simel DL, et al. **Am J Obstet Gynecol** 1988 Nov; 159(5):1049–53

A large trial of intravenous Conray 325 and Niopam 300 to assess immediate and delayed reactions. McCullough M, et al. **Br J Radiol** 1989 Mar;62(735):260–5

The excretory urogram bowel preparation—is it necessary? Roberge-Wade AP, et al. **J Urol** 1988 Dec;140(6):1473–4

Intravenous pyelography in children with urinary tract infection and vesicoureteral reflux. Alon U, et al. **Pediatrics** 1989 Mar;83(3):332–6

Urinary peristalsis investigated by radionuclide and X-ray methods: a comparison. Müller-Suur R, et al. **Scand J Urol Nephrol Suppl** 1988;110:285–90

Technique for more rapid localization of distal ureteral obstruction with excretory urography. Marshall S, et al. **Urology** 1989 Feb;33(2):146–7

[Diagnostic problems and the potential for resolving them via percutaneous antegrade pyelography] Ganchev D. **Khirurgiia (Sofiia)** 1988;41(6):92–5 (Eng. Abstr.) (Bul)

[Picture quality of a digital urogram using image enhancement radiography] Scholz A, et al. **Digitale Bilddiagn** 1989 Mar;9(1):31–5 (Eng. Abstr.) (Ger)

[Digital image intensifier radiography—application in angiography, urography and bone diagnosis] Langer M, et al. **ROFO** 1989 Jun;150(6):723–8 (Eng. Abstr.) (Ger)

[Value of an abbreviated intravenous urogram] Maier U, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):579–80 (Eng. Abstr.) (Ger)

[Excretory urography: comparison of the ionic contrast medium amidotrezoic acid with the non-ionic contrast medium iohexol] Grabenwöger F, et al. **Wien Med Wochenschr** 1989 Feb 15;139(3):48–50 (Eng. Abstr.) (Ger)

[The value of sonography and intravenous urography in the preoperative diagnosis before prostate adenoma operations] Hübner W, et al. **Z Urol Nephrol** 1989 May;82(5):247–51 (Eng. Abstr.) (Ger)

[Radiographic examination for children] Fujioka M. **Rinsho Hoshasen** 1988 Oct;33(11):1219–27 (Jpn)

[Urography] Hiramatsu Y. **Rinsho Hoshasen** 1988 Oct; 33(11):1487–97 (Jpn)

[Excretory urography with non-ionic contrast medium; clinical reassessment of the necessity of water deprivation] Soga T, et al. **Rinsho Hoshasen** 1989 Feb;34(2):233–6 (Eng. Abstr.) (Jpn)

[Anterograde pyelography under ultrasonic control]

Mladenov D, et al. **Khirurgiia (Sofiia)** 1988;41(3):24–7 (Eng. Abstr.) (Rus)

STANDARDS

Comparison of urograms using ionic contrast, non-ionic contrast and non-ionic contrast with mannitol. Lovett I, et al. **Australas Radiol** 1988 Nov;32(4):434–6

UROKINASE

The preparation of a urokinase–AT–III–PGE1–methyldopa complex, and its effects on platelet adhesion, coagulation times, protein adsorption, and fibrinolysis. Chandy T, et al. **Artif Organs** 1989 Jun;13(3):229–37

Affinity purification of active plasminogen activator inhibitor–1 (PAI–1) using immobilized anhydroarokinase. Demonstration of the binding, stabilization, and activation of PAI–1 by vitronectin. Wun TC, et al. **J Biol Chem** 1989 May 15;264(14):7862–8

In vivo studies on the involvement of urokinase in pemphigus acantholysis [letter] Lotti T, et al. **J Invest Dermatol** 1988 Oct;91(4):372–3

Dynamics of the multidomain fibrinolytic protein urokinase from two–dimensional NMR. Oswald RE, et al. **Nature** 1989 Feb 9;337(6207):579–82

[Comparison of structures and functions of urokinase (u–PA) and tissue plasminogen activator (t–PA)] Takada A, et al. **Nippon Rinsho** 1989 Apr;47(4):891–900 (Jpn)

ADMINISTRATION & DOSAGE

Direct thrombolytic therapy for superior sagittal sinus thrombosis. Higashida RT, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S4–6

Pulsed–spray pharmacomechanical thrombolysis: preliminary clinical results. Bookstein JJ, et al. **AJR Am J Roentgenol** 1989 May;152(5):1097–100

Short–duration, high–dose urokinase infusion for recanalization of occluded saphenous aortocoronary bypass grafts. Marx M, et al. **AJR Am J Roentgenol** 1989 Jul; 153(1):167–71

Angina preceding myocardial infarction and residual coronary narrowing after intracoronary thrombolysis. Ogasawara K, et al. **Am Heart J** 1989 Apr;117(4):804–8

Low dose urokinase preactivated natural prourokinase for thrombolysis in acute myocardial infarction. Gulba DC, et al. **Am J Cardiol** 1989 May 1;63(15):1025–31

Effect of combined administration of saruplase and single–chain alteplase on coronary recanalization in acute myocardial infarction. Tranchesi B Jr, et al. **Am J Cardiol** 1989 Jul 15;64(3):229–32

Thrombolytic properties of human tissue–type plasminogen activator, single–chain urokinase–type plasminogen activator, and synergistic combinations in venous thrombosis models in dogs and rabbits. Spriggs DJ, et al. **Blood** 1989 Apr;73(5):1207–12

Low–dose fibrinolytic therapy for recent lower extremity thromboembolism. Sniderman KW, et al. **Can Assoc Radiol J** 1989 Apr;40(2):98–103

Selective thrombolysis with low–dose urokinase in chronic arteriosclerotic obstructions. Lupattelli L, et al. **Cardiovasc Intervent Radiol** 1988 Jun;11(3):123–6

Successful treatment of superior vena cava syndrome with urokinase in an infant with a central venous catheter. Caglar MK, et al. **Helv Paediatr Acta** 1989 Jun; 43(5–6):483–6

Clinical application of percutaneous transluminal angioscopy. Comparison of findings in percutaneous transluminal angioplasty, thrombolysis, thrombus–extraction and stent–application. Beck A, et al. **Herz** 1988 Dec;13(6):392–9 (44 ref.)

Early detection and simplified management of obstructed Hickman and Broviac catheters. Stokes DC, et al. **J Pediatr Surg** 1989 Mar;24(3):257–62

Intraarterial urokinase increases skeletal muscle viability after acute ischemia. Belkin M, et al. **J Vasc Surg** 1989 Jan; 9(1):161–8

Continuous infusion of low–dose urokinase in the treatment of central venous catheter thrombosis in infants and children. Bagnall HA, et al. **Pediatrics** 1989 Jun;83(6):963–6

Regional infusion of urokinase into occluded lower–extremity bypass grafts: long–term clinical results. Durham JD, et al. **Radiology** 1989 Jul;172(1):83–7

Acute renal vein thrombosis: successful treatment with intrarterial urokinase. Vogelzang RL, et al. **Radiology** 1988 Dec;169(3):681–2

Importance of fibrin specificity in therapeutic thrombolysis and the rationale of using sequential and synergistic combinations of tissue plasminogen activator and pro–urokinase. Gurewich V. **Semin Thromb Hemost** 1989 Apr;15(2):123–8 (40 ref.)

Intraoperative intra–arterial thrombolytic therapy for salvage of limbs in patients with distal arterial thrombosis. Comerota AJ, et al. **Surg Gynecol Obstet** 1989 Oct; 169(4):283–9

Bolus dose response characteristics of single chain urokinase plasminogen activator and tissue plasminogen activator in a dog model of arterial thrombosis. Badylak SF, et al. **Thromb Res** 1988 Nov 15;52(4):295–312

[Percutaneous transluminal coronary thrombolysis in acute myocardial infarction] Li YG. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Jun; 16(3):140–1 (Chi)

[Experiences at a peripheral hospital with the intracoronary administration of streptokinase and urokinase in acute heart infarct] van Brussel BL, et al. **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):358–62 (Eng. Abstr.) (Dut)

[Treatment of acute iliac artery occlusion by catheter lysis, catheter dilatation and implantation of a new kind of metallic vascular endoprosthesis] Richter GM, et al. **Chirurg** 1989 May;60(5):346–51 (Eng. Abstr.) (Ger)

[The dose of intracoronary urokinase infusion in acute myocardial infarct] Tebbe U, et al. **Klin Wochenschr** 1988 Dec 1;66(23):1193–5 (Eng. Abstr.) (Ger)

[Venous thrombolysis and venous angioplasty] Günther RW, et al. **Rontgenblatter** 1988 Jul;41(7):293–6 (Eng. Abstr.) (Ger)

[Local thrombolysis of acute and subacute forearm, hand and finger artery occlusions. Early and late results] Pfyffer M, et al. **Vasa** 1989;18(2):128–35 (Eng. Abstr.) (Ger)

[Long–term results following fibrinolytic treatment of deep venous thromboses in the area of the pelvis and leg] Thiele C, et al. **Vasa** 1989;18(1):48–55 (Eng. Abstr.) (Ger)

[Fibrinolytic therapy of thromboembolic vascular occlusions: experiences based on 87 patients] Grabenwöger F, et al. **Vasa Suppl** 1988;26:96–8 (Ger)

[Pseudostabilization of unstable angina pectoris: disappearance of symptoms in persistence of silent myocardial ischemia] Hausmann D, et al. **Z Kardiol** 1988 Dec;77(12):805–10 (Eng. Abstr.) (Ger)

[Neonatal renal insufficiency and thrombosis of the renal vein. Systemic thrombolytic treatment] Artesani L, et al. **Minerva Urol Nefrol** 1988 Oct–Dec;40(4):313–6 (Eng. Abstr.) (Ita)

[Medical treatment of pulmonary thromboembolism] Nagata H. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):478–86 (Eng. Abstr.) (Jpn)

[Use of urokinase in acute myocardial infarction] Bokarev IN, et al. **Kardiologiia** 1988 Nov;28(11):36–40 (Eng. Abstr.) (Rus)

ANALYSIS

Multicentric reticulohistiocytosis. Report of three cases with the evaluation of tissue proteinase activity. Lotti T, et al. **Am J Dermatopathol** 1988 Dec;10(6):497–504

Comparative study of plasminogen activators in cancers and normal mucosae of human urinary bladder. Hasui Y, et al. **Cancer Res** 1989 Feb 15;49(4):1067–70

Relationship of membrane–bound tissue type and urokinase type plasminogen activators in human breast cancers to estrogen and epidermal growth factor receptors. Needham GK, et al. **Cancer Res** 1988 Nov 15;48(22):6603–7

Urokinase–type plasminogen activator in colorectal carcinomas and adenomatous polyps: quantitative expression of active and proenzyme. Sim PS, et al. **Int J Cancer** 1988 Oct 15;42(4):483–8

Charge heterogeneity of recombinant pro–urokinase and urinary urokinase, as revealed by isoelectric focusing in immobilized pH gradients. Righetti PG, et al. **J Chromatogr** 1989 May 26;470(2):337–50

ANTAGONISTS & INHIBITORS

Kinetics of the inhibition by plasminogen activator inhibitor 2 of urokinase isolated from human urine and recombinant microorganisms. Further evidence for correct tertiary structure of recombinant urokinase. Cramer J, et al. **Arzneimittelforschung** 1988 Aug;38(8):1196–8

A form of protease nexin I is expressed on the platelet surface during platelet activation. Gronke RS, et al. **Blood** 1989 Feb;73(2):472–8

Plasminogen activator activity and urokinase inhibitor activity in human amniotic fluid and fetal membranes. Milwidsky A, et al. **Clin Biochem** 1988 Oct;21(5):301–6

Inhibition of fibrinolytic enzymes by thrombin inhibitors. Gilboa N, et al. **Enzyme** 1988;40(2–3):144–8

Inhibition of plasminogen activators and the growth of cultured human tumour cells. Scott GK. **Int J Biochem** 1988;20(8):817–22

Characterization of keratinocyte plasminogen activator inhibitors and demonstration of the prevention of pemphigus IgG–induced acantholysis by a purified plasminogen activator inhibitor. Hashimoto K, et al. **J Invest Dermatol** 1989 Mar;92(3):310–4

Different mechanisms contribute to simultaneous inhibition of urokinase and tissue–type plasminogen activators by glucocorticoids in human ovarian carcinoma cells. Karlan BY, et al. **Mol Endocrinol** 1989 Jun;3(6):1006–13

In vitro inhibition of urokinase by penicillins. Higazi AA, et al. **Thromb Haemost** 1988 Oct 31;60(2):305–7

BIOSYNTHESIS

Recombinant human interleukin–1 stimulates human articular cartilage to undergo resorption and human chondrocytes to produce both tissue– and urokinase–type plasminogen activator. Campbell IK, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):183–94

Regulation and secretion of plasminogen activators and their inhibitors in a human leukemic cell line (K562). Oliver LJ, et al. **Blood** 1989 Sep;74(4):1321–7

Examination of the effects of epidermal growth factor on the production of urokinase and the expression of the plasminogen activator receptor in a human colon cancer cell line. Boyd D. **Cancer Res** 1989 May 1;49(9):2427–32

Enhanced plasminogen activator production of Syrian hamster embryo cells transformed by chemicals or the c–Ha–ras oncogene: type of plasminogen activators involved and their contribution to the transformed phenotype. de Kok AJ, et al. **Carcinogenesis** 1989 Jul; 10(7):1155–61

Production of urokinase–type plasminogen activator by normal and transformed rat thyroid cells in culture. Cassano S, et al. **Exp Cell Res** 1989 May;182(1):197–205

Synthesis of recombinant human single–chain urokinase–type plasminogen activator variants resistant to plasmin and thrombin. Miyake T, et al. **J Biochem (Tokyo)** 1988 Oct; 104(4):643–7

Vascular origin determines plasminogen activator expression in human endothelial cells. Renal endothelial cells produce large amounts of single chain urokinase type plasminogen activator. Wojta J, et al. **J Biol Chem** 1989 Feb 15; 264(5):2846–52

Stimulated production of urokinase and plasminogen activator inhibitor–2 by the human promyelocytic leukemia cell line HL–60. Alving BM, et al. **Thromb Res** 1988 Jul 15;51(2):175–85

Enhanced expression of urokinase activity on U 937 cell line by 1,25–dihydroxyvitamin D3 induction. Lu H, et al. **Thromb Res Suppl** 1988;8:57–63

BLOOD

Sensitive and direct assays for functionally active plasminogen activators (tissue–type and urokinase–type) in plasma. Mahmoud–Alexandroni M, et al. **Am J Clin Pathol** 1989 Sep;92(3):308–14

Elevated urokinase–type plasminogen activator level and bleeding in amyloidosis: case report and literature review. Sane DC, et al. **Am J Hematol** 1989 May;31(1):53–7 (25 ref.)

Demonstration of single chain urokinase–type plasminogen activator on human platelet membrane. Park S, et al. **Blood** 1989 May 1;73(6):1421–5

The bleeding disorder in acute promyelocytic leukaemia: fibrinolysis due to u–PA rather than defibrination. Bennett B, et al. **Br J Haematol** 1989 Apr;71(4):511–7

Plasma urokinase–type plasminogen activator correlates to bone scintigraphy in prostatic carcinoma. Hienert G, et al. **Eur Urol** 1988;15(3–4):256–8

Urokinase–type plasminogen activator as a marker for the formation of distant metastases in prostatic carcinomas. Hienert G, et al. **J Urol** 1988 Dec;140(6):1466–9

Source of increased plasminogen activators during pregnancy and puerperium. Shimada H, et al. **Thromb Res** 1989 Apr 15;54(2):91–8

[Immunosorption method of urokinase determination] Isachenkov VA, et al. **Vopr Med Khim** 1988 Nov–Dec; 34(6):133–6 (Eng. Abstr.) (Rus)

[Interaction of plasminogen activator of urokinase type with human serum] Vakulina OP, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):32–6 (Eng. Abstr.) (Rus)

GENETICS

Increased expression of urokinase mRNA in bovine aortic endothelial cells treated with propranolol. Peracchia F, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):977–81

Examination of urokinase protein/transcript levels and their relationship with laminin degradation in cultured colon carcinoma. Boyd D, et al. **Cancer Res** 1989 Feb 15; 49(4):816–20

Regulation by epidermal growth factor of human squamous cell carcinoma plasminogen activator–mediated proteolysis of extracellular matrix. Niedbala MJ, et al. **Cancer Res** 1989 Jun 15;49(12):3302–9

Production in eukaryotic cells and characterization of four hybrids of tissue–type and urokinase–type plasminogen activators. Piérard L, et al. **DNA** 1989 Jun;8(5):321–8

Structural and functional characterization of mutants of recombinant single–chain urokinase–type plasminogen activator obtained by site–specific mutagenesis of Lys158, Ile159 and Ile160. Lijnen HR, et al. **Eur J Biochem** 1988 Nov 15;177(3):575–82

Isolation of a human cDNA of urokinase and its expression in COS–1 cells. Cheng SM, et al. **Gene** 1988 Sep 30; 69(2):357–63

Construction and expression of a hybrid plasminogen activator gene with sequences from non–protease region of tissue–type plasminogen activator (t–PA) and protease region of urokinase (u–PA). Kalyan NK, et al. **Gene** 1988 Sep 7;68(2):205–12

Urokinase–type plasminogen activator biosynthesis is induced by the EJ–Ha–ras oncogene in CL26 mouse colon carcinoma cells. Testa JE, et al. **Int J Cancer** 1989 May 15;43(5):816–22

Synthesis of recombinant human single–chain urokinase–type plasminogen activator variants resistant to plasmin and thrombin. Miyake T, et al. **J Biochem (Tokyo)** 1988 Oct; 104(4):643–7

Regulation of urokinase– and tissue–type plasminogen activator gene expression in the rat seminiferous epithelium. Vihko KK, et al. **Mol Endocrinol** 1989 Jan;3(1):52–9

An upstream enhancer and a negative element in the 5' flanking region of the human urokinase plasminogen activator gene. Verde P, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10699–716

[Development of new thrombolytic enzymes by gene technology—with special references to t-PA, scu-PA, protein C] Ueshima S. **Nippon Rinsho** 1989 Apr;47(4):901–9 **(Jpn)**

ISOLATION & PURIFICATION

Purification and properties of a single-chain urokinase-type plasminogen activator form produced by subcultured human umbilical vein endothelial cells. Booyse FM, et al. **J Biol Chem** 1988 Oct 15;263(29):15139–45

Isolation and interrelationships of the multiple molecular tissue-type and urokinase-type plasminogen activator forms produced by cultured human umbilical vein endothelial cells. Booyse FM, et al. **J Biol Chem** 1988 Oct 15;263(29):15129–38

Human ovarian tumor-associated trypsin. Its purification and characterization from mucinous cyst fluid and identification as an activator of pro-urokinase. Koivunen E, et al. **J Biol Chem** 1989 Aug 25;264(24):14095–9

[Purification of urokinase. I. Preparation and characterization of affinity chromatographic solid supports] Takahashi R. **Yakugaku Zasshi** 1988 Apr;108(4):331–8 (Eng. Abstr.) **(Jpn)**

METABOLISM

Modification of urokinase. Shi BZ, et al. **Ann N Y Acad Sci** 1988;542:180–4

Transforming growth factor-beta 1 is a potent inducer of plasminogen activator inhibitor type-1 in human glioblastoma and carcinoma cell lines. Helseth E, et al. **APMIS** 1988 Sep;96(9):845–9

Activation of pro-urokinase by plasmin: non-Michaelian kinetics indicates a mechanism of negative cooperativity. Scully MF, et al. **Arch Biochem Biophys** 1989 Feb 1; 268(2):438–46

Specific cleavage of diphtheria toxin by human urokinase. Cieplak W, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):747–54

Production of proteases type plasminogen activator and their inhibitor in cornea. Mirshahi M, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1021–5

Comparison of the effects of auranofin and retinoic acid on plasminogen activator activity of peritoneal macrophages and Lewis lung carcinoma cells. Lison D, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2107–12

Urokinase-catalysed plasminogen activation. Effects of ligands binding to the AH-site of plasminogen. Christensen U. **Biochim Biophys Acta** 1988 Nov 23;957(2):258–65

Complex formation between urokinase and plasma protein C inhibitor in vitro and in vivo. Geiger M, et al. **Blood** 1989 Aug 1;74(2):722–8

Functional characteristics of receptor-bound urokinase on human monocytes: catalytic efficiency and susceptibility to inactivation by plasminogen activator inhibitors. Kirchheimer JC, et al. **Blood** 1989 Sep;74(4):1396–402

Enzymology of plasminogen activation. **Enzyme** 1988; 40(2–3):61–172

Interaction of urokinase with specific receptors stimulates mobilization of bovine adrenal capillary endothelial cells. Fibbi G, et al. **Exp Cell Res** 1988 Dec;179(2):385–95

Plasminogen activator and its inhibitor in the experimental corneal wound. Tervo T, et al. **Exp Eye Res** 1989 Mar; 48(3):445–9

Plasminogen activator and its enhancement in differentiating mouse Friend erythroleukemia cells. Amici C, et al. **Int J Cancer** 1989 Jan 15;43(1):171–6

Enhancement of urokinase-type plasminogen activator activity during the growth of a murine mammary adenocarcinoma [letter] Pereyra-Alfonso S, et al. **Int J Cancer** 1989 Feb 15;43(2):356–7

The effect of cervical dilatation by laminaria tent in first trimester legal abortions on blood loss related to fibrinolytic activity in the decidua and placenta. Jonasson A, et al. **Int J Gynaecol Obstet** 1989 May;29(1):73–7

Anticoagulant low molecular weight heparin does not enhance the activation of plasminogen by tissue plasminogen activator. Andrade-Gordon P, et al. **J Biol Chem** 1989 Sep 15;264(26):15177–81

Plasminogen activation initiated by single-chain urokinase-type plasminogen activator. Potentiation by U937 monocytes. Ellis V, et al. **J Biol Chem** 1989 Feb 5;264(4):2185–8

Characterization of the cellular binding site for the urokinase-type plasminogen activator. Estreicher A, et al. **J Biol Chem** 1989 Jan 15;264(2):1180–9

Characterization of a chimeric plasminogen activator consisting of amino acids 1 to 274 of tissue-type plasminogen activator and amino acids 138 to 411 of single-chain urokinase-type plasminogen activator. Lijnen HR, et al. **J Biol Chem** 1988 Dec 15;263(35):19083–91

Induction of urokinase activity and malignant phenotype in bladder carcinoma cells after transfection of the activated Ha-ras oncogene. Brunner G, et al. **J Cancer Res Clin Oncol** 1989;115(2):139–44

Mouse L cells expressing human prourokinase-type plasminogen activator: effects on extracellular matrix degradation and invasion. Cajot JF, et al. **J Cell Biol** 1989 Aug;109(2):915–25

Activation of pro-urokinase and plasminogen on human sarcoma cells: a proteolytic system with surface-bound reactants. Stephens RW, et al. **J Cell Biol** 1989 May; 108(5):1987–95

Down-regulation of proteolytic activity in 12-O-tetradecanoyl-phorbol-13-acetate-induced K562 leukemia cell cultures: depletion of active urokinase by excess type 1 plasminogen activator inhibitor. Alitalo R, et al. **J Cell Physiol** 1989 Jul;140(1):119–30

Simultaneous stimulation of urokinase and tissue-type plasminogen activators by phorbol esters in human ovarian carcinoma cells. Band V, et al. **J Cell Physiol** 1989 Jan; 138(1):106–14

Urokinase-dependent adhesion loss and shape change after cyclic adenosine monophosphate elevation in cultured rat mesangial cells. Glass WF 2d, et al. **J Clin Invest** 1988 Dec;82(6):1992–2000

Characterization of the intrinsic fibrinolytic properties of pro-urokinase through a study of plasmin-resistant mutant forms produced by site-specific mutagenesis of lysine(158). Gurewich V, et al. **J Clin Invest** 1988 Dec;82(6):1956–62

Interaction between plasminogen activator inhibitor type 1 (PAI-1) bound to fibrin and either tissue-type plasminogen activator (t-PA) or urokinase-type plasminogen activator (u-PA). Binding of t-PA/PAI-1 complexes to fibrin mediated by both the finger and the kringle-2 domain of t-PA. Wagner OF, et al. **J Clin Invest** 1989 Aug; 84(2):647–55

Modulation of urokinase-type plasminogen activator and plasminogen activator inhibitor-2 expression by U-937 mononuclear phagocytes. Effects of 1 alpha, 25-dihydroxyvitamin D3 and phorbol ester. Gyetko MR, et al. **J Immunol** 1988 Oct 15;141(8):2693–8

Modulation of plasminogen activator systems by matrix components in two breast cancer cell lines: MCF-7 and MDA-MB-231. Pourreau-Schneider N, et al. **J Natl Cancer Inst** 1989 Feb 15;81(4):259–66

Tissue plasminogen activator binding to mouse cerebellar granule neurons. Verrall S, et al. **J Neurosci Res** 1988 Oct-Dec;21(2-4):420–5

Fibrinolytic activity and localization of plasminogen activator in bovine vitreous body and aqueous humor. Hayashi K, et al. **Jpn J Ophthalmol** 1989;33(1):66–75

Tumor necrosis factor-alpha regulates mRNA for urokinase-type plasminogen activator and type-1 plasminogen activator inhibitor in human neoplastic cell lines. Georg B, et al. **Mol Cell Endocrinol** 1989 Jan; 61(1):87–96

Accessibility of receptor-bound urokinase to type-1 plasminogen activator inhibitor. Cubellis MV, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4828–32

Marked potentiation of the plasminogenolytic activity of pro-urokinase by unfractionated heparin and a low molecular-weight heparin. Dosne AM, et al. **Thromb Res** 1988 Sep 15;51(6):627–30

Placental and decidual u-PA, t-PA, PAI-1 and PAI-2 concentrations, as affected by cervical dilatation with laminaria tents or Hegar dilators. Jonasson A, et al. **Thromb Res** 1989 Jan 15;53(2):91–7

Characterization of a chimaeric plasminogen activator obtained by insertion of the second kringle structure of tissue-type plasminogen activator (amino acids 173 through 262) between residues Asp130 and Ser139 of urokinase-type plasminogen activator. Lijnen HR, et al. **Thromb Res** 1988 Dec 1;52(5):431–41

PHARMACOKINETICS

Distribution model for the intact urokinase and urokinases modified by soluble macromolecules in rat and mouse bodies. Jin FX, et al. **Radioisotopes** 1988 Aug;37(8):441–7

PHARMACOLOGY

Additional myocardial salvage by coadministration of the epoprostenol analog taprostene to recombinant single-chain urokinase-type plasminogen activator in a canine coronary thrombosis model. Groves R, et al. **Arzneimittelforschung** 1989 Apr;39(4):534–8

The mechanism of plasminogen activation and fibrin dissolution by single chain urokinase-type plasminogen activator in a plasma milieu in vitro. Lijnen HR, et al. **Blood** 1989 May 15;73(7):1864–72

Mitogenic effect of urokinase on malignant and unaffected adjacent human renal cells. Kirchheimer JC, et al. **Carcinogenesis** 1988 Nov;9(11):2121–3

Effects of aspirin and prostaglandin E1 on in vitro thrombolysis with urokinase. Evidence for a possible role of inhibiting platelet activity in thrombolysis. Terres W, et al. **Circulation** 1989 Jun;79(6):1309–14

Synergistic combinations of recombinant human tissue-type plasminogen activator and human single-chain urokinase-type plasminogen activator. Effect on thrombolysis and reocclusion in a canine coronary artery thrombosis model with high-grade stenosis. Ziakind AA, et al. **Circulation** 1989 Feb;79(2):393–9

Activation of fibrin-bound plasminogen by pro-urokinase and its complementariness with that by tissue plasminogen activator. Gurewich V. **Enzyme** 1988;40(2–3):97–108 (56 ref.)

Growth stimulation of human epidermal cells by urokinase is restricted to the intact active enzyme. Kirchheimer JC, et al. **Eur J Biochem** 1989 Apr 15;181(1):103–7

Comparison of thrombolytic, fibrinolytic, and fibrinogenolytic properties of tissue plasminogen activator, streptokinase, single-chain urokinase, high molecular weight and low molecular weight urokinase in human plasma in vitro. Samama M, et al. **Fundam Clin Pharmacol** 1988;2(6):509–23

Enhancement of the activation of Glu-plasminogen by urokinase in the simultaneous presence of tranexamic acid or fibrin. Takada A, et al. **Haemostasis** 1989;19(1):26–31

IFN-gamma, tumor necrosis factor-alpha, and urokinase regulate the expression of urokinase receptors on human monocytes. Kirchheimer JC, et al. **J Immunol** 1988 Dec 15;141(12):4229–34

Absence of synergism between tissue-type plasminogen activator and urokinase on plasminogen activation rate in plasma. Rydzewski A, et al. **Thromb Res** 1989 Mar 15; 53(6):577–83

[Thrombolytic action of urokinase preparation covalently bound to modified thrombin] Maksimenko AV, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):322–4 (Eng. Abstr.) **(Rus)**

[Thrombolysis using tissue-type plasminogen activator and pro-urokinase: synergism; mutants and hybrids] Páramo JA, et al. **Sangre (Barc)** 1989 Aug;34(4):297–9 (28 ref.) **(Spa)**

PHYSIOLOGY

In vivo invasion of modified chorioallantoic membrane by tumor cells: the role of cell surface-bound urokinase. Ossowski L. **J Cell Biol** 1988 Dec;107(6 Pt 1):2437–45

Functional inhibition of endogenously produced urokinase decreases cell proliferation in a human melanoma cell line. Kirchheimer JC, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5424–8

[Role of single chain pro-UK on the initiation and regulation of fibrinolysis] Arimura H, et al. **Rinsho Byori** 1989 Apr; Spec No 81:107–17 **(Jpn)**

SECRETION

Determination of the effects of epidermal growth factor on urokinase secretion and urokinase receptor display in a well-differentiated human colon carcinoma cell line. Boyd D, et al. **Cancer Res** 1989 Apr 15;49(8):1948–53

THERAPEUTIC USE

Anticoagulant combination therapy of gabexate mesilate and urokinase in purpura fulminans. Mimura S, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Dec;29(6):824–6

Presence of angina pectoris before acute myocardial infarction and degree of residual stenosis after coronary thrombolysis. Matsuda Y, et al. **Am Heart J** 1989 May; 117(5):1014–7

Acute myocardial infarction complicating recanalization of aortocoronary bypass grafts with urokinase therapy. McKeever LS, et al. **Am J Cardiol** 1989 Sep 15;64(10):683–5

Successful urokinase therapy for superior vena cava syndrome in a premature infant [letter] Griffin MP, et al. **Am J Dis Child** 1988 Dec;142(12):1267–8

Urokinase therapy for a central venous catheter thrombus. Suarez CR, et al. **Am J Hematol** 1989 Aug;31(4):269–72

Thrombolytic therapy in acute arterial thrombosis. Price C, et al. **Am J Surg** 1988 Dec;156(6):488–91

Comparison of cost effectiveness of streptokinase and urokinase in the treatment of deep vein thrombosis. Graor RA, et al. **Ann Vasc Surg** 1987 Dec;1(5):524–8

Urokinase. A cost-effective alternative treatment of superior vena cava thrombosis and obstruction. Meister FL, et al. **Arch Intern Med** 1989 May;149(5):1209–10

Urokinase dissolution of a right atrial thrombus [letter] Tenney RD, et al. **Arch Intern Med** 1989 Feb;149(2):475

Cost-effectiveness of intra-arterial thrombolytic therapy. Dacey LJ, et al. **Arch Surg** 1988 Oct;123(10):1218–23

A new therapeutic approach to accidental intra-arterial injection of thiopentone. Vangerven M, et al. **Br J Anaesth** 1989 Jan;62(1):98–100

Neonatal aortic thrombosis treated with intra-arterial urokinase therapy. Goldberg RE, et al. **Can Assoc Radiol J** 1989 Feb;40(1):55–6

Peaking time of creatine-kinase MB in patients treated with urokinase or conventionally during acute myocardial infarction: is it really a clue to reperfusion? Brunelli C, et al. **Cardiologia** 1988 Jul;33(7):669–74

Accelerated thrombolysis and angioplasty for hand ischemia in Buerger's disease. Lang EV, et al. **Cardiovasc Intervent Radiol** 1989 Mar-Apr;12(2):95–7

Prolonged selective urokinase infusion in totally occluded coronary arteries and bypass grafts: two case reports. McKeever L, et al. **Cathet Cardiovasc Diagn** 1988; 15(4):247–51

A comparative study of urokinase and heparin in the treatment of deep vein thrombosis. Lai ST, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;42(2):99–104

Randomized, double-blinded multicenter study. Comparison of intracoronary single-chain urokinase-type plasminogen activator, pro-urokinase (GE-0943), and intracoronary urokinase in patients with acute myocardial infarction. Kambara H, et al. **Circulation** 1988 Oct;78(4):899–905

Clot-selective coronary thrombolysis with pro-urokinase. Loscalzo J, et al. **Circulation** 1989 Apr;79(4):776–82

Angiographic features in the infarct-related artery after intracoronary urokinase followed by prolonged anticoagulation. Role of ruptured atheromatous plaque and adherent thrombus in acute myocardial infarction in vivo. Nakagawa S, et al. **Circulation** 1988 Dec;78(6):1335–44

Scintigraphic demonstration of restored Denver peritoneovenous shunt patency using urokinase. Balon H, et al. **Clin Nucl Med** 1989 Apr;14(4):310–1

Local urokinase infusion for total occlusion of the lower abdominal aorta. Report of two cases and a review of the literature. Goffette P, et al. **Eur J Radiol** 1989 May; 9(2):121–4 (11 ref.)

Long-term results of percutaneous transluminal angioplasty: a study of 4750 dilatations and local lyses. Beck AH, et al. **Eur J Vasc Surg** 1989 Jun;3(3):245–52

Use of urokinase in acute myocardial infarction. Makolkin VI, et al. **Folia Haematol (Leipz)** 1988;115(3):394–7

Fibrinolytic therapy with streptokinase and urokinase in deep vein thrombosis. Trübestein G, et al. **Folia Haematol (Leipz)** 1988;115(4):599–602

Jellyfish sting resulting in severe hand ischaemia successfully treated with intra-arterial urokinase. Abu-Nema T, et al. **Injury** 1988 Jul;19(4):294–6

Endoarterial treatment of acute ischemia of the limbs with urokinase. Italian Cooperative Study "Bologna". **Int Angiol** 1989 Jan–Mar;8(1):53–6

Thrombus formation in deep venous thrombosis. A clinical approach to diagnosis and control of lysis efficacy. Scheffler P, et al. **Int Angiol** 1988 Jul–Sep;7(3):207–13

Thrombolysis of graft occlusion using high dose urokinase. An alternative to surgical treatment? Mingoli A, et al. **Ital J Surg Sci** 1989;19(1):79–84

A canine model of coronary artery thrombosis with superimposed high grade stenosis for the investigation of rethrombosis after thrombolysis. Yasuda T, et al. **J Am Coll Cardiol** 1989 May;13(6):1409–14

Treatment of experimental frostbite with urokinase. Zdeblick TA, et al. **J Hand Surg [Am]** 1988 Nov;13(6):948–53

Clot lysis for thrombosed central venous catheters in pediatric patients. Kellam B, et al. **J Perinatol** 1987 Summer;7(3):242–4

Massive pulmonary embolism: triple-armed therapy. Rosenthal D, et al. **J Vasc Surg** 1989 Feb;9(2):261–70

Effects of coronary thrombolysis on left ventricular ejection fraction in patients with acute myocardial infarction. Ishikawa K, et al. **Jpn Circ J** 1988 Oct;52(10):1141–8

Intracoronary urokinase in acute myocardial infarction: prevalence of total coronary occlusion during the early hours, effects on myocardial infarct size and left ventricular function, and outcome of residual coronary stenosis. Motomiya T, et al. **Jpn Circ J** 1988 Jul;52(7):702–8

A white flapping structure in the coronary artery lumen observed by angioscopy after coronary thrombolysis—is this the "ruptured atheroma" that initiated the acute myocardial infarction? Susawa T, et al. **Jpn Circ J** 1988 Jun;52(6):580–2

Human plasma superoxide dismutase (SOD) activity on reperfusion injury with successful thrombolysis in acute myocardial infarction. Kodama K, et al. **Jpn J Med** 1989 Mar–Apr;28(2):202–6

Randomised double-blind trial of recombinant pro-urokinase against streptokinase in acute myocardial infarction. PRIMI Trial Study Group. **Lancet** 1989 Apr 22;1(8643):863–8

Tissue plasminogen activator versus urokinase [letter] Ebers GC. **Lancet** 1988 Oct 29;2(8618):1028

Urokinase versus tissue plasminogen activator in pulmonary embolism [letter] Goldhaber SZ, et al. **Lancet** 1988 Oct 15;2(8616):915

Thrombolytic therapy on the homefront. Intravenous urokinase in community hospitals. Wall TC, et al. **N C Med J** 1989 Jul;50(7):363–6

Urokinase: a treatment for relapsing peritonitis due to coagulase-negative staphylococci. Pickering SJ, et al. **Nephrol Dial Transplant** 1989;4(1):62–5

Successful fibrinolytic treatment of arterial thrombosis and hypertension in a cocaine-exposed neonate. Reznik VM, et al. **Pediatrics** 1989 Oct;84(4):735–8

Fibrinolytic effects of urokinase and heparin in acute pulmonary embolism: a randomized clinical trial. Marini C, et al. **Respiration** 1988;54(3):162–73

Potentiation of the thrombolytic efficacy of single-chain urokinase (Pro-urokinase) by heparin [letter] Gulba DC, et al. **Thromb Haemost** 1988 Oct 31;60(2):350–1

Evaluation of fibrinolytic capacity in plasma during thrombolytic therapy with single (scu-PA) or two-chain urokinase type plasminogen activator (tcu-PA) by a combined assay system for urokinase type plasminogen activator antigen and function. Wojta J, et al. **Thromb Haemost** 1989 Apr 25;61(2):289–93

[Comparison of the efficacy of intravenous urokinase and defibrase on 6-hour-old canine coronary thrombosis] Huang DX, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Dec; 16(6):363–5, 384 (Eng. Abstr.) (Chi)

[Early postoperative thrombosis of an aortic Saint-Jude prosthesis. Success of fibrinolytic treatment] Sadoun D, et al. **Ann Cardiol Angeiol (Paris)** 1988 Jul–Sep;37(7):365–9 (32 ref.) (Eng. Abstr.) (Fre)

[Treatment with urokinase of systemic arterial thrombosis in the newborn infant] Brevière GM, et al. **Arch Mal Coeur** 1989 May;82(5):771–7 (20 ref.) (Eng. Abstr.) (Fre)

[Treatment by redilatation and thrombolysis of occlusion occurring during percutaneous coronary angioplasty] Drobinski G, et al. **Arch Mal Coeur** 1988 Jun;81(6):745–52 (Eng. Abstr.) (Fre)

[Role of fibrinolysis in the treatment of retinal arterial occlusion. Discussion of 5 cases] Annonier P, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1167–71 (Eng. Abstr.) (Fre)

[Percutaneous transluminal angioplasty, local thrombolysis and percutaneous thrombus extraction in the treatment of arterial occlusions of the extremities] Schneider E. **Internist (Berlin)** 1989 Jul;30(7):440–6 (22 ref.) (Ger)

[Antibody mediated thrombolysis. A new therapeutic principle] Bode C, et al. **Klin Wochenschr** 1989 Jul 3; 67(13):651–8 (39 ref.) (Eng. Abstr.) (Ger)

[Follow-up of local lytic therapy of pulmonary emboli using DSA] Busch D, et al. **ROFO** 1989 Jun;150(6):684–6 (Eng. Abstr.) (Ger)

[Subclavian occlusion and an anomaly of the vertebral artery with subclavian steal syndrome. Fibrinolysis and PTA therapy] Lederer W, et al. **ROFO** 1989 Apr;150(4):477–9 (Ger)

[Thrombolysis in acute massive lung embolism] Marbet GA. **Schweiz Med Wochenschr** 1988 Aug 9;118(31–32):1138–41 (Eng. Abstr.) (Ger)

[The progress of a fibrinolytic therapy with streptokinase, urokinase and warfarin in a thoroughbred with intermittent lameness with special reference to resonance thrombography] Pause B, et al. **Tierarztl Prax** 1988; 16(4):377–83 (Eng. Abstr.) (Ger)

[Prodromic syndrome and recovery time in acute myocardial infarction] Beccaria E, et al. **Minerva Cardioangiol** 1989 Jan–Feb;37(1–2):1–2 (Eng. Abstr.) (Ita)

[Urokinase in the therapy of spontaneous angina] Ibba GV, et al. **Minerva Cardioangiol** 1989 May;37(5):259–64 (Eng. Abstr.) (Ita)

[Thrombolytic therapy of pulmonary thromboembolism—result of 18 patients] Sasagawa Y, et al. **Kokyu To Junkan** 1989 Jan;37(1):83–6 (Eng. Abstr.) (Jpn)

[Noninvasive assessment of the patency of the previously occluded coronary artery following coronary thrombolysis in patients with acute myocardial infarction using serial changes in serum creatine kinase] Sato Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):338–44 (Jpn)

[Cerebral infarction—thrombolytic therapy by tissue-type plasminogen activator or prourokinase] Amano T. **Nippon Rinsho** 1989 Apr;47(4):917–20 (Jpn)

[Coronary thrombolysis by t-PA and pro-UK] Kanmatsuse K, et al. **Nippon Rinsho** 1989 Apr;47(4):910–6 (Jpn)

[Short-term intraarterial urokinase infusion in the treatment of traumatic peripheral arterial occlusion; a case report] Uchino A, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1609–11 (Eng. Abstr.) (Jpn)

[Local-regional fibrinolysis as elective treatment in deep venous thromboses: experimental clinical study] Magallón Ortín P, et al. **Angiologia** 1989 Jan–Feb;41(1):20–37 (Spa)

[Clinico-angiographic correlations in transmural acute myocardial infarction treated with thrombolytic agents (retracted in Medicina (B Aires) 1988;48(3):284)] Rodríguez A, et al. **Medicina (B Aires)** 1988;48(2):132–40 (Eng. Abstr.) (Spa)

[Streptokinase or urokinase in the treatment of myocardial infarction?] Dahlström H. **Lakartidningen** 1988 Oct 12; 85(41):3367 (Swe)

TOXICITY

[Possible side effects of plasminogen activators on the conduction system of the heart] Stark G, et al. **Vasa Suppl** 1988;26:205–8 (Eng. Abstr.) (Ger)

URINE

Charge heterogeneity of recombinant pro-urokinase and urinary urokinase, as revealed by isoelectric focusing in immobilized pH gradients. Righetti PG, et al. **J Chromatogr** 1989 May 26;470(2):337–50

Fibrin activatable urokinase (FA-UK): a latent form of UK found in urine related to a complex with an inhibitor/fibrin-interacting cofactor. Dwivedi C, et al. **Thromb Res** 1988 Jul 15;51(2):197–208

[New methods of studying the plasmin system using azofibrin] Monastyrskiĭ VA, et al. **Lab Delo** 1988;(10):49–53 (Eng. Abstr.) (Rus)

UROLITHIASIS see **URINARY CALCULI**

UROLOGIC DISEASES

Abstracts of the proceedings of the Urological Society of Australasia, 41st annual scientific meeting. Sydney, Australia, 20 to 25 March 1988. **Br J Urol** 1988 Nov; 62(5):465–83

AUA eighty-fourth annual meeting. American Urological Association, Inc. May 7–11, 1989, Dallas. Abstracts. **J Urol** 1989 Apr;141(4 Pt 2):1A–605A

Papers presented at annual meeting of the Section of Urology, American Academy of Pediatrics. New Orleans, Louisiana, October 30–November 2, 1987. **J Urol** 1988 Nov;140(5 Pt 2):1089–324

Papers presented at the annual meeting of the Section of Urology, American Academy of Pediatrics. San Francisco, California, October 15–20, 1988. **J Urol** 1989 Aug;142(2 Pt 2):473–668

Scandinavian Association of Urology. Proceedings of the XVIth congress. Uppsala, May 21–23, 1987. **Scand J Urol Nephrol Suppl** 1988;110:1–336

Swedish Association of Urology. Proceedings of the annual meeting 1987. Stockholm, December 2–4, 1987. Abstracts. **Scand J Urol Nephrol Suppl** 1988;117:1–30

Office urology. **Urol Clin North Am** 1988 Nov;15(4):555–776

[Pathology of the lower urogenital tract in children. Papers presented at the 54th congress of the Belgian Society of Urology. Brussels, 27–2 May 1989] **Acta Urol Belg** 1989; 57(2):249–680 (Fre)

[1st meeting of the Japanese Pediatric Urology Section. Abstracts] **Nippon Hinyokika Gakkai Zasshi** 1988 Dec; 79(13 Suppl):2258–73 (Jpn)

[76th annual meeting of the Japanese Urological Association. Abstracts] **Nippon Hinyokika Gakkai Zasshi** 1988 Dec; 79(13 Suppl):2081–257 (Jpn)

BLOOD

[Plasma cortisol dynamics during epidural analgesia in patients undergoing transurethral resection] Bovianska N. **Khirurgiia (Sofiia)** 1989;42(2):30–4 (Bul)

[Clinical evaluation of serum and urinary alpha 1-microglobulin in patients with urological diseases] Nasu Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun; 79(6):1078–84 (Eng. Abstr.) (Jpn)

[Nonenzymatic fibrinolysis of the blood and urine in urologic diseases] Popov AI, et al. **Sov Med** 1988;(12):39–43 (57 ref.) (Rus)

CHEMICALLY INDUCED

Influence of buthionine sulfoximine on the lethality of ifosfamide and ifosfamide-induced urotoxicity in mice. Ishikawa M, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar;63(3):455–8

Urologic manifestations of drug therapy. Bissada NK, et al. **Urol Clin North Am** 1988 Nov;15(4):725–36 (72 ref.)

COMPLICATIONS

The significance of asymptomatic microhematuria in women and its economic implications. A ten-year study. Bard RH. **Arch Intern Med** 1988 Dec;148(12):2629–32

Spina bifida occulta and functional disorders of the lower urinary tract [letter] Hall PN, et al. **BMJ** 1989 Mar 18; 298(6675):755

Urine microscopy and culture in the selection of patients for urinary tract investigation. Maskell R. **Br J Urol** 1989 Jan;63(1):7–10

The urological manifestations of the acquired immunodeficiency syndrome. Miles BJ, et al. **J Urol** 1989 Sep;142(3):771–3

[Kidney failure in urologic diseases] Mandevski S, et al. **Khirurgiia (Sofiia)** 1989;42(2):49–55 (Eng. Abstr.) (Bul)

[Assessment of nosocomial infections at a urological clinic—methods and results] Jaeger P, et al. **Helv Chir Acta** 1988 Jul;55(3):305–7 (Eng. Abstr.) (Ger)

[Dysuria] Rabillard C, et al. **Ther Umsch** 1988 Dec; 45(12):857–64 (15 ref.) (Eng. Abstr.) (Ger)

[Prevention of postoperative phlebothrombosis of the legs using low-dose heparin in urologic patients] Savchenko NE, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):62–6 (Eng. Abstr.) (Rus)

CONGENITAL

[The early stages of chronic kidney failure in children with congenital obstructive uropathies and results of surgical treatment] Alferov SM, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):58–62 (Eng. Abstr.) (Rus)

DIAGNOSIS

Clinical outcome of fetal uropathy [letter] Campbell J. **Arch Dis Child** 1989 Jan;64(1):176

Bilateral fetal uropathy: what is the outlook? Arthur RJ, et al. **BMJ** 1989 May 27;298(6685):1419–20

Value of antenatal diagnosis of abnormalities of the urinary tract. Greig JD, et al. **BMJ** 1989 May 27;298(6685):1417–9

Antenatal ultrasonography to detect fetal renal abnormalities: a prospective screening programme. Livera LN, et al. **BMJ** 1989 May 27;298(6685):1421–3

Urological history-taking and management recommendations by microcomputer. Glen ES, et al. **Br J Urol** 1989 Feb; 63(2):117–21

1989 Canadian Guidelines for the Diagnosis and Management of Sexually Transmitted Diseases, by Syndrome, in Children, Adolescents and Adults. **Can Dis Wkly Rep** 1989 Mar;15 Suppl 1:1–33 (Eng, Fre)

Detection and management of the dilated fetal urinary tract. Tudor J, et al. **Clin Radiol** 1989 May;40(3):229–30 (9 ref.)

Prenatal diagnosis of urological abnormalities. Barratt TM, et al. **Contrib Nephrol** 1988;67:171–4

Significance of immunoglobulin A titres in the diagnosis of urogenital chlamydial infections. Scheel O, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug;8(8):726–8

Ultrasonography versus excretory urography: value in urological disease. Aslaksen A, et al. **Eur J Radiol** 1988 Aug;8(3):179–80

Calculation of internal costs in a department of diagnostic radiology. Geitung JT, et al. **Eur J Radiol** 1988 Aug; 8(3):181–2

The significance of adult hematuria: 1,000 hematuria evaluations including a risk-benefit and cost-effectiveness

analysis. Mariani AJ, et al. J Urol 1989 Feb;141(2):350–5
Non-invasive management of fetal obstructive uropathy. Reuss A, et al. Lancet 1988 Oct 22;2(8617):949–51
Extrapelvic endometriosis. Markham SM, et al. Obstet Gynecol Clin North Am 1989 Mar;16(1):193–219 (79 ref.)
Urinary imaging in children. Belman AB. Pediatr Infect Dis J 1989 Aug;8(8):548–51
Variable-flip-angle spin-echo MR imaging of the pelvis: more versatile T2-weighted images. Mitchell DG, et al. Radiology 1989 May;171(2):525–9
Office urologic ultrasound in pediatric patients. Zaontz MR, et al. Urol Clin North Am 1988 Nov;15(4):589–99 (16 ref.)
Nondilated obstructive uropathy [letter] Goldfarb R, et al. Urology 1989 Mar;33(3):257
[Evaluation of the value of ultrasonic examination in screening for diseases of the urinary tract and abdominal cavity organs] Kladenský J, et al. Rozhl Chir 1988 Oct; 67(10):671–4 (Eng. Abstr.) (Cze)
[Urologic examination and treatment of patients with acute injuries of the spinal medulla] Jeppesen LJ, et al. Ugeskr Laeger 1989 Aug 7;151(32):2019–21 (Eng. Abstr.) (Dan)
[The value of a guidewire without an end in endoscopic interventions of the upper urinary tract] Viville C, et al. Acta Urol Belg 1988;56(3):396–9 (Eng. Abstr.) (Fre)
[Frequent diagnostic errors in findings of the kidneys and urinary tract] Sieberth HG. Internist (Berlin) 1989 Apr; 30(4):247–53 (11 ref.) (Ger)
[Check-ups from the urologic viewpoint] Tscholl R. Ther Umsch 1989 Jun;46(6):378–83 (Eng. Abstr.) (Ger)
[Ultrasound in internal medicine. The kidney and urinary tract] Weiss H. Verh Dtsch Ges Inn Med 1988;94:568–76 (40 ref.) (Ger)
[Significance of ultrasonic studies in urologic diagnosis] Romics I. Orv Hetil 1989 Jan 15;130(3):129–32 (Eng. Abstr.) (Hun)
[Selection and understanding of bedside tests. Symptoms involving the kidney and urinary tract] Kojima H, et al. Rinsho Byori 1987 Jul;Spec No 72:170–7 (Jpn)
[The minimal urinary syndrome in children] Enikeeva ZM, et al. Pediatriia 1988;(11):41–3 (Rus)
[Detection of pathology of the urinary system in students during preventive mass screening] Seisembekov TZ, et al. Ter Arkh 1988;60(6):16–8 (Eng. Abstr.) (Rus)

DRUG THERAPY

[Efficacy and tolerability of nimesulide in inflammatory diseases of the genito-urinary system] Corrado F, et al. Minerva Urol Nefrol 1989 Apr-Jun;41(2):115–9 (Eng. Abstr.) (Ita)
[Controlled clinical study on the use of nimesulide in inflammatory diseases of the genitourinary system] Mirone V, et al. Minerva Urol Nefrol 1988 Oct-Dec;40(4):261–5 (Eng. Abstr.) (Ita)

ECONOMICS

Financial risk and hospital cost for elderly patients in non-age stratified urology DRGs. Muñoz E, et al. Urology 1989 May;33(5):445–8

ENZYMOLOGY

Circadian rhythm in serum acid phosphatase in young men with infravesical obstruction & elderly men with symptomatic prostatism. Mandal AK, et al. Indian J Med Res 1988 Sep;88:231–4

EPIDEMIOLOGY

[Clinical statistics on outpatients, inpatients and operations in 1986] Ikoma F, et al. Hinyokika Kiyo 1988 Nov; 34(11):2047–52 (Eng. Abstr.) (Jpn)
[Clinical statistics on the patients operated at the Department of Urology, Kinki University Hospital during three years from 1984 to 1986] Kurita T, et al. Hinyokika Kiyo 1989 Feb;35(2):283–90 (Eng. Abstr.) (Jpn)
[Clinical statistics on outpatients at the Urological Clinic of Sanjukai Hospital in 1987] Tanda H, et al. Hinyokika Kiyo 1988 Dec;34(12):2213–8 (Eng. Abstr.) (Jpn)
[Clinical statistics in patients in the past 10 years after initiation of our clinic] Aso Y, et al. Nippon Hinyokika Gakkai Zasshi 1988 Jun;79(6):1025–31 (Eng. Abstr.) (Jpn)
[Analysis of the morbidity rate among children born in the region of the Rural Health Center in Galiny] Witkiewicz-Kink A. Pediatr Pol 1988 Jun;63(6):374–80 (Pol)
[Methodological problems and various results of the study of the incidence and structure of diseases of the urinary system among adult population (data from outpatient clinics of Moscow, Celinograd and the Celinograd district of the Kazakh SSR)] Khasabov NN, et al. Ter Arkh 1988; 60(6):13–6 (Eng. Abstr.) (Rus)

ETIOLOGY

Posterior urethral valves. Churchill BM, et al. Acta Urol Belg 1989;57(2):435–49 (24 ref.)
Prostatic urinary obstruction and its surgical treatment: Japanese experience, 1980–1987. Clin Ther 1988;10 Spec No:1–63
Urological aspects of cloacal malformations. Hendren WH. J Urol 1988 Nov;140(5 Pt 2):1207–13
The urological manifestations of the tethered spinal cord. Kaplan WE, et al. J Urol 1988 Nov;140(5 Pt 2):1285–8
Urological complications in pediatric renal transplantation: management and prevention. Zaontz MR, et al. J Urol 1988 Nov;140(5 Pt 2):1123–8
Urinary tract disorders in patients with chronic granulomatous disease. Alisbadi H, et al. N Engl J Med 1989 Sep 14;321(11):706–8
Urological complications following aorto-iliac reconstructive surgery. van Helsdingen PJ, et al. Neth J Surg 1989 Feb;41(1):18–20
Lower urinary tract complications of the treatment of cervical carcinoma. Parkin DE. Obstet Gynecol Surv 1989 Jul;44(7):523–9 (70 ref.)
Urogenital problems in neurology. Semin Neurol 1988 Summer;8(2):121–73
Myelodysplasia. McGuire EJ. Semin Neurol 1988 Summer; 8(2):145–9 (8 ref.)
Malakoplakia in renal transplantation: an expression of altered tissue reactivity under immunosuppression. Shabtai M, et al. Transplant Proc 1989 Aug;21(4):3725–7
[Angiomyolipoma of the kidney as a source of severe hemorrhage in the urogenital tract] Kania R, et al. Cas Lek Cesk 1988 Dec 23;127(52):1621–2 (Eng. Abstr.) (Cze)
[Urologic manifestations of AIDS] Boccon-Gibod L, et al. Ann Urol (Paris) 1989;23(3):173–7 (Eng. Abstr.) (Fre)
[Urologic complications secondary to sacral agenesis] Monfort G, et al. Ann Urol (Paris) 1989;23(3):239–41 (Eng. Abstr.) (Fre)
[Urologic complications in 280 renal transplants] Franco Esteve A, et al. Actas Urol Esp 1988 May-Jun;12(3):217–22 (Eng. Abstr.) (Spa)
[Urologic symptoms as first clinical manifestation of tumors of the nervous system. Apropos of 2 cases] Perea J, et al. Actas Urol Esp 1989 Jan-Feb;13(1):71–4 (Eng. Abstr.) (Spa)
[Nuclear medicine in the diagnosis of vascular and urologic complications of kidney transplantation] Requena MJ, et al. Actas Urol Esp 1988 May-Jun;12(3):223–31 (56 ref.) (Eng. Abstr.) (Spa)
[Endo-urologic procedures and renal transplantation] Chicharro Molero JA, et al. Arch Esp Urol 1988 Nov-Dec; 41(9):865–71 (Eng. Abstr.) (Spa)

METABOLISM

[Neuropeptides in urology] Scultéty S. Orv Hetil 1988 Jun 19;129(25):1317–20 (33 ref.) (Eng. Abstr.) (Hun)
[Enzymuria and creatinine clearance in the clinico-laboratory evaluation of kidney damage in urological disease] Minardi D, et al. Boll Soc Ital Biol Sper 1988 Jun;64(6):539–46 (Eng. Abstr.) (Ita)

MICROBIOLOGY

Coxsackie virus and urogenital pathology. Scalia G, et al. Clin Exp Obstet Gynecol 1989;16(2-3):55–8
[Bacteria and infections of the genitourinary system] Dubini F, et al. Minerva Urol Nefrol 1988 Oct-Dec;40(4):243–56 (41 ref.) (Eng. Abstr.) (Ita)

PATHOLOGY

Trends in modern nephro- and uropathology. In honor of Steen Olsen, Professor of Pathology. APMIS Suppl 1988; 4:1–147
[An automatic histologic-cytologic image analysis procedure of organs of the urogenital tract. Technics and value in urology] Nafe R, et al. Urologe [A] 1989 May;28(3):163–7 (34 ref.) (Eng. Abstr.) (Ger)
[Semen parameters in patients affected with urological diseases (varicocele, cryptorchism, testicular tumors and genital tract infections)] Morresi F, et al. Boll Soc Ital Biol Sper 1988 Jun;64(6):583–9 (Eng. Abstr.) (Ita)

PHYSIOPATHOLOGY

[Pathology of the lower urogenital tract in children] Opsomer RJ, et al. Acta Urol Belg 1989;57(2):249–410 (517 ref.) (Fre)
[Glycosaminoglycans as a defense mechanism of the urothelium, in children] Di Stefano A, et al. Minerva Pediatr 1989 Apr;41(4):167–71 (Eng. Abstr.) (Ita)
[Disorders of microcirculation and problems of their correction in children with severe surgical pathology] Stepanova NA. Pediatriia 1989;(5):57–63 (Rus)

PREVENTION & CONTROL

A preliminary clinical study of cyclophosphamide with reduced glutathione as uroprotector. Nobile MT, et al. Tumori 1989 Jun 30;75(3):257–8
[Role of prevention in pediatric urology] Bono AV, et al. Arch Ital Urol Nefrol Androl 1988 Jun;60(2):169–73 (12 ref.) (Eng. Abstr.) (Ita)
[The role of prevention in urology] Comeri G. Arch Ital Urol Nefrol Androl 1988 Jun;60(2):119–24 (7 ref.) (Eng. Abstr.) (Ita)
[Significance of microhematuria in over 50 years of mass urologic screening] Comeri G, et al. Arch Ital Urol Nefrol Androl 1988 Jun;60(2):133–41 (Eng. Abstr.) (Ita)
[Preventive medicine in urology] Nippon Hinyokika Gakkai Zasshi 1987 Dec;78(13):2270–9 (Jpn)

RADIOGRAPHY

Urinary tract malakoplakia with extension into the retroperitoneum with secondary gastrointestinal involvement. Westra SJ, et al. Urol Radiol 1988;10(4):181–5

RADIONUCLIDE IMAGING

Use of lymphoscintigraphy in chyluria. Pettit J, et al. Urology 1988 Oct;32(4):367–9
[A complex of mathematical models in the radionuclide diagnosis of the status of the urinary system] Gabuniia RI, et al. Med Radiol (Mosk) 1989 Jan;34(1):37–42 (Eng. Abstr.) (Rus)

SURGERY

Locoregional anesthesia in pediatric urogenital surgery. Veyckemans F. Acta Urol Belg 1989;57(2):593–5
A comparison of alfentanil, halothane and enflurane as supplements for outpatient urological surgery. Biswas TK, et al. Anaesth Intensive Care 1989 Aug;17(3):275–9
"Short-term" prophylaxis by aztreonam in prevention of post-operative infections in patients undergoing transurethral surgery. Giannoni R, et al. Arch Ital Urol Nefrol Androl 1988 Mar;60(1):77–80
Endoscopic application of lasers in urology. McNicholas T. Br J Hosp Med 1988 Sep;40(3):197–206 (39 ref.)
AIDS: the contamination risk in urological surgery. McNicholas TA, et al. Br J Urol 1989 Jun;63(6):563–8
Cefotetan vs. cefoxitin in short-term antibacterial prophylaxis in urological surgery. Rizzo M, et al. Chemioterapia 1987 Jun;6(2 Suppl):609–11
Contained neonatal urinoma: management and functional results. Connor JP, et al. J Urol 1988 Nov;140(5 Pt 2):1319–22
Re: The dorsal lumbotomy incision in pediatric urological surgery [letter] Mallafre JM, et al. J Urol 1989 Jun; 141(6):1434
Elective cholecystectomy during major urological surgery. Rozanski TA, et al. J Urol 1989 Jun;141(6):1295–7
Surgery in solitary kidney and correction of urinary transport disturbances. Prog Pediatr Surg 1989;23:1–205
Urological operations for solitary kidneys in children. Helmig FJ, et al. Prog Pediatr Surg 1989;23:42–50
Reconstructive surgery in eight children with solitary kidneys. Nielsen OH, et al. Prog Pediatr Surg 1989;23:51–4
Urologic surgery. Surg Clin North Am 1988 Oct; 68(5):891–1184
Induction of anesthesia with propofol in urological outpatient surgery. Katz Y, et al. Urol Int 1989;44(1):41–2
Transplant techniques applied to general urology. McCoy GB, et al. Urology 1989 Feb;33(2):110–5
[Changes in blood cortisol and ACTH concentrations during urologic operations performed under halothane and neuroleptanesthesia] Gosheva-Antonova Ts, et al. Khirurgiia (Sofiia) 1988;41(5):71–7 (Eng. Abstr.) (Bul)
[Gastrostomy in urological surgery] Dumont O, et al. Acta Urol Belg 1988;56(4):559–61 (Eng. Abstr.) (Fre)
[Urinary tract infection and surgical disorders of the lower urinary tract] Carpentier JP, et al. Med Trop (Mars) 1989 Jan-Mar;49(1):47–50 (18 ref.) (Eng. Abstr.) (Fre)
[Surgery and endoscopic urology] Sauvain J, et al. Rev Med Suisse Romande 1988 Nov;108(11):927–8 (Fre)
[Endourology—minimal invasive surgery. I] Eickenberg HU. Urologe [A] 1989 Mar;28(2):70–6 (19 ref.) (Eng. Abstr.) (Ger)
[Autologous blood transfusion in urology] Faul P, et al. Urologe [A] 1989 Mar;28(2):88–93 (Eng. Abstr.) (Ger)
[Proceedings of the 33d meeting of the Lombard Urologic Society. Milan, 11 June 1988. Problems of urologic surgery in the irradiated pelvis] Arch Ital Urol Nefrol Androl 1988 Dec;60(4):353–411 (Ita)
[Antibiotic prevention with aztreonam in urologic surgery in children] Lace R, et al. Minerva Urol Nefrol 1989 Apr-Jun;41(2):121–5 (Eng. Abstr.) (Ita)
[Statistics on operations at the Hara Genitourinary Hospital (1971–1986)] Hara S, et al. Hinyokika Kiyo 1988 Dec; 34(12):2205–12 (Eng. Abstr.) (Jpn)
[Operations during a 5-year period (1982–1986) at our department] Tada Y, et al. Hinyokika Kiyo 1988 May; 34(5):898–903 (Eng. Abstr.) (Jpn)
[Function of the circulatory system under general anesthesia with fentanyl and kalipsol in children with urologic diseases] Katkovskii DG, et al. Anesteziol Reanimatol 1988 Sep-Oct;(5):31–3 (Eng. Abstr.) (Rus)
[Postoperative period upon use of epidural morphine analgesia in urological patients] Novozhilov VA, et al. Urol Nefrol (Mosk) 1988 Nov-Dec;(6):63–5 (Eng. Abstr.) (Rus)
[Effects of urologic surgery on lymphocyte subpopulations] Gil Salom M, et al. Actas Urol Esp 1989 May-Jun; 13(3):171–6 (Eng. Abstr.) (Spa)
[Serum immunosuppressive activity of patients undergoing urologic surgery] Gil Salom M, et al. Actas Urol Esp 1988 Nov-Dec;12(6):544–8 (Eng. Abstr.) (Spa)

THERAPY

Management of prenatally diagnosed uropathies. Thomas DF, et al. **Arch Dis Child** 1989 Jan;64(1 Spec No):58–63
Fetal obstructive uropathy [letter] Longaker MT, et al. **BMJ** 1989 Jul 29;299(6694):325–6
Fetal uropathy. White RH. **BMJ** 1989 May 27; 298(6685):1408–9 (18 ref.)
Physical methods used in the complex therapy of chronic non-specific urinary tract diseases. Nesterov NI, et al. **Int Urol Nephrol** 1988;20(5):525–31
Gastrocystoplasty: an alternative solution to the problem of urological reconstruction in the severely compromised patient. Adams MC, et al. **J Urol** 1988 Nov;140(5 Pt 2):1152–6
The use of the Magnetip double-J ureteral stent in urological practice. Macaluso JN Jr, et al. **J Urol** 1989 Sep; 142(3):701–3
Continuous venous access in children with urological diseases. Springer JC, et al. **J Urol** 1989 Feb;141(2):364–6
[Perspectives and new contributions in urology: the machines] Graber P. **Helv Chir Acta** 1989 Apr;55(6):741–8 (5 ref.) (Eng. Abstr.) (Fre)
[Care and treatment of uropathies detected in utero. Evaluation of an 8-year experiment] Dodat H. **Pediatrie** 1988;43(7):597–602 (Eng. Abstr.) (Fre)
[Urologic complications. Diagnosis and treatment of therapy complications] Petri E. **Gynakologe** 1989 Feb;22(1):39–45 (22 ref.) (Ger)
[Nephrology and urology (editorial)] Buchborn E. **Urologe [A]** 1988 Nov;27(6):305–6 (Ger)
[Various principles of the organization of nephrologic and urologic services for children] Bardina GA, et al. **Pediatriia** 1989;(5):68–72 (Rus)
[The use of local deep microwave hyperthermia in urology] Berklaid PM, et al. **Urol Nefrol (Mosk)** 1989 May-Jun; (3):73–8 (73 ref.) (Rus)
[Legal aspects of patient services in urological practice] Sergeev IuD, et al. **Urol Nefrol (Mosk)** 1988 May-Jun; (3):37–60 (Eng. Abstr.) (Rus)
[Therapeutic physical exercise in the combined therapy of patients with disorders of urination and of the urodynamics of the urinary tract] Iunusov FA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan-Feb;(1):66–8 (Rus)
[How new drugs and new technology have affected various aspects of urology] Zvara V. **Rozhl Chir** 1988 Oct; 67(10):622–4 (Slo)

URINE

Dipstick urinalysis screening of asymptomatic adults for urinary tract disorders. I. Hematuria and proteinuria. Woolhandler S, et al. **JAMA** 1989 Sep 1;262(9):1214–9 (58 ref.)

VETERINARY

Economic impact of urogenital diseases in the gilt: the use of portfolio theory to minimize economic risk associated with post-epidemic breeding management. Parsons TD, et al. **Acta Vet Scand Suppl** 1988;84:415–8
A survey of urinary tract disease in New South Wales koalas. Canfield PJ. **Aust Vet J** 1989 Apr;66(4):103–6
Urologic syndrome associated with wire caging in AKR mice. Everitt JI, et al. **Lab Anim Sci** 1988 Oct;38(5):609–11
Urogenital surgery. **Vet Clin North Am [Equine Pract]** 1988 Dec;4(3):339–523
Urologic disorders of the geriatric dog. Krawiec DR. **Vet Clin North Am [Small Anim Pract]** 1989 Jan;19(1):75–85 (38 ref.)
Advertisement claims [letter] Davies M, et al. **Vet Rec** 1989 Apr 15;124(15):412
[Results of several blood studies in sows with acute urinary tract inflammation] Stirnimann J. **Schweiz Arch Tierheilkd** 1988 Nov;130(11):599–604 (Eng. Abstr.) (Ger)
[The treatment of acute urinary tract inflammation in the sow] Stirnimann J. **Schweiz Arch Tierheilkd** 1988 Nov; 130(11):605–11 (Eng. Abstr.) (Ger)

UROLOGIC NEOPLASMS

[Malignant fibrous histiocytoma in urology] Kanamaru H, et al. **Nippon Rinsho** 1989 Mar;47(3):645–7 (Jpn)

CHEMICALLY INDUCED

The effects of acetaminophen, antipyrine and phenacetin on rat urothelial cell proliferation. Johansson SL, et al. **Carcinogenesis** 1989 Jan;10(1):105–11
The effect of withdrawal of phenacetin-containing analgesics on the incidence of kidney and urothelial cancer and renal failure. McCredie M, et al. **Clin Nephrol** 1989 Jan;31(1):35–9

CLASSIFICATION

TNM classification of urological tumours in 1988 [editorial] Chisholm GD. **Br J Urol** 1988 Dec;62(6):501
Urology and the TNM classification [letter] Hermanek P, et al. **Lancet** 1988 Dec 24-31;2(8626-8627):1495

COMPLICATIONS

Association of renal xanthogranuloma and urological neoplasia. Ballesteros JJ, et al. **Eur Urol** 1988; 15(3-4):306-10 (21 ref.)
Inverted Y-ureteral duplication with an uterine ectopy as cause of ureteric enuresis. Ecke M, et al. **Urol Int** 1989; 44(2):116-8

DIAGNOSIS

Urologic cancer. Murphy GP. **Cancer** 1988 Oct 15;62(8 Suppl):1800-7 (92 ref.)
Clinical assay of serum SCC-Ag in urothelial cancers. Takahashi Y, et al. **Int J Biol Markers** 1988 Jan-Mar; 3(1):15-8
Urinary tract endometriosis. Koszczuk JC, et al. **J Am Osteopath Assoc** 1989 Jan;89(1):83-9
Diagnostic and therapeutic utility of monoclonal antibodies in urologic oncology. McCarley DL, et al. **Semin Surg Oncol** 1989;5(4):293-301 (63 ref.)
Evaluation of polysialic acid in the diagnosis of Wilms' tumor. A comparative study on urinary tract tumors and non-neuroendocrine tumors. Roth J, et al. **Virchows Arch [B]** 1988;56(2):95-102
[Clinical application of MRI for urological malignancy. 1: Usefulness of various imaging modalities for local staging of prostatic cancer; a comparison between MRI, CT and transrectal ultrasonography] Nishimura K, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2083-9 (Eng. Abstr.) (Jpn)
[Clinical application of MRI for urological malignancy. 2: Usefulness of various imaging modalities for local staging of bladder cancer; a comparison between MRI, CT and transurethral ultrasonography] Nishimura K, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2091-6 (Eng. Abstr.) (Jpn)
[Clinical studies on the measurement of urinary tissue polypeptide antigen (TPA) levels using Prolifigen TPA kit "Daiichi"-II in urothelial cancers] Ohmori H, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2101-10 (Eng. Abstr.) (Jpn)
[Clinical importance of microhematuria as an initial sign of urological neoplasms] Hattori R, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1393-8 (Eng. Abstr.) (Jpn)
[Serum levels of IAP, CEA and CA19-9 in patients with urological malignancies] Iizumi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1448-52 (Eng. Abstr.) (Jpn)

DRUG THERAPY

Phase II trial of carboplatin in patients with advanced germ-cell testicular tumors and transitional cell carcinomas of the urinary tract. Akaza H, et al. **Cancer Chemother Pharmacol** 1989;23(3):181-5
In vitro chemosensitivity assay of human urologic malignancies. Chang SY, et al. **Eur Urol** 1989;16(1):51-6
A randomized trial of cisplatin versus cisplatin plus methotrexate in advanced cancer of the urothelial tract. Hillcoat BL, et al. **J Clin Oncol** 1989 Jun;7(6):706-9
Should single agents be standard therapy for urothelial tract tumors? Scher HI. **J Clin Oncol** 1989 Jun;7(6):694-7
[Results of combination chemotherapy in advanced urothelial cancer] Komatsubara S, et al. **Hinyokika Kiyo** 1988 Oct; 34(10):1697-702 (Eng. Abstr.) (Jpn)
[Sequential combination chemotherapy consisting of vincristine, pepiomycin, methotrexate, cis-diamminedichloroplatinum (II) and adriamycin in urothelial cancer] Konami T, et al. **Hinyokika Kiyo** 1989 Feb;35(2):231-7 (Eng. Abstr.) (Jpn)
[Experience with combination chemotherapy consisting of methotrexate, vinblastine, adriamycin and cisplatin (M-VAC) in advanced urothelial cancer] Nishio Y, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1371-5 (Eng. Abstr.) (Jpn)
[Combination chemotherapy with methotrexate (MTX), vincristine (VCR), cisplatinum (CDDP), cyclophosphamide (CPM), adriamycin (ADM), and bleomycin (BLM); MVP-CAB in patients with advanced urothelial tract cancer] Fujii A, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):985-93 (Eng. Abstr.) (Jpn)
[Clinical evaluation of M-VAC chemotherapy (methotrexate, vinblastine, adriamycin and cisplatin) for advanced urothelial cancer] Gohji K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):321-8 (Eng. Abstr.) (Jpn)
[Photodynamic therapy of urologic cancer] Hisazumi H. **Nippon Hinyokika Gakkai Zasshi** 1987 Dec;78(13):2266-7 (0 ref.) (Jpn)
[Combination chemotherapy of advanced urothelial cancer with methotrexate, vinblastine, adriamycin and cisplatin (M-VAC)] Nakagawa S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep;79(9):1510-5 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

An approach to the investigation of cancer in tool and die workers. I. Epidemiologic findings in a suspected cancer cluster among tool and die workers. Garry VF, et al. **Mutat Res** 1989 Mar;225(3):107-13
Relationship between blood groups and tumors of the upper urinary tract. Kvist E, et al. **Scand J Urol Nephrol** 1988; 22(4):289-91
Recurrent unexplained haematuria and risk of urological cancer. A follow-up study. Rasmussen OO, et al. **Scand J Urol Nephrol** 1988;22(4):335-7
[The incidence of multi-organ involvement in urothelial malignancies] Gu FL, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;69(3):147-9, 12 (Eng. Abstr.) (Chi)

ETIOLOGY

Molecular biological concepts in the etiology of testicular and other urologic malignancies. Rukstalis DB, et al. **Semin Urol** 1988 Aug;6(3):161-70 (24 ref.)

IMMUNOLOGY

[Immune parameters of peripheral blood in chemoembolization with microencapsulated anticancer drugs] Sato K, et al. **Gan To Kagaku Ryoho** 1989 Jan; 16(1):73-7 (Eng. Abstr.) (Jpn)

MORTALITY

Urothelial tumours of the upper urinary tract. Kirkali Z, et al. **Br J Urol** 1989 Jul;64(1):18-24
Survival of the upper-urothelial-cancer patients from the Balkan nephropathy endemic and nonendemic areas. Janković S, et al. **Eur Urol** 1988;15(1-2):59-61

PATHOLOGY

Localized neurofibromatosis of the female genitourinary tract. Gersell DJ, et al. **Am J Surg Pathol** 1989 Oct; 13(10):873-8
Predictive value of DNA measurements in bladder washings. Comparison of flow cytometry, image cytophotometry, and cytology in patients with a past history of urothelial tumors. Koss LG, et al. **Cancer** 1989 Aug 15;64(4):916-24
Urology and the TNM classification [letter] Hall RR, et al. **Lancet** 1988 Nov 12;2(8620):1145-6
[False positive urinary cytology. Diagnostic and prognostic value in the detection and surveillance of urothelial tumors. Apropos of 57 false positive cases in a series of 1000 cytologies] Gilloz A, et al. **J Urol (Paris)** 1989;95(3):143-8 (12 ref.) (Eng. Abstr.) (Fre)
[In vitro chemosensitivity test by human tumor colony forming assay] Kanamaru H, et al. **Hinyokika Kiyo** 1988 Nov;34(11):1917-21 (Eng. Abstr.) (Jpn)

PREVENTION & CONTROL

[The experience of the Armenian Republic Endoscopic Center in the active detection of tumors of the urinary system] Mkrtchian LN, et al. **Vopr Onkol** 1989;35(6):709-11 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Transitional cell carcinoma of the upper urinary tract [letter] Zuckier LS, et al. **Radiology** 1989 Jan;170(1 Pt 1):282-3
[Diagnosis of tumors of the upper urinary tract] Matveev BP, et al. **Urol Nefrol (Mosk)** 1988 Sep-Oct;(5):29-34 (Eng. Abstr.) (Rus)

SURGERY

Role of lasers in urology. Campbell EW Jr. **Prog Clin Biol Res** 1988;277:21-5
Autotransfusion and blood conservation in urologic oncology. Klimberg IW. **Semin Surg Oncol** 1989; 5(4):286-92 (45 ref.)
Laser treatment of urologic cancers. Smith JA Jr. **Semin Surg Oncol** 1989;5(1):30-7 (18 ref.)
Technique and complications of reconstruction of the pelvic floor with polyglactin mesh. Sener SF, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):475-80
[Obturator nerve block in transurethral surgery] Rubial Alvarez M, et al. **Actas Urol Esp** 1989 Mar-Apr;13(2):79-81 (16 ref.) (Eng. Abstr.) (Spa)
[Synchronous or metachronous urotheliomas of the bladder and urinary ducts. Clinical and prognostic considerations] Pavone-Macaluso M, et al. **Arch Esp Urol** 1988 Jun; 41(5):331-3 (Eng. Abstr.) (Spa)

THERAPY

Therapeutic progress in urological cancers. Proceedings of an international symposium. Paris, France, June 29-July 1, 1988. **Prog Clin Biol Res** 1989;303:1-913
Future perspectives in systemic therapy. Conclusion of the expert meeting of the University of Würzburg. Burk K, et al. **Prog Clin Biol Res** 1989;303:549-58 (22 ref.)
Biologic response modifiers and urologic malignancies. Fleischmann J. **Surg Clin North Am** 1988 Oct;68(5):1125-45 (62 ref.)
[Perspectives and new contributions in urology: the machines] Graber P. **Helv Chir Acta** 1989 Apr;55(6):741-8 (5 ref.) (Eng. Abstr.) (Fre)
[Interferon therapy in urology] Kriegmair M, et al. **Urologe [A]** 1989 Mar;28(2):116-21 (71 ref.) (Eng. Abstr.) (Ger)

URINE

[Validity of cytologic examination of voided urine in patients with urologic cancer] Fischer S, et al. **Ugeskr Laeger** 1989 May 22;151(21):1320-2 (Eng. Abstr.) (Dan)

UROLOGY

see related
UROLOGIC DISEASES

A unique opportunity to upgrade genitourinary medicine. Adler MW. **BMJ** 1989 May 6;298(6682):1201–2
Presentation of arms to the Urological Society of Australasia. Urquhart–Hay D. **Br J Urol** 1989 Apr;63(4):337–9
Ruminations and resolutions. Dowd JB. **J Urol** 1989 Feb; 141(2):240–2
Pediatric Urology Medal. John K. Lattimer: renaissance man. Ehrlich RM, et al. **J Urol** 1988 Nov;140(5 Pt 2):1165–6
Pediatric Urology Medal. J. Herbert Johnston tribute. Glassberg KI. **J Urol** 1989 Aug;142(2 Pt 2):544–5
Transurethral prostatectomy: practice aspects of the dominant operation in American urology. Holtgrewe HL, et al. **J Urol** 1989 Feb;141(2):248–53
Urology. Litwin MS, et al. **JAMA** 1989 May 19; 261(19):2896–7
Wither urology. Mandell HN. **Postgrad Med** 1989 Jun; 85(8):30–1, 34
The modern urology office. McDonald HP Jr.
Urol Clin North Am 1988 Nov;15(4):687–98 (7 ref.)
The urologic office laboratory. Stribling MD, et al.
Urol Clin North Am 1988 Nov;15(4):635–52
[The gestion of information in medicine. A thesaurus of urology] Lardennois B, et al. **J Urol (Paris)** 1989; 95(3):177–9 (Fre)
[Aspects of roentgen ray burden in endourologic surgery] Andersen C, et al. **Z Urol Nephrol** 1989 Jun;82(6):301–6 (Eng. Abstr.) (Ger)
["Nephropathy of pregnant women": from the viewpoint of the urologist where is the harm in the wide use of this term?] Morozov AV, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):72–4 (Rus)

EDUCATION

[Report on a training trip to the urologic department of the Rudolf Foundation Hospital in Vienna] Kuzaka B.
Wiad Lek 1988 Oct 15;41(20):1405–7 (Pol)

HISTORY

The development and progress of urology in Europe. Magasi P. **Acta Chir Hung** 1989;30(1):3–31
AUA members, branches, and sections: early politics (1902–1919). Zorgniotti AW. **Urology** 1988 Nov; 32(5):478–81
[Urological care in Bulgaria during the Renaissance] Neĭkov K, et al. **Khirurgiia (Sofiia)** 1988;41(4):9–12 (Eng. Abstr.) (Bul)
[The history of urology at the Prague Medical School] Simon V, et al. **Cas Lek Cesk** 1988 Jul 15;127(29):923–6 (Cze)

INSTRUMENTATION

A new low–speed, rotational atherolytic device for ureteral recanalization. Uflacker R, et al. **AJR** 1988 Dec; 151(6):1157–8
Palliation of rectal lesions. Another use of the urologic resectoscope. Pitts WR Jr, et al. **AORN J** 1989 Jul; 50(1):87–9
Urinary tract infection following instrumentation for urodynamic testing. Hamill RJ, et al.
Infect Control Hosp Epidemiol 1989 Jan;10(1):26–32
Bleeding hemangioma detected by enuresis blanket. Mallory SB, et al. **Pediatr Dermatol** 1989 Jun;6(2):139–40
Double–lumen needle for percutaneous ureteral pressure–flow studies. Epstein DH, et al. **Radiology** 1989 Aug;172(2):569–70
[Initial experience with the Urodyn 5000 urodynamics examination system] Blovský J, et al. **Cesk Gynekol** 1989 May;54(4):279–83 (Cze)
[Microcomputer systems in urology: hardware—mole's hole or useful equipment?] Goetz C, et al. **Urologe [A]** 1989 Jan;28(1):1–10 (Eng. Abstr.) (Ger)

METHODS

Qualitative analysis of the four–channel, high–resolution urethral pressure profile of the female dog. De Haas D, et al. **J Urol** 1989 Sep;142(3):855–9
Technical refinements in endoscopic correction of vesicoureteral reflux. O'Donnell B, et al. **J Urol** 1988 Nov; 140(5 Pt 2):1101–2
A new technique for retrograde stone displacement in the tortuous ureter before extracorporeal shock wave lithotripsy. Pryor JL, et al. **J Urol** 1989 Sep;142(3):778–9
Dipstick urinalysis screening of asymptomatic adults for urinary tract disorders. II. Bacteriuria. Pels RJ, et al.
JAMA 1989 Sep 1;262(9):1221–4 (69 ref.)
Dipstick urinalysis screening of asymptomatic adults for urinary tract disorders. I. Hematuria and proteinuria. Woolhandler S, et al. **JAMA** 1989 Sep 1;262(9):1214–9 (58 ref.)

ORGANIZATION & ADMINISTRATION

[Experience in organizing nephrologic and urologic care for the population of Orel Province] Iakovlev PA, et al.
Vrach Delo 1988 Nov;(11):115–6 (Rus)

STANDARDS

Computerization of the urologic office. Billing, record keeping, and education. Andrassy JJ, et al.
Urol Clin North Am 1988 Nov;15(4):705–13 (4 ref.)

STATISTICS & NUMERICAL DATA

[Multivariant statistics in urologic research (II)] Urrutia Aviserror M. **Actas Urol Esp** 1988 May–Jun;12(3):195–201 (Spa)

TRENDS

Subspecialization and general urology. Hinman F Jr.
J Urol 1989 Mar;141(3):482–5
Stone composition is no guide to strength: changing the direction of research? [letter] Ison KT, et al. **J Urol** 1989 Sep;142(3):833–4
Open advertisements and medical care. Shah BN.
Ohio Med 1988 Nov;84(11):859
Urinary calculus: high–tech changes a urology practice. Kramolowsky EV, et al. **Va Med** 1989 Sep;116(9):368–70
[The prospects for Soviet–Bulgarian cooperation in the field of urology] Lopatkin NA, et al. **Khirurgiia (Sofiia)** 1988; 41(6):1–3 (Bul)

UROLOGY DEPARTMENT, HOSPITAL see under **HOSPITAL DEPARTMENTS**

URONIC ACIDS

Structural studies on the amino–acid–linked teichuronic acid of Bacillus subtilis AHU 1219 cell walls. Iwasaki H, et al.
Eur J Biochem 1989 Jan 2;178(3):643–8

ANALYSIS

Ultrastructural study of galacturonic acid distribution in some pathogenic fungi using gold–complexed Aplysia depilans gonad lectin. Benhamou N. **Can J Microbiol** 1989 Mar; 35(3):349–58
A new lectin–gold complex for ultrastructural localization of galacturonic acids. Benhamou N, et al.
J Histochem Cytochem 1988 Nov;36(11):1403–11
Cell surface of Micrococcus luteus: chemical treatment of the cells and teichuronic acids on the surface. Monodane T, et al. **Microbiol Immunol** 1989;33(3):165–74

ISOLATION & PURIFICATION

Determination of iduronic acid and glucuronic acid in glycosaminoglycans after stoichiometric reduction and depolymerization using high–performance liquid chromatography and ultraviolet detection. Karamanos NK, et al. **Anal Biochem** 1988 Aug 1;172(2):410–9
Separation and quantitation of galacturonic acid oligomers from 3 to over 25 residues in length by anion–exchange high–performance liquid chromatography. Maness NO, et al. **Anal Biochem** 1989 May 1;178(2):248–54
Isolation and characterization of the unusual lipopolysaccharide component, 2–amino–2–deoxy–2–N–(27–hydroxyoctacosanoyl)–3–O–(3–hydroxy– tetradecanoyl)–gluco–hexuronic acid, and its de–O–acylation product from the free lipid A of Rhizobium trifolii ANU843. Hollingsworth RI, et al. **J Biol Chem** 1989 Aug 25;264(24):14039–42

METABOLISM

Conformational flexibility: a new concept for explaining binding and biological properties of iduronic acid–containing glycosaminoglycans. Casu B, et al.
Trends Biochem Sci 1988 Jun;13(6):221–5 (29 ref.)

THERAPEUTIC USE

[Hemostatic effect of traumacel P in rats] Hloušková D, et al. **Cas Lek Cesk** 1987 Jun 12;126(24):757–9 (Eng. Abstr.) (Cze)

UROPORPHYRINOGEN DECARBOXYLASE see under **CARBOXY–LYASES**

UROPORPHYRINOGEN III SYNTHASE see under **HYDRO–LYASES**

UROPORPHYRINOGENS see under **PORPHYRINOGENS**

UROPORPHYRINS see under **PORPHYRINS**

UROTENSINS see under **PEPTIDES**

URSODEOXYCHOLIC ACID see under **DEOXYCHOLIC ACID**

URTICARIA

Contact urticaria—a review. Ng SK.
Ann Acad Med Singapore 1988 Oct;17(4):563–8 (33 ref.)
Urticaria: then and now. Champion RH. **Br J Dermatol** 1988 Oct;119(4):427–36 (51 ref.)
Urticarial vasculitis. Berg RE, et al. **Int J Dermatol** 1988 Sep;27(7):468–72 (37 ref.)
Guide to physical urticarias. Casale TB, et al.
J Allergy Clin Immunol 1988 Nov;82(5 Pt 1):758–63 (43 ref.)

BLOOD

Preliminary identification of a low molecular weight serological mediator in chronic idiopathic urticaria. Grattan CE, et al. **Br J Dermatol** 1988 Aug;119(2):179–83
Leukotriene E4 release in cold urticaria. Maltby NH, et al.
Clin Exp Allergy 1989 Jan;19(1):33–6
[Coagulation and anticoagulation systems of the blood in allergic diseases] Kalikshtein DB, et al. **Sov Med** 1988; (9):104–6 (Rus)
[The kallikrein–kinin system in chronic urticaria and Quincke's edema] Grebennikov VA, et al.
Vestn Dermatol Venerol 1988;(6):12–5 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Monosodium glutamate and skin pathology in pediatric allergology. Botey J, et al.
Allergol Immunopathol (Madr) 1988 Nov–Dec;16(6):425–8
Serum neutrophil chemotactic activity (NCA) during aspirin–induced urticaria and angioedema. Grzelewska–Rzymowska I.
Allergol Immunopathol (Madr) 1988 Jul–Aug;16(4):231–6
Basophil histamine release and lymphocyte proliferation tests in latex contact urticaria. In vitro tests in latex contact urticaria. Turjanmaa K, et al. **Allergy** 1989 Apr;44(3):181–6
Contact urticaria from a chemical textile finish. de Groot AC, et al. **Contact Dermatitis** 1989 Jan;20(1):63–4
Hypochlorite sensitivity in man. Hostynek JJ, et al.
Contact Dermatitis 1989 Jan;20(1):32–7
Contact urticaria from levomepromazine. Johansson G.
Contact Dermatitis 1988 Oct;19(4):304
Contact urticaria from Tilia (lime). Picardo M, et al.
Contact Dermatitis 1988 Jul;19(1):72–3
Condoms as a source of latex allergen and cause of contact urticaria. Turjanmaa K, et al. **Contact Dermatitis** 1989 May; 20(5):360–4
Rubber contact urticaria. Allergenic properties of 19 brands of latex gloves. Turjanmaa K, et al. **Contact Dermatitis** 1988 Nov;19(5):362–7
IgE–mediated allergy to natural rubber in 30 patients with contact urticaria. Wrangsjö K, et al. **Contact Dermatitis** 1988 Oct;19(4):264–71
Urticaria, asthma, and anaphylaxis due to sodium sulfite in an antifungal cream complicated by treatment with aminophylline in an ethylenediamine–sensitive person. Part I. Fisher AA. **Cutis** 1989 Jul;44(1):19–20
Contact urticaria from chlorhexidine. Fisher AA. **Cutis** 1989 Jan;43(1):17–8
Procainamide–induced urticarial vasculitis. Knox JP, et al.
Cutis 1988 Nov;42(5):469–72
Chronic urticaria due to dental eugenol. Grade AC, et al.
Dermatologica 1989;178(4):217–20
Cholinergic urticaria, passive transfer experiments from human to monkey. Murphy GM, et al. **Dermatologica** 1988; 177(6):338–40
Mesna–induced urticaria [letter] Pratt CB, et al.
Drug Intell Clin Pharm 1988 Nov;22(11):913–4
Pancytopenia, rash and fever caused by diethylstilbestrol used for prostate cancer. Collins D. **J Rheumatol** 1989 Mar; 16(3):408–9
Persistent urticaria caused by a common coloring agent. Baumgardner DJ. **Postgrad Med** 1989 May 1;85(6):265–6
[Urticaria and angioedema caused by cooking herbs and spices] de Maat–Bleeker F, et al.
Ned Tijdschr Geneeskd 1988 Dec 24;132(52):2351–4 (Eng. Abstr.) (Dut)
[Cutaneous allergic accidents caused by insulin. Current aspects apropos of 2 cases] Plantin P, et al.
Ann Dermatol Venereol 1988;115(8):813–7 (Eng. Abstr.) (Fre)
[Pseudo–crossreactivity between aspirin and tartrazine] Valsecchi R, et al. **G Ital Dermatol Venereol** 1988 Apr; 123(4):177–80 (Eng. Abstr.) (Ita)
[Clinical and experimental studies of the effect of cationic detergent in liquid "K"] Starzycki Z, et al.
Przegl Dermatol 1988 Mar–Apr;75(2):129–35 (Eng. Abstr.) (Pol)
[Allergic problems in relation to antipyretic analgesic treatment in pediatrics] Botey J, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 32:209–12 (Spa)

COMPLICATIONS

On psoriasis and associated diseases [letter] Krasteva M, et al. **Dermatologica** 1988;177(1):21–3
Syndrome of idiopathic chronic urticaria and angioedema with thyroid autoimmunity: a study of 90 patients. Leznoff A, et al. **J Allergy Clin Immunol** 1989 Jul;84(1):66–71
Efficacy and safety of nalmefene in patients with severe pruritis caused by chronic urticaria and atopic dermatitis. Monroe EW. **J Am Acad Dermatol** 1989 Jul;21(1):135–6
Immunofluorescence biopsy for pruritic urticarial papules and plaques of pregnancy [letter] Saurat JH.
J Am Acad Dermatol 1989 Apr;20(4):711
Jaccoud's arthritis and urticarial hypocomplementemic vasculitis [letter] Kahn MF. **J Rheumatol** 1989 Feb; 16(2):252
Jaccoud's arthritis and panvasculitis in the hypocomplementemic urticarial vasculitis syndrome. Sturgess AS, et al. **J Rheumatol** 1988;15(5):858–61

DIAGNOSIS

How should we proceed when confronted with urticaria and angioedema? Stevens E. **Acta Clin Belg** 1988;43(5):388–95

Evaluation of three skin tests in physical urticaria. Zhu TC. **Chin Med J [Engl]** 1988 May;101(5):377–80

Comparison of diagnostic methods in latex surgical glove contact urticaria. Turjanmaa K, et al. **Contact Dermatitis** 1988 Oct;19(4):241–7

Urticarial vasculitis in adults. Berg RE, et al. **Int J Dermatol** 1988 Sep;27(7):504–5

Traumatic plantar urticaria or plantar erythema nodosum [letter] Berger TG, et al. **J Am Acad Dermatol** 1989 Apr; 20(4):701–2

[Differential diagnosis of allergic and pseudoallergic variants of urticaria, Quincke's edema and neurodermatitis in children] Cheburkin AA, et al. **Pediatriia** 1989;(5):39–42 (Rus)

[Urticarial vasculitis] Rodionov AN, et al. **Vestn Dermatol Venerol** 1989;(4):59–63 (Eng. Abstr.) (Rus)

DRUG THERAPY

Acrivastine versus hydroxyzine in the treatment of cholinergic urticaria. A placebo-controlled study. Kobza Black A, et al. **Acta Derm Venereol (Stockh)** 1988; 68(6):541–4

Clinical evaluation of ketotifen for chronic urticaria: multicenter double-blind comparative study with clemastine. Kamide R, et al. **Ann Allergy** 1989 Apr; 62(4):322–5

Comparative study of astemizole and terfenadine in the treatment of chronic idiopathic urticaria. A randomized double-blind study of 40 patients. Paul E, et al. **Ann Allergy** 1989 Apr;62(4):318–20

The natural history and response to therapy of chronic urticaria and angioedema. Quaranta JH, et al. **Ann Allergy** 1989 May;62(5):421–4

Methotrexate in corticosteroid-resistant urticaria [letter] Weiner MJ. **Ann Intern Med** 1989 May 15;110(10):848

Alpha-fluoromethylhistidine in the treatment of idiopathic cold urticaria. Neittaanmäki H, et al. **Arch Dermatol Res** 1989;281(2):99–104

Chronic urticaria with angio-oedema controlled by warfarin. Berth-Jones J, et al. **BMJ** 1988 Nov 26;297(6660):1382–3

Cholinergic pruritus, erythema and urticaria: a disease spectrum responding to danazol. Berth-Jones J, et al. **Br J Dermatol** 1989 Aug;121(2):235–7

Delayed pressure urticaria, objective evaluation of a variable disease using a dermographometer and assessment of treatment using colchicine. Lawlor F, et al. **Br J Dermatol** 1989 Mar;120(3):403–8

Assessment of the duration of action of terfenadine on histamine induced weals. Shall L, et al. **Br J Dermatol** 1988 Oct;119(4):525–31

Treatment of chronic idiopathic urticaria with astemizole. Huerter CJ, et al. **Cleve Clin J Med** 1989 May;56(3):263–6

Combination of localized heat urticaria and cold urticaria. Release of histamine in suction blisters and successful treatment of heat urticaria with doxepin. Neittaanmäki H, et al. **Clin Exp Dermatol** 1988 Mar;13(2):87–91

Terfenadine in the treatment of chronic idiopathic urticaria and atopic dermatitis. Hjorth N. **Cutis** 1988 Oct 27; 42(4A):29–30

Antihistamines in the treatment of urticarial disorders. Shuster S. **Cutis** 1988 Oct 27;42(4A):26–8

Calcium antagonist in the treatment of symptomatic dermographism. Low-dose and high-dose studies with nifedipine. Lawlor F, et al. **Dermatologica** 1988; 177(5):287–91

Comparison of the new antihistamine acrivastine (BW 825C) versus cyproheptadine in the treatment of idiopathic cold urticaria. Neittaanmäki H, et al. **Dermatologica** 1988; 177(2):98–103

Histamine2 (H2)-receptor antagonists in the treatment of urticaria. Theoharides TC. **Drugs** 1989 Mar;37(3):345–55 (103 ref.)

Attenuation of cutaneous reactivity to histamine by cetirizine and dexchlorpheniramine. Müller FO, et al. **Eur J Clin Pharmacol** 1988;35(3):319–21

Effect of terfenadine and ranitidine on histamine and suxamethonium wheals. Paul E, et al. **Eur J Clin Pharmacol** 1988;34(6):591–4

Therapy of chronic idiopathic urticaria with nifedipine: demonstration of beneficial effect in a double-blinded, placebo-controlled, crossover trial. Bressler RB, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):756–63

Refractory cholinergic urticaria successfully treated with ketotifen. McClean SP, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):738–41

Terfenadine inhibits itch and wheal, but not abnormal erythema, in physical urticarias [letter] Cox NH, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):586–7

Chronic urticaria: review of nonsedating H1 antihistamines in treatment. Monroe EW. **J Am Acad Dermatol** 1988 Nov; 19(5 Pt 1):842–9 (22 ref.)

Acrivastine versus terfenadine in the treatment of symptomatic dermographism—a double-blind, placebo-controlled study. Boyle J, et al. **J Int Med Res** 1989;17 Suppl 2:9B–13B

A comparison of acrivastine versus chlorpheniramine in the treatment of chronic idiopathic urticaria. Gale AE, et al. **J Int Med Res** 1989;17 Suppl 2:25B–27B

A comparison of acrivastine versus clemastine and placebo in the treatment of patients with chronic idiopathic urticaria. Leyh F, et al. **J Int Med Res** 1989;17 Suppl 2:22B–24B

Acrivastine—an evaluation of initial and peak activity in human skin. Marks P, et al. **J Int Med Res** 1989;17 Suppl 2:3B–8B

A comparison of acrivastine versus hydroxyzine and placebo in the treatment of chronic idiopathic urticaria. Salo OP, et al. **J Int Med Res** 1989;17 Suppl 2:18B–21B

A comparison of acrivastine versus terfenadine and placebo in the treatment of chronic idiopathic urticaria. van Joost T, et al. **J Int Med Res** 1989;17 Suppl 2:14B–17B

Comparison of the efficacy of four antihistamines in chronic urticaria. Youngchaiyud U. **J Med Assoc Thai** 1988 Oct; 71(10):548–52

Astemizole—another non-sedating antihistamine. **Med Lett Drugs Ther** 1989 May 5;31(791):43–4

[Bibliographic review of antihistaminics H2 in the treatment of chronic (or recurrent) idiopathic urticaria] Gay G, et al. **Allerg Immunol (Paris)** 1988 Dec;20(10):377–8 (6 ref.) (Eng. Abstr.) (Fre)

[Treatment of solar urticaria: advantage of terfenadine] Jeanmougin M, et al. **Allerg Immunol (Paris)** 1989 May; 21(5):205–7 (Eng. Abstr.) (Fre)

[Therapy of acute and chronic urticaria and of Quincke's edema] Wüthrich B. **Schweiz Rundsch Med Prax** 1989 May 16;78(20):576–81 (Eng. Abstr.) (Ger)

[Experimental studies with external and internal administration of antihistaminics in insect venom allergies] Forck G. **Z Hautkr** 1988;63 Suppl 4:35–41 (Ger)

[Usefulness of propranolol in the treatment of cholinergic urticaria] Pachor ML, et al. **Clin Ter** 1987 Feb 15; 120(3):205–10 (Eng. Abstr.) (Ita)

[Treatment of chronic urticaria of unknown origin with a combination of H1 and H2 antihistaminics] Novikov DK, et al. **Klin Med (Mosk)** 1989 Apr;67(4):101–3 (Rus)

[Treatment of patients with food allergy using Nalcrom] Nogaller AM, et al. **Ter Arkh** 1989;61(2):115–8 (Eng. Abstr.) (Rus)

ETIOLOGY

Contribution to the etiopathogenesis of urticaria in children. Moreno MV, et al. **Allergol Immunopathol (Madr)** 1988 Jul–Aug;16(4):225–30

Cold-induced cholinergic urticaria—case report. Geller M. **Ann Allergy** 1989 Jul;63(1):29–30

Occupational asthma and contact urticaria caused by buckwheat flour. Valdivieso R, et al. **Ann Allergy** 1989 Aug;63(2):149–52

Fever and urticaria in acute giardiasis. Clyne CA, et al. **Arch Intern Med** 1989 Apr;149(4):939–40

Localized heat urticaria (heat contact urticaria). Freeman PA, et al. **Australas J Dermatol** 1988 Apr;29(1):43–6 (39 ref.)

Contact urticaria caused by stinging nettles [letter] Kulze A, et al. **Br J Dermatol** 1988 Aug;119(2):269–70

Clinical observations on delayed pressure urticaria. Warin RP. **Br J Dermatol** 1989 Aug;121(2):225–8

IgE-mediated allergic reactions to fruit gums and investigation of cross-reactivity between gelatine and modified gelatine-containing products. Wahl R, et al. **Clin Exp Allergy** 1989 Jan;19(1):77–80

Delayed pressure urticaria inhibition of induced lesions by adrenaline. Aubin F, et al. **Clin Exp Dermatol** 1988 Nov; 13(6):397–401

Broadening of action spectrum in a patient with solar urticaria. Murphy GM, et al. **Clin Exp Dermatol** 1987 Nov; 12(6):455–6

Papular urticaria and transfer of allergy following bone marrow transplantation. Smith SR, et al. **Clin Exp Dermatol** 1988 Jul;13(4):260–2

Contact urticaria and anaphylactoid reaction from cornstarch surgical glove powder. Assalve D, et al. **Contact Dermatitis** 1988 Jul;19(1):61

Contact urticaria from dog saliva. Valsecchi R, et al. **Contact Dermatitis** 1989 Jan;20(1):62

Allergic contact urticaria of the hands due to seafood in food handlers. Fisher AA. **Cutis** 1988 Nov;42(5):388–9

A most memorable case. Fisher DA. **Cutis** 1989 Feb;43(2):132

Urticarial papular and plaque eruptions. A noneczematous manifestation of allergic contact dermatitis. Goh CL. **Int J Dermatol** 1989 Apr;28(3):172–6

Thrips stings in Israel: a case report. Mumcuoglu KY, et al. **Isr J Med Sci** 1988 Dec;24(12):715

Progesterone-responsive urticaria and eosinophilia. Mittman RJ, et al. **J Allergy Clin Immunol** 1989 Sep;84(3):304–10

Vibratory urticaria associated with bladder-wall infection with the yeast Torulopsis glabrata [letter] Rose MH. **J Allergy Clin Immunol** 1989 Sep;84(3):408

Pathogenesis and classification of solar urticaria: a new concept. Leenutaphong V, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):237–40 (21 ref.)

Urticarial dermatosis associated with Waldenström's macroglobulinemia [letter] Pujol RM, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):855–7

Delayed shear-induced dermatographism and delayed pressure-induced dermatographism are distinct entities [letter] Shuster S. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):588–9

Occurrence of urticaria as a manifestation of Falciparum malaria. Singh RP, et al. **J Assoc Physicians India** 1988 Apr;36(4):261–2

Cold urticaria and employment. Shaw D. **J Soc Occup Med** 1988 Autumn;38(3):89

Solar urticaria induced by visible light and inhibited by UVA. Leenutaphong V, et al. **Photodermatol** 1988 Aug;5(4):170–4

Solar urticaria: demonstration of histamine release and effective treatment with doxepin. Neittaanmäki H, et al. **Photodermatol** 1989 Feb;6(1):52–5

Systemic manifestations of erucism: a case report. Finkelstein Y, et al. **Vet Hum Toxicol** 1988 Dec;30(6):573–4

[Urticaria caused by streptococcal tonsillitis. A differential diagnosis of type I penicillin allergy] Sørensen HT, et al. **Ugeskr Laeger** 1988 Nov 21;150(47):2913–4 (Eng. Abstr.) (Dan)

[Urticaria and angioedema caused by the use of kitchen herbs and spices (letter)] Van Toorenenbergen AW. **Ned Tijdschr Geneeskd** 1989 Mar 25;133(12):634–5 (Dut)

[The oak processionary caterpillar (Thaumetopoea processiona L.) and man: urticating apparatus and mechanism of action] Lamy M, et al. **Ann Dermatol Venereol** 1988;115(10):1023–32 (Eng. Abstr.) (Fre)

[Waldenström's disease with diffuse large immunoblastic cell lymphoma and chronic urticaria (letter)] Carlioz R, et al. **Ann Med Interne (Paris)** 1989;140(1):51–2 (5 ref.) (Fre)

[Acute recurrent urticaria in Wissler-Fanconi syndrome in adult. Apropos of a case (letter)] Guerra F, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):719–20 (Fre)

[The elimination of dental and sinusal infectious foci in dermatologic pathology. A double-blind study in 27 cases confined to chronic urticaria] Goga D, et al. **Rev Stomatol Chir Maxillofac** 1988;89(5):273–5 (Eng. Abstr.) (Fre)

[Urticaria and auto-immune thyroiditis] Belkahia M, et al. **Tunis Med** 1988 Aug–Sep;66(8–9):619–22 (10 ref.) (Eng. Abstr.) (Fre)

[Urticaria, pruritus (clinical conference)] Juergens UR, et al. **Schweiz Rundsch Med Prax** 1989 Apr 4;78(14):403–5 (Eng. Abstr.) (Ger)

[Urticaria: allergic—not allergic] Schröpl F. **Wien Med Wochenschr** 1989 Apr 15;139(6–7):145–9 (18 ref.) (Eng. Abstr.) (Ger)

[Chronic urticaria—still a vexing problem? Progress in diagnosis and therapy] Paul E. **Z Hautkr** 1988;63 Suppl 4:42–6 (13 ref.) (Eng. Abstr.) (Ger)

[Diagnosis of chronic urticaria. Critical analysis of test results based on catamnestic studies] Paul E, et al. **Z Hautkr** 1988 Nov 15;63(11):917–20, 925 (Eng. Abstr.) (Ger)

[Chronic urticaria associated with giardiasis (letter)] Garrido Martín JA, et al. **Med Clin (Barc)** 1988 May 28;91(1):38 (Spa)

[Frequency of urticaria and angioedema induced by food additives] Montaño García ML, et al. **Rev Alerg Mex** 1989 Jan–Feb;36(1):15–8 (Eng. Abstr.) (Spa)

HISTORY

The history of urticaria. Czarnetzki BM. **Int J Dermatol** 1989 Jan–Feb;28(1):52–7

IMMUNOLOGY

Current concepts of urticaria and angioedema. Sheffer AL, et al. **Allergy Proc** 1989 May–Jun;10(3):237–41 (26 ref.)

Urticaria/arthritis syndrome: report of four B51 positive patients. Pasero G, et al. **Ann Rheum Dis** 1989 Jun; 48(6):508–11

Serum IgG antibodies to C1q in hypocomplementemic urticarial vasculitis syndrome. Wisnieski JJ, et al. **Arthritis Rheum** 1989 Sep;32(9):1119–27

Attempted passive transfer of a serum factor in chronic urticaria from human to monkey [letter] Grattan CE, et al. **Br J Dermatol** 1989 Jun;120(6):853–6

Frequency and isotype distribution of serum antibodies reactive with dietary proteins in adults with chronic urticaria. Lewis-Jones MS, et al. **Clin Exp Dermatol** 1987 Nov;12(6):419–23

IgG4 and IgE antibodies in atopic dermatitis and urticaria. Shehade SA, et al. **Clin Exp Dermatol** 1988 Nov;13(6):393–6

Characterization of C1q found in a patient with hypocomplementemic vasculitis-urticaria syndrome. Sasaki T, et al. **Microbiol Immunol** 1989;33(5):413–22

[Immune status in allergic and pseudoallergic urticaria] Vyshnepol'skiĭ Iula, et al. **Sov Med** 1988;(11):12–5 (Eng. Abstr.) (Rus)

[Allergic mechanisms of skin damage in chronic urticaria and Quincke's edema] Grebennikov VA, et al. **Vestn Dermatol Venerol** 1988;(9):18–21 (Eng. Abstr.) (Rus)

[Disordered interferon status in patients with urticaria and angioneurotic edema against a background of frequent ARVI: its correction with reaferon] Belostotskaia OI, et al. **Vopr Virusol** 1989 Mar–Apr;34(2):176–80 (Eng. Abstr.) (Rus)

METABOLISM

Mediators of heat urticaria [letter] Archer CB. **Clin Exp Dermatol** 1988 Nov;13(6):418

Immunohistochemical demonstration of migration inhibitory factor in different types of urticaria. Czarnetzki BM, et al. **J Invest Dermatol** 1989 Oct;93(4):471–4

[Vitamin B6 metabolism in children with allergic dermatoses] Chistiakov GM, et al. **Pediatriia** 1989;(5):43–5 **(Rus)**

PATHOLOGY

Hydrophobic probe's fluorescence intensity.
3–methoxybenzanthrone (3–MBA) in bronchial asthma and urticaria patients lymphocyte membranes. Pytsky VI, et al. **Allergol Immunopathol (Madr)** 1988 Jul–Aug; 16(4):237–42

Geometrical considerations in the statistical analysis of histamine induced weal studies. Newcombe RG, et al. **Br J Dermatol** 1988 Oct;119(4):533–4

A sequential histopathological study of dermographism. English JS, et al. **Clin Exp Dermatol** 1988 Sep;13(5):314–7

Light microscopic and electron microscopic (EM) examination of contact urticaria. Daróczy J, et al. **Contact Dermatitis** 1988 Aug;19(2):156–8

Chronic urticaria and macroglobulinemia (Schnitzler's syndrome): report of two cases. Janier M, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):206–11 (21 ref.)

Evidence for eosinophil degranulation with deposition of granule major basic protein in solar urticaria. Leiferman KM, et al. **J Am Acad Dermatol** 1989 Jul;21(1):75–80

[Urticaria, abdominal pain, arthritis, pseudotumor cerebri and nephrotic syndrome in a 20–year–old patient] Piper C, et al. **Internist (Berlin)** 1988 Dec;29(12):824–7 **(Ger)**

PHYSIOPATHOLOGY

Decreased releasability of basophils from patients with cold urticaria after cold exposure. Hessler HJ, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):236–41

Analysis of compound 48/80–induced skin histamine release and leukotriene production in chronic urticaria. Brunet C, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):398–402

Prostaglandin D2 and histamine release in cold urticaria unaccompanied by evidence of platelet activation. Ormerod AD, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):586–9

[Muckle–Wells syndrome. Apropos of a case (letter)] Milán JA, et al. **Med Clin (Barc)** 1989 Feb 18;92(6):239 **(Spa)**

PSYCHOLOGY

Our earthquake [editorial] McCarthy JT. **Cutis** 1989 Apr; 43(4):310

Earthquake urticaria. Stewart JH, et al. **Cutis** 1989 Apr; 43(4):340

SURGERY

A premenstrual urticarial eruption treated with bilateral oophorectomy and hysterectomy. Mayou SC, et al. **Clin Exp Dermatol** 1988 Mar;13(2):114–6

THERAPY

Aspirin "desensitization" in patients with aspirin–induced urticaria and angioedema. Grzelewska–Rzymowska I, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct;16(5):305–8

Urticaria successfully treated by desensitization with grass pollen extract. August PJ, et al. **Br J Dermatol** 1989 Mar; 120(3):409–10

[Urticaria in general practice] Sørensen HT, et al. **Nord Med** 1989;104(1):21–2 (Eng. Abstr.) **(Dan)**

VETERINARY

Dermatographism in a horse. Cornick JL, et al. **Cornell Vet** 1989 Jan;79(1):109–16

URTICARIA, GIANT see **ANGIONEUROTIC EDEMA**

URTICARIA PIGMENTOSA

COMPLICATIONS

Urticaria pigmentosa in a child with Prader–Labhart–Willi syndrome. Fowler JF Jr, et al. **J Am Acad Dermatol** 1989 Jul;21(1):147–8

Shock in an infant with bullous mastocytosis. Poterack CD, et al. **Pediatr Dermatol** 1989 Jun;6(2):122–5

[Mastocytosis associated with von Willebrand's disease (letter)] Margalef N, et al. **Rev Clin Esp** 1989 Apr; 184(6):339–40 **(Spa)**

DIAGNOSIS

Fever, hemorrhagic bullae and gastritis in a 20–month–old male [clinical conference] Frieri M, et al. **Ann Allergy** 1989 Sep;63(3):179–83

[Nodular urticaria pigmentosa, clinically bullous] Hernández Rastrollo R, et al. **An Esp Pediatr** 1989 Mar;30(3):239–41 **(Spa)**

PATHOLOGY

Hematopathology of the bone marrow in pediatric cutaneous mastocytosis. A study of 17 patients. Kettelhut BV, et al. **Am J Clin Pathol** 1989 May;91(5):558–62

Peroxidase activity in mast cell granules in urticaria pigmentosa. Akiyama M, et al. **Dermatologica** 1989; 178(3):145–50

[Systemic mastocytosis] Duschet P, et al. **Z Hautkr** 1988 Nov 15;63(11):945–8 (Eng. Abstr.) **(Ger)**

[Ultrastructural findings in tissue mast cells in urticaria pigmentosa] Schmidt U, et al. **Z Hautkr** 1988 Aug 15; 63(8):651–7 (Eng. Abstr.) **(Ger)**

[Systemic mastocytosis with typical skin involvement] Potekaev NS, et al. **Vestn Dermatol Venerol** 1988;(5):49–52 **(Rus)**

[Urticaria pigmentosa] Oliván Gonzalvo G, et al. **An Esp Pediatr** 1988 Jun;28(6):561–4 (Eng. Abstr.) **(Spa)**

[Urticaria pigmentosa and systemic mastocytosis] Roupe G. **Lakartidningen** 1989 Apr 12;86(15):1370–2 **(Swe)**

PHYSIOPATHOLOGY

Mechanisms for hyperpigmentation in postinflammatory pigmentation, urticaria pigmentosa and sunburn. Tomita Y, et al. **Dermatologica** 1989;179 Suppl 1:49–53

USER–COMPUTER INTERFACE see under **SOFTWARE**

USNIC ACID see under **BENZOFURANS**

USTILAGINALES see under **BASIDIOMYCETES**

USTILAGO see under **BASIDIOMYCETES**

UTERINE CONTRACTION

see related
CARDIOTOCOGRAPHY
LABOR, PREMATURE
TOCOLYTIC AGENTS

Variation of myometrial activities and steroid sexual hormones following bilateral ovariectomy in the rat at midpregnancy. Clabaut M, et al. **Acta Physiol Hung** 1988; 71(4):477–83

Longitudinally and circularly measured EMG activity in the human uterine cervix during labour. Pajntar M, et al. **Acta Physiol Hung** 1988;71(4):497–502

Power spectrum analysis of myometrial electromyogram and intrauterine pressure changes in the pregnant rhesus monkey in late gestation. Hsu HW, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):467–73

A functional and structural study of the innervation of the human uterus. Morizaki N, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):218–28

Randomized trial of home uterine activity monitoring [letter] Newman RB. **Am J Obstet Gynecol** 1988 Nov; 159(5):1308–9

A comparison of perinatal outcome in patients undergoing contraction stress testing performed by nipple stimulation versus spontaneously occurring contractions. Owen J, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1081–5

Uncoupling of excitation from contraction in uterine smooth muscle in near–term ewes. Reid DL, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):229–33

Pressure–velocity analysis of uterine muscle during spontaneous dysmenorrheic contractions in vivo. Smith RP. **Am J Obstet Gynecol** 1989 Jun;160(6):1400–3; discussion 1403–5

Cervical change and uterine activity as predictors of preterm delivery. Catalano PM, et al. **Am J Perinatol** 1989 Apr; 6(2):185–90

Influence of premature rupture of membranes on induction of labor and plasma 13,14–dihydro–15–keto–prostaglandin F2 alpha and oxytocin levels in patients with unripe cervix. Fuchs AR, et al. **Am J Perinatol** 1989 Apr;6(2):176–80

Indications for tocolytic therapy: incidence of true preterm labor with uterine contractions as the sole deciding factor. Ljungstrom B, et al. **Am J Perinatol** 1989 Apr;6(2):218–21

Circadian uterine activity in the pregnant rhesus macaque: do prostaglandins play a role? Ducsay CA, et al. **Biol Reprod** 1989 May;40(5):988–93

Human abdominal EHG processing for uterine contraction monitoring. Marque C, et al. **Biotechnology** 1989; 11:187–226 (92 ref.)

Effect of uterine contractions in a pregnant woman with mitral valve stenosis [letter] Buxton EJ, et al. **BMJ** 1989 Mar 4;298(6673):600–1

Effect of uterine contractions on left atrial pressure in a pregnant woman with mitral stenosis. Jakobi P, et al. **BMJ** 1989 Jan 7;298(6665):27

Uterine activity during spontaneous labour after previous lower–segment caesarean section. Arulkumaran S, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):933–8

Uterine activity in cows during the oestrous cycle, after ovariectomy and following exogenous oestradiol and progesterone. al–Eknah MM, et al. **Br Vet J** 1989 Jul–Aug; 145(4):328–36

Coupling of uterine contractions during labor: a pilot study. Cronjé HS, et al. **Int J Gynaecol Obstet** 1988 Aug; 27(1):69–72

Cost effectiveness of ambulatory uterine activity monitoring. Morrison JC, et al. **Int J Gynaecol Obstet** 1989 Feb; 28(2):127–32

Fetal oxygen uptake during uterine contractures. Llanos AJ, et al. **J Dev Physiol** 1988 Dec;10(6):525–9

Interpretation of the fetal ECG during labor: the effect of uterine contractions. Thaler I, et al. **J Perinat Med** 1988; 16(4):373–9

Fetal heart rate monitoring casebook. Antepartum testing: its role in the diagnosis of premature labor. Gimovsky ML, et al. **J Perinatol** 1987 Fall;7(4):382–5

A program of uterine activity monitoring and its effect on neonatal morbidity. Morrison JC, et al. **J Perinatol** 1988 Summer;8(3):228–31

Contraction stress test after hyperstimulation patterns during antepartum fetal heart rate monitoring. Elliott JP, et al. **J Reprod Med** 1988 Sep;33(9):761–4

A preliminary study on the effect of induced hypocalcaemia and nifedipine on uterine activity in the parturient cow. Al–Eknah MM, et al. **J Vet Pharmacol Ther** 1989 Jun; 12(2):237–9

Diagnostic and therapeutic technology assessment. Home monitoring of uterine activity. **JAMA** 1989 May 26; 261(20):3027–9

Postpartum changes in the mechanical responses of the circular muscle of rat uterus. Osa T, et al. **Jpn J Physiol** 1988;38(3):329–44

Automatic unit for monitoring and diagnosis with the contraction stress test. Hernández Sande C, et al. **Med Biol Eng Comput** 1988 Jul;26(4):410–5

Changes in the pattern of uterine contractility in relationship to coitus during pregnancies at low and high risk for preterm labor. Brustman LE, et al. **Obstet Gynecol** 1989 Feb;73(2):166–8

Patterns of uterine contractions and prolonged uterine activity using three methods of breast stimulation for contraction stress tests. Curtis P, et al. **Obstet Gynecol** 1989 Apr;73(4):631–8

Intermittent weekly contraction monitoring to predict preterm labor in low–risk women: a blinded study. Main DM, et al. **Obstet Gynecol** 1988 Nov;72(5):757–61

The influence of fetal number on antepartum uterine activity. Newman RB, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):695–9

Control of myometrial contractility: role and regulation of gap junctions. Garfield RE, et al. **Oxf Rev Reprod Biol** 1988;10:436–90 (258 ref.)

[The analgesic mechanism of BL–32 acupoint in electro–acupuncture anesthesia of uterine operations] Gao WJ, et al. **Chen Tzu Yen Chiu** 1988;13(4):340–4 (Eng. Abstr.) **(Chi)**

[Magnesium and the threat of premature labor] Le Bouëdec G, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(1):53–60 (44 ref.) (Eng. Abstr.) **(Fre)**

[Ambulatory monitoring and telephone transmission of uterine activity. Preliminary study on the evaluation of the TOKOS system] Pons JC, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(8):1031–6 (Eng. Abstr.) **(Fre)**

[Practical aspects of signal processing in perinatal medicine] Thoulon JM. **Rev Fr Gynecol Obstet** 1989 Mar 10; 84(3):158–61 **(Fre)**

[Electrophysiologic studies of uterine motility during estrus in young female swine after ovulation synchronization] Brüssow KP, et al. **Arch Exp Veterinarmed** 1988 Nov; 42(6):933–43 (Eng. Abstr.) **(Ger)**

[Oxytocin stress test by breast stimulation] Schröcksnadel H, et al. **Gynekol Rundsch** 1988;28 Suppl 2:157–8 **(Ger)**

[Pregnancy and labor in the mare: uterine activity and endocrinology] Haluska GJ. **Tierarztl Prax** 1989;Suppl 4:56–62 (Eng. Abstr.) **(Ger)**

[Involution–induced changes in arterial uterine blood flow] Sohn C, et al. **Z Geburtshilfe Perinatol** 1988 Sep–Oct; 192(5):203–9 (Eng. Abstr.) **(Ger)**

[Nipple stimulation contraction stress test and oxytocin challenge test in evaluating fetal well being in high risk pregnancy] Ihara Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):101–4 **(Jpn)**

[Fetal monitoring with a combination transducer for FHR and uterine contraction—production of the transducer] Maeda K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):91–2 **(Jpn)**

[Studies of physical stress of parturients in the attempt to minimize intrapartum fetal risk. III. Comparative evaluation of exertion tolerance and the degree of stress in physiological labor] Brodziński W. **Ginekol Pol** 1988 Jan; 59(1):24–8 (Eng. Abstr.) **(Pol)**

[Preparation of pregnant women for labor with relaxin] Abramchenko VV. **Akush Ginekol (Mosk)** 1988 Dec; (12):3–4 (23 ref.) **(Rus)**

[Biochemical indicators of the regulation of uterine contractility in twin pregnancy] Burlev VA, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):53–7 (Eng. Abstr.) **(Rus)**

[Interrelations of central and organ hemodynamics in pregnant women the day before normal labor and labor complicated by incoordination of uterine contraction] Gazazian MG. **Akush Ginekol (Mosk)** 1989 Jun;(6):67–8 **(Rus)**

[Prevention of hemorrhage caused by disorders of uterine contractility] Levashova II, et al. **Akush Ginekol (Mosk)** 1988 Dec;(12):49–51 **(Rus)**

[Receptor binding of H3–dexamethasone in the myometrium during pregnancy and labor] Rakitskaia VV, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):63–5 **(Rus)**

[Non–pharmacological methods of prevention and treatment of anomalies of the contractile activity of the uterus] Serov VN, et al. **Akush Ginekol (Mosk)** 1988 Dec;(12):4–6 (31 ref.) **(Rus)**

[The DU–1 dynamo–uterograph] Chikhetov VV, et al. **Med Tekh** 1989 Jan–Feb;(1):54 **(Rus)**

[The role of catecholamines in the development of obstetrical pathology] Abramchenko VV. **Sov Med** 1988;(5):43–6 (33 ref.) **(Rus)**

[Changes in the level of the mediators of inflammation and

of the contractile activity of the uterine tubes in infertile patients being treated with a native mud solution] Perfil'eva IF, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec;(6):36–40 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Effect of alpha–adrenergic blocking agents on uterine activity in the ewe at the end of gestation. Prud'Homme MJ. **Acta Physiol Hung** 1988;71(4):485–9

Uterine motor responses to an alpha 2–adrenergic agonist medetomidine hydrochloride in the bitches during the end of gestation and the post–partum period. Jedrusch J, et al. **Acta Vet Scand Suppl** 1989;85:129–34

Effect of hydrogen peroxide on prostaglandin production and contractions of the pregnant rat uterus. Cherouny PH, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1390–4

Effect of a 48–hour intravenous delta 4–androstenedione infusion on the pregnant rhesus monkey in the last third of gestation: changes in maternal plasma estradiol concentrations and myometrial contractility. Figueroa JP, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):481–6

Increased myometrial responsiveness to oxytocin during term and preterm labor. Garfield RE, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):454–61

The effect of continuous or pulsatile administration of oxytocin to ewes at 126 to 136 days' gestation on myometrial activity and fetal oxygenation. Pimentel G, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):242–7

Dexamethasone effects on ritodrine–induced changes in myometrial contractility and beta–adrenergic receptor function. Ward SM, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1461–6

Oxytocin receptor blockade: a new principle in the treatment of preterm labor? Andersen LF, et al. **Am J Perinatol** 1989 Apr;6(2):196–9

Profile of an oxytocin antagonist, RWJ 22164 for treatment of preterm labor in laboratory models of uterine contractility. Demarest KT, et al. **Am J Perinatol** 1989 Apr; 6(2):200–4

Low–dose ethanol for inhibition of preterm uterine activity. Schröck A, et al. **Am J Perinatol** 1989 Apr;6(2):191–5

Intravenous nitroglycerin for uterine relaxation in the postpartum patient with retained placenta [letter] Peng AT, et al. **Anesthesiology** 1989 Jul;71(1):172–3

Structure of a porcine relaxin inactive on the mouse pubic ligament. Frieden EH, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):334–42

Calcium and calmodulin antagonism for inhibition of uterine contractions. Lechner W, et al. **Arch Gynecol Obstet** 1989; 244(3):137–9

Effect of nicardipine on the isolated uterus and other smooth muscles of the rat. Milovanović SR, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:291–304

Inhibition of uterine contractions by rolipram in vitro. Loge O. **Arzneimittelforschung** 1988 Dec;38(12):1808–10

Endothelin induces two types of contractions of rat uterus: phasic contractions by way of voltage–dependent calcium channels and developing contractions through a second type of calcium channels. Kozuka M, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):317–23

TPA– and agonist–induced force development in myometrium from pregnant and non–pregnant rats. Missiaen L, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):302–6

Correlation between selective inhibition of the cyclic nucleotide phosphodiesterases and the contractile activity in human pregnant myometrium near term. Leroy MJ, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):9–15

Effects of external calcium, magnesium, and temperature on spontaneous contractions of pregnant human myometrium. Kawarabayashi T, et al. **Biol Reprod** 1989 May;40(5):942–8

The effects of prostanoids on estrogen–dominated rat myometrial longitudinal muscle in vitro. Wainman BC, et al. **Biol Reprod** 1988 Sep;39(2):221–8

Uterine blood flow and myometrial activity at menstruation, and the action of vasopressin and a synthetic antagonist. Haukkson A, et al. **Br J Obstet Gynaecol** 1988 Sep; 95(9):898–904

Are leukotrienes involved in human uterine contractility? López Bernal A, et al. **Br J Obstet Gynaecol** 1989 May; 96(5):568–73

Studies on the effects of nitrendipine on oxytocin–, angiotensin II– and ergometrine–induced contraction of pregnant human myometrium in vitro. Odum CU, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):765–70

The competitive antagonistic effect of compounds from Mandevilla velutina on kinin–induced contractions of rat uterus and guinea–pig ileum in vitro. Calixto JB, et al. **Br J Pharmacol** 1988 Aug;94(4):1133–42

Nifedipine kinetics in the rat and relationship between its serum concentrations and uterine and cardiovascular effects. Downing SJ, et al. **Br J Pharmacol** 1988 Sep; 95(1):23–32

Characterization of the muscarinic receptor subtype mediating contractions of the guinea–pig uterus. Eglen RM, et al. **Br J Pharmacol** 1989 Mar;96(3):497–9

Effect of an oral contraceptive in primary dysmenorrhea—changes in uterine activity and reactivity to agonists. Ekström P, et al. **Contraception** 1989 Jul; 40(1):39–47

The effect of estrogen, progesterone and prostaglandin F2 alpha on uterine contractions in seasonally anovulatory mares. Cross DT, et al. **Domest Anim Endocrinol** 1987 Oct; 4(4):271–8

Antagonism of contractants and relaxants at the level of intracellular calcium and phosphoinositide turnover in the rat uterus. Anwer K, et al. **Endocrinology** 1989 Jun; 124(6):2995–3002

Variation in myometrial response to intravenous oxytocin administration at different times of the day in the pregnant rhesus monkey. Honnebier MB, et al. **Endocrinology** 1989 Sep;125(3):1498–503

Pharmacological characterization of mare uterus motility with special reference to calcium antagonists and beta–2–adrenergic stimulants. Coruzzi G, et al. **Gen Pharmacol** 1989;20(4):513–8

Effect of neonatal monosodium–L–glutamate treatment on the response of isolated uterine preparation to various uterine contraction stimulators. Wong CC, et al. **Gen Pharmacol** 1988;19(5):673–7

Effects of histamine and serotonin on the contractility of isolated pregnant and nonpregnant human myometrium. Cruz MA, et al. **Gynecol Obstet Invest** 1989;28(1):1–4

Effects of D2343, a new beta–mimetic drug, and terbutaline on spontaneous term labor. Ingemarsson I, et al. **Gynecol Obstet Invest** 1988;26(2):130–5

Effect of oral prostaglandin E2 on uterine contractility and outcome of treatment in women receiving RU 486 (mifepristone) for termination of early pregnancy. Swahn ML, et al. **Hum Reprod** 1989 Jan;4(1):21–8

The influence of oestrogen and progesterone on the actions of two calcium entry blockers in the rat uterus. Downing SJ, et al. **J Endocrinol** 1988 Aug;118(2):251–8

Pharmacological activity of the essential oil of Bupleurum gibraltaricum: anti–inflammatory activity and effects on isolated rat uteri. Ocete MA, et al. **J Ethnopharmacol** 1989 May;25(3):305–13

The zoapatle. XV. Activity of 16 alpha–hydroxy–ent–kauran–19–oic acid isolated from Montanoa hibiscifolia, and its methyl ester on rat and guinea pig uterus. Ponce–Monter H, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):127–34

Uterine inhibitory effect of reticuline. Martin ML, et al. **J Pharm Pharmacol** 1988 Nov;40(11):801–2

Nalozone–insensitive inhibitory and excitatory effects of opioid agonists in the rat isolated uterus. Ohia SE, et al. **J Pharm Pharmacol** 1989 Mar;41(3):168–72

[Arg1–D–Phe7]–substituted bradykinin analogs inhibit bradykinin– and vasopressin–induced contractions of uterine smooth muscle. Farmer SG, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):677–81

Blockade of epidermal growth factor–induced uterine contractions by indomethacin or nordihydroguaiaritic acid. Gardner RM, et al. **J Pharmacol Exp Ther** 1989 Sep; 250(3):882–6

Kinins contribute to the contractile effects of rat glandular kallikrein on the isolated rat uterus. Orce GG, et al. **J Pharmacol Exp Ther** 1989 May;249(2):470–5

Effects of synthetic omega–conotoxin on the contractile responses of segments of rat ileum, stomach fundus and uterus and guinea pig taenia coli. Ichida S, et al. **Jpn J Pharmacol** 1988 Dec;48(4):395–405

A comparative study on the contraction induced by high K+/Na+ deficient solution in rat uterus or urinary bladder. Kamizaki J, et al. **Jpn J Pharmacol** 1988 Jun; 47(2):179–88

The value of prolonged administration of salbutamol for blocking of excessive uterine contractions in premature labour. Krasomski G, et al. **Mater Med Pol** 1988 Apr–Jun; 20(2):89–90

Influence of piroxicam on the contractile action of prostaglandin E1 on the isolated rat uterus. Gamaniel K, et al. **Methods Find Exp Clin Pharmacol** 1988 Aug; 10(8):493–6

Relaxant effect of dopamine on the isolated rat uterus. Estañ L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):484–8

Oxytocin–induced labor characteristics and uterine activity after preinduction cervical priming with prostaglandin E2 intracervical gel. Ferguson JE 2d, et al. **Obstet Gynecol** 1988 Nov;72(5):739–45

Maternal cardiovascular effects of drugs that alter uterine activity. Spielman FJ, et al. **Obstet Gynecol Surv** 1988 Sep; 43(9):516–22 (43 ref.)

Morphine diminishes the constancy of spontaneous uterine contractions, antagonizes the positive inotropic effects of prostaglandin E2, but not of prostaglandin F2 alpha and inhibits prostaglandin E and F outputs from the uterus of ovariectomized rats. Faletti A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Dec; 34(3):147–51

Acute and chronic effects of oral enprostil, a synthetic dehydroprostaglandin E2, on uterine contractility. Pulkkinen MO. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):15–9

Calcium antagonism in isolated rat uterus by methylmethacrylate. Born CK, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):213–26

Detomidine [letter] Vainio O. **Vet Rec** 1988 Dec 17; 123(25):655

[The effect of calcium on the contractility of uterine strips in vitro] Mareš J, et al. **Cesk Gynekol** 1989 May;54(4):241–5 (Eng. Abstr.) (Cze)

[The effect of certain drugs on the contractility of uterine strips in vitro] Mareš J, et al. **Cesk Gynekol** 1989 Apr; 54(3):168–73 (Eng. Abstr.) (Cze)

[The uterotonic activity of Bridelia atroviridis and Phyllanthus discoideus (Euphorbiaceae). Evidence of an effect on alpha–adrenergic receptors] Corallo MA, et al. **Ann Pharm Fr** 1988;46(3):171–7 (Eng. Abstr.) (Fre)

[Inhibition of spontaneous uterine contractions by gestagens] Lechner W, et al. **Geburtshilfe Frauenheilkd** 1989 Mar; 49(3):259–61 (Eng. Abstr.) (Ger)

[Influence of pindolol on maternal cardiovascular parameters and contractility of the puerperal uterus] Egarter C, et al. **Z Geburtshilfe Perinatol** 1988 May–Jun;192(3):123–5 (Eng. Abstr.) (Ger)

[Control of uterine contractions with fenoterol. II. Significance of the beginning, duration and manner of therapy for the status of the newborn infant and early childhood development up to 4 years of age] Gerhard I, et al. **Z Geburtshilfe Perinatol** 1989 Mar–Apr;193(2):51–9 (Eng. Abstr.) (Ger)

[Evaluation of the effectiveness of preventing premature labor by intravenous infusions of ethanol] Krasomski G, et al. **Ginekol Pol** 1988 Jan;59(1):1–4 (Eng. Abstr.) (Pol)

[Tocographic pattern induced by misoprostol] Mariani Neto C, et al. **Rev Paul Med** 1988 Jul–Aug;106(4):205–8 (Eng. Abstr.) (Por)

[Effect of gamma–aminobutyric acid and its agonists on uterine contractile activity] Sizov PI, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):62–3 (Eng. Abstr.) (Rus)

[The effect of noradrenaline, adrenaline and acetylcholine on contractility of the uterus of the guinea pig after testosterone administration] Sochorová R, et al. **Bratisl Lek Listy** 1989 Jun;90(6):436–40 (Eng. Abstr.) (Slo)

[Prevention with agents affecting uterine contraction is seldom necessary in the third stage of labor] Jilcke P. **Lakartidningen** 1989 Mar 1;86(9):736–8 (Swe)

UTERINE DISEASES

Term interstitial pregnancy with uterine torsion: sonographic, pathologic, and clinical findings. Bond AL, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):857–9

[Vesico–uterine fistula. Apropos of 5 cases] Trabelsi N, et al. **Ann Urol (Paris)** 1989;23(2):113–6 (22 ref.) (Eng. Abstr.) (Fre)

BLOOD

[Functional research on carbohydrate metabolism in women with climacteric metropathy] Rachev E, et al. **Akush Ginekol (Sofiia)** 1989;28(2):57–61 (Eng. Abstr.) (Bul)

CHEMICALLY INDUCED

Gynecologic consequences of long–term, unopposed estrogen replacement therapy. Ettinger B, et al. **Maturitas** 1988 Dec;10(4):271–82

COMPLICATIONS

Is hysteroscopy of value in the investigation of female infertility? Mencaglia L, et al. **Acta Eur Fertil** 1988 Jul–Aug;19(4):239–41

Spontaneous uterine rupture during pregnancy after treatment of Asherman's syndrome. Deaton JL, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1053–4

Generalized peritonitis due to spontaneous rupture of pyometra. Bui A, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):82–3 (10 ref.)

Long–term prognosis of pregnancies in women with intrauterine hematomas. Børlum KG, et al. **Obstet Gynecol** 1989 Aug;74(2):231–3

Erythema induratum (of Bazin) in a patient with endometrial tuberculosis. De Silva HJ, et al. **Postgrad Med J** 1988 Mar; 64(749):242–4

Infection in the pathogenesis of preterm labor. Romero R, et al. **Semin Perinatol** 1988 Oct;12(4):262–79 (163 ref.)

Pneumoperitoneum and an acute abdominal condition caused by spontaneous perforation of a pyometra in an elderly woman: a case report. Sussman AM, et al. **Surgery** 1989 Feb;105(2 Pt 1):230–1

[Congenital and acquired organ changes of the uterus and habitual abortion] Campo RL, et al. **Gynakologe** 1988 Sep; 21(3):237–44 (57 ref.) (Ger)

[Uterus–bladder fistula causing repeated spontaneous abortion] Szentgyörgyi E, et al. **Orv Hetil** 1989 Apr 2; 130(14):731–3 (Eng. Abstr.) (Hun)

[Treatment of threatened premature labor due to subclinical intrauterine infection] Sanjoh N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Apr;41(4):461–6 (Eng. Abstr.) (Jpn)

[Clinical significance of mean molecules in the prognosis of pyo–septic complications in patients with genital fistulas] Kulikova NN, et al. **Akush Ginekol (Mosk)** 1989 Jun; (6):62–5 (Eng. Abstr.) (Rus)

[Pyometra] Serra I, et al. **Rev Chil Obstet Ginecol** 1986; 51(2):173–5 (Eng. Abstr.) (Spa)

CONGENITAL

Familial uterine hernia syndrome: report of an Arab family

with four affected males. Naguib KK, et al. **Am J Med Genet** 1989 Jun;33(2):180–1

DIAGNOSIS

Hysteroscopy in infertile Nigerian women. Otubu JA, et al. **Afr J Med Med Sci** 1989 Jun;18(2):117–20

Phosphorus 31 nuclear magnetic resonance examination of female reproductive tissues. Noyszewski EA, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):282–8

Sarcoidosis of the uterus. DiCarlo FJ Jr, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):941–3 (11 ref.)

Torsion of the pregnant uterus with a change in placental localization on ultrasound; a case report. Kremer JA, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun;31(3):273–5

MR imaging of uterine inversion. Lewin JS, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):357–9

D&C results improved by hysteroscopy. Goldfarb HA. **N J Med** 1989 Apr;86(4):277–9 (28 ref.)

Indications for hysteroscopy. Corfman RS. **Obstet Gynecol Clin North Am** 1988 Mar;15(1):41–9 (57 ref.)

Hysteroscopy as a diagnostic aid. Lavy G. **Obstet Gynecol Clin North Am** 1988 Mar;15(1):61–72 (31 ref.)

Future growth and development of hysteroscopy. Valle RF. **Obstet Gynecol Clin North Am** 1988 Mar;15(1):111–26 (34 ref.)

Neonatal hydrometrocolpos: report of a case. Liu HC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1229–33

[Diagnostic and therapeutic applications of hysteroscopy] Wamsteker K, et al. **Ned Tijdschr Geneeskd** 1988 Nov 5; 132(45):2041–4 (Dut)

[Echography and extra-uterine pregnancy. Images and their pitfalls] Le Gac MP, et al. **Rev Fr Gynecol Obstet** 1988 Dec;83(12):753–819 (Fre)

[Hysteroscopy and infertility. First data from a brief study] Struzziero E, et al. **Minerva Ginecol** 1989 Jan;41(1):23–5 (Eng. Abstr.) (Ita)

[A case of hydrometrocolpos observed prenatally by echography] Riboni G, et al. **Radiol Med (Torino)** 1989 Mar;77(3):285–7 (Ita)

[Significance of ultrasonic examination in the diagnosis of genital tuberculosis in women] Batashova MI, et al. **Probl Tuberk** 1989;(5):51–3 (Eng. Abstr.) (Rus)

[Importance of colposcopy in the diagnosis of female genital tuberculosis] Kralnenko EV, et al. **Probl Tuberk** 1988; (12):51–3 (Rus)

DRUG THERAPY

Adhesion re-formation in the rabbit uterine horn model: I. Reduction with carboxymethylcellulose. Diamond MP, et al. **Int J Fertil** 1988 Sep–Oct;33(5):372–5

Erythromycin therapy for subclinical intrauterine infections in threatened preterm delivery—a preliminary report. Winkler M, et al. **J Perinat Med** 1988;16(3):253–6

[Studies of ceftizoxime in perinatal period] Cho N, et al. **Jpn J Antibiot** 1988 Aug;41(8):1142–54 (Eng. Abstr.) (Jpn)

[Fundamental and clinical study on cefuzonam in the field of obstetrics and gynecology] Hirabayashi K, et al. **Jpn J Antibiot** 1988 Aug;41(8):1008–14 (Eng. Abstr.) (Jpn)

[Pharmacokinetic, bacteriological and clinical studies of cefuzonam in the field of obstetrics and gynecology] Kubota K, et al. **Jpn J Antibiot** 1988 Aug;41(8):1015–29 (Eng. Abstr.) (Jpn)

[Pharmacokinetic and clinical studies of ceftizoxime in the perinatal period. The Chemotherapy Research Group for Mothers and Children] Matsuda S, et al. **Jpn J Antibiot** 1988 Aug;41(8):1129–41 (Eng. Abstr.) (Jpn)

[Pharmacokinetic, bacteriological and clinical studies of cefuzonam in the field of obstetrics and gynecology. Study group of cefuzonam in the field of obstetrics and gynecological infections] Matsuda S, et al. **Jpn J Antibiot** 1988 Aug;41(8):971–96 (Eng. Abstr.) (Jpn)

[Clinical study of cefuzonam in the field of obstetrics and gynecology] Naito H, et al. **Jpn J Antibiot** 1988 Aug; 41(8):1002–7 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

Puerperal uterine inversion. Shah-Hosseini R, et al. **Obstet Gynecol** 1989 Apr;73(4):567–70

ETIOLOGY

Acute inversion of the uterus at caesarean section [letter] Masters AP. **Anaesthesia** 1989 Feb;44(2):167–8

Colouterine fistula and pyometrium treated with percutaneous drainage: a case report. Shultz S, et al. **Cardiovasc Intervent Radiol** 1988 Jun;11(3):157–61

Ultrasonography in extended placental retention and intra-uterine adhesions; a case report. Vartiainen J, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jan;30(1):89–93

Pyometra in a three year old girl. Chandra J, et al. **Indian Pediatr** 1988 Jul;25(7):688–90

Old rupture of the uterus. Chaudhury ML, et al. **J Indian Med Assoc** 1988 Apr;86(4):100–1

Vesicouterine fistula associated with placenta percreta. Krysiewicz S, et al. **Urol Radiol** 1988;10(4):213–5

[Cervico-isthmus tears of traumatic origin] Roman C, et al. **Gynecol Prat** 1972;23(5–6):241–4, 247–8 (Eng. Abstr.) (Fre)

[Puerperal inversion of the uterus] Aspevik RK, et al. **Tidsskr Nor Laegeforen** 1989 May 10;109(13):1403–4 (Eng. Abstr.) (Nor)

HISTORY

[Unusual historical cases of uterine inversion] Dumont M. **Rev Fr Gynecol Obstet** 1988 Dec;83(12):821–2 (Eng. Abstr.) (Fre)

MICROBIOLOGY

Human papillomavirus type 31 infection of the uterine cervix in England. Gibson PE, et al. **J Infect** 1989 May;18(3):265–7

Human papillomavirus coinfections of the vulva and uterine cervix. Kulski JK, et al. **J Med Virol** 1989 Mar;27(3):244–51

PATHOLOGY

Gross and histological characterization of endometrial tissues from SLA miniature pigs with cystic endometrial hyperplasia. Lipetz KJ, et al. **Acta Anat (Basel)** 1987; 130(2):137–42

Endometrial sampling: analysis of 310 procedures performed by family physicians. Rosenthal TC, et al. **J Fam Pract** 1989 Sep;29(3):249–54; discussion 254–6

Diagnostic vacuum aspiration curettage and biopsy without anaesthesia in general practice. Damsbo N. **Scand J Prim Health Care** 1988 Nov;6(4):225–7

[Granular cells of the endometrium] Loubet A, et al. **Ann Pathol** 1989;9(2):92–9 (33 ref.) (Fre)

[Possibilities and limits of contact hysteroscopic assessment of the causes of postmenopausal bleeding] Buchholz F, et al. **Zentralbl Gynakol** 1988;110(14):884–9 (Eng. Abstr.) (Ger)

[Endometrial biopsy in gynecologic practice] Kondrikov NI. **Akush Ginekol (Mosk)** 1989 Apr;(4):68–74 (Rus)

[State of the endometrium in patients with female genital tuberculosis according to biopsy data] Solov'eva IP. **Probl Tuberk** 1989;(5):53–6 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

[Bladder function after closure of vesicouterine fistulae] Kan DV, et al. **Akush Ginekol (Mosk)** 1988 May;(5):60–1 (Rus)

PREVENTION & CONTROL

The use of calcium channel blockade for the prevention of postoperative adhesion formation. Steinleitner A, et al. **Fertil Steril** 1988 Nov;50(5):818–21

Assessment of carboxymethylcellulose and 32% dextran 70 for prevention of adhesions in a rabbit uterine horn model. Diamond MP, et al. **Int J Fertil** 1988 Jul–Aug;33(4):278–82

[Surgical hysteroscopy in preventing the occurrence of Asherman's syndrome following the removal of intrauterine contraceptive devices] Davydov SN, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):70–1 (Rus)

SURGERY

Routine intravenous pyelograms before hysterectomy in cases of benign disease: possibly effective, definitely expensive. Simel DL, et al. **Am J Obstet Gynecol** 1988 Nov; 159(5):1049–53

Division of uterine adhesions (Asherman's syndrome) with the Nd-YAG laser. Newton JR, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):102–4

The significance of preoperative hysterosalpingography and laparoscopy for predicting the pregnancy outcome in patients with a bilateral hydrosalpinx. te Velde ER, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Apr;31(1):33–45

Hyperglycemia and hyponatremia during operative hysteroscopy with 5% dextrose in water distention. Carson SA, et al. **Fertil Steril** 1989 Feb;51(2):341–3

Anaphylactic shock from intracavitary 32% Dextran-70 during hysteroscopy. Trimbos-Kemper TC, et al. **Fertil Steril** 1989 Jun;51(6):1053–4

Experience with a new flexible hysteroscope. Marty R. **Int J Gynaecol Obstet** 1988 Aug;27(1):97–9

Treatment of vesicouterine fistula by fulguration. Molina LR, et al. **J Urol** 1989 Jun;141(6):1422–3

Office hysteroscopy. Wheeler JM, et al. **Obstet Gynecol Clin North Am** 1988 Mar;15(1):29–39 (13 ref.)

Do British women undergo too many or too few hysterectomies? Coulter A, et al. **Soc Sci Med** 1988; 27(9):987–94 (68 ref.)

[Serum proteins in vaginal and abdominal hysterectomy] Binstorfer-Vytiska E, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):788–90 (Eng. Abstr.) (Ger)

[Analysis of intra- and postoperative complications of hysterectomy based on the data from the Department of Gynecology of the District Hospital in Toruń 1982–1985] Chojnacki A, et al. **Ginekol Pol** 1988 Aug;59(8):476–80 (Eng. Abstr.) (Pol)

[Analysis of the indications for hysterectomy based on the data of the Department of Gynecology of the District Hospital in Toruń 1982–1985] Chojnacki A, et al. **Ginekol Pol** 1988 Aug;59(8):499–503 (Eng. Abstr.) (Pol)

THERAPY

Acute puerperal inversion of the uterus [letter] Beard R. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):241–2

A nonsurgical method of drainage of pyometra [letter] Ngan HY, et al. **Aust N Z J Obstet Gynaecol** 1988 Nov; 28(4):328–9

Acute puerperal inversion of the uterus—an obstetric emergency. Rachagan SP, et al. **Aust N Z J Obstet Gynaecol** 1988 Feb;28(1):29–32

Acute puerperal uterine inversion. New approaches to management. Brar HS, et al. **J Reprod Med** 1989 Feb; 34(2):173–7

Inversion of the uterus. Replacement without general anaesthesia. Gudgeon CW. **Med J Aust** 1979 Oct 20; 2(8):434–5

Puerperal uterine inversion [letter] Catanzarite V. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):429–30

Incarceration of the retroverted gravid uterus: report of four patients managed with uterine reduction. Hess LW, et al. **South Med J** 1989 Mar;82(3):310–2 (13 ref.)

VETERINARY

Renal dysfunction in dogs with pyometra. Stone EA, et al. **J Am Vet Med Assoc** 1988 Aug 15;193(4):457–64

Nonsurgical treatment of uterine torsion in seven mares. Wichtel JJ, et al. **J Am Vet Med Assoc** 1988 Aug 1; 193(3):337–8

Early postpartum reproductive profiles in Holstein cows with retained placenta and uterine discharges. Holt LC, et al. **J Dairy Sci** 1989 Feb;72(2):533–9

Uterine involvement in guineapig salmonellosis. Okewole PA, et al. **Lab Anim** 1989 Jul;23(3):275–7

Urinary gamma-glutamyl transferase and the degree of renal dysfunction in 75 bitches with pyometra. De Schepper J, et al. **Res Vet Sci** 1989 May;46(3):396–400

Immaculate conception? [letter] Prentice MW. **Vet Rec** 1989 Jun 24;124(25):667

Sonographic diagnosis of a mucometra in a cat. van Haaften B, et al. **Vet Rec** 1989 Apr 1;124(13):346–7

Distribution of histological lesions in the equine endometrium. Waelchli RO, et al. **Vet Rec** 1989 Mar 18; 124(11):271–3

[Postpartum torsion of the right uterus horn in a cow] Maithijsen HF, et al. **Tijdschr Diergeneeskd** 1989 Jan 1; 114(1):17–9 (Eng. Abstr.) (Dut)

[Uterine gland cyst in a cow: an unusual condition] Stocker H, et al. **Schweiz Arch Tierheilkd** 1988 Dec;130(12):701–8 (Eng. Abstr.) (Ger)

UTERINE HEMORRHAGE

Gestational vaginal bleeding and pregnancy outcome. Strobino B, et al. **Am J Epidemiol** 1989 Apr;129(4):806–15

Perinatal protocol. Second or third trimester bleeding. Tucker SM. **J Perinatol** 1988 Spring;8(2):174–7

BLOOD

[Pituitary gonadotropin production in uterine hemorrhages in the premenopause] Rachev E. **Akush Ginekol (Sofiia)** 1988;27(3):57–61 (Eng. Abstr.) (Bul)

[Determination of trophoblast-specific beta-1-globulin in the serum of women during hemorrhage in the 2d half of pregnancy] Fialová L, et al. **Cesk Gynekol** 1988 May; 53(4):257–61 (Eng. Abstr.) (Cze)

[Disseminated intravascular coagulation disorder in the 2d trimester of pregnancy. Case report from the 16th week of pregnancy with spontaneous parturition at term] Prömpeler HJ, et al. **Geburtshilfe Frauenheilkd** 1989 Jul; 49(7):679–81 (Eng. Abstr.) (Ger)

CHEMICALLY INDUCED

Does terbutaline cause uterine atony and increase intraoperative blood loss? [letter] Brown MS. **Am J Obstet Gynecol** 1989 Jul;161(1):259

Genital bleeding during the administration of danazol. Nakamura G, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):373–7

Rifampicin induced uterine bleeding. Nigam PK, et al. **Indian J Lepr** 1988 Apr;60(2):303–5

[Use of gonadotropin releasing hormone analogs in Marcumar-treated patients for contraception and prevention of life-threatening ovulation hemorrhages] Prömpeler H, et al. **Geburtshilfe Frauenheilkd** 1988 Aug; 48(8):588–9 (Eng. Abstr.) (Ger)

COMPLICATIONS

Threatened miscarriage and intrauterine hematomas. Sonographic and biochemical studies. Stabile I, et al. **J Ultrasound Med** 1989 Jun;8(6):289–92

DIAGNOSIS

The intrauterine hematoma: diagnostic and clinical aspects. Mandruzzato GP, et al. **JCU** 1989 Sep;17(7):503–10

Abnormal uterine bleeding. Connell A. **Nurse Pract** 1989 Apr;14(4):40, 43–4, 47 passim (19 ref.)

[Uterine hemorrhage as an indication for performing contact hysteroscopic examination] Grozdanov G, et al. **Akush Ginekol (Sofiia)** 1989;28(1):58–60 (Eng. Abstr.) (Bul)

[Diagnostic value of separate curettage in women with

genital bleeding in the menopause] Zlatkov V, et al. **Akush Ginekol (Sofiia)** 1988;27(5):39–44 (Eng. Abstr.) (Bul)

DRUG THERAPY

[Initial experience with centralized care of women with bleeding in the climacteric and postmenopausal period] Reilová T, et al. **Cesk Gynekol** 1989 Mar;54(2):101–5 (Eng. Abstr.) (Cze)

[Lutenyl and menstrual disorders. A hospital study] Cohen A, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):741–3 (Eng. Abstr.) (Fre)

[Danazol in the therapy of dysfunctional uterine hemorrhage in women of fertility age] Bardi M. **Minerva Ginecol** 1989 May;41(5):219–23 (Eng. Abstr.) (Ita)

[Use of partusisten in cases of placenta praevia and the incidence of respiratory distress syndrome in newborn infants] Gerber J, et al. **Wiad Lek** 1989 Jan 1;42(1):35–9 (Eng. Abstr.) (Pol)

[Effect of hormonal therapy of patients with dysfunctional uterine hemorrhage on the hepatobiliary system] Benediktov II, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):22–5 (Eng. Abstr.) (Rus)

ETIOLOGY

Uterine bleeding with an IUD requiring emergency hysterectomy. Glew S, et al. **Adv Contracept** 1989 Mar; 5(1):51–3

The Copper-Fix (Cu-Fix): a new concept in IUD technology. Wildemeersch D, et al. **Adv Contracept** 1988 Sep;4(3):197–205

Bleeding as a consequence of chorion villus sampling. Liu DT, et al. **Asia Oceania J Obstet Gynaecol** 1989 Mar; 15(1):1–5

Can the fetus cause placental separation? Eden J. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):119–20

Post-menopausal bleeding. Wagman H. **Baillieres Clin Obstet Gynaecol** 1988 Jun;2(2):355–62 (9 ref.)

The aetiology of vaginal bleeding in children. A 20-year review. Hill NC, et al. **Br J Obstet Gynaecol** 1989 Apr; 96(4):467–70

Reduced blood loss during caesarean section due to a controlled stapling technique. van Dongen PW, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):95–102

Placenta previa and antepartum hemorrhage after previous cesarean section. Nielsen TF, et al. **Gynecol Obstet Invest** 1989;27(2):88–90

Abnormal uterine bleeding in women aged 40 and over. Vijatranil S, et al. **J Med Assoc Thai** 1988 Jul;71(7):361–5

Uterine haemangioma in Klippel–Trenaunay–Weber syndrome. Lawlor F, et al. **J R Soc Med** 1988 Nov; 81(11):665–6

Pelvic ultrasound—should it be used routinely in the diagnosis and screening of postmenopausal bleeding? Discussion paper. Ross LD. **J R Soc Med** 1988 Dec; 81(12):723–4

Dysfunctional uterine bleeding. Field CS. **Prim Care** 1988 Sep;15(3):561–74 (25 ref.)

[Placenta percreta: a danger in pregnancy] Kerl J, et al. **Geburtshilfe Frauenheilkd** 1988 Dec;48(12):900–1 (Eng. Abstr.) (Ger)

[Occurrence of pregnancy despite an in situ IUD] Tews G, et al. **Gynakol Rundsch** 1988;28 Suppl 2:243–6 (Ger)

[Placenta praevia—a diagnostic problem in hemorrhage in pregnancy] Loch EG. **Gynakologe** 1989 Jun;22(3):185–9 (8 ref.) (Ger)

[A life-saving hemostatic procedure by ligation of the hypogastric artery in hemorrhage caused by cervix carcinoma] Papp Z, et al. **Orv Hetil** 1989 Aug 6; 130(32):1715–8 (Eng. Abstr.) (Hun)

[Spontaneous rupture of the uterine vein in the 33d week of pregnancy] Abel W, et al. **Ginekol Pol** 1988 Sep; 59(9):591–3 (Eng. Abstr.) (Pol)

[The course of pregnancy and labor and the status of newborn infants in women with decidual ectopia of the cervix uteri] Basta A. **Wiad Lek** 1988 Jul 15;41(14):925–9 (Eng. Abstr.) (Pol)

[Characteristics of the course of hemorrhagic syndrome during pregnancy and labor in women with von Willebrand's disease] Sumskaia GF, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):30–3 (Eng. Abstr.) (Rus)

GENETICS

[Pre- and postpartum hemostasis in type II Willebrand-Jürgens syndrome] Lutze G, et al. **Z Gesamte Inn Med** 1989 Feb 15;44(4):117–20 (Eng. Abstr.) (Ger)

PATHOLOGY

Colonic adenocarcinoma presenting with vaginal bleeding [letter] Jotkowitz MW. **Aust N Z J Obstet Gynaecol** 1988 Feb;28(1):79–80

Diagnostic role of dilatation and curettage in the management of abnormal premenopausal bleeding. Hammond RH, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):496–7

Incomplete Behcet's syndrome in the differential diagnosis of genital ulceration and postcoital bleeding. A case report. Morgan ED, et al. **J Reprod Med** 1988 Oct;33(10):844–6

Hysteroscopy with selective endometrial sampling compared with D&C for abnormal uterine bleeding: the value of a negative hysteroscopic view. Loffer FD. **Obstet Gynecol** 1989 Jan;73(1):16–20

[Morphological studies of the endometrium in hemorrhages in the premenopause] Rachev E, et al. **Akush Ginekol (Sofiia)** 1988;27(6):61–6 (Eng. Abstr.) (Bul)

[Possibilities and limits of contact hysteroscopic assessment of the causes of postmenopausal bleeding] Buchholz F, et al. **Zentralbl Gynakol** 1988;110(14):884–9 (Eng. Abstr.) (Ger)

[Cytomorphologic characteristics of the regeneration of endometrial epithelium after diagnostic curettage and uterine hemorrhage] Novik VI, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):64–6 (Rus)

PHYSIOPATHOLOGY

First trimester bleeding in clinical IVF pregnancies. Goldman JA, et al. **Hum Reprod** 1988 Aug;3(6):807–9

PREVENTION & CONTROL

Cervical pregnancy: hysterectomy avoided with the use of a large Foley catheter balloon. Hurley VA, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):230–2

[Single-hormone prophylaxis of uterine hemorrhages in the premenopause] Rachev E. **Akush Ginekol (Sofiia)** 1989; 28(2):75–8 (Eng. Abstr.) (Bul)

[Missed abortion: its diagnosis and prevention of complications] Vinnitskil OI. **Akush Ginekol (Mosk)** 1988 Oct;(10):69–73 (Rus)

[Prevention with agents affecting uterine contraction is seldom necessary in the third stage of labor] Jilcke P. **Lakartidningen** 1989 Mar 1;86(9):736–8 (Swe)

RADIOTHERAPY

Radiotherapy in benign uterine bleeding disorders. The Radiumhemmet metropathia cohort 1912–1977. Short and long term results. Ryberg M, et al. **Ups J Med Sci** 1989; 94(2):161–9

SURGERY

Surgical management of life-threatening obstetric and gynecologic hemorrhage. Fehrman H. **Acta Obstet Gynecol Scand** 1988;67(2):125–28

Electrocoagulation of the endometrium with the ball-end resectoscope. Vancaillie TG. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):425–7

Dysfunctional uterine bleeding. Zimmermann R. **Obstet Gynecol Clin North Am** 1988 Mar;15(1):107–10

Emergency hysterectomies in obstetrics. Chua SM. **Singapore Med J** 1988 Jun;29(3):281–4

THERAPY

Management of early pregnancy bleeding in the accident and emergency department. Gilling-Smith C, et al. **Arch Emerg Med** 1988 Sep;5(3):133–8

Transcatheter arterial embolization in the management of gynecological neoplasms. Takemura M, et al. **Gynecol Oncol** 1989 Jul;34(1):38–42

[Control of bleeding in cervical pregnancy: two clinical case reports] Wang SJ, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Dec;40(6):551–6 (Eng. Abstr.) (Chi)

[Percutaneous embolization with spirals in bleeding uterine cancer] Gmelin E, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):24–7 (Eng. Abstr.) (Ger)

[Atmocausis vaporization. Most severe internal burns following intrauterine use of steam] Hardt W, et al. **Geburtshilfe Frauenheilkd** 1989 Mar;49(3):293–5 (Eng. Abstr.) (Ger)

[Embolization of the internal iliac arteries in treating hemorrhage caused by uterine neoplasm] Szczerbo-Trojanowska M, et al. **Pol Przegl Radiol (Warszawa)** 1988 May-Jun;52(3):184–7 (Eng. Abstr.) (Pol)

UTERINE INERTIA

COMPLICATIONS

[Arrest of hypotonic and atonic hemorrhages in the early postpartum period by using a cryokoagulator] Grishchenko VI, et al. **Akush Ginekol (Mosk)** 1988 Dec;(12):51–2 (Rus)

ETIOLOGY

[Uterine atonia and hemorrhage from the inferior epigastric artery after cesarean section] Krasomski G, et al. **Ginekol Pol** 1988 Dec;59(12):748–51 (Eng. Abstr.) (Pol)

[Course of pregnancy and labor in obesity] Szysz J, et al. **Ginekol Pol** 1988 Apr;59(4):186–91 (Eng. Abstr.) (Pol)

[Clinico-experimental data on the outcome of pregnancy and labor in hypokinesia] Bogdashkin NG, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):17–20 (Eng. Abstr.) (Rus)

[The role of catecholamines in the development of obstetrical pathology] Abramchenko VV. **Sov Med** 1988;(5):43–6 (33 ref.) (Rus)

IMMUNOLOGY

[Immunological changes in parturients in relation to different types of labor activity] Varga P, et al. **Akush Ginekol (Mosk)** 1988 Dec;(12):45–7 (Eng. Abstr.) (Rus)

METABOLISM

[Receptor binding of H3-dexamethasone in the myometrium during pregnancy and labor] Rakitskaia VV, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):63–5 (Rus)

THERAPY

[Non-pharmacological methods of prevention and treatment of anomalies of the contractile activity of the uterus] Serov VN, et al. **Akush Ginekol (Mosk)** 1988 Dec;(12):4–6 (31 ref.) (Rus)

[Use of vital point massage in various types of obstetrical pathology] Zharkin NA. **Akush Ginekol (Mosk)** 1988 Oct; (10):62–5 (Rus)

UTERINE MUSCLE see MYOMETRIUM

UTERINE NEOPLASMS

Massive hemoperitoneum following rupture of hepatic metastases from unsuspected choriocarcinoma. Erb RE, et al. **Am J Emerg Med** 1989 Mar;7(2):196–8

Myxoid leiomyosarcoma of the uterus: case report and review of the literature. Peacock G, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1515–8; discussion 1518–9 (9 ref.)

Intracaval and intracardiac leiomyomatosis of uterine origin. Mazzola A, et al. **Ann Vasc Surg** 1986 May;1(1):134–8 (18 ref.)

Treatment of choroidal metastasis from choriocarcinoma. Case report. Barondes MJ, et al. **Arch Ophthalmol** 1989 Jun;107(6):796–8

Endometrioid carcinoma of the ovary: a retrospective study. Tidy J, et al. **Br J Obstet Gynaecol** 1988 Nov;95(11):1165–9

Uterine leiomyosarcoma with cardiac metastases. Hoy F, et al. **Can J Surg** 1988 Nov;31(6):418–20

Liver metastasis of choriocarcinoma. Report of 44 patients. Wang YE, et al. **Chin Med J [Engl]** 1988 Sep;101(9):637–42

Cancer of the uterine body in Kenyans. Rogo KO, et al. **East Afr Med J** 1988 Jul;65(7):431–7

Uterine sarcomas. A retrospective study of 17 cases. Geraci P, et al. **Eur J Gynaecol Oncol** 1988;9(6):497–501 (16 ref.)

Molar pregnancy coexisting with a normal fetus: a case report. Deaton JL, et al. **Gynecol Oncol** 1989 Mar; 32(3):394–7

Gynecologic cancer in the very elderly. Kennedy AW, et al. **Gynecol Oncol** 1989 Jan;32(1):49–54

Endolymphatic stromal myosis: surgical and hormonal therapy for extensive venous recurrence. Montag TW, et al. **Gynecol Oncol** 1989 May;33(2):255–60

Flow cytometry for all mole-like abortion specimens [editorial] Benirschke K. **Hum Pathol** 1989 May;20(5):403–4

Lipoleiomyoma of uterus (report of three cases). Gupta AK, et al. **Indian J Cancer** 1988 Jun;25(2):104–7

Placental-site trophoblastic tumor: diagnosis, treatment, and biological behavior. Heintz AP, et al. **Int J Gynecol Pathol** 1985;4(1):75–82

Patterns of uterine sarcomas in northern Louisiana. Chapman GW, et al. **J La State Med Soc** 1988 Nov;140(11):22–6 (29 ref.)

Adenomyosis: a retrospective view. Thomas JS Jr, et al. **J Natl Med Assoc** 1989 Sep;81(9):969–72 (9 ref.)

Uterine myomas in pregnancy. Two case reports. Keleher KC. **J Nurse Midwifery** 1988 Nov-Dec;33(6):285–8

Sonographic demonstration of an intrauterine device perforating a uterine myoma. Caspi B, et al. **JCU** 1989 Sep; 17(7):535–7

A prospective randomized comparison of methotrexate, dactinomycin, and chlorambucil versus methotrexate, dactinomycin, cyclophosphamide, doxorubicin, melphalan, hydroxyurea, and vincristine in "poor prognosis" metastatic gestational trophoblastic disease: a Gynecologic Oncology Group study. Curry SL, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):357–62

Renal metastases of gestational trophoblastic disease: a report of eight cases. Soper JT, et al. **Obstet Gynecol** 1988 Nov; 72(5):796–8

Trophoblastic disease. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):435–590

Metastatic uterine leiomyosarcoma in association with recurrent lung abscess. Sheron N, et al. **Thorax** 1989 Jul; 44(7):597–8

[Malignant mixed müllerian tumor of uterus—report of 3 cases] Chang SY, et al. **Chung Keng I Hsueh** 1988 Jun; 11(2):128–33 (Eng. Abstr.) (Chi)

[Hepatic metastasis of choriocarcinoma] Wang YE. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Jul;23(4):228–30, 254 (Eng. Abstr.) (Chi)

[Diagnostic value of ratio of serum hCG level to CSF in the brain metastasis of choriocarcinoma] Wang YN. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Oct; 10(5):317–20 (Eng. Abstr.) (Chi)

[The perils of endometrial carcinoma] Kobilková J, et al. **Cesk Gynekol** 1988 Dec;53(10):744–9 (Cze)

[The Center for Trophoblastic Diseases] Zavadil M, et al. **Cesk Gynekol** 1988 Nov;53(9):695–700 (Cze)

[The Center for Trophoblastic Disease] Zavadil M, et al. **Cesk Patol** 1988 Aug;24(3):189–92 (Eng. Abstr.) (Cze)

[A case of simultaneous development of leiomyomas of the labia majora and the uterine corpus] Zlatkov V, et al. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):351–3 (Eng. Abstr.) (Fre)

[Estrogens and carcinoma] Kaiser R. **Dtsch Med Wochenschr** 1989 Apr 21;114(16):637–43 (22 ref.) (Ger)

[Principles of prevention, early diagnosis, treatment and after-care of gestational trophoblastic tumors] Ebeling K, et al. **Radiobiol Radiother (Berl)** 1989;30(1):25–30 (Eng. Abstr.) (Ger)

[Morphology, general and differential diagnosis of intravenous leiomyomatosis of the uterus] Jäger J, et al. **Zentralbl Allg Pathol** 1988;134(6):555–60 (Eng. Abstr.) (Ger)

[Principles of prophylaxis, early detection, treatment and follow-up of gestational trophoblastic tumors] Ebeling K, et al. **Zentralbl Gynakol** 1988;110(22):1401–6 (Eng. Abstr.) (Ger)

[Analysis of failures in radiation and surgical treatment of endometrial carcinoma in FIGO stage I] Fioretti P, et al. **Ann Ostet Ginecol Med Perinat** 1988 Jul–Aug;109(4):212–8 (Eng. Abstr.) (Ita)

[Mixed müllerian malignant tumors of the endometrium (MMMT). Clinico-pathologic study of 14 cases] Franchi M, et al. **Ann Ostet Ginecol Med Perinat** 1988 Sep–Oct; 109(5):265–71 (35 ref.) (Eng. Abstr.) (Ita)

[Uterine adenomyosis] Gilardenghi F, et al. **Minerva Ginecol** 1988 Jun;40(6):369–72 (Eng. Abstr.) (Ita)

[Choriocarcinoma] Takamizawa H, et al. **Gan No Rinsho** 1989 Jan;Spec No:407–15 (Jpn)

[A case of benign metastasizing leiomyoma with pulmonary metastases] Kondo K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2131–5 (Eng. Abstr.) (Jpn)

[Coexistence of endometrioid carcinoma of the ovary and adenocarcinoma of the uterine body as a case of systemic cancer] Brodziński W, et al. **Wiad Lek** 1988 May 1; 41(9):580–3 (Eng. Abstr.) (Pol)

[A giant cyst of ectopic ovarian tissue] Derevianko AIu, et al. **Klin Khir** 1988;(12):56 (Rus)

ANALYSIS

Estrogen and progesterone receptors in leiomyomas and normal uterine tissues during reproductive life. Marelli G, et al. **Acta Eur Fertil** 1989 Jan–Feb;20(1):19–22

Hypomethylated state of estrogen receptor gene in endometrial carcinomas. Piva R, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):787–90

Progesterone receptor heterogeneity and endometrial tumour differentiation. Cheng C, et al. **Cancer Lett** 1988 Dec 15; 43(3):215–8

Immunocytochemical study of progesterone receptors in hyperplastic and neoplastic endometrial tissues. Bergeron C, et al. **Cancer Res** 1988 Nov 1;48(21):6132–6

Study of estrogen receptor, progesterone receptor, and the estrogen-regulated Mr 24,000 protein in patients with carcinomas of the endometrium and cervix. Ciocca DR, et al. **Cancer Res** 1989 Aug 1;49(15):4298–304

Relationship between changes of the steroid receptor and synchronization in human endometrial adenocarcinoma cells in vitro. Nishiya I, et al. **Cytometry** 1988 Nov; 9(6):588–93

Hormonal receptors in endometrial neoplasias. Contreras Ortiz O, et al. **Eur J Gynaecol Oncol** 1988;9(5):396–8

An immunohistochemical study of difference between cervical and endometrial adenocarcinomas of the uterus—using monoclonal antibodies of vimentin and cytokeratin. Jinnouchi H. **Fukushima J Med Sci** 1987 Dec; 33(2):85–108

An immunohistochemical study of difference between cervical and endometrial adenocarcinomas of the uterus—using monoclonal antibodies of CEA and cytokeratin. Jinnouchi H. **Fukushima J Med Sci** 1987 Jun; 33(1):29–46

Ethnic variation in estrogen and progesterone receptor concentration in leiomyoma and normal myometrium. Sadan O, et al. **Gynecol Endocrinol** 1988 Dec;2(4):275–82

Relative prognostic significance of DNA flow cytometry and histologic grading in endometrial carcinoma. Quillamor RM, et al. **Gynecol Obstet Invest** 1988;26(4):332–7

Immunocytochemical assays in human endometrial carcinomas: a multiparametric computerized analysis and comparison with nonmalignant changes. Charpin C, et al. **Gynecol Oncol** 1989 Apr;33(1):9–22

Cytoplasmic steroid receptors in tumoral and "normal" endometrial samples from symmetrical uterine zones. Enriori CL, et al. **Gynecol Oncol** 1989 Apr;33(1):40–3

Identification of transferrin receptor in cervical and endometrial tissues. Mizuuchi H, et al. **Gynecol Oncol** 1988 Oct;31(2):292–300

Immunohistochemical demonstration of pancreatic secretory trypsin inhibitor in gynecologic tumors. Ueda G, et al. **Gynecol Oncol** 1989 Jan;32(1):37–40

A comparative study of the estrogen receptor ratio in myometrium and uterine leiomyomas. Otsuka H, et al. **Int J Gynaecol Obstet** 1989 Jun;29(2):189–94

Endothelium and thrombomodulin: expression and distribution of thrombomodulin on altered endothelium and neoplastic syncytiotrophoblast. Maruyama I, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):150–5

Estrogen receptor content, immunohistochemically determined by monoclonal antibodies, in endometrial stromal sarcoma. Tosi P, et al. **Obstet Gynecol** 1989 Jan; 73(1):75–8

Identification of endocrine responsive breast and endometrial carcinoma using steroid hormone receptors. Wittliff JL, et al. **Prog Clin Biol Res** 1988;276:11–41 (43 ref.)

Proliferation characteristics and receptor concentrations in two gynecological carcinomas serially passaged into female nude mice or castrated males. Vering A, et al. **Strahlenther Onkol** 1989 Jul;165(7):498–9

Sex steroid receptors in endometrial cancer. Chambers JT. **Yale J Biol Med** 1988 Jul–Aug;61(4):339–50 (60 ref.)

[Hormone receptors and tumor markers in cancer of the endometrium] Hustin J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):748–50 (Fre)

[A comparison of radioreceptor assay and immunocytochemical staining for estrogen receptor in leiomyoma and myometrium] Ohtsuka H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1400–4 (Eng. Abstr.) (Jpn)

[Determining estrogen receptors in neoplastic and normal human tissues: comparison of immunoenzyme and radioligand methods] Chrapusta S, et al. **Nowotwory** 1988 Apr–Jun;38(2):87–94 (Pol)

[Electron spin resonance study of the structure of the spin glass type in nodular variant of adenomyosis] Tsapin AI, et al. **Biofizika** 1988 May–Jun;33(3):534–5 (Eng. Abstr.) (Rus)

[Human chorionic prealbumin: its identification, physicochemical properties and detection in the blood serum in trophoblastic disease] Tatarinov IuS, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):552–3 (Eng. Abstr.) (Rus)

BLOOD

Changes of serum proteins in patients with malignant gynaecological tumours. Pulay T, et al. **Acta Chir Hung** 1988;29(4):305–14

Evidence suggesting the trophoblastic origin of follicle-stimulating hormone, luteinizing hormone and prolactin in hydatidiform mole. Loganath A, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):383–8

Inhibin: a new circulating marker of hydatidiform mole? Yohkaichiya T, et al. **BMJ** 1989 Jun 24;298(6689):1684–6

Beta-hCG vs intact hCG assays in the detection of trophoblastic disease. Rinker AD, et al. **Clin Chem** 1989 Aug;35(8):1799–800

Serum methotrexate and human chorionic gonadotropin concentrations during five-day chemotherapy for low-risk metastatic gestational trophoblastic neoplasia. Hilgers RD, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):421–5

Human chorionic gonadotropin and free subunits' serum levels in patients with partial and complete hydatidiform moles. Berkowitz R, et al. **Obstet Gynecol** 1989 Aug; 74(2):212–6

CA 125, NB/70K, and lipid-associated sialic acid in monitoring uterine papillary serous carcinoma. Tseng PC, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):384–7

Comparison of human chorionic gonadotrophin concentrations in the sera of patients with normal and abnormal pregnancy measured by radio-immunoassay and immunoradiometric assay. Norman RJ, et al. **S Afr Med J** 1989 Apr 1;75(7):318–9

Decreased aggregability of platelets in hydatidiform molar pregnancy [letter] Rákóczi I, et al. **Thromb Res** 1988 Oct 1;52(1):75–6

Serum levels of some fat metabolism parameters in women with uterine leiomyoma. Rzempoluch J, et al. **Zentralbl Gynakol** 1989;111(12):831–6

[The serum concentration of specific beta 1-glycoprotein in trophoblastic disease] Radikov N. **Akush Ginekol (Sofiia)** 1989;28(2):15–9 (Eng. Abstr.) (Bul)

[Changes in serum human chorionic gonadotropin in patients with hydatidiform mole following evacuation] Wang X. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Nov;23(6):362–4, 388 (Eng. Abstr.) (Chi)

[Clinical significance of pregnancy-specific beta glycoprotein, human placental lactogen and beta-human chorionic gonadotropin in the serum of patients with trophoblastic diseases] Zhang WY. **Chung Hua I Hsueh Tsa Chih** 1989 Apr;69(4):206–8, 16 (Eng. Abstr.) (Chi)

[Detection of hCG serum levels in choriocarcinoma using monoclonal antibodies] Vlachová J, et al. **Cesk Gynekol** 1989 Apr;54(3):179–84 (Eng. Abstr.) (Cze)

[Effects of gestrinone on serum lipid and lipoprotein levels in women with endometriosis] Fukuda Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May; 41(5):577–84 (Eng. Abstr.) (Jpn)

[A case of hypoglycemia originating outside the pancreas] Dowiacka-Okruszko D, et al. **Pol Arch Med Wewn** 1985 Apr;73(4):256–8 (Eng. Abstr.) (Pol)

[Characteristics of the hormonal ratios following the surgical treatment of patients with uterine myoma] Gladun EV, et al. **Akush Ginekol (Mosk)** 1988 May;(5):17–9 (Rus)

[Characteristics of blood rheological and coagulation properties in patients with uterine myoma] Kirsanova MI. **Akush Ginekol (Mosk)** 1988 May;(5):14–7 (Eng. Abstr.) (Rus)

[Blood coagulation changes in gynecologic patients during surgery] Vdovina GF, et al. **Akush Ginekol (Mosk)** 1988 May;(5):27–30 (Eng. Abstr.) (Rus)

[Blood levels of gonadotropic and steroid hormones in patients with internal endometriosis treated by transcerebral ultrahigh frequency electromagnetic fields] Perfil'eva IF, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):66–8 (Rus)

[1H-NMR of blood lipids in malignant and benign tumors] Iushmanov VE, et al. **Vopr Onkol** 1989;35(5):560–4 (Eng. Abstr.) (Rus)

BLOOD SUPPLY

Successful pregnancy after selective embolization of a post-molar vascular malformation. Case report. Tacchi D, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):814–7

Blood flow and oxygen consumption rates of human gynecological tumors xenografted into rnu/rnu-rats. Vaupel P, et al. **Strahlenther Onkol** 1989 Jul;165(7):502

[Embolization of the internal iliac arteries in treating hemorrhage caused by uterine neoplasm] Szczerbo-Trojanowska M, et al. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun;52(3):184–7 (Eng. Abstr.) (Pol)

CHEMICALLY INDUCED

Risk of endometrial cancer after treatment with oestrogens alone or in conjunction with progestogens: results of a prospective study. Persson I, et al. **BMJ** 1989 Jan 21; 298(6667):147–51

Endometrial cancer and patterns of use of oestrogen replacement therapy: a cohort study. Paganini-Hill A, et al. **Br J Cancer** 1989 Mar;59(3):445–7

Estrone v estradiol: an examination of relative carcinogenic potential. Notelovitz M. **Int J Fertil** 1986;31 Suppl:35–8 (38 ref.)

Endometrial polyps in postmenopausal patients receiving tamoxifen. Nuovo MA, et al. **Int J Gynecol Pathol** 1989; 8(2):125–31

Induction of uterine hemangioendothelioma and lymphoma in (C57BL/6N x C3H/2N)F1 mice by oral administration of azathioprine. Ito A, et al. **Jpn J Cancer Res** 1989 May; 80(5):419–23

Tamoxifen and the uterus and endometrium [letter] **Lancet** 1989 Feb 18;1(8634):375–6

Adjuvant tamoxifen in early breast cancer: occurrence of new primary cancers. Fornander T, et al. **Lancet** 1989 Jan 21;1(8630):117–20

Adjuvant tamoxifen and second cancers [letter] Fornander T, et al. **Lancet** 1989 Mar 18;1(8638):616

Tamoxifen and endometrial cancer [letter] Jordan VC. **Lancet** 1989 Apr 1;1(8640):733–4

[Paradoxical effects of tamoxifen on the woman's uterus. Apropos of 7 cases of myoma that appeared while under anti-estrogen treatment] Boudouris O, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(3):372–8 (Eng. Abstr.) (Fre)

[Modifying effect of ascorbic acid and sodium ascorbate on uterine carcomogenesis induced by 1,2-dimethylhydrazine in CBA mice] Trukhanova LS. **Eksp Onkol** 1988;10(5):65–6 (Eng. Abstr.) (Rus)

[Effect of estradiol dipropionate on the development of uterine sarcoma induced by 1,2-dimethylhydrazine in mice] Morozova OV, et al. **Vopr Onkol** 1989;35(1):52–7 (Eng. Abstr.) (Rus)

CLASSIFICATION

[Cytologic classification of precancer and cancer of the endometrium and esophagus and of malignant lymphomas] Puchkov IuG, et al. **Vopr Onkol** 1988;34(9):1075–9 (Eng. Abstr.) (Rus)

COMPLICATIONS

Cerebral sinus thrombosis in patients with severe iron deficiency anaemia due to myoma uteri. Aoki N, et al. **Acta Neurochir (Wien)** 1989;97(3–4):131–4

Life-threatening hemorrhage due to uterine vascular abnormality. Jensen H, et al. **Acta Obstet Gynecol Scand** 1988;67(4):363–5

Hormonal contraception and trophoblastic sequelae after hydatidiform mole (a Gynecologic Oncology Group Study). Curry SL, et al. **Am J Obstet Gynecol** 1989 Apr; 160(4):805–9; discussion 809–11

Peritoneal keratin granulomas from transtubal spread of endometrial carcinoma with squamous metaplasia (adenoacanthoma). Case report. Wotherspoon AC, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):236–40

Infectious pneumoperitoneum as an uncommon presentation of endometrial carcinoma: report of two cases. Douvier S, et al. **Gynecol Oncol** 1989 Jun;33(3):392–4 (22 ref.)

Eclampsia as a possible risk factor for persistent trophoblastic disease. Newman RB, et al. **Gynecol Oncol** 1989 Aug; 34(2):212–5 (33 ref.)

Virilization due to a rare ovarian tumor in a postmenopausal woman. Varma TR, et al. **Int J Gynaecol Obstet** 1988 Dec; 27(3):443–9

Peripheral neuropathy with predominantly motor

manifestations in a patient with carcinoma of the uterus. Yamada M, et al. **J Neurol** 1988 Jul;235(6):368–70

Uterine haemangioma in Klippel–Trenaunay–Weber syndrome. Lawlor F, et al. **J R Soc Med** 1988 Nov; 81(11):665–6

Uterine incarceration associated with uterine leiomyomata: clinical and sonographic presentation. Hankins GD, et al. **JCU** 1989 Jun;17(5):385–8

Endometrial carcinoma with uterus didelphys. Thomas AG, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):411–3

Complications of uterine leiomyomas in pregnancy. Katz VL, et al. **Obstet Gynecol** 1989 Apr;73(4):593–6

Paraneoplastic hypercalcemia in endometrial carcinoma. Hiller N, et al. **Oncology** 1989;46(1):45–8

Endolymphatic stromal myosis coexisting with adenocarcinoma of the uterus. Ohta H, et al. **Ultrastruct Pathol** 1988 Nov–Dec;12(6):559–66

[Pelvic arterio–venous fistula of gestational trophoblastic neoplasms] Yang XY. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Mar;23(2):91–4, 128 (Eng. Abstr.) (Chi)

[Bronchial hyperreactivity in non–asthmatic patients harboring a uterine fibroma] Giamarchi D, et al. **Allerg Immunol (Paris)** 1989 Feb;21(2):72–5 (26 ref.) (Eng. Abstr.) (Fre)

[What lesions of the myometrium are responsible for hemorrhage?] Delarue T, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):679–86 (Eng. Abstr.) (Fre)

[Fertility after trophoblastic disease] Garozzo G, et al. **G Ital Oncol** 1987 Apr–Sep;7(2–3):91–4 (Eng. Abstr.) (Ita)

[Percutaneous nephrostomy of postrenal failure due to locally advanced uterine cervical cancer] Shimamoto T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1471–4 (Jpn)

[A combination of a nodular uterine fibromyoma and a carcinoid of the vermiform process] Bragin VV, et al. **Klin Khir** 1989;(5):63–4 (Rus)

[Strangulation of a fibromatous uterine node in a hernia of the semilunar line in pregnancy] Sinepupov NA, et al. **Klin Khir** 1989;(2):57 (Rus)

[Acute renal failure following necrosis of a myoma in the puerperium] Boaner H, et al. **Jugosl Ginekol Perinatol** 1989 Jan–Apr;29(1–2):55–8 (Eng. Abstr.) (Ser)

[Uterine leiomyosarcoma which spread through the vena cava to the pulmonary artery] Contreras Rodriguez R, et al. **Arch Inst Cardiol Mex** 1988 Sep–Oct;58(5):453–9 (Eng. Abstr.) (Spa)

CONGENITAL

Choriocarcinoma in mother and child. Case report. Flam F, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):241–4 (22 ref.)

DIAGNOSIS

Cytologic features of endometrial papillary serous carcinoma. Kuebler DL, et al. **Acta Cytol** 1989 Jan–Feb;33(1):120–6

Secretory carcinoma of the endometrium. Kusuyama Y, et al. **Acta Cytol** 1989 Jan–Feb;33(1):127–30

Pelvic arteriovenous malformation diagnosed by color flow Doppler imaging. Abu Musa A, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1311–2

Mixed müllerian sarcoma of the uterus: MR imaging findings. Shapeero LG, et al. **AJR Am J Roentgenol** 1989 Aug; 153(2):317–9

Radioimmunoassay of free beta–subunit of human chorionic gonadotropin in diagnosis of high–risk and low–risk gestational trophoblastic disease. Khazaeli MB, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):444–9

The clinical significance of uterine leiomyomas in pregnancy. Rice JP, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1212–6

First trimester diagnosis of a partial mole with the combined use of ultrasound and chorionic villous sampling. Romero R, et al. **Am J Perinatol** 1989 Jul;6(3):314–5

CA19–9, CA125 and CEA in endometrial carcinoma tissue and its relation to hormone receptor content and histological grading. Neunteufel W, et al. **Arch Gynecol Obstet** 1988;244(1):47–52

Recurrent hydatidiform mole: a report of a patient with 7 consecutive moles. Thavarasah AS, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):233–5

Don't ignore a positive pregnancy test. Smith DB, et al. **BMJ** 1988 Oct 29;297(6656):1119–20

Cystic uterine fibroid: an unusual ultrasonic appearance. Case report. Grech P, et al. **Br J Obstet Gynaecol** 1989 Aug; 96(8):992–3

Studies with choriocarcinoma and normal pregnancy serum chorionic gonadotrophin. Mwenda JM, et al. **East Afr Med J** 1989 Jan;66(1):2–9

Echographic aspects of the mixed müllerian tumor of the endometrium. Mastrantonio P, et al. **Eur J Gynaecol Oncol** 1989;10(1):43–8

Human chorionic gonadotropin levels in various compartments in disturbed early pregnancy. Dericks–Tan JS, et al. **Fertil Steril** 1989 Feb;51(2):351–3

Doppler color flow mapping of an invasive mole. Aoki S, et al. **Gynecol Obstet Invest** 1989;27(1):52–4

Uterine leiomyosarcoma—magnetic resonance imaging. Janus C, et al. **Gynecol Oncol** 1989 Jan;32(1):79–81

Magnetic resonance imaging determination of myometrial invasion in endometrial carcinoma. Yazigi R, et al. **Gynecol Oncol** 1989 Jul;34(1):94–7

Serum CA 125 as a marker for patients with external endometriosis. Takahashi K, et al. **Int J Fertil** 1989 Mar–Apr;34(2):143–8

Biomagnetic measurements in uterine leiomyomas using a superconducting quantum interference device (SQUID). Anastasiadis PG, et al. **Int J Gynaecol Obstet** 1989 May; 29(1):47–9

In vivo release of beta human chorionic gonadotropin by luteinizing hormone releasing hormone stimulation and its clinical application as a remission criterion in patients with gestational trophoblastic disease. Kim SJ, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):193–8

Endometrial carcinoma presenting as a large inguinal mass. Ramahi A, et al. **Int J Gynaecol Obstet** 1989 Jan;28(1):67–70

Uterine myoma in pregnancy: ultrasound study. Rosati P, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):109–17

Uterine leiomyomas with lymphoid infiltration simulating lymphoma. A report of seven cases. Ferry JA, et al. **Int J Gynecol Pathol** 1989;8(3):263–70

Complex endometrial hyperplasia and carcinoma in adolescents and young women 15 to 20 years of age. A report of 10 cases. Lee KR, et al. **Int J Gynecol Pathol** 1989;8(3):201–13

Metastatic adnexal trophoblastic neoplasm: contribution of MR imaging. Mirich DR, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1061–7

Computed tomography and angiographic findings in metastatic choriocarcinoma. Watanabe AS, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):319–22

Endometrial cancer—diagnosis and management. Crozier MA. **J Med Assoc Ga** 1989 Jun;78(6):354–6

Meningopolyradiculitis (Bannwarth syndrome) as primary manifestation of a centrocytic–centroblastic lymphoma. Wilder–Smith E, et al. **J Neurol** 1989 Mar;236(3):168–9

Non–Hodgkin's lymphoma of the uterus in a child. Egwuatu VE. **J Pediatr Surg** 1989 Feb;24(2):220–2

Antibody imaging to locate a placental site trophoblastic tumour following a complete hydatidiform mole. Heyderman RS, et al. **J R Soc Med** 1989 May;82(5):299–300

Pelvic ultrasound—should it be used routinely in the diagnosis and screening of postmenopausal bleeding? Discussion paper. Ross LD. **J R Soc Med** 1988 Dec; 81(12):723–4

Ultrasound findings in pregnancies complicated by fetal triploidy. Pircon RA, et al. **J Ultrasound Med** 1989 Sep; 8(9):507–11

Vaginal endosonography in endometrial cancer [letter] Cruickshank DJ, et al. **Lancet** 1989 Feb 25;1(8635):445–6

Vaginal ultrasound [letter] Luesley D. **Lancet** 1989 Apr 15; 1(8642):843

Intrauterine ultrasonography and endometrial cancer [letter] Rosenberg P, et al. **Lancet** 1989 Apr 15;1(8642):842–3

Sonographic diagnosis of partial hydatidiform mole. Fine C, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):414–8

Endometrial sampling prior to hysterectomy [published erratum appears in Obstet Gynecol 1989 Jul;74(1):105] Stovall TG, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):405–9

Diagnosis and management of the primary hydatidiform mole. Berkowitz RS, et al. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):491–503 (47 ref.)

Human chorionic gonadotropin assays and their uses. Tyrey L. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):457–75 (76 ref.)

MR imaging of the uterus. McCarthy S. **Radiology** 1989 May; 171(2):321–2

Recurrence of ovarian and uterine neoplasms: diagnosis with transrectal US. Squillaci E, et al. **Radiology** 1988 Nov; 169(2):355–8

Enlarged uterus: differentiation between adenomyosis and leiomyoma with MR imaging. Togashi K, et al. **Radiology** 1989 May;171(2):531–4

Gestational choriocarcinoma presenting as endobronchial carcinoma. McLeod DT. **Thorax** 1988 May;43(5):410–1

The use of monoclonal antibody B72.3 in the management of gynecologic malignancies. Simpson J, et al. **Yale J Biol Med** 1988 Jul–Aug;61(4):351–66 (57 ref.)

[Hysteroscopic assessment of endometrial cancer] Grozdanov G. **Akush Ginekol (Sofiia)** 1988;27(6):76–8 (Eng. Abstr.) (Bul)

[Diagnostic value of serum copper/zinc ratio in gynecologic tumors] Gao ZJ. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):434–6 (Eng. Abstr.) (Chi)

[Gestational trophoblastic diseases in women aged 50 or over] Zhang SZ. **Chung Hua Fu Chan Ko Tsa Chih** 1988 May; 23(3):159–61, 189 (Eng. Abstr.) (Chi)

[Clinical application of magnetic resonance imaging in gynecology] Zou SS. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jan;24(1):19–21, 58 (Eng. Abstr.) (Chi)

[Diagnostic and therapeutic applications of hysteroscopy] Wamsteker K, et al. **Ned Tijdschr Geneeskd** 1988 Nov 5; 132(45):2041–4 (Dut)

[Imaging of malignant tumors of the uterus and ovary] Masselot J, et al. **Ann Radiol (Paris)** 1989;32(2):136–46 (49 ref.) (Eng. Abstr.) (Fre)

[Early diagnosis of cancer of the endometrium and its precursors: clinical and imaging aspects] Leroy–Brasme T, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988; 17(6):727–32 (42 ref.) (Fre)

[Mixed Müllerian tumors. Apropos of a new case with a review of the literature] Zhiri MA, et al. **Rev Fr Gynecol Obstet** 1989 May;84(5):447–50 (14 ref.) (Eng. Abstr.) (Fre)

[Vaginosonographic measurement of the postmenopausal endometrium in the early detection of endometrial cancer] Osmers R, et al. **Geburtshilfe Frauenheilkd** 1989 Mar; 49(3):262–5 (Eng. Abstr.) (Ger)

[Endosonography in gynecology—especially in the climacteric and in endometrial cancer] Schurz B, et al. **Gynakol Rundsch** 1988;28 Suppl 2:214–5 (Ger)

[HCG and SP–1 as markers in trophoblast tumors. The HCG/SP–1 ratio] Than GN, et al. **Gynakol Rundsch** 1988; 28(3):157–65 (Eng. Abstr.) (Ger)

[Problems of the cytological diagnosis in carcinoma of the corpus uteri] Bacher R, et al. **Osterr Z Erforsch Bekampf Krebskr** 1970;25(1):1–5 (Eng. Abstr.) (Ger)

[Cytology of endometrial carcinoma] Jahoda E. **Osterr Z Erforsch Bekampf Krebskr** 1970;25(2):119–28 (Eng. Abstr.) (Ger)

[Bone and liver metastases in uterine, cervical and ovarian cancer] Karkavitsas N. **Rontgenblatter** 1988 Aug; 41(8):326–8 (Eng. Abstr.) (Ger)

[Recurrent thrombophlebitis, weakness (clinical conference)] Predel HG, et al. **Schweiz Rundsch Med Prax** 1989 May 2;78(18):532–4 (Eng. Abstr.) (Ger)

[Up–to–date diagnosis and therapy of trophoblastic diseases] Gáti I. **Orv Hetil** 1988 Sep 18;129(38):2011–6 (41 ref.) (Eng. Abstr.) (Hun)

[Serum CA 125 and TPA determination in malignant neoplasms of the uterus] Gadducci A, et al. **Ann Ostet Ginecol Med Perinat** 1988 May–Jun;109(3):151–5 (Eng. Abstr.) (Ita)

[Magnetic resonance in the evaluation of pathology of the uterus and ovary] Gualdi GF, et al. **Clin Ter** 1989 Apr 15;129(1):55–61 (Ita)

[Mesonephric adenocarcinoma of the endometrium. Reflections on a case] Vucusa C, et al. **Minerva Ginecol** 1988 Oct;40(10):609–11 (Eng. Abstr.) (Ita)

[Assessment of the myometrial infiltration of endometrial carcinoma (FIGO stage I–II). The accuracy of magnetic resonance (1.5 T)] Sironi S, et al. **Radiol Med (Torino)** 1989 Apr;77(4):386–90 (Eng. Abstr.) (Ita)

[Transvaginal echography: initial experiences in oncologic gynecology] Squillaci E, et al. **Radiol Med (Torino)** 1989 Jun;77(6):658–62 (Eng. Abstr.) (Ita)

[Differential diagnosis of early carcinoma of the uterus] Hasumi K. **Gan No Rinsho** 1988 Aug;34(10):1416–20 (Eng. Abstr.) (Jpn)

[Diagnosis of uterine cancer] Yajima A. **Gan No Rinsho** 1989 Jan;Spec No:367–73 (Jpn)

[Detection and diagnosis of early uterine cancer] Kitao M, et al. **Nippon Rinsho** 1989 May;47(5):1158–64 (Jpn)

[Adenomyosis] Gwóźdź AZ. **Ginekol Pol** 1988 Oct; 59(10):632–6 (Eng. Abstr.) (Pol)

[Management of patients with uterine myoma showing trophic disorders] Brumshtein LM. **Akush Ginekol (Mosk)** 1989 Apr;(4):31–3 (Eng. Abstr.) (Rus)

[Echographic characteristics of endometrial cancer] Demidov VN, et al. **Akush Ginekol (Mosk)** 1988 May; (5):21–3 (Eng. Abstr.) (Rus)

[Possibilities of transvaginal echography in the examination of the uterus and ovaries] Griaznova IM, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):17–21 (Eng. Abstr.) (Rus)

[Detection and treatment of patients with malignant neoplasms of the female genital organs] Gulaia VI, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):21–3 (Rus)

[Diagnosis of precancerous conditions of the endometrium] Khait BM. **Akush Ginekol (Mosk)** 1988 Nov;(11):30–3 (Eng. Abstr.) (Rus)

[Echographic transvaginal diagnosis of diseases of the internal genital organs] Strizhakov AN, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):12–7 (Eng. Abstr.) (Rus)

[Clinical aspects, diagnosis and treatment of endometrial polyps] Zheleznov BI, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):73–7 (Rus)

[Differential diagnostic cytologic signs of atypical hyperplasia and cancer of the endometrium] Iagubov AS, et al. **Vopr Onkol** 1989;35(6):680–4 (Eng. Abstr.) (Rus)

DRUG THERAPY

The GnRH agonists in the treatment of uterine leiomyomas. Bianchi S, et al. **Acta Eur Fertil** 1989 Jan–Feb;20(1):5–10 (34 ref.)

Results of low–dose methotrexate treatment of persistent gestational trophoblastic disease in Sheffield 1980–1987. Dorreen MS, et al. **Acta Oncol** 1988;27(5):551–6

A phase II clinical trial of diaziquone in the treatment of patients with recurrent endometrial carcinoma. A Gynecologic Oncology Group study. Slayton RE, et al. **Am J Clin Oncol** 1988 Dec;11(6):612–3

Endocrine aspects of human uterine sarcoma [letter] Quinn MA. **Am J Obstet Gynecol** 1988 Oct;159(4):1019

Phase II trial of ifosfamide and mesna in mixed mesodermal tumors of the uterus (a Gynecologic Oncology Group study). Sutton GP, et al. **Am J Obstet Gynecol** 1989 Aug; 161(2):309–12

Bleomycin, cisplatin and etoposide combination therapy (BCE) in drug–resistant gestational choriocarcinoma.

Yamamoto T, et al. **Asia Oceania J Obstet Gynaecol** 1988 Dec;14(4):443–7

Anti-oestrogens in the treatment of breast and gynaecological cancers. Furr BJ. **Baillieres Clin Obstet Gynaecol** 1988 Sep;2(3):567–80 (76 ref.)

LHRH analogues in the management of uterine fibroids, premenstrual syndrome and breast malignancies. West CP. **Baillieres Clin Obstet Gynaecol** 1988 Sep;2(3):689–709 (88 ref.)

The role of low-dose methotrexate and folinic acid in gestational trophoblastic tumours (GTT). Bagshawe KD, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):795–802

A randomized trial of progestogens in the primary treatment of endometrial carcinoma [letter] Kneale BL, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):828

Long-term follow-up of patients with uterine fibroids after treatment with the LHRH agonist buserelin. Matta WH, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):200–6

Preliminary report on the use of danazol in the treatment of endometrial adenomatous hyperplasia. Terakawa N, et al. **Cancer** 1988 Dec 15;62(12):2618–21

A randomized trial of adjuvant progestagen in early endometrial cancer. Vergote I, et al. **Cancer** 1989 Sep 1; 64(5):1011–6

Supplementation with selenium, vitamin E and their combination in gynaecological cancer during cytotoxic chemotherapy. Sundström H, et al. **Carcinogenesis** 1989 Feb;10(2):273–8

Double-layered stick-type formulation of bleomycin for treatment of uterine cervical cancer. Iwata M, et al. **Drug Des Deliv** 1987 Feb;1(3):253–60

Death from chemotherapy in gestational trophoblastic disease. Hoogla..d HJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Oct;29(2):167–72

Long-term treatment of leiomyomas with gestrinone. Coutinho EM, et al. **Fertil Steril** 1989 Jun;51(6):939–46

Treatment of uterine fibroids with implants of gonadotropin-releasing hormone agonist: assessment by hysterography. Donnez J, et al. **Fertil Steril** 1989 Jun; 51(6):947–50

Vaginal hemorrhage associated with degenerating submucous leiomyomata during leuprolide acetate treatment. Friedman AJ. **Fertil Steril** 1989 Jul;52(1):152–4

A randomized, placebo-controlled, double-blind study evaluating the efficacy of leuprolide acetate depot in the treatment of uterine leiomyomata. Friedman AJ, et al. **Fertil Steril** 1989 Feb;51(2):251–6

Treatment of leiomyomata uteri with short-term leuprolide followed by leuprolide plus estrogen-progestin hormone replacement therapy for 2 years: a pilot study. Friedman AJ. **Fertil Steril** 1989 Mar;51(3):526–8

Cornual fibroids: a conservative approach to restoring tubal patency using a gonadotropin-releasing hormone agonist (goserelin) with successful pregnancy. Gardner RL, et al. **Fertil Steril** 1989 Aug;52(2):332–4

D-Trp-6-luteinizing hormone-releasing hormone microcapsules in the treatment of uterine leiomyomas. Golan A, et al. **Fertil Steril** 1989 Sep;52(3):406–11

The effect of chronic gonadotropin-releasing hormone analog (D-Trp-6) treatment on elevated and normal serum prolactin levels. Golan A, et al. **Fertil Steril** 1989 Mar; 51(3):532–4

Efficacy of a gonadotropin-releasing hormone agonist in the treatment of uterine leiomyomata: long-term follow-up. Letterie GS, et al. **Fertil Steril** 1989 Jun;51(6):951–6

Evaluation of management of gestational trophoblastic tumor in National Taiwan University Hospital. Ouyang PC. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1544–52

Rapid reduction of uterine leiomyomas with monthly injections of D-Trp6-GnRH. van Leusden HA, et al. **Gynecol Endocrinol** 1988 Mar;2(1):45–51

Doxorubicin delivered by subcutaneous pellets suppresses uterine sarcoma xerografts in athymic mice. Amalfitano T, et al. **Gynecol Oncol** 1989 Mar;32(3):354–6

Efficacy of sequential cyclical hormonal therapy in endometrial cancer and its correlation with steroid hormone receptor status. Ayoub J, et al. **Gynecol Oncol** 1988 Oct;31(2):327–37

Treatment of nonmetastatic gestational trophoblastic disease with sequential intramuscular and oral methotrexate. Barter JF, et al. **Gynecol Oncol** 1989 Apr;33(1):82–4

EMA/CO regimen in high-risk gestational trophoblastic tumor (GTT). Bolis G, et al. **Gynecol Oncol** 1988 Nov; 31(3):439–44

Glassy cell carcinoma of the endometrium responsive to megestrol acetate. Dawson EC, et al. **Gynecol Oncol** 1989 Apr;33(1):121–4

High risk malignant gestational trophoblastic disease: experience with triple chemotherapy (MAC) in Third World circumstances. du Toit JP. **Gynecol Oncol** 1989 Mar; 32(3):310–3

Successful salvage therapy of resistant gestational trophoblastic disease with etoposide, methotrexate, dactinomycin, vincristine, and cyclophosphamide. Gallion HH, et al. **Gynecol Oncol** 1989 Jul;34(1):98–100

High-risk metastatic gestational trophoblastic disease: further stratification into two clinical entities. Gordon AN, et al. **Gynecol Oncol** 1989 Jul;34(1):54–6

Cisplatin and adriamycin combination chemotherapy for uterine stromal sarcomas and mixed mesodermal tumors. Peters WA 3d, et al. **Gynecol Oncol** 1989 Sep;34(3):323–7

Tamoxifen therapy in advanced/recurrent endometrial carcinoma. Quinn MA, et al. **Gynecol Oncol** 1989 Jan; 32(1):1–3

Treatment of advanced and recurrent endometrial carcinoma: correlation of patient response to hormonal and cytotoxic chemotherapy and the response predicted by the subrenal capsule chemosensitivity assay. Stratton JA, et al. **Gynecol Oncol** 1989 Jan;32(1):55–9

Phase II trial of cisplatin as first-line chemotherapy in patients with advanced or recurrent endometrial carcinoma: a Gynecologic Oncology Group Study. Thigpen JT, et al. **Gynecol Oncol** 1989 Apr;33(1):68–70

Hexamethylmelamine as first-line chemotherapy in the treatment of advanced or recurrent carcinoma of the endometrium: a phase II trial of the Gynecologic Oncology Group. Thigpen JT, et al. **Gynecol Oncol** 1988 Nov; 31(3):435–8

Reversible bone loss in women treated with GnRH-agonists for endometriosis and uterine leiomyoma. Waibel-Treber S, et al. **Hum Reprod** 1989 May;4(4):384–8

Changes in receptor status after treatment with tamoxifen in endometrial cancer. Oriana S, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):233–6

Long-term use of an LH-RH agonist in the management of uterine leiomyomas: a study of 17 cases. George M, et al. **Int J Fertil** 1989 Jan-Feb;34(1):19–24

Therapeutic hypogonadism induced by a delayed-release preparation of microcapsules of D-Trp-6-luteinizing hormone-releasing hormone: a preliminary study in eight women with endometriosis. Zorn JR, et al. **Int J Fertil** 1986 Mar-Apr;31(1):11–3, 16–27

Vinblastine, cisplatin and bleomycin as salvage therapy for refractory high-risk metastatic gestational trophoblastic disease. DuBeshter B, et al. **J Reprod Med** 1989 Mar; 34(3):189–92

Alternating methotrexate and dactinomycin in nonmetastatic gestational trophoblastic disease. Rose PG, et al. **J Surg Oncol** 1989 Jul;41(3):148–52

Complication of triptorelin treatment for uterine myomas [letter] Ellenbogen A, et al. **Lancet** 1989 Jul 15; 2(8655):167–8

Treating endometriosis with nafarelin. Few BJ. **MCN** 1988 Sep-Oct;13(5):323

A preliminary study of a combination chemotherapy with ifosfamide, adriamycin and cisplatin for endometrial carcinoma. Nishida T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1883–8

VM-26-vincristine-cisplatin combination chemotherapy in the treatment of primary advanced and recurrent endometrial carcinoma. Sorbe B, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):343–8

Low-risk metastatic gestational trophoblastic disease. Morrow CP, et al. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):521–9 (24 ref.)

Clinical experience in the treatment of fibroids with leuprolide and other GnRH agonists. Friedman AJ. **Obstet Gynecol Surv** 1989 May;44(5):311–3

Etiology and pathophysiology of fibroid tumor disease: diagnosis and current medical and surgical treatment alternatives. Marut EL. **Obstet Gynecol Surv** 1989 May; 44(5):308–10

Mitoxantrone therapy of advanced adenocarcinoma of the endometrium. A phase II trial. Runge HM, et al. **Onkologie** 1989 Apr;12(2):102–3

Phase II experience with ifosfamide/mesna in gynecologic malignancies: preliminary report of Gynecologic Oncology Group studies. Sutton GP, et al. **Semin Oncol** 1989 Feb; 16(1 Suppl 3):68–72

[Clinical and experimental study of gossypol in the treatment of dysfunctional menorrhagia, endometriosis and fibromyoma of the uterus] Ye XQ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Apr;8(4):216–7, 197 (Eng. Abstr.) (Chi)

[Combined treatment of malignant trophoblastic tumor with 5-fluorouracil and nitrocaphane] Wang YE. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):696–8 (Chi)

[Observation on blood biochemical indices after gossypol treatment in gynecological cases] Wang YF. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):215–8 (Eng. Abstr.) (Chi)

[An innovative protocol, cyclic hormone-chemotherapy in the treatment of high-risk localized endometrial cancer] Audet-Lapointe P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):751–5 (Fre)

[New possibilities for differentiated therapy of leiomyoma of the uterus using the GnRH agonist zoladex] Gesenhues T, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49 Suppl 1:96–8 (Eng. Abstr.) (Ger)

[Tolerance of intraoperative, intraperitoneal chemotherapy in advanced gynecologic malignancies] Werner A, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):574–8 (Eng. Abstr.) (Ger)

[The medroxyprogesterone acetate serum level following various medroxyprogesterone acetate dose schedules in gynecologic oncology] Huslein P, et al. **Zentralbl Gynakol** 1988;110(20):1277–82 (Eng. Abstr.) (Ger)

[Behavior of parameters of liver metabolism in intermediate-term use of the gestagen dienogest in the treatment of endometriosis] Köhler G, et al. **Zentralbl Gynakol** 1989;111(12):807–10 (Eng. Abstr.) (Ger)

[Therapy of juvenile adenomatous hyperplasia of the endometrium by progesterone stimulation] Krafft W. **Zentralbl Gynakol** 1989;111(12):846–8 (Ger)

[Adjuvant gestagen therapy in stage I endometrial cancer] Lahousen M, et al. **Zentralbl Gynakol** 1988;110(16):1013–7 (Eng. Abstr.) (Ger)

[Chemotherapy of carcinoma of the endometrium. Current approaches] Sesti F, et al. **G Ital Oncol** 1989 Apr-Sep; 9(2-3):59–62 (26 ref.) (Eng. Abstr.) (Ita)

[Current aspects of hormone therapy of endometrial carcinoma] Sesti F, et al. **G Ital Oncol** 1987 Oct-Dec; 7(4):168–74 (59 ref.) (Eng. Abstr.) (Ita)

[Combination chemotherapy using cyclophosphamide, adriamycin, and cisplatin in recurrent or advanced endometrial cancer—a preliminary report] Baba S, et al. **Gan No Rinsho** 1989 Feb;35(3):371–7 (Eng. Abstr.) (Jpn)

[Experimental study of the treatment of uterine leiomyosarcoma in the mouse with progestogen] Sato Y, et al. **Gan No Rinsho** 1988 Nov;34(14):1979–84 (Eng. Abstr.) (Jpn)

[A case of recurrent endometrial cancer (clear cell adenocarcinoma) remarkably responsive to combination chemotherapy containing cisplatin] Kitayama S, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2099–101 (Eng. Abstr.) (Jpn)

[Mechanism of action of endocrine therapy of endometrial carcinoma] Kuramoto H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1851–7 (Eng. Abstr.) (Jpn)

[Comparative studies of the antitumor activities of CDDP and the analogs—using gynecological carcinomas transplanted into nude mice] Suzumori K, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):387–91 (Eng. Abstr.) (Jpn)

[Combination with medroxyprogesterone acetate and chemotherapy making possible complete removal of uterine corpus carcinoma] Tajima H, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2461–4 (Eng. Abstr.) (Jpn)

[Effect of medroxyprogesterone acetate on side effects of CAP therapy in gynecological malignant tumors] Yanagawa Y, et al. **Gan To Kagaku Ryoho** 1989 Jul; 16(7):2393–8 (Eng. Abstr.) (Jpn)

[A case of carcinoma corporis by intra-arterial hypertension chemotherapy] Yoshino N, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3003–6 (Eng. Abstr.) (Jpn)

[Therapeutic results of the internal iliac arterial chemotherapy in uterine cervical and endometrial cancers] Kawagoe K. **Nippon Gan Chiryo Gakkai Shi** 1989 Apr 20; 24(4):765–71 (Eng. Abstr.) (Jpn)

[Effective progestogen therapy of endometrial hyperplasia and adenocarcinoma by administration of a combined progestogen-estrogen preparation] Miyawaki Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20; 23(10):2598–605 (Eng. Abstr.) (Jpn)

[Level of 5-fluorouracil in cancerous and normal tissues of nude mice bearing human endometrial carcinoma after administration of UFT coadministered with nicardipin] Suzuki M, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2703–8 (Eng. Abstr.) (Jpn)

[Effect of medical vagotomy on the CDDP induced nausea and vomiting evaluated by the chemotherapy-vomiting time (CV time)] Chen JT, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1359–64 (Eng. Abstr.) (Jpn)

[Shrinkage of uterine leiomyomas after intranasal administration of a LHRH agonist] Uemura T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar;41(3):365–8 (Jpn)

[Effects of tamoxifen and oxyprogesterone caproate on steroid hormone receptors in tumors and indicators of reproductive homeostasis in patients with cancer of the uterine body] Vishnevskii AS, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):33–6 (Eng. Abstr.) (Rus)

[Effect of tamoxifen on the content of cytoplasmic steroid hormone receptors of the tumor in patients with cancer of the corpus uteri] Tsyrlina EV, et al. **Vopr Onkol** 1989; 35(6):675–80 (Eng. Abstr.) (Rus)

[Effect of progestin therapy on the level of cytoplasmic receptors in patients with cancer of the corpus uteri] Vishnevskii AS, et al. **Vopr Onkol** 1989;35(5):594–8 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Immunochemical studies of human placental alkaline phosphatase in normal and neoplastic tissues. Vengerov YuYu, et al. **Adv Enzyme Regul** 1988;27:345–54

Estrone sulfatase activity in normal and neoplastic endometrial tissues of human uterus. Urabe M, et al. **Asia Oceania J Obstet Gynaecol** 1989 Mar;15(1):101–6

Modulation of plasminogen activator activity in human endometrial adenocarcinoma cells by basic fibroblast growth factor and transforming growth factor beta. Presta M, et al. **Cancer Res** 1988 Nov 15;48(22):6384–9

Expression of the germ cell alkaline phosphatase gene in human choriocarcinoma cells. Watanabe S, et al. **J Biol Chem** 1989 Jul 25;264(21):12611–9

Estrogen synthetase (aromatase) in cultured human term placental cells and neoplastic human trophoblast. Bellino FL, et al. **Steroids** 1987 Jul–Sep;50(1–3):73–87

Glucose, lactate, and ketone body utilization by human gynecological tumors xenografted into rnu/rnu–rats. Kallinowski F, et al. **Strahlenther Onkol** 1989 Jul; 165(7):507–8

[Experience and results with a lactate dehydrogenase marker in vaginal secretions of women at high risk for endometrial cancer] Osorio MT, et al. **Rev Fr Gynecol Obstet** 1989 Jan; 84(1):1–4 (Eng. Abstr.) **(Fre)**

[Paramagnetic form of ribonucleotide reductase in human tissues] Orazvalieva DR, et al. **Biofizika** 1989 Jan–Feb; 34(1):139–40 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Incidence of uterine cancer and precursor lesions in Alabama women in 1983. Lehman HF, et al. **Ala J Med Sci** 1988 Oct;25(4):383–8

Gynaecological cancer screening. Sivanesaratnam V. **Ann Acad Med Singapore** 1989 Jan;18(1):75–9

Mixed lipomas of the uterus and the broad ligament [letter] Fernández FA, et al. **Appl Pathol** 1989;7(1):70–1

Clinical experience with trophoblastic diseases in Nepal. Soma H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1577–81

A case–control study of cancer of endometrium in Athens. Koumantaki Y, et al. **Int J Cancer** 1989 May 15;43(5):795–9

The epidemiology of cancer of the uterine corpus in Canada: 1950–1985. Ayiomamitis A. **Int J Gynaecol Obstet** 1988 Oct;27(2):205–11

Observations on molar pregnancy in Enugu, Nigeria. Egwuatu VE, et al. **Int J Gynaecol Obstet** 1989 Jul; 29(3):219–25

Trophoblastic disease: 20 years' experience. Remy JC, et al. **Int J Gynaecol Obstet** 1989 Apr;28(4):355–60

Adipose tissue distribution and female carcinomas. A 12–year follow–up of participants in the population study of women in Gothenburg, Sweden. Lapidus L, et al. **Int J Obes** 1988; 12(4):361–8 (25 ref.)

The increasing trend in Japan of müllerian mixed tumor of endometrium. Kato T, et al. **Jpn J Clin Oncol** 1988 Dec; 18(4):303–8

Oral contraceptive use and malignancies of the genital tract. Results from the Royal College of General Practitioners' Oral Contraception Study. Beral V, et al. **Lancet** 1988 Dec 10;2(8624):1331–5

The occurrence of trophoblastic disease in Western Samoa. Paksoy N, et al. **N Z Med J** 1989 Apr 12;102(865):162–3

Epidemiologic characteristics of women with uterine fibroids: a case–control study. Parazzini F, et al. **Obstet Gynecol** 1988 Dec;72(6):853–7

Epidemiologic study of gestational trophoblastic diseases in Saudi Arabia. Chattopadhyay SK, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):393–8

[Epidemiology of cancer of the endometrium] Conte M, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):710–6 (73 ref.) **(Fre)**

[New trends in trophoblastic disease] Obata N. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1582–7 (Eng. Abstr.) **(Jpn)**

[Obesity as a risk factor in uterine cancer] Arai T, et al. **Nippon Rinsho** 1988 Nov;46(11):2462–6 **(Jpn)**

[Statistical analysis of trophoblastic disease in Kanagawa prefecture] Iwata Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):48–54 (Eng. Abstr.) **(Jpn)**

[Cancer of the uterine body and pathological endometrial hyperplasia] Malarewicz A, et al. **Wiad Lek** 1988 Mar 15; 41(6):368–72 (Eng. Abstr.) **(Pol)**

[Dependence of the incidence of the occurrence of ovarian and uterine tumors in rats on the irradiation dosage from accelerated particles and gamma rays] Fedorenko BS, et al. **Eksp Onkol** 1989;11(1):24–7 (Eng. Abstr.) **(Rus)**

[The incidence of recurrences and metastases of cancer of the corpus uteri and the reasons for their occurrence] Smakhtina OL, et al. **Vopr Onkol** 1989;35(4):473–7 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Endometrial carcinoma following chronic anovulation in a premenopausal woman with systemic lupus erythematosus. Sekiya S, et al. **Acta Obstet Gynecol Scand** 1988;67(6):553–6

Gestational trophoblastic disease: a case–control study from the People's Republic of China. Brinton LA, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):121–7

The biologic significance of cytologic atypia in progestogen–treated endometrial hyperplasia. Ferenczy A, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):126–31

Endometriosis etiology questioned [letter] Edwards IK. **AORN J** 1989 Feb;49(2):478

Persistent ectopic syndrome. Cairns JD, et al. **Can J Surg** 1989 Sep;32(5):387–9

Reproductive factors and risk of cancer of the uterine corpus: a prospective study. Kvåle G, et al. **Cancer Res** 1988 Nov 1;48(21):6217–21

Risk factors of endometrial cancer in Palermo. Geraci P, et al. **Clin Exp Obstet Gynecol** 1988;15(4):129–33

Increased frequency of complete hydatidiform mole in women with repeated abortion. Acaia B, et al. **Gynecol Oncol** 1988 Oct;31(2):310–4

Uterine tumors in ataxia–telangiectasia. Gatti RA, et al. **Gynecol Oncol** 1989 Feb;32(2):257–60

Risk factors for breast and endometrial cancer in a cohort of women treated with menopausal oestrogens. Bergkvist L, et al. **Int J Epidemiol** 1988 Dec;17(4):732–7

Pelvic irradiation and tamoxifen as risk factors for carcinoma of corpus uteri [letter] Hardell L. **Lancet** 1988 Dec 17; 2(8625):1432

How many endometrial cancer may develop from hyperplasia? Surico N, et al. **Panminerva Med** 1988 Oct–Dec;30(4):225–30

A new approach using DNA fingerprinting for the determination of androgenesis as a cause of hydatidiform mole. Saji F, et al. **Placenta** 1989 Jul–Aug;10(4):399–405

[Papillomavirus and carcinoma of the uterine cervix] ter Schegget J. **Ned Tijdschr Geneeskd** 1989 May 13; 133(19):967–71 (28 ref.) **(Dut)**

[Diagnosis of thyroid function in uterine myomatosis] Lange R, et al. **Zentralbl Gynakol** 1989;111(1):47–52 (Eng. Abstr.) **(Ger)**

[Materno–fetal complications in pregnancies with multiple myomas] Rosati P, et al. **Zentralbl Gynakol** 1988; 110(19):1213–7 (Eng. Abstr.) **(Ger)**

[The investigation on high risk factors and common etiological factors in patients with endometrial cancer] Kobayashi H. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1651–9 (Eng. Abstr.) **(Jpn)**

[Clinical pathology of hydatidiform mole] Romanowicz–Makowska H, et al. **Pol Tyg Lek** 1988 Sep 26;43(39):1270–3 **(Pol)**

[Uterine myoma] Marfunin DL. **Akush Ginekol (Mosk)** 1988 Nov;(11):6–9 (36 ref.) **(Rus)**

[The role of enzymes in the pathogenesis of genital tumors] Nagornaia VF. **Akush Ginekol (Mosk)** 1989 Apr;(4):11–5 (64 ref.) **(Rus)**

[Mucus formation in epithelial derivations of Müller's canal as exemplified by mucinous cancer of the endometrium] Karseladze AI. **Arkh Patol** 1988;50(10):33–7 (Eng. Abstr.) **(Rus)**

[Analysis of the association between previous contraceptive use and the incidence of cervico–uterine cancer in women from the northern and eastern area of Santiago] Dabancens A, et al. **Rev Chil Obstet Ginecol** 1986;51(2):188–94 (Eng. Abstr.) **(Spa)**

GENETICS

DNA ploidy and steroid receptors as predictors of disease course in patients with endometrial carcinoma. Iversen OE, et al. **Acta Obstet Gynecol Scand** 1988;67(6):531–7

ras oncogene is expressed in adenocarcinoma of the endometrium. Long CA, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1512–6

Cytogenetical observations in human benign uterine leiomyomas. Mark J, et al. **Anticancer Res** 1988 Jul–Aug; 8(4):621–6

Similar chromosomal evolution in a uterine stromomyosarcoma and in one of two leiomyomas from the same patient. Havel G, et al. **APMIS** 1989 Feb; 97(2):143–6

Genetically homozygous choriocarcinoma following pregnancy with hydatidiform mole. Fisher RA, et al. **Br J Cancer** 1988 Dec;58(6):788–92

Familial keratoses of actinic distribution associated with internal malignancy and cellular hypersensitivity to UVA. Atherton DJ, et al. **Br J Dermatol** 1989 May;120(5):671–81

No amplification or rearrangement of INT1, GLI, or COL2A1 in uterine leiomyomas with t(12;14)(q14–15;q23–24). Arheden K, et al. **Cancer Genet Cytogenet** 1989 Jun;39(2):195–201

Ins(10;19) in an endometrial stromal sarcoma. Dal Cin P, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):1–5

Association of trisomy 8 and squamous differentiation in an endometrial adenocarcinoma. Fletcher JA, et al. **Cancer Genet Cytogenet** 1989 Jun;39(2):185–9

Trisomy and tetrasomy of the long arm of chromosome 1 in a direct preparation of human endometrial adenocarcinoma. Horgas G, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):269–72

Ring formation and structural rearrangements of chromosome 1 as secondary changes in uterine leiomyomas with t(12;14)(q14–15;q23–24). Nilbert M, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):183–90

A uterine leiomyoma showing both t(12;14) and del(7) abnormalities. Sait SN, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):157–61

Genetically different cell subpopulations in hydatidiform moles. A study of three cases by RFLP, flow cytometric, cytogenetic, HLA, and morphologic analyses. Sunde L, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):179–92

Uterine leiomyoma cytogenetics. I. Rearrangements of chromosome 12. Vanni R, et al. **Cancer Genet Cytogenet** 1989 Jan;37(1):49–54

inv(12)(p11.2q13) in an endometrial polyp. Walter TA, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):99–103

Karyotypic rearrangements in 20 uterine leiomyomas. Nilbert M, et al. **Cytogenet Cell Genet** 1988;49(4):300–4

Flow cytometric DNA analysis of stage I endometrial carcinoma. Britton LC, et al. **Gynecol Oncol** 1989 Sep; 34(3):317–22

DNA content as a prognostic index in gestational trophoblastic neoplasia. Martin DA, et al. **Gynecol Oncol** 1989 Sep;34(3):383–8

The biology of tetraploid hydatidiform moles: histopathology, cytogenetics, and flow cytometry. Lage JM, et al. **Hum Pathol** 1989 May;20(5):419–25

Recurrent uterine myomata in three sisters—an uncommon occurrence. Kulenthran A, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):289–91

High level expression of fms proto–oncogene mRNA is observed in clinically aggressive human endometrial adenocarcinomas. Kacinski BM, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):823–9

Abnormal methylation of estrogen receptor gene and reduced estrogen receptor RNA levels in human endometrial carcinomas. Piva R, et al. **J Steroid Biochem** 1989 Jan; 32(1A):1–4

Rapid RFLP screening using DNA from complete hydatidiform moles. Litt M, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):464

Amplification and rearrangement of c–erb B proto–oncogenes in cancer of human female genital tract. Zhang X, et al. **Oncogene** 1989 Aug;4(8):985–9

Cytogenetic relationship between uterine lipoleiomyomas and typical leiomyomas. Havel G, et al. **Virchows Arch [B]** 1989; 57(1):77–9

[Partial hydatidiform mole—phenotype of triploidy] Zahradka M, et al. **Zentralbl Gynakol** 1988;110(20):1315–7 (Eng. Abstr.) **(Ger)**

[Somatic cell hybrids used in cytogenetic analysis of transformation mechanism of uterine endometrial cell] Yamada H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):122–8 (Eng. Abstr.) **(Jpn)**

[The expression of c–myc, c–fms, c–sis oncogenes in the trophoblast of normal pregnancy and trophoblastic disease] Yokoyama S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1867–74 (Eng. Abstr.) **(Jpn)**

HISTORY

Precursors of corpus carcinoma. Estrogens and adenomatous hyperplasia. 1947 [classical article] Gusberg SB. **CA** 1989 May–Jun;39(3):179–92

Gestational trophoblastic neoplasms: history of the current understanding. Hammond CB. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):435–41

IMMUNOLOGY

Trophoblast–derived immunoregulatory factor: demonstration of the biological function and the physicochemical characteristics of the factor derived from choriocarcinoma cell lines. Matsuzaki N, et al. **Am J Reprod Immunol** 1989 Apr;19(4):121–7

Serological analysis of cell surface antigens in choriocarcinoma cell lines. Saito M, et al. **Am J Reprod Immunol** 1989 Mar;19(3):114–9

Hydatidiform mole macromolecules inhibit interleukin–2–mediated murine lymphocyte proliferation in vitro. Bennett WA, et al. **Am J Reprod Immunol Microbiol** 1988 Nov;18(3):76–80

Human milk–fat globule membrane antigens (Mam–3 group) in normal cycling endometrium and endometrial carcinomas—an immunohistochemical study. A preliminary report. Ravn V, et al. **APMIS** 1989 May; 97(5):452–8

Immunohistochemical expression of CA 125 in endometrial adenocarcinoma: correlation of antigen expression with metastatic potential. Berchuck A, et al. **Cancer Res** 1989 Apr 15;49(8):2091–5

Multiple serum markers in patients with endometrial cancer. Panici PB, et al. **Gynecol Obstet Invest** 1989;27(4):208–12

A nonsialylated high–molecular–weight glycoprotein defined by a monoclonal antibody to adenocarcinoma of the uterine endometrium. Inoue M, et al. **Gynecol Oncol** 1989 Jun; 33(3):344–50

Monoclonal antibody–defined antigen of human uterine endometrial carcinomas is Leb. Iwamori M, et al. **J Biochem (Tokyo)** 1989 May;105(5):718–22

Suppression of lymphocyte proliferation in vitro by macromolecules in the vesicle fluid and tissue extracts of hydatidiform mole. Cowan BD, et al. **J Reprod Immunol** 1989 Mar;15(1):39–49

Immunohistological identification of T and B cells in normal and malignant tissues of the uterine endometrium. Mizuuchi H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):349–56

[Monoclonal antibodies raised against cultured cells and their application in cancer diagnosis] Nozawa S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1858–63 (Eng. Abstr.) **(Jpn)**

[Serum CA125 and CA19–9 levels in adenocarcinoma of the uterine cervix and endometrial carcinoma] Ihara Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1711–8 (Eng. Abstr.) **(Jpn)**

[Altered expression of Lewis antigens associated with malignant transformation in endometrial tissues] Inoue M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1425–31 (Eng. Abstr.) **(Jpn)**

[Distribution of oncotrophoblast antigens defined by monoclonal antibodies] Inoue R. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1837–43 (Eng. Abstr.) **(Jpn)**

[Biochemical indicators of neoplasms of the female genital organs] Kamiński K. **Ginekol Pol** 1988 Jun;59(6):376–80

(19 ref.) (Eng. Abstr.) (Pol)
[The role of the immune factor in the pathogenesis of uterine myoma] Zudikova SI. **Akush Ginekol (Mosk)** 1988 May; (5):11–3 (Eng. Abstr.) (Rus)
[Immunosuppressive activity of the blood serum of patients with cancer of the corpus uteri] Movsesian MA, et al. **Eksp Onkol** 1989;11(2):73–4 (Eng. Abstr.) (Rus)
[Immunological aspects of hyperplastic processes, precancerous conditions and cancer of the endometrium during the post–menopausal period] Kadagidze ZG, et al. **Sov Med** 1988;(7):25–9 (Rus)

METABOLISM

Cytochemical examinations of Ca, cytochrome oxidase and succinate dehydrogenase enzymes in endometrium carcinomatous tissue after high dose progestogen treatment. Szarvas Z, et al. **Acta Morphol Hung** 1988;36(3–4):177–83
The binding of epidermal growth factor to the human uterus and leiomyomata in women rendered hypo–oestrogenic by continuous administration of an LHRH agonist. Lumsden MA, et al. **Br J Obstet Gynaecol** 1988 Dec;95(12):1299–304
Immunohistological localization of pregnancy–associated endometrial alpha 2–globulin (alpha 2–PEG) in endometrial adenocarcinoma and effect of medroxyprogesterone acetate. Wood PL, et al. **Br J Obstet Gynaecol** 1988 Dec; 95(12):1292–8
Prognostic value of quantitative pathologic features and DNA content in individual patients with stage I endometrial adenocarcinoma. van der Putten HW, et al. **Cancer** 1989 Apr 1;63(7):1378–87
Increased extraction of estrogens in human endometrial hyperplasia and carcinoma. Bulletti C, et al. **Cancer Detect Prev** 1988;13(2):123–30
O–glycosylation of the alpha–subunit does not limit the assembly of chorionic gonadotropin alpha beta dimer in human malignant and nonmalignant trophoblast cells. Peters BP, et al. **Endocrinology** 1989 Apr;124(4):1602–12
Methotrexate–resistant mechanisms in human choriocarcinoma cells. Sakai K, et al. **Gynecol Oncol** 1989 Jul;34(1):7–11
Leydig cell tumor of the ovary associated with endometrial carcinoma and containing 17 beta–hydroxysteroid dehydrogenase. Ichinohasama R, et al. **Int J Gynecol Pathol** 1989;8(1):64–71
The predictive value of progesterone receptor levels in endometrial cancer. Ingram SS, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):21–7
The occurrence of epidermal growth factor receptors and the characterization of EGF–like factors in human ovarian, endometrial, cervical and breast cancer. EGF receptors and factors in gynecological carcinomas. Bauknecht T, et al. **J Cancer Res Clin Oncol** 1989;115(2):193–9
Sex hormones modulate the synthesis of basic fibroblast growth factor in human endometrial adenocarcinoma cells: implications for the neovascularization of normal and neoplastic endometrium. Presta M. **J Cell Physiol** 1988 Dec;137(3):593–7
The binding of peroxidase–labelled lectins to human endometrium in normal cyclical endometrium and endometrial adenocarcinoma. West KP, et al. **J Clin Pathol** 1989 Feb;42(2):140–7
The binding of steroids to myometrium and leiomyomata (fibroids) in women treated with the gonadotrophin–releasing hormone agonist Zoladex (ICI 118630). Lumsden MA, et al. **J Endocrinol** 1989 May; 121(2):389–96
Altered estrogen receptor system in estrogen–unresponsive human endometrial adenocarcinoma cells. Kassan S, et al. **J Steroid Biochem** 1989 Sep;33(3):327–33
Lectin–binding patterns in normal endometrium and endometrial adenocarcinoma. Aoki D. **Keio J Med** 1988 Dec;37(4):398–414
Human uterine leiomyoma cells: binding and growth responses to epidermal growth factor, platelet–derived growth factor, and insulin. Fayed YM, et al. **Lab Invest** 1989 Jan;60(1):30–7
Modulation of steroidogenesis in choriocarcinoma cells by cholera toxin, phorbol ester, epidermal growth factor and insulin–like growth factor I. Ritvos O. **Mol Cell Endocrinol** 1988 Sep;59(1–2):125–33
Collagen type III formation and distribution in the uterus: effects of hormones and neoplasm development. Stenbäck F. **Oncology** 1989;46(5):326–34
Receptor–mediated endocytosis of 125I–labelled transferrin by human choriocarcinoma (JAR) cells. Douglas GC, et al. **Placenta** 1988 May–Jun;9(3):253–65
A chromatofocusing study of human chorionic gonadotropin in biological fluids in normal pregnancy, pre–eclampsia and choriocarcinoma. Huang SC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1036–44
Atypical polypoid adenomyoma of the uterus. An immunohistochemical study of a case. Di Palma S, et al. **Tumori** 1989 Jun 30;75(3):292–5
[Drug sensitivity and cellular potassium release of cancer cells] Iwagaki H, et al. **Gan To Kagaku Ryoho** 1988 Oct; 15(10):2889–93 (Eng. Abstr.) (Jpn)
[Structural changes in human chorionic gonadotropin in trophoblastic diseases] Nishimura R, et al. **Rinsho Byori** 1988 Nov;Spec No 79:78–88 (Jpn)
[Cyclic AMP metabolism in target tissues in uterine myoma] Dobrotina AF, et al. **Sov Med** 1988;(5):16–8 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Typing of human papillomaviruses in cervical intraepithelial neoplasia grade 3 biopsies from Cape Town. Williamson AL, et al. **J Med Virol** 1989 Jul;28(3):146–9

MORTALITY

Features associated with survival and disease–free survival in early endometrial cancer. Sutton GP, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1385–91; discussion 1391–3
Analysis of endometrial carcinoma. Holohan M, et al. **Ir Med J** 1989 Feb;82(1):16–8
Parity as prognostic factor for malignant mixed müllerian tumours [letter] Marth C, et al. **Lancet** 1989 Apr 29; 1(8644):957
[No apparent correlation between the level of participation in the German early cancer detection program and the development of cancer mortality in females. An ecologic analysis] Robra BP, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):587–91 (Eng. Abstr.) (Ger)

PATHOLOGY

Cytological diagnosis of endometrial cancer and preinvasive endometrial lesions. A comparison of the Endo–Pap sampler with fractional curettage. Bistoletti P, et al. **Acta Obstet Gynecol Scand** 1988;67(4):343–5
Carcinofibroma—a rare variant of mixed müllerian tumor. Engdahl E, et al. **Acta Obstet Gynecol Scand** 1988; 67(1):85–8
Uterine microcurettage with combined endometrial histopathology and cytology. An alternative to conventional curettage. Löfgren O, et al. **Acta Obstet Gynecol Scand** 1988;67(5):401–3
A case of ovarian granulosa cell tumor with invasive adenocarcinoma of the endometrium. A case report and review of the Japanese literature. Nakamura S, et al. **Acta Pathol Jpn** 1988 Jul;38(7):947–51 (13 ref.)
Endometrial stromal sarcoma of low–grade malignancy. Immunohistochemical and three–dimensional reconstruction study with special emphasis on the inadequate terminology of endolymphatic stromal myosis. Suzuki M, et al. **Acta Pathol Jpn** 1989 Apr;39(4):260–5
Müllerian adenosarcomas of the uterus with sex cord–like elements. A clinicopathologic analysis of eight cases. Clement PB, et al. **Am J Clin Pathol** 1989 Jun;91(6):664–72
Preoperative sonographic evaluation of endometrial cancer. Cacciatore B, et al. **Am J Obstet Gynecol** 1989 Jan; 160(1):133–7
A clinical–pathologic study of mixed müllerian tumors of the uterus over a 16–year period—the Medical College of Georgia experience. Gallup DG, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):533–8; discussion 538–9
Mitotic activity in uterine leiomyomas during the menstrual cycle. Kawaguchi K, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):637–41
Sarcoma associated with pregnancy. Kyodo Y, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):94–6
Flow cytometry of normal, hyperplastic, and malignant human endometrium. A study of ploidy and proliferative indices including comparison with in vitro S–phase labeling. Thornton JG, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):487–92
Intravenous leiomyomatosis of the uterus. A clinicopathological analysis of 16 cases with unusual histologic features. Clement PB, et al. **Am J Surg Pathol** 1988 Dec;12(12):932–45
Müllerian adenosarcomas of the uterus with sarcomatous overgrowth. A clinicopathological analysis of 10 cases. Clement PB. **Am J Surg Pathol** 1989 Jan;13(1):28–38
Muscle tumor mitoses [letter] Tiltman AJ. **Am J Surg Pathol** 1988 Dec;12(12):967–8
Adenocarcinoma of the endometrium [letter] Uthman EO. **Am J Surg Pathol** 1989 Jun;13(6):524
Metastatic uterine tumor to the oral cavity: case report and 20–year review of the English literature. Tsounias B. **Ann Dent** 1988 Winter;47(2):26–7 (12 ref.)
Verrucous carcinoma of the endometrium. A case report. Hussain SF. **APMIS** 1988 Dec;96(12):1075–8
Pituitary–containing benign cystic teratoma arising from the uterosacral ligament. Heller DS, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):802–4
The clear–cell variant of uterine epithelioid leiomyoma. An immunohistologic and ultrastructural study. Hyde KE, et al. **Arch Pathol Lab Med** 1989 May;113(5):551–3
Intravenous leiomyomatosis: case report and review. Hughes PF. **Asia Oceania J Obstet Gynaecol** 1988 Dec;14(4):421–5 (20 ref.)
Pure rhabdomyosarcoma of the corpus uteri: a case report with a review of the literature. Teshima H, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):301–5 (17 ref.)
Metastasizing leiomyoma of the uterus. Ford JM, et al. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):154–5
Adenomyosis uteri: a study of 416 cases. Raju GC, et al. **Aust N Z J Obstet Gynaecol** 1988 Feb;28(1):72–3
Langerhans cell population in early invasive squamous cell carcinoma of the uterine cervix. Tay SK, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):38–40
Malignant lymphoma presenting as initial symptom in the uterus [letter] Divers MJ. **Br J Obstet Gynaecol** 1989 May; 96(5):623–5
Malignant lymphoma presenting as initial symptom in the uterus. Case report. Maeda T, et al. **Br J Obstet Gynaecol** 1988 Nov;95(11):1195–7
Discrepancy between curettage and hysterectomy histology in patients with stage I uterine malignancy. Soothill PW, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):478–81
Medroxyprogesterone acetate enhances spontaneous mammary tumorigenesis and uterine adenomyosis in mice. Nagasawa H, et al. **Breast Cancer Res Treat** 1988 Sep; 12(1):59–66
Smooth muscle neoplasms of the uterus other than ordinary leiomyoma. A study of 46 cases, with emphasis on diagnostic criteria and prognostic factors. Evans HL, et al. **Cancer** 1988 Nov 15;62(10):2239–47
Stage I serous papillary carcinoma of the endometrium. Gallion HH, et al. **Cancer** 1989 Jun 1;63(11):2224–8
Metastatic gestational choriocarcinoma. Unusual pathologic variant following therapy. Mazur MT. **Cancer** 1989 Apr 1;63(7):1370–7
Patterns of metastasis in uterine sarcoma. An autopsy study. Rose PG, et al. **Cancer** 1989 Mar 1;63(5):935–8
Generalized lymph node metastasis of early uterine cancer in an HTLV–I carrier. Taguchi H, et al. **Cancer** 1988 Dec 15;62(12):2614–7
Stimulatory effects of 4–hydroxytamoxifen on proliferation of human endometrial adenocarcinoma cells (Ishikawa line). Anzai Y, et al. **Cancer Res** 1989 May 1;49(9):2362–5
Enhanced growth of an estrogen receptor–negative endometrial adenocarcinoma by estradiol in athymic mice. Friedl A, et al. **Cancer Res** 1989 Sep 1;49(17):4758–64
Proliferation and responsiveness to estrogen of human endometrial cancer cells under serum–free culture conditions. Holinka CF, et al. **Cancer Res** 1989 Jun 15; 49(12):3297–301
Intravenous leiomyomatosis of the uterus with early pregnancy. Hui YZ, et al. **Chin Med J [Engl]** 1988 May; 101(5):325–8
Choriocarcinoma and invasive mole. Clinicopathologic study of 65 autopsied cases. Tang MY, et al. **Chin Med J [Engl]** 1988 Dec;101(12):890–7
Malignant mixed müllerian tumor of uterine corpus. Han CP, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;42(1):53–8
Pathology of endometriosis. Gerbie AB, et al. **Clin Obstet Gynecol** 1988 Dec;31(4):779–86 (48 ref.)
Mucinous metaplasia to neoplastic lesions in endometrial samples with cytohistologic correlation. Galera–Davidson H, et al. **Diagn Cytopathol** 1989;5(2):150–3
Leiomyosarcoma metastatic to the thyroid gland. Cruickshank JC. **Ear Nose Throat J** 1988 Dec; 67(12):899–900, 902, 904 passim (23 ref.)
Malignant mixed müllerian tumor of the endometrium. Report of a case with cytological diagnosis. Barbazza R, et al. **Eur J Gynaecol Oncol** 1988;9(5):381–5
Myoma uterus as a marker of oncogynecological pathology in pre– and post–menopause. Bokhman Ya, et al. **Eur J Gynaecol Oncol** 1988;9(5):355–9
Endometrial adenocarcinoma: therapeutic impact of preoperative histopathologic examination of endometrial tissue. Oakley G, et al. **Eur J Gynaecol Oncol** 1989; 10(4):255–60
Prognostic factors and endometrial carcinoma. Pfleiderer A, et al. **Eur J Gynaecol Oncol** 1989;10(3):186–91
Morphological changes of the ovarian surface epithelium in women with ovarian polycystic disease or endometrial carcinoma and a control group. Resta L, et al. **Eur J Gynaecol Oncol** 1989;10(1):39–41
Atypical polypoid adenomyoma—clinical histological and immunocytochemical findings. Rollason TP, et al. **Eur J Gynaecol Oncol** 1988;9(6):444–51
Dedifferentiating endometrial adenocarcinoma. Report of a case. Tenti P, et al. **Eur J Gynaecol Oncol** 1989;10(4):292–4
Cytology of malignant mixed mesodermal tumour of the uterus: experience of 10 cases. Tenti P, et al. **Eur J Gynaecol Oncol** 1989;10(2):125–8
The prognostic value of quantitative analysis in the endometrial carcinoma. Aalto ML. **Eur J Obstet Gynecol Reprod Biol** 1988 Oct;29(2):159–65
A case report of unusual complication of myomatous uterus in pregnancy: spontaneous perforation of myoma after red degeneration. Makar AP, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun;31(3):289–93
Intramural ectopic pregnancy implanting in adenomyosis. Ginsburg KA, et al. **Fertil Steril** 1989 Feb;51(2):354–6
Establishment and characterization of a human cell line from a serous papillary endometrial carcinoma. Boyd JA, et al. **Gynecol Oncol** 1989 Jun;33(3):301–12
Propensity of retroperitoneal lymph node metastasis in patients with stage I sarcoma of the uterus. Chen SS. **Gynecol Oncol** 1989 Feb;32(2):215–7
Characterization of human ovarian and endometrial carcinoma cell lines established on extracellular matrix. Crickard K, et al. **Gynecol Oncol** 1989 Feb;32(2):163–73
Endometrial adenocarcinoma histologic subtypes: clinical and pathologic profile. Fanning J, et al. **Gynecol Oncol** 1989 Mar;32(3):288–91
Preoperative assessment of myometrial invasion of endometrial adenocarcinoma by sonography (US) and magnetic resonance imaging (MRI). Gordon AN, et al. **Gynecol Oncol** 1989 Aug;34(2):175–9
Adenocarcinoma of the endometrium and endometrioid carcinoma of the ovary associated with pregnancy.

Hoffman MS, et al. **Gynecol Oncol** 1989 Jan;32(1):82–5

Synchronous adenocarcinoma and carcinoid of the uterine cervix: immunohistochemical study of a case and review of literature. Husain AN, et al. **Gynecol Oncol** 1989 Apr; 33(1):125–8 (19 ref.)

Peritoneal cytology in malignant mixed müllerian tumors of the uterus. Kanbour AI, et al. **Gynecol Oncol** 1989 Apr; 33(1):91–5

Advanced-stage endometrial cancer: contributions of estrogen use, smoking, and other risk factors. Lawrence C, et al. **Gynecol Oncol** 1989 Jan;32(1):41–5

Reliability of frozen section examination in identifying poor prognostic indicators in stage I endometrial adenocarcinoma. Malviya VK, et al. **Gynecol Oncol** 1989 Sep;34(3):299–304

Clinicopathologic analysis of uterine malignant mixed müllerian tumors. Nielsen SN, et al. **Gynecol Oncol** 1989 Sep;34(3):372–8

Synchronous carcinomas of endometrium and ovary. Piura B, et al. **Gynecol Oncol** 1989 May;33(2):261–4

Primary squamous cell carcinoma of the endometrium. Simon A, et al. **Gynecol Oncol** 1988 Nov;31(3):454–61 (16 ref.)

Stage IV endometrial carcinoma in a 25-year-old woman: a case report and review of the literature. Vardi JR, et al. **Gynecol Oncol** 1989 Aug;34(2):244–8 (26 ref.)

Type IV collagen immunostaining and computerized image analysis (SAMBA) in breast and endometrial disorders. Charpin C, et al. **Histopathology** 1989 Jan;14(1):47–60

A sertoliform endometrioid adenocarcinoma of the endometrium. Fox H, et al. **Histopathology** 1988 Nov; 13(5):584–6

Adenoid cystic carcinoma of the endometrium. Gernow A, et al. **Histopathology** 1989 Aug;15(2):197–8

Adenomatoid tumour of the uterus. Marcussen N, et al. **Histopathology** 1988 Nov;13(5):582–3

Morphometric assesment of ovarian stromal proliferation—a clinicopathological study. Snowden JA, et al. **Histopathology** 1989 Apr;14(4):369–79

Neoplasms of endometrial stroma: histopathologic and flow cytometric analysis with clinical correlation. August CZ, et al. **Hum Pathol** 1989 Mar;20(3):232–7

Intravascular lipoleiomyomatosis: a report of two cases. Brescia RJ, et al. **Hum Pathol** 1989 Mar;20(3):252–6

Leiomyoma of the uterus with multiple extrauterine smooth muscle tumors: a case report suggesting multifocal origin. Cho KR, et al. **Hum Pathol** 1989 Jan;20(1):80–3

Primary papillary serous neoplasia of the peritoneum [letter] Fechner RE, et al. **Hum Pathol** 1989 Sep;20(9):924

A comparative morphometric and cytophotometric study of endometrial hyperplasia, atypical hyperplasia, and endometrial carcinoma. Norris HJ, et al. **Hum Pathol** 1989 Mar;20(3):219–23

ETN-1: a new human endometrial carcinoma cell line producing ascites and distant metastases in nude mice. Kruitwagen RF, et al. **Int J Cancer** 1989 Jun 15; 43(6):1098–103

Uterine sarcoma with liposarcomatous differentiation: report of a case and review of the literature. Bapat K, et al. **Int J Gynaecol Obstet** 1989 Jan;28(1):71–5 (13 ref.)

Liesegang rings in the female genital tract. A report of three cases. Clement PB, et al. **Int J Gynecol Pathol** 1989; 8(3):271–6

Malignant mixed müllerian tumor of the uterus with neuroectodermal differentiation. Gersell DJ, et al. **Int J Gynecol Pathol** 1989;8(2):169–78

Carcinoma of the lower uterine segment. Clinicopathologic analysis of 12 cases. Hachisuga T, et al. **Int J Gynecol Pathol** 1989;8(1):26–35

Endometrial carcinoma arising in a large polypoid adenomyoma of the uterus. Kay S, et al. **Int J Gynecol Pathol** 1988;7(4):391–8 (12 ref.)

Hemorrhagic cellular leiomyomas ("apoplectic leiomyoma") of the uterus associated with pregnancy and oral contraceptives. Norris HJ, et al. **Int J Gynecol Pathol** 1988; 7(3):212–24

Epithelial hyperplasia of the fallopian tube. Its association with serous borderline tumors of the ovary. Robey SS, et al. **Int J Gynecol Pathol** 1989;8(3):214–20

Analysis of failure patterns in stage III endometrial carcinoma and therapeutic implications. Greven KM, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):35–9

Peritoneal fluid cytology in endometrial cancer: its significance and the role of chromic phosphate (32P) therapy. Heath R, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):815–22

Vaginal recurrences in endometrial cancer [editorial] Rotman M, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct; 15(4):1043–4

Effect of medroxyprogesterone acetate on secondary spreading of endometrial cancer. Fujimoto J, et al. **Invasion Metastasis** 1989;9(4):209–15

Chorioadenoma destruens: an unusual clinical profile. Gupta S, et al. **J Indian Med Assoc** 1988 Nov;86(11):303–4

The Bethesda System unveiled; revamps Pap smear reporting [news] Smigel K. **J Natl Cancer Inst** 1989 Sep 20; 81(18):1354–5

Measurement of the S-phase duration in normal and abnormal human endometrium by in vitro double labelling with bromodeoxyuridine and tritiated thymidine. Thornton JG, et al. **J Pathol** 1989 Feb;157(2):109–15

Hodgkin's lymphoma of the uterus presenting as refractory pelvic inflammatory disease. A case report. Raggio ML, et al. **J Reprod Med** 1988 Oct;33(10):827–30

Reliability of ultrasound in predicting uterine leiomyoma volume. Sauer MV, et al. **J Reprod Med** 1988 Jul; 33(7):612–4

Proliferative cell index in endometrial adenocarcinoma of different nuclear grades. Mushika M, et al. **Jpn J Cancer Res** 1989 Mar;80(3):223–7

Endometrial sampling using the Mi Mark procedure as a primary routine: first year's experience. Uvebrant M, et al. **Maturitas** 1989 Mar;11(1):5–12

Papanicolaou smear-test screening in pregnancy [letter] Abraham S, et al. **Med J Aust** 1989 Jul 17;151(2):116

Effect of lipoxygenase products on choriogonadotropin secretion by cultured human choriocarcinoma JEG-3 cells pre- and post-stimulation with epidermal growth factor and a phorbol ester. Ilekis J, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):155–8

Establishment and characterization of three new human gestational choriocarcinoma cell lines. Sugiura M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1447–54

Mixed müllerian tumors of the uterus: a clinicopathologic study. Dinh TV, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):388–92

Peritoneal fluid cytology and prognosis in patients with endometrial carcinoma. Hirai Y, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):335–8

Prognostic significance of positive peritoneal cytology in clinical stage I adenocarcinoma of the endometrium. Lurain JR, et al. **Obstet Gynecol** 1989 Aug;74(2):175–9

A uterine tumor that resembled ovarian sex-cord tumors: a low-grade sarcoma. Malfetano JH, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):489–91

Repetitive complete and partial hydatidiform mole. Rice LW, et al. **Obstet Gynecol** 1989 Aug;74(2):217–9

Endometrial cancer: histologic correlates of immunohistochemical localization of progesterone receptor and estrogen receptor. Segreti EM, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):780–5

High-risk metastatic trophoblastic disease. Bagshawe KD. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):531–43 (29 ref.)

Hysteroscopy in the management of endometrial cancer. Kohorn EI. **Obstet Gynecol Clin North Am** 1988 Mar; 15(1):73–5

Classification and staging of gestational trophoblastic tumors. Miller DS, et al. **Obstet Gynecol Clin North Am** 1988 Sep; 15(3):477–90 (36 ref.)

Trophoblastic neoplasms: occult disease. Pattillo RA. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):577–85 (13 ref.)

Nonmetastatic gestational trophoblastic disease. Soper JT, et al. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):505–19 (42 ref.)

Trophoblastic disease: clinical pathology of hydatidiform moles. Szulman AE. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):443–56 (43 ref.)

Uterine sarcomas: a clinicopathologic study. Chiara S, et al. **Oncology** 1988;45(6):428–33

Atypical hyperplasia of the endometrium. Natural history and correlability with carcinoma. Surico N, et al. **Panminerva Med** 1988 Jul–Sep;30(3):164–8

Intravenous leiomyomatosis of the uterus. Clement PB. **Pathol Annu** 1988;23 Pt 2:153–83 (71 ref.)

Alveolar soft part sarcoma of the cervix uteri. A case report. Foschini MP, et al. **Pathol Res Pract** 1989 Mar; 184(3):354–8; discussion 359–60

Flow cytometry in persistent trophoblastic disease. Hemming JD, et al. **Placenta** 1988 Nov–Dec;9(6):615–21

Carcinoma of the endometrium in a teenager [letter] Routh A, et al. **South Med J** 1989 Jun;82(6):804–5

Endometrial stromatosis of the uterus: report of 4 cases. Chow CY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jul; 87(7):755–9

Cellularity of the ovarian stroma in patients with endometrial carcinoma. Aalto ML. **Tumori** 1989 Jun 30;75(3):289–91

[Primary "pure" ovarian chorionepithelioma in a 14-year-old girl] Stepanova V. **Akush Ginekol (Sofiia)** 1988;27(3):78–80 (Eng. Abstr.) (Bul)

[Value of endometrial aspiration cytology in assessing endometrial status] Zhou XS. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Mar;24(2):89–90, 124 (Eng. Abstr.) (Chi)

[Myxoid leiomyosarcoma: immunohistochemical study of a case (letter)] Balaton AJ, et al. **Ann Pathol** 1989;9(1):73 (Fre)

[Melanotic adenocarcinoma of the uterus. Neuroendocrine tumor of the uterus] Bertrand G. **Ann Pathol** 1988; 8(4–5):295–304 (Eng. Abstr.) (Fre)

[Contribution of immunohistochemistry to the histogenesis of uterine sarcoma] Smadja A, et al. **Arch Anat Cytol Pathol** 1988;36(4):143–9 (Eng. Abstr.) (Fre)

[Carcinoma in situ of the cervix uteri extending to the endometrium. Apropos of 1 case] Tranbaloc P, et al. **Arch Anat Cytol Pathol** 1988;36(3):100–3 (Eng. Abstr.) (Fre)

[Hyperplasia and adenocarcinoma of the endometrium: morphologic and immunohistochemical aspects] Charpin C, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988; 17(6):719–27 (37 ref.) (Fre)

[Detection and diagnosis of atypical hyperplasia and adenocarcinoma of the endometrium using cytology] Nollomont-Lambert JC, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):733–6 (Fre)

[Intrarectal echography in the evaluation of locoregional extension of female genital cancers (letter)] Giovannini M, et al. **Presse Med** 1989 Jan 28;18(3):128–9 (Fre)

[Lipoma of the uterus: apropos of a case of leiomyolipoma] Haouet S, et al. **Tunis Med** 1988 Oct;66(10):701–3 (Eng. Abstr.) (Fre)

[Genital endometriosis. Statistical and anatomo-clinical study apropos of 159 cases] Kammoun N, et al. **Tunis Med** 1988 May;66(5):441–7 (25 ref.) (Eng. Abstr.) (Fre)

[Disseminated peritoneal leiomyomatosis. A rare disease picture] Dallenbach C, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):201–4 (Eng. Abstr.) (Ger)

[Plexiform tumor of the uterus] Dressler W, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):205–6 (Eng. Abstr.) (Ger)

[Malignant mixed Müllerian tumors of the uterus. Clinical, morphologic and immunohistochemical findings] Falk S, et al. **Geburtshilfe Frauenheilkd** 1989 Jul;49(7):630–4 (Eng. Abstr.) (Ger)

[Primary malignant non-Hodgkin lymphoma of the uterus] Kühn W, et al. **Geburtshilfe Frauenheilkd** 1989 May; 49(5):506–8 (Eng. Abstr.) (Ger)

[Myeloreticulosis of the uterus following acute myeloid leukemia] Seitzer D, et al. **Geburtshilfe Frauenheilkd** 1988 Dec;48(12):896–9 (Eng. Abstr.) (Ger)

[Stomach hemorrhage—a leading symptom of metastatic choriocarcinoma] Bartenstein O, et al. **Med Klin** 1988 Jul 15;83(15):473–4 (Ger)

[Detection of pregnancy protein-1 (SP1) in the serum of a patient with beta-HCG negative choriocarcinoma] Göldel N, et al. **Med Klin** 1988 Jul 15;83(15):490–1 (Ger)

[Histogenesis and morphology of mucoepidermoid adenocarcinoma of the corpus endometrium] Dallenbach-Hellweg G, et al. **Pathologe** 1988 Nov; 9(6):351–7 (Ger)

[Morphology, general and differential diagnosis of intravenous leiomyomatosis of the uterus] Jäger J, et al. **Zentralbl Allg Pathol** 1988;134(6):555–60 (Eng. Abstr.) (Ger)

[Mature cystic teratoma of the uterus] Pommerenke F, et al. **Zentralbl Allg Pathol** 1988;134(8):737–40 (Eng. Abstr.) (Ger)

[Hemangiopericytoma of the uterus] Dieminger HJ, et al. **Zentralbl Gynakol** 1989;111(4):250–3 (Eng. Abstr.) (Ger)

[CEA studies in endometrial cancer] Kunze M, et al. **Zentralbl Gynakol** 1989;111(8):524–9 (Eng. Abstr.) (Ger)

[Endometrial carcinoma in stage III. Clinicopathologic problems] Franchi M, et al. **Ann Ostet Ginecol Med Perinat** 1988 Jul–Aug; 109(4):205–11 (Eng. Abstr.) (Ita)

[Uterine leiomyoma: presentation of 2 cases with diffuse metastasis and a long clinical course] Bonardi GM, et al. **G Ital Oncol** 1988 Jul–Dec;8(3–4):123–6 (Eng. Abstr.) (Ita)

[Trophoblastic disease: study and clinical review of 107 cases] Garozzo G, et al. **G Ital Oncol** 1987 Apr–Sep;7(2–3):119–22 (Eng. Abstr.) (Ita)

[Morphologic typing of endometrial adenocarcinoma: clinico-statistical study] Tolino A, et al. **G Ital Oncol** 1988 Apr–Jun;8(2):79–88 (Eng. Abstr.) (Ita)

[Stromal tumors of the endometrium] Bianchini E, et al. **Minerva Ginecol** 1989 May;41(5):237–40 (Eng. Abstr.) (Ita)

[Uterine fibroleiomyoma: a case of abdominal mass of extraordinary dimensions] Lalario R, et al. **Minerva Ginecol** 1989 Jun;41(6):307–8 (Eng. Abstr.) (Ita)

[Subcutaneous metastasis of uterine leiomyosarcoma] Zarcone N, et al. **Minerva Ginecol** 1988 Aug;40(8):489–91 (6 ref.) (Eng. Abstr.) (Ita)

[Intravenous leiomyomatosis. Presentation of 5 cases and a review of the literature] Bianchini E, et al. **Pathologica** 1989 Mar–Apr;81(1072):151–62 (51 ref.) (Eng. Abstr.) (Ita)

[Adenocarcinoma of the uterus: presentation of 3 cases] De Rosa G, et al. **Pathologica** 1987 Nov–Dec;79(1064):751–9 (23 ref.) (Eng. Abstr.) (Ita)

[Endolymphatic stromal myosis] Innocenti S, et al. **Pathologica** 1987 Nov–Dec;79(1064):805–7 (Eng. Abstr.) (Ita)

[Endometrial adenomyofibroma: a variety of Mullerian adenofibroma. Immunohistochemical study of a case with a review of the literature] Lanzafame S, et al. **Pathologica** 1988 Mar–Apr;80(1066):207–13 (10 ref.) (Eng. Abstr.) (Ita)

[Pathology of early cancer of the uterus] Sakamoto A. **Gan No Rinsho** 1988 Aug;34(10):1421–6 (Eng. Abstr.) (Jpn)

[Lipoleiomyoma of the uterus—report of a case] Sonobe H, et al. **Gan No Rinsho** 1988 Nov;34(14):2019–22 (Eng. Abstr.) (Jpn)

[Placental-site trophoblastic tumor of the uterus—a case report] Tsujimura T, et al. **Gan No Rinsho** 1988 Nov; 34(14):2002–6 (Eng. Abstr.) (Jpn)

[Diagnosis of precancerous lesions of the endometrium] Iwasaki H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1605–11 (Eng. Abstr.) (Jpn)

[A case of metastatic leiomyosarcoma of the heart originating in the uterus] Sato T, et al.

Nippon Naika Gakkai Zasshi 1987 Nov;76(11):1730–7 (Jpn)
[Relationship between peritoneal cytology and prognosis in endometrial carcinomas] Hirai Y, et al. Nippon Sanka Fujinka Gakkai Zasshi 1988 Nov; 40(11):1707–10 (Eng. Abstr.) (Jpn)
[Cell culture—its application in the study of hormone and endometrial carcinoma and feed-back to clinical medicine] Kuramoto H. Nippon Sanka Fujinka Gakkai Zasshi 1988 Aug;40(8):1050–5 (10 ref.) (Eng. Abstr.) (Jpn)
[Establishment and characterization of three endometrial cancer cell lines from the same patient] Misawa Y. Nippon Sanka Fujinka Gakkai Zasshi 1988 Sep; 40(9):1439–46 (Eng. Abstr.) (Jpn)
[Establishment and characterization of a cell line (OMC–6) originating from a human endometrial stromal sarcoma] Ueda M, et al. Nippon Sanka Fujinka Gakkai Zasshi 1988 Oct;40(10):1555–6 (Jpn)
[Asynchronous quadruplicate malignancies: cancer of the stomach, breast and uterus and acute leukemia] Suzuki A, et al. Rinsho Ketsueki 1989 Apr;30(4):553–7 (8 ref.) (Eng. Abstr.) (Jpn)
[Necrosis of a myoma in the 20th week of pregnancy] Palatyński A, et al. Wiad Lek 1988 May 15;41(10):674–7 (Eng. Abstr.) (Pol)
[Characteristics of myometrial structure in uterine leiomyoma] Kokh LI, et al. Akush Ginekol (Mosk) 1988 May;(5):8–10 (Eng. Abstr.) (Rus)
[Cytomorphologic characteristics of the regeneration of endometrial epithelium after diagnostic curettage and uterine hemorrhage] Novik VI, et al. Akush Ginekol (Mosk) 1989 Apr;(4):64–6 (Rus)
[Aspects of the morphogenesis of cancer of the endometrium] Frank GA, et al. Arkh Patol 1988;50(9):40–6 (Eng. Abstr.) (Rus)
[Müllerian adenosarcoma of the uterus] Palkova LV, et al. Arkh Patol 1988;50(8):57–61 (Eng. Abstr.) (Rus)
[Intravenous leiomyomatosis] Parkhomenko IuG, et al. Arkh Patol 1988;50(12):54–8 (Eng. Abstr.) (Rus)
[Cytologic study of the endometrium and detection of groups at increased risk of developing cancer] Kozbagarova RG, et al. Lab Delo 1989;(4):43–7 (Eng. Abstr.) (Rus)
[Cytomorphometric analysis of glandular and atypical hyperplasia and cancer of the endometrium] Sidorova NA, et al. Lab Delo 1988;(6):18–20 (Eng. Abstr.) (Rus)
[Müllerian adenosarcoma of the uterus] Palkova LV, et al. Vopr Onkol 1989;35(3):359–61 (Rus)
[Morphological characteristics of normal trophoblast and choriocarcinoma] Semenovskiĭ AV. Vopr Onkol 1988; 34(10):1195–8 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Reproductive performance of patients with gestational trophoblastic disease in Hong Kong. Ngan HY, et al. Acta Obstet Gynecol Scand 1988;67(1):11–4
Spectrum of thyroid function abnormalities in gestational trophoblastic neoplasia. Desai RK, et al. Clin Endocrinol (Oxf) 1988 Dec;29(6):583–92
Tamoxifen and endometrial cancer [letter] Jordan VC. Lancet 1988 Oct 29;2(8618):1019
Partial hydatidiform mole with a coexistent live full-term fetus. A case report. Pool R, et al. S Afr Med J 1989 Feb 18;75(4):186–7
[Urinary function in women with uterine myoma] Ketskarova S, et al. Akush Ginekol (Sofiia) 1989;28(1):67–9 (Bul)
[Electric characteristics of acupuncture points in patients with benign and malignant uterine tumors] Botwin MA, et al. Akush Ginekol (Mosk) 1989 Apr;(4):27–30 (Eng. Abstr.) (Rus)
[Status of cervical microcirculation in patients with myoma] Vasil'chenko NP, et al. Akush Ginekol (Mosk) 1989 Apr; (4):24–7 (Eng. Abstr.) (Rus)
[Beta 2-microglobulin and a test using 169 Yb-DTPA in evaluating glomerular filtration and reabsorption of protein in gynecologic cancer patients] Modnikov OP. Med Radiol (Mosk) 1989 Apr;34(4):57–9 (Eng. Abstr.) (Rus)
[Influence of the pathogenetic variant of uterine cancer on the dynamics of prolactin secretion in the early and late postoperative periods] Modnikov OP, et al. Vopr Onkol 1989;35(7):826–9 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Screening for endometrial cancer: is it effective? Pritchard KI. Ann Intern Med 1989 Feb 1;110(3):177–9
Detection and prevention of uterine cancer. Gusberg SB. Cancer 1988 Oct 15;62(8 Suppl):1784–6
Endometrial sampling for women on peri-menopausal hormone replacement therapy. Kovacs GT, et al. Maturitas 1988 Dec;10(4):259–62
[Prevention of carcinoma of the uterus. Selected papers presented at the 9th Oncology and Gynecology Seminar. Prague, 8 December 1987] Cesk Gynekol 1989 May; 54(4):308–17 (Cze, Slo)
[Prevention of carcinoma of the uterus. Selected abstracts of papers presented at the 9th Prague Oncology Seminar for Gynecologists. Prague, 8 December 1987] Cesk Gynekol 1989 Apr;54(3):221–40 (Cze)
[Periodic medical examination. 2. Unwanted pregnancy in adolescents. Cancer of the endometrium] Goldbloom R, et al. Union Med Can 1988 Aug;118(3):236–7, 239–40 (Fre)
[Method of mass screening and detection rate of early uterine cancer] Ohta M, et al. Nippon Rinsho 1989 May; 47(5):1012–6 (Jpn)
[Mass screening for endometrial cancer according to the Law of Health for the Elderly] Kashimura M, et al. Sangyo Ika Daigaku Zasshi 1989 Jun 1;11(2):155–61 (Eng. Abstr.) (Jpn)

PSYCHOLOGY

[Are psychosocial aspects of practical relevance in gynecologic oncology?] Wenderlein JM. Gynakologe 1988 Dec;21(4):283–8 (12 ref.) (Ger)

RADIOGRAPHY

Evaluation of gestational trophoblastic neoplasia using the computerized tomography. Benitez IB, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2–3):1568–76
Lymphography in the initial evaluation of endometrial carcinoma. Galakhoff C, et al. Gynecol Oncol 1988 Oct; 31(2):276–84 (26 ref.)
Use of angio computed tomography to evaluate extent of endometrial carcinoma. Hirai Y, et al. Gynecol Oncol 1989 Jun;33(3):372–5
Cystic degeneration of a large uterine leiomyoma. Radiologic and surgical analyses [clinical conference] Green WJ, et al. Invest Radiol 1989 Aug;24(8):626–9
Hysterosalpingographic diagnosis of uterine adenomyoma. Hofmann GE, et al. Obstet Gynecol 1989 May;73(5 Pt 2):885–7 (8 ref.)
[X-ray diagnosis of submucosal fibromyoma] Cherveniashki S, et al. Akush Ginekol (Sofiia) 1989;28(1):49–52 (Eng. Abstr.) (Bul)
[CT appearance of uterine adenomyosis] Katsumata Y, et al. Rinsho Hoshasen 1989 Feb;34(2):227–32 (Eng. Abstr.) (Jpn)
[The diagnostic value of transvaginal pelvic phlebography in gynecologic oncology] Sidorenko IuS, et al. Vopr Onkol 1989;35(4):465–73 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

[Clinico-radionuclide study of cerebral blood circulation in cancer patients in the postoperative period] Bolko IP. Med Radiol (Mosk) 1989 May;34(5):13–5 (Eng. Abstr.) (Rus)

RADIOTHERAPY

Gynaecological treatments using the Selectron remote afterloading system. Dean EM, et al. Br J Radiol 1988 Nov; 61(731):1053–7
Radiation therapy in stage II carcinoma of the endometrium. Ahmad K, et al. Cancer 1989 Mar 1;63(5):854–8
Postoperative adjuvant external-beam radiotherapy in surgical stage I endometrial carcinoma. Torrisi JR, et al. Cancer 1989 Oct 1;64(7):1414–7
Preservation of intestinal integrity during radiotherapy using live Lactobacillus acidophilus cultures. Salminen E, et al. Clin Radiol 1988 Jul;39(4):435–7
Does adenocarcinoma of uterine cervix have a worse prognosis than squamous carcinoma when treated by radiotherapy? Davidson SE, et al. Gynecol Oncol 1989 Apr; 33(1):23–6
Intracavitary irradiation of endometrial carcinoma stage I by a high dose-rate afterloading technique. Sorbe B, et al. Gynecol Oncol 1989 May;33(2):135–45
Results of whole abdominopelvic irradiation with nodal boost for patients with endometrial cancer at high risk of failure in the peritoneal cavity. A prospective clinical trial at the Mayo Clinic. Martinez A, et al. Hematol Oncol Clin North Am 1988 Sep;2(3):431–46
Results of radiotherapy in recurrent endometrial carcinoma: a retrospective analysis of 51 patients. Kuten A, et al. Int J Radiat Oncol Biol Phys 1989 Jul;17(1):29–34
Postoperative whole abdomino-pelvic irradiation for patients with high risk endometrial cancer. Martinez A, et al. Int J Radiat Oncol Biol Phys 1989 Aug;17(2):371–7
Intracavitary irradiation of carcinomas of the uterus and cervix: the Créteil method. Pierquin B, et al. Int J Radiat Oncol Biol Phys 1988 Dec;15(6):1465–73
Abdominal radiotherapy for cancer of the uterine cervix and endometrium. Potish RA. Int J Radiat Oncol Biol Phys 1989 Jun;16(6):1453–8
Radiation therapy alone for medically inoperable patients with adenocarcinoma of the endometrium. Taghian A, et al. Int J Radiat Oncol Biol Phys 1988 Nov;15(5):1135–40
External radiation therapy of stage I cancer of the endometrium: a need for reappraisal of this adjunctive modality. Vaeth JM, et al. Int J Radiat Oncol Biol Phys 1988 Dec;15(6):1291–7
Systematic irradiation of the vaginal vault in stage I endometrial carcinoma. Nguyen TD, et al. Radiother Oncol 1988 Jul;12(3):171–6
Radiotherapy in benign uterine bleeding disorders. The Radiumhemmet metropathia cohort 1912–1977. Short and long term results. Ryberg M, et al. Ups J Med Sci 1989; 94(2):161–9
[The value of postoperative irradiation in endometrial cancer of pathohistologic stage I] Kucera H, et al. Geburtshilfe Frauenheilkd 1989 Jul;49(7):618–24 (Eng. Abstr.) (Ger)
[Objective detection of the effects of radiotherapy on female patients with tumors] Kellner G, et al. Osterr Z Erforsch Bekampf Krebskr 1970;25(2):89–100 (Eng. Abstr.) (Ger)
[Possibilities of isodose distribution in afterloading contact therapy of non-operated uterine cancer using an applicator tube and a point-shaped radiation source] Kloetzer KH, et al. Radiobiol Radiother (Berl) 1989;30(1):77–85 (Eng. Abstr.) (Ger)
[Hormono-metabolic relations in radiotherapy of uterine neoplasms] Lozinskaja IN, et al. Radiobiol Radiother (Berl) 1988;29(5):617–22 (Eng. Abstr.) (Ger)
[A prospective randomized study on the fractionation of afterloading therapy of cancer of the cervix and endometrium] Kob D, et al. Strahlenther Onkol 1988 Dec; 164(12):708–13 (Eng. Abstr.) (Ger)
[Postoperative irradiation of carcinoma of the corpus uteri using the iridium afterloading technic] Kucera H, et al. Strahlenther Onkol 1988 Sep;164(9):501–7 (Eng. Abstr.) (Ger)
[Treatment of inoperable endometrial carcinoma with intracavitary high-dose rate iridium irradiation] Kucera H, et al. Strahlenther Onkol 1988 Sep;164(9):508–14 (Eng. Abstr.) (Ger)
[Ureterotransversopyelostomy and unilateral nephrostomy as supravesical urinary diversion in vesico-vagino-rectal fistula and incurable bladder cancers] Hoffmann L, et al. Z Urol Nephrol 1988 Nov;81(11):689–92 (Eng. Abstr.) (Ger)
[Prospective study of K-cell activity in patients with malignant gynecologic tumors. Effect of radiation therapy] Siklós P, et al. Orv Hetil 1989 May 7;130(19):979–84 (39 ref.) (Eng. Abstr.) (Hun)
[Analysis of failures in radiation and surgical treatment of endometrial carcinoma in FIGO stage I] Fioretti P, et al. Ann Ostet Ginecol Med Perinat 1988 Jul–Aug;109(4):212–8 (Eng. Abstr.) (Ita)
[Functional bladder-urethral injuries in the irradiated pelvis] Simeone C, et al. Arch Ital Urol Nefrol Androl 1988 Dec; 60(4):357–65 (Eng. Abstr.) (Ita)
[Surgical and radiotherapeutic treatment in stage I endometrial adenocarcinoma. Retrospective analysis of 218 patients] Latini P, et al. Radiol Med (Torino) 1989 Jun; 77(6):679–83 (Eng. Abstr.) (Ita)
[Radiation therapy of endometrial carcinoma] Ogawa Y, et al. Gan No Rinsho 1989 Sep;35(10):1137–41 (Eng. Abstr.) (Jpn)
[Intraperitoneal spontaneous rupture of the bladder subsequent to irradiation of the uterus: a case report] Ishii T, et al. Hinyokika Kiyo 1988 Dec;34(12):2185–8 (Eng. Abstr.) (Jpn)
[Optimization of the intracavitary irradiation of patients with cancer of the endometrium] Kaganskiĭ VL, et al. Med Radiol (Mosk) 1988 Nov;33(11):55–9 (Eng. Abstr.) (Rus)
[Intracavity thermo- and gamma-therapy of uterine cancer] Kostromina KN, et al. Med Radiol (Mosk) 1989 Jan; 34(1):50–4 (Eng. Abstr.) (Rus)
[Ureteral obstruction after radiotherapy in patients with cancer] Kan IaD, et al. Urol Nefrol (Mosk) 1989 Mar–Apr; (2):31–4 (Eng. Abstr.) (Rus)
[The action of electromagnetic radiation at frequencies of 420, 540 and 600 MHz on the course of the tumor process and the death of animals with a transplanted RShM-5 tumor] Smirnov AIu, et al. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Jan–Feb;(1):11–6 (Rus)
[Radiation injuries of the bones during treatment of uterine cancer] Gun'ko RI, et al. Vopr Onkol 1988;34(10):1188–95 (Eng. Abstr.) (Rus)
[Neutron therapy of endometrial cancer using californium-252 sources of high activity] Kiseleva VN, et al. Vopr Onkol 1988;34(9):1070–4 (Eng. Abstr.) (Rus)
[Dosimetric planning in the radiation therapy of patients with cancer of the corpus uteri] Ushakova GA. Vopr Onkol 1989;35(3):318–24 (Eng. Abstr.) (Rus)

SECONDARY

Invasion and metastasis of Lewis lung carcinoma in the mouse uterus. Maharajan V, et al. Invasion Metastasis 1989; 9(5):310–24
[Endometrium metastasis of a malignant melanoma of the skin] Pommerenke F, et al. Zentralbl Gynakol 1989; 111(5):324–8 (Eng. Abstr.) (Ger)

SECRETION

Squamous cell carcinoma of the cervix with extensive superficial spreading to almost whole genital tract and associated with endometrial stromal sarcoma. Motoyama T, et al. Acta Pathol Jpn 1988 Nov;38(11):1445–52
[Progesterone secretion in healthy women and in women with uterine myoma] Popivanova P. Akush Ginekol (Sofiia) 1989;28(2):54–7 (Eng. Abstr.) (Bul)
[Modification of hCG secretion by biological modulators of cell response and cytostatics in the normal placenta and choriocarcinoma cells] Marth C, et al. Gynakol Rundsch 1988;28 Suppl 2:62–3 (Ger)

SURGERY

Uterine fibromyoma and sterility: role of myomectomy. Gatti

D, et al. **Acta Eur Fertil** 1989 Jan-Feb;20(1):11-3
The value of endometrial curettage in the follow-up of hydatidiform mole. Flam F, et al.
Acta Obstet Gynecol Scand 1988;67(7):649-51
Solitary metastatic endometrial carcinoma of the spleen. Jørgensen LN, et al. **Acta Obstet Gynecol Scand** 1988; 67(1):91-2
Clinical evaluation of focal excision of myometrial lesion for treatment of invasive hydatidiform mole. Kanazawa K, et al. **Acta Obstet Gynecol Scand** 1988;67(6):487-92
Endometrial cancer. Boyd ME. **Can J Surg** 1989 Mar; 32(2):89-92 (30 ref.)
Operative treatment in stage I endometrial carcinoma with deep myometrial invasion and/or grade 3 tumor surgically limited to the corpus uteri. No recurrence with only primary surgery. Chen SS. **Cancer** 1989 May 1;63(9):1843-5
Myonecrosis of the abdominal wall, complicating radical hysterectomy. Giamarellou H. **Chemioterapia** 1987 Jun;6(2 Suppl):616-8
Piperacillin in prophylaxis and therapy of gynecologic cancer patients. Scalambrino S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):535-7
Local infiltration of ornithine 8-vasopressin (POR 8) as a vasoconstrictive agent in surgical pelviscopy (applied to myoma enucleation, salpingotomy in cases of tubal pregnancy and peripheral salpingostomy). Semm K, et al. **Endoscopy** 1988 Nov;20(6):298-304
Complications of pelvic lymphadenectomy in patients with endometrial adenocarcinoma. Babilonti L, et al.
Eur J Gynaecol Oncol 1989;10(2):131-3
Surgery and radiotherapy in the treatment of early stage uterine sarcomas. Gadducci A, et al.
Eur J Gynaecol Oncol 1989;10(4):276-80
Successful outcome of pregnancy complicated by giant myoma and severe heparin-induced osteopenia. Silber M, et al. **Gynecol Obstet Invest** 1989;28(1):51-2
Cholecystectomy accompanying major abdominal surgery for gynecologic cancer. Patsner B, et al. **Gynecol Oncol** 1989 Jan;32(1):46-8
Hydatidiform mole in the elderly: hysterectomy or evacuation? Bahar AM, et al. **Int J Gynaecol Obstet** 1989 Jul;29(3):233-8
Effects of preparation for mastectomy/hysterectomy on women's post-operative self-care behaviors. Williams PD, et al. **Int J Nurs Stud** 1988;25(3):191-206
Vaginal recurrences of endometrial carcinoma: the prognostic value of staging by a primary vaginal carcinoma system. Curran WJ Jr, et al.
Int J Radiat Oncol Biol Phys 1988 Oct;15(4):803-8
The salvage of recurrent endometrial carcinoma in the vagina and pelvis. Poulsen MG, et al.
Int J Radiat Oncol Biol Phys 1988 Oct;15(4):809-13
Transcervical resection of submucous uterine fibroids: an alternative approach to management. Cowan BD, et al. **J Miss State Med Assoc** 1989 Jan;30(1):1-3
Resectoscopic removal of symptomatic intrauterine lesions. Brooks PG, et al. **J Reprod Med** 1989 Jul;34(7):435-7
Treatment of stage I endometrial carcinoma. Schulz MJ, et al. **J Reprod Med** 1989 Feb;34(2):167-72
Immediate and late outcome of vaginal myomectomy for prolapsed pedunculated submucous myoma. Ben-Baruch G, et al. **Obstet Gynecol** 1988 Dec;72(6):858-61
Morbidity of lymph node sampling in cancers of the uterine corpus and cervix. Moore DH, et al. **Obstet Gynecol** 1989 Aug;74(2):180-4
Integration of surgery and other techniques in the management of trophoblastic malignancy. Jones WB, et al. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):565-76 (51 ref.)
Acute bilateral diffuse pulmonary shadowing after evacuation of hydatid mole. Pope TL Jr, et al. **South Med J** 1989 Mar;82(3):377-9
[Incidental myomectomy in cesarean section] Hsieh TT, et al. **Chang Keng I Hsueh** 1989 Mar 20;12(1):13-20 (Eng. Abstr.) (Chi)
[Research on the need to perform a second curettage of hydatidiform mole: analysis of 152 cases] Gao YL, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jan;24(1):35-6, 59 (Eng. Abstr.) (Chi)
[Molar pregnancy in a 56-year old woman] Pirhonen J. **Duodecim** 1988;104(11):862-3 (Fin)
[Indications for vaginal hysterectomy in adenocarcinoma of the endometrium] Dargent D, et al.
J Gynecol Obstet Biol Reprod (Paris) 1988;17(6):755-8 (Fre)
[Therapy of uterine cancer: a review] Hofmann HM, et al. **Gynakol Rundsch** 1988;28 Suppl 2:187-9 (Ger)
[Conservative organ-preserving measures in precancerous stages of endometrial cancer] Dallenbach-Hellweg G. **Gynakologe** 1988 Dec;21(4):302-7 (31 ref.) (Ger)
[Therapeutic results in uterine sarcoma (1955-1985)] Köhler U, et al. **Zentralbl Gynakol** 1988;110(20):283-9 (Eng. Abstr.) (Ger)
[Postpartum curettage--is it always indicated?] Ring D, et al. **Zentralbl Gynakol** 1988;110(15):949-52 (Eng. Abstr.) (Ger)
[Role of lymphadenectomy in endometrial carcinoma: analysis of the literature] Franchi M, et al.
Ann Ostet Ginecol Med Perinat 1988 Nov-Dec; 109(6):351-60 (68 ref.) (Eng. Abstr.) (Ita)
[Surgical therapy in high-risk patients with endometrial adenocarcinoma] Malzoni C, et al. **Minerva Ginecol** 1989 Feb;41(2):109-11 (Eng. Abstr.) (Ita)
[Prognostic factors in endometrial carcinoma treated by surgery and postoperative radiotherapy] Mancini M, et al. **Minerva Ginecol** 1988 Apr;40(4):235-9 (Eng. Abstr.) (Ita)
[The application of autologous blood transfusion and hypotensive anesthesia for radical hysterectomy in uterine cancer] Yamasaki M, et al. **Gan No Rinsho** 1988 Sep; 34(11):1572-8 (Eng. Abstr.) (Jpn)
[Gestagenic activity of the ovaries after hysterectomy] Kotarski J, et al. **Ginekol Pol** 1988 Jun;59(6):363-6 (Eng. Abstr.) (Pol)
[Use of the Omega intrauterine contraceptive device in reconstructive operations on the uterine body] Dmoch E, et al. **Wiad Lek** 1988 Sep 1;41(17):1138-40 (Eng. Abstr.) (Pol)
[Endometriosis of the abdominal wall scar after cesarean section] Palatyński A, et al. **Wiad Lek** 1988 Jun 15; 41(12):818-20 (Eng. Abstr.) (Pol)
[Comparative evaluation of various methods of preventing infectious complications after planned gynecologic surgery] Evseev AA. **Akush Ginekol (Mosk)** 1989 Apr;(4):33-6 (Rus)
[The role of surgical interventions in the treatment of uterine choriocarcinoma] Mokshin VE, et al.
Akush Ginekol (Mosk) 1988 Nov;(11):40-2 (Eng. Abstr.) (Rus)
[Uterine sarcoma] Nurov AU, et al.
Akush Ginekol (Mosk) 1988 Nov;(11):63-5 (Rus)
[Endometrial cancer at an early stage] Savinova VF, et al. **Akush Ginekol (Mosk)** 1988 May;(5):19-20 (Eng. Abstr.) (Rus)
[Remote results of radical treatment of patients with stage I endometrial cancer] Semenovich MV, et al.
Akush Ginekol (Mosk) 1988 Nov;(11):36-8 (Eng. Abstr.) (Rus)
[Ultrasonic scanning in planning radiation therapy of cancer of the uterine cervix stump] Nazarova IS, et al.
Med Radiol (Mosk) 1989 Jun;34(6):48-51 (Rus)
[Tamoxifen in the treatment of cancer of the uterine body] Chulkova OV, et al. **Sov Med** 1989;(5):118 (Rus)
[Characteristics of the surgical stage in the combined treatment of poorly differentiated cancer of the corpus uteri] Pronin VN, et al. **Vopr Onkol** 1988;34(9):1102-5 (Eng. Abstr.) (Rus)
[Immediate results of surgical and combined treatment of patients over 60 years of age with cancer of the uterine body] Vishnevskaia EE, et al. **Vopr Onkol** 1988; 34(10):1249-54 (Eng. Abstr.) (Rus)

THERAPY

Pregnancy in a patient with diffuse cavernous hemangioma of the uterus. Lotgering FK, et al.
Am J Obstet Gynecol 1989 Mar;160(3):628-30
Gynecologic malignancies: detection, prevention, and therapeutics. Part 2. Cervical and endometrial cancer. Perkins J. **Am Pharm** 1988 Dec;ns28(12):34-7
The methods and results of uterine body cancer: a twenty-year experience of treatments at the Tbilisi Oncological Center. Charkviani TL.
Eur J Gynaecol Oncol 1989;10(2):109-14
Simultaneous appearance of ovarian and endometrial carcinoma: a therapeutic challenge. Montoya F, et al.
Eur J Gynaecol Oncol 1989;10(2):135-9
Multidisciplinary approach in the management of gestational trophoblastic tumor (GTT). Kim SJ, et al.
Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-3):1561-7
The treatment of malignant trophoblastic tumors. Wang SL, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1553-60
Treatment of stage II endometrial carcinoma. Boothby RA, et al. **Gynecol Oncol** 1989 May;33(2):204-8
Clinical stage I and II endometrial carcinoma treated with surgery and/or radiation therapy: analysis of prognostic and treatment-related factors. Bucy GS, et al.
Gynecol Oncol 1989 Jun;33(3):290-5
Treatment of malignant ascites with allogeneic and autologous lymphokine-activated killer cells. Kamada M, et al. **Gynecol Oncol** 1989 Jul;34(1):34-7
426 cases of stage I endometrial carcinoma: a clinicopathological analysis. Marziale P, et al.
Gynecol Oncol 1989 Mar;32(3):278-81
Successful treatment of primary endodermal sinus tumor of the endometrium. Ohta M, et al. **Gynecol Oncol** 1988 Oct; 31(2):357-64
Management of malignant, mixed mesodermal tumors of the uterus. Podczaski ES, et al. **Gynecol Oncol** 1989 Feb; 32(2):240-4
Adoptive cellular immunotherapy to the endometrial carcinoma cell line xenografts in nude mice. Shimizu H, et al. **Gynecol Oncol** 1989 Aug;34(2):195-9
Metastatic choriocarcinoma complicated by term pregnancy. Sutton G, et al. **Gynecol Oncol** 1989 Jul;34(1):122-4
Endometrial stromal sarcoma: a report of nine cases. Taina E, et al. **Gynecol Oncol** 1989 Feb;32(2):156-62
Appearance of neuropeptides in ascitic fluid after peritoneal therapy with interleukin-2 and lymphokine-activated killer cells for intraabdominal malignancy. Schiogolev SA, et al. **J Clin Immunol** 1989 Mar;9(2):169-73
Augmentation of antitumor effect of recombinant interleukin-2 activated killer cells by the administration of rIL-2 and lentinan. Shimizu H, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1988 Dec; 40(12):1899-900
Asian approaches in the treatment of trophoblastic disease. Teoh ES. **Obstet Gynecol Clin North Am** 1988 Sep; 15(3):545-64 (69 ref.)
TAH and BSO with adjuvant pelvic EXRT and vaginal Cs-137 boost in the management of carcinoma of the endometrium. Kumar PP, et al. **Radiat Med** 1988 Sep-Oct; 6(5):240-7
Survival and complications in stage I carcinoma of corpus uteri receiving post-operative irradiation. Murrell DS, et al. **Radiother Oncol** 1988 Aug;12(4):281-8
Treatment of pathologic stage I-II endometrial adenocarcinoma. A retrospective analysis of 139 patients. Volterrani F, et al. **Rays** 1988 May-Aug;13(2):107-11
[Therapeutic and preventive care of trophoblastic disease in Czechoslovakia] Zavadil M, et al. **Cas Lek Cesk** 1989 May 5;128(19):586-9 (Eng. Abstr.) (Cze)
[Prognostic factors in cancer of the endometrium] Conte M, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988; 17(6):758-65 (38 ref.) (Fre)
[Results of therapy of endometrial carcinoma and analysis of risk factors in comparison with a control group] Sommer H, et al. **Arch Geschwulstforsch** 1989;59(3):191-7 (Eng. Abstr.) (Ger)
[Percutaneous embolization with spirals in bleeding uterine cancer] Gmelin E, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):24-7 (Eng. Abstr.) (Ger)
[Treatment of uterine cancer] Okada H, et al.
Gan No Rinsho 1989 Jan;Spec No:374-81 (Jpn)
[Selective intra-arterial administration of a high dose of CDDP in combination with plasmapheresis] Tateyama I, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20; 23(4):889-98 (Eng. Abstr.) (Jpn)
[Nodular pulmonary leiomyomatosis (benign metastasising leiomyoma)] Roncoroni AJ, et al. **Medicina (B Aires)** 1988; 48(2):179-85 (Eng. Abstr.) (Spa)

ULTRASTRUCTURE

Ultrastructure of trophoblast of hydatidiform mole. Tang MY, et al. **Chin Med J [Engl]** 1988 Aug;101(8):608-14
Trophoblastic tumors: ultrastructural comparison of choriocarcinoma and placental-site trophoblastic tumor. Duncan DA, et al. **Hum Pathol** 1989 Apr;20(4):370-81
Clear cell carcinoma of the endometrium with lipid-producing activity. Histologic and ultrastructural study suggesting a unique neoplasm. Yorishima M, et al.
Int J Gynecol Pathol 1989;8(3):286-95
Chorangiocarcinoma: an unusual tumour of the placenta. The missing link? Jauniaux E, et al. **Placenta** 1988 Nov-Dec; 9(6):607-13
Hydatidiform mole: an ultrastructural analysis of syncytiotrophoblast surface organization. Ockleford C, et al. **Placenta** 1989 Mar-Apr;10(2):195-212
[Electron microscopic and electron radioautographic study of cells in glandular hyperplasia and cancer of the endometrium] Buchinskaia LG, et al. **Tsitol Genet** 1988 Sep-Oct;22(5):3-7 (Eng. Abstr.) (Rus)

URINE

Characterization of a small immunoreactive HCG-like component isolated from urine of a patient with choriocarcinoma. Koyama K, et al. **Exp Clin Endocrinol** 1988 Dec;92(2):199-210
Altered glycosylation is induced in both alpha- and beta-subunits of human chorionic gonadotropin produced by choriocarcinoma. Endo T, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):1035-8

VETERINARY

Multiple spontaneous lesions in an aged spider monkey. Binhazim AA, et al. **Lab Anim Sci** 1989 Jul;39(4):355-7
Choriocarcinoma in a DDD mouse: a case report with immunohistochemical and ultrastructural studies.
Madarame H, et al. **Lab Anim Sci** 1989 May;39(3):255-8
Hyperplastic endometrial polyps in a two-year-old filly. Hamir AN, et al. **Vet Pathol** 1989 Mar;26(2):185-7

UTERINE PERFORATION see under **UTERINE RUPTURE**

UTERINE PROLAPSE

Female genital prolapse and pelvic floor deficiency. Hudson CN. **Int J Color Dis** 1988 Aug;3(3):181-5 (28 ref.)

COMPLICATIONS

Primary carcinoma of vagina with uterine prolapse. Rao K, et al. **J Indian Med Assoc** 1989 Jan;87(1):10-2
[Prolapse of the uterus and maternal health care] Jiang YZ, et al. **Chung Hua Hu Li Tsa Chih** 1988 Apr;23(4):203-5 (Chi)
[Renal insufficiency and severe genital prolapse. 2 cases] Guérin C, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988; 17(4):507-10 (Eng. Abstr.) (Fre)

DIAGNOSIS

A technique to study the passive supports of the uterus. Bartscht KD, et al. **Obstet Gynecol** 1988 Dec;72(6):940-3

ETIOLOGY

Prolapse of the vaginal vault associated with a large granuloma of the sigmoid colon. Case report. Nel RW, et al. **Br J Obstet Gynaecol** 1988 Sep;95(9):949–50

HISTORY

[Creative contribution of Poles to the surgical treatment of uterine prolapse] Krzyś Z. **Wiad Lek** 1988 Apr 1; 41(7):483–7 (Eng. Abstr.) (Pol)

PATHOLOGY

[Estrogen and progesterone receptors in mesenchymal structures of the female urogenital tract] Methfessel HD, et al. **Zentralbl Gynakol** 1989;111(8):503–6 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Prolapse. Stanton SL. **Baillieres Clin Obstet Gynaecol** 1988 Jun;2(2):385–95 (9 ref.)

SURGERY

A vaginal approach to the treatment of genital prolapse. Tanaka S, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun; 14(2):161–5

Transvaginal sacrospinous vaginal fixation. Dony JM. **Eur J Obstet Gynecol Reprod Biol** 1989 Jul;32(1):13–14

Uterosacral ligament suspension of vaginal vault (McCall's culdeplasty). Hirsch HA. **Eur J Obstet Gynecol Reprod Biol** 1989 Jul;32(1):13

Ultrasonic prediction of stress urinary incontinence development in surgery for severe pelvic relaxation. Bergman A, et al. **Gynecol Obstet Invest** 1988;26(1):66–72

Endoscopic suspension of vaginal prolapse. Palma PC, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):451–4

Surgical correction of total procindentia and vaginal vault prolapse. Barclay DL. **J Arkansas Med Soc** 1989 Apr; 85(11):487–93

Management of vaginal vault prolapse: retrospective comparison of abdominal versus vaginal approach. Brown WE, et al. **J Fla Med Assoc** 1989 Feb;76(2):249–52

Surgical management of uterine prolapse in young women. Richardson DA, et al. **J Reprod Med** 1989 Jun;34(6):388–92 (18 ref.)

Four-corner bladder and urethral suspension for moderate cystocele. Raz S, et al. **J Urol** 1989 Sep;142(3):712–5

Failed abdominal sacral colpopexy: observations and recommendations. Addison WA, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):480–3

Retroperitoneal sacrocolpopexy for correction of prolapse of vaginal vault. Angulo A, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):319–23 (14 ref.)

An anatomic evaluation of the sacrospinous ligament colpopexy. Kettel LM, et al. **Surg Gynecol Obstet** 1989 Apr;168(4):318–22

Uterine preservation in the surgical management of genuine stress urinary incontinence associated with uterovaginal prolapse. Nesbitt RE Jr. **Surg Gynecol Obstet** 1989 Feb; 168(2):143–7

[The treatment of stress urinary incontinence associated with genital prolapse using the Bologna technic (115 cases): indications in elderly patients] Crépin G, et al. **Bull Acad Natl Med (Paris)** 1988 Oct;172(7):987–93 (Eng. Abstr.) (Fre)

[A simple technic for vaginal suspension using multiple approaches. Study of a series of 50 cases] Raudrant D, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(3):395–400 (Eng. Abstr.) (Fre)

[Surgical therapy of prolapse of the vaginal vault. Abdominal sacropexy with Gore-tex mesh] Pierluigi G, et al. **Minerva Ginecol** 1988 Nov;40(11):639–41 (Eng. Abstr.) (Ita)

[Fixation of the vagina to the rectus abdominis muscle in the treatment of stress-induced urinary incontinence in women] Sprogis J, et al. **Ginekol Pol** 1988 Jul;59(7):446–9 (Eng. Abstr.) (Pol)

[Surgical treatment of ptosis and prolapse of the female genitalia] Griaznova IM, et al. **Akush Ginekol (Mosk)** 1988 May;(5):32–4 (Eng. Abstr.) (Rus)

[Elongation of the cervix uteri and its surgical treatment] Rubin BL, et al. **Akush Ginekol (Mosk)** 1988 May;(5):36–7 (Eng. Abstr.) (Rus)

[A method of autodermoplasty in prolapse of the anterior wall of the vagina] Stezhkovol VV. **Akush Ginekol (Mosk)** 1988 Nov;(11):66–7 (Rus)

[Surgical treatment of vaginal and uterine prolapse associated with elongation of the cervix uteri and stress-induced urinary incontinence] Susloparov LA, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):61–2 (Rus)

[Surgical correction of ptosis of the vaginal walls during uterine extirpation] Zagrebina VA, et al. **Akush Ginekol (Mosk)** 1988 May;(5):35–6 (Eng. Abstr.) (Rus)

VETERINARY

A note on post partum utero vaginal prolapse in Gir cows: estimation of serum calcium, phosphorus, proteins, and cholesterol. Dhanotiya RS, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):79–80

Studies on antepartum prolapse of the vagina in buffalo—plasma trace element concentrations. Kelkar MA, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):315–8

Vaginal prolapse in a camel [letter] Gitao CG, et al. **Vet Rec** 1989 Feb 25;124(8):203–4

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. II. Hematological studies] Wawron W. **Pol Arch Weter** 1987;27(2–3):41–50 (Eng. Abstr.) (Pol)

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. I. Clinical observations] Wawron W. **Pol Arch Weter** 1987;27(2–3):29–40 (Eng. Abstr.) (Pol)

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. III. Serum electrolyte levels] Wawron W. **Pol Arch Weter** 1987;27(2–3):51–60 (Eng. Abstr.) (Pol)

UTERINE RUPTURE

Rupture uterus. Jain M, et al. **J Indian Med Assoc** 1988 Nov; 86(11):297–8

CHEMICALLY INDUCED

Uterine rupture with the use of Cervagem (prostaglandin E1) for induction of labour on account of intrauterine death. Thavarasah AS, et al. **Singapore Med J** 1988 Aug; 29(4):351–2

COMPLICATIONS

Successful vaginal delivery after caesarean scar rupture: a case report. Maouris P. **Clin Exp Obstet Gynecol** 1989; 16(1):1–2

Old rupture of the uterus. Chaudhury ML, et al. **J Indian Med Assoc** 1988 Apr;86(4):100–1

Rupture of the scarred uterus. Clark SL. **Obstet Gynecol Clin North Am** 1988 Dec;15(4):737–44

Pneumoperitoneum and an acute abdominal condition caused by spontaneous perforation of a pyometra in an elderly woman: a case report. Sussman AM, et al. **Surgery** 1989 Feb;105(2 Pt 1):230–1

DIAGNOSIS

Spontaneous rupture of uterine vein during late pregnancy. Sigurd J, et al. **Acta Obstet Gynecol Scand** 1988;67(5):477–8

Uterine rupture: are intrauterine pressure catheters useful in the diagnosis? Rodriguez MH, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):666–9

Sonographic demonstration of an intrauterine device perforating a uterine myoma. Caspi B, et al. **JCU** 1989 Sep; 17(7):535–7

[Silent uterine rupture in cardiotocography] Klein M, et al. **Gynakol Rundsch** 1988;28 Suppl 2:240–3 (Ger)

EPIDEMIOLOGY

The frequency and management of uterine perforations during first-trimester abortions. Kaali SG, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):406–8

True rupture of the caesarean section scar (a 15 year review, 1972–1987). Meehan FP, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):129–35

[Comparative study of 2 series of cases of uterine rupture collected at the Averroès Hospital in Casablanca from 1979 to 1981 and from 1984 to 1986] Zhiri MA, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(2):206–12 (29 ref.) (Eng. Abstr.) (Fre)

ETIOLOGY

Spontaneous uterine rupture during pregnancy after treatment of Asherman's syndrome. Deaton JL, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1053–4

Rupture and dehiscence of cesarean section scar during pregnancy and delivery. Nielsen TF, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):569–73

Generalized peritonitis due to spontaneous rupture of pyometra. Bui A, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):82–3 (10 ref.)

Spontaneous uterine rupture in late pregnancy caused by placenta percreta: a case report. Nsofor BI, et al. **Cent Afr J Med** 1989 May;35(5):407–8

Determinant factors in uterine rupture following previous caesarean section. Ojo VA, et al. **East Afr Med J** 1988 May;65(5):307–13

Intra abdominal rupture of first trimester cervical pregnancy. Marcellus M, et al. **Ir J Med Sci** 1989 Jan;158(1):20–1

Rupture of the uterus with expulsion of the foetus. Kriplani A, et al. **J Indian Med Assoc** 1989 Mar;87(3):73

Intrapartum uterine rupture. Adams DM, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):471–3

CT scanning in intracavitary therapy: unexpected findings in "straightforward" insertions. Makin WP, et al. **Radiother Oncol** 1988 Dec;13(4):253–5

[On pregnancies with previous uterine scar] Zheng YY, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Mar;24(2):73–5, 123 (Eng. Abstr.) (Chi)

[Cicatricial uteri. Vaginal delivery under peridural analgesia] Camus M, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(3):379–87 (Eng. Abstr.) (Fre)

[Uterine rupture due to placenta accreta at 22 weeks' pregnancy. Apropos of a case] Faguer C. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):646–9 (Eng. Abstr.) (Fre)

[Uterine rupture after tubal reimplantation] Horovitz J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):650–2 (Eng. Abstr.) (Fre)

[Uterine rupture. Apropos of a series of 52 cases from the brush] Duverger V, et al. **Med Trop (Mars)** 1988 Jul–Sep; 48(3):273–6 (Eng. Abstr.) (Fre)

[Uterine rupture. Apropos of 31 cases seen at the Hospital Center of Libreville (Gabon)] Picaud A, et al. **Rev Fr Gynecol Obstet** 1989 May;84(5):411–6 (Eng. Abstr.) (Fre)

[2 cases of rupture of a rudimentary uterine horn] Chelli H, et al. **Tunis Med** 1987 Feb;65(2):143–7 (13 ref.) (Eng. Abstr.) (Fre)

[Uterine rupture in the Maternity Department in Sfax. Apropos of 72 cases 1980–1984] Rekik S, et al. **Tunis Med** 1987 Apr;65(4):243–6 (Eng. Abstr.) (Fre)

[Labor in patients previously subjected to cesarean section: maternal and fetal aspects. Review of the literature] Ceruti M, et al. **Ann Ostet Ginecol Med Perinat** 1989 Jan–Feb; 110(1):28–34 (16 ref.) (Eng. Abstr.) (Ita)

[Uterine perforation during legal abortion] Popović M, et al. **Jugosl Ginekol Perinatol** 1988 May–Aug;28(3–4):96–8 (Eng. Abstr.) (Ser)

PATHOLOGY

A case report of unusual complication of myomatous uterus in pregnancy: spontaneous perforation of myoma after red degeneration. Makar AP, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun;31(3):289–93

PREVENTION & CONTROL

Routine intraoperative ultrasonography for second trimester abortion reduces incidence of uterine perforation. Darney PD, et al. **J Ultrasound Med** 1989 Feb;8(2):71–5

[Obstetric future of women having undergone cesarean section] Grio R, et al. **Minerva Ginecol** 1988 Nov; 40(11):657–60 (Eng. Abstr.) (Ita)

[Management of labor through the natural birth canal in pregnant women with a history of cesarean section] Pogorelova AB, et al. **Akush Ginekol (Mosk)** 1988 Oct; (10):44–6 (Eng. Abstr.) (Rus)

[Pregnancy and labor after cesarean section] Strizhakov AN, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):72–7 (Rus)

SURGERY

Pregnancy following simple repair of the ruptured gravid uterus. O'Connor RA, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):942–4

[Obstetrical activity of a regional hospital center in the northern Ivory Coast] Ribault L. **Rev Fr Gynecol Obstet** 1989 May;84(5):377–9 (Eng. Abstr.) (Fre)

[Spontaneous uterine rupture in the 18th week of pregnancy] Dudkiewicz D, et al. **Ginekol Pol** 1988 Aug;59(8):508–11 (Eng. Abstr.) (Pol)

VETERINARY

Hydramnios causing uterine rupture in a mare. Honnas CM, et al. **J Am Vet Med Assoc** 1988 Aug 1;193(3):334–6

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. III. Serum electrolyte levels] Wawron W. **Pol Arch Weter** 1987;27(2–3):51–60 (Eng. Abstr.) (Pol)

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. II. Hematological studies] Wawron W. **Pol Arch Weter** 1987;27(2–3):41–50 (Eng. Abstr.) (Pol)

[Effect of hysterectomy in swine on health status and various indicators of peripheral blood. I. Clinical observations] Wawron W. **Pol Arch Weter** 1987;27(2–3):29–40 (Eng. Abstr.) (Pol)

UTEROGLOBIN see under **GLYCOPROTEINS**

UTERUS

see related
HYSTERECTOMY
HYSTEROSALPINGOGRAPHY

Oxytocin administration and uterine exploration in the management of vaginal birth after cesarean—not routine procedures [letter] Jakobi P, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1538–40

High-pressure uterine displacement [letter] Dorsey MJ, et al. **Anesthesiology** 1989 Jan;70(1):165–6

Palpation of the uterine scar after vaginal delivery [letter] Schneider G. **Can Med Assoc J** 1989 Jul 15;141(2):98

Different outcomes of sperm competition in right and left sides of the female reproductive tract revealed by thymidine-3H-labeled spermatozoa in the rat. Spinka M. **Gamete Res** 1988 Nov;21(3):313–21

The impact of maternal uterine genotype on postnatal growth and adult body size in mice. Cowley DE, et al. **Genetics** 1989 May;122(1):193–203

Surrogate human fallopian tubes for overcoming tubal infertility. Formigli L, et al. **Hum Reprod** 1989 May; 4(4):416–7

Efficacy of routine postpartum uterine exploration and manual sponge curettage. Epperly TD, et al. **J Fam Pract** 1989 Feb;28(2):172–6

Using amnioinfusion for the relief of repetitive variable decelerations during labor. Galvan BJ, et al. **J Obstet Gynecol Neonatal Nurs** 1989 May–Jun;18(3):222–9

Uterine incarceration associated with uterine leiomyomata: clinical and sonographic presentation. Hankins GD, et al. **JCU** 1989 Jun;17(5):385–8

Hysteroscopy. **Obstet Gynecol Clin North Am** 1988 Mar; 15(1):1–166

Distending media for hysteroscopy. Pellicer A, et al. **Obstet Gynecol Clin North Am** 1988 Mar;15(1):23–8 (20 ref.)

History and development of hysteroscopy. Russell JB. **Obstet Gynecol Clin North Am** 1988 Mar;15(1):1–11

Instrumentation in hysteroscopy. Shapiro BS. **Obstet Gynecol Clin North Am** 1988 Mar;15(1):13–21 (27 ref.)

Inverted Y–ureteral duplication with an uterine ectopy as cause of ureteric enuresis. Ecke M, et al. **Urol Int** 1989; 44(2):116–8

[Uterine hemorrhage as an indication for performing contact hysteroscopic examination] Grozdanov G, et al. **Akush Ginekol (Sofiia)** 1989;28(1):58–60 (Eng. Abstr.) **(Bul)**

[Hysteroscopic assessment of endometrial cancer] Grozdanov G. **Akush Ginekol (Sofiia)** 1988;27(6):76–8 (Eng. Abstr.) **(Bul)**

[Hysteroscopic resection of the uterine septum] Mergui JL, et al. **Presse Med** 1989 Mar 4;18(9):488–9 (Eng. Abstr.) **(Fre)**

ABNORMALITIES

Reproductive impairment of women with unicornuate uterus. Maneschi M, et al. **Acta Eur Fertil** 1988 Sep–Oct; 19(5):273–5

Hysterosalpingographic abnormalities in infertile women: radiological and clinical interpretation. Nicotra M, et al. **Acta Eur Fertil** 1988 Mar–Apr;19(2):79–82

Congenital absence of vagina and uterus. Kvint S, et al. **Acta Obstet Gynecol Scand** 1988;67(4):367–8

The combination of pregnancy and acute salpingitis in a case of uterus didelphys. Søgaard Andersen E, et al. **Acta Obstet Gynecol Scand** 1988;67(2):175–6

Pregnancies in septate uteri: outcome in relation to site of uterine implantation as determined by sonography. Fedele L, et al. **AJR** 1989 Apr;152(4):781–4

Familial uterine hernia syndrome: report of an Arab family with four affected males. Naguib KK, et al. **Am J Med Genet** 1989 Jun;33(2):180–1

Uterus didelphys with an obstructed hemivagina and ipsilateral renal agenesis in teenagers: report of three cases. Tridenti G, et al. **Am J Obstet Gynecol** 1988 Oct; 159(4):882–3

Transabdominal chorionic villus sampling in a patient with a bicornuate uterus. Johnson JM, et al. **Am J Perinatol** 1989 Jul;6(3):292–5

Hernia uteri inguinale associated with unicornuate uterus. Elliott DC, et al. **Arch Surg** 1989 Jul;124(7):872–3

Term pregnancy in a rudimentary horn of a bicornuate uterus with foetal salvage: a case report. Akhtar AZ. **Asia Oceania J Obstet Gynaecol** 1988 Jun;14(2):143–6

Vaginal dystocia in a patient with a double uterus and a longitudinal vaginal septum. Carey MP, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):74–5 (6 ref.)

Hysteroscopic metroplasty. Itzkowic DJ, et al. **Aust N Z J Obstet Gynaecol** 1988 Nov;28(4):305–6

Invasive carcinoma of both cervices in a patient with uterus didelphys. Tam G, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):239–40

Minor müllerian anomalies and oligomenorrhea in infertile women. A syndrome. Gynecologic and obstetric implications. Stampe Sørensen S. **Dan Med Bull** 1989 Jun; 36(3):248–63 (155 ref.)

Uterus bicollis in a Clydesdale mare. Volkmann DH, et al. **Equine Vet J** 1989 Jan;21(1):71

The Mayer–Rokitansky syndrome. Report of 5 cases. Guys JM, et al. **Eur Urol** 1988;14(4):301–4

Classification of müllerian anomalies [letter] Daya S. **Fertil Steril** 1989 Mar;51(3):551–2

Microsurgical transposition of the human fallopian tube: report of a successful case of pregnancy. Okamura H, et al. **Fertil Steril** 1988 Dec;50(6):980–1

Mesodermal band deformity and associated pathologies. Case report. Ragnekar A, et al. **Indian J Med Sci** 1988 Jul; 42(7):162

Successful hemisterilization in a patient with uterus didelphus. Børlum KG, et al. **Int J Gynaecol Obstet** 1989 Mar;28(3):287–8

Pregnancy in a non–communication rudimentary uterine horn. Seoud MA, et al. **Int J Gynaecol Obstet** 1989 Mar; 28(3):275–8

Diagnostic laparoscopy in apparent uterine agenesis. Joshi NP, et al. **J Adolesc Health Care** 1988 Sep;9(5):403–6

Hernia uteri inguinale: an unusual form of male pseudohermaphroditism. Sarda AK, et al. **J Assoc Physicians India** 1988 May;36(5):341–4

Acute urinary retention due to didelphys uterus associated with an obstructed hemivagina in a 5–month–old infant. Pansini L, et al. **J Pediatr Surg** 1988 Oct;23(10):984–5

Utero vaginal malformations: a trap for the unsuspecting surgeon. Tolete–Velcek F, et al. **J Pediatr Surg** 1989 Aug; 24(8):736–40

Uterus didelphys with obstructed hemivagina and pyocolpos, ipsilateral tubal occlusion and renal agenesis, and bilateral cervical hypoplasia. A case report. Legino L, et al. **J Reprod Med** 1989 Mar;34(3):237–40

Double uterus associated with unilateral vaginal obstruction and ipsilateral renal agenesis: ultrasonographic diagnosis. Burgos FJ, et al. **JCU** 1989 May;17(4):296–8

Endometrial carcinoma with uterus didelphys. Thomas AG, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):411–3

Hysteroscopic metroplasty: six years' experience. Daly DC, et al. **Obstet Gynecol** 1989 Feb;73(2):201–5

Hysteroscopic management of mullerian fusion defects. Graebe RA. **Obstet Gynecol Clin North Am** 1988 Mar; 15(1):91–8 (8 ref.)

Prenatal sampling and bicornuate uterus [letter] Bagnasco JF, et al. **Prenat Diagn** 1989 Jun;9(6):447

Prenatal sampling and bicornuate uterus [letter] Black SH, et al. **Prenat Diagn** 1988 Jul;8(6):476–7

Septate versus bicornuate uteri: errors in imaging diagnosis. Reuter KL, et al. **Radiology** 1989 Sep;172(3):749–52

Unilateral renal agenesis associated with bicornuate uterus. Nakada T, et al. **Urol Int** 1988;43(6):352–5

Neonatal hydrometrocolpos. Simmer K, et al. **Z Kinderchir** 1989 Apr;44(2):124–5

[Pregnancy in a rudimentary horn—a report of 2 cases] Katsulov A, et al. **Akush Ginekol (Sofiia)** 1988;27(5):73–6 **(Bul)**

[Uterus didelphys with a blind hemi–vagina and homolateral renal agenesis] Denis X, et al. **Ann Urol (Paris)** 1989; 23(1):31–4 (Eng. Abstr.) **(Fre)**

[The association of a dysplastic kidney with a single vaginal ectopic ureter and a homolateral genital abnormality in a girl. Comments based on 3 case reports] Bondonny JM, et al. **Chir Pediatr** 1988;29(5):273–80 (Eng. Abstr.) **(Fre)**

[Unilateral hematocolpos in utero–vaginal duplication associated with homolateral renal agenesis. Apropos of 2 clinical case reports] Tarvidel–Raimondeau P, et al. **Chir Pediatr** 1988;29(4):208–12 (Eng. Abstr.) **(Fre)**

[The obstetrical outlook in uterine malformations] Rudigoz RC, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(2):185–91 (Eng. Abstr.) **(Fre)**

[Retrograde section of uterine septa under ultrasonic control] Querleu D, et al. **Presse Med** 1988 Nov 26;17(42):2253–5 (Eng. Abstr.) **(Fre)**

[2 cases of rupture of a rudimentary uterine horn] Chelli H, et al. **Tunis Med** 1987 Feb;65(2):143–7 (13 ref.) (Eng. Abstr.) **(Fre)**

[Congenital and acquired organ changes of the uterus and habitual abortion] Campo RL, et al. **Gynakologe** 1988 Sep; 21(3):237–44 (57 ref.) **(Ger)**

[Segmentary aplasia of a uterine horn (uterus unicornis) in a cow of the beef breed Senepol] Stettler M, et al. **Schweiz Arch Tierheilkd** 1988 Dec;130(12):709–12 (Eng. Abstr.) **(Ger)**

[Metroplasty in congenital uterine malformations] Kessler I, et al. **Harefuah** 1989 Apr 2;116(7):347–50 (Eng. Abstr.) **(Heb)**

[Congenital malformations of the female genital tract and gestation capacity] Marcello C, et al. **Ann Ostet Ginecol Med Perinat** 1988 Jul–Aug; 109(4):219–28 (Eng. Abstr.) **(Ita)**

[Rokitansky–Kuster–Hauser syndrome: presentation of 14 cases] Schivardi MR, et al. **Ann Ostet Ginecol Med Perinat** 1988 May–Jun; 109(3):145–50 (Eng. Abstr.) **(Ita)**

[Unilateral renal agenesis associated with uterine malformations. Description of 2 clinical cases] Listorto G, et al. **Minerva Ginecol** 1988 Jun;40(6):377–81 (Eng. Abstr.) **(Ita)**

[A case of Mayer–Rokitansky syndrome] Ogawa O, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1461–7 (Eng. Abstr.) **(Jpn)**

[Developmental defects of the uterus and their surgical correction to restore the child–bearing function] Davydov SN, et al. **Akush Ginekol (Mosk)** 1988 May;(5):30–2 (Eng. Abstr.) **(Rus)**

ANALYSIS

Estrogen and progesterone receptors in leiomyomas and normal uterine tissues during reproductive life. Marelli G, et al. **Acta Eur Fertil** 1989 Jan–Feb;20(1):19–22

Unmasking of surface negativity on day 6 pregnant rat uterine epithelial cells by trypsin and pronase. Hosie MJ, et al. **Acta Histochem (Jena)** 1989;86(1):33–8

Ovine trophoblast protein–1 and bovine trophoblast protein–1 are present as specific components of uterine flushings of pregnant ewes and cows. Kazemi M, et al. **Biol Reprod** 1988 Sep;39(2):457–63

Immunological analysis of the biochemical properties of the uterine estrogen receptor. Yamashita S, et al. **Biol Reprod** 1989 Jun;40(6):1275–85

Acyl type platelet–activating factor in normal rat uterus determined by gas chromatography mass spectrometry. Yasuda K, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 16(1–12):137–41

Coexistence of cytoplasmic and nuclear estrogen receptors. A histochemical study on human mammary cancer and rabbit uterus. Lee SH. **Cancer** 1989 Oct 1;64(7):1461–6

Distribution of progesterone to the uterus and associated vasculature of cattle. Weems CW, et al. **Endocrinol Jpn** 1988 Aug;35(4):625–30

Identification of the major sources of error in estrogen receptor measurements for individual laboratories using both tissue and cytosol samples. Borjesson BW, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1079–86

Sources of improvement in between laboratory variation in estrogen and progestin receptor measurement using tissue samples during the Australian Quality Assurance Programme. Borjesson BW, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1087–93

Effect of aging on populations of estrogen receptor–containing cells in the rat uterus. Han Z, et al. **Exp Cell Res** 1989 Jan;180(1):234–42

Distribution of total estradiol receptor levels in various segments and tissues of the normal and pathological human uterus. Gorodeski IG, et al. **Gynecol Obstet Invest** 1988; 26(4):296–301

Identification of transferrin receptor in cervical and endometrial tissues. Mizuuchi H, et al. **Gynecol Oncol** 1988 Oct;31(2):292–300

Differential growth factor content of uterine luminal fluids from large white and prolific Meishan pigs during the estrous cycle and early pregnancy. Simmen RC, et al. **J Anim Sci** 1989 Jun;67(6):1538–45

High–performance affinity chromatography of human progesterone receptor. Boyle DM, et al. **J Chromatogr** 1988 Nov 25;455:434–8

Distribution of total progesterone receptor levels in various segments and tissues of the normal human uterus: the effect of short–term estrogen administration. Gorodeski IG, et al. **J Endocrinol Invest** 1988 Jul–Aug;11(7):465–9

Autoradiographic localization of beta–adrenoreceptors in rat uterus. Tolszczuk M, et al. **J Histochem Cytochem** 1988 Dec;36(12):1475–9

Ontogeny and implication of pregnancy–associated agglutinin of the rat uterus. Mukhopadhyay PK, et al. **J Reprod Fertil** 1989 May;86(1):59–63

Immunofluorescent localization, by use of anti–idiotypic antibody, of monoclonal anti–progesterone antibody in the mouse uterus before implantation. Wang MW, et al. **J Reprod Fertil** 1989 May;86(1):211–8

Structural characterization of the 9–10S estradiol receptor from calf uterus. Ratajczak T, et al. **J Steroid Biochem** 1988 Dec;31(6):909–16

Autoradiographic visualization of the GABA–A receptor agonist, 3H–muscimol in the rat uterus. Amenta F, et al. **Pharmacol Res Commun** 1988 Oct;20(10):863–8

Gestational changes in calbindin–D9k in rat uterus, yolk sac, and placenta: implications for maternal–fetal calcium transport and uterine muscle function. Mathieu CL, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3433–7

PGE measurement in mouse embryos and uterine/embryo tissue. Anton RF, et al. **Prostaglandins** 1988 Dec; 36(6):835–46

Tissue levels of prostaglandins and what do they mean? Studies on the guinea–pig uterus. Poyser NL. **Prostaglandins** 1988 Nov;36(5):645–53

Pharmacokinetics and distribution of sulphadimidine in plasma, milk and uterine fluid of female buffaloes. Singh MK, et al. **Vet Res Commun** 1988;12(1):41–6

[The uterus and estrogen, progesterone receptors] Yang ZR, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Sep; 23(5):304–6 (21 ref.) **(Chi)**

[A study on the characterization of beta–adrenoceptor populations in mice uteri] Xu DZ, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):265–70 (Eng. Abstr.) **(Chi)**

[Detection and distribution of estrogen receptors in the human uterus by immunocytochemical assay (ER–ICA)] Ishi K, et al. **Rinsho Byori** 1988 Jul;36(7):855–60 **(Jpn)**

[Localization of histamine in uterine structures] Gordon DS, et al. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):66–8 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Assessment of uterine shape and size using Kurz's Cavimeter. de Castro A. **Adv Contracept** 1988 Jun;4(2):115–23

What are the ultrasound and biochemical features of impending ovulation? Eden JA, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):225–7

The effect of maternal bladder volume on fundal height measurements. Engstrom JL, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):987–91

Effect of a pineal indolamine, 5–methoxyindole–3–acetic acid, on the estrous cycle and reproductive organs of female Wistar albino rats. Ocal–Irez T, et al. **Brain Res** 1989 Jul 24;493(1):1–7

Ultrasonic demonstration of thanatophoric dwarfism in utero. Kapoor R, et al. **Indian Pediatr** 1988 Oct;25(10):1009–11

The intramural segment and the uterotubal junction: an anatomic and histologic study. Rocca M, et al. **Int J Gynaecol Obstet** 1989 Apr;28(4):343–9

Retained pregnancy complicating donor ovum transfer. Sauer MV. **Int J Gynaecol Obstet** 1989 May;29(1):83–5

Effect of stage of gestation, litter size and uterine space on the incidence of mummified fetuses in pigs. Wu MC, et al. **J Anim Sci** 1988 Dec;66(12):3202–7

Effect of initial length of uterus per embryo on fetal survival and development in the pig. Wu MC, et al. **J Anim Sci** 1989 Jul;67(7):1767–72

Doisynolic–type acids—uterotropically potent estrogens which compete poorly with estradiol for cytosolic estradiol receptors. Meyers CY, et al. **J Steroid Biochem** 1988 Oct; 31(4A):393–404

Parturient fundal height and its relation to fetal weight.

Bergström S, et al. **J Trop Pediatr** 1989 Feb;35(1):27–30

Sonography of the puerperal uterus. Lavery JP, et al. **J Ultrasound Med** 1989 Sep;8(9):481–6

Uterine junctional zone: MR study of water content and relaxation properties. McCarthy S, et al. **Radiology** 1989 Apr;171(1):241–3

[Clinical application of gravidography] Dong JH. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Sep;23(5):265–7, 316 (Eng. Abstr.) (Chi)

[Reproducibility of the echographic biometry of the uterus] Zorzoli A, et al. **Ann Ostet Ginecol Med Perinat** 1988 Jul–Aug;109(4):229–32 (Eng. Abstr.) (Ita)

[Pelvic echography in the differential diagnosis of isolated precocious thelarche and true precocious puberty] Arrigo T, et al. **Minerva Pediatr** 1988 May;40(5):269–72 (Eng. Abstr.) (Ita)

BLOOD SUPPLY

Influence of medullar anesthetic techniques on uterine blood flow, placental transfer and foetal outcome. Shnider SM. **Acta Anaesthesiol Belg** 1988;39(3):169–75 (38 ref.)

Umbilical artery and uteroplacental blood flow velocity waveforms in normal pregnancy—a cross-sectional study. Gudmundsson S, et al. **Acta Obstet Gynecol Scand** 1988; 67(4):347–54

Life-threatening hemorrhage due to uterine vascular abnormality. Jensen H, et al. **Acta Obstet Gynecol Scand** 1988;67(4):363–5

Uterine and umbilical blood flow during cesarean section under epidural anesthesia. Petrikovsky BM, et al. **Acta Obstet Gynecol Scand** 1988;67(8):737–40

Spontaneous rupture of uterine vein during late pregnancy. Sigurd J, et al. **Acta Obstet Gynecol Scand** 1988;67(5):477–8

Doppler measurements of changes in human mammary and uterine blood flow during pregnancy and lactation. Thoresen M, et al. **Acta Obstet Gynecol Scand** 1988; 67(8):741–5

Hormonal influence on utero-ovarian blood flow distribution in the mid-luteal pseudopregnant rat. Gåfvels M, et al. **Acta Physiol Scand** 1988 Mar;132(3):329–34

Pregnancy-induced hypertension and its influence on uteroplacental blood flow. Rýznar V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:361–5

Changes in uteroplacental blood flow in relation to intrauterine hazard to fetus. Rýznar V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:367–73

Measurement of regional uteroplacental blood flow. Rýznar V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:353–9

The effect of fluorocarbon emulsion on placental insufficiency. Faithfull NS, et al. **Adv Exp Med Biol** 1989; 248:357–64

Nifedipine does not adversely affect uteroplacental blood flow in the hypertensive term-pregnant rat. Ahokas RA, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1440–5

Maternal and fetal blood flow velocity waveforms in patients with preterm labor: prediction of successful tocolysis. Brar HS, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):947–50

Fetal and maternal endocrine responses to prolonged reductions in uterine blood flow in pregnant sheep. Challis JR, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):926–32

Vaginosonographic velocimetry of both main uterine arteries by visual vessel recognition and pulsed Doppler method during pregnancy. Deutinger J, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1072–6

The effect of placental location on uterine artery flow velocity waveforms. Kofinas AD, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1504–8

Maternal cigarette smoking: the effects on umbilical and uterine blood flow velocity. Morrow RJ, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1069–71

Fetal and maternal hemodynamic responses to exercise in pregnancy assessed by Doppler ultrasonography. Morrow RJ, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):138–40

Effect of exogenous prostacyclin on central and uterine hemodynamics in the chronically instrumented pregnant guinea pig before and after indomethacin administration. Weiner CP, et al. **Am J Obstet Gynecol** 1989 Feb; 160(2):489–93

The effect of maternal position on uterine artery flow during antepartum fetal heart rate testing. Witter FR, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):379–80

Dynamics of the uteroplacental circulation in health and disease. Assali NS. **Am J Perinatol** 1989 Apr;6(2):105–9 (15 ref.)

Local and systemic estradiol-17 beta: effects on uterine and systemic vasodilation. Magness RR, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E536–42

Uterine and nonuterine vascular responses to angiotensin II in ovine pregnancy. Rosenfeld CR, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H17–24

Role of the renin–angiotensin system in hypertension during reduced uteroplacental perfusion pressure. Woods LL, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R204–9

The effect of intravenously administered 2-chloroprocaine upon uterine artery blood flow velocity in gravid guinea pigs. Chestnut DH, et al. **Anesthesiology** 1989 Feb; 70(2):305–8

Morphological evidence for increased uterine vascular permeability at the time of embryonic attachment in the pig. Keys JL, et al. **Biol Reprod** 1988 Sep;39(2):473–87

Blood flow velocity waveforms in large maternal and uterine vessels throughout pregnancy and postpartum: a longitudinal study using Duplex sonography. Baumann H, et al. **Br J Obstet Gynaecol** 1988 Dec;95(12):1282–91

Reference ranges and sources of variation for indices of pulsed Doppler flow velocity waveforms from the uteroplacental and fetal circulation [letter] Fogarty PP. **Br J Obstet Gynaecol** 1988 Sep;95(9):954–6

Uterine blood flow and myometrial activity at menstruation, and the action of vasopressin and a synthetic antagonist. Hauksson A, et al. **Br J Obstet Gynaecol** 1988 Sep; 95(9):898–904

The effect of sublingual nifedipine on uteroplacental blood flow in hypertensive pregnancy. Lindow SW, et al. **Br J Obstet Gynaecol** 1988 Dec;95(12):1276–81

Doppler time velocity waveform studies of the uterine artery and uterus. Long MG, et al. **Br J Obstet Gynaecol** 1989 May;96(5):588–93

Uteroplacental perfusion after epidural analgesia for elective caesarean section. Long MG, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):1081–2

Successful pregnancy after selective embolization of a post-molar vascular malformation [letter] Poppe W, et al. **Br J Obstet Gynaecol** 1989 May;96(5):623

Maternal blood viscosity and uteroplacental blood flow velocity waveforms in normal and complicated pregnancies. Steel SA, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):747–52

The uterine artery blood flow velocity waveform in pathological pregnancy. Mulders LG, et al. **Early Hum Dev** 1988 Nov;18(1):45–57

The uterine artery blood flow velocity waveform: reproducibility and results in normal pregnancy. Mulders LG, et al. **Early Hum Dev** 1988 May;17(1):55–70

Etilefrine and amezinium reduce uterine blood flow of pregnant guinea pigs. Hohmann M, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):173–81

Uterine and umbilical artery blood flow velocity waveforms and their validity in the prediction of fetal compromise. Mulders LG, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):143–54

Transvaginal Doppler color flow mapping. Hata T, et al. **Gynecol Obstet Invest** 1989;27(4):217–8

Pregnancy hypertension, placental evidences of low uteroplacental blood flow, and spontaneous premature delivery. Naeye RL. **Hum Pathol** 1989 May;20(5):441–4

Decreased uterine perfusion—a cause of infertility. Goswamy RK, et al. **Hum Reprod** 1988 Nov;3(8):955–9

Doppler ultrasound studies of the uterine artery in spontaneous ovarian cycles. Goswamy RK, et al. **Hum Reprod** 1988 Aug;3(6):721–6

The uterine vascular system of the golden hamster and its changes during the oestrous cycle. Ogura A, et al. **J Anat** 1988 Jun;158:43–55

Structural and mechanical changes of uterine arteries during pregnancy in the pig. Guenther AE, et al. **J Anim Sci** 1988 Dec;66(12):3144–52

The effect of nitrendipine (NIT) on maternal and fetal blood pressure, uterine blood flow, and blood gas status in pregnant sheep. Pipkin FB, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S123–5

Significance of umbilical and uterine artery velocimetry in the well-controlled pregnant diabetic. Bracero LA, et al. **J Reprod Med** 1989 Apr;34(4):273–6

Postpartum blood flow velocity waveforms of the uterine arteries. Kirkinen P, et al. **J Reprod Med** 1988 Sep; 33(9):745–8

The effects of placental site on the arcuate artery flow velocity waveform. Chambers SE, et al. **J Ultrasound Med** 1988 Dec;7(12):671–3

Doppler ultrasound in the nonpregnant pelvis. Farquhar CM, et al. **J Ultrasound Med** 1989 Aug;8(8):451–7

Umbilical and uterine artery flow velocity waveforms. Effect of the sampling site on Doppler ratios. Mehalek KE, et al. **J Ultrasound Med** 1989 Apr;8(4):171–6

The effects of different anaesthetic agents on the estimation of uterine vascular permeability in mice. Milligan SR, et al. **Lab Anim** 1988 Oct;22(4):343–6

Effect of allyloestrenol on deteriorating uteroplacental circulation [letter] Pearce JM, et al. **Lancet** 1988 Nov 26; 2(8622):1252

Vascular nature of pre-eclampsia. Leiberman JR. **Med Hypotheses** 1989 Apr;28(4):281–3

Co-existence of neuropeptides and differential inhibition of vasodilator responses by neuropeptide Y in guinea pig uterine arteries. Fallgren B, et al. **Neurosci Lett** 1989 May 22;100(1–3):71–6

Relationship between glycosaminoglycans and pregnancy-induced sclerosis in bovine uterine arteries. Kamiya S, et al. **Nippon Juigaku Zasshi** 1988 Oct; 50(5):1055–9

Arteriovenous malformations of the uterus. Fleming H, et al. **Obstet Gynecol** 1989 Feb;73(2):209–14

Intravenous leiomyomatosis of the uterus. Clement PB. **Pathol Annu** 1988;23 Pt 2:153–83 (71 ref.)

Selective ligation of uterine artery branches accelerates fetal growth in the rat. Ogata ES, et al. **Pediatr Res** 1988 Sep; 24(3):384–90

Effect of pregnancy and sex steroids on alpha 1-adrenoceptor mechanisms in the guinea-pig uterine vascular bed. Fallgren B, et al. **Pharmacol Toxicol** 1988 Nov;63(5):375–81

Effects of vasoactive intestinal polypeptide and substance P on human intramyometrial arteries and stem villous arteries in term pregnancy. Hansen V, et al. **Placenta** 1988 Sep–Oct; 9(5):501–6

Reversal of depressed miduterine arterial flow during hyperthermia-induced respiratory alkalosis. Brown DE, et al. **Proc Soc Exp Biol Med** 1988 Nov;189(2):152–7

Involvement of perivascular neuropeptide Y nerve fibres in uterine arterial vasoconstriction in conjunction with pregnancy. Fallgren B, et al. **Regul Pept** 1989 Feb; 24(2):119–30

Effects of verapamil and nifedipine on human uterine artery "in vitro". García de Boto MJ, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov;62(2):361–4

Effect of placental resistance, arterial diameter, and blood pressure on the uterine arterial velocity waveform: a computer modeling approach. Adamson SL, et al. **Ultrasound Med Biol** 1989;15(5):437–42

A transmission line modelling approach to the interpretation of uterine Doppler waveforms. Mo LY, et al. **Ultrasound Med Biol** 1988;14(5):365–76

[Characteristics of venous reflux in women examined for sterility] Nalbanski B, et al. **Akush Ginekol (Sofiia)** 1988; 27(3):66–71 (Eng. Abstr.) (Bul)

[Uterero-placenta blood flow and intrauterine growth retardation] Li YL, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Mar;24(2):108–10 (21 ref.) (Chi)

[MRI and post-partum thrombosis of the utero-ovarian vein. Apropos of a case] Martin B, et al. **Ann Radiol (Paris)** 1988; 31(4):251–4 (Eng. Abstr.) (Fre)

[A comparative study of pulsed Doppler versus continuous Doppler technic without spectral analysis in obstetrics] Hamel-Desnos C, et al. **J Mal Vasc** 1989;14(1):32–8 (Eng. Abstr.) (Fre)

[Uterine spiral arteries of the human in gestosis, fetal growth retardation and postmaturity] Wang T. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):548–52 (Eng. Abstr.) (Ger)

[Comparison of transvaginal and transabdominal Doppler flow measurements in uterine vessels in the normal course of pregnancy] Deutinger J, et al. **Ultraschall Med** 1989 Feb; 10(1):15–8 (Eng. Abstr.) (Ger)

[The effect of body position on uterine blood flow in the 3d trimester of pregnancy] Sohn C, et al. **Ultraschall Med** 1989 Feb;10(1):10–4 (Eng. Abstr.) (Ger)

[Involution-induced changes in arterial uterine blood flow] Sohn C, et al. **Z Geburtshilfe Perinatol** 1988 Sep–Oct; 192(5):203–9 (Eng. Abstr.) (Ger)

[Spontaneous rupture of the uterine vein in the 33d week of pregnancy] Abel W, et al. **Ginekol Pol** 1988 Sep; 59(9):591–3 (Eng. Abstr.) (Pol)

[Phlebographic picture of extravasation of a contrast medium as a complication of hysterography] Waszyński E, et al. **Ginekol Pol** 1988 Feb;59(2):114–6 (Eng. Abstr.) (Pol)

[The role of the cholinergic system in the regulation of blood flow through the reproductive organs of swine during the estrous cycle] Dynarowicz I, et al. **Pol Arch Weter** 1987; 27(4):69–83 (Eng. Abstr.) (Pol)

[Spontaneous rupture of veins of the utero-ovarian plexus in pregnancy] Starzewski J, et al. **Wiad Lek** 1988 Sep 1; 41(17):1175–7 (Eng. Abstr.) (Pol)

[Status of the utero-placental blood circulation in pregnant women with chronic pyelonephritis and nephropathy] Alieva EM, et al. **Akush Ginekol (Mosk)** 1989 May;(5):24–8 (Eng. Abstr.) (Rus)

[Analysis of the correlation of indicators of utero-placental blood flow and various blood enzymes in pregnant women at high-risk of perinatal pathology] Burler VA, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):49–54 (Eng. Abstr.) (Rus)

[Value of utero-placental and feto-placental Doppler flowmetry in selecting rational tactics in the management of pregnancy and the method of delivery] Strizhakov AN, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):24–7 (Eng. Abstr.) (Rus)

[Relations between indicators of the activity of several blood enzymes and the state of the utero-placental blood flow in pregnant women at high risk of perinatal pathology] Volobuev AI, et al. **Akush Ginekol (Mosk)** 1989 Jan; (1):38–42 (Eng. Abstr.) (Rus)

[Changes in utero-placental blood flow in comparison with placental morphological characteristics in chronic threatened abortion] Zheleznov BI, et al. **Akush Ginekol (Mosk)** 1988 Dec;(12):13–8 (Eng. Abstr.) (Rus)

CYTOLOGY

Structural changes in the luminal epithelium of the porcine uterus between days 10 and 19 of the estrous cycle. Keys JL, et al. **Am J Anat** 1989 May;185(1):42–57

Biochemical evidence for programmed cell death in rabbit uterine epithelium. Rotello RJ, et al. **Am J Pathol** 1989 Mar;134(3):491–5

Chromogranin- and somatostatin-containing neuroendocrine cells in the porcine uterus. An immunocytochemical study. Vittoria A, et al. **Anat Histol Embryol** 1989 Jun; 18(2):136–42

The mast cells of the human uterus. Crow J, et al. **APMIS** 1988 Oct;96(10):921–6

Estradiol-stimulated nuclear ribonucleoprotein transport in the rat uterus: a molecular basis. Thampan RV. **Biochemistry** 1988 Jul 12;27(14):5019–26

Effect of ovarian steroids on migration of uterine lumenal neutrophils and on chemokinetic factors in uterine

secretions from mares. Watson ED. **Equine Vet J** 1988 Sep; 20(5):368–70

Quantitative comparison of the passage of homologous and heterologous spermatozoa through the uterotubal junction of the golden hamster. Smith TT, et al. **Gamete Res** 1988 Mar;19(3):227–34

Reduction in uterine intra-epithelial lymphocytes during early gestation in pigs. King GJ. **J Reprod Immunol** 1988 Oct;14(1):41–6

The killing of mouse trophoblast cells by granulated metrial gland cells in vitro. Stewart I, et al. **Placenta** 1988 Jul–Aug; 9(4):417–25

The uterine lumen of the pregnant guinea-pig contains a large macrophage population. Sype W, et al. **Placenta** 1989 Mar–Apr;10(2):125–35

[Effect of ovarian hormones on mast cells in the denervated uterus of rats] Popova LA. **Fiziol Zh** 1989 Mar–Apr; 35(2):75–80 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Responsiveness of mouse parametrial fat to relaxin. Bani G, et al. **Acta Anat (Basel)** 1989;134(2):128–32

Do steroid hormones influence the concentration of PGF2 alpha receptors of the uterine muscles? Lintner F, et al. **Acta Chir Hung** 1989;30(2):109–17

The effect of flurbiprofen and naproxen sodium on intra-uterine pressure and menstrual pain in patients with primary dysmenorrhea. Milsom I, et al. **Acta Obstet Gynecol Scand** 1988;67(8):711–6

Does terbutaline cause uterine atony and increase intraoperative blood loss? [letter] Brown MS. **Am J Obstet Gynecol** 1989 Jul;161(1):259

Dose-response curves of the uterine and placental vascular beds to prostaglandin I2. Hollister MC, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1372–5

Endogenous prostaglandin F2 alpha release induced by physiologic saline solution infusion in utero in the mare: effect of temperature, osmolarity, and pH. Pascoe DR, et al. **Am J Vet Res** 1989 Jul;50(7):1080–3

Epidural clonidine analgesia in obstetrics: sheep studies. Eisenach JC, et al. **Anesthesiology** 1989 Jan;70(1):51–6

A study of the effect of mifepristone (antiprogesterone) followed by prostaglandin on uterine activity and fetal heart rate in patients having a termination of pregnancy. Pulkkinen MO, et al. **Arch Gynecol Obstet** 1989;244(2):75–8

Effect of nicardipine on the isolated uterus and other smooth muscles of the rat. Milovanović SR, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:291–304

Hormonal control of the expression of antibody-defined lactosaminoglycans in the mouse uterus. Babiarz BS, et al. **Biol Reprod** 1988 Oct;39(3):699–706

Human chorionic gonadotropin affects tissue levels of progesterone and cyclic adenosine 3',5'-monophosphate in the metestrus rat uterus in vitro. Bonnamy PJ, et al. **Biol Reprod** 1989 Mar;40(3):511–6

Differential effects of p-nitrophenyl-D-xylosides on mouse blastocysts and uterine epithelial cells. Farach MC, et al. **Biol Reprod** 1988 Sep;39(2):443–55

Uterine decidualization in hypophysectomized-ovariectomized rats: effects of pituitary hormones. Kennedy TG, et al. **Biol Reprod** 1988 Sep;39(2):318–28

Tolerance to cromakalim in the rat uterus in vivo. Downing SJ, et al. **Br J Pharmacol** 1989 Mar;96(3):732–8

Decreased myometrial beta-adrenoceptors in women receiving beta 2-adrenergic tocolytic therapy: correlation with lymphocyte beta-adrenoceptors. Michel MC, et al. **Clin Pharmacol Ther** 1989 Jan;45(1):1–8

Anti-uterotrophic and folliculostatic activities of anordiol (2 alpha,17 alpha-diethynyl-A-nor-5 alpha-androstane-2 beta,17 beta-diol). Chatterton RT Jr, et al. **Contraception** 1989 Mar;39(3):291–7

Steroid hormone receptors in the uterus and ovary of immature rats treated with gonadotropins. Arakawa S, et al. **Endocrinol Jpn** 1989 Apr;36(2):219–28

Actions of an estradiol-17-fatty acid ester in estrogen target tissues of the rat: comparison with other C-17 metabolites and a pharmacological C-17 ester. MacLusky NJ, et al. **Endocrinology** 1989 Jan;124(1):318–24

Ergometrine--a partial agonist at 5-HT receptors in the uterus isolated from the oestrogen-primed rat. Hollingsworth , et al. **Eur J Pharmacol** 1988 Dec 6; 158(1-2):79–84

Stimulation of uterine prolactin secretion by human chorionic gonadotropin and progesterone in the cynomolgus monkey. Ying YK, et al. **Fertil Steril** 1988 Dec;50(6):976–9

Involvement of prostaglandins in the inhibitory response of adrenoceptor agonists in the rat isolated uterus. Ohia SE, et al. **Gen Pharmacol** 1988;19(6):807–13

Prenatal androgenization selectively modifies some responses to oestrogen in the prepubertal rat uterus. Arriaza CA, et al. **J Endocrinol** 1989 Mar;120(3):379–84

Temporal effects of progesterone inhibition of occupied nuclear oestrogen receptor retention in the rat uterus. Okulicz WC. **J Endocrinol** 1989 Apr;121(1):101–7

Preliminary investigation of the estrogenic potential of grandiflorenic acid from Montanoa tomentosa. Bejar E. **J Ethnopharmacol** 1988 Jul–Aug;23(2–3):329–31

Effects of a Chinese herbal medicine, keishi-bukuryo-gan, on the gonadal system of rats. Sakamoto S, et al. **J Ethnopharmacol** 1988 Jul–Aug;23(2–3):151–8

Biochemical and histological studies of reproductive organs in cyclic and ovariectomized rats supporting a non-hormonal action for neem oil. Tewari RK, et al. **J Ethnopharmacol** 1989 May;25(3):281–93

Naloxone-insensitive inhibitory and excitatory effects of opioid agonists in the rat isolated uterus. Ohia SE, et al. **J Pharm Pharmacol** 1989 Mar;41(3):168–72

Regulation of rat uterine steroid receptors by nomegestrol acetate, a new 19-nor-progesterone derivative. Botella J, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):758–61

A study of the early morphological changes initiated in the uterine luminal epithelium by substances (oil and carrageenan) which induce the decidual cell reaction in mice. Finn CA, et al. **J Reprod Fertil** 1989 Jul;86(2):619–26

Dissociation by colchicine of the wet weight and the cGMP responses to estradiol in immature rat uterus. Alexandre K, et al. **J Steroid Biochem** 1988 Dec;31(6):873–5

Effects of cycloheximide on hepatic and uterine insulin-like growth factor-I mRNA. Murphy LJ, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):81–6

Servomechanism of prolactin and progesterone in regulating uterine gene expression. Chilton BS, et al. **Mol Endocrinol** 1988 Dec;2(12):1169–75

Estrogen induces expression of c-fos and c-myc protooncogenes in rat uterus. Weisz A, et al. **Mol Endocrinol** 1988 Sep;2(9):816–24

Relaxant effect of dopamine on the isolated rat uterus. Estañ L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):484–8

The effect of clomiphene citrate on follicular phase increase in endometrial thickness and uterine volume. Eden JA, et al. **Obstet Gynecol** 1989 Feb;73(2):187–90

Use of sulprostone for induction of preoperative cervical dilation or uterine evacuation: a comparison among the effects of different treatment schedules. Fruzzetti F, et al. **Obstet Gynecol** 1988 Nov;72(5):704–8

Progesterone inhibits the uterotrophic effect of relaxin in immature rats. Adams WC, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):159–62

Gastrointestinal and uterine effects of enprostil. Wong AG, et al. **Proc West Pharmacol Soc** 1989;32:41–7

Morphine diminishes the constancy of spontaneous uterine contractions, antagonizes the positive inotropic effects of prostaglandin E2, but not of prostaglandin F2 alpha and inhibits prostaglandin E and F outputs from the uterus of ovariectomized rats. Faletti A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Dec; 34(3):147–51

Factors subserving the enhancing effect of progesterone on the output of prostaglandin F2 alpha in uteri from ovariectomized rats. Franchi AM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Feb; 35(2):113–8

Influences of estradiol and of catechol and non-catechol estrogens on the output of prostaglandins in uteri from spayed rats. Franchi AM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):25–9

Prostaglandin E2 alters the metabolism of labelled glucose in uteri isolated from ovariectomized rats. Effects of 17-beta estradiol and indomethacin. Gonzalez ET, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jan; 35(1):31–5

A novel anti-lipolytic action of norepinephrine in uteri isolated from spayed rats appears subserved by the activation of alpha 1-adrenoreceptors diminishing the generation and release of lipolytic prostaglandins. Gonzalez ET, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Nov;34(2):101–8

Addition of steroids to embryo-uterine monolayer co-culture enhances embryo survival and implantation in vitro. Lavranos TC, et al. **Reprod Fertil Dev** 1989;1(1):41–6

Induction of estrogen receptor, peroxidase activity, and epithelial abnormalities in the mouse uterovaginal epithelium after neonatal treatment with diethylstilbestrol. Andersson C, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(6):347–61

Transplacental estrogen responses in the fetal rat: increased uterine weight and ornithine decarboxylase activity. Harmon JR, et al. **Teratology** 1989 Mar;39(3):253–60

Methoxychlor induces estrogen-like alterations of behavior and the reproductive tract in the female rat and hamster: effects on sex behavior, running wheel activity, and uterine morphology. Gray LE Jr, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):525–40

Uterine abnormalities in rats exposed neonatally to diethylstilbestrol, ethynylestradiol, or clomiphene citrate. Branham WS, et al. **Toxicology** 1988 Oct;51(2–3):201–12

[Histometric studies of the effect of various estrogen and gestagen preparations on the uterus of nonpregnant ovariectomized gilts] Schnurrbusch U, et al. **Arch Exp Veterinarmed** 1988 Nov;42(6):807–19 (Eng. Abstr.) **(Ger)**

[Histochemical and biochemical studies of the effect of various estrogen and gestagen preparations on the uterus of nonpregnant ovariectomized gilts] Schnurrbusch U, et al. **Arch Exp Veterinarmed** 1988 Nov;42(6):820–39 (Eng. Abstr.) **(Ger)**

[Effect of thymalin on the immunological indices and morphofunctional structure of the uterus in guinea pigs with endometrial hyperplasia] Zaporozhan VN, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):251–3 (Eng. Abstr.) **(Rus)**

[Effect of estrogens on the lipid composition of the plasma membranes of the uterine cells in ovariectomized rats] Mineeva EN. **Farmakol Toksikol** 1988 Nov–Dec;51(6):51–2 (Eng. Abstr.) **(Rus)**

[Effect of partusisten and complamin on the general hemodynamics and on uteroplacental blood flow in pregnant rabbits] Tsypkun AG. **Fiziol Zh** 1988 Jul–Aug; 34(4):101–4 (Eng. Abstr.) **(Rus)**

[Estrogenic effect of phosmet on the uterus of neonatal rats] Gajdová M, et al. **Bratisl Lek Listy** 1988 Nov;89(11):843–7 (Eng. Abstr.) **(Slo)**

ENZYMOLOGY

Cholinesterase activities in uterus of normal and fenchlorphos treated blue foxes (Alopex lagopus) during various reproductive states. Berge GN, et al. **Acta Vet Scand** 1988; 29(1):117–23

Estrogenic control of spermidine/spermine N1-acetyltransferase activity in rat uterus. Perin A, et al. **Adv Exp Med Biol** 1988;250:345–51 (48 ref.)

Elevated tissue levels of collagenase during dilation of uterine cervix in human parturition. Rajabi MR, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):971–6

Purification and characterization of a uterine phospholipase inhibitor that loses activity after labor onset in women. Wilson T, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):602–6

Separation and identification of two phosphatidylinositol 4-kinase activities in bovine uterus. Li YS, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):202–9

Estradiol-stimulated proteolytic cleavage of the estrogen receptor in mouse uterus. Horigome T, et al. **Endocrinology** 1988 Nov;123(5):2540–8

Glycerylphosphorylcholine diesterase activity of uterine fluid in conditions inducing secondary sex ratio change in the rat. Mitra J, et al. **Gamete Res** 1989 Aug;23(4):415–20

Purification and properties of a small latent matrix metalloproteinase of the rat uterus. Woessner JF Jr, et al. **J Biol Chem** 1988 Nov 15;263(32):16918–25

Ultrastructural localization of human uterine peroxidase. Ishikawa Y, et al. **J Electron Microsc (Tokyo)** 1988; 37(6):287–93

Estrogen-like effect of 5-androstene-3 beta,17 beta-diol on the induction of fetal thymidine kinase in the rat uterus. Leroy B, et al. **J Steroid Biochem** 1988 Oct;31(4A):453–8

Adenosine triphosphatase in the uterus and duodenum of chicken hens during eggshell formation. Watanabe E, et al. **Poult Sci** 1989 Apr;68(4):564–8

Identification of a uterine elastase in the pregnant rat uterus. Percival S, et al. **Proc Soc Exp Biol Med** 1988 Oct; 189(1):117–29

Evidence for several fold more activity of NAD+-dependent uterine prostaglandin 15-hydroxydehydrogenase in transsexual than in non-transsexual women. Roy AC, et al. **Prostaglandins** 1989 Feb;37(2):171–80

[The role of enzymes in the pathogenesis of genital tumors] Nagornaia VF. **Akush Ginekol (Mosk)** 1989 Apr;(4):11–5 (64 ref.) **(Rus)**

[Paramagnetic form of ribonucleotide reductase in human tissues] Orazvalieva DR, et al. **Biofizika** 1989 Jan–Feb; 34(1):139–40 (Eng. Abstr.) **(Rus)**

[Purification and properties of cyclic nucleotide phosphodiesterase from uterine tissue] Artem'ev NO, et al. **Biokhimiia** 1988 Aug;53(8):1304–9 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Uterine development and endocrine relationships after menarche. Porcu E, et al. **Am J Obstet Gynecol** 1989 Jul; 161(1):174–7

Lactotransferrin gene expression in the mouse uterus and mammary gland. Teng CT, et al. **Endocrinology** 1989 Feb; 124(2):992–9

A partial characterization of uterine and mammary growth stimulatory activity from placenta. Grissom FE, et al. **Growth Dev Aging** 1988 Spring;52(1):23–35

Effects of creep feeding, zeranol implants and breed type on beef production: II. Reproductive development and fat deposition in heifers. Prichard DL, et al. **J Anim Sci** 1989 Mar;67(3):617–23

Ovarian influence on uterine growth in prepubertal gilts. Wu MC, et al. **J Anim Sci** 1988 Nov;66(11):2893–8

Estradiol receptor-nuclear interactions in aging mouse uteri: the role of DNA and nuclear matrix. Belisle S, et al. **J Steroid Biochem** 1989 Jan;32(1A):41–3

Histochemical and ultrastructural studies on lipofuscin in the aged rat uterus. Staneva L, et al. **Prog Clin Biol Res** 1989; 296:411–4

Alterations in developing rat uterine cell populations after neonatal exposure to estrogens and antiestrogens. Branham WS, et al. **Teratology** 1988 Sep;38(3):271–9

Effect of orally administered neomycin on uterine growth in young mice and rats. Rao SB. **Vet Hum Toxicol** 1988 Dec;30(6):571–2

[Uterine growth in the endometrium active phase] Schaller A. **Wien Klin Wochenschr** 1989 May 12;101(10):352–9 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

A polyclonal antiserum against the rabbit progesterone

receptor recognizes the human receptor: immunohistochemical localization in rabbit and human uterus. Zaino RJ, et al. **Cell Biochem Funct** 1989 Apr; 7(2):147–52

Plasma cell numbers in uteri of mares with persistent endometritis and in ovariectomised mares treated with ovarian steroids. Watson ED, et al. **Equine Vet J** 1988 Nov; 20(6):424–5

Opsonins in uterine washings influencing in vitro activity of equine neutrophils. Watson ED. **Equine Vet J** 1988 Nov; 20(6):435–7

Uterine defence mechanisms in mares resistant and susceptible to persistent endometritis: a review. Watson ED. **Equine Vet J** 1988 Nov;20(6):397–400 (73 ref.)

Site-directed differences in the immune response to the fetus. Gogolin-Ewens KJ, et al. **Immunology** 1989 Feb; 66(2):312–7

Distribution of some Gal beta 1-3(4)GlcNAc related carbohydrate antigens on the mouse uterine epithelium in relation to the peri-implantational period. Kimber SJ, et al. **J Reprod Immunol** 1988 Mar;12(4):297–313

Localization and purification of SBU-4—a pregnancy specific protein of the ovine uterus. Mercer WR, et al. **Placenta** 1989 Jan–Feb;10(1):71–82

[Spermatozoal antibodies in cervical mucus and in the luminal fluid of the uterus in sterile patients] Maas DH, et al. **Geburtshilfe Frauenheilkd** 1989 Mar;49(3):248–51 (Eng. Abstr.) (Ger)

[The early chemotactic reaction of the equine uterus to acute inflammatory stimulation] Pycock JF, et al. **Tierarztl Prax** 1989;Suppl 4:17–20 (Eng. Abstr.) (Ger)

INJURIES

Stab wound of the gravid uterus: a case report and literature update. Degefu S, et al. **J La State Med Soc** 1988 Oct; 140(10):39–41 (7 ref.)

Intrauterine cranial gunshot wound in a 32-week fetus. Edner G, et al. **J Trauma** 1988 Nov;28(11):1605–6

Avulsion of the nongravid uterus due to pelvic fracture. Smith RJ. **South Med J** 1989 Jan;82(1):70–3

[Septic shock following a criminal intervention on the nonpregnant uterus] Ianeva R, et al. **Akush Ginekol (Sofiia)** 1988;27(4):77–9 (Bul)

[Atmocausis vaporization. Most severe internal burns following intrauterine use of steam] Hardt W, et al. **Geburtshilfe Frauenheilkd** 1989 Mar;49(3):293–5 (Eng. Abstr.) (Ger)

[The "birth" of a living infant after compression of the pregnant uterus in automobile trauma] Kononenko VI, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):48–9 (Rus)

INNERVATION

Changes in cholinergic and noradrenergic nerves in the pregnant and postpartum uterus of the albino rat and guinea pig. Moustafa FA. **Acta Anat (Basel)** 1988;132(4):310–6

A functional and structural study of the innervation of the human uterus. Morizaki N, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):218–28

Mechanical responses of the rat uterus, cervix, and bladder to stimulation of hypogastric and pelvic nerves in vivo. Sato S, et al. **Biol Reprod** 1989 Feb;40(2):209–19

Co-existence and origin of peptidergic and adrenergic nerves in the guinea pig uterus. Retrograde tracing and immunocytochemistry, effects of chemical sympathectomy, capsaicin treatment and pregnancy. Alm P, et al. **Cell Tissue Res** 1988;254(3):517–30

Organization of the guinea-pig uterine innervation. Distribution of immunoreactivities for different neuronal markers. Effects of chemical- and pregnancy-induced sympathectomy. Alm P, et al. **Histochem J** 1988 May; 20(5):290–300

Effects of pregnancy on the extrinsic innervation of the guinea pig uterus. A histochemical, immunohistochemical and ultrastructural study. Alm P, et al. **Histochem J** 1988 Aug;20(8):414–26

Ontogenetic development of the guinea pig uterine innervation. An immunohistochemical study of different neuronal markers, neuropeptides and S-100 protein. Alm P, et al. **Histochemistry** 1988;90(1):19–24

Protein gene product 9.5 (PGP 9.5). A new neuronal marker visualizing the whole uterine innervation and pregnancy-induced and developmental changes in the guinea pig. Lundberg LM, et al. **Histochemistry** 1988; 90(1):9–17

[A preliminary investigation of the segmental distribution of afferent fibers in acupoint Zijiao (BL-32) and uterus with HRP method] Gao WJ, et al. **Chen Tzu Yen Chiu** 1988; 13(2):144–9 (Eng. Abstr.) (Chi)

[Evaluation of the density of acetylcholinesterase-positive and intrinsic adrenergic innervation of the uterus in rats] Canon E, et al. **Bull Assoc Anat (Nancy)** 1987 Sep; 71(214):23–8 (Eng. Abstr.) (Fre)

METABOLISM

Immunoreactive oxytocin and vasopressin in the non-pregnant human uterus and oviductal isthmus. Lundin S, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):239–44

Regulation of uterine insulin-like growth factor I mRNA and insulin-like growth factor II mRNA by estrogen in the rat. Norstedt G, et al. **Acta Endocrinol (Copenh)** 1989 Apr;120(4):466–72

The effect of relaxin on calcium fluxes in the rat uterus. Ginsburg FW, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1395–401

Synergistic effect of relaxin and progesterone on cyclic adenosine 3',5'-monophosphate levels in the rat uterus. Grazi RV, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1402–6

Functional endothelin/sarafotoxin receptors in the rat uterus. Bousso-Mittler D, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):952–7

Phosphorylation of calf uterine progesterone receptor by cAMP-dependent protein kinase. Hurd C, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):160–7

Estradiol enhanced acetylation of nuclear high mobility group proteins of the uterus of newborn guinea pigs. Pasqualini JR, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1260–6

Metal binding sites of the estradiol receptor from calf uterus and their possible role in the regulation of receptor function. Medici N, et al. **Biochemistry** 1989 Jan 10; 28(1):212–9

Purification of heat shock protein 90 from calf uterus and rat liver and characterization of the highly hydrophobic region. Iwasaki M, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):1–8

Estradiol regulation of reactions involved in turnover of the amino acid acceptor terminus of tRNA in the rat uterus. Rasmussen K, et al. **Biochim Biophys Acta** 1988 Nov 18; 972(2):179–91

Regulation of intracellular pH in rat uterine smooth muscle, studied by 31P NMR spectroscopy. Wray S. **Biochim Biophys Acta** 1988 Dec 9;972(3):299–301

Estrogen interconversions in the induced cycle in female rhesus monkeys. Longcope C, et al. **Biol Reprod** 1989 May; 40(5):949–52

Hamster uterine tissues accumulate corticosteroid-binding globulin during decidualization. Selcer KW, et al. **Biol Reprod** 1988 Oct;39(3):592–602

Effects of vitamin B6 deficiency and repletion on the uptake of steroid hormones into uterus slices and isolated liver cells of rats. Bender DA, et al. **Br J Nutr** 1989 May; 61(3):619–28

Protein tyrosine sulfation in guinea-pig uterus: estradiol and progesterone effects. Thiard MC, et al. **Cell Mol Biol** 1989; 35(2):199–205

Effect of ether or ketamine anesthesia on rat uterine estrogen and progesterone receptors. Zarembka FR, et al. **Clin Chem** 1989 Jan;35(1):143–5

Alterations in estrogen receptor isoforms in the mammary gland and uterus of the rat during differentiation. Hyder SM, et al. **Comp Biochem Physiol [B]** 1988;91(3):517–23

Effect of an oral contraceptive in primary dysmenorrhea—changes in uterine activity and reactivity to agonists. Ekström P, et al. **Contraception** 1989 Jul; 40(1):39–47

Impaired estrogen-induced uterine insulin-like growth factor-I gene expression in the streptozotocin diabetic rat. Murphy LJ. **Diabetologia** 1988 Nov;31(11):842–7

Bimodal nuclear estrogen receptor binding: synchrony in athymic mouse uterus and human breast tumor xenografts. Beckman WC Jr, et al. **Endocrinology** 1989 Jun; 124(6):2651–8

Serum and monohydroxytamoxifen inhibit progesterone receptor concentrations in primary rat uterine cells grown in serum-free medium. Greco TL, et al. **Endocrinology** 1989 Jun;124(6):2837–43

Cell type-specific localization of c-myc protein in the mouse uterus: modulation by steroid hormones and analysis of the periimplantation period. Huet-Hudson YM, et al. **Endocrinology** 1989 Sep;125(3):1683–90

Antiestrogens antagonize the stimulatory effect of epidermal growth factor on the induction of progesterone receptor in fetal uterine cells in culture. Sumida C, et al. **Endocrinology** 1989 Feb;124(2):591–7

Molecular interaction of non-steroidal compounds with uterine progesterone receptor (Part II). Agnihotri A, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):327–33

The expression of genes coding for positive acute-phase proteins in the reproductive tract of the female rat. High levels of ceruloplasmin mRNA in the uterus. Thomas T, et al. **FERS Lett** 1989 Jan 30;243(2):381–4

Uptake of 3H-norepinephrine in different segments of the human non-pregnant and pregnant uterus. Norström A, et al. **Gynecol Obstet Invest** 1989;27(1):26–8

Immunohistochemical detection of factor XIII subunit a in histiocytes of human uterus. Adány R, et al. **Histochemistry** 1989;91(2):169–74

Diethylstilbestrol metabolites and analogs. Stereochemical probes for the estrogen receptor binding site. Korach KS, et al. **J Biol Chem** 1989 Apr 5;264(10):5642–7

The interaction site for tamoxifen aziridine with the bovine estrogen receptor. Ratajczak T, et al. **J Biol Chem** 1989 Aug 15;264(23):13453–9

Subunit composition of the estrogen receptor. Involvement of the hormone-binding domain in the dimeric state. Sabbah M, et al. **J Biol Chem** 1989 Feb 15;264(5):2397–400

Estrogen regulation of tissue-specific expression of complement C3. Sundstrom SA, et al. **J Biol Chem** 1989 Oct 5;264(28):16941–7

Adrenal glands alter the concentration of oestradiol-17 beta and its receptor in the uterus of ovariectomized ewes. Atkinson S, et al. **J Endocrinol** 1988 Sep;118(3):375–80

The presence of beta-adrenoceptors in rat endometrium is dependent on circulating oestrogen. Nimmo AJ, et al. **J Endocrinol** 1989 Aug;122(2):R1–4

Characterization of prostaglandin E2 binding to uterine membranes from baboon, rabbit and tree shrew (Tupaia belangeri). Hodam JR, et al. **J Mol Endocrinol** 1989 Jul; 3(1):33–42

Polypeptide growth factors in uterine tissues and secretions. Brigstock DR, et al. **J Reprod Fertil** 1989 Mar;85(2):747–58 (74 ref.)

Variability in the response of the rabbit uterus to progesterone as influenced by prolactin. Daniel JC Jr, et al. **J Reprod Fertil** 1988 Sep;84(1):13–21

Embryonic mortality and the uterine environment in first-service lactating dairy cows. Wiebold JL. **J Reprod Fertil** 1988 Nov;84(2):393–9

Comparison of peripheral, uterine and cord estrogen and progesterone levels in laboring and nonlaboring women at term. Keresztes P, et al. **J Reprod Med** 1988 Aug; 33(8):691–4

Tissue specific effects of progesterone on progesterone and estrogen receptors in the female urogenital tract. Batra S, et al. **J Steroid Biochem** 1989 Jan;32(1A):35–9

Differential inhibition of estrogen and antiestrogen binding to the estrogen receptor by diethylpyrocarbonate. Borgna JL, et al. **J Steroid Biochem** 1988 Oct;31(4A):427–36

Size heterogeneity of affinity labeled estrogen receptors in the MtTF4 tumor whose growth is inhibited by estradiol, in pituitary gland and uterus. Bouillard B, et al. **J Steroid Biochem** 1989 Jan;32(1A):45–52

Catechol estrogen formation in mouse uterus. Bunyagidj C, et al. **J Steroid Biochem** 1988 Nov;31(5):795–801

Inhibition of the nuclear localization of [3H]estradiol in rat uterine tissue in vitro. Campbell PS, et al. **J Steroid Biochem** 1989 May;32(5):681–7

Tamoxifen decreases the estradiol induced progesterone receptors by interfering with nuclear estrogen receptor accumulation. Castellano-Díaz E, et al. **J Steroid Biochem** 1989 Jul;33(1):133–9

Binding of estrogen and antiestrogen in uterine cell nuclei: in vivo autoradiographic studies. Ennis BW, et al. **J Steroid Biochem** 1988 Oct;31(4A):405–9

Mapping on the calf estrogen receptor of the binding domain for an antibody interfering with receptor activation. Fauque J, et al. **J Steroid Biochem** 1989 Jun;32(6):769–80

In vitro effects of cytosolic inhibitor and opiates on the binding of [3H]oestradiol to nuclear type II binding sites of rat uterus and hypothalamus. Garai J, et al. **J Steroid Biochem** 1989 Mar;32(3):433–8

Regulation of uterine epidermal growth factor (EGF) receptors by estrogen in the mature rat and during the estrous cycle. Gardner RM, et al. **J Steroid Biochem** 1989 Mar;32(3):339–43

Estrogen effects on modifications of chromatin proteins in the rat uterus. Guo JZ, et al. **J Steroid Biochem** 1989 Jan; 32(1A):13–20

Prolonged cultivation of rat uterine cells with preserved estrogen responsiveness. Kroll J, et al. **J Steroid Biochem** 1989 Aug;33(2):189–94

Concentration and turnover of estradiol in the rat uterus in vivo. Tetsuo M, et al. **J Steroid Biochem** 1989 Sep; 33(3):371–8

Interaction of antiprogestins with progesterone receptors in rat uterus. Vij U, et al. **J Steroid Biochem** 1989 Feb; 32(2):279–82

Comparative ultrastructural localization of collagen types III, IV, VI and laminin in rat uterus and kidney. Karkavelas G, et al. **J Ultrastruct Mol Struct Res** 1988 Aug; 100(2):137–55

Characteristics of acetylcholine-induced phosphorylase a activity in uterine segments as a substitute for contractile response to acetylcholine. Ichida S, et al. **Jpn J Pharmacol** 1988 Nov;48(3):307–16

Oxytocin-induced release of prostaglandin-like substance in isolated rat uterus. Chan WY. **Life Sci** 1974 Jun 16; 14(12):2385–92

Gestational changes of GABA levels and GABA binding in the human uterus. Erdö SL, et al. **Life Sci** 1989; 44(26):2009–14

The estrogen receptor: a minireview. Williams DL. **Life Sci** 1974 Aug 15;15(4):583–97 (63 ref.)

Changes in desmosine and pyridinoline crosslinks during rapid synthesis and degradation of elastin and collagen in the rat uterus. Gunja-Smith Z, et al. **Matrix** 1989 Jan; 9(1):21–7

Cefoxitin levels in guinea pig uterine tissue after post-surgical irrigation. Oortman EH, et al. **Milit Med** 1988 Oct; 153(10):530–3

Characterization and estrogen regulation of growth factor activity from uterus. Beck CA, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):93–101

Effect of progesterone on the activity of occupied nuclear estrogen receptor in vitro. Smanik EJ, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):111–7

Molecular aspects of estrogen receptor activation factor (E-RAF) function. Thampan RV. **Mol Cell Endocrinol** 1989 Jun;64(1):19–34

Differential stimulation of histone and high mobility group chromatin protein synthesis in the rat uterus by estrogen. Guo JZ, et al. **Mol Endocrinol** 1988 Aug;2(8):686–92

Estrogen effects on histone messenger ribonucleic acid levels in the rat uterus. Guo JZ, et al. **Mol Endocrinol** 1988 Aug;

2(8):693–700

Porcine insulin-like growth factor-I (pIGF-I): complementary deoxyribonucleic acid cloning and uterine expression of messenger ribonucleic acid encoding evolutionarily conserved IGF-I peptides. Tavakkol A, et al. **Mol Endocrinol** 1988 Aug;2(8):674–81

Collagen type III formation and distribution in the uterus: effects of hormones and neoplasm development. Stenbäck F. **Oncology** 1989;46(5):326–34

Role of maternal glucose as a metabolic substrate for the guinea pig conceptus. Peeters LL, et al. **Pediatr Res** 1989 Jun;25(6):641–4

Myosin composition and functional properties of smooth muscle from the uterus of pregnant and non-pregnant rats. Sparrow MP, et al. **Pflugers Arch** 1988 Oct;412(6):624–33

Reproductive tract and pancreatic norepinephrine levels in pre- and overt-diabetic C57BL/KsJ mice: relationship to body weight, blood glucose, serum insulin, and reproductive dysfunction. Garris DR. **Proc Soc Exp Biol Med** 1988 Oct;189(1):79–83

Effect of maternal glucose concentration on uteroplacental glucose consumption and transfer in pregnant sheep. Hay WW Jr, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):63–9

Identification of LH/hCG receptors in rabbit uterus. Jensen JD, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):28–30

Increase in uterine prostaglandin E2, F2 alpha, prostacyclin and stability in thromboxane A2 production during late pregnancy in streptozotocin-induced diabetic rats. Chartrel N, et al. **Prostaglandins** 1989 Jun;37(6):695–706

Prostaglandin (PG) accumulation in vitro by mouse ovaries, oviducts, and uteri. Saffaripour S, et al. **Prostaglandins** 1988 Aug;36(2):229–39

Histamine alters prostaglandin output from diestrous rat uteri. Involvement of H2-receptors and 9-keto-reductase. Viggiano M, et al. **Prostaglandins** 1988 Sep;36(3):317–28

Prostaglandin F2 alpha fails to alter the number of beta adrenoceptive specific binding sites in metestrous rat uteri but diminishes noradrenaline tissue uptake. Chaud M, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Nov; 34(2):95–100

The output of uterine prostaglandins and the activity of 15-hydroxy-prostaglandin dehydrogenase are enhanced in chronic ethanol fed rats. Franchi AM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul; 33(1):69–73

The influences of leukotriene C4 on the metabolism of labelled glucose in uteri isolated from ovariectomized and from ovariectomized-estrogenized rats. Effects of indomethacin. Gonzalez ET, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 May; 36(2):113–7

Prostaglandin production by isolated cells of rat uterus incubated with or without progesterone. Peplow PV, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jan; 35(1):57–62

Prostaglandin synthesis by isolated cells of rat uterus: production rates, and effects of indomethacin and histamine. Peplow PV, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jan; 35(1):51–6

The antiprogesterone RU486 stabilizes the heterooligomeric, non-DNA-binding, 8S-form of the rabbit uterus cytosol progesterone receptor. Renoir JM, et al. **Steroids** 1989 Jan-Feb;53(1-2):1–20

Induction of nucleolar changes in rat luminal cells by single injection or low-dose infusion of estradiol. Roberts DK, et al. **Steroids** 1988 Jan-Feb;51(1-2):123–41

Alkaline phosphatase activities and progesterone concentrations in uterine flushings of dairy cows: side-effects and variations during oestrous cycle. Wittkowski G, et al. **Zentralbl Veterinarmed [A]** 1989 Apr; 36(4):241–6

[Stimulation and selective inhibition of protein synthesis by 17 beta-estradiol, in the uterus of immature rats] Haras D, et al. **C R Acad Sci [III]** 1988;307(1):19–22 (Eng. Abstr.) (Fre)

[Lipid domains in the plasma membrane of rabbit uterine epithelium from the time of ovum implantation. A freeze fracture-cytochemical study] Winterhager E, et al. **Acta Histochem Suppl (Jena)** 1988;36:395–8 (Ger)

[Fundamental and clinical study on cefuzonam in the field of obstetrics and gynecology] Hirabayashi K, et al. **Jpn J Antibiot** 1988 Aug;41(8):1008–14 (Eng. Abstr.) (Jpn)

[Transfer of cefuzonam into female genital organs] Hongo M, et al. **Jpn J Antibiot** 1988 Aug;41(8):997–1001 (Eng. Abstr.) (Jpn)

[Pharmacokinetic, bacteriological and clinical studies of cefuzonam in the field of obstetrics and gynecology] Kubota K, et al. **Jpn J Antibiot** 1988 Aug;41(8):1015–29 (Eng. Abstr.) (Jpn)

[Lipid peroxidation in the uterus-placenta-fetus system in cases of nephropathy and fetal hypotrophy] Sieroń G, et al. **Ginekol Pol** 1988 Oct;59(10):618–23 (Eng. Abstr.) (Pol)

[Effect of sex hormones on the content of cyclic nucleotides in the rat denervated uterus] Popova LA. **Fiziol Zh** 1989 Jan-Feb;35(1):30–5 (Eng. Abstr.) (Rus)

MICROBIOLOGY

The fimbrial biopsy in Chlamydia trachomatis pelvic inflammatory disease [letter] De Wilde RL. **Am J Obstet Gynecol** 1988 Dec;159(6):1599–600

Uterine clearance mechanisms during the early postovulatory period in mares. LeBlanc MM, et al. **Am J Vet Res** 1989 Jun;50(6):864–7

Deposition of C3 on bacteria in the mouse uterus after mating. Parr EL, et al. **J Reprod Immunol** 1988 Mar;12(4):315–9

Transcervical uterine cultures with a new endometrial suction curette: a comparison of three sampling methods in postpartum endometritis. Martens MG, et al. **Obstet Gynecol** 1989 Aug;74(2):273–6

Bovine uterine flora post partum: a comparison of swabbing and biopsy. Noakes DE, et al. **Vet Rec** 1989 May 27; 124(21):563–4

PATHOLOGY

Clinicopathological problems of the local tissue effect of the copper-releasing intrauterine contraceptive device (IUD). I. General characteristics of the copper-containing IUD (clinical study). Patai K, et al. **Acta Chir Hung** 1989; 30(2):129–32 (29 ref.)

"Repair cells" in equine uterine cytologic and histologic specimens. Freeman KP, et al. **Acta Cytol** 1989 May-Jun; 33(3):397–402

Combined use of serial serum human chorionic gonadotropin testing, ultrasound and panoramic diagnostic microhysteroscopy in the early diagnosis of ectopic pregnancy. La Sala GB. **Acta Eur Fertil** 1988 Mar-Apr; 19(2):83–7

Hysteroscopy in an IVF-ER program. Clinical experience with 360 infertile patients. Seinera P, et al. **Acta Obstet Gynecol Scand** 1988;67(2):135–7

Hysteroscopy in infertile Nigerian women. Otubu JA, et al. **Afr J Med Med Sci** 1989 Jun;18(2):117–20

Intrauterine shelves in pregnancy: sonographic observations. Brown DL, et al. **AJR Am J Roentgenol** 1989 Oct; 153(4):821–4

Amenorrhea in an ovulatory woman despite a normal uterine cavity: case report. Check JH, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):598–9

Histologic and immunologic study of uterine biopsy tissue of women with incipient abortion. Michel M, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):409–14

Unknown uterine scar and trial of labor. Pruett KM, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):807–10

Examination of previous caesarean section scars by ultrasound. Fukuda M, et al. **Arch Gynecol Obstet** 1988; 243(4):221–4

Sarcoidosis of the uterus. DiCarlo FJ Jr, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):941–3 (11 ref.)

Parametrial involvement and therapeutic programming in stage Ib cervical cancer. Carenza L, et al. **Baillieres Clin Obstet Gynaecol** 1988 Dec;2(4):889–902

Histological features of uteroplacental vessels in normal and hypertensive patients in relation to birthweight. Frusca T, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):835–9

Solitary thick intra-uterine membranes not associated with the amniotic band syndrome; three case reports. Zosmer A, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug; 32(2):173–8

Tissue effects of a new laparoscopic carbon dioxide laser probe. Tadir Y, et al. **Fertil Steril** 1989 Jun;51(6):1046–9

Hysteroscopy in infertility and habitual abortion. Taylor PJ, et al. **Hum Reprod** 1989 Jan;4(1):13–6 (32 ref.)

The ultrasonographic features in anorexia nervosa and bulimia nervosa: a simplified method of monitoring hormonal states during weight gain. Treasure JL. **J Psychosom Res** 1988;32(6):623–34

Ultrasound and infertility. Shapiro BS, et al. **J Reprod Med** 1989 Feb;34(2):151–5 (38 ref.)

The uterotubal junction. A proposal for classifying its morphology as assessed with hysteroscopy. Vancaillie T, et al. **J Reprod Med** 1988 Jul;33(7):624–9

Prediction of cesarean section scars with ultrasound imaging during pregnancy. Lonky NM, et al. **J Ultrasound Med** 1989 Jan;8(1):15–9

Ultrasound volumetry in hematometrocolpos. Ali GM, et al. **JCU** 1989 May;17(4):257–9

Small for dates infants [letter] Baeyertz JD. **N Z Med J** 1988 Dec 14;101(859):834–5

The evaluation of transrectal radial ultrasonography on parametrial infiltration in untreated cervical carcinoma for more accurate staging. Yamamoto K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Apr; 41(4):487–94

An evaluation of uterine scar integrity after cesarean section in rabbits. Dunnihoo DR, et al. **Obstet Gynecol** 1989 Mar; 73(3 Pt 1):390–4

A uterine tumor that resembled ovarian sex-cord tumors: a low-grade sarcoma. Malfetano JH, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):489–91

MR imaging of the uterus. McCarthy S. **Radiology** 1989 May; 171(2):321–2

Enlarged uterus: differentiation between adenomyosis and leiomyoma with MR imaging. Togashi K, et al. **Radiology** 1989 May;171(2):531–4

Acute renal failure due to bilateral ureteral obstruction by the pregnant uterus. Eika B, et al. **Urol Int** 1988;43(5):315–7

Immaculate conception? [letter] Prentice MW. **Vet Rec** 1989 Jun 24;124(25):667

[The development of a new operating hysteroscopic fiberscope and its clinical application] Lin BL, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1733–9 (Eng. Abstr.) (Jpn)

[Ultrasonographic examination of the female genital organs in hirsutism] Baron J, et al. **Ginekol Pol** 1988 Sep; 59(9):548–51 (Eng. Abstr.) (Pol)

[Cytomorphologic studies of metroaspirates in postpartum endometritis] Chikin VG, et al. **Lab Delo** 1988;(6):17–8 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Second International Symposium on the Pregnant Uterus. May 22–24, 1986, Debrecen, Hungary. Proceedings. **Acta Physiol Hung** 1988;71(4):471–559

Power spectrum analysis of myometrial electromyogram and intrauterine pressure changes in the pregnant rhesus monkey in late gestation. Hsu HW, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):467–73

Uncoupling of excitation from contraction in uterine smooth muscle in near-term ewes. Reid DL, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):229–33

Serum lipoprotein effects of conjugated estrogen and a sequential conjugated estrogen-medrogestone regimen in hysterectomized postmenopausal women. Sonnendecker EW, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1128–34

Fast Na+ and slow Ca2+ channels in single uterine muscle cells from pregnant rats. Ohya Y, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C408–12

Human uterine endocrinology and the implantation window. Edwards RG. **Ann N Y Acad Sci** 1988;541:445–54

Uterine receptivity for blastocyst implantation. Yoshinaga K. **Ann N Y Acad Sci** 1988;541:424–31 (49 ref.)

Mitogenic activity in ovine uterine fluids: characterization of a growth factor activity which specifically stimulates myoblast proliferation. Bird RC, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):108–15

Identification and purification of truncated insulin-like growth factor I from porcine uterus. Evidence for high biological potency. Ogasawara M, et al. **Biochemistry** 1989 Mar 21;28(6):2710–21

Role of uterine epithelium in the development of myometrial smooth muscle cells. Cunha GR, et al. **Biol Reprod** 1989 Apr;40(4):861–71

Uterine asynchrony: a cause of embryonic loss. Pope WF. **Biol Reprod** 1988 Dec;39(5):999–1003 (71 ref.)

Influence of mouse uterus on the metastatic patterns of tumour cells. Maharajan P, et al. **Cancer Lett** 1988 Dec 1;43(1-2):33–6

GR43175 does not share the complex pharmacology of the ergots. Feniuk W, et al. **Cephalalgia** 1989;9 Suppl 9:35–9

Increased binding of epidermal growth factor at preimplantation sites in mouse uteri. Brown MJ, et al. **Endocrinology** 1989 Jun;124(6):2882–8

Effects of in utero and in vitro incubation on the lipid-bound fatty acids and sterols of porcine spermatozoa. Evans RW, et al. **Gamete Res** 1987 Oct;18(2):153–62

Autoradiographic localization of [3H]hydroxytamoxifen to uterine oestrogen- and antioestrogen-binding sites. Ennis BW, et al. **Histochem J** 1989 Jan;21(1):52–60

A comparative study of attachment of human, bovine and mouse blastocysts to uterine epithelial monolayer. Lindenberg S, et al. **Hum Reprod** 1989 May;4(4):446–56

The effect of postplacental insertion of the spiked and the standard Lippes loop on uterine involution. Younis MN, et al. **Int J Gynaecol Obstet** 1989 Mar;28(3):263–7

In utero changes of the plasma membrane in the head region of the rat spermatozoa. Toyama Y. **J Electron Microsc (Tokyo)** 1989;38(2):148–54

Time course of the establishment of uterine seawater conditions in late-term pregnant spiny dogfish (Squalus acanthias). Kormanik GA. **J Exp Biol** 1988 Jul;137:443–56

The fate of embryos transferred to the oviducts of entire, unilaterally ovariectomized and bilaterally ovariectomized ewes. Ryan JP, et al. **J Reprod Fertil** 1988 Sep;84(1):171–8

A model for the generation of intra-uterine pressure in the human parturient uterus which demonstrates the critical role of the cervix. Gee H, et al. **J Theor Biol** 1988 Aug 8;133(3):281–91

Proenkephalin gene expression in the primate uterus: regulation by estradiol in the endometrium. Low KG, et al. **Mol Endocrinol** 1989 May;3(5):852–7

Gonadal steroids regulate proenkephalin gene expression in a tissue-specific manner within the female reproductive system. Muffly KE, et al. **Mol Endocrinol** 1988 Oct; 2(10):979–85

Evidence for transuterine migration of embryos in the domestic cat. Tsutsui T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):613–7

Transport of spermatozoa in the reproductive tract of the bitch: observations through uterine fistula. Tsutsui T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):560–5

Intrapartum uterine activity: evaluation of an intrauterine pressure transducer. Strong TH Jr, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):432–4

Control of myometrial contractility: role and regulation of gap junctions. Garfield RE, et al. **Oxf Rev Reprod Biol** 1988;10:436–90 (258 ref.)

Use of fetal streptozotocin injection to determine the role of normal levels of fetal insulin in regulating uteroplacental and umbilical glucose exchange. Hay WW Jr, et al. **Pediatr Res** 1988 Sep;24(3):312–7

Uterine and cytoplasmic effects on pup eyelid opening in two inbred strains of mice. Nosten M, et al.

Physiol Behav 1988;43(2):167–71

Myoelectrical activity changes in the uterus and vagina during oviposition in the conscious domestic hen. Wechsung E, et al. **Poult Sci** 1988 Nov;67(11):1615–8

Cardiotonic steroids extracted from rabbit uterine tissue and amnionic fluid. Katsiyannis WT, et al.
Proc West Pharmacol Soc 1989;32:19–22

Uterine receptivity in the primate. Anderson TL, et al.
Prog Clin Biol Res 1989;294:389–99

Modulation of c-myc protein in the mouse uterus during pregnancy and by steroid hormones. Huet YM, et al.
Prog Clin Biol Res 1989;294:401–12

Embryonic signaling at implantation in the mouse. Weitlauf HM. **Prog Clin Biol Res** 1989;294:359–76

Receptor concept in implantation research. Yoshinaga K.
Prog Clin Biol Res 1989;294:379–87

In vitro motility of non-pregnant rat uterine horns. Mancinelli R, et al. **Q J Exp Physiol** 1988 Jul;73(4):459–69

Embryo–uterine interactions during early stages of pregnancy in domestic mammals. Guillomot M, et al.
Reprod Nutr Dev 1988;28(6B):1629–48 (75 ref.)

Effect of a progesterone-releasing intravaginal device on uterine activity of heifers. al-Eknah MM, et al.
Vet Rec 1988 Sep 3;123(10):275–6

Responses to dinoprost in the bovine early post partum period. Young IM. **Vet Rec** 1989 May 13;124(19):511–2

[The analgesic mechanism of BL-32 acupoint in electro-acupuncture anesthesia of uterine operations] Gao WJ, et al. **Chen Tzu Yen Chiu** 1988;13(4):340–4 (Eng. Abstr.) **(Chi)**

[Electrophysiologic studies of uterine motility during estrus in young female swine after ovulation synchronization] Brüssow KP, et al. **Arch Exp Veterinarmed** 1988 Nov; 42(6):933–43 (Eng. Abstr.) **(Ger)**

[Pregnancy and labor in the mare: uterine activity and endocrinology] Haluska GJ. **Tierarztl Prax** 1989;Suppl 4:56–62 (Eng. Abstr.) **(Ger)**

[A different interpretation of the functional role of uterine fixation during natural delivery] Mergoni A.
Acta Biomed Ateneo Parmense 1988;59(3–4):67–78 (Eng. Abstr.) **(Ita)**

[The influence of increased uterine resting tonus on renal sympathetic nerve activity in pregnant rabbit] Kitanaka T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun; 41(6):639–46 (Eng. Abstr.) **(Jpn)**

[Studies on renal sympathetic nerve activity related to the existence of a utero-renal reflex in pregnant rabbit] Kitanaka T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):669–75 (Eng. Abstr.) **(Jpn)**

[Ultrasonographic evaluation of uterine involution in puerperium] Lipecka-Kidawska E, et al.
Pol Przegl Radiol (Warszawa) 1988 Mar-Apr;52(2):92–5 (Eng. Abstr.) **(Pol)**

[Reception of progesterone and its biological action in the uterus of neonatally androgenized rats] Sekretareva EV, et al. **Probl Endokrinol (Mosk)** 1988 Sep-Oct;34(5):61–5 (Eng. Abstr.) **(Rus)**

[Possibilities of the use of hysterothermometry in modern gynecologic studies] Berić BM, et al. **Med Pregl** 1988; 41(3–4):139–41 **(Ser)**

PHYSIOPATHOLOGY

The diabetic intrauterine milieu has a long-lasting effect on insulin secretion by B cells and on insulin uptake by target tissues. Aerts L, et al. **Am J Obstet Gynecol** 1988 Nov; 159(5):1287–92

Pressure-velocity analysis of uterine muscle during spontaneous dysmenorrheic contractions in vivo. Smith RP. **Am J Obstet Gynecol** 1989 Jun;160(6):1400–3; discussion 1403–5

Intrauterine insemination with washed sperm. Szöllösi J, et al. **Arch Androl** 1989;23(1):71–6

Uterine activity in spontaneous labour with breech presentation. Arulkumaran S, et al.
Aust N Z J Obstet Gynaecol 1988 Nov;28(4):275–8

Uterine receptivity in women receiving steroid replacement therapy for premature ovarian failure: ultrastructural and endocrinological parameters. Rogers P, et al.
Hum Reprod 1989 May;4(4):349–54

Intrapartum uterine activity: evaluation of an intrauterine pressure transducer [letter] Goodlin RC. **Obstet Gynecol** 1989 Aug;74(2):283–4

Effect of induced thyroid dysfunction upon uterine responsiveness in strips from pregnant and nonpregnant rats. Medeiros YS, et al. **Pharmacology** 1989;38(4):235–42

Pre-chemotactic and chemotactic properties of uterine fluid from mares with experimentally induced endometritis. Pycock JF, et al. **Vet Rec** 1988 Aug 20;123(8):193–5

RADIATION EFFECTS

Radiation-induced uterine changes: MR imaging. Arrivé L, et al. **Radiology** 1989 Jan;170(1 Pt 1):55–8

SECRETION

The estrogen-responsive 110K and 74K rat uterine secretory proteins are structurally related to complement component C3. Kuivanen PC, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):898–905

Uterine secretory alterations coincident with embryonic mortality in the gilt after exogenous estrogen administration. Gries LK, et al. **J Anim Sci** 1989 Jan; 67(1):276–84

Evidence for maternal regulation of early conceptus growth and development in beef cattle. Garrett JE, et al.
J Reprod Fertil 1988 Nov;84(2):437–46

Effect of deciduogenic stimuli on protein secretion by the mouse uterus. Nieder GL. **J Reprod Fertil** 1988 Sep; 84(1):273–81

Changes in secreted uterine proteins associated with embryo implantation in the mouse. Weitlauf HM, et al.
J Reprod Fertil 1988 Nov;84(2):539–49

Dispersal of rat uterine mast cells and their functional response to an embryo-derived histamine releasing factor: a possible model for embryo implantation. Cocchiara R, et al. **J Reprod Immunol** 1988 Nov;14(2):191–201

Concentrations of immunoreactive leukotriene B4 in uterine lavage fluid from mares with experimentally induced and naturally occurring endometritis. Watson ED, et al.
J Vet Pharmacol Ther 1988 Jun;11(2):130–4

Factors affecting the composition of mare uterine fluid. Martin RG, et al. **Res Vet Sci** 1988 Jul;45(1):111–6

[Peptidergic regulation of the processes of gestation and labor in mammals] Mamamtavrishvili ID, et al.
Akush Ginekol (Mosk) 1988 Jul;(7):60–3 (Eng. Abstr.) **(Rus)**

SURGERY

Dilutional hyponatremia associated with intrauterine endoscopic laser surgery. Van Boven MJ, et al.
Anesthesiology 1989 Sep;71(3):449–50

A new technique for closure of the uterus at caesarean section. Sivasuriya M, et al.
Aust N Z J Obstet Gynaecol 1988 May;28(2):96–8

A new technique for closure of the uterus at caesarean section [letter] Smith CW. **Aust N Z J Obstet Gynaecol** 1988 Nov; 28(4):328

Recombinant tissue plasminogen activator reduces adhesion formation in a rabbit uterine horn model. Doody KJ, et al. **Fertil Steril** 1989 Mar;51(3):509–12

Tubocornual anastomosis: surgical considerations and coexistent infertility factors in determining the prognosis. Gillett WR, et al. **Fertil Steril** 1989 Feb;51(2):241–6

Gore-Tex surgical membrane [letter] Shoham Z, et al.
Fertil Steril 1989 Jun;51(6):1071–2

Histologic response to microsuture materials. Beauchamp PJ, et al. **J Reprod Med** 1988 Jul;33(7):615–23

Value of intrauterine device insertion and estrogen administration after hysteroscopic metroplasty. Vercellini P, et al. **J Reprod Med** 1989 Jul;34(7):447–50

An animal study of different treatments to prevent postoperative pelvic adhesions. Graebe RA, et al.
Microsurgery 1989;10(1):53–5

Selective delivery of an acardiac, acephalic twin. Robie GF, et al. **N Engl J Med** 1989 Feb 23;320(8):512–3

Cesarean delivery and hysterotomy using an absorbable stapling device. Bond SJ, et al. **Obstet Gynecol** 1989 Jul; 74(1):25–8

Endometrial reconstruction after hysteroscopic incisional metroplasty. Fedele L, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):492–5

Uterine incision and maternal morbidity after cesarean section for delivery of the very low birthweight fetus. Druzin ML, et al. **Surg Gynecol Obstet** 1989 Aug;169(2):131–2

[Personal experience with uterine sutures in cesarean section over a 12-year-period] Černý F. **Cesk Gynekol** 1988 Jul; 53(6):412–5 (Eng. Abstr.) **(Cze)**

[Prevention using cefotetan of post-partum and post-abortion infectious complications in intra-uterine procedures] Cormier P, et al. **Rev Fr Gynecol Obstet** 1988 Dec; 83(12):829–32 (Eng. Abstr.) **(Fre)**

[Excimer laser cold section technic for surgical gynecology] Schmidt S, et al. **Geburtshilfe Frauenheilkd** 1989 Mar; 49(3):305–6 **(Ger)**

[Pregnancy and labor after microsurgical anastomosis of the uterus in rats] Wydrzyński M. **Ginekol Pol** 1988 Oct; 59(10):624–7 (Eng. Abstr.) **(Pol)**

[Use of the Omega intrauterine contraceptive device in reconstructive operations on the uterine body] Dmoch E, et al. **Wiad Lek** 1988 Sep 1;41(17):1138–40 (Eng. Abstr.) **(Pol)**

[Surgical hysteroscopy in preventing the occurrence of Asherman's syndrome following the removal of intrauterine contraceptive devices] Davydov SN, et al.
Akush Ginekol (Mosk) 1988 Aug;(8):70–1 **(Rus)**

[Experimental evaluation of the possibility of fixing uterine sutures after cesarean section using polymer materials] Makarov IO, et al. **Akush Ginekol (Mosk)** 1989 Mar; (3):33–6 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

Embryo implantation in the anterior chamber of the eye. Effects on uterine allografts and the microvasculature. Rogers PA, et al. **Ann N Y Acad Sci** 1988;541:455–64

ULTRASTRUCTURE

Ultrastructural study of human uterine epithelium from a patient with a confirmed pregnancy. Rogers PA, et al.
Acta Anat (Basel) 1989;135(2):176–9

Effect of phospholipids on estrogen receptor of rat uterine cytosol. Mitsuhashi N, et al. **Endocrinol Jpn** 1988 Oct; 35(5):759–62

Uterine insulin-like growth factor-I receptors: regulation by estrogen and variation throughout the estrous cycle. Ghahary A, et al. **Endocrinology** 1989 Aug;125(2):597–604

Immunofluorescent analysis of estrogen induction of progesterone receptor in the rhesus uterus. Okulicz WC, et al. **Endocrinology** 1989 Aug;125(2):930–4

The effect of homogenization temperature upon the apparent cellular compartmentalization of unoccupied estrogen receptor. Campbell PS, et al. **Experientia** 1989 Feb 15; 45(2):171–3

The epithelial pathology of bovine genital tuberculosis. Biolatti B, et al. **J Comp Pathol** 1989 Feb;100(2):137–44

The effect of estradiol on collagen structure and organization in the immature rat uterus. Pastore GN, et al.
Proc Soc Exp Biol Med 1989 May;191(1):69–77

UTILITARIANISM see **ETHICS**

UTILIZATION AND QUALITY CONTROL PEER REVIEW ORGANIZATIONS see **PROFESSIONAL REVIEW ORGANIZATIONS**

UTILIZATION REVIEW

Involving quality review nurses in pharmacy-based drug-use evaluation program [letter] Ketley D, et al.
Am J Hosp Pharm 1989 Jul;46(7):1340

Utilization review of treatment for suicide attempters. Kirstein L, et al. **Am J Psychiatry** 1975 Jan;132(1):22–7

Experience of a concurrent screening quality assurance programme on a vascular surgical unit. Lawrence-Brown M, et al. **Aust Clin Rev** 1989;9(1):17–26

Work of a rehabilitation medicine service. Roy CW, et al.
BMJ 1988 Sep 3;297(6648):601–4

Pursuing efficiency in surgical practice. Wyllie JH, et al.
BMJ 1988 Nov 26;297(6660):1368–71

Utilization management: a medical responsibility. Linton AL, et al. **Can Med Assoc J** 1989 Aug 15;141(4):283–6

Utilization management must be shared [editorial] Sutherland RW. **Can Med Assoc J** 1989 Aug 15;141(4):287

Patterns of nursing home use in a prepaid managed care system: the continuing care retirement community. Cohen MA, et al. **Gerontologist** 1989 Feb;29(1):74–80

A community-wide effort to reduce hospital utilization by patients requiring nursing home placement. Lagoe RJ.
Gerontologist 1989 Feb;29(1):67–73

The secret of medical management. Rohrer JE.
Health Care Manage Rev 1989 Summer;14(3):7–13 (22 ref.)

PROs: peering harder in the '90s. Holthaus D. **Hospitals** 1989 Feb 5;63(3):42–6

Utilization review and management: a brief analysis of a growth industry. Credé WB, et al.
Infect Control Hosp Epidemiol 1989 Jan;10(1):33–6

Surgical unit time utilization review: resource utilization and management implications. Gordon T, et al. **J Med Syst** 1988 Jun;12(3):169–79 (27 ref.)

Does utilization review reduce unnecessary hospital care and contain costs? Wickizer TM, et al. **Med Care** 1989 Jun; 27(6):632–47

Delegates approve protocol for third-party telephone review. Dickey NW. **Tex Med** 1989 Aug;85(8):60–1

Quality patient care and blood usage review [editorial] van Schoonhoven P. **Transfusion** 1989 Jul-Aug;29(6):471–2

A peer review of a peer review organization. Dippe SE, et al. **West J Med** 1989 Jul;151(1):93–6

[Visit to the emergency department: primary or secondary character?] Creutzberg CL, et al.
Ned Tijdschr Geneeskd 1989 Jan 14;133(2):73–6 (Eng. Abstr.) **(Dut)**

ECONOMICS

The state of Nebraska, Medicaid, the Sunderbruch Corporation & you [letter] Sloan JW. **Nebr Med J** 1989 Jun;74(6):162–3

METHODS

Modular caseload management—an alternative to traditional waiting lists. Hill SD. **Aust Clin Rev** 1988 Jun;8(29):85–90

Use of hospital beds: a cohort study of admissions to a provincial teaching hospital. Anderson P, et al. **BMJ** 1988 Oct 8;297(6653):910–2

Methodologic approaches to quality care evaluation. Miransky LJ. **Cancer** 1989 Jul 1;64(1 Suppl):302–5; discussion 314–6

Strategies for the review of transfusion practices. Silberstein LE, et al. **JAMA** 1989 Oct 13;262(14):1993–7

An explanation of the Blues' utilization review process. Bartzack C. **Mich Med** 1988 Jul;87(7):409–10

[Systematic bias in measuring of the utilization of ambulatory medical services] Béland F. **Can J Public Health** 1989 Jan-Feb;80(1):58–62 (Eng. Abstr.) **(Fre)**

ORGANIZATION & ADMINISTRATION

An example of hospital utilization review. Wilson LD.
West J Med 1989 Jun;150(6):718–22

STANDARDS

Utilization review and health care expenditures [letter] Zwarenstein M, et al. **N Engl J Med** 1988 Oct 27; 319(17):1158

The reliability and validity of the pediatric appropriateness evaluation protocol. Kemper KJ, et al. **QRB** 1989 Mar;

15(3):77–80

STATISTICS & NUMERICAL DATA

A study of emergency ambulance utilisation. Sosnin M, et al. **Aust Fam Physician** 1989 Mar;18(3):233–4, 236, 238
Use of electroconvulsive therapy at a university hospital: 1970 and 1980–81. Tancer ME, et al.
Hosp Community Psychiatry 1989 Jan;40(1):64–8
Influence of CT on radiologic utilization in The Netherlands. Barneveld Binkhuysen FH, et al. **Radiology** 1988 Dec; 169(3):827–9

TRENDS

Cost containment, DRGs, and the ethics of health care. A physician's reflections. Berenson RA. **Hastings Cent Rep** 1989 Jan–Feb;19(1):12–5
International health spending and utilization trends. Schieber GJ, et al. **Health Aff (Millwood)** 1988 Fall;7(4):105–12
Hospital utilization review: past experience, future directions. Ermann D. **J Health Polit Policy Law** 1988 Winter; 13(4):683–704
Interference [editorial] Grider PC Jr. **J Ky Med Assoc** 1988 Sep;86(9):521

UTOPIAS

Communal upbringing in the Kibbutz. The allure and risks of psychoanalytic utopianism. Berman E.
Psychoanal Study Child 1988;43:319–35
[Primary health care: reality or utopia in a developing country?] Abiodun PO, et al. **Monatsschr Kinderheilkd** 1988 Jul;136(7):343–7 (15 ref.) (Eng. Abstr.) (Ger)

UTRICLE see SACCULE AND UTRICLE

UVEA

ABNORMALITIES

[Dystrophy of aniridia in patients with coloboma] Vérin P, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):783–5 (Fre)
[A typical congenital defect of the uvea] Gerkowicz M. **Klin Oczna** 1988 Jun;90(6):225–6 (Eng. Abstr.) (Pol)

BLOOD SUPPLY

Regional uveal response to increased nutritional needs in the retinal zone of the developing eye demonstrated in an eye with retinoblastoma. Wolter JR.
J Pediatr Ophthalmol Strabismus 1989 May–Jun; 26(3):120–3
Scanning electron microscopic study of the microcirculation of the rabbit's anterior uvea. O'Neill JG, et al.
Prog Clin Biol Res 1989;295:515–9
[Interrelation of the rate of decompression of the eyeball and associated vasomotor reactions occurring in the vessels of the uveal tract] Melianchenko NB, et al.
Vestn Oftalmol 1988 Sep–Oct;104(5):29–31 (Eng. Abstr.) (Rus)

CYTOLOGY

Theophylline effects on normal uveal melanocytes in culture: an ultrastructural study. Hu F, et al. **Pigment Cell Res** 1987; 1(2):104–10
Normal uveal melanocytes in culture. Hu F, et al.
Pigment Cell Res 1987;1(2):94–103

DRUG EFFECTS

Effects of intravenous calcitonin gene-related peptide (CGRP) and substance P on the blood–aqueous barrier in the rabbit. Andersson SE, et al. **Acta Physiol Scand** 1989 Mar;135(3):349–57
The effect of pilocarpine on the bovine eye uvea. Kovačik L, et al. **Klin Oczna** 1988 Apr–May;90(4–5):152–3
[Effects of flurbiprofen on uveal volume change during ocular surgery] Tsuchisaka H, et al.
Nippon Ganka Gakkai Zasshi 1988 Dec;92(12):2015–9 (Eng. Abstr.) (Jpn)

ENZYMOLOGY

Nerve fibers showing immunoreactivities for thyrosine hydroxylase and dopamine-beta-hydroxylase re-appear in the guinea pig uvea after sympathectomy. Lehtosalo J, et al. **Acta Ophthalmol (Copenh)** 1988 Aug;66(4):419–26

IMMUNOLOGY

HLA antigens in ocular tissues. III. Antigen presentation by gamma interferon–treated cultured uveal cells. Abi-Hanna D, et al. **Hum Immunol** 1989 Jan;24(1):31–9
[Immune responses to lens and uveal antigens in patients with endogenous uveitis] Xie CF.
Chung Hua Yen Ko Tsa Chih 1988 Jul;24(4):211–3 (Eng. Abstr.) (Chi)

INNERVATION

Calcitonin gene-related peptide (CGRP) immunoreactive sensory nerves in the human and guinea pig uvea and cornea. Uusitalo H, et al. **Exp Eye Res** 1989 Apr; 48(4):467–75

METABOLISM

Increased uveoscleral outflow as a possible mechanism of ocular hypotension caused by prostaglandin F2 alpha-1-isopropylester in the cynomolgus monkey. Nilsson SF, et al. **Exp Eye Res** 1989 May;48(5):707–16

PATHOLOGY

Uveal damage in secondary glaucoma. A morphometric study. Ueno M, et al.
Graefes Arch Clin Exp Ophthalmol 1989;227(4):380–3

PHYSIOLOGY

Neuropeptides in the uveal tract. Unger WG, et al. **Eye** 1988; 2 Suppl:S202–12 (106 ref.)
[Effect of intraocular pressure on uveoscleral outflow at normal and cyclodialysis eye in the monkey] Suguro K. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):837–42 (Eng. Abstr.) (Jpn)

UVEAL DISEASES

CHEMICALLY INDUCED

Acute closed-angle glaucoma complicating hemorrhagic choroidal detachment associated with parenteral thrombolytic agents. Steinemann T, et al.
Am J Ophthalmol 1988 Dec 15;106(6):752–3

COMPLICATIONS

Angle-closure glaucoma complicating ciliochoroidal detachment. Fourman S. **Ophthalmology** 1989 May; 96(5):646–53

DIAGNOSIS

Idiopathic central serous choroidopathy (ICSC) [letter] Moisseiev J, et al. **Retina** 1989;9(2):153–4
Invasive squamous cell carcinoma of the conjunctiva presenting as necrotizing scleritis with scleral perforation and uveal prolapse. Lindenmuth KA, et al.
Surv Ophthalmol 1988 Jul–Aug;33(1):50–4 (20 ref.)

ETIOLOGY

Serous choroidal detachment after spontaneous expulsion of episcleral exoplant. Watanabe M, et al. **Ann Ophthalmol** 1989 Jul;21(7):258–9
[Severe ocular involvement in a case of boutonneuse fever] Moreno Villares JM, et al. **An Esp Pediatr** 1988 Aug; 29(2):177–8 (Spa)

GENETICS

At least two mutant alleles of ornithine
delta-aminotransferase cause gyrate atrophy of the choroid and retina in Finns. Mitchell GA, et al.
Proc Natl Acad Sci U S A 1989 Jan;86(1):197–201

IMMUNOLOGY

[Comparative evaluation of immunologic reactivity in patients with chronic uveitis and uveopathies] Stukalov SE, et al. **Vestn Oftalmol** 1988 Nov–Dec;104(6):45–8 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Vitreous fluorophotometry in carriers of choroideremia and X-linked retinitis pigmentosa. Rusin MM, et al.
Arch Ophthalmol 1989 Feb;107(2):209–12
[Visual evoked potential (VEP) abnormality in central serous choroid-retinopathy during the active stage] Xin DY, et al. **Yen Ko Hsueh Pao** 1987 Mar;3(1):28–31 (Eng. Abstr.) (Chi)
[Single binocular vision of central serous
choroid-retinopathy] Yang SM, et al.
Yen Ko Hsueh Pao 1987 Mar;3(1):25–7 (Eng. Abstr.) (Chi)

UVEAL NEOPLASMS

ANALYSIS

DNA content analysis of uveal melanoma [letter] McMillan J, et al. **Arch Ophthalmol** 1989 Sep;107(9):1278
A perfusion system developed for 31P NMR study of melanoma cells at tissue-like density. Minichiello MM, et al. **Magn Reson Med** 1989 Apr;10(1):96–107

COMPLICATIONS

Borderline spindle cell nevus of the ciliary body as a second primary melanoma—a clinicopathologic case. Kremer I, et al. **Ann Ophthalmol** 1989 Jun;21(6):217–21
Spontaneous hyphaema from an iris microhaemangioma. Thomas R, et al. **Aust N Z J Ophthalmol** 1988 Nov; 16(4):367–8
Choroidal melanoma and pigment dispersion [letter] McMenamin PG. **Ophthalmology** 1988 Dec;95(12):1704

DIAGNOSIS

Fine needle aspiration biopsy in uveal melanoma. Char DH, et al. **Acta Cytol** 1989 Sep–Oct;33(5):599–605
Pleomorphic adenocarcinoma of ciliary epithelium simulating an epibulbar tumor. Rodrigues M, et al.
Am J Ophthalmol 1988 Nov 15;106(5):595–600
Malignant teratoid medulloepithelioma of the ciliary body simulating persistent hyperplastic primary vitreous. Shields JA, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):296–8
Iris microhemangiomas [published erratum appears in J Am Optom Assoc 1989 Jan;60(1):9] Roberts DK, et al.
J Am Optom Assoc 1988 Oct;59(10):780–4
Preliminary results on phosphorus-31 nuclear magnetic resonance evaluation of human uveal melanoma in enucleated eyes. Kolodny NH, et al. **Ophthalmology** 1988 May;95(5):666–73
[Tapioca melanoma of the iris] Winklerová S, et al.
Cesk Oftalmol 1988 Jul;44(4):268–71 (Eng. Abstr.) (Cze)

DRUG THERAPY

Photodynamic therapy for experimental intraocular melanoma using chloroaluminum sulfonated phthalocyanine. Panagopoulos JA, et al.
Arch Ophthalmol 1989 Jun;107(6):886–90

EPIDEMIOLOGY

Other cancers in uveal melanoma patients and their families. Turner BJ, et al. **Am J Ophthalmol** 1989 Jun 15; 107(6):601–8
Absence of seasonal variation in the diagnosis of melanoma of the eye in the United States. Schwartz SM, et al.
Br J Cancer 1988 Sep;58(3):402–4

ETIOLOGY

Malignant melanoma of the iris in xeroderma pigmentosum. Johnson MW, et al. **Arch Ophthalmol** 1989 Mar; 107(3):402–7

GENETICS

DNA cell cycle studies in uveal melanoma. Char DH, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):65–72

IMMUNOLOGY

B-lymphocytes from melanoma patients and normal individuals react with melanoma cells but also with irrelevant antigens. Damato BE, et al. **Br J Cancer** 1988 Aug;58(2):182–5
Immunogenetic heterogeneity of uveal melanoma. Martinetti M, et al. **Cancer Detect Prev** 1988;12(1–6):145–8
Analysis of the antigenic profile of uveal melanoma lesions with anti-cutaneous melanoma-associated antigen and anti-HLA monoclonal antibodies. Natali PG, et al.
Cancer Res 1989 Mar 1;49(5):1269–74
[Immunoglobulins M, G and A as prognostic criteria of the treatment outcome in uveal melanoblastoma] Koteliankii EO. **Oftalmol Zh** 1989;(2):104–7 (Eng. Abstr.) (Rus)
[Detection of surface antigens in uveal melanoma using monoclonal antibodies] Černák A, et al. **Cesk Oftalmol** 1989 May;45(3):145–52 (Eng. Abstr.) (Slo)

METABOLISM

Recurrent medulloepithelioma of the ciliary body. Immunohistochemical characteristics. Kivelä T, et al.
Ophthalmology 1988 Nov;95(11):1565–75

PATHOLOGY

Diffuse uveal melanoma in a 5-year-old child. Rosenbaum PS, et al. **Am J Ophthalmol** 1988 Nov 15;106(5):601–6
Malignant melanoma of the choroid with vitreal seeding. Pavan PR, et al. **Arch Ophthalmol** 1989 Jan;107(1):130
Medulloepithelioma (diktyoma). Canning CR, et al.
Br J Ophthalmol 1988 Oct;72(10):764–7 (11 ref.)
A study of iris melanoma in Northern Ireland. McGalliard JN, et al. **Br J Ophthalmol** 1989 Aug;73(8):591–5
Leiomyoma of the iris. Jellie HG, et al.
Can J Ophthalmol 1989 Jun;24(4):169–71
Bilateral ciliary body melanomas. Waterhouse WJ, et al.
Can J Ophthalmol 1989 Apr;24(3):125–8
Malignant transformation of an iris melanocytoma. A case report. Cialdini AP, et al.
Graefes Arch Clin Exp Ophthalmol 1989;227(4):348–54
Clinical and pathological status of mesectodermal leiomyoma of the ciliary body. A case report and review of the literature. Ishigooka H, et al.
Graefes Arch Clin Exp Ophthalmol 1989;227(2):101–5 (9 ref.)
Transvitreal retinochoroidal biopsy. Scherfig E, et al.
Graefes Arch Clin Exp Ophthalmol 1989;227(4):369–73
Characterization of uveal melanoma cell lines that grow as xenografts in rabbit eyes. Kan-Mitchell J, et al.
Invest Ophthalmol Vis Sci 1989 May;30(5):829–34
Massive pseudophakic pigment dispersion associated with an iris nevus. Kremer I, et al. **Ophthalmic Surg** 1989 Mar; 20(3):182–5
Comparison of transillumination and histologic slide measurements of tumor diameter in uveal melanoma. Polivogianis L, et al. **Ophthalmology** 1988 Nov; 95(11):1576–82
Natural course of melanocytic tumors of the iris. Territo C, et al. **Ophthalmology** 1988 Sep;95(9):1251–5
Iris pigmentation and pigmented lesions: an ultrastructural study. Eagle RC Jr. **Trans Am Ophthalmol Soc** 1989; 86:581–687

[Isolated leukemic iritis in childhood] Hatvani I, et al. **Klin Monatsbl Augenheilkd** 1988 Jun;192(6):703–5 (Eng. Abstr.) **(Ger)**

[Is iris melanoma really a nevus?] Kremer I, et al. **Harefuah** 1989 Mar 1;116(5):252–4 (Eng. Abstr.) **(Heb)**

[A tumor metastasizing into another tumor] Zalatnai A. **Orv Hetil** 1988 Nov 20;129(47):2535–6, 2539 (Eng. Abstr.) **(Hun)**

[Tapioca melanoma of the iris] Marin C. **Rev Chir [Oftalmol]** 1988 Jul–Sep;32(3):231–3 (Eng. Abstr.) **(Rum)**

[Malignant uveal melanoma and cutaneous pigmented nevi] Talea L. **Rev Chir [Oftalmol]** 1988 Jul–Sep;32(3):217–20 (Eng. Abstr.) **(Rum)**

PHYSIOPATHOLOGY

Iris melanoma with increased intraocular pressure. Differentiation of focal solitary tumors from diffuse or multiple tumors. Char DH, et al. **Arch Ophthalmol** 1989 Apr;107(4):548–51

[Natural history of malignant melanoma of the uvea (apropos of 2 cases: 1—Malignant melanoma of the uvea followed-up without treatment during 25 years. 2—Simultaneous discovery of a malignant melanoma of the uvea and meningeal metastases)] Bacin F, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):675–8 (12 ref.) (Eng. Abstr.) **(Fre)**

RADIOTHERAPY

Failure of preenucleation radiation to decrease uveal melanoma mortality. The Collaborative Ocular melanoma Study Steering Committee [letter] Fine SL, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):440–2

Effect of various doses of radiation for uveal melanoma on regression, visual acuity, complications, and survival. Kindy-Degnan NA, et al. **Am J Ophthalmol** 1989 Feb 15; 107(2):114–20

Episcleral plaque radiotherapy for uveal melanoma. Giblin ME, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):153–6 (28 ref.)

Uveal melanoma management [letter] Char DH, et al. **Br J Ophthalmol** 1989 Jun;73(6):476–7

Conservative treatment of uveal melanoma: local recurrence after proton beam therapy. Munzenrider JE, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):493–8

Treatment of uveal melanomas with charged particles [letter] Packer S, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep; 17(3):698

The risk of enucleation after proton beam irradiation of uveal melanoma. Egan KM, et al. **Ophthalmology** 1989 Sep; 96(9):1377–82; discussion 1382–3

Metastasis from uveal melanoma after proton beam irradiation. Gragoudas ES, et al. **Ophthalmology** 1988 Jul; 95(7):992–9

Recurrence of posterior uveal melanoma after 60Co episcleral plaque therapy. Karlsson UL, et al. **Ophthalmology** 1989 Mar;96(3):382–8

Complications after proton beam therapy for uveal malignant melanoma. A clinical and histopathologic study of five cases. Kincaid MC, et al. **Ophthalmology** 1988 Jul; 95(7):982–91

Proton beam therapy for uveal melanoma [letter] Lawton AW. **Ophthalmology** 1989 Jan;96(1):138–9

Reasons for enucleation after plaque radiotherapy for posterior uveal melanoma. Clinical findings. Shields CL, et al. **Ophthalmology** 1989 Jun;96(6):919–23; discussion 924

DNA cell cycle studies in uveal melanoma. Char DH. **Trans Am Ophthalmol Soc** 1989;86:561–80

[Impression cytology of the conjunctiva following high-dose brachytherapy of malignant melanoma of the uvea using 106Ru/106Rh applicators] Koch JM, et al. **Fortschr Ophthalmol** 1988;85(6):642–5 (Eng. Abstr.) **(Ger)**

[Preoperative irradiation before enucleation in malignant melanoma of the uvea. Review of the literature and initial personal experiences] Bornfeld N, et al. **Klin Monatsbl Augenheilkd** 1989 Apr;194(4):252–60 (107 ref.) (Eng. Abstr.) **(Ger)**

SECONDARY

Plasmacytoma of the uvea in a case of multiple myeloma. Sandberg HO, et al. **Acta Ophthalmol (Copenh)** 1989 Jun; 67(3):329–32

Follicular thyroid cancer metastatic to the iris. Case report. Weisenthal R, et al. **Arch Ophthalmol** 1989 Apr; 107(4):494–5

Coincident systemic malignant disease in uveal melanoma patients. Kindy-Degnan N, et al. **Can J Ophthalmol** 1989 Aug;24(5):204–6

Carcinoma of the male breast and ocular metastases. Scilletta B, et al. **Ital J Surg Sci** 1989;19(1):93–6

Carcinoma metastatic to the eye. Harris S. **J Am Optom Assoc** 1989 Jan;60(1):48–51

The efficacy of radiotherapy in the treatment of intraocular metastases. Minatel E, et al. **Rays** 1988 May–Aug; 13(2):95–9

Fine needle aspiration biopsy of suspected metastatic cancers to the posterior uvea. Augsburger JJ. **Trans Am Ophthalmol Soc** 1989;86:499–560

SURGERY

Photoablation of ocular melanoma with a high-powered argon endolaser. Jaffe GJ, et al. **Arch Ophthalmol** 1989 Jan; 107(1):113–8

Internal eye wall resection in the management of uveal melanoma. Peyman GA, et al. **Can J Ophthalmol** 1988 Aug; 23(5):218–23

Penetrating keratoplasty in the management of iridocorneal endothelial syndrome. Crawford GJ, et al. **Cornea** 1989; 8(1):34–40

Ciliary body neurilemoma recurring after 15 years. Hufnagel TJ, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):443–6

Surgical approach to lamellar sclerouvectomy for posterior uveal melanomas: the 1986 Schoenberg lecture. Shields JA, et al. **Ophthalmic Surg** 1988 Nov;19(11):774–80

Mesectodermal leiomyoma of the ciliary body managed by partial lamellar iridocyclochoroidectomy. Shields JA, et al. **Ophthalmology** 1989 Sep;96(9):1369–76

[Prognostic study of malignant melanoma of the uvea treated by enucleation] Bacin F, et al. **J Fr Ophtalmol** 1988; 11(10):639–49 (30 ref.) (Eng. Abstr.) **(Fre)**

[Enucleation with orbital implant in malignant melanoma of the uvea] Sassmannshausen J, et al. **Fortschr Ophthalmol** 1988;85(5):529–33 (Eng. Abstr.) **(Ger)**

[Iridocyclectomy using a lamellar explorative technic. Long-term studies] Mackensen G, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):608–10 (Eng. Abstr.) **(Ger)**

THERAPY

Melanoma of the iris [editorial] **Br J Ophthalmol** 1989 Aug; 73(8):586

[Trends and developments in the management of malignant uveal melanoma] Lund OE. **Klin Oczna** 1988 Apr–May; 90(4–5):159–64 **(Ger)**

ULTRASTRUCTURE

A comparative study of morphometric measurements of nucleoli in uveal melanomas from electron micrographs and plastic-embedded and paraffin-embedded sections. Mikel UV, et al. **Anal Quant Cytol Histol** 1989 Apr; 11(2):111–4

Mesectodermal leiomyoma of the ciliary body: case report. White V, et al. **Br J Ophthalmol** 1989 Jan;73(1):12–8

UVEITIS

Uveitis in childhood—Part III. Posterior. Giles CL. **Ann Ophthalmol** 1989 Jan;21(1):23–8 (3 ref.)

Vogt-Koyanagi-Harada syndrome. Phanthumchinda K, et al. **J Med Assoc Thai** 1989 Mar;72(3):144–9

BLOOD

Effects of ciclosporin on plasma renin activity, catecholamines and prostaglandins in patients with idiopathic uveitis. Deray G, et al. **Am J Nephrol** 1988; 8(4):298–304

[Morphologic changes of the nucleolar system of lymphocytes as the indicator of sensitivity to tuberculin and Toxoplasma antigen] Gavrilova LO, et al. **Pediatriia** 1989;(7):43–7 (Eng. Abstr.) **(Rus)**

[Clinical significance of determining ceruloplasmin activity in the blood serum in children with uveitis] Babenkova IV, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):60–2 (Eng. Abstr.) **(Rus)**

[The role of activation of polymorphic nuclear leukocytes in the development of experimental uveitis] Klebanov GI, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):128–32 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Endotoxin-induced uveitis in the rat. A study of the role of inflammation mediators. Herbort CP, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(6):553–8

[Uveal reaction in an asthmatic patient treated by a local beta-blocker] Agenos B. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):803–5 (Eng. Abstr.) **(Fre)**

CLASSIFICATION

[Clinical analysis of 33 cases of peripheral uveitis] Luo CQ. **Chung Hua Yen Ko Tsa Chih** 1988 Jul;24(4):218–21 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

Granulomatous uveitis in Crohn's disease. A clinicopathologic case report. Salmon JF, et al. **Arch Ophthalmol** 1989 May;107(5):718–9

Cyclitic glaucoma. Brooks AM, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):157–64

Inflammatory pigmented paravenous retinochoroidal atrophy. Yamaguchi K, et al. **Br J Ophthalmol** 1989 Jun; 73(6):463–7

Vogt-Koyanagi-Harada syndrome variant. Dewan S, et al. **Can J Ophthalmol** 1989 Apr;24(3):109–11

Anterior uveitis and multiple sclerosis. Meisler DM, et al. **Cleve Clin J Med** 1989 Jul–Aug;56(5):535–8

Panuveitis with positive serological tests for syphilis and Lyme disease. Zierhut M, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):71–5; discussion 76–8

A case of Vogt-Koyanagi-Harada syndrome in a patient affected by Hodgkin's disease. Cipriani D, et al. **J Neurol** 1989 Jul;236(5):303–4

Ocular fluorescein clearance in patients with hypotony secondary to chronic uveitis. Herman DC, et al. **J Ocul Pharmacol** 1988 Winter;4(4):327–33

Characterization of uveitis associated with spondyloarthritis. Rosenbaum JT. **J Rheumatol** 1989 Jun;16(6):792–6

Recurrent syphilitic uveitis [letter] Richards BW, et al. **N Engl J Med** 1989 Jan 5;320(1):62

IgA nephropathy and Henoch-Schönlein purpura nephritis with anterior uveitis. Yamabe H, et al. **Nephron** 1988; 50(4):368–70

Cytomegalovirus panuveitis with infection of corneo-trabecular endothelium in AIDS. Daicker B. **Ophthalmologica** 1988;197(4):169–75

Hypotensive effect of carteolol on intraocular pressure elevation and secondary glaucoma associated with endogenous uveitis. Ohno S, et al. **Ophthalmologica** 1989; 199(1):41–5

[Interstitial nephritis and uveitis coexisting in a school-aged child] Huttunen NP, et al. **Duodecim** 1988;104(16):1249–52 **(Fin)**

[A new syndrome: acute interstitial nephropathy with uveitis. Apropos of a case] Kenouch S, et al. **Ann Med Interne (Paris)** 1989;140(3):169–72 (25 ref.) (Eng. Abstr.) **(Fre)**

[Retinal detachment in uveitis: reflections on vitreoretinal relations apropos of 3 cases] Boscher-Southall C, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):943–8 (12 ref.) **(Fre)**

[Involvement of the renal interstitium in systemic diseases (II)] Kenouch S, et al. **Nephrologie** 1988;9(3):117–24 (144 ref.) **(Fre)**

[Luetic uveitis in a patient with AIDS. Case report] Hungerbühler U, et al. **Schweiz Med Wochenschr** 1988 Nov 26;118(47):1762–6 (Eng. Abstr.) **(Ger)**

[Complicated cataract and secondary glaucoma in the chronic stage of Harada's disease] Tada R, et al. **Nippon Ganka Gakkai Zasshi** 1988 Nov;92(11):1864–8 (Eng. Abstr.) **(Jpn)**

[A case of Heerfordt's syndrome associated with acquired type II-b hyperlipoproteinemia, leading to the development of myocardial infarction during its clinical course] Umeki S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):881–7 (Eng. Abstr.) **(Jpn)**

[A case of ulcerative colitis complicated articular, cutaneous and ocular lesions] Koganei K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2444–9 (29 ref.) **(Jpn)**

[Each one case of Vogt-Koyanagi-Harada disease with vestibular and cerebellar ataxia, and multiple cranial nerve palsies] Hiraki Y, et al. **Rinsho Shinkeigaku** 1989 Jan; 29(1):54–8 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Characteristics of microcirculatory changes in various forms of rheumatoid arthritis in children] Iakovleva AA, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):40–4 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Overlap of granulomatous vasculitis and sarcoidosis: presentation with uveitis, eosinophilia, leg ulcers, sinusitis, and past foot drop. Petri M, et al. **J Rheumatol** 1988 Jul; 15(7):1171–3

Acute retinal necrosis syndrome presenting with papillitis and arcuate neuroretinitis. Margolis T, et al. **Ophthalmology** 1988 Jul;95(7):937–40

[Clinical analysis of sarcoidosis uveitis] Sun SM. **Chung Hua Yen Ko Tsa Chih** 1988 Mar;24(2):83–5 (Eng. Abstr.) **(Chi)**

[Placoid pigment epitheliopathy—Vogt-Koyanagi-Harada. Nosologic discussion apropos of an intermediate form] Guillaume JB, et al. **Bull Soc Ophtalmol Fr** 1988 May; 88(5):713–7 (24 ref.) (Eng. Abstr.) **(Fre)**

[Intermediate uveitis] Arocker-Mettinger E, et al. **Klin Monatsbl Augenheilkd** 1989 Apr;194(4):249–51 (Eng. Abstr.) **(Ger)**

[Fluorescein angiography findings in intermediate uveitis] Schenck F, et al. **Klin Monatsbl Augenheilkd** 1988 Sep; 193(3):261–5 (Eng. Abstr.) **(Ger)**

[Clinical characteristics of uveitis from the viewpoint of age] Pen'kov MA, et al. **Oftalmol Zh** 1988;3(3):171–5 (Eng. Abstr.) **(Rus)**

[A syndrome of facial hemiatrophy, circumscribed scleroderma and focal epileptic seizures associated with bilateral uveitis] Aver'ianov IuN, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):26–8 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Uveitis in childhood—Part II. Intermediate. Giles CL. **Ann Ophthalmol** 1989 Jan;21(1):20–2 (3 ref.)

Renal function and blood pressure in patients treated with cyclosporin A for uveitis. Deray G, et al. **Eur J Clin Pharmacol** 1988;34(6):601–4

Topical BVDU plus low-dosage steroids in the treatment of chronic relapsing zoster keratouveitis. A pilot study. Ameye C, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;

227(2):118–22

Suppression of experimental autoimmune uveitis in guinea pigs by ethylenediamine tetra-acetic acid, corticosteroids, and cyclosporin. Mahlberg K, et al. **J Ocul Pharmacol** 1987 Fall;3(3):199–210

Cyclosporine therapy of guinea-pig autoimmune uveoretinitis induced with autologous retina. Nordmann JP, et al. **J Ocul Pharmacol** 1986 Fall;2(4):325–33

Cyclosporine therapy for uveitis: long-term followup. Nussenblatt RB, et al. **J Ocul Pharmacol** 1985 Winter; 1(4):369–82

Characterized and predictable rabbit uveitis model for antiinflammatory drug screening. Jamieson L, et al. **J Pharmacol Methods** 1989 Jul;21(4):329–38

Posterior sub-Tenon's injections of corticosteroids in uveitis patients with cystoid macular edema. Jennings T, et al. **Jpn J Ophthalmol** 1988;32(4):385–91

Combination therapy with cyclosporin A and steroid in severe case of Vogt-Koyanagi-Harada's disease. Wakatsuki Y, et al. **Jpn J Ophthalmol** 1988;32(3):358–60

Pharmacologic modulation of acute ocular inflammation. I. Adenosine. Marak GE Jr, et al. **Ophthalmic Res** 1988; 20(4):220–6

Anti-inflammatory effect of glutathione peroxidase on experimental lens-induced uveitis. Rao NA, et al. **Ophthalmic Res** 1988;20(4):213–9

[Cyclosporin and treatment of non-infectious uveitis (apropos of a case of recurrent and bilateral uveopapillitis)] Boizeau P, et al. **Bull Soc Ophtalmol Fr** 1988 Apr;88(4):561–4, 567 **(Fre)**

[Cyclosporin and treatment of non-infectious and recurrent uveitis (apropos of a case of bilateral uveopapillitis)] Boizeau P, et al. **Bull Soc Ophtalmol Fr** 1988 Jun-Jul; 88(6-7):907–11 **(Fre)**

EPIDEMIOLOGY

Vogt-Koyanagi-Harada's disease in Brazil. Belfort Junior R, et al. **Jpn J Ophthalmol** 1988;32(3):344–7

Clinical studies of Vogt-Koyanagi-Harada's disease at the National Eye Institute, NIH, USA. Nussenblatt RB. **Jpn J Ophthalmol** 1988;32(3):330–3

Clinical studies of Vogt-Koyanagi-Harada's disease. Ohno S, et al. **Jpn J Ophthalmol** 1988;32(3):334–43

Unusual childhood uveitis in Tanzania [letter] Foster A, et al. **Lancet** 1989 Jan 28;1(8631):226

ETIOLOGY

Fanconi syndrome with uveitis in an adult woman. Lessard M, et al. **Am J Kidney Dis** 1989 Feb;13(2):158–9

Etiologic role of infectious agents in uveitis. Noor Sunba MS, et al. **APMIS Suppl** 1988;3:71–3

Uveitis. An internist's view. Rosenbaum JT. **Arch Intern Med** 1989 May;149(5):1173–6

Rat T-cell lines specific to a nonimmunodominant determinant of a retinal protein (IRBP) produce uveoretinitis and pinealitis. Hu LH, et al. **Cell Immunol** 1989 Aug;122(1):251–61

Sequence homology between yeast histone H3 and uveitopathogenic site of S-antigen: lymphocyte cross-reaction and adoptive transfer of the disease. Singh VK, et al. **Cell Immunol** 1989 Mar;119(1):211–21

Molecular mimicry between uveitopathogenic site of retinal S-antigen and Escherichia coli protein: induction of experimental autoimmune uveitis and lymphocyte cross-reaction. Singh VK, et al. **Cell Immunol** 1989 Aug; 122(1):262–73

An 18-mer peptide derived from the retinal S antigen induces uveitis and pinealitis in primates. Hirose S, et al. **Clin Exp Immunol** 1989 Jul;77(1):106–11

Human S-antigen: characterization of uveitopathogenic sites. Donoso LA, et al. **Curr Eye Res** 1988 Nov;7(11):1077–85

Human IRBP: characterization of uveitopathogenic sites. Donoso LA, et al. **Curr Eye Res** 1988 Nov;7(11):1087–95

Immunopharmacological analysis of endotoxin-induced uveitis in the rat. Herbort CP, et al. **Exp Eye Res** 1989 May;48(5):693–705

Radiological investigation in the management of uveitis. Austin MW, et al. **Eye** 1988;2 (Pt 5):578–9

Immune response to intraocular injection of retinal S-antigen in adjuvant. Roberge FG, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):67–71

Human interstitial retinoid binding protein. A potent uveitopathogenic agent for the induction of experimental autoimmune uveitis. Donoso LA, et al. **J Immunol** 1989 Jul 1;143(1):79–83

Molecular mimicry. Yeast histone H3-induced experimental autoimmune uveitis. Singh VK, et al. **J Immunol** 1989 Mar 1;142(5):1512–7

Endotoxin-induced uveitis in rats: morphological and biochemical study. Okumura A, et al. **Jpn J Ophthalmol** 1988;32(4):457–65

The onset of bilateral uveitis in an elderly man with fever, headache, and a rash. Wong T. **Ophthalmic Surg** 1989 Feb; 20(2):154, 156

Relationship between sympathetic ophthalmia, phacoanaphylatic endophthalmitis, and Vogt-Koyanagi-Harada disease. Chan CC. **Ophthalmology** 1988 May;95(5):619–24 (64 ref.)

[An analytical study of 600 cases of endogenous uveitis] Sun SM. **Chung Hua Yen Ko Tsa Chih** 1988 Sep;24(5):261–4 (Eng. Abstr.) **(Chi)**

[Lens-induced uveitis] Sun XQ. **Yen Ko Hsueh Pao** 1986 Dec;2(4):249–52 (Eng. Abstr.) **(Chi)**

[A case of sarcoidosis manifested by acute uveitis] Favre F, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):407–10 (Eng. Abstr.) **(Fre)**

[Etiologic evaluation of uveitis] Vadot E. **Bull Soc Ophtalmol Fr** 1988 May;88(5):719–24 (8 ref.) **(Fre)**

[Serologic and immunologic evaluation in uveitis] Beuchat L. **Klin Monatsbl Augenheilkd** 1989 May;194(5):361–4 (5 ref.) (Eng. Abstr.) **(Fre)**

[Importance of ocular biopsies in the etiologic diagnosis of uveitis] Bovey E. **Klin Monatsbl Augenheilkd** 1989 May; 194(5):365–7 (23 ref.) (Eng. Abstr.) **(Fre)**

[Specific immunologic treatment of uveitis associated with the HLA-B27 group in ankylosing spondylarthritis] Demillière B, et al. **Ophtalmologie** 1988 Apr-Jun;2(2):171–5 (Eng. Abstr.) **(Fre)**

[A case of psittacosis meningitis complicated with uveitis] Adachi K, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):122–4 (Eng. Abstr.) **(Jpn)**

[A case of herpes simplex encephalitis associated with severe uveitis] Ohori N, et al. **Rinsho Shinkeigaku** 1988 Nov; 28(11):1262–5 (Eng. Abstr.) **(Jpn)**

[Uveitis today] Mihail S. **Rev Chir [Oftalmol]** 1988 Jul-Sep; 32(3):179–82 (7 ref.) (Eng. Abstr.) **(Rum)**

[A case of sarcoid uveitis believed for a long time to be tuberculous] Ustinova EI, et al. **Oftalmol Zh** 1988;(4):254–6 **(Rus)**

[An experimental study of the pathogenetic mechanisms of uveitis following cataract extraction and implantation of an artificial lens] Veselovskaia ZF, et al. **Oftalmol Zh** 1989; (1):41–4 (Eng. Abstr.) **(Rus)**

[Prolonged febrile syndrome and uveitis as initial manifestation of ulcerative colitis] De Zárraga Fernández MA, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):549–51 (Eng. Abstr.) **(Spa)**

GENETICS

Possible interaction between HLA and Ig light chain markers in susceptibility to uveitis. Martinetti M, et al. **Dis Markers** 1988 Oct-Dec;6(4):257–62

IMMUNOLOGY

Immunological findings in human beings with autoimmune uveitis. Alonso A, et al. **Allergol Immunopathol (Madr)** 1988 Nov-Dec;16(6):417–20

Selected immunological parameters in patients suffering from uveitis subjected to different treatment. Wieczorek E, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):367–76

Naturally occurring antibodies to bovine and human retinal S antigen: a comparison between uveitis patients and healthy volunteers. Forrester JV, et al. **Br J Ophthalmol** 1989 Feb;73(2):155–9

High incidence of corneal epithelium antibodies in Fuch's heterochromic cyclitis. la Hey E, et al. **Br J Ophthalmol** 1988 Dec;72(12):921–5

Antinuclear autoantibodies in uveitis. Hundert I, et al. **Clin Exp Rheumatol** 1989 May-Jun;7(3):237–41

Experimental autoimmune uveitis (EAU): immunophenotypic analysis of inflammatory cells in chorio retinal lesions. Liversidge J, et al. **Curr Eye Res** 1988 Dec; 7(12):1231–41

The role of the immune system in uveitis induced in animals. Hylkema HA. **Doc Ophthalmol** 1988 Dec;70(4):339–51 (39 ref.)

Ocular injection of retinal S antigen: suppression of autoimmune uveitis. Mizuno K, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):772–4

Immunity to a corneal antigen in Fuchs' heterochromic cyclitis patients. van der Gaag R, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):443–8

Intraocular antibody synthesis during experimental uveitis. van der Voet JC, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):316–22

EB-virus transformed human lymphocytes from uveitis and retinitis pigmentosa patients secrete antibodies to retinal antigens. Reid DM, et al. **J Clin Lab Immunol** 1988 Jul; 26(3):107–11

Identification of an immunodominant and highly immunopathogenic determinant in the retinal interphotoreceptor retinoid-binding protein (IRBP). Sanui H, et al. **J Exp Med** 1989 Jun 1;169(5):1947–60

The induction of tolerance by cyclosporine-G in experimental autoimmune uveitis in the Lewis rat. Dinning WJ, et al. **J Ocul Pharmacol** 1987 Summer;3(2):135–40

Requirement of Ia-positive nylon wool adherent cells for activation of cytotoxic T-lymphocytes specific to melanocyte-associated antigens in patients with Vogt-Koyanage-Harada's disease. Maezawa N, et al. **Jpn J Ophthalmol** 1988;32(3):348–57

Advances in immunology and uveitis. Fujikawa LS. **Ophthalmology** 1989 Jul;96(7):1115–20 (16 ref.)

Immunopathology of uveitis. Chan CC. **Yen Ko Hsueh Pao** 1985 Dec;1(2):133–5 (30 ref.)

Immunopathogenic mechanisms of experimental autoimmune uveoretinitis in rats. Mochizuki M, et al. **Yen Ko Hsueh Pao** 1986 Dec;2(4):245–8

Pathophysiology of uveitis and therapeutic intervention. Nussenblatt RB. **Yen Ko Hsueh Pao** 1985 Dec;1(2):136–8 (15 ref.)

[Immune responses to lens and uveal antigens in patients with endogenous uveitis] Xie CF. **Chung Hua Yen Ko Tsa Chih** 1988 Jul;24(4):211–3 (Eng. Abstr.) **(Chi)**

[The specific immune responses in patients with complicated cataract in uveitis] Xie CF, et al. **Yen Ko Hsueh Pao** 1987 Jun;3(2):104–6 (Eng. Abstr.) **(Chi)**

[Cellular immunity in patients with Vogt-Koyanagi-Harada syndrome] Xie CF, et al. **Yen Ko Hsueh Pao** 1988 Jun; 4(2):118–20 (Eng. Abstr.) **(Chi)**

[The dynamics of leucocytes and complements in endotoxin induced uveitis] Bando Y, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar;93(3):369–74 (Eng. Abstr.) **(Jpn)**

[Natural antibody to sheep red blood cell in human sera. 2. Uveitis cases] Sunakawa M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct;92(10):1687–9 (Eng. Abstr.) **(Jpn)**

[The detection of varicella-zoster virus (VZV) antigen from vitreous humor of 3 cases with Kirisawa-Urayama type uveitis] Usui M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1398–405 (Eng. Abstr.) **(Jpn)**

[Comparative evaluation of immunologic reactivity in patients with chronic uveitis and uveopathies] Stukalov SE, et al. **Vestn Oftalmol** 1988 Nov-Dec;104(6):45–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Morphology of the fibrinogen exudate during evolution of a mycobacterial-induced murine eye granuloma. O'Rourke J, et al. **Curr Eye Res** 1988 Dec;7(12):1207–19

MICROBIOLOGY

Mouse exophthalmic chronic orbital inflammatory disease. Induction by human leucocyte intracellular Mollicutes. Wirostko E, et al. **Virchows Arch [A]** 1988;413(4):349–55

[ECHO-II virus, the pathogen of the third outbreak of uveitis in children in Kransnoyarsk, 1986] Koroleva GA, et al. **Vopr Virusol** 1989 Jan-Feb;34(1):55–65 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

[Toxoplasma study of uveitis patients] Wang CG. **Chung Hua Yen Ko Tsa Chih** 1988 Mar;24(2):101–2 (Eng. Abstr.) **(Chi)**

PATHOLOGY

Crohn's disease uveitis. Parasitization of vitreous leukocytes by mollicute-like organisms. Johnson LA, et al. **Am J Clin Pathol** 1989 Mar;91(3):259–64

A clinical and histopathological review of intermediate uveitis ("pars planitis"). Eichenbaum JW, et al. **Bull N Y Acad Med** 1988 Mar;64(2):164–74 (22 ref.)

Anti-Ia antibody diminishes ocular inflammation in experimental autoimmune uveitis. Wetzig R, et al. **Curr Eye Res** 1988 Aug;7(8):809–18

Pediatric intermediate uveitis. Giles CL. **J Pediatr Ophthalmol Strabismus** 1989 May-Jun; 26(3):136–9

Bronchoalveolar lavage studies in uveitis patients without radiological intrathoracic involvement of sarcoidosis. Sugimoto M, et al. **Jpn J Med** 1989 Jan-Feb;28(1):50–4

Relationship between sympathetic ophthalmia, phacoanaphylatic endophthalmitis, and Vogt-Koyanagi-Harada disease. Chan CC. **Ophthalmology** 1988 May;95(5):619–24 (64 ref.)

[Corneal endothelium and uveitis] Wang YL. **Chung Hua Yen Ko Tsa Chih** 1988 Mar;24(2):79–82 (Eng. Abstr.) **(Chi)**

[The influence of uveitis on the corneal endothelium] Xie LX, et al. **Yen Ko Hsueh Pao** 1987 Jun;3(2):107–9, 98 (Eng. Abstr.) **(Chi)**

[Listeria monocytogenes kerato-uveitis] Bialasiewicz AA, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):62–5 (Eng. Abstr.) **(Ger)**

[Role of vitreous changes in uveitis with respect to posterior vitreous detachment, macular changes and visual acuity] Hirokawa H. **Nippon Ganka Gakkai Zasshi** 1988 Dec; 92(12):2020–8 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Clinical signs of acute ocular inflammatory response to endotoxin are not altered by increasing antioxidant potency of intraocular fluids. McGahan MC, et al. **Inflammation** 1989 Aug;13(4):393–400

Cataract surgery and intraocular lens implantation in patients with uveitis. Foster CS, et al. **Ophthalmology** 1989 Mar; 96(3):281–8

Intraocular lenses in uveitis patients [editorial] Lichter PR. **Ophthalmology** 1989 Mar;96(3):279–80

[Fluorometry and uveitis] Hamel C, et al. **Ophtalmologie** 1988 Jul-Sep;2(3):249–52 (Eng. Abstr.) **(Fre)**

[Choroidal circulation in experimental autoimmune uveoretinitis II. Choroidal blood flow in experimental autoimmune uveoretinitis induced by interphotoreceptor retinoid-binding protein] Koyama M. **Nippon Ganka Gakkai Zasshi** 1988 Nov;92(11):1904–11 (Eng. Abstr.) **(Jpn)**

[Choroidal circulation in experimental autoimmune uveoretinitis. I. Choroidal blood flow in experimental

autoimmune uveoretinitis induced by S-antigen] Koyama M. **Nippon Ganka Gakkai Zasshi** 1988 Jul;92(7):1139–48 (Eng. Abstr.) **(Jpn)**

[Course of uveitis and visual functions in retarded cases of Harada's disease] Yoshida H, et al. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):726–30 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

The effect of retinal S-antigen-specific monoclonal antibody therapy on experimental autoimmune uveoretinitis (EAU) and experimental autoimmune pinealitis (EAP). Dua HS, et al. **Clin Exp Immunol** 1989 Jan;75(1):100–5

Histopathologic analysis of experimental autoimmune uveitis attenuated by intracameral injection of S-antigen. Mizuno K, et al. **Curr Eye Res** 1989 Jan;8(1):113–21

Pharmacologic modulation of acute ocular inflammation with quercetin. Romero J, et al. **Ophthalmic Res** 1989; 21(2):112–7

RADIOGRAPHY

Fluorescein angiography of the iris and specular microscopy of the corneal endothelium in some cases of glaucoma secondary to chronic cyclitis. Brooks AM, et al. **Ophthalmology** 1988 Dec;95(12):1624–30

SURGERY

Vitrectomy in the management of uveitis [editorial] Foster CS. **Ophthalmology** 1988 Aug;95(8):1011–2

Vitrectomy in the management of peripheral uveitis. Mieler WF, et al. **Ophthalmology** 1988 Jul;95(7):859–64

[Pars plana vitrectomy in chronic uveitis in the child] Ulbig M, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):10–2 (Eng. Abstr.) **(Ger)**

[Posterior vitrectomy in children and adolescents] Koraszewska-Matuszewska B, et al. **Klin Oczna** 1988 Sep; 90(9):327–8 (Eng. Abstr.) **(Pol)**

THERAPY

Effect of antioxidant enzymes on experimental uveitis in rats. de Kozak Y, et al. **Ophthalmic Res** 1989;21(3):230–4

[Plasma exchange with human albumin or preserved serum and infusion therapy with preserved serum in posterior and intermediate uveitis] Brunner R, et al. **Fortschr Ophthalmol** 1988;85(6):731–6 (Eng. Abstr.) **(Ger)**

[Modification of hemorrheologic and laboratory chemical parameters by infusion therapy and preserved serum and by plasma exchange with human albumin and preserved serum in patients with posterior and intermediate uveitis] Jahn M, et al. **Fortschr Ophthalmol** 1988;85(6):740–3 (Eng. Abstr.) **(Ger)**

[Modification of the course of chronic intraocular inflammations by sunlight (Israel study)] Manthey KF, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):44–7 (Eng. Abstr.) **(Ger)**

[Ambulatory care and treatment of children with rheumatoid uveitis] Ionova TA, et al. **Oftalmol Zh** 1989;(1):14–5 (Eng. Abstr.) **(Rus)**

[Experience in the treatment of peripheral uveitis] Pen'kov MA, et al. **Oftalmol Zh** 1989;(1):26–8 (Eng. Abstr.) **(Rus)**

[Exchange plasmapheresis in combined treatment of severe uveitis] Chentsova OB, et al. **Vestn Oftalmol** 1989 Jan–Feb; 105(1):40–3 (Eng. Abstr.) **(Rus)**

VETERINARY

Topically applied cyclosporin for modulation of induced immunogenic uveitis in rabbits. Kaswan RL, et al. **Am J Vet Res** 1988 Oct;49(10):1757–9

Evaluation of breed as a risk factor for sarcoid and uveitis in horses. Angelos J, et al. **Anim Genet** 1988;19(4):417–25

Effect of Newcastle disease virus on ocular and paraocular tissues in experimentally inoculated chickens. Obaldia N 3d, et al. **Avian Dis** 1989 Apr-Jun;33(2):285–90

Granulomatous uveitis in an owl. Miller WW, et al. **J Am Vet Med Assoc** 1988 Aug 1;193(3):365–6

A case of chronic diffuse uveitis accompanied with dermal depigmentation in Akita dog. Usami H, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):215–8

Baled silage-associated uveitis in cows [letter] Mee JF, et al. **Vet Rec** 1989 Jul 1;125(1):25

UVEITIS, ANTERIOR

Acute iridocyclitis [letter] Ringvold A, et al. **Acta Ophthalmol (Copenh)** 1989 Apr;67(2):222–4

Uveitis in childhood—Part I. Anterior. Giles CL. **Ann Ophthalmol** 1989 Jan;21(1):13–9, 28 (0 ref.)

[Fuchs's syndrome (report of 9 cases)] Li HM, et al. **Yen Ko Hsueh Pao** 1987 Jun;3(2):110–3 (Eng. Abstr.) **(Chi)**

[A rare clinical variant of the course of acute anterior uveitis] Khvatova AV, et al. **Vestn Oftalmol** 1989 Jan–Feb; 105(1):59–61 **(Rus)**

BLOOD

Serum beta-2 microglobulin level in acute idiopathic anterior uveitis. Sen DK, et al. **Acta Ophthalmol (Copenh)** 1989 Feb; 67(1):87–90

[beta 2 microglobulin and the proximal kidney tubules (letter)] Beersma MF, et al. **Ned Tijdschr Geneeskd** 1989 May 20;133(20):1044–5 **(Dut)**

CHEMICALLY INDUCED

Rhodopsin-induced experimental autoimmune uveoretinitis in monkeys. Schalken JJ, et al. **Br J Ophthalmol** 1989 Mar; 73(3):168–72

Induction of keratouveitis by capsaicin. Waldrep JC, et al. **Curr Eye Res** 1988 Dec;7(12):1173–82

COMPLICATIONS

Bilateral anterior uveitis and interstitial nephritis [letter] BenEzra D. **Am J Ophthalmol** 1988 Dec 15;106(6):766–7

Acute unilateral toxoplasmic iridocyclitis in an AIDS patient. Rehder JR, et al. **Am J Ophthalmol** 1988 Dec 15; 106(6):740–1

Idiopathic acute interstitial nephritis associated with anterior uveitis in adults. Cacoub P, et al. **Clin Nephrol** 1989 Jun; 31(6):307–10 (10 ref.)

Uveitis in juvenile chronic arthritis: incidence, clinical features and prognosis. Kanski JJ. **Eye** 1988;2 (Pt 6):641–5

Acute tubulo-interstitial nephritis with uveitis and favourable outcome after five months of continuous ambulatory peritoneal dialysis (CAPD). van Leusen R, et al. **Neth J Med** 1988 Oct;33(3-4):133–9

[Involvement of the posterior eye segment in HLA B27(+) iridocyclitis. Incidence. Value of surgical treatment] Bayen H, et al. **J Fr Ophtalmol** 1988;11(8–9):561–6 (17 ref.) (Eng. Abstr.) **(Fre)**

[Anterior uveitis in ankylosing spondylitis. A retrospective study] Piergiacomi G, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):979–82 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Immunophenotypic characterization of an unusual T-cell lymphoma presenting as anterior uveitis. A clinicopathologic case report. Goldey SH, et al. **Arch Ophthalmol** 1989 Sep;107(9):1349–53

Fuchs' heterochromic iridocyclitis. Hendricks WM. **Cutis** 1989 Jan;43(1):49–51

Kawasaki syndrome and the eye. Smith LB, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):116–8

[Diagnosis of anterior uveitis] Pen'kov MA, et al. **Oftalmol Zh** 1989;(2):125–7 **(Rus)**

DIET THERAPY

Effects of a fish oil dietary supplement on endotoxin-induced ocular inflammation. Rubin RM, et al. **J Ocul Pharmacol** 1988 Fall;4(3):259–67

DRUG THERAPY

Nonsteroidal anti-inflammatory drug therapy in chronic childhood iridocyclitis. Olson NY, et al. **Am J Dis Child** 1988 Dec;142(12):1289–92

Nonsteroidal anti-inflammatory drugs in pediatric patients [editorial] Stiehm ER. **Am J Dis Child** 1988 Dec; 142(12):1281–2

The effect of bromocriptine on anterior uveitis. Palestine AG, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):488–9

Piroxicam in the treatment of immunologic, experimental inflammation of the anterior part of the eyeball. Giedianowski J. **Arch Immunol Ther Exp (Warsz)** 1988; 36(3):229–37

Danazol, premenstrual tension, and uveitis. Case report. Bell JA. **Arch Ophthalmol** 1989 Jun;107(6):796

Clinical evaluation of Arflur (flurbiprofen) in acute iridocyclitis. Srinivas C. **Korean J Ophthalmol** 1988 Jun; 2(1):44–7

Therapeutic approaches for ophthalmic problems in juvenile rheumatoid arthritis. O'Brien JM, et al. **Rheum Dis Clin North Am** 1989 Aug;15(3):413–37 (128 ref.)

ETHNOLOGY

Fuchs' heterochromic iridocyclitis in blacks. Tabbut BR, et al. **Arch Ophthalmol** 1988 Dec;106(12):1688–90

ETIOLOGY

The diagnostic significance of serological screening of patients with uveitis. Noor Sunba MS, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):709–12

Screening for uveitis in juvenile chronic arthritis. Kanski JJ. **Br J Ophthalmol** 1989 Mar;73(3):225–8

Yersinia-induced uveitis in Ireland. Larkin DF, et al. **Br J Ophthalmol** 1988 Dec;72(12):938–41

Childhood leukaemia: relapse in the anterior segment of the eye. Novakovic P, et al. **Br J Ophthalmol** 1989 May; 73(5):354–9

Unusual eye manifestations in systemic lupus erythematosus patients. Drosos AA, et al. **Clin Rheumatol** 1989 Mar; 8(1):49–53

Pauciarticular juvenile rheumatoid arthritis presenting in an adult. Cook DJ, et al. **J Rheumatol** 1988 Dec;15(12):1865–7

Endophthalmitis due to Propionibacterium acnes sequestered between IOL optic and posterior capsule. Sawusch MR, et al. **Ophthalmic Surg** 1989 Feb;20(2):90–2

[Posner-Schlossmann syndrome. A cytomegalovirus infection?] Bloch-Michel E, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):75–6 **(Fre)**

[Rare late manifestations of erythema migrans disease] Schlotfeldt D, et al. **Med Klin** 1988 Jul 15;83(15):475–6, 502 **(Ger)**

IMMUNOLOGY

Identification of antihistone antibodies in subsets of juvenile chronic arthritis. Ostensen M, et al. **Ann Rheum Dis** 1989 Feb;48(2):114–7

Clinical manifestations of HLA-B27-positive acute anterior uveitis in Chinese. Chung YM, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Feb;43(2):97–104

Immunity to ocular and collagen antigens in childhood arthritis and uveitis. Petty RE, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):31–7

HLA antigens in the iris and aqueous humor gamma interferon levels in anterior uveitis. Abi-Hanna D, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):990–4

Uveitis and arthritis induced by adjuvant: clinical, immunologic and histologic characteristics. Petty RE, et al. **J Rheumatol** 1989 Apr;16(4):499–505

Experimental autoimmune uveoretinitis (EAU) in rats: isolation of S-antigen, EAU susceptibility of rat strains, genetic control of EAU induction, and effects of cyclophosphamide and irradiation on EAU. Suzuki I, et al. **Jpn J Ophthalmol** 1989;33(1):13–26

Experimental autoimmune uveoretinitis (EAU) in rats: abrogation of resistance to the induction and augmentation of the inflammation by pertussis toxin. Suzuki I, et al. **Jpn J Ophthalmol** 1989;33(1):27–35

[An immunogenetic study of anterior uveitis] Tian ZG. **Chung Hua Yen Ko Tsa Chih** 1988 Jul;24(4):214–7 (Eng. Abstr.) **(Chi)**

METABOLISM

Aqueous flare and cell meter in iridocyclitis. Ohara K, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):487–8

[Prostaglandin E1 and c-AMP contents in the aqueous humor of immunoreactive rabbit eyes] Guo AJ. **Chung Hua Yen Ko Tsa Chih** 1988 Sep;24(5):279–81 (Eng. Abstr.) **(Chi)**

MICROBIOLOGY

[Pseudo- "toxic lens" syndrome over the course of 4 years caused by staphylococcus epidermidis endophthalmitis] Bialasiewicz AA, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):142–5 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Interendothelial junctions of the rabbit iris vasculature in anterior uveitis. Freddo TF, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1104–11

[Granuloma gangraenescens with bilateral anterior uveitis] Schenck F, et al. **Fortschr Ophthalmol** 1988;85(6):737–9 (Eng. Abstr.) **(Ger)**

[Acute recurrent uveitis and idiopathic interstitial nephritis—a nosologic entity (tubulo-interstitial nephritis and uveitis)] Hausmann N, et al. **Klin Monatsbl Augenheilkd** 1988 Jul; 193(1):35–8 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Histopathologic analysis of experimental autoimmune uveitis attenuated by intracameral injection of S-antigen. Mizuno K, et al. **Curr Eye Res** 1989 Jan;8(1):113–21

Dimethylthiourea inhibits the inflammatory response to intravitreally-injected endotoxin. Fleisher LN, et al. **Exp Eye Res** 1989 Apr;48(4):561–7

SURGERY

Extracapsular cataract extraction in Fuchs' heterochromic iridocyclitis. Gee SS, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):310–4

THERAPY

[Modification of the course of chronic intraocular inflammations by sunlight (Israel study)] Manthey KF, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):44–7 (Eng. Abstr.) **(Ger)**

VETERINARY

Glaucoma and anterior uveitis; the continuing enigma. Martin CL. **Tijdschr Diergeneeskd** 1989 Apr;114 Suppl 1:46S–49S

UVEOMENINGOENCEPHALITIC SYNDROME see under **UVEITIS**

UVEOPAROTID FEVER see under **SARCOIDOSIS**

UVULA

Acute uvulitis: a sauna hazard. Duggal MS, et al. **Br Dent J** 1988 Aug 6;165(3):97–8

Acute uvular edema. Jarvis BL, et al. **Ear Nose Throat J** 1988 Sep;67(9):665–6, 669

Isolated uvulitis secondary to marijuana use. Guarisco JL, et al. **Laryngoscope** 1988 Dec;98(12):1309–12 (18 ref.)

Squamous cell carcinoma of the soft palate, uvula, and anterior faucial pillar. Weber RS, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):16–23

[Carcinoma of the soft palate and uvula. An analysis of the

results and the reasons for failures. A study of 76 cases] Calais G, et al. **Rev Stomatol Chir Maxillofac** 1988; 89(5):306–10 (Eng. Abstr.) (Fre)

ABNORMALITIES

Bifid uvula: prevalence and association in otitis media with effusion in children admitted for routine otolaryngological operations. Rivron RP. **J Laryngol Otol** 1989 Mar; 103(3):249–52

PATHOLOGY

Glycogen-rich clear cell carcinoma arising from minor salivary glands of the uvula. A case report. Hayashi K, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1227–34

Morphology of the uvula in obstructive sleep apnea. Stauffer JL, et al. **Am Rev Respir Dis** 1989 Sep;140(3):724–8

PHYSIOLOGY

An electromyographic study of the musculus uvulae. Kuehn DP, et al. **Cleft Palate J** 1988 Oct;25(4):348–55

RADIOGRAPHY

Localization of parasoral soft tissue calcifications: the known object rule. Katz JO, et al.
Oral Surg Oral Med Oral Pathol 1989 Apr;67(4):459–63

SURGERY

Uvulopalatopharyngoplasty: postoperative management and evaluation of results. Macaluso RA, et al.
Ann Otol Rhinol Laryngol 1989 Jul;98(7 Pt 1):502–7

The predictive efficacy of the Müller maneuver in uvulopalatopharyngoplasty. Katsantonis GP, et al.
Laryngoscope 1989 Jul;99(7 Pt 1):677–80

Changes in pharyngeal properties after uvulopalatopharyngoplasty. Wright S, et al.
Laryngoscope 1989 Jan;99(1):62–5

Uvulopalatopharyngoplasty [letter] Finkelstein Y, et al.
Plast Reconstr Surg 1989 Mar;83(3):577–8

[Anesthesia problems posed by uvulo-palato-pharyngoplasty (UPPP)] Esteben D, et al.
Rev Laryngol Otol Rhinol (Bord) 1988;109(3):277–9 (Fre)

V-ONC PROTEINS see ONCOGENE PROTEINS, VIRAL

VACCINATION

Clinico-immunologic and allergologic studies with the inactivated influenza virus vaccine purified and concentrated by gradient centrifugation. Subbotina TI, et al. **Acta Virol (Praha)** 1988 Nov;32(6):494–502

Why wait for DTP-E-IPV? [editorial] Marcuse EK.
Am J Dis Child 1989 Sep;143(9):1006–7

Attitude of hospital personnel toward hepatitis B vaccination. Scapa E, et al. **Am J Gastroenterol** 1989 Apr;84(4):400–2

Hepatitis B vaccination implementation strategies. Hedrick E. **Am J Infect Control** 1989 Jun;17(3):190–2

Feasibility of controlling or eradicating the hepatitis B virus. Blumberg BS. **Am J Med** 1989 Sep 4;87(3A):2S–4S

Vaccination against hepatitis B in homosexual men. A review. Goilav C, et al. **Am J Med** 1989 Sep 4;87(3A):21S–25S (45 ref.)

Hepatitis B vaccination of neonates and children. Tong MJ. **Am J Med** 1989 Sep 4;87(3A):33S–35S

Recent advances in otitis media. Microbiology, immunology, biochemistry, and vaccination. Ogra PL, et al.
Ann Otol Rhinol Laryngol Suppl 1989 Apr;139:23–32 (9 ref.)

Oral vaccination. Dougan G, et al.
Antonie Van Leeuwenhoek 1988;54(5):447–51 (36 ref.)

Rubella immunisation [letter] Elliman A. **Arch Dis Child** 1989 Feb;64(2):306

Rubella immunisation for girls over 14 years [letter] Smithells RW. **Arch Dis Child** 1989 Apr;64(4):638–9

HLA antigens and the antibody response after vaccination to hepatitis B. Matej H, et al.
Arch Immunol Ther Exp (Warsz) 1988;36(4):505–9

Organizational strategies to improve influenza vaccine delivery. A standing order in a general medicine clinic. Margolis KL, et al. **Arch Intern Med** 1988 Oct; 148(10):2205–7

Prophylaxis of serious cytomegalovirus infection in renal transplant candidates using live human cytomegalovirus vaccine. Interim results of a randomized controlled trial. Brayman KL, et al. **Arch Surg** 1988 Dec;123(12):1502–8

Travelling [letter] Ruff T. **Aust Fam Physician** 1988 Sep; 17(9):734

Hepatitis B vaccination and Sydney dental practitioners. Barrett AP, et al. **Aust N Z J Med** 1988 Aug;18(5):729–30

Towards the eradication of hepatitis B in Australia. Farrell GC. **Aust N Z J Med** 1988 Aug;18(5):645–7

Parents' beliefs about vaccination [letter] **BMJ** 1989 Jul 22; 299(6693):257

Immunising children in hospital [news] Hull D. **BMJ** 1988 Sep 24;297(6651):755

Vaccination against pneumococcal infection. Noah ND.
BMJ 1988 Nov 26;297(6660):1351–2 (23 ref.)

Immunoprophylaxis for influenza: comparison of a subunit and a whole virion vaccine. Carle F, et al.
Boll Ist Sieroter Milan 1988;67(2):105–15

Hepatitis B immunisation of dental students in 14 UK dental schools [letter] Mitchell R. **Br Dent J** 1989 Aug 5;167(3):94

BCG vaccination against tuberculosis and leprosy. Fine PE.
Br Med Bull 1988 Jul;44(3):691–703 (51 ref.)

BCG vaccination and AIDS. Bregere P.
Bull Int Union Tuberc Lung Dis 1988 Dec;63(4):40–1

Reduction in the risk of tuberculous meningitis in children in France. Impact of BCG vaccination. Lotte A, et al.
Bull Int Union Tuberc Lung Dis 1988 Dec;63(4):52–6

Swedish experiences 12 years after the cessation of general BCG vaccination of newborns in 1975 [published erratum appears in Bull Int Union Tuberc Lung Dis 1989 Mar;64(1):60] Romanus V.
Bull Int Union Tuberc Lung Dis 1988 Dec;63(4):34–8

First experience with the project of discontinuation of BCG primovaccination in newborns in Czechoslovakia. Trnka L, et al. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):39

The effects of systematic BCG vaccination of newborns on the incidence of postprimary tuberculosis meningitis in childhood. Wasz-Hockert O, et al.
Bull Int Union Tuberc Lung Dis 1988 Dec;63(4):49–51

Japanese encephalitis vaccination, with reference to travellers to Seoul, Korea. **Can Dis Wkly Rep** 1988 Sep 10; 14(36):161–2 (Eng, Fre)

Statement on influenza vaccination for the 1989–90 season. **Can Med Assoc J** 1989 Sep 1;141(5):425–7

Pertussis vaccine: why do some parents say no? [letter] Feher PJ. **Can Med Assoc J** 1989 Mar 1;140(5):498

Haemophilus influenzae meningitis in Manitoba and the Keewatin District, NWT: potential for mass vaccination. Hammond GW, et al. **Can Med Assoc J** 1988 Oct 15; 139(8):743–7

Vaccination campaign against hepatitis B in Italy. Stroffolini T. **Chemioterapia** 1987 Jun;6(2 Suppl):649–50

Updated statement on measles prevention issued by Centers for Disease Control [news] **Clin Pharm** 1987 Oct;6(10):754

A survey of pre-school vaccination programmes in England and Wales. Begg NT, et al. **Community Med** 1988 Nov; 10(4):344–50

Immunomodulation of experimental murine herpes simplex keratitis: II. Glycoprotein D protection. Foster CS, et al.
Curr Eye Res 1988 Nov;7(11):1051–61

Immunomodulation of experimental murine herpes simplex keratitis: I. UV-HSV protection. Thompson P, et al.
Curr Eye Res 1988 Nov;7(11):1043–9

Immunity and immunization of children against diphtheria in Sweden. Mark A, et al.
Eur J Clin Microbiol Infect Dis 1989 Mar;8(3):214–9

Vaccination against Boophilus microplus: localization of antigens on tick gut cells and their interaction with the host immune system. Kemp DH, et al.
Exp Appl Acarol 1989 Jun;7(1):43–58 (29 ref.)

Protection against the transmission of hepatitis B virus in dental practitioners: better gloves, earlier vaccination, or both? Koff RS. **Hepatology** 1989 Jun;9(6):902

Immunization of newborns of HBsAg-positive mothers: a successful first step in control of hepatitis B virus in Taiwan. McMahon BJ. **Hepatology** 1989 Jun;9(6):900–2

T-cell vaccination against autoimmune disease. Cohen IR.
Hosp Pract [Off] 1989 Feb 15;24(2):57–64

Prevention and control of influenza in institutional settings. Fedson DS. **Hosp Pract [Off]** 1989 Sep 30;24(9A):87–91, 94–6

Altered virulence and vaccination properties of Leishmania parasites grown in infected vaccinated mice. Gorczynski RM. **Infect Immun** 1989 Aug;57(8):2430–3

Hepatitis B vaccination with short dose intervals--a possible alternative for post-exposure prophylaxis? Wahl M, et al.
Infection 1988 Jul-Aug;16(4):229–32

Evaluation of the effectiveness of BCG vaccination using the case-control method in Buenos Aires, Argentina. Miceli I, et al. **Int J Epidemiol** 1988 Sep;17(3):629–34

A pilot study of three potential vaccines for leprosy in Bombay. Ganapati R, et al.
Int J Lepr Other Mycobact Dis 1989 Mar;57(1):33–7

Vaccination and skin test studies on children living in villages with differing endemicity for leprosy and tuberculosis. Ghazi Saidi K, et al. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):45–53

Comments on leprosy vaccination [letter] Kato L.
Int J Lepr Other Mycobact Dis 1989 Sep;57(3):693–4

HLA-DR-restricted antigen-induced proliferation and cytotoxicity mediated by CD4+ T-cell clones from subjects vaccinated with killed M. leprae. Mustafa AS, et al. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):1–11

Vaccination and skin test studies on the children of leprosy patients. Stanford JL, et al.
Int J Lepr Other Mycobact Dis 1989 Mar;57(1):38–44

Immunity in mice vaccinated with a molecular weight 60,000 glycoprotein secreted by adult Nematospiroides dubius. Monroy FG, et al. **Int J Parasitol** 1989 Feb;19(1):71–6

Vaccination against experimental autoimmune disease using autoimmune T-lymphocytes. Cohen IR. **Isr J Med Sci** 1988 Dec;24(12):734–6 (27 ref.)

Postcard reminders and influenza vaccination [letter] Barnas GP, et al. **J Am Geriatr Soc** 1989 Feb;37(2):195

Measles in schools: age at vaccination vs risk of disease. Narian JP, et al. **J Arkansas Med Soc** 1989 Feb;85(9):383–5

Vaccination against experimental autoimmune encephalomyelitis using a subencephalitogenic dose of autoimmune effector cells (1). Characteristics of vaccination. Beraud E, et al. **J Autoimmun** 1989 Feb; 2(1):75–86

Vaccination against experimental autoimmune encephalomyelitis using a subencephalitogenic dose of autoimmune effector T cells. (2). Induction of a protective anti-idiotypic response. Lider O, et al. **J Autoimmun** 1989 Feb;2(1):87–99

Development of a mouse model to estimate the potency of the diphtheria toxoid component of diphtheria–tetanus and diphtheria–tetanus–pertussis vaccines. Maheshwari SC, et al. **J Biol Stand** 1988 Jul;16(3):139–46

Vaccination coverage evaluation survey, Thane district, Maharashtra–1987. Sokhey J, et al. **J Commun Dis** 1988 Mar;20(1):22–31

Idiotypic vaccination as a treatment for a B cell lymphoma. George AJ, et al. **J Immunol** 1988 Sep 15;141(6):2168–74

Immunized mice challenged with herpes simplex virus by the intranasal route show protection against latent infection. Rooney JF, et al. **J Infect Dis** 1989 May;159(5):974–6

Rubella prevention--a new era? [editorial] Hutchinson A.
J R Coll Gen Pract 1988 May;38(310):193–4

Leads from the MMWR. Adult immunization: knowledge, attitudes, and practices--DeKalb and Fulton Counties, Georgia, 1988. **JAMA** 1988 Dec 9;260(22):3253–5

Leads from the MMWR. State and local influenza immunization program activities. **JAMA** 1988 Dec 16; 260(23):3408, 3410

The efficacy of acellular pertussis vaccine [letter] [published erratum appears in JAMA 1989 Jul 7;262(1):33] Olin P, et al. **JAMA** 1989 Jan 27;261(4):560

Meningococcal meningitis [editorial] [published erratum appears in Lancet 1989 Apr 1;1(8640):742] **Lancet** 1989 Mar 25;1(8639):647–8

Mumps meningitis following measles, mumps, and rubella immunisation [letter] **Lancet** 1989 Aug 12;2(8659):394–5

Hepatitis B vaccine in the expanded programme of immunisation: The Gambian experience. The Gambia Hepatitis Study Group. **Lancet** 1989 May 13;1(8646):1057–9

Measles, mumps, and rubella vaccine coverage [letter] **Lancet** 1989 Feb 4;1(8632):271–2

Measles immunisation before the age of nine months? Position statement by the expanded programme on immunisation of the World Health Organisation. **Lancet** 1988 Dec 10; 2(8624):1356–7

Trial of high-dose Edmonston-Zagreb measles vaccine in Guinea-Bissau: protective efficacy. Aaby P, et al.
Lancet 1988 Oct 8;2(8615):809–11

Incentive for measles, mumps, and rubella vaccination [letter] Anand JK. **Lancet** 1989 Mar 4;1(8636):496

Brother-to-sister transmission of measles after MMR immunisation [letter] Campbell AG. **Lancet** 1989 Feb 25; 1(8635):442

Immunogenicity of a killed hepatitis A vaccine in seronegative volunteers [see comments] Flehmig B, et al.
Lancet 1989 May 13;1(8646):1039–41. **Comment in:** Lancet 1989 Jul 8;2(8654):114

Prevention of hepatitis B virus carrier state in infants according to maternal serum levels of HBV DNA. Ip HM, et al. **Lancet** 1989 Feb 25;1(8635):406–10

Post-exposure prophylaxis for hepatitis B: active or passive? Iwarson S. **Lancet** 1989 Jul 15;2(8655):146–8 (13 ref.)

Measles, mumps, and rubella vaccine: what coverage to block transmission? [letter] Nokes DJ, et al. **Lancet** 1988 Dec 10;2(8624):1374

Rubella vaccination: persistence of antibodies for 10–21 years [letter] O'Shea S, et al. **Lancet** 1988 Oct 15;2(8616):909

Mass vaccination against hepatitis B in infants in Italy [letter] Piazza M, et al. **Lancet** 1988 Nov 12;2(8620):1132

Measles, mumps, and rubella immunisation [letter] Walker D. **Lancet** 1989 Jan 21;1(8630):167

Trial of high-dose Edmonston-Zagreb measles vaccine in the Gambia: antibody response and side-effects. Whittle H, et al. **Lancet** 1988 Oct 8;2(8615):811–4

Influenza program 1988–1989 [news] **Md Med J** 1988 Nov; 37(11):626–7

Health maintenance issues of the elderly. Immunization. Levitt A. **Md Med J** 1989 Feb;38(2):141–3

Immunization of asymptomatic HIV-infected children with measles vaccine: assessment of risks and benefits. Onorato IM, et al. **Med Decis Making** 1989 Apr-Jun;9(2):76–83

Japanese B encephalitis [letter; comment] **Med J Aust** 1989 Jun 19;150(12):725–6. **Comment on:** Med J Aust 1989 Mar 20;150(6):334–6, 339

Seroconversion after administration of measles vaccine to central Australian Aboriginal children at nine months of age. Hanna JN, et al. **Med J Aust** 1989 Feb 20;150(4):188, 191–2

Health advice for Australian travellers [letter] Stürchler D.
Med J Aust 1989 May 1;150(9):542

Octavalent Pseudomonas aeruginosa O-polysaccharide-toxin A conjugate vaccine. Cryz SJ Jr, et al. **Microb Pathog** 1989 Jan;6(1):75–80

Poxvirus deletion mutants: virulence and immunogenicity. Edwards KM, et al. **Microb Pathog** 1988 May;4(5):325–33

Protective immunity in mouse salmonellosis: comparison of smooth and rough live and killed vaccines. Muotiala A, et al. **Microb Pathog** 1989 Jan;6(1):51–60

Adult immunization: knowledge, attitudes, and practices--DeKalb and Fulton Counties, Georgia, 1988. **MMWR** 1988 Nov 4;37(43):657–61

Pneumococcal immunization program--California, 1986–1988. **MMWR** 1989 Aug 4;38(30):517–9

Influenza vaccination [letter] Abernethy IA. **N Z Med J** 1989 Apr 26;102(866):199

The risk of hepatitis B [letter] Daniels WL. **N Z Med J** 1988 Sep 28;101(854):614
Interval between hepatitis B vaccine doses [letter] Lang SD. **N Z Med J** 1989 Apr 12;102(865):172
Mass vaccination against hepatitis B in preschool children: immunogenicity after three reduced doses. Milne A, et al. **N Z Med J** 1989 Aug 23;102(874):429–30
Vaccination against influenza and pneumococcal disease—are we doing our best? Morris A, et al. **N Z Med J** 1989 Apr 26;102(866):193–5
Trial of human malaria vaccine [letter] **Nature** 1988 Dec 15; 336(6200):626
Vaccination against ovine cysticercosis using a defined recombinant antigen. Johnson KS, et al. **Nature** 1989 Apr 13;338(6216):585–7
Seal vaccination success [letter] Osterhaus AD, et al. **Nature** 1989 Jan 5;337(6202):21
Programme of vaccinations in Somalia. De Stasio A, et al. **Nuovi Ann Ig Microbiol** 1987 Jan–Apr;38(1–2):31–4
Vaccines, health counseling needed when employees travel overseas. Strasser AL. **Occup Health Saf** 1988 Oct;57(11):18
AIDS vaccine study begins in England [news] **Ohio Med** 1989 Aug;85(8):596
Vaccines and vaccination strategies. **Parasitology** 1989;98 Suppl:S1–100
Experiences with vaccines against cutaneous leishmaniasis: of men and mice. Modabber F. **Parasitology** 1989;98 Suppl:S49–60 (106 ref.)
Pathogenesis of otitis media related to vaccine efficacy. Bluestone CD. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S14–7 (24 ref.)
Field trial of rhesus rotavirus vaccine in infants. Christy C, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):645–50
Effects of undernutrition on infection with Vibrio cholerae O1 and on response to oral cholera vaccine. Glass RI, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):105–9
Intradermal hepatitis B vaccination: efficacy and timing for a booster dose in infants at risk [letter] Leonardi S, et al. **Pediatr Infect Dis J** 1989 May;8(5):337
Vaccination trials in otitis media: experiences in Finland since 1977. Mäkelä PH, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S79–82 (10 ref.)
Childhood immunization, vaccine-preventable diseases and infection with human immunodeficiency virus. Onorato IM, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):588–95 (50 ref.)
Sample size considerations in vaccine trials. Rockette HE. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S91–3
Immunization of children with sickle cell disease with Haemophilus influenzae type b polysaccharide vaccine. Rubin LG, et al. **Pediatrics** 1989 Sep;84(3):509–13
Protection of rhesus monkeys from fatal Lassa fever by vaccination with a recombinant vaccinia virus containing the Lassa virus glycoprotein gene. Fisher-Hoch SP, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):317–21
Pertussis in England and Wales: an investigation of transmission dynamics and control by mass vaccination. Grenfell BT, et al. **Proc R Soc Lond [Biol]** 1989 Apr 22; 236(1284):213–52
COVER (cover of vaccination evaluated rapidly): description of the England and Wales scheme. Begg NT, et al. **Public Health** 1989 Mar;103(2):81–9
HBsAg carriers among pregnant women in Italy: results from the screening during a vaccination campaign against hepatitis B. Stroffolini T, et al. **Public Health** 1988 Jul; 102(4):329–33
Report of the Second Public Health Service AIDS Prevention and Control Conference. Report of the workgroup on vaccines. **Public Health Rep** 1988;103 Suppl 1:52–7
International Symposium on Vaccine Development and Utilization. Washington, D.C., 9–10 June 1986. Proceedings. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S491–667
Feasible improvements in vaccines in the Expanded Programme on Immunization. McIntosh K. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S530–7 (30 ref.)
Implementation of vaccine programs in Ecuador. Martinez P. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S507–8
Development and strategies of the Colombian vaccination program. Silva E. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S505–6 (3 ref.)
Varying antibody response in hospital staff vaccinated against hepatitis B. Ljunggren K, et al. **Scand J Infect Dis** 1988; 20(5):485–8
Immunotherapy of metastatic renal cancer. Rauschmeier HA. **Semin Surg Oncol** 1988;4(3):169–73
Clinical trials of rabies vaccines in Thailand. Suntharasamai P. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):537–47 (36 ref.)
Analytical threshold and stability results on age-structured epidemic models with vaccination. Greenhalgh D. **Theor Popul Biol** 1988 Jun;33(3):266–90
Asymptomatic malaria parasitaemia and the antibody response to tetanus toxoid vaccination. Corrigall RJ. **Trans R Soc Trop Med Hyg** 1988;82(4):540–1
Protection of goats against Caribbean and African heartwater isolates by the Ball 3 heartwater vaccine. Brown CC, et al. **Trop Anim Health Prod** 1989 May;21(2):100–6
Comparison between Sri Lankan and Australian strains of Babesia bovis in the vaccination of imported cattle in Sri Lanka. Weilgama DJ, et al. **Trop Anim Health Prod** 1989 May;21(2):141–5
National policies for hepatitis B vaccinations [editorial] Tandon BN. **Trop Gastroenterol** 1988 Oct–Dec;9(4):167–8
Sensitisation by mycobacteria and the effects of BCG on children attending schools in the slums of Bombay. Stanford JL, et al. **Tubercle** 1988 Dec;69(4):293–8
The protective and allergenic potency of four BCG substrains in use in China determined in two animal models. Wang GZ, et al. **Tubercle** 1988 Dec;69(4):283–91
Vaccination strategies in developing countries. Poore P. **Vaccine** 1988 Oct;6(5):393–8 (24 ref.)
A nationwide vaccination programme in Italy against hepatitis B virus infection in infants of hepatitis B surface antigen-carrier mothers. Stroffolini T, et al. **Vaccine** 1989 Apr;7(2):152–4
Duration of immunity to hepatitis B vaccination in institutionalized mentally retarded patients. Torre D, et al. **Vaccine** 1989 Apr;7(2):102–3
Porcine parvovirus vaccination [letter] Hardy BD, et al. **Vet Rec** 1988 Aug 27;123(9):235
[The integration of the vaccination program in a primary care center] Artemán Jané A, et al. **Gac Sanit** 1987 Jul–Aug;1(1):16–22 (Eng. Abstr.) (Cat, Spa)
[The rubella immunity survey of unmarried school-aged women in Taipei and feasibility study of rubella vaccination] Wu LC, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Sep;40(3):309–16 (Eng. Abstr.) (Chi)
[The effect of prevention of infectious diseases in travelers to (sub)tropical areas] Bruné H, et al. **Ned Tijdschr Geneeskd** 1988 Nov 12;132(46):2106–9 (Eng. Abstr.) (Dut)
[Vaccinations in Africa, experiences in Burkina Faso] Stuyt LB. **Ned Tijdschr Geneeskd** 1988 Dec 24;132(52):2375–80 (Dut)
[Prevention in pediatrics in the Nord-Cotentin. Prospective study of 255 cases] Cholet S, et al. **Arch Fr Pediatr** 1989 May;46(5):381–5 (Eng. Abstr.) (Fre)
[Vaccination of mice against murine coccidiosis by ingestion of surface proteins of Eimeria falciformis incorporated in liposomes] Rhalem A, et al. **C R Acad Sci [III]** 1989; 309(1):19–23 (Eng. Abstr.) (Fre)
[Vaccination against hepatitis B of children with of homozygous beta-thalassemia (letter)] Sclavounou-Tsouroutsoglou S, et al. **Presse Med** 1988 Dec 10;17(44):2356 (Fre)
[Pneumovax vaccination in children] Melamed A. **Harefuah** 1989 Feb 1;116(3):166–8 (Heb)
[Pertussis vaccine—a cause for concern? (editorial)] Weizer S, et al. **Harefuah** 1988 Aug;115(3–4):96–8 (Heb)
[An approach to the evaluation of the efficacy of anti-pertussis vaccination] Barlassina C, et al. **Clin Ter** 1987 Aug 31;122(4):245–9 (Eng. Abstr.) (Ita)
[Problems of vaccinations during pregnancy] Sesti F, et al. **Clin Ter** 1988 Apr 15;125(1):65–70 (32 ref.) (Ita)
[Therapy and prevention of malaria] Bianchini C. **Medicina (Firenze)** 1989 Jan–Mar;9(1):27–40 (6 ref.) (Eng. Abstr.) (Ita)
[Anticaries vaccination: present and future prospects] Mosci F, et al. **Minerva Stomatol** 1989 Mar;38(3):379–88 (71 ref.) (Eng. Abstr.) (Ita)
[International prevention: geographic aspects] Calamo-Specchia FP. **Nuovi Ann Ig Microbiol** 1988 Jul–Oct;39(4–5):439–48 (Ita)
[Course of HBV infection among dentistry students: longitudinal study] Simonetti D'Arca A, et al. **Nuovi Ann Ig Microbiol** 1988 May–Jun;39(3):175–81 (Eng. Abstr.) (Ita)
[Tuberculosis in children in the early 90's] Battistini A, et al. **Pediatr Med Chir** 1989 Jan–Feb;11(1):1–11 (15 ref.) (Eng. Abstr.) (Ita)
[Hospital experience in active immunoprophylaxis against HBV] Guasti E, et al. **Pediatr Med Chir** 1988 Nov–Dec; 10(6):571–3 (Eng. Abstr.) (Ita)
[The results of an investigation on the prevalence rate of rubella antibody, history of rubella infection and of vaccination in pregnant women] Hirosawa H, et al. **Kansenshogaku Zasshi** 1988 Jul;62(7):652–6 (Eng. Abstr.) (Jpa)
[Hepatitis B vaccination in alcoholics] Maruyama N, et al. **Kansenshogaku Zasshi** 1989 Jan;63(1):27–34 (Eng. Abstr.) (Jpa)
[Retrospective assessment of the effectiveness of BCG vaccination by multiple puncture method (Kuchiki's needle) in childhood tuberculosis] Kamigawara N. **Kekkaku** 1989 Apr;64(4):305–11 (Eng. Abstr.) (Jpa)
[Vaccination coverage and migration of families with small children] Solberg LK, et al. **Tidsskr Nor Laegeforen** 1988 Nov 20;108(32):3001–3 (Eng. Abstr.) (Nor)
[Autoimmunity is not an impediment for vaccination against Chagas disease] Teixeira AR, et al. **Rev Soc Bras Med Trop** 1987 Apr–Jun;20(2):123–7 (28 ref.) (Por)
[Evaluation of the vaccinal coverage of 1- to 3-year-old children in district 3 of the city of Bucharest by the EVP/WHO method of random sampling] Ion-Nedelcu N, et al. **Rev Ig [Bacteriol]** 1988 Oct–Dec;33(4):327–40 (Eng. Abstr.) (Rum)
[Effectiveness of selective anti-measles reimmunization of risk-group children] Sokhin AA, et al. **Pediatriia** 1988; (9):69–72 (Rus)
[What a vaccine against viral gastroenteritis should be: problems and prospects] Rukhadze GG, et al. **Vopr Virusol** 1989 Jan–Feb;34(1):5–16 (70 ref.) (Rus)
[The work experience of the inoculations office of a polyclinic for the adult population] Kirpatenko VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):122–3 (Rus)
[Determination of Shigella antigens in the feces of people, immunized with enteral vaccine prepared from S. flexneri antigen] Nurkina NV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):71–5 (Eng. Abstr.) (Rus)
[Doubts and errors in vaccinations] González A. **An Esp Pediatr** 1988 Sep;29 Suppl 33:38–41 (13 ref.) (Spa)
[In favor of the integration of continuing vaccination in the Primary Health Centers (letter)] Alonso Ciruelos J, et al. **Gac Sanit** 1987 Nov–Dec;1(3):128 (Spa)
[Prevalence of hepatitis B infection in institutions for the mentally retarded. Epidemiologic characteristics in the province of Vizcaya] Aristegui Fernández J, et al. **Med Clin (Barc)** 1989 Mar 11;92(9):323–7 (Eng. Abstr.) (Spa)
[Current strategies in the prevention of congenital rubella] Salleras Sanmarti L. **Med Clin (Barc)** 1989 Mar 18; 92(10):378–81 (74 ref.) (Spa)
[Prevention and control of influenza. Brief review of the subject] Pérez Rodríguez A. **Rev Cubana Med Trop** 1988 Sep–Dec;40(3):134–43 (22 ref.) (Eng. Abstr.) (Spa)
[Immunoprophylaxis of viral hepatitis] Cervera Solórzano J. **Rev Gastroenterol Mex** 1988 Jul–Sep;53(3):193–9 (48 ref.) (Eng. Abstr.) (Spa)
[The National Seroepidemiological Survey. I. Conceptual design and methodology] Gutiérrez G, et al. **Salud Publica Mex** 1988 Nov–Dec;30(6):836–42 (Eng. Abstr.) (Spa)
[Infections preventable by vaccination] Kumate J, et al. **Salud Publica Mex** 1988 May–Jun;30(3):349–61 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Development of local morphological changes after intradermal inoculation of Q-fever chemovaccine. Reil M, et al. **Acta Virol (Praha)** 1989 Mar;33(2):167–71
Immunisation triggering rheumatoid arthritis? [letter] Jawad AS, et al. **Ann Rheum Dis** 1989 Feb;48(2):174
Disseminated BCG in HIV infection. Ninane J, et al. **Arch Dis Child** 1988 Oct;63(10):1268–9
Needling doubts about where to vaccinate. Piggot J. **BMJ** 1988 Oct 29;297(6656):1130
Infectious and noninfectious exposures in the etiology of light chain myeloma: a case-control study. Williams AR, et al. **Cancer Res** 1989 Jul 15;49(14):4038–41
Bulging fontanelle after immunization with diphtheria–tetanus–pertussis vaccine and diphtheria–tetanus vaccine. Gross TP, et al. **J Pediatr** 1989 Mar;114(3):423–5
Physicians' obligations under the National Childhood Vaccine Injury Act. Stratton WT. **Kans Med** 1989 Feb; 90(2):32–3
Typhoid-fever-like syndrome after Ty21a live oral vaccine [letter] Beishuizen A, et al. **Lancet** 1988 Oct 8;2(8615):855–6
Congenital malformations and oral poliovirus vaccination during pregnancy. Harjulehto T, et al. **Lancet** 1989 Apr 8;1(8641):771–2
Brother-to-sister transmission of measles after measles, mumps, and rubella immunisation [letter] Millson DS. **Lancet** 1989 Feb 4;1(8632):271
Cluster of childhood Guillain-Barré cases after an oral poliovaccine campaign [letter] Uhari M, et al. **Lancet** 1989 Aug 19;2(8660):440–1
Analyses of adverse reactions to diphtheria and tetanus toxoids and pertussis vaccine by vaccine lot, endotoxin content, pertussis vaccine potency and percentage of mouse weight gain. Baraff LJ, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):502–7
Adverse reactions to immunisation [letter] Pick WM, et al. **S Afr Med J** 1989 Sep 2;76(5):229–30
[Contraindications for vaccination] Domorázková E, et al. **Cesk Pediatr** 1989 Jan;44(1):41–3 (Cze)
[Real and putative contraindications to vaccination] Göpfertová D, et al. **Cesk Pediatr** 1988 Jul;43(7):394–9 (Eng. Abstr.) (Cze)
[Primary tubercular infection and BCG vaccination] Lindgren I. **Duodecim** 1988;104(7):554–6 (9 ref.) (Fin)
[Adverse reactions to anti-hepatitis B vaccine in hospital personnel: results and experiences] Panizo Delgado A, et al. **Rev Med Univ Navarra** 1988 Jul–Sep;32(3):131–4 (Eng. Abstr.) (Spa)

ECONOMICS

Mumps in the US Army 1980–86: should recruits be immunized? Arday DR, et al. **Am J Public Health** 1989 Apr;79(4):471–4
Economic analysis of the vaccination strategies adopted in Brazil in 1982. Domínguez Ugá MA. **Bull Pan Am Health Organ** 1988;22(3):250–68
Cost-effectiveness of primary tetanus vaccination among elderly Canadians. Hutchison BG, et al. **Can Med Assoc J** 1988 Dec 15;139(12):1143–51 (35 ref.)
Cost-effectiveness of primary tetanus vaccination among elderly Canadians [letter] Muckle TJ. **Can Med Assoc J**

1989 Mar 15;140(6):586–7
Hepatitis B insurance for the newborn [letter] Chongsuvivatwong V, et al. **Lancet** 1989 Sep 23; 2(8663):749–50
Influenza vaccination in Australia: a review of the economic evidence for policy recommendations. Evans DB, et al. **Med J Aust** 1988 Nov 21;149(10):540–3
Hypothetical vaccination of the Dutch population with a herpes simplex virus vaccine: estimation of the profitability using a demographic projection model. Bos CA. **Vaccine** 1988 Aug;6(4):309–14
[Attempt to evaluate the economical impact of hepatitis B in Italy and comparison to costs of strategies of vaccinal prevention] Ricciardi G, et al. **Nuovi Ann Ig Microbiol** 1988 May–Jun;39(3):241–61 (Eng. Abstr.) (Ita)
[Vaccines today and tomorrow. Cost benefit of vaccination—methods and examples] Lindgren B, et al. **Lakartidningen** 1989 May 17;86(20):1892–5 (Swe)

HISTORY

The logic of the magic of vaccination. Salk JE. **Allergy Proc** 1988 Nov–Dec;9(6):689–92
Benjamin Jesty, farmer vaccinator. Hart FD. **Br J Clin Pract** 1988 Jan;42(1):33–4
The Royal Navy and the spread of vaccination. Jones RW. **J R Nav Med Serv** 1987 Winter;73(3):204–6
The politics of prevention: anti-vaccinationism and public health in nineteenth-century England. Porter D, et al. **Med Hist** 1988 Jul;32(3):231–52
[Medical decorations during the reign of Leopold I] Mayer R, et al. **Rev Med Brux** 1988 Dec;9(10):473–89 (Eng. Abstr.) (Fre)
[The centenary of the organization of the Pasteur Vaccination Institute and Bacteriological Station in Kharkov] Diachenko SS. **Vrach Delo** 1989 Jan;(1):118–20 (Rus)

LEGISLATION & JURISPRUDENCE

National childhood vaccine injury act. Requirements for permanent vaccination records and for reporting of selected events after vaccination. National Vaccine Program, Centers for Disease Control. **Ohio Med** 1988 Sep; 84(9):754–6
[Implementation of vaccine prophylaxis in confronting international travellers] Ballada D, et al. **Nuovi Ann Ig Microbiol** 1988 Jul–Oct;39(4–5):419–29 (Ita)
[Immunologic prophylaxis and the health professions] Boccia A, et al. **Nuovi Ann Ig Microbiol** 1988 Jul–Oct; 39(4–5):379–95 (Ita)
[Organizational problems with mandatory vaccination in the environment of the regional health services of Rome] Muzzi A, et al. **Nuovi Ann Ig Microbiol** 1988 Jul–Oct; 39(4–5):411–7 (Ita)
[Comments on the necessity to discontinue BCG vaccination in Spain (letter)] de March Ayuela P. **Rev Clin Esp** 1988 Nov;183(8):442–3 (Spa)

METHODS

Childhood tuberculosis in Britain [letter] Dunkley MP, et al. **BMJ** 1988 Dec 17;297(6663):1611–2
Immune response of infants and preschool children to typhoid vaccine given intradermally or subcutaneously. Mohandas V, et al. **BMJ** 1989 Jan 21;298(6667):162–3
Needling doubts about where to vaccinate [letter] Moss AL. **BMJ** 1988 Oct 15;297(6654):980
Needling doubts about where to vaccinate. Thompson MK. **BMJ** 1988 Sep 24;297(6651):779–80
Lymphocyte vaccination against experimental autoimmune encephalomyelitis: evaluation of vaccination protocols. Offner H, et al. **J Neuroimmunol** 1989 Jan;21(1):13–22
Field evaluation of a simplified unit-dose syringe for administration of measles vaccine. Halsey NA, et al. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S631–8
An aerial baiting system for the distribution of attenuated or recombinant rabies vaccines for foxes, raccoons, and skunks. Johnston DH, et al. **Rev Infect Dis** 1988 Nov–Dec; 10 Suppl 4:S660–4
Experience with preexposure rabies vaccination. Roumiantzeff M, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S751–7 (61 ref.)
Current issues in human rabies immunization. Vodopija I. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S758–63 (35 ref.)
[A new perspective in the field of vaccination] Pizzigallo E, et al. **Nuovi Ann Ig Microbiol** 1988 Jul–Oct; 39(4–5):455–63 (Ita)

PSYCHOLOGY

Parents' beliefs about vaccination: the continuing propagation of false contraindications. Klein N, et al. **BMJ** 1989 Jun 24;298(6689):1687

STANDARDS

Comparing the efficacy of pertussis vaccines [letter] Olin P. **Lancet** 1989 Jan 14;1(8629):95–6
Smallpox vaccination for investigators using vaccinia recombinants [letter] Wenzel RP, et al. **Lancet** 1989 Sep 9;2(8663):630–1
[Evaluation of the National Vaccination Program] Rümke HC. **Ned Tijdschr Geneeskd** 1989 Apr 29;133(17):866–8 (Dut)

SUPPLY & DISTRIBUTION

[Carrying-out compulsory preventive vaccination in Poland in 1986] Słomska Z, et al. **Przegl Epidemiol** 1988;42(2):147–53 (Eng. Abstr.) (Pol)
[The role of primary medical services in the implementation of the Expanded Immunization Program of the WHO] Litvinov SK, et al. **Sov Zdravookhr** 1989;(2):61–5 (Rus)

TRENDS

New vaccines. Stanley PJ, et al. **Br J Hosp Med** 1989 Apr; 41(4):364–7 (18 ref.)
Evaluation of vaccination coverage through sample surveys. Sokhey J, et al. **J Commun Dis** 1987 Dec;19(4):341–8
The changing face of vaccination [editorial] **J R Army Med Corps** 1988 Oct;134(3):117–8
Vaccination for children: so many changes. Ellis-Pegler RB. **N Z Med J** 1989 Jul 12;102(871):342–4 (56 ref.)
A vaccine for otitis media: is there a need? What are the prospects? Klein JO. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S7–8
[Trends and difficulties in vaccination of the child in France (editorial)] Bégué P. **Arch Fr Pediatr** 1989 Apr;46(4):241–3 (Fre)
[Vaccination status of children and adolescents in Schleswig-Holstein. Principles and initial experiences of an assessment throughout the district] Bader HM. **Off Gesundheitswes** 1989 Jul;51(7):352–8 (Eng. Abstr.) (Ger)
[Vaccines today and tomorrow] **Lakartidningen** 1989 Mar 22;86(12):1075–80 (Swe)
[Vaccines—today and tomorrow] Berg R. **Lakartidningen** 1989 Feb 1;86(5):337–9 (Swe)
[Vaccination trends] Iwarson S. **Lakartidningen** 1989 Feb 1; 86(5):311–2 (Swe)
[Vaccines today and tomorrow. Vaccination trends in developing countries: 90 per cent of children will be vaccinated by the year of 2000] Kallings LO. **Lakartidningen** 1989 Apr 5;86(14):1287–9 (Swe)

UTILIZATION

Immunization coverage and social differentiation in urban Senegal. Fassin D, et al. **Am J Public Health** 1989 Apr; 79(4):509–11
Influenza immunization in the elderly: knowledge and attitudes do not explain physician behavior. McKinney WP, et al. **Am J Public Health** 1989 Oct;79(10):1422–4
Screening for hepatitis B and vaccination of homosexual men. Loke RH, et al. **BMJ** 1989 Jan 28;298(6668):234
Rubella immunisation: improving the uptake. Carter H, et al. **Health Bull (Edinb)** 1988 May;46(3):182–4
Evaluation of factors influencing vaccine uptake in Mozambique. Cutts FT, et al. **Int J Epidemiol** 1989 Jun; 18(2):427–33
Effectiveness of follow-up reminder methods [letter] Cherkin D. **J Fam Pract** 1989 Jan;28(1):20
Hepatitis B immunisation in Tauranga [letter] Ashworth N. **N Z Med J** 1988 Sep 28;101(854):613
Measles, mumps, rubella and the GP [editorial] Kerrigan P. **Practitioner** 1988 Oct 22;232(1456 (Pt 2)):1121
Measles immunisation non-acceptance: validation of computer-held records and raising the vaccine uptake at early school age; the Maidstone experience. Brambleby P, et al. **Public Health** 1989 Jul;103(4):289–94
[Evaluation of coverage under the national plan for measles and rubella vaccination based on a sample of schools] Goulet V, et al. **Ann Pediatr (Paris)** 1989 Jan;36(1):43–8 (Eng. Abstr.) (Fre)
[Vaccination coverage in a school population of Guipúzcoa: DTP, polio and measles] Basterretxea Irurzun M, et al. **Gac Sanit** 1988 Jan–Feb;2(4):26–9 (Eng. Abstr.) (Spa)

VETERINARY

A new, simple aerosol immunization technique against Newcastle disease. Tamási G, et al. **Acta Vet Hung** 1988; 36(3–4):185–93
An economic analysis of foot and mouth disease policy options—problems and opportunities. Davies G. **Acta Vet Scand Suppl** 1988;84:423–6
Statistical analysis of binary data from matched designs that require multiple observations on the same herd, litter or animal. Donald A. **Acta Vet Scand Suppl** 1988;84:446–8
A cost effectiveness study on the vaccination against foot-and-mouth disease (FMD) in the Federal Republic of Germany. Lorenz RJ. **Acta Vet Scand Suppl** 1988; 84:427–9
Brucellosis of cattle in Nigeria: proposals for a control program under intensive and extensive husbandry systems. Rikin EU. **Acta Vet Scand Suppl** 1988;84:94–7
Economic analysis of the development and usage of thermoresistant rinderpest vaccine. Stryker JD, et al. **Acta Vet Scand Suppl** 1988;84:398–401
Peste des Petits Ruminants and cost effectiveness of its prevention in Niger. van den Ende M, et al. **Acta Vet Scand Suppl** 1988;84:126–8
Dairy heifer health management and growth programming in an intensive agricultural environment. Williamson NB. **Acta Vet Scand Suppl** 1988;84:91–3
Immune response to vaccination. Osburn BI, et al. **Adv Vet Sci Comp Med** 1989;33:93–108 (68 ref.)
Oral vaccination of dogs fed canine adenovirus in baits. Baer GM, et al. **Am J Vet Res** 1989 Jun;50(6):836–7
Transmission of a vaccinal strain of infectious bovine rhinotracheitis virus from intranasally vaccinated steers commingled with nonvaccinated steers. Baker JC, et al. **Am J Vet Res** 1989 Jun;50(6):814–6
Effect of vaccination with a bacterin containing Leptospira interrogans serovar bratislava on the breeding performance of swine herds. Frantz JC, et al. **Am J Vet Res** 1989 Jul; 50(7):1044–7
Enhancement of infectious bovine keratoconjunctivitis by modified-live infectious bovine rhinotracheitis virus vaccine. George LW, et al. **Am J Vet Res** 1988 Nov; 49(11):1800–6
Cerebrospinal fluid analysis of rabid and vaccinia-rabies glycoprotein recombinant, orally vaccinated raccoons (Procyon lotor). Hanlon CA, et al. **Am J Vet Res** 1989 Mar;50(3):364–7
Clinical evaluation of transmissible gastroenteritis virus vaccines and vaccination procedures for inducing lactogenic immunity in sows. Moxley RA, et al. **Am J Vet Res** 1989 Jan;50(1):111–8
Enzyme-linked immunosorbent assay for differentiation of the antibody response of cattle naturally infected with Brucella abortus or vaccinated with strain 19. Nielsen K, et al. **Am J Vet Res** 1989 Jan;50(1):5–9
Serum antibody response to canine parvovirus, canine adenovirus-1, and canine distemper virus in dogs with known status of immunization: study of dogs in Sweden. Olson P, et al. **Am J Vet Res** 1988 Sep;49(9):1460–6
Estimation of maternally acquired immunity in suckling mice to evaluate foot-and-mouth disease vaccine. Strobbe R, et al. **Arch Exp Veterinarmed** 1988 May;42(3):410–3
Protection against enzootic pneumonia of pigs: intraperitoneal inoculation with live LKR strain of Mycoplasma hyopneumoniae. Lloyd LC, et al. **Aust Vet J** 1989 Jan;66(1):9–12
Prevention of Leptospira interrogans serovar pomona infection in domestic pigs by vaccination. Palit A, et al. **Aust Vet J** 1988 Sep;65(9):289–90
Vaccination as a possible means of preventing lantana poisoning. Stewart C, et al. **Aust Vet J** 1988 Nov; 65(11):349–52
Prevention of Potomac horse fever. Palmer JE. **Cornell Vet** 1989 Jul;79(3):201–5 (23 ref.)
A preliminary evaluation of factors affecting an experimental system for vaccination-and-challenge with Haemonchus contortus in sheep. Adams DB. **Int J Parasitol** 1989 Apr; 19(2):169–75
The effects of immunization of sheep with Trichostrongylus colubriformis larvae on worm burdens acquired during grazing. Douch PG. **Int J Parasitol** 1989 Apr;19(2):177–81
Oesophagostomum radiatum: successful vaccination of calves with high molecular weight antigens. East IJ, et al. **Int J Parasitol** 1989 May;19(3):271–4
A comparison of worm burden and faecal egg count for measuring the efficacy of vaccination against Oesophagostomum radiatum. East IJ, et al. **Int J Parasitol** 1988 Sep;18(6):863–4
Effectiveness of vaccination in controlling ovine footrot. Lewis RD, et al. **J Anim Sci** 1989 May;67(5):1160–6
Bovine brucellosis in the Highveld region: effect of calfhood vaccination [letter] Erasmus JA. **J S Afr Vet Assoc** 1989 Mar;60(1):2
Vaccination trial against canine visceral leishmaniasis. Phocean Veterinary Study Group on Visceral Leishmaniasis. Dunan S, et al. **Parasite Immunol** 1989 Jul; 11(4):397–402
Hereford cattle immunized and protected against Boophilus microplus with soluble and membrane-associated antigens from the midgut of ticks. Opdebeeck JP, et al. **Parasite Immunol** 1988 Jul;10(4):405–10
Parenteral vaccination of calves against the cattle lungworm Dictyocaulus viviparus. Bain RK, et al. **Res Vet Sci** 1988 Sep;45(2):270–1
Attempted immunisation of cats against feline infectious peritonitis using canine coronavirus. Stoddart CA, et al. **Res Vet Sci** 1988 Nov;45(3):383–8
Oral rabies vaccination: an overview. Baer GM. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S644–8
Organization of mass vaccination for dog rabies in Brazil. Belotto AJ. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S693–6
Experience in field rabies control programs. Ben Osman F, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S703–6
Domestic animal rabies control: an overview. Beran GW, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S672–7
Mass vaccination campaign against rabies: are dogs correctly protected? The Peruvian experience. Chomel B, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S697–702
Development of animal recombinant DNA vaccine and its efficacy in foxes. Kieny MP, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S799–802
Planning for rabies control in Ontario. MacInnes CD, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S665–9 (18 ref.)
Efficacy of a vaccinia-rabies glycoprotein recombinant virus vaccine in raccoons (Procyon lotor). Rupprecht CE, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S803–9
Current oral rabies vaccination in Europe: an interim balance. Schneider LG, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S654–9
Oral immunization of wildlife against rabies: concept and first field experiments. Wandeler AI, et al. **Rev Infect Dis** 1988

Nov–Dec;10 Suppl 4:S649–53

Use of recombinant vaccinia–rabies virus for oral vaccination of fox cubs (Vulpes vulpes, L) against rabies. Brochier BM, et al. **Vet Microbiol** 1988 Oct;18(2):103–8

The effects of vaccination with tissue culture–derived viral vaccines on detection of antibodies to equine arteritis virus by enzyme–linked immunosorbent assay (ELISA). Cook RF, et al. **Vet Microbiol** 1989 Jun;20(2):181–9

Iscom of viral envelope proteins protects against Aujeszky's disease. Morein B, et al. **Vet Microbiol** 1989 Jun; 20(2):143–54

A critical look at the importance, prevalence and control of toxocariasis and the possibilities of immunological control. Barriga OO. **Vet Parasitol** 1988 Sep; 29(2–3):195–234 (232 ref.)

Inactivated oil emulsion vaccines from selected clones of Newcastle disease virus. Adu FD, et al. **Vet Q** 1989 Jul; 11(3):190–2

Vaccinating seals [letter] **Vet Rec** 1989 May 27;124(21):570

Equine herpesvirus [letter] [published erratum appears in Vet Rec 1989 May 20;124(20):548] **Vet Rec** 1989 May 13; 124(19):519

Immunisation of pigs with Streptococcus suis type 2. **Vet Rec** 1989 May 20;124(20):538

Vaccinating seals [letter] **Vet Rec** 1989 May 13;124(19):520

A field trial in Belgium to control fox rabies by oral immunisation. Brochier B, et al. **Vet Rec** 1988 Dec 10; 123(24):618–21

Equine herpesvirus [letter] Collins A. **Vet Rec** 1989 May 6; 124(18):496

Adverse reaction to vaccine? [letter] Cook KC, et al. **Vet Rec** 1989 May 27;124(21):570–1

Anthrax vaccination [letter] Edginton AB. **Vet Rec** 1989 Jun 24;124(25):668

Development of an ELISA to differentiate between animals either vaccinated with or infected by Aujeszky's disease virus. Eloit M, et al. **Vet Rec** 1989 Jan 28;124(4):91–4

Optimum age to vaccinate for contagious caprine pleuropneumonia. King GJ. **Vet Rec** 1988 Nov 26; 123(22):572–3

An evaluation in pigs of Nobi–Vac AR and an experimental atrophic rhinitis vaccine containing P multocida DNT–toxoid and B bronchiseptica. Kobisch M, et al. **Vet Rec** 1989 Jan 21;124(3):57–61

The effect of East Coast fever immunisation and different acaricidal treatments on the productivity of beef cattle. Morzaria SP, et al. **Vet Rec** 1988 Sep 17;123(12):313–20

Prostaglandins and clostridial vaccination [letter] Muirhead FS. **Vet Rec** 1989 Jun 3;124(22):595–6

First field trial of fox vaccination against rabies using a vaccinia–rabies recombinant virus. Pastoret PP, et al. **Vet Rec** 1988 Nov 5;123(19):481–3

Misuse of antibiotics in horses [letter] Robinson LR. **Vet Rec** 1988 Dec 3;123(23):608

Compatibility of the OPRB with vaccination of calves against parasitic bronchitis. Rowlands DA, et al. **Vet Rec** 1989 Mar 25;124(12):309

Anti–chlamydial immunity in ewes conferred by vaccination with a combination of three live chlamydia, brucella and salmonella vaccines. Souriau A, et al. **Vet Rec** 1988 Jul 2;123(1):12, 29–32

Microbiological and pathological evaluation of vaccination against naturally occurring caprine pasteurellosis. Zamri–Saad M, et al. **Vet Rec** 1989 Feb 18;124(7):171–2

Cell–derived vaccine against bovine leukaemia virus infection. Altaner C, et al. **Zentralbl Veterinarmed [B]** 1988 Dec;35(10):736–46

Duration of immunity in swine inoculated with a monovalent foot–and–mouth disease oil emulsion vaccine. Buonavoglia C, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):397–401

Research on susceptibility of cats to the oral administration of rabies vaccine SAD B 19 Tü. Ciuchini F, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):675–80

The effect on inflammation of the bovine mammary gland of vaccination with a cell wall extract of Staphylococcus aureus. Frost AJ, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):688–94

[The development of immunity after vaccination of cattle against trichophytosis] Rybnikář A, et al. **Vet Med (Praha)** 1989 Feb;34(2):97–100 (Eng. Abstr.) (Cze)

[Immunoprophylactic possibilities for the control of fowl coccidiosis] Jungmann R, et al. **Angew Parasitol** 1989 May; 30(2):79–85 (57 ref.) (Eng. Abstr.) (Ger)

[Immunomorphological studies of swine vaccinated with an attenuated vaccine against swine fever] Dshurov A, et al. **Arch Exp Veterinarmed** 1988 May;42(3):347–59 (Eng. Abstr.) (Ger)

[Brucella clearance as a sensitive method for the detection of cross reactions of Brucella abortus with Yersinia enterocolitica 03, 06, 09 and Salmonella urbana and Salmonella abony] Hoffmann A, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):279–83 (Eng. Abstr.) (Ger)

[Correlation between 146S antigen dosage and antibody titers after foot–and–mouth disease vaccination in cattle and swine] Liebermann HT, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):528–36 (Eng. Abstr.) (Ger)

[Maternal immunization against coronavirus infection of calves: the mouse as a laboratory animal model] Bengelsdorff HJ. **Berl Munch Tierarztl Wochenschr** 1988 Aug 1;101(8):278–82 (Eng. Abstr.) (Ger)

[The prevention of atrophic rhinitis of swine] Bilkei G. **Berl Munch Tierarztl Wochenschr** 1989 Apr 1;102(4):109–11 (Eng. Abstr.) (Ger)

[Experiences with vaccination against Haemophilus pleuropneumonia of swine] Ewald C, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jan 1;102(1):6–11 (Eng. Abstr.) (Ger)

[The economic value of a protective vaccination against enzootic bronchopneumonia of cattle] Kandler J, et al. **Berl Munch Tierarztl Wochenschr** 1989 May 1;102(5):152–5 (15 ref.) (Eng. Abstr.) (Ger)

[Virus persistence—a key phenomenon of BVD virus infection] Liess B. **DTW** 1988 Jul–Aug;95(7):264–6 (15 ref.) (Eng. Abstr.) (Ger)

[Duck plague: clinical aspects, diagnosis, control] Weingarten M. **Tierarztl Prax** 1989;17(1):53–6 (Eng. Abstr.) (Ger)

VACCINATION ENCEPHALITIS see **ENCEPHALITIS, POST-VACCINAL**

VACCINES

Use of recombinant vaccinia viruses to examine cytotoxic T lymphocyte recognition of individual viral proteins. Yewdell J, et al. **Adv Exp Med Biol** 1988;239:151–61 (40 ref.)

Vaccine biotechnology. **Adv Vet Sci Comp Med** 1989; 33:1–444

Immunomodifiers in vaccines. Altman A, et al. **Adv Vet Sci Comp Med** 1989;33:301–43 (135 ref.)

Vaccines for parasitic infections. Barbet AF. **Adv Vet Sci Comp Med** 1989;33:345–75 (203 ref.)

The development of chemically synthesized vaccines. Brown F. **Adv Vet Sci Comp Med** 1989;33:173–93 (37 ref.)

The development of biosynthetic vaccines. Collett MS. **Adv Vet Sci Comp Med** 1989;33:109–72 (437 ref.)

Infectious recombinant vectored virus vaccines. Esposito JJ, et al. **Adv Vet Sci Comp Med** 1989;33:195–247 (242 ref.)

Active immunization against gonadotropin–releasing hormone combined with androgen supplementation is a promising antifertility vaccine for males. Ladd A, et al. **Am J Reprod Immunol Microbiol** 1988 Aug;17(4):121–7

Immunization of Saimiri sciureus boliviensis with recombinant vaccines based on the circumsporozoite protein of Plasmodium vivax. Collins WE, et al. **Am J Trop Med Hyg** 1989 May;40(5):455–64

Plasmodium vivax malaria: parasite biology defines potential targets for vaccine development. David PH, et al. **Biol Cell** 1988;64(2):251–60 (76 ref.)

Molecular dynamics of the alpha–helical epitope of a novel synthetic lipopeptide foot–and–mouth disease virus vaccine. Krug M, et al. **Biopolymers** 1989 Jan;28(1):499–512

ABC of modern vaccines. Geraint James D, et al. **Br J Clin Pract** 1987 Nov;41(11):1012–7 (31 ref.)

Role of non–human primates in malaria vaccine development: memorandum from a WHO meeting. **Bull WHO** 1988; 66(6):719–28

The gravimetric method for the determination of residual moisture in freeze–dried biological products. May JC, et al. **Cryobiology** 1989 Jun;26(3):277–84

Malaria vaccine [editorial] **East Afr Med J** 1988 Apr; 65(4):217–8

Prospects and problems for malaria vaccination: an African perspective. Mulla AF. **East Afr Med J** 1988 Apr; 65(4):219–23 (17 ref.)

Malaria vaccines: results of human trials and directions of current research. Cattani JA. **Exp Parasitol** 1989 Feb; 68(2):242–7 (23 ref.)

Vaccines for prevention of head and neck infections. Scheifele DW. **Infect Dis Clin North Am** 1988 Mar; 2(1):85–98 (37 ref.)

A preliminary evaluation of factors affecting an experimental system for vaccination–and–challenge with Haemonchus contortus in sheep. Adams DB. **Int J Parasitol** 1989 Apr; 19(2):169–75

Induction of resistance to Schistosoma mansoni infection in mice by purified parasite paramyosin. Flanigan TP, et al. **J Clin Invest** 1989 Mar;83(3):1010–4

Antiidiotypic antibody vaccine in murine Schistosomiasis mansoni comprising the internal image of antigen. Kresina TF, et al. **J Clin Invest** 1989 Mar;83(3):912–20

Veterinary vaccines: from plagues to percentages. Spier RE. **J Comp Pathol** 1988 Aug;99(2):121–31 (28 ref.)

Vaccination with the major secretory protein of Legionella pneumophila induces cell–mediated and protective immunity in a guinea pig model of Legionnaires' disease. Blander SJ, et al. **J Exp Med** 1989 Mar 1;169(3):691–705

Expression of glycoprotein D of herpes simplex virus type 1 in a recombinant baculovirus: protective responses and T cell recognition of the recombinant–infected cell extracts. Krishna S, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1805–14

Immunization with solid matrix–antibody–antigen complexes containing surface or internal virus structural proteins protects mice from infection with the paramyxovirus, simian virus 5. Randall RE, et al. **J Gen Virol** 1988 Oct; 69 (Pt 10):2517–26

Recombinant vaccinia virus/Venezuelan equine encephalitis (VEE) virus protects mice from peripheral VEE virus challenge. Kinney RM, et al. **J Virol** 1988 Dec; 62(12):4697–702

Effects and virulences of recombinant vaccinia viruses derived from attenuated strains that express the human T–cell leukemia virus type I envelope gene. Shida H, et al. **J Virol** 1988 Dec;62(12):4474–80

A synthetic peptide corresponding to the cleavage region of VP3 from rotavirus SA11 induces neutralizing antibodies. Streckert HJ, et al. **J Virol** 1988 Nov; 62(11):4265–9

Group A streptococcus vaccine may be ready for phase I clinical trials in late 1989 [news] Raymond CA. **JAMA** 1988 Nov 18;260(19):2778

Heat–stable versus heat–labile vaccines [letter] Muller CP, et al. **Lancet** 1988 Dec 17;2(8625):1424–5

Developing a human malaria sporozoite vaccine. Young JF, et al. **Microb Pathog** 1987 Apr;2(4):237–40 (16 ref.)

Eliminate poverty first... [letter] Antia NH. **Nature** 1988 Oct 13;335(6191):584

Indo–French agreement stresses vaccines [news] Jayaraman KS. **Nature** 1989 Jan 19;337(6204):197

New vaccine and initiative mean end of rabies in sight for Europe? [news] Newmark P. **Nature** 1988 Dec 1; 336(6198):416

DNA sequence of the gene encoding a Plasmodium falciparum malaria candidate vaccine antigen. Campbell JR. **Nucleic Acids Res** 1989 Jul 25;17(14):5854

Vaccines and vaccination strategies. **Parasitology** 1989;98 Suppl:S1–100

Mechanisms of immunity to malaria and the possibilities of a blood–stage vaccine: a critical appraisal. Butcher GA. **Parasitology** 1989 Apr;98 Pt 2:315–27 (134 ref.)

Parasite vaccines versus anti–parasite drugs: rivals or running mates? Gutteridge WE. **Parasitology** 1989;98 Suppl:S87–97 (68 ref.)

The Wellcome Trust lecture. Problems specific to parasite vaccines. Mitchell GF. **Parasitology** 1989;98 Suppl:S19–28 (67 ref.)

An update on candidate malaria vaccines. Mitchell GH. **Parasitology** 1989;98 Suppl:S29–47 (146 ref.)

Experiences with vaccines against cutaneous leishmaniasis: of men and mice. Modabber F. **Parasitology** 1989;98 Suppl:S49–60 (106 ref.)

Immunological control of ticks and tick–borne parasitic diseases of livestock. Morrison WI. **Parasitology** 1989;98 Suppl:S69–86 (121 ref.)

Basic concepts and new aspects of vaccine development. Roitt IM. **Parasitology** 1989;98 Suppl:S7–12 (5 ref.)

Schistosome vaccines: current progress and future prospects. Sher A, et al. **Parasitology** 1989;98 Suppl:S61–8 (25 ref.)

Proceedings of a workshop on vaccines for otitis media. Pittsburgh, PA, September 1–2, 1988. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S1–97

A vaccine for otitis media: is there a need? What are the prospects? Klein JO. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S7–8

The conformational restriction of synthetic peptides, including a malaria peptide, for use as immunogens. Satterthwait AC, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12;323(1217):565–72

Vaccine T–cell epitope selection by a peptide competition assay. Kilgus J, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1629–33

Recombinant system for overexpression of cholera toxin B subunit in Vibrio cholerae as a basis for vaccine development. Sanchez J, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):481–5

Development of asexual erythrocytic malaria vaccines. Chulay JD. **Prog Clin Biol Res** 1989;313:13–21 (34 ref.)

Active specific immunotherapy in the treatment of human cancers. Mitchell MS. **Prog Clin Biol Res** 1989;288:323–36

International Symposium on Vaccine Development and Utilization. Washington, D.C., 9–10 June 1986. Proceedings. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S491–667

What biotechnology has to offer vaccine development. Fields BN, et al. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S519–23 (26 ref.)

Improving the heat stability of vaccines: problems, needs, and approaches. Hilleman MR. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S613–6 (7 ref.)

Impediments to the development of additional vaccines: vaccines against important diseases that will not be available in the next decade. Jordan WS Jr. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S603–12 (30 ref.)

Extraction of protective components of Rickettsia rickettsii with n–octyl–beta–D–glucopyranoside. McDonald GA, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S382–5

Feasible improvements in vaccines in the Expanded Programme on Immunization. McIntosh K. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S530–7 (30 ref.)

Antisporozoite vaccine for malaria: experimental basis and current status. Nussenzweig RS, et al. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S579–85 (40 ref.)

Vaccines: obstacles and opportunities from discovery to use. Petricciani JC, et al. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S524–9

Importance of vaccines in child survival. Ramalingaswami V. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S498–502 (10 ref.)

Protection against streptococcal pharyngeal colonization with a vaccinia: M protein recombinant. Fischetti VA, et al. **Science** 1989 Jun 23;244(4911):1487–90

Cancer vaccines show promise at last [news] Marx JL. **Science** 1989 Aug 25;245(4920):813–5

South Carolina blocks test of rabies vaccine [news] Sun M.

Science 1989 Jun 30;244(4912):1535
Protection of cattle against rinderpest with vaccinia virus recombinants expressing the HA or F gene. Yilma T, et al. **Science** 1988 Nov 18;242(4881):1058–61
Development of asexual blood stage malaria vaccines. Kidson C. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):391–6
Vaccines for human malaria: epidemiological and immunological perspectives. Webster HK, et al. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):375–89 (59 ref.)
Development of malaria vaccines. Perrin LH, et al. **Trop Geogr Med** 1988 Jul;40(3):S6–21 (81 ref.)
Polyvalent recombinant antigens: a new vaccine strategy. Kingsman SM, et al. **Vaccine** 1988 Aug;6(4):304–6 (16 ref.)
Recombinant versus plasma-derived hepatitis B vaccines: issues of safety, immunogenicity and cost-effectiveness. Stephenne J. **Vaccine** 1988 Aug;6(4):299–303 (39 ref.)
Development of oral vaccines against enterotoxinogenic Escherichia coli diarrhoea. Svennerholm AM, et al. **Vaccine** 1989 Jun;7(3):196–8 (14 ref.)
Present and future applications of vaccinia virus as a vector. Hruby DE. **Vet Parasitol** 1988 Sep;29(2–3):281–92 (48 ref.)
Infectivity of cryopreserved Babesia bovis, Babesia bigemina and Anaplasma centrale for cattle after thawing, dilution and incubation at 30 degrees C. Jorgensen WK, et al. **Vet Parasitol** 1989 Jun;31(3–4):243–51
Discount chores [letter] Nelson RJ. **Vet Rec** 1988 Sep 10; 123(11):304
Efforts towards a vaccine against Toxoplasma gondii: a review. Hermentin K, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):423–36 (109 ref.)
[Synthetic vaccines for immunization against infection with hepatitis B virus] Hořejší J. **Cas Lek Cesk** 1989 Feb 10; 128(7):193–7 (Eng. Abstr.) (Cze)
[Genetic engineering and trends in the research on new vaccines] Hofnung M. **C R Soc Biol (Paris)** 1988; 182(2):141–57 (Eng. Abstr.) (Fre)
[Immunoprophylactic possibilities for the control of fowl coccidiosis] Jungmann R, et al. **Angew Parasitol** 1989 May; 30(2):79–85 (57 ref.) (Eng. Abstr.) (Ger)
[Progress report of the period 1 January 1986–31 December 1987] **Arb Paul Ehrlich Inst Georg Speyer Haus Ferdinand Blum Inst** 1989;(83):1–175 (Ger)
[Modern vaccination from the viewpoint of benefits, risks and costs—a survey. 14 March 1989, Munich] **Internist (Berlin)** 1989;30(7 Suppl):1–12 (Ger)
[Characteristics, indications for and adverse effects of various preparations with immunologic properties] Niedworok J. **Wiad Lek** 1988 Aug 1;41(15):1039–47 (Eng. Abstr.) (Pol)
[Vaccines with anti-idiotypic antibodies] Munk ME. **AMB Rev Assoc Med Bras** 1987 Nov–Dec;33(11–12):241–4 (32 ref.) (Por)
[Sterilization of serums and vaccines by cobalt gamma radiation] Guidolin R, et al. **Rev Saude Publica** 1988 Apr; 22(2):113–7 (Eng. Abstr.) (Por)
[The use of the gene responsible for formation of hemorrhage as a phenotypic marker in creating hybrid variations of vaccinia virus] Totmenin AV, et al. **Dokl Akad Nauk SSSR** 1989;305(5):1246–8 (Rus)

ADMINISTRATION & DOSAGE

Summary of safety and efficacy data on a yeast-derived hepatitis B vaccine. André FE. **Am J Med** 1989 Sep 4; 87(3A):14S–20S
Protective efficacy of a recombinant deoxyribonucleic acid hepatitis B vaccine in institutionalized mentally handicapped clients. Van Damme P, et al. **Am J Med** 1989 Sep 4;87(3A):26S–29S
Immunization strategies for the immunocompromised host: the need for immunoadjuvants. Hibberd PL, et al. **Ann Intern Med** 1989 Jun 15;110(12):955–6 (14 ref.)
Vaccinia virus: a suitable vehicle for recombinant vaccines? Kaplan C. **Arch Virol** 1989;106(1–2):127–39 (54 ref.)
Hepatitis B immunization in high risk neonates born from HBsAg positive mothers: comparison between plasma derived and recombinant DNA vaccine. Pongpipat D, et al. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):37–40
Liposomes as carriers for a human malaria sporozoite vaccine. Richards RL, et al. **Biochem Soc Trans** 1988 Dec; 16(6):921–2
Malaria: the search for vaccine antigens and new chemotherapeutic strategies. Howard RJ. **Blood** 1989 Aug 1;74(2):533–6 (9 ref.)
Biodegradable microspheres: vaccine delivery system for oral immunization. Eldridge JH, et al. **Curr Top Microbiol Immunol** 1989;146:59–66
Immunization of chickens with live Escherichia coli expressing Eimeria acervulina merozoite recombinant antigen induces partial protection against coccidiosis. Kim KS, et al. **Infect Immun** 1989 Aug;57(8):2434–40
Characterization of integral membrane proteins of Leishmania major by Triton X-114 fractionation and analysis of vaccination effects in mice. Murray PJ, et al. **Infect Immun** 1989 Jul;57(7):2203–9
Vaccine-preventable diseases on college campuses: the emergence of mumps. Williams WW, et al. **J Am Coll Health** 1989 Mar;37(5):197–203
Vaccination against murine cutaneous leishmaniasis by using Leishmania major antigen/liposomes. Optimization and assessment of the requirement for intravenous immunization. Kahl LP, et al. **J Immunol** 1989 Jun 15; 142(12):4441–9
Class II restriction in mice to the malaria candidate vaccine ring infected erythrocyte surface antigen (RESA) as synthetic peptides or as expressed in recombinant vaccinia. Lew AM, et al. **J Immunol** 1989 Jun 1;142(11):4012–6
Protective immunity in mice vaccinated with the Schistosoma mansoni P-28–1 antigen. Wolowczuk I, et al. **J Immunol** 1989 Feb 15;142(4):1342–50
Comparison of results of recombinant and plasma-derived hepatitis B vaccines in Japanese nursery-school children. Hayashi J, et al. **J Infect** 1988 Jul;17(1):49–55
Possibilities of using nanoparticles as carriers for drugs and vaccines. Kreuter J. **J Microencapsul** 1988 Apr–Jun; 5(2):115–27 (74 ref.)
A synthetic luteinizing hormone releasing hormone vaccine II. Temporal aspects of titer development and formulation trials in BALB/c mice. Silversides DW, et al. **J Reprod Immunol** 1988 Oct;14(1):47–58
Measles/mumps/rubella vaccine [news] **Lancet** 1988 Oct 8; 2(8615):860
Intradermal hepatitis B vaccine [letter] Lunn JA. **Lancet** 1989 Mar 18;1(8638):625
Smallpox vaccination for investigators using vaccinia recombinants [letter] Wenzel RP, et al. **Lancet** 1989 Sep 9;2(8663):630–1
Hepatitis B vaccines [letter] **N Z Med J** 1988 Dec 14; 101(859):831
International travel and the child younger than two years: I. Recommendations for immunization. Preblud SR, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):416–25 (63 ref.)
Development of animal recombinant DNA vaccine and its efficacy in foxes. Kieny MP, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S799–802
Efficacy of a vaccinia–rabies glycoprotein recombinant virus vaccine in raccoons (Procyon lotor). Rupprecht CE, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S803–9
Vaccinia–interleukin 2 recombinant virus or exogenous interleukin 2 does not alter the magnitude or immune response gene defects of the cytotoxic T-cell response to vaccinia virus in vivo. Müllbacher A, et al. **Scand J Immunol** 1989 Jan;29(1):1–6
Towards a live oral vaccine against enterotoxigenic Escherichia coli of swine. Attridge S, et al. **Vaccine** 1988 Oct;6(5):387–9
Persistence of antibodies following vaccination with a yeast-derived recombinant hepatitis B vaccine. Just M, et al. **Vaccine** 1988 Oct;6(5):401–2
Use of recombinant vaccinia–rabies virus for oral vaccination of fox cubs (Vulpes vulpes, L) against rabies. Brochier BM, et al. **Vet Microbiol** 1988 Oct;18(2):103–8
[A potential AIDS vaccine tester (news)] **Fortschr Med** 1988 Jul 30;106(22):14–5 (Ger)
[AIDS research. Cooperation is extended] **Fortschr Med** 1989 Jan 30;107(3):14 (Ger)
[Comment on the contribution by F. Ehring: Regression of over 150 skin metastases of malignant melanoma by homeopathic complex therapy] Grond K. **Hautarzt** 1989 Jul;40(7):464 (Ger)
[Comparative studies of the effectiveness of specific immunotherapy in house dust mite allergy] Ebner H, et al. **Wien Klin Wochenschr** 1989 Aug 4;101(15):504–11 (Eng. Abstr.) (Ger)
[AIDS: possibilities of active immunization] Heinz F. **Wien Med Wochenschr** 1988 Oct 31;138(19–20):535–7 (10 ref.) (Eng. Abstr.) (Ger)
[Possible immunologic prevention of recurrences and metastases of gastric cancer after its radical surgical treatment] Ageenko AI, et al. **Sov Med** 1988;(10):27–30 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Hazards with desensitising vaccines. Rawlins MD, et al. **Arb Paul Ehrlich Inst Bundesamt Sera Impfstoffe Frankf A M** 1988;(82):147–51
Adverse events temporally associated with immunizing agents—1987 report. Koch J, et al. **Can Dis Wkly Rep** 1989 Jul 29;15(30):151–8 (Eng, Fre)
Vaccine adverse reactions in young children in Ontario. Morrison H, et al. **Can J Public Health** 1988 Nov–Dec; 79(6):459–60
Sensitization to aluminium by aluminium-precipitated dust and pollen extracts. Castelain PY, et al. **Contact Dermatitis** 1988 Jul;19(1):58–60
Acute sixth nerve palsy following vaccination [letter] Reynolds DJ, et al. **J Infect** 1988 Jul;17(1):84–5
Safety of vaccines [letter] Reid S. **N Z Med J** 1988 Sep 28; 101(854):615
Guillain–Barré syndrome following immunisation with synthetic hepatitis B vaccine [letter] Tuohy PG. **N Z Med J** 1989 Mar 8;102(863):114–5
Febrile seizures after immunization with meningococcal A + C vaccine. Novelli VM, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):250–1
Adverse reaction to vaccine? [letter] Cook KC, et al. **Vet Rec** 1989 May 27;124(21):570–1
The need for characterization of pathogenicity genes of recombinant DNA viruses used as human vaccines. Becker Y. **Virus Genes** 1987 Nov;1(1):117–20
[Doubts and errors in vaccinations] González A. **An Esp Pediatr** 1988 Sep;29 Suppl 33:38–41 (13 ref.) (Spa)

ANALYSIS

Identification of T epitopes within a potential Plasmodium falciparum vaccine antigen. A study of human lymphocyte responses to repeat and nonrepeat regions of Pf155/RESA [published erratum appears in J Immunol 1989 Apr 15;142(8):2968] Rzepczyk CM, et al. **J Immunol** 1988 Nov 1;141(9):3197–202
Quantitation of putative glycoprotein X in bioengineered pseudorabies vaccine virus culture medium by ELISA. Eaton LC. **J Immunol Methods** 1989 Mar 10;118(1):125–8
In vitro assessment of viral antigen content in inactivated aluminum hydroxide adjuvanted vaccines. Katz JB, et al. **J Virol Methods** 1989 Jul;25(1):101–8

CHEMICAL SYNTHESIS

Development of an asexual blood stage malaria vaccine. Moreno A, et al. **Blood** 1989 Aug 1;74(2):537–46 (73 ref.)

DIAGNOSTIC USE

[Synthetic antigens in the diagnosis of viral diseases] Bektimirov TA, et al. **Vopr Virusol** 1989 Mar–Apr; 34(2):133–9 (48 ref.) (Rus)

GENETICS

Toxoid of Pseudomonas aeruginosa exotoxin A generated by deletion of an active-site residue. Lukač M, et al. **Infect Immun** 1988 Dec;56(12):3095–8
Antigenic analysis of the Epstein–Barr virus major membrane antigen (gp350/220) expressed in yeast and mammalian cells: implications for the development of a subunit vaccine. Emini EA, et al. **Virology** 1988 Oct;166(2):387–93

HISTORY

[Mexican contributions to vaccines] Kumate J, et al. **Gac Med Mex** 1988 Mar–Apr;124(3–4):73–97 (Spa)

IMMUNOLOGY

Assessment of the prevalence and titer of antibodies to a candidate schistosomiasis vaccine molecule, Sj26, in several human serum banks. Lightowlers MW, et al. **Acta Trop (Basel)** 1989 Jul;46(4):229–38
Antigenic properties of vaccinia virus and of the virus recombinant strains expressing heterologous genes. Chelyapov NV, et al. **Acta Virol (Praha)** 1988 Sep; 32(5):409–16
Possibilities and limitations of synthetic peptide vaccines. Barteling SJ. **Adv Biotechnol Processes** 1988;10:25–60 (206 ref.)
Synthetic T and B cell recognition sites: implications for vaccine development. Milich DR. **Adv Immunol** 1989; 45:195–282 (485 ref.)
Immune response to vaccination. Osburn BI, et al. **Adv Vet Sci Comp Med** 1989;33:93–108 (68 ref.)
Large-scale production and purification of a vaccinia recombinant-derived HIV-1 gp160 and analysis of its immunogenicity. Barrett N, et al. **AIDS Res Hum Retroviruses** 1989 Apr;5(2):159–71
Isolate- and group-specific immune responses to the envelope protein of human immunodeficiency virus induced by a live recombinant vaccinia virus in macaques. Earl PL, et al. **AIDS Res Hum Retroviruses** 1989 Feb; 5(1):23–32
Plasma-derived and yeast-derived hepatitis B vaccines. Ellis RW, et al. **Am J Infect Control** 1989 Jun;17(3):181–9 (12 ref.)
Clinical experience with hepatitis B vaccines. West DJ. **Am J Infect Control** 1989 Jun;17(3):172–80 (6 ref.)
Differential non-responsiveness in humans of candidate Plasmodium falciparum vaccine antigens. Quakyi IA, et al. **Am J Trop Med Hyg** 1989 Aug;41(2):125–34
Kinetics of in vivo tumor cell destruction after specific immunization. Orbach-Arbouys S, et al. **Anticancer Res** 1989 Jan–Feb;9(1):97–101
Anti-idiotypic antibodies as vaccine candidates. The immune network. Rico MJ, et al. **Arch Dermatol** 1989 Feb; 125(2):271–5 (41 ref.)
Immunization of foxes against rabies with a vaccinia recombinant virus expressing the rabies glycoprotein. Tolson ND, et al. **Arch Virol** 1988;102(3–4):297–301
Evaluation of serum and secretory antibody responses to an immunodominant recombinant merozoite surface antigen, p150, using a sensitive enzyme-linked immunosorbent assay. Kim KS, et al. **Avian Dis** 1989 Jul–Sep;33(3):431–7
Cyclophosphamide potentiates the antitumor activity of v-p97NY. Estin CD, et al. **Cell Immunol** 1989 Apr 15; 120(1):126–31
HIV-specific T lymphocyte immunity in mice immunized with a recombinant vaccinia virus. Michel F, et al. **Eur J Immunol** 1988 Dec;18(12):1917–24
The real difficulties for malaria sporozoite vaccine development: nonresponsiveness and antigenic variation. Good MF, et al. **Immunol Today** 1988 Nov;9(11):351–5 (53 ref.)
Major histocompatibility complex control of immunity elicited by genetically engineered Eimeria tenella (Apicomplexa) antigen in chickens. Clare RA, et al. **Infect Immun** 1989 Mar;57(3):701–5

Altered virulence and vaccination properties of Leishmania parasites grown in infected vaccinated mice. Gorczynski RM. **Infect Immun** 1989 Aug;57(8):2430–3

Effectiveness of natural and synthetic complexes of porin and O polysaccharide as vaccines against Brucella abortus in mice. Winter AJ, et al. **Infect Immun** 1988 Nov; 56(11):2808–17

Four-year experience with a recombinant hepatitis B vaccine. Jilg W, et al. **Infection** 1989 Mar–Apr;17(2):70–6

Immunogenicity of three recombinant Treponema pallidum antigens examined in guinea pigs. Wicher K, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):128–35

Micro-immunofluorescence antibody responses to trachoma vaccines. Wang SP, et al. **Int Ophthalmol** 1988;12(1):73–80

Production of antibody to lipopolysaccharide (LPS) after immunization with a LPS–polymyxin B–agarose immunogen. Ryan LK, et al. **J Appl Bacteriol** 1988 Jun; 64(6):487–95

Structural baris of antigen recognition by T lymphocytes. Implications for vaccines. Berzofsky JA. **J Clin Invest** 1988 Dec;82(6):1811–7 (89 ref.)

Evidence for a 6.5-day minimum exoerythrocytic cycle for Plasmodium falciparum in humans and confirmation that immunization with a synthetic peptide representative of a region of the circumsporozoite protein retards infection. Murphy JR, et al. **J Clin Microbiol** 1989 Jul;27(7):1434–7

Target antigens of malaria transmission blocking immunity. Kaushal DC, et al. **J Commun Dis** 1987 Dec;19(4):417–21

Qualitative and quantitative differences in the immune response to foot-and-mouth disease virus antigens and synthetic peptides. Francis MJ, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2483–91

Immunosuppression of the antibody response to respiratory syncytial virus (RSV) by pre-existing serum antibodies: partial prevention by topical infection of the respiratory tract with vaccinia virus–RSV recombinants. Murphy BR, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2185–90

Humoral and cytotoxic T cell immune responses to internal and external structural proteins of simian virus 5 induced by immunization with solid matrix–antibody–antigen complexes. Randall RE, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2505–16

Protection of woodchucks from infection with woodchuck hepatitis virus by immunization with recombinant core protein. Roos S, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2087–95

Effect of oligosaccharide chain length, exposed terminal group, and hapten loading on the antibody response of human adults and infants to vaccines consisting of Haemophilus influenzae type b capsular antigen unterminally coupled to the diphtheria protein CRM197. Anderson PW, et al. **J Immunol** 1989 Apr 1;142(7):2464–8

Immune response gene regulation of immunity to Plasmodium berghei sporozoites and circumsporozoite protein vaccines. Overcoming genetic restriction with whole organism and subunit vaccines. Hoffman SL, et al. **J Immunol** 1989 May 15;142(10):3581–4

Interdependence of CD4+ T cells and malarial spleen in immunity to Plasmodium vinckei vinckei. Relevance to vaccine development. Kumar S, et al. **J Immunol** 1989 Sep 15;143(6):2017–23

Cell-mediated immune responses to vaccine peptides derived from the circumsporozoite protein of Plasmodium falciparum. Russo DM, et al. **J Immunol** 1989 Jul 15; 143(2):655–9

Immunologic control of a parasitic arthropod. Identification of a protective antigen from Boophilus microplus. Willadsen P, et al. **J Immunol** 1989 Aug 15;143(4):1346–51

Recombinant vaccinia viruses and the development of immunization strategies using influenza virus. Doherty PC, et al. **J Infect Dis** 1989 Jun;159(6):1119–22

Herpes simplex virus type 1–vaccinia virus recombinant expressing glycoprotein B: protection from acute and latent infection. Willey DE, et al. **J Infect Dis** 1988 Dec; 158(6):1382–6

Protective effect of a synthetic peptide comprising the complete preS2 region of the hepatitis B virus surface protein. Emini EA, et al. **J Med Virol** 1989 May;28(1):7–12

Comparison of the immunogenicity of reduced doses of two recombinant DNA hepatitis B vaccines in New Zealand children. Milne A, et al. **J Med Virol** 1989 Mar;27(3):264–7

A synthetic adjuvant effective in inducing antitumor immunity. Kataoka T, et al. **Jpn J Cancer Res** 1988 Jul; 79(7):817–20

Plasma-derived versus recombinant hepatitis B vaccines [letter] Kurtz JB, et al. **Lancet** 1989 Feb 25;1(8635):451

Prospects for a nonliving vaccine against schistosomiasis based on cell-mediated immune resistance mechanisms. James SL, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:121–3

GP38, P28-I and P28-II: candidates for a vaccine against schistosomiasis. Pierce RJ, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:111–4

Yersinia enterocolitica O:9 as a potential live oral carrier for protective antigens. Sory MP, et al. **Microb Pathog** 1988 Jun;4(6):431–42

Minimal variation in a vaccine candidate from the sexual stage of Plasmodium falciparum. Kaslow DC, et al. **Mol Biochem Parasitol** 1989 Jan 1;32(1):101–3

Affinity consideration in the design of synthetic vaccines intended to elicit antibodies. Jemmerson R, et al. **Mol Immunol** 1989 Mar;26(3):301–7

The safety and immunogenicity of a recombinant hepatitis B vaccine in neonates. Gunn TR, et al. **N Z Med J** 1989 Jan 25;102(860):1–3

Trial of SKF rDNA hepatitis B vaccine [letter] Milne A. **N Z Med J** 1989 Apr 26;102(866):198–9

Vaccination trials in rhesus monkeys with a minor, invariant, Plasmodium knowlesi 66 kD merozoite antigen. Deans JA, et al. **Parasite Immunol** 1988 Sep;10(5):535–52

Identification of a peptide sequence of the 25 kD surface protein of Plasmodium falciparum recognized by transmission-blocking monoclonal antibodies: implications for synthetic vaccine development. van Amerongen A, et al. **Parasite Immunol** 1989 Jul;11(4):425–8

Design and development of pilus vaccines for Haemophilus influenzae diseases. Brinton CC Jr, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S54–61 (31 ref.)

Structural features of T-cell recognition: applications to vaccine design. Berzofsky JA. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):535–44 (62 ref.)

Modulation of IgG subclass expression during antibody responses in sheep. Kerlin RL, et al. **Res Vet Sci** 1988 Nov; 45(3):353–9

Malaria vaccines. Kinoshita J. **Sci Am** 1988 May;258(5):34, 36

Limited immunological recognition of critical malaria vaccine candidate antigens. Good MF, et al. **Science** 1988 Oct 28;242(4878):574–7

Stability of an antifertility vaccine consisting of gonadotropin subunits linked to tetanus toxoid. Alam A, et al. **Vaccine** 1989 Apr;7(2):129–31

Putative failures of recombinant DNA hepatitis B vaccines [letter] Arya SC. **Vaccine** 1989 Apr;7(2):164–5

Controlled organization of multimolecular complexes of enveloped virus glycoproteins: study of immunogenicity. Berezin VE, et al. **Vaccine** 1988 Oct;6(5):450–6

Immunogenicity of a heat-treated recombinant DNA hepatitis B vaccine [published erratum appears in Vaccine 1989 Feb;7(1):77] Just M, et al. **Vaccine** 1988 Oct; 6(5):399–400

Antibody response to a foreign epitope expressed at the surface of recombinant bacteria: importance of the route of immunization. Leclerc C, et al. **Vaccine** 1989 Jun; 7(3):242–8

Antibodies to synthetic peptides from the preS1 region of the hepatitis B virus (HBV) envelope (env) protein are virus-neutralizing and protective. Neurath AR, et al. **Vaccine** 1989 Jun;7(3):234–6

Immunogenicity of a recombinant vaccinia virus expressing envelope a glycoprotein of bovine leuksemia virus. Ohishi K, et al. **Vaccine** 1988 Oct;6(5):428–32

Anti-fertility vaccines. Talwar GP, et al. **Vaccine** 1989 Apr; 7(2):97–101 (47 ref.)

Immunogenicity of low doses of recombinant hepatitis B vaccine in young males. Tsakalakis C, et al. **Vaccine** 1988 Aug;6(4):328–30

Improved recombinant LC16m0 or LC16m8 vaccinia virus successfully expressing hepatitis B surface antigen. Watanabe K, et al. **Vaccine** 1989 Feb;7(1):53–9

Feline leukemia virus vaccine: new developments. Lewis MG, et al. **Vet Microbiol** 1988 Jul;17(3):297–308 (20 ref.)

Immunization with a vaccinia recombinant expressing the F protein protects rabbits from challenge with a lethal dose of rinderpest virus. Barrett T, et al. **Virology** 1989 May; 170(1):11–8

Protection of chickens from lethal influenza infection by vaccinia-expressed hemagglutinin. Chambers TM, et al. **Virology** 1988 Dec;167(2):414–21

Protection of guinea pigs from Lassa fever by vaccinia virus recombinants expressing the nucleoprotein or the envelope glycoproteins of Lassa virus. Morrison HG, et al. **Virology** 1989 Jul;171(1):179–88

Baculovirus expression of the M genome segment of Rift Valley fever virus and examination of antigenic and immunogenic properties of the expressed proteins. Schmaljohn CS, et al. **Virology** 1989 May;170(1):184–92

Vaccinia virus recombinants expressing rabiesvirus glycoprotein protect against rabies. Esposito J, et al. **Virus Genes** 1987 Nov;1(1):7–21

The use of synthetic antigens for diagnosis of infectious diseases. Report of a WHO Scientific Group. **WHO Tech Rep Ser** 1989;784:1–74 (236 ref.)

[Use of synthetic peptides in virology] Truyen U, et al. **DTW** 1989 Feb;96(2):69–72 (Eng. Abstr.) (Ger)

[Immunization against HIV. Problems in developing a vaccine] Uhl D. **Med Monatsschr Pharm** 1988 Nov; 11(11):376–8 (2 ref.) (Ger)

[Multifactor immunopharmacological analysis. Effect of rifampicin and low-molecular immunomodulator of microbial origin on the primary immune response to fraction 1 of vaccine EV.] Nikitin AV, et al. **Antibiot Khimioter** 1988 Oct;33(10):763–7 (Eng. Abstr.) (Rus)

[Molecular mechanisms of proteolytic processing of viral proteins and the problem of antiviral chemotherapy and vaccine design] Zhirnov OP. **Mol Biol (Mosk)** 1988 May–Jun;22(3):581–600 (163 ref.) (Eng. Abstr.) (Rus)

[Immunogenic activity of synthetic brucellosis antigens] Petrov RV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jul;(7):39–43 (Eng. Abstr.) (Rus)

[Immunoenzyme analysis in a system of serologic evaluation of louse-borne typhus vaccines] Pshenichnov VA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):79–82 (Eng. Abstr.) (Rus)

[Neutralization of foot-and-mouth disease virus O1 Campos by antibodies induced by a synthetic peptide] Piccone M, et al. **Rev Argent Microbiol** 1988 Apr–Jun;20(2):69–75 (Eng. Abstr.) (Spa)

[Serologic demonstration of the activity of a Mycobacterium leprae antigen obtained by chemical synthesis] González-Abreu Castells E, et al. **Rev Cubana Med Trop** 1989 Jan–Apr;41(1):10–7 (Eng. Abstr.) (Spa)

ISOLATION & PURIFICATION

Structure and function of candidate vaccine antigens in Plasmodium falciparum. Anders RF, et al. **Biochem Soc Symp** 1987;53:103–14 (66 ref.)

Characterization and vaccine potential of a novel recombinant coccidial antigen. Miller GA, et al. **Infect Immun** 1989 Jul;57(7):2014–20

Anti-idiotypic antibodies as idiotope vaccines that induce immunity against infectious agents. Kennedy RC, et al. **Int Rev Immunol** 1986 Jan;1(1):67–78 (39 ref.)

Rational design and application of idiotope vaccines. Kieber-Emmons T, et al. **Int Rev Immunol** 1986 Jan; 1(1):1–26 (69 ref.)

Helper T-cell determinants in vaccine design. Brown F. **J Autoimmun** 1989 Jun;2 Suppl:251–5

An improved immunogen for anti-human chorionic gonadotropin vaccine eliciting antibodies reactive with a conformation native to the hormone without cross-reaction with human follicle stimulating hormone and human thyroid stimulating hormone. Talwar GP, et al. **J Reprod Immunol** 1988 Dec;14(3):203–12

Immunization against Plasmodium falciparum with recombinant polypeptides produced in Escherichia coli. Holder AA, et al. **Parasite Immunol** 1988 Nov;10(6):607–17

Strategies for vaccine development and utilization. Kidson C. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):343–8

Malaria vaccines: experience with sporozoite vaccines against falciparum malaria. Levine MM, et al. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):369–74

[Vaccinology: the development, preparation, control and administration of vaccines] Ruitenberg EJ. **Ned Tijdschr Geneeskd** 1989 Apr 29;133(17):863–4 (Dut)

[Synthetic gene technology for new vaccines] Mäkelä PH. **Duodecim** 1988;104(22):1874–80 (23 ref.) (Fin)

[Malaria: vaccines and clinical trials] Fernex M, et al. **Schweiz Rundsch Med Prax** 1988 Dec 6;77(49):1341–2 (32 ref.) (Ger)

PHARMACOLOGY

Cell-mediated immune proliferative responses to HIV-1 of chimpanzees vaccinated with different vaccinia recombinant viruses. Van Eendenburg JP, et al. **AIDS Res Hum Retroviruses** 1989 Feb;5(1):41–50

Inhibition of HIV-1 replication and syncytium formation by synthetic CD4 peptides. Hayashi Y, et al. **Arch Virol** 1989; 105(1–2):129–35

A synthetic luteinizing hormone releasing hormone vaccine. I. Conjugation and specificity trials in BALB/c mice. Silverides DW, et al. **J Reprod Immunol** 1988 Aug; 13(3):249–61

Schistosoma mansoni: migration and attrition of challenge parasites in naive rats and rats protected with vaccine serum. Ward RE, et al. **Parasite Immunol** 1989 Mar; 11(2):125–46

Semisynthetic anti-LHRH vaccine causing atrophy of the prostate. Jayashankar R, et al. **Prostate** 1989;14(1):3–11

STANDARDS

Advantages of modern biotechnical developments for vaccine production in developing countries. Seifert HS, et al. **DTW** 1988 Jul–Aug;95(7):266–8 (8 ref.)

Assessing vaccine efficacy in the field. Further observations. Orenstein WA, et al. **Epidemiol Rev** 1988;10:212–41 (115 ref.)

Storage of vaccines [letter] Singh T. **Indian J Pediatr** 1988 May–Jun;55(3):460

A simple screening method for field evaluation of vaccine efficacy. Kim-Farley R, et al. **J Commun Dis** 1988 Mar; 20(1):32–7

On sample sizes to estimate the protective efficacy of a vaccine. O'Neill RT. **Stat Med** 1988 Dec;7(12):1279–88

[State control of vaccines] Künzel W, et al. **Z Gesamte Hyg** 1989 Feb;35(2):66–71 (Eng. Abstr.) (Ger)

SUPPLY & DISTRIBUTION

New vaccines. Stanley PJ, et al. **Br J Hosp Med** 1989 Apr; 41(4):364–7 (18 ref.)

Biotechnological trends towards synthetic vaccines. Liew FY. **Immunol Lett** 1988 Nov;19(3):241–4

Vaccines: around which corner? Ogilvie BM. **Immunol Lett** 1988 Nov;19(3):245–50

Vaccine delivery management. Cheyne J. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S617–22

Role of nongovernmental agencies in vaccine delivery. ma-Disu M. **Rev Infect Dis** 1989 May–Jun;11 Suppl

3:S646–8
Vaccine distribution: an operations research study. Subramanyam K. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S623–8
Obstacles to developing vaccines for the Third World. Robbins A, et al. **Sci Am** 1988 Nov;259(5):126–33

TOXICITY

Development of local morphological changes after intradermal inoculatioe of Q–fever chemovaccine. Reil M, et al. **Acta Virol (Praha)** 1989 Mar;33(2):167–71

VACCINES, ATTENUATED

Genetic control of vaccine–induced immunity against a parasitic helminth, Schistosoma mansoni. Sher A, et al. **Bioessays** 1988 Nov;9(5):163–6 (25 ref.)
Differences in replication of attenuated and neurovirulent polioviruses in human neuroblastoma cell line SH–SY5Y. La Monica N, et al. **J Virol** 1989 May;63(5):2357–60
Genetics of cold–adapted B/Ann Arbor/1/66 influenza virus reassortants: the acidic polymerase (PA) protein gene confers temperature sensitivity and attenuated virulence. Donabedian AM, et al. **Microb Pathog** 1987 Aug; 3(2):97–108
Influence of live virus vaccination against infectious bursal disease on coccidial infection in chickens. Onaga H, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):463–5
Rubella virus: mechanism of attenuation in the vaccine strain (HPV77). Nakhasi HL, et al. **Virus Res** 1989 Jul; 13(3):231–43
[Oral vaccination with live attenuated rotavirus] Escobar Castro H, et al. **An Esp Pediatr** 1988 Jun;28(6):527–9 (Eng. Abstr.) (Spa)

ADMINISTRATION & DOSAGE

Characterization of porin and ompR mutants of a virulent strain of Salmonella typhimurium: ompR mutants are attenuated in vivo. Dorman CJ, et al. **Infect Immun** 1989 Jul;57(7):2136–40
Characteristics of protective immunity in mice induced by drug–attenuated larvae of Schistosoma mansoni. Antigen localization and antibody responses. Mountford AP, et al. **J Immunol** 1989 Aug 1;143(3):989–95
Protection of Peruvian children against rotavirus diarrhea of specific serotypes by one, two, or three doses of the RIT 4237 attenuated bovine rotavirus vaccine. Lanata CF, et al. **J Infect Dis** 1989 Mar;159(3):452–9
[Rubella screening in school girls using the radial hemolysis test and their vaccination with attenuated live vaccine of the RA.23/3 strain] Strauss J, et al. **Z Gesamte Hyg** 1988 Oct;34(10):589–91 (Eng. Abstr.) (Ger)
[Herpes simplex infections] Kimmig W. **Z Hautkr** 1989 Apr 15;64(4):266–8, 271 (16 ref.) (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Chronic splenitis as a possible complicating factor in calves inoculated with an attenuated redwater vaccine. Ehret WJ, et al. **J S Afr Vet Assoc** 1987 Sep;58(3):131–4

ANALYSIS

Expression of the major surface glycoprotein of Leishmania donovani chagasi in virulent and attenuated promastigotes. Wilson ME, et al. **J Immunol** 1989 Jul 15;143(2):678–84

GENETICS

Determinants in the 5' noncoding region of poliovirus Sabin 1 RNA that influence the attenuation phenotype. Kawamura N, et al. **J Virol** 1989 Mar;63(3):1302–9
Mapping of attenuating sequences of an avirulent poliovirus type 2 strain. Moss EG, et al. **J Virol** 1989 May; 63(5):1884–90
Genetic basis of attenuation of the Sabin type 3 oral poliovirus vaccine. Westrop GD, et al. **J Virol** 1989 Mar; 63(3):1338–44
Identification of sequence changes in the cold–adapted, live attenuated influenza vaccine strain, A/Ann Arbor/6/60 (H2N2). Cox NJ, et al. **Virology** 1988 Dec;167(2):554–67

IMMUNOLOGY

Toward understanding the molecular basis for attenuation of picornaviruses. Cohen JI. **Adv Virus Res** 1989;36:153–80 (124 ref.)
T lymphocyte cytotoxicity with natural varicella–zoster virus infection and after immunization with live attenuated varicella vaccine. Diaz PS, et al. **J Immunol** 1989 Jan 15; 142(2):636–41
Study of bivalent dengue vaccine in volunteers [letter] Bhamarapravati N, et al. **Lancet** 1989 May 13;1(8646):1077
Acquirement of protective immunity in mice through infection with an attenuated isolate and its failure in parent virulent Plasmodium berghei. Waki S, et al. **Parasitol Res** 1989;75(8):614–8
Schistosoma mansoni: circulating and pulmonary leucocyte responses related to the induction of protective immunity in mice by irradiated parasites. Menson EN, et al. **Parasitology** 1989 Feb;98 (Pt 1):43–55
[Immunization against HIV. Problems in developing a vaccine] Uhl D. **Med Monatsschr Pharm** 1988 Nov; 11(11):376–8 (2 ref.) (Ger)
[Selective resistance of human neuroblastoma cells to a vaccine strain of poliomyelitis virus] Tol'kaia EA, et al. **Dokl Akad Nauk SSSR** 1989;305(4):987–9 (Rus)

ISOLATION & PURIFICATION

Development of a live attenuated vaccine against coccidiosis of poultry. Shirley MW. **Parasite Immunol** 1989 Mar; 11(2):117–24

THERAPEUTIC USE

A trial of RIT–4237 rotavirus vaccine in 1–month–old infants. Mutz ID, et al. **Eur J Pediatr** 1989 Jun;148(7):634–5

TOXICITY

Pathology resulting from the administration of a live attenuated anti–Schistosoma haematobium vaccine in baboons [published erratum appears in Am J Trop Med Hyg 1989 Jul;41(1):2] Byram JE, et al. **Am J Trop Med Hyg** 1989 Jan;40(1):55–65

VACCINES, INACTIVATED

Immunomodulation of experimental murine herpes simplex keratitis: I. UV–HSV protection. Thompson P, et al. **Curr Eye Res** 1988 Nov;7(11):1043–9
Protection against bovine rotaviruses in newborn calves by continuous feeding of immune colostrum. Tsunemitsu H, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):300–8
Comparative study of the safety and protective value, in pre–exposure use, of rabies vaccine cultivated on human diploid cells (HDCV) and of the new vaccine grown on Vero cells. Ajjan N, et al. **Vaccine** 1989 Apr;7(2):125–8
Towards a second generation of inactivated vaccines. Use of herpesvirus (feline rhinotracheitis virus) subunits for the prevention of cat flu. Saint–Gérand AL. **Vaccine** 1988 Dec; 6(6):468–9
[Inactivation methods of Mycobacterium leprae as a leprosy vaccine] Mori T, et al. **Nippon Rai Gakkai Zasshi** 1987 Oct–Dec;56(4):172–5 (Eng. Abstr.) (Jpn)

ADMINISTRATION & DOSAGE

Contagious caprine pleuropneumonia: some observations in a field vaccination trial using inactivated Mycoplasma strain F38. Litamoi JK, et al. **Trop Anim Health Prod** 1989 May;21(2):146–50

ANALYSIS

In vitro assessment of viral antigen content in inactivated aluminum hydroxide adjuvanted vaccines. Katz JB, et al. **J Virol Methods** 1989 Jul;25(1):101–8

IMMUNOLOGY

Immunogenicity study of a plasma–derived heat–inactivated hepatitis–B vaccine in newborn babies: a randomised dose–response study. Ip HM, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):367–71
Nonspecific reactions to Mycoplasma serum plate antigens induced by inactivated poultry disease vaccines. Yoder HW Jr. **Avian Dis** 1989 Jan–Mar;33(1):60–8
Immunogenicity of two formulations of oral cholera vaccine comprised of killed whole vibrios and the B subunit of cholera toxin. Migasena S, et al. **Infect Immun** 1989 Jan; 57(1):117–20
Antibody–independent protection against Pseudomonas aeruginosa infection in mice after treatment with a homologous strain vaccine. Fujimura T, et al. **J Med Microbiol** 1989 Feb;28(2):101–8
Fecal immunoglobulin A (IgA) antibodies to Yersinia enterocolitica in mice orally vaccinated and infected. Shimono K, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):273–7
Interleukin 2 acts as an adjuvant to increase the potency of inactivated rabies virus vaccine. Nunberg JH, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4240–3
Efficacy of an inactivated oil–adjuvanted rotavirus vaccine in the control of calf diarrhoea in beef herds in Argentina. Bellinzoni RC, et al. **Vaccine** 1989 Jun;7(3):263–8
Serological responses in cats vaccinated with FeLV ISCOM and an inactivated FeLV vaccine. Osterhaus A, et al. **Vaccine** 1989 Apr;7(2):137–41
[The humoral and cell–mediated immune response induced by the NIVGRIP inactivated influenza vaccine] Mihail A, et al. **Virologie** 1988 Jul–Sep;39(3):185–98 (Eng. Abstr.) (Fre)
[Immunization against HIV. Problems in developing a vaccine] Uhl D. **Med Monatsschr Pharm** 1988 Nov; 11(11):376–8 (2 ref.) (Ger)
[Allergy–unresponsive vaccines and allergoids] Matsuhashi T. **Arerugi** 1988 Sep;37(9):897–904 (24 ref.) (Jpn)

STANDARDS

Serology–based potency test for inactivated Newcastle disease vaccines. Goddard RD, et al. **Vaccine** 1988 Dec; 6(6):530–2

THERAPEUTIC USE

Further comparison of adjuvants for an inactivated infectious coryza vaccine. Blackall PJ. **Avian Dis** 1988 Oct–Dec; 32(4):831–5

VACCINES, KILLED see VACCINES, INACTIVATED

VACCINES, SYNTHETIC see under VACCINES

VACCINIA

DIAGNOSIS

A severe human cowpox infection in south Germany. Klingebiel T, et al. **Pediatr Infect Dis J** 1988 Dec; 7(12):883–5
[Laboratory–confirmed case of human infection with ratpox (cowpox)] Marennnikova SS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):30–2 (Eng. Abstr.) (Rus)

DRUG THERAPY

Efficacy of phosphonylmethoxyalkyl derivatives of adenine in experimental herpes simplex virus and vaccinia virus infections in vivo. De Clercq E, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):185–91

IMMUNOLOGY

Enhancement of nonspecific resistance to viral infection by chemically synthesized lipid A–subunit analogs with different backbone structures and acyl groups. Ikeda S, et al. **Antiviral Res** 1988 Dec 1;10(4–5):167–78
Expression of herpes simplex virus glycoprotein D on antigen presenting cells infected with vaccinia recombinants and protective immunity. Wachsman M, et al. **Biosci Rep** 1988 Aug;8(4):323–34
Role of lymphokine–secreting CD8+ T cells in cytotoxic T lymphocyte responses against vaccinia virus. Mizuochi T, et al. **J Immunol** 1989 Jan 1;142(1):270–3
[Testing the immunity to orthopoxviruses in the white mouse with vaccinia virus] Czerny CP, et al. **Zentralbl Veterinarmed [B]** 1989 Mar;36(2):100–12 (Eng. Abstr.) (Ger)

PATHOLOGY

Inhibition of an inflammatory response is mediated by a 38–kDa protein of cowpox virus. Palumbo GJ, et al. **Virology** 1989 Sep;172(1):262–73

VETERINARY

Immunogenicity, pathogenicity, and transmissibility of a recombinant vaccinia virus in calves. Wedman EE, et al. **Am J Vet Res** 1988 Dec;49(12):2018–21
Studies on poxvirus infection in cats. Bennett M, et al. **Arch Virol** 1989;104(1–2):19–33
Experimental vaccinia virus infection of horses. Studdert MJ. **Aust Vet J** 1989 May;66(5):157–9
Evaluation of the pathogenicity and immunogenicity of vaccinia virus to piglets. Imada T, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):96–104
Protection of cattle from infection with vaccinia virus by bovine interferon alpha C. Schwers A, et al. **Vet Rec** 1989 Jul 1;125(1):15–6

VACCINIA VIRUS

Cervical papilloma virus treatment [letter] Hooley JS. **J Fla Med Assoc** 1989 Feb;76(2):241
Use of vaccinia virus to express biopharmaceutical products. Hruby DE, et al. **Pharm Res** 1987 Apr;4(2):92–7 (41 ref.)
[Safety and efficacy of an antirabies vaccine consisting of recombinant vaccinia–rabies virus administered orally to the fox, dog and cat] Blancou J, et al. **Ann Rech Vet** 1989; 20(2):195–204 (Eng. Abstr.) (Fre)

ANALYSIS

Purification and characterization of vaccinia virus structural protein VP8. Yang WP, et al. **Virology** 1988 Dec; 167(2):578–84

DRUG EFFECTS

Relationship between intracellular concentration of S–adenosylhomocysteine and inhibition of vaccinia virus replication and inhibition of murine L–929 cell growth. Hasobe M, et al. **Antimicrob Agents Chemother** 1989 Jun; 33(6):828–34
Inhibition of HSV–1 and vaccinia virus replication by cephalosporin derivatives. Cottagnoud P, et al. **Antiviral Res** 1988 Nov;10(1–3):59–70
The antiviral activity of 9–beta–D–arabinofuranosyladenine is enhanced by the 2',3'–dideoxyriboside, the 2',3'–didehydro–2',3'–dideoxyriboside and the 3'–azido–2',3'–dideoxyriboside of 2,6–diaminopurine. Balzarini J, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):61–7
Correlation between the antiviral activity of acyclic and carbocyclic adenosine analogues in murine L929 cells and their inhibitory effect on L929 cells S–adenosylhomocysteine hydrolase. Cools M, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1061–7
Elucidation of the mechanism by which homocysteine potentiates the anti–vaccinia virus effects of the S–adenosylhomocysteine hydrolase inhibitor 9–(trans–2',trans–3'–dihydroxycyclopent–4'–enyl)–adenine. Hasobe M, et al. **Mol Pharmacol** 1989 Sep;36(3):490–6

Rifampicin prevents virosome localization of L65, an essential vaccinia virus polypeptide. Miner JN, et al. **Virology** 1989 May;170(1):227–37

ENZYMOLOGY

Activation of the vaccinia virus nicking–joining enzyme by trypsinization. Reddy MK, et al. **J Biol Chem** 1989 Jan 5;264(1):443–9

Functional domains of vaccinia virus mRNA capping enzyme. Analysis by limited tryptic digestion. Shuman S. **J Biol Chem** 1989 Jun 5;264(16):9690–5

Human NADPH–P450 oxidoreductase: complementary DNA cloning, sequence and vaccinia virus–mediated expression and localization of the CYPOR gene to chromosome 7. Yamano S, et al. **Mol Pharmacol** 1989 Jul; 36(1):83–8

Vaccinia DNA topoisomerase I promotes illegitimate recombination in Escherichia coli. Shuman S. **Proc Natl Acad Sci U S A** 1989 May;86(10):3489–93

GENETICS

HIV–1 core proteins expressed from recombinant vaccinia viruses. Rautmann G, et al. **AIDS Res Hum Retroviruses** 1989 Apr;5(2):147–57

Partial deletion of the human host range gene in the attenuated vaccinia virus MVA. Altenburger W, et al. **Arch Virol** 1989;105(1–2):15–27

Fine structure of the vaccinia virus gene encoding the precursor of the major core protein 4 a. Van Meir E, et al. **Arch Virol** 1988;102(1–2):19–27

Expression of herpes simplex virus glycoprotein D on antigen presenting cells infected with vaccinia recombinants and protective immunity. Wachsman M, et al. **Biosci Rep** 1988 Aug;8(4):323–34

Derepression of a novel class of vaccinia virus genes upon DNA replication. Vos JC, et al. **EMBO J** 1988 Nov; 7(11):3487–92

cDNA–directed expression of rat testosterone 7 alpha–hydroxylase using the modified vaccinia virus, T7–RNA–polymerase system and evidence for 6 alpha–hydroxylation and delta 6–testosterone formation. Aoyama T, et al. **Eur J Biochem** 1989 May 1;181(2):331–6

Production of pro–opiomelanocortin (POMC) by a vaccinia virus transient expression system and in vitro processing of the expressed prohormone by POMC–converting enzyme. Andreasson KI, et al. **FEBS Lett** 1989 May 8; 248(1–2):43–7

Expression of biologically active human chorionic gonadotropin and its subunits by recombinant vaccinia virus. Chakrabarti S, et al. **Gene** 1989 Apr 15;77(1):87–93

A general method for the construction of recombinant vaccinia viruses expressing multiple foreign genes. Coupar BE, et al. **Gene** 1988 Aug 15;68(1):1–10

Characterization of polyoma virus early proteins expressed from vaccinia virus recombinants. Guizani I, et al. **Gene** 1988 Dec 15;73(1):163–73

Expression vector pT7:TKII for the synthesis of authentic biologically active RNA encoding vaccinia virus thymidine kinase. Wilson EM, et al. **Gene** 1989 Apr 15;77(1):69–78

Use of vaccinia virus as an infectious molecular cloning and expression vector. Moss B, et al. **Gene Amplif Anal** 1983; 3:201–13 (48 ref.)

Vaccinia specific kinase inhibitory factor prevents translational inhibition by double–stranded RNA in rabbit reticulocyte lysate. Akkaraju GR, et al. **J Biol Chem** 1989 Jun 15;264(17):10321–5

Identification of protein intermediates in the processing of the p55 HIV–1 gag precursor in cells infected with recombinant vaccinia virus. Gowda SD, et al. **J Biol Chem** 1989 May 25;264(15):8459–62

Multiple tachykinins are produced and secreted upon post–translational processing of the three substance P precursor proteins, alpha–, beta–, and gamma–preprotachykinin. Expression of the preprotachykinins in AtT–20 cells infected with vaccinia virus recombinants. MacDonald MR, et al. **J Biol Chem** 1989 Sep 15;264(26):15578–92

Characterization of vaccinia virus DNA topoisomerase I expressed in Escherichia coli. Shuman S, et al. **J Biol Chem** 1988 Nov 5;263(31):16401–7

Vaccinia virus hemagglutinin. A novel member of the immunoglobulin superfamily. Jin DY, et al. **J Exp Med** 1989 Aug 1;170(2):571–6

Non–essential genes in the vaccinia virus HindIII K fragment: a gene related to serine protease inhibitors and a gene related to the 37K vaccinia virus major envelope antigen. Boursnell ME, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):2995–3003

Recombinant vaccinia/Venezuelan equine encephalitis (VEE) virus expresses VEE structural proteins. Kinney RM, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3005–13

Evaluation of antiviral immunity using vaccinia virus recombinants expressing cloned genes for herpes simplex virus type 1 glycoproteins. Martin S, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1359–70

Vaccinia virus encodes a family of genes with homology to serine proteinase inhibitors. Smith GL, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2333–43

Enhanced expression of the Epstein–Barr virus latent membrane protein by a recombinant vaccinia virus. Stewart JP, et al. **J Gen Virol** 1989 May;70 (Pt 5):1231–7

Regulation of expression of herpes simplex virus (HSV) glycoprotein D in vaccinia recombinants affects their ability to protect from cutaneous HSV–2 disease. Wachsman M, et al. **J Infect Dis** 1989 Apr;159(4):625–34

Capped poly(A) leaders of variable lengths at the 5' ends of vaccinia virus late mRNAs. Ahn BY, et al. **J Virol** 1989 Jan;63(1):226–32

Site of the base change in the vaccinia virus DNA polymerase gene which confers aphidicolin resistance. DeFilippes FM. **J Virol** 1989 Sep;63(9):4060–3

Identification of temperature–sensitive mutants of vaccinia virus that are defective in conversion of concatemeric replicative intermediates to the mature linear DNA genome. DeLange AM. **J Virol** 1989 Jun;63(6):2437–44

Antibodies directed against a synthetic peptide enable detection of a protein encoded by a vaccinia virus host range gene that is conserved within the Orthopoxvirus genus. Gillard S, et al. **J Virol** 1989 Apr;63(4):1814–7

Expression in recombinant vaccinia virus of the equine herpesvirus 1 gene encoding glycoprotein gp13 and protection of immunized animals. Guo PX, et al. **J Virol** 1989 Oct;63(10):4189–98

Detailed phenotypic characterization of five temperature–sensitive mutants in the 22– and 147–kilodalton subunits of vaccinia virus DNA–dependent RNA polymerase. Hooda–Dhingra U, et al. **J Virol** 1989 Feb;63(2):714–29

Vaccinia virus encodes two proteins that are structurally related to members of the plasma serine protease inhibitor superfamily. Kotwal GJ, et al. **J Virol** 1989 Feb;63(2):600–6

Genetic evidence for involvement of vaccinia virus DNA–dependent ATPase I in intermediate and late gene expression. Künzi MS, et al. **J Virol** 1989 Sep; 63(9):3999–4010

Intramolecular homologous recombination in cells infected with temperature–sensitive mutants of vaccinia virus. Merchlinsky M. **J Virol** 1989 May;63(5):2030–5

Nucleotide sequence required for resolution of the concatemer junction of vaccinia virus DNA. Merchlinsky M, et al. **J Virol** 1989 Oct;63(10):4354–61

Resolution of vaccinia virus DNA concatemer junctions requires late–gene expression. Merchlinsky M, et al. **J Virol** 1989 Apr;63(4):1595–603

DNA sequences that regulate expression of a vaccinia virus late gene (L65) and interact with a DNA–binding protein from infected cells. Miner JN, et al. **J Virol** 1989 Jun; 63(6):2726–36

Cloning and expression of foreign genes in vaccinia virus, using a host range selection system. Perkus ME, et al. **J Virol** 1989 Sep;63(9):3829–36

Plaque size phenotype as a selectable marker to generate vaccinia virus recombinants. Rodriguez JF, et al. **J Virol** 1989 Feb;63(2):997–1001

Syncytium formation by recombinant vaccinia viruses carrying bovine parainfluenza 3 virus envelope protein genes. Sakai Y, et al. **J Virol** 1989 Sep;63(9):3661–8

Effects and virulences of recombinant vaccinia viruses derived from attenuated strains that express the human T–cell leukemia virus type I envelope gene. Shida H, et al. **J Virol** 1988 Dec;62(12):4474–80

Fine structure mapping of five temperature–sensitive mutants in the 22– and 147–kilodalton subunits of vaccinia virus DNA–dependent RNA polymerase. Thompson CL, et al. **J Virol** 1989 Feb;63(2):705–13

Molecular genetic analysis of vaccinia virus DNA polymerase mutants. Traktman P, et al. **J Virol** 1989 Feb; 63(2):841–6

Construction and application of plasmids containing bidirectional promoters of vaccinia virus. Tsao H, et al. **J Virol** 1988 Dec;62(12):4832–4

Relationship between RNA polymerase II and efficiency of vaccinia virus replication. Wilton S, et al. **J Virol** 1989 Apr;63(4):1540–8

Identification of factors specific for transcription of the late class of vaccinia virus genes. Wright CF, et al. **J Virol** 1989 Oct;63(10):4224–33

Attenuated deletion mutants of vaccinia virus lacking the vaccinia growth factor are defective in replication in vivo. Lai AC, et al. **Microb Pathog** 1989 Mar;6(3):219–26

Transcription mapping of glycoprotein I (gpI) and gpIV of varicella–zoster virus and immunological analysis of the gpI produced in cells infected with the recombinant vaccinia virus. Kato T, et al. **Microbiol Immunol** 1989; 33(4):299–312

Amplification of the ribonucleotide reductase small subunit gene: analysis of novel joints and the mechanism of gene duplication in vaccinia virus. Slabaugh MB, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):7073–88

Cap–independent translation of mRNA conferred by encephalomyocarditis virus 5' sequence improves the performance of the vaccinia virus/bacteriophage T7 hybrid expression system. Elroy–Stein O, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6126–30

Protection of rhesus monkeys from fatal Lassa fever by vaccination with a recombinant vaccinia virus containing the Lassa virus glycoprotein gene. Fisher–Hoch SP, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):317–21

Transfer of the inducible lac repressor/operator system from Escherichia coli to a vaccinia virus expression vector. Fuerst TR, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2549–53

Activated B cells can deliver help for the in vitro generation of antiviral cytotoxic T cells. Liu Y, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4629–33

Highly attenuated vaccinia virus mutants for the generation of safe recombinant viruses. Rodriguez D, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1287–91

Retroviral protease–like gene in the vaccinia virus genome. Slabaugh MB, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4152–5

Expression of herpes simplex virus thymidine kinase, mediated by vaccinia virus early promoters. Sharif A, et al. **Res Virol** 1989 Mar–Apr;140(2):103–13

Evaluation in non–human primates of the safety, immunogenicity and efficacy of recombinant vaccinia viruses expressing the F or G glycoprotein of respiratory syncytial virus. Olmsted RA, et al. **Vaccine** 1988 Dec; 6(6):519–24

Analysis of a large cluster of nonessential genes deleted from a vaccinia virus terminal transposition mutant. Kotwal GJ, et al. **Virology** 1988 Dec;167(2):524–37

Mapping and insertional mutagenesis of a vaccinia virus gene encoding a 13,800–Da secreted protein. Kotwal GJ, et al. **Virology** 1989 Aug;171(2):579–87

Inhibition of an inflammatory response is mediated by a 38–kDa protein of cowpox virus. Palumbo GJ, et al. **Virology** 1989 Sep;172(1):262–73

Insertional mutagenesis of the vaccinia virus gene encoding a type I DNA topoisomerase: evidence that the gene is essential for virus growth. Shuman S, et al. **Virology** 1989 May;170(1):302–6

Vaccinia virus recombinants expressing rabiesvirus glycoprotein protect against rabies. Esposito J, et al. **Virus Genes** 1987 Nov;1(1):7–21

Characterization of a binding factor that interacts with the sequences upstream of the vaccinia virus thymidine kinase gene. Wilson EM, et al. **Virus Genes** 1988 Oct;2(1):31–48

Characterization of vaccinia virus deletion mutants isolated from persistently infected Friend erythroleukemia cells. Lai AC, et al. **Virus Res** 1989 Mar;12(3):239–50

[Expression of Epstein–Barr virus membrane antigen in recombinant vaccinia virus] Gu SY. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Aug; 10(4):233–9 (Eng. Abstr.) (Chi)

[The use of the gene responsible for formation of hemorrhage as a phenotypic marker in creating hybrid variations of vaccinia virus] Totmenin AV, et al. **Dokl Akad Nauk SSSR** 1989;305(5):1246–8 (Rus)

[Mapping of "nonessential" regions in the genome of vaccinia virus] Loparev VN, et al. **Mol Gen Mikrobiol Virusol** 1988 Dec;(12):33–8 (Eng. Abstr.) (Rus)

[Expression of gag gene of human immunodeficiency virus in recombinant vaccinia virus] Popov SA, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep;(9):36–9 (Eng. Abstr.) (Rus)

[Design of a recombinant strain of the vaccinia virus containing an expressible gene for influenza A virus hemagglutinin] Gibadulin RA, et al. **Vopr Virusol** 1988 May–Jun;33(3):275–8 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Antigenic properties of vaccinia virus and of the virus recombinant strains expressing heterologous genes. Chelyapov NV, et al. **Acta Virol (Praha)** 1988 Sep; 32(5):409–16

Isolate– and group–specific immune responses to the envelope protein of human immunodeficiency virus induced by a live recombinant vaccinia virus in macaques. Earl PL, et al. **AIDS Res Hum Retroviruses** 1989 Feb; 5(1):23–32

Cell–mediated immune proliferative responses to HIV–1 of chimpanzees vaccinated with different vaccinia recombinant viruses. Van Eendenburg JP, et al. **AIDS Res Hum Retroviruses** 1989 Feb;5(1):41–50

Immune response to vaccinia virus and recombinant virus products in dogs. Appel MJ, et al. **Am J Vet Res** 1988 Nov;49(11):1932–4

Immunogenicity, pathogenicity, and transmissibility of a recombinant vaccinia virus in calves. Wedman EE, et al. **Am J Vet Res** 1988 Dec;49(12):2018–21

Vaccinia colon oncolysate immunotherapy for murine hepatic metastases can be modulated with low–dose interleukin–2. Third place winner: Conrad Jobst Award. Barnavon Y, et al. **Am Surg** 1988 Dec;54(12):696–701

Enhancement of nonspecific resistance to viral infection by chemically synthesized lipid A–subunit analogs with different backbone structures and acyl groups. Ikeda S, et al. **Antiviral Res** 1988 Dec 1;10(4–5):167–78

Behaviour of the typhoid vaccine intradermally administered in association with tetanus unadsorbed vaccine and soluble antigens of vaccinia virus. Croitoru M, et al. **Arch Roum Pathol Exp Microbiol** 1988 Apr–Jun; 47(2):139–43

Orf virus and vaccinia virus do not cross–protect sheep. Robinson AJ, et al. **Arch Virol** 1988;101(3–4):255–9

Immunization of foxes against rabies with a vaccinia recombinant virus expressing the rabies glycoprotein. Tolson ND, et al. **Arch Virol** 1988;102(3–4):297–301

Recombinant polyoma—vaccinia viruses: T antigen expression vectors and anti–tumor immunization agents. Clertant P, et al. **Biochimie** 1988 Aug;70(8):1075–87

Immunotherapy of tumor–bearing mice utilizing virus help. Shimizu Y, et al. **Cancer Immunol Immunother** 1988; 27(3):223–7

Anti-viral protection and prevention of lymphocytic choriomeningitis or of the local footpad swelling reaction in mice by immunization with vaccinia-recombinant virus expressing LCMV-WE nucleoprotein or glycoprotein. Hany M, et al. **Eur J Immunol** 1989 Mar;19(3):417-24

Establishment of tumor-specific immunotherapy model utilizing vaccinia virus-reactive helper T cell activity. Shimizu Y, et al. **Eur J Immunol** 1988 Nov;18(11):1773-8

Comparison of antibody avidity and titre elicited by peptide as a protein conjugate or as expressed in vaccinia. Lew AM, et al. **Immunology** 1988 Oct;65(2):311-4

Defective presentation to class I-restricted cytotoxic T lymphocytes in vaccinia-infected cells is overcome by enhanced degradation of antigen. Townsend A, et al. **J Exp Med** 1988 Oct 1;168(4):1211-24

Thymic selection of H-2-incompatible bone marrow cells in SCID mice. Differences in T help for induction of B cell IgG responses versus cytotoxic T cells. Zinkernagel RM, et al. **J Exp Med** 1988 Sep 1;168(3):1187-92

Mechanism of immunity to influenza: maternal and passive neonatal protection following immunization of adult ferrets with a live vaccinia-influenza virus haemagglutinin recombinant but not with recombinants containing other influenza virus proteins. Jakeman KJ, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1523-31

Immunosuppression of the antibody response to respiratory syncytial virus (RSV) by pre-existing serum antibodies: partial prevention by topical infection of the respiratory tract with vaccinia virus-RSV recombinants. Murphy BR, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2185-90

Antigen-presenting capacity of epidermal cells infected with vaccinia virus recombinants containing the herpes simplex virus glycoprotein D, and protective immunity. Wachsman M, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2513-20

Induction of cell surface expression of HLA antigens by human IFN-gamma encoded by recombinant vaccinia virus. Kohonen-Corish MR, et al. **J Immunol** 1989 Jul 15; 143(2):623-7

Recombinant vaccinia viruses and the development of immunization strategies using influenza virus. Doherty PC, et al. **J Infect Dis** 1989 Jun;159(6):1119-22

Vaccinia virus-infected C-C36 colon tumor cell lysates stimulate cellular responses in vitro and protect syngeneic Balb/c mice from tumor cell challenge. Iwaki H, et al. **J Surg Oncol** 1989 Feb;40(2):90-6

Mice immunized with recombinant vaccinia virus expressing dengue 4 virus structural proteins with or without nonstructural protein NS1 are protected against fatal dengue virus encephalitis. Bray M, et al. **J Virol** 1989 Jun; 63(6):2853-6

HIV-1 gag-specific cytotoxic T lymphocytes defined with recombinant vaccinia virus and synthetic peptides. Nixon DF, et al. **Nature** 1988 Dec 1;336(6198):484-7

Evaluation of the pathogenicity and immunogenicity of vaccinia virus to piglets. Imada T, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):96-104

Vaccinia-interleukin 2 recombinant virus or exogenous interleukin 2 does not alter the magnitude or immune response gene defects of the cytotoxic T-cell response to vaccinia virus in vivo. Müllbacher A, et al. **Scand J Immunol** 1989 Jan;29(1):1-6

Protection against streptococcal pharyngeal colonization with a vaccinia: M protein recombinant. Fischetti VA, et al. **Science** 1989 Jun 23;244(4911):1487-90

Immunogenicity of a recombinant vaccinia virus expressing envelope a glycoprotein of bovine leukaemia virus. Ohishi K, et al. **Vaccine** 1988 Oct;6(5):428-32

Improved recombinant LC16m0 or LC16m8 vaccinia virus successfully expressing hepatitis B surface antigen. Watanabe K, et al. **Vaccine** 1989 Feb;7(1):53-9

Use of recombinant vaccinia-rabies virus for oral vaccination of fox cubs (Vulpes vulpes, L) against rabies. Brochier BM, et al. **Vet Microbiol** 1988 Oct;18(2):103-8

Present and future applications of vaccinia virus as a vector. Hruby DE. **Vet Parasitol** 1988 Sep;29(2-3):281-92 (48 ref.)

Molecular characterization of a prominent antigen of the vaccinia virus envelope. Gordon J, et al. **Virology** 1988 Dec;167(2):361-9

The need for characterization of pathogenicity genes of recombinant DNA viruses used as human vaccines. Becker Y. **Virus Genes** 1987 Nov;1(1):117-20

[Testing the immunity to orthopoxviruses in the white mouse with vaccinia virus] Czerny CP, et al. **Zentralbl Veterinarmed [B]** 1989 Mar;36(2):100-12 (Eng. Abstr.) (Ger)

[Significance of priming of hosts with virus in the tumor-specific immunotherapy model utilizing virus-reactive helper T cell activity] Shimizu Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):1007-14 (Eng. Abstr.) (Jpn)

[Tumor-specific immunotherapy model utilizing virus-reactive helper T-cell activities] Shimizu Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jun 20;23(6):1307-14 (Eng. Abstr.) (Jpn)

ISOLATION & PURIFICATION

[Methods of isolating and selecting recombinant vaccinia viruses expressing heterogenetic viral antigens] Gibadulin RA, et al. **Vopr Virusol** 1988 Jul-Aug;33(4):428-31 (Eng. Abstr.) (Rus)

METABOLISM

Characterization of the atrial natriuretic peptide clearance receptor using a vaccinia virus expression vector. Porter JG, et al. **J Biol Chem** 1988 Dec 15;263(35):18827-33

Structure and stability of mRNA synthesized by vaccinia virus-encoded bacteriophage T7 RNA polymerase in mammalian cells. Importance of the 5' untranslated leader. Fuerst TR, et al. **J Mol Biol** 1989 Mar 20;206(2):333-48

Fatty acid acylation of vaccinia virus proteins. Franke CA, et al. **J Virol** 1989 Oct;63(10):4285-91

Biosynthesis and post-translational cleavage of vaccinia virus structural protein VP8. Yang WP, et al. **Virology** 1988 Dec; 167(2):585-90

PATHOGENICITY

Vaccinia virus: a suitable vehicle for recombinant vaccines? Kaplan C. **Arch Virol** 1989;106(1-2):127-39 (54 ref.)

Evaluation of the pathogenicity and immunogenicity of vaccinia virus to piglets. Imada T, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):96-104

PHYSIOLOGY

Differential effects of epidermal growth factor, transforming growth factor-alpha, and vaccinia virus growth factor in the positive regulation of IFN-gamma production. Abdullah NA, et al. **J Immunol** 1989 Jul 1;143(1):113-7

Modulation of ppp(A2'p)nA-dependent RNase by a temperature-sensitive mutant of vaccinia virus. Cohrs RJ, et al. **J Virol** 1989 Feb;63(2):948-51

Enhanced production of poxvirus vectors by high speed rolling. Hughes JH, et al. **J Virol Methods** 1988 Oct; 22(1):75-80

ULTRASTRUCTURE

Ultra-high resolution scanning electron microscopy of biological materials. Tanaka K, et al. **Prog Clin Biol Res** 1989;295:21-30

VACUOLATING AGENT see **SV40 VIRUS**

VACUOLES

Isolation of rat liver endocytic vesicles using the proton pump as a marker. Sabolić I, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):191-201

[Vacuoles] Nishimura M. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):55-60 (19 ref.) (Jpn)

ANALYSIS

The red cell membrane and its vesiculation. Vasantha K. **Indian J Med Sci** 1988 Nov;42(11):273-9 (25 ref.)

Immunocytochemistry of calciosomes in liver and pancreas. Hashimoto S, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2523-31

Ultrastructural immunocytochemical localization of secretory proteins in autophagic vacuoles of parotid acinar cells of starved rats. Hand AR, et al. **J Oral Pathol** 1988 Jul;17(6):279-86

ENZYMOLOGY

Vacuolated plasma cell: ultrastructural distribution of acid phosphatase and intracellular immunoglobulin. Yasuda N, et al. **Acta Haematol (Basel)** 1989;81(4):203-7

Characterization of a vacuolar proton ATPase in Dictyostelium discoideum. Padh H, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):271-8

Inhibition of the vacuolar ATPase of Acer pseudoplatanus cells by vanadate. Montrichard F, et al. **Biochimie** 1989 Jul;71(7):813-7

Transport of yeast vacuolar trehalase to the vacuole. Harris SD, et al. **Can J Microbiol** 1988 Jul;34(7):835-8

Biogenesis of the yeast lysosome (vacuole): biosynthesis and maturation of proteinase yscB. Mechler B, et al. **EMBO J** 1988 Jun;7(6):1705-10

Functional molecular masses of vacuolar membrane H+-ATPase from Saccharomyces cerevisiae as studied by radiation inactivation analysis. Hirata R, et al. **FEBS Lett** 1989 Feb 27;244(2):397-401

The progenitor of ATP synthases was closely related to the current vacuolar H+-ATPase. Nelson H, et al. **FEBS Lett** 1989 Apr 10;247(1):147-53

A study on the identities of the three species of chromatin-associated proteinases in a mutant of Saccharomyces cerevisiae which lacks four major vacuolar proteinases. Motizuki M, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):192-5

Isolation of genes encoding the Neurospora vacuolar ATPase. Analysis of vma-2 encoding the 57-kDa polypeptide and comparison to vma-1. Bowman BJ, et al. **J Biol Chem** 1988 Oct 5;263(28):14002-7

The vacuolar ATPase of Neurospora crassa contains an F1-like structure. Bowman BJ, et al. **J Biol Chem** 1989 Sep 15;264(26):15606-12

Isolation of genes encoding the Neurospora vacuolar ATPase. Analysis of vma-1 encoding the 67-kDa subunit reveals homology to other ATPases. Bowman EJ, et al. **J Biol Chem** 1988 Oct 5;263(28):13994-4001

cDNA sequence and homologies of the "57-kDa" nucleotide-binding subunit of the vacuolar ATPase from Arabidopsis. Manolson MF, et al. **J Biol Chem** 1988 Dec 5;263(34):17987-94

Cold inactivation of vacuolar proton-ATPases. Moriyama Y, et al. **J Biol Chem** 1989 Feb 25;264(6):3577-82

A vacuolar-type ATPase, partially purified from potassium transporting plasma membranes of tobacco hornworm midgut. Schweikl H, et al. **J Biol Chem** 1989 Jul 5; 264(19):11136-42

Lysosomal (vacuolar) proteinases of yeast are essential catalysts for protein degradation, differentiation, and cell survival. Teichert U, et al. **J Biol Chem** 1989 Sep 25; 264(27):16037-45

Structure, biosynthesis, and localization of dipeptidyl aminopeptidase B, an integral membrane glycoprotein of the yeast vacuole. Roberts CJ, et al. **J Cell Biol** 1989 Apr; 108(4):1363-73

H+-ATPase from vacuolar membranes of higher plants. Bennett AB, et al. **Methods Enzymol** 1988;157:579-90

Purification of vacuolar membranes, mitochondria, and plasma membranes from Neurospora crassa and modes of discriminating among the different H+-ATPases. Bowman EJ, et al. **Methods Enzymol** 1988;157:562-73

Purification of yeast vacuolar membrane H+-ATPase and enzymological discrimination of three ATP-driven proton pumps in Saccharomyces cerevisiae. Uchida E, et al. **Methods Enzymol** 1988;157:544-62

Purification of Plasmodium falciparum digestive vacuoles and partial characterization of the vacuolar membrane ATPase. Choi I, et al. **Mol Biochem Parasitol** 1988 Oct;31(1):71-8

Evolution of the vacuolar H+-ATPase: implications for the origin of eukaryotes. Gogarten JP, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6661-5

[Effect of vanadate on the vacuolar ATPase of Acer pseudoplatanus] Montrichard F, et al. **C R Soc Biol (Paris)** 1988;182(2):208-21 (Eng. Abstr.) (Fre)

[Intracellular location of vacuoles with acid phosphatase activity in trophozoites of Entamoeba histolytica adhered to guinea pig cecal epithelium] Mora-Galindo J. **Arch Invest Med (Mex)** 1988 Apr-Jun;19(2):119-26 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Protein p126: a parasitophorous vacuole antigen associated with the release of Plasmodium falciparum merozoites. Delplace P, et al. **Biol Cell** 1988;64(2):215-21

Immune response to a synthetic peptide corresponding to an epitope of a parasitophorous vacuole membrane antigen from Plasmodium falciparum. Kara U, et al. **J Immunol** 1989 Aug 15;143(4):1334-9

METABOLISM

Inositol trisphosphate induces calcium release from Neurospora crassa vacuoles. Cornelius G, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):852-6

Decreased vacuolar acidification capacity in drug-resistant rat liver preneoplastic nodules. Andersson GN, et al. **Cancer Res** 1989 Jul 15;49(14):3765-9

Increased sterol formation in Saccharomyces cerevisiae. Analysis of cell components and ultrastructure of vacuoles. Běhalová B, et al. **Folia Microbiol (Praha)** 1988;33(4):292-7

Transport of proteins to the plant vacuole is not by bulk flow through the secretory system, and requires positive sorting information. Dorel C, et al. **J Cell Biol** 1989 Feb; 108(2):327-37

Prelysosomal acidic vacuoles in Dictyostelium discoideum. Padh H, et al. **J Cell Biol** 1989 Mar;108(3):865-74

Acidification of the lysosome-like vacuole and the vacuolar H+-ATPase are deficient in two yeast mutants that fail to sort vacuolar proteins. Rothman JH, et al. **J Cell Biol** 1989 Jul;109(1):93-100

Gating behaviors of a voltage-dependent and Ca2+-activated cation channel of yeast vacuolar membrane incorporated into planar lipid bilayer. Tanifuji M, et al. **J Membr Biol** 1988 Nov;106(1):47-55

Measurement of vacuolar pH and cytoplasmic calcium in living cells using fluorescence microscopy. Maxfield FR. **Methods Enzymol** 1989;173:745-71

Assay of vacuolar pH in yeast and identification of acidification-defective mutants. Preston RA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7027-31

MICROBIOLOGY

Ultrastructure and protein A-gold immunolabelling of HRT-18 cells infected with turkey enteric coronavirus. Dea S, et al. **Vet Microbiol** 1989 May;20(1):21-33

PATHOLOGY

Blast cell vacuoles in childhood lymphoblastic leukaemia. Lilleyman JS, et al. **Br J Haematol** 1988 Oct;70(2):183-6

Marginal vacuoles in metastatic thyroid carcinoma: a case report. Pitts WC, et al. **Diagn Cytopathol** 1989;5(2):200-2

Regulation of protein turnover versus growth state. III. Growth cessation is associated with activation of autophagy in Yoshida ascites hepatoma AH-340. Pfeifer U, et al. **Virchows Arch [B]** 1988;55(6):363-9

[Two cases (brother and sister) of distal myopathy with rimmed vacuole type—with special reference to histocompatibility antigens (HLA) typing] Furukawa S, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1091-2 (Jpn)

PHYSIOLOGY

Sorting and traffic in the central vacuolar system. Klausner RD. **Cell** 1989 Jun 2;57(5):703–6 (14 ref.)

Polyol and vacuole formation in cultured canine lens epithelial cells. Nagata M, et al. **Exp Eye Res** 1989 May; 48(5):667–77

Dynamic morphological responses of mouse astrocytes in primary cultures following medium changes. Devon RM, et al. **GLIA** 1989;2(4):266–72

Structure and function of vacuolar class of ATP-driven proton pumps. Forgac M. **Physiol Rev** 1989 Jul; 69(3):765–96 (224 ref.)

[Dynamics of vacuolar compartment] Ohsumi Y. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):398–407 (45 ref.) (Jpn)

ULTRASTRUCTURE

Creutzfeldt–Jakob disease with intranuclear vacuolar inclusions: a biopsy case of negative light microscopic findings and successful animal transmission. Kim JH, et al. **Acta Neuropathol (Berl)** 1988;76(4):422–6

Spleen dysfunction in hemoglobinopathies determined by pitted red cells. Grover R, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):340–3

The vacuolated glycogen–laden leukemic lymphocytes of a T–cell lymphoproliferative disorder. Krauss JS, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):937–40

Immunohistochemistry of vacuoles occurring in rat hepatocytes after retinol administration. Kudo S. **Cell Tissue Res** 1989 Aug;257(2):263–8

Diagnostic and prognostic significance of glomerular epithelial cell vacuolization and podocyte effacement in children with minimal lesion nephrotic syndrome and focal segmental glomerulosclerosis: an ultrastructural study. Chiang ML, et al. **Clin Nephrol** 1988 Jul;30(1):8–14

Distal myopathy with focal granular degenerative change in vacuolated type 2 fibers. Swash M, et al. **Clin Neuropathol** 1988 Sep–Oct;7(5):249–53

Preferential localisation of red cell vacuoles to pathologically shaped human red blood cells. Demeter J, et al. **Eur J Haematol** 1989 Jul;43(1):41–4

Temperature–dependent formation of vacuolar and canalicular systems in association with degranulation in stimulated neutrophils. Hara Y, et al. **Eur J Haematol** 1989 May;42(5):474–80

Ultrastructure of the mucus–negative vacuolated cells in the metaplastic pyloric gland of the human stomach. Torikata C, et al. **Hum Pathol** 1989 May;20(5):437–40

Organelle assembly in yeast: characterization of yeast mutants defective in vacuolar biogenesis and protein sorting. Banta LM, et al. **J Cell Biol** 1988 Oct;107(4):1369–83

Vacuolation of muscle fibers near sarcolemmal breaks represents T–tubule dilatation secondary to enhanced sodium pump activity. Casademont J, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):618–28

Vacuolated cytotrophoblast: a subpopulation of trophoblast in the chorion laeve. Yeh IT, et al. **Placenta** 1989 Sep–Oct; 10(5):429–38

Subtypes of intercalated cells in rat kidney collecting duct defined by antibodies against erythroid band 3 and renal vacuolar H+–ATPase. Alper SL, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5429–33

Variable hepatocellular vacuolization associated with glycogen in rabbits. Wells MY, et al. **Toxicol Pathol** 1988; 16(3):360–5

[The so–called endothelial vacuoles of the placental vessels—physiology or disease?] Hey A, et al. **Pathologe** 1989 Jan;10(1):66–9 (Ger)

[The ultrastructure and possible role of the vacuolar component of hepatocyte nucleoli] Chelidze PV, et al. **Tsitologiia** 1989 Jan;31(1):23–8 (Eng. Abstr.) (Rus)

[Electron microscopic and biochemical research on the vacuoles formed in the erythrocytes of frogs as affected by neutral red and novocaine] Veselkina MN, et al. **Tsitologiia** 1988 Jun;30(6):663–71 (Eng. Abstr.) (Rus)

VACUUM see under ATMOSPHERIC PRESSURE

VACUUM CURETTAGE see under DILATATION AND CURETTAGE

VACUUM EXTRACTION, OBSTETRICAL see under EXTRACTION, OBSTETRICAL

VAGINA

Vaginal birth after cesarean delivery in the twin gestation. Strong TH Jr, et al. **Am J Obstet Gynecol** 1989 Jul; 161(1):29–32

Patients' experience of transvaginal follicle aspiration under local anesthesia. Hammarberg K, et al. **Ann N Y Acad Sci** 1988;541:134–7

Transvaginal pulsed Doppler velocimetry in fetal arteries. Deutinger J, et al. **Arch Gynecol Obstet** 1989;246(1):57–60

Giant cervical polyp due to a foreign body in a 'virgin'. Aridogan N, et al. **Aust N Z J Obstet Gynaecol** 1988 May; 28(2):146–7

Comparison of transabdominal and transvaginal pelvic ultrasonography for ovarian follicle assessment in in vitro fertilisation. O'Shea RT, et al. **Gynecol Obstet Invest** 1988; 26(1):52–5

Vaginal douching in teenagers attending a family planning clinic. Chacko MR, et al. **J Adolesc Health Care** 1989 May; 10(3):217–9

Vaginal douching [letter] **J Natl Med Assoc** 1989 Sep; 81(9):927–8, 949

Concentrations of spermatozoa in the vagina of heifers after deposition of semen in the uterine horns, uterine body or cervix. Gallagher GR, et al. **J Reprod Fertil** 1989 May; 86(1):19–25

Teaching vaginal examination [letter] Cohen DL, et al. **Lancet** 1988 Dec 10;2(8624):1375

Miniaturised device for long–term intravaginal electrical stimulation for the treatment of urinary incontinence. Ohlsson BL, et al. **Med Biol Eng Comput** 1988 Sep; 26(5):509–15

Incisional hernia of the vaginal apex following vaginal hysterectomy in a premenopausal, sexually inactive woman. DeLancey JO, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):880–1

Topical anesthesia for gynecologic procedures. Rabin JM, et al. **Obstet Gynecol** 1989 Jun;73(6):1040–4

Comparative study between prostaglandin E2 vaginal tablet and intravenous oxytocin in induction of labour. Chua SM, et al. **Singapore Med J** 1988 Aug;29(4):379–82

[Intravaginal culture and embryo transfer] Ranoux C, et al. **Rev Fr Gynecol Obstet** 1988 Oct;83(10):637–8 (Eng. Abstr.) (Fre)

[Vaginal sonography in early pregnancy] Hugentobler W, et al. **Ther Umsch** 1988 Oct;45(10):704–7 (Eng. Abstr.) (Ger)

[Detection of ABO blood group of seminal stains mixed with vaginal secretion or blood by a method using NCF coated with anti alpha 2–SGP serum—forensic immunological studies of body fluids and secretions, report XXXVI] Iki H, et al. **Nippon Hoigaku Zasshi** 1988 Dec;42(6):504–8 (Eng. Abstr.) (Jpn)

ABNORMALITIES

Congenital absence of vagina and uterus. Kvint S, et al. **Acta Obstet Gynecol Scand** 1988;67(4):367–8

McKusick–Kaufman syndrome: report of an instructive family. Vince JD, et al. **Am J Med Genet** 1989 Feb; 32(2):174–7

Ileocecal vaginal construction. Bürger RA, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):162–7

Uterus didelphys with an obstructed hemivagina and ipsilateral renal agenesis in teenagers: report of three cases. Tridenti G, et al. **Am J Obstet Gynecol** 1988 Oct; 159(4):882–3

Congenital absence of the vagina. Surgical treatment and perioperative care. Fliegner JR, et al. **AORN J** 1989 Mar; 49(3):789, 791–5, 798–800

Vaginal dystocia in a patient with a double uterus and a longitudinal vaginal septum. Carey MP, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):74–5 (6 ref.)

Oral conception. Impregnation via the proximal gastrointestinal tract in a patient with an aplastic distal vagina. Case report. Verkuyl DA. **Br J Obstet Gynaecol** 1988 Sep;95(9):933–4

Congenital vaginal malformation: clinical experiences on vaginal agenesia. Valente S. **Clin Exp Obstet Gynecol** 1988; 15(4):143–50

Uterus bicollis in a Clydesdale mare. Volkmann DH, et al. **Equine Vet J** 1989 Jan;21(1):71

The Mayer–Rokitansky syndrome. Report of 5 cases. Guys JM, et al. **Eur Urol** 1988;14(4):301–4

Classification of müllerian anomalies [letter] Daya S. **Fertil Steril** 1989 Mar;51(3):551–2

Hydrometrocolpos with respiratory distress. Sharma S, et al. **Indian Pediatr** 1988 May;25(5):461–4

MR imaging of vaginal agenesis with hematocolpos. Vainright JR Jr, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):891–3

Pregnancy following repair of vaginal atresia. Bergman KS, et al. **J Pediatr Surg** 1988 Nov;23(11):1063–4

Acute urinary retention due to didelphys uterus associated with an obstructed hemivagina in a 5–month–old infant. Pansini L, et al. **J Pediatr Surg** 1988 Oct;23(10):984–5

The surgical management of persistent cloaca: results in 54 patients treated with a posterior sagittal approach. Peña A. **J Pediatr Surg** 1989 Jun;24(6):590–8

Utero vaginal malformations: a trap for the unsuspecting surgeon. Tolete–Velcek F, et al. **J Pediatr Surg** 1989 Aug; 24(8):736–40

Uterus didelphys with obstructed hemivagina and pyocolpos, ipsilateral tubal occlusion and renal agenesis, and bilateral cervical hypoplasia. A case report. Legino L, et al. **J Reprod Med** 1989 Mar;34(3):237–40

Ultrasonographic diagnosis and assisted surgical management of hematotrachelos and hematometra due to uterine cervical atresia with associated vaginal agenesis. Sherer DM, et al. **J Ultrasound Med** 1989 Jun;8(6):321–3

Double uterus associated with unilateral vaginal obstruction and ipsilateral renal agenesis: ultrasonographic diagnosis. Burgos FJ, et al. **JCU** 1989 May;17(4):296–8

McIndoe procedure for vaginal agenesis: results and complications. Buss JG, et al. **Mayo Clin Proc** 1989 Jul; 64(7):758–61

Vaginal reconstruction with an axial subcutaneous pedicle flap from the inferior abdominal wall: a new method. Chen ZJ, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1005–12

Surgical correction of virilised female external genitalia. Engert J. **Prog Pediatr Surg** 1989;23:151–64

Genitoplasty for congenital adrenal hyperplasia: anatomy and technical review. Whitaker RH. **Prog Pediatr Surg** 1989; 23:144–50

Neonatal hydrometrocolpos. Simmer K, et al. **Z Kinderchir** 1989 Apr;44(2):124–5

[Uterus didelphys with a blind hemi–vagina and homolateral renal agenesis] Denis X, et al. **Ann Urol (Paris)** 1989; 23(1):31–4 (Eng. Abstr.) (Fre)

[Unilateral hematocolpos in utero–vaginal duplication associated with homolateral renal agenesis. Apropos of 2 clinical case reports] Tarvidel–Raimondeau P, et al. **Chir Pediatr** 1988;29(4):208–12 (Eng. Abstr.) (Fre)

[Long–term results of Grossmann vaginoplasty] Heidenreich W. **Zentralbl Gynakol** 1988;110(14):890–2 (Eng. Abstr.) (Ger)

[Large colpohematometra with bilateral hematosalpinx resulting from progressive obstruction caused by incomplete vaginal septum] Belvisi L, et al. **Ann Ostet Ginecol Med Perinat** 1989 Jan–Feb;110(1):42–8 (Eng. Abstr.) (Ita)

[Rokitansky–Kuster–Hauser syndrome: presentation of 14 cases] Schivardi MR, et al. **Ann Ostet Ginecol Med Perinat** 1988 May–Jun; 109(3):145–50 (Eng. Abstr.) (Ita)

[A case of Mayer–Rokitansky syndrome] Ogawa O, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1461–7 (Eng. Abstr.) (Jpn)

[McKusick–Kaufman syndrome] Aoki K, et al. **Rinsho Hoshasen** 1989 Feb;34(2):243–4 (Jpn)

[A case report of cervical agenesis combined with vaginal agenesis diagnosed by MRI] Satoh T, et al. **Rinsho Hoshasen** 1989 Mar;34(3):391–4 (Eng. Abstr.) (Jpn)

[Colpopoiesis using an epidermo–dermal flap in vaginal aplasia] Omarov SM, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):59–60 (Rus)

ANALYSIS

Detection of human papillomavirus deoxyribonucleic acid in exfoliated cervicovaginal cells as a predictor of cervical neoplasia in a high–risk population. Ritter DB, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1517–25

Vaginal odor chromatographic assays; changes caused by douche or suppository—preliminary data. Keith L, et al. **Chic Med Sch Q** 1970;30(1):1–11

Vaginal fluid prolactin: a reliable marker for the diagnosis of prematurely ruptured membranes. Comparison with vaginal fluid alpha–fetoprotein and placental lactogen. Phocas I, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):133–41

The endogenous concentration and subcellular distribution of androgens in normal human premenopausal endometrium, myometrium and vagina. Vermeulen–Meiners C, et al. **Gynecol Endocrinol** 1988 Jun; 2(2):121–30

Menstrual variation of estrogen receptor content in vaginal tissue. Sjöberg I, et al. **Gynecol Obstet Invest** 1989; 27(1):48–51

ANATOMY & HISTOLOGY

Vaginosonographic examination—routine procedure? [letter] Furness ME. **Am J Obstet Gynecol** 1989 Aug;161(2):499

Morphometric characteristics of the vaginal epithelium during the menstrual cycle. Sjöberg I, et al. **Gynecol Obstet Invest** 1988;26(2):136–44

BLOOD SUPPLY

Recording maternal vaginal apex pulse. Loy G, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1489–94; discussion 1494–5

CYTOLOGY

The cytology of vaginal, cervical and endometrial smears obtained at the time of embryo transfer during in vitro fertilization. Bercovici B, et al. **Acta Cytol** 1988 Nov–Dec; 32(6):789–93

Langerhans cells in mouse vaginal epithelium—variations in relation to keratinization. Lin XR, et al. **Arch Dermatol Res** 1988;280(7):451–3

Association of sperm, vaginal cytology, and reproductive organ weight data with results of continuous breeding reproduction studies in Swiss (CD–1) mice. Morrissey RE, et al. **Fundam Appl Toxicol** 1988 Aug;11(2):359–71

Evaluation of rodent sperm, vaginal cytology, and reproductive organ weight data from National Toxicology Program 13–week studies. Morrissey RE, et al. **Fundam Appl Toxicol** 1988 Aug;11(2):343–58

Influence of the maturity of the vaginal epithelium upon the absorption of vaginally administered estradiol–17 beta and progesterone in postmenopausal women. Pachera H, et al. **Gynecol Obstet Invest** 1989;27(4):204–7

A quantitative morphological study of the bovine vaginal epithelium during the oestrous cycle. Blazquez NB, et al. **J Comp Pathol** 1989 Feb;100(2):187–93

A demonstration of spermatozoa on vaginal swabs after complete destruction of the vaginal cell deposits. Iwasaki M, et al. **J Forensic Sci** 1989 May;34(3):659–64

Visualization of the Langerhans cells in the human vaginal epithelium by the L–dopa histofluorescence method.

Crivellato E, et al. Z Mikrosk Anat Forsch 1989; 103(1):102–7
Oestrus phases of the Syrian hamster. Scharmann W, et al. Z Versuchstierkd 1988;31(6):276–80
[Use of the Leukomat in the evaluation of the vaginal cytogram] Nyklíček O. Cesk Gynekol 1988 Aug;53(7):506–7 (Cze)

DRUG EFFECTS

Effects of ovarian steroids on vaginal smears in the rat. Montes GS, et al. Acta Anat (Basel) 1988;133(3):192–9
The effects of an aromatase inhibitor and a 5 alpha–reductase inhibitor upon the occurrence of polyovular follicles, persistent anovulation, and permanent vaginal stratification in mice treated neonatally with testosterone. Iguchi T, et al. Biol Reprod 1988 Oct;39(3):689–97
Vaginal abnormalities in ovariectomized BALB/cCrgl mice after neonatal exposure to different doses of diethylstilbestrol. Iguchi T, et al. Cancer Lett 1988 Dec 15;43(3):207–14
Effect of Foeniculum vulgare seed extracts on cervix & vagina of ovariectomised rats. Annusuya S, et al. Indian J Med Res 1988 Apr;87:364–7
Estradiol induced vaginal cornification in spayed rats: a model to study hepatic microsomal enzyme induction. Shanbhag TV, et al. Indian J Physiol Pharmacol 1989 Jan–Mar;33(1):31–4
Endometrial and vaginal response to three different oestrogen preparations administered by the transdermal and oral routes. Johannisson E, et al. Maturitas 1988 Oct; 10(3):181–92
Induction of estrogen receptor, peroxidase activity, and epithelial abnormalities in the mouse uterovaginal epithelium after neonatal treatment with diethylstilbestrol. Andersson C, et al. Teratogenesis Carcinog Mutagen 1988; 8(6):347–61
[Experimental study of the effect of corticosteroid preparations on the adhesion of Candida genus fungi to the epitheliocytes of mucous membranes] Bykov VL, et al. Zh Mikrobiol Epidemiol Immunobiol 1988 Aug;(8):115–8 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

Neonatal melatonin administration advances rat vaginal opening and disrupts estrous cyclicity and estrogen–dependent regulatory mechanisms of luteinizing hormone and prolactin. Villanúa MA, et al. J Pineal Res 1989;7(2):165–74
Influence of pyrazine derivatives on the day of vaginal opening in juvenile female rats. Yamada K, et al. Jpn J Pharmacol 1989 Apr;49(4):529–30

IMMUNOLOGY

Seminal plasma & sperm antibody activity in vaginal fluid of infertile women. Gupta A, et al. Indian J Med Res 1988 Nov;88:421–6
Human seminal plasma suppresses delayed–type hypersensitivity responses to intravaginally deposited sheep red blood cells and sperm: separation of immunosuppressive factors. Lee HK, et al. Int Arch Allergy Appl Immunol 1989;88(4):412–9
T lymphocytes in genital lymph nodes protect mice from intravaginal infection with herpes simplex virus type 2. McDermott MR, et al. J Infect Dis 1989 Mar;159(3):460–6
Vaginal eosinophils and IgE antibodies to Candida albicans in women with recurrent vaginitis. Witkin SS, et al. J Med Vet Mycol 1989;27(1):57–8
A comparison of specific antibody responses in mouse vaginal fluid after immunization by several routes. Parr EL, et al. J Reprod Immunol 1988 Nov;14(2):165–76
Antibodies to HIV2 in genital secretions. Bélec L, et al. Res Virol 1989 Jan–Feb;140(1):15–21
[Quantitative determination of secretory IgA (SIgA), serum IgA (7S–IgA) and IgG in cervico–vaginal secretions in gonorrhea] Koch HJ, et al. Dermatol Monatsschr 1988; 174(6):351–4 (Ger)

INJURIES

Iatrogenic vagina dentata [letter] Davies JN. Am J Forensic Med Pathol 1989 Sep;10(3):269
Vaginal "fisting" as a cause of death. Fain DB, et al. Am J Forensic Med Pathol 1989 Mar;10(1):73–5
Anteromedial (perineal) dislocation of the hip: a case report. Burrell JC, et al. Can J Surg 1989 Jan;32(1):77–8
Vaginal introital diameter in the evaluation of sexual abuse. White ST, et al. Child Abuse Negl 1989;13(2):217–24
Open pelvic fracture with vaginal laceration and diaphragmatic rupture in a child. Heinrich SD, et al. J Orthop Trauma 1988;2(3):257–61
Vaginal evisceration with pneumoperitoneum. A case report. Cullins V, et al. J Reprod Med 1989 Jun;34(6):426–8 (14 ref.)
[Total traumatic urethrovaginal detachment. Functional evaluation some time after repair] Cocimano V, et al. Minerva Urol Nefrol 1988 Apr–Jun;40(2):121–3 (Eng. Abstr.) (Ita)
[A tumor–like lesion of the parametrium caused by foreign body of the bladder] Sprogis J, et al. Ginekol Pol 1988 Dec;59(12):755–7 (Eng. Abstr.) (Pol)

METABOLISM

Metabolism of estrone sulfate in postmenopausal vaginal mucosa. Carlström K, et al. Acta Obstet Gynecol Scand 1988;67(3):241–2
Vaginal hydrolysis of retinyl acetate: increase in plasma retinol and retinol binding protein in women with cervical dysplasias. Palan PR, et al. Biochem Med Metab Biol 1988 Dec;40(3):282–90
Keratinization of rat vaginal epithelium. III. Effect of estradiol on keratinization. Gupta PD, et al. Biol Cell 1989; 65(3):281–9
The vaginal epithelium of immature rats metabolizes androgens through an aromatase–like reaction: changes during the time of puberty. Lephart ED, et al. Biol Reprod 1989 Feb;40(2):259–67
Vaginal pH in pregnancy in women delivered at and before term. Gleeson RP, et al. Br J Obstet Gynaecol 1989 Feb; 96(2):183–7
Tissue specific effects of progesterone on progesterone and estrogen receptors in the female urogenital tract. Batra S, et al. J Steroid Biochem 1989 Jan;32(1A):35–9
Conversion of dihydrotestosterone to androstanediol glucuronide by female sexual skin. Pasupuleti V, et al. Steroids 1988 Mar–Apr;51(3–4):269–82

MICROBIOLOGY

The cytologist and bacterioses of the vaginal–ectocervical area. Clues, commas and confusion. Schnadig VJ, et al. Acta Cytol 1989 May–Jun;33(3):287–97
Recto–vaginal colonization and urinary tract infection by group B Streptococcus in the pregnant diabetic patient. Matorras R, et al. Acta Obstet Gynecol Scand 1988; 67(7):617–20
Rapid detection of vaginal colonization with group B streptococci by means of latex agglutination. Stiller RJ, et al. Am J Obstet Gynecol 1989 Mar;160(3):566–8
Culture–positive persistence and serum agglutinating antibody response after intrauterine inoculation of Haemophilus somnus in virgin heifers. Hoblet KH, et al. Am J Vet Res 1989 Jul;50(7):1008–14
Pharmacodynamic evaluation of ofloxacin and trimethoprim–sulfamethoxazole in vaginal fluid of women treated for acute cystitis. Tartaglione TA, et al. Antimicrob Agents Chemother 1988 Nov;32(11):1640–3
The use of high vaginal, endocervical and rectal swabs in the diagnosis of genital infection in association with pre–term labour. Lamont RF, et al. Br J Clin Pract 1988 Apr;42(4):146–9
Ultrastructure of the in situ adherence of Mobiluncus to vaginal epithelial cells. De Boer JM, et al. Can J Microbiol 1988 Jun;34(6):757–66
Microbial flora of the lower genital tract of women in labour at Harare Maternity Hospital. The Puerperal Sepsis Study Group. Mason PR, et al. Cent Afr J Med 1989 Mar; 35(3):337–44
Vaginal flora of women admitted to hospital with signs of sepsis following normal delivery, cesarean section or abortion. The Puerperal Sepsis Study Group. Mason PR, et al. Cent Afr J Med 1989 Mar;35(3):344–51
Evaluation of a rapid latex agglutination test for detection of group B streptococci in vaginal specimens. Lotz–Nolan L, et al. Eur J Clin Microbiol Infect Dis 1989 Apr; 8(4):289–93
Isolation of Weeksella virosa (formerly CDC group IIf) from a vaginal sample [letter] Reina J, et al. Eur J Clin Microbiol Infect Dis 1989 Jun;8(6):569–70
Chlorhexidine for prevention of neonatal colonization with group B streptococci. V. Chlorhexidine concentrations in blood following vaginal washing during delivery. Nilsson G, et al. Eur J Obstet Gynecol Reprod Biol 1989 Jun; 31(3):221–6
Fewer Trichomonas vaginalis organisms in vaginas of infected women during menstruation [letter] Fox H. Genitourin Med 1988 Aug;64(4):280
Antibiotic spectrum of isolated germs in the vaginal smear of Nigerian women. Ecker–Eckhofen C, et al. Geogr Med 1988;18:157–69
Incidence of group–B beta haemolytic streptococci in the vaginal flora of pregnant women. Lakshmi V, et al. Indian J Pathol Microbiol 1988 Jul;31(3):240–4
Elimination of vaginal colonization with Escherichia coli by administration of indigenous flora. Herthelius M, et al. Infect Immun 1989 Aug;57(8):2447–51
Pathogenesis of urinary tract infections—amoxicillin induces genital Escherichia coli colonization. Herthelius BM, et al. Infection 1988 Sep–Oct;16(5):263–6
Prevalence of hydrogen peroxide–producing Lactobacillus species in normal women and women with bacterial vaginosis. Eschenbach DA, et al. J Clin Microbiol 1989 Feb;27(2):251–6
Evaluation of the enhanced rapid identification method for Gardnerella vaginalis. Lien EA, et al. J Clin Microbiol 1989 Mar;27(3):566–7
Antibodies to human immunodeficiency virus in vaginal secretions of heterosexual women. Belec L, et al. J Infect Dis 1989 Sep;160(3):385–91
The establishment and persistence of Ureaplasma urealyticum in oestradiol–treated female mice. Furr PM, et al. J Med Microbiol 1989 Jun;29(2):111–4
Antibodies against Trichosporon beigelii in vaginal washings from asymptomatic women. Quindos G, et al. J Med Microbiol 1989 Mar;28(3):223–5
Candida concentrations in the vagina and their association with signs and symptoms of vaginal candidosis. Odds FC, et al. J Med Vet Mycol 1988;26(5):277–83
Genital mucosal transmission of simian immunodeficiency virus: animal model for heterosexual transmission of human immunodeficiency virus. Miller CJ, et al. J Virol 1989 Oct; 63(10):4277–84
Bacterial flora of vagina and cervix in normal pregnancy. Kirmani N, et al. JPMA 1989 May;39(5):133–4
Anaerobic curved rods in breast abscess and vagina [letter] Bennett KW, et al. Lancet 1989 Mar 11;1(8637):564
Detection of microorganisms in clinical specimens using slides prestained with acridine orange (AOS). Giorgio A, et al. Microbiologica 1989 Jan;12(1):97–100
Alterations in lower reproductive tract flora after single–dose piperacillin and triple–dose cefoxitin at vaginal and abdominal hysterectomy. Hemsell DL, et al. Obstet Gynecol 1988 Dec;72(6):875–80
Normal vaginal flora in relation to vaginitis. Hammill HA. Obstet Gynecol Clin North Am 1989 Jun;16(2):329–36 (24 ref.)
Vaginal bacterial flora partially determines sexual attractivity of female rats. Merkx J, et al. Physiol Behav 1988; 44(1):147–9
Sequential assessment of vaginal microflora in healthy women randomly assigned to tampon or napkin use. Chow AW, et al. Rev Infect Dis 1989 Jan–Feb;11 Suppl 1:S68–73; discussion S73–4
Normal vaginal microflora during use of various forms of catamenial protection. Onderdonk AB, et al. Rev Infect Dis 1989 Jan–Feb;11 Suppl 1:S61–7
Isolation of Chlamydia psittaci from the genital tract of lambs: a possible link with enzootic abortion of ewes. Morgan KL, et al. Vet Rec 1988 Oct 8;123(15):399–400
Rapid detection of group B streptococci in vaginal swabs of parturients by latex particle agglutination. Hoppe JE, et al. Zentralbl Bakteriol Mikrobiol Hyg [A] 1989 Jan; 270(3):379–84
[Bacterial vaginosis and the microbial picture of the vagina] Mendl V. Cesk Gynekol 1988 Jul;53(6):448–50 (Cze)
[Vaginal microbial flora and infectious pathology] Cavallo G. G Batteriol Virol Immunol 1987 Jan–Dec; 80(1–12):277–95 (34 ref.) (Eng. Abstr.) (Ita)
[Isolation of seminal and vaginal bacteria from patients on a protocol of in vitro fertilization and embryo transfer] Arisio R, et al. Minerva Ginecol 1988 Aug;40(8):461–3 (25 ref.) (Eng. Abstr.) (Ita)
[Microbiological studies on vaginal smears: casuistry of women consulting a Rome walk–in clinic] Cantalamessa Carboni L, et al. Nuovi Ann Ig Microbiol 1986 Jan–Dec; 37(1–6):233–43 (Eng. Abstr.) (Ita)
[Incidence and distribution of vaginal yeast in non selected obstetric and gynecologic patients] Laurelli T, et al. Nuovi Ann Ig Microbiol 1986 Jan–Dec;37(1–6):245–57 (Eng. Abstr.) (Ita)
[Cervico–vaginal pathogens and contraception: microbiological observations] Crotti D, et al. Quad Sclavo Diagn 1987 Dec;23(4):369–77 (Eng. Abstr.) (Ita)
[Diagnostic–detecting value of selected methods used for evaluating the vaginal biocenosis in women] Grys E. Ginekol Pol 1988 Feb;59(2):103–8 (Eng. Abstr.) (Pol)
[Vaginal biocenosis and the microbiologic status of the bladder and urethra in women with stress–induced urinary incontinence] Lotocki W, et al. Ginekol Pol 1988 Jun; 59(6):367–70 (Eng. Abstr.) (Pol)
[Occurrence and the sensitivity to drugs of fungi other than Candida albicans isolated from the vagina] Pawlik B, et al. Med Dosw Mikrobiol 1989;41(1):60–6 (Eng. Abstr.) (Pol)
[Effect of Streptococci on epithelial cells of the vagina of albino inbred mice NMRI] Stefanowicz M, et al. Patol Pol 1988 Jul–Sep;39(3):210–9 (Eng. Abstr.) (Pol)
[Morphological analysis of the effect of corticosteroids on the development and course of vaginal candidiasis] Bykov VL. Akush Ginekol (Mosk) 1989 Feb;(2):35–7 (Eng. Abstr.) (Rus)
[Microbiological aspects of suppurative–inflammatory complications (pericultitis) after hysterectomy] Danilov Alu. Akush Ginekol (Mosk) 1989 Apr;(4):36–9 (Eng. Abstr.) (Rus)
[Adhesion of fungi of the genus Candida to vaginal epithelium in various physiological changes in the levels of sex hormones] Velichko EV, et al. Akush Ginekol (Mosk) 1989 Feb;(2):67–8 (Rus)
[Biological properties of Streptococcus group B: the interrelations of the virulence in mice, the adhesion to human epithelial cells and the production of type–specific antigen] Bulgakova TN, et al. Zh Mikrobiol Epidemiol Immunobiol 1988 Dec;(12):29–34 (Eng. Abstr.) (Rus)
[[Staphylococcus aureus producing toxic shock syndrome toxin 1 in the lower genital tract of the female] Puig de Centorbi ON, et al. Rev Argent Microbiol 1987 Apr–Jun; 19(2):47–54 (Eng. Abstr.) (Spa)

PARASITOLOGY

Trichomonas vaginalis surface proteinase activity is necessary for parasite adherence to epithelial cells. Arroyo R, et al. Infect Immun 1989 Oct;57(10):2991–7
Adherence of Tritrichomonas foetus to bovine vaginal

epithelial cells. Corbeil LB, et al. **Infect Immun** 1989 Jul; 57(7):2158–65

Monoclonal–antibody–based enzyme–linked immunosorbent assay for Trichomonas vaginalis. Lisi PJ, et al. **J Clin Microbiol** 1988 Sep;26(9):1684–6

Evaluation of six media for the growth of Trichomonas vaginalis from vaginal secretions. Schmid GP, et al. **J Clin Microbiol** 1989 Jun;27(6):1230–3

Evaluation of the laboratory diagnosis of vaginal trichomoniasis in Khartoum. Omer EF, et al. **J Trop Med Hyg** 1988 Dec;91(6):292–5

[Observation of the processes of phagocytosis and digestion of Staphylococcus aureus by Trichomonas vaginalis using a transmission electron microscope] Szreter H, et al. **Wiad Parazytol** 1989;35(2):121–6 (Eng. Abstr.) (Pol)

PATHOLOGY

Detection of bacterial vaginosis in Papanicolaou smears. Platz–Christensen JJ, et al. **Am J Obstet Gynecol** 1989 Jan; 160(1):132–3

The management of the patient with abnormal vaginal cytology following hysterectomy. Ireland D, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):973–5

Action of chronic peracetic acid (wofasteril) administration on the rabbit oral mucosa, vaginal mucosa, and skin. Müller P, et al. **Exp Pathol** 1988;34(4):223–8

Ultrasound volumetry in hematometrocolpos. Ali GM, et al. **JCU** 1989 May;17(4):257–9

[Radiation–induced vaginal necrosis] Rhomberg W, et al. **Strahlenther Onkol** 1988 Sep;164(9):527–30 (Eng. Abstr.) (Ger)

[Pregnancy after ejaculatio ante portas in a patient with an anatomical obstruction to intercourse] Wolf B. **Zentralbl Gynakol** 1988;110(22):1457–9 (Eng. Abstr.) (Ger)

PHYSIOLOGY

Vaginal sensitivity to electric stimuli: theoretical and practical implications. Weijmar Schultz WC, et al. **Arch Sex Behav** 1989 Apr;18(2):87–95

Modulation of male mouse genital sniff, attack, and mount behaviors by urogenital substances from estrous females. Weinhold LL, et al. **Behav Neural Biol** 1988 Sep; 50(2):207–28

Electrical conductivity of reproductive tissue for detection of estrus in dairy cows. Smith JW, et al. **J Dairy Sci** 1989 Mar;72(3):693–701

The effect of exercise on the circumvaginal muscles in postpartum women. Dougherty MC, et al. **J Nurse Midwifery** 1989 Jan–Feb;34(1):8–14

IgG and IgA content of vaginal fluid during the menstrual cycle. Usala SJ, et al. **J Reprod Med** 1989 Apr;34(4):292–4

The role of the Grafenberg Spot and female ejaculation in the female orgasmic response: an empirical analysis. Davidson JK Sr, et al. **J Sex Marital Ther** 1989 Summer; 15(2):102–20

Ovulation prediction by monitoring salivary and vaginal electrical resistance with the PEAK Ovulation Predictor. Jacobs MH, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):817–22

Analgesia produced by vaginal self–stimulation in women is independent of heart rate acceleration. Martinez–Gomez M, et al. **Physiol Behav** 1988;43(6):849–50

Myoelectrical activity changes in the uterus and vagina during oviposition in the conscious domestic hen. Wechsung E, et al. **Poult Sci** 1988 Nov;67(11):1615–8

Changes in electrical resistance of the vaginal mucosa in prostaglandin–treated cows. Peters AR. **Vet Rec** 1989 May 13;124(19):505–7

PHYSIOPATHOLOGY

Effects of some different pulse parameters on the perception of intravaginal and intra–anal electrical stimulation. Ohlsson BL. **Med Biol Eng Comput** 1988 Sep;26(5):503–8

RADIATION EFFECTS

Systematic irradiation of the vaginal vault in stage I endometrial carcinoma. Nguyen TD, et al. **Radiother Oncol** 1988 Jul;12(3):171–6

RADIOGRAPHY

Contrast material in posterior vaginal fornix mimicking bladder rupture: CT features. Pistoia F, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):153–5

SECRETION

Vaginal mucus? [letter] Fribourg S. **Am J Obstet Gynecol** 1989 Apr;160(4):1023

Is analysis of vaginal secretions for volatile organic acids to detect bacterial vaginosis of any diagnostic value? Thomason JL, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1509–11

Brdicka reaction in vaginal secretions. A possible diagnostic tool in cervical cancer. Velázquez A, et al. **Arch Invest Med (Mex)** 1988 Apr–Jun;19(2):133–8

Subtyping of group specific component (GC) in human semen, blood and vaginal fluid by isoelectric focusing in immobilized pH gradients. Pötsch–Schneider L, et al. **Electrophoresis** 1988 Sep;9(9):602–5

High–performance liquid chromatographic method for the determination of miconazole in vaginal fluid. Selinger K, et al. **J Chromatogr** 1988 Dec 29;434(1):259–64

Isolation of mumps virus from vaginal secretions in association with oophoritis. Taparelli F, et al. **J Infect** 1988 Nov;17(3):255–8

[Isolation, identification and serotyping of Candida albicans from vaginal secretions] Garcia AL, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jul–Aug;30(4):270–3 (Eng. Abstr.) (Por)

SURGERY

Removal of extrauterine IUDs by the vaginal route with laparoscopic assistance. Sheth SS. **Adv Contracept** 1988 Sep;4(3):213–6

Gracilis myocutaneous vaginal reconstruction concurrent with total pelvic exenteration. Copeland LJ, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1095–101

Construction of a neovagina for patients with a flat perineum. Rock JA, et al. **Am J Obstet Gynecol** 1989 Apr; 160(4):845–51; discussion 852–3

Vaginal reconstruction using labia minora flaps in congenital total absence. Hwang WY, et al. **Ann Plast Surg** 1985 Dec; 15(6):534–7

Colposuspension in treatment of genuine stress incontinence. Rizvi JH, et al. **Asia Oceania J Obstet Gynaecol** 1988 Dec; 14(4):427–31

A vaginal approach to the treatment of genital prolapse. Tanaka S, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun; 14(2):161–5

The urodynamic effect of colposuspension immediately after surgery for genuine stress incontinence. Wang AC, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):335–8

Successful pregnancy after radical surgery for diethylstilboestrol (DES)–related vaginal adenocarcinoma. Case report. Hudson CN, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):818–9

A two–dimensional self–retaining vaginal retractor for high obstetric trauma. Phipps JH. **Br J Obstet Gynaecol** 1989 Aug;96(8):1003–5

An improvised mould for vaginoplasty. Viegas T, et al. **Br J Plast Surg** 1989 Jul;42(4):487–9

Surgical treatment of carcinoma involving the vagina. Schofield PF, et al. **Br J Surg** 1989 Aug;76(8):816–7

Transvaginal sacrospinous vaginal fixation. Dony JM. **Eur J Obstet Gynecol Reprod Biol** 1989 Jul;32(1):13–14

Uterosacral ligament suspension of vaginal vault (McCall's culdeplasty). Hirsch HA. **Eur J Obstet Gynecol Reprod Biol** 1989 Jul;32(1):13

Urethral placement through a bilateral myocutaneous gracilis flap neovagina. Wheelock JB, et al. **Gynecol Oncol** 1989 Jan;32(1):88–90

Resurfacing the vulva and vagina. Cronjé HS, et al. **Int J Gynaecol Obstet** 1988 Aug;27(1):113–8

Ultrasonic evaluation of residual urine volume after vaginal surgery. Rojansky N, et al. **Isr J Med Sci** 1989 May; 25(5):282–4

Correlation of follicular diameter with oocyte recovery and maturity at the time of transvaginal follicular aspiration. Scott RT, et al. **J In Vitro Fert Embryo Transf** 1989 Apr; 6(2):73–5

A prospective randomized comparison of single– and double–lumen needles for transvaginal follicular aspiration. Scott RT, et al. **J In Vitro Fert Embryo Transf** 1989 Apr; 6(2):98–100

Transabdominal laser colpotomy. Davis GD, et al. **J Reprod Med** 1989 Jul;34(7):438–40

Benefits of posturethropexy bladder conditioning. Fact or fiction? Harlass FE, et al. **J Reprod Med** 1988 Dec; 33(12):961–3

Laparoscopic and vaginal colpotomy for the excision of infiltrating cul–de–sac endometriosis. Martin DC. **J Reprod Med** 1988 Oct;33(10):806–8

Vaginal flap urethral reconstruction: an alternative to the bladder flap neourethra. Blaivas JG. **J Urol** 1989 Mar; 141(3):542–5

Continent urinary reconstruction in ischiopagus tripus conjoined twins. Holcomb GW 3d, et al. **J Urol** 1989 Jan; 141(1):100–2

A new 1–stage procedure for clitorovaginoplasty in severely masculinized female pseudohermaphrodites. Passerini–Glazel G. **J Urol** 1989 Aug;142(2 Pt 2):565–8; discussion 572

Vaginal wall sling [published erratum appears in J Urol 1989 May;141(5):1214] Raz S, et al. **J Urol** 1989 Jan;141(1):43–6

Reconstruction of sigmoid vagina and conduit in total pelvic exenteration for recurrent cervical carcinoma. Shiromizu K, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):170–2

McIndoe procedure for vaginal agenesis: results and complications. Buss JG, et al. **Mayo Clin Proc** 1989 Jul; 64(7):758–61

Failed abdominal sacral colpopexy: observations and recommendations. Addison WA, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):480–3

Vaginal reconstruction in gynecologic oncology. Beemer W, et al. **Obstet Gynecol** 1988 Dec;72(6):911–4

The morbidity and benefits of concurrent gracilis myocutaneous graft with pelvic exenteration. Cain JM, et al. **Obstet Gynecol** 1989 Aug;74(2):185–9

Transvaginal needle bladder neck suspension procedures for stress urinary incontinence: a comprehensive review. Karram MM, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):906–14 (57 ref.)

The value of simultaneous hysterectomy during Burch colposuspension for urinary stress incontinence. Langer R, et al. **Obstet Gynecol** 1988 Dec;72(6):866–9

Vaginal reconstruction with an axial subcutaneous pedicle flap from the inferior abdominal wall: a new method. Chen ZJ, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1005–12

Silicon–rubber vaginal stent [letter] Nicolai JP, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1105–6

A new technique of vaginal reconstruction using neurovascular pudendal–thigh flaps: a preliminary report. Wee JT, et al. **Plast Reconstr Surg** 1989 Apr;83(4):701–9

Methods of vaginal cuff closure during vaginal hysterectomy. Cruikshank SH. **South Med J** 1988 Nov;81(11):1375–8

Bone fixation technique for transvaginal needle suspension. Leach GE, et al. **Urol Clin North Am** 1989 Feb;16(1):175–82

Perirenal urinary extravasation complicating Burch colposuspension. Delaere KP, et al. **Urol Int** 1989; 44(2):119–20

[The results in 7 cases of Marion's operation] Belchev B. **Khirurgiia (Sofiia)** 1989;42(1):55–6 (Bul)

[Reconstruction of the vagina] Wang XL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):47–9 (Eng. Abstr.) (Chi)

[Vaginoplasty with sigmoid: a report of 53 cases] Liu XM. **Chung Hua Fu Chan Ko Tsa Chih** 1988 May;23(3):156–8, 189 (Eng. Abstr.) (Chi)

[Research on operative mode of artificial vagina with sigmoid colon] Wang MQ. **Chung Hua Fu Chan Ko Tsa Chih** 1988 May;23(3):153–5, 189 (Eng. Abstr.) (Chi)

[Clinical and urodynamic results of the Burch colposuspension operation in the treatment of female urinary stress incontinence. A study apropos of 370 cases] Pigné A, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988; 17(7):922–30 (Eng. Abstr.) (Fre)

[A simple technic for vaginal suspension using multiple approaches. Study of a series of 50 cases] Raudrant D, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(3):395–400 (Eng. Abstr.) (Fre)

[Surgical anatomy of the bladder neck sphincter and its significance for vaginal surgery of stress incontinence] Richter K. **Geburtshilfe Frauenheilkd** 1988 Aug; 48(8):541–50 (47 ref.) (Eng. Abstr.) (Ger)

[Colposuspension in the therapy of female urinary incontinence] Guba H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:35–7 (Ger)

[The value of anterior colporrhaphy and colpoperineoplasty in therapy of stress incontinence] Ralph G, et al. **Gynakol Rundsch** 1988;28 Suppl 2:33–4 (Ger)

[Are operations for urinary incontinence using colposuspension contraindicated in low urethral closing pressure?] Fischer W, et al. **Z Urol Nephrol** 1988 Sep; 81(9):571–4 (Eng. Abstr.) (Ger)

[Comparison of 2 simple surgical methods: posterior colpocleitotomy versus laparoscopy—competition or synergism?] Lange R, et al. **Zentralbl Gynakol** 1988; 110(18):1145–52 (Eng. Abstr.) (Ger)

[Surgical colpo–suspension (Burch's method) in the management of female stress incontinence] Antal H, et al. **Orv Hetil** 1989 Apr 9;130(15):781–2 (Eng. Abstr.) (Hun)

[Fixation of the vagina to the rectus abdominis muscle in the treatment of stress–induced urinary incontinence in women] Sprogis J, et al. **Ginekol Pol** 1988 Jul;59(7):446–9 (Eng. Abstr.) (Pol)

[Evaluation of methods for colpopoiesis] Kozbagarov AA. **Akush Ginekol (Mosk)** 1988 May;(5):58–9 (Rus)

[A method of autodermoplasty in prolapse of the anterior wall of the vagina] Sterhkovol VV. **Akush Ginekol (Mosk)** 1988 Nov;(11):66–7 (Rus)

ULTRASTRUCTURE

Study of the vaginal mucous membrane following tampon utilisation; aspect on colposcopy, scanning electron microscopy and transmission electron microscopy. Raudrant D, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Apr;31(1):53–65

The mucosa of the rabbit vagina: a morphodynamic study by transmission and scanning electron microscopy. Barberini F, et al. **Prog Clin Biol Res** 1989;296:415–20

[Ultrastructural study of the vaginal epithelium in albino rats during at–term pregnancy, immediately postpartum and at postpartum estrus] De Teves DC, et al. **Rev Bras Biol** 1988 Nov;48(4):777–83 (Eng. Abstr.) (Por)

VAGINAL DISEASES

CHEMICALLY INDUCED

Ginseng face cream and unexplained vaginal bleeding. Hopkins MP, et al. **Am J Obstet Gynecol** 1988 Nov; 159(5):1121–2

COMPLICATIONS

Post–surgical pyoderma gangrenosum of the vaginal vault associated with ulcerative colitis and Behçet's disease; a case report. Lilford RJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Apr;31(1):93–4

Herpes simplex virus infection in women with previous spontaneous abortion. Bujko M, et al. **J Perinat Med** 1988; 16(3):193–6

Neoplasia in vaginal cuff epithelial inclusion cysts after hysterectomy. Hoffman MS, et al. **J Reprod Med** 1989 Jun;

34(6):412–4 (20 ref.)

DIAGNOSIS

Neonatal hydrometrocolpos: report of a case. Liu HC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1229–33

[A case of hydrometrocolpos observed prenatally by echography] Riboni G, et al. **Radiol Med (Torino)** 1989 Mar;77(3):285–7 (Ita)

DRUG THERAPY

Roxithromycin compared with erythromycin against genitourinary chlamydial infections. Worm AM, et al. **Genitourin Med** 1989 Jan;65(1):35–8

Comparison of tinidazole given as a single dose and on 2 consecutive days for the treatment of nonspecific bacterial vaginosis. Ekgren J, et al. **Gynecol Obstet Invest** 1988; 26(4):313–7

The effectiveness of single-dose metronidazole therapy for patients and their partners with bacterial vaginosis. Mengel MB, et al. **J Fam Pract** 1989 Feb;28(2):163–71

Treatment of bacterial vaginosis with intravaginal sponges containing metronidazole. Edelman DA, et al. **J Reprod Med** 1989 May;34(5):341–4

Vaginal rings for continuous low-dose release of oestradiol in the treatment of urogenital atrophy. Holmgren PA, et al. **Maturitas** 1989 Mar;11(1):55–63

EPIDEMIOLOGY

Cervicovaginal infection with group B streptococci among pregnant Mexican women [letter] Solorzano-Santos F, et al. **J Infect Dis** 1989 May;159(5):1003–4

ETIOLOGY

An effective clinical approach to vaginismus—putting the patient in charge. Caplan HW. **West J Med** 1988 Dec; 149(6):769–70

[Benign vulvovaginal tumefactions in children. General review illustrated by a series of 57 personal cases] Dodat H, et al. **Pediatrie** 1988;43(3):227–33 (0 ref.) (Eng. Abstr.) (Fre)

IMMUNOLOGY

Neonatal serologic response at term to the genital mycoplasmas. Dinsmoor MJ, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):487–91

Mucosal antibody response to vaginal infection with herpes simplex virus in pre-vaccinated guinea-pigs [published erratum appears in Vaccine 1989 Feb;7(1):77] McBride BW, et al. **Vaccine** 1988 Oct;6(5):414–8

MICROBIOLOGY

Comparison of the in vitro activities of fenticonazole, other imidazoles, metronidazole, and tetracycline against organisms associated with bacterial vaginosis and skin infections. Jones BM, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):970–2

Elimination of vaginal colonization with Escherichia coli by administration of indigenous flora. Herthelius M, et al. **Infect Immun** 1989 Aug;57(8):2447–51

Newly recovered and delineated microbial species of the human genital tract. Hammann R. **Infection** 1989 May–Jun; 17(3):188–93 (29 ref.)

Clue cells in bacterial vaginosis: immunofluorescent identification of the adherent gram-negative bacteria as Gardnerella vaginalis. Cook RL, et al. **J Infect Dis** 1989 Sep;160(3):490–6

Bacteriological study of genital tract infection in puerperium. Baqai R, et al. **JPMA** 1989 Mar;39(3):70–2

Bacterial vaginosis: a comprehensive review. Secor RM. **Nurs Clin North Am** 1988 Dec;23(4):865–75 (24 ref.)

[Bacterial vaginosis and the microbial picture of the vagina] Mendl V. **Cesk Gynekol** 1988 Jul;53(6):448–50 (Cze)

PATHOLOGY

Histologic correlates of papillomavirus infection of the vagina. Nuovo GJ, et al. **Obstet Gynecol** 1988 Nov; 72(5):770–4

[Papillomavirus infection of the epithelium of the vaginal vault. A prospective study of morphological aspects] Liverani CA, et al. **Minerva Ginecol** 1988 Jun;40(6):351–6 (Eng. Abstr.) (Ita)

THERAPY

Angiographic embolization of intractable puerperal hematomas. Chin HG, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):434–8

VETERINARY

Surgical management of urovagina and associated infertility in a cow. Gilbert RO, et al. **J Am Vet Med Assoc** 1989 Apr 1;194(7):931–2

Immaculate conception? [letter] **Vet Rec** 1989 Jul 15;125(3):74

Urethral extension for correction of urovagina in cattle. A review of 14 cases. St. Jean G, et al. **Vet Surg** 1988 Sep–Oct; 17(5):258–62

Rectovaginal constriction in Jersey cattle: ultrastructural features. Troyer D, et al. **Zentralbl Veterinarmed [A]** 1988 Aug;35(7):481–6

VAGINAL FISTULA

COMPLICATIONS

Anovaginal fistula presenting as a vulvar ulcer. A report of two cases in postmenopausal women. Josey WE. **J Reprod Med** 1988 Oct;33(10):857–8

[Clinical significance of mean molecules in the prognosis of pyo-septic complications in patients with genital fistulas] Kulikova NN, et al. **Akush Ginekol (Mosk)** 1989 Jun; (6):62–5 (Eng. Abstr.) (Rus)

[Fistula due to cerclage as a cause of recurrent vulvovaginal candidiasis] Seban J. **Cesk Gynekol** 1988 Sep;53(8):586–8 (Slo)

CONGENITAL

Congenital anal fistula with normal anus. Brem H, et al. **J Pediatr Surg** 1989 Feb;24(2):183–5

ETIOLOGY

Vagino-peritoneal fistula from a cervical carcinoma. Singh P, et al. **Gynecol Oncol** 1988 Oct;31(2):352–6

Pneumoperitoneum due to peritoneovaginal fistula following hysterectomy. Masaad LS, et al. **Int J Gynaecol Obstet** 1989 Jul;29(3):257–61 (16 ref.)

[Ureterovaginal fistulae after obstetrical-gynecological operations] Kumanov Kh, et al. **Khirurgiia (Sofiia)** 1988; 41(4):1–5 (Bul)

PATHOLOGY

Early diagnosis of a diverticular colovaginal fistula with colposcopy. A case report. Wisniewski PM, et al. **J Reprod Med** 1988 Aug;33(8):705–8

PHYSIOPATHOLOGY

Conception through a cervicovaginal fistula. Miyakawa I, et al. **Fertil Steril** 1989 Apr;51(4):731–2

SURGERY

Treatment of urethrovaginal fistula. Krogh J, et al. **Br J Urol** 1989 May;63(5):555

Cervicovaginal fistula. A case report. Leake JF, et al. **J Reprod Med** 1988 Oct;33(10):847–9

[Functional status of the bladder and urethral sphincter systems after correction of urethrovaginal fistula] Kan LV, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):67–9 (Rus)

THERAPY

Vaginal fistulas in Crohn's disease. Heyen F, et al. **Dis Colon Rectum** 1989 May;32(5):379–83

VAGINAL NEOPLASMS

Vulvovaginal melanoma: report of seven cases and literature review. Brand E, et al. **Gynecol Oncol** 1989 Apr;33(1):54–60 (28 ref.)

Gynecologic cancer in the very elderly. Kennedy AW, et al. **Gynecol Oncol** 1989 Jan;32(1):49–54

Primary malignant melanoma of the vagina: report of four cases and review of the literature. Levitan Z, et al. **Gynecol Oncol** 1989 Apr;33(1):85–90 (53 ref.)

Vaginal adenocarcinoma developing in residual pelvic endometriosis: a clinical dilemma. Orr JW Jr, et al. **Gynecol Oncol** 1989 Apr;33(1):96–8

[Vagina cancer] Yang KM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;42(1):41–6 (Eng. Abstr.) (Chi)

[Tumors of the vagina and vulva] Kasamatsu T, et al. **Gan No Rinsho** 1989 Jan;Spec No:399–406 (Jpn)

[A combination of sarcoma of the breast and cancer of the female genital organs] Kachanov IP, et al. **Sov Med** 1988; (11):120–1 (Rus)

[Primary vaginal non-Hodgkin's lymphoma (letter)] García-Girón C, et al. **Med Clin (Barc)** 1989 Feb 25; 92(7):276–7 (Spa)

CHEMICALLY INDUCED

Female psychosexual development: mothers, daughters, and inner organs. Fisher SM, et al. **Adolesc Psychiatry** 1988; 15:5–33

Diethylstilbestrol exposure and the risk of clear cell cervical and vaginal adenocarcinoma. Edelman DA. **Int J Fertil** 1989 Jul–Aug;34(4):251–5

The effects in the human of diethylstilbestrol (DES) use during pregnancy. Herbst AL. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:67–75

[Use of diethylstilbestrol in Spain (letter)] García Alonso F, et al. **Med Clin (Barc)** 1988 Oct 8;91(11):436 (Spa)

[Use of sex hormones during pregnancy in Spain (letter)] Iglesias Guiu J. **Med Clin (Barc)** 1988 Oct 8;91(11):436–7 (Spa)

COMPLICATIONS

Lateralized lumbar pain during sexual intercourse. Early clinical sign of single ectopic ureter? Cisternino A, et al. **Eur Urol** 1988;14(6):490–2

Primary carcinoma of vagina with uterine prolapse. Rao K, et al. **J Indian Med Assoc** 1989 Jan;87(1):10–2

Vaginal myxoma presenting as acute urinary retention. Egley CC, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):882–3

CONGENITAL

Endodermal sinus tumour in girls—improved survival in metastatic disease. Olsen L, et al. **Z Kinderchir** 1989 Apr; 44(2):83–5

DIAGNOSIS

The 1988 Bethesda System for reporting cervical/vaginal cytologic diagnoses. Developed and approved at the National Cancer Institute Workshop, Bethesda, Maryland, U.S.A., December 12–13, 1988. **Acta Cytol** 1989 Sep–Oct; 33(5):567–74

Squamous cell carcinoma with sarcomatoid variant in the vagina [letter] Motoyama T, et al. **Acta Cytol** 1989 Jan–Feb; 33(1):142–4

Posthysterectomy carcinoma of the fallopian tube presenting as vaginal adenocarcinoma: a case report. Ehlen T, et al. **Gynecol Oncol** 1989 Jun;33(3):382–5

A primary amelanotic melanoma of the vagina diagnosed by immunocytochemistry. Scambia G, et al. **Int J Gynaecol Obstet** 1989 Jun;29(2):159–64 (21 ref.)

[Primary malignant melanoma of the vagina—report of 8 cases] Li JX. **Chung Hua Chung Liu Tsa Chih** 1989 Jan; 11(1):64–6 (Eng. Abstr.) (Chi)

DRUG THERAPY

Mitoxantrone in the treatment of advanced vulvar and vaginal carcinoma. A gynecologic oncology group study. Muss HB, et al. **Am J Clin Oncol** 1989 Apr;12(2):142–4

Endodermal sinus tumor of the infant vagina treated exclusively by chemotherapy. Collins HS, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):507–9

Capillary hemangioma of the vagina and urethra in a child: response to short-term steroid therapy. Cook CL, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):883–5 (14 ref.)

EPIDEMIOLOGY

[Vaginal cancer: primary invasive squamous cell carcinoma in adults] Gesta P, et al. **Bull Cancer (Paris)** 1989; 76(6):591–604 (Eng. Abstr.) (Fre)

ETIOLOGY

Promoting effect of croton oil on the induction of cervical and vaginal cancers with herpes simplex virus types 1 and 2 in mice. Man YG, et al. **Gynecol Oncol** 1989 Apr; 33(1):27–33

Vaginal leukoplakia in association with solitary rectal ulcer syndrome. Mackie EJ, et al. **Ir J Med Sci** 1989 Apr; 158(4):92

Neoplasia in vaginal cuff epithelial inclusion cysts after hysterectomy. Hoffman MS, et al. **J Reprod Med** 1989 Jun; 34(6):412–4 (20 ref.)

IMMUNOLOGY

Serum squamous cell carcinoma antigen levels in patients with invasive squamous vulvar and vaginal cancer: a preliminary report. Patsner B, et al. **Gynecol Oncol** 1989 Jun;33(3):323–5

[Integrated immunotherapy in two cases of vulvar and vaginal melanoma] Cappello F. **Minerva Ginecol** 1988 Oct; 40(10):613–5 (Eng. Abstr.) (Ita)

METABOLISM

Immunohistochemical differentiation of clear-cell carcinoma of the female genital tract and endodermal sinus tumor with the use of alpha-fetoprotein and Leu-M1. Zirker TA, et al. **Am J Clin Pathol** 1989 May;91(5):511–4

MICROBIOLOGY

Multicentric intraepithelial neoplasia involving the vulva. Clinical features and association with human papillomavirus and herpes simplex virus. Bornstein J, et al. **Cancer** 1988 Oct 15;62(8):1601–4

The analysis of carcinomas of the vagina for human papillomavirus DNA. Ostrow RS, et al. **Int J Gynecol Pathol** 1988;7(4):308–14

PATHOLOGY

Multicentric neoplasia of the lower female genital tract—a case report of neoplastic change at an unusual site. Ngan HY, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug; 28(3):236–8

The management of the patient with abnormal vaginal cytology following hysterectomy. Ireland D, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):973–5

Angiomyolipoma of the vagina—an uncommon tumour. Case report. Peh SC, et al. **Br J Obstet Gynaecol** 1988 Aug; 95(8):820–3

Vaginal botryoid embryonal rhabdomyosarcoma (sarcoma botryoides). A report of one case and review of the literature. Han CP, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Feb;41(2):169–72 (15 ref.)

Fibromyoma of the vagina. Liu MM. **Eur J Obstet Gynecol Reprod Biol** 1988 Dec;29(4):321–8

Embryonal rhabdomyosarcoma of the vagina associated with pregnancy; a case report. Mhaskar R, et al.

Eur J Obstet Gynecol Reprod Biol 1989 Jan;30(1):95–8
Stage II papillary clear cell adenocarcinoma of the vagina during observation in a diethylstilbestrol–exposed daughter. Carlson JA Jr, et al. Gynecol Oncol 1989 Jan;32(1):86–7
A case of glandular intraepithelial neoplasia involving the cervix and vagina. Cullimore JE, et al. Gynecol Oncol 1989 Aug;34(2):249–52
Vaginal endometrioid adenocarcinoma arising in vaginal endometriosis: a case report and literature review. Haskel S, et al. Gynecol Oncol 1989 Aug;34(2):232–6 (13 ref.)
Fibroepithelial polyps with atypical stromal cells (pseudosarcoma botryoides) of vulva and vagina. A report of 13 cases. Ostör AG, et al. Int J Gynecol Pathol 1988; 7(4):351–60
Small cell carcinoma of the vagina with neuroendocrine features. A report of three cases. Hopkins MP, et al. J Reprod Med 1989 Jul;34(7):486–91
Primary melanoma of the vagina: a clinicopathologic analysis. Reid GC, et al. Obstet Gynecol 1989 Aug;74(2):190–9
Vaginal intra–epithelial neoplasia following hysterectomy for cervical intra–epithelial neoplasia [letter] Frohlich EP, et al. S Afr Med J 1989 Apr 1;75(7):352–3
[Endometrial stromal sarcoma of vaginal and para–vaginal localization. Morphology, diagnosis and differential diagnosis] Urban H, et al. Zentralbl Allg Pathol 1988; 134(4–5):511–7 (Eng. Abstr.) (Ger)
[Squamous cell carcinoma with a sarcomatoid variant of the vagina] Motoyama T, et al. Gan No Rinsho 1988 Oct; 34(12):1748–52 (Eng. Abstr.) (Jpn)
[Clear cell adenocarcinoma of the cervix uteri and vagina in young women in Norway] Kjørstad KE, et al. Tidsskr Nor Laegeforen 1989 May 30;109(15):1634–7 (Eng. Abstr.) (Nor)

RADIOGRAPHY

Primary malignant melanoma of the vagina. Constant O, et al. Br J Radiol 1989 Jul;62(739):623–4

RADIOTHERAPY

Radiotherapy in the management of vaginal intraepithelial neoplasia after hysterectomy. Woodman CB, et al. Br J Obstet Gynaecol 1988 Oct;95(10):976–9
Concomitant radiation therapy and chemotherapy in the treatment of advanced squamous carcinoma of the lower female genital tract. Roberts WS, et al. Gynecol Oncol 1989 Aug;34(2):183–6
Definitive irradiation in carcinoma of the vagina: long–term evaluation of results. Perez CA, et al. Int J Radiat Oncol Biol Phys 1988 Dec;15(6):1283–90
Choice of afterloading endocurietherapy techniques for vaginal carcinoma. Kumar PP, et al. Radiat Med 1988 Mar–Apr;6(2):71–8
[Comparative evaluation of the results of combined radiation therapy in patients with primary vaginal cancer] Kostromina KN, et al. Med Radiol (Mosk) 1989 Feb; 34(2):57–60 (Rus)

SECONDARY

Colonic adenocarcinoma presenting with vaginal bleeding [letter] Jotkowitz MW. Aust N Z J Obstet Gynaecol 1988 Feb;28(1):79–80
Vaginal metastasis from renal cell carcinoma: the role of electron microscopy. Serretta V, et al. Eur Urol 1989; 16(1):78–9
Vaginal recurrences of endometrial carcinoma: the prognostic value of staging by a primary vaginal carcinoma system. Curran WJ Jr, et al. Int J Radiat Oncol Biol Phys 1988 Oct;15(4):803–8
The salvage of recurrent endometrial carcinoma in the vagina and pelvis. Poulsen MG, et al. Int J Radiat Oncol Biol Phys 1988 Oct;15(4):809–13
Vaginal recurrences in endometrial cancer [editorial] Rotman M, et al. Int J Radiat Oncol Biol Phys 1988 Oct; 15(4):1043–4
Unusual solitary soft tissue metastases from renal cell carcinoma. Lipman JC, et al. Urol Radiol 1988;10(2):110–2
Vaginal metastasis from transitional cell carcinoma of renal pelvis in horseshoe kidney. Murai M, et al. Urology 1989 Jun;33(6):477–80

SURGERY

Successful pregnancy after radical surgery for diethylstilboestrol (DES)–related vaginal adenocarcinoma. Case report. Hudson CN, et al. Br J Obstet Gynaecol 1988 Aug;95(8):818–9
Surgical treatment of carcinoma involving the vagina. Schofield PF, et al. Br J Surg 1989 Aug;76(8):816–7
Carbon dioxide laser surgery for the cervix and vagina: indications, complications, and results. Wright VC. Compr Ther 1988 Nov;14(11):54–64 (15 ref.)
Pelvic exenteration in clear cell adenocarcinoma of the vagina and cervix. Senekjian EK, et al. Gynecol Oncol 1989 Sep;34(3):413–6
Urethral placement through a bilateral myocutaneous gracilis flap neovagina. Wheelock JB, et al. Gynecol Oncol 1989 Jan;32(1):88–90
Laparoscopic and vaginal colpotomy for the excision of infiltrating cul–de–sac endometriosis. Martin DC. J Reprod Med 1988 Oct;33(10):806–8
Resection of the pubic bone as an adjunct to management of primary, recurrent, and metastatic pelvic malignancies. King LA, et al. Obstet Gynecol 1989 Jun;73(6):1022–6
[Pain following the treatment of vulvo–vaginal condylomatous lesions. Efficacy of benzydamine] Dargent D. Rev Fr Gynecol Obstet 1988 Oct;83(10):663–6 (Eng. Abstr.) (Fre)

THERAPY

The treatment of vaginal intraepithelial neoplasia after hysterectomy. Soutter WP. Br J Obstet Gynaecol 1988 Oct; 95(10):961–2 (9 ref.)
The management of vaginal melanoma. Bonner JA, et al. Cancer 1988 Nov 1;62(9):2066–72
Melanoma relapse of the upper third of the vagina treated with BCG and beta–interferon. Cappello F, et al. Clin Exp Obstet Gynecol 1989;16(2–3):88–92
Vulvo–vaginal condylomatosis and relapse: combined treatment with electrocauterization and beta–interferon. Piccoli R, et al. Clin Exp Obstet Gynecol 1989;16(1):30–5
Recombinant interferon alpha–2A (Roferon–A) in a case of Buschke–Löwenstein giant condyloma. Zacharise H, et al. Dermatologica 1988;177(3):175–9
Use of Cavitron Ultrasonic Surgical Aspirator (CUSA) for palliative resection of recurrent gynecologic malignancies involving the vagina. Deppe G, et al. Eur J Gynaecol Oncol 1989;10(1):1–2
Primary carcinoma of the vagina: a study of 29 cases. Andersen ES. Gynecol Oncol 1989 Jun;33(3):317–20
Concomitant 5–fluorouracil, mitomycin–C, and radiotherapy for advanced gynecologic malignancies. Evans LS, et al. Int J Radiat Oncol Biol Phys 1988 Oct;15(4):901–6
Vaginal neoplasms in infancy: the combined role of chemotherapy and conservative surgical resection. McHenry CR, et al. J Pediatr Surg 1988 Sep;23(9):842–5
Treatment of vaginal intraepithelial neoplasia with laser and topical 5–fluorouracil. Krebs HB. Obstet Gynecol 1989 Apr;73(4):657–60

VETERINARY

Urethral incarceration and colonic obstruction caused by vaginal leiomyoma in a margay. Kollias GV, et al. J Am Vet Med Assoc 1986 Nov 1;189(9):1207–8

VAGINAL PROLAPSE see UTERINE PROLAPSE

VAGINAL SMEARS

Effects of ovarian steroids on vaginal smears in the rat. Montes GS, et al. Acta Anat (Basel) 1988;133(3):192–9
Microbiologic classification of cervicovaginal flora in Papanicolaou smears. Giacomini G, et al. Acta Cytol 1989 Mar–Apr;33(2):276–8
Intracellular bacilli in vaginal smears in a case of malacoplakia of the uterine cervix [letter] Kapila K, et al. Acta Cytol 1989 May–Jun;33(3):410–1
What can be expected from the cytologic examination of cervicovaginal smears for the diagnosis of Chlamydia trachomatis infections? Sekhri A, et al. Acta Cytol 1988 Nov–Dec;32(6):805–10
Detection of bacterial vaginosis in Papanicolaou smears. Platz–Christensen JJ, et al. Am J Obstet Gynecol 1989 Jan; 160(1):132–3
Accuracy of women's self–report of their last pap smear. Sawyer JA, et al. Am J Public Health 1989 Aug; 79(8):1036–7
Human papillomavirus in cervical smears taken from women wearing an intrauterine contraceptive device. Czeglédy J, et al. Arch Gynecol Obstet 1989;244(2):87–9
Annual Pap smears queried [letter] Roberts RW. Aust Fam Physician 1988 Oct;17(10):839
Pap smear results of Victorian teenagers, 1980–1987. Mitchell H, et al. Aust N Z J Obstet Gynaecol 1988 Aug;28(3):213–5
New cervical cytology request form is unusable. Clark JV, et al. BMJ 1989 Feb 11;298(6670):371–2
Preliminary results of a district call scheme for cervical screening organised in general practice. Havelock CM, et al. BMJ 1988 Nov 26;297(6660):1384–6
Adherence to recommendations for early repeat cervical smear tests. Mitchell H, et al. BMJ 1989 Jun 17; 298(6688):1605–7
Prospective randomised controlled trial of methods of call and recall for cervical cytology screening. Pierce M, et al. BMJ 1989 Jul 15;299(6692):160–2
Evaluation of a call programme for cervical cytology screening in women aged 50–60. Robertson AJ, et al. BMJ 1989 Jul 15;299(6692):163–6
Cervical cytology screening [letter] Sherwood A. BMJ 1988 Sep 3;297(6648):625
Making cervical screening work. Smith A, et al. BMJ 1989 Jun 24;298(6689):1662–4 (19 ref.)
Is routine antenatal booking vaginal examination necessary for reasons other than cervical cytology if ultrasound examination is planned [letter] Kristensen FB, et al. Br J Obstet Gynaecol 1989 May;96(5):625–6
Effect of organized screening on incidence and mortality of cervical cancer in Denmark. Lynge E, et al. Cancer Res 1989 Apr 15;49(8):2157–60
Cervical chlamydia trachomatis and mycoplasmal infections in women with abnormal papanicolaou smears. Cardillo MR. Clin Exp Obstet Gynecol 1988;15(4):161–7
Hospital–based strategy for early diagnosis of cervical neoplasia in the northern part of Italy [letter] Franceschi S, et al. Community Med 1988 Nov;10(4):365–6
The Prentif cervical cap and pap smear results: a critical appraisal. Gollub EL, et al. Contraception 1989 Sep; 40(3):343–9
Cytopathologic detection of Chlamydia trachomatis in vaginopancervical (Fast) smears. Gupta PK, et al. Diagn Cytopathol 1988;4(3):224–9
Immunocytochemical staining of different cell types in vaginal smears by monoclonal anti–DNA methylase antibodies. Naujoks H, et al. Diagn Cytopathol 1988; 4(3):230–3
Cervical cytology in an urban Nigeria population. Ayangade O, et al. East Afr Med J 1989 Jan;66(1):50–6
Isoelectric focusing of group specific component in semen and vaginal stains on ultrathin immobilized pH gradient gels. Pflug W, et al. Electrophoresis 1988 May;9(5):239–40
Prospective follow–up of cervical HPV infections: life table analysis of histopathological, cytological and colposcopic data. Kataja V, et al. Eur J Epidemiol 1989 Mar;5(1):1–7
An up–dating on oncologic colpocytology. Gentile G. Eur J Gynaecol Oncol 1988;9(5):399–403
PAP class III A: a 'proliferating' problem in cervical cytology. Vooijs GP, et al. Eur J Obstet Gynecol Reprod Biol 1988 Nov;29(3):219–26
Cigarette smoking and other correlates of cytologic estrogen effect in postmenopausal women. Baron JA, et al. Fertil Steril 1988 Nov;50(5):766–71
Cervical cytology screening in a sexually transmitted diseases clinic for the first time in Sri Lanka. Abeyewickreme I. Genitourin Med 1989 Apr;65(2):98–102
Evaluation of abnormal cervical cytology results at a genitourinary medicine clinic [letter] Coker DM, et al. Genitourin Med 1988 Aug;64(4):281–2
Sensitivity of the screening program for cervical cancer in the Florence District. Cecchini S, et al. Gynecol Oncol 1989 May;33(2):182–4
Is there a need for a place–of–work cervical smear service? Reid G, et al. Health Bull (Edinb) 1988 May;46(3):153–5
Cervical screening at a breast screening clinic. Roberts MM, et al. Health Bull (Edinb) 1988 Jul;46(4):213–6
Condylomatous lesions of uterine cervix: a cytological and histopathological study. Das DK, et al. Indian J Pathol Microbiol 1987 Oct;30(4):337–41
Postpartum pap smear [letter] Baxley EG. J Am Board Fam Pract 1989 Jul–Sep;2(3):217–8
The postpartum Papanicolaou smear. Weiss BD, et al. J Am Board Fam Pract 1989 Jan–Mar;2(1):4–9
Classification, management, and tracking of abnormal Papanicolaou smears. Estrin HM. J Am Coll Health 1989 May;37(6):283–7
Management of the abnormal Papanicolaou smear. Frisch LE. J Am Coll Health 1989 May;37(6):279–82
Screening for cervical carcinoma in elderly women. Developed by the Clinical Practice Committee and approved by the American Geriatrics Society Board of Directors. J Am Geriatr Soc 1989 Sep;37(9):85–7
Community screening for cervical cancer in New Hampshire. Dietrich AJ, et al. J Fam Pract 1989 Sep;29(3):319, 321, 323
The Bethesda System unveiled; revamps Pap smear reporting [news] Smigel K. J Natl Cancer Inst 1989 Sep 20; 81(18):1354–5
Pap smear screening and cervical pathology in an American Indian population. Skubi D. J Nurse Midwifery 1988 Sep–Oct;33(5):203–7
The organization of cervical screening in general practice. Havelock C, et al. J R Coll Gen Pract 1988 May; 38(310):207–11
Prophylactic cytological investigation for cervical cancer in relation to stage at diagnosis: a study of 420 women in Denmark. Olesen F. J R Coll Gen Pract 1988 Aug; 38(313):356–9
Cervical screening in general practice [letter] Pollock EE, et al. J R Coll Gen Pract 1987 Nov;37(304):512
Screening for cervical cancer by pap smear [letter; comment] Rehan N. JPMA 1989 Apr;39(4):116–8. Comment on: JPMA 1988 Sep;38(9):229–31
Screening for cervical cancer by Pap smear [see comments] Rizvi JH, et al. JPMA 1988 Sep;38(9):229–31. Comment in: JPMA 1989 Apr;39(4):116–8
Cervical screening [letter] Lancet 1989 Sep 9;2(8663):627–9
Cervical screening management [letter] Muir Gray JA, et al. Lancet 1989 Jul 29;2(8657):280
Human papillomavirus subtype 16a [letter] Ward P, et al. Lancet 1989 Jul 15;2(8655):170
Papanicolaou smear–tests [letter] Med J Aust 1988 Dec 5–19; 149(11–12):720
Papanicolaou smear–test screening in pregnancy [letter] Abraham S, et al. Med J Aust 1989 Jul 17;151(2):116
Gynaecological cytology screening in South Australia: a 23–year experience. MacCormac L, et al. Med J Aust 1988 Nov 21;149(10):530–6
Screening for cervical cancer—where are we going wrong? [editorial] Quinn MA. Med J Aust 1989 Apr 17; 150(8):414–5
Encouraging and reminding women to have cervical smears [letter] Chang AR. N Z Med J 1989 Sep 13;102(875):482
The fate of cervical smears with minimal abnormality [letter] Chang B, et al. N Z Med J 1989 Jan 25;102(860):23
Paired Papanicolaou smears in the evaluation of atypical squamous cells. Andrews S, et al. Obstet Gynecol 1989

May;73(5 Pt 1):747–50
The significance of a negative Papanicolaou smear with hyperkeratosis or parakeratosis. Andrews S, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):751–3
The significance of atypical cervical cytology in an older population. Kaminski PF, et al. **Obstet Gynecol** 1989 Jan; 73(1):13–5
False negative cervical cytology. Evans H. **Pa Med** 1989 Mar;92(3):62–3
Cervical cytology and the evaluation of the abnormal Papanicolaou smear. Noller KL. **Prim Care** 1988 Sep; 15(3):461–71 (20 ref.)
Schoolchildren's knowledge of cervical cancer and smears. Adams J, et al. **Public Health** 1989 Jul;103(4):251–7
General practitioner survey in Stockport: reference cervical cytology screening service. Carr R, et al. **Public Health** 1988 Nov;102(6):577–80
Reasons for non-attendance for computer-managed cervical screening: pilot interviews. Elkind AK, et al. **Soc Sci Med** 1988;27(6):651–60
Significance of a positive Papanicolaou smear in a well screened population. Lyon DS, et al. **South Med J** 1989 Feb;82(2):190–2
Clinical management of patients with invasive cervical cancer following a negative pap smear. Schwartz PE, et al. **Yale J Biol Med** 1988 Jul–Aug;61(4):327–38 (30 ref.)
[Diagnostic reliability of pre-biopsy methods (colposcopy and cytology) in predicting the histological basis of cervical lesions] Rokyta Z, et al. **Cesk Gynekol** 1989 Mar; 54(2):96–100 (Eng. Abstr.) (Cze)
[Microbiological evaluation of cytological preparations from the vagina] Bro F, et al. **Ugeskr Laeger** 1988 Oct 17; 150(42):2506–9 (Eng. Abstr.) (Dan)
[Significance of the demonstration of Actinomyces in cervical cytological smears] Dybdahl H, et al. **Ugeskr Laeger** 1988 Oct 17;150(42):2509–11 (Eng. Abstr.) (Dan)
[Medical policy concerning the results of cytologic screening studies of the cervix uteri (letter)] Sie-Go DM, et al. **Ned Tijdschr Geneeskd** 1989 Mar 11;133(10):520–1 (Dut)
[Pseudo-condylomatous cytological aspects of smears in menopause. Study of 100 cases and review of the literature] Gestin E, et al. **Arch Anat Cytol Pathol** 1988;36(3):85–92 (15 ref.) (Eng. Abstr.) (Fre)
[Cyto-microbiologic study of cervico-vaginal specimens, associated with a serologic study to detect sexually transmissible diseases in Madagascan prostitutes] Mouden JC, et al. **Arch Inst Pasteur Madagascar** 1988;54(1):217–28 (Eng. Abstr.) (Fre)
[Detection and diagnosis of atypical hyperplasia and adenocarcinoma of the endometrium using cytology] Nollomont-Lambert JC, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):733–6 (Fre)
[Reflections on the systematic screening of cervico-vaginal smears rich in polynuclear cells] Saliou-Diallo M, et al. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):201–4 (Eng. Abstr.) (Fre)
[Pathologic Papanicolaou class IV smear without histologic correlation—what should be done?] Biedermann K, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):781–4 (Eng. Abstr.) (Ger)
[Clinical relevance of nucleic acid detection of human papillomaviruses (HPV) in cells from smears of the cervix uteri] Neumann R, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):11–6 (Eng. Abstr.) (Ger)
[To what extent have early cancer detection and preventive examination for cancer of the uterine cervix fulfilled established expectations?] Soost HJ, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):579–86 (Eng. Abstr.) (Ger)
[Cytology of endometrial carcinoma] Jahoda E. **Osterr Z Erforsch Bekampf Krebskr** 1970;25(2):119–28 (Eng. Abstr.) (Ger)
[Cervix smear: study prevalence in city dwellers in the climacteric] Gass R, et al. **Soz Praventivmed** 1988; 33(6):263–8 (Eng. Abstr.) (Ger)
[Chlorhexidine as a vaginal antiseptic in obstetrics] Ketscher KD, et al. **Zentralbl Gynakol** 1988;110(15):953–6 (Eng. Abstr.) (Ger)
[Ten years' experience in colpocytology. Statistical considerations on the relation of dysplasia and carcinoma] Mercadante T, et al. **G Ital Oncol** 1987 Jan–Mar;7(1):29–38 (Eng. Abstr.) (Ita)
[Colpocytologic screening at the Institute of Gynecology, Obstetrics and Physiopathology of Human Reproduction of the 2d Medical and Surgical Faculty of the University of Naples from January 1978 to December 1985] Zarcone R, et al. **G Ital Oncol** 1987 Apr–Sep;7(2–3):109–13 (Eng. Abstr.) (Ita)
[Presence of koilocytes and viral infection in the epithelium of the uterine cervix. Immunohistochemical study] Laureti E, et al. **Minerva Ginecol** 1988 Sep;40(9):547–9 (Eng. Abstr.) (Ita)
[Microbiological studies on vaginal smears: casuistry of women consulting a Rome walk-in clinic] Cantalamessa Carboni L, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec; 37(1–6):233–43 (Eng. Abstr.) (Ita)
[Detection of papilloma virus infection in the human uterine cervix by dot blot (Vira Pap) method in comparison with Southern blot method] Ishi K, et al. **Rinsho Byori** 1989 Jan;37(1):73–8 (Jpn)
[Cytological mass screenings for the cancer of the cervix uteri. Resources, organization and costs] Kolstad P. **Tidsskr Nor Laegeforen** 1988 Sep 10;108(25):2057–60 (Eng. Abstr.) (Nor)
[Characterization of Actinomyces in cervico-vaginal smears: cytologic and immunocytochemical aspects] Meirelles MI, et al. **Rev Paul Med** 1988 Mar–Apr;106(2):95–8 (Eng. Abstr.) (Por)
[Experience in using cytological screening studies of working women for the early detection of tumorous and pretumorous diseases of the cervix uteri] Lapenkova NB, et al. **Akush Ginekol (Mosk)** 1988 May;(5):57–8 (Rus)
[The cytologic picture of the vaginal smear in inflammatory processes] Kliukina LB, et al. **Lab Delo** 1988;(8):42–5 (Eng. Abstr.) (Rus)
[A method of rapid cytodiagnosis of cytomegalic virus infections in pregnant women] Tiukavkin VV, et al. **Lab Delo** 1989;(4):41–3 (Eng. Abstr.) (Rus)
[The prognostic significance of cytological data in the radiation therapy of cervix cancer] Polonskaia NIu, et al. **Med Radiol (Mosk)** 1989 Jul;34(7):50–3 (Eng. Abstr.) (Rus)
[Proficiency testing in gynecologic cytodiagnosis in Zagreb] Audy-Jurković S, et al. **Jugosl Ginekol Perinatol** 1988 May–Aug;28(3–4):83–8 (Eng. Abstr.) (Ser)

CLASSIFICATION

Current use of the Papanicolaou class system in gynecologic cytology. Maguire NC. **Diagn Cytopathol** 1988;4(2):169–76
Managing abnormal Pap smears: comments on two articles. Buck HW. **J Am Coll Health** 1989 Sep;38(2):101–2
The 1988 Bethesda System for reporting cervical/vaginal cytological diagnoses. National Cancer Institute Workshop. **JAMA** 1989 Aug 18;262(7):931–4
Cytopathological interpretation and medical consultation. Malkasian GD Jr. **JAMA** 1989 Aug 18;262(7):942

ECONOMICS

The intraepithelial lesion: a spectrum of problems [editorial] Ohrt DK. **JAMA** 1989 Aug 18;262(7):944–5
Cervical smears: a questionable practice? McCormick JS. **Lancet** 1989 Jul 22;2(8656):207–9

INSTRUMENTATION

Detection of abnormal cervical smears. A comparative study. Pistofides GA, et al. **Acta Obstet Gynecol Scand** 1988; 67(2):153–4
Nylon brush improves collection of cervical cytologic specimens. Dotters DJ, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):814–9
The inadequacies of instruments used for cervical screening. Spurrett B, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb; 29(1):44–6
Performance of the Cytobrush in patients at risk for cervical pathology: does it add anything to the wooden spatula? Van Erp EJ, et al. **Eur J Gynaecol Oncol** 1988;9(6):456–60
Ayre v Aylesbury cervical spatulas. Goorney BP, et al. **Genitourin Med** 1989 Jun;65(3):161–2
Comparison of cytobrush with cotton swab for endocervical cytologic sampling. Neinstein LS, et al. **J Adolesc Health Care** 1989 Jul;10(4):305–7
Papanicolaou smear adequacy: the cervical cytobrush and Ayre spatula compared with the extended-tip spatula. Noel ML. **J Am Board Fam Pract** 1989 Jul–Sep;2(3):156–60
Endocervical brush cytology. An alternative to endocervical curettage? Weitzman GA, et al. **J Reprod Med** 1988 Aug; 33(8):677–83
Endocervical brush device [letter] Vooijs GP. **Lancet** 1989 Apr 8;1(8641):784
The importance of the cell sample in cervical cytology: a controlled trial of a new sampling device. Laverty CR, et al. **Med J Aust** 1989 Apr 17;150(8):432–4, 436

METHODS

Diagnostic accuracy of squamous cervical lesions studied in spatula-cytobrush smears. Alons-van Kordelaar JJ, et al. **Acta Cytol** 1988 Nov–Dec;32(6):801–4
Should smears in a colposcopy clinic be taken after the application of acetic acid? Griffiths M, et al. **Acta Cytol** 1989 May–Jun;33(3):324–6
What you should know about Papanicolaou smears. Bibbo M. **Diagn Cytopathol** 1989;5(1):104–7
Cytobrush washings and false-negative reports [letter] Gupta RK, et al. **Diagn Cytopathol** 1988;4(4):360–1
The importance of histology. Correlation between direct biopsies and associated methodologies—Panama 1982–1985. Garrido JL. **Eur J Gynaecol Oncol** 1988; 9(6):470–3
Taking cervical smears in departments of genitourinary medicine. Griffiths M, et al. **Genitourin Med** 1989 Apr; 65(2):96–7
Detecting Chlamydia trachomatis by direct immunofluorescence using a Cytobrush sampling technique [letter] Taylor-Robinson D. **Genitourin Med** 1989 Apr; 65(2):130
Papanicolaou smear [letter] Ruffin MT 4th. **J Am Board Fam Pract** 1988 Jul–Sep;1(3):225–6
Comparison of Dacron-tipped applicator and cytobrush for detection of chlamydial infections. Weiland TL, et al. **J Clin Microbiol** 1988 Nov;26(11):2437–8
Papanicolaou smear techniques [letter] Ornstein SM, et al. **J Fam Pract** 1989 Jan;28(1):17, 20
Papanicolaou smear techniques [letter] Ruffin MT. **J Fam Pract** 1988 Dec;27(6):577–8
Papanicolaou smear and endocervical cell yield [letter] Shadel RF. **J Fam Pract** 1988 Nov;27(5):551
The Papanicolaou test for cervical cancer detection. A triumph and a tragedy [see comments] Koss LG. **JAMA** 1989 Feb 3;261(5):737–43 (73 ref.). **Comment in:** JAMA 1989 Jul 7;262(1):32–3
How to take a cervical smear? Rizvi JH. **JPMA** 1989 May; 39(5):142–3
Indicators of effective cytological sampling of the uterine cervix. Woodman CB, et al. **Lancet** 1989 Jul 8; 2(8654):88–90
The fingerprint, a false-positive fern test. Lodeiro JG, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):873–4
Pap smears. Do them right and every year—forever! Gall SA. **Postgrad Med** 1989 May 1;85(6):235–9

PSYCHOLOGY

Cervical atypia. Tayler S, et al. **Aust Fam Physician** 1989 Mar;18(3):223
Study of the women overdue for a smear test in a general practice cervical screening programme. Meadows P. **J R Coll Gen Pract** 1987 Nov;37(304):500–3

STANDARDS

Evaluation of proposed cytomorphologic criteria for the diagnosis of Chlamydia trachomatis in Papanicolaou smears. Bernal JN, et al. **Acta Cytol** 1989 May–Jun; 33(3):309–13
Intraobserver and interobserver variability in the diagnosis of epithelial abnormalities in cervical smears. Klinkhamer PJ, et al. **Acta Cytol** 1988 Nov–Dec;32(6):794–800
Intraobserver and interobserver variability in the quality assessment of cervical smears. Klinkhamer PJ, et al. **Acta Cytol** 1989 Mar–Apr;33(2):215–8
Experience in managing a large-scale rescreening of Papanicolaou smears and the pros and cons of measuring proficiency with visual and written examinations. Rube IF. **Acta Cytol** 1989 Jul–Aug;33(4):479–83
Improving the adequacy of Pap smears. Baker RM. **Am Fam Physician** 1989 Jun;39(6):109–14
Evaluation of serial cervical cytology in the assessment of preinvasive cervical neoplasia. Sfameni SF, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):40–3
An explanation for the problem of false-negative cervical smears. Barton SE, et al. **Br J Obstet Gynaecol** 1989 Apr; 96(4):482–5
Chain of events in Papanicolaou smear testing: impact on quality assurance. Genack LJ, et al. **Diagn Cytopathol** 1989; 5(2):221–7
Accuracy of Papanicolaou smears. Art or science? Lee D, et al. **J Reprod Med** 1988 Oct;33(10):795–8
The significance of atypical cervical smears. Morrison BW, et al. **J Reprod Med** 1988 Oct;33(10):809–12
Quality assurance in cervical cytology. The Papanicolaou smear. Council on Scientific Affairs. **JAMA** 1989 Sep 22–29;262(12):1672–9
Cervical smears: a questionable practice? [letter] **Lancet** 1989 Aug 12;2(8659):391–3
Effective cytological sampling [letter] Cecchini S, et al. **Lancet** 1989 Aug 12;2(8659):393
Cervical cytology policy [letter] McPherson K. **Lancet** 1989 Jul 15;2(8655):162–3
Effective cervical cytological sampling [letter] Slater D. **Lancet** 1989 Aug 5;2(8658):335
Cervical cytology in a community laboratory. McCafferty JA, et al. **N Z Med J** 1989 Jun 28;102(870):316–7
In search of more representative cervical cytology. A preliminary prospective study. Brink AL, et al. **S Afr Med J** 1989 Jul 15;76(2):55–7
Role of the Papanicolaou smear in diagnosis of chlamydial infections. Arroyo G, et al. **Sex Transm Dis** 1989 Jan–Mar; 16(1):11–4
Intralaboratory reproducibility of interpretation of Pap smears: results of an experiment. Duca P, et al. **Tumori** 1988 Dec 31;74(6):737–44

STATISTICS & NUMERICAL DATA

Cervical cancer screening [letter] **Can J Public Health** 1988 Jul–Aug;79(4):277–8
A case-control study of cervical cytology before diagnosis of cervical cancer in Denmark. Olesen F. **Int J Epidemiol** 1988 Sep;17(3):501–8
[Cervical smears in general medicine. Evaluation of the regular performance of cervical smears among the patients of general practitioners in the Rhône-Alpes region] Riou F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(2):145–51 (Eng. Abstr.) (Fre)

UTILIZATION

Papanicolaou test coverage without a cytology registry. Cohen MM, et al. **Am J Epidemiol** 1989 Feb;129(2):388–94
Computerized reminders to encourage cervical screening in family practice. McDowell I, et al. **J Fam Pract** 1989 Apr; 28(4):420–4
Pap smear screening intervals among patients with cervical cancer in West Virginia. Jubelirer S, et al. **Prog Clin Biol Res** 1989;293:323–30

VAGINAL SUPPOSITORIES see PESSARIES

VAGINITIS

Style notes: bacterial vaginosis or vaginal bacteriosis? [editorial] Huth EJ. **Ann Intern Med** 1989 Oct 1; 111(7):553–4

Evaluation and management of vaginitis. An update for primary care practitioners. McCue JD. **Arch Intern Med** 1989 Mar;149(3):565–8 (56 ref.)

COMPLICATIONS

The vulvo–vaginal–gingival syndrome. A new form of erosive lichen planus. Pelisse M. **Int J Dermatol** 1989 Jul–Aug;28(6):381–4

DIAGNOSIS

The 1988 Bethesda System for reporting cervical/vaginal cytologic diagnoses. Developed and approved at the National Cancer Institute Workshop, Bethesda, Maryland, U.S.A., December 12–13, 1988. **Acta Cytol** 1989 Sep–Oct; 33(5):567–74

Detection of bacterial vaginosis in Papanicolaou smears. Platz–Christensen JJ, et al. **Am J Obstet Gynecol** 1989 Jan; 160(1):132–3

Is analysis of vaginal secretions for volatile organic acids to detect bacterial vaginosis of any diagnostic value? Thomason JL, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1509–11

Comparative study of culture, direct immunofluorescent antibody test and enzyme immunoassay for the diagnosis of urogenital infections caused by Chlamydia trachomatis. Dhar R, et al. **APMIS Suppl** 1988;3:35–9

Evaluation of vaginal malodor and efficacy of treatment by high performance ion exchange chromatography. Stanek R, et al. **Biomed Chromatogr** 1987;2(2):76–8

The effect of dependence on the performance of Bayes' theorem: an evaluation using a computer simulation. Chard T. **Comput Methods Programs Biomed** 1989 May;29(1):15–9

Diagnostic procedures in vaginitis. Bleker OP, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):179–83

Comparison of methods for diagnosing bacterial vaginosis among pregnant women. Krohn MA, et al. **J Clin Microbiol** 1989 Jun;27(6):1266–71

Differentiation of Gardnerella vaginalis, Candida albicans, and Trichomonas vaginalis infections of the vagina. Reed BD, et al. **J Fam Pract** 1989 Jun;28(6):673–80 (61 ref.)

Allergic vaginitis, a possibly new syndrome. A case report. Ricer RE, et al. **J Reprod Med** 1988 Sep;33(9):781–3

Gardnerella vaginalis: diagnosis and management. O'Dowd T. **Practitioner** 1988 Jul;232(1452):789–91

Vaginitis: a common malady. Chantigian PD. **Prim Care** 1988 Sep;15(3):517–47 (122 ref.)

[Immunoenzyme tests Gonozyme and Chlamydiazyme as new methods of the screening studies of Neisseria gonorrhoeae and Chlamydia trachomatis infections] Zaba R, et al. **Pol Tyg Lek** 1988 Jul 18;43(29):948–51 (Eng. Abstr.) **(Pol)**

[Cytodiagnosis of inflammatory disease of the vagina and cervix in pregnancy] Tomljanović M, et al. **Jugosl Ginekol Perinatol** 1988 Sep–Dec;28(5–6):143–7 (Eng. Abstr.) **(Ser)**

DRUG THERAPY

Bacterial vaginosis: a double–blind randomized trial of the effect of treatment of the sexual partner. Vejtorp M, et al. **Br J Obstet Gynaecol** 1988 Sep;95(9):920–6

Therapy of amine–vaginitis by a single dose of ornidazole (Tiberal); serum and tissue (vagina) concentrations of ornidazole after vaginal or rectal application. Petersen E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):539–40

Estrogen replacement therapy for atrophic vaginitis. Rigg LA. **Int J Fertil** 1986;31 Suppl:29–34

Clindamycin versus metronidazole in the treatment of bacterial vaginosis [letter] Bignardi GE. **Obstet Gynecol** 1989 Aug;74(2):281–2

Clindamycin versus metronidazole in the treatment of bacterial vaginosis. Greaves WL, et al. **Obstet Gynecol** 1988 Nov;72(5):799–802

[Controlled trial of the therapeutic efficacy and tolerability of imidazole–2–hydroxybenzoate in gynecologic inflammatory conditions] Albertazzi E, et al. **Boll Chim Farm** 1988 Apr;127(4):53S–56S (Eng. Abstr.) **(Ita)**

[Non–specific vaginitis and topical treatment. Comparison of flunoxaprofen and benzydamine] Cecchini G, et al. **Minerva Ginecol** 1989 Jun;41(6):287–90 (Eng. Abstr.) **(Ita)**

EPIDEMIOLOGY

Chlamydia trachomatis infection in late pregnancy: a prospective study. Preece PM, et al. **Paediatr Perinat Epidemiol** 1989 Jul;3(3):268–77

[Epidemiologic study of changes in vaginal biozoonoses in patients of the Greifswald gynecologic university clinic in the last 25 years] Birnbaum H. **Zentralbl Gynakol** 1988; 110(18):1161–5 (Eng. Abstr.) **(Ger)**

[Remarks on incidence of infections observed during 4 years of ambulatory practice] Sagone I, et al. **Clin Ter** 1988 Dec 31;127(6):435–43 (Eng. Abstr.) **(Ita)**

ETIOLOGY

The incidence of Chlamydia trachomatis–induced infection in women suffering from cervicovaginitis. Pungetti D, et al. **Acta Eur Fertil** 1988 Mar–Apr;19(2):93–7

Evidence relating bacterial vaginosis to intraamniotic infection. Silver HM, et al. **Am J Obstet Gynecol** 1989 Sep; 161(3):808–12

Quality control standards for the proline aminopeptidase assay used to detect bacterial vaginosis. Thomason JL, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):757–8

Bacterial vaginosis: etiology, association with preterm labor, diagnosis, and management. Swedberg JA. **Compr Ther** 1989 Aug;15(8):47–53 (22 ref.)

Unusual causes of vaginitis (excluding trichomonas, bacterial vaginosis, and Candida albicans). Hammill HA. **Obstet Gynecol Clin North Am** 1989 Jun;16(2):337–45 (22 ref.)

[Relationship between clinical diagnosis and microbiological diagnosis of symptomatic vaginitis] Sagone I, et al. **Clin Ter** 1989 Jan 15;128(1):21–5 (Eng. Abstr.) **(Ita)**

[Chlamydia trachomatis infections in obstetrics and gynecology] Roszkowski PI. **Ginekol Pol** 1988 Nov; 59(11):700–4 (27 ref.) (Eng. Abstr.) **(Pol)**

[Chlamydia trachomatis infections of the urogenital system in women] Zdrodowska–Stefanow B, et al. **Ginekol Pol** 1988 Jan;59(1):29–34 (Eng. Abstr.) **(Pol)**

[Effect of Streptococci on epithelial cells of the vagina of albino inbred mice NMRI] Stefanowicz M, et al. **Patol Pol** 1988 Jul–Sep;39(3):210–9 (Eng. Abstr.) **(Pol)**

[Microbiological aspects of suppurative–inflammatory complications (pericultitis) after hysterectomy] Danilov AIu. **Akush Ginekol (Mosk)** 1989 Apr;(4):36–9 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Humoral circulatory immune response to Gardnerella vaginalis. Ghione M, et al. **J Clin Microbiol** 1989 Sep; 27(9):2138–9

MICROBIOLOGY

Microbiologic classification of cervicovaginal flora in Papanicolaou smears. Giacomini G, et al. **Acta Cytol** 1989 Mar–Apr;33(2):276–8

On the microbiologic classification of cervicovaginal flora in Papanicolaou smears [letter] Leppäluoto PA. **Acta Cytol** 1989 Sep–Oct;33(5):687–8

Bacterial vaginosis—an ecologic mystery. Sobel JD. **Ann Intern Med** 1989 Oct 1;111(7):551–3 (20 ref.)

Phenotypic complexity in Mobiluncus. Garlind A, et al. **APMIS** 1989 Jan;97(1):38–42

Ultrastructure of the in situ adherence of Mobiluncus to vaginal epithelial cells. De Boer JM, et al. **Can J Microbiol** 1988 Jun;34(6):757–66

In vitro activity of azithromycin and erythromycin against organisms associated with bacterial vaginosis and chancroid. Jones BM, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):551–3

Chemotaxis inhibition by Gardnerella vaginalis and succinate producing vaginal anaerobes: composition of vaginal discharge associated with G vaginalis. Sturm AW. **Genitourin Med** 1989 Apr;65(2):109–12

Gardnerella vaginalis vaginitis in Cu T 200 users. Bhalla P, et al. **Indian J Med Res** 1989 Mar;89:80–6

Prevalence of hydrogen peroxide–producing Lactobacillus species in normal women and women with bacterial vaginosis. Eschenbach DA, et al. **J Clin Microbiol** 1989 Feb;27(2):251–6

Production and characterization of monoclonal antibodies to Mobiluncus species. Fohn MJ, et al. **J Clin Microbiol** 1988 Dec;26(12):2598–603

Torulopsis glabrata in vaginitis. Chin CS, et al. **Med J Malaysia** 1988 Sep;43(3):250–1

Normal vaginal flora in relation to vaginitis. Hammill HA. **Obstet Gynecol Clin North Am** 1989 Jun;16(2):329–36 (24 ref.)

[Gardnerella vaginalis in relation to the clinical syndrome of bacterial vaginosis] Wolfová J, et al. **Cesk Gynekol** 1988 Aug;53(7):484–92 (Eng. Abstr.) **(Cze)**

[Incidence and distribution of vaginal yeast in non selected obstetric and gynecologic patients] Laurelli T, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):245–57 (Eng. Abstr.) **(Ita)**

[Gonococcal vaginitis in a newborn infant] Sanz Sanz F, et al. **An Esp Pediatr** 1988 Jul;29(1):71–2 **(Spa)**

PATHOLOGY

Vaginitis. Smibert J. **Aust Fam Physician** 1976 Sep; 5(8):1131–2, 1135–6, 1141–3 passim (7 ref.)

[Relation between Chlamydia cervico–vaginitis and changes in cellular morphology] Oddi G, et al. **Minerva Ginecol** 1988 Mar;40(3):163–7 (Eng. Abstr.) **(Ita)**

[The cytologic picture of the vaginal smear in inflammatory processes] Kliukina LB, et al. **Lab Delo** 1988;(8):42–5 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Bacterial vaginitis: protection against infection and secretory immunoglobulin levels in the vagina after immunization therapy with Gynatren. Rüttgers H. **Gynecol Obstet Invest** 1988;26(3):240–9

THERAPY

Persistent vaginitis. Drummond–Hay LK. **West J Med** 1988 Dec;149(6):767–9

VAGOTOMY

Treatment of recurrent ulceration after vagotomy for duodenal ulcer. Hoffmann J, et al. **Acta Chir Scand Suppl** 1988;547:82–5 (39 ref.)

The outcome of vagotomy for peptic ulcer disease. Meisner S, et al. **Acta Chir Scand Suppl** 1988;547:59–64 (68 ref.)

Alteration of gastrin–producing cells in rat antral mucosa after truncal vagotomy. Murakami S, et al. **Acta Pathol Jpn** 1988 Jul;38(7):841–52

Influence of bilateral subnodular vagotomy and section of retrotracheal plexus on allergic bronchial constriction in guinea pigs. Becher G, et al. **Allergol Immunopathol (Madr)** 1988 May–Jun;16(3):163–6

Somatostatin analogue SMS 201–995 (octreotide) as a possible solution to the dumping syndrome after gastrectomy or vagotomy. Primrose JN, et al. **Br J Surg** 1989 Feb;76(2):140–4

Central motor program for relaxation of periesophageal diaphragm during the expulsive phase of vomiting. Miller AD, et al. **Brain Res** 1988 Jul 26;456(2):367–70

The effects of atrial pacing and ballooning on the plasma concentration of atrial natriuretic peptide in anesthetized dogs with or without vagotomy. Hirata Y, et al. **Clin Exp Hypertens [A]** 1989;11(1):89–101

Opiate receptor subtypes in the nucleus tractus solitarii of the cat: the effect of vagal section. Dashwood MR, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):85–92

Modified sham feeding and Congo red test in determining completeness of vagotomy. Abraham P, et al. **Indian J Gastroenterol** 1989 Jul;8(3):145–7

Effect of hepatic vagotomy on postexercise substrate levels in food–restricted rats. Lavoie JM, et al. **J Appl Physiol** 1989 Apr;66(4):1965–9

Neuronal surface changes in the dorsal vagal motor nucleus of the guinea pig in response to axotomy. Engel AK, et al. **J Comp Neurol** 1988 Sep 8;275(2):181–200

Vagotomy by the local anesthetic procaine hydrochloride: a study in the rat. Salim AS. **J Pharm Sci** 1988 Jul; 77(7):579–81

CCK– and VIP–induced glycoprotein secretion from mouse gallbladder epithelium following vagotomy: a quantitative electron microscopic study. Axelsson H, et al. **J Surg Res** 1989 Sep;47(3):260–5

Decreased parietal cell secretory capacity following vagotomy and pyloroplasty. Zdon MJ, et al. **J Surg Res** 1989 May;46(5):490–5

Vagal influences on respiratory mechanics, pressures, and control in rats. Caldeira MP, et al. **Respir Physiol** 1988 Jul;73(1):43–53

Effect of vagotomy on bile acid absorption by rat small intestine in vitro [letter] Vaquero C, et al. **Rev Esp Fisiol** 1988 Mar;44(1):107–8

Experimental study of vagotomy for prevention of stress ulcer after hepatectomy of cirrhotic livers. Its influence on hepatic regeneration. Urakawa T, et al. **Scand J Gastroenterol** 1988 Aug;23(6):705–11

Intraoperative testing for completeness of vagotomy. Burkitt DS. **Surg Annu** 1989;21:135–55 (80 ref.)

[Cardiorespiratory changes after vagotomy and carotid sinus nerve section in decerebrated cats] Chiang CH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Sep;87(9):866–71 (Eng. Abstr.) **(Chi)**

[Myocardial enzymes in the serum after high and low laparotomy] Andersen JC, et al. **Ugeskr Laeger** 1989 Jun 5;151(23):1462–5 (Eng. Abstr.) **(Dan)**

[Masticatory cycles of the rumination type in vagotomized lambs] Ruckebusch Y, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:143–4 (Eng. Abstr.) **(Fre)**

[Do surgical interventions in bronchial asthma promise success?] Engelmann C. **Z Arztl Fortbild (Jena)** 1989; 83(12):605–8 (20 ref.) **(Ger)**

[Adaptation of the upper gastrointestinal tract following vagotomy] Starlinger M. **Z Gastroenterol [Verh]** 1989 Jul; 24:223–4 (36 ref.) **(Ger)**

[The role of vagotomy in the therapy of duodenal ulcer] Doldi SB. **Minerva Chir** 1989 Feb 15;44(3):275–82 **(Ita)**

[Effect of medical vagotomy on the CDDP induced nausea and vomiting evaluated by the chemotherapy–vomiting time (CV time)] Chen JT, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1359–64 (Eng. Abstr.) **(Jpn)**

[Chromatin matrix activity in hepatocyte nuclei after disturbance of the hepatic vagal innervation] Shcherbo IV, et al. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):69–72 (Eng. Abstr.) **(Rus)**

[Comparative volume of membrane microflora and morphology of the epitheliocytes during irradiation of chronic stomach ulcer with helium–neon laser in association with vagotomy] Balbekov IM, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):106–8 (Eng. Abstr.) **(Rus)**

[Automated morphometric evaluation of the chromatin structure of liver cell nuclei after vagotomy] Butusova NN, et al. **Biull Eksp Biol Med** 1989 May;107(5):637–9 (Eng. Abstr.) **(Rus)**

[Effects of vagotomy on the lymphatic system of the small intestine] Dzhumabaev SU, et al. **Khirurgiia (Mosk)** 1989

Apr;(4):42–5 (Eng. Abstr.) (Rus)
[Role of blood flow in the etiology of pain caused by ulcer and its cessation after vagotomy] Koval'chuk LA. **Khirurgiia (Mosk)** 1989 Apr;(4):45–8 (Eng. Abstr.) (Rus)
[Motor-evacuatory function before and after vagotomy in middle-aged and aged patients] Mirzaev AK. **Khirurgiia (Mosk)** 1989 Apr;(4):27–30 (Eng. Abstr.) (Rus)
[Anterior seromyotomy of the corpus and fundus of the stomach in combination with posterior selective vagotomy in the treatment of duodenal ulcer] Petrov VI, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):84–7 (Rus)
[Cryosurgical methods in the treatment of duodenal ulcer] Sandomirskiĭ BP, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):107–10 (Rus)
[20 years' results of vagotomy] Izbenko GS, et al. **Klin Khir** 1988;(8):1–4 (Eng. Abstr.) (Rus)
[Gastric motor and evacuatory functions and membrane digestion after vagotomy] Khachiev LG, et al. **Klin Khir** 1988;(8):59–60 (Rus)
[Gastric motor and evacuatory functions following resection and vagotomy] Khoromskiĭ LN, et al. **Klin Khir** 1988;(8):10–2 (Eng. Abstr.) (Rus)
[Late results of antrumectomy with vagotomy] Pantsyrev IuM, et al. **Sov Med** 1988;(12):76–9 (Rus)
[Cavitary and membrane hydrolysis and trans-membrane transport of carbohydrates before and after organ-sparing surgery of duodenal ulcer] Frolov LA, et al. **Vestn Khir** 1988 Oct;141(10):27–30 (Eng. Abstr.) (Rus)
[Peptic ulcer recurrence after vagotomy] Pavlovskiĭ MP, et al. **Vrach Delo** 1989 Apr;(4):13–6 (Eng. Abstr.) (Rus)
[Features of the functional status of the pancreas and liver after vagotomy] Shevchenko BF, et al. **Vrach Delo** 1989 May;(5):33–5 (Eng. Abstr.) (Rus)
[A method for treating reflux gastritis after vagotomy] Vdovichenko VI, et al. **Vrach Delo** 1989 Jun;(6):8–9 (Eng. Abstr.) (Rus)
[Effects of cimetidine and vagotomy on food ingestion and drinking in mice] Menéndez-Abraham E, et al. **Rev Esp Fisiol** 1988 Jun;44(2):233–4 (Spa)

ADVERSE EFFECTS

The mechanism of vagotomy-induced acute gastric mucosal injury in the rat. Salim AS. **Am J Med Sci** 1989 Jun; 297(6):343–7
Enhancement by vagotomy of experimental induction of intestinal metaplasia and atypical glandular hyperplasia in Wistar rats. Tatsuta M, et al. **Arch Geschwulstforsch** 1988; 58(5):305–11
Pathologic changes in pulmonary tissue of rabbits subjected to various types of vagotomy: truncal, selective and highly selective one. Głuszek S, et al. **Mater Med Pol** 1988 Apr–Jun;20(2):79–83
Gastric emptying after truncal vagotomy and pyloroplasty. Calabuig R, et al. **Scand J Gastroenterol** 1988 Aug; 23(6):659–64
[The effect of vagotomy and gastrectomy on the lower esophageal sphincter motility] Furukawa Y, et al. **Nippon Heikatsukin Gakkai Zasshi** 1988 May;24(2):131–45 (Eng. Abstr.) (Jpn)
[Vagotomy—the other side (editorial)] Cunha JC. **Arq Gastroenterol** 1987 Apr–Jun;24(2):73–4 (Por)
[Effect of thyroliberin and its analog on the respiratory activity of intact and vagotomized rabbits] Batyrgozhina AA, et al. **Fiziol Zh SSSR** 1989 Mar;75(3):409–12 (Rus)
[Membrane digestion and carbohydrate absorption in post-vagotomy syndromes] Khachiev LG, et al. **Sov Med** 1989;(2):80–1 (Rus)
[Endoscopic evaluation of reflux gastritis in patients operated on for stomach and duodenal ulcers] Gorbashko AI, et al. **Vestn Khir** 1988 Oct;141(10):22–6 (Eng. Abstr.) (Rus)
[Post-vagotomy diarrhea] Iarugskiĭ EE, et al. **Vestn Khir** 1988 Aug;141(8):148–51 (36 ref.) (Rus)
[Operation in postvagotomy peptic ulcer of the gastro-duodeno-anastomosis] Khachiev LG, et al. **Vestn Khir** 1988 May;140(5):110–1 (Rus)
[Post-vagotomy syndromes and their surgical treatment] Khachiev LG, et al. **Vestn Khir** 1988 Aug;141(8):143–8 (51 ref.) (Rus)
[Gastric atony after vagotomy] de la Cuadra R, et al. **Rev Med Chil** 1988 Feb;116(2):169–73 (Eng. Abstr.) (Spa)

HISTORY

[Development of surgery of the stomach during the 70-year period of Soviet rule] Gorbashko AI. **Vestn Khir** 1987 Dec; 139(12):8–15 (Rus)

METHODS

Vagotomy—antrectomy. How I do it. Herrington JL Jr. **Acta Chir Scand Suppl** 1988;547:54–8
A new look at selective vagotomies. Johnston D, et al. **Am J Surg** 1988 Nov;156(5):416–27 (100 ref.)
Prospective controlled vagotomy trial for duodenal ulcer. Results after 11–15 years. Hoffmann J, et al. **Ann Surg** 1989 Jan;209(1):40–5
Transgastric vagotomy with selective proximal vagotomy for duodenal ulcer. Takeda J, et al. **Kurume Med J** 1989; 36(1):35–9
[A technic of fundus vagotomy] Picaud R, et al. **J Chir (Paris)** 1989 May;126(5):334–7 (Eng. Abstr.) (Fre)
[Thoracoscopy in the treatment of bronchial asthma] Satter P, et al. **Pneumologie** 1989 Feb;43(2):109–11 (Eng. Abstr.) (Ger)
[Long-term results following fundus plication and vagotomy in reflux disease. Complaints after 10–20 years] Ackermann C, et al. **Schweiz Med Wochenschr** 1989 May 27; 119(21):717–9 (Eng. Abstr.) (Ger)
[Alkaline reflux gastritis: treatment by the Henley–Soupault operation] de Mello JB, et al. **AMB Rev Assoc Med Bras** 1988 Jan–Feb;34(1):34–8 (Eng. Abstr.) (Por)
[Anterior seromyotomy of the stomach combined with posterior truncal vagotomy in the treatment of duodenal ulcer complicated by hemorrhage or perforation] Petrov VI, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):18–21 (Eng. Abstr.) (Rus)
[Effect of variants of vagotomy on the acid-producing function of the stomach in duodenal ulcer in middle-aged and elderly patients] Faĭn SI, et al. **Klin Khir** 1988;(8):6–8 (Eng. Abstr.) (Rus)
[Ways of improving the results in treating patients with acute gastrointestinal hemorrhage of peptic ulcer etiology] Kharaberiush VA, et al. **Klin Khir** 1989;(4):1–4 (Eng. Abstr.) (Rus)
[Surgical anatomy of the vagus nerves in the vagotomy aspect] Ivanov NM, et al. **Vestn Khir** 1988 May;140(5):22–5 (Eng. Abstr.) (Rus)
[Reflux esophagitis at remote periods after vagotomy for duodenal ulcer] Maĭstrenko NA. **Vestn Khir** 1988 Sep; 141(9):11–3 (Eng. Abstr.) (Rus)
[Surgical treatment of combined ulcers of the stomach and duodenum] Nechaĭ AI, et al. **Vestn Khir** 1988 Oct; 141(10):19–22 (Eng. Abstr.) (Rus)

REHABILITATION

[Principles of the dispensary care of peptic ulcer patients following organ-preserving operations with vagotomy] Pavlovskiĭ MP, et al. **Klin Khir** 1988;(8):42–4 (Rus)

STATISTICS & NUMERICAL DATA

Mortality from colorectal and breast cancer in gastric-surgery patients. Caygill CP, et al. **Int J Color Dis** 1988 Aug;3(3):144–8

VETERINARY

Desheathing the nodose ganglion is not a reliable method of de-efferentation in the ferret [published erratum appears in Life Sci 1989;44(3):243] Greenwood B, et al. **Life Sci** 1988;43(17):1393–401

VAGOTOMY, PARIETAL CELL see **VAGOTOMY, PROXIMAL GASTRIC**

VAGOTOMY, PROXIMAL GASTRIC

The insulin test after highly selective vagotomy. Prognostic value in a series of 73 patients followed for 4–10 years. Van Hee R. **Acta Gastroenterol Belg** 1987 Nov–Dec; 50(6):657–65
A prospective study of intraoperative histologic antrum–corpus boundary in patients undergoing highly selective vagotomy for duodenal ulcer [letter; comment] Donahue PE, et al. **Am J Surg** 1989 Jul;158(1):79–80.
Comment on: Am J Surg 1988 Mar;155(3):443–6
Postoperative gastric stony after vagotomy for obstructing peptic ulcer. Hom S, et al. **Am J Surg** 1989 Mar; 157(3):282–6
Indications for parietal cell vagotomy without drainage in gastrointestinal surgery. Jordan PH Jr. **Ann Surg** 1989 Jul; 210(1):29–41
Current status of proximal gastric vagotomy. Schirmer BD. **Ann Surg** 1989 Feb;209(2):131–48 (251 ref.)
Highly selective vagotomy: a 14-year experience. Byrne DJ, et al. **Br J Surg** 1988 Sep;75(9):869–72
A prospective comparison of the effects of placebo, ranitidine and highly selective vagotomy on 24 h ambulatory intragastric pH in patients with duodenal ulcer. Rogers MJ, et al. **Br J Surg** 1988 Oct;75(10):961–5
Successful treatment of gastric stasis following proximal gastric vagotomy using endoscopic balloon dilatation. Steele RJ, et al. **Endoscopy** 1989 May;21(3):120
Gastric emptying of liquids after highly selective vagotomy for duodenal ulcer. Van Hee R, et al. **Hepatogastroenterology** 1989 Apr;36(2):92–6
Proximal gastric vagotomy for complicated duodenal ulcer and benign gastric ulcer disease. Gupta R, et al. **Indian J Gastroenterol** 1988 Oct;7(4):223–5
Expedient surgical treatment of chronic ulcer stenosis. A case for proximal gastric vagotomy. Gleysteen JJ, et al. **J Clin Gastroenterol** 1988 Dec;10(6):619–22
Comparison between the sexes of the results of parietal cell vagotomy for duodenal ulcer 11–18 years after surgery. Hoffmann J, et al. **J R Coll Surg Edinb** 1988 Aug; 33(4):179–81
Strengths and weaknesses of highly selective vagotomy as treatment of duodenal ulcer. Banatwala NS. **JPMA** 1988 Sep;38(9):246–50 (17 ref.)
Transgastric vagotomy with selective proximal vagotomy for duodenal ulcer. Takeda J, et al. **Kurume Med J** 1989; 36(1):35–9
Comparison between medical and elective surgical treatment of peptic ulcers. Ström M. **Scand J Gastroenterol Suppl** 1988;155:159–65 (13 ref.)
Proximal gastric vagotomy for duodenal ulcer disease. Malangoni MA, et al. **South Med J** 1989 Jun;82(6):733–5 (14 ref.)
Intraoperative testing for completeness of vagotomy. Burkitt DS. **Surg Annu** 1989;21:135–55 (80 ref.)
Proximal gastric vagotomy with drainage for obstructing duodenal ulcer. Donahue PE, et al. **Surgery** 1988 Oct; 104(4):757–64
Parietal cell vagotomy and truncal vagotomy in elective duodenal ulcer surgery—results after six to twelve years. Elfberg BA, et al. **Ups J Med Sci** 1989;94(2):129–36
[Proximal selective vagotomy in the treatment of uncomplicated forms of duodenal ulcer] Deredzhian Kh. **Khirurgiia (Sofiia)** 1989;42(2):1–7 (Eng. Abstr.) (Bul)
[Experience with selective proximal vagotomy in the surgical department of a type I polyclinic hospital] Kuthan D, et al. **Rozhl Chir** 1989 Jun;68(6):411–5 (Eng. Abstr.) (Cze)
[Parietal cell vagotomy and dilatation in duodenal ulcer complicated by pyloric stenosis] Gyrtrup HJ, et al. **Ugeskr Laeger** 1989 Jan 23;151(4):228–30 (Eng. Abstr.) (Dan)
[Effect of proximal gastric vagotomy on the competence of the lower sphincter of the esophagus] Ottignon Y, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):250–4 (Eng. Abstr.) (Fre)
[A rare complication following vagotomy with circular myotomy of the esophagus and hemifundoplication. A case report] Zornig C, et al. **Chirurg** 1989 Feb;60(2):119–20 (Ger)
[Experimental animal studies of the effect of selective proximal vagotomy on the prostaglandin content of the gastric mucosa in the Shay ulcer model] Dubecz S Jr, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989; 22(1):45–9 (Eng. Abstr.) (Ger)
[Selective proximal vagotomy with and without pyloroplasty—results of a randomized clinical study of duodenal ulcer 5 and 8 years after surgery] Hildebrandt J, et al. **Zentralbl Chir** 1988;113(13):827–36 (Eng. Abstr.) (Ger)
[The effect of proximal selective vagotomy on the healing of duodenal ulcer] Kisfalvi I, et al. **Orv Hetil** 1988 Sep 18;129(38):2019–22 (42 ref.) (Eng. Abstr.) (Hun)
[Changes in gastric mucosal blood flow after selective proximal vagotomy; an experimental study in rats] Eto S. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):377–84 (Eng. Abstr.) (Jpn)
[Correlation between the anterior antral branches of the vagus nerve and the antral-fundic boundary in duodenal ulcer] Setsu Y. **Nippon Geka Gakkai Zasshi** 1988 Jun; 89(6):834–42 (Eng. Abstr.) (Jpn)
[Surgical therapy of reflux esophagitis in patients with normal lower esophageal sphincter pressure] Veiga Fernandes F, et al. **Acta Med Port** 1989 Jan–Feb;2(1):21–5 (Eng. Abstr.) (Por)
[Enterogastric reflux after partial gastrectomy: comparative study of Billroth I and Billroth II anastomoses] de Andrade JI, et al. **AMB Rev Assoc Med Bras** 1987 Nov–Dec; 33(11–12):219–22 (Eng. Abstr.) (Por)
[Motor-evacuatory function of the duodenum in the early period after selective proximal vagotomy] Dudenko GI, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):21–3 (Eng. Abstr.) (Rus)
[Recurrence of peptic ulcer following selective proximal vagotomy] Pantsyrev IuM, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):11–6 (Eng. Abstr.) (Rus)
[Immediate and late results of selective proximal vagotomy in pyloroduodenal ulcers] Rzaev NM, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):11–5 (Eng. Abstr.) (Rus)
[Regional blood flow and gastric and duodenal function in the late period after selective proximal vagotomy] Koval'chuk LA, et al. **Klin Khir** 1988;(8):58–9 (Rus)
[Indications for the use of selective proximal vagotomy] Nikonenko AS, et al. **Klin Khir** 1988;(8):12–3 (Eng. Abstr.) (Rus)
[Recurrent ulcers following selective proximal vagotomy (10 years' results)] Saenko VF, et al. **Klin Khir** 1989;(3):10–3 (Eng. Abstr.) (Rus)
[Reasons for nonhealing and ulcer recurrence after proximal vagotomy and pyloroplasty] Sibul' UF, et al. **Klin Khir** 1988;(8):58 (Rus)
[Treatment of peptic ulcer complicated by pyloroduodenal stenosis] Kuzin MI, et al. **Sov Med** 1989;(2):72–5 (Rus)
[Functional status of the pancreas in the late period after selective proximal vagotomy] Loranskaia TI, et al. **Sov Med** 1989;(2):113 (Rus)
[Gastric emptying in patients with pyloroduodenal ulcers after selective proximal vagotomy] Gorbashko AI, et al. **Vestn Khir** 1988 Aug;141(8):21–5 (Eng. Abstr.) (Rus)
[Peptic ulcer recurrence after selective proximal vagotomy] Polous IuM, et al. **Vrach Delo** 1989 Apr;(4):16–8 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Long-term recurrence patterns following proximal gastric vagotomy. Schache DJ, et al. **Aust N Z J Surg** 1989 May; 59(5):387–90
Pathologic changes in pulmonary tissue of rabbits subjected to various types of vagotomy: truncal, selective and highly

selective one. Głuszek S, et al. **Mater Med Pol** 1988 Apr–Jun;20(2):79–83

Preservation of the distal part of the stomach by esophagoantral jejunal interposition. Lenzi V, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):175–6

[A prospective controlled study of vagotomy in the treatment of duodenal ulcer. Results after 11–15 years] Hoffmann J, et al. **Ugeskr Laeger** 1989 Mar 27;151(13):812–4 (Eng. Abstr.) (Dan)

[Fundus vagotomy and gastroesophageal reflux. Towards an electric attitude] Pélissier E, et al. **Chirurgie** 1988; 114(6):449–57 (24 ref.) (Eng. Abstr.) (Fre)

[Histologic characteristics of the gastric and duodenal mucosa in post-vagotomy complications] Lirman AV, et al. **Klin Med (Mosk)** 1988 Oct;66(10):102–6 (Rus)

[Secondary stomach ulcers after organ-sparing operations in duodenal ulcer] Borisov VF, et al. **Vestn Khir** 1988 Jun; 140(6):25–8 (Eng. Abstr.) (Rus)

[Early complications of vagotomy] Chemodurov NT. **Vestn Khir** 1988 May;140(5):103–6 (Rus)

[Clinical anatomy of the upper part of the abdominal cavity in reoperations on the stomach after organ-sparing surgery] Gusak VK, et al. **Vestn Khir** 1988 Oct;141(10):16–8 (Eng. Abstr.) (Rus)

[Reflux esophagitis at remote periods after vagotomy for duodenal ulcer] Maistrenko NA. **Vestn Khir** 1988 Sep; 141(9):11–3 (Eng. Abstr.) (Rus)

[Causes of post-gastrectomy and post-vagotomy recurrences of peptic ulcer] Zavgorodnil LG, et al. **Vestn Khir** 1988 Aug;141(8):25–9 (Eng. Abstr.) (Rus)

ECONOMICS

Costs of medical and surgical treatment of duodenal ulcer. Sonnenberg A. **Gastroenterology** 1989 Jun;96(6):1445–52

METHODS

Operative technique of highly selective (parietal cell) vagotomy. Johnston D. **Acta Chir Scand Suppl** 1988; 547:49–53

Effects of intramural division of gastric vagal fibers on stimulated acid production. Mulholland MW, et al. **Am J Surg** 1989 Feb;157(2):225–9

[Can recurrent reflux disease following fundoplication be prevented by adding a vagotomy?] Ackermann C, et al. **Helv Chir Acta** 1989 Jan;55(5):565–9 (Eng. Abstr.) (Ger)

[Intravagal fundoplication and cardiofundal vagotomy: a technical physiologic variant in surgery of reflux] Rosaetti M, et al. **Helv Chir Acta** 1989 Jan;55(5):559–64 (Eng. Abstr.) (Ger)

[Proximal gastric vagotomy with single-layer sutures—the method of choice in perforated duodenal ulcers (15 years' experience)] Peev A, et al. **Acta Chir Iugosl** 1987;34 Suppl 2:43–9 (Eng. Abstr.) (Mac)

[Unextended and extended selective proximal vagotomy in the treatment of chronic uncomplicated duodenal ulcer] Fomin MV, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):15–8 (Eng. Abstr.) (Rus)

[Anterior seromyotomy of the stomach combined with posterior truncal vagotomy in the treatment of duodenal ulcer complicated by hemorrhage or perforation] Petrov VI, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):18–21 (Eng. Abstr.) (Rus)

[Seromuscular proximal vagotomy in the treatment of pyloroduodenal ulcer] Shaposhnikov AV, et al. **Klin Khir** 1988;(8):26–9 (Eng. Abstr.) (Rus)

[Determining the safety of antral branches of the vagus nerve during selective proximal vagotomy] Pinskiĭ SB, et al. **Vestn Khir** 1989 Feb;142(2):20–3 (Eng. Abstr.) (Rus)

[A 12-year retrospective study of 114 cases of proximal gastric vagotomy] López-Cantarero Ballesteros M, et al. **Rev Esp Enferm Apar Dig** 1989 Feb;75(2):157–63 (Eng. Abstr.) (Spa)

MORTALITY

[Long-term survival after surgical treatment of peptic ulcer. Results of the Aarhus County Vagotomy Trial] Ditlevsen S. **Ugeskr Laeger** 1988 Jan 18;150(3):144–7 (Eng. Abstr.) (Dut)

TRENDS

[Ulcer surgery at the cross-road? (letter)] Axelsson CK. **Ugeskr Laeger** 1989 Jun 12;151(24):1557–8 (Dan)

VAGOTOMY, SELECTIVE PROXIMAL see VAGOTOMY, PROXIMAL GASTRIC

VAGOTOMY, TRUNCAL

The effect of truncal vagotomy on the bicarbonate-ion secretion of the stomach in rat. Dubecz S Jr, et al. **Acta Chir Hung** 1988;29(2):131–6

The role of endogenous prostaglandins in maintaining the integrity of the gastric mucosa in Shay's ulcer model after truncal vagotomy in rat. Dubecz S Jr, et al. **Acta Chir Hung** 1988;29(3):205–13

Postoperative gastric atony after vagotomy for obstructing peptic ulcer. Hom S, et al. **Am J Surg** 1989 Mar; 157(3):282–6

Anterior lesser curve seromyotomy and posterior truncal vagotomy for chronic duodenal ulcer: the results at five years. Siriwardena AK, et al. **Br J Surg** 1988 Sep; 75(9):866–8

Mechanisms governing the biphasic pattern of gastric emptying after truncal vagotomy and pyloroplasty. Parr NJ, et al. **Gut** 1988 Sep;29(9):1253–7

The preventive and therapeutic effects of vagotomy for stress ulcer—experimental studies on the aspects of gastric submucosal blood flow and ulcer index. Watanabe Y, et al. **Jpn J Surg** 1988 Jul;18(4):446–54

Parietal cell vagotomy and truncal vagotomy in elective duodenal ulcer surgery—results after six to twelve years. Elfberg BA, et al. **Ups J Med Sci** 1989;94(2):129–36

[Experimental animal studies on the significance of endogenous prostaglandins in maintaining the integrity of the stomach mucosa after truncal vagotomy] Dubecz S Jr, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988; 21(6):322–7 (Eng. Abstr.) (Ger)

[The influence of truncal vagotomy or surgical sympathectomy on the pancreatic trophic effect of trypsin inhibitor upon normal rats and major pancreatectomized rats] Aki T, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):586–97 (Eng. Abstr.) (Jpn)

[Discriminative index of the efficiency of vagotomy in gastrectomized patients] Mascarenhas L, et al. **Acta Med Port** 1988 Jul–Dec;1(4–6):273–7 (Eng. Abstr.) (Por)

[Regional blood flow and gastric motor function following truncal vagotomy in patients with duodenal ulcer complicated by hemorrhage] Koval'chuk LA, et al. **Klin Khir** 1988;(8):8–10 (Eng. Abstr.) (Rus)

[The role of reinnervation of the stomach in the development of recurrent ulcers] Savinskiĭ GA, et al. **Vestn Khir** 1989 Mar;142(3):38–40 (Eng. Abstr.) (Rus)

[Truncal vagotomy, antrectomy and Roux-en-Y gastrojejunostomy in the surgical treatment of ulcer disease] Maksimović V, et al. **Vojnosanit Pregl** 1988 Sep–Oct;45(5):328–33 (Eng. Abstr.) (Scr)

ADVERSE EFFECTS

Pathologic changes in pulmonary tissue of rabbits subjected to various types of vagotomy: truncal, selective and highly selective one. Głuszek S, et al. **Mater Med Pol** 1988 Apr–Jun;20(2):79–83

[A prospective controlled study of vagotomy in the treatment of duodenal ulcer. Results after 11–15 years] Hoffmann J, et al. **Ugeskr Laeger** 1989 Mar 27;151(13):812–4 (Eng. Abstr.) (Dan)

[Jejunogastric intussusception. Apropos of a case] Biagini J, et al. **Ann Chir** 1989;43(4):299–301 (23 ref.) (Eng. Abstr.) (Fre)

METHODS

A simplified technique for rapid truncal vagotomy. Roberts JP, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):539–41

[Can truncal vagotomy still be justified?] Olah A, et al. **Helv Chir Acta** 1989 Jan;55(5):571–6 (Eng. Abstr.) (Ger)

VAGUS NERVE

Reversion by vagal reflex of a fetal paroxysmal atrial tachycardia detected by echocardiography. Fernández C, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):860–1

Intravagal parathyroid adenoma. Takimoto T, et al. **J Laryngol Otol** 1989 Jul;103(7):704–6

Glomus vagale tumors. Davidson J, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):66–70 (34 ref.)

Glomus vagale tumor: the significance of early vocal cord paralysis. Leonetti JP, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):533–7

[Cervical localization of a neurinoma of the n. vagus treated surgically] Kazandzhiev P, et al. **Khirurgiia (Sofiia)** 1989; 42(2):81–3 (Bul)

[Laterocervical paraganglioma] Thomassin JM, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):213–7 (Eng. Abstr.) (Fre)

[Neurinoma of the vagus nerve, contralateral peripheral facial paralysis] Labauge R, et al. **Rev Neurol (Paris)** 1988; 144(10):606–9 (Eng. Abstr.) (Fre)

[Vagal paraganglioma. Apropos of 2 cases. Review of the literature] Mondie JM, et al. **Rev Stomatol Chir Maxillofac** 1988;89(6):342–7 (20 ref.) (Eng. Abstr.) (Fre)

[Production of experimental infective endocarditis in rabbit mitral valve prolapse induced by vagus stimulation] Imataka K, et al. **J Cardiol** 1989;19 Suppl 21:57–63, discussion 64 (Eng. Abstr.) (Jpn)

[A case of mediastinal schwannoma originating from the intrathoracic vagal nerve] Hasegawa N, et al. **Kyobu Geka** 1989 Jun;42(6):474–7 (9 ref.) (Eng. Abstr.) (Jpn)

[Three cases of neurinoma arising from the vagus nerve in the neck] Furukawa M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug;91(8):1256–66 (66 ref.) (Eng. Abstr.) (Jpn)

[Four cases of intrathoracic schwannoma originating from the vagal nerve] Yoshida K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1408–12 (21 ref.) (Eng. Abstr.) (Jpn)

[Neurilemmoma of the vagus nerve and the cervical section of the marginal sympathetic trunk] Prokof'ev VA, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):66 (Rus)

[Neurinoma of the right vagus nerve, sympathetic nerve trunk and branches of the cervical plexus] Tolstov IuP, et al. **Vestn Otorinolaringol** 1989 May–Jun;(3):73–4 (Rus)

ANALYSIS

Angiotensin receptors and the vagal system. Allen AM, et al. **Clin Exp Hypertens** [A] 1988;10(6):1239–49

Immunohistochemical study of neuropeptides in vagal and glossopharyngeal afferent neurons in the rat. Helke CJ, et al. **Neuroscience** 1988 Aug;26(2):539–51

ANATOMY & HISTOLOGY

Neurons of origin of the internal ramus of the rabbit accessory nerve: localization in the dorsal nucleus of the vagus nerve and the nucleus retroambigualis. Kitamura S, et al. **Anat Rec** 1989 Aug;224(4):541–9

Pyloroplasty divides vagus nerve fibers to the greater curvature of the stomach. An axonal tracing study. Yoshida J, et al. **Ann Surg** 1988 Dec;208(6):708–13

Selective vagal postganglionic innervation of the sinoatrial and atrioventricular nodes in the non-human primate. Billman GE, et al. **J Auton Nerv Syst** 1989 Feb;26(1):27–36

Structure, afferent innervation, and transmitter content of ganglia of the guinea pig gallbladder: relationship to the enteric nervous system. Mawe GM, et al. **J Comp Neurol** 1989 May 15;283(3):374–90

Vagal afferents interact with substance P-immunoreactive structures in the nucleus of the tractus solitarius: immunoelectron microscopy combined with an anterograde degeneration study. Kawai Y, et al. **Neurosci Lett** 1989 Jun 5;101(1):6–10

Neurons of origin of the internal ramus of the rabbit accessory nerve: localization in the nucleus ambiguus. Kitamura S, et al. **Okajimas Folia Anat Jpn** 1988 Dec; 65(5):291–301

[The ultrastructure of the nucleus of the solitary tract of the sheep and goat] Störmer R, et al. **J Hirnforsch** 1988; 29(6):633–41 (Eng. Abstr.) (Ger)

[Correlation between the anterior antral branches of the vagus nerve and the antral-fundic boundary in duodenal ulcer] Setsu Y. **Nippon Geka Gakkai Zasshi** 1988 Jun; 89(6):834–42 (Eng. Abstr.) (Jpn)

[Location of neurons in the dorsal motor nucleus of the vagus nerve, innervating the pyloric part of the stomach] Bagaev VA, et al. **Dokl Akad Nauk SSSR** 1989;304(4):985–7 (Rus)

[Surgical anatomy of the vagus nerves in the vagotomy aspect] Ivanov NM, et al. **Vestn Khir** 1988 May;140(5):22–5 (Eng. Abstr.) (Rus)

CYTOLOGY

Occurrence of methionine-enkephalin-like immunoreactive cells in the feline vagus nerve. Maeda S, et al. **Acta Anat (Basel)** 1988;133(2):127–9

Differential regulation of calcitonin gene-related peptide and substance P in cultured neonatal rat vagal sensory neurons. MacLean DB, et al. **Brain Res** 1989 Jan 30;478(2):349–55

The allocation of nerve fibres to the anterior eye segment and peripheral ganglia of rats. I. The sensory innervation. ten Tusscher MP, et al. **Brain Res** 1989 Aug 7;494(1):95–104

The central amygdaloid nucleus innervation of the dorsal vagal complex in rat: a Phaseolus vulgaris leucoagglutinin lectin anterograde tracing study. Danielsen EH, et al. **Brain Res Bull** 1989 Apr;22(4):705–15

Anatomical evidence for interaction of ACTH1-39 immunostained fibers and hypothalamic paraventricular neurons that project to the dorsal vagal complex. Hornby PJ, et al. **Histochemistry** 1988;90(3):201–6

Central origin of vagal nerve fibres innervating the fundus and corpus of the stomach in rat. Ewart WR, et al. **J Auton Nerv Syst** 1988 Dec;25(2–3):219–31

Ganglionic distribution of afferent neurons innervating the canine heart and cardiopulmonary nerves. Hopkins DA, et al. **J Auton Nerv Syst** 1989 Apr;26(3):213–22

Identification of vagal efferent fibers and putative target neurons in the enteric nervous system of the rat. Kirchgessner AL, et al. **J Comp Neurol** 1989 Jul 1; 285(1):38–53

Vagal paraganglia of the rat. Kummer W, et al. **J Electron Microsc Tech** 1989 Aug;12(4):343–55 (45 ref.)

Brain stem topography of vagus nerve to the greater curvature of the stomach. Yoshida J, et al. **J Surg Res** 1989 Jan;46(1):60–9

The vagal connection of the carotid sinus. Torrealba F, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):186–90

DRUG EFFECTS

Vagally induced hexamethonium-resistant jejunal contractions in the cat. Delbro D, et al. **Acta Physiol Scand** 1989 May;136(1):143–4

Participation of sympathetic and vagal tones in the hypotensive and bradycardic effects of some 5-HT1-like receptor agonists in the rat. Cherqui C, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:18–28

Acute laryngeal stridor with respiratory arrest in drug induced systemic lupus erythematosus. Chong WK, et al. **BMJ** 1988 Sep 10;297(6649):660–61

Developmental neurophysiology of mammalian peripheral nerves and age-related differential sensitivity to local anaesthetic. Benzon HT, et al. **Br J Anaesth** 1988 Dec; 61(6):754–60

LTD4-induced bronchoconstriction in patients with asthma: lack of a vagal reflex. Ayala LE, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):110-2

Thyrotropin-releasing hormone: effects on identified neurons of the dorsal vagal complex. McCann MJ, et al. **J Auton Nerv Syst** 1989 Mar;26(2):107-12

Comparing the cardiac vagolytic effects of atropine and methylatropine in rhesus macaques. Jansen HT, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):175-9

CCK inhibits real and sham feeding in gastric vagotomized rats. Le Sauter J, et al. **Physiol Behav** 1988;44(4-5):527-34

Modulation of the effects of postganglionic vagal stimulation in the sinus and atrioventricular nodes by cardioactive agents and electrolytes. Dreifus LS, et al. **Prog Clin Biol Res** 1988;275:207-23

The stimulatory effect of nicotine on vagal pulmonary C-fibers in dogs. Kou YR, et al. **Respir Physiol** 1989 Jun; 76(3):347-56

[Behavior of heart rate following active change in posture with pharmacologic block of the autonomic nervous system] Weise F, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 May; 41(5):306-9 (Ger)

[Effect of natural ribonucleotides on the ATP receptors of the neurons of the rat nodose ganglion] Marchenko SM, et al. **Neirofiziologiia** 1988;20(3):410-2 (Eng. Abstr.) (Rus)

EMBRYOLOGY

Transient catecholaminergic (TC) cells in the vagus nerves and bowel of fetal mice: relationship to the development of enteric neurons. Baetge G, et al. **Dev Biol** 1989 Mar; 132(1):189-211

Effects of nerve growth factor on sensory neurons in the chick embryo: a stereological study. Dimberg Y, et al. **Int J Dev Neurosci** 1987;5(3):207-13

ENZYMOLOGY

Loss of transmitter-associated enzyme staining following axotomy does not indicate death of brainstem cholinergic neurons. Lams BE, et al. **Brain Res** 1988 Dec 20; 475(2):401-6

INJURIES

Collet-Sicard syndrome after minor head trauma. Hashimoto T, et al. **Neurosurgery** 1988 Sep;23(3):367-70 (13 ref.)

METABOLISM

TRH: immunocytochemical distribution in vagal nuclei of the cat and physiological effects of microinjection. Hornby PJ, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G454-62

Occurrence of calcitonin-positive C cells within the distal vagal ganglion and the recurrent laryngeal nerve of the chicken. Kameda Y. **Anat Rec** 1989 May;224(1):43-54

Developmentally different onset of alpha 1- and alpha 2-adrenergic responses in the neonatal rat dorsal motor nucleus of the vagus in vitro. Fukuda A, et al. **Brain Res** 1989 Jul 31;493(2):357-61

Quantitative autoradiography of angiotensin II receptors in the rat solitary-vagal area: effects of nodose ganglionectomy or sinoaortic denervation. Healy DP, et al. **Brain Res** 1989 Apr 10;484(1-2):1-12

Distribution of cholecystokinin receptors in the dorsal vagal complex and other selected nuclei in the human medulla. Hyde TM, et al. **Brain Res** 1989 Aug 21;495(1):198-202

Reduction of CCK-8 binding in the nucleus of the solitary tract in unilaterally nodosectomized rats. Ladenheim EE, et al. **Brain Res** 1988 Nov 22;474(1):125-9

Substance P content in cultured neonatal rat vagal sensory neurons: the effect of nerve growth factor. MacLean DB, et al. **Brain Res** 1988 Aug 2;457(1):53-62

Reduced glutamate binding in rat dorsal vagal complex after nodose ganglionectomy. Lewis SJ, et al. **Brain Res Bull** 1988 Dec;21(6):913-6

Bidirectional transport of NMDA receptor and ionophore in the vagus nerve. Cincotta M, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):167-71

Binding of the 5-HT3 ligand, [3H]GR65630, to rat area postrema, vagus nerve and the brains of several species. Kilpatrick GJ, et al. **Eur J Pharmacol** 1989 Jan 10; 159(2):157-64

Infiltration of carbon-labelled monocytes into the dorsal motor nucleus following an intraneural injection of ricinus communis agglutinin-60 into the vagus nerve in rats. Ling EA, et al. **J Anat** 1988 Aug;159:207-18

Distribution of calcitonin gene-related peptide-like immunoreactivity in the nucleus ambiguus of the cat. McWilliam PN, et al. **J Comp Neurol** 1989 Apr 8; 282(2):206-14

Changes of calcitonin gene-related peptide-like immunoreactivity in cerebrovascular nerve fibers in the dog after experimentally produced subarachnoid hemorrhage. Nozaki K, et al. **Neurosci Lett** 1989 Jul 17;102(1):27-32

Calcitonin gene-related peptide in visceral afferent nerve fibres: quantification by radioimmunoassay and determination of axonal transport rates. Varro A, et al. **Neuroscience** 1988 Sep;26(3):927-32

PATHOLOGY

Neurilemmoma of the vagus nerve in the neck. Hussain SS, et al. **Ear Nose Throat J** 1989 Jan;68(1):52-6

Selective destruction of vagal sensory neurons using Shigella cytotoxin. Wiley RG, et al. **Methods Enzymol** 1988; 165:250-4

[Differential diagnosis of parapharyngeal tumors--the vagus neurinoma] Kehrl W, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug;67(8):389-91 (Eng. Abstr.) (Ger)

[Pathomorphology of the nodose ganglia of the vagus nerves in burns] Isaev IM. **Biull Eksp Biol Med** 1988 Dec; 106(12):754-7 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Vagally induced hexamethonium-resistant jejunal contractions in the cat. Delbro D, et al. **Acta Physiol Scand** 1989 Aug;136(4):621-2

Vagally mediated vasodilatation by motor and sensory nerves in the tracheal and bronchial circulation of the pig. Matran R, et al. **Acta Physiol Scand** 1989 Jan;135(1):29-37

Increased plasma levels of oxytocin in response to afferent electrical stimulation of the sciatic and vagal nerves and in response to touch and pinch in anaesthetized rats. Stock S, et al. **Acta Physiol Scand** 1988 Jan;132(1):29-34

Processing of pulmonary afferent input patterns by respiratory I-beta neurons. Bajić J, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R379-93

Brain stem responses to electrical stimulation of ventral vagal gastric fibers. Barber WD, et al. **Am J Physiol** 1989 Jul; 257(1 Pt 1):G24-9

Muscarinic autoreceptors do not modulate kinetics of acetylcholine release in hearts. Dexter F, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1073-8

Mathematical model of dependence of heart rate on tissue concentration of acetylcholine. Dexter F, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H520-6

Medullary sites for TRH analogue stimulation of gastric contractility in the rat. Garrick T, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1011-5

Vagal stimulation decreases rate of left ventricular relaxation. Henning RJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H428-33

Neural mechanisms of pancreatic polypeptide release in conscious dogs. Hosotani R, et al. **Am J Physiol** 1989 Jul; 257(1 Pt 1):G134-7

Effects of vagus nerve on heart rate and ventricular contractility in chicken. Lang SA, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1295-302

Direct effect of CNS on insulin hypersecretion in obese Zucker rats: involvement of vagus nerve. Lee HC, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E439-44

Brief vagal stimuli and AV conduction in dogs: effects on retrograde exceed antegrade. Martin PJ. **Am J Physiol** 1989 Sep;257(3 Pt 2):H812-7

Inhibitory effect of somatostatin on vagal motoneurons in the rat brain stem in vitro. Nabekura J, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C155-9

Localization of vagal preganglionic somata controlling sinoatrial and atrioventricular nodes. Plecha DM, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R703-8

Brief vagal bursts can induce Wenckebach arrhythmia. Wallick DW, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H935-41

Neurogenic inflammation in the airways. I. Neurogenic stimulation induces plasma protein extravasation into the rat airway lumen. Kowalski ML, et al. **Am Rev Respir Dis** 1989 Jul;140(1):101-9

The role of pirenzepine-sensitive (M1) muscarinic receptors in vagally mediated bronchoconstriction in humans. Lammers JW, et al. **Am Rev Respir Dis** 1989 Feb; 139(2):446-9

Inability to elicit vagal responses from the acid-infused esophagus of pigs. Andersen LI, et al. **Ann Allergy** 1989 Jan;62(1):47-50

Effects of recurrent laryngeal nerve transection and vagotomy on respiratory contraction of the cricothyroid muscle. Woodson GE. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):373-8

Lactate and hyperventilation substantially attenuate vagal tone in normal volunteers. A possible mechanism of panic provocation? George DT, et al. **Arch Gen Psychiatry** 1989 Feb;46(2):153-6

Effect of vagal stimulation on gastric mucosal barrier in albino rats. Somasundaram K, et al. **Arq Gastroenterol** 1987 Apr-Jun;24(2):75-9

Conditioned taste aversion induced by motion is prevented by selective vagotomy in the rat. Fox RA, et al. **Behav Neural Biol** 1988 Nov;50(3):275-84

Vagal innervation techniques in the treatment of panic disorder. Sartory G, et al. **Behav Res Ther** 1988;26(5):431-4

Effects of methohexitone, althesin, ketamine and droperidol on peripheral vagal transmission. Inoue K, et al. **Br J Anaesth** 1988 Oct;61(4):456-61

Gastric vagal-splanchnic interactions in the brainstem of the cat. Barber WD, et al. **Brain Res** 1989 May 15;487(1):1-8

Vagally mediated insulin secretion by stimulation of brain cholinergic neurons with neostigmine in bilateral adrenalectomized rats. Gotoh M, et al. **Brain Res** 1989 Jul 24;493(1):97-102

Ceruletide suppresses endogenous dopamine release via vagal afferent system, studied by in vivo intracerebral dialysis. Hamamura T, et al. **Brain Res** 1989 Mar 27;483(1):78-83

Quantitative autoradiography of angiotensin II receptors in the rat solitary-vagal area: effects of nodose ganglionectomy or sinoaortic denervation. Healy DP, et al. **Brain Res** 1989 Apr 10;484(1-2):1-12

Nucleus raphe obscurus (nRO) influences vagal control of gastric motility in rats. McCann MJ, et al. **Brain Res** 1989 May 1;486(1):181-4

TRH stimulation and L-glutamic acid inhibition of proximal gastric motor activity in the rat dorsal vagal complex. Raybould HE, et al. **Brain Res** 1989 Aug 28;495(2):319-28

A GABAergic mechanism in the inhibition of cardiac vagal reflexes. Wang QA, et al. **Brain Res** 1988 Aug 9; 457(2):367-70

Pancreatic vagal functional distribution in the secretion of insulin evoked by portal infusion of D-glucose. Yamazaki M, et al. **Brain Res** 1989 Apr 10;484(1-2):357-60

Effects of sulphated cholecystokinin octapeptide (CCK-8) on the dorsal motor nucleus of the vagus. Plata-Salamán CR, et al. **Brain Res Bull** 1988 Nov;21(5):839-42

Role of vagal and sympathetic afferents in reflex respiratory responses to capsaicin in dogs. Ravi K. **Can J Physiol Pharmacol** 1988 Jul;66(7):946-50

Phasic influences of vagal stimulation on atrioventricular conduction. Warner MR, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1198-205

The protective effect of vagus nerve stimulation on catecholamine-halothane-induced ventricular fibrillation in dogs. Waxman MB, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):801-9

Interacting negative chronotropic effects of adenosine and the vagus nerve on the canine sinus node. Pelleg A, et al. **Cardiovasc Res** 1988 Jan;22(1):55-61

Heart rate response to breath-hold, valsalva and Mueller maneuvers in obstructive sleep apnea. Hanly PJ, et al. **Chest** 1989 Apr;95(4):735-9

Vagally induced block and delayed conduction as a mechanism for circus movement tachycardia in frog atria. Rosenshtraukh LV, et al. **Circ Res** 1989 Feb;64(2):213-26

Neuropeptide Y as a putative modulator of the vagal effects on heart rate. Warner MR, et al. **Circ Res** 1989 May; 64(5):882-9

Role of vagosympathetic fibers in the control of adrenocorticotropic hormone, vasopressin, and renin responses to hemorrhage in fetal sheep. Wood CE, et al. **Circ Res** 1989 Mar;64(3):515-23

Time-series analysis of heart rate variability during submaximal exercise. Evidence for reduced cardiac vagal tone in animals susceptible to ventricular fibrillation. Billman GE, et al. **Circulation** 1989 Jul;80(1):146-57

Role of beta 1-receptors and vagal tone in cardiac inotropic and chronotropic responses to a beta 2-agonist in humans. Levine MA, et al. **Circulation** 1989 Jan;79(1):107-15

A new mechanism for atrioventricular nodal gap-vagal modulation of conduction. Mazgalev T, et al. **Circulation** 1989 Feb;79(2):417-30

The effect of differential vagal nerve cooling on feline esophageal function. Reynolds RP, et al. **Clin Invest Med** 1988 Dec;11(6):452-6

Relaxatory responses of canine proximal stomach to esophageal and duodenal distension. Importance of vagal pathways. De Ponti F, et al. **Dig Dis Sci** 1989 Jun; 34(6):873-81

Sham feeding. Cephalic-vagal influences on gastric myoelectric activity. Stern RM, et al. **Dig Dis Sci** 1989 Apr;34(4):521-7

Nervous control of gastric and pancreatic secretory response to 2-deoxy-D-glucose in the dog. Becker S, et al. **Digestion** 1988;39(3):187-96

Vagally mediated inhibition of acoustic stress-induced cortisol release by orally administered kappa-opioid substances in dogs. Bueno L, et al. **Endocrinology** 1989 Apr; 124(4):1788-93

Differential vagal inhibition of the positive chronotropic and inotropic responses to cardiotonics in the isolated dog atrium. Furukawa Y, et al. **Eur J Pharmacol** 1989 Feb 14; 161(1):1-8

Evidence that the novel antihypertensive agent, flesinoxan, causes differential sympathoinhibition and also increases vagal tone by a central action. Ramage AG, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):373-9

Neurally mediated increase in vascular permeability in the rat trachea: onset, duration, and tachyphylaxis. Brokaw JJ, et al. **Exp Lung Res** 1988;14(6):757-67

Stimulation of duodenal mucosal bicarbonate secretion in the rat by brain peptides. Flemström G, et al. **Gastroenterology** 1989 Aug;97(2):412-20

Cerebral responses evoked by electrical stimulation of the esophagus in normal subjects. Frieling T, et al. **Gastroenterology** 1989 Aug;97(2):475-8

Medullary sites of action of the TRH analogue, RX 77368, for stimulation of gastric acid secretion in the rat. Ishikawa T, et al. **Gastroenterology** 1988 Dec;95(6):1470-6

Role of gastrin-releasing peptide in the neural control of pepsinogen secretion from the pig stomach. Skak-Nielsen T, et al. **Gastroenterology** 1988 Nov;95(5):1216-20

Central nervous system action of thyrotropin-releasing hormone to increase gastric mucosal blood flow in the rat. Thiefin G, et al. **Gastroenterology** 1989 Aug;97(2):405-11

Vagal branches for gastric acid secretion [letter] Tovey FI, et al. **Gastroenterology** 1989 Jan;96(1):269-70

Alterations in gastric acid secretion following hepatic vagotomy at a stage of development in rats. Ohtake M, et al. **Int J Dev Neurosci** 1987;5(4):289-93

Human Pavlovian HR-decelerative conditioning with negative tilt as US: evidence of vagal and sympathetic influences on the UR in dogs. Furedy JJ, et al. **Int J Psychophysiol** 1989 Mar;7(1):25-33

Tonic activity in inspiratory muscles and phrenic motoneurons by stimulation of vagal afferents. Badier M, et al. **J Appl Physiol** 1989 Apr;66(4):1613-9

A muscarinic receptor subtype modulates vagally stimulated bronchial contraction. Bloom JW, et al. **J Appl Physiol** 1988 Nov;65(5):2144-50

Importance of vagal afferents in determining ventilation in newborn rats. Fedorko L, et al. **J Appl Physiol** 1988 Sep; 65(3):1033-9

Nonadrenergic inhibitory innervation to the airways of the newborn cat. Waldron MA, et al. **J Appl Physiol** 1989 Apr; 66(4):1995-2000

Circulating atrial natriuretic factor activates vagal afferent inputs to paraventriculo-spinal neurones in the rat. Lovick TA, et al. **J Auton Nerv Syst** 1989 Mar;26(2):129-34

Effects of volume loading on paraventriculo-spinal neurones in the rat. Lovick TA, et al. **J Auton Nerv Syst** 1988 Dec; 25(2-3):135-40

Capsaicin pretreatment attenuates multiple responses to cholecystokinin in rats. McCann MJ, et al. **J Auton Nerv Syst** 1988 Sep;23(3):265-72

Dorsal medullary serotonin and gastric motility: enhancement of effects by thyrotropin-releasing hormone. McCann MJ, et al. **J Auton Nerv Syst** 1988 Nov;25(1):35-40

Effects of short-term ketanserin treatment on the QT interval and vagal function in healthy subjects. Stott DJ, et al. **J Auton Pharmacol** 1989 Feb;9(1):45-51

Verapamil potentiates vagally mediated atrioventricular chronotropic responses in dogs. Wallick DW, et al. **J Cardiovasc Pharmacol** 1988 Jul;12(1):122-5

On the asymmetry of the primary branching of vagal sensory axons: possible role of the supporting tissue. Serra M, et al. **J Comp Neurol** 1989 Jun 1;284(1):108-18

Predominance of vagal bradycardia mechanism in the brain stem of turtles. Hsieh JH, et al. **J Exp Biol** 1988 Nov; 140:405-20

Vagal afferent modulation of spinal nociceptive transmission in the rat. Ren K, et al. **J Neurophysiol** 1989 Aug; 62(2):401-15

Characteristics of vagal esophageal tension-sensitive afferent fibers in the opossum. Sengupta JN, et al. **J Neurophysiol** 1989 May;61(5):1001-10

Association of neurotensin binding sites with sensory and visceromotor components of the vagus nerve. Kessler JP, et al. **J Neurosci** 1989 Feb;9(2):466-72

Depolarization of nonmyelinated fibers of the rat vagus nerve produced by activation of protein kinase C. Rang HP, et al. **J Neurosci** 1988 Jul;8(7):2606-17

Ultrastructural demonstration of a gastric monosynaptic vagal circuit in the nucleus of the solitary tract in rat. Rinaman L, et al. **J Neurosci** 1989 Jun;9(6):1985-96

Inhibition of vagal transmission by cardiac sympathetic nerve stimulation in the dog: possible involvement of opioid receptor. Koyanagawa H, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1092-6

Effects of opioid agonists on sympathetic and parasympathetic transmission to the dog heart. Musha T, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1087-91

6-Keto-prostaglandin E1 is a potent coronary vasodilator and stimulates a vagal reflex in dogs. Panzenbeck MJ, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):814-9

Dependence of non-adrenergic inhibition of cardiac vagal action on peak frequency of sympathetic stimulation in the dog. Gardner TD, et al. **J Physiol (Lond)** 1988 Nov; 405:115-22

Short- and long-latency muscarinic inhibition of noradrenaline release from rabbit atria induced by vagal stimulation. Habermeier-Muth A, et al. **J Physiol (Lond)** 1988 Jul;401:277-93

Gastric relaxation and vasoactive intestinal peptide output in response to reflex vagal stimulation in the dog. Ito S, et al. **J Physiol (Lond)** 1988 Oct;404:683-93

Gastric vasodilatation and vasoactive intestinal peptide output in response to vagal stimulation in the dog. Ito S, et al. **J Physiol (Lond)** 1988 Oct;404:669-82

Electrophysiology of degenerating neurones in the vagal motor nucleus of the guinea-pig following axotomy. Laiwand R, et al. **J Physiol (Lond)** 1988 Oct;404:749-66

Heart rate power spectral analysis during homeostatic action of neiguan acupoint--role played by the cardial vagus nerve. Kong SM, et al. **J Tradit Chin Med** 1988 Dec; 8(4):271-6

Two types of gastric excitatory responses to stimulation of the vagal trunk in cats: efferent and afferent responses. Tsubomura T, et al. **Jpn J Pharmacol** 1988 Jun;47(2):115-22

Activation by systemic GABA of vagal efferent transmission in the rat: correlation to its acid secretagogue action. Yamasaki K, et al. **Jpn J Pharmacol** 1989 Jul;50(3):307-13

Fade responses at neuroeffector junction to vagal stimulation in the isolated, blood-perfused dog atrium. Furukawa Y, et al. **Jpn J Physiol** 1988;38(3):345-59

Insulin and glucagon secretion in the rat: effects of gastrin releasing peptide. Pettersson M, et al. **Neuropeptides** 1988 Oct;12(3):159-63

Vagal vasodilatory mechanisms in the pig bronchial circulation preferentially involves sensory nerves. Martling CR, et al. **Neurosci Lett** 1989 Jan 30;96(3):306-11

The ability of gustatory stimuli to modify the cardiac sympathetic and vagus nerve activities. Yonemura K, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):85-90

Somatic and vagal afferent convergence on solitary tract neurons in cat: electrophysiological characteristics. Person RJ. **Neuroscience** 1989;30(2):283-95

A.V. Waller (1816-1870) and "vagus" pressure. Burchell HB. **PACE** 1988 Oct;11(10):1499-501

Selective hypervagotonia isolated to the atrioventricular node. Rubin DA, et al. **PACE** 1988 Nov;11(11 Pt 1):1529-32

Ca2+-activated K+ current generating the after-hyperpolarization in mammalian nonmyelinated nerve fibres. Jirounek P, et al. **Pflugers Arch** 1989;414 Suppl 1:S135-6

Cardiac vagal and sympathetic nerve responses to baroreceptor stimulation in the dog. Kollai M, et al. **Pflugers Arch** 1989 Feb;413(4):365-71

Is an increased vagal tone involved in the pathogenesis of gastroduodenal ulcers? Jaup BH. **Pharmacology** 1988;37 Suppl 1:4-10 (25 ref.)

Olfactory and visceral projections to the nucleus of the solitary tract. Garcia-Diaz DE, et al. **Physiol Behav** 1988; 44(4-5):619-24

The effect of endogenous sugar acids on the afferent discharge rate of the hepatic branch of the vagus nerve in the rat. Niijima A. **Physiol Behav** 1988;44(4-5):661-4

The body weight loss of young rats caused by hepatic branch vagotomy is influenced by environmental temperature. Sakaguchi T, et al. **Physiol Behav** 1988;43(5):673-5

Lesion of vagal afferent terminals impairs glucagon-induced suppression of food intake. Weatherford SC, et al. **Physiol Behav** 1988;43(5):645-50

Autonomic control of the heart in some vagal maneuvers and normal sleep. Negoescu RM, et al. **Physiologie** 1989 Jan-Mar;26(1):39-49

The effect of gastro-entero-pancreatic hormones on the activity of vagal hepatic afferent fibres. Niijima A. **Prog Brain Res** 1988;74:155-60

Sympathetic-vagal interactions in the sinus and atrioventricular nodes. Levy MN. **Prog Clin Biol Res** 1988; 275:187-97 (22 ref.)

Vagal control of the atrioventricular node--in vitro observations. II. Differential postganglionic vagal influence on anterograde atrioventricular nodal conduction and junctional pacemaker activity. Mazgalev T, et al. **Prog Clin Biol Res** 1988;275:155-67

Vagal control of the atrioventricular node--in vitro observations. I. Electrophysiological mechanism underlying the effects of brief vagal discharges on atrioventricular nodal conduction. Mazgalev T, et al. **Prog Clin Biol Res** 1988;275:133-54

Inhibition of brain stem neuronal activity by cardiac and pulmonary vagal afferent fibres in the cat. Bennett JA, et al. **Q J Exp Physiol** 1988 Nov;73(6):959-72

Reflex responses of vagal efferent fibres influenced by gastrointestinal mechanoreceptors to electrical afferent stimulation in the anaesthetized ferret. Blackshaw LA, et al. **Q J Exp Physiol** 1988 Nov;73(6):1001-4

Vagal gastric efferent activity and its reflex changes in conscious sheep. Dalal A, et al. **Q J Exp Physiol** 1989 May; 74(3):277-89

Gastrin and the vagus interact in the trophic control of the rat oxyntic mucosa. Axelson J, et al. **Regul Pept** 1988 Aug; 22(3):237-43

Regulatory mechanisms in the luminal and portal release of vasoactive intestinal polypeptide during vagal nerve stimulation in the cat. Blank MA, et al. **Regul Pept** 1988 Oct;23(1):15-26

Neuropeptide Y: prejunctional inhibition of vagally induced contractions in the guinea pig trachea. Grundemar L, et al. **Regul Pept** 1988 Dec;23(3):309-13

Bombesin microinjected into the dorsal vagal complex inhibits vagally stimulated gastric acid secretion in the rat. Ishikawa T, et al. **Regul Pept** 1989 Feb;24(2):187-94

Vagal influences on respiratory mechanics, pressures, and control in rats. Caldeira MP, et al. **Respir Physiol** 1988 Jul;73(1):43-53

The effects of electrical stimulation of myelinated and non-myelinated vagal motor fibres on airway tone in the rabbit and the cat. Lama A, et al. **Respir Physiol** 1988 Dec; 74(3):265-74

Afferent vagal activity during hyperthermic polypnea in the pigeon. Mückenhoff K, et al. **Respir Physiol** 1989 Mar; 75(3):267-78

Entrainment of the respiratory rhythm by periodic lung inflation during vagal cooling. Muzzin S, et al. **Respir Physiol** 1989 Feb;75(2):157-72

Effects of intrapulmonary CO2 and airway pressure on pulmonary vagal afferent activity in the alligator. Powell FL, et al. **Respir Physiol** 1988 Dec;74(3):285-98

Effect of electric stimulation of the celiac vagus on gastric acid secretion and plasma concentrations of somatostatin and gastrin in the portal and gastroepiploic veins of dogs. Yamamoto M, et al. **Scand J Gastroenterol** 1988 Nov; 23(9):1109-16

Effects of vagal cryo-interruption on colon contractions in monkeys. Esser MJ, et al. **Surgery** 1989 Aug;106(2):139-45; discussion 145-6

Interdigestive gastric motility patterns: the role of vagal and nonvagal extrinsic innervation. Spencer MP, et al. **Surgery** 1989 Aug;106(2):185-93 discussion 193-4

Effect of duration of vagal stimulation on shortening velocity of in vivo canine trachealis muscle. Okayama H, et al. **Tohoku J Exp Med** 1989 May;158(1):37-46

[The effect of electro-acupuncture at bilateral "Yifeng" points on blood pressure responses in rabbits] Li CF, et al. **Chen Tzu Yen Chiu** 1988;13(2):114-8 (Eng. Abstr.) (Chi)

[Studies on the cervical and abdominal vagal pressor responses in the cat] Chen MQ, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):561-8 (Eng. Abstr.) (Chi)

[Role of vagus nerves and adrenergic receptor in the effect of hypertonic NaCl infusion during severe hemorrhagic shock in rabbits] Pan JY, et al. **Sheng Li Hsueh Pao** 1988 Oct;40(5):473-9 (Eng. Abstr.) (Chi)

[Hemodynamic effects of the Bezold-Jarisch reflex in rabbit] Sun SY, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):1-9 (Eng. Abstr.) (Chi)

[Effect of electrical stimulation of the vagus nerve on paraventricular neurons of the hypothalamus] Wang CA, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):180-4 (Eng. Abstr.) (Chi)

[Electrophysiological study of medullary projection of the abdominal vagal and greater splanchnic afferents in the rabbit] Zhong SN, et al. **Sheng Li Hsueh Pao** 1988 Dec; 40(6):539-46 (Eng. Abstr.) (Chi)

[Peripheral interaction of the sympathetico-vagal nerves on the heart function] Yang TE. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):213-7 (46 ref.) (Chi)

[Psychosensory initiation of gastric secretion in dogs. Inter-relation of vagal component, gastrin, histamine and somatostatin] Riquet W, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):364-71 (46 ref.) (Eng. Abstr.) (Fre)

[The local anesthetic effect of tetrodotoxin on the natural spike activity of the depressor nerve in rabbits] Lipfert P, et al. **Reg Anaesth** 1989 Jul;12(4):69-75 (Eng. Abstr.) (Ger)

[Effects of vagal stimulation in conscious dogs with previous myocardial infarct] Stramba-Badiale M, et al. **Cardiologia** 1988 May;33(5):481-3 (Eng. Abstr.) (Ita)

[Termination of idiopathic ventricular tachycardia with QRS morphology of right bundle branch block and anterior fascicular hemiblock (fascicular tachycardia) by vagal maneuvers. Presentation of 4 cases] Buja G, et al. **G Ital Cardiol** 1988 Jul;18(7):560-6 (Eng. Abstr.) (Ita)

[Experimental production of mitral valve and papillary muscle lesions by cervical vagus stimulation in rabbits] Imataka K, et al. **J Cardiol** 1987;17 Suppl 14:21-36 (Eng. Abstr.) (Jpn)

[Involvements of the mitral apparatus in rabbits induced by vagal stimulation: histological and biochemical investigations] Sekine I. **J Cardiol** 1987;17 Suppl 14:37-42 (Eng. Abstr.) (Jpn)

[The effect of bilateral vagal blockade on respiration] Nakada T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb; 27(2):119-28 (Eng. Abstr.) (Jpn)

[Function of the gastroduodenal zone during electric stimulation of the afferent innervation area of the vagus nerve in the concha auriculae] Repin AA, et al. **Fiziol Cheloveka** 1988 Jan-Feb;14(1):76-80 (Rus)

[Microelectrophysiologic analysis of the representation of the vagal, splanchnic, sciatic nerves and sensomotor region of the cortex in the central nucleus of the amygdala] Avetisian EA, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):462-9 (Eng. Abstr.) (Rus)

[Effect of the burst stimulation of the vagus nerve on the sinoatrial and atrioventricular conduction of excitation in the feline heart] Shelkh-Zade IuR. **Fiziol Zh SSSR** 1988 Oct;74(10):1418-24 (Eng. Abstr.) (Rus)

[The effect of a single firing stimulation of the vagus nerve on atrioventricular behavior of stimulation in the cat heart] Sheikh-Zade IuR. **Fiziol Zh SSSR** 1989 Apr;75(4):536-41 (Eng. Abstr.) (Rus)

[Changes in the neuronal activity of the nodose ganglion under the action of a traveling pulsed magnetic field in animals with various arterial pressure levels] Mikhailova SD, et al. **Patol Fiziol Eksp Ter** 1988 Sep-Oct;(5):65-7 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Sympathetic inhibition from vagal afferents during severe haemorrhage in rats. Thoren P, et al. **Acta Physiol Scand Suppl** 1988;571:97-105 (45 ref.)

Electrophysiologic alterations produced by hypoxia in the canine heart. Krause PC, et al. **Am Heart J** 1989 Mar; 117(3):550-61

Capsaicin-sensitive nerves exert an inhibitory effect on the development of fibrin-induced pulmonary edema in rats. Hashiba Y, et al. **Am Rev Respir Dis** 1989 Sep;140(3):652-8

Laparoscopy and vagal arrest [letter] Doyle DJ, et al. **Anaesthesia** 1989 May;44(5):448

Propranolol and vagal nerve stimulation do not affect postsystolic shortening during acute myocardial ischaemia in the dog. Geary GG, et al. **Cardiovasc Res** 1988 Aug; 22(8):527-36

Surgery for Wolff-Parkinson-White syndrome interrupts efferent vagal innervation to the left ventricle and to the atrioventricular node in the canine heart. Inoue H, et al. **Cardiovasc Res** 1988 Mar;22(3):163-70

Effect of chronic myocardial infarction on vagal cardiopulmonary baroreflex. Minisi AJ, et al. **Circ Res** 1989 Aug;65(2):396-405

Pitfalls in the assessment of cardiovascular reflexes in patients with sympathetic failure but intact vagal control. van Lieshout JJ, et al. **Clin Sci** 1989 May;76(5):523–8

Pressure-induced inhibition of fast axonal transport of proteins in the rabbit vagus nerve in galactose neuropathy: prevention by an aldose reductase inhibitor. McLean WG. **Diabetologia** 1988 Jul;31(7):443–8

Impaired vagal heart rate control in aortic valve stenosis. Airaksinen KE, et al. **Eur Heart J** 1988 Oct;9(10):1126–30

Evaluation of the vagal–sympathetic interaction in diabetics with autonomic neuropathy through power spectrum density analysis of the heart rate. A critical revision of the natural history of diabetic autonomic neuropathy is possible. Bellavere F, et al. **Funct Neurol** 1989 Apr–Jun; 4(2):177–81

What is the role of vagal tone in the genesis of life-threatening ventricular tachyarrhythmias in humans? [letter] Santinelli V, et al. **J Am Coll Cardiol** 1989 Jun; 13(7):1694

Stimulation of vagal pulmonary C-fibers by a single breath of cigarette smoke in dogs. Lee LY, et al. **J Appl Physiol** 1989 May;66(5):2032–8

A vagally mediated response to metabolic acidosis in anesthetized rabbits. Maskrey M, et al. **J Appl Physiol** 1989 Apr;66(4):1635–41

Vagal stimulation and heart rate slowing in acute experimental chagasic myocarditis. Davila DF, et al. **J Auton Nerv Syst** 1988 Dec;25(2–3):233–4

Firing rate may be a determinant of nerve fibre vulnerability in axonopathies. Satchell PM, et al. **J Neurol Sci** 1988 Nov; 87(2–3):289–97

Cigarette smoke-induced irritation in the airways in relation to peptide-containing, capsaicin-sensitive sensory neurons. Lundberg JM, et al. **Klin Wochenschr** 1988;66 Suppl 11:151–60

Growth hormone deficiency is not associated with impaired vagal cholinergic nervous system activity in children. Hanukoglu A, et al. **Pediatr Res** 1988 Nov;24(5):574–6

[The role of vagal reflex on adenosine-induced bronchoconstriction in asthma] Ma JY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):279–81, 319 (Eng. Abstr.) (Chi)

[Effect of the sinusal rate on experimental vagal atrial arrhythmia] Gagey S, et al. **Arch Mal Coeur** 1988 Dec; 81(12):1563–8 (Eng. Abstr.) (Fre)

[A case of syncope attack due to vagal reflex of rest angina] Ohyagi Y, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):883–6 (Eng. Abstr.) (Jpn)

[Changes in the efferent impulsation in the vagus nerves during the metastasis of Lewis lung carcinoma in mice] Syromiatnikov AV, et al. **Eksp Onkol** 1989;11(3):47–50 (Eng. Abstr.) (Rus)

[Determining the safety of antral branches of the vagus nerve during selective proximal vagotomy] Pinskiĭ SB, et al. **Vestn Khir** 1989 Feb;142(2):20–3 (Eng. Abstr.) (Rus)

SECRETION

[Substance P increases acetylcholine release from vagal nerve terminals] Aizawa H, et al. **Arerugi** 1988 Jun;37(6):387–90 (Eng. Abstr.) (Jpn)

SURGERY

Vagal afferents inhibit the antidiuresis and antinatriuresis secondary to bilateral carotid occlusion in the chloralose-anesthetized dog. Gorman AJ, et al. **Basic Res Cardiol** 1989 Mar–Apr;84(2):125–35

Desheathing the nodose ganglion is not a reliable method of de-efferentation in the ferret [published erratum appears in Life Sci 1989;44(3):243] Greenwood B, et al. **Life Sci** 1988;43(17):1393–401

Intrathoracic tumors arising from the vagus nerve. Review of resected tumors in Japan. Shirakusa T, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):173–5 (14 ref.)

Bone metabolism following gastric surgery: microdensitometry and single-photon absorptiometry. Imamura M, et al. **Tohoku J Exp Med** 1988 Nov; 156(3):237–49

[Schwannoma and neurofibroma of the neck] Decurtins C, et al. **HNO** 1988 Nov;36(11):437–44 (Eng. Abstr.) (Ger)

ULTRASTRUCTURE

Neuronal surface changes in the dorsal vagal motor nucleus of the guinea pig in response to axotomy. Engel AK, et al. **J Comp Neurol** 1988 Sep 8;275(2):181–200

An electron microscopic study of the nodose (inferior vagal) ganglion cells in the monkey. Ling EA, et al. **J Neurocytol** 1988 Dec;17(6):845–57

VALERATES

A comparative study of 2-deoxyglucose patterns of glomerular activation in the olfactory bulbs of C57 BL/6J and AKR/J mice. Sicard G, et al. **Brain Res** 1989 Mar 6;481(2):325–34

ADMINISTRATION & DOSAGE

Birthweights in the Faroe Islands: possible role of isovaleric acid. Ackman RG. **J Intern Med** 1989 Feb;225(2):73–5 (20 ref.)

Effects of dietary leucine, alpha-ketoisocaproate and isovalerate on antibody production and lymphocyte blastogenesis in growing lambs. Kuhlman G, et al. **J Nutr** 1988 Dec;118(12):1564–9

[The growth of rats in renal compensatory adaptation in feeding with a supplemented diet of hydroxy-analogs of essential amino acids] Friedrich M, et al. **Z Urol Nephrol** 1989 Feb;82(2):105–12 (Eng. Abstr.) (Ger)

BLOOD

Acute and chronic-intermittent isovaleric acidemia: diagnosis and glycine therapy. Elsas LJ 2d, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):442–51

A Scandinavian case of isovaleric acidaemia. Gerdes AM, et al. **J Inherited Metab Dis** 1988;11(2):219–20

Isovaleric acidaemia in a premature infant: diagnosis and treatment. Heimler R, et al. **J Inherited Metab Dis** 1988; 11(3):313–4

METABOLISM

Kinetics of p-nitrophenyl pivalate hydrolysis catalysed by cytoplasmic aldehyde dehydrogenase. Kitson TM. **Biochem J** 1989 Jan 15;257(2):573–8

Formation of 5-aminolevulinate via glutamate-1-semialdehyde and 4,5-dioxovalerate with participation of an RNA component in Scenedesmus obliquus mutant C-2A'. Breu V, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):135–40

Selective pivaloylation of 2-acetamido-2-deoxy sugars. Ljevaković D, et al. **Carbohydr Res** 1988 Nov 1; 182(2):197–205

PHARMACOLOGY

The effects of 4-pentenoic and pentanoic acids on the isolated rat atria. Varela A, et al. **Arch Int Physiol Biochim** 1988 Dec;96(5):165–70

Delta-guanidinovaleric acid as an endogenous and specific GABA-receptor antagonist: electroencephalographic study [published erratum appears in Epilepsy Res 1987 Nov–Dec;1(6):365] Yokoi I, et al. **Epilepsy Res** 1987 Mar; 1(2):114–20

R 68 070: thromboxane A2 synthetase inhibition and thromboxane A2/prostaglandin endoperoxide receptor blockade combined in one molecule—I. Biochemical profile in vitro. De Clerck F, et al. **Thromb Haemost** 1989 Feb 28;61(1):35–42

R 68 070: thromboxane A2 synthetase inhibition and thromboxane A2/prostaglandin endoperoxide receptor blockade combined in one molecule—II. Pharmacological effects in vivo and ex vivo. De Clerck F, et al. **Thromb Haemost** 1989 Feb 28;61(1):43–9

[Superficial and deep EEG recordings of valerian-related drugs] de Romanis F, et al. **Clin Ter** 1988 Jul 31; 126(2):101–8 (Eng. Abstr.) (Ita)

THERAPEUTIC USE

A double-blind, placebo-controlled study to determine the efficacy of Nicobrevin anti-smoking capsules. Dankwa E, et al. **Br J Clin Pract** 1988 Sep;42(9):359–63

URINE

Early identification of isovaleric aciduria using photodiode array detection for liquid chromatographic profiling of urinary carboxylic acids. Buchanan DN, et al. **Biomed Chromatogr** 1986 Feb;1(1):38–40

VALERIAN see under **PLANTS, MEDICINAL**

VALINE

A high proportion of ADA point mutations associated with a specific alanine-to-valine substitution. Markert ML, et al. **Am J Hum Genet** 1989 Sep;45(3):354–61

[Arg292——Val] or [Arg292——Leu] mutation enhances the reactivity of Escherichia coli aspartate aminotransferase with aromatic amino acids. Hayashi H, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):337–42

Effect of residue 65 substitutions on thermal stability of tissue plasminogen activator kringle-2 domain. Kelley RF, et al. **Biochemistry** 1989 May 2;28(9):4047–54

High-resolution NMR studies of fibrinogen-like peptides in solution: structural basis for the bleeding disorder caused by a single mutation of Gly(12) to Val(12) in the A alpha chain of human fibrinogen Rouen. Ni F, et al. **Biochemistry** 1989 Apr 4;28(7):3106–19

Regularly alternating L,D-peptides. III. Hexacyclic peptides from valine or phenylalanine. Pavone V, et al. **Biopolymers** 1989 Jan;28(1):215–23

Conformational studies on host–guest peptides containing chiral alpha-methyl-alpha-amino acids. Comparison of the helix-inducing potential of alpha-aminoisobutyric acid, (S)-2-ethylalanine and (S)-2-methylserine. Altmann E, et al. **Int J Pept Protein Res** 1988 Nov;32(5):344–51

Conformational effects of chiral alpha,alpha-dialkyl amino acids. I. C-terminal tetrapeptides of emerimicin containing alpha-ethylalanine. Marshall GR, et al. **Int J Pept Protein Res** 1988 Dec;32(6):544–55

Translational coupling between the ilvD and ilvA genes of Escherichia coli. Harms E, et al. **J Bacteriol** 1988 Oct; 170(10):4798–807

Serum alpha 1-antitrypsin deficiency associated with the common S-type (Glu264——Val) mutation results from intracellular degradation of alpha 1-antitrypsin prior to secretion. Curiel DT, et al. **J Biol Chem** 1989 Jun 25; 264(18):10477–86

Synthesis of 4% Glu-containing Val1 and Ile1-polypentapeptides: model protein systems for demonstrating mechanochemical coupling. Zhang H, et al. **J Protein Chem** 1989 Apr;8(2):173–82

Identification of resonances from an oncogenic activating locus of human N-RAS-encoded p21 protein using isotope-edited NMR. Burk SC, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):817–20

Xenopus oocyte germinal-vesicle breakdown induced by [Val12]Ras is inhibited by a cytosol-localized Ras mutant. Gibbs JB, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6630–4

Secretion in yeast of human lysozymes with different specific activities created by replacing valine-110 with proline by site-directed mutagenesis. Kikuchi M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9411–5

[Studies on the stability of complexes of Cu(II), Ni(II), Zn(II) and Co(II) with DL-alanine and DL-valine] Zhou JY, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec; 19(4):422–5 (Eng. Abstr.) (Chi)

ANALOGS & DERIVATIVES

Hydroxyethylvaline adduct formation in haemoglobin as a biological monitor of cigarette smoke intake. Bailey E, et al. **Arch Toxicol** 1988;62(4):247–53

Antagonism of NMDA receptors impairs acquisition but not retention of olfactory memory. Staubli U, et al. **Behav Neurosci** 1989 Feb;103(1):54–60

Amino acid pharmacology in neocortical slices: evidence for bimolecular actions from an extension of the Hill and Gaddum-Schild equations. Williams TL, et al. **Br J Pharmacol** 1988 Nov;95(3):805–10

Evidence for a specific role for cortical NMDA receptors in slow-wave sleep. Armstrong-James M, et al. **Brain Res** 1988 Jun 7;451(1–2):189–96

Differential sensitivity of dorsal and ventral root activity to magnesium and 2-amino-5-phosphonovalerate (APV) in an isolated mammalian spinal cord preparation. Bagust J, et al. **Brain Res** 1989 Feb 6;479(1):138–44

NMDA receptor antagonists block norepinephrine-induced long-lasting potentiation and long-term potentiation in rat dentate gyrus. Burgard EC, et al. **Brain Res** 1989 Mar 20; 482(2):351–5

APV, an N-methyl-D-aspartate receptor antagonist, blocks the hippocampal theta rhythm in behaving rats. Leung LW, et al. **Brain Res** 1988 Oct 25;463(1):148–52

Excitatory amino acid receptors intrinsic to synaptic transmission in nucleus tractus solitarii. Miller BD, et al. **Brain Res** 1988 Jul 26;456(2):333–43

N-methyl-D-aspartate antagonist applied to the spinal cord hindlimb enlargement reduces the amplitude of flexion reflex in the turtle. Stein PS, et al. **Brain Res** 1989 Feb 13;479(2):379–83

Calcium dependent regulation of catecholamine and serotonin metabolism in human neuroblastoma cells. Pastuszko A, et al. **Cancer Biochem Biophys** 1988 Jul; 10(1):67–76

Comparison of the properties of [3H]-D-2-amino-5-phosphonopentanoic acid and [3H]-DL-2-amino-7-phosphonoheptanoic acid binding to homogenates of rat cerebral cortex. Manallack DT, et al. **Clin Exp Pharmacol Physiol** 1989 Jan;16(1):49–58

D-aminophosphonovaleric acid-sensitive spontaneous giant EPSPs in immature rat hippocampal neurones. Corradetti R, et al. **Eur J Pharmacol** 1988 Sep 13;154(2):221–2

Intra-ventricular infusion of the NMDA antagonist AP5 impairs performance on a non-spatial operant DRL task in the rat. Tonkiss J, et al. **Exp Brain Res** 1988;73(1):181–8

The N-methyl-D-aspartate antagonists aminophosphonovaleric acid and MK-801 reduce anoxic damage to dentate granule and CA1 pyramidal cells in the rat hippocampal slice. Kass IS, et al. **Exp Neurol** 1989 Feb; 103(2):116–22

Kynurenic acid and AP5 distinguish between NMDA receptor agonists. Williams TL, et al. **Exp Neurol** 1988 Dec; 102(3):366–7

2-Hydroxyethylation of haemoglobin in man. Passingham BJ, et al. **IARC Sci Publ** 1988;(89):279–85

Hemoglobin adducts in animals exposed to gasoline and diesel exhausts. 1. Alkenes. Törnqvist M, et al. **J Appl Toxicol** 1988 Jun;8(3):159–70

Effects of DL-2-amino-5-phosphonovalerate on metabolism of catecholamines in synaptosomes from rat brain. Yee DK, et al. **J Neurochem** 1989 Jan;52(1):54–60

Sites of antagonist action on N-methyl-D-aspartic acid receptors studied using fluctuation analysis and a rapid perfusion technique. Mayer ML, et al. **J Neurophysiol** 1988 Aug;60(2):645–63

Glycine potentiates strychnine-induced convulsions: role of NMDA receptors. Larson AA, et al. **J Neurosci** 1988 Oct; 8(10):3822–6

2-amino-5-phosphonovaleric acid blocks induction of an epileptiform discharge following a brief hypoxic episode in the hippocampal slices prepared from dietary Mg-deficient mouse. Nakanishi H, et al. **Jpn J Pharmacol** 1989 May;50(1):31–6

Behavioural and electroencephalographic effects of excitatory amino acid antagonists and sigma

opiate/phencyclidine-like compounds in rats. Sagratella S, et al. **Neuropharmacology** 1989 Jan;28(1):57–61

Kynurenate and 2-amino-5-phosphonovalerate interact with multiple binding sites of the N-methyl-D-aspartate-sensitive glutamate receptor domain. Danysz W, et al. **Neurosci Lett** 1989 Jan 30; 96(3):340–4

Excitatory transmission in the dorsal horn is in part mediated through APV-sensitive NMDA receptors. Jeftinija S. **Neurosci Lett** 1989 Jan 16;96(2):191–6

N-methyl-D-aspartate receptor activation is required for the induction of both early and late phases of long-term potentiation in rat hippocampal slices. Reymann KG, et al. **Neurosci Lett** 1989 Jan 2;96(1):96–101

Linear relation between the magnitude of long-term potentiation in the dentate gyrus and associative learning in the rat. A demonstration using commissural inhibition and local infusion of an N-methyl-D-aspartate receptor antagonist. Laroche S, et al. **Neuroscience** 1989; 28(2):375–86

Subchronic administration of MK-801 in the rat decreases cortical binding of [3H]D-AP5, suggesting down-regulation of the cortical N-methyl-D-aspartate receptors. Manallack DT, et al. **Neuroscience** 1989; 30(1):87–94

Stimulation of ingestive behaviors following injections of excitatory amino acid antagonists into the median raphe nucleus. Wirtshafter D, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):529–33

N-methyl-D-aspartate receptor-mediated component of synaptic responses to single-pulse stimulation in rat hippocampal slices. Muller D, et al. **Synapse** 1988; 2(6):666–8

[Synthesis of the marine cyclopeptide thiazole amino acid component (D-Val)Thz] Long KH, et al. **Yao Hsueh Hsueh Pao** 1988 Apr;23(4):304–7 (Eng. Abstr.) (Chi)

ANALYSIS

Blood clotting factor IX Kashihara: amino acid substitution of valine-182 by phenylalanine. Sakai T, et al. **J Biochem (Tokyo)** 1989 May;105(5):756–9

DEFICIENCY

Sparrows discriminate between diets differing in valine or lysine concentrations. Murphy ME, et al. **Physiol Behav** 1989 Feb;45(2):423–30

Anti-cancer therapy with valine-depleted amino acid imbalance solution. Nishihira T, et al. **Tohoku J Exp Med** 1988 Nov;156(3):259–70

DIAGNOSTIC USE

[2-amino-2-methyl-butanoic acid (2-AMB)—a potential tumor-seeking agent] Shiba K, et al. **Kaku Igaku** 1988 Jun; 25(6):505–11 (Eng. Abstr.) (Jpn)

GENETICS

Mutation of glycine 49 to valine in the alpha subunit of GS results in the constitutive elevation of cyclic AMP synthesis. Woon CW, et al. **Biochemistry** 1989 May 30; 28(11):4547–51

Physical identification of an internal promoter, ilvAp, in the distal portion of the ilvGMEDA operon. Lopes JM, et al. **Gene** 1989;76(2):255–69

Point mutation of alanine (31) to valine prohibits the folding of reduced lysozyme by sulfhydryl-disulfide interchange. Imoto T, et al. **Protein Eng** 1987 Aug-Sep;1(4):333–8

[Valine replacement in hemoglobin in sickle cell anemia and in p21 N-RAS protein] Lalaiants IE, et al. **Med Parazitol (Mosk)** 1988 Nov-Dec;(6):13–8 (43 ref.) (Eng. Abstr.) (Rus)

METABOLISM

Regulation of valine and alpha-ketoisocaproate metabolism in rat kidney mitochondria. Miller RH, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E475–81

Substitution of valine for glycine-558 in the congenital dysthrombin thrombin Quick II alters primary substrate specificity. Henriksen RA, et al. **Biochemistry** 1989 Mar 7;28(5):2078–82

Quantitative measurements of regional glucose utilization and rate of valine incorporation into proteins by double-tracer autoradiography in the rat brain tumor model. Kirikae M, et al. **J Cereb Blood Flow Metab** 1989 Feb;9(1):87–95

PHARMACOKINETICS

Enkephalin regulation of L-valine transport in rabbit ileum. Meyer G, et al. **Arch Int Physiol Biochim** 1989 Feb; 97(1):65–9

PHARMACOLOGY

Effect of valine and the herbicide sulfometuron methyl on acetolactate synthase activity in nuclear and plasmid-borne sulphometuron methyl resistant Saccharomyces cerevisiae strains. Maiti SN, et al. **Can J Microbiol** 1988 May; 34(5):680–5

VALINOMYCIN

NMR study of the interactions of polymyxin B, gramicidin S, and valinomycin with dimyristoyllecithin bilayers. Zidovetzki R, et al. **Biochemistry** 1988 Jul 26; 27(15):5686–92

ADMINISTRATION & DOSAGE

Liposome mediated dissipation of valinomycin-imposed potassium potential across erythrocytes membrane. Matsudaira R, et al. **Tokai J Exp Clin Med** 1987 Nov; 12(4):253–61

METABOLISM

Valinomycin binds stoichiometrically to cytochrome c oxidase and changes its structure and function. Steverding D, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1132–9

PHARMACOLOGY

Effects of valinomycin on calcium mobilization in vascular smooth muscle cells induced by angiotensin II. Koh E, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):491–7

Active transport of nucleosides and nucleoside drugs. Jarvis SM, et al. **Biochem Soc Trans** 1989 Jun;17(3):448–50

In vitro effect of liposome-incorporated valinomycin on growth and macromolecular synthesis of normal and ras-transformed 3T3 cells. Daoud SS, et al. **Cancer Chemother Pharmacol** 1989;23(3):151–5

Modulation of doxorubicin resistance by valinomycin (NSC 122023) and liposomal valinomycin in Chinese hamster ovary cells. Daoud SS, et al. **Cancer Res** 1989 May 15; 49(10):2661–7

Valinomycin-induced chloride permeability in isolated rat liver mitochondria. Schnell FC, et al. **Int J Biochem** 1988; 20(12):1361–8

Protonophore anion permeability of the human red cell membrane determined in the presence of valinomycin. Bennekou P. **J Membr Biol** 1988 Jun;102(3):225–34

[Drug sensitivity and cellular potassium release of cancer cells] Iwagaki H, et al. **Gan To Kagaku Ryoho** 1988 Oct; 15(10):2889–93 (Eng. Abstr.) (Jpn)

[The effect of valinomycin and nigericin on the efficacy of bacteriophage infection of staphylococcal cells] Vinnikov AI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb; (2):17–20 (Eng. Abstr.) (Rus)

VALPROATE

Common hierarchies of susceptibility to the induction of neural tube defects in mouse embryos by valproic acid and its 4-propyl-4-pentenoic acid metabolite. Finnell RH, et al. **Teratology** 1988 Oct;38(4):313–20

ADMINISTRATION & DOSAGE

Comparison of monotherapy with valproate and other antiepileptic drugs in the treatment of seizure disorders. Chadwick D. **Am J Med** 1988 Jan 25;84(1A):3–6 (25 ref.)

Crossover from polytherapy to monotherapy in primary generalized epilepsy. Mattson RH, et al. **Am J Med** 1988 Jan 25;84(1A):23–8

Valproate monotherapy in children. Murphy JV. **Am J Med** 1988 Jan 25;84(1A):17–22

Valproate monotherapy in partial seizures. Penry JK, et al. **Am J Med** 1988 Jan 25;84(1A):14–6

Review of valproate monotherapy in the treatment of generalized tonic-clonic seizures. Wilder BJ, et al. **Am J Med** 1988 Jan 25;84(1A):7–13 (33 ref.)

Combination of valproate and ethosuximide: antiepileptic and neurotoxic interaction. Bourgeois BF. **J Pharmacol Exp Ther** 1988 Dec;247(3):1128–32

A trial of once-daily administration of KW6066N for patients with benign rolandic and primary generalized epilepsy. Kugoh T, et al. **Jpn J Psychiatry Neurol** 1988 Sep; 42(3):580–2

A case of anorexia nervosa associated with epileptic seizures showing favorable responses to sodium valproate and clonazepam. Tachibana N, et al. **Jpn J Psychiatry Neurol** 1989 Mar;43(1):77–84

Expanded therapeutic range of valproate. Hurst DL. **Pediatr Neurol** 1987 Nov-Dec;3(6):342–4

[Advantages of a single daily dose of sodium valproate in the child] Giroud M, et al. **Arch Fr Pediatr** 1989 Apr; 46(4):255–6 (Eng. Abstr.) (Fre)

[Treatment of epilepsy. Superiority of a single daily dose of sodium valproate over fractionated doses (letter)] Giroud M, et al. **Presse Med** 1988 Sep 10;17(30):1544 (Fre)

[Prognosis of complicated febrile convulsions in therapy with primidone, cathine-phenobarbital and calcium valproinate] Rohmann E, et al. **Kinderarztl Prax** 1988 Oct;56(10):495–8 (Eng. Abstr.) (Ger)

[Detailed monitoring of valproic acid and phenobarbital in the treatment of epilepsy in children] Sobaniec W, et al. **Neurol Neurochir Pol** 1988 Sep-Oct;22(5):413–20 (Eng. Abstr.) (Pol)

ADVERSE EFFECTS

Side effects of valproate. Dreifuss FE, et al. **Am J Med** 1988 Jan 25;84(1A):34–41 (44 ref.)

Congenital abnormalities in two sibs exposed to valproic acid in utero. Chitayat D, et al. **Am J Med Genet** 1988 Oct; 31(2):369–73

The fetal valproate syndrome [letter] Wellesley D. **Am J Med Genet** 1988 Oct;31(2):475, 477–8

Late onset ornithine carbamoyl transferase deficiency in males [letter] Kennedy CR, et al. **Arch Dis Child** 1989 Apr; 64(4):638

Amniotic fluid cholinesterase of valproate-induced exencephaly in the mouse: an animal model for prenatal diagnosis of neural tube defects. Elmazar MM, et al. **Arch Toxicol** 1988;61(6):501–3

Valproate and spina bifida. Oakeshott P, et al. **BMJ** 1989 May 13;298(6683):1300–1

'Perming' effects associated with chronic valproate therapy. Gupta AK. **Br J Clin Pract** 1988 Feb;42(2):75–7

Protoporphyrinaemia and decreased activities of 5-aminolevulinic acid dehydrase and uroporphyrinogen I synthetase in erythrocytes of a Vitamin B6-deficient epileptic boy given valproic acid and carbamazepine. Haust HL, et al. **Clin Biochem** 1989 Jun;22(3):201–11

Carnitine deficiency associated with anticonvulsant therapy. Rodriguez-Segade S, et al. **Clin Chim Acta** 1989 May 15; 181(2):175–81

Valproic acid prenatal exposure. Association with lipomyelomeningocele. Carter BS, et al. **Clin Pediatr (Phila)** 1989 Feb;28(2):81–5 (17 ref.)

Exaggerated cholestasis and hepatic fibrosis following simultaneous administration of chlorpromazine and sodium valproate. Bach N, et al. **Dig Dis Sci** 1989 Aug;34(8):1303–7

Camptocormia, a new side effect of sodium valproate. Kiuru S, et al. **Epilepsy Res** 1987 Jul;1(4):254–7

A clinically significant interaction between carbamazepine and valproic acid [letter] Sovner R. **J Clin Psychopharmacol** 1988 Dec;8(6):448–9

Fetal valproate phenotype is recognisable by mid pregnancy [letter] Serville F, et al. **J Med Genet** 1989 May;26(5):348–9

Withdrawal symptoms from phenytoin, carbamazepine and sodium valproate. Duncan JS, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):924–8

The occurrence of intramitochondrial Ca2+ granules in valproate-induced liver injury. Kimura A, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):13–8

Valproate and spina bifida [letter] **Lancet** 1989 Mar 18; 1(8638):611–2

Valproate, spina bifida, and birth defect registries [editorial] [see comments] **Lancet** 1988 Dec 17;2(8625):1404–5. **Comment in:** Lancet 1989 Feb 4;1(8632):278–9

Acute psychosis with carbamazepine and sodium valproate [letter] McKee RJ, et al. **Lancet** 1989 Jan 21;1(8630):167

Valproate, spina bifida, and birth defect registries [letter] Staunton H. **Lancet** 1989 Feb 18;1(8634):381

Valproic acid hepatic fatalities. II. US experience since 1984. Dreifuss FE, et al. **Neurology** 1989 Feb;39(2 Pt 1):201–7

Valproate hepatotoxicity [letter] Blaw ME, et al. **Pediatr Neurol** 1985 Sep-Oct;1(5):320

Valproate hepatotoxicity: two new cases, a summary of others, and recommendations. Fenichel GM, et al. **Pediatr Neurol** 1985 Mar-Apr;1(2):109–13 (31 ref.)

Prolactin response to sodium valproate in schizophrenics with and without tardive dyskinesia. Monteleone P, et al. **Psychopharmacology (Berlin)** 1988;96(2):223–6

Valproate for epilepsy in renal transplant recipients receiving cyclosporine [letter] Fischman MA, et al. **Transplantation** 1989 Sep;48(3):542

[Transient Parkinson syndrome and tremor caused by the use of sodium valproate] van der Zwan A Jr. **Ned Tijdschr Geneeskd** 1989 Jun 17;133(24):1230–2 (Eng. Abstr.) (Dut)

[Valproic acid and gastroesophageal reflux in children (letter)] Chevallier B, et al. **Arch Fr Pediatr** 1989 May; 46(5):387 (Fre)

[Fetal disease caused by sodium valproate. Apropos of a case (letter)] Haddad J, et al. **Arch Fr Pediatr** 1989 Jan;46(1):71 (5 ref.) (Fre)

[Reye syndrome treated with valproic acid in association with varicella infection] Lorz U, et al. **Nervenarzt** 1989 May;60(5):291–3 (Ger)

[Reye-like syndrome following valproate therapy in an adult] Klein M, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Jun;40(6):353–7 (Eng. Abstr.) (Ger)

[Valproate dosage] Meyer FP, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Mar; 41(3):134–43 (36 ref.) (Eng. Abstr.) (Ger)

[The first case of a child born with fetal valproic acid syndrome in Hungary (letter)] Robinek F, et al. **Orv Hetil** 1989 Jan 29;130(5):267 (Hun)

[Acute hepatic steatosis. Description of a clinical case of sodium valproate-induced acute hepatic steatosis] Coraggio F, et al. **Clin Ter** 1988 Mar 31;124(6):451–63 (24 ref.) (Eng. Abstr.) (Ita)

ANALOGS & DERIVATIVES

Comparison of the biological activity of sodium valproate and L-lysine valproate on brain GABA levels by (3H) muscimol radioreceptor assay. Brunet C, et al. **Farmaco [Prat]** 1988 Sep;43(9):291–6

Transplacental transfer and biotransformation studies of valproic acid and its glucuronide(s) in the perfused human placenta. Fowler DW, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):318–23

[Comparison of anti-arrhythmic activities of valproic acid

derivatives in animals] Jia HJ, et al.
Chung Kuo Yao Li Hsueh Pao 1988 Jan;9(1):37-40 (Eng. Abstr.) (Chi)

ANALYSIS

Quantitative metabolic profiling of valproic acid in humans using automated gas chromatographic/mass spectrometric techniques. Rettenmeier AW, et al.
Biomed Environ Mass Spectrom 1989 Mar;18(3):192-9

Capillary gas chromatographic assay for valproic acid and its 2-desaturated metabolite in brain and plasma. Semmes RL, et al. **J Chromatogr** 1988 Nov 18;432:185-97

Automated analysis procedure for valproic acid in blood, serum and brain dialysate by high-performance liquid chromatography with bromomethylmethoxycoumarin as fluorescent label. Wolf JH, et al. **J Chromatogr** 1989 Feb 24;487(2):496-502

ANTAGONISTS & INHIBITORS

[Pharmacologic modulation of the anticonvulsant action of calcium-valproate in maximal electroshock in the mouse] Fischer W. **Pharmazie** 1989 May;44(5):356-7 (Ger)

BLOOD

Simple and rapid gas chromatographic determination of valproic acid in plasma. Başaran N, et al. **Analyst** 1988 Dec;113(12):1873-4

Plasma concentrations of unbound valproate in the management of epilepsy [letter] Beran RG.
Aust N Z J Med 1988 Aug;18(5):735

Solvent flush method for determination of valproic acid in plasma by gas chromatography. Kohda Y, et al.
Chem Pharm Bull (Tokyo) 1988 Dec;36(12):5012-5

Automated fluoroimmunoassay of theophylline and valproic acid by flow-injection analysis with use of HPLC instruments. Allain P, et al. **Clin Chem** 1989 Mar; 35(3):469-70

Predictability of unbound antiepileptic drug concentrations in children treated with valproic acid and phenytoin. Miles MV, et al. **Clin Pharm** 1988 Sep;7(9):688-93

Variability of phenytoin, carbamazepine and valproate concentrations in a clinic population. Leppik IE.
Epilepsy Res Suppl 1988;1:85-90

High-performance liquid chromatographic determination of valproic acid in plasma using a micelle-mediated pre-column derivatization. van der Horst FA, et al.
J Chromatogr 1988 Dec 2;456(1):191-9

Distribution of drugs over whole blood: I. The transport function of whole blood for valproate. Driessen O, et al. **Ther Drug Monit** 1989;11(4):384-9

Derivation and evaluation of an equation for prediction of free phenytoin concentration in patients co-medicated with valproic acid. Haidukewych D, et al. **Ther Drug Monit** 1989;11(2):134-9

[Serum concentration of valproic acid after rectal administration] Matsumura S, et al.
Neurol Med Chir (Tokyo) 1988 May;28(5):473-6 (Eng. Abstr.) (Jpn)

METABOLISM

The covalent binding to protein of valproic acid and its hepatotoxic metabolite, 2-n-propyl-4-pentenoic acid, in rats and in isolated rat hepatocytes. Porubek DJ, et al.
Drug Metab Dispos 1989 Mar-Apr;17(2):123-30

Valproate competes with palmitate for binding to serum albumin. Vorum H, et al. **Epilepsia** 1989 May-Jun; 30(3):370-3

Stereoselective synthesis of the diunsaturated metabolites of valproic acid. Lee RD, et al. **J Pharm Sci** 1989 Aug; 78(8):667-71

PHARMACOKINETICS

Enzyme cytochemistry for the risk assessment of drug administration during pregnancy with special reference to proteases. Gossrau R, et al.
Acta Histochem Suppl (Jena) 1988;36:361-76

Pharmacologic interactions between valproate and other drugs. Bourgeois BF. **Am J Med** 1988 Jan 25;84(1A):29-33

Pharmacokinetics of valproate in adults after a single loading dose [letter] Giroud M, et al. **Arch Neurol** 1989 Jan; 46(1):13-4

Absorption of valproic acid suppositories in human volunteers. Holmes GB, et al. **Arch Neurol** 1989 Aug; 46(8):906-9

The effect of carbamazepine on valproic acid disposition in adult volunteers. Panesar SK, et al.
Br J Clin Pharmacol 1989 Mar;27(3):323-8

Diurnal variation in pharmacokinetics of valproic acid with unequal dosing intervals. Johno I, et al.
Chem Pharm Bull (Tokyo) 1988 Jul;36(7):2551-6

Clinical pharmacokinetics of valproic acid—1988. Zaccara G, et al. **Clin Pharmacokinet** 1988 Dec;15(6):367-89 (151 ref.)

Pharmacokinetics of free and total sodium valproate in adolescents and young adults during maintenance therapy. Herngren L, et al. **J Neurol** 1988 Nov;235(8):491-5

Pharmacokinetics of a valpromide isomer, valnoctamide, in dogs. Haj-Yehia A, et al. **J Pharm Sci** 1988 Oct; 77(10):831-4

A pharmacokinetic model for percutaneous absorption of valproic acid and prediction of drug disposition. Ogiso T, et al. **J Pharmacobiodyn** 1988 Jun;11(6):444-52

Transplacental transfer and biotransformation studies of valproic acid and its glucuronide(s) in the perfused human placenta. Fowler DW, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):318-23

Valproic acid pharmacokinetics in children: III. Very high dosage requirements. Kriel RL, et al. **Pediatr Neurol** 1986 Jul-Aug;2(4):202-8

Valproic acid disposition and protein binding in pregnancy. Koerner M, et al. **Ther Drug Monit** 1989;11(3):228-30

PHARMACOLOGY

Experimental studies and controlled clinical testing of valproate and vigabatrin. Gram L. **Acta Neurol Scand** 1988 Oct;78(4):241-70 (196 ref.)

Changes in urea cycle-related metabolites in the mouse after combined administration of valproic acid and an amino acid load. Alonso E, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):267-73

Valpromide is a poor inhibitor of the cytosolic epoxide hydrolase. Pacifici GM, et al. **Arch Toxicol** 1989; 63(2):157-9

Inhibition of the formation of 4-hydroxyandrostenedione glucuronide by valproate. Parr IB, et al.
Biochem Pharmacol 1988 Dec 1;37(23):4581-3

Inhibition by sodium valproate of the arginine vasopressin and adrenocorticotropin responses to angiotensin II in normal men. Coiro V, et al. **Brain Res** 1989 Jul 3; 491(1):169-72

Sodium valproate decreases synaptic potentiation and epileptiform activity in hippocampus. Griffith WH, et al. **Brain Res** 1988 Nov 22;474(1):155-64

The anticonvulsant sodium valproate specifically induces the expression of a rat glial heat shock protein which is identified as the collagen type IV receptor. Martin ML, et al. **Brain Res** 1988 Aug 30;459(1):131-7

Metabolic effects of valproate on dog renal cortical tubules. Gougoux A, et al. **Can J Physiol Pharmacol** 1989 Feb; 67(2):88-97

Effect of sodium valproate (VPA) on cerebral amino acids: mechanism of gamma-aminobutyric acid (GABA) elevation and possible causal relation of VPA-induced encephalopathy and glutamine level. Miyazaki C, et al.
Chem Pharm Bull (Tokyo) 1988 Sep;36(9):3589-94

Inhibition of human liver microsomal epoxide hydrolase by valproate and valpromide: in vitro/in vivo correlation [published erratum appears in Clin Pharmacol Ther 1989 Sep;46(3):343] Kerr BM, et al. **Clin Pharmacol Ther** 1989 Jul;46(1):82-93

Ammoniagenesis and valproic acid in the rat in vivo: role of the kidney. Rengel M, et al. **Contrib Nephrol** 1988; 63:132-5

Effects of valproate, vigabatrin and aminooxyacetic acid on release of endogenous and exogenous GABA from cultured neurons. Gram L, et al. **Epilepsy Res** 1988 Mar-Apr; 2(2):87-95

Failure of the antiepileptic drug valproic acid to modify synaptic and non-synaptic responses of CA1 hippocampal pyramidal cells maintained 'in vitro'. Perreault P, et al. **Epilepsy Res** 1989 May-Jun;3(3):227-31

Effect of phenytoin, carbamazepine, and valproic acid on caffeine metabolism. Wietholtz H, et al.
Eur J Clin Pharmacol 1989;36(4):401-6

Sodium valproate reduces immobility in the behavioral 'despair' test in rats. Fernández Teruel A, et al.
Eur J Pharmacol 1988 Jul 26;152(1-2):1-7

Sodium valproate decreases exploratory behaviour in mice: development of tolerance and cross-tolerance with chlordiazepoxide. File SE, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):293-9

Succinate transport inhibition by valproate in rat renal mitochondria. Rumbach L, et al. **Eur J Pharmacol** 1989 May 30;164(3):577-81

Dipropylacetate-induced shaking behaviour in the rat: a role of spinal alpha 2-adrenoceptors. Van der Laan JW, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):197-205

Comparison of the biological activity of sodium valproate and L-lysine valproate on brain GABA levels by (3H) muscimol radioreceptor assay. Brunet C, et al.
Farmaco [Prat] 1988 Sep;43(9):291-6

Pharmacological activation of the GABAergic system does not affect GH and PRL release in acromegaly. Orio F, et al. **Horm Metab Res** 1988 Nov;20(11):701-4

The effects of sodium valproate on plasma somatostatin and insulin in humans. Kusunoki M, et al.
J Clin Endocrinol Metab 1988 Nov;67(5):1060-3

Valproic acid, unlike other anticonvulsants, has no effect on methadone metabolism: two cases. Saxon AJ, et al.
J Clin Psychiatry 1989 Jun;50(6):228-9

Metergoline, naloxone, and sodium valproate did not modify arginine vasopressin response to insulin-induced hypoglycemia in man. Chiodera P, et al.
J Endocrinol Invest 1988 May;11(5):365-9

The effect of valproic acid on 65Zn distribution in the pregnant rat. Keen CL, et al. **J Nutr** 1989 Apr; 119(4):607-11

Valproic acid in amygdala-kindled rats: alterations in anticonvulsant efficacy, adverse effects and drug and metabolite levels in various brain regions during chronic treatment. Löscher W, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1069-78

Acute effects of sodium valproate on epileptic photosensitivity in the lateral geniculate-kindled cat. Wada Y, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):351-6

Effect of valproate on renal metabolism in the intact dog. Rengel-Aranda M, et al. **Kidney Int** 1988 Nov;34(5):645-54

Valproate doubles the anoxic survival time of normal developing mice: possible relevance to valproate-induced decreases in cerebral levels of glutamate and aspartate, and increases in taurine. Thurston JH, et al. **Life Sci** 1989; 45(1):59-62

Valproate enhances GABA-A mediated inhibition of locus coeruleus neurones in vitro. Olpe HR, et al.
Naunyn Schmiedebergs Arch Pharmacol 1988 Dec; 338(6):655-7

Suppression of preoptic GABA release caused by push-pull-perfusion with sodium valproate. Wolf R, et al.
Naunyn Schmiedebergs Arch Pharmacol 1988 Dec; 338(6):658-63

Sodium valproate and chlordiazepoxide in the elevated plus-maze test of anxiety in the rat. File SE, et al.
Neuropsychobiology 1988;20(2):82-6

Effects of valpromide and viloxazine on the elimination of carbamazepine-10,11-epoxide, an active metabolite of carbamazepine. Perucca E, et al. **Pharmacol Res** 1989 Jan-Feb;21(1):111-2

Evidence that a GABAergic mechanism influences the development of obesity in obese Zucker rats. Squadrito F, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1087-8

Antimetrazol action and plasma levels of valproate in developing rats. Mareš P, et al. **Physiol Bohemoslov** 1989; 38(2):97-107

Effect of valproate on lactate and glutamine metabolism by rat renal cortical tubules. Doval M, et al.
Proc Soc Exp Biol Med 1989 Apr;190(4):357-64

Valpromide increases the plasma concentrations of amitriptyline and its metabolite nortriptyline in depressive patients. Vandel S, et al. **Ther Drug Monit** 1988;10(4):386-9

Is the anticonvulsant mechanism of valproate linked to its interaction with the cerebral gamma-hydroxybutyrate system? Vayer P, et al. **Trends Pharmacol Sci** 1988 Apr; 9(4):127-9 (28 ref.)

[Effect of sodium valproate and nimodipine on learning in rats during cold exposure] Surcheva S, et al.
Eksp Med Morfol 1988;27(2):24-7 (Eng. Abstr.) (Bul)

POISONING

Central nervous system manifestations of a valproic acid overdose responsive to naloxone. Alberto G, et al.
Ann Emerg Med 1989 Aug;18(8):889-91

[Cerebral edema with hyperammonemia in valpromide poisoning. Manifestation in an adult, of a partial deficit in type I carbamylphosphate synthetase] Bourrier P, et al.
Presse Med 1988 Nov 5;17(39):2063-6 (Eng. Abstr.) (Fre)

THERAPEUTIC USE

Influence of clonazepam and valproate on kainate-induced model of psychomotor seizures. Velíšek L, et al.
Act Nerv Super (Praha) 1989 Apr;31(1):66-7

Size reduction of an ACTH-secreting pituitary macroadenoma in Nelson's syndrome by sodium valproate: effect of withdrawal and re-institution of treatment. Loli P, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):435-42

VPA syrup in childhood epilepsy. Results of an international clinical multicentre trial. Van Sweden B.
Acta Neurol Belg 1988 May-Jul;88(3):152-62

Valproate: a new drug in migraine prophylaxis. Sørensen KV.
Acta Neurol Scand 1988 Oct;78(4):346-8

Prevention of alcohol withdrawal seizures with carbamazepine and valproic acid. Hillbom M, et al.
Alcohol 1989 May-Jun;6(3):223-6

Valproate monotherapy in the treatment of epilepsy.
Am J Med 1988 Jan 25;84(1A):1-41

Randomised controlled trials of phenobarbitone and valproate in febrile convulsions. Newton RW.
Arch Dis Child 1988 Oct;63(10):1189-91

Sodium valproate [letter] Beran RG. **Aust Fam Physician** 1988 Oct;17(10):840-2

GABAergic agents and panic disorder [letter] Primeau F, et al. **Biol Psychiatry** 1988 Dec;24(8):942-3

Unbound phenytoin plasma concentrations in patients comedicated with sodium valproate—the predictive value of plasma albumin concentration. Johnson GJ, et al.
Br J Clin Pharmacol 1989 Jun;27(6):843-9

Long-term treatment of Nelson's syndrome with sodium valproate. Kelly W, et al. **Clin Endocrinol (Oxf)** 1988 Feb; 28(2):195-204

The combined use of sodium valproate and metyrapone in the treatment of Cushing's syndrome. Nussey SS, et al.
Clin Endocrinol (Oxf) 1988 Apr;28(4):373-80

Anticonvulsant potency and neurotoxicity of valproate alone and in combination with carbamazepine or phenobarbital. Bourgeois BF. **Clin Neuropharmacol** 1988 Aug;11(4):348-59

The effect of sodium valproate on plasma ACTH and cortisol concentrations in Cushing's disease and Nelson's syndrome. Kasperlik-Załuska A, et al. **Endokrynol Pol** 1988; 39(5):245-52

Antiepileptic drugs and plasma and platelet taurine in epilepsy. Goodman HO, et al. **Epilepsia** 1989 Mar-Apr; 30(2):201-7

Protection by GABA agonists, gamma-hydroxybutyric acid,

and valproic acid against seizures evoked in epileptic chicks by hyperthermia. Pedder SC, et al. **Epilepsia** 1988 Nov–Dec;29(6):738–42

Juvenile myoclonic epilepsy: long–term response to therapy. Penry JK, et al. **Epilepsia** 1989;30 Suppl 4:S19–23; discussion S24–7

Antiepileptic drugs reduce serum uric acid. Krause KH, et al. **Epilepsy Res** 1987 Sep;1(5):306–7

A comparison of the acute effect of single doses of vigabatrin and sodium valproate on photosensitivity in epileptic patients. Rimmer EM, et al. **Epilepsy Res** 1987 Nov–Dec; 1(6):339–46

Sister chromatid exchanges in adult epilepsy patients on valproate monotherapy. Schaumann BA, et al. **Epilepsy Res** 1989 Mar–Apr;3(2):182–4

Hyperamino–acidaemia and hyperammonaemia in epileptic children treated with valproic acid. Iinuma K, et al. **Eur J Pediatr** 1988 Dec;148(3):267–9

Abnormal 13C–fatty acid breath tests in patients treated with valproic acid. Arimoto K, et al. **J Child Neurol** 1988 Oct; 3(4):250–7

Emerging perspectives on valproate in affective disorders. **J Clin Psychiatry** 1989 Mar;50 Suppl:1–48

U.S. experience with valproate in manic depressive illness: a multicenter trial. Brown R. **J Clin Psychiatry** 1989 Mar; 50 Suppl:13–6 (16 ref.)

Phenomenology of rapid cycling manic depression and its treatment with valproate. Calabrese JR, et al. **J Clin Psychiatry** 1989 Mar;50 Suppl:30–4 (48 ref.)

Valproate use in acute mania and bipolar disorder: an international perspective. Fawcett J. **J Clin Psychiatry** 1989 Mar;50 Suppl:10–2 (25 ref.)

Long–term use of valproate in primary psychiatric disorders. Hayes SG. **J Clin Psychiatry** 1989 Mar;50 Suppl:35–9

Valproate in psychiatric disorders: literature review and clinical guidelines. McElroy SL, et al. **J Clin Psychiatry** 1989 Mar;50 Suppl:23–9 (60 ref.)

The scope and use of valproate in epilepsy. Penry JK, et al. **J Clin Psychiatry** 1989 Mar;50 Suppl:17–22 (45 ref.)

Emerging perspectives on valproate in affective disorders. Post RM. **J Clin Psychiatry** 1989 Mar;50 Suppl:3–9 (39 ref.)

Valproate in anxiety and withdrawal syndromes. Roy–Byrne PP, et al. **J Clin Psychiatry** 1989 Mar;50 Suppl:44–8 (42 ref.)

The use of valproate in the treatment of mentally retarded persons with typical and atypical bipolar disorders. Sovner R. **J Clin Psychiatry** 1989 Mar;50 Suppl:40–3

Valproate in the treatment of rapid–cycling bipolar disorder. McElroy SL, et al. **J Clin Psychopharmacol** 1988 Aug; 8(4):275–9

Neuroleptic–valproic acid combination in treatment of psychotic symptoms: a three–case report. Wassef A, et al. **J Clin Psychopharmacol** 1989 Feb;9(1):45–8

The effect of sodium valproate in Cushing's disease, Nelson's syndrome and Addison's disease. Reincke M, et al. **Klin Wochenschr** 1988 Aug 1;66(15):686–9

Sodium valproate. **Lancet** 1988 Nov 26;2(8622):1229–31 (48 ref.)

Effect of magnesium valproate on amygdala–kindled seizures in the rat: comparison with sodium valproate. Pallini R, et al. **Neurol Res** 1989 Mar;11(1):17–23

Treatment of infantile spasms with valproic acid. Soetomenggolo TS. **Paediatr Indones** 1988 Jan–Feb; 28(1–2):20–6

Valproic acid in the treatment of Sydenham chorea. Alvarez LA, et al. **Pediatr Neurol** 1985 Sep–Oct;1(5):317–9

Startle disease or hyperekplexia: adolescent onset and response to valproate. Dooley JM, et al. **Pediatr Neurol** 1989 Mar–Apr;5(2):126–7

Short term effects of valproate on infantile spasms. Dyken PR, et al. **Pediatr Neurol** 1985 Jan–Feb;1(1):34–7

The use of valproic acid [editorial] Lockman LA. **Pediatr Neurol** 1985 Mar–Apr;1(2):124

Comparison of antiepileptic action of valproate and ethosuximide in adult and immature rats. Mareš P, et al. **Pol J Pharmacol Pharm** 1987 Sep–Oct;39(5):505–12

Sodium valproate interactions with the HPNS: EEG and behavioral observations. Pearce PC, et al. **Undersea Biomed Res** 1989 Mar;16(2):99–113

[Comparative study of sodium valproate and ketoprofen in the treatment of postoperative pain] Martin C, et al. **Ann Fr Anesth Reanim** 1988;7(5):387–92 (Eng. Abstr.) **(Fre)**

[A valproic acid–diazepam combination as an alternative to neuroleptic treatment] Schnetzler JP, et al. **Ann Med Psychol (Paris)** 1988 Apr;146(4):325–39 (40 ref.) (Eng. Abstr.) **(Fre)**

[Comparative study of preparations of sodium and magnesium valproate (VPA) in treatment of patients with epileptic seizures] Onofrj M, et al. **Riv Neurol** 1988 Nov–Dec;58(6):223–30 (Eng. Abstr.) **(Ita)**

[Clinical treatment of resistant epilepsy] Damasceno BP, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):351–8 (Eng. Abstr.) **(Por)**

[Elimination of disorders in the electrical stability of the heart during postinfarct cardiosclerosis by using a factor that induces GABA accumulation in the brain] Abdikaliev NA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):152–4 (Eng. Abstr.) **(Rus)**

[Direct cardiotropic anti–arrhythmic effect of sodium valproate] Meerson FZ, et al. **Kardiologiia** 1988 Jun; 28(6):100–2 **(Rus)**

TOXICITY

Lesions and repair of cells of maternal mice after valproic acid (VPA) treatment on day 8 of pregnancy: an enzyme histochemical analysis. Gosrau R, et al. **Acta Histochem (Jena)** 1989;86(1):23–32

Evaluation of valproic acid (VPA) developmental toxicity and pharmacokinetics in Sprague–Dawley rats. Binkerd PE, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):485–93

Effects of sodium valproate and oxygen on the CD–1 mouse fetus. Paulson RB, et al. **J Craniofac Genet Dev Biol** 1988; 8(1):35–45

Valproic acid therapy and mitochondrial alterations. Partin JS. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):5–7

Valproic acid induction of coma in rats: synergism with NH4+ and pentobarbital. Zieve L, et al. **Metab Brain Dis** 1989 Jun;4(2):105–11

Evaluation of the cytotoxicity of sodium valproate on primary cultured rat hepatocytes. Takeuchi T, et al. **Neuropediatrics** 1988 Aug;19(3):158–61

Effects of sodium valproate on development and social behaviour in the Mongolian gerbil. Chapman JB, et al. **Neurotoxicol Teratol** 1989 Mar–Apr;11(2):193–8

Differential neurochemical effects of chronic exposure of cerebral cortical cell culture to valproic acid, diazepam, or ethosuximide. Sher PK, et al. **Pediatr Neurol** 1985 Jul–Aug;1(4):232–7

Valproic acid developmental toxicity and pharmacokinetics in the rhesus monkey: an interspecies comparison. Hendrickx AG, et al. **Teratology** 1988 Oct;38(4):329–45

Strain differences in the teratogenicity induced by sodium valproate in cultured mouse embryos. Naruse I, et al. **Teratology** 1988 Jul;38(1):87–96

URINE

Urinary excretion of valproate and some metabolites in chronically treated patients. Dickinson RG, et al. **Ther Drug Monit** 1989;11(2):127–33

VALSALVA'S MANEUVER

Tubal function and surgery in chronic otitis media. A study on the predictive value of testing tubal function, Valsalva's manoeuvre and volume of ear spaces. Reimer A, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:127–30

Diabetic autonomic neuropathy—Part II. Coefficient of variation of RR–variation and Valsalva maneuver tests. Schumer M, et al. **Am J Med** 1988 Nov 28;85(5A):144–6

Effect of different body postures on the pressures generated during an L–1 maneuver. Williams CA, et al. **Aviat Space Environ Med** 1988 Oct;59(10):920–7

Do hemodynamic responses to the valsalva maneuver reflect myocardial dysfunction? Bernardi L, et al. **Chest** 1989 May; 95(5):986–91

Heart rate response to breath–hold, valsalva and Mueller maneuvers in obstructive sleep apnea. Hanly PJ, et al. **Chest** 1989 Apr;95(4):735–9

Effects of transient increase in intrathoracic pressure on hemodynamic determinants of myocardial oxygen supply and demand. Pepine CJ, et al. **Clin Cardiol** 1988 Dec; 11(12):831–7

Physiological and clinical correlates of cardiorespiratory reflexes in diabetes mellitus. Kennedy WR, et al. **Diabetes Care** 1989 Jun;12(6):399–408

Ventricular tachycardia induced by Valsalva's manoeuvre in a patient with hypertrophic cardiomyopathy. Bhattacharya S, et al. **Int J Cardiol** 1988 Nov;21(2):187–9

Brady– and tachycardia in light of the Valsalva and the Mueller maneuver (apnea). Paulev PE, et al. **Jpn J Physiol** 1988;38(4):507–17

Testing parasympathetic function at the bedside [editorial] de Leeuw PW. **Neth J Med** 1988 Dec;33(5–6):257–9

Preexisting physical activity level and cardiovascular responses across the Valsalva maneuver. Folta A, et al. **Nurs Res** 1989 May–Jun;38(3):139–43

Vitreous hemorrhage and the Valsalva maneuver in proliferative diabetic retinopathy. Kassoff A, et al. **Retina** 1988;8(3):174–6

Emergency cardiac maneuvers [letter] Cheng TO. **South Med J** 1989 Aug;82(8):1066

[Valsalva's maneuver in vasodepressive syncope] Lagi A, et al. **Recenti Prog Med** 1988 Dec;79(12):506–8 (Eng. Abstr.) **(Ita)**

[Latent WPW syndrome diagnosed in Valsalva's method] Chang ZH. **Kokyu To Junkan** 1988 Aug;36(8):873–4 **(Jpn)**

[The effect of apressin on the results of the Valsalva test in ischemic heart disease] Sivkov SI, et al. **Sov Med** 1988; (9):9–12 (Eng. Abstr.) **(Rus)**

[Changes in coronary sinus blood flow in patients with ischemic disease during Valsalva's maneuver] Augé JM, et al. **Rev Esp Cardiol** 1988 Aug–Sep;41(7):421–5 (Eng. Abstr.) **(Spa)**

[Abnormal response to the Valsalva's maneuver in non–dialysed patients with uremia] Idiáquez J, et al. **Rev Med Chil** 1988 Jul;116(7):659–61 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Pulsatile tinnitus during a Valsalva maneuver in a patient with Wolff–Parkinson–White syndrome [letter] Rodenberg H, et al. **Am J Emerg Med** 1988 Nov;6(6):679–81

VALYL T RNA SYNTHETASE see under **AMINO ACYL T RNA SYNTHETASES**

VAN BOGAERT'S LEUKOENCEPHALITIS see **SUBACUTE SCLEROSING PANENCEPHALITIS**

VANADATE see **VANADATES**

VANADATES

Comparison of the electron spin echo envelope modulation (ESEEM) for human lactoferrin and transferrin complexes of copper(II) and vanadyl ion. Eaton SS, et al. **J Biol Chem** 1989 Mar 25;264(9):4776–81

Interaction of vanadium(V) oxoanions with ovalbumin and transfusion gelatin. Ashraf SM, et al. **J Inorg Biochem** 1989 Jan;35(1):1–8

Interaction of vanadate with monosaccharides and nucleosides: a multinuclear NMR study. Geraldes CF, et al. **J Inorg Biochem** 1989 Feb;35(2):79–93

Lithium/silver vanadium oxide batteries for implantable defibrillators. Takeuchi ES, et al. **PACE** 1988 Nov;11(11 Pt 2):2035–9

ANTAGONISTS & INHIBITORS

Antagonistic action of reductants against vanadate–induced EP decrease. Nakano T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:124–31

METABOLISM

Interaction of vanadyl ribonucleoside complex with the androgen receptor. Ohara–Nemoto Y, et al. **Biochem Int** 1988 Aug;17(2):197–202

Interaction of calcium and vanadate with fluorescein isothiocyanate labeled Ca2+–ATPase from sarcoplasmic reticulum: kinetics and equilibria. Markus S, et al. **Biochemistry** 1989 Jan 24;28(2):793–9

Vanadate–stimulated NADH oxidation requires polymeric vanadate, phosphate and superoxide. Patole MS, et al. **Free Radic Res Commun** 1988;4(4):201–7

Probing the mechanism of ATP hydrolysis on F–actin using vanadate and the structural analogs of phosphate BeF–3 and AlF–4. Combeau C, et al. **J Biol Chem** 1988 Nov 25; 263(33):17429–36

PHARMACOLOGY

Effects of various vanadium compounds on cochlear potentials. Nakano T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:132–6

Effects of vanadate on EP and its distribution in guinea pig cochlea. Nakano T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:117–23

Orthograde and retrograde axonal transport in the regenerating frog sciatic nerve show different sensitivities to vanadate. Edström A, et al. **Acta Physiol Scand** 1988 Nov;134(3):437–41

Some further characteristics of histamine secretion from rat mast cells stimulated with sodium orthovanadate. al–Laith M, et al. **Agents Actions** 1989 Apr;27(1–2):65–7

Suppression of the hepatic glucose–6–phosphatase system in diabetic rats by vanadate. Schulz LO. **Ann Nutr Metab** 1988;32(5–6):289–96

The effects of vanadate on the yeast Saccharomyces cerevisiae. Henderson G, et al. **Antonie Van Leeuwenhoek** 1989;55(2):99–107

Oxidation of NADH by vanadium compounds in the presence of thiols. Keller RJ, et al. **Arch Biochem Biophys** 1989 May 15;271(1):40–8

Effects of vanadate on the oxidation of NADH by xanthine oxidase. Liochev S, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):188–93

Vanadate–dependent NAD(P)H oxidation by microsomal enzymes. Reif DW, et al. **Arch Biochem Biophys** 1989 Apr; 270(1):137–43

Stimulatory release of lipoprotein lipase activity from rat fat pads by vanadate. Ueki H, et al. **Arch Biochem Biophys** 1989 Jul;272(1):18–24

Vanadate–mediated oxidation of NADH: description of an in vitro system requiring ascorbate and phosphate. Yoshino S, et al. **Arch Biochem Biophys** 1989 Jul;272(1):76–80

Vanadate stimulation of pyridine nucleotide oxidation in mammalian liver microsomal membranes. Coulombe RA Jr, et al. **Basic Life Sci** 1988;49:777–80

Evidence for a regulatory action of vanadate on protein phosphorylation in brain microvessels. Catalán RE, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):771–9

ATP–dependent H+ transport by the turtle bladder: NBD–Cl preferentially inhibits the vanadate–insensitive component in isolated membranes. Youmans SJ, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):312–9

Vanadate activation of bromoperoxidase from Corallina officinalis. Yu H, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):87–92

Vanadate raises fructose 2,6–bisphosphate concentrations and activates glycolysis in rat hepatocytes. Gómez–Foix AM, et al. **Biochem J** 1988 Oct 15;255(2):507–12

Vanadate inhibits degradation of short–lived, but not of long–lived, proteins in L–132 human cells. Vargas JL, et

al. Biochem J 1989 Feb 15;258(1):33–40
Characterization of the ethenoadenosine diphosphate binding site of myosin subfragment 1. Energetics of the equilibrium between two states of nucleotide.S1 and vanadate-induced global conformation changes detected by energy transfer. Aguirre R, et al. Biochemistry 1989 Jan 24;28(2):799–807
The effect of vanadate on glucose transport and metabolism in rat small intestine. Kellett GL, et al. Biochim Biophys Acta 1989 Mar 13;979(3):311–5
Inhibition of the vacuolar ATPase of Acer pseudoplatanus cells by vanadate. Montrichard F, et al. Biochimie 1989 Jul;71(7):813–7
Effects of Ca2+ and V5+ on glucose-6-phosphatase activity in rat liver microsomes: the Ca2+ effect is reversed by regucalcin. Yamaguchi M, et al. Chem Pharm Bull (Tokyo) 1989 Feb;37(2):388–90
Control of glycogen synthase and phosphorylase in hepatocytes from diabetic rats. Effects of glucagon, vasopressin, and vanadate. Rodriguez-Gil JE, et al. Diabetes 1989 Jun;38(6):793–8
Effect of vanadate administration on blood glucose and insulin levels as well as on the exocrine pancreatic function in streptozotocin-diabetic rats. Bendayan M, et al. Diabetologia 1989 Aug;32(8):561–7
Vanadate stimulates bone cell proliferation and bone collagen synthesis in vitro. Lau KH, et al. Endocrinology 1988 Dec; 123(6):2858–67
The insulin-like effect of vanadate on lipolysis in rat adipocytes is not accompanied by an insulin-like effect on tyrosine phosphorylation. Mooney RA, et al. Endocrinology 1989 Jan;124(1):422–9
The insulin-mimetic effect of vanadate is not correlated with insulin receptor tyrosine kinase activity nor phosphorylation in mouse diaphragm in vivo. Strout HV, et al. Endocrinology 1989 Apr;124(4):1918–24
Vanadate-mediated photocleavage of rabbit skeletal myosin. Mocz G. Eur J Biochem 1989 Feb 1;179(2):373–8
The reactivation of apodopamine beta-monooxygenase by vanadyl ions. Markosian KA, et al. FEBS Lett 1988 Oct 10;238(2):401–4
Vanadate-stimulated oxidation of NAD(P)H. Liochev SI, et al. Free Radic Biol Med 1989;6(6):617–22 (36 ref.)
A study on the mechanism of the vanadate-dependent NADH oxidation. Liochev SI, et al. Free Radic Biol Med 1988;5(5–6):349–54
Vanadyl- and vanadate-induced lipid peroxidation in mitochondria and in phosphatidylcholine suspensions. Liochev S, et al. Free Radic Res Commun 1988;4(5):317–23
Calcium transport mechanism in the endolymph of the chinchilla. Ikeda K, et al. Hear Res 1988 Aug;34(3):307–11
Extra- and intracellular calcium in vanadate-induced contraction of vascular smooth muscle. Sunano S, et al. Heart Vessels 1988;4(1):6–13
The effect of vanadate upon calcium-stimulated ATPase of the rabbit iris-ciliary body. Socci RR, et al. Invest Ophthalmol Vis Sci 1988 Dec;29(12):1866–70
Purification and characterization of a 40 S ribosomal protein S6 kinase from vanadate-stimulated Swiss 3T3 cells. Jenö P, et al. J Biol Chem 1989 Jan 15;264(2):1293–7
Mechanism of inhibition of transducin guanosine triphosphatase activity by vanadate. Kanaho Y, et al. J Biol Chem 1988 Nov 25;263(33):17584–9
Purification of a vanadate-sensitive ATPase from clathrin-coated vesicles of bovine brain. Xie XS, et al. J Biol Chem 1989 Jan 25;264(3):1710–4
Correction of chronic hyperglycemia with vanadate, but not with phlorizin, normalizes in vivo glycogen repletion and in vitro glycogen synthase activity in diabetic skeletal muscle. Rossetti L, et al. J Clin Invest 1989 Sep;84(3):892–9
Vanadate stimulates the N-ethylmaleimide-sensitive adenosine triphosphatase in rat nephron. Sabatini S, et al. J Pharmacol Exp Ther 1989 Aug;250(2):529–33
The nonspecific nature of the vanadate inhibition of rat ileal (NA,K)-ATPase. Hajjar JJ, et al. Life Sci 1988; 43(21):1741–6
Vanadate counteracts glucagon effects in isolated rat hepatocytes. Miralpeix M, et al. Life Sci 1989;44(20):1491–7
Vanadate sensitivity of Na+, K+-ATPase from Schistosoma mansoni and its modulation by Na+, K+ and Mg2+. Noel F, et al. Life Sci 1989;44(22):1677–83
Effect of vanadate on protein phosphorylation and on acid phosphatase activity in the canine prostate. Tessier S, et al. Mol Cell Endocrinol 1989 Jun;64(1):87–94
Na+, K+-ATPase activity in cultured C6 glioma cells. Folbergrova J, et al. Neurochem Res 1989 May;14(5):391–7
Does vanadyl affect adenylate cyclase? Křivánek J, et al. Physiol Bohemoslov 1988;37(4):289–98
Effect of acute and chronic vanadate administration on sugar transport in rat jejunum. Hajjar JJ, et al. Proc Soc Exp Biol Med 1989 Jan;190(1):35–41
Na,K-ATPase isozymes in rat tissues: differential sensitivities to sodium, vanadate and dihydroouabain. Feige G, et al. Prog Clin Biol Res 1988;268B:377–84
Vanadate inhibition of mitochondrial respiration and H+ ATPase activity in Saccharomyces cerevisiae. Henderson GE, et al. Yeast 1989 Jan-Feb;5(1):73–7
[Effect of vanadate on the vacuolar ATPase of Acer pseudoplatanus] Montrichard F, et al. C R Soc Biol (Paris) 1988;182(2):208–21 (Eng. Abstr.) (Fre)
[Vanadate and smooth muscles] Sunano S. Nippon Heikatsukin Gakkai Zasshi 1988 Jun;24(3):147–58 (68 ref.) (Eng. Abstr.) (Jpn)
[Actions of vanadate on muscles] Sunano S. Nippon Yakurigaku Zasshi 1989 Mar;93(3):103–12 (123 ref.) (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Experimental compounds to lower intraocular pressure. Podos SM, et al. Aust N Z J Ophthalmol 1989 May; 17(2):129–35 (47 ref.)
In vivo insulin resistance in streptozotocin-diabetic rats—evidence for reversal following oral vanadate treatment. Blondel O, et al. Diabetologia 1989 Mar; 32(3):185–90
Vanadate substitutes insulin role in chronic experimental diabetes. Kanthasamy A, et al. Indian J Exp Biol 1988 Oct; 26(10):778–80

TOXICITY

Effect of chronic vanadate ingestion on amino acid and water absorption in rat intestine. Hajjar JJ, et al. Arch Toxicol 1989;63(1):29–33
Decreased resistance to Listeria monocytogenes in mice following vanadate exposure: effects upon the function of macrophages. Cohen MD, et al. Int J Immunopharmacol 1989;11(3):285–92
On the role of mitochondria in cell injury caused by vanadate-induced Ca2+ overload. Richelmi P, et al. Toxicology 1989 Jul 3;57(1):29–44
[Effect of vanadium on selected biochemical parameters of the blood and internal organs in rats] Zaporowska H, et al. Rocz Panstw Zakl Hig 1988;39(5):379–84 (Eng. Abstr.) (Pol)

VANADIUM

Vanadium K-edge X-ray-absorption spectroscopy of the functioning and thionine-oxidized forms of the VFe-protein of the vanadium nitrogenase from Azotobacter chroococcum. Arber JM, et al. Biochem J 1989 Mar 15;258(3):733–7
[Experimental study of pathogenic effects of dusts of vanad-titan-magnetite on rats lungs] Song YK. Chung Hua Yu Fang I Hsueh Tsa Chih 1989 Mar;23(2):87–9 (Eng. Abstr.) (Chi)

ADVERSE EFFECTS

[Blastomogenic and nephrotoxic effects of a petroleum product obtained from high-vanadium oil at a temperature of 300–350 degrees C] Karimov MA, et al. Gig Tr Prof Zabol 1988 Nov;(11):53–5 (Rus)

ANALYSIS

Improved determination of vanadium in biological fluids by electrothermal atomic absorption spectrometry. Ishida O, et al. Clin Chem 1989 Jan;35(1):127–30
Distribution of tunichrome and vanadium in sea squirt blood cells sorted by flow cytometry. Oltz EM, et al. Experientia 1989 Feb 15;45(2):186–90
Synthesis and reactivity of the oxovanadium(IV) complexes of two N-O donors and potentiation of the antituberculosis activity of one of them on chelation to metal ions: Part IV. Maiti A, et al. J Inorg Biochem 1989 Jun;36(2):131–9
Vanadium in particles and sediments of the northern Saronikos Gulf, Greece. Kalogeropoulos N, et al. Sci Total Environ 1989 Apr;79(3):241–52
[Quantitation of manganese and vanadium levels in the lung of "normal" and occupationally exposed persons] Kraus T, et al. Zentralbl Hyg Umweltmed 1989 May; 188(1–2):108–26 (Eng. Abstr.) (Ger)

BLOOD

Vanadium in patients undergoing chronic haemodialysis. Hosokawa S, et al. Nephrol Dial Transplant 1989;4(4):282–4

METABOLISM

Molybdenum and vanadium nitrogenases of Azotobacter chroococcum. Low temperature favours N2 reduction by vanadium nitrogenase. Miller RW, et al. Biochem J 1988 Dec 1;256(2):429–32
The vanadium-containing nitrogenase of Azotobacter. Eady RR. Biofactors 1988 Jul;1(2):111–6 (45 ref.)
Vanadium biochemistry: the unknown role of vanadium-containing cells in ascidians (sea squirts). Smith MJ. Experientia 1989 May 15;45(5):452–7 (65 ref.)
Placental vanadium in gestational diabetes mellitus. Manci EA, et al. Placenta 1989 Jul-Aug;10(4):417–25
Vanadium metabolism in wild type and respiratory-deficient strains of S. cerevisiae. Willsky GR, et al. Yeast 1986 Jun; 2(2):77–85

PHARMACOLOGY

Oxidation of NADH by vanadium compounds in the presence of thiols. Keller RJ, et al. Arch Biochem Biophys 1989 May 15;271(1):40–8
Vanadium(IV)-stimulated hydrolysis of 2,3-diphosphoglycerate. Stankiewicz PJ. Arch Biochem Biophys 1989 May 1;270(2):489–94
Effects of vanadyl sulphate on ornithine decarboxylase and progesterone levels in the ovary of rat. Reddy RL, et al. Biochem Int 1989 Feb;18(2):467–74
Inhibition of phosphorylation of the mitochondrial 34 kDa protein. A unique effect of vanadium ions? Krivanek J, et al. Biochem Pharmacol 1989 Aug 15;38(16):2713–7
Electrostatic analysis of effects of ions on the inhibition of corn root plasma membrane Mg2+-ATPase by the bivalent orthovanadate. Gibrat R, et al. Biochim Biophys Acta 1989 Feb 13;979(1):46–52
Vanadium-mediated lipid peroxidation in microsomes from human term placenta. Byczkowski JZ, et al. Bull Environ Contam Toxicol 1988 Nov;41(5):696–703
Importance of hydroxyl radical in the vanadium-stimulated oxidation of NADH. Keller RJ, et al. Free Radic Biol Med 1989;6(1):15–22
Contractile responses of the guinea-pig vas deferens to the combination of vanadium ions with ouabain. Garcia AG, et al. Gen Pharmacol 1989;20(4):457–62
Inhibition of apatite formation by titanium and vanadium ions. Blumenthal NC, et al. J Biomed Mater Res 1989 Apr; 23(A1 Suppl):13–22
Effects of vanadate on tyrosine phosphorylation and the pattern of glycosaminoglycan synthesis in rabbit chondrocytes in culture. Owada MK, et al. J Cell Physiol 1989 Mar;138(3):484–92
Effect of vanadium on bone metabolism in weanling rats: zinc prevents the toxic effect of vanadium. Yamaguchi M, et al. Res Exp Med (Berl) 1989;189(1):47–53

THERAPEUTIC USE

Oral vanadyl sulfate in treatment of diabetes mellitus in rats. Ramanadham S, et al. Am J Physiol 1989 Sep;257(3 Pt 2):H904–11

TOXICITY

Some selected peripheral blood and haemopoietic system indices in Wistar rats with chronic vanadium intoxication. Zaporowska H, et al. Comp Biochem Physiol [C] 1989; 93(1):175–80
Vanadium intoxication inhibits sulfhydryl groups and glutathione in the rat brain. Haider SS, et al. Ind Health 1989;27(1):23–5
Effectiveness of chelation therapy with time after acute vanadium intoxication. Gómez M, et al. J Appl Toxicol 1988 Dec;8(6):439–44
Changes in rat lung collagen after life-time treatment with vanadium. Kowalska M. Toxicol Lett 1989 May; 47(2):185–90
Effects of high pressure and vanadium on cell growth. Jenssen J, et al. Undersea Biomed Res 1988 Sep;15(5):353–9

URINE

Urinary vanadium as a biological indicator of exposure to vanadium. Kawai T, et al. Int Arch Occup Environ Health 1989;61(4):283–7
[Creatinine as an adjustment parameter in urinary excretion of vanadium and nickel] Barbieri F, et al. G Ital Med Lav 1988 Mar;10(2):65–71 (Eng. Abstr.) (Ita)
[Vanadium level in the urine of workers on a shift-work schedule during drilling of oil wells for high-vanadium petroleum] Karimov MA, et al. Gig Tr Prof Zabol 1989 (3):9–12 (Eng. Abstr.) (Rus)

VANADYL see VANADATES

VANCOMYCIN

ADMINISTRATION & DOSAGE

Cost-effective treatment of pseudomembranous colitis [letter] McKenna JP, et al. Am Fam Physician 1989 Apr;39(4):74, 78
Accuracy of delivery of cefazolin, chloramphenicol, and vancomycin by a controlled-release membrane infusion device. Nahata MC, et al. Am J Hosp Pharm 1988 Nov; 45(11):2358–60
Intraperitoneal (IP) vancomycin therapy for CAPD peritonitis—a prospective, randomized comparison of intermittent v continuous therapy. Boyce NW, et al. Am J Kidney Dis 1988 Oct;12(4):304–6
Relationship of serum antibiotic concentrations to nephrotoxicity in cancer patients receiving concurrent aminoglycoside and vancomycin therapy. Cimino MA, et al. Am J Med 1987 Dec;83(6):1091–7
Evaluation of the combination effects of ampicillin or vancomycin combined with streptomycin, gentamicin, tobramycin or netilmicin against enterococci. Fuursted K. APMIS 1989 Jan;97(1):23–6
Intravitreal antibiotic therapy with vancomycin and aminoglycoside. An experimental study of combination and repetitive injections. Oum BS, et al. Arch Ophthalmol 1989 Jul;107(7):1055–60
Collagen-shield delivery of gentamicin and vancomycin. Phinney RB, et al. Arch Ophthalmol 1988 Nov; 106(11):1599–604
Vancomycin administration to hemodialysis patients [letter] Keller F. Clin Nephrol 1988 Sep;30(3):173
Accuracy of Bayesian, Sawchuk-Zaske, and nomogram dosing methods for vancomycin. Garrelts JC, et al. Clin Pharm 1987 Oct;6(10):795–9
Evaluation of three methods for determining initial

vancomycin doses. Ackerman BH. **DICP** 1989 Feb; 23(2):123–8
Evaluation of a Bayesian method for predicting vancomycin dosing. Burton ME, et al. **DICP** 1989 Apr;23(4):294–300
Comment: vancomycin dosing methods [letter] Lake KD, et al. **DICP** 1989 Jul–Aug;23(7–8):618–9
Three-step empiric treatment for severely neutropenic patients with fever: ceftazidime—vancomycin—amphotericin B. Koeppler H, et al. **Infection** 1989 May–Jun;17(3):142–5
Comparison of two oral formulations of vancomycin for treatment of diarrhoea associated with Clostridium difficile [letter] Baird DR. **J Antimicrob Chemother** 1989 Jan; 23(1):167–9
Stability and delivery of vancomycin hydrochloride when admixed in a total parenteral nutrition solution. Schilling CG, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb; 13(1):63–4
Vancomycin, ticarcillin, and amikacin compared with ticarcillin–clavulanate and amikacin in the empirical treatment of febrile, neutropenic children with cancer. Shenep JL, et al. **N Engl J Med** 1988 Oct 20;319(16):1053–8
Vancomycin and ceftazidime in the treatment of CAPD peritonitis. Beaman M, et al. **Nephron** 1989;51(1):51–5
Combined medical and surgical management of severe pseudomembranous colitis. Ware R, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):602–4
Evaluation of a method for initiating vancomycin therapy: experience in 205 patients. Lake KD, et al. **Pharmacotherapy** 1988;8(5):284–6
Simulation of vancomycin peak and trough concentrations using five dosing methods in 37 patients. Zokufa HZ, et al. **Pharmacotherapy** 1989;9(1):10–6
[Prophylaxis of Gram-positive infections after bone marrow graft. Controlled study of the 6-day administration of vancomycin. Intermediate analysis of 60 patients] Maraninchi D, et al. **Pathol Biol (Paris)** 1988 Sep; 36(7):915–9 (Eng. Abstr.) **(Fre)**

ADVERSE EFFECTS

Diphenhydramine reversal of vancomycin–induced hypotension. Lyon GD, et al. **Anesth Analg** 1988 Nov; 67(11):1109–10
Vancomycin– and erythromycin–induced hearing loss in humans. Brummett RE, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):791–6 (94 ref.)
Acute interstitial nephritis associated with vancomycin therapy. Bergman MM, et al. **Arch Intern Med** 1988 Oct; 148(10):2139–40
Vancomycin allergy presenting as fever of unknown origin. Clayman MD, et al. **Arch Intern Med** 1989 Jun; 149(6):1425–6
An experimental study of vancomycin–induced cochlear damage. Tange RA, et al. **Arch Otorhinolaryngol** 1989; 246(2):67–70
Perioperative complications following the use of vancomycin in children: a report of two cases. Best CJ, et al. **Br J Anaesth** 1989 May;62(5):576–7
Lack of chemical peritonitis after intraperitoneal use of two brands of vancomycin hydrochloride [letter] Abel SR. **Clin Pharm** 1989 Feb;8(2):91–2
Phlebitis associated with vancomycin therapy [letter] Garrelts JC, et al. **Clin Pharm** 1988 Oct;7(10):720–1
Clostridium difficile colitis secondary to intravenous vancomycin. Hecht JR, et al. **Dig Dis Sci** 1989 Jan; 34(1):148–9
Paresthesia and back pain in a patient receiving vancomycin during hemodialysis. Cohen LG, et al. **Drug Intell Clin Pharm** 1988 Oct;22(10):784–5
Vancomycin–associated exfoliative dermatitis during continuous ambulatory peritoneal dialysis. Gutfeld MB, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):881–2
"Red man syndrome" with vancomycin: report of case. Pearson DA. **J Am Dent Assoc** 1989 Jan;118(1):59–60
Red man syndrome [letter] Zallen RD. **J Am Dent Assoc** 1989 Apr;118(4):410
Teicoplanin administration in patients experiencing reactions to vancomycin. Smith SR, et al. **J Antimicrob Chemother** 1989 May;23(5):810–2
Severe reaction to vancomycin not mediated by histamine release and documented by rechallenge [letter] Sahai JV, et al. **J Infect Dis** 1988 Dec;158(6):1413–4
Anaphylactoid reaction to vancomycin: report of a case. Roelofse JA, et al. **J Oral Maxillofac Surg** 1989 Jan; 47(1):69–71
Vancomycin and nephrotoxicity [letter] Gudmundsson GH, et al. **Lancet** 1989 Mar 18;1(8638):625
Teicoplanin in patients who are allergic to vancomycin [letter] Wood G, et al. **Med J Aust** 1989 Jun 5;150(11):668
Vancomycin ototoxicity and nephrotoxicity. A review. Bailie GR, et al. **Med Toxicol Adverse Drug Exp** 1988 Sep–Oct; 3(5):376–86 (52 ref.)
Vancomycin–induced red cell aggregation. Williams L, et al. **Transfusion** 1989 Jan;29(1):23–6

ANALOGS & DERIVATIVES

Synthesis and antibacterial evaluation of N–alkyl vancomycins. Nagarajan R, et al. **J Antibiot (Tokyo)** 1989 Jan;42(1):63–72
Synthesis and antibacterial activity of N–acyl vancomycins. Nagarajan R, et al. **J Antibiot (Tokyo)** 1988 Oct; 41(10):1430–8
New glycopeptide antibiotics: II. The isolation and structures of chloroorienticins. Tsuji N, et al. **J Antibiot (Tokyo)** 1988 Oct;41(10):1506–10

BLOOD

Requisition forms for serum aminoglycoside or vancomycin concentration determinations [letter] Shovick VA. **Am J Hosp Pharm** 1989 Aug;46(8):1547–8
Clinical performance of the EMIT vancomycin assay. Yeo KT, et al. **Clin Chem** 1989 Jul;35(7):1504–7
Rapid and specific method for the determination of vancomycin in plasma by high–performance liquid chromatography on an aminopropyl column. Hosotsubo H. **J Chromatogr** 1989 Feb 24;487(2):421–7
Evaluation of a two–compartment Bayesian forecasting program for predicting vancomycin concentrations. Rodvold KA, et al. **Ther Drug Monit** 1989;11(3):269–75

CEREBROSPINAL FLUID

CSF vancomycin concentrations [letter] Bayston R. **J Antimicrob Chemother** 1988 Aug;22(2):265–6

METABOLISM

The in–vitro degradation at 37 degrees C of vancomycin in serum, CAPD fluid and phosphate–buffered saline. White LO, et al. **J Antimicrob Chemother** 1988 Nov; 22(5):739–45

PHARMACOKINETICS

Single– and multiple–dose pharmacokinetics of intravenously administered vancomycin in dogs. Zaghlol HA, et al. **Am J Vet Res** 1988 Sep;49(9):1637–40
Vancomycin concentrations in infected and noninfected human bone. Graziani AL, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1320–2
Elimination of vancomycin by continuous arteriovenous hemofiltration. Lau AH, et al. **Child Nephrol Urol** 1988–89; 9(4):232–5
Vancomycin disposition during continuous arteriovenous hemofiltration. Dupuis RE, et al. **Clin Pharm** 1989 May; 8(5):371–4
Elimination of vancomycin during hemofiltration. Rawer P, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):529–31
Dosage guidelines for the use of vancomycin based on its pharmacokinetics in infants. Lisby–Sutch SM, et al. **Eur J Clin Pharmacol** 1988;35(6):637–42
Kinetics of intraventricular vancomycin in infections of cerebrospinal fluid shunts [letter] Reesor C, et al. **J Infect Dis** 1988 Nov;158(5):1142–3
Transscleral and transcorneal iontophoresis of vancomycin in rabbit eyes. Choi TB, et al. **J Ocul Pharmacol** 1988 Summer;4(2):153–64
Markedly increased clearance of vancomycin during hemodialysis using polysulfone dialyzers. Lanese DM, et al. **Kidney Int** 1989 Jun;35(6):1409–12
Vancomycin pharmacokinetics in very low birth weight neonates. Leonard MB, et al. **Pediatr Infect Dis J** 1989 May;8(5):282–6 (23 ref.)
Individualizing vancomycin dosage regimens: one– versus two–compartment Bayesian models. Pryka RD, et al. **Ther Drug Monit** 1989;11(4):450–4

PHARMACOLOGY

Interaction between cell wall synthesis inhibitors and human granulocytes and monocytes. van den Broek PJ, et al. **Acta Paediatr Hung** 1988–89;29(1–2):163–5
Transferable vancomycin and teicoplanin resistance in Enterococcus faecium. Leclercq R, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):10–5
Characterization of vancomycin resistance in Enterococcus faecium and Enterococcus faecalis. Nicas TI, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1121–4
Inducible, transferable resistance to vancomycin in Enterococcus faecalis A256. Shlaes DM, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):198–203
In vitro interactions of carumonam in combination with coumermycin, teicoplanin, flucloxacillin and vancomycin. Machka K, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):117–8
Comparison of in vitro activity of daptomycin, vancomycin and fluoroquinolones in broth and serum against Staphylococcus epidermidis as determined by time–kill kinetics. Lentino JR, et al. **Chemotherapy** 1989;35(3):168–73
Interaction of ciprofloxacin with ampicillin and vancomycin for Streptococcus faecalis. Smith SM, et al. **Diagn Microbiol Infect Dis** 1988 Apr;9(4):239–43
Time kill curve analysis of vancomycin and rifampin alone and in combination against nine strains of nutritionally deficient streptococci. Stein DS, et al. **Diagn Microbiol Infect Dis** 1988 Jul;10(3):139–44
The in vitro activity of ramoplanin (A–16686/MDL 62,198), vancomycin and teicoplanin against methicillin–susceptible and methicillin–resistant Staphylococcus spp. O'Hare MD, et al. **Drugs Exp Clin Res** 1988;14(10):617–9
High–level vancomycin–resistant enterococci causing hospital infections. Uttley AH, et al. **Epidemiol Infect** 1989 Aug;103(1):173–81
Comparative in vitro activity of daptomycin (LY146032) and vancomycin against gram–positive cocci determined using a pharmacokinetic model. Blenkharn JI, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug;8(8):734–7
Vancomycin. A new old agent. Ingerman MJ, et al. **Infect Dis Clin North Am** 1989 Sep;3(3):641–51 (45 ref.)
The microbiological efficacy of the combination of fosfomycin and vancomycin against clinically relevant staphylococci. Gatermann S, et al. **Infection** 1989 Jan–Feb; 17(1):35–7
Comparative in–vitro activity of erythromycin, vancomycin and pristinamycin. Maskell JP, et al. **Infection** 1988; 16(6):365–70
The bactericidal activity of vancomycin and teicoplanin against methicillin–resistant strains of coagulase negative Staphylococcus spp. O'Hare MD, et al. **J Antimicrob Chemother** 1989 May;23(5):800–2
Inducible, transferable resistance to vancomycin in Enterococcus faecium, D399. Shlaes DM, et al. **J Antimicrob Chemother** 1989 Apr;23(4):503–8
In–vitro induction of resistance in coagulase–negative staphylococci to vancomycin and teicoplanin. Watanakunakorn C. **J Antimicrob Chemother** 1988 Sep; 22(3):321–4
Identification of gram–positive coccal and coccobacillary vancomycin–resistant bacteria. Facklam R, et al. **J Clin Microbiol** 1989 Apr;27(4):724–30
Vancomycin–resistant gram–positive bacteria isolated from human sources. Ruoff KL, et al. **J Clin Microbiol** 1988 Oct;26(10):2064–8
Problems with the disk diffusion test for detection of vancomycin resistance in enterococci. Swenson JM, et al. **J Clin Microbiol** 1989 Sep;27(9):2140–2
Activity of various glycopeptides against an inducibly vancomycin–resistant strain of Enterococcus faecium (D366). Shlaes DM, et al. **J Infect Dis** 1989 Jun; 159(6):1132–5
Inducible resistance to vancomycin in Enterococcus faecium D366. Williamson R, et al. **J Infect Dis** 1989 Jun; 159(6):1095–104
Predominance of vancomycin–sensitive strains of Neisseria gonorrhoeae in Djibouti [letter] Haberberger RL Jr, et al. **Lancet** 1989 Sep 16;2(8664):683
Effect of topical administration of vancomycin versus chlorhexidine on alpha–hemolytic streptococci in oral cavity. Borthen Svinlufvud L, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):304–9
Bacteremia caused by a vancomycin–resistant Enterococcus. Bingen E, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):475–6
Therapeutic update on glycopeptide and lipopeptide antibiotics. Rotschafer JC, et al. **Pharmacotherapy** 1988; 8(4):211–9 (79 ref.)
[Bactericidal activity of daptomycin and vancomycin alone or in combination with tobramycin, netilmicin or ampicillin against enterococcus] Duez JM, et al. **Pathol Biol (Paris)** 1989 Apr;37(4):263–8 (Eng. Abstr.) **(Fre)**
[Effect of teicoplanin and vancomycin on cerebrospinal fluid proteins of non–infected rabbits after suboccipital injection] Manquat G, et al. **Pathol Biol (Paris)** 1989 May;37(5):455–8 (Eng. Abstr.) **(Fre)**
[Effects of vancomycin and ofloxacin on rabbit ERG in vivo] Mochizuki K, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar; 93(3):322–8 (Eng. Abstr.) **(Jpn)**

POISONING

Acute renal failure owing to inadvertent vancomycin overdose. Vancomycin removal by continuous arteriovenous hemofiltration. Walczyk MH, et al. **Ann Clin Lab Sci** 1988 Nov–Dec;18(6):440–3

THERAPEUTIC USE

Treatment of antibiotic–associated Clostridium difficile colitis with oral vancomycin: comparison of two dosage regimens. Fekety R, et al. **Am J Med** 1989 Jan;86(1):15–9
Right–sided staphylococcal endocarditis [letter] Monane M, et al. **Ann Intern Med** 1989 May 1;110(9):749–50
Comparative evaluation of daptomycin (LY146032) and vancomycin in the treatment of experimental methicillin–resistant Staphylococcus aureus osteomyelitis in rabbits. Mader JT, et al. **Antimicrob Agents Chemother** 1989 May;33(5):689–92
Oral vancomycin in prevention of necrotising enterocolitis. Ng PC, et al. **Arch Dis Child** 1988 Nov;63(11):1390–3
Methicillin–resistant Staphylococcus epidermidis keratitis treated with vancomycin. Goodman DF, et al. **Arch Ophthalmol** 1988 Nov;106(11):1570–1
Therapeutic approach to methicillin–resistant Staphylococcus aureus (MRSA) infections: vancomycin update. Gennery BA, et al. **Br J Clin Pract Symp Suppl** 1988 Feb;57:100–1 (3 ref.)
Therapy of Clostridium difficile in pseudomembranous and antibiotic–associated colitis. Panichi G. **Chemioterapia** 1987 Jun;6(2 Suppl):493–4
Vancomycin for pseudomembranous colitis [letter] Ritchie M. **Clin Pharm** 1989 Jul;8(7):472–3
Treatment of chronic experimental Staphylococcus aureus osteomyelitis with LY146032 and vancomycin. Luu QN, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):562–3
Lack of extracellular slime effect on treatment outcome of Staphylococcus epidermidis experimental endocarditis. Steckelberg JM, et al. **J Antimicrob Chemother** 1989 Jan; 23(1):117–21
Comparative efficacy of amoxicillin–clavulanate, cloxacillin,

and vancomycin against methicillin-sensitive and methicillin-resistant Staphylococcus aureus endocarditis in rats. Cantoni L, et al. **J Infect Dis** 1989 May;159(5):989–93
Failure of intravenous vancomycin and intravenous metronidazole to prevent or treat antibiotic-associated pseudomembranous colitis [letter] Oliva SL, et al. **J Infect Dis** 1989 Jun;159(6):1154–5
Antibiotics for the treatment of febrile children with neutropenia and cancer [letter] Rubin M, et al. **N Engl J Med** 1989 Apr 6;320(14):939
Therapeutic considerations for infections caused by Staphylococcus epidermidis. Rodvold KA. **Pharmacotherapy** 1988;8(6 Pt 2):14S–18S (31 ref.)
[Initial antibacterial prophylaxis after bone marrow allograft. Pilot study with systemic vancomycin] Rubie H, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):912–4 (Eng. Abstr.) (Fre)
[Prospective and comparative study of 2 antibiotic therapy protocols in 66 febrile neutropenic patients. Ceftazidime–vancomycin versus ticarcillin–vancomycin–amikacin] Brion JP, et al. **Presse Med** 1988 Oct 26;17(37):1964–7 (Eng. Abstr.) (Fre)
[Antibiotic therapy protocol using ceftazidime 3g/day alone or in combination with vancomycin or amikacin. In febrile episodes in neutropenic patients] Marie JP, et al. **Presse Med** 1988 Oct 26;17(37):1968–70 (Eng. Abstr.) (Fre)
[A case of pneumococcal meningitis resistant to beta-lactam antibiotic treatment] Arimasu O, et al. **Kansenshogaku Zasshi** 1988 Jul;62(7):682–3 (Jpn)

TOXICITY

Mild nephrotoxicity associated with vancomycin use. Downs NJ, et al. **Arch Intern Med** 1989 Aug;149(8):1777–81
Vancomycin does not enhance amikacin-induced tubular nephrotoxicity in children. Goren MP, et al. **Pediatr Infect Dis J** 1989 May;8(5):278–82 (32 ref.)
Gentamicin-induced renal metabolic alterations in newborn rat kidney: lack of potentiation by vancomycin. Kacew S, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):61–71

VANILLIC ACID see under HYDROXYBENZOIC ACIDS

VANILMANDELIC ACID

ANALYSIS

Estimation of vanillylmandelic acid in parotid saliva. Zielinsky D. **J Clin Chem Clin Biochem** 1989 Apr; 27(4):238–9

BLOOD

Determination of serum catecholamine metabolites in neuroblastoma by high performance liquid chromatography with electrochemical detection. Tang QM, et al. **Biomed Chromatogr** 1986 Feb;1(1):7–11
Determination of vanillylmandelic acid in plasma by high-performance liquid chromatography with electrochemical detection. Schinelli S, et al. **J Chromatogr** 1988 Sep 23;431(1):150–5

DIAGNOSTIC USE

Imaging evaluation of infants with neuroblastoma detected by VMA screening spot test. Fujioka M, et al. **Pediatr Radiol** 1988;18(6):479–83

IMMUNOLOGY

Production and characterisation of antibodies to vanillylmandelic acid. Mellor GW, et al. **J Immunol Methods** 1989 Mar 10;118(1):101–7

METABOLISM

Hepatic hemangioendothelioma of infancy associated with elevated alpha fetoprotein and catecholamine by-products. Seo IS, et al. **Pediatr Pathol** 1988;8(6):625–31

URINE

Simultaneous assay for urinary 4-hydroxy-3-methoxy-mandelic acid, 5-hydroxyindoleacetic acid and homovanillic acid by isocratic HPLC with electrochemical detection. Davidson DF. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):137–43
Urinary excretion of HMMA in children. Walters EG, et al. **Ann Clin Biochem** 1989 Jan;26 (Pt 1):44–8
Falsely elevated urinary level of vanillylmandelic acid induced by griseofulvin. Rampini E, et al. **Arch Dermatol** 1989 Feb;125(2):269–70
Urinary 5-HIAA and VMA and their relationship with immunoregulatory cells in stress administered subjects. Khan NA, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(6):717–21
Simultaneous liquid chromatographic determination of vanillylmandelic acid, homovanillic acid, and 5-hydroxy-3-indoleacetic acid in urine, using isocratic elution and electrochemical detection. Richards DA, et al. **Biomed Chromatogr** 1987;2(3):115–9
Direct determination of vanillylmandelic acid in human urine by reversed-phase HPLC. Shang ZH, et al. **Biomed Chromatogr** 1987 Feb;2(1):1–3
Direct concurrent measurement of urinary vanillylmandelic acid, 5-hydroxyindoleacetic acid and homovanillic acid by HPLC. Three methodologies compared. van Haard PM, et al. **Biomed Chromatogr** 1987;2(5):209–15
Urinary catecholamine metabolite and tribulin output during lactate infusion. Clow A, et al. **Br J Psychiatry** 1988 Jan; 152:122–6
Simultaneous liquid-chromatographic determination of urinary vanillylmandelic acid, homovanillic acid, and 5-hydroxyindoleacetic acid. Gironi A, et al. **Clin Chem** 1988 Dec;34(12):2504–6
Determination of vanillylmandelic acid, vanillactic acid, and homovanillic acid in dried urine on filter-paper discs by high-performance liquid chromatography with coulometric electrochemical detection for neuroblastoma screening. Kinoshita Y, et al. **Clin Chem** 1988 Nov; 34(11):2228–30
Measurements of postcoital sympathetic activity in females by means of vanillylmandelic acid. Ende N, et al. **Horm Behav** 1989 Mar;23(1):150–6
Simultaneous determination of urinary vanillylmandelic acid, 5-hydroxyindoleacetic acid and homovanillic acid by liquid chromatography. Gotelli GR, et al. **J Chromatogr** 1988 Jun 24;428(1):147–51
Full automation of catecholamine metabolite determination by column switching and high-performance liquid chromatography. Grossi G, et al. **J Chromatogr** 1989 Mar 10;465(1):113–9
Automated analysis of urinary 3-methoxy-4-hydroxy-mandelic acid using ion-pair chromatography and fluorimetric detection. Nebinger P, et al. **J Chromatogr** 1988 Dec 29;434(1):43–9
Method of measurement of urinary homovanillic acid and vanillylmandelic acid by gas chromatography–mass spectrometry suitable for neuroblastoma screening. Seviour JA, et al. **J Chromatogr** 1988 Nov 18;432:273–7
Convergence between the Daily Stress Inventory and endocrine measures of stress. Brantley PJ, et al. **J Consult Clin Psychol** 1988 Aug;56(4):549–51
Biochemical tests for pheochromocytoma: strategies in hypertensive patients. Young MJ, et al. **J Gen Intern Med** 1989 Jul–Aug;4(4):273–6
A new urinary mass screening system for neuroblastoma in infancy by use of monoclonal antibodies against VMA and HVA. Yokomori K, et al. **J Pediatr Surg** 1989 Apr; 24(4):391–4
Stage and urinary catecholamine metabolite excretion in neuroblastoma. European Neuroblastoma Study Group [letter] Pritchard J, et al. **Lancet** 1989 Aug 26;2(8661):514–5
Laboratory techniques and neuroblastoma screening [letter] Sawada T. **Lancet** 1988 Nov 12;2(8620):1134–5
[Increase in urinary excretion of vanilmandelic acid and noradrenaline under nifedipine (letter)] Premel-Cabic A, et al. **Presse Med** 1988 Sep 10;17(30):1545 (Fre)
[Procedures for studying the excretion of vanillylmandelic acid (review of the literature)] Svistunova OI, et al. **Lab Delo** 1989;(1):4–10 (47 ref.) (Rus)
[Evaluation of the excretion of vanilmandelic acid using paper and cellulose acetate electrophoresis] Svistunova OI, et al. **Lab Delo** 1989;(3):61–4 (Eng. Abstr.) (Rus)

VAPORIZATION, LASER see LASER SURGERY

VAPORIZERS see NEBULIZERS AND VAPORIZERS

VARIABLE REGION, IG see IMMUNOGLOBULIN VARIABLE REGION

VARIANT ANGINA PECTORIS see ANGINA PECTORIS, VARIANT

VARIANT SURFACE GLYCOPROTEINS, TRYPANOSOMA

Disulfide bond involvement in the maintenance of the cryptic nature of the cross-reacting determinant of metacyclic forms of Trypanosoma congolense. Fish WR, et al. **Biochemistry** 1989 Jun 27;28(13):5415–21
Solution structure of the glycosylphosphatidylinositol membrane anchor glycan of Trypanosoma brucei variant surface glycoprotein. Homans SW, et al. **Biochemistry** 1989 Apr 4;28(7):2881–7

ANALYSIS

Evidence of myristylated disulfide-linked dimer of variant surface glycoprotein of Trypanosoma brucei-brucei. Hublart M, et al. **Comp Biochem Physiol [B]** 1989; 92(4):705–10
Characterization of the cross-reacting determinant (CRD) of the glycosyl-phosphatidylinositol membrane anchor of Trypanosoma brucei variant surface glycoprotein. Zamze SE, et al. **Eur J Biochem** 1988 Oct 1;176(3):527–34
Trypanosoma brucei brucei: variability in the association of some variant surface glycoproteins. Huet-Duvillier G, et al. **Exp Parasitol** 1988 Oct;67(1):31–8
Crystallization of amino-terminal domains and domain fragments of variant surface glycoproteins from Trypanosoma brucei brucei. Metcalf P, et al. **J Biol Chem** 1988 Nov 15;263(32):17030–3

BIOSYNTHESIS

A novel pathway for glycan assembly: biosynthesis of the glycosyl-phosphatidylinositol anchor of the trypanosome variant surface glycoprotein. Masterson WJ, et al. **Cell** 1989 Mar 10;56(5):793–800
Biosynthesis of a variant surface glycoprotein of Trypanosoma brucei. Processing of the glycolipid membrane anchor and N-linked oligosaccharides. Bangs JD, et al. **J Biol Chem** 1988 Nov 25;263(33):17697–705
Biosynthesis of the glycosyl phosphatidylinositol membrane anchor of the trypanosome variant surface glycoprotein. Origin of the non-acetylated glucosamine. Doering TL, et al. **J Biol Chem** 1989 Jul 5;264(19):11168–73

GENETICS

Control of antigen gene expression in African trypanosomes. Pays E, et al. **Annu Rev Genet** 1988;22:107–26 (116 ref.)
The genes and transcripts of an antigen gene expression site from T. brucei. Pays E, et al. **Cell** 1989 Jun 2;57(5):835–45
Trypanosoma brucei: frequent loss of a telomeric variant surface glycoprotein gene. Aline RF Jr, et al. **Exp Parasitol** 1989 Jan;68(1):8–16
Trypanosoma brucei: conserved sequence organization 3' to telomeric variant surface glycoprotein genes. Aline RF Jr, et al. **Exp Parasitol** 1989 Jan;68(1):57–66
Boundaries of telomere conversion in Trypanosoma brucei. Kooter JM, et al. **Gene** 1988 Sep 15;69(1):1–11
Transcripts from the co-transposed segment of variant surface glycoprotein genes are in Trypanosoma brucei polyribosomes. Aline RF Jr, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):169–78
Shared surface epitopes among trypanosomes of the same serodeme expressing different variable surface glycoprotein genes. Barbet AF, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):191–9
Two variant surface glycoprotein genes distinguish between different substrains of Trypanosoma brucei gambiense. Barnes DA, et al. **Mol Biochem Parasitol** 1989 May 1; 34(2):135–46
A gene expressed only in serum-resistant variants of Trypanosoma brucei rhodesiense. De Greef C, et al. **Mol Biochem Parasitol** 1989 Sep;36(2):169–76
A novel telomeric gene conversion in Trypanosoma brucei. Scholler JK, et al. **Mol Biochem Parasitol** 1989 Jun 1; 35(1):11–9
Trypanosoma brucei: enrichment by UV of intergenic transcripts from the variable surface glycoprotein gene expression site. Coquelet H, et al. **Mol Cell Biol** 1989 Sep; 9(9):4022–5
Trypanosoma brucei: posttranscriptional control of the variable surface glycoprotein gene expression site. Pays E, et al. **Mol Cell Biol** 1989 Sep;9(9):4018–21
Activation of genes for variant surface glycoproteins in trypanosomes. Michels PA. **Oxf Surv Eukaryot Genes** 1984; 1:145–68 (83 ref.)

IMMUNOLOGY

Presence of antibodies to the major surface glycoprotein of Trypanosoma cruzi amastigotes in sera from Chagasic patients. Andrews NW, et al. **Am J Trop Med Hyg** 1989 Jan;40(1):46–9
Immune response to minor variant antigen types (VATs) in a mixed VAT infection of the African trypanosomes. Seed JR, et al. **Parasite Immunol** 1988 Sep;10(5):569–79

ISOLATION & PURIFICATION

Procyclin: an unusual immunodominant glycoprotein surface antigen from the procyclic stage of African trypanosomes. Richardson JP, et al. **Mol Biochem Parasitol** 1988 Dec; 31(3):203–16

METABOLISM

Procyclin gene expression and loss of the variant surface glycoprotein during differentiation of Trypanosoma brucei. Roditi I, et al. **J Cell Biol** 1989 Feb;108(2):737–46

PHYSIOLOGY

Characterization of a protein from Trypanosoma cruzi trypomastigotes that cleaves non-immune IgG bound through its Fab fragment. Cicarelli RM, et al. **J Immunol** 1989 Mar 1;142(5):1685–90
Trypanosoma cruzi trypomastigote clones differentially express a parasite cell adhesion molecule. Lima MF, et al. **Mol Biochem Parasitol** 1989 Mar 1;33(2):159–70

VARIATION, ANTIGENIC see ANTIGENIC VARIATION

VARIATION (GENETICS)

C-heterochromatin variation and transposition in tumor progression. Larizza L, et al. **Adv Exp Med Biol** 1988; 233:309–18 (30 ref.)
Molecular characterization of HIV-1 isolated from a serum collected in 1976: nucleotide sequence comparison to recent isolates and generation of hybrid HIV. Srinivasan A, et al. **AIDS Res Hum Retroviruses** 1989 Apr;5(2):121–9
Genetic factors in the electrocardiogram and heart rate of twins reared apart and together. Hanson B, et al. **Am J Cardiol** 1989 Mar 1;63(9):606–9
Genetic variation and nutrition. Childs B.

Am J Clin Nutr 1988 Dec;48(6):1500–4 (2 ref.)
Genetic variation in nutritional requirements and susceptibility to disease: policy implications. Holtzman NA. **Am J Clin Nutr** 1988 Dec;48(6):1510–6 (23 ref.)
Nutrient–gene interactions: the gene is not the disease and vice versa. Scriver CR. **Am J Clin Nutr** 1988 Dec; 48(6):1505–9 (19 ref.)
Population amalgamation and genetic variation: observations on artificially agglomerated tribal populations of Central and South America. Chakraborty R, et al. **Am J Hum Genet** 1988 Nov;43(5):709–25
Gene and gene–product variation in the apolipoprotein A–I/C–III/A–IV cluster in the Dogrib Indians of the Northwest Territories. Cole SA, et al. **Am J Hum Genet** 1989 Jun;44(6):835–43
Origin and differentiation of human mitochondrial DNA. Excoffier L, et al. **Am J Hum Genet** 1989 Jan;44(1):73–85
High–resolution analysis of a hypervariable region in the human apolipoprotein B gene. Ludwig EH, et al. **Am J Hum Genet** 1989 Sep;45(3):458–64
Genetic determination of plasma apolipoprotein AI in a population–based sample. Moll PP, et al. **Am J Hum Genet** 1989 Jan;44(1):124–39
A simple method to detect and estimate heterogeneity: application to Huntington disease, diabetes, and HIV seroconversion. Payami H. **Am J Hum Genet** 1989 Jan; 44(1):107–14
Genetic heterogeneity, modes of inheritance, and risk estimates for a joint study of Caucasians with insulin–dependent diabetes mellitus. Thomson G, et al. **Am J Hum Genet** 1988 Dec;43(6):799–816 (86 ref.)
Identification of a deoxyribonucleic acid allelic variant for beta 1–4 galactosyltransferase expression associated with male sperm binding/penetration infertility. Humphreys–Beher MG, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1160–5
Genetic variation within two linguistic Amerindian groups: relationship to geography and population size. Callegari–Jacques SM, et al. **Am J Phys Anthropol** 1989 Jul;79(3):313–20
Genetic differentiation among some endogamous populations of Andhra Pradesh, India. Char KS, et al. **Am J Phys Anthropol** 1989 Mar;78(3):421–9
Genetic variation in the Aleuts of the Pribilof Islands and the Eskimos of Kodiak Island. Majumder PP, et al. **Am J Phys Anthropol** 1988 Aug;76(4):481–8
Complex segregation analysis of dental morphological variants. Nichol CR. **Am J Phys Anthropol** 1989 Jan; 78(1):37–59
Genetic variation among geographic isolates of Rift Valley fever virus. Battles JK, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):617–31
Biological variation of serum and urine creatinine and creatinine clearance [letter] Gunn IR. **Ann Clin Biochem** 1989 May;26 (Pt 3):302–3
Genetic variation within the Tupi linguistic group: new data on three Amazonian tribes. Black FL, et al. **Ann Hum Biol** 1988 Sep–Oct;15(5):337–51
Study of genetic variance in the fluctuating asymmetry of anthropometrical traits. Livshits G, et al. **Ann Hum Biol** 1989 Mar–Apr;16(2):121–9
Patterns in the within–population variability of stature and weight. Schmitt LH, et al. **Ann Hum Biol** 1988 Sep–Oct; 15(5):353–64 (6 ref.)
Genetic and morphometric variances in three human populations. Schmitt LH, et al. **Ann Hum Genet** 1988 May; 52 (Pt 2):145–9
Development of an efficient method for generating and screening active trypsin and trypsin variants. Evnin LB, et al. **Ann N Y Acad Sci** 1988;542:61–74
Common and rare genetic variants of human red blood cell enzymes in Italy. Biondi G, et al. **Anthropol Anz** 1989 Jun; 47(2):155–74
Strain variation in Campylobacter pylori detected by numerical analysis of one–dimensional electrophoretic protein patterns. Owen RJ, et al. **Antonie Van Leeuwenhoek** 1989;55(3):253–67
Clonal dynamics of Escherichia coli in its natural habitat. Whittam TS. **Antonie Van Leeuwenhoek** 1989;55(1):23–32 (41 ref.)
Genetic diversity and relationships among isolates of Rhizobium leguminosarum biovar phaseoli. Pinero D, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2825–32
Role of variant prealbumin in the pathogenesis of familial amyloidotic polyneuropathy: fate of normal and variant prealbumin in the circulation. Ando Y, et al. **Arch Biochem Biophys** 1989 Oct;274(1):87–93
Genetic diversity of enterovirus subgroups. Auvinen P, et al. **Arch Virol** 1989;104(3–4):175–86
Population structure of some street rabies virus strains. Gribencha SV, et al. **Arch Virol** 1989;104(3–4):347–50
Apolipoprotein E2(Arg158——Cys) frequency in a hyperlipidemic French–Canadian population of apolipoprotein E2/2 subjects. Determination by synthetic oligonucleotide probes. Weisgraber KH, et al. **Arterioscler Thromb** 1989 Jan–Feb;9(1):50–7
Intrapopulational variation of olfactory responses in Drosophila melanogaster. Alcorta E, et al. **Behav Genet** 1989 Mar;19(2):285–99
Burrowing behavior in wild house mice: variation within and between populations. Bouchard PR, et al. **Behav Genet** 1989 May;19(3):447–56
Geographic variation in the territorial success of Drosophila melanogaster males. Hoffmann AA. **Behav Genet** 1989 Mar; 19(2):241–55
Direct and indirect IQ heritability estimates: a puzzle. Plomin R, et al. **Behav Genet** 1989 May;19(3):331–42 (26 ref.)
Comment on Tambs'(1987) "No Genetic Effect on Variation in Field Dependence". Thomas H. **Behav Genet** 1989 May; 19(3):467–8
Genetic variability of sexual behavior in a natural population of Drosophila melanogaster. Veuille M, et al. **Behav Genet** 1988 May;18(3):389–403
Genetic and environmental variation in the birth weight of twins. Vlietinck R, et al. **Behav Genet** 1989 Jan;19(1):151–61
Variant apolipoprotein AI as a major constituent of a human hereditary amyloid. Nichols WC, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):762–8
Titration of variant DNA sequences differing by a single point–mutation by selective dot–blot hybridization with synthetic oligonucleotides. Nicoloso M, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1233–41
Analysis of transketolase and identification of an enzyme variant in human leukocytes. Paoletti F, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):150–5
Isolation and characterization of variant cDNAs encoding mouse tyrosinase. Terao M, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):848–53
An allele of the Prot locus in maize is a variant for the site of protein processing. Osterman JC. **Biochem Genet** 1988 Aug;26(7–8):463–74
Limited allozymic variation in a marsupial, the Tammar wallaby (Macropus eugenii). van Oorschot RA, et al. **Biochem Genet** 1988 Aug;26(7–8):481–8
The amylase gene–enzyme system of chickens. I. Allozymic and activity variation. Yardley DG, et al. **Biochem Genet** 1988 Dec;26(11–12):747–55
Molecular genetic studies on alcohol and aldehyde dehydrogenase: individual variation, gene mapping and analysis of regulation. Smith M. **Biochem Soc Trans** 1988 Jun;16(3):227–30
Variability in the amino terminus of myosin light chain 1. Rushbrook JI, et al. **Biochemistry** 1988 Dec 13; 27(25):8953–8
Downregulation of cell growth and cell cycle regulated genes during chick osteoblast differentiation with the reciprocal expression of histone gene variants. Shalhoub V, et al. **Biochemistry** 1989 Jun 27;28(13):5318–22
Fetal and variant alpha–fetoproteins are encoded by mRNAs that differ in sequence at the 5' end. Wan YJ, et al. **Biochemistry** 1988 Sep 20;27(19):7269–76
Genetics of surface protein variation in Neisseria gonorrhoeae. Murphy GL, et al. **Bioessays** 1988 Jul; 9(1):7–11 (30 ref.)
Demonstration of glycosylation variants of human fibrinogen, using the new technique of glycoprotein lectin immunosorbent assay (GLIA). Köttgen E, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1157–66
Genetic variants of the insulin receptor in type II (non–insulin dependent) diabetes mellitus. Galton DJ, et al. **Biomed Biochim Acta** 1988;47(4–5):323–7
Isolation and characterization of the factor X Friuli variant. Fair DS, et al. **Blood** 1989 Jun;73(8):2108–16
Megakaryocyte and hepatocyte origins of human fibrinogen biosynthesis exhibit hepatocyte–specific expression of gamma chain–variant polypeptides. Haidaris PJ, et al. **Blood** 1989 Aug 1;74(2):743–50
Spectrin–alpha I/61: a new structural variant of alpha–spectrin in a double–heterozygous form of hereditary pyropoikilocytosis. Lawler J, et al. **Blood** 1988 Oct; 72(4):1412–5
Spectrin Tunis (Sp alpha I/78), an elliptocytogenic variant, is due to the CGG——TGG codon change (Arg——Trp) at position 35 of the alpha I domain. Morlé L, et al. **Blood** 1989 Aug 1;74(2):828–32
Should anti–Rh immunoglobulin be given D variant women? Lubenko A, et al. **Br J Haematol** 1989 Jul;72(3):429–33
Mitochondrial DNA variation in Drosophila pseudoobscura and related species in Pacific northwest populations. Hale LR, et al. **Can J Genet Cytol** 1985 Jun;27(3):357–64
"Variability gene" effect of cholesteryl ester transfer protein (CETP) genes. Berg K, et al. **Clin Genet** 1989 Jun; 35(6):437–45
Variant nucleolus organizing regions and the risk of Down syndrome. Green JE, et al. **Clin Genet** 1989 Apr; 35(4):243–50
Genetic heterogeneity between two clinical forms of cystic fibrosis evidenced by familial analysis and linked DNA probes. Mornet E, et al. **Clin Genet** 1989 Feb;35(2):81–7
Mouse strain variations in the magnitude of induction of liver DT–diaphorase and hereditary transmission of the trait. Horie S, et al. **Comp Biochem Physiol [B]** 1989;93(2):493–8
Differing attachment of diabetogenic and nondiabetogenic variants of encephalomyocarditis virus to beta–cells. Kaptur PE, et al. **Diabetes** 1989 Sep;38(9):1103–8
Genetic aspects of variation of protein amounts in maize and pea. de Vienne D, et al. **Electrophoresis** 1988 Nov; 9(11):742–50
Elevated plasma levels of haptoglobin in Duchenne muscular dystrophy:electrophoretic variants in patients with a severe form of the disease. John HA, et al. **Electrophoresis** 1989 Jul;10(7):489–93
Composition and genetic variability of proteins from nuclear fractions of mouse (DBA/2J and C57BL/6J) liver and brain. Jungblut P, et al. **Electrophoresis** 1989 Jul; 10(7):464–72
Isoelectric focusing in immobilized pH gradients with carrier ampholytes added for high–resolution phenotyping of bovine beta–lactoglobulins: characterization of a new genetic variant. Krause I, et al. **Electrophoresis** 1988 Sep; 9(9):609–13
Characterization of genetic variants of human serum transferrin by isoelectric focusing: comparison between conventional and immobilized pH gradients, and application to a protocol for paternity testing. Pascali VL, et al. **Electrophoresis** 1988 Aug;9(8):411–7
Genetic variations of human serum beta 2–glycoprotein I demonstrated by isoelectric focusing. Richter A, et al. **Electrophoresis** 1988 Jul;9(7):317–22
Rat ovarian insulin–like growth factor I (IGF–I) gene expression is granulosa cell–selective: 5'–untranslated mRNA variant representation and hormonal regulation. Hernandez ER, et al. **Endocrinology** 1989 Jul;125(1):572–4
Glycosylated human growth hormone variant. Ray J, et al. **Endocrinology** 1989 Jul;125(1):566–8
Evaluation of the use of S1 nuclease to detect small length variations in genomic DNA. Brookes AJ, et al. **Eur J Biochem** 1989 Aug 1;183(2):291–6
Nutritional adaptation and variability. Sukhatme PV. **Eur J Clin Nutr** 1989 Feb;43(2):75–87
Unexplained variations in life span of the Oregon–R strain of Drosophila melanogaster over a four–year period. Lints FA, et al. **Exp Gerontol** 1989;24(3):265–71
Single amino acid substitutions in sn–glycerol–3–phosphate dehydrogenase allozymes from Drosophila virilis. Tominaga H, et al. **Experientia** 1989 Mar 15;45(3):312–4
Variations in genome fragments coding for RNA polymerase in human and simian hepatitis A viruses. Balayan MS, et al. **FEBS Lett** 1989 Apr 24;247(2):425–8
Comparison of partial amino acid sequences of two protamine 2 variants from stallion sperm. Structural evidence that the variants are products of different genes. Pirhonen A, et al. **FEBS Lett** 1989 Feb 13;244(1):199–202
Clones containing variant forms of complete human rRNA genes. Characterization and sequence of their transcription initiation region. Renalier MH, et al. **FEBS Lett** 1989 Apr 24;247(2):298–302
Low–cytopathic infectious clone of human immunodeficiency virus type I (HIV–I). Sakai K, et al. **FEBS Lett** 1988 Oct 10;238(2):257–61
Species–specific variation in signal peptide design. Implications for protein secretion in foreign hosts. von Heijne G, et al. **FEBS Lett** 1989 Feb 27;244(2):439–46
A population–genetic study of crab–eating macaques (Macaca fascicularis) on the island of Angaur, Palau, Micronesia. Kawamoto Y, et al. **Folia Primatol (Basel)** 1988;51(4):169–81
Glucose phosphate isomerase variants in human bloodstains and seminal stains. Oya M, et al. **Forensic Sci Int** 1988 Oct;39(1):55–8
Sequence analysis of cloned dengue virus type 2 genome (New Guinea–C strain). Irie K, et al. **Gene** 1989 Feb 20; 75(2):197–211
Robust methods for the detection of genetic linkage for quantitative data from pedigrees. Amos CI, et al. **Genet Epidemiol** 1989;6(2):349–60
Estimation of genetic model parameters: variables correlated with a quantitative phenotype exhibiting major locus inheritance. Hasstedt SJ, et al. **Genet Epidemiol** 1989; 6(2):319–32
Phenylthiocarbamide taste sensitivity revisited: complete sorting test supports residual family resemblance. Reddy BM, et al. **Genet Epidemiol** 1989;6(3):413–21
Insertion–deletion variation at the yellow–achaete–scute region in two natural populations of Drosophila melanogaster. Beech RN, et al. **Genet Res** 1989 Feb; 53(1):7–15
Genic differentiation and origin of Robertsonian populations of the house mouse (Mus musculus domesticus Rutty). Britton–Davidian J, et al. **Genet Res** 1989 Feb;53(1):29–44
Quantitative genetic variability maintained by mutation–stabilizing selection balance in finite populations. Keightley PD, et al. **Genet Res** 1988 Aug;52(1):33–43
The epistasis of Adh and Gpdh allozymes and variation in the ethanol tolerance of Drosophila melanogaster larvae. McKechnie SW, et al. **Genet Res** 1988 Dec;52(3):179–84
Effects of identity disequilibrium and linkage on quantitative variation in finite populations. Tachida H, et al. **Genet Res** 1989 Feb;53(1):63–70
Parental age dependent changes as a source of genetic variation in Drosophila melanogaster. Marinković D, et al. **Genetica** 1988 Sep 30;77(2):113–21
A polymorphic variant of the lactate dehydrogenase B subunit in the rat. Stolc V. **Genetics** 1987 May 15;72(1):65–8
Patterns of variation in the rDNA cistron within and among world populations of a mosquito, Aedes albopictus (Skuse). Black WC, et al. **Genetics** 1989 Mar;121(3):539–50
Linkage and the maintenance of heritable variation by mutation–selection balance. Bürger R. **Genetics** 1989 Jan; 121(1):175–84
Linkage disequilibrium and genetic variances under mutation–selection balance. Hastings A. **Genetics** 1989 Apr; 121(4):857–60
Models of quantitative variation of flux in metabolic pathways [published erratum appears in Genetics 1989 Jul;122(3):719] Keightley PD. **Genetics** 1989 Apr;

121(4):869–76
Genetic correlations and maternal effect coefficients obtained from offspring–parent regression. Lande R, et al. **Genetics** 1989 Aug;122(4):915–22
Nucleotide variation and divergence in the histone multigene family in Drosophila melanogaster. Matsuo Y, et al. **Genetics** 1989 May;122(1):87–97
Molecular and phenotypic variation of the white locus region in Drosophila melanogaster. Miyashita N, et al. **Genetics** 1988 Sep;120(1):199–212
The maintenance of genetic variability in two–locus models of stabilizing selection. Nagylaki T. **Genetics** 1989 May; 122(1):235–48
Genetic variation in an inbred plant: variation in tissue cultures of soybean [Glycine max (L.) Merrill] Roth EJ, et al. **Genetics** 1989 Feb;121(2):359–68
Molecular evolution of the Escherichia coli chromosome. I. Analysis of structure and natural variation in a previously uncharacterized region between trp and tonB. Stoltzfus A, et al. **Genetics** 1988 Oct;120(2):345–58
A cladistic analysis of phenotype associations with haplotypes inferred from restriction endonuclease mapping. II. The analysis of natural populations. Templeton AR, et al. **Genetics** 1988 Dec;120(4):1145–54
Carcinoembryonic antigen family: characterization of cDNAs coding for NCA and CEA and suggestion of nonrandom sequence variation in their conserved loop–domains. Barnett T, et al. **Genomics** 1988 Jul; 3(1):59–66
Clustering of hypervariable minisatellites in the proterminal regions of human autosomes. Royle NJ, et al. **Genomics** 1988 Nov;3(4):352–60
Long–range restriction maps of Plasmodium falciparum chromosomes: crossingover and size variation among geographically distant isolates. Sinnis P, et al. **Genomics** 1988 Nov;3(4):287–95
Molecular characterization of a spontaneously generated new allele at a VNTR locus: no exchange of flanking DNA sequence. Wolff RK, et al. **Genomics** 1988 Nov;3(4):347–51
Hb N–Baltimore or beta 95(Fg2)Lys——Glu in Portugal. Anderson Fernandes BL. **Hemoglobin** 1989;13(1):83–7
Hb G–Coushatta or alpha 2 beta 222(B4)Glu——Ala in a Turkish male. Dinçol G, et al. **Hemoglobin** 1989;13(1):75–7
Biochemical genetic variation and population structure of fourhorn sculpin (Myoxocephalus quadricornis; Cottidae) in Scandinavia. Gyllensten U, et al. **Hereditas** 1988; 108(2):179–85
Electrophoretically detectable genetic variation in natural and hatchery stocks of Atlantic salmon in Finland. Koljonen ML. **Hereditas** 1989;110(1):23–35
Geographical patterns of karyotype polymorphism in Italian populations of Ornithogalum montanum (Liliaceae). Barbujani G, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):67–75
Inversion polymorphisms in Trimerotropis pallidipennis (Orthoptera): clinical variation along an altitudinal gradient. Confalonieri VA, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):107–12
Latitudinal variation of Adh gene frequencies in Drosophila melanogaster: a Mediterranean instability. David JR, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):11–6
Variation in the amount and activity of esterase 6 in a natural population of Drosophila melanogaster. Game AY, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):27–34
Microgeographic variation in rDNA intergenic spacers of Anopheles gambiae in western Kenya. McLain DK, et al. **Heredity (Edinburgh)** 1989 Apr;62 (Pt 2):257–64
Extreme chromosomal heterogeneity in a small–island population of Rumex acetosa. Parker JS, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):133–40
Mating system in rye: variability in relation to the population and plant density. Vaquero F, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):17–26
Population genetics of Polyphemus pediculus (Cladocera: Polyphemidae). Weider LJ. **Heredity (Edinburgh)** 1989 Feb; 62 (Pt 1):1–10
The many faces of human immunodeficiency virus. **Hosp Pract [Off]** 1989 Feb 15;24(2):49–50
Variation in the gene frequencies of three generations of humans from Monterrey, Nuevo León, Mexico. Cerda–Flores RM, et al. **Hum Biol** 1989 Apr;61(2):249–61
Anthropometric variation and the genetic structure of the Jirels of Nepal. Williams–Blangero S, et al. **Hum Biol** 1989 Feb;61(1):1–12
Clan–structured migration and phenotypic differentiation in the Jirels of Nepal. Williams–Blangero S. **Hum Biol** 1989 Apr;61(2):143–57
SCE variability in lymphocytes and fibroblasts. A controlled study. Lukusa T, et al. **Hum Genet** 1988 Oct;80(2):117–23
A new rare PGD variant, PGD Mediterranean. Nevo S. **Hum Genet** 1989 Jan;81(2):199
Heterogeneity of chromosomal breakage levels in epithelial tissue of ataxia–telangiectasia homozygotes and heterozygotes. Rosin MP, et al. **Hum Genet** 1989 Sep; 83(2):133–8
A new method for FXIIIA genetic variants determination using isoelectric focusing in 1 M urea. Evidence for three structural gene loci, FXIIIA1, FXIIIA2, and FXIIIA3. Sebetan IM. **Hum Genet** 1988 Dec;81(1):95–7
C4A7: a new variant of human complement C4. Abbal M, et al. **Hum Hered** 1988;38(6):363–6
Possible influence of major gene heterozygosity on variation of quantitative traits. Bishop GR, et al. **Hum Hered** 1988; 38(4):216–27
Biochemical variation in the Sunni Muslims of Pulwama district, Jammu and Kashmir. Chahal SM, et al. **Hum Hered** 1989;39(2):113–5
Apolipoprotein A–IV polymorphism in the Finnish population: gene frequencies and description of a rare allele. Lukka M, et al. **Hum Hered** 1988;38(6):359–62
Population studies in northern Sweden. XIV. Variation of the A1A2B0 blood group gene frequencies. Nylander PO, et al. **Hum Hered** 1988;38(5):291–302
Rare apolipoprotein E variant cosegregating with a unique APOE–C1–C2 haplotype in a normolipidemic family. Smit M, et al. **Hum Hered** 1988;38(5):277–82
A PGM1*1A variant with a reduced activity. Suzuki K, et al. **Hum Hered** 1988;38(5):326–8
Variants of HLA–DRw52 defined by T lymphocyte clones. Mickelson EM, et al. **Hum Immunol** 1988 Aug;22(4):263–74
Molecular evidence of genetic heterogeneity in Wistar–Kyoto rats: implications for research with the spontaneously hypertensive rat. Kurtz TW, et al. **Hypertension** 1989 Feb;13(2):188–92
The "Sardinian" HLA–A30,B18,DR3,DQw2 haplotype constantly lacks the 21–OHA and C4B genes. Is it an ancestral haplotype without duplication? Contu L, et al. **Immunogenetics** 1989;30(1):13–7
Human class II DNA and DOB genes display low sequence variability. Jonsson AK, et al. **Immunogenetics** 1989; 29(6):411–3
Analysis of HLA–B35 variants and B35 haplotypes by isoelectric focusing and Southern blot analysis. Lederer E, et al. **Immunogenetics** 1989;30(1):63–5
Allelic variation in HLA–B and HLA–C sequences and the evolution of the HLA–B alleles. Pohla H, et al. **Immunogenetics** 1989;29(5):297–307
Genetic control of variation in human gingival fibroblast proliferation rate. Cockey GH, et al. **In Vitro Cell Dev Biol** 1989 Mar;25(3 Pt 1):255–8
Hybridization of Escherichia coli producing Shiga–like toxin I, Shiga–like toxin II, and a variant of Shiga–like toxin II with synthetic oligonucleotide probes. Brown JE, et al. **Infect Immun** 1989 Sep;57(9):2811–4
Deoxyribonucleic acid relatedness and phenotypic variation among human isolates of Eikenella corrodens. Göthe E, et al. **Int J Med Microbiol** 1989 May;271(1):61–9
Electrophoretic analysis of genetic variation in Echinococcus granulosus from domestic hosts in Australia. Lymbery AJ, et al. **Int J Parasitol** 1988 Sep;18(6):803–11
Geographic variation in Giardia karyotypes. Upcroft JA, et al. **Int J Parasitol** 1989 Aug;19(5):519–27
HIV–1 isolates are rapidly evolving quasispecies: evidence for viral mixtures and preferred nucleotide substitutions. Goodenow M, et al. **J Acquir Immune Defic Syndr** 1989; 2(4):344–52
Isozyme variation in Simulium (Edwardsellum) damnosum s.l. (Diptera: Simuliidae) from Kenya. Mebrahtu Y, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):196–200
Nucleotide sequence of IS492, a novel insertion sequence causing variation in extracellular polysaccharide production in the marine bacterium Pseudomonas atlantica. Bartlett DH, et al. **J Bacteriol** 1989 Mar;171(3):1763–6
High–frequency variation in Mycoplasma pulmonis colony size. Dybvig K, et al. **J Bacteriol** 1989 Sep;171(9):5165–8
Saturation mutagenesis of an Escherichia coli rRNA promoter and initial characterization of promoter variants. Gaal T, et al. **J Bacteriol** 1989 Sep;171(9):4852–61
A single base mutation that converts glycine 907 of the alpha 2(I) chain of type I procollagen to aspartate in a lethal variant of osteogenesis imperfecta. The single amino acid substitution near the carboxyl terminus destabilizes the whole triple helix. Baldwin CT, et al. **J Biol Chem** 1989 Feb 15;264(5):3002–6
Detection of 10 variants of biliverdin reductase in rat liver by two–dimensional gel electrophoresis. Huang TJ, et al. **J Biol Chem** 1989 May 15;264(14):7844–9
A novel amino acid substitution in the reactive site of a congenital variant antithrombin. Antithrombin pescara, ARG393 to pro, caused by a CGT to CCT mutation. Lane DA, et al. **J Biol Chem** 1989 Jun 15;264(17):10200–4
Disruption of the 290–342 salt bridge is not responsible for the secretory defect of the PiZ alpha 1–antitrypsin variant. Sifers RN, et al. **J Biol Chem** 1989 Feb 15;264(5):2997–3001
Expression of asparagine independence in variants of ICR 2A haploid frog cells. Hepler CE, et al. **J Cell Physiol** 1989 Apr;139(1):175–80
Analysis of cell variants showing differential susceptibilities to radiation– or chemical–induced neoplastic transformation: differences in their responses to growth factors. Tatsuka M, et al. **J Cell Physiol** 1989 Apr; 139(1):18–23
Plasma cholinesterase genetic variants phenotyped using a Cobas–Fara centrifugal analyser. Brock A. **J Clin Chem Clin Biochem** 1988 Dec;26(12):873–5
Characterization and histologic localization of human growth hormone–variant gene expression in the placenta. Liebhaber SA, et al. **J Clin Invest** 1989 Jun;83(6):1985–91
Molecular cloning and nucleotide sequence of complementary DNAs encoding human short chain acyl–coenzyme A dehydrogenase and the study of the molecular basis of human short chain acyl–coenzyme A dehydrogenase deficiency. Naito E, et al. **J Clin Invest** 1989 May;83(5):1605–13
Type III hyperlipoproteinemia associated with apolipoprotein E phenotype E3/3. Structure and genetics of an apolipoprotein E3 variant. Rall SC Jr, et al. **J Clin Invest** 1989 Apr;83(4):1095–101
Sequence of the variant thyroxine–binding globulin of Australian aborigines. Only one of two amino acid replacements is responsible for its altered properties. Takeda K, et al. **J Clin Invest** 1989 Apr;83(4):1344–8
Genetic diversity within Streptococcus mutans evident from chromosomal DNA restriction fragment polymorphisms [published erratum appears in J Clin Microbiol 1989 Aug;27(8):1918] Caufield PW, et al. **J Clin Microbiol** 1989 Feb;27(2):274–8
Genome variants of human adenovirus types 40 and 41 (subgroup F) in Japan. Shinozaki T, et al. **J Clin Microbiol** 1988 Dec;26(12):2567–71
Genetic and environmental factors in the longitudinal growth of rats: II. Ventrodorsal craniofacial size. Nonaka K, et al. **J Craniofac Genet Dev Biol** 1988;8(4):329–35
Genetic and environmental factors in the longitudinal growth of rats: III. Craniofacial shape change. Nonaka K, et al. **J Craniofac Genet Dev Biol** 1988;8(4):337–44
Genetic and environmental factors in the longitudinal growth of rats: I. Body weight and overall craniofacial size. Nonaka K, et al. **J Craniofac Genet Dev Biol** 1988;8(4):319–27
Heritabilities of and genetic correlations among six health problems in Holstein cows. Lin HK, et al. **J Dairy Sci** 1989 Jan;72(1):180–6
Repetitive deoxyribonucleic acid (DNA) and human genome variation—a concise review relevant to forensic biology. Fowler JC, et al. **J Forensic Sci** 1988 Sep;33(5):1111–26 (133 ref.)
Genetic diversity of African swine fever virus isolates from soft ticks (Ornithodoros moubata) inhabiting warthog burrows in Zambia. Dixon LK, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):2981–93
A herpes simplex virus type 2 variant in which a deletion across the L–S junction is replaced by single or multiple reiterations of extraneous DNA. Harland J, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2121–37
Detection of reassortant orbiviruses (Wallal serogroup) in a prototype strain isolated from a pool of biting midges (Culicoides dycei). Walker PJ, et al. **J Gen Virol** 1989 Apr; 70 (Pt 4):1011–6
Genetic diversity within and between natural populations of Rattus norvegicus. Cramer DV, et al. **J Hered** 1988 Sep–Oct;79(5):319–24
Inbreeding, coancestry, and covariance between relatives for X–chromosomal loci. Grossman M, et al. **J Hered** 1989 Mar–Apr;80(2):137–42
Genetic control of juvenile growth rate in mice: variation between a congenic strain and its background strain. Lutz SE, et al. **J Hered** 1989 Jul–Aug;80(4):264–7
Prevalence of antigen receptor variants in human T cell lines and tumors. Maecker HT, et al. **J Immunol** 1989 Feb 15; 142(4):1395–404
Spontaneous T cell antigen receptor variants of a human T leukemia cell line. Maecker HT, et al. **J Immunol** 1988 Nov 1;141(9):2994–3002
Molecular characterization by high resolution isoelectric focusing of the products encoded by the class II region loci of the MHC in humans. II. DP alpha and DP beta gene variants. Rodriguez de Cordoba S, et al. **J Immunol** 1989 Feb 1;142(3):836–41
Variability of CR2 gene products is due to alternative exon usage and different CR2 alleles. Toothaker LE, et al. **J Immunol** 1989 May 15;142(10):3668–75
Idiotype variants emerging after anti–idiotype monoclonal antibody therapy of a murine B cell lymphoma. Weiner GJ, et al. **J Immunol** 1989 Jan 1;142(1):343–51
Genotypic variation in pathogenic Escherichia coli O157:H7 isolated from patients in Washington, 1984–1987. Tarr PI, et al. **J Infect Dis** 1989 Feb;159(2):344–7
Intrafamilial phenotypic variability in citrullinaemia: report of a family. Issa AR, et al. **J Inherited Metab Dis** 1988; 11(3):306–7
Dichotomous electrophoretic taxonomic key for identification of sibling species A, B, and C of the Anopheles quadrimaculatus complex (Diptera: Culicidae). Narang SK, et al. **J Med Entomol** 1989 Mar;26(2):94–9
A new high activity plasma cholinesterase variant. Krause A, et al. **J Med Genet** 1988 Oct;25(10):677–81
Becker muscular dystrophy (BMD) and Klinefelter's syndrome: a possible cause of variable expression of BMD within a pedigree. Suthers GK, et al. **J Med Genet** 1989 Apr;26(4):251–4
Four DNA polymorphisms in the LDL receptor gene: their genetic relationship and use in the study of variation at the LDL receptor locus. Taylor R, et al. **J Med Genet** 1988 Oct;25(10):653–9
Demonstration of a functional variant of chloramphenicol acetyltransferase in Haemophilus influenzae. Smith MD, et al. **J Med Microbiol** 1989 Aug;29(4):263–8
Genetic diversity among simian immunodeficiency virus isolates from African green monkeys. Johnson PR, et al. **J Med Primatol** 1989;18(3–4):271–7
Genetic diversity of simian immunodeficiency virus. Li Y, et al. **J Med Primatol** 1989;18(3–4):261–9
Protein and nucleic acid analysis of influenza B viruses isolated in Italy in 1984. Donatelli I, et al. **J Med Virol** 1989 Mar;27(3):201–9
The effects of guanine and cytosine variation on dinucleotide

frequency and amino acid composition in the human genome. Hanai R, et al. **J Mol Evol** 1988;27(4):321–5
Variation in salmonid mitochondrial DNA: evolutionary constraints and mechanisms of substitution. Thomas WK, et al. **J Mol Evol** 1989 Sep;29(3):233–45
Developmental study of myelin basic protein variants in various regions of pig nervous system. Sheng HZ, et al. **J Neurochem** 1989 Mar;52(3):736–40
Large genetic heterogeneity within amoebas of the species Naegleria gruberi and evolutionary affinities to the other species of the genus. Pernin P, et al. **J Protozool** 1989 Mar–Apr;36(2):179–81
Comparative affinity of the major genetic variants of human group-specific component (vitamin D–binding protein) for 25–(OH) vitamin D. Boutin B, et al. **J Steroid Biochem** 1989 Jan;32(1A):59–63
Differences in cytopathogenicity and host cell range among infectious molecular clones of human immunodeficiency virus type 1 simultaneously isolated from an individual. Sakai K, et al. **J Virol** 1988 Nov;62(11):4078–85
The genetic variation and the expression of human glutathione transferase mu. Seidegård J, et al. **Klin Wochenschr** 1988;66 Suppl 11:125–6
Stability of multiple antigen receptor gene rearrangements and immunophenotype in Hodgkin's disease–derived cell line L428 and variant subline L428KSA. Athan ES, et al. **Leukemia** 1989 Jul;3(7):505–10
Limited genetic diversity of Haemophilus influenzae (type b). Allan I, et al. **Microb Pathog** 1987 Feb;2(2):139–45
Genetic mechanisms of bacterial antigenic variation. Seifert HS, et al. **Microbiol Rev** 1988 Sep;52(3):327–36 (94 ref.)
Structural alterations of chromosome 2 in Leishmania major as evidence for diploidy, including spontaneous amplification of the mini–exon array. Iovannisci DM, et al. **Mol Biochem Parasitol** 1989 May 1;34(2):177–88
Requirement of one functional RAS gene and inability of an oncogenic ras variant to mediate the glucose–induced cyclic AMP signal in the yeast Saccharomyces cerevisiae. Mbonyi K, et al. **Mol Cell Biol** 1988 Aug;8(8):3051–7
An element with long terminal repeats and its variant arrangements in the genome of Lilium henryi. Sentry JW, et al. **Mol Gen Genet** 1989 Jan;215(2):349–54
Reiterated DNA sequences defining genomic diversity within the species Mycoplasma hyorhinis. Taylor MA, et al. **Mol Microbiol** 1988 Sep;2(5):665–72
Chromosomal instability in an oxygen–tolerant variant of Chinese hamster ovary cells. Gille JJ, et al. **Mutat Res** 1989 Jan;219(1):17–28
Fingerprinting trials. **Nature** 1989 Jun 15;339(6225):491–2
The 5S rRNA–histone repeat in the crustacean Artemia: structure, polymorphism and variation of the 5S rRNA segment in different populations. Cruces J, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6283–97
Species variation in transcription factor IIIA. Gaskins CJ, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):781–94
Human type III collagen 'variant' is a cDNA cloning artefact. Molyneux K, et al. **Nucleic Acids Res** 1988 Dec 23; 16(24):11833
Substitution of an invariant nucleotide at the base of the highly conserved '530–loop' of 15S rRNA causes suppression of yeast mitochondrial ochre mutations. Shen ZH, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4535–9
Hypervariability of simple sequences as a general source for polymorphic DNA markers. Tautz D. **Nucleic Acids Res** 1989 Aug 25;17(16):6463–71
G6PD mahidol, a common deficient variant in South East Asia is caused by a (163)glycine——serine mutation. Vulliamy TJ, et al. **Nucleic Acids Res** 1989 Jul 25; 17(14):5868
Gantzer's muscle–like variation inserted into the forearm flexor retinaculum. Kida M, et al. **Okajimas Folia Anat Jpn** 1989 May;66(1):1–11
Differentiation of Schistosoma mansoni from S. rodhaini using cloned DNA probes. Walker TK, et al. **Parasitology** 1989 Feb;98 (Pt 1):75–80
Genetically determined variation in the immune system: implications for host defense. Winkelstein JA, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S31–4 (15 ref.)
Frequency dependence and competition. Christiansen FB. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6; 319(1196):587–600
The evolution of aggression: can selection generate variability? Maynard Smith J, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6;319(1196):557–70
Relative roles of mutation and selection in the maintenance of genetic variability. Nei M. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6;319(1196):615–29
Preliminary studies on combiners and combinations for quality traits in tomato (Lycopersicon esculentum Mill.). Patil AA, et al. **Plant Foods Hum Nutr** 1988;38(1):43–9
Genetic variation of plasma growth hormone and its genetic association with growth traits in young chickens. Scott TR, et al. **Poult Sci** 1988 Dec;67(12):1781–2
Erythrocyte alloantigen diversity and some immunological effects of the B system in related New Hampshire strains. Scott TR, et al. **Poult Sci** 1988 Aug;67(8):1210–7
Point substitutions in Japanese alloalbumins. Arai K, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6092–6
Amino acid substitutions in albumin variants found in Brazil. Arai K, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(6):1821–5
Identical structural changes in inherited albumin variants from different populations. Arai K, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):434–8
Toward a population genetic analysis of Salmonella: genetic diversity and relationships among strains of serotypes S. choleraesuis, S. derby, S. dublin, S. enteritidis, S. heidelberg, S. infantis, S. newport, and S. typhimurium. Beltran P, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(20):7753–7
Rapid typing of tandemly repeated hypervariable loci by the polymerase chain reaction: application to the apolipoprotein B 3' hypervariable region. Boerwinkle E, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):212–6
Localization of human ERBA2 to the 3p22——3p24.1 region of chromosome 3 and variable deletion in small cell lung cancer. Drabkin H, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9258–62
Rearrangement by inversion of a T–cell receptor delta variable region gene located 3' of the delta constant region gene. Korman AJ, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):267–71
Human T–cell–receptor delta chain: genomic organization, diversity, and expression in populations of cells. Loh EY, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9714–8
Identification of the structural mutation responsible for the dibucaine–resistant (atypical) variant form of human serum cholinesterase. McGuire MC, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):953–7
Effect of mutations and variations of HLA–A2 on recognition of a virus peptide epitope by cytotoxic T lymphocytes. McMichael AJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9194–8
Nucleotide changes in sequential variants of influenza virus hemagglutinin genes and molecular structures of corresponding monoclonal antibodies specific for each variant. Meek K, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4664–8
Evolutionary genetics of the encapsulated strains of Haemophilus influenzae. Musser JM, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7758–62
Two sodium–channel genes in Drosophila: implications for channel diversity. Ramaswami M, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2079–82
Identification of a human transcription unit affected by the variant chromosomal translocations 2;8 and 8;22 of Burkitt lymphoma. Shtivelman E, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3257–60
Tissue–specific genetic variation in the level of mouse alcohol dehydrogenase is controlled transcriptionally in kidney and posttranscriptionally in liver. Tussey L, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5903–7
Analyzing variation in egg–to–adult viability in experimental populations of Drosophila melanogaster. Wallace B. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2117–21
Major microheterogeneity of alpha 1–acid glycoprotein in management of patients with rheumatic diseases. Mackiewicz A, et al. **Prog Clin Biol Res** 1989;300:219–22
Human plasma alpha 1–acid glycoprotein—biochemical properties, the amino acid sequence and the structure of the carbohydrate moiety, variants and polymorphism. Schmid K. **Prog Clin Biol Res** 1989;300:7–22 (37 ref.)
Intraindividual tissue–specific variations in organization of genes coding for the Na,K–ATPase subunits. Sverdlov ED, et al. **Prog Clin Biol Res** 1988;268B:135–42
One selectionist's perspective. Wallace B. **Q Rev Biol** 1989 Jun;64(2):127–45 (66 ref.)
Regulation of the synthesis of heat–shock proteins in heat–resistant variants of Chinese hamster fibroblasts. Laszlo A. **Radiat Res** 1988 Dec;116(3):427–41
Radiation response of drug–resistant variants of a human breast cancer cell line. Lehnert S, et al. **Radiat Res** 1989 Jun;118(3):568–80
Generational variability in the patterns of motor activity circadian rhythm in the rats. Cambras T, et al. **Rev Esp Fisiol** 1988 Sep;44(3):243–6
Allelic variation linked to adenine phosphoribosyltransferase locus in mouse teratocarcinoma cell line and feral–derived mouse strains. Turker MS, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):159–66
Genetic variation in the malaria mosquito vector Anopheles maculatus from Peninsular Malaysia. Yong HS, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):681–7
Morphological and functional variations in the transplantable lymph node metastasis of a human tongue carcinoma. Arnold W, et al. **Strahlenther Onkol** 1989 Jul;165(7):490–1
Morphologic instability of transplanted soft tissue sarcomas. Donhuijsen K, et al. **Strahlenther Onkol** 1989 Jul; 165(7):489–90
Investigations on the individuality of tumours from 20 xenotransplanted sarcomas on nude mice. Steinberg F, et al. **Strahlenther Onkol** 1989 Jul;165(7):504–5
On the evolution of genetic incompatibility systems. III. Introduction of weak gametophytic self–incompatibility under partial inbreeding. Uyenoyama MK. **Theor Popul Biol** 1988 Aug;34(1):47–91
Homozygous variant of antithrombin III that lacks affinity for heparin, AT III Kumamoto. Okajima K, et al. **Thromb Haemost** 1989 Feb 28;61(1):20–4
Somaclonal variation—genetic basis and breeding applications. Evans DA. **Trends Genet** 1989 Feb;5(2):46–50 (29 ref.)
Genetic variation between New Zealand and Western Samoan isolates of Aujeszky's disease virus. Tisdall DJ, et al. **Vet Microbiol** 1988 Aug;17(4):335–43
Identification of genetic variation between strains of bluetongue virus serotype 11 using cDNA probes. Dunn SJ, et al. **Virology** 1989 Jun;170(2):578–82
Genetic heterogeneity of the RNA genome population of the plant virus U5–TMV. Rodríguez–Cerezo E, et al. **Virology** 1989 Jun;170(2):418–23
Sequence variation of the P gene among mumps virus strains. Yamada A, et al. **Virology** 1989 Sep;172(1):374–6
Anti–U recognizing a variant of the U–blood group. Mentor J, et al. **Vox Sang** 1989;56(1):62
A very slow BF variant (S085) detected in a Japanese population. Kido A, et al. **Z Rechtsmed** 1988;101(1):45–8
Genome type analysis of certain adenovirus serotypes of subgenus D. Adrian T, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):527–33
[The expression of a new bifunctional vector for cloning in Bacillus thuringiensis subsp. israelensis and its deletion variants] Miteva V, et al. **Acta Microbiol Bulg** 1988;23:22–8 (Eng. Abstr.) (Bul)
[Genetic diversity in chronic juvenile arthritis] Job–Deslandre C. **Presse Med** 1989 May 27;18(21):1054–6 (Fre)
[Genetic variants of human albumin: structural characterization of allotypes used as references for electrophoretic classification] Rochu D, et al. **Rev Fr Transfus Immunohematol** 1988 Dec;31(5):725–33 (Eng. Abstr.) (Fre)
[A new glucose 6–phosphate dehydrogenase (G6PD) variant (G6PD Niigata) with chronic hemolysis and liver hemochromatosis] Chiba Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan;78(1):41–7 (Jpn)
[Computer analysis of genetic variation in AIDS viruses] Tajima K. **Nippon Rinsho** 1989 Jan;47(1):175–82 (Jpn)
[Reduction of actinomycin biosynthesis during protoplast regeneration in an inactive variant producer] Orlova TI, et al. **Antibiot Khimioter** 1988 Jul;33(7):486–90 (Eng. Abstr.) (Rus)
[The role of hereditary and environmental factors in the variability of the components comprising the mass of the human upper extremity at various stages of postnatal ontogeny] Kogan BI, et al. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):75–80 (Eng. Abstr.) (Rus)
[Determination of the indices of genetic similarity and diversity using programmable microcomputers] Polupan IuP, et al. **Biol Nauki** 1988;(7):105–9 (Eng. Abstr.) (Rus)
[Characteristics of the phenotypic variability in the levels of DNA autoantibodies in healthy persons] Nesvizhskii IuV, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):585–7 (Eng. Abstr.) (Rus)
[Variability and inheritability of the "level of endogenous SH groups" trait in cell and clone populations of transplantable rat tumors] Ismailov BI, et al. **Eksp Onkol** 1989;11(3):73–6 (Eng. Abstr.) (Rus)
[Phenotypical and genetic differentiation of human populations for morphological and psychophysiological traits. Factor analysis] Bulaeva KB, et al. **Genetika** 1988 Oct;24(10):1882–8 (Eng. Abstr.) (Rus)
[Integral evaluation of phenotypic and genotypic variability of morphologic and psychophysiologic human traits] Bulaeva KB, et al. **Genetika** 1988 Dec;24(12):2208–13 (Eng. Abstr.) (Rus)
[Inversion polymorphism of the malaria mosquito Anopheles messeae. VIII. Distribution of larvae in biotopes under conditions of co–habitation with Anopheles beklemishevi] Gordeev MI, et al. **Genetika** 1989 Feb;25(2):283–91 (Eng. Abstr.) (Rus)
[The variability of arboviruses reproducing in vectors and their cell and tissue cultures] Khozinskaia GA, et al. **Med Parazitol (Mosk)** 1988 May–Jun;(3):3–8 (42 ref.) (Rus)
[Interferon–forming activity of genetic variants of the Sabin type–II poliovirus differing in affinity for bentonite] Frolova IA. **Mikrobiol Zh** 1988 Jul–Aug;50(4):91–2 (Eng. Abstr.) (Rus)
[Lysogeny of strains of Xanthomonas campestris and their variants] Gvozdiak RI, et al. **Mikrobiol Zh** 1987 Jan–Feb; 49(1):9–12 (Eng. Abstr.) (Rus)
[The role of the variability of gonococci in the development of therapeutic–prophylactic measures in gonorrhea] Mavrov II, et al. **Mikrobiol Zh** 1987 Jul–Aug;49(4):62–4 (Eng. Abstr.) (Rus)
[Variability of Pseudomonas aeruginosa 1C—a degrader of alkylsulfates] Stavskaia SS, et al. **Mikrobiol Zh** 1987 Mar–Apr;49(2):3–6 (Eng. Abstr.) (Rus)
[Biological properties and the molecular structure of variants of the influenza virus isolated from the body of mice during persistent infection] Viktorova LM, et al. **Mikrobiol Zh** 1988 Mar–Apr;50(2):63–9 (Eng. Abstr.) (Rus)
[Variability of Bacillus thuringiensis bacteriophages with C2–morphology] Kuzin AI, et al. **Mol Gen Mikrobiol Virusol** 1988 Dec;(12):29–33 (Eng. Abstr.) (Rus)
[Heterogeneity of globin protein synthesis in bone marrow cells of patients with homozygous beta–thalassemia from Tadzhikistan] Nasyrova FIu, et al. **Mol Gen Mikrobiol Virusol** 1988 Oct;(10):34–40 (Eng. Abstr.) (Rus)
[Interrelations of genetic markers (HLA antigens and

haptoglobin variants) and the course of fibrous-cavernous pulmonary tuberculosis] Sadykov AS, et al. **Ter Arkh** 1988; 60(11):97–100 (Eng. Abstr.) (Rus)

[A new variant of chromosome 1 in the house mouse] Agul'nik SI, et al. **Tsitologiia** 1988 Jun;30(6):773–6 (Eng. Abstr.) (Rus)

[Reproducible chromosomal instability of an established Chinese hamster cell line detectable by flow cytometry] Filatov MV, et al. **Tsitologiia** 1988 Aug;30(8):999–1007 (Eng. Abstr.) (Rus)

[Sequence divergence of the mitochondrial DNA of Pacific Ocean salmon] Ginatulina LK, et al. **Zh Evol Biokhim Fiziol** 1988 Jul–Aug;24(4):477–83 (Eng. Abstr.) (Rus)

[Differentiation of virulent strains of Shigella and entero-invasive Escherichia from their avirulent variants using modified indirect immunoenzyme analysis] Nastichkin IA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):55–61 (Eng. Abstr.) (Rus)

[Isolation of strains of a new ecological variant of Staphylococcus aureus from asses] Orzuev MI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):16–8 (Eng. Abstr.) (Rus)

[The role of genotype and environment in shaping the interindividual variability of brain potentials related to movement] Malykh SB, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1003–9 (Eng. Abstr.) (Rus)

DRUG EFFECTS

[Interferon-inducing activity and sensitivity to urea of Machupo virus variants] Trofimov NM, et al. **Vopr Virusol** 1989 Mar–Apr;34(2):234–6 (Rus)

VARICELLA see CHICKENPOX

VARICELLA-ZOSTER VIRUS

Varicella zoster-associated neurologic disease without skin lesions. Mayo DR, et al. **Arch Neurol** 1989 Mar;46(3):313–5

Giant cell pneumonia caused by varicella zoster virus in a neonate. Saito F, et al. **Arch Pathol Lab Med** 1989 Feb; 113(2):201–3

[A regrettable lapse (letter)] Frankl J. **Orv Hetil** 1988 Jun 19;129(25):1343 (Hun)

DRUG EFFECTS

Inhibition of varicella-zoster virus-induced DNA polymerase by a new guanosine analog, 9-[4-hydroxy-2-(hydroxymethyl)butyl]guanine triphosphate. Abele G, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1137–42

Improvement of the absorption of oral (R,S)-9-[4-hydroxy-2-(hydroxymethyl)butyl]guanine, an anti-varicella-zoster virus drug, in rats and monkeys. Lake-Bakaar DM, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):110–2

Pharmacokinetics and antiviral activity in simian varicella virus-infected monkeys of (R,S)-9-[4-hydroxy-2-(hydroxymethyl) butyl]guanine, an anti-varicella-zoster virus drug. Lake-Bakaar DM, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1807–12

Evaluation of varicella-zoster antiviral drugs by a nucleic acid hybridization assay. Stanberry LR, et al. **Antiviral Res** 1988 Sep;9(6):367–77

Mechanism of selective inhibition of varicella zoster virus replication by 1-beta-D-arabinofuranosyl-E-5-(2-bromovinyl)uracil. Yokota T, et al. **Mol Pharmacol** 1989 Aug;36(2):312–6

[Toxicologic research on the antiherpetic preparation viracin and its effect on fetal development] Boiadzhieva N. **Akush Ginekol (Sofiia)** 1988;27(5):8–11 (Eng. Abstr.) (Bul)

ENZYMOLOGY

2-Acetylpyridine 5-[(dimethylamino)thiocarbonyl]-thiocarbonohydrazone (A1110U), a potent inactivator of ribonucleotide reductases of herpes simplex and varicella-zoster viruses and a potentiator of acyclovir. Spector T, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1051–5

Varicella zoster virus deoxythymidine kinase is present in serum before the onset of varicella. Källander CF, et al. **Scand J Infect Dis** 1989;21(3):255–7

GENETICS

Molecular analysis of the thymidine kinase gene of thymidine kinase-deficient mutants of varicella-zoster virus. Mori H, et al. **Intervirology** 1988;29(6):301–10

Molecular analysis of the pyrimidine deoxyribonucleoside kinase gene of wild-type and acyclovir-resistant strains of varicella-zoster virus. Sawyer MH, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2585–93

Investigation of varicella-zoster virus infection of lymphocytes by in situ hybridization. Koropchak CM, et al. **J Virol** 1989 May;63(5):2392–5

Identification of new protein kinase-related genes in three herpesviruses, herpes simplex virus, varicella-zoster virus, and Epstein-Barr virus. Smith RF, et al. **J Virol** 1989 Jan; 63(1):450–5

Transcription mapping of glycoprotein I (gpI) and gpIV of varicella-zoster virus and immunological analysis of the gpI produced in cells infected with the recombinant vaccinia virus. Kato T, et al. **Microbiol Immunol** 1989; 33(4):299–312

Regulation of thymidine kinase activity in mouse L cells biochemically transformed by varicella-zoster virus. Shiraki K, et al. **Microbiol Immunol** 1989;33(8):693–8

Biotinylated and radioactive DNA probes for detection of varicella-zoster virus genome in infected human cells. Cuthbertson G, et al. **Mol Cell Probes** 1988 Sep; 2(3):197–207

Detection of cytomegalovirus by dot-blot DNA hybridization using probes labelled with 32P by nick translation or random hexanucleotide priming. Kimpton CP, et al. **Mol Cell Probes** 1988 Sep;2(3):181–8

Evidence for genetic relationship between RNA and DNA viruses from the sequence homology of a putative polymerase gene of bluetongue virus with that of vaccinia virus: conservation of RNA polymerase genes from diverse species. Roy P, et al. **Nucleic Acids Res** 1988 Dec 23; 16(24):11759–67

Patterns of gene expression and sites of latency in human nerve ganglia are different for varicella-zoster and herpes simplex viruses. Croen KD, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9773–7

Computer-assisted primary and secondary structure analyses of DNA polymerases of herpes simplex, Epstein-Barr and varicella zoster viruses reveal conserved domains with some homology to DNA-binding domain in E. coli DNA pol I. Becker Y. **Virus Genes** 1988 Jul;1(4):351–67

[Structure and functional analysis of genomes of herpesviruses: varicella-zoster virus] Hayakawa Y, et al. **Nippon Rinsho** 1989 Feb;47(2):302–8 (Jpn)

[DNA diagnosis and epidemiologic analysis of varicella-zoster virus infection] Hondo R. **Nippon Rinsho** 1989 Feb;47(2):331–9 (Jpn)

GROWTH & DEVELOPMENT

A simple and sensitive assay for varicella-zoster virus. Ilobi CP, et al. **J Virol Methods** 1989 Feb;23(2):137–48

IMMUNOLOGY

Clinical use of Oka live varicella vaccine. Kamiya H, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Oct;30(5):594–600

Development and characteristics of Oka strain of live varicella vaccine. Takahashi M. **Acta Paediatr Jpn Overseas Ed** 1988 Apr;30(2):185–93 (47 ref.)

Experimental activation of latent cytomegalovirus infection of the captive bred (F1) cynomolgus monkeys by live or killed varicella-zoster virus inoculated under immunosuppression. Ohtaki S, et al. **Acta Pathol Jpn** 1988 Aug;38(8):967–78

Varicella-zoster virus IgG antibodies during primoinfection in competent and transfer factor modulated immunocompromised host: comparison of three indirect assays. Zachar V, et al. **Acta Virol (Praha)** 1988 May; 32(3):243–51

Use of recombinant vaccinia viruses to examine cytotoxic T lymphocyte recognition of individual viral proteins. Yewdell J, et al. **Adv Exp Med Biol** 1988;239:151–61 (40 ref.)

Varicella serology in institutional exposure management. Sulkes SB, et al. **Am J Ment Retard** 1988 Sep;93(2):113–7

Screening for varicella-zoster immunity and the use of varicella zoster immune globulin in pregnancy [letter] Greenspoon JS, et al. **Am J Obstet Gynecol** 1989 Apr; 160(4):1020–2

Production of polyclonal antisera against cytomegalovirus and varicella-zoster virus by use of affinity-purified viral antigens. Ukkonen P. **APMIS** 1989 Mar;97(3):267–73

Serology in facial paralysis caused by clinically presumed herpes zoster infection. Njoo FL, et al. **Arch Otorhinolaryngol** 1988;245(4):230–3

Inhibition of varicella-zoster virus in vitro by human peripheral blood mononuclear cells. Rabalais GP, et al. **Clin Exp Immunol** 1989 Mar;75(3):381–6

Screening of antibodies to varicella-zoster virus in leukemic patients: comparison of commercial methods of enzyme-immunoassay and fluoroimmunoassay. de Ory F, et al. **Diagn Microbiol Infect Dis** 1988 May;10(1):61–4

Detection of antibodies to varicella-zoster virus proteins in sera from the elderly. Vafai A, et al. **Gerontology** 1988; 34(5–6):242–9

IgG subclass distribution among antibodies to varicella-zoster virus in human varicella/zoster immunoglobulin preparations and the corresponding donor plasma. Møyner K, et al. **J Biol Stand** 1988 Jul;16(3):157–64

Use of murine monoclonal antibodies for laboratory diagnosis of varicella-zoster virus infection. Gleaves CA, et al. **J Clin Microbiol** 1988 Sep;26(9):1623–5

Varicella-zoster virus-specific HLA-restricted cytotoxicity of normal immune adult lymphocytes after in vitro stimulation. Cooper EC, et al. **J Infect Dis** 1988 Oct; 158(4):780–8

Immunity to whole varicella-zoster virus antigen and glycoproteins I and p170: relation to the immunizing regimen of live attenuated varicella vaccine. Diaz PS, et al. **J Infect Dis** 1988 Dec;158(6):1245–52

Western blot analysis poorly detects antibody to gpIII of Varicella-Zoster virus [letter] Dubey L, et al. **J Infect Dis** 1989 Feb;159(2):358–9

Herpes zoster in an adult recipient of live attenuated varicella vaccine. Hammerschlag MR, et al. **J Infect Dis** 1989 Sep; 160(3):535–7

IgM and IgG responses to varicella-zoster virus p32/p36 complex after chickenpox and zoster, congenital and subclinical infections, and vaccination. Harper DR, et al. **J Infect Dis** 1989 Mar;159(3):444–51

Zoster in normal children after varicella vaccine [letter] Plotkin SA, et al. **J Infect Dis** 1989 May;159(5):1000–1

Placental transfer of IgG subclass-specific antibodies to varicella-zoster virus. Asano Y, et al. **J Med Virol** 1988 Sep;26(1):1–6

Serological responses in varicella and zoster assayed by immunoblotting. Harper DR, et al. **J Med Virol** 1988 Aug; 25(4):387–98

Antibodies against varicella-zoster virus and herpes simplex virus deoxythymidine kinase in heterologous infections. Källander CF, et al. **J Med Virol** 1989 May;28(1):30–7

Titration of IgG antibodies against varicella zoster virus before bone marrow transplantation is not predictive of future zoster. Webster A, et al. **J Med Virol** 1989 Feb; 27(2):117–9

Sequestration of virus-specific T cells in the cerebrospinal fluid of a patient with varicella zoster viral meningoencephalitis. Duby AD, et al. **J Neuroimmunol** 1989 Mar;22(1):63–8

Antiviral IgM and IgG subclasses in varicella zoster associated neurological syndromes. Mathiesen T, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):578–82

Placebo-controlled trial of varicella vaccine given with or after measles-mumps-rubella vaccine. Englund JA, et al. **J Pediatr** 1989 Jan;114(1):37–44

Varicella-zoster virus prevalence in Japan: no significant change in a decade. Taylor-Wiedeman J, et al. **Jpn J Med Sci Biol** 1989 Feb;42(1):1–11

Outcome in newborn babies given anti-varicella-zoster immunoglobulin after perinatal maternal infection with varicella-zoster virus. Miller E, et al. **Lancet** 1989 Aug 12;2(8659):371–3

Varicella zoster virus and recurrent aphthous ulceration [letter] Pedersen A. **Lancet** 1989 May 27;1(8648):1203

Immunological diagnosis in viral infections of the central nervous system: course of antibody titres against homo- and heterologous viruses. Dennin RH, et al. **Med Microbiol Immunol (Berl)** 1989;178(5):255–68

Persistence of immunity to varicella in children with leukemia immunized with live attenuated varicella vaccine. Gershon AA, et al. **N Engl J Med** 1989 Apr 6;320(14):892–7

Demonstration of varicella-zoster virus antigens in the vitreous aspirates of patients with acute retinal necrosis syndrome. Soushi S, et al. **Ophthalmology** 1988 Oct; 95(10):1394–8

Humoral immunity and clinical reinfections following varicella vaccine in healthy children. Johnson C, et al. **Pediatrics** 1989 Sep;84(3):418–21

[Interpretation of varicella serology in pregnancy] von Hintzenstern J, et al. **Geburtshilfe Frauenheilkd** 1988 Dec; 48(12):859–62 (Eng. Abstr.) (Ger)

[The detection of varicella-zoster virus (VZV) antigen from vitreous humor of 3 cases with Kirisawa-Urayama type uveitis] Usui M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1398–405 (Eng. Abstr.) (Jpn)

[Early diagnosis of varicella-zoster virus infection in acute facial paralysis—significance of VZV antigen skin test and CSF examination] Okuno H. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jul;91(7):1078–84 (Eng. Abstr.) (Jpn)

[Efficacy of live varicella vaccine strain (Oka) in high-risk patients] Eizuru Y, et al. **Nippon Rinsho** 1989 Feb; 47(2):424–8 (Jpn)

[Diagnosis of varicella-zoster virus infection by immunological method] Sata T, et al. **Nippon Rinsho** 1989 Feb;47(2):356–60 (Jpn)

ISOLATION & PURIFICATION

Laboratory studies of acute varicella and varicella immune status. Balfour HH Jr, et al. **Diagn Microbiol Infect Dis** 1988 Jul;10(3):149–58

Increased detection rate for varicella-zoster virus with combination of two techniques. West PG, et al. **J Clin Microbiol** 1988 Dec;26(12):2680–1

Viral activity in skin lesions of herpes zoster. Hata S, et al. **J Dermatol (Tokyo)** 1988 Oct;15(5):448–50

Rapid detection of varicella-zoster virus in clinical specimens using monoclonal antibodies on shell vials and smears. Schirm J, et al. **J Med Virol** 1989 May;28(1):1–6

Comparative restriction endonuclease analysis of varicella-zoster virus clinical isolates. Takayama M, et al. **Med Microbiol Immunol (Berl)** 1989;178(2):61–7

METABOLISM

Varicella-zoster virus glycoprotein oligosaccharides are phosphorylated during posttranslational maturation. Gabel CA, et al. **J Virol** 1989 Oct;63(10):4264–76

Phosphorylation of varicella-zoster virus glycoprotein gpI by mammalian casein kinase II and casein kinase I. Grose C, et al. **J Virol** 1989 Sep;63(9):3912–8

PATHOGENICITY

Varicella-zoster virus infection of adult rat sensory neurons

in vitro. Merville-Louis MP, et al. **J Virol** 1989 Jul; 63(7):3155–60

[Pathogenesis of herpes zoster] Smirnov IuK, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):3–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Transsynaptic spread of varicella zoster virus through the visual system: a mechanism of viral dissemination in the central nervous system [published erratum appears in Hum Pathol 1989 Aug;20(8):820] Rostad SW, et al. **Hum Pathol** 1989 Feb;20(2):174–9

ULTRASTRUCTURE

Varicella in an immunocompromised patient an electron microscopic study. Meigh RE, et al. **NIPH Ann** 1989 Jun; 12(1):3–12

VARICOCELE

Experimental model of varicocele. Shafik A, et al. **Eur Urol** 1989;16(4):298–303

Adolescent varicocele: current concepts. Kass EJ. **Semin Urol** 1988 May;6(2):140–5 (43 ref.)

[Etiopathogeny and histopathology of varicocele] Redondo E, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):309–15 (152 ref.) **(Spa)**

BLOOD

Pulse pattern of luteinizing hormone (LH) in patients with varicocele: a preliminary report. Osegbe DN. **Andrologia** 1989 Jan–Feb;21(1):23–7

[Blood gas analysis of varicocele, spermatic vein and peripheral vein] Yan CH. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):37–8, 62 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

Urogenital inflammations: aetiology, diagnosis and their correlation with varicocele and male infertility. Gattuccio F, et al. **Acta Eur Fertil** 1988 Jul–Aug;19(4):201–8

[The role of varicocele in dysuria] Henry JC. **Acta Urol Belg** 1988;56(4):563–70 (Eng. Abstr.) **(Fre)**

[Papillary cystadenoma of the epididymis. Apropos of a rare case in a patient with grade III varicocele] Cavallaro G, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):27–9 (Eng. Abstr.) **(Ita)**

[Treatment of oligospermic patients with varicocele] Shinoda M, et al. **Hinyokika Kiyo** 1988 Nov;34(11):1989–94 (Eng. Abstr.) **(Jpn)**

[Varicocele and infertility] Koriakin MV. **Urol Nefrol (Mosk)** 1988 Jul–Aug;(4):60–7 (154 ref.) **(Rus)**

DIAGNOSIS

Effectiveness of varicocelectomy [letter] Amelar RD, et al. **Fertil Steril** 1989 Jan;51(1):198–9

The application of intrascrotal deep body temperature measurement for the noninvasive diagnosis of varicoceles. Yamaguchi M, et al. **Fertil Steril** 1989 Aug;52(2):295–301

Doppler examination in varicocele. A standard method of evaluation. Annoni F, et al. **J Androl** 1988 Jul–Aug; 9(4):248–52

Adolescent varicocele: objective indications for treatment. Kass EJ, et al. **J Urol** 1989 Aug;142(2 Pt 2):579–82; discussion 603–5

Echography in the study of varicocele: evaluation of reliability versus Doppler method. Bock E, et al. **Rays** 1988 Sep–Dec;13(3):97–9

[Angiodynography of idiopathic varicocele compared to conventional methods] Thomas C, et al. **ROFO** 1989 May; 150(5):573–6 (Eng. Abstr.) **(Ger)**

[Importance of lateral inspection of the scrotum and value of intraoperative spermatic phlebography in varicocele] Tomoyoshi T, et al. **Hinyokika Kiyo** 1988 Nov; 34(11):1935–7 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Decrease of topoisomerase I activity in the testes of infertile men with varicocele. Fujisawa M, et al. **Arch Androl** 1988; 21(1):45–50

Deoxyribonucleic acid polymerase activity in the testes of infertile men with varicocele. Fujisawa M, et al. **Fertil Steril** 1988 Nov;50(5):795–800

EPIDEMIOLOGY

Varicocele and puberty. A transversal and longitudinal survey. Gattuccio F, et al. **Acta Eur Fertil** 1988 Jul–Aug; 19(4):189–99

Incidence and clinical significance of subclinical scrotal varicoceles. Yarborough MA, et al. **J Urol** 1989 Jun; 141(6):1372–4

ETIOLOGY

Varicocele as the presenting sign of an abdominal mass. Roy CR 2d, et al. **J Urol** 1989 Mar;141(3):597–9

Contralateral testicular disease after unilateral testicular injury: current concepts. Tarter TH, et al. **Semin Urol** 1988 May;6(2):120–39 (181 ref.)

[Causes of varicocele recurrence after Ivanissevich's operation] Kim VV. **Urol Nefrol (Mosk)** 1989 May–Jun; (3):66–9 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Correlation of sperm-bound immunoglobulins with impaired semen analysis in infertile men with varicoceles. Gilbert BR, et al. **Fertil Steril** 1989 Sep;52(3):469–73

METABOLISM

The evaluation of free-L-carnitine, zinc and fructose in the seminal plasma of patients with varicocele and normozoospermia. Andó S, et al. **Andrologia** 1989 Mar–Apr;21(2):155–60

Biochemical changes in testicular varicocele. Fujisawa M, et al. **Arch Androl** 1989;22(2):149–59 (65 ref.)

Seminal plasma transferrin concentration in normozoospermic fertile men and oligozoospermic men associated with varicocele. Yoshida KI, et al. **Int J Fertil** 1988 Nov–Dec;33(6):432–6

PATHOLOGY

Pathological and immunological effects of surgically induced varicocele in juvenile and adult rats. Shook TE, et al. **Am J Reprod Immunol Microbiol** 1988 Aug;17(4):141–4

Testicular and vascular changes in children and adults with varicocele. Hadziselimovic F, et al. **J Urol** 1989 Aug;142(2 Pt 2):583–5; discussion 603–5

PHYSIOPATHOLOGY

Hemodynamics of varicoceles: venous shunting in grade II and III varicoceles. Sigmund G, et al. **Ann Radiol (Paris)** 1989;32(1):24–8

Clinical observations on fertile males with varicocele. Hirokawa M, et al. **Eur Urol** 1989;16(1):23–7

Induction of varicocele in the dog: I. Partial ligation of the left renal vein does not induce a varicocele in the dog. Laven JS, et al. **J Androl** 1989 Jan–Feb;10(1):9–16

Elevation of intratesticular and scrotal skin surface temperature in men with varicocele. Goldstein M, et al. **J Urol** 1989 Sep;142(3):743–5

[Status of the reproductive function in men with varicocele] Artifeksov SB, et al. **Sov Med** 1989;(5):111–3 **(Rus)**

[The role of disorders of mineralocorticoid function of the adrenal glands in the development of infertility in patients with left-side varicocele] Mazo EB, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):38–45 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

[Value of trans-scrotal phlebography. Considerations and results in 10 years of experience] Ialongo A, et al. **Ann Ital Chir** 1987;59(1–6):127–34 **(Ita)**

[Retrograde gonadal venography in patient with bilateral varicocele; a rare venous return via Santorini's plexus] Yasumoto R, et al. **Rinsho Houshasen** 1989 Mar;34(3):387–9 (Eng. Abstr.) **(Jpn)**

[Varicocele in kidney tumors] Panchev P, et al. **Khirurgiia (Sofiia)** 1988;41(3):28–30 (Eng. Abstr.) **(Rus)**

[Regional phlebography in patients with recurrences of varicocele] Pereverzev AS, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):39–44 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

[Detection of varicocele by using 99mTc-diethylenetriamine pentaacetic acid human serum albumin (99mTc-DTPA human serum albumin)] Otsuka N, et al. **Radioisotopes** 1988 Jun;37(6):330–5 (Eng. Abstr.) **(Jpn)**

SURGERY

Testicular ischemia and infarction following herniorrhaphy or varicocelectomy: evaluation by radionuclide imaging. Nagle C, et al. **Clin Nucl Med** 1989 Apr;14(4):243–8

Preoperative parameters related to the improvement of semen characteristics after surgical repair of varicocele in subfertile men. Okuyama A, et al. **Eur Urol** 1988; 14(6):442–6

Surgical repair of varicocele: effective treatment for subfertile men in a controlled study. Okuyama A, et al. **Eur Urol** 1988;14(4):298–300

The impact of spermatic vein ligation on the male factor in in vitro fertilization–embryo transfer and its relation to testosterone levels before and after operation. Ashkenazi J, et al. **Fertil Steril** 1989 Mar;51(3):471–4

Varicocelectomy: twenty-five years of experience. Dubin L, et al. **Int J Fertil** 1988 Jul–Aug;33(4):226–8, 231–5 (48 ref.)

[Does repair of varicocele improve fertility?] Vermeulen A. **Verh K Acad Geneeskd Belg** 1988;50(2):140–50 **(Dut)**

[Varicocele in children and adolescents. Is surgical treatment justified?] Bouchot O, et al. **Ann Urol (Paris)** 1989; 23(1):74–8 (Eng. Abstr.) **(Fre)**

[Treatment of varicoceles] Sachot JL, et al. **Rev Fr Gynecol Obstet** 1989 Feb;84(2):109–11 (Eng. Abstr.) **(Fre)**

[Effect on fertility and on sperm cytology of treatment of varicocele: apropos of 117 controlled cases] Horchani A, et al. **Tunis Med** 1988 May;66(5):425–30 (Eng. Abstr.) **(Fre)**

[Early treatment of varicocele in children and adolescents] Hösli PO. **Helv Chir Acta** 1989 Jun;56(1–2):229–33 (Eng. Abstr.) **(Ger)**

[Rhabdomyolysis following ligation of the internal spermatic vein in varicocele] Piccardo M. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):87–90 (Eng. Abstr.) **(Ita)**

[Surgical treatment of varicocele] Bertolotti A. **Minerva Chir** 1989 Feb 28;44(4):551–4 (36 ref.) **(Ita)**

[Surgical and microsurgical treatment of varicocele. Our experience] Cavallaro G, et al. **Minerva Chir** 1988 Sep 15; 43(17):1343–7 (Eng. Abstr.) **(Ita)**

[Essential varicocele] Garetto F, et al. **Minerva Chir** 1988 Apr 30;43(8):729–32 (Eng. Abstr.) **(Ita)**

[Proposal for a new technic for surgical treatment of essential varicocele] Giudice PA, et al. **Minerva Chir** 1989 Mar 31; 44(6):1025–8 (Eng. Abstr.) **(Ita)**

[Role of intraoperative phlebography in the therapeutic approach of varicocele] Latteri M, et al. **Minerva Chir** 1989 May 15;44(9):1349–51 (Eng. Abstr.) **(Ita)**

[Role of microsurgery in the treatment of idiopathic varicocele] Puleo S, et al. **Minerva Chir** 1989 Feb 28; 44(4):755–8 (9 ref.) **(Ita)**

[Intraoperative anterograde spermatic phlebography: its usefulness in the treatment of varicocele] Gibbs A, et al. **Minerva Urol Nefrol** 1989 Jan–Mar;41(1):1–4 (Eng. Abstr.) **(Ita)**

[Postoperative hydrocele testis as a complication of high ligation of internal spermatic vein] Kageyama Y, et al. **Hinyokika Kiyo** 1988 May;34(5):851–4 (Eng. Abstr.) **(Jpn)**

[Results of the surgical treatment of varicocele in children by the Erokhin method] Petrenko IuI, et al. **Klin Khir** 1988; (6):53–5 (Eng. Abstr.) **(Rus)**

[Causes of varicocele recurrence after Ivanissevich's operation] Kim VV. **Urol Nefrol (Mosk)** 1989 May–Jun; (3):66–9 (Eng. Abstr.) **(Rus)**

[Surgical treatment of primary varicocele. I: Our experience with the inguinal approach. Clinical results with the modified Buntz technic. Comparative study] Soler Fernández JM, et al. **Arch Esp Urol** 1988 Sep;41(7):533–40 (22 ref.) (Eng. Abstr.) **(Spa)**

[Surgical treatment of primary varicocele. II. Results in infertile patients using a modified Buntz technic] Soler Fernández JM, et al. **Arch Esp Urol** 1988 Oct;41(8):601–4 (43 ref.) (Eng. Abstr.) **(Spa)**

THERAPY

Percutaneous sclerotherapy of idiopathic varicocele in childhood: a preliminary report. Thon WF, et al. **J Urol** 1989 Apr;141(4):913–5

Aid for safer sclerotherapy of the internal spermatic vein. Hunter DW, et al. **Radiology** 1989 Oct;173(1):282

[Percutaneous sclerotherapy of varicoceles using a coaxial catheter system] Friedrich JM, et al. **Roatgenpraxis** 1989 Feb;42(2):35–9 **(Ger)**

[Percutaneous therapy of primary varicocele. 6 years' experience] Benea G, et al. **Radiol Med (Torino)** 1988 Nov; 76(5):458–65 (Eng. Abstr.) **(Ita)**

[Varicocele: the effects of sclerotherapy on hemodynamics and spermatogenesis] Fuochi C, et al. **Radiol Med (Torino)** 1989 Mar;77(3):217–22 (Eng. Abstr.) **(Ita)**

[Causes of failures and means for their prevention in the sclerotherapy of a left-sided varicocele] Ralkevich NP, et al. **Sov Med** 1988;(9):99–101 **(Rus)**

[The use of absolute alcohol in the endovascular therapy of varicoceles] Ralkevich NP, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):85–6 **(Rus)**

VARICOSE ULCER

BLOOD

Clinical parameters and transcutaneous oxygen measurements for the prognosis of venous ulcers. Nemeth AJ, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):186–90

Chronic venous incompetence and transcutaneous oxygen pressure: a controlled study. Mannarino E, et al. **Vasa** 1988; 17(3):159–61

CHEMICALLY INDUCED

Vasculitic leg ulcers associated with diltiazem. Carmichael AJ, et al. **BMJ** 1988 Aug 20–27;297(6647):562

COMPLICATIONS

Malignant fibrous histiocytoma: a new complication of chronic venous ulceration. Berth-Jones J, et al. **BMJ** 1989 Jan 28;298(6668):230–1

Coexistence of obstructive arterial disease and chronic venous stasis in leg ulcer patients. Sindrup JH, et al. **Clin Exp Dermatol** 1987 Nov;12(6):410–2

Basal cell carcinoma and chronic venous stasis. Ryan JF. **Histopathology** 1989 Jun;14(6):657–9

[Neoplastic degeneration of chronic venous ulcers. Description of 2 clinical cases] Castrati G, et al. **Minerva Chir** 1989 Apr 15;44(7):1179–81 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Noninvasive diagnosis and quantitation of popliteal reflux in the swollen and ulcerated leg. Christopoulos D, et al.

J Cardiovasc Surg (Torino) 1988 Sep-Oct;29(5):535-9

DRUG THERAPY

Effect of oral pentoxifylline therapy on venous lower extremity ulcers due to deep venous incompetence. Angelides NS, et al. Angiology 1989 Aug;40(8):752-63

Comparison of cadexomer iodine and dextranomer for chronic venous ulcers. Moss C, et al. Clin Exp Dermatol 1987 Nov;12(6):413-8

Double-blind placebo-controlled study with topical 2% ketanserin ointment in the treatment of venous ulcers. Roelens P. Dermatologica 1989;178(2):98-102

[Increase of oxygen partial pressure and acceleration of wound healing by tetrachlorodecaoxide] Weiler-Mithoff EM, et al. Z Hautkr 1989 Mar 15;64(3):208-11 (Eng. Abstr.) (Ger)

ETIOLOGY

White blood cells and venous ulceration [letter] BMJ 1988 Aug 13;297(6646):485

Causes of venous ulceration [letter] Gaylarde PM, et al. BMJ 1988 Aug 13;297(6646):485-6

White blood cells and venous ulceration [letter] Thomas PR, et al. BMJ 1988 Sep 10;297(6649):685

GENETICS

[Venous ulcus cruris in Klinefelter syndrome] Feier V, et al. Dermatol Monatsschr 1988;174(8):472-5 (Eng. Abstr.) (Ger)

PATHOLOGY

Direct method of measuring venous ulcers. Coleridge Smith PD, et al. Br J Surg 1989 Jul;76(7):689

PHYSIOPATHOLOGY

Transcutaneous oxygen potentials in venous disease. Quigley FG, et al. Aust N Z J Surg 1989 Feb;59(2):165-8

Skin perfusion pressure in leg ulcers assessed by photoplethysmography. Guillot B, et al. Int Angiol 1988 Apr-Jun;7(2 Suppl):33-4

RADIOTHERAPY

The short-term benefit and long-term failure of ultraviolet light in the treatment of venous leg ulcers. Dodd HJ, et al. Br J Dermatol 1989 Jun;120(6):809-18

SURGERY

A new technique for chronic venous ulcers of the lower limb: modified Felder-Rob procedure. Ananthakrishnan N, et al. Aust N Z J Surg 1989 Feb;59(2):157-60 (16 ref.)

Culture-grafted leg ulcers [letter] Clancy J, et al. Clin Exp Dermatol 1987 Nov;12(6):469

Split-skin grafting of varicose leg ulcers--a survey and the importance of assessment of risk factors in predicting outcome from the procedure. Harrison PV. Clin Exp Dermatol 1988 Jan;13(1):4-6

Endoscopic subfascial discission of perforating veins. Hauer G, et al. Surg Endosc 1988;2(1):5-12

[Popliteo-femoral venous reconstruction: indications and results] Stockmann U, et al. Langenbecks Arch Chir 1988; Suppl 2:177-80 (Eng. Abstr.) (Ger)

THERAPY

Sustained compression and healing of chronic venous ulcers [letter] Chant AD. BMJ 1989 Jan 7;298(6665):48

In-patient treatment of chronic varicose venous ulcers. A randomized trial of cadexomer iodine versus standard dressings. Laudanska H, et al. J Int Med Res 1988 Nov-Dec;16(6):428-35

A prospective randomized trial of Unna's boots versus hydroactive dressing in the treatment of venous stasis ulcer [letter] Moglia RM. J Vasc Surg 1989 Mar;9(3):508

[Difficulties with compression dressings in the obese] Wallois P. Phlebologie 1988 Jul-Oct;41(3):559-62 (Fre)

[The treatment of varicose ulcers] Ramelet AA. Ther Umsch 1989 Feb;46(2):128-32 (Eng. Abstr.) (Fre)

[Phlebology--current therapeutic aspects from the dermatologic viewpoint] Kaufmann R. Z Hautkr 1988 Jul 15;63(7):577-84 (46 ref.) (Eng. Abstr.) (Ger)

[Therapy of venous leg ulcer] Mayerhausen W. Z Hautkr 1988;63 Suppl 4:92-4 (7 ref.) (Eng. Abstr.) (Ger)

[Treatment of varicose ulcers] Voitenok NK. Klin Khir 1988; (7):62 (Rus)

VARICOSE VEINS

see related

SCLEROSING SOLUTIONS

Symposium on Venous Leg Ulcers. Helsingborg, Sweden, October 7-8, 1985. Proceedings. Acta Chir Scand Suppl 1988;544:1-80

Varicose veins. Murtagh J. Aust Fam Physician 1989 Jun; 18(6):714

Spontaneous rupture of a lower extremity varix: case report. Teitelbaum GP, et al. Cardiovasc Intervent Radiol 1989 Mar-Apr;12(2):101-2

Reduction in pulmonary varix size after mitral valve replacement. Iwasaki T, et al. J Cardiovasc Surg (Torino) 1989 May-Jun;30(3):381-3

Anatomy and pathophysiology of varicose veins. Goldman MP, et al. J Dermatol Surg Oncol 1989 Feb;15(2):138-45 (60 ref.)

Prelining of polytetrafluoroethylene grafts with cultured human endothelial cells isolated from varicose veins. Leseche G, et al. Surgery 1989 Jan;105(1):36-45

BLOOD

[Pathogenesis of thrombus formation in varicose veins] Vedenskii AN, et al. Vestn Khir 1988 Sep;141(9):41-3 (Eng. Abstr.) (Rus)

COMPLICATIONS

Venous collaterals and metastatic disease coexisting in the retroperitoneum. Anderson JE, et al. Australas Radiol 1989 May;33(2):184-6

Haematuria secondary to idiopathic renal vein varices. O'Flynn KJ, et al. Br J Urol 1989 Jul;64(1):101-2

Intermittent exophthalmos. Phanthumchinda K, et al. J Med Assoc Thai 1989 Jun;72(6):351-4

Myelopathy due to epidural varicose veins of the cervicothoracic junction. Case report. Dickman CA, et al. J Neurosurg 1988 Dec;69(6):940-1

Urethral varices as an unusual cause of third-trimester bleeding. A case report. Prater JM, et al. J Reprod Med 1988 Jul;33(7):664-6

A case of ruptured duodenal varices and review of the literature. Tanaka T, et al. Jpn J Surg 1988 Sep; 18(5):595-600 (39 ref.)

Anorectal varices, haemorrhoids, and portal hypertension [letter] Chawla YK, et al. Lancet 1989 Apr 1;1(8640):725

Arteriovenous malformation of the pancreas associated with mesenteric varices: case report and review of the literature. Uchino A, et al. Radiat Med 1989 Jan-Feb;7(1):6-9 (26 ref.)

Orbital varix--an unusual cause of proptosis. A case report. Salmenson BD, et al. S Afr Med J 1988 Nov 19; 74(10):529-30

[Enophthalmos apropos of a case] Toussaint P, et al. Bull Soc Ophtalmol Fr 1988 Aug-Sep;88(8-9):1007-8 (Eng. Abstr.) (Fre)

[Differential diagnosis of vascular and radicular leg pains with special consideration given to the frequency of the coincidence of these 2 causes] Van der Molen HR, et al. Phlebologie 1989 Jan-Mar;42(1):139-41 (Fre)

[Antral varices in a patient in sclerosing treatment of esophageal varices] Barcena Marugán R, et al. Rev Esp Enferm Apar Dig 1989 May;75(5):489-92 (Eng. Abstr.) (Spa)

DIAGNOSIS

Jugular phlebectasia. Diagnosis and treatment of 20 patients. Xu JB, et al. Chin Med J [Engl] 1988 Jul;101(7):478-80

The assessment of primary varicose veins by Doppler ultrasound--the role of sapheno-popliteal incompetence and the short saphenous systems in calf varicosities. Mitchell DC, et al. Eur J Vasc Surg 1987 Apr;1(2):113-5

Noninvasive diagnosis and quantitation of popliteal reflux in the swollen and ulcerated leg. Christopoulos D, et al. J Cardiovasc Surg (Torino) 1988 Sep-Oct;29(5):535-9

Photoplethysmography in the assessment of venous insufficiency. Nicolaides AN, et al. J Vasc Surg 1987 Mar; 5(3):405-12

[Difficulties of clinical tests of the veins in an obese subject] Vin F. Phlebologie 1988 Jul-Oct;41(3):501-7 (Fre)

[Phlebologic indications for duplex sonography] Marshall M. Fortschr Med 1989 May 20;107(15):325-9 (Eng. Abstr.) (Ger)

[Sonography versus phlebography. New variants of the color-coded duplex ultrasound technic--controversy: diagnostic accuracy] Schwing C. Fortschr Med 1989 Jun 30;107(19):63-4 (Ger)

[Sonography as a screening examination method of the venous system in pregnancy. Comparative studies of the arm and leg vein system] Sohn C, et al. Ultraschall Med 1988 Aug;9(4):191-5 (Eng. Abstr.) (Ger)

[Doppler sonographic diagnosis of secondary popliteal and femoral vein insufficiency] Stranzenbach W. Z Hautkr 1989 Jan 15;64(1):7 (Ger)

[Results of new diagnostic applications in the phlebologic field with reflected-light rheography] Tumino G, et al. Ann Ital Chir 1987;59(1-6):391-401 (Ita)

[Non-invasive methods of diagnosis of chronic venous pathology of the lower extremities] Konstantinova GD, et al. Kardiologiia 1988 Jun;28(6):76-80 (Eng. Abstr.) (Rus)

[Value of rheovasography and thermography in the diagnosis of varicose veins of the legs in the practice of expert evaluation of work capacity] Kosichkin MM, et al. Khirurgiia (Mosk) 1989 Jun;(6):27-31 (Eng. Abstr.) (Rus)

[Varicose disease in children] Tikhonov IuA, et al. Khirurgiia (Mosk) 1988 Jul;(7):28-32 (Eng. Abstr.) (Rus)

[Occlusive plethysmography in the diagnosis of disorders of venous blood flow in the legs] Lytkin MI, et al. Vestn Khir 1988 Jun;140(6):38-43 (Eng. Abstr.) (Rus)

[Oscillographic, rheovasographic and radioisotope research methods in the diagnosis of obliterating vascular diseases of the extremities] Suvorov PM, et al. Voen Med Zh 1988 Dec;(12):27-9 (Rus)

[Ultrasonic demonstration of gallbladder varices in a patient with hepatocarcinoma and portal thrombosis] Celorio Peinado C, et al. Rev Esp Enferm Apar Dig 1988 Oct;74(4 Pt 2):467-9 (Eng. Abstr.) (Spa)

DRUG THERAPY

Plethysmographic confirmation of the beneficial effect of calcium dobesilate in primary varicose veins. Androulakis G, et al. Angiology 1989 Jan;40(1):1-4

Use of extract of Ruscus aculeatus in venous disease in the lower limbs. Cappelli R, et al. Drugs Exp Clin Res 1988; 14(4):277-83

Somatostatin on intravariceal pressure [letter] Jenkins SA, et al. Gut 1988 Sep;29(9):1289-90

[The effect of dihydroergotamine on the venous system in patients with essential varices of the lower limbs] Alvarez Sánchez J, et al. Angiologia 1988 Sep-Oct;40(5):174-8 (20 ref.) (Eng. Abstr.) (Spa)

ENZYMOLOGY

[Lysosomal enzymes and N-procollagen peptide in varicose veins] Haustein UF, et al. Dermatol Monatsschr 1988; 174(8):476-9 (Eng. Abstr.) (Ger)

EPIDEMIOLOGY

Varicose veins (VV) and chronic venous insufficiency (CVI). Medical and socio-economic aspects, Basle study. Biland L, et al. Acta Chir Scand Suppl 1988;544:9-11

[Epidemiology and pathophysiology of primary varicose veins] Rudofsky G. Langenbecks Arch Chir 1988;Suppl 2:139-44 (13 ref.) (Eng. Abstr.) (Ger)

ETIOLOGY

Role of venous elasticity in the development of varicose veins. Clarke H, et al. Br J Surg 1989 Jun;76(6):577-80

Pulsatile varicose veins associated with tricuspid regurgitation [letter] Hollins GW, et al. Br J Surg 1989 Feb;76(2):207

Stoma-related Variceal Bleeding: An Under-Recognized Complication of Biliary Atresia [letter] Brandt C, et al. J Pediatr Surg 1988 Dec;23(12):1228

A case of vesical varices as a complication of portal hypertension and manifested gross hematuria. Sano K, et al. J Urol 1989 Feb;141(2):369-71

Anorectal varices, haemorrhoids, and portal hypertension. Hosking SW, et al. Lancet 1989 Feb 18;1(8634):349-52

Rectal and colonic varices in cirrhosis [letter] Naveau S, et al. Lancet 1989 Mar 18;1(8638):624

Presidential address. Concepts and misconcepts in venous disease. Newcombe JF. Trans Med Soc Lond 1986-87; 103:1-6

[Effect of parity on the venous system of the leg] Karl C, et al. Geburtshilfe Frauenheilkd 1989 Jan;49(1):49-52 (Eng. Abstr.) (Ger)

[Klippel-Trenaunay syndrome with complications during pregnancy] Fishman A, et al. Harefuah 1989 Feb 1; 116(3):147-8 (Eng. Abstr.) (Heb)

[Clinical significance of umbilical varicose veins] Utkin VM, et al. Akush Ginekol (Mosk) 1989 Mar;(3):65-6 (Rus)

[Varicose veins of the lower extremities in construction workers] Riabtsev VG, et al. Sov Med 1989;(2):66-8 (Rus)

[Relapses of varicose disease] Kokhan EP, et al. Voen Med Zh 1989 Feb;(2):29-32 (Rus)

GENETICS

Familial varices of the colon. Beermann EM, et al. Endoscopy 1988 Sep;20(5):270-1

HISTORY

Caput Medusae in medicine and art. Park RH, et al. BMJ 1988 Dec 24-31;297(6664):1677-9

METABOLISM

Prostanoid production in varicose veins: evidence for decreased prostacyclin with increased thromboxane A2 and prostaglandin E2 formation. Biagi G, et al. Angiology 1988 Dec;39(12):1036-42

Influence of pentoxifylline administered in vivo on the synthesis of PGI2 in human varicose veins. Fahr A, et al. Biomed Biochim Acta 1988;47(10-11):S238-40

PATHOLOGY

Number and anatomical distribution of incompetent thigh perforating veins. Papadakis K, et al. Br J Surg 1989 Jun; 76(6):581-4

Morphology and localization of sunburst varicosities: an electron microscopic and morphometric study. Wokalek H, et al. J Dermatol Surg Oncol 1989 Feb;15(2):149-54

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 1-1989. A 50-year-old man with alcoholic cirrhosis and gastrointestinal hemorrhage. N Engl J Med 1989 Jan 5;320(1):43-50

[Essential varices of the internal saphenous vein] Bouissou H, et al. Bull Acad Natl Med (Paris) 1988 Apr;172(4):529-34 (Eng. Abstr.) (Fre)

[Ultrasonic analysis of the influence of position on dimensions of the bend of the external saphenous veins] Guex JJ. Phlebologie 1989 Apr-Jun;42(2):181-3; discussion 184-5 (Fre)

[Simulation of varicosity of the parva branch by massive varicosity of the venae nervi suralis] Fischer R. **Vasa** 1988; 17(4):283–7 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Elastic compression stockings—an evaluation with foot volumetry, strain-gauge plethysmography and photoplethysmography. Norgren L. **Acta Chir Scand** 1988 Sep;154(9):505–7

Transcutaneous oxygen potentials in venous disease. Quigley FG, et al. **Aust N Z J Surg** 1989 Feb;59(2):165–8

Pulsatile varicose veins. Blackett RL, et al. **Br J Surg** 1988 Sep;75(9):865

Viscoelastic properties and collagen content of the long saphenous vein in normal and varicose veins. Psaila JV, et al. **Br J Surg** 1989 Jan;76(1):37–40

Objective noninvasive evaluation of venous surgical results. Christopoulos D, et al. **J Vasc Surg** 1988 Dec;8(6):683–7

[Peripheral hemodynamics at various stages of deep vein thrombosis of the legs] Ovcharenko KI, et al. **Kardiologiia** 1988 Jun;28(6):80–4 (Eng. Abstr.) (Rus)

[The role of changes in venous capacity in the lower extremities in the pathogenesis of post-thrombotic disease] Vasilenko IuV, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):52–6 (Eng. Abstr.) (Rus)

[State of the musculo-venous pump of the lower extremities in patients with a recurrence of varicose disease] Gladkikh VG, et al. **Klin Khir** 1988;(7):11–4 (Eng. Abstr.) (Rus)

[Effect of functional disorders of deep veins of the lower extremities on the clinical course of varicose veins] Gladkikh VG, et al. **Vestn Khir** 1987 Dec;139(12):50–3 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

[Prevention of recurrence of varicose veins of the lower extremities] Kurguzova OP, et al. **Sov Med** 1988;(8):77–9 (Rus)

RADIOGRAPHY

Recurrent varicose veins—is there a role for varicography? Savolainen H, et al. **Ann Chir Gynaecol** 1988;77(2):70–3

False-negative IV-DSA in external jugular phlebectasia. Aggarwal S, et al. **Can Assoc Radiol J** 1989 Feb;40(1):57–8

Sciatic venous drainage demonstrated by varicography in patients with a patent deep venous system. Trigaux JP, et al. **Cardiovasc Intervent Radiol** 1989 Mar–Apr; 12(2):103–6

The left ascending lumbar vein: a potential pitfall in CT diagnosis. Meanock CI, et al. **Clin Radiol** 1988 Sep; 39(5):565–6

[Iliac vein compression syndrome] Xu JB. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Jun;22(3):144–7 (Eng. Abstr.) (Chi)

[Study of the veins of the foot by counter-current phlebography] Lengua F, et al. **J Mal Vasc** 1988; 13(4):344–50 (Eng. Abstr.) (Fre)

[Venous anomalies of the popliteal fossa] Thiery L. **Phlebologie** 1988 Nov–Dec;41(4):729–34 (Fre)

[Venous diseases of the extremities—surgery and demands on radiology] Imig H. **Rontgenblatter** 1988 Jul;41(7):267–9 (Eng. Abstr.) (Ger)

[Venous diseases of the lower extremities—methods and results of phlebography of the lower extremity—the superficial and deep systems] Roth FJ, et al. **Rontgenblatter** 1988 Jul;41(7):270–2 (Eng. Abstr.) (Ger)

[Clinical aspects of venous diseases and diagnostic demands on radiology] Wienert V. **Rontgenblatter** 1988 Jul; 41(7):265–6 (Eng. Abstr.) (Ger)

[Roentgen phlebography diagnosis of varicose changes of the ovarian veins] Botschorischwili GG, et al. **Z Urol Nephrol** 1989 Mar;82(3):135–8 (Eng. Abstr.) (Ger)

[Technics and indications of phlebography in the study of essential varices of the lower limbs] Vigo M, et al. **Minerva Chir** 1988 Sep 15;43(17):1367–70 (Eng. Abstr.) (Ita)

[Varicography in the preoperative assessment of primary varices. A study of 100 cases] Pinzani A, et al. **Radiol Med (Torino)** 1989 May;77(5):504–11 (Eng. Abstr.) (Ita)

[Transpopliteal phlebography in the diagnosis of chronic diseases of the veins of the lower extremities] Konstantinova GD, et al. **Khirurgiia (Mosk)** 1989 Mar; (3):47–52 (Eng. Abstr.) (Rus)

[Videomagnetic recording during phleboscopy of the lower extremities (videophlebography) and its diagnostic value in varicose disease] Khachkuruzov SG, et al. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):27–9 (Eng. Abstr.) (Rus)

[Peri-choledochal varices. (Report of a case)] Villazón Sahagún A, et al. **Rev Gastroenterol Mex** 1989 Jan–Mar; 54(1):27–9 (Eng. Abstr.) (Spa)

SURGERY

The anatomic relationship between the long saphenous vein and the saphenous nerve. Relevance for radical varicose vein surgery. Holme JB, et al. **Acta Chir Scand** 1988 Nov–Dec;154(11–12):631–3

Varix of the facial vein. Manstein ME, et al. **Ann Plast Surg** 1988 Aug;21(2):155–7

Clean up varicose vein surgery—use a tourniquet. Corbett R, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):57–8

Surgical correction of venous incompetence restores normal skin blood flow and abolishes skin hypoxia during exercise. Sarkany I, et al. **Arch Dermatol** 1989 Feb;125(2):223–6

Minor and major phlebectasia: a report of three cases. Odelowo EO, et al. **East Afr Med J** 1987 Sep;64(9):628–33

Venous bypass for decompression of bleeding varices of the pharynx. Caffee HH. **Head Neck Surg** 1987 Nov–Dec; 10(2):124–8

Duodenal varices [letter] Kochher R, et al. **Indian Pediatr** 1988 May;25(5):481–3

Surgery in the treatment of varicose veins. O'Shaughnessy M, et al. **Ir Med J** 1989 Jun;82(2):54–5

Cosmetic varicectomy versus sclerotherapy [letter] Galimberti-Bencini M, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):684–5

Reasons to strip the long saphenous vein. Corbett CR, et al. **Phlebologie** 1988 Nov–Dec;41(4):766–9

Failure in surgery of the long and short saphenous vein. de Groot WP. **Phlebologie** 1988 Nov–Dec;41(4):746–9

Haemorrhage from an adhesion-related mesenteric varix in a patient with portal hypertension. Crawford DJ, et al. **Scott Med J** 1988 Jun;33(3):271–3

Endoscopic subfascial discision of perforating veins. Hauer G, et al. **Surg Endosc** 1988;2(1):5–12

Surgical reconstruction of incompetent deep vein valves. Eriksson I, et al. **Ups J Med Sci** 1988;93(2):139–43

[Postoperative complications of surgery of the veins of the lower extremities in the obese] Brünner U, et al. **Phlebologie** 1988 Jul–Oct;41(3):592–5 (Eng. Abstr.) (Fre)

[Comparative results of stripping under general anesthesia and under locoregional anesthesia (200 cases)] Creton D. **Phlebologie** 1989 Jan–Mar;42(1):121–8; discussion 128–30 (Eng. Abstr.) (Fre)

[Does obesity modify surgical indications in the treatment of varices?] Perrin M. **Phlebologie** 1988 Jul–Oct;41(3):573–5 (Fre)

[Does obesity modify surgical technics?] Rettori R. **Phlebologie** 1988 Jul–Oct;41(3):576–84 (Eng. Abstr.) (Fre)

[Surgery in a bloodless field with roll cuffs] Löfqvist J. **Chirurg** 1988 Dec;59(12):853–4 (Ger)

[Long-term results following surgery of varicose veins] Ris HB, et al. **Chirurg** 1988 Sep;59(9):592–7 (Eng. Abstr.) (Ger)

[Intestinal angiodysplasia—a diagnostic and therapeutic challenge] Wicky B, et al. **Helv Chir Acta** 1989 Jan; 55(5):637–42 (Eng. Abstr.) (Ger)

[Diagnosis and surgical methods in primary varicose veins] Hach W. **Langenbecks Arch Chir** 1988;Suppl 2:145–51 (9 ref.) (Eng. Abstr.) (Ger)

[Endoscopic dissection of perforating veins] Hauer G, et al. **Langenbecks Arch Chir** 1988;Suppl 2:157–60 (Eng. Abstr.) (Ger)

[Surgery of varicose veins. Surgical errors and complications] Horsch S. **Langenbecks Arch Chir** 1988;Suppl 2:153–6 (Eng. Abstr.) (Ger)

[Surgery of varicose veins. Late results in relation to vessel morphology] Lindner F, et al. **Langenbecks Arch Chir** 1988; Suppl 2:161–3 (Eng. Abstr.) (Ger)

[Perioperative treatment of patients with varicose veins using calcium dobesilate] Mühleder J, et al. **Wien Med Wochenschr** 1988 Nov 30;138(22):569–73 (Eng. Abstr.) (Ger)

[Ligation of the vena dorsalis penis profunda in treating vascular-induced impotence] Darewicz J, et al. **Z Urol Nephrol** 1989 Apr;82(4):217–20 (Eng. Abstr.) (Ger)

[Preservation of the vena saphena magna for vascular substitution in patients with varicose veins] Bihari I. **Orv Hetil** 1988 Nov 27;129(48):2569–70 (Eng. Abstr.) (Hun)

[Varicose disease in the pathogenesis of recurrences after surgical treatment of essential varices] Pelli P, et al. **Minerva Chir** 1988 Nov 30;43(22):1941–5 (Eng. Abstr.) (Ita)

[Varicose veins and therapeutic routines] Høivik B. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2700–1 (Nor)

[Partial stripping in insufficiency of the long saphenous vein] Krohg-Sørensen K, et al. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2715–8 (Eng. Abstr.) (Nor)

[A method of diagnosing and evaluating the efficacy of surgical treatment of primary valvular insufficiency of the femoral vein] Konstantinova GD, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):126–7 (Rus)

[Recurrences of varicose veins] Lytkin MI, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):82–4 (Eng. Abstr.) (Rus)

[Tactics of the surgeon in acute thrombophlebitis of a great saphenous varix of the leg] Genyk SN, et al. **Klin Khir** 1988;(7):4–6 (Eng. Abstr.) (Rus)

[A subcutaneous continuous twisted crossing suture for obliteration of varicose veins] Tupchii VM. **Klin Khir** 1988; (7):67 (Rus)

[Surgical treatment of diseases of the leg veins in elderly patients] Kamalov SK. **Sov Med** 1989;(5):102–6 (Rus)

[Detection of arteriovenous anastomoses using thermography] Nagovitsyn ES, et al. **Vestn Khir** 1988 May; 140(5):46–8 (Rus)

[Prevention of complications of endoscopic correction of the crural venous blood flow] Nagovitsyn ES, et al. **Vestn Khir** 1989 Mar;142(3):113–5 (Rus)

[Treatment of recurrence of varicose veins of the lower extremities] Gadzhiev MM, et al. **Voen Med Zh** 1988 Oct; (10):35–7 (Rus)

[Results of surgical treatment of varices of the lower extremities and the problem of recurrence] Mazuch J, et al. **Rozhl Chir** 1989 Apr;68(4):272–9 (Eng. Abstr.) (Slo)

[Plethysmography in the study and follow-up of patients operated on for varices] Alvarez Sánchez JA, et al. **Angiologia** 1988 Jul–Aug;40(4):145–8 (Spa)

[Noninvasive monitoring of aortic blood flow and other hemodynamic parameters during anesthesia with isoflurane and enflurane] Muchada R, et al. **Rev Esp Anestesiol Reanim** 1988 Jul–Aug;35(4):194–8 (Eng. Abstr.) (Spa)

THERAPY

Ultrasonic treatment of varicose veins. Schultz-Haakh H, et al. **Angiology** 1989 Feb;40(2):129–37

Compression sclerotherapy techniques. Green D. **Dermatol Clin** 1989 Jan;7(1):137–46 (15 ref.)

A case of endoscopic injection sclerotherapy for a bleeding duodenal varix. Tsuji H, et al. **Gastroenterol Jpn** 1989 Feb; 24(1):60–4

Treatment of varicose veins: modern concepts and methods. de Groot WP. **J Dermatol Surg Oncol** 1989 Feb;15(2):191–8 (12 ref.)

Allergic reactions to Sotradecol [letter] Fronek H, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):684

Noninvasive examination of the venous system in the leg: presclerotherapy evaluation. Fronek HS. **J Dermatol Surg Oncol** 1989 Feb;15(2):170–3

Sclerotherapy: review of results and complications in 200 patients. Puissegur Lupo ML. **J Dermatol Surg Oncol** 1989 Feb;15(2):214–9

Sclerotherapy—translucidation of the skin prior to injection. Scarborough DA, et al. **J Dermatol Surg Oncol** 1989 May; 15(5):498–9

Bleeding stomal varices treated by sclerotherapy. Mosquera DA, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):337

A review of the treatment and recurrence of varicose veins in the Royal Naval Hospital, Plymouth 1981–1985. Quaile A, et al. **J R Nav Med Serv** 1987 Winter;73(3):185–8

Injection treatment for vascular flares. McCaffrey J. **Med J Aust** 1979 Oct 20;2(8):440–1

Stomal varices: percutaneous transhepatic embolization. Samaraweera RN, et al. **Radiology** 1989 Mar;170(3 Pt 1):779–82

Transhepatic embolization of superior mesenteric varices in portal hypertension. Ozaki CK, et al. **Surgery** 1989 Mar; 105(3):446–8

[Management of patients with varicose veins presenting with a history of deep venous thrombosis] Battino A, et al. **J Mal Vasc** 1989;14(3):254–7; discussion 257–8 (Eng. Abstr.) (Fre)

[The immediate arterial and microcirculatory hemodynamic effects of elastic support in arteritic varices] Boccalon H, et al. **Phlebologie** 1988 Nov–Dec;41(4):837–41 (Fre)

[The limits of effective sclerotherapy in the obese] Griton P. **Phlebologie** 1988 Jul–Oct;41(3):563–72 (Eng. Abstr.) (Fre)

[Varices caused by ostial insufficiency of the internal saphenous vein] Maleti O. **Phlebologie** 1988 Jul–Oct; 41(3):709–13 (Fre)

[The role of sclerotherapy in the treatment of varices of the small saphenous vein] Ouvry P, et al. **Phlebologie** 1988 Nov–Dec;41(4):751–65 (Fre)

[Patients' rights, being the fourth third of phlebology therapy. Tribute to Glauco Bassi] Tessari L. **Phlebologie** 1989 Apr–Jun;42(2):201–9 (Eng. Abstr.) (Fre)

[The risk of deep thrombosis due to intra-varicose injections. Why is it virtually non-existent?] Van der Molen HR. **Phlebologie** 1989 Jan–Mar;42(1):137–9 (Fre)

[When and how should varices be treated?] Piquerez MJ. **Rev Med Suisse Romande** 1989 Jun;109(6):465–8 (24 ref.) (Fre)

[Sclerosing of varicose veins in von Willebrand-Jürgens syndrome] Schuler T. **Hautarzt** 1989 Apr;40(4):239–40 (Ger)

[Methods and current therapy of varicosis] Oesch A. **Schweiz Med Wochenschr** 1988 Sep 3;118(35):1242–7 (Eng. Abstr.) (Ger)

[Phlebology—current therapeutic aspects from the dermatologic viewpoint] Kaufmann R. **Z Hautkr** 1988 Jul 15;63(7):577–84 (46 ref.) (Eng. Abstr.) (Ger)

[Sclerosing therapy of varices. Indications and technical notes] Berni A, et al. **Clin Ter** 1987 Dec 15;123(5):377–81 (Eng. Abstr.) (Ita)

[Angle of safety in sclerotherapy] Sánchez CF, et al. **Angiologia** 1988 Nov–Dec;40(6):215–8 (Eng. Abstr.) (Spa)

VARIOLA see **SMALLPOX**

VARIOLA VIRUS see **SMALLPOX VIRUS**

VARNISH see **PAINT**

VARNISH, CAVITY see **DENTAL CAVITY LINING**

VAS DEFERENS

Ectopic vas deferens, imperforate anus and hypospadias: a new triad. Hicks CM, et al. **J Urol** 1989 Mar;141(3):586–8
Vas deferens calculus. Küpeli S, et al. **J Urol** 1989 Feb; 141(2):378
Effects of ligation of the ductus deferens on the fowl epididymal region. Nakai M, et al.
Nippon Juigaku Zasshi 1989 Jun;51(3):521–9
Occlusion of the duct system as a cause of sterility—diagnosis and results of treatment. Fall M, et al.
Scand J Urol Nephrol Suppl 1988;110:51–2

ABNORMALITIES

Antispermatozoal antibodies in three men with infertility due to congenital aplasia of the vasa deferentia. Kay DJ, et al. **Am J Reprod Immunol Microbiol** 1988 Jun;17(2):48–52
On the familial occurrence of congenital bilateral absence of vas deferens. Kleczkowska A, et al. **Clin Genet** 1989 Apr;35(4):268–71 (34 ref.)
Crossed testicular ectopia with bilateral duplication of the vasa deferentia: an unusual finding in cryptorchism. Tolete-Velcek F, et al. **J Pediatr Surg** 1988 Jul;23(7):641–3
Significance of epididymal and ductal anomalies associated with testicular maldescent. Gill B, et al. **J Urol** 1989 Aug; 142(2 Pt 2):556–8; discussion 572
Re: Men with Congenital Absence of the Vas Deferens Often Have Seminal Vesicles [letter; comment] Horan AH.
J Urol 1989 Jul;142(1):142. **Comment on:** J Urol 1988 Jul;140(1):85–6
Unilateral absence of the vas deferens. A useful clinical sign. Donohue RE, et al. **JAMA** 1989 Feb 24;261(8):1180–2
Unilateral absence of a palpable vas deferens [letter] Schneiderman H. **JAMA** 1989 Oct 6;262(13):1771–2
Two births after microsurgical sperm aspiration in congenital absence of vas deferens [letter] Patrizio P, et al. **Lancet** 1988 Dec 10;2(8624):1364
[In vivo and in vitro fertilizing ability of immature human epididymal spermatozoa] Jardin A, et al.
Reprod Nutr Dev 1988;28(5):1375–85 (Eng. Abstr.) **(Fre)**
[Anomalies of the ductus deferens] Goriunov VG, et al.
Urol Nefrol (Mosk) 1988 Sep-Oct;(5):50–3 (Eng. Abstr.) **(Rus)**

ANALYSIS

Influence of long and short photoperiods on the morphology and androgen receptor levels of the epididymis and the ductus deferens of Phodopus sungorus. Schindelmeiser J, et al. **Andrologia** 1988 Nov-Dec;20(6):507–15
Age-related changes in the concentration of cytosolic androgen receptors in the epididymis, vas deferens and seminal vesicle of maturing male mice. Gallon C, et al. **J Androl** 1989 May-Jun;10(3):188–94

ANATOMY & HISTOLOGY

Structure of rete testis, vas efferens, epididymis and vas deferens of langur monkey (Presbytis entellus entellus Dufresne). Lohiya NK, et al. **Acta Eur Fertil** 1988 May-Jun;19(3):167–73
An enzyme histochemical study on phosphatases and glycosidases in the ductus epididymidis and ductus deferens of Phodopus sungorus under different photoperiods. Schindelmeiser J, et al. **Acta Histochem Suppl (Jena)** 1989; 37:203–7
Immunological relationships between specific sperm proteins and secretory polypeptides from seminal vesicles. Seitz J, et al. **Acta Histochem Suppl (Jena)** 1989;37:231–3
Structural differentiation and fluid reabsorption in the ductuli efferentes testis of the rat. Jones RC, et al.
Aust J Biol Sci 1987;40(1):79–90
The lymphatic drainage of the epididymis and of the ductus deferens of the rat, with reference to the immune response to vasectomy. McDonald SW, et al. **J Anat** 1988 Jun; 158:57–64

DRUG EFFECTS

Changes of norepinephrine levels, tyrosine hydroxylase and dopamine-beta-hydroxylase activities after castration and testosterone treatment in vas deferens of adult rats. Bustamante D, et al. **Biol Reprod** 1989 Mar;40(3):541–8
Safety evaluation of a male injectable antifertility agent, styrene maleic anhydride, in rats. Sethi N, et al.
Contraception 1989 Feb;39(2):217–26
Heterogeneity of the effects of monensin on two types of contractions evoked by inhibition of Na+–K+ ATPase in the guinea-pig vas deferens. Katsuragi T, et al.
Eur J Pharmacol 1989 Aug 11;167(1):147–53
Androgen regulation of major mRNAs for proteins of the immature and adult mouse vas deferens. Martinez A, et al. **J Endocrinol** 1989 Jan;120(1):67–74
Some pharmacological properties of the circular smooth muscle layer of the rat vas deferens. Brito AR, et al.
J Pharm Pharmacol 1988 Nov;40(11):781–6
Distinctive effect of ginseng saponins on development of morphine tolerance in guinea-pig ileum and mouse vas deferens. Watanabe J, et al. **J Pharmacobiodyn** 1988 Nov; 11(11):744–8
Effect of thiorphan on tachykinin-induced potentiation of nerve-mediated contractions of the rat isolated vas deferens. Patacchini R, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):678–81
Assessment of selectivity of muscarinic antagonists for M1 and M2 receptors in rabbit isolated vas deferens. Eltze M. **Pharmacology** 1988;37 Suppl 1:40–7
[Regulation of neural transmission in the mouse vas deferens by 2 subtypes of dopaminergic receptors] Mitolo-Chieppa D, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):763–8 (Eng. Abstr.) **(Ita)**
[The vas deferens as a model for the study of psychotropic drugs] Cugurra F, et al. **Clin Ter** 1987 Dec 31;123(6):429–39 (52 ref.) (Eng. Abstr.) **(Ita)**
[Regularities of the alpha-agonists inhibitory effect on the magnitude of maximum adrenergic response of the rat vas deferens] Berdysheva LV, et al. **Fiziol Zh SSSR** 1989 Jan; 75(1):19–27 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Epididymal and vas deferens immaturity in cryptorchidism. DePalma L, et al. **J Urol** 1988 Nov;140(5 Pt 2):1194–6

INJURIES

Presynaptic muscarinic receptors mediating inhibition of neurogenic contractions in rabbit vas deferens are of the ganglionic M1-type. Eltz M, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):233–42

INNERVATION

Do alpha 2-agonists inhibit sympathetic transmitter secretion in part by depressing a Ca2+ component of the nerve impulse 'upstream' of varicosities? Stjärne C, et al.
Acta Physiol Scand 1988 Aug;133(4):591–2
Basic features of an extracellular recording method to study secretion of a sympathetic co-transmitter, presumably ATP. Stjärne L, et al. **Acta Physiol Scand** 1989 Mar; 135(3):217–26
Evidence that alpha 2-agonists may inhibit sympathetic transmitter secretion by an effect 'upstream' of varicosities. Stjärne L, et al. **Acta Physiol Scand** 1988 Jul;133(3):433–4
Some pharmacological applications of an extracellular recording method to study secretion of a sympathetic co-transmitter, presumably ATP. Stjärne L, et al.
Acta Physiol Scand 1989 Mar;135(3):227–39
Photoperiodic influence on the innervation of the ductus epididymidis and ductus deferens of Phodopus sungorus—light microscopic studies. Schindelmeiser J, et al. **Anat Anz** 1989;168(4):347–53
Some morphohistochemical observations on the noradrenergic fibres of the vas deferens of the adult rat, after reserpine administration: preliminary study. Paparelli A, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):461–6
Photoperiodic influence on the innervation of the ductus epididymidis and ductus deferens of the Djungarian hamster, Phodopus sungorus: electron-microscopic and biochemical results. Schindelmeiser J, et al.
Cell Tissue Res 1989 Apr;256(1):175–81
Muscarinic M1- and M2-receptors mediating opposite effects on neuromuscular transmission in rabbit vas deferens. Eltze M. **Eur J Pharmacol** 1988 Jul 7;151(2):205–21
A possible crossed histamine-containing pathway adjacent to the sympathetic system of the rat vas deferens. Campos HA. **J Pharmacol Exp Ther** 1988 Mar;244(3):1121–7
Effects of castration and diabetes mellitus on cholinergic responsiveness and muscarinic receptors in the rat vas deferens. Longhurst PA, et al. **J Urol** 1989 May; 141(5):1225–9
2-Hydroxy-saclofen: an improved antagonist at central and peripheral GABAB receptors. Kerr DI, et al.
Neurosci Lett 1988 Sep 23;92(1):92–6
Simultaneous intracellular and focal extracellular recording of junction potentials and currents, and the time course of quantal transmitter action in rodent vas deferens. Cunnane TC, et al. **Neuroscience** 1989;30(3):563–75
Regulation of voltage-dependent excitatory responses to alpha,beta-methylene ATP, ATP and non-adrenergic nerve stimulation by dihydropyridines in the guinea-pig vas deferens. MacKenzie I, et al. **Neuroscience** 1988 Oct; 27(1):317–32
Agonists at presynaptic receptors on sympathetic nerves differentially affect two phases of the contractile response in the rat vas deferens. Mottram DR.
Pharmacol Res Commun 1988 Nov;20(11):963–73
Prostaglandins do not mediate the inhibitory effects of angiotensins II and III on autonomic neurotransmission in the rabbit vas deferens. Trachte GJ. **Prostaglandins** 1988 Aug;36(2):215–28

METABOLISM

Release of 5-hydroxytryptamine, dopamine and noradrenaline in the rat vas deferens in the presence of compound 48/80, veratridine or K+. Celuch SM, et al. **Br J Pharmacol** 1989 Jan;96(1):77–82
Age-related changes in neuronal uptake of catecholamines. Avellar MC, et al. **Braz J Med Biol Res** 1988;21(3):553–5
Alpha-adrenoceptor occupancy by N,N-dimethyl-2-bromo-2-phenethylamine hydrobromide (DMPEA) in rat vas deferens. Melchiorre C, et al.
Eur J Pharmacol 1988 Aug 24;153(2–3):255–61
Lack of evidence for epsilon-opioid receptors in the rat vas deferens. Sheehan MJ, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):237–45
Alpha 2-adrenoceptor-mediated modulation of noradrenaline release is decreased in vas deferens but not in cerebral cortex of diabetic rats. Drukarch B, et al.
J Neurol Sci 1989 Jul;91(3):293–9
Immunoreactive arginine vasopressin (AVP) and effects of AVP in the human vas deferens. Andersson KE, et al.
J Urol 1988 Nov;140(5):1054–7
Age-related differences in norepinephrine and non-collagenous protein in human vas deferens. Nakada T, et al. **J Urol** 1989 Apr;141(4):998–1002
Characteristics of [3H]nimodipine binding to sarcolemmal membranes from rat vas deferens and its regulation by guanine nucleotide. Higo K, et al. **Jpn J Pharmacol** 1988 Oct;48(2):213–21
Regional distribution of dopamine, 5-hydroxytryptamine, and noradrenaline in the rat vas deferens. Celuch SM, et al. **Neurochem Res** 1988 Oct;13(10):967–72

PATHOLOGY

[Two cases of pathological dilatation of seminal duct end] Terada T, et al. **Hinyokika Kiyo** 1989 Jan;35(1):153–7 (8 ref.) (Eng. Abstr.) **(Jpn)**
[Suprapubic sector real-time sonography of the prostato-vesicular segment and the vas deferens] Fučkar Z. **Lijec Vjesn** 1988 Aug;110(8):274–9 (Eng. Abstr.) **(Scr)**

PHYSIOLOGY

Relationship between alpha-adrenoceptor occupancy and contractile response in rat vas deferens. Experimental and theoretical analysis. Diaz-Toledo A, et al.
Eur J Pharmacol 1988 Nov 8;156(3):315–24
Effect of mating on sperm distribution in the reproductive tract of the male rat. Ratnasooriya WD, et al.
Gamete Res 1987 Jul;17(3):261–6
Microrecanalization after vasectomy in man. Freund MJ, et al. **J Androl** 1989 Mar-Apr;10(2):120–32
Adrenergic modulation of 'non-adrenergic' twitches in the rat vas deferens. Amobi NI, et al. **J Auton Pharmacol** 1988 Jun;8(2):141–52
Two alpha-adrenergic contractions with different Ca2+ activation mechanisms in response to field nerve stimulation in the circular smooth muscle of guinea-pig vas deferens. Fukushi Y, et al. **J Auton Pharmacol** 1988 Jun;8(2):119–25
Noradrenergic, purinergic, and cholinergic transmission in the mouse vas deferens: influence of field-stimulation parameters, reserpinization, 6-hydroxydopamine and 4-aminopyridine. Kaschube M, et al. **J Neural Transm** 1989; 76(1):39–53
Parasympathetic depression of vas deferens contraction in the guinea-pig involves adenosine receptors. Kurokawa M, et al. **J Physiol (Lond)** 1988 Dec;407:135–53
Effects of ryanodine on the smooth muscle of the rat vas deferens. Khoyi MA, et al. **Proc West Pharmacol Soc** 1988; 31:91–3
Sem observations of the male reproductive tract with special reference to epithelial phagocytosis. Murakami M, et al.
Prog Clin Biol Res 1989;296:207–14
Sodium-depletion-induced contractures in isolated rat vas deferens: possible role of endogenous catecholamines. Mishra SK, et al. **Q J Exp Physiol** 1988 Sep;73(5):747–54

PHYSIOPATHOLOGY

Changes in the contractile activity of the male genital tract as a consequence of vasectomy. Hib J.
Acta Physiol Pharmacol Latinoam 1988;38(2):159–65

RADIOGRAPHY

Vasography: experimental study. Levi d'Ancona CA, et al.
Int Urol Nephrol 1989;21(1):73–9
[The clinical application of percutaneous vasography and vaso-catheterization] Sun YC.
Chung Hua Wai Ko Tsa Chih 1988 Oct;26(10):608–9, 638 (Eng. Abstr.) **(Chi)**

SECRETION

Origin of ATP release in the rat vas deferens: concomitant measurement of [3H]noradrenaline and [14C]ATP. Vizi ES, et al. **Eur J Pharmacol** 1988 Dec 6;158(1–2):69–77

SURGERY

Prognostic factors in the surgical treatment of azoospermia. Kapur MM, et al. **Br J Urol** 1989 Jul;64(1):69–71
Results of microsurgical vasoepididymostomy: role of epididymis in sperm maturation. Silber SJ. **Hum Reprod** 1989 Apr;4(3):298–303
Transvasovasostomy—an alternative operation for obstructive azoospermia. Hamidinia A. **J Urol** 1988 Dec; 140(6):1545–8
Epididymal microsurgery: current techniques and new horizons. Southwick GJ, et al. **Microsurgery** 1988; 9(4):266–77
[Obstructive azoospermia treated by epididymovasostomy following vasovasostomy: a case report] Matsuda T, et al.
Hinyokika Kiyo 1988 May;34(5):889–91 (Eng. Abstr.) **(Jpn)**
[Vasectomy and vasovasostomy. II. Histological changes in the spermatic cord] López A, et al. **Actas Urol Esp** 1988 Jul-Aug;12(4):389–98 (44 ref.) (Eng. Abstr.) **(Spa)**
[Vasectomy and vasovasostomy. I. Testicular histological changes] López A, et al. **Actas Urol Esp** 1988 Jul-Aug;

12(4):381–8 (51 ref.) (Eng. Abstr.) (Spa)

TRANSPLANTATION

Transplant of a pediculate segment of vas deferens. Experimental study. Romero-Maroto J, et al. **Eur Urol** 1989;16(2):133–7

ULTRASTRUCTURE

Electron microscopic study of the secretion process in bovine reproductive organs. Agrawal Y, et al. **J Androl** 1988 Sep–Oct;9(5):307–16

VASA NERVORUM see under **BLOOD VESSELS**

VASA VASORUM

ANATOMY & HISTOLOGY

[The vasa vasorum of peripheral lymph vessels in the human] Schäfer K. **Z Lymphol** 1989 Jul;13(1):37–8 (Eng. Abstr.) (Ger)

PATHOLOGY

Vein-to-artery grafts: the long-term development of neo-intimal hyperplasia and its relationship to vasa vasorum and sympathetic innervation. McGeachie JK, et al. **Aust N Z J Surg** 1989 Jan;59(1):59–65

PHYSIOLOGY

The path of retrograde flow from the lumen of the lateral saphenous vein of the dog to its vasa vasorum. Crotty TP. **Microvasc Res** 1989 Jan;37(1):119–22

[Mechanisms of the regulation of the blood supply of the aortic wall] Azin AL, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):353–8 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Rapid development of atherosclerotic lesions in the rabbit carotid artery induced by perivascular manipulation. Booth RF, et al. **Atherosclerosis** 1989 Apr;76(2–3):257–68

Vasa vasorum in the carotid sinus of atherosclerotic monkeys: implications for baroreceptor function. Williams JK, et al. **Atherosclerosis** 1989 Jul;78(1):25–32

The role of vasa vasorum in atherosclerosis. Crotty TP. **Med Hypotheses** 1989 Apr;28(4):233–43

ULTRASTRUCTURE

[Scanning electron microscopy analysis of peroperative injury at the junctions of the vasa vasorum and the collateral veins of venous autografts prepared for myocardial revascularization] Jelić I, et al. **Lijec Vjesn** 1989 Jan–Feb;111(1–2):6–9 (Eng. Abstr.) (Scr)

VASCULAR DEMENTIA see **DEMENTIA, VASCULAR**

VASCULAR DISEASES

Proceedings of the first joint meeting of the Swedish and British Angiology Societies. Stockholm, Sweden, August 21–24, 1988. Abstracts. **Acta Chir Scand Suppl** 1988; 548:1–60

Guidewire technique for severe peripheral vascular disease [letter] Ghahramani AR, et al. **Cathet Cardiovasc Diagn** 1988;15(3):216

Systemic fungal infections: diagnosis and treatment II. Preface. Drutz DJ. **Infect Dis Clin North Am** 1989 Mar; 3(1):ix–xiii (22 ref.)

Adventitial cystic disease of the radial artery. Durham JR, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun; 30(3):517–20 (20 ref.)

Research initiatives in vascular surgery. Seminar sponsored by the Society for Vascular Surgery and the International Society for Cardiovascular Surgery, with the cooperation of the National Institutes of Health and the National Heart, Lung, and Blood Institute. Bethesda, Md., Feb. 19–20, 1988. Abstracts. **J Vasc Surg** 1989 Feb;9(2):367–98

Neutrophilic vascular dermatoses. Schreiner DT, et al. **Med Clin North Am** 1989 Sep;73(5):1237–45 (43 ref.)

[List of new members admitted to the French College of Vascular Pathology in 1988] **J Mal Vasc** 1989;14(2):163–5 (Fre)

[3d French-Britannic Colloquium on Phlebology. Nice 29–30 April 1988. Proceedings] **Phlebologie** 1988 Nov–Dec; 41(4):719–836 (Fre)

[Benelux Society of Phlebology. Ghent, 27 February 1988. Proceedings] **Phlebologie** 1988 Jul–Oct;41(3):624–89 (Fre)

[Vascular Pathology Society of Normandy. Deauville, 19 November 1988. Proceedings] **Phlebologie** 1989 Apr–Jun; 42(2):211–343 (Fre)

[French Society of Phlebology. Plenary session. 19 March 1988, Paris. Proceedings] **Phlebologie** 1988 Jul–Oct; 41(3):487–622 (Fre)

[French Society of Phlebology. 16 December 1988, Paris. Proceedings] **Phlebologie** 1989 Apr–Jun;42(2):181–209 (Fre)

[Vascular Pathology Society of Normandy. Opening comments] **Passas H. Phlebologie** 1989 Apr–Jun;42(2):211–3 (Fre)

[Swiss Society for Thoracic and Cardiovascular Surgery. 3d annual meeting. 17–18 March 1988, Zurich. Proceedings] **Helv Chir Acta** 1988 Nov;55(4):383–534 (Ger)

[Annual meeting of the Swiss Society of Angiology. Freiburg, 4–5 November 1988. Abstracts] **Vasa** 1988; 17(4):309–28 (Ger)

[Advances in angiology 1988. 17th annual meeting of the German Society of Angiology. 22–24 September 1988, Esslingen. Proceedings] **Vasa Suppl** 1988;23:1–301 (Ger)

[Vascular emergencies in childhood] Esposito G, et al. **Pediatr Med Chir** 1988 Jul–Aug;10(4):433–44 (41 ref.) (Eng. Abstr.) (Ita)

[Angiology and vascular surgery in Catalonia] Matas Docampo M. **Angiologia** 1989 Mar–Apr;41(2):78–81 (Spa)

BLOOD

Severe hemolysis and red cell fragmentation caused by the combination of a spectrin mutation with a thrombotic microangiopathy. Jarolim P, et al. **Am J Hematol** 1989 Sep; 32(1):50–6

Serum gonadotrophin concentrations in men with peripheral vascular disease and impotence. Fonseca VA, et al. **BMJ** 1989 Jan 21;298(6667):163–4

Fibronectin concentrations in plasma in peripheral vascular disease. Ejim OS, et al. **Clin Chem** 1988 Dec;34(12):2426–9

Intraplatelet serotonin in patients with diabetes mellitus and peripheral vascular disease. Barradas MA, et al. **Eur J Clin Invest** 1988 Aug;18(4):399–404

Elevated plasma levels of ED1+ ("cellular") fibronectin in patients with vascular injury. Peters JH, et al. **J Lab Clin Med** 1989 May;113(5):586–97

Plasma histamine concentrations are elevated in patients with diabetes mellitus and peripheral vascular disease. Gill DS, et al. **Metabolism** 1989 Mar;38(3):243–7

[The biology of fibrinogen. The role of pentoxifylline] Soria J, et al. **J Mal Vasc** 1989;14 Suppl A:25–8 (18 ref.) (Eng. Abstr.) (Fre)

CHEMICALLY INDUCED

Atherogenicity and carcinogenicity of high-arsenic artesian well water. Multiple risk factors and related malignant neoplasms of blackfoot disease. Chen CJ, et al. **Arteriosclerosis** 1988 Sep–Oct;8(5):452–60

Effect of diluting propofol on the incidence of pain on injection and venous sequelae. Stokes DN, et al. **Br J Anaesth** 1989 Feb;62(2):202–3

Acute vasospasm associated with anorexiant use. Kim I, et al. **J Okla State Med Assoc** 1988 Jul;81(7):395–8

Bilateral upper extremity ischemia after administration of dihydroergotamine-heparin for prophylaxis of deep venous thrombosis. Seifert KB, et al. **J Vasc Surg** 1988 Oct; 8(4):410–4

Arteritis and arterial drug toxicity in the safety assessment of drugs. Presented at the Toxicology Forum. Aspen, Colorado, July 9–11, 1987. **Toxicol Pathol** 1989;17(1 Pt 2):65–231

Pathogenesis of arterial lesions induced by dopaminergic compounds in the rat. Kerns WD, et al. **Toxicol Pathol** 1989;17(1 Pt 2):203–13

[Coronary and vascular pathology in dynamite workers] Vandevoir D, et al. **Phlebologie** 1989 Apr–Jun;42(2):223–32 (Eng. Abstr.) (Fre)

CLASSIFICATION

Classification of naturally occurring arterial disease in the dog. Kelly DF. **Toxicol Pathol** 1989;17(1 Pt 2):77–93 (44 ref.)

COMPLICATIONS

Vascular disease as a cause of vertigo and hearing loss: the role of 'normal' alcohol consumption. Kornhuber HH. **Adv Otorhinolaryngol** 1988;41:229–30

Aortocoronary saphenous vein graft spasm inducing ventricular fibrillation. Webb JG, et al. **Am Heart J** 1989 Feb;117(2):485–6

Incidence of arteriosclerotic lesions of the carotid arteries in chronic peripheral arterial diseaae and myocardial infarction. Spürk P, et al. **Angiology** 1989 Jan;40(1):39–44

Basic data concerning associated coronary disease in peripheral vascular patients. Hertzer NR. **Ann Vasc Surg** 1987 Dec;1(5):616–20 (50 ref.)

Platelet thrombus formation on collagen type I. A model of deep vessel injury. Influence of blood rheology, von Willebrand factor, and blood coagulation. Badimon L, et al. **Circulation** 1988 Dec;78(6):1431–42

Clinical and subclinical alveolitis in collagen vascular diseases: contribution of alpha 2-macroglobulin levels in BAL fluid. Martinot JB, et al. **Eur Respir J** 1989 May; 2(5):437–43

Endoscopic sclerotherapy for portal hypertension due to extrahepatic obstruction: long-term follow-up. Bhargava DK, et al. **Gastrointest Endosc** 1989 Jul–Aug;35(4):309–11

Hypothesis: stress induced vascular entrapment and migraine. Gage AA. **Headache** 1988 May;28(4):267–8

Effect of serum cholesterol on platelet adhesiveness in vascular complications of diabetes mellitus. Ramani A, et al. **Indian Heart J** 1988 May–Jun;40(3):144–7

Vascular involvement in leprosy. Kaur S, et al. **Indian J Lepr** 1989 Apr;61(2):238–48 (39 ref.)

Consequences of breast irradiation in patients with pre-existing collagen vascular diseases. Fleck R, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):829–33

Carpal tunnel syndrome associated with extra tunnel vascular compression of the median nerve motor branch. Widder S, et al. **J Hand Surg [Am]** 1988 Nov;13(6):926–7

Vasculopathy in the antiphospholipid syndrome: thrombosis or vasculitis, or both? [editorial] Lie JT. **J Rheumatol** 1989 Jun;16(6):713–5

Cutaneous gangrene, vascular calcification, and hyperparathyroidism. Mehregan DA, et al. **Mayo Clin Proc** 1989 Feb;64(2):211–5 (8 ref.)

Cutaneous manifestations of collagen vascular diseases and related disorders. **Med Clin North Am** 1989 Sep; 73(5):1055–305

Effects of crystalloid and colloid infusions on intracranial pressure and computerized electroencephalographic data in dogs with vasogenic brain edema. Tranmer BI, et al. **Neurosurgery** 1989 Aug;25(2):173–8; discussion 178–9

Exudative retinitis pigmentosa. Spallone A. **Ophthalmologica** 1988;197(4):185–92

Vascular damage, fibrosis, and chronic inflammation in mechanical back pain problems. Jayson MI. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):73–6 (23 ref.)

Diagnosis of vasculogenic impotence: combination of penile xenon-133 washout and papaverine tests. Lin SN, et al. **Urology** 1989 Jul;34(1):28–32

[Multiple primary cancers in blackfoot endemic area: report of a case] Chen KS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1125–8 (Eng. Abstr.) (Chi)

[Doppler ultrasound and sexual impotence] Battino J. **J Mal Vasc** 1989;14(2):138–9 (Fre)

[Treatment of the unstable erection syndrome caused by venous leakage. Preliminary study] Garbe JF. **J Mal Vasc** 1989;14(2):141–2 (Fre)

[Ultrasonic examination of impotence] Kercret G, et al. **J Mal Vasc** 1989;14(2):139–40 (Fre)

[Impotence in a urologic service] Sarramon JP, et al. **J Mal Vasc** 1989;14(2):130–2 (Eng. Abstr.) (Fre)

[Impotence of vascular origin] Virag R, et al. **J Mal Vasc** 1989;14(2):112–26 (Eng. Abstr.) (Fre)

[Definition and treatment of patients with venous leakage] Wespes E. **J Mal Vasc** 1989;14(2):140–1 (Fre)

[Pain in arterial pathology] van der Stricht J. **Phlebologie** 1988 Jul–Oct;41(3):659–63 (Eng. Abstr.) (Fre)

[Considerations on a case of hemolytic microangiopathic anemia in a patient with adenocarcinoma of the gallbladder] Barletta R, et al. **Recenti Prog Med** 1989 Mar;80(3):142–6 (Eng. Abstr.) (Ita)

[Fasciotomy in acute compartmental syndromes of vascular origin] Rodríguez Camarero S, et al. **Angiologia** 1988 Nov–Dec;40(6):206–11 (17 ref.) (Eng. Abstr.) (Spa)

[Intestinal angiodysplasia associated with hypertrophic subaortic stenosis (letter)] Peris P, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):599 (Spa)

CONGENITAL

[Infantile arterial calcification] Tegllund L. **Ugeskr Laeger** 1989 Feb 13;151(7):448–9 (Eng. Abstr.) (Dan)

DIAGNOSIS

Non-invasive assessment of blood vessels. Jonnart LE. **Acta Cardiol** 1989;44(1):1–6

Problems of the evaluation of occupational vasoneurosis in medical practice—a case report. Zák J. **Acta Univ Palacki Olomuc Fac Med** 1987;117:211–8

The positive effect of accurate noninvasive studies in decreasing the number of normal radiographic studies. Hill SL. **Am Surg** 1989 Sep;55(9):543–8

Basic data concerning noninvasive vascular testing. Moneta GL, et al. **Ann Vasc Surg** 1989 Apr;3(2):190–3

Arm exercise testing with myocardial scintigraphy in asymptomatic patients with peripheral vascular disease. Goodman S, et al. **Chest** 1989 Apr;95(4):740–6

Evaluation of a computerised test for the assessment of peripheral vascular disease. Goss DE, et al. **Eur J Vasc Surg** 1988 Oct;2(5):333–8

Intravascular ultrasound. Techniques, developments, clinical perspectives. **Int J Card Imaging** 1989;4(2–4):79–216

External magnetic guidance of endovascular catheters with a superconducting magnet: preliminary trials. Experimental studies in dogs and prospects of application. Gaston A, et al. **J Neuroradiol** 1988;15(2):137–47 (Eng, Fre)

Acute-phase reactants in sickle cell disease. Becton DL, et al. **J Pediatr** 1989 Jul;115(1):99–102

Overlap of granulomatous vasculitis and sarcoidosis: presentation with uveitis, eosinophilia, leg ulcers, sinusitis, and past foot drop. Petri M, et al. **J Rheumatol** 1988 Jul; 15(7):1171–3

Qualifications of the physician in charge of the vascular diagnostic laboratory. Rutherford RB. **J Vasc Surg** 1988 Dec;8(6):732–5

Fast magnetic resonance in vascular diseases of the abdomen. Raval B, et al. **Magn Reson Imaging** 1988 Jul–Aug; 6(4):473–7

Vascular occlusions detected by magnetic resonance imaging. Choyke PL, et al. **Magn Reson Med** 1985 Dec;2(6):540–54

The vascular laboratory: advances in noninvasive techniques. Bollinger A, et al. **World J Surg** 1988 Dec;12(6):724–31 (39 ref.)

[Clinical approach to the patient with polyvascular disease]

Zicot M. **Acta Chir Belg** 1988 May–Jun;88(3):169–74 (Eng. Abstr.) (Fre)

[Malignant venous tumors of the limbs. Apropos of 6 cases] Pietri J, et al. **J Chir (Paris)** 1988 Oct;125(10):575–81 (10 ref.) (Eng. Abstr.) (Fre)

[What can a neurophysiologic examination contribute to phlebologists?] Guex JJ, et al. **Phlebologie** 1988 Nov–Dec; 41(4):781–5 (Eng. Abstr.) (Fre)

[Angiologic diagnosis in the physician's office] Krahenbuhl B. **Ther Umsch** 1988 Aug;45(8):568–71 (Eng. Abstr.) (Fre)

[Basic abdominal ultrasound diagnosis course. Retroperitoneal blood vessels] Weigold B. **Bildgebung** 1987–89;56 Suppl 1:59–64 (Ger)

[The significance of functional vasospasms] Gasser P. **Dtsch Med Wochenschr** 1989 Jan 20;114(3):107–15 (58 ref.) (Ger)

[Doppler in peripheral arterial and venous pathology] Gioffrè L, et al. **Minerva Chir** 1989 Feb 28;44(4):693–7 (17 ref.) (Ita)

[A vascular syndrome as a paraneoplastic reaction] Mokrousov VM. **Ter Arkh** 1988;60(11):133–5 (Rus)

DRUG THERAPY

Therapeutic effectiveness of prostaglandins (PGs) in peripheral vascular disease (PVD). Linet OI, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:307–10

Microvascular evaluation of the effects of nifedipine in vascular patients by laser–Doppler flowmetry. Belcaro G, et al. **Angiology** 1989 Aug;40(8):689–94

Potential therapeutic mechanisms of stable prostacyclin (PGI2)–mimetics in severe peripheral vascular disease. Müller B, et al. **Biomed Biochim Acta** 1988;47(10–11):S40–4

Thrombolytic therapy. A review (Part 1 of 2). Stewart JH, et al. **Cleve Clin J Med** 1989 Mar–Apr;56(2):189–96 (81 ref.)

The pharmacological, pharmacodynamic and clinical properties of a new vasoactive agent: A meeting on Dalfon 500 mg. Held during the IVth European–American Symposium on Venous Diseases. Washington, D.C., March 31–April 2, 1987. **Int Angiol** 1988 Apr–Jun;7(2 Suppl):1–43

EDTA chelation therapy in chronic degenerative disease. Olszewer E, et al. **Med Hypotheses** 1988 Sep;27(1):41–9

Clinical evaluation of defibrotide in the treatment of arterial and venous vascular disease. A preliminary report. Belcaro G, et al. **Panminerva Med** 1989 Jan–Mar;31(1):34–41

Ciprostene in patients with peripheral vascular disease (PVD). An open–label, tolerance trial. Linet OI, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):9–14

Post–SAH vasospasm in patients treated with oral nimodipine. Volpin L, et al. **Riv Ear Sci Med Farmacol** 1987 Jun;9(2):179–83

Modulation of endothelium and control of vascular and thrombotic disorders. **Semin Thromb Hemost** 1988;14 Suppl:1–114

Medical treatment of abnormal endothelial cell function. Messmore HL Jr. **Semin Thromb Hemost** 1988;14 Suppl:47–57 (102 ref.)

Study on the effect of 150–mg Mydocalm coated tablets in peripheral vascular diseases and in myotonias of various origin. Abrányi I. **Ther Hung** 1988;36(2):56–61

Fibrinogen and pentoxifylline. Bachet P, et al. **Thromb Res** 1989 Jul 1;55(1):161–3

[Action of oral mesoglycan in dermatology] Scarsella A, et al. **G Ital Dermatol Venereol** 1988 Jun;123(6):XXIX–XXXII (Eng. Abstr.) (Ita)

[Chronic treatment of vascular diseases with indobufen] Belcaro G, et al. **Minerva Cardioangiol** 1989 May; 37(5):241–50 (Eng. Abstr.) (Ita)

[Pharmacologic correction of microcirculatory disorders in recurrent peptic ulcer] Pavlova NI. **Klin Med (Mosk)** 1988 Oct;66(10):106–9 (Eng. Abstr.) (Rus)

[Cardiac glycosides and calcium antagonists in the treatment of blood circulation insufficiency] Shushliapin OI, et al. **Vrach Delo** 1989 May;(5):28–31 (Eng. Abstr.) (Rus)

ECONOMICS

[Socioeconomic study on venous diseases] Hermoso Cuenca V, et al. **Angiologia** 1988 Nov–Dec;40(6):203–5 (Eng. Abstr.) (Spa)

EPIDEMIOLOGY

Peripheral arterial disease in large vessels is epidemiologically distinct from small vessel disease. An analysis of risk factors. Criqui MH, et al. **Am J Epidemiol** 1989 Jun; 129(6):1110–9

Common prevalence of coronary and peripheral vascular disease. Müller–Bühl U, et al. **Bol Asoc Med P R** 1988 Aug;80(8):289–90

Prevalence, risk factors and rheological profile of arterial vascular disease; first results of the Aachen study. Kiesewetter H, et al. **Folia Haematol (Leipz)** 1988; 115(4):587–93

Comparative study on the high prevalence of bladder cancer in the blackfoot disease endemic area in Taiwan. Chiang HS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov; 87(11):1074–80

[Round table on the current status of vascular surgery] Capdevila JM. **Angiologia** 1989 Mar–Apr;41(2):69–74 (Spa)

[Application of epidemiologic data to the organization of medical care of peripheral angiopathies] Estevan Solano JM, et al. **Angiologia** 1989 Mar–Apr;41(2):52–61 (65 ref.) (Spa)

[Current status of specialized care in angiology and vascular surgery in Andalusia] Gutiérrez del Manzano JA, et al. **Angiologia** 1989 Mar–Apr;41(2):62–8 (Spa)

[Planification of angiology and vascular surgery specialties. Incidence of vascular diseases and supply of care units in the autonomous community of Galicia] Varela Irijoa F. **Angiologia** 1989 Mar–Apr;41(2):49–51 (Spa)

ETIOLOGY

Idiopathic megacolon presenting with fatal inferior vena caval obstruction and colonic perforation. Case report. Scott MJ. **Acta Chir Scand** 1988 Oct;154(10):605–7

Significance of lymphocytes and blood vessel changes for edema formation in polyradiculoneuritis. Seitz RJ, et al. **Acta Neuropathol (Berl)** 1988;76(6):564–73

Peripheral vascular complications from percutaneous transluminal coronary angioplasty: a comparison with transfemoral cardiac catheterization. Kaufman J, et al. **Am J Med Sci** 1989 Jan;297(1):22–5

A vasculopathy with deposition of lambda light chain crystals. Stone GC, et al. **Ann Intern Med** 1989 Feb 15; 110(4):275–8

Arterial resistance to neoplastic invasion. Kolin A, et al. **Anticancer Res** 1989 Mar–Apr;9(2):409–11

Vascular disorders of the proximal femur following treatment of congenital hip dislocation. Bensahel H, et al. **Arch Orthop Trauma Surg** 1988;107(6):372–6

Prostaglandins in the pathogenesis and prevention of vascular disease. Moncada S, et al. **Blood Rev** 1987 Jun;1(2):141–5 (39 ref.)

Roentgenogram of the month. Exertional dyspnea and a widened mediastinum. Krawtz SM, et al. **Chest** 1989 Apr; 95(4):899–900

Vascular calcification, autonomic neuropathy, and peripheral blood flow in patients with diabetic nephropathy. Gilbey SG, et al. **Diabetic Med** 1989 Jan–Feb;6(1):37–42

Type 2 diabetes and Reaven's syndrome. Home P. **Diabetic Med** 1989 Sep–Oct;6(7):559–60

The clinical significance of vascular invasion in colorectal cancer. Minsky B, et al. **Dis Colon Rectum** 1989 Sep; 32(9):794–803 (25 ref.)

Long–term follow–up of Syme amputations for peripheral vascular disease associated with diabetes mellitus. Jany RS, et al. **Foot Ankle** 1988 Dec;9(3):107–10

An eye disorder caused by chronic cardiovascular disease. Schimeca GH, et al. **Geriatrics** 1989 May;44(5):98–102 (16 ref.)

Complications after total hip replacement. The contralateral limb. Smith JW, et al. **J Bone Joint Surg [Am]** 1989 Apr; 71(4):528–35

Vascular complications of diagnostic angiography via limb arteries [letter] Berridge DC, et al. **J R Coll Surg Edinb** 1989 Feb;34(1):54

Mesoaortic compression of the left renal vein (the so–called nutcracker syndrome): repair by a new stenting procedure. Barnes RW, et al. **J Vasc Surg** 1988 Oct;8(4):415–21

Vein compression by arterial aneurysms. Walsh JJ, et al. **J Vasc Surg** 1988 Oct;8(4):465–9

Effects of cytokines on vascular endothelium: their role in vascular and immune injury. Cotran RS, et al. **Kidney Int** 1989 Apr;35(4):969–75 (67 ref.)

Trends in risk factors for vascular disease [letter] Martin FI. **Med J Aust** 1989 Mar 20;150(6):348

Late pulmonary venous obstruction after surgical repair of infradiaphragmatic total anomalous pulmonary venous return. Kveselis DA, et al. **Pediatr Cardiol** 1988;9(3):175–7

Smoking–related disease in a VA hospital. Allen A. **Prev Med** 1988 Jul;17(4):440–8

Adrenovascular alterations from neurogenic stress modified by denervation of the adrenal gland in rat. Gonzalo–Sanz LM, et al. **Rev Esp Fisiol** 1989 Mar;45(1):1–7

DIPA (decompression–inducible platelet aggregation) and hemostasis: vascular occlusion and its prevention, in the web of the frog's foot. Murayama M. **Thromb Res** 1989 Jun 1;54(5):493–8

[Environmental temperature and circulatory diseases] Sotaniemi EA. **Duodecim** 1989;105(5):452–60 (40 ref.) (Fin)

[Contraception in a diabetic woman] Basdevant A. **Journ Annu Diabetol Hotel Dieu** 1989;:75–87 (30 ref.) (Fre)

[Occupational angioneurotic disorders provoked by vinyl monochloride and vibration] Letourneux M, et al. **Phlebologie** 1989 Apr–Jun;42(2):233–43 (Eng. Abstr.) (Fre)

[Vascular Pathology Society of Normandy. Summary and conclusions] Passas H. **Phlebologie** 1989 Apr–Jun; 42(2):339–43 (Fre)

[Effect of noise on circulatory disorders] Reinharez D. **Phlebologie** 1989 Apr–Jun;42(2):215–22 (Eng. Abstr.) (Fre)

[Venous sequelae after trauma to the lower limbs] Staelens I. **Phlebologie** 1989 Apr–Jun;42(2):299–305 (Fre)

[Laboratory methods for the testing of fibrinolytic capacity] Siegert G. **Z Med Lab Diagn** 1988;29(6):321–6 (15 ref.) (Eng. Abstr.) (Ger)

[Pulmonary vascular disease in shunted and nonshunted patients with tetralogy of Fallot] Yamaki S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):62–7 (Eng. Abstr.) (Jpn)

[Nuclear medicine in the diagnosis of vascular and urologic complications of kidney transplantation] Requena MJ, et al. **Actas Urol Esp** 1988 May–Jun;12(3):223–31 (56 ref.) (Eng. Abstr.) (Spa)

GENETICS

Hereditary vestibulo–cochlear dysfunction and vascular disorders. Verhagen WI, et al. **J Neurol Sci** 1989 Aug; 92(1):55–63

IMMUNOLOGY

The spectrum of livedo reticularis and anticardiolipin antibodies. Asherson RA, et al. **Br J Dermatol** 1989 Feb; 120(2):215–21

Immunopathogenesis of arterial diseases in animals and man. Krakowka S. **Toxicol Pathol** 1989;17(1 Pt 2):118–21 (1 ref.)

METABOLISM

Prostacyclin production in vascular endothelium of patients with Blackfoot disease. Mak OT. **Adv Exp Med Biol** 1988; 242:119–25

A statistical assessment of the dependability of transcutaneous tissue oxygen tension measurements. Stein M, et al. **J Surg Res** 1989 Jan;46(1):70–5

PATHOLOGY

Mice carrying a CAR–2 null allele lack carbonic anhydrase II immunohistochemically and show vascular calcification. Spicer SS, et al. **Am J Pathol** 1989 Apr;134(4):947–54

Intravenous leiomyomatosis of the uterus. A clinicopathological analysis of 16 cases with unusual histologic features. Clement PB, et al. **Am J Surg Pathol** 1988 Dec;12(12):932–45

Intermediate and fine filaments of vascular leiomyomas (angiomyoma), leiomyoma and leiomyosarcomas of large veins. Lundgren L, et al. **APMIS** 1989 Jul;97(7):637–45

Intravascular papillary endothelial hyperplasia. Miyamoto H, et al. **Clin Exp Dermatol** 1988 Nov;13(6):411–5 (29 ref.)

Leiomyosarcomata of the popliteal vessels: rare primary tumours. Basu SK, et al. **Eur J Vasc Surg** 1988 Dec; 2(6):423–5

Intravenous pyogenic granuloma of the hand. DiFazio F, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):310–2

Vascular lesions in lupus nephritis. Grishman E, et al. **Mod Pathol** 1988 May;1(3):235–41

Adrenovascular lesions from neurogenic stress modified by suppression of nervous centres in rat. Gonzalo–Sanz LM, et al. **Rev Esp Fisiol** 1989 Mar;45(1):9–14

An overview of human arterial pathology. McAllister HA Jr. **Toxicol Pathol** 1989;17(1 Pt 2):219–31 (33 ref.)

[Vascular dilatation in the gastric antrum—a rare cause of hemorrhage] Koivisto P. **Duodecim** 1988;104(5):336–40 (Fin)

[Idiopathic white atrophy causing cutaneous thrombotic microangiopathy. Apropos of a case] Boisnic S, et al. **Ann Pathol** 1989;9(2):118–20 (Eng. Abstr.) (Fre)

[Arteriopathia calcificans infantum in an infant with mucoviscidosis] Rübe C, et al. **Pathologe** 1989 Jan; 10(1):53–6 (Ger)

PHYSIOPATHOLOGY

Physiology and pathobiology of the microcirculation. Granger HJ, et al. **Am J Otolaryngol** 1988 Nov–Dec; 9(6):264–77 (77 ref.)

Real time multivariable laser Doppler analysis of arterial and venous compromise. Phillips JG, et al. **Am J Otolaryngol** 1989 Jan–Feb;10(1):26–31

Effects of oleic acid–, alpha–naphthylthiourea–, and phorbol myristate acetate–induced microvascular damage on indexes of pulmonary endothelial function in anesthetized dogs. Gardaz JP, et al. **Am Rev Respir Dis** 1988 Jun; 137(6):1350–5

Resting ankle–arm pressure index in vascular diseases of the lower extremities. Piecuch T, et al. **Angiology** 1989 Mar; 40(3):181–5

Mechanics of normal and diseased blood vessels. Dobrin PB. **Ann Vasc Surg** 1988 Jul;2(3):283–94 (32 ref.)

Assessment of regional blood flow and specific microvascular resistance in the foot by means of the transient thermal clearance method. Nitzan M, et al. **Clin Phys Physiol Meas** 1988 Nov;9(4):347–52

Velocity profiles in stenosed tube models using magnetic resonance imaging. Rittgers SE, et al. **J Biomech Eng** 1988 Aug;110(3):180–4

Flow/velocity characteristics of arterial bypass stenoses. Leopold PW, et al. **J Surg Res** 1989 Jan;46(1):23–8

Modeling sickle cell vasoocclusion in the rat leg: quantification of trapped sickle cells and correlation with 31P metabolic and 1H magnetic resonance imaging changes. Fabry ME, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3808–12

Spontaneous and induced arterial disease in the dog: pathology and pathogenesis. Detweiler DK. **Toxicol Pathol** 1989;17(1 Pt 2):94–108 (80 ref.)

[Rheologic particulars of venous flow. Physiopathologic consequences] Larcan A, et al. **J Mal Vasc** 1989; 14(2):107–10 (Eng. Abstr.) (Fre)

[Arm pain due to vascular causes] Bollinger A.

Ther Umsch 1988 Nov;45(11):794–800 (Eng. Abstr.) (Ger)

[Evaluation of coronary arterial diseases and left ventricular function in cases of vascular disease] Ozaki S, et al. Nippon Kyobu Geka Gakkai Zasshi 1988 Sep;36(9):1962–6 (Eng. Abstr.) (Jpn)

PREVENTION & CONTROL

Differences between premenopausal women and young men in the transamination pathway of methionine catabolism, and the protection against vascular disease. Blom HJ, et al. Eur J Clin Invest 1988 Dec;18(6):633–8

Treatment with calcium antagonists: pharmacokinetics and effects on blood pressure, vascular protection, and quality of life. Bühler FR, et al. J Cardiovasc Pharmacol 1989;13 Suppl 4:S29–30 (0 ref.)

Agonal hepatic arterial vasospasm. D'Alessandro AM, et al. Surg Gynecol Obstet 1989 Oct;169(4):324–8

[Non–medication prevention of vascular complications in mild arterial hypertension] Aleksandrov AA, et al. Sov Med 1988;(12):35–9 (57 ref.) (Rus)

RADIOGRAPHY

Intra–arterial digital subtraction angiography for children with idiopathic renal bleeding: a diagnosis of nutcracker phenomenon [published erratum appears in Clin Nephrol 1989 May;31(5):280] Takahashi Y, et al. Clin Nephrol 1988 Sep;30(3):134–40

Investigation of basic imaging properties in digital radiography. 13. Effect of simple structured noise on the detectability of simulated stenotic lesions. Ohara K, et al. Med Phys 1989 Jan–Feb;16(1):14–21

[Vascular pseudotumors in the mediastinum in the CT picture] Salamoun V, et al. Cesk Radiol 1988 Nov; 42(6):370–7 (Eng. Abstr.) (Cze)

[Digital subtraction angiography in clinical practice] Ruijs JH, et al. Ned Tijdschr Geneeskd 1988 Sep 24; 132(39):1789–92 (24 ref.) (Dut)

[Pitfalls in phlebography] Foucart H, et al. J Mal Vasc 1989; 14 Suppl B:61–7 (Eng. Abstr.) (Fre)

[Experience with 1–year use of the Thomson set for digital subtraction angiography] Pruszyński B, et al. Pol Przegl Radiol (Warszawa) 1987 Nov–Dec;51(6):310–4 (Eng. Abstr.) (Pol)

[Primary vascular diseases of the liver in adults] Hartleb M, et al. Pol Tyg Lek 1988 Sep 12;43(37):1179–83 (Pol)

RADIONUCLIDE IMAGING

Radionuclide angiography of the hand in occupational vasoneurosis. Zák J, et al. Acta Univ Palacki Olomuc Fac Med 1987;117:219–24

Density analysis of scintigram with flow dynamics at bolus radionuclide venography: count correction with velocity. Márk B, et al. Eur J Nucl Med 1989;15(2):93–5

REHABILITATION

[Treatment of autonomic vascular dystonia by combined physiotherapy methods] Lobzin VS, et al. Vrach Delo 1989 Mar;(3):22–3 (Eng. Abstr.) (Rus)

SURGERY

Effects of anesthesia on leg blood flow in vascular surgical patients. Haljamäe H. Acta Chir Scand Suppl 1989;550:81–7 (54 ref.)

Comparative effectiveness of argon (488, 514 nm), green (514 nm.) and carbon dioxide (10,600 nm.) laser irradiation on vascular and other cutaneous lesions. Arndt KA. Ann Acad Med Singapore 1988 Oct;17(4):502–4

Initial experience with the argon laser in cutaneous vascular lesions. Fong PH, et al. Ann Acad Med Singapore 1988 Oct;17(4):498–501

The Vascular Surgical Society of Great Britain and Ireland. Leeds, 24–25 November 1988. Abstracts. Br J Surg 1989 Apr;76(4):413–20

Amputation for peripheral vascular disease [letter] Gwynn BR, et al. Br J Surg 1989 Jun;76(6):654

Amputation for peripheral vascular disease: the case for level selection. McCollum PT, et al. Br J Surg 1988 Dec; 75(12):1193–5

Sartorius muscle coverage for the treatment of complicated vascular surgical wounds. Kaufman JL, et al. J Cardiovasc Surg (Torino) 1989 May–Jun;30(3):479–83

Success and failure in vascular surgery. The René Leriche memorial lecture 1988. Vollmar JF. J Cardiovasc Surg (Torino) 1989 Mar–Apr;30(2):141–54 (41 ref.)

Ankle and foot fasciotomy: an adjunctive technique to optimize limb salvage after revascularization for acute ischemia. Ascer E, et al. J Vasc Surg 1989 Apr;9(4):594–7

Tibiotibial vein bypass grafts: a new operation for limb salvage [letter] Danza R. J Vasc Surg 1987 Mar;5(3):501

Silent myocardial ischemia in patients undergoing peripheral vascular surgery: incidence and association with perioperative cardiac morbidity and mortality. McCann RL, et al. J Vasc Surg 1989 Apr;9(4):583–7

Nutrient bed protection during lower extremity arterial reconstruction. Rutherford RB. J Vasc Surg 1987 Mar; 5(3):529–34 (34 ref.)

Joint session of the German Society for Vascular Surgery and the German Society for Thoracic and Cardiovascular Surgery. (18th annual meeting). February 23–February 25, 1989, Munich. Abstracts. Thorac Cardiovasc Surg 1989 Feb; 37 Suppl 1:1–92 (Eng, Ger)

[Treatment of vasculogenic impotence by corporeal revascularization and/or ligation of deep dorsal veins: a preliminary report] Lin SN, et al. Chung Hua I Hsueh Tsa Chih 1988 Mar;41(3):211–6 (Eng. Abstr.) (Chi)

[Advances and current status of vascular grafts] Qian YQ. Chung Hua Wai Ko Tsa Chih 1988 Oct;26(10):633–5 (24 ref.) (Chi)

[Advances in vascular surgery] Wang ZG. Chung Hua Wai Ko Tsa Chih 1988 Feb;26(2):83–5 (25 ref.) (Chi)

[Behçet's disease and vascular surgery] Bahnini A, et al. J Mal Vasc 1988;13(3):270–2 (Eng. Abstr.) (Fre)

[Experiences with electronic data processing in vascular surgery] Loeprecht H. Chirurg 1989 Feb;60(2):90–4 (4 ref.) (Ger)

[Surgical therapy of vascular impotence] Schnyder von Wartensee M, et al. Schweiz Med Wochenschr 1988 Sep 3;118(35):1237–41 (Eng. Abstr.) (Ger)

[A review of post–operative multiple organ failure in peripheral arterial diseases] Kurihara H, et al. Nippon Geka Gakkai Zasshi 1988 Nov;89(11):1908–13 (Eng. Abstr.) (Jpn)

[Spontaneous rupture of veins of the utero–ovarian plexus in pregnancy] Starzewski J, et al. Wiad Lek 1988 Sep 1; 41(17):1175–7 (Eng. Abstr.) (Pol)

[Current problems of vascular surgery] Pokrovskiĭ AV. Kardiologiia 1988 Jun;28(6):5–7 (Rus)

THERAPY

Update on interventional neuroradiology. Viñuela F, et al. AJR Am J Roentgenol 1989 Jul;153(1):23–33 (73 ref.)

Proceedings of the 1988 UAEM/IRIEM Research Symposium on Emergency Thrombolytic Therapies. Ann Emerg Med 1988 Nov;17(11):1136–220

Percutaneous transluminal angioplasty without anticoagulation. Ameli FM, et al. Ann Vasc Surg 1989 Jul; 3(3):244–7

Peripheral angioplasty—10 years on [editorial] Cumberland DC. Clin Radiol 1988 Nov;39(6):573–4

The non–operative care of the vascular surgical patient. Bradham GB. J S C Med Assoc 1989 May;85(5):221–5

[Influence of nonsurgical intervention on vascular surgical practice. Hollier LH. J Vasc Surg 1989 May;9(5):627–9

Interventional procedures for the treatment of vascular disease: recommendations regarding quality assurance, development, credentialing criteria, and education. Regional Vascular Society Committee on Interventional Therapy. String ST, et al. J Vasc Surg 1989 May;9(5):736–9

The vascular war [letter] JAMA 1989 Jun 23–30; 261(24):3550–1

The vascular war of 1988. Wexler L, et al. JAMA 1989 Jan 20;261(3):418–9

The vascular war of 1988: the enemy is met. Zarins CK. JAMA 1989 Jan 20;261(3):416–7

Noncoronary angioplasty. Becker GJ, et al. Radiology 1989 Mar;170(3 Pt 2):921–40 (304 ref.)

[Interventional radiology and vascular pathology] Joffre F, et al. J Chir (Paris) 1989 Mar;126(3):169–78 (30 ref.) (Eng. Abstr.) (Fre)

[Reflections of an angiologist apropos of the present–day indications for intraluminal angioplasty (letter)] Becker F. J Mal Vasc 1989;14(2):153 (Fre)

[TNS in peripheral circulatory disorders] Kaada B. Lakartidningen 1988 Oct 12;85(41):3370–1 (Nor)

[Correction of microcirculation disorders and rheologic properties of the blood in patients with dynamic intestinal obstruction] Seidov VD, et al. Khirurgiia (Mosk) 1989 Jan; (1):104–8 (Rus)

[Bioregulation problems in the treatment of patients with autonomic vascular dystonia] Agte BS, et al. Vrach Delo 1988 Sep;(9):32–4 (Eng. Abstr.) (Rus)

[Meeting of the association for medical angiology: how to manage atherosclerosis and treat peripheral vascular disease?] Fagrell B. Lakartidningen 1989 Feb 8;86(6):424–5 (Swe)

URINE

Urinary excretion of connective tissue protein markers in arterial disease. McIntosh CJ, et al. Angiology 1989 Sep; 40(9):814–7

VASCULAR ENDOTHELIUM see ENDOTHELIUM, VASCULAR

VASCULAR GRAFT OCCLUSION see GRAFT OCCLUSION, VASCULAR

VASCULAR HEADACHE

[Cluster headache] Tervo K, et al. Duodecim 1989; 105(4):351–5 (32 ref.) (Fin)

[Present knowledge of pathogenesis, pathophysiology, clinical aspects and therapy of vascular headaches] Bokonjić R. Neurologija 1988;37(3–4):83–104 (42 ref.) (Eng. Abstr.) (Ser)

[Vascular headache: circulatory, hemorrheologic, electrophysiologic and psychological aspects] Bartko D, et al. Cesk Neurol Neurochir 1989 Mar;52(2):103–9 (Eng. Abstr.) (Slo)

BLOOD

Significance of hormonal changes in migraine and cluster headache. Martignoni E, et al. Gynecol Endocrinol 1987 Sep;1(3):295–319 (100 ref.)

TRH test in cluster headache. Bussone G, et al. Headache 1988 Aug;28(7):462–4

Differential changes in receptor–mediated transduction in migraine and cluster headache: studies on polymorphonuclear leucocytes. de Belleroche J, et al. Headache 1988 Jul;28(6):409–13

Basophil histamine release and leukotriene (LTB4–LTC4) production in cluster headache. Martelletti P, et al. Headache 1989 Jan;29(1):46–8

CLASSIFICATION

[Clinical characteristics of cluster headache] Jelencsik I, et al. Orv Hetil 1989 May 28;130(22):1153–4, 1157–8 (36 ref.) (Eng. Abstr.) (Hun)

COMPLICATIONS

Shortlasting unilateral neuralgiform headache attacks with conjunctival injection, tearing, sweating, and rhinorrhea. Sjaastad O, et al. Cephalalgia 1989 Jun;9(2):147–56

Limb pain in migraine and cluster headache. Guiloff RJ, et al. J Neurol Neurosurg Psychiatry 1988 Aug;51(8):1022–31

Facial pain due to migraine and cluster headache. Campbell JK. Semin Neurol 1988 Dec;8(4):324–31 (35 ref.)

[Cluster headache and multiple sclerosis. Is it coincidence or a causal relation?] Ara JR, et al. Med Clin (Barc) 1989 Jun 3;93(1):39 (Spa)

DIAGNOSIS

Cluster headache: combined assessment with pupillometry and evaporimetry. Salvesen R, et al. Cephalalgia 1988 Sep; 8(3):211–8

Chronic paroxysmal hemicrania. XIII. The pupillometric pattern. Souza Souza Carvalho D, et al. Cephalalgia 1988 Sep;8(3):219–26

Cluster headache and its variants. Sjaastad O. Headache 1988 Nov;28(10):667–8

Cold spot question heats up [letter] Swerdlow B, et al. Headache 1989 Feb;29(2):122–3

[Clinical and therapeutic aspects of headache of vascular origin in children] Buruiană M, et al. Rev Chir [Otorinolaringol] 1989 Jan–Mar;34(1):39–44 (Eng. Abstr.) (Rum)

DRUG THERAPY

Ergot alkaloids block neurogenic extravasation in dura mater: proposed action in vascular headaches. Saito K, et al. Ann Neurol 1988 Dec;24(6):732–7

Cluster headache and intercalated seizures in a young man: therapeutic effectiveness of flunarizine. Astarloa R, et al. Headache 1989 Jun;29(6):377–8

Prophylactic treatment of cluster headache with verapamil. Gabai IJ, et al. Headache 1989 Mar;29(3):167–8

The chronic paroxysmal hemicrania concept expanded. Spierings EL. Headache 1988 Oct;28(9):597–8

Comparison of single–dose meperidine, butorphanol, and dihydroergotamine in the treatment of vascular headache. Belgrade MJ, et al. Neurology 1989 Apr;39(4):590–2

Intravenous nitroglycerin as an experimental model of vascular headache. Basic characteristics. Iversen HK, et al. Pain 1989 Jul;38(1):17–24

[Clinical and experimental research on lutongning in treating vascular headache] Yu BF. Chung Hsi I Chieh Ho Tsa Chih 1989 May;9(5):278–9, 261 (Eng. Abstr.) (Chi)

[Clinical evaluation of a new preparation of Ersilan drops in patients with vascular headaches] Serclová L. Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1988;31(5):649–55 (Eng. Abstr.) (Cze)

[Treatment of vascular pain of the face by methylprednisolone injection into the area of the greater occipital nerve: 16 cases] Bigo A, et al. Rev Neurol (Paris) 1989;145(2):160–2 (Eng. Abstr.) (Fre)

ETIOLOGY

[Vascular headache, thrombopenia and serotonin metabolism] Laloux P, et al. Acta Neurol Belg 1988 Nov–Dec; 88(5):290–6 (Eng. Abstr.) (Fre)

[Symptomatic cluster headache? Apropos of 4 case reports] Molins A, et al. Med Clin (Barc) 1989 Feb 11;92(5):181–3 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Assessment of the immune status in patients with cluster headache. Frequency of immunocompetent cells and analysis of Salmonella spontaneous binding to peripheral blood lymphocytes. Covelli V, et al. Acta Neurol (Napoli) 1988 Dec;10(6):322–30

Lymphokine–activated killer (LAK) cell phenomenon in cluster headache. "In vitro" activation by recombinant interleukin–2. Giacovazzo M, et al. Headache 1989 Mar; 29(3):177–9

[Local and general humoral immunity in patients with

migraine, Horton's syndrome and autonomic pain] Puzin MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):56–8 (Eng. Abstr.) (Rus)

METABOLISM

Cluster headache in the male: sex steroid pattern and gonadotropic response to luteinizing hormone releasing hormone. Murialdo G, et al. **Cephalalgia** 1989 Jun;9(2):91–8

PHYSIOPATHOLOGY

Autonomic disturbances in cluster headache. Drummond PD. **Brain** 1988 Oct;111 (Pt 5):1199–209

Dysfunction of the sympathetic nervous system in cluster headache. Drummond PD. **Cephalalgia** 1988 Sep;8(3):181–6

Pupil responsiveness in cluster headache: a dynamic TV pupillometric evaluation. Micieli G, et al. **Cephalalgia** 1988 Sep;8(3):193–201

Cluster headache: forehead sweating pattern during heating and pilocarpine tests. Variation as a function of time. Salvesen R, et al. **Cephalalgia** 1988 Dec;8(4):245–53

Cluster headache: combined assessment with pupillometry and evaporimetry [letter] Salvesen R, et al. **Cephalalgia** 1989 Mar;9(1):81

Cluster headache: pupillometric patterns as a function of the degree of anisocoria. Salvesen R, et al. **Cephalalgia** 1989 Jun;9(2):131–8

Cluster headache: on the inadequacy of existing hypotheses concerning the origin of the autonomic phenomena. Sjaastad O. **Cephalalgia** 1988 Sep;8(3):133–7

Cluster headache: the possible significance of midline structures. Sjaastad O. **Cephalalgia** 1988 Dec;8(4):229–36

Cluster headache: on the significance of so-called minibouts. Sjaastad O, et al. **Cephalalgia** 1988 Dec;8(4):285–91

Impaired cardiovascular reflexes in cluster headache and migraine patients: evidence for an autonomic dysfunction. Boiardi A, et al. **Headache** 1988 Jul;28(6):417–22

Are there objective criteria to follow up migrainous patients? A prospective study with thermography and evoked potentials. Dalla Volta G, et al. **Headache** 1988 Jul; 28(6):423–5

Reversal of cluster headache side following treatment of arteriovenous malformation. Gawel MJ, et al. **Headache** 1989 Jul;29(7):453–4

Intracranial haemodynamics in cluster headache. Gawel MJ, et al. **Headache** 1988 Aug;28(7):484–7

Ocular blood flow changes in cluster headache and chronic paroxysmal hemicrania. Horven I, et al. **Headache** 1989 Jun;29(6):373–6

Cluster headache: evidence for a pathophysiologic focus in the superior pericarotid cavernous sinus plexus. Moskowitz MA. **Headache** 1988 Oct;28(9):584–6 (20 ref.)

The pericarotid region and cluster headache [letter] Vijayan N, et al. **Headache** 1989 Mar;29(3):189

Unilateral impairment of pupillary response to trigeminal nerve stimulation in cluster headache. Fanciullacci M, et al. **Pain** 1989 Feb;36(2):185–91

Pain mechanisms underlying vascular headaches. Progress Report 1989. Moskowitz MA, et al. **Rev Neurol (Paris)** 1989;145(3):181–93 (135 ref.)

[Cluster headache: clinical and physiopathogenetic aspects] Pauri F, et al. **Riv Neurol** 1988 Jul–Aug;58(4):156–63 (55 ref.) (Eng. Abstr.) (Ita)

[Cluster headache] Alberca R, et al. **Arch Neurobiol (Madr)** 1988 Jul–Aug;51(4):181–9 (Eng. Abstr.) (Spa)

[Cluster headache: relation of age at onset and various clinical data] Alberca Herrador R, et al. **Arch Neurobiol (Madr)** 1988 Sep–Oct;51(5):237–41 (Eng. Abstr.) (Spa)

PREVENTION & CONTROL

Episodic cluster headache: short and long term results of prophylactic treatment. de Carolis P, et al. **Headache** 1988 Aug;28(7):475–6

SURGERY

Surgical treatment of chronic cluster headache. Sweet WH. **Headache** 1988 Nov;28(10):669–70

THERAPY

Nasal plug as an aid for cluster headaches: relevance of the nasal cycle [letter] Backon J. **Headache** 1989 Jan;29(1):60

Two studies of the potential mechanisms of action in the thermal biofeedback treatment of vascular headache. Morrill B, et al. **Headache** 1989 Mar;29(3):169–76

Non-invasive treatment of vascular and muscle contraction headache: a comparative longitudinal clinical study. Reich BA. **Headache** 1989 Jan;29(1):34–41

Treatment of a cluster headache patient in a hyperbaric chamber. Weiss LD, et al. **Headache** 1989 Feb;29(2):109–10

An observation on the treatment of 34 cases of vascular headache with head-acupuncture therapy. Sheng LL, et al. **J Tradit Chin Med** 1989 Mar;9(1):25–7

VASCULAR PATENCY

see related

GRAFT OCCLUSION, VASCULAR

New ultrasonic femoropopliteal and tibiofemoral tests in the study of patency of the deep venous system. Barták JV. **Angiology** 1989 Aug;40(8):701–4

Post-operative Doppler evaluation of 48 arterial reconstructions at the wrist. Bellan N, et al. **Ann Chir Main** 1989;8(1):22–9 (Eng, Fre)

Femoropopliteal in situ saphenous vein bypass: technical aspects and factors determining patency. Becquemin JP, et al. **Ann Vasc Surg** 1987 May;1(4):432–40

The in situ bypass above the knee. Buchbinder D, et al. **Ann Vasc Surg** 1989 Jul;3(3):210–3

Functional failure of patent femorodistal in situ grafts. Fowl RJ, et al. **Ann Vasc Surg** 1989 Jul;3(3):200–4

Long-term patency of regenerated neoaortic wall following the implant of a fully biodegradable polyurethane prosthesis: experimental lipid diet model in pigs. Galletti G, et al. **Ann Vasc Surg** 1989 Jul;3(3):236–43

Patency after iliofemoral and iliocaval venous thrombectomy. Juhan C, et al. **Ann Vasc Surg** 1987 Dec;1(5):529–33

In situ bypass to the dorsalis pedis and tibial arteries at the ankle. Levine AW, et al. **Ann Vasc Surg** 1989 Jul;3(3):205–9

Effect of preclotting on the porosity and thrombogenicity of knitted Dacron grafts. Sheehan SJ, et al. **Biomaterials** 1989 Mar;10(2):75–9

Electrocardiographic prediction of coronary artery patency after thrombolytic treatment in acute myocardial infarction: use of the ST segment as a non-invasive marker. Hogg KJ, et al. **Br Heart J** 1988 Oct;60(4):275–80

The significance of resection length on the patency rate, and the histopathology, of experimentally avulsed and microsurgically repaired blood vessels. Zeeman BJ, et al. **Br J Plast Surg** 1988 Sep;41(5):509–14

Biologic and structural evaluation of 80 surgically excised human umbilical vein grafts. Julien S, et al. **Can J Surg** 1989 Mar;32(2):101–7

Self-expanding stents for the treatment of a long venous stenosis in a dialysis shunt: case report. Günther RW, et al. **Cardiovasc Intervent Radiol** 1989 Jan–Feb;12(1):29–31

Pentoxifylline reduces pulmonary leucostasis and improves capillary patency in a rabbit peritonitis model. Tighe D, et al. **Circ Shock** 1989 Jun;28(2):159–64

Scintigraphic demonstration of restored Denver peritoneovenous shunt patency using urokinase. Balon H, et al. **Clin Nucl Med** 1989 Apr;14(4):310–1

Assessment of portal vein patency: comparison of arterial portography and ultrasound scanning. Raby N, et al. **Clin Radiol** 1988 Jul;39(4):381–5

The future of saphenous vein as a coronary artery bypass conduit. Angelini GD, et al. **Eur Heart J** 1989 Mar; 10(3):273–80 (101 ref.)

The influence of patent branches on in situ vein graft haemodynamics. Gwynn BR, et al. **Eur J Vasc Surg** 1987 Jun;1(3):169–72

Response of skin photoplethysmography, laser Doppler flowmetry and transcutaneous oxygen tensiometry to stenosis-induced reductions in limb blood flow. Kvernebo K, et al. **Eur J Vasc Surg** 1989 Apr;3(2):113–20

Three years experience with denaturated venous homografts as an arterial substitute: a clinical, pathological and immunological study. van Reedt Dortland RW, et al. **Eur J Vasc Surg** 1988 Aug;2(4):233–9

Intraoperative assessment of in situ saphenous vein bypass grafts by vascular endoscopy. Woelfle KD, et al. **Eur J Vasc Surg** 1988 Aug;2(4):257–62

Assessment of portal vein patency: pitfalls and problems in diagnostic comparative studies. Taylor CR. **Hepatology** 1989 Jul;10(1):117–8

Radionuclide angiography in the evaluation of iliofemoral venous patency. Akesson H, et al. **Int Angiol** 1989 Jan–Mar; 8(1):22–7

Dual function of the distal arteriovenous fistula for maintenance of arterial and venous prosthetic graft patency in the lower extremity. Miller N, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):225–9

Intraoperative pulse oximetry in peripheral revascularization in an infant. Skeen JT, et al. **J Clin Monit** 1988 Oct; 4(4):272–3

A study of coronary artery bypass graft patency using MR imaging. Frija G, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):226–32

Noninvasive assessment of microvessels with the duplex scanner. Dooley TW, et al. **J Hand Surg [Am]** 1989 Jul; 14(4):670–3

Vascular medullary patency in free vascularized bone grafts: CT scan experimental study. González del Pino J, et al. **J Reconstr Microsurg** 1988 Jul;4(4):271–6

Vascular patency of fibular free graft: assessment by Doppler color-flow imager: a case report. Stevenson TR, et al. **J Reconstr Microsurg** 1988 Oct;4(5):409–13

Thrombogenicity of canine free internal mammary artery autografts. Mashburn JP, et al. **J Surg Res** 1989 Jan; 46(1):16–22

Monitoring functional patency of in situ saphenous vein bypasses: the impact of a surveillance protocol and elective revision. Bandyk DF, et al. **J Vasc Surg** 1989 Feb; 9(2):286–96

Effect of twist on flow and patency of vein grafts. Endean ED, et al. **J Vasc Surg** 1989 May;9(5):651–5

Patency of femorofemoral venous crossover grafts assessed by duplex scanning and phlebography. Harris JP, et al. **J Vasc Surg** 1988 Dec;8(6):679–82

Duplex sonography accurately assesses portacaval shunt patency. Helton WS, et al. **J Vasc Surg** 1988 Dec; 8(6):657–60

Reperfusion or persisting occlusion? **Lancet** 1989 May 20; 1(8647):1114–5 (20 ref.)

A reliable method for monitoring the microvascular patency of free jejunal transfers in reconstructing the pharynx and cervical esophagus. Bafitis H, et al. **Plast Reconstr Surg** 1989 May;83(5):896–8

Macro assumptions from micro experiments [letter; comment] McMahon R. **Plast Reconstr Surg** 1989 Jul;84(1):174–5. **Comment on:** Plast Reconstr Surg 1988 Sep;82(3):473–9

Microvascular anastomosis of interpositional vein grafts with the UNILINK system. A comparative experimental study. Ragnarsson R, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):23–8

Recanalization of autogenous vein grafts. Beggs JH. **South Med J** 1988 Nov;81(11):1446–7

The influence of early surface thromboreactivity on long-term arterial graft patency. Rumisek JD, et al. **Surgery** 1989 May;105(5):654–61

Prostacyclin and thromboxane production by autogenous femoral veins grafted into the arterial circulation of the dog. de Castellarnau C, et al. **Thromb Haemost** 1989 Apr 25;61(2):279–85

Progress in the treatment of anastomotic aneurysms. Courbier R, et al. **World J Surg** 1988 Dec;12(6):742–9

[Progression of coronary artery disease after coronary artery bypass graft surgery] Huang J. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Oct; 16(5):279–82, 317 (Eng. Abstr.) (Chi)

[Graft patency and myocardial viability after aorto-coronary bypass surgery evaluated by exercise 201T1 myocardial SPECT] Yada T, et al. **J Cardiol** 1988 Jun;18(2):299–306 (Eng. Abstr.) (Jpn)

[A study of coronary artery bypass graft patency in early postoperative period] Kino K, et al. **Kyobu Geka** 1988 Nov; 41(12):954–7 (Eng. Abstr.) (Jpn)

[Effect of the quantity and phasic structure of volumetric blood flow on the patency of aortocoronary shunts] Sandrikov VA, et al. **Kardiologiia** 1989 Feb;29(2):98–9 (Rus)

[Clinico-angiographic correlations in transmural acute myocardial infarction treated with thrombolytic agents (retracted in Medicina (B Aires) 1988;48(3):284)] Rodriguez A, et al. **Medicina (B Aires)** 1988;48(2):132–40 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Reperfusion, patency and reocclusion with anistreplase (APSAC) in acute myocardial infarction. Anderson JL. **Am J Cardiol** 1989 Jul 5;64(2):12A–17A; discussion 24A–26A (31 ref.)

Comparison of thrombolytic agents: selected hematologic, vascular and clinical events. Marder VJ. **Am J Cardiol** 1989 Jul 5;64(2):2A–7A; discussion 24A–26A (35 ref.)

Calcitonin gene-related peptide delays the no-reflow phenomenon in the rat island flap. Westin M, et al. **Ann Plast Surg** 1988 Oct;21(4):329–34

Effects of aspirin, dipyridamole, and cod liver oil on accelerated myointimal proliferation in canine veno-arterial allografts. DeCampli WM, et al. **Ann Surg** 1988 Dec; 208(6):746–54

Patency and intimal hyperplasia: the effect of aspirin on small arterial anastomosis. Quiñones-Baldrich WJ, et al. **Ann Vasc Surg** 1988 Jan;2(1):50–6

The statistical analysis of graft patency data in a clinical trial of antiplatelet agents following coronary artery bypass grafting. Henderson WG, et al. **Controlled Clin Trials** 1988 Sep;9(3):189–205 (16 ref.)

Prevention of aortocoronary vein-graft attrition with low-dose aspirin and triflusal, both associated with dipyridamole: a randomized, double-blind, placebo-controlled trial. Guiteras P, et al. **Eur Heart J** 1989 Feb;10(2):159–67

The influence of endothelial seeding and platelet inhibition on the patency of ePTFE grafts used to replace small arteries—an experimental study. Campbell JB, et al. **Eur J Vasc Surg** 1988 Dec;2(6):365–70

Increased serum levels of fibrinogen degradation products due to treatment with recombinant tissue-type plasminogen activator for acute myocardial infarction are related to bleeding complications, but not to coronary patency. European Co-operative Study Groups for rt-PA. Arnold AE, et al. **J Am Coll Cardiol** 1989 Sep;14(3):581–8

Studies on the vasoocclusive crisis of sickle cell disease IV. Mechanism of action of pentoxifylline (Trental). Ambrus JL, et al. **J Med** 1988;19(2):67–88

Effects of thromboxane synthetase inhibition on patency and anastomotic hyperplasia of vascular grafts. Graham LM, et al. **J Surg Res** 1989 Jun;46(6):611–5

Randomised double-blind trial of recombinant pro-urokinase against streptokinase in acute myocardial infarction. PRIMI Trial Study Group. **Lancet** 1989 Apr 22;1(8643):863–8

Improving microgaft patency. Nichter LS, et al. **Microsurgery** 1988;9(4):235–41

Effect of heparinized irrigating solutions on patency of experimental microvascular anastomoses. Zinberg EM, et al. **Microsurgery** 1989;10(2):103–7; discussion 108–9

Oxygen radical scavengers improve vascular patency and bone-muscle cell survival in an ischemic extremity replant model. Weiss AP, et al. **Plast Reconstr Surg** 1989 Jul; 84(1):117–23

Quantitative ECG changes and patency of infarct-related arteries after intravenous streptokinase. Gourassas J, et al. **S Afr Med J** 1989 May 6;75(9):422–7

Patency rate of small caliber fibrous polyurethane vascular prostheses implanted in the dog carotid and femoral artery improved by use of acetylsalicylic acid and dipyridamol. Hess F, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):221–6

VASCULAR PROSTHESIS see **BLOOD VESSEL PROSTHESIS**

VASCULAR RESISTANCE

Decreased capillary resistance of the uninvolved skin in psoriasis [letter] Kemény L, et al.
Acta Derm Venereol (Stockh) 1988;68(5):459–60

Ocular blood flow changes with increased vascular resistance external and internal to the eye. Schilder P.
Acta Ophthalmol Suppl (Copenh) 1989;191:19–23

Tissue oxygen tension in the stria vascularis. Nagahara K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:137–42

Metabolic control of large-bore arterial resistance vessels, arterioles, and veins in cat skeletal muscle during exercise. Björnberg J, et al. **Acta Physiol Scand** 1989 Feb; 135(2):83–94

Site of autoregulatory reactions in the vascular bed of cat skeletal muscle as determined with a new technique for segmental vascular resistance recordings. Björnberg J, et al. **Acta Physiol Scand** 1988 Jun;133(2):199–210

Sympathetic vascular control of the pig nasal mucosa: (I). Increased resistance and capacitance vessel responses upon stimulation with irregular bursts compared to continuous impulses. Lacroix JS, et al. **Acta Physiol Scand** 1988 Jan; 132(1):83–90

Transmission of externally applied negative pressure to the underlying tissue. A study on the upper arm of man. Lundvall J, et al. **Acta Physiol Scand** 1989 Jul;136(3):403–9

Biophysical aspects of resistance vessels studied in spontaneous and renal hypertensive rats. Mulvany MJ.
Acta Physiol Scand Suppl 1988;571:129–37

Vascular wall hypertrophy in hypertension. Sivertsson R.
Acta Physiol Scand Suppl 1988;571:149–61 (35 ref.)

Leukocyte endothelium adhesion and microvascular hemodynamics. Lipowsky HH, et al.
Adv Exp Med Biol 1988;242:85–93

Role of eicosanoids in regulation of vascular resistance. Frölich JC, et al.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:211–5 (41 ref.)

Assessment and follow-up of patients with ventricular septal defect and elevated pulmonary vascular resistance. Neutze JM, et al. **Am J Cardiol** 1989 Feb 1;63(5):327–31

Exercise-induced differences in cardiac output, blood pressure, and systemic vascular resistance in a healthy biracial population of 10-year-old boys. Arensman FW, et al. **Am J Dis Child** 1989 Feb;143(2):212–6

Greater calmodulin-dependent regulation of neurotransmitter release and vascular responsiveness in chronic Doca-salt hypertension. Tsuda K, et al.
Am J Hypertens 1989 Feb;2(2 Pt 1):93–8

Influence of mean pressure on aortic impedance and reflections in the systemic arterial system. Alexander J Jr, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H969–78

Pulmonary vascular permeability and resistance measurements in control and ANTU-injured dog lungs. Allison RC, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1711–8

Carotid sinus baroreceptor control of splanchnic resistance and capacity. Brunner MJ, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):H1305–10

Microvascular rarefaction and tissue vascular resistance in hypertension. Greene AS, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 2):H126–31

Early in reperfusion, leukocytes alter perfused coronary capillarity and vascular resistance. Reynolds JM, et al.
Am J Physiol 1989 Apr;256(4 Pt 2):H982–9

Effective diameter as a determinant of local vascular resistance in presence of vasomotion. Slaaf DW, et al.
Am J Physiol 1988 Nov;255(5 Pt 2):H1240–3

Estimating arterial resistance and compliance during transient conditions in humans. Yin FC, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H190–7

Changes in muscle sympathetic nerve activity, venous plasma catecholamines, and calf vascular resistance during mechanical ventilation with PEEP in humans. Selldén H, et al. **Anesthesiology** 1989 Feb;70(2):243–50

The longitudinal distribution of pulmonary vascular resistance during unilateral hypoxia. Siegel LC, et al.
Anesthesiology 1989 Mar;70(3):527–32

Erythrocytic and vascular factors influencing the microcirculatory behavior of blood in sickle cell anemia. Kaul DK, et al. **Ann N Y Acad Sci** 1989;565:316–26 (35 ref.)

Coronary and systemic vascular resistance during reperfusion after global myocardial ischemia. Digerness SB, et al.
Ann Thorac Surg 1988 Oct;46(4):447–54

Effects of posture on upper and lower limb peripheral resistance following submaximal cycling. Swan PD, et al.
Arch Phys Med Rehabil 1989 Sep;70(9):678–80

Runoff resistance and early graft failure in infrainguinal bypass surgery. Peterkin GA, et al. **Arch Surg** 1988 Oct; 123(10):1199–201

Electromyographic and vasomotor activity in tension, migraine, and combined headache patients: the influence of postural variation. Ahles TA, et al. **Behav Res Ther** 1988; 26(6):519–25

Flow-dependent contraction observed in a myograph-mounted resistance artery. Bevan JA, et al.
Blood Vessels 1988;25(5):261–4

Intra-operative inflow resistance measurement: a predictor of steal syndromes following femoro-femoral bypass grafting. Nicholson ML, et al. **Br J Surg** 1988 Nov; 75(11):1064–6

Effect of coronary sinus occlusion on coronary flow, resistance, and zero flow pressure during maximum vasodilatation in swine. Pantely GA, et al.
Cardiovasc Res 1988 Feb;22(2):79–86

Skeletal muscle blood flow and venous capacitance in patients with severe sepsis and systemic hypoperfusion. Astiz ME, et al. **Chest** 1989 Aug;96(2):363–6

Circadian rhythm in total pulmonary resistance of asthmatic children. Effects of a beta-agonist agent. Gaultier C, et al. **Chronobiol Int** 1988;5(3):285–90

Progressive improvement in pulmonary vascular resistance after percutaneous mitral valvuloplasty. Levine MJ, et al.
Circulation 1989 May;79(5):1061–7

Severe impairment of coronary reserve during rejection in patients with orthotopic heart transplant. Nitenberg A, et al. **Circulation** 1989 Jan;79(1):59–65

Age-related decreases in cardiac receptor control of forearm vascular resistance in humans. Jingu S, et al.
Clin Exp Hypertens [A] 1989;11 Suppl 1:211–6

Assessment of regional blood flow and specific microvascular resistance in the foot by means of the transient thermal clearance method. Nitzan M, et al.
Clin Phys Physiol Meas 1988 Nov;9(4):347–52

Pulmonary vascular resistance rises with lung volume on exercise in obstructed airflow disease. Schrijen FV, et al.
Clin Physiol 1989 Apr;9(2):143–50

Neural influences on the pulmonary vascular bed in man. Moruzzi P, et al. **Clin Sci** 1989 Apr;76(4):363–8

Gaar equation is not a reliable predictor of pulmonary capillary pressure [letter] Cope DK, et al.
Crit Care Med 1989 Mar;17(3):300–1

Fetal cerebral circulation assessment by Doppler ultrasound in normal and pathological pregnancies. Arbeille P, et al.
Eur J Obstet Gynecol Reprod Biol 1988 Dec;29(4):261–73

Quantitative assessment of vasospasm by Doppler spectrum analysis in patients with primary Raynaud's phenomenon. Arntz IE, et al. **Eur J Vasc Surg** 1987 Feb;1(1):19–28

Cardiovascular responses to hypoxia in the Atlantic cod, Gadus morhua. Fritsche R, et al. **Exp Biol** 1989; 48(3):153–60

Umbilical artery blood flow velocity waveforms and associations with fetal abnormality. Hata K, et al.
Gynecol Obstet Invest 1989;27(4):179–82

Pulsatility index and its relationship to placental vascular resistance during partial umbilical venous occlusion: a study in fetal lambs. van Vugt JM, et al.
Gynecol Obstet Invest 1988;26(1):1–7

Noninvasive measurement of elastic properties in human finger arteries: clinical data comparing blood pressure and funduscopic examination. Seki K. **Heart Vessels** 1988; 4(4):221–8

Pathophysiology of obstructive arterial disease. Coffman JD.
Herz 1988 Dec;13(6):343–50 (32 ref.)

Resistance to blood flow at maximal vasodilation [letter; comment] Distler A, et al. **Hypertension** 1989 Jul;14(1):115 . **Comment on:** Hypertension 1988 Dec;12(6):635–7

Resistance to blood flow at maximal vasodilatation [letter] [see comments] Folkow B. **Hypertension** 1988 Dec; 12(6):635–7. **Comment in:** Hypertension 1989 Jul;14(1):115

Pulmonary resistance during cold provocation in 8 patients with vasospastic angina [letter] Bajaj R, et al.
Int J Cardiol 1988 Oct;21(1):85–6

Vascular resistance vs. perfusate osmolarity: the short term microvascular effect of hypotonic and hypertonic perfusion in the isolated kidney. Collins GM, et al.
Int J Microcirc Clin Exp 1989 Jul;8(3):259–73

Effect of alpha-1 and beta agonists on contraction of bovine retinal resistance arteries in vitro. Hoste AM, et al.
Invest Ophthalmol Vis Sci 1989 Jan;30(1):44–50

Daily exercise enhances coronary resistance vessel sensitivity to pharmacological activation. DiCarlo SE, et al.
J Appl Physiol 1989 Jan;66(1):421–8

Pulmonary vascular resistance after cessation of positive end-expiratory pressure. Fuhrman BP, et al.
J Appl Physiol 1989 Feb;66(2):660–8

Erythrocyte deformability and segmental pulmonary vascular resistance: osmolarity and heat treatment. Hakim TS.
J Appl Physiol 1988 Oct;65(4):1634–41

Distribution of pulmonary vascular resistance in experimental fibrosis. Michel RP, et al. **J Appl Physiol** 1988 Sep; 65(3):1180–90

Lung edema increases transvascular filtration rate but not filtration coefficient. Parker JC, et al. **J Appl Physiol** 1989 Apr;66(4):1553–60

Sympathetic neural discharge and vascular resistance during exercise in humans. Seals DR. **J Appl Physiol** 1989 May; 66(5):2472–8

Distribution of pulmonary vascular pressure as a function of perinatal age in lambs. Tod ML, et al.
J Appl Physiol 1989 Jan;66(1):79–87

Activation of gastric afferent fibers increases coronary arterial resistance in anesthetized dogs. Pitetti KH, et al.
J Auton Nerv Syst 1988 Jun;23(1):25–34

The measurement of afterload, vascular input impedance, and power distribution in aorto-femoral bypass. Ashe JW, et al. **J Biomech** 1989;22(5):447–53

Analysis of flow and vascular resistance in a model of the circle of Willis. Hillen B, et al. **J Biomech** 1988; 21(10):807–14

Physical properties of resistance vessel wall in peripheral blood flow regulation—I. Mathematical model. Iida N.
J Biomech 1989;22(2):109–17

Role of physical properties of resistance vessel wall in regulating peripheral blood flow—II. Structural and mechanical behavior. Iida N, et al. **J Biomech** 1989; 22(2):119–27

Pulmonary vascular resistance and the risk of heart transplantation. Kirklin JK, et al. **J Heart Transplant** 1988 Sep-Oct;7(5):331–6

Calculated splanchnic oxygen uptake and hepatic vascular resistance: what do these terms mean? Hadengue A, et al.
J Hepatol 1989 May;8(3):387–90

Abnormal structure and function of isolated subcutaneous resistance vessels from essential hypertensive patients despite antihypertensive treatment. Aalkjaer C, et al.
J Hypertens 1989 Apr;7(4):305–10

Beta 1- and beta 2-adrenoceptor-mediated relaxation responses in peripheral arteries from spontaneously hypertensive rats at pre-hypertensive and early hypertensive stages. Fujimoto S, et al. **J Hypertens** 1988 Jul;6(7):543–50

The measurement of internal pH in resistance arterioles: evidence that intracellular pH is more alkaline in SHR than WKY animals. Izzard AS, et al. **J Hypertens** 1989 Mar; 7(3):173–80

Selective central alpha-2 adrenoceptor control of regional haemodynamic responses to air jet stress in conscious spontaneously hypertensive rats. Kapusta DR, et al.
J Hypertens 1989 Mar;7(3):189–94

Resistance vessel structure and function in the etiology of hypertension studied in F2-generation hypertensive-normotensive rats. Mulvany MJ.
J Hypertens 1988 Aug;6(8):655–63

Rapid haemodynamic response to adrenocorticotrophin and the role of peripheral resistance in adrenocorticotrophin-induced hypertension in conscious sheep. Spence CD, et al. **J Hypertens** 1989 Apr;7(4):277–85

Does cytosolic free calcium concentration in platelets reflect tone and structural changes of resistance vessels? Ueno H, et al. **J Hypertens Suppl** 1988 Dec;6(4):S255–7

Model for the study of portal-systemic collateral vascular resistance in the conscious rat. Koshy A, et al.
J Pharmacol Methods 1988 Nov;20(3):265–77

Pulmonary flow-resistance relationships in allografts after single lung transplantation in dogs. Eishi K, et al.
J Thorac Cardiovasc Surg 1989 Jan;97(1):24–9

Real pulmonary resistance depends on real pulmonary flow [letter] Lloyd TR. **J Thorac Cardiovasc Surg** 1989 Aug; 98(2):297

Placental vascular resistance using umbilical velocimetry in patients undergoing cesarean section for fetal distress. Brar HS, et al. **J Ultrasound Med** 1989 Apr;8(4):211–4

Cerebral, umbilical, and uterine resistance using Doppler velocimetry in postterm pregnancy. Brar HS, et al.
J Ultrasound Med 1989 Apr;8(4):187–91

Simultaneous use of Doppler ultrasound and electromagnetic flow probes in fetal flow assessment. Nimrod C, et al.
J Ultrasound Med 1989 Apr;8(4):201–5

Shear stress regulation of artery lumen diameter in experimental atherogenesis. Zarins CK, et al.
J Vasc Surg 1987 Mar;5(3):413–20

Acute hypothyroidism has no effect on pulmonary vascular resistance. Wieshammer S, et al. **Klin Wochenschr** 1989 May 15;67(10):530–4

Doppler ultrasound and early pregnancy failure [letter] Stabile I, et al. **Lancet** 1989 Apr 22;1(8643):910–1

Effects of the dialysis on total peripheral resistance (TPR) and myocardial contractility. Mastrangelo F, et al.
Life Support Syst 1983;1 Suppl 1:219–22

Relation of sinusoidal stenoses following hepatocyte swelling to hepatic vascular resistance in experimental liver cirrhosis. Shibayama Y, et al. **Liver** 1989 Feb;9(1):36–42

Erythrocytosis: a key to understanding the hemodynamic changes in hypertension. Gaar KA Jr. **Med Hypotheses** 1988 Oct;27(2):107–13

Resistance or conductance for expression of arterial vascular tone. Lautt WW. **Microvasc Res** 1989 Mar;37(2):230–6

Vascular flow resistance in rabbit hearts: "apparent viscosity" of RBC suspensions. Sutera SP, et al. **Microvasc Res** 1988 Nov;36(3):305–13

Changes in vasomotion pattern and local arteriolar resistance during stepwise pressure reduction. Oude Vrielink HH, et al. **Pflugers Arch** 1989 Sep;414(5):571–8

Gravitational influence on systemic arterial dynamics using a 3-element Windkessel model. Latham RD, et al.
Physiologist 1989 Feb;32(1 Suppl):S82–3

Phase-related vascular reactivity in hemorrhagic shock. Henrich HA, et al. **Prog Clin Biol Res** 1989;308:143–9

Reflex responses of vascular resistance in anaesthetized dogs to independent changes in ventricular systolic pressure and cardiac inotropic state. Tutt SM, et al.
Q J Exp Physiol 1988 Sep;73(5):801–4

Hemodynamic interactions between intrinsic blood flow control mechanisms in the rat kidney. Häberle DA.
Renal Physiol Biochem 1988 Nov-Dec;11(6):289–315 (241 ref.)

Improved evaluation of pulmonary vascular resistance prior to heart transplantation. Dreyfus G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2559–61

[Incidence of kidney function deficiency in 2050 patients admitted to a general hospital; a prospective study (letter)] Koning HM. **Ned Tijdschr Geneeskd** 1989 Feb 25;133(8):415 (Dut)

[Limitations of the feasibility of right catheterization in the evaluation for cardiac transplantation] Dreyfus G, et al. **Arch Mal Coeur** 1989 Jun;82(6):903–9 (Eng. Abstr.) (Fre)

[Characteristics of peripheral rheograms following thermal provocation in normal and pathologic pregnancy] Feiks A, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):647–50 (Eng. Abstr.) (Ger)

[Measuring the dynamics of maternal vascular resistance for early identification of at risk pregnancies] Feiks A, et al. **Gynakol Rundsch** 1988;28 Suppl 2:141–3 (Ger)

[Doppler sonography determination of flow ratios Qp/Qs and resistance ratios Rp/Rs in isolated ventricular septal defect] Rupprecht T, et al. **Ultraschall Med** 1989 Apr; 10(2):83–9 (Eng. Abstr.) (Ger)

[Pharmacologic modification of the converting enzyme—local and systemic effects on the heart and blood vessels] Schölkens BA, et al. **Z Kardiol** 1988;77 Suppl 3:13–21 (44 ref.) (Eng. Abstr.) (Ger)

[Simultaneous determination of pressor and peripheral vascular response to isometric exercise. Reassessment of the methodology] Borghi C, et al. **Cardiologia** 1988 Oct; 33(10):949–55 (Eng. Abstr.) (Ita)

[Analysis in the coronary artery resistance during reperfusion after myocardial ischemia] Ban K, et al. **Kokyu To Junkan** 1988 Jun;36(6):667–74 (Eng. Abstr.) (Jpn)

[New selection criterion for Fontan procedure: pulmonary artery clamping test and pulmonary vascular resistance in increased pulmonary blood flow] Sawatari K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):208–17 (Eng. Abstr.) (Jpn)

[The effect of "pulsation" on vascular resistance during extracorporeal circulation—experimental study based on the quantification of pulsatile flow curve] Sohma A. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2058–67 (Eng. Abstr.) (Jpn)

[The pressor zone in the caudal part of the ventral surface of the medulla oblongata] Kul'chitskiĭ VA. **Biull Eksp Biol Med** 1988 Oct;106(10):387–9 (Eng. Abstr.) (Rus)

[Comparative analysis of the efficacy of sympathetic effects on resistive vessels in spontaneously hypertensive and normotensive rats undergoing perfusion at a constant flow rate and under constant pressure] Rodionov IM, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):645–8 (Eng. Abstr.) (Rus)

[Comparative characteristics of the changes in resistance in the vessels of the skeletal muscle and small intestine after the destruction of the structures in the ventral portions of the medulla oblongata] Tkachenko BI, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):161–4 (Eng. Abstr.) (Rus)

[Lipoproteins as a factor regulating vascular tonus] Vedernikov IuP, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):515–7 (Eng. Abstr.) (Rus)

[A method of recording the dynamic changes in postcapillary resistance and capillary pressure in skeletal muscle] Kudrinshov IuA. **Fiziol Zh SSSR** 1988 Jun;74(6):881–5 (Rus)

[The blood-perfused tail artery of the rat as a model for studying spontaneous vascular tonus] Mashina SIu, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1341–4 (Rus)

[The effect of amplitude and frequency of pulse oscillations of blood flow on resistive and metabolic function of skeletal muscle vessels in cats] Poiasov IZ, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):548–54 (Eng. Abstr.) (Rus)

[Increase in the structural component of the vascular bed resistance in hypertension and its regulatory sequelae] Rodionov IM, et al. **Fiziol Zh SSSR** 1988 Nov; 74(11):1580–7 (34 ref.) (Eng. Abstr.) (Rus)

[An analysis of the mechanisms of cholinergic influences on vascular tonus in in vitro experiments] Medvedeva NA, et al. **Nerv Sist** 1988;27:76–87 (Rus)

[Evaluation of the status of the distal arterial bed in occlusive lesions of major arteries of the extremities] Lemen'ev VL, et al. **Vestn Khir** 1989 Mar;142(3):44–6 (Eng. Abstr.) (Rus)

[Vascular conductance and critical closing pressure in the isolated canine lung in situ. Its natural history] Lupi-Herrera E, et al. **Arch Inst Cardiol Mex** 1988 Sep–Oct;58(5):395–407 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Age-related variations in the relative importance of noradrenaline and ATP as mediators of the contractile response of rat tail artery to sympathetic nerve stimulation. Bao JX, et al. **Acta Physiol Scand** 1989 Jun;136(2):287–8

The calcium entry blocker verapamil increases red cell flux in the vasa recta of the exposed renal papilla. Hansell P, et al. **Acta Physiol Scand** 1988 Sep;134(1):9–15

On the regulatory functions of neuropeptide Y (NPY) with respect to vascular resistance and exocrine and endocrine secretion in the pig pancreas. Holst JJ, et al. **Acta Physiol Scand** 1989 Aug;136(4):519–26

Sympathetic vascular control of the pig nasal mucosa (III): Co-release of noradrenaline and neuropeptide Y. Lacroix JS, et al. **Acta Physiol Scand** 1989 Jan;135(1):17–28

Regional and species differences in vascular reactivity to extracellular potassium. Ryman T, et al. **Acta Physiol Scand** 1989 Jun;136(2):151–9

The strong contractile effect of the thromboxane receptor agonist U-46619 in isolated human pulmonary arteries and its competitive antagoniam by BM-13.505. Sjöberg T, et al. **Acta Physiol Scand** 1989 Jun;136(2):161–5

Vasodilation and reduction in forearm vascular resistance after acute administration of dilevalol. Lambeth MA, et al. **Am J Cardiol** 1989 Jun 5;63(19):17I–20I

Differential effects of isradipine and atenolol on peripheral hemodynamics and arterial compliance. Jespersen LT, et al. **Am J Med** 1989 Apr 17;86(4A):57–9

Antitrophic properties of antihypertensive drugs may depend solely on their blood pressure-lowering capability. A comparative study of isradipine, hydralazine, and metoprolol. Nielsen H, et al. **Am J Med** 1989 Apr 17; 86(4A):67–9

Blunted vasoreactivity in pregnant guinea pigs is not restored by meclofenamate. Harrison GL, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):258–64

Histamine's effect on pulmonary vascular resistance and compliance at elevated tone. Barman SA, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H618–25

Redistribution of coronary microvascular resistance produced by dipyridamole. Chilian WM, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H383–90

Effects of althesin and urethan–chloralose on neurohumoral cardiovascular regulation. Faber JE. **Am J Physiol** 1989 Mar;256(3 Pt 2):R757–65

Vascular sensitivity and reactivity to norepinephrine in diabetes mellitus. Friedman JJ. **Am J Physiol** 1989 Apr; 256(4 Pt 2):H1134–8

Regional hemodynamic responses to adrenoceptor antagonism in conscious rats. Gardiner SM, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H813–24

Regional hemodynamic effects of calcitonin gene-related peptide. Gardiner SM, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R332–8

Furazolidone-induced injury in the isolated perfused chicken heart. McCallum T, et al. **Am J Vet Res** 1989 Jul; 50(7):1183–5

Effects of butorphanol tartrate on arterial pressure, jejunal blood flow, vascular resistance, O2 extraction, and O2 uptake in halothane-anesthetized ponies. Stick JA, et al. **Am J Vet Res** 1989 Aug;50(8):1202–6

Pulmonary vascular pressure-flow plots in canine oleic acid pulmonary edema. Effects of prostaglandin E1 and nitroprusside. Leeman M, et al. **Am Rev Respir Dis** 1988 Aug;138(2):362–7

Effects of metaraminol on the resistance and capacitance vessels in humans [letter] Baraka A, et al. **Anesth Analg** 1989 Apr;68(4):545

The effect of sublingual nifedipine on coronary venous graft resistance immediately following cardiopulmonary bypass. Eide TR, et al. **Anesth Analg** 1989 Apr;68(4):462–6

Effects of vasodilators on rates of change of nasopharyngeal temperature and systemic vascular resistance during cardiopulmonary bypass in anaesthetized dogs. Li DM, et al. **Aust N Z J Surg** 1988 Apr;58(4):327–33

Action of cyclooxygenase (COX) and lipoxygenase (LOX) inhibitors as well as of oxygen free radical scavengers (OFRS) in the inflammation-induced vasodepression. Kuhn C, et al. **Biomed Biochim Acta** 1988;47(10–11):S320–3

Effect of infused adenosine on cardiac output and systemic resistance in normal subjects. Bush A, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):165–71

The effects of infusions of arginine vasopressin or 1-deamino-8-D-arginine vasopressin on common carotid vascular resistance in conscious, Long Evans rats. Gardiner SM, et al. **Br J Pharmacol** 1989 May;97(1):153–7

Reversion of cardiac hypertrophy and reduced arterial compliance after converting enzyme inhibition in essential hypertension. Asmar RG, et al. **Circulation** 1988 Oct; 78(4):941–50

Cardiovascular and renal hemodynamic effects of intravenous infusions of the selective DA1 agonist, fenoldopam, used alone or in combination with dopamine and dobutamine. Lass NA, et al. **Circulation** 1988 Nov;78(5 Pt 1):1310–5

Vasopressin and the mature coronary collateral circulation. Peters KG, et al. **Circulation** 1989 Jun;79(6):1324–31

Age does not alter human vascular and nonvascular beta 2-adrenergic responses to isoproterenol. Klein C, et al. **Clin Pharmacol Ther** 1988 Nov;44(5):573–8

Evidence for a decreased noradrenaline sensitivity in mesenteric resistance vessels from rats with chemical renal medullectomy. Bund SJ, et al. **Clin Sci** 1989 Aug; 77(2):167–70

Paradoxical elevation of pulmonary vascular resistance after nifedipine in primary pulmonary hypertension. A case study. Pohar B, et al. **Cor Vasa** 1989;31(3):238–41

Effect of vasodilators on hepatic microcirculation in cirrhosis: a study in the isolated perfused rat liver. Marteau P, et al. **Hepatology** 1989 Jun;9(6):820–3

Endurance training in dogs increases vascular responsiveness to an alpha 1-agonist. Evans YM, et al. **J Appl Physiol** 1988 Aug;65(2):625–32

Analysis of responses to sympathetic nerve stimulation in the feline pulmonary vascular bed. Hyman AL, et al. **J Appl Physiol** 1989 Jul;67(1):371–6

Effects of carbon dioxide on hindlimb vascular resistance in the acute spinal cat. Accili EA, et al. **J Auton Nerv Syst** 1988 Aug;23(2):87–94

Agonist-induced activation of rat mesenteric resistance vessels: comparison between noradrenaline and vasopressin. Cauvin C, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 5:S128–33

Human vascular responses to endothelin-1: observations in vivo and in vitro. Hughes AD, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S225–8

Effect of endothelin-1 on regional vascular resistances in the pig. Pernow J, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S205–6

Effects of histamine on vascular resistance and protein permeability in the isolated dually perfused guinea-pig placenta. Berhe A, et al. **J Dev Physiol** 1988 Aug; 10(4):357–69

Cyclosporine A inhibits relaxation but does not induce vasoconstriction in human subcutaneous resistance vessels. Richards NT, et al. **J Hypertens** 1989 Jan;7(1):1–3

Hypertensive effects of calcium infusion in subjects with normotension and hypertension. Suzuki T, et al. **J Hypertens** 1988 Dec;6(12):1003–8

Structural change in the rat hindlimb during deoxycorticosterone acetate hypertension; its reversibility and prevention. Vial JH, et al. **J Hypertens** 1989 Feb; 7(2):143–50

Size and site-dependent heterogeneity of human vascular responses in vitro. Hughes AD, et al. **J Hypertens Suppl** 1988 Dec;6(4):S173–5

Effect of verapamil and sodium nitroprusside on hindlimb vascular resistance in New Zealand genetically hypertensive and Japanese spontaneously hypertensive rats. Phelan EL, et al. **J Hypertens Suppl** 1988 Dec;6(4):S681–3

Long-term reduction of peripheral resistance with celiprolol and effects on left ventricular mass. Trimarco B, et al. **J Int Med Res** 1988;16 Suppl 1:62A–72A

Effects of exogenous vasoconstrictors on coronary vascular resistance and prostacyclin production of the quiescent heart: the inhibitory effect of aspirin. Lee SL, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):44–9

Effect of nisoldipine on coronary resistance, contractility and oxygen consumption of the isolated blood-perfused canine left ventricle. Schipke JD, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1000–4

Cardiovascular pharmacological therapy in children—a review. Part 4: Manipulation of vascular resistance and patent ductus arteriosus. Chan KY, et al. **J Singapore Paediatr Soc** 1989;31(1–2):26–31 (23 ref.)

Fibronectin enhances early shear stress resistance of seeded adult human venous endothelial cells. Ivarsson BL, et al. **J Surg Res** 1989 Sep;47(3):203–7

Effects of drug treatment on human resistance arteriole morphology in essential hypertension: direct evidence for structural remodelling of resistance vessels. Heagerty AM, et al. **Lancet** 1988 Nov 26;2(8622):1209–12

Practical use of duplex Doppler analysis of the renal vasculature in critically ill patients. Stevens PE, et al. **Lancet** 1989 Feb 4;1(8632):240–2

Increases in coronary vascular resistance initiated by blockade of CNS GABAergic tone occurs in the hindbrain. Segal SA, et al. **Neuropharmacology** 1989 Apr;28(4):367–72

Regional differences of cardiovascular effects of diltiazem in the rat. Bravený P, et al. **Physiol Bohemoslov** 1989; 38(1):41–50

Neuropeptide Y and control of vascular resistance in skeletal muscle. Revington M, et al. **Regul Pept** 1988 Dec; 23(3):331–42

Influence of the rate of infusion on cyclosporine nephrotoxicity in the rat. Finn WF, et al. **Ren Fail** 1989; 11(1):3–15

Diltiazem (0.5 mg/l) decreases coronary vascular resistance during reperfusion, but not during low flow ischemia, in the isolated perfused rat heart. Mohanlal RW, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jan;63(1):3–11

Reduced angiotensin II induced vascular reactivity in chronic renal failure. Jespersen B, et al. **Scand J Clin Lab Invest** 1988 Nov;48(7):705–13

Postoperative ketamine analgesia in children: efficacy and safety after halothane anesthesia. Forestner JE. **South Med J** 1988 Oct;81(10):1253–7

Prostaglandin E1 for treatment of elevated pulmonary vascular resistance in patients undergoing cardiac transplantation. Weiss CI, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2555–6

Altered vascular responses in cyclosporine-treated rats. Golub MS, et al. **Transplantation** 1989 Jul;48(1):116–8

[Dose-dependent vasodilator effect of dobutamine in calves with a constant cardiac output artificial heart] Binhas M, et al. **Arch Mal Coeur** 1989 Apr;82(4):601–5 (25 ref.) (Eng. Abstr.) (Fre)

[Beta-mimetics and Pourcelot's index] Mourey C, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):713–5 (Eng. Abstr.) (Fre)

[Pharmacologic portrait of enalapril] Rahn KH. **Fortschr Med** 1988;106 Suppl 52:4–5 (Ger)

[Modification of vascular resistance and O2 utilization by prostaglandin E1] Stark G, et al. **Vasa Suppl** 1988;26:116–9 (Eng. Abstr.) (Ger)

[The irritant effect of dithranol using capillary resistance

measurement] Kemény L, et al. **Z Hautkr** 1989 Jan 15; 64(1):34–40 (Eng. Abstr.) (Ger)
[Effect on the systemic hemodynamics of polymers that decrease hydrodynamic resistance] Gannushkina IV, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):533–6 (Eng. Abstr.) (Rus)
[Changes in systemic hemodynamics and vascular resistance in unilaterally nephrectomized rats with vasorenal hypertension] Kuznetsova LV, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):32–6 (Eng. Abstr.) (Rus)
[Vascular hyperreactivity to vasopressin in mild essential arterial hypertension] Cases Amenós A, et al. **Med Clin (Barc)** 1989 Jun 10;93(2):46–9 (Eng. Abstr.) (Spa)
[Coronary selectivity of nitrendipine in dogs] Mosca SM, et al. **Medicina (B Aires)** 1988;48(3):255–9 (Eng. Abstr.) (Spa)

VASCULAR SURGERY

Development of muscular tissue PO2 after vascular reconstructive surgery. Krawzak HW, et al. **Adv Exp Med Biol** 1989;248:713–8
Intraoperative angioscopy: principles of irrigation and description of a new dedicated irrigation pump. Miller A, et al. **Am Heart J** 1989 Aug;118(2):391–9
Artificial materials in cardiovascular surgery. Golding LA. **Am J Cardiovasc Pathol** 1988;2(2):97–103 (74 ref.)
Hemostasis in blood vessels after ligation. Hay DL, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):737–9
A twelve-year survey of cervicothoracic vascular injuries. Bladergroen M, et al. **Am J Surg** 1989 May;157(5):483–6
Choice and challenge in vascular surgery. DeLaurentis DA. **Am J Surg** 1989 Aug;158(2):84–6
Altered pharmacokinetics of antibiotics during vascular surgery. Guglielmo BJ, et al. **Am J Surg** 1989 Apr; 157(4):410–2
Results of vascular surgery in younger versus older patients. N–Hsiang Y, et al. **Am J Surg** 1989 Apr;157(4):419–22
Comparison of hemodynamic, electrocardiographic, mechanical, and metabolic indicators of intraoperative myocardial ischemia in vascular surgical patients with coronary artery disease. Häggmark S, et al. **Anesthesiology** 1989 Jan;70(1):19–25
Combining clinical and thallium data optimizes preoperative assessment of cardiac risk before major vascular surgery. Eagle KA, et al. **Ann Intern Med** 1989 Jun 1;110(11):859–66
Complex limb trauma requiring revascularization: early multidisciplinary management. Glasson DW, et al. **Aust N Z J Surg** 1988 Jul;58(7):543–8
The Vascular Surgical Society of Great Britain and Ireland. Leeds, 24–25 November 1988. Abstracts. **Br J Surg** 1989 Apr;76(4):413–20
Overview of types and results of vascular surgical procedures for impotence. Goldstein I. **Cardiovasc Intervent Radiol** 1988 Aug;11(4):240–4 (33 ref.)
Level of amputation following failed vascular reconstruction for lower limb ischemia. Epstein SB, et al. **Curr Surg** 1989 May–Jun;46(3):185–92
Articles presented at the second meeting of the ESVS. European Society for Vascular Surgery. Rotterdam, September 1988. **Eur J Vasc Surg** 1989 Feb;3(1):1–87
On diagnostic protocols in vascular surgery with special emphasis on vascular imaging technology. Bergqvist D. **Eur J Vasc Surg** 1989 Jun;3(3):191–3 (7 ref.)
The European Society for Vascular Surgery. Greenhalgh RM. **Eur J Vasc Surg** 1987 Oct;1(5):291–3
Cardiovascular surgery and heparin induced thrombocytopenia. Glock Y, et al. **Int Angiol** 1988 Jul–Sep; 7(3):238–45
The International Society for Cardiovascular Surgery (North American Chapter), 36th scientific meeting. Chicago, Illinois (U.S.A.), June 13 and 14, 1988. Abstracts. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):290–305
The Society for the Vascular Surgery, 42nd annual meeting. Chicago, Illinois (U.S.A.), June 13 and 14, 1988. Abstracts. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):306–16
Dipyridamole–thallium scan for screening of coronary artery disease prior to vascular surgery. Fletcher JP, et al. **J Cardiovasc Surg (Torino)** 1988 Nov–Dec;29(6):666–9
Long–term results of arterial reconstruction of lower extremities determined by flow waveform analysis. Okadome K, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):64–9
Chest x–ray before vascular surgery [letter] Humphrey LL, et al. **J Gen Intern Med** 1989 May–Jun;4(3):268
Vascular surgery and the National Health Service [editorial] Campbell DR. **J Med** 1987;18(5–6):261–4
An experimental investigation into the use of implanted thermocouples and differential thermometry as monitors for microvascular anastomoses. Roberts JO, et al. **J Reconstr Microsurg** 1985 Oct;2(1):51–7
Central lung injuries: a need for early vascular control. Wiencek RG Jr, et al. **J Trauma** 1988 Oct;28(10):1418–24
Research initiatives in vascular surgery. Seminar sponsored by the Society for Vascular Surgery and the International Society for Cardiovascular Surgery, with the cooperation of the National Institutes of Health and the National Heart, Lung, and Blood Institute. Bethesda, Md., Feb. 19–20, 1988. Abstracts. **J Vasc Surg** 1989 Feb;9(2):367–98
Understanding investigative clinical trials. Barnes RW. **J Vasc Surg** 1989 Apr;9(4):609–18 (41 ref.)
Postoperative thrombotic complications in patients with the lupus anticoagulant: increased risk after vascular procedures [letter] Baumgartner FJ, et al. **J Vasc Surg** 1989 Mar;9(3):506–7
Extended reconstruction rate for limb salvage with intraoperative prereconstruction angiography [letter] Belkin M, et al. **J Vasc Surg** 1988 Oct;8(4):546–7
Perioperative and late outcome in patients with left ventricular ejection fraction of 35% or less who require major vascular surgery [letter] Bunt TJ. **J Vasc Surg** 1989 Apr;9(4):619–20
Can change in life–style reduce failure of arterial reconstructions? [letter] Edwards WS. **J Vasc Surg** 1989 Feb;9(2):399–400
Responsibilities of vascular surgeons to study and control the field of endovascular surgery [letter] Elsey JK. **J Vasc Surg** 1989 Aug;10(2):213–4
In the words of a vascular surgeon [letter] Friedman SG. **J Vasc Surg** 1989 Aug;10(2):211–2
Anaphylactoid reactions to protamine: an often lethal complication in insulin–dependent diabetic patients undergoing vascular surgery. Gupta SK, et al. **J Vasc Surg** 1989 Feb;9(2):342–50
Protecting the brain and spinal cord. Hollier LH. **J Vasc Surg** 1987 Mar;5(3):524–8 (20 ref.)
Socioeconomic concerns in vascular surgery: a survey of the role of age, resource consumption, and outcome in treatment cost. Munoz E, et al. **J Vasc Surg** 1989 Mar; 9(3):479–86
Monitoring of heparin in vascular surgery [letter] Porte RJ. **J Vasc Surg** 1989 Jun;9(6):832–3
Endovascular surgery: the new challenge [editorial] Rutherford RB. **J Vasc Surg** 1989 Aug;10(2):208–10
Renal effects of dopamine in vascular surgical patients. Schwartz LB, et al. **J Vasc Surg** 1988 Oct;8(4):367–74
The vascular war [letter] **JAMA** 1989 Jun 23–30; 261(24):3550–1
The vascular war of 1988. Wexler L, et al. **JAMA** 1989 Jan 20;261(3):418–9
The vascular war of 1988: the enemy is met. Zarins CK. **JAMA** 1989 Jan 20;261(3):416–7
Microvascular reconstruction of the pharyngoesophagus with free jejunal graft. McDonough JJ, et al. **Microsurgery** 1988; 9(2):116–27
Immediate microvascular reconstruction of combined palatal and midfacial defects using soft tissue only. Shestak KC, et al. **Microsurgery** 1988;9(2):128–31
The role of microvascular surgery in head and neck reconstruction. Swartz WM. **Microsurgery** 1988;9(2):115
Intraoperative brainstem auditory evoked potentials: significant decrease in postoperative morbidity. Radtke RA, et al. **Neurology** 1989 Feb;39(2 Pt 1):187–91
Improvements in the management of civilian vascular trauma. Meyer JP. **Surg Annu** 1989;21:1–25 (44 ref.)
Side branch completion arteriography. Nuñez AA, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):538
A simple method for preventing blood–borne contamination to operating room personnel during vascular reconstructive operations. Patterson RB, et al. **Surg Gynecol Obstet** 1989 Jan;168(1):63–4
Limb–threatening ischemia in the medically compromised patient: amputation or revascularization? Ouriel K, et al. **Surgery** 1988 Oct;104(4):667–72
[The use of laser beam in the anastomosis of blood vessels] Chen G. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):62–4 (Chi)
[The results of a questionnaire on the status of vascular surgery in Czechoslovakia] Táborský J, et al. **Rozhl Chir** 1989 Jun;68(6):444–9 (Eng. Abstr.) (Cze)
[Angiology and vascular surgery] **Rev Med Suisse Romande** 1988 Sep;108(9):721–789 (Fre)
[Free functional muscle transplantation with microneurovascular anastomosis: development of a standardized surgical procedure] Frey M. **Wien Klin Wochenschr** 1989 Jan 20;101(2):57–62 (Eng. Abstr.) (Ger)
[Revascularization of the distal arteries of the lower limbs with "in situ" saphenous vein] Bacciu PP, et al. **Minerva Cardioangiol** 1989 Mar;37(3):99–103 (Eng. Abstr.) (Ita)
[Experimental study on the use of fibrin glue in vascular microsurgery] Cerillo A, et al. **Minerva Chir** 1988 Aug 31; 43(15–16):1261–5 (Eng. Abstr.) (Ita)
[Methods for preparing patients to vascular surgery. Our experience] Gullà P, et al. **Minerva Chir** 1989 Apr 30; 44(8):1203–5 (Eng. Abstr.) (Ita)
[Antibiotic prophylaxis in vascular surgery] Locati P, et al. **Minerva Chir** 1988 Oct 31;43(20):1729–32 (Eng. Abstr.) (Ita)
[Intraoperative fiber optic angioscopy during cardiovascular surgery] Ishimaru S, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1286–90 (Eng. Abstr.) (Jpn)
[Prevention of infectious complications in vascular surgery] Polous IuM, et al. **Klin Khir** 1988;(7):65–6 (Rus)
[Comparative study of the value of a single dose of mezlocillin versus continuous therapy with cefuroxime–garamycin in the prevention of infection in cardiovascular surgery] Popović M, et al. **Acta Chir Iugosl** 1988;35(1):5–20 (Eng. Abstr.) (Scc)
[The effect of diabetes mellitus on long–term results of femoro–crural bypass] De Syo D, et al. **Acta Med Iugosl** 1988;42(4):305–20 (Eng. Abstr.) (Ser)
[Round table on the current status of vascular surgery] Capdevila JM. **Angiologia** 1989 Mar–Apr;41(2):69–74 (Spa)
[Angiology and vascular surgery in Aragon and its health area] Marco Luque MA. **Angiologia** 1989 Mar–Apr; 41(2):75–7 (Spa)
[Surgery of portal hypertension. 12 years' experience] Hurtado Andrade H, et al. **Rev Gastroenterol Mex** 1989 Apr–Jun;54(2):91–7 (Eng. Abstr.) (Spa)
[Smoking after vascular surgery impairs surgical results] Bergquist D, et al. **Lakartidningen** 1988 Nov 16; 85(46):3919–22 (Swe)

ADVERSE EFFECTS

Delayed recovery of hand grip strength predicts postoperative morbidity following major vascular surgery. Griffith CD, et al. **Br J Surg** 1989 Jul;76(7):704–5
Groin infections following vascular surgery: obturator bypass (BYP) versus "biologic coverage" (TRP)—a comparative analysis. Kretschmer G, et al. **Eur J Vasc Surg** 1989 Feb; 3(1):25–9
Multifarious complications after vascular reconstructive surgery. Diagnostic and therapeutic errors. Rykowski H, et al. **Int Angiol** 1988 Oct–Dec;7(4):328–32
Ureteral injuries complicating vascular surgery: is repair indicated? Spirnak JP, et al. **J Urol** 1989 Jan;141(1):13–4
Low molecular weight heparin prevention of post–operative deep vein thrombosis in vascular surgery. Speziale F, et al. **Pharmatherapeutica** 1988;5(4):261–8
Laser welding in microvascular surgery [letter] Flemming AF. **Plast Reconstr Surg** 1989 Jan;83(1):198–9
Vascular surgery and pressure sores [letter] Zimman OA, et al. **Plast Reconstr Surg** 1988 Nov;82(5):921
Risk factors of postoperative pulmonary complications after vascular surgery. Vodinh J, et al. **Surgery** 1989 Mar; 105(3):360–5
[Successful resuscitation by extracorporeal circulation after fibrillation during vascular reconstruction] Fornhoff H, et al. **Acta Chir Belg** 1988 Sep–Oct;88(5):367–8 (Eng. Abstr.) (Dut)
[The vascular surgical patient: problems in the management of coronary and cerebrovascular risk] Van den Brande P, et al. **Acta Chir Belg** 1988 Sep–Oct;88(5):359–62 (Eng. Abstr.) (Dut)
[How reliable is microvascular surgery?] Lanz U. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):263–5 (Eng. Abstr.) (Ger)
[Prevention of thromboses in vascular microanastomoses. Experimental study on the role of anti–aggregant drugs. Preliminary remarks] Cerillo A, et al. **Minerva Chir** 1988 Oct 15;43(19):1593–5 (Eng. Abstr.) (Ita)

ECONOMICS

Financial risk and hospital cost in stratified, peripheral vascular surgical DRGs without complications and comorbidities. Munoz E, et al. **Ann Vasc Surg** 1989 Apr; 3(2):170–6
Hospital costs by clinical parameters for peripheral vascular surgical DRGs. Muñoz E, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):58–63

EDUCATION

Changes in the education of a vascular surgeon. Bergan JJ. **Ann Vasc Surg** 1986 Sep;1(2):230–6
Acute [letter] Diethrich EB. **Eur J Vasc Surg** 1989 Apr; 3(2):186
The impact of vascular surgical training on vascular surgical care [editorial] Ernst CB. **J Vasc Surg** 1987 Mar;5(3):403–4
Use of small–caliber polytetrafluoroethylene (Gore–Tex) grafts in microsurgical training. Korber KE, et al. **Microsurgery** 1989;10(2):113–5

HISTORY

The evolution of vascular surgery and the Nobel Prize. Szilagyi DE. **Ann Vasc Surg** 1986 Sep;1(2):237–40
Vascular problems at the Battle of Waterloo. Crumplin MK. **Eur J Vasc Surg** 1987 Apr;1(2):137–42
A brief history of vascular surgery in Poland. Noszczyk WK. **Int Angiol** 1988 Oct–Dec;7(4):292–6
The Australian Bicentenary Issue [editorial] **J Cardiovasc Surg (Torino)** 1988 Nov–Dec;29(6):621–3
Natural history and management of iliac aneurysms [letter] Friedman SG. **J Vasc Surg** 1989 Apr;9(4):620
History of sleeve anastomosis [letter] Cuadros CL. **Plast Reconstr Surg** 1988 Dec;82(6):1102–3
[Development and current status of vascular surgery in Hungary] Papp S. **Orv Hetil** 1988 Jul 31;129(31):1629–32, 1635–6 (Eng. Abstr.) (Hun)

INSTRUMENTATION

MR imaging in patients with intracranial aneurysm clips. Becker RL, et al. **AJNR** 1988 Sep;9(5):885–9
Comparison of MR imaging and CT in patients with intracranial aneurysm clips. Holtås S, et al. **AJNR** 1988 Sep;9(5):891–7
Safety of percutaneous coronary atherectomy with deep arterial resection. Garratt KN, et al. **Am J Cardiol** 1989 Sep 1;64(8):538–40

In-situ saphenous vein bypass grafts [letter; comment] LeMaitre GD. **Ann Surg** 1989 Jul;210(1):125–6. **Comment on:** Ann Surg 1988 Oct;208(4):435–42

Simplified microvascular clamps. Govila A. **Br J Plast Surg** 1989 May;42(3):347–8

Installation requirements for an argon laser angioplasty system. Smithson PH, et al. **Br J Radiol** 1989 Jan; 62(733):71–3

The use of the venous stripper for graft removal in arterial reoperations. Shifrin EG, et al. **Eur J Vasc Surg** 1987 Oct; 1(5):351–2

Magnetic resonance imaging and aneurysm clips. Magnetic properties and image artifacts. Romner B, et al. **J Neurosurg** 1989 Mar;70(3):426–31

Contamination of suction drainage systems in vascular surgery. Watson JD, et al. **J R Coll Surg Edinb** 1988 Jun; 33(3):130–1

Use of the vascular punch in microsurgery. Pederson WC, et al. **J Reconstr Microsurg** 1989 Apr;5(2):115–8

Some mechanical properties of polypropylene sutures: relationship to the use of polypropylene in vascular surgery. Dobrin PB. **J Surg Res** 1988 Dec;45(6):568–73

Ureteral obstruction secondary to a vena caval clip. Wrenn JJ, et al. **J Urol** 1988 Nov;140(5):1014–5

Assessment of transmural force during application of vascular occlusive devices. Moore WM Jr, et al. **J Vasc Surg** 1988 Oct;8(4):422–7

Microvascular anastomosis using a new diode laser system with a contact probe. Unno N, et al. **Lasers Surg Med** 1989; 9(2):160–8

The behavior of platelets at foreign surfaces. Packham MA. **Proc Soc Exp Biol Med** 1988 Dec;189(3):261–74 (123 ref.)

Microvascular anastomosis of interpositional vein grafts with the UNILINK system. A comparative experimental study. Ragnarsson R, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):23–8

Echocardiography in planned interruption of the inferior vena cava. Alberts WM, et al. **South Med J** 1989 Jun; 82(6):772–4

Posttraumatic phlegmasia cerulea dolens: an indication for the Greenfield filter. Wilson B, et al. **South Med J** 1989 Jun;82(6):780–2

Technique using the fiberoptic valvulotome for the in situ vein graft. Chin AK, et al. **Surg Gynecol Obstet** 1989 Sep; 169(3):255–6

[Cerebral vascular clips in MRI. Absolute or relative contraindications] Doyon D, et al. **J Radiol** 1989 Feb; 70(2):123–6 (Eng. Abstr.) **(Fre)**

[A device for disobliteration of the vessels in acute and chronic ischemia of the extremities] Palkin AE. **Klin Khir** 1988;(7):68 **(Rus)**

METHODS

Neodymium:yttrium–aluminum–garnet laser occlusion of rhesus placental vasculature via fetoscopy. DeLia JE, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):485–9

Experimental microvascular anastomoses with a CO2 laser. A series of 240 anastomoses. Travers V, et al. **Ann Chir Main** 1988;7(3):202–9 **(Eng, Fre)**

"Insert sutures first, tie later": new microvascular anastomosis techniques. Tark KC, et al. **Ann Plast Surg** 1989 Apr; 22(4):343–6

Routine intraoperative angioscopy in lower extremity revascularization. Miller A, et al. **Arch Surg** 1989 May; 124(5):604–8

Proposition for a new continuous suturing technique for microvascular anastomosis: a comparative study. Adani A, et al. **Br J Plast Surg** 1988 Sep;41(5):506–8

Microvascular anastomosis using polyethylene glycol 4000 and fibrin glue. Kamiji T, et al. **Br J Plast Surg** 1989 Jan; 42(1):54–8

Defining parameters for peripheral laser angioplasty. Murray A, et al. **Eur J Vasc Surg** 1989 Feb;3(1):31–6

Management of thoracoabdominal aortic aneurysms. Myhre HO, et al. **Eur J Vasc Surg** 1988 Aug;2(4):209–11 (19 ref.)

Evaluation of the expanded polytetrafluoroethylene (EPTFE) suture in peripheral vascular surgery using EPTFE prosthetic vascular grafts. Gayle RG, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct;29(5):556–9

End-to-side and end-to-end vascular anastomoses with a carbon dioxide laser. Nakata S, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):57–62

Clam-shell technique for right renal vein extension in cadaver kidney transplantation. Barry JM, et al. **J Urol** 1988 Dec;140(6):1479

Use of a caval–atrial shunt for resection of a caval tumor thrombus in renal cell carcinoma. Foster RS, et al. **J Urol** 1988 Dec;140(6):1370–1

Is there a reason for controversy regarding fasciotomy? [editorial] Blaisdell FW. **J Vasc Surg** 1989 Jun;9(6):828

Fasciotomy—in perspective [editorial] Ernst CB. **J Vasc Surg** 1989 Jun;9(6):829–30

Interventional procedures for the treatment of vascular disease: recommendations regarding quality assurance, development, credentialing criteria, and education. Regional Vascular Society Committee on Interventional Therapy. String ST, et al. **J Vasc Surg** 1989 May;9(5):736–9

CO2 and argon laser vascular welding: acute histologic and thermodynamic comparison. Kopchok GE, et al. **Lasers Surg Med** 1988;8(6):584–8

Effect of heparinized irrigating solutions on patency of experimental microvascular anastomoses. Zinberg EM, et al. **Microsurgery** 1989;10(2):103–7; discussion 108–9

Postoperative epidural narcotics for vascular surgery. Raggi R. **N J Med** 1988 Dec;85(12):1025–31

Microvascular applications in limb sparing tumor surgery. Hausman M. **Orthop Clin North Am** 1989 Jul;20(3):427–37 (52 ref.)

New method of microvascular anastomosis. Ahn, et al. **Osaka City Med J** 1988 Oct;34(2):77–113

Aneurysms and the sleeve technique for vessel anastomosis [letter] Acland RD. **Plast Reconstr Surg** 1989 Feb;83(2):398

The laser-assisted end-to-side microvascular anastomosis. Ruiz-Razura A, et al. **Plast Reconstr Surg** 1989 Mar; 83(3):511–7

Abdominal aortic reconstruction without renal bypass in renal transplant patients. Jivegård L, et al. **Surgery** 1989 Jul;106(1):110–3

Management of small branching vessels in microsurgery: an experiment on a rat model. Hou SM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1045–9

Vascular anastomosis in liver grafting by use of a synthetic absorbable cuff material. Sumimoto K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2371–3

[Evaluation of two experimental models of end-to-side microvessel anastomosis in rats] Shi SS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):49–50 **(Chi)**

[Free flap transplantation by using a blood vessel anastomosing ring—report of 20 cases] Zhou G. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):103–5 **(Chi)**

[Arterial and venous vascular reconstruction following trauma] Herrmann M. **Rev Med Suisse Romande** 1988 Sep; 108(9):785–9 **(Fre)**

[Abdominal surgery and vascular surgery] Mishima Y. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1335–8 (5 ref.) (Eng. Abstr.) **(Jpn)**

[Experimental and clinical studies on free toe-joint transplantation to replace a finger joint by microvascular technic] Watanabe M. **Nippon Seikeigeka Gakkai Zasshi** 1988 May;62(5):495–510 (Eng. Abstr.) **(Jpn)**

[Combined retroperitoneal approach in reconstructive surgery of the infrarenal segment of the aorta, its bifurcation and iliac arteries] Dronov AF, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):122–6 **(Rus)**

[Elements of vascular surgery in surgery of the lungs and mediastinal organs] Vishnevskiĭ AA, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):68–72 (Eng. Abstr.) **(Rus)**

[Preservation of optimal gastric blood flow after gastrectomy in patients with peptic ulcer] Koval'chuk LA, et al. **Sov Med** 1988;(7):93–6 **(Rus)**

[Results of thrombendarterectomy and bypass in comparison to the preoperative and postoperative clinical state] Soša T, et al. **Acta Chir Iugosl** 1988;35(1):21–31 (Eng. Abstr.) **(Scr)**

NURSING

Microvascular reconstruction. Nursing management. Goodman T, et al. **AORN J** 1988 Oct;48(4):666–9, 672–6

REHABILITATION

The functional recovery of revascularised colon and jejunum replacing the cervical oesophagus. Smith RW, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(2):117–20

STATISTICS & NUMERICAL DATA

[Vascular surgery in Norway in 1986] Saether OD, et al. **Tidsskr Nor Laegeforen** 1989 Jan 10;109(1):23–6 (Eng. Abstr.) **(Nor)**

TRENDS

Vascular surgery: what was and what will be. Berguer R. **Ann Vasc Surg** 1986 Sep;1(2):225–9

Scientific prognosis of trends in the development of cardiovascular surgery in the socialist countries. Chekanov VS, et al. **Cor Vasa** 1988;30(6):456–61

European vascular surgery 1988. Increasing needs in an era of constrained economical resources. Myhre HO. **Eur J Vasc Surg** 1989 Feb;3(1):1–4

Success and failure in vascular surgery. The René Leriche memorial lecture 1988. Vollmar JF. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):141–54 (41 ref.)

[Influence of nonsurgical intervention on vascular surgical practice. Hollier LH. **J Vasc Surg** 1989 May;9(5):627–9

[Current problems of vascular surgery] Pokrovskiĭ AV. **Kardiologiia** 1988 Jun;28(6):5–7 **(Rus)**

VASCULITIS

Microscopic polyarteritis. Kaufman LD, et al. **Hosp Pract [Off]** 1989 Jun 15;24(6):85–9, 92–7, 101 passim

Urticarial vasculitis. Berg RE, et al. **Int J Dermatol** 1988 Sep;27(7):468–72 (37 ref.)

Update on systemic necrotizing vasculitis. Conn DL. **Mayo Clin Proc** 1989 May;64(5):535–43 (54 ref.)

Cutaneous vasculitis: its relationship to systemic disease. Swerlick RA, et al. **Med Clin North Am** 1989 Sep; 73(5):1221–35

BLOOD

Free radical pathology in chronic arterial disease. Belch JJ, et al. **Free Radic Biol Med** 1989;6(4):375–8

Plasma concentrations of complement–activation complexes correlate with disease activity in patients diagnosed with isolated central nervous system vasculitis. Langlois PF, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):11–6

Enhanced transcription of TNF in systemic vasculitis [letter] Deguchi Y, et al. **Lancet** 1989 Sep 23;2(8665):745–6

[Inflammatory proteins and systemic diseases] Hachulla E. **Rev Med Interne** 1989 May–Jun;10(3):235–45 (79 ref.) **(Fre)**

CHEMICALLY INDUCED

Severe reaction to diphosphonate: implications for treatment of Paget's disease. Elliott AT, et al. **BMJ** 1988 Sep 3; 297(6648):592–3

Hypersensitivity vasculitis due to ofloxacin. Huminer D, et al. **BMJ** 1989 Jul 29;299(6694):303

Vasculitis complicating treatment with intravenous anisoylated plasminogen streptokinase activator complex in acute myocardial infarction [letter] Gemmill JD, et al. **Br Heart J** 1988 Oct;60(4):361

Lisinopril–induced vasculitis. Barlow RJ, et al. **Clin Exp Dermatol** 1988 Mar;13(2):117–20

Vasculitis and retinoids. Dwyer JM, et al. **Lancet** 1989 Aug 26;2(8661):494–6

Vasculitis and retinoids [letter] Harrison PV. **Lancet** 1989 Sep 23;2(8665):749

Ciprofloxacin–induced vasculitis [letter] Choe U, et al. **N Engl J Med** 1989 Jan 26;320(4):257–8

Arteritis and arterial drug toxicity in the safety assessment of drugs. Presented at the Toxicology Forum. Aspen, Colorado, July 9–11, 1987. **Toxicol Pathol** 1989;17(1 Pt 2):65–231

CLASSIFICATION

Classification and immunodiagnosis of vasculitis: a new solution or promises unfulfilled? Lie JT. **J Rheumatol** 1988; 15(5):728–32

[Vasculitis: histopathologic classification] Wechsler J, et al. **Rev Med Interne** 1988 Nov–Dec;9(5):507–15 (60 ref.) **(Fre)**

[Current problems of systemic vasculitis] Semenkova EN. **Klin Med (Mosk)** 1989 Apr;67(4):18–24 **(Rus)**

COMPLICATIONS

Vasculitis in hairy cell leukemia: rapid response to interferon alpha. Gómez–Almaguer D, et al. **Am J Hematol** 1989 Apr; 30(4):261–2

"Possible" primary Sjögren's syndrome with diffuse cerebrovasculitis and lymphocytic interstitial pneumonitis [letter] Calabrese LH. **Am J Med** 1987 Dec;83(6):1175–6

Capillaritis and pulmonary hemorrhage in Wegener's granulomatosis [letter] Yoshikawa Y, et al. **Am J Surg Pathol** 1989 Jan;13(1):78–9

Recurrent massive alveolar hemorrhage, crescentic glomerulonephritis, and necrotizing vasculitis in a patient with rheumatoid arthritis. Naschitz JE, et al. **Arch Intern Med** 1989 Feb;149(2):406–8

Necrotizing Pneumocystis carinii vasculitis associated with lung necrosis and cavitation in a patient with acquired immunodeficiency syndrome. Liu YC, et al. **Arch Pathol Lab Med** 1989 May;113(5):494–7

Chronic meningitis and vasculitis in acquired immunodeficiency syndrome [letter] Rosenblum WI. **Arch Pathol Lab Med** 1989 Sep;113(9):966–7

Chronic basal meningitis and vasculitis in acquired immunodeficiency syndrome. A possible role for human immunodeficiency virus. Scaravilli F, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):192–5

Systemic vasculitis in association with human immunodeficiency virus infection. Calabrese LH, et al. **Arthritis Rheum** 1989 May;32(5):569–76 (32 ref.)

Lumbosacral plexopathy in a woman with CREST syndrome and vasculitis [letter] Moore ME, et al. **Arthritis Rheum** 1989 May;32(5):661–3

Leg claudication and peripheral neuropathy as main features of systemic necrotizing vasculitis [letter] Tan WD, et al. **Arthritis Rheum** 1989 Apr;32(4):510–1

Necrotizing vasculitis and atherosclerosis. Alegre VA, et al. **Br J Dermatol** 1988 Sep;119(3):381–4

Sneddon's syndrome (livedo reticularis and cerebral thrombosis) with livedo vasculitis and anticardiolipin antibodies. Grattan CE, et al. **Br J Dermatol** 1989 Mar; 120(3):441–7

Systemic symptoms associated with orbital venous vasculitis. Hannerz J. **Cephalalgia** 1988 Dec;8(4):255–63

Cutaneous vasculitis in the LE patient. Synkowski DR, et al. **Clin Dermatol** 1985 Jul–Sep;3(3):88–95

Diffuse angioma–like changes associated with chronic DIC. Bolton–Maggs PH, et al. **Clin Exp Dermatol** 1988 May; 13(3):180–2

Autoimmune disease in hairy-cell leukemia: systemic vasculitis and anticardiolipin syndrome [letter] Salvarani C, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):329–30

Idiopathic atrophie blanche associated with digital infarction. Skrokov R, et al. **Int J Dermatol** 1988 Dec;27(10):714–5

Adult celiac disease, small and medium vessel cutaneous necrotizing vasculitis, and T cell lymphoma. Alegre VA,

et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 2):973–8
Behçet's syndrome associated with bullous necrotizing vasculitis. Lee SH, et al. **J Am Acad Dermatol** 1989 Aug; 21(2 Pt 2):327–30
Acute posterior multifocal placoid pigment epitheliopathy associated with cerebral vasculitis. Weinstein JM, et al. **J Clin Neuro Ophthalmol** 1988 Sep;8(3):195–201
Systemic lupus erythematosus and concurrent cytomegalovirus vasculitis: diagnosis by antemortem skin biopsy. Bulpitt KJ, et al. **J Rheumatol** 1989 May; 16(5):677–80
Jaccoud's arthritis and urticarial hypocomplementemic vasculitis [letter] Kahn MF. **J Rheumatol** 1989 Feb; 16(2):252
Goodpasture's syndrome associated with pulmonary eosinophilic vasculitis. Komadina KH, et al. **J Rheumatol** 1988 Aug;15(8):1298–301
Rheumatoid vasculitis with intrarenal aneurysm formation. Moreland L, et al. **J Rheumatol** 1988;15(5):845–9
Jaccoud's arthritis and panvasculitis in the hypocomplementemic urticarial vasculitis syndrome. Sturgess AS, et al. **J Rheumatol** 1988;15(5):858–61
Retinal vasculitis [editorial] **Lancet** 1989 Apr 15; 1(8642):823–4
Neurologic manifestations of vasculitis. Kissel JT. **Neurol Clin** 1989 Aug;7(3):655–73 (89 ref.)
Combined sarcoidosis and disseminated visceral giant cell vasculitis. Marcussen N, et al. **Pathol Res Pract** 1989 Mar; 184(3):325–30
Eosinophilic granuloma and necrotizing vasculitis (Churg–Strauss syndrome?) involving a parotid gland, lymph nodes, liver and spleen. Gambari PF, et al. **Scand J Rheumatol** 1989;18(3):171–5
Chronic vasculitis causing unilateral ureteral stenosis. Goodman GR, et al. **Urology** 1988 Oct;32(4):354–6
[Various clinical courses of hypersensitivity vasculitis with eosinophilia] Jira M, et al. **Vnitr Lek** 1989 Feb;35(2):168–74 (Eng. Abstr.) (Cze)
[Cutaneo–systemic vasculitis in homozygote C4 deficiency] Bilet S, et al. **Ann Dermatol Venereol** 1988;115(11):1152–4 (Fre)
[Vasculitis with hypocomplementemia, paraproteinemia and plane xanthoma] Escallier F, et al. **Ann Dermatol Venereol** 1988;115(6–7):713–6 (Fre)
[Association of bilateral serous otitis, systemic vasculitis and temporal arteritis. Nosological problems (letter)] Vinceneux P, et al. **Presse Med** 1989 Jan 28;18(3):132 (Fre)
[Sternocostoclavicular hyperostosis. Association with pustular psoriasis and systemic vasculitis] Wieland T, et al. **Schweiz Med Wochenschr** 1988 Dec 3;118(48):1803–7 (Eng. Abstr.) (Ger)
[A 31–year–old asthmatic woman with multisystemic disease (clinical conference)] Weinblatt ME, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):465–72 (Ita)
[Two cases of obstructive lung disease associated with collagen vascular diseases] Kunitoh H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1291–6 (Eng. Abstr.) (Jpn)
[A case of ulcerative colitis complicated articular, cutaneous and ocular lesions] Koganei K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2444–9 (29 ref.) (Jpn)
[A case of cerebral amyloid angiopathy associated with granulomatous angiitis of the central nervous system] Yamazaki T, et al. **Rinsho Shinkeigaku** 1988 Oct; 28(10):1164–70 (Eng. Abstr.) (Jpn)
[Reversible 1st degree atrioventricular block associated with leukocytoclastic vasculitis. A case report] Haddad WT, et al. **Arq Bras Cardiol** 1988 Dec;51(6):459–61 (Eng. Abstr.) (Por)
[AIDS–vasculitis, a chance association? (letter)] Larrañaga JR, et al. **Rev Clin Esp** 1988 Apr;182(7):395–6 (Spa)
[Vasculitis–AIDS. A fortuitous association? (letter)] Muñoz Sanz A, et al. **Rev Clin Esp** 1989 Mar;184(5):274–5 (Spa)

DIAGNOSIS

Diagnostic studies for systemic necrotizing vasculitis. Sensitivity, specificity, and predictive value in patients with multisystem disease. Dahlberg PJ, et al. **Arch Intern Med** 1989 Jan;149(1):161–5
Acute febrile cerebrovasculitis. A non–spotted fever group rickettsial disease. Linnemann CC Jr, et al. **Arch Intern Med** 1989 Jul;149(7):1682–4
Urticarial vasculitis in adults. Berg RE, et al. **Int J Dermatol** 1988 Sep;27(7):504–5
Laryngeal vasculitis [letter] Godeau B, et al. **J Rheumatol** 1989 Apr;16(4):562–3
Overlap of granulomatous vasculitis and sarcoidosis: presentation with uveitis, eosinophilia, leg ulcers, sinusitis, and past foot drop. Petri M, et al. **J Rheumatol** 1988 Jul; 15(7):1171–3
Diagnosis and management of isolated angiitis of the central nervous system. Moore PM. **Neurology** 1989 Feb;39(2 Pt 1):167–73
Echogenic vasculature in the basal ganglia of neonates: a sonographic sign of vasculopathy. Teele RL, et al. **Radiology** 1988 Nov;169(2):423–7
Antineutrophil cytoplasmic auto–antibodies in the diagnosis and management of vasculitis [editorial] Ress S. **S Afr Med J** 1989 Jan 21;75(2):41
Cholesterol embolism: a pseudovasculitic syndrome. Cappiello RA, et al. **Semin Arthritis Rheum** 1989 May; 18(4):240–6
[Neuroborreliosis: progressive encephalomyelitis with cerebral vasculitis] Lock G, et al. **Monatsschr Kinderheilkd** 1989 Feb;137(2):101–4 (Eng. Abstr.) (Ger)
[Vasculitis of the central nervous system] Aukrust P, et al. **Tidsskr Nor Laegeforen** 1988 Nov 30;108(33):3094–6 (Eng. Abstr.) (Nor)
[A rare case of generalized angiosarcomatosis, masked by pulmonary tuberculosis and systemic vasculitis] Bruk BB, et al. **Ter Arkh** 1989;61(5):137–8 (Rus)
[Scurvy, not vasculitis (letter)] García Jiménez N, et al. **Med Clin (Barc)** 1988 Jun 25;91(5):197 (Spa)

DRUG THERAPY

Infectious complications of cyclophosphamide treatment for vasculitis. Bradley JD, et al. **Arthritis Rheum** 1989 Jan; 32(1):45–53
Visual recovery in orbital vasculitis. Bagegni A, et al. **Br J Ophthalmol** 1988 Oct;72(10):737–40
Amyloid angiopathy and granulomatous angiitis of the central nervous system: a case responding to corticosteroid treatment. Ginsberg L, et al. **J Neurol** 1988 Sep; 235(7):438–40
Glucocorticoids in the management of vasculitis—a double edged sword? Conn DL, et al. **J Rheumatol** 1988 Aug; 15(8):1181–3
[Principles of the treatment of various forms of systemic vasculitis] Semenkova EN. **Ter Arkh** 1988;60(6):107–11 (Rus)

ETIOLOGY

Gastrointestinal vasculitis and pneumatosis intestinalis due to systemic lupus erythematosus: successful treatment with pulse intravenous cyclophosphamide. Laing TJ. **Am J Med** 1988 Oct;85(4):555–8
Immunology of a serum sickness/vasculitis reaction secondary to streptokinase used for acute myocardial infarction. Davidson JR, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):381–4
Rheumatoid arthritis complicated by vasculitis. Hess EV. **Hosp Pract [Off]** 1988 Oct 30;23(10A):50–4, 57, 61–4 passim
Human parvovirus B19 infection associated with vascular purpura and vasculitis [letter] Schwarz TF, et al. **Infection** 1989 May–Jun;17(3):170–1
Coral ulcer as a vasculitis. Bianchini G, et al. **Int J Dermatol** 1988 Sep;27(7):506–7
Localized cutaneous leukocytoclastic vasculitis in an intravenous drug abuser. Bickley LK, et al. **Int J Dermatol** 1988 Sep;27(7):512–3
Behçet's disease with severe cutaneous necrotizing vasculitis: response to plasma exchange—report of a case. Cornelis F, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):576–9
Evidence for the role of platelet–activating factor in immune complex vasculitis in the rat. Warren JS, et al. **J Clin Invest** 1989 Feb;83(2):669–78
Vasculitis—an overview. Mukherjee S, et al. **J Indian Med Assoc** 1989 Feb;87(2):45–8 (9 ref.)
Mycotic vasculitis with repeated intracranial aneurysmal hemorrhage. Case report. Venger BH, et al. **J Neurosurg** 1988 Nov;69(5):775–9
Polyarteritis nodosa and necrotizing glomerulonephritis associated with long–standing silicosis. Arnalich F, et al. **Nephron** 1989;51(4):544–7
Necrotizing vasculitis of the nervous system in a patient with AIDS–related complex. Vinters HV, et al. **Neuropathol Appl Neurobiol** 1988 Sep–Oct;14(5):417–24
Retinal vasculitis. Sanders MD, et al. **Postgrad Med J** 1988 Jul;64(753):488–96 (32 ref.)
Animal models of vasculitis. Lessons we can learn to improve our understanding of Kawasaki disease. Lehman TJ, et al. **Rheum Dis Clin North Am** 1988 Aug;14(2):479–87 (19 ref.)
Vasculitis in pig kidney autografts from human albumin perfusion preservation. Roper L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1265
[Chronic eosinophilic infiltrating pneumonia followed by angiitis of Churg–Strauss type (letter)] Chaouat D, et al. **Ann Med Interne (Paris)** 1988;139(3):228–30 (Fre)
[Cutaneous vasculitis of the upper limb disclosing breast cancer (letter)] Benk V, et al. **Presse Med** 1989 Apr 1; 18(13):684 (Fre)
[Leukocytoclastic vasculitis and hepatic tuberculosis disclosing hairy cell leukemia] Thorel JB, et al. **Rev Med Interne** 1988 Nov–Dec;9(5):530–3 (10 ref.) (Fre)
[An unusual slow course of systemic vasculitis with multiorgan involvement] Pfisterer J, et al. **Immun Infekt** 1989 Apr;17(2):57–9 (Eng. Abstr.) (Ger)
[Subcutaneous fat necroses, arthritis and vasculitis of small skin vessels in chronic pancreatitis] Mayet WJ, et al. **Z Gastroenterol** 1989 Jan;27(1):1–5 (Eng. Abstr.) (Ger)
[Vasculitis from the dermatologic viewpoint] Wiemers U. **Z Gesamte Inn Med** 1988 Sep 15;43(18):519–22 (13 ref.) (Eng. Abstr.) (Ger)
[Vasculitis in childhood] Truckenbrodt H. **Z Rheumatol** 1988 May–Jun;47(3):131–8 (20 ref.) (Eng. Abstr.) (Ger)
[Dermal vasculitis in rheumatoid arthritis and systemic lupus erythematosus. A study using capillaroscopy of the nailfold] Binaghi F, et al. **Minerva Cardioangiol** 1988 Jun; 36(6):305–10 (Eng. Abstr.) (Ita)
[A case of chronic thyroiditis associated with vasculitic neuropathy] Awaki E, et al. **Rinsho Shinkeigaku** 1988 May; 28(5):501–6 (Eng. Abstr.) (Jpn)
[Multiple aneurysms and cerebral vasculitis in systemic lupus erythematosus] Atanes Sandoval A, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):577–9 (Eng. Abstr.) (Spa)
[Vasculitis of the central nervous system and giant cell arteritis (letter)] Cobeta García JC, et al. **Med Clin (Barc)** 1989 Apr 8;92(13):516–7 (Spa)
[Cutaneous necrotizing vasculitis as a presenting feature of infectious mononucleosis (letter)] López D, et al. **Med Clin (Barc)** 1988 Dec 3;91(19):756–7 (Spa)
[Leukocytoclastic vasculitis and ulcerative colitis (letter)] Allegue Rodríguez F, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):185–6 (Spa)

IMMUNOLOGY

Identification of an autoantibody to vascular endothelial cell–specific antigens in patients with systemic vasculitis. Brasile L, et al. **Am J Med** 1989 Jul;87(1):74–80
Autoimmune responses in systemic vasculitis. Lockwood CM. **Am J Nephrol** 1989;9 Suppl 1:30–2
Peripheral nerve vasculitis: immune characterization of the vascular lesions. Kissel JT, et al. **Ann Neurol** 1989 Mar; 25(3):291–7
Anticardiolipin antibody in Henoch–Schönlein purpura and related vascular disorders. Katayama I, et al. **Arch Dermatol Res** 1989;281(4):296–8
Anti–endothelial cell antibodies in patients with rheumatoid vasculitis [letter] Heurkens AH, et al. **Arthritis Rheum** 1989 Sep;32(9):1191–2
Serum IgG antibodies to C1q in hypocomplementemic urticarial vasculitis syndrome. Wisniacki JJ, et al. **Arthritis Rheum** 1989 Sep;32(9):1119–27
Anti–IgM treatment of C57BL/6–1pr/1pr mice: depletion of B cells reduces 1pr gene–induced lymphoproliferation and mononuclear cell vasculitis. Cerny A, et al. **Clin Exp Immunol** 1989 Jul;77(1):124–9
Thrombotic skin disease as a marker of the anticardiolipin syndrome. Livedo vasculitis and distal gangrene associated with abnormal serum antiphospholipid activity. Grob JJ, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1063–9
Autoantibodies to neutrophil cytoplasmic antigens in systemic vasculitis have the same target specificity. Harrison DJ, et al. **J Pathol** 1989 Jul;158(3):233–8
Lytic IgG anti–endothelial cell antibodies in vasculitis [letter] Baguley E, et al. **Lancet** 1988 Oct 15;2(8616):907
Antineutrophil cytoplasmic antibodies [letter] Thompson RA, et al. **Lancet** 1989 Mar 25;1(8639):670–1
Characterization of C1q found in a patient with hypocomplementemic vasculitis–urticaria syndrome. Sasaki T, et al. **Microbiol Immunol** 1989;33(5):413–22
Antibodies to components of neutrophil cytoplasm: a new diagnostic tool in patients with Wegener's granulomatosis and systemic vasculitis. Parlevliet KJ, et al. **Q J Med** 1988 Jan;66(249):55–63

MORTALITY

[Complicated purulent meningitis in the adult: persisting high mortality caused by vasculitis and intracranial pressure] Pfister HW. **Nervenarzt** 1989 May;60(5):249–54 (56 ref.) (Ger)

PATHOLOGY

Lichenoid lymphocytic vasculitis with a high component of histiocytes. Histogenetic implications in a specified clinical setting. Ferguson DL, et al. **Am J Dermatopathol** 1989 Jun; 11(3):259–69
Vasculitis of breast in Behçet's disease—a case report. Dündar SV, et al. **Angiology** 1988 Oct;39(10):921–4
Rheumatoid papules: lesions showing features of vasculitis and palisading granuloma. Smith ML, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 2):348–52 (16 ref.)
Sixth nerve palsies, temporal artery biopsy, and necrotizing vasculitis. Sedwick LA, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):119–21
Isolated necrotizing granulomatous vasculitis of the spermatic cords. Karnauchow PN, et al. **J Urol** 1989 Feb; 141(2):379–81
Systemic vasculitis: a temporal bone histopathologic study. Yoon TH, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):600–9
Idiopathic and secondary vasculitis: a review. Churg J, et al. **Mod Pathol** 1989 Mar;2(2):144–60 (152 ref.)
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 8–1989. A 46–year–old woman with progressive dementia. **N Engl J Med** 1989 Feb 23;320(8):514–24
Acute multifocal hemorrhagic retinal vasculitis. Blumenkranz MS, et al. **Ophthalmology** 1988 Dec;95(12):1663–72
Systemic and isolated vasculitis. A rational approach to classification and pathologic diagnosis. Lie JT. **Pathol Annu** 1989;24 Pt 1:25–114 (320 ref.)
The lung in systemic vasculitis. Leatherman JW. **Semin Respir Infect** 1988 Sep;3(3):274–88 (56 ref.)
Granulomatous vasculitides of the lung: a clinicopathologic approach to diagnosis and treatment. Warren J, et al. **South Med J** 1989 Apr;82(4):481–91 (115 ref.)
Granulomatous angiitis masquerading as a mass lesion. Magnetic resonance imaging and stereotactic biopsy findings in a patient with occult Hodgkin's disease. Johnson

M, et al. **Surg Neurol** 1989 Jan;31(1):49–53

[Livido racemosa in detection of anti-phospholipid antibodies] Degitz K, et al. **Hautarzt** 1989 Jul;40(7):437–40 (Eng. Abstr.) (Ger)

[Vasculitis and granulomatosis in the respiratory tract] Gross WL, et al. **Immun Infekt** 1988 Aug;16(4):125–34 (59 ref.) (Eng. Abstr.) (Ger)

[Urticaria, abdominal pain, arthritis, pseudotumor cerebri and nephrotic syndrome in a 20-year-old patient] Piper C, et al. **Internist (Berlin)** 1988 Dec;29(12):824–7 (Ger)

[Vasculitis with anemia infarcts of the villi of the synovial membrane in rheumatoid arthritis] Geiler G, et al. **Z Rheumatol** 1989 Mar–Apr;48(2):63–7 (Eng. Abstr.) (Ger)

[An autopsy case of subarachnoid and intracerebral hemorrhage and necrotizing angiitis associated with methamphetamine abuse] Shibata S, et al. **No To Shinkei** 1988 Nov;40(11):1089–94 (Eng. Abstr.) (Jpn)

[Disseminated livedo angiitis] Tatarkin VM, et al. **Klin Med (Mosk)** 1988 Aug;66(8):132–3 (Rus)

[Cutaneous angiitis: direct immunofluorescence and morphopathology in 23 cases] Chuaqui R, et al. **Rev Med Chil** 1989 Jun;116(6):520–4 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Vasculitis and the kidney. Frascà GM, et al. **Adv Exp Med Biol** 1989;252:41–52 (32 ref.)

Multiple systems organ failure: malignant intravascular inflammation. Pinsky MR. **Crit Care Clin** 1989 Apr; 5(2):195–8

Role of cytokines and platelet-activating factor in microvascular immune injury. Braquet P, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):88–100 (68 ref.)

Involvement of tumour necrosis factor and other cytokines in immune-mediated vascular pathology. Grau GE, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):34–9 (44 ref.)

Animal models of vasculitis. Bishop SP. **Toxicol Pathol** 1989; 17(1 Pt 2):109–17 (59 ref.)

The human vasculitis syndromes. Lightfoot RW Jr. **Toxicol Pathol** 1989;17(1 Pt 2):72–6 (6 ref.)

Vasculitis in MRL/1 pr mice: model of cell-mediated autoimmunity. Moyer CF, et al. **Toxicol Pathol** 1989;17(1 Pt 2):122–8 (23 ref.)

RADIOGRAPHY

Orbital phlebography for differentiation between multiple sclerosis and venous vasculitis in subacute blindness. Hannerz J, et al. **Acta Radiol** 1988 Sep–Oct;29(5):505–7

Pulmonary angiitis and granulomatosis: a review. Weisbrod GL. **Can Assoc Radiol J** 1989 Jun;40(3):127–34 (125 ref.)

Varicella-zoster angiitis with inflammatory and angiomatous angiographic signs. Kutluk K, et al. **ROFO** 1988 Nov; 149(5):550–1

SURGERY

Transposition of the Sartorius Muscle in the treatment of Infected Vascular Grafts in the Groin [letter] Kretschmer G, et al. **Eur J Vasc Surg** 1989 Apr;3(2):186–7

THERAPY

Acute retinal necrosis syndrome treated with vitrectomy and intravenous acyclovir. Immonen I, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):106–8

[Principles of the pathogenetic therapy of systemic vasculitis] Shilkina NP. **Vestr Boles** 1988;27(6):43–8 (Bul)

[Does plasma exchange have a place in the treatment of necrotizing angiodermatitis?] Guillot B, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:26–8 (Eng. Abstr.) (Fre)

[Hemosorption in systemic vasculitis] Shilkina NP, et al. **Ter Arkh** 1989;61(5):10–5 (Eng. Abstr.) (Rus)

VETERINARY

Idiopathic cutaneous and renal glomerular vasculopathy of greyhounds. Carpenter JL, et al. **Vet Pathol** 1988 Nov; 25(6):401–7

VASCULITIS, ALLERGIC CUTANEOUS

CHEMICALLY INDUCED

Hypersensitivity vasculitis induced by terbutaline sulfate. Enat R, et al. **Ann Allergy** 1988 Oct;61(4):275–6

Hypersensitivity angiitis associated with naproxen. Singhal PC, et al. **Ann Allergy** 1989 Aug;63(2):107–9

Cutaneous vasculitis due to cyclophosphamide therapy for chronic lymphocytic leukemia. Green RM, et al. **Aust N Z J Med** 1989 Feb;19(1):55–7

Cutaneous vasculitis after intermediate dose of methotrexate (IDMTX). Fondevila Carlos G, et al. **Br J Haematol** 1989 Aug;72(4):591–2

Cutaneous vasculitis associated with rifampin therapy. Iredale JP, et al. **Chest** 1989 Jul;96(1):215–6

Procainamide-induced urticarial vasculitis. Knox JP, et al. **Cutis** 1988 Nov;42(5):469–72

Lymphocytic angiitis following streptokinase therapy. Sorber WA, et al. **Cutis** 1988 Jul;42(1):57–8

Atenolol-induced cutaneous vasculitis. Wolf R, et al. **Cutis** 1989 Mar;43(3):231–3

Hypersensitivity vasculitis complicating intravenous streptokinase therapy in acute myocardial infarction. Ong AC, et al. **Int J Cardiol** 1988 Oct;21(1):71–3

Unusual autoimmune manifestations in furosemide-associated hypersensitivity angiitis. Lin RY. **N Y State J Med** 1988 Aug;88(8):439–40

Widespread cutaneous vasculitis associated with diltiazem. Sheehan-Dare RA, et al. **Postgrad Med J** 1988 Jun; 64(752):467–8

[Hypersensitivity angiitis following allopurinol therapy] Wöss E, et al. **Fortschr Med** 1988 Dec 20;106(36):730–1, 729 (Eng. Abstr.) (Ger)

COMPLICATIONS

Re: Hypocomplementemic urticarial vasculitis in a patient with chronic obstructive pulmonary disease and pulmonary silicosis [letter] Strimlan CV, et al. **Cleve Clin J Med** 1989 Jul–Aug;56(5):543–4

Segmental infarct of the testis due to hypersensitivity angiitis. Baer HM, et al. **J Urol** 1989 Jul;142(1):125–7

[Polyarthritis, vasculitis and cancer of the esophagus. Apropos of a new case (letter)] Collantes Estevez E, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):425 (Fre)

[Leukocytoclastic vasculitis and multiple myeloma. Presentation of 2 cases] Benet A, et al. **Med Clin (Barc)** 1988 Oct 8;91(11):420–3 (Eng. Abstr.) (Spa)

DIAGNOSIS

Alpha-methyldopa-induced systemic vasculitis confused with Wegener's granulomatosis [letter] Matteson EL, et al. **Arthritis Rheum** 1989 Mar;32(3):356–7

[Urticarial vasculitis] Rodionov AN, et al. **Vestn Dermatol Venerol** 1989;(4):59–63 (Eng. Abstr.) (Rus)

DRUG THERAPY

[Inhibition of hypersensitivity reactions by oleanolic acid] Dai Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov; 9(6):562–5 (Eng. Abstr.) (Chi)

[Endolymphatic antibiotic therapy of allergic vasculitis] Antonov AA, et al. **Vestn Dermatol Venerol** 1989;(1):4–7 (Eng. Abstr.) (Rus)

ETIOLOGY

Cutaneous vasculitis—a rare complication of acute meningococcal meningitis in an adult. Singh N, et al. **J Assoc Physicians India** 1988 Dec;36(12):736–8

Hypersensitivity angiitis. Sams WM Jr. **J Invest Dermatol** 1989 Aug;93(2 Suppl):78S–81S (29 ref.)

IMMUNOLOGY

Complement-mediated endothelial cell damage in immune complex vasculitis of the skin: ultrastructural localization of the membrane attack complex. Boom BW, et al. **J Invest Dermatol** 1989 Aug;93(2 Suppl):68S–72S

[Clinico-immunological indices in treatment with the helium-neon laser in surface vasculitis of the skin] Radionov VG. **Vestn Dermatol Venerol** 1988;(5):10–4 (Eng. Abstr.) (Rus)

PATHOLOGY

Fournier's gangrene in hypersensitivity vasculitis. Sohn M, et al. **J Urol** 1989 Sep;142(3):823–5

PHYSIOPATHOLOGY

Granulocyte-macrophage colony-stimulating factor and vasculitis [letter] Dreicer R, et al. **Ann Intern Med** 1989 Jul 1;111(1):91–2

VETERINARY

Probable hypersensitivity vasculitis in a dog. Rachofsky MA, et al. **J Am Vet Med Assoc** 1989 Jun 1;194(11):1592–4

VASCULITIS, CHURG-STRAUSS see **CHURG-STRAUSS SYNDROME**

VASCULITIS, HEMORRHAGIC see **PURPURA, SCHOENLEIN-HENOCH**

VASECTOMY

see related
STERILIZATION REVERSAL

Changes in the epididymis after vasectomy: sonographic findings. Jarvis LJ, et al. **AJR** 1989 Mar;152(3):531–4

Post-vasectomy sperm autoimmunogens in the Lewis rat. Handley HH, et al. **Biol Reprod** 1988 Dec;39(5):1239–50

General and anomalous sperm disappearance characteristics found in a large vasectomy series. Alderman PM. **Fertil Steril** 1989 May;51(5):859–62

Effect of vasectomy on spermatogenesis in the albino rat Mus norvegicus. Singh RP, et al. **Folia Morphol (Praha)** 1988; 36(3):260–3

A survey of the concentration of 19-OH F1 alpha/F2 alpha prostaglandins in the semen of fertile, infertile and vasectomized men and their stability in both liquid semen and semen stains. King SJ, et al. **Forensic Sci Int** 1989 Mar; 40(3):217–20

Radioimmunoassay detection limits for 19-OH F1 alpha/F2 alpha prostaglandin in normal, infertile and vasectomized semen stains. Analysis of saliva, sweat and urine for possible non-specific or matrix effects. King SJ, et al. **Forensic Sci Int** 1989 Mar;40(3):221–9

Chromatographic separation of immunosuppressive factors from seminal plasma from vasectomized boars. Cechová D, et al. **Int J Fertil** 1989 Mar–Apr;34(2):149–53

Vasectomy as a contraceptive method. Orr D, et al. **Ir Med J** 1989 Feb;82(1):19–20

A quantitative study of the effects of vasectomy on spermatogenesis in rats. McDonald SW, et al. **J Anat** 1988 Aug;159:219–25

The lymphatic drainage of the epididymis and of the ductus deferens of the rat, with reference to the immune response to vasectomy. McDonald SW, et al. **J Anat** 1988 Jun; 158:57–64

Microrecanalization after vasectomy in man. Freund MJ, et al. **J Androl** 1989 Mar–Apr;10(2):120–32

An analysis of 870 bilateral vasectomies. Surabote A. **J Med Assoc Thai** 1989 Apr;72(4):230–3

Liposarcoma of the cord presenting at vasectomy counselling. Milner SM, et al. **J R Army Med Corps** 1989 Jun;135(2):86–7

Seminal plasma antigens detected by immunoblotting with human sera from vasectomized males. Gupta SK, et al. **J Reprod Immunol** 1988 Mar;12(4):263–76

Failed vasectomy [letter] Walton JK. **N Z Med J** 1989 Aug 23;102(874):448

Performed and refused vasectomy: a decade of waning popularity and increasing awareness of safety. Uhlman J, et al. **Soc Biol** 1988 Spring–Summer;35(1–2):41–9

How should vasectomy be promoted in Guatemala? Piotrow PT, et al. **Stud Fam Plann** 1988 Jul–Aug;19(4):248–9

Infrapubic incision for specific vasectomy reversal situations. Belker AM. **Urology** 1988 Nov;32(5):413–5

Vasectomy complications at a family practice center. Beavers CH. **W V Med J** 1989 Sep;85(9):379–80

[Vasectomy and its reversibility] Schoysman R, et al. **Acta Urol Belg** 1989;57(1):103–16 (Eng. Abstr.) (Fre)

[Vasectomy: criteria of choice or protocol?] Bourmeau A, et al. **J Chir (Paris)** 1988 Nov;125(11):666–71 (Eng. Abstr.) (Fre)

[Experimental study of reconstruction of the vas deferens in the rat] Martínez-Urrutia MJ, et al. **Arch Esp Urol** 1989 May;42(4):305–7 (Eng. Abstr.) (Spa)

[Lipid profile in vasectomized men] Giner J, et al. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):199–205 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Changes in the contractile activity of the male genital tract as a consequence of vasectomy. Hib J. **Acta Physiol Pharmacol Latinoam** 1988;38(2):159–65

The effect of vasectomy on serum lipids. Nikkanen V, et al. **Andrologia** 1989 Mar–Apr;21(2):174–7

Atherosclerosis of cynomolgus monkeys hyper- and hyporesponsive to dietary cholesterol. Lack of effect of vasectomy. Clarkson TB, et al. **Arteriosclerosis** 1988 Sep–Oct;8(5):488–98

Sperm auto-immunity associated with vasectomy, vasovasostomy and epididymovasostomy in Korean males. Lee HY, et al. **Clin Reprod Fertil** 1987 Dec;5(6):347–57

Complications following vasectomy. A comparison between Mersilene and autosuture surgiclips. Zeegers AG, et al. **Eur Urol** 1988;14(4):294–7

Vasectomy and health: cardiovascular and other diseases following vasectomy in Sichuan province, People's Republic of China. Tang GH, et al. **Int J Epidemiol** 1988 Sep;17(3):608–17

Vasectomy and arterial disease. Campbell WB. **J R Soc Med** 1988 Dec;81(12):683–5 (37 ref.)

Detection of testicular endocrine abnormalities and their correlation with serum antisperm antibodies in men following vasectomy. Fisch H, et al. **J Urol** 1989 May; 141(5):1129–32

[Vasectomy and vasovasostomy. I. Testicular histological changes] López A, et al. **Actas Urol Esp** 1988 Jul–Aug; 12(4):381–8 (51 ref.) (Eng. Abstr.) (Spa)

[Vasectomy and vasovasostomy. II. Histological changes in the spermatic cord] López A, et al. **Actas Urol Esp** 1988 Jul–Aug;12(4):389–98 (44 ref.) (Eng. Abstr.) (Spa)

EDUCATION

Initiating a vasectomy training clinic in a family practice residency. Eggertsen SC, et al. **Fam Med** 1989 Jul–Aug; 21(4):301–2

METHODS

Ultrastructural changes in the rabbit epididymis following vasectomy and clip occlusion. Lohiya NK, et al. **Acta Eur Fertil** 1988 Jul–Aug;19(4):233–7

Vasectomy technique. Greenberg MJ. **Am Fam Physician** 1989 Jan;39(1):131–8

Vasectomy: how much is enough? Hallan RI, et al. **Br J Urol** 1988 Oct;62(4):377–9

The percutaneous electrocoagulation vasectomy technique—a comparative trial with the standard incision technique at Marie Stopes House, London. Black TR, et al. **Contraception** 1989 Apr;39(4):359–68

The lurking sperm: vasectomy failures [letter] **JAMA** 1988 Dec 16;260(23):3433–4

Vasectomy. Rajfer J, et al. **Urol Clin North Am** 1988 Nov; 15(4):631–4 (21 ref.)

[Male sterilization. Historic review and current methods in Denmark] Siana JE, et al. **Ugeskr Laeger** 1988 Sep 12; 150(37):2157–9 (30 ref.) (Eng. Abstr.) (Dan)

[Vasectomy through a single scrotal incision. Review of 500 cases. Technical note] Arango Toro O, et al. **Actas Urol Esp** 1988 Sep–Oct;12(5):430–1 (Eng. Abstr.) (Spa)

PSYCHOLOGY

The impact of mass media advertising on a voluntary sterilization program in Brazil. Foreit KG, et al. **Stud Fam Plann** 1989 Mar–Apr;20(2):107–16

UTILIZATION

Sterilization: Canadian choices. Alderman PM, et al. **Can Med Assoc J** 1989 Mar 15;140(6):645–9

VETERINARY

Stray dog problem [letter] **Vet Rec** 1989 Apr 1;124(13):356

VASOACTIVE AGONISTS see **VASOCONSTRICTOR AGENTS**

VASOACTIVE ANTAGONISTS see **VASODILATOR AGENTS**

VASOACTIVE INTESTINAL PEPTIDE

Unique pattern of cleavage of vasoactive intestinal peptide by human lymphocytes. Goetzl EJ, et al. **Immunology** 1989 Apr;66(4):554–8

ADMINISTRATION & DOSAGE

Effects of vasoactive intestinal polypeptide, TRH, and dopamine on prolactin secretion in estrogen–primed postmenopausal women. Couzinet B, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):235–40

Substance P and vasoactive intestinal peptide influence polyamine metabolism in salivary glands of the rat. Ekström J, et al. **Acta Physiol Scand** 1989 Jul;136(3):427–33

Vasoactive intestinal peptide inhibits luteinizing hormone secretion: the inhibition is not mediated by dopamine. Stobie KM, et al. **Neuroendocrinology** 1989 Jun; 49(6):597–603

ADVERSE EFFECTS

[The effect of vasoactive intestinal polypeptide (VIP) on ocular inflammation in rabbit ocular tissue] Katayama T. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):16–21 (Eng. Abstr.) (Jpn)

ANALOGS & DERIVATIVES

Interaction of peptides related to VIP and secretin with guinea pig pancreatic acini. Zhou ZC, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G283–90

Solution structure of an analogue of vasoactive intestinal peptide as determined by two–dimensional NMR and circular dichroism spectroscopies and constrained molecular dynamics. Fry DC, et al. **Biochemistry** 1989 Mar 21;28(6):2399–409

Development of helix–based vasoactive intestinal peptide analogues: identification of residues required for receptor interaction. Musso GF, et al. **Biochemistry** 1988 Oct 18; 27(21):8174–81

Decrease of rapid–eye–movement sleep in the light by intraventricular application of a VIP–antagonist in the rat. Mirmiran M, et al. **Brain Res** 1988 Aug 16;458(1):192–4

Analogues of vasoactive intestinal peptide (VIP) contract the guinea–pig uterine artery but do not antagonize VIP–induced relaxations. Morris JL, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):375–9

The action of vasoactive intestinal peptide antagonists on peptidergic modulation of the squid Schwann cell. Evans PD, et al. **J Exp Biol** 1988 Sep;138:259–69

ANALYSIS

Distribution and function of enteric GAL–IR nerves in dogs: comparison with VIP. Gonda T, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G884–96

Chick heart peptidergic innervation: localization and development. Corvetti G, et al. **Basic Appl Histochem** 1988; 32(4):485–93

An increase in the expression of neuropeptidergic vasodilator, but not vasoconstrictor, cerebrovascular nerves in aging rats. Mione MC, et al. **Brain Res** 1988 Sep 13;460(1):103–13

Ontogeny of enkephalin– and VIP–containing neurons in dissociated cultures of embryonic mouse spinal cord and dorsal root ganglia. Eiden LE, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):141–50

Immunocytochemical analysis of calcitonin gene–related peptide and vasoactive intestinal polypeptide in Merkel cells and cutaneous free nerve endings of cats. Alvarez FJ, et al. **Cell Tissue Res** 1988 Nov;254(2):429–37

Further analysis of presence of peptides in dopamine neurons. Cholecystokinin, peptide histidine–isoleucine/vasoactive intestinal polypeptide and substance P in rat supramammillary region and mesencephalon. Seroogy K, et al. **Exp Brain Res** 1988;72(3):523–34

An increase of vasoactive intestinal polypeptide–, but not neuropeptide Y–, substance P– or catecholamine–containing nerves in the iris of the streptozotocin–induced diabetic rat. Crowe R, et al. **Exp Eye Res** 1988 Nov;47(5):751–9

Quantitative immunohistochemical analysis of VIP–neurons in the rat visual cortex. Hajós F, et al. **Histochemistry** 1988; 90(2):139–44

The co–localisation of substance P and VIP in cholinergic–type terminals of the rat parotid gland. al–Hadithi BA, et al. **J Anat** 1988 Aug;159:83–92

Neuropeptide Y–, tyrosine hydroxylase– and vasoactive intestinal polypeptide–immunoreactive nerves in bone and surrounding tissues. Bjurholm A, et al. **J Auton Nerv Syst** 1988 Dec;25(2–3):119–25

Vasoactive intestinal peptide in the hypothalamohypophysial system of the Mongolian gerbil. Mikkelsen JD, et al. **J Comp Neurol** 1988 Jul 1;273(1):87–98

Reduced vasoactive intestinal polypeptide immunoreactivity in the pituitaries of hormone–deficient mutant mice. Noguchi T, et al. **J Endocrinol** 1988 Aug;118(2):179–85

Characterization and regional distribution of peptides derived from the vasoactive intestinal peptide precursor in the normal human brain. Fahrenkrug J, et al. **J Neurochem** 1989 Oct;53(4):1142–8

Spinal cord lesions at different levels affect either the adrenergic or vasoactive intestinal polypeptide–immunoreactive nerves in the human urethra. Crowe R, et al. **J Urol** 1988 Dec;140(6):1412–4

The autonomic innervation of the human vocal cord: neuropeptides. Basterra J, et al. **Laryngoscope** 1989 Mar; 99(3):293–6

Absence of immunoreactive vasoactive intestinal polypeptide in tissue from the lungs of patients with asthma. Ollerenshaw S, et al. **N Engl J Med** 1989 May 11; 320(19):1244–8

Vasoactive intestinal polypeptide and asthma [editorial] Said SI. **N Engl J Med** 1989 May 11;320(19):1271–3

A peptide with N–terminal histidine and C–terminal isoleucine amide (PHI) and vasoactive intestinal peptide (VIP) are copackaged in myenteric neurones of the guinea pig ileum. Agoston DV, et al. **Peptides** 1989 May–Jun; 10(3):571–3

Regional distribution of vasoactive intestinal peptide in brains from normal and parkinsonian subjects. Jégou S, et al. **Peptides** 1988 Jul–Aug;9(4):787–93

Vasoactive intestinal polypeptide carboxy–terminal fragment, VIP(22–28), and other fragments of VIP, in the central nervous system of the rat. Romualdi P, et al. **Peptides** 1989 May–Jun;10(3):621–6

Development of substance P– and vasoactive intestinal polypeptide–containing neurones in the rat stomach. Ito S, et al. **Q J Exp Physiol** 1988 Sep;73(5):729–36

Neuropeptide Y and vasoactive intestinal peptide coexist in rat thyroid nerve fibers emanating from the thyroid ganglion. Grunditz T, et al. **Regul Pept** 1988 Nov; 23(2):193–208

High– and low–affinity binding sites for vasoactive intestinal peptide (VIP) in the rat kidney revealed by light microscopic autoradiography. Magistretti PJ, et al. **Regul Pept** 1988 Nov;23(2):145–52

Vasoactive intestinal polypeptidergic innervation of human urinary bladder in normal and pathological conditions. Van Poppel H, et al. **Urol Int** 1988;43(4):205–10

[A study of the contents of vasoactive intestinal peptide, somatostatin and neurotensin in rectal mucosa in patients with inflammatory bowel disease] Zhang J. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Oct; 10(5):365–7 (Eng. Abstr.) (Chi)

[Peptidergic innervation of the human dental pulp: localization of VIP] Marini R, et al. **Minerva Stomatol** 1988 Nov;37(11):819–21 (Eng. Abstr.) (Ita)

[Morphological studies of cholecystokinin–8, vasoactive intestinal polypeptide and gamma–aminobutyrate–containing neuron systems in the rat spinal cord: an immunohistochemical analysis] Fuji K. **Masui** 1988 Jun;37(6):678–90 (Eng. Abstr.) (Jpn)

ANTAGONISTS & INHIBITORS

Effect of VIP antagonist on VIP–, PGE2–, and acid–stimulated duodenal bicarbonate secretion. Algazi MC, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G833–6

Decrease of rapid–eye–movement sleep in the light by intraventricular application of a VIP–antagonist in the rat. Mirmiran M, et al. **Brain Res** 1988 Aug 16;458(1):192–4

Peptide–YY and neuropeptide–Y inhibit vasoactive intestinal peptide–stimulated adenosine 3',5'–monophosphate production in rat small intestine: structural requirements of peptides for interacting with peptide–YY–preferring receptors. Servin AL, et al. **Endocrinology** 1989 Feb; 124(2):692–700

Somatostatin inhibition of VIP–induced somatostatin release, cyclic AMP accumulation and 45Ca2+ uptake in diencephalic cells. Pares–Herbute N, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):241–4

Neuropeptide Y inhibits vasoactive intestinal peptide– and dopamine–induced cyclic AMP formation in human Ewing's sarcoma WE–68 cells. van Valen F, et al. **FEBS Lett** 1989 Jun 5;249(2):271–4

The action of vasoactive intestinal peptide antagonists on peptidergic modulation of the squid Schwann cell. Evans PD, et al. **J Exp Biol** 1988 Sep;138:259–69

BIOSYNTHESIS

Synthesis, cloning and expression in Escherichia coli of artificial genes coding for biologically active elongated precursors of the vasoactive intestinal polypeptide. Simoncsits A, et al. **Eur J Biochem** 1988 Dec 15; 178(2):343–50

BLOOD

Effect of bile salts on the plasma concentration of immunoreactive vasoactive intestinal polypeptide in man. Matsumura M, et al. **Endocrinol Jpn** 1989 Feb;36(1):15–21

Lunch induces an increase in the plasma prolactin concentration, but not vasoactive intestinal peptides or cholecystokinin. Miyake A, et al. **Endocrinol Jpn** 1988 Aug; 35(4):647–50

Plasma vasoactive intestinal peptide in uremic patients [letter] Viron B, et al. **Int J Artif Organs** 1989 Apr;12(4):276

Gastric relaxation and vasoactive intestinal peptide output in response to reflex vagal stimulation in the dog. Ito S, et al. **J Physiol (Lond)** 1988 Oct;404:683–93

Gastric vasodilatation and vasoactive intestinal peptide output in response to vagal stimulation in the dog. Ito S, et al. **J Physiol (Lond)** 1988 Oct;404:669–82

Pharmacological evidence that the sympathetic nervous system mediates the increase in renin secretion produced by immobilization and head–up tilt in rats. Golin RM, et al. **Neuropharmacology** 1988 Dec;27(12):1209–13

Autoradiographic quantification of vasoactive intestinal peptide binding sites in sections from human blood mononuclear cell pellets. Gutkind JS, et al. **Neuropsychopharmacology** 1988 Sep;1(3):231–5

Elevated VIP and endotoxin plasma levels in human gram–negative septic shock. Brandtzaeg P, et al. **Regul Pept** 1989 Jan;24(1):37–44

Release of vasoactive intestinal peptide during hyperdynamic sepsis in dogs. Fuortes M, et al. **Surgery** 1988 Nov; 104(5):894–8

Neurotensin and vasoactive intestinal peptide levels during orthotopic liver transplantation in man. Khoury GF, et al. **Transplantation** 1988 Oct;46(4):601–2

[Humoral substances in peripheral and portal veins in cirrhotic patients] Li SJ, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):44–7, 62 (Eng. Abstr.) (Chi)

[Maternal plasma concentration of vasoactive intestinal polypeptide before, during and following labor] Knogler W, et al. **Gynakol Rundsch** 1988;28 Suppl 2:253–6 (Ger)

[Diabetes mellitus and the intestinal nervous system] Schusdziarra V. **Z Gastroenterol** 1988 Apr;26(4):237–8 (Eng. Abstr.) (Ger)

[VIP: clinical value] Troc P, et al. **Acta Gastroenterol Latinoam** 1988;18(4):275–7 (Spa)

CHEMICAL SYNTHESIS

Development of helix–based vasoactive intestinal peptide analogues: identification of residues required for receptor interaction. Musso GF, et al. **Biochemistry** 1988 Oct 18; 27(21):8174–81

Studies on peptides. CLXIII. Synthesis of guinea pig vasoactive intestinal polypeptide (gVIP). Hatano M, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):3857–66

GENETICS

Chromosomal assignment of human VIP/PHM–27 gene to 6q26——q27 region by spot blot hybridization and in situ hybridization. Gotoh E, et al. **Biochem Int** 1988 Sep; 17(3):555–62

Localization of vasoactive intestinal peptide and peptide histidine isoleucine immunoreactivity and mRNA within the rat suprachiasmatic nucleus. Stopa EG, et al. **Brain Res** 1988 Dec;464(4):319–25

Lactation elevates vasoactive intestinal peptide messenger ribonucleic acid in rat suprachiasmatic nucleus. Gozes I, et al. **Endocrinology** 1989 Jan;124(1):181–6

A novel peptide, vasoactive intestinal contractor, of a new (endothelin) peptide family. Molecular cloning, expression, and biological activity. Saida K, et al. **J Biol Chem** 1989 Sep 5;264(25):14613–6

Lineage–specific regulation of the vasoactive intestinal peptide gene in neuroblastoma cells is conferred by 5.2 kilobases of 5'–flanking sequence. Waschek JA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9547–51

IMMUNOLOGY

Identification of noradrenergic nerve terminals immunoreactive for neuropeptide Y and vasoactive intestinal peptide in the rat kidney. Knight DS, et al. **Am J Anat** 1989 Mar;184(3):190–204

Immuno–affinity purification of specific antibodies against vasoactive intestinal polypeptide (VIP) on VIP (1–10)–linked polydimethylacrylamide resin. Takeyama M, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):834–7

Simultaneous localization of acetylcholinesterase activity and met–enkephalin, vasoactive intestinal peptide and substance P immunoreactivity in the rat myenteric plexus. Anglade P, et al. **Histochem J** 1988 Aug;20(8):464–7

Vasoactive intestinal peptide (VIP)-like immunoreactivity in the human sympathetic ganglia. Järvi R, et al. **Histochemistry** 1989;90(5):347-51

Characterization of autoantibodies to vasoactive intestinal peptide in asthma. Paul S, et al. **J Neuroimmunol** 1989 Jul; 23(2):133-42

Human autoantibody to vasoactive intestinal peptide: increased incidence in muscular exercise. Paul S, et al. **Life Sci** 1988;43(13):1079-84

Catalytic hydrolysis of vasoactive intestinal peptide by human autoantibody. Paul S, et al. **Science** 1989 Jun 9; 244(4909):1158-62

ISOLATION & PURIFICATION

Concurrent separation of catecholamines, dihydroxyphenylglycol, vasoactive intestinal peptide, and neuropeptide Y in superfusate and tissue extract. Hunter LW, et al. **Anal Biochem** 1988 Sep;173(2):340-52

Purification of neuropeptides: cholecystokinin and vasoactive intestinal peptide. Eng J, et al. **Methods Enzymol** 1989; 168:302-8

METABOLISM

Effects of transient forebrain ischaemia on vasoactive intestinal polypeptide-immunoreactive neuronal populations in the frontoparietal cortex and hippocampal formation of the male rat. Grimaldi R, et al. **Acta Physiol Scand** 1989 Jun;136(2):289-90

Substance P-, VIP- and CGRP-like immunoreactivities coexist in a population of cholinergic postganglionic sympathetic nerves innervating sweat glands in the cat. Lindh B, et al. **Acta Physiol Scand** 1988 Dec;134(4):569-70

Vasoactive intestinal peptide in the human pituitary gland and adenomas. An immunocytochemical study. Hsu DW, et al. **Am J Pathol** 1989 Aug;135(2):329-38

Ultrastructural analysis of VIP internalization in rat beta- and acinar cells in situ. Anteunis A, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G689-97

Functional VIP receptors in the human mucus-secreting colonic epithelial cell line CL.16E. Laburthe M, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G443-50

Lindane effect upon the vasoactive intestinal peptide receptor/effector system in rat enterocytes. Carrero I, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1391-6

Preferential cleavage of amino- and carboxyl-terminal oligopeptides from vasoactive intestinal polypeptide by human recombinant enkephalinase (neutral endopeptidase, EC 3.4.24.11). Goetzl EJ, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):850-4

Decreased binding of vasoactive intestinal peptide to intestinal epithelial cells from hypothyroid rats. Molinero P, et al. **Biochem Biophys Res Commun** 1989 Jul 31; 162(2):701-7

Receptor binding of guinea pig and pig vasoactive intestinal peptides by rat lung. Paul S, et al. **Biochem J** 1988 Sep 1;254(2):613-5

Decreased selectivity of vasoactive intestinal peptide receptors by GTP. Paul S. **Biochem Pharmacol** 1989 Feb 15;38(4):699-702

Solubilization and hydrodynamic characterization of guanine nucleotide sensitive vasoactive intestinal peptide-receptor complexes from rat intestine. Calvo JR, et al. **Biochemistry** 1989 Feb 21;28(4):1667-72

The vasoactive intestinal peptide (VIP) receptor: recent data and hypothesis. Luis J, et al. **Biochimie** 1988 Oct; 70(10):1311-22 (80 ref.)

The effects of experimental uremia in rats on duodenal VIP levels and the interaction of VIP with duodenal epithelial cells. Fernández-Moreno MD, et al. **Biosci Rep** 1989 Apr; 9(2):207-12

Distribution of vasoactive intestinal polypeptide-like immunoreactivity in the olfactory bulb of the rainbow trout (Salmo gairdneri). Alonso JR, et al. **Brain Res** 1989 Jun 26;490(2):385-9

An electron microscopic study on VIP-, BOM- and CCK-like immunoreactive terminals in the celiac-superior mesenteric ganglion complex of the guinea pig. Hamaji M, et al. **Brain Res** 1989 May 29;488(1-2):283-7

VIP-, SS-, and GABA-like immunoreactivity in the mid-hippocampal region of El (epileptic) and C57BL/6 mice. King JT Jr, et al. **Brain Res** 1988 Dec 13;475(1):192-7

Reciprocal regulation of tachykinin- and vasoactive intestinal peptide-gene expression in rat sensory neurones following cut and crush injury. Nielsch U, et al. **Brain Res** 1989 Feb 27;481(1):25-30

Co-existence of vasoactive intestinal polypeptide (VIP)- and cholecystokinin (CCK)-like immunoreactivities in thalamocortical neuron in the ventrolateral nucleus of the rat. Ogawa R, et al. **Brain Res** 1989 Jun 19;490(1):152-6

Somatostatin-, vasoactive intestinal polypeptide- and neuropeptide Y-like immunoreactivity in eye- and submandibular gland-projecting sympathetic neurons. Wright LL, et al. **Brain Res** 1989 Aug 14;494(2):267-75

Direct hypothalamic control of vasoactive intestinal peptide (VIP) levels in the developing rat ovary. Advis JP, et al. **Brain Res Bull** 1989 Apr;22(4):605-10

Characterization of inhibitory innervation in porcine colonic circular muscle. Jager LP, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1386-97

Combined ultrastructural and biochemical study of cellular processing of vasoactive intestinal peptide and its receptors in human colonic carcinoma cells in culture. Hejblum G, et al. **Cancer Res** 1988 Nov 1;48(21):6201-10

Vasoactive intestinal polypeptide-immunoreactive nerves in the pulmonary vasculature of the aquatic file snake Acrochordus granulatus. Donald JA, et al. **Cell Tissue Res** 1989 Mar;255(3):585-8

Intramural distribution of immunoreactive vasoactive intestinal polypeptide (VIP), substance P, somatostatin and mammalian bombesin in the oesophago-gastro-pyloric region of the human gut. Ferri GL, et al. **Cell Tissue Res** 1989 Apr;256(1):191-7

Vasoactive intestinal polypeptide-like immunoreactivity in the bovine heart: high degree of coexistence with neuropeptide Y-like immunoreactivity. Forsgren S. **Cell Tissue Res** 1989 Apr;256(1):125-35

Immunohistochemical localization of vasoactive intestinal peptide (VIP) in the circumventricular organs of the rat. Mikkelsen JD. **Cell Tissue Res** 1989 Feb;255(2):307-13

Vasoactive intestinal polypeptide (VIP)- and neuropeptide Y (NPY)-containing nerve fibres in the penile cavernous tissue of green monkeys (Cercopithecus aethiops). Schmalbruch H, et al. **Cell Tissue Res** 1989 Jun; 256(3):529-41

Cholecystokinin (CCK) and vasoactive intestinal peptide (VIP) in the cerebral cortex of the non-hibernating and hibernating golden mantled ground squirrel. Bauman WA, et al. **Comp Biochem Physiol [A]** 1988;91(1):179-81

Alpha 2-adrenergic and VIP receptors in rabbit ciliary processes interact. Bausher LP, et al. **Curr Eye Res** 1989 Jan;8(1):47-54

Distribution of vasoactive intestinal polypeptide and substance P receptors in human colon and small intestine. Korman LY, et al. **Dig Dis Sci** 1989 Jul;34(7):1100-8

Vasoactive intestinal peptide in the anterior pituitary is increased in hypothyroidism. Lam KS, et al. **Endocrinology** 1989 Feb;124(2):1077-84

A human melanoma-derived cell line (IGR39) with a very high number of vasoactive-intestinal-peptide (VIP) receptors. 1. Molecular characterization of the binding site. Luis J, et al. **Eur J Biochem** 1989 Mar 15;180(2):429-33

Effects of prepro-vasoactive intestinal polypeptide-derived peptides on net fluid flux in small intestine of anesthetized rats. Spokes RA, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):327-30

Cholecystokinin and vasoactive intestinal peptide in brain and gut of the hypothyroid neonatal rat. Zheng B, et al. **Horm Metab Res** 1989 Mar;21(3):127-31

Acetylcholine and vasoactive intestinal peptide in cerebral blood vessels: effect of extirpation of the sphenopalatine ganglion. Hara H, et al. **J Cereb Blood Flow Metab** 1989 Apr;9(2):204-11

Development of vasoactive-intestinal-polypeptide-immunoreactive neurons in the rat occipital cortex: a combined immunohistochemical-autoradiographic study. Cavanagh ME, et al. **J Comp Neurol** 1989 Jun 22;284(4):637-45

Distribution of substance P and vasoactive intestinal polypeptide neurons in the chicken spinal cord, with notes on their postnatal development. Du F, et al. **J Comp Neurol** 1988 Dec 8;278(2):253-64

Localization of vasoactive intestinal peptide- and peptide histidine isoleucine amide-like immunoreactivities in the rat superior cervical ganglion and its nerve trunks. Sasek CA, et al. **J Comp Neurol** 1989 Feb 22;280(4):522-32

Early postnatal development of vasoactive intestinal polypeptide- and peptide histidine isoleucine-immunoreactive structures in the cat visual cortex. Wahle P, et al. **J Comp Neurol** 1989 Apr 8; 282(2):215-48

Layers I and VI of the visual cortex in the rabbit. A correlated Golgi and immunocytochemical study of somatostatin and vasoactive intestinal peptide containing neurons. Ramón y Cajal-Agüeras S, et al. **J Hirnforsch** 1989;30(2):163-73

High-affinity receptors for vasoactive intestinal peptide on human myeloma cells. Finch RJ, et al. **J Immunol** 1989 Mar 15;142(6):1977-81

Identification of high affinity receptors for vasoactive intestinal peptide on human lymphocytes of B cell lineage. O'Dorisio MS, et al. **J Immunol** 1989 May 15; 142(10):3533-6

Age-related changes in vasoactive intestinal polypeptide levels and distribution in the rat lung. Geppetti P, et al. **J Neural Transm** 1988;74(1):1-10

Isolation and characterization of secretory granules storing a vasoactive intestinal polypeptide-like peptide in Torpedo cholinergic electromotor neurones. Agoston DV, et al. **J Neurochem** 1989 Jun;52(6):1729-40

Characterization, by size, density, osmotic fragility, and immunoaffinity, of acetylcholine- and vasoactive intestinal polypeptide-containing storage particles from myenteric neurones of the guinea-pig. Agoston DV, et al. **J Neurochem** 1989 May;52(5):1474-80

Calcium uptake and protein phosphorylation in myenteric neurons, like the release of vasoactive intestinal polypeptide and acetylcholine, are frequency dependent. Agoston DV, et al. **J Neurochem** 1989 May;52(5):1637-40

Release of vasoactive intestinal peptide in mouse cerebral cortex: evidence for a role of arachidonic acid metabolites. Martin JL, et al. **J Neurosci** 1989 Jul;9(7):2536-42

Morphometry of peptide-containing nerves in gut muscle layers: a quantitative approach to the study of autonomic neuro-muscular junctions. Ferri GL, et al. **J Neurosci Methods** 1989 Apr;27(3):211-8

Evidence for vasoactive intestinal peptide receptors in apical membranes from tracheal epithelium. Elgavish A, et al. **Life Sci** 1989;44(15):1037-42

Ac-Tyr1hGRF discriminates between VIP receptors from rat liver and intestinal epithelium. Rouyer-Fessard C, et al. **Life Sci** 1989;45(9):829-33

Differential increases in brain levels of neuropeptide Y and vasoactive intestinal polypeptide after kainic acid-induced seizures in the rat. Marksteiner J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):173-7

Differences in ME-LI and VIP-LI in discrete brain regions of seizure-naive and seizure-experienced El mice. Kanamatsu T, et al. **Neurochem Res** 1988 Oct;13(10):983-8

Vasoactive intestinal polypeptide (VIP) immunoreactivity in the ependymal cells of the rat spinal cord. Chung K, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):1-6

Co-existence of neuropeptides and differential inhibition of vasodilator responses by neuropeptide Y in guinea pig uterine arteries. Fallgren B, et al. **Neurosci Lett** 1989 May 22;100(1-3):71-6

Vasoactive intestinal peptide (VIP)-like immunoreactive neurons located in the rat suprachiasmatic nucleus receive a direct retinal projection. Ibata Y, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):1-5

Vasoactive intestinal polypeptide-immunoreactive neurons in the main olfactory bulb of the hedgehog (Erinaceus europaeus). López-Mascaraque L, et al. **Neurosci Lett** 1989 Mar 13;98(1):19-24

Release of VIP- but not CGRP-like immunoreactivity by capsaicin from the human isolated small intestine. Maggi CA, et al. **Neurosci Lett** 1989 Apr 10;98(3):317-20

Differential distribution of neuropeptides and serotonin in pig adrenal glands. Kong JY, et al. **Neuroscience** 1989; 28(3):765-75

Pharmacological studies of voltage-sensitive Ca2+-channels involved in the release of vasoactive intestinal peptide evoked by K+ in mouse cerebral cortical slices. Martin JL, et al. **Neuroscience** 1989;30(2):423-31

Trigeminal fibre collaterals storing substance P and calcitonin gene-related peptide associate with ganglion cells containing choline acetyltransferase and vasoactive intestinal polypeptide in the sphenopalatine ganglion of the rat. An axon reflex modulating parasympathetic ganglionic activity? Suzuki N, et al. **Neuroscience** 1989;30(3):595-604

Autoradiographic localization of binding sites for galanin and VIP in small intestine. King SC, et al. **Peptides** 1989 Mar-Apr;10(2):313-7

Vasoactive intestinal peptide (VIP) receptors in the canine gastrointestinal tract. Zimmerman RP, et al. **Peptides** 1988 Nov-Dec;9(6):1241-53

Marked depression of brain cholecystokinin and vasoactive intestinal polypeptide levels in Eck fistula dogs. Sato S, et al. **Regul Pept** 1989 Apr;25(1):111-21

Characterization of peptidylglycine alpha-amidating activities in rat pituitary, brain and small intestine using glycine-extended C-terminal analogues of vasoactive intestinal polypeptide as substrate. Noguchi M, et al. **Tohoku J Exp Med** 1988 Oct;156(2):191-207

[Age changes in the distribution of VIP-positive neurons in the rat auditory cortex] Dolchev V, et al. **Eksp Med Morfol** 1989;28(2):15-8 (Eng. Abstr.) **(Bul)**

PHARMACOKINETICS

Distribution of vasoactive intestinal peptide and its receptors in the arteries of the rabbit. Sidawy AN, et al. **J Surg Res** 1989 Aug;47(2):105-11

PHARMACOLOGY

Effects of VIP and PHM in human intracervical arteries. Hansen V, et al. **Acta Obstet Gynecol Scand** 1988; 67(8):699-701

Carbachol stimulation of inositol phosphate accumulation in rat submandibular gland fragments is not modified by VIP. Larsson O, et al. **Acta Physiol Scand** 1989 Mar;135(3):263-9

Effects of ethanol on VIP-and/or noradrenaline-stimulated cAMP formation in mouse brain. Schaad NC, et al. **Alcohol** 1988 Nov-Dec;5(6):445-9

Inhibitory function of VIP-PHI and galanin in canine pylorus. Allescher HD, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G789-97

VIP and acetylcholine: neurotransmitters in esophageal circular smooth muscle. Behar J, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G380-5

Effects of vasoactive intestinal peptide on vascular conductance are unaffected by anesthesia. Bouder TG, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R968-73

Secretagogue-induced protein phosphorylation and chloride transport in Caco-2 cells. Burnham DB, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G808-16

Vasoactive intestinal peptide stimulates blood flow and secretion of avian salt glands. Gerstberger R, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R575-82

Cyclic nucleotide-mediated effects of ANF and VIP on flounder intestinal ion transport. O'grady SM. **Am J Physiol** 1989 Jan;256(1 Pt 1):C142-6

Regulation of ion transport in porcine gallbladder: effects of VIP and norepinephrine. O'Grady SM, et al.

Am J Physiol 1989 Jul;257(1 Pt 1):C52-7

Interaction of peptides related to VIP and secretin with guinea pig pancreatic acini. Zhou ZC, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G283-90

HT 29, a model cell line: stimulation by the vasoactive intestinal peptide (VIP); VIP receptor structure and metabolism. Marchis-Mouren G, et al. **Biochimie** 1988 May;70(5):663-71 (39 ref.)

Peptide histidine valine-42 stimulates gastric acid secretion in man. Nikou GC, et al. **Biosci Rep** 1989 Jun;9(3):369-74

A comparison of the differential effects of vasoactive intestinal peptide and peptide histidine isoleucine on the vascular and capsular smooth muscle of the dog spleen. Corder R, et al. **Br J Pharmacol** 1988 Oct;95(2):664-70

Vasoactive intestinal polypeptide and non-adrenergic, non-cholinergic inhibition in lower oesophageal sphincter of opossum. Daniel EE, et al. **Br J Pharmacol** 1989 Mar; 96(3):746-52

The effects of vasoactive intestinal peptide (VIP) antagonists, and VIP and peptide histidine isoleucine antisera on non-adrenergic, non-cholinergic relaxations of tracheal smooth muscle. Ellis JL, et al. **Br J Pharmacol** 1989 Mar; 96(3):513-20

Effects of peptidases on non-adrenergic, non-cholinergic inhibitory responses of tracheal smooth muscle: a comparison with effects on VIP- and PHI-induced relaxation. Ellis JL, et al. **Br J Pharmacol** 1989 Mar; 96(3):521-6

The differential effect with time of neuropeptides on the proliferative responses of murine Peyer's patch and splenic lymphocytes. Scicchitano R, et al. **Brain Behav Immun** 1987 Sep;1(3):231-7

Prolactin, vasoactive intestinal peptide, and peptide histidine methionine elicit selective increases in REM sleep in rabbits. Obal F Jr, et al. **Brain Res** 1989 Jun 26; 490(2):292-300

Augmentation of neurotransmitter receptor-stimulated cyclic AMP accumulation in rat brain: differentiation between the effects of baclofen and phorbol esters. Scherer RW, et al. **Brain Res** 1988 Jun 7;451(1-2):361-5

Distinct interactions between Ca2+/calmodulin and neurotransmitter stimulation of adenylate cyclase in striatum and hippocampus. Ahlijanian MK, et al. **Cell Mol Neurobiol** 1988 Dec;8(4):459-69

Vasoactive intestinal peptide. An inhibitor of feline gastric smooth muscle in vitro. Merlo A, et al. **Dig Dis Sci** 1989 Sep;34(9):1365-8

Effect of vaso-active intestinal polypeptide on systemic and splanchnic haemodynamics: role in vasodilation following mesenteric ischaemia. Somjen G, et al. **Digestion** 1988; 40(3):133-43

Influence of gastrointestinal neuropeptides on the anal canal. Lorentzen M, et al. **Dis Colon Rectum** 1989 Apr;32(4):293-5

Release of oxytocin and vasopressin by intracerebroventricular vasoactive intestinal polypeptide. Bardrum B, et al. **Endocrinology** 1988 Nov;123(5):2249-54

Oxytocin mediates the hypothalamic action of vasoactive intestinal peptide to stimulate prolactin secretion. Samson WK, et al. **Endocrinology** 1989 Feb;124(2):812-9

Alpha 2-adrenergic stimulation counteracts the metabolic effects of vasoactive intestinal peptide in isolated rat enterocytes. Vidal H, et al. **Endocrinology** 1989 Jun; 124(6):3117-21

Homologous and heterologous regulation of the helodermin/vasoactive-intestinal-peptide response in the murine radiation leukemia-virus-induced lymphoma cell line BL/VL3. Abello J, et al. **Eur J Biochem** 1989 Aug 1;183(2):269-74

A human melanoma-derived cell line (IGR39) with a very high number of vasoactive-intestinal-peptide (VIP) receptors. 2. Effect of VIP on cAMP production and on cell-surface VIP-binding sites. Martin JM, et al. **Eur J Biochem** 1989 Mar 15;180(2):435-9

Secretion-stimulating and secretion-inhibiting hormones stimulate high-affinity pertussis-toxin-sensitive GTPases in membranes of a pituitary cell line. Offermanns S, et al. **Eur J Biochem** 1989 Mar 15;180(2):283-7

Comparison of the effect of vasoactive intestinal polypeptide and non-adrenergic non-cholinergic neurone stimulation in the cat gastric fundus. D'Amato M, et al. **Eur J Pharmacol** 1988 Jul 26;152(1-2):71-82

Distribution of vasoactive intestinal peptide-sensitive adenylate cyclase activity along the nephron. Edwards RM. **Eur J Pharmacol** 1988 Nov 22;157(2-3):227-30

VIP modulates substance P-induced plasma extravasation in vivo. Khalil Z, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):281-7

Analogues of vasoactive intestinal peptide (VIP) contract the guinea-pig uterine artery but do not antagonize VIP-induced relaxations. Morris JL, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):375-9

Peptide histidine isoleucine and vasoactive intestinal polypeptide cause relaxation of opossum internal anal sphincter via two distinct receptors. Nurko S, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):403-13

Evidence that vasoactive intestinal peptide induces ductular secretion of bile in humans. Nyberg B, et al. **Gastroenterology** 1989 Mar;96(3):920-4

Novel effect of vasoactive intestinal polypeptide and peptide histidine isoleucine: inhibition of in vitro secretion of prolactin in the tilapia, Oreochromis mossambicus. Kelley KM, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):97-106

Gonadal steroid modulation of basal and vasoactive intestinal polypeptide-stimulated prolactin release by turkey anterior pituitary cells. Knapp TR, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):226-36

Vasoactive intestinal polypeptide (VIP) selectively stimulates prolactin release in healthy women. Falsetti L, et al. **Gynecol Endocrinol** 1988 Mar;2(1):11-8

In vivo depression of lymphocyte traffic in sheep by VIP and HIV (AIDS)-related peptides. Moore TC, et al. **Immunopharmacology** 1988 Nov-Dec;16(3):181-9

Effect of vasoactive intestinal peptide (VIP) on propranolol-induced bronchoconstriction. Crimi N, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):617-21

VIP augments cholinergic-induced glycoconjugate secretion in tracheal submucosal glands. Shimura S, et al. **J Appl Physiol** 1988 Dec;65(6):2537-44

Vasoactive intestinal peptide stimulates long-chain fatty acid oxidation and inhibits acetyl-coenzyme A carboxylase activity in isolated rat enterocytes. Vidal H, et al. **J Biol Chem** 1989 Mar 25;264(9):4901-6

Effect of vasoactive intestinal peptide on myocardial contractility and coronary blood flow in the dog: comparison with isoproterenol and forskolin. Anderson FL, et al. **J Cardiovasc Pharmacol** 1988 Sep;12(3):365-71

Oestradiol, vasoactive intestinal peptide and fibroblast growth factor in the growth of human pituitary tumour cells in vitro. Prysor-Jones RA, et al. **J Endocrinol** 1989 Jan;120(1):171-7

Astrocytes from forebrain, cerebellum, and spinal cord differ in their responses to vasoactive intestinal peptide. Cholewinski AJ, et al. **J Neurochem** 1988 Nov; 51(5):1626-33

Alpha 2-adrenoceptors mediate inhibition of cyclic AMP production in the spinal cord after stimulation of cyclic AMP with forskolin but not after stimulation with capsaicin or vasoactive intestinal peptide. Uhlén S, et al. **J Neurochem** 1989 Mar;52(3):761-7

Vasoactive intestinal polypeptide inhibits the expression of the MHC class II antigens on astrocytes. Frohman EM, et al. **J Neurol Sci** 1988 Dec;88(1-3):339-46

Peptidergic and adrenergic regulation of the intracellular 3',5'-cyclic adenosine monophosphate content in cultured rat Schwann cells. Yasuda T, et al. **J Neurol Sci** 1988 Dec; 88(1-3):315-25

Secretin and vasoactive intestinal peptide activate tyrosine hydroxylase in sympathetic nerve endings. Schwarzschild MA, et al. **J Neurosci** 1989 Jan;9(1):160-6

Vasoactive intestinal polypeptide potentiates the hypoxemia-induced decrease in splanchnic circulation in the rat. Grisoni ER, et al. **J Pediatr Surg** 1988 Dec; 23(12):1193-7

Mast cell tryptase and chymase reverse airway smooth muscle relaxation induced by vasoactive intestinal peptide in the ferret. Franconi GM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):947-51

CCK- and VIP-induced glycoprotein secretion from mouse gallbladder epithelium following vagotomy: a quantitative electron microscopic study. Axelsson H, et al. **J Surg Res** 1989 Sep;47(3):260-5

Pancreastatin inhibits insulin secretion as induced by glucagon, vasoactive intestinal peptide, gastric inhibitory peptide, and 8-cholecystokinin in the perfused rat pancreas. Peiró E, et al. **Metabolism** 1989 Jul;38(7):679-82

Comparison of vasoactive intestinal peptide-mediated protein phosphorylation in human lymphoblasts and colonic epithelial cells. O'Dorisio MS, et al. **Mol Immunol** 1989 Jun;26(6):583-90

Neuronal cell killing by the envelope protein of HIV and its prevention by vasoactive intestinal peptide. Brenneman DE, et al. **Nature** 1988 Oct 13;335(6191):639-42

Similarities between the relaxations induced by vasoactive intestinal peptide and by stimulation of the non-adrenergic non-cholinergic neurons in the rat stomach. Kamata K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):401-6

Effect of vasoactive intestinal polypeptide on the release of serotonin from the in vitro vascularly perfused small intestine of guinea pig. Schwörer H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):540-5

Infusion of prepro-VIP derived peptides in man: effect on secretion of prolactin. Yiangou Y, et al. **Neuroendocrinology** 1988 Dec;48(6):615-8

Effects of VIP and helodermin on thyroid hormone secretion in the mouse. Ahrén B, et al. **Neuropeptides** 1989 Jan; 13(1):59-64

Interaction of vasoactive intestinal peptide (VIP) and growth hormone releasing factor (GRF) with corticotropin releasing factor (CRF) on corticotropin secretion in vitro. Léonard JF, et al. **Neuropeptides** 1988 Oct;12(3):131-3

Stimulatory effect of vasoactive intestinal polypeptide on catecholamine secretion from isolated guinea pig adrenal chromaffin cells. Misbahuddin M, et al. **Neurosci Lett** 1988 Oct 5;92(2):202-6

Vasoactive intestinal peptide stimulates proenkephalin A mRNA expression in bovine adrenal chromaffin cells. Wan DC, et al. **Neurosci Lett** 1989 Jun 19;101(2):218-22

The influence of experimental subarachnoid hemorrhage on the relaxation induced by vasoactive intestinal polypeptide in the cerebral arteries of the rabbit. Tsukahara T, et al. **Neurosurgery** 1989 May;24(5):731-5

Vasoactive intestinal peptide inhibits the growth of hamster pancreatic cancer but not human pancreatic cancer in vivo. Poston GJ, et al. **Pancreas** 1988;3(4):439-43

Phorbol ester potentiates VIP-stimulated amylase release in rat pancreatic acini. Suwandito L, et al. **Pancreas** 1989; 4(4):459-63

Influence of vasoactive intestinal polypeptide (VIP) on splanchnic and central hemodynamics in healthy subjects. Eriksson LS, et al. **Peptides** 1989 Mar-Apr;10(2):481-4

VIP and related peptides induce rapid homologous desensitization in the human lymphoma SUP T1 cell line. Robberecht P, et al. **Peptides** 1989 Mar-Apr;10(2):441-6

Vasoactive intestinal peptide evokes endothelium-dependent relaxation and cyclic AMP accumulation in rat aorta. Sata T, et al. **Peptides** 1988 Jul-Aug;9(4):853-8

Distribution of vasoactive intestinal peptide-sensitive adenylate cyclase activity along the rabbit nephron. Griffiths NM, et al. **Pflugers Arch** 1988 Sep;412(4):363-8

Vasoactive intestinal peptide stimulation of renal adenylate cyclase and antagonism by (4Cl-D-Phe6Leu17)VIP. Griffiths NM, et al. **Pflugers Arch** 1989 Jun;414(2):222-7

Effects of vasoactive intestinal polypeptide and substance P on human intramyometrial arteries and stem villous arteries in term pregnancy. Hansen V, et al. **Placenta** 1988 Sep-Oct; 9(5):501-6

Vasoactive intestinal polypeptide stimulates cell proliferation and adenylate cyclase activity of cultured human keratinocytes. Haegerstrand A, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5993-6

Peptidergic modulation of efferent sympathetic neurons in intrathoracic ganglia regulating the canine heart. Armour JA. **Proc Soc Exp Biol Med** 1989 May;191(1):60-8

Vasoactive intestinal peptide control of renal adenylate cyclase: in vitro studies of canine renal membranes and cultured canine renal epithelial (MDCK) cells. Griffiths NM, et al. **Q J Exp Physiol** 1989 May;74(3):339-53

Neuropeptide Y and vasoactive intestinal polypeptide in cerebral arteries of the rat: relationships between innervation pattern and mechanical response. Brayden JE, et al. **Regul Pept** 1988 Aug;22(3):253-65

Promotion of differentiation in human colon carcinoma cells by vasoactive intestinal polypeptide. Hoosein NM, et al. **Regul Pept** 1989 Jan;24(1):15-26

Growth-inhibitory properties of vasoactive intestinal polypeptide. Hultgårdh-Nilsson A, et al. **Regul Pept** 1988 Aug;22(3):267-74

Vasoactive intestinal peptide in the normal and inflamed feline gallbladder. Jivegård L, et al. **Regul Pept** 1989 May; 25(2):179-85

Comparison of helodermin, VIP and PHI in pancreatic secretion and blood flow in dogs. Konturek SJ, et al. **Regul Pept** 1989 Feb;24(2):155-66

Vasoactive intestinal peptide inhibits the respiratory burst in human monocytes by a cyclic AMP-mediated mechanism. Wiik P. **Regul Pept** 1989 May;25(2):187-97

Peptide T does not affect induction of pineal N-acetyltransferase by vasoactive intestinal peptide. Yuwiler A, et al. **Regul Pept** 1989 Apr;25(1):69-73

The effect of vasoactive intestinal peptide, secretin, and glucagon on human duodenal bicarbonate secretion. Wolosin JD, et al. **Scand J Gastroenterol** 1989 Mar; 24(2):151-7

Stimulatory effect of vasoactive intestinal polypeptide on human normal and neoplastic thyroid tissue. Siperstein AE, et al. **Surgery** 1988 Dec;104(6):985-91

Effect of peptide histidine valine on cardiovascular and respiratory function in normal subjects. Chilvers ER, et al. **Thorax** 1988 Oct;43(10):750-5

Vasoactive intestinal polypeptide stimulates cholecystokinin secretion in perfused rat duodenum. Funakoshi A, et al. **Tohoku J Exp Med** 1989 Jan;157(1):55-9

[Inhibition by VIP of the proliferation of pancreatic cancer cells] Yao CZ. **Chung Hua Wai Ko Tsa Chih** 1989 Jan; 27(1):42-4, 62 (Eng. Abstr.) **(Chi)**

[Changes induced by vasointestinal peptide (VIP) and diltiazem on bronchoreactivity specific and aspecific aspects] Gianotti A, et al. **Riv Eur Sci Med Farmacol** 1987 Mar;9(1):23-5 (Eng. Abstr.) **(Ita)**

[Effect of vasoactive intestinal peptide on the motility of guinea-pig colon in vitro] Ishizawa M. **Nippon Heikatsukin Gakkai Zasshi** 1988 Jun;24(3):185-92 (Eng. Abstr.) **(Jpn)**

[The regulatory effect of VIP on exploratory behavior of the rat and on the neuromediator level in the normal brain and in frontal lobectomy] Romanova GA, et al. **Fiziol Zh SSSR** 1989 May;75(5):670-6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Increased tear secretion in pancreatic cholera: a newly recognized symptom in an experiment of nature. Gilbard JP, et al. **Am J Med** 1988 Oct;85(4):552-4

Vasoactive intestinal peptide stimulates oocyte maturation, steroidogenesis, and cyclic adenosine 3',5'-monophosphate production in isolated preovulatory rat follicles. Törnell J, et al. **Biol Reprod** 1988 Sep;39(2):213-20

Vasoactive intestinal peptide and anterior pituitary function. Prysor-Jones RA, et al. **Clin Endocrinol (Oxf)** 1988 Dec; 29(6):677-88 (67 ref.)

Role of dopamine and vasoactive intestinal peptide in the control of pulsatile prolactin secretion. López FJ, et al. **Endocrinology** 1989 Jan;124(1):527-35

The peak phase of the proestrous prolactin surge is blocked

by either posterior pituitary lobectomy or antisera to vasoactive intestinal peptide. Murai I, et al. **Endocrinology** 1989 Feb;124(2):1050–5

Retinoic acid enhances VIP receptor expression and responsiveness in human neuroblastoma cell, SH–SY5Y. Waschek JA, et al. **FEBS Lett** 1989 Jul 3;250(2):611–4

Adrenergic and VIP–ergic relaxatory mechanisms of the feline extrahepatic biliary tree. Dahlstrand C, et al. **J Auton Nerv Syst** 1989 Mar;26(2):97–106

Functional vasoactive intestinal polypeptide (VIP) receptors in human neuroblastoma subclones that contain VIP precursor mRNA and release VIP–like substances. Muller JM, et al. **J Biol Chem** 1989 Mar 5;264(7):3647–50

The role of hypothalamic vasoactive intestinal polypeptide in the maintenance of prolactin secretion in incubating bantam hens: observations using passive immunization, radioimmunoassay and immunohistochemistry. Sharp PJ, et al. **J Endocrinol** 1989 Jul;122(1):5–13

Vasoactive intestinal polypeptide as possible mediator of relaxation in the rat gastric fundus. De Beurme FA, et al. **J Pharm Pharmacol** 1988 Oct;40(10):711–5

Vasoactive intestinal peptide (VIP), a putative neurotransmitter of nonadrenergic, noncholinergic (NANC) inhibitory innervation and its relevance to therapy. Venugopalan CS. **J Vet Pharmacol Ther** 1989 Jun; 12(2):113–23 (100 ref.)

Effects of passive immunization against vasoactive intestinal peptide on serum prolactin and LH levels. Lasaga M, et al. **Neuroendocrinology** 1989 Jun;49(6):574–9

VIP potentiates cholinergic effects on the mucociliary system in the maxillary sinus. Lindberg S, et al. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):401–7

Effects of guinea pig vasoactive intestinal peptide on the isolated perfused guinea pig heart. Hoover DB. **Peptides** 1989 Mar–Apr;10(2):343–7

Human glucagon and vasoactive intestinal polypeptide (VIP) stimulate free fatty acid release from human adipose tissue in vitro. Richter WO, et al. **Peptides** 1989 Mar–Apr; 10(2):333–5

VIP and autonomic neurotransmission. Fahrenkrug J. **Pharmacol Ther** 1989;41(3):515–34 (231 ref.)

Regulation by cAMP and vasoactive intestinal peptide of phosphorylation of specific proteins in striatal cells in culture. Girault JA, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7790–4

Influence of VIP on D–galactose transport across rabbit jejunum in vivo. Rodríguez–Yoldi MJ, et al. **Rev Esp Fisiol** 1988 Jun;44(2):127–30

[Nonadrenergic noncholinergic nervous system in the lung and bronchial asthma] Fu JX. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):48–50 (20 ref.) (Chi)

[Vasoactive intestinal peptide and substance P in the regulation of reproductive functions] Uher J. **Cesk Gynekol** 1988 Sep;53(8):588–99 (62 ref.) (Cze)

[Airway mucus secretion and neuropeptides] Shimura S. **Kokyu To Junkan** 1989 May;37(5):505–10 (Jpn)

[Postnatal development of neurons containing vasoactive intestinal peptide (VIP) in the rabbit visual cortex: quantitative and morphological study] Ramón y Cajal Agüeras S, et al. **Arch Neurobiol (Madr)** 1988 May–Jun; 51(3):139–42 (Eng. Abstr.) (Spa)

SECRETION

Somatostatin and methionine–enkephalin inhibit cholera toxin–induced jejunal net fluid secretion and release of vasoactive intestinal polypeptide in the cat in vivo. Eklund S, et al. **Acta Physiol Scand** 1988 Aug;133(4):551–7

The effect of splanchnic nerve stimulation and neuropeptide Y on cholera secretion and release of vasoactive intestinal polypeptide in the feline small intestine. Sjöqvist A, et al. **Acta Physiol Scand** 1988 Jul;133(3):289–95

Release of VIP and substance P from isolated perfused canine ileum. Manaka H, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G182–90

Does vasoactive intestinal polypeptide mediate the pathophysiology of bowel obstruction? Basson MD, et al. **Am J Surg** 1989 Jan;157(1):109–15

Prolactin release induced by physical exercise is independent from peripheral vasoactive intestinal polypeptide secretion. Rolandi E, et al. **Ann Clin Res** 1988;20(6):428–30

Selective depletion of the acetylcholine and vasoactive intestinal polypeptide of the guinea–pig myenteric plexus by differential mobilization of distinct transmitter pools. Agoston DV, et al. **Exp Brain Res** 1988;72(3):535–42

Vasoactive intestinal polypeptide–secreting ganglioneuromatosis affecting the entire colon and rectum. Rescorla FJ, et al. **J Pediatr Surg** 1988 Jul;23(7):635–7

Evidence for prolactin feedback actions on hypothalamic oxytocin, vasoactive intestinal peptide and dopamine secretion. Sarkar DK. **Neuroendocrinology** 1989 May; 49(5):520–4

Regulatory mechanisms in the luminal and portal release of vasoactive intestinal polypeptide during vagal nerve stimulation in the cat. Blank MA, et al. **Regul Pept** 1988 Oct;23(1):15–26

[Metastatic neuroblastoma with secondary hypersecretion of vasoactive intestinal peptide] Brunet J, et al. **Pediatrie** 1988; 43(5):415–7 (Eng. Abstr.) (Fre)

THERAPEUTIC USE

Penile response to intracavernosal vasoactive intestinal polypeptide alone and in combination with other vasoactive agents. Kiely EA, et al. **Br J Urol** 1989 Aug;64(2):191–4

Abnormal responses to vasoactive intestinal peptide and corticotropin releasing hormone during the spontaneous remission of Cushing's disease. Cannavò S, et al. **J Endocrinol Invest** 1988 Jun;11(6):425–8

VASOCONSTRICTION

Temperature–dependent interaction between vasoconstrictor and vasodilator mechanisms in human skin. Oberle J, et al. **Acta Physiol Scand** 1988 Apr;132(4):459–69

Adenosine deaminase in stroma–free hemoglobin solution is not responsible for coronary vasoconstriction. Lawless K, et al. **Adv Exp Med Biol** 1989;248:365–70

Relation of atrial natriuretic factor to vasoconstrictor hormones and regional blood flow in congestive heart failure. Hirsch AT, et al. **Am J Cardiol** 1989 Jan 15; 63(3):211–6

Effect of reducing atrial pressure on atrial natriuretic factor and vasoactive hormones in congestive heart failure secondary to ischemic and nonischemic dilated cardiomyopathy. Webster MW, et al. **Am J Cardiol** 1989 Jan 15;63(3):217–21

Alterations in vascular smooth muscle contractility during ovine pregnancy. Annibale DJ, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1282–8

Decreased vascular contraction and elastic stiffening after intramural lymphostasis. Bérczi V, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1289–94

Intrarenal vasoconstriction during hyperchloremia: role of thromboxane. Bullivant EM, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 2):F152–7

Coronary flow during exercise after selective alpha 1– and alpha 2–adrenergic blockade. Dai XZ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1148–55

alpha–Adrenoceptors and cold–induced vasoconstriction in human finger skin. Ekenvall L, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1000–3

Characterization of coronary vasoconstrictor site in medullary reticular formation. Gutterman DD, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1218–27

Vasomotor activity of moderately well–developed canine coronary collateral circulation. Hautamaa PV, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H890–7

Hemodilution causes size–dependent constriction of pial arterioles in the cat. Hudak ML, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H912–7

Stretch–induced contraction in pulmonary arteries. Kulik TJ, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1391–8

Stenotic amplification of vasoconstriction responses. Li K, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1044–51

Coronary constriction due to neuropeptide Y: alleviation with cyclooxygenase blockers. Martin SE, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H927–34

Reflex control of mesenteric vein diameter and pressure in situ in rabbits. Ozono K, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 2):H1066–72

Endothelium–dependent pressure–induced contraction of isolated canine carotid arteries. Rubanyi GM. **Am J Physiol** 1988 Oct;255(4 Pt 2):H783–8

Conduction of vasomotor responses in arterioles: a role for cell–to–cell coupling? Segal SS, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H838–45

Mutual interaction of vasoconstriction and endothelial damage in stenotic arteries. Tulenko TN, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H881–9

Local complement activation, thromboxane–mediated vasoconstriction, and vascular leakage in isolated lungs. Role of the terminal complement sequence. Seeger W, et al. **Am Rev Respir Dis** 1989 Jan;139(1):88–99

Translation of contractile force to constriction in major diameter canine airways in vivo. Shioya T, et al. **Am Rev Respir Dis** 1989 Sep;140(3):687–94

Mechanisms of hypoxic pulmonary vasoconstriction. Voelkel NF. **Am Rev Respir Dis** 1986 Jun;133(6):1186–95

Vasoconstriction in telencephalic microvessels: a response to one model for intraventricular hemorrhage in beagle pups. Leuschen MP, et al. **Anat Rec** 1989 Aug; 224(4):534–40

Endothelin action on vascular smooth muscle involves inositol trisphosphate and calcium mobilization. Marsden PA, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):86–93

Endothelin, a novel endothelium–derived peptide. Pharmacological activities, regulation and possible roles in cardiovascular control. Yanagisawa M, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1877–83 (41 ref.)

Physiological mechanism of digital vasoconstriction training. Freedman RR, et al. **Biofeedback Self Regul** 1988 Dec; 13(4):299–305

Phasic activity of human dorsal foot veins. Barthel W, et al. **Biomed Biochim Acta** 1988;47(3):273–7

Impaired blood pressure response to exercise in patients with coronary artery disease: possible contribution of attenuated reflex vasoconstriction in non–exercising muscles. Okamatsu S, et al. **Br Heart J** 1989 Feb;61(2):149–54

Postjunctional alpha 2–adrenoceptors mediate vasoconstriction in human subcutaneous resistance vessels. Nielsen H, et al. **Br J Pharmacol** 1989 Jul;97(3):829–34

Vascular escape from vasoconstriction and post–stimulatory hyperemia in the superior mesenteric artery of the cat. Lautt WW, et al. **Can J Physiol Pharmacol** 1988 Sep; 66(9):1174–80

Effect of coronary sinus occlusion on coronary flow, resistance, and zero flow pressure during maximum vasodilatation in swine. Pantely GA, et al. **Cardiovasc Res** 1988 Feb;22(2):79–86

Heterogeneous microvascular coronary alpha–adrenergic vasoconstriction. Chilian WM, et al. **Circ Res** 1989 Feb; 64(2):376–88

Reactive oxygen metabolites relax the lamb ductus arteriosus by stimulating prostaglandin production. Clyman RI, et al. **Circ Res** 1989 Jan;64(1):1–8

Cholinergic constriction in the general circulation and its role in coronary artery spasm. Kalsner S. **Circ Res** 1989 Aug;65(2):237–57 (247 ref.)

Endothelium–dependent constriction demonstrated in vivo in mouse cerebral arterioles. Rosenblum WI, et al. **Circ Res** 1988 Oct;63(4):837–43

Inhibition of adrenergic vasoconstriction by endothelial cell shear stress. Tesfamariam B, et al. **Circ Res** 1988 Oct; 63(4):720–5

Coronary artery vasoconstriction routinely occurs after percutaneous transluminal coronary angioplasty. A quantitative arteriographic analysis. Fischell TA, et al. **Circulation** 1988 Dec;78(6):1323–34

Endothelium–dependent arterial vasoconstriction after balloon angioplasty. Fischell TA, et al. **Circulation** 1989 Apr;79(4):899–910

Local platelet activation causes vasoconstriction of large epicardial canine coronary arteries in vivo. Thromboxane A2 and serotonin are possible mediators. Golino F, et al. **Circulation** 1989 Jan;79(1):154–66

Enhanced hypoxic pulmonary vasoconstriction in hypertension. Guazzi MD, et al. **Circulation** 1989 Feb; 79(2):337–43

Direct vasoconstriction and endothelium–dependent vasodilation. Mechanisms of acetylcholine effects on coronary flow and arterial diameter in patients with nonstenotic coronary arteries. Hodgson JM, et al. **Circulation** 1989 May;79(5):1043–51

Effect of early and advanced atherosclerosis on vascular responses to serotonin, thromboxane A2, and ADP. Lopez JA, et al. **Circulation** 1989 Mar;79(3):698–705

Sympathetic vasoconstriction during exercise in ambulatory patients with left ventricular failure. Wilson JR, et al. **Circulation** 1989 May;79(5):1021–7

Effects of atropine on adrenergic responsiveness and reflex vasoconstriction in humans. Takata S, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:295–301

The role of calmodulin in neurotransmitter release and vascular responsiveness in spontaneously hypertensive rats. Tsuda K, et al. **Clin Exp Hypertens [A]** 1988;10(6):1051–64

The veno–arteriolar reflex in free skin flaps. Zoltie N, et al. **Clin Physiol** 1989 Apr;9(2):183–8

Enhancement of the pulmonary vasoconstriction reaction to alveolar hypoxia in systemic high blood pressure. Guazzi MD, et al. **Clin Sci** 1989 Jun;76(6):589–94

Mechanism of the postural vasoconstrictor response in the human foot. Hassan AA, et al. **Clin Sci** 1988 Oct; 75(4):379–87

Hypoxic pulmonary vasoconstrictor response with asymmetric oleic acid injury in the dog. Johnston WE, et al. **Crit Care Med** 1989 Jul;17(7):647–51

Clinical aspects of coronary arterial vasomotion in angina pectoris. A review with particular reference to the application of provocative testing. Rasmussen K. **Dan Med Bull** 1989 Apr;36(2):125–41 (201 ref.)

Local thermal sensation and finger vasoconstriction in the locally heated hand. Hirata K, et al. **Eur J Appl Physiol** 1988;58(1–2):92–6

Adrenoceptor subtypes involved in the baroreceptor reflex constriction of large coronary arteries in the anaesthetized dog. Woodman OL. **Eur J Pharmacol** 1988 Dec 6; 158(1–2):37–42

Postpartum cerebral angiopathy: reversible vasoconstriction assessed by transcranial Doppler ultrasounds. Bogousslavsky J, et al. **Eur Neurol** 1989;29(2):102–5

Hemoglobin causes both endothelium–dependent and endothelium–independent contraction of the pig coronary arteries, independently of an inhibition of EDRF effects. Bény JL, et al. **Experientia** 1989 Feb 15;45(2):132–4

Absence of sustained reflex vasoconstriction in women with menopausal flushes. Rees MC, et al. **Hum Reprod** 1988 Oct; 3(7):823–5

Increased peripheral vasoconstrictor reaction upon local cold in patients with coronary heart disease. Saner HE, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):127–34

Effect of alpha–1 and beta agonists on contraction of bovine retinal resistance arteries in vitro. Hoste AM, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):44–50

Hypoxic contractile response in isolated human pulmonary artery: role of calcium ion. Hoshino Y, et al. **J Appl Physiol** 1988 Dec;65(6):2468–74

Absence of neural modulation of hypoxic pulmonary vasoconstriction in conscious dogs. Lodato RF, et al. **J Appl Physiol** 1988 Oct;65(4):1481–7

Effect of platelet depletion on lung vasoconstriction in heparin–protamine reactions. Montalescot G, et al. **J Appl Physiol** 1989 May;66(5):2344–50

Muscle acidosis during static exercise is associated with calf

vasoconstriction. Sinoway L, et al. **J Appl Physiol** 1989 Jan;66(1):429–36

Chemoreflex blunting of hypoxic pulmonary vasoconstriction is vagally mediated. Wilson LB, et al. **J Appl Physiol** 1989 Feb;66(2):782–91

Evidence that neuropeptide Y released from noradrenergic axons causes prolonged contraction of the guinea-pig uterine artery. Morris JL, et al. **J Auton Nerv Syst** 1988 Oct;24(3):241–9

Age and the platelet serotonin vasoconstrictor axis in essential hypertension. Amstein R, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S35–40 (68 ref.)

Threshold phenomena and interactions between receptors. Flavahan NA, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S67–72

Serotonin potentiates noradrenaline-induced vasoconstriction through 5-HT1-type receptors in guinea pig basilar artery. Chang JY, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):713–6

Hypothesis: vasoconstriction contributes to amaurosis fugax. Williams JK, et al. **J Cereb Blood Flow Metab** 1989 Feb; 9(1):111–6

Meconium-induced vasocontraction: a potential cause of cerebral and other fetal hypoperfusion and of poor pregnancy outcome. Altshuler G, et al. **J Child Neurol** 1989 Apr;4(2):137–42

In vivo regulation of beta-adrenergic receptors on mononuclear leukocytes and heart. Assessment of receptor compartmentation after agonist infusion and acute aortic constriction in guinea pigs. Maisel AS, et al. **J Clin Invest** 1988 Dec;82(6):2038–44

Ageing suppresses endothelium-dependent relaxation and generates contraction mediated by the muscarinic receptors in vascular smooth muscle of normotensive Wistar-Kyoto and spontaneously hypertensive rats. Koga T, et al. **J Hypertens Suppl** 1988 Dec;6(4):S243–5

IL-2 induces pulmonary edema and vasoconstriction independent of circulating lymphocytes. Ferro TJ, et al. **J Immunol** 1989 Mar 15;142(6):1916–21

Cholinergic contraction to field stimulation in coronary arteries of cattle. Kalsner S, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):785–9

Hypoxic contraction of isolated rat pulmonary artery. Rodman DM, et al. **J Pharmacol Exp Ther** 1989 Mar; 248(3):952–9

Renal periarterial nerve stimulation-induced vasoconstriction at low frequencies is primarily due to release of a purinergic transmitter in the rat. Schwartz DD, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):764–71

Prostaglandin F2 alpha-induced contraction in isolated dog cerebral, coronary and mesenteric arteries soaked in excess potassium. Toda N, et al. **Jpn J Pharmacol** 1988 Jun; 47(2):204–7

Abnormal hindquarter vasoconstrictor tone, a feature common to various kinds of hypertensive rats. Iriuchijima J. **Jpn J Physiol** 1988;38(4):545–8

Recognizing and treating two types of long-term vasoconstriction in hypertension. Laragh JH, et al. **Kidney Int Suppl** 1988 Sep;25:S162–74 (83 ref.)

EDRF and microvascular constriction after angioplasty [letter] Vallance P. **Lancet** 1989 May 20;1(8647):1139

The effect of alkalosis on hypoxia-induced pulmonary vasoconstriction in lungs of newborn rabbits. Fike CD, et al. **Pediatr Res** 1989 Apr;25(4):383–8

Regional variation of postjunctional alpha-adrenoceptor responses in the developing renal vascular bed of sheep. Matherne GP, et al. **Pediatr Res** 1989 May;25(5):461–5

Adrenaline and enhanced vasoconstriction in patients with essential hypertension. Bolli P, et al. **Pharmacol Toxicol** 1988;63 Suppl 1:41–4

Effects of chronic hypoxia and verapamil on cAMP content in tissues and blood plasma. Yuan XJ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(1):30–3

Kinetics of adenosine antagonism of sympathetic nerve induced vasoconstriction. Lockhart LK, et al. **Proc West Pharmacol Soc** 1988;31:105–7

Effect of changes in intracellular pH on the contractility of rat resistance vessels. Aalkjaer C, et al. **Prog Biochem Pharmacol** 1988;23:150–8

Involvement of perivascular neuropeptide Y nerve fibres in uterine arterial vasoconstriction in conjunction with pregnancy. Fallgren B, et al. **Regul Pept** 1989 Feb; 24(2):119–30

Identification of constriction in large versus small vessels using the arterial-venous and the double-occlusion techniques in isolated canine lungs. Hakim TS. **Respiration** 1988;54(1):61–9

Atherosclerosis potentiates constrictor responses of cerebral and ocular blood vessels to thromboxane in monkeys. Faraci FM, et al. **Stroke** 1989 Feb;20(2):242–7

Calcium dependence of intracerebral arteriolar vasomotor tone and constrictor responses in rats. Takayasu M, et al. **Stroke** 1989 Jun;20(6):778–82

Scanning electron microscopic investigations of the human umbilical artery intima. A new conception on postnatal arterial closure mechanism. Röckelein G, et al. **Virchows Arch [A]** 1988;413(6):555–61

[Calcium: the entering pathways and mechanisms of vasoconstriction] Miao JP. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):49–52 (39 ref.) (Chi)

[Implication of spinal catecholaminergic pathways in sympathetic pressor responses] Elghozi JL, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:267–70 (Eng. Abstr.) (Fre)

[The influence of preload on the reactivity of coronary arteries] Karmrodt W, et al. **Biomed Biochim Acta** 1988; 47(3):251–6 (Eng. Abstr.) (Ger)

[Studies of the isolated pulmonary artery of rabbits as a contribution to research on the pathogenesis of constrictive reactions of lung vessels] Schulz KT, et al. **Prax Klin Pneumol** 1988 Oct;42(10):745–8 (Eng. Abstr.) (Ger)

[Evidence of pulmonary vascular hyperreactivity in the initial phase of systemic arterial hypertension] Moruzzi P, et al. **Cardiologia** 1988 Aug;33(8):771–8 (Eng. Abstr.) (Ita)

[Abnormal coronary response to vasomotor stimuli: analogies between variant angina and X syndrome] Pozzati A, et al. **Cardiologia** 1989 May;34(5):411–8 (Eng. Abstr.) (Ita)

[Neural influences on pulmonary vasomotility in man] Moruzzi P, et al. **G Ital Cardiol** 1988 Apr;18(4):301–7 (Eng. Abstr.) (Ita)

[Hypoxic pulmonary vasoconstriction] Muneyuki M. **Masui** 1988 Dec;37(12):1424–36 (58 ref.) (Eng. Abstr.) (Jpn)

[Studies on 5-hydroxytryptamine receptor in the pulmonary vasculature with special reference to its role in the regulation of the pulmonary hemodynamics] Kato J, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr; 26(4):405–14 (Eng. Abstr.) (Jpn)

[Electrophysiological analysis of the excitatory action of serotonin on the coronary artery] Gurkovskia AV, et al. **Fiziol Zh** 1988 Sep–Oct;34(5):66–73 (Eng. Abstr.) (Rus)

[The role of circular and tangential smooth-muscle fibers in arteriole constriction and closure] Kostromina ElIu, et al. **Fiziol Zh SSSR** 1988 Oct;74(10):1438–46 (Eng. Abstr.) (Rus)

[The vascular response of spontaneously hypertensive and normotensive rats with diabetes mellitus] Storozhevykh TP, et al. **Probl Endokrinol (Mosk)** 1989 Jan–Feb; 35(1):68–72 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Interaction of verapamil and halogenated inhalation anesthetics on hypoxic pulmonary vasoconstriction. Kjaeve J, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):193–8

Cerebral antivasoconstrictive effects of flunarizine. Van Nueten JM, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 460:42–9 (39 ref.)

Effects of nimodipine, Bay K 8644 and pinacidil on alpha 1- and alpha 2-adrenoceptor-mediated vasoconstriction in human hand veins. Arner M, et al. **Acta Physiol Scand** 1988 Jul;133(3):417–22

Cerebrovascular serotonergic receptors mediating vasoconstriction: further evidence for the existence of 5-HT2 receptors in rat and 5-HT1-like receptors in guinea-pig basilar arteries. Chang JY, et al. **Acta Physiol Scand** 1989 May;136(1):59–67

Sympathetic vascular control of the pig nasal mucosa (2): Reserpine-resistant, non-adrenergic nervous responses in relation to neuropeptide Y and ATP. Lacroix JS, et al. **Acta Physiol Scand** 1988 Jun;133(2):183–97

Possible involvement of neuropeptide Y in sympathetic vascular control of canine skeletal muscle. Pernow J, et al. **Acta Physiol Scand** 1988 Jan;132(1):43–50

Potent selective vasoconstrictor effects of endothelin in the pig kidney in vivo. Pernow J, et al. **Acta Physiol Scand** 1988 Dec;134(4):573–4

Release and vasoconstrictor effects of neuropeptide Y in relation to non-adrenergic sympathetic control of renal blood flow in the pig. Pernow J, et al. **Acta Physiol Scand** 1989 Aug;136(4):507–17

Mechanism of hemoglobin-induced spasm in the isolated middle cerebral artery of the cat. Dora E, et al. **Adv Exp Med Biol** 1989;248:533–42

Regional differences in the regulation of contraction-relaxation machinery of vascular smooth muscle. Kovach AG, et al. **Adv Exp Med Biol** 1989; 248:601–9

Differential effects of 17 alpha and 17 beta estradiol on PGF2 alpha mediated contraction of the porcine coronary artery. Vargas R, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:277–80

Role of EDRF in inflammation-induced vasodepression in the rat leg. Bekemeier H, et al. **Agents Actions** 1989 Jan; 26(1–2):219–21

Vasodepression ex vivo after administration of inflammatory mediators in vivo in the rat. Bekemeier H, et al. **Agents Actions** 1989 Aug;28(1–2):103–7

Low dose alcohol contracts the human umbilical artery in vitro. Savoy-Moore RT, et al. **Alcoholism (NY)** 1989 Feb; 13(1):40–2

Effects of acetylcholine on epicardial coronary arteries after cardiac transplantation without angiographic evidence of fixed graft narrowing. Nellessen U, et al. **Am J Cardiol** 1988 Nov 15;62(16):1093–7

Mesenteric artery contractile properties during dietary calcium manipulation in spontaneously hypertensive and Wistar Kyoto normotensive rats. Bukoski RD, et al. **Am J Hypertens** 1989 Jun;2(6 Pt 1):440–8

Reduction of norepinephrine-induced tonic contraction and phosphoinositide turnover in arteries of spontaneously hypertensive rats. A possible role for protein kinase C [published erratum appears in Am J Hypertens 1989 Apr;2(4):following Table of Contents] Ek TP, et al. **Am J Hypertens** 1989 Jan;2(1):40–5

Fetoplacental vascular responses to prostacyclin after thromboxane-induced vasoconstriction. Parisi VM, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):502–7

Pharmacodynamic study of maturation and closure of human umbilical arteries. White RP. **Am J Obstet Gynecol** 1989 Jan;160(1):229–37

Cholesterol-induced changes in rabbit arterial smooth muscle sensitivity to adrenergic stimulation. Broderick R, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H170–8

Intralipid effect on normal and hypoxic remodeled rat pulmonary vasculature. Ilkiw R, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1499–508

Superoxide anion is an endothelium-derived contracting factor. Katusic ZS, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H33–7

Endothelin: a potent renal and systemic vasoconstrictor peptide. King AJ, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F1051–8

Fetal placental vascular responses to prostacyclin after angiotensin II-induced vasoconstriction. Parisi VM, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E102–7

Mechanism of adenosine receptor-induced renal vasoconstriction in rats. Rossi N, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H885–90

Venoconstriction and central mobilization of blood [letter] Scher AM. **Am J Physiol** 1989 Jul;257(1 Pt 2):H348

Propagation of vasomotor responses coordinates arteriolar resistances. Segal SS, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H832–7

Selective inhibition of angiotensin II-mediated vasoconstriction by lipoxygenase blockade. Stern N, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H434–43

Endothelin has potent ulcerogenic and vasoconstrictor actions in the stomach. Wallace JL, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G661–6

Antiserum to angiotensin-binding protein inhibits vascular responses to angiotensin II. Webb RC, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1542–4

Pentobarbital attenuates pulmonary vasoconstriction in isolated sheep lungs. Wetzel RC, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H898–903

Alpha-adrenergic vasoconstriction and receptor subtypes in large coronary arteries of calves. Young MA, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1452–9

In vitro reactivity of digital arteries and veins to vasoconstrictive mediators in healthy horses and in horses with early laminitis. Baxter GM, et al. **Am J Vet Res** 1989 Apr;50(4):508–17

Reactivity of dorsal pedal vein of cattle to selected alkaloids associated with Acremonium coenophialum-infected fescue grass. Solomons RN, et al. **Am J Vet Res** 1989 Feb; 50(2):235–8

The contrasting influence of two lipoxygenase inhibitors on hypoxic pulmonary vasoconstriction in anesthetized pigs. McCormack DG, et al. **Am Rev Respir Dis** 1989 Jan; 139(1):100–5

Enhancement of hypoxic pulmonary vasoconstriction by low dose almitrine bismesylate in normal humans. Mélot C, et al. **Am Rev Respir Dis** 1989 Jan;139(1):111–9

Epidermal growth factor augments reactivity to angiotensin II in the rat pulmonary circulation. Rippetoe PE, et al. **Am Rev Respir Dis** 1989 Sep;140(3):821–4

The contractile responses of isolated dog cerebral and extracerebral arteries to oxybarbiturates and thiobarbiturates. Hatano Y, et al. **Anesthesiology** 1989 Jul; 71(1):80–6

Barbiturate anesthetics inhibit thromboxane-, potassium-, but not angiotensin-induced pulmonary vasoconstriction. McShane AJ, et al. **Anesthesiology** 1989 May;70(5):775–9

Endothelium-dependent effects of halothane, enflurane, and isoflurane on isolated rat aortic vascular rings. Stone DJ, et al. **Anesthesiology** 1989 Jul;71(1):126–32

Resolution of experimental microvascular vasoconstriction in rats by topical application of lidocaine hydrochloride in varying concentrations. Beekman WH, et al. **Ann Plast Surg** 1988 Dec;21(6):570–5

Influence of endothelium on the vasoconstrictor effect of dihydroergotamine in the isolated rat aorta. Ghusa E, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:66–75

Augmented vasoconstrictor responses to serotonin precede development of atherosclerosis in aorta of WHHL rabbit. Wines PA, et al. **Arteriosclerosis** 1989 Mar–Apr; 9(2):195–202

Endothelin and the production of cerebral vasospasm in dogs. Asano T, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1345–51

Blockade of endothelin-induced contractions by dichlorobenzamil: mechanism of action. Criscione L, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):247–54

Endothelin-1 induces vasoconstriction through two functionally distinct pathways in porcine coronary artery: contribution of phosphoinositide turnover. Kasuya Y, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1049–55

Structure-activity relationship of endothelin: importance of charged groups. Nakajima K, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):424–9

Endothelin enhances adrenergic vasoconstriction in perfused

rat mesenteric arteries. Tabuchi Y, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1304–8

Molecular mechanism of action of the vasoconstrictor peptide endothelin. Van Renterghem C, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):977–85

Role of calcium in the potentiating effect of phorbol ester on KCl-induced vasocontraction. Wakabayashi I, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1195–202

Vasoactive effects of growth factors. Berk BC, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):219–25 (77 ref.)

Effects of stroma-free hemoglobin solutions on isolated perfused rabbit hearts and isolated perfused rat kidneys. Vogel WM, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):227–35

Prostaglandins and altered diabetic vasoregulation. Koltai MZ, et al. **Biomed Biochim Acta** 1988;47(9):849–54

Dietary fish oil reduces intimal proliferation of the coronary artery caused by implantation of a constrictor in pigs. Lamers JM, et al. **Biomed Biochim Acta** 1988; 47(10–11):S83–5

Actions of PGE2 and indomethacin on adrenergic neuroeffector transmission in the rabbit coeliac artery. Malomvölgyi B, et al. **Biomed Biochim Acta** 1988; 47(10–11):S129–32

The effect of naftidrofuryl on PGF2 alpha, U 46.619, 5-HT and thromboxane A2 (TXA2) induced vasoconstriction. Verheggen R, et al. **Biomed Biochim Acta** 1988; 47(10–11):S264–7

Alfuzosin and the venous reflex response: studies in normal subjects. Sinclair AJ, et al. **Br J Clin Pharmacol** 1989 Jan; 27(1):19–22

Suitability of the upper back for corticosteroid vasoconstrictor assay [letter] Duhra P, et al. **Br J Dermatol** 1988 Sep;119(3):406–7

Potentiation by neuropeptide Y of vasoconstriction in rat resistance arteries. Andriantsitohaina R, et al. **Br J Pharmacol** 1988 Oct;95(2):419–28

Endothelin induces potent microvascular constriction. Brain SD, et al. **Br J Pharmacol** 1988 Dec;95(4):1005–7

Investigation of the vasoconstrictor action of subarachnoid haemoglobin in the pig cerebral circulation in vivo. Byrne JV, et al. **Br J Pharmacol** 1989 Jul;97(3):669–74

Characterization of 5-HT receptors mediating contraction of canine and primate basilar artery by use of GR43175, a selective 5-HT1-like receptor agonist. Connor HE, et al. **Br J Pharmacol** 1989 Feb;96(2):379–87

Expression of functional postjunctional alpha 2-adrenoceptors in rabbit isolated distal saphenous artery—a permissive role for angiotensin II? Dunn WR, et al. **Br J Pharmacol** 1989 Feb;96(2):259–61

Neurotransmission in pig renal artery: the actions of angiotensin II and dopamine. Ferguson DR, et al. **Br J Pharmacol** 1989 Feb;96(2):279–82

Endothelin- and neuropeptide Y-induced vasoconstriction of human epicardial coronary arteries in vitro. Franco-Cereceda A. **Br J Pharmacol** 1989 Jul;97(3):968–72

Neuropeptide Y and reserpine-resistant vasoconstriction evoked by sympathetic nerve stimulation in the dog skeletal muscle. Pernow J, et al. **Br J Pharmacol** 1988 Jul; 94(3):952–60

Role of endoperoxides in arachidonic acid-induced vasoconstriction in the isolated perfused kidney of the rat. Quilley J, et al. **Br J Pharmacol** 1989 Jan;96(1):111–6

Topical nasopharyngeal anaesthesia with vasoconstriction in preeclampsia-eclampsia. Mokriski BK, et al. **Can J Anaesth** 1988 Nov;35(6):641–3

Attenuation of pulmonary and systemic vasoconstriction with pentoxifylline and aminophylline. Hakim TS, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):396–401

Adenosine modulation of vasoconstrictor responses to stimulation of sympathetic nerves and norepinephrine infusion in the superior mesenteric artery of the cat. Lautt WW, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):937–41

Aminergic histofluorescence and contractile responses to transmural electrical field stimulation and norepinephrine of human middle cerebral arteries obtained promptly after death. Duckworth JW, et al. **Circ Res** 1989 Aug; 65(2):316–24

Actions of a phorbol ester on factors regulating contraction in rabbit mesenteric artery. Fujiwara T, et al. **Circ Res** 1988 Nov;63(5):893–902

Angiotensin II amplification of alpha-adrenergic vasoconstriction: role of receptor reserve. Purdy RE, et al. **Circ Res** 1988 Oct;63(4):748–57

Response of femoral arteries to norepinephrine following endotoxicosis. Kato T, et al. **Circ Shock** 1988 Dec; 26(4):383–90

Persistence of sympathetic-mediated forearm vasoconstriction after alpha-blockade in hypertensive patients. Taddei S, et al. **Circulation** 1989 Sep;80(3):485–90

Differences in alpha-adrenergic responsiveness between human internal mammary arteries and saphenous veins. Weinstein JS, et al. **Circulation** 1989 Jun;79(6):1264–70

Biphasic response of coronary arterial diameter to intracoronary ergonovine. Mohri M, et al. **Clin Cardiol** 1988 Oct;11(10):710–4

Inhibition of vasoconstriction by platelet activating factor in the in situ blood perfused rat mesentery. Gerkens JF. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):161–7

Reversal of a calcium-mediated vasoconstrictor component in patients with congestive heart failure. Cody RJ, et al. **Clin Pharmacol Ther** 1989 Sep;46(3):291–6

Calcium entry blockade and alpha-adrenergic vascular reactivity in human beings: differences between nicardipine and verapamil. Pedrinelli R, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):285–90

Effect of oral administration of nifedipine on neuropeptide Y- and noradrenaline-induced vasoconstriction in the human forearm. Pernow J, et al. **Clin Physiol** 1989 Feb; 9(1):67–75

Angiotensin II augments sympathetically induced venoconstriction in man. Benjamin N, et al. **Clin Sci** 1988 Oct;75(4):337–40

Arterial dilatation and venous constriction induced by serotonin in the elderly. Blauw GJ, et al. **Drugs** 1988;36 Suppl 1:74–7

Phorbol 12,13-dibutyrate potentiates alpha 2-adrenoceptor-mediated contraction in the rat saphenous vein. Cheung DW. **Eur J Pharmacol** 1988 Dec 6; 158(1–2):145–8

Effect of endothelin as a coronary vasoconstrictor in the Langendorff-perfused rat heart. Fukuda K, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):301–4

Neuropeptide Y (NPY): a coronary vasoconstrictor and potentiator of catecholamine-induced coronary constriction. Macho P, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):67–74

Selective inhibition by nifedipine of the purinergic component of neurogenic vasoconstriction in the dog mesenteric artery. Omote S, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):239–45

Effects of praeruptorin C and E isolated from 'Qian-Hu' on swine coronary artery and guinea-pig atria. Rao MR, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):293–6

Biphasic contraction induced by ouabain in human umbilical arteries. Sato K, et al. **Eur J Pharmacol** 1988 Dec 13; 158(3):299–302

Comparison of the effects of endothelin-1 and endothelin-3 on the rat stomach. Wallace JL, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):41–7

Vascular responses of ophthalmic arteries to exogenous and endogenous norepinephrine. Ohkubo H, et al. **Exp Eye Res** 1989 Apr;48(4):539–47

Ethanol induces acute pulmonary vasoconstriction in salt-perfused rat lungs. Drummond WH, et al. **Exp Lung Res** 1989 May;15(3):447–58

Putative precursors of endothelin have less vasoconstrictor activity in vitro but a potent pressor effect in vivo. Kashiwabara T, et al. **FEBS Lett** 1989 Apr 10;247(1):73–6

Contractions to oxygen-derived free radicals are augmented in aorta of the spontaneously hypertensive rat. Auch-Schwelk W, et al. **Hypertension** 1989 Jun;13(6 Pt 2):859–64

Regenerative electrical activity and arterial contraction in hypertensive rats. Lamb FS, et al. **Hypertension** 1989 Jan; 13(1):70–6

Epicardial coronary artery constriction with intravenous ethanol. Rogers PJ, et al. **Int J Cardiol** 1989 Mar; 22(3):301–10

The influence of the atrial natriuretic factor on venous tone in man. Ljutić D, et al. **Int J Clin Pharmacol Res** 1989; 9(4):255–60

Vasodilatation and vasoconstriction in the rabbit isolated aorta. Effects of ioxilan, iohexol, and diatrizoate. Schneider KM, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S150–2

Enhanced vasoconstrictor responses to potassium, 5-hydroxytryptamine, and prostaglandin F2 alpha of isolated coronary arteries from magnesium-deficient rats. Comparison with vasomotor activity of aorta. Sjögren A, et al. **J Am Coll Nutr** 1988 Dec;7(6):461–9

Cyclooxygenase blockers inhibit ethanol-induced pulmonary vasoconstriction in lambs. Drummond WH, et al. **J Appl Physiol** 1989 Feb;66(2):822–9

Nisoldipine inhibits vasoconstrictor responses in the cat pulmonary vascular bed. Kadowitz PJ, et al. **J Appl Physiol** 1989 Jun;66(6):2885–90

Endothelin produces pulmonary vasoconstriction and systemic vasodilation. Lippton HL, et al. **J Appl Physiol** 1989 Feb;66(2):1008–12

Dynamic response of local pulmonary blood flow to alveolar gas tensions: experiment. Paradowski LJ, et al. **J Appl Physiol** 1989 Jun;66(6):2559–64

Importance of vasoconstriction in lipid mediator-induced pulmonary edema. Sakai A, et al. **J Appl Physiol** 1989 Jun; 66(6):2667–74

Mepacrine attenuates pulmonary vasoreactivity in rabbits. Shayevitz JR, et al. **J Appl Physiol** 1989 Apr;66(4):1921–6

Role of venoconstriction in thromboxane-induced pulmonary hypertension and edema in lambs. Yoshimura K, et al. **J Appl Physiol** 1989 Feb;66(2):929–35

No evidence for the differential antagonism of the initial fast and secondary slow contractile responses of the rat portal vein to phenylephrine, 5-hydroxytryptamine or methacholine. Doggrell SA. **J Auton Pharmacol** 1988 Jun; 8(2):69–78

The isolated rat portal vein as a model for studying beta-adrenoreceptor agonists and antagonists [published erratum appears in J Auton Pharmacol 1988 Dec;8(4):347] Vidal-Beretervide K, et al. **J Auton Pharmacol** 1988 Sep; 8(3):173–80

Antagonism of alpha 1-adrenoceptor-mediated vascular contraction by urapidil in isolated arterial strips of spontaneously hypertensive rats. Aoki K, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):167–78

Endothelin-1 is a potent long-lasting vasoconstrictor in dog peripheral vasculature in vivo. Clarke JG, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S211–2

Differential effects of verapamil and flunarizine on epinephrine-induced vasoconstriction and on spontaneous vasomotion of arterioles in skeletal muscle in the rat in vivo. De Clerck F, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):76–83

Conversion of big endothelin-1 to 21-residue endothelin-1 is essential for expression of full vasoconstrictor activity: structure-activity relationships of big endothelin-1. Kimura S, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S5–7; discussion S18

Synthesis of endothelin-1 analogues, endothelin-3, and sarafotoxin S6b: structure-activity relationships. Nakajima K, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S8–12; discussion S18

Mechanism of inhibition of rat caudal artery contraction by amiloride. Sharma RV, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):152–9

Positive inotropic and vasoconstrictive effects of endothelin-1 in in vivo and in vitro experiments: characteristics and the role of L-type calcium channels. Watanabe T, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S108–11 discussion s123

Endothelin-1 causes vasoconstriction and vasodilation in the blood perfused liver of the dog. Withrington PG, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S209–10

Reoxygenation and calcium-induced cerebroarterial contractions as affected by vasodilator agents. Bian K, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):808–15

The effects of dipyridamole and theophylline on rat pial vessels during hypocarbia. Ibayashi S, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):829–33

Interleukin 1 inhibits contraction of vascular smooth muscle. Beasley D, et al. **J Clin Invest** 1989 Jan;83(1):331–5

Augmentation of hypoxic pulmonary vasoconstriction in the isolated perfused rat lung by in vitro antagonists of endothelium-dependent relaxation. Brashers VL, et al. **J Clin Invest** 1988 Nov;82(5):1495–502

Raynaud's phenomenon in patients treated with cisplatin, vinblastine, and bleomycin for germ cell cancer: measurement of vasoconstrictor response to cold. Hansen SW, et al. **J Clin Oncol** 1989 Jul;7(7):940–2

Prostaglandin I2 and the constricted maternal ovine placenta: effects of local infusion and placental age. Rankin JH, et al. **J Dev Physiol** 1988 Oct;10(5):393–8

Cyclosporine A inhibits relaxation but does not induce vasoconstriction in human subcutaneous resistance vessels. Richards NT, et al. **J Hypertens** 1989 Jan;7(1):1–3

Involvement of vascular endothelium in the potentiation of vasoconstrictor responses by neuropeptide Y. Hieble JP, et al. **J Hypertens Suppl** 1988 Dec;6(4):S239–42

Amiloride potentiates the vascular effects of atrial natriuretic factor. Linz W, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S300–2

Ouabain vasoconstricts human forearm arterioles through alpha-adrenergic stimulation. Taddei S, et al. **J Hypertens Suppl** 1988 Dec;6(4):S357–9

Role of calcium in the vasoconstriction induced by angiotensin II. van Heiningen PN, et al. **J Hypertens Suppl** 1988 Dec;6(4):S640–2

Sympathetically mediated vasoconstriction is augmented by angiotensin II in man. Webb DJ, et al. **J Hypertens Suppl** 1988 Dec;6(4):S542–3

Myocardial dysfunction and coronary vasoconstriction induced by platelet-activating factor in the post-infarcted rabbit isolated heart. Mickelson JK, et al. **J Mol Cell Cardiol** 1988 Jun;20(6):547–61

Effect of intracisternal antithrombin III on subarachnoid hemorrhage-induced arterial narrowing. Vollmer DG, et al. **J Neurosurg** 1989 Apr;70(4):599–604

Effect of levonorgestrel and ethinyloestradiol on vasoconstriction in rat isolated vasculature. Byrne KB, et al. **J Pharm Pharmacol** 1988 Aug;40(8):562–6

Beta 2-adrenoceptor influences on the alpha 1- and alpha 2-mediated vasoconstriction induced by phenylpropanolamine and its two component enantiomers in the pithed rat. Moya-Huff FA, et al. **J Pharm Pharmacol** 1988 Dec;40(12):876–8

Acetylcholine produces cerebrovascular constriction through activation of muscarinic-1 receptors in the newborn pig. Armstead WM, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):926–33

Influence of stimulation train length on the opioid-induced inhibition of norepinephrine release in the rabbit ear artery. Budai D, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):839–43

Inhibition of renal vasoconstriction induced by intrarenal hypertonic saline by the nonxanthine adenosine antagonist CGS 15943A. Callis JT, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1123–9

Vasoactivity of 20-hydroxyeicosatetraenoic acid is dependent on metabolism by cyclooxygenase. Escalante B, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):229–32

Hyperthyroidism induces supersensitivity to biogenic amines in rat vascular tissue via a pre- and a postjunctional mechanism. Grassby PF, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1027–35

Time-dependent enhancement of xylazine-induced, alpha-2 adrenoceptor-mediated vasoconstriction in isolated and

perfused canine pulmonary veins. Haniuda M, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):340–7

Evidence that prostaglandins can contract the rat aorta via a novel protein kinase C-dependent mechanism. Heaslip RJ, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):44–51

Functional importance of alpha adrenoceptor–mediated, D600–insensitive Ca++ entry in rabbit aorta. Hester RK. **J Pharmacol Exp Ther** 1988 Oct;247(1):223–34

Effects of neuropeptide Y on the response of isolated blood vessels to norepinephrine and sympathetic field stimulation. Hieble JP, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):523–8

Effects of alpha adrenoceptor blockade on renal nerve stimulation–induced norepinephrine release and vasoconstriction in the dog kidney. Hisa H, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):752–7

Endothelial injury provokes collateral arterial vasoconstriction: response to a serotonin 2 antagonist, thromboxane antagonist or synthetase inhibition. Hollenberg NK, et al. **J Pharmacol Exp Ther** 1988 Mar; 244(3):1164–8

Adenosine–angiotensin II interactions. Part I. Role of adenosine in regulating angiotensin II–induced potentiation of noradrenergic neurotransmission and angiotensin II–induced vasoconstriction. Holycross BJ, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):433–41

Leukotriene D4 potentiates the contractile effects of epinephrine and norepinephrine on rat aortic rings. Lawson DL, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):953–7

Cellular mechanisms of endothelin in rabbit aorta. Ohlstein EH, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):548–55

Effect of Na+/H+ exchange inhibitors on agonist–induced contraction of rat aorta. Reynolds EE, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1146–51

Mechanism of cyclosporine A–induced renal vasoconstriction in the rat. Rossi NF, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):896–901

Endothelium–dependent contraction and –independent relaxation induced by adenine nucleotides and nucleoside in the canine basilar artery. Shirahase H, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1152–7

An endothelium–dependent contraction induced by A–23187, a Ca++ ionophore in canine basilar artery. Shirahase H, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):701–5

Antagonism of leukotriene C4, leukotriene D4 and leukotriene E4 vasoconstrictor responses in the conscious rat with the peptidoleukotriene receptor antagonist SK&F 104353: evidence for leukotriene D4 receptor heterogeneity. Smith EF 3d, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):805–11

Role of alpha–adrenoceptors in constrictor responses of rat, guinea–pig and rabbit small arteries to neural activation. Angus JA, et al. **J Physiol (Lond)** 1988 Sep;403:495–510

Effects of selective alpha 1–adrenoceptor blockade in dogs with hypoxic pulmonary vasoconstriction. Yoshioka T, et al. **Jpn Circ J** 1988 Oct;52(10):1201–8

Comparison of inhibitory effects of calcium channel blockers and that of a calmodulin antagonist in strips of mesenteric arteries from spontaneously hypertensive and normotensive rats. Asano M, et al. **Jpn J Pharmacol** 1988 Sep;48(1):77–90

Perfusion–time–dependent appearance of blocking effect of diltiazem on norepinephrine–induced vasoconstriction in isolated, perfused dog pulmonary veins. Haniuda M, et al. **Jpn J Pharmacol** 1989 Jan;49(1):139–42

Suppression of clonidine–induced vasoconstriction by cooling. Kawarai M, et al. **Jpn J Pharmacol** 1988 Dec; 48(4):510–2

Early effects of dietary calcium on blood pressure, plasma volume, and vascular reactivity. Hatton DC, et al. **Kidney Int Suppl** 1988 Sep;25:S16–8

Dibutyryl cyclic adenosine monophosphate inhibits pulmonary vasoconstriction. Sakai A, et al. **Lung** 1988; 166(4):221–31

Antagonism of leukotriene receptors and administration of a 5–lipoxygenase inhibitor do not affect hypoxic vasoconstriction. Thomas HM 3d, et al. **Lung** 1989; 167(3):187–98

Arteriolar vasoconstriction and tachyphylaxis with intraarterial angiotensin II. Vicaut E, et al. **Microvasc Res** 1989 Jan;37(1):28–41

Alpha–1 and alpha–2 adrenoceptor agonists induce vasoconstriction of the normotensive rat caudal artery in vitro by stimulation of a heterogeneous population of alpha–1 adrenoceptors. Atkinson J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):529–35

Effect of 8–(N,N–diethylamino)octyl–3,4,5–trimethoxybenzoate (TMB–8), an inhibitor of intracellular Ca2+ release, on autoregulation of renal blood flow in the dog. Ogawa N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):293–6

Reflex epicardial coronary vasoconstriction elicited by nicotine in anaesthetized dogs. Sobey CG, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):464–8

Vasoconstrictor effects in spinal cord of the substance P antagonist [D–Arg, D–Trp7,9 Leu11]–substance P (Spantide) and somatostatin and interaction with thyrotropin releasing hormone. Freedman J, et al. **Neuroscience** 1988 Oct;27(1):267–78

Responses of small intrapulmonary arteries to vasoactive compounds in the fetal and neonatal lamb: norepinephrine, epinephrine, serotonin, and potassium chloride. Dunn JA, et al. **Pediatr Res** 1989 Apr;25(4):360–3

Substance P antagonist–induced spinal cord vasoconstriction: effects of thyrotropin–releasing hormone and substance P agonists. Helke CJ, et al. **Peptides** 1988 Nov–Dec; 9(6):1307–15

The effects of various peptides on the isolated pulmonary artery. Obara H, et al. **Peptides** 1989 Jan–Feb;10(1):241–3

Activation of sodium channels is not essential for endothelin induced vasoconstriction. Borges R, et al. **Pflugers Arch** 1989 Jan;413(3):313–5

Vascular changes during calcium loading in experimental hypertension. Bukoski RD, et al. **Pharmacol Res Commun** 1988 Sep;20 Suppl 3:55–70

Effect of nisoldipine on large coronary arteries in situ: inhibition of vasoconstriction induced by vasopressin. Saito T, et al. **Pharmacology** 1988;37(2):85–93

Histamine–mediated vasoconstriction and cAMP levels in coronary arteries of the isolated rabbit heart. Schuschke DA, et al. **Pharmacology** 1989;38(1):23–33

The dark side of methylene blue [letter] Johnson PC, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1076–7

Ca2+–channel blockers inhibit the action of recombinant platelet–derived growth factor in vascular smooth muscle cells. Block LH, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2388–92

Relaxing effect of atrial natriuretic factor on endothelin–precontracted vascular strips. Bonhomme MC, et al. **Proc Soc Exp Biol Med** 1989 Jul;191(3):309–15

The effect of glucagon on autoregulatory escape from hepatic arterial vasoconstriction in the cat. D'Almeida MS, et al. **Proc West Pharmacol Soc** 1989;32:265–7

Potentiation of norepinephrine–induced vasoconstrictions by neuropeptide Y in isolated canine carotid artery. Gintautas J, et al. **Proc West Pharmacol Soc** 1989;32:327–8

Effect of Na/K–ATPase inhibition on transmurally stimulated vascular contractions. Haberey M, et al. **Prog Biochem Pharmacol** 1988;23:128–35

The effect of leukotriene D4 on pulmonary and systemic circulation in conscious newborn piglets [published erratum appears in Prostaglandins 1988 Nov;36(5):747] Coe JY, et al. **Prostaglandins** 1988 Jul;36(1):31–47

Leukotrienes cause mesenteric vasoconstriction and hemoconcentration in rats without activating thromboxane receptors. Schumacher WA, et al. **Prostaglandins** 1989 Sep; 38(3):335–44

Prostacyclin contributes to inhibition of hypoxic pulmonary vasoconstriction by alkalosis. Yamaguchi T, et al. **Prostaglandins** 1989 Jul;38(1):53–63

Influence of the thromboxane–mimetic U–46619 and the prostacyclin metabolite 6–keto prostaglandin E1 on vasoconstriction induced by noradrenaline and 5–HT in rat mesenteric vasculature. Stanton BJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul; 33(1):7–12

Neuropeptide Y and control of vascular resistance in skeletal muscle. Revington M, et al. **Regul Pept** 1988 Dec; 23(3):331–42

Alveolar hypoxia, inhibition of hypoxic pulmonary vasoconstriction, and permeability edema. Cheney FW, et al. **Respir Physiol** 1989 Jan;75(1):11–8

Prolonged exposure to oxyhemoglobin modifies the response of isolated dog middle cerebral arteries to vasoactive substances. Onoue H, et al. **Stroke** 1989 May;20(5):657–63

Almitrine bismesylate reduces hypoxic pulmonary vasoconstriction in isolated rat lungs. Kato S, et al. **Tohoku J Exp Med** 1989 Feb;157(2):119–29

Venous flushing with vasodilators aids recovery of vasoconstricted and warm ischemic injured pig kidneys. Kaneko H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1233–5

Characterization of inhibition by nifedipine and nitroprusside of the pressor responses to alpha 1–adrenoceptor agonists cirazoline and Sgd 101/75 in pithed rats. Jung HO, et al. **Yonsei Med J** 1988;29(2):176–84

[Constrictive and stiffening effects of parasympathetic blockade on the pressure response of the aorta to angiotensin in the conscious dog] Cabrera E, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:129–32 (Eng. Abstr.) **(Fre)**

[Inhibition of the spasmogenic effect of exogenous and endogenous serotonin on isolated blood vessels by naftidrofuryl] Verheggen R, et al. **Vasa Suppl** 1988;24:5–10 (Eng. Abstr.) **(Ger)**

[Telethermography, a new method in the evaluation of topical corticosteroid activity] Ippolito F, et al. **G Ital Dermatol Venereol** 1988 Jun;123(6):291–5 (Eng. Abstr.) **(Ita)**

[The effect of almitrine on hypoxic pulmonary vasoconstriction in isolated perfused rat lungs] Kato S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul; 26(7):707–13 (Eng. Abstr.) **(Jpn)**

[Effects of nitrendipine on cardiovascular systems] Kawahara K, et al. **Nippon Yakurigaku Zasshi** 1988 Dec;92(6):397–410 (Eng. Abstr.) **(Jpn)**

[Selective augmenting effect of oxy–Hb on the contractions of cerebral arteries elicited by various vasoactive substances] Tsuiki K. No **Shinkei Geka** 1988 Sep; 16(10):1155–62 (Eng. Abstr.) **(Jpn)**

VASOCONSTRICTOR AGENTS

Endothelin and Ca++ agonist Bay K 8644: different vasoconstrictive properties. Auguet M, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):186–92

Structure–activity relationship of endothelin: importance of charged groups. Nakajima K, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):424–9

Vasoconstriction: a novel activity for low density lipoprotein. Sachinidis A, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):315–20

Does suppression of responsiveness to beta–adrenoceptor activation explain the enhancement of vasoconstrictor responses by alpha 2–adrenoceptor agonists? Rand MJ, et al. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):457–60

Local infiltration of ornithine 8–vasopressin (POR 8) as a vasoconstrictive agent in surgical pelviscopy (applied to myoma enucleation, salpingotomy in cases of tubal pregnancy and peripheral salpingostomy). Semm K, et al. **Endoscopy** 1988 Nov;20(6):298–304

Vasoconstrictor response of large cerebral arteries of cats to endothelin, an endothelium–derived vasoactive peptide. Saito A, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):353–8

Endothelium–derived relaxing and contracting factors. Furchgott RF, et al. **FASEB J** 1989 Jul;3(9):2007–18 (108 ref.)

A novel peptide, vasoactive intestinal contractor, of a new (endothelin) peptide family. Molecular cloning, expression, and biological activity. Saida K, et al. **J Biol Chem** 1989 Sep 5;264(25):14613–6

Metabolism of 20–hydroxyeicosatetraenoic acid by cyclooxygenase. Formation and identification of novel endothelium–dependent vasoconstrictor metabolites. Schwartzman ML, et al. **J Biol Chem** 1989 Jul 15; 264(20):11658–62

Endothelin–1 is a potent constrictor in conductive and resistive coronary arteries. Tippins JR, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S177–9

2(1H)–quinolinones with cardiac stimulant activity. 3. Synthesis and biological properties of 6–imidazol–1–yl derivatives. Bell AS, et al. **J Med Chem** 1989 Jul; 32(7):1552–8

Nonsteroidal cardiotonics. 2. The inotropic activity of linear, tricyclic 5–6–5 fused heterocycles. von der Saal W, et al. **J Med Chem** 1989 Jul;32(7):1481–91

Prior inhibition of vasoconstrictorz normalizes GFR in postobstructed kidneys. Purkerson ML, et al. **Kidney Int** 1989 Jun;35(6):1305–14

Endothelin: a potent vasoconstrictor associated with coronary vasospasm. Kurihara H, et al. **Life Sci** 1989; 44(25):1937–43

Vasoreactive effects of hypothalamic sodium transport inhibitor. Mir MA, et al. **Prog Biochem Pharmacol** 1988; 23:119–27

[Vasoconstrictor action of ibuprofen in treating patients with pulmonary hypertension] Gavriliuk VK, et al. **Vrach Delo** 1989 Jan;(1):62–4 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

NG–methylarginine, an inhibitor of endothelium–derived nitric oxide synthesis, is a potent pressor agent in the guinea pig: does nitric oxide regulate blood pressure in vivo? Aisaka K, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):881–6

Neuropeptide–Y. A peptide found in human coronary arteries constricts primarily small coronary arteries to produce myocardial ischemia in dogs. Maturi MF, et al. **J Clin Invest** 1989 Apr;83(4):1217–24

Local anaesthetic with vasoconstrictor combinations in septal surgery. McClymont LG, et al. **J Laryngol Otol** 1988 Sep; 102(9):793–5

[Pharmacologic agents for reducing peroperative blood loss] Marynen L. **Rev Med Brux** 1989 Apr;10(4):155–8 (Eng. Abstr.) **(Fre)**

ADVERSE EFFECTS

Sulfite, asthma and vasoconstrictors. Pérusse R, et al. **Can Dent Assoc J** 1989 Jan;55(1):55–6 (11 ref.)

[Nephrotoxicity of vasoactive drugs in the fetus and the newborn infant] Guignard JP. **Therapie** 1988 Aug–Sep; 43(5):407–11 (Eng. Abstr.) **(Fre)**

ANALYSIS

Seasonal, geographic and individual variation of okadaic acid content in cultivated mussels in Sweden. Edebo L, et al. **APMIS** 1988 Nov;96(11):1036–42

Structure–activity relationships of endothelin: importance of the C–terminal moiety. Kimura S, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1182–6

BIOSYNTHESIS

Concomitant secretion of big endothelin and its C–terminal fragment from human and bovine endothelial cells. Emori T, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):217–23

Immunoreactive endothelin in rat kidney inner medulla: marked decrease in spontaneously hypertensive rats. Kitamura K, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):38–44

CHEMICAL SYNTHESIS

Studies on topical antiinflammatory agents. I. Synthesis and vasoconstrictive activity of corticosteroid 17-succinyl esters. Mitsukuchi M, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1534–9

Synthesis of endothelin-1 analogues, endothelin-3, and sarafotoxin S6b: structure-activity relationships. Nakajima K, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S8–12; discussion S18

DIAGNOSTIC USE

[Evaluation of the newly designed pharmacoangiography (dynamic pharmacoangiography) in hepatic tumors] Watanabe S, et al. **Rinsho Hoshasen** 1988 Jul;33(7):767–72 (Eng. Abstr.) **(Jpn)**

ISOLATION & PURIFICATION

Presence of endothelin-1 in porcine spinal cord: isolation and sequence determination. Shimmi O, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):340–6

METABOLISM

Serotonin, vasoconstrictor of human aqueous humor [letter] Martin XD, et al. **Arch Ophthalmol** 1989 Apr;107(4):488–9

Neuropeptide Y: vasoconstrictor effects and possible role in cerebral vasospasm after experimental subarachnoid hemorrhage. Abel PW, et al. **Brain Res** 1988 Nov 1; 463(2):250–8

Binding and receptor down-regulation of a novel vasoconstrictor endothelin in cultured rat vascular smooth muscle cells. Hirata Y, et al. **FEBS Lett** 1988 Oct 24; 239(1):13–7

Endothelin binding to cultured calf adrenal zona glomerulosa cells and stimulation of aldosterone secretion. Cozza EN, et al. **J Clin Invest** 1989 Sep;84(3):1032–5

Receptors mediating vasoconstrictor response in rabbit femoral artery. Grandaw PP, et al. **Proc West Pharmacol Soc** 1989;32:259

PHARMACOKINETICS

Autoradiographic localization of 125J-endothelin in rat tissues. Stasch JP, et al. **Arzneimittelforschung** 1989 Jan; 39(1):59–61

PHARMACOLOGY

Antivasoconstrictor effects of isradipine. A quantitative approach in anesthetized rats and conscious rabbits. Hof RP, et al. **Am J Med** 1989 Apr 17;86(4A):50–6

Pharmacodynamic study of maturation and closure of human umbilical arteries. White RP. **Am J Obstet Gynecol** 1989 Jan;160(1):229–37

Systemic vascular autoregulation amplifies pressor responses to vasoconstrictor agents. Metting PJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R98–105

Endothelium-dependent and -independent responses to vasoactive substances of isolated human coronary arteries. Toda N, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H988–95

In vitro reactivity of digital arteries and veins to vasoconstrictive mediators in healthy horses and in horses with early laminitis. Baxter GM, et al. **Am J Vet Res** 1989 Apr;50(4):508–17

Altered response to vasopressors before and during cardiopulmonary bypass [letter] Baraka A. **Anesthesiology** 1989 Jun;70(6):1023–4

Balloon catheter injury to rabbit carotid artery. II. Selective increase in reactivity to some vasoconstrictor drugs. Manderson JA, et al. **Arteriosclerosis** 1989 May-Jun; 9(3):299–307

Endothelin is a potent mitogen for rat vascular smooth muscle cells. Hirata Y, et al. **Atherosclerosis** 1989 Aug; 78(2-3):225–8

Interaction of synthetic sarafotoxin with rat vascular endothelin receptors. Hirata Y, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):441–7

Calyculin A and okadaic acid: inhibitors of protein phosphatase activity. Ishihara H, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):871–7

Vasoconstrictor effects of sarafotoxins in rabbit aorta: structure-function relationships. Wollberg Z, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):371–6

Selective blockade by nifedipine of 'purinergic' rather than adrenergic nerve-mediated vasopressor responses in the pithed rat. Bulloch JM, et al. **Br J Pharmacol** 1988 Nov; 95(3):695–700

The selective carotid arterial vasoconstrictor action of GR43175 in anaesthetized dogs. Feniuk W, et al. **Br J Pharmacol** 1989 Jan;96(1):83–90

Vasoconstrictor and vasodilator effects in normal and atherosclerotic conscious rabbits. Hof RP, et al. **Br J Pharmacol** 1988 Dec;95(4):1075–80

Pressor effects of the alpha 2-adrenoceptor agonist B-HT 933 in anaesthetized and haemorrhagic rats: comparison with the haemodynamic effects of amidephrine. MacLean MR, et al. **Br J Pharmacol** 1989 Jun;97(2):419–32

Actions of constrictor (NPY and endothelin) and dilator (substance P, CGRP and VIP) peptides on pig splenic and human skeletal muscle arteries: involvement of the endothelium. Pernow J. **Br J Pharmacol** 1989 Jul; 97(3):983–9

Alpha 2-adrenoceptor agonists enhance responses to certain other vasoconstrictor agonists in the rat tail artery. Xiao XH, et al. **Br J Pharmacol** 1989 Mar;96(3):539–46

Effects of perfusion flow rate, prostaglandin F2 alpha, phenylephrine, and serotonin on isolated, perfused brains of spontaneously hypertensive rats. Gong D, et al. **Brain Res** 1989 Mar 13;482(1):122–8

Vasoconstrictor effect of the Ca2+ agonist Bay K 8644 on human cerebral arteries. Salaices M, et al. **Brain Res** 1989 Jun 19;490(1):133–40

Effects of vasoconstrictor agents on flow rate of isolated epicardial coronary artery of humans with various degrees of atherosclerosis and of young pigs. Sakaino N, et al. **Cardiovasc Res** 1988 Aug;22(8):555–61

GR43175 does not share the complex pharmacology of the ergots. Feniuk W, et al. **Cephalalgia** 1989;9 Suppl 9:35–9

The pharmacology of the novel 5-HT1-like receptor agonist, GR43175. Humphrey PP, et al. **Cephalalgia** 1989;9 Suppl 9:23–33

Lack of effect of GR43175 on peripheral arteries in man. Nielsen TH, et al. **Cephalalgia** 1989;9 Suppl 9:93–5

Reactivity of human isolated internal mammary artery to constrictor and dilator agents. Implications for treatment of internal mammary artery spasm. He GW, et al. **Circulation** 1989 Sep;80(3 Pt 1):1141–50

Concomitant increase in cytosolic free calcium and phosphorylation of myosin light chain by vasoconstrictive hormones in cultured rat vascular smooth muscle cells. Takata S, et al. **Endocrinol Jpn** 1988 Aug;35(4):577–84

Vasoconstrictor-induced heterologous down-regulation of vascular atrial natriuretic peptide receptor. Hirata Y, et al. **Eur J Pharmacol** 1989 May 30;164(3):603–6

Ethanol induces acute pulmonary vasoconstriction in salt-perfused rat lungs. Drummond WH, et al. **Exp Lung Res** 1989 May;15(3):447–58

Agonist-induced polyphosphoinositide breakdown in cultured human endothelial and vascular smooth muscle cells. Shirinsky VP, et al. **Health Psychol** 1988;7 Suppl:61–74

Daily exercise enhances coronary resistance vessel sensitivity to pharmacological activation. DiCarlo SE, et al. **J Appl Physiol** 1989 Jan;66(1):421–8

Microneurographic analysis of thyrotropin-releasing hormone effects on sympathetic outflow in human muscle nerves. Tsunoda S, et al. **J Auton Nerv Syst** 1988 Sep; 23(3):207–11

Noradrenaline-induced constriction of large and small coronary arteries in the anaesthetized dog. Woodman OL. **J Auton Pharmacol** 1989 Feb;9(1):53–61

Reactivity of the canine isolated internal mammary artery, saphenous vein, and coronary artery to constrictor and dilator substances: relevance to coronary bypass graft surgery. He GW, et al. **J Cardiovasc Pharmacol** 1988 Jul; 12(1):12–22

Vasoconstrictor hormones depolarize renal glomerular mesangial cells by activating chloride channels. Kremer SG, et al. **J Cell Physiol** 1989 Jan;138(1):97–105

A cerebral vasoconstrictive effect of some adenosine analogues. A study of adenosine analogues on local cerebral blood flow and glucose utilisation in the rat. McBean DE, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):548–55

Cyclosporine treatment of normal rats produces a rise in blood pressure and decreased renal vascular responses to nerve stimulation, vasoconstrictors and endothelium-dependent dilators. Gerkens JF. **J Pharmacol Exp Ther** 1989 Sep;250(3):1105–12

Pharmacological properties of the receptor(s) involved in the 5-hydroxytryptamine-induced contraction of the feline middle cerebral artery. Hamel E, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):879–89

Effects of exogenous vasoconstrictors on coronary vascular resistance and prostacyclin production of the quiescent heart: the inhibitory effect of aspirin. Lee SL, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):44–9

Vascular reactivities of isolated and perfused human ciliary arteries. Ohkubo H, et al. **Jpn J Ophthalmol** 1988; 32(4):450–6

The endothelium-derived vasoconstrictor peptide endothelin inhibits renin release in vitro. Matsumura Y, et al. **Life Sci** 1989;44(2):149–57

Role of the endothelium and arginine peptides on the vaso-motor response of porcine internal mammary artery. Thomas G, et al. **Life Sci** 1989;44(24):1823–30

Effects of vasoactive agents on isolated human umbilical arteries in preeclamptic women treated with magnesium sulfate: a preliminary report. Handwerker SM, et al. **Magnesium** 1989;8(1):1–10

The role of endothelin in the pathogenesis of vasospasm following subarachnoid haemorrhage. Ide K, et al. **Neurol Res** 1989 Jun;11(2):101–4

The reaction of cerebral arteries to non-ionic contrast media during cerebral angiography. Nakstad PH. **Neuroradiology** 1989;31(3):247–9

Adrenergic neuromodulation by endothelin in guinea pig pulmonary artery. Wiklund NP, et al. **Neurosci Lett** 1989 Jul 3;101(3):269–73

Cholinergic neuromodulation by endothelin in guinea pig ileum. Wiklund NP, et al. **Neurosci Lett** 1989 Jul 3; 101(3):342–6

Positive chronotropic effects of endothelin, a novel endothelium-derived vasoconstrictor peptide. Ishikawa T, et al. **Pflugers Arch** 1988 Nov;413(1):108–10

Blunted responses to vasoconstrictors in mesenteric vasculature but not in portal vein of spontaneously hypertensive rats treated with relaxin. Massicotte G, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):254–9

Differential vasoconstrictor and vasodilator responses in the proximal and distal human coronary arteries. Stupecky GL, et al. **Proc West Pharmacol Soc** 1988;31:319–21

12-Hydroperoxyeicosatetraenoic acid (12-HPETE) and 15-HPETE stimulate melatonin synthesis in rat pineals. Sakai K, et al. **Prostaglandins** 1988 Jun;35(6):969–76

Modulation of renal hemodynamics by renal eicosanoids during vasopressor infusions in man. Lebel M, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jan; 35(1):41–9

Vascular "sphincter" and microangioarchitecture in the central nervous system: constriction of intraparenchymal blood vessels following a treatment of vasoconstrictive neurotransmitter. Nakai K, et al. **Scanning Microsc** 1989 Mar;3(1):337–41

Intracavernous injection of vasoactive drugs in the rabbit. Stackl W, et al. **Urol Res** 1988;16(6):455–8

[Selective augmenting effect of oxy-Hb on the contractions of cerebral arteries elicited by various vasoactive substances] Tsuiki K. **No Shinkei Geka** 1988 Sep; 16(10):1155–62 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

A novel peptide vasoconstrictor, endothelin, is produced by vascular endothelium and modulates smooth muscle Ca2+ channels. Yanagisawa M, et al. **J Hypertens Suppl** 1988 Dec;6(4):S188–91

THERAPEUTIC USE

Vasopressor therapy for hypotension due to epidural anesthesia for cesarean section. Ramanathan S, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):559–65

Somatostatin analogue improves survival in conscious cirrhotic rats subjected to gastrointestinal bleeding. Cerini R, et al. **Clin Sci** 1989 Jul;77(1):7–9

Therapeutic progress in intensive care—rational use of vasoactive and inotropic drugs in the intensive care unit. Clapham MC, et al. **J Clin Pharm Ther** 1989 Apr; 14(2):87–102 (10 ref.)

TOXICITY

Toxic mussels and okadaic acid induce rapid hypersecretion in the rat small intestine. Edebo L, et al. **APMIS** 1988 Nov; 96(11):1029–35

VASOCONSTRICTOR AGENTS, NASAL

ADMINISTRATION & DOSAGE

SCH 434: a new antihistamine/decongestant for seasonal allergic rhinitis. Storms WW, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):1083–90

How to stop a nosebleed. Petruzzelli GJ, et al. **Postgrad Med** 1989 Sep 15;86(4):44–6, 51, 55–6

ADVERSE EFFECTS

Use of nasal preparations and the incidence of sinonasal cancer. Strader CH, et al. **J Epidemiol Community Health** 1988 Sep;42(3):243–8

PHARMACOLOGY

Use of pharmacologic decongestion in the generation of rhinomanometric norms for the nasal airway. Jessen M, et al. **Am J Otolaryngol** 1988 Nov-Dec;9(6):336–40

THERAPEUTIC USE

Predicting the outcome of submucosal diathermy to the inferior turbinates. Jones AS, et al. **Clin Otolaryngol** 1989 Feb;14(1):41–4

VASODILATION

Is vasodilatation following dorsal column stimulation mediated by antidromic activation of small diameter afferents? Linderoth B, et al. **Acta Neurochir Suppl (Wien)** 1989;46:99–101

Cerebrovascular response to elevation of ventricular pressure. Kato Y, et al. **Acta Neurochir (Wien)** 1989; 98(3-4):184–8

Vagally mediated vasodilatation by motor and sensory nerves in the tracheal and bronchial circulation of the pig. Matran R, et al. **Acta Physiol Scand** 1989 Jan;135(1):29–37

Temperature-dependent interaction between vasoconstrictor and vasodilator mechanisms in human skin. Oberle J, et al. **Acta Physiol Scand** 1988 Apr;132(4):459–69

Prostacyclin, endothelium-derived relaxing factor and vasodilatation. Siegel G, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:267–70

Neurogenic inflammation in the skin of the rabbit. Lynn B, et al. **Agents Actions** 1988 Dec;25(3-4):228–30

Maximal coronary vasodilator capacity of orthotopic heart transplants in patients with and without rejection. Nitenberg A, et al. **Am J Cardiol** 1989 Sep 1;64(8):513–8

Effect of the venodilated state on sympathetic-induced

venoconstriction in normal subjects. Sumner A, et al. **Am J Cardiol** 1989 Apr 15;63(13):973–6

Changes in peripheral venous tone before the onset of hypertension in women with gestational hypertension. Pickles CJ, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):678–80

Distribution of perfusate flow during vasodilation in isolated guinea pig heart. Gorman MW, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H297–301

Effects of renal artery pressure on interstitial pressure and Na excretion during renal vasodilation. Granger JP, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F828–33

Adenosine–induced hyperemia attenuates myocardial ischemia in coronary microembolization in dogs. Hori M, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H244–51

Flow–mediated dilation attenuates constriction of large coronary arteries to serotonin. Lamping KG, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1317–24

Impairment of endothelium–dependent dilatation of cerebral arterioles during diabetes mellitus. Mayhan WG. **Am J Physiol** 1989 Mar;256(3 Pt 2):H621–5

Reflex control of mesenteric vein diameter and pressure in situ in rabbits. Ozono K, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 2):H1066–72

Oxygen free radicals abolish endothelium–dependent relaxation in diabetic rat aorta. Pieper GM, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H825–33

Conduction of vasomotor responses in arterioles: a role for cell–to–cell coupling? Segal SS, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H838–45

Vasopressin–induced pulmonary vasodilation in rats. Walker BR, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H415–22

Anaphylactoid reactions to vascular graft material presenting with vasodilation and subsequent disseminated intravascular coagulation. Roizen MF, et al. **Anesthesiology** 1989 Sep;71(3):331–8

Heat exchange through cutaneous vasodilation after atropine treatment in a cool environment. Kolka MA, et al. **Aviat Space Environ Med** 1989 Jan;60(1):29–33

Characterization and biological significance of endothelium–derived relaxing factor. Moncada S, et al. **Biochem Soc Trans** 1988 Aug;16(4):484–6 (30 ref.)

Metabolic vasodilatation: the role of adenosine. Newby AC. **Biochem Soc Trans** 1988 Aug;16(4):479–80 (15 ref.)

Training to vasodilate in a cooling environment: a valid treatment for Raynaud's phenomenon? Stambrook M, et al. **Biofeedback Self Regul** 1988 Mar;13(1):9–23

Endothelium–dependent relaxant effect of thrombin on isolated pig coronary arteries. Glusa E. **Biomed Biochim Acta** 1988;47(10–11):S67–70

Changes in vascular reactivity in experimental diabetic rats: comparison with hypothyroid rats. Takiguchi Y, et al. **Blood Vessels** 1988;25(5):250–60

Acetylcholine induces vasodilatation in the rabbit isolated heart through the release of nitric oxide, the endogenous nitrovasodilator. Amezcua JL, et al. **Br J Pharmacol** 1988 Nov;95(3):830–4

Endothelium–derived relaxing factor and the effects of acetylcholine and histamine on resistance blood vessels. Bhardwaj R, et al. **Br J Pharmacol** 1988 Nov;95(3):835–43

Effect of diabetes on metabolic coronary dilatation in the rat. Durante W, et al. **Cardiovasc Res** 1989 Jan;23(1):40–5

Effect of coronary sinus occlusion on coronary flow, resistance, and zero flow pressure during maximum vasodilatation in swine. Pantely GA, et al. **Cardiovasc Res** 1988 Feb;22(2):79–86

Persistence of subendocardial perfusion after subtotal coronary embolisation. Pelosi G, et al. **Cardiovasc Res** 1988 Feb;22(2):113–21

Effects of respiration and vasodilation on venous volume in animals and man, as measured with an impedance catheter. Ferguson JJ 3d, et al. **Cathet Cardiovasc Diagn** 1989 Jan; 16(1):25–34

Flow–dependent dilation in a resistance artery still occurs after endothelium removal. Bevan JA, et al. **Circ Res** 1988 Nov;63(5):980–5

Reactive oxygen metabolites relax the lamb ductus arteriosus by stimulating prostaglandin production. Clyman RI, et al. **Circ Res** 1989 Jan;64(1):1–8

Coronary pressure–flow relations in hypertensive left ventricular hypertrophy. Comparison of intact autoregulation with physiological and pharmacological vasodilation in the dog. Jeremy RW, et al. **Circ Res** 1989 Jul;65(1):224–36

Impaired canine coronary vasodilator response to acetylcholine and bradykinin after occlusion–reperfusion. Mehta JL, et al. **Circ Res** 1989 Jan;64(1):43–54

Characteristics of flow–mediated brachial artery vasodilation in human subjects. Sinoway LI, et al. **Circ Res** 1989 Jan; 64(1):32–42

Atherosclerosis impairs flow–mediated dilation of coronary arteries in humans. Cox DA, et al. **Circulation** 1989 Sep; 80(3):458–65

Flow–dependent coronary artery dilatation in humans. Drexler H, et al. **Circulation** 1989 Sep;80(3):466–74

Direct vasoconstriction and endothelium–dependent vasodilation. Mechanisms of acetylcholine effects on coronary flow and arterial diameter in patients with nonstenotic coronary arteries. Hodgson JM, et al. **Circulation** 1989 May;79(5):1043–51

Coronary vasodilator reserve after human orthotopic cardiac transplantation. McGinn AL, et al. **Circulation** 1988 Nov; 78(5 Pt 1):1200–9

Severe impairment of coronary reserve during rejection in patients with orthotopic heart transplant. Nitenberg A, et al. **Circulation** 1989 Jan;79(1):59–65

Evidence for cholinergically mediated vasodilation at the beginning of isometric exercise in humans. Sanders JS, et al. **Circulation** 1989 Apr;79(4):815–24

Presynaptic inhibition of sympathetic fibers participating in vasodilatation in response to K+–induced contraction of frog skeletal muscle. Fuglsang A, et al. **Clin Invest Med** 1988 Oct;11(5):357–65

Vasodilatation in human skin induced by low–amplitude high–frequency vibration. Skoglund CR. **Clin Physiol** 1989 Aug;9(4):361–72

Vascular and renal prostaglandins as counter–regulatory systems in heart failure. Dzau VJ. **Eur Heart J** 1988 Jun; 9 Suppl H:15–9 (37 ref.)

Haemorheologic studies in patients with reduced coronary vasodilator capacity but normal coronary angiogram (syndrome X). Neumann FJ, et al. **Eur Heart J** 1989 Jun; 10(6):509–13

Habituation of vasodilatation in the calf elicited by repeated sensory stimulation in man. Zbrożyna AW, et al. **Eur J Appl Physiol** 1988;58(3):284–90

Does vasodilatation promote ascites formation and portal hypertension? [letter; comment] Thornton JR, et al. **Hepatology** 1989 May;9(5):797–8. **Comment on:** Hepatology 1988 Sep–Oct;8(5):1151–7

Resistance to blood flow at maximal vasodilation [letter; comment] Distler A, et al. **Hypertension** 1989 Jul;14(1):115 **Comment on:** Hypertension 1988 Dec;12(6):635–7

Resistance to blood flow at maximal vasodilatation [letter] [see comments] Folkow B. **Hypertension** 1988 Dec; 12(6):635–7. **Comment in:** Hypertension 1989 Jul;14(1):115

The dilation of arterioles in frog submaxillaris muscle caused by visible light. Sonina RS, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):143–58

Distensibility of single capillaries and venules in the rat and frog mesentery. Swayne GT, et al. **Int J Microcirc Clin Exp** 1989 Feb;8(1):25–42

Pulmonary vasodilation with structurally altered pulmonary vessels and pulmonary hypertension. Orton EC, et al. **J Appl Physiol** 1988 Dec;65(6):2459–67

12(R)–hydroxyeicosatrienoic acid: a vasodilator cytochrome P–450–dependent arachidonate metabolite from the bovine corneal epithelium. Murphy RC, et al. **J Biol Chem** 1988 Nov 15;263(32):17197–202

Limited maximal vasodilator capacity of forearm resistance vessels in hypertrophic cardiomyopathy. Takeshita A, et al. **J Cardiol** 1987;17 Suppl 16:89–90

Endothelium–dependent dilation of feline cerebral arteries: role of membrane potential and cyclic nucleotides. Brayden JE, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):256–63

Fetal pulmonary vasodilation and vasoreactivity during metabolic acidaemia. Accurso FJ, et al. **J Dev Physiol** 1988 Oct;10(5):411–21

Flow–dependent vasodilation of the brachial artery in essential hypertension: preliminary report. Laurent S, et al. **J Hypertens Suppl** 1988 Dec;6(4):S182–4

Non–invasive measurement of internal diameter of peripheral arteries during the cardiac cycle. Mooser V, et al. **J Hypertens Suppl** 1988 Dec;6(4):S179–81

The effect of atherosclerosis on endothelium–dependent relaxation in the aorta and intracranial arteries of rabbits. Kanamaru K, et al. **J Neurosurg** 1989 May;70(5):793–8

Nonneurogenic relaxation to field stimulation in coronary arteries. Kalsner S, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):461–9

Possible involvement of 5–lipoxygenase products in the generation of endothelium–derived relaxing factor. Minami Y, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1055–60

Calcitonin gene–related peptide and vasodilator nerves in large cerebral arteries of cats. Saito A, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):455–62

Gastric vasodilatation and vasoactive intestinal peptide output in response to vagal stimulation in the dog. Ito S, et al. **J Physiol (Lond)** 1988 Oct;404:669–82

Surface–induced hypothermia: effects on coronary blood flow autoregulation and vascular reserve. London MJ, et al. **J Surg Res** 1988 Nov;45(5):481–95

Probing of the canine mammary artery damages endothelium and impairs vasodilation resulting from prostacyclin and endothelium–derived relaxing factor. Johns RA, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):252–8

Endothelial injury and vascular dysfunction associated with the Fogarty balloon catheter. Barone GW, et al. **J Vasc Surg** 1989 Mar;9(3):422–5

Neurogenic vasodilation in the rat hairy skin measured using a laser Doppler flowmeter. Low A, et al. **Life Sci** 1989; 45(1):49–57

Vascular response in diabetes with neuropathic foot lesions [letter] Stamler JS, et al. **N Engl J Med** 1988 Oct 27; 319(17):1155

Vagal vasodilatory mechanisms in the pig bronchial circulation preferentially involves sensory nerves. Martling CR, et al. **Neurosci Lett** 1989 Jan 30;96(3):306–11

Relationship between extraluminal oxyhemoglobin and endothelium–dependent vasodilatation in isolated perfused canine internal carotid arteries. Tanaka Y, et al. **Neurosurgery** 1988 Aug;23(2):158–61

Vasoactive intestinal peptide evokes endothelium–dependent relaxation and cyclic AMP accumulation in rat aorta. Sata T, et al. **Peptides** 1988 Jul–Aug;9(4):853–8

The vasodilator role of adenosine. Collis MG. **Pharmacol Ther** 1989;41(1–2):143–62 (171 ref.)

Cyclic GMP and mechanisms of vasodilation. Lincoln TM. **Pharmacol Ther** 1989;41(3):479–502 (223 ref.)

Identification of arginine as a precursor of endothelium–derived relaxing factor. Sakuma I, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8664–7

Molecular mechanisms of endothelium–mediated vasodilation. Fiscus RR. **Semin Thromb Hemost** 1988;14 Suppl:12–22 (115 ref.)

Recovery of impaired endothelium–dependent relaxation after fluid–percussion brain injury in cats. Ellison MD, et al. **Stroke** 1989 Jul;20(7):911–7

Role of the cyclic–AMP system in cerebral vasodilation [letter] Leblanc R, et al. **Stroke** 1989 Mar;20(3):428

Endothelium dependence of dilation of pial arterioles in mouse brain by calcium ionophore. Rosenblum WI, et al. **Stroke** 1988 Nov;19(11):1379–82

Operative venodilation: a previously unsuspected factor in the cause of postoperative deep vein thrombosis. Comerota AJ, et al. **Surgery** 1989 Aug;106(2):301–8; discussion 308–9

[Endothelial vasodilating factor] Henderson AH. **Cas Lek Cesk** 1988 Jul 29;127(31):965–8 (37 ref.) (Eng. Abstr.) (Cze)

[Flow–dependent vasodilation of the brachial artery in the normotensive and essential hypertensive patient] Brunel P, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:71–4 (Eng. Abstr.) (Fre)

[Abnormalities of the peripheral circulation and tolerance to exertion of patients with heart failure] Cohen–Solal A, et al. **Arch Mal Coeur** 1989 Apr;82(4):593–8 (49 ref.) (Eng. Abstr.) (Fre)

[Increased vasodilation response to the stimulation of low pressure mechanoreceptors in borderline hypertension] Girerd X, et al. **Arch Mal Coeur** 1989 Feb;82(2):231–5 (Eng. Abstr.) (Fre)

[Characteristics of peripheral rheograms following thermal provocation in normal and pathologic pregnancy] Feiks A, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):647–50 (Eng. Abstr.) (Ger)

[Abnormal coronary response to vasomotor stimuli: analogies between variant angina and X syndrome] Pozzati A, et al. **Cardiologia** 1989 May;34(5):411–8 (Eng. Abstr.) (Ita)

[Reflex control of the nasal blood vessels—relationships between nasal blood vessels and lung receptors] Nishihira S. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):865–71 (Eng. Abstr.) (Jpn)

[EDRF—endothelium–derived relaxant factor: its properties and biological significance] Pietraszek MH, et al. **Pol Tyg Lek** 1988 Jun 13;43(24):763–4 (Eng. Abstr.) (Pol)

[Autoregulation and dilatory reserves of the rat coronary arteries upon limiting their motor activity] Bozhko AP, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):522–8 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Allergen challenge induces vasodilatation in pig bronchial circulation via a capsaicin–sensitive mechanism. Alving K, et al. **Acta Physiol Scand** 1988 Dec;134(4):571–2

Sympathetic vascular control of the pig nasal mucosa (2): Reserpine–resistant, non–adrenergic nervous responses in relation to neuropeptide Y and ATP. Lacroix JS, et al. **Acta Physiol Scand** 1988 Jun;133(2):183–97

Vasodilator responses to alpha–human–atrial natriuretic peptide in isolated omental and pulmonary arteries from rabbit and man. Lindberg F, et al. **Acta Physiol Scand** 1988 Nov;134(3):391–7

Regional differences in the regulation of contraction–relaxation machinery of vascular smooth muscle. Kovach AG, et al. **Adv Exp Med Biol** 1989; 248:601–9

Involvement of prostaglandins in arteriolar vasodilation to peroxides. Wolin MS, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:281–4

Potential mechanism of pulmonary arterial relaxation and guanylate cyclase activation by 15–hydroperoxyeicosatetraenoic acid. Wolin MS, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:285–8

Comparison of venodilatory effects of nitroglycerin spray and tablets in healthy volunteers. Fanelli C, et al. **Am J Cardiol** 1989 Mar 1;63(9):637–9

Aging reduces venous distensibility and the venodilatory response to nitroglycerin in normal subjects. Gascho JA, et al. **Am J Cardiol** 1989 May 15;63(17):1267–70

Vasodilation and reduction in forearm vascular resistance after acute administration of dilevalol. Lambeth MA, et al. **Am J Cardiol** 1989 Jun 5;63(19):17I–20I

Fetal vascular responses to prostacyclin. Parisi VM, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):871–6; discussion 876–8

Lipoxins A4 and B4 dilate cerebral arterioles of newborn pigs. Busija DW, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H468–71

Alpha 2–adrenoceptor stimulation can augment coronary vasodilation maximally induced by adenosine in dogs. Hori M, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H132–40

Inhibition by arachidonate of cerebral arteriolar dilation from acetylcholine. Kontos HA, et al. **Am J Physiol** 1989 Mar;

256(3 Pt 2):H665–71
Peripheral vasodilatation induced by a vasopressin analogue with selective V2–agonism in dogs. Liard JF.
Am J Physiol 1989 Jun;256(6 Pt 2):H1621–6
Local and systemic estradiol–17 beta: effects on uterine and systemic vasodilation. Magness RR, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E536–42
Independent blockade of cerebral vasodilation from acetylcholine and nitric oxide. Marshall JJ, et al.
Am J Physiol 1988 Oct;255(4 Pt 2):H847–54
Effect of inosine on pial arterioles: potentiation of adenosine–induced vasodilation. Ngai AC, et al.
Am J Physiol 1989 Mar;256(3 Pt 2):H603–6
Propagation of vasomotor responses coordinates arteriolar resistances. Segal SS, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H832–7
Free radicals inhibit endothelium–dependent dilation in the coronary resistance bed. Stewart DJ, et al.
Am J Physiol 1988 Oct;255(4 Pt 2):H765–9
Angiotensin II–induced relaxation of fowl aorta. Yamaguchi K, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R591–9
Local anesthetics inhibit endothelium–dependent vasodilation. Johns RA. **Anesthesiology** 1989 May; 70(5):805–11
The interaction of sodium nitroprusside, hypotension, and isoflurane in determining cerebral vasculature effects. Michenfelder JD, et al. **Anesthesiology** 1988 Dec; 69(6):870–5
Resolution of experimental microvascular vasoconstriction in rats by topical application of lidocaine hydrochloride in varying concentrations. Beekman WH, et al.
Ann Plast Surg 1988 Dec;21(6):570–5
Vasodilatory properties in vascular smooth muscle of the calcium antagonist NB–818 compared to nicardipine and nimodipine. Nishikibe M, et al.
Arch Int Pharmacodyn Ther 1989 Jan–Feb;297:98–111
Comparative vasodilator effects of magnesium salts on rat mesenteric arterioles and venules. Nishio A, et al.
Arch Int Pharmacodyn Ther 1989 Mar–Apr;298:139–63
Stereospecificity of beta–adrenoceptor blockade and renal vasodilatation by tertatolol. Smits JF, et al.
Arch Int Pharmacodyn Ther 1989 Mar–Apr;298:164–71
Endothelium–dependent relaxations to histamine in the rat common carotid, renal and cranial mesenteric artery. Krstić MK, et al. **Arch Int Physiol Biochim** 1988 Dec; 96(5):197–200
Positive inotropic and vasodilatory actions of saterinone in vivo. Armah BI, et al. **Arzneimittelforschung** 1988 Sep; 38(9):1303–9
Vasodilating effect of the new beta–blocker tilisolol hydrochloride in humans. Imaizumi T, et al.
Arzneimittelforschung 1988 Sep;38(9):1342–4
Vasodilating effects of the new calcium antagonist benidipine hydrochloride in anesthetized dogs and cats. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1707–12
Improvement of reduced coronary vasodilatory response during reactive hyperemia by diltiazem. Saito D, et al.
Arzneimittelforschung 1989 Apr;39(4):440–5
L–arginine availability determines the duration of acetylcholine–induced systemic vasodilation in vivo. Aisaka K, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):710–7
Staurosporine, a protein kinase C inhibitor, attenuates Ca2+–dependent stretch–induced vascular tone. Laher I, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):58–62
Neither nitric oxide nor nitroglycerin accounts for all the characteristics of endothelially mediated vasodilatation of pig coronary arteries. Bény JL, et al. **Blood Vessels** 1988; 25(6):308–11
Selective impairment of endothelium–dependent relaxation by oxygen–derived free radicals: distinction between receptor versus nonreceptor mediators. Pieper GM, et al.
Blood Vessels 1989;26(1):44–7
Coronary artery calibre after direct intra–arterial infusion of epoprostenol (prostacyclin). Wilson J, et al. **Br Heart J** 1988 Nov;60(5):373–6
The potassium channel opening drug cromakalim produces arterioselective vasodilation in the upper limbs of healthy volunteers. Webb DJ, et al. **Br J Clin Pharmacol** 1989 Jun; 27(6):757–61
Age–associated decrease in histamine–induced vasodilation may be due to reduction of cyclic GMP formation. Moritoki H, et al. **Br J Pharmacol** 1988 Dec;95(4):1015–22
Characterization of histamine receptors in isolated human cerebral arteries. Ottosson A, et al. **Br J Pharmacol** 1988 Jul;94(3):901–7
Effect of phenobarbitone pretreatment upon endothelium–dependent relaxation to acetylcholine in rat superior mesenteric arterial bed. Randall MD, et al.
Br J Pharmacol 1988 Jul;94(3):977–83
A specific inhibitor of nitric oxide formation from L–arginine attenuates endothelium–dependent relaxation. Rees DD, et al. **Br J Pharmacol** 1989 Feb;96(2):418–24
Vasodilator actions of acetylcholine, A23187 and bradykinin in the guinea–pig isolated perfused heart are independent of prostacyclin. Stewart AG, et al. **Br J Pharmacol** 1988 Oct;95(2):379–84
A comparison of vasodilator activity of agents activating cyclic nucleotides with those inhibiting their metabolism in rabbit isolated ear artery. Wood LM, et al.
Br J Pharmacol 1989 Mar;96(3):718–24
Renal vasodilatation after central administration of galanin. Gardiner SM, et al. **Brain Res** 1988 Aug 16;458(1):176–9
Effect of cooling and warming on the vasodilator response of the isolated dog saphenous artery to acetylcholine. de Moura RS, et al. **Braz J Med Biol Res** 1988;21(1):157–9
Heterogeneity in responses of isolated monkey arteries and veins to atrial natriuretic peptide. Kawai Y, et al.
Can J Physiol Pharmacol 1989 Apr;67(4):326–30
Vasorelaxant effects of and receptors for atrial natriuretic peptides in the mesenteric artery and aorta of the rat. St–Louis J, et al. **Can J Physiol Pharmacol** 1988 Jul; 66(7):951–6
Nitric oxide–induced vasodilation of organic nitrate–tolerant rabbit aorta. Slack CJ, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1344–6
Adenosine deaminase attenuates canine coronary vasodilatation during regional non–ischaemic myocardial hypoxia. Merrill GF, et al. **Cardiovasc Res** 1988 May; 22(5):345–50
Effects of atrial natriuretic peptide on transmural blood flow and reactive hyperemia in the presence of flow–limiting coronary stenosis in the awake dog: evidence for dilation of the intramural vasculature. Chu A, et al. **Circ Res** 1989 Mar;64(3):600–6
Effects of alpha–human atrial natriuretic peptide on the interrelationship of arterial pressure, aortic nerve activity, and aortic diameter. Hirooka Y, et al. **Circ Res** 1988 Dec; 63(6):987–96
Substance P dilates epicardial coronary arteries and increases coronary blood flow in humans. Crossman DC, et al.
Circulation 1989 Sep;80(3):475–84
Biphasic response of coronary arterial diameter to intracoronary ergonovine. Mohri M, et al. **Clin Cardiol** 1988 Oct;11(10):710–4
Calcium blocker lacidipine and carotid arteriolar vasodilation in healthy volunteers. Safar M, et al.
Clin Pharmacol Ther 1989 Jul;46(1):94–8
Effect of potassium supplementation on blood pressure and vasodilator mechanisms in spontaneously hypertensive rats. Barden A, et al. **Clin Sci** 1988 Nov;75(5):527–34
Responsiveness of superficial hand veins to adrenergic stimuli in patients with cystic fibrosis. Eichler HG, et al.
Clin Sci 1989 Mar;76(3):283–7
Endothelium–dependent relaxation in isolated pulmonary arteries from rabbits exposed to hyperoxia. Obara H, et al. **Crit Care Med** 1989 Aug;17(8):780–5
Effect of vaso–active intestinal polypeptide on systemic and splanchnic haemodynamics: role in vasodilation following mesenteric ischaemia. Somjen G, et al. **Digestion** 1988; 40(3):133–43
Vasodilating effects of carbon monoxide. Lin H, et al.
Drug Chem Toxicol 1988;11(4):371–85
Arterial dilatation and venous constriction induced by serotonin in the elderly. Blauw GJ, et al. **Drugs** 1988;36 Suppl 1:74–7
Sustained dilatation of large coronary artery by alpha–human atrial natriuretic peptide in conscious dogs: a comparison with nitroglycerin. Adachi H, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):189–96
Ciclosporin A inhibits endothelium–dependent vasodilatation and vascular prostacyclin production. Bossaller C, et al.
Eur J Pharmacol 1989 Jun 8;165(1):165–9
Adenosine 5'–triphosphate, adenosine and endothelium–derived relaxing factor in hypoxic vasodilatation of the heart. Hopwood AM, et al.
Eur J Pharmacol 1989 Jun 20;165(2–3):323–6
Effects of sulfhydryl–containing compounds on nitroglycerin–induced coronary dilatation in isolated working rat hearts. Hütter J, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):215–22
VIP modulates substance P–induced plasma extravasation in vivo. Khalil Z, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):281–7
Muscarinic receptor subtypes mediating vasodilation in the pulmonary artery. McCormack DG, et al.
Eur J Pharmacol 1988 Dec 13;158(3):293–7
The effects of adenosine triphosphate and related purines on arterial resistance vessels in vitro and in vivo. Taylor EM, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):121–33
Streptozotocin: a nitric oxide carrying molecule and its effect on vasodilation. Thomas G, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):279–80
Regional vasodilation is a prominent feature of the haemodynamic response to endothelin in anaesthetized, spontaneously hypertensive rats. Wright CE, et al.
Eur J Pharmacol 1988 Oct 11;155(1–2):201–3
Dirofilaria immitis: alteration of endothelium–dependent relaxation in the in vivo canine femoral artery. Kaiser L, et al. **Exp Parasitol** 1989 Jul;69(1):9–15
The effect of a bradykinin antagonist on vasodilator responses with particular reference to the submandibular gland of the cat. Barton S, et al. **Experientia** 1988 Oct 15; 44(10):897–8
High flow attenuates relaxation by acetylcholine in isolated perfused canine femoral arteries. Bell DR, et al.
Heart Vessels 1988;4(1):14–8
Arterial dilation and reduced wave reflection. Benefit of dilevalol in hypertension. Kelly R, et al. **Hypertension** 1989 Jul;14(1):14–21
High potassium diet augments endothelium–dependent relaxations in the Dahl rat. Raij L, et al. **Hypertension** 1988 Dec;12(6):562–7
Vasodilatation and vasoconstriction in the rabbit isolated aorta. Effects of ioxilan, iohexol, and diatrizoate. Schneider KM, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S150–2
Digital perfusion with tibial nerve block. A comparative study of eight local anesthetics. Green DR, et al.
J Am Podiatr Med Assoc 1988 Oct;78(10):495–511
Effects of posture on the venodilatory response to nitroglycerin. Gascho JA, et al. **J Appl Physiol** 1989 Jun; 66(6):2585–8
Methylene blue selectively inhibits pulmonary vasodilator responses in cats. Hyman AL, et al. **J Appl Physiol** 1989 Mar;66(3):1513–7
Endothelin produces pulmonary vasoconstriction and systemic vasodilation. Lippton HL, et al.
J Appl Physiol 1989 Feb;66(2):1008–12
Pinacidil–induced vascular relaxation: comparison to other vasodilators and to classical mechanisms of vasodilation. Cohen ML, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S5–9
Effect of gamma–aminobutyric acid (GABA) on vasodilation in resistance–sized arteries isolated from the monkey, rabbit, and rat. Lai FM, et al. **J Cardiovasc Pharmacol** 1988 Sep;12(3):372–6
Long–term renal vasodilator effect of the beta–adrenoceptor blocker tertatolol in conscious spontaneously hypertensive rats. Nievelstein HN, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):252–4
Endothelin–1 causes vasoconstriction and vasodilation in the blood perfused liver of the dog. Withrington PG, et al.
J Cardiovasc Pharmacol 1989;13 Suppl 5:S209–10
Reoxygenation and calcium–induced cerebroarterial contractions as affected by vasodilator agents. Bian K, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):808–15
Effect of hemoglobin on neurogenic responses and cholinergic parameters in porcine cerebral arteries. Linnik MD, et al. **J Cereb Blood Flow Metab** 1989 Apr;9(2):219–25
Relaxation of rat vascular muscle by peripheral benzodiazepine modulators. Erne P, et al. **J Clin Invest** 1989 Aug;84(2):493–8
Vasopressin–mediated forearm vasodilation in normal humans. Evidence for a vascular vasopressin V2 receptor. Hirsch AT, et al. **J Clin Invest** 1989 Aug;84(2):418–26
Biphasic forearm vascular responses to intraarterial arginine vasopressin. Suzuki S, et al. **J Clin Invest** 1989 Aug; 84(2):427–34
Forskolin dilates the maternal ovine placental vascular bed. Rankin JH, et al. **J Dev Physiol** 1988 Jun;10(3):201–9
The effect of local angiotensin converting enzyme inhibition on the action of atrial natriuretic peptide in the human forearm. Cockcroft JR, et al. **J Hum Hypertens** 1989 Feb; 3(1):49–52
The vasodilator effect of human atrial natriuretic factor (99–126) on human omental arteries. Bruschi G, et al.
J Hypertens Suppl 1988 Dec;6(4):S333–5
Capsaicin–sensitive vasodilatatory mechanisms in the rat substantia nigra and striatum. Hajós M, et al.
J Neural Transm 1988;74(3):129–39
Vasorelaxant effects of cromakalim in rats are mediated by glibenclamide–sensitive potassium channels. Cavero I, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1261–8
Antagonism of acetylcholine–mediated relaxation of rabbit pulmonary arteries by phorbol myristate acetate. Cherry PD, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):542–6
Demonstration of specific dopamine–1 receptor–mediated coronary vasodilation in the anesthetized dog. Kopia GA, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):215–21
Relaxant effect of N–formyl–methionyl–leucyl–phenylalanine on rabbit vascular strips. Laplante C, et al.
J Pharmacol Exp Ther 1989 Feb;248(2):774–80
Interactions of light and sodium nitrite in producing relaxation of rabbit aorta. Matsunaga K, et al.
J Pharmacol Exp Ther 1989 Feb;248(2):687–95
Adenosine does not mediate the pulmonary vasodilator response of adenosine 5'–triphosphate in the feline pulmonary vascular bed. Neely CF, et al.
J Pharmacol Exp Ther 1989 Jul;250(1):170–6
Inhibitory actions of a novel benzothiazepine derivative, TA3090, on the electrical and mechanical responses of the rabbit mesenteric artery. Nishiye E, et al.
J Pharmacol Exp Ther 1989 Sep;250(3):1079–86
Endothelium–dependent contraction and –independent relaxation induced by adenine nucleotides and nucleoside in the canine basilar artery. Shirahase H, et al.
J Pharmacol Exp Ther 1988 Dec;247(3):1152–7
Vasorelaxing effects of prostaglandin I2 on the canine basilar and coronary arteries. Shirahase H, et al.
J Pharmacol Exp Ther 1989 Feb;248(2):769–73
Glyburide blocks the relaxation response to BRL 34915 (cromakalim), minoxidil sulfate and diazoxide in vascular smooth muscle. Winquist RJ, et al.
J Pharmacol Exp Ther 1989 Jan;248(1):149–56
Factors influencing vascular and natriuretic responses to ANP. Torikai S. **Jpn Circ J** 1988 Dec;52(12):1450–2
Vasodilator actions of flunarizine in isolated dog cerebral and extracerebral arteries. Bian K, et al.
Jpn J Pharmacol 1989 Jan;49(1):83–94
A study on the hypotensive mechanism of pinacidil: relationship between its vasodilating effect and intracellular Ca2+ levels. Nakajima S, et al. **Jpn J Pharmacol** 1989 Feb; 49(2):205–13
Effects of DN–9693, a selective inhibitor of cyclic AMP

phosphodiesterase, in isolated and perfused canine large coronary arteries. Nakane T, et al. **Jpn J Pharmacol** 1988 Dec;48(4):507–9

Synchronous facial vascular vasodilation and salivatory response to atropine in the parasympathetically denervated human salivary parotid gland. Levin SL. **Laryngoscope** 1989 Mar;99(3):297–301

Serotonin induced vasodilatation in the human forearm is antagonized by the selective 5–HT3 receptor antagonist ICS 205–930. Blauw GJ, et al. **Life Sci** 1988;43(18):1441–9

Antihypertensive compounds with potent protein kinases inhibitory activity. Hachisu M, et al. **Life Sci** 1989; 44(19):1351–62

Endothelin induces an initial increase in cardiac output associated with selective vasodilation in rats. Hoffman A, et al. **Life Sci** 1989;45(3):249–55

Effect of intermittent exposure and drug–free intervals on the in vitro vascular tolerance to nitroglycerin. Kowaluk E, et al. **Life Sci** 1989;44(17):1157–63

Correlation of lysophosphatidylcholine–induced vs spontaneous relaxation to cyclic GMP levels in rabbit thoracic aorta. Menon NK, et al. **Life Sci** 1989;44(9):611–8

Coronary vasodilatation induced by calcitonin gene–related peptide in the anaesthetised pig. Tippins JR, et al. **Neuropeptides** 1989 Feb–Mar;13(2):95–102

The influence of experimental subarachnoid hemorrhage on the relaxation induced by vasoactive intestinal polypeptide in the cerebral arteries of the rabbit. Tsukahara T, et al. **Neurosurgery** 1989 May;24(5):731–5

Endothelium–mediated coronary dilatation by adenosine does not depend on endothelial adenylate cyclase activation: studies in isolated guinea pig hearts. Newman WH, et al. **Pflugers Arch** 1988 Nov;413(1):1–7

Vascular actions of atrial natriuretic peptide. Mulvany MJ. **Pharmacol Res Commun** 1988 Sep;20 Suppl 3:23–34 (39 ref.)

Inhibitory effects of nitroglycerin on contractile responses to methoxamine and clonidine in isolated rabbit renal and femoral arteries. Ito M, et al. **Pharmacology** 1988; 37(5):293–304

Time–dependent effects of extraluminally–applied oxyhemoglobin and endothelial removal on vasodilator responses in isolated, perfused canine basilar arteries. Tsuji T, et al. **Pharmacology** 1989;38(2):101–12

Lipoxins A4 and B4: comparison of icosanoids having bronchoconstrictor and vasodilator actions but lacking platelet aggregatory activity. Lefer AM, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8340–4

Increased vasodilator responsiveness to BRL 34915 in spontaneously hypertensive versus normotensive rats: contrast with nifedipine. Falotico R, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):179–85

External carotid vasodilation induced by serotonin and indorenate. Hong E, et al. **Proc West Pharmacol Soc** 1988; 31:99–101

Tachykinin–induced vasodilatation in rat skin measured with a laser–Doppler flowmeter: evidence for receptor–mediated effects. Andrews PV, et al. **Regul Pept** 1989 Jun–Jul;25(3):267–75

Diaphragmatic vasodilation elicited by pulmonary C–fiber stimulation. Coast JR, et al. **Respir Physiol** 1989 Mar; 75(3):279–88

Increased skin flap survival and arterial dilation by calcitonin gene–related peptide. A study in the pig. Hedén P, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):11–6

Effect of subarachnoid hemorrhage on calcitonin gene–related peptide–induced relaxation in rabbit basilar artery. Hongo K, et al. **Stroke** 1989 Jan;20(1):100–4

Prolonged exposure to oxyhemoglobin modifies the response of isolated dog middle cerebral arteries to vasoactive substances. Onoue H, et al. **Stroke** 1989 May;20(5):657–63

[Endothelium–derived relaxing factor(s): endogenous nitrates in the circulation?] Lüscher TF, et al. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1724–9 (32 ref.) (Eng. Abstr.) **(Ger)**

[Arterial and venous dilation using nitroglycerin and isosorbide dinitrate during cardiopulmonary bypass] Niimi Y, et al. **Masui** 1988 Dec;37(12):1492–7 (Eng. Abstr.) **(Jpn)**

[Effect of sodium nitroprusside and diazoxide on renal hemodynamics: a study with radioactive microspheres] Monteiro JL, et al. **Arq Bras Cardiol** 1988 May;50(5):315–21 (Eng. Abstr.) **(Por)**

RADIATION EFFECTS

Pulsed ultraviolet laser irradiation produces endothelium–independent relaxation of vascular smooth muscle. Steg PG, et al. **Circulation** 1989 Jul;80(1):189–97

VASODILATOR AGENTS

Magnesium salts exert direct vasodilator effects on rat cremaster muscle microcirculation. Nagai I, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:194–214

Citrus oil: an effective vasodilator in rabbit blood collection [letter] Rao S. **Arch Toxicol** 1989;63(1):79

Hydroxylamine is a vasorelaxant and a possible intermediate in the oxidative conversion of L–arginine to nitric oxide. DeMaster EG, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):527–33

Phosphorylation and dephosphorylation of the natriuretic peptide urodilatin (CDD–/ANP–95–126) and the effect on biological activity. Dörner T, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):830–5

Vasoactive compound effects on autoregulating versus nonautoregulating intestinal and renal circulations in young swine. Buckley NM, et al. **Biol Neonate** 1988;54(1):49–59

Human alpha–calcitonin gene–related peptide (CGRP) is a potent vasodilator in human mesenteric vasculature. Marshall I, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):691–5

Finger clubbing, inflammatory bowel disease, and circulant vasodilators [letter] Olm M, et al. **Dis Colon Rectum** 1989 Feb;32(2):176

Rat endothelin is a vasodilator in the isolated perfused mesentery of the rat. Warner TD, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):325–6

Endothelium–derived relaxing and contracting factors. Furchgott RF, et al. **FASEB J** 1989 Jul;3(9):2007–18 (108 ref.)

The role of potassium channels in vascular relaxation. Proceedings of a symposium on pinacidil. Indianapolis, Indiana, June 25, 1987. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S1–47

The vasodilating effect of atrial natriuretic peptide in normotensive and hypertensive humans. Bolli P, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S75–9 (27 ref.)

Cilazapril and enalapril inhibit local angiotensin I conversion in human veins but lack direct venodilating properties. Eichler HG, et al. **J Cardiovasc Pharmacol** 1989 Aug; 14(2):248–52

Vasodilatory action of amlodipine on rat aorta, pig coronary artery, human coronary artery, and on isolated Langendorff rat heart preparations. Matlib MA, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S50–4

The mechanism for the clonidine–induced coronary artery dilatation in the canine heart. Söhngen W, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):689–700

Effects of sophoramine, an alkaloid from Sophora alopecuroides on isolated dog blood vessels. Bian K, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):167–78

Increased vasodilator response to acetylcholine of renal blood vessels from diabetic rats. Bhardwaj R, et al. **J Pharm Pharmacol** 1988 Oct;40(10):739–42

Hydroxylamine dilates resistance blood vessels of the perfused rat kidney and mesentery. Moore PK, et al. **J Pharm Pharmacol** 1989 Jun;41(6):426–9

S–nitrosocaptopril. II. Effects on vascular reactivity. Cooke JP, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):730–4

S–nitrosocaptopril. I. Molecular characterization and effects on the vasculature and on platelets. Loscalzo J, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):726–9

Effect of vasodilator prostaglandins on the vascular renin–angiotensin system. Saito H, et al. **Life Sci** 1988; 43(19):1557–63

Differential effects of tetrodotoxin on the sialogenous and vasodilator actions of prostaglandin E2 in the dog salivary gland. Taira N, et al. **Life Sci** 1974 Sep 1;15(5):987–93

Nipradilol, a beta–adrenoceptor antagonist having a vasodilatory action, attenuates myocardial acidosis induced by coronary artery occlusion in dogs. Hiro T, et al. **Methods Find Exp Clin Pharmacol** 1989 Jun;11(6):373–8

Novel halogenated dihydropyridine derivatives with high vascular selectivity. Fricke U, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):449–54

A novel vasodilatory peptide from the salivary glands of the sand fly Lutzomyia longipalpis. Ribeiro JM, et al. **Science** 1989 Jan 13;243(4888):212–4

[Negative chronotropic effects of meglumine cyclic adenylate on heart] Jia L, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):421–6 (Eng. Abstr.) **(Chi)**

[Calcitonin gene–related peptide] Wu K. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):57–62 (54 ref.) **(Chi)**

[Studies on the isolation and structures of baohuoside–II, III, IV and V] Li F, et al. **Yao Hsueh Hsueh Pao** 1988; 23(9):672–81 (Eng. Abstr.) **(Chi)**

[Effects of cavinton on isolated basilar arteries of dogs] Lu YQ, et al. **Yao Hsueh Hsueh Pao** 1988 Nov;23(11):817–9 (Eng. Abstr.) **(Chi)**

[The effect of premedication with neurotropic and myotropic vasodilators on the effect of adrenaline in the isolated liver in rabbits. II. Premedication with phenoxybenzamine, papaverine and Palerol] Tiller I, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):513–26 (Eng. Abstr.) **(Cze)**

[The effect of premedication with neurotropic and myotropic vasodilators on the effect of adrenaline in the isolated liver in rabbits. I. Premedication with phenoxybenzamine and papaverine] Tiller I, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):503–12 (Eng. Abstr.) **(Cze)**

[Preparation and in vitro study of suppositories containing No–Spa. I. Significance of choosing the basic substance. Determination of physical parameters of suppositories] Regdon G, et al. **Acta Pharm Hung** 1989 Jan;59(1):23–31 **(Hun)**

[Preparation and in vitro study of suppositories containing No–Spa. II. Determination of release of the active principle by membrane diffusion methods] Regdon G, et al. **Acta Pharm Hung** 1989 Jan;59(1):32–41 (Eng. Abstr.) **(Hun)**

[New inotropic drugs] Presbitero P, et al. **Cardiologia** 1988 Aug;33(8):747–53 (51 ref.) **(Ita)**

[Anti–tachycardiac effect of a direct–acting vasodilator, budralazine] Yoshioka M. **Hokkaido Igaku Zasshi** 1989 May;64(3):255–68 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Comparative acute blood pressure reduction from intravenous fenoldopam mesylate versus sodium nitroprusside in severe systemic hypertension. Bednarczyk EM, et al. **Am J Cardiol** 1989 Apr 15;63(13):993–6

A controlled single–dose study of the efficacy, dose response and duration of action of nicorandil in angina pectoris. Camm AJ, et al. **Am J Cardiol** 1989 Jun 20;63(21):61J–65J

Acute hemodynamic effects of single–dose nicorandil in coronary artery disease. Coltart DJ, et al. **Am J Cardiol** 1989 Jun 20;63(21):34J–39J

Effects of intravenous administration of nicorandil on cardiovascular hemodynamics and left ventricular function. Kambara H, et al. **Am J Cardiol** 1989 Jun 20;63(21):56J–60J

Exercise capacity after single and twice–daily doses of nicorandil in chronic stable angina pectoris. Meany TB, et al. **Am J Cardiol** 1989 Jun 20;63(21):66J–70J

Sustained effect of and lack of development of tolerance to controlled–release isosorbide–5–mononitrate in chronic stable angina pectoris. Wisenberg G, et a.. **Am J Cardiol** 1989 Sep 15;64(10):569–76

Ibopamine: long–term safety study in patients with congestive heart failure. The Italian Ibopamine Working Group. Riva E, et al. **Int J Clin Pharmacol Res** 1989;9(1):21–8

Reappraisal of OP–1206, a prostaglandin E1 derivative in combination with low–flow oxygen inhalation therapy in chronic lung disease. Ishizaki T, et al. **Jpn J Med** 1989 Jan–Feb;28(1):34–40

Drugs for hypertensive emergencies. **Med Lett Drugs Ther** 1989 Apr 7;31(789):32–4

A comparison of oral milrinone, digoxin, and their combination in the treatment of patients with chronic heart failure. DiBianco R, et al. **N Engl J Med** 1989 Mar 16; 320(11):677–83

[Intermittent intra–arterial infusion treatment of severe intermittent claudication. Results of a prospective double–blind study: prostaglandin E1 versus energy–rich phosphates] Creutzig A, et al. **Med Klin** 1988 Jun 17; 83(13–14):434–8 (Eng. Abstr.) **(Ger)**

[Comparison of the effectiveness of intra–arterial and intravenous administration of buflomedil in patients with intermittent claudication] Diehm C, et al. **Vasa** 1989; 18(1):40–7 (Eng. Abstr.) **(Ger)**

[Ways of individualizing use of anti–anginal preparations] Katsenovich RA, et al. **Kardiologiia** 1989 Feb;29(2):5–9 **(Rus)**

[Effect of inosine after early infusion of contrykal and heparin in various hemodynamic types of acute myocardial ischemia] Korotkov AA, et al. **Kardiologiia** 1988 Oct; 28(10):91–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Is it ethical to administer vasodilator drugs to patients with primary pulmonary hypertension? [editorial] Packer M. **Chest** 1989 Jun;95(6):1173–5

Tale of the unexpected: hypothermia during vasodilation [editorial] de Leeuw PW. **Neth J Med** 1989 Apr; 34(3–4):171–3

[Acute severe coronary insufficiency during intravenous therapy with buflomedil hydrochloride. Description of 4 cases] Romanò M, et al. **Minerva Cardioangiol** 1988 Sep; 36(9):451–5 (Eng. Abstr.) **(Ita)**

[Total necrosis of the urinary system as a result of drug therapy] Al'berton VM, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):65–6 **(Rus)**

ANALYSIS

Rapid, sensitive high–performance liquid chromatographic method for the analysis of buflomedil hydrochloride and its potential by–products. Gobetti M, et al. **J Chromatogr** 1989 Apr 21;467(1):327–31

The interaction of dopexamine with various drugs and excipients in parenteral solutions. Pereira–Rosario R, et al. **J Pharm Pharmacol** 1988 Nov;40(11):749–53

Gas chromatographic assay and disposition of 6–chloro–2–pyridylmethyl nitrate, a new antianginal drug, in healthy volunteers. Terada T, et al. **J Pharm Sci** 1989 Mar;78(3):206–10

BLOOD

Simplified procedures for the determination of fenoldopam and its metabolites in human plasma by high–performance liquid chromatography with electrochemical detection: comparison of manual and robotic sample preparation methods. Boppana VK, et al. **J Chromatogr** 1989 Feb 24; 487(2):385–99

High–performance liquid chromatographic method for the simultaneous determination of the enantiomers of carvedilol and its O–desmethyl metabolite in human plasma after chiral derivatization. Eisenberg EJ, et al. **J Chromatogr** 1989 Aug 25;493(1):105–15

Arterial–venous plasma concentration differences of 6–chloro–2–pyridylmethyl nitrate in humans after sublingual administration. Terada T, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar;63(3):331–9

CHEMICAL SYNTHESIS

Studies on dihydropyridines. III. Synthesis of 4,7-dihydrothieno [2,3-b]-pyridines with vasodilator and antihypertensive activities. Adachi I, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4389–402

Long acting dihydropyridine calcium antagonists. 2. 2-[2-Aminoheterocycloethoxy]methyl derivatives. Arrowsmith JE, et al. **J Med Chem** 1989 Mar;32(3):562–8

5-Isoquinolinesulfonamide derivatives. 1. Synthesis and vasodilatory activity of N-(2-guanidinoethyl)-5-isoquinolinesulfonamide derivatives. Morikawa A, et al. **J Med Chem** 1989 Jan; 32(1):42–6

5-Isoquinolinesulfonamide derivatives. 2. Synthesis and vasodilatory activity of N-(2-aminoethyl)-5-isoquinolinesulfonamide derivatives. Morikawa A, et al. **J Med Chem** 1989 Jan;32(1):46–50

Cardiotonic agents. 9. Synthesis and biological evaluation of a series of (E)-4,5-dihydro-6-[2-[4-(1H-imidazol-1-yl)-phenyl]ethenyl]-3 (2H)-pyridazinones: a novel class of compounds with positive inotropic, antithrombotic, and vasodilatory activities for the treatment of congestive heart failure. Sircar I, et al. **J Med Chem** 1989 Feb;32(2):342–50

Conformationally restricted analogues of atriopeptin(103–125)amide. Spear KL, et al. **J Med Chem** 1989 Jan;32(1):67–72

Organic phosphorus compounds. 2. Synthesis and coronary vasodilator activity of (benzothiazolylbenzyl) phosphonate derivatives. Yoshino K, et al. **J Med Chem** 1989 Jul; 32(7):1528–32

DIAGNOSTIC USE

Acetazolamide effects on cerebral blood flow in acute reversible ischemia. Di Piero V, et al. **Acta Neurol Scand** 1989 Jul;80(1):35–40

[Diagnostic value of intra-arterial buflomedil, during arteriography of the limbs] Flageat J, et al. **Ann Radiol (Paris)** 1988;31(6):379–84 (Eng. Abstr.) (Fre)

ISOLATION & PURIFICATION

Araguspongines B, C, D, E, F, G, H, and J, new vasodilative bis-1-oxaquinolizidine alkaloids from an okinawan marine sponge, Xestospongia sp. Kobayashi M, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1676–8

[Studies on the chemical components of Viscum coloratum. III. Structure of viscumneoside III, V and VI] Kong DY, et al. **Yao Hsueh Hsueh Pao** 1988;23(8):593–600 (Eng. Abstr.) (Chi)

METABOLISM

Evidence of pulmonary tropism of bamifylline and its main active metabolite. Schiantarelli P, et al. **Arzneimittelforschung** 1989 Feb;39(2):215–9

Variable metabolism of pinacidil: lack of correlation with the debrisoquine and trimethylamine C- and N-oxidative polymorphisms. Ayesh R, et al. **Br J Clin Pharmacol** 1989 Apr;27(4):423–8

A comparison of bradykinin- and capsaicin-induced myocardial and coronary effects in isolated perfused heart of guinea-pig: involvement of substance P and calcitonin gene-related peptide release. Manzini S, et al. **Br J Pharmacol** 1989 Jun;97(2):303–12

Assessment of superoxide-mediated release of vascular-inhibitory factor(s) from endothelial cells by using a two-bath system. Hong KW, et al. **Experientia** 1989 Apr 15;45(4):320–2

[Value of the endothelium-derived relaxant factor as a mediator in vascular regulation. Effect of the vascular endothelium on vascular tone and thrombocyte function] Bassenge E, et al. **Fortschr Med** 1988 Jul 10;106(20):428–30 (21 ref.) (Eng. Abstr.) (Ger)

[Nitrate therapy—a causal therapy of the angina pectoris syndrome? New knowledge on the endothelium-derived relaxing factor] Hütter P, et al. **Fortschr Med** 1988 Jul 10; 106(20):413–6 (19 ref.) (Eng. Abstr.) (Ger)

PHARMACOKINETICS

Pharmacokinetics of nicorandil. Frydman AM, et al. **Am J Cardiol** 1989 Jun 20;63(21):25J–33J

Pharmacokinetics of nisoldipine. II. Distribution to and elimination from tissues and organs following single or repeated administration of [14C]nisoldipine to rats and dogs. Ahr HJ, et al. **Arzneimittelforschung** 1988 Aug; 38(8):1099–104

Pharmacokinetics of nisoldipine. I. Absorption, concentration in plasma, and excretion after single administration of [14C]nisoldipine in rats, dogs, monkey, and swine. Ahr HJ, et al. **Arzneimittelforschung** 1988 Aug;38(8):1093–8

Pharmacokinetics of nisoldipine. III. Biotransformation of nisoldipine in rat, dog, monkey, and man. Scherling D, et al. **Arzneimittelforschung** 1988 Aug;38(8):1105–10

Clinical pharmacokinetics of ibopamine on different diseases and conditions. Ventresca GP, et al. **Arzneimittelforschung** 1988 Aug;38(8):1175–80

Pharmacokinetics of buflomedil after various dosage forms. Zecca L, et al. **Arzneimittelforschung** 1989 Apr;39(4):518–9

Effect of indomethacin on the pharmacokinetics and pharmacodynamics of felodipine. Hardy BG, et al. **Br J Clin Pharmacol** 1985 Nov;26(5):557–62

Single- and multiple-dose nisoldipine kinetics and effects in the young, the middle-aged, and the elderly. van Harten J, et al. **Clin Pharmacol Ther** 1989 Jun;45(6):600–7

Pharmacokinetics and hemodynamic effects of long-term nisoldipine treatment in hypertensive patients. van Harten J, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):624–9

Simultaneous high-performance liquid chromatography assay of two metabolites of 6-chloro-2-pyridylmethyl nitrate, a new antianginal drug, and its application to a pharmacokinetic study in rats. Terada T, et al. **J Pharm Sci** 1989 Jun;78(6):515–8

Arterial-venous concentration gradient as a potential source of error in pharmacokinetic studies. Plasma concentration differences of 6-chloro-2-pyridylmethyl nitrate on constant infusion to rats. Terada T, et al. **Xenobiotica** 1989 Jun;19(6):661–7

Disposition of bemitradine, a renal vasodilator and diuretic, in man. Walls CM, et al. **Xenobiotica** 1988 Dec; 18(12):1413–23

[Pharmacokinetic aspects of anti-hypertensive therapy] Casiglia E, et al. **G Clin Med** 1988 Jun-Jul;69(6-7):457–8, 460–2 (Ita)

PHARMACOLOGY

The effects of calcitonin gene-related peptide on the blood flow of the upper respiratory tract and the middle and inner ear. Hillerdal M, et al. **Acta Otolaryngol (Stockh)** 1989 Jul-Aug;108(1-2):94–100

Capsaicin-induced vasodilatation of human coronary arteries in vitro is mediated by calcitonin gene-related peptide rather than substance P or neurokinin A. Franco-Cereceda A, et al. **Acta Physiol Scand** 1989 Aug;136(4):575–80

Dose- and time-related vasodilator response of conduit coronary arteries to intracoronary isosorbide dinitrate in human beings. Simonetti I, et al. **Am Heart J** 1989 Feb; 117(2):323–31

Effects of nicorandil on arterial and venous vessels of the forearm in systemic hypertension. Levenson J, et al. **Am J Cardiol** 1989 Jun 20;63(21):40J–43J

Effects of arterial dilator agents on central aortic systolic pressure and on left ventricular hydraulic load. O'Rourke MF, et al. **Am J Cardiol** 1989 Jun 5;63(19):38I–44I (28 ref.)

Effects of nisoldipine on systemic and leg blood flow, oxygen transport and metabolism, and hemodynamics during exercise in effort angina pectoris. Ram J, et al. **Am J Cardiol** 1989 Apr 1;63(12):802–6

Nicorandil: animal pharmacology. Sakai K. **Am J Cardiol** 1989 Jun 20;63(21):2J–10J (103 ref.)

Effects of nicorandil on left ventricular hemodynamics and volume at rest and during exercise-induced angina pectoris. Silke B, et al. **Am J Cardiol** 1989 Jun 20;63(21):49J–55J

Coronary vasodilatory action after nicorandil: a quantitative angiographic study. Suryapranata H, et al. **Am J Cardiol** 1989 Jun 20;63(21):80J–85J

Nicorandil as a hybrid between nitrates and potassium channel activators. Taira N. **Am J Cardiol** 1989 Jun 20; 63(21):18J–24J (38 ref.)

Use of selective vasodilation in treatment of sickle cell disease. Rodgers GP, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):351–6 (28 ref.)

Inhibition of rat mesangial cell mitogenesis by nitric oxide-generating vasodilators. Garg UC, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):F60–6

Endothelium-dependent and -independent responses to vasoactive substances of isolated human coronary arteries. Toda N, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H988–95

Effect of posture, hydralazine, and nifedipine on hemodynamics, ventilation, and gas exchange in patients with chronic obstructive pulmonary disease. Corriveau ML, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1494–8

Effect of buflomedil chlorhydrate on local oxygen delivery in peripheral vascular disease. Mannarino E, et al. **Angiology** 1989 Jun;40(6):559–62

Hydrostatic distention and pharmacological treatment of epinephrine-induced microarterial spasm. Pederson WC, et al. **Ann Plast Surg** 1989 Jul;23(1):17–26

Different inhibition by vasodilators of coronary artery contraction. Inoue S, et al. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct;295:181–93

Adenosine and its agonists cause retinal vasodilation and hemorrhages. Implications for ischemic retinopathies. Campochiaro PA, et al. **Arch Ophthalmol** 1989 Mar; 107(3):412–6

Vasodilating effects of the new calcium antagonist benidipine hydrochloride in anesthetized dogs and cats. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1707–12

Cardiovascular effects of 1-(3,4-dimethoxyphenyl)-2-(4-diphenylmethylpiperazinyl) ethanol and possible mechanisms involved. Kushiku K, et al. **Arzneimittelforschung** 1989 Apr;39(4):458–63

Cardiovascular actions of buflomedil and possible mechanisms involved. Kushiku K, et al. **Arzneimittelforschung** 1989 Jun;39(6):670–7

Effects of vasodilators on rates of change of nasopharyngeal temperature and systemic vascular resistance during cardiopulmonary bypass in anaesthetized dogs. Li DM, et al. **Aust N Z J Surg** 1988 Apr;58(4):327–33

Endothelium-derived relaxing factor, calcium and inositol phosphates. Lewis MJ, et al. **Biochem Soc Trans** 1988 Aug; 16(4):486–8

Role of cyclic GMP in the mechanism of action of nitrovasodilators, endothelium-dependent agents and atrial natriuretic peptide. Murad F. **Biochem Soc Trans** 1988 Aug; 16(4):490–2 (36 ref.)

A comparison of the effects of flosequinan, a new vasodilator, and propranolol on sub-maximal exercise in healthy volunteers. Lewis HM, et al. **Br J Clin Pharmacol** 1989 May;27(5):547–52

The influence of infusion rate on the pharmacokinetics and haemodynamic effects of nisoldipine in man. van Harten J, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):709–17

Ultrastructure of an arterial lesion induced in rats by fenoldopam mesylate, a dopaminergic vasodilator. Bugelski PJ, et al. **Br J Exp Pathol** 1989 Apr;70(2):153–65

The cardiovascular pharmacology of ICI 170777 ((6RS)-6-methyl-5-(pyrid-4-yl)-3H,6H-1,3,4-thiadiazin-2-one) a novel compound with positive inotropic and vasodilator effects. Collis MG, et al. **Br J Pharmacol** 1989 Jun;97(2):409–18

Anti-vasoconstrictor effects of the K+ channel opener cromakalim on the rabbit aorta—comparison with the calcium antagonist isradipine. Cook NS, et al. **Br J Pharmacol** 1988 Nov;95(3):741–52

N-methylhydroxylamine inhibits and M&B 22948 potentiates relaxations of the mouse anococcygeus to non-adrenergic, non-cholinergic field stimulation and to nitrovasodilator drugs. Gibson A, et al. **Br J Pharmacol** 1989 Mar; 96(3):637–44

Vasoconstrictor and vasodilator effects in normal and atherosclerotic conscious rabbits. Hof RP, et al. **Br J Pharmacol** 1988 Dec;95(4):1075–80

Calcitonin gene-related peptide desensitizes skeletal muscle arterioles to substance P in vivo. Ohlén A, et al. **Br J Pharmacol** 1988 Nov;95(3):673–4

Actions of constrictor (NPY and endothelin) and dilator (substance P, CGRP and VIP) peptides on pig splenic and human skeletal muscle arteries: involvement of the endothelium. Pernow J. **Br J Pharmacol** 1989 Jul; 97(3):983–9

The effects of endothelium-dependent vasodilators on cardiac output and their distribution in the anaesthetized rat: a comparison with sodium nitroprusside. Thomas GR, et al. **Br J Pharmacol** 1988 Nov;95(3):986–92

Pinacidil opens K+-selective channels causing hyperpolarization and relaxation of noradrenaline contractions in rat mesenteric resistance vessels. Videback LM, et al. **Br J Pharmacol** 1988 Sep;95(1):103–8

The relaxant properties of human calcitonin gene-related peptide on vascular and extravascular capsular) smooth muscle of the isolated blood-perfused spleen of the anaesthetized dog. Withrington PG. **Br J Pharmacol** 1989 Apr;96(4):823–8

The negative inotropic effect of nicorandil is independent of cyclic GMP changes: a comparison with pinacidil and cromakalim in canine atrial muscle. Yanagisawa T, et al. **Br J Pharmacol** 1988 Oct;95(2):393–8

Effects of ligustrazine and anisodamine on rabbit whole blood viscosity and erythrocyte deformability. Luo G, et al. **Chin Med J [Engl]** 1988 Jan;101(1):48–51

Importance of venodilatation in prevention of left ventricular dilatation after chronic large myocardial infarction in rats: a comparison of captopril and hydralazine. Raya TE, et al. **Circ Res** 1989 Feb;64(2):330–7

Reactivity of human isolated internal mammary artery to constrictor and dilator agents. Implications for treatment of internal mammary artery spasm. He GW, et al. **Circulation** 1989 Sep;80(3 Pt 1):I141–50

Does alpha 1-adrenergic blockade influence regional blood flow regulation in hearts with coronary artery occlusion? Westby J, et al. **Clin Physiol** 1989 Apr;9(2):107–20

Effects of nitrovasodilators, endothelium-dependent vasodilators, and atrial peptides on cGMP. Murad F, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:1005–9 (49 ref.)

Doxazosin, a case history. Campbell SF, et al. **Drug Des Deliv** 1986 Aug;1(1):83–99 (36 ref.)

Pinacidil. Preclinical investigations. Ahnfelt-Rønne I. **Drugs** 1988;36 Suppl 7:4–9 (26 ref.)

Ion channel effects of pinacidil in vascular muscle. Hermsmeyer K. **Drugs** 1988;36 Suppl 7:29–32

Vasodilatation with pinacidil. Mode of action in rat resistance vessels. Videback LM, et al. **Drugs** 1988;36 Suppl 7:33–40

In vitro studies on the mode of action of pinacidil. Weston AH, et al. **Drugs** 1988;36 Suppl 7:10–28

Dopexamine hydrochloride, a beta 2 adrenergic and dopaminergic agonist; haemodynamic effects following cardiac surgery. Hakim M, et al. **Eur Heart J** 1988 Aug; 9(8):853–8

Increased exercise tolerance and reduced electrocardiographic ischaemia 3 and 12 hours after oral felodipine in effort angina. Verdecchia P, et al. **Eur Heart J** 1989 Jan;10(1):70–6

Intracellular mechanism of action of vasodilators. Walter U, et al. **Eur Heart J** 1988 Jun;9 Suppl H:1–6 (21 ref.)

Haemodynamic requirements for an ideal pulmonary vasodilator. Widimský J, et al. **Eur Heart J** 1988 Sep;9 Suppl J:23–8 (54 ref.)

Acute haemodynamic effects of ibopamine and dopamine on isovolumic relaxation. Bernardi L, et al. **Eur J Pharmacol** 1989 May 30;164(3):415–24

Endothelium-derived nitric oxide relaxes nonvascular smooth muscle. Buga GM, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):61–72

Effects of vasodilator drugs on venous tone in conscious rats. D'Oyley HM, et al. **Eur J Pharmacol** 1989 Mar 21; 162(2):337–44

Human red blood cells inhibit endothelium–derived relaxing factor (EDRF) activity. Evans HG, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):361–4

Assessment of the antiarrhythmic activity of nicorandil during myocardial ischemia and reperfusion. Kempsford RD, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):61–8

Trachealis responses induced by vincamine and vinpocetine; inhibition by indomethacin and Ca2+ dependence. Machová J, et al. **Eur J Pharmacol** 1989 Mar 29; 162(3):387–95

Cyclic nucleotide elevating vasodilators inhibit platelet aggregation at an early step of the activation cascade. Waldmann R, et al. **Eur J Pharmacol** 1989 Jan 17; 159(3):317–20

Comparative effects of K+ channel blockade on the vasorelaxant activity of cromakalim, pinacidil and nicorandil. Wilson C, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):331–9

Modulation of pulmonary artery contraction by endothelium–derived relaxing factor. Yamaguchi T, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):259–62

Potentiating effect of 3–isobutyryl–2–isopropylpyrazolo–[1,5a]–pyridine (KC–404), a new cerebral vasodilator with anti–platelet activity, on prostacyclin–induced increase of cyclic AMP content in platelets of rat. Hisayama T, et al. **Gen Pharmacol** 1989;20(2):183–6

Acute effects of noradrenalin related vasoactive agents on the ototoxicity of aspirin: an experimental study in the guinea pig. Cazals Y, et al. **Hear Res** 1988 Oct;36(1):89–96

Effect of vasodilators on hepatic microcirculation in cirrhosis: a study in the isolated perfused rat liver. Marteau P, et al. **Hepatology** 1989 Jun;9(6):820–3

Arterial vascular compliance response to vasodilators by Fourier and pulse contour analysis. Finkelstein SM, et al. **Hypertension** 1988 Oct;12(4):380–7

The discovery of nitric oxide as the endogenous nitrovasodilator. Moncada S, et al. **Hypertension** 1988 Oct; 12(4):365–72 (86 ref.)

Effect of buflomedil on cell metabolism in ischemic muscle. Skau T, et al. **Int Angiol** 1988 Oct–Dec;7(4):337–43

Long–term clinical results after vasodilator evaluation in patients with primary (unexplained) and secondary precapillary pulmonary hypertension: acute hemodynamic comparisons and long–term survival. McKay CR, et al. **Int J Cardiol** 1989 Mar;22(3):311–9

Pupillographic evaluation of the mydriatic effect of ibopamine solution. Gelmi C, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jul;27(7):346–51

Daily exercise enhances coronary resistance vessel sensitivity to pharmacological activation. DiCarlo SE, et al. **J Appl Physiol** 1989 Jan;66(1):421–8

Nisoldipine inhibits vasoconstrictor responses in the cat pulmonary vascular bed. Kadowitz PJ, et al. **J Appl Physiol** 1989 Jun;66(6):2885–90

Influence of vasoactive agents on cytoplasmic free calcium in vascular endothelial cells. Ryan US, et al. **J Appl Physiol** 1988 Nov;65(5):2221–7

Inhibition by sulphonylureas of vasorelaxation induced by K+ channel activators in vitro. Wilson C. **J Auton Pharmacol** 1989 Feb;9(1):71–8

Pinacidil: history, basic pharmacology, and therapeutic implications. Ahnfelt–Rønne I. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S1–4

Cardiovascular profile of UDCG 115 BS–pimobendane and reversibility of catecholamine subsensitivity in severe congestive heart failure secondary to idiopathic dilated cardiomyopathy. Baumann G, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):730–8

Pinacidil–induced vascular relaxation: comparison to other vasodilators and to classical mechanisms of vasodilation. Cohen ML, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S5–9

Effect of KT–362, a putative intracellular calcium antagonist, on norepinephrine–induced contractions and inositol monophosphate accumulation in canine femoral artery. Eskinder H, et al. **J Cardiovasc Pharmacol** 1989 Mar; 13(3):502–7

Positive inotropic and hemodynamic properties of flosequinan, a new vasodilator, and a sulfone metabolite. Falotico R, et al. **J Cardiovasc Pharmacol** 1989 Sep; 14(3):412–8

Acceleration of recovery of mitochondrial function after coronary reperfusion by various coronary dilating drugs in canine hearts. Hanaki Y, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):336–41

Vascular effects of carvedilol, a new beta–adrenoceptor antagonist with vasodilating properties, in isolated canine coronary artery. Hattori Y, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):572–9

Reactivity of the canine isolated internal mammary artery, saphenous vein, and coronary artery to constrictor and dilator substances: relevance to coronary bypass graft surgery. He GW, et al. **J Cardiovasc Pharmacol** 1988 Jul; 12(1):12–22

Pinacidil actions on ion channels in vascular muscle. Hermsmeyer RK. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S17–22

Cumulative hemodynamic response to short–term treatment with flosequinan (BTS 49465), a new direct–acting vasodilator drug, in severe chronic congestive heart failure. Kessler PD, et al. **J Cardiovasc Pharmacol** 1988 Jul; 12(1):6–11

Hemodynamic effects of beta–blocking compounds possessing vasodilating activity: a review of labetalol, prizidilol, and dilevalol. Lund–Johansen P. **J Cardiovasc Pharmacol** 1988;11 Suppl 2:S12–7 (35 ref.)

Intravenous nisoldipine in severe congestive heart failure. Moe GW, et al. **J Cardiovasc Pharmacol** 1988 Aug; 12(2):160–6

Interaction of selected vasodilating beta–blockers with adrenergic receptors in human cardiovascular tissues. Monopoli A, et al. **J Cardiovasc Pharmacol** 1989 Jul; 14(1):114–20

In vitro pharmacologic profile of Ro 40–5967, a novel Ca2+ channel blocker with potent vasodilator but weak inotropic action. Osterrieder W, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):754–9

The relation between vascular relaxant and cardiac electrophysiological effects of pinacidil. Steinberg MI, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S30–40

Effect of pinacidil on norepinephrine– and potassium–induced contractions and membrane potential in rat and human resistance vessels and in rat aorta. Videbaek LM, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S23–9

The mechanism of action of endothelin–1 as compared with other agonists in vascular smooth muscle. Wallnöfer A, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S23–31; discussion S45

Effects of the antihypertensive dilevalol on aortic compliance in anesthetized dogs. Watkins RW, et al. **J Cardiovasc Pharmacol** 1988 Jul;12(1):42–50

The mode of action of pinacidil and its analogs P1060 and P1368: results of studies in rat blood vessels. Weston AH, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S10–6

Reoxygenation and calcium–induced cerebroarterial contractions as affected by vasodilator agents. Bian K, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):808–15

The effects of flosequinan and nifedipine on glucose tolerance in healthy volunteers. Lewis H, et al. **J Clin Pharm Ther** 1988 Aug;13(4):269–72

Vasodilation induced by a specific vasopressin V2 agonist in dogs. Liard JF. **J Hypertens Suppl** 1988 Dec;6(4):S673–4

Peptides encoded by the calcitonin gene inhibit macrophage function. Nong YH, et al. **J Immunol** 1989 Jul 1;143(1):45–9

Renal vasodilators. The role of the 4–substituent in isoquinolin–3–ol cardiovascular agents: 4–ureido derivatives of isoquinolin–3–ol with selective renal vasodilator properties. Kanojia RM, et al. **J Med Chem** 1989 May;32(5):990–7

Guanylate cyclase activation by organic nitrates is not mediated via nitrite. Romanin C, et al. **J Mol Cell Cardiol** 1988 May;20(5):389–96

A comparison of the effects of oxodipine and nifedipine on rat vas deferens. Martin I, et al. **J Pharm Pharmacol** 1988 Sep;40(9):657–9

Actions of amrinone and milrinone on the guinea–pig ileum. Stone TW, et al. **J Pharm Pharmacol** 1988 Jul;40(7):521–3

Effects of an antihypertensive vasodilator, pinacidil, on regional blood flow in conscious spontaneously hypertensive rats. Kimura S, et al. **J Pharmacobiodyn** 1988 Jun;11(6):430–7

Cardioprotective effects of a new vascular intracellular calcium antagonist, KT–362, in the stunned myocardium. Farber NE, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):39–43

Nitroglycerin–induced tolerance affects multiple sites in the organic nitrate bioconversion cascade. Henry PJ, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):762–8

Activation of ATP–sensitive outward K+ current by nicorandil (2–nicotinamidoethyl nitrate) in isolated ventricular myocytes. Hiraoka M, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):278–85

6–Keto–prostaglandin E1 is a potent coronary vasodilator and stimulates a vagal reflex in dogs. Panzenbeck MJ, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):814–9

Effects of combination of vasodilator drugs and hypertonic solutions on methotrexate distribution into the rat brain. Abe H. **Jpn J Pharmacol** 1988 Nov;48(3):373–6

Effect of NC–1100 [1–(3,4–dimethoxyphenyl)–2–(4–diphenylmethylpiperazinyl) ethanol dihydrochloride] on gamma–aminobutyric acid (GABA) metabolism in rat brain: analysis using stroke–prone spontaneously hypertensive rat. Hashimoto T, et al. **Jpn J Pharmacol** 1989 Jun;50(2):131–9

Mechanisms of action of eperisone on isolated dog saphenous arteries and veins. Inoue S, et al. **Jpn J Pharmacol** 1989 Jul;50(3):271–82

Effect of buflomedil [4–(1–pyrrolidinyl)–1–(2,4,6–trimethoxyphenyl)–1–butanone hydrochloride] on neurotransmitters in the striatum and substantia nigra. Koda H, et al. **Jpn J Pharmacol** 1988 Jul;47(3):253–9

Effect of buflomedil (4–(1–pyrrolidinyl)–1–(2,4,6–trimethoxy phenyl)–1–butanone hydrochloride) on the function of striatal dopaminergic neurons. Koda H, et al. **Jpn J Pharmacol** 1989 Feb;49(2):215–23

Cardiovascular pharmacology of RS–1893, an orally active cardiotonic agent with arterial and venous vasodilator actions. Miyake S, et al. **Jpn J Pharmacol** 1988 Jul; 47(3):273–83

The first demonstration of CGRP–immunoreactive fibers in canine hearts: coronary vasodilator, inotropic and chronotropic effects of CGRP in canine isolated, blood–perfused heart preparations. Sugiyama A, et al. **Jpn J Pharmacol** 1989 Aug;50(4):421–7

Role of the endothelium and arginine peptides on the vaso–motor response of porcine internal mammary artery. Thomas G, et al. **Life Sci** 1989;44(24):1823–30

Endothelium–derived relaxing factor release on activation of NMDA receptors suggests role as intercellular messenger in the brain. Garthwaite J, et al. **Nature** 1988 Nov 24;336(6197):385–8

In vitro inhibition of human polymorphonuclear cell function by cloricromene. Bertocchi F, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):697–703

Effects of calcitonin gene–related peptide (CGRP), neurokinin A and neurokinin A (4–10) on the mitogenic response of human peripheral blood mononuclear cells. Casini A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar;339(3):354–8

Actions of calcitonin gene–related peptide and tachykinins in relation to the contractile effects of capsaicin in the guinea–pig and rat heart in vitro. Franco–Cereceda A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):649–55

Coronary vasodilatation induced by calcitonin gene–related peptide in the anaesthetised pig. Tippins JR, et al. **Neuropeptides** 1989 Feb–Mar;13(2):95–102

Cerebral vasodilators potentiate the anti–anoxic activity of indeloxazine hydrochloride, a new cerebral activator. Yamamoto M, et al. **Neuropharmacology** 1989 Mar; 28(3):313–7

The reaction of cerebral arteries to non–ionic contrast media during cerebral angiography. Nakstad PH. **Neuroradiology** 1989;31(3):247–9

Co–existence of neuropeptides and differential inhibition of vasodilator responses by neuropeptide Y in guinea pig uterine arteries. Fallgren B, et al. **Neurosci Lett** 1989 May 22;100(1–3):71–6

Cromakalim (BRL 34915) acts on an inwardly rectifying neuronal K+ conductance, which is similar to that activated by adenosine. Alzheimer C, et al. **Pflugers Arch** 1989;414 Suppl 1:S121–2

A comparison of the effects and interactions of cromakalim and glibenclamide in cardiac and vascular tissues. BoSmith RE, et al. **Pflugers Arch** 1989;414 Suppl 1:S190

Characterization of a novel K+ channel activator, EMD 52962, in electrophysiological and pharmacological experiments. De Peyer JE, et al. **Pflugers Arch** 1989;414 Suppl 1:S191

Cromakalim (BRL 34915) and diazoxide activate ATP–regulated potassium channels in insulin–secreting cells. Dunne MJ, et al. **Pflugers Arch** 1989;414 Suppl 1:S154–5

Pulmonary vascular and renal effects of cromakalim in anaesthetized dogs. Hicks PE, et al. **Pflugers Arch** 1989;414 Suppl 1:S192–3

Comparison of the effects of putative activators of K+ channels on pancreatic B–cell function. Plant TD, et al. **Pflugers Arch** 1989;414 Suppl 1:S152–3

Cromakalim, pinacidil and RP 49356 activate a tolbutamide–sensitive K+ conductance in human skeletal muscle fibres. Quasthoff S, et al. **Pflugers Arch** 1989;414 Suppl 1:S179–80

External ATP triggers a biphasic activation process of a calcium–dependent K+ channel in cultured bovine aortic endothelial cells. Sauve R, et al. **Pflugers Arch** 1988 Oct; 412(5):469–81

Smooth muscle K+ channel openers; their pharmacology and clinical potential. Weston AH. **Pflugers Arch** 1989;414 Suppl 1:S99–105 (79 ref.)

Endothelium–derived relaxing factor. Angus JA, et al. **Pharmacol Ther** 1989;41(1–2):303–52 (215 ref.)

Relaxant effects of the selective phosphodiesterase inhibitors milrinone and OPC 3911 on isolated human mesenteric vessels. Lindgren S, et al. **Pharmacol Toxicol** 1989 May; 64(5):440–5

Competing effects of intravenously infused dilator agents and raised portal blood flow on hepatic arterial conductance. d'Almeida MS, et al. **Proc West Pharmacol Soc** 1988; 31:113–5

Differential vasoconstrictor and vasodilator responses in the proximal and distal human coronary arteries. Stupecky GL, et al. **Proc West Pharmacol Soc** 1988;31:319–21

Mechanisms of regional ischemia and antianginal drug action during exercise. Ross J Jr. **Prog Cardiovasc Dis** 1989 May–Jun;31(6):455–66 (49 ref.)

Insulin as a vasodilating agent in the first hour after cardiopulmonary bypass. Svensson S, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):139–43

Hyperpolarizing vasodilators activate ATP–sensitive K+ channels in arterial smooth muscle. Standen NB, et al. **Science** 1989 Jul 14;245(4914):177–80

Endothelium–dependent and –independent responses to vasodilators of isolated dog cerebral arteries. Onoue H, et al. **Stroke** 1988 Nov;19(11):1388–94

Effects of a selective inhibitor of cyclic AMP phosphodiesterase on the pial microcirculation in feline cerebral ischemia. Tanaka K, et al. **Stroke** 1989 May; 20(5):668–73

Intracavernous injection of vasoactive drugs in the rabbit. Stackl W, et al. **Urol Res** 1988;16(6):455–8

Reactivity of equine palmar digital arteries and veins to vasodilating agents. Baxter GM, et al. **Vet Surg** 1989 May–Jun;18(3):221–6

[Comparison of effects of four vasodilators on contractions induced by norepinephrine, KCl, and CaCl2 in isolated rabbit aortic strips] Liu Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):237–9 (Eng. Abstr.) (Chi)

[Cardiovascular action of m-nisoldipine in anaesthetized rabbits and guinea pigs] Ren LM, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):426–30 (Eng. Abstr.) (Chi)

[Effects of puerarin on blood pressure and plasma renin activity in spontaneously hypertensive rats] Song XP, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):55–8 (Eng. Abstr.) (Chi)

[A study using laser-Doppler velocimetry of modifications of the labyrinthine microcirculation induced by chemical and physical stimuli] Galioto GB, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(2):117–22 (Eng. Abstr.) (Fre)

[Vasodilator effects of LF 2.0254, a new 1,4-dihydropyridine. Comparison with nifedipine] Pruneau D, et al. **Therapie** 1989 May–Jun;44(3):203–8 (Eng. Abstr.) (Fre)

[Hemodynamic effect of certain vasodilators on the major and lesser circulation] Romoda T. **Orv Hetil** 1988 Aug 21; 129(34):1791–6 (50 ref.) (Eng. Abstr.) (Hun)

[Decrease of blood viscosity induced by buflomedil in healthy volunteers] Craveri A, et al. **Minerva Cardioangiol** 1988 Jul–Aug;36(7–8):357–60 (Eng. Abstr.) (Ita)

[The effects of cerebral vasodilators and stimulators of brain metabolism on the patients with vascular dementia] Araki G. **Nippon Ronen Igakkai Zasshi** 1988 Jul;25(4):390–5 (Eng. Abstr.) (Jpn)

[Effect of vasoactive substances and electrical stimulation of the inferior alveolar nerve on blood flow in the dental pulp in dogs] Todoki K. **Nippon Yakurigaku Zasshi** 1988 Aug;92(2):61–7 (Eng. Abstr.) (Jpn)

[Cardiovascular agents in pregnancy] Lopes AC, et al. **Arq Bras Cardiol** 1988 Nov;51(5):419–25 (87 ref.) (Por)

[Molecular mechanism of tolerance for vasodilator nitrates] Popescu LM, et al. **Rev Med Interna [Med Interna]** 1988 Mar–Apr;40(2):145–54 (Eng. Abstr.) (Rum)

[Effect of kavinton on systemic and regional hemodynamics in waking and anesthetized rats] Ivashev MN, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):26–9 (Eng. Abstr.) (Rus)

[Effects of intravenous administration of fenoldopam on blood pressure and renal function in severe arterial hypertension] Miranda B, et al. **Med Clin (Barc)** 1988 Oct 15;91(12):445–8 (Eng. Abstr.) (Spa)

[Is endogenous nitroglycerin discovered?] Anggård E. **Nord Med** 1988;103(11):319–20 (Eng. Abstr.) (Swe)

PHYSIOLOGY

Characterization and biological significance of endothelium-derived relaxing factor. Moncada S, et al. **Biochem Soc Trans** 1988 Aug;16(4):484–6 (30 ref.)

Neurotransmission. A relaxing factor in the brain [news] Stevens CF. **Nature** 1988 Nov 24;336(6197):308–9

SECRETION

Cosecretion of calcitonin and calcitonin gene-related peptide from cultured rat medullary thyroid C cells. Seitz PK, et al. **J Bone Miner Res** 1989 Feb;4(1):129–34

THERAPEUTIC USE

Influence of drug therapy on the ischemic response to acute coronary occlusion in man: supply-side economics. Kern MJ, et al. **Am Heart J** 1989 Aug;118(2):361–80 (109 ref.)

Celiprolol in angina pectoris. Soberman JE, et al. **Am Heart J** 1988 Nov;116(5 Pt 2):1422–5 (6 ref.)

Inducible ventricular arrhythmias and sudden death during vasodilator therapy of severe heart failure. Stevenson WG, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1447–54

A symposium: A new treatment for angina pectoris and heart failure. October 17, 1987, San Francisco. Proceedings. **Am J Cardiol** 1989 Jun 20;63(21):1J–85J

Effect of nicorandil on coronary spasm. Aizawa T, et al. **Am J Cardiol** 1989 Jun 20;63(21):75J–79J

Effects of nicorandil on coronary circulation and myocardial ischemia. Gross G, et al. **Am J Cardiol** 1989 Jun 20; 63(21):11J–17J (13 ref.)

Central and regional hemodynamic effects of flosequinan for congestive heart failure. Haas GJ, et al. **Am J Cardiol** 1989 Jun 1;63(18):1354–9

Hemodynamic effects of pimobendan given orally in congestive heart failure secondary to ischemic or idiopathic dilated cardiomyopathy. Hagemeijer F, et al. **Am J Cardiol** 1989 Mar 1;63(9):571–6

Comparison of antianginal activity of nicorandil, propranolol and diltiazem with reference to the antianginal mechanism. Kinoshita M, et al. **Am J Cardiol** 1989 Jun 20; 63(21):71J–74J

Hemodynamic action of nicorandil in chronic congestive heart failure. Solal AC, et al. **Am J Cardiol** 1989 Jun 20; 63(21):44J–48J

Acute hemodynamic effects of adibendan, a new phosphodiesterase inhibitor, for severe congestive heart failure. Voelker W, et al. **Am J Cardiol** 1989 Aug 1; 64(5):390–2

Efficacy of vasodilator therapy in canine model of acute pulmonary hypertension. Priebe HJ. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1232–9

Sevoflurane anesthesia with adenosine triphosphate for resection of pheochromocytoma. Doi M, et al. **Anesthesiology** 1989 Feb;70(2):360–3

Effect of long-term administration of buflomedil on regional cerebral blood flow in chronic cerebral infarction. Kobayashi S, et al. **Angiology** 1988 Nov;39(11):934–41

Calcitonin gene-related peptide delays the no-reflow phenomenon in the rat island flap. Westin M, et al. **Ann Plast Surg** 1988 Oct;21(4):329–34

Vasodilating prostaglandins attenuate ischemic renal injury only if thromboxane is inhibited. Klausner JM, et al. **Ann Surg** 1989 Feb;209(2):219–24

Prazosin for vasodilator treatment of acute pulmonary oedema due to scorpion sting. Bawaskar HS, et al. **Ann Trop Med Parasitol** 1987 Dec;81(6):719–23

Use of the novel cardiotonic and vasodilator agent pimobendan in traumatic shock. Bitterman H, et al. **Arzneimittelforschung** 1988 Oct;38(10):1389–93

Cold weather or cold immersion induced reduction of circulation within the distal extremities [letter] Morey WA, et al. **Aviat Space Environ Med** 1989 Jul;60(7):715

Effect of flosequinan on exercise capacity and symptoms in severe heart failure. Elborn JS, et al. **Br Heart J** 1989 Apr; 61(4):331–5

The effects of treatment with felodipine as a single agent in coronary artery disease. Metcalfe MJ, et al. **Br Heart J** 1989 Mar;61(3):258–61

Haemodynamic response to dopexamine hydrochloride in postinfarction heart failure: lack of tolerance after continuous infusion. Svenson G, et al. **Br Heart J** 1988 Dec;60(6):489–96

Sustained haemodynamic effects of felodipine in patients with chronic cardiac failure. Tweddel AC, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):689–94

Does inositol nicotinate (Hexopal) influence intermittent claudication? A controlled trial. Kiff RS, et al. **Br J Clin Pract** 1988 Apr;42(4):141–5

The therapeutic efficacy of inositol nicotinate (Hexopal) in intermittent claudication: a controlled trial. O'Hara J, et al. **Br J Clin Pract** 1988 Sep;42(9):377–83

Digitalis and non-ACE inhibitor vasodilators in heart failure. Chatterjee K. **Cardiol Clin** 1989 Feb;7(1):99–118 (116 ref.)

Vasodilators for heart failure—useful or useless? Franciosa JA. **Cardiology** 1988;75 Suppl 1:110–7 (47 ref.)

Inodilation—the way ahead in the early therapy of congestive heart failure? Opie LH. **Cardiology** 1988;75 Suppl 1:138–47 (16 ref.)

Efficacy and safety of flosequinan, given over 3 days, evaluated by continuous hemodynamic monitoring. Schneeweiss A, et al. **Cardiology** 1989;76(3):201–5

Continuous monitoring of mixed venous oxygen saturation as an indicator of pharmacologic intervention. Hassan E, et al. **Chest** 1989 Feb;95(2):406–9

The use of inotropic and afterload-reducing agents in neonates. Keeley SR, et al. **Clin Perinatol** 1988 Sep; 15(3):467–89 (129 ref.)

Effect of flosequinan in patients with acute-onset heart failure complicating acute myocardial infarction. Schneeweiss A, et al. **Crit Care Med** 1989 Sep;17(9):879–81

An evaluation of the ability of the peripheral vasodilator buflomedil to improve vascular patency after acute frostbite. Daum PS, et al. **Cryobiology** 1989 Feb;26(1):85–92

Treatment of chronic pulmonary hypertension by vasodilators. Symposium: E.S.C. Working Group on Pulmonary Circulation. 9 September 1987, Santiago de Compostela, Spain.Proceedings. **Eur Heart J** 1988 Sep;9 Suppl J:1–43

Clinical trials with long-term treatment of pulmonary hypertension due to lung disease. Denolin H. **Eur Heart J** 1988 Sep;9 Suppl J:29–32 (20 ref.)

The treatment of chronic pulmonary hypertension by vasodilators: hope and hesitation. Ježek V. **Eur Heart J** 1988 Sep;9 Suppl J:1–6 (48 ref.)

Effect of vasodilator and inotropic drugs on clinical symptoms and long-term survival in chronic congestive heart failure. Packer M. **Eur Heart J** 1988 Jun;9 Suppl H:105–8 (20 ref.)

The United States experience with the acute and chronic treatment of primary pulmonary hypertension. Weir EK. **Eur Heart J** 1988 Sep;9 Suppl J:33–8 (34 ref.)

Vasodilator therapy of portal hypertension: focus on the liver. Blei AF. **Hepatology** 1989 Jun;9(6):896–9 (42 ref.)

Flosequinan induces hemodynamic improvement in heart failure complicating acute myocardial infarction. Schneeweiss A, et al. **Herz** 1988 Aug;13(4):259–62

Pharmacologic treatment of angina: nitrate tolerance. Parker JO. **Hosp Pract [Off]** 1988 Nov 15;23(11):63–71, 76–7, 80–3 (12 ref.)

Renal vasomotion in essential hypertension: influence of vasodilators. Hollenberg NK, et al. **Hypertension** 1989 Jul; 14(1):9–13

A randomised double-blind crossover study of isosorbide mononitrate and nifedipine retard in chronic stable angina. Akhras F, et al. **Int J Cardiol** 1989 Aug;24(2):191–6

The effect of flosequinan in patients with heart failure of acute onset complicating acute myocardial infarction. Schneeweiss A, et al. **Int J Cardiol** 1989 Jul;24(1):73–6

Vasodilators and pulmonary arterial hypertension: the paradox of therapeutic success and clinical failure. Sniderman AD, et al. **Int J Cardiol** 1988 Aug;20(2):173–81 (18 ref.)

Enhancement of the anti-tumor effect of melphalan in experimental mice by some vaso-active agents. Adams GE, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1137–9

Potentiation of the tumor cytotoxicity of melphalan by vasodilating drugs. Chaplin DJ, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1131–5

Dopexamine hydrochloride, a novel drug with renal vasodilator properties: two case studies. Bodenham AR, et al. **Intensive Care Med** 1988;14(6):663–5

Vasodilator and inotropic drugs for the treatment of chronic heart failure: distinguishing hype from hope. Packer M. **J Am Coll Cardiol** 1988 Nov;12(5):1299–317 (228 ref.)

Pathophysiology and current therapy of congestive heart failure. Parmley WW. **J Am Coll Cardiol** 1989 Mar 15; 13(4):771–85 (97 ref.)

The safety and lack of efficacy of vinpocetine in Alzheimer's disease. Thal LJ, et al. **J Am Geriatr Soc** 1989 Jun; 37(6):515–20

Antihypertensive treatment with dilevalol, a new beta-blocking vasodilator. A satellite symposium to the 1987 European Society of Hypertension meeting. **J Cardiovasc Pharmacol** 1988;11 Suppl 2:S1–45

Reduction of size of myocardial infarction with nicorandil, a new antianginal drug, after coronary artery occlusion in dogs. Endo T, et al. **J Cardiovasc Pharmacol** 1988; 12(5):587–92

Participation of the vasodilating property of nipradilol in improving ischemic derangement of myocardial energy metabolism. Higuchi M. **J Cardiovasc Pharmacol** 1989 Jul; 14(1):157–65

Therapeutic progress in intensive care—rational use of vasoactive and inotropic drugs in the intensive care unit. Clapham MC, et al. **J Clin Pharm Ther** 1989 Apr; 14(2):87–102 (10 ref.)

Renal effects of fenoldopam in refractory hypertension. Ruilope LM, et al. **J Hypertens** 1988 Aug;6(8):665–9

Vasodilating effects of celiprolol in patients with peripheral obliterative arterial disease. Diehm C. **J Int Med Res** 1988; 16 Suppl 1:34A–38A

Cardiovascular pharmacological therapy in children—a review. Part 2: Vasodilators and diuretics. Chan KY, et al. **J Singapore Paediatr Soc** 1988;30(3–4):100–8 (25 ref.)

Vasodilators in chronic congestive heart failure [letter] Zatuchni J. **JAMA** 1988 Nov 4;260(17):2510

Progress in anti-hypertensive vasodilative therapy. Satellite symposium of the 50th annual scientific meeting of the Japanese Circulation Society. March 29, 1986, Kyoto. Abstracts. **Jpn Circ J** 1989 May;53(5):462–8

Dilated cardiomyopathy. I: Vasodilator therapy. Vine DL. **Kans Med** 1989 Feb;90(2):55, 53 (0 ref.)

Vinpocetine prevents ischemic cell damage in rat hippocampus. Sauer D, et al. **Life Sci** 1988;43(21):1733–9

Neuro-endocrine changes as new targets in the drug treatment of congestive heart failure. van Zwieten PA. **Pharmacol Res Commun** 1988 Dec;20(12):1017–23

Venous flushing with vasodilators aids recovery of vasoconstricted and warm ischemic injured pig kidneys. Kaneko H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1233–5

[Hemodynamic changes and left ventricular function in patients with hypertension during an acute trial of urapidil] Sirakova V, et al. **Vutr Boles** 1988;27(5):20–3 (Eng. Abstr.) (Bul)

[Nursing care of patients using 654-2 in the prevention and treatment of epidemic hemorrhagic fever renal failure] Xu GP. **Chung Hua Hu Li Tsa Chih** 1988 Oct;23(10):581–3 (Chi)

[Evaluation of the immediate effect of ligustrazine in chronic cor pulmonale] Peng W, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Feb;28(2):93–4, 126–7 (Eng. Abstr.) (Chi)

[Clinical overview of the present state of treatment of cardiac insufficiency using vasodilating agents] **Cesk Fysiol** 1986; 35(5):432–9 (Cze)

[Pharmacologic aspects of therapeutic advances in the treatment of cardiac insufficiency using vasodilating agents] **Cesk Fysiol** 1986;35(5):445–51 (Cze)

[Vasoactive drugs in the treatment of inner ear disorders] Hahn A, et al. **Cesk Otolaryngol** 1988 Dec;37(6):361–3 (Eng. Abstr.) (Cze)

[Vasodilators in the treatment of hypertension] Huysmans FT, et al. **Ned Tijdschr Geneeskd** 1989 Mar 25; 133(12):595–9 (Dut)

[The use of buflomedil in the treatment of post-traumatic cerebral edema] Urciuoli R, et al. **Agressologie** 1988 May; 29(6):469–71 (Eng. Abstr.) (Fre)

[Ifenprodil tartrate in the treatment of occlusive arteriopathies of the lower limbs. Results of a prospective double-blind controlled multicenter trial] Natali J, et al. **Ann Cardiol Angeiol (Paris)** 1989 Jun;38(6):339–42 (Fre)

[Value of vasodilator treatment in beginning cardiac insufficiency] Vacheron A. **Bull Acad Natl Med** 1989 Jan; 173(1):51–5; discussion 55–6 (Eng. Abstr.) (Fre)

[Prostaglandins including prostacyclin in the treatment of peripheral arterial occlusive disorders] Alexander K. **Internist (Berlin)** 1989 Jul;30(7):429–39 (134 ref.) (Ger)

[Therapy of heart failure with vasodilator agents] Just H, et al. **Z Kardiol** 1988;77 Suppl 5:97–101 (21 ref.) (Eng.

Abstr.) (Ger)
[Acute effects of nisoldipine in patients with stable effort angina] De Caprio L, et al. **Cardiologia** 1988 Oct; 33(10):985–8 (Eng. Abstr.) (Ita)
[Two sides of the coin, or converting enzyme inhibitors in the therapy of heart failure] Guazzi MD, et al. **Cardiologia** 1989 Jan;34(1):15–8 (32 ref.) (Ita)
[Evaluation of hemorrheological drugs in microcirculatory ischemia] Avellone G, et al. **Clin Ter** 1987 Jul 31; 122(2):121–7 (44 ref.) (Eng. Abstr.) (Ita)
[Treatment of chronic cardiac decompensation in patients 70 years of age and older] D'Amore F, et al. **Clin Ter** 1988 Oct 15;127(1):53–8 (11 ref.) (Eng. Abstr.) (Ita)
[Vasodilators: which, how, when] Mestroni L, et al. **G Ital Cardiol** 1988 Dec;18(12):1065–71 (52 ref.) (Ita)
[Digital blood flow in peripheral vascular diseases. Action of drugs: buflomedil] Frausini G, et al. **Minerva Cardioangiol** 1988 Jun;36(6):319–22 (Eng. Abstr.) (Ita)
[Effects of short-term administration of ibopamine on hemodynamic parameters] Perroni GB, et al. **Minerva Med** 1989 May;80(5):461–8 (Eng. Abstr.) (Ita)
[Pharmacological study of TJ-8007 (tsumura-zokumeito) (II): Protective effect of TJ-8007 against cerebral ischemia] Goto K, et al. **Nippon Yakurigaku Zasshi** 1989 Apr; 93(4):255–60 (Eng. Abstr.) (Jpn)
[Treatment of vasospasm after ruptured cerebral aneurysms by 'pellet-cisternal-drain: PCD' containing sustained-release vasodilators] Oda Y, et al. **No Shinkei Geka** 1988 Jul;16(8):965–70 (Eng. Abstr.) (Jpn)
[Pharmacotherapy of cardiogenic shock and acute circulatory insufficiency based on bedside hemodynamic monitoring] Czarnecki W. **Kardiol Pol** 1988;31(7):439–48 (Pol)
[Effect of beta-pyridylcarbinol on pulmonary arterial pressure and various indicators of the blood coagulation system in patients with secondary pulmonary hypertension] Dubiel JP, et al. **Kardiol Pol** 1988;31(10):626–32 (Eng. Abstr.) (Pol)
[Vasodilator agents in the treatment of acute myocardial infarction] Ostrzycki A, et al. **Pol Tyg Lek** 1988 Sep 5; 43(36):1139–42 (Pol)
[Anti-arrhythmic and vasodilator actions of the antioxidant fenozan in acute ischemia and reperfusion] Vasilets LA, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):554–7 (Eng. Abstr.) (Rus)
[Peripheral vasodilators in the treatment of heart failure] Ol'binskaia LI. **Farmakol Toksikol** 1989 Mar–Apr; 52(2):116–22 (Rus)
[Left-ventricular function in patients with unstable stenocardia after pharmacological and surgical treatment] Ioseliani DG, et al. **Kardiologiia** 1988 Jun;28(6):44–8 (Eng. Abstr.) (Rus)
[Pharmacologic effects of peripheral vasodilators in patients with secondary pulmonary hypertension] Kukes VG, et al. **Klin Med (Mosk)** 1989 May;67(5):52–6 (Eng. Abstr.) (Rus)
[Effectiveness of vasoactive preparations in patients with circulatory encephalopathy] Petelin LS, et al. **Klin Med (Mosk)** 1988 Sep;66(9):67–9 (Rus)
[Treatment and outpatient observation of patients with chronic cor pulmonale] Butorov IV. **Sov Med** 1988; (10):90–2 (Rus)
[Pathogenetic therapy of traumatic diseases of the spinal cord] Murashkina LV, et al. **Sov Med** 1989;(5):41–4 (47 ref.) (Rus)
[Prognosis of the length of remission following conservative treatment of atherosclerotic occlusions of the main arteries of the extremities] Shishkin EK, et al. **Sov Med** 1988; (11):65–7 (Rus)
[Dyscirculatory encephalopathy] Shtok VN, et al. **Sov Med** 1988;(11):99–101 (Rus)
[The effect of apressin on the results of the Valsalva test in ischemic heart disease] Sivkov SI, et al. **Sov Med** 1988; (9):9–12 (Eng. Abstr.) (Rus)
[Effect of kavinton on the hemodynamics and adenosine metabolism in atherosclerosis patients] Mikunis RI, et al. **Vrach Delo** 1988 Jul;(7):27–9 (Eng. Abstr.) (Rus)
[Selective, rational, monitored chronic therapy of heart decompensation using vasodilators] **Cesk Fysiol** 1986; 35(5):448–51 (Slo)
[Evaluation of the efficacy and safety of dilevalol in the treatment of essential arterial hypertension] Bochicchio T, et al. **Arch Inst Cardiol Mex** 1989 Mar–Apr;59(2):181–6 (Eng. Abstr.) (Spa)
[Vasodilator agents in pulmonary hypertension] Farga V. **Rev Med Chil** 1987 Sep;115(9):902–4 (Spa)

TOXICITY

Nitric oxide–generating vasodilators and 8-bromo-cyclic guanosine monophosphate inhibit mitogenesis and proliferation of cultured rat vascular smooth muscle cells. Garg UC, et al. **J Clin Invest** 1989 May;83(5):1774–7

VASOMOTOR RHINITIS see **RHINITIS, VASOMOTOR**

VASOMOTOR SYSTEM

CYTOLOGY

Reticulospinal vasomotor neurons in the RVL mediate the somatosympathetic reflex. Morrison SF, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1084–97

DRUG EFFECTS

Differential vasomotor action of noradrenaline, serotonin, and histamine in isolated basilar artery from rat and guinea-pig. Chang JY, et al. **Acta Physiol Scand** 1988 Jan; 132(1):91–102
Different coronary vasomotor effects of nifedipine and therapeutic correlates in angina with spontaneous and effort components versus Prinzmetal angina. Loaldi A, et al. **Am Heart J** 1989 Feb;117(2):315–22
Superior efficacy of propranolol versus nifedipine in double-component angina, as related to different influences on coronary vasomotility. DeCesare N, et al. **Am J Med** 1989 Jul;87(1):15–21
Halothane induced vasomotion of coronary, renal and iliac arterial rings in malignant hyperthermia susceptible swine. DeRoth L, et al. **Can J Vet Res** 1988 Oct;52(4):407–10
Nonuniform vasomotor responses of the coronary microcirculation to serotonin and vasopressin. Lamping KG, et al. **Circ Res** 1989 Aug;65(2):343–51
Mechanisms of pressor responses to intracisternal administration of hypertonic NaCl in conscious, unrestrained normotensive and spontaneously hypertensive rats. Takata Y, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:281–7
Oxygen radicals and antioxidant enzymes alter pulmonary vascular reactivity in the rat lung. Archer SL, et al. **J Appl Physiol** 1989 Jan;66(1):102–11
Effects of bilirubin on cerebral arterial tone in vitro. Miao FJ, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):666–74
Effects of cyclosporine on human renal allograft renin and prostaglandin production. Klassen DK, et al. **Transplantation** 1989 Jun;47(6):1072–5
[Relation between the therapeutic efficacy of nifedipine in exercise-induced, mixed and spontaneous angina and acute coronary vasomotor effects evaluated by quantitative angiography] Polese A, et al. **Cardiologia** 1988 May; 33(5):515–24 (Eng. Abstr.) (Ita)
[Pharmacologic characterization of the internal mammary artery used in myocardial revascularization] Raddino R, et al. **Cardiologia** 1989 May;34(5):431–7 (Eng. Abstr.) (Ita)

INJURIES

[Vascular trauma—sequelae] Jantet G. **Phlebologie** 1989 Apr-Jun;42(2):307–11 (Fre)

PHYSIOLOGY

Cerebral and carotid haemodynamic changes following cervical spinal cord stimulation. An experimental study. Garcia-March G, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:102–4
Is vasodilatation following dorsal column stimulation mediated by antidromic activation of small diameter afferents? Linderoth B, et al. **Acta Neurochir Suppl (Wien)** 1989;46:99–101
Effects of free radicals on permeability and vasomotor response of cerebral vessels. Unterberg A, et al. **Acta Neuropathol (Berl)** 1988;76(3):238–44
ATP as a sympathetic co-transmitter in rat vasomotor nerves—further evidence that individual release sites respond to nerve impulses by intermittent release of single quanta. Astrand P, et al. **Acta Physiol Scand** 1989 Jul; 136(3):355–65
Vasomotor responses of the umbilical circulation in fetal sheep. Adamson SL, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1056–62
Mechanisms of respiration-induced changes in vasomotor control exerted by rostral ventrolateral medulla. Cox BF, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R626–34
Ventrolateral medullary lesions and fastigial cardiovascular response in beagles. Dormer KJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1200–8
Dietary omega 3 fatty acids and endothelium-dependent relaxations in porcine coronary arteries. Shimokawa H, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H968–73
Effective diameter as a determinant of local vascular resistance in presence of vasomotion. Slaaf DW, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1240–3
N-methyl-D-aspartate receptors mediate tonic vasodepressor control in the caudal ventrolateral medulla of the rat. Kubo T, et al. **Brain Res** 1988 Jun 7; 451(1–2):366–70
Pulmonary vasomotor responses to neural activation in man. Moruzzi P, et al. **Cardiovasc Res** 1988 Jan;22(1):25–30
Respiratory and vasomotor influences of the ventrolateral medulla. Cherniack NS, et al. **Clin Exp Hypertens [A]** 1988; 10 Suppl 1:1–9 (25 ref.)
Evidence for two functionally distinct vasomotor subregions of rostral ventral medulla. Cox BF, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:11–8
Endothelium-derived relaxing and contracting factors. Furchgott RF, et al. **FASEB J** 1989 Jul;3(9):2007–18 (108 ref.)
The Prony spectral line estimation (PSLE) method for the analysis of vascular oscillations. Meyer JU, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):968–71
Presynaptic modulation of sympathetic nerve transmission—an element in vasomotor control. Fuglsang A, et al. **Int J Microcirc Clin Exp** 1989 Feb;8(1):71–84
Origin of tonic GABAergic inputs to vasopressor neurons in the subretrofacial nucleus of the rabbit. Dampney RA, et al. **J Auton Nerv Syst** 1988 Oct;24(3):227–39
Potassium-induced endothelium-dependent rhythmic activity in the canine basilar artery. Katusic ZS, et al. **J Cardiovasc Pharmacol** 1988 Jul;12(1):37–41
The role of neuropeptide Y in vascular sympathetic neurotransmission may be enhanced in hypertension. Daly RN, et al. **J Hypertens Suppl** 1988 Dec;6(4):S535–8
Role of calcium in the vasoconstriction induced by angiotensin II. van Heiningen PN, et al. **J Hypertens Suppl** 1988 Dec;6(4):S640–2
Impaired baroreflex changes in muscle sympathetic nerve activity in adolescents who have a family history of essential hypertension. Yamada Y, et al. **J Hypertens Suppl** 1988 Dec;6(4):S525–8
Poiseuille, periodicity, and perfusion: rhythmic oscillatory vasomotion in the skin. Wilkin JK. **J Invest Dermatol** 1989 Aug;93(2 Suppl):113S–118S
Prejunctional inhibitory effect of a dopamine D-2 agonist, N-0437, on vascular adrenergic responses. Friedman DJ, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):853–9
Relation between density (maximum binding) of alpha adrenoceptor binding sites and contractile response in four canine vascular tissues. Shi AG, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1119–24
Central vasomotor control of the rabbit portal vein. Takeuchi T, et al. **Pflugers Arch** 1989 Feb;413(4):348–53
Respiratory and vasomotor responses to focal cooling of the ventral medullary surface (VMS) of the rat. Mitra J, et al. **Respir Physiol** 1988 Oct;74(1):35–47
[Effects of acupuncture on microvascular vasomotion] Xiu RJ. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):489–90, 34 (Eng. Abstr.) (Chi)
[Neural influences on pulmonary vasomotility in man] Moruzzi P, et al. **G Ital Cardiol** 1988 Apr;18(4):301–7 (Eng. Abstr.) (Ita)
[The participation of the structures of the ventral sections of the medulla oblongata in realizing vasomotor pressor reflexes] Kul'chitskiĭ VA, et al. **Fiziol Zh SSSR** 1988 Oct; 74(10):1409–17 (Eng. Abstr.) (Rus)
[Interrelation of the rate of decompression of the eyeball and associated vasomotor reactions occurring in the vessels of the uveal tract] Melianchenko NB, et al. **Vestn Oftalmol** 1988 Sep-Oct;104(5):29–31 (Eng. Abstr.) (Rus)
[New discoveries in vascular physiology: vascular endothelium controls the vasomotor system] Thulesius O. **Lakartidningen** 1988 Nov 9;85(45):3809–10, 3812 (Swe)

PHYSIOPATHOLOGY

Relation to restenosis after percutaneous transluminal coronary angioplasty to vasomotion of the dilated coronary arterial segment. Bertrand ME, et al. **Am J Cardiol** 1989 Feb 1;63(5):277–81
Transitory postural vasomotor dysfunction in the finger after short term hand vibration. Olsen N, et al. **Br J Ind Med** 1989 Aug;46(8):575–81
Renal vasomotion in essential hypertension: influence of vasodilators. Hollenberg NK, et al. **Hypertension** 1989 Jul; 14(1):9–13
Effects of vasomotor- and mediator-induced hypotension on bronchomotor tone in swine. White SR, et al. **J Appl Physiol** 1989 Apr;66(4):1852–9
Atherosclerosis influences the vasomotor response of epicardial coronary arteries to exercise. Gordon JB, et al. **J Clin Invest** 1989 Jun;83(6):1946–52
Normal endothelial function and decreased vasoreactivity of experimental arterial grafts. el-Sanadiki MN, et al. **J Vasc Surg** 1989 Jan;9(1):98–106

VASOPRESSIN, ARGININE see **ARGIPRESSIN**

VASOPRESSIN, DEAMINO ARGININE see **DESMOPRESSIN**

VASOPRESSIN, ISOLEUCYL see **VASOTOCIN**

VASOPRESSIN, ISOLEUCYL-LEUCYL see **OXYTOCIN**

VASOPRESSIN, LYSINE see **LYPRESSIN**

VASOPRESSIN, NON-MAMMALIAN see **VASOTOCIN**

VASOPRESSINS

see related
INAPPROPRIATE ADH SYNDROME

Effect of pH on vasopressin-induced water permeability in collecting ducts of isolated rat papillae. Fitzgibbon W, et al. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):857–64
Atrial natriuretic factor inhibits vasopressin-stimulated osmotic water permeability in rat inner medullary collecting duct. Nonoguchi H, et al. **J Clin Invest** 1988 Oct;82(4):1383–90

ADMINISTRATION & DOSAGE

Intravenous vasopressin and gastrointestinal hemorrhage in children. Tuggle DW, et al. **J Pediatr Surg** 1988 Jul; 23(7):627–9

[A case of leiomyosarcoma of the jejunum with effective hemostasis in massive hemorrhage by continuous intraarterial vasopressin injection] Kitahara T, et al. **Rinsho Hoshasen** 1988 Jul;33(7):829–32 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Simultaneous infusion of nitroglycerin and nitroprusside to offset adverse effects of vasopressin during portosystemic shunting. Sirinek KR, et al. **Am J Surg** 1989 Jan;157(1):33–7

Mesenteric thrombosis following sclerotherapy during vasopressin infusion: mechanism and therapeutic implications. Goldberg H, et al. **J Clin Gastroenterol** 1989 Feb;11(1):56–7

Ornithine–vasopressin gangrene and reconstruction of the upper lip. Case report. Bittow KW, et al. **J Craniomaxillofac Surg** 1989 Feb;17(2):88–91

[Undesirable effects following the local injection of ornipressin during general anesthesia: can the risk be lessened? A prospective study] Kleemann PP, et al. **Anaesthesist** 1988 Aug;37(8):551–7 (Eng. Abstr.) **(Ger)**

ANALYSIS

Oxytocin and vasopressin are present in human and rat pancreas. Amico JA, et al. **Am J Med Sci** 1988 Nov; 296(5):303–7

Central and peripheral release of vasopressin and oxytocin in the conscious rat after osmotic stimulation. Landgraf R, et al. **Brain Res** 1988 Aug 9;457(2):219–25

Corticotropin–releasing factor and vasopressin production in the rat pituitary tumor 7315a: biochemical and immunohistochemical studies. Morano MI, et al. **Cancer Res** 1989 May 15;49(10):2755–60

Mutant vasopressin precursor in the endoplasmic reticulum of the Brattleboro rat. Ultrastructural evidence from individual "vasopressin" cells localized with the light microscope by use of a new gold/silver method for immunostain enhancement. Guldenaar SE, et al. **Cell Tissue Res** 1988 Sep;253(3):671–6

Vasopressin and oxytocin systems in the brain and upper spinal cord of Macaca fascicularis. Caffé AR, et al. **J Comp Neurol** 1989 Sep 15;287(3):302–25

Distributions of pro–vasopressin expressing and pro–vasopressin deficient CRH neurons in the paraventricular hypothalamic nucleus of colchicine–treated normal and adrenalectomized rats. Whitnall MH. **J Comp Neurol** 1988 Sep 1;275(1):13–28

Monoclonal antibodies: uses in studies on vasopressin. Valiquette G, et al. **Methods Enzymol** 1989;168:574–87

Neuropeptide Y–like immunoreactivity is present in boutons synapsing on vasopressin–containing neurons in rabbit supraoptic nucleus. Beroukas D, et al. **Neuroendocrinology** 1989 Aug;50(2):222–8

Vasopressin neuron is the target of monoclonal antibodies raised against vasopressin–neurophysin injected in vivo. Leon–Henri B, et al. **Neuroendocrinology** 1989 Feb; 49(2):125–33

Galanin and vasopressin coexist in the rat hypothalamo–neurohypophyseal system. Skofitsch G, et al. **Neuroendocrinology** 1989 Apr;49(4):419–27

Neurohypophyseal aging: differential changes in oxytocin and vasopressin release, studied in Fischer 344 and Sprague–Dawley rats. Zbuzek V, et al. **Neuroendocrinology** 1988 Dec;48(6):619–26

Sex–specific effects of met–enkephalin treatment on vasopressin immunoreactivity in the rat supraoptic nucleus. Blanco E, et al. **Neuropeptides** 1989 Feb–Mar;13(2):115–20

Circadian variations of vasopressin level and vasopressin–converting aminopeptidase activity in the rat pineal gland. Liu B, et al. **Peptides** 1988 Sep–Oct;9(5):973–8

Presence and actions of vasopressin–like peptides in the rabbit anterior uvea. Too HP, et al. **Regul Pept** 1989 Jun–Jul; 25(3):259–66

Localization and regulation of vasopressin mRNA in human neurons. Rivkees SA, et al. **Synapse** 1989;3(3):246–54

[Immunohistochemical identification of VP- and OT-containing neurons in the hypothalamus and its adjacent areas of the rat] Yang M, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):367–70 (Eng. Abstr.) **(Chi)**

[Immunochemical identification of vasopressin in neurons and in granule–containing cells of the human cerebral blood vessels] Motavkin PA, et al. **Arkh Anat Gistol Embriol** 1989 May;96(5):18–23 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Vasopressin and oxytocin receptors on plasma membranes from rat mammary gland. Demonstration of vasopressin receptors by stimulation of inositol phosphate formation, and oxytocin receptors by binding of a specific 125I–labeled oxytocin antagonist, d(CH2)5(1)[Tyr(Me)2, Thr4,Tyr–NH2(9)]OVT. Soloff MS, et al. **Biochem Cell Biol** 1989 Feb–Mar;67(2–3):152–62

Inhibition of vasopressin–stimulated flank marking behavior by V1–receptor antagonists. Ferris CF, et al. **Eur J Pharmacol** 1988 Sep 13;154(2):153–9

Attenuation of spontaneous hypertension in rats by a vasopressin antagonist. Sladek CD, et al. **Hypertension** 1988 Nov;12(5):506–12

Central and systemic effects of a vasopressin V1 antagonist on MAP recovery after haemorrhage in rats. Johnson JV, et al. **J Cardiovasc Pharmacol** 1988 Oct;12(4):405–12

Structure–activity relationships of novel vasopressin antagonists containing C–terminal diaminoalkanes and (aminoalkyl)guanidines. Callahan JF, et al. **J Med Chem** 1989 Feb;32(2):391–6

A minor modification of residue 1 in potent vasopressin antagonists dramatically reduces agonist activity. Huffman WF, et al. **J Med Chem** 1989 Apr;32(4):880–4

[Arg1–D–Phe7]–substituted bradykinin analogs inhibit bradykinin– and vasopressin–induced contractions of uterine smooth muscle. Farmer SG, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):677–81

Effect of vasopressin antagonist on antidiuresis by oxotremorine microinjected into the hypothalamic supraoptic and paraventricular nuclei in a water–loaded and ethanol–anesthetized rat. Mori M, et al. **Jpn J Pharmacol** 1989 Mar;49(3):357–64

Mechanisms of action of vasopressin and vasopressin antagonists. Jard S. **Kidney Int Suppl** 1988 Oct;26:S38–42 (48 ref.)

The development of potent and specific vasopressin antagonists. Sawyer WH, et al. **Kidney Int Suppl** 1988 Oct; 26:S34–7 (22 ref.)

Use of vasopressin antagonists in human diseases. Thibonnier M. **Kidney Int Suppl** 1988 Oct;26:S48–51 (28 ref.)

Vasopressin inhibition via combined head–out water immersion and a prostaglandin E–1 precursor in the treatment of male reproductive failure due to chronic alcohol abuse. Backon J. **Med Hypotheses** 1989 Jun; 29(2):81–3

Endothelin and sarafotoxin produce dissimilar effects on renal blood flow, but both block the antidiuretic effects of vasopressin. Goetz K, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):425–7

BIOSYNTHESIS

Total translation of vasopressin and oxytocin in neurohypophysis of rats. Robinson AG, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R109–17

[Ectopic hormone production by neoplasms] Yamaji T. **Rinsho Byori** 1988 Dec;36(12):1386–92 **(Jpn)**

BLOOD

Identification of vasopressin–like peptides in the plasma of a patient with the syndrome of inappropriate secretion of antidiuretic hormone and an oat cell carcinoma. Smitz S, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):567–74

Atrial natriuretic polypeptide in patients with subarachnoid haemorrhage due to aneurysmal rupture. Correlation to hyponatremia. Shimoda M, et al. **Acta Neurochir (Wien)** 1989;97(1–2):53–61

Regulation of vasopressin and oxytocin release in vitro. Sladek CD, et al. **Adv Exp Med Biol** 1988;245:157–65 (46 ref.)

Antidiuretic hormone in acute asthma in children: effects of medication on serum levels and clinical course. Iikura Y, et al. **Allergy Proc** 1989 May–Jun;10(3):197–201

Stimulation of atrial natriuretic peptide and vasopressin during percutaneous transluminal aortic valvuloplasty. Lewin RF, et al. **Am Heart J** 1989 Aug;118(2):292–8

Volume receptors in guinea pig labyrinth: relevance with respect to ADH and Na control. Bartoli E, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F341–6

Facilitatory role of central dopamine in the osmotic release of vasopressin. Yamaguchi K, et al. **Brain Res** 1989 Mar 6;481(2):388–91

Neuropeptide Y, epinephrine and norepinephrine in the paraventricular nucleus: stimulation of feeding and the release of corticosterone, vasopressin and glucose. Leibowitz SF, et al. **Brain Res Bull** 1988 Dec;21(6):905–12

Plasma vasopressin and atrial natriuretic factor in response to blood volume changes in the anaesthetized rabbit. Courneya CA, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):344–52

Role of vagosympathetic fibers in the control of adrenocorticotropic hormone, vasopressin, and renin responses to hemorrhage in fetal sheep. Wood CE, et al. **Circ Res** 1989 Mar;64(3):515–23

Vasopressin in rats with genetic and streptozocin–induced diabetes. Brooks DP, et al. **Diabetes** 1989 Jan;38(1):54–7

Immediate insulin effect upon plasma anti–diuretic hormone concentration [letter] Chaudhuri TK, et al. **Diabetologia** 1988 Sep;31(9):714

Release of oxytocin and vasopressin by intracerebroventricular vasoactive intestinal polypeptide. Bardrum B, et al. **Endocrinology** 1988 Nov;123(5):2249–54

Vasopressin secretion: suppression after light and tone stimuli previously paired with footshocks in rats. Onaka T, et al. **Exp Brain Res** 1988;71(2):291–7

Increased basal plasma vasopressin–neurophysin in mania. Legros JJ, et al. **Horm Res** 1989;31(1–2):55–8

Role of vasopressin in cardiovascular response to central cholinergic stimulation in rats. Imai Y, et al. **Hypertension** 1989 Jun;13(6 Pt 1):549–57

Does the kind of immunosuppressive therapy influence plasma renin activity, aldosterone and vasopressin in patients with a kidney transplant? Nieszporek T, et al. **Int Urol Nephrol** 1989;21(2):233–40

Vasopressin response to dehydration in Alzheimer's disease. Albert SG, et al. **J Am Geriatr Soc** 1989 Sep;37(9):843–7

Contributions of the kidneys and intestines to water conservation, and plasma levels of antidiuretic hormone, during dehydration in house sparrows (Passer domesticus). Goldstein DL, et al. **J Comp Physiol [B]** 1988;158(3):353–61

Increase in plasma atrial natriuretic factor and right atrial area during endogenous and exogenous volume loading in healthy volunteers: effect on plasma renin activity, aldosterone and antidiuretic hormone. Wingender W, et al. **J Hypertens Suppl** 1988 Dec;6(4):S314–6

Plasma vasopressin is not involved in footshock–induced analgesia in rats. Hamamura M, et al. **Jpn J Physiol** 1988; 38(5):741–6

Inappropriate secretion of antidiuretic hormone, polydipsia and hypothalamic calcifications. Gross P, et al. **Klin Wochenschr** 1989 Jul 17;67(14):730–3

Bimodal effects of noxious stimuli on vasopressin secretion in rats. Onaka T, et al. **Neurosci Res** 1988 Dec;6(2):143–8

Cord plasma vasopressin, erythropoietin, and hypoxanthine as indices of asphyxia at birth. Ruth V, et al. **Pediatr Res** 1988 Oct;24(4):490–4

Effects of penbutolol on plasma atrial natriuretic peptide and antidiuretic hormone levels before and after exercise: a double–blind comparison against placebo. Verho M, et al. **Pharmatherapeutica** 1989;5(5):320–8

Vasopressin in dehydrated and rehydrated ponies. Houpt KA, et al. **Physiol Behav** 1989 Mar;45(3):659–61

Oxytocin, vasopressin, and prolactin responses associated with nipple stimulation. Hatjis CG, et al. **South Med J** 1989 Feb;82(2):193–6

Compensatory changes of sympathetic tone, the renin–angiotensin–aldosterone system, vasopressin, and ANF as potential therapeutic targets in congestive heart failure. van Zwieten PA. **Z Kardiol** 1988;77 Suppl 5:67–76 (38 ref.)

[Hypernatremia due to hypothalamic tumor: ADH response to changes in plasma osmolality] Matsumoto K, et al. **No Shinkei Geka** 1989 Mar;17(3):267–71 (Eng. Abstr.) **(Jpn)**

[Endocrine changes induced by water immersion in women with normal pregnancy and pregnancy complicated by EPH gestosis. II. Effect of water immersion on blood vasopressin and plasma molality] Ulman J, et al. **Ginekol Pol** 1988 Jul;59(7):408–13 (Eng. Abstr.) **(Pol)**

[Effect of immersion (WI) in mineral water on plasma renin activity (PRA) and aldosterone (ALD) and vasopressin (VP) levels in the blood of patients with arterial hypertension] Kierzktejn M, et al. **Kardiol Pol** 1988;31 Suppl 1:16–21 (Eng. Abstr.) **(Pol)**

[Effect of naloxone on vasopressin level in the blood of patients with acute and chronic renal failure] Grzeszczak W, et al. **Pol Arch Med Wewn** 1985 Sep;74(3):176–80 (Eng. Abstr.) **(Pol)**

[Content of vasopressin and beta2–microglobulin in the blood in patients with diabetes mellitus type II accompanied by microangiopathy] Livshits IB, et al. **Probl Endokrinol (Mosk)** 1989 Jan–Feb;35(1):15–8 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Vasopressin content of cerebrospinal fluid and fluid perfusing cerebral ventricles after the stimulation of preganglionic fibres of superior cervical ganglia in rats. Lipińska S, et al. **Endocrinol Exp** 1988 Dec;22(4):261–8

Diurnal changes in vasopressin and oxytocin levels in cerebrospinal fluid of post–operative patients with intracranial aneurysms. Kuboyama T, et al. **Endocrinol Jpn** 1988 Apr;35(2):249–54

Circadian rhythm of vasopressin levels in cerebrospinal fluid of the fetus: effect of continuous light. Stark RI, et al. **Endocrinology** 1989 Jun;124(6):3095–101

CHEMICAL SYNTHESIS

Novel linear antagonists of the antidiuretic (V2) and vasopressor (V1) responses to vasopressin. Manning M, et al. **Int J Pept Protein Res** 1988 Dec;32(6):455–67

DEFICIENCY

Lack of vasopressin increases hypothalamic atrial natriuretic peptide binding sites. Castrén E, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R168–73

Early renal changes in lithium–treated normal and vasopressin–deficient rats. Jacobsen NO, et al. **APMIS Suppl** 1988;4:56–65

Atrial natriuretic peptide in plasma, atria, ventricles, and hypothalamus of Long–Evans and vasopressin–deficient Brattleboro rats. Ruskoaho H, et al. **Endocrinology** 1989 May;124(5):2595–603

[The role of the endocrine system in memory disorders] Bidzan L. **Psychiatr Pol** 1988 Sep–Oct;22(5):363–8 (0 ref.) **(Pol)**

DIAGNOSTIC USE

[Posttraumatic diabetes insipidus syndrome, pitressin–sensitive and spontaneously reversible, in a child] Sasu P, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1989 Jan–Mar;38(1):87–90 **(Rum)**

GENETICS

Regulation of vasopressin and oxytocin synthesis in anterior pituitary and peripheral tissues. Dave JR, et al. **Adv Alcohol Subst Abuse** 1988;7(3–4):231–4

Differential polyadenylation of the mutant vasopressin mRNA during development of Brattleboro rats. Fehr S, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):555–61

A single rat genomic DNA fragment encodes both the oxytocin and vasopressin genes separated by 11 kilobases and oriented in opposite transcriptional directions. Mohr E, et al. **Biochimie** 1988 May;70(5):649–54

Diurnal variation in vasopressin and oxytocin messenger RNAs in hypothalamic nuclei of the rat. Burbach JP, et al. **Brain Res** 1988 Sep;464(2):157–60

The vasopressin gene is expressed prior to regulation in the supraoptic nuclei of fetal rats. Reppert SM, et al. **Brain Res** 1988 Jul 26;456(2):392–6

Vasopressin and oxytocin gene expression in the supraoptic and paraventricular nucleus of the spontaneously hypertensive rat (SHR) during development of hypertension. van Tol HH, et al. **Brain Res** 1988 Dec; 464(4):303–11

Oxytocin and vasopressin gene expression during gestation and lactation. Zingg HH, et al. **Brain Res** 1988 Aug; 464(1):1–6

Ontogeny of hypothalamic vasopressin, oxytocin and somatostatin gene expression. Almazan G, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):69–75

Expression of the oxytocin and vasopressin genes in the rat hypothalamus during development: an in situ hybridization study. Laurent FM, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):145–54

Vasopressin gene expression in hypertensive, normotensive, and diabetes insipidus rats. McCabe JT, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:131–42

Impact of altered protein structures on the intracellular traffic of a mutated vasopressin precursor from Brattleboro rats. Schmale H, et al. **Eur J Biochem** 1989 Jul 1;182(3):621–7

Nonradioactive detection of vasopressin mRNA with in situ hybridization histochemistry. Baldino F Jr, et al. **Exp Neurol** 1989 Jun;104(3):200–7

Expression of the vasopressin and oxytocin genes in rats occurs in mutually exclusive sets of hypothalamic neurons. Mohr E, et al. **FEBS Lett** 1988 Dec 19;242(1):144–8

The vasopressin precursor in the Brattleboro (di/di) rat. Birkett SD, et al. **Int J Pept Protein Res** 1988 Dec; 32(6):565–72

Presence of pro-vasopressin mRNA, neurophysin and arginine vasopressin in mouse anterior pituitary cells and the AtT-20 corticotrophic tumour cell line. Loh YP, et al. **J Mol Endocrinol** 1988 Jul;1(1):39–48

Corticotrophin-releasing factor, vasopressin and pro-opiomelanocortin mRNA responses to stress and opiates in the rat. Lightman SL, et al. **J Physiol (Lond)** 1988 Sep;403:511–23

Quantitation of vasopressin and oxytocin mRNA levels in the brain. Van Tol HH, et al. **Methods Enzymol** 1989; 168:398–413

Differential responses in vasopressin and oxytocin gene expression in distinct hypothalamic nuclei after hypothalamoneurohypophyseal disconnection and vasopressin substitution. Van Tol HH, et al. **Neuroendocrinology** 1989 Apr;49(4):337–43

Simultaneous use of digoxigenin- and radiolabeled oligodeoxyribonucleotide probes for hybridization histochemistry. Young WS 3d. **Neuropeptides** 1989 May-Jun;13(4):271–5

A study of non-isotopic in situ hybridization histochemistry on postmortem changes in vasopressin mRNA in rat brain. Arai H, et al. **Neurosci Lett** 1989 Aug 28;103(2):127–32

Detection of vasopressin messenger RNA in cells within the bed nucleus of the stria terminalis by in situ hybridization histochemistry. Miller MA, et al. **Neurosci Lett** 1988 Dec 5;94(3):264–8

In situ hybridization demonstrates vasopressin gene transcription in hypothalamic neurons of crossbred hypertensive x diabetes insipidus rats. McCabe JT, et al. **Neuroscience** 1988 Oct;27(1):159–67

Sex differences in vasopressin neurons in the bed nucleus of the stria terminalis by in situ hybridization. Miller MA, et al. **Peptides** 1989 May-Jun;10(3):615–9

IMMUNOLOGY

Distributional pattern of oxytocin- and vasopressin-immunoreactivity in the neurohypophysis of the Djungarian hamster (Phodopus sungorus). Redecker P, et al. **Cell Tissue Res** 1988 Sep;253(3):677–81

[The use of immunoenzyme assay for the control of specific activity of antisera against vasopressin] Meniavtseva TA, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):114–6 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Use of perfluorated carboxylic acids in the separation of metabolites of vasopressin prior to radioimmunoassay. Höglund U. **J Chromatogr** 1988 Aug 19;430(1):128–34

Preparative high-performance liquid chromatography of peptides on a new reversed-phase packing material, Kromasil C18. Larsson K, et al. **J Chromatogr** 1988 Oct 19;450(1):71–80

METABOLISM

The effect of substance P (SP) infusion above the supraoptic nuclei of hypothalamus on the vasopressin content in the posterior pituitary lobe after haemorrhage in rats. Rubacha G, et al. **Acta Physiol Pol** 1988 May-Jun;39(3):175–82

Cultured hypothalamic explants from spontaneously hypertensive rats have decreased vasopressin and oxytocin content and release. Bennett BA, et al. **Am J Hypertens** 1989 Jan;2(1):46–51

Effects of hemorrhage on vasopressin and Met-Enk releases in blood and cerebrospinal fluid in dogs. Ota K, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R731–6

Vasopressin is metabolized by a trypsinlike enzyme in guinea pig amniotic fluid. Uyehara CF, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E354–60

Exposure of cultured hepatocytes to cyclic AMP enhances the vasopressin-mediated stimulation of inositol phosphate production. Pittner RA, et al. **Biochem J** 1989 Jan 15; 257(2):455–60

Lack of V1 vasopressin receptors in rabbit hepatocytes. Vandekerckhove A, et al. **Biochem J** 1989 Apr 15; 259(2):609–11

Vasopressin and noradrenaline coexistence in the rat locus ceruleus: differential decreases of their levels in distant brain areas after thermal and neurotoxic lesions. Caffé AR, et al. **Brain Res** 1988 Sep 6;459(2):386–90

Localization of vasopressin mRNA in the rat brain using in situ hybridization with short cRNA probes made from synthetic DNA templates. Emson PC, et al. **Brain Res** 1988 Nov;464(3):255–8

Immobilization stress affects oxytocin and vasopressin levels in hypothalamic and extrahypothalamic sites. Miaskowski C, et al. **Brain Res** 1988 Aug 16;458(1):137–41

Facilitation by forskolin of electrically evoked vasopressin release in vitro requires bursting pattern of stimulation. Treiman M, et al. **Brain Res** 1989 May 29;488(1–2):260–4

The distribution and plasticity of [3H]vasopressin-labelled specific binding sites in the canary brain. Voorhuis TA, et al. **Brain Res** 1988 Aug 2;457(1):148–53

Simultaneous immunogold labeling of GABAergic terminals and vasopressin-containing neurons in the rat paraventricular nucleus. Decavel C, et al. **Cell Tissue Res** 1989 Jan;255(1):77–80

Characterization of human platelet vasopressin receptor and the relation between vasopressin-induced platelet aggregation and vasopressin binding to platelets. Inaba K, et al. **Clin Endocrinol (Oxf)** 1988 Oct;29(4):377–86

Hypoglycemia enhances turnover of corticotropin-releasing factor and of vasopressin in the zona externa of the rat median eminence. Berkenbosch F, et al. **Endocrinology** 1989 Jul;125(1):28–34

Vasopressin receptor antagonism in rhesus monkey and man: stereochemical requirements. Brooks DP, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):159–62

Role of brain acetylcholine in vasopressin release during osmotic stimulation and hemorrhage. Iitake K, et al. **Exp Brain Res** 1989;75(1):47–52

Involvement of the median preoptic nucleus in the regulation of paraventricular vasopressin neurons by the subfornical organ in the rat. Tanaka J. **Exp Brain Res** 1989;76(1):47–54

Growth factor requirements of normal and polyomavirus middle T gene transformed REF52 cells in serum-free medium: indications of a reduced vasopressin requirement and its relationship to the control of phosphatidylinositol metabolism. Li L, et al. **Exp Cell Res** 1989 Jul;183(1):229–38

Insulin and release of neurohypophysial hormones: in vivo and in vitro studies. Guzek JW, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):43–50

AVP receptors of mouse Leydig cells are regulated by LH and E2 and influenced by experimental cryptorchidism. Tahri-Joutei A, et al. **FEBS Lett** 1989 Aug 28; 254(1–2):189–93

Effect of aging on hepatic clearance of vasopressin in Fischer 344 rats. Shih AP, et al. **Gerontology** 1988;34(5–6):257–63

Alpha 2-adrenergic stimulation and vasopressin in congestive heart failure. Goldsmith SR, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):425–9

Comparative study of collecting tubules and vasopressin binding capacity in the renal medulla of developing hypothyroid rat. Ali M, et al. **J Dev Physiol** 1988 Aug; 10(4):297–308

Compensatory pressor role of vasopressin following acute diuresis. DiPette DJ, et al. **J Hypertens** 1988 Aug; 6(8):633–8

The role of membrane turnover in the water permeability response to antidiuretic hormone. Harris HW Jr, et al. **J Membr Biol** 1988 Aug;103(3):207–16 (102 ref.)

Hypothalamic and neurohypophysial vasopressin and oxytocin in melatonin-treated pinealectomized male rats. Juszczak M, et al. **J Pineal Res** 1988;5(6):545–52

Frequency-dependent effects of activation and inhibition of protein kinase C on neurohypophysial release of oxytocin and vasopressin. Racké K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):617–24

Characteristics of neurosecretory centers of the hypothalamus of rats which are associated with regulation of the function of the adrenal cortex. Chernigovskaya EV, et al. **Neurosci Behav Physiol** 1988 Jul-Aug;18(4):289–93

Biochemical evidence for the GABA regulation of vasopressin levels in microdissected brain structures after servo-controlled hypotension. Magnusson A, et al. **Neurosci Lett** 1989 Jul 3;101(3):281–7

Vasopressin immunoreactivity in the anterior hypothalamus is altered during the establishment of dominant/subordinate relationships between hamsters. Ferris CF, et al. **Neuroscience** 1989;29(3):675–83

In vivo stimulation of phosphoinositide metabolism in the brainstem of rats following osmotic stress. Moratalla R, et al. **Neuroscience** 1989;29(2):391–400

Differential distribution of acetylcholinesterase activity among vasopressin- and oxytocin-containing supraoptic magnocellular neurons. Pow DV, et al. **Neuroscience** 1989; 28(1):109–19

Interaction of putative vasopressin receptors in rat brain and bovine pituitary gland with a vasopressin anti-idiotype antibody as revealed by immunoblotting. Abood LG, et al. **Peptides** 1988 Nov-Dec;9(6):1407–9

Changes in vasopressin-converting aminopeptidase activity in the rat pineal gland during summer: relationship to vasopressin contents. Liu B, et al. **Peptides** 1988 Nov-Dec; 9(6):1235–40

Vasopressin release induced by intracranial injection of eledoisin is mediated by central angiotensin II. Perfumi M, et al. **Pharmacol Res Commun** 1988 Sep;20(9):811–26

Modification of adrenergic and vasopressin receptor-linked lipid metabolism during endotoxemia. Spitzer JA, et al. **Prog Clin Biol Res** 1989;286:77–99

Plasma and urine electrolyte concentrations and vasopressin levels in patients admitted to hospital for falciparum malaria. Fryatt RJ, et al. **Trop Geogr Med** 1989 Jan; 41(1):57–60

PHARMACOKINETICS

Pharmacokinetics of vasopressin and atrial natriuretic peptide in anesthetized rabbits. King KA, et al. **Endocrinology** 1989 Jan;124(1):77–83

Topical peptides: percutaneous absorption of a vasopressin derivate, grass pollen, and other allergens by iontophoresis in men [letter] Remy W, et al. **J Invest Dermatol** 1988 Dec; 91(6):606

PHARMACOLOGY

Role of guanine nucleotide regulatory proteins and inositol phosphates in the hormone induced mobilization of hepatocyte calcium. Blackmore PF, et al. **Adv Exp Med Biol** 1988;232:169–82

Organic osmolytes in inner medulla of Brattleboro rat: effects of ADH and dehydration. Blumenfeld JD, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F916–22

Vasopressin: a regulator of adrenal glucocorticoid production? Brooks VL, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E566–72

Effects of histidine on vasopressin action: role of decreased prostaglandin production. Carvounis CP, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F685–9

Pressor responsiveness to and secretion of vasopressin during the estrous cycle. Crofton JT, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R1041–8

Mechanism of Li inhibition of vasopressin-sensitive adenylate cyclase in cultured renal epithelial cells. Goldberg H, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F995–1002

Hypotonic cell volume regulation in mouse medullary thick ascending limb: effects of ADH. Hebert SC, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F962–9

Mercurial reagents inhibit flow through ADH-induced water channels in toad bladder. Hoch BS, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F948–53

Variability of cellular responsiveness to ADH stimulation in toad urinary bladder. Kachadorian WA, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F590–5

Pressor responses to vasopressin in pigs and sheep with DOCA hypertension. Ling WD, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H101–4

Peptide hormone effects on urinary acidification and acid-base balance: PTH, ADH, and glucagon. Paillard M, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F973–85 (101 ref.)

Dexamethasone accelerates differentiation of A6 epithelia and increases response to vasopressin. Preston AS, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C661–6

Effect of vasopressin on adrenal steroidogenesis. Schneider EG. **Am J Physiol** 1988 Nov;255(5 Pt 2):R806–11

Cytochalasin B inhibition of toad bladder apical membrane responses to ADH. Wade JB, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C526–30

Effect of vasopressin on intracellular [Ca] and Na transport in cultured toad bladder cells. Wong SM, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F1015–24

Antidiuretic and pressor actions of vasopressin in age-dependent DOCA-salt hypertension. Zicha J, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R138–45

Inositol lipid metabolism in vasopressin stimulated hepatocytes from rats infused with tumor necrosis factor. Spitzer JA, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):197–203

The effect of cholera toxin on the inhibition of vasopressin-stimulated inositol phospholipid hydrolysis is a cyclic AMP-mediated event at the level of receptor binding. Gardner SD, et al. **Biochem J** 1989 May 1; 259(3):679–84

Influence of bacterial toxins and forskolin upon vasopressin-induced inositol phosphate accumulation in WRK 1 cells. Guillon G, et al. **Biochem J** 1989 Jun 15; 260(3):665–72

Epidermal growth factor stimulates phospholipase A2 in vasopressin-treated rat glomerular mesangial cells.

Margolis BL, et al. **Biochem J** 1988 Dec 1;256(2):469–74
Effect of vasopressin on the regulation of protein synthesis initiation in liver cells. Menaya J, et al. **Biochem J** 1988 Sep 15;254(3):773–9
Activation of rat liver plasma-membrane diacylglycerol kinase by vasopressin and phenylephrine. Rider MH, et al. **Biochem J** 1988 Nov 1;255(3):923–8
Ca2+ mobilization by vasopressin and glucagon in perfused livers. Effect of prior intoxication with bromotrichloromethane. Benedetti A, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1799–805
Stimulation of surfactant secretion by vasopressin in primary cultures of adult rat type II pneumocytes. Brown LA, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):76–81
Vasopressin transiently stimulates phospholipase C activity in cultured rat hepatocytes. Pittner RA, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):227–32
Vasopressin modifies osmium impregnation of the endoplasmic reticulum in cultured kidney collecting duct cells. Denis G, et al. **Biol Cell** 1988;63(3):335–41
Regional haemodynamic effect of vasopressin infusion in conscious, unrestrained, Brattleboro rats. Gardiner SM, et al. **Br J Pharmacol** 1989 May;97(1):147–52
A mechanism for vasopressin action in the hippocampus. Albeck D, et al. **Brain Res** 1988 Nov 1;463(2):394–7
Vasopressin and oxytocin express excitatory effects on respiratory and respiration-related neurones in the nuclei of the tractus solitarius in the cat. Henry JL, et al. **Brain Res** 1989 Jul 3;491(1):150–5
Antinociception vs motor effects of intrathecal vasopressin as measured by four pain tests. Thurston CL, et al. **Brain Res** 1988 Oct 25;463(1):1–11
Evidence for regionally selective changes in response to potassium chloride but not vasopressin or methoxamine in vasculature from diabetic rats. Hebden RA, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1464–7
Renal proton magnetic resonance and bound and free water distribution in the normal, angiotensin II–and ADH–infused rats, before and after Gd DTPA paramagnetic enhancement. Isina A, et al. **Child Nephrol Urol** 1988–89; 9(1–2):6–10
Role of renal nerves in the potentiation of atriopeptin–induced natriuresis by vasopressin. Hartupee DA, et al. **Circ Res** 1989 Feb;64(2):370–5
Nonuniform vasomotor responses of the coronary microcirculation to serotonin and vasopressin. Lamping KG, et al. **Circ Res** 1989 Aug;65(2):343–51
Impairments in vasopressin–stimulated inositol lipid metabolism in hepatocytes of septic rats. Rodriguez de Turco EB, et al. **Circ Shock** 1988 Aug;25(4):299–307
Vasopressin and the mature coronary collateral circulation. Peters KG, et al. **Circulation** 1989 Jun;79(6):1324–31
Micropuncture comparison of nephron function during acute and chronic ADH excess in the rat. Field MJ, et al. **Clin Exp Pharmacol Physiol** 1989 Feb;16(2):77–87
Cyclosporine induced alterations in vasopressin signalling in the glomerular mesangial cell. Kremer S, et al. **Clin Invest Med** 1989 Jun;12(3):201–6
Haemodynamic responses to vasopressin in anaesthetized young and adult Brattleboro rats. Obika LF, et al. **Clin Sci** 1989 Jun;76(6):667–71
The effect of T-2 toxin on active sodium transport across frog skin in the presence of ADH and amphotericin B. Gallucci E, et al. **Comp Biochem Physiol [C]** 1989; 93(1):33–6
Temporal relationship between inositol polyphosphate formation and increases in cytosolic Ca2+ in quiescent 3T3 cells stimulated by platelet-derived growth factor, bombesin and vasopressin. Nänberg E, et al. **EMBO J** 1988 Sep;7(9):2741–7
Vasopressin stimulates endocytosis in kidney collecting duct principal cells. Brown D, et al. **Eur J Cell Biol** 1988 Jun; 46(2):336–41
76 and 14 kDa polypeptides, two major components released from amphibian urinary bladder epithelium. Purification and characterization. Dassouli A, et al. **Eur J Cell Biol** 1989 Jun;49(1):180–8
Indirect relationship between vasopressin–induced secretion of ACTH and cyclic nucleotides in cultured anterior pituitary cells. Koch B, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):53–60
N alpha–acetyl–[Arg8]vasopressin antagonizes the behavioral effect of [Cyt6]vasopressin–(5–9), but not of vasopressin. Kovács GL, et al. **Eur J Pharmacol** 1989 Feb 14; 161(1):27–35
Vasopressin and adrenalectomy–induced sensitivity to morphine. Ratka A, et al. **Eur J Pharmacol** 1988 Aug 9; 153(1):65–71
Mediators of vasopressin induced natriuresis in cirrhosis—possible role of atrial natriuretic factor [letter] Gerbes AL. **Gut** 1989 Aug;30(8):1158–9
Antihypertensive effect of vasopressin withdrawal in young and adult spontaneously hypertensive rats. Chiu EK, et al. **Hypertension** 1989 Jul;14(1):66–72
Uncoupling of intracellular cyclic AMP and dome formation in cultured canine kidney epithelial cells: effects of gangliosides and vasopressin. Rodrig N, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):215–9
Vasopressin inhibits type–I collagen and albumin gene expression in primary cultures of adult rat hepatocytes. Chojkier M, et al. **J Biol Chem** 1989 Jun 5;264(16):9583–91
Hormonal regulation of inositol 1,4,5–trisphosphate receptor in rat liver. Mauger JP, et al. **J Biol Chem** 1989 May 25; 264(15):8821–6
Agonist–induced activation of rat mesenteric resistance vessels: comparison between noradrenaline and vasopressin. Cauvin C, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 5:S128–33
Plasma concentrations of adrenocorticotropin–related peptides in lambs injected with ovine corticotropin releasing factor or vasopressin. Pradier P, et al. **J Dev Physiol** 1989 Feb;11(2):103–9
Phenylephrine, vasopressin and angiotensin II as determinants of proto–oncogene and heat–shock protein gene expression in adult rat heart and aorta. Moalic JM, et al. **J Hypertens** 1989 Mar;7(3):195–201
Calcium efflux in cultured vascular smooth muscle cells from genetically hypertensive rats: effect of angiotensin II and vasopressin. Harris EL, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S234–5
Corticotropin releasing factor activity of CRF 41 in normal man is potentiated by angiotensin II and vasopressin but not by desmopressin. Gaillard RC, et al. **Life Sci** 1988; 43(23):1935–44
Differential responses in vasopressin and oxytocin gene expression in distinct hypothalamic nuclei after hypothalamoneurohypophyseal disconnection and vasopressin substitution. Van Tol HH, et al. **Neuroendocrinology** 1989 Apr;49(4):337–43
Experimental assessment of drug–induced changes in cognitive function: vasopressin as a case study. Dantzer R, et al. **Neurotoxicology** 1988 Fall;9(3):471–7 (20 ref.)
Effect of nisoldipine on large coronary arteries in situ: inhibition of vasoconstriction induced by vasopressin. Saito T, et al. **Pharmacology** 1988;37(2):85–93
Total body capacitance (TBC) responses to vasopressin differ from those to angiotensin II and norepinephrine. McNeill JR, et al. **Proc West Pharmacol Soc** 1989;32:297
Antisecretory effects of somatostatin and vasopressin in the rat colon descendens in vitro. Knobloch SP, et al. **Regul Pept** 1989 Apr;25(1):75–85
Transient hyperkalaemia immediately after acute haemorrhage in rats. Obika LF. **Scand J Clin Lab Invest** 1988 Sep;48(5):461–7
Membrane and microfilament organization and vasopressin action in transporting epithelia. Ausiello DA, et al. **Soc Gen Physiol Ser** 1987;42:259–75 (64 ref.)
Endothelium–dependent and –independent responses to vasodilators of isolated dog cerebral arteries. Onoue H, et al. **Stroke** 1988 Nov;19(11):1388–94
Effect of physiological concentrations of vasopressin on components of the fibrinolytic system. Hariman H, et al. **Thromb Haemost** 1989 Apr 25;61(2):298–300
Clinicopathological study of livers from brain–dead patients treated with a combination of vasopressin and epinephrine. Nagareda T, et al. **Transplantation** 1989 May;47(5):792–7
[The effect of vasopressin in acupuncture analgesia] Liu Q, et al. **Chen Tzu Yen Chiu** 1988;13(3):239–43 (Eng. Abstr.) **(Chi)**
[Vasopressin and colonic motility] Schang JC, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):946–52 (Eng. Abstr.) **(Fre)**
[The effect of oxytocin and vasopressin on individual behavior and EEG–correlates of narcotic dependent rats in the "open field" test] Ibragimov RSh, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):441–6 (Eng. Abstr.) **(Rus)**
[Effect of vasopressin on the osmotic permeability of the bladder wall in the frog and its content of cAMP, cGMP and inositol triphosphate] Natochin IuV, et al. **Fiziol Zh SSSR** 1989 May;75(5):702–8 (Eng. Abstr.) **(Rus)**
[Effect of vasopressin on the somatic membrane of spinal ganglion neurons] Molokanova EA, et al. **Neirofiziologiia** 1988;20(6):801–8 (Eng. Abstr.) **(Rus)**
[Effect of vasopressin and oxytocin on the dorsal root potentials of the isolated perfused spinal cord in rat pups] Tamarova ZA. **Neirofiziologiia** 1988;20(6):757–63 (Eng. Abstr.) **(Rus)**
[Comparative study of the role of cAMP, cGMP and Ca2+ in the action of the antidiuretic hormone on bladder cells of the frog] Shakhmatova EI, et al. **Probl Endokrinol (Mosk)** 1988 Jul–Aug;34(4):57–60 (Eng. Abstr.) **(Rus)**
[Ultrastructure of the apical plasma membrane of the granular cells in the frog bladder during cobalt–ion decrease in the vasopressin effect] Komissarchik IaIu, et al. **Tsitologiia** 1989 May;31(5):515–22 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Regulation of brain water and electrolyte contents: the opposite actions of central vasopressin and atrial natriuretic factor (ANF). Dóczi T, et al. **Acta Neurochir Suppl (Wien)** 1988;43:186–8
Dissociation between activation of the hypothalamo–hypophyseal antidiuretic system and the type of diuresis during acute intracranial hypertension. Experimental observation. Rap ZM, et al. **Acta Neurochir (Wien)** 1989;96(1–2):63–71
Hyponatremia and atrial natriuretic peptide secretion in patients with vasopressin–induced antidiuresis [letter] Vieweg WV, et al. **Am J Med** 1988 Oct;85(4):594–5
Vasopressin and ANG II in the control of ACTH secretion and arterial and atrial pressures. Brooks VL. **Am J Physiol** 1989 Feb;256(2 Pt 2):R339–47
Role of vesicular transport in ADH–stimulated aggregate delivery. Ding G, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C641–52
Vasopressin contributes to maintenance of arterial blood pressure in dehydrated baboons. Ryan KL, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H486–92
Acute infectious pneumonia is accompanied by a latent vasopressin–dependent impairment of renal water excretion. Dreyfuss D, et al. **Am Rev Respir Dis** 1988 Sep; 138(3):583–9
Post–traumatic stress disorder, hormones, and memory [editorial] Pittman RK. **Biol Psychiatry** 1989 Jul; 26(3):221–3 (14 ref.)
Brattleboro rats exhibit normal PaCO2–induced changes in cerebral microcirculation. Preskorn SH, et al. **Biol Psychiatry** 1989 Mar 1;25(5):648–53
Cardiovascular interactions between vasopressin, angiotensin and noradrenaline in the Brattleboro rat. Laycock JF, et al. **Br J Pharmacol** 1989 Feb;96(2):347–55
Kindling in spontaneous hypertensive rats. Greenwood RS, et al. **Brain Res** 1989 Aug 21;495(1):58–65
A study of ionic conductances involved in plateau potential activity in putative vasopressinergic neurons in primary cell culture. Legendre P, et al. **Brain Res** 1988 Aug 9; 457(2):386–91
Twenty–four–hour pineal melatonin synthesis in the vasopressin–deficient Brattleboro rat. Schröder H, et al. **Brain Res** 1988 Sep 6;459(2):328–32
The median preoptic nucleus participates in the control of paraventricular vasopressin neurons by the subfornical organ in the rat. Tanaka J, et al. **Brain Res** 1988 Oct 4; 461(2):403–6
Criteria for establishing a physiological role for brain peptides. A case in point: the role of vasopressin in thermoregulation during fever and antipyresis. Kasting NW. **Brain Res Brain Res Rev** 1989 Apr–Jun;14(2):143–53 (86 ref.)
The differential cardiovascular response to centrally administered carbachol seen in Brattleboro and normal Long–Evans rats. Imai Y, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:323–30
Central nervous system and mechanisms of hypertension. Brody MJ. **Clin Physiol Biochem** 1988;6(3–4):230–9 (58 ref.)
Vasopressin and blood pressure regulation. Cowley AW Jr. **Clin Physiol Biochem** 1988;6(3–4):150–62 (54 ref.)
ADH–induced water permeability: what role for the microtubular network? Bourguet J, et al. **Comp Biochem Physiol [A]** 1988;90(4):669–72 (33 ref.)
Central and systemic antidiuretic hormone and angiotensin II in salt and fluid balance of birds as compared to mammals. Simon–Oppermann C, et al. **Comp Biochem Physiol [A]** 1988;90(4):789–803 (107 ref.)
Regulation of membrane permeability by vasopressin; activation of the water permeability pathway in toad urinary bladder by N–ethyl–maleimide. Taylor A, et al. **Comp Biochem Physiol [A]** 1988;90(4):661–8 (59 ref.)
Vasopressin– and proctolin–like immunoreactive efferent neurons in blowfly abdominal ganglia: development and ultrastructure. Nässel DR, et al. **J Comp Neurol** 1989 May 15;283(3):450–63
Renin–angiotensin and vasopressin in the development of salt–induced hypertension. Gavras I, et al. **J Hypertens** 1988 Dec;6(12):999–1002
Surface hydrophobicity and water transport of the toad urinary bladder: effects of vasopressin. Dial EJ, et al. **J Membr Biol** 1988 Dec;106(2):119–22
Apical membrane endocytosis via coated pits is stimulated by removal of antidiuretic hormone from isolated, perfused rabbit cortical collecting tubule. Strange K, et al. **J Membr Biol** 1988 Jul;103(1):17–28
Immunoreactivity in pituitary gonadotropes and hypothalamic vasopressinergic neurons for the monoclonal antibody INO. Madsen JR, et al. **J Neuroimmunol** 1988 Nov;20(1):83–91
Mechanisms of action of vasopressin and vasopressin antagonists. Jard S. **Kidney Int Suppl** 1988 Oct;26:S38–42 (48 ref.)
Vasopressin and blood pressure. Thibonnier M. **Kidney Int Suppl** 1988 Sep;25:S52–6 (39 ref.)
Involvement of the septum in the regulation of paraventricular vasopressin neurons by the subfornical organ in the rat. Tanaka J, et al. **Neurosci Lett** 1988 Oct 5;92(2):187–91
Lateral hypothalamic area and paraventricular nucleus connections with subfornical organ neurons: an electrophysiological study in the rat. Tanaka J, et al. **Neurosci Res** 1988 Oct;6(1):45–52
Differential effects of ADH on sodium, chloride, potassium, calcium and magnesium transport in cortical and medullary thick ascending limbs of mouse nephron. Wittner M, et al. **Pflugers Arch** 1988 Oct;412(5):516–23
Role of vasopressin in cardiovascular regulation. Share L. **Physiol Rev** 1988 Oct;68(4):1248–84 (251 ref.)
Water intake in rats subjected to hypothalamic immunoneutralization of angiotensin II, atrial natriuretic peptide, vasopressin, or oxytocin. Franci CR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2952–6
Vasopressin V1–receptor blockade lowers arterial blood pressure in young conscious Long–Evans rats. Obika LF, et al. **Q J Exp Physiol** 1989 May;74(3):371–4
Antidiuretic hormone regulation of electrolyte transport in

the distal nephron. Schlatter E. **Renal Physiol Biochem** 1989 Mar–Apr;12(2):65–84 (162 ref.)

Hydrocephalus and vasopressin: a reassessment. Gueli U, et al. **Riv Ear Sci Med Farmacol** 1987 Mar;9(1):31–7 (29 ref.)

The antidiuretic hormone: new aspects of an "old" peptide. Langhans W. **Zentralbl Veterinarmed [A]** 1988 Nov; 35(9):641–54 (102 ref.)

[Changes induced by carbamazepine in the action of ADH (antidiuretic hormone) in neurologic patients] Vivalda L, et al. **Riv Neurol** 1988 May–Jun;58(3):106–9 (Eng. Abstr.) **(Ita)**

[Studies on the role of heart innervation and other non–osmotic factors in regulating water and sodium metabolism] Pruszczyński W. **Pol Tyg Lek** 1988 Sep 5; 43(36):1169–72 **(Pol)**

[The role of pulsatile perfusion flow in decreasing hormonal stress reaction in open–heart surgery] Arakelov AM, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):13–7 (Eng. Abstr.) **(Rus)**

[Relation between activities of vasopressinergic and pituitary–adrenal cortex systems] Filaretov AA, et al. **Dokl Akad Nauk SSSR** 1988;301(2):500–2 **(Rus)**

[Role of vasopressin in the development of arterial hypertension and the search for ways to correct it] Frol'kis IV, et al. **Fiziol Zh SSSR** 1988 Nov;74(11):1607–14 (Eng. Abstr.) **(Rus)**

[Hormonal factors in the pathogenesis of hypertension] Meshkov AP. **Kardiologiia** 1989 Mar;29(3):117–22 (104 ref.) **(Rus)**

[Role of vasopressin– and oxytocinergic cells of macrocellular rat hypothalamic nuclei in regulating the thyroid during the administration of thyroliberin] Krasnovskaia IA, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):67–70 (Eng. Abstr.) **(Rus)**

SECRETION

Periodic ACTH . ADH discharge syndrome: relationship to inappropriate ADH secretion. Ogihara M, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):772–80

Osmoregulation of thirst and vasopressin release in pregnancy. Lindheimer MD, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 2):F159–69 (17 ref.)

Osmoregulation of vasopressin secretion and thirst during the estrous cycle of pigs. Rollin C, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R270–5

Secretion of antidiuretic hormone in neurosurgical patients: appropriate or inappropriate? Poon WS, et al. **Aust N Z J Surg** 1989 Feb;59(2):173–80

Osmoregulation of vasopressin secretion and thirst in health and disease. Baylis PH, et al. **Clin Endocrinol (Oxf)** 1988 Nov;29(5):549–76 (152 ref.)

Opioid modulation of vasopressin secretion in conscious rats. Yamada T, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:361–7

Contributions of the sympathetic nervous system, vasopressin and baroreceptor function in brain angiotensin II excess–induced hypertension in the dog. Yamamoto K, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:309–16

Water immersion–induced alterations of plasma atrial natriuretic peptide level and its relationship to the renin–angiotensin–aldosterone system and vasopressin secretion in acute and chronic renal failure. Kokot F, et al. **Clin Nephrol** 1989 May;31(5):247–52

Vasopressin secretion during insulin–induced hypoglycaemia: exaggerated responses in people with type 1 diabetes. Thompson CJ, et al. **Diabetic Med** 1989 Mar;6(2):158–63

Does cortisol inhibit vasopressin secretion in sheep? Wood CE, et al. **Domest Anim Endocrinol** 1988 Apr;5(2):177–83

Effects of naloxone on vasopressin secretion in conscious rats: evidence for inhibitory role of endogenous opioid peptides in vasopressin secretion. Yamada T, et al. **Endocrinology** 1989 Aug;125(2):785–90

Baroreceptor influences on oxytocin and vasopressin secretion. Morris M, et al. **Hypertension** 1989 Feb; 13(2):110–4

Feedback control of vasopressin and corticotrophin secretion in conscious dogs: effect of hypertonic saline. Raff H, et al. **J Endocrinol** 1989 Jul;122(1):41–8

Optimizing release from peptide hormone secretory nerve terminals. Bicknell RJ. **J Exp Biol** 1988 Sep;139:51–65 (55 ref.)

Differential effects of potassium channel blockers on neurohypophysial release of oxytocin and vasopressin. Evidence for frequency–dependent interaction with the endogenous opioid inhibition of oxytocin release. Racké K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):560–6

Opioid–noradrenergic interactions in the neurohypophysis. I. Differential opioid receptor regulation of oxytocin, vasopressin, and noradrenaline release. Zhao BG, et al. **Neuroendocrinology** 1988 Jul;48(1):16–24

Opioid inhibition of secretion from oxytocin and vasopressin nerve terminals following selective depletion of neurohypophysial catecholamines. Bicknell RJ, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):281–6

Cholecystokinin evokes secretion of oxytocin and vasopressin from rat neural lobe independent of external calcium. Bondy CA, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):5198–201

Control of release of vasopressin by neuroendocrine reflexes. Bisset GW, et al. **Q J Exp Physiol** 1988 Nov;73(6):811–72 (480 ref.)

Drinking and vasopressin release following central injections of angiotensin II in minipigs. Thornton SN, et al. **Q J Exp Physiol** 1989 Mar;74(2):211–4

The syndrome of inappropriate antidiuretic hormone secretion and its effect on blood indices following spinal fusion. Mason RJ, et al. **Spine** 1989 Jul;14(7):722–6

[A case of adenocarcinoma of the nasal cavity associated with syndrome of inappropriate secretion of antidiuretic hormone(SIADH)] Tatemoto K, et al. **Gan No Rinsho** 1989 Sep;35(10):1153–9 (Eng. Abstr.) **(Jpn)**

[A case of antidiuretic hormone–producing malignant teratoma of the anterior mediastinum] Matsuda S, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):884–5 **(Jpn)**

[A case of postoperative craniopharyngioma with hypernatremia. The mechanisms of ADH and atrial natriuretic peptide (ANP) releases] Ota M, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1262–7 **(Jpn)**

[A case of pituitary adenoma with hyponatremia, polydipsia and polyuria produced by low resetting of the osmostat for antidiuretic hormone (ADH) release and potentiated thirst perception] Sato K, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1251–6 **(Jpn)**

[Disorders of the posterior pituitary] Yoshida S. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1373–7 **(Jpn)**

[Vasopressin secretion in hypertension of the hypothalamic origin] Slavnov VN, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):74–8 (Eng. Abstr.) **(Rus)**

[A bupivacaine–morphine combination by intrathecal route: correlation between pain relief and postoperative neuroendocrine response] Adrián JR, et al. **Rev Med Univ Navarra** 1988 Jan–Mar;32(1):35–9 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Local infiltration of ornithine 8–vasopressin (POR 8) as a vasoconstrictive agent in surgical pelviscopy (applied to myoma enucleation, salpingotomy in cases of tubal pregnancy and peripheral salpingostomy). Semm K, et al. **Endoscopy** 1988 Nov;20(6):298–304

Beneficial effect of 8–ornithin vasopressin on renal dysfunction in decompensated cirrhosis. Lenz K, et al. **Gut** 1989 Jan;30(1):90–6

The physiological effects of vasopressin when used to control intra–abdominal bleeding. Shelly MP, et al. **Intensive Care Med** 1988;14(5):526–31

Vasopressin and vasopressin plus nitroglycerin for portal hypertension. Effects on systemic and splanchnic hemodynamics and coronary blood flow. Rector WG Jr, et al. **J Hepatol** 1989 May;8(3):308–15

Vasopressin and vasopressin analogues for treatment of memory disorders in clinical practice. Legros JJ, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S71–86 (75 ref.)

[Value of POR 8 in the treatment of burns] De Mey A, et al. **Rev Med Brux** 1989 Apr;10(4):160–2 (Eng. Abstr.) **(Fre)**

URINE

Vasopressin and oxytocin excretion in the Brown–Norway rat in relation to aging, water metabolism and testosterone. Goudsmit E, et al. **Mech Ageing Dev** 1988 Sep;44(3):241–52

Vasopressin in aged rats: longitudinal studies of vasopressin excretion in Sprague–Dawley and Fischer 344 strains. Phelps CJ, et al. **Neurobiol Aging** 1989 May–Jun; 10(3):233–9 (27 ref.)

Vasopressin levels and pediatric head trauma. Padilla G, et al. **Pediatrics** 1989 May;83(5):700–5

[Radioimmunoassay of vasopressin in unextracted random urine; clinical application for screening of central diabetes insipidus] Kondo K, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 May 20;65(5):537–48 (Eng. Abstr.) **(Jpn)**

VASOPRESSOR AGENTS see **VASOCONSTRICTOR AGENTS**

VASOSTOMY see **VASOVASOSTOMY**

VASOTOCIN

ANALOGS & DERIVATIVES

Oxytocin receptor blockade: a new principle in the treatment of preterm labor? Andersen LF, et al. **Am J Perinatol** 1989 Apr;6(2):196–9

Profile of an oxytocin antagonist, RWJ 22164 for treatment of preterm labor in laboratory models of uterine contractility. Demarest KT, et al. **Am J Perinatol** 1989 Apr; 6(2):200–4

Oxytocin antagonist (dTVT) and oxytocin receptors in myometrium and decidua. Fuchs AR, et al. **Am J Perinatol** 1989 Apr;6(2):205–8

An oxytocin inhibitor for suppressing preterm labour [letter] Crankshaw DJ. **Br J Obstet Gynaecol** 1988 Dec; 95(12):1339–41

Hydrins, hydroosmotic neurohypophysial peptides: osmoregulatory adaptation in amphibians through vasotocin precursor processing. Rouillé Y, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5272–5

ANALYSIS

Phylogenetic study of the arginine–vasotocin/arginine–vasopressin–like immunoreactive system in invertebrates. Mizuno J, et al. **Comp Biochem Physiol [A]** 1988;91(4):739–47

Distribution of immunoreactive vasotocin and mesotocin in the chicken gastrointestinal tract. Robinzon B, et al. **Domest Anim Endocrinol** 1988 Jul;5(3):241–6

Distribution of immunoreactive mesotocin and vasotocin in the brain and pituitary of chickens. Robinzon B, et al. **Peptides** 1988 Jul–Aug;9(4):829–33

BLOOD

Relationships between renal hemodynamics and plasma levels of arginine vasotocin and mesotocin during hemorrhage in the domestic fowl (Gallus domesticus). Bottje WG, et al. **Comp Biochem Physiol [A]** 1989;92(3):423–7

Plasma arginine vasotocin and angiotensin II in the water deprived Kelp gull (Larus dominicanus), Cape gannet (Sula capensis) and Jackass penguin (Spheniscus demersus). Gray DA, et al. **Comp Biochem Physiol [A]** 1988;91(4):727–32

Effect of heat stress on plasma levels of arginine vasotocin and mesotocin in domestic fowl (Gallus domesticus). Wang S, et al. **Comp Biochem Physiol [A]** 1989;93(4):721–4

Increased levels of arginine vasotocin and neurophysin during nesting in sea turtles. Figler RA, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):223–32

Control of plasma arginine vasotocin in Kelp gulls (Larus dominicanus): roles of osmolality, volume, and plasma angiotensin II. Gray DA, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):110–9

Influence of age on August levels of pineal immunoreactive arginine vasotocin in rats. Prechel MM, et al. **J Pineal Res** 1989;6(1):1–7

GENETICS

Vasotocin and isotocin precursors from the white sucker, Catostomus commersoni: cloning and sequence analysis of the cDNAs. Heierhorst J, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5242–6

Hydrins, hydroosmotic neurohypophysial peptides: osmoregulatory adaptation in amphibians through vasotocin precursor processing. Rouillé Y, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5272–5

METABOLISM

Arginine vasotocin binding to isolated branchial cells of the eel: effect of salinity. Guibbolini ME, et al. **J Mol Endocrinol** 1988 Sep;1(2):125–30

Autoradiographic localization of binding sites for vasotocin in the brain and pituitary of the sea bass (Dicentrarchus labrax). Moons L, et al. **Neurosci Lett** 1989 May 22; 100(1–3):11–6

PHARMACOLOGY

Glomerular filtration changes during vasotocin–induced antidiuresis in kelp gulls. Gray DA, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R936–9

Direct cardiac stimulation by arginine vasotocin in bullfrogs (Rana catesbeiana). Sham JS, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 2):R187–92

Stimulation of sodium transport by aldosterone and arginine vasotocin in A6 cells. Bindels RJ, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):320–30

Physiological effects of arginine vasotocin and mesotocin in cockerels. Robinzon B, et al. **Br Poult Sci** 1988 Sep; 29(3):639–52

Effects of arginine vasotocin on water balance of three leiopelmatid frogs. Cree A. **Gen Comp Endocrinol** 1988 Dec;72(3):340–50

Opposite effects of vasotocin and of a specific vasotocin antiserum on active sleep of kittens. Goldstein R. **J Neural Transm** 1988;74(1):11–6

[Luliberin alters the effects of gonadotropins and arginine vasotocin on steroid hormone production by mouse ovaries in vitro] Sirotkin AV, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1333–6 **(Rus)**

[Morphofunctional research on the interrenal gland of the frog Rana temporaria following arginine vasotocin administration] Elifanov AV, et al. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):740–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[Factors regulating the synthesis and release of arginine vasotocin and its role in mammals] Książewski B, et al. **Pol Tyg Lek** 1988 Apr 25;43(17):531–3 (Eng. Abstr.) **(Pol)**

VASOTOCIN, LEUCYL see **OXYTOCIN**

VASOVASOSTOMY

Evaluation of vasovasostomy candidates by deoxyribonucleic acid flow cytometry of testicular aspirates. Hellstrom WJ, et al. **Fertil Steril** 1989 Mar;51(3):546–8

Pregnancy after vasovasostomy for vasectomy reversal: a study of factors affecting long–term return of fertility in

282 patients followed for 10 years. Silber SJ. **Hum Reprod** 1989 Apr;4(3):318–22

The incidence and influence upon fertility of antisperm antibodies in seminal fluid following vasectomy reversal. Matson PL, et al. **Int J Androl** 1989 Apr;12(2):98–103

Reduced levels of T suppressor/cytotoxic lymphocytes in semen from vasovasostomized men: relationship to sperm autoantibodies. Witkin SS, et al. **J Reprod Immunol** 1988 Dec;14(3):283–90

Immunological status of patients before and after vasovasostomy as determined by the immunobead antisperm antibody test. Broderick GA, et al. **J Urol** 1989 Sep;142(3):752–5

Applications of microsurgery in urology. Belker AM, et al. **Surg Clin North Am** 1988 Oct;68(5):1157–78 (100 ref.)

Laser-assisted vasovasostomy in the rat. Comparison of CO2 and neodymium:YAG laser techniques. Bürger RA, et al. **Urol Int** 1988;43(5):289–92

[Obstructive azoospermia treated by epididymovasostomy following vasovasostomy: a case report] Matsuda T, et al. **Hinyokika Kiyo** 1988 May;34(5):889–91 (Eng. Abstr.) (Jpn)

[Experimental study of reconstruction of the vas deferens in the rat] Martínez-Urrutia MJ, et al. **Arch Esp Urol** 1989 May;42(4):305–7 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

The influence of vasovasostomy on antisperm antibodies in rats. Herr JC, et al. **Biol Reprod** 1989 Feb;40(2):353–60

Sperm auto-immunity associated with vasectomy, vasovasostomy and epididymovasostomy in Korean males. Lee HY, et al. **Clin Reprod Fertil** 1987 Dec;5(6):347–57

IgG antisperm antibodies attached to sperm do not correlate with infertility following vasovasostomy. Newton RA. **Microsurgery** 1988;9(4):278–80

INSTRUMENTATION

Studies of polyglycolic acid hollow self-retaining vasal stent in vasovasostomy. Berger RE, et al. **Fertil Steril** 1989 Mar; 51(3):504–8

Experimental study of hollow, absorbable polyglycolic acid tube as stent for vasovasostomy. Flam TA, et al. **Urology** 1989 Jun;33(6):490–4

Evaluation of new Owen microforceps and microneedleholderscissors for microvasovasostomy. Wosnitzer M. **Urology** 1989 Jun;33(6):483–5

METHODS

Transvasovasostomy—an alternative operation for obstructive azoospermia. Hamidinia A. **J Urol** 1988 Dec; 140(6):1545–8

Laser-assisted vasovasostomy. Gilbert PT, et al. **Lasers Surg Med** 1989;9(1):42–4

Vasovasostomy in the murine vas deferens: comparison of the Nd:YAG laser at 1.06 microns and 1.318 microns to the CO2 laser. Lowe BA, et al. **Lasers Surg Med** 1988; 8(4):377–80

VATER'S AMPULLA

Percutaneous transhepatic Oddi-sphincter dilatation for bile duct stone removal. Graziani L, et al. **AJR** 1989 Jan; 152(1):73–5

Metastatic hypernephroma to the ampulla of Vater: an unusual cause of malabsorption diagnosed at endoscopic sphincterotomy. McKenna JI, et al. **Am J Gastroenterol** 1989 Jan;84(1):81–3

Cancer of the pancreas and periampullary region—diagnosis and surgical therapy. Vogt DP, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):107–12 (29 ref.)

Influence of site of origin and mucin production on survival in ampullary carcinoma. Dawson PJ, et al. **Ann Surg** 1989 Aug;210(2):173–9

Patients with ampullary carcinoma are prone to other malignant tumours. Robertson JF, et al. **Br J Cancer** 1988 Aug;58(2):216–8

High prevalence of adenomatous polyps of the duodenal papilla in familial adenomatous polyposis. Alexander JR, et al. **Dig Dis Sci** 1989 Feb;34(2):167–70

Ampullary neurofibroma [letter] Simmons TC. **Dig Dis Sci** 1988 Nov;33(11):1500–1

Frontiers of Gastrointestinal Endoscopy No. 4. Disorders of the major duodenal papilla and sphincter of Oddi. **Endoscopy** 1988 Aug;20 Suppl 1:165–235

Balloon dilation of the sphincter of Oddi. Kozarek RA. **Endoscopy** 1988 Aug;20 Suppl 1:207–10

Clinical and endoscopic aspects of tumors of the ampulla of Vater. Sivak MV. **Endoscopy** 1988 Aug;20 Suppl 1:211–7 (46 ref.)

Diagnosis of sphincter of Oddi dysfunction [letter] Hershfield NB. **Gastroenterology** 1989 Jul;97(1):241

Adenocarcinoid tumor of the periampullary region: a novel duodenal neoplasm presenting as biliary tract obstruction. Jones MA, et al. **Hum Pathol** 1989 Feb;20(2):198–200

Periampullary, colorectal and gastric cancer in two siblings. Schlossberg D, et al. **Int J Cancer** 1988 Dec 15;42(6):839–41

Papillary stenosis: fact or fiction? Speranza V. **Ital J Surg Sci** 1988;18(4):401–6

Adjuvant chemotherapy after resection of adenocarcinoma of the periampullary region and the head of the pancreas. A non-randomized pilot study. Splinter TA, et al. **J Cancer Res Clin Oncol** 1989;115(2):200–2

Clinical and histopathological appraisal of preoperative irradiation for adenocarcinoma of the pancreatoduodenal region. Ishikawa O, et al. **J Surg Oncol** 1989 Mar; 40(3):143–51

Of pancreas, pain, and papilla [letter] Lowes JR. **Lancet** 1988 Dec 24–31;2(8626–8627):1499

Benign tumour of the ampulla of Vater presenting with portal hypertension. Aitken P, et al. **Postgrad Med J** 1988 Nov; 64(757):891–2

Carcinoma of the ampulla of Vater [letter] Bodner E. **Surg Endosc** 1987;1(3):182–3

Carcinoma of the ampulla of Vater. The role of endoscopic drainage. Huibregtse K, et al. **Surg Endosc** 1987;1(2):79–82

[Surgical resection of 48 patients with malignant disease of the pancreas and periampullary region] Zhu SL. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):385–7 (Eng. Abstr.) (Chi)

[2 cases of malignant papillomatosis of the bile ducts] Rambaud S, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Dec;24(7):355–6 (Eng. Abstr.) (Fre)

[Inflammation of Oddi's sphincter in 1989] Seyrig JA, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Mar–Apr; 25(2):55–60 (79 ref.) (Fre)

[Endoscopy in the diagnosis and treatment of acute obstructive pancreatitis] Neuhaus H, et al. **Bildgebung** 1987–89;56(1):42, 45–6, 48 (33 ref.) (Eng. Abstr.) (Ger)

[Villous adenoma of the papilla of Vater and acute necrotizing pancreatitis] Meyer W, et al. **Dtsch Med Wochenschr** 1988 Oct 7;113(40):1557–60 (33 ref.) (Eng. Abstr.) (Ger)

[Biliary pancreatitis—pathogenesis, therapy, results] Arendt R, et al. **Z Gesamte Inn Med** 1989 Jul 1;44(13):401–4 (18 ref.) (Eng. Abstr.) (Ger)

[Benign stenosis of Vater's papilla from the pathogenetic viewpoint] Horntrich J. **Zentralbl Chir** 1989;114(7):421–8 (Eng. Abstr.) (Ger)

[Validation of intraoperative diagnostic criteria in the differentiation of benign stenoses of Vater's papilla] Horntrich J. **Zentralbl Chir** 1989;114(7):429–34 (Eng. Abstr.) (Ger)

[Para-Vaterian diverticuli and bilio-digestive pathology] Franceschini R, et al. **Ann Ital Chir** 1987;59(1–6):115–22 (Eng. Abstr.) (Ita)

[Multiple duodenal and ampullary carcinoids and von Recklinghausen's neurofibromatosis] Turri L, et al. **Chir Ital** 1988 Aug–Oct;40(4–5):285–94 (47 ref.) (Eng. Abstr.) (Ita)

[Role of Vater's papilla and Wirsung's duct in acute biliary pancreatitis. Surgery with laser and operating microscope] Casaccia M, et al. **Minerva Chir** 1989 Jan 31;44(1–2):203–10 (19 ref.) (Ita)

[Well-differentiated adenocarcinoma of the papilla of vater—report of a case] Kurisu A, et al. **Gan No Rinsho** 1989 Aug;35(9):1093–7 (Eng. Abstr.) (Jpn)

[Diagnosis and treatment of obstruction of the major duodenal papilla of nontumor origin] Shalimov SA, et al. **Klin Khir** 1988;(11):13–6 (Eng. Abstr.) (Rus)

[Use of a choleretic probe in the ultrasonic study of the bile ducts in patients subjected to cholecystectomy] Roslov AL, et al. **Vestn Rentgenol Radiol** 1988 Sep–Oct;(5):40–5 (Eng. Abstr.) (Rus)

[Nephrotic syndrome associated with ampulloma] López-Navidad A, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):691–3 (Eng. Abstr.) (Spa)

[Adenocarcinoid of Vater's ampulla] Mayol Belda MJ, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):670–2 (Eng. Abstr.) (Spa)

[Duodenal diverticulum next to Vater's papilla. Study of its prevalence and association with biliopancreatic pathology] Ponce J, et al. **Rev Esp Enferm Apar Dig** 1988 Nov; 74(5):525–7 (Eng. Abstr.) (Spa)

ABNORMALITIES

[Abnormalities of the common bile duct and Vater's papilla in various forms of duodenal atresia] Lochbühler H, et al. **Z Kinderchir** 1989 Feb;44(1):13–6 (15 ref.) (Eng. Abstr.) (Ger)

ANATOMY & HISTOLOGY

The gross anatomy and histology of the gallbladder, extrahepatic bile ducts, Vaterian system, and minor papilla. Frierson HF Jr. **Am J Surg Pathol** 1989 Feb;13(2):146–62 (62 ref.)

Ruggero Oddi. To commemorate the centennial of his original article—"Di una speciale disposizione a sfintere allo sbocco del coledoco". Ono K, et al. **Jpn J Surg** 1988 Jul;18(4):373–5

CYTOLOGY

Three-dimensional arrangement of dense connective tissue around the human major duodenal papilla. Including the ampullary region and the distal choledochal duct. Dziwisch L, et al. **Acta Anat (Basel)** 1989;135(3):231–5

DRUG EFFECTS

Contractile response of canine gallbladder and sphincter of Oddi to substance P and related peptides in vitro. Guo YS, et al. **Dig Dis Sci** 1989 Jun;34(6):812–7

Pharmacology of the sphincter of Oddi. Staritz M. **Endoscopy** 1988 Aug;20 Suppl 1:171–4 (18 ref.)

Effects of buprenorphine on motor activity of the sphincter of Oddi in man. Cuer JC, et al. **Eur J Clin Pharmacol** 1989; 36(2):203–4

Effects of morphine on the human sphincter of Oddi. Helm JF, et al. **Gut** 1988 Oct;29(10):1402–7

Pharmacological activity of essential oils on Oddi's sphincter. Giachetti D, et al. **Planta Med** 1988 Oct;54(5):389–92

[Effects of cholecystokinin-octapeptide and tetragastrin on the contractile activities of the stomach, duodenum and papilla of Vater] Yada S, et al. **Nippon Heikatsukin Gakkai Zasshi** 1988 May;24(2):101–11 (Eng. Abstr.) (Jpn)

INNERVATION

[Postganglionic sympathetic innervation of the duodenal papilla in the cat] Sai S. **Fukuoka Igaku Zasshi** 1988 Dec; 79(12):866–78 (Eng. Abstr.) (Jpn)

PARASITOLOGY

[Opisthorchiasis-induced suppurative cholangitis (clinical course and diagnosis)] Brazhnikova NA. **Klin Med (Mosk)** 1989 Feb;67(2):89–94 (Eng. Abstr.) (Rus)

PATHOLOGY

The role of intra-operative biopsy in the treatment of resectable neoplasms of the pancreas and periampullary region. Buice WS, et al. **Am Surg** 1989 May;55(5):307–10

Contribution of endoscopy to diagnosis and treatment of tumors of the ampulla of Vater. Ponchon T, et al. **Cancer** 1989 Jul 1;64(1):161–7

Carcinoma of the ampulla of Vater: the endoscopic approach. Huibregtse K, et al. **Endoscopy** 1988 Aug;20 Suppl 1:223–6

The use of endoscopic ultrasonography in the diagnosis and staging of carcinoma of the papilla of Vater. Yasuda K, et al. **Endoscopy** 1988 Aug;20 Suppl 1:218–22

Endoscopic observation of ampullary hemorrhage secondary to occult pancreatitis. Wolfe MW, et al. **Gastrointest Endosc** 1989 Jul–Aug;35(4):344–6

[Fine-needle aspiration cytodiagnosis of tumors of the pancreas and ampullary region: an analysis of 150 cases] Jia ZG. **Chung Hua Wai Ko Tsa Chih** 1988 Dec; 26(12):731–2, 781 (Eng. Abstr.) (Chi)

[Carcinoid tumor of the ampulla of Vater. Morphology, diagnosis and therapy of a rare papilla tumor] Schürmann G, et al. **Chirurg** 1988 Oct;59(10):670–5 (12 ref.) (Eng. Abstr.) (Ger)

[Acute pancreatitis in adenoma and carcinoma of Vater's papilla] Foth B, et al. **Med Klin** 1988 Nov 25;83(23):809–12 (Ger)

[Is dilatation of the papilla a differential diagnostic or therapeutic intervention?] Horntrich J. **Zentralbl Chir** 1988; 113(18):1210–6 (27 ref.) (Eng. Abstr.) (Ger)

[Primary evolutive papillo-odditis An anatomico-clinical and therapeutic study] Grădinaru V, et al. **Rev Chir [Chir]** 1988 Sep–Oct;37(5):353–61 (Eng. Abstr.) (Rum)

[Odditis. Pathologic reality or tactics necessity] González Cajigal R, et al. **Rev Esp Enferm Apar Dig** 1989 Jan; 75(1):31–4 (Eng. Abstr.) (Spa)

[Results and indications of sphincteroplasty in the treatment of complicated biliary lithiasis] Mejuto FJ, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):256–8 (Eng. Abstr.) (Spa)

[Villous adenoma of Vater's ampulla with carcinoma in situ] Puente Domínguez JL, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):151–3 (11 ref.) (Eng. Abstr.) (Spa)

PHYSIOLOGY

Flow resistance in the feline choledocho-duodenal sphincter as studied by constant-pressure and constant-perfusion techniques. Thune A, et al. **Acta Physiol Scand** 1989 Mar; 135(3):279–84

The sphincter of Oddi motor function after choledochoduodenostomy and sphincterotomy [letter] Cherubini M, et al. **Am J Gastroenterol** 1989 Jun; 84(6):684–5

Control mechanisms of sphincter of Oddi contraction rate in the opossum. Suzuki T, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 1):G619–26

The human sphincter of Oddi. Physiology and pathophysiology. Goff JS. **Arch Intern Med** 1988 Dec; 148(12):2673–7 (81 ref.)

Effect of intravenous glucagon and glucagon-(1–21)-peptide on motor activity of sphincter of Oddi in humans. Ponce J, et al. **Dig Dis Sci** 1989 Jan;34(1):61–4

Sphincter of Oddi and filling of the gallbladder. A necropsy study. Teilum D, et al. **Endoscopy** 1989 May;21(3):131–2

Physiology of the human sphincter of Oddi. Torsoli A. **Endoscopy** 1988 Aug;20 Suppl 1:166–70 (37 ref.)

Reflex regulation of the sphincter of Oddi by intrapancreatic ductal pressure in the Japanese monkey. Okazaki K, et al. **Int J Pancreatol** 1989 May;4(4):407–18

Characterization of substance P effects on sphincter of Oddi myoelectric activity. Parodi JE, et al. **J Surg Res** 1989 May; 46(5):405–12

A model for simultaneous study of pressure and electric events in the rabbit sphincter of Oddi and duodenum. Elbrønd H, et al. **Scand J Gastroenterol** 1988 Dec;

23(10):1211–6
Some comparative aspects on biliary motility in animal species. Aldman G. **Scand J Gastroenterol Suppl** 1988; 152:63–6
Cholecystectomy and sphincter of Oddi hormonal response [letter] Cherubini M, et al. **Surgery** 1988 Nov;104(5):934–5
Dynamics of bile flow through the human choledochal sphincter following exploration of the common bile duct. Holdsworth RJ, et al. **World J Surg** 1989 May–Jun; 13(3):300–4; discussion 305–6
[The experimental study on the motility of Oddi sphincter] Liu YF. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):425–8, 446–7 (Eng. Abstr.) (Chi)

PHYSIOPATHOLOGY

The significance of elevated ampullary sphincter pressure [editorial] Steinberg WM. **Am J Gastroenterol** 1989 Jul; 84(7):712
Evaluation of sphincter of Oddi function. Toouli J. **Aust N Z J Surg** 1989 Jun;59(6):445–8 (20 ref.)
Human fasting and postprandial sphincter of Oddi motility. Worthley CS, et al. **Br J Surg** 1989 Jul;76(7):709–14
Endoscopic biliary manometry in patients with suspected sphincter of Oddi dysfunction and in patients with cystic dilatation of the bile ducts. Ponce J, et al. **Dig Dis Sci** 1989 Mar;34(3):367–71
Papillary stenosis. Guelrud M. **Endoscopy** 1988 Aug;20 Suppl 1:193–202 (103 ref.)
Motility of Oddi's sphincter in Parkinson's disease, progressive systemic sclerosis, and achalasia. Hagenmüller F, et al. **Endoscopy** 1988 Aug;20 Suppl 1:189–92
Biliary dyskinesia. Hogan WJ, et al. **Endoscopy** 1988 Aug; 20 Suppl 1:179–83
Papillotomy and functional disorders of the sphincter of Oddi. Krims PE, et al. **Endoscopy** 1988 Aug;20 Suppl 1:203–6 (32 ref.)
Sphincter of Oddi manometry: comparison of microtransducer and perfusion methods. Tanaka M, et al. **Endoscopy** 1988 Aug;20 Suppl 1:184–8 (62 ref.)
Sphincter of Oddi dysfunction: a clinical controversy. Steinberg WM. **Gastroenterology** 1988 Nov;95(5):1409–15 (44 ref.)
What is sphincter of Oddi dysfunction? Toouli J. **Gut** 1989 Jun;30(6):753–61 (36 ref.)
Pressure of papillary sphincter zone and pancreatic main duct in patients with alcoholic and idiopathic chronic pancreatitis. Okazaki K, et al. **Int J Pancreatol** 1988 Dec; 3(6):457–68
[Observations on the function of Oddi's sphincter in patients with primary bile duct stones] Tian FZ. **Chung Hua Wai Ko Tsa Chih** 1989 Mar;27(3):144–6, 188 (Eng. Abstr.) (Chi)
[Functional disorders of Oddi's sphincter following cholecystectomy. Endoscopic manometric study] Warzée P, et al. **Acta Gastroenterol Belg** 1988 May–Jun; 51(3):276–83 (Eng. Abstr.) (Fre)
[Chronic disorders of duodenal patency and the problem of insufficiency of the major duodenal papilla] Vitebskiĭ IaD. **Khirurgiia (Mosk)** 1988 Dec;(12):51–8 (Eng. Abstr.) (Rus)
[Oddi's sphincter in patients operated on for cholelithiasis] Ivanchenkova RA, et al. **Klin Med (Mosk)** 1988 Jun; 66(6):94–8 (Eng. Abstr.) (Rus)
[Functional changes in Oddi's sphincter after cholecystectomy] Ivanchenkova RA, et al. **Klin Med (Mosk)** 1988 Oct;66(10):113–6 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Radiological appearance of the ampulla of Vater. Aspestrand F, et al. **Radiologe** 1988 Nov;28(11):533–5

RADIONUCLIDE IMAGING

Quantitative 99mTc-DISIDA scanning and endoscopic biliary manometry in sphincter of Oddi dysfunction. Fullarton GM, et al. **Gut** 1988 Oct;29(10):1397–401

SURGERY

The endoscopic treatment of choledocholithiasis [editorial] De Vos M, et al. **Acta Clin Belg** 1989;44(1):1–2
Duodenoscopic sphincterotomy in patients with gallbladders in situ: report of a series of 1272 patients. Siegel JH, et al. **Am J Gastroenterol** 1988 Nov;83(11):1255–8
Duodenoscopic sphincterotomy in patients with gallbladders in situ [letter] Tulassay Z, et al. **Am J Gastroenterol** 1989 Aug;84(8):983–4
Alternatives to cholecystectomy and common duct exploration [editorial] Zimmon DS. **Am J Gastroenterol** 1988 Nov;83(11):1272–3 (18 ref.)
Transduodenal sphincteroplasty and transampullary septotomy for primary sphincter of Oddi dysfunction. Nussbaum MS, et al. **Am J Surg** 1989 Jan;157(1):38–43
Endoscopic management of bile duct stones. Sivak MV Jr. **Am J Surg** 1989 Sep;158(3):228–40 (105 ref.)
Endoscopic sphincterotomy for bile duct stones in patients with intact gallbladders. Hansell DT, et al. **Br J Surg** 1989 Aug;76(8):856–8
Ampullary carcinoma [letter] Neoptolemos JP, et al. **Br J Surg** 1988 Aug;75(8):829–30
Technique for operative cholangiography after endoscopic sphincterotomy. Vipond MN, et al. **Br J Surg** 1989 Jun; 76(6):571
Laser treatment of tumors of the papilla of Vater. Lambert R, et al. **Endoscopy** 1988 Aug;20 Suppl 1:227–31
Papillary stenosis and sclerosing cholangitis in an immunodeficient child. Gremse DA, et al. **Gastroenterology** 1989 Jun;96(6):1600–3
Unilateral periorbital emphysema: an unusual complication of endoscopic papillotomy. Colemont LJ, et al. **Gastrointest Endosc** 1988 Nov–Dec;34(6):473–5
Endoscopic sphincterotomy for common bile duct calculi [letter] Tulassay Z, et al. **Gut** 1988 Sep;29(9):1295
Endoscopic papillosphincterotomy and surgical sphincteroplasty for the treatment of bile duct stones: a comparative analysis. Motta G, et al. **Ital J Surg Sci** 1989; 19(2):165–71
Surgical treatment of pancreas divisum causing pancreatitis in children. Adzick NS, et al. **J Pediatr Surg** 1989 Jan; 24(1):54–8; discussion 58
Endoscopic sphincterotomy—a cautionary note [editorial] **Lancet** 1988 Oct 22;2(8617):945–6
Of pancreas, pain, and papilla. **Lancet** 1988 Nov 12; 2(8620):1116–7 (28 ref.)
Endoscopic sphincterotomy in acute gallstone pancreatitis [letter] Neoptolemos JP. **Lancet** 1989 Jan 7;1(8628):43
Controlled trial of urgent endoscopic retrograde cholangiopancreatography and endoscopic sphincterotomy versus conservative treatment for acute pancreatitis due to gallstones. Neoptolemos JP, et al. **Lancet** 1988 Oct 29; 2(8618):979–83
Carcinoma of the pancreas and periampullary area. Part III: Therapeutic approaches. Elias EG. **Md Med J** 1988 Jul; 37(7):512
The efficacy of endoscopic sphincterotomy after cholecystectomy in patients with sphincter-of-Oddi dysfunction. Geenen JE, et al. **N Engl J Med** 1989 Jan 12;320(2):82–7
Tumors of the ampulla of Vater treated by local resection: a report of five cases. Eggink WF, et al. **Neth J Surg** 1988 Jun;40(4):110–3
Villous tumors of the ampulla of Vater: local resection versus pancreatoduodenectomy. Gray G, et al. **South Med J** 1989 Jul;82(7):917–20 (12 ref.)
Second look operation in managing carcinoma of the pancreas and periampullary region. Hashimi H, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):224–6
The overlooked technique of ampullary excision. Kalm MB, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):253–4
Biliary concrements: the endoscopic approach. Rosseland AR, et al. **World J Surg** 1989 Mar–Apr;13(2):178–85 (97 ref.)
[Surgical treatment of postoperative insufficiency of Vater's papilla] Vitebskiĭ IaD, et al. **Khirurgiia (Sofiia)** 1988; 41(5):92–9 (Bul)
[Whipple's resection in cancer of Vater's ampulla and the pancreatic head] Schrøder HM, et al. **Ugeskr Laeger** 1989 Jan 2;151(1):21–3 (Eng. Abstr.) (Dan)
[Endoscopic sphincterotomy] Henkinbrant A, et al. **Acta Clin Belg** 1989;44(1):3–9 (Eng. Abstr.) (Fre)
[Intraoperative antegrade endoscopic papillotomy] Lange V, et al. **Chirurg** 1989 Jan;60(1):58–9 (Ger)
[Surgical treatment of adenomas of Vater's ampulla by transduodenal submucous excision of Vater's ampulla] Pratschke E, et al. **Chirurg** 1988 Dec;59(12):845–7 (Ger)
[Arguments for a revised concept in the therapy of acute pancreatitis. On the indications for conservative, endoscopic and surgical procedures] Sulkowski U, et al. **Chirurg** 1989 Apr;60(4):246–50 (Eng. Abstr.) (Ger)
[Protection of the pancreatico-digestive anastomosis following resection of the head of the pancreas by pancreatic duct occlusion with fibrin (=glue). Animal experiment and clinical experiences] Waclawiczek HW, et al. **Chirurg** 1989 Jun;60(6):403–9 (Eng. Abstr.) (Ger)
[Endoscopic removal of bile duct calculi (papillotomy, mechanical lithotripsy, laser-induced lithotripsy] Ell C. **Verh Dtsch Ges Inn Med** 1988;94:112–6 (Ger)
[Quo vadis endoscopic sphincterotomy?] Seifert E, et al. **Z Gastroenterol** 1989 Feb;27(2):77–82 (Eng. Abstr.) (Ger)
[Surgical and endoscopic papillosphincterotomy in surgery of the bile ducts] Černý J, et al. **Zentralbl Chir** 1989; 114(7):448–52 (Eng. Abstr.) (Ger)
[Duodeno-cephalopancreatectomy with preservation of the pylorus] Kozuschek W. **Zentralbl Chir** 1989;114(11):745–54 (Ger)
[Late results following dilatation of Vater's papilla in benign stenosis] Lange U, et al. **Zentralbl Chir** 1989;114(7):435–41 (Eng. Abstr.) (Ger)
[Diagnosis and therapy of benign stenoses of Vater's papilla] Schalimow SA, et al. **Zentralbl Chir** 1989;114(7):442–7 (Eng. Abstr.) (Ger)
[Bile duct calculi. Comparison of surgical and endoscopic therapy] Oselladore D, et al. **Minerva Chir** 1989 Jan 31; 44(1–2):151–2 (Ita)
[Endoscopic papillotomy in the treatment of acute biliary pancreatitis] Nowak A, et al. **Pol Arch Med Wewn** 1985 Sep;74(3):189–94 (Eng. Abstr.) (Pol)
[Acute pancreatitis of biliary origin as an indication for emergency endoscopic sphincterotomy] Nowak A, et al. **Wiad Lek** 1988 Nov 15;41(22):1515–8 (Pol)
[Papillary operations in biliary reinterventions] Duca S, et al. **Rev Chir [Chir]** 1988 May–Jun;37(3):187–95 (Eng. Abstr.) (Rus)
[Surgical tactics in middle-aged and elderly patients with mechanical jaundice caused by cholelithiasis] Beliaev AA, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):24–7 (Eng. Abstr.) (Rus)
[Complications after papillosphincterotomy and the ways of their correction] Kochnev OS, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):87–91 (Rus)
[Problems of the treatment of acute cholecystitis] Magdiev TSh, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):44–50 (Eng. Abstr.) (Rus)
[Comparative evaluation of various approaches to the surgical treatment of cholelithiasis in patients of a high-risk group] Mamedov IM, et al. **Khirurgiia (Mosk)** 1989 Mar; (3):96–9 (Eng. Abstr.) (Rus)
[Surgical treatment of primary and secondary pancreatitis] Mianniste IuE, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):97–100 (Eng. Abstr.) (Rus)
[Surgical treatment of choledocholithiasis] Nikolaev NO, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):36–40 (Eng. Abstr.) (Rus)
[Endoscopic papillosphincterotomy in acute pancreatitis] Sinev IuV, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):87–9 (Eng. Abstr.) (Rus)
[Evolution of surgical tactics in biliary calculi] Tsybyrné KA, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):66–9 (Eng. Abstr.) (Rus)
[Clinical evaluation of biliodigestive anastomoses] Gredzhev AF, et al. **Klin Khir** 1988;(9):1–3 (Eng. Abstr.) (Rus)
[Drainage of the extrahepatic bile ducts in transduodenal papillosphincterotomy] Kozyrev MA. **Klin Khir** 1988;(9):67 (Rus)
[Treatment of duodenal injuries acquired during endoscopic papillosphincterotomy] Masalin MM, et al. **Klin Khir** 1988; (9):44–6 (Rus)
[A method of transduodenal papillosphincterotomy] Mitiuk II, et al. **Klin Khir** 1988;(9):66 (Rus)
[Unsatisfactory late results of transpapillary interventions] Prokhorova IP, et al. **Klin Khir** 1988;(9):48–9 (Rus)
[Selection of the method of endoscopic surgery in patients with pathology of the extrahepatic bile ducts] Chervinskaia AA, et al. **Klin Med (Mosk)** 1989 Feb;67(2):100–2 (Rus)
[Replantation of the major duodenal papilla] Artem'eva NN, et al. **Vestn Khir** 1988 Jul;141(7):33–6 (Eng. Abstr.) (Rus)
[Single-stage surgical intervention in cancer of the major duodenal papilla, ascending colon and rectum] Fedorov VD, et al. **Vestn Khir** 1988 Sep;141(9):56–7 (Rus)
[The organization, equipment and performing of microsurgical operations on the bile ducts] Trunin MA, et al. **Vestn Khir** 1989 Mar;142(3):105–7 (Rus)
[A method of endoscopic papillotomy] Volkov SV, et al. **Vestn Khir** 1988 Dec;141(12):88–9 (Rus)
[Various problems of surgery of the extrahepatic bile ducts] Zemskov VS, et al. **Vestn Khir** 1988 Aug;141(8):36–41 (Eng. Abstr.) (Rus)
[X-ray endoscopic study of the bile ducts following endoscopic papillosphincterotomy] Krendal' AP, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):89 (Rus)
[Endoscopic sphincterotomy in the treatment of choledocholithiasis: are there any contraindications?] Moreira Vicente VF, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):606–10 (Eng. Abstr.) (Spa)
[Carcinomas of the biliopancreatic juncture. Review of 58 cases] Pardo Correcher JM, et al. **Rev Esp Enferm Apar Dig** 1988 Jul;74(1):11–6 (Eng. Abstr.) (Spa)

ULTRASTRUCTURE

Radiation-induced changes in mouse duodenal papilla. Indran M, et al. **Br J Radiol** 1988 Nov;61(731):1039–42

VECTORCARDIOGRAPHY

Vectorcardiographic 'bites' in diabetes mellitus [letter; comment] Giampietro O, et al. **Acta Diabetol Lat** 1989 Jan–Mar;26(1):83–5, **Comment on:** Acta Diabetol Lat 1988 Jul–Sep;25(3):227–34
Vector U loop in patients with old myocardial infarction. Yang Q, et al. **Clin Cardiol** 1989 May;12(5):277–82
Vectorcardiographic criteria for acute right ventricular infarction. Carson W, et al. **Eur Heart J** 1988 Sep; 9(9):955–61
The vectorcardiogram in 4 children undergoing the arterial switch repair. Fong LV, et al. **Int J Cardiol** 1989 Sep; 24(3):277–82
Evaluation of spatial R maximum cardiac vector changes in exercise testing: pre-exercise versus post-exercise measurements. Talwar KK, et al. **Int J Cardiol** 1989 Sep; 24(3):293–5
Planarity of the spatial QRS loop. Comparative analysis in normals, infarcts, ventricular hypertrophies, and intraventricular conduction defects. Arnaud P, et al. **J Electrocardiol** 1989 Apr;22(2):143–52
CAVIAR: a serial ECG processing system for the comparative analysis of VCGs and their interpretation with auto-reference to the patient. Fayn J, et al. **J Electrocardiol** 1988;21 Suppl:S173–6
Electrovectorcardiographic study of negative T waves on precordial leads in arrhythmogenic right ventricular dysplasia: relationship with right ventricular volumes. Nava A, et al. **J Electrocardiol** 1988 Aug;21(3):239–45

New methods of quantitative assessment of the extent and significance of serial ECG changes of the repolarization phase. Rubel P, et al. **J Electrocardiol** 1988;21 Suppl:S177–81

[Semiquantitative evaluation of infarct area by a vectorcardiographic study: a comparison of acute phase and after 6 months] Gotti G, et al. **Cardiologia** 1988 Aug; 33(8):759–63 (Eng. Abstr.) (Ita)

[Electrocardiographic, vectorcardiographic and echocardiographic study of the grade of left ventricular hypertrophy in trained and semi-trained athletes] Zanfardino V, et al. **Cardiologia** 1988 Oct;33(10):945–8 (Eng. Abstr.) (Ita)

[Vectorcardiographic manifestations of the W-P-W syndrome with associated cardiopathy] de Micheli A, et al. **Arch Inst Cardiol Mex** 1989 May-Jun;59(3):309–21 (57 ref.) (Eng. Abstr.) (Spa)

[Diagnosis of the myocardial inactivatable zone in the presence of right and bilateral intraventricular blocks] de Micheli A, et al. **Arch Inst Cardiol Mex** 1988 Nov-Dec; 58(6):575–86 (Eng. Abstr.) (Spa)

[Diagnosis of an inactivable myocardial zone in the presence of left intraventricular block] de Micheli A, et al. **Arch Inst Cardiol Mex** 1988 Sep-Oct;58(5):461–73 (Eng. Abstr.) (Spa)

[Vectorcardiographic diagnosis of the myocardial inactivatable zone] de Micheli A, et al. **Arch Inst Cardiol Mex** 1989 Mar-Apr;59(2):195–210 (35 ref.) (Eng. Abstr.) (Spa)

[The P loop in atrioventricular septal defect. Embryologico-vectorcardiographic correlation] Zevallos JC, et al. **Arch Inst Cardiol Mex** 1988 Nov-Dec; 58(6):517–23 (Eng. Abstr.) (Spa)

METHODS

The analysis of ventricular late potentials using orthogonal recordings. Lander P, et al. **IEEE Trans Biomed Eng** 1988 Aug;35(8):629–39

Spatial vectorcardiogram in acute inferior wall myocardial infarction: its utility in identification of patients prone to complete heart block. Talwar KK, et al. **Int J Cardiol** 1989 Sep;24(3):289–92

Vectorcardiogram synthesized from a 12-lead ECG: superiority of the inverse Dower matrix. Edenbrandt L, et al. **J Electrocardiol** 1988 Nov;21(4):361–7

[Lead system in limb electrocardiogram] Wieshammer S, et al. **Dtsch Med Wochenschr** 1989 Jul 7;114(27):1089 (Ger)

[The Sanz method of cardiogoniometry] Vontobel H, et al. **Schweiz Med Wochenschr** 1988 Nov 5;118(44):1603–8 (Eng. Abstr.) (Ger)

[Cardiogoniometry in coronary heart disease. A clinical study] Vontobel H, et al. **Schweiz Med Wochenschr** 1988 Nov 5;118(44):1609–11 (Eng. Abstr.) (Ger)

STATISTICS & NUMERICAL DATA

[Vectorcardiographic significance of three-dimensional devices ended and nevertheless without boundaries] Troquet J. **Arch Int Physiol Biochim** 1988 Jun;96(2):127–36 (Eng. Abstr.) (Fre)

VECTORS, GENETIC see **GENETIC VECTORS**

VECURONIUM

Phenytoin-induced resistance to vecuronium [letter] Gough JD, et al. **Anaesthesia** 1989 Jun;44(6):520

The effect of acutely administered phenytoin on vecuronium-induced neuromuscular blockade. Gray HS, et al. **Anaesthesia** 1989 May;44(5):379–81

Phenytoin-induced resistance to vecuronium [letter] Kumar CM, et al. **Anaesthesia** 1989 Mar;44(3):263–4

Atrioventricular Mobitz I block during propofol anesthesia for laparoscopic tubal ligation. Ganansia MF, et al. **Anesth Analg** 1989 Oct;69(4):524–5

Modified rapid sequence induction [letter] **Anesthesiology** 1989 Jun;70(6):1029–33

Muscle pain occurs after outpatient laparoscopy despite the substitution of vecuronium for succinylcholine. Zahl K, et al. **Anesthesiology** 1989 Mar;70(3):408–11

Comparison of atracurium and vecuronium during anaesthesia for laparoscopy. Bailey DM, et al. **Br J Anaesth** 1988 Nov;61(5):557–9

Use of atracurium or vecuronium to prolong the action of tubocurarine. Middleton CM, et al. **Br J Anaesth** 1989 Jun; 62(6):659–63

Accelerated recovery from combined atracurium–vecuronium neuromuscular block. Stirt JA. **Br J Anaesth** 1989 Jun;62(6):697–9

[Hemodynamic effects of anesthesia using propofol, fentanyl, nitrous oxide and vecuronium in kidney transplantation in the adult] Nguyên HN, et al. **Can Anesthesiol** 1989 Jan–Feb; 37(1):17–21 (Fre)

[Vecuronium bromide and succinylcholine procedures in medial relaxation. A comparison of electromyography and clinical findings] Leyser KH, et al. **Anaesthesist** 1989 Jun; 38(6):288–93 (Eng. Abstr.) (Ger)

[The effect of pancuronium and norcuron on hemodynamics, coronary circulation and myocardial oxygen consumption in coronary surgery patients] Günnicker M, et al. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):88–93 (Eng. Abstr.) (Ger)

[Mechanomyography and electromyography—2 competing methods of relaxometry using vecuronium] Mellinghoff H, et al. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):57–9 (Eng. Abstr.) (Ger)

[Postoperative, opiate-induced respiratory depression is not dependent on arousal] Tolkadorf W, et al. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):94–9 (Eng. Abstr.) (Ger)

ADMINISTRATION & DOSAGE

Experience with vecuronium during long-lasting surgery. Eriksson LI, et al. **Acta Anaesthesiol Scand** 1988 Nov; 32(8):619–22

Weight determined dosage of vecuronium bromide [letter] Harrison MJ, et al. **Anaesthesia** 1989 Aug;44(8):692

Doses of muscle relaxants [letter] Northwood D. **Anaesthesia** 1989 Feb;44(2):172–3

Increased requirements for continuously infused vecuronium in critically ill patients. Coursin DB, et al. **Anesth Analg** 1989 Oct;69(4):518–21

Vecuronium infusion requirements in pediatric patients during fentanyl-N2O-O2 anesthesia. Meretoja OA. **Anesth Analg** 1989 Jan;68(1):20–4

An alternative method of paralysis for rapid-sequence induction. Cicala R, et al. **Anesthesiology** 1988 Dec; 69(6):983–6

Onset and duration of neuromuscular blockade following high-dose vecuronium administration. Ginsberg B, et al. **Anesthesiology** 1989 Aug;71(2):201–5

Atracurium or vecuronium for MHS patients? [letter] Allen G. **Br J Anaesth** 1988 Oct;61(4):513

Recovery of neuromuscular function after infusion or intermittent bolus doses of atracurium or vecuronium. Gordon KL, et al. **Br J Anaesth** 1989 Mar;62(3):269–73

Infusion of vecuronium assessed by tactile evaluation of evoked thumb twitch. Haraldsted VY, et al. **Br J Anaesth** 1988 Oct;61(4):479–81

Administration of vecuronium, atracurium and pancuronium in divided doses: effect on onset and duration of action. Brady MM, et al. **Eur J Anaesthesiol** 1988 Jul;5(4):243–9

Priming with atracurium and vecuronium [letter] Sosis M. **Eur J Anaesthesiol** 1988 Nov;5(6):400–1

Simulating the time-course of clinical paralysis. Shanks CA. **Int J Clin Monit Comput** 1988;5(4):201–5

[Effects of isoflurane on the duration of neuromuscular block induced by a single dose of vecuronium bromide] Amiot JF, et al. **Can Anesthesiol** 1988 Sep;36(5):349–52 (Fre)

[Vecuronium in dystrophia myotonica (Curschmann-Steinert)] Wruck G, et al. **Anaesthesist** 1989 May;38(5):255–8 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Cardiovascular responses caused by the combination of lidocaine and vecuronium in the induction of general anaesthesia. Pouttu J, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):549–52

Anaphylaxis following vecuronium [letter] Holt AW, et al. **Anaesth Intensive Care** 1988 Aug;16(3):378–9

Prolonged neuromuscular blockade following the use of vecuronium for mediastinoscopy. Schindler MB. **Anaesth Intensive Care** 1989 Aug;17(3):372–4

Bradycardia in patients receiving atracurium or vecuronium in conditions of low vagal stimulation. Cozanitis DA, et al. **Anaesthesia** 1989 Apr;44(4):303–5

The incidence of myocardial ischemia during anesthesia for coronary artery bypass surgery in patients receiving pancuronium or vecuronium. O'Connor JP, et al. **Anesthesiology** 1989 Feb;70(2):230–6

Cyclosporine–vecuronium interaction [letter] Wood GG. **Can J Anaesth** 1989 May;36(3 Pt 1):358

ANTAGONISTS & INHIBITORS

Impairment of the antagonism of vecuronium-induced paralysis and intra-operative disopyramide administration. Baurain M, et al. **Anaesthesia** 1989 Jan;44(1):34–6

Dose-response relationships for edrophonium and neostigmine as antagonists of atracurium and vecuronium neuromuscular blockade. Smith CE, et al. **Anesthesiology** 1989 Jul;71(1):37–43

Antagonism of moderate degrees of vecuronium-induced neuromuscular block by small doses of neostigmine. Johnson RA, et al. **Br J Anaesth** 1989 May;62(5):483–7

Antagonism of blockade produced by atracurium or vecuronium with low doses of neostigmine. Jones JE, et al. **Br J Anaesth** 1988 Nov;61(5):560–4

PHARMACOKINETICS

Pharmacodynamics of vecuronium and atracurium in the obese surgical patient. Weinstein JA, et al. **Anesth Analg** 1988 Dec;67(12):1149–53

Uptake and excretion of vecuronium bromide and pancuronium bromide in the isolated perfused rat liver. Bencini AF, et al. **Anesthesiology** 1988 Oct;69(4):487–92

[Protracted action of vecuronium in a patient with chronic renal insufficiency treated by dialysis] Hackl W, et al. **Anaesthesist** 1988 Sep;37(9):598–600 (Eng. Abstr.) (Ger)

PHARMACOLOGY

The influence of 0.5% isoflurane on a vecuronium-induced neuromuscular blockade. Eriksson LI, et al. **Acta Anaesthesiol Scand** 1989 May;33(4):309–12

Spontaneous recovery of residual neuromuscular blockade after atracurium or vecuronium during isoflurane anaesthesia. Erkola O, et al. **Acta Anaesthesiol Scand** 1989 May;33(4):290–4

Train-of-four fade during onset of neuromuscular block with nondepolarising neuromuscular blocking agents. Gibson FM, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):204–6

Midazolam does not potentiate the effect of vecuronium in patients. Husby P, et al. **Acta Anaesthesiol Scand** 1989 May; 33(4):280–2

Duration of action of vecuronium in infants and children anaesthetized without potent inhalation agents. Kalli I, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):29–33

A clinical study into the possible intrinsic bradycardic activity of vecuronium. Cozanitis DA, et al. **Anaesthesia** 1989 Aug;44(8):648–50

Effect of vecuronium on atropine-induced changes in heart rate. Ridley S, et al. **Anaesthesia** 1989 Mar;44(3):216–8

Prolonged vecuronium-induced neuromuscular blockade in children. Harwood TN, et al. **Anesth Analg** 1989 Apr; 68(4):534–6

Negative chronotropic actions of sufentanil and vecuronium in chronically instrumented dogs pretreated with propranolol and/or diltiazem. Schmeling WT, et al. **Anesth Analg** 1989 Jul;69(1):4–14

Ketamine potentiates nondepolarizing neuromuscular relaxants in a primate. Tsai SK, et al. **Anesth Analg** 1989 Jan;68(1):5–8

Differing effect of agonist and antagonist muscle relaxants on cat jaw muscles. Van der Spek AF, et al. **Anesth Analg** 1989 Jul;69(1):76–80

Atracurium, vecuronium, and pancuronium do not alter the minimum alveolar concentration of halothane in humans. Fahey MR, et al. **Anesthesiology** 1989 Jul;71(1):53–6

The effect of neuromuscular blockade with vecuronium on hemodynamic responses to noxious stimuli in the rat. Gibbs NM, et al. **Anesthesiology** 1989 Aug;71(2):214–7

The effect of H2-receptor antagonist premedication on the duration of vecuronium-induced neuromuscular blockade in postpartum patients. Hawkins JL, et al. **Anesthesiology** 1989 Aug;71(2):175–7

The effect of maintenance dose vecuronium on pre-established metocurine- or vecuronium-induced neuromuscular blockade. Ornstein E, et al. **Anesthesiology** 1988 Dec;69(6):954–5

Resistance to muscle relaxants in a patient receiving prolonged testosterone therapy. Reddy P, et al. **Anesthesiology** 1989 May;70(5):871–3

Actions of enflurane, isoflurane, vecuronium, atracurium, and pancuronium on pulmonary resistance in dogs. Vettermann J, et al. **Anesthesiology** 1988 Nov;69(5):688–95

Clinical pharmacology of mivacurium chloride (BW B1090U) infusion: comparison with vecuronium and atracurium. Ali HH, et al. **Br J Anaesth** 1988 Nov;61(5):541–6

Comparison of neuromuscular blockade in the diaphragm and the hand. Derrington MC, et al. **Br J Anaesth** 1988 Sep; 61(3):279–85

Comparison of the adductor pollicis and the first dorsal interosseous muscles during atracurium and vecuronium blockade: an electromyographic study. Harper NJ. **Br J Anaesth** 1988 Oct;61(4):477–8

Potency of atracurium and vecuronium at the diaphragm and the adductor pollicis muscle. Laycock JR, et al. **Br J Anaesth** 1988 Sep;61(3):286–91

Is vecuronium a long-acting neuromuscular blocking agent in neonates and infants? Meretoja OA. **Br J Anaesth** 1989 Feb;62(2):184–7

Influence of suxamethonium on the action of subsequently administered vecuronium or pancuronium. Ono K, et al. **Br J Anaesth** 1989 Mar;62(3):324–6

Post-tetanic count and intense neuromuscular blockade with vecuronium in children. Ridley SA, et al. **Br J Anaesth** 1988 Nov;61(5):551–6

Haemodynamic effects of vecuronium. Wierda JM, et al. **Br J Anaesth** 1989 Feb;62(2):194–8

Neuromuscular blockade with vecuronium in paediatric patients with burn injury. Mills AK, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):155–9

Atracurium and vecuronium interaction with gentamicin and tobramycin. Dupuis JY, et al. **Can J Anaesth** 1989 Jul; 36(4):407–11

The onset of ablation of the evoked adductor pollicis muscle twitch in children: a clinical perspective. Reynolds PI, et al. **Can J Anaesth** 1988 Nov;35(6):576–80

Does vecuronium accumulate in the renal transplant patient? Starsnic MA, et al. **Can J Anaesth** 1989 Jan;36(1):35–9

A clinical study on vecuronium in children: a comparison with fazadinium and pancuronium. Esener Z. **Turk J Pediatr** 1988 Jul–Sep;30(3):163–72

[Influence of isoflurane on the neuromuscular block induced by vecuronium in the child] Bazin JE, et al. **Can Anesthesiol** 1988 Dec;36(8):593–8 (Fre)

[Prolonged action of vecuronium in neurofibromatosis (von Recklinghausen's disease)] Mitterschiffthaler G, et al. **Anaesthesiol Reanim** 1989;14(3):175–8 (Eng. Abstr.) (Ger)

[Vecuronium bromide: modification of its pharmacodynamics by etomidate, cimetidine and ranitidine] Ulsamer B. **Anaesthesist** 1988 Aug;37(8):504–9 (Eng. Abstr.) (Ger)

[Behavior of neuromuscular blockade parameters in response to vecuronium] Mastronardi P, et al. **Minerva Anestesiol**

1988 Jun;54(6):255–8 (Eng. Abstr.) (Ita)
[Onset and duration of action times for the new muscle relaxants vecuronium and atracurium. Comparison with pancuronium] Melloni C, et al. **Minerva Anestesiol** 1988 Jun;54(6):233–48 (Eng. Abstr.) (Ita)
[A clinical and experimental study on potentiation with sevoflurane of neuromuscular blocking effects of vecuronium and pancuronium] Itagaki T, et al. **Masui** 1988 Aug;37(8):943–54 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Intravenous infusion of midazolam, propofol and vecuronium in a patient with severe tetanus. Orko R, et al.
Acta Anaesthesiol Scand 1988 Oct;32(7):590–2

VECURONIUM BROMIDE see VECURONIUM

VEGETABLE OILS see PLANT OILS

VEGETABLE PROTEINS

Soy products and the human diet. Erdman JW Jr, et al.
Am J Clin Nutr 1989 May;49(5):725–37 (144 ref.)
Per-oral controlled release dosage form of theophylline using soybean protein. Machida Y, et al. **Drug Des Deliv** 1987 Feb;1(3):187–92
Use of soybean protein for controlled release of drugs administered orally. Machida Y, et al. **Drug Des Deliv** 1987 Feb;1(3):179–86
Association-dissociation and denaturation-renaturation of high-molecular-weight protein: carmin from safflower seed (Carthamus tinctorius L.) in alkaline solution. Rajendran S, et al. **J Protein Chem** 1988 Dec;7(6):689–712
[Obtention and evaluation of a precooked flour of auyama (Cucurbita maxima) and rice, enriched with oleaginous proteins and/or skim milk] Garrido de Cayuela R, et al.
Arch Latinoam Nutr 1988 Mar;38(1):143–51 (Eng. Abstr.) (Spa)

ADMINISTRATION & DOSAGE

Effect of feeding whey hydrolysate, soy and conventional cow milk formulas on incidence of atopic disease in high risk infants. Chandra RK, et al. **Ann Allergy** 1989 Aug; 63(2):102–6
Effect of animal and vegetable protein intake on oxalate excretion in idiopathic calcium stone disease. Marangella M, et al. **Br J Urol** 1989 Apr;63(4):348–51

ADVERSE EFFECTS

Gastrointestinal milk intolerance of infancy. Berezin S, et al. **Am J Dis Child** 1989 Mar;143(3):361–2
[Hidden inhalation and food allergens: legume proteins] Baur X, et al. **Prax Klin Pneumol** 1988 Sep;42(9):701–4 (Eng. Abstr.) (Ger)

ANALYSIS

Measurement of some antinutritive factors in meat products containing texturated vegetable protein (TVP). Komándi K, et al. **Nahrung** 1988;32(7):643–8
Quality of zabadi made from cow's milk fortified with whey and soy proteins. el-Neshawy AA, et al. **Nahrung** 1988; 32(10):939–43
Nutritive value of acetylated and hydrolysed rapeseed proteins in rats. Delisle J, et al. **Plant Foods Hum Nutr** 1987;37(3):265–74
Amino acid profile of winged bean (Psophocarpus tetragonolobus (L.) DC): a rich source of vegetable protein. Prakash D, et al. **Plant Foods Hum Nutr** 1987;37(3):261–4
[Evaluation of the protein quality of legume flours obtained by roasting in heated beds] Loayza Jibaja C, et al.
Arch Latinoam Nutr 1988 Mar;38(1):152–61 (Eng. Abstr.) (Spa)

GENETICS

Sequences responsible for the tissue specific promoter activity of a pea legumin gene in tobacco. Shirsat A, et al.
Mol Gen Genet 1989 Jan;215(2):326–31
The glycinin Gy3 gene from soybean. Cho TJ, et al.
Nucleic Acids Res 1989 Jun 12;17(11):4388
The glycinin Gy1 gene from soybean. Sims TL, et al.
Nucleic Acids Res 1989 Jun 12;17(11):4386
The glycinin Gy2 gene from soybean. Thanh VH, et al.
Nucleic Acids Res 1989 Jun 12;17(11):4387

IMMUNOLOGY

Enzyme-linked immunosorbent assay and immunoblotting determination of antibody response to major component proteins of soybeans in patients with soy protein intolerance. Burks AW, et al.
J Pediatr Gastroenterol Nutr 1989 Feb;8(2):195–203
[Mechanisms implicated in the intestinal allergic reaction to soya proteins in the preruminant calf] Duvaux C, et al.
Reprod Nutr Dev 1988;28 Suppl 1:159–60 (Eng. Abstr.) (Fre)
[Antibodies against dietary proteins and intestinal permeability to macromolecules in the preruminant calf receiving pea flour] Nunes do Prado I, et al.
Reprod Nutr Dev 1988;28 Suppl 1:157–8 (Eng. Abstr.) (Fre)

ISOLATION & PURIFICATION

Characterization of a lectin-binding storage protein from pea (Pisum sativum). Kummer H, et al.
Biol Chem Hoppe Seyler 1988 Aug;369(8):639–46
Identification and isolation of methionine-cysteine rich proteins in soybean seed. Kho CJ, et al.
Plant Foods Hum Nutr 1988;38(4):287–96

METABOLISM

Plant protein in milk replacers for rearing buffalo calves. II. Effect of replacing 75% of the milk proteins by plant proteins on the preweaning performance of buffalo calves. el-Ashry MA, et al.
Beitr Trop Landwirtsch Veterinarmed 1988;26(2):189–95
Reconstitution of intermediate filaments from a higher plant. Hargreaves AJ, et al. **Biochem J** 1989 Jul 15;261(2):679–82
Substitution of milk protein with isolated soy protein in calf milk replacers. Khorasani GR, et al. **J Anim Sci** 1989 Jun; 67(6):1634–41
Diet digestibility and growth of holstein calves fed acidified milk replacers containing soy protein concentrate. Erickson PS, et al. **J Dairy Sci** 1989 Jun;72(6):1528–33
Proteolysis of alcohol-treated soybean meal proteins by Bacteroides ruminicola, Bacteroides amylophilus, pepsin, trypsin, and in the rumen of steers. Lynch GL, et al.
J Dairy Sci 1988 Sep;71(9):2416–27
Relationship between content and intake of bean polyphenolics and protein digestibility in humans. Bressani R, et al. **Plant Foods Hum Nutr** 1988;38(1):5–21
Protein and energy utilization of boiled rice-legume diets and boiled cereals in growing rats. Eggum BO, et al.
Plant Foods Hum Nutr 1987;37(3):237–45
Relationship between dietary fiber levels and protein digestibility in selected foods as determined in rats. Mongeau R, et al. **Plant Foods Hum Nutr** 1989;39(1):45–51

PHARMACOLOGY

Experimental atherosclerosis in rabbits fed cholesterol-free diets. 13. Interaction of proteins and fat. Kritchevsky D, et al. **Atherosclerosis** 1989 Feb;75(2–3):123–7
Effects of soy protein and casein in low cholesterol diets on plasma lipoproteins in normolipidemic subjects. Meinertz H, et al. **Atherosclerosis** 1988 Jul;72(1):63–70
The hypocholesterolemic action of the undigested fraction of soybean protein in rats [published erratum appears in Atherosclerosis 1988 Nov;74(1–2):187] Sugano M, et al.
Atherosclerosis 1988 Aug;72(2–3):115–22
Turnover of 125I-VLDL and 131I-LDL apolipoprotein B in rabbits fed diets containing casein or soy protein. Khosla P, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):157–63
Effects of dietary amines on the small intestine in calves fed soybean protein. Grant AL, et al. **J Nutr** 1989 Jul; 119(7):1034–41
Comparison of the hypocholesterolemic effects of dietary soybean protein with those of formaldehyde-treated casein in rabbits. West CE, et al. **J Nutr** 1989 Jun;119(6):843–56
Effects of dietary casein and soybean protein on triglyceride turnover in rat liver. Iritani N, et al.
J Nutr Sci Vitaminol (Tokyo) 1988 Jun;34(3):309–15
Effects of dietary casein and soy protein on metabolism of radiolabelled low density apolipoprotein B in rabbits. Samman S, et al. **Lipids** 1989 Mar;24(3):169–72
54Mn absorption and excretion in rats fed soy protein and casein diets. Lee DY, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):211–6
[The effects of food ingredients on non-heme iron absorption in rats and the inhibitory mechanism of soy protein isolate] Migita S. **Nippon Ika Daigaku Zasshi** 1988 Dec; 55(6):555–63 (Eng. Abstr.) (Jpn)
[Effect of soy protein isolates in the diet of animals on the histochemical characteristics of the digestive tract] Ivanitskiĭ SB, et al. **Vopr Pitan** 1988 Sep-Oct;(5):54–6 (Eng. Abstr.) (Rus)

TOXICITY

Hypertrophy and hyperplasia of the rat pancreas produced by short-term dietary administration of soya-derived protein and soybean trypsin inhibitor. Smith JC, et al.
J Appl Toxicol 1989 Jun;9(3):175–9

VEGETABLES

Vegetable cells in sputum: possible confusion with helminth eggs [letter] Alpern HD, et al. **Acta Cytol** 1989 May-Jun; 33(3):421–2
Plasma carotenoids in normal men after a single ingestion of vegetables or purified beta-carotene. Brown ED, et al.
Am J Clin Nutr 1989 Jun;49(6):1258–65
Bioavailability of vitamin B-6 from plant foods [letter] Gregory JF 3d. **Am J Clin Nutr** 1989 Apr;49(4):717
Assessing dermatitis in epidemiologic studies: occupational skin disease among California grape and tomato harvesters. McCurdy SA, et al. **Am J Ind Med** 1989;16(2):147–57
Nutritional evaluation of roasted, flaked and popped A. caudatus. Bressani R, et al. **Arch Latinoam Nutr** 1987 Sep; 37(3):525–31
Development and evaluation of a low-cost amaranth (Amaranthus cruentus) containing food for preschool children. del Valle FR, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):480–93
Nutritional impact of food processing: fruits and vegetables. Hobson GE. **Bibl Nutr Dieta** 1989;(43):89–95 (15 ref.)
Asparagus and malodorous urine [letter] Mitchell SC.
Br J Clin Pharmacol 1989 May;27(5):641–2
Odorous urine in man after asparagus [letter] Richer C, et al. **Br J Clin Pharmacol** 1989 May;27(5):640–1
Organochlorine insecticide residues in soils used for vegetable and tropical fruit production in the Cudgen-Duranbah area of New South Wales. Wan H, et al.
Bull Environ Contam Toxicol 1989 Feb;42(2):177–80
Effect of dietary brussels sprouts with increased selenium content on mammary carcinogenesis in the rat. Stoewsand GS, et al. **Cancer Lett** 1989 Apr;45(1):43–8
Allergy to sunflower honey associated with allergy to celery. Birnbaum J, et al. **Clin Exp Allergy** 1989 Mar;19(2):229–30
Prevention of cancer: vegetables and plants. Hocman G.
Comp Biochem Physiol [B] 1989;93(2):201–12 (69 ref.)
Modified atmosphere packaging of fruits and vegetables. Kader AA, et al. **CRC Crit Rev Food Sci Nutr** 1989; 28(1):1–30 (188 ref.)
The effect of a diet rich in brussels sprouts on warfarin pharmacokinetics. Ovesen L, et al.
Eur J Clin Pharmacol 1988;34(5):521–3
Quality control in fruit and vegetable processing. Board PW.
FAO Food Nutr Pap 1988;39:1–63
A study on the carcinogenicity of human diets in rats: the influence of heating and the addition of vegetables and fruit. Alink GM, et al. **Food Chem Toxicol** 1989 Jul;27(7):427–36
Preliminary observations on serum biochemical parameters of albino rabbits fed on seeds of Trichosanthes dioica (Roxb). Sharma G, et al. **Indian J Med Res** 1988 Apr; 87:398–400
Serum concentration of beta-carotene and intake frequency of green-yellow vegetables among healthy inhabitants of Japan. Shibata A, et al. **Int J Cancer** 1989 Jul 15;44(1):48–52
Vegetable consumption and lung cancer risk: a population-based case-control study in Hawaii. Le Marchand L, et al. **J Natl Cancer Inst** 1989 Aug 2; 81(15):1158–64
Clinical studies of a vegetarian food diet mixture. Carter JP, et al. **J Natl Med Assoc** 1989 May;81(5):557–63
Mineral balances of men fed a diet containing fiber in fruits and vegetables and oxalic acid in spinach for six weeks. Kelsay JL, et al. **J Nutr** 1988 Oct;118(10):1197–204
Dietary fiber, vegetables and cancer. Potter JD. **J Nutr** 1988 Dec;118(12):1591–2
The bioavailability of calcium in spinach and calcium-oxalate to calcium-deficient rats. Kikunaga S, et al.
J Nutr Sci Vitaminol (Tokyo) 1988 Apr;34(2):195–207
Modification of aflatoxin B1 biotransformation in vitro and DNA binding in vivo by dietary broccoli in rats. Ramsdell HS, et al. **J Toxicol Environ Health** 1988;25(3):269–84
Listeria in hospital lettuce [letter] Bendig JW, et al.
Lancet 1989 Mar 18;1(8638):616–7
Effect of blanching and drying methods on the nutritional and sensory quality of leafy vegetables. Onayemi O, et al.
Plant Foods Hum Nutr 1987;37(4):291–8
Effects of nitrogen fertilizer and weed control on nutritive quality of carrots (Daucus carota L.). Sandhu KS, et al.
Plant Foods Hum Nutr 1988;38(1):67–73
Effects of lime on nickel uptake and toxicity in celery grown on muck soil contaminated by a nickel refinery. Bisessar S. **Sci Total Environ** 1989 Aug;84:82–90
Pesticides and kids [news] Roberts L. **Science** 1989 Mar 10; 243(4896):1280–1
[Multiple stepwise regression analysis of etiological factors of esophageal cancer in Cixian county] Hou J.
Chung Hua Chung Liu Tsa Chih 1989 Jan;11(1):25–7 (Eng. Abstr.) (Chi)
[Thermal epiglottitis in a 3-month-old infant following feeding of hot vegetables] Laufkötter EA.
Monatsschr Kinderheilkd 1989 Mar;137(3):168–9 (Eng. Abstr.) (Ger)
[Vegetables and prevention of cancer. Carrots are still good for you] Jacobsen BK. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2744–6 (Eng. Abstr.) (Nor)
[Specifically-dynamic action of raw vegetable products] Dunaevskiĭ GA, et al. **Fiziol Cheloveka** 1989 Jan-Feb; 15(1):162–6 (Rus)
[Evaluation of the effect of a single dose of ammonia on lettuce photosynthesis in a hermetically sealed phytotron] Berkovich IuA, et al. **Kosm Biol Aviakosm Med** 1989 Mar-Apr;23(2):67–70 (Eng. Abstr.) (Rus)
[Comparative ecologic study of microbial biocenosis of the lettuce rhizosphere under various conditions of cultivation] Drugova NA, et al. **Kosm Biol Aviakosm Med** 1989 Mar-Apr;23(2):75–9 (Eng. Abstr.) (Rus)
[Effect of plant products of nutrition (radish and carrot tops) on various indicators of metabolism in humans] Sivuk AK, et al. **Kosm Biol Aviakosm Med** 1989 Mar-Apr;23(2):56–9 (Eng. Abstr.) (Rus)
[Use of a carrot powder mixture in acute intestinal diseases in infants in the 1st year of life] Grishchenko EM, et al.
Pediatriia 1988;(5):98–9 (Rus)
[Body vitamin allowance of vegetable growers working on sheltered soil] Veden'kina LK. **Vopr Pitan** 1988 Nov-Dec; (6):32–6 (Eng. Abstr.) (Rus)
[Morbidity with temporary loss of work capacity in animal breeders and beet growers] Karakashian AN, et al.
Vrach Delo 1988 Oct;(10):106–8 (Eng. Abstr.) (Rus)
[Obtention and evaluation of a precooked flour of auyama (Cucurbita maxima) and rice, enriched with oleaginous proteins and/or skim milk] Garrido de Cayuela R, et al.

Arch Latinoam Nutr 1988 Mar;38(1):143–51 (Eng. Abstr.) (Spa)

[Use of chickpea (Cicer arietinum L.) in non-dairy formulas. I. Chemical composition and nutritive quality of chickpeas and a comparison with commercial infant formulas] Sotelo A, et al. Arch Latinoam Nutr 1987 Sep;37(3):551–9 (Eng. Abstr.) (Spa)

[Epidemic human fascioliasis, Cuba 1983. III. Trematode indices] Brito E, et al. GEN 1987 Apr–Jun;41(2):58–61 (Eng. Abstr.) (Spa)

[Characterization of Xanthomonas campestris pv. cucurbitae, causal agent of the bacterial spot of squash] Alippi AM. Rev Argent Microbiol 1989 Jan–Mar;21(1):15–9 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

A shigellosis outbreak traced to commercially distributed shredded lettuce. Davis H, et al. Am J Epidemiol 1988 Dec; 128(6):1312–21

Hypercarotenaemia in a tomato soup faddist. Gandhi M, et al. BMJ 1988 Dec 24–31;297(6664):1635

Contact dermatitis due to Cryptotaenia japonica Makino. Kanzaki T. Contact Dermatitis 1989 Jan;20(1):60–1

Contact sensitivity to lettuce in a chef. Mitchell D, et al. Contact Dermatitis 1989 May;20(5):398–9

ANALYSIS

Investigation of organic aerosols generated during sugar beet slicing. Forster HW, et al. Am Ind Hyg Assoc J 1989 Jan; 50(1):44–50

Extraction and isolation of triazine herbicides from water and vegetables by a double trap tandem system. Battista M, et al. Anal Chem 1989 May 1;61(9):935–9

Determination of fentin residues in potatoes and celery. van den Broek HH, et al. Analyst 1988 Aug;113(8):1237–9

Synthesis of an elastase inhibitor by monosubstitution of arginine-5 with valine at the reactive site in a trypsin inhibitor from squash seeds (CMTI III). Rolka K, et al. Biol Chem Hoppe Seyler 1989 May;370(5):499–502

Residues of organochlorine insecticides in Delhi vegetables. Lal R, et al. Bull Environ Contam Toxicol 1989 Jan; 42(1):45–9

Residues of dacthal and metabolites in field-treated Chinese cabbage. Sweet RD, et al. Bull Environ Contam Toxicol 1988 Nov;41(5):642–4

Roussin red methyl ester, a tumor promoter isolated from pickled vegetables. Liu JG, et al. Carcinogenesis 1989 Mar; 10(3):617–20

Lead and cadmium levels in some leafy vegetables sold in Nairobi vegetable markets. Tumbo-Oeri AG. East Afr Med J 1988 Jun;65(6):387–92

A procedure for the determination of lead in green vegetables at concentrations down to 1 microgram/kg. Baxter MJ, et al. Food Addit Contam 1989 Jul–Sep;6(3):341–9

Formation of mutagenic N-nitroso compounds in vegetable extracts upon nitrite treatment: a comparison with the glucosinolate content. Tiedink HG, et al. Food Chem Toxicol 1988 Nov–Dec;26(11–12):947–54

Lead, cadmium, mercury and insecticide residue control of fresh vegetables. Köck M, et al. Geogr Med 1989;Suppl 2:91–100

An assessment of soil-to-plant concentration ratios for some natural analogues of the transuranic elements. Linsalata P, et al. Health Phys 1989 Jan;56(1):33–46

Southeast Asian renal exchange list: correction in table heading [letter] Ziegler VS. J Am Diet Assoc 1989 May; 89(5):622

Determination of SCN--in vegetables by gas chromatography in relation to endemic goiter. Olea Serrano MR, et al. J Anal Toxicol 1988 Nov–Dec; 12(6):307–9

Effect of commercial processing on pesticide residues in selected fruits and vegetables. Elkins ER. J Assoc Off Anal Chem 1989 May–Jun;72(3):533–5

Microscopic detection and identification of various substitute vegetable tissues in ground horseradish. Galacci RR. J Assoc Off Anal Chem 1989 Jul–Aug;72(4):619–21

Single-step solid-matrix clean-up of vegetable extracts for organophosphorus pesticide residue determination. Di Muccio A, et al. J Chromatogr 1988 Dec 2;456(1):149–53

Multiresidue method for fungicide residues in fruit and vegetables. Newsome WH, et al. J Chromatogr 1989 Jun 23;472(2):416–21

Microorganisms associated with mouldiness of dried yam chips and their prevention. Adeyanju SA, et al. Nahrung 1988;32(8):777–81

Nitrate levels in edible wild herbs and vegetables common in Jordan. Takruri HR, et al. Nutr Health 1988;6(2):89–98

Reversed phase HPLC analysis of alpha- and beta-carotene from selected raw and cooked vegetables. Dietz JM, et al. Plant Foods Hum Nutr 1988;38(4):333–41

Yield and content in nitrates, minerals and ascorbic acid of leeks and turnips grown under mineral or organic nitrogen fertilizations. Termine E, et al. Plant Foods Hum Nutr 1987; 37(4):321–32

The assessment of air and soil as contributors of some trace metals to vegetable plants. II. Translocation of atmospheric and laboratory-generated cadmium aerosols to and within vegetable plants. Harrison RM, et al. Sci Total Environ 1989 Jul 1;83(1–2):35–45

The assessment of air and soil as contributors of some trace metals to vegetable plants. I. Use of a filtered air growth cabinet. Harrison RM, et al. Sci Total Environ 1989 Jul 1;83(1–2):13–34

The assessment of air and soil as contributors of some trace metals to vegetable plants. III. Experiments with field-grown plants. Harrison RM, et al. Sci Total Environ 1989 Jul 1;83(1–2):47–62

The effect of processing conditions on glucosinolates in cruciferous vegetables. de Vos RH, et al. Z Lebensm Unters Forsch 1988 Dec;187(6):525–9 (28 ref.)

Headspace—gas chromatographic determination of inorganic bromide residues in vegetables. Van Rillaer W, et al. Z Lebensm Unters Forsch 1989 Jul;189(1):21–5

[The residue behavior of pirimiphos-methyl of tomatoes, leaf- and soil surfaces in greenhouses] Goedicke HJ. Nahrung 1988;32(5):475–80 (Eng. Abstr.) (Ger)

[A method of atomic absorption spectrophotometry in determining the levels of cadmium and lead in milk-cereal products, cereals and canned vegetables and meat for children up to 3 years of age] Jedrzejczak R. Rocz Panstw Zakl Hig 1988;39(2):118–24 (Eng. Abstr.) (Pol)

[Determining the levels of insecticides from the group of synthetic pyrethroids in plant specimens] Ludwicki JK, et al. Rocz Panstw Zakl Hig 1988;39(4):302–8 (Eng. Abstr.) (Pol)

[Wild and cultivated carrot greens as a potential nutritional and medicinal resource] Kilibarda V, et al. Vojnosanit Pregl 1988 May–Jun;45(3):188–91 (Eng. Abstr.) (Scr)

ENZYMOLOGY

Modification of an essential arginine residue associated with the plasma membrane ATPase of red beet (Beta vulgaris L.) storage tissue. Gildensoph LH, et al. Arch Biochem Biophys 1989 May 15;271(1):254–9

GENETICS

Preliminary studies on combiners and combinations for quality traits in tomato (Lycopersicon esculentum Mill.). Patil AA, et al. Plant Foods Hum Nutr 1988;38(1):43–9

[Structure and expression of genes coding for sporamin, the major protein of the sweet potato tuberous root] Hattori T, et al. Tanpakushitsu Kakusan Koso 1987 Jul;(30 Suppl):261–76 (49 ref.) (Jpn)

METABOLISM

Bioavailability of oxalic acid from spinach, sugar beet fibre and a solution of sodium oxalate consumed by female volunteers. Hanson CF, et al. Food Chem Toxicol 1989 Mar; 27(3):181–4

MICROBIOLOGY

Partial cleavage of sweet potato feathery mottle virus coat protein subunit by an enzyme in extracts of infected symptomless leaves. Salomon R. J Gen Virol 1989 Aug;70 (Pt 8):1943–9

Effect of dressing on the microbiological quality of lettuce. Rodríguez de Lecea J, et al. Rev Latinoam Microbiol 1987 Oct–Dec;29(4):407–11

RADIATION EFFECTS

[Combined effects of beta radiation and shock wave on the seeds of lettuce Lactuca sativa L.] Brill' OD, et al. Kosm Biol Aviakosm Med 1989 Mar–Apr;23(2):70–4 (Eng. Abstr.) (Rus)

STANDARDS

[2 projects of decrees relating to the determination of maximal pesticide residue contents in and on fruit and vegetables on the one side and cereals destined for human consumption on the other side] Truhaut R. Bull Acad Natl Med (Paris) 1988 Nov;172(8):1141–7 (Fre)

TOXICITY

[Toxicologic evaluation of nitrates entering the body with plant products] Voronina LP, et al. Biol Nauki 1988; (7):22–5 (Eng. Abstr.) (Rus)

VEGETARIANISM

Diet and plasma androgens in postmenopausal vegetarian and omnivorous women and postmenopausal women with breast cancer. Adlercreutz H, et al. Am J Clin Nutr 1989 Mar;49(3):433–42

Bone mineral content in postmenopausal women: comparison of omnivores and vegetarians. Hunt IF, et al. Am J Clin Nutr 1989 Sep;50(3):517–23

Cardiovascular disease risk factors in free-living men: comparison of two prudent diets, one based on lactoovovegetarianism and the other allowing lean meat. Kestin M, et al. Am J Clin Nutr 1989 Aug;50(2):280–7

Biotin nutritional status of vegans, lactoovovegetarians, and nonvegetarians. Lombard KA, et al. Am J Clin Nutr 1989 Sep;50(3):486–90

Carnitine status of lactoovovegetarians and strict vegetarian adults and children. Lombard KA, et al. Am J Clin Nutr 1989 Aug;50(2):301–6

The association of dietary fat with serum cholesterol in vegetarians: the effect of dietary assessment on the correlation coefficient. Kushi LH, et al. Am J Epidemiol 1988 Nov;128(5):1054–64

Relation between vegetarian/nonvegetarian diets and blood pressure in black and white adults. Melby CL, et al. Am J Public Health 1989 Sep;79(9):1283–8

Vegetarian weaning. Nutrition Standing Committee of the British Paediatric Association. Arch Dis Child 1988 Oct; 63(10):1286–92

High arachidonic acid levels in the cord blood of infants of mothers on vegetarian diets. Stammers JP, et al. Br J Nutr 1989 Jan;61(1):89–97

Normal reference values for creatine, creatinine, and carnitine are lower in vegetarians [letter] Delanghe J, et al. Clin Chem 1989 Aug;35(8):1802–3

Effects of a vegetarian, supplemented diet on renal function, proteinuria, and glucose metabolism in patients with 'overt' diabetic nephropathy and renal insufficiency. Barsotti G, et al. Contrib Nephrol 1988;65:87–94

Weight reduction on lactovegetarian and mixed diets. Changes in weight, nutrient intake, skinfold thicknesses and blood pressure. Hakala P, et al. Eur J Clin Nutr 1989 Jun; 43(6):421–30

Selenium content and glutathione peroxidase activity of milk from vegetarian and nonvegetarian women. Debski B, et al. J Nutr 1989 Feb;119(2):215–20

Dietary sources of vitamin B12 for vegans and other special groups [letter] Allen R, et al. J R Coll Gen Pract 1988 Mar;38(308):123

Differences in health, knowledge and attitudes between vegetarians and meat eaters in a random population sample. Shickle D, et al. J R Soc Med 1989 Jan;82(1):18–20

Natural killer cells, vitamins, and other blood components of vegetarian and omnivorous men. Malter M, et al. Nutr Cancer 1989;12(3):271–8

Growth of vegetarian children: The Farm Study. O'Connell JM, et al. Pediatrics 1989 Sep;84(3):475–81

What should humans eat? Ryde D. Practitioner 1988 Apr 8;232(1446):415–8

Factors related to dental health and some salivary factors in Finnish Seventh-Day Adventists. Linkosalo E, et al. Proc Finn Dent Soc 1988;84(5–6):279–89

Salivary composition and dental erosions in lacto-ovo-vegetarians. Linkosalo E, et al. Proc Finn Dent Soc 1988;84(4):253–60

Lactovegetarian diet and dental health. Linkosalo E. Proc Finn Dent Soc 1988;84 Suppl 8–9:1–77

Adaptations of digestive systems in non-ruminant herbivores. Chivers DJ. Proc Nutr Soc 1989 Jan;48(1):59–67 (12 ref.)

Nutrition of marsupial herbivores. Hume ID. Proc Nutr Soc 1989 Jan;48(1):69–79 (38 ref.)

[Severe megaloblastic anemia in 6-month-old girl breast-fed by a vegetarian mother] Cheron G, et al. Arch Fr Pediatr 1989 Mar;46(3):205–7 (Eng. Abstr.) (Fre)

[Effect of an egg-milk-vegetarian diet on nutritional and blood status. II. Findings of a study on circulation, blood status; discussion] Wirths W, et al. Z Ernahrungswiss 1988 Jun;27(2):84–100 (Eng. Abstr.) (Ger)

[Vegetarian diets and rheumatoid arthritis. Is it possible that a vegetarian diet might influence the disease?] Sköldstam L. Nord Med 1989;104(4):112–4, 124 (Eng. Abstr.) (Swe)

ADVERSE EFFECTS

Nutritional status and phytate:zinc and phytate x calcium:zinc dietary molar ratios of lacto-ovo vegetarian Trappist monks: 10 years later. Harland BF, et al. J Am Diet Assoc 1988 Dec;88(12):1562–6

[Acute osteoporosis in a breast-feeding vegetarian woman] Böstman L, et al. Duodecim 1988;104(12):937–40 (Fin)

[Vitamin D deficiency in vegetarian nutrition (letter)] Gain T, et al. Dtsch Med Wochenschr 1989 Jul 28;114(30):1177 (Ger)

VEGETATIVE STATE see COMA

VEHICLES

p-Benzylthiocarbamoyl-aspartyl-daunorubicin-substituted polytrisacryl. A new drug acid-labile arm-carrier conjugate. Daussin F, et al. Eur J Biochem 1988 Oct 1; 176(3):625–8

Liposomes as carriers of drugs. Observations on vesicle fate after injection and its control. Gregoriadis G. Subcell Biochem 1989;14:363–78 (60 ref.)

ADMINISTRATION & DOSAGE

Sugar load of oral liquid medications on chronically ill children. Kenny DJ, et al. Can Dent Assoc J 1989 Jan; 55(1):43–6

ADVERSE EFFECTS

A new formulation of flunisolide for intranasal application reduces side effects. Nielsen NH, et al. Allergy 1989 Apr; 44(3):233–4

Cholesterol vehicle in experimental atherosclerosis. A brief review with special reference to peanut oil. Kritchevsky D. Arch Pathol Lab Med 1988 Oct;112(10):1041–4 (34 ref.)

PHARMACOLOGY

Ectopic induction of cartilage and bone by water-soluble proteins from bovine bone using a collagenous delivery vehicle. Lucas PA, et al. **J Biomed Mater Res** 1989 Apr; 23(A1 Suppl):23–39

Naloxone for septic shock [letter] Soulioti AM. **Lancet** 1988 Nov 12;2(8620):1133–4

The effect of vehicle additives on the transdermal delivery of nitroglycerin. Loftsson T, et al. **Pharm Res** 1987 Oct; 4(5):436–7

VEILED CELLS see DENDRITIC CELLS

VEILLONELLA

ENZYMOLOGY

The carboxyltransferase activity of the sodium-ion-translocating methylmalonyl-CoA decarboxylase of Veillonella alcalescens. Hoffmann A, et al. **Eur J Biochem** 1989 Feb 15;179(3):645–50

METABOLISM

Production of volatile fatty acids as a result of bacterial interactions in the cecum of gnotobiotic rats and chickens fed a lactose-containing diet. Szylit O, et al. **Reprod Nutr Dev** 1988;28(6A):1455–64

PHYSIOLOGY

Coaggregation properties of human oral Veillonella spp.: relationship to colonization site and oral ecology. Hughes CV, et al. **Appl Environ Microbiol** 1988 Aug;54(8):1957–63

Monobacterial and mixed bacterial plaques of Streptococcus mutans and Veillonella alcalescens in an artificial mouth: development, metabolism, and effect on human dental enamel. Noorda WD, et al. **Caries Res** 1988;22(6):342–7

Coaggregation of black-pigmented Bacteroides species with other oral bacteria. Eke PI, et al. **J Med Microbiol** 1989 Jan;28(1):1–4

VEIN OF GALEN see CEREBRAL VEINS

VEINS

Regional venous outflow, blood volume, and sympathetic nerve activity during severe hypoxia. Hoka S, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H162–70

Hemodynamics of varicoceles: venous shunting in grade II and III varicoceles. Sigmund G, et al. **Ann Radiol (Paris)** 1989;32(1):24–8

Synchronized diastolic coronary sinus retroperfusion. Technique, physiologic and experimental basis, clinical experience, future perspectives. Di Mario C, et al. **Cardiologia** 1988 Nov;33(11):1017–22

Differences between capillary and venous blood-alcohol concentrations as a function of time after drinking, with emphasis on sampling variations in left vs right arm. Jones AW, et al. **Clin Chem** 1989 Mar;35(3):400–4

Experimental prosthetic vein valve. Taheri SA, et al. **Int Angiol** 1989 Jan–Mar;8(1):7–9

[Bruising after venepuncture] Hansen HC, et al. **Ugeskr Laeger** 1989 Mar 6;151(10):626–7 (Eng. Abstr.) (Dan)

[3d French-Britannic Colloquium on Phlebology. Nice 29–30 April 1988. Proceedings] **Phlebologie** 1988 Nov–Dec; 41(4):719–836 (Fre)

[French Society of Phlebology. 16 December 1988, Paris. Proceedings] **Phlebologie** 1989 Apr–Jun;42(2):181–209 (Fre)

[Venous access in anesthesia and resuscitation] Hug PF, et al. **Phlebologie** 1989 Jan–Mar;42(1):83–91 (Eng. Abstr.) (Fre)

[The medicolegal implications of local anesthetics in phlebology] Husson R. **Phlebologie** 1989 Jan–Mar; 42(1):119–20 (Fre)

[Anesthesia and medical responsibility. Principles] Labadie L, et al. **Phlebologie** 1989 Jan–Mar;42(1):113–8 (Eng. Abstr.) (Fre)

[Ovarian vein syndrome] Montagnac R, et al. **Rev Fr Gynecol Obstet** 1989 Jan;84(1):11–4 (14 ref.) (Eng. Abstr.) (Fre)

[Our experience in vascular surgery in male impotence of venous nature] Vaccari R, et al. **Minerva Chir** 1989 Apr 15;44(7):1123–6 (Eng. Abstr.) (Ita)

[Spontaneous rupture of the uterine vein in the 33d week of pregnancy] Abel W, et al. **Ginekol Pol** 1988 Sep; 59(9):591–3 (Eng. Abstr.) (Pol)

[Results of comparative studies of the non-enzymatic fibrinolysis of capillary and venous blood] Popov AI, et al. **Lab Delo** 1988;(11):74 (Rus)

[Anticardiolipin antibodies and Sneddon's syndrome (letter)] Tomás Martínez JF, et al. **Med Clin (Barc)** 1988 Jul 2; 91(6):237 (Spa)

ABNORMALITIES

Anomalous venous connection of the superior vena cava to the left atrium. Arsenian MA, et al. **Am J Cardiol** 1988 Nov 1;62(13):989–90

Vortex veins in the macula. Sekimoto M, et al. **Ophthalmologica** 1988;197(1):34–5

Pathology of angiodysplasia in Klippel-Trenaunay syndrome. Lie JT. **Pathol Res Pract** 1988 Nov; 183(6):747–55

[X-ray diagnosis of anomalous drainage of pulmonary and systemic veins] Podashev BI. **Vestn Rentgenol Radiol** 1988 May–Jun;(3):41–9 (Eng. Abstr.) (Rus)

ANALYSIS

Occluding structures in circumflex veins of the penis. Goldstein AM, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):127–31

Partial purification of a bioactive substance(s) from human veins independent of prostacyclin production. Bermejo E, et al. **Thromb Res** 1989 Aug 1;55(3):385–8

The activity of diagnostic enzymes and the concentration of lipids in the blood vessels of cattle. Mahmoud OM, et al. **Vet Res Commun** 1988;12(2–3):233–5

ANATOMY & HISTOLOGY

Spatial distribution of coronary capillaries: A–V segment staggering. Batra S, et al. **Adv Exp Med Biol** 1989;248:241–7

Architecture and structure of canine veins with special reference to confluences. Stone EA, et al. **Anat Rec** 1988 Oct;222(2):154–63

Mammalian frontal diploic vein and the human foramen caecum. Thewissen JG. **Anat Rec** 1989 Feb;223(2):242–4

The venous territories of muscles: anatomical study and clinical implications. Watterson PA, et al. **Br J Plast Surg** 1988 Nov;41(6):569–85

Macro assumptions from micro experiments [letter; comment] McMahon R. **Plast Reconstr Surg** 1989 Jul;84(1):174–5. **Comment on:** Plast Reconstr Surg 1988 Sep;82(3):473–9

Projection arteriography and venography: initial clinical results with MR. Edelman RR, et al. **Radiology** 1989 Aug; 172(2):351–7

[Venous drainage of Littler's neurovascular pedicle flap] Lebreton E, et al. **Ann Chir Main** 1988;7(2):126–9 (Eng. Abstr.) (Fre)

[Angioarchitecture of the choroid. V. Peripheral choroid. The vortex veins] Fryczkowski AW, et al. **Klin Oczna** 1988 Mar;90(3):81–6 (Eng. Abstr.) (Pol)

DRUG EFFECTS

Alfuzosin and the venous reflex response: studies in normal subjects. Sinclair AJ, et al. **Br J Clin Pharmacol** 1989 Jan; 27(1):19–22

Nitrate tolerance in epicardial arteries or in the venous system is not reversed by N-acetylcysteine in vivo, but tolerance-independent interactions exist. Münzel T, et al. **Circulation** 1989 Jan;79(1):188–97

The influence of the atrial natriuretic factor on venous tone in man. Ljutić D, et al. **Int J Clin Pharmacol Res** 1989; 9(4):255–60

Effects of posture on the venodilatory response to nitroglycerin. Gascho JA, et al. **J Appl Physiol** 1989 Jun; 66(6):2585–8

Responsiveness of superficial hand veins to phenylephrine in essential hypertension. Alpha adrenergic blockade during prazosin therapy. Eichler HG, et al. **J Clin Invest** 1989 Jan;83(1):108–12

[Changes in the venular epithelium of the mesentery in rats after application of hydrogen peroxide] Banin VV, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):498–502 (Eng. Abstr.) (Rus)

[Effect of substance P and its N-terminal fragment on the components of the normal microcirculatory system and under stress] Gorizontova MP. **Fiziol Zh SSSR** 1989 May; 75(5):709–14 (Eng. Abstr.) (Rus)

INJURIES

Spontaneous rupture of uterine vein during late pregnancy. Sigurd J, et al. **Acta Obstet Gynecol Scand** 1988;67(5):477–8

Central venous catheter stiffness and its relation to vascular perforation. Bersten AD, et al. **Anaesth Intensive Care** 1988 Aug;16(3):342–51

Traumatic arteriovenous fistula. Haas GE. **J Am Osteopath Assoc** 1988 Sep;88(9):1109–14

Delayed recognition of vascular complications caused by central venous catheters. Kapadia CB, et al. **J Clin Monit** 1988 Oct;4(4):267–71

Venous rupture during transvenous approach to a carotid-cavernous fistula. Case report. King WA, et al. **J Neurosurg** 1989 Jul;71(1):133–7

Noniatrogenic pediatric vascular trauma. Myers SI, et al. **J Vasc Surg** 1989 Sep;10(3):258–65

Vascular complications associated with orthopedic procedures. Freischlag JA, et al. **Surg Gynecol Obstet** 1989 Aug;169(2):147–52 (21 ref.)

Ultrasound-induced damage of veins in pig ears, as revealed by scanning electron microscopy. Kerr CL, et al. **Ultrasound Med Biol** 1989;15(1):45–52

[Vascular trauma—sequelae] Jantet G. **Phlebologie** 1989 Apr–Jun;42(2):307–11 (Fre)

[Venous trauma of the limbs] Rettori R. **Phlebologie** 1989 Apr–Jun;42(2):283–92 (Eng. Abstr.) (Fre)

[Arterial and venous vascular reconstruction following trauma] Herrmann M. **Rev Med Suisse Romande** 1988 Sep; 108(9):785–9 (Fre)

[Phlebographic picture of extravasation of a contrast medium as a complication of hysterography] Waszyński E, et al. **Ginekol Pol** 1988 Feb;59(2):114–6 (Eng. Abstr.) (Pol)

[Iatrogenic injuries to the magistral vessels during surgery of the extremities] Artemenko OV, et al. **Klin Khir** 1988; (7):61–2 (Rus)

[Prevention of complications of endoscopic correction of the crural venous blood flow] Nagovitsyn ES, et al. **Vestn Khir** 1989 Mar;142(3):113–5 (Rus)

[Damage to the major vessels during surgical interventions in patients with cancer] Vasiutkov VIa. **Vopr Onkol** 1988; 34(12):1485–9 (Eng. Abstr.) (Rus)

INNERVATION

Venomotor responses during central and local hypoxia. Rowell LB, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H760–4

Adrenergic innervation of the large arteries and veins of the semiarboreal rat snake Elaphe obsoleta. Donald JA, et al. **J Morphol** 1988 Oct;198(1):25–31

METABOLISM

Metabolic control of large-bore arterial resistance vessels, arterioles, and veins in cat skeletal muscle during exercise. Björnberg J, et al. **Acta Physiol Scand** 1989 Feb; 135(2):83–94

Biological actions and properties of endothelium-derived nitric oxide formed and released from artery and vein. Ignarro LJ. **Circ Res** 1989 Jul;65(1):1–21 (251 ref.)

Localization of tissue factor in the normal vessel wall and in the atherosclerotic plaque. Wilcox JN, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2839–43

PATHOLOGY

Intravenous leiomyomatosis of the uterus. A clinicopathological analysis of 16 cases with unusual histologic features. Clement PB, et al. **Am J Surg Pathol** 1988 Dec;12(12):932–45

Malignancy presenting as peripheral venous gangrene. Adamson AS, et al. **J R Soc Med** 1988 Oct;81(10):609–10

Perivascular color artifact: pathologic significance and appearance on color Doppler US images. Middleton WD, et al. **Radiology** 1989 Jun;171(3):647–52

[Intravenous leiomyomatosis. Presentation of 5 cases and a review of the literature] Bianchini E, et al. **Pathologica** 1989 Mar–Apr;81(1072):151–62 (51 ref.) (Eng. Abstr.) (Ita)

PHYSIOLOGY

Capillary lengths and anastomoses in rat hindlimb muscles, studied by Aquablak perfusion during rest versus exercise. Potter RF, et al. **Adv Exp Med Biol** 1989;248:313–22

Aging reduces venous distensibility and the venodilatory response to nitroglycerin in normal subjects. Gascho JA, et al. **Am J Cardiol** 1989 May 15;63(17):1267–70

Effect of the venodilated state on sympathetic-induced venoconstriction in normal subjects. Sumner A, et al. **Am J Cardiol** 1989 Apr 15;63(13):973–6

Pressure-flow characteristics and nutritional capacity of coronary veins in dogs. Cohen MV, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H834–46

Leukocyte margination and deformation in mesenteric venules of rat. Firrell JC, et al. **Am J Physiol** 1989 Jun; 256(6 Pt 2):H1667–74

Acute changes in forearm venous volume and tone using radionuclide plethysmography. Manyari DE, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H947–52

Venoconstriction and central mobilization of blood [letter] Scher AM. **Am J Physiol** 1989 Jul;257(1 Pt 2):H348

Trial of the RBC aggregometer head for estimating blood flow in veins in vivo. Tomita M, et al. **Biorheology** 1988; 25(1–2):57–64

Extrarenal production and activation of human plasma prorenin: the evidence after venous occlusion. Hare GM, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):59–67

Heterogeneity in responses of isolated monkey arteries and veins to atrial natriuretic peptide. Kawai Y, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):326–30

Dynamic compliance of single perfused frog mesenteric capillaries and rat venules: a filtration coefficient correction. Swayne GT, et al. **Int J Microcirc Clin Exp** 1989 Feb;8(1):43–52

White blood cells as mediators of hyperviscosity-induced tissue damage in neutrophilic vascular reactions: therapy with pentoxifylline. Ely H. **J Am Acad Dermatol** 1989 Apr; 20(4):677–80

Heat transfer normal to paired arterioles and venules embedded in perfused tissue during hyperthermia. Charny CK, et al. **J Biomech Eng** 1988 Nov;110(4):277–82

A model of oxygen exchange between an arteriole or venule and the surrounding tissue. Weerappuli DP, et al. **J Biomech Eng** 1989 Feb;111(1):24–31

Immunohistologic and functional characterization of a vascular addressin involved in lymphocyte homing into peripheral lymph nodes. Streeter PR, et al. **J Cell Biol** 1988 Nov;107(5):1853–62

Evolutionary conservation of tissue-specific lymphocyte-endothelial cell recognition mechanisms involved in lymphocyte homing. Wu NW, et al. **J Cell Biol** 1988 Nov;107(5):1845–51

Model for the physics and physiology of fluid administration. Philip JH. **J Clin Monit** 1989 Apr;5(2):123–34 (48 ref.)

In vivo analysis of partitioning of cardiac output between systemic and central venous sinus circuits in rainbow trout:

a new approach using chronic cannulation of the branchial vein. Ishimatsu A, et al. **J Exp Biol** 1988 Jul;137:75–88
Role of lipoxygenase, cyclooxygenase and cytochrome P-450 metabolites in contractions of isolated guinea pig pulmonary venules induced by hypoxia and anoxia. Tracey WR, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1097–104
Fibronectin enhances early shear stress resistance of seeded adult human venous endothelial cells. Ivarsson BL, et al. **J Surg Res** 1989 Sep;47(3):203–7
This month in investigative urology: venous impotence. Lewis RW. **J Urol** 1988 Dec;140(6):1560
Influence of pressure, flow rate, and pulsatility on release of 6-keto-prostaglandin F1 alpha and thromboxane B2 in ex vivo perfused canine veins [letter] Dalessandri KM. **J Vasc Surg** 1989 May;9(5):747
The heated dorsal hand vein: an alternative arterial sampling site. Brooks DC, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):102–5
Pathophysiology and evaluation of severity of congestive heart failure on the basis of venous characteristics. Sato H, et al. **Jpn Circ J** 1989 Feb;53(2):141–5
Strength of microvascular anastomoses: comparison between the unilink anastomotic system and sutures. Gilbert RW, et al. **Microsurgery** 1989;10(1):40–6
Effect of venous stasis and physical exercise on plasma extracellular-superoxide dismutase. Nilsson S, et al. **Scand J Clin Lab Invest** 1988 Sep;48(5):441–4
[Study of the veno-arteriolar reflex in young and elderly subjects by recording of TcPO2] Bilesimo M, et al. **J Mal Vasc** 1989;14(1):19–25 (Eng. Abstr.) (Fre)
[Rheologic particulars of venous flow. Physiopathologic consequences] Larcan A, et al. **J Mal Vasc** 1989; 14(2):107–10 (Eng. Abstr.) (Fre)
[The motor structures responsible for venous flow] Lemaire R. **J Mal Vasc** 1989;14(2):95–9 (Eng. Abstr.) (Fre)
[Venous hemodynamics. Basic equations] Ribreau C. **J Mal Vasc** 1989;14(2):100–6 (Eng. Abstr.) (Fre)
[Functional and morphological characteristics in venous vessels] Ohhashi T. **Kokyu To Junkan** 1989 Feb; 37(2):127–35 (37 ref.) (Jpn)
[A method for assessing the sensitivity of alpha adrenergic receptors in the venous bed] Almazov VA, et al. **Fiziol Cheloveka** 1988 Jan–Feb;14(1):167–8 (Rus)

PHYSIOPATHOLOGY

Changes in peripheral venous tone before the onset of hypertension in women with gestational hypertension. Pickles CJ, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):678–80
Effect of physical training on thrombotic tendency in rats: decrease in thrombotic tendency measured by the He-Ne laser-induced thrombus formation method. Yamamoto J, et al. **Haemostasis** 1989;19(5):260–5
The diagnosis of venogenic impotence: dynamic or pharmacologic cavernosometry? Stief CG, et al. **J Urol** 1988 Dec;140(6):1561–3
Quantitative estimation of compliance of human systemic veins by occlusion plethysmography with radionuclide—methodology and the effect of nitroglycerin. Takatsu H, et al. **Jpn Circ J** 1989 Mar;53(3):245–54
Operative venodilation: a previously unsuspected factor in the cause of postoperative deep vein thrombosis. Comerota AJ, et al. **Surgery** 1989 Aug;106(2):301–8: discussion 308–9
[The physiology and physiopathology of the venous system in the obese] Klüken N. **Phlebologie** 1988 Jul–Oct; 41(3):487–91 (Eng. Abstr.) (Fre)
[The flow of venous blood in the obese] Lemaire R. **Phlebologie** 1988 Jul–Oct;41(3):493–9 (Eng. Abstr.) (Fre)
[The left ovarian vein as a functional renal vein] Sigmund G, et al. **ROFO** 1989 Aug;151(2):243–4 (Ger)
[The role of changes in venous capacity in the lower extremities in the pathogenesis of post-thrombotic disease] Vasilenko IuV, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):52–6 (Eng. Abstr.) (Rus)
[Efficacy of noninvasive study methods in assessing the state of the magistral veins in postthrombotic disease] Ignat'ev IM, et al. **Klin Khir** 1988;(7):6–8 (Eng. Abstr.) (Rus)
[Dynamics of venous blood return in normal conditions and in patients with obstructive lung disease] Perlei VE, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):28–31 (Eng. Abstr.) (Rus)
[Comparison of single and double doses of hydrochlorothiazide in the treatment of arterial hypertension with special emphasis on changes in vascular reactivity] Bagatin J, et al. **Lijec Vjesn** 1989 Apr–May; 111(4–5):153–8 (Eng. Abstr.) (Scr)

RADIATION EFFECTS

Contractile properties of isolated vascular smooth muscle after photoradiation. Freas W, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H655–64

RADIONUCLIDE IMAGING

The best radionuclide venography [letter] Kagan A, et al. **J Nucl Med** 1989 Apr;30(4):564–5
[A case of Budd-Chiari syndrome with leg pain—venous and portal scintigraphy] Yamaguchi K, et al. **Rinsho Hoshasen** 1989 Jan;34(1):157–8 (Jpn)

SURGERY

Venous outflow simplified by the cephalic vein loop. Hallock GG. **Ann Plast Surg** 1988 Nov;21(5):427–9
Caverno-venous leakage: retrograde opacification and resection of the deep dorsal vein completed by ligation of the crural edges of the corpora. Wespes E, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):149–54
Microvascular anastomosis and transplantation. Experimental studies and clinical application. Tsai CY, et al. **Chin Med J** 1966 Sep;85(9):610–7
Arterialized free flap. Report of four cases. Gu YD, et al. **Chin Med J [Engl]** 1989 Feb;102(2):140–4
Diversion of the gastroduodenal vein: an in situ model of systemic insulin drainage. Miller AR, et al. **Diabetes Res Clin Pract** 1989 Aug 1;7(2):109–14
Painless cauterization of spider veins with the use of iontophoretic local anesthesia. Bezzant JL, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):869–75
Effect of preexcisional heparin anticoagulation on excised canine vein and artery prostanoid production. Kresowik TF, et al. **J Surg Res** 1989 Jun;46(6):605–10
Repair of incompetent venous valves: a new technique. Jessup G, et al. **J Vasc Surg** 1988 Nov;8(5):569–75
Technique in direct venous valvuloplasty. Sottiurai VS. **J Vasc Surg** 1988 Nov;8(5):646–8
Experience with microlymphaticovenous anastomoses for congenital and acquired lymphoedema. Ipsen T, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):233–6
A pitfall in the interhemispheric translamina terminalis approach for the removal of a craniopharyngioma. Significance of preserving draining veins. Part I. Clinical study. Kanno T, et al. **Surg Neurol** 1989 Aug;32(2):111–5
A pitfall in the interhemispheric translamina terminalis approach for the removal of a craniopharyngioma. Significance of preserving draining veins. Part II. Experimental study. Kasama A, et al. **Surg Neurol** 1989 Aug;32(2):116–20
New observations on the healing process in prosthetic substitution of large veins by microporous grafts—animal experiments. Kogel H, et al. **Thorac Cardiovasc Surg** 1989 Apr;37(2):119–24
A new bioabsorbable material for rat venous anastomosis. Kitakado Y, et al. **Transplantation** 1988 Oct;46(4):620–2
[French Society of Phlebology. Paris, 22 October 1988. Anesthesia and phlebology. Proceedings] **Phlebologie** 1989 Jan–Mar;42(1):1–130 (Fre)
[The risk of general anesthesia in surgery of the veins of the lower limbs] Baron JF. **Phlebologie** 1989 Jan–Mar; 42(1):47–54; discussion 54–7 (9 ref.) (Eng. Abstr.) (Fre)
[Precautions to be taken from the anesthesiologic point of view during venous surgery in the obese] Duruble M. **Phlebologie** 1988 Jul–Oct;41(3):596–602 (Eng. Abstr.) (Fre)
[Phlebectomy using mini-incisions. A surgical technic or an alternative to sclerosis? Our experience with the first 100 surgical cases] Mancini S. **Phlebologie** 1989 Jan–Mar; 42(1):157–61 (Fre)
[Choice of an anesthetic technic for venous surgery of the lower limbs] Tinturier F, et al. **Phlebologie** 1989 Jan–Mar; 42(1):59–68 (Eng. Abstr.) (Fre)
[Reconstructive venous surgery. Principles and technical prerequisites] Vollmar JF. **Langenbecks Arch Chir** 1988; Suppl 2:165–8 (12 ref.) (Eng. Abstr.) (Ger)
[Importance of venous anastomosis in autotransplantation of the testis] Schioschwili TJ, et al. **Z Urol Nephrol** 1988 Dec; 81(12):711–3 (Eng. Abstr.) (Ger)
[Surgical aspects of venous puncture] Dahl HD. **Zentralbl Chir** 1988;113(16):1061–71 (Ger)
[Diagnosis and therapy of impotence] Rigatti P, et al. **Minerva Chir** 1989 Feb 28;44(4):767–71 (10 ref.) (Ita)
[A method of closing phlebectomy wounds with indurative changes in the skin] Medvedenko AF, et al. **Klin Khir** 1988; (7):67–8 (Rus)
[Efficacy of lymphovenous anastomoses in the treatment of lymphedema of the lower extremities] Potashov LV, et al. **Klin Khir** 1988;(7):14–6 (Eng. Abstr.) (Rus)
[Lymphovenous anastomoses in the prevention of post-mastectomy edema of the arm] Pronin VI, et al. **Sov Med** 1989;(4):32–5 (Eng. Abstr.) (Rus)

TRANSPLANTATION

Vein valve transplantation segmental transposition: a case report. Márk B, et al. **Acta Chir Hung** 1989;30(2):89–96
Vein graft drainage of the endolymphatic sac in patients with Ménière's disease. A preliminary report. Futaki T, et al. **Am J Otol** 1988 Nov;9(6):476–80
The use of arm veins for infrainguinal bypass in end-stage peripheral vascular disease. Balshi JD, et al. **Arch Surg** 1989 Sep;124(9):1078–81
The orthograde venous autograft and allograft. Presidential address. Donovan TJ. **Arch Surg** 1988 Oct;123(10):1191–5 (50 ref.)
Femoropopliteal reconstruction for claudication. The risk to life and limb. Kent KC, et al. **Arch Surg** 1988 Oct; 123(10):1196–8
Runoff resistance and early graft failure in infrainguinal bypass surgery. Peterkin GA, et al. **Arch Surg** 1988 Oct; 123(10):1199–201
Vein-to-artery grafts: the long-term development of neo-intimal hyperplasia and its relationship to vasa vasorum and sympathetic innervation. McGeachie JK, et al. **Aust N Z J Surg** 1989 Jan;59(1):59–65
Comparative analysis of structural change in a free autovenous graft and in a transplant with spiral reinforcement after correction of experimental arterial defects. Pshenisnov KV, et al. **Cor Vasa** 1988;30(3):218–24
Combination reversed and non-reversed upper arm vein for femoro-distal grafting. Grigg MJ, et al. **Eur J Vasc Surg** 1988 Feb;2(1):49–52
Long-term results and current indications in femoropopliteal vascular reconstructions. Balas P, et al. **Int Surg** 1988 Oct–Dec;73(4):221–6 (15 ref.)
The detection of early femoro-distal vein graft stenosis by treadmill exercise testing. Benveniste GL, et al. **J Cardiovasc Surg (Torino)** 1988 Nov–Dec;29(6):723–6
Long term results of vein valve transplants placed in the popliteal vein for intractable post-phlebitic venous ulcers and pre-ulcer skin changes. Nash T. **J Cardiovasc Surg (Torino)** 1988 Nov–Dec;29(6):712–6
The fate of the freeze-preserved xenograft: an experimental study on rabbits, cats, and dogs. Siegal A, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):76–80
Interpositional vein grafts to restore the superficial palmar arch in severe devascularizing injuries of the hand. Greenberg BM, et al. **J Hand Surg [Am]** 1988 Sep; 13(5):753–7
Short-term and midterm results of an all-autogenous tissue policy for infrainguinal reconstruction. Kent KC, et al. **J Vasc Surg** 1989 Jan;9(1):107–14
Post-mortem allogeneic vein for graft as vascular access in chronic haemodialysis [letter] Brynitz S, et al. **Lancet** 1988 Oct 15;2(8616):900–1
Experimental microvascular autogenous vein grafts for arterial defects: II. A histopathologic study of the grafts. Fletcher CD, et al. **Microsurgery** 1988;9(2):82–6
The reversed venous arterialized nerve graft in digital nerve reconstruction across scarred beds. Rose EH, et al. **Plast Reconstr Surg** 1989 Apr;83(4):593–604
Enzyme histochemical studies on veno-venous grafts in rats. Remes V. **Res Exp Med (Berl)** 1989;189(2):121–7
Microvascular anastomosis of interpositional vein grafts with the UNILINK system. A comparative experimental study. Ragnarsson R, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):23–8
Side-branch uses in venous interposition grafting. Gonzalez GD, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):432–4
A simplified technique for thrombectomy of vein grafts. Konigsberg SF, et al. **Surg Gynecol Obstet** 1989 Apr; 168(4):355–6
Mechanical factors predisposing to intimal hyperplasia and medial thickening in autogenous vein grafts. Dobrin PB, et al. **Surgery** 1989 Mar;105(3):393–400
Donor criteria and procurement procedures for hearts and veins used as allograft transplants. Heacox AE, et al. **Transplant Proc** 1988 Oct;20(5):751–2
Induction of Ia antigen expression on endothelium of rat vein allografts: studies by immunogold labeling. Marin ML, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):113–4
Immunomodulation of vascular endothelium: induction of Ia antigen expression in rejecting venous allografts. Marin ML, et al. **Transplant Proc** 1989 Aug;21(4):3709–13
Procurement of both liver and whole pancreas/duodenum allografts from a single donor without the use of interposition vascular grafts on transplantation. Thistlethwaite JR Jr, et al. **Transplant Proc** 1988 Oct; 20(5):833–4
The rate of re-endothelialization correlates inversely with the degree of the following intimal thickening in vein grafts. Electron microscopic and immunohistochemical studies. Shiokawa Y, et al. **Virchows Arch [A]** 1989; 415(3):225–35
[Advances and current status of vascular grafts] Qian YQ. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):633–5 (24 ref.) (Chi)
[Preliminary study on nerve regeneration through an autologous venous tube] Pirenne J, et al. **C R Soc Biol (Paris)** 1988;182(1):126–35 (Eng. Abstr.) (Fre)
[Complex reconstruction versus simple anastomosis in the crural vascular area] Krisch I, et al. **Vasa Suppl** 1988; 26:71–4 (Ger)
[Results of femoro-distal by-pass in the treatment of chronic severe ischemia of the lower limbs] Cavallaro A. **Minerva Chir** 1989 Feb 15;44(3):503–9 (81 ref.) (Ita)
[Transplantation of allogeneic veins and xenogeneic arteries in the reconstructive surgery of occlusive diseases of arteries of the lower extremities] Belorusov OS, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):3–6 (Eng. Abstr.) (Rus)
[Reconstructive surgery of the deep femoral artery in the treatment of arteriosclerotic occlusions of the femoropopliteal segment] Karvanen ES, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):32–5 (Eng. Abstr.) (Rus)
[An ampule for conservation of vascular transplants] Azizov GA. **Klin Khir** 1988;(7):69 (Rus)
[Surgical reconstruction of the valves of the deep veins in the femoro-popliteal segment] Driuk NF, et al. **Klin Khir** 1988;(7):49–52 (Eng. Abstr.) (Rus)
[Topographic and anatomical substantiation of variants of the "saphenous" flap formation] Ostrovskii NV, et al. **Klin Khir** 1989;(1):20–1 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

[Scanning electron microscopy analysis of peroperative

injury at the junctions of the vasa vasorum and the collateral veins of venous autografts prepared for myocardial revascularization] Jelić I, et al. **Lijec Vjesn** 1989 Jan–Feb;111(1–2):6–9 (Eng. Abstr.) (Scr)

VELOCIMETERS see FLOWMETERS

VELOCITY METERS see FLOWMETERS

VELOPHARYNGEAL INSUFFICIENCY

Velopharyngeal nomenclature: incompetence, inadequacy, insufficiency, and dysfunction. Folkins JW. **Cleft Palate J** 1988 Oct;25(4):413–6 (18 ref.)

CLASSIFICATION

Coming to terms with VPI: a response to Loney and Bloem. Trost–Cardamone JE. **Cleft Palate J** 1989 Jan;26(1):68–70 (21 ref.)

COMPLICATIONS

Otologic manifestations in congenital velopharyngeal insufficiency. Durr DG, et al. **Am J Dis Child** 1989 Jan; 143(1):75–7

Voice perturbations of children with perceived nasality and hoarseness. Zajac DJ, et al. **Cleft Palate J** 1989 Jul; 26(3):226–31; discussion 231–2

DIAGNOSIS

Screening of velopharyngeal inadequacy by differential pressure measurements. Morr KE, et al. **Cleft Palate J** 1989 Jan;26(1):42–5

Evaluation of velopharyngeal insufficiency. Shprintzen RJ, et al. **Otolaryngol Clin North Am** 1989 Jun;22(3):519–36 (37 ref.)

[Study of velopharyngeal closure using the fibrorhinopharyngoscope] Wang GH. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):337–8, 385 (Eng. Abstr.) (Chi)

ETIOLOGY

Speech and nasendoscopic evaluation of velopharyngeal incompetence (VPI) in cleft palate patients. Ngim RC, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):380–3

Velopharyngeal incompetence as the presenting symptom of myotonic dystrophy. Salomonson J, et al. **Cleft Palate J** 1988 Jul;25(3):296–300

[Is velopharyngeal competence stable with growth in patients with cleft palate?] Caouette–Laberge L, et al. **Chir Pediatr** 1989;30(2):88–90 (Eng. Abstr.) (Fre)

GENETICS

Gastrointestinal abnormalities in the syndrome of mosaic trisomy 9. Levy I, et al. **J Med Genet** 1989 Apr;26(4):280–1

PHYSIOPATHOLOGY

Perceived articulatory adequacy and velopharyngeal function in dysarthric speakers. Yorkston KM, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):313–7

Intraoral pressure and its relationship to velopharyngeal inadequacy. Dalston RM, et al. **Cleft Palate J** 1988 Jul; 25(3):210–9

Screening of velopharyngeal closure based on nasal airflow rate measurements. Laine T, et al. **Cleft Palate J** 1988 Jul; 25(3):220–5

Patterns and location of velopharyngeal valving problems: atypical findings on video nasopharyngoscopy. Witzel MA, et al. **Cleft Palate J** 1989 Jan;26(1):63–7

Effects of velar resistance on speech aerodynamics. Laine T, et al. **Eur J Orthod** 1989 Feb;11(1):52–8

Nasal airflows in parkinsonian speakers. Hoodin RB, et al. **J Commun Disord** 1989 Jun;22(3):169–80

Intraoral pressure, nasal pressure and airflow rate in cleft palate speech. Laine T, et al. **J Speech Hear Res** 1988 Sep; 31(3):432–7

The speech regulating system: temporal and aerodynamic responses to velopharyngeal inadequacy. Warren DW, et al. **J Speech Hear Res** 1989 Sep;32(3):566–75

[Velopharyngeal insufficiency. Anatomo–physiological aspects] Wellens W. **Acta Otorhinolaryngol Belg** 1988; 42(4):463–76 (Eng. Abstr.) (Fre)

PREVENTION & CONTROL

The effect of intravelar veloplasty on velopharyngeal competence following pharyngeal flap surgery. Jarvis BL, et al. **Cleft Palate J** 1988 Oct;25(4):389–94

Intravelar veloplasty: a prospective study. Marsh JL, et al. **Cleft Palate J** 1989 Jan;26(1):46–50

RADIOGRAPHY

Radiographic evaluation of velopharyngeal incompetence in childhood. Barr LL, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):811–4

Comparison of multi–view videofluoroscopy and nasopharyngoscopy in the assessment of velopharyngeal insufficiency. Stringer DA, et al. **Cleft Palate J** 1989 Apr; 26(2):88–92

[Study of velar insufficiency by digital subtraction radiography] Perri G, et al. **Ann Radiol (Paris)** 1988; 31(6):351–4 (Eng. Abstr.) (Fre)

[A new method of x–ray diagnosis of palatopharyngeal functional disorders following uranoplasty] Ananian SG. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):46–8 (Eng. Abstr.) (Rus)

SURGERY

Denervated palmaris longus tendon as a skeletal muscle transplant in circumferential pharyngoplasty. Ramakrishnan KM, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):392–3

Maxillary dental arch dimensions following pharyngeal–flap surgery. Keller BG, et al. **Cleft Palate J** 1988 Jul; 25(3):248–57

Proplast as a pharyngeal wall implant to correct velopharyngeal insufficiency. Wolford LM, et al. **Cleft Palate J** 1989 Apr;26(2):119–26; discussion 126–8

Experience with surgical management of velopharyngeal incompetence. Crockett DM, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):1–9

Levator repositioning and palatal lengthening for submucous clefts. Penler JM, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):765–9

The effectiveness of the superiorly based pharyngeal flap in relation to the type of palatal defect and timing of the operation. Seyfer AE, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):760–4

THERAPY

A different design of palatal lift appliance: review and case reports. Spratley MH, et al. **Aust Dent J** 1988 Dec; 33(6):491–5

Research revisited. Shprintzen RJ. **Cleft Palate J** 1989 Apr; 26(2):148–9

VELUM PALATINUM see PALATE, SOFT

VENA CAVA, INFERIOR

Primary leiomyosarcoma of the inferior vena cava with Budd–Chiari syndrome. Imakita M, et al. **Acta Pathol Jpn** 1989 Jan;39(1):73–7 (31 ref.)

Günther vena caval filter: results of long–term follow–up. Fobbe F, et al. **AJR** 1988 Nov;151(5):1031–4

Percutaneous insertion of the Greenfield filter. Pais SO, et al. **AJR Am J Roentgenol** 1989 May;152(5):933–8 (57 ref.)

Percutaneous transluminal balloon angioplasty for obstruction of the suprahepatic inferior vena cava and cavo–atrial graft stenosis. Dev V, et al. **Am J Cardiol** 1989 Aug 1;64(5):397–9

A retrospective analysis of inferior vena caval filtration for prevention of pulmonary embolization. Thomas WO 3d, et al. **Am Surg** 1988 Dec;54(12):726–30

Abdominal aortic aneurysm with inferior vena cava obstruction: case report. Demircioglu FF, et al. **Angiology** 1989 Mar;40(3):227–32

Effect of a 1.5 Tesla magnetic field on Greenfield filters in vitro and in dogs. Williamson MR, et al. **Angiology** 1988 Dec;39(12):1022–4

Unusual approaches for insertion of the Greenfield vena cava filter: the value of its approach through the jugulosubclavian junction. Combe J, et al. **Ann Vasc Surg** 1986 Nov;1(3):364–8

Acute Budd–Chiari syndrome secondary to leiomyosarcoma of the inferior vena cava. Kracht M, et al. **Ann Vasc Surg** 1989 Jul;3(3):268–72 (33 ref.)

Intracaval and intracardiac leiomyomatosis of uterine origin. Mazzola A, et al. **Ann Vasc Surg** 1986 May;1(1):134–8 (18 ref.)

Percutaneous transvenous caval interruption with the "LGM" filter: early results of a multicenter trial. Ricco JB, et al. **Ann Vasc Surg** 1988 Jul;2(3):242–7

Greenfield filter insertions: predictability of technical difficulties. Smyk R, et al. **Ann Vasc Surg** 1988 Oct; 2(4):316–8

In vitro evaluation of caval filters. Robinson JD, et al. **Cardiovasc Intervent Radiol** 1988 Dec;11(6):346–51

Entrapment of venous catheter following inferior vena caval spasm. Dalvi BV, et al. **Cathet Cardiovasc Diagn** 1989 Jul; 17(3):161–3

Acute inferior vena cava thrombosis. Early results of heparin therapy. Girard P, et al. **Chest** 1989 Feb;95(2):284–91

Hepatic localization of Tc–99m MAA during lower extremity venography. Kolla I, et al. **Clin Nucl Med** 1989 Jun; 14(6):433–5

The detection of inferior vena cava obstruction using Tc–99m RBC venography. Skarzynski JJ, et al. **Clin Nucl Med** 1988 Oct;13(10):763–4

Inferior vena cava filters and when to use them. Wells I. **Clin Radiol** 1989 Jan;40(1):11–2 (13 ref.)

Development of large spleno–adreno–renal shunt after endoscopic sclerotherapy. Dilawari JB, et al. **Gastroenterology** 1989 Aug;97(2):421–6

Membranous obstruction of the inferior vena cava associated with a myeloproliferative disorder: a clue to membrane formation? Sevenet F, et al. **Gastroenterology** 1989 Oct; 97(4):1019–21

Laser–assisted angioplasty of inferior vena caval obstructions: what's good for the artery is good for the vein. Deckelbaum LI. **Hepatology** 1989 Feb;9(2):338–9

Interruption of the inferior vena cava for prevention of pulmonary embolism: transvenous filter devices. Grassi CJ, et al. **Herz** 1989 Jun;14(3):182–91 (37 ref.)

Insertion and recovery of a new retrievable vena caval filter. Work in progress. Teitelbaum GP, et al. **Invest Radiol** 1988 Jul;23(7):527–33

Reevaluation of indications for percutaneous placement of the Greenfield filter. Tobin KD, et al. **Invest Radiol** 1989 Feb;24(2):115–8

Inferior vena cava plethora as an echocardiographic sign of cardiac tamponade [editorial] Fowler NO. **J Am Coll Cardiol** 1988 Dec;12(6):1478–9

Inferior vena cava plethora with blunted respiratory response: a sensitive echocardiographic sign of cardiac tamponade. Himelman RB, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1470–7

Phlegmasia cerulea dolens as a complication of percutaneous insertion of a vena caval filter. Feinman LJ, et al. **J Am Osteopath Assoc** 1989 Jan;89(1):63–8

Intraoperative disruption of a Greenfield vena cava filter. Alexander JJ, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):130–3

Vena caval penetration by gastric ulcer: massive hemorrhage and embolization of gastric contents to lungs. Palmer RC. **J Clin Gastroenterol** 1989 Aug;11(4):455–7

Inferior vena cava thrombosis following a cycle ride. Simpson AH, et al. **J R Soc Med** 1988 Dec;81(12):738–9

Cardiovascular evaluation before circulatory arrest for removal of vena caval extension of renal carcinoma. Belis JA, et al. **J Urol** 1989 Jun;141(6):1302–7

Intracaval and atrial involvement with nephroblastoma: review of National Wilms Tumor Study–3. Ritchey ML, et al. **J Urol** 1988 Nov;140(5 Pt 2):1113–8

Ureteral obstruction secondary to a vena caval clip. Wrenn JJ, et al. **J Urol** 1988 Nov;140(5):1014–5

Complications of caval interruption by Greenfield filter in quadriplegics. Balshi JD, et al. **J Vasc Surg** 1989 Apr; 9(4):558–62

Cerebrovascular accident after Greenfield filter placement for paradoxical embolism. Dalman R, et al. **J Vasc Surg** 1989 Mar;9(3):452–4

Percutaneous insertion of the Greenfield inferior vena cava filter: experience with ninety–six patients. Pais SO, et al. **J Vasc Surg** 1988 Oct;8(4):460–4

Extended indications for placement of an inferior vena cava filter. Rohrer MJ, et al. **J Vasc Surg** 1989 Jul;10(1):44–9; discussion 49–50

Massive pulmonary embolism: triple–armed therapy. Rosenthal D, et al. **J Vasc Surg** 1989 Feb;9(2):261–70

Treatment of a case of asynchronous bilateral renal cell carcinomas with inferior vena caval thrombus and hepatic metastases. Takai K, et al. **Jpn J Clin Oncol** 1988 Dec; 18(4):379–85

Early experience with the bird's nest inferior vena–caval filter [letter] Smith JA, et al. **Med J Aust** 1989 Feb 6;150(3):164–5

An unusual cause of an inferior vena cava syndrome. Regoort M, et al. **Neth J Surg** 1989 Aug;41(4):92–4

Pancreatic carcinoma. An unusual presentation—inferior vena cava thrombosis. Beyth RJ, et al. **Postgrad Med** 1989 Jul;86(1):229–32

Hepatic visualization with a "hot" spot adjacent to the porta hepatis in Tc–99m MAA venography of the lower extremity: a sign of IVC obstruction. DeLand FH, et al. **Radiat Med** 1988 May–Jun;6(3):107–10

Inferior vena cava: translumbar catheterization for central venous access. Denny DF Jr, et al. **Radiology** 1989 Sep; 172(3 Pt 2):1013–4

Iatrogenic changes at the venotomy site after percutaneous placement of the Greenfield filter. Dorfman GS, et al. **Radiology** 1989 Oct;173(1):159–62

Experience with the Amplatz retrievable vena cava filter. Epstein DH, et al. **Radiology** 1989 Jul;172(1):105–10

Thrombosis at venous insertion sites after inferior vena caval filter placement. Mewissen MW, et al. **Radiology** 1989 Oct; 173(1):155–7

Simon nitinol inferior vena cava filter: initial clinical experience. Work in progress. Simon M, et al. **Radiology** 1989 Jul;172(1):99–103

Thrombus–trapping efficiency of the Greenfield filter in vivo. Thompson BH, et al. **Radiology** 1989 Sep;172(3 Pt 2):979–81

Inferior vena cava filter: search for an ideal device [editorial] Yune HY. **Radiology** 1989 Jul;172(1):15–6

Pulmonary embolism in renal cell carcinoma with vena cava extension. Henriksson C, et al. **Scand J Urol Nephrol** 1988; 22(3):215–8

Echocardiography in planned interruption of the inferior vena cava. Alberts WM, et al. **South Med J** 1989 Jun; 82(6):772–4

Translumbar catheterization of the inferior vena cava for long term angiosccess. Boddie AW Jr. **Surg Gynecol Obstet** 1989 Jan;168(1):54–6

Cannulation of inferior vena cava for long term central venous access. Curtas S, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):121–4

Simple instrument occlusion of the anterior visceral branches of the aorta during en bloc renal allograft procurement. Maley WR, et al. **Surg Gynecol Obstet** 1988 Nov; 167(5):442–4

Preservation of the retrohepatic vena cava during recipient hepatectomy for orthotopic transplantation of the liver. Stieber AC, et al. **Surg Gynecol Obstet** 1989 Jun; 168(6):542–4

Aberrant right hepatic artery vena cava fistula: a case report

[published erratum appears in Surgery 1989 May;105(5):694] **Das BM, et al. Surgery 1989 Feb;105(2 Pt 1):232–6**

[Combined superior and inferior vena caval obstruction syndrome: a case report] **Guan H, et al. Chung Hua Wai Ko Tsa Chih 1988 Feb;26(2):78–9, 125 (Eng. Abstr.) (Chi)**

[Carbon fiber composite biomaterials in the substitution of the inferior vena cava] **Ratto GB, et al. Ann Chir 1989; 43(4):311–4 (Eng. Abstr.) (Fre)**

[Portal cavernoma and inferior caval thrombosis disclosing Behçet's disease (letter)] **Tilli–Graies K, et al. Ann Med Interne (Paris) 1988;139(6):444–6 (Fre)**

[Calcified thrombus of the inferior vena cava. Apropos of a case] **Paillé P, et al. Ann Radiol (Paris) 1989;32(2):151–4 (Eng. Abstr.) (Fre)**

[Calcified thrombosis of the inferior vena cava in children] **Levard G, et al. Chir Pediatr 1988;29(4):201–4 (12 ref.) (Eng. Abstr.) (Fre)**

[Interruption of the inferior vena cava by a titanium filter] **Ohanessian JH, et al. Chirurgie 1988;114(4):334–7 (Eng. Abstr.) (Fre)**

[Budd–Chiari syndrome with thrombosis of the inferior vena cava. Treatment by mesenterico–innominate shunt] **Hay JM, et al. Gastroenterol Clin Biol 1988 Oct;12(10):755–8 (Eng. Abstr.) (Fre)**

[Partial interruption of the inferior vena cava: initial results with a two–tiered endocaval filter (letter)] **Pietri J, et al. J Mal Vasc 1988;13(3):288–9 (Fre)**

[Cancer of the kidney and caval thrombus. Adenocarcinoma of the kidney and neoplastic thrombus of the inferior cava vena. Therapeutic and developing aspects] **Tremeaux JC, et al. J Urol (Paris) 1989;95(1):61–2 (Fre)**

[Insertion of a temporary percutaneous filter before suprarenal caval thrombectomy (letter)] **Du Cailar C, et al. Presse Med 1989 Jun 17;18(24):1208–9 (Fre)**

[Sarcomatous recurrence of leiomyoma of the inferior vena cava] **Pezet D, et al. Presse Med 1988 Oct 15;17(35):1793–6 (Eng. Abstr.) (Fre)**

[Ultrasound diagnosis of thrombosis of the inferior vena cava in the puerperium] **Troester U, et al. Geburtshilfe Frauenheilkd 1988 Dec;48(12):902–3 (Eng. Abstr.) (Ger)**

[Studies on the portasystemic shunt in pelvic vein thrombosis and the vena cava inferior syndrome] **Zückmantel WR, et al. Radiol Diagn (Berl) 1988;29(4):635–40 (Eng. Abstr.) (Ger)**

[The percutaneous vena cava umbrella filter in the prevention of pulmonary embolism] **Günther RW, et al. Roentgenblatter 1988 Jul;41(7):297–300 (21 ref.) (Eng. Abstr.) (Ger)**

[Surgical treatment of thrombosis of the inferior vena cava] **Bajardi G, et al. Minerva Chir 1989 Apr 15;44(7):1103–6 (Eng. Abstr.) (Ita)**

[Günther's caval filter in the prevention of pulmonary embolism] **Grosso M, et al. Minerva Chir 1988 Sep 30; 43(18):1437–44 (Eng. Abstr.) (Ita)**

[A case of leiomyosarcoma of the inferior vena cava] **Nagayoshi M, et al. Kyobu Geka 1989 Feb;42(2):155–9 (14 ref.) (Eng. Abstr.) (Jpn)**

[A right common iliac aneurysm perforating into the inferior vena cava with resultant congestive heart failure] **Inoue K, et al. Nippon Geka Gakkai Zasshi 1989 Jan;90(1):141–4 (7 ref.) (Eng. Abstr.) (Jpn)**

[Percutaneous placement of the inferior vena caval filter—a clinical experience with the Günther vena caval filter] **Kodera K. Nippon Igaku Hoshasen Gakkai Zasshi 1989 Feb 25;49(2):168–71 (Eng. Abstr.) (Jpn)**

[Leiomyosarcoma of the inferior vena cava with Budd–Chiari syndrome] **Hakozaki Y, et al. Nippon Naika Gakkai Zasshi 1987 May;76(5):701–6 (Jpn)**

[A case of essential mesocaval shunt] **Morita Y, et al. Rinsho Hoshasen 1989 May;34(5):633–6 (Eng. Abstr.) (Jpn)**

[Consumption coagulopathy associated with thrombosis of inferior vena cava: trial of intracaval filter] **Tatewaki W, et al. Rinsho Ketsueki 1988 Jul;29(7):1115–9 (Eng. Abstr.) (Jpn)**

[Behçet disease with superior sagittal sinus and inferior vena caval thrombosis] **Hata T, et al. Rinsho Shinkeigaku 1988 Oct;28(10):1217–24 (26 ref.) (Eng. Abstr.) (Jpn)**

[Diagnostic, staging and therapeutic problems in invasion of the abdominal vena cava in renal cancer] **Proca E, et al. Rev Chir [Chir] 1989 Jan–Feb;38(1):1–17 (Eng. Abstr.) (Rum)**

[Prevention of pulmonary thromboembolism using a method of transcutaneous implantation of a cava–filter] **Iablokov EG, et al. Kardiologiia 1988 Sep;28(9):109–14 (24 ref.) (Rus)**

[Rupture of an aneurysm of the abdominal aorta into the inferior vena cava] **Evstifeev LK, et al. Khirurgiia (Mosk) 1989 Mar;(3):136–7 (Rus)**

[Recanalization and dilatation of the inferior vena cava in a patient with Budd–Chiari syndrome] **Rabkin IKh, et al. Khirurgiia (Mosk) 1989 Apr;(4):132–3 (Rus)**

[A case of retrocaval location of the ureter in bilateral nephroptosis] **Zhila VV, et al. Klin Khir 1988;(12):53–4 (Rus)**

[Trousseau's syndrome: thrombosis of the inferior vena cava and of the left renal vein associated with a testicular neoplasm] **Castiñeiras J, et al. Actas Urol Esp 1988 Sep–Oct; 12(5):402–10 (32 ref.) (Eng. Abstr.) (Spa)**

[Puerperal thrombosis of the ovarian vein associated with an intracaval "floating" thrombus] **Vaquero F, et al. Angiologia 1988 Nov–Dec;40(6):219–24 (Eng. Abstr.) (Spa)**

[Cancer of the kidney with tumor thrombosis of the inferior vena cava and right atrium] **González Martín M, et al. Arch Esp Urol 1988 May;41(4):291–6 (35 ref.) (Eng. Abstr.) (Spa)**

[Uterine leiomyosarcoma which spread through the vena cava to the pulmonary artery] **Contreras Rodriguez R, et al. Arch Inst Cardiol Mex 1988 Sep–Oct;58(5):453–9 (Eng. Abstr.) (Spa)**

ABNORMALITIES

Chronic Budd–Chiari syndrome due to congenital membranous obstruction of the inferior vena cava: clinical experience. **Rao KS, et al. Aust N Z J Surg 1989 Apr; 59(4):335–8**

Patent ductus venosus: problems in assessment and management. **Barsky MF, et al. Can J Surg 1989 Jul; 32(4):271–5**

Complete membranous obstruction of inferior vena cava: case treated by balloon dilatation. **Loya YS, et al. Cathet Cardiovasc Diagn 1989 Jul;17(3):164–7**

Anomalous drainage of the inferior vena cava into a left atrial connection: a case report involving a 41–year–old man. **Meyers DG, et al. Cathet Cardiovasc Diagn 1989 Apr; 16(4):239–44 (10 ref.)**

A segmental agenesis of the inferior vena cava with azygos continuation. A case report. **Cha EM, et al. Chic Med Sch Q 1972;31(1–4):69–72**

Double inferior vena cava diagnosis by technetium–99m labeled RBC study. **Howard JL, et al. Clin Nucl Med 1988 Sep;13(9):671–2**

Bilateral paraaortic lymphadenectomy in the presence of double inferior vena cava. **Ashraf M, et al. Gynecol Oncol 1989 May;33(2):251–4**

The role of membranous obstruction of the inferior vena cava in the etiology of hepatocellular carcinoma in Southern African blacks. **Kew MC, et al. Hepatology 1989 Jan; 9(1):121–5**

IVC interruption in a case of TOF. **Shah LS, et al. Indian Heart J 1988 Jul–Aug;40(4):277–80**

Patient with a cyanotic atrial septal defect without pulmonary hypertension [letter] **Cheng TO. Int J Cardiol 1989 Apr; 23(1):139**

Unusual drainage of the inferior caval vein in left atrial isomerism. **Roguin N, et al. Int J Cardiol 1989 Jul; 24(1):35–9**

Abdominal aortic replacement with a left–sided inferior vena cava: transperitoneal and left retroperitoneal approaches. **Perler BA. J Cardiovasc Surg (Torino) 1989 Mar–Apr; 30(2):236–40**

Radionuclide, computed tomography, and digital imaging of duplicated inferior vena cava. **Davis M, et al. Radiat Med 1988 Nov–Dec;6(6):256–8**

CT demonstration of a complex anomaly of inferior vena cava. **Coppola V, et al. Radiol Med (Torino) 1988 Sep; 76(3):232–4**

Azygos and hemiazygos continuation of inferior vena cava: CT patterns. **Bighi S, et al. Rays 1988 Sep–Dec;13(3):87–91**

Azygos lobe and azygos continuation of the inferior vena cava. **Shah Y. Semin Roentgenol 1989 Jan;24(1):5–6**

Azygos continuation of the inferior vena cava masquerading as neoplasm. **Pallin J, et al. South Med J 1989 Feb; 82(2):259–61**

Coarctation of the inferior vena cava associated with hypoplasia of the entire vena cava and a chronic Budd–Chiari syndrome. **Hodkinson HJ, et al. Trop Gastroenterol 1988 Oct–Dec;9(4):219–22**

[Atrial septal defect and cyanosis. Apropos of 6 cases related to abnormal drainage of the inferior vena cava into the left atrium] **Hallali P, et al. Arch Mal Coeur 1988 Jun; 81(6):783–6 (Eng. Abstr.) (Fre)**

[Clinical and paraclinical identification by various imaging technics of congenital anomalies of the inferior vena cava (apropos of 4 cases)] **Rettori R, et al. J Mal Vasc 1989; 14(3):191–201 (Eng. Abstr.) (Fre)**

[Temporary exertion–dependent paresthesias in agenesis of the inferior vena cava] **Boecken G. Dtsch Med Wochenschr 1988 Dec 2;113(48):1879–81 (Eng. Abstr.) (Ger)**

[Azygos and hemiazygos connections imaged by two–dimensional, and pulsed and color Doppler echocardiography] **Satomi G, et al. J Cardiol 1988 Jun; 18(2):435–41 (Eng. Abstr.) (Jpn)**

[Open heart surgery in a case of ventricular septal defect, infundibular stenosis, and aortic regurgitation associated with a periureteral venous ring] **Komeda M, et al. Kyobu Geka 1988 Sep;41(10):846–9 (Eng. Abstr.) (Jpn)**

[Surgical treatment of retroperitoneal tumor in a patient with double inferior vena cava] **Nikitaev NS, et al. Khirurgiia (Mosk) 1989 Jun;(6):131–2 (Rus)**

ANATOMY & HISTOLOGY

Two–dimensional echocardiographic evaluation of inferior vena cava, right ventricle, and left ventricle during positive–pressure ventilation with varying levels of positive end–expiratory pressure. **Mitaka C, et al. Crit Care Med 1989 Mar;17(3):205–10**

Biometry of infrarenal inferior vena cava measured by cavography. Clinical applications. **Bonnichon P, et al. Surg Radiol Anat 1989;11(2):149–54**

[Study of the Eustachian valve using two–dimensional echocardiography] **Barriales V, et al. Rev Esp Cardiol 1988 Jun–Jul;41(6):349–51 (Eng. Abstr.) (Spa)**

INJURIES

Spontaneous fatal perforation of aorta and vena cava by Mobin–Uddin umbrella. **Rozin L, et al. Am J Forensic Med Pathol 1989 Jun;10(2):149–51**

Injuries of the inferior vena cava. **Burch JM, et al. Am J Surg 1988 Dec;156(6):548–52**

Fatal accident with weight–lifting equipment: implications for safety standards. **George DH, et al. Can Med Assoc J 1989 Apr 15;140(8):925–6**

Following microdiskectomy. Laceration of the abdominal aorta and vena cava. **Young PH. IMJ 1988 Aug;174(2):93–4**

Retroperitoneal haemorrhage following femoral vein catheterization for hemodialysis. **Pereira BJ, et al. J Assoc Physicians India 1988 Jun;36(6):396–7**

Repair of suprahepatic caval lesions under extracorporeal circulation in major liver trauma. **Launois B, et al. J Trauma 1989 Jan;29(1):127–8**

Traumatic aortocaval fistula: case report. **Linker RW, et al. J Trauma 1989 Feb;29(2):255–7**

Transection of the inferior vena cava from blunt thoracic trauma: case reports. **Peitzman AB, et al. J Trauma 1989 Apr;29(4):534–6**

Perforation of the inferior vena cava with aortic and vertebral penetration by a suprarenal Greenfield filter. **Kim D, et al. Radiology 1989 Sep;172(3):721–3**

Combined aortic and inferior vena cava injury during laminectomy. A serious complication. **Fargally M, et al. Vasa 1988;17(4):288–92**

[Combined injuries of the inferior vena cava, transverse colon and the gallbladder] **Kudinskii IuG, et al. Klin Khir 1988; (9):62–3 (Rus)**

[Injuries of the venae cavae] **Grinev MV, et al. Vestn Khir 1988 Sep;141(9):72–7 (Eng. Abstr.) (Rus)**

[Wounds and intraoperative injuries of the inferior vena cava] **Vasiutkov VIa, et al. Vestn Khir 1988 Aug;141(8):136–9 (Eng. Abstr.) (Rus)**

[Injuries of the inferior vena cava—prerequisites of successful treatment] **Batʼalik B, et al. Rozhl Chir 1989 Mar; 68(3):176–9 (Eng. Abstr.) (Slo)**

PATHOLOGY

Idiopathic megacolon presenting with fatal inferior vena caval obstruction and colonic perforation. Case report. **Scott MJ. Acta Chir Scand 1988 Oct;154(10):605–7**

Angiomyolipoma of the kidney extending into the inferior vena cava: sonographic and CT findings. **Arenson AM, et al. AJR 1988 Dec;151(6):1159–61**

Embolism of massive hepatic tissue in inferior vena cava and right atrium after closed liver injury. **Takatsu A, et al. Am J Forensic Med Pathol 1988 Sep;9(3):233–5**

Intravenous leiomyomatosis: case report and review. **Hughes PF. Asia Oceania J Obstet Gynaecol 1988 Dec;14(4):421–5 (20 ref.)**

Autopsy assessment of the Gunther vena caval filter. **Mahendran M, et al. Br J Radiol 1989 Feb;62(734):174–5**

Invasion of the inferior vena cava in malignant phaeochromocytoma. **Fisher EW, et al. Br J Urol 1988 Sep;62(3):272–3**

Obstruction of the vena cava secondary to an enlarged bladder. **Markus HS, et al. Br J Urol 1989 Jul;64(1):102–3**

Involvement of the caval vein lumen by a metastasis of a non–seminomatous testicular tumor. **Jacqmin D, et al. Eur Urol 1989;16(3):233–4**

Magnetic resonance imaging of renal vein and inferior vena cava thrombosis in a patient with glomerulonephritis: a case report. **Honda H, et al. J Comput Tomogr 1988 Apr; 12(2):147–9**

Pulmonary hydatid seeding mimicking hematogenous metastases: sonographic diagnosis of hydatid rupture into the inferior vena cava. **Segura JM, et al. JCU 1989 Feb; 17(2):112–4**

Hepatocellular carcinoma with tumor thrombus in inferior vena cava [clinical conference] **Close P, et al. Med Pediatr Oncol 1989;17(3):232–5**

Duplex Doppler ultrasound evaluation of calcified inferior vena cava thrombosis. **Uglietta JP, et al. Pediatr Radiol 1989;19(4):250–2**

Pseudoportal Doppler signal in the partially obstructed inferior vena cava. **Keller MS, et al. Radiology 1989 Feb; 170(2):475–7**

[A mysterious enlarged liver (or, when the inferior vena cava strikes back...)] **Sevenet F, et al. Ann Gastroenterol Hepatol (Paris) 1989 Jan–Feb;25(1):11–2 (Fre)**

[Giant leiomyoma of the inferior vena cava] **Payan MJ, et al. Ann Pathol 1989;9(1):44–6 (Eng. Abstr.) (Fre)**

PHYSIOLOGY

Importance of cholescintigraphy and inferior vena cava flow studies in the differential diagnosis of hepatocellular carcinoma. **Botha U, et al. Am J Physiol Imaging 1989; 4(2):55–61**

Effects of respiration and vasodilation on venous volume in animals and man, as measured with an impedance catheter.

Ferguson JJ 3d, et al. **Cathet Cardiovasc Diagn** 1989 Jan; 16(1):25–34

Use of a conductance (volume) catheter and transient inferior vena caval occlusion for rapid determination of pressure–volume relationships in man. **Kass DA**, et al. **Cathet Cardiovasc Diagn** 1988;15(3):192–202

Quantitative assessment of average velocity in inferior vena cava by phase-display MR imaging: pulsed Doppler correlation. Didier D, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):94–100

Passive elastic properties of the rat abdominal vena cava. Weizsäcker HW. **Pflugers Arch** 1988 Jul;412(1–2):147–54

Increased sodium reabsorption in the ascending limb of the loop of henle in chronic caval dogs. Chou SY, et al. **Proc West Pharmacol Soc** 1988;31:225–30

Partial liver transplantation in dogs: preserving the IVC of the recipient and use of a heparinized catheter (Anthron) for portal vein bypass. Taira N, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2362–3

PHYSIOPATHOLOGY

Inferior vena cava plethora with blunted respiratory response [letter] Spodick DH. **J Am Coll Cardiol** 1989 Apr; 13(5):1217–8

Detection of pulmonary hypertension by Doppler echocardiography of the inferior vena cava in chronic airflow obstruction. **Laaban JP**, et al. **Thorax** 1989 May; 44(5):396–401

Pathogenesis of early thrombus formation in experimental vein graft. Itoh T, et al. **Thromb Res** 1989 Feb 15; 53(4):357–65

RADIOGRAPHY

Analysis of inferior venacavography before Greenfield filter placement. Mejia EA, et al. **Ann Vasc Surg** 1989 Jul; 3(3):232–5

Pseudo–Budd–Chiari syndrome: extrinsic deformity of the intrahepatic inferior vena cava mimicking membranous obstruction. Rector WG Jr. **J Clin Gastroenterol** 1989 Feb; 11(1):88–91

Scimitar sign with normal pulmonary venous drainage and anomalous inferior vena cava. Herer B, et al. **Thorax** 1988 Aug;43(8):651–2

[CT cavography: diagnosis of iliocaval thrombosis by administration of contrast medium into the foot] Bostel F, et al. **ROFO** 1988 Oct;149(4):423–6 (Eng. Abstr.) **(Ger)**

[Clinical case (nephrotic syndrome associated with thrombosis of the inferior vena cava)] Fornaciari M, et al. **G Clin Med** 1989 Apr;70(4):305–6, 308 **(Ita)**

[The vertebral venous plexus: its physiopathological aspects. A CT study in 2 patients with obstruction of the inferior vena cava] Bellelli A, et al. **Radiol Med (Torino)** 1989 May; 77(5):564–7 **(Ita)**

[CT anatomy of para-caval portion of the caudate lobe of the liver] Matsui O, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):841–6 (Eng. Abstr.) **(Jpn)**

SURGERY

Extended right hepatic lobectomy: combined resection of inferior vena cava and its reconstruction by EPTFE graft (Gore–Tex). Case report. **Kumada K**, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):481–3

Valvular xenografts in the inferior vena cava. Phifer TJ, et al. **Am J Surg** 1989 Jun;157(6):588–92

Transatrial membranotomy for Budd–Chiari syndrome. Chang CH, et al. **Ann Thorac Surg** 1989 Sep;48(3):409–12

Resection of atriocaval adrenal carcinoma using hypothermic circulatory arrest. Shahian DM, et al. **Ann Thorac Surg** 1989 Sep;48(3):421–2

Patency after iliofemoral and iliocaval venous thrombectomy. Juhan C, et al. **Ann Vasc Surg** 1987 Dec;1(5):529–33

Rupture of abdominal aortic aneurysm into the inferior vena cava: a study of seven cases. Petetin L, et al. **Ann Vasc Surg** 1987 Dec;1(5):572–7

Unfastening of an Adams–de Weese clip: an uncommon cause of recurrent pulmonary embolism after interruption of the inferior vena cava. Rudondy P, et al. **Ann Vasc Surg** 1988 Jul;2(3):235–6

Left gastric venous caval shunt with externally reinforced polytetrafluoroethylene graft. Kambayashi J, et al. **Br J Surg** 1988 Sep;75(9):886–7

Aftermath of caval ligation [letter] Singer EP. **Chest** 1988 Nov;94(5):1115–6

The preoperative recognition of aorto–caval syndrome. Wu AV. **Eur J Vasc Surg** 1989 Aug;3(4):375–6

A safe surgical technique for the infradiaphragmatic removal of caval tumor thrombus complicating renal cell carcinoma. Moskovitz B, et al. **Eur Urol** 1989;16(1):67–8

Right renal vein extension technique in human kidney transplantation. Szmidt J, et al. **Eur Urol** 1989;16(3):204–6

Use of a caval–atrial shunt for resection of a caval tumor thrombus in renal cell carcinoma. Foster RS, et al. **J Urol** 1988 Dec;140(6):1370–1

Total replacement of the suprarenal inferior vena cava with an expanded polytetrafluoroethylene tube graft in 2 patients with tumor thrombi from renal cell carcinoma. Okada Y, et al. **J Urol** 1989 Jan;141(1):111–4

Arterialization of liver transplants in rats: I. Application of the tissue perfusion monitor in hemodynamic studies. Lee S, et al. **Microsurgery** 1989;10(1):15–20

Obstruction to hepatic venous drainage after liver transplantation: treatment with balloon angioplasty. Zajko AB, et al. **Radiology** 1989 Mar;170(3 Pt 1):763–5

New extension of the Fontan principle: inferior vena cava–pulmonary artery bridge operation. Nawa S, et al. **Thorax** 1988 Dec;43(12):1022–3

Metabolic effects of systemic versus portal venous drainage of orthotopic small bowel isografts. Shaffer D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2872–4

Splenocaval shunt for selective portal decompression. Iliopoulos JI, et al. **World J Surg** 1988 Dec;12(6):852–5

[Membranous obstruction of the inferior vena cava: report of 5 cases] Ye JR, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Feb;26(2):76–7, 124–5 (Eng. Abstr.) **(Chi)**

[Experience with management of invasion of renal carcinoma into the venous system] Navrátil P, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(3):349–54 (Eng. Abstr.) **(Cze)**

[An abdominal approach above the liver to the inferior vena cava] Leger P, et al. **J Urol (Paris)** 1988;94(9–10):437–44 (Eng. Abstr.) **(Fre)**

[Temporary transsection of the inferior vena cava for complete removal of a retroperitoneal metastatic testicular tumor] Kumada K, et al. **Chirurg** 1988 Oct;59(10):676–8 **(Ger)**

[A case of aortocaval fistula following rupture of an infrarenal aortic aneurysm] Stauber R, et al. **Chirurg** 1988 Dec;59(12):851–2 **(Ger)**

[Ligation of the inferior vena cava as embolism prevention. Clinical experiences and experimental studies] Schima E. **Klin Med Osterr Z Wiss Prakt Med** 1967;22(12):563–9 **(Ger)**

[Reconstructive interventions of the inferior vena cava] Hutschenreiter S, et al. **Langenbecks Arch Chir** 1988;Suppl 2:191–5 (Eng. Abstr.) **(Ger)**

[Prosthesis in surgery of portal hypertension] Morino F, et al. **Minerva Chir** 1989 Feb 15;44(3):477–9 **(Ita)**

[Surgical treatment of renal carcinoma with inferior vena cava thrombus] Kitajima K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1459–66 (Eng. Abstr.) **(Jpn)**

[Prolonged survival after right nephrectomy, excision of the inferior vena cava and ligation of the left renal vein: a case report] Asano T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec;79(12):2027–30 (Eng. Abstr.) **(Jpn)**

[Successful emergency embolectomy and inferior vena cava ligation in acute pulmonary embolism—a case report] Shigeta O, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2305–9 (Eng. Abstr.) **(Jpn)**

[Reconstruction of the inferior vena cava in an experiment with a PTFE prosthesis] Grga A, et al. **Lijec Vjesn** 1988 Sep–Oct;110(9–10):303–6 (Eng. Abstr.) **(Ser)**

TRANSPLANTATION

Assessment of metabolic activity in aortic vein grafts in rats by histochemical examination of hydrolases. Remes V, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug;30(4):538–43

Use of vena cava to obtain additional length for the right renal vein during transplantation of cadaveric kidneys. Chopin DK, et al. **J Urol** 1989 May;141(5):1143–4

Transplantation using inverted renal unit and donor vena cava–iliac vein conduit to bypass recipient distal vena cava and iliac venous systems. Gibel LJ, et al. **J Urol** 1988 Dec; 140(6):1480–1

Sequential changes of noradrenaline content of vein grafts in rats: quantitative estimation by high-performance liquid chromatography using electrochemical detection. Hukki J, et al. **Microsurgery** 1989;10(2):110–2

VENA CAVA, SUPERIOR

see related

SUPERIOR VENA CAVA SYNDROME

Pulmonary embolism as a result of Hickman catheter–related thrombosis. Leiby JM, et al. **Am J Med** 1989 Feb; 86(2):228–31 (32 ref.)

Inadvertent passage of a pulmonary artery catheter from the superior vena cava through the left atrium and left ventricle into the aorta. Allyn J, et al. **Anesthesiology** 1989 Jun; 70(6):1019–21

Central venous catheter vascular erosions. Diagnosis and clinical course. Ellis LM, et al. **Ann Surg** 1989 Apr; 209(4):475–8

Percutaneous extraction of centrally embolized foreign bodies: a report of 16 cases. Grabenwoeger F, et al. **Br J Radiol** 1988 Nov;61(731):1014–8

Extended operations for T3–T4 primary lung cancers. Indications and results. Dartevelle P, et al. **Chest** 1989 Jul; 96(1 Suppl):51S–53S

Echocardiographic detection of an infected superior vena caval thrombus presenting as a right atrial mass. Dick AE, et al. **Chest** 1989 Jul;96(1):212–4

Congenital saccular aneurysm of the superior vena cava. Itoh S, et al. **Jpn J Surg** 1988 Sep;18(5):588–91 (6 ref.)

Bilateral Paget–von Schroetter syndrome including superior caval vein. Maurer HJ. **ROFO** 1989 Aug;151(2):245–7

Suppurative thrombophlebitis of the superior vena cava. de Marie S, et al. **Scand J Infect Dis** 1989;21(1):107–11

A safe technique for the placement of implantable vascular access devices in patients with thrombocytopenia. Coit DG, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):429–31

[Chylothorax due to thrombosis of the superior vena cava during Behçet's disease] Bouslama A, et al. **Tunis Med** 1987 Aug–Sep;65(8–9):539–42 (Eng. Abstr.) **(Fre)**

[Percutaneous transfemoral foreign body removal from the heart or great vessels] Erdmann E. **Dtsch Med Wochenschr** 1988 Oct 14;113(41):1594–7 (Eng. Abstr.) **(Ger)**

[Operative technic for aortic arch aneurysm using profound hypothermic cerebral circulatory arrest with intermittent retrograde cerebral perfusion through the superior vena cava] Kusuhara K, et al. **Kyobu Geka** 1988 Dec; 41(13):1050–4 (Eng. Abstr.) **(Jpn)**

[An experimental study of the use of fresh aortic valve homograft for the usage of the vena caval valve. Part 1. The evaluation of hemodynamics and cineangiographic study] Ishihara K, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):298–305 (Eng. Abstr.) **(Jpn)**

[5 cases of iatrogenic foreign body in the heart and/or great vessels—retrieved percutaneously by interventional radiological technic] Uda M, et al. **Rinsho Hoshasen** 1988 Jul;33(7):761–5 (Eng. Abstr.) **(Jpn)**

[Thrombosis of the superior vena cava caused by catheterization. Successfully treated with streptokinase] Kjernsmo A, et al. **Lakartidningen** 1989 Mar 15; 86(11):954–6 **(Nor)**

ABNORMALITIES

Anomalous venous connection of the superior vena cava to the left atrium. Arsenian MA, et al. **Am J Cardiol** 1988 Nov 1;62(13):989–90

Incidental discovery of persistent left superior vena cava during cardiac surgery. Tomlinson DL, et al. **Anesth Analg** 1989 Sep;69(3):393–5

Echocardiography diagnosis of a persistent left superior vena cava draining into the coronary sinus. Johnson CD. **Bol Asoc Med P R** 1988 Sep;80(9):337–9

Anomalous superior vena cava causing non–visualization of the lungs in perfusion scintigraphy. Morgan A, et al. **Br J Radiol** 1989 Jan;62(733):78–9

Successful permanent pacing via a unilateral left sided superior vena cava [letter] Rosenthal E. **Cathet Cardiovasc Diagn** 1989 Feb;16(2):144

Anomalous systemic venous drainage occurring in association with the hypogenetic lung syndrome. Heron CW, et al. **Clin Radiol** 1988 Jul;39(4):446–9

Atrial septal defect with cyanosis without pulmonary hypertension or anomalous systemic venous drainage to the left atrium. Gdalia J, et al. **Int J Cardiol** 1988 Dec; 21(3):343–6

Anomalous left superior vena cava in combined heart–lung transplantation. von Oppell UO, et al. **J Heart Transplant** 1988 Nov–Dec;7(6):445–7

Right-to-left shunting via persistent left superior vena cava identified by perfusion lung scintigraphy. Rosenbaum RC, et al. **J Nucl Med** 1989 Mar;30(3):412–4

Superior caval to pulmonary venous fistula—the progenitor of the sinus venosus defect? Devine WA, et al. **Pediatr Pathol** 1989;9(3):345–9

Diseases of the major thoracic vessels with emphasis on CT: Seminar B. **Semin Roentgenol** 1989 Apr;24(2):69–141

Congenital anomalies of the superior vena cava: a CT study. Cormier MG, et al. **Semin Roentgenol** 1989 Apr;24(2):77–83

The superior vena cava: conventional projections. Felson B. **Semin Roentgenol** 1989 Apr;24(2):91–5

[Malposition of a central venous catheter in the coronary sinus of an 8-month-old infant] Sarti A, et al. **Cah Anesthesiol** 1988 Nov;36(7):571–3 **(Fre)**

[Endocardial dual-chamber stimulation in an anomalous persistent left superior vena cava] Scherer HE, et al. **Dtsch Med Wochenschr** 1989 Feb 24;114(8):298–300 (Eng. Abstr.) **(Ger)**

[Surgical correction of partial anomalous pulmonary venous drainage: a complication-free operation?] Brunelli F, et al. **Cardiologia** 1988 May;33(5):499–503 (Eng. Abstr.) **(Ita)**

[Nuclear magnetic resonance diagnosis of the retro-esophageal aorta and left superior vena cava] Di Renzi P, et al. **Cardiologia** 1988 Aug;33(8):809–11 (Eng. Abstr.) **(Ita)**

[Surgical repair of common atrium associated with persistent left superior vena cava draining into the left atrium] Kawai T, et al. **Kyobu Geka** 1989 Jun;42(6):490–4 (Eng. Abstr.) **(Jpn)**

[A case report of coronary sinus septal defect associated with left superior vena cava, sinus venosus defect and partial anomalous pulmonary venous drainage] Muraguchi T, et al. **Nippon Geka Hokan** 1988 Sep 1;57(5):434–42 (27 ref.) (Eng. Abstr.) **(Jpn)**

[Surgical treatment of a defect of the venous sinus] Zorin AB, et al. **Vestn Khir** 1989 Jan;142(1):130–4 (55 ref.) **(Rus)**

[A new method of surgical correction of a Venous sinus defect] Zorin AB, et al. **Vestn Khir** 1989 Feb;142(2):91–3 **(Rus)**

INJURIES

Perforation of superior vena cava by subclavian haemodialysis access cannula—a preventable complication? [letter] Salahudeen AK, et al. **Nephrol Dial Transplant** 1988; 3(3):354–5

Pleural effusion with intimal injury of superior vena cava caused by central venous catheter: report of a case. Okada

A, et al. **Tokushima J Exp Med** 1987 Dec;34(3–4):113–8
[Injuries of the venae cavae] Grinev MV, et al. **Vestn Khir** 1988 Sep;141(9):72–7 (Eng. Abstr.) **(Rus)**

PATHOLOGY

[Saccular aneurysm of the superior vena cava] Gaucher L, et al. **Rev Mal Respir** 1988;5(6):637–9 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Physiological changes during temporary occlusion of the superior vena cava in cynomolgus monkeys. Masuda H, et al. **Ann Thorac Surg** 1989 Jun;47(6):890–6
[Comparison of venous pressure in the external jugular vein and the superior vena cava during anesthesia] Blanco Vargas D, et al. **Rev Esp Anestesiol Reanim** 1989 Jan–Feb; 36(1):12–5 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

[Respiratory changes of superior vena cava flow velocity in old myocardial infarction with severe left ventricular dysfunction] Iuchi K, et al. **J Cardiol** 1988 Mar;18(1):99–104 (Eng. Abstr.) **(Jpn)**

SURGERY

Superior vena cava–pulmonary artery shunt. By William W. L. Glenn, 1958 [classical article] Glenn WW. **Ann Thorac Surg** 1989 Jan;47(1):62–4
Superior vena cava bypass: use of the azygos vein. Lee AW, et al. **Ann Thorac Surg** 1988 Dec;46(6):686–7
Longevity of expanded polytetrafluoroethylene grafts for superior vena cava. Masuda H, et al. **Ann Thorac Surg** 1989 Sep;48(3):376–80
Bidirectional cavopulmonary shunts: clinical applications as staged or definitive palliation. Mazzera E, et al. **Ann Thorac Surg** 1989 Mar;47(3):415–20
Vascular reconstruction in surgery for tumor resection. Lee PC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Oct; 42(4):281–8
Total cavopulmonary connection: a logical alternative to atriopulmonary connection for complex Fontan operations. Experimental studies and early clinical experience [see comments] de Leval MR, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):682–95, **Comment in:** J Thorac Cardiovasc Surg 1989 Jul;98(1):150–1
Invited letter concerning: total cavopulmonary connection [letter] Jonas RA, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):830
Extended operation for lung cancer invading the aortic arch and superior vena cava. Nakahara K, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):428–33
The modified Fontan operation [letter; comment] Puga FJ. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):150–1. **Comment on:** J Thorac Cardiovasc Surg 1988 Nov;96(5):682–95
Atresia of the coronary sinus orifice. Fatal outcome after intraoperative division of the drainage left superior vena cava. Yokota M, et al. **J Thorac Cardiovasc Surg** 1989 Jul; 98(1):30–2
Transdiaphragmatic exposure for direct atrial–caval anastomosis in liver transplantation for Budd–Chiari syndrome. Burtch GD, et al. **Transplantation** 1989 Jul; 48(1):161–3
Suprahepatic vena cava cuffs in rat liver transplantation—a simplified method? [letter] Knoop M, et al. **Transplantation** 1989 Mar;47(3):576
[An experimental study on the use of the umbilical vein in blood vessel transplantation and its clinical application] Sun JX. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):114–5, 127 (Eng. Abstr.) **(Chi)**
[A 21-year-old male with progressive body position-dependent cyanosis following 3 corrective operations in tricuspid valve atresia] von Scheidt W, et al. **Internist (Berlin)** 1989 May;30(5):338–40 **(Ger)**
[Assessment of pulmonary blood flow after total cavopulmonary shunt operation and the modified Fontan procedure for univentricular heart] Miura T, et al. **J Cardiol** 1988 Sep;18(3):837–44 (Eng. Abstr.) **(Jpn)**
[Experimental study of superior vena caval's reconstruction with ringed E-PTFE grafts] Ninomiya J, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):114–9 (Eng. Abstr.) **(Jpn)**
[Surgical treatment of the malignant mediastinal tumors—with special reference to prosthetic reconstruction of superior vena cava] Fukushima K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):195–202 (Eng. Abstr.) **(Jpn)**
[Successful pregnancy in a patient with single ventricle after total cavopulmonary shunt operation] Kitagawa T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1369–73 (12 ref.) (Eng. Abstr.) **(Jpn)**
[Radical correction of Fallot's tetralogy following 2 earlier operations, transventricular pulmonary valvulotomy and cavopulmonary anastomosis] Podzolkov VP, et al. **Grudn Khir** 1989 Mar–Apr;(2):92–3 **(Rus)**

VENAE CAVAE

Recent clinical experience with the vena cava filter. Todd GJ, et al. **Am J Surg** 1988 Nov;156(5):353–8
Preliminary clinical experience with the titanium Greenfield vena caval filter. Greenfield LJ, et al. **Arch Surg** 1989 Jun; 124(6):657–9
Treatment of chronic hepatic encephalopathy by the progressive suppression of a spontaneous portacaval shunt via the umbilical vein. Bismuth H, et al. **Br J Surg** 1989 Apr;76(4):409
Lost guide wires: a case report showing a complication of central vein cannulation. Collin GR, et al. **Conn Med** 1988 Sep;52(9):521–3 (17 ref.)
Aorto-caval fistula: a clinical spectrum. Harrington EB, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug;30(4):579–83
Successful treatment of Candida-infected caval thrombosis in critically ill infants by low-dose streptokinase infusion. Lacey SR, et al. **J Pediatr Surg** 1988 Dec;23(12):1204–9
Aorta-vena cava fistula. Alexander JJ, et al. **Surgery** 1989 Jan;105(1):1–12 (188 ref.)
Twelve-year clinical experience with the Greenfield vena caval filter. Greenfield LJ, et al. **Surgery** 1988 Oct; 104(4):706–12
Renal cell carcinoma in horseshoe kidney associated with Turner syndrome and caval extension. Hellström P, et al. **Urology** 1989 Jul;34(1):46–8 (16 ref.)
[Cancer of the kidney with neoplastic caval emboli: surgical excision and prognostic factors] Bittard M, et al. **J Urol (Paris)** 1989;95(1):62 **(Fre)**
[Treatment of invasion of the vena cava by an embryonal carcinoma of the testis] Jacqmin D, et al. **J Urol (Paris)** 1989;95(1):62–3 **(Fre)**
[Aorto-caval fistula complicated by a DeBakey IIIb-type dissecting aortic aneurysm: report of a case] Yamamoto K, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct; 89(10):1744–7 (Eng. Abstr.) **(Jpn)**
[Successful case report concerning removal of right atrial tumor of malignant thymoma—review of right atrial tumor thrombus via the superior or inferior vena cava] Ikeda T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1025–30 (19 ref.) **(Jpn)**
[Renal adenocarcinoma with extension into the vena cava: experience with 10 cases] Srougi M, et al. **AMB Rev Assoc Med Bras** 1988 May–Jun;34(3):84–8 (Eng. Abstr.) **(Por)**

DRUG EFFECTS

Effects of nitroprusside and nitroglycerin on cGMP content and PGI2 formation in aorta and vena cava. Tsai SC, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):61–5

GROWTH & DEVELOPMENT

Age-related anisotropic changes in the fiber orientation of the human blood vessel. An attempt at the application of the molecular orientation analyser for the measurement of human tissue. Yamamoto K, et al. **Cell Mol Biol** 1988; 34(5):571–9

INJURIES

Small-bowel obstruction by adhesions secondary to caval perforation by Greenfield vena cava filter. Burandt TM, et al. **J Am Osteopath Assoc** 1988 Oct;88(10):1239–41

PARASITOLOGY

Caval syndrome in a Dirofilaria immitis–infected dog treated with dichlorvos. Eaton KA, et al. **J Am Vet Med Assoc** 1989 Jul 15;195(2):223–4
Investigation of caval syndrome in dogs experimentally infected with Dirofilaria immitis. Atkins CE, et al. **J Vet Intern Med** 1988 Jan–Mar;2(1):36–40

PATHOLOGY

Vena caval involvement by renal cell carcinoma. Surgical resection provides meaningful long-term survival. Skinner DG, et al. **Ann Surg** 1989 Sep;210(3):387–92; discussion 392–4
Cardiovascular complications of chronic catheterization of the jugular vein in the dog. Mesfin GM, et al. **Vet Pathol** 1988 Nov;25(6):492–502

PHYSIOLOGY

Distensibility characteristics of caval veins and empirical exponential formulae. Sakanishi A, et al. **Biorheology** 1988; 25(1–2):165–72

SURGERY

Treatment of post-shunt portal systemic encephalopathy by embolization of the shunt. Henderson JM. **Hepatology** 1989 Jan;9(1):164–5
Treatment of major venous obstruction with an expandable endoluminal spiral prosthesis. Jakob H, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):112–7
Effect of preclotting and precoating agents on seeded venous grafts. Vo NM, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug;30(4):604–8
[Use of the vena cava in renal transplantation. Extension of the right renal vein] Chopin DK, et al. **Ann Urol (Paris)** 1988;22(5):325–7 (Eng. Abstr.) **(Fre)**

TRANSPLANTATION

Benefits of vena cava removal with the renal vein in cadaver kidney procurement: incidence of arterial complications. Hammoudi Y, et al. **Transplant Proc** 1988 Oct;20(5):762

VENEREAL DISEASES see **SEXUALLY TRANSMITTED DISEASES**

VENEREAL DISEASES, BACTERIAL see **SEXUALLY TRANSMITTED DISEASES, BACTERIAL**

VENEREAL DISEASES, VIRAL see **SEXUALLY TRANSMITTED DISEASES, VIRAL**

VENEREAL TUMORS, TRANSMISSIBLE see **VENEREAL TUMORS, VETERINARY**

VENEREAL TUMORS, VETERINARY

Canine transmissible venereal tumor (TVT): a review. Vermooten MI. **J S Afr Vet Assoc** 1987 Sep;58(3):147–50 (54 ref.)

BLOOD

Role of lymphocytes in dogs experimentally re-challenged with canine transmissible sarcoma. Mizuno S, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):86–95

PATHOLOGY

[Observations on the transmissible venereal tumor (sticker) in the dog. A review of the tumors sent into the Institute for Animal Pathology of Ludwig-Maximilian University, Munich, from 1975 to 1987] Laging C, et al. **Tierarztl Prax** 1989;17(1):85–7 (Eng. Abstr.) **(Ger)**

VENEREAL WARTS see **CONDYLOMATA ACUMINATA**

VENEREOLOGY

see related
SEXUALLY TRANSMITTED DISEASES

EDUCATION

[Methods for monitoring instruction in dermatology and venereology] Anton'ev AA, et al. **Vestn Dermatol Venerol** 1988;(6):73–6 (Eng. Abstr.) **(Rus)**
[The Scientific Society of Dermatovenereologists in the system of increasing the qualifications of physicians] Bukharovich MN, et al. **Vestn Dermatol Venerol** 1989; (3):34–6 (Eng. Abstr.) **(Rus)**
[Perestroika in the teaching of dermatology and venereology at medical institutes] Il'in II, et al. **Vestn Dermatol Venerol** 1988;(8):4–6 (Eng. Abstr.) **(Rus)**

HISTORY

Dermatology and venereology in Greece. Yesterday and today. Stratigos JD. **Int J Dermatol** 1988 Dec;27(10):723–9
[The 100th birthday of Walther Schönfeld: his contribution to the Greifswald University Dermatology Clinic (1920–1935) as the first chairman of dermatology and venereology] Pambor M. **Dermatol Monatsschr** 1989; 175(1):49–54 (Eng. Abstr.) **(Ger)**
[V. M. Tarnovskii, the founder of Russian venereology] Monakhov BS, et al. **Sov Zdravookhr** 1989;(2):76–8 **(Rus)**
[75th anniversary of the Department of Skin and Venereal Diseases of the Saratov Medical Institute] Dovzhanskii SI, et al. **Vestn Dermatol Venerol** 1988;(7):73–6 (Eng. Abstr.) **(Rus)**
[Activity of the Stavropol scientific society of dermatovenereology] Mar'iasis ED, et al. **Vestn Dermatol Venerol** 1989;(2):75–6 (Eng. Abstr.) **(Rus)**
[Review of the articles on dermatology and venereology published in the issues of the Great Medical Encyclopedia (on the 60th anniversary of Soviet medical encyclopedias)] Romanenko GF. **Vestn Dermatol Venerol** 1988;(7):31–6 **(Rus)**
[Contribution of dermatologists and venereologists in the study of pathology of buccal mucosa diseases] Troianskii GN, et al. **Vestn Dermatol Venerol** 1989;(2):73–5 (Eng. Abstr.) **(Rus)**
[The history of the Comenius University Medical School Dermatovenereology Clinic 1939–1945] Tichý M, et al. **Cesk Zdrav** 1988 Sep;36(8–9):387–91 (Eng. Abstr.) **(Slo)**

TRENDS

[Problems of dermatology and venereology in conducting universal dispensary care of the population] Iatsukha MV. **Vestn Dermatol Venerol** 1989;(4):35–8 (Eng. Abstr.) **(Rus)**
[The prospective tasks of dermatovenereology] Skripkin IuK, et al. **Vestn Dermatol Venerol** 1988;(9):4–9 **(Rus)**

VENESECTION see **BLOODLETTING**

VENIPUNCTURE see **BLOODLETTING**

VENO-OCCLUSIVE DISEASE OF LIVER see **HEPATIC VENO-OCCLUSIVE DISEASE**

VENOGRAPHY see **PHLEBOGRAPHY**

VENOMS

see related
ANTIVENINS

ADVERSE EFFECTS

Hypotension, myocardial infarction, and coagulopathy following gila monster bite. Preston CA. **J Emerg Med** 1989 Jan–Feb;7(1):37–40

ANALYSIS

Purification and characterization of a lethal factor in venom from the crown-of-thorns starfish (Acanthaster planci). Shiomi K, et al. **Toxicon** 1988;26(11):1077–83

ENZYMOLOGY

The proinflammatory effect of intra-articular injection of soluble human and venom phospholipase A2. Vadas P, et al. **Am J Pathol** 1989 Apr;134(4):807–11

IMMUNOLOGY

Further observations of stopping venom immunotherapy: comparison of patients stopped because of a fall in serum venom-specific IgE to insignificant levels with patients stopped prematurely by self-choice. Reisman RE, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):1049–54

PHARMACOLOGY

Helodermin stimulates glucagon secretion in the mouse. Ahrén B. **Peptides** 1989 May–Jun;10(3):709–11

THERAPEUTIC USE

Late onset reactions following venom immunotherapy and venom skin tests. Reisman RE. **Ann Allergy** 1988 Nov; 61(5):383–7

TOXICITY

Comparison of phospholipase activity with direct and indirect lytic effects of animal venoms upon human red cells. Sosa BP, et al. **Comp Biochem Physiol [B]** 1979; 64(2):231–4

VENOUS INSUFFICIENCY

[Chronic venous insufficiency: physiopathology, clinical aspects and therapy] Antignani PL. **Clin Ter** 1987 Jan 15; 120(1):61–5 (Ita)

BLOOD

White cell and platelet trapping in patients with chronic venous insufficiency. Thomas PR, et al. **Phlebologie** 1988 Nov–Dec;41(4):771–6

Chronic venous incompetence and transcutaneous oxygen pressure: a controlled study. Mannarino E, et al. **Vasa** 1988; 17(3):159–61

[Therapy using stanozolol and measurement of transcutaneous oxygen] Neumann HA, et al. **Phlebologie** 1988 Jul–Oct;41(3):679–82 (Fre)

COMPLICATIONS

The aetiology of venous ulceration. Burnand KG. **Acta Chir Scand Suppl** 1988;544:21–4

Local treatment of venous leg ulcers. Eriksson G. **Acta Chir Scand Suppl** 1988;544:47–52

Treatment of venous leg ulcers with cadexomer iodine with particular reference to iodine sensitivity. Floyer C, et al. **Acta Chir Scand Suppl** 1988;544:60–1

Iodosorb compared to standard treatment in chronic venous leg ulcers—a multicenter study. Hillström L. **Acta Chir Scand Suppl** 1988;544:53–6

Investigations on the pathogenesis of venous leg ulcers. Partsch H. **Acta Chir Scand Suppl** 1988;544:25–9

Therapy of lower extremity infections with ciprofloxacin in patients with diabetes mellitus, peripheral vascular disease, or both. Peterson LR, et al. **Am J Med** 1989 Jun;86(6 Pt 2):801–8

Aggressive ulcerative necrobiosis lipoidica associated with venous insufficiency, giant-cell phlebitis and arteritis. Markey AC, et al. **Clin Exp Dermatol** 1988 May;13(3):183–6

[Procedure to follow with a resistant venous ulcer of the ankle] Rettori R, et al. **J Mal Vasc** 1989;14(2):143–8 (Eng. Abstr.) (Fre)

[Varices caused by ostial insufficiency of the internal saphenous vein] Maleti O. **Phlebologie** 1988 Jul–Oct; 41(3):709–13 (Fre)

[Venous pain] Thiery L. **Phlebologie** 1988 Jul–Oct; 41(3):673–8 (Eng. Abstr.) (Fre)

[Diagnosis of venous insufficiency in erectile dysfunction: comparative studies of cavernosonography and Doppler sonography] Gall H, et al. **Urologe [A]** 1989 Jan;28(1):48–53 (Eng. Abstr.) (Ger)

[Evaluation of blood and lymphatic vascularization in post-traumatic edema of the legs] Pawelec R. **Ann Acad Med Stetin** 1988;34:177–90 (Eng. Abstr.) (Pol)

[Surgical treatment of impotence of vascular origin] Dudkin BP, et al. **Klin Med (Mosk)** 1989 Mar;67(3):88–92 (Eng. Abstr.) (Rus)

DIAGNOSIS

Progress in the investigation of chronic venous insufficiency. Nicolaides A, et al. **Ann Vasc Surg** 1989 Jul;3(3):278–92 (33 ref.)

The assessment of primary varicose veins by Doppler ultrasound—the role of sapheno-popliteal incompetence and the short saphenous systems in calf varicosities. Mitchell DC, et al. **Eur J Vasc Surg** 1987 Apr;1(2):113–5

Venous insufficiency of the leg. Menzoian JO, et al. **Hosp Pract [Off]** 1989 May 30;24(5A):109–10, 113–4, 116

Noninvasive diagnosis and quantitation of popliteal reflux in the swollen and ulcerated leg. Christopoulos D, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct;29(5):535–9

Photoplethysmography in the assessment of venous insufficiency. Nicolaides AN, et al. **J Vasc Surg** 1987 Mar; 5(3):405–12

[Light reflex rheography—a new examination method in phlebology] Bizoň J. **Vnitr Lek** 1989 Feb;35(2):158–63 (Eng. Abstr.) (Cze)

[Functional explorations of the veins in the obese with superficial venous insufficiency] Schadeck M. **Phlebologie** 1988 Jul–Oct;41(3):333–7 (Fre)

[Difficulties of clinical tests of the veins in an obese subject] Vin F. **Phlebologie** 1988 Jul–Oct;41(3):501–7 (Fre)

[Noninvasive angiological studies and venous pathology of the lower limbs] Buchheim G. **Rev Med Suisse Romande** 1988 Sep;108(9):753–60 (Fre)

[Phlebologic indications for duplex sonography] Marshall M. **Fortschr Med** 1989 May 20;107(15):325–9 (Eng. Abstr.) (Ger)

[Computed tomography and magnetic resonance tomography of the lower leg in chronic venous insufficiency] Gmelin E, et al. **ROFO** 1989 Jul;151(1):50–6 (Eng. Abstr.) (Ger)

[The diagnosis of acute (deep venous thrombosis) amd of chronic venous circulatory disorders "chronic venous insufficiency) using light reflection rheography (LRR) in clinical and hospital practice] Hördegen KM. **Schweiz Rundsch Med Prax** 1988 Nov 8;77(45):1224–30 (Eng. Abstr.) (Ger)

[Venous hemodynamics in axillary venous stasis] Joel A, et al. **Z Gesamte Inn Med** 1988 Oct 15;43(20):592–3 (Eng. Abstr.) (Ger)

[Doppler sonographic diagnosis of secondary popliteal and femoral vein insufficiency] Stranzenbach W. **Z Hautkr** 1989 Jan 15;64(1):7 (Ger)

[Results of new diagnostic applications in the phlebologic field with reflected-light rheography] Tumino G, et al. **Ann Ital Chir** 1987;59(1–6):391–401 (Ita)

[Clinical evaluation of phlebopathies of the lower limbs using Doppler ultrasonography] Scagno C, et al. **Minerva Med** 1988 Dec;79(12):1079–83 (Eng. Abstr.) (Ita)

[Non-invasive methods of diagnosis of chronic venous pathology of the lower extremities] Konstantinova GD, et al. **Kardiologiia** 1988 Jun;28(6):76–80 (Eng. Abstr.) (Rus)

[Occlusive plethysmography in the diagnosis of disorders of venous blood flow in the legs] Lytkin MI, et al. **Vestn Khir** 1988 Jun;140(6):38–43 (Eng. Abstr.) (Rus)

[Oscillographic, rheovasographic and radioisotope research methods in the diagnosis of obliterating vascular diseases of the extremities] Suvorov PM, et al. **Voen Med Zh** 1988 Dec;(12):27–9 (Rus)

DRUG THERAPY

Effect of oral pentoxifylline therapy on venous lower extremity ulcers due to deep venous incompetence. Angelides NS, et al. **Angiology** 1989 Aug;40(8):752–63

A double-blind trial of calcium dobesilate in chronic venous insufficiency. Casley-Smith JR. **Angiology** 1988 Oct; 39(10):853–7

Use of extract of Ruscus aculeatus in venous disease in the lower limbs. Cappelli R, et al. **Drugs Exp Clin Res** 1988; 14(4):277–83

Evaluation of the clinical pharmacological activity of a phlebotonic agent. Application to the study of Daflon 500 mg. Duchene Marullaz P, et al. **Int Angiol** 1988 Apr–Jun; 7(2 Suppl):25–32

Effect of a flavonoid preparation (S 5682) on experimental capillary permeability increase in rat paw and rabbit skin. Godfraind T. **Int Angiol** 1988 Apr–Jun;7(2 Suppl):17–9

Clinical evaluation of a venotropic drug in man. Example of Daflon 500 mg. Laurent R, et al. **Int Angiol** 1988 Apr–Jun;7(2 Suppl):39–43

Control of therapy with microcirculatory and phlebotropically active drugs in patients with congenital and acquired venous insufficiency. Wenzel E, et al. **Int Angiol** 1989 Jan–Mar;8(1):41–6

Evaluation of the microcirculatory effects of Venoruton in patients with chronic venous hypertension by laserdoppler flowmetry, transcutaneous PO2 and PCO2 measurements, leg volumetry and ambulatory venous pressure measurements. Belcaro G, et al. **Vasa** 1989;18(2):146–51

[Control of venous stasis. Use of low molecular weight heparin—a multicenter study] Kreutzberg K. **Fortschr Med** 1988 Sep 20;106(27):67 (Ger)

[Effect of dihydroergotamine on venous macro- and microcirculation in patients with healthy veins and in patients with chronic venous insufficiency] Birkel L, et al. **Vasa Suppl** 1988;23:253–6 (Ger)

[Mesoglycan in acute and chronic venous insufficiency of the legs] Sangrigoli V, et al. **Clin Ter** 1989 May 15; 129(3):207–9 (Eng. Abstr.) (Ita)

[Effects of therapy with aminaftone on chronic venous and lymphatic stasis] De Anna D, et al. **Minerva Cardioangiol** 1989 May;37(5):251–4 (Eng. Abstr.) (Ita)

[Evaluation of the efficacy of a phlebotropic drug by the Doppler method] Severin E, et al. **Minerva Cardioangiol** 1988 Jul–Aug;36(7–8):375–6 (Eng. Abstr.) (Ita)

EPIDEMIOLOGY

Varicose veins (VV) and chronic venous insufficiency (CVI). Medical and socio-economic aspects. Basle study. Biland L, et al. **Acta Chir Scand Suppl** 1988;544:9–11

[Epidemiology and pathophysiology of primary varicose veins] Rudofsky G. **Langenbecks Arch Chir** 1988;Suppl 2:139–44 (13 ref.) (Eng. Abstr.) (Ger)

ETIOLOGY

Venous insufficiency in a young man secondary to a traumatic arteriovenous fistula. Psaila JV, et al. **Ann Vasc Surg** 1989 Jan;3(1):63–7

[Chronic venous insufficiency of the adipose limb] Bassi G, et al. **Phlebologie** 1988 Jul–Oct;41(3):603–8 (Fre)

[Comparative evaluation of the methods of treating postphlebitic syndrome in the light of remote results] Vasiutkov VIa, et al. **Kardiologiia** 1988 Jun;28(6):111–2 (Rus)

[Effect of functional disorders of deep veins of the lower extremities on the clinical course of varicose veins] Gladkikh VG, et al. **Vestn Khir** 1987 Dec;139(12):50–3 (Eng. Abstr.) (Rus)

PATHOLOGY

Intervertebral foramen venous obstruction. A cause of periradicular fibrosis? Hoyland JA, et al. **Spine** 1989 Jun; 14(6):558–68

[Congestive lymphostatic papillomatosis] Stöberl C, et al. **Hautarzt** 1988 Jul;39(7):441–6 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Flow and pressure studies in venous insufficiency. Bjørdal R. **Acta Chir Scand Suppl** 1988;544:30–3

Non-invasive functional investigation of chronic venous insufficiency with special reference to foot volumetry. Norgren L. **Acta Chir Scand Suppl** 1988;544:39–43

Hemodynamics of revascularization for iliofemoral venous occlusion: a short-term canine model. Laika SG, et al. **J Vasc Surg** 1988 Nov;8(5):592–9

RADIOGRAPHY

Radiological aspects of venous insufficiency. Nylander G. **Acta Chir Scand Suppl** 1988;544:34–8

Clinical use of indirect lymphography in different forms of leg edema. Partsch H, et al. **Lymphology** 1988 Sep; 21(3):152–60

[Computerized tomography studies of the lower legs of patients with chronic venous insufficiency and arthrogenic venous stasis syndrome] Schmeller W, et al. **Hautarzt** 1989 May;40(5):281–9 (Eng. Abstr.) (Ger)

[Venous diseases of the extremities—surgery and demands on radiology] Imig H. **Rontgenblatter** 1988 Jul;41(7):267–9 (Eng. Abstr.) (Ger)

[Clinical aspects of venous diseases and diagnostic demands on radiology] Wienert V. **Rontgenblatter** 1988 Jul; 41(7):265–6 (Eng. Abstr.) (Ger)

[Videomagnetic recording during phleboscopy of the lower extremities (videophlebography) and its diagnostic value in varicose disease] Khachkuruzov SG, et al. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):27–9 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

Testing minimal transit time in the venous system of the lower limbs using dynamic radionuclide venography. Márk B, et al. **Int Angiol** 1988 Jul–Sep;7(3):231–3

SURGERY

Vein valve transplantation segmental transposition: a case report. Márk B, et al. **Acta Chir Hung** 1989;30(2):89–96

Reconstructive venous surgery. Eriksson I. **Acta Chir Scand Suppl** 1988;544:69–74

Surgical management of chronic venous insufficiency. Löfgren KA. **Acta Chir Scand Suppl** 1988;544:62–8 (38 ref.)

Venous reconstruction for iliofemoral venous occlusion facilitated by temporary arteriovenous shunt. Long-term results in nine patients. Okadome K, et al. **Arch Surg** 1989 Aug;124(8):957–60

Superficial femoral vein transposition in Klippel-Trenaunay syndrome. Taheri SA, et al. **J Pediatr Surg** 1989 May; 24(5):494–6

Repair of incompetent venous valves: a new technique. Jessup G, et al. **J Vasc Surg** 1988 Nov;8(5):569–75

Technique in direct venous valvuloplasty. Sottiurai VS. **J Vasc Surg** 1988 Nov;8(5):646–8

Can pre-operative duplex scanning replace pre-operative short saphenous venography as an aid to localizing the sapheno-popliteal junction? Sugrue M, et al. **Phlebologie**

1988 Nov–Dec;41(4):722–5
Surgical reconstruction of incompetent deep vein valves. Eriksson I, et al. **Ups J Med Sci** 1988;93(2):139–43
Venous surgery in erectile dysfunction: a critical report on 116 patients. Treiber U, et al. **Urologe** 1989 Jul;34(1):22–7
[Ringing of femoral veins for primary valvular incompetency of deep veins of the lower extremity] Cheng CJ, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Feb;26(2):74–5, 124 (Eng. Abstr.) (Chi)
[Experimental and clinical study of transplanted autogenous valve-bearing venous segments of superficial femoral veins] Sun JM. **Chung Hua Wai Ko Tsa Chih** 1988 Oct; 26(10):628–30, 640 (Eng. Abstr.) (Chi)
[Advances in vascular surgery] Wang ZG. **Chung Hua Wai Ko Tsa Chih** 1988 Feb;26(2):83–5 (25 ref.) (Chi)
[Valvular substitution of the popliteal vein by double tendon transposition] Zhu SQ. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):620–1, 639 (Eng. Abstr.) (Chi)
[Prevention of venous thromboses and cutaneous necroses using physical methods and pressure therapy in the surgery of chronic venous insufficiency of the lower limbs] Valentin J, et al. **Phlebologie** 1988 Jul–Oct;41(3):690–6 (Eng. Abstr.) (Fre)
[Hypervascularization syndrome of the penis following arterialization of the dorsal penile vein for erectile impotence] Fritsch P, et al. **Hautarzt** 1989 Jul;40(7):434–6 (Eng. Abstr.) (Ger)
[Endoscopic dissection of perforating veins] Hauer G, et al. **Langenbecks Arch Chir** 1988;Suppl 2:157–60 (Eng. Abstr.) (Ger)
[Leakage correction by resection of the deep dorsal penis vein. Assessment of results after 4 years of venous potency surgery] Weidner W, et al. **Urologe [A]** 1989 Jul; 28(4):217–22 (Eng. Abstr.) (Ger)
[Resection of the deep dorsal penile vein in the treatment of vascular-induced impotence] Darewicz J, et al. **Z Urol Nephrol** 1989 Jun;82(6):321–3 (Eng. Abstr.) (Ger)
[Surgery of the saphenous-popliteal junction in the treatment of initial insufficiency of the small saphenous vein] Pampari GC, et al. **Acta Biomed Ateneo Parmense** 1988; 59(3–4):111–5 (Eng. Abstr.) (Ita)
[Surgical reconstruction of the valves of the deep veins in the femoro-popliteal segment] Driuk NF, et al. **Klin Khir** 1988;(7):49–52 (Eng. Abstr.) (Rus)
[New methods of surgical correction of regional blood flow in combined disorders of the iliac and femoral veins in patients with the post-thrombophlebitis syndrome] Sukharev II, et al. **Klin Khir** 1989;(3):16–8 (Eng. Abstr.) (Rus)
[Surgical correction and reconstruction of the valves of the femoro-popliteal segment of deep veins] Driuk NF, et al. **Vestn Khir** 1988 Jun;140(6):134–7 (Rus)

THERAPY

Evaluation of the effects of elastic compression in patients with chronic venous hypertension by laser–Doppler flowmetry. Belcaro G, et al. **Acta Chir Belg** 1988 May–Jun; 88(3):163–7
Compression sclerotherapy in venous insufficiency. Hobbs JT. **Acta Chir Scand Suppl** 1988;544:75–80
Compression treatment of venous insufficiency and its sequels. Mathiesen F. **Acta Chir Scand Suppl** 1988;544:44–6
Meningococcal purpura fulminans: treatment of vascular insufficiency in a 2-yr-old child with lumbar epidural sympathetic blockade. Anderson CT, et al. **Anesthesiology** 1989 Sep;71(3):463–4
A prospective randomized trial of Unna's boots versus hydroactive dressing in the treatment of venous stasis ulcer [letter] Moglia RM. **J Vasc Surg** 1989 Mar;9(3):508
The venous flow augmentation pump: a solution to venous congestion. Lendvay PG, et al. **Microsurgery** 1988; 9(3):208–12
High-compression elastic stockings [letter] O'Donnell TF Jr. **Surgery** 1989 Jan;105(1):117–8
[Stimulation of the spinal cord in peripheral vasculopathies] Meglio M. **J Mal Vasc** 1989;14(1):50–1 (Eng. Abstr.) (Fre)
[Evaluation of venous therapy. Venous tonics, vascular protectants and thermal cures. What are the advantages for the patient?] Garreau C, et al. **Phlebologie** 1988 Nov–Dec;41(4):857–76 (26 ref.) (Eng. Abstr.) (Fre)
[Patients' rights, being the fourth third of phlebology therapy. Tribute to Glauco Bassi] Tessari L. **Phlebologie** 1989 Apr–Jun;42(2):201–9 (Eng. Abstr.) (Fre)
[Assessment of the effect of compression bandages] Ohlert P, et al. **Vasa** 1988;17(4):262–6 (Eng. Abstr.) (Ger)
[Indications-related use of stockings—measuring venous pump function] Stöberl C, et al. **Vasa** 1989;18(1):35–9 (Eng. Abstr.) (Ger)
[Therapeutic guidelines in chronic venous insufficiency] von Uslar D. **Z Hautkr** 1988;63 Suppl 4:87–91 (11 ref.) (Eng. Abstr.) (Ger)
[Conservative treatment of chronic venous insufficiency of the legs (I)] Winkler M, et al. **Zentralbl Chir** 1988; 113(20):1351–8 (Eng. Abstr.) (Ger)
[Chronic deep venous insufficiency. Medical pharmacologic and surgical treatment] Pietravallo A. **Angiologia** 1989 Jan–Feb;41(1):4–10 (0 ref.) (Eng. Abstr.) (Spa)
[Compression using elastic stockings in deep and superficial venous insufficiency of the legs: plethysmographic study] Tanzini G, et al. **Angiologia** 1988 Jul–Aug;40(4):149–51 (Eng. Abstr.) (Spa)

VENOUS PRESSURE

Evaluation of the effects of elastic compression in patients with chronic venous hypertension by laser–Doppler flowmetry. Belcaro G, et al. **Acta Chir Belg** 1988 May–Jun; 88(3):163–7
Failure of the venous pressure decline in hypovolaemia to be transmitted to the capillary level and cause compensatory absorption of extravascular fluid into the circulation. Länne T, et al. **Acta Physiol Scand** 1989 May; 136(1):141–2
Venous pressure measurements in vein of Galen aneurysms. Quisling RG, et al. **AJNR** 1989 Mar–Apr;10(2):411–7
Intestinal lymphatic flow during portal venous hypertension. Dunbar BS, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G94–8
Sodium excretion during elevation of renal venous pressure: modulation by dDAVP. Firth JD, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F776–9
Portal venous pressure and portasystemic shunting in experimental portal hypertension. Geraghty JG, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G52–7
Effect of jugular venous pressure on cerebral autoregulation in dogs. McPherson RW, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):H1516–24
Systolic venous waves cause spurious signs of arterial hemoglobin desaturation. Mark JB. **Anesthesiology** 1989 Jul;71(1):158–60
Intrahepatic pressure measurement as a reflection of portal venous pressure [letter] Gibson PR. **Hepatology** 1988 Nov–Dec;8(6):1723
Effect of intermittent venous occlusion on transcutaneous oxygen tension in lower limbs with severe arterial occlusive disease. Rooke TW, et al. **Int J Cardiol** 1988 Oct;21(1):76–8
Reflex increase in renal nerve activity during acutely altered portal venous pressure. Koyama S, et al. **J Auton Nerv Syst** 1988 Jun;23(1):55–62
The effect of cerebrospinal fluid pressure on dural venous pressure in young rats. Jones HC, et al. **J Neurosurg** 1989 Jul;71(1):119–23
Hemodynamics of revascularization for iliofemoral venous occlusion: a short-term canine model. Lalka SG, et al. **J Vasc Surg** 1988 Nov;8(5):592–9
Laser–Doppler flowmetry evaluation of the effects of elastic compression in patients with venous ulcerations. Belcaro G, et al. **Panminerva Med** 1988 Oct–Dec;30(4):208–12
A study of the capillary permeability in patients with venous hypertension by a new system: the vacuum suction chamber (VSC) device. Belcaro G, et al. **Panminerva Med** 1988 Oct–Dec;30(4):201–4
Tolerance of the cerebral venous system to retrograde perfusion pressure in focal cerebral ischemia in rats. Ueda T, et al. **Stroke** 1989 Mar;20(3):378–85
Observations on abdominal venous pressures during orthotopic liver transplantation in man. Peachey T, et al. **Transplant Proc** 1989 Jun;21(3):3526–7
[Measurements of portal venous pressure in 100 normal Chinese] Zhou YB, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):158–9, 191 (Eng. Abstr.) (Chi)
[The role of episcleral venous pressure in the development of secondary glaucomas] Jørgensen JS, et al. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):471–5 (Eng. Abstr.) (Ger)
[The combination of phlebography and invasive measurement of venous pressure] Weber J. **Rontgenblatter** 1988 Jul; 41(7):280–7 (Eng. Abstr.) (Ger)
[Light reflection rheography and invasive measurement of venous pressure in the standing exercise test] Seyček J. **Vasa** 1989;18(1):18–23 (Eng. Abstr.) (Ger)
[Indications-related use of stockings—measuring venous pump function] Stöberl C, et al. **Vasa** 1989;18(1):35–9 (Eng. Abstr.) (Ger)

DRUG EFFECTS

Effect of renal venous pressure elevation on tubular sodium and water reabsorption in the dog kidney. Abildgaard U, et al. **Acta Physiol Scand** 1988 Feb;132(2):135–42
Angiotensin II and tubular transport responses to renal venous pressure elevation in the dog kidney. Abildgaard U. **Acta Physiol Scand** 1988 Feb;132(2):257–8
Effects of ANP on venous pressures and microvascular protein permeability in dog forelimb. Eliades D, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H272–9
Mechanisms involved in the effect of M6434 on experimental hemorrhagic shock: I. Effects on myocardial contractility and venous return. Uemura A, et al. **Circ Shock** 1989 Mar; 27(3):173–82
Evaluation of capillary permeability and microcirculation in patients with chronic venous hypertension treated with venoruton by the vacuum suction chamber (VSC) device and laser–Doppler flowmetry. Belcaro G, et al. **Phlebologie** 1988 Nov–Dec;41(4):847–56
Evaluation of the microcirculatory effects of Venoruton in patients with chronic venous hypertension by laserdoppler flowmetry, transcutaneous PO2 and PCO2 measurements, leg volumetry and ambulatory venous pressure measurements. Belcaro G, et al. **Vasa** 1989;18(2):146–51
[Venoruton and capillary permeability] Cesarone MR, et al. **Minerva Cardioangiol** 1989 May;37(5):265–8 (Eng. Abstr.) (Ita)

VENOUS PRESSURE, CENTRAL see **CENTRAL VENOUS PRESSURE**

VENOUS THROMBOSIS see **THROMBOPHLEBITIS**

VENOVENOUS HEMOFILTRATION see **HEMOFILTRATION**

VENTILATION

Reducing workers' dust exposure during bag stacking in enclosed vehicles. Cecala AB, et al. **Am Ind Hyg Assoc J** 1989 Feb;50(2):99–104
Concentrations of nicotine, RSP, CO and CO2 in nonsmoking areas of offices ventilated by air recirculated from smoking designated areas. Sterling TD, et al. **Am Ind Hyg Assoc J** 1988 Sep;49(9):423–6
Air exchange efficiency of displacement ventilation in a printing plant. Breum NO. **Ann Occup Hyg** 1988; 32(4):481–8
Breathing conditions for animals in radiobiological experiments [letter] Stevens GN, et al. **Br J Radiol** 1988 Sep;61(729):863–4
The ergonomics of ventilated operating theatre clothing. Ross I, et al. **Ergonomics** 1988 Jul;31(7):1103–13
Basement ventilation needed to lower indoor radon to acceptable levels. Fleischer RL. **JAPCA** 1988 Jul; 38(7):914–6
An evaluation of intra-cage ventilation in three animal caging systems. Keller LS, et al. **Lab Anim Sci** 1989 May; 39(3):237–42
Evaluation of a smoke evacuator used for laser surgery. Smith JP, et al. **Lasers Surg Med** 1989;9(3):276–81
Superior limbic keratoconjunctivitis apparently related to particulate material from a ventilation system [letter] Corona R, et al. N **Engl J Med** 1989 May 18;320(20):1354
[Evaluation of technical indoor air ventilation systems in operating departments from the health viewpoint] Bahr E, et al. **Off Gesundheitswes** 1989 Jan;51(1):21–6 (Eng. Abstr.) (Ger)
[Effect of the outdoor climate on microclimatic conditions of work sites in buildings] Sickert P, et al. **Z Gesamte Hyg** 1988 Aug;34(8):481–3 (Eng. Abstr.) (Ger)
[Dermatologic problems of workers in clean rooms] Viehbeck G. **Z Hautkr** 1988;63 Suppl 4:79–81 (Eng. Abstr.) (Ger)
[Hygienic and medico-biological aspects of ventilation and air conditioning systems] Lebedev SV, et al. **Gig Sanit** 1988 Oct;(10):68–71 (Rus)
[Estimation of the instability of emissions of chemical substances in evaluating sanitary and hygienic conditions] Oganezov KA, et al. **Gig Sanit** 1989 May;(5):72–3 (Rus)
[Improving working conditions during the use of electroerosion equipment in the trimming and stripping of diamond wheels] Beliavskii EM, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):47–8 (Rus)
[Ventilation of the PNSh-14 continuous spinning machine] Zhigalov VP, et al. **Gig Tr Prof Zabol** 1989;(2):48–50 (Rus)
[The quality of indoor air and its significance for health. Ventilation systems and smoking are the most hazardous] Werkö L. **Lakartidningen** 1989 Mar 29;86(13):1158 (Swe)

INSTRUMENTATION

A comparison of the effectiveness of nitrous oxide scavenging devices. Donaldson D, et al. **Can Dent Assoc J** 1989 Jul; 55(7):535–7
The efficiency of nitrous oxide scavenging devices in dental offices. Donaldson D, et al. **Can Dent Assoc J** 1989 Jul; 55(7):541–3
The mechanisms of nitrous oxide scavenging devices. Donaldson D, et al. **Can Dent Assoc J** 1989 Jul;55(7):531–4

VENTILATION, HIGH-FREQUENCY see **HIGH-FREQUENCY VENTILATION**

VENTILATION, HIGH FREQUENCY JET see **HIGH-FREQUENCY JET VENTILATION**

VENTILATION, MECHANICAL see **RESPIRATION, ARTIFICIAL**

VENTILATION, MIDDLE EAR see **MIDDLE EAR VENTILATION**

VENTILATION-PERFUSION RATIO

see related
PULMONARY CIRCULATION

Ventilation-perfusion mismatching. Nunn JF. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):33–6
The influence of position on ventilation-perfusion distribution after abdominal surgery. Bonnet F, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):585–9
A slide-rule for assessment of venous admixture. Zetterström H. **Acta Anaesthesiol Scand** 1989 Apr;33(3):250–4
Regional distribution of lung perfusion and ventilation in patients with chronic congestive heart failure and its relationship to cardiopulmonary hemodynamics. Mohsenifar Z, et al. **Am Heart J** 1989 Apr;117(4):887–91
Patterns of pulmonary perfusion scans in normal subjects.

IV. The prevalence of abnormal scans in smokers 30 to 49 years of age. Fedullo PF, et al. **Am Rev Respir Dis** 1989 May;139(5):1155–7

Serial relationships between ventilation–perfusion inequality and spirometry in acute severe asthma requiring hospitalization. Roca J, et al. **Am Rev Respir Dis** 1988 May; 137(5):1055–61

Spontaneous abrupt changes in the distribution of ventilation: a cause for apparent mismatching on ventilation/perfusion scintigraphy. Peters AM, et al. **Br J Radiol** 1989 Jun; 62(738):536–43

Microscopic tumour embolism: an unusual cause of ventilation–perfusion mismatch. Rawlinson J, et al. **Br J Radiol** 1988 Oct;61(730):956–7

Ventilation–perfusion imaging in evaluating regional lung function in nonpenetrating injury to the chest. Van Eeden SF, et al. **Chest** 1989 Mar;95(3):632–8

Unusual cause of entire lung ventilation–perfusion mismatch. Bergh JR, et al. **Clin Nucl Med** 1989 Jun;14(6):464–7

Ventilation/perfusion mismatch caused by emphysematous bullae. Goodgold HM, et al. **Clin Nucl Med** 1989 Jul; 14(7):475–8

Perfusion lung scan in patients operated for transposition of the great arteries. Houzard C, et al. **Clin Nucl Med** 1989 Apr;14(4):268–70

Abnormal ventilation–perfusion scan due to swallowed DTPA aerosol and a paralyzed hemidiaphragm. Kolla I, et al. **Clin Nucl Med** 1988 Nov;13(11):842–3

Recursive identification of lung parameters. Valcke CP, et al. **Comput Methods Programs Biomed** 1989 Jun;29(2):143–9

End–tidal carbon dioxide as a noninvasive monitor of circulatory status during cardiopulmonary resuscitation [letter] Fletcher R. **Crit Care Med** 1989 Sep;17(9):970–1

Ventilation–perfusion relationships in the standing horse: an inert gas elimination study. Hedenstierna G, et al. **Equine Vet J** 1987 Nov;19(6):514–9

Ventilation–perfusion relationships in the anaesthetised horse. Nyman G, et al. **Equine Vet J** 1989 Jul;21(4):274–81

V/Q and alveolar gas exchange in pulmonary sarcoidosis. Eklund A, et al. **Eur Respir J** 1989 Feb;2(2):135–44

Assessment of ventilation–perfusion distribution by multiple inert gas elimination techniques: its application in the child. Hedenstierna G, et al. **Eur Respir J [Suppl]** 1989 Mar; 2(4):181S–183S

Ventilation–perfusion heterogeneity and gas exchange variables in acute pulmonary embolism evaluated by two different computerized techniques. Prediletto R, et al. **Int J Clin Monit Comput** 1988;5(4):221–7

Effect of positional change on ventilation–perfusion distribution in unilateral pleural effusion. Gillespie DJ, et al. **Intensive Care Med** 1989;15(4):266–8

Reflection of differential pulmonary perfusion in polytrauma patients on differential lung ventilation (DLV). A comparison of two CO2–derived methods. Zandstra DF, et al. **Intensive Care Med** 1989;15(3):151–4

Ventilation–perfusion relationships during induced normovolemic polycythemia in dogs. Balgos AA, et al. **J Appl Physiol** 1988 Oct;65(4):1686–92

Reduction of lung perfusion increases VA/Q heterogeneity. Ohlsson J, et al. **J Appl Physiol** 1989 May;66(5):2423–30

Quantification of regional V/Q ratios in humans by use of PET. I. Theory. Rhodes CG, et al. **J Appl Physiol** 1989 Apr;66(4):1896–904

Quantification of regional V/Q ratios in humans by use of PET. II. Procedure and normal values. Rhodes CG, et al. **J Appl Physiol** 1989 Apr;66(4):1905–13

Lobar contribution to VA/Q inequality during constant–flow ventilation. Schumacker PT, et al. **J Appl Physiol** 1988 Nov;65(5):2132–7

Ventilation/perfusion mismatch caused by positive pressure ventilatory support. Kim CK, et al. **J Nucl Med** 1989 Jul; 30(7):1268–70

Effect of PEEP on regional ventilation and perfusion in the mechanically ventilated preterm lamb. Schlessel JS, et al. **J Nucl Med** 1989 Aug;30(8):1342–50

Gastrointestinal visualization during xenon–133 ventilation study in a patient with tracheoesophageal fistula. Takehara Y, et al. **J Nucl Med** 1989 Feb;30(2):258–9

Changes in ventilation during V/Q scanning. **Lancet** 1989 Sep 16;2(8664):660 (15 ref.)

Lung perfusion and aerosol distributions in preterm ventilated lambs. Berry D, et al. **Pediatr Pulmonol** 1989;6(3):147–52

Unusual ventilation–perfusion patterns in primary lung tuberculosis. Chanoine JP, et al. **Pediatr Pulmonol** 1988; 5(1):51–4

Resting oxygen consumption and ventilation in cystic fibrosis. Hirsch JA, et al. **Pediatr Pulmonol** 1989;6(1):19–26

Unusual ventilation–perfusion mismatch in partial anomalous venous return. Chanoine JP, et al. **Pediatr Radiol** 1988; 18(6):497–8

Comparison of the information in two lung function experiments. Lim LL, et al. **Stat Med** 1989 Jul;8(7):861–70

The topographical distribution of the inhalation–to–perfusion ratio in double–muscled and Friesian calves. Gustin P, et al. **Vet Res Commun** 1988;12(4–5):401–5

[Relation of the fall in PO2 in ventilation of the lower lung in pulmonary surgery and the preoperative distribution of respiratory function] Fischler M, et al. **Ann Fr Anesth Reanim** 1988;7(5):365–9 (Eng. Abstr.) **(Fre)**

[Pulmonary ventilation/perfusion ratio] Guenard H. **J Physiol (Paris)** 1987;82(2):160–71 (19 ref.) (Eng. Abstr.) **(Fre)**

[Imaging and measurement of global and regional airflow in the lung using a radioactive gas] Speshardt K, et al. **Pneumologie** 1989 Jan;43(1):25–31 (Eng. Abstr.) **(Ger)**

[Lung perfusion–ventilation scintigraphy in squamous cell carcinoma of the lung] Beyer–Enke SA, et al. **ROFO** 1989 Jun;150(6):680–3 (Eng. Abstr.) **(Ger)**

[Combined 113Xe/99mTC human serum albumin microspheres lung scintigraphy in children with recurrent and chronic bronchitis] Fein R, et al. **Z Erkr Atmungsorgane** 1988;171(2):135–42 (Eng. Abstr.) **(Ger)**

[Effect of hemodilution on distribution of ventilation–perfusion ratio] Yoshida H. **Masui** 1988 Nov; 37(11):1351–8 **(Jpn)**

[Regional distribution of perfusion and ventilation in hamartoangiomyomatosis of the lung] Tominaga S, et al. **Rinsho Hoshasen** 1989 Jan;34(1):147–52 (Eng. Abstr.) **(Jpn)**

[Significance of van Merten's index in the diagnosis of ventilation–perfusion disorders and causes of respiratory insufficiency] Andreev VM, et al. **Ter Arkh** 1989; 61(4):105–7 (Eng. Abstr.) **(Rus)**

[Hypoxemia and liver cirrhosis (letter)] Gea J, et al. **Med Clin (Barc)** 1989 Apr 8;92(13):519 **(Spa)**

DRUG EFFECTS

Effect of almitrine on ventilation–perfusion distribution in adult respiratory distress syndrome. Reyes A, et al. **Am Rev Respir Dis** 1988 May;137(5):1062–7

Prostaglandin E1 and nitroglycerin reduce pulmonary capillary pressure but worsen ventilation–perfusion distributions in patients with adult respiratory distress syndrome. Radermacher P, et al. **Anesthesiology** 1989 Apr; 70(4):601–6

Effect of venous (gut) CO2 loading on intrapulmonary gas fractions and ventilation in the tegu lizard. Ballam GO, et al. **J Comp Physiol [B]** 1988;158(5):591–600

Almitrine enhances in low dose the reactivity of pulmonary vessels to hypoxia. Nakanishi S, et al. **Respir Physiol** 1988 Nov;74(2):139–50

Ventilation–perfusion mismatching in acute severe asthma: effects of salbutamol and 100% oxygen. Ballester E, et al. **Thorax** 1989 Apr;44(4):258–67

[Changes in pulmonary gas exchange in chronic obstructive bronchopneumopathies and their modifications induced by therapy] Prediletto R, et al. **Medicina (Firenze)** 1989 Jan–Mar;9(1):56–9 (Eng. Abstr.) **(Ita)**

[The effect of nebulized beta–stimulant on the regional ventilation–perfusion ratio and blood gas analysis] Suzuki T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr; 26(4):367–72 (Eng. Abstr.) **(Jpn)**

VENTILATOR WEANING

Inspiratory work of breathing during weaning from mechanical ventilation. Lemaire F. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):227–9

Weaning from mechanical ventilation. Marini JJ, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1043–6

Patient–ventilator partitioning of the work of breathing during weaning. Chapman FW, et al. **Ann Biomed Eng** 1989;17(3):279–87

Effect of temporary external stabilization on ventilator weaning after sternal resection. Ali J, et al. **Chest** 1989 Feb;95(2):472–3

Depressed central respiratory drive causing weaning failure. Its reversal with doxapram. Haake RE, et al. **Chest** 1989 Mar;95(3):695–7

Determinants of weaning and survival among patients with COPD who require mechanical ventilation for acute respiratory failure. Menzies R, et al. **Chest** 1989 Feb; 95(2):398–405

Steady–state breathing pattern responses to small inspiratory resistive loads in COPD patients. Application to weaning from mechanical ventilation. Pourriat JL, et al. **Chest** 1989 Feb;95(2):364–9

Metabolic and nutritional aspects of weaning from mechanical ventilation. Benotti PN, et al. **Crit Care Med** 1989 Feb;17(2):181–5 (45 ref.)

Importance of trigger sensitivity to ventilator response delay in advanced chronic obstructive pulmonary disease with respiratory failure. Gurevitch MJ, et al. **Crit Care Med** 1989 Apr;17(4):354–9

Evaluation of conventional criteria for predicting successful weaning from mechanical ventilatory support in elderly patients. Krieger BP, et al. **Crit Care Med** 1989 Sep; 17(9):858–61

[The functional effects of weaning from mechanical ventilation in patients operated on under ECC] Nedev N. **Khirurgiia (Sofiia)** 1988;41(5):11–7 **(Bul)**

[Hyperoxia test during attempts to withdraw artificial ventilation] Pourriat JL, et al. **Agressologie** 1989 Apr; 30(4):217–21 (Eng. Abstr.) **(Fre)**

[Does Swan–ganz catheter help in weaning from controlled ventilation after mitral valve replacement?] Lehot JJ, et al. **Presse Med** 1988 Nov 12;17(40):2121–4 (Eng. Abstr.) **(Fre)**

[New arguments in favor of early extubation following surgical interventions on the heart] Deutrich C, et al. **Anaesthesiol Reanim** 1989;14(1):29–36 (Eng. Abstr.) **(Ger)**

[Efficacy of erythromycin (EM) for extubation of tracheostomy tube in 4 cases of chronic respiratory disease] Mikasa K, et al. **Kansenshogaku Zasshi** 1988 Jul; 62(7):675–81 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Inspiratory pressure support prevents diaphragmatic fatigue during weaning from mechanical ventilation. Brochard L, et al. **Am Rev Respir Dis** 1989 Feb;139(2):513–21

METHODS

Comparative evaluation of caffeine and theophylline for weaning premature infants from the ventilator. Sims ME, et al. **Am J Perinatol** 1989 Jan;6(1):72–5

Inspiratory pressure support prevents diaphragmatic fatigue during weaning from mechanical ventilation [letter] Sanborn WG. **Am Rev Respir Dis** 1989 Sep;140(3):854

Mandatory minute volume weaning in patients with pulmonary pathology. Davis S, et al. **Anaesth Intensive Care** 1989 May;17(2):170–4

Randomised controlled trial of two methods of weaning from high frequency positive pressure ventilation. Greenough A, et al. **Arch Dis Child** 1989 Jun;64(6):834–8

A prospective comparison of IMV and T–piece weaning from mechanical ventilation. Tomlinson JR, et al. **Chest** 1989 Aug;96(2):348–52

Weaning from mechanical ventilation: adjunctive use of inspiratory muscle resistive training. Aldrich TK, et al. **Crit Care Med** 1989 Feb;17(2):143–7

BSTER: an expert system for management of respiratory weaning therapy. Hernández–Sande C, et al. **IEEE Trans Biomed Eng** 1989 May;36(5):559–64

Carbon dioxide mandatory ventilation (CO2MV): a new method for weaning from mechanical ventilation. Description and comparative clinical study with I.M.V. and T. tube method in COPD patient. Chopin C, et al. **Int J Clin Monit Comput** 1989 Jan;6(1):11–9

Total inspiratory work with modern demand valve devices compared to continuous flow CPAP. Samodelov LF, et al. **Intensive Care Med** 1988;14(6):632–9

Successful extubation of newborn infants without preextubation trial of continuous positive airway pressure. Kim EH. **J Perinatol** 1989 Mar;9(1):72–6

Neck breathing: a form of voluntary respiration for the spine–injured ventilator–dependent quadriplegic child. Gilgoff IS, et al. **Pediatrics** 1988 Nov;82(5):741–5

NURSING

Effect of nursing contact on the stress response of patients being weaned from mechanical ventilation. Henneman EA. **Heart Lung** 1989 Sep;18(5):483–9

VENTILATORS, MECHANICAL

Multiple intensive care unit outbreak of Acinetobacter calcoaceticus subspecies anitratus respiratory infection and colonization associated with contaminated, reusable ventilator circuits and resuscitation bags. Hartstein AI, et al. **Am J Med** 1988 Nov;85(5):624–31

How do you use a poncho respirator? Bauer LE, et al. **Am J Nurs** 1988 Dec;88(12):1705–8

Mechanisms of expiratory valves resistance. Kayaleh RA, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1390–4

A new intensive care ventilator. Beaudoin MG, et al. **Anaesth Intensive Care** 1988 Nov;16(4):472–4

A continuous high flow intermittent mandatory ventilation system incorporating a Downs venturi device and a modified Nuffield Series 200 ventilator. Breen DP, et al. **Anaesth Intensive Care** 1988 Aug;16(3):351–7

Disconnection and the Campbell ventilator [letter] Gillies A. **Anaesth Intensive Care** 1989 Feb;17(1):114

Constancy of air–oxygen mixtures in intensive care. Johnson PA, et al. **Anaesth Intensive Care** 1989 Feb;17(1):78–82

Health Equipment (Dis)Information: HEI 166 evaluation of heat and moisture exchangers [letter] Bethune DW. **Anaesthesia** 1989 Feb;44(2):161–2

Anaesthesia for emergency caesarean section using the brain laryngeal airway [letter] Chadwick IS, et al. **Anaesthesia** 1989 Mar;44(3):261–2

A comparison of anaesthetic breathing systems during spontaneous ventilation. An in–vitro study using a lung model. Chan AS, et al. **Anaesthesia** 1989 Mar;44(3):194–9

Rebreathing during spontaneous and controlled ventilation with T–piece breathing systems: a general solution. Dorrington KL, et al. **Anaesthesia** 1989 Apr;44(4):300–2

Another misconnexion [letter] Edwards ND. **Anaesthesia** 1988 Dec;43(12):1066

Tests for co–axial systems [letter] Jackson FJ. **Anaesthesia** 1988 Dec;43(12):1060–1

Failure to detect disconnexion by capnography [letter] Levins FA, et al. **Anaesthesia** 1989 Jan;44(1):79

Another problem with an expiratory valve [letter] Murray AW, et al. **Anaesthesia** 1988 Oct;43(10):891–2

The pneuPAC ventilator with new patient valve and air compressors. Park GR, et al. **Anaesthesia** 1989 May; 44(5):419–24

Inappropriate triggering [letter] Sansome AJ. **Anaesthesia** 1988 Dec;43(12):1065–6

A modified expiratory valve for teaching. Sansome AJ, et al. **Anaesthesia** 1989 May;44(5):425–7

Flapper valve malfunction [letter] Eisenkraft JB, et al.

Anesth Analg 1988 Nov;67(11):1132

Flapper valve malfunction [letter] Khalil S. **Anesth Analg** 1988 Dec;67(12):1192

Hypoventilation caused by ventilator valve rupture [letter] Schreiber PJ. **Anesth Analg** 1989 Apr;68(4):546

The measurement of expiratory oxygen as disconnection alarm. Knaack-Steinegger R, et al. **Anesthesiology** 1989 Feb;70(2):343–4

Pressure and flow limitations of anesthesia ventilators. Marks JD, et al. **Anesthesiology** 1989 Sep;71(3):403–8

Inadvertent development of subatmospheric airway pressure during cardiopulmonary bypass. Mushlin PS, et al. **Anesthesiology** 1989 Sep;71(3):459–62

Perioperative pulmonary function in acute respiratory failure: effect of ventilator type and gas mixture. Schapera A, et al. **Anesthesiology** 1989 Sep;71(3):396–402

Failure of low pressure alarm associated with the use of a humidifier. Slee TA, et al. **Anesthesiology** 1988 Nov; 69(5):791–3

Flash sterilization of anesthesia bellows reduces postoperative infection rate. Dryden GE. **AORN J** 1989 Apr;49(4):1123–5

Pneumobelt for sleep in the ventilator user: clinical experience. Yang GF, et al. **Arch Phys Med Rehabil** 1989 Sep;70(9):707–11

Amniotic fluid embolism [letter] Fay R. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):241

The anaesthetic ventilator. Pietak SP. **Can Anaesth Soc J** 1983 May;30(3 Pt 2):S42–5 (3 ref.)

Care in the air [letter] **Can Med Assoc J** 1989 Mar 15; 140(6):584

Jet flow–regulated expiratory resistance to maintain constant CPAP during the entire respiratory phase. Nishimura M, et al. **Chest** 1989 Apr;95(4):876–80

Ventilatory support in the management of septic patients. Lee RM, et al. **Crit Care Clin** 1989 Jan;5(1):157–75 (96 ref.)

Some infant ventilators do not limit peak inspiratory pressure reliably during active expiration [letter] Bernstein G, et al. **Crit Care Med** 1989 Sep;17(9):969–70

A new infant ventilator for normal and high-frequency ventilation: influence of tracheal tube on distal airway pressure during high-frequency ventilation. Chakrabarti MK, et al. **Crit Care Med** 1988 Nov;16(11):1142–6

Simple method for ventilating transported newborn infants [letter] Weintraub Z, et al. **Crit Care Med** 1989 Jan; 17(1):109

Endemic Acinetobacter anitratus in a surgical intensive care unit: mechanical ventilators as reservoir. Vandenbroucke-Grauls CM, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):485–9

Aspirin–intolerance as a precipitating factor of life–threatening attacks of asthma requiring mechanical ventilation. Picado C, et al. **Eur Respir J** 1989 Feb; 2(2):127–9

An automated method of separating patient from ventilator work on the lungs. Boom MJ, et al. **Int J Clin Monit Comput** 1988;5(4):235–42

Investigation of the spontaneous modes of breathing of different ventilators. Cox D, et al. **Intensive Care Med** 1988; 14(5):532–7

Inspiratory effort and occlusion pressure in triggered mechanical ventilation. Fernández R, et al. **Intensive Care Med** 1988;14(6):650–3

Microbial burdens in disposable and nondisposable ventilator circuits used for 24 and 48 h in intensive care units. Malecka-Griggs B, et al. **J Clin Microbiol** 1989 Mar; 27(3):495–503

Ventilation and ventilators—an update. Hayes B. **J Med Eng Technol** 1988 Sep–Oct;12(5):197–218 (370 ref.)

Effects of infant ventilator design on spontaneous breathing. Kopotic RJ, et al. **J Perinatol** 1987 Fall;7(4):298–300

Changing attitudes of neonatologists toward ventilator support. Pomerance JJ, et al. **J Perinatol** 1988 Summer; 8(3):232–41

Ventilation management casebook: congenital lobar emphysema. Sharp MJ, et al. **J Perinatol** 1988 Summer; 8(3):285–7

Combined use of artificial lung and kidney in the treatment of terminal acute respiratory distress syndrome. Gattinoni L, et al. **Life Support Syst** 1983;1 Suppl 1:365–7

Mechanical ventilation of the neonate during magnetic resonance imaging. McGowan JE, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):145–8

Optimal design of mechanical ventilator waveform using a mathematical model of the ventilatory system. Ben-Haim SA, et al. **Med Biol Eng Comput** 1988 Jul;26(4):419–24

Lack of aerosol dispersal of cytomegalovirus during mechanical ventilation. Faix RG. **Pediatr Infect Dis J** 1989 May;8(5):330–2

Evaluation of the flow–volume loop as an intra–operative monitor of respiratory mechanics in infants. Brown K, et al. **Pediatr Pulmonol** 1989;6(1):8–13

An inexpensive servo–respirator based upon regulation of a shunt resistance. Daubenspeck JA, et al. **Respir Physiol** 1988 Jul;73(1):87–96

[Proper use of ventilators] Gao L. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Apr; 11(2):85–8, 127 (Eng. Abstr.) **(Chi)**

[Prognosis of comatose patients on ventilator: a prospective study of brain death] Hung TP, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan;88(1):65–9 (Eng. Abstr.) **(Chi)**

[Permanent home respiratory treatment of patients with muscular diseases] Jørs E. **Ugeskr Laeger** 1989 May 22; 151(21):1329–30 **(Dan)**

[A problem posed by the adaptation of an alarm on RPR respirators] Trebuchet C, et al. **Cah Anesthesiol** 1988 Sep; 36(5):369–70 **(Fre)**

[Broadening the applicability of the Praktiwarn 200 using a combination of the Spezivent 221 and the Praktimorph 201] Hamann J, et al. **Anaesthesiol Reanim** 1988;13(5):307–8 (Eng. Abstr.) **(Ger)**

[Respiratory pressure control. Comment on the paper by J. Hamann, H. Winzig and Jutta Bunge: Temperature-dependent recording of disconnection and obstruction during ventilation] Weber F, et al. **Anaesthesiol Reanim** 1988;13(5):309–10 **(Ger)**

[Contamination of respirators in long–term ventilation] Bonath K, et al. **Anasth Intensivther Notfallmed** 1989 Jun; 24(3):181–5 (Eng. Abstr.) **(Ger)**

[Noninvasive monitoring of gas exchange: methodologic prerequisites and clinical use] Kreymann G, et al. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):43–8 (Eng. Abstr.) **(Ger)**

[BEATE—a new function test instrument for safety technical assessment of respirators] Boenick U, et al. **Biomed Tech (Berlin)** 1988 Nov;33(11):271–4 (Eng. Abstr.) **(Ger)**

[Periodic nocturnal ventilation using an Emerson chest respirator as an alternative to permanent tracheostomy with positive pressure ventilation in patients with idiopathic scoliosis and severe global respiratory insufficiency] Pfister M, et al. **Schweiz Med Wochenschr** 1988 Sep 24; 118(38):1371–4 (Eng. Abstr.) **(Ger)**

[Formaldehyde chamber disinfection: not suitable for respirators and anesthesia equipment] Lüderitz P, et al. **Z Gesamte Hyg** 1989 Mar;35(3):158–61 (Eng. Abstr.) **(Ger)**

[Chronic respiratory insufficiency in the acute phase: a pathology of renewed resuscitation interest] Gritti G, et al. **Minerva Anestesiol** 1988 Nov;54(11):457–97 (116 ref.) **(Ita)**

[Evaluation of additional respiratory work in a new Drager Evita ventilator] Tavola M, et al. **Minerva Anestesiol** 1988 Sep;54(9):339–44 (Eng. Abstr.) **(Ita)**

[Clinical usefulness of the monitoring of thorax movement for postoperative neonates with congenital heart disease—a preliminary study for developing a new volume–limited ventilator for neonates] Komeda M, et al. **Kokyu To Junkan** 1988 Jul;36(7):767–71 **(Jpn)**

[Home–stay respiratory management of a child with nemaline myopathy by using a negative pressure–controlled respirator] Ikeya K, et al. **No To Hattatsu** 1988;20(5):423–8 (Eng. Abstr.) **(Jpn)**

[Effectiveness of oxygen equipment as a means of the life support system during space flights] Cherniakov IN. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):11–6 (52 ref.) (Eng. Abstr.) **(Rus)**

[Outpatient clinic treatment of broncho–obstructive syndrome using an artificial regulator of respiration] Sil'vestrov VP, et al. **Ter Arkh** 1989;61(1):73–5 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Risks of placing one–way valves in ventilator circuits [letter] Demers B, et al. **Am J Dis Child** 1989 Apr;143(4):444

Induction of lower esophageal sphincter (LES) dysfunction during use of the negative pressure body ventilator. Marino WD, et al. **Am J Gastroenterol** 1988 Dec;83(12):1376–80

Central nervous system air embolism in respiratory distress syndrome: considerations for patient survival. Jordan GD, et al. **Am J Perinatol** 1989 Jan;6(1):80–3

Unusual cause of obstructed expiration [letter] Johnston P. **Anaesthesia** 1989 Aug;44(8):704–5

Debris in a breathing system [letter] Taylor BL, et al. **Anaesthesia** 1989 Aug;44(8):702–3

Accuracy of delivered versus preset minute ventilation of portable emergency ventilators. Heinrichs W, et al. **Crit Care Med** 1989 Jul;17(7):682–5

Prevention of pneumothorax during mechanical ventilation using chest tubes in patients with blunt thoracic trauma. van Niekerk JL, et al. **Neth J Surg** 1988 Jun;40(4):114

[Gas microembolism caused by equipment for artificial circulation. Its significance, causes and prevention] Maksimenko VB, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):9–11 (Eng. Abstr.) **(Rus)**

HISTORY

Historical perspective on mechanical ventilation: from simple life support system to ethical dilemma. Snider GL. **Am Rev Respir Dis** 1989 Aug;140(2 Pt 2):S2–7

STANDARDS

Controlled ventilation with a Mapleson A (Magill) breathing system: reassessment using a lung model. Tyler CK, et al. **Br J Anaesth** 1989 Apr;62(4):462–6

Construction of linear resistance units for a model lung. Mecklenburgh JS. **Med Biol Eng Comput** 1988 Sep; 26(5):552–4

Gas exchange during high frequency flow–interruption in rabbits before and after bronchoalveolar lavage. Sullivan KJ, et al. **Pediatr Res** 1988 Aug;24(2):203–8

[A new light–weight respiratory] Maksimenko NN, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):46–8 **(Rus)**

[Dual control of artificial ventilation processes of the lungs using a fuzzy regulator in the feedback circuit] Vasil'eva OI, et al. **Med Tekh** 1989 Jan–Feb;(1):11–21 (Eng. Abstr.) **(Rus)**

VETERINARY

High frequency ventilation: a review [letter] Roach FM Jr. **Vet Surg** 1987 Mar–Apr;16(2):183

VENTILATORS, MECHANICAL, WEANING see **VENTILATOR WEANING**

VENTILATORS, PULMONARY see **VENTILATORS, MECHANICAL**

VENTILATORS, PULMONARY, WEANING see **VENTILATOR WEANING**

VENTILATORY MUSCLES see **RESPIRATORY MUSCLES**

VENTRAL HERNIA see **HERNIA, VENTRAL**

VENTRICULAR EJECTION FRACTION see **STROKE VOLUME**

VENTRICULAR END-DIASTOLIC VOLUME see **STROKE VOLUME**

VENTRICULAR FIBRILLATION

Does hypothermic fibrillatory arrest improve myocardial protection during emergency revascularization? Greene PS, et al. **Ann Thorac Surg** 1989 Jul;48(1):38–42

CHEMICALLY INDUCED

Flecainide–induced ventricular tachycardia and fibrillation in patients treated for atrial fibrillation. Falk RH. **Ann Intern Med** 1989 Jul 15;111(2):107–11

Cardiac effects of inhaled typewriter correction fluid [letter] Wodka RM, et al. **Ann Intern Med** 1989 Jan 1;110(1):91–2

The effect of caffeine on ventricular ectopic activity in patients with malignant ventricular arrhythmia. Graboys TB, et al. **Arch Intern Med** 1989 Mar;149(3):637–9

Low–osmolality contrast media–induced ventricular fibrillation. Hayakawa K, et al. **Invest Radiol** 1989 Apr; 24(4):298–301

Contrast media–induced ventricular fibrillation. Hayakawa K, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S144–6

The importance of sodium concentration on the incidence of fibrillation during coronary arteriography in dogs. Morris TW. **Invest Radiol** 1988 Sep;23 Suppl 1:S137–9

The effect of sodium on the fibrillatory potential of ioversol. Ralston WH, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S140–3

Arrhythmogenic effects of antiarrhythmic drugs: a study of 506 patients treated for ventricular tachycardia or fibrillation. Stanton MS, et al. **J Am Coll Cardiol** 1989 Jul; 14(1):209–15; discussion 216–7

Effects of alcohol on isoproterenol–induced ventricular fibrillation in adult rats. Guideri G, et al. **J Cardiovasc Pharmacol** 1988 Oct;12(4):479–85

Butane sniffing causing ventricular fibrillation [letter] Gunn J, et al. **Lancet** 1989 Mar 18;1(8638):617

[Arrhythmogenic effects of antidepressive agents demonstrated by programmed ventricular pacing] Cointe R, et al. **Arch Mal Coeur** 1989 Mar;82(3):401–4 (Eng. Abstr.) **(Fre)**

[Ventricular fibrillation of a favourable course during perfusion with fluorouracil (letter)] Glaser E, et al. **Presse Med** 1989 Feb 18;18(7):359–60 **(Fre)**

[Wolff–Parkinson–White syndrome and verapamil: apropos of a case of ventricular fibrillation] Michel B, et al. **Schweiz Med Wochenschr** 1989 May 13;119(19):630–4 (Eng. Abstr.) **(Fre)**

[Ventricular tachycardia and ventricular fibrillation as complications of intravenous administration of ethacizine] Lukoshiavichiute AI, et al. **Kardiologiia** 1988 Dec; 28(12):117–20 **(Rus)**

[A variant of the pre–fibrillation form of ventricular tachycardia] Zabela PV, et al. **Kardiologiia** 1989 Mar; 29(3):104–6 **(Rus)**

[2 cases of complications after intravenous administration of ethacizine] Grosu AA, et al. **Klin Med (Mosk)** 1989 Apr; 67(4):115–6 **(Rus)**

COMPLICATIONS

Sudden cardiac death during ambulatory ECG monitoring. A report of 2 cases. Badenhorst JC, et al. **S Afr Med J** 1989 Sep 2;76(5):223–6

DIAGNOSIS

Exercise testing in patients with life–threatening ventricular tachyarrhythmias: results and correlation with clinical and arrhythmia factors. Allen BJ, et al. **Am Heart J** 1988 Oct; 116(4):997–1002

Reproducibility of exercise–induced ventricular arrhythmia in patients undergoing evaluation for malignant ventricular arrhythmia. Saini V, et al. **Am J Cardiol** 1989 Mar 15; 63(11):697–701

Polymorphic ventricular tachycardia. O'Dea DJ, et al. **Ann Emerg Med** 1989 Jan;18(1):100–2

Evaluation of techniques for recognition of ventricular arrhythmias by implanted devices. Ripley KL, et al. **IEEE Trans Biomed Eng** 1989 Jun;36(6):618–24

Isolated episode of exercise-related ventricular fibrillation in a healthy athlete. Buja G, et al. **Int J Cardiol** 1989 Jul; 24(1):121–3

Electrophysiologic studies on ventricular tachyarrhythmias in a chronic canine infarct model. Moore EN, et al. **J Electrocardiol** 1988;21 Suppl:S64–7

[Significance of QT interval as a premonitory sign of severe ventricular arrhythmia in the early phase of myocardial infarct] Giglioli C, et al. **G Ital Cardiol** 1988 Apr; 18(4):290–5 (Eng. Abstr.) (Ita)

[Measurement of QT interval in patients with myocardial infarct] Schwartz PJ. **G Ital Cardiol** 1988 Apr;18(4):296–300 (Ita)

DRUG THERAPY

Usefulness of sotalol in suppressing ventricular tachycardia or ventricular fibrillation in patients with healed myocardial infarcts. Kuchar DL, et al. **Am J Cardiol** 1989 Jul 1; 64(1):33–6

Intravenous amiodarone for the rapid treatment of life-threatening ventricular arrhythmias in critically ill patients with coronary artery disease. Ochi RP, et al. **Am J Cardiol** 1989 Sep 15;64(10):599–603

Antiarrhythmic efficacy of magnesium in the setting of life-threatening digoxin toxicity [letter] Green SM, et al. **Am J Emerg Med** 1989 May;7(3):347–8

Randomized study of epinephrine versus methoxamine in prehospital ventricular fibrillation. Olson DW, et al. **Ann Emerg Med** 1989 Mar;18(3):250–3

Electropharmacology of amiodarone therapy initiation. Time courses of onset of electrophysiologic and antiarrhythmic effects. Mitchell LB, et al. **Circulation** 1989 Jul;80(1):34–42

Low-dose oral sotalol for monomorphic ventricular tachycardia: effects during programmed electrical stimulation and follow-up. Jordaens LJ, et al. **Eur Heart J** 1989 Mar;10(3):218–26

A new group of defibrillatory drugs in the classification of antiarrhythmic agents. Manoach M, et al. **Int J Cardiol** 1988 Dec;21(3):211–7

Usefulness of sotalol for drug-refractory malignant ventricular arrhythmias. Gonzalez R, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1568–72

Long-term results of amiodarone therapy in patients with recurrent sustained ventricular tachycardia or ventricular fibrillation. Herre JM, et al. **J Am Coll Cardiol** 1989 Feb; 13(2):442–9

Arrhythmogenic effects of antiarrhythmic drugs: a study of 506 patients treated for ventricular tachycardia or fibrillation. Stanton MS, et al. **J Am Coll Cardiol** 1989 Jul; 14(1):209–15; discussion 216–7

Effects of flecainide on occlusion and reperfusion arrhythmias in dogs. Lederman SN, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):541–6

Terminating SVT-mediated recurrent ventricular fibrillation with verapamil. Applebaum D. **J Emerg Med** 1988 May-Jun;6(3):189–92

The effect of chronic oral and acute intravenous amiodarone administration on ventricular defibrillation threshold using implanted electrodes in dogs. Frame LH. **PACE** 1989 Feb; 12(2):339–46

The efficacy of amiodarone in the treatment of ventricular tachycardia or ventricular fibrillation. Greene HL. **Prog Cardiovasc Dis** 1989 Mar-Apr;31(5):319–54 (358 ref.)

Alcohol-induced coagulation necrosis in cardiac tissue: a new concept in the surgical management of recurrent ventricular arrhythmias. Ayisi K, et al. **Thorac Cardiovasc Surg** 1989 Apr;37(2):76–9

[Effects of dauricine combined with other anti-arrhythmia agents on electrically induced ventricular fibrillation in rabbits] Du ZH, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):33–6 (Eng. Abstr.) (Chi)

[Antifibrillatory and cardiovascular effects of VULM 456, a quaternary salt of exaprolol, on anesthetized dogs] Ježek L, et al. **Cesk Fysiol** 1988;37(6):521–4 (Cze)

[Allapinin pharmacokinetics after its single intravenous administration] Khakimov AG, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):31–6 (Eng. Abstr.) (Rus)

ETIOLOGY

Hypokalemia and ventricular arrhythmias in acute myocardial infarction. Clausen TG, et al. **Acta Med Scand** 1988;224(6):531–7

Modulation of arachidonic acid metabolites and vulnerability to ventricular fibrillation during myocardial ischemia in the cat. Cooper DR, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1194–200

Nonventricular arrhythmias as precursors of ventricular fibrillation in patients with out-of-hospital cardiac arrest. Hays LJ, et al. **Am Heart J** 1989 Jul;118(1):53–7

Aortocoronary saphenous vein graft spasm inducing ventricular fibrillation. Webb JG, et al. **Am Heart J** 1989 Feb;117(2):485–6

New coronary events at four-year follow-up in elderly patients with recognized or unrecognized myocardial infarction. Aronow WS. **Am J Cardiol** 1989 Mar 1; 63(9):621–2

Evolution of late potential activity in the first six weeks after acute myocardial infarction. Lewis SJ, et al. **Am J Cardiol** 1989 Mar 15;63(11):647–51

Modulated parasystole as a mechanism of ventricular ectopic activity leading to ventricular fibrillation. Robles de Medina EO, et al. **Am J Cardiol** 1989 Jun 1;63(18):1326–32

One-year prognosis of primary ventricular fibrillation complicating acute myocardial infarction. The GISSI (Gruppo Italiano per lo Studio della Streptochinasi nell'Infarto miocardico) investigators. Volpi A, et al. **Am J Cardiol** 1989 May 15;63(17):1174–8

Ventricular fibrillation during rectal examination. Munter DW, et al. **Am J Emerg Med** 1989 Jan;7(1):57–60

The influence of age and dietary fat in an animal model of sudden cardiac death. McLennan PL, et al. **Aust N Z J Med** 1989 Feb;19(1):1–5

Influence of spontaneous hypertension and cardiac hypertrophy on the severity of ischemic arrhythmias in the rat. Bélichard P, et al. **Basic Res Cardiol** 1988 Sep-Oct; 83(5):560–6

Failure of amiodarone to prevent ventricular fibrillation (sudden death) in hypertrophic cardiomyopathy. Mercereau D, et al. **Can J Cardiol** 1989 Mar;5(2):77–80

Use of temporary pacemakers during coronary angioplasty: an evolving experience with ventricular fibrillation in 400 cases. Johnson LW, et al. **Cathet Cardiovasc Diagn** 1988; 15(3):150–4

Time-series analysis of heart rate variability during submaximal exercise. Evidence for reduced cardiac vagal tone in animals susceptible to ventricular fibrillation. Billman GE, et al. **Circulation** 1989 Jul;80(1):146–57

Autonomic mechanisms and sudden death. New insights from analysis of baroreceptor reflexes in conscious dogs with and without a myocardial infarction. Schwartz PJ, et al. **Circulation** 1988 Oct;78(4):969–79

Late potentials in the acute phase of myocardial infarction indicate the risk of early ventricular fibrillation. Dłużniewski M, et al. **Eur Heart J** 1988 Nov;9(11):1175–80

Fibrillation induced at powerline current levels. Chilbert MA, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):864–9

Ventricular fibrillation in six adults without overt heart disease. Lemery R, et al. **J Am Coll Cardiol** 1989 Mar 15; 13(4):911–6

Primary ventricular fibrillation in acute myocardial infarction. Mølstad P. **J Intern Med** 1989 Aug; 226(2):107–11

Ventricular fibrillation during antiarrhythmic drug therapy [letter] Rude RK, et al. **N Engl J Med** 1989 Feb 23; 320(8):537–8

[An analysis of causes and prevention of ventricular fibrillation complicating selective coronary angiography] Wang SC. **Chung Hua Wai Ko Tsa Chih** 1988 Oct; 26(10):586–7, 636 (Eng. Abstr.) (Chi)

[Kearns-Sayre syndrome: complete auriculoventricular block, torsade de pointes and ventricular fibrillation] Biard F, et al. **Ann Cardiol Angeiol (Paris)** 1988 Nov;37(9):529–34 (19 ref.) (Eng. Abstr.) (Fre)

[Ventricular tachycardia and ventricular fibrillation following myocardial infarct: determinants of prognosis and disease course] Trappe HJ, et al. **Z Kardiol** 1988 Nov; 77(11):687–95 (Eng. Abstr.) (Ger)

[Level of enkephalins and cyclic nucleotides in the myocardium in ventricular fibrillation caused by experimental myocardial infarct] Maslov LN, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):408–10 (Eng. Abstr.) (Rus)

[Ventricular fibrillation associated with accessory left-ventricular chorda in patients with myocardial infarction] Kuznetsov VA, et al. **Kardiologiia** 1989 Jan; 29(1):94–5 (Rus)

[Effect of compensatory myocardial hypertrophy on the electric stability of the heart] Mirrakhimov MM, et al. **Kardiologiia** 1988 Dec;28(12):44–7 (Eng. Abstr.) (Rus)

[Various rhythmologic precursors of terminal arrhythmia in patients with myocardial infarct] Oparin AA, et al. **Klin Med (Mosk)** 1989 Mar;67(3):58–61 (Eng. Abstr.) (Rus)

METABOLISM

Myocardial tissue pCO2 and calcium content during ventricular fibrillation and reperfusion periods. Kobayashi M, et al. **Jpn J Surg** 1988 Sep;18(5):494–501

MORTALITY

Usefulness of echocardiographic left ventricular hypertrophy, ventricular tachycardia and complex ventricular arrhythmias in predicting ventricular fibrillation or sudden cardiac death in elderly patients. Aronow WS, et al. **Am J Cardiol** 1988 Nov 15;62(16):1124–5

EMT-defibrillation: the Wisconsin experience. Olson DW, et al. **Ann Emerg Med** 1989 Aug;18(8):806–11

Survival of patients with the automatic implantable cardioverter defibrillator. Mercando AD, et al. **PACE** 1988 Nov;11(11 Pt 2):2059–63

[Long-term (beyond 5 years) prognosis of successfully resuscitated patients with ventricular fibrillation] Kadinov V, et al. **Vutr Boles** 1989;28(3):53–7 (Eng. Abstr.) (Bul)

[Life-threatening disorders of cardiac rhythm] Mazur NA. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):3–6 (Rus)

PATHOLOGY

A case of sudden cardiac death manifesting contraction band necrosis of the cardiac myocytes. Bunai Y, et al. **Nippon Heigaku Zasshi** 1988 Aug;42(4–5):403–6

Ultrastructure of Purkinje cells in the subendocardium and false tendons in early experimental myocardial infarction complicated by fibrillation in the dog. Sharov VG, et al. **Virchows Arch [B]** 1989;57(2):131–9

[Biopsy of the myocardium in patients with ventricular arrhythmia of unknown etiology] Włodarska EK, et al. **Kardiol Pol** 1988;31(8):488–96 (Eng. Abstr.) (Pol)

PHYSIOPATHOLOGY

Ventricular arrhythmias parallel cardiac histamine efflux after coronary artery occlusion in the dog. Wolff AA, et al. **Agents Actions** 1988 Dec;25(3–4):296–306

Influence of leukopenia on collateral flow, reperfusion flow, reflow ventricular fibrillation, and infarct size in dogs. de Lorgeril M, et al. **Am Heart J** 1989 Mar;117(3):523–32

Effect of calcium channel blockers on hemodynamic responses to defibrillation. Hite PR, et al. **Am Heart J** 1989 Mar;117(3):569–76

Spontaneous reversion of VF [letter; comment] Viskin S, et al. **Am Heart J** 1989 Jun;117(6):1401–2. **Comment on:** Am Heart J 1988 Apr;115(4):919–23

Influence of shock strength and timing on induction of ventricular arrhythmias in dogs. Shibata N, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H891–901

Epicardial activation after unsuccessful defibrillation shocks in dogs. Shibata N, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H902–9

The effect of heart rate on the termination of electrically induced ventricular fibrillation in the isolated perfused rat heart. Arad M, et al. **Basic Res Cardiol** 1988 Nov-Dec; 83(6):678–86

Halothane anesthesia reduces inducibility of ventricular tachyarrhythmias in chronic canine myocardial infarction. Denniss AR, et al. **Basic Res Cardiol** 1989 Jan-Feb; 84(1):5–12

The protective effect of vagus nerve stimulation on catecholamine-halothane-induced ventricular fibrillation in dogs. Waxman MB, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):801–9

Computer simulation of myocardial fibrillation using a one dimensional model of excitation and recovery processes. Malik M, et al. **Cardiovasc Res** 1989 Feb;23(2):132–44

Electrophysiological and anatomic differences between canine hearts with inducible ventricular tachycardia and fibrillation associated with chronic myocardial infarction. Denniss AR, et al. **Circ Res** 1989 Jan;64(1):155–66

Cell calcium in the pathophysiology of ventricular fibrillation and in the pathogenesis of postarrhythmic contractile dysfunction. Koretsune Y, et al. **Circulation** 1989 Aug; 80(2):369–79

Exercise training after experimental myocardial infarction increases the ventricular fibrillation threshold before and after the onset of reinfarction in the isolated rat heart. Posel D, et al. **Circulation** 1989 Jul;80(1):138–45

The coherence spectrum. A quantitative discriminator of fibrillatory and nonfibrillatory cardiac rhythms. Ropella KM, et al. **Circulation** 1989 Jul;80(1):112–9

Respective role of sympathetic tone and of cardiac pauses in the genesis of 62 cases of ventricular fibrillation recorded during Holter monitoring. Leclercq JF, et al. **Eur Heart J** 1988 Dec;9(12):1276–83

Ventricular arrhythmias, Part II: Special concerns in evaluation. Grauer K, et al. **J Am Board Fam Pract** 1988 Jul-Sep;1(3):201–6 (27 ref.)

Effects of flecainide on defibrillation thresholds in the anesthetized dog. Hernandez R, et al. **J Am Coll Cardiol** 1989 Sep;14(3):777–81

Effects of ventricular fibrillation and defibrillation on pacing threshold in the anesthetized dog. Reiter MJ, et al. **J Am Coll Cardiol** 1989 Jan;13(1):180–4

Interaction of metoprolol and lidocaine on the ventricular fibrillation threshold in the anesthetized dog. de Langen CD, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):683–8

Ischemia-induced conduction delay and ventricular arrhythmias: comparative electropharmacology of bethanidine sulfate and bretylium tosylate. Kabell G. **J Cardiovasc Pharmacol** 1989 Mar;13(3):471–82

Effects of pimobendan (UD-CG 115 BS), a new positive inotropic agent, on ventricular tachycardia and ischemic ventricular fibrillation in a conscious canine model of recent myocardial infarction. Lynch JJ, et al. **J Cardiovasc Pharmacol** 1988;12(5):547–54

Flecainide acetate does not alter the energy requirements for direct ventricular defibrillation using sequential pulse defibrillation in pigs. Szabo TS, et al. **J Cardiovasc Pharmacol** 1988 Oct;12(4):377–83

Alinidine reduces the incidence of ischemic ventricular fibrillation in a conscious canine model, a protective effect antagonized by overdrive atrial pacing. Uprichard AC, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):475–82

Influence of ventricular fibrillation duration on defibrillation energy in dogs using bidirectional pulse discharges. Echt DS, et al. **PACE** 1988 Sep;11(9):1315–23

[Effects of coenzyme Q10 on the contractility and fibrillation threshold of isolated rabbit heart during ischemia and reperfusion] Caldarera CM, et al. **Cardiologia** 1988 Nov; 33(11):1083–8 (Eng. Abstr.) (Ita)

[Protective action of adaptation to high-altitude hypoxia in arrhythmia and cardiac fibrillation] Meerson FZ, et al. **Fiziol Zh** 1988 Jul-Aug;34(4):71-8 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Reducing the risk of ventricular fibrillation by adding sodium to ionic and non-ionic contrast media with low iodine concentration. Coronary perfusion of the isolated rabbit heart with meglumine diatrizoate or iopentol at 140 mg I/ml and 0-154 mmol Na+/l. Bååth L, et al. **Acta Radiol** 1989 Mar-Apr;30(2):207-12

Reduction of the risk of ventricular fibrillation in the isolated rabbit heart by small additions of electrolytes to non-ionic monomeric contrast media. Bååth L, et al. **Acta Radiol** 1989 May-Jun;30(3):327-33

The effect of beta-adrenergic blockade on vulnerability to ventricular fibrillation and inducibility of ventricular arrhythmia in short- and long-term feline infarction models. Luketich J, et al. **Am Heart J** 1989 Aug; 118(2):265-71

The effect of thromboxane inhibition on vulnerability to ventricular fibrillation in the acute and chronic feline infarction models. O'Connor KM, et al. **Am Heart J** 1989 Apr;117(4):848-53

Role of invasive electrophysiologic testing in the management of life-threatening ventricular arrhythmias. Wyndham CR. **Am J Cardiol** 1988 Nov 3;62(14):131I-171I (23 ref.)

Ventricular fibrillation in acute experimental myocardial ischemia: protection by magnesium sulfate. Barros LF, et al. **Braz J Med Biol Res** 1988;21(4):791-9

Effects of calcium blockers on ventricular fibrillation during acute myocardial infarction. Da-Luz PL, et al. **Braz J Med Biol Res** 1988;21(4):801-10

Mannitol and reperfusion-induced arrhythmias: possible mechanisms of action in the isolated rat heart. Yeatman M, et al. **Can J Cardiol** 1988 Sep;4(6):287-94

Effects of antiarrhythmic drugs on the repetitive extrasystole threshold and the ventricular fibrillation threshold. Murakawa Y, et al. **Cardiology** 1989;76(1):58-66

Prevention of ventricular fibrillation with magnesium sulfate. Billman GE, et al. **Eur J Pharmacol** 1988 Dec 6; 158(1-2):167-71

Cocaine-induced ventricular fibrillation: protection afforded by the calcium antagonist verapamil. Billman GE, et al. **FASEB J** 1988 Nov;2(14):2990-5

Prophylactic automatic implantable cardioverter-defibrillator patches in patients at high risk for postoperative ventricular tachyarrhythmias. Manolis AS, et al. **J Am Coll Cardiol** 1989 May;13(6):1367-73

Critical role of dose in protection by propranolol against ventricular fibrillation in a pig model of acute myocardial ischemia. Muller CA, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):192-7

Prophylaxis of early ventricular fibrillation by inhibition of acylcarnitine accumulation. Corr PB, et al. **J Clin Invest** 1989 Mar;83(3):927-36

Dietary fish oil and ischaemic arrhythmias. Riemersma RA, et al. **J Intern Med Suppl** 1989;225(731):111-6

Effect of calcium channel antagonists on susceptibility to sudden cardiac death: protection from ventricular fibrillation. Billman GE. **J Pharmacol Exp Ther** 1989 Mar; 248(3):1334-42

Reduction of energy required for defibrillation by delivering shocks in orthogonal directions in the dog [published erratum appears in PACE 1989 Jan;12(1 Pt 1):following Table of Contents] Bardou AL, et al. **PACE** 1988 Nov; 11(11 Pt 2):1990-5

Coronary revascularization and implantation of the automatic cardioverter/defibrillator: reliability of immediate intraoperative testing. Blakeman BM, et al. **PACE** 1989 Jan;12(1 Pt 1):86-91

A model to evaluate alternative methods of defibrillation threshold determination. Church T, et al. **PACE** 1988 Nov; 11(11 Pt 2):2002-7

Defibrillation current and impedance are determinants of defibrillation energy requirements. Dorian P, et al. **PACE** 1988 Nov;11(11 Pt 2):1996-2001

Mechanism of death in patients with the automatic implantable cardioverter defibrillator. Luceri RM, et al. **PACE** 1988 Nov;11(11 Pt 2):2015-22

Implanted automatic defibrillators: effects of drugs and pacemakers. Singer I, et al. **PACE** 1988 Dec;11(12):2250-62 (41 ref.)

Implantable defibrillation: eight years clinical experience. Thomas AC, et al. **PACE** 1988 Nov;11(11 Pt 2):2053-8

Long-term internal cardiac defibrillation threshold stability. Wetherbee JN, et al. **PACE** 1989 Mar;12(3):443-50

Failure of thromboxane synthetase inhibition to protect the postinfarcted heart against the induction of ventricular tachycardia and ventricular fibrillation in a conscious canine model of sudden coronary death. Kitzen JM, et al. **Pharmacology** 1988;37(3):171-86

[Effects of sophoramine on ventricular fibrillation threshold and dispersion of refractoriness in cats] Chen XS, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):551-4 (Eng. Abstr.) (Chi)

[Effects of sophoramine on the ventricular fibrillation threshold in dogs] Wu QH, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):137-9 (Eng. Abstr.) (Chi)

[Efficacy of verapamil in the prevention of ventricular fibrillation in the acute phase of myocardial infarction] Rolli A, et al. **Arch Mal Coeur** 1988 Jul;81(7):907-11 (Eng. Abstr.) (Fre)

[Preventive antifibrillatory treatment of sudden cardiac death in acute myocardial infarct] Thale J, et al. **Z Kardiol** 1988; 77 Suppl 4:11-22 (132 ref.) (Eng. Abstr.) (Ger)

[Bretylium tosylate in the treatment and prevention of ventricular arrhythmia: a new look at an old drug] Dłużniewski M. **Pol Tyg Lek** 1988 Oct 31;43(44):1415-8 (44 ref.) (Pol)

[Characteristics of the anti-arrhythmia effect of phosphocreatine in the acute stage of experimental myocardial infarction] Kryzhanovskiĭ SA, et al. **Kardiologiia** 1988 Nov;28(11):100-3 (Eng. Abstr.) (Rus)

[Clinico-experimental substantiation of the use of physical exercise in patients with ischemic heart disease for the prevention of arrhythmia] Liusov VA, et al. **Kardiologiia** 1988 Nov;28(11):98-100 (Eng. Abstr.) (Rus)

[Possibility of reflex activation of stress-limiting systems and the prevention of arrhythmia by electroacupuncture] Meerson FZ, et al. **Kardiologiia** 1989 Jan;29(1):88-90 (Rus)

[Use of ethacizine and lidocaine to prevent ventricular fibrillation in acute myocardial infarction] Tsyganov OO. **Sov Med** 1988;(11):54-5 (Rus)

[Prevention of ventricular fibrillation after long RR intervals using a pacemaker] Nilsson G, et al. **Lakartidningen** 1989 Mar 15;86(11):957-60 (Swe)

SURGERY

Coronary artery bypass grafting in patients with ventricular fibrillation. Kron IL, et al. **Ann Thorac Surg** 1989 Jul; 48(1):85-9

Percutaneous cardiopulmonary bypass limits myocardial injury from ischemic fibrillation and reperfusion. Axelrod HI, et al. **Circulation** 1988 Nov;78(5 Pt 2):III148-52

Electrophysiologic actions and antifibrillatory efficacy of subacute left stellectomy in a conscious, post-infarction canine model of ischemic ventricular fibrillation. Nelson SD, et al. **Int J Cardiol** 1989 Mar;22(3):365-76

Surgical decisions in the management of sudden cardiac death and malignant ventricular arrhythmias. Subendocardial resection, the automatic internal defibrillator, or both. Hargrove WC 3d, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):923-8

Surgery of ventricular tachycardia and ventricular fibrillation in patients with coronary artery disease and LV-aneurysms. Kromann-Hansen O, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):87-93

THERAPY

Clinical experience in seventy-seven patients with the automatic implantable cardioverter defibrillator. Manolis AS, et al. **Am Heart J** 1989 Sep;118(3):445-50

Success rate versus defibrillation energy: temporal profile and the most efficient defibrillation threshold. Murakawa Y, et al. **Am Heart J** 1989 Sep;118(3):451-8

Prolonged ventricular fibrillation-salvage using a new percutaneous cardiopulmonary support system. O'Neill P, et al. **Am J Cardiol** 1989 Sep 1;64(8):545

Long-term arrhythmic outcome in survivors of ventricular fibrillation with absence of inducible ventricular tachycardia. Zheutlin TA, et al. **Am J Cardiol** 1988 Dec 1;62(17):1213-7

Experience with a mobile coronary care unit in Brisbane. Bett JH. **Ann Emerg Med** 1989 Sep;18(9):969-74

Median sternotomy for implantable cardioverter/defibrillator. Blakeman BM, et al. **Arch Surg** 1989 Sep;124(9):1065-6

Long-term closed chest partial and total cardiopulmonary bypass by peripheral cannulation for severe right and/or left ventricular failure, including ventricular fibrillation. The use of a percutaneous spring in the pulmonary artery position to decompress the left heart. Kolobow T, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):485-9

Initial experience with a microprocessor controlled current based defibrillator. Dalzell GW, et al. **Br Heart J** 1989 Jun;61(6):502-5

Automatic implantable defibrillators. Crozier IG, et al. **Br J Hosp Med** 1988 Aug;40(2):136-9 (12 ref.)

Ventricular arrhythmias: medical therapy, device treatment, and indications for electrophysiologic study. Sager PT, et al. **Cardiol Clin** 1988 Feb;6(1):37-47 (102 ref.)

Evaluation of antiarrhythmic drugs on defibrillation energy requirements in dogs. Sodium channel block and action potential prolongation. Echt DS, et al. **Circulation** 1989 May;79(5):1106-17

Prediction of defibrillation success from a single defibrillation threshold measurement with sequential pulses and two current pathways in humans. Jones DL, et al. **Circulation** 1988 Nov;78(5 Pt 1):1144-9

The importance of the electrode system for the success of intracardiac defibrillation. Byteĭnik J, et al. **Cor Vasa** 1988; 30(6):405-12

Automatic implantable cardioverter defibrillator: report of the first two implants in Hawaii. Shen EN, et al. **Hawaii Med J** 1989 Jul;48(7):262-4, 267

A prospective, randomized evaluation of effect of ventricular fibrillation duration on defibrillation thresholds in humans. Bardy GH, et al. **J Am Coll Cardiol** 1989 May;13(6):1362-6

A prospective randomized evaluation of biphasic versus monophasic waveform pulses on defibrillation efficacy in humans. Bardy GH, et al. **J Am Coll Cardiol** 1989 Sep; 14(3):728-33

Prospective comparison of sequential pulse and single pulse defibrillation with use of two different clinically available systems. Bardy GH, et al. **J Am Coll Cardiol** 1989 Jul; 14(1):165-71

Current-based versus energy-based ventricular defibrillation: a prospective study. Lerman BB, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1259-64

Long-term outcome with the automatic implantable cardioverter-defibrillator. Winkle RA, et al. **J Am Coll Cardiol** 1989 May;13(6):1353-61

Fourier analysis of ventricular fibrillation and synchronization of DC countershocks in defibrillation. Carlisle EJ, et al. **J Electrocardiol** 1988 Nov;21(4):337-43

Transthoracic defibrillation threshold of sine and trapezoidal waveforms in defibrillation. Wilson CM, et al. **J Electrocardiol** 1989 Jul;22(3):241-7

Delayed myocardial rupture after the use of an implantable left ventricular assist device intractable ventricular fibrillation caused by myocardial infarction [letter] Graham TR, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):307-8

Automatic implantable cardioverter defibrillator. Current status. Manolis AS, et al. **JAMA** 1989 Sep 8;262(10):1362-8 (82 ref.)

Actuarial incidence and pattern of occurrence of shocks following implantation of the automatic implantable cardioverter defibrillator. Fogoros RN, et al. **PACE** 1989 Sep;12(9):1465-73

AICD benefit [editorial] Furman S. **PACE** 1989 Mar; 12(3):399-400

The influence of opening the thorax on defibrillation threshold in canines. Kallok MJ. **PACE** 1989 Jan;12(1 Pt 1):70-9

Defibrillation threshold testing and other practices related to AICD implantation: do all roads lead to Rome? Lehmann MH, et al. **PACE** 1989 Sep;12(9):1530-7

Evaluating AICD therapy [letter] Singer I, et al. **PACE** 1989 Sep;12(9):1552-3

DL and D sotalol decrease defibrillation energy requirements. Wang M, et al. **PACE** 1989 Sep;12(9):1522-9

Algorithm use in the treatment of pre-hospital ventricular fibrillation: an analysis of 160 cases. Hoffman JR, et al. **Resuscitation** 1989 Apr;17(2):131-41

Long-term prognosis after resuscitation from primary ventricular fibrillation complicating acute transmural myocardial infarction in the north east of Scotland. Chan NS, et al. **Scott Med J** 1989 Apr;34(2):430-3

Emergency cardiac maneuvers [editorial] Bartecchi CE. **South Med J** 1989 Jan;82(1):1-2

[Successful resuscitation by extracorporeal circulation after fibrillation during vascular reconstruction] Fornhoff H, et al. **Acta Chir Belg** 1988 Sep-Oct;88(5):367-8 (Eng. Abstr.) (Dut)

[Blunt upper abdominal trauma as a complication of cardiac resuscitation] Reinartz H. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):111-4 (Eng. Abstr.) (Ger)

[Ventricular fibrillation and electric defibrillation (letter)] Gutschmidt HJ. **Dtsch Med Wochenschr** 1989 Apr 21; 114(16):648-9 (Ger)

[Ventricular fibrillation and electric defibrillation] Rossi R. **Dtsch Med Wochenschr** 1989 Jan 27;114(4):145-9 (15 ref.) (Ger)

[The effect of transatrial chemical ablation with Lugol's solution on ventricular vulnerability] Nitta T. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec;36(12):2581-9 (Eng. Abstr.) (Jpn)

VETERINARY

ECG of the month. The sudden death of a dog with dilatative cardiomyopathy. Rush JE, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):52-3

VENTRICULAR INFLOW OBSTRUCTION see **VENTRICULAR OUTFLOW OBSTRUCTION**

VENTRICULAR OUTFLOW OBSTRUCTION

COMPLICATIONS

[Correlation of left ventricular outflow obstruction with mitral regurgitation] Hasegawa I, et al. **J Cardiol** 1988 Jun; 18(2):339-51 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Doppler evidence that true left ventricular-to-aortic pressure gradients exist in hypertrophic cardiomyopathy. Come PC, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1253-61

Two-dimensional and Doppler echocardiographic evaluation of heart disease in the neonate and fetus. Snider AR. **Clin Perinatol** 1988 Sep;15(3):523-65 (73 ref.)

ETIOLOGY

Giant right atrial thrombus causing right ventricular inflow and outflow obstruction. Gultekin N, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1367-9

Right ventricular outflow tract obstruction due to extracardiac tumors. A report of three cases diagnosed and

followed up by echocardiographic studies. Israeli A, et al. **Arch Intern Med** 1989 Sep;149(9):2105–6

Left ventricular outflow obstruction by a mitral valve prosthesis: Doppler ultrasound and cardiac catheterization findings. Byrnes TJ, et al. **Cathet Cardiovasc Diagn** 1989 May;17(1):34–8

Fatal acute left ventricular outflow obstruction due to interventricular septal haematoma—diagnosis by transoesophageal echocardiography. Ettles DF, et al. **Eur Heart J** 1989 May;10(5):479–81

Right ventricular outflow obstruction secondary to post-infarction aneurysm: a possible new syndrome. Hasegawa K, et al. **Heart Vessels** 1988;4(2):116–9

Inspiratory right ventricular outflow obstruction in a patient with hypertrophic cardiomyopathy. Tsuchihashi K, et al. **Jpn Heart J** 1988 Nov;29(6):871–5

[Surgical mitral valvuloplasty and dynamic left ventricular obstruction syndrome] Fernandez F, et al. **Arch Mal Coeur** 1989 Feb;82(2):241–7 (Eng. Abstr.) **(Fre)**

[Evaluation of pump function of the heart in patients with occlusive diseases of the abdominal aorta and ischemic heart disease based on radionuclide ventriculography] Pokrovskiĭ AV, et al. **Ter Arkh** 1988;60(7):33–6 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Size of the normal aortic root in normal subjects and in those with left ventricular outflow obstruction. el Habbal M, et al. **Am J Cardiol** 1989 Feb 1;63(5):322–6

Fixed subaortic stenosis: the value of cross-sectional echocardiography in evaluating different anatomical patterns. Cabrera A, et al. **Int J Cardiol** 1989 Aug; 24(2):151–7

Sudden death and left ventricular outflow disease. Cohle SD, et al. **Pathol Annu** 1988;23 Pt 2:97–124 (124 ref.)

PHYSIOPATHOLOGY

The significance of increased left ventricular outflow tract velocities in the elderly measured by continuous wave Doppler. Agatston AS, et al. **Am Heart J** 1989 Jun; 117(6):1320–6

Doppler color flow mapping studies of jet formation and spatial orientation in obstructive hypertrophic cardiomyopathy. Hoit BD, et al. **Am Heart J** 1989 May; 117(5):1119–26

Pulsed Doppler assessment of left ventricular diastolic filling in children with left ventricular outflow obstruction before and after balloon angioplasty. Meliones JN, et al. **Am J Cardiol** 1989 Jan 15;63(3):231–6

Differences of postextrasystolic behavior of left ventricular and aortic pressures between fixed and dynamic left ventricular outflow tract stenosis. Angel J, et al. **Chest** 1988 Nov;94(5):1058–62

Left ventricular ejection dynamics and outflow obstruction in hypertrophic cardiomyopathy. Bonow RO. **J Am Coll Cardiol** 1989 May;13(6):1280–2

Causal relation between the pressure gradient and left ventricular ejection time in hypertrophic cardiomyopathy. Sasson Z, et al. **J Am Coll Cardiol** 1989 May;13(6):1275–9

SURGERY

Clinical and hemodynamic results after mitral valve replacement in patients with obstructive hypertrophic cardiomyopathy. McIntosh CL, et al. **Ann Thorac Surg** 1989 Feb;47(2):236–46

Effect of surgical reduction of left ventricular outflow obstruction on hemodynamics, coronary flow, and myocardial metabolism in hypertrophic cardiomyopathy. Cannon RO 3d, et al. **Circulation** 1989 Apr;79(4):766–75

Surgical relief of subpulmonary stenosis after previous Senning (or Mustard) operation for complete transposition. Battistessa S, et al. **Int J Cardiol** 1989 Aug;24(2):230–3

Atrioventricular septal defect complicated by right ventricular outflow tract obstruction. Analysis of risk factors regarding surgical repair. Vogel M, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):34–9

[Experimental studies of original valved conduit using glutaraldehyde-preserved equine pericardium (Xenomedica)] Murakami T. **Hokkaido Igaku Zasshi** 1989 May;64(3):286–300 (Eng. Abstr.) **(Jpn)**

THERAPY

Growth of the pulmonary artery after neonatal balloon dilatation of the right ventricular outflow tract in an infant with the tetralogy of Fallot and atrioventricular septal defect. Parsons JM, et al. **Br Heart J** 1989 Jul;62(1):65–8

Balloon dilation of postoperative right ventricular outflow obstructions. Zeevi B, et al. **J Am Coll Cardiol** 1989 Aug; 14(2):401–8; discussion 409–12

VENTRICULAR OUTFLOW OBSTRUCTION, LEFT see **VENTRICULAR OUTFLOW OBSTRUCTION**

VENTRICULAR OUTFLOW OBSTRUCTION, RIGHT see **VENTRICULAR OUTFLOW OBSTRUCTION**

VENTRICULOGRAPHY, CEREBRAL

Brain morphology in schizophrenia: a 2- to 5-year CT scan follow-up study. Vita A, et al. **Acta Psychiatr Scand** 1988 Nov;78(5):618–21

MR and CT of masses of the anterosuperior third ventricle. Waggenspack GA, et al. **AJR** 1989 Mar;152(3):609–14

Alzheimer's disease: longitudinal CT studies of ventricular change. de Leon MJ, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1257–62

Dementia praecox revisited. Age disorientation, mental status, and ventricular enlargement. Goldberg TE, et al. **Br J Psychiatry** 1988 Aug;153:187–90

Partially sequestered fourth ventricle: CT and MR diagnosis of an unusual entity. Wagle VG, et al. **Can J Neurol Sci** 1989 Feb;16(1):84–7

The prognostic significance of the third ventricle and basal cisterns in severe closed head injury. Colquhoun IR, et al. **Clin Radiol** 1989 Jan;40(1):13–6

Intraventricular arachnoid cyst [letter] Lee KS, et al. **J Neurosurg** 1989 Jan;70(1):154–5

Colloid cyst of the fourth ventricle: diagnostic problems and pathogenic considerations. Jan M, et al. **Neurosurgery** 1989 Jun;24(6):939–42

[Intracranial physiological calcification on computed tomography (Part 2): Calcification in the choroid plexus of the lateral ventricles] Kwak R, et al. **No To Shinkei** 1988 Aug;40(8):707–11 (Eng. Abstr.) **(Jpn)**

[Symptoms of tuberous sclerosis of the brain in computerized tomography] Bem Z, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jul–Oct;52(4–5):201–4 (Eng. Abstr.) **(Pol)**

INSTRUMENTATION

[The problem of infection in measuring brain ventricle pressure] Rieger A, et al. **Zentralbl Chir** 1989;114(8):530–3 (Eng. Abstr.) **(Ger)**

METHODS

Rapid three-dimensional display of the cerebral ventricles from noncontrast CT scans. Naidich TP, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):779–88

VENTRICULOSTOMY see under **CEREBROSPINAL FLUID SHUNTS**

VENTROMEDIAL HYPOTHALAMIC NUCLEUS

Infusion of the 5-hydroxytryptamine agonists RU24969 and TFMPP into the paraventricular nucleus of the hypothalamus causes hypophagia. Hutson PH, et al. **Psychopharmacology (Berlin)** 1988;95(4):550–2

ANALYSIS

Considerations in the quantitative analysis of autoradiograms from 2-dimensional gels. Lustig RH, et al. **J Neurosci Methods** 1989 Jul;29(1):17–26

Comprehensive polypeptide analysis of microdissected rat brain areas: combining 2-dimensional gel electrophoresis with 2-dimensional HPLC and immunoanalysis and sequencing procedures. Mobbs C, et al. **J Neurosci Methods** 1989 Jul;29(1):5–15

DRUG EFFECTS

A 5-HT1-like receptor mediates a pertussis toxin-sensitive inhibition of rat ventromedial hypothalamic neurones in vitro. Newberry NR, et al. **Br J Pharmacol** 1988 Sep; 95(1):6–8

Dilute estradiol implants and progestin receptor induction in the ventromedial nucleus of the hypothalamus: correlation with receptive behavior in female rats. Pleim ET, et al. **Endocrinology** 1989 Apr;124(4):1807–12

Effect of prostaglandin E2 on thermoresponsive neurones in the preoptic and ventromedial hypothalamic regions of rats. Morimoto A, et al. **J Physiol (Lond)** 1988 Nov; 405:713–25

Estradiol modulation of oxytocin binding in the ventromedial hypothalamic nucleus of male and female rats. Coirini H, et al. **Neuroendocrinology** 1989 Aug;50(2):193–8

Colchicine lesions of ventromedial hypothalamus: effects on regulatory thermogenesis in the rat. Preston E, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):301–7

METABOLISM

Increased GABA shunt activity in VMN of three hyperphagic rat models. Beverly JL, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1225–31

Hypothalamic regulation of histidyl-proline diketopiperazine binding sites in the rat liver. Ogawa N, et al. **Brain Res** 1988 Jun 7;451(1–2):115–8

Age-dependent expression of microtubule-associated protein 2 in the ventromedial nucleus of the hypothalamus. Crandall JE, et al. **Brain Res Bull** 1989 Mar;22(3):571–4

Anatomical localization of the effects of 17 beta-estradiol on oxytocin receptor binding in the ventromedial hypothalamic nucleus. Johnson AE, et al. **Endocrinology** 1989 Jan;124(1):207–11

Time course of the estradiol-dependent induction of oxytocin receptor binding in the ventromedial hypothalamic nucleus of the rat. Johnson AE, et al. **Endocrinology** 1989 Sep; 125(3):1414–9

Two-dimensional gel autoradiographic analysis of the acute effects of estradiol on protein synthesis in the female rat ventromedial nucleus in vivo. Lustig RH, et al. **Endocrinology** 1989 Apr;124(4):1863–9

Quantitative assessment of the synergistic and independent effects of estradiol and progesterone on ventromedial hypothalamic and preoptic-area proteins in female rat brain. Jones KJ, et al. **Metab Brain Dis** 1987 Dec; 2(4):271–81

Testosterone modulates oxytocin binding in the hypothalamus of castrated male rats. Johnson AE, et al. **Neuroendocrinology** 1989 Aug;50(2):199–202

Circadian changes in the RNA content of rat hypothalamic nuclei in relation to food intake. Noskovič P, et al. **Physiol Bohemoslov** 1989;38(2):127–33

PATHOLOGY

Increased level of apolipoprotein B mRNA in the liver of ventromedial hypothalamus lesioned obese rats. Inui Y, et al. **Biochem Biophys Res Commun** 1989 Sep 15; 163(2):1107–12

PHYSIOLOGY

Effects of intraventricular infusion of corticotropin-releasing factor on VMH-lesioned obese rats. Arase K, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R751–6

Development of VMH obesity: in vivo insulin secretion and tissue insulin sensitivity. Pénicaud L, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E255–60

Ventromedial hypothalamic lesions eliminate gastric acid secretion elicited by anticipated eating. Weingarten HP, et al. **Appetite** 1988 Jun;10(3):205–19

Food intake and lateral hypothalamic self-stimulation covary after medial hypothalamic lesions or ventral midbrain 6-hydroxydopamine injections that cause obesity. Hernandez L, et al. **Behav Neurosci** 1989 Apr;103(2):412–22

Intra-ventromedial hypothalamic injection of insulin suppresses brown fat thermogenesis in the anaesthetized rat. Amir S, et al. **Brain Res** 1989 Feb 20;480(1–2):340–3

Studies on the sympathetic efferent nerves of brown adipose tissue of lean and obese Zucker rats. Holt SJ, et al. **Brain Res** 1989 Feb 27;481(1):106–12

Progesterone effects on sexual behavior and neuronal ultrastructure in female rats. Meisel RL, et al. **Brain Res** 1988 Oct 25;463(1):153–7

Direct effects of 3,4-dihydroxybutanoic acid gamma-lactone and 2,4,5-trihydroxypentanoic acid gamma-lactone on lateral and ventromedial hypothalamic neurons. Minami T, et al. **Brain Res** 1988 Oct 18;462(2):258–64

Accelerated norepinephrine turnover in peripheral tissues after ventromedial hypothalamic stimulation in rats. Saito M, et al. **Brain Res** 1989 Mar 6;481(2):298–303

Effect of norepinephrine, serotonin and tryptophan on the firing rate of sympathetic nerves. Sakaguchi T, et al. **Brain Res** 1989 Jul 17;492(1–2):271–80

Role of the ventromedial hypothalamus in the regulation of adenohypophyseal immunoreactive dynorphin in the rat. Spampinato S, et al. **Brain Res** 1988 Oct 25;463(1):100–6

Lateralized effects on hamster lordosis of unilateral hormonal and somatosensory stimuli. Floody OR. **Brain Res Bull** 1989 Apr;22(4):745–9

Lateral and ventromedial hypothalamic influences on hepatic autonomic nerve activity in the rat. Yoshimatsu H, et al. **Brain Res Bull** 1988 Aug;21(2):239–44

Influence of glucose on polysensory properties of neurons of the ventromedial nucleus of the hypothalamus. Smirnov SI, et al. **Neurosci Behav Physiol** 1989 Mar–Apr;19(2):150–6

Nerve growth factor-mediated sexual differentiation of the rat hypothalamus. Yanase M, et al. **Neurosci Res** 1988 Dec; 6(2):181–5

Injections of cholecystokinin into the ventromedial hypothalamic nucleus inhibit lordosis behavior in the rat. Babcock AM, et al. **Physiol Behav** 1988;43(2):195–9

A comparison of taste reactivity changes induced by ventromedial hypothalamic lesions and stria terminalis transections. Black RM, et al. **Physiol Behav** 1988; 44(6):699–708

Cholinergic mechanisms of lordotic behavior in rats. Kaufman LS, et al. **Physiol Behav** 1988;43(4):507–14

Hypothalamic obesity: comparison of radio-frequency and electrolytic lesions in weanling rats. King BM, et al. **Physiol Behav** 1989 Jan;45(1):127–32

RNA content of neurons in the ventromedial nuclei and lateral hypothalamic area relative to feeding status. Mozes S, et al. **Physiol Behav** 1988;43(3):287–91

Localized actions of progesterone in hypothalamus involve oxytocin. Schumacher M, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6798–801

[Syndrome following injury of the ventromedial hypothalamic nucleus (VMH syndrome) and its relation to increased secretion of gastric acid (hyperchlorhydria)—an experimental study with rats] Albrecht R, et al. **Zentralbl Neurochir** 1988;49(3):169–77 (Eng. Abstr.) **(Ger)**

[Neuropeptides in the mechanisms of the activation of escape reactions induced by stimulation of the ventromedial hypothalamus during food motivation satiation] Sudakov SK. **Biull Eksp Biol Med** 1989 Feb;107(2):135–8 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Involvement of dopaminergic systems in the ventromedial hypothalamic hyperphagia. Najam N. **Brain Res Bull** 1988

Oct;21(4):571–4
Partial compensation of sexual receptivity deficits in female rats with bilateral lesions of the hypothalamic ventromedial nucleus by transplants of fetal mediobasal hypothalamic tissue. Jensen C, et al. **Exp Clin Endocrinol** 1988 Aug; 91(3):287–300

SECRETION

Ovarian steroids and hypothalamic norepinephrine release: studies using in vivo brain microdialysis. Vathy I, et al. **Life Sci** 1988;43(19):1493–9

SURGERY

Psychiatric and neuropsychological findings after stereotactic hypothalamotomy, in cases of extreme sexual aggressivity. Dieckmann G, et al. **Acta Neurochir Suppl (Wien)** 1988; 44:163–6

ULTRASTRUCTURE

[Effects of stereotaxic excision of the basolateral amygdaloid nucleus on the ultrastructure of the ventromedial hypothalamic nucleus] López-Muñiz A, et al. **Bol Asoc Med P R** 1988 Aug;80(8):277–82 (Eng. Abstr.) (Spa)

VENTURICIDINS see under LACTONES

VENULES see under VEINS

VERAPAMIL

Stereoselective protein binding of verapamil enantiomers. Gross AS, et al. **Biochem Pharmacol** 1988 Dec 15; 37(24):4623–7
Improved recovery of cardiac function after hypothermic ischemic storage with ouabain. Lagerstrom CF, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):782–8
[Preservation of swine liver during 24 hours with C2 solution and verapamil] Aller Reyero MA, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):591–600 (Eng. Abstr.) (Spa)

ADMINISTRATION & DOSAGE

The calcium entry blocker verapamil increases red cell flux in the vasa recta of the exposed renal papilla. Hansell P, et al. **Acta Physiol Scand** 1988 Sep;134(1):9–15
Comparisons of verapamil administration twice and three times daily in hypertension. Salmela PI, et al. **Ann Clin Res** 1988;20(3):195–200
Efficacy of verapamil in the salvage of failing random skin flaps. Nichter LS, et al. **Ann Plast Surg** 1988 Sep; 21(3):242–5
Cellular pharmacology of doxorubicinol alone and combined with verapamil in pancreatic cancer cell lines. Chang BK, et al. **Anticancer Res** 1989 Mar–Apr;9(2):341–5
Dissociation of the verapamil-induced enhancement of doxorubicin's cytotoxicity from changes in cellular accumulation or retention of doxorubicin in pancreatic cancer cell lines. Chang BK, et al. **Anticancer Res** 1989 Mar–Apr;9(2):347–51
Hydrochlorothiazide is not additive to verapamil in treating essential hypertension. Nicholson JP, et al. **Arch Intern Med** 1989 Jan;149(1):125–8
Intraperitoneal verapamil therapy in CAPD patients with peritoneal hypopermeability. Effects on ultrafiltration. Lamperi S, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):425–8
Once-daily verapamil in hypertension: intra-arterial recording of blood pressure. Brigden GS, et al. **Br J Clin Pract Symp Suppl** 1988 Apr;60:48–52
Comparative efficacy of Univer and conventional verapamil in the control of ventricular response in atrial fibrillation. Hogg KJ, et al. **Br J Clin Pract Symp Suppl** 1988 Apr; 60:38–44
Scientific rationale and clinical implications of sustained-release formulations. Kellaway IW. **Br J Clin Pract Symp Suppl** 1988 Apr;60:9–13
Studies with sustained-release verapamil in essential hypertension. Silke B. **Br J Clin Pract Symp Suppl** 1988 Apr;60:53–7
Reversible cardiomyopathy following chronic supraventricular tachycardia. Belli B, et al. **Cardiologia** 1988 Jul;33(7):709–11
Left ventricular diastolic filling improvement obtained by intravenous verapamil in mild to moderate essential hypertension: a complex effect. Franchi F, et al. **Cardiology** 1989;76(1):32–41
Gel ointment of verapamil for percutaneous absorption. Sekine T, et al. **Drug Des Deliv** 1987 Feb;1(3):245–52
Drug input rate from the GI-tract. Michaelis-Menten kinetics and the bioavailability of slow release verapamil and nifedipine. Woodcock BG, et al. **Drug Des Deliv** 1988 May;2(4):299–310
Cataract formation is prevented by administration of verapamil to diabetic rats. Pierce GN, et al. **Endocrinology** 1989 Aug;125(2):730–5
Combination of ketanserin and verapamil or propranolol in patients with alcoholic cirrhosis: search for an additive effect. Hadengue A, et al. **Hepatology** 1989 Jan;9(1):83–7
Beneficial effect of oral verapamil on exercise induced silent myocardial ischemia. Bajaj R, et al. **Indian Heart J** 1989 Mar–Apr;41(2):75–81
Intracoronary verapamil for reversal of refractory coronary vasospasm during percutaneous transluminal coronary angioplasty. Babbitt DG, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1377–81
Addition of verapamil to overcome drug resistance in multiple myeloma: preliminary clinical observations in 10 patients [letter] Trümper LH, et al. **J Clin Oncol** 1989 Oct; 7(10):1578–9
Verapamil SR and propranolol LA: a comparison of efficacy and side effects in the treatment of mild to moderate hypertension. Bochsler JA, et al. **J Hum Hypertens** 1988 Mar;1(4):305–10
Casual versus 24-hour ambulatory blood pressure recording in the evaluation of chronic administration of sustained-release verapamil. Cardillo C, et al. **J Hum Hypertens** 1988 Mar;1(4):281–5
Verapamil as a co-mutagen in the Salmonella/mammalian microsome mutagenicity test. Ferguson LR, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):57–62
Transvenous perfusion of the brain with verapamil during focal cerebral ischemia in rats. Ueda T, et al. **Stroke** 1989 Apr;20(4):501–6
Does systemic pretreatment with verapamil prevent acute tubular necrosis after renal transplantation? Koller J, et al. **Transplant Proc** 1988 Oct;20(5):905–6
[Acute hypotensive effect after sublingual verapamil] Chen YS, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Feb;17(1):35–6 (Chi)
[Regression of hypertension-induced left heart enlargement in an endurance athlete treated with verapamil RR] Lehmann M, et al. **Z Kardiol** 1989 Jul;78(7):465–8 (Eng. Abstr.) (Ger)
[The cardioprotective effect of verapamil in acute percutaneous transluminal coronary angioplasty] Werner GS, et al. **Z Kardiol** 1988 Nov;77(11):728–35 (Eng. Abstr.) (Ger)
[Hemodynamic effect of a single intravenous dose of verapamil in patients with hypoxemic pulmonary hypertension] Poloński L, et al. **Pneumonol Pol** 1988 Sep; 56(9):398–405 (Pol)
[Interactions of propranolol with nifedipine, verapamil and diltiazem] Halawa B, et al. **Pol Tyg Lek** 1988 Oct 31; 43(44):1412–4 (Pol)
[Effects of tetrodotoxin and verapamil on abnormal ventricular activity at the late stage of experimental myocardial infarction in dogs] Aniukhovskiĭ EP, et al. **Kardiologiia** 1989 May;29(5):66–71 (Eng. Abstr.) (Rus)
[Effect of alpha-tocopherol combined with finoptin on the level of lipid hydroperoxides in plasma lipoproteins and on the functional activity of thrombocytes in patients with exertion-induced stable stenocardia] Levchenklo VA, et al. **Kardiologiia** 1989 Jun;29(6):25–8 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Potentiation of cocaine toxicity with calcium channel blockers. Derlet RW, et al. **Am J Emerg Med** 1989 Sep; 7(5):464–8
The association of fecal impaction and verapamil in a patient with scleroderma [letter] Ackerman Z, et al. **Am J Gastroenterol** 1989 Aug;84(8):981–2
Slow-release verapamil and hyperglycemic metabolic acidosis [letter] Roth A, et al. **Ann Intern Med** 1989 Jan 15;110(2):171–2
Cardiovascular collapse after verapamil in supraventricular tachycardia [letter] Zatuchni J. **Arch Dis Child** 1988 Sep; 63(9):1115–6
Cardiac arrest following i.v. verapamil may be related to concomitant digoxin therapy as well as halothane [letter] Merin RG. **Br J Anaesth** 1988 Sep;61(3):366
Increased cyclosporine blood concentrations due to verapamil administration. Maggio TG, et al. **Drug Intell Clin Pharm** 1988 Sep;22(9):705–7
Liver injury due to verapamil. Burgunder JM, et al. **Hepatogastroenterology** 1988 Aug;35(4):169–70
Serum gonadotropins in postmenopausal women after long-term verapamil treatment. Hulthén UL, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S63–4
Chronic calcium antagonist therapy: some unexpected results. Nayler WG, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S79–82
Long-acting verapamil and heart failure [letter] Mohindra SK, et al. **JAMA** 1989 Feb 17;261(7):994
Degeneration of junctional tachycardia to pre-excited atrial fibrillation after intravenous verapamil [letter] Garratt C, et al. **Lancet** 1989 Jul 22;2(8656):219
Misuse of verapamil in pre-excited atrial fibrillation. Garratt C, et al. **Lancet** 1989 Feb 18;1(8634):367–9
Verapamil withdrawal as a possible cause of myocardial infarction in a hypertensive woman with a normal coronary angiogram. Dimmitt SB, et al. **Med J Aust** 1988 Aug 15; 149(4):218
Effect of a single intravenous dose of verapamil on some immune parameters in duodenal ulcer patients. Malec P, et al. **Pol J Pharmacol Pharm** 1988 Jul–Aug;40(4):373–80
[Wolff-Parkinson-White syndrome and verapamil: apropos of a case of ventricular fibrillation] Michel B, et al. **Schweiz Med Wochenschr** 1989 May 13;119(19):630–4 (Eng. Abstr.) (Fre)
[Antiarrhythmic agent caused marked hypoglycemia in a patient receiving hemodialysis: relation with disopyramide and verapamil] Naitoh M, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Nov 20; 64(11):1115–23 (24 ref.) (Eng. Abstr.) (Jpn)
[Withdrawal syndrome after discontinuation of calcium channel blockers] Sosnowski M, et al. **Pol Tyg Lek** 1988 Oct 31;43(44):1409–11 (Pol)
[Verapamil-induced serum sickness (letter)] Pascual Velasco F. **Med Clin (Barc)** 1989 May 13;92(18):719 (Spa)

ANALOGS & DERIVATIVES

The effect of calcium entry blocker S-emopamil on cerebrocortical metabolism and blood flow changes evoked by graded hypotension. Kovách AG, et al. **Adv Exp Med Biol** 1989;248:461–70
Effect of emopamil on cerebrocortical microcirculation during hypoxia and reactive hyperemia and on [K+]e, pH, pO2 changes during and after N2 anoxia. Urbanics R, et al. **Adv Exp Med Biol** 1989;248:479–87
(S)-emopamil, a novel calcium and serotonin antagonist for the treatment of cerebrovascular disorders. 1st communication: pharmacological profile. Hofmann HP, et al. **Arzneimittelforschung** 1989 Mar;39(3):304–8
(S)-emopamil, a novel calcium and serotonin antagonist for the treatment of cerebrovascular disorders. 2nd communication: brain penetration, cerebral vascular and metabolic effects. Szabo L. **Arzneimittelforschung** 1989 Mar;39(3):309–14
(S)-emopamil, a novel calcium and serotonin antagonist for the treatment of cerebrovascular disorders. 3rd communication: effect on postischemic cerebral blood flow and metabolism, and ischemic neuronal cell death. Szabo L, et al. **Arzneimittelforschung** 1989 Mar;39(3):314–9
Characteristics of the phenylalkylamine binding site in canine cardiac sarcolemmal membranes. Dumont L, et al. **Basic Res Cardiol** 1988 Jul–Aug;83(4):369–75
Partition of Ca2+ antagonists in brain plasma membranes. Carvalho CM, et al. **Biochem Pharmacol** 1989 Jul 1; 38(13):2121–7
Enhancement of the activity of immunotoxins by analogues of verapamil. Pirker R, et al. **Cancer Res** 1989 Sep 1; 49(17):4791–5
Liquid-chromatographic quantification compared with gas-chromatographic-mass-spectrometric determination of verapamil and norverapamil in plasma. Hynning PA, et al. **Clin Chem** 1988 Dec;34(12):2502–3
Altered transverse tubule dihydropyridine receptor binding in malignant hyperthermia. Ervasti JM, et al. **J Biol Chem** 1989 Feb 15;264(5):2711–7
Determination of verapamil and its primary metabolites in serum by ion-pair adsorption high-performance liquid chromatography. Pieper JA, et al. **J Chromatogr Sci** 1988 Sep;26(9):473–7
Effects of emopamil on postischemic blood flow and neuronal damage in rat brain. Bielenberg GW, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):230–5
SR 33557, a novel calcium-antagonist: interaction with [3H]-(+/-)-nitrendipine and [3H]-(-)-desmethoxy-verapamil binding sites in cerebral membranes. Nokin P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):31–6
(S)-emopamil, a novel calcium channel blocker and serotonin S2 antagonist, markedly reduces infarct size following middle cerebral artery occlusion in the rat [see comments] Nakayama H, et al. **Neurology** 1988 Nov;38(11):1667–73. **Comment in:** Neurology 1989 Jul;39(7):1000
Treatment of focal ischemia [letter; comment] Weintraub MI. **Neurology** 1989 Jul;39(7):1000. **Comment on:** Neurology 1988 Nov;38(11):1667–73
Pharmacokinetics of verapamil and norverapamil in patients with hypertension: a comparison of oral conventional and sustained release formulations. Jørgensen NP, et al. **Pharmacol Toxicol** 1988 Aug;63(2):105–7
Photoaffinity labeling of the multidrug-resistance-related P-glycoprotein with photoactive analogs of verapamil. Safa AR. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7187–91
The Ca2+ channel and 5-HT2 receptor antagonist (s)-emopamil in cerebral ischaemia. Defeudis FV. **Trends Pharmacol Sci** 1989 Jun;10(6):215–7 (35 ref.)

ANALYSIS

Compatibility of aminophylline and verapamil in intravenous admixtures. Johnson CE, et al. **Am J Hosp Pharm** 1989 Jan;46(1):97–100

ANTAGONISTS & INHIBITORS

Epinephrine-induced reversal of verapamil's electrophysiologic and therapeutic effects in patients with paroxysmal supraventricular tachycardia. Morady F, et al. **Circulation** 1989 Apr;79(4):783–90
Biphasic dose-response relationship observed with Bay k 8644 on atrioventricular nodal conduction inhibited by verapamil. Lang J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):196–201

BLOOD

Quantitative determination of verapamil and metabolites in human serum by high-performance liquid chromatography and its application to biopharmaceutic investigations.

Salama ZB, et al. **Arzneimittelforschung** 1989 Feb; 39(2):210–5

Liquid–chromatographic quantification compared with gas–chromatographic–mass–spectrometric determination of verapamil and norverapamil in plasma. Hynning PA, et al. **Clin Chem** 1988 Dec;34(12):2502–3

Determination of verapamil and its primary metabolites in serum by ion–pair adsorption high–performance liquid chromatography. Pieper JA, et al. **J Chromatogr Sci** 1988 Sep;26(9):473–7

CEREBROSPINAL FLUID

Steady–state cerebrospinal fluid transfer of verapamil and metabolites in patients with schizophrenia. Narang PK, et al. **Clin Pharmacol Ther** 1988 Nov;44(5):550–7

DIAGNOSTIC USE

The excitable gap in atrioventricular nodal reentrant tachycardia. Characterization with ventricular extrastimuli and pharmacologic intervention. Schuger CD, et al. **Circulation** 1989 Aug;80(2):324–34

METABOLISM

Partial purification of a protein from maize (Zea mays) coleoptile membranes binding the Ca2+–channel antagonist verapamil. Harvey HJ, et al. **Biochem J** 1989 Jan 1;257(1):95–100

Reversal mechanism of multidrug resistance by verapamil: direct binding of verapamil to P–glycoprotein on specific sites and transport of verapamil outward across the plasma membrane of K562/ADM cells. Yusa K, et al. **Cancer Res** 1989 Sep 15;49(18):5002–6

Regiochemistry and enantioselectivity in the oxidative N–dealkylation of verapamil [published erratum appears in Drug Metab Dispos 1989 Mar–Apr;17(2):227] Nelson WL, et al. **Drug Metab Dispos** 1988 Nov–Dec;16(6):834–41

Enantioselective N–oxygenation of verapamil by the hepatic flavin–containing monooxygenase. Cashman JR. **Mol Pharmacol** 1989 Sep;36(3):497–503

PHARMACOKINETICS

First–pass uptake of verapamil, diazepam, and thiopental in the human lung. Roerig DL, et al. **Anesth Analg** 1989 Oct; 69(4):461–6

Multiple dose comparison of a whole 240 mg verapamil sustained–release tablet with two half tablets. Moreland TA, et al. **Biopharm Drug Dispos** 1989 May–Jun;10(3):311–9

Pharmacokinetics of once–daily verapamil: comparative bioavailability of two sustained–release formulations. Muirhead DC, et al. **Br J Clin Pract Symp Suppl** 1988 Apr; 60:14–9

Near–total reduction in verapamil bioavailability by rifampin. Electrocardiographic correlates. Barbarash RA, et al. **Chest** 1988 Nov;94(5):954–9

Extent and pharmacokinetic mechanisms of oral atenolol–verapamil interaction in man. Keech AC, et al. **Eur J Clin Pharmacol** 1988;35(4):363–6

Sustained–release verapamil: multiple–dose pharmacokinetic comparison of 120–mg and 240–mg tablets and the effect of halving a 240–mg tablet. McEwen J, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S57–9

An evaluation of the pharmacokinetics, pharmacodynamics, and dialyzability of verapamil in chronic hemodialysis patients. Hanyok JJ, et al. **J Clin Pharmacol** 1988 Sep; 28(9):831–6

Influence of 1–dodecylhexahydro–2H–azepin–2–one (Azone) on the in vitro permeation of verapamil hydrochloride across rat, hairless mouse, and human cadaver skin. Agrawala P, et al. **J Pharm Sci** 1988 Sep;77(9):776–8

Pharmacokinetics of verapamil and norverapamil in patients with hypertension: a comparison of oral conventional and sustained release formulations. Jørgensen NP, et al. **Pharmacol Toxicol** 1988 Aug;63(2):105–7

Influence of lidocaine on plasma protein binding and pharmacokinetics of verapamil in dogs. Belpaire FM, et al. **Prog Clin Biol Res** 1989;300:437–40

PHARMACOLOGY

Interaction of verapamil and halogenated inhalation anesthetics on hypoxic pulmonary vasoconstriction. Kjaeve J, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):193–8

Inhibitory effect of calcium channel blockers on proliferation of human glioma cells in vitro. Kunert–Radek J, et al. **Acta Neurol Scand** 1989 Feb;79(2):166–9

The effects of indomethacin and verapamil on the shape changes of vascular endothelial cells resulting from exposure to various inflammatory agents. Northover AM. **Agents Actions** 1988 Jul;24(3–4):351–5

Dextrorotatory isomer of sotalol: electrophysiologic effects and interaction with verapamil. Hiromasa S, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1552–7

The effect of verapamil cardioplegia on myocardial ultrastructure. Atkinson JB, et al. **Am J Cardiovasc Pathol** 1988 Apr;2(1):69–77

Influence of verapamil on some subcellular defects in diabetic cardiomyopathy. Afzal N, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 1):E453–8

Disparate effects of Ca channel blockade on afferent and efferent arteriolar responses to ANG II. Carmines PK, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F1015–20

Verapamil induces PTH resistance but increases duodenal calcium absorption in rats. Fox J. **Am J Physiol** 1988 Nov; 255(5 Pt 1):E702–7

Histamine–induced calcium transients in vascular smooth muscle cells: effects of verapamil and diltiazem. Matsumoto T, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H563–70

Regional differences in left ventricular wall motion in the anesthetized dog. Diedericks J, et al. **Anesthesiology** 1989 Jan;70(1):82–90

Effects and interaction of verapamil and volatile anesthetics on the isolated perfused guinea pig heart. Marijic J, et al. **Anesthesiology** 1988 Dec;69(6):914–22

Augmented fragmentation of atrial activity upon premature electrical stimuli by verapamil. Aizawa Y, et al. **Angiology** 1989 Feb;40(2):94–100

Effect of verapamil in vitro and in vivo on the accumulation of vincristine in leukemic cells from patients with low malignant lymphoma. Gruber A, et al. **Anticancer Res** 1989 Jan–Feb;9(1):9–12

Doxorubicin resistance circumvention by verapamil in B16 melanoma cells. Mariani M, et al. **Anticancer Res** 1989 Jan–Feb;9(1):29–32

Effects of chronic treatment with verapamil on adrenoceptor–mediated contraction of rabbit aorta. Aceto JF, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr; 298:125–38

Cardioselective effects of gallopamil compared with verapamil in the dog heart. Takahashi K, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:157–73

Diabetes enhances vasoreactivity to calcium entry blockers. Pieper GM, et al. **Artery** 1989;16(5):263–71

Stable analogues of prostacyclin and thromboxane A2 display contradictory influences on atherosclerotic properties of cells cultured from human aorta. The effect of calcium antagonists. Akopov SE, et al. **Atherosclerosis** 1988 Aug; 72(2–3):245–8

Human tumor cells resistant to verapamil. Huber KR, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1312–8

Modulation by verapamil of vincristine pharmacokinetics and toxicity in mice bearing human tumor xenografts. Horton JK, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1727–36

Lack of effect by prostaglandin F2 alpha and verapamil on calcium uptake by isolated corpora lutea from pseudopregnant rats. Lahav M, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):546–8

Lipid peroxidation of phosphatidylcholine liposomes depressed by the calcium channel blockers nifedipine and verapamil and by the antiarrhythmic–antihypoxic drug stobadine. Ondrias K, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):238–45

Cardiac conduction interactions of propranolol and verapamil with halothane in pentobarbitone–anaesthetized dogs. Hart AP, et al. **Br J Anaesth** 1988 Dec;61(6):748–53

The calcium–channel blocker, verapamil, does not improve portal pressure in patients with alcoholic cirrhosis. Merkel C, et al. **Br J Clin Pharmacol** 1988 Sep;26(3):273–7

Clinical pharmacology of verapamil. McInnes GT. **Br J Clin Pract Symp Suppl** 1988 Apr;60:3–8 (43 ref.)

Effects of verapamil on the cellular accumulation of daunorubicin in blast cells and on the chemosensitivity of leukaemic blast progenitors in acute myelogenous leukaemia. Maruyama Y, et al. **Br J Haematol** 1989 Jul; 72(3):357–62

Interactions of calcium antagonists and the calcium channel agonist Bay K 8644 on neurotransmission of the mouse isolated vas deferens. Rae GA, et al. **Br J Pharmacol** 1989 Feb;96(2):333–40

Verapamil blocks the afterhyperpolarization but not the spike frequency accommodation of rat CA1 pyramidal cells in vitro. Jones RS, et al. **Brain Res** 1988 Oct 18;462(2):367–71

Depolarization–induced [3H]arachidonic acid accumulation: effects of external Ca2+ and phospholipase inhibitors. Dorman RV, et al. **Brain Res Bull** 1988 Sep;21(3):445–50

The effect of verapamil on potentiated rest contractions in the rat ventricular myocardium. Leite CM, et al. **Braz J Med Biol Res** 1988;21(4):859–62

Contractile reactivity of the perfused mesenteric vascular bed from sinoaortic denervated rats to norepinephrine, methoxamine and verapamil. Vasquez EC, et al. **Braz J Med Biol Res** 1988;21(3):629–32

Neuromuscular blocking action of verapamil in cats. Kraynack BJ, et al. **Can Anaesth Soc J** 1983 May;30(3 Pt 1):242–7

Pharmacologic alterations of the isovolumic index: a study of the effects of isoproterenol, propranolol and verapamil. McGillem MJ, et al. **Can J Cardiol** 1989 Mar;5(2):121–6

Effects of manganese chloride, verapamil, and hypoxia on the rate–dependent increase in internal longitudinal resistance of rabbit myocardium. Alvarez J, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):263–8

Effects of verapamil on sympathetic tone in normal and chronic sinoaortic–denervated conscious dogs. Damase–Michel C, et al. **Can J Physiol Pharmacol** 1989 May;67(5):428–30

Effects of K–channel blockers, calcium, and verapamil suggest different pacemaker mechanisms in cultured neonatal rat and embryonic chick ventricle cells. Schanne OF, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):795–800

Verapamil reversal of doxorubicin resistance in multidrug–resistant human myeloma cells and association with drug accumulation and DNA damage. Bellamy WT, et al. **Cancer Res** 1988 Nov 15;48(22):6365–70

Correlation of multidrug resistance with decreased drug accumulation, altered subcellular drug distribution, and increased P–glycoprotein expression in cultured SW–1573 human lung tumor cells. Keizer HG, et al. **Cancer Res** 1989 Jun 1;49(11):2988–93

Competitive inhibition by verapamil of ATP–dependent high affinity vincristine binding to the plasma membrane of multidrug–resistant K562 cells without calcium ion involvement. Naito M, et al. **Cancer Res** 1989 Mar 15; 49(6):1452–5

Modulation by adriamycin, daunomycin, verapamil, and trifluoperazine of the biochemical processes linked to mouse skin tumor promotion by 12–O–tetradecanoylphorbol–13–acetate. Satyamoorthy K, et al. **Cancer Res** 1989 Oct 1;49(19):5364–70

Cyclosporin A and verapamil enhancement of daunorubicin–produced nucleolar protein B23 translocation in daunorubicin–resistant and –sensitive human and murine tumor cells. Sweet P, et al. **Cancer Res** 1989 Feb 1; 49(3):677–80

The classification of calcium antagonists by the WHO expert committee: relevance in neurology. Agnoli A. **Cephalalgia** 1988;8 Suppl 8:7–10

Interaction of aminoglycoside antibiotics with calcium channel blockers at the smooth muscles of the isolated tracheal rings of the rat. Paradelis A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):321

Influence of calcium antagonists on the antitumor activity and the cardiac toxicity of doxorubicin in the rat. Villani F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):686–7

Effects of verapamil and propranolol on changes in extracellular K+, pH, and local activation during graded coronary flow in the pig. Watanabe I, et al. **Circulation** 1989 Apr;79(4):939–47

Effects of ketanserin, verapamil and diltiazem on vascular sympathetic nerve activity in hypertension. Tsuda K, et al. **Clin Exp Hypertens** [A] 1989;11 Suppl 1:435–40

Caffeine– and potassium–induced contractures of mouse isolated soleus muscle: effects of verapamil, manganese, EGTA and calcium withdrawal. Savage AO, et al. **Clin Exp Pharmacol Physiol** 1988 Dec;15(12):901–11

The effect of verapamil, diltiazem and nifedipine on baroreceptor reflexes. Zsotér TT, et al. **Clin Invest Med** 1988 Dec;11(6):430–4

The pharmacodynamic and pharmacokinetic interaction between single doses of flecainide acetate and verapamil: effects on cardiac function and drug clearance. Holtzman JL, et al. **Clin Pharmacol Ther** 1989 Jul;46(1):26–32

Verapamil–induced natriuretic and diuretic effects: dependency on sodium intake. Hughes GS Jr, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):400–7

The influence of verapamil and nifedipine on hepatic indocyanine green clearance in patients with HBsAg–positive cirrhosis and ascites. Lay CS, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):453–7

Calcium entry blockade and alpha–adrenergic vascular reactivity in human beings: differences between nicardipine and verapamil. Pedrinelli R, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):285–90

The actions of verapamil at the neuromuscular junction. Ribera AB, et al. **Comp Biochem Physiol [C]** 1989; 93(1):137–41

Prevention of detrimental effect of cyclosporin A on vascular ingrowth of transplanted pancreatic islets with verapamil. Rooth P, et al. **Diabetes** 1989 Jan;38 Suppl 1:202–5

Calcium antagonists and hormone release. VI. Effects of a calcium antagonist (verapamil) on the biphasic insulin release in vivo. Barbarino A, et al. **Diabetes Res** 1988 May; 8(1):21–4

Diabetic nephropathy in the rat: differing renal effects of an angiotensin converting enzyme inhibitor and a calcium inhibitor. Whitty MR, et al. **Diabetes Res** 1988 Jun; 8(2):91–6

Verapamil. An updated review of its pharmacodynamic and pharmacokinetic properties, and therapeutic use in hypertension. McTavish D, et al. **Drugs** 1989 Jul; 38(1):19–76 (400 ref.)

The role of calcium in gonadotropin–releasing hormone induction of follicle–stimulating hormone release by the pituitary gonadotrope. Simpson WG, et al. **Endocr Res** 1989;15(3):355–73

Effect of calcium channel blockade and beta–adrenoceptor blockade on short graded and single–level endurance exercises in normal men. Vanhees L, et al. **Eur J Appl Physiol** 1988;58(1–2):87–91

Verapamil, neuromuscular transmission and the nicotinic receptor. Edeson RO, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):301–6

Different antagonism of the positive chronotropic and inotropic responses of the isolated, blood–perfused dog atrium to Bay k 8644 by nicardipine and verapamil. Furukawa Y, et al. **Eur J Pharmacol** 1988 Nov 1; 156(2):231–7

Effects of verapamil on gastric acid secretion in vitro and in vivo. Herling AW, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):341–50

Antagonism by tubocurarine and verapamil of the regenerative acetylcholine release from mouse motor nerve. Hong SJ, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):11–7

Effects of verapamil, diltiazem and disopyramide on sinus function: a comparison with bepridil. Kirchhof CJ, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):369–76

Specific suppression of pentylenetetrazol-induced epileptiform discharges in CA3 neurons (hippocampal slice, guinea pig) by the organic calcium antagonists flunarizine and verapamil. Bingmann D, et al. **Exp Brain Res** 1989; 74(2):239–48

Differential antiepileptic effects of the organic calcium antagonists verapamil and flunarizine in neurons of organotypic neocortical explants from newborn rats. Bingmann D, et al. **Exp Brain Res** 1988;72(2):439–42

The membrane transport system responsible for multidrug resistance is operating in nonresistant cells. Neyfakh AA, et al. **Exp Cell Res** 1988 Oct;178(2):513–7

Elimination of permeability mutants from selections for drug resistance in mammalian cells. Schibler MJ, et al. **FASEB J** 1989 Feb;3(2):163–8

Glycolysis in P-glycoprotein-overexpressing human tumor cell lines. Effects of resistance-modifying agents. Broxterman HJ, et al. **FEBS Lett** 1989 Apr 24; 247(2):405–10

Effect of verapamil on platelet aggregation. Glusa E. **Folia Haematol (Leipz)** 1988;115(4):469–73

Interference of pentobarbital and verapamil with the reactivity of middle cerebral artery of cat exposed to experimental subarachnoid hemorrhage. Marín J, et al. **Gen Pharmacol** 1989;20(2):243–8

Effect of verapamil on gastric acid secretion and ulceration by pyloric-ligation and aspirin in albino rats. Kale A, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun;33(2):113–7

Failure of oral atenolol and verapamil to increase the capacity and duration of exercise in patients in sinus rhythm with mitral stenosis. Misra M, et al. **Int J Cardiol** 1989 Apr; 23(1):37–41

Renal effects of calcium channel blockers in vivo. Mittal SR, et al. **Int J Cardiol** 1988 Oct;21(1):82–4

Effects of verapamil and diltiazem on hyperthermic cell death in CHO cells. Coss RA, et al. **Int J Hyperthermia** 1989 May–Jun;5(3):383–7

Verapamil ameliorates clinical, pathologic and biochemical manifestations of experimental chagasic cardiomyopathy in mice. Morris SA, et al. **J Am Coll Cardiol** 1989 Sep; 14(3):782–9

Verapamil attenuates lung vascular responses to endotoxin in sheep. Parker RE, et al. **J Appl Physiol** 1988 Nov; 65(5):2138–43

Verapamil: a novel probe of surfactant secretion from rat type II pneumocytes. Warburton D, et al. **J Appl Physiol** 1989 Mar;66(3):1304–8

Effects of different dosages of the calcium antagonist verapamil in exercise- and methacholine-induced bronchospasm in children with chronic asthma. Boner AL, et al. **J Asthma** 1987;24(2):81–9

Immediate effect of verapamil on pulmonary functions in bronchial asthma. Sharma SK, et al. **J Asthma** 1987; 24(3):179–82

Effect of verapamil on glycogenolysis and gluconeogenesis in the perfused rat liver. Badr M. **J Biochem Toxicol** 1989 Spring;4(1):35–7

Augmentation of cardiac reflexes in the cat by the calcium antagonist verapamil. Bom AH, et al. **J Cardiovasc Pharmacol** 1988 Oct;12(4):397–404

Differential effects of verapamil and flunarizine on epinephrine-induced vasoconstriction and on spontaneous vasomotion of arterioles in skeletal muscle in the rat in vivo. De Clerck F, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):76–83

Electrophysiologic effects of dextro- and levo-verapamil on sinus node and AV node function in humans. Echizen H, et al. **J Cardiovasc Pharmacol** 1988;12(5):543–6

Dissociation of cardiodepression from cardioprotection with calcium antagonists: diltiazem protects ischemic rat myocardium with a lower functional cost as compared with verapamil or nifedipine. Grover GJ, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):331–40

Influence of allopurinol plus verapamil treatment on myocardial tissue necrosis during permanent coronary occlusion in canine hearts with small infarcts. Kingma JG Jr, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):6–13

Verapamil alters the relationship between renal perfusion pressure and glomerular filtration rate and renin release: the mechanism of the antihypertensive effect. Lin HB, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S57–9

Effect of chronic verapamil therapy on cardiac norepinephrine and beta-adrenoceptor density. Nayler WG, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):629–36

Is the increased responsiveness to verapamil in the forearm resistance vessels of patients with hypertension a consequence of structural change? Robinson BF, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S63–5

Verapamil potentiates vagally mediated strioventricular chronotropic responses in dogs. Wallick DW, et al. **J Cardiovasc Pharmacol** 1988 Jul;12(1):122–5

Drug-resistance in multiple myeloma and non-Hodgkin's lymphoma: detection of P-glycoprotein and potential circumvention by addition of verapamil to chemotherapy. Dalton WS, et al. **J Clin Oncol** 1989 Apr;7(4):415–24

Clinical trials of agents that reverse multidrug-resistance. Gottesman MM, et al. **J Clin Oncol** 1989 Apr;7(4):409–11

The effect of verapamil on the pharmacokinetic disposition of theophylline in cigarette smokers. Gin AS, et al. **J Clin Pharmacol** 1989 Aug;29(8):728–32

Verapamil has no effect on porto-hepatic pressure gradient, hepatic blood flow and elimination function of the liver in patients with liver cirrhosis. Vinel JP, et al. **J Hepatol** 1989 May;8(3):302–7

Effects of verapamil and nifedipine on systemic hemodynamics in spontaneously hypertensive rats. Lee JY, et al. **J Hypertens** 1988 Dec;6(12):1017–22

Effect of verapamil and sodium nitroprusside on hindlimb vascular resistance in New Zealand genetically hypertensive and Japanese spontaneously hypertensive rats. Phelan EL, et al. **J Hypertens Suppl** 1988 Dec;6(4):S681–3

Effects of calcium channel blockers on the endothelial release of von Willebrand factor after exercise in healthy subjects. Musumeci V, et al. **J Lab Clin Med** 1989 Apr;113(4):525–31

Effects of chlorpromazine, berberine and verapamil on Escherichia coli heat-labile enterotoxin-induced intestinal hypersecretion in rabbit ileal loops. Askri H, et al. **J Med Microbiol** 1988 Oct;27(2):99–103

Diltiazem and verapamil reduce the loss of adenine nucleotide metabolites from hypoxic hearts. Takeo S, et al. **J Mol Cell Cardiol** 1988 May;20(5):443–56

Increased cytosolic pH in multidrug-resistant human lung tumor cells: effect of verapamil. Keizer HG, et al. **J Natl Cancer Inst** 1989 May 3;81(9):706–9

Blood–brain barrier breakdown in cold-injured brain is linked to a biphasic stimulation of ornithine decarboxylase activity and polyamine synthesis: both are coordinately inhibited by verapamil, dexamethasone, and aspirin. Koenig H, et al. **J Neurochem** 1989 Jan;52(1):101–9

Verapamil and nifedipine effects on gastric acid secretion and ulcer formation in rats. Glavin GB. **J Pharm Pharmacol** 1988 Jul;40(7):514–5

Substrate-selective inhibition by verapamil and diltiazem: differential disposition of antipyrine and theophylline in humans. Abernethy DR, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):994–9

Contrasting effects of verapamil and nifedipine on pH of ischemic myocardium in the dog. Moo Y, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):654–60

Calcium channel antagonists modulate the acrosome reaction but not capacitation in mouse spermatozoa. Fraser LR, et al. **J Reprod Fertil** 1989 May;86(1):223–33

Bradycardic effects of AQ-A 39 (falipamil) in situ and in isolated, blood-perfused dog hearts. Comparison with alinidine and verapamil. Ogiwara Y, et al. **Jpn Heart J** 1988 Nov;29(6):849–61

Verapamil reverses PTH- or CRF-induced abnormal fatty acid oxidation in muscle. Perna AF, et al. **Kidney Int** 1988 Dec;34(6):774–8

Age-related digoxin–verapamil interactions in the adult rat. Weinhouse E, et al. **Methods Find Exp Clin Pharmacol** 1989 Jun;11(6):367–72

Hemodynamic effects of verapamil during fentanyl–nitrous oxide anesthesia. Griffin RM, et al. **Mt Sinai J Med** 1989 Mar;56(2):93–6

Anti-cholinergic effect of verapamil on the muscarinic acetylcholine receptor-gated K+ channel in isolated guinea-pig atrial myocytes. Ito H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):244–6

Intracellular mechanisms of verapamil and diltiazem action on striated muscle of the rabbit. Su JY. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):297–302

Differential effects of verapamil and flunarizine on cardiac L-type and T-type Ca channels. Tytgat J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):690–2

Long-term neurological assessment of the post-resuscitative effects of flunarizine, verapamil and nimodipine in a new model of global complete ischaemia. Wauquier A, et al. **Neuropharmacology** 1989 Aug;28(8):837–46

Modulation of mitoxantrone cytotoxicity by verapamil in human chronic myeloid leukemia cells. Satyamoorthy K, et al. **Oncology** 1989;46(2):128–31

The effect of propranolol and verapamil on external pacing threshold: a placebo-controlled study. Falk RH, et al. **PACE** 1988 Oct;11(10):1439–43

The electrophysiological effects of alpha-chloralose anesthesia in the intact dog: (1) alone and (2) in combination with verapamil. Schwartz JB, et al. **PACE** 1989 Feb; 12(2):283–93

Effects of verapamil on amylase release from rat pancreatic acini and its relation to calcium fluxes. Duan RD, et al. **Pancreas** 1988;3(4):427–32

Action of papaverine and verapamil on norepinephrine and calcium evoked contraction of vascular and non vascular smooth muscle. D'Agostino G, et al. **Pharmacol Res Commun** 1983 Nov;15(10):937–49

Inhibition of theophylline elimination in rabbits by verapamil. Nielsen-Kudsk JE. **Pharmacol Toxicol** 1989 Apr; 64(4):349–51

The effect of verapamil on serotonergic mechanisms in the rat blood platelets. Pietraszek M, et al. **Pol J Pharmacol Pharm** 1988 Jan–Feb;40(1):81–6

Effects of chronic hypoxia and verapamil on cAMP content in tissues and blood plasma. Yuan XJ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(1):30–3

Swimming-induced suppression of rat pineal melatonin is prevented by pretreatment with calcium channel blockers. Morton DJ, et al. **Proc Soc Exp Biol Med** 1989 Jan; 190(1):105–8

Role of theophylline, verapamil, and diltiazem on rat fatigued diaphragmatic muscle in vitro. Mitra P, et al. **Proc West Pharmacol Soc** 1989;32:209–10

The effects of two calcium antagonists (nifedipine and verapamil) on renal function in sheep. Verschuer L, et al. **Q J Exp Physiol** 1988 Jul;73(4):533–8

Effects of verapamil and nifedipine on human uterine artery "in vitro". García de Boto MJ, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov;62(2):361–4

Verapamil sensitizes cardiomyopathic hamsters to the effects of stress. Tapp WN, et al. **Res Commun Chem Pathol Pharmacol** 1988 Dec;62(3):511–4

Ventilatory response to sustained hypoxia: effect of methysergide and verapamil. Long GR, et al. **Respir Physiol** 1989 Feb;75(2):173–82

Effects of verapamil on intracellular lipid accumulation in cat hearts with 3 h of regional-ischaemia. Jodalen H, et al. **Scand J Clin Lab Invest** 1989 Feb;49(1):55–61

Blocking of the receptor-stimulated calcium entry into human platelets by verapamil and nicardipine. Avdonin PV, et al. **Thromb Res** 1988 Dec 15;52(6):587–97

Verapamil is a potent inhibitor of 5-HT-induced platelet aggregation. Glusa E, et al. **Thromb Res** 1989 Jul 15; 55(2):239–245

Effects of verapamil and BAY K 8644 on the hypoxic contraction of the isolated human pulmonary artery. Ohe M, et al. **Tohoku J Exp Med** 1989 Jan;157(1):81–2

Value of prostacyclin plus verapamil for obtaining 24-hour preserved liver allografts. Mora NP, et al. **Transplant Proc** 1988 Oct;20(5):980–2

Comparison of the effect of cyclosporine, verapamil, and trifluoperazine on calcium-induced membrane permeability of mitochondria. Strzelecki T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):182–3

Additive inhibitory effect of cyclosporine and verapamil may occur through different mechanisms that may be dependent or independent of the slow calcium channel. Weir MR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):866–70

Verapamil selectively inhibits expression of interleukin-2 messenger RNA in mitogen activated mononuclear blood cells. Zanker B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):85–7

Effect of verapamil on glomerular filtration rate and glomerular prostaglandin production during cyclosporine administration. Bunke M, et al. **Transplantation** 1988 Dec; 46(6):919–21

In vitro cyclosporine toxicity. The effect of verapamil. Scoble JE, et al. **Transplantation** 1989 Apr;47(4):647–50

Similar effects of cyclosporine and verapamil on lymphokine, interleukin 2 receptor, and proto-oncogene expression. Walz G, et al. **Transplantation** 1989 Feb;47(2):331–4

Analysis of the in vitro pharmacologic response of renal pelvis and detrusor smooth muscle to thiphenamil, oxybutynin and verapamil. Levounis P, et al. **Urol Int** 1988; 43(4):211–8

Verapamil and chlorpromazine inhibit the budding of Sindbis and vesicular stomatitis viruses from infected chicken embryo fibroblasts. Schlesinger MJ, et al. **Virology** 1989 Jan;168(1):187–90

[The effect of calcium antagonists nimodipin, verapamil, diltiazem and flunarizin on local cerebral blood flow in rabbits in chronic experiments] Gachev E, et al. **Eksp Med Morfol** 1989;28(2):48–51 (Eng. Abstr.) **(Bul)**

[The effect of the calcium antagonists nimodipin, verapamil and diltiazem on local cerebral blood flow of the cortex and thalamus in cats] Ganchev E. **Eksp Med Morfol** 1989; 28(2):44–7 (Eng. Abstr.) **(Bul)**

[Facilitatory effect of verapamil on adrenergic transmitter release and its relation to calmodulin] Min L, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):530–2 (Eng. Abstr.) **(Chi)**

[Dependence of the major inhibitory effects of mesocaine and isoptin on electrical activity] **Cesk Fysiol** 1986; 35(5):470–3 **(Cze)**

[The effect of verapamil on action potentials in the ventricular myocardium in the human embryo] **Cesk Fysiol** 1986;35(5):465–4 **(Cze)**

[Comparison of the effects of mesocaine (trimecaine) and isoptin (verapamil) on the electrical and mechanical activity of cardiac cells] **Cesk Fysiol** 1986;35(5):466–9 **(Cze)**

[Hemodynamic effect of certain vasodilators on the major and lesser circulation] Romoda T. **Orv Hetil** 1988 Aug 21; 129(34):1791–6 (50 ref.) (Eng. Abstr.) **(Hun)**

[Chemo-sensitivity of a human salivary adenocarcinoma cell line to several anti-cancer drugs and enhancement of the antitumor effects by combination with filipin or verapamil] Sugiyama M, et al. **Gan To Kagaku Ryoho** 1989 Jan; 16(1):89–94 (Eng. Abstr.) **(Jpn)**

[Effect of verapamil on the granulocyte activity studied by the NBT test in patients with hay fever and non-atopic bronchial asthma] Jankowska R, et al. **Pneumonol Pol** 1988 Aug;56(8):352–5 (Eng. Abstr.) **(Pol)**

[Changes in the functional level of baroreceptors under the action of verapamil in arterial hypertension] Luna RL, et al. **Arq Bras Cardiol** 1988 Oct;51(4):297–303 (Eng. Abstr.) **(Por)**

[Mechanism of the vascular action of verapamil and a crown ether derivative] Gurbanov KG, et al. **Farmakol Toksikol** 1988 Nov–Dec;51(6):45–8 (Eng. Abstr.) **(Rus)**

[Effect of anti-angina agents on the intensity of lipid peroxidation in the myocardium and liver of rats under hyperbaric oxygenation] Nikolaĭ SL. **Farmakol Toksikol**

1988 Sep–Oct;51(5):65–8 (Eng. Abstr.) (Rus)
[Effect of the calcium antagonists ryodipine and verapamil on the carnitine–dependent metabolism of fatty acids in the rat heart] Simkhovich BZ, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):34–7 (Eng. Abstr.) (Rus)
[Frequency–related blocking of sodium channels in the membrane of isolated rat cardiomyocytes by the calcium antagonist verapamil] Pidoplichko VI, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):87–9 (Eng. Abstr.) (Rus)
[Effect of preoperative administration of isoptin on the blood flow and function of the kidneys in patients with nephrolithiasis] Karaev ME, et al. **Vestn Khir** 1988 Dec; 141(12):74–7 (Eng. Abstr.) (Rus)
[The effect of verapamil on the dynamics of decrease in the brain levels of phosphorus macroergs during ischemia studied by 31P–NMR in vivo] Likhodil SS, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):109–13 (Eng. Abstr.) (Rus)
[The effect of Ca2+ blockers on the response of respiratory tract smooth muscle to bronchoconstrictor and bronchodilator agents] Haxhiu MA, et al. **Pnene Bolesti** 1988 Jan–Jun;40(1–2):3–8 (Eng. Abstr.) (Scr)
[Metabolism of the ischemic heart muscle and the effect of reperfusion and verapamil] Kucharská J, et al. **Bratisl Lek Listy** 1988 Nov;89(11):815–27 (Eng. Abstr.) (Slo)
[Cardioprotective effects of verapamil on mitochondrial function in the ischemic myocardium] Kucharská J, et al. **Cesk Fysiol** 1988;37(6):545–8 (Slo)
[Clinically important interactions of carbamazepine with verapamil and diltiazem] Ochodnický M. **Cesk Neurol Neurochir** 1988 Jul;51(4):236–8 (Slo)
[Action of calcium antagonists on ureteral dynamics] Salman S, et al. **Actas Urol Esp** 1989 Mar–Apr;13(2):150–2 (Eng. Abstr.) (Spa)

POISONING

Extracorporeal bypass for the treatment of verapamil poisoning. Hendren WG, et al. **Ann Emerg Med** 1989 Sep; 18(9):984–7 (26 ref.)
Combined intoxication with digitoxin and verapamil. The possible inhibition of sensitisation to digitalis–specific antiserum by toxic drug concentrations. Bruserud O, et al. **J Clin Lab Immunol** 1988 Apr;25(4):167–71
Management of acute severe verapamil intoxication. McMillan R. **J Emerg Med** 1988 May–Jun;6(3):193–6
Cerebral infarction associated with oral verapamil overdose. Samniah N, et al. **J Toxicol Clin Toxicol** 1988;26(5–6):365–9
[Death induced by verapamil overdose] Härkönen M, et al. **Duodecim** 1988;104(16):1247–8 (Fin)
[Attempted suicide with verapamil] Pap I, et al. **Orv Hetil** 1989 Apr 2;130(14):735–6 (27 ref.) (Eng. Abstr.) (Hun)

STANDARDS

[Bioequivalence of verapamil–ratiopharm 80 mg tablets: is control of cheaper generic drugs superfluous?] Rietbrock N, et al. **Z Kardiol** 1988 Jul;77(7):476–7 (Ger)

THERAPEUTIC USE

Attenuation of the pressor response to laryngoscopy and tracheal intubation with intravenous verapamil. Nishikawa T, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):232–5
Celiprolol and verapamil in the treatment of essential hypertension. McInnes GT, et al. **Am Heart J** 1988 Nov; 116(5 Pt 2):1437–8
Effects of verapamil on left ventricular relaxation and filling dynamics in coronary artery disease: a study by pulsed Doppler echocardiography. Myreng Y, et al. **Am Heart J** 1989 Apr;117(4):870–5
Comparison of verapamil versus propranolol therapy in syndrome X. Bugiardini R, et al. **Am J Cardiol** 1989 Feb 1;63(5):286–90
Esmolol versus verapamil in the acute treatment of atrial fibrillation or atrial flutter. Platia EV, et al. **Am J Cardiol** 1989 Apr 15;63(13):925–9
Effect of intravenous propranolol or verapamil on infant orthodromic reciprocating tachycardia. Silberbach M, et al. **Am J Cardiol** 1989 Feb 15;63(7):438–42
Intravenous flecainide versus verapamil for acute conversion of paroxysmal atrial fibrillation or flutter to sinus rhythm. Suttorp MJ, et al. **Am J Cardiol** 1989 Mar 15;63(11):693–6
Calcium channel blockers in dysphagia secondary to esophageal dysmotility [letter] Tabibian N. **Am J Gastroenterol** 1989 Jun;84(6):688–9
A randomized, double–blind, placebo–controlled study of verapamil and metoprolol in treatment of multifocal atrial tachycardia [published erratum appears in Am J Med 1989 Jan;86(1):142] Arsura E, et al. **Am J Med** 1988 Oct; 85(4):519–24
No metabolic side effects of long–term treatment with verapamil in hypertension. Midtbø K, et al. **Angiology** 1988 Dec;39(12):1025–9
Verapamil treatment of canine hemorrhagic shock. Carroll RG, et al. **Ann Emerg Med** 1989 Jul;18(7):750–4
The effect of verapamil in patients with asymptomatic stress–induced ischemia. Zilberman A, et al. **Arch Intern Med** 1989 May;149(5):1062–4
A trial of verapamil in the treatment of stuttering in adults. Brady JP, et al. **Biol Psychiatry** 1989 Mar 1;25(5):630–3
Verapamil treatment of premenstrual syndrome. Deicken RF. **Biol Psychiatry** 1988 Oct;24(6):689–92
Verapamil in affective disorders: a controlled, double–blind study. Höschl C, et al. **Biol Psychiatry** 1989 Jan 15; 25(2):128–40
Treating hypertension in black compared with white non–insulin dependent diabetics: a double blind trial of verapamil and metoprolol. Cruickshank JK, et al. **BMJ** 1988 Nov 5;297(6657):1155–9
Effect of verapamil on cell cycle transit and c–myc gene expression in normal and malignant murine cells. Huber KR, et al. **Br J Cancer** 1989 May;59(5):714–8
Univer, a new one–daily calcium antagonist—its role in cardiovascular disease. Proceedings of a symposium. London, 9th October 1987. **Br J Clin Pract Symp Suppl** 1988 Apr;60:1–59
Clinical trials of verapamil: comparative studies of verapamil with beta–blockers and nifedipine. Jackson SH. **Br J Clin Pract Symp Suppl** 1988 Apr;60:45–7 (10 ref.)
Sustained–release verapamil in stable angina. Kohli RS, et al. **Br J Clin Pract Symp Suppl** 1988 Apr;60:20–3
Diuretics and calcium antagonists in hypertension. MacGregor GA, et al. **Br J Clin Pract Symp Suppl** 1988 Apr;60:58–9
Improvement in left ventricular diastolic function in patients with stable angina after chronic treatment with verapamil and nicardipine. Rodrigues EA, et al. **Br J Clin Pract Symp Suppl** 1988 Apr;60:27–32
A double–blind study of verapamil in the treatment of stuttering. Brumfitt SM, et al. **Br J Disord Commun** 1988 Apr;23(1):35–40
Fetal supraventricular tachycardia: detection by routine auscultation and successful in–utero management [letter] Mills MS. **Br J Obstet Gynaecol** 1989 Apr;96(4):501–2
Ventricular fibrillation in acute experimental myocardial ischemia: protection by magnesium sulfate. Barros LF, et al. **Braz J Med Biol Res** 1988;21(4):791–9
Effects of calcium blockers on ventricular fibrillation during acute myocardial infarction. Da–Luz PL, et al. **Braz J Med Biol Res** 1988;21(4):801–10
Identification of anthracyclines and related agents that retain preferential activity over adriamycin in multidrug–resistant cell lines, and further resistance modification by verapamil and cyclosporin A. Coley HM, et al. **Cancer Chemother Pharmacol** 1989;24(5):284–90
Recurrent sustained ventricular tachycardia solely responsive to verapamil in a patient with a remote myocardial infarction. Belhassen B, et al. **Cardiology** 1988;75(4):294–300
Verapamil prevents silent myocardial perfusion abnormalities during exercise in asymptomatic patients with hypertrophic cardiomyopathy. Udelson JE, et al. **Circulation** 1989 May; 79(5):1052–60
Evaluation of cyclosporin–verapamil interaction, with observations on parent cyclosporin and metabolites. Sabaté I, et al. **Clin Chem** 1988 Oct;34(10):2151
Pindolol, not verapamil, in combination with digoxin is the treatment of choice in chronic atrial fibrillation [letter] Channer KS, et al. **Clin Sci** 1989 Feb;76(2):229–30
Pulmonary artery pressure changes in primary pulmonary hypertension after verapamil and oxygen. Dubiel JP, et al. **Cor Vasa** 1988;30(3):200–10
Relationships between heart rate, exercise tolerance and cardiac output in atrial fibrillation: the effects of treatment with digoxin, verapamil and diltiazem. Lewis RV, et al. **Eur Heart J** 1988 Jul;9(7):777–81
Effectiveness of calcium antagonist drugs in patients with unstable angina and proven coronary artery disease. Mauri F, et al. **Eur Heart J** 1988 Dec;9 Suppl N:158–63
Effect of sustained–release verapamil therapy on the blood pressure at rest and on the pressor response to isometric exertion in hypertensive patients. Cardillo C, et al. **Eur J Clin Pharmacol** 1988;34(6):549–53
Sustained–release and instant–release verapamil in treatment of angina pectoris. Jespersen CM, et al. **Eur J Clin Pharmacol** 1989;36(6):625–7
An objective evaluation of once–daily sustained–release verapamil (480 mg) in chronic stable angina. Rodrigues EA, et al. **Eur J Clin Pharmacol** 1988;34(5):531–2
Cocaine–induced ventricular fibrillation: protection afforded by the calcium antagonist verapamil. Billman GE, et al. **FASEB J** 1988 Nov;2(14):2990–5
Prophylactic treatment of cluster headache with verapamil. Gabai IJ, et al. **Headache** 1989 Mar;29(3):167–8
Verapamil in migraine prophylaxis—a five–year review. Solomon GD. **Headache** 1989 Jul;29(7):425–7 (16 ref.)
Chronic hypotensive effects of verapamil in angiotensin hypertension are steroid independent. Lohmeier TE, et al. **Hypertension** 1989 Mar;13(3):273–82
Effects of intravenous verapamil on left ventricular systolic function and diastolic filling dynamics in patients with coronary artery disease: analysis of intramyocardial markers. Amende I, et al. **Int J Card Imaging** 1988; 3(2–3):169–76
Myocardial salvage with streptokinase combined with nitroglycerine and verapamil in acute myocardial infarction. Lee KJ, et al. **Int J Cardiol** 1988 Dec; 21(3):279–91
Bepridil versus verapamil in stable angina pectoris—a controlled clinical trial. Nielsen HK, et al. **Int J Cardiol** 1989 Jun;23(3):357–64
Relationships between verapamil plasma concentrations and its antihypertensive action. Gonzalez–Gomez A, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Sep;26(9):453–60
Comparative effects of verapamil and nitroprusside on left ventricular function in patients with hypertension. Brush JE Jr, et al. **J Am Coll Cardiol** 1989 Aug;14(2):515–22
Prevention of hereditary cardiomyopathy in the Syrian hamster with chronic verapamil therapy. Factor SM, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1599–604
Reversal of atrial tachycardia with intravenous administration of verapamil in a dog. Foodman MS, et al. **J Am Vet Med Assoc** 1989 Mar 15;194(6):800–2
Verapamil administration for acute termination of supraventricular tachycardia in dogs. Kittleson M, et al. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1525–9
Calcium antagonists into the nineties: appraisal and future trends. Verapamil satellite symposium to the 25th anniversary International Symposium on Calcium Antagonists. Basel, Switzerland, February 12, 1988. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S1–82
Treatment of isolated systolic hypertension in the elderly with verapamil slow–release 240 mg. Böhmer F, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S45–6
Effects of sustained–release verapamil on 24–hour ambulatory blood pressure and on pressor response to isometric exertion in hypertensive patients. Cardillo C, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S31–3
Verapamil sustained–release in renal parenchymal hypertension: effect on blood pressure, kidney function, angiotensin II, aldosterone, arginine vasopressin, atrial natriuretic peptide, and lipoproteins. Eiskjaer H, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S17–22
Verapamil versus nicardipine in rest and exercise hypertension. Fisconaro G, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S71–2
Comparative efficacy, safety, and kinetics of immediate– and slow–release verapamil in hispanic patients with essential hypertension. Fuenmayor NT, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S53–6
Treatment of mild to moderate hypertension with verapamil slow–release in outpatients. Collaborative Group of the Spanish League for the Fight Against Hypertension. Gómez Pajuelo C, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S50–2
A double–blind, randomized, crossover comparison of equivalent (by weight) oral doses of verapamil and diltiazem in patients with mild to moderate hypertension. Hollifield JW, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S68–70
The effects of age on the pharmacodynamics and pharmacokinetics of two formulations of verapamil. Hosie J, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S60–2
Effects of atenolol, verapamil, and xamoterol on heart rate and exercise tolerance in digitalised patients with chronic atrial fibrillation. Lewis RV, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):1–6
Comparison of amlodipine and verapamil in the treatment of mild to moderate hypertension. Lorimer AR, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S89–93
The efficacy and duration of action of sustained–release verapamil in essential hypertension. McCormack PM, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S34–7
The effects of slow–release verapamil on blood pressure and cardiovascular system in essential hypertension. Meric M, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S42–4
Noninvasive blood pressure monitoring evaluation of verapamil slow–release 240–mg antihypertensive effectiveness. Novo S, et al. **J Cardiovasc Pharmacol** 1989; 13 Suppl 4:S38–41
Efficacy and safety of verapamil SR 240 mg in essential hypertension: results of a multicentric phase IV study. Speders S, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S47–9
Treatment of resistant hypertension: 3 years of follow–up with the combination of verapamil and methyldopa. Spritzer N, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S65–7
Correlation between verapamil plasma concentration and P–R prolongation in essential hypertension. Zachariah PK, et al. **J Clin Pharmacol** 1988 Sep;28(9):843–7
Effects of verapamil on tardive dyskinesia and psychosis in schizophrenic patients. Reiter S, et al. **J Clin Psychiatry** 1989 Jan;50(1):26–7
Treatment of tardive dyskinesia with verapamil [letter] Buck OD, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):303–4
Terminating SVT–mediated recurrent ventricular fibrillation with verapamil. Applebaum D. **J Emerg Med** 1988 May–Jun;6(3):189–92
The effects of verapamil, diltiazem, nifedipine and propranolol on metabolic control in hypertensives with non–insulin dependent diabetes mellitus. Chellingsworth MC, et al. **J Hum Hypertens** 1989 Feb;3(1):35–9
The antihypertensive efficacy of verapamil in the elderly evaluated by ambulatory blood pressure measurement. Cox JP, et al. **J Hum Hypertens** 1988 Jun;2(1):41–7
The effects of verapamil and propranolol on quality of life in hypertension. Fletcher AE, et al. **J Hum Hypertens** 1989 Apr;3(2):125–30
A comparison of amlodipine, verapamil and placebo in the treatment of mild to moderate hypertension. Amlodipine Study Group. Lorimer AR, et al. **J Hum Hypertens** 1989 Jun;3(3):191–6
Sustained–release verapamil as a first–step drug in the treatment of mild to moderate hypertension. Karcier SM,

et al. **J Int Med Res** 1989 May-Jun;17(3):268-76

Management of esophageal spasm in epidermolysis bullosa dystrophica using verapamil [letter] Mitchell JD, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):133-4

Reperfusion-induced arrhythmias in the conscious rat: a comparative study with three calcium antagonists. Kinoshita K, et al. **J Surg Res** 1989 Aug;47(2):166-72

Effects of naloxone and verapamil in experimental amitriptyline poisoning in rats. Knudsen K, et al. **J Toxicol Clin Toxicol** 1988;26(5-6):313-24

Effects of intravesical instillation of verapamil in patients with detrusor hyperactivity. Mattiasson A, et al. **J Urol** 1989 Jan;141(1):174-7

Hemodynamic benefits of verapamil after aortic reconstruction. Dahn MS, et al. **J Vasc Surg** 1989 Jun; 9(6):806-11

Sustained ventricular tachycardia responsive to verapamil in patients with hypertrophic cardiomyopathy. Clinical and electrophysiological assessment of drug efficacy. Miyajima S, et al. **Jpn Heart J** 1989 Mar;30(2):241-9

Declaration of vested interest [letter] Leschin J. **Lancet** 1989 Sep 30;2(8666):806

The effect of the association of calcium channel inhibitors with antagonists of H2 histamine receptors on the gastric secretion in duodenal ulcer patients. Gluhovschi GH, et al. **Med Interne** 1988 Jul-Sep;26(3):207-11

Modulation of ischemic-induced damage to cerebral adenylate cyclase in gerbils by calcium channel blockers. Christie-Pope BC, et al. **Metab Brain Dis** 1986 Dec; 1(4):249-61

Protective effect of verapamil in experimental myocardial ischaemia: an electron microscopic investigation. Georgescu L, et al. **Morphol Embryol (Bucur)** 1988 Oct-Dec;34(4):277-80

Comparison of the ulcerogenicity of indomethacin and the gastric secretion in verapamil-treated rats. Mirossay L, et al. **Physiol Bohemoslov** 1988;37(6):503-6

Tissue calcium in uraemia. Krog M, et al. **Scand J Urol Nephrol** 1989;23(2):141-4

Verapamil ameliorates acute cyclosporine A (CsA) nephrotoxicity and improves immunosuppression after cadaver renal transplantation. Dawidson I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1511-3

Verapamil pretreatment of hemodynamically unstable donors prevents delayed graft function post-transplant. Korb S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1236-8

Pharmacological method (triple-drug therapy) for successful 24-hour preservation of liver allografts. Pereira F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1303-4

A prospective randomized study of the protective effect of verapamil on ischemic renal injury in renal allotransplants. Sobh MA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1230-2

[Experimental study on myocardial protection with verapamil cardioplegia] Zhu P. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):316-9, 22 (Eng. Abstr.) (Chi)

[Doppler evaluation of left ventricular diastolic filling after intravenous injection of verapamil in patients with hypertrophic cardiomyopathy] Jin L, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jul;27(7):412-4, 454 (Eng. Abstr.) (Chi)

[Beta adrenergic receptors in patients with untreated and verapamil-treated hypertrophic cardiomyopathy] Kölbel F, et al. **Sb Lek** 1988 Jul;90(7):218-22 (Eng. Abstr.) (Cze)

[Cross-over double-blind study of verapamil versus diltiazem in effort myocardial ischemia] Lablanche JM, et al. **Ann Cardiol Angeiol (Paris)** 1989 May;38(5):281-4 (Eng. Abstr.) (Fre)

[Efficacy of verapamil in the prevention of ventricular fibrillation in the acute phase of myocardial infarction] Rolli A, et al. **Arch Mal Coeur** 1988 Jul;81(7):907-11 (Eng. Abstr.) (Fre)

[Effect of enalapril, furosemide and verapamil on cyclosporin concentration in whole blood] Spes CH, et al. **Klin Wochenschr** 1988 Dec 1;66(23):1184-9 (Eng. Abstr.) (Ger)

[Modification of pulmonary hypertension in patients with chronic obstructive lung diseases using calcium antagonists in an acute trial] Schauer J, et al. **Z Gesamte Inn Med** 1989 Jan 15;44(2):50-4 (Eng. Abstr.) (Ger)

[Verapamil in primary hyperparathyroidism] Scholz G, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):330-2 (Eng. Abstr.) (Ger)

[Successful treatment of stress-induced therapy refractory ventricular tachycardia with verapamil] Kühlkamp V, et al. **Z Kardiol** 1989 Jun;78(6):405-7 (Eng. Abstr.) (Ger)

[Hemodynamic effects of verapamil in pulmonary hypertension caused by heart valve disease] Marozsán I, et al. **Orv Hetil** 1989 Apr 30;130(18):945-8 (Eng. Abstr.) (Hun)

[Experimental study on combination chemotherapy of UFT and calcium antagonist in gastric cancer] Nakano GI, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):793-8 (Eng. Abstr.) (Jpn)

[Three cases of Torsades de pointes] Nanimatsu H, et al. **Kokyu To Junkan** 1989 May;37(5):535-9 (Eng. Abstr.) (Jpn)

[A case of coronary spasm during general anesthesia successfully treated with nitroglycerin and verapamil] Asao Y, et al. **Masui** 1989 Mar;38(3):376-9 (Eng. Abstr.) (Jpn)

[Use of non-invasive transdermal stimulation of the heart in selecting an anti-arrhythmia drug in a patient with supraventricular paroxysmal tachycardia with a re-entry mechanism within the atrioventricular node] Prochaczek F, et al. **Kardiol Pol** 1988;31(6):337-42 (Eng. Abstr.) (Pol)

[Calcium channel blockers and their value in the treatment of bronchial asthma] Wąsek Z. **Pneumonol Pol** 1988 Oct; 56(10):467-71 (Pol)

[Effect of verapamil on electrophysiologic characteristics of the accessory pathway in patients with Wolff-Parkinson-White syndrome] Molenda W, et al. **Pol Tyg Lek** 1988 Sep 5;43(36):1157-60 (Eng. Abstr.) (Pol)

[Calcium antagonists in hypertrophic cardiomyopathy] Nartowicz E, et al. **Pol Tyg Lek** 1988 Oct 31;43(44):1395-8 (Pol)

[Comparative studies of the effects of nifedipine, verapamil and diltiazem on respiratory mechanics in patients with atopic and non-atopic asthma] Wąsek Z, et al. **Pol Tyg Lek** 1988 Oct 17-24;43(42-43):1358-60 (Eng. Abstr.) (Pol)

[Effect of verapamil on the functional status of thrombocytes in patients with ischemic heart disease] Belousov IuB, et al. **Kardiologiia** 1989 Feb;29(2):42-5 (Eng. Abstr.) (Rus)

[Calcium antagonists in the treatment of stenocardia] Furkalo NK, et al. **Kardiologiia** 1988 Oct;28(10):5-9 (Rus)

[Comparative effectiveness of finoptin and phosphobion in treating attacks of supraventricular tachycardia] Lukoshiavichiute AI, et al. **Kardiologiia** 1989 Apr; 29(4):64-9 (Eng. Abstr.) (Rus)

[Anti-arrhythmia effectiveness of phosphobion and finoptin in the treatment of atrioventricular retrograde paroxysmal tachycardia] Lukoshiavichiute AI, et al. **Kardiologiia** 1989 Jan;29(1):21-5 (Eng. Abstr.) (Rus)

[Methodological approaches to the evaluation of the effectiveness of anti-anginal preparations in patients with stenocardia by 24-hour ECG monitoring] Metelitsa VI, et al. **Kardiologiia** 1988 Dec;28(12):61-5 (Eng. Abstr.) (Rus)

[Diagnosis and prevention of myocardial reperfusion injury in experimental myocardial infarction] Rudnev DV, et al. **Kardiologiia** 1988 Dec;28(12):94-7 (Eng. Abstr.) (Rus)

[Effects of isoptin and obsidan on the coronary blood flow and tactics in anti-angina therapy of patients with ischemic heart disease] Vakhliev VD, et al. **Kardiologiia** 1988 Oct; 28(10):36-9 (Eng. Abstr.) (Rus)

[Finoptin treatment of patients with psoriasis] Mavrov II, et al. **Vrach Delo** 1988 Nov;(11):76-7 (Eng. Abstr.) (Rus)

[Effect of digoxin, furosemide and finoptin on the central hemodynamics in hypertension] Orynchak Ma. **Vrach Delo** 1989 Mar;(3):35-8 (Eng. Abstr.) (Rus)

[Experience in the use of finoptin (verapamil) in cerebrovascular diseases] Burtsev EM, et al. **Zh Nevropatol Psikhiatr** 1989;89(1):43-6 (Eng. Abstr.) (Rus)

[Effect of calcium antagonists of the verapamil type on regional cerebral blood flow and bioelectric activity of the brain in patients with cerebral infarction] Tomberg TA, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):34-8 (Eng. Abstr.) (Rus)

[Antiarrhythmic effects of verapamil] Shapiro M, et al. **Arch Inst Cardiol Mex** 1976 May-Jun;46(3):305-16 (Eng. Abstr.) (Spa)

[Combination of quinidine and verapamil in auricular fibrillation] Sobrino JA, et al. **Rev Esp Cardiol** 1989 Apr; 42(4):262-6 (Eng. Abstr.) (Spa)

TOXICITY

Potentiating effects of verapamil on cardiovascular teratogenicity of phenobarbital in the chick embryos. Nishikawa T, et al. **Dev Pharmacol Ther** 1988;11(6):322-7

VERATRIDINE see under **VERATRINE**

VERATRINE

ANALOGS & DERIVATIVES

High-affinity uptake of 67Cu into a veratridine-releasable pool in brain tissue. Barnea A, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C315-22

Symmetry and asymmetry of permeation through toxin-modified Na+ channels. Garber SS. **Biophys J** 1988 Nov;54(5):767-76

Release of 5-hydroxytryptamine, dopamine and noradrenaline in the rat vas deferens in the presence of compound 48/80, veratridine or K+. Celuch SM, et al. **Br J Pharmacol** 1989 Jan;96(1):77-82

Interactions of benztropine, atropine and ketamine with veratridine-activated sodium channels: effects on membrane depolarization, K+-efflux and neurotransmitter amino acid release. Erecińska M, et al. **Br J Pharmacol** 1988 Jul;94(3):871-81

Depolarization and insulin-like growth factor-I (IGF-I) differentially regulate the mitotic cycle in cultured rat sympathetic neuroblasts. DiCicco-Bloom E, et al. **Brain Res** 1989 Jul 10;491(2):403-6

Veratridine-induced release of endogenous glutamate from rat brain cortex slices: a reappraisal of the role of calcium. Villanueva S, et al. **Brain Res** 1988 Oct 4;461(2):377-80

Sodium channel toxins veratrine and veratridine modify opioid and muscarinic but not beta-adrenergic binding sites in brain slices. Van Huizen F, et al. **Brain Res Bull** 1988 Jul;21(1):129-32

Pharmacological characterization of sodium channels in the primary culture of individual Drosophila embryos: neurons of a mutant deficient in a putative sodium channel gene. Sakai K, et al. **Cell Differ Dev** 1989 Mar;26(2):107-18

Enhancement by veratridine and 60 mM KCl of vasopressin-induced 3',5'-cyclic adenosine monophosphate production and cellular free calcium concentration in rat renal papillary collecting tubule cells in culture. Ishikawa S, et al. **Endocrinology** 1989 Jan;124(1):265-71

The influence of ouabain on twitch contractions in the presence of veratridine. Nishimura M, et al. **Gen Pharmacol** 1989;20(1):23-30

Rapid and slow gating of veratridine-modified sodium channels in frog myelinated nerve. Rando TA. **J Gen Physiol** 1989 Jan;93(1):43-65

Effect of cocaine and cocaine congeners on veratridine-induced depolarization in mouse cerebrocortical synaptoneurosomes. Zimányi I, et al. **J Neurosci Res** 1989 Feb;22(2):201-8

Cardiovascular responses to stimulation of cardiac receptors in the cat and their modification by changes in respiration. de Burgh Daly M, et al. **J Physiol (Lond)** 1988 Dec; 407:349-62

Veratridine-induced phosphorylation and activation of tyrosine hydroxylase, and synthesis of catecholamines in cultured bovine adrenal medullary cells. Uezono Y, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):653-9

Differential effects of 4-aminopyridine on acetylcholine release triggered by K+ depolarization, veratridine, or A23187 in rat cerebral cortical synaptosomes. Meyer EM, et al. **Neurochem Res** 1989 Feb;14(2):157-60

Activation of the release of dopamine in the carotid body by veratridine. Evidence for the presence of voltage-dependent Na+ channels in type I cells. Rocher A, et al. **Neurosci Lett** 1988 Dec 5;94(3):274-8

Catecholamine mediated actions of the veratrum alkaloids on the isovolumic canine heart. Blomquist TM, et al. **Proc West Pharmacol Soc** 1988;31:109-11

Inotropic effects of veratridine on the canine atria and ventricles in vivo and in vitro. Blomquist TM, et al. **Proc West Pharmacol Soc** 1989;32:217-20

PHARMACOLOGY

The effects of calcium antagonists on calcium overload contractures in embryonic chick myocytes induced by ouabain and veratrine. Patmore L, et al. **Br J Pharmacol** 1989 May;97(1):83-94

Sodium channel toxins veratrine and veratridine modify opioid and muscarinic but not beta-adrenergic binding sites in brain slices. Van Huizen F, et al. **Brain Res Bull** 1988 Jul;21(1):129-32

Central alpha-adrenoceptor influence over the cardiovascular reflexes activated by veratrine. Gurtu S, et al. **Indian J Med Res** 1989 Jun;90:209-14

Effect of organic and inorganic calcium channel blockers on gamma-amino-n-butyric acid release induced by monensin and veratrine in the absence of external calcium. Sitges M. **J Neurochem** 1989 Aug;53(2):436-41

Veratrine-induced decrease of (Na+ + K+)-adenosine triphosphatase activity in rat brain slices. Matsuda T, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):729-35

Sodium dependent 3H-noradrenaline release from rat neocortical slices in the absence of extracellular calcium: presynaptic modulation by mu-opioid receptor and adenylate cyclase activation. Schoffelmeer AN, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):548-52

[Monoclonal antibodies to cytoplasmic tetrodotoxin-sensitive brain protein. The effect of veratrine on antibody binding to neuroblastoma cells] Pinchuk GV, et al. **Neirofiziologiia** 1988;20(6):794-800 (Eng. Abstr.) (Rus)

VERATRUM see under **PLANTS, TOXIC**

VERATRUM ALKALOIDS

ISOLATION & PURIFICATION

[Isolation and identification of alkaloids from Fritillaria ningguoensis S. C. Chen et S. F. Yin] Li QH, et al. **Yao Hsueh Hsueh Pao** 1988 Jun;23(6):415-21 (Eng. Abstr.) (Chi)

[The structure and absolute configuration of vertaline B isolated from Veratrum taliense Lose. f.] Min ZD, et al. **Yao Hsueh Hsueh Pao** 1988;23(8):584-7 (Eng. Abstr.) (Chi)

VERBAL BEHAVIOR

see related
LANGUAGE DISORDERS
SPEECH DISORDERS

Epilepsy and verbal behaviour. Lebrun Y. **Acta Neurochir Suppl (Wien)** 1988;44:106-10 (16 ref.)

Adolescent language as affectively coded behavior: findings of an observational research project. Danesi M. **Adolescence** 1989 Summer;24(94):311-20

Maternal language environment of children with mental retardation. Davis H, et al. **Am J Ment Retard** 1988 Sep; 93(2):144–53

Three procedures for increasing vocal response to therapist prompt in infants and children with Down syndrome. Drash PW, et al. **Am J Ment Retard** 1989 Jul;94(1):64–73

Increasing oral reading proficiency through overcorrection and phonic analysis. Singh NN, et al. **Am J Ment Retard** 1988 Nov;93(3):312–9

Mothers' directiveness in their interactions with their children with and without Down syndrome. Tannock R. **Am J Ment Retard** 1988 Sep;93(2):154–65

Clinicians can agree in assessing relationship patterns in psychotherapy. The Core Conflictual Relationship Theme method. Crits–Christoph P, et al. **Arch Gen Psychiatry** 1988 Nov;45(11):1001–4

Conversational skills of inpatient conduct-disordered youths. Social validation of component behaviors and implications for skills training. Hansen DJ, et al. **Behav Modif** 1988 Jul; 12(3):424–44

Effects of undesirable, competing behaviors on the generalization of adaptive skills. A case study. Horner RH, et al. **Behav Modif** 1989 Jan;13(1):74–90

Cognitions and self-talk during food intake of restrained and unrestrained eaters. Jansen A, et al. **Behav Res Ther** 1988; 26(5):393–8

Clarification requests of normal and language-impaired children. Hargrove PM, et al. **Br J Disord Commun** 1988 Apr;23(1):51–61

The behavioural treatment of verbal interaction skills following severe head injury: a single case study. Giles GM, et al. **Brain Inj** 1988 Jan–Mar;2(1):75–9

Compensatory strategies in the language of closed head injured patients. Penn C, et al. **Brain Inj** 1988 Jan–Mar; 2(1):3–17

Semantic abilities in dementia of the Alzheimer type. II. Grammatical semantics. Smith SR, et al. **Brain Lang** 1989 May;36(4):533–42

Verbal reaction time patterns in aphasic adults: consideration for apraxia of speech [published erratum appears in Brain Lang 1989 Jul;37(1):177] Towne RL, et al. **Brain Lang** 1988 Sep;35(1):138–53

The verbal selective reminding test: preliminary data for healthy elderly. Banks PG, et al. **Exp Aging Res** 1987 Winter;13(4):203–7

Discontinuity in mother–child conversations: cleft palate child compared to normal sibling. Lynch JI, et al. **Folia Phoniatr (Basel)** 1988;40(5):209–17

Literalness: an unsuggested (spontaneous) item of hypnotic behavior? McCue PA, et al. **Int J Clin Exp Hypn** 1988 Jul;36(3):192–7

Transference, language, and affect in the treatment of bulimarexia. Rizzuto AM. **Int J Psychoanal** 1988;69 (Pt 3):369–87

The fetishistic use of speech. Weich MJ. **Int J Psychoanal** 1989;70 (Pt 2):245–53

Production deficiencies in elicited language but not in the spontaneous verbalizations of hyperactive children. Zentall SS. **J Abnorm Child Psychol** 1988 Dec;16(6):657–73

Influence of verbal ability on the expression of aggression in physically abused children. Burke AE, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):215–8

Confusion of tongues: the Ferenczian metaphor for childhood seduction and emotional trauma. Rachman AW. **J Am Acad Psychoanal** 1989 Summer;17(2):181–205

An evaluation of labeling–then–doing with moderately handicapped persons: acquisition and generalization with complex tasks. Wacker DP, et al. **J Appl Behav Anal** 1988 Winter;21(4):369–80

Quantitative meanings of verbal probability expressions. Reagan RT, et al. **J Appl Psychol** 1989 Jun;74(3):433–42

Word fluency in high–functioning autistic children. Boucher J. **J Autism Dev Disord** 1988 Dec;18(4):637–45

Functional analysis and treatment of bizarre speech. Mace FC, et al. **J Behav Ther Exp Psychiatry** 1988 Dec; 19(4):289–96

A procedural distinction between elective and progressive mutism. Paniagua FA, et al. **J Behav Ther Exp Psychiatry** 1988 Sep;19(3):207–10 (9 ref.)

The effects of social context and verbal skill on the stereotypic and task-involved behaviour of autistic children. Dadds M, et al. **J Child Psychol Psychiatry** 1988 Sep;29(5):669–76

Aspects of structure and content of maternal talk with infants. Elias G, et al. **J Child Psychol Psychiatry** 1988 Jul; 29(4):523–31

The effect of pictured visual cues on elicited sentence imitation. Madison CL, et al. **J Commun Disord** 1989 Apr; 22(2):81–91

Verbal response mode use in contrasting psychotherapies: a within-subjects comparison. Stiles WB, et al. **J Consult Clin Psychol** 1988 Oct;56(5):727–33

Children's expressions of spatial knowledge. Allen GL, et al. **J Exp Child Psychol** 1989 Aug;48(1):114–30

Stress in time. Kelly MH, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):389–403

Effects of speaking rate and lexical status on phonetic perception. Miller JL, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):369–78

The language of patient care [editorial] Branch WT. **J Gen Intern Med** 1989 Jul–Aug;4(4):359

The language of attentive patient care: a comparison of two medical interviews. Mishler EG, et al. **J Gen Intern Med** 1989 Jul–Aug;4(4):325–35 (34 ref.)

What doctors should call their patients. Lavin M. **J Med Ethics** 1988 Sep;14(3):129–31

Lay people's judgements of storytellers as mentally retarded or not retarded. Kernan KT, et al. **J Ment Defic Res** 1989 Apr;33 (Pt 2):149–57

Responses to requests for clarification by linguistically normal and language-impaired children in conversation. Brinton B, et al. **J Speech Hear Disord** 1988 Nov; 53(4):383–91

Referential communication by aphasic and nonaphasic adults. Busch CR, et al. **J Speech Hear Disord** 1988 Nov; 53(4):475–82

Acoustic phonetic effects of two types of verbal feedback in dysarthric subjects. Till JA, et al. **J Speech Hear Disord** 1988 Nov;53(4):449–58

The oral syntactic proficiency of learning disabled students: a spontaneous story sampling analysis. Roth FP, et al. **J Speech Hear Res** 1989 Mar;32(1):67–77

Mothers' verbal directives to delayed and nondelayed children. Garrard KR. **Ment Retard** 1989 Feb;27(1):11–8

Development of functional use of oral language in a child with Down syndrome. Blackbourn JM, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1137–8

A pilot study on the effect of training parents of language-delayed children in pragmatic interaction strategies. Iven CJ, et al. **Percept Mot Skills** 1989 Aug; 69(1):295–303

Prognosis of aphasia by fitting growth curves. Yamada K. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1147–50

Concept formation and verbalization. Zepp RA. **Percept Mot Skills** 1986 Apr;62(2):370

Psychophysiological triad and verbal system in the study of affect and emotion. Lolas F. **Psychopathology** 1988; 21(2–3):76–82 (26 ref.)

Modelling affect in terms of speech parameters. Stassen HH. **Psychopathology** 1988;21(2–3):83–8

Vocal indicators of affective disorders. Scherer KR, et al. **Psychother Psychosom** 1988;49(3–4):179–86 (24 ref.)

Communication in the hospital setting: a survey of medical and everyday language use amongst patients, nurses and doctors. Bourhis RY, et al. **Soc Sci Med** 1989;28(4):339–46

[Language of caregivers to the elderly in a psychogeriatric nursing home] de Wilde I, et al. **Tijdschr Gerontol Geriatr** 1989 Jun;20(3):97–100 (Eng. Abstr.) (Dut)

[Temporal structure of maternal language directed at infants 3 months old] Cossette L, et al. **Can J Psychol** 1986 Dec; 40(4):414–22 (Eng. Abstr.) (Fre)

[Verbal or nonverbal diagnosis of intelligence in speech-handicapped children] Wochnik M. **Folia Phoniatr (Basel)** 1988;40(3):111–6 (Ger)

[Markers of schizophrenic language. A comparative patholinguistic study of dialogues with schizophrenic, manic, depressive and brain-damaged patients] Frommer J, et al. **Fortschr Neurol Psychiatr** 1989 Mar;57(3):85–93 (Eng. Abstr.) (Ger)

[Constituent differences of delusions in various psychotic illness states] Müller-Suur H. **Nervenarzt** 1988 Aug; 59(8):477–81 (9 ref.) (Ger)

[Assessment of the function of language in social medicine expert testimony] Grosspietzsch R, et al. **Off Gesundheitswes** 1988 Oct;50(10):565–7 (Eng. Abstr.) (Ger)

[Self dialog in self pity] Grunert U. **Psyche (Stuttg)** 1988 Jul; 42(7):602–27 (Eng. Abstr.) (Ger)

[Projective identification and the psychoanalytic dialogue] Hinz H. **Psyche (Stuttg)** 1989 Jul;43(7):609–31 (Eng. Abstr.) (Ger)

[The psychoanalytic discourse. The Freudian subject of analysis] Pohlen M, et al. **Psyche (Stuttg)** 1989 Jun; 43(6):481–505 (Eng. Abstr.) (Ger)

[The effect of auditory feedback on the perception of verbal behavior in dynamic group psychotherapy] Salz M, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Mar; 41(3):144–50 (Eng. Abstr.) (Ger)

[Verbalization of the therapeutic relationship in focal–psychoanalytic and client–centered psychotherapy. A content analytic study from the Hamburg comparative brief psychotherapy experiment] Bechmann R, et al. **Psychother Psychosom Med Psychol** 1989 May;39(5):143–50 (Eng. Abstr.) (Ger)

[Emotional processing of perceived stresses by myocardial infarct rehabilitation patients: a speech content analytic study of affect in narrative interviews] Faller H. **Psychother Psychosom Med Psychol** 1989 May;39(5):151–60 (Eng. Abstr.) (Ger)

[The significance of exteropropioception (tactile–kinesthetic system) for verbal and nonverbal behavior following brain lesions] Estapé R. **Ther Umsch** 1989 Jan;46(1):51–5 (Eng. Abstr.) (Ger)

[Cultural aspects of lectures presented at meetings] Kuhlendahl H, et al. **Wien Med Wochenschr** 1988 Nov 30; 138(22):579–80 (Ger)

[Type A personality and its relations: the significance of hostility, neuroticism and verbal behavior for coronary heart diseases] Siegman AW. **Z Klin Psychol Psychopathol Psychother** 1988;36(1):3–24 (86 ref.) (Eng. Abstr.) (Ger)

[The importance of language in psychotherapy education] Kimura B. **Z Psychosom Med Psychoanal** 1989;35(2):143–55 (Eng. Abstr.) (Ger)

[Computerized analysis of the verbal behavior of patients and therapists in the 1st diagnostic interview] de la Parra G, et al. **Acta Psiquiatr Psicol Am Lat** 1988 Dec; 34(4):309–20 (Eng. Abstr.) (Spa)

[Educational level and intellectual performance] Fernández JH. **Acta Psiquiatr Psicol Am Lat** 1988 Mar;34(1):47–50 (Eng. Abstr.) (Spa)

DRUG EFFECTS

The influence of dose, beverage type, and sex of interactor on female bar patrons' verbal aggression. Murdoch DD, et al. **Int J Addict** 1988 Sep;23(9):953–66

PHYSIOLOGY

Regional cerebral blood flow during comprehension and speech (in cerebrally healthy subjects). Lechevalier B, et al. **Brain Lang** 1989 Jul;37(1):1–11

Differential perseverations in verbal retrieval related to anterior and posterior left hemisphere lesions. Vilkki J. **Brain Lang** 1989 May;36(4):543–54

Dynamic aphasia: the selective impairment of verbal planning. Costello AL, et al. **Cortex** 1989 Mar;25(1):103–14

EEG spectra in severely dyslexic men: rest and word and design recognition. Rumsey JM, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jul;73(1):30–40

EEG activity during performance of cognitive tasks demanding verbal and/or spatial processing. Gutiérrez S, et al. **Int J Neurosci** 1988 Sep;42(1–2):149–55

The influence of final-syllable position on the vowel and word duration of deaf talkers. Tye-Murray N, et al. **J Acoust Soc Am** 1989 Jan;85(1):313–21

Cerebral metabolic effects of a verbal fluency test: a PET scan study. Parks RW, et al. **J Clin Exp Neuropsychol** 1988 Oct;10(5):565–75

Language deficits in depression: comparisons with SDAT and normal aging. Emery OB, et al. **J Gerontol** 1989 May; 44(3):M85–92

Children's comprehension of time-altered sentences. Bochner JH. **Lang Speech** 1987 Apr–Jun;30 (Pt 2):131–43

Deterioration of verbal centers function in aphasics as demonstrated by EEG spectral reaction curves. Psatta DM, et al. **Neurol Psychiatr (Bucur)** 1988 Oct–Dec;26(4):237–50

Frequency analysis of electromyographically measured covert speech behavior. Dollins AB, et al. **Pavlov J Biol Sci** 1989 Jan–Mar;24(1):27–30

Patterns of covert speech behavior and phonetic coding. McGuigan FJ, et al. **Pavlov J Biol Sci** 1989 Jan–Mar; 24(1):19–26

Effect of short lateralized signals on arousal versus activation on tasks requiring visuospatial or elementary semantic stimulus processing. De Brabander B. **Percept Mot Skills** 1988 Dec;67(3):783–8

On the relation between ratings of the emotional state and expressive variables of gesture and verbal activities in old-aged people. Hüppe M, et al. **Pharmacopsychiatry** 1989 Feb;22 Suppl 1:35–8 (27 ref.)

[Dynamic EEG asymmetry during verbal–logical activities with stimuli of different modalities] Fedotchev AI, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):371–7 (Rus)

[Sex differences of functional lateralization in the perception of verbal and emotional information in ontogeny] Dmitrieva ES, et al. **Zh Vysh Nerv Deiat** 1988 May–Jun; 38(3):411–8 (Eng. Abstr.) (Rus)

[Changes in EEG rhythms during verbal and visual–image thinking] Shcheblanova EI. **Zh Vysh Nerv Deiat** 1988 Jul–Aug;38(4):627–32 (Eng. Abstr.) (Rus)

VERBAL LEARNING

see related

LANGUAGE DISORDERS

The effect of prior sleep on retrieval. Tilley A, et al. **Acta Psychol (Amst)** 1989 Mar;70(2):199–203

Effects of elaboration and relational distinctiveness on sentence memory. McDaniel MA, et al. **Am J Psychol** 1988 Fall;101(3):357–69

Lexical and semantic search in cued recall, fragment completion, perceptual identification, and recognition. Nelson DL, et al. **Am J Psychol** 1988 Winter;101(4):465–80

A verbal memory test with high predictive accuracy for dementia of the Alzheimer type. Knopman DS, et al. **Arch Neurol** 1989 Feb;46(2):141–5

Anxious mood and memory. Foa EB, et al. **Behav Res Ther** 1989;27(2):141–7

Mood state-dependent retention using identical or non-identical mood inductions at learning and recall. Haaga DA. **Br J Clin Psychol** 1989 Feb;28 (Pt 1):75–83

Accurate non-word spelling despite congenital inability to speak: phoneme-grapheme conversion does not require subvocal articulation. Bishop DV, et al. **Br J Psychol** 1989 Feb;80 (Pt 1):1–13

Verbal memory and learning in unilateral posterior cerebral infarction. A report on 30 cases. von Cramon DY, et al. **Brain** 1988 Oct;111 (Pt 5):1061–77

Memory for internally generated words in Alzheimer-type dementia: breakdown in encoding and semantic memory. Dick MB, et al. **Brain Cogn** 1989 Jan;9(1):88–108

Attempted clinical application of a technique for promoting robust free recall to a case of alcoholic Korsakoff's syndrome. Heinrichs RW. **Brain Cogn** 1989 Mar;9(2):151–7

Performance in free recall following rupture and repair of intracranial aneurysm. Richardson JT. **Brain Cogn** 1989 Mar;9(2):210–26

Priming and semantic memory loss in Alzheimer's disease. Chertkow H, et al. **Brain Lang** 1989 Apr;36(3):420–46

Written spelling agraphia. Friedman RB, et al. **Brain Lang** 1989 Apr;36(3):503–17

The nature of prolonged word search. Goodglass H, et al. **Brain Lang** 1989 Apr;36(3):411–9

The graphemic buffer and attentional mechanisms. Hillis AE, et al. **Brain Lang** 1989 Feb;36(2):208–35

Recognizing orally spelled words: an analysis of procedures shared with reading and spelling. Katz RB. **Brain Lang** 1989 Aug;37(2):201–19

Developmental dyslexia and word retrieval deficits. Murphy LA, et al. **Brain Lang** 1988 Sep;35(1):1–23

The effect of semantic and syntactic structure on verbal memory in Alzheimer's disease. Nebes RD, et al. **Brain Lang** 1989 Feb;36(2):301–13

Immediate memory functions in reading disability subtypes. Wood KM, et al. **Brain Lang** 1989 Feb;36(2):181–92

General and context-specific encoding: a life-span development study. Guttentag RE, et al. **Can J Psychol** 1986 Dec;40(4):457–62

Incorporating new words into the lexicon: preliminary evidence for language hierarchies in two-year-old children. Taylor M, et al. **Child Dev** 1989 Jun;60(3):625–36

The effects of incidental teaching on vocabulary acquisition by young children. Valdez-Menchaca MC, et al. **Child Dev** 1988 Dec;59(6):1451–9

Task-sharing within and between hemispheres: a multiple-resources approach. Polson MC, et al. **Hum Factors** 1988 Oct;30(5):633–43

Reading, spelling, and vigilance in attention deficit and conduct disorder. Levy F, et al. **J Abnorm Child Psychol** 1989 Jun;17(3):291–8

Working memory in skilled and less skilled readers. Swanson HL, et al. **J Abnorm Child Psychol** 1989 Apr;17(2):145–56

Rejoinder to Spanos, Bertrand, and Perlini. Kihlstrom JF, et al. **J Abnorm Psychol** 1988 Aug;97(3):381–3

Reduced clustering during hypnotic amnesia for a long word list: comment on Wilson and Kihlstrom. Spanos NP, et al. **J Abnorm Psychol** 1988 Aug;97(3):378–80

California Verbal Learning Test (CVLT) performance in severely head-injured and neurologically normal adult males. Crosson B, et al. **J Clin Exp Neuropsychol** 1988 Dec; 10(6):754–68

Developmental aspects of linguistic and mnestic abilities in normal children. Halperin JM, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):518–28

Selective Reminding Tests: a normative study of verbal learning in adults. Ruff RM, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):539–50

Rey–Auditory Verbal Learning and Rey–Osterrieth Complex Figure Design performance in Alzheimer's disease and closed head injury. Bigler ED, et al. **J Clin Psychol** 1989 Mar;45(2):277–80

Differential effects on verbal–performance achievement levels on the WAIS-R as a function of progressive error rate on the Memory for Designs Test (MFD). Mandes E, et al. **J Clin Psychol** 1988 Sep;44(5):795–8

Effect of stimulus context and response coding variables on word retrieval performances in dysphasia. Dunn ND, et al. **J Commun Disord** 1989 Jun;22(3):209–23

The effects of central processing strategies on learning disabled, mildly retarded, average, and gifted children's elaborative encoding abilities. Swanson HL. **J Exp Child Psychol** 1989 Jun;47(3):370–97

The effect of response bias on recall performance, with some observations on processing bias. Erdelyi MH, et al. **J Exp Psychol [Gen]** 1989 Sep;118(3):245–54

On the status of nonconscious processes in human cognition: comment on Reber. Lewicki P, et al. **J Exp Psychol [Gen]** 1989 Sep;118(3):239–41

More thoughts on the unconscious: reply to Brody and to Lewicki and Hill. Reber AS. **J Exp Psychol [Gen]** 1989 Sep;118(3):242–4

Recognition memory and the mere exposure effect. Brooks JO 3d, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Sep; 15(5):968–76

Data-driven and conceptually driven processes in partial-word identification and recognition. Hashtroudi S, et al. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct; 14(4):749–57

More on recognition and recall in amnesics. Hirst W, et al. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct;14(4):758–62

A reexamination of the role of imagery in learning and memory. Marschark M, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jul;15(4):710–20

Effects of talker variability on recall of spoken word lists. Martin CS, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jul;15(4):676–84

Word-fragment cuing: the lexical search hypothesis. Nelson DL, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 May; 15(3):388–97

Semantic encoding by mildly retarded and non-retarded individuals. Stan EA, et al. **J Ment Defic Res** 1988 Oct; 32 (Pt 5):371–82

The effect of non-factual post-training negative comment on the recall of verbal information. Izquierdo I, et al. **J Psychiatr Res** 1988;22(3):165–9

Pre- and postoperative memory of dichotically presented words in patients with complex partial seizures. Christianson SA, et al. **Neuropsychologia** 1989;27(4):427–36

Retrieval from semantic and letter-initial categories in patients with Parkinson's disease. Gurd JM, et al. **Neuropsychologia** 1989;27(5):743–6

Effect of imaging vs silently rehearsing sentences on concurrent unimanual tapping: a follow-up. Lempert H. **Neuropsychologia** 1989;27(4):575–9

Learning disabled students' performance on visual and auditory spelling tests. Ferre L, et al. **Percept Mot Skills** 1989 Feb;68(1):114

Impairment in processing meaningless verbal material in several modalities: the relationship between short-term memory and phonological skills. Bisiacchi PS, et al. **Q J Exp Psychol [A]** 1989 May;41(2):293–319

Deafness, spelling and rhyme: how spelling supports written word and picture rhyming skills in deaf subjects. Campbell R, et al. **Q J Exp Psychol [A]** 1988 Nov;40(4):771–88

Modality effects: do they fall on deaf ears? Engle RW, et al. **Q J Exp Psychol [A]** 1989 May;41(2):273–92

Movement and working memory: patterns and positions in space. Smyth MM, et al. **Q J Exp Psychol [A]** 1988 Aug; 40(3):497–514

An attempt to improve auditory short-term memory in Down's syndrome individuals through reducing distractions. Marcell MM, et al. **Res Dev Disabil** 1988; 9(4):405–17

[Anxiety and processing of self-referent information] Kerres M, et al. **Arch Psychol (Frankf)** 1988;140(1):1–13 (Eng. Abstr.) (Ger)

[Effect of divided attention on explicit and implicit aspects of recall] Wippich W, et al. **Z Exp Angew Psychol** 1989; 36(2):328–48 (Eng. Abstr.) (Ger)

DRUG EFFECTS

Effect of physostigmine and its combination with some drugs on the process of verbal learning. Hrbek J, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):74–5

Cognitive functioning of alcoholics and its relationship with prognosis. Trivedi S, et al. **Drug Alcohol Depend** 1989 Jan; 23(1):41–4

Effects of a cholinergic nootropic (WEB 1881 FU) on event-related potentials recorded in incidental and intentional memory tasks. Münte TF, et al. **Neuropsychobiology** 1988;19(3):158–68

PHYSIOLOGY

Patterns of verbal memory impairment in dementia. Alzheimer disease versus multinfarctual dementia. Parlato V, et al. **Acta Neurol (Napoli)** 1988 Dec;10(6):343–51

Neuronal activity in human lateral temporal cortex related to short-term verbal memory, naming and reading. Ojemann GA, et al. **Brain** 1988 Dec;111 (Pt 6):1383–403

Differential perseverations in verbal retrieval related to anterior and posterior left hemisphere lesions. Vilkki J. **Brain Lang** 1989 May;36(4):543–54

The neuropsychological significance of a verbal–performance discrepancy with the Wechsler Intelligence Scale for Children-Revised. Batchelor ES, et al. **Int J Neurosci** 1989 Mar;45(1–2):33–9

The interaction of hemispheric related strategies and individual differences in learning. Markman S, et al. **Int J Neurosci** 1988 Dec;43(3–4):165–70

The effect of categorization on verbal memory after temporal lobectomy. Channon S, et al. **Neuropsychologia** 1989; 27(6):777–85

VERMIFUGES see **ANTHELMINTICS**

VERNAMYCINS see **VIRGINIAMYCINS**

VERO CELLS

Polio and rabies vaccines produced in continuous cell lines: a reality for Vero cell line. Montagnon BJ. **Dev Biol Stand** 1989;70:27–47

Qualification of working cell banks for the Vero cell line to produce licensed human vaccines. Vincent-Falquet JC, et al. **Dev Biol Stand** 1989;70:153–6

IMMUNOLOGY

Comparative study of the safety and protective value, in pre-exposure use, of rabies vaccine cultivated on human diploid cells (HDCV) and of the new vaccine grown on Vero cells. Ajjan N, et al. **Vaccine** 1989 Apr;7(2):125–8

METABOLISM

Gly-Gly-X, a novel consensus sequence for the proteolytic processing of viral and cellular proteins. López-Otín C, et al. **J Biol Chem** 1989 Jun 5;264(16):9107–10

MICROBIOLOGY

Characterization of Vero cells. Swanson SK, et al. **J Biol Stand** 1988 Oct;16(4):311–20

Characterization of simian virus 40 receptor moieties on the surfaces of Vero C1008 cells. Clayson ET, et al. **J Virol** 1989 Mar;63(3):1095–100

The entry of African swine fever virus into Vero cells. Alcami A, et al. **Virology** 1989 Jul;171(1):68–75

VERRUCA see **WARTS**

VERRUGA PERUANA see **BARTONELLA INFECTIONS**

VERSION, FETAL see under **DELIVERY**

VERTEBRAL ARTERY

Balloon embolization of a giant vertebral–basilar aneurysm. Guglielmi G, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S28–9

Percutaneous obliteration of a postoperatively persistent vertebral arteriovenous fistula. Russell EJ, et al. **AJNR** 1989 Jan–Feb;10(1):196–200

Pseudoaneurysm of the vertebral artery: appearance on color-flow Doppler sonography. Wilkinson DL, et al. **AJR** 1988 Nov;151(5):1051–2

Endovascular treatment of vertebral arteriovenous fistulas in twenty-two patients. Merland JJ, et al. **Ann Vasc Surg** 1986 May;1(1):73–8

Neurofibromatosis with spinal paralysis due to arteriovenous fistula. Wada K, et al. **Arch Orthop Trauma Surg** 1989; 108(5):322–4

Pure motor stroke due to vertebral artery dissection. Phillips SJ, et al. **Can J Neurol Sci** 1989 Aug;16(3):348–51

Spontaneous arterio-venous fistulae of the vertebral artery. Diagnostic and therapeutic considerations. Beltramello A, et al. **Eur J Radiol** 1988 Aug;8(3):148–52

Cerebrovascular accident complicating Klippel-Feil syndrome. A case report. Born CT, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1412–5

Profound hypothermia and circulatory arrest for aneurysm surgery. Case report. Chyatte D, et al. **J Neurosurg** 1989 Mar;70(3):489–91

Fatal intracranial hemorrhage after balloon occlusion of an extracranial vertebral arteriovenous fistula. Case report. Kondoh T, et al. **J Neurosurg** 1988 Dec;69(6):945–8

Vertebral artery compression as an adjunct to transcutaneous Doppler ultrasound examination. Rossman ME, et al. **J Ultrasound Med** 1988 Oct;7(10):541–4

Rotational stenosis of the first segment of the vertebral artery through compression by the cervical sympathetic chain—case report. Fujimoto S, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):1020–3

Bilateral vertebral arteriovenous fistulas and atlantoaxial dislocation associated with neurofibromatosis—case report. Hasegawa H, et al. **Neurol Med Chir (Tokyo)** 1989 Jan; 29(1):55–9

Stroke in patients with fusiform vertebrobasilar aneurysms. Pessin MS, et al. **Neurology** 1989 Jan;39(1):16–21

The use of the "cross over technique" in the management of a traumatic vertebro–vertebral fistula. Freitag HJ, et al. **Neuroradiology** 1989;31(2):174–6

Giant aneurysm of the vertebral artery simulating intracranial tumour at the foramen magnum. Sørensen P, et al. **Neuroradiology** 1988;30(4):359

Subarachnoid hemorrhage from intraspinal intradural vertebral artery aneurysm: case report and review of the literature. Barnett GH. **Neurosurgery** 1989 May;24(5):753–5 (16 ref.)

Intra-arterial thrombolytic therapy improves outcome in patients with acute vertebrobasilar occlusive disease. Hacke W, et al. **Stroke** 1988 Oct;19(10):1216–22

Positive platelet scintigram of a vertebral aneurysm presenting thromboembolic transient ischemic attacks. Maruyama M, et al. **Stroke** 1989 May;20(5):687–90

Balloon embolization of nontraumatic vertebral arteriovenous fistulae in children. Sadasivan B, et al. **Surg Neurol** 1989 Aug;32(2):126–30

[Vertebro–basilar vascular accident after manipulation of the cervical spine] Ponge T, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):545–8 (Fre)

[Vascular disease of the supra-aortic trunk (SAT). Clinical, velocimetric and risk factors findings in a group of elderly subjects] Gallo E, et al. **Minerva Cardioangiol** 1988 Dec; 36(12):601–4 (Eng. Abstr.) (Ita)

[Extra-anatomical bypass in the treatment of stenotico-obstructive lesions of the subclavian and vertebral arteries] Barile C, et al. **Minerva Chir** 1989 Mar 15;44(5):877–81 (8 ref.) (Eng. Abstr.) (Ita)

[Multicentric intrathoracic obstructions of the supra-aortic trunks. Presentation of a clinical case] Bortolani E, et al. **Minerva Chir** 1988 Nov 30;43(22):1977–82 (Eng. Abstr.) (Ita)

[Vertebrobasilar artery occlusion in childhood associated with atlantoaxial dislocation. Case report] Kurimoto M, et al. **Neurol Med Chir (Tokyo)** 1988 Sep;28(9):919–24 (40 ref.) (Eng. Abstr.) (Jpn)

[Treatment of subclavian steal syndrome by percutaneous transluminal angioplasty with temporary balloon occlusion of the vertebral artery. Report of two cases] Minakawa T, et al. **Neurol Med Chir (Tokyo)** 1988 Aug;28(8):802–7 (Jpn)

[Ruptured dissecting aneurysm of the vertebral artery. A case report] Tsukada A, et al. **Neurol Med Chir (Tokyo)** 1988 May;28(5):486–90 (23 ref.) (Eng. Abstr.) (Jpn)

[Dissecting aneurysm of the vertebral artery—report of two cases and review of the literature] Tanabe H, et al. **No Shinkei Geka** 1988 Nov;16(12):1405–10 (28 ref.) (Eng. Abstr.) (Jpn)

[Percutaneous transluminal dilatation of stenoses of the supraaortic blood vessels] Kakhel' R, et al. **Vestn Rentgenol Radiol** 1988 Sep–Oct;(5):63–4 (Rus)

[Neurologic manifestations of nonspecific aorto-arteritis of the branches of the aortic arch] Kuperberg EB, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):17–22 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Variations in the extracranial origin of the human vertebral artery. Cavdar S, et al. **Acta Anat (Basel)** 1989;135(3):236–8 (14 ref.)

Vertebral and right subclavian artery abnormalities in the Down syndrome. Rathore MH, et al. **Am J Cardiol** 1989 Jun 15;63(20):1528–9

Persistent hypoglossal artery encountered during carotid endarterectomy. McCartney SF, et al. **Ann Vasc Surg** 1989 Jul;3(3):257–60

Downbeat nystagmus associated with dolichoectasia of the vertebrobasilar artery. Jacobson DM, et al. **Arch Neurol** 1989 Sep;46(9):1005–8

Posterior inferior cerebellar artery aneurysm associated with fenestration of the vertebral artery—case report. Arai K, et al. **Neurol Med Chir (Tokyo)** 1989 Jan;29(1):29–31

Vertebrobasilar dolichoectasia: assessment using MR. Giang DW, et al. **Neuroradiology** 1988;30(6):518–23

[Subclavian occlusion and an anomaly of the vertebral artery with subclavian steal syndrome. Fibrinolysis and PTA therapy] Lederer W, et al. **ROFO** 1989 Apr;150(4):477–9 **(Ger)**

[Accessory nerve paralysis due to compression of the fenestrated vertebral artery] Kitagawa M, et al. **No Shinkei Geka** 1988 Sep;16(10):1173–7 (Eng. Abstr.) **(Jpn)**

[Operative correction of kinking and coiling at the origin of vertebral artery and stellate ganglionectomy in patients with severe vertigo and dizziness] Nishijima M, et al. **No Shinkei Geka** 1989 Mar;17(3):255–61 (Eng. Abstr.) **(Jpn)**

[A case report of quadriparesis due to compression of the medulla oblongata by the elongated left vertebral artery] Maruyama K, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):108–11 (Eng. Abstr.) **(Jpn)**

[Surgical anatomy of the anastomotic branch between the occipital and vertebral arteries] Mansone Ala. **Arkh Anat Gistol Embriol** 1988 Jul;95(7):38–41 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Drainage of the prelymphatics of the brain via the adventitia of the vertebral artery. Wang HJ, et al. **Acta Anat (Basel)** 1989;134(1):67–71

Colour flow imaging of the great intracranial arteries in infants. Deeg KH. **Neuroradiology** 1989;31(1):40–3

DRUG EFFECTS

A possible mechanism on the potentiated vascular effect of coadministration of ifenprodil tartrate and calcium hopantenate: a study in the basilar and vertebral arteries. Shibuya T, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Nov;26(11):534–9

INJURIES

Vertebral arteriovenous fistulae. Report of two cases and review of the literature. Ammirati M, et al. **Acta Neurochir (Wien)** 1989;99(3–4):122–6 (51 ref.)

Vertebral artery dissection after rapid head turning. Traflet RF, et al. **AJNR** 1989 May–Jun;10(3):650–1

Interventional neurovascular treatment of traumatic carotid and vertebral artery lesions: results in 234 cases. Higashida RT, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):577–82

Trends in the management of traumatic vertebral artery injuries. Blickenstaff KL, et al. **Am J Surg** 1989 Aug; 158(2):101–5; discussion 105–6

Are physicians' opinions about chiropractors changing? [letter] Potter GE. **Can Med Assoc J** 1988 Oct 15; 139(8):705–6

Treatment of traumatic vertebral arteriovenous fistula by balloon occlusion and compressive manoeuvres. Nelson M, et al. **Eur J Vasc Surg** 1988 Apr;2(2):133–9

Traumatic disruption of bilateral vertebral arteries and internal carotid arteries: case report. Fukuda I, et al. **J Trauma** 1989 Feb;29(2):263–6

Cervical vessel injury after blunt trauma. Fakhry SM, et al. **J Vasc Surg** 1988 Oct;8(4):501–8 (30 ref.)

Vascular complications of shotgun injury to the face. Moss J Jr, et al. **Milit Med** 1989 Apr;154(4):191–4

Penetrating injury of the vertebral artery: a unique management approach. Hetz SP, et al. **South Med J** 1989 Aug;82(8):1037–40 (22 ref.)

[Extra- and intracranial injuries of the cerebral arteries as a sequela of assault] Maxeiner H. **Z Rechtsmed** 1989; 102(2–3):191–8 (Eng. Abstr.) **(Ger)**

INNERVATION

Nerves accompanying the vertebral artery and their clinical relevance. Chen XQ, et al. **Spine** 1988 Dec;13(12):1360–4

PATHOLOGY

A protocol for the isolation of carotid and vertebral arteries in MR angiography. Cousins JP, et al. **AJNR** 1989 Sep–Oct; 10(5):921–2

Ultrasonic duplex scanning of the prevertebral segment of the vertebral artery in patients with cerebral atherosclerosis. Ackerstaff RG, et al. **Eur J Vasc Surg** 1988 Dec;2(6):387–93

Spontaneous dissection of the vertebral artery: MR findings. Chen JL, et al. **J Comput Assist Tomogr** 1989 Mar–Apr; 13(2):326–9

Usefulness of duplex ultrasound in evaluating vertebral arteries. Bluth EI, et al. **J Ultrasound Med** 1989 May; 8(5):229–35

Dissecting aneurysm of the vertebral artery and cervical manipulation: a case report with autopsy. Mas JL, et al. **Neurology** 1989 Apr;39(4):512–5

Impairment of vertebral artery flow caused by extrinsic lesions. George B, et al. **Neurosurgery** 1989 Feb; 24(2):206–14

PHYSIOLOGY

Quantified EEG cartography, computerized electro-oculography in hemodynamic vertebrobasilar insufficiency, modifications induced by vertebral artery compression. Sebban C, et al. **Adv Otorhinolaryngol** 1988; 41:235–8

Special Doppler ultrasound transducers for recording vertebral artery blood flow in rabbits. Stürm RP, et al. **Ultrasound Med Biol** 1989;15(5):499–503

PHYSIOPATHOLOGY

Sonography of vertebral arteries in De Kleyn's position in subjects and in patients with vertebrobasilar transient ischemic attacks. Arnetoli G, et al. **Angiology** 1989 Aug; 40(8):716–20

Simple laboratory experiments to replicate some of the stresses on vertebro-basilar arterial walls. An investigation of possible mechanisms of traumatic subarachnoid haemorrhage. Farag AM, et al. **Forensic Sci Int** 1988 Sep; 38(3–4):275–84

Compression spectral analysis of the EEG in patients with occlusive lesions of the carotid and vertebral arteries. Gusev EI, et al. **Neurosci Behav Physiol** 1989 Jan–Feb; 19(1):51–6

[Non-invasive methods of examination in the diagnosis of hemodynamic phenomena of "borrowing" and "stealing" of blood] Bokhya NK, et al. **Kardiologiia** 1988 Dec; 28(12):68–71 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Intraluminal clot in the vertebrobasilar circulation: clinical and radiologic features. Levine SR, et al. **Neurology** 1989 Apr;39(4):515–22

Estimation of vertebral arterial asymmetry by computed tomography. Kazui S, et al. **Neuroradiology** 1989; 31(3):237–9

Ruptured dissecting aneurysm of the vertebral artery revealed by repeat angiography. Ito Y, et al. **Neurosurgery** 1988 Aug;23(2):225–7

Chronic arteriovenous fistulas masquerading as arteriovenous malformations: diagnostic considerations and therapeutic implications. Lawdahl RB, et al. **Radiology** 1989 Mar;170(3 Pt 2):1011–5

[Digital subtraction angiography in traumatology—visualization of an arteriovenous fistula in the neck] Pedersen PR, et al. **Rontgenblatter** 1988 Sep; 41(9):369–70 (Eng. Abstr.) **(Ger)**

[Relationship between angiographical manifestations and operative findings in 100 cases of hemifacial spasm] Baba T, et al. **No Shinkei Geka** 1988 Nov;16(12):1355–62 (Eng. Abstr.) **(Jpn)**

SURGERY

Simultaneous revascularization of the internal carotid and vertebral arteries in their distal cervical segments. Branchereau A, et al. **Ann Vasc Surg** 1986 Sep;1(2):267–70

Arteriovenous fistulae of the vertebral artery. Two cases successfully managed by surgery. Jensen FB, et al. **Eur J Vasc Surg** 1988 Dec;2(6):419–22

Surgical approaches to aneurysms of the vertebral and basilar arteries. Solomon RA, et al. **Neurosurgery** 1988 Aug; 23(2):203–8

[Surgical treatment of extracranial occlusive processes of the vertebral artery by construction of a subclavio-vertebral bypass] Bürger K, et al. **Zentralbl Chir** 1989;114(3):181–9 (Eng. Abstr.) **(Ger)**

[A method of reconstruction of the orifice of the vertebral artery] Barkauskas EM, et al. **Khirurgiia (Mosk)** 1988 Dec; (12):98–102 **(Rus)**

VERTEBRAL ARTERY INSUFFICIENCY see **VERTEBROBASILAR INSUFFICIENCY**

VERTEBRATE VIRUSES

Some highlights of animal virus research in 1987. McGeoch DJ, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2419–40 (171 ref.)

[Viruses and plasmids in the environment. Elimination, release, biotechnology] **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:1–315 **(Ger)**

CLASSIFICATION

Biological concepts in virus classification. Kingsbury DW. **Intervirology** 1988;29(5):242–53 (35 ref.)

Species concept should not be universally applied to virus taxonomy—but what to do instead? Milne RG. **Intervirology** 1988;29(5):254–9 (23 ref.)

[Virus infections of aquatic organisms] Ahne W. **Zentralbl Veterinarmed [B]** 1988 Aug;35(7):493–503 (17 ref.) (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

The interferon sensitivity of selected porcine viruses. Derbyshire JB. **Can J Vet Res** 1989 Jan;53(1):52–5

Molecular targets of antiviral therapy. Crumpacker CS 2d. **N Engl J Med** 1989 Jul 20;321(3):163–72 (101 ref.)

Antiviral effects of phosphonoformate (PFA, foscarnet sodium). Oberg B. **Pharmacol Ther** 1989;40(2):213–85 (245 ref.)

GENETICS

Animal virus DNA replication. Challberg MD, et al. **Annu Rev Biochem** 1989;58:671–717 (352 ref.)

Putative elements in the vicinity of viral transcription initiation sites. Nussinov R. **Int J Biochem** 1988; 20(7):721–30

Polycistronic animal virus mRNAs. Samuel CE. **Prog Nucleic Acid Res Mol Biol** 1989;37:127–53 (141 ref.)

Current problems in zoonosis research. Mayr A, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):3–9 (16 ref.)

[Probe seeks gene: nucleic acid hybridization as a current contribution to virologic diagnosis] Haas L, et al. **DTW** 1989 Feb;96(2):66–9 (Eng. Abstr.) **(Ger)**

[Limits and risks of biotechnology in veterinary medicine from the viewpoint of the virologist] Kaaden OR. **DTW** 1989 Feb;96(2):47–8 (Eng. Abstr.) **(Ger)**

[Questions of the safety of setting viruses and plasmids free] Seeber E. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:5–6 **(Ger)**

GROWTH & DEVELOPMENT

Cell lines for growth of sheep viruses. Pye D. **Aust Vet J** 1989 Jul;66(7):231–2

Microbiological and virological analysis of water from two water filtration plants and their distribution systems. Payment P, et al. **Can J Microbiol** 1988 Dec;34(12):1304–9

Advantages of modern biotechnical developments for vaccine production in developing countries. Seifert HS, et al. **DTW** 1988 Jul–Aug;95(7):266–8 (8 ref.)

Survey of vaccines and SPF flocks for contamination with chick anaemia agent. Nicholas RA, et al. **Vet Rec** 1989 Feb 18;124(7):170–1

[The elimination of viruses in the setting of waste water clarification, in progressive waste water purification and in natural areas near purification plants] Lopez Pila JM, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:59–67 (17 ref.) **(Ger)**

[Viruses in fluid and solid manure and in waste water from abattoirs] Wekerle J. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:39–56 (16 ref.) **(Ger)**

IMMUNOLOGY

Modern approaches to live virus vaccines. Norrby E. **Adv Vet Sci Comp Med** 1989;33:249–70 (90 ref.)

The use of saliva for viral diagnosis and screening. Mortimer PP, et al. **Epidemiol Infect** 1988 Oct;101(2):197–201 (11 ref.)

Serological examinations for antibodies against West Nile virus, Semlikivirus and chikungunyavirus in laboratory mice, parasitized by nidicole fauna from swallow's nests. Sixl W, et al. **Geogr Med** 1988;Suppl 1:51–5

Activation of chicken complement by avian viruses. Ohta H, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1099–102

ISOLATION & PURIFICATION

Virology of germfree rodents. England DM. **Chic Med Sch Q** 1972;31(1–4):26–9 (36 ref.)

Sensitive fluorogenic enzyme immunoassay on nitrocellulose membranes for quantitation of virus. Fulton RE, et al. **J Virol Methods** 1988 Dec;22(2–3):149–64

Temperature-sensitive gel for virus concentration from urine. Maheshkumar S, et al. **J Virol Methods** 1989 Jan;23(1):41–6

Annual report on Findings of Infectious Agents in Japan 1986. **Jpn J Med Sci Biol** 1987;40 Suppl:1–100

Comparison of virus isolation, immunofluorescence and electron microscopy for the diagnosis of animal viruses. Naeem K, et al. **Microbiologica** 1988 Oct;11(4):355–62

Isolation and identification of trout viruses in South Africa. Bragg RR, et al. **Onderstepoort J Vet Res** 1988 Sep; 55(3):139–43

[The use of embryonic chicken liver cell culture for the diagnosis of virus infections in hens] Pfirschke CD. **Arch Exp Veterinarmed** 1989 May;43(3):345–50 (Eng. Abstr.) **(Ger)**

[Biological cycle and biotope of ticks in Alpine regions] Sixl W, et al. **Geogr Med** 1989;Suppl 2:153–8 **(Ger)**

METABOLISM

Parasite-directed endocytosis. McGee ZA, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S311–6 (33 ref.)

PHYSIOLOGY

Virus entry into animal cells. Marsh M, et al. **Adv Virus Res** 1989;36:107–51 (239 ref.)
Assembly of animal viruses at cellular membranes. Stephens EB, et al. **Annu Rev Microbiol** 1988;42:489–516 (143 ref.)
The importance of the zona pellucida for disease control in livestock by embryo transfer. Chen SS, et al. **Br Vet J** 1989 Mar–Apr;145(2):129–40 (56 ref.)
Isolation, culture and main characteristics of mouse fat-storing cells: interaction with viruses. Chen W, et al. **Hepatology** 1989 Mar;9(3):352–62
Transmission of Akabane virus from the ewe to the early fetus (32 to 53 days). Parsonson IM, et al. **J Comp Pathol** 1988 Aug;99(2):215–27
Modification of membrane permeability by animal viruses. Carrasco L, et al. **Pharmacol Ther** 1989;40(2):171–212 (298 ref.)
The transmission of virus disease by the marine environment. Shuval HI. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 78:7–23 (53 ref.)
[Evolution of viruses] Horzinek MC. **Berl Munch Tierarztl Wochenschr** 1988 Sep 1;101(9):293–6 (0 ref.) (Eng. Abstr.) (Ger)
[The inactivation of viruses in water and disinfection] Mahnel H. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:121–35 (26 ref.) (Ger)

ULTRASTRUCTURE

[Electron microscopic virus detection in fecal samples from swine with enteric diseases between 1981 and 1987] Herbst W, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May; 96(6):294, 296 (Eng. Abstr.) (Ger)

VERTEBRATE VIRUSES, UNCLASSIFIED

GROWTH & DEVELOPMENT

Cultivation and partial characterization of bovine astrovirus. Aroonprasert D, et al. **Vet Microbiol** 1989 Feb;19(2):113–25

ISOLATION & PURIFICATION

Western blot (immunoblot) assay of small, round-structured virus associated with an acute gastroenteritis outbreak in Tokyo. Hayashi Y, et al. **J Clin Microbiol** 1989 Aug; 27(8):1728–33

ULTRASTRUCTURE

Physical properties of the Creutzfeldt-Jakob disease agent. Sklaviadis TK, et al. **J Virol** 1989 Mar;63(3):1212–22

VERTEBRATES

ANATOMY & HISTOLOGY

Comparative immunohistochemical study of the presence of glial fibrillary acidic protein in the pituitary of several vertebrates. Redecker P, et al. **Anat Anz** 1989;168(1):37–47
Evolution of vertebrate motor systems for acoustic and electric communication: peripheral and central elements. Bass AH. **Brain Behav Evol** 1989;33(4):237–47 (74 ref.)
A review of early (Silurian and Devonian) vertebrate biogeography and biostratigraphy of China. Jiang P, et al. **Proc R Soc Lond [Biol]** 1988 Oct 22;235(1278):29–61 (120 ref.)
Comparative anatomy of vertebrate electroreceptors. Andres KH, et al. **Prog Brain Res** 1988;74:113–31 (45 ref.)
Microscopic effects of predator digestion on the surfaces of bones and teeth. Rensberger JM, et al. **Scanning Microsc** 1988 Sep;2(3):1541–51
[Comparative characteristics of adrenergic innervation of the cerebrospinal arteries of vertebrates and man] Pigolkin IuI. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):36–43 (Eng. Abstr.) (Rus)
[Ultrastructural manifestations of the functional plasticity of the renal glomerular endothelium in vertebrates] Zaitsev VB, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):493–7 (Eng. Abstr.) (Rus)

BLOOD

Plasma calcium difference between man and vertebrates. Driessens FC, et al. **Comp Biochem Physiol [A]** 1989; 93(4):651–4 (44 ref.)
Red cell uridine monophosphate kinase: a comparative study in various vertebrate species. Gallango ML, et al. **Comp Biochem Physiol [B]** 1979;63(4):507–9
Comparative studies on the nonprotein but nondialysable sugar–peptide fraction isolated from the plasma of various classes of vertebrates. Turyna I, et al. **Comp Biochem Physiol [B]** 1977;56(4):403–6

CLASSIFICATION

[Brain cholesterol in representatives of different vertebrate classes] Chebotareva MA, et al. **Zh Evol Biokhim Fiziol** 1988 May–Jun;24(3):426–31 (Eng. Abstr.) (Rus)

EMBRYOLOGY

Expression of glycoconjugates during development of the vertebrate nervous system. Schwarting GA, et al. **Bioessays** 1988 Jul;9(1):19–23 (27 ref.)
Homeobox genes and development of the vertebrate CNS. Wilkinson DG. **Bioessays** 1989 Feb–Mar;10(2–3):82–5 (36 ref.)
Polarity and patterning in the neural tube: the origin and function of the floor plate. Jessell TM, et al. **Ciba Found Symp** 1989;144:255–76; discussion 276–80, 290–5 (79 ref.)
Strategies of head development: workshop report. Alberch P, et al. **Development** 1988;103 Suppl:25–30
Mechanisms of vertebrate segmentation. Keynes RJ, et al. **Development** 1988 Jul;103(3):413–29 (131 ref.)
The developmental specification of the vertebrate skull. Thorogood P. **Development** 1988;103 Suppl:141–53

GENETICS

Hox and HOM: homologous gene clusters in insects and vertebrates. Akam M. **Cell** 1989 May 5;57(3):347–9 (20 ref.)
Evolutionary diversity of reverse (R) fluorescent chromosome bands in vertebrates. Schmid M, et al. **Chromosoma** 1988;97(2):101–14
Homeobox genes and the vertebrate head. Holland PW. **Development** 1988;103 Suppl:17–24 (58 ref.)
Cytosine methylation and the fate of CpG dinucleotides in vertebrate genomes. Cooper DN, et al. **Hum Genet** 1989 Sep;83(2):181–8
Evolutionarily conserved sequences of striated muscle myosin heavy chain isoforms. Epitope mapping by cDNA expression. Miller JB, et al. **J Biol Chem** 1989 Aug 5; 264(22):13122–30
Compositional patterns in vertebrate genomes: conservation and change in evolution. Bernardi G, et al. **J Mol Evol** 1988 Dec–1989 Feb;28(1–2):7–18 (58 ref.)
Two steps in the evolution of Antennapedia-class vertebrate homeobox genes. Kappen C, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5459–63
Conservation of the human telomere sequence (TTAGGG)n among vertebrates. Meyne J, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7049–53
Duplication of large genomic regions during the evolution of vertebrate homeobox genes. Schughart K, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7067–71
An update on the vertebrate homeobox. Dressler GR. **Trends Genet** 1989 May;5(5):129–31 (21 ref.)

GROWTH & DEVELOPMENT

Do multigene families regulate vertebrate development? Dressler GR, et al. **Trends Genet** 1988 Aug;4(8):214–9 (42 ref.)

IMMUNOLOGY

Immunological relationships among vertebrate lysine-rich histones. Shay CE, et al. **Comp Biochem Physiol [B]** 1988; 91(1):69–78
Corticosteroids and immune systems of non-mammalian vertebrates: a review. Saad AH. **Dev Comp Immunol** 1988 Summer;12(3):481–94 (87 ref.)
A monoclonal antibody specific for a subpopulation of retinal bipolar cells in vertebrates. Onoda N. **Neurosci Res Suppl** 1988;8:S113–25

METABOLISM

Classes of calcium channels in vertebrate cells. Bean BP. **Annu Rev Physiol** 1989;51:367–84 (134 ref.)
Structural and functional diversity in vertebrate skeletal muscle nicotinic acetylcholine receptors. Steinbach JH. **Annu Rev Physiol** 1989;51:353–65 (61 ref.)
Characterization and comparison of epsilon-crystallin and lactate dehydrogenases in the lenses of vertebrates and invertebrates. Chiou SH, et al. **Biochem Int** 1989 Jun; 18(6):1093–100
28 S ribosomal RNA in vertebrates. Locations of large-scale features revealed by electron microscopy in relation to other features of the sequences. Wakeman JA, et al. **Biochem J** 1989 Feb 15;258(1):49–56
Phylogenetic distribution of enamel proteins: immunohistochemical localization with monoclonal antibodies indicates the evolutionary appearance of enamelins prior to amelogenins. Herold R, et al. **Calcif Tissue Int** 1989 Aug;45(2):88–94
Vitamin D2 in vertebrate evolution. Hay AW, et al. **Comp Biochem Physiol [B]** 1977;56(4):375–80
Intestinal arginase in vertebrates and invertebrates. Lisowska-Myjak B, et al. **Comp Biochem Physiol [B]** 1978; 61(4):545–52
An isoelectric focusing study of acid phosphohydrolases in liver lysosomes of higher vertebrates. Nakabayashi T, et al. **Comp Biochem Physiol [B]** 1979;63(2):221–31
Comparative studies of vertebrate and invertebrate pyruvate kinases. Wu SW, et al. **Comp Biochem Physiol [B]** 1978; 61(1):93–8
Insulin-related materials in the nervous system of vertebrates and non-vertebrates: possible extrapancreatic production. LeRoith D, et al. **Horm Metab Res** 1988 Jul;20(7):411–20 (49 ref.)
Comparative monolayer investigations of surface properties of negatively charged glycosphingolipids from vertebrates (gangliosides) and invertebrates (SGL-II, lipid IV). Beitinger H, et al. **J Biochem (Tokyo)** 1989 Apr; 105(4):664–9
Sulfogalactolipid binding protein SLIP 1: a conserved function for a conserved protein. Law H, et al. **J Cell Physiol** 1988 Dec;137(3):462–8
Organic acid (or anion) and organic base (or cation) transport by renal tubules of nonmammalian vertebrates. Dantzler WH. **J Exp Zool** 1989 Mar;249(3):247–57 (54 ref.)
Localization of acrosomal enzymes in Arthropoda, Echinodermata and Vertebrata. Baccetti B, et al. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):385–9
Comparison of proteins in the interphotoreceptor matrix of vertebrates. Adler AJ, et al. **Ophthalmic Res** 1988; 20(5):275–85
Novel neurotransmitters in the autonomic nervous systems of nonmammalian vertebrates. Nilsson S, et al. **Pharmacol Ther** 1989;41(1–2):257–87 (320 ref.)
Evolution of urea synthesis in vertebrates: the piscine connection. Mommsen TP, et al. **Science** 1989 Jan 6; 243(4887):72–5
Corticosteroid 11 beta-hydroxysteroid dehydrogenase activities in vertebrate liver. Monder C, et al. **Steroids** 1988 Nov–Dec;52(5–6):515–28
[The specificity of the interaction of the cholinesterases in Far Eastern squid and certain vertebrates with reversible inhibitors] Rozengart EV, et al. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):679–85 (Eng. Abstr.) (Rus)

PARASITOLOGY

Immunological aspects of host–schistosome relationships. Damian RT. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:13–6

PHYSIOLOGY

Spatial coordination of compensatory eye movements in vertebrates: form and function. Graf W. **Acta Biol Hung** 1988;39(2–3):279–90 (30 ref.)
Parathyroid hormone-like immunoreactivity in brains of tetrapod vertebrates. Pang PK, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R635–42
Immunocytochemical distribution of PTH immunoreactivity in vertebrate brains. Pang PK, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R643–7
Modulation of defined vertebrate neural circuits. **Ann N Y Acad Sci** 1989;563:1–195
Comparative study of actin filament patterns in lens epithelial cells. Are these determined by the mechanisms of lens accommodation? Rafferty NS, et al. **Curr Eye Res** 1989 Jun;8(6):569–79
Differences in nuclear thyroid hormone receptors among species. Ichikawa K, et al. **Gen Comp Endocrinol** 1989 Apr; 74(1):68–76
Phylogenetic study on the immunoreactive atrial natriuretic peptide in the heart. Kim SH, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):127–35
Insulin and other islet hormones (somatostatin, glucagon and PP) in the neuroendocrine system of some lower vertebrates and that of invertebrates—a minireview. Conlon JM, et al. **Horm Metab Res** 1988 Jul;20(7):406–10 (39 ref.)
A mathematical approach enabling the calculation of the total endolymph flow in the semicircular ducts. Muller M, et al. **J Theor Biol** 1988 Oct 21;134(4):503–29
A new quantitative model of total endolymph flow in the system of semicircular ducts. Muller M, et al. **J Theor Biol** 1988 Oct 21;134(4):473–501
Histamine and its actions on isolated tissues of lower vertebrates. Kiniwa M, et al. **Methods Find Exp Clin Pharmacol** 1989 Feb;11(2):87–95
Sex inversion as a model for the study of sex determination in vertebrates. Wolf U. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1;322(1208):97–107 (55 ref.)
Visuomotor coordination in reaching and locomotion. Georgopoulos AP, et al. **Science** 1989 Sep 15; 245(4923):1209–10 (21 ref.)
[Osmoregulatory adaptation in vertebrates] Ando M. **Nippon Seirigaku Zasshi** 1988;50(10):669–83 (112 ref.) (Jpn)
[Possible mechanisms of Na+-induced release of calcium ions from sarcoplasmic reticulum of skeletal muscle fibers of vertebrates] Nesterov VP. **Fiziol Zh** 1988 Sep–Oct; 34(5):60–6 (Eng. Abstr.) (Rus)
[Comparative organization of the neuromuscular synapses of the phasic skeletal muscles in vertebrates] Balezina OP. **Usp Fiziol Nauk** 1989 Jan–Mar;20(1):68–89 (81 ref.) (Rus)
[Development of manipulative activity in vertebrate phylogeny] Deriagina MA, et al. **Zh Obshch Biol** 1988 May–Jun;49(3):304–17 (Eng. Abstr.) (Rus)

VERTEBROBASILAR INSUFFICIENCY

CHEMICALLY INDUCED

Hemodynamic vertebrobasilar insufficiency as an adverse effect of antihypertensive therapy. Fagan SC, et al. **DICP** 1989 Mar;23(3):238–9

COMPLICATIONS

Vascular dizziness and transcranial Doppler ultrasonography. Rock EH. **Ann Otol Rhinol Laryngol Suppl** 1989 Jul; 141:1–24
An adolescent girl with headache and syncope. Smith MS, et al. **J Adolesc Health Care** 1989 Jan;10(1):54–6

Vertebrobasilar insufficiency in a patient with persistent trigeminal artery and stenosis of the ipsilateral carotid bifurcation--case report. Hirashima Y, et al. **Neurol Med Chir (Tokyo)** 1988 Jun;28(6):584–7

[Effect of the vertebral syndrome in cervical osteochondrosis on the course of I–IIA stage hypertension and cerebral electrical activity and hemodynamics] Semke GV, et al. **Klin Med (Mosk)** 1989 May;67(5):60–3 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Quantified EEG cartography, computerized electro-oculography in hemodynamic vertebrobasilar insufficiency, modifications induced by vertebral artery compression. Sebban C, et al. **Adv Otorhinolaryngol** 1988; 41:235–8

Sonography of vertebral arteries in De Kleyn's position in subjects and in patients with vertebrobasilar transient ischemic attacks. Arnetoli G, et al. **Angiology** 1989 Aug; 40(8):716–20

Failure of clinical tests to predict cerebral ischemia before neck manipulation. Bolton PS, et al. **J Manipulative Physiol Ther** 1989 Aug;12(4):304–7

Takayasu arteritis presenting as retinal and vertebrobasilar ischemia. Edwards KK, et al. **J Rheumatol** 1989 Jul; 16(7):1000–2

A modern outlook on the transient ischemic attacks in the vertebrobasilar system. Pendefunda L. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):463–6

[Transcranial Doppler ultrasonic examination in vertebro-basilar circulatory pathology] De Bray JM, et al. **J Mal Vasc** 1989;14(3):202–5 (Eng. Abstr.) **(Fre)**

[The value of auditory evoked brain stem potentials in the diagnosis of circulatory disorders in the area of vertebrobasilar circulation] Meier U, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Aug; 40(8):472–9 (Eng. Abstr.) **(Ger)**

[Magnetic resonance angiography of the supra-aortic arteries supplying the brain] Felber S, et al. **Vasa Suppl** 1988; 26:18–21 **(Ger)**

[Doppler ultrasound procedures in the diagnosis of occlusive processes of the supra-aortic arteries] Kornotzki M, et al. **Zentralbl Chir** 1988;113(20):1315–9 (Eng. Abstr.) **(Ger)**

[Non-invasive methods of examination in the diagnosis of hemodynamic phenomena of "borrowing" and "stealing" of blood] Bokhya NK, et al. **Kardiologiia** 1988 Dec; 28(12):68–71 (Eng. Abstr.) **(Rus)**

[Early diagnosis and mass screening of patients with initial signs of pathology of the brachiocephalic arteries using an automated screening system at industrial plants] Vilianskiĭ MP, et al. **Kardiologiia** 1988 Sep;28(9):96–7 **(Rus)**

[Positional nystagmus and other otoneurological symptoms in transient vascular disorders of the vertebrobasilar system] Tanchev KS. **Vestn Otorinolaringol** 1988 Jul–Aug; (4):32–5 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Calcium antagonists in an animal model of vertebrobasilar insufficiency. Hirschberg M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;460:61–5 (15 ref.)

Treatment of vertebrobasilar insufficiency. Use of calcium antagonists. Hofferberth B, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;460:154–9

ETIOLOGY

Bilateral retinopathy and encephalopathy. Matamoros N, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):39–41

Impairment of vertebral artery flow caused by extrinsic lesions. George B, et al. **Neurosurgery** 1989 Feb; 24(2):206–14

Angiographic examination and surgical treatment of bow hunter's stroke. Hanakita J, et al. **Neurosurgery** 1988 Aug; 23(2):228–32

Vertebrobasilar occlusive disease and childhood migraine. Dunn DW. **Pediatr Neurol** 1985 Jul–Aug;1(4):252–4

Superior cerebellar artery infarction and vertebral artery dissection. Levine SR, et al. **Stroke** 1988 Nov;19(11):1431–4

Cervical osteochondroma (C2 level) with vertebral artery occlusion and second cervical nerve root irritation. George B, et al. **Surg Neurol** 1989 Jun;31(6):459–64

Idiopathic muscular torticollis complicated with vertebral artery compression and brachial plexus neuropathy. Mertol T, et al. **Zentralbl Neurochir** 1988;49(2):109–12

HISTORY

The death of Porthos, or the first description of vertebrobasilar insufficiency in fiction. Rønnov-Jessen V. **BMJ** 1988 Dec 24–31;297(6664):1658

PATHOLOGY

[Change in the flow relations in the vertebral arteries in head-neck movements] Leinzinger EP. **Beitr Gerichtl Med** 1988;46:451–69 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Vertigo and vertebrobasilar insufficiency. A critical comment. Bruyn GW. **Acta Otolaryngol Suppl (Stockh)** 1988;460:128–34 (25 ref.)

Complete visual inversion in vertebrobasilar ischaemic disease [letter] Mehler MF. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1236–7

Regional cerebral blood flow during an attack of vertebrobasilar insufficiency. Sakai F, et al. **Stroke** 1988 Nov;19(11):1426–30

[Status of the microcirculatory bed of the bulbar conjunctiva in various forms of vestibular dysfunction] Aleksandrov IuG, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):11–5 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

The rostral basilar artery syndrome: diagnosis, etiology, prognosis. Mehler MF. **Neurology** 1989 Jan;39(1):9–16

Recurrent vertebrobasilar embolism in an infant with Klippel–Feil anomaly. Ross CA, et al. **Pediatr Neurol** 1987 May–Jun;3(3):181–3

[Computerized tomography imaging of calcified arteriosclerosis of the vertebral artery] Vieregge P, et al. **Med Klin** 1988 Jul 15;83(15):477–9 **(Ger)**

[Spontaneous recanalization of basilar artery occlusions] Karnik R, et al. **Vasa Suppl** 1988;26:173–7 **(Ger)**

[Angiographic diagnosis and rheologic properties of blood in vertebrobasilar insufficiency caused by scalenus anticus syndrome] Apsatarov EA, et al. **Kardiologiia** 1988 Sep; 28(9):74–7 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Vertebrobasilar insufficiency revealed by xenon-133 inhalation SPECT. Delecluse F, et al. **Stroke** 1989 Jul; 20(7):952–6

SURGERY

Vertebral artery release in vertebro-basilar insufficiency due to cervical uncoarthrosis. Solini A, et al. **Ital J Orthop Traumatol** 1989 Mar;15(1):43–56

Simultaneous carotid-vertebral reconstruction. McNamara MF, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr; 30(2):161–4

Complications of intracranial bypass for vertebrobasilar insufficiency. Hopkins LN, et al. **J Neurosurg** 1989 Feb; 70(2):207–11 (20 ref.)

[Carotid endarterectomy in vertebrobasilar insufficiency syndromes. The need for a precise classification of symptoms] Courbier R, et al. **Chirurgie** 1988;114(9):678–83 (Eng. Abstr.) **(Fre)**

[Cerebrovascular insufficiency caused by extracranial vascular changes--results of surgical therapy] Glass S, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:46–8 **(Ger)**

[Current surgical therapy of stenoses of arteries supplying the brain] Koch G. **Vasa Suppl** 1988;26:140–2 **(Ger)**

[Surgical treatment of extracranial occlusive processes of the vertebral artery by construction of a subclavio-vertebral bypass] Bürger K, et al. **Zentralbl Chir** 1989;114(3):181–9 (Eng. Abstr.) **(Ger)**

VERTICAL DIMENSION

Vertical dimensional changes of the lips in the North American black patient after four first-premolar extractions. Park S, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):152–60

Simultaneous superior repositioning of the maxilla and mandibular advancement. A report on stability. Turvey TA, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov; 94(5):372–83

Freeway space measurement using mandibular kinesiograph and EMG before and after TENS. Konchak PA, et al. **Angle Orthod** 1988 Oct;58(4):343–50

An evaluation of the relationship between rest position of the mandible and malocclusion. Sperry TP. **Angle Orthod** 1989 Fall;59(3):217–25

Determination of vertical dimension by hydraulic intraoral jack. LoSchiavo M, et al. **J Oral Rehabil** 1988 Jul; 15(4):393–9

Increasing occlusal vertical dimension with an orthodontic 'clothes pin appliance.' A clinical report. Alexander SA, et al. **J Prosthet Dent** 1989 Jul;62(1):1–3

The effect of increasing occlusal vertical dimension on transcranial radiographic projections of the temporomandibular joints. Gross MD. **J Prosthet Dent** 1988 Oct;60(4):491–9

An electromyographic study of masticatory muscle activity at increased occlusal vertical dimension in complete denture wearers. Lyons MF. **J Prosthet Dent** 1988 Sep; 60(3):346–8

The effect of prior jaw motion on the plot of electromyographic amplitude versus jaw position. Plesh O, et al. **J Prosthet Dent** 1988 Sep;60(3):369–73

Modified Boley gauge for recording vertical dimension. Salib MM, et al. **J Prosthet Dent** 1988 Oct;60(4):520–1

VERTICILLIUM see **HYPHOMYCETES**

VERTIGO

Lermoyez's syndrome. A follow-up study in 12 patients. Schmidt PH, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):467–73

A computer-based consultation system (expert system) for the classification and diagnosis of dizziness. Mira E, et al. **Adv Otorhinolaryngol** 1988;42:77–80

Diagnosis and management of vertigo. Hart CW. **Compr Ther** 1988 Oct;14(10):47–50

Vertigo. How serious are recurrent and single attacks? Slater R. **Postgrad Med** 1988 Oct;84(5):58–63, 67 (13 ref.)

[Protocol on vertigo for emergency room residents at a clinical hospital in Barcelona] Cuchí A, et al. **An Otorrinolaringol Ibero Am** 1988;15(6):637–45 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Vestibulo-oculomotor disturbances caused by occupational hazards. Wenngren BI, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:7–10 (23 ref.)

[A vertiginous syndrome: a side effect of buprenorphine?] Richard JP, et al. **Cah Anesthesiol** 1988 Dec;36(8):641–2 **(Fre)**

DIAGNOSIS

Value of vestibular function tests in the differential diagnosis of vertigo. Odkvist LM. **Acta Otolaryngol Suppl (Stockh)** 1988;460:122–7 (25 ref.)

Sensitivity and specificity of audiological tests in patients with vertigo. Pedersen KE, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:69–73 (30 ref.)

Vestibular neuronitis. An otoneurological evaluation. Silvoniemi P. **Acta Otolaryngol Suppl (Stockh)** 1988; 453:1–72 (134 ref.)

Cases from the aerospace medicine residents' teaching file, case #30. A difficult differentiation between idiopathic perilymph fistula and psychosomatic dizziness and unsteadiness [clinical conference] Mason KT. **Aviat Space Environ Med** 1989 Mar;60(3):277–9

Alternobaric vertigo: an aeromedical review. Wicks RE. **Aviat Space Environ Med** 1989 Jan;60(1):67–72 (18 ref.)

Dynamic posturography and caloric test results in patients with and without vertigo. Goebel JA, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):553–8

[Benign paroxysmal positional vertigo: clinical aspects and medico-legal considerations] Ghilardi PL, et al. **Acta Otorhinolaryngol Ital** 1989 Jan–Feb;9(1):79–85 (Eng. Abstr.) **(Ita)**

[Computerized stabilometry: a complete study in the examination of patients with vertigo] Guidetti G, et al. **Acta Otorhinolaryngol Ital** 1986 Sep–Oct;6(5):487–504 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

Flunarizine and betahistine. Two different therapeutic approaches in vertigo compared in a double-blind study. Elbaz P. **Acta Otolaryngol Suppl (Stockh)** 1988;460:143–8

The use of vestibular tests for the selection of anti-vertigo drugs. Oosterveld WJ. **Acta Otolaryngol Suppl (Stockh)** 1988;460:94–8

Late onset Cogan's syndrome. Fidler H, et al. **J Laryngol Otol** 1989 May;103(5):512–4

Streptomycin in Menière's disease: a case requiring multiple treatments. Glasscock ME 3d, et al. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):237–41

[Treatment of vertigo syndrome with Nootropil] Miszke A, et al. **Otolaryngol Pol** 1988;42(5):312–7 (Eng. Abstr.) **(Pol)**

[Clinical trial of the use of the combination of piracetam and dihydroergocristine in vertigo from different causes] Ordosgoitia H, et al. **An Otorrinolaringol Ibero Am** 1989; 16(3):271–9 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Epidemiological studies on benign paroxysmal positional vertigo in Japan. Mizukoshi K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:67–72

Paroxysmal positional vertigo in the elderly. Bloom J, et al. **J Otolaryngol** 1989 Apr;18(3):96–8

ETIOLOGY

Positional nystagmus. Rosenhall U. **Acta Otolaryngol Suppl (Stockh)** 1988;455:17–20 (15 ref.)

Vestibular neuronitis in childhood. Shirabe S. **Acta Otolaryngol Suppl (Stockh)** 1988;458:120–2

Effects of blood pressure change upon brain-stem pO2 in rabbits with surgically removed baroreceptor nerve. Possible mechanisms for vertigo due to autonomic nerve dysfunction. Yamamoto K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:46–54

Vestibular neuritis--a horizontal semicircular canal paresis? Büchele W, et al. **Adv Otorhinolaryngol** 1988;42:157–61 (9 ref.)

Vascular disease as a cause of vertigo and hearing loss: the role of 'normal' alcohol consumption. Kornhuber HH. **Adv Otorhinolaryngol** 1988;41:229–30

Noninvasive ultrasound investigation of cerebral vessels in the case of vertigo and dizziness. Widder B, et al. **Adv Otorhinolaryngol** 1988;41:231–4

Vertigo in postoperative follow-up of otosclerosis. Causse JB, et al. **Am J Otol** 1988 May;9(3):246–55 (36 ref.)

Vestibular atelectasis. Merchant SN, et al. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):565–76

Vertigo of vascular origin. Clinical and electronystagmographic features in 84 cases. Grad A, et al. **Arch Neurol** 1989 Mar;46(3):281–4

Vertigo following aural suction: can it be prevented? Gray RF, et al. **Clin Otolaryngol** 1988 Aug;13(4):285–8
Hypertriglyceridemia presenting as a reversible cause of vertigo: a case report and review of the literature. Snowden MS, et al. **J Ky Med Assoc** 1988 Nov;86(11):609–11 (8 ref.)
Benign paroxysmal positional vertigo resulting from surgical trauma. Nigam A, et al. **J Laryngol Otol** 1989 Feb; 103(2):203–4
Benign paroxysmal vertigo of the horizontal canal. Pagnini P, et al. **ORL J Otorhinolaryngol Relat Spec** 1989; 51(3):161–70
Post-traumatic vertigo in children: a diagnostic approach. Evistar L, et al. **Pediatr Neurol** 1986 Mar–Apr;2(2):61–6
Borrelia infection in patients with vertigo and sensorineural hearing loss. Hanner P, et al. **Scand Audiol Suppl** 1988; 30:201–3
Otoneurophysiologic diagnosis of vascular disturbances in the central nervous system. Tjell C. **Scand Audiol Suppl** 1988;30:205–9
Alternobaric vertigo in professional divers. Molvaer OI, et al. **Undersea Biomed Res** 1988 Jul;15(4):271–82
[Distal infarction of the left superior cerebellar artery presenting with dysarthria and unsteadiness] Amarenco P, et al. **Rev Neurol (Paris)** 1988;144(6–7):459–61 (Eng. Abstr.) **(Fre)**
[Positional nystagmus and other otoneurological symptoms in transient vascular disorders of the vertebrobasilar system] Tanchev KS. **Vestn Otorinolaringol** 1988 Jul–Aug; (4):32–5 (Eng. Abstr.) **(Rus)**

GENETICS

Familial periodic ataxia. Hankey GJ, et al. **Med J Aust** 1989 Mar 6;150(5):277–8
Dominant recurrent ataxia and vertigo of childhood. Tibbles JA, et al. **Pediatr Neurol** 1986 Jan–Feb;2(1):35–8

HISTORY

[The medical history of vertigo from Hippocrates to the modern interpretation of Menière's disease] Celestino D, et al. **Acta Otorhinolaryngol Ital** 1985;5 Suppl 5:5–30 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Vertigo and vertebrobasilar insufficiency. A critical comment. Bruyn GW. **Acta Otolaryngol Suppl (Stockh)** 1988;460:128–34 (25 ref.)
Visual modulatory influences of vestibulo-ocular reflex in patients with vertigo. Mizukoshi K, et al. **Adv Otorhinolaryngol** 1988;41:63–70
Vestibulospinal findings in two syndromes with spontaneous vertigo attacks. Norré ME, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):191–5
Dizziness. Hollander J. **Semin Neurol** 1987 Dec;7(4):317–35 (99 ref.)
[Evoked potentials and the oculofacial reflex in otoneurological pathology] Pascu A, et al. **Rev Chir [Otorinolaringol]** 1988 Jul–Sep;33(3):179–83 (Eng. Abstr.) **(Rum)**

PREVENTION & CONTROL

Prevention of vertigo in Ménière's syndrome by means of transtympanic ventilation tubes. Montandon P, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(6):377–81

PSYCHOLOGY

Depersonalization, vertigo and Ménière's disease. Grigsby JP, et al. **Psychol Rep** 1989 Apr;64(2):527–34
[Psychological symptoms in patients with hearing and equilibrium disorders and possibilities of treatment with psychopharmacologic agents] Baštecký J, et al. **Cesk Psychiatr** 1989 Apr;85(2):82–8 (Eng. Abstr.) **(Cze)**

RADIONUCLIDE IMAGING

[Preliminary study of patients with vertigo and dizziness using 123I-IMP] Tamamoto F, et al. **Kaku Igaku** 1989 Jan; 26(1):61–7 (Eng. Abstr.) **(Jpn)**

REHABILITATION

Physiotherapy in vertigo. Odkvist I, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:74–6 (8 ref.)
Comparative study of two types of exercise treatment for paroxysmal positioning vertigo. Norré ME, et al. **Adv Otorhinolaryngol** 1988;42:287–9
Vestibular habituation training for positional vertigo in elderly patients. Norré ME, et al. **Arch Gerontol Geriatr** 1989 Mar;8(2):117–22
Rehabilitation treatment for vertigo. Norré ME, et al. **Int J Rehabil Res** 1988;11(2):117–23

SURGERY

Surgical treatment of vertigo. Bagger-Sjöbäck D. **Acta Otolaryngol Suppl (Stockh)** 1988;455:86–9 (21 ref.)
Indications and results of neurovascular decompression of the eighth cranial nerve for vertigo, tinnitus and hearing disturbances. Ryu H, et al. **Adv Otorhinolaryngol** 1988; 42:280–3
Retrolabyrinthine versus middle fossa vestibular neurectomy. Zini C, et al. **Am J Otol** 1988 Nov;9(6):448–50
Transmastoid labyrinthectomy: reliable surgical management of vertigo. Kemink JL, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):5–10
Management of vertigo in patients with syphilis: is endolymphatic shunt surgery appropriate? Shih L, et al. **Otolaryngol Head Neck Surg** 1988 Dec;99(6):574–7
The surgery of vertigo. Moffat D. **Practitioner** 1988 Nov 22;232(1459):1322–4
[Operative correction of kinking and coiling at the origin of vertebral artery and stellate ganglionectomy in patients with severe vertigo and dizziness] Nishijima M, et al. **No Shinkei Geka** 1989 Mar;17(3):255–61 (Eng. Abstr.) **(Jpn)**

THERAPY

Curing the BPPV with a liberatory maneuver. Semont A, et al. **Adv Otorhinolaryngol** 1988;42:290–3
Long-term relief by caloric stimulation in the treatment of vertigo. Umeda Y, et al. **Adv Otorhinolaryngol** 1988; 42:284–6
Vestibular habituation training: exercise treatment for vertigo based upon the habituation effect. Norré ME, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):14–9
[Role of Semont's maneuver in the diagnosis and treatment of paroxysmal positional vertigo. Critical review of 310 cases] Guidetti G, et al. **Acta Otorhinolaryngol Ital** 1988 Sep–Oct;8(5):493–502 (Eng. Abstr.) **(Ita)**
[Motion therapy in dizziness improves the function of the injured balance system] Silfverskiöld R. **Lakartidningen** 1988 Sep 7;85(36):2850–3 **(Swe)**

VERTIGO, AURAL see **MENIERE'S DISEASE**

VERY LOW DENSITY LIPOPROTEINS see **LIPOPROTEINS, VLDL**

VESICAL CALCULI see **BLADDER CALCULI**

VESICAL FISTULA see **BLADDER FISTULA**

VESICANTS see **IRRITANTS**

VESICATION see **BLISTER**

VESICO-URETERAL REFLUX

[Diagnostic aspects of primary vesico-ureteral reflux in adults] De Dominicis C, et al. **Minerva Urol Nefrol** 1988 Jul–Sep;40(3):151–4 (Eng. Abstr.) **(Ita)**
[Urinary infection and vesico-ureteral reflux: protocol of diagnosis, treatment and control] Heras M, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:119–23 (9 ref.) **(Spa)**

CLASSIFICATION

[Classification of vesico-ureteral reflux] Lopatkin NA, et al. **Urol Nefrol (Mosk)** 1988 Jul–Aug;(4):3–7 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Influence of vesicoureteral reflux and urinary tract infection on renal growth in children with upper urinary tract duplication. Hannerz L, et al. **Acta Radiol** 1989 Jul–Aug; 30(4):391–4
Vesicoureteric reflux and renal scarring. White RH. **Arch Dis Child** 1989 Mar;64(3):407–12 (53 ref.)
Vesicoureteric reflux and urinary calculi in children. Roberts JP, et al. **Br J Urol** 1989 Jul;64(1):10–2
Reflux nephropathy as a cause of end-stage renal failure [letter] Niyamathullah MM, et al. **Clin Nephrol** 1989 Jul; 32(1):49
Obstruction in the refluxing urinary tract—a common phenomenon. Leighton DM, et al. **Clin Radiol** 1989 May; 40(3):271–3
Hemorrhagic cystitis [letter] Raman TS, et al. **Indian Pediatr** 1989 Feb;26(2):193–4
Incidence of reflux nephropathy (RN) in ESRD and effect of nephrectomy in RN on blood pressure and haematocrit following renal transplantation. Agarwal SK, et al. **J Assoc Physicians India** 1989 Mar;37(3):207–9
Reflux nephropathy—pathogenetic aspects. Gupta A, et al. **J Assoc Physicians India** 1989 Mar;37(3):199–200 (35 ref.)
Vesico ureteric reflux and reflux nephropathy. Visweswaran RK, et al. **J Assoc Physicians India** 1988 Sep;36(9):555–9
Vesicoureteral reflux in complete ureteral duplication: surgical options. Ahmed S, et al. **J Urol** 1988 Nov;140(5 Pt 2):1092–4
Vesicoureteral reflux in boys. Decter RM, et al. **J Urol** 1988 Nov;140(5 Pt 2):1089–91
Coexisting ureteropelvic junction obstruction and vesicoureteral reflux: diagnostic and therapeutic implications. Hollowell JG, et al. **J Urol** 1989 Aug;142(2 Pt 2):490–3; discussion 501
Protective factors in posterior urethral valves. Rittenberg MH, et al. **J Urol** 1988 Nov;140(5):993–6
Vesicoureteral reflux and voiding dysfunction: a prospective study. Seruca H. **J Urol** 1989 Aug;142(2 Pt 2):494–8; discussion 501
Pseudotumor cerebri associated with obstructive nephropathy. Noetzel MJ, et al. **Pediatr Neurol** 1986 Jul–Aug;2(4):238–40
Vesicorenal reflux and intravesical chemotherapy. Mazeman E, et al. **Prog Clin Biol Res** 1989;303:517–22 (24 ref.)
Neonatal hydronephrosis due to primary vesicoureteral reflux: trends in diagnosis and treatment. Paltiel HJ, et al. **Radiology** 1989 Mar;170(3 Pt 1):787–9
Trimethoprim-sulphadiazine prophylaxis in children with vesico-ureteric reflux. Hanson E, et al. **Scand J Infect Dis** 1989;21(2):201–4
Vesico-ureteric reflux and lymphoid resistance to in vitro steroid: adverse risk factors for renal transplantation. Dumble LJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2179–81
Acute focal bacterial nephritis and renal abscess associated with vesicoureteral reflux. Report of a case. Sugao H, et al. **Urol Int** 1988;43(4):253–6
Renal calculi in spinal cord-injured patient: association with reflux, bladder stones, and foley catheter drainage. Hall MK, et al. **Urology** 1989 Sep;34(3):126–8
[You make the diagnosis. Acute postinfectious glomerulonephritis. Grade IV left and grade III right vesico-ureteral reflux. Bilateral high-grade reflux nephropathy with left atrophic kidney and right focal parenchymal scar] Ring E, et al. **Padiatr Padol** 1989; 24(1):77–80 **(Ger)**
[BCG in reflux] Böhle A, et al. **Urologe [A]** 1989 Jan; 28(1):36–9 (Eng. Abstr.) **(Ger)**
[Vesico-ureteral reflux, a cause of arterial hypertension in children] Brumariu O. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec;92(4):635–42 (14 ref.) (Eng. Abstr.) **(Rum)**
[Vesico-ureteral reflux, a cause of arterial hypertension in children] Brumariu O. **Rev Pediatr Obstet Ginecol [Pediatr]** 1988 Apr–Jun; 37(2):135–43 (14 ref.) **(Rum)**
[Renal dysplasia and vesico-ureteral reflux] Gil Salom M, et al. **Actas Urol Esp** 1989 May–Jun;13(3):195–200 (56 ref.) (Eng. Abstr.) **(Spa)**
[Glomerulosclerosis in reflux nephropathy. Apropos of 2 cases. Theory of hyperfiltration (letter)] Baños Gallardo M, et al. **Rev Clin Esp** 1989 Apr;184(7):390 **(Spa)**

DIAGNOSIS

Follow-up evaluation of prenatally recognized vesicoureteric reflux. Steele BT, et al. **J Pediatr** 1989 Jul;115(1):95–6
Intravenous pyelography in children with urinary tract infection and vesicoureteral reflux. Alon U, et al. **Pediatrics** 1989 Mar;83(3):332–6
[Ultrasonic confirmation of vesico-ureteral reflux] Bergius AR, et al. **Duodecim** 1988;104(14):1047–52 **(Fin)**
[The "asymmetric crying facies": an indication of other malformations?] Fiocchi A, et al. **Minerva Pediatr** 1988 Mar;40(3):195–8 (16 ref.) (Eng. Abstr.) **(Ita)**
[A clinical study and the diagnosis in magnetic resonance imaging of renal scarring] Tsugaya M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):532–9 (Eng. Abstr.) **(Jpn)**
[Radiodiagnosis of vesicoureteral reflux in the early postoperative period following adenectomy of the prostate gland] Gytlan ID, et al. **Med Radiol (Mosk)** 1988 Oct; 33(10):8–13 (Eng. Abstr.) **(Rus)**
[Ultrasonic diagnosis of vesico-ureteral reflux] Vinarov AZ, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):8–9 (Eng. Abstr.) **(Rus)**
[Stimulating cystotonometry—a new method of diagnosis of neurogenic diseases of the bladder in children] Salov PP, et al. **Vestn Khir** 1988 Dec;141(12):89–90 **(Rus)**

DRUG THERAPY

Nonsurgical approach to the management of vesicoureteral reflux in children. Belman AB, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):556–9

EPIDEMIOLOGY

Epidemiology of urinary tract infections and vesico-ureteral reflux in children. Messi G, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):389–96
Urinary morbidity of vesicoureteral reflux patients without surgical correction prior to renal transplantation [letter] Morales JM, et al. **Nephron** 1989;51(4):571–2

ETHNOLOGY

Primary vesicoureteral reflux in blacks with posterior urethral valves: does it occur? Nancarrow PA, et al. **Pediatr Radiol** 1988;19(1):31–5

ETIOLOGY

The fate of infant kidneys with fetal hydronephrosis but initially normal postnatal sonography. Dejter SW Jr, et al. **J Urol** 1989 Aug;142(2 Pt 2):661–2; discussion 667–8
Bladder hypocompliance in the spinal cord injury population. Hackler RH, et al. **J Urol** 1989 Jun;141(6):1390–3
The late occurrence of urinary tract damage in patients successfully treated by radiotherapy for cervical carcinoma. Zoubek J, et al. **J Urol** 1989 Jun;141(6):1347–9
Long-term follow-up of spinal cord injury patients with vesicoureteral reflux [letter] Lindan R. **Paraplegia** 1988 Oct; 26(5):359
Urinary tract infection and vesicoureteral reflux. Edelmann CM Jr. **Pediatr Ann** 1988 Sep;17(9):568, 570–80, 582
Initiation of vesicoureteral reflux after heminephrectomy for ureterocele. Uehling DT, et al. **Urology** 1989 Apr;

33(4):302–4
[Vesico–ureteral reflux associated with functional disorders of the distal segment of the large intestine in children] Salov PP. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):17–22 (Eng. Abstr.) **(Rus)**
[Vesico–ureteral reflux following adenomectomy] Vinarov AZ, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):37–41 (Eng. Abstr.) **(Rus)**
[Double kidney and vesico–ureteral reflux in children] Kushch NL, et al. **Vestn Khir** 1988 Jun;140(6):74–8 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Inflammatory cell infiltrate in distal ureteral segments from patients with reflux. Josifidis HT, et al. **Urology** 1989 Sep; 34(3):131–3
[New development and progression of renal scarring in children with primary VUR] Shimada K, *et al.* **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):501–6 (Eng. Abstr.) **(Jpn)**
[Characteristics of kidney involvement in vesico–renal reflux in children] Leonova LV, et al. **Pediatriia** 1988;(5):25–9 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Functional vesico–urethral pathology and the influence on the urinary tract in children. Van Kerrebroeck PE, et al. **Acta Urol Belg** 1989;57(2):585–91
Effect of unilateral vesicoureteric reflux on renal growth and the uptake of 99mTc DMSA by the kidney. An experimental study in the minipig. Godley ML, et al. **Br J Urol** 1989 Apr;63(4):340–7
Fractional excretion of magnesium and renal concentrating capacity in refluxing renal units. Kekomäki M, et al. **J Urol** 1988 Nov;140(5 Pt 2):1095–6
Renal growth and progression of reflux nephropathy in children with vesicoureteral reflux. Shimada K, et al. **J Urol** 1988 Nov;140(5 Pt 2):1097–100
The natural history of reflux in the lower pole of duplicated collecting systems: a controlled study. Ben–Ami T, et al. **Pediatr Radiol** 1989;19(5):308–10
[The unstable detrusor and vesico–ureteral reflux (a group of 20 children)] Kočvara R, et al. **Cesk Pediatr** 1988 Nov; 43(11):667–70 (Eng. Abstr.) **(Cze)**
[Comparative characteristics of stimulant cystotonometry in children] Salov PP, et al. **Pediatriia** 1989;(2):95–6 **(Rus)**
[Functional status of the adrenal and pituitary–adrenal systems in children with urologic diseases under general anesthesia] Katkovskil DG, et al. **Vestn Khir** 1988 May; 140(5):90–2 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

The split–cuff ureteral nipple reimplantation technique: reliable reflux prevention from bowel segments. Stone AR, et al. **J Urol** 1989 Sep;142(3):707–9

RADIOGRAPHY

Voiding cystourethrography as a predictor of reflux nephropathy in children with urinary–tract infection. Hellström M, et al. **AJR** 1989 Apr;152(4):801–4
Reliability of voiding cystourethrography to detect reflux. Jequier S, et al. **AJR Am J Roentgenol** 1989 Oct; 153(4):807–10
Normal and near normal caliceal patterns in reflux nephropathy. Gedroyc WM, et al. **Clin Radiol** 1988 Nov; 39(6):615–9
New development and progression of renal scarring in children with primary VUR. Shimada K, et al. **Int Urol Nephrol** 1989;21(2):153–8
Detection of missing vesicoureteral reflux with bethanechol chloride–aided voiding cystourethrography. Koyanagi T, et al. **J Urol** 1989 Mar;141(3):580–2
Extracorporeal shock wave lithotripsy and stents: fluoroscopic observations and a hypothesis on the mechanisms of stent function. Fine H, et al. **Urol Radiol** 1989;11(1):37–41
[2 cases of exception to the law of Weigert and Meyer] Valla JS, et al. **Chir Pediatr** 1989;30(2):83–7 (Eng. Abstr.) **(Fre)**
[Digital cystography in the evaluation of vesico–ureteral reflux in childhood] Perri G, et al. **Radiol Med (Torino)** 1989 Apr;77(4):373–7 (Eng. Abstr.) **(Ita)**
[Roentgenological evaluation of the condition of the urinary tract in children with urethral valve] Gruchalska E. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec;51(6):315–20 (Eng. Abstr.) **(Pol)**

SURGERY

Management of vesico–ureteric reflux in myelodysplasia neurogenic bladder. Sen S, et al. **Aust N Z J Surg** 1988 Aug;58(8):639–42
Primary vesicoureteric reflux treated by antireflux ureterocystostomy at the vertex of the bladder. A 12–year follow–up and analysis of operative failure. Bradić I, et al. **Br J Urol** 1988 Dec;62(6):531–6
Long–term follow–up of children with surgically treated vesicorenal reflux: postoperative incidence of urinary tract infections, renal scars and arterial hypertension. Beetz R, et al. **Eur Urol** 1989;16(5):366–71
Lich–Gregoir anti–reflux operation: a surgical experience and 5–20 years of follow–up in 149 ureters. Linn R, et al. **Eur Urol** 1989;16(3):200–3
Undiversion with ileocecal segment following high transureteroureterostomy. Selli C, et al. **Eur Urol** 1989; 16(4):315–6
Complications of pregnancy in women after reimplantation for vesicoureteral reflux. Austenfeld MS, et al. **J Urol** 1988 Nov;140(5 Pt 2):1103–6
Open versus endoscopic surgery in the treatment of vesicoureteral reflux. Brown S. **J Urol** 1989 Aug;142(2 Pt 2):499–500; discussion 501
The Mitrofanoff principle: an alternative form of continent urinary diversion. Weingarten JL, et al. **J Urol** 1988 Dec; 140(6):1529–31
Problems in severe bilateral urinary tract anomalies. Nielsen OH, et al. **Prog Pediatr Surg** 1989;23:81–5
Ureteral crossover method: animal experiment for correction of reflux. Kondo A, et al. **Urology** 1988 Nov;32(5):438–41
[Surgical treatment of vesico–renal reflux using the Gil–Vernet technic. Apropos of 22 cases] Dore B, et al. **Acta Urol Belg** 1988;56(4):545–52 (Eng. Abstr.) **(Fre)**
[Is the Gil–Vernet advancement procedure for reflux legitimate? Considerations apropos of 22 cases in adults and children] Doré B, et al. **Ann Urol (Paris)** 1988; 22(5):363–7 (Eng. Abstr.) **(Fre)**
[Surgical correction of intermittent vesico–ureteral reflux without radiologically detectable reflux] Cukier J, et al. **J Urol (Paris)** 1988;94(7):319–22 (Eng. Abstr.) **(Fre)**
[A new technic of exclusion of the remaining, refluxing ureteral stump in cases of ectopic ureteral implantation] Ehrlich RM, et al. **J Urol (Paris)** 1988;94(7):329–31 (Eng. Abstr.) **(Fre)**
[Surgical treatment of vesico–ureteral reflux using the Gil Vernet technic. Apropos of 30 cases in children] Ravasse P, et al. **J Urol (Paris)** 1989;95(3):153–4 (Eng. Abstr.) **(Fre)**
[Vesico–ureteral reflux in children. Apropos of 59 operated cases] Hentati M, et al. **Tunis Med** 1989 Feb;67(2):75–9 (Eng. Abstr.) **(Fre)**
[Clinical evaluation of vesicoureteroneostomy. I. Efficacy of surgery in 65 cases (100 ureters) of primary vesicoureteral reflux] Saito S, et al. **Hinyokika Kiyo** 1988 May; 34(5):797–804 (Eng. Abstr.) **(Jpn)**
[Management of vesicoureteral reflux in patients with imperforate anus] Shimada K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1379–84 (Eng. Abstr.) **(Jpn)**
[Indications for surgery and the postoperative treatment of vesico–ureteral reflux in children] Tereshchenko AV, et al. **Klin Khir** 1988;(6):27–9 (Eng. Abstr.) **(Rus)**
[Functional status of the kidneys and upper urinary tract after anti–reflux operations in children] Abdullaev KI, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):10–3 (Eng. Abstr.) **(Rus)**
[Surgical treatment of vesico–ureteral reflux by a modified Gil–Vernet method in children] Dvorzhachek Ia, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):14–6 (Eng. Abstr.) **(Rus)**
[A method of surgery in bilateral vesico–ureteral reflux in children with a double ureter] Fryczkowski M, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):29–31 (Eng. Abstr.) **(Rus)**
[Cohen's operation in the treatment of vesico–ureteral reflux in children] Pugachev AG, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):26–9 (Eng. Abstr.) **(Rus)**
[Immediate and late results of anti–reflux surgery in children] Dzhavad–Zade MD, et al. **Vestn Khir** 1988 Aug;141(8):72–6 (Eng. Abstr.) **(Rus)**
[Should systematic correction of vesicoureteral reflux be performed before renal transplantation?] Morales JM, et al. **Actas Urol Esp** 1988 May–Jun;12(3):259–62 (Eng. Abstr.) **(Spa)**
[Substitution of the ureter with ileum in renal transplantation] Morote J, et al. **Actas Urol Esp** 1988 May–Jun;12(3):271–4 (Eng. Abstr.) **(Spa)**
[Ureteropyelostomy in the treatment of ureteral duplication with reflux] Arango Toro O, et al. **Arch Esp Urol** 1988 Sep;41(7):507–10 (Eng. Abstr.) **(Spa)**

THERAPY

Radiographic evaluation of subureteric injection of teflon to correct vesicoureteral reflux. Gore MD, et al. **AJR** 1989 Jan;152(1):115–9
The endoscopic correction of vesico–ureteric reflux. King PA, et al. **Aust N Z J Surg** 1988 Jul;58(7):569–71
The endoscopic correction of vesico–ureteric reflux. King PA, et al. **Aust N Z J Surg** 1988 Jul;58(7):569–71
Endoscopic correction of vesico–ureteric reflux by subureteric Teflon injection: follow–up ultrasound and voiding cystography. Blake NS, et al. **Br J Radiol** 1989 May;62(737):443–6
Physical growth velocity during conservative treatment and following subsequent surgical treatment for primary vesicoureteric reflux. Sutton R, et al. **Br J Urol** 1989 Mar; 63(3):245–50
Endoscopic treatment of refluxing ureteric stump following nephrectomy with Tissucol and teflon injection. Carini M, et al. **Eur Urol** 1989;16(4):312–4
Endoscopic correction of vesicoureteral reflux in the renal transplant candidate. Jackson CL, et al. **J Urol** 1989 Sep; 142(3):710–1
Technical refinements in endoscopic correction of vesicoureteral reflux. O'Donnell B, et al. **J Urol** 1988 Nov; 140(5 Pt 2):1101–2
Teflon injection for ureteric reflux [letter] Hughes PD. **Med J Aust** 1989 May 15;150(10):608
Endoscopic injection of polytetrafluoroethylene for treatment of vesicoureteral reflux. Kaplan WE. **Urol Clin North Am** 1988 Nov;15(4):777–83 (9 ref.)
Treatment of vesicoureteral reflux by endoscopic injection of blood. Kohri K, et al. **Urol Int** 1988;43(6):324–6
Endoscopic management of vesico–ureteric reflux in children with neuropathic bladder secondary to myelomeningocoele. Quinn FM, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:43–5
[Ureterovesical reimplantation after failure of endoscopic treatment of reflux by Teflon injection. Apropos of 4 cases] Lacombe A, et al. **Ann Urol (Paris)** 1989;23(1):83–4 (Eng. Abstr.) **(Fre)**
[Endoscopic treatment of vesico–ureteral reflux using a sub–mucous injection of Teflon paste in children. Apropos of 337 patients (491 ureters)] Valla JS, et al. **Chir Pediatr** 1989;30(1):37–42 (Eng. Abstr.) **(Fre)**
[Vesico–ureteral reflux. Ultrasonographic aspect of endoscopic treatment (excluding follow–up)] Coche G, et al. **J Radiol** 1988 Oct;69(10):577–9 (Eng. Abstr.) **(Fre)**

URINE

[Microalbuminuria in children with vesicoureteral reflux] Konda R, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep; 79(9):1504–9 (Eng. Abstr.) **(Jpn)**

VESICOSTOMY see CYSTOSTOMY

VESICOVAGINAL FISTULA

COMPLICATIONS

[Clinical significance of mean molecules in the prognosis of pyo–septic complications in patients with genital fistulas] Kulikova NN, et al. **Akush Ginekol (Mosk)** 1989 Jun; (6):62–5 (Eng. Abstr.) **(Rus)**

CONGENITAL

Neonatal hydrometrocolpos. Simmer K, et al. **Z Kinderchir** 1989 Apr;44(2):124–5
[Continent reconstruction of an extreme urogenital sinus—case report of a so–called high vesicovaginal confluence] Schott G, et al. **Urologe** [A] 1988 Jul; 27(4):193–7 (10 ref.) (Eng. Abstr.) **(Ger)**

ETIOLOGY

Vesico–vaginal fistula induced by an intravesical foreign body. Mhiri MN, et al. **Br J Urol** 1988 Sep;62(3):271
Tuberculous vesicovaginal fistula in a child. Singh A, et al. **Br J Urol** 1988 Dec;62(6):615
Postcoital vesico–vaginal fistula following surgery for cancer cervix. Oumachigui A, et al. **Int J Gynaecol Obstet** 1989 Jan;28(1):77–8
The late occurrence of urinary tract damage in patients successfully treated by radiotherapy for cervical carcinoma. Zoubek J, et al. **J Urol** 1989 Jun;141(6):1347–9
[Obstetrical–gynecological vesicovaginal fistulae—etiological factors, diagnosis and treatment] Kumanov Kh, et al. **Khirurgiia (Sofiia)** 1988;41(4):5–8 **(Bul)**
[Urogenital fistulae of obstetrical and gynecologic origin] Petrov P, et al. **Khirurgiia (Sofiia)** 1989;42(1):68–74 (134 ref.) **(Bul)**
[Urogenital fistulas of obstetrical origin. Apropos of 421 cases] Docquier J. **Acta Urol Belg** 1988;56(4):535–44 (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

An initiative on vesicovaginal fistula [see comments] Tahzib F. **Lancet** 1989 Jun 10;1(8650):1316–7. **Comment in:** Lancet 1989 Jul 8;2(8654):109

PSYCHOLOGY

Vesicovaginal fistula [letter; comment] Kelly J. **Lancet** 1989 Jul 8;2(8654):109. **Comment on:** Lancet 1989 Jun 10;1(8650):1316–7

RADIOGRAPHY

Air pyelo–ureterogram in obstetric vesico–vaginal fistula. Dahniya MH, et al. **Cent Afr J Med** 1988 Oct;34(10):251–2

SURGERY

Transvesical and transabdominal closure of vesicovaginal fistulas. Pintér J, et al. **Acta Chir Hung** 1988;29(2):143–9
Surgical treatment of female anorectal malformations. Peña A. **Birth Defects** 1988;24(4):403–23
Two–stage repair of giant vesico–vaginal fistula. Iloabachie GC. **Int J Gynaecol Obstet** 1989 Jan;28(1):27–31
New surgical approach for treatment of complex vesicovaginal fistula. Gil–Vernet JM, et al. **J Urol** 1989 Mar;141(3):513–6
Percutaneous transrenal endoureteral radio–frequency electrocautery for occlusion: case report. Kopecky KK, et al. **Radiology** 1989 Mar;170(3 Pt 2):1047–8
Early closure of posthysterectomy vesicovaginal fistulas.

Cruikshank SH. South Med J 1988 Dec;81(12):1525–8
[Treatment in a ventral position of vesicovaginal fistula by ordinary suture or autoplasty of the labia majora] Zerbib M, et al. J Chir (Paris) 1988 Nov;125(11):657–60 (Eng. Abstr.) (Fre)
[Treatment by omentoplasty of vesicorectovaginal and rectovaginal fistulae] Kiricuta I. J Urol (Paris) 1988; 94(5–6):289–93 (Eng. Abstr.) (Fre)
[Vesicovaginal fistula. Still a daily reality in Africa. Apropos of 89 cases] Ribault L, et al. Rev Fr Gynecol Obstet 1989 May;84(5):405–8 (Eng. Abstr.) (Fre)
[Ureterotransversopyelostomy and unilateral nephrostomy as supravesical urinary diversion in vesico–vagino–rectal fistula and incurable bladder cancers] Hoffmann L, et al. Z Urol Nephrol 1988 Nov;81(11):689–92 (Eng. Abstr.) (Ger)
[Bulbocavernosus fatty tissue flap–plasty] Wandschneider G, et al. Z Urol Nephrol 1988 Nov;81(11):685–8 (Eng. Abstr.) (Ger)
[A case of surgical treatment of vesico– and rectovaginal fistulas after radiotherapy of cervical cancer] Kasperczyk Z. Ginekol Pol 1988 Mar;59(3):170–3 (Eng. Abstr.) (Pol)
[Functioning of the artificial bladder after fistuloplasty by the transvaginal approach] Tiarin RB, et al. Urol Nefrol (Mosk) 1989 Jan–Feb;(1):67–9 (Rus)

THERAPY

[Transrenal ureteral occlusion using detachable balloons. An alternative to cutaneous ureterostomy in the treatment of vesicovaginal fistula] Boudghène F, et al. Ann Urol (Paris) 1988;22(6):425–7 (Eng. Abstr.) (Fre)

VESICULAR STOMATITIS VIRUS

ANALYSIS

Vesicular stomatitis virus M protein in the nuclei of infected cells. Lyles DS, et al. J Virol 1988 Nov;62(11):4387–92
NH2–terminal acidic region of the phosphoprotein of vesicular stomatitis virus can be functionally replaced by tubulin. Chattopadhyay D, et al. Proc Natl Acad Sci U S A 1988 Nov;85(21):7977–81
The functional domains of the phosphoprotein (NS) of vesicular stomatitis virus (Indiana serotype). Paul PR, et al. Virology 1988 Oct;166(2):350–7

DRUG EFFECTS

Sulfated polysaccharides are potent and selective inhibitors of various enveloped viruses, including herpes simplex virus, cytomegalovirus, vesicular stomatitis virus, and human immunodeficiency virus. Baba M, et al. Antimicrob Agents Chemother 1988 Nov;32(11):1742–5
The in vitro antiviral activity of tumor necrosis factor (TNF) in WISH cells is mediated by IFN–beta induction. Ruggiero V, et al. Antiviral Res 1989 Mar;11(2):77–88
Correlation between the antiviral activity of acyclic and carbocyclic adenosine analogues in murine L929 cells and their inhibitory effect on L929 cells S–adenosylhomocysteine hydrolase. Cools M, et al. Biochem Pharmacol 1989 Apr 1;38(7):1061–7
Potentiation of the antiviral activity of poly r(A–U) by riboflavin, FAD and FMN. Jamison JM, et al. Cell Biol Int Rep 1989 Feb;13(2):215–22
Comparative study on the antiviral activity of tumor necrosis factor (TNF)–alpha, lymphotoxin/TNF–beta, and IL–1 in WISH cells. Ruggiero V, et al. Immunol Lett 1989 May; 21(2):165–9
Interferon alters intracellular transport of vesicular stomatitis virus glycoprotein. Singh VK, et al. J Biol Regul Homeost Agents 1988 Apr–Jun;2(2):53–62
Mechanism of interferon action. Interferon alpha inhibits vesicular stomatitis virus primary transcript accumulation in P1/eIF–2 alpha protein kinase–deficient human fibroblast cells. Zhang XT, et al. J Biol Regul Homeost Agents 1987 Oct–Dec;1(4):157–65
Studies on the mechanism of the interferon–mediated antiviral state to vesicular stomatitis virus in resting mouse peritoneal macrophages. Di Francesco P, et al. J Gen Virol 1989 Jul;70 (Pt 7):1899–905
Effect of analogues of S–adenosylmethionine on in vitro polyadenylation by vesicular stomatitis virus. Hunt DM. J Gen Virol 1989 Mar;70 (Pt 3):535–42
Possible involvement of virus–induced protein kinase in the antiviral state induced with interferon–gamma against Sindbis virus. Saito S. J Interferon Res 1989 Feb;9(1):23–34
Verapamil and chlorpromazine inhibit the budding of Sindbis and vesicular stomatitis viruses from infected chicken embryo fibroblasts. Schlesinger MJ, et al. Virology 1989 Jan;168(1):187–90

ENZYMOLOGY

Phosphorylation of vesicular stomatitis virus M protein: evidence for a second virion–associated protein serine kinase activity. Beckes JD, et al. Virology 1989 Mar; 169(1):161–71
Redistributive properties of the vesicular stomatitis virus polymerase. Helfman WB, et al. Virology 1989 Aug; 171(2):319–30
Two domains distantly related to protein–tyrosine kinases in the vesicular stomatitis virus polymerase. McClure MA, et al. Virology 1989 Sep;172(1):391–7

GENETICS

Antiviral activity of conjugates between poly(L–lysine) and synthetic oligodeoxyribonucleotides. Leonetti JP, et al. Gene 1988 Dec 10;72(1–2):323–32
Multiple thermolabile and temperature–sensitive lesions in mutant tl17 of vesicular stomatitis virus. Fan W, et al. Intervirology 1989;30(3):148–55
Expression of the glycoprotein of vesicular stomatitis virus by infectious adenovirus vectors. Schneider M, et al. J Gen Virol 1939 Feb;70 (Pt 2):417–27
Interferon induction by viruses. XVII. Non–temperature–sensitive mutations regulate interferon induction by vesicular stomatitis virus. Sekellick MJ, et al. J Gen Virol 1989 Feb;70 (Pt 2):405–15
Restricted expression of viral glycoprotein in vesicular stomatitis virus–infected Drosophila melanogaster cells. Wyers F, et al. J Gen Virol 1989 Jan;70 (Pt 1):213–8
Altered neurovirulence of temperature–sensitive vesicular stomatitis virus mutants in a murine model by inoculation of bombesin: a neuropeptide. I. Clinical, virological and pathological observations. Huprikar J, et al. J Neurol Sci 1989 Feb;89(2–3):279–88
Transcription inhibition site on the M protein of vesicular stomatitis virus located by marker rescue of mutant tsO23(III) with M–gene expression vectors. Li Y, et al. J Virol 1989 Jun;63(6):2841–3
Extreme heterogeneity in populations of vesicular stomatitis virus. Steinhauer DA, et al. J Virol 1989 May;63(5):2072–80
High nucleotide substitution error frequencies in clonal pools of vesicular stomatitis virus. Steinhauer DA, et al. J Virol 1989 May;63(5):2063–71
A sorting signal for the basolateral delivery of the vesicular stomatitis virus (VSV) G protein lies in its luminal domain: analysis of the targeting of VSV G–influenza hemagglutinin chimeras. Compton T, et al. Proc Natl Acad Sci U S A 1989 Jun;86(11):4112–6
In vitro assembly of a functional nucleocapsid from the negative–stranded genome RNA of a defective interfering particle of vesicular stomatitis virus. Mirakhur B, et al. Proc Natl Acad Sci U S A 1988 Oct;85(20):7511–5
Evidence for the loop model of signal–sequence insertion into the endoplasmic reticulum. Shaw AS, et al. Proc Natl Acad Sci U S A 1988 Oct;85(20):7592–6
Inhibitory effects of vesicular stomatitis virus on cellular and influenza viral RNA metabolism and protein synthesis. Frielle DW, et al. Virology 1989 Sep;172(1):274–84
Vesicular stomatitis virus and its defective interfering particles exhibit in vitro transcriptional and replicative competition for purified L–NS polymerase molecules. Giachetti C, et al. Virology 1989 May;170(1):264–7
Altered ATP utilization by the polR mutants of vesicular stomatitis virus maps to the N–RNA template. Helfman WB, et al. Virology 1988 Nov;167(1):311–3
The L protein of a VSV mutant isolated from a persistent infection is responsible for viral interference and dominance over the wild–type. Jordan JA, et al. Virology 1989 Mar; 169(1):137–41
Epitope mapping by deletion mutants and chimeras of two vesicular stomatitis virus glycoprotein genes expressed by a vaccinia virus vector. Keil W, et al. Virology 1989 Jun; 170(2):392–407
Replication of the genome RNAs of defective interfering particles of vesicular stomatitis and Sendai viruses using heterologous viral proteins. Moyer SA. Virology 1989 Sep; 172(1):341–5
Glycoprotein evolution of vesicular stomatitis virus New Jersey. Nichol ST, et al. Virology 1989 Feb;168(2):281–91

GROWTH & DEVELOPMENT

Regulation of macrophage growth and antiviral activity by interferon–gamma. Goldberg M, et al. J Cell Biol 1989 Sep;109(3):1331–40
The 1:1 N–NS protein complex of vesicular stomatitis virus is essential for efficient genome replication. La Ferla FM, et al. J Virol 1989 Sep;63(9):3852–7
Efficient medium for impingement and storage of enveloped viruses. Stolze B, et al. Zentralbl Veterinarmed [B] 1989 May;36(3):161–7
[A micromethod of titrating viruses by plaque formation] Grigor'ian SS, et al. Vopr Virusol 1988 Sep–Oct;33(5):606–7 (Rus)

IMMUNOLOGY

Infectivity–deficient vesicular stomatitis virus produced in the presence of interferon has a functional virion core. Jay FT, et al. Can J Microbiol 1989 Feb;35(2):334–9
The role of antibodies in natural and acquired resistance of mice to vesicular stomatitis virus. Gobet R, et al. Exp Cell Biol 1988;56(4):175–80
Trojan horse lymphocytes: a vesicular stomatitis virus–specific T–cell clone lyses target cells by carrying virus. Hom RC, et al. J Virol 1989 Oct;63(10):4157–64
Human cervical carcinoma cell lines contain an antigen identical to the tumor–specific 75 kDa antigen of HeLa cells: detection by viral acquisition. Chen SS, et al. J Virol Methods 1989 Apr–May;24(1–2):159–67
T cell hybridomas define the class II MHC–restricted response to vesicular stomatitis virus infection. Petrarca MA, et al. Microb Pathog 1988 Nov;5(5):319–32
Antiviral and antigenic properties of recombinant porcine interferon gamma. Charley B, et al. Vet Immunol Immunopathol 1988 Sep;19(2):95–103
Antigen–specific proliferative responses to vesicular stomatitis virus following immunization of cattle with inactive virus. Redelman D, et al. Vet Immunol Immunopathol 1989 Mar;20(4):363–73
Monoclonal antibodies to the NS protein of vesicular stomatitis virus inhibit initiation of transcripts in vitro and dissociate leader RNA from mRNA synthesis. Williams PM, et al. Virology 1988 Dec;167(2):342–8

ISOLATION & PURIFICATION

Characterization of virulent isolates of vesicular stomatitis virus in relation to interference by defective particles. Huang AS, et al. Microb Pathog 1986 Apr;1(2):205–15
Experimental vesicular stomatitis virus infection of swine: extent of infection and immunological response. Redelman D, et al. Vet Immunol Immunopathol 1989 Mar;20(4):345–61
An enzyme–linked immunosorbent assay for the detection of vesicular stomatitis virus antigen. Ferris NP, et al. Vet Microbiol 1988 Dec;18(3–4):243–58

METABOLISM

Poliovirus protease 2A is required for interference with vesicular stomatitis virus–specified protein synthesis. Garry RF. Arch Virol 1988;103(1–2):133–7
Fatty acid acylation at the single cysteine residue in the cytoplasmic domain of the glycoprotein of vesicular–stomatitis virus. Mack D, et al. Biochem J 1988 Dec 15;256(3):1021–7
Dissection of a single round of vesicular transport: sequential intermediates for intercisternal movement in the Golgi stack. Orci L, et al. Cell 1989 Feb 10;56(3):357–68
A growth hormone–vesicular stomatitis virus G hybrid protein is rapidly degraded in lysosomes following transport to the cell surface. Rizzolo LJ. Eur J Cell Biol 1989 Jun;49(1):92–8
Palmitylation of viral membrane glycoproteins takes place after exit from the endoplasmic reticulum. Bonatti S, et al. J Biol Chem 1989 Jul 25;264(21):12590–5
The L protein of vesicular stomatitis virus modulates the response of the polyadenylic acid polymerase to S–adenosylhomocysteine. Hunt DM, et al. J Gen Virol 1988 Oct;69 (Pt 10):2555–61
Viral transcription is necessary and sufficient for vesicular stomatitis virus to inhibit maturation of small nuclear ribonucleoproteins. Crone DE, et al. J Virol 1989 Oct; 63(10):4172–80
Glycoprotein cytoplasmic domain sequences required for rescue of a vesicular stomatitis virus glycoprotein mutant. Whitt MA, et al. J Virol 1989 Sep;63(9):3569–78

PATHOGENICITY

Non–lethal infection of aminergic reticular core neurons: age–dependent spread of ts mutant vesicular stomatitis virus from the nose. Lundh B, et al. J Neuropathol Exp Neurol 1988 Sep;47(5):497–506

PHYSIOLOGY

Effect of cellular inhibitors on the infection of various susceptible cells with vesicular stomatitis virus. Superti F, et al. Acta Virol (Praha) 1988 Nov;32(6):487–93
Trypsin treatment of bovine ova after in vitro exposure to vesicular stomatitis virus. Stringfellow DA, et al. Am J Vet Res 1989 Jun;50(6):990–2
The M protein of vesicular stomatitis virus associates specifically with the basolateral membranes of polarized epithelial cells independently of the G protein. Bergmann JE, et al. J Cell Biol 1988 Nov;107(5):1707–15
Epizootic vesicular stomatitis in Colorado, 1982: isolation of virus from insects collected along the northern Colorado Rocky Mountain Front Range. Francy DB, et al. J Med Entomol 1988 Sep;25(5):343–7
Interferon induction by viruses. XIX. Vesicular stomatitis virus—New Jersey: high multiplicity passages generate interferon–inducing, defective–interfering particles. Marcus PI, et al. Virology 1989 Aug;171(2):630–3

ULTRASTRUCTURE

Intracellular vesicular stomatitis virus nucleocapsids and virions visualized by surface spreading. Yazaki K, et al. J Virol Methods 1989 Jan;23(1):1–12
pH–dependent accumulation of the vesicular stomatitis virus glycoprotein at the ends of intact virions. Brown JC, et al. Virology 1988 Dec;167(2):625–9

VESTIBULAR APPARATUS

Some considerations on caloric test results. Bergenius J, et al. Acta Otolaryngol Suppl (Stockh) 1988;455:21–3
Vestibular and non–vestibular nystagmus in examination of dizzy patients. Bergstedt M. Acta Otolaryngol Suppl (Stockh) 1988;455:14–6
Presentation of a posturographic test with loading of the proprioceptive system. Enbom H, et al. Acta Otolaryngol Suppl (Stockh) 1988;455:58–61
Rotatory test in otoneurology. Fluur E. Acta Otolaryngol Suppl (Stockh) 1988;455:33–47
Broad–frequency rotatory testing. Hydén D, et al. Acta Otolaryngol Suppl (Stockh) 1988;455:48–52
Pursuit eye movements. Methodological aspects. Larsby B.

Acta Otolaryngol Suppl (Stockh) 1988;455:24–7
Calcium antagonists as a peripherally acting labyrinthine suppressant in humans. Mangabeira-Albernaz PL.
Acta Otolaryngol Suppl (Stockh) 1988;460:99–103
Calcium-entry blockers in the treatment of vestibular disorders. Pfaltz CR, et al.
Acta Otolaryngol Suppl (Stockh) 1988;460:135–42
Clinical aspects of eye tracking test. Schalén L, et al.
Acta Otolaryngol Suppl (Stockh) 1988;455:28–32
Representation of three-dimensional space in the vestibular, oculomotor, and visual systems. Introduction. Henn V.
Ann N Y Acad Sci 1988;545:1–9 (20 ref.)
Primary intravestibular lipoma. Huang TS.
Ann Otol Rhinol Laryngol 1989 May;98(5 Pt 1):393–5
Visual symptoms of vestibular disease. Halmagyi GM, et al.
Aust N Z J Ophthalmol 1988 Aug;16(3):177–9
Cases from the aerospace medicine residents' teaching file. Case #27. An aircrewman with a perilymph fistula. Salisbury DA. Aviat Space Environ Med 1988 Nov;59(11 Pt 1):1106–8
Clinical value of caloric tests. Norré ME.
Clin Otolaryngol 1988 Aug;13(4):247–9
Vestibular syndrome associated with an ependymoma in a cat. Ingwersen W, et al. J Am Vet Med Assoc 1989 Jul 1;195(1):98–100
Round window reflex and oval window fistulae. Grewal DS.
J Laryngol Otol 1989 Jun;103(6):562–5
Hereditary vestibulo-cochlear dysfunction and vascular disorders. Verhagen WI, et al. J Neurol Sci 1989 Aug; 92(1):55–63
Evaluation of the monothermal caloric test. Bhansali SA, et al. Laryngoscope 1989 May;99(5):500–4
Idiopathic bilateral vestibulopathy. Baloh RW, et al.
Neurology 1989 Feb;39(2 Pt 1):272–5
[Protein fractions in workers with vestibular disorders] Savov A, et al. Probl Khig 1988;13:164–72 (Eng. Abstr.) (Bul)
[Electrical stimulation of the fenestra ovale. Perspectives] Frachet B, et al. Ann Otolaryngol Chir Cervicofac 1988; 105(8):597–600 (Eng. Abstr.) (Fre)
[Arslan and Belloni acute nucleoreticular vestibular syndrome. Interpretation of changes in neuromediators] Sala T. Rev Laryngol Otol Rhinol (Bord) 1988;109(5):457–9 (15 ref.) (Eng. Abstr.) (Fre)
[Lyme borreliosis and its significance for the ENT physician] Diehl GE, et al. Laryngorhinootologie 1989 Feb;68(2):81–7 (Eng. Abstr.) (Ger)
[Significance of associated causes in the evaluation of post-traumatic vestibular damage] Giordano C, et al.
Acta Otorhinolaryngol Ital 1989 Jan–Feb;9(1):87–93 (Eng. Abstr.) (Ita)
[Medico-legal evaluation of vestibular damage] Puxeddu P, et al. Acta Otorhinolaryngol Ital 1988 May–Jun;8(3):205–55 (Ita)
[Audio-vestibular changes in patients with rheumatoid arthritis] Ferrara P, et al. Minerva Med 1988 Dec; 79(12):1043–7 (Eng. Abstr.) (Ita)
[Clinical aspects of sudden deafness and vestibulopathy] Bosatra A. Recenti Prog Med 1989 Jun;80(6):333–7 (15 ref.) (Eng. Abstr.) (Ita)
[Each one case of Vogt-Koyanagi-Harada disease with vestibular and cerebellar ataxia, and multiple cranial nerve palsies] Hiraki Y, et al. Rinsho Shinkeigaku 1989 Jan; 29(1):54–8 (15 ref.) (Eng. Abstr.) (Jpn)
[Peripheral-type acute cochleovestibular involvement in the Klippel-Feil syndrome. Comments on 2 clinical cases] Ene F, et al. Rev Chir [Otorinolaringol] 1989 Jan–Mar; 34(1):45–56 (Eng. Abstr.) (Rum)
[The most important aspects of preventing noise and vibration-induced pathology in coal mines] Kolganov AV, et al. Gig Tr Prof Zabol 1988 Nov;(11):22–4 (Eng. Abstr.) (Rus)
[Reactions of the auditory, vestibular and visual analyzers in man to intermittent noise] Svistunov NT, et al.
Kosm Biol Aviakosm Med 1989 Mar–Apr;23(2):86–8 (Rus)
[Prevention of hearing and vestibular disorders] Blagoveshchenskaia NS. Vestn Otorinolaringol 1988 Nov–Dec;(6):3–8 (Rus)
[Evaluation of the efficacy of reflexotherapy of vestibular functional disorders] Filatov VF, et al.
Vestn Otorinolaringol 1988 Nov–Dec;(6):14–6 (Eng. Abstr.) (Rus)
[Anatomo-physiological aspects of the vestibular analyzer in children] Mostovaia TS. Vestn Otorinolaringol 1988 Jul–Aug;(4):84–8 (48 ref.) (Rus)
[Syndromology and differential treatment of secondary cochleovestibulitis in patients with early clinical forms of cerebral circulatory insufficiency] Pankov DD, et al.
Vestn Otorinolaringol 1989 Jan–Feb;(1):7–11 (Eng. Abstr.) (Rus)
[Diagnosis and treatment of noise-induced vestibular disorders] Shidlovskaia TV, et al. Vestn Otorinolaringol 1988 Jul–Aug;(4):28–31 (Eng. Abstr.) (Rus)

ABNORMALITIES

Enlargement of the vestibular aqueduct. Hill JH, et al.
Am J Otolaryngol 1984 Nov–Dec;5(6):411–4
The large vestibular aqueduct syndrome in children. A review of 12 cases and the description of a new clinical entity. Levenson MJ, et al.
Arch Otolaryngol Head Neck Surg 1989 Jan;115(1):54–8 (12 ref.)
[The dilated vestibular aqueduct syndrome] Lacombe H, et al. Ann Otolaryngol Chir Cervicofac 1989;106(3):152–7 (Eng. Abstr.) (Fre)

ANALYSIS

Alpha-fodrin (brain spectrin) immunocytochemical localization in rat vestibular hair cells. Scarfone E, et al.
Neurosci Lett 1988 Oct 31;93(1):13–8
Carbohydrates of the vestibular end organs detected by lectins. Takumida M, et al.
ORL J Otorhinolaryngol Relat Spec 1989;51(3):144–50

ANATOMY & HISTOLOGY

Visualization of human vestibular aqueduct with computer-aided serial section reconstruction system. Saito R, et al. Acta Otolaryngol Suppl (Stockh) 1988;447:100–4
Planar relations of semicircular canals in awake, resting turtles, Pseudemys scripta. Brichta AM, et al.
Brain Behav Evol 1988;32(4):236–45

BLOOD SUPPLY

Postural hypotension—cochleo-vestibular hypoxia—deafness. Hansen S.
Acta Otolaryngol Suppl (Stockh) 1988;449:165–9
[Fenibut treatment of a vascular lesion of the vestibular analyzer] Gorokhov EA, et al. Sov Med 1988;(8):90–2 (Rus)

CYTOLOGY

Melanocytes in vestibular dark cell areas in human fetuses. Igarashi Y, et al. Acta Otolaryngol (Stockh) 1989 Jul–Aug; 108(1–2):9–18

DRUG EFFECTS

Relationship between the nephrotoxicity and ototoxicity induced by gentamicin in the guinea pig. Dulon D, et al.
Acta Otolaryngol (Stockh) 1988 Sep–Oct;106(3–4):219–25
Cellular target of streptomycin in the internal ear. Meza G, et al. Acta Otolaryngol (Stockh) 1989 May–Jun; 107(5–6):406–11
Drop attacks in Menière's disease. Odkvist LM, et al.
Acta Otolaryngol Suppl (Stockh) 1988;455:82–5
Pharmacological treatment of vertigo. Pyykkö I, et al.
Acta Otolaryngol Suppl (Stockh) 1988;455:77–81 (24 ref.)
Vestibular autorotation testing of cisplatin chemotherapy patients. Kitsigianis GA, et al. Adv Otorhinolaryngol 1988; 42:250–3
Early symptoms of side effects due to aminoglycoside antibiotics. Miyoshi T. Adv Otorhinolaryngol 1988;42:246–9
The use of streptomycin to induce unilateral ablation of vestibular function in the rat: a preliminary report. Proctor LR, et al. Am J Otolaryngol 1989 May–Jun;10(3):188–97
Selective lesions of the vestibular labyrinth. Kimura RS, et al. Ann Otol Rhinol Laryngol 1988 Nov–Dec;97(6 Pt 1):577–84
Vestibular ototoxicity following intratympanic applications of chlorhexidine gluconate in the cat. Igarashi Y, et al.
Arch Otorhinolaryngol 1988;245(4):210–7
[Principles of conservative therapy of peripheral and central disorders of equilibrium] Ehrenberger K. HNO 1988 Aug; 36(8):301–4 (18 ref.) (Eng. Abstr.) (Ger)
[Effect of the drug Humex on the development of experimental motion sickness] Bodo G, et al.
Kosm Biol Aviakosm Med 1989 May–Jun;23(3):84 (Rus)
[The effect of vestibuloprotectors on the cyclic nucleotide system in experimental motion sickness] Leshchiniuk II, et al. Patol Fiziol Eksp Ter 1989 Jan–Feb;(1):26–8 (Eng. Abstr.) (Rus)

EMBRYOLOGY

Submicroscopic study of the vestibular dark cell area in human fetuses. Igarashi Y. Acta Otolaryngol (Stockh) 1989 Jan–Feb;107(1–2):29–38
Ultrastructural study of striated organelles in vestibular sensory cells of human fetuses. Sans A.
Anat Embryol (Berl) 1989;179(5):457–63
[Histogenetic study of the vestibular ganglion cells in the chick embryo—in relation to the vestibular sensory organs] Yamashita H, et al. Nippon Jibiinkoka Gakkai Kaiho 1988 Nov;91(11):1898–909 (Eng. Abstr.) (Jpn)

ENZYMOLOGY

Some properties of frog vestibular choline acetyltransferase and acetylcholinesterase. López I, et al. Neurochem Res 1989 Feb;14(2):113–8

GROWTH & DEVELOPMENT

Developmental modulation of vestibular-ocular function. Ornitz EM, et al. Adv Otorhinolaryngol 1988;41:36–9
Visual and vestibular control of locomotion in early and late sensory-deprived cats. Marchand AR, et al.
Prog Brain Res 1988;76:229–38 (45 ref.)

INJURIES

Pressure transmission properties from the externa ear canal to the inner ear. An experimental study using guinea pigs. Gyo K, et al. Acta Otolaryngol Suppl (Stockh) 1988; 456:87–91

INNERVATION

Vestibular sympathetic nervous system in guinea pig. Hozawa K, et al. Acta Otolaryngol (Stockh) 1989 Mar–Apr; 107(3–4):171–81
Neurophysiology of the vestibular system. Selected papers of the Bárány Society Meeting. Bologna, June 1–4, 1987.
Adv Otorhinolaryngol 1988;41:1–243
Membrane currents in vestibular and cochlear hair cells. Harada Y, et al. Adv Otorhinolaryngol 1988;41:7–13
Ultrastructural localization of carbonic anhydrase in the vestibular end organs of the guinea pig. Takumida M, et al. Arch Otorhinolaryngol 1989;246(1):56–60
Recording of electrical-evoked responses from a remote field in the vestibular part of the eighth nerve. A preliminary technical report. Latkowski B, et al. Audiology 1989; 28(2):111–6
Actions of excitatory amino acid acid agonists and antagonists on the primary afferents of the vestibular system of the axolotl (Ambystoma mexicanum). Soto E, et al.
Brain Res 1988 Oct 11;462(1):104–11
The endolymphatic sac and inner ear homeostasis. II: Effect of glycerol on the sensory end organs with or without colchicine pretreatment. Takumida M, et al. Hear Res 1989 Jun 15;40(1–2):17–28
The effect of gentamicin on the glycocalyx and the ciliary interconnections in vestibular sensory cells: a high resolution scanning electron microscopic investigation. Takumida M, et al. Hear Res 1989 Jan;37(2):163–70
The area acustico-vestibularis of Discoglossus pictus. I. Cytoarchitecture and ultrastructure features. Gonzalez A, et al. J Hirnforsch 1988;29(4):411–9
The area acustico-vestibularis of Discoglossus pictus. II. The primary afferent projections. Gonzalez A, et al.
J Hirnforsch 1988;29(4):421–34
Pharmacological aspects of excitatory synaptic transmission to second-order vestibular neurons in the frog. Cochran SL, et al. Synapse 1987;1(1):102–23
[Trans-cochlear neurectomy of the vestibular part of the cochlear nerve] Latkowski B. Otolaryngol Pol 1988; 42(3):145–50 (Eng. Abstr.) (Pol)

METABOLISM

Immunohistochemical demonstration of neuroactive substances in the inner ear of rat and guinea pig. Ylikoski J, et al. Acta Otolaryngol (Stockh) 1989 May–Jun; 107(5–6):417–23

PATHOLOGY

Vestibular atelectasis. Merchant SN, et al.
Ann Otol Rhinol Laryngol 1988 Nov–Dec;97(6 Pt 1):565–76

PHYSIOLOGY

Indicators of the influence a peripheral vestibular deficit has on vestibulo-spinal reflex responses controlling postural stability. Allum JH, et al. Acta Otolaryngol (Stockh) 1988 Sep–Oct;106(3–4):252–63
The contribution of vestibulo-spinal mechanisms to the maintenance of human upright posture. Dichgans J, et al.
Acta Otolaryngol (Stockh) 1989 May–Jun;107(5–6):338–45
Evidence of direct thermal action upon the vestibular receptors in the caloric test. A re-interpretation of the data of Coats and Smith. Hood JD.
Acta Otolaryngol (Stockh) 1989 Mar–Apr;107(3–4):161–5
Modulation by head and trunk positions of the vestibulo-spinal reflexes evoked by galvanic stimulation of the labyrinth. Observations by labyrinthine evoked EMG. Tokita T, et al. Acta Otolaryngol (Stockh) 1989 May–Jun; 107(5–6):327–32
Ca++ and the vestibular system. Symposium. Boerse, Belgium, April 28–29, 1988. Proceedings.
Acta Otolaryngol Suppl (Stockh) 1988;460:1–159
Effect of blindfolding one eye on vestibular compensation in guinea pigs. Ishikawa K, et al.
Acta Otolaryngol Suppl (Stockh) 1988;447:55–60
Vestibular disturbances after neck muscle sectioning in rat. Niklasson M, et al. Acta Otolaryngol Suppl (Stockh) 1988; 449:85–8
Possible role of Ca ions in the vestibular system. Sterkers O, et al. Acta Otolaryngol Suppl (Stockh) 1988;460:28–32 (31 ref.)
Inner ear blood flow in the rabbit after caloric stimulation. Angelborg C, et al. Adv Otorhinolaryngol 1988;42:39–42
Vestibular-contingent voluntary saccades based on cognitive estimates of remembered vestibular information.
Bloomberg J, et al. Adv Otorhinolaryngol 1988;41:71–5
Caloric testing of the vestibular function during orbital flight.
Clarke AH, et al. Adv Otorhinolaryngol 1988;42:31–5
Otolithic control of posture: vestibulo-spinal reflexes in a patient with a Tullio phenomenon. Fries W, et al.
Adv Otorhinolaryngol 1988;41:162–5
Head rotation evoked EEG responses are governed by rate of angular acceleration change. Hansen HC, et al.
Adv Otorhinolaryngol 1988;41:210–5
The role of cervical inputs in compensation of unilateral labyrinthectomized patients. Kobayashi Y, et al.
Adv Otorhinolaryngol 1988;42:185–9
Influence of the vestibular stimulation on the activity of muscles of the lower limb in man. Electromyographic evidence. Marcellini S, et al. Adv Otorhinolaryngol 1988; 41:184–9

The relative effect of saccular and somatosensory information on spatial perception and control. Mittelstaedt H, et al. **Adv Otorhinolaryngol** 1988;42:24–30

The role of the vestibular system in eye–head coordination and the generation of vestibular nystagmus. Schmid R, et al. **Adv Otorhinolaryngol** 1988;41:89–94

Gain regulation of the vestibulospinal reflex following microinjection of a beta–adrenergic agonist or antagonist into the locus coeruleus and the dorsal pontine reticular formation. Stampacchia G, et al. **Adv Otorhinolaryngol** 1988;41:134–41

Modulation of microphonics: a new method to study the vestibular system. Wit HP, et al. **Adv Otorhinolaryngol** 1988;42:59–64

Representation of three–dimensional space in the vestibular, oculomotor, and visual systems. A symposium of the Bárány Society. Bologna, Italy, June 3, 1987. Proceedings. **Ann N Y Acad Sci** 1988;545:1–263

Representation of three–dimensional space in the vestibular, oculomotor, and visual systems. Concluding remarks. Cohen B. **Ann N Y Acad Sci** 1988;545:239–47 (36 ref.)

Spatial transformation of horizontal linear acceleration by the cat vestibulospinal system. Schor RH. **Ann N Y Acad Sci** 1988;545:21–8 (19 ref.)

Injections of beta–adrenergic substances in the locus coeruleus affect the gain of vestibulospinal reflexes in decerebrate cats. D'Ascanio P, et al. **Arch Ital Biol** 1989 Jun;127(3):187–218

Vestibular habituation in student pilots. Schwarz U, et al. **Aviat Space Environ Med** 1989 Aug;60(8):755–61

Effects of optokinetic velocity and medial vestibulo–cerebellum lesions on vestibulo–ocular reflex direction adaptation in the cat. Mason CR, et al. **Brain Res** 1989 Jun 26;490(2):373–7

Cochlear and vestibular functions of the rat after obliteration of the endolymphatic sac. Manni JJ, et al. **Hear Res** 1988 Nov;36(2–3):139–51

Rehabilitation treatment for vertigo. Norré ME, et al. **Int J Rehabil Res** 1988;11(2):117–23

Early abrupt recovery from ataxia during vestibular compensation in goldfish. Ott JF, et al. **J Exp Biol** 1988 Sep;138:345–57

Postural changes occurring during one month of vestibular compensation in goldfish. Ott JF, et al. **J Exp Biol** 1988 Sep;138:359–74

The relation between horizontality and rod–and–frame and vestibular navigational performance. Sholl MJ. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan;15(1):110–25

Visual, vestibular and somatosensory contributions to balance control in the older adult. Manchester D, et al. **J Gerontol** 1989 Jul;44(4):M118–27

Comparison of vestibular and auditory startle responses in the rat and cat. Gruner JA. **J Neurosci Methods** 1989 Feb; 27(1):13–23

The NMDA antagonists MK801 and CPP disrupt compensation for unilateral labyrinthectomy in the guinea pig. Smith PF, et al. **Neurosci Lett** 1988 Dec 5;94(3):309–13

Gain of the adaptation mechanism in the human vestibulo–ocular reflex system. Boumans LJ, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(5):319–29

Vestibular evoked potentials in response to direct unilateral mechanical stimulation. Coale FS, et al. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):177–86

Vestibular habituation training: exercise treatment for vertigo based upon the habituation effect. Norré ME, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):14–9

Studies of space adaptation syndrome in experiments on primates performed on board of soviet biosatellite "Cosmos–1887". Kozlovskaya IB, et al. **Physiologist** 1989 Feb;32(1 Suppl):S45–8

Organization of leg–trunk–head equilibrium movements in normals and patients with peripheral vestibular deficits. Allum JH, et al. **Prog Brain Res** 1988;76:277–90

On the role of vestibular, visual and somatosensory information for dynamic postural control in humans. Diener HC, et al. **Prog Brain Res** 1988;76:253–62 (28 ref.)

Interaction between vestibulocollic and cervicocollic reflexes: automatic compensation of reflex gain by muscle afferents. Dutia MB. **Prog Brain Res** 1988;76:173–80 (12 ref.)

Dynamic and kinematic properties of the vestibulocollic and cervicocollic reflexes in the cat. Peterson BW, et al. **Prog Brain Res** 1988;76:163–72 (25 ref.)

Labyrinthine control of upright standing posture in humans. Tokita T, et al. **Prog Brain Res** 1988;76:291–5

[Posturography and otoneurology] Guidetti G. **Agressologie** 1988 Oct;29(9):653–6 (17 ref.) (Eng. Abstr.) **(Fre)**

[The significance of slow flows for the caloric excitability of the vestibular organs in weightlessness] Pau HW, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):616–20 (Eng. Abstr.) **(Ger)**

[Characteristics of vestibular deprivation in postnatal growing rabbits] Grübsch K, et al. **Padiatr Grenzgeb** 1988; 27(6):433–43 (Eng. Abstr.) **(Ger)**

[Study of dynamic counterrolling of the eye—quantitative analysis of effects by visual and vestibular systems] Tsunekawa F, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):227–33 (Eng. Abstr.) **(Jpn)**

[Vestibular function under weightlessness conditions] Watanabe S. **Nippon Seirigaku Zasshi** 1988;50(6):211–22 **(Jpn)**

[Progress in electrophysiological studies of hearing, equilibrium and voice] Iwankiewicz S, et al. **Otolaryngol Pol** 1988;42(1–2):121–30 (Eng. Abstr.) **(Pol)**

[Individual variability of vestibular sensitivity based on subjective perception and long–latent vestibular evoked potentials] Trinus KF. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):562–8 **(Rus)**

[Spectrum analysis of vestibular nystagmus] Telezhnikov AV, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):18–23 (Eng. Abstr.) **(Rus)**

[Autocorrelation analysis of electronystagmograms] Telezhnikov AV, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):68–71 **(Rus)**

[Changes in the direction of vestibulomotor responses in the process of adaptation to prolonged static head turning in man] Gurfinkel' VS, et al. **Neirofiziologiia** 1989;21(2):210–7 (Eng. Abstr.) **(Rus)**

[Influence of the efferent vestibular system on the vestibulo–spinal reflexes in the guinea pig] Marlinskiĭ VV, et al. **Neirofiziologiia** 1989;21(1):78–86 (Eng. Abstr.) **(Rus)**

[Effect of adequate stimulation of the vestibular apparatus on the locomotor activity of the fore– and hindlimb muscles in guinea pigs. Movements relative to the vertical axis] Marlinskiĭ VV, et al. **Neirofiziologiia** 1989;21(2):192–7 (Eng. Abstr.) **(Rus)**

[Ultrastructure of the Mauthner neurons in goldfish fry after their adaptation to vestibular stimulation] Potemkin VV, et al. **Tsitologiia** 1989 Mar;31(3):273–6 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Contralateral hyperactive caloric response in unilateral labyrinthine weakness. Huygen PL, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):1–4

Nonlinearity and asymmetry in the human vestibulo–ocular reflex. Paige GD. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug; 108(1–2):1–8

Clinical diagnosis of vestibular disorders. A system approach to dizziness. Vesterhauge S. **Acta Otolaryngol Suppl (Stockh)** 1988;460:114–21 (14 ref.)

Quantitative analysis of cerebello–vestibular function in congenital hypothyroidism. Sato T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):121–9

Statistical identification of the extent of a peripheral vestibular deficit using vestibulo–spinal reflex responses. Allum JH, et al. **Adv Otorhinolaryngol** 1988;42:65–71

Vestibular involvement in spasmodic torticollis: an old hypothesis with new data from otolith testing. Diamond SG, et al. **Adv Otorhinolaryngol** 1988;42:219–23

Considerations on vestibular physiopathology with special reference to comparison of irritative state and paralytic state. Hozawa J, et al. **Adv Otorhinolaryngol** 1988;42:135–8

The examination of body sway in normal subjects and patients with Ménière's disease or cerebellar dysfunction. Ishizaki H, et al. **Adv Otorhinolaryngol** 1988;41:166–72

Comparison of caloric and OKAN tests in patients with vestibular deficits. Jell RM, et al. **Adv Otorhinolaryngol** 1988;41:201–5

Development of righting reflexes, gross motor functions and balance in infants with labyrinth hypoactivity with or without mental retardation. Kaga K, et al. **Adv Otorhinolaryngol** 1988;41:152–61

Earth horizontal axis rotational responses in patients with unilateral peripheral vestibular deficits. Furman JM, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):551–5

Vestibulospinal findings in two syndromes with spontaneous vertigo attacks. Norré ME, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):191–5

Vestibular habituation training for positional vertigo in elderly patients. Norré ME, et al. **Arch Gerontol Geriatr** 1989 Mar;8(2):117–22

Vestibular testing in comatose patients. Buettner UW, et al. **Arch Neurol** 1989 May;46(5):561–3 (18 ref.)

Vestibular function of hearing–impaired children [letter] Costeff H, et al. **Dev Med Child Neurol** 1988 Aug; 30(4):552–3

Interaction of spatial perception, vestibular function, and exercise in young school age boys with learning disabilities. Byl NN, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):727–38

Effect of physical exercise prelabyrinthectomy on locomotor balance compensation in the squirrel monkey. Igarashi M, et al. **Percept Mot Skills** 1989 Apr;68(2):407–14

The cerebellar–vestibular basis of learning disabilities in children, adolescents and adults: hypothesis and study [published erratum appears in Percept Mot Skills 1989 Feb;68(1):preceding 3] Levinson HN. **Percept Mot Skills** 1988 Dec;67(3):983–1006

Abnormal optokinetic and perceptual span parameters in cerebellar–vestibular dysfunction and related anxiety disorders. Levinson HN. **Percept Mot Skills** 1989 Apr; 68(2):471–84

Motor proficiency associated with vestibular deficits in children with hearing impairments. Crowe TK, et al. **Phys Ther** 1988 Oct;68(10):1493–9

Abnormal postural control associated with peripheral vestibular disorders. Black FO, et al. **Prog Brain Res** 1988; 76:263–75

Dizziness. Hollander J. **Semin Neurol** 1987 Dec;7(4):317–35 (99 ref.)

[Rehabilitation of patients with vestibular disorders] Hamann KF. **HNO** 1988 Aug;36(8):305–7 (12 ref.) (Eng. Abstr.) **(Ger)**

[Vestibular functions in patients with idiopathic scoliosis] Fior R, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 19:19–24 (Eng. Abstr.) **(Ita)**

[Quantitative abnormalities in nystagmus induced by caloric stimulation in multiple sclerosis] Prosser S, et al. **Acta Otorhinolaryngol Ital** 1989 Jan–Feb;9(1):67–77 (Eng. Abstr.) **(Ita)**

[Visual–vestibulo–ocular interactions in patients with peripheral vestibular disorders] Kobayashi H. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jul;91(7):1012–22 (Eng. Abstr.) **(Jpn)**

[Evaluation of the vestibular system in patients with migraine] Split W, et al. **Neurol Neurochir Pol** 1988 Sep–Oct; 22(5):383–6 (Eng. Abstr.) **(Pol)**

[Directional preponderance in post–traumatic vestibular syndrome] Kaźmierczak H, et al. **Otolaryngol Pol** 1988; 42(4):246–52 (Eng. Abstr.) **(Pol)**

[Directional preponderance in Ménière's disease] Kaźmierczak H. **Otolaryngol Pol** 1988;42(1–2):80–5 (Eng. Abstr.) **(Pol)**

[Vestibular hyperactivity in patients with damaged cerebellar hemispheres] Nakiela J. **Wiad Lek** 1988 Oct 1;41(19):1293–6 (Eng. Abstr.) **(Pol)**

[Characteristics of the statokinetic function of the vestibular apparatus and of gastric motor activity in children with functional digestive disorders] Kliorin AI, et al. **Fiziol Cheloveka** 1988 Jan–Feb;14(1):20–5 **(Rus)**

[Space motion sickness] Gorgiladze GI, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):4–14 (82 ref.) (Eng. Abstr.) **(Rus)**

[Structural resistance of receptor organs of the vestibular apparatus to the factors of space flight] Lychakov DV. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):13–9 (40 ref.) (Eng. Abstr.) **(Rus)**

[Effect of adaptive biofeedback on the severity of vestibulo–autonomic symptoms of experimental motion sickness] Smirnov SA, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):35–9 (Eng. Abstr.) **(Rus)**

[Status of the microcirculatory bed of the bulbar conjunctiva in various forms of vestibular dysfunction] Aleksandrov IuG, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):11–5 (Eng. Abstr.) **(Rus)**

[Electronystagmography used in patients with chronic suppurative mesotympanitis] Dibirov DA, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):11–4 (Eng. Abstr.) **(Rus)**

[Equilibrium function in Menière's disease] Luchikhin LA. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):3–7 (Eng. Abstr.) **(Rus)**

[Evaluation of the Fitzgerald–Hallpike caloric test in patients with lesions of the cerebellar hemispheres] Nakelia E, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):49–50 (Eng. Abstr.) **(Rus)**

[Electronystagmographic characteristics of peripheral vestibular asymmetries in compensation development stage II] Skliut IA, et al. **Vestn Otorinolaringol** 1989 Mar–Apr; (2):6–9 (Eng. Abstr.) **(Rus)**

[Vestibulometry and its importance in elucidating the pathogenesis and prognosis of the course of nervous system diseases in children] Semenova KA, et al. **Zh Nevropatol Psikhiatr** 1988;88(8):32–7 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Correlation of high–resolution computed tomography and gross anatomic sections of the temporal bone: II. Vestibular apparatus. Archer CR, et al. **Am J Otol** 1988 Jul; 9(4):276–81

The vestibular aqueduct in clinical radiography. Wilbrand HF. **Scand Audiol Suppl** 1988;30:149–51

[Equality and symmetry in the use of vestibular orientation] Canal P, et al. **Orthod Fr** 1987;58 Pt 2:607–14 (Eng. Abstr.) **(Fre)**

SURGERY

Spontaneous perilymphatic fistula in children. Ruben RJ, et al. **Am J Otol** 1989 May;10(3):198–207

Why do vestibular destructive procedures sometimes fail? Monsell EM, et al. **Otolaryngol Head Neck Surg** 1988 Nov; 99(5):472–9

ULTRASTRUCTURE

Fine structure of the primary afferent vestibulocochlear terminals in the frog. Matesz C. **Acta Biol Hung** 1988; 39(2–3):267–77

Geometrical array of the vestibular sensory hair bundle. Bagger–Sjöbäck D, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec;106(5–6):393–403

Fine structure of guinea pig vestibular kinocilium. Kikuchi T, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug; 108(1–2):26–30

Vestibular hair cell pathology in the dancer mouse mutant. Wenngren BI, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):182–90

Orthogonal arrays of intramembrane particles in the supporting cells of the guinea–pig vestibular sensory epithelium. Saito K. **Am J Anat** 1988 Dec;183(4):338–43

Synthesis of glycocalyx and associated structures in vestibular sensory cells. Takumida M, et al.

ORL J Otorhinolaryngol Relat Spec 1989;51(2):116–23
Glycocalyx and ciliary interconnections of the vestibular end organs: an investigation by high-resolution scanning electron microscopy. Takumida M.
ORL J Otorhinolaryngol Relat Spec 1989;51(3):137–43
Correlation between auditory brainstem recordings and morphology as seen through the scanning electron microscope. Hultcrantz M. Scanning Microsc 1988 Sep; 2(3):1725–37
[Ultrastructural changes in the vestibular receptors of the labyrinth after exposure to acceleration] Anichin VF, et al. Vestn Otorinolaringol 1988 Sep–Oct;(5):38–42 (Eng. Abstr.) (Rus)

VESTIBULAR AQUEDUCT see under **VESTIBULAR APPARATUS**

VESTIBULAR FUNCTION TESTS

The reproducibility of caloric tests of vestibular function in young and old subjects. Davidson J, et al.
Acta Otolaryngol (Stockh) 1988 Sep–Oct;106(3–4):264–8
Evidence of direct thermal action upon the vestibular receptors in the caloric test. A re-interpretation of the data of Coats and Smith. Hood JD.
Acta Otolaryngol (Stockh) 1989 Mar–Apr;107(3–4):161–5
Some considerations on caloric test results. Bergenius J, et al. Acta Otolaryngol Suppl (Stockh) 1988;455:21–3
Rotatory test in otoneurology. Fluur E.
Acta Otolaryngol Suppl (Stockh) 1988;455:33–47
Audiovestibular tests in the diagnosis of cerebellopontine angle tumours. Harder H.
Acta Otolaryngol Suppl (Stockh) 1988;452:5–11
Broad-frequency rotatory testing. Hydén D, et al.
Acta Otolaryngol Suppl (Stockh) 1988;455:48–52
Clinical considerations concerning horizontal optokinetic nystagmus. Magnusson M, et al.
Acta Otolaryngol Suppl (Stockh) 1988;455:53–7
Value of vestibular function tests in the differential diagnosis of vertigo. Odkvist LM.
Acta Otolaryngol Suppl (Stockh) 1988;460:122–7 (25 ref.)
Differential diagnosis of vertigo—combined galvanic test and MRI. Sekitani T. Acta Otolaryngol Suppl (Stockh) 1988; 458:113–9
Influence of caloric and rotation testing upon blood pressure and pulse rate. Norré ME, et al.
Acta Otorhinolaryngol Belg 1988;42(4):571–9
Caloric testing of the vestibular function during orbital flight. Clarke AH, et al. Adv Otorhinolaryngol 1988;42:31–5
High frequency rotation test: clinical and research application. Dayal VS, et al. Adv Otorhinolaryngol 1988; 41:40–3
Diagnostic confirmation of lesions in cerebellar peduncles by combined use of optokinetic nystagmus and fixation-suppression of caloric nystagmus. Kato I, et al. Adv Otorhinolaryngol 1988;42:202–4
The influence of hyperventilation on caloric and optokinetic responses in normal and pathological subjects. Modugno GC, et al. Adv Otorhinolaryngol 1988;42:108–15
Long-term relief by caloric stimulation in the treatment of vertigo. Umeda Y, et al. Adv Otorhinolaryngol 1988; 42:284–6
Testing vestibular function: problems with the Southern California Postrotary Nystagmus Test. Cohen H.
Am J Occup Ther 1989 Jul;43(7):475–7
Vestibular and audiologic functions in gentamicin-treated Menière's disease. Möller C, et al. Am J Otol 1988 Sep; 9(5):383–91
Vestibular testing in comatose patients. Buettner UW, et al. Arch Neurol 1989 May;46(5):561–3 (18 ref.)
Caloric stimulation during short episodes of microgravity. Clarke AH, et al. Arch Otorhinolaryngol 1988;245(3):175–9
Clinical value of caloric tests. Norré ME.
Clin Otolaryngol 1988 Aug;13(4):247–9
The effects of caloric vestibular stimulation on the soleus alpha motoneurons reinvestigated in man. Rossi A, et al. Electromyogr Clin Neurophysiol 1988 Nov–Dec; 28(7–8):409–13
Vestibular hyperreactivity in patients with idiopathic spasmodic torticollis. Huygen PL, et al.
J Neurol Neurosurg Psychiatry 1989 Jun;52(6):782–5
Evaluation of the monothermal caloric test. Bhansali SA, et al. Laryngoscope 1989 May;99(5):500–4
Usher syndrome: an otoneurologic study. Möller CG, et al. Laryngoscope 1989 Jan;99(1):73–9
Modern vestibular function testing. Baloh RW, et al.
West J Med 1989 Jan;150(1):59–67 (67 ref.)
The place for vestibular function tests [editorial] Zee DS.
West J Med 1989 Jan;150(1):81–2
[Electronystagmography and vestibular diagnosis in daily practice] Minnigerode B. Dtsch Med Wochenschr 1988 Nov 11;113(45):1764–6 (Ger)
[Therapeutic success following endolymphatic sac surgery—postoperative course of vestibular compensation] Westhofen M, et al. HNO 1988 Aug;36(8):315–7 (Eng. Abstr.) (Ger)
[Unilateral vestibular failure. Causes, diagnosis, therapy] Schöder HJ. Z Arztl Fortbild (Jena) 1989;83(5):263–6 (Ger)
[Head-shaking nystagmus and caloric vestibular testing: clinical correlations] Fattori B, et al.
Acta Otorhinolaryngol Ital 1988 Jul–Aug;8(4):385–8 (Eng. Abstr.) (Ita)
[Quantitative abnormalities in nystagmus induced by caloric stimulation in multiple sclerosis] Prosser S, et al.
Acta Otorhinolaryngol Ital 1989 Jan–Feb;9(1):67–77 (Eng. Abstr.) (Ita)
[Vestibular decruitment in normal people] de la Puente Arjona L, et al. An Otorrinolaringol Ibero Am 1988; 15(6):607–14 (Eng. Abstr.) (Spa)

HISTORY

Military medicine and surgery: the ear and aviation. 1917 [classical article] Jones IH. Aviat Space Environ Med 1989 Apr;60(4):378–82

INSTRUMENTATION

Recording of electrical-evoked responses from a remote field in the vestibular part of the eighth nerve. A preliminary technical report. Latkowski B, et al. Audiology 1989; 28(2):111–6
[Pseudo-spontaneous nystagmus with Frenzel eyeglasses] Blessing R, et al. Laryngol Rhinol Otol (Stuttg) 1988 Sep; 67(9):453–6 (Eng. Abstr.) (Ger)
[Possibilities for quantifying vestibular vertigo] Hamann KF. Laryngol Rhinol Otol (Stuttg) 1988 Sep;67(9):457–9 (Eng. Abstr.) (Ger)
[Quantifying the stimulus parameters in the neck torsion test] Holtmann S, et al. Laryngol Rhinol Otol (Stuttg) 1988 Sep; 67(9):460–4 (Eng. Abstr.) (Ger)
[Intermodal vestibulo-optical transformation of sensory perception] Polyzoidis T, et al. Laryngorhinootologie 1989 Jun;68(6):347–8 (Eng. Abstr.) (Ger)
[An improved vestibulometric chair] Lygun AN, et al.
Voen Med Zh 1988 Jun;(6):62 (Rus)

METHODS

Electrovestibulogram: first results in the guinea pig. Charlet de Sauvage RC, et al. Acta Otolaryngol (Stockh) 1989 May–Jun;107(5–6):489–95
Two types of head-shaking tests in vestibular examination. Kamei T. Acta Otolaryngol Suppl (Stockh) 1988;458:108–12
Otoneurological diagnostics in posterior fossa lesions. Odkvist LM. Acta Otolaryngol Suppl (Stockh) 1988; 452:12–5 (19 ref.)
The use of vestibular tests for the selection of anti-vertigo drugs. Oosterveld WJ. Acta Otolaryngol Suppl (Stockh) 1988;460:94–8
The velocity step test. Its use in the evaluation of the effects of drugs in dizzy patients. Theunissen EJ, et al.
Acta Otolaryngol Suppl (Stockh) 1988;460:104–13
Clinical testing of the vestibular system. Selected papers of the Bárány Society Meeting. Bologna, June 1–4, 1987.
Adv Otorhinolaryngol 1988;42:1–312
Objective and quantitative vestibular spinal testing by means of computer-video-cranio-corpo-graphy. Claussen CF, et al. Adv Otorhinolaryngol 1988;42:43–9
Comparison of caloric and OKAN tests in patients with vestibular deficits. Jell RM, et al. Adv Otorhinolaryngol 1988;41:201–5
Test-retest reliability of the rotatory test in normal subjects. Jenkins HA, et al. Adv Otorhinolaryngol 1988;41:190–5
Vestibular autorotation testing of cisplatin chemotherapy patients. Kitsigianis GA, et al. Adv Otorhinolaryngol 1988; 42:250–3
A new visual suppression test using postrotatory nystagmus. Teramoto K, et al. Adv Otorhinolaryngol 1988;42:104–7
Modulation of microphonics: a new method to study the vestibular system. Wit HP, et al. Adv Otorhinolaryngol 1988;42:59–64
Alternate and simultaneous binaural bithermal testing: a comparison [letter] Brookler KH.
Ann Otol Rhinol Laryngol 1989 Sep;98(9):753–4
Optokinetic afternystagmus in humans: normal values of amplitude, time constant, and asymmetry. Tijssen MA, et al. Ann Otol Rhinol Laryngol 1989 Sep;98(9):741–6
Recording eye movements and vestibular tests utilizing EEG equipment. Toglia JU. Clin Electroencephalogr 1988 Oct; 19(4):225–30
Intentionally induced abnormalities in optokinetic pattern tests. Gyo K. Laryngoscope 1989 Mar;99(3):335–8
Dynamic posturography and caloric test results in patients with and without vertigo. Goebel JA, et al.
Otolaryngol Head Neck Surg 1989 Jun;100(6):553–8
[The status of galvanic assessment of equilibrium] Brackmann T, et al. HNO 1989 Apr;37(4):174–8 (Eng. Abstr.) (Ger)
[Position on the publication by W. Keck and J. Thoma: "The significance of the stimulating medium—water or air—in thermal vestibular evaluation"] Fiebach A.
Laryngol Rhinol Otol (Stuttg) 1988 Nov;67(11):607 (Ger)
[The significance of slow flows for the caloric excitability of the vestibular organs in weightlessness] Pau HW, et al. Laryngol Rhinol Otol (Stuttg) 1988 Dec;67(12):616–20 (Eng. Abstr.) (Ger)
[Flow kinetics of the endolymph in caloric stimulation] Pau HW, et al. Laryngorhinootologie 1989 Jun;68(6):342–6 (Eng. Abstr.) (Ger)
[Differential heat diffusion as a factor in the etiology of the caloric nystagmus phenomenon] Lothaller R.
Wien Klin Wochenschr 1989 May 26;101(11):395–7 (Eng. Abstr.) (Ger)
[Comparative studies of computerized trapezoid rotation test and sinusoidal harmonic acceleration test] Ichijo H.
Nippon Jibiinkoka Gakkai Kaiho 1988 Dec;91(12):2051–61 (Eng. Abstr.) (Jpn)

VESTIBULAR NERVE

Vestibular neuronitis in childhood. Shirabe S.
Acta Otolaryngol Suppl (Stockh) 1988;458:120–2
Vestibular neuronitis. An otoneurological evaluation. Silvoniemi P. Acta Otolaryngol Suppl (Stockh) 1988; 453:1–72 (134 ref.)
Vestibular neuritis—a horizontal semicircular canal paresis? Büchele W, et al. Adv Otorhinolaryngol 1988;42:157–61 (9 ref.)
Vascular loop as a cause of incapacitating dizziness. McCabe BF, et al. Am J Otol 1989 Mar;10(2):117–20
Encephalopathy and vestibulopathy following short-term hydrocarbon exposure. Hodgson MJ, et al.
J Occup Med 1989 Jan;31(1):51–4
Recurrent vestibulopathy: support for a viral etiology. Longridge NS. J Otolaryngol 1989 Apr;18(3):99–100
[Investigation of serum viral antibody titers in vestibular neuronitis] Hirata T, et al.
Nippon Jibiinkoka Gakkai Kaiho 1988 Jun;91(6):835–46 (Eng. Abstr.) (Jpn)
[A case of Cogan's syndrome with aseptic meningitis and hydrocephalus] Yoshioka T, et al. Rinsho Shinkeigaku 1988 Aug;28(8):878–82 (Eng. Abstr.) (Jpn)
[Syphilitic vestibulocochlear neuritis] Bętkowski A, et al. Wiad Lek 1988 Mar 15;41(6):397–400 (Eng. Abstr.) (Pol)
[Neuronitis vestibularis—analysis of clinical material, differential diagnosis] Filer A. God Vojnomed Akad 1987; 29:83–5 (Eng. Abstr.) (Scr)

ANATOMY & HISTOLOGY

Computer-generated three-dimensional reconstruction of the singular nerve. Ohmichi T, et al. J Otolaryngol 1988 Dec; 17(7):343–5

BLOOD SUPPLY

Air CT cisternography in the diagnosis of vascular loop causing vestibular nerve dysfunction. Esfahani F, et al. AJNR 1989 Sep–Oct;10(5):1045–9

DRUG EFFECTS

[Acoustic nerve and cerebellar damage in a child treated with streptomycin] Nakiela J. Wiad Lek 1988 Oct 15; 41(20):1393–5 (Eng. Abstr.) (Pol)

EMBRYOLOGY

Two distinct phases and mechanisms of axonal growth shown by primary vestibular fibres in the brain, demonstrated by parvalbumin immunohistochemistry. Morris RJ, et al. Neuroscience 1988 Nov;27(2):571–96
[Histogenetic study of the vestibular ganglion cells in the chick embryo—in relation to the vestibular sensory organs] Yamashita H, et al. Nippon Jibiinkoka Gakkai Kaiho 1988 Nov;91(11):1898–909 (Eng. Abstr.) (Jpn)

INJURIES

[Relationship between directions of cerebellar retractions and cochlear and vestibular nerve injuries] Sekiya T, et al.
No Shinkei Geka 1989 Jan;17(1):41–9 (Eng. Abstr.) (Jpn)

METABOLISM

Neurotransmitters in vestibular pathways. Raymond J, et al.
Prog Brain Res 1988;76:29–43 (106 ref.)

PATHOLOGY

Magnetic resonance imaging in the diagnosis of lesions of the central vestibular structures. Pirodda A, et al.
Adv Otorhinolaryngol 1988;41:216–23
The incidence of fibrosis in the vestibular ganglia in Menière's disease. Quijano ML, et al. Arch Otorhinolaryngol 1988; 245(3):133–5
Central vestibulocochlear pathology: role of MRI and CT. Mafee MF. Scand Audiol Suppl 1988;30:153–9

PHYSIOLOGY

Ultrastructural evidence of repair and neuronal survival after labyrinthectomy in the squirrel monkey. Fermin CD, et al. Acta Anat (Basel) 1989;135(1):62–70
Head rotation evoked EEG responses are governed by rate of angular acceleration change. Hansen HC, et al.
Adv Otorhinolaryngol 1988;41:210–5
Rotatory evoked potentials in normal and labyrinthectomized rabbits. Hofferberth B, et al. Adv Otorhinolaryngol 1988; 41:206–9
Recovery of resting activity in the ipsilateral vestibular nucleus following unilateral labyrinthectomy: noncommissural influences. Smith PF, et al.
Adv Otorhinolaryngol 1988;42:177–9
Inhibition of vestibulospinal reflexes during the episodes of postural atonia induced by unilateral lesion of the locus coeruleus in the decerebrate cat. D'Ascanio P, et al.
Arch Ital Biol 1989 Mar;127(2):81–97
The influence of middle ear pressure on the otolith system in cats. Naito Y, et al. Arch Otorhinolaryngol 1988;

245(5):321–4
Vestibular stimulation disrupts acquisition of place navigation in the Morris water tank task. Semenov LV, et al. **Behav Neural Biol** 1989 May;51(3):346–63
Mechanisms of recovery following unilateral labyrinthectomy: a review. Smith PF, et al. **Brain Res Brain Res Rev** 1989 Apr–Jun;14(2):155–80 (190 ref.)
The mechanism by which intracellular GABA increases Cl– outward permeability across Deiters' neurone plasma membranes. Rapallino MV, et al. **Int J Neurosci** 1989 Mar; 45(1–2):71–4
Anatomic and physiological correlates in bullfrog vestibular nerve. Honrubia V, et al. **J Neurophysiol** 1989 Apr; 61(4):688–701
Regeneration of the eighth cranial nerve. III. Central projections of the primary afferent fibers from individual vestibular receptors in the bullfrog. Newman A, et al. **Laryngoscope** 1989 Feb;99(2):162–73
Convergence and interaction of neck and macular vestibular inputs on locus coeruleus and subcoeruleus neurons. Manzoni D, et al. **Pflugers Arch** 1989 Apr;413(6):580–98

PHYSIOPATHOLOGY

Beat-to-beat variability of nystagmus. A clinical study. Pyykkö I, et al. **Adv Otorhinolaryngol** 1988;41:196–200
Vestibular hyperreactivity in patients with idiopathic spasmodic torticollis. Huygen PL, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):782–5
Familial vestibulocerebellar dysfunction: a new syndrome? Theunissen EJ, et al. **J Neurol Sci** 1989 Feb;89(2–3):149–55
[Changes in the sensitivity of the cornea in patients with intracerebral tumors. Studies of patients with meningioma of the cranial base and neurinoma of the trigeminal nerve and the vestibulocochlear nerve using the Draeger esthesiometer] Heller H, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):356–9 (Eng. Abstr.) (Ger)

SECRETION

Secretory function of the vestibular nerve calyx suggested by presence of vesicles, synapsin I, and synaptophysin. Scarfone E, et al. **J Neurosci** 1988 Dec;8(12):4640–5

SURGERY

Vestibular neurectomy. Palva T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:19–20
Neurophysiologic intraoperative monitoring: I. Auditory function. Kileny PR, et al. **Am J Otol** 1988 Dec;9 Suppl:17–24 (25 ref.)
Combined retrolab–retrosigmoid vestibular neurectomy. An evolution in approach. Silverstein H, et al. **Am J Otol** 1989 May;10(3):166–9
Retrolabyrinthine versus middle fossa vestibular neurectomy. Zini C, et al. **Am J Otol** 1988 Nov;9(6):448–50
Recurrent diplopia after vestibular nerve section. Whittaker CK. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):278–80
Persisting nystagmus following vestibular nerve section for Menière's disease. Shotton JC, et al. **J Laryngol Otol** 1989 Mar;103(3):263–8
Changes in the time constants of the vestibulo–ocular reflex and optokinetic afternystagmus following unilateral ablative vestibular surgery. Blakley BW, et al. **J Otolaryngol** 1989 Aug;18(5):210–7
Selective vestibular neurectomy through the posterior fossa in Ménière's disease. Dufour JJ, et al. **J Otolaryngol** 1988 Oct;17(6):311–4
Use of bacitracin for neurotologic surgery. Kartush JM, et al. **Laryngoscope** 1988 Oct;98(10):1050–4
Histopathologic consequences of surgical approaches to the singular nerve. Ohmichi T, et al. **Laryngoscope** 1989 Sep; 99(9):963–70
Long-term hearing results following middle fossa vestibular nerve section. Glasscock ME 3d, et al. **Otolaryngol Head Neck Surg** 1989 Jan;100(1):35–40
Long-term results of transmeatal cochleovestibular neurectomy: an analysis of 100 cases. Jones R, et al. **Otolaryngol Head Neck Surg** 1989 Jan;100(1):22–9
Abnormal oculovestibular response. Meyerhoff WL. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):24–7
Why do vestibular destructive procedures sometimes fail? Monsell EM, et al. **Otolaryngol Head Neck Surg** 1988 Nov; 99(5):472–9
[Surgical interventions for ameliorating of equilibrium disorders refractory to conservative therapy] Haid T. **HNO** 1988 Aug;36(8):308–14 (35 ref.) (Eng. Abstr.) (Ger)
[Surgical and physical therapy treatment of benign paroxysmal positional vertigo] Häusler R, et al. **Laryngorhinootologie** 1989 Jun;68(6):349–54 (Eng. Abstr.) (Ger)
[Meatotomy by the retrosigmoid approach to the cerebellopontile angle: an anatomo-surgical study] Magliulo G, et al. **Acta Otorhinolaryngol Ital** 1988 Sep–Oct; 8(5):525–32 (Eng. Abstr.) (Ita)

ULTRASTRUCTURE

Morphologic correlates of vestibular compensation in the cat. Gacek RR, et al. **Acta Otolaryngol Suppl (Stockh)** 1989; 462:1–16
Structural basis for three-dimensional coding in the vestibulospinal reflex. Morphology of single vestibulospinal axons in the cervical cord. Shinoda Y, et al. **Ann N Y Acad Sci** 1988;545:216–27 (28 ref.)
Ultrastructural study of calycine synaptic endings of colossal vestibular fibers in the cristae ampullares of the developing chick. Peusner KD, et al. **Int J Dev Neurosci** 1988; 6(3):267–83
Fine structure of synapses in the vestibular ganglion of the cat. Spassova I. **J Hirnforsch** 1988;29(4):385–91

VESTIBULAR NUCLEI

[Arslan and Belloni acute nucleoreticular vestibular syndrome. Interpretation of changes in neuromediators] **Sala T. Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):457–9 (15 ref.) (Eng. Abstr.) (Fre)

ANALYSIS

Serotonin-like immunoreactive fibers in the medial dorsal accessory group and the anterior fornical nucleus of the magnocellular neurosecretory system in the rat. Ju G, et al. **Neurosci Lett** 1988 Oct 31;93(1):19–22
Electrophysiological evidence for cholinoceptive neurons in the medial vestibular nucleus: studies on rat brain stem in vitro. Ujihara H, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):231–5

ANATOMY & HISTOLOGY

Topographic organization of the corticonuclear and corticovestibular projections from the pyramis and copula pyramidis in the albino rat. An autoradiographic orthograde tracing study. Umetani T, et al. **Brain Behav Evol** 1988;32(3):160–8
Projections of the temporo-parietal cortex on vestibular complex in the macaque monkey (Macaca fascicularis). Ventre J, et al. **Exp Brain Res** 1988;72(3):653–8
Axonal connections of a forebrain nucleus involved with vocal learning in zebra finches. Bottjer SW, et al. **J Comp Neurol** 1989 Jan 8;279(2):312–26
Central distribution of cervical primary afferents in the rat, with emphasis on proprioceptive projections to vestibular, perihypoglossal, and upper thoracic spinal nuclei. Neuhuber WL, et al. **J Comp Neurol** 1989 Feb 8; 280(2):231–53
Comparison of brain structure volumes in insectivora and primates. VIII. Vestibular complex. Baron G, et al. **J Hirnforsch** 1988;29(5):509–23
Ipsilateral and contralateral projections to the trochlear nucleus arise from different subdivisions in the vestibular nuclei. Coffey AR, et al. **Neurosci Lett** 1989 May 8; 99(3):274–80
Vestibular nuclei: afferent and efferent projections. Carpenter MB. **Prog Brain Res** 1988;76:5–15 (56 ref.)
[Anatomy of the nucleus magnocellularis in the basal forebrain of rodents and rabbits] Schober W, et al. **J Hirnforsch** 1988;29(4):443–59 (Eng. Abstr.) (Ger)
[Vestibulofugal projections to the lateral reticular nucleus of the cat medulla] Voitenko LP, et al. **Neirofiziologiia** 1989;21(2):147–52 (Eng. Abstr.) (Rus)

CYTOLOGY

HRP morphology of functionally identified vestibular type I neurons in the cat. Ohgaki T, et al. **Adv Otorhinolaryngol** 1988;41:14–9
Response characteristics of different size vestibulospinal neurons to roll tilt of the animal and neck rotation in decerebrate cats with the cerebellum intact. Pompeiano O, et al. **Adv Otorhinolaryngol** 1988;41:127–33
A quantitative study of the vestibular commissures in the gerbil. Newlands SD, et al. **Brain Res** 1989 May 15; 487(1):152–7
Corticonuclear and corticovestibular projections from the uvula in the albino rat: differential projections from sublobuli of the uvula. Tabuchi T, et al. **Brain Res** 1989 Jul 17;492(1–2):176–86
Morphology of physiologically identified second-order vestibular neurons in cat, with intracellularly injected HRP. Ohgaki T, et al. **J Comp Neurol** 1988 Oct 15;276(3):387–411
Differential mossy fiber projections to the dorsal and ventral uvula in the cat. Sato Y, et al. **J Comp Neurol** 1989 Jan 1;279(1):149–64
Vestibular projections to the spinal cord: the morphology of single vestibulospinal axons. Shinoda Y, et al. **Prog Brain Res** 1988;76:17–27 (43 ref.)
[Afferent connections of the lateral vestibular nucleus in the cat] Pogosian VI, et al. **Neirofiziologiia** 1988;20(4):494–503 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Improvement of vestibular plasticity in the guinea pig with a calcium entry blocker. Tolu E, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;460:72–9
The lateral vestibular nucleus is a site for the depressant action of benzodiazepines on the crossed extensor reflex. Kawasaki K, et al. **Brain Res** 1988 Oct 4;461(2):282–9
[Inhibition of the response of Deiters nucleus neurons to serotonin in the presence of antagonists] Licata F, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1121–8 (Eng. Abstr.) (Ita)

METABOLISM

Neurochemical changes in the cholinergic system of the rat lateral vestibular nucleus following hemilabyrinthectomy. Yamada C, et al. **Arch Otorhinolaryngol** 1988; 245(4):197–202
Bilateral changes in neocortical [3H]pirenzepine and [3H]oxotremorine-M binding following unilateral lesions of the rat nucleus basalis magnocellularis: an autoradiographic study. Atack JR, et al. **Brain Res** 1989 Apr 3;483(2):367–72
Local cerebral glucose utilization following unilateral and bilateral lesions of the nucleus basalis magnocellularis in the rat. Orzi F, et al. **Brain Res** 1988 Oct 11;462(1):99–103
Neurotransmitters in vestibular pathways. Raymond J, et al. **Prog Brain Res** 1988;76:29–43 (106 ref.)

PATHOLOGY

Magnetic resonance imaging in the diagnosis of lesions of the central vestibular structures. Pirodda A, et al. **Adv Otorhinolaryngol** 1988;41:216–23

PHYSIOLOGY

Secondary vestibular and neck position signals in the vestibular nuclei of alert rhesus monkeys performing active head movements. Khalsa SB, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct;106(3–4):269–75
Effect of blindfolding one eye on vestibular compensation in guinea pigs. Ishikawa K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:55–60
Head rotation evoked EEG responses are governed by rate of angular acceleration change. Hansen HC, et al. **Adv Otorhinolaryngol** 1988;41:210–5
Rotatory evoked potentials in normal and labyrinthectomized rabbits. Hofferberth B, et al. **Adv Otorhinolaryngol** 1988; 41:206–9
The role of NMDA and non-NMDA receptors in the central vestibular synaptic transmission. Knöpfel T, et al. **Adv Otorhinolaryngol** 1988;42:229–33
Recovery of resting activity in the ipsilateral vestibular nucleus following unilateral labyrinthectomy: noncommissural influences. Smith PF, et al. **Adv Otorhinolaryngol** 1988;42:177–9
Current concepts of the vestibular system reviewed: 1. The role of the vestibulospinal system in postural control. Keshner EA, et al. **Am J Occup Ther** 1989 May; 43(5):320–30 (80 ref.)
Responses of single neurons in the parietoinsular vestibular cortex of primates. Akbarian S, et al. **Ann N Y Acad Sci** 1988;545:187–202
Spatial transformation of horizontal linear acceleration by the cat vestibulospinal system. Schor RH. **Ann N Y Acad Sci** 1988;545:21–8 (19 ref.)
The accessory optic system. Analyzer of self-motion. Simpson JI, et al. **Ann N Y Acad Sci** 1988;545:170–9
Inhibition of vestibulospinal reflexes following cholinergic activation of the dorsal pontine reticular formation. D'Ascanio P, et al. **Arch Ital Biol** 1988 Oct;126(4):291–316
Head tilt produced by hemilabyrinthectomy does not depend on the direct vestibulospinal tracts. Fukushima K, et al. **Brain Behav Evol** 1988;32(3):181–6
Sensitivity of magnocellular oxytocin neurones to opioid antagonists in rats treated chronically with intracerebroventricular (i.c.v.) morphine. Leng G, et al. **Brain Res** 1989 Apr 10;484(1–2):290–6
Mechanisms of recovery following unilateral labyrinthectomy: a review. Smith PF, et al. **Brain Res Brain Res Rev** 1989 Apr–Jun;14(2):155–80 (190 ref.)
Vestibulospinal and reticulospinal interactions in the activation of back muscle EMG in the rat. Cottingham SL, et al. **Exp Brain Res** 1988;73(1):198–208
Fast head tilt has only a minor effect on quick compensatory reactions during the regulation of stance and gait. Dietz V, et al. **Exp Brain Res** 1988;73(3):470–6
Lesion-induced vestibular plasticity in the frog: are N-methyl-D-aspartate receptors involved? Knöpfel T, et al. **Exp Brain Res** 1988;72(1):129–34
Electrophysiological study of the tangential vestibular nucleus of the chick embryo "in vitro". Peusner KD, et al. **Exp Brain Res** 1989;74(1):80–8
Properties and localization of the anterior semicircular canal-activated vestibulocollic neurons in the cat. Uchino Y, et al. **Exp Brain Res** 1988;71(2):345–52
GABA A receptors on the cytoplasmic side of the Deiters' neurone plasma membrane: mechanism and functional implications. Rapallino MV, et al. **Int J Neurosci** 1988 Nov; 43(1–2):69–73
Response of vestibular neurons to head rotations in vertical planes. I. Response to vestibular stimulation. Kasper J, et al. **J Neurophysiol** 1988 Nov;60(5):1753–64
Response of vestibular neurons to head rotations in vertical planes. II. Response to neck stimulation and vestibular-neck interaction. Kasper J, et al. **J Neurophysiol** 1988 Nov;60(5):1765–78
Evidence for glycine as an inhibitory neurotransmitter of vestibular, reticular, and prepositus hypoglossi neurons that project to the cat abducens nucleus. Spencer RF, et al. **J Neurosci** 1989 Aug;9(8):2718–36
Pulsed linear acceleration as a vestibular stimulus in electrophysiological investigations. Jones TA, et al. **J Neurosci Methods** 1989 Mar;27(2):115–20

Effects of afloqualone on vestibular nystagmus and the lateral vestibular nucleus. Kudo Y, et al. **Jpn J Pharmacol** 1989 Aug;50(4):515–9
The firing properties of second-order vestibular neurons in correlation with the far-field recorded vestibular-evoked response. Elidan J, et al. **Laryngoscope** 1989 Jan;99(1):92–9
Vestibular nucleus inputs to paramedian reticulospinal neurons in the cat. Elisevich K, et al. **Neurosci Lett** 1988 Aug 15;91(1):1–6
The contribution of vestibular input to the stabilization of human posture: a new experimental approach. Horstmann GA, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):179–84
Modulation of hypothalamic cholecystokinin receptor density with changes in magnocellular activity: a quantitative autoradiographic study. Day NC, et al. **Neuroscience** 1989;29(2):371–83
Abnormal optokinetic and perceptual span parameters in cerebellar–vestibular dysfunction and learning disabilities or dyslexia [published erratum appears in Percept Mot Skills 1989 Feb;68(1):2] Levinson HN. **Percept Mot Skills** 1989 Feb;68(1):35–54
Electrophysiological properties of the isolated vestibulocerebellar complex of the frog in vitro. Strauss P. **Physiol Bohemoslov** 1988;37(5):407–16
Vestibulospinal control of posture and locomotion. **Prog Brain Res** 1988;76:1–442
The role of gaze in compensation of vestibular disfunction: the gaze substitution hypothesis. Berthoz A. **Prog Brain Res** 1988;76:411–20 (54 ref.)
Unit responses to bidirectional off-vertical axes rotations in central vestibular and cerebellar fastigial nuclei. Chan YS, et al. **Prog Brain Res** 1988;76:67–75
Postural compensation in the guinea pig following unilateral labyrinthectomy. Curthoys IS, et al. **Prog Brain Res** 1988; 76:375–84 (31 ref.)
Noradrenergic and cholinergic mechanisms responsible for the gain regulation of vestibulospinal reflexes. D'Ascanio P, et al. **Prog Brain Res** 1988;76:361–74 (98 ref.)
Immediate saccadic substitution for deficits in dynamic vestibular reflexes of frogs with selective peripheral lesions. Dieringer N. **Prog Brain Res** 1988;76:403–9 (22 ref.)
Synaptic mechanisms of interaction of lateral vestibulospinal neurons with some brainstem structures. Fanardjian VV, et al. **Prog Brain Res** 1988;76:45–60 (94 ref.)
Integration of vestibular and neck afferent signals in the central cervical nucleus. Hongo T, et al. **Prog Brain Res** 1988;76:155–62 (35 ref.)
Physical exercise and balance compensation after total ablation of vestibular organs. Igarashi M, et al. **Prog Brain Res** 1988;76:395–401
Effects of melanocortins on vestibular compensation. Lüneburg U, et al. **Prog Brain Res** 1988;76:421–9
Mechanisms of vestibular compensation in the unilateral labyrinthectomized cat. Maeda M. **Prog Brain Res** 1988; 76:385–94
Convergence of macular vestibular and neck inputs on vestibulospinal and reticulospinal neurons projecting to the lumbosacral cord. Manzoni D. **Prog Brain Res** 1988; 76:145–54 (42 ref.)
The behaviour of lateral vestibular neurons during walk, trot and gallop in acute precollicular decerebrate cats. Mori S, et al. **Prog Brain Res** 1988;76:211–20 (38 ref.)
Tensorial aspects of the multidimensional massively parallel sensorimotor function of neuronal networks. Pellionisz A. **Prog Brain Res** 1988;76:341–54 (85 ref.)
The role of Renshaw cells in the dynamic control of posture during vestibulospinal reflexes. Pompeiano O. **Prog Brain Res** 1988;76:83–95 (65 ref.)
Temporal transformation of signals from the otolith organs by the central nervous system of the cat. Schor RH. **Prog Brain Res** 1988;76:77–81 (13 ref.)
Convergence of neck and vestibular signals on spinal interneurons. Wilson VJ. **Prog Brain Res** 1988;76:137–43 (39 ref.)
Synergistic interactions and functional working range of the visual and vestibular systems in postural control: neuronal correlates. Xerri C, et al. **Prog Brain Res** 1988;76:193–203 (51 ref.)
Primary afferent excitatory transmission recorded intracellularly in vitro from rat medial vestibular neurons. Lewis MR, et al. **Synapse** 1989;3(2):149–53
[Visuo-vestibular cooperation in postural control: information complementarity and sensory substitution] Xerri C. **Agressologie** 1988 Oct;29(9):627–9 (27 ref.) (Eng. Abstr.) **(Fre)**
[Cervical afferent fibers and their relation to the regulation of equilibrium] Holtmann S, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):72–7 (74 ref.) (Eng. Abstr.) **(Ger)**
[Differences in neuron responsiveness to serotonin between the dorsal and ventral zones of the Deiters nucleus] Licata F, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1135–42 (Eng. Abstr.) **(Ita)**
[Extracellular field potentials in the four vestibular subnuclei evoked by stimulation of the ampullary nerve of the posterior semicircular canal in cats] Nakashima H. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug;91(8):1285–93 (Eng. Abstr.) **(Jpn)**
[Activity of premotor vestibular neurons in the alert cat] Escudero M, et al. **Rev Esp Fisiol** 1989 Jun;45(2):171–8 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

A cerebellar–vestibular explanation for fears/phobias: hypothesis and study. Levinson HN. **Percept Mot Skills** 1989 Feb;68(1):67–84
The cerebellar–vestibular predisposition to anxiety disorders. Levinson HN. **Percept Mot Skills** 1989 Feb;68(1):323–38

ULTRASTRUCTURE

Morphologic correlates of vestibular compensation in the cat. Gacek RR, et al. **Acta Otolaryngol Suppl (Stockh)** 1989; 462:1–16
Synaptic endfeet in the 'acoustic nerve nucleus' of the rat. An electron microscopic study. Alvarez-Bolado G, et al. **J Anat** 1988 Aug;159:19–28

VESTIBULO-OCULAR REFLEX see REFLEX, VESTIBULO-OCULAR

VESTIBULOPLASTY

An alternative method of fixation of alveolar ridge mucosa during the vestibuloplasty procedure. Grgurević J, et al. **Br J Oral Maxillofac Surg** 1988 Oct;26(5):370–4
Metric results of vestibuloplasty in unilateral cleft patients. Quarta M, et al. **J Craniomaxillofac Surg** 1989 May; 17(4):175–8

METHODS

Two-stage combined vestibuloplasty and partial mandibular ridge augmentation with hydroxyapatite. Brook IM, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):331–5

VETERANS

Trends in mortality from chronic obstructive pulmonary disease among U.S. veterans: 1954 to 1979. Rogot E, et al. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S69–75
The fate of World War II veterans with posttraumatic seizures. Walker AE, et al. **Arch Neurol** 1989 Jan;46(1):23–6
Leukaemia and smoking habits among United States veterans. Kinlen LJ, et al. **BMJ** 1988 Sep 10;297(6649):657–9
Cancer risk in male veterans utilizing the Veterans Administration medical system. Harris RE, et al. **Cancer** 1989 Sep 1;64(5):1160–8
Determining zygosity in the Vietnam Era Twin Registry: an approach using questionnaires. Eisen S, et al. **Clin Genet** 1989 Jun;35(6):423–32
Risk factors for mortality in Australian Vietnam-era national servicemen: a case-control study. O'Toole BI, et al. **Community Health Stud** 1988;12(4):408–17
New light on the health of Vietnam veterans [editorial] Gochfeld M. **Environ Res** 1988 Dec;47(2):109–11
Post-traumatic stress disorder among American Legionnaires in relation to combat experience in Vietnam: associated and contributing factors. Snow BR, et al. **Environ Res** 1988 Dec;47(2):175–92
Utilization, attitudes, and experiences of Vietnam Era veterans with Veterans Administration health facilities: the American Legion experience. Stellman JM, et al. **Environ Res** 1988 Dec;47(2):193–209
Social and behavioral consequences of the Vietnam experience among American Legionnaires. Stellman JM, et al. **Environ Res** 1988 Dec;47(2):129–49
Combat and herbicide exposures in Vietnam among a sample of American Legionnaires. Stellman SD, et al. **Environ Res** 1988 Dec;47(2):112–28
Health and reproductive outcomes among American Legionnaires in relation to combat and herbicide exposure in Vietnam. Stellman SD, et al. **Environ Res** 1988 Dec; 47(2):150–74
Hyperglycemia as a predictor for mortality in veterans with pneumonia. Kinzel T, et al. **Exp Aging Res** 1988 Summer–Autumn;14(2–3):99–102 (20 ref.)
Community-based mental health program. Outreach and rehabilitation center for homeless veterans. Kerson TS. **Health Soc Work** 1989 May;14(2):140–1
A community of buddies: support groups for veterans forced into early retirement. Sweet M, et al. **Hosp Community Psychiatry** 1989 Feb;40(2):172–6
Reproductive behaviour and consistent patterns of abnormality in offspring of Vietnam veterans. Field B, et al. **J Med Genet** 1988 Dec;25(12):819–26
Vets disabled by alcoholism not entitled to time extension for educational benefits [editorial] **J Miss State Med Assoc** 1988 Sep;29(9):273
Bacteremia in adult men. Flournoy DJ, et al. **J Natl Med Assoc** 1987 Aug;79(8):816–24
Paternal military service in Vietnam and risk of spontaneous abortion. Aschengrau A, et al. **J Occup Med** 1989 Jul; 31(7):618–23
Causes of tooth loss in a veteran population. Niessen LC, et al. **J Public Health Dent** 1989 Winter;49(1):19–23
Estimates of the half-life of 2,3,7,8-tetrachlorodibenzo-p-dioxin in Vietnam Veterans of Operation Ranch Hand. Pirkle JL, et al. **J Toxicol Environ Health** 1989;27(2):165–71
Dioxin levels in Vietnam veterans [letter] Rippee B. **JAMA** 1989 Apr 21;261(15):2201
The health of Australian veterans. Adena MA. **Med J Aust** 1989 Apr 3;150(7):356–7
Postwar mortality among Australian World War II prisoners of the Japanese [see comments] Dent OF, et al. **Med J Aust** 1989 Apr 3;150(7):378–82. **Comment in:** Med J Aust 1989 Jul 17;151(2):113–4
Dioxin and health. Agent Orange study blasted [news] McGourty C. **Nature** 1989 Jul 20;340(6230):179
Effects of unilateral brain damage on contralateral and ipsilateral upper extremity function in hemiplegia. Smutok MA, et al. **Phys Ther** 1989 Mar;69(3):195–203
Delivering health care to the elderly. The development and validation testing of a typology of problems. White DL, et al. **Res Aging** 1986 Sep;8(3):441–54
Agent Orange studies [letter] **Science** 1989 Sep 8; 245(4922):1031
Agent Orange: Congress impatient for answers [news] Barinaga M. **Science** 1989 Jul 21;245(4915):249–50
Posttraumatic epilepsy in World War II veterans. Walker AE. **Surg Neurol** 1989 Sep;32(3):235–6
[Rehabilitation of World War II invalids with chronic gunshot osteomyelitis in the Poltava region] Mazurik MF, et al. **Klin Khir** 1989;(1):44–6 **(Rus)**

PSYCHOLOGY

Prevalence of posttraumatic stress disorder in wounded Vietnam veterans. Pitman RK, et al. **Am J Psychiatry** 1989 May;146(5):667–9
Alcohol consumption and problem drinking in white male veterans and nonveterans. Richards MS, et al. **Am J Public Health** 1989 Aug;79(8):1011–5
Combat level and social support in the development of posttraumatic stress disorder in Vietnam veterans. Barrett TW, et al. **Behav Modif** 1988 Jan;12(1):100–15
A naturalistic analytic study of veterans using naltrexone in Puerto Rico. Santos EF. **Bol Asoc Med P R** 1989 Apr; 81(4):134–6
Familial psychiatric illness in chronic posttraumatic stress disorder. Davidson J, et al. **Compr Psychiatry** 1989 Jul–Aug;30(4):339–45
Substance abuse among Vietnam veterans: a view from the CAP control perspective. McCormack NA. **Int J Addict** 1988;23(12):1311–6 (13 ref.)
The unconscious history of Vietnam in the group: an innovative multiphasic model for working through authority transferences in guilt-driven veterans. Parson ER. **Int J Group Psychother** 1988 Jul;38(3):275–301
Treatment outcomes of Vietnam veterans with PTSD and the consistency of the MCMI. Hyer L, et al. **J Clin Psychol** 1989 Jul;45(4):547–52
MMPI F–K index among hospitalized Vietnam veterans. Hyer L, et al. **J Clin Psychol** 1989 Mar;45(2):250–4
Psychometric detection of fabricated symptoms of combat-related post-traumatic stress disorder: a systematic replication. McCaffrey RJ, et al. **J Clin Psychol** 1989 Jan; 45(1):76–9
PTSD 40 years later: incidence and person-situation correlates in former POWs. Zeiss RA, et al. **J Clin Psychol** 1989 Jan;45(1):80–7
Childhood stress disorder behaviors in veterans who do and do not develop posttraumatic stress disorder. Watson CG, et al. **J Nerv Ment Dis** 1989 Feb;177(2):92–5
Combat experience and emotional health: impairment and resilience in later life. Elder GH Jr, et al. **J Pers** 1989 Jun; 57(2):311–41
Vietnam veterans: overreporting versus acceptable reporting of symptoms. Hyer L, et al. **J Pers Assess** 1988 Fall; 52(3):475–86
Efficacy of a suicide detection scale in determining lethality of ideation among hospitalized veterans: a case study. Eisenberg MG, et al. **Milit Med** 1989 May;154(5):246–9
A survey of the effect of the Vietnam Memorial dedication on psychiatric symptoms in Vietnam veterans. Parsons JP, et al. **Milit Med** 1988 Nov;153(11):578–82
The aging war veteran and alcohol abuse: an emerging relationship? Pareitte HP Jr, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):985–6
A chronic psychotic: a longitudinal perspective. Gracia RI, et al. **Psychiatry** 1989 Feb;52(1):26–40
Commentary on Gracia et al.: diagnostic entity or dynamic processes? Strauss JS. **Psychiatry** 1989 Feb;52(1):41–4
Concurrent validation of the Million Clinical Multiaxial Inventory among Vietnam veterans with posttraumatic stress disorder. Hyer L, et al. **Psychol Rep** 1988 Aug; 63(1):271–8
Interest patterns among Vietnam-era veterans. O'Leary WC, et al. **Psychol Rep** 1988 Aug;63(1):79–85
The association of peripheral arterial disease with hostility in a young, healthy veteran population. Joesoef MR, et al. **Psychosom Med** 1989 May–Jun;51(3):285–9
Rx: art. Horgan J. **Sci Am** 1988 Jun;258(6):38
Treatment of drug abuse in veterans [letter] De Ford HA. **Tex Med** 1989 May;85(5):9–10

STATISTICS & NUMERICAL DATA

Trends in mortality from coronary heart disease and stroke among U.S. veterans; 1954–1979. Rogot E, et al. **J Clin Epidemiol** 1989;42(3):245–56

VETERANS ADMINISTRATION (U.S.) see UNITED STATES VETERANS ADMINISTRATION

VETERANS DISABILITY CLAIMS

see related
DISABILITY EVALUATION

The logic of a controversy: the case of Agent Orange in Australia. Hall W. Soc Sci Med 1989;29(4):537–44

LEGISLATION & JURISPRUDENCE

Dioxin and health. Agent Orange study blasted [news] McGourty C. Nature 1989 Jul 20;340(6230):179

VETERANS HOSPITALS see HOSPITALS, VETERANS

VETERINARY MEDICINE

see related
ANIMAL DISEASES

Back to the future: the animal health monitoring system—a political necessity being addressed in the United States. Glosser JW. Acta Vet Scand Suppl 1988;84:42–8

Veterinary clinical research: a survey of epidemiologic study designs and clinical issues appearing in a practice journal. Smith RD. Acta Vet Scand Suppl 1988;84:504–6

Prevalence of hazardous exposures in veterinary practice. Wiggins P, et al. Am J Ind Med 1989;16(1):55–66

Evaluation of radiation safety in 29 central Ohio veterinary practices. Moritz SA, et al. Am J Public Health 1989 Jul; 79(7):895–6

Code of practice for the use of schedule 4 substances in the pig industry [news] Aust Vet J 1989 Jun;66(6):suppl 177–9

Responsible drug use [news] Barton MB, et al. Aust Vet J 1989 Jan;66(1):suppl 1–2

Veterinary pharmaceutics in Australia. Chapman C. Br Vet J 1989 Mar–Apr;145(2):97–8

Immunology and veterinary science. Mackay CR, et al. Br Vet J 1989 Mar–Apr;145(2):185–90 (21 ref.)

More on living within the practice income [letter] J Am Vet Med Assoc 1989 Jan 1;194(1):6–7

Preview of AVMA-funded drug residue study [news] J Am Vet Med Assoc 1989 May 15;194(10):1392, 1396

Federal service: one of the best-kept secrets around. Ahl AS. J Am Vet Med Assoc 1988 Dec 15;193(12):1486–7

Clients beliefs vs veterinary attitudes. Antelyes J. J Am Vet Med Assoc 1989 Mar 15;194(6):760–2

Narcissistic clients. Antelyes J. J Am Vet Med Assoc 1989 Apr 15;194(8):1032–4

Coping with stress. Antelyes J. J Am Vet Med Assoc 1988 Nov 15;193(10):1222–3

The previous veterinarian. Antelyes J. J Am Vet Med Assoc 1989 Jul 15;195(2):194–5

Emotion: the inescapable element in practice. Antelyes J. J Am Vet Med Assoc 1989 Aug 15;195(4):453–5

Credibility factor in practice. Antelyes J. J Am Vet Med Assoc 1988 Sep 15;193(6):655–7

Caught in the no-man's-land between animal protection and animal exploitation. Antelyes J. J Am Vet Med Assoc 1988 Aug 15;193(4):418–20

Talking to clients. Antelyes J. J Am Vet Med Assoc 1988 Dec 15;193(12):1502–4

Listening: heart and soul of doctor/client relationships. Antelyes J. J Am Vet Med Assoc 1989 Jan 15;194(2):205–7

Convenience euthanasia revisited. Antelyes J. J Am Vet Med Assoc 1988 Oct 15;193(8):906–8

A coming unity crisis in veterinary medicine? Antelyes J. J Am Vet Med Assoc 1989 Jun 15;194(12):1712–3

A critical analysis of swine medicine in American veterinary schools. Backstrom L. J Am Vet Med Assoc 1989 Feb 15; 194(4):502–7

Factors influencing the evolution of theriogenology. Bartlett DE. J Am Vet Med Assoc 1989 Jul 1;195(1):51–5

Call for action on violation of practice acts [letter] Beard GB. J Am Vet Med Assoc 1988 Nov 1;193(9):1017–8

Are veterinarians health professionals? [news] Brody M. J Am Vet Med Assoc 1989 Feb 15;194(4):460, 464

Medical waste: confusion reigns [news] Brody MD. J Am Vet Med Assoc 1989 Mar 15;194(6):754–5

AVMA guide for veterinary medical waste management. Brody MD. J Am Vet Med Assoc 1989 Aug 15; 195(4):440–52

Videotaping as a potential safeguard against veterinary malpractice lawsuits. Buckley WR. J Am Vet Med Assoc 1989 Mar 1;194(5):652–3

To be or not to be an extremist [letter] Buyukmihci NC. J Am Vet Med Assoc 1989 Jul 1;195(1):15–6

More on right to life [letter] Craige JE. J Am Vet Med Assoc 1989 Sep 1;195(5):561–2

Good records help in the defense of malpractice suits. DiFrancesca E. J Am Vet Med Assoc 1988 Oct 1; 193(7):806–7

Types of professional liability insurance. DiFrancesca E. J Am Vet Med Assoc 1988 Dec 1;193(11):1391

The Pew report—required reading [editorial] Fink RB. J Am Vet Med Assoc 1989 Apr 1;194(7):864

How do employees feel about working in a veterinary practice? [news] Gavzer K. J Am Vet Med Assoc 1989 Jul 15;195(2):182–3

Reinventing the regulatory wheel [news] Gloyd JS. J Am Vet Med Assoc 1989 Jul 1;195(1):30–1

Etymologic considerations [letter] Haas KB. J Am Vet Med Assoc 1989 Aug 15;195(4):423

Cat cases. Hannah HW. J Am Vet Med Assoc 1989 May 1;194(9):1182–3

Veterinary medical associations, state government, and the courts. Hannah HW. J Am Vet Med Assoc 1989 Aug 1; 195(3):322–3

Legal status of veterinary dentistry. Hannah HW. J Am Vet Med Assoc 1988 Aug 1;193(3):310–1

Specialty practice—some legal considerations. Hannah HW. J Am Vet Med Assoc 1989 Feb 1;194(3):354–5

Corporate practice of veterinary medicine. Hannah HW. J Am Vet Med Assoc 1989 Mar 1;194(5):650–1

Veterinarians and the joint venture. Hannah HW. J Am Vet Med Assoc 1988 Oct 1;193(7):802–3

Veterinarians and state reciprocity requirements. Hannah HW. J Am Vet Med Assoc 1989 Jan 1;194(1):50–1

Malpractice suits and malicious prosecution—veterinarian countersuits. Hannah HW. J Am Vet Med Assoc 1988 Dec 1;193(11):1392–3

Biotechnology and the veterinarian—some legal considerations. Hannah HW. J Am Vet Med Assoc 1989 Apr 1;194(7):890–1

Dissolution of a veterinarian's marriage. Hannah HW. J Am Vet Med Assoc 1989 Jul 1;195(1):46–7

Reducing the risk of malpractice. Hannah HW. J Am Vet Med Assoc 1986 Nov 1;189(9):986

The veterinarian as a friend of the court—amicus curiae. Hannah HW. J Am Vet Med Assoc 1989 Jun 1; 194(11):1560–1

Suppliers of food animal health products are changing. Herrick JB. J Am Vet Med Assoc 1989 Aug 15;195(4):438–9

Why do we become veterinarians? Keefer WO. J Am Vet Med Assoc 1989 Aug 1;195(3):318–21

The etymology of veterinarian [news] Lawrence EA. J Am Vet Med Assoc 1989 Mar 15;194(6):751, 753

Cryptosporidiosis in veterinary students. Levine JF, et al. J Am Vet Med Assoc 1988 Dec 1;193(11):1413–4

Coping with a buildup of waste anesthetic gases [letter] Manning NF. J Am Vet Med Assoc 1989 Aug 1;195(3):288

Zoologic medicine, comparative medicine, and veterinary medical education. Martin HD. J Am Vet Med Assoc 1989 Jul 15;195(2):196–7

What is good communication? [letter] Palmquist RE. J Am Vet Med Assoc 1988 Sep 1;193(5):524

Peace Corps offers Third World experience [news] Pedersen V, et al. J Am Vet Med Assoc 1989 Jul 1;195(1):26–9

Admissibility of computerized medical records as evidence in a court of law. Philbrick MF, et al. J Am Vet Med Assoc 1988 Dec 1;193(11):1386–90

Overview of the Pew report [news] Pritchard W. J Am Vet Med Assoc 1989 Apr 1;194(7):865–7, 870

Animal welfare advocate speaks out [letter] Remetta J. J Am Vet Med Assoc 1989 Jun 1;194(11):1522

Additions to commentary on serologic testing [letter] Riemann HP. J Am Vet Med Assoc 1989 Sep 1;195(5):562

Pronunciation of "veterinarian" [letter] Smyth WG. J Am Vet Med Assoc 1989 Jul 1;195(1):14

Comments on "Reflections" article [letter] Sussman O. J Am Vet Med Assoc 1989 Jan 15;194(2):165

Skillful writing: a tool for today's veterinarian. Tacker MM. J Am Vet Med Assoc 1989 Feb 15;194(4):510–1

AVMA guidelines for dealing with AIDS-infected persons in the veterinary workplace. Tennyson AV. J Am Vet Med Assoc 1989 Jul 15;195(2):190–3

Horse owners and their use of veterinary services. Troutman CM. J Am Vet Med Assoc 1988 Dec 1;193(11):1362–3

Farmers in distress: how veterinarians can help out. Williams RT. J Am Vet Med Assoc 1988 Nov 1;193(9):1062–5

The ethics of veterinary biophotography. Shaffer CA. J Biol Photogr 1989 Apr;57(2):31–3

Photographing animals. An annotated bibliography. Stambaugh D. J Biol Photogr 1989 Apr;57(2):51–2

Silver Medal of the South African Veterinary Association posthumously awarded to the late John Murray (Ian) Hofmeyr. J S Afr Vet Assoc 1987 Dec;58(4):240–1

Winner of the Boswell award for 1987. Dr. C. M. Veary. J S Afr Vet Assoc 1987 Dec;58(4):237

Clinical award of the South African Veterinary Association for 1987. Dr. O. M. Briggs. J S Afr Vet Assoc 1987 Dec; 58(4):238

New association for veterinary diagnostic laboratories called the Veterinary Laboratory Association (VLA) [letter] Mack DJ. J Vet Intern Med 1989 Jul–Sep;3(3):190

Clinical transplantation in veterinary medicine [editorial] Schall WD, et al. J Vet Intern Med 1987 Apr–Jun;1(2):95–6

Opening of the Comparative Cancer Center (CCC) [letter] Theilen GH. J Vet Intern Med 1989 Jul–Sep;3(3):190

Periodicals in veterinary pharmacology and therapeutics [letter] Gibb M. J Vet Pharmacol Ther 1988 Jun;11(2):227–9

Listeria in food: a veterinary perspective [letter] Low JC, et al. Lancet 1989 Feb 11;1(8633):322

Ecosystem health. IV. The National Animal Poison Information Network database as a tool for ecological risk assessment. Beasley VR, et al. Regul Toxicol Pharmacol 1989 Aug;10(1):63–73

Client services for geriatric pets. Hancock G, et al. Vet Clin North Am [Small Anim Pract] 1989 Jan; 19(1):187–96 (11 ref.)

A geriatric program in practice. Johnson GH, et al. Vet Clin North Am [Small Anim Pract] 1989 Jan; 19(1):155–64

Therapeutic drug monitoring in veterinary medicine. Neff-Davis CA. Vet Clin North Am [Small Anim Pract] 1988 Nov;18(6):1287–307

Homoeopathy [letter] Vet Rec 1989 Apr 1;124(13):355

Food hygiene in the 1990s [letter] Vet Rec 1989 Apr 22; 124(16):439–40

For whom the bell tolls [letter] Vet Rec 1988 Oct 15; 123(16):427–8

For whom the bell tolls [letter] Vet Rec 1988 Aug 27; 123(9):234–5

Veterinary remuneration [letter] Vet Rec 1989 Mar 18; 124(11):284

Veterinary remuneration [letter] Vet Rec 1989 Mar 4; 124(9):226–7

Veterinarians and animal medicines. Vet Rec 1988 Oct 29; 123(18):453

Solovets and multivets. Vet Rec 1988 Dec 10;123(24):609–10

Homoeopathy [letter] Vet Rec 1989 Apr 22;124(16):440

AVS debates Riley. Vet Rec 1989 Feb 11;124(6):129

Southwood calls for monitoring of BSE risk in veterinarians [news] Vet Rec 1989 Mar 4;124(9):207–10

Exotic and wild animal society [letter] Barrett DC, et al. Vet Rec 1989 Jan 14;124(2):47

Ophthalmology society invites members [letter] Bedford PG. Vet Rec 1988 Oct 8;123(15):404

The place of molecular biology in veterinary research and teaching. Biggs PM. Vet Rec 1988 Aug 13;123(7):176–9

Wooldridge memorial lecture. The welfare of animals: a shared responsibility. Birbeck AL. Vet Rec 1988 Oct 22; 123(17):433–6

MoD grant to Bristol veterinary school [letter] Blaxter A, et al. Vet Rec 1989 Jan 7;124(1):22

Interview technique. Bower J. Vet Rec 1989 Jul 8;125(2):45–6

Provision of referral services [letter] Chivers AW, et al. Vet Rec 1989 Feb 25;124(8):204

Salmonella infection in a vet [letter] Collyer JH. Vet Rec 1988 Oct 29;123(18):476

Veterinary surgeons and leeches [letter] Cooper JE. Vet Rec 1989 Jul 29;125(5):117

The veterinary surgeon as a law enforcement officer. Davies EB. Vet Rec 1989 Jan 28;124(4):101–2

Veterinarians and animal medicines [letter] Dawson RR. Vet Rec 1988 Nov 12;123(20):528

How gullible are the media? Dineen B. Vet Rec 1989 Jun 3;124(22):579

Solovets [letter] Douch J. Vet Rec 1989 May 20;124(20):547

Killing with kindness. Edney AT. Vet Rec 1989 Apr 1; 124(13):320–2

Veterinary opinion [letter] Ellis RN. Vet Rec 1989 Mar 25; 124(12):312

Veterinarians and seals [letter] Farrell T. Vet Rec 1988 Sep 10;123(11):304

Geographical titles [letter] Frackowiak AM. Vet Rec 1989 Jul 29;125(5):118

A new insurance form [letter] Gerring EL, et al. Vet Rec 1989 Jan 21;124(3):71

Veterinary role in public health [letter] Gracey JF. Vet Rec 1989 Mar 11;124(10):257

Voluntary suspected adverse reaction scheme [letter] Gray AK, et al. Vet Rec 1988 Nov 26;123(22):584

Suspected adverse reactions to medicines during 1988 [news] Gray AK, et al. Vet Rec 1989 Mar 25;124(12):286–7

Partnership contracts [published erratum appears in Vet Rec 1989 Apr 22;124(16):442] Gripper J. Vet Rec 1989 Apr 8; 124(14):361–3

Building a practice. Employment law. Gripper J. Vet Rec 1989 Mar 18;124(11):263–4

Partnership contracts [letter] Gripper JN. Vet Rec 1989 Apr 22;124(16):442

Partnership responsibilities. Gunn D. Vet Rec 1989 Apr 15; 124(15):385–6

Buying and selling a partnership. Gunn D. Vet Rec 1989 Jun 3;124(22):577–9

Practice management. Tax troubles. Hadley J. Vet Rec 1988 Nov 26;123(22):561

Salmonella infection in a vet [letter] Hopper D. Vet Rec 1988 Nov 26;123(22):583–4

Veterinarians and seals [letter] Kennedy S, et al. Vet Rec 1988 Oct 29;123(18):475

Homoeopathy [letter] Kirkwood JK, et al. Vet Rec 1989 Mar 18;124(11):282–3

Veterinary opinion [letter] Kyle R. Vet Rec 1989 May 6; 124(18):497

Veterinary role in public health [letter] Leslie NW. Vet Rec 1989 Apr 15;124(15):410

The move towards specialist professional qualifications. Lucke JN. Vet Rec 1989 May 6;124(18):493–4

Withdraw of product licences [letter] Mackinnon JD. Vet Rec 1989 Jul 8;125(2):49

BSE safety precautions [letter] Madeiros CA. Vet Rec 1989 Jul 15;125(3):73–4

BVA Review Working Party recommendations [letter] Nelson M. Vet Rec 1989 Jun 17;124(24):643–4

Veterinary nurses [letter] Paradise GP. Vet Rec 1988 Nov 5;123(19):499

Veterinary services to smaller poultry flocks [letter] Pennycott T. Vet Rec 1989 Jul 1;125(1):26

Veterinary opinion [letter] Pickles RW. Vet Rec 1989 Mar 11;124(10):257

Aid for Poland [letter] Remfry J. Vet Rec 1989 May 20; 124(20):547

Speaking up for the profession [letter] Shaw JM. Vet Rec 1989 Jan 7;124(1):24

Early history of the World Small Animal Veterinary Association. Singleton WB. Vet Rec 1989 Mar 25; 124(12):288

Partners' wives [letter] Smith CD. Vet Rec 1989 Apr 29; 124(17):472–3
Salmonella infection in a vet [letter] Spalton DE. Vet Rec 1989 Jan 14;124(2):47
Right to dispense [letter] Stopforth A. Vet Rec 1989 Jul 1; 125(1):26
Veterinary attendance at driving trials [letter] Taylor DJ. Vet Rec 1989 Jul 1;125(1):25
Europe—matters of concern [letter] Teale ML. Vet Rec 1989 Jul 15;125(3):72–3
The medicines (medicated animal feeding stuffs) regulations 1988 [letter] Thomas DA. Vet Rec 1989 Jul 29;125(5):116–7
A professional opinion. Turner J. Vet Rec 1989 Jul 22; 125(4):94–5
Equine topics. Legal pitfalls at events. Vogel C. Vet Rec 1988 Nov 26;123(22):580–1
Withdrawal of product licences [letter] Watson JO. Vet Rec 1989 Jul 29;125(5):116
SPVS/BSAVA survey [letter] Wells BT. Vet Rec 1989 Jan 14;124(2):46
1992: challenge and opportunity. Wilkes KW. Vet Rec 1989 Jul 15;125(3):53–4
Development of a coding system for recording clinical findings in farm animal practice. Williams PC, et al. Vet Rec 1989 Feb 4;124(5):118–22
Development of a microcomputer system for recording veterinary visits, preparing accounts, and as an aid to herd fertility and herd health schemes. Williams PC, et al. Vet Rec 1989 Mar 18;124(11):265–8
Veterinary profession in the EC [letter] Wilson AJ. Vet Rec 1989 Jun 10;124(23):619–20
Inappropriate dress [letter] Yarrow TG. Vet Rec 1988 Aug 27;123(9):236
Current models in pharmacokinetics: applications in veterinary pharmacology. Kinabo LD, et al. Vet Res Commun 1989;13(2):141–57 (78 ref.)
Scientific abstracts from the ACVA annual meeting. American College of Veterinary Surgeons. October 9, 1987, Atlanta, Georgia. Vet Surg 1988 May–Jun;17(3):160–79
Scientific presentation abstracts. American College of Veterinary Surgeons, 23rd annual meeting. February 1988. Vet Surg 1988 Jan–Feb;17(1):27–47
Scientific presentation abstracts. American College of Veterinary Surgeons. 24th annual meeting. February 1989. Vet Surg 1989 Jan–Feb;18(1):57–84
Research training of surgical residents as studied from the Resident's Forum. Rawlings CA. Vet Surg 1987 Mar–Apr; 16(2):172–4
[Recipient of the research award of the SAVV for 1987. Dr. J. D. Bezuidenhout] J S Afr Vet Assoc 1987 Dec; 58(4):239 (Afr)
[Silver Medal of the SAVV. Dr. L. Coetzee] J S Afr Vet Assoc 1987 Dec;58(4):242 (Afr)
[Gold Medal of the South African Veterinary Association for 1987. Dr. A. Polson] J S Afr Vet Assoc 1987 Dec; 58(4):243–4 (Afr)
[Africaans in veterinary medicine] le Roux JM. J S Afr Vet Assoc 1987 Sep;58(3):105–7 (Afr)
[Interaction between the veterinarian, the client and the patient] Odendaal JS, et al. J S Afr Vet Assoc 1989 Mar; 60(1):15–9 (Eng. Abstr.) (Afr)
[Client profile of an animal companion practice] Odendaal JS, et al. J S Afr Vet Assoc 1989 Mar;60(1):25–7 (Eng. Abstr.) (Afr)
[To whom do roentgen photos belong?] Tijdschr Diergeneeskd 1989 Mar 1;114(5):293 (Dut)
[Report of the presentation veterinary immunological research] Bokhout BA. Tijdschr Diergeneeskd 1988 Nov 15;113(22):1257–60 (Dut)
[Veterinary professional partnership] Lommers H. Tijdschr Diergeneeskd 1988 Dec 1;113(23):1303–9 (Eng. Abstr.) (Dut)
[Labor market study for veterinary graduates. Final report especially helpful as discussion topic] Rutgers LJ. Tijdschr Diergeneeskd 1988 Dec 15;113(24):1393–7 (Dut)
[Ethics in veterinary medicine and animal experiments (letter)] van der Gulden WJ. Tijdschr Diergeneeskd 1989 Apr 15;114(8):469–70 (Dut)
[Ethical evaluation of veterinary research] Visser MB, et al. Tijdschr Diergeneeskd 1988 Oct 1;113(19):1064–75 (Eng. Abstr.) (Dut)
[Reflections of a French-speaking practitioner of the veterinary arts in Switzerland] Jacquier C. Schweiz Arch Tierheilkd 1988 Aug;130(8):445–60 (Fre)
[Use of office computers to efficiently determine parameters of periodic time series for chronopharmacologic and toxicologic studies] Bache K, et al. Arch Exp Veterinarmed 1988 Nov;42(6):915–23 (Eng. Abstr.) (Ger)
[Computer simulation of the stable climate on the PC in veterinary practice] Schauberger G. Berl Munch Tierarztl Wochenschr 1989 Feb 1;102(2):58–63 (Eng. Abstr.) (Ger)
[New methods for poultry meat hygiene: a challenge for veterinary medicine] Siegmann O. DTW 1989 Mar; 96(3):135–6 (Ger)
[Veterinary expert opinion: bloodless castration of bulls (Burdizzo forceps)] Stöber M. DTW 1989 Apr;96(4):232–4 (Eng. Abstr.) (Ger)
[The veterinarian and animal welfare] Sojka K. DTW Dtsch Tierarztl Wochenschr 1989 May;96(6):298–301 (Eng. Abstr.) (Ger)
[The psychology of the relationship between house pets, pet owners and veterinarians] Bergler R. Zentralbl Veterinarmed [B] 1988 Jul;35(6):443–61 (2 ref.) (Eng. Abstr.) (Ger)
[The profession of veterinarian: opinions of a practitioner in Ticino] Gendotti M. Schweiz Arch Tierheilkd 1988 Aug; 130(8):461–3 (Ita)
[Changes in the agriculture in the Engadine and Surselva valleys—the consequences for the veterinarian] Thun R, et al. Schweiz Arch Tierheilkd 1988 Aug;130(8):465–72 (Eng. Abstr.) (Ita)
[The state of veterinary genetics in the Estonian SSR] Pavel IuG, et al. Genetika 1988 Oct;24(10):1717–20 (Eng. Abstr.) (Rus)

ECONOMICS

Multilevel training activities in veterinary epidemiology and economics in developing countries. Ellis PR. Acta Vet Scand Suppl 1988;84:507–9
Conceptual affinities in veterinary epidemiology and economics. Howe KS. Acta Vet Scand Suppl 1988;84:347–9
The use of relative value studies in the determination of veterinary fees. Clarke RE. Aust Vet J 1988 Nov; 65(11):345–9
Trend in real starting salaries of US veterinary medical college graduates, 1980–1988. J Am Vet Med Assoc 1989 Jan 15;194(2):283–4
Hagglers, slow payers, and no payers. Antelyes J. J Am Vet Med Assoc 1989 May 15;194(10):1412–3
Hospice care expense benefit. Donnellan L. J Am Vet Med Assoc 1988 Sep 1;193(5):545–6
Welfare benefits may be taxable [news] Kennedy JP. J Am Vet Med Assoc 1989 Feb 15;194(4):450–1
1987 professional incomes of US veterinarians, by hours worked and years since graduation. Wise JK. J Am Vet Med Assoc 1989 Mar 15;194(6):815–7
1987 US veterinary practice income, expenses, and financial ratios. Wise JK. J Am Vet Med Assoc 1989 Apr 15; 194(8):1100–4
Employment, starting salaries, and educational indebtedness of 1988 graduates of US veterinary medical colleges. Wise JK. J Am Vet Med Assoc 1988 Nov 15;193(10):1317–8
1987 gross practice income attributable to veterinary service and product categories. Wise JK. J Am Vet Med Assoc 1989 Jun 15;194(12):1767
Trends in veterinarians' incomes, 1980 to 1987. Wise JK. J Am Vet Med Assoc 1989 May 15;194(10):1474–5
Fringe benefits received by veterinarians, 1987. Wise JK. J Am Vet Med Assoc 1989 Aug 15;195(4):521–2
1987 incomes of US veterinarians. Wise JK. J Am Vet Med Assoc 1989 Feb 15;194(4):563–6
Living within the practice income [letter] Wolff A. J Am Vet Med Assoc 1988 Oct 1;193(7):760–1
Veterinary remuneration [letter] Vet Rec 1989 Feb 4; 124(5):127
Veterinary remuneration [letter] Vet Rec 1989 Apr 22; 124(16):441
Establishing an economic database. Vet Rec 1988 Aug 27; 123(9):213
PAYE and locums [letter] Bennett R. Vet Rec 1988 Dec 10;123(24):632
LVI remuneration [letter] Borthwick BR. Vet Rec 1988 Oct 15;123(16):428
The practice administrator. Bower J. Vet Rec 1988 Sep 17; 123(12):307, 322
Understanding practice accounts. Gripper J. Vet Rec 1989 Apr 29;124(17):449–52
Building a practice. Budget forecasts and performance monitoring. Gripper J. Vet Rec 1989 Jan 14;124(2):29–30
Building a practice (14). Bookkeeping. Gripper J. Vet Rec 1988 Nov 5;123(19):497–8
Building a practice. Valuation of goodwill. Gripper J. Vet Rec 1988 Dec 3;123(23):588–9
Insurance and pensions. Gripper J. Vet Rec 1989 Feb 25; 124(8):182–3, 198
Building a practice (12). PAYE and national insurance. Gripper J. Vet Rec 1988 Oct 1;123(14):363–4
A tax on income. Gunn D. Vet Rec 1989 Jun 17;124(24):637–8
Construction of a fee. Gunn D. Vet Rec 1988 Sep 10; 123(11):286
The ins and outs of cash flow. Gunn D. Vet Rec 1989 Feb 4;124(5):109–10
Discount chores [letter] Nelson RJ. Vet Rec 1988 Sep 10; 123(11):304
Vetsure and the profession [news] Paine M. Vet Rec 1989 Jun 17;124(24):639
Veterinary remuneration [letter] Straiton EC. Vet Rec 1989 Feb 18;124(7):177–8
Professional remuneration: is it adequate? Turner T. Vet Rec 1988 Aug 27;123(9):215
Veterinary remuneration [letter] Walton AN. Vet Rec 1989 Feb 25;124(8):203
Professional remuneration [letter] Wells BT. Vet Rec 1988 Sep 3;123(10):280

HISTORY

The laboratory diagnosis of diseases in stock in New South Wales: 1890 to 1947. Mylrea PJ. Aust Vet J 1989 Apr; 66(4):114–7
Some notes on the treatment of human and animal diseases in the folklore of Turkey and the Balkan countries. Dinçer F. DTW 1988 Nov–Dec;95(10):419–20
An attempt to find an old book on equine medicine. Katsuyama O. DTW 1988 Nov–Dec;95(10):432–3
American Indians and their horses' health. Lawrence EA. J Am Vet Med Assoc 1989 Jun 15;194(12):1690–1
People and events influence life. Pierson RE. J Am Vet Med Assoc 1988 Sep 1;193(5):540–4
Fabric of many-colored threads. Pollock S. J Am Vet Med Assoc 1988 Oct 1;193(7):790–3
Veterinary medicine on the Palouse. Spencer GR. J Am Vet Med Assoc 1989 Sep 1;195(5):579–82
Veterinary perestroika. Stalheim OH. J Am Vet Med Assoc 1989 Jun 1;194(11):1546–9
The veterinarian as biologist. Bothma JD. J S Afr Vet Assoc 1987 Dec;58(4):213–7
A century of letters to the editor. Brandenberg M. Vet Rec 1988 Jul 2;123(1):18–9
The pharmaceutical industry and The Veterinary Record. Brander G. Vet Rec 1988 Jul 2;123(1):20–3
A matter of confidence? Jackson F. Vet Rec 1988 Jul 2; 123(1):27–8
An editor remembers. Mitchell C. Vet Rec 1988 Jul 2; 123(1):24–5
William Hunting and The Veterinary Record. Pattison I. Vet Rec 1988 Jul 2;123(1):14–7
The Royal College and The Veterinary Record. Porter A. Vet Rec 1988 Jul 2;123(1):25–6
[70 years of Bioveta] Krupka V, et al. Vet Med (Praha) 1988 Nov;33(11):641–2 (Cze)
[The beginning of homeopathy in veterinary medicine] Achilles H. DTW 1988 Nov–Dec;95(10):412–5 (Eng. Abstr.) (Ger)
[The Basel manuscript of Meister Albrant's Horse Medicine] Hils HP, et al. DTW 1988 Nov–Dec;95(10):426–9 (Eng. Abstr.) (Ger)
["Der kwe harem". Cow urine—a treatise on a pregnancy test from the 15th century] Keil G. DTW 1988 Nov–Dec; 95(10):433–4 (Eng. Abstr.) (Ger)
[The subject "history of veterinary medicine" at the Vienna Veterinary School] Knezevic PF. DTW 1988 Nov–Dec; 95(10):437 (Eng. Abstr.) (Ger)
["If a monster..."—the omen series "summa izbu" and its significance for the history of veterinary medicine] Schäffer J. DTW 1988 Nov–Dec;95(10):453–8 (Eng. Abstr.) (Ger)
[The history of veterinary medicine in Czechoslovakia—documentation, research and current teaching] Sindlář J, et al. DTW 1988 Nov–Dec;95(10):458–9 (Eng. Abstr.) (Ger)
[The Museum of Veterinary Medicine in Ciechanowiec (Poland)] TropiLo VJ, et al. DTW 1988 Nov–Dec; 95(10):464–5 (Eng. Abstr.) (Ger)
[A short history of the editing of the "Schweizer Archiv für Tierheilkunde"] Fankhauser R, et al. Schweiz Arch Tierheilkd 1988 Sep;130(9):477–516 (Ger)
[The honorary members of the Swiss Association of Veterinary Medicine from 1814 to 1983] Hörning B, et al. Schweiz Arch Tierheilkd 1988 Sep;130(9):517–42 (Ger)
[Parasites of domestic animals in the work "De re rustica" by L.I. Columella. III. Scabies] Kreyser K, et al. Wiad Parazytol 1989;35(1):3–10 (Eng. Abstr.) (Pol)

INSTRUMENTATION

Urine cup for collection of urine from cows [published erratum appears in J Dairy Sci 1988 Dec;71(12):3595] Fellner V, et al. J Dairy Sci 1988 Aug;71(8):2250–5
Blowpipes and dart guns [letter] Greenwood AG, et al. Vet Rec 1988 Oct 1;123(14):379
Computers in veterinary practice. Gripper J, et al. Vet Rec 1989 Feb 18;124(7):156–8
Blowpipes and dart guns [letter] Kock MD. Vet Rec 1988 Sep 3;123(10):279
[The makers of veterinary instruments in Paris: 1750–1950] Thery A. DTW 1988 Nov–Dec;95(10):461–3 (Eng. Abstr.) (Ger)

LEGISLATION & JURISPRUDENCE

Malpractice actions—what recovery? Hannah HW. J Am Vet Med Assoc 1988 Sep 1;193(5):538–9
Jurisprudent obstetrics [letter] Edwards BL. Vet Rec 1988 Aug 27;123(9):236

MANPOWER

Clearinghouse for veterinarians wishing to work in developing countries [letter] Giam CH. J Am Vet Med Assoc 1988 Dec 1;193(11):1361
Animal technician shortage—any solution? [news] Gloyd JS. J Am Vet Med Assoc 1989 Jan 1;194(1):32–3
More on veterinary manpower [letter] Jeanes KL. J Am Vet Med Assoc 1988 Aug 1;193(3):294
Can it be true? A manpower shortage? [letter] Lane DM. J Am Vet Med Assoc 1989 Jan 1;194(1):4
Sources of federal employment opportunities for veterinarians. Menning EL. J Am Vet Med Assoc 1988 Sep 15;193(6):658–61
Animal technicians—the glue that holds a practice together [letter] Rambow VJ. J Am Vet Med Assoc 1989 Apr 15; 194(8):1005
Manpower: a surplus in supply or demand? [news] Spencer L. J Am Vet Med Assoc 1989 May 1;194(9):1172–3, 1175
Size and practice density of local veterinary service areas, 1988. Wise JK. J Am Vet Med Assoc 1989 Jul 15;

195(2):251–2
Employment of 1988 male and female graduates of US veterinary medical colleges. Wise JK.
J Am Vet Med Assoc 1988 Dec 15;193(12):1569–70
Riley recommendations [letter] Vet Rec 1989 Mar 25; 124(12):313
Dearth of veterinary surgeons [letter] Vet Rec 1988 Dec 24–31;123(26–27):678–9
Riley recommendations [letter] Vet Rec 1989 Mar 18; 124(11):282
Dearth of veterinarians [letter] Vet Rec 1988 Aug 20; 123(8):211
Riley recommendations [letter] Vet Rec 1989 Feb 18; 124(7):176–7
Riley recommendations [letter] Vet Rec 1989 Feb 11; 124(6):150–1
Lords condemn schools closure proposals [news] Vet Rec 1989 Mar 18;124(11):260–1
Dearth of veterinarians [letter] Vet Rec 1988 Dec 10; 123(24):630–1
Riley working party and veterinary manpower [news] Vet Rec 1989 Mar 25;124(12):311
Dearth of veterinary surgeons [letter] Vet Rec 1988 Dec 3; 123(23):607–8
Dearth of veterinary surgeons [letter] Bentley H. Vet Rec 1989 Mar 25;124(12):314
Farm research cuts [letter] Bracewell CD. Vet Rec 1989 Apr 15;124(15):409
Responsible advertising or game show tactics? [letter] Bromhall N. Vet Rec 1989 May 20;124(20):548
European myths [letter] Carter HE. Vet Rec 1988 Nov 26; 123(22):584
Procedures: canine and feline medicine [letter] Farrell T. Vet Rec 1989 Apr 22;124(16):442
Dearth of veterinarians [letter] Flower PJ. Vet Rec 1988 Oct 1;123(14):379–80
SerVet [letter] Giam CH. Vet Rec 1989 May 13;124(19):521–2
Veterinary education in the marketplace [letter] Icarus. Vet Rec 1989 Jan 28;124(4):103
Food hygiene in the 1990s [letter] Laven RA. Vet Rec 1989 Jun 17;124(24):642–3
Dearth of veterinary surgeons [letter] McCullagh M. Vet Rec 1989 Jan 14;124(2):48
Veterinary manpower, past and future [letter] Michell AR. Vet Rec 1989 Aug 5;125(6):136
Riley working party and veterinary manpower [news] Riley R. Vet Rec 1989 Mar 11;124(10):232
Dearth of veterinarians [letter] Williams BM. Vet Rec 1988 Nov 19;123(21):556

METHODS

Veterinary vaccines: from plagues to percentages. Spier RE. J Comp Pathol 1988 Aug;99(2):121–31 (28 ref.)
Pharmacokinetic estimation for therapeutic dosage regimens (PETDR)—a software program designed to determine intravenous drug dosage regimens for veterinary applications. Riviere JE, et al. J Vet Pharmacol Ther 1988 Dec;11(4):390–6
Blowpipes and dart guns [letter] Adams SJ. Vet Rec 1988 Oct 15;123(16):426–7
[Medical decision analysis in veterinary practice. An introduction with reference to the problem: to operate or not in cryptorchism in dogs] Bosch AG, et al. Tijdschr Diergeneeskd 1989 Apr 1;114(7):369–75 (Eng. Abstr.) (Dut)

ORGANIZATION & ADMINISTRATION

Closing the information gap: problem formulation as the critical first step [news] Gavzer K.
J Am Vet Med Assoc 1989 May 15;194(10):1393
Automation: how not to do. Hoek D.
Tijdschr Diergeneeskd 1989 Apr;114 Suppl 1:89S–90S
Fundamental principles of veterinary commerce: management for results. Riegger MH.
Tijdschr Diergeneeskd 1989 Apr;114 Suppl 1:75S–87S
[Discussion memo concerning the organization of veterinary care of companion animals] Tijdschr Diergeneeskd 1989 May 15;114(10):590–5 (Dut)

STANDARDS

Grounded theory—collection and analysis of qualitative data in a preliminary research investigation. Boland CJ, et al. Acta Vet Scand Suppl 1988;84:493–5
Euthanasia of healthy pets [letter] J Am Vet Med Assoc 1989 Jan 1;194(1):6
Veterinarians should be aware of ecologic and environmental problems [letter] Boyer ME. J Am Vet Med Assoc 1989 Apr 15;194(8):1006–7
Caring about animals—thoughts from a student [letter] Bristoll S. J Am Vet Med Assoc 1988 Dec 15;193(12):1481–2
Satisfactory vs poor, fair, good, and excellent [letter] Cameron DB. J Am Vet Med Assoc 1988 Dec 15; 193(12):1481
Equine drug use: protecting your license [news] Gloyd JS. J Am Vet Med Assoc 1989 Mar 15;194(6):748–9
More on benefits of animal research [letter] Hamm TE Jr. J Am Vet Med Assoc 1989 Jan 1;194(1):5
Limitations on the right to practice veterinary medicine. Hannah HW. J Am Vet Med Assoc 1988 Nov 1; 193(9):1040–1
Food for thought for food animal veterinarians. Where did the art of practice go? Herrick JB.
J Am Vet Med Assoc 1989 Jun 15;194(12):1698–9
One bad apple affects a barrel of apples. Herrick JB.
J Am Vet Med Assoc 1989 Jul 15;195(2):168
The siren song of merchandising [letter] McCormick RH.
J Am Vet Med Assoc 1989 Jun 15;194(12):1680
Professional dental care [letter] Rhody JL.
J Am Vet Med Assoc 1989 Jan 1;194(1):8–9
Comparison of the general moral reasoning of small animal veterinarians vs large animal veterinarians. Self DJ, et al.
J Am Vet Med Assoc 1988 Dec 15;193(12):1509–12
National Board Examination revisited. West RL.
J Am Vet Med Assoc 1989 Jul 15;195(2):188–9
Veterinary opinion [letter] Vet Rec 1989 May 27;124(21):571
Disciplinary committee decision [letter] Appelbe GE. Vet Rec 1989 Mar 25;124(12):313
Condemnation of sports [letter] Coffey DJ. Vet Rec 1988 Dec 24–31;123(26–27):679
Wildlife rehabilitation [letter] Cooke SW. Vet Rec 1989 Jan 14;124(2):47
Export certification [letter] Grime PA, et al. Vet Rec 1988 Nov 5;123(19):500
Prescribing: harnessing public support [letter] Macholc EJ. Vet Rec 1989 Jun 10;124(23):620
Question of practice standards [letter] Payne AR. Vet Rec 1988 Aug 13;123(7):187–8
Prescription only medicines [letter] Rhodes WB. Vet Rec 1989 Mar 25;124(12):312
Quality assessment scheme [letter] Tribe GW. Vet Rec 1989 Feb 4;124(5):127–8
Improving standards in veterinary practice—laboratory testing [letter] Wishart DF. Vet Rec 1989 Mar 11; 124(10):257–8
Veterinary attendance at driving trials [letter] Woodger SJ. Vet Rec 1989 Jun 10;124(23):620
[Veterinary pharmacy and the European Economic Community] Ruijgh C. Tijdschr Diergeneeskd 1989 May 15;114(10):595–6 (Dut)
[When you work you make mistakes, but make as few as possible] van Haeringen H. Tijdschr Diergeneeskd 1988 Aug 15;113(15–16):901–2 (Dut)
[Objectivity, specialization and cooperation in veterinary medicine with immunopathology as an example] Schulz LC. DTW 1989 Apr;96(4):160–1 (Ger)
[Advice as to the safety precautions for handling infectious material in a veterinary practice laboratory] Böhm R, et al. Tierarztl Prax 1988;16(4):431–5 (8 ref.) (Eng. Abstr.) (Ger)

STATISTICS & NUMERICAL DATA

Statistical analysis of life time data in the veterinary sciences. Andersen PK. Acta Vet Scand Suppl 1988;84:75–8

TRENDS

The future of veterinary epidemiology and economics. Riemann HP. Acta Vet Scand Suppl 1988;84:85–8
Creative veterinary marketing. Antelyes J.
J Am Vet Med Assoc 1989 Feb 15;194(4):492–4
Veterinarians and animal rights: a relationship of ambivalence [editorial] Ostrich SW. J Am Vet Med Assoc 1988 Sep 1; 193(5):526–7
Changing environments and external factors that may impact veterinary medicine [news] Pritchard W.
J Am Vet Med Assoc 1989 May 15;194(10):1394–5, 1399
Veterinary practice in the 21st century [news] Pritchard W.
J Am Vet Med Assoc 1989 Jul 1;195(1):32–5
Changing environments and external factors that may impact veterinary medicine [news] Pritchard W.
J Am Vet Med Assoc 1989 May 1;194(9):1156–7
Changing environments and external factors that may impact veterinary medicine. Pritchard W.
J Am Vet Med Assoc 1989 Jun 15;194(12):1694–6
Changing environments and external factors that may impact veterinary medicine. Pritchard W.
J Am Vet Med Assoc 1989 Jun 1;194(11):1540–1
What's past is prologue. Smithcors JF.
J Am Vet Med Assoc 1988 Dec 1;193(11):1382–5
Pet-bird and exotic-pet owners and their use of veterinary services. Troutman CM. J Am Vet Med Assoc 1988 Dec 15;193(12):1490–1
Apprehensive about some trends in the profession [letter] Whitford RE. J Am Vet Med Assoc 1989 Mar 15; 194(6):740–1
Into the 21st century. Vet Rec 1989 Jul 15;125(3):65–6
Food hygiene in the 1990s. Cooke M. Vet Rec 1989 Apr 1;124(13):352–3
For whom the bell tolls [letter] Mares RG. Vet Rec 1988 Oct 1;123(14):380
Keith Entwistle memorial lecture. The veterinary profession in the European community: 1992 and beyond. Oakley RG. Vet Rec 1989 May 20;124(20):527–9
[1988 annual address at the Annual Congress of the Royal Society for Veterinary Medicine, Groningen, 30 September 1988] Kampelmacher EH. Tijdschr Diergeneeskd 1988 Oct 15;113(20):1119–28 (Dut)
[Limits and risks of biotechnology in veterinary medicine from the viewpoint of the virologist] Kaaden OR. DTW 1989 Feb;96(2):47–8 (Eng. Abstr.) (Ger)
[The professional image of veterinarians in 1988] Siegfried JP. Schweiz Arch Tierheilkd 1988 Aug;130(8):411–44 (Ger)
[A review of Polish publications on veterinary parasitology 1984–1986] Ramisz A. Wiad Parazytol 1988; 34(4–6):395–406 (Pol)

UTILIZATION

Cat owners and their use of veterinary services. Troutman CM. J Am Vet Med Assoc 1988 Nov 15;193(10):1217–9
Veterinary services market for companion animals. Summary report. Troutman CM. J Am Vet Med Assoc 1988 Oct 15; 193(8):920–2
Dog owners and their use of veterinary services. Troutman CM. J Am Vet Med Assoc 1988 Nov 1;193(9):1056–8

VETERINARY SERVICE, MILITARY

Veterinary services in disasters and emergencies. Tennyson AV. Milit Med 1989 Jan;154(1):41–5

VIBRATION

Biodynamic behavior of the trunk and the abdomen during whole-body vibration. Dupuis H.
Acta Anaesthesiol Scand Suppl 1989;90:34–8 (13 ref.)
Computerized posturography, a development of the measuring system. Aalto H, et al.
Acta Otolaryngol Suppl (Stockh) 1988;449:71–5
Presentation of a posturographic test with loading of the proprioceptive system. Enbom H, et al.
Acta Otolaryngol Suppl (Stockh) 1988;455:58–61
Three-dimensional laser Doppler interferometric display of human tympanic membrane vibrations at two different frequencies and sound pressure levels. Konrádsson KS, et al. Acta Otolaryngol Suppl (Stockh) 1988;449:183–6
Fetal responses to vibratory acoustic stimulation: influence of basal heart rate. Gagnon R, et al.
Am J Obstet Gynecol 1988 Oct;159(4):835–9
Increased skin temperature after vibratory stimulation. Oliveri DJ, et al. Am J Phys Med Rehabil 1989 Apr; 68(2):81–5
Vibrotactile sensation and response to nifedipine dose titration in primary Raynaud's phenomenon. Challenor VF, et al. Angiology 1989 Feb;40(2):122–8
Responses of myocardial blood flows to whole-body vibration in the dog. Matoba T, et al. Angiology 1989 Jun; 40(6):534–8
Dimensions of and vibrations in the round window membrane in cats. Fukaya T, et al. Ann Otol Rhinol Laryngol 1989 Jun;98(6):438–42
Detection of clustered gastrointestinal contractions in partial intestinal obstruction by surface vibration analysis. Cullen PT, et al. Ann Surg 1989 Aug;210(2):234–8
Intensity judgments of vibrations in the X axis, Z axis, and X-plus-Z axes. Shoenberger RW.
Aviat Space Environ Med 1988 Aug;59(8):749–53
Black box analysis of the skin senses as a multiple communication channel. Eijkman EG. Biol Cybern 1989; 61(3):163–70
The computer-vibromyography as a biometric progress in studying muscle function. Keidel M, et al.
Biomed Tech (Berlin) 1989 May;34(5):107–16
Audiological rehabilitation of older people: visual and vibrotactile considerations. Oyer HJ, et al. Br J Audiol 1989 Feb;23(1):33–7 (26 ref.)
Reliability of a widely used test of peripheral cutaneous vibration sensitivity and a comparison of two testing protocols. Gerr FE, et al. Br J Ind Med 1988 Sep; 45(9):635–9
Reactive fetal heart rate response to vibroacoustic stimulation in fetuses with low scalp blood pH. Ingemarsson I, et al. Br J Obstet Gynaecol 1989 May;96(5):562–5
Neck muscle vibration modifies the representation of visual motion and direction in man. Biguer B, et al. Brain 1988 Dec;111 (Pt 6):1405–24
Vibrotactile reaction times in unilateral neglect. The effects of hand location, rehabilitation and eyes open/closed. Pierson-Savage JM, et al. Brain 1988 Dec;111 (Pt 6):1531–45
Changes in premovement activity in primary somatosensory cortex differ when monkeys make hand movements in response to visual vs vibratory cues. Nelson RJ, et al.
Brain Res 1989 Apr 10;484(1–2):43–56
Set related and premovement related activity of primate primary somatosensory cortical neurons depends upon stimulus modality and subsequent movement. Nelson RJ.
Brain Res Bull 1988 Sep;21(3):411–24
Vasodilatation in human skin induced by low-amplitude high-frequency vibration. Skoglund CR. Clin Physiol 1989 Aug;9(4):361–72
Left-right ratio of the tonic vibration reflex at full occlusion in the human masseter muscles. Hoogmartens MJ, et al.
Electromyogr Clin Neurophysiol 1988 Jan;28(1):45–52
The responses of muscle spindles in the kitten to stretch and vibration. Gregory JE, et al. Exp Brain Res 1988; 73(3):606–14
Interference of vibrations with input transmission in dorsal horn and cuneate nucleus in man: a study of somatosensory evoked potentials (SEPs) to electrical stimulation of median nerve and fingers. Ibañez V, et al. Exp Brain Res 1989; 75(3):599–610
Vibratory detection thresholds following a digital nerve lesion. Morley JW, et al. Exp Brain Res 1988;72(1):215–8
Alteration of proprioceptive messages induced by tendon

vibration in man: a microneurographic study. Roll JP, et al. **Exp Brain Res** 1989;76(1):213–22
Surface vibration analysis (SVA): a new non–invasive monitor of gastrointestinal activity. Campbell FC, et al. **Gut** 1989 Jan;30(1):39–45
Mechanical energy absorption in human hand–arm exposed to sinusoidal vibration. Burström L, et al. **Int Arch Occup Environ Health** 1988;61(3):213–6
Effects of combined hand–arm vibration and cold on skin temperature. Scheffer M, et al. **Int Arch Occup Environ Health** 1989;61(6):375–8
Psychophysical assessment of sinusoidal whole–body vibration in z–axis between 0.6 and 5 Hz combined with different noise levels. Seidel H, et al. **Int Arch Occup Environ Health** 1989;61(6):413–22
Four channels mediate the mechanical aspects of touch. Bolanowski SJ Jr, et al. **J Acoust Soc Am** 1988 Nov; 84(5):1680–94
Vibrotactile masking: effects of stimulus onset asynchrony and stimulus frequency. Gescheider GA, et al. **J Acoust Soc Am** 1989 May;85(5):2059–64
The apparent mass of the seated human body: vertical vibration. Fairley TE, et al. **J Biomech** 1989;22(2):81–94
Effects of vibration on steady flow downstream of a stenosis. Jones SA, et al. **J Biomech** 1988;21(11):903–14
Trunk muscle electromyography and whole body vibration. Seroussi RE, et al. **J Biomech** 1989;22(3):219–29
A lateral line analogue in cephalopods: water waves generate microphonic potentials in the epidermal head lines of Sepia and Lolliguncula. Budelmann BU, et al. **J Comp Physiol [A]** 1988 Nov;164(1):1–5
Response characteristics of vibration–sensitive neurons in the midbrain of the grassfrog, Rana temporaria. Christensen–Dalsgaard J, et al. **J Comp Physiol [A]** 1989 Jan;164(4):495–9
Effects of hand–arm transmitted vibration on hand manipulative dexterity. Chen B, et al. **J Hum Ergol (Tokyo)** 1988 Sep;17(1):87–90
One–year reliability of vibration sensitivity thresholds in human beings. Maurissen JP, et al. **J Neurol Sci** 1989 May; 90(3):325–34
Vibrating glass stylets: tools for precise microsurgery on cuticular structures. Gödde J. **J Neurosci Methods** 1989 Jul;29(1):77–83
Sensory thresholds among construction trade painters: a cross–sectional study using new methods for measuring temperature and vibration sensitivity. Bove FJ, et al. **J Occup Med** 1989 Apr;31(4):320–5
Different effects of mechanical vibration on bone ingrowth into porous hydroxyapatite and fracture healing in a rabbit model. Usui Y, et al. **J Orthop Res** 1989;7(4):559–67
Vibratory response in congenital scoliosis. Whitecloud TS 3d, et al. **J Pediatr Orthop** 1989 Jul–Aug;9(4):422–6
Instability in human forearm movements studied with feed–back–controlled muscle vibration. Prochazka A, et al. **J Physiol (Lond)** 1988 Aug;402:421–42
Vibrotactile perception of segmental features of speech: a comparison of single–channel and multichannel instruments. Carney AE. **J Speech Hear Res** 1988 Sep; 31(3):438–48
Magnitude estimation and cross–modal matching of lingual vibrotactile and auditory sensation. Harris D, et al. **J Speech Hear Res** 1989 Sep;32(3):698–702
Comparison of two single–channel vibrotactile aids for the hearing–impaired. Weisenberger JM, et al. **J Speech Hear Res** 1989 Mar;32(1):83–92
Evaluation of the Siemens Minifonator vibrotactile aid. Weisenberger JM. **J Speech Hear Res** 1989 Mar;32(1):24–32
Reliability of spontaneous otoacoustic emission suppression tuning curve measures. Zizz CA, et al. **J Speech Hear Res** 1988 Dec;31(4):616–9
Externally induced vibration on massive vocal fold. Tsuzuki T, et al. **Keio J Med** 1988 Sep;37(3):255–64
Tuning fork screening for sudden hearing loss. Burgess LP, et al. **Milit Med** 1988 Sep;153(9):456–8
Long–lasting afterdischarge of alpha–motoneurons after muscle vibration or electrical stimulation of group I afferent fibers in the anemically decerebrated cat. Wada N, et al. **Neurosci Res** 1989 Feb;6(3):234–47
Tachykinins enhance the depression of spinal nociceptive neurons caused by cutaneously applied vibration in the cat. Salter MW, et al. **Neuroscience** 1988 Oct;27(1):243–9
Human skull vibratory patterns in audiometric and supersonic ranges. Dunlap SA, et al. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):389–91
Vibrotactile threshold shift during magnitude–estimation scaling on the hand: effects on magnitude–estimation responses and scaling behavior. Fucci D, et al. **Percept Mot Skills** 1989 Aug;69(1):187–94
Sensory–substitution systems for the sensorily impaired: the case for the use of tactile–vibratory stimulation. Lechelt EC. **Percept Mot Skills** 1986 Apr;62(2):356–8
Effects of auditory masking on lingual vibrotactile magnitude–estimation scaling responses of young children. Petrosino L, et al. **Percept Mot Skills** 1989 Apr;68(2):523–9
Effect of auditory masking on lingual vibrotactile thresholds and magnitude estimation scaling responses. Petrosino L, et al. **Percept Mot Skills** 1988 Oct;67(2):491–4
Effect of vibratory stimulation on experimental and clinical pain. Lundeberg T, et al. **Scand J Rehabil Med** 1988; 20(4):149–59
Effects of low– and high–frequency local vibration on the occurrence of intimal thickening of the peripheral arteries of rats. Inaba R, et al. **Scand J Work Environ Health** 1988 Oct;14(5):312–6
Vibration perception thresholds in 279 diabetic patients. McKillop GM, et al. **Scott Med J** 1988 Oct;33(5):334–5
Responses of neurons in somatosensory cortical area II of cats to high–frequency vibratory stimuli during iontophoresis of a GABA antagonist and glutamate. Alloway KD, et al. **Somatosens Mot Res** 1988;6(2):109–40
The response of normal and failing heart to externally applied vibration in the canine open chest preparation. Koiwa Y, et al. **Tohoku J Exp Med** 1989 Feb;157(2):183–4
[Vibration–induced inactivation of insulin] Mathiassen B. **Ugeskr Laeger** 1989 Mar 6;151(10):639–40 (Eng. Abstr.) (Dan)
[Digital vibration syndrome and carpal tunnel syndrome: possible neurophysiological differences?] Vecchierini–Blineau MF, et al. **Neurophysiol Clin** 1988 Dec;18(6):541–8 (Eng. Abstr.) (Fre)
[Digital systolic pressure during cold test: standardization, reproducibility and validity of a method for the evaluation of digital vasospasm in normal subjects and in subjects exposed to hand–arm vibrations] Bovenzi M. **Med Lav** 1988 Mar–Apr;79(2):100–9 (Eng. Abstr.) (Ita)
[Characteristics of the vibration modes and the contact compliances of a soft material measured with a newly developed piezoelectric vibrometer] Omata S. **Iyodenshi To Seitai Kogaku** 1988 Mar;26(1):32–40 (Eng. Abstr.) (Jpn)
[Quantitative estimation of thermal and vibration sensations in diabetic neuropathy] Inoue M, et al. **Rinsho Byori** 1988 Jun;36(6):719–24 (Jpn)
[Cutaneous vibration and thermal–cooling threshold in control subjects] Ohnishi A, et al. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1;10(3):283–7 (Eng. Abstr.) (Jpn)
[A method of rapid beveling of microelectrodes using vibration] Maiskii VA, et al. **Fiziol Zh** 1989 May–Jun; 35(3):107–9 (Eng. Abstr.) (Rus)
[Gamma–aminobutyric and glutamic acid levels in the brain of rats exposed to noise and vibration on ships] Stoianov AP, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):13–8 (Eng. Abstr.) (Rus)
[Characteristics of the effects of etimizol and caffeine on the conditioned–reflex escape reaction after exposure to noise and vibration] Stoianov AP, et al. **Gig Sanit** 1988 Jul; (7):74–5 (Rus)
[Physiologic and hygienic substantiation of shift–work schedules in combined effects of noise, local vibration and microclimate heating] Gorban' VS. **Gig Tr Prof Zabol** 1988 Nov;(11):48–50 (Rus)
[Characteristics of physiologic reactions of persons with increased individual sensitivity to noise after exposure to general low–frequency vibration] Nazarenko VI. **Gig Tr Prof Zabol** 1988 Dec;(12):49–51 (Rus)
[Characteristics of functional reorganization of the body after exposure to noise in the initial period of work activity] Zvereva GS. **Gig Tr Prof Zabol** 1988 Dec;(12):25–8 (Eng. Abstr.) (Rus)
[Effect of vibration and impact and radial loads on blood enzyme activity in monkeys] Drozdova TE, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):86–9 (Rus)
[The physiological role and significance of prostaglandins in the reaction of the body to unfavorable environmental factors] Petrova TV, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):6–14 (109 ref.) (Eng. Abstr.) (Rus)
[Changes in the behavioral reactions of nereids to vibration following the action of unconditioned stimuli] Inozemtsev AN. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):376–8 (Rus)

ADVERSE EFFECTS

Transient increase in insulin–like growth factor I immunoreactivity in rat peripheral nerves exposed to vibrations. Hansson HA, et al. **Acta Physiol Scand** 1988 Jan;132(1):35–41
Radionuclide angiography of the hand in occupational vasoneurosis. Žák J, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:219–24
Problems of the evaluation of occupational vasoneurosis in medical practice—a case report. Žák J. **Acta Univ Palacki Olomuc Fac Med** 1987;117:211–8
Vibration in textile mills. Sorainen E. **Am Ind Hyg Assoc J** 1988 Dec;49(12):A775–8
Vibration white finger, digital blood pressure, and some biochemical findings on workers operating vibrating tools in the engine manufacturing industry. Bovenzi M. **Am J Ind Med** 1988;14(5):575–84
Possible deleterious effects of sound or vibratory fetal stimuli [letter] Goodlin RC. **Am J Obstet Gynecol** 1988 Oct; 159(4):1016
Exposure to shock and vibration and symptoms in workers using impact power tools. Musson Y, et al. **Ann Occup Hyg** 1989;33(1):85–96
Vibration disease. Kákosy T. **Baillieres Clin Rheumatol** 1989 Apr;3(1):25–50 (162 ref.)
Correspondence between neurological symptoms and outcome of quantitative sensory testing in the hand–arm vibration syndrome. Ekenvall L, et al. **Br J Ind Med** 1989 Aug;46(8):570–4
Ultrastructural changes of the peripheral nerve induced by vibration: an experimental study. Ho ST, et al. **Br J Ind Med** 1989 Mar;46(3):157–64
Transitory postural vasomotor dysfunction in the finger after short term hand vibration. Olsen N, et al. **Br J Ind Med** 1989 Aug;46(8):575–81
Carpal tunnel syndrome (CTS) and exposure to vibration, repetitive wrist movements, and heavy manual work: a case–referent study. Wieslander G, et al. **Br J Ind Med** 1989 Jan;46(1):43–7
Functioning of field of vision in the seamen of a merchant navy ship. Jettmar A, et al. **Bull Inst Marit Trop Med Gdynia** 1987;38(3–4):189–92
Influence of physical factors on the ro–ro vessel over selected parameters of the circulatory system. Otto B, et al. **Bull Inst Marit Trop Med Gdynia** 1987;38(3–4):175–80
Influence of vibration on endurance of maximal isometric contraction. Samuelson B, et al. **Clin Physiol** 1989 Feb; 9(1):21–25
Vibration–induced white finger. Physiological and clinical aspects. Olsen N. **Dan Med Bull** 1989 Feb;36(1):47–64 (223 ref.)
Performance of a complex manual control task during exposure to vertical whole–body vibration between 0.5 and 5.0 Hz. McLeod RW, et al. **Ergonomics** 1988 Aug; 31(8):1193–203
Experience with Doppler investigations in vibration syndrome. Mackiewicz Z, et al. **Int Angiol** 1988 Oct–Dec; 7(4):305–8
Long–term sickness absence due to back disorders in crane operators exposed to whole–body vibration. Bongers PM, et al. **Int Arch Occup Environ Health** 1988;61(1–2):59–64
Quantitative estimation of aesthesiometric thresholds for assessing impaired tactile sensation in workers exposed to vibration. Bovenzi M, et al. **Int Arch Occup Environ Health** 1989;61(7):431–5
Prevalence of vibration–induced white finger and assessment of vibration exposure among travertine workers in Italy. Bovenzi M, et al. **Int Arch Occup Environ Health** 1988; 61(1–2):25–34
Heart rate variation and serum dopamine–beta–hydroxylase activity in workers exposed to vibration. Harada N, et al. **Int Arch Occup Environ Health** 1989;61(6):369–73
Raynaud's phenomenon of fingers and toes of miners exposed to local and whole–body vibration and cold. Hedlund U. **Int Arch Occup Environ Health** 1989;61(7):457–61
Hearing of forest workers with vibration–induced white finger: a five–year follow–up. Iki M, et al. **Int Arch Occup Environ Health** 1989;61(7):437–42
Risk assessment of vibration exposure and white fingers among platers. Nilsson T, et al. **Int Arch Occup Environ Health** 1989;61(7):473–81
Isolated and combined effects of prolonged exposures to noise and whole–body vibration on hearing, vision and strain. Seidel H, et al. **Int Arch Occup Environ Health** 1988; 61(1–2):95–106
Tactile sensory changes in hands occupationally exposed to vibration. Brammer AJ, et al. **J Acoust Soc Am** 1988 Nov; 84(5):1940–1
Vibratory urticaria associated with bladder–wall infection with the yeast Torulopsis glabrata [letter] Rose MH. **J Allergy Clin Immunol** 1989 Sep;84(3):408
Afferent and efferent nerve injury in vibration white fingers. Ekenvall L, et al. **J Auton Nerv Syst** 1988 Oct;24(3):261–6
Vibration syndrome—with special reference to the effects of temperature on vibration–induced white finger. Yu HS, et al. **J Dermatol (Tokyo)** 1988 Dec;15(6):466–72
Effects of episodic air hammer usage on digital artery hemodynamics of foundry workers with vibration white finger disease. Brown TD, et al. **J Occup Med** 1988 Nov; 30(11):853–62
Primary torsion of the omentum in a jackhammer operator: another vibration–related injury [see comments] Shields PG, et al. **J Occup Med** 1988 Nov;30(11):892–4. **Comment in:** J Occup Med 1989 Jun;31(6):563
Jackhammer usage and the omentum [letter; comment] Wasserman DE. **J Occup Med** 1989 Jun;31(6):563. **Comment on:** J Occup Med 1988 Nov;30(11):892–4
A review of 132 consecutive patients referred for assessment of vibration white finger. James CA, et al. **J Soc Occup Med** 1989 Summer;39(2):61–4 (13 ref.)
Protection against the lethal effects of whole body vibration by the alpha–adrenergic system in rat. Inaba R, et al. **Jpn J Exp Med** 1988 Oct;58(5):207–11
Corticosterone–induced responses in rat brain RNA are also evoked in hippocampus by acute vibratory stress. Nichols NR, et al. **Neuroendocrinology** 1989 Jan;49(1):40–6
VFWS threatens your most valuable tools: employee hands. Erdreich J. **Occup Health Saf** 1989 Jun;:26–7
Cardiovascular reactions to vibration stress. Matoba T. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:96–105 (16 ref.)
Impulse noise and hand–arm vibration in relation to sensory neural hearing loss. Starck J, et al. **Scand J Work Environ Health** 1988 Aug;14(4):265–71
Analysis of rabbit intervertebral disc physiology based on water metabolism. II. Changes in normal intervertebral discs under axial vibratory load. Hirano N, et al. **Spine** 1988 Nov;13(11):1297–302
Neuropharmacologic effects of vibration on the dorsal root ganglion. An animal model. Weinstein J, et al. **Spine** 1988 May;13(5):521–5
Influence of vibration on work performance during

ergometer cycling. Samuelson B, et al. **Ups J Med Sci** 1989; 94(1):73–9

[Study on the application of the "Guide for the evaluation of human exposures to whole body vibration" to Chinese workers] Zhou DL.
Chung Hua Yu Fang I Hsueh Tsa Chih 1988 Jul; 22(4):217–20 (Eng. Abstr.) (Chi)

[Research on the dose–response relationship of hand transmitted vibration and its hygienic standard] Zhou DL, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan; 23(1):23–6 (Eng. Abstr.) (Chi)

[Changes in the thermographic picture of hands of healthy persons after vibrations of 125 Hz] Chudáček Z. **Cesk Radiol** 1989 Mar;43(2):98–101 (Eng. Abstr.) (Cze)

[The histopathological substrate of the empty fingers phenomenon in vibration disease] Trickovic K.
G Ital Med Lav 1987 Jan;9(1):7–10 (Eng. Abstr.) (Fre)

[Occupational angioneurotic disorders provoked by vinyl monochloride and vibration] Letourneux M, et al.
Phlebologie 1989 Apr–Jun;42(2):233–43 (Eng. Abstr.) (Fre)

[Bone infarcts and vibration] Penanhoat B. **Phlebologie** 1989 Apr–Jun;42(2):281–2 (Fre)

[Diagnosis and therapy of Raynaud's phenomenon in occupationally–induced vibration trauma] Roeser BE, et al. **Dtsch Berufl Umwelt** 1989 May–Jun;37(3):78–81 (Eng. Abstr.) (Ger)

[The "exposure–specific" stress–strain concept in relation to the effect of partial body vibration on the hand–arm system] Oeser R. **Z Arztl Fortbild (Jena)** 1989;83(12):617–9 (29 ref.) (Ger)

[Psychological effects of long–term occupational whole body vibration] Schneider H, et al. **Z Gesamte Hyg** 1989 Apr; 35(4):206–8 (Eng. Abstr.) (Ger)

[Long–term local vibration exposure: influence of frequencies on the occurrence of intimal thickening of peripheral arteries] Inaba R. **Nippon Eiseigaku Zasshi** 1988 Jun; 43(2):634–7 (Eng. Abstr.) (Jpn)

[The effects of whole body vibration on dopamine metabolism and dopamine–related peptides in the rat brain] Nakamura H. **Nippon Eiseigaku Zasshi** 1988 Oct; 43(4):872–86 (Eng. Abstr.) (Jpn)

[Plasma platelet–derived factors in patients with systemic scleroderma—alterations of plasma beta–thromboglobulin and platelet factor 4 levels after vibration stress on bilateral hands] Maeda M, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Nov;98(12):1205–9 (Eng. Abstr.) (Jpn)

[Two cases of scleroderma associated with vibration syndrome] Matsumoto Y, et al.
Nippon Hifuka Gakkai Zasshi 1989 Feb;99(2):155–61 (Eng. Abstr.) (Jpn)

[Studies on prevention of health hazard due to hand–held tools (vibration tools, tools with triggers) operation] Kurosawa S. **Nippon Ika Daigaku Zasshi** 1988 Oct; 55(5):452–64 (Eng. Abstr.) (Jpn)

[Effects of local vibration exposure on whole blood viscosity in rats] Inaba R, et al. **Sangyo Igaku** 1988 Sep;30(5):392–5 (Eng. Abstr.) (Jpn)

[Functions of the sympathetic–adrenomedullar system and adrenocortex in patients with vibration syndrome. Investigations of plasma and urine catecholamine and plasma cortisol during cold exposure] Kondo H.
Sangyo Igaku 1988 Jul;30(4):256–65 (Eng. Abstr.) (Jpn)

[Effect of free and immobilized terrilytin on the proliferative activity of normal hepatocytes and under physical loading and exposure to vibration] Chalyi GA, et al.
Farmakol Toksikol 1989 Mar–Apr;52(2):86–90 (Eng. Abstr.) (Rus)

[Biological equivalents of noise, local vibration, temperature and air mobility during their combined action on the human body] Gorban' VS. **Fiziol Zh** 1988 Nov–Dec;34(6):97–101 (Eng. Abstr.) (Rus)

[Osteoarticular changes in vibration disease] Ablamunets KIa, et al. **Gig Sanit** 1988 Oct;(10):24–6 (Eng. Abstr.) (Rus)

[Status and prospects of research on the problem of preventing unfavorable effects of occupational noise and vibration] Izmerov NF, et al. **Gig Sanit** 1988 Sep;(9):4–6 (Rus)

[The contribution of Prof. E. Ts. Andreeva–Galanina to the study of occupational vibration and noise (on the centenary of her birth)] Artamonova VG, et al.
Gig Tr Prof Zabol 1988 Jul;(7):1–5 (Rus)

[Reaction of the pituitary gland–adrenal cortex system of miners to vibration and noise] ChatskiiGIa, et al.
Gig Tr Prof Zabol 1988 Dec;(12):52–3 (Rus)

[The combined effect on the human body of general and local vibration, noise and work stress characteristic of the work sites of agricultural equipment operators] Cherniuk VI, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):47–8 (Rus)

[Roentgenologic diagnosis of osteoporotic changes of the bone structure in persons occupationally exposed to vibration] Druzhinin VN, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):12–5 (Eng. Abstr.) (Rus)

[The most important aspects of preventing noise and vibration–induced pathology in coal mines] Kolganov AV, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):22–4 (Eng. Abstr.) (Rus)

[Brain function and cerebral and peripheral circulation in vibration–induced disease from exposure to local vibration] Lipenetskaia TD, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):42–4 (Rus)

[Treatment of vibration–induced disease with corinfar] Sukharevskaia TM, et al. **Gig Tr Prof Zabol** 1989;(4):37–9 (Eng. Abstr.) (Rus)

[Changes in the nervous system from combined exposure to vibration and hyperbaric oxygenation] Nenashev AA, et al. **Nerv Sist** 1988;27:87–92 (Rus)

[Clinical aspects of occupational pathology caused by noise and vibration] Tarasova LA, et al. **Ter Arkh** 1988; 60(9):84–7 (15 ref.) (Eng. Abstr.) (Rus)

[Characteristics of the development of neurosensory hearing loss caused by noise and vibration] Pankova VB, et al.
Vestn Otorinolaringol 1988 May–Jun;(3):63–7 (Eng. Abstr.) (Rus)

DIAGNOSTIC USE

The effects of vibratory acoustic stimulation on baseline fetal heart rate in term pregnancy. Devoe LD, et al.
Am J Obstet Gynecol 1989 May;160(5 Pt 1):1086–90

THERAPEUTIC USE

Effect of chest wall oscillation on mucus clearance: comparison of two vibrators. Rubin EM, et al.
Pediatr Pulmonol 1989;6(2):122–6

[Therapeutic methods for continuous joint movement] Hämäläinen O, et al. **Duodecim** 1989;105(4):335–9 (34 ref.) (Fin)

[Vibrations in deafness and psychosis] Gayda M, et al.
Ann Med Psychol (Paris) 1988 Jul–Aug;146(8):773–6 (Eng. Abstr.) (Fre)

[Resonance stimulation of regional ventilation of the lungs by sound vibration in the prevention of acute respiratory insufficiency] Bentsianov AD, et al. **Probl Tuberk** 1989; (2):61–5 (Rus)

[Vibration as a therapeutic factor and its use in urology] Bykovskiĭ IaA. **Urol Nefrol (Mosk)** 1989 Mar–Apr; (2):57–64 (143 ref.) (Rus)

[A method of stabilizing auditory thresholds in patients with adhesive otitis media after stapedoplasty] Dmitriev NS, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):17–20 (Eng. Abstr.) (Rus)

[Thermovibrotherapy in the combined rehabilitation of children with a history of acute pneumonia] Kreĭmer AIa, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb; (1):43–5 (Eng. Abstr.) (Rus)

[Determination of the optimal frequency for therapeutic vibration] Rubikas RA, et al.
Vopr Kurortol Fizioter Lech Fiz Kult 1988 Nov–Dec; (6):10–2 (Eng. Abstr.) (Rus)

[Vibroacoustic treatment of infants with colic has no effect] Danielsson B, et al. **Lakartidningen** 1989 May 24; 86(21):1985–6 (Swe)

[Vibro–acoustic treatment of colic in 3–month–old infants—questions on risks and marketing] Eckerberg B. **Lakartidningen** 1988 Sep 14;85(37):2938–40 (Swe)

[Vibroacoustic treatment of infantile colic is effective] Rosén KG. **Lakartidningen** 1989 Jun 28;86(26–27):2436 (Swe)

VIBRIO

ANALYSIS

Detection of Vibrio vulnificus cytolysin in V. vulnificus–infected mice. Gray LD, et al. **Toxicon** 1989; 27(4):439–64

CLASSIFICATION

Study of Vibrio anguillarum strains from different sources with emphasis on ecological and pathobiological properties. Larsen JL, et al. **Appl Environ Microbiol** 1988 Sep; 54(9):2264–7

CAMP–like phenomena of Vibrios. Köhler W.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Nov; 270(1–2):35–40

ENZYMOLOGY

Interaction between luciferases from various species of bioluminescent bacteria and the yellow fluorescent protein of Vibrio fischeri strain Y–1. Daubner SC, et al.
Biochem Biophys Res Commun 1989 Jun 30;161(3):1191–8

Phosphoenolpyruvate carboxykinase from the moderate halophile Vibrio costicola. Purification, physicochemical properties and the effect of univalent–cation salts. Salvarrey MS, et al. **Biochem J** 1989 May 15;260(1):221–30

Random and site–directed mutagenesis of bacterial luciferase: investigation of the aldehyde binding site. Chen LH, et al. **Biochemistry** 1989 Mar 21;28(6):2684–9

Dynamic fluorescence properties of bacterial luciferase intermediates. Lee J, et al. **Biochemistry** 1988 Jun 28; 27(13):4862–70

Bioluminescence emission of bacterial luciferase with 1–deaza–FMN. Evidence for the noninvolvement of N(1)–protonated flavin species as emitters. Kurfürst M, et al. **Eur J Biochem** 1989 May 1;181(2):453–7

Comparison of L–asparaginase activity in different species of Vibrio. Dey SK, et al. **Indian J Med Res** 1988 Nov; 88:398–403

Inhibition of Vibrio harveyi bioluminescence by cerulenin: in vivo evidence for covalent modification of the reductase enzyme involved in aldehyde synthesis. Byers DM, et al. **J Bacteriol** 1989 Jul;171(7):3866–71

N,N'–diacetylchitobiase of Vibrio harveyi. Primary structure, processing, and evolutionary relationships. Soto–Gil RW, et al. **J Biol Chem** 1989 Sep 5;264(25):14778–83

Immunogold labeling of luciferase in the luminous bacterium Vibrio harveyi after fast–freeze fixation and different freeze–substitution and embedding procedures. Nicolas MT, et al. **J Histochem Cytochem** 1989 May;37(5):663–74

GENETICS

Virulence studies based on plasmid profiles of the fish pathogen Vibrio salmonicida. Wiik R, et al.
Appl Environ Microbiol 1989 Apr;55(4):819–25

Relationships between plasmids and phenotypes of presumptive strains of Vibrio anguillarum isolated from different fish species. Wiik R, et al.
Appl Environ Microbiol 1989 Apr;55(4):826–31

The nucleotide sequence of the luxE gene of Vibrio harveyi and a comparison of the amino acid sequences of the acyl–protein synthetases from V. harveyi and V. fischeri. Johnston TC, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):93–101

Expression of bacterial luciferase genes from Vibrio harveyi in Bacillus subtilis and in Escherichia coli. Karp M.
Biochim Biophys Acta 1989 Jan 23;1007(1):84–90

Nucleotide sequence of the Vibrio alginolyticus calcium–dependent, detergent–resistant alkaline serine exoprotease A. Deane SM, et al. **Gene** 1989;76(2):281–8

A plasmid vector and quantitative techniques for the study of transcription termination in Escherichia coli using bacterial luciferase. Peabody DS, et al. **Gene** 1989 Feb 20; 75(2):289–96

Requirement for autoinducer in transcriptional negative autoregulation of the Vibrio fischeri luxR gene in Escherichia coli. Dunlap PV, et al. **J Bacteriol** 1989 Jun; 171(6):3549–52

Establishment of gene transfer systems for and construction of the genetic map of a marine Vibrio strain. Ichige A, et al. **J Bacteriol** 1989 Apr;171(4):1825–34

Identification of a locus controlling expression of luminescence genes in Vibrio harveyi. Martin M, et al.
J Bacteriol 1989 May;171(5):2406–14

Identification of polypeptides encoded by cloned pJM1 iron uptake DNA isolated from Vibrio anguillarum 775. Singer JT, et al. **J Bacteriol** 1989 May;171(5):2293–302

Purification and some properties of a chloramphenicol acetyltransferase mediated by plasmids from Vibrio anguillarum. Masuyoshi S, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):131–5

The transcription of bacterial luminescence is regulated by sigma 32. Ulitzur S, et al. **J Biolumin Chemilumin** 1988 Apr–Jun;2(2):81–93

Characterization of Vibrio metschnikovii and Vibrio gazogenes by DNA–DNA hybridization and phenotype. Farmer JJ 3d, et al. **J Clin Microbiol** 1988 Oct; 26(10):1993–2000

Plasmids in Vibrio salmonicida isolated from salmonids with hemorrhagic syndrome (Hitra disease). Sørum H, et al.
J Clin Microbiol 1988 Sep;26(9):1679–83

Nucleotide sequences of 5S ribosomal RNAs from three marine eubacteria: Shewanella hanedai, Alteromonas colwelliana and Vibrio mediterranei. Ortiz–Conde BA, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4881

Lux C, D and E genes of the Vibrio fischeri luminescence operon code for the reductase, transferase, and synthetase enzymes involved in aldehyde biosynthesis. Boylan M, et al. **Photochem Photobiol** 1989 May;49(5):681–8

Identification of the operator of the lux regulon from the Vibrio fischeri strain ATCC7744. Devine JH, et al.
Proc Natl Acad Sci U S A 1989 Aug;86(15):5688–92

Bacterial luciferase alpha beta fusion protein is fully active as a monomer and highly sensitive in vivo to elevated temperature. Escher A, et al.
Proc Natl Acad Sci U S A 1989 Sep;86(17):6528–32

Regulation of the iron uptake system in Vibrio anguillarum: evidence for a cooperative effect between two transcriptional activators. Salinas PC, et al.
Proc Natl Acad Sci U S A 1989 May;86(10):3529–33

The cloning and expression of transfer RNA gene cluster of Vibrio eltor phage e4. Chattopadhyay S, et al.
Virology 1989 Jul;171(1):114–9

[Auxotrophic mutants of cholera and nonagglutinating vibrios and a method of their determination] Vallamatov ST, et al. **Lab Delo** 1988;(6):52–4 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

Ecology of Vibrio mimicus in aquatic environments. Chowdhury MA, et al. **Appl Environ Microbiol** 1989 Aug; 55(8):2073–8

Survival of Vibrio anguillarum and Vibrio salmonicida at different salinities. Hoff KA. **Appl Environ Microbiol** 1989 Jul;55(7):1775–86

Occurrence and distribution of Vibrio spp., Listonella spp., and Clostridium botulinum in the Seto Inland Sea of Japan. Venkateswaran K, et al. **Appl Environ Microbiol** 1989 Mar; 55(3):559–67

Cytolytic toxins of Vibrio vulnificus and Vibrio damsela. Kreger AS, et al. **Methods Enzymol** 1988;165:176–89

Thermostable direct hemolysin of Vibrio parahaemolyticus. Takeda Y. **Methods Enzymol** 1988;165:189–93

IMMUNOLOGY

Monoclonal antibodies against surface antigens of Vibrio anguillarum serogroup 02. Svendsen I, et al.

Acta Vet Scand 1988;29(3–4):363–8

Isolation and identification of 3-deoxy-D-threo-hexulosonic acid as a constituent of the lipopolysaccharide of Vibrio parahaemolyticus serotypes O7 and O12. Kondo S, et al. Carbohydr Res 1989 Jun 1;188:97–104

Effects of divalent cations and saccharides on Vibrio metschnikovii cytolysin-induced hemolysis of rabbit erythrocytes. Miyake M, et al. Infect Immun 1989 Jan; 57(1):158–63

Coagglutination of Vibrio cholerae, Vibrio mimicus, and Vibrio vulnificus with anti-flagellar monoclonal antibody. Simonson JG, et al. J Clin Microbiol 1988 Oct; 26(10):1962–6

Chemiluminescence of rainbow trout (Salmo gairdneri) phagocytes and factors affecting their response. Yamada F, et al. Nippon Juigaku Zasshi 1988 Oct;50(5):1092–8

ISOLATION & PURIFICATION

Isolation from a coastal fish of Vibrio hollisae capable of producing a hemolysin similar to the thermostable direct hemolysin of Vibrio parahaemolyticus. Nishibuchi M, et al. Appl Environ Microbiol 1988 Aug;54(8):2144–6

Identification of Vibrio anguillarum in fish by using partial 16S rRNA sequences and a specific 16S rRNA oligonucleotide probe. Rehnstam AS, et al. Appl Environ Microbiol 1989 Aug;55(8):1907–10

Isolation of Vibrio mimicus from a patient with gastroenteritis in Belgium [letter] Van den Abeele AM, et al. Eur J Clin Microbiol Infect Dis 1989 Jan;8(1):86–7

Response of enteric luminous bacteria to environmental conditions in the gut of the fish. Ramesh A, et al. J Appl Bacteriol 1989 Jun;66(6):529–33

Septicaemia caused by Vibrio vulnificus. Chagla AH, et al. J Infect 1988 Sep;17(2):135–8

Halophilic Vibrio spp. associated with hard clams (Mercenaria spp.) from the Calabar river estuary. Utsalo SJ, et al. Trans R Soc Trop Med Hyg 1988;82(2):327–9

[The first isolation of Vibrio alginolyticus from samples which caused food poisoning] Ji SP. Chung Hua Yu Fang I Hsueh Tsa Chih 1989 Mar;23(2):71–3 (Eng. Abstr.) (Chi)

[Species of the genus Vibrio associated with marine products from Arachon Bay] Urdaci MC, et al. Ann Inst Pasteur Microbiol 1988 May-Jun;139(3):351–62 (Eng. Abstr.) (Fre)

[Isolation of halophilic vibrios from seawater of the Palermo coastline used for bathing] Oliveri R, et al. Nuovi Ann Ig Microbiol 1987 May-Aug;38(3–4):181–91 (Eng. Abstr.) (Ita)

METABOLISM

Comparison of hemolysins of Vibrio cholerae non-O1 and Vibrio hollisae with thermostable direct hemolysin of Vibrio parahaemolyticus. Yoh M, et al. Can J Microbiol 1988 Dec;34(12):1321–4

Synthesis of glycoconjugates derived from various lipopolysaccharides of the Vibrionaceae family. Banoub JH, et al. Eur J Biochem 1989 Feb 15;179(3):651–7

Elongation of exogenous fatty acids by the bioluminescent bacterium Vibrio harveyi. Byers DM. J Bacteriol 1989 Jan; 171(1):59–64

In vitro protein synthesis by the moderate halophile Vibrio costicola: site of action of Cl- ions. Choquet CG, et al. J Bacteriol 1989 Feb;171(2):880–6

Regulation of luminescence by cyclic AMP in cya-like and crp-like mutants of Vibrio fischeri. Dunlap PV. J Bacteriol 1989 Feb;171(2):1199–202

Roles of the respiratory Na+ pump in bioenergetics of Vibrio alginolyticus. Tokuda H, et al. J Biochem (Tokyo) 1988 Apr;103(4):650–5

A study on Na+ -coupled oxidative phosphorylation: ATP formation supported by artificially imposed delta pNa and delta pK in Vibrio alginolyticus cells. Dibrov PA, et al. J Bioenerg Biomembr 1989 Jun;21(3):347–57

O-antigenic lipopolysaccharides isolated from a marine Vibrio, bio-serogroup 1875, possessing an antigenic factor in common with O1 Vibrio cholerae. Haishima Y, et al. J Gen Microbiol 1988 Jul;134 (Pt 7):1827–33

A comparative study of the sugar composition of lipopolysaccharides isolated from Vibrio cholerae, 'Vibrio albensis' and Vibrio metschnikovii. Kondo S, et al. J Gen Microbiol 1988 Jun;134 (Pt 6):1699–705

Synthesis of membrane and periplasmic proteins during starvation of a marine Vibrio sp. Nyström T, et al. J Gen Microbiol 1988 Jun;134 (Pt 6):1645–51

Studies on the factors affecting the haemolysin production of Vibrio mimicus isolated from clinical and environmental sources. Hossain A, et al. Trans R Soc Trop Med Hyg 1988; 82(2):337–9

[Production of antibiotic substances by natural variants of the marine bacterium Vibrio Fischeri] Baranova NA, et al. Antibiot Khimioter 1989 Jan;34(1):7–10 (Eng. Abstr.) (Rus)

PATHOGENICITY

The human pathogenic vibrios—a public health update with environmental perspectives. West PA. Epidemiol Infect 1989 Aug;103(1):1–34 (259 ref.)

Virulence of Vibrio vulnificus strains isolated from seafoods. Malathi GR, et al. Indian J Med Res 1989 May;89:128–31

Extracellular and surface-bound biological activities of Vibrio fluvialis, Vibrio furnissii and related species. Myatt DC, et al. Med Microbiol Immunol (Berl) 1989; 178(5):279–87

Role of the protease in the permeability enhancement by Vibrio vulnificus. Miyoshi S, et al. Microbiol Immunol 1988; 32(10):1025–32

Enterotoxigenic substance and other toxins produced by Vibrio fluvialis and Vibrio furnisii. Chikahira M, et al. Nippon Juigaku Zasshi 1988 Aug;50(4):865–73

[Morphologic characterization of the pathogenic action of cholera and nonagglutinating vibrios] Kolesnik VS, et al. Zh Mikrobiol Epidemiol Immunobiol 1988 Jul;(7):93–7 (50 ref.) (Rus)

PHYSIOLOGY

Chemotaxis to chitin oligosaccharides by Vibrio furnissii, a chitinivorous marine bacterium. Bassler B, et al. Biochem Biophys Res Commun 1989 Jun 30;161(3):1172–6

Adherence targets of Vibrio parahaemolyticus in human small intestines. Yamamoto T, et al. Infect Immun 1989 Aug;57(8):2410–9

Iron regulation of swarmer cell differentiation of Vibrio parahaemolyticus. McCarter L, et al. J Bacteriol 1989 Feb; 171(2):731–6

Long-term preservation of active luminous bacteria by lyophilization. Janda I, et al. J Biolumin Chemilumin 1989 Jan-Mar;3(1):27–9

Survival of Vibrio parahaemolyticus in two gastropod molluscs, Clithon retropictus and Nerita albicilla. Kumazawa NH, et al. Nippon Juigaku Zasshi 1988 Aug; 50(4):918–24

ULTRASTRUCTURE

Basal-body-associated disks are additional structural elements of the flagellar apparatus isolated from Wolinella succinogenes. Kupper J, et al. J Bacteriol 1989 May; 171(5):2803–10

Detection of piluslike structures on clinical and environmental isolates of Vibrio vulnificus. Gander RM, et al. J Clin Microbiol 1989 May;27(5):1015–21

VIBRIO CHOLERAE

see related
CHOLERA TOXIN

ANALYSIS

Isolation and chemical analysis of 7-O-(2-amino-2-deoxy-alpha-D-glucopyranosyl)-L-glycero-D-manno-heptose as a constituent of the lipopolysaccharides of the UDP-galactose epimerase-less mutant J-5 of Escherichia coli and Vibrio cholerae. Kaca W, et al. Carbohydr Res 1988 Aug 15;179:289–99

Production and partial purification of a fluid-accumulating factor of non-O1 Vibrio cholerae. Gyobu Y, et al. Microbiol Immunol 1988;32(6):565–77

Rapid preparation of samples for compositional sugar analysis of the "degraded polysaccharide" fraction of lipopolysaccharides from Vibrio cholerae. Kondo S, et al. Microbiol Immunol 1988;32(9):907–15

CLASSIFICATION

Monoclonal antibodies to Vibrio cholerae O1 serotype inaba. Ito T, et al. J Clin Microbiol 1988 Nov;26(11):2367–70

Sugar composition of the polysaccharide portion of lipopolysaccharides isolated from non-O1 Vibrio cholerae O2 to O41, O44, and O68. Kondo S, et al. Microbiol Immunol 1989;33(8):641–8

Non-O:1 Vibrio cholerae bacteremia [letter] Rabadan PM, et al. Rev Infect Dis 1989 Jul-Aug;11(4):667

[Bacteriologic characteristics of 25 strains of Vibrio cholerae, biotype eltor isolated in Mali] Bougoudogo F, et al. Bull Soc Pathol Exot Filiales 1988;81(3):286–92 (Eng. Abstr.) (Fre)

[Interserovar antitoxic immunity to Vibrio cholerae toxins] Belov LG, et al. Zh Mikrobiol Epidemiol Immunobiol 1988 Jul;(7):43–6 (Eng. Abstr.) (Rus)

CYTOLOGY

Vibrio cholerae O1 adherence to villi and lymphoid follicle epithelium: in vitro model using formalin-treated human small intestine and correlation between adherence and cell-associated hemagglutinin levels. Yamamoto T, et al. Infect Immun 1988 Dec;56(12):3241–50

DRUG EFFECTS

Epidemiology of antimicrobial resistant cholera in Kenya and East Africa. Finch MJ, et al. Am J Trop Med Hyg 1988 Nov;39(5):484–90

R plasmids in environmental Vibrio cholerae non-O1 strains. Amaro C, et al. Appl Environ Microbiol 1988 Nov; 54(11):2771–6

Factors affecting the colonization of isolated rabbit intestinal epithelial cells by Vibrio cholerae 01 in vitro. Sasmal D, et al. Can J Microbiol 1989 Jun;35(6):642–5

Inhibition of enteropathogenic bacteria by human milk whey in vitro. Dolan SA, et al. Pediatr Infect Dis J 1989 Jul; 8(7):430–6

ENZYMOLOGY

Purification and characterization of a protease produced by Vibrio cholerae non-O1 and comparison with a protease of V. cholerae O1. Honda T, et al. Infect Immun 1989 Sep; 57(9):2799–803

A zymovar analysis of Vibrio cholerae isolated in Australia. Desmarchelier PM, et al. Trans R Soc Trop Med Hyg 1988; 82(6):914–7

[A minimal synthetic medium for determining cystine desulfohydrolase in Vibrio cholerae] Naumshina MS, et al. Lab Delo 1988;(9):62–3 (Eng. Abstr.) (Rus)

[Enzyme activity of induced auxotrophic mutants of El Tor Vibrio cholerae] Ognevskil Pla, et al. Lab Delo 1989; (6):61–3 (Eng. Abstr.) (Rus)

[The enzyme activity of the main catabolic metabolism pathways in L-form and typical-form Vibrio cholerae cells] Golubkova LA, et al. Mikrobiol Zh 1988 May-Jun; 50(3):64–8 (Eng. Abstr.) (Rus)

[Characteristics of the protease activity of Vibrio cholerae strains and mutants with various biological properties] Uraleva VS, et al. Zh Mikrobiol Epidemiol Immunobiol 1988 Sep;(9):7–10 (Eng. Abstr.) (Rus)

GENETICS

Campylobacter jejuni chromosomal sequences that hybridize to Vibrio cholerae and Escherichia coli LT enterotoxin genes. Calva E, et al. Gene 1989 Feb 20;75(2):243–51

Chromosomal transfer and in vivo cloning of genes in Vibrio cholerae using RP4::mini-Mu. Srivastava R, et al. Gene 1989 Feb 20;75(2):253–9

Characterization of the Vibrio cholerae ToxR regulon: identification of novel genes involved in intestinal colonization [published erratum appears in Infect Immun 1989 Feb;57(2):660] Peterson KM, et al. Infect Immun 1988 Nov;56(11):2822–9

Identification of toxS, a regulatory gene whose product enhances toxR-mediated activation of the cholera toxin promoter. Miller VL, et al. J Bacteriol 1989 Mar; 171(3):1288–93

Broad-host-range vectors for delivery of TnphoA: use in genetic analysis of secreted virulence determinants of Vibrio cholerae. Taylor RK, et al. J Bacteriol 1989 Apr; 171(4):1870–8

Molecular epidemiology of Vibrio cholerae in Hong Kong. Yam WC, et al. J Clin Microbiol 1989 Aug;27(8):1900–2

A molecular epidemiological study of Vibrio cholerae in Australia. Desmarchelier PM, et al. Med J Aust 1989 Jun 5;150(11):631–4

Mapping of chromosomal loci associated with lipopolysaccharide synthesis and serotype specificity in Vibrio cholerae 01 by transposon mutagenesis using Tn5 and Tn2680. Ward HM, et al. Mol Gen Genet 1989 Aug; 218(2):367–70

Extracellular proteins of Vibrio cholerae: nucleotide sequence of the structural gene (hlyA) for the haemolysin of the haemolytic El Tor strain 017 and characterization of the hlyA mutation in the non-haemolytic classical strain 569B. Alm RA, et al. Mol Microbiol 1988 Jul;2(4):481–8

Lack of umuDC gene functions in Vibrio cholerae cells. Ghosh SK, et al. Mutat Res 1989 Jan;210(1):149–56

Cloning and characterization of mutL and mutS genes of Vibrio cholerae: nucleotide sequence of the mutL gene. Bera TK, et al. Nucleic Acids Res 1989 Aug 11; 17(15):6241–51

Recombinant system for overexpression of cholera toxin B subunit in Vibrio cholerae as a basis for vaccine development. Sanchez J, et al. Proc Natl Acad Sci U S A 1989 Jan;86(2):481–5

The expression of enterotoxin A-B+ gene of V. cholerae in E. coli. Ma QJ, et al. Sci China [B] 1989 Feb;32(2):186–92

[Auxotrophic mutants of cholera and nonagglutinating vibrios and a method of their determination] Vallamatov ST, et al. Lab Delo 1988;(6):52–4 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

In situ survival of Vibrio cholerae and Escherichia coli in a tropical rain forest watershed. Pérez-Rosas N, et al. Appl Environ Microbiol 1989 Feb;55(2):495–9

Vibrio cholerae expresses cell surface antigens during intestinal infection which are not expressed during in vitro culture. Jonson G, et al. Infect Immun 1989 Jun; 57(6):1809–15

Bacterial growth and toxin production in ileostomy effluents. Ala Aldeen DA, et al. J Med Microbiol 1989 Apr; 28(4):287–90

Effects of salinity on the survival of non-O1 Vibrio cholerae under environments of low temperature. Uchiyama H, et al. Kansenshogaku Zasshi 1989 Feb;63(2):138–44

Production and purification of cholera toxin. Mekalanos JJ. Methods Enzymol 1988;165:169–75

An adaptive response of Vibrio cholerae strain OGAWA 154 to furazolidone. Bhattacharya R. Mutat Res 1989 Jan-Feb;225(1-2):43–7

[The population composition of cultures of Vibrio cholerae strain 569 B Pakistan in relation to the manufacture of a cholera vaccine (choleragen-anatoxin+O-antigen)] Lobanov VV, et al. Zh Mikrobiol Epidemiol Immunobiol 1988 Aug;(8):73–6 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Bacterial characteristics and follicle surface structure: their roles in Peyer's patch uptake and transport of Vibrio cholerae. Owen RL, et al. **Adv Exp Med Biol** 1988; 237:705–15

Bovine lactogenic immunity against cholera toxin-related enterotoxins and Vibrio cholerae outer membranes. Boesman-Finkelstein M, et al. **Infect Immun** 1989 Apr; 57(4):1227–34

Human immune response to Vibrio cholerae O1 whole cells and isolated outer membrane antigens. Richardson K, et al. **Infect Immun** 1989 Feb;57(2):495–501

Coagglutination of Vibrio cholerae, Vibrio mimicus, and Vibrio vulnificus with anti-flagellar monoclonal antibody. Simonson JG, et al. **J Clin Microbiol** 1988 Oct; 26(10):1962–6

Expression and detection of different biotype-associated cell-bound haemagglutinins of Vibrio cholerae O1. Jonson G, et al. **J Gen Microbiol** 1989 Jan;135 (Pt 1):111–20

Immunobiological relationships among new cholera toxins produced by CT gene-negative strains of Vibrio cholerae O1. Saha S, et al. **J Med Microbiol** 1989 Jan;28(1):33–7

Identification of some antigenically related outer-membrane proteins of strains of Vibrio cholerae O1 and non-O1 serovars involved in intestinal adhesion and the protective role of antibodies to them. Sengupta D, et al. **J Med Microbiol** 1989 May;29(1):33–9

Cellular immunity after oral administration with V. cholerae. Kazuno Y. **Kansenshogaku Zasshi** 1988 Mar;62(3):259–65

Priming and boosting of the rabbit intestinal immune system with live and killed, smooth and rough Vibrio cholerae cells. Jansen WH, et al. **Microb Pathog** 1988 Jan;4(1):21–6

The maltose-inducible 43 kDa major outer membrane protein in Vibrio cholerae is immunogenic and common to different isolates. Lång HA, et al. **Microb Pathog** 1988 Sep; 5(3):169–75

Immunoglobulins in bile and serum of the rabbit associated with protection after Vibrio cholerae infection and vaccination. Rijpkema SG, et al. **Microb Pathog** 1987 Nov; 3(5):365–75

The development of a bivalent vaccine against diarrhoeal disease. Forrest BD. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):449–57 (26 ref.)

Reactogenicity and immunogenicity of oral cholera vaccine in Thai volunteers. Migasena S, et al. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):423–8

Infection and immunity to Vibrio cholerae, Salmonella typhimurium and Escherichia coli in a rabbit model. Guinée PA, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):260–9

Antigenic analysis of Vibrio cholerate O1 by crossed immunoelectrophoresis. Kabir S. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):361–72

[Vaccination against cholera: what prospects?] Pierre P, et al. **Ann Soc Belg Med Trop** 1988 Jun;68(2):83–93 (68 ref.) (Fre)

[Characteristics of immunoglobulins specific for LPS and lipid A of Aeromonas sobria and non O1 Vibrio cholerae] Kuźniewski P. **Med Dosw Mikrobiol** 1988;40(3):142–8 (Eng. Abstr.) (Pol)

[Immunogenic and antigenic properties of bacterial cells, lipopolysaccharides and lipids A of Aeromonas sobria and non 01 vibrio cholerae] Kuźniewski P. **Med Dosw Mikrobiol** 1988;40(2):91–7 (Eng. Abstr.) (Pol)

[Serological cross reactions of LPS and lipid A isolated from Aeromonas sobria and non 01 Vibrio cholerae] Kuźniewski P. **Med Dosw Mikrobiol** 1988;40(3):135–41 (Eng. Abstr.) (Pol)

ISOLATION & PURIFICATION

Epidemiological patterns and incidence of bio-, sero- and phage types of Vibrio cholerae in Hyderabad, India, during 1971–1984. Rathna K, et al. **Acta Microbiol Hung** 1988; 35(3):313–22

Isolation of Vibrio cholerae from aquatic birds in Colorado and Utah. Ogg JE, et al. **Appl Environ Microbiol** 1989 Jan; 55(1):95–9

Ecology of Vibrio cholerae non-O1 and Salmonella spp. and role of zooplankton in their seasonal distribution in Fukuyama coastal waters, Japan. Venkateswaran K, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1591–8

Detection of Vibrio cholerae with monoclonal antibodies specific for serovar O1 lipopolysaccharide. Adams LB, et al. **J Clin Microbiol** 1988 Sep;26(9):1801–9

Vibrio cholerae non-serogroup O1 cystitis. Dumler JS, et al. **J Clin Microbiol** 1989 Aug;27(8):1898–9

Nontoxigenic Vibrio cholerae wound infection after exposure to contaminated lake water [letter] [published erratum appears in J Infect Dis 1989 Aug;160(2):358] Mulder GD, et al. **J Infect Dis** 1989 Apr;159(4):809–11

Rapid identification of Vibrio cholerae serotype O1 from primary isolation plates by a coagglutination test. Rahman M, et al. **J Med Microbiol** 1989 Jan;28(1):39–41

[2 hemocultures positive for Vibrio cholerae] Le Pennec MP, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):293–8 (Eng. Abstr.) (Fre)

[Incidence of cholera outbreaks in the world: distribution in the environment and imported seafoods] Minami A, et al. **Nippon Rinsho** 1989 Jan;47(1):52–7 (Jpn)

[Survey on overseas traveller's diarrhea at Narita Airport Quarantine Station—the species of bacteria isolated and the suspected countries for infection] Nakajima K, et al. **Nippon Rinsho** 1989 Jan;47(1):22–7 (Jpn)

[Environmental phages active in relation to vibrios of the non-01 group] Kudriakova TA, et al. **Lab Delo** 1988; (8):63–5 (Eng. Abstr.) (Rus)

METABOLISM

Comparison of hemolysins of Vibrio cholerae non-O1 and Vibrio hollisae with thermostable direct hemolysin of Vibrio parahaemolyticus. Yoh M, et al. **Can J Microbiol** 1988 Dec;34(12):1321–4

Neutralisation of the new cholera toxin by antiserum against crude enterotoxin of cholera toxin gene-positive Vibrio cholerae 01 in rabbit ileal loop model. Saha S, et al. **Indian J Med Res** 1989 May;89:117–20

Iron-regulated hemolysin production and utilization of heme and hemoglobin by Vibrio cholerae. Stoebner JA, et al. **Infect Immun** 1988 Nov;56(11):2891–5

Binding of Vibrio cholera toxin and the heat-labile enterotoxin of Escherichia coli to GM1, derivatives of GM1, and nonlipid oligosaccharide polyvalent ligands. Schengrund CL, et al. **J Biol Chem** 1989 Aug 5; 264(22):13233–7

Clinical isolates of Vibrio cholerae O1 not producing cholera toxin [letter] Honda S, et al. **Lancet** 1988 Dec 24–31; 2(8626–8627):1486

[Hemolysin production by Vibrio cholerae non-O1 and O1 El Tor determined by biological and immunological activities] Arakaki T, et al. **Kansenshogaku Zasshi** 1988 Sep; 62(9):792–7 (Eng. Abstr.) (Jpn)

[Dissimilation of glucose by strains of the L-form of cholera vibrio] Lomov IuM, et al. **Mikrobiol Zh** 1983 May-Jun; 45(3):42–5 (Eng. Abstr.) (Rus)

[Use of the DNA-DNA hybridization method on filters for determining the toxic potency of atypical strains of Vibrio cholerae isolated from natural sources] Demkin VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):41–5 (Eng. Abstr.) (Rus)

PATHOGENICITY

The pathogenesis and immunology of Vibrio cholerae and Bordetella pertussis. Mekalanos JJ, et al. **Antonie Van Leeuwenhoek** 1988;54(5):379–87

Toxin profiles of Vibrio cholerae non-O1 from environmental sources in Calcutta, India. Nair GB, et al. **Appl Environ Microbiol** 1988 Dec;54(12):3180–2

Nontoxigenic 01 Vibrio cholerae in Peru: a report of two cases associated with diarrhea. Batchelor RA, et al. **Diagn Microbiol Infect Dis** 1988 Jul;10(3):135–8

Toxin, toxin-coregulated pili, and the toxR regulon are essential for Vibrio cholerae pathogenesis in humans. Herrington DA, et al. **J Exp Med** 1988 Oct 1; 168(4):1487–92

Cholera and contagion [letter] Puntis JW. **Lancet** 1989 Apr 29;1(8644):969

[Toxic properties of lipopolysaccharide and lipid A of Aeromonas sobria and non 01 Vibrio cholerae] Kuźniewski P. **Med Dosw Mikrobiol** 1988;40(2):85–90 (Eng. Abstr.) (Pol)

[Evaluation of the adhesive properties of non-O1-group Vibrio cholerae isolated from people and open reservoirs] Frunze OV, et al. **Mikrobiol Zh** 1988 May-Jun;50(3):55–8 (Eng. Abstr.) (Rus)

[Effect of the cultivation conditions on the development of adhesive and hemagglutinating properties in the causative agent of cholera] Gofman EL, et al. **Mikrobiol Zh** 1988 May-Jun;50(3):58–63 (Eng. Abstr.) (Rus)

[Morphologic characterization of the pathogenic action of cholera and nonagglutinating vibrios] Kolesnik VS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jul;(7):93–7 (50 ref.) (Rus)

[Pathogenicity factors of Vibrio cholerae] Urbanovich LIa, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep; (9):105–9 (49 ref.) (Rus)

PHYSIOLOGY

Biophysical properties of the lysogenic vibrio phage 'Kappa'. Samad SA, et al. **Indian J Biochem Biophys** 1988 Oct; 25(5):450–4

Vibrio cholerae non-O1: production of cell-associated hemagglutinins and in vitro adherence to mucus coat and epithelial surfaces of the villi and lymphoid follicles of human small intestines treated with formalin. Yamamoto T, et al. **J Clin Microbiol** 1988 Oct;26(10):2018–24

Vibrio cholerae O1 adherence to human small intestinal M cells in vitro [letter] Yamamoto T, et al. **J Infect Dis** 1989 Jul;160(1):168–9

A major outer membrane protein in Vibrio cholerae is maltose-inducible. Lång HA, et al. **Microb Pathog** 1987 Aug;3(2):143–7

Hemolytic Vibrio cholerae O1 that is sensitive to Mukerjee's cholera phage IV and the phage produced by the hemolytic vibrio lysogenized with the infection of Mukerjee's cholera phage IV. Iwanaga M, et al. **Microbiol Immunol** 1989; 33(8):609–18

[Purification and characterization of Vibrio parahaemolyticus pili isolated from a patient with diarrhea: comparative studies with Vibrio cholerae O1 pili] Nakasone N, et al. **Nippon Saikingaku Zasshi** 1988 Nov;43(6):981–7 (Eng. Abstr.) (Jpn)

[The antagonistic activity of lactobacilli relative to cholera vibrios and to non-O1-group cholera vibrios in vitro] Bogdanova TF, et al. **Mikrobiol Zh** 1988 Mar-Apr; 50(2):69–72 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Morphological studies on fimbriae expressed by Vibrio cholerae 01. Hall RH, et al. **Microb Pathog** 1988 Apr; 4(4):257–65

Pili of Vibrio cholerae O1 biotype El Tor: a comparative study on adhesive and non-adhesive strains. Iwanaga M, et al. **Microbiol Immunol** 1989;33(1):1–9

VIBRIO COMMA see **VIBRIO CHOLERAE**

VIBRIO FETUS see **CAMPYLOBACTER FETUS**

VIBRIO INFECTIONS

Vibrio vulnificus and pulmonary infection [letter] Sabapathi R. **Ann Intern Med** 1988 Dec 15;109(12):988–9

Vibrio vulnificus corneal ulcer. Case reports. DiGaetano M, et al. **Arch Ophthalmol** 1989 Mar;107(3):323–4

Vibrio vulnificus infections. Burnett JW. **Cutis** 1988 Nov; 42(5):392–3

Localized and systemic infection due to Vibrio species. Hill MK, et al. **Infect Dis Clin North Am** 1987 Sep;1(3):687–707 (85 ref.)

Vibrios and Aeromonas. Holmberg SD. **Infect Dis Clin North Am** 1988 Sep;2(3):655–76 (154 ref.)

Vibrio vulnificus infection in Hawaii. Nip-Sakamoto CJ, et al. **Int J Dermatol** 1989 Jun;28(5):311–6 (26 ref.)

A case of Vibrio vulnificus infection. Ohta T, et al. **Jpn J Surg** 1988 Sep;18(5):580–7 (36 ref.)

[Acute gastroenteritis due to Vibrio parahaemolyticus. Serotypes and presentation of 4 new cases (letter)] Bartolomé RM, et al. **Med Clin (Barc)** 1989 Jan 14;92(1):38 (Spa)

[Acute gastroenteritis due to Vibrio parahaemolyticus in Spain. Presentation of 8 cases] Molero X, et al. **Med Clin (Barc)** 1989 Jan 14;92(1):1–4 (Eng. Abstr.) (Spa)

COMPLICATIONS

Vibrio vulnificus necrotizing fasciitis presenting with compartmental syndrome of the hand. Hung LK, et al. **J Hand Surg [Br]** 1988 Aug;13(3):337–9

Acute hepatic failure precipitated in a patient with subclinical liver disease by vibrionic and clostridial septicemia. Simon TP, et al. **Pathology** 1988 Apr;20(2):188–90

Vibrio sepsis in a cirrhotic patient. Jordan JH, et al. **South Med J** 1989 Jun;82(6):799–800

[Non 01 Vibrio cholerae septicemia (letter)] Moinard D, et al. **Presse Med** 1989 Apr 29;18(17):898 (Fre)

[Otitis caused by Vibrio alginolyticus] Puy H, et al. **Presse Med** 1989 May 13;18(19):985 (Fre)

EPIDEMIOLOGY

Current perspectives on the epidemiology and pathogenesis of clinically significant Vibrio spp. Janda JM, et al. **Clin Microbiol Rev** 1988 Jul;1(3):245–67 (224 ref.)

Cholera in a Pacific island. Haddock RL. **J Diarrhoeal Dis Res** 1987 Sep;5(3):181–3

[The risk of infection from the sea: Vibrionaceae] Larsen JL. **Ugeskr Laeger** 1989 Jul 3;151(27):1738–40 (25 ref.) (Eng. Abstr.) (Dan)

ETIOLOGY

Nontoxigenic Vibrio cholerae wound infection after exposure to contaminated lake water [letter] [published erratum appears in J Infect Dis 1989 Aug;160(2):358] Mulder GD, et al. **J Infect Dis** 1989 Apr;159(4):809–11

Vibrio vulnificus sepsis after eating raw oysters. Stahr B, et al. **J Ky Med Assoc** 1989 May;87(5):219–22

Toxigenic Vibrio cholerae O1 infection acquired in Colorado. **MMWR** 1989 Jan 20;38(2):19–20

Vibrio vulnificus meningitis in a boy with thalassemia after eating raw oysters. Katz BZ. **Pediatrics** 1988 Nov; 82(5):784–6

Non-O:1 Vibrio cholerae bacteremia: case report and review. Safrin S, et al. **Rev Infect Dis** 1988 Sep-Oct;10(5):1012–7 (41 ref.)

[Two case reports of septic shock due to Vibrio vulnificus with liver cirrhosis] Tateyama M, et al. **Kansenshogaku Zasshi** 1989 Feb;63(2):156–61 (Eng. Abstr.) (Jpn)

[Food poisoning caused by halophilic Vibrio parahaemolyticus] Karbyshev GL, et al. **Sov Med** 1988; (5):89–92 (Rus)

IMMUNOLOGY

Stress alters immune function and disease resistance in chinook salmon (Oncorhynchus tshawytscha). Maule AG, et al. **J Endocrinol** 1989 Jan;120(1):135–42

METABOLISM

Detection of Vibrio vulnificus cytolysin in V.

vulnificus-infected mice. Gray LD, et al. **Toxicon** 1989; 27(4):439–64

MICROBIOLOGY

The human pathogenic vibrios—a public health update with environmental perspectives. West PA. **Epidemiol Infect** 1989 Aug;103(1):1–34 (259 ref.)

Isolation of Vibrio mimicus from a patient with gastroenteritis in Belgium [letter] Van den Abeele AM, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):86–7

More on the enteropathogenic mechanisms of Plesiomonas shigelloides [letter] Fumarola D, et al. **Eur J Epidemiol** 1989 Mar;5(1):123–4

Vibrio cholerae non-serogroup O1 cystitis. Dumler JS, et al. **J Clin Microbiol** 1989 Aug;27(8):1898–9

Temporal relationship of Vibrio parahaemolyticus in patients and the environment. Kelly MT, et al. **J Clin Microbiol** 1988 Sep;26(9):1754–6

Septicaemia caused by Vibrio vulnificus. Chagla AH, et al. **J Infect** 1988 Sep;17(2):135–8

Vibrio fluvialis, an unusual pediatric enteric pathogen. Bellet J, et al. **Pediatr Emerg Care** 1989 Mar;5(1):27–8

Vibrio alginolyticus cellulitis following coral injury. Patterson TF, et al. **Yale J Biol Med** 1988 Nov–Dec; 61(6):507–12

[The first isolation of Vibrio alginolyticus from samples which caused food poisoning] Ji SP. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):71–3 (Eng. Abstr.) (Chi)

PATHOLOGY

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 41–1989. A 65-year-old man with fever, bullae, erythema, and edema of the leg after wading in brackish water. **N Engl J Med** 1989 Oct 12;321(15):1029–38

TRANSMISSION

Vibrio carchariae infection after a shark bite. Pavia AT, et al. **Ann Intern Med** 1989 Jul 1;111(1):85–6

VETERINARY

Protection of rainbow trout against vibriosis and furunculosis by the use of attenuated strains of Vibrio anguillarum. Norqvist A, et al. **Appl Environ Microbiol** 1989 Jun; 55(6):1400–5

Identification of Vibrio anguillarum in fish by using partial 16S rRNA sequences and a specific 16S rRNA oligonucleotide probe. Rehnstam AS, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1907–10

Virulence studies based on plasmid profiles of the fish pathogen Vibrio salmonicida. Wiik R, et al. **Appl Environ Microbiol** 1989 Apr;55(4):819–25

Relationships between plasmids and phenotypes of presumptive strains of Vibrio anguillarum isolated from different fish species. Wiik R, et al. **Appl Environ Microbiol** 1989 Apr;55(4):826–31

Plasmids in Vibrio salmonicida isolated from salmonids with hemorrhagic syndrome (Hitra disease). Sørum H, et al. **J Clin Microbiol** 1988 Sep;26(9):1679–83

VIBRIO PARAHAEMOLYTICUS

Effect of ionizing radiation on macrophage stimulating property of Vibrio parahaemolyticus lipopolysaccharide. Bandekar JR, et al. **Indian J Exp Biol** 1988 Sep;26(9):661–4

ANALYSIS

Comparison of Vibrio parahaemolyticus grown in estuarine water and rich medium. Pace J, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1877–87

CLASSIFICATION

Serovars of Vibrio parahaemolyticus. Aldová E. **J Hyg Epidemiol Microbiol Immunol** 1989;33(2):219–28

[Demonstration of new K-antigens in strains of Vibrio parahaemolyticus isolated from patients with traveller's diarrhea] Ishibashi M, et al. **Nippon Saikingaku Zasshi** 1988 May;43(3):673–5 (Eng. Abstr.) (Jpn)

[Acute gastroenteritis due to Vibrio parahaemolyticus. Serotypes and presentation of 4 new cases (letter)] Bartolomé RM, et al. **Med Clin (Barc)** 1989 Jan 14;92(1):38 (Spa)

ENZYMOLOGY

A respiratory-driven and an artificially driven ATP synthesis in mutants of Vibrio parahaemolyticus lacking H+-translocating ATPase. Sakai Y, et al. **Biochim Biophys Acta** 1989 Mar 23;973(3):450–6

Purification and characterization of membrane-bound 5'-nucleotidase of Vibrio parahaemolyticus. Itami H, et al. **J Biochem (Tokyo)** 1989 May;105(5):785–9

Cloning and expression of the 5'-nucleotidase gene of Vibrio parahaemolyticus in Escherichia coli and overproduction of the enzyme. Sakai Y, et al. **J Biochem (Tokyo)** 1989 May;105(5):841–6

GENETICS

Cloning and nucleotide sequence of the gene (trh) encoding the hemolysin related to the thermostable direct hemolysin of Vibrio parahaemolyticus. Nishibuchi M, et al. **Infect Immun** 1989 Sep;57(9):2691–7

Plasmid patterns, serotyping and Kanagawa phenomenon of Vibrio parahaemolyticus isolates from man, water and fish in Calcutta, India. Mitra U, et al. **J Diarrhoeal Dis Res** 1987 Sep;5(3):171–4

Comparison of the nucleotide sequences of the genes for the thermostable direct hemolysin and the thermolabile hemolysin from Vibrio parahaemolyticus. Taniguchi H, et al. **Microb Pathog** 1986 Oct;1(5):425–32

Specificity of transposition of Tn7 in Vibrio parahaemolyticus. Thomasian SK, et al. **Plasmid** 1989 Jul; 22(1):82–5

GROWTH & DEVELOPMENT

Effect of pH, NaCl, temperature and time of incubation on the probability of Vibrio parahaemolyticus growth initiation in a model broth. Lin JF. **Acta Vet Scand Suppl** 1988;84:283–6

IMMUNOLOGY

Purification of a TDH-related hemolysin produced by a Kanagawa phenomenon-negative clinical isolate of Vibrio parahaemolyticus 06: K46. Honda T, et al. **FEMS Microbiol Lett** 1989 Jan 15;48(2):241–5

ISOLATION & PURIFICATION

Vibrio parahaemolyticus and other halophilic vibrios associated with seafood in Hong Kong. Chan KY, et al. **J Appl Bacteriol** 1989 Jan;66(1):57–64

Temporal relationship of Vibrio parahaemolyticus in patients and the environment. Kelly MT, et al. **J Clin Microbiol** 1988 Sep;26(9):1754–6

[Absence of Vibrio parahaemolyticus in raw fish] Fernández Rendón E, et al. **Rev Latinoam Microbiol** 1988 Apr–Jun; 30(2):91–6 (Eng. Abstr.) (Spa)

[Prevalence of Vibrio parahaemolyticus in seafood from restaurants in the city of Mérida, Yucatán] Franco-Monsreal J, et al. **Salud Publica Mex** 1989 May–Jun;31(3):314–25 (Eng. Abstr.) (Spa)

METABOLISM

Comparison of hemolysins of Vibrio cholerae non-O1 and Vibrio hollisae with thermostable direct hemolysin of Vibrio parahaemolyticus. Yoh M, et al. **Can J Microbiol** 1988 Dec;34(12):1321–4

Production of monoclonal antibodies against thermostable direct hemolysin of Vibrio parahaemolyticus and application of the antibodies for enzyme-linked immunosorbent assay. Honda T, et al. **Med Microbiol Immunol (Berl)** 1989;178(5):245–53

Activities and properties of putrescine-biosynthetic enzymes in Vibrio parahaemolyticus. Yamamoto S, et al. **Microbiol Immunol** 1988;32(7):675–87

Characterization of putrescine production in nongrowing Vibrio parahaemolyticus cells in response to external osmolality. Yamamoto S, et al. **Microbiol Immunol** 1989; 33(1):11–21

PHYSIOLOGY

[Purification and characterization of Vibrio parahaemolyticus pili isolated from a patient with diarrhea: comparative studies with Vibrio cholerae O1 pili] Nakasone N, et al. **Nippon Saikingaku Zasshi** 1988 Nov;43(6):981–7 (Eng. Abstr.) (Jpn)

ULTRASTRUCTURE

Production of pili on Vibrio parahaemolyticus. Honda T, et al. **Can J Microbiol** 1988 Nov;34(11):1279–81

VIBRIONACFAE

ANALYSIS

Synthesis of glycoconjugates derived from various lipopolysaccharides of the Vibrionaceae family. Banoub JH, et al. **Eur J Biochem** 1989 Feb 15;179(3):651–7

CLASSIFICATION

[The IP 85 identification program for G-intestinal rods] Zampach P, et al. **Cesk Epidemiol Mikrobiol Immunol** 1988 Nov;37(6):336–9 (Eng. Abstr.) (Cze)

ENZYMOLOGY

Bioluminescent microassay of various metabolites using bacterial luciferase co-immobilized with multienzyme systems. Ugarova NN, et al. **Anal Biochem** 1988 Sep; 173(2):221–7

IMMUNOLOGY

Oral cholera vaccines containing B-subunit-killed whole cells and killed whole cells only. I. Cross-reacting antigens of members of family Vibrionaceae and the vaccines. Cižnár I, et al. **Vaccine** 1989 Apr;7(2):111–6

ISOLATION & PURIFICATION

Case report of Plesiomonas shigelloides-associated persistent dysentery and pseudomembranous colitis. van Loon FP, et al. **J Clin Microbiol** 1989 Aug;27(8):1913–5

Aquarium-associated Plesiomonas shigelloides infection—Missouri. **MMWR** 1989 Sep 15;38(36):617–9

[Plesiomonas for imported diarrheal disease] Tsukamoto T, et al. **Nippon Rinsho** 1989 Jan;47(1):58–62 (Jpn)

METABOLISM

Production of a heat stable enterotoxin by Plesiomonas shigelloides. Matthews BG, et al. **Microb Pathog** 1988 Sep; 5(3):207–13

[Biochemical activity and sensitivity to selected antibiotics of Plesiomonas shigelloides isolated from surface water] Kaznowski A. **Med Dosw Mikrobiol** 1988;40(3):130–4 (Eng. Abstr.) (Pol)

PATHOGENICITY

Aeromonas and Plesiomonas as etiological agents. Khardori N, et al. **Annu Rev Microbiol** 1988;42:395–419 (150 ref.)

More on the enteropathogenic mechanisms of Plesiomonas shigelloides [letter] Fumarola D, et al. **Eur J Epidemiol** 1989 Mar;5(1):123–4

Plesiomonas shigelloides septicemia and meningitis in a newborn. Waecker NJ, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):877–9

VIBRISSAE

Critical period-dependent alterations of the transient body image in the rodent cerebral cortex. Cooper NG, et al. **Brain Res** 1989 Jun 5;489(1):167–76

ANALYSIS

Membrane heterogeneity in sensory receptors of rat vibrissae: Merkel receptors differ from other nerve endings. Byers MR, et al. **Brain Res** 1988 Oct 4;461(2):397–402

CYTOLOGY

Development of Merkel cell populations with contrasting sensitivities to neonatal deafferentation in the rat whisker pad. Nurse CA, et al. **Somatosens Mot Res** 1988;6(2):141–62

DRUG EFFECTS

Minoxidil stimulates mouse vibrissae follicles in organ culture. Buhl AE, et al. **J Invest Dermatol** 1989 Mar; 92(3):315–20

INNERVATION

Role of inhibitory processes in shaping functional characteristics of neurons of the vibrissae projection area of the somatosensory cortex in the cat. Batuev AS, et al. **Neurosci Behav Physiol** 1988 May–Jun;18(3):222–30

PHYSIOLOGY

Rats can learn a roughness discrimination using only their vibrissal system. Guić-Robles E, et al. **Behav Brain Res** 1989 Jan 1;31(3):285–9

Representation of vibrissae inputs through the climbing fiber pathway in lobule VII of the adult rat cerebellar vermis. Thomson MA, et al. **Brain Res** 1989 May 29; 488(1–2):241–52

The role of inhibitory processes in the formation of functional properties of neurons in vibrissal projection zone of the cat somatosensory cortex. Batuev AS, et al. **Exp Brain Res** 1989;76(1):198–206

Plasticity in the barrel cortex of the adult mouse: effects of peripheral deprivation on GAD-immunoreactivity. Welker E, et al. **Exp Brain Res** 1989;74(3):441–52

Spatial organization of thalamocortical and corticothalamic projection systems in the rat SmI barrel cortex. Chmielowska J, et al. **J Comp Neurol** 1989 Jul 15; 285(3):325–38

Structure-function relationships in rat brainstem subnucleus interpolaris: V. Functional consequences of neonatal infraorbital nerve section. Jacquin MF. **J Comp Neurol** 1989 Apr 1;282(1):63–79

Structure-function relationships in rat brainstem subnucleus interpolaris: III. Local circuit neurons. Jacquin MF, et al. **J Comp Neurol** 1989 Apr 1;282(1):24–44

Structure-function relationships in rat brainstem subnucleus interpolaris: IV. Projection neurons. Jacquin MF, et al. **J Comp Neurol** 1989 Apr 1;282(1):45–62

Degeneration and regeneration of peripheral nerve in the rat trigeminal system: III. Abnormal sensory reinnervation of rat guard hairs following nerve transection and crush. Munger BL, et al. **J Comp Neurol** 1989 May 8;283(2):169–76

Response properties and topography of vibrissa-sensitive VPM neurons in the rat. Ito M. **J Neurophysiol** 1988 Oct; 60(4):1181–97

Single vibrissal cortical column in SI cortex of rat and its alterations in neonatal and adult vibrissa-deafferented animals: a quantitative 2DG study. Kossut M, et al. **J Neurophysiol** 1988 Aug;60(2):829–52

Thalamocortical response transformation in the rat vibrissa/barrel system. Simons DJ, et al. **J Neurophysiol** 1989 Feb;61(2):311–30

Efferent neurons and suspected interneurons in S-1 vibrissa cortex of the awake rabbit: receptive fields and axonal properties. Swadlow HA. **J Neurophysiol** 1989 Jul;

62(1):288–308
Habituation and dishabituation of a cleaning reflex in normal and mutant Drosophila. Corfas G, et al. **J Neurosci** 1989 Jan;9(1):56–62
Optical recordings of the cortical response to whisker stimulation before and after the addition of an epileptogenic agent. London JA, et al. **J Neurosci** 1989 Jun;9(6):2182–90
[Neuronal responses of the rate somatosensory cortex transplanted into the vibrissae representation field of the neocortex to the electrical stimulation of the recipient brain] Bragin AG, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1098–106 (Eng. Abstr.) (Rus)

TRANSPLANTATION

Ectopic growth of mouse whiskers from implanted lengths of plucked vibrissa follicles. Kobayashi K, et al. **J Invest Dermatol** 1989 Feb;92(2):278–82

ULTRASTRUCTURE

An electron microscopic analysis of the morphology and connectivity of individual HRP-labeled slowly adapting vibrissa primary afferents in the adult rat. Renehan WE, et al. **Brain Res** 1988 Oct 18;462(2):396–400
High-resolution 2-deoxyglucose mapping of functional cortical columns in mouse barrel cortex. McCasland JS, et al. **J Comp Neurol** 1988 Dec 22;278(4):555–69

VIBROCARDIOGRAPHY see KINETOCARDIOGRAPHY

VIDARABINE

ADMINISTRATION & DOSAGE

Successful combination therapy with acyclovir and vidarabine for disseminated varicella zoster virus infection with retinal involvement in a patient with B-cell lymphoma and adult T-cell leukemia. Moriyama K, et al. **Am J Med** 1988 Dec;85(6):885–6
[Superiority of a new etiopathogenic treatment curing periarteritis nodosa caused by hepatitis B virus, using a combination of brief corticotherapy, vidarabine and plasma exchange] Trepo C, et al. **Presse Med** 1988 Sep 10; 17(30):1527–31 (Eng. Abstr.) (Fre)

ANALOGS & DERIVATIVES

Gene deletion, a mechanism of induced mutation by arabinosyl nucleosides. Huang P, et al. **Mutat Res** 1989 Feb;210(2):291–301
Synthesis and biological evaluation of some phosphate triester derivatives of the anti-viral drug AraA. McGuigan C, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6065–75

BIOSYNTHESIS

Biosynthesis of 9-beta-D-arabinofuranosyladenine: hydrogen exchange at C-2' and oxygen exchange at C-3' of adenosine. Suhadolnik RJ, et al. **Arch Biochem Biophys** 1989 Apr;270(1):363–73

PHARMACOLOGY

The antiviral activity of 9-beta-D-arabinofuranosyladenine is enhanced by the 2',3'-dideoxyriboside, the 2',3'-didehydro-2',3'-dideoxyriboside and the 3'-azido-2',3'-dideoxyriboside of 2,6-diaminopurine. Balzarini J, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):61–7
Sensitization of noncycling human diploid cells to X-irradiation by pretreatment with 9-beta-D-arabinofuranosyladenine. Little JB, et al. **Cancer Res** 1989 Feb 15;49(4):838–42
Sequence-specific inhibition of DNA strand elongation by incorporation of 9-beta-D-arabinofuranosyladenine. Ohno Y, et al. **Cancer Res** 1989 Apr 15;49(8):2077–81
Kinetics of chromatid aberrations in G2 ataxia-telangiectasia cells exposed to X-rays and ara A. Mozdarani H, et al. **Int J Radiat Biol** 1989 Jan;55(1):71–84
The initial slope of human tumor cell survival curves: its modification by the oxic cell sensitizer beta-arabinofuranosyladenine. Chavaudra N, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1267–71
Comparative studies on repair inhibition by araA, araC and aphidicolin of radiation induced DNA and chromosome damage in rodent cells: comparison with fixation of PLD. Iliakis G, et al. **Int J Radiat Oncol Biol Phys** 1989 May; 16(5):1261–5
The effect of the oxic cell sensitizer, beta-ara A on human fibroblasts in plateau and in exponential growth phases. Malaise EP, et al. **Int J Radiat Oncol Biol Phys** 1989 May; 16(5):1257–9
Potentiation of growth-inhibitory activity of 9-beta-D-arabinofuranosyladenine by 2'-deoxycoformycin in human cultured cell lines derived from leukemias and lymphomas. Kuroki Y, et al. **Jpn J Cancer Res** 1989 May; 80(5):482–9
Differences in inhibition by beta-arabinofuranosyladenine (araA) of radiation induced DNA damage repair in exponentially growing and plateau-phase CHO-cells. Iliakis G, et al. **Radiat Environ Biophys** 1988;27(4):295–305
Study on the apparent resistant strains of herpes simplex virus type 1 against 9-beta-D-arabinofuranosyladenine. Yoshida T, et al. **Tohoku J Exp Med** 1988 Nov;156(3):279–90

THERAPEUTIC USE

Antiviral treatment and postherpetic neuralgia [letter] Klenerman P, et al. **BMJ** 1989 Mar 25;298(6676):832
An antiviral combination treatment for virus encephalitis—theoretical aspects and clinical experiences. Prange HW, et al. **J Neuroimmunol** 1988 Dec;20(2–3):165–7
Combination therapy for dendritic keratitis with acyclovir and vidarabine. Colin J, et al. **J Ocul Pharmacol** 1987 Spring;3(1):39–42
Treatment of disseminated herpes zoster in six severely immunocompromised patients: acyclovir and vidarabine. Nagafuchi S, et al. **Jpn J Med** 1989 Jan–Feb;28(1):100–4
Chickenpox pneumonia: experience with antiviral treatment. Davidson RN, et al. **Thorax** 1988 Aug;43(8):627–30
[Follow-up and prognosis of herpes simplex encephalitis. Observations on 57 patients between 1960 and 1987] Huber M, et al. **Med Klin** 1989 Jun 15;84(6):273–5 (Eng. Abstr.) (Ger)
[Diagnosis and therapy of herpes simplex encephalitis] Klein M, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:67–9 (Ger)
[Varicellas and herpes zoster in children with oncologic diseases. 2: Prevention and therapy] Heidl M, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):136–8 (Ger)
[Chemotherapy to thymidine kinase producing virus (HSV-1, HSV-2, VZV) infection] Goto H, et al. **Nippon Rinsho** 1989 Feb;47(2):378–83 (Jpn)
[Histolical background of herpesvirus infections and antiviral drugs] Shimada K. **Nippon Rinsho** 1989 Feb;47(2):245–51 (Jpn)
[Herpes simplex virus encephalitis—its diagnosis and treatment] Takasu T, et al. **Nippon Rinsho** 1989 Feb; 47(2):401–12 (Jpn)
[Progress in treatment of herpetic keratitis] Uchida Y, et al. **Nippon Rinsho** 1989 Feb;47(2):419–23 (Jpn)

TOXICITY

Gene deletion, a mechanism of induced mutation by arabinosyl nucleosides. Huang P, et al. **Mutat Res** 1989 Feb;210(2):291–301

VIDEO DISPLAY TERMINAL see COMPUTER SYSTEMS

VIDEO GAMES see PLAY AND PLAYTHINGS

VIDEO RECORDING

Video documentation at laryngoscopy. Svanholm H, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:35
Objective and quantitative vestibular spinal testing by means of computer-video-cranio-corpo-graphy. Claussen CF, et al. **Adv Otorhinolaryngol** 1988;42:43–9
Superimposition of ENG recording on video eye movements (congenital nystagmus). Longridge NS, et al. **Adv Otorhinolaryngol** 1988;42:85–9
Interactive computer program for biomechanical analysis of videoradiographic studies of swallowing. Logemann JA, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):277–80
The impact of video endoscopy on surgical training. Satava RM, et al. **Am Surg** 1989 May;55(5):263–6
Bedside videolaryngoscopic assessment of intubation trauma. Alessi DM, et al. **Ann Otol Rhinol Laryngol** 1989 Aug;98(8 Pt 1):586–90
Video nasopharyngoscopy: a comparison of fiberscopic, telescopic, and microscopic documentation. Yanagisawa E, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):15–20
Producing still images in arthroscopy. Brown CH Jr. **Arthroscopy** 1989;5(2):87–92
ALARA—unprofessional presentation [letter] Muir JD. **Br Dent J** 1989 May 6;166(9):318
Elusive videos [letter] Toplis JW. **Br Dent J** 1989 Jun 24; 166(12):438
Immunocytochemical assay for oestrogen receptor in fine needle aspirates of breast cancer by video image analysis. Horsfall DJ, et al. **Br J Cancer** 1989 Jan;59(1):129–34
A film video processor for the viewing of fluorescein angiograms. Stur M. **Br J Ophthalmol** 1989 Jul;73(7):566–9
Videourodynamic assessment of the Stamey procedure for stress incontinence. English PJ, et al. **Br J Urol** 1988 Dec; 62(6):550–2
Nanometer-scale measurements using video light microscopy. Schnapp BJ, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):47–53
Absorbed doses and energy imparted from radiographic examination of velopharyngeal function during speech. Isberg A, et al. **Cleft Palate J** 1989 Apr;26(2):105–9
Comparison of multi-view videofluoroscopy and nasopharyngoscopy in the assessment of velopharyngeal insufficiency. Stringer DA, et al. **Cleft Palate J** 1989 Apr; 26(2):88–92
The use of videonasopharyngoscopy for biofeedback therapy in adults after pharyngeal flap surgery. Witzel MA, et al. **Cleft Palate J** 1989 Apr;26(2):129–34; discussion 135
Percutaneous video angioscopy in peripheral vascular disease. Rees MR, et al. **Clin Radiol** 1989 Jul;40(4):347–51
From variables to videodiscs. Interactive video in the clinical setting. Sweeney MA, et al. **Comput Nurs** 1988 Jul–Aug; 6(4):157–63
Video fluorescein angiography: method and clinical application. Wolf S, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(2):145–51
Debunking "video magic" [letter] Ravensborg MR. **Int J Group Psychother** 1988 Oct;38(4):521
Laser video disk archival storage. Adrain RS, et al. **J Audiov Media Med** 1988 Oct;11(4):129–38
The marketing and distribution of health films and videos. Broadhurst JJ. **J Audiov Media Med** 1988 Apr;11(2):65–7
The production process of health films and videos. Cull P. **J Audiov Media Med** 1988 Apr;11(2):63–5
Interactive video in health care: blending patient care, computer technology, and research results. Sweeney MA, et al. **J Biocommun** 1988 Fall;15(4):6–11
Video-enhanced light microscopy and its applications in cell biology. Shotton DM. **J Cell Sci** 1988 Feb;89 (Pt 2):129–50 (90 ref.)
A literature review on the efficacy of video in patient education. Gagliano ME. **J Med Educ** 1988 Oct; 63(10):785–92 (27 ref.)
Real-time imaging of axonally transported subresolution organelles in vertebrate myelinated axons. Smith RS. **J Neurosci Methods** 1989 Jan;26(3):203–9
Video imaging for planning and counseling in orthognathic surgery. Sarver DM, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):939–45
How do we teach pathology? The laser videodisc and computer-assisted learning. Mercer J, et al. **J Pathol** 1988 Sep;156(1):83–9
A comparison of photodetector and endoscopic evaluations of velopharyngeal function. Karnell MP, et al. **J Speech Hear Res** 1988 Sep;31(3):503–10
Pictures for the developing world [letter] Gibson T. **Lancet** 1988 Oct 15;2(8616):909
Interacting with videodisc technology. Harrison LL. **MCN** 1989 May-Jun;14(3):173
POSSUM: the microcomputer laser-videodisk syndrome information system. Bankier A, et al. **Ophthalmic Paediatr Genet** 1989 Mar;10(1):51–2
American Academy of Pediatrics Committee on Communications: Impact of rock lyrics and music videos on children and youth. **Pediatrics** 1989 Feb;83(2):314–5
Fully automated TV-image analysis of the cell-cycle: comparison of the PLM method with determinations of the percentage and the DNA content of labelled cells. Wachsmuth ED, et al. **Virchows Arch [B]** 1988;55(6):323–35
[Video fluorescence angiography follow-up of patients with retinal stasis syndrome] Wolf S, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):39–43 (Eng. Abstr.) (Ger)
[Literature search in data banks using a video recording system] Vahlensieck M. **Radiologe** 1988 Dec;28(12):588–9 (Eng. Abstr.) (Ger)
[Laser imaging: modern radiologic picture documentation] Arlart IP. **Rontgenpraxis** 1988 Oct;41(10):367–72 (Ger)
[The "euphoria" effect of music videos—a study of the reception of music with visual images] Wallbott HG. **Z Exp Angew Psychol** 1989;36(1):138–61 (Eng. Abstr.) (Ger)
[Literature, periodicals and video—example for selections for health care center] **Lakartidningen** 1988 Sep 7; 85(36):2867–72 (Swe)
[General medicine video-magazines are a complement to traditional teaching materials] Hey M. **Lakartidningen** 1988 Sep 7;85(36):2873–4 (Swe)

HISTORY

Interactive clinical teaching with computers combined with a laser vision disc. Verbeek HA. **Clio Med** 1987–88; 21(1–4):169–74

INSTRUMENTATION

Videoprostatectomy. Guidelines for choosing an effective microvideo operating system. O'Boyle PJ, et al. **Br J Urol** 1989 Jun;63(6):624–6
Results obtained with a sensitive confocal scanning system designed for epifluorescence. Amos WB. **Cell Motil Cytoskeleton** 1988;10(1–2):54–61
Interactive videodiscs: suicide and chronic mental illness. Alger I. **Hosp Community Psychiatry** 1989 Jun;40(6):582–3
Contrast enhancement amplifier for television microscopy. Intaglietta M, et al. **Int J Microcirc Clin Exp** 1988 Aug; 7(3):253–60
A versatile video image analysis system for microcirculatory research. Pries AR. **Int J Microcirc Clin Exp** 1988 Nov; 7(4):327–45
Modification of a TEM cross-section lapping apparatus in order to accommodate VCR dimpler platen. Cole MW, et al. **J Electron Microsc Tech** 1988 Sep;10(1):125–6
A low-cost method for simultaneous video-recording of ambulant subject and electroencephalograph: the Quarrier's system. Kerr AM, et al. **J Ment Defic Res** 1988 Dec;32 (Pt 6):497–500
New videos address AIDS. Kerr DL. **J Sch Health** 1988 Aug;58(6):239
Computereyes video image digitizer. McDonald CJ. **MD Comput** 1989 Jan–Feb;6(1):5–8
Input of treatment planning data via a video frame grabber. Amols HI. **Med Phys** 1989 Jan–Feb;16(1):140–1
An improved apparatus for the optical recording of contraction of single heart cells. Boyett MR, et al. **Pflugers Arch** 1988 Dec;413(2):197–205
A new device for monitoring early motor development:

prenatal nicotine-induced changes. Schlumpf M, et al. **Pharmacol Biochem Behav** 1988 May;30(1):199–203

[Endoscopy in transition. Video endoscopes replace glass fiber systems—uses of the new technic?] Schwing C. **Fortschr Med** 1988 Jul 30;106(22):56–7 (Ger)

[High resolution control of the central visual field with a video campimeter] Krastel H, et al. **Fortschr Ophthalmol** 1988;85(6):750–5 (Eng. Abstr.) (Ger)

[Determination of the circulation in the human retina using image analysis of video-angiograms] Preussner PR, et al. **Fortschr Ophthalmol** 1989;86(2):111–4 (Eng. Abstr.) (Ger)

[Choroidal hemodynamics using videoangiography] Richard G, et al. **Klin Monatsbl Augenheilkd** 1988 Jun;192(6):686–92 (Eng. Abstr.) (Ger)

[Computer-assisted video processing of Phast gels with ELBA] Hensel J, et al. **Klin Wochenschr** 1989;67 Suppl 17:23–6 (Eng. Abstr.) (Ger)

[A high- resolution video-graphic printer for the documentation of surgical specimens] Komminoth P, et al. **Pathologe** 1989 Mar;10(2):131–2 (Ger)

[A videorecorder attached to the D-800] Rosenthal P, et al. **Radiol Diagn (Berl)** 1989;30(2):207–10 (Eng. Abstr.) (Ger)

[Videodensitometry analysis of stomach wall motility—presentation of a new method] Weissbrodt M, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989; 22(3):168–72 (Eng. Abstr.) (Ger)

[Electronic video-endoscopy] Pietropaolo V, et al. **Ann Ital Chir** 1987;59(1–6):371–6 (Eng. Abstr.) (Ita)

[A time-saving autoradiogram system using a video camera and an imaging processor] Toyoshima H, et al. **Kaku Igaku** 1989 Mar;26(3):453–7 (Jpn)

[Experience using videoendoscopes] Veselov VV, et al. **Klin Med (Mosk)** 1989 May;67(5):68–71 (Rus)

[Videomagnetic recording during phleboscopy of the lower extremities (videophlebography) and its diagnostic value in varicose disease] Khachkuruzov SG, et al. **Vestn Rentgenol Radiol** 1988 Jul-Aug;(4):27–9 (Eng. Abstr.) (Rus)

METHODS

Simultaneous Nomarski and fluorescence imaging during video microscopy of cells. Foskett JK. **Am J Physiol** 1988 Oct;255(4 Pt 1):C566–71

Detection of surface movements on single smooth muscle cells: digital video microscopy. Work SS, et al. **Comput Biol Med** 1988;18(6):385–93

Video techniques for on-line portal imaging. Shalev S, et al. **Comput Med Imaging Graph** 1989 May-Jun;13(3):217–26 (66 ref.)

Comparison of absorption measurements of DNA stain content by utilizing video and scanning image cytometers. Allison DC, et al. **Cytometry** 1988 Nov;9(6):573–8

The analytic and functional accuracy of a video densitometry system. McEachron DL, et al. **J Neurosci Methods** 1988 Aug;25(1):63–74

[Indocyanine green video fluorescence angiography: statistical image analysis for quantifying choroidal blood circulation] Prünte C. **Fortschr Ophthalmol** 1988; 85(4):407–9 (Eng. Abstr.) (Ger)

TRENDS

Progress in video microscopy. Inoué S. **Cell Motil Cytoskeleton** 1988;10(1–2):13–7 (21 ref.)

Some thoughts on the use of health films and videos. Clarke JW. **J Audiov Media Med** 1988 Apr;11(2):61–3

UTILIZATION

Influence of image sampling frequency on the perceived movement characteristics of progressively motile human spermatozoa. Mortimer D, et al. **Gamete Res** 1988 Jul; 20(3):313–27

VIDEODISC RECORDING see under **VIDEO RECORDING**

VIDEOTAPE RECORDING

Isolated sign vocabulary acquisition by hearing adults: CAI vs. videotaped presentation. Beykirch HL, et al. **Am Ann Deaf** 1989 Mar;134(1):31–4

A model for teaching parents of young hearing-impaired children total communication in the home—Project RITCH. Watkins S, et al. **Am Ann Deaf** 1988 Oct; 133(4):289–93

What's new in interactive video? Rizzolo MA. **Am J Nurs** 1989 Mar;89(3):407–8

Videotaped versus live instruction in demonstrating evaluation skills to occupational therapy students. Bazyk S, et al. **Am J Occup Ther** 1989 Jul;43(7):465–8

Consent and the anaesthetist—use of a videofilm [letter] Kalla GN. **Anaesthesia** 1989 Feb;44(2):171

Video filming and pollution measurement as a teaching aid in reducing exposure to airborne pollutants. Rosén G, et al. **Ann Occup Hyg** 1989;33(1):137–44

Indirect videolaryngoscopy versus direct endoscopy for larynx and pharynx cancer staging. Toward elimination of preliminary direct laryngoscopy. Bastian RW, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):693–8

Office-based system for voice analysis. Berke GS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):74–7

Producing still images in arthroscopy. Brown CH Jr. **Arthroscopy** 1989;5(2):87–92

Examination of subgingival plaque samples. Direct microscopy versus video recording. Paterson N, et al. **Br Dent J** 1988 Dec 24;165(12):430–2

Getting it taped: the 'bad news' consultation with cancer patients. Hogbin B, et al. **Br J Hosp Med** 1989 Apr; 41(4):330–3

Attorneys' perceptions of electroconvulsive therapy: impact of instruction with an ECT videotape demonstration. Guze BH, et al. **Compr Psychiatry** 1988 Sep-Oct;29(5):520–2

Videocinematography of fresh and cryopreserved embryos: a retrospective analysis of embryonic morphology and implantation. Cohen J, et al. **Fertil Steril** 1989 May; 51(5):820–7

Video endoscopy by nurse practitioners: a model for colorectal cancer screening. Schroy PC, et al. **Gastrointest Endosc** 1988 Sep-Oct;34(5):390–4

Video self-portraits: a novel approach to group psychotherapy with young adults. Cox E, et al. **Int J Group Psychother** 1989 Apr;39(2):237–53

A microcomputer-based system for mapping microvascular networks. Wu CH, et al. **Int J Microcirc Clin Exp** 1989 Jul;8(3):303–11

The efficacy of educational movies on AIDS knowledge and attitudes among college students. Gilliam A, et al. **J Am Coll Health** 1989 May;37(6):261–5

Effect of instructional videotapes on AIDS knowledge and attitudes. Rhodes F, et al. **J Am Coll Health** 1989 May; 37(6):266–71

Comparison of conventional and videotaped diabetic exchange lists instruction. Bethea CD, et al. **J Am Diet Assoc** 1989 Mar;89(3):405–6

The use of videotapes in improving clinical performance in the final MB examination. Afzal Mir M, et al. **J Audiov Media Med** 1987 Oct;10(4):131–4

Editing surgical videotapes. Gilder RS. **J Audiov Media Med** 1988 Oct;11(4):117–20

Defaecating video proctography. Hyland GJ. **J Audiov Media Med** 1988 Jul;11(3):91–3

Use of interactive video in teaching history-taking to medical students: a pilot project. Kwan RM, et al. **J Audiov Media Med** 1988 Oct;11(4):121–4

Spine kinematics: a digital videofluoroscopic technique. Breen AC, et al. **J Biomed Eng** 1989 May;11(3):224–8

Puppets for Prevention: "playing safe is playing smart". Morrison MI, et al. **J Burn Care Rehabil** 1988 Nov-Dec; 9(6):650–1

Media manipulation of adolescents' personal level judgements regarding consequences of smokeless tobacco use. Sussman S, et al. **J Drug Educ** 1989;19(1):43–57

Comparison between videotape and personalized patient education for anticoagulant therapy. Stone S, et al. **J Fam Pract** 1989 Jul;29(1):55–7

A digital videofluoroscopic technique for spine kinematics. Breen A, et al. **J Med Eng Technol** 1989 Jan-Apr; 13(1–2):109–13

Subliminal messages, persuasion, and behavior change. Treimer M, et al. **J Soc Psychol** 1988 Aug;128(4):563–5

The use of videotechnology by the medical trial defense bar—a case study. Couch JB. **Leg Med** 1987;:148–64

The use of videorecordings of medical postgraduates in improving clinical skills. Mir MA, et al. **Med Educ** 1989 May;23(3):276–81

The video medium creates new responsibilities and opportunities [editorial] Fahn S, et al. **Mov Disord** 1986; 1(2):91–2

Effects of visual aids on acquisition of selected tennis skills. Miller G, et al. **Percept Mot Skills** 1988 Oct;67(2):603–6

Throwing action from full-cue and motion-only video-models of an arm movement sequence. Williams JG. **Percept Mot Skills** 1989 Feb;68(1):259–66

Videotaped materials in a school-based smoking prevention program. Biglan A, et al. **Prev Med** 1988 Sep;17(5):559–84

An examination of three methods of psychodynamic formulation based on the same videotaped interview. Perry JC, et al. **Psychiatry** 1989 Aug;52(3):302–23

Rating affective flattening from videotaped interviews. Waltrip RW 2d, et al. **Psychiatry Res** 1989 Feb; 27(2):199–205

Influence of rock videos on attitudes of violence against women. Peterson DL, et al. **Psychol Rep** 1989 Feb; 64(1):319–22

An assessment of framelapse videography of the effect of cryopreservation on human sperm motility. Wiswedel K, et al. **S Afr Med J** 1989 Jan 7;75(1):18–20

[Body image and anorexia nervosa. The use of confrontation via video in psychomotor therapy] Probst M, et al. **Acta Psychiatr Belg** 1988 Mar-Apr;88(2):117–26 (Eng. Abstr.) (Fre)

[Assessment of the distorted video image of the body by schizophrenic patients] Danzinger R. **Nervenarzt** 1989 Jun; 60(6):355–60 (Eng. Abstr.) (Ger)

ECONOMICS

Using videotape modeling to prepare children psychologically for surgery: influence of parents and costs versus benefits of providing preparation services. Pinto RP, et al. **Health Psychol** 1989;8(1):79–95

Self-administered videotape therapy for families with conduct-problem children: comparison with two cost-effective treatments and a control group. Webster-Stratton C, et al. **J Consult Clin Psychol** 1988 Aug; 56(4):558–66

INSTRUMENTATION

Video EEG diagnosis of repetitive behavior in early childhood and its relationship to seizures. Duchowny MS, et al. **Pediatr Neurol** 1988 May-Jun;4(3):162–4

[Videodensitometry in echoencephalography of premature infants] Baerts W, et al. **Ultraschall Med** 1989 Apr; 10(2):80–2 (Eng. Abstr.) (Ger)

[Value of skull identification as evidence using a superimposed video image technic with reference to individual craniometric differences in the human skull] Helmer R, et al. **Z Rechtsmed** 1989;102(7):451–9 (Eng. Abstr.) (Ger)

LEGISLATION & JURISPRUDENCE

Videotape recording of assaultive inpatients [letter] Leong GB, et al. **Am J Psychiatry** 1989 Feb;146(2):287–8

Videotaping as a potential safeguard against veterinary malpractice lawsuits. Buckley WR. **J Am Vet Med Assoc** 1989 Mar 1;194(5):652–3

Off-air recording are you breaking the law? Duguid KP. **J Audiov Media Med** 1988 Jan;11(1):11–3

METHODS

Preoperative patient teaching. Producing a video account. Barrett JB, et al. **AORN J** 1989 Sep;50(3):602–3, 605, 607–8

Defaecography: setting up a service. Shorvon PJ, et al. **Br J Hosp Med** 1989 May;41(5):460–6

Use of videoendoscopy during exercise for determination of appropriate surgical treatment of laryngeal hemiplegia in a colt. Stick JA, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):619–22

The use of videotape to demonstrate the dynamics of bite marks. West MH, et al. **J Forensic Sci** 1989 Jan;34(1):88–95

Comparison of the effectiveness of videotape versus live group infant care classes. Leff EW. **J Obstet Gynecol Neonatal Nurs** 1988 Sep-Oct;17(5):338–44

Interactive video: producing the goods. McGlade K, et al. **Med Teach** 1988;10(3–4):309–12

VIDINE see **CHOLINE**

VIGILANCE, CORTICAL see **AROUSAL**

VILLAGE HEALTH WORKER see **COMMUNITY HEALTH AIDES**

VILOXAZINE see under **MORPHOLINES**

VIMENTIN

ANALYSIS

Coexpression of cytokeratins and vimentin in hyaluronic acid-rich tissues. Kasper M, et al. **Acta Histochem (Jena)** 1988;84(1):107–8

Patterns of cytokeratin/vimentin coexpression in the guinea pig. Kasper M. **Acta Histochem (Jena)** 1989;86(1):85–91

Immunocytochemical localization of vimentin in stellate cells (folliculo-stellate cells) of the rat, cat and rabbit pituitary pars distalis. Marin F, et al. **Anat Embryol (Berl)** 1989; 179(5):491–5

Coexpression of cytokeratin and vimentin. McGuire LJ, et al. **Appl Pathol** 1989;7(2):73–84 (113 ref.)

The development of astrocytes in the cat retina: evidence of migration from the optic nerve. Ling TL, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):73–85

Vimentin rather than keratin expression in some hormone-independent breast cancer cell lines and in oncogene-transformed mammary epithelial cells. Sommers CL, et al. **Cancer Res** 1989 Aug 1;49(15):4258–63

Tuberous sclerosis in the premature infant: a report of a case with immunohistochemistry on the CNS. Chou TM, et al. **Clin Neuropathol** 1989 Jan-Feb;8(1):45–52

Primitive neuroectodermal tumors of the cerebrum: a histological and immunohistochemical study of 10 cases. Grant JW, et al. **Clin Neuropathol** 1988 Sep-Oct; 7(5):228–33

Vimentin expression in oocytes, eggs and early embryos of Xenopus laevis. Tang P, et al. **Development** 1988 Jun; 103(2):279–87

Distribution of intermediate-filament proteins in the human enamel organ: unusually complex pattern of coexpression of cytokeratin polypeptides and vimentin. Kasper M, et al. **Differentiation** 1989 Jun;40(3):207–14

Coexpression of vimentin and desmin in gastric leiomyomas. An immunohistochemical study in paraffin sections. Szczudrawa J, et al. **Folia Histochem Cytobiol** 1989; 27(2):73–81

An immunohistochemical study of difference between cervical and endometrial adenocarcinomas of the uterus—using monoclonal antibodies of vimentin and cytokeratin. Jinnouchi H. **Fukushima J Med Sci** 1987 Dec; 33(2):85–108

Coexpression of glial fibrillary acidic protein and vimentin in the central and peripheral nervous systems of the twitcher mutant. Chiu FC, et al. **GLIA** 1988;1(2):105–12

Antigenic phenotype of Langerhans cell histiocytosis: an immunohistochemical study demonstrating the value of LN-2, LN-3, and vimentin. Azumi N, et al. **Hum Pathol** 1988 Dec;19(12):1376-82

Vimentin intermediate filaments in fish melanophores. Gyoeva FK, et al. **J Cell Sci** 1987 Dec;88 (Pt 5):649-55

The microglial cytoskeleton: vimentin is localized within activated cells in situ. Graeber MB, et al. **J Neurocytol** 1988 Aug;17(4):573-80

Immunohistochemical staining for vimentin filaments and S-100 protein in myxoma of the jaws. Lombardi T, et al. **J Oral Pathol** 1988 Apr;17(4):175-7

Monoclonal antibody-detected vimentin distribution in pleomorphic adenomas of salivary glands. Yamada K, et al. **J Oral Pathol** 1988 Aug;17(7):348-53

Patterns of expression of intermediate filaments in ameloblastoma and human fetal tooth germ. Heikinheimo K, et al. **J Oral Pathol Med** 1989 May;18(5):264-73

Coexpression of keratin and vimentin in salivary pleomorphic adenomas. Shinohara H, et al. **J Oral Pathol Med** 1989 Mar;18(3):133-9

Vimentin--a new prognostic parameter in breast carcinoma? Raymond WA, et al. **J Pathol** 1989 Jun;158(2):107-14

Co-expression of cytokeratin and vimentin intermediate filament proteins in benign and neoplastic breast epithelium. Raymond WA, et al. **J Pathol** 1989 Apr;157(4):299-306

Myofibroblasts from diverse pathologic settings are heterogeneous in their content of actin isoforms and intermediate filament proteins. Skalli O, et al. **Lab Invest** 1989 Feb;60(2):275-85

Characterization of two highly phosphorylated cytoskeleton-associated proteins, pp58 and pp60, in tumoricidal murine peritoneal macrophages and their comparison with vimentin. Didier ES, et al. **Mol Immunol** 1988 Aug;25(8):785-94

Vimentin and glial fibrillary acidic protein filaments in radial glia of the adult urodele spinal cord. Zamora AJ, et al. **Neuroscience** 1988 Oct;27(1):279-88

Expression of intermediate filaments and stromal proteins in granular cell tumor of the tongue. Ophir D, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):689-96

In vitro cultures of epithelial cells from healthy breast tissues and cells from breast carcinomas. Regenass U, et al. **Recent Results Cancer Res** 1989;113:4-15

Adenomatoid odontogenic tumour: co-expression of keratin and vimentin. Tatemoto Y, et al. **Virchows Arch [A]** 1988; 413(4):341-7

Vimentin and glial fibrillary acidic protein are codistributed in the same intermediate filament system of malignant glioma cells in vivo. A double-labeling immunoelectron-microscopical study. Paulus W, et al. **Virchows Arch [B]** 1988;56(1):67-70

[Immunohistochemical study of 20 synovial sarcomas in children] Sastre-Garau X, et al. **Ann Pathol** 1989; 9(2):109-14 (Eng. Abstr.) **(Fre)**

[Cytokeratin-vimentin coexpression in cyst epithelium] Stosiek P, et al. **Pathologe** 1988 Nov;9(6):330-3 **(Ger)**

[Intermediate filament cytokeratin and vimentin polypeptide pattern of renal cell carcinoma] Suzuki A. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):527-33 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Induction of vimentin synthesis in a murine myeloma cell line by TPA is strongly dependent on the composition of the cell culture medium. Giese G, et al. **Eur J Cell Biol** 1988 Dec;47(2):291-9

GENETICS

Developmental expression of a neurofilament-M and two vimentin-like genes in Xenopus laevis. Sharpe CR. **Development** 1988 Jun;103(2):269-77

Down-regulation of vimentin gene expression during myogenesis is controlled by a 5'-flanking sequence. Sax CM, et al. **Gene** 1989 May 30;78(2):235-42

Vimentin cDNA clones covering the complete intermediate-filament protein are found in an EHS tumor cDNA library. Wood L, et al. **Gene** 1989 Mar 15; 76(1):171-5

Chromosomal localization of the mouse gene coding for vimentin. Mattei MG, et al. **Genet Res** 1989 Jun;53(3):183-5

Transgenic expression of the muscle-specific intermediate filament protein desmin in nonmuscle cells. Pieper FR, et al. **J Cell Biol** 1989 Mar;108(3):1009-24

Intermediate filament formation after transfection with modified hamster vimentin and desmin genes. van den Heuvel RM, et al. **J Cell Sci** 1987 Nov;88 (Pt 4):475-82

Epstein-Barr virus latent infection membrane protein increases vimentin expression in human B-cell lines. Birkenbach M, et al. **J Virol** 1989 Sep;63(9):4079-84

BclI RFLP for the human vimentin gene. Marcus EM, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9068

AP-1/jun binding sites mediate serum inducibility of the human vimentin promoter. Rittling SR, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1619-33

Developmental regulation of intermediate filament and actin mRNAs during myogenesis is disrupted by oncogenic ras genes. Olson EN, et al. **Oncogene** 1989 Jul;4(7):907-13

Expression of the chicken vimentin gene in transgenic mice: efficient assembly of the avian protein into the cytoskeleton. Capetanaki Y, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):4882-6

IMMUNOLOGY

Expression of vimentin and glial fibrillary acidic protein in ethylnitrosourea-induced rat gliomas and glioma cell lines. Reifenberger G, et al. **Acta Neuropathol (Berl)** 1989; 78(3):270-82

Relation of antivimentin antibodies to anticardiolipin antibodies in systemic lupus erythematosus. Blaschek MA, et al. **Ann Rheum Dis** 1988 Sep;47(9):708-16

Keratin and vimentin expression in early organogenesis of the rabbit embryo. Viebahn C, et al. **Cell Tissue Res** 1988 Sep;253(3):553-62

Autoantibodies to intermediate filaments in sera of patients with Schistosoma mansoni infection. Boehme MW, et al. **Clin Exp Immunol** 1989 Aug;77(2):230-3

A common antigenic determinant of vimentin and desmin defined by monoclonal antibody. Dráberová E, et al. **Folia Biol (Praha)** 1986;32(5):295-303

Vimentin-cross-reactive epitope of type 12 streptococcal M protein. Kraus W, et al. **Infect Immun** 1989 Aug; 57(8):2457-61

Autoantibodies to vimentin-type intermediate filament in patients with progressive systemic sclerosis. Tsuneda Y, et al. **J Dermatol (Tokyo)** 1988 Apr;15(2):128-32

Autoimmune sequence of streptococcal M protein shared with the intermediate filament protein, vimentin. Kraus W, et al. **J Exp Med** 1989 Feb 1;169(2):481-92

The expression of intermediate filaments and mam-6 antigen in relation to the degree of morphologic differentiation of carcinoma of the head and neck: diagnostic implications. Henzen-Logmans SC, et al. **Otolaryngol Head Neck Surg** 1988 Dec;99(6):539-47

ISOLATION & PURIFICATION

Large scale co-isolation of vimentin and nuclear lamins from ehrlich ascites tumor cells cultured in vitro. Traub P, et al. **Prep Biochem** 1988;18(4):381-404

[Isolation, purification and antibody preparation of vimentin] Su YX. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Mar; 18(1):30-3 (Eng. Abstr.) **(Chi)**

METABOLISM

Immunocytochemical localization of vimentin in the posterior lobe of the cat, rabbit and rat pituitary glands. Marin F, et al. **Acta Anat (Basel)** 1989;134(3):184-90

Intermediate filament proteins in spindle cell carcinoma of the larynx and tongue. Meijer JW, et al. **Acta Otolaryngol (Stockh)** 1988 Sep-Oct;106(3-4):306-13

An immunohistochemical study of cytokeratin and vimentin in benign and malignant thyroid lesions. Uchida H, et al. **Acta Pathol Jpn** 1989 Mar;39(3):169-75

Leukocyte-common antigen and vimentin are reliable adjuncts in the diagnosis of non-Hodgkin's lymphoma in fine needle aspirates. Domagala W, et al. **Anal Quant Cytol Histol** 1989 Feb;11(1):15-21

The developing neuroepithelium in human embryonic and fetal brain studied with vimentin-immunocytochemistry. Stagaard M, et al. **Anat Embryol (Berl)** 1989;180(1):17-28

Presence and distribution of vimentin in cynomolgus monkey trabecular cells. Ken J, et al. **Anat Rec** 1988 Dec; 222(4):309-16

Immunofluorescent localization of desmin and vimentin in developing cardiac muscle of Syrian hamster. Osinska HE, et al. **Anat Rec** 1989 Apr;223(4):406-13

Domain- and sequence-specific phosphorylation of vimentin induces disassembly of the filament structure. Ando S, et al. **Biochemistry** 1989 Apr 4;28(7):2974-9

The distribution of glial fibrillary acidic protein and vimentin in postnatal marmoset (Callithrix jacchus) brain. McDermott KW, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):169-77

Immunohistochemical identification of lysozyme and vimentin in an experimental malignant fibrous histiocytoma. Ribeiro RA, et al. **Braz J Med Biol Res** 1988;21(5):995-7

Immunohistochemical localization of glial fibrillary acidic protein (GFAP) and vimentin in the subcommissural organ of the Mongolian gerbil (Meriones unguiculatus). Redecker P. **Cell Tissue Res** 1989 Mar;255(3):595-600

Antigenic abnormalities in fiber tract astrocytes of myelin-deficient rats: an immunocytochemical study in the olfactory cortex. Friedman B, et al. **Dev Neurosci** 1989; 11(2):99-111

Expression of cytokeratin and vimentin in nucleus pulposus cells. Stosiek P, et al. **Differentiation** 1988 Nov;39(1):78-81

Phosphorylation in vitro of vimentin by protein kinases A and C is restricted to the head domain. Identification of the phosphoserine sites and their influence on filament formation. Geisler N, et al. **Eur J Biochem** 1989 Aug 1; 183(2):441-7

Organization of the vimentin system and its spatial relationship to the microtubule complex during the division of mammalian cells growing attached and in suspension. Paulin-Levasseur M, et al. **Eur J Cell Biol** 1989 Jun; 49(1):189-95

Differential sensitivity of vimentin and nuclear lamins from Ehrlich ascites tumor cells toward Ca2+ -activated neutral thiol proteinase. Traub P, et al. **Eur J Cell Biol** 1988 Aug; 46(3):478-90

Response of cultured Müller cells to heat shock--an immunocytochemical study of heat shock and intermediate filament proteins in response to temperature elevation. Wakakura M, et al. **Exp Eye Res** 1989 Mar;48(3):337-50

Gliosis in the spinal cords of rats with experimental allergic encephalomyelitis: immunostaining of carbonic anhydrase and vimentin in reactive astrocytes. Cammer W, et al. **GLIA** 1989;2(4):223-30

Vimentin: changes in distribution during brain development. Hutchins JB, et al. **GLIA** 1989;2(1):55-66

An immunohistological study of 66 ependymomas. Cruz-Sanchez FF, et al. **Histopathology** 1988 Oct; 13(4):443-54

Cytokeratin and vimentin intermediate filament proteins in benign and neoplastic prostatic epithelium. Leong AS, et al. **Histopathology** 1988 Oct;13(4):435-42

Exoenzyme S of Pseudomonas aeruginosa ADP-ribosylates the intermediate filament protein vimentin. Coburn J, et al. **Infect Immun** 1989 Mar;57(3):996-8

Vimentin-GFAP transition in primary dissociated cultures of rat embryo spinal cord. Bignami A, et al. **Int J Dev Neurosci** 1989;7(4):343-57

The binding in vitro of the intermediate filament protein vimentin to synthetic oligonucleotides containing telomere sequences. Shoeman RL, et al. **J Biol Chem** 1988 Dec 15; 263(35):18744-9

Angiotensin II stimulates vimentin phosphorylation via a Ca2+-dependent, protein kinase C-independent mechanism in cultured vascular smooth muscle cells. Tsuda T, et al. **J Biol Chem** 1988 Dec 25;263(36):19758-63

Phosphorylation of vimentin in mitotically selected cells. In vitro cyclic AMP-independent kinase and calcium-stimulated phosphatase activities. Evans RM. **J Cell Biol** 1989 Jan;108(1):67-78

Myogenesis in the mouse embryo: differential onset of expression of myogenic proteins and the involvement of titin in myofibril assembly. Fürst DO, et al. **J Cell Biol** 1989 Aug;109(2):517-27

Modulation of vimentin containing intermediate filament distribution and phosphorylation in living fibroblasts by the cAMP-dependent protein kinase. Lamb NJ, et al. **J Cell Biol** 1989 Jun;108(6):2409-22

Expression of NF-L and NF-M in fibroblasts reveals coassembly of neurofilament and vimentin subunits. Monteiro MJ, et al. **J Cell Biol** 1989 Feb;108(2):579-93

Cyclic AMP increasing agents rapidly stimulate vimentin phosphorylation in quiescent cultures of Swiss 3T3 cells. Escribano J, et al. **J Cell Physiol** 1988 Nov;137(2):223-34

Age-related changes in the expression of cytokeratin and vimentin in human choroid plexus. Kasper M, et al. **J Hirnforsch** 1989;30(1):1-4

Immunostaining of keratin and vimentin in epidermis: comparison of different post-embedding immunogold techniques for electron microscopy. Mahrle G, et al. **J Histochem Cytochem** 1989 Jun;37(6):863-8

LN-6: a monoclonal antibody to vimentin expressed in non-hematopoietic mesenchymal cells and derived tumors and reactive [illegible] B5-fixed, paraffin-embedded tissues. Stathopoulos E, et al. **J Histochem Cytochem** 1989 Sep; 37(9):1363-70

Evidence that formation of an intermediate filament-protein complex plays a primary role in aggregation of neurofilaments, glial fibrillary acidic protein (GFAP)-filaments and vimentin-filaments by 2,5-hexanedione. Durham HD, et al. **J Neuropathol Exp Neurol** 1989 Mar;48(2):197-211

Immunofluorescence studies of the cytoskeletal and contractile elements in cultured human trabecular cells. Tamura M, et al. **Jpn J Ophthalmol** 1989;33(1):95-102

Prognostic significance of vimentin positivity in formalin-fixed renal cell carcinomas. Donhuijsen K, et al. **Pathol Res Pract** 1989 Mar;184(3):287-91

Phosphorylation and disassembly of intermediate filaments in mitotic cells [published erratum appears in Proc Natl Acad Sci U S A 1989 May;86(9):3214] Chou YH, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1885-9

Dynamic aspects of intermediate filament networks in BHK-21 cells. Vikstrom KL, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):549-53

Ultrastructural spectrum of hemangiopericytoma: a comparative study of fetal, adult, and neoplastic pericytes. Dardick I, et al. **Ultrastruct Pathol** 1989 Mar-Jun; 13(2-3):111-54

Bronchial carcinoid with paranuclear fibrillary inclusions related to cytokeratins and vimentin. Barbareschi M, et al. **Virchows Arch [A]** 1989;415(1):31-7

Coexpression of cytokeratin, neurofilament and vimentin in carcinoid tumors. Kimura N, et al. **Virchows Arch [A]** 1989; 415(1):69-77

Vimentin expression of newly formed rat bile duct epithelial cells in secondary biliary fibrosis. Milani S, et al. **Virchows Arch [A]** 1989;415(3):237-42

[The distribution of vimentin filaments in CHO cells after enucleation by centrifugation] Sun Q. **Shih Yen Sheng Wu Hsueh Pao** 1988 Jun;21(2):209-21 (Eng. Abstr.) **(Chi)**

[Coexpression of keratin and vimentin in squamous cell carcinoma as evidence of pseudosarcomatous differentiation] Fischer HP, et al. **Verh Dtsch Ges Pathol** 1988;72:237-40 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Association of mRNA and eIF-2 alpha with the cytoskeleton

in cells lacking vimentin. Heuijerjans JH, et al. **Exp Cell Res** 1989 Apr;181(2):317–30

Epstein–Barr virus latent membrane protein: induction of B-cell activation antigens and membrane patch formation does not require vimentin. Liebowitz D, et al. **J Virol** 1989 Sep;63(9):4051–4

Involvement of vimentin in the reverse transformation reaction. Chan D, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2747–51

Opioid peptides modulate the organization of vimentin filaments, phagocytic activity, and expression of surface molecules in monocytes. Prieto J, et al. **Scand J Immunol** 1989 Apr;29(4):391–8

VINBLASTINE

ADMINISTRATION & DOSAGE

A phase II trial of vinblastine, bleomycin, and cisplatin induction followed by dacarbazine and dibromodulcitol maintenance in the treatment of metastatic melanoma. A follow-up study of twenty-two patients. Gentile PS, et al. **Am J Clin Oncol** 1988 Dec;11(6):666–8

Combination of recombinant interferon alpha-2a and vinblastine in advanced renal cell cancer. Bergerat JP, et al. **Cancer** 1988 Dec 1;62(11):2320–4

Ten-year survival and late sequelae in testicular cancer patients treated with cisplatin, vinblastine, and bleomycin. Stoter G, et al. **J Clin Oncol** 1989 Aug;7(8):1099–104

Hepatotoxicity of paracetamol in combination with interferon and vinblastine [letter] Kellokumpu-Lehtinen P, et al. **Lancet** 1989 May 20;1(8647):1143

Mitomycin-C and vinblastine in advanced breast cancer. Navarro M, et al. **Oncology** 1989;46(3):137–42 (28 ref.)

Recombinant alpha-interferon and vinblastine in metastatic renal cell carcinoma: efficacy of low doses. Cetto GL, et al. **Semin Surg Oncol** 1988;4(3):184–90 (19 ref.)

Is interferon with or without vinblastine the "treatment of choice" in metastatic renal cell carcinoma? The Norwegian Radium Hospital's experience 1983–1986. Fosså SD. **Semin Surg Oncol** 1988;4(3):178–83

Phase II study of divided-dose vinblastine in advanced cancer patients. Giaccone G, et al. **Tumori** 1989 Jun 30; 75(3):248–51

[Iontophoretic administration of vinblastine in the control of refractory spinal root pain and postherpetic neuralgia] Opavský J, et al. **Cas Lek Cesk** 1989 May 5;128(19):590–4 (Eng. Abstr.) **(Cze)**

[Decrease in the antimetastatic effect of vinblastine administered in liposomes] Kaledin VI, et al. **Eksp Onkol** 1988;10(5):43–6 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Early-onset thrombocytopenia during combination chemotherapy in testicular cancer is induced by vinblastine. Steurer G, et al. **Cancer** 1989 Jan 1;63(1):51–8

Long-term effects on renal function and blood pressure of treatment with cisplatin, vinblastine, and bleomycin in patients with germ cell cancer. Hansen SW, et al. **J Clin Oncol** 1988 Nov;6(11):1728–31

[Infarct-typical changes in the electrocardiogram following chemotherapy with vinblastine] Zeymer U, et al. **Dtsch Med Wochenschr** 1989 Apr 14;114(15):589–92 (Eng. Abstr.) **(Ger)**

[Acute dyspnea following intravenous administration of vinblastine/mitomycin C] Lagler U, et al. **Schweiz Med Wochenschr** 1989 Mar 4;119(9):290–2 (Eng. Abstr.) **(Ger)**

[Aseptic osteonecrosis of the femoral head in cancer patients with neuropathies caused by vincristine and vinblastine] Meneghello A, et al. **Radiol Med (Torino)** 1989 Jun; 77(6):626–30 (Eng. Abstr.) **(Ita)**

ANALOGS & DERIVATIVES

Vinblastine-C4 alkyl maleoyl and amino acid maleoyl derivatives. II. Experimental antitumor activity against leukemias and human tumor xenografts. Collard MP, et al. **Anticancer Res** 1989 May-Jun;9(3):625–30

Vinblastine-C4 alkyl maleoyl and amino acid maleoyl derivatives: I. Chemistry and physicochemical data. Rao KS, et al. **Anticancer Res** 1989 May-Jun;9(3):619–24

Specific alterations in the biological activities of C-20'-modified vinblastine congeners. Borman LS, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):715–24

Pharmacokinetics of a new anticancer drug, navelbine, in patients. Comparative study of radioimmunologic and radioactive determination methods. Boré P, et al. **Cancer Chemother Pharmacol** 1989;23(4):247–51

In vivo efficacy of monoclonal antibody-drug conjugates of three different subisotypes which bind the human tumor-associated antigen defined by the KS1/4 monoclonal antibody. Starling JJ, et al. **Cancer Immunol Immunother** 1989;28(3):171–8

New antitumor monoclonal antibody-vinca conjugates LY203725 and related compounds: design, preparation, and representative in vivo activity. Laguzza BC, et al. **J Med Chem** 1989 Mar;32(3):548–55

Advances in vinca-alkaloids: Navelbine. Marty M, et al. **Nouv Rev Fr Hematol** 1989;31(2):77–84 (19 ref.)

Photochemical oxidation of vindoline and 16-O-acetylvindoline. Filippelli FJ, et al. **Photochem Photobiol** 1988 Sep;48(3):265–9

Navelbine. Portions of this supplement were presented at a symposium. Lugano, Switzerland, October 31, 1988. **Semin Oncol** 1989 Apr;16(2 Suppl 4):1–45

Navelbine: a new step in cancer therapy? Armand JP, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):41–5 (0 ref.)

Safety and tolerance of Navelbine in phase I-II clinical studies. Besenval M, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):37–40

In situ analysis of the action of Navelbine on various types of microtubules using immunofluorescence. Binet S, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):5–8

Phase-II study of Navelbine in advanced breast cancer. Canobbio L, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):33–6

Experimental antitumor activity of Navelbine. Cros S, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):15–20

Efficacy of Navelbine (NVB) in non-small cell lung cancer (NSCLC). Depierre A, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):26–9

Biochemical effects of Navelbine on tubulin and associated proteins. Fellous A, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):9–14

Navelbine in advanced ovarian epithelial cancer: a study of the French oncology centers. George MJ, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):30–2

Pharmacokinetics and metabolism of Navelbine. Krikorian A, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):21–5 (9 ref.)

The synthesis of Navelbine prototype of a new series of vinblastine derivatives. Potier P. **Semin Oncol** 1989 Apr; 16(2 Suppl 4):2–4

ANALYSIS

Studies on the stability of vinblastine sulfate in aqueous solution. Black J, et al. **J Pharm Sci** 1988 Jul;77(7):630–4

METABOLISM

Enhanced efflux of [3H]vinblastine from Chinese hamster ovary cells transfected with a full-length complementary DNA clone for the mdr1 gene. Hammond JR, et al. **Cancer Res** 1989 Jul 15;49(14):3867–71

In vitro metabolic transformations of vinblastine: oxidations catalyzed by peroxidase. Elmarakby SA, et al. **J Med Chem** 1989 Mar;32(3):674–9

Binding of vinblastine to stabilized microtubules. Singer WD, et al. **Mol Pharmacol** 1989 Sep;36(3):366–70

PHARMACOKINETICS

The correlation of vinblastine pharmacokinetics to toxicity in testicular cancer patients. Chong CD, et al. **J Clin Pharmacol** 1988 Aug;28(8):714–8

In vitro metabolic transformations of vinblastine: oxidations catalyzed by human ceruloplasmin. Elmarakby SA, et al. **J Med Chem** 1989 Sep;32(9):2158–62

Kinetic study on the mechanism of tissue distribution of vinblastine. Wierzba K, et al. **J Pharmacobiodyn** 1988 Oct; 11(10):651–61

PHARMACOLOGY

Comparison of the synergistic potentiation of etoposide, doxorubicin, and vinblastine cytotoxicity by dipyridamole. Howell SB, et al. **Cancer Res** 1989 Jun 15;49(12):3178–83

A vinblastine sensitive high affinity choline uptake system. Ivy MT, et al. **Comp Biochem Physiol [C]** 1989;92(1):81–8

Protein synthesis and mitosis. 1. Influence of anti-tubulins on protein synthetic activity in synchronous M-phase and asynchronous populations of HeLa S-3 cells. Wheatley DN, et al. **Cytobios** 1988;55(220):41–50

Induction of random microtubule polymerization in cold and drug-treated PtK1 cells following hyperosmotic shock treatment. Mullins JM, et al. **Eur J Cell Biol** 1989 Jun; 49(1):149–53

Airway permeability in rats exposed to ozone or treated with cytoskeleton-destabilizing drugs. Bhalla DK, et al. **Exp Lung Res** 1988;14(4):501–25

Transport across rat trachea in vitro after exposure to cytoskeleton-active drugs in vitro or to ozone in vivo. Rasmussen RE, et al. **Exp Lung Res** 1989 Mar;15(2):253–68

Vinblastine sensitivity of leukaemic lymphoblasts modulated by serum lipid. Holmes KT, et al. **FEBS Lett** 1989 Feb 13;244(1):103–7

Plasma membrane lipid composition of vinblastine sensitive and resistant human leukaemic lymphoblasts. May GL, et al. **Int J Cancer** 1988 Nov 15;42(5):728–33

The multidrug transporter: rapid modulation of efflux activity monitored in single cells by the morphologic effects of vinblastine and daunomycin. Konen PL, et al. **J Histochem Cytochem** 1989 Jul;37(7):1141–5

Meiotic arrest and aneuploidy induced by vinblastine in mouse oocytes. Russo A, et al. **Mutat Res** 1988 Nov; 202(1):215–21

The inhibitory effects of colchicine, vinblastine and cytochalasin D on lymphocyte blastogenic responses. Tajima M, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):403–7

The in vitro effect of electromagnetically generated shock waves (Lithostar) on the Dunning R3327 PAT-2 rat prostatic cancer cell-line. A potentiating effect on the in vitro cytotoxicity of vinblastin. Oosterhof GO, et al. **Urol Res** 1989;17(1):13–9

[Electron microscopic-cytochemical study of the effect of vinblastine on synaptosome adenylate cyclase in the rat cerebral cortex] Rostomian MA, et al. **Tsitologiia** 1989 Mar; 31(3):282–6 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Effects of microtubular transport blockade in peripheral nerve axons on chronic unalloyable root pain. Pěničková V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 118:93–105

Recombinant alpha-2a interferon plus vinblastine in the treatment of metastatic renal cell carcinoma. Sertoli MR, et al. **Am J Clin Oncol** 1989 Feb;12(1):43–5

Multidrug resistance in haemopoietic cell lines, myelodysplastic syndromes and acute myeloblastic leukaemia. Holmes J, et al. **Br J Haematol** 1989 May; 72(1):40–4

Interferon alpha-2a and vinblastine in the treatment of metastatic renal carcinoma. Rizzo M, et al. **Eur Urol** 1989; 16(4):271–7 (45 ref.)

Variations in serum alkaline DNase activity in rats during growth and treatment of tumors sensitive or resistant to therapy. Economidou-Karaoglou A, et al. **Int J Cancer** 1989 May 15;43(5):956–9

Phase II trial of five day intravenous infusion vinblastine sulfate in patients with diffuse malignant mesothelioma: a Southwest Oncology Group study [letter] Cowan JD, et al. **Invest New Drugs** 1988 Sep;6(3):247–8

Phase II trials of 5-day vinblastine infusion (NSC 49842), L-alanosine (NSC 153353), acivicin (NSC 163501), and aminothiadiazole (NSC 4728) in patients with recurrent or metastatic renal cell carcinoma. Elson PJ, et al. **Invest New Drugs** 1988 Jun;6(2):97–103

Uses of vincristine and vinblastine in dogs and cats. Golden DL, et al. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1114–7 (20 ref.)

Angiosarcoma of the breast: long-term survival following adjuvant chemotherapy. Rosner D. **J Surg Oncol** 1988 Oct; 39(2):90–5

Phase II study of recombinant interferon alpha-2a and vinblastine in advanced renal cell carcinoma. Schornagel JH, et al. **J Urol** 1989 Aug;142(2):253–6

VINCA ALKALOIDS

Stability of vinca alkaloid anticancer drugs in three commonly used infusion fluids. Beijnen JH, et al. **J Parenter Sci Technol** 1989 Mar-Apr;43(2):84–7

ADMINISTRATION & DOSAGE

[The oral liquid form of vinburnine: biopharmaceutics] Sado PA, et al. **J Pharm Belg** 1989 Jan-Feb;44(1):50–9 (Eng. Abstr.) **(Fre)**

ADVERSE EFFECTS

A transient hemolytic reaction and stomatocytosis following vinca alkaloid administration. Ohsaka A, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):7–17

ANALYSIS

Complexation behavior of vinburnine with beta and gamma cyclodextrins in aqueous solution and in the solid state. Giordano F, et al. **Farmaco [Prat]** 1988 Nov;43(11):345–55

Relative configuration and cytotoxic activity of vincarubine: a novel bisindole alkaloid from Vinca minor. Proksa B, et al. **Planta Med** 1988 Jun;54(3):214–8

BLOOD

[Simultaneous determination of vinburnine and 6-hydroxyvinburnine in human plasma by high-performance liquid chromatography] Sado PA, et al. **J Chromatogr** 1988 Dec 29;434(1):157–67 (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

In vitro metabolic transformations of vinblastine: oxidations catalyzed by peroxidase. Elmarakby SA, et al. **J Med Chem** 1989 Mar;32(3):674–9

METABOLISM

Influence of the guanine nucleotide phosphorylation state and of $Mg2+$ ions on the interaction of vinzolidine/tubulin 6 S: a fluorescence quenching study. Codaccioni F, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):236–44

Atypical multidrug resistance in a therapy-induced drug-resistant human leukemia cell line (LALW-2): resistance to Vinca alkaloids independent of P-glycoprotein. Haber M, et al. **Cancer Res** 1989 Oct 1; 49(19):5281–7

Determination of vinca alkaloids in plasma and urine using ion-exchange chromatography on silica gel and fluorescence detection. Vendrig DE, et al. **J Chromatogr** 1988 Dec 29;434(1):145–55

PHARMACOLOGY

In vitro antagonism between cisplatin and vinca alkaloids. Lee K, et al. **Br J Cancer** 1989 Jan;59(1):36–41

RU 24722, a new eburnamine derivative, induces selective alterations in cerebral glucose utilization in freely moving

rat. Broussolle E, et al. **Eur J Pharmacol** 1989 Jan 17; 159(3):225–31
Trachealis responses induced by vincamine and vinpocetine; inhibition by indomethacin and Ca2+ dependence. Machová J, et al. **Eur J Pharmacol** 1989 Mar 29; 162(3):387–95
Long-term effects of RU24722 on tyrosine hydroxylase of the rat brain. Labatut R, et al. **J Neurochem** 1988 Nov; 51(5):1367–74
Effect of (+/-)-methyl 3-ethyl-2,3,3a,4-tetrahydro-1H-indolo-[3,2,1-de] [1,5] naphthyridine-6-carboxylate hydrochloride (OM-853), a new vincamine analogue, on the metabolism and function of cerebral serotonergic neurons. Koda H, et al. **Jpn J Pharmacol** 1989 Mar;49(3):413–21
Effects of brovincamine on stereological capillary parameters in adult and old Fischer-344 rats. Jucker M, et al. **Microvasc Res** 1989 May;37(3):298–307
Azotomy-induced ornithine decarboxylase activity in the mouse dorsal root ganglion is inhibited by the vinca alkaloids. Soiefer AI, et al. **Neurochem Res** 1988 Dec; 13(12):1169–73
Idebenone and vinpocetine augment long-term potentiation in hippocampal slices in the guinea pig. Ishihara K, et al. **Neuropharmacology** 1989 Jun;28(6):569–73
[Effects of cavinton on isolated basilar arteries of dogs] Lu YQ, et al. **Yao Hsueh Hsueh Pao** 1988 Nov;23(11):817–9 (Eng. Abstr.) (Chi)
[Effect of kavinton on systemic and regional hemodynamics in waking and anesthetized rats] Ivashev MN, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):26–9 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Preventive effect of vinpocetine on calcifications: atherosclerosis in experimental rabbits. Yasui M, et al. **Acta Neurol Scand** 1989 Mar;79(3):239–42
Vinca alkaloids. Freireich EJ. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:56
Pharmacoclinical study of the action of vinburnin versus placebo: study of the hemodynamic, microcirculatory and rheological effects in angiopathy of the lower limbs in diabetes mellitus. Le Devehat C, et al. **Int Angiol** 1989 Jan-Mar;8(1):57–61
The safety and lack of efficacy of vinpocetine in Alzheimer's disease. Thal LJ, et al. **J Am Geriatr Soc** 1989 Jun; 37(6):515–20
Vinpocetine prevents ischemic cell damage in rat hippocampus. Sauer D, et al. **Life Sci** 1988;43(21):1733–9
Prevention of delayed neuronal death in gerbil hippocampus by a novel vinca alkaloid derivative (vinconate). Araki T, et al. **Mol Chem Neuropathol** 1989 Aug;11(1):33–43
[Effect of kavinton on the hemodynamics and adenosine metabolism in atherosclerosis patients] Mikunis RI, et al. **Vrach Delo** 1988 Jul;(7):27–9 (Eng. Abstr.) (Rus)
[Initial dyscirculatory encephalopathy in middle-aged and elderly patients (problems of early diagnosis and therapy)] Man'kovskiĭ NB, et al. **Zh Nevropatol Psikhiatr** 1989; 89(1):16–20 (Eng. Abstr.) (Rus)

TOXICITY

Comparison of the neurotoxic effects of colchicine, the vinca alkaloids, and other microtubule poisons. Goldschmidt RB, et al. **Brain Res** 1989 May 1;486(1):133–40
Snail neurons as a possible model for testing neurotoxic side effects of antitumor agents: paracrystal formation by Vinca alkaloids. Müller LJ, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7184–8

VINCALEUKOBLASTINE see **VINBLASTINE**

VINCAMINE see under **VINCA ALKALOIDS**

VINCENT'S INFECTION see **GINGIVITIS, NECROTIZING ULCERATIVE**

VINCRISTINE

ADMINISTRATION & DOSAGE

Slow infusion of vincristine in the treatment of refractory thrombocytopenic purpura. Linares M, et al. **Acta Haematol (Basel)** 1988;80(3):173–4
In vivo antitumor activity demonstrated with squamous carcinoma reactive monoclonal antibody–Vinca immunoconjugates. Johnson DA, et al. **Cancer Immunol Immunother** 1988;27(3):241–5
Vincristine infusion in advanced non Hodgkin's lymphoma. Kumar L, et al. **Indian J Cancer** 1989 Mar;26(1):14–6
Preservation of anaplastic features in Wilms' tumors after preoperative chemotherapy. Alvarez-Silvan AM, et al. **Med Pediatr Oncol** 1989;17(2):131–3
Micronucleus test with vincristine administered by intraperitoneal injection and oral gavage. Ohuchida A, et al. **Mutat Res** 1989 Aug;223(4):395–8
[Myelomatosis. A study of 138 patients treated with melphalan, prednisone and vincristine with particular attention to the prognostic value of a stage subdivision] Johnsen HE, et al. **Ugeskr Laeger** 1989 Mar 27; 151(13):816–21 (Eng. Abstr.) (Dan)
[Results of palliative chemotherapy in advanced small cell bronchial carcinoma] Fritze D, et al. **Dtsch Med Wochenschr** 1988 Oct 28;113(43):1663–8 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Vincristine treatment of acute lymphoblastic leukemia induces transient autonomic cardioneuropathy. Hirvonen HE, et al. **Cancer** 1989 Aug 15;64(4):801–5
Severe visual loss after a single dose of vincristine in a patient with spinal cord astrocytoma. Teichmann KD, et al. **J Ocul Pharmacol** 1988 Summer;4(2):117–21
[Veno-occlusive disease of the liver and nephroblastoma in children (role of the vincristine-actinomycin combination?] Chevallier B, et al. **Ann Pediatr (Paris)** 1988 Sep; 35(7):525–6 (Fre)
[Aseptic osteonecrosis of the femoral head in cancer patients with neuropathies caused by vincristine and vinblastine] Meneghello A, et al. **Radiol Med (Torino)** 1989 Jun; 77(6):626–30 (Eng. Abstr.) (Ita)
[A case of Hodgkin's disease exhibiting erythrodermia probably due to allergic reaction to vinca alkaloids] Matsumoto N, et al. **Gan To Kagaku Ryoho** 1989 Jun; 16(6):2297–300 (Eng. Abstr.) (Jpn)
[Inappropriate ADH syndrome and other toxic effects in the course of childhood ALL treated with vincristine] Indiano JM, et al. **An Esp Pediatr** 1988 Oct;29 Suppl 34:155–6 (Spa)

ANALOGS & DERIVATIVES

In vivo antitumor activity demonstrated with squamous carcinoma reactive monoclonal antibody–Vinca immunoconjugates. Johnson DA, et al. **Cancer Immunol Immunother** 1988;27(3):241–5

ANTAGONISTS & INHIBITORS

GM1 ganglioside counteracts cholinergic and behavioral deficits induced in the rat by intracerebral injection of vincristine. Di Patre PL, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):43–50

METABOLISM

Steroid hormones inhibit binding of Vinca alkaloid to multidrug resistance related P-glycoprotein. Naito M, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):1066–71
Daunorubicin and vincristine binding to plasma membrane vesicles from daunorubicin-resistant and wild type Ehrlich ascites tumor cells. Sehested M, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3017–27
Competitive inhibition by verapamil of ATP-dependent high affinity vincristine binding to the plasma membrane of multidrug-resistant K562 cells without calcium ion involvement. Naito M, et al. **Cancer Res** 1989 Mar 15; 49(6):1452–5

PHARMACOKINETICS

Effect of verapamil in vitro and in vivo on the accumulation of vincristine in leukemic cells from patients with low malignant lymphoma. Gruber A, et al. **Anticancer Res** 1989 Jan-Feb;9(1):9–12
Modulation by verapamil of vincristine pharmacokinetics and toxicity in mice bearing human tumor xenografts. Horton JK, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1727–36
Relationships between tumor responsiveness, vincristine pharmacokinetics and arrest of mitosis in human tumor xenografts. Horton JK, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3995–4000
[In vitro 3H-vincristine accumulation as a possible marker of the sensitivity of animal and human leukemic cells to the preparation] Sidorova TA, et al. **Eksp Onkol** 1988; 10(6):50–3 (Eng. Abstr.) (Rus)

PHARMACOLOGY

A new assay to evaluate cell growth and drug sensitivity in culture using a cell image processor. Kiss R, et al. **Anticancer Res** 1988 Jul-Aug;8(4):765–74
Effect of homoharringtonine on the viability of murine leukemia P388 cells resistant to either adriamycin, vincristine, or 1-beta-D-arabinofuranosylcytosine. Wilkoff LJ, et al. **Cancer Chemother Pharmacol** 1989;23(3):145–50
Identification of the bromosulfophthalein-sensitive efflux route for methotrexate as the site of action of vincristine in the vincristine-dependent enhancement of methotrexate uptake in L1210 cells. Henderson GB, et al. **Cancer Res** 1988 Nov 1;48(21):5995–6001
Protection by cycloheximide against cytotoxicity induced by vincristine, colchicine, or delta 12-prostaglandin J2 on human osteosarcoma cells. Sakai T, et al. **Cancer Res** 1989 Mar 1;49(5):1193–6
Inhibitory effects of vincristine, ifosfamide and peplomycin on hormone-independent human prostatic carcinoma cell line. Moriyama-Gonda N, et al. **Exp Pathol** 1988; 35(3):141–8
Vincristine and gastrointestinal transit [letter] Sharma RK. **Gastroenterology** 1988 Nov;95(5):1435–6
Vincristine-resistant human cancer KB cell line and increased expression of multidrug-resistance gene. Kohno K, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1238–46
The effects of vincristine and doxorubicin on the clonogenic cells of a human lung cancer cell line in methylcellulose and suspension culture. Yamashita Y, et al. **Jpn J Cancer Res** 1989 Mar;80(3):277–82
Mutagenicity testing of vincristine sulfate in germ cells of male mice. Ehling UH, et al. **Mutat Res** 1988 Nov-Dec; 209(3-4):107–13
[Effect of vincristine on Mg2+-ATPase activity of actomyosin-like protein from sarcoma-45 and actomyosin from rat skeletal muscle] Senchuk VV, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):18–22 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Treatment of chronic pain syndromes with transcutaneous iontophoresis of vinca alkaloids, with special regard to post-herpetic neuralgia. Tajti J, et al. **Acta Med Hung** 1989; 46(1):3–12 (35 ref.)
Effective therapy for a severe case of the idiopathic hypereosinophilic syndrome. Marshall GM, et al. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):178–83 (26 ref.)
Efficacy of adjuvant chemotherapy for patients with poor-risk medulloblastoma: a preliminary report. Packer RJ, et al. **Ann Neurol** 1988 Oct;24(4):503–8
Diffuse histiocytic lymphoma: the 20-year experience of an Australian teaching hospital. Burrow JN, et al. **Aust N Z J Med** 1988 Oct;18(6):758–63
A phase II study of vincristine in malignant mesothelioma—a negative report. Mårtensson G, et al. **Cancer Chemother Pharmacol** 1989;24(2):133–4
In vivo circumvention of vincristine resistance in mice with P388 leukemia using a novel compound, AHC-52. Shinoda H, et al. **Cancer Res** 1989 Apr 1;49(7):1722–6
Uses of vincristine and vinblastine in dogs and cats. Golden DL, et al. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1114–7 (20 ref.)
Comment on the article by Paul R. Layman, E. Argyras, and C.J. Glynn entitled 'Iontophoresis of vincristine versus saline in post-herpetic neuralgia. A controlled trial.' **Pain**, 25 (1986) 165–170. Gangarosa LP Sr. **Pain** 1988 Nov; 35(2):230–3
Treatment with 5-FU, VCR and BCNU in tumor bearing nude mice. Köhler L, et al. **Strahlenther Onkol** 1989 Jul; 165(7):542–4
[The antiproliferative effects associated with vincristine and human interferons in experimental in vitro systems] Danielescu G, et al. **Virologie** 1989 Apr-Jun;40(2):107–13 (Eng. Abstr.) (Fre)
[The correlation of the in vitro 14C-glycine absorption by murine and human leukemic cells with the antitumor effect of vincristine] Sidorova TA, et al. **Eksp Onkol** 1989; 11(2):52–4 (Eng. Abstr.) (Rus)

TOXICITY

Modulation by verapamil of vincristine pharmacokinetics and toxicity in mice bearing human tumor xenografts. Horton JK, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1727–36
Vincristine-induced changes in the retina of the isolated arterially-perfused cat eye. Ripps H, et al. **Exp Eye Res** 1989 Jun;48(6):771–90
The mouse bone marrow micronucleus assay can be used to distinguish aneugens from clastogens. Vanderkerken K, et al. **Mutagenesis** 1989 Jan;4(1):6–11
Influence of vincristine on the neurosecretory nuclei of the hypothalamo-neurohypophyseal system of the developing rat. Pietrzak M. **Neuropatol Pol** 1988;26(4):521–35
[Neurotoxic and teratogenic risks of vincristine in the rat] Barberi I, et al. **Boll Soc Ital Biol Sper** 1988 Jun; 64(6):577–81 (Eng. Abstr.) (Ita)

VINDESINE

ADMINISTRATION & DOSAGE

Continuous venous infusion of vindesine in metastatic breast cancer: experience with a subcutaneously implanted system and portable pump. Amoroso D, et al. **Anticancer Res** 1989 Jan-Feb;9(1):141–3
Cytotoxic activity of daunorubicin or vindesin conjugated to a monoclonal antibody on cultured MCF-7 breast carcinoma cells. Aboud-Pirak E, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):641–8
Phase I study of 21 days continuous infusion with vindesine. de Vries EG, et al. **Br J Cancer** 1989 Mar;59(3):471–2
Chemotherapy for non-small cell lung cancer: a randomized trial of cisplatin/vindesine v no chemotherapy. Williams CJ, et al. **Semin Oncol** 1988 Dec;15(6 Suppl 7):58–61

ADVERSE EFFECTS

Fatal paralytic ileus following vindesine chemotherapy in a patient with myeloma-associated amyloidosis [letter] Kanoh T. **Eur J Haematol** 1989 Jan;42(1):108
Fatal acute interstitial pneumonia induced by low-dose doxorubicin and vindesine. Isawa T, et al. **Tohoku J Exp Med** 1989 Jun;158(2):149–54
[A case of Hodgkin's disease exhibiting erythrodermia probably due to allergic reaction to vinca alkaloids] Matsumoto N, et al. **Gan To Kagaku Ryoho** 1989 Jun; 16(6):2297–300 (Eng. Abstr.) (Jpn)

ANALOGS & DERIVATIVES

Analysis of structural features of dihydropyridine analogs

needed to reverse multidrug resistance and to inhibit photoaffinity labeling of P-glycoprotein. Nogae I, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):519–27

PHARMACOKINETICS

[Pharmacokinetics of cisplatin and vindesine in a patient with chronic renal failure undergoing hemodialysis] Ayabe H, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3283–5 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Phase II trial of spirogermanium and vindesine in malignant glioma. Alavi JB, et al. **Am J Clin Oncol** 1989 Feb; 12(1):8–10

Fractionated irradiation under ambient conditions of human NSCLC transplanted into nude mice: effect of different fractionation schedules and of radiotherapy and vindesine. Hinkelbein W, et al. **Strahlenther Onkol** 1989 Jul; 165(7):519–20

VINYL CHLORIDE see under **VINYL COMPOUNDS**

VINYL COMPOUNDS

The use of acrylic copolymers as antibody carriers for immunoaffinity chromatography. Rapak A, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):811–8

Murine monoclonal antibody adsorbed onto vinylidene fluoride floccules used to eliminate antibody interference in "sandwich"-type immunoassays. Newman ES, et al. **Clin Chem** 1989 Aug;35(8):1743–6

Determination of the functionally important heme peripheral vinyl group orientation in paramagnetic hemoprotein by 2D NMR. Yamamoto Y, et al. **FEBS Lett** 1989 Apr 24; 247(2):263–7

Vinyl chloride–induced hepatic angiosarcoma. Falk H. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:39–46

4–vinyl and 2,4–divinyl deuteration effects on the low frequency resonance Raman bands of myoglobin: correlation with the structure of vinyl group. Uchida K, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):979–85

[Usefulness of ethyl vinyl acetate bags for total parenteral nutrition in surgery] Bonadimani B, et al. **Minerva Dietol Gastroenterol** 1988 Apr–Jun;34(2):101–4 (Eng. Abstr.) **(Ita)**

ADMINISTRATION & DOSAGE

[Use of ferromagnetic liquid in the treatment of anastomotic fistulas in total esophagoplasty] Mamontov AS, et al. **Grudn Khir** 1989 May–Jun;(3):69–71 **(Rus)**

ADVERSE EFFECTS

Human male exposure to vinyl chloride and possible teratogenic and mutagenic risks: a review. Uzych L. **Hum Toxicol** 1988 Nov;7(6):517–27 (32 ref.)

Epithelioid hemangioendothelioma of the liver following contact with vinyl chloride. Recurrence after orthotopic liver transplantation. Gelin M, et al. **J Hepatol** 1989 Jan; 8(1):99–106

Update to vinyl chloride mortality study. Dahar WS, et al. **J Occup Med** 1988 Aug;30(8):648–9

Cohort and case–control analyses of workers exposed to vinyl chloride: an update. Wu WA, et al. **J Occup Med** 1989 Jun;31(6):518–23

Liver angiosarcoma in a vinyl chloride polymerization plant worker. Report of the seventh Italian case. Brugnami G, et al. **Med Lav** 1988 Jan–Feb;79(1):34–41

Acroosteolysis and Raynaud's phenomenon after vinyl chloride exposure. Freudiger H, et al. **Vasa** 1988; 17(3):216–8

[The effects of vinyl chloride on pregnancy parturition and fetal development among female workers] Bao YS. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov; 22(6):343–6 (Eng. Abstr.) **(Chi)**

[Hepatic angiosarcoma caused by vinyl chloride: a new Italian case] Chiozzini G, et al. **Med Lav** 1988 Jan–Feb; 79(1):24–33 (Eng. Abstr.) **(Ita)**

[Effect of vinyl chloride and its polymers on the nervous system] Kurzbauer H. **Neurol Neurochir Pol** 1988 Sep–Oct; 22(5):404–9 (Eng. Abstr.) **(Pol)**

[A probability approach to evaluating the results of epidemiologic research in the hygienic regulation of chemical carcinogens (the example of vinyl chloride)] Fedotova IV, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):10–3 (Eng. Abstr.) **(Rus)**

ANALYSIS

Effect of the content of divinylbenzene in ion–exchange resins on the chromatographic separation of alpha–cyclodextrin and glucose. Hashimoto K, et al. **J Chromatogr** 1988 Sep 2;448(2):241–8

Evaluation of a process gas chromatograph as a continuous emission monitor for benzene and vinyl chloride. Pau JC, et al. **JAPCA** 1988 Dec;38(12):1528–9

CHEMICAL SYNTHESIS

Oligomers with pendant isocyanate groups as adhesives for dentin and other tissues. Lee CH, et al. **J Dent Res** 1989 Mar;68(3):484–8

METABOLISM

An unstable epoxy intermediate formed by the microsomal oxidation of 4–nitrophenyl vinyl ether. Isobe M, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2267–9

Uptake of vinylidene fluoride in rats simulated by a physiological model. Medinsky MA, et al. **Fundam Appl Toxicol** 1988 Aug;11(2):250–60

Prenatal ethanol exposure decreases hippocampal 3H–vinyldene kainic acid binding in 45–day–old rats. Farr KL, et al. **Neurotoxicol Teratol** 1988 Nov–Dec;10(6):563–8

PHARMACOKINETICS

Preparation of polymer nano– and microspheres by vinyl polymerization techniques. Arshady R. **J Microencapsul** 1988 Apr–Jun;5(2):101–14 (49 ref.)

PHARMACOLOGY

Immunobiochemical profiles of workers differing in the degree of occupational exposure to vinyl chloride. Bencko V, et al. **J Hyg Epidemiol Microbiol Immunol** 1988; 32(4):375–84

POISONING

[Occupational angioneurotic disorders provoked by vinyl monochloride and vibration] Letourneux M, et al. **Phlebologie** 1989 Apr–Jun;42(2):233–43 (Eng. Abstr.) **(Fre)**

[The late sequelae of occupational vinyl chloride poisoning] Antoniuzhenko VA. **Gig Tr Prof Zabol** 1989;(2):39–41 **(Rus)**

[Various approaches to the study of the late effects of occupational diseases] Penknovich AA, et al. **Gig Tr Prof Zabol** 1989;(5):43–4 **(Rus)**

TOXICITY

1,N6–etheno–2'–deoxyadenosine and 3,N4–etheno–2'–deoxycytidine detected by monoclonal antibodies in lung and liver DNA of rats exposed to vinyl chloride. Eberle G, et al. **Carcinogenesis** 1989 Jan; 10(1):209–12

Comparison of potency of human carcinogens: vinyl chloride, chloromethylmethyl ether and bis(chloromethyl)ether. Van Duuren BL. **Environ Res** 1989 Aug;49(2):143–51 (41 ref.)

Induction of single–strand breaks in liver DNA of mice after inhalation of vinyl chloride. Walles SA, et al. **IARC Sci Publ** 1988;(89):227–31

Effects of vinyl chloride on liver function of exposed workers, evaluated by measurements of plasma clearance of the 99mTc–N–2,4–dimethylacetanilido–iminodiacetate complex. Studniarek M, et al. **J Appl Toxicol** 1989 Aug; 9(4):213–8

Factors of humoral resistance in workers exposed to vinyl chloride with a view to smoking habits. Wagnerová M, et al. **J Hyg Epidemiol Microbiol Immunol** 1988; 32(3):265–72

Comparative studies on the metabolism and mutagenicity of vinyl ethers. Sone T, et al. **J Pharmacobiodyn** 1989 Jun; 12(6):345–51

Effects of vinyl acetate and acetaldehyde on sperm morphology and meiotic micronuclei in mice. Lähdetie J. **Mutat Res** 1988 Nov;202(1):171–8

Increased alkylation of liver DNA and cell turnover in young versus old rats exposed to vinyl chloride correlates with cancer susceptibility. Laib RJ, et al. **Toxicol Lett** 1989 Feb; 45(2–3):231–9

[Hygienic regulation of vinyl chloride in the environment] Dmitriev MT, et al. **Gig Sanit** 1988 Sep;(9):51–3 (38 ref.) **(Rus)**

VIOLENCE

see related
RIOTS

Posteromedial hypothalamotomy in the treatment of violent, aggressive behaviour. Sano K, et al. **Acta Neurochir Suppl (Wien)** 1988;44:145–51

Use of the MMPI in the prediction of dangerous behavior. Sloore H. **Acta Psychiatr Belg** 1988 Jan–Feb;88(1):42–51

Minor physical anomalies and recidivistic adult violent criminal behavior. Kandel E, et al. **Acta Psychiatr Scand** 1989 Jan;79(1):103–7

Suicide and violent death among adolescent suicide attempters. Kotila L, et al. **Acta Psychiatr Scand** 1989 May; 79(5):453–9

Evaluation of the Brief Psychopathological Rating Scale in relation to aggressive behavior by acute involuntarily admitted patients. Palmstierna T, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):313–6

The self–reported effects of PCP on human aggression. McCardle L, et al. **Addict Behav** 1989;14(4):465–72

Firearm violence and the effects of gun control legislation. Jung RS, et al. **Am J Community Psychol** 1988 Aug; 16(4):515–24

TEARS: does domestic violence play a role? [letter] Rimsza M. **Am J Dis Child** 1989 Feb;143(2):137–8

Rapid tranquilization of the violent patient. Dubin WR, et al. **Am J Emerg Med** 1989 May;7(3):313–20 (69 ref.)

Regional use of violent suicide methods: an analysis of suicide attempts in Houston, Texas [published erratum appears in Am J Emerg Med 1989 May;7(3):349] Peterson LG, et al. **Am J Emerg Med** 1989 Jan;7(1):21–7

Exposure to television as a risk factor for violence. Centerwall BS. **Am J Epidemiol** 1989 Apr;129(4):643–52

Acceptability of behavioral interventions for self–injurious behavior. Tarnowski KJ, et al. **Am J Ment Retard** 1989 Mar;93(5):575–80

The birth–weight/battering connection. Bullock LF, et al. **Am J Nurs** 1989 Sep;89(9):1153–5

Child abuse, neglect, and adult behavior: research design and findings on criminality, violence, and child abuse. Widom CS. **Am J Orthopsychiatry** 1989 Jul;59(3):355–67

Statutory approaches to limiting psychiatrists' liability for their patients' violent acts. Appelbaum PS, et al. **Am J Psychiatry** 1989 Jul;146(7):821–8

Defense mechanisms in risk of suicide and risk of violence. Apter A, et al. **Am J Psychiatry** 1989 Aug;146(8):1027–31

Midazolam for aggressivity and violence in three mentally retarded patients. Bond WS, et al. **Am J Psychiatry** 1989 Jul;146(7):925–6

Violent crime possibly associated with anabolic steroid use [letter] Conacher GN, et al. **Am J Psychiatry** 1989 May; 146(5):679

Effects of diagnosis and context on dangerousness [letter] Cooper AJ. **Am J Psychiatry** 1989 Feb;146(2):289–90

Misconceptions about mentally ill patients [letter] Doherty E. **Am J Psychiatry** 1989 Jan;146(1):131–2

Physical assaults in a psychiatric unit of a general hospital. Edwards JG, et al. **Am J Psychiatry** 1988 Dec; 145(12):1568–71

Dangerously aggressive behavior as a side effect of alprazolam [letter] French AP. **Am J Psychiatry** 1989 Feb; 146(2):276

Childhood trauma in borderline personality disorder. Herman JL, et al. **Am J Psychiatry** 1989 Apr;146(4):490–5

An empirical comparison of the stone and dangerousness criteria for civil commitment. Hoge SK, et al. **Am J Psychiatry** 1989 Feb;146(2):170–5

Physical and sexual assault histories among psychiatric outpatients. Jacobson A. **Am J Psychiatry** 1989 Jun; 146(6):755–8

Neurological impairment in violent schizophrenic inpatients. Krakowski MI, et al. **Am J Psychiatry** 1989 Jul; 146(7):849–53

Videotape recording of assaultive inpatients [letter] Leong GB, et al. **Am J Psychiatry** 1989 Feb;146(2):287–8

Murder and assault arrests of White House cases: clinical and demographic correlates of violence subsequent to civil commitment. Shore D, et al. **Am J Psychiatry** 1989 May; 146(5):645–51

Family violence. Emery RE. **Am Psychol** 1989 Feb; 44(2):321–8 (68 ref.)

Psychology and violence against women. Walker LE. **Am Psychol** 1989 Apr;44(4):695–702

The 1983 Beirut Airport terrorist bombing. Injury patterns and implications for disaster management. Frykberg ER, et al. **Am Surg** 1989 Mar;55(3):134–41

Emergency department violence in United States teaching hospitals. Lavoie FW, et al. **Ann Emerg Med** 1988 Nov; 17(11):1227–33

Violence in the emergency department: a very real concern [editorial] Taliaferro E. **Ann Emerg Med** 1988 Nov; 17(11):1248

Terrorist bombings. Lessons learned from Belfast to Beirut. Frykberg ER, et al. **Ann Surg** 1988 Nov;208(5):569–76 (41 ref.)

The 1986 terrorist bombing experience in Paris. Rignault DP, et al. **Ann Surg** 1989 Mar;209(3):368–73

Effects of media violence on children. A review of the literature. Heath L, et al. **Arch Gen Psychiatry** 1989 Apr; 46(4):376–9

Family history of alcoholism in violent offenders and impulsive fire setters. Linnoila M, et al. **Arch Gen Psychiatry** 1989 Jul;46(7):613–6

Psychobiological concomitants of history of suicide attempts among violent offenders and impulsive fire setters. Virkkunen M, et al. **Arch Gen Psychiatry** 1989 Jul; 46(7):604–6

Relationship of psychobiological variables to recidivism in violent offenders and impulsive fire setters. A follow–up study. Virkkunen M, et al. **Arch Gen Psychiatry** 1989 Jul; 46(7):600–3

Serum cholesterol and risk of accidental or violent death in a 25–year follow–up. The Finnish cohorts of the Seven Countries Study. Pekkanen J, et al. **Arch Intern Med** 1989 Jul;149(7):1589–91

A descriptive study of seclusion: the unit environment, patient behavior, and nursing interventions. Kirkpatrick H. **Arch Psychiatr Nurs** 1989 Feb;3(1):3–9

Pattern of emergency cases related to accidents, violence and violent deaths during 1985 in Sukkertoppen/Maniitsoq, Greenland. Marchall B. **Aretic Med Res** 1988 Jul; 47(3):125–30

Community treatment orders [letter] Bartholomew AA. **Aust N Z J Psychiatry** 1989 Jun;23(2):162–3

The dangerousness of psychiatrists. Ellard J. **Aust N Z J Psychiatry** 1989 Jun;23(2):169–75 (28 ref.)

The use of seclusion: a comparison of two psychiatric intensive care units. Hafner RJ, et al. **Aust N Z J Psychiatry** 1989 Jun;23(2):235–9

Investigation of incidents of terrorism involving commercial aircraft. Clark MA, et al. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A55–9

Combat level and social support in the development of posttraumatic stress disorder in Vietnam veterans. Barrett TW, et al. **Behav Modif** 1988 Jan;12(1):100–15

Paradoxical punishment as it relates to the battered woman syndrome. Long GM, et al. **Behav Modif** 1989 Apr; 13(2):192–205

Frontal cerebral lesions and violent incidents in chronic neuropsychiatric patients. Heinrichs RW. **Biol Psychiatry** 1989 Jan 15;25(2):174–8

The roots of violence [letter] **BMJ** 1989 Jan 7;298(6665):46–7

Aggression and the general practitioner. D'Urso P, et al. **BMJ** 1989 Jan 14;298(6666):97–8

Violence in general practice [editorial] Harris A. **BMJ** 1989 Jan 14;298(6666):63–4

Sexual drive of patients in psychiatric hospitals [letter] James D, et al. **BMJ** 1988 Dec 17;297(6663):1613

The roots of violence [editorial] Pearson G. **BMJ** 1988 Nov 26;297(6660):1352–3

Supporting victims of violent crime [editorial] Shepherd J. **BMJ** 1988 Nov 26;297(6660):1353

Colour naming of violence-related words in Northern Ireland. Giles M, et al. **Br J Clin Psychol** 1989 Feb;28 (Pt 1):87–8

Violence and mental disorder. Mullen PE. **Br J Hosp Med** 1988 Dec;40(6):460–3 (50 ref.)

Surgical, socio-economic and forensic aspects of assault: a review. Shepherd JP. **Br J Oral Maxillofac Surg** 1989 Apr; 27(2):89–98 (57 ref.)

Marital violence in the community. A biographical approach. Andrews B, et al. **Br J Psychiatry** 1988 Sep;153:305–12

Violent incidents in special hospitals [letter] Coldwell JB, et al. **Br J Psychiatry** 1989 Feb;154:270

Psychiatric aspects of terrorist violence: Northern Ireland 1969–1987. Curran PS. **Br J Psychiatry** 1988 Oct;153:470–5 (32 ref.)

Dangerous delusions. Violence and the misidentification syndromes. De Pauw KW, et al. **Br J Psychiatry** 1988 Jan; 152:91–6

Dangerous delusions: violence and the misidentification syndromes [letter] Fishbain DA. **Br J Psychiatry** 1988 Jun; 152:859–60

Assaults on staff by psychiatric in-patients. A critical review. Haller RM, et al. **Br J Psychiatry** 1988 Feb;152:174–9 (33 ref.)

A preliminary study of violent incidents in a special hospital (Rampton). Larkin E, et al. **Br J Psychiatry** 1988 Aug; 153:226–31

Post-traumatic stress disorder and civil violence in Northern Ireland. Loughrey GC, et al. **Br J Psychiatry** 1988 Oct; 153:554–60

Psychometric correlates of episodic violent behaviour. A multidimensional neuropsychological approach. Mungas D. **Br J Psychiatry** 1988 Feb;152:180–7

Attempted strangulation during phenothiazine-induced sleep-walking and night terrors. Scott AI. **Br J Psychiatry** 1988 Nov;153:692–4

Perception of violence as a function of observer's ideology and actor's group membership. Vala J, et al. **Br J Soc Psychol** 1988 Sep;27 (Pt 3):231–7

Violence in geriatric patients with dementia. Haller E, et al. **Bull Am Acad Psychiatry Law** 1989;17(2):183–8

Emerging problems for staff associated with the release of potentially dangerous forensic patients. Miller RD, et al. **Bull Am Acad Psychiatry Law** 1988;16(4):309–20

An HIV-infected psychiatric patient: some clinicolegal dilemmas. Silva JA, et al. **Bull Am Acad Psychiatry Law** 1989;17(1):33–43

Capgras syndrome and dangerousness. Silva JA, et al. **Bull Am Acad Psychiatry Law** 1989;17(1):5–14

The impact of litigation and court decisions on clinical practice. Menninger WW. **Bull Menninger Clin** 1989 May; 53(3):203–14 (27 ref.)

Assault by burning and its relationship to social circumstances. Stone MJ. **Burns Incl Therm Inj** 1988 Dec; 14(6):461–7

Violent behaviour and psychiatric diagnosis in female offenders. Brownstone DY, et al. **Can J Psychiatry** 1989 Apr;34(3):190–4

A clinical study of violence in patients referred on a Form I to a general hospital psychiatric unit. Cooper AJ. **Can J Psychiatry** 1988 Nov;33(8):711–5

Assaultive behaviour: before it happens.... Durivage A. **Can J Psychiatry** 1989 Jun;34(5):393–7 (37 ref.)

Regional Review Board: patient's right to withdraw? [letter] Manchanda R, et al. **Can J Psychiatry** 1989 Aug; 34(6):628–9

Investigation of the criteria for involuntary admission to a general hospital. Malla A. **Can Med Assoc J** 1988 Oct 15; 139(8):749–52

Post-traumatic stress disorder: a reaction to state-supported child abuse and neglect. Straker G, et al. **Child Abuse Negl** 1988;12(3):383–95

Parental predictions of their children's knowledge about dangerous situations. Yarmey AD, et al. **Child Abuse Negl** 1988;12(3):355–61

Violence, youth and a way out. Calhoun JA. **Child Today** 1988 Sep-Oct;17(5):9–11

Correlates of suicide and violence risk 1: the suicide risk measure. Plutchik R, et al. **Compr Psychiatry** 1989 Jul-Aug; 30(4):296–302

Why are torturers never punished? Vesti P. **Dan Med Bull** 1988 Oct;35(5):493–5

A study of aggressive and violent behaviour among a group of psychiatric in-patients in Kenya. Wazome EG. **East Afr Med J** 1988 Jun;65(6):360–5

Auditory event related potentials in violent and nonviolent prisoners. Drake ME, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(1):7–10

Violence and the systemic view: the problem of power. Dell PF. **Fam Process** 1989 Mar;28(1):1–14

Injuries due to deliberate violence in areas of Argentina. I. The extent of violence. Copenhagen Study Group. Aalund O, et al. **Forensic Sci Int** 1989 Jul;42(1–2):151–63

Injuries due to deliberate violence in areas of Denmark. IV. Alcohol intoxication in victims of violence. The Copenhagen Study Group. Albrektsen SB, et al. **Forensic Sci Int** 1989 Apr–May;41(1–2):181–91

Injuries due to deliberate violence in areas of Denmark. I. The extent of violence. Breiting VB, et al. **Forensic Sci Int** 1989 Feb;40(2):183–99

Injuries due to deliberate violence in areas of Denmark. V. Violence against women and children. Copenhagen Study Group. Breiting VB, et al. **Forensic Sci Int** 1989 Jun; 41(3):285–94

Injuries due to deliberate violence in areas of Argentina. II. Lesions. Copenhagen Study Group. Danielsen L, et al. **Forensic Sci Int** 1989 Jul;42(1–2):165–75

Injuries due to deliberate violence in areas of Denmark. III. Lesions. The Copenhagen Study Group. Kjaerulff H, et al. **Forensic Sci Int** 1989 Apr–May;41(1–2):169–80

Injuries due to deliberate violence in areas of Denmark. II. Victims of homicide in the Copenhagen area. Thomsen JL, et al. **Forensic Sci Int** 1989 Mar;40(3):291–7

Gold award. A regional resource for psychiatric treatment of victims of violence. **Hosp Community Psychiatry** 1988 Nov;39(11):1192–5

Consumers speak [letter] **Hosp Community Psychiatry** 1988 Aug;39(8):890–1

Protecting the president [letter; comment] **Hosp Community Psychiatry** 1989 Jun;40(6):647–50, **Comment on:** Hosp Community Psychiatry 1988 Nov;39(11):1166–71

Management of HIV-positive psychiatric patients who fail to reduce high-risk behaviors. Carlson GA, et al. **Hosp Community Psychiatry** 1989 May;40(5):511–4

Staff injuries from inpatient violence. Carmel H, et al. **Hosp Community Psychiatry** 1989 Jan;40(1):41–6

Do dangerousness-oriented commitment laws restrict hospitalization of patients who need treatment? A test. Cleveland S, et al. **Hosp Community Psychiatry** 1989 Mar; 40(3):266–71

The bad–mad dilemma for public psychiatry. Cohen NL, et al. **Hosp Community Psychiatry** 1989 Jul;40(7):677

Multifaceted therapeutic interventions with the violent psychiatric inpatient. Davis DL, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):867–9

Violent behavior and length of psychiatric hospitalization. Greenfield TK, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):809–14

Institutional response to inpatients' threats against the President [see comments] Griffith EE, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1166–71, **Comment in:** Hosp Community Psychiatry 1989 Jun;40(6):647–50

Psychiatrists' accuracy in predicting violent behavior on an inpatient unit. Janofsky JS, et al. **Hosp Community Psychiatry** 1988 Oct;39(10):1090–4

Urban psychiatric commitments: disability and dangerous behavior of black and white recent admissions. Lindsey KP, et al. **Hosp Community Psychiatry** 1989 Mar; 40(3):286–94

Relationship between preadmission threats and later violent behavior by acute psychiatric inpatients. McNiel DE, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):605–8

The tyranny of irresponsible freedom [editorial] Maier GJ. **Hosp Community Psychiatry** 1989 May;40(5):453

Use of a holding technique to control the violent behavior of seriously disturbed adolescents. Miller D, et al. **Hosp Community Psychiatry** 1989 May;40(5):520–4

Warning third parties at risk of AIDS: APA's policy is a barrier to treatment. Perry S. **Hosp Community Psychiatry** 1989 Feb;40(2):158–61

Violent behavior and length of hospitalization [editorial] Tardiff K. **Hosp Community Psychiatry** 1989 Aug;40(8):781

Assessing the victimized psychiatric patient. Westermeyer J, et al. **Hosp Community Psychiatry** 1989 Mar;40(3):245–9

Warning third parties at risk of AIDS: APA's policy is a reasonable approach. Zonana H. **Hosp Community Psychiatry** 1989 Feb;40(2):162–4

Assault: characteristics of victims attending an inner-city hospital. Shepherd J, et al. **Injury** 1988 May;19(3):185–90

Injuries caused by personal violence. Sumner BB, et al. **Injury** 1987 Jul;18(4):258–60

When violence has a benevolent face: the paradox of hunger in the world's wealthiest democracy. Brown JL. **Int J Health Serv** 1989;19(2):257–77

Organizational approaches to improving institutional estimations of dangerousness in forensic psychiatric hospitals: a Dutch perspective. Blankstein H. **Int J Law Psychiatry** 1988;11(4):341–5

Crime, inpatient admissions, and violence among male mental patients. Klassen D, et al. **Int J Law Psychiatry** 1988; 11(3):305–12

Risk assessment of violence among the mentally disordered: generating useful knowledge. Monahan J. **Int J Law Psychiatry** 1988;11(3):249–57 (40 ref.)

Violence counseling in the routine health care of adolescents. Stringham P, et al. **J Adolesc Health Care** 1988 Sep; 9(5):389–93

Violent incidents on a regional secure unit. Rix G, et al. **J Adv Nurs** 1988 Nov;13(6):746–51

Community treatment of violent youth: seven years of experience with a class action suit. Keith CR. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):600–4

Toward a theory of the genesis of violence: a follow-up study of delinquents. Lewis DO, et al. **J Am Acad Child Adolesc Psychiatry** 1989 May;28(3):431–6

Children's reactions to loss of parent through violence. Payton JB, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):563–6

Children's memory and proximity to violence. Pynoos RS, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar; 28(2):236–41

Children who witness the sexual assaults of their mothers. Pynoos RS, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):567–72

Dangerous behavior in a demented patient. Preserving autonomy in a patient with diminished competence. Watts DT, et al. **J Am Geriatr Soc** 1989 Jul;37(7):658–62

The attack in Central Park [editorial] McGoldrick KE. **J Am Med Wom Assoc** 1989 Jul–Aug;44(4):103

Eyewitnesses show hypermnesia for details about a violent event. Scrivner E, et al. **J Appl Psychol** 1988 Aug; 73(3):371–7

Subtypes of suicidal and assaultive behaviors in adolescent psychiatric inpatients: a research note. Pfeffer CR, et al. **J Child Psychol Psychiatry** 1989 Jan;30(1):151–63

Severity of early separation and later abusive mothering in monkeys: what is the pathogenic threshold? Troisi A, et al. **J Child Psychol Psychiatry** 1989 Mar;30(2):277–84

Anger, hostility, and depression in assaultive vs. suicide-attempting males. Maiuro RD, et al. **J Clin Psychol** 1989 Jul;45(4):531–41

Phencyclidine and violence: clinical and legal issues. Brecher M, et al. **J Clin Psychopharmacol** 1988 Dec;8(6):397–401 (50 ref.)

View from the Nation's Courts. Freishtat HW. **J Clin Psychopharmacol** 1989 Jun;9(3):215–6

View from the Nation's Courts. Freishtat HW. **J Clin Psychopharmacol** 1988 Dec;8(6):434–6

Discriminant analysis of risk factors for sexual victimization among a national sample of college women. Koss MP, et al. **J Consult Clin Psychol** 1989 Apr;57(2):242–50

The dangerous patient. Lande RG. **J Fam Pract** 1989 Jul; 29(1):74–8

Circumstances of sexual and physical victimization of black psychiatric outpatients. Jenkins EJ, et al. **J Natl Med Assoc** 1989 Mar;81(3):246–52

Ethnic differences in seclusion and restraint. Carpenter MD, et al. **J Nerv Ment Dis** 1988 Dec;176(12):726–31

Effects of long-term exposure to violent and sexually degrading depictions of women. Linz DG, et al. **J Pers Soc Psychol** 1988 Nov;55(5):758–68

Inpatient violence: trait and state. Krakowski MI, et al. **J Psychiatr Res** 1989;23(1):57–64

Domestic violence and chemical dependency: dual problems, dual interventions. Gorney B. **J Psychoactive Drugs** 1989 Apr–Jun;21(2):229–38 (54 ref.)

Difficult adolescents [letter] **J Psychosoc Nurs Ment Health Serv** 1988 Dec;26(12):34

Battered women and abusive partners: treatment issues and strategies. Moehling KS. **J Psychosoc Nurs Ment Health Serv** 1988 Sep;26(9):8–11, 15–7 (14 ref.)

The angry adolescent. Treatment versus containment practices. Pond VE. **J Psychosoc Nurs Ment Health Serv** 1988 Dec;26(12):15–7 (14 ref.)

Restraining the elderly. Strome TM. **J Psychosoc Nurs Ment Health Serv** 1988 Sep;26(9):18–21

Assaults in south east London. Hocking MA. **J R Soc Med** 1989 May;82(5):281–4

Acute and chronic effects of alcohol use on violence. Collins JJ, et al. **J Stud Alcohol** 1988 Nov;49(6):516–21

Cervical spine immobilization of penetrating neck wounds in a hostile environment. Arishita GI, et al. **J Trauma** 1989 Mar;29(3):332–7

Leads from the MMWR. Education about adult domestic violence in U.S. and Canadian medical schools, 1987–88. **JAMA** 1989 Feb 17;261(7):972, 978

Hospital violence reduction among high-risk patients. Drummond DJ, et al. **JAMA** 1989 May 5;261(17):2531–4

Proactive violence reduction: successful quality assurance [editorial] Eichelman B. **JAMA** 1989 May 5;261(17):2546

Alcohol and family violence [letter] Schwartz I. **JAMA** 1989 Jul 21;262(3):351–2

Violence increasingly being viewed as problem of public health; prevention programs attempted [news] Zylke JW. **JAMA** 1988 Nov 11;260(18):2621, 2624–5

A psychiatrist's duty of confidentiality. Brahams D. **Lancet** 1988 Dec 24–31;2(8626–8627):1503

Benzodiazepine sedation and allegations of sexual assault. Brahams D. **Lancet** 1989 Jun 10;1(8650):1339–40

Automatism and the law. Fenwick P. **Lancet** 1989 Sep 23; 2(8665):753–4

Inner city teenagers' exposure to violence: a prevalence

study. Gladstein J, et al. **Md Med J** 1988 Dec;37(12):951–4
More on the role of weapons in homicidal violence. Barlow HD, et al. **Med Law** 1988;7(4):347–58
Some biological predispositions and multivariate analysis of the bio–psycho–social correlates of violent prisoners. Shoham SG, et al. **Med Law** 1989;7(6):607–28
Violent prisoners. Shoham SG, et al. **Med Law** 1988; 7(3):247–67 (123 ref.)
Personality and social attitude correlates of violent prisoners. Shoham SG, et al. **Med Law** 1988;7(3):269–86
Public attitudes to mental illness: the influence of the Hungerford massacre. Appleby L, et al. **Med Sci Law** 1988 Oct;28(4):291–5
Violent incidents on special care wards in a special hospital. Coldwell JB, et al. **Med Sci Law** 1989 Apr;29(2):116–23
The importance of previous convictions in assessing criminal motivation—the need for detail. Prins H. **Med Sci Law** 1989 Apr;29(2):107–8
Recording by the police of violent offences; an Accident and Emergency Department perspective. Shepherd J, et al. **Med Sci Law** 1989 Jul;29(3):251–7
Towards integrating the behavioural sciences to meet the threats of violence and war. Hinde RA. **Med War** 1989 Jan–Mar;5(1):5–15
Terrorism: causes and prevention. Poteliakhoff A, et al. **Med War** 1988 Oct–Dec;4(4):227–31
The Porter lecture. Common psychological themes in societies' reaction to terrorism and disasters. Duffy JC. **Milit Med** 1988 Aug;153(8):387–90
Education about adult domestic violence in U.S. and Canadian medical schools, 1987–88. **MMWR** 1989 Jan 20; 38(2):17–9
Prisoner with AIDS convicted of assault with dangerous weapon [news] **N J Med** 1988 Sep;85(9):705
Fetal neglect and abuse. Risemberg HM. **N Y State J Med** 1989 Mar;89(3):148–51
Anti–terrorism bill introduced in Senate [news] Pennisi E. **Nature** 1989 Apr 27;338(6218):694
Dying is no accident. Adolescents, violence, and intentional injury. Spivak H, et al. **Pediatr Clin North Am** 1988 Dec; 35(6):1339–47 (28 ref.)
Violent death in the pediatric age group: rural and urban differences. Gausche M, et al. **Pediatr Emerg Care** 1989 Mar;5(1):64–7
Field experiments of television violence with children: evidence for an environmental hazard? Gadow KD, et al. **Pediatrics** 1989 Mar;83(3):399–405 (52 ref.)
Victimization of mothers of abused children: a controlled study. McKibben L, et al. **Pediatrics** 1989 Sep;84(3):531–5
Children, adolescents, and television—1989: I. Television violence: a critique. Singer DG. **Pediatrics** 1989 Mar; 83(3):445–6
Children, adolescents, and television—1989: II. The role of pediatricians. Strasburger VC. **Pediatrics** 1989 Mar; 83(3):446–8
The assaulted nurse: strategies for healing. Morrison EF. **Perspect Psychiatr Care** 1987–88;24(3–4):120–6 (15 ref.)
The violent patient. **Psychiatr Clin North Am** 1988 Dec; 11(4):499–698
The therapist's legal duty when the patient may be violent. Beck JC. **Psychiatr Clin North Am** 1988 Dec;11(4):665–79 (22 ref.)
Psychopharmacology and the management of violent patients. Brizer DA. **Psychiatr Clin North Am** 1988 Dec; 11(4):551–68 (145 ref.)
Research on the biologic aspects of violence. Burrowes KL, et al. **Psychiatr Clin North Am** 1988 Dec;11(4):499–509 (70 ref.)
Spouse abuse and other domestic violence. Dickstein LJ. **Psychiatr Clin North Am** 1988 Dec;11(4):611–28 (43 ref.)
Research on cultural and socioeconomic factors in criminal violence. Messner SF. **Psychiatr Clin North Am** 1988 Dec; 11(4):511–25 (60 ref.)
Clinical evaluation of the violent patient. Reid WH. **Psychiatr Clin North Am** 1988 Dec;11(4):527–37
Victims of violence and post–traumatic stress disorder. Sonnenberg SM. **Psychiatr Clin North Am** 1988 Dec; 11(4):581–90 (44 ref.)
Management of the violent patient in an emergency situation. Tardiff K. **Psychiatr Clin North Am** 1988 Dec;11(4):539–49
Hostage–takers in health care settings. Turner JT. **Psychiatr Clin North Am** 1988 Dec;11(4):649–64 (28 ref.)
Behavioral treatment of violent psychiatric patients. Wong SE, et al. **Psychiatr Clin North Am** 1988 Dec;11(4):569–80 (47 ref.)
The psychiatrist and the violent acting out patient in the setting of a general hospital. Curtin JJ. **Psychiatr J Univ Ottawa** 1988 Sep;13(3):124–6 (10 ref.)
Clinical and demographic characteristics of 15 patients with repetitively assaultive behavior. Barber JW, et al. **Psychiatr Q** 1988 Fall;59(3):213–24
Parens patriae considerations in the commitment process. Bursztajn H, et al. **Psychiatr Q** 1988 Fall;59(3):165–81
Correlates of suicide and violence risk: III. A two–stage model of countervailing forces. Plutchik R, et al. **Psychiatry Res** 1989 May;28(2):215–25
Temperature and aggression: ubiquitous effects of heat on occurrence of human violence. Anderson CA. **Psychol Bull** 1989 Jul;106(1):74–96 (80 ref.)
Does violence beget violence? A critical examination of the literature. Widom CS. **Psychol Bull** 1989 Jul;106(1):3–28 (115 ref.)
Hair mineral analysis: biochemical imbalances and violent criminal behavior. Cromwell PF, et al. **Psychol Rep** 1989 Feb;64(1):259–66
Early exposure to toxic radiation and violent death: a comment. de Man AF. **Psychol Rep** 1988 Dec;63(3):870
Attitudes toward animals and personal violence (suicide and homicide). Lester D. **Psychol Rep** 1988 Dec;63(3):810
Early–developmental exposure to nuclear fallout radiation: interpretive considerations for epidemiological studies of violent death. Pellegrini RJ. **Psychol Rep** 1988 Dec; 63(3):857–8
Toxic radiation exposure and the epidemiology of violent death: confronting obstacles to productive inquiry. Pellegrini RJ. **Psychol Rep** 1988 Dec;63(3):906
Influence of rock videos on attitudes of violence against women. Peterson DL, et al. **Psychol Rep** 1989 Feb; 64(1):319–22
Serious assaults by inpatients [published erratum appears in Psychosomatics 1989 Summer;30(3):358] Reid WH, et al. **Psychosomatics** 1989 Winter;30(1):54–6
The fit of elder abuse with the family violence paradigm, and the implications of a paradigm shift for clinical practice. Phillips LR. **Public Health Nurs** 1988 Dec; 5(4):222–9
Theoretical modeling to predict violence in hospitalized psychiatric patients. Morrison EF. **Res Nurs Health** 1989 Feb;12(1):31–40
Violent crime arrests and paranoid schizophrenia: the White House case studies. Shore D, et al. **Schizophr Bull** 1988; 14(2):279–81
Animal rightists claim bomb blast [news] Dickson D. **Science** 1989 Mar 3;243(4895):1133
The cycle of violence. Widom CS. **Science** 1989 Apr 14; 244(4901):160–6
Chronic behavioral disorders of human REM sleep: a new category of parasomnia. Schenck CH, et al. **Sleep** 1986 Jun; 9(2):293–308
The effect of publicized mass murders and murder–suicides on lethal violence, 1968–1980. A research note. Stack S. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jul;24(4):202–8
Coping with political violence in Northern Ireland. Cairns E, et al. **Soc Sci Med** 1989;28(6):621–4
Children in political violence. Gibson K. **Soc Sci Med** 1989; 28(7):659–67 (70 ref.)
Psychoanalysis confronts the politics of repression: the case of Argentina. Hollander NC. **Soc Sci Med** 1989;28(7):751–8
Violence, conflict and health in Africa. Ityavyar DA, et al. **Soc Sci Med** 1989;28(7):649–57
Statutory change and 'street–level' implementation of psychiatric commitment. Marx JI, et al. **Soc Sci Med** 1988; 27(11):1247–56
Political violence and Eritrean health care. Sabo LE, et al. **Soc Sci Med** 1989;28(7):677–84
Towards an epidemiology of political violence in the Third World. Zwi A, et al. **Soc Sci Med** 1989;28(7):633–42 (59 ref.)
Penetrating thoracic aortic injuries: rare but potentially salvageable sequelae of urban warfare. Timberlake GA, et al. **South Med J** 1989 Aug;82(8):970–2 (18 ref.)
Violence and trauma response. White SG, et al. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):677–94 (11 ref.)
Violence is a public health problem. Rosenberg ML. **Trans Stud Coll Physicians Phila** 1988 Dec;10(1–4):147–68
Violence against women. Hindberg BO. **Women Health** 1988; 13(3–4):151–8
[Basic behavior guidelines in airplane hijacking] Hagelsten JO. **Nord Med** 1989;104(3):67–8 **(Dan)**
[Children and domestic fights. A review of 105 social reports] Bitsch–Christensen M, et al. **Ugeskr Laeger** 1989 Apr 10; 151(15):932–4 (Eng. Abstr.) **(Dan)**
[Post–traumatic stress disorder: not only in war victims] van Meekeren E, et al. **Ned Tijdschr Geneeskd** 1989 Jan 21; 133(3):97–9 **(Dut)**
[Projective methods and dangerous behavior] Mormont C. **Acta Psychiatr Belg** 1988 Jan–Feb;88(1):52–9 (Eng. Abstr.) **(Fre)**
[Terrorism and surgery] Pailler JL, et al. **Ann Chir** 1988; 42(7):505–11 (22 ref.) (Eng. Abstr.) **(Fre)**
[The nature of the mission entrusted to the expert psychiatrist in matters concerning danger, accessibility to approval, etc.] Pouget R, et al. **Ann Med Psychol (Paris)** 1988 Sep–Oct;146(9):905–9 **(Fre)**
[Forensic problems in the assessment of a terrorist attack in the Schwechat airport in Vienna] Missliwetz J, et al. **Beitr Gerichtl Med** 1988;46:477–87 (Eng. Abstr.) **(Ger)**
[Psychiatrically ill criminals. Epidemiology and current practice of of implementing forensic psychiatric measures] Leygraf N. **Monogr Gesamtgeb Psychiatr (Berlin)** 1988; 53:1–274 **(Ger)**
[Role of the victim in the expert assessment of the offender] Weber J. **Off Gesundheitswes** 1989 Jun;51(6):303–8 (Eng. Abstr.) **(Ger)**
[Indirect forms of iatrogenic violence in clinical psychiatry] Hinrichs R. **Psychiatr Prax** 1988 Sep;15(5):165–70 (Eng. Abstr.) **(Ger)**
[Extra– and intracranial injuries of the cerebral arteries as a sequela of assault] Maxeiner H. **Z Rechtsmed** 1989; 102(2–3):191–8 (Eng. Abstr.) **(Ger)**
[Relationship between violent behavior and quality of communication in couples with an alcoholic member] Casacchia M, et al. **Minerva Psichiatr** 1988 Jul–Sep; 29(3):153–6 (Eng. Abstr.) **(Ita)**
[Terrorist bombing] Solheim K. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1036–7 **(Nor)**

HISTORY

[Julius Moses (1868–1942)—Jew—physician—social democrat. In memory of a victim of fascist antisemitism] Hahn S. **Z Gesamte Hyg** 1988 Dec;34(12):712–5 (Eng. Abstr.) **(Ger)**
[Reflections on the aftereffects of the Nürnberg trial of physicians] Mausbach H. **Z Gesamte Hyg** 1988 Dec; 34(12):717–21 **(Ger)**

PREVENTION & CONTROL

Assaultive behaviour: before it happens.... Durivage A. **Can J Psychiatry** 1989 Jun;34(5):393–7 (37 ref.)
Weapon carrying among patients in a psychiatric emergency room. Anderson AA, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):845–7
[Medical management of aggressive and violent behavior] Virkkunen M. **Duodecim** 1989;105(12):1206–10 (18 ref.) **(Fin)**

PSYCHOLOGY

A prospective study of patient assaults on nursing staff in a psychogeriatric unit. Cooper AJ, et al. **Can J Psychiatry** 1989 Jun;34(5):399–404

VIOLOGENS see under **PYRIDINIUM COMPOUNDS**

VIOMYCINS

PHARMACOLOGY

The effect of viomycin on elongation steps in cell–free polypeptide synthesis. Yamada T. **J Antibiot (Tokyo)** 1988 Sep;41(9):1277–80

THERAPEUTIC USE

Superiority of enviomycin or streptomycin over ethambutol in initial treatment of lung disease caused by Mycobacterium avium complex. Tsukamura M, et al. **Chest** 1989 May;95(5):1056–8

VIPER VENOMS

Precipitation of animal plasma proteins by puff–adder venom. Hattingh J, et al. **Comp Biochem Physiol [B]** 1979; 63(4):557–9
[First aid and treatment of bites by snakes of the genus Vipera] Pozio E. **Minerva Med** 1988 Nov;79(11):973–6 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

The action of Russell's viper venom on fibrin formation and fibrinolysis in vivo. Woodhams BJ, et al. **Br J Haematol** 1989 Jan;71(1):107–11

ANALYSIS

Russell's viper venom proteins: molecular probes for neurotransmitter receptors: a review. Slater NT, et al. **Comp Biochem Physiol [C]** 1988;91(1):51–60 (66 ref.)
Biological study of muscle degenerating hemorrhagic factor from the venom of Vipera aspis aspis (aspic viper). Komori Y, et al. **Int J Biochem** 1988;20(12):1417–23
Isolation and purification of a fibrinogenolysin from the venom of the saw–scaled viper (Echis carinatus) by high–performance liquid chromatography. Tseng A, et al. **J Chromatogr** 1989 Jul 19;474(2):424–9
Purification and characterization of a major phospholipase A2 from Russell's viper (Vipera russelli) venom. Kasturi S, et al. **Toxicon** 1989;27(2):229–37
Sequence homology between sarafotoxins S6 and porcine endothelin [letter] Lee CY, et al. **Toxicon** 1989;27(3):277–9
Sarafotoxins S6: several isotoxins from Atractaspis engaddensis (burrowing asp) venom that affect the heart. Takasaki C, et al. **Toxicon** 1988;26(6):543–8
The enzymatic activities and lethal toxins of Trimeresurus wagleri (speckled pit viper) venom. Tan NH, et al. **Toxicon** 1989;27(3):349–57
Purification and partial biochemical characterization of an edema inducing phospholipase A2 from Vipera russelli (Russell's viper) snake venom. Vishwanath BS, et al. **Toxicon** 1988;26(8):713–20
[Identification of toxic components from the venom of Cerastes cerastes and Vipera lebetina vipers; purification of phospholipases] Gasmi A, et al. **Arch Inst Pasteur Tunis** 1988 Jan–Apr;65(1–2):43–52 (Eng. Abstr.) **(Fre)**

CHEMICAL SYNTHESIS

Synthesis of endothelin–1 analogues, endothelin–3, and sarafotoxin S6b: structure–activity relationships. Nakajima K, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S8–12; discussion S18
Chemical synthesis of echistatin, a potent inhibitor of platelet aggregation from Echis carinatus: synthesis and biological activity of selected analogs. Garsky VM, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4022–6

GENETICS

High-level expression in Escherichia coli of a chemically synthesized gene for [Leu-28]echistatin. Gan ZR, et al. **Gene** 1989 Jun 30;79(1):159–66

IMMUNOLOGY

Immunological and structural characterization of sarafotoxin/endothelin family of peptides. Fleminger G, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1317–23

ISOLATION & PURIFICATION

Characterization of cerastobin, a thrombin-like enzyme from the venom of Cerastes vipera (Sahara sand viper). Farid TM, et al. **Biochemistry** 1989 Jan 10;28(1):371–7

Echistatin. A potent platelet aggregation inhibitor from the venom of the viper, Echis carinatus. Gan ZR, et al. **J Biol Chem** 1988 Dec 25;263(36):19827–32

Cell-free synthesis of a putative precursor to the rat liver mitochondrial glycerol-3-phosphate dehydrogenase. Garrib A, et al. **J Biol Chem** 1988 Dec 25;263(36):19821–6

Amino acid sequence of ammodytoxin C as deduced from cDNA. Pungerčar J, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4367

Sarafotoxins S6: several isotoxins from Atractaspis engaddensis (burrowing asp) venom that affect the heart. Takasaki C, et al. **Toxicon** 1988;26(6):543–8

METABOLISM

Competitive interaction between endothelin and sarafotoxin: Binding and phosphoinositides hydrolysis in rat atria and brain. Ambar I, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):195–201

Functional endothelin/sarafotoxin receptors in the rat uterus. Bousso-Mittler D, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):952–7

Functional endothelin/sarafotoxin receptors in rat heart myocytes: structure-activity relationships and receptor subtypes. Galron R, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):936–43

Sarafotoxin S6b displaces specifically bound 125I-endothelin. Gu XH, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):509–10

Three apparent receptor subtypes for the endothelin/sarafotoxin family. Kloog Y, et al. **FEBS Lett** 1989 Aug 14;253(1-2):199–202

Sarafotoxin, a novel vasoconstrictor peptide: phosphoinositide hydrolysis in rat heart and brain. Kloog Y, et al. **Science** 1988 Oct 14;242(4876):268–70

PHARMACOLOGY

Interaction of synthetic sarafotoxin with rat vascular endothelin receptors. Hirata Y, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):441–7

Sarafotoxin S6c is a relatively weak displacer of specifically bound 125I-endothelin. Nayler WG, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):89–94

Vasoconstrictor effects of sarafotoxins in rabbit aorta: structure-function relationships. Wollberg Z, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):371–6

Sarafotoxin receptors mediate phosphoinositide hydrolysis in various rat brain regions. Kloog Y, et al. **FEBS Lett** 1989 Jan 2;242(2):387–90

Burmese Russell's viper venom causes hormone release from rat pituitary cells in vitro. Hart GR, et al. **J Endocrinol** 1989 Aug;122(2):489–94

Endothelin and sarafotoxin produce dissimilar effects on renal blood flow, but both block the antidiuretic effects of vasopressin. Goetz K, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):425–7

Proteolysis in vitro of low and high density lipoproteins in human plasma by Cerastes cerastes (Egyptian sand viper) venom. el-Asmar MF, et al. **Toxicon** 1988;26(9):809–16

Similarities in mode and sites of action of sarafotoxins and endothelins. Kloog Y, et al. **Trends Pharmacol Sci** 1989 Jun;10(6):212–4 (26 ref.)

POISONING

Contribution of focal haemorrhage and microvascular fibrin deposition to fatal envenoming by Russell's viper (Vipera russelli siamensis) in Burma. Than-Than, et al. **Acta Trop (Basel)** 1989 Jan;46(1):23–38

Acute renal failure following Russell's viper envenomation: a report of two cases. Chen HC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Aug; 4(8):467–72

Snake-bite-induced acute renal failure in India [clinical conference] Chugh KS. **Kidney Int** 1989 Mar;35(3):891–907 (115 ref.)

Acute renal failure due to viperine snake bite as seen in tropical western India. Acharya VN, et al. **Ren Fail** 1989; 11(1):33–5

TOXICITY

Antithrombin III in Echis carinatus envenomation in northern Nigeria. Mba EC, et al. **Acta Haematol (Basel)** 1989;81(2):98–100

Direct nephrotoxicity of Russell's viper venom demonstrated in the isolated perfused rat kidney. Ratcliffe PJ, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):312–9

An investigation of the coagulant activity of the venom of the saw-scaled viper (Echis carinatus) from Saudi Arabia. Kamiguti AS, et al. **Ann Trop Med Parasitol** 1988 Oct; 82(5):503–9

The effects of gaboon viper (Bitis gabonica) venom on voltage-clamped single heart cells. Busso C, et al. **Toxicon** 1988;26(6):559–70

Dissociation of catalytic activity and neurotoxicity of a basic phospholipase A2 from Russell's viper (Vipera russelli) venom. Jayanthi GP, et al. **Toxicon** 1989;27(8):875–85

Physiological and biochemical properties of a kallikrein-like enzyme from the venom of Vipera aspis aspis (aspic viper). Komori Y, et al. **Toxicon** 1988;26(12):1193–203

Immunological comparison of hemorrhagic principles present in venoms of the Crotalinae and Viperinae subfamilies. Mandelbaum FR, et al. **Toxicon** 1989;27(2):169–77

Effect of chemical modification with p-bromophenacyl bromide on the enzymatic and lethal properties of phospholipase A2 from Bothrops alternatus (Vibora de la Cruz) venom. Nisenbom HE, et al. **Toxicon** 1988; 26(12):1137–44

A novel cardiotoxic polypeptide from the venom of Atractaspis engaddensis (burrowing asp): cardiac effects in mice and isolated rat and human heart preparations. Wollberg Z, et al. **Toxicon** 1988;26(6):525–34

[Dynamics of qualitative and quantitative erythrocyte changes during the development of toxigenic syndromes of disseminated intravascular coagulation] Glazunova GA, et al. **Gematol Transfuziol** 1988 Nov;33(11):38–41 (Eng. Abstr.) (Rus)

VIRAL ANTIBODIES see ANTIBODIES, VIRAL

VIRAL ANTIGENS see ANTIGENS, VIRAL

VIRAL COAT PROTEINS see CAPSID

VIRAL CONJUNCTIVITIS see CONJUNCTIVITIS, VIRAL

VIRAL CORE PROTEINS

Sindbis virus core protein crystals. Boege U, et al. **J Mol Biol** 1989 Jul 5;208(1):79–82

ANALYSIS

Follow-up of subjects with isolated and persistent anti-core (anti-p24 or anti-p17) antibodies to HIV. Lefrère JJ, et al. **Aids** 1988 Aug;2(4):287–90

Detection of dengue 4 virus core protein in the nucleus. II. Antibody against dengue 4 core protein produced by a recombinant baculovirus reacts with the antigen in the nucleus. Makino Y, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1417–25

Detection of dengue 4 virus core protein in the nucleus. I. A monoclonal antibody to dengue 4 virus reacts with the antigen in the nucleus and cytoplasm. Tadano M, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1409–15

A genome-linked copy of the NS-1 polypeptide is located on the outside of infectious parvovirus particles. Cotmore SF, et al. **J Virol** 1989 Sep;63(9):3902–11

Nucleocapsid mass and capsomer protein stoichiometry in equine herpesvirus 1: scanning transmission electron microscopic study. Newcomb WW, et al. **J Virol** 1989 Sep; 63(9):3777–83

Rotavirus SA11 genome segment 11 protein is a nonstructural phosphoprotein. Welch SK, et al. **J Virol** 1989 Sep; 63(9):3974–82

NH2-terminal acidic region of the phosphoprotein of vesicular stomatitis virus can be functionally replaced by tubulin. Chattopadhyay D, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7977–81

Conserved cysteine and histidine residues of the avian myeloblastosis virus nucleocapsid protein are essential for viral replication but are not "zinc-binding fingers". Jentoft JE, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7094–8

Characterization of a unique protein produced by influenza A virus recovered from a long-term persistent infection. Lucas WT, et al. **Virology** 1988 Oct;166(2):620–3

The structure of tubes of bovine rotavirus nucleocapsid protein (VP6) assembled in vitro. Ready KF, et al. **Virology** 1988 Nov;167(1):50–5

Positive identification of NS4A, the last of the hypothetical nonstructural proteins of flaviviruses. Speight G, et al. **Virology** 1989 May;170(1):299–301

ANTAGONISTS & INHIBITORS

Inactivation of human hepatitis B virus DNA polymerase by pyridoxal 5'-phosphate. Oh SH, et al. **J Med Virol** 1989 May;28(1):42–6

BIOSYNTHESIS

HIV-1 core proteins expressed from recombinant vaccinia viruses. Rautmann G, et al. **AIDS Res Hum Retroviruses** 1989 Apr;5(2):147–57

In vitro assembly of a functional nucleocapsid from the negative-stranded genome RNA of a defective interfering particle of vesicular stomatitis virus. Mirakhur B, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7511–5

Maturation of Japanese encephalitis virus glycoproteins produced by infected mammalian and mosquito cells. Mason PW. **Virology** 1989 Apr;169(2):354–64

In vitro assembly of the outer capsid of bovine rotavirus is calcium-dependent. Ready KF, et al. **Virology** 1988 Nov; 167(1):269–73

Biosynthesis and post-translational cleavage of vaccinia virus structural protein VP8. Yang WP, et al. **Virology** 1988 Dec; 167(2):585–90

GENETICS

Sequence and analysis of bovine enteritic coronavirus (F15) genome. I. Sequence of the gene coding for the nucleocapsid protein; analysis of the predicted protein. Crucière C, et al. **Ann Inst Pasteur Virol** 1988 Jan-Mar; 139(1):123–38

Fine structure of the vaccinia virus gene encoding the precursor of the major core protein 4 a. Van Meir E, et al. **Arch Virol** 1988;102(1-2):19–27

Bluetongue virus-17 fusion protein ns1 expressed in Escherichia coli by pUC vectors. Wang LF, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):892–9

Total chemical synthesis of a gene for hepatitis B virus core protein and its functional characterization. Nassal M. **Gene** 1988 Jun 30;66(2):279–94

Expression of measles virus nucleoprotein in Escherichia coli: use of deletion mutants to locate the antigenic sites. Buckland R, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):435–41

The 1B (NS2), 1C (NS1) and N proteins of human respiratory syncytial virus (RSV) of antigenic subgroups A and B: sequence conservation and divergence within RSV genomic RNA. Johnson PR, et al. **J Gen Virol** 1989 Jun; 70 (Pt 6):1539–47

Proper processing of dengue virus nonstructural glycoprotein NS1 requires the N-terminal hydrophobic signal sequence and the downstream nonstructural protein NS2a. Falgout B, et al. **J Virol** 1989 May;63(5):1852–60

Mapping of RNA- temperature-sensitive mutants of Sindbis virus: complementation group F mutants have lesions in nsP4. Hahn YS, et al. **J Virol** 1989 Mar;63(3):1194–202

Mutagenesis of the in-frame opal termination codon preceding nsP4 of Sindbis virus: studies of translational readthrough and its effect on virus replication. Li GP, et al. **J Virol** 1989 Mar;63(3):1326–37

Characterization of Moloney murine leukemia virus mutants with single-amino-acid substitutions in the Cys-His box of the nucleocapsid protein. Méric C, et al. **J Virol** 1989 Apr;63(4):1558–68

The ends of La Crosse virus genome and antigenome RNAs within nucleocapsids are base paired. Raju R, et al. **J Virol** 1989 Jan;63(1):122–8

Differentiation of rinderpest and peste des petits ruminants viruses using specific cDNA clones. Diallo A, et al. **J Virol Methods** 1989 Feb;23(2):127–36

Coronavirus genome: prediction of putative functional domains in the non-structural polyprotein by comparative amino acid sequence analysis. Gorbalenya AE, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4847–61

Complete nucleotide sequence of gene segment 8 encoding non-structural protein NS2 of SA bluetongue virus serotype 10. Hall SJ, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):457

Evidence for genetic relationship between RNA and DNA viruses from the sequence homology of a putative polymerase gene of bluetongue virus with that of vaccinia virus: conservation of RNA polymerase genes from diverse species. Roy P, et al. **Nucleic Acids Res** 1988 Dec 23; 16(24):11759–67

Complete nucleotide sequence of wound tumor virus genomic segments encoding nonstructural polypeptides. Anzola JV, et al. **Virology** 1989 Jul;171(1):222–8

Nucleotide sequence of the Lassa virus (Josiah strain) S genome RNA and amino acid sequence comparison of the N and GPC proteins to other arenaviruses. Auperin DD, et al. **Virology** 1989 Feb;168(2):421–5

The sequence of the reovirus serotype 3 L3 genome segment which encodes the major core protein lambda 1. Bartlett JA, et al. **Virology** 1988 Nov;167(1):31–7

Nucleotide sequence and expression of the small (S) RNA segment of Maguari bunyavirus. Elliott RM, et al. **Virology** 1989 Aug;171(2):516–24

A measles virus subgenomic RNA: structure and generation mechanism. Enami M, et al. **Virology** 1989 Aug; 171(2):427–33

Organization of the middle RNA segment of snowshoe hare Bunyavirus. Fazakerley JK, et al. **Virology** 1988 Dec; 167(2):422–32

The nucleocapsid gene of infectious hematopoietic necrosis virus, a fish rhabdovirus. Gilmore RD Jr, et al. **Virology** 1988 Dec;167(2):644–8

The nucleoprotein gene of Ebola virus: cloning, sequencing, and in vitro expression. Sanchez A, et al. **Virology** 1989 May;170(1):81–91

Sequence analysis of the nucleocapsid protein gene of human coronavirus 229E. Schreiber SS, et al. **Virology** 1989 Mar; 169(1):142–51

Host age and cell type influence measles virus protein expression in the central nervous system. Swoveland PT, et al. **Virology** 1989 May;170(1):131–8

The B allele of the NS gene of avian influenza viruses, but not the A allele, attenuates a human influenza A virus for squirrel monkeys. Treanor JJ, et al. **Virology** 1989 Jul; 171(1):1–9

The sequences of the S2 genome segments of reovirus

serotype 3 and of the daRNA-negative mutant ts447. Wiener JR, et al. **Virology** 1989 May;170(1):340–1
The sequences of reovirus serotype 3 genome segments M1 and M3 encoding the minor protein mu 2 and the major nonstructural protein mu NS, respectively. Wiener JR, et al. **Virology** 1989 Apr;169(2):293–304
The mumps virus nucleocapsid mRNA sequence and homology among the Paramyxoviridae proteins. Elango N. **Virus Res** 1989 Jan;12(1):77–86
Nucleotide and deduced amino acid sequences of the non-structural protein, NS1, of Australian and South African bluetongue virus serotype 1. Gould AR, et al. **Virus Res** 1988 Sep;11(2):97–107
Sequence analysis of nucleocapsid gene and leader RNA of human coronavirus OC43. Kamahora T, et al. **Virus Res** 1989 Jan;12(1):1–9

IMMUNOLOGY

Expression of proteins immunologically related to murine mammary tumour virus (MMTV) core proteins in the cells of breast cancer continuous lines MCF-7, T47D, MDA-231 and cells from human milk. Litvinov SV, et al. **Acta Virol (Praha)** 1989 Mar;33(2):137–42
Effect of pepsin treatment on the HIV envelope and core antigens. Ujhelyi E, et al. **Aids** 1989 Jun;3(6):383–7
Epitope mapping of the Lassa virus nucleoprotein using monoclonal anti-nucleocapsid antibodies. Hufert FT, et al. **Arch Virol** 1989;106(3–4):201–12
Porcine epidemic diarrhea virus (CV 777) and feline infectious peritonitis virus (FIPV) are antigenically related. Zhou YL, et al. **Arch Virol** 1988;102(1–2):63–71
Characterization of infectious bronchitis virus using monoclonal antibodies. Wainright PO, et al. **Avian Dis** 1989 Jul–Sep;33(3):482–90
Investigation of atypical western blot (immunoblot) reactivity involving core proteins of human immunodeficiency virus type. Josephson SL, et al. **J Clin Microbiol** 1989 May; 27(5):932–7
Most alphaviruses share a conserved epitopic region on their nucleocapsid protein. Greiser-Wilke I, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):743–8
The synthesis and maturation of a non-structural extracellular antigen from tick-borne encephalitis virus and its relationship to the intracellular NS1 protein. Lee JM, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):335–43
Protection of woodchucks from infection with woodchuck hepatitis virus by immunization with recombinant core protein. Roos S, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2087–95
Cell-mediated immune response toward viral envelope and core antigens in gibbon apes (Hylobates lar) chronically infected with human immunodeficiency virus-1. Lusso P, et al. **J Immunol** 1988 Oct 1;141(7):2467–73
IgM and IgG responses to varicella-zoster virus p32/p36 complex after chickenpox and zoster, congenital and subclinical infections, and vaccination. Harper DR, et al. **J Infect Dis** 1989 Mar;159(3):444–51
Human immunodeficiency virus type 1 antigenemia in children. Borkowsky W, et al. **J Pediatr** 1989 Jun; 114(6):940–5
Induction of rabies virus-specific T-helper cells by synthetic peptides that carry dominant T-helper cell epitopes of the viral ribonucleoprotein. Ertl HC, et al. **J Virol** 1989 Jul; 63(7):2885–92
Mapping of antigenic domains of Sendai virus nucleocapsid protein expressed in Escherichia coli. Gill DS, et al. **J Virol** 1988 Dec;62(12):4805–8
Induction of measles virus-specific human cytotoxic T cells by purified measles virus nucleocapsid and hemagglutinin polypeptides. Jacobson S, et al. **Viral Immunol** 1987–88; 1(3):153–62
Protection of guinea pigs from Lassa fever by vaccinia virus recombinants expressing the nucleoprotein or the envelope glycoproteins of Lassa virus. Morrison HG, et al. **Virology** 1989 Jul;171(1):179–88
Monoclonal antibodies to the NS protein of vesicular stomatitis virus inhibit initiation of transcripts in vitro and dissociate leader RNA from mRNA synthesis. Williams PM, et al. **Virology** 1988 Dec;167(2):342–8
Preparation and characterization of monoclonal antibodies to nucleocapsid protein N and H glycoprotein of rinderpest virus. Bhavani K, et al. **Virus Res** 1989 Apr;12(4):331–48
[Fragments of the matrix and nucleocapsid proteins of the influenza A virus containing antigenic determinants] Stefanovich LE, et al. **Vopr Virusol** 1989 Mar–Apr; 34(2):230–4 **(Rus)**

ISOLATION & PURIFICATION

Completion of the sequence of bluetongue virus serotype 10 by the characterization of a structural protein, VP6, and a non-structural protein, NS2. Fukusho A, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1677–89
Isolation and characterization of canine distemper virus nucleocapsid variants. Oglesbee M, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2409–19
Recovery of antigenically reactive HIV-2 cores. Chrystie IL, et al. **J Med Virol** 1989 Mar;27(3):188–95
Rapid isolation of morbillivirus nucleocapsid for genomic RNA cDNA cloning and the production of specific core protein antisera. Oglesbee M, et al. **J Virol Methods** 1989 Jun;24(3):285–300
Purification and characterization of vaccinia virus structural protein VP8. Yang WP, et al. **Virology** 1988 Dec; 167(2):578–84
Characterization of a nonstructural phosphoprotein of two orbiviruses. Devaney MA, et al. **Virus Res** 1988 Sep; 11(2):151–64

METABOLISM

Flavivirus infection: essential ultrastructural changes and association of Kunjin virus NS3 protein with microtubules. Ng ML, et al. **Arch Virol** 1989;106(1–2):103–20
An enzyme which specifically splits a covalent bond between picornaviral RNA and VPg. Drygin YuF, et al. **FEBS Lett** 1988 Nov 7;239(2):343–6
Carboxy-terminal analysis of nine proteins specified by the flavivirus Kunjin: evidence that only the intracellular core protein is truncated. Speight G, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2209–14
Detection of hepatitis B virus core gene products in sera and liver of HBV-infected individuals. Theilmann L, et al. **J Hepatol** 1989 Jan;8(1):77–85
An association between actin and nucleocapsid polypeptides in isolated murine retroviral particles. Mortara RA, et al. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):295–306
Interactions between coronavirus nucleocapsid protein and viral RNAs: implications for viral transcription. Baric RS, et al. **J Virol** 1988 Nov;62(11):4280–7
Role of human immunodeficiency virus type 1-specific protease in core protein maturation and viral infectivity. Peng C, et al. **J Virol** 1989 Jun;63(6):2550–6
Parvovirus replication in normal and transformed human cells correlates with the nuclear translocation of the early protein NS1. Rhode SL 3d, et al. **J Virol** 1989 Jan; 63(1):349–55
Specific interaction between coronavirus leader RNA and nucleocapsid protein. Stohlman SA, et al. **J Virol** 1988 Nov; 62(11):4288–95
Vesicular stomatitis virus and its defective interfering particles exhibit in vitro transcriptional and replicative competition for purified L-NS polymerase molecules. Giachetti C, et al. **Virology** 1989 May;170(1):264–7
Interaction of rotavirus cores with the nonstructural glycoprotein NS28. Meyer JC, et al. **Virology** 1989 Jul; 171(1):98–107
Carboxyl-terminal region of Sendai virus P protein is required for binding to viral nucleocapsids [published erratum appears in Virology 1989 Apr;169(2):489] Ryan KW, et al. **Virology** 1988 Nov;167(1):106–12
[An enzyme hydrolyzing the covalent bond between RNA and VPg of picornaviruses. Substrates and methods of analysis of activity] Drygin IuF, et al. **Biokhimiia** 1988 Aug; 53(8):1371–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Biological functions of the NS1 protein of an influenza B virus mutant which has a long carboxyl terminal deletion. Tanaka T, et al. **Arch Virol** 1988;102(3–4):173–85
DNA-binding activity associated with the v-myb oncogene product is not sufficient for transformation. Ibanez CE, et al. **J Virol** 1988 Nov;62(11):4398–402
Mutational analysis of the genome-linked protein VPg of poliovirus. Kuhn RJ, et al. **J Virol** 1988 Nov;62(11):4207–15
The 1:1 N-NS protein complex of vesicular stomatitis virus is essential for efficient genome replication. La Ferla FM, et al. **J Virol** 1989 Sep;63(9):3852–7
Evidence for the role of the P2 protein of human rhinovirus in its host range change. Lomax NB, et al. **J Virol** 1989 May;63(5):2396–9
Both excision and replication of cloned autonomous parvovirus DNA require the NS1 (rep) protein. Rhode SL 3d. **J Virol** 1989 Oct;63(10):4249–56
The duck hepatitis B virus core protein contains a highly phosphorylated C terminus that is essential for replication but not for RNA packaging. Schlicht HJ, et al. **J Virol** 1989 Jul;63(7):2995–3000
Evidence that Sindbis virus NSP2 is an autoprotease which processes the virus nonstructural polyprotein. Ding MX, et al. **Virology** 1989 Jul;171(1):280–4
The functional domains of the phosphoprotein (NS) of vesicular stomatitis virus (Indiana serotype). Paul PR, et al. **Virology** 1988 Oct;166(2):350–7
Limitations to the expression of parvoviral nonstructural proteins may determine the extent of sensitization of EJ-ras-transformed rat cells to minute virus of mice. Van Hille B, et al. **Virology** 1989 Jul;171(1):89–97
Newly synthesized dengue-2 virus nonstructural protein NS1 is a soluble protein but becomes partially hydrophobic and membrane-associated after dimerization. Winkler G, et al. **Virology** 1989 Jul;171(1):302–5

ULTRASTRUCTURE

Three-dimensional structure of the HSV1 nucleocapsid. Schrag JD, et al. **Cell** 1989 Feb 24;56(4):651–60
Form-determining functions in Sindbis virus nucleocapsids: nucleosomelike organization of the nucleocapsid. Coombs KM, et al. **J Virol** 1989 Feb;63(2):883–91
The Sendai virus nucleocapsid exists in at least four different helical states. Egelman EH, et al. **J Virol** 1989 May; 63(5):2233–43
Intracellular vesicular stomatitis virus nucleocapsids and virions visualized by surface spreading. Yazaki K, et al. **J Virol Methods** 1989 Jan;23(1):1–12
Evidence that nucleocapsid disassembly and a later step in virus replication are inhibited in transgenic tobacco protoplasts expressing TMV coat protein. Osbourn JK, et al. **Virology** 1989 Sep;172(1):370–3

VIRAL ENVELOPE PROTEINS

A general model for the transmembrane proteins of HIV and other retroviruses. Gallaher WR, et al. **AIDS Res Hum Retroviruses** 1989 Aug;5(4):431–40
Theoretically determined three-dimensional structures for amphipathic segments of the HIV-1 gp41 envelope protein. Venable RM, et al. **AIDS Res Hum Retroviruses** 1989 Feb; 5(1):7–22
Carbohydrate structures of the human-immunodeficiency-virus (HIV) recombinant envelope glycoprotein gp120 produced in Chinese-hamster ovary cells. Mizuochi T, et al. **Biochem J** 1988 Sep 1; 254(2):599–603
Carbohydrate structure of glycoprotein 65 encoded by the polycythemia-inducing strain of Friend spleen focus-forming virus. Strube KH, et al. **Eur J Biochem** 1989 Feb 1;179(2):441–50
Peptides as potential virus inhibitors. Synthesis and bioassay of five respiratory syncytial virus peptide analogs with antimeasles activity. Lobl TJ, et al. **Int J Pept Protein Res** 1988 Nov;32(5):326–30
Identification of the fusion peptide of primate immunodeficiency viruses. Bosch ML, et al. **Science** 1989 May 12;244(4905):694–7
Control of feline leukaemia virus. Weijer K, et al. **Vet Immunol Immunopathol** 1989 May;21(1):69–83 (49 ref.)
Chemical crosslinking of glycoproteins on the envelope of herpes simplex virus. Zhu Q, et al. **Virology** 1988 Dec; 167(2):377–84

ADMINISTRATION & DOSAGE

Herpes simplex virus glycoprotein immunotherapy of recurrent genital herpes: factors influencing efficacy. Stanberry LR, et al. **Antiviral Res** 1989 May–Jun; 11(4):203–14
Antigen-presenting liposomes are effective in treatment of recurrent herpes simplex virus genitalis in guinea pigs. Ho RJ, et al. **J Virol** 1989 Jul;63(7):2951–8
The envelope proteins from purified respiratory syncytial virus protect mice from intranasal virus challenge. Levine S, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):349–56
[Use of reconstructed Sendai virus envelopes for the microinjection of proteins into monolayer cells] Bokhon'ko AI, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):600–3 (Eng. Abstr.) **(Rus)**

ANALYSIS

A radioimmunoassay detecting the bovine leukaemia virus transmembrane protein gp30 and anti-gp30 antibodies in the serum of cattle. Bossmann H, et al. **Acta Virol (Praha)** 1989 Mar;33(2):113–20
Sensitive ELISA for the gp120 and gp160 surface glycoproteins of HIV-1. Moore JP, et al. **AIDS Res Hum Retroviruses** 1988 Oct;4(5):369–79
Comparative analysis of gp41 antigens by enzyme-linked immunosorbent assays for detecting antibodies to human immunodeficiency virus type 1. Zweig M, et al. **AIDS Res Hum Retroviruses** 1988 Dec;4(6):487–92
Serine 71 of the glycoprotein HEF is located at the active site of the acetylesterase of influenza C virus. Herrler G, et al. **Arch Virol** 1988;102(3–4):269–74
A hybrid cell line producing anti-PreS2 monoclonal antibody for detection of PreS2 antigen. Xia MQ, et al. **Chin Med J [Engl]** 1988 Jun;101(6):398–402
Expression of Pre-S-encoded proteins in sera of individuals chronically infected with hepatitis D virus. Hess G, et al. **Digestion** 1988;40(1):61–4
Reduction-modifiable properties of Moloney murine leukemia virus gp70 as an indicator of envelope glycoprotein heterogeneity. Trauger R, et al. **Intervirology** 1989;30(3):137–47
Human B-cell epitopes of HIV-2 transmembrane protein are similarly spaced as in HIV-1. Goudsmit J, et al. **J Acquir Immune Defic Syndr** 1989;2(3):297–302
Antigenicity of linear B-cell epitopes in the C1, V1, and V3 region of HIV-1 gp 120. van Tijn DA, et al. **J Acquir Immune Defic Syndr** 1989;2(3):303–6
Topogenic analysis of the human immunodeficiency virus type 1 envelope glycoprotein, gp160, in microsomal membranes. Haffar OK, et al. **J Cell Biol** 1988 Nov; 107(5):1677–87
Morphology and distribution of gp52 on extracellular human cytomegalovirus (HCMV) supports biochemical evidence that it represents the HCMV glycoprotein B. Stannard LM, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1553–60
Immunodominant sites of human T cell lymphotropic virus type 1 envelope protein for murine helper T cells. Kurata A, et al. **J Immunol** 1989 Sep 15;143(6):2024–30
Several antigenic determinants exposed on the gp120 moiety of HIV-1 gp160 are hidden on the mature gp120. Thiriart C, et al. **J Immunol** 1989 Sep 15;143(6):1832–6
Quantitation of putative glycoprotein X in bioengineered pseudorabies vaccine virus culture medium by ELISA. Eaton LC. **J Immunol Methods** 1989 Mar 10;118(1):125–8

Location of a synergistic factor in the capsule of a granulosis virus of the armyworm, Pseudaletia unipuncta. Zhu Y, et al. **J Invertebr Pathol** 1989 Jul;54(1):49–56

A preliminary study on expression and significance of pre-S1 protein in liver tissue of patients with HBV infection. Hu KQ, et al. **J Tongji Med Univ** 1989;9(1):8–12

Depletion of the surface CD4 molecule by the envelope protein of human immunodeficiency virus expressed in a human CD4+ monocytoid cell line. Kawamura I, et al. **J Virol** 1989 Sep;63(9):3748–54

The 1A protein of respiratory syncytial virus is an integral membrane protein present as multiple, structurally distinct species. Olmsted RA, et al. **J Virol** 1989 May;63(5):2019–29

Oligomeric structure of gp41, the transmembrane protein of human immunodeficiency virus type 1. Pinter A, et al. **J Virol** 1989 Jun;63(6):2674–9

Isolation of a biologically active soluble form of the hemagglutinin-neuraminidase protein of Sendai virus. Thompson SD, et al. **J Virol** 1988 Dec;62(12):4653–60

Localization of Epstein-Barr virus envelope glycoproteins on the inner nuclear membrane of virus-producing cells. Torrisi MR, et al. **J Virol** 1989 Feb;63(2):828–32

A reverse passive haemagglutination test for detection of Japanese encephalitis virus antigens in cerebrospinal fluid. Ravi V, et al. **J Virol Methods** 1989 Mar;23(3):291–8

Pre-S2 and its antibody in fulminant type B hepatitis [letter] Tassopoulos NC, et al. **JAMA** 1989 Feb 17;261(7):991–2

Expression and clinical significance of pre-S1 and S2 proteins of HBV in sera of patients with chronic liver disease. Hu KQ, et al. **Liver** 1989 Jun;9(3):146–52

Role of protein N-glycosylation in pathogenesis of human immunodeficiency virus type 1. Montefiori DC, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9248–52

Methods for the study of pre-S proteins of hepatitis B virus and their antibodies: pathogenetic and clinical implications. Alberti A, et al. **Ric Clin Lab** 1988 Apr–Sep;18(2–3):241–58 (38 ref.)

Formation and characterization of FeLV ISCOMs. Akerblom L, et al. **Vaccine** 1989 Apr;7(2):142–6

A syncytia assay for human immunodeficiency virus type I (HIV-I) envelope protein and its use in studying HIV-I mutations. Felser JM, et al. **Virology** 1989 Jun; 170(2):566–70

Characterization of N- and O-linked oligosaccharides of glycoprotein 350 from Epstein-Barr virus. Serafini-Cessi F, et al. **Virology** 1989 May;170(1):1–10

[An immunohistochemical study on pre-S proteins of hepatitis B virus] Hu KQ.
Chung-hua Ping Li Hsueh Tsa Chih 1989 Mar;18(1):27–9 (Eng. Abstr.) (Chi)

BIOSYNTHESIS

Production of hepatitis B virus surface antigen containing pre-S1 and pre-S2 domains by Chinese hamster ovary cells. Lee T, et al. **Arch Virol** 1989;106(1–2):151–8

A bio-engineered rubella E1 antigen. Terry GM, et al. **Arch Virol** 1989;104(1–2):63–75

Expression of rubella virus cDNA encoding the E1 structural protein. de Mazancourt A, et al. **Biochimie** 1989 May; 71(5):681–5

Palmitylation of viral membrane glycoproteins takes place after exit from the endoplasmic reticulum. Bonatti S, et al. **J Biol Chem** 1989 Jul 25;264(21):12590–5

Glucocorticoids stimulate the release of a viral tumor marker (MMTV gp52) while inhibiting tumor cell growth. Ritzi EM, et al. **J Steroid Biochem** 1989 Apr;32(4):499–505

Synthesis and processing of human immunodeficiency virus type 1 envelope proteins encoded by a recombinant human adenovirus. Dewar RL, et al. **J Virol** 1989 Jan;63(1):129–36

Biosynthesis and processing of human immunodeficiency virus type 1 envelope glycoproteins: effects of monensin on glycosylation and transport. Dewar RL, et al. **J Virol** 1989 Jun;63(6):2452–6

C3b receptor activity on transfected cells expressing glycoprotein C of herpes simplex virus types 1 and 2. Seidel-Dugan C, et al. **J Virol** 1988 Nov;62(11):4027–36

Synthesis, cellular location, and immunogenicity of bovine herpesvirus 1 glycoproteins gI and gIII expressed by recombinant vaccinia virus. van Drunen Littel-van den Hurk S, et al. **J Virol** 1989 May;63(5):2159–68

A gag-env hybrid protein of human T-cell leukemia virus type I and its application to serum diagnosis. Kuga T, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1168–73

Biosynthesis, cleavage, and degradation of the human immunodeficiency virus 1 envelope glycoprotein gp160. Willey RL, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9580–4

On the processing of HIV-2 envelope glycoproteins. Rey MA, et al. **Res Virol** 1989 May-Jun;140(3):271–4

Inhibition of terminal N- and O-glycosylation specific for herpesvirus-infected cells: mechanism of an inhibitor of sugar nucleotide transport across Golgi membranes. Olofsson S, et al. **Virology** 1988 Oct;166(2):440–50

CEREBROSPINAL FLUID

Cerebrospinal fluid from cognitively impaired patient with acquired immunodeficiency syndrome shows gp120-like neuronal killing in vitro [letter] Buzy JM, et al. **Am J Med** 1989 Sep;87(3):361–2

An isoelectric focusing study in herpes simplex virus encephalitis. Grimaldi LM, et al. **Ann Neurol** 1988 Aug; 24(2):227–32

CHEMICAL SYNTHESIS

Pre-S proteins in hepatitis B. Kuijpers L, et al. **J Med Virol** 1989 May;28(1):47–51

DIAGNOSTIC USE

Synthetic env gp41 peptide as a sensitive and specific diagnostic reagent in different stages of human immunodeficiency virus type 1 infection. Närvänen A, et al. **J Med Virol** 1988 Oct;26(2):111–8

GENETICS

Expression and purification of protein segments encoded by the envelope and 3'-orf genes of human immunodeficiency virus type 1. DuBois GC, et al. **AIDS Res Hum Retroviruses** 1988 Dec;4(6):419–31

The simian immunodeficiency virus envelope open reading frame located after the termination codon is expressed in vivo in infected animals. Franchini G, et al. **AIDS Res Hum Retroviruses** 1988 Aug;4(4):251–8

Nucleotide sequences of gag and env genes of a Japanese isolate of HIV-1 and their expression in bacteria. Komiyama N, et al. **AIDS Res Hum Retroviruses** 1989 Aug; 5(4):411–9

Expression of the yellow fever virus envelope protein using hybrid SV40/yellow fever viruses. Desprès P, et al. **Ann Inst Pasteur Virol** 1988 Jan–Mar;139(1):59–67

Variation of the nucleotide and encoded amino acid sequences of the envelope gene from eight dengue-2 viruses. Blok J, et al. **Arch Virol** 1989;105(1–2):39–53

Biological and molecular analysis of LCV, an endogenous retrovirus with defective env gene. De Giuli Morghen C, et al. **Arch Virol** 1988;102(1–2):99–110

Human cell lines stably expressing HIV env and tat gene products. Sosa MA, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):305–11

Cotransfection of nucleic acid segments by Sendai virus envelopes. Bartzatt R. **Biotechnol Appl Biochem** 1989 Feb; 11(1):133–5

Identification of nanopeptide from HTLV-III, ARV-2 and LAVBRU envelope gp120 determining binding to T4 cell surface protein. Veljković V, et al. **Cancer Biochem Biophys** 1988 Nov;10(2):91–106

The rev gene product of the human immunodeficiency virus affects envelope-specific RNA localization. Emerman M, et al. **Cell** 1989 Jun 30;57(7):1155–65

Translational selection in the expression of the hepatitis B virus envelope proteins. Price PM, et al. **DNA** 1988 Jul-Aug;7(6):417–22

Glycosylation of glycoproteins 52 and 65 encoded by the polycythemia-inducing strain of Friend spleen focus-forming virus. Isolation of glycopeptides containing individual glycosylation sites. Strube KH, et al. **Eur J Biochem** 1989 Sep 1;184(1):119–24

Expression of a bovine leukaemia virus envelope fusion protein in E. coli. Zajac V, et al. **Folia Biol (Praha)** 1989; 35(1):35–41

Cell lines that express stably env gene products from three strains of HIV-1. Terwilliger E, et al. **J Acquir Immune Defic Syndr** 1988;1(4):317–23

The spleen focus-forming virus envelope glycoprotein is defective in oligomerization. Kilpatrick DR, et al. **J Biol Chem** 1989 Jun 25;264(18):10732–7

A major neutralizing domain maps within the carboxyl-terminal half of the cleaved cytomegalovirus B glycoprotein. Banks T, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):979–85

Non-essential genes in the vaccinia virus HindIII K fragment: a gene related to serine protease inhibitors and a gene related to the 37K vaccinia virus major envelope antigen. Boursnell ME, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):2995–3003

Expression of Epstein-Barr virus membrane antigen gp340/220 in mouse fibroblasts using a bovine papillomavirus vector. Conway M, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):729–34

Mapping of neutralizing epitopes to fragments of the bovine coronavirus E2 protein by proteolysis of antigen-antibody complexes. Deregt D, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):647–58

Conservation of glycoprotein H (gH) in herpesviruses: nucleotide sequence of the gH gene from herpesvirus saimiri. Gompels UA, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2819–29

A subset of type-specific epitopes map in the amino terminus of herpes simplex virus type 1 glycoprotein B. Kousoulas K, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):735–41

Nucleotide sequence and characterization of the Marek's disease virus homologue of glycoprotein B of herpes simplex virus. Ross LJ, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1789–804

Expression of the glycoprotein of vesicular stomatitis virus by infectious adenovirus vectors. Schneider M, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):417–27

Pseudorabies virus displays variable numbers of a repeat unit adjacent to the 3' end of the glycoprotein gII gene. Simon A, et al. **J Gen Virol** 1989 May;70 (Pt 5):1239–46

Antigen-presenting capacity of epidermal cells infected with vaccinia virus recombinants containing the herpes simplex virus glycoprotein D, and protective immunity. Wachsman M, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2513–20

Identification and nucleotide sequence of a gene in equine herpesvirus 1 analogous to the herpes simplex virus gene encoding the major envelope glycoprotein gB. Whalley JM, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):383–94

Restricted expression of viral glycoprotein in vesicular stomatitis virus-infected Drosophila melanogaster cells. Wyers F, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):213–8

Molecular events during B lymphocyte differentiation. Induction of endogenous mouse mammary tumor proviral envelope transcripts after B cell stimulation. Sharma S, et al. **J Immunol** 1988 Oct 1;141(7):2510–8

Regulation of expression of herpes simplex virus (HSV) glycoprotein D in vaccinia recombinants affects their ability to protect from cutaneous HSV-2 disease. Wachsman M, et al. **J Infect Dis** 1989 Apr;159(4):625–34

Expression and immunogenicity of the extracellular domain of the human immunodeficiency virus type 1 envelope glycoprotein, gp160. Berman PW, et al. **J Virol** 1989 Aug; 63(8):3489–98

Influence of env and long terminal repeat sequences on the tissue tropism of avian leukosis viruses. Brown DW, et al. **J Virol** 1988 Dec;62(12):4828–31

The rev (trs/art) protein of human immunodeficiency virus type 1 affects viral mRNA and protein expression via a cis-acting sequence in the env region. Hadzopoulou-Cladaras M, et al. **J Virol** 1989 Mar; 63(3):1265–74

Regulation of human immunodeficiency virus env expression by the rev gene product. Hammarskjöld ML, et al. **J Virol** 1989 May;63(5):1959–66

Identification of mar mutations in herpes simplex virus type 1 glycoprotein B which alter antigenic structure and function in virus penetration. Highlander SL, et al. **J Virol** 1989 Feb;63(2):730–8

Nucleotide sequence and distinctive characteristics of the env gene of endogenous feline leukemia provirus [published erratum appears in J Virol 1989 Aug;63(8):3560] Kumar DV, et al. **J Virol** 1989 May;63(5):2379–84

Identification and characterization of a human cytomegalovirus gene coding for a membrane protein that is conserved among human herpesviruses. Lehner R, et al. **J Virol** 1989 Sep;63(9):3792–800

Amino acid sequence of a conserved neutralizing epitope of murine coronaviruses. Luytjes W, et al. **J Virol** 1989 Mar;63(3):1408–12

Identification and nucleotide sequence of the glycoprotein gB gene of equine herpesvirus 4. Riggio MP, et al. **J Virol** 1989 Mar;63(3):1123–33

The gene encoding the gIII envelope protein of pseudorabies virus vaccine strain Bartha contains a mutation affecting protein localization. Robbins AK, et al. **J Virol** 1989 Jan; 63(1):250–8

Sindbis virus mutations which coordinately affect glycoprotein processing, penetration, and virulence in mice. Russell DL, et al. **J Virol** 1989 Apr;63(4):1619–29

Effects and virulences of recombinant vaccinia viruses derived from attenuated strains that express the human T-cell leukemia virus type I envelope gene. Shida H, et al. **J Virol** 1988 Dec;62(12):4474–80

ICP4-binding sites in the promoter and coding regions of the herpes simplex virus gD gene contribute to activation of in vitro transcription by ICP4. Tedder DG, et al. **J Virol** 1989 Jun;63(6):2510–20

A herpesvirus vector for expression of glycosylated membrane antigens: fusion proteins of pseudorabies virus gIII and human immunodeficiency virus type 1 envelope glycoproteins. Whealy ME, et al. **J Virol** 1988 Nov; 62(11):4185–94

Replacement of the pseudorabies virus glycoprotein gIII gene with its postulated homolog, the glycoprotein gC gene of herpes simplex virus type 1. Whealy ME, et al. **J Virol** 1989 Sep;63(9):4055–9

Identification and sequence analysis of a gene encoding gp67, an abundant envelope glycoprotein of the baculovirus Autographa californica nuclear polyhedrosis virus. Whitford M, et al. **J Virol** 1989 Mar;63(3):1393–9

Xenogenization of tumor cells by transfection with plasmid containing env gene of Friend leukemia virus. Sugiura C, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1259–63

Use of a glucocorticoid-inducible promoter for expression of herpes simplex virus type 1 glycoprotein gC1, a cytotoxic protein in mammalian cells. Friedman HM, et al. **Mol Cell Biol** 1989 Jun;9(6):2303–14

Expression of HBV surface antigen or HIV envelope protein using recombinant adenovirus vectors. Hung PP, et al. **Nat Immun Cell Growth Regul** 1988;7(3):135–43

Single amino-acid changes in HIV envelope affect viral tropism and receptor binding. Cordonnier A, et al. **Nature** 1989 Aug 17;340(6234):571–4

Nucleotide sequence of the gene coding for the peplomer protein (= spike protein) of infectious bronchitis virus, strain D274. Jordi BJ, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6726

Sequence divergence and open regions of RNA secondary structures in the envelope regions of the 17 human immunodeficiency virus isolates. Le SY, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3275–88

Nucleotide sequence of capsid, E2 and E1 protein genes of Rubella virus vaccine strain RA27/3. Nakhasi HL, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4393–4

Cloning and sequencing of the

haemagglutinin–neuraminidase gene of mumps virus (Miyahara strain). Takeuchi K, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5840

The use of beta-galactosidase as a marker gene to define the regulatory sequences of the herpes simplex virus type 1 glycoprotein C gene in recombinant herpesviruses [published erratum appears in Nucleic Acids Res 1989 Mar 11;17(5):2157] Weir JP, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10267–82

A sorting signal for the basolateral delivery of the vesicular stomatitis virus (VSV) G protein lies in its luminal domain: analysis of the targeting of VSV G–influenza hemagglutinin chimeras. Compton T, et al.
Proc Natl Acad Sci U S A 1989 Jun;86(11):4112–6

Retrovirus–induced murine motor neuron disease: mapping the determinant of spongiform degeneration within the envelope gene. Paquette Y, et al.
Proc Natl Acad Sci U S A 1989 May;86(10):3896–900

Nucleotide sequence of the Lassa virus (Josiah strain) S genome RNA and amino acid sequence comparison of the N and GPC proteins to other arenaviruses. Auperin DD, et al. **Virology** 1989 Feb;168(2):421–5

Location, sequence, transcriptional mapping, and temporal expression of the gp64 envelope glycoprotein gene of the Orgyia pseudotsugata multicapsid nuclear polyhedrosis virus. Blissard GW, et al. **Virology** 1989 Jun;170(2):537–55

Stably expressed FIPV peplomer protein induces cell fusion and elicits neutralizing antibodies in mice. De Groot RJ, et al. **Virology** 1989 Aug;171(2):493–502

Organization of the middle RNA segment of snowshoe hare Bunyavirus. Fazakerley JK, et al. **Virology** 1988 Dec; 167(2):422–32

A baculovirus polyhedral envelope–associated protein: genetic location, nucleotide sequence, and immunocytochemical characterization. Gombart AF, et al. **Virology** 1989 Mar;169(1):182–93

Molecular characterization of a prominent antigen of the vaccinia virus envelope. Gordon J, et al. **Virology** 1988 Dec;167(2):361–9

Epitope mapping by deletion mutants and chimeras of two vesicular stomatitis virus glycoprotein genes expressed by a vaccinia virus vector. Keil W, et al. **Virology** 1989 Jun; 170(2):392–407

Antibody–resistant mutations in cross–reactive and type–specific epitopes of herpes simplex virus 1 glycoprotein B map in separate domains. Kousoulas KG, et al. **Virology** 1988 Oct;166(2):423–31

Constitutive expression in human cells of herpes simplex virus type 1 glycoprotein B gene cloned in an episomal eukaryotic vector. Manservigi R, et al. **Virology** 1988 Nov; 167(1):284–8

Structure and expression of the glycoprotein gene of Chandipura virus. Masters PS, et al. **Virology** 1989 Jul; 171(1):285–90

Avian cells expressing the Newcastle disease virus hemagglutinin–neuraminidase protein are resistant to Newcastle disease virus infection. Morrison TG, et al. **Virology** 1989 Jul;171(1):10–7

Glycoprotein evolution of vesicular stomatitis virus New Jersey. Nichol ST, et al. **Virology** 1989 Feb;168(2):281–91

Baculovirus polyhedrin promoter–directed expression of rubella virus envelope glycoproteins, E1 and E2, in Spodoptera frugiperda cells. Oker–Blom C, et al. **Virology** 1989 Sep;172(1):82–91

Antigenic variants of bovine leukemia virus (BLV) are defined by amino acid substitutions in the NH2 part of the envelope glycoprotein gp51. Portetelle D, et al. **Virology** 1989 Mar;169(1):27–33

Newcastle disease virus evolution. I. Multiple lineages defined by sequence variability of the hemagglutinin–neuraminidase gene. Sakaguchi T, et al. **Virology** 1989 Apr;169(2):260–72

A viable HSV–1 mutant deleted in two nonessential major glycoproteins. Schranz P, et al. **Virology** 1989 May; 170(1):273–6

Human cytomegalovirus strain Towne glycoprotein B is processed by proteolytic cleavage. Spaete RR, et al. **Virology** 1988 Nov;167(1):207–25

Identification of amino acids involved in the sialidase activity of the mumps virus hemagglutinin–neuraminadase protein. Waxham MN, et al. **Virology** 1988 Nov;167(1):226–32

Nucleotide sequence between the peplomer and matrix protein genes of the porcine transmissible gastroenteritis coronavirus identifies three large open reading frames. Kapke PA, et al. **Virus Genes** 1989 May;2(3):293–4

Complete nucleotide sequence of the hemagglutinin–neuraminidase (HN) mRNA of mumps virus and comparison of paramyxovirus HN proteins. Kövamees J, et al. **Virus Res** 1989 Jan;12(1):87–96

Pathogenicity of glycoprotein C negative mutants of herpes simplex virus type 1 for the mouse central nervous system. Sunstrum JC, et al. **Virus Res** 1988 Aug;11(1):17–32

[Effect of the membrane potential on the fusion of the Sendai viral envelope with the membrane of chick erythrocytes and on virus–induced erythrocyte hemolysis] Slepushkin VA, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):709–11 (Eng. Abstr.) **(Rus)**

[Genetically engineered mutants of the envelope protein of the RNA–containing bacteriophage] Kozlovskaia TM, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):731–40 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Immunoblotting analysis of class–specific antibody response in patients with primary HSV infection. Lehtinen M, et al. **Acta Virol (Praha)** 1989 Jan;33(1):8–14

Expression of proteins immunologically related to murine mammary tumour virus (MMTV) core proteins in the cells of breast cancer continuous lines MCF–7, T47D, MDA–231 and cells from human milk. Litvinov SV, et al. **Acta Virol (Praha)** 1989 Mar;33(2):137–42

Interpretation of antibodies reacting solely with human retroviral core proteins in western equatorial Africa. Delaporte E, et al. **Aids** 1989 Mar;3(3):179–82

Antibody–dependent cellular cytotoxicity is directed against both the gp120 and gp41 envelope proteins of HIV. Evans LA, et al. **Aids** 1989 May;3(5):273–6

An enzyme–linked immunosorbent assay for antibodies to the envelope glycoproteins of divergent strains of HIV–1. Moore JP, et al. **Aids** 1989 Mar;3(3):155–63

Site–directed enzyme–linked immunosorbent assay with a synthetic simian immunodeficiency virus SIVmac peptide identifying antibodies against the HIV–2 transmembrane glycoprotein. Norrby E, et al. **Aids** 1989 Jan;3(1):17–20

Recombinant peptides derived from the env–gene of HIV–2 in the serodiagnosis of HIV–2 infections. Schulz TF, et al. **Aids** 1989 Mar;3(3):165–72

Human trials of experimental AIDS vaccines: recombinant envelope proteins. Snart RS. **Aids** 1988;2 Suppl 1:S107–11

Effect of pepsin treatment on the HIV envelope and core antigens. Ujhelyi E, et al. **Aids** 1989 Jun;3(6):383–7

Possibility of HIV gp41 and thymosin beta–4 sharing the same antigenic epitope [letter] Wu AF, et al. **Aids** 1989 May;3(5):319–20

Large–scale production and purification of a vaccinia recombinant–derived HIV–1 gp160 and analysis of its immunogenicity. Barrett N, et al.
AIDS Res Hum Retroviruses 1989 Apr;5(2):159–71

Isolate– and group–specific immune responses to the envelope protein of human immunodeficiency virus induced by a live recombinant vaccinia virus in macaques. Earl PL, et al. **AIDS Res Hum Retroviruses** 1989 Feb; 5(1):23–32

Patterns of antibody recognition of selected conserved amino acid sequences from the HIV envelope in sera from different stages of HIV infection. Shafferman A, et al. **AIDS Res Hum Retroviruses** 1989 Feb;5(1):33–9

Delineation of contiguous determinants essential for biological functions of the pre–S sequence of the hepatitis B virus envelope protein: its antigenicity, immunogenicity and cell–receptor recognition. Neurath AR, et al. **Ann Inst Pasteur Virol** 1988 Jan–Mar;139(1):13–38

Sindbis virus neutralization. Westarp ME, et al. **Ann N Y Acad Sci** 1988;540:566–7

Prognostic significance of cellular immunity to autologous breast carcinoma and glycoprotein 55. Black MM, et al. **Arch Surg** 1989 Feb;124(2):202–6

Serologically defined linear epitopes in the envelope protein of dengue 2 (Jamaica strain 1409). Aaskov JG, et al. **Arch Virol** 1989;105(3–4):209–21

An ELISA blocking test using a peroxidase–labelled anti–HN monoclonal antibody for the specific titration of antibodies to avian paramyxovirus type 1 (PMV1). Jestin V, et al. **Arch Virol** 1989;105(3–4):199–208

Immunological properties of an N–terminal fragment of herpes simplex virus type 1 glycoprotein D expressed in Escherichia coli. Kocken CH, et al. **Arch Virol** 1988; 103(3–4):267–74

Human monoclonal antibody against glycoproteins of human immunodeficiency virus. Sugano T, et al.
Biochem Biophys Res Commun 1988 Sep 30;155(3):1105–12

Expression of herpes simplex virus glycoprotein D on antigen presenting cells infected with vaccinia recombinants and protective immunity. Wachsman M, et al. **Biosci Rep** 1988 Aug;8(4):323–34

Paramyxovirus membrane protein augments the antibody response to actin in mice. Anomasiri WT, et al. **Clin Exp Immunol** 1988 Oct;74(1):59–62

In vitro T cell responses to a candidate Epstein–Barr virus vaccine: human CD4+ T cell clones specific for the major envelope glycoprotein gp340. Ulaeto D, et al. **Eur J Immunol** 1988 Nov;18(11):1689–97

Antibodies against a peptide sequence within the HIV envelope protein crossreacts with human interleukin–2. Bost KL, et al. **Immunol Invest** 1988 Aug–Oct; 17(6–7):577–86

HIV and HIV–infected cells differentially activate the human complement system independent of antibody. Sölder BM, et al. **Immunol Lett** 1989 Aug;22(2):135–45

Analysis of a subclass–restricted HIV–1 gp41 epitope by omission peptides. Mathiesen T, et al. **Immunology** 1989 May;67(1):1–7

Interaction of immunoliposomes with avian myeloblastosis virus and virus transformed cells. Dhananjaya KV, et al. **Indian J Exp Biol** 1988 Dec;26(12):965–8

Improved HIV antiglycoprotein antibody detection by immunoblotting on a hydrophobic membrane. Lauritzen E, et al. **J Acquir Immune Defic Syndr** 1988;1(4):333–9

Use of synthetic oligopeptides in identification and characterization of immunological functions in the amino acid sequence of the envelope protein of HIV–1. Modrow S, et al. **J Acquir Immune Defic Syndr** 1989;2(1):21–7

Enzyme–linked immunosorbent assay for determination of antibodies to the envelope glycoprotein of rabies virus. Grassi M, et al. **J Clin Microbiol** 1989 May;27(5):899–902

Isolation of peplomer glycoprotein E2 of transmissible gastroenteritis virus and application in enzyme–linked immunosorbent assay. Rukhadze GG, et al. **J Clin Microbiol** 1989 Aug;27(8):1754–8

Monitoring human immunodeficiency virus type 1–infected patients by ratio of antibodies to gp41 and p24. Schmidt G, et al. **J Clin Microbiol** 1989 May;27(5):843–8

Respiratory syncytial virus–specific antibody responses in immunoglobulin A and E isotypes to the F and G proteins and to intact virus after natural infection. Welliver RC, et al. **J Clin Microbiol** 1989 Feb;27(2):295–9

Human cytomegalovirus–specific cytotoxic T cells. Relative frequency of stage–specific CTL recognizing the 72–kD immediate early protein and glycoprotein B expressed by recombinant vaccinia viruses. Borysiewicz LK, et al. **J Exp Med** 1988 Sep 1;168(3):919–31

Genetic control of T cell responsiveness to the Friend marine leukemia virus envelope antigen. Identification of class II loci of the H–2 as immune response genes. Miyazawa M, et al. **J Exp Med** 1988 Nov 1;168(5):1587–605

Lack of immunodominance in the T cell response to herpes simplex virus glycoprotein D after administration of infectious virus. Yamashita K, et al. **J Exp Med** 1989 Sep 1;170(3):997–1002

Characterization of Hantaan virus envelope glycoprotein antigenic determinants defined by monoclonal antibodies. Arikawa J, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):615–24

Epitope mapping of Japanese encephalitis virus envelope protein using monoclonal antibodies against an Indian strain. Cecilia D, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2741–7

The central segment of herpes simplex virus type 1 glycoprotein C (gC) is not involved in C3b binding: demonstration by using monoclonal antibodies and recombinant gC expressed in Escherichia coli. Huemer HP, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1571–8

Expression of glycoprotein D of herpes simplex virus type 1 in a recombinant baculovirus: protective responses and T cell recognition of the recombinant–infected cell extracts. Krishna S, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1805–14

Evaluation of antiviral immunity using vaccinia virus recombinants expressing cloned genes for herpes simplex virus type 1 glycoproteins. Martin S, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1359–70

A hamster model of equine herpesvirus type 1 (EHV–1) infection; passive protection by monoclonal antibodies to EHV–1 glycoproteins 13, 14 and 17/18. Stokes A, et al. **J Gen Virol** 1989 May;70 (Pt 5):1173–83

An analysis of the antibody response against West Nile virus E protein purified by SDS–PAGE indicates that this protein does not contain sequential epitopes for efficient induction of neutralizing antibodies. Wengler G, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):987–92

IgG subclass responses to a transmembrane protein (gp41) peptide in HIV infection. Chiodi F, et al. **J Immunol** 1989 Jun 1;142(11):3809–14

Alterations in the antigenic structure of two major HSV–1 glycoproteins, gC and gB, influence immune regulation and susceptibility to murine herpes keratitis. Hendricks RL, et al. **J Immunol** 1989 Jan 1;142(1):263–9

Cell–mediated immune response toward viral envelope and core antigens in gibbon apes (Hylobates lar) chronically infected with human immunodeficiency virus–1. Lusso P, et al. **J Immunol** 1988 Oct 1;141(7):2467–73

T cell recognition of HIV synthetic peptides in a natural infection. Schrier RD, et al. **J Immunol** 1989 Feb 15; 142(4):1166–76

Application of a human monoclonal antibody in a rapid competitive anti–HIV ELISA. Döpel SH, et al. **J Immunol Methods** 1989 Jan 17;116(2):229–33

Western blot analysis poorly detects antibody to gpIII of Varicella–Zoster virus [letter] Dubey L, et al. **J Infect Dis** 1989 Feb;159(2):358–9

Herpes simplex virus type 1–vaccinia virus recombinant expressing glycoprotein B: protection from acute and latent infection. Willey DE, et al. **J Infect Dis** 1988 Dec; 158(6):1382–6

Topological distribution of virus–specific and cross–reactive antigenic determinants on the gB glycoprotein of the herpes simplex viruses. Eberle R, et al. **J Med Virol** 1989 Apr; 27(4):309–16

Neutralizing activity of antibodies against the major herpes simplex virus type 1 glycoproteins. Eing BR, et al. **J Med Virol** 1989 Jan;27(1):59–65

Long–term immune reactivity to pre–S(2)–antigen after acute hepatitis B infection. Heijtink RA, et al. **J Med Virol** 1989 Feb;27(2):95–9

Dissociated antibody responses to the S and pre–S2 regions of the hepatitis B virus after vaccination in hemophiliacs. Zanetti A, et al. **J Med Virol** 1989 Jul;28(3):156–8

Neutralizing antibodies specific for glycoprotein H of herpes simplex virus permit viral attachment to cells but prevent penetration. Fuller AO, et al. **J Virol** 1989 Aug; 63(8):3435–43

Fine mapping of antigenic site II of herpes simplex virus glycoprotein D. Isola VJ, et al. **J Virol** 1989 May; 63(5):2325–34

Antigenic specificity of antibody–dependent cell–mediated cytotoxicity directed against human immunodeficiency virus in antibody–positive sera. Koup RA, et al. **J Virol** 1989 Feb;63(2):584–90

Antigenic structure of the flavivirus envelope protein E at the molecular level, using tick-borne encephalitis virus as a model. Mandl CW, et al. J Virol 1989 Feb;63(2):564–71
Human immunodeficiency virus-specific cytotoxic responses of seropositive individuals: distinct types of effector cells mediate killing of targets expressing gag and env proteins. Riviere Y, et al. J Virol 1989 May;63(5):2270–7
Neutralizing antibodies to an immunodominant envelope sequence do not prevent gp120 binding to CD4. Skinner MA, et al. J Virol 1988 Nov;62(11):4195–200
Identification of a neutralizing epitope on glycoprotein gp58 of human cytomegalovirus. Utz U, et al. J Virol 1989 May; 63(5):1995–2001
Identification of simian immunodeficiency virus SIVMAC env gene products. Veronese FD, et al. J Virol 1989 Mar; 63(3):1416–9
Discrimination of HIV-1 and HIV-2 infection based on recombinant immunoblots. Baur A, et al. J Virol Methods 1989 Jun;24(3):275–83
Fine mapping of an immunodominant region of the transmembrane protein of the human immunodeficiency virus (HIV-1). Döpel SH, et al. J Virol Methods 1989 Aug; 25(2):167–77
Use of two monoclonal antibodies in an ELISA test for the detection of antibodies to bovine leukaemia virus envelope protein gp51. Portetelle D, et al. J Virol Methods 1989 Feb;23(2):211–22
Retroviral gp70 antigen in spontaneous mesangial glomerulonephritis of ddY mice. Takeuchi E, et al. Kidney Int 1989 Feb;35(2):638–46
Envelope cross-reactivity in Western blot for HIV-1 and HIV-2 may not indicate dual infection. Tedder RS, et al. Lancet 1988 Oct 22;2(8617):927–30
Elicitation of bovine antibody to BLV-gp51 by BLV-vaccination. Maruyama K, et al. Leukemia 1988 Dec; 2(12 Suppl):216S–222S
Antigenic changes in gp70 associated with the adult variant of Gross murine leukemia virus, WB91. Jones SM, et al. Microb Pathog 1986 Jun;1(3):275–82
VSV G protein induces murine cytolytic T lymphocytes. Reiss CS, et al. Microb Pathog 1986 Jun;1(3):261–7
Antigenicity of the peplomer protein of infectious bronchitis virus. Lenstra JA, et al. Mol Immunol 1989 Jan;26(1):7–15
Hepatitis B virus surface antigen (HBsAg) as carrier for synthetic peptides having an attached hydrophobic tail. Neurath AR, et al. Mol Immunol 1989 Jan;26(1):53–62
Lack of cross-reaction between myelin basic proteins and putative demyelinating virus envelope proteins. Rubio N, et al. Mol Immunol 1989 Jul;26(7):663–8
Bovine monoclonal antibody to bovine leukemia virus glycoprotein GP51 from bovine-murine hybridoma. Tanaka M, et al. Nippon Juigaku Zasshi 1988 Oct; 50(5):1136–8
Protection of macaques against simian AIDS by immunization with a recombinant vaccinia virus expressing the envelope glycoproteins of simian type D retrovirus. Hu SL, et al. Proc Natl Acad Sci U S A 1989 Sep; 86(18):7213–7
Principal neutralizing domain of the human immunodeficiency virus type 1 envelope protein. Javaherian K, et al. Proc Natl Acad Sci U S A 1989 Sep; 86(17):6768–72
Group-specific, major histocompatibility complex class I-restricted cytotoxic responses to human immunodeficiency virus 1 (HIV-1) envelope proteins by cloned peripheral blood T cells from an HIV-1-infected individual. Koenig S, et al. Proc Natl Acad Sci U S A 1988 Nov;85(22):8638–42
Human immunodeficiency virus-infected T cells and monocytes are killed by monoclonal human anti-gp41 antibodies coupled to ricin A chain. Till MA, et al. Proc Natl Acad Sci U S A 1989 Mar;86(6):1987–91
Improved antigenicity of the HIV env protein by cleavage site removal. Kieny MP, et al. Protein Eng 1988 Sep; 2(3):219–25
A single amino acid interchange yields reciprocal CTL specificities for HIV-1 gp160. Takahashi H, et al. Science 1989 Oct 6;246(4926):118–21
Controlled organization of multimolecular complexes of enveloped virus glycoproteins: study of immunogenicity. Berezin VE, et al. Vaccine 1988 Oct;6(5):450–6
Immunogenicity of herpes simplex virus glycoprotein gB-1-related protein produced in yeast. Kino Y, et al. Vaccine 1989 Apr;7(2):155–60
Antibodies to synthetic peptides from the preS1 region of the hepatitis B virus (HBV) envelope (env) protein are virus-neutralizing and protective. Neurath AR, et al. Vaccine 1989 Jun;7(3):234–6
Serological responses in cats vaccinated with FeLV ISCOM and an inactivated FeLV vaccine. Osterhaus A, et al. Vaccine 1989 Apr;7(2):137–41
Iscom of viral envelope proteins protects against Aujeszky's disease. Morein B, et al. Vet Microbiol 1989 Jun; 20(2):143–54
Antibodies to HTLV-1 in saliva of seropositive individuals from Japan. Archibald D, et al. Viral Immunol 1987–88; 1(4):241–6
Production, binding characteristics, and immunogenicity of heterologous anti-idiotypic antibody to herpes simplex virus glycoprotein C. Lathey JL, et al. Viral Immunol 1987 Spring;1(1):13–23
The role of bone marrow and thymic elements in the initiation and spread of virus production in the AKR thymus. Buckheit RW Jr, et al. Virology 1988 Oct; 166(2):533–41
Epitope model of tick-borne encephalitis virus envelope glycoprotein E: analysis of structural properties, role of carbohydrate side chain, and conformational changes occurring at acidic pH. Guirakhoo F, et al. Virology 1989 Mar;169(1):90–9
Crystallization of Sendai virus HN protein complexed with monoclonal antibody Fab fragments. Laver WG, et al. Virology 1989 Jul;171(1):291–3
Protection of mice against lethal challenge with herpes simplex virus by vaccination with an adenovirus vector expressing HSV glycoprotein B. McDermott MR, et al. Virology 1989 Mar;169(1):244–7
Sequence of a bovine herpesvirus type-1 glycoprotein gene that is homologous to the herpes simplex gene for the glycoprotein gB. Misra V, et al. Virology 1988 Oct; 166(2):542–9
Protection of guinea pigs from Lassa fever by vaccinia virus recombinants expressing the nucleoprotein or the envelope glycoproteins of Lassa virus. Morrison HG, et al. Virology 1989 Jul;171(1):179–88
Domain structure of herpes simplex virus 1 glycoprotein B: neutralizing epitopes map in regions of continuous and discontinuous residues. Pereira L, et al. Virology 1989 Sep; 172(1):11–24
Synthetic peptides approach to identification of epitopes on bovine leukemia virus envelope glycoprotein gp51. Portetelle D, et al. Virology 1989 Mar;169(1):34–41
Synthetic peptides derived from the deduced amino acid sequence of the E-glycoprotein of Murray Valley encephalitis virus elicit antiviral antibody. Roehrig JT, et al. Virology 1989 Jul;171(1):49–60
Site-directed cytotoxic antibody against the C-terminal segment of the surface glycoprotein gp90 of avian reticuloendotheliosis virus. Tsai WP, et al. Virology 1988 Oct;166(2):608–11
Interactions of a nonneutralizing IgM antibody and complement in parainfluenza virus neutralization. Vasantha S, et al. Virology 1988 Dec;167(2):433–41
The glycoprotein of infectious hematopoietic necrosis virus elicits neutralizing antibody and protective responses. Engelking HM, et al. Virus Res 1989 Jul;13(3):213–30
Functional and neutralization profile of seven overlapping antigenic sites on the HN glycoprotein of Newcastle disease virus: monoclonal antibodies to some sites prevent viral attachment. Iorio RM, et al. Virus Res 1989 Jul; 13(3):245–61
Characterization of an iscom prepared with envelope glycoproteins of bovine herpesvirus type 1. Merza M, et al. Zentralbl Veterinarmed [B] 1988 Nov;35(9):695–703
[Possible use of anti-envelope immunotoxins against HIV-infection] Matsushita S, et al. Nippon Rinsho 1989 Jan;47(1):220–6 (Jpn)
[Enzyme immunoassay using recombinant env peptides of human immunodeficiency virus type 1 (HIV-1) as a confirmatory technic for anti-HIV-1 (letter)] Corzo JE, et al. Med Clin (Barc) 1989 Feb 25;92(7):278–9 (Spa)

ISOLATION & PURIFICATION

The use of aqueous two-phase systems to concentrate and purify bovine leukemia virus outer envelope protein gp51. Hammar L, et al. Biotechnol Appl Biochem 1989 Jun; 11(3):296–306
Free gp70 from FeLV: enrichment from cell culture fluid by ferric oxide-agarose chromatography. Zelikman I, et al. Biotechnol Appl Biochem 1989 Apr;11(2):209–16
Molecular characterization of a neutralizing domain of the Japanese encephalitis virus structural glycoprotein. Mason PW, et al. J Gen Virol 1989 Aug;70 (Pt 8):2037–49
Mapping of immunogenic regions of human T cell leukemia virus type I (HTLV-I) gp46 and gp21 envelope glycoproteins with env-encoded synthetic peptides and a monoclonal antibody to gp46. Palker TJ, et al. J Immunol 1989 Feb 1;142(3):971–8
Characterisation of a fimbrial, mannose-resistant and eluting haemagglutinin (MREHA) produced by strains of Salmonella of serotype Sendai. Old DC, et al. J Med Microbiol 1989 Sep;30(1):59–68
Concentration and purification of feline leukaemia virus (FeLV) and its outer envelope protein gp70 by aqueous two-phase systems. Hammar L, et al. J Virol Methods 1989 Apr-May;24(1-2):91–101
Oligomeric structure of a prototype retrovirus glycoprotein. Einfeld D, et al. Proc Natl Acad Sci U S A 1988 Nov; 85(22):8688–92
Immunogenicity of a recombinant vaccinia virus expressing envelope a glycoprotein of bovine leukaemia virus. Ohishi K, et al. Vaccine 1988 Oct;6(5):428–32

METABOLISM

Lectin affinity of Junin virus glycoproteins. Mersich SE, et al. Ann Inst Pasteur Virol 1988 Jul-Sep;139(3):277–83
Turnover and compartmentation of gp70/p15 E in psi 2 cells. Hare JF. Biochem Biophys Res Commun 1989 Jun 15; 161(2):596–603
A rapid solution immunoassay to quantify binding of the human immunodeficiency virus envelope glycoprotein to soluble CD4. McQuade TJ, et al. Biochem Biophys Res Commun 1989 Aug 30;163(1):172–6
Fatty acid acylation at the single cysteine residue in the cytoplasmic domain of the glycoprotein of vesicular-stomatitis virus. Mack D, et al. Biochem J 1988 Dec 15;256(3):1021–7
Dissection of a single round of vesicular transport: sequential intermediates for intercisternal movement in the Golgi stack. Orci L, et al. Cell 1989 Feb 10;56(3):357–68
Transport of influenza virus envelope proteins from the Golgi complex to the apical plasma membrane in MDCK cells: pH-controlled interaction with a cycling receptor is not involved. Daniels-Holgate PU, et al. FEBS Lett 1989 Jun 5;249(2):407–10
pH-dependent fusion of reconstituted vesicular stomatitis virus envelopes with Vero cells. Measurement by dequenching of fluorescence. Paternostre MT, et al. FEBS Lett 1989 Jan 30;243(2):251–8
Processing and secretion of envelope glycoproteins of human immunodeficiency virus type 1 in the presence of trimming glucosidase inhibitor deoxynojirimycin. Pal R, et al. Intervirology 1989;30(1):27–35
Herpes simplex virus type-1 strain influence on chorioretinal disease patterns following intracameral inoculation in Igh-1 disparate mice. Hemady R, et al. Invest Ophthalmol Vis Sci 1989 Aug;30(8):1750–7
Glycosylation and processing of the human immunodeficiency virus type 1 envelope protein. Kozarsky K, et al. J Acquir Immune Defic Syndr 1989;2(2):163–9
Membrane integration and intracellular transport of the coronavirus glycoprotein E1, a class III membrane glycoprotein. Mayer T, et al. J Biol Chem 1988 Oct 15; 263(29):14956–63
Access of proteinase K to partially translocated nascent polypeptides in intact and detergent-solubilized membranes. Connolly T, et al. J Cell Biol 1989 Feb; 108(2):299–307
The dynamic nature of the Golgi complex. Griffiths G, et al. J Cell Biol 1989 Feb;108(2):277–97
Selective retention of monoglucosylated high mannose oligosaccharides by a class of mutant vesicular stomatitis virus G proteins. Suh K, et al. J Cell Biol 1989 Mar; 108(3):811–9
Role of N-linked glycans in the interaction between the envelope glycoprotein of human immunodeficiency virus and its CD4 cellular receptor. Structural enzymatic analysis. Fenouillet E, et al. J Exp Med 1989 Mar 1; 169(3):807–22
Human eosinophils express CD4 protein and bind human immunodeficiency virus 1 gp120. Lucey DR, et al. J Exp Med 1989 Jan 1;169(1):327–32
Immunoblotting reveals differences in the accumulation of envelope protein by wild-type and vaccine strains of yellow fever virus. Cane PA, et al. J Gen Virol 1989 Mar; 70 (Pt 3):557–64
Effect of amino acid substitutions on glycosylation of the haemagglutinin-neuraminidase glycoprotein of Newcastle disease virus strain Beaudette C. Yusoff K, et al. J Gen Virol 1989 Jun;70 (Pt 6):1549–52
Characterization of GP120 binding to CD4 and an assay that measures ability of sera to inhibit this binding. Schnittman SM, et al. J Immunol 1988 Dec 15;141(12):4181–6
Processing of the gp55-116 envelope glycoprotein complex (gB) of human cytomegalovirus. Britt WJ, et al. J Virol 1989 Jan;63(1):403–10
Effects of mutations in hyperconserved regions of the extracellular glycoprotein of human immunodeficiency virus type 1 on receptor binding. Cordonnier A, et al. J Virol 1989 Oct;63(10):4464–8
Leukemogenic membrane glycoprotein encoded by Friend spleen focus-forming virus: transport to cell surfaces and shedding are controlled by disulfide-bonded dimerization and by cleavage of a hydrophobic membrane anchor. Gliniak BC, et al. J Virol 1989 Sep;63(9):3561–8
Herpes simplex viruses lacking glycoprotein D are unable to inhibit virus penetration: quantitative evidence for virus-specific cell surface receptors. Johnson DC, et al. J Virol 1988 Dec;62(12):4605–12
A single-amino-acid substitution eliminates the stringent carbohydrate requirement for intracellular transport of a viral glycoprotein. Pitta AM, et al. J Virol 1989 Sep; 63(9):3801–9
Human liver plasma membranes contain receptors for the hepatitis B virus pre-S1 region and, via polymerized human serum albumin, for the pre-S2 region. Pontisso P, et al. J Virol 1989 May;63(5):1981–8
Posttranslational modifications distinguish the envelope glycoprotein of the immunodeficiency disease-inducing feline leukemia virus retrovirus. Poss ML, et al. J Virol 1989 Jan;63(1):189–95
The proteolytic cleavage of PE2 to envelope glycoprotein E2 is not strictly required for the maturation of Sindbis virus. Presely JF, et al. J Virol 1989 May;63(5):1975–80
Characterization of human immunodeficiency virus type 2 envelope glycoproteins: dimerization of the glycoprotein precursor during processing. Rey MA, et al. J Virol 1989 Feb;63(2):647–58
Soluble gp350/220 and deletion mutant glycoproteins block Epstein-Barr virus adsorption to lymphocytes. Tanner J, et al. J Virol 1988 Dec;62(12):4452–64
Addition of high-mannose sugars must precede disulfide bond formation for proper folding of Sendai virus glycoproteins. Vidal S, et al. J Virol 1989 Feb; 63(2):892–900

Glycoprotein cytoplasmic domain sequences required for rescue of a vesicular stomatitis virus glycoprotein mutant. Whitt MA, et al. **J Virol** 1989 Sep;63(9):3569–78

Immunoadhesins for HIV infection [news] **Lancet** 1989 Feb 18;1(8634):397

Inhibition of soluble CD4 therapy by antibodies to HIV [letter] Callahan LN, et al. **Lancet** 1989 Sep 23; 2(8665):734–5

Levels of viral glycoprotein provide a dose–dependent measure of tumor cell inhibition. Ritzi EM, et al. **Life Sci** 1989;44(26):2041–50

Complement component C3b binds directly to purified glycoprotein C of herpes simplex virus types 1 and 2. Eisenberg RJ, et al. **Microb Pathog** 1987 Dec;3(6):423–35

Role of oligosaccharides in the processing and maturation of envelope glycoproteins of human immunodeficiency virus type 1. Pal R, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3384–8

Evidence for the loop model of signal–sequence insertion into the endoplasmic reticulum. Shaw AS, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7592–6

Intracellular transport and processing of Sindbis virus glycoproteins. Knipfer ME, et al. **Virology** 1989 May; 170(1):117–22

Enzyme processing of La Crosse virus glycoprotein G1: a bunyavirus–vector infection model. Ludwig GV, et al. **Virology** 1989 Jul;171(1):108–13

Fatty acid acylation of the 67K envelope glycoprotein of a baculovirus: Autographa californica nuclear polyhedrosis virus. Roberts TE, et al. **Virology** 1989 Sep;172(1):377–81

[HIV envelope proteins are bound by human epidermal Langerhans cells by a binding site which differs from the site on the CD4 molecule, and are internalized by receptor endocytosis] Schmitt D, et al. **C R Acad Sci [III]** 1989; 308(10):269–75 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Human retrovirus–related synthetic peptides inhibit T lymphocyte proliferation. Cianciolo GJ, et al. **Immunol Lett** 1988 Sep;19(1):7–13

Human immunodeficiency virus glycoprotein (gp120) induction of monocyte arachidonic acid metabolites and interleukin 1. Wahl LM, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):621–5

PHYSIOLOGY

Molecular pathogenesis of Sindbis virus encephalitis in experimental animals. Griffin DE. **Adv Virus Res** 1989; 36:255–71 (70 ref.)

Role of the carboxy–terminal portion of the HIV–1 transmembrane protein in viral transmission and cytopathogenicity. Lee SJ, et al. **AIDS Res Hum Retroviruses** 1989 Aug;5(4):441–9

Fusogenic properties of reconstituted hybrid vesicles containing Sendai and influenza envelope glycoproteins: fluorescence dequenching and fluorescence microscopy studies. Lapidot M, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):281–90

Identification of an epitope in the major envelope protein of Epstein–Barr virus that mediates viral binding to the B lymphocyte EBV receptor (CR2). Nemerow GR, et al. **Cell** 1989 Feb 10;56(3):369–77

A role for herpes simplex virus type 1 glycoprotein E in induction of cell fusion. Chatterjee S, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2157–62

Inhibition of CD4+ T cell function by the HIV envelope protein, gp120. Diamond DC, et al. **J Immunol** 1988 Dec 1;141(11):3715–7

HIV–1 and its envelope glycoprotein down–regulate chemotactic ligand receptors and chemotactic function of peripheral blood monocytes. Wahl SM, et al. **J Immunol** 1989 May 15;142(10):3553–9

Evaluation of the interaction of phi X174 gene products E and K in E–mediated lysis of Escherichia coli. Blisi U, et al. **J Virol** 1988 Nov;62(11):4362–4

The cytoplasmic domain of simian immunodeficiency virus transmembrane protein modulates infectivity. Chakrabarti L, et al. **J Virol** 1989 Oct;63(10):4395–403

Role of reticuloendotheliosis virus envelope glycoprotein in superinfection interference. Delwart EL, et al. **J Virol** 1989 Jan;63(1):273–80

The carboxy–terminal 41 amino acids of herpes simplex virus type 1 glycoprotein B are not essential for production of infectious virus particles. Huff V, et al. **J Virol** 1988 Nov; 62(11):4403–6

Herpes simplex virus glycoprotein D mediates interference with herpes simplex virus infection. Johnson RM, et al. **J Virol** 1989 Feb;63(2):819–27

Identification, using synthetic peptides, of the minimum amino acid sequence from the retroviral transmembrane protein p15E required for inhibition of lymphoproliferation and its similarity to gp21 of human T–lymphotropic virus types I and II. Ruegg CL, et al. **J Virol** 1989 Aug; 63(8):3250–6

Inhibition of lymphoproliferation by a synthetic peptide with sequence identity to gp41 of human immunodeficiency virus type 1. Ruegg CL, et al. **J Virol** 1989 Aug; 63(8):3257–60

Formation of infectious hybrid virions with gibbon ape leukemia virus and human T–cell leukemia virus retroviral envelope glycoproteins and the gag and pol proteins of Moloney murine leukemia virus. Wilson C, et al. **J Virol** 1989 May;63(5):2374–8

Early interactions of pseudorabies virus with host cells: functions of glycoprotein gIII. Zuckermann F, et al. **J Virol** 1989 Aug;63(8):3323–9

Complex between glycoproteins gI and gp63 of pseudorabies virus: its effect on virus replication. Zuckermann FA, et al. **J Virol** 1988 Dec;62(12):4622–6

Selective infection of human CD4+ cells by simian immunodeficiency virus: productive infection associated with envelope glycoprotein–induced fusion. Koenig S, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2443–7

AIDS virus coat activates T cells [news] Barnes DM. **Science** 1988 Oct 28;242(4878):515

Evaluation in non–human primates of the safety, immunogenicity and efficacy of recombinant vaccinia viruses expressing the F or G glycoprotein of respiratory syncytial virus. Olmsted RA, et al. **Vaccine** 1988 Dec; 6(6):519–24

Glycosylation is not required for the fusion activity of the G protein of vesicular stomatitis virus in insect cells. Bailey MJ, et al. **Virology** 1989 Apr;169(2):323–31

Herpes simplex virus glycoprotein D is sufficient to induce spontaneous pH–independent fusion in a cell line that constitutively expresses the glycoprotein. Campadelli–Fiume G, et al. **Virology** 1988 Oct; 166(2):598–602

A recent field isolate of Sendai virus has a temperature–sensitive HN glycoprotein. Gorman WL, et al. **Virology** 1989 Feb;168(2):413–6

Cell surface receptors for ecotropic murine retroviruses: mobile membrane proteins that mediate binding and slow endocytosis of the viral envelope glycoprotein. Kabat D. **Virology** 1989 Aug;171(2):467–74

Glycoprotein gIII deletion mutants of pseudorabies virus are impaired in virus entry. Mettenleiter TC. **Virology** 1989 Aug;171(2):623–5

Arginine or lysine in position 333 of ERA and CVS glycoprotein is necessary for rabies virulence in adult mice. Tuffereau C, et al. **Virology** 1989 Sep;172(1):206–12

The role of monovalent cation transport in Sindbis virus maturation and release. Ulug ET, et al. **Virology** 1989 Sep; 172(1):42–50

SECRETION

A unique human immunodeficiency virus culture secreting soluble gp160. Kalyanaraman VS, et al. **AIDS Res Hum Retroviruses** 1988 Oct;4(5):319–29

THERAPEUTIC USE

Experimental treatments for HIV–infected patients. **Am Fam Physician** 1989 Jun;39(6):330

Herpes simplex virus glycoprotein treatment of recurrent genital herpes reduces cervicovaginal virus shedding in guinea pigs. Myers MG, et al. **Antiviral Res** 1988 Nov; 10(1–3):83–8

TOXICITY

Cytocidal effect caused by the envelope glycoprotein of a newly isolated avian hemangioma–inducing retrovirus. Resnick–Roguel N, et al. **J Virol** 1989 Oct;63(10):4325–30

ULTRASTRUCTURE

Envelope structure model of human immunodeficiency virus type 1. Takahashi I, et al. **J Acquir Immune Defic Syndr** 1989;2(2):136–40

Low pH–induced conformational change of rubella virus envelope proteins. Katow S, et al. **J Gen Virol** 1988 Nov; 69 (Pt 11):2797–807

Studies with crosslinking reagents on the oligomeric structure of the env glycoprotein of HIV. Schawaller M, et al. **Virology** 1989 Sep;172(1):367–9

VIRAL FUSION GLYCOPROTEINS see **VIRAL FUSION PROTEINS**

VIRAL FUSION PROTEINS

Leucine zipper motif extends [letter] Buckland R, et al. **Nature** 1989 Apr 13;338(6216):547

Identification of the fusion peptide of primate immunodeficiency viruses. Bosch ML, et al. **Science** 1989 May 12;244(4905):694–7

ANALYSIS

Identification of amino acids recognized by syncytium–inhibiting and neutralizing monoclonal antibodies to the human parainfluenza type 3 virus fusion protein. Coelingh KV, et al. **J Virol** 1989 Sep;63(9):3755–60

BIOSYNTHESIS

Nucleotide sequences of gag and env genes of a Japanese isolate of HIV–1 and their expression in bacteria. Komiyama N, et al. **AIDS Res Hum Retroviruses** 1989 Aug; 5(4):411–9

Synthesis and encapsidation of duck hepatitis B virus reverse transcriptase do not require formation of core–polymerase fusion proteins. Schlicht HJ, et al. **Cell** 1989 Jan 13; 56(1):85–92

Expression of the fusion glycoprotein of human parainfluenza type 3 virus in insect cells by a recombinant baculovirus and analysis of its immunogenic property. Ray R, et al. **Virus Res** 1989 Feb;12(2):169–80

DIAGNOSTIC USE

Identification and preliminary use of recombinant lambda gt11 fusion proteins in human cytomegalovirus diagnosis. Ripalti A, et al. **J Gen Virol** 1989 May;70 (Pt 5):1247–51

GENETICS

Bluetongue virus–17 fusion protein ns1 expressed in Escherichia coli by pUC vectors. Wang LF, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):892–9

The mumps virus fusion protein mRNA sequence and homology among the paramyxoviridae proteins. Elango N, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):801–7

Single amino acid change at the cleavage site of the fusion protein is responsible for both enhanced chymotrypsin sensitivity and trypsin resistance of a Sendai virus mutant, TR–5. Itoh M, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2907–11

The fusion glycoproteins of human respiratory syncytial virus of subgroups A and B: sequence conservation provides a structural basis for antigenic relatedness. Johnson PR, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2623–8

Gene product of Moloney murine leukemia virus required for proviral integration is a DNA–binding protein. Roth MJ, et al. **J Mol Biol** 1988 Sep 5;203(1):131–9

Neutralization epitopes of the F glycoprotein of respiratory syncytial virus: effect of mutation upon fusion function. Beeler JA, et al. **J Virol** 1989 Jul;63(7):2941–50

Differential requirements of gag and gamma–actin domains for transforming potential of Gardner–Rasheed feline sarcoma virus. Miyoshi J, et al. **J Virol** 1989 Mar; 63(3):1174–80

Mutations located on both F1 and F2 subunits of the Newcastle disease virus fusion protein confer resistance to neutralization with monoclonal antibodies. Neyt C, et al. **J Virol** 1989 Feb;63(2):952–4

Syncytium formation by recombinant vaccinia viruses carrying bovine parainfluenza 3 virus envelope protein genes. Sakai Y, et al. **J Virol** 1989 Sep;63(9):3661–8

Cloning and sequencing of the fusion protein gene of mumps virus (Miyahara strain). Takeuchi K, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5839

Molecular cloning and sequence determination of the fusion protein gene of human parainfluenza virus type 1. Merson JR, et al. **Virology** 1988 Nov;167(1):97–105

Newcastle disease virus evolution. II. Lack of gene recombination in generating virulent and avirulent strains. Toyoda T, et al. **Virology** 1989 Apr;169(2):273–82

Fusion (F) protein gene of Newcastle disease virus: sequence and hydrophobicity comparative analysis between virulent and avirulent strains. Le L, et al. **Virus Genes** 1988 Jul; 1(4):333–50

Nucleotide sequence of the matrix, fusion and putative SH protein genes of mumps virus and their deduced amino acid sequences. Elliott GD, et al. **Virus Res** 1989 Jan; 12(1):61–75

[Effect of the membrane potential on the fusion of the Sendai viral envelope with the membrane of chick erythrocytes and on virus–induced erythrocyte hemolysis] Slepushkin VA, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):709–11 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Attempts at the detection of antibodies to Newcastle disease virus by haemofusion–inhibition test. Trybala E. **Acta Virol (Praha)** 1988 Sep;32(5):435–42

Formalin–inactivated respiratory syncytial virus vaccine induces antibodies to the fusion glycoprotein that are deficient in fusion–inhibiting activity. Murphy BR, et al. **J Clin Microbiol** 1988 Aug;26(8):1595–7

Recognition of respiratory syncytial virus fusion protein by mouse cytotoxic T cell clones and a human cytotoxic T cell line. Cannon MJ, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):79–87

Marked differences in the antigenic structure of human respiratory syncytial virus F and G glycoproteins. García–Barreno B, et al. **J Virol** 1989 Feb;63(2):925–32

Identification of amino acids relevant to three antigenic determinants on the fusion protein of Newcastle disease virus that are involved in fusion inhibition and neutralization. Toyoda T, et al. **J Virol** 1988 Nov; 62(11):4427–30

Antigenic and functional organization of human parainfluenza virus type 3 fusion glycoprotein. van Wyke Coelingh K, et al. **J Virol** 1989 Jan;63(1):375–82

Use of TrpE/Gag fusion proteins to characterize immunoreactive domains on the human immunodeficiency virus type 1 core protein. Windheuser MG, et al. **J Virol** 1989 Sep;63(9):4064–8

Protective role of human antibody to the fusion protein of measles virus. Sato TA, et al. **Microbiol Immunol** 1989; 33(7):601–7

Antigenic diversity of the glycoprotein and nucleocapsid proteins of rabies and rabies–related viruses: implications for epidemiology and control of rabies. Dietzschold B, et al. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S785–98

Protection of cattle against rinderpest with vaccinia virus recombinants expressing the HA or F gene. Yilma T, et

al. **Science** 1988 Nov 18;242(4881):1058–61
Expression of a poliovirus type 1 neutralization epitope on a diphtheria toxin fusion protein. Phalipon A, et al. **Vaccine** 1989 Apr;7(2):132–6
Induction in chimpanzees of antibodies inhibiting receptor–mediated cell fusion by HIV glycoprotein. Goudsmit J, et al. **Viral Immunol** 1987–88;1(3):225–40
Relation of serum antibody to glycoproteins of respiratory syncytial virus with immunity to infection in children. Kasel JA, et al. **Viral Immunol** 1987–88;1(3):199–205
Immunization with a vaccinia recombinant expressing the F protein protects rabbits from challenge with a lethal dose of rinderpest virus. Barrett T, et al. **Virology** 1989 May; 170(1):11–8

METABOLISM

Hydrophobic binding of the ectodomain of influenza hemagglutinin to membranes occurs through the "fusion peptide". Harter C, et al. **J Biol Chem** 1989 Apr 15; 264(11):6459–64
Analysis of the relationship between cleavability of a paramyxovirus fusion protein and length of the connecting peptide. Paterson RG, et al. **J Virol** 1989 Mar; 63(3):1293–301
Addition of high–mannose sugars must precede disulfide bond formation for proper folding of Sendai virus glycoproteins. Vidal S, et al. **J Virol** 1989 Feb; 63(2):892–900
Membrane penetration of Sendai virus glycoproteins during the early stages of fusion with liposomes as determined by hydrophobic photoaffinity labeling. Novick SL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7433–7
pH–dependent accumulation of the vesicular stomatitis virus glycoprotein at the ends of intact virions. Brown JC, et al. **Virology** 1988 Dec;167(2):625–9
Endoproteolytic activation of Newcastle disease virus fusion proteins requires an intracellular acidic environment. Yoshida T, et al. **Virology** 1989 Jun;170(2):571–4
The mode of insertion of the paramyxovirus F1 N–terminus into lipid matrix, an initial step in host cell/virus fusion. Brasseur R, et al. **Virus Genes** 1988 Jul;1(4):325–32

PHYSIOLOGY

Effects of fusion temperature on the lateral mobility of Sendai virus glycoproteins in erythrocyte membranes and on cell fusion indicate that glycoprotein mobilization is required for cell fusion. Aroeti B, et al. **Biochemistry** 1988 Jul 26; 27(15):5654–61
Mechanism of fusion of Sendai virus: role of hydrophobic interactions and mobility constraints of viral membrane proteins. Effects of polyethylene glycol. Hoekstra D, et al. **J Biol Chem** 1989 Apr 25;264(12):6786–92
Endocytosis of the human immunodeficiency virus in vitro. Bauer PG, et al. **Mem Inst Oswaldo Cruz** 1987 Jul–Sep; 82(3):449–50
Evaluation in non–human primates of the safety, immunogenicity and efficacy of recombinant vaccinia viruses expressing the F or G glycoprotein of respiratory syncytial virus. Olmsted RA, et al. **Vaccine** 1988 Dec; 6(6):519–24
Glycosylation is not required for the fusion activity of the G protein of vesicular stomatitis virus in insect cells. Bailey MJ, et al. **Virology** 1989 Apr;169(2):323–31
Low pH–dependent Sindbis virus–induced fusion of BHK cells: differences between strains correlate with amino acid changes in the E1 glycoprotein. Boggs WM, et al. **Virology** 1989 Apr;169(2):485–8
Herpes simplex virus glycoprotein D is sufficient to induce spontaneous pH–independent fusion in a cell line that constitutively expresses the glycoprotein. Campadelli–Fiume G, et al. **Virology** 1988 Oct; 166(2):598–602

VIRAL GENES see **GENES, VIRAL**

VIRAL GENOMES see **GENES, VIRAL**

VIRAL HEPATITIS VACCINES

Acceptance of hepatitis B vaccine among dentists [letter] Maguire B, et al. **Am J Public Health** 1989 Jan;79(1):101–2
Long–term immunoprophylaxis of hepatitis B surface antigen carrier in infants born to hepatitis B surface antigen positive mothers using plasma derived vaccine. Theppisai U, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):111–5
Towards the eradication of hepatitis B in Australia. Farrell GC. **Aust N Z J Med** 1988 Aug;18(5):645–7
Screening for hepatitis B and vaccination of homosexual men. Loke RH, et al. **BMJ** 1989 Jan 28;298(6668):234
Hepatitis B immunisation of dental students in the 14 UK dental schools [letter] Scully C. **Br Dent J** 1989 May 20; 166(10):360
The hepatitis B immunization programme in Singapore. Goh KT, et al. **Bull WORLD Health Organ** 1989;67(1):65–70
New vaccines against hepatitis B. Papaevangelou G. **Chemioterapia** 1987 Jun;6(2 Suppl):650–2 (0 ref.)
Vaccination campaign against hepatitis B in Italy. Stroffolini T. **Chemioterapia** 1987 Jun;6(2 Suppl):649–50
Hepatitis B virus vaccine. Cost–benefit analysis of its use in a children's hospital. Hicks RA, et al. **Clin Pediatr (Phila)** 1989 Aug;28(8):359–65
Immunoprophylaxis of hepatitis B in India. Joshi YK. **Indian J Pediatr** 1988 Sep–Oct;55(5):675–80 (28 ref.)
Hepatitis vaccines. Chitkara AJ, et al. **Indian Pediatr** 1988 May;25(5):453–9 (25 ref.)
Hepatitis B infection [letter] Rattan A, et al. **Indian Pediatr** 1989 Jan;26(1):88–9
Immunogenicity and reactogenicity of a yeast–derived hepatitis B vaccine in Thai school children. Lolekha S, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:98–101
Awareness and acceptance of the hepatitis B vaccine by dental practitioners in Malaysia. Yaacob HB, et al. **J Oral Pathol Med** 1989 Apr;18(4):236–9
Mass vaccination against hepatitis B in infants in Italy [letter] Pizzza M, et al. **Lancet** 1988 Nov 12;2(8620):1132
Interferon and hepatitis B vaccine in haemodialysis patients [letter] Quiroga JA, et al. **Lancet** 1989 Jun 3;1(8649):1264
Trial of SKF rDNA hepatitis B vaccine [letter] **N Z Med J** 1989 May 10;102(867):230–1
SKF marketing of hepatitis B vaccine [letter] Jarman J. **N Z Med J** 1989 Sep 13;102(875):481
Another vaccine enters the fray [news] Swinbanks D. **Nature** 1989 Jan 12;337(6203):106
Factors influencing the response to hepatitis B vaccination of hemodialysis patients. Walz G, et al. **Nephron** 1989; 51(4):474–7
The trial preparation of attenuated live hepatitis A vaccine. Dong DX, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(4):199–202
Global control of hepatitis B through vaccination: role of hepatitis B vaccine in the Expanded Programme on Immunization. Maynard JE, et al. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S574–8 (14 ref.)
Differences in the regional prevalence of chronic hepatitis B in southern Africa—implications for vaccination. Dusheiko GM, et al. **S Afr Med J** 1989 May 20;75(10):473–8
Clinical experience with a recombinant DNA hepatitis B vaccine. Andre FE. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):501–10
National policies for hepatitis B vaccinations [editorial] Tandon BN. **Trop Gastroenterol** 1988 Oct–Dec;9(4):167–8
Recombinant versus plasma–derived hepatitis B vaccines: issues of safety, immunogenicity and cost–effectiveness. Stephenne J. **Vaccine** 1988 Aug;6(4):299–303 (39 ref.)
Duration of immunity to hepatitis B vaccination in institutionalized mentally retarded patients. Torre D, et al. **Vaccine** 1989 Apr;7(2):102–3
[Vaccination with HB vaccine to prevent transmission of hepatitis B between mother and infant] Kang P. **Chung Hua Hu Li Tsa Chih** 1988 Dec;23(12):714–6 (Chi)
[Observation on immunogenic effect of intradermal inoculation of small dose of hepatitis B vaccine] Liu PY. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Apr; 10(2):109–12 (Eng. Abstr.) (Chi)
[A study on the immunogenicity, safety and protective efficacy of a plasma–derived hepatitis B vaccine made in China] Nie J. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Dec; 9(6):332–5 (Eng. Abstr.) (Chi)
[Worldwide use of hepatitis B vaccine in the prevention and control of hepatitis B] Wu YP. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Feb; 10(1):57–60 (33 ref.) (Chi)
[Serologic epidemiology of hepatitis B viral infection and observation on the immunologic effect of hepatitis B vaccine] Ge QY. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Mar;22(2):92–4 (Eng. Abstr.) (Chi)
[The trial preparation of attenuated live hepatitis A vaccine] Dong DX. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Feb; 11(1):1–6 (Eng. Abstr.) (Chi)
[Synthetic vaccines for immunization against infection with hepatitis B virus] Hořejší J. **Cas Lek Cesk** 1989 Feb 10; 128(7):193–7 (Eng. Abstr.) (Cze)
[How infants of hepatitis B–positive mothers are protected] Pohjanpelto P. **Duodecim** 1989;105(10):883–5 (Fin)
[Prevalence of HBsAG during pregnancy at the local health unit in Sassari and initial results of the anti–HBV prophylactic vaccine in newborn infants] Maida A, et al. **Nuovi Ann Ig Microbiol** 1988 Mar–Apr;39(2):115–28 (Eng. Abstr.) (Ita)
[Prospects for a vaccine against the infectious hepatitis virus] Panà A. **Nuovi Ann Ig Microbiol** 1987 Jan–Apr; 38(1–2):57–79 (49 ref.) (Eng. Abstr.) (Ita)
[Hepatitis B: is the current vaccination policy the correct one everywhere?] Paolillo F, et al. **Pediatr Med Chir** 1988 Sep–Oct;10(5):489–92 (Eng. Abstr.) (Ita)
[Highly endemic areas of HAV and present state of imported type A hepatitis and its prevention] Suzuki S. **Nippon Rinsho** 1989 Jan;47(1):106–11 (Jpn)
[Hepatitis B virus. Application of recombinant DNA technics to the development of hepatitis B vaccines and its diagnosis] Hamada F. **Rinsho Byori** 1988 May;36(5):548–52 (10 ref.) (Jpn)
[Vaccines today and tomorrow] Nordenfelt E. **Lakartidningen** 1989 Mar 8;86(10):871–4 (Swe)

ADMINISTRATION & DOSAGE

Immunogenicity of the intradermal route of hepatitis B vaccination with the use of recombinant hepatitis B vaccine. Lancaster D, et al. **Am J Infect Control** 1989 Jun; 17(3):126–9
Summary of safety and efficacy data on a yeast–derived hepatitis B vaccine. André FE. **Am J Med** 1989 Sep 4; 87(3A):14S–20S
Protective efficacy of a recombinant deoxyribonucleic acid hepatitis B vaccine in institutionalized mentally handicapped clients. Van Damme P, et al. **Am J Med** 1989 Sep 4;87(3A):26S–29S
Intradermal hepatitis B vaccine in thalassaemia and sickle cell disease. Mok Q, et al. **Arch Dis Child** 1989 Apr; 64(4):535–40
Hepatitis B immunization in high risk neonates born from HBsAg and HBeAg positive mothers: comparison of standard and low dose regimens. Pongpipat D, et al. **Asian Pac J Allergy Immunol** 1988 Dec;6(2):107–10
Hepatitis B immunization in high risk neonates born from HBsAg positive mothers: comparison between plasma derived and recombinant DNA vaccine. Pongpipat D, et al. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):37–40
Hepatitis B immunisation of dental students in 14 UK dental schools [letter] Mitchell R. **Br Dent J** 1989 Aug 5;167(3):94
A new program for provision of hepatitis B vaccine to neonates of HBsAg+ mothers. **Colo Med** 1989 Apr 15; 86(8):125
Do hospital personnel in hyperendemic areas require immunization against hepatitis B virus (HBV) infection? Is vertical transmission of HBV infection common in this group? Tsega E, et al. **Ethiop Med J** 1989 Jul;27(3):101–6
Hepatitis B vaccination of relatives of hepatitis B virus DNA positive carriers: an experience with plasma–derived vaccine. Craxì A, et al. **Eur J Epidemiol** 1989 Mar;5(1):65–9
Combined hepatitis B immune globulin and vaccine for postexposure prophylaxis of hepatitis B virus infection [letter] Akahane Y, et al. **Hepatology** 1989 Sep;10(3):398
Passive–active immunoprophylaxis after percutaneous exposure to hepatitis B virus. Dienstag JL. **Hepatology** 1989 Sep;10(3):385–7 (19 ref.)
Combined hepatitis B immune globulin and vaccine for postexposure prophylaxis of accidental hepatitis B virus infection in hemodialysis staff members: comparison with immune globulin without vaccine in historical controls. Mitsui T, et al. **Hepatology** 1989 Sep;10(3):324–7
Hepatitis B vaccination with short dose intervals—a possible alternative for post–exposure prophylaxis? Wahl M, et al. **Infection** 1988 Jul–Aug;16(4):229–32
Absence of antibodies to human immunodeficiency virus (HIV) in health workers after hepatitis B vaccination [letter] Israel Z, et al. **J Assoc Physicians India** 1988 Feb; 36(2):179
Virus hepatitis B, A, non–A, non–B. Sherlock S. **J Hepatol** 1989 Mar;8(2):254–8
Is booster injection with hepatitis B vaccine necessary in healthy responders? A study of the immune response. Wismans PJ, et al. **J Hepatol** 1989 Mar;8(2):236–40
Comparison of results of recombinant and plasma–derived hepatitis B vaccines in Japanese nursery–school children. Hayashi J, et al. **J Infect** 1988 Jul;17(1):49–55
Two–year study of passive–active immunization for prevention of hepatitis B infection in newborns. Theppisai U, et al. **J Med Assoc Thai** 1988 Aug;71(8):413–6
Successful postexposure vaccination against hepatitis B in chimpanzees. Iwarson S, et al. **J Med Virol** 1988 Aug; 25(4):433–9
Worldwide elimination of hepatitis B transmission: we have the way, we need the will [editorial] Francis DP, et al. **JAMA** 1989 Apr 28;261(16):2400–1
Efficacy of a mass hepatitis B vaccination program in Taiwan. Studies on 3464 infants of hepatitis B surface antigen–carrier mothers. Hsu HM, et al. **JAMA** 1988 Oct 21;260(15):2231–5
Intradermal hepatitis B vaccine [letter] Braddick MR. **Lancet** 1989 Apr 29;1(8644):957–8
Response to hepatitis B vaccine in infants born to mothers with schistosomiasis [letter] Ghaffar YA, et al. **Lancet** 1989 Jul 29;2(8657):272
Immune dysfunction in patients not responding to hepatitis B vaccination [letter] Kitas GD, et al. **Lancet** 1989 Mar 11;1(8637):551–2
Intradermal hepatitis B vaccine [letter] Lunn JA. **Lancet** 1989 Mar 18;1(8638):625
Hemophilus influenzae type B vaccine. Few BJ. **MCN** 1988 Nov–Dec;13(6):407
Hepatitis B vaccines [letter] **N Z Med J** 1988 Dec 14; 101(859):831
Interval between hepatitis B vaccine doses [letter] Lang SD. **N Z Med J** 1989 Apr 12;102(865):172
The dose of hepatitis B vaccine [letter] Seville P. **N Z Med J** 1988 Nov 9;101(857):774
Hepatitis B vaccination [letter] Turner B. **N Z Med J** 1989 Feb 22;102(862):83
Vaccination against hepatitis B in children and adolescent patients on dialysis. Drachman R, et al. **Nephrol Dial Transplant** 1989;4(5):372–4
Controlled trial of thymopentin in hemodialysis patients who fail to respond to hepatitis B vaccination. Donati D, et al. **Nephron** 1988;50(2):133–6
Combined passive–active immunization against the hepatitis B virus of 132 newborns of chronic carrier mothers: long term results. Delage G, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):769–76

Prevention of hepatitis B infection in newborns through mass screening and delayed vaccination of all infants of mothers with hepatitis B surface antigen. Schalm SW, et al. **Pediatrics** 1989 Jun;83(6):1041–8

Intramuscular versus subcutaneous injection for hepatitis B vaccine [letter] Fessard C, et al. **Vaccine** 1988 Dec;6(6):469

Effect of timing of hepatitis B vaccine doses on response to vaccine in Yucpa Indians. Hadler SC, et al. **Vaccine** 1989 Apr;7(2):106–10

Persistence of antibodies following vaccination with a yeast-derived recombinant hepatitis B vaccine. Just M, et al. **Vaccine** 1988 Oct;6(5):401–2

Few physicians vaccinated against hepatitis B. **Wis Med J** 1989 Apr;88(4):14

[Simultaneous administration of hepatitis B vaccine and BCG] Yin SR. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Sep;22(5):266–8 (Eng. Abstr.) **(Chi)**

[Preventive hepatitis B vaccination of professional firefighters as an occupational medicine responsibility of the public health service] Hoss J. **Off Gesundheitswes** 1989 Apr; 51(4):186–7 (Eng. Abstr.) **(Ger)**

[Low-dose intradermal vaccination in the prevention of hepatitis B] Ibrányi E, et al. **Orv Hetil** 1988 Sep 11; 129(37):1967–8 (Eng. Abstr.) **(Hun)**

[Hepatitis B vaccination with the plasma-derived Hevac-B Pasteur vaccine. A comparison of 2 populations: hospital personnel and hemodialysis patients] Di Giandomenico G, et al. **Minerva Med** 1989 Feb;80(2):149–51 (Eng. Abstr.) **(Ita)**

[Program of vaccination against hepatitis B in Latium] Albertoni F, et al. **Nuovi Ann Ig Microbiol** 1988 Jul–Oct; 39(4–5):407–9 **(Ita)**

[Initial experience with an inactivated anti-hepatitis-A vaccine] Panà A, et al. **Nuovi Ann Ig Microbiol** 1988 Jul–Oct;39(4–5):373–7 **(Ita)**

[Immunization against hepatitis A and B] Focaccia R, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Mar–Apr; 43(2):124–8 (49 ref.) (Eng. Abstr.) **(Por)**

[Hepatitis vaccination of health personnel (letter)] García Páez JM, et al. **Med Clin (Barc)** 1988 Oct 1;91(10):398 **(Spa)**

[Importance of controlling immunity after vaccination against hepatitis B] Eriksson I, et al. **Lakartidningen** 1989 Mar 1; 86(9):705 **(Swe)**

[Vaccination against hepatitis B. Follow-up with antibody tests] Iwarson S. **Lakartidningen** 1988 Nov 9;85(45):3808–9 **(Swe)**

ADVERSE EFFECTS

Myasthenia gravis after general anesthesia and hepatitis B vaccine. Biron P, et al. **Arch Intern Med** 1988 Dec; 148(12):2685

Yeast-derived hepatitis B vaccine and yeast sensitivity [letter] Brightman CA, et al. **Lancet** 1989 Apr 22;1(8643):903

Guillain-Barré syndrome following immunisation with synthetic hepatitis B vaccine [letter] Tuohy PG. **N Z Med J** 1989 Mar 8;102(863):114–5

Vaccine hypersensitivity or coincidental virus infection [letter] Boxall EH, et al. **Vaccine** 1989 Feb;7(1):77

[Periarteritis nodosa following vaccination against hepatitis B (letter)] Le Goff P, et al. **Presse Med** 1988 Oct 8; 17(34):1763 **(Fre)**

[Hepatitis A in the adult during vaccination against hepatitis B] Panizo Delgado A, et al. **Rev Esp Enferm Apar Dig** 1988 May;73(5 Pt 2):625–7 (Eng. Abstr.) **(Spa)**

[Adverse reactions to anti-hepatitis B vaccine in hospital personnel: results end experiences] Panizo Delgado A, et al. **Rev Med Univ Navarra** 1988 Jul–Sep;32(3):131–4 (Eng. Abstr.) **(Spa)**

ANALYSIS

[Detection of antibodies and assessment of an international unit of anti-HBs specific immunoglobulin, HEPAGA] Kselíková M, et al. **Cas Lek Cesk** 1989 Jun 16; 128(25):777–80 (Eng. Abstr.) **(Cze)**

[Study on recombinant hepatitis B vaccine: development of ELISA methods for detection of contaminating yeast components in the vaccine and humoral anti-yeast component antibody developed in humans and guinea-pigs] Ohtani W, et al. **Yakugaku Zasshi** 1988 Apr;108(4):339–44 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Immunogenicity of a recombinant hepatitis B vaccine in hemophiliacs. Mannucci PM, et al. **Am J Hematol** 1988 Dec;29(4):211–4

Plasma-derived and yeast-derived hepatitis B vaccines. Ellis RW, et al. **Am J Infect Control** 1989 Jun;17(3):181–9 (12 ref.)

Clinical experience with hepatitis B vaccines. West DJ. **Am J Infect Control** 1989 Jun;17(3):172–80 (6 ref.)

Immunogenicity of a yeast-derived hepatitis B vaccine in hemodialysis patients. Bruguera M, et al. **Am J Med** 1989 Sep 4;87(3A):30S–32S

Long-term immunogenicity of a plasma-derived hepatitis B vaccine in HIV seropositive and HIV seronegative hemophiliacs. Mannucci PM, et al. **Arch Intern Med** 1989 Jun;149(6):1333–7

Immunogenicity study of a plasma-derived heat-inactivated hepatitis-B vaccine in newborn babies: a randomised dose-response study. Ip HM, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):367–71

Immunogenicity of hepatitis B vaccine in Chinese school children: a comparison of two plasma-derived vaccines. Lee SD, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug; 42(2):87–92

Comparison of enzyme- and radio-immunoassay kits to detect hepatitis B surface antibody response among hepatitis B vaccinees. Lee SD, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Aug;21(3):158–64

Enhancing effects of oral adjuvants on anti-HBs responses induced by hepatitis B vaccine. Kuriyama S, et al. **Clin Exp Immunol** 1988 Jun;72(3):383–9

Immune response to anti-HBV vaccination: study of conditioning factors. Corrao G, et al. **Eur J Epidemiol** 1988 Dec;4(4):492–6

HBsAg carrier infants with serum anti-HBc negativity. Lee SD, et al. **Hepatology** 1989 Jan;9(1):102–4

Lack of immune potentiation by complexing HBsAg in a heat-inactivated hepatitis B vaccine with antibody in hepatitis B immunoglobulin. Lelie PN, et al. **Hepatology** 1989 Jul;10(1):36–8

Immunogenicity of hepatitis B vaccine in healthy Malaysian adults. Ton SH, et al. **Indian J Med Res** 1988 Jun;87:542–4

Four-year experience with a recombinant hepatitis B vaccine. Jilg W, et al. **Infection** 1989 Mar–Apr;17(2):70–6

Protection of woodchucks from infection with woodchuck hepatitis virus by immunization with recombinant core protein. Roos S, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2087–95

Phytohemagglutinin mitogenic response of normal individuals vaccinated with hepatitis B vaccine. Filion LG, et al. **J Infect Dis** 1989 Sep;160(3):398–404

Primary study of attenuated live hepatitis A vaccine (H2 strain) in humans. Mao JS, et al. **J Infect Dis** 1989 Apr; 159(4):621–4

Randomized dose range study of a recombinant hepatitis B vaccine produced in mammalian cells and containing the S and PreS2 sequences. Tron F, et al. **J Infect Dis** 1989 Aug;160(2):199–204

Recombinant-yeast-derived hepatitis B vaccine in healthy adults: safety and two-year immunogenicity of early investigative lots of vaccine. Butterly L, et al. **J Med Virol** 1989 Feb;27(2):155–9

Protective effect of a synthetic peptide comprising the complete preS2 region of the hepatitis B virus surface protein. Emini EA, et al. **J Med Virol** 1989 May;28(1):7–12

Low-dose (2 micrograms) hepatitis B vaccination in medical students: comparable immunogenicity for intramuscular and intradermal routes. Heijtink RA, et al. **J Med Virol** 1989 Feb;27(2):151–4

Immune response of patients with congenital coagulation disorders to hepatitis B vaccine: suboptimal response and human immunodeficiency virus infection. Miller EJ, et al. **J Med Virol** 1989 Jun;28(2):96–100

Comparison of the immunogenicity of reduced doses of two recombinant DNA hepatitis B vaccines in New Zealand children. Milne A, et al. **J Med Virol** 1989 Mar;27(3):264–7

Immunogenicity of a yeast-recombinant hepatitis B vaccine in high-risk children. Rumi MG, et al. **J Med Virol** 1989 Jan;27(1):48–51

Dissociated antibody responses to the S and pre-S2 regions of the hepatitis B virus after vaccination in hemophiliacs. Zanetti A, et al. **J Med Virol** 1989 Jul;28(3):156–8

HLA and immune response [letter] McCombs CC, et al. **JAMA** 1989 Aug 11;262(6):774

Comparative immunogenicity of plasma and recombinant hepatitis B virus vaccines in homosexual men. Odaka N, et al. **JAMA** 1988 Dec 23–30;260(24):3635–7

Protective efficacy of a recombinant DNA hepatitis B vaccine in neonates of HBe antigen-positive mothers. Poovorawan Y, et al. **JAMA** 1989 Jun 9;261(22):3278–81

Duration of immunogenicity and efficacy of hepatitis B vaccine in a Yupik Eskimo population. Wainwright RB, et al. **JAMA** 1989 Apr 28;261(16):2362–6

Non-responsiveness to hepatitis-B vaccination: revaccination and immunogenetic typing. Krämer A, et al. **Klin Wochenschr** 1988 Aug 1;66(15):670–4

Immunogenicity of a killed hepatitis A vaccine in seronegative volunteers [see comments] Flehmig B, et al. **Lancet** 1989 May 13;1(8646):1039–41. **Comment in:** Lancet 1989 Jul 8;2(8654):114

Plasma-derived versus recombinant hepatitis B vaccines [letter] Kurtz JB, et al. **Lancet** 1989 Feb 25;1(8635):451

Low-dose interleukin-2 induces systemic immune responses against HBsAg in immunodeficient non-responders to hepatitis B vaccination. Meuer SC, et al. **Lancet** 1989 Jan 7;1(8628):15–8

Hepatitis A vaccine [letter; comment] Misra SP, et al. **Lancet** 1989 Jul 8;2(8654):114. **Comment on:** Lancet 1989 May 13;1(8646):1039–41

Genetic prediction of nonresponse to hepatitis B vaccine. Alper CA, et al. **N Engl J Med** 1989 Sep 14;321(11):708–12

The safety and immunogenicity of a recombinant hepatitis B vaccine in neonates. Gunn TR, et al. **N Z Med J** 1989 Jan 25;102(860):1–3

Mass vaccination against hepatitis B in preschool children: immunogenicity after three reduced doses. Milne A, et al. **N Z Med J** 1989 Aug 23;102(874):429–30

Trial of SKF rDNA hepatitis B vaccine [letter] Milne A. **N Z Med J** 1989 Apr 26;102(866):198–9

Immunogenicity and efficacy testing in chimpanzees of an oral hepatitis B vaccine based on live recombinant adenovirus. Lubeck MD, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6763–7

Antibody response to heat-inactivated hepatitis B vaccine (CLB-3 micrograms) in hemodialysis patients and occupational risk personnel: a one year follow-up. Yoshida FT, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jan–Feb; 30(1):11–6

IgG subclass deficiency in patients with Down's syndrome and aberrant hepatitis B vaccine response. Avanzini MA, et al. **Scand J Immunol** 1988 Oct;28(4):465–70

Immune response to hepatiuis B vaccine in subjects positive for serum hepatitis B core antibody alone. Wu JS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):944–7

Vaccine hypersensitivity or coincidental virus infection [letter] Boxall EH, et al. **Vaccine** 1989 Feb;7(1):77

Anti-pre-S2 antibodies in natural hepatitis B virus infection and after immunization. Coursaget P, et al. **Vaccine** 1988 Aug;6(4):357–61

Immunogenicity of a heat-treated recombinant DNA hepatitis B vaccine [published erratum appears in Vaccine 1989 Feb;7(1):77] Just M, et al. **Vaccine** 1988 Oct; 6(5):399–400

Comparative immunogenicity study of four plasma-derived hepatitis B vaccines in Thai young adults. Phanuphak P, et al. **Vaccine** 1989 Jun;7(3):253–6

Immunogenicity of low doses of recombinant hepatitis B vaccine in young males. Tsakalakis C, et al. **Vaccine** 1988 Aug;6(4):328–30

Reactogenicity and immunogenicity of a new recombinant yeast-derived hepatitis B vaccine. Scheiermann N, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):411–21

[Approaches to developing an optimal vaccine against hepatitis B viruses] Gerlich WH, et al. **Immun Infekt** 1988 Oct;16(5):167–74 (43 ref.) (Eng. Abstr.) **(Ger)**

[Secondary immune deficiency in renal failure exemplified by hepatitis B vaccination] Köhler H, et al. **Klin Wochenschr** 1988 Sep 15;66(18):865–72 (20 ref.) (Eng. Abstr.) **(Ger)**

[Induction of HBs antibodies using a new genetically engineered vaccine] Just M, et al. **Schweiz Rundsch Med Prax** 1988 Dec 20;77(51):1407–9 (Eng. Abstr.) **(Ger)**

[Detection of pre-S gene products in HBsAg carriers and in hepatitis B vaccines] Gerken G, et al. **Z Gastroenterol** 1988 Jul;26(7):374–9 (Eng. Abstr.) **(Ger)**

[Long-term observation of the immunogenicity of hepatitis B vaccine in hospital personnel] Hayashi J, et al. **Kansenshogaku Zasshi** 1988 Sep;62(9):805–10 (Eng. Abstr.) **(Jpn)**

[Hepatitis B vaccination in alcoholics] Maruyama N, et al. **Kansenshogaku Zasshi** 1989 Jan;63(1):27–34 (Eng. Abstr.) **(Jpn)**

[Hepatitis B markers in health service personnel with reference to preventive vaccination] Stempień R, et al. **Pol Tyg Lek** 1988 Jul 18;43(29):942–4 (Eng. Abstr.) **(Pol)**

[Current status and outlook of the artificial-active immunoprophylaxis of viral hepatitis B] Ivan A, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):455–8 (18 ref.) (Eng. Abstr.) **(Rum)**

[Hepatitis B vaccination: immunogenicity of the plasmatic vaccine in hospital personnel] Panizo Delgado A, et al. **Med Clin (Barc)** 1989 Mar 25;92(11):401–4 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

The development of novel hepatitis B vaccines. Zuckerman AJ. **Biochem Soc Symp** 1987;53:39–49 (24 ref.)

Significance of pre-S2 peptide of hepatitis B virus: should it be in the vaccine? Hellström UB, et al. **Prog Med Virol** 1988;35:76–106 (146 ref.)

PHARMACOLOGY

[Inoculation against hepatitis B. Vaccines, mechanism of action, duration of the inoculation protection and revaccination] Jilg W. **Dtsch Med Wochenschr** 1989 Apr 14;114(15):596–8 (12 ref.) **(Ger)**

STANDARDS

A collaborative study to establish the International Reference Reagent for hepatitis B vaccine containing plasma-derived hepatitis B surface antigen. Ferguson M, et al. **J Biol Stand** 1989 Apr;17(2):151–60

THERAPEUTIC USE

Hepatitis B vaccines: who, when, why, and how much? Hamory BH. **Am J Infect Control** 1989 Jun;17(3):119–20

Hepatitis B vaccine programs give ICPs a shot in the arm. Results of a national survey. Hanacik LJ, et al. **Am J Infect Control** 1989 Jun;17(3):148–53

Health care groups put on push for free hepatitis B vaccine [news] **Am J Nurs** 1988 Dec;88(12):1715, 1722–3

Efficacy of hepatitis B virus (HBV) vaccine in long term prevention of HBV infection. Pongpipat D, et al. **Asian Pac J Allergy Immunol** 1988 Jun;6(1):19–22

Why isn't the hepatitis B vaccine being used? Hardie J. **Can Dent Assoc J** 1988 Nov;54(11):821–3

Choosing and using hepatitis B vaccine. **Drug Ther Bull** 1988

Dec 12;26(25):99–100
Hepatitis B and dialysis patients [letter] Silver HJ. **Infect Control Hosp Epidemiol** 1988 Aug;9(8):343
Management of health care workers remotely vaccinated for hepatitis B who sustain significant blood and body fluid exposures. Snyder MB. **Infect Control Hosp Epidemiol** 1988 Oct;9(10):462–4
Hepatitis B vaccination in Ramathibodi health personnel 1986–1987. Promjunyakul K, et al. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:23–5
Hepatitis B vaccine in sickle-cell anemia [letter] Miller ST, et al. **J Pediatr** 1988 Nov;113(5):955–6
Acceptance of hepatitis B vaccine among dental health care workers. Jacobson JJ, et al. **J Public Health Dent** 1989 Spring;49(2):67–72
Immune response to HBsAg differently interpreted by RIA and EIA. Kruining J, et al. **J Virol Methods** 1988 Oct; 22(1):89–98
Prevalence of hepatitis B in children in a high risk New Zealand community, and control using recombinant DNA vaccine. Milne A, et al. **N Z Med J** 1989 Apr 26; 102(866):182–4
Protective efficacy of plasma-derived hepatitis beta vaccine in preventing perinatal transmission of HBV infection in infants of HBsAg/HBeAg positive mothers. Pojanagaroon B, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec;19(4):615–21
[Evaluation of the efficacy of a recombinant hepatitis B vaccine] Polywka S, et al. **Immun Infekt** 1988 Oct; 16(5):175–8 (Eng. Abstr.) **(Ger)**
[Immunoprophylaxis of viral hepatitis] Cervera Solórzano J. **Rev Gastroenterol Mex** 1988 Jul–Sep;53(3):193–9 (48 ref.) (Eng. Abstr.) **(Spa)**

VIRAL INTERFERENCE

Defective response to interferons in cells transfected with the hepatitis B virus genome. Onji M, et al. **Hepatology** 1989 Jan;9(1):92–6
A large component of the antiviral activity of mouse interferon-gamma may be due to its induction of interferon-alpha. Hughes TK, et al.
J Biol Regul Homeost Agents 1987 Jan–Mar;1(1):29–32
Viral interference in the tick, Rhipicephalus appendiculatus. I. Interference to oral superinfection by Thogoto virus. Davies CR, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2461–8
Viral interference in the tick, Rhipicephalus appendiculatus. II. Absence of interference with Thogoto virus when the tick gut is by-passed by parenteral inoculation. Jones LD, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2469–73
Inhibition of interferon-gamma antiviral and antiproliferative activities by ras oncogene expression. Gariglio M, et al. **J Natl Cancer Inst** 1989 Jul 5;81(13):1014–20
Herpes simplex virus glycoprotein D mediates interference with herpes simplex virus infection. Johnson RM, et al. **J Virol** 1989 Feb;63(2):819–27
A neutrophil-derived antiviral protein: induction requirements and biological properties. Ohmann HB, et al. **J Virol** 1989 May;63(5):1916–23
Prevention of T-cell lymphoma in AKR/J mice. Peled A, et al. **Leukemia** 1988 Dec;2(12 Suppl):125S–131S
A baculovirus blocks insect molting by producing ecdysteroid UDP-glucosyl transferase. O'Reilly DR, et al. **Science** 1989 Sep 8;245(4922):1110–2

VIRAL M PROTEINS see **VIRAL MATRIX PROTEINS**

VIRAL MATRIX PROTEINS

ANALYSIS

Rapid detection of cytomegalovirus by 24-well plate centrifugation with the use of a monoclonal antibody to an early nuclear antigen. Woods GL, et al.
Am J Clin Pathol 1989 Jun;91(6):695–700
Vesicular stomatitis virus M protein in the nuclei of infected cells. Lyles DS, et al. **J Virol** 1988 Nov;62(11):4387–92
Transcription-inhibition and RNA-binding domains of influenza A virus matrix protein mapped with anti-idiotypic antibodies and synthetic peptides. Ye ZP, et al. **J Virol** 1989 Sep;63(9):3586–94

GENETICS

Matrix protein of cell-associated subacute sclerosing panencephalitis viruses. Enami M, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2191–6
Structural defect linked to nonrandom mutations in the matrix gene of biken strain subacute sclerosing panencephalitis virus defined by cDNA cloning and expression of chimeric genes. Ayata M, et al. **J Virol** 1989 Mar;63(3):1162–73
Sindbis virus ts103 has a mutation in glycoprotein E2 that leads to defective assembly of virions. Hahn CS, et al. **J Virol** 1989 Aug;63(8):3459–65
Transcription inhibition site on the M protein of vesicular stomatitis virus located by marker rescue of mutant tsO23(III) with M-gene expression vectors. Li Y, et al. **J Virol** 1989 Jun;63(6):2841–3
Syncytium formation by recombinant vaccinia viruses carrying bovine parainfluenza 3 virus envelope protein genes. Sakai Y, et al. **J Virol** 1989 Sep;63(9):3661–8
Growth restriction of influenza A virus by M2 protein antibody is genetically linked to the M1 protein. Zebedee SL, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1061–5
Complete nucleotide sequence of the matrix protein mRNA of mumps virus. Elango N. **Virology** 1989 Feb;168(2):426–8
Nucleotide sequence between the peplomer and matrix protein genes of the porcine transmissible gastroenteritis coronavirus identifies three large open reading frames. Kapke PA, et al. **Virus Genes** 1989 May;2(3):293–4
Nucleotide sequence of the matrix, fusion and putative SH protein genes of mumps virus and their deduced amino acid sequences. Elliott GD, et al. **Virus Res** 1989 Jan; 12(1):61–75
Nucleotide sequence of coronavirus TGEV genomic RNA: evidence for 3 mRNA species between the peplomer and matrix protein genes. Wesley RD, et al. **Virus Res** 1989 Jun;13(2):87–100

IMMUNOLOGY

Antigenic reactivity of matrix protein and nucleoprotein of influenza virus as detected by EIA after dissociation with different detergents. Khristova ML, et al.
Acta Virol (Praha) 1989 Jan;33(1):1–7
Identification of a DTH-inducing T-cell epitope on the E2 membrane protein of Semliki Forest virus. Snijders A, et al. **Cell Immunol** 1989 Oct 1;123(1):23–35
Differential effects of amino acid substitutions in the beta-sheet floor and alpha-2 helix of HLA-A2 on recognition by alloreactive viral peptide-specific cytotoxic T lymphocytes. Mattson DH, et al. **J Immunol** 1989 Aug 15;143(4):1101–7
A single amino acid substitution in HLA-A2 can alter the selection of the cytotoxic T lymphocyte repertoire that responds to influenza virus matrix peptide 55–73. Shimojo N, et al. **J Immunol** 1989 Jul 15;143(2):558–64
M protein (M1) of influenza virus: antigenic analysis and intracellular localization with monoclonal antibodies. Bucher D, et al. **J Virol** 1989 Sep;63(9):3622–33
Production and characterization of monoclonal antibodies specific for the transmembrane protein of simian immunodeficiency virus from the African green monkey. Kodama T, et al. **J Virol** 1988 Dec;62(12):4782–5
Binding of labelled influenza matrix peptide to HLA DR in living B lymphoid cells. Ceppellini R, et al. **Nature** 1989 Jun 1;339(6223):392–4
Monoclonal antibodies to the matrix (E1) glycoprotein of mouse hepatitis virus protect mice from encephalitis. Fleming JO, et al. **Virology** 1989 Jan;168(1):162–7
Recognition of the PB1, neuraminidase, and matrix proteins of influenza virus A/NT/60/68 by cytotoxic T lymphocytes. Reay PA, et al. **Virology** 1989 Jun; 170(2):477–85
[Fragments of the matrix and nucleocapsid proteins of the influenza A virus containing antigenic determinants] Stefanovich LE, et al. **Vopr Virusol** 1989 Mar–Apr; 34(2):230–4 **(Rus)**

ISOLATION & PURIFICATION

Selective extraction of haemagglutinin and matrix protein from Sendai virions by employing trifluoperazine as a detergent. Baiocchi M, et al. **FEBS Lett** 1988 Sep 26; 238(1):171–4

METABOLISM

Interferon alters intracellular transport of vesicular stomatitis virus glycoprotein. Singh VK, et al.
J Biol Regul Homeost Agents 1988 Apr–Jun;2(2):53–62
The M protein of vesicular stomatitis virus associates specifically with the basolateral membranes of polarized epithelial cells independently of the G protein. Bergmann JE, et al. **J Cell Biol** 1988 Nov;107(5):1707–15
Recognition of influenza A matrix protein by HLA-A2-restricted cytotoxic T lymphocytes. Use of analogues to orientate the matrix peptide in the HLA-A2 binding site. Gotch F, et al. **J Exp Med** 1988 Dec 1; 168(6):2045–57
Cell-associated West Nile flavivirus is covered with E+pre-M protein heterodimers which are destroyed and reorganized by proteolytic cleavage during virus release. Wengler G, et al. **J Virol** 1989 Jun;63(6):2521–6
Direct binding of influenza peptides to class I HLA molecules. Chen BP, et al. **Nature** 1989 Feb 23; 337(6209):743–5
Phosphorylation of vesicular stomatitis virus M protein: evidence for a second virion-associated protein serine kinase activity. Beckes JD, et al. **Virology** 1989 Mar; 169(1):161–71

PHARMACOLOGY

[Effect of a new antiviral compound 1-morpholinomethyltetrahydro-2(1H)-pyrimidinone on the interaction of influenza virus proteins with flat lipid membranes] Tverdislov VA, et al. **Vopr Virusol** 1988 May–Jun;33(3):278–81 (Eng. Abstr.) **(Rus)**

VIRAL NONSTRUCTURAL PROTEINS see **VIRAL PROTEINS**

VIRAL ONCOGENE PROTEINS see **ONCOGENE PROTEINS, VIRAL**

VIRAL PROTEINS

Evidence that the fusion protein of respiratory syncytial virus exists as a dimer in its native form. Brief report. Arumugham RG, et al. **Arch Virol** 1989;106(3–4):327–34
NMR spectroscopy of 113Cd(II)-substituted gene 32 protein. Giedroc DP, et al. **Biochemistry** 1989 Mar 21;28(6):2410–8
Prediction of terminal protein and ribonuclease H domains in the gene P product of hepadnaviruses. Khudyakov YuE, et al. **FEBS Lett** 1989 Jan 30;243(2):115–8
The nucleotide sequence of the structural-protein-coding region of foot-and-mouth disease virus serotype SAT3. Brown AL, et al. **Gene** 1989 Feb 20;75(2):225–33
Reductive methylation and 13C NMR studies of the lysyl residues of fd gene 5 protein. Lysines 24, 46, and 69 may be involved in nucleic acid binding. Dick LR, et al.
J Biol Chem 1988 Dec 15;263(35):18864–72
Reconstitution of the thermostable trimeric phage P22 tailspike protein from denatured chains in vitro. Seckler R, et al. **J Biol Chem** 1989 Jul 15;264(20):11750–3
Properties of a mutant Cre protein that alters the topological linkage of recombination products. Abremski K, et al.
J Mol Biol 1988 Jul 5;202(1):59–66
Three-dimensional structure of complexes of single-stranded DNA-binding proteins with DNA. IKe and fd gene 5 proteins form left-handed helices with single-stranded DNA. Gray CW. **J Mol Biol** 1989 Jul 5;208(1):57–64
Temperature dependence of the structure of aggregates of tobacco mosaic virus protein at pH 7.2. Static synchrotron small-angle X-ray scattering. Hiragi Y, et al.
J Mol Biol 1988 Nov 5;204(1):129–40
A method to identify distinctive charge configurations in protein sequences, with application to human herpesvirus polypeptides. Karlin S, et al. **J Mol Biol** 1989 Jan 5; 205(1):165–77
Scaffolding protein regulates the polymerization of P22 coat subunits into icosahedral shells in vitro. Prevelige PE Jr, et al. **J Mol Biol** 1988 Aug 20;202(4):743–57
Conformational change of rubella virus spike proteins induced by 2-mercaptoethanol. Katow S, et al.
Jpn J Med Sci Biol 1988 Jun;41(3):109–15
Superfamily expands [letter] Wang HC, et al. **Nature** 1989 Feb 9;337(6207):514
An improved double stranded DNA sequencing method using gene 32 protein. Kaspar P, et al.
Nucleic Acids Res 1989 May 11;17(9):3616
Charge configurations in viral proteins. Karlin S, et al.
Proc Natl Acad Sci U S A 1988 Dec;85(24):9396–400
Computer modeling of membrane-anchored cellular and viral proteins: organization and function. Becker Y.
Prog Clin Biol Res 1989;289:109–29
Predicted secondary structure and membrane topology of the scrapie prion protein. Bazan JF, et al. **Protein Eng** 1987 Feb–Mar;1(2):125–35
Comparison of the dynamics of the membrane-bound form of fd coat protein in micelles and in bilayers by solution and solid-state nitrogen-15 nuclear magnetic resonance spectroscopy. Bogusky MJ, et al. **Proteins** 1988;4(2):123–30
Influence of interior packing and hydrophobicity on the stability of a protein. Sandberg WS, et al. **Science** 1989 Jul 7;245(4913):54–7
Computer-assisted primary and secondary structure analyses of DNA polymerases of herpes simplex, Epstein-Barr and varicella zoster viruses reveal conserved domains with some homology to DNA-binding domain in E. coli DNA pol I. Becker Y. **Virus Genes** 1988 Jul;1(4):351–67
[Function of protein myristoylation in cellular regulation and viral proliferation] Shoji S, et al. **Yakugaku Zasshi** 1989 Feb;109(2):71–85 (49 ref.) (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Immunomodulation of experimental murine herpes simplex keratitis: II. Glycoprotein D protection. Foster CS, et al. **Curr Eye Res** 1988 Nov;7(11):1051–61

ANALYSIS

Characterization of the structural proteins of porcine epizootic diarrhea virus, strain CV777. Egberink HF, et al. **Am J Vet Res** 1988 Aug;49(8):1320–4
Identification and location of the structural glycoproteins of a tissue culture-adapted turkey enteric coronavirus. Dea S, et al. **Arch Virol** 1989;106(3–4):221–37
Limitations of different ELISA procedures for localizing epitopes in viral coat protein subunits. Dekker EL, et al. **Arch Virol** 1989;105(3–4):269–86
Virus-specific proteins and RNAs from cells infected with hemorrhagic fever with renal syndrome (HFRS) viruses derived from endemic areas of the U.S.S.R. Lukashevich IS, et al. **Arch Virol** 1988;102(1–2):147–54
Association of viral 126 kDa protein-containing X-bodies with nuclei in mosaic-diseased tobacco leaves. Wijdeveld MM, et al. **Arch Virol** 1989;104(3–4):225–39
Structural proteins of two different plaque-size phenotypes of fowlpox virus. Nazerian K, et al. **Avian Dis** 1989 Jul–Sep; 33(3):458–65
Detection of latent avian adenovirus-associated virus proteins in chicken cells. Sadasiv EC, et al. **Avian Dis** 1989 Jan–Mar;33(1):125–33
Determination of the secondary structure of the DNA binding protein Ner from phage Mu using 1H homonuclear and 15N–1H heteronuclear NMR spectroscopy.

Gronenborn AM, et al. **Biochemistry** 1989 Jun 13; 28(12):5081–9

Thermal denaturation of T4 gene 32 protein: effects of zinc removal and substitution. Keating KM, et al. **Biochemistry** 1988 Jul 12;27(14):5240–5

Structural and antigenic variation of the structural protein VP3 in serotype 1 poliovirus isolated from vaccinees. Cash P. **Can J Microbiol** 1988 Jun;34(6):802–6

Ras oncogene and the acquisition of metastasizing properties by rectal adenocarcinoma. Michelassi F, et al. **Dis Colon Rectum** 1989 Aug;32(8):665–8

Screening recombinant baculovirus plaques in situ with antibody probes. Capone J. **Gene Anal Tech** 1989 May–Jun; 6(3):62–6

Human B-cell epitopes of HIV-2 transmembrane protein are similarly spaced as in HIV-1. Goudsmit J, et al. **J Acquir Immune Defic Syndr** 1989;2(3):297–302

Comparison of non-ionic detergents for extraction and ion-exchange high-performance liquid chromatography of Sendai virus integral membrane proteins. Van Ede J, et al. **J Chromatogr** 1989 Aug 4;476:319–27

Effect of detergents on the structure of integral membrane proteins of Sendai virus studied with size-exclusion high-performance liquid chromatography and monoclonal antibodies. Welling-Wester S, et al. **J Chromatogr** 1988 Jun 29;443:255–66

Proteins specified by bovine herpesvirus type 4: structural proteins of the virion and identification of two major glycoproteins by using monoclonal antibodies. Dubuisson J, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1743–53

Polypeptides of pneumonia virus of mice. II. Characterization of the glycoproteins. Ling R, et al. **J Gen Virol** 1989 Jun; 70 (Pt 6):1441–52

Identification of the gB homologues of equine herpesvirus types 1 and 4 as disulphide-linked heterodimers and their characterization using monoclonal antibodies. Meredith DM, et al. **J Gen Virol** 1989 May;70 (Pt 5):1161–72

Protein and nucleic acid analysis of influenza B viruses isolated in Italy in 1984. Donatelli I, et al. **J Med Virol** 1989 Mar;27(3):201–9

Identification of a domain required for autoproteolytic cleavage of murine coronavirus gene A polyprotein. Baker SC, et al. **J Virol** 1989 Sep;63(9):3693–9

Identification of proteins specific for human herpesvirus 6-infected human T cells. Balachandran N, et al. **J Virol** 1989 Jun;63(6):2835–40

Characterization of bovine respiratory syncytial virus proteins and mRNAs and generation of cDNA clones to the viral mRNAs. Lerch RA, et al. **J Virol** 1989 Feb; 63(2):833–40

Separation of primary structural components conferring autoregulation, transactivation, and DNA-binding properties to the herpes simplex virus transcriptional regulatory protein ICP4. Shepard AA, et al. **J Virol** 1989 Sep;63(9):3714–28

Molecular and biochemical analyses of human immunodeficiency virus type 1 vpu protein. Strebel K, et al. **J Virol** 1989 Sep;63(9):3784–91

Analysis of near-neighbor contacts in bacteriophage T4 wedges and hubless baseplates by using a cleavable chemical cross-linker. Watts NR, et al. **J Virol** 1989 Jun; 63(6):2427–36

Rotavirus SA11 genome segment 11 protein is a nonstructural phosphoprotein. Welch SK, et al. **J Virol** 1989 Sep; 63(9):3974–82

A major transcriptional regulatory protein (ICP4) of herpes simplex virus type 1 is associated with purified virions. Yao F, et al. **J Virol** 1989 Aug;63(8):3338–44

Identification of herpes simplex viruses by automated profile analysis of viral proteins. Connor JD, et al. **J Virol Methods** 1989 Jun;24(3):245–52

Anomalous electrophoretic behavior of the major potato virus X RNA translation product. Karasev AV, et al. **J Virol Methods** 1989 Feb;23(2):223–7

A general method for the detection of potyviral gene products in plant protoplasts and tissue. Luciano CS, et al. **J Virol Methods** 1989 Jun;24(3):347–55

Sensitive detection of nucleic acids and protein of human papillomavirus type 6 in respiratory and genital tract papillomata. Wu TC, et al. **J Virol Methods** 1989 Jul; 25(1):31–47

Biochemical and immunological characterization of murine leukemia viruses that are paralysis-inducing in rats. Shibamura S, et al. **Jpn J Cancer Res** 1989 Jan;80(1):24–30

VP-1 antigen in chronic postviral fatigue syndrome [letter] Halpin D, et al. **Lancet** 1989 May 6;1(8645):1028–9

herpes simplex virus infection accelerates the age-related reactivity of mouse trigeminal ganglia neurons with anti-mouse IgG antibody in immunostaining. Wroblewska Z, et al. **Microb Pathog** 1988 Oct;5(4):233–40

Mammalian ets-1 and ets-2 genes encode highly conserved proteins. Watson DK, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7862–6

Characterization of a non-structural 147-kDa precursor polypeptide of echovirus 33 and its immunogenicity in man. Aouni M, et al. **Res Virol** 1989 Jul-Aug;140(4):313–7

Molecular pathogenesis of equine coital exanthema: identification and expression of infected cell polypeptides at the restricted temperature during equine herpesvirus 3 infection. Jacob RJ, et al. **Vet Microbiol** 1988 Dec; 18(3–4):363–71

African swine fever virus-induced proteins on the plasma membranes of infected cells. Alcaraz C, et al. **Virology** 1989 Feb;168(2):406–8

Identification of the sigma 1S protein in reovirus serotype 2-infected cells with antibody prepared against a bacterial fusion protein. Cashdollar LW, et al. **Virology** 1989 Jan; 168(1):183–6

Characterization of novel populations of MVM virions containing covalent DNA-protein complexes. Faust EA, et al. **Virology** 1989 Jan;168(1):128–37

Studies on Tanapox virus. Knight JC, et al. **Virology** 1989 Sep;172(1):116–24

Virus-specific polypeptides of human parainfluenza virus type 4 and their synthesis in infected cells. Komada H, et al. **Virology** 1989 Jul;171(1):254–9

Characterization of a unique protein produced by influenza A virus recovered from a long-term persistent infection. Lucas WT, et al. **Virology** 1988 Oct;166(2):620–3

Association of Autographa californica nuclear polyhedrosis virus (AcMNPV) with the nuclear matrix. Wilson ME, et al. **Virology** 1988 Nov;167(1):233–41

Definition of the carboxy termini of the three glycoproteins specified by dengue virus type 2. Wright PJ, et al. **Virology** 1989 Jul;171(1):61–7

The cell attachment proteins of type 1 and type 3 reovirus are differentially susceptible to trypsin and chymotrypsin. Yeung MC, et al. **Virology** 1989 May;170(1):62–70

Pneumovirus-like characteristics of the mRNA and proteins of turkey rhinotracheitis virus. Cavanagh D, et al. **Virus Res** 1988 Oct;11(3):241–56

Virion and nonstructural polypeptides of human herpesvirus-6. Shiraki K, et al. **Virus Res** 1989 Jun; 13(2):173–8

[Syncytia formation in cultures and analysis of the protein composition of various strains of caprine arthritis encephalitis virus (CAEV)] Blondin I, et al. **Ann Rech Vet** 1989;20(2):153–8 (Eng. Abstr.) (Fre)

[Cytomegalovirus diagnosis in immunocompromised patients: detection of early viral protein and viral nucleic acids in shell vial culture] Cathomas G, et al. **Schweiz Med Wochenschr** 1989 Jan 21;119(3):75–80 (Eng. Abstr.) (Ger)

[A western blot test for the serological diagnosis of equine infectious anemia] Rossmanith W, et al. **Zentralbl Veterinarmed** [B] 1989 Feb;36(1):49–56 (Eng. Abstr.) (Ger)

[Humoral immune response to unique structural proteins of human cytomegalovirus. Prospects of using antibodies detected by immunoblotting in the serological diagnosis of cytomegalovirus infections] Landini MP. **Recenti Prog Med** 1988 Oct;79(10):430–40 (Eng. Abstr.) (Ita)

[The role of structural changes in T4 bacteriophage tail proteins] Veprintseva OD, et al. **Biofizika** 1988 Nov–Dec; 33(6):954–61 (Eng. Abstr.) (Rus)

[Localization of ligand-receptor sites of proteins] Petrov RV, et al. **Dokl Akad Nauk SSSR** 1989;305(6):1506–8 (Rus)

[The effect of nucleotides on the sedimentation properties of contracted sheath of bacteriophage T4] Seryaheva II, et al. **Dokl Akad Nauk SSSR** 1988 Nov–Dec;303(1):245–8 (Rus)

[Epitope analysis of mumps virus proteins in a persistent cell culture infection: changes in the hemagglutinin-neuraminidase polypeptide] Boriskin IuS, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):595–600 (Eng. Abstr.) (Rus)

[Detection of the virus-specific proteins of the tick-borne encephalitis virus by immunosorption] Liapustin VN, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):448–52 (Eng. Abstr.) (Rus)

[Identification of the antigenic components of the host cell in isolated glycoproteins of the influenza virus] Rovnova ZI, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):419–24 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

Interaction of Epstein-Barr virus DNA polymerase with aphidicolin, phosphonoformate and 5'-GMP. Li JS, et al. **Virus Genes** 1988 Jul;1(4):369–75

BIOSYNTHESIS

Modulation in response to temperature of Mayaro virus proteosynthesis in Aedes Albopictus cells. Carvalho M da G, et al. **Acta Virol (Praha)** 1989 May;33(3):235–45

Herpes simplex virus type 1 (HSV-1) HSZP interferes also heat inactivated with early shutoff of host protein synthesis induced by HSV-1 KOS. Matis J, et al. **Acta Virol (Praha)** 1988 Sep;32(5):379–85

Poliovirus protease 2A is required for interference with vesicular stomatitis virus-specified protein synthesis. Garry RF. **Arch Virol** 1988;103(1–2):133–7

Inability of translation of mRNA for HVJ (Sendai virus) M protein in a rat glioma cell line at nonpermissive temperatures. Ogura H, et al. **Arch Virol** 1988; 102(3–4):263–8

Purification of the Sendai virus nonstructural C protein expressed in E. coli, and preparation of antiserum against C protein. Omata-Yamada T, et al. **Arch Virol** 1988; 103(1–2):61–72

Scanning independent ribosomal initiation of the Sendai virus Y proteins in vitro and in vivo. Curran J, et al. **EMBO J** 1989 Feb;8(2):521–6

Scanning independent ribosomal initiation of the Sendai virus X protein. Curran J, et al. **EMBO J** 1988 Sep;7(9):2869–74

Effects of mutations in stem and loop regions on the structure and function of adenovirus VA RNAI. Mellits KH, et al. **EMBO J** 1988 Sep;7(9):2849–59

Characterization, overproduction and purification of the product of gene 1 of Bacillus subtilis phage phi 29. Prieto I, et al. **Gene** 1989 Apr 30;77(2):195–204

Replication of Herpesvirus saimiri is semipermissive in human cells because of a block in the synthesis of certain late proteins. Dahlberg JE, et al. **Intervirology** 1988; 29(4):277–34

Cis-acting sequences responsive to the rev gene product of the human immunodeficiency virus. Dayton AI, et al. **J Acquir Immune Defic Syndr** 1988;1(5):441–52

Palmitylation of viral membrane glycoproteins takes place after exit from the endoplasmic reticulum. Bonatti S, et al. **J Biol Chem** 1989 Jul 25;264(21):12590–5

Gly-Gly-X, a novel consensus sequence for the proteolytic processing of viral and cellular proteins. López-Otín C, et al. **J Biol Chem** 1989 Jun 5;264(16):9107–10

Interferon inhibits herpes simplex virus-specific translation: a reinvestigation. Altinkilic B, et al. **J Gen Virol** 1988 Dec; 69 (Pt 12):3107–12

Synthesis and processing of the bovine enteric coronavirus hacmagglutinin protein. Hogue BG, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):345–52

Recombinant vaccinia/Venezuelan equine encephalitis (VEE) virus expresses VEE structural proteins. Kinney RM, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3005–13

Temperature-sensitive mutants of bovine herpesvirus type 1: mutants which make unaltered levels of 'early' glycoproteins but fail to synthesize a 'late' glycoprotein. Nelson R, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):125–32

Synthesis of immunogenic, but non-infectious, poliovirus particles in insect cells by a baculovirus expression vector. Urakawa T, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1453–63

Expression of five proteins from the Sendai virus P/C mRNA in infected cells. Dillon PJ, et al. **J Virol** 1989 Feb; 63(2):974–7

Expression of bovine herpesvirus 1 glycoproteins gI and gIII in transfected murine cells. Fitzpatrick DR, et al. **J Virol** 1988 Nov;62(11):4239–48

Initiation of protein synthesis by internal entry of ribosomes into the 5' nontranslated region of encephalomyocarditis virus RNA in vivo. Jang SK, et al. **J Virol** 1989 Apr; 63(4):1651–60

Regulation of the temporal synthesis of proteins in bacteriophage BF23-infected cells. Kikuchi S, et al. **J Virol** 1988 Dec;62(12):4569–76

Rotavirus-specific protein synthesis is not necessary for recognition of infected cells by virus-specific cytotoxic T lymphocytes. Offit PA, et al. **J Virol** 1989 Aug; 63(8):3279–83

Adeno-associated virus rep protein synthesis during productive infection. Redemann BE, et al. **J Virol** 1989 Feb;63(2):873–82

Leader-encoded open reading frames modulate both the absolute and relative rates of synthesis of the virion proteins of simian virus 40. Sedman SA, et al. **J Virol** 1989 Sep; 63(9):3884–93

Induction of anti-EBNA-1 protein by 12-O-tetradecanoylphorbol-13-acetate treatment of human lymphoblastoid cells. Wen LT, et al. **J Virol** 1989 Aug;63(8):3315–22

Effect of mutations and deletions in a bicistronic mRNA on the synthesis of influenza B virus NB and NA glycoproteins. Williams MA, et al. **J Virol** 1989 Jan; 63(1):28–35

Differential expression of Epstein-Barr virus (EBV) genes BBRF3, BILF1, and BMRF2 in EBV-transformed lymphoblastoid lines from ataxia-telangiectasia patients. Becker Y, et al. **Leukemia** 1988 Dec;2(12 Suppl):178S–191S

Variation in herpes simplex virus type 1 glycoproteins produced in kidney cells from different species. Al-Ahdal MN, et al. **Microbios** 1989;58(234):7–15

Processing of the structural proteins of human immunodeficiency virus type 1 in the presence of monensin and cerulenin. Pal R, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9283–6

The development of multiple expression vectors for high level synthesis of eukaryotic proteins: expression of LCMV-N and AcNPV polyhedrin protein by a recombinant baculovirus. Emery VC, et al. **Protein Eng** 1987 Aug–Sep;1(4):359–66

Expression of herpes simplex virus thymidine kinase, mediated by vaccinia virus early promoters. Sharif A, et al. **Res Virol** 1989 Mar–Apr;140(2):103–13

A baculovirus blocks insect molting by producing ecdysteroid UDP-glucosyl transferase. O'Reilly DR, et al. **Science** 1989 Sep 8;245(4922):1110–2

Unexpectedly high levels of HIV-1 RNA and protein synthesis in a cytocidal infection. Somasundaran M, et al. **Science** 1988 Dec 16;242(4885):1554–7

Expression of the 16K cistron of tobacco rattle virus in protoplasts. Angenent GC, et al. **Virology** 1989 Apr; 169(2):305–11

Inhibitory effects of vesicular stomatitis virus on cellular and influenza viral RNA metabolism and protein synthesis. Frielle DW, et al. **Virology** 1989 Sep;172(1):274–84

Intracellular accumulation of Punta Toro virus glycoproteins expressed from cloned cDNA. Matsuoka Y, et al.

Virology 1988 Nov;167(1):251–60
Analyses of the terminal sequences of West Nile virus structural proteins and of the in vitro translation of these proteins allow the proposal of a complete scheme of the proteolytic cleavages involved in their synthesis. Nowak T, et al. **Virology** 1989 Apr;169(2):365–76
Expression of pre-S1, pre-S2, and C proteins in duck hepatitis B virus infection. Yokosuka O, et al. **Virology** 1988 Nov;167(1):82–6
Abnormal expression of a late gene family L1 protein in monkey cells abortively infected with adenovirus type 2. Anderson CW, et al. **Virus Genes** 1988 Mar;1(2):149–64
Transcription and in vitro translation of the dsRNA virus isolated from Rhizoctonia solani. Finkler A, et al. **Virus Genes** 1988 Mar;1(2):205–19
Further characterization of an RNA defective mutant of the foot-and-mouth disease virus. Giachetti C, et al. **Virus Res** 1988 Oct;11(3):257–67
A protein of molar mass 12 kDa incorporates into the membrane of ASF virus-infected cells. Revilla Y, et al. **Virus Res** 1988 Sep;11(2):193–7
Expression of snowshoe hare bunyavirus S RNA coding proteins by recombinant baculoviruses. Urakawa T, et al. **Virus Res** 1988 Nov;11(4):303–17
[Effect of sodium selenite and its combination with remantadine on the synthesis of virus-specific polypeptides in a cell culture infected with influenza A virus] Abdullaev II, et al. **Vopr Virusol** 1988 Nov-Dec;33(6):676–80 (Eng. Abstr.) (Rus)

CHEMICAL SYNTHESIS

Multiple continuous-flow solid-phase peptide synthesis. Synthesis of an HIV antigenic peptide and its omission analogues. Krchňák V, et al. **Int J Pept Protein Res** 1989 Mar;33(3):209–13

GENETICS

Adenovirus proteins and MHC expression. Pääbo S, et al. **Adv Cancer Res** 1989;52:151–63 (68 ref.)
Evolution of the structural proteins of human immunodeficiency virus: selective constraints on nucleotide substitution. Brown AL, et al. **AIDS Res Hum Retroviruses** 1988 Dec;4(6):399–407
The human immunodeficiency virus type 2 (HIV-2) contains a novel gene encoding a 16 kD protein associated with mature virions. Franchini G, et al. **AIDS Res Hum Retroviruses** 1988 Aug;4(4):243–50
Expression of CaMV ORF IV in Escherichia coli. Albrecht H, et al. **Ann Inst Pasteur Virol** 1988 Jul-Sep;139(3):263–76
Asparagine-linked glycosylation of the scrapie and cellular prion proteins. Haraguchi T, et al. **Arch Biochem Biophys** 1989 Oct;274(1):1–13
Comparison of the nucleoprotein genes of a chicken and a mink influenza A H 10 virus. Reinhardt U, et al. **Arch Virol** 1988;103(1–2):139–45
Involvement of reactive oxygen intermediates in the mutagenicity of tumor promoters. Biggart NW, et al. **Basic Life Sci** 1988;49:457–60
Pro——leu change at position 102 of prion protein is the most common but not the sole mutation related to Gerstmann-Sträussler syndrome. Doh-ura K, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):974–9
The two core sequences of the adenovirus E1A inducible E4 promoter are required for the formation of a specific DNA-protein complex. Gilardi P, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1143–9
Expression of a potyvirus non-structural protein in transgenic tobacco. Graybosch R, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):425–32
Post-translational modifications of poliovirus proteins. Urzainqui A, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):263–71
Possible finger structure in gene A protein of Microviridae. Kodaira K, et al. **Biochim Biophys Acta** 1989 Jun 1; 1008(1):123–4
Measles virus editing provides an additional cysteine-rich protein. Cattaneo R, et al. **Cell** 1989 Mar 10;56(5):759–64
The Abelson protein is required for initiation and maintenance for transformation in murine pre-B cells. Engelman A, et al. **Curr Top Microbiol Immunol** 1988; 141:310–5
The amino-terminal domain of the hepadnaviral P-gene encodes the terminal protein (genome-linked protein) believed to prime reverse transcription. Bartenschlager R, et al. **EMBO J** 1988 Dec 20;7(13):4185–92
Sequence-specific and general transcriptional activation by the bovine papillomavirus-1 E2 trans-activator require an N-terminal amphipathic helix-containing E2 domain. Haugen TH, et al. **EMBO J** 1988 Dec 20;7(13):4245–53
Bovine papilloma virus encoded E2 protein activates lymphokine genes through DNA elements, distinct from the consensus motif, in the long control region of its own genome. Heike T, et al. **EMBO J** 1989 May;8(5):1411–7
A novel replicon occurring naturally in Escherichia coli is a phage-plasmid hybrid. Seufert W, et al. **EMBO J** 1988 Dec 1;7(12):4005–10
DNA-binding properties of gene-5 protein encoded by bacteriophage M 13. 1. The kinetics of the dissociation of gene-5-protein.polynucleotide complexes upon addition of salt. Bulsink H, et al. **Eur J Biochem** 1988 Oct 1; 176(3):589–96
Defect in phorbol acetate-induced translocation of diacylglycerol kinase in erbB-transformed fibroblast cells. Kato M, et al. **FEBS Lett** 1989 Apr 24;247(2):247–50
Directed mutagenesis of the bacteriophage P2 ogr gene defines an essential function. Birkeland NK, et al. **Gene** 1988 Dec 20;73(2):327–35
Transposition of lambda placMu is mediated by the A protein altered at its carboxy-terminal end. Bremer E, et al. **Gene** 1988 Nov 15;71(1):177–86
The nucleotide sequence of the structural-protein-coding region of foot-and-mouth disease virus serotype SAT3. Brown AL, et al. **Gene** 1989 Feb 20;75(2):225–33
Expression and processing of human rhinovirus type 14 polypeptide precursors in Escherichia coli maxicells. Cheah KC, et al. **Gene** 1988 Sep 30;69(2):265–74
Characterization of the phage P1 dam gene. Coulby JN, et al. **Gene** 1988 Dec 25;74(1):191
DNA methylation, chromatin structure and regulation of Herpes simplex virus tk gene expression. Graessmann A, et al. **Gene** 1988 Dec 25;74(1):135–7 (7 ref.)
Organization of the bacteriophage P1 tail-fibre operon. Guidolin A, et al. **Gene** 1989;76(2):239–43
High-level transient expression of influenza virus proteins from a series of SV40 late and early replacement vectors. Huylebroeck D, et al. **Gene** 1988 Jun 30;66(2):163–81
Sequence analysis of cloned dengue virus type 2 genome (New Guinea-C strain). Irie K, et al. **Gene** 1989 Feb 20; 75(2):197–211
Biosynthesis and analysis of a genetically engineered HIV-1 reverse transcriptase/endonuclease polyprotein in Escherichia coli. Leuthardt A, et al. **Gene** 1988 Aug 15; 68(1):35–42
Single amino acid changes which alter the sequence specificity of the T4 and T2 (Dam) DNA-adenine methyltransferases. Miner Z, et al. **Gene** 1988 Dec 25; 74(1):275–6
The amino acid sequence of the eukaryotic DNA [N6-adenine]methyltransferase, M.CviBIII, has regions of similarity with the prokaryotic isoschizomer M.TaqI and other DNA [N6-adenine] methyltransferases. Narva KE, et al. **Gene** 1988 Dec 25;74(1):253–9
Physical map and polyhedrin gene sequence of Lymantria dispar nuclear polyhedrosis virus. Smith IR, et al. **Gene** 1988 Nov 15;71(1):97–105
Organization of target-recognizing domains in the multispecific DNA (cytosine-5)methyltransferases of Bacillus subtilis phages SPR and phi 3T. Trautner TA, et al. **Gene** 1988 Dec 25;74(1):267
Functional analysis of the papilloma virus E2 trans-activator in Saccharomyces cerevisiae. Lambert PF, et al. **Genes Dev** 1989 Jan;3(1):38–48
Regulation of two nested proteins from gene 49 (recombination endonuclease VII) and of a lambda RexA-like protein of bacteriophage T4. Barth KA, et al. **Genetics** 1988 Oct;120(2):329–43
Fine structure genetic and physical map of the phage P22 tail protein gene. Berget PB, et al. **Genetics** 1989 Jan; 121(1):13–28
The isolation and sequence of missense and nonsense mutations in the cloned bacteriophage P22 tailspike protein gene. Schwarz JJ, et al. **Genetics** 1989 Apr;121(4):635–49
Role of bacteriophage Mu C protein in activation of the mom gene promoter. Bölker M, et al. **J Bacteriol** 1989 Apr; 171(4):2019–27
Cloning and sequencing of an Escherichia coli gene, nlp, highly homologous to the ner genes of bacteriophages Mu and D108. Choi YL, et al. **J Bacteriol** 1989 Sep; 171(9):5222–5
Overexpression of N antitermination proteins of bacteriophages lambda, 21, and P22: loss of N protein specificity. Franklin NC, et al. **J Bacteriol** 1989 May; 171(5):2513–22
Nucleotide sequence and expression of the gene for the site-specific integration protein from bacteriophage HP1 of Haemophilus influenzae. Goodman SD, et al. **J Bacteriol** 1989 Aug;171(8):4232–40
Effect of DNA sequence and structure on nuclease activity of the DexA protein of bacteriophage T4. Gruber H, et al. **J Bacteriol** 1988 Dec;170(12):5830–6
Cloning and identification of bacteriophage T4 gene 2 product gp2 and action of gp2 on infecting DNA in vivo. Lipinska B, et al. **J Bacteriol** 1989 Jan;171(1):488–97
Impaired expression of certain prereplicative bacteriophage T4 genes explains impaired T4 DNA synthesis in Escherichia coli rho (nusD) mutants. Stitt BL, et al. **J Bacteriol** 1989 Jul;171(7):3872–80
Induction of the autolytic system of Escherichia coli by specific insertion of bacteriophage MS2 lysis protein into the bacterial cell envelope. Walderich B, et al. **J Bacteriol** 1988 Nov;170(11):5027–33
Altered expression of the bacteriophage T4 gene 41 (primase-helicase) in an Escherichia coli rho mutant. Hinton DM. **J Biol Chem** 1989 Aug 25;264(24):14440–6
Regulation of glycosylation. The influence of protein structure on N-linked oligosaccharide processing. Hubbard SC. **J Biol Chem** 1988 Dec 25;263(36):19303–17
Identification of functionally important residues in the DNA binding region of the mnt repressor. Knight KL, et al. **J Biol Chem** 1989 Aug 15;264(23):13706–10
The 44P subunit of the T4 DNA polymerase accessory protein complex catalyzes ATP hydrolysis. Rush J, et al. **J Biol Chem** 1989 Jul 5;264(19):10943–53
Thermostability of temperature-sensitive folding mutants of the P22 tailspike protein. Sturtevant JM, et al. **J Biol Chem** 1989 Jun 25;264(18):10693–8
Uracil-DNA glycosylase inhibitor gene of bacteriophage PBS2 encodes a binding protein specific for uracil-DNA glycosylase. Wang Z, et al. **J Biol Chem** 1989 Jan 15; 264(2):1163–71
Structural domains of the poliovirus polyprotein are major determinants for proteolytic cleavage at Gln-Gly pairs. Ypma-Wong MF, et al. **J Biol Chem** 1988 Nov 25; 263(33):17846–56
Nucleotide sequence of the 3'-terminal region of clover yellow mosaic virus RNA. Abouhaidar MG, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1871–5
Biological and genetic evolution of the nucleoprotein gene of human influenza A viruses. Altmüller A, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2111–9
Genetic relatedness among structural protein genes of dengue 1 virus strains. Chu MC, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1701–12
A herpes simplex virus type 1 mutant containing a deletion within immediate early gene 1 is latency-competent in mice. Clements GB, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2501–6
Engineering of an Oryctes baculovirus recombinant: insertion of the polyhedrin gene from the Autographa californica nuclear polyhedrosis virus. Crawford AM. **J Gen Virol** 1989 Apr;70 (Pt 4):1017–24
Use of retroviral vectors for mapping of splice sites in cottontail rabbit papillomavirus. Dostatni N, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3093–100
The large viral RNA segment of California serogroup bunyaviruses encodes the large viral protein. Endres MJ, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):223–8
Construction and characterization of herpes simplex virus type 1 mutants with defined lesions in immediate early gene 1. Everett RD. **J Gen Virol** 1989 May;70 (Pt 5):1185–202
The cell attachment site on foot-and-mouth disease virus includes the amino acid sequence RGD (arginine-glycine-aspartic acid). Fox G, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):625–37
The polypeptide of Mr 14,000 of porcine transmissible gastroenteritis virus: gene assignment and intracellular location. Garwes DJ, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2495–9
Human cytomegalovirus ICP22, the product of the HWLF1 reading frame, is an early nuclear protein that is released from cells. Mocarski ES, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2613–21
Nucleotide sequence of the polyhedrin gene of Bombyx mori cytoplasmic polyhedrosis virus A strain with nuclear localization of polyhedra. Mori H, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1885–8
Analysis of transcription initiation in the Panolis flammea nuclear polyhedrosis virus polyhedrin gene. Oakey R, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):769–75
Characterization of a new temperature-sensitive and avirulent mutant of the rabies virus. Préhaud C, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):133–43
The type-specific epitopes of the Epstein-Barr virus nuclear antigen 2 are near the carboxy terminus of the protein. Rowe DT, et al. **J Gen Virol** 1989 May;70 (Pt 5):1217–29
Partial nucleotide sequence of potato virus M RNA shows similarities to protexviruses in gene arrangement and the encoded amino acid sequences. Rupasov VV, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1861–9
Mapping of two novel transcripts of bovine papillomavirus type 4. Stamps AC, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3033–45
Complementation of a herpes simplex virus type 1 Vmw110 deletion mutant by human cytomegalovirus. Stow EC, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):695–704
Analysis of the promoter of the Autographa californica nuclear polyhedrosis virus p10 gene. Weyer U, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):203–8
Sequence, transcription and translation of a late gene of the Autographa californica nuclear polyhedrosis virus encoding a 34.8K polypeptide. Wu JG, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2449–59
Nucleotide sequence of Lymantria dispar nuclear polyhedrosis virus polyhedrin gene. Chang MT, et al. **J Invertebr Pathol** 1989 Mar;53(2):241–6
Characterization of a new prokaryotic transcriptional activator and its DNA recognition site. Barthelemy I, et al. **J Mol Biol** 1989 Jul 20;208(2):225–32
Complementary peptide sequences in partner proteins of the adenovirus capsid. Caillet-Boudin ML. **J Mol Biol** 1989 Jul 5;208(1):195–8
Analysis of the functional domains of herpes simplex virus type 1 immediate-early polypeptide Vmw110. Everett RD. **J Mol Biol** 1988 Jul 5;202(1):87–96
Bacteriophage f1 DNA replication genes. II. The roles of gene V protein and gene II protein in complementary strand synthesis. Fulford W, et al. **J Mol Biol** 1988 Sep 5;203(1):39–48
Regulation of bacteriophage f1 DNA replication. I. New functions for genes II and X. Fulford W, et al. **J Mol Biol** 1988 Sep 5;203(1):49–62
UvsY protein of bacteriophage T4 is an accessory protein for in vitro catalysis of strand exchange. Harris LD, et al. **J Mol Biol** 1989 Mar 5;206(1):19–27
ban operon of bacteriophage P1. Mutational analysis of the

c1 repressor–controlled operator. Heinzel T, et al. **J Mol Biol** 1989 Jan 5;205(1):127–35

Bent DNA is needed for recombinational enhancer activity in the site–specific recombination system Cin of bacteriophage P1. The role of FIS protein. Hübner P, et al. **J Mol Biol** 1989 Feb 5;205(3):493–500

Translation of phage f1 gene VII occurs from an inherently defective initiation site made functional by coupling. Ivey–Hoyle M, et al. **J Mol Biol** 1989 Jul 20;208(2):233–44

Lambda cro repressor complex with OR3 operator DNA. 19F nuclear magnetic resonance observations. Metzler WJ, et al. **J Mol Biol** 1989 Jan 5;205(1):149–64

Structure of phage 434 Cro protein at 2.35 A resolution. Mondragón A, et al. **J Mol Biol** 1989 Jan 5;205(1):179–88

Structure of the amino–terminal domain of phage 434 repressor at 2.0 A resolution. Mondragón A, et al. **J Mol Biol** 1989 Jan 5;205(1):189–200

Visualization of protein–nucleic acid interactions in a virus. Refined structure of intact tobacco mosaic virus at 2.9 A resolution by X–ray fiber diffraction. Namba K, et al. **J Mol Biol** 1989 Jul 20;208(2):307–25

An NTP–binding motif is the most conserved sequence in a highly diverged monophyletic group of proteins involved in positive strand RNA viral replication. Gorbalenya AE, et al. **J Mol Evol** 1989 Mar;28(3):256–68

Evolution of RNA genomes: does the high mutation rate necessitate high rate of evolution of viral proteins? Koonin EV, et al. **J Mol Evol** 1989 Jun;28(6):524–7

Construction and characterization of a herpes simplex virus type 1 mutant unable to transinduce immediate–early gene expression. Ace CI, et al. **J Virol** 1989 May;63(5):2260–9

Expression of bicistronic measles virus P/C mRNA by using hybrid adenoviruses: levels of C protein synthesized in vivo are unaffected by the presence or absence of the upstream P initiator codon. Alkhatib G, et al. **J Virol** 1988 Nov; 62(11):4059–69

Overlapping octamer and TAATGARAT motifs in the VP65–response elements in herpes simplex virus immediate–early promoters represent independent binding sites for cellular nuclear factor III. apRhys CM, et al. **J Virol** 1989 Jun;63(6):2798–812

Guanidine–resistant mutants of poliovirus have distinct mutations in peptide 2C. Baltera RF Jr, et al. **J Virol** 1989 Oct;63(10):4441–4

In vitro transcription of bacteriophage phi 29 DNA: inhibition of early promoters by the viral replication protein p6. Barthelemy I, et al. **J Virol** 1989 Jan;63(1):460–2

The hepatitis B virus–associated reverse transcriptase is encoded by the viral pol gene. Bavand M, et al. **J Virol** 1989 Feb;63(2):1019–21

Herpes simplex virus type 1 DNA synthesis requires the product of the UL8 gene: isolation and characterization of an ICP6::lacZ insertion mutation. Carmichael EP, et al. **J Virol** 1989 Feb;63(2):591–9

Fine mapping of the immediate–early gene of the Indiana–Funkhauser strain of pseudorabies virus. Cheung AK. **J Virol** 1988 Dec;62(12):4763–6

Regulated expression of the human cytomegalovirus pp65 gene: octamer sequence in the promoter is required for activation by viral gene products. Depto AS, et al. **J Virol** 1989 Mar;63(3):1232–8

mRNA sequence and deduced amino acid sequence of the mumps virus small hydrophobic protein gene. Elango N, et al. **J Virol** 1989 Mar;63(3):1413–5

Expression of two related nonstructural proteins of bluetongue virus (BTV) type 10 in insect cells by a recombinant baculovirus: production of polyclonal ascitic fluid and characterization of the gene product in BTV–infected BHK cells. French TJ, et al. **J Virol** 1989 Aug;63(8):3270–8

Stimulation of chloramphenicol acetyltransferase mRNA translation by reovirus capsid polypeptide sigma 3 in cotransfected COS cells. Giantini M, et al. **J Virol** 1989 Jun;63(6):2415–21

Expression in recombinant vaccinia virus of the equine herpesvirus 1 gene encoding glycoprotein gp13 and protection of immunized animals. Guo PX, et al. **J Virol** 1989 Oct;63(10):4189–98

The rev (trs/art) protein of human immunodeficiency virus type 1 affects viral mRNA and protein expression via a cis–acting sequence in the env region. Hadzopoulou–Cladaras M, et al. **J Virol** 1989 Mar; 63(3):1265–74

Mapping of RNA– temperature–sensitive mutants of Sindbis virus: assignment of complementation groups A, B, and G to nonstructural proteins. Hahn YS, et al. **J Virol** 1989 Jul;63(7):3142–50

Detailed phenotypic characterization of five temperature–sensitive mutants in the 22– and 147–kilodalton subunits of vaccinia virus DNA–dependent RNA polymerase. Hooda–Dhingra U, et al. **J Virol** 1989 Feb;63(2):714–29

Adenovirus early region 4 encodes two gene products with redundant effects in lytic infection. Huang MM, et al. **J Virol** 1989 Jun;63(6):2605–15

X–region–specific transcript in mammalian hepatitis B virus–infected liver. Kaneko S, et al. **J Virol** 1988 Nov; 62(11):3979–84

Vaccinia virus encodes two proteins that are structurally related to members of the plasma serine protease inhibitor superfamily. Kotwal GJ, et al. **J Virol** 1989 Feb;63(2):600–6

Regulation of cytomegalovirus late–gene expression: differential use of three start sites in the transcriptional activation of ICP36 gene expression. Leach FS, et al. **J Virol** 1989 Apr;63(4):1783–91

Immediate–early regulatory gene mutants define different stages in the establishment and reactivation of herpes simplex virus latency. Leib DA, et al. **J Virol** 1989 Feb; 63(2):759–68

Herpes simplex virus type 1 ICP27 deletion mutants exhibit altered patterns of transcription and are DNA deficient. McCarthy AM, et al. **J Virol** 1989 Jan;63(1):18–27

Analysis of a region of the human cytomegalovirus (AD169) genome coding for a 25–kilodalton virion protein. Martinez J, et al. **J Virol** 1989 Jan;63(1):233–41

Relationships among genes and gene products of bacteriophage BF23. Nagasu T, et al. **J Virol** 1988 Dec; 62(12):4561–8

Comparative analysis of the VP3 gene of divergent strains of the rotaviruses simian SA11 and bovine Nebraska calf diarrhea virus. Nishikawa K, et al. **J Virol** 1988 Nov; 62(11):4022–6

Identification of a cis–regulatory element involved in accumulation of human T–cell leukemia virus type II genomic mRNA. Ohta M, et al. **J Virol** 1988 Dec; 62(12):4445–51

Expression of Sindbis virus 26S cDNA in Spodoptera frugiperda (Sf9) cells, using a baculovirus expression vector. Oker–Blom C, et al. **J Virol** 1989 Mar;63(3):1256–64

Herpes simplex virus type 1 gene products required for DNA replication: identification and overexpression. Olivo PD, et al. **J Virol** 1989 Jan;63(1):196–204

DNA binding by the herpes simplex virus type 1 ICP4 protein is necessary for efficient down regulation of the ICP0 promoter. Resnick J, et al. **J Virol** 1989 Jun; 63(6):2497–503

Herpes simplex virus alpha protein ICP27 possesses separable positive and negative regulatory activities. Rice SA, et al. **J Virol** 1989 Aug;63(8):3399–407

Primate cytomegalovirus assembly protein: genome location and nucleotide sequence. Robson L, et al. **J Virol** 1989 Feb;63(2):669–76

Genetic analysis of the filamentous bacteriophage packaging signal and of the proteins that interact with it. Russel M, et al. **J Virol** 1989 Aug;63(8):3284–95

Identification of bovine papillomavirus E1 mutants with increased transforming and transcriptional activity. Schiller JT, et al. **J Virol** 1989 Apr;63(4):1775–82

The herpes simplex virus type 1 alpha protein ICP27 can act as a trans–repressor or a trans–activator in combination with ICP4 and ICP0. Sekulovich RE, et al. **J Virol** 1988 Dec;62(12):4510–22

Intragenic complementation among partial peptides of herpes simplex virus regulatory protein ICP4. Shepard AA, et al. **J Virol** 1989 Mar;63(3):1203–11

Herpes simplex virus type 2 mutants with deletions in the intergenic region between ICP4 and ICP22/47: identification of nonessential cis–acting elements in the context of the viral genome. Smith CA, et al. **J Virol** 1989 May;63(5):2036–47

Oncogenic and nononcogenic human genital papillomaviruses generate the E7 mRNA by different mechanisms. Smotkin D, et al. **J Virol** 1989 Mar; 63(3):1441–7

Regulated expression of early and late RNAs and proteins from the human cytomegalovirus immediate–early gene region. Stenberg RM, et al. **J Virol** 1989 Jun;63(6):2699–708

Expression of the BZLF1 latency–disrupting gene differs in standard and defective Epstein–Barr viruses. Taylor N, et al. **J Virol** 1989 Apr;63(4):1721–8

Role for DNA–protein interaction in activation of the herpes simplex virus glycoprotein D gene. Tedder DG, et al. **J Virol** 1988 Dec;62(12):4661–72

ICP4–binding sites in the promoter and coding regions of the herpes simplex virus gD gene contribute to activation of in vitro transcription by ICP4. Tedder DG, et al. **J Virol** 1989 Jun;63(6):2510–20

Fine structure mapping of five temperature–sensitive mutants in the 22– and 147–kilodalton subunits of vaccinia virus DNA–dependent RNA polymerase. Thompson CL, et al. **J Virol** 1989 Feb;63(2):705–13

Molecular genetic analysis of vaccinia virus DNA polymerase mutants. Traktman P, et al. **J Virol** 1989 Feb; 63(2):841–6

Mutational analysis of bovine papillomavirus E6 gene. Vousden KH, et al. **J Virol** 1989 May;63(5):2340–2

Posttranscriptional regulation of a class of human cytomegalovirus phosphoproteins encoded by an early transcription unit. Wright DA, et al. **J Virol** 1989 Jul; 63(7):3117–27

Adenovirus vector expressing functional herpes simplex virus ICP0. Zhu XX, et al. **J Virol** 1988 Dec;62(12):4544–53

Delivery of macromolecules into cells expressing a viral membrane fusion protein. Ellens H, et al. **Methods Cell Biol** 1989;31:155–78

Transcription mapping of glycoprotein I (gpI) and gpIV of varicella–zoster virus and immunological analysis of the gpI produced in cells infected with the recombinant vaccinia virus. Kato T, et al. **Microbiol Immunol** 1989; 33(4):299–312

Genetics and polymorphism of the mouse prion gene complex: control of scrapie incubation time. Carlson GA, et al. **Mol Cell Biol** 1988 Dec;8(12):5528–40

Identification and characterization of the genes encoding three structural proteins of the Thermoproteus tenax virus TTV1. Neumann H, et al. **Mol Gen Genet** 1989 May; 217(1):105–10

Translational signals of a major head protein gene of bacteriophage lambda. Suissa M, et al. **Mol Gen Genet** 1988 Nov;214(3):570–3

Linkage of a prion protein missense variant to Gerstmann–Sträussler syndrome. Hsiao K, et al. **Nature** 1989 Mar 23;338(6213):342–5

Tale of two serines [letter] Koonin EV, et al. **Nature** 1989 Apr 6;338(6215):467–8

Nucleotide sequence of the VP1 gene from a Chinese strain of hepatitis A virus (HAV) [published erratum appears in Nucleic Acids Res 1989 Jun 26;17(12):4916] Andonov AP, et al. **Nucleic Acids Res** 1989 May 11;17(9):3594

Complete nucleotide sequence of wound tumor virus genomic segment S7. Anzola JV, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3300

Cloning and sequencing of the nucleoprotein gene of measles virus (Hallé strain). Buckland R, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11821

DNA nucleotide sequence analysis of the immediate–early gene of pseudorabies virus. Cheung AK. **Nucleic Acids Res** 1989 Jun 26;17(12):4637–46

Analysis of Ori–S sequence of HSV–1: identification of one functional DNA binding domain. Deb S, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2733–52

Effects of all single base substitutions in the loop of boxB on antitermination of transcription by bacteriophage lambda's N protein. Doelling JH, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5565–77

N–terminal domains of putative helicases of flavi– and pestiviruses may be serine proteases. Gorbalenya AE, et al. **Nucleic Acids Res** 1989 May 25;17(10):3889–97

Bacteriophage T4 gene 25. Gruidl ME, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9862

Expression of Hox–2.4 homeobox gene directed by proviral insertion in a myeloid leukemia. Kongsuwan K, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1881–92

Nucleotide sequences of the bacteriophage T2 and T6 gene 32 mRNAs. McPheeters DS, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9341

Characterization of the phage phi 29 protein p5 as a single–stranded DNA binding protein. Function in phi 29 DNA–protein p3 replication. Martin G, et al. **Nucleic Acids Res** 1989 May 25;17(10):3663–72

Regions at the carboxyl end of bacteriophage phi 29 protein p6 required for DNA binding and activity in phi 29 DNA replication. Otero MJ, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4567–77

The regions of the herpes simplex virus type 1 immediate early protein Vmw175 required for site specific DNA binding closely correspond to those involved in transcriptional regulation. Paterson T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11005–25

Nucleotide and deduced amino acid sequence of bacteriophage T4 gene wac. Prilipov AG, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10361

Modulations of the in vitro translational efficiencies of Yellow Fever virus mRNAs: interactions between coding and noncoding regions. Ruiz–Linares A, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2463–76

Cre–stimulated recombination at loxP–containing DNA sequences placed into the mammalian genome. Sauer B, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):147–61

Amplification of the ribonucleotide reductase small subunit gene: analysis of novel joints and the mechanism of gene duplication in vaccinia virus. Slabaugh MB, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):7073–88

Multiple cooperative interactions constrain BPV–1 E2 dependent activation of transcription. Sowden M, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):2959–72

A genetic selection for temperature–sensitive variants of the gene V protein of bacteriophage f1. Terwilliger TC, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9027–39

Empirical estimation of protein–induced DNA bending angles: applications to lambda site–specific recombination complexes. Thompson JF, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9687–705

High voltage E. coli electro–transformation with DNA following ligation. Willson TA, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11820

Acceleration of B–lymphoid tumorigenesis in E mu–myc transgenic mice by v–H–ras and v–raf but not v–abl. Langdon WY, et al. **Oncogene Res** 1989;4(4):253–8

Analysis of temperature–sensitive mutations in the simian virus 40 gene encoding virion protein 1. Behm M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9421–5

Identifying determinants of folding and activity for a protein of unknown structure. Bowie JU, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2152–6

Protection of rhesus monkeys from fatal Lassa fever by vaccination with a recombinant vaccinia virus containing the Lassa virus glycoprotein gene. Fisher–Hoch SP, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):317–21

DNA binding specificity of the Arc and Mnt repressors is determined by a short region of N–terminal residues. Knight KL, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):797–801

E2 polypeptides encoded by bovine papillomavirus type 1 form dimers through the common carboxyl–terminal domain: transactivation is mediated by the conserved

amino-terminal domain. McBride AA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):510–4

Translational repression in bacteriophage f1: characterization of the gene V protein target on the gene II mRNA. Michel B, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4002–6

Nerve growth factor increases mRNA levels for the prion protein and the beta-amyloid protein precursor in developing hamster brain. Mobley WC, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9811–5

Genome rearrangements activate the Epstein-Barr virus gene whose product disrupts latency. Rooney C, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9801–5

Susceptibility to rheumatoid arthritis maps to a T-cell epitope shared by the HLA-Dw4 DR beta-1 chain and the Epstein-Barr virus glycoprotein gp110. Roudier J, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5104–8

Genetic determinants of neoplastic transformation by the retroviral oncogene v-erbB. Wells A, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7597–601

Polycistronic animal virus mRNAs. Samuel CE. **Prog Nucleic Acid Res Mol Biol** 1989;37:127–53 (141 ref.)

The development of multiple expression vectors for high level synthesis of eukaryotic proteins: expression of LCMV-N and AcNPV polyhedrin protein by a recombinant baculovirus. Emery VC, et al. **Protein Eng** 1987 Aug-Sep;1(4):359–66

Prion protein gene expression in cultured cells. Scott MR, et al. **Protein Eng** 1988 Apr;2(1):69–76

Evolution of the DNA invertase Gin of phage Mu and related site-specific recombination proteins. Stern B, et al. **Protein Seq Data Anal** 1989 Feb;2(2):87–91

Enzyme regions in structural and viral proteins. Tsonis PA. **Protein Seq Data Anal** 1989 Apr;2(3):189–91 (22 ref.)

Antigenic and genetic characterization of three influenza C strains isolated in the Kinki district of Japan in 1982–1983. Adachi K, et al. **Virology** 1989 Sep;172(1):125–33

Nucleotide sequence from the ssRNA bacteriophage JP34 resolves the discrepancy between serological and biophysical classification. Adhin MR, et al. **Virology** 1989 May;170(1):238–42

High-level synthesis of biologically active reovirus protein sigma 1 in a mammalian expression vector system. Banerjea AC, et al. **Virology** 1988 Dec;167(2):601–12

Filamentous phage morphogenetic signal sequence and orientation of DNA in the virion and gene-V protein complex. Bauer M, et al. **Virology** 1988 Nov;167(1):166–75

Location and nucleotide sequence of the 25K protein missing from baculovirus few polyhedra (FP) mutants. Beames B, et al. **Virology** 1989 Feb;168(2):344–53

Analysis of the fowlpoxvirus gene encoding the 4b core polypeptide and demonstration that it possesses efficient promoter sequences. Binns MM, et al. **Virology** 1989 May; 170(1):288–91

Segment W of Campoletis sonorensis virus: expression, gene products, and organization. Blissard GW, et al. **Virology** 1989 Mar;169(1):78–89

Nucleotide sequence, transcriptional mapping, and temporal expression of the gene encoding p39, a major structural protein of the multicapsid nuclear polyhedrosis virus of Orgyia pseudotsugata. Blissard GW, et al. **Virology** 1989 Feb;168(2):354–62

The expression of the TMV-specific 30-kDa protein in tobacco protoplasts is strongly and selectively enhanced by actinomycin. Blum H, et al. **Virology** 1989 Mar; 169(1):51–61

The duck hepatitis B virus P-gene codes for protein strongly associated with the 5'-end of the viral DNA minus strand. Boech V, et al. **Virology** 1988 Oct;166(2):475–85

Transposon mutagenesis of baculoviruses: analysis of Trichoplusia ni transposon IFP2 insertions within the FP-locus of nuclear polyhedrosis viruses. Cary LC, et al. **Virology** 1989 Sep;172(1):156–69

Nucleotide sequence of the bacteriophage P22 gene 19 to 3 region: identification of a new gene required for lysis. Casjens S, et al. **Virology** 1989 Aug;171(2):588–98

Yellow fever virus proteins NS2A, NS2B, and NS4B: identification and partial N-terminal amino acid sequence analysis. Chambers TJ, et al. **Virology** 1989 Mar; 169(1):100–9

Replication of a human parvovirus nonsense mutant in mammalian cells containing an inducible amber suppressor. Chejanovsky N, et al. **Virology** 1989 Jul;171(1):239–47

Nucleotide sequence of bovine rotavirus gene 1 and expression of the gene product in baculovirus. Cohen J, et al. **Virology** 1989 Jul;171(1):131–40

Sequence divergence yet conserved physical characteristics among the E4 proteins of cutaneous human papillomaviruses. Doorbar J, et al. **Virology** 1989 Sep; 172(1):51–62

Molecular genetic analysis of a plant virus polyprotein cleavage site: a model. Dougherty WG, et al. **Virology** 1989 Aug;171(2):356–64

Sequence analysis of the mumps virus mRNA encoding the P protein. Elango N, et al. **Virology** 1989 Mar;169(1):62–7

Nucleotide sequence of the polyhedrin gene of Euxoa scandens cytoplasmic polyhedrosis virus (EsCPV). Fossiez F, et al. **Virology** 1989 Apr;169(2):462–5

Insertion of the SfMNPV polyhedrin gene into an AcMNPV polyhedrin deletion mutant during viral infection. Gonzalez MA, et al. **Virology** 1989 May;170(1):160–75

Evidence of duplication and deletion in super short segment 11 of rabbit rotavirus Alabama strain. Gorziglia M, et al. **Virology** 1989 Jun;170(2):587–90

DNA sequence and comparative analyses of the equine herpesvirus type 1 immediate early gene. Grundy FJ, et al. **Virology** 1989 Sep;172(1):223–36

Nucleotide sequence of barley stripe mosaic virus RNA alpha: RNA alpha encodes a single polypeptide with homology to corresponding proteins from other viruses. Gustafson G, et al. **Virology** 1989 Jun;170(2):370–7

Tacaribe virus L gene encodes a protein of 2210 amino acid residues. Iapalucci S, et al. **Virology** 1989 May;170(1):40–7

The L protein of a VSV mutant isolated from a persistent infection is responsible for viral interference and dominance over the wild-type. Jordan JA, et al. **Virology** 1989 Mar; 169(1):137–41

Rift Valley fever virus M segment: phlebovirus expression strategy and protein glycosylation. Kakach LT, et al. **Virology** 1989 Jun;170(2):505–10

Nucleotide sequence of UK bovine rotavirus segment 4: possible host restriction of VP3 genes. Kantharidis P, et al. **Virology** 1988 Oct;166(2):308–15

Biological evaluation of glycoproteins mapping to two distinct mRNAs within the BamHI fragment 7 of pseudorabies virus: expression of the coding regions by vaccinia virus. Kost TA, et al. **Virology** 1989 Aug; 171(2):365–76

Mapping and insertional mutagenesis of a vaccinia virus gene encoding a 13,800-Da secreted protein. Kotwal GJ, et al. **Virology** 1989 Aug;171(2):579–87

Sequence analyses and structural predictions of double-stranded RNA segment S1 and VP7 from United States prototype bluetongue virus serotypes 13 and 10. Kowalik TF, et al. **Virology** 1989 Sep;172(1):189–95

Phylogeny of antigenic variants of avian coronavirus IBV. Kusters JG, et al. **Virology** 1989 Mar;169(1):217–21

Papillomavirus-associated inductions of cellular proteins in mouse C127 cells: correlation with the presence of open reading frame E2. Levenson RM, et al. **Virology** 1989 Sep; 172(1):170–9

The S RNA segment of Sandfly Fever Sicilian virus: evidence for an ambisense genome. Marriott AC, et al. **Virology** 1989 Apr;169(2):341–5

Association of the Sindbis virus RNA methyltransferase activity with the nonstructural protein nsP1. Mi S, et al. **Virology** 1989 Jun;170(2):385–91

The bovine papillomavirus type 1 transcriptional activator E2 protein binds to its DNA recognition sequence as a dimer. Moskaluk CA, et al. **Virology** 1989 Mar;169(1):236–8

Sequences of VP9 genes from short and supershort rotavirus strains. Nuttall SD, et al. **Virology** 1989 Aug;171(2):453–7

The human cytomegalovirus strain Towne glycoprotein H gene encodes glycoprotein p86. Pachl C, et al. **Virology** 1989 Apr;169(2):418–26

Identification and characterization of the BPV-2 L2 protein. Rippe RA, et al. **Virology** 1989 Jul;171(1):298–301

Analysis of the in vitro translation products of the equine herpesvirus type 1 immediate early mRNA. Robertson AT, et al. **Virology** 1988 Oct;166(2):451–62

Complete nucleotide sequence of the cucumber necrosis virus genome. Rochon DM, et al. **Virology** 1989 Apr; 169(2):251–9

Carboxyl-terminal region of Sendai virus P protein is required for binding to viral nucleocapsids [published erratum appears in Virology 1989 Apr;169(2):489] Ryan KW, et al. **Virology** 1988 Nov;167(1):106–12

Interviral homologies of the 30K proteins of tobamoviruses. Saito T, et al. **Virology** 1988 Dec;167(2):653–6

Characterization of a latent protein encoded by the large internal repeats and the BamHI Y fragment of the Epstein-Barr virus (EBV) genome. Sauter M, et al. **Virology** 1988 Oct;166(2):586–90

Bacteriophage T4 late gene expression: overlapping promoters direct divergent transcription of the base plate gene cluster. Scarlato V, et al. **Virology** 1989 Aug; 171(2):475–83

Baculovirus expression of the M genome segment of Rift Valley fever virus and examination of antigenic and immunogenic properties of the expressed proteins. Schmaljohn CS, et al. **Virology** 1989 May;170(1):184–92

trans-activation of viral enhancers including long terminal repeat of the human immunodeficiency virus by the hepatitis B virus X protein. Siddiqui A, et al. **Virology** 1989 Apr;169(2):479–84

Cloning of the herpes simplex virus ICP4 gene in an adenovirus vector: effects on adenovirus gene expression and replication. Spessot R, et al. **Virology** 1989 Feb; 168(2):378–87

Herpes simplex virus alpha protein ICP27 can inhibit or augment viral gene transactivation. Su L, et al. **Virology** 1989 Jun;170(2):496–504

The cloning of full-length genome segments 2, 5, 6, and 8 of bluetongue virus (BTV) serotype 17 and studies of their genetic relatedness to United States BTV serotypes. Unger RE, et al. **Virology** 1988 Nov;167(1):296–8

The sequences of reovirus serotype 3 genome segments M1 and M3 encoding the minor protein mu 2 and the major nonstructural protein mu NS, respectively. Wiener JR, et al. **Virology** 1989 Apr;169(2):293–304

The sequences of the reovirus serotype 1, 2, and 3 L1 genome segments and analysis of the mode of divergence of the reovirus serotypes. Wiener JR, et al. **Virology** 1989 Mar; 169(1):194–203

Characterization of proteins encoded by the Epstein-Barr virus transactivator gene BMLF1. Wong KM, et al. **Virology** 1989 Jan;168(1):101–11

Transcriptional activation by the pseudorabies virus immediate early protein requires the TATA box element in the adenovirus 2 E1B promoter. Wu L, et al. **Virology** 1988 Nov;167(1):318–22

Assignment of wound tumor virus nonstructural polypeptides to cognate dsRNA genome segments by in vitro expression of tailored full-length cDNA clones. Xu ZK, et al. **Virology** 1989 Jan;168(1):73–8

Cycloheximide-resistant gene of Epstein-Barr virus in freshly infected B lymphocytes. Yamamoto M, et al. **Virology** 1989 May;170(1):307–10

UL5, a protein required for HSV DNA synthesis: genetic analysis, overexpression in Escherichia coli, and generation of polyclonal antibodies. Zhu L, et al. **Virology** 1988 Oct; 166(2):366–78

Bean mild mosaic virus: genome and its translation products. Hari V, et al. **Virus Genes** 1989 May;2(3):211–21

Potential gene products of bean golden mosaic virus have higher sequence homologies to those of tomato golden mosaic virus than to those of cassava latent virus. Ikegami M, et al. **Virus Genes** 1988 Mar;1(2):191–203

Mapping and sequence of the gene encoding protein p37, a major structural protein of African swine fever virus. López-Otín C, et al. **Virus Genes** 1988 Jun;1(3):291–303

Amino acids within hypervariable region 1 of avian coronavirus IBV (Massachusetts serotype) spike glycoprotein are associated with neutralization epitopes. Cavanagh D, et al. **Virus Res** 1988 Sep;11(2):141–50

Nucleotide sequence of the matrix, fusion and putative SH protein genes of mumps virus and their deduced amino acid sequences. Elliott GD, et al. **Virus Res** 1989 Jan; 12(1):61–75

Multiplicity dependent expression of the predominant phosphoprotein pp65 of human cytomegalovirus. Kluges S, et al. **Virus Res** 1989 Feb;12(2):159–68

Complementation and analysis of an NP mutant of influenza virus. Li RA, et al. **Virus Res** 1989 Feb;12(2):97–111

Localisation of the temperature-sensitive defect in the nucleoprotein of an influenza A/FPV/Rostock/34 virus. Mandler J, et al. **Virus Res** 1989 Feb;12(2):113–21

Genomic locus for a 140 kDa structural protein (pp150) of human cytomegalovirus in strains Towne and AD169. Pande H, et al. **Virus Res** 1989 Jan;12(1):11–8

Complete sequence of neutralization protein VP2 of the recent US isolate bluetongue virus serotype 2: its relationship with VP2 species of other US serotypes. Yamaguchi S, et al. **Virus Res** 1988 Aug;11(1):49–58

[Development of a system for expression and secretion of bovine leukosis virus X-protein in cultured cells] Ivanova MN, et al. **Dokl Akad Nauk SSSR** 1988;301(4):1007–9 **(Rus)**

IMMUNOLOGY

Antigenic reactivity of matrix protein and nucleoprotein of influenza virus as detected by EIA after dissociation with different detergents. Khristova ML, et al. **Acta Virol (Praha)** 1989 Jan;33(1):1–7

Use of recombinant vaccinia viruses to examine cytotoxic T lymphocyte recognition of individual viral proteins. Yewdell J, et al. **Adv Exp Med Biol** 1988;239:151–61 (40 ref.)

Molecular determinant of rotavirus neutralization and protection. Matsui SM, et al. **Adv Virus Res** 1989; 36:181–214 (116 ref.)

Seroconversion to HIV-1 rev- and tat-gene-encoded proteins [letter] Reiss P, et al. **Aids** 1989 Feb;3(2):105–6

Failure of a dengue 1 sub-unit vaccine to protect mice against a lethal dengue virus infection. Aaskov JG, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):511–8

Neutralizing antibodies for infectious hematopoietic necrosis virus in eggs of steelhead trout (Salmo gairdneri). Shors ST, et al. **Am J Vet Res** 1989 Feb;50(2):232–4

Bovine parainfluenza-3 virus proteins recognized by antibodies of serosol-exposed calves. Toth TE, et al. **Am J Vet Res** 1988 Nov;49(11):1945–9

Accessibility of three continuous epitopes in tomato bushy stunt virus. Jaegle M, et al. **Ann Inst Pasteur Virol** 1988 Jan-Mar;139(1):39–50

Detection of antibodies against initial polypeptides in patients infected with an enterovirus (EV-33). Aouni M, et al. **Arch Virol** 1988;102(3-4):285–8

Genetic and antigenic differences between fowlpox and quailpox viruses. Ghildyal N, et al. **Arch Virol** 1989; 106(1-2):85–92

Characterization of infectious bronchitis virus using monoclonal antibodies. Wainright PO, et al. **Avian Dis** 1989 Jul-Sep;33(3):482–90

A 165 kd protein of the herpes simplex virion shares a common epitope with the regulatory protein, ICP4. Bibor-Hardy V, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):124–30

Characterization of VP1 as immunodominant antigen of enterovirus type 70 and antigenic analysis of virus strains by monoclonal antibodies. Lin Y, et al. **Chin Med J [Engl]** 1988 Jan;101(1):20–4

Properties of the immunosuppressive factor induced by murine cytomegalovirus. Hudson JB, et al. **Comp Immunol Microbiol Infect Dis** 1989;12(1-2):39–46

Peptide antibodies to the human c-fyn gene product demonstrate pp59c-fyn is capable of complex formation

with the middle-T antigen of polyomavirus. Cheng SH, et al. **EMBO J** 1988 Dec 1;7(12):3845-55

Identification and characterization of p59fyn (a src-like protein tyrosine kinase) in normal and polyoma virus transformed cells. Kypta RM, et al. **EMBO J** 1988 Dec 1;7(12):3837-44

Orientation of epitopes influences the immunogenicity of synthetic peptide dimers. Cox JH, et al. **Eur J Immunol** 1988 Dec;18(12):2015-9

Detection of antibodies to varicella-zoster virus proteins in sera from the elderly. Vafai A, et al. **Gerontology** 1988; 34(5-6):242-9

Monoclonal antibody to rat brain actin antigenically enhanced with HVJ (Sendai virus) M protein. Hiruma S, et al. **Histochemistry** 1988;90(1):1-8

Characterization of the immune response to intracerebral inoculation of Theiler's murine encephalomyelitis virus: fine protein specificity of the splenic T cell and humoral antibody response. Scheu AK, et al. **Immunol Lett** 1989 May;21(2):171-6

Pathways of viral antigen processing and presentation to CTL: defined by the mode of virus entry? Long EO, et al. **Immunol Today** 1989 Feb;10(2):45-8 (28 ref.)

Bovine naturally cytolytic cell activation against bovine herpes virus type 1-infected cells does not require late viral glycoproteins. Cook CG, et al. **Immunology** 1989 Apr; 66(4):565-9

Production and characterization of monoclonal antibodies to the N-terminal domain of lambda repressor. Breyer RM, et al. **J Biol Chem** 1989 Aug 5;264(22):13348-54

Binding and transepithelial transport of immunoglobulins by intestinal M cells: demonstration using monoclonal IgA antibodies against enteric viral proteins. Weltzin R, et al. **J Cell Biol** 1989 May;108(5):1673-85

IgM to human cytomegalovirus: comparison of two enzyme immunoassays and IgM reactivity to viral polypeptides detected by immunoblotting. Re MC, et al. **J Clin Lab Anal** 1989;3(3):169-73

Immunoglobulin A antibody response to respiratory syncytial virus structural proteins in colostrum and milk. Tsutsumi H, et al. **J Clin Microbiol** 1989 Sep;27(9):1949-51

Serum immunoglobulin G antibody subclass response to respiratory syncytial virus F and G glycoproteins after first, second, and third infections. Wagner DK, et al. **J Clin Microbiol** 1989 Mar;27(3):589-92

Murine cytotoxic T lymphocyte recognition of individual influenza virus proteins. High frequency of nonresponder MHC class I alleles. Bennink JR, et al. **J Exp Med** 1988 Nov 1;168(5):1935-9

Recognition of oligonucleotide-encoded T cell epitopes introduced into a gene unrelated to the original antigen. Chimini G, et al. **J Exp Med** 1989 Jan 1;169(1):297-302

Class II major histocompatibility complex-restricted T cells specific for a virion structural protein that do not recognize exogenous influenza virus. Evidence that presentation of labile T cell determinants is favored by endogenous antigen synthesis. Eisenlohr LC, et al. **J Exp Med** 1989 Mar 1; 169(3):921-31

A 15 amino acid fragment of influenza nucleoprotein synthesized in the cytoplasm is presented to class I-restricted cytotoxic T lymphocytes. Gould K, et al. **J Exp Med** 1989 Sep 1;170(3):1051-6

Class I MHC can present an endogenous peptide to cytotoxic T lymphocytes. Whitton JL, et al. **J Exp Med** 1989 Sep 1;170(3):1033-8

Characterization of a new virus-neutralizing epitope that denotes a sequential determinant on the rabies virus glycoprotein. Bunschoten H, et al. **J Gen Virol** 1989 Feb; 70 (Pt 2):291-8

Rabies virus-specific human T cell clones provide help for an in vitro antibody response against neutralizing antibody-inducing determinants of the viral glycoprotein. Bunschoten H, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1513-21

Monoclonal antibodies to bovine coronavirus glycoproteins E2 and E3: demonstration of in vivo virus-neutralizing activity. Deregt D, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):993-8

A conformational immunogen on VP-2 of infectious bursal disease virus that induces virus-neutralizing antibodies that passively protect chickens. Fahey KJ, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1473-81

Monoclonal antibodies to the E1 and E2 glycoproteins of Sindbis virus: definition of epitopes and efficiency of protection from fatal encephalitis. Mendoza QP, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3015-22

Neutralizing epitopes of type O foot-and-mouth disease virus. II. Mapping three conformational sites with synthetic peptide reagents. Parry NR, et al. **J Gen Virol** 1989 Jun; 70 (Pt 6):1493-503

Analysis of the antibody response to bovine respiratory syncytial virus proteins in calves. Westenbrink F, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):591-601

Individual class II-restricted antigenic determinants of the same protein exhibit distinct kinetics of appearance and persistence on antigen-presenting cells. Eisenlohr LC, et al. **J Immunol** 1988 Oct 15;141(8):2581-4

Antiviral immunity induced by recombinant nucleoprotein of influenza A virus. I. Characteristics and cross-reactivity of T cell responses. Tite JP, et al. **J Immunol** 1988 Dec 1;141(11):3980-7

Consequences of self-presentation of peptide antigen by cytolytic T lymphocytes. Vitiello A, et al. **J Immunol** 1989 Sep 1;143(5):1512-7

Primary cytomegalovirus infection in pregnancy: comparison of antibody responses to virus-encoded proteins between women with and without intrauterine infection. Alford CA, et al. **J Infect Dis** 1988 Nov;158(5):917-24

Immunity to whole varicella-zoster virus antigen and glycoproteins I and p170: relation to the immunizing regimen of live attenuated varicella vaccine. Diaz PS, et al. **J Infect Dis** 1988 Dec;158(6):1245-52

Chronic-dose acyclovir to suppress frequently recurring genital herpes simplex virus infection: effect on antibody response to herpes simplex virus type 2 proteins. Gold D, et al. **J Infect Dis** 1988 Dec;158(6):1227-34

Nasopharyngeal secretory antibody response to poliovirus type 3 virion proteins exhibit different specificities after immunization with live or inactivated poliovirus vaccines. Zhaori G, et al. **J Infect Dis** 1989 Jun;159(6):1018-24

Lack of serum antibodies to the major HSV-2 specified DNA-binding protein before diagnosis of cervical neoplasia. Lehtinen M, et al. **J Med Virol** 1989 Feb; 27(2):131-6

Low incidence and high titers of antibodies to hepatitis B virus X-protein in sera of Chinese patients with hepatocellular carcinoma. Liang XH, et al. **J Med Virol** 1988 Jul;25(3):329-37

Immunoglobulin-class-specific immune response to respiratory syncytial virus structural proteins in infants, children, and adults. Popow-Kraupp T, et al. **J Med Virol** 1989 Mar;27(3):215-23

Virion proteins of viruses causing hemorrhagic fever with renal syndrome; monoclonal antibody analysis. Yang DL, et al. **J Tongji Med Univ** 1989;9(1):13-7

Analysis of neutralizing antigenic sites on the surface of type A12 foot-and-mouth disease virus. Baxt B, et al. **J Virol** 1989 May;63(5):2143-51

Mice immunized with recombinant vaccinia virus expressing dengue 4 virus structural proteins with or without nonstructural protein NS1 are protected against fatal dengue virus encephalitis. Bray M, et al. **J Virol** 1989 Jun; 63(6):2853-6

Molecular basis for cytolytic T-lymphocyte recognition of the murine cytomegalovirus immediate-early protein pp89. Del Val M, et al. **J Virol** 1988 Nov;62(11):3965-72

Antibodies directed against a synthetic peptide enable detection of a protein encoded by a vaccinia virus host range gene that is conserved within the Orthopoxvirus genus. Gillard S, et al. **J Virol** 1989 Apr;63(4):1814-7

Polymorphism of cytotoxic T-lymphocyte clones that recognize a defined nine-amino-acid immunodominant domain of lymphocytic choriomeningitis virus glycoprotein. Joly E, et al. **J Virol** 1989 May;63(5):1845-51

Dengue virus-specific murine T-lymphocyte proliferation: serotype specificity and response to recombinant viral proteins. Rothman AL, et al. **J Virol** 1989 Jun; 63(6):2486-91

A synthetic peptide corresponding to the cleavage region of VP3 from rotavirus SA11 induces neutralizing antibodies. Streckert HJ, et al. **J Virol** 1988 Nov; 62(11):4265-9

Post-mortem immunodiagnosis of scrapie and bovine spongiform encephalopathy. Farquhar CF, et al. **J Virol Methods** 1989 Apr-May;24(1-2):215-21

Quantitation of serological cross-reactivity between two geographical isolates of Oryctes baculovirus by a modified ELISA. Mohan KS, et al. **J Virol Methods** 1989 Apr-May; 24(1-2):203-13

Production of antiserum to a non-structural potyviral protein and its use to detect narcissus yellow stripe and other potyviruses. Mowat WP, et al. **J Virol Methods** 1989 Aug; 25(2):199-209

Antibodies to hepatitis B virus x-protein in sera of patients with acute and chronic active hepatitis. Abraham R, et al. **Med Microbiol Immunol (Berl)** 1989;178(4):187-97

Antibodies to the Giardia lamblia double-stranded RNA virus major protein can block the viral infection. Wang AL, et al. **Mol Biochem Parasitol** 1988 Sep;30(3):225-32

Recognition of influenza virus proteins by cytotoxic T lymphocytes. Townsend A, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):527-33

Effect of mutations and variations of HLA-A2 on recognition of a virus peptide epitope by cytotoxic T lymphocytes. McMichael AJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9194-8

Antigenic relationship among strains of ibaraki virus and epizootic haemorrhagic disease virus studied with monoclonal antibodies. Sugiyama M, et al. **Res Vet Sci** 1989 Mar;46(2):283-5

Brefeldin A specifically inhibits presentation of protein antigens to cytotoxic T lymphocytes. Yewdell JW, et al. **Science** 1989 Jun 2;244(4908):1072-5

Epitope specificity and protective efficacy of the bovine immune response to bovine herpesvirus-1 glycoprotein vaccines. Israel BA, et al. **Vaccine** 1988 Aug;6(4):349-56

Effects of immunization with bovine herpesvirus-1 glycoproteins on bovine herpesvirus-1-induced alteration of bovine neutrophil chemotactic and anti-Pasteurella haemolytica activities. Noel EJ, et al. **Vaccine** 1988 Oct; 6(5):433-9

Interleukin-2 production in vitro: a new approach to the study of rabies vaccine immunogenicity as appraised by testing different glycoprotein presentations. Perrin P, et al. **Vaccine** 1988 Aug;6(4):331-8

Epitope specificity of the bovine antibody response to the gIII glycoprotein of bovine herpesvirus type 1. Ayers VK, et al. **Viral Immunol** 1989;2(2):79-88

Analysis of lettuce necrotic yellows virus structural proteins with monoclonal antibodies and concanavalin A. Dietzgen RG, et al. **Virology** 1988 Oct;166(2):486-94

Identification of PR8 M1 protein in influenza virus high-yield reassortants by M1-specific monoclonal antibodies. Johansson BE, et al. **Virology** 1989 Aug;171(2):634-6

Isolation and characterization of monoclonal antibodies to human parainfluenza virus type 4 and their use in revealing antigenic relation between subtypes 4A and 4B. Komada H, et al. **Virology** 1989 Jul;171(1):28-37

Synthesis and processing of a 22-26K murine cytomegalovirus glycoprotein recognized by a neutralizing monoclonal antibody. Loh LC. **Virology** 1989 Apr; 169(2):474-8

p39, a major baculovirus structural protein: immunocytochemical characterization and genetic location. Pearson MN, et al. **Virology** 1988 Dec;167(2):407-13

Antigenic analysis of Punta Toro virus and identification of protective determinants with monoclonal antibodies. Pifat DY, et al. **Virology** 1988 Dec;167(2):442-50

A region of the influenza A/NT/60/68 PB2 protein containing an antigenic determinant recognized by murine H-2Dd restricted cytotoxic T lymphocytes. Reay PA, et al. **Virology** 1988 Nov;167(1):261-8

Recognition of the PB1, neuraminidase, and matrix proteins of influenza virus A/NT/60/68 by cytotoxic T lymphocytes. Reay PA, et al. **Virology** 1989 Jun; 170(2):477-85

Comparison of six different murine coronavirus JHM variants by monoclonal antibodies against the E2 glycoprotein. Taguchi F, et al. **Virology** 1989 Mar;169(1):233-5

Neutralizing epitopes of lymphocytic choriomeningitis virus are conformational and require both glycosylation and disulfide bonds for expression. Wright KE, et al. **Virology** 1989 Aug;171(2):417-26

Monoclonal antibodies that cross-react with the E1 glycoprotein of different alphavirus serogroups: characterization including passive protection in vivo. Wust CJ, et al. **Virus Res** 1989 Jun;13(2):101-12

Mapping of three antigenic sites on the haemagglutinin-neuraminidase protein of Newcastle disease virus. Yusoff K, et al. **Virus Res** 1988 Nov; 11(4):319-33

[Antigenic structure of the foot-and-mouth-disease virus. I. Synthesis of protective peptides from the major immunogenic region of VP1 protein of foot-and-mouth virus type O1K] Surovol AIu, et al. **Bioorg Khim** 1988 Oct; 14(10):1352-62 (Eng. Abstr.) (Rus)

[Antigenic structure of the foot-and-mouth disease virus. II. Synthesis of protective peptides from the major immunogenic region of VP1 protein of foot-and-mouth disease virus type A22] Vol'pina OM, et al. **Bioorg Khim** 1988 Oct;14(10):1363-71 (Eng. Abstr.) (Rus)

[Antibodies to the structural and nonstructural gag-coded proteins of type-D retroviruses in patients with lymphadenopathy] Morozov VA, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):706-8 (Eng. Abstr.) (Rus)

[Functional role of the tertiary structure of the surface antigen of tick-borne encephalitis virus--polypeptide E] Vorovich MF, et al. **Dokl Akad Nauk SSSR** 1988; 301(3):728-30 (Rus)

[The antigenic specificity of the proteins of bovine adenoviruses studied by the passive hemagglutination reaction] Mikhallova EG, et al. **Mikrobiol Zh** 1988 Mar-Apr;50(2):90-1 (Eng. Abstr.) (Rus)

[Physico-chemical and antigenic properties of adenovirus filaments] Tarasishin LA. **Mikrobiol Zh** 1989 Mar-Apr; 51(2):74-7 (Eng. Abstr.) (Rus)

[Antibodies against structural proteins of carlaviruses in human and other mammals] Morozov VA, et al. **Mol Gen Mikrobiol Virusol** 1988 Jul;(7):16-20 (Eng. Abstr.) (Rus)

[Adsorption study of the virions of the influenza virus and its individual proteins on polystyrene] Sokolova MV, et al. **Vopr Virusol** 1988 May-Jun;33(3):369-72 (Rus)

ISOLATION & PURIFICATION

The construction of the hybrid plasmid containing genes of the central part of phage T4 baseplate and gene 29 product separation. Nieradko J, et al. **Acta Biochim Pol** 1988; 35(4):357-66

O-linked GlcNAc in serotype-2 adenovirus fibre. Caillet-Boudin ML, et al. **Eur J Biochem** 1989 Sep 1; 184(1):205-11

Commentary on the article: Purification and Characterization of the Ner Repressor of Bacteriophage Mu (1989) FEBS Lett. 244, 369-375 by G. Kukolj, P.P. Tolias and M.S. DuBow. Allet B, et al. **FEBS Lett** 1989 Jul 17;251(1-2):282

Purification and characterization of the Ner repressor of bacteriophage Mu. Kukolj G, et al. **FEBS Lett** 1989 Feb 27;244(2):369-75

An animal virus-induced DNA methyltransferase. Essani K, et al. **Gene** 1988 Dec 25;74(1):71-2

Chlorella viruses code for restriction and modification enzymes. Van Etten JL, et al. **Gene** 1988 Dec 25;

74(1):113–5
Structural proteins of rinderpest virus. II: Purification and characterization of the nucleocapsid protein N, the haemagglutinin protein, H and the matrix protein, M. Kesari KV, et al. **Indian J Biochem Biophys** 1988 Dec; 25(6):574–9
Structural and functional characterization of the human immunodeficiency virus rev protein. Perkins A, et al. **J Acquir Immune Defic Syndr** 1989;2(3):256–63
Isolation of recombinant partial gag gene product p18 (HIV–1Bru) from Escherichia coli. Kolbe HV, et al. **J Chromatogr** 1989 Aug 4;476:99–112
Comparison of ion–exchange high–performance liquid chromatography columns for purification of Sendai virus integral membrane proteins. Welling–Wester S, et al. **J Chromatogr** 1989 Aug 4;476:477–85
Isolation and purification of scrapie–associated fibrils and prion protein from scrapie–infected hamster brain. Liberski PP, et al. **J Comp Pathol** 1989 Feb;100(2):177–85
Characterization of papillomavirus polypeptides from bovine cutaneous fibropapillomas. Della Torre G, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2919–24
Completion of the sequence of bluetongue virus serotype 10 by the characterization of a structural protein, VP6, and a non–structural protein, NS2. Fukusho A, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1677–89
Separation of functional West Nile virus replication complexes from intracellular membrane fragments. Grun JB, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3121–7
Comparison of RNAs and polypeptides of infectious pancreatic necrosis virus isolates from eel and rainbow trout. Hsu YL, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2233–9
Purification and characterization of adult diarrhea rotavirus: identification of viral structural proteins. Fang ZY, et al. **J Virol** 1989 May;63(5):2191–7
Detection and purification of bovine herpesvirus 1 glycoproteins by lectin affinity. Badia M, et al. **J Virol Methods** 1988 Oct;22(1):23–9
Purification of replication protein C, a cellular protein involved in the initial stages of simian virus 40 DNA replication in vitro. Virshup DM, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3584–8
Human cytomegalovirus proteins. Landini MP, et al. **Prog Med Virol** 1988;35:152–85 (152 ref.)
[Coprecipitation of proteins and DNA–protein complexes with magnesium sarcolysate: research on an association of topoisomerase I and RNA polymerase with DNA] Vasetskii ES, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jan–Feb;(1):148–51 (Eng. Abstr.) **(Rus)**
[Detection of viral proteins during synthesis of defective phage of Proteus mirabilis D52 using the immunocolloid gold method] Kretova AF, et al. **Mol Biol (Mosk)** 1988 Jul–Aug;22(4):992–8 (Eng. Abstr.) **(Rus)**
[Isolation of influenza virus hemagglutinin and its separation into subunits by a stage–by–stage scheme for viral protein fractionation] Glushakova SE, et al. **Vopr Virusol** 1988 May–Jun;33(3):286–9 (Eng. Abstr.) **(Rus)**

METABOLISM

Creutzfeldt–Jakob disease and scrapie prions. Prusiner SB. **Alzheimer Dis Assoc Disord** 1989 Spring–Summer; 3(1–2):52–78 (124 ref.)
Viral proteinases. Kräusslich HG, et al. **Annu Rev Biochem** 1988;57:701–54 (268 ref.)
Intracellular synthesis and processing of the structural glycoproteins of turkey enteric coronavirus. Dea S, et al. **Arch Virol** 1989;106(3–4):239–59
Structural proteins of bovine coronavirus strain L 9: effects of the host cell and trypsin treatment. St. Cyr–Coats KS, et al. **Arch Virol** 1988;103(1–2):35–45
The 65 K DNA binding protein appears early in HSV–1 replication. Schenk P, et al. **Arch Virol** 1988; 102(1–2):119–23
Acylation of viral and eukaryotic proteins. Grand RJ. **Biochem J** 1989 Mar 15;258(3):625–38 (140 ref.)
Herpes simplex virus–1–specific proteins are involved in alteration of polyphosphoinositide metabolism in baby–hamster kidney cells. Langeland N, et al. **Biochem J** 1989 Jul 15;261(2):683–6
Formation of D loops by the UvsX protein of T4 bacteriophage: a comparison of the reaction catalyzed in the presence or absence of gene 32 protein. Harris LD, et al. **Biochemistry** 1988 Sep 6;27(18):6954–9
The Ff gene 5 protein–d(pA)40–60 complex: 1H NMR supports a localized base–binding model. King GC, et al. **Biochemistry** 1988 Sep 6;27(18):6947–53
DNA binding properties and replication activity of the T antigen related D2 phosphoprotein. Klausing K, et al. **Biochemistry** 1989 Mar 7;28(5):2238–44
Time–resolved solution X–ray scattering of tobacco mosaic virus coat protein: kinetics and structure of intermediates. Potschka M, et al. **Biochemistry** 1988 Nov 1;27(22):8481–91
Structure and function of disk aggregates of the coat protein of tobacco mosaic virus. Raghavendra K, et al. **Biochemistry** 1988 Oct 4;27(20):7583–8
Protein–DNA interactions at the simian virus 40 origin of replication. Baur CP, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2–3):388–95
Characterization of the single–stranded DNA–binding domain of the herpes simplex virus protein ICP8. Leinbach SS, et al. **Biochim Biophys Acta** 1989 Aug 14;1008(3):281–6
Initiation of lambda DNA replication reconstituted with purified lambda and Escherichia coli replication proteins. Zylicz M, et al. **Biochim Biophys Acta** 1988 Dec 20; 951(2–3):344–50
Phosphorylation of African swine fever virus proteins in vitro and in vivo. Salas ML, et al. **Biochimie** 1988 May; 70(5):627–35
Synthesis of frog virus 3 proteins occurs on intermediate filament–bound polyribosomes. Murti K, et al. **Biol Cell** 1989;65(3):205–14
The internal dynamics of gene 32 protein–DNA complexes studied by quasi–elastic light scattering. Kuil ME, et al. **Biophys Chem** 1988 Dec;32(2–3):211–27
Preparation of branched hexasaccharides by the action of a viral lyase on Klebsiella K14 polysaccharide. Parolis H, et al. **Carbohydr Res** 1988 Oct 15;182(1):127–34
Formation of DNA replication structures in herpes virus–infected cells requires a viral DNA binding protein. de Bruyn Kops A, et al. **Cell** 1988 Dec 2;55(5):857–68
Gene overlap results in a viral protein having an RNA binding domain and a major coat protein domain. Fujimura T, et al. **Cell** 1988 Nov 18;55(4):663–71
Nuclear transport of adenovirus DNA polymerase is facilitated by interaction with preterminal protein. Zhao LJ, et al. **Cell** 1988 Dec 23;55(6):1005–15
Topology of the non–structural rotavirus receptor glycoprotein NS28 in the rough endoplasmic reticulum. Bergmann CC, et al. **EMBO J** 1989 Jun;8(6):1695–703
A dimer of BPV–1 E2 containing a protease resistant core interacts with its DNA target. Dostatni N, et al. **EMBO J** 1988 Dec 1;7(12):3807–16
Epstein–Barr virus BZLF1 trans–activator specifically binds to a consensus AP–1 site and is related to c–fos. Farrell PJ, et al. **EMBO J** 1989 Jan;8(1):127–32
Signals at the bacteriophage phi 29 DNA replication origins required for protein p6 binding and activity. Serrano M, et al. **EMBO J** 1989 Jun;8(6):1879–85
DNA–binding properties of gene–5 protein encoded by bacteriophage M13. 2. Further characterization of the different binding modes for poly– and oligodeoxynucleic acids. Bulsink H, et al. **Eur J Biochem** 1988 Oct 1; 176(3):597–608
A growth hormone–vesicular stomatitis virus G hybrid protein is rapidly degraded in lysosomes following transport to the cell surface. Rizzolo LJ. **Eur J Cell Biol** 1989 Jun;49(1):92–8
Binding properties of T4 gene 32 protein fragments carrying partially cleaved terminal domains. Casas–Finet JR. **FEBS Lett** 1989 Jun 5;249(2):396–400
The terminal protein of minute virus of mice is an 83 kilodalton polypeptide linked to specific forms of double–stranded and single–stranded viral DNA. Gunther M, et al. **FEBS Lett** 1988 Dec 19;242(1):22–6
Interaction between bacteriophage T4 coded gene 32 protein and poly(rA). Watanabe F. **FEBS Lett** 1989 Jan 2; 242(2):444–6
Functioning of the cloned phage MS2 lysis protein in Escherichia coli impaired in murein synthesis. Ursinus–Wössner A, et al. **FEMS Microbiol Lett** 1989 Jan 1;48(1):75–9
In vivo methylation of yeast DNA by prokaryotic DNA methyltransferases. Fehér Z, et al. **Gene** 1988 Dec 25; 74(1):193–5
Specific recognition nucleotides and their DNA context determine the affinity of E2 protein for 17 binding sites in the BPV–1 genome. Li R, et al. **Genes Dev** 1989 Apr; 3(4):510–26
Comparative study on the antiviral activity of tumor necrosis factor (TNF)–alpha, lymphotoxin/TNF–beta, and IL–1 in WISH cells. Ruggiero V, et al. **Immunol Lett** 1989 May; 21(2):165–9
Messenger RNAs of beta–amyloid precursor protein and prion protein are regulated by nerve growth factor in PC12 cells. Wion D, et al. **Int J Dev Neurosci** 1988;6(4):387–93
Proteolysis of bacteriophage phi X174 prohead protein gpB by a protease located in the Escherichia coli outer membrane. Richardson DL Jr, et al. **J Bacteriol** 1988 Dec; 170(12):5564–71
Specific localization of the lysis protein of bacteriophage MS2 in membrane adhesion sites of Escherichia coli. Walderich B, et al. **J Bacteriol** 1989 Jun;171(6):3331–6
Overproduced bacteriophage T4 gene 33 protein binds RNA polymerase. Williams KP, et al. **J Bacteriol** 1989 Jun; 171(6):3579–82
In vitro requirements for N4 RNA polymerase II–specific initiation. Abravaya K, et al. **J Biol Chem** 1989 Jul 25; 264(21):12695–9
Characterization of the helicase and primase activities of the 63–kDa component of the bacteriophage T7 gene 4 protein. Bernstein JA, et al. **J Biol Chem** 1989 Aug 5; 264(22):13066–73
Identification of C–terminal extensions that protect proteins from intracellular proteolysis. Bowie JU, et al. **J Biol Chem** 1989 May 5;264(13):7596–602
Benzo[a]pyrene–DNA adducts inhibit translocation by the gene 4 protein of bacteriophage T7. Brown WC, et al. **J Biol Chem** 1989 Apr 25;264(12):6748–54
The bacteriophage T4 DNA replication fork. Only DNA helicase is required for leading strand DNA synthesis by the DNA polymerase holoenzyme. Cha TA, et al. **J Biol Chem** 1989 Jul 25;264(21):12220–5
Double–strand cleavage and strand joining by the replication initiator protein of filamentous phage f1. Greenstein D, et al. **J Biol Chem** 1989 Jul 25;264(21):12627–32
Structural and enzymatic studies of the T4 DNA replication system. I. Physical characterization of the polymerase accessory protein complex. Jarvis TC, et al. **J Biol Chem** 1989 Jul 25;264(21):12709–16
Structural and enzymatic studies of the T4 DNA replication system. II. ATPase properties of the polymerase accessory protein complex. Jarvis TC, et al. **J Biol Chem** 1989 Jul 25;264(21):12717–29
Reconstitution of a nine–protein system that initiates bacteriophage lambda DNA replication. Mensa–Wilmot K, et al. **J Biol Chem** 1989 Feb 15;264(5):2853–61
Trypsin cleavage in the COOH terminus of the bacteriophage T4 gene 41 DNA helicase alters the primase–helicase activities of the T4 replication complex in vitro. Richardson RW, et al. **J Biol Chem** 1989 Mar 15;264(8):4732–9
Characterization of the bacteriophage T4 gene 41 DNA helicase. Richardson RW, et al. **J Biol Chem** 1989 Mar 15;264(8):4725–31
The M protein of vesicular stomatitis virus associates specifically with the basolateral membranes of polarized epithelial cells independently of the G protein. Bergmann JE, et al. **J Cell Biol** 1988 Nov;107(5):1707–15
Primary sequence domains required for the retention of rotavirus VP7 in the endoplasmic reticulum. Poruchynsky MS, et al. **J Cell Biol** 1988 Nov;107(5):1697–706
Myristylation of rotavirus proteins. Clark B, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2681–6
The products of herpes simplex virus type 1 gene UL26 which are involved in DNA packaging are strongly associated with empty but not with full capsids. Rixon FJ, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2879–91
Inhibition of virus protein glycosylation as the mechanism of the antiviral action of prostaglandin A in Sendai virus–infected cells. Santoro MG, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):789–800
Lambda repressor mutants that are better substrates for RecA–mediated cleavage. Gimble FS, et al. **J Mol Biol** 1989 Mar 5;206(1):29–39
Linear dichroism of the complex between the gene 32 protein of bacteriophage T4 and poly(1,N6–ethenoadenylic acid). van Amerongen H, et al. **J Mol Biol** 1988 Nov 20; 204(2):397–405
Characterization of DNA sequence–common and sequence–specific proteins binding to cis–acting sites for cleavage of the terminal a sequence of the herpes simplex virus 1 genome. Chou J, et al. **J Virol** 1989 Mar; 63(3):1059–68
Evidence for a ligation step in the DNA replication of the autonomous parvovirus minute virus of mice. Cotmore SF, et al. **J Virol** 1989 Feb;63(2):1002–6
DNA binding and gene regulation by the herpes simplex virus type 1 protein ICP4 and involvement of the TATA element. DiDonato JA, et al. **J Virol** 1989 Sep; 63(9):3737–47
Fatty acid acylation of vaccinia virus proteins. Franke CA, et al. **J Virol** 1989 Oct;63(10):4285–91
Varicella–zoster virus glycoprotein oligosaccharides are phosphorylated during posttranslational maturation. Gabel CA, et al. **J Virol** 1989 Oct;63(10):4264–76
Interplay of viral and cellular proteins along the long control region of human papillomavirus type 18. Garcia–Carranca A, et al. **J Virol** 1988 Nov;62(11):4321–30
Phosphorylation of varicella–zoster virus glycoprotein gpI by mammalian casein kinase II and casein kinase I. Grose C, et al. **J Virol** 1989 Sep;63(9):3912–8
Phosphorylation of the rev gene product of human immunodeficiency virus type 1. Hauber J, et al. **J Virol** 1988 Dec;62(12):4801–4
Translocation of rubella virus glycoprotein E1 into the endoplasmic reticulum. Hobman TC, et al. **J Virol** 1988 Nov;62(11):4259–64
Characterization of the DNA–binding properties of herpes simplex virus regulatory protein ICP4. Kattar–Cooley P, et al. **J Virol** 1989 Feb;63(2):696–704
In vitro processing of dengue virus structural proteins: cleavage of the pre–membrane protein. Markoff L. **J Virol** 1989 Aug;63(8):3345–52
Processing of yellow fever virus polyprotein: role of cellular proteases in maturation of the structural proteins. Ruiz–Linares A, et al. **J Virol** 1989 Oct;63(10):4199–209
The E3 protein of bovine coronavirus is a receptor–destroying enzyme with acetylesterase activity. Vlasak R, et al. **J Virol** 1988 Dec;62(12):4686–90
Antipeptide monoclonal antibodies inhibit the binding of rabies virus glycoprotein and alpha–bungarotoxin to the nicotinic acetylcholine receptor. Bracci L, et al. **Mol Immunol** 1988 Sep;25(9):881–8
Spike—nucleocapsid interaction in Semliki Forest virus reconstructed using network antibodies. Vaux DJ, et al. **Nature** 1988 Nov 3;336(6194):36–42
DNA sequencing artifacts in dITP reactions containing gene 32 protein. Joho KE. **Nucleic Acids Res** 1989 Sep 12; 17(17):7111
Dissection of Semliki Forest virus glycoprotein delivery from the trans–Golgi network to the cell surface in permeabilized BHK cells. de Curtis I, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8052–6
Gene Q antiterminator proteins of Escherichia coli phages 82 and lambda suppress pausing by RNA polymerase at a rho–dependent terminator and at other sites. Yang XJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5301–5

Photochemical crosslinking of bacteriophage T4 single-stranded DNA-binding protein (gp32) to oligo-p(dT)8: identification of phenylalanine-183 as the site of crosslinking. Shamoo Y, et al. **Proteins** 1988;4(1):1-6

Recognition of a DNA operator by the repressor of phage 434: a view at high resolution. Aggarwal AK, et al. **Science** 1988 Nov 11;242(4880):899-907

Analysis of viral proteins in human cytomegalovirus-infected cells during impaired lytic replication of herpes simplex virus. Cockley KD, et al. **Virology** 1989 May;170(1):268-72

Molecular genetic and biochemical evidence for the involvement of the heptapeptide cleavage sequence in determining the reaction profile at two tobacco etch virus cleavage sites in cell-free assays. Dougherty WG, et al. **Virology** 1989 Sep;172(1):145-55

Proteolytic activity of the plum pox potyvirus NIa-like protein in Escherichia coli. García JA, et al. **Virology** 1989 Jun;170(2):362-9

Phosphorylation of the human papillomavirus type 1 E4 proteins in vivo and in vitro. Grand RJ, et al. **Virology** 1989 May;170(1):201-13

An unusual coordinated cleavage event in the processing of encephalomyocarditis virus polypeptides. Jackson RJ. **Virology** 1989 Sep;172(1):363-6

Proteolytic processing of poliovirus polyprotein: elimination of 2Apro-mediated, alternative cleavage of polypeptide 3CD by in vitro mutagenesis. Lee CK, et al. **Virology** 1988 Oct;166(2):405-14

The pattern of accumulation of cauliflower mosaic virus-specific products in infected turnips. Maule AJ, et al. **Virology** 1989 Apr;169(2):436-46

Interaction of rotavirus cores with the nonstructural glycoprotein NS28. Meyer JC, et al. **Virology** 1989 Jul; 171(1):98-107

Rifampicin prevents virosome localization of L65, an essential vaccinia virus polypeptide. Miner JN, et al. **Virology** 1989 May;170(1):227-37

DNA looping induced by bacteriophage lambda O protein: implications for formation of higher order structures at the lambda origin of replication. Schnos M, et al. **Virology** 1989 Feb;168(2):370-7

Polypeptide 2A of human rhinovirus type 2: identification as a protease and characterization by mutational analysis. Sommergruber W, et al. **Virology** 1989 Mar;169(1):68-77

Different palmitoylation of paramyxovirus glycoproteins. Veit M, et al. **Virology** 1989 Jan;168(1):173-6

Computer analysis suggests a role for signal sequences in processing polyproteins of enveloped RNA viruses and as a mechanism of viral fusion. Fazakerley JK, et al. **Virus Genes** 1989 May;2(3):223-39

[Molecular mechanisms of proteolytic processing of viral proteins and the problem of antiviral chemotherapy and vaccine design] Zhirnov OP. **Mol Biol (Mosk)** 1988 May-Jun;22(3):581-600 (163 ref.) (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Protein-primed replication of bacteriophage phi 29 DNA. Salas M, et al. **Biochim Biophys Acta** 1988 Dec 20; 951(2-3):419-24

Glycosylation of human leukocyte locus A molecules is dependent on the cell type. Merlu B, et al. **Eur J Biochem** 1989 May 15;181(3):755-60

Synergistic action of three recombination gene products of bacteriophage T4, uvsX, uvsY, and gene 32 proteins. Yonesaki T, et al. **J Biol Chem** 1989 May 15; 264(14):7814-20

Purified glycoproteins of influenza virus stimulate cell-mediated cytotoxicity in vivo. Arora DJ, et al. **Nat Immun Cell Growth Regul** 1988;7(5-6):287-96

Cytolytic T-lymphocyte response to isolated class I H-2 proteins and influenza peptides. Kane KP, et al. **Nature** 1989 Jul 13;340(6229):157-9

Efficient activation of transcription in yeast by the BPV1 E2 protein. Stanway CA, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2187-96

Regulation of viral expression of human immunodeficiency virus in vitro by an antisense phosphorothioate oligodeoxynucleotide against rev (art/trs) in chronically infected cells. Matsukura M, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4244-8

Trans-activation of the human immunodeficiency virus long terminal repeat by the hepatitis B virus X protein. Seto E, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8286-90

Replication of the genome RNAs of defective interfering particles of vesicular stomatitis and Sendai viruses using heterologous viral proteins. Moyer SA. **Virology** 1989 Sep; 172(1):341-5

[Toward an unpublished method of detecting human retroviruses: activation of HIV-1 LacZ recombinant provirus by the tat gene product] Bonnerot C, et al. **C R Acad Sci [III]** 1988;307(6):311-6 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Cauliflower mosaic virus ORF VII is not required for aphid transmissibility. Givord L, et al. **Ann Inst Pasteur Virol** 1988 Apr-Jun;139(2):227-31

Involvement of structural and nonstructural polypeptides on rotavirus RNA synthesis. Sandino AM, et al. **Arch Biol Med Exp (Santiago)** 1988 Dec;21(3-4):381-92

Functional and topographical analyses of epitopes on bovine herpesvirus type 1 glycoprotein IV. Hughes G, et al. **Arch Virol** 1988;103(1-2):47-60

Functional similarity of HIV-I rev and HTLV-I rex proteins: identification of a new nucleolar-targeting signal in rev protein. Kubota S, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):963-70

The trans-activation of herpes simplex virus gene expression: comparison of two factors and their cis sites. Roizman B, et al. **Biochimie** 1988 Aug;70(8):1031-43 (51 ref.)

Gin-mediated recombination of catenated and knotted DNA substrates: implications for the mechanism of interaction between cis-acting sites. Kanaar R, et al. **Cell** 1989 Jul 14;58(1):147-59

Short cytoplasmic sequences serve as retention signals for transmembrane proteins in the endoplasmic reticulum. Nilsson T, et al. **Cell** 1989 Aug 25;58(4):707-18

Transcriptional regulation by the immediate early protein of pseudorabies virus during in vitro nucleosome assembly. Workman JL, et al. **Cell** 1988 Oct 21;55(2):211-9

Translation of the bacteriophage Mu mom gene is positively regulated by the phage com gene product. Wulczyn FG, et al. **Cell** 1989 Jun 30;57(7):1201-10

Biochemical characterization of phi X174-protein-E-mediated lysis of Escherichia coli. Witte A, et al. **Eur J Biochem** 1989 Mar 15;180(2):393-8

Coupling of viral membrane proteins to phosphatidylinositide signalling system. Weinmann-Dorsch C, et al. **FEBS Lett** 1989 Apr 24;247(2):185-8

Molecular cloning and characterization of cellular genes whose expression is repressed by the adenovirus E1a gene products and growth factors in quiescent rat cells. Hara E, et al. **Gene** 1988 Oct 15;70(1):97-106

Suppression of recA deficiency in plasmid recombination by bacteriophage lambda beta protein in RecBCD- ExoI-Escherichia coli cells. Berger I, et al. **J Bacteriol** 1989 Jun; 171(6):3523-9

A component of the side tail fiber of Escherichia coli bacteriophage lambda can functionally replace the receptor-recognizing part of a long tail fiber protein of the unrelated bacteriophage T4. Montag D, et al. **J Bacteriol** 1989 Aug;171(8):4378-84

Lysis of Escherichia coli by the bacteriophage phi X174 E protein: inhibition of lysis by heat shock proteins. Young KD, et al. **J Bacteriol** 1989 Aug;171(8):4334-41

Studies on the role of the phi X174 gene A protein in phi X viral strand synthesis. I. Replication of DNA containing an alteration in position 1 of the 30-nucleotide icosahedral bacteriophage origin. Goetz GS, et al. **J Biol Chem** 1988 Nov 5;263(31):16421-32

Studies on the role of the phi X174 gene A protein in phi X viral strand synthesis. II. Effects of DNA replication of mutations in the 30-nucleotide icosahedral bacteriophage origin. Goetz GS, et al. **J Biol Chem** 1988 Nov 5; 263(31):16433-42

Studies on the role of the phi X174 gene A protein in phi X174 viral strand synthesis. III. Replication of DNA containing two viral replication origins. Goetz GS, et al. **J Biol Chem** 1988 Nov 5;263(31):16443-51

Effect of phi X C protein on leading strand DNA synthesis in the phi X174 replication pathway. Goetz GS, et al. **J Biol Chem** 1988 Nov 5;263(31):16452-60

Functional domains of vaccinia virus mRNA capping enzyme. Analysis by limited tryptic digestion. Shuman S. **J Biol Chem** 1989 Jun 5;264(16):9690-5

The effect of bovine herpesvirus type 1 glycoproteins gI and gIII on herpesvirus infections. Chase CC, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1561-9

The L protein of vesicular stomatitis virus modulates the response of the polyadenylic acid polymerase to S-adenosylhomocysteine. Hunt DM, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2555-61

The herpes simplex virus immediate-early protein, ICP4, is required to potentiate replication of human immunodeficiency virus in CD4+ lymphocytes. Albrecht MA, et al. **J Virol** 1989 May;63(5):1861-8

Expression from the adeno-associated virus p5 and p19 promoters is negatively regulated in trans by the rep protein. Beaton A, et al. **J Virol** 1989 Oct;63(10):4450-4

Transition from initiation to elongation in protein-primed phi 29 DNA replication: salt-dependent stimulation by the viral protein p6. Blanco L, et al. **J Virol** 1988 Nov; 62(11):4167-72

Evaluation of the interaction of phi X174 gene products E and K in E-mediated lysis of Escherichia coli. Blasi U, et al. **J Virol** 1988 Nov;62(11):4362-4

Herpes simplex virus type 1 DNA synthesis requires the product of the UL8 gene: isolation and characterization of an ICP6::lacZ insertion mutation. Carmichael EP, et al. **J Virol** 1989 Feb;63(2):591-9

Human cytomegalovirus ie1 transactivates the alpha promoter-enhancer via an 18-base-pair repeat element. Cherrington JM, et al. **J Virol** 1989 Mar;63(3):1435-40

Transcriptional activation of homologous and heterologous genes by the hepatitis B virus X gene product in cells permissive for viral replication. Colgrove R, et al. **J Virol** 1989 Sep;63(9):4019-26

Transcriptionally active immediate-early protein of pseudorabies virus binds to specific sites on class II gene promoters. Cromlish WA, et al. **J Virol** 1989 May; 63(5):1869-76

Activation of human papillomavirus type 18 gene expression by herpes simplex virus type 1 viral transactivators and a phorbol ester. Gius D, et al. **J Virol** 1989 Feb;63(2):555-63

Herpes simplex virus type 1 immediate-early protein Vmw110 reactivates latent herpes simplex virus type 2 in an in vitro latency system. Harris RA, et al. **J Virol** 1989 Aug;63(8):3513-5

Adenovirus L1 52- and 55-kilodalton proteins are required for assembly of virions. Hasson TB, et al. **J Virol** 1989 Sep;63(9):3612-21

The Epstein-Barr virus immediate-early gene product, BMLF1, acts in trans by a posttranscriptional mechanism which is reporter gene dependent. Kenney S, et al. **J Virol** 1989 Sep;63(9):3870-7

The Epstein-Barr virus BMLF1 promoter contains an enhancer element that is responsive to the BZLF1 and BRLF1 transactivators. Kenney S, et al. **J Virol** 1989 Sep; 63(9):3878-83

Characterization of major recognition sequences for a herpes simplex virus type 1 origin-binding protein. Koff A, et al. **J Virol** 1988 Nov;62(11):4096-103

Mutational analysis of the genome-linked protein VPg of poliovirus. Kuhn RJ, et al. **J Virol** 1988 Nov;62(11):4207-15

Isolation of poliovirus 2C mutants defective in viral RNA synthesis. Li JP, et al. **J Virol** 1988 Nov;62(11):4016-21

Direct correlation between a negative autoregulatory response element at the cap site of the herpes simplex virus type 1 IE175 (alpha 4) promoter and a specific binding site for the IE175 (ICP4) protein. Roberts MS, et al. **J Virol** 1988 Nov;62(11):4307-20

Bluetongue virus tubules made in insect cells by recombinant baculoviruses: expression of the NS1 gene of bluetongue virus serotype 10. Urakawa T, et al. **J Virol** 1988 Nov; 62(11):3919-27

The HIV-1 rev trans-activator acts through a structured target sequence to activate nuclear export of unspliced viral mRNA. Malim MH, et al. **Nature** 1989 Mar 16; 338(6212):254-7

Complementation of adenovirus E4 mutants by transient expression of E4 cDNA and deletion plasmids. Ketner G, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3037-48

Retroviral integration: structure of the initial covalent product and its precursor, and a role for the viral IN protein. Brown PO, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2525-9

rev protein of human immunodeficiency virus type 1 affects the stability and transport of the viral mRNA. Felber BK, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1495-9

The herpes simplex virus type 1 immediate-early protein ICP27 is obligately required for the accumulation of a cellular protein during viral infection. Estridge JK, et al. **Virology** 1989 Jan;168(1):67-72

The superimmunity gene sim of bacteriophage P1 causes superinfection exclusion. Kliem M, et al. **Virology** 1989 Aug;171(2):350-5

The use of sulfite to study the mechanism of membrane fusion induced by E1 of Semliki Forest virus. Omar A, et al. **Virology** 1989 Jan;168(1):177-9

Stress-induced increase of hexose transport as a novel index of cytopathic effects in virus-infected cells: role of the L protein in the action of vesicular stomatitis virus. Pasternak CA, et al. **Virology** 1988 Oct;166(2):379-86

The responsiveness of human papillomavirus upstream regulatory regions to herpes simplex virus immediate early proteins. McCusker CT, et al. **Virus Res** 1988 Oct; 11(3):199-207

ULTRASTRUCTURE

The second-largest subunit of the poxvirus RNA polymerase is similar to the corresponding subunits of procaryotic and eucaryotic RNA polymerases. Patel DD, et al. **J Virol** 1989 Mar;63(3):1076-86

The antigenic structure of poliovirus. Hogle JM, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):467-78 (35 ref.)

[Structural organization and intravirion interactions of proteins of the bovine leukemia virus] Eremin VF. **Eksp Onkol** 1989;11(4):3-9 (46 ref.) (Eng. Abstr.) **(Rus)**

VIRAL TRANSFORMING PROTEINS see **ONCOGENE PROTEINS, VIRAL**

VIRAL TUMOR ANTIGENS see **ANTIGENS, VIRAL, TUMOR**

VIRAL VACCINES

Japanese encephalitis vaccine. Oya A. **Acta Paediatr Jpn Overseas Ed** 1988 Apr;30(2):175-84 (64 ref.)

Development and characteristics of Oka strain of live varicella vaccine. Takahashi M. **Acta Paediatr Jpn Overseas Ed** 1988 Apr;30(2):185-93 (47 ref.)

A model for the epidemiological and economic evaluation of Newcastle disease of village poultry in South-East Asia and its control using heat tolerant V4 vaccine. Copland JW, et al. **Acta Vet Scand Suppl** 1988;84:405-7

Economic analysis of the development and usage of thermoresistant rinderpest vaccine. Stryker JD, et al. **Acta Vet Scand Suppl** 1988;84:398-401

Peste des Petits Ruminants and cost effectiveness of its prevention in Niger. van den Ende M, et al. **Acta Vet Scand Suppl** 1988;84:126-8

Vaccines against tumor antigens. Arlinghaus RB.
Adv Vet Sci Comp Med 1989;33:377–95 (70 ref.)
Vaccines produced by conventional means to control major infectious diseases of man and animals. Bittle JL, et al.
Adv Vet Sci Comp Med 1989;33:1–63 (387 ref.)
The development of chemically synthesized vaccines. Brown F. Adv Vet Sci Comp Med 1989;33:173–93 (37 ref.)
The development of biosynthetic vaccines. Collett MS.
Adv Vet Sci Comp Med 1989;33:109–72 (437 ref.)
Infectious recombinant vectored virus vaccines. Esposito JJ, et al. Adv Vet Sci Comp Med 1989;33:195–247 (242 ref.)
Human immunodeficiency virus: an agent that defies vaccination. Nathanson N, et al.
Adv Vet Sci Comp Med 1989;33:397–412 (84 ref.)
Modern approaches to live virus vaccines. Norrby E.
Adv Vet Sci Comp Med 1989;33:249–70 (90 ref.)
Animal virus infections that defy vaccination: equine infectious anemia, caprine arthritis–encephalitis, maedi–visna, and feline infectious peritonitis. Pedersen NC.
Adv Vet Sci Comp Med 1989;33:413–28 (55 ref.)
French HIV vaccine is reported to show promise. Zagury D. Am Fam Physician 1989 Apr;39(4):286
Why clinical trials of AIDS vaccines are premature. Mariner WK. Am J Public Health 1989 Jan;79(1):86–91 (47 ref.)
Failure of a dengue 1 sub-unit vaccine to protect mice against a lethal dengue virus infection. Aaskov JG, et al.
Am J Trop Med Hyg 1988 Nov;39(5):511–8
Clinical evaluation of transmissible gastroenteritis virus vaccines and vaccination procedures for inducing lactogenic immunity in sows. Moxley RA, et al.
Am J Vet Res 1989 Jan;50(1):111–8
NIH conference. Development and evaluation of a vaccine for human immunodeficiency virus (HIV) infection. Fauci AS, et al. Ann Intern Med 1989 Mar 1;110(5):373–85 (70 ref.)
Lactogenic immunity to transmissible gastroenteritis (TGE) of swine induced by the attenuated Nouzilly strain of TGE virus: neutralizing antibody classes and protection. Shiral J, et al. Ann Rech Vet 1988;19(4):267–72
Persistence of commercial modified live reovirus vaccines in chicks. Montgomery RD, et al. Avian Dis 1988 Jul–Sep; 32(3):461–8
Efficacy of oil-emulsion vaccines prepared with pigeon paramyxovirus-1, Ulster, and La Sota Newcastle disease viruses. Stone HD. Avian Dis 1989 Jan–Mar;33(1):157–62
Molecular dynamics of the alpha-helical epitope of a novel synthetic lipopeptide foot-and-mouth disease virus vaccine. Krug M, et al. Biopolymers 1989 Jan;28(1):499–512
Current approaches to the development of vaccines effective against parainfluenza viruses. Murphy BR. Bull WHO 1988; 66(3):391–7 (28 ref.)
Virus vaccines: principles and prospects. Melnick JL.
Bull WORLD Health Organ 1989;67(2):105–12 (0 ref.)
Cervical carcinoma: an experimental approach. Cowan ME, et al. Cancer Surv 1988;7(3):469–79 (39 ref.)
A prototype vaccine to prevent Epstein–Barr virus–associated cancers. Epstein M. Chemioterapia 1987 Jun;6(2 Suppl):655–8 (39 ref.)
Applications of biotechnology to human–papillomavirus–induced diseases. Faras AJ, et al. Clin Dermatol 1985 Oct–Dec;3(4):200–3
Current status of the development of an AIDS vaccine. Lasky LA. Crit Rev Immunol 1989;9(3):153–72 (118 ref.)
Prospects for HIV vaccines. Ada GL.
J Acquir Immune Defic Syndr 1988;1(3):295–303
AIDS: animal retrovirus models and vaccines. Kurth R, et al. J Acquir Immune Defic Syndr 1988;1(3):284–94 (58 ref.)
Noninfectious rotavirus (strain RRV) induces an immune response in mice which protects against rotavirus challenge. Offit PA, et al. J Clin Microbiol 1989 May; 27(5):885–8
Virulence of a live dengue virus vaccine candidate: a possible new marker of dengue virus attenuation. Innis BL, et al. J Infect Dis 1988 Oct;158(4):876–80
Protective effects of Towne cytomegalovirus vaccine against low-passage cytomegalovirus administered as a challenge. Plotkin SA, et al. J Infect Dis 1989 May;159(5):860–5
Mice immunized with recombinant vaccinia virus expressing dengue 4 virus structural proteins with or without nonstructural protein NS1 are protected against fatal dengue virus encephalitis. Bray M, et al. J Virol 1989 Jun; 63(6):2853–6
Recombinant vaccinia virus/Venezuelan equine encephalitis (VEE) virus protects mice from peripheral VEE virus challenge. Kinney RM, et al. J Virol 1988 Dec; 62(12):4697–702
The gene encoding the gIII envelope protein of pseudorabies virus vaccine strain Bartha contains a mutation affecting protein localization. Robbins AK, et al. J Virol 1989 Jan; 63(1):250–8
Various approaches to AIDS vaccines begin to 'pierce the armor' of virus [news] Goldsmith MF. JAMA 1989 Jul 7;262(1):13
Genetics of cold-adapted B/Ann Arbor/1/66 influenza virus reassortants: the acidic polymerase (PA) protein gene confers temperature sensitivity and attenuated virulence. Donabedian AM, et al. Microb Pathog 1987 Aug; 3(2):97–108
Prospects for a vaccine against HIV. Ada G. Nature 1989 Jun 1;339(6223):331–2
A preliminary study for development of an inactivated Chuzan virus vaccine. Goto Y, et al.
Nippon Juigaku Zasshi 1988 Jun;50(3):673–8
Protection against bovine rotaviruses in newborn calves by continuous feeding of immune colostrum. Tsunemitsu H, et al. Nippon Juigaku Zasshi 1989 Apr;51(2):300–8
Nucleotide sequence comparison of the genome of two 17D-204 yellow fever vaccines. Dupuy A, et al.
Nucleic Acids Res 1989 May 25;17(10):3989
Nucleotide sequence of capsid, E2 and E1 protein genes of Rubella virus vaccine strain RA27/3. Nakhasi HL, et al.
Nucleic Acids Res 1989 Jun 12;17(11):4393–4
Strategies for viral vaccines: scientific challenge and regulatory aspects. Schild GC. Parasitology 1989;98 Suppl:S13–8 (9 ref.)
Field trial of rhesus rotavirus vaccine in infants. Christy C, et al. Pediatr Infect Dis J 1988 Sep;7(9):645–50
Viral vaccines in the control of otitis media. Gwaltney JM Jr. Pediatr Infect Dis J 1989 Jan;8(1 Suppl):S78–9 (10 ref.)
Humoral immunity and clinical reinfections following varicella vaccine in healthy children. Johnson C, et al.
Pediatrics 1989 Sep;84(3):418–21
Why we won't use an AIDS vaccine. Grossman J.
Postgrad Med 1989 Feb 1;85(2):31
Immunoglobulin concentrations in serum and tissues of vitamin A–deficient broiler chicks after Newcastle disease virus vaccination. Davis CY, et al. Poult Sci 1989 Jan; 68(1):136–44
Protection of macaques against simian AIDS by immunization with a recombinant vaccinia virus expressing the envelope glycoproteins of simian type D retrovirus. Hu SL, et al. Proc Natl Acad Sci U S A 1989 Sep; 86(18):7213–7
Expression of immunogenic epitopes of hepatitis B surface antigen with hybrid flagellin proteins by a vaccine strain of Salmonella. Wu JY, et al.
Proc Natl Acad Sci U S A 1989 Jun;86(12):4726–30
Report of the Second Public Health Service AIDS Prevention and Control Conference. Report of the workgroup on vaccines. Public Health Rep 1988;103 Suppl 1:52–7
HIV-specific cytotoxic T lymphocytes and their possible implications in the future vaccine against AIDS. Langlade-Demoyen P, et al. Res Immunol 1989 Jan; 140(1):95–9; discussion 119–20 (25 ref.)
Efficacy of infectious bronchitis virus vaccines against heterologous challenge. Muneer MA, et al. Res Vet Sci 1988 Jul;45(1):22–7
Attempted immunisation of cats against feline infectious peritonitis using canine coronavirus. Stoddart CA, et al. Res Vet Sci 1988 Nov;45(3):383–8
Prospects for development of a rotavirus vaccine against rotavirus diarrhea in infants and young children. Kapikian AZ, et al. Rev Infect Dis 1989 May–Jun;11 Suppl 3:S539–46 (49 ref.)
Patented remedy. Benditt J. Sci Am 1988 May;258(5):32, 34
AIDS vaccines. Matthews TJ, et al. Sci Am 1988 Oct; 259(4):120–7 (4 ref.)
Flying blind. Wright K. Sci Am 1988 Feb;258(2):35–6
Hope for AIDS vaccines [news] Cherfas J. Science 1989 Oct 6;246(4926):23–4
South Carolina blocks test of rabies vaccine [news] Sun M. Science 1989 Jun 30;244(4912):1535
Feline leukemia virus vaccines. Rojko JL.
Semin Vet Med Surg (Small Anim) 1986 Feb;1(1):61–7 (79 ref.)
AIDS can be cured [letter] Greentree LB. South Med J 1988 Nov;81(11):1465
Viral infections and cancer in the tropics. Epstein MA.
Trop Geogr Med 1988 Jul;40(3):S52–60 (64 ref.)
Hypothetical vaccination of the Dutch population with a herpes simplex virus vaccine: estimation of the profitability using a demographic projection model. Bos CA.
Vaccine 1988 Aug;6(4):309–14
Polyvalent recombinant antigens: a new vaccine strategy. Kingsman SM, et al. Vaccine 1988 Aug;6(4):304–6 (16 ref.)
Towards a second generation of inactivated vaccines. Use of herpesvirus (feline rhinotracheitis virus) subunits for the prevention of cat flu. Saint-Gérand AL. Vaccine 1988 Dec; 6(6):468–9
Control of feline leukaemia virus. Weijer K, et al.
Vet Immunol Immunopathol 1989 May;21(1):69–83 (49 ref.)
Inactivated oil emulsion vaccines from selected clones of Newcastle disease virus. Adu FD, et al. Vet Q 1989 Jul; 11(3):190–2
Equine herpesvirus [letter] [published erratum appears in Vet Rec 1989 May 20;124(20):548] Vet Rec 1989 May 13; 124(19):519
Vaccine for the control of egg drop syndrome '76. Holmes HC, et al. Vet Rec 1989 Mar 25;124(12):309–10
First field trial of fox vaccination against rabies using a vaccinia–rabies recombinant virus. Pastoret PP, et al.
Vet Rec 1988 Nov 5;123(19):481–3
A preliminary vaccine potency trial of a Newcastle disease virus inactivated with binary ethylenimine. Buonavoglia C, et al. Vet Res Commun 1988;12(2–3):195–7
Protection of mice against lethal challenge with herpes simplex virus by vaccination with an adenovirus vector expressing HSV glycoprotein B. McDermott MR, et al.
Virology 1989 Mar;169(1):244–7
Cell-derived vaccine against bovine leukaemia virus infection. Altaner C, et al. Zentralbl Veterinarmed [B] 1988 Dec;35(10):736–46
Characterization of an iscom prepared with envelope glycoproteins of bovine herpesvirus type 1. Merza M, et al. Zentralbl Veterinarmed [B] 1988 Nov;35(9):695–703
[Isolation of the pathogenic virus of Marek's disease from a flock of chickens vaccinated with the turkey herpes vaccine] Jurajda V, et al. Vet Med (Praha) 1988 Dec; 33(12):741–6 (Eng. Abstr.) (Cze)
[Gumboro disease in broiler chicks] Tijdschr Diergeneeskd 1988 Nov 15;113(22):1254–6 (Dut)
[Trial of hepatitis B prophylaxis in children born to mothers carrying HBs antigen in New Caledonia] Laille M, et al. Bull Soc Pathol Exot Filiales 1988;81(4):673–8 (Eng. Abstr.) (Fre)
[Randomization of a population for a clinical trial of immunization against the human immunodeficiency virus (HIV)] Dechazal L, et al. Med Trop (Mars) 1988 Oct–Dec; 48(4):413–6 (Eng. Abstr.) (Fre)
[Immunization against the human immunodeficiency virus in Zaire] Zagury D, et al. Med Trop (Mars) 1988 Oct–Dec; 48(4):417–23 (Eng. Abstr.) (Fre)
[The prevention of distemper in zoo animals] Franke V, et al. Berl Munch Tierarztl Wochenschr 1989 Feb 1; 102(2):56–8 (Eng. Abstr.) (Ger)
[The control of kennel cough] Mayr A, et al.
Tierarztl Prax 1988;16(4):403–7 (10 ref.) (Eng. Abstr.) (Ger)
[Efficacy of live varicella vaccine strain (Oka) in high-risk patients] Eizuru Y, et al. Nippon Rinsho 1989 Feb; 47(2):424–8 (Jpn)
[AIDS vaccines] Kojima A. Nippon Rinsho 1989 Jan; 47(1):187–96 (Jpn)
[The use of the gene responsible for formation of hemorrhage as a phenotypic marker in creating hybrid variations of vaccinia virus] Totmenin AV, et al.
Dokl Akad Nauk SSSR 1989;305(5):1246–8 (Rus)
[Possible ways of improving the prevention of viral infections] Chumakov MP, et al.
Vestn Akad Med Nauk SSSR 1989;(3):23–8 (Rus)
[What a vaccine against viral gastroenteritis should be: problems and prospects] Rukhadze GG, et al.
Vopr Virusol 1989 Jan–Feb;34(1):5–16 (70 ref.) (Rus)
[Oral vaccination with live attenuated rotavirus] Escobar Castro H, et al. An Esp Pediatr 1988 Jun;28(6):527–9 (Eng. Abstr.) (Spa)

ADMINISTRATION & DOSAGE

Clinical use of Oka live varicella vaccine. Kamiya H, et al.
Acta Paediatr Jpn Overseas Ed 1988 Oct;30(5):594–600
A new, simple aerosol immunization technique against Newcastle disease. Tamási G, et al. Acta Vet Hung 1988; 36(3–4):185–93
Some immune reactions induced in pigs by an attenuated Aujeszky's disease vaccine. Tuboly S, et al.
Acta Vet Hung 1988;36(1–2):11–20
Recombinant polyoma—vaccinia viruses: T antigen expression vectors and anti-tumor immunization agents. Clertant P, et al. Biochimie 1988 Aug;70(8):1075–87
Development of new vaccines for AIDS. Garrison L, et al.
Compr Ther 1989 Jul;15(7):47–55 (34 ref.)
Oral immunization with Sendai virus in mice. Nedrud JG, et al. Curr Top Microbiol Immunol 1989;146:117–22 (18 ref.)
Oral immunization and secretory immunity to viruses. Ogra PL, et al. Curr Top Microbiol Immunol 1989;146:73–81 (20 ref.)
Introduction to oral immunization against viral infections. Waldman RH, et al. Curr Top Microbiol Immunol 1989; 146:69–72
Interference between strains in live virus vaccines. II: Combined vaccination with varicella and measles–mumps–rubella vaccine. Berger R, et al.
J Biol Stand 1988 Oct;16(4):275–9
Study of combined vaccination against yellow fever and measles in infants from six to nine months. Lhuillier M, et al. J Biol Stand 1989 Jan;17(1):9–15
Protection of Peruvian children against rotavirus diarrhea of specific serotypes by one, two, or three doses of the RIT 4237 attenuated bovine rotavirus vaccine. Lanata CF, et al. J Infect Dis 1989 Mar;159(3):452–9
Immunized mice challenged with herpes simplex virus by the intranasal route show protection against latent infection. Rooney JF, et al. J Infect Dis 1989 May;159(5):974–6
Placebo-controlled trial of varicella vaccine given with or after measles–mumps–rubella vaccine. Englund JA, et al.
J Pediatr 1989 Jan;114(1):37–44
Vaccine protection against simian immunodeficiency virus infection. Desrosiers RC, et al.
Proc Natl Acad Sci U S A 1989 Aug;86(16):6353–7
The envelope proteins from purified respiratory syncytial virus protect mice from intranasal virus challenge. Levine S, et al. Proc Soc Exp Biol Med 1989 Apr;190(4):349–56
Immune response of chicks vaccinated with fowl pox virus vaccines by the feather follicle method. Sarma DK, et al.
Trop Anim Health Prod 1989 May;21(2):107–8
Oral immunization symposium. Edelman R. Vaccine 1989 Apr;7(2):166–7
Mucosal antibody response to vaginal infection with herpes simplex virus in pre-vaccinated guinea-pigs [published erratum appears in Vaccine 1989 Feb;7(1):77] McBride BW, et al. Vaccine 1988 Oct;6(5):414–8
Simultaneous vaccination of piglets against foot-and-mouth disease and classical swine fever. De Clercq K, et al.
Vet Microbiol 1989 Jul;20(3):215–21
Vaccination of seals [letter] Vet Rec 1988 Nov 12;123(20):527

Characterization of the antibody response in vaccinated mice protected against Coxsackievirus B3-induced myocarditis. Godney EK, et al. **Viral Immunol** 1987-88;1(4):305-14

Modulation of murine coxsackievirus-induced myocarditis utilizing anti-idiotypes. Paque RE, et al. **Viral Immunol** 1987-88;1(3):207-24

Failure of vaccine or virulent strains of canine parvovirus to induce immunosuppressive effects on the immune system of the dog. Phillips TR, et al. **Viral Immunol** 1987; 1(2):135-44

[AIDS research. Cooperation is extended] **Fortschr Med** 1989 Jan 30;107(3):14 (Ger)

[AIDS vaccines. Is optimism justified? (news)] **Fortschr Med** 1989 Jul 20;107(21):13 (Ger)

[A potential AIDS vaccine tester (news)] **Fortschr Med** 1988 Jul 30;106(22):14-5 (Ger)

[Vaccine development. Obstacles in evaluating AIDS vaccines] **Fortschr Med** 1989 Jun 30;107(19):14-5 (Ger)

[Clinical tests in the United States. Initial success with an AIDS vaccine (news)] **Fortschr Med** 1988 Jun 20;106(18):13 (Ger)

[What vaccinations do children at risk of infection need?] Eujen R. **Med Monatsschr Pharm** 1989 Jun;12(6):184-6 (0 ref.) (Ger)

[AIDS: possibilities of active immunization] Heinz F. **Wien Med Wochenschr** 1988 Oct 31;138(19-20):535-7 (10 ref.) (Eng. Abstr.) (Ger)

[HIV infection: epidemiology and vaccination] Hunsmann G. **Z Gastroenterol [Verh]** 1989 Jul;24:164 (Ger)

[Herpes simplex infections] Kimmig W. **Z Hautkr** 1989 Apr 15;64(4):266-8, 271 (16 ref.) (Eng. Abstr.) (Ger)

[Status and prospects of immunologic disease prevention] Morunova AA. **Pediatriia** 1989;(7):5-7 (Rus)

[Vaccination against Japanese encephalitis in not justified] Niklasson P. **Lakartidningen** 1988 Nov 9;85(45):3815 (Swe)

[Vaccines today and tomorrow] Stenbeck J, et al. **Lakartidningen** 1989 May 31;86(22):2126-8 (Swe)

[Vaccines today and tomorrow. Rotavirus vaccine to prevent infant mortality in developing countries] Vesikari T, et al. **Lakartidningen** 1989 Jun 14;86(24):2299-301 (Swe)

ADVERSE EFFECTS

Enhancement of infectious bovine keratoconjunctivitis by modified-live infectious bovine rhinotracheitis virus vaccine. George LW, et al. **Am J Vet Res** 1988 Nov; 49(11):1800-6

Contamination of a live virus vaccine against pseudorabies (Aujeszky's disease) by an ovine pestivirus pathogen for the pig. Vannier P, et al. **Ann Rech Vet** 1988;19(4):283-90

Potential allergens in oil emulsion foot-and-mouth disease vaccines for pigs. Black L, et al. **Epidemiol Infect** 1988 Oct;101(2):477-80

Herpes zoster in an adult recipient of live attenuated varicella vaccine. Hammerschlag MR, et al. **J Infect Dis** 1989 Sep; 160(3):535-7

Zoster in normal children after varicella vaccine [letter] Plotkin SA, et al. **J Infect Dis** 1989 May;159(5):1000-1

Neurological complications after simultaneous immunisation against tick-borne encephalitis and tetanus [letter] Schabet M, et al. **Lancet** 1989 Apr 29;1(8644):959-60

AIDS: is a safe vaccine readily available? Godin N. **Med Hypotheses** 1989 Jan;28(1):3-5 (26 ref.)

Protection for AIDS vaccine suits. **N J Med** 1989 May; 86(5):338

Bovine viral diarrhoea virus infections in piglets born to sows vaccinated against swine fever with contaminated vaccine. Wensvoort G, et al. **Res Vet Sci** 1988 Sep;45(2):143-8

Detection of feline calicivirus antigens in the joints of infected cats. Bennett D, et al. **Vet Rec** 1989 Apr 1;124(13):329-32

Advertising for a new vaccine [letter] Taylor CW, et al. **Vet Rec** 1988 Jul 16;123(3):88

[No negligence in preventive vaccinations!] Stickl H. **Fortschr Med** 1989 Jul 20;107(21):14-5 (Ger)

ANALYSIS

A sandwich enzyme-linked immunosorbent assay (ELISA) for measuring antigen concentrations of infectious bursal disease virus. Kardi V, et al. **Acta Vet Hung** 1988; 36(1-2):123-34

Use of a monoclonal antibody specific for wild-type yellow fever virus to identify a wild-type antigenic variant in 17D vaccine pools. Gould EA, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1889-94

Quantitation of putative glycoprotein X in bioengineered pseudorabies vaccine virus culture medium by ELISA. Eaton LC. **J Immunol Methods** 1989 Mar 10;118(1):125-8

In vitro assessment of viral antigen content in inactivated aluminum hydroxide adjuvanted vaccines. Katz JB, et al. **J Virol Methods** 1989 Jul;25(1):101-8

Formation and characterization of FeLV ISCOMs. Akerblom L, et al. **Vaccine** 1989 Apr;7(2):142-6

BIOSYNTHESIS

Detection and elimination of adventitious agents in continuous cell lines. Erickson GA, et al. **Dev Biol Stand** 1989;70:59-66

Experience with production of interferon and Japanese encephalitis vaccine in continuous cell lines. Peiwei G, et al. **Dev Biol Stand** 1989;70:223-6

GENETICS

Antigenic analysis of the Epstein-Barr virus major membrane antigen (gp350/220) expressed in yeast and mammalian cells: implications for the development of a subunit vaccine. Emini EA, et al. **Virology** 1988 Oct;166(2):387-93

The full-length nucleotide sequences of the virulent Trinidad donkey strain of Venezuelan equine encephalitis virus and its attenuated vaccine derivative, strain TC-83. Kinney RM, et al. **Virology** 1989 May;170(1):19-30

Identification of mutations in the M RNA of a candidate vaccine strain of Rift Valley fever virus. Takehara K, et al. **Virology** 1989 Apr;169(2):452-7

IMMUNOLOGY

Efficacy of an inactivated porcine parvovirus (PPV) vaccine under field conditions. Sørensen KJ, et al. **Acta Vet Scand** 1988;29(3-4):295-302

Antigenic properties of vaccinia virus and of the virus recombinant strains expressing heterologous genes. Chelyapov NV, et al. **Acta Virol (Praha)** 1988 Sep; 32(5):409-16

Total haemolytic complement profile in chicks following fowl pox vaccination or infection. Kapil S, et al. **Acta Virol (Praha)** 1989 Jan;33(1):87-90

Mucosal priming alters pathogenesis of Rift Valley fever. Anderson AO, et al. **Adv Exp Med Biol** 1988;237:717-23

Toward understanding the molecular basis for attenuation of picornaviruses. Cohen JI. **Adv Virus Res** 1989;36:153-80 (124 ref.)

Transmission of a vaccinal strain of infectious bovine rhinotracheitis virus from intranasally vaccinated steers commingled with nonvaccinated steers. Baker JC, et al. **Am J Vet Res** 1989 Jun;50(6):814-6

Specificity of neutralizing and precipitating antibodies induced in healthy calves by monovalent modified-live bovine viral diarrhea virus vaccines. Bolin SR, et al. **Am J Vet Res** 1989 Jun;50(6):817-21

Antibody response of pseudorabies virus subunit-vaccinated pigs to viral nucleocapsid proteins following low-dose virus challenge of immunity. McGinley MJ, et al. **Am J Vet Res** 1989 Aug;50(8):1290-3

Lesions of transmissible gastroenteritis virus infection in experimentally inoculated pigs suckling immunized sows. Moxley RA, et al. **Am J Vet Res** 1989 May;50(5):708-16

Induction of antibodies to pseudorabies virus by immunization with antiidiotypic antibodies. Gurish MF, et al. **Ann Inst Pasteur Immunol** 1988 Nov-Dec;139(6):677-87

The serological response to foot-and-mouth disease vaccination is not affected by simultaneous infectious bovine rhinotracheitis/adenovirus/parainfluenza 3 vaccination. de Clercq K, et al. **Arch Exp Veterinarmed** 1989 May;43(3):409-13

Estimation of maternally acquired immunity in suckling mice to evaluate foot-and-mouth disease vaccine. Strobbe R, et al. **Arch Exp Veterinarmed** 1988 May;42(3):410-3

Infectious bronchitis: safety and protection in chickens with maternal antibody. Klieve AV, et al. **Aust Vet J** 1988 Dec; 65(12):396-7

Comparative serological evaluation of avian influenza vaccine in turkeys. Abraham A, et al. **Avian Dis** 1988 Oct-Dec;32(4):659-62

Studies of infectious laryngotracheitis vaccines: immunity in broilers. Andreasen JR Jr, et al. **Avian Dis** 1989 Jul-Sep; 33(3):516-23

Studies of infectious laryngotracheitis vaccines: immunity in layers. Andreasen JR Jr, et al. **Avian Dis** 1989 Jul-Sep; 33(3):524-30

Serologic comparison of avian reovirus isolates using virus neutralization and an enzyme-linked immunoasorbent assay. Giambrone JJ, et al. **Avian Dis** 1988 Oct-Dec;32(4):678-80

Effects of vaccines on the canine immune system. Phillips TR, et al. **Can J Vet Res** 1989 Apr;53(2):154-60

Anti-viral protection and prevention of lymphocytic choriomeningitis or of the local footpad swelling reaction in mice by immunization with vaccinia-recombinant virus expressing LCMV-WE nucleoprotein or glycoprotein. Hany M, et al. **Eur J Immunol** 1989 Mar;19(3):417-24

HIV-specific T lymphocyte immunity in mice immunized with a recombinant vaccinia virus. Michel F, et al. **Eur J Immunol** 1988 Dec;18(12):1917-24

In vitro T cell responses to a candidate Epstein-Barr virus vaccine: human CD4+ T cell clones specific for the major envelope glycoprotein gp340. Ulaeto D, et al. **Eur J Immunol** 1988 Nov;18(11):1689-97

The role of antibodies in natural and acquired resistance of mice to vesicular stomatitis virus. Gobet R, et al. **Exp Cell Biol** 1988;56(4):175-80

Safety & efficacy of Japanese encephalitis vaccine produced in India. Rao Bhau LN, et al. **Indian J Med Res** 1988 Oct; 88:301-7

Antibody titers in domestic ferret jills and their kits to canine distemper virus vaccine. Appel MJ, et al. **J Am Vet Med Assoc** 1988 Aug 1;193(3):332-3

Feline leukemia virus infection in a captive cheetah and the clinical and antibody response of six captive cheetahs to vaccination with a subunit feline leukemia virus vaccine. Briggs MB, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1197-9

Serologic response of domestic ferrets (Mustela putorius furo) to canine distemper and rabies virus vaccines. Hoover JP, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):234-8

Strategies for the development of vaccines against HIV. Minor PD. **J Antimicrob Chemother** 1989 Jan;23 Suppl A:55-62 (19 ref.)

Reactions to and antigenicity of two human-rhesus rotavirus reassortant vaccine candidates of serotypes 1 and 2 in Venezuelan infants. Flores J, et al. **J Clin Microbiol** 1989 Mar;27(3):512-8

Formalin-inactivated respiratory syncytial virus vaccine induces antibodies to the fusion glycoprotein that are deficient in fusion-inhibiting activity. Murphy BR, et al. **J Clin Microbiol** 1988 Aug;26(8):1595-7

Solid-phase immunosorbent technique for rapid detection of Rift Valley fever virus immunoglobulin M by hemagglutination inhibition. Soliman AK, et al. **J Clin Microbiol** 1988 Sep;26(9):1913-5

Antibody responses and protection in mice immunized with herpes simplex virus type 1 antigen immune-stimulating complex preparations. Ertürk M, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2149-55

Cross-protection against microvariants of influenza virus type B by vaccinia viruses expressing haemagglutinins from egg- or MDCK cell-derived subpopulations of influenza virus type B/England/222/82. Rota PA, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1533-7

T lymphocyte cytotoxicity with natural varicella-zoster virus infection and after immunization with live attenuated varicella vaccine. Diaz PS, et al. **J Immunol** 1989 Jan 15; 142(2):636-41

Immunity to whole varicella-zoster virus antigen and glycoproteins I and p170: relation to the immunizing regimen of live attenuated varicella vaccine. Diaz PS, et al. **J Infect Dis** 1988 Dec;158(6):1245-52

Humoral immune response to cytomegalovirus Towne vaccine strain and to Toledo low-passage strain. Gönczöl E, et al. **J Infect Dis** 1989 May;159(5):851-9

Prolonged efficacy of rhesus rotavirus vaccine in Swedish children. Gothefors L, et al. **J Infect Dis** 1989 Apr; 159(4):753-7

Human-rhesus reassortant rotavirus vaccines: safety and immunogenicity in adults, infants, and children. Halsey NA, et al. **J Infect Dis** 1988 Dec;158(6):1261-7

Herpes simplex virus type 1-vaccinia virus recombinant expressing glycoprotein B: protection from acute and latent infection. Willey DE, et al. **J Infect Dis** 1988 Dec; 158(6):1382-6

Factors affecting antibody response of newborns to repeated administration of rotavirus RIT 4237 [letter] Cadranel S, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep-Oct;7(5):787

Molecularly engineered vaccine which expresses an immunodominant T-cell epitope induces cytotoxic T lymphocytes that confer protection from lethal virus infection. Klavinskis LS, et al. **J Virol** 1989 Oct; 63(10):4311-6

Immunization against multiple viruses by using solid-matrix-antibody-antigen complexes. Randall RE, et al. **J Virol** 1989 Apr;63(4):1808-10

Herpes simplex virus (HSV)-specific proliferative and cytotoxic T-cell responses in humans immunized with an HSV type 2 glycoprotein subunit vaccine. Zarling JM, et al. **J Virol** 1988 Dec;62(12):4481-5

Elicitation of bovine antibody to BLV-gp51 by BLV-vaccination. Maruyama K, et al. **Leukemia** 1988 Dec; 2(12 Suppl):216S-222S

The ability by different preparations of porcine parvovirus to enhance humoral immunity in swine and guinea pigs. Gualandi GL, et al. **Microbiologica** 1988 Oct;11(4):363-9

Persistence of immunity to varicella in children with leukemia immunized with live attenuated varicella vaccine. Gershon AA, et al. **N Engl J Med** 1989 Apr 6;320(14):892-7

Reactogenicity and antigenicity of rhesus rotavirus vaccine (MMU-18006) in newborn infants in Venezuela. Flores J, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):776-80

Transmission of foot-and-mouth disease by vaccinated cattle following natural challenge. Donaldson AI, et al. **Res Vet Sci** 1989 Jan;46(1):9-14

Reactogenicity and immunogenicity of rotavirus WC3 vaccine in 5-12 month old infants. Garbag-Chenon A, et al. **Res Virol** 1989 May-Jun;140(3):207-17

New hope on the AIDS vaccine front [news] Marx JL. **Science** 1989 Jun 16;244(4910):1254, 1256

Clinical and immunological studies of rotavirus vaccines. Vesikari T. **Southeast Asian J Trop Med Public Health** 1988 Sep;19(3):437-47

Dengue-4 vaccine: neurovirulence, viraemia and immune responses in rhesus and cynomolgus monkeys. Angsubhakorn S, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):746-9

Observations on antibody levels associated with active and passive immunity to African horse sickness. Blackburn NK, et al. **Trop Anim Health Prod** 1988 Nov;20(4):203-10

Controlled organization of multimolecular complexes of enveloped virus glycoproteins: study of immunogenicity. Berezin VE, et al. **Vaccine** 1988 Oct;6(5):450-6

Epitope specificity and protective efficacy of the bovine immune response to bovine herpesvirus-1 glycoprotein vaccines. Israel BA, et al. **Vaccine** 1988 Aug;6(4):349-56

Immunogenicity of a recombinant vaccinia virus expressing envelope a glycoprotein of bovine leukaemia virus. Ohishi K, et al. **Vaccine** 1988 Oct;6(5):428-32

Serological responses in cats vaccinated with FeLV ISCOM and an inactivated FeLV vaccine. Osterhaus A, et al. **Vaccine** 1989 Apr;7(2):137-41

Experimental polyvalent ISCOMs subunit vaccine induces antibodies that neutralize human and bovine respiratory syncytial virus. Trudel M, et al. **Vaccine** 1989 Feb;7(1):12–6

Enhancement of humoral immune responses against viral vaccines by a non–pyrogenic 6–O–acylmuramyldipeptide and synthetic low toxicity analogues of lipid A. Tsujimoto M, et al. **Vaccine** 1989 Feb;7(1):39–48

Improved recombinant LC16m0 or LC16m8 vaccinia virus successfully expressing hepatitis B surface antigen. Watanabe K, et al. **Vaccine** 1989 Feb;7(1):53–9

Antigen–specific proliferative responses to vesicular stomatitis virus following immunization of cattle with inactive virus. Redelman D, et al. **Vet Immunol Immunopathol** 1989 Mar;20(4):363–73

Influence of immunomodulatory agents on bovine humoral and cellular immune responses to parenteral inoculation with bovine rotavirus vaccines. Archambault D, et al. **Vet Microbiol** 1988 Aug;17(4):323–34

The effects of vaccination with tissue culture–derived viral vaccines on detection of antibodies to equine arteritis virus by enzyme–linked immunosorbent assay (ELISA). Cook RF, et al. **Vet Microbiol** 1989 Jun;20(2):181–9

Isolation and characterization of monoclonal antibodies against an attenuated vaccine strain of equine herpesvirus type 1 (EHV–1). Meyer H, et al. **Vet Microbiol** 1988 Sep; 18(1):95–101

Possible impairment of rotavirus immune response in cattle infected with BLV [letter] Archambault D, et al. **Vet Rec** 1989 May 27;124(21):570

Immune response and protection of cattle and pigs generated by a vaccinia virus recombinant expressing the F protein of rinderpest virus. Belsham GJ, et al. **Vet Rec** 1989 Jun 24;124(25):655–8

Development of an ELISA to differentiate between animals either vaccinated with or infected by Aujeszky's disease virus. Eloit M, et al. **Vet Rec** 1989 Jan 28;124(4):91–4

Control of Aujeszky's disease. Kit S, et al. **Vet Rec** 1989 Jun 17;124(24):635

Comparison of two ELISAs for detecting antibodies to glycoprotein I of Aujeszky's disease virus. Van Oirschot JT, et al. **Vet Rec** 1989 Jul 15;125(3):63–4

Serological response to a booster foot–and–mouth disease vaccination with strains different from the primary vaccine. De Clercq K, et al. **Vet Res Commun** 1989;13(3):199–204

Immunization with a vaccinia recombinant expressing the F protein protects rabbits from challenge with a lethal dose of rinderpest virus. Barrett T, et al. **Virology** 1989 May; 170(1):11–8

Protection of guinea pigs from Lassa fever by vaccinia virus recombinants expressing the nucleoprotein or the envelope glycoproteins of Lassa virus. Morrison HG, et al. **Virology** 1989 Jul;171(1):179–88

Duration of immunity in swine inoculated with a monovalent foot–and–mouth disease oil emulsion vaccine. Buonavoglia C, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):397–401

Humoral immunity of neonatal swine after FMD vaccination. Panjević D, et al. **Zentralbl Veterinarmed [B]** 1989 Mar; 36(2):119–22

[Objective evaluation of the immunogenic effectiveness of polyvalent vaccines against enteral infections of newborn calves under enzootic conditions] Menšík J, et al. **Vet Med (Praha)** 1989 Jan;34(1):1–12 (Eng. Abstr.) **(Cze)**

[Production and trials of inactivated vaccines in oil excipient against Newcastle disease in Ethiopia] Thiaucourt F. **Rev Elev Med Vet Pays Trop** 1988;41(3):229–33 (Eng. Abstr.) **(Fre)**

[Immunomorphological studies of swine vaccinated with an attenuated vaccine against swine fever] Dshurov A, et al. **Arch Exp Veterinarmed** 1988 May;42(3):347–59 (Eng. Abstr.) **(Ger)**

[Correlation between 146S antigen dosage and antibody titers after foot–and–mouth disease vaccination in cattle and swine] Liebermann HT, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):528–36 (Eng. Abstr.) **(Ger)**

[Testing the effectiveness of foot–and–mouth disease vaccines: the relationship between test infection results and corresponding neutralization titers of vaccinated cattle] Bengeladorff HJ. **Berl Munch Tierarztl Wochenschr** 1989 Jun 1;102(6):193–8 (Eng. Abstr.) **(Ger)**

[Training of the immune system of foals against ERP virus infections by frequent vaccination with presently available commercial vaccines] Bürki F, et al. **DTW** 1989 Apr; 96(4):162–5 (Eng. Abstr.) **(Ger)**

[Use of synthetic peptides in virology] Truyen U, et al. **DTW** 1989 Feb;96(2):69–72 (Eng. Abstr.) **(Ger)**

[Immunization against HIV. Problems in developing a vaccine] Uhl D. **Med Monatsschr Pharm** 1988 Nov; 11(11):376–8 (2 ref.) **(Ger)**

[HIV: virology and vaccination] Löwer J, et al. **Verh Dtsch Ges Inn Med** 1988;94:537–42 (20 ref.) **(Ger)**

[Clinico–immunologic evaluation of a trivalent vaccine against measles, rubella and mumps] Schettini F, et al. **Minerva Pediatr** 1989 Mar;41(3):117–22 (Eng. Abstr.) **(Ita)**

[Enzyme–linked immunospot (ELISPOT) assay for detection of anti–HBs antibody secreting cells in peripheral blood] Ohara M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):966 **(Jpn)**

[Molecular mechanisms of proteolytic processing of viral proteins and the problem of antiviral chemotherapy and vaccine design] Zhirnov OP. **Mol Biol (Mosk)** 1988 May–Jun;22(3):581–600 (163 ref.) (Eng. Abstr.) **(Rus)**

[Monoclonal antibodies to flavivirus antigens induced by a vaccinal strain of yellow fever] Gaidamovich SIa, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):461–5 (Eng. Abstr.) **(Rus)**

[Characteristics of the immune response in mice immunized with the inactivated Lassa virus] Ignat'ev GM, et al. **Vopr Virusol** 1989 Mar–Apr;34(2):213–6 (Eng. Abstr.) **(Rus)**

[Persistence of the tick–borne encephalitis virus in the vaccinated organism] Levina LS, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):485–90 **(Rus)**

[The status of research to develop new vaccines against infection caused by the respiratory syncytial virus] Pervikov IuV, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):523–9 (53 ref.) **(Rus)**

[Neutralization of foot–and–mouth disease virus O1 Campos by antibodies induced by a synthetic peptide] Piccone M, et al. **Rev Argent Microbiol** 1988 Apr–Jun;20(2):69–75 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

A simple novel procedure for preparation of herpes simplex virus subunit vaccine. Rajčáni J, et al. **Acta Virol (Praha)** 1988 Jul;32(4):317–28

Antigenic structures recognized by T cells: towards the rational design of an AIDS vaccine. Cease KB, et al. **Aids** 1988;2 Suppl 1:S95–101 (63 ref.)

Perspectives on developing anti–idiotype–based vaccines for controlling HIV infection. Kennedy RC, et al. **Aids** 1988; 2 Suppl 1:S119–27 (73 ref.)

Use of vaccinia virus vectors for development of AIDS vaccines. Moss B. **Aids** 1988;2 Suppl 1:S103–5 (30 ref.)

Primate models for evaluation of AIDS vaccines. Zarling JM. **Aids** 1988;2 Suppl 1:S113–7 (45 ref.)

From Jenner to genes—the next generation of virus vaccines. Brown F. **Biochem Soc Symp** 1987;53:75–84 (23 ref.)

A new freeze–dried living virus vaccine against sheep–pox. Précausta P, et al. **Comp Immunol Microbiol Infect Dis** 1979;1(4):305–19

Induction of anti–viral immunity by an anti–idiotypic antibody directed to a Sendai virus specific T helper cell clone. Ertl HC, et al. **Int Rev Immunol** 1986 Jan;1(1):41–65 (81 ref.)

Limitations of the anti–idiotype strategy for an HIV vaccine. Beverley PC, et al. **J Autoimmun** 1989 Jun;2 Suppl:243–9

Vaccine potential of a live avirulent herpes simplex virus. Thompson RL, et al. **Microb Pathog** 1986 Aug;1(4):409–16

Program for accelerated development of new viral vaccines. Jordan WS Jr. **Prog Med Virol** 1988;35:1–20 (2 ref.)

The present status of rotavirus vaccine development. Bishop R. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):429–35

Development of the second generation Japanese encephalitis (JE) vaccine. Igarashi A. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):493–500

Japanese encephalitis virus live–attenuated vaccine, Chinese strain SA14–14–2; adaptation to primary canine kidney cell cultures and preparation of a vaccine for human use. Eckels KH, et al. **Vaccine** 1988 Dec;6(6):513–8

Current approaches to the development of vaccines effective against parainfluenza and respiratory syncytial viruses. Murphy BR, et al. **Virus Res** 1988 Aug;11(1):1–15 (58 ref.)

METABOLISM

Immunoblotting reveals differences in the accumulation of envelope protein by wild–type and vaccine strains of yellow fever virus. Cane PA, et al. **J Gen Virol** 1989 Mar; 70 (Pt 3):557–64

PHARMACOLOGY

Host immune responses after administration of inactivated Venezuelan equine encephalomyelitis virus vaccines—III. Kinetics for neutralizing antibody immunoglobulin class responses in donors and adoptively–immunized recipients. Rabinowitz SG, et al. **Comp Immunol Microbiol Infect Dis** 1979;1(4):295–303

[Effect of combined administration of HBs antigen and anti–HBs antibody on induction of anti–HBs antibody production in vitro and in vivo] Kumagai N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):897–904 (Eng. Abstr.) **(Jpn)**

[Immunomodulating properties of interferon inducers] Ershov FI, et al. **Antibiot Khimioter** 1989 Apr;34(4):270–6 (Eng. Abstr.) **(Rus)**

STANDARDS

Laryngotracheitis in chickens: infection studies and the efficacy of a tissue–culture vaccine in chicks less than four weeks old. Davison S, et al. **Avian Dis** 1989 Jan–Mar; 33(1):24–9

History of cell substrates used for human biologicals. Hayflick L. **Dev Biol Stand** 1989;70:11–26

Efficacy of viral components of a nonabortigenic combination vaccine for prevention of respiratory and reproductive system diseases in cattle. Talens LT, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1273–80

The potency testing of pseudorabies vaccines in pigs. A proposal for a quantitative criterion and a minimum requirement. Stellmann C, et al. **J Biol Stand** 1989 Jan; 17(1):17–27

Serology–based potency test for inactivated Newcastle disease vaccines. Goddard RD, et al. **Vaccine** 1988 Dec; 6(6):530–2

Rapid correlation between field isolates and vaccine strains of foot–and–mouth disease virus. Kitching RP, et al. **Vaccine** 1988 Oct;6(5):403–8

Survey of vaccines and SPF flocks for contamination with chick anaemia agent. Nicholas RA, et al. **Vet Rec** 1989 Feb 18;124(7):170–1

THERAPEUTIC USE

Human trials of AIDS vaccines: novel means of passive and active immunotherapy. Dalgleish AG. **Aids** 1988;2 Suppl 1:S129–31 (15 ref.)

Vaccines and immunology. Overview. Laurence J. **Aids** 1988; 2 Suppl 1:S91–4 (32 ref.)

Human trials of experimental AIDS vaccines: recombinant envelope proteins. Snart RS. **Aids** 1988;2 Suppl 1:S107–11

Experimental treatments for HIV–infected patients. **Am Fam Physician** 1989 Jun;39(6):330

A pathologist's look at infectious diseases: selection by AIDS and other infections, clinical types of immunities and vaccine expectations [published erratum appears in Am J Trop Med Hyg 1989 Jul;41(1):2] Frenkel JK. **Am J Trop Med Hyg** 1989 Apr;40(4):335–43 (47 ref.)

Viral oncolysates in cancer treatment: immunological mechanisms of action (review). Ioannides CG, et al. **Anticancer Res** 1989 May–Jun;9(3):535–44 (92 ref.)

Bovine leucosis virus contamination of a vaccine produced in vivo against bovine babesiosis and anaplasmosis. Rogers RJ, et al. **Aust Vet J** 1988 Sep;65(9):285–7

Further comparison of adjuvants for an inactivated infectious coryza vaccine. Blackall PJ. **Avian Dis** 1988 Oct–Dec; 32(4):831–5

A trial of RIT–4237 rotavirus vaccine in 1–month–old infants. Mutz ID, et al. **Eur J Pediatr** 1989 Jun;148(7):634–5

Long–term immunogenicity and efficacy of hepatitis B vaccine in infants born to HBeAg–positive HBsAg–carrier mothers. Lo KJ, et al. **Hepatology** 1988 Nov–Dec; 8(6):1647–50

Taking a shot at herpes. Athy D. **Ohio Med** 1988 Jun; 84(6):436–7

Varicella exposure time [letter] Brunell PA. **Pediatrics** 1988 Nov;82(5):810–1

Protective immunity against avian influenza induced by a fowlpox virus recombinant. Taylor J, et al. **Vaccine** 1988 Dec;6(6):504–8

Control of infectious bovine rhinotracheitis in calves with a BHV–1 subunit–ISCOM vaccine. Trudel M, et al. **Vaccine** 1988 Dec;6(6):525–9

Animal lentivirus vaccines: problems and prospects. Pearson LD, et al. **Vet Immunol Immunopathol** 1989 Feb; 20(3):183–212 (189 ref.)

[Clinico–immunological aspects of recurrent herpes simplex during vaccine therapy] Semenova TB, et al. **Vestn Dermatol Venerol** 1988;(7):49–53 (Eng. Abstr.) **(Rus)**

[Elements of the systems approach in studying and using antiviral preparations] Pshenichnov VA. **Vopr Virusol** 1989 Mar–Apr;34(2):139–45 (17 ref.) **(Rus)**

[Vaccines today and tomorrow] **Lakartidningen** 1989 Apr 12;86(15):1380–7 **(Swe)**

TOXICITY

Augmentation of retrovirus–induced lymphoid leukosis by Marek's disease herpesviruses in White Leghorn chickens. Bacon LD, et al. **J Virol** 1989 Feb;63(2):504–12

VIREMIA

Efficient isolation of HIV from plasma during different stages of HIV infection. Ehrnst A, et al. **J Med Virol** 1988 Sep; 26(1):23–32

Dengue–4 vaccine: neurovirulence, viraemia and immune responses in rhesus and cynomolgus monkeys. Angsubhakorn S, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):746–9

BLOOD

Survival of human immunodeficiency virus in blood culture systems. Hodinka RL, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1251–4

Canine distemper virus infectivity of various blood fractions for central nervous system vasculature. Krakowka S. **J Neuroimmunol** 1989 Jan;21(1):75–80

COMPLICATIONS

Experimental cytomegalovirus infection: viremic spread to the inner ear. Fukuda S, et al. **Am J Otolaryngol** 1988 May–Jun;9(3):135–41

DIAGNOSIS

Correlation between immunofluorescent detection of human cytomegalovirus immediate early antigens in polymorphonuclear leukocytes and viremia [letter] Grazia Revello M, et al. **J Infect Dis** 1989 Jul;160(1):159–60

ENZYMOLOGY

Virus-like particles associated with reverse transcriptase activity in acute sporadic non-A,non-B hepatitis. Castillo I, et al. **Digestion** 1989;42(1):7-15

ETIOLOGY

Experimental labyrinthitis in rats caused by infecting with virus causing hemorrhagic fever with renal syndrome (HFRS). Tamura M, et al. **Acta Otolaryngol (Stockh)** 1989 Jul-Aug;108(1-2):19-25

Absence of viraemia in cattle after experimental infection with Japanese encephalitis virus. Ilkal MA, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):628-31

IMMUNOLOGY

Relationship between the intrahepatic expression of 'e' and 'c' epitopes of the nucleocapsid protein of hepatitis B virus and viraemia. Ballaré M, et al. **Clin Exp Immunol** 1989 Jan;75(1):64-9

MICROBIOLOGY

The duration of viremia patients with epidemic hemorrhagic fever. Yao ZQ, et al. **Chin Med J [Engl]** 1989 Feb; 102(2):116-9

Relationship between the occurrence of virus in plasma and cerebrospinal fluid of HIV-1 infected individuals. Sönnerborg A, et al. **J Med Virol** 1989 Mar;27(3):258-63

Rift Valley fever infection of rhesus monkeys: implications for rapid diagnosis of human disease. Morrill JC, et al. **Res Virol** 1989 Mar-Apr;140(2):139-46

PREVENTION & CONTROL

Prevention of Rift Valley fever in rhesus monkeys with interferon-alpha. Morrill JC, et al. **Rev Infect Dis** 1989 May-Jun;11 Suppl 4:S815-25

SURGERY

[Surgical treatment of hypersplenism in a viral lesion of the blood and bone marrow cells] Didenko VM, et al. **Klin Med (Mosk)** 1988 Aug;66(8):122-6 (Eng. Abstr.) (Rus)

TRANSMISSION

Exposure of heterosexuals to human immunodeficiency virus and viremia: evidence for continuing risks in spouses of hemophiliacs. Andes WA, et al. **Sex Transm Dis** 1989 Apr-Jun;16(2):68-73

VETERINARY

BVD virus antigens in tissues of persistently viraemic, clinically normal cattle: implications for the pathogenesis of clinically fatal disease. Bielefeldt Ohmann H. **Acta Vet Scand** 1988;29(1):77-84

Viremia and antibody response of small African and laboratory animals to Crimean-Congo hemorrhagic fever virus infection. Shepherd AJ, et al. **Am J Trop Med Hyg** 1989 May;40(5):541-7

Equine interferons following exposure to equid herpesvirus-1 or -4. Edington N, et al. **J Interferon Res** 1989 Aug; 9(4):389-92

BVD-virus infection in peripheral blood mononuclear cells from persistently viraemic calves studied by correlative immunoelectron microscopy. Bielefeldt Ohmann H, et al. **Zentralbl Veterinarmed [B]** 1988 Aug;35(7):477-92

[Intention tremor in a heifer with persistent BVD viremia] Stöber M, et al. **DTW** 1988 Oct;95(9):392-4 (Eng. Abstr.) (Ger)

VIRGIMYCINE see VIRGINIAMYCINS

VIRGINIAMYCINS

ANALYSIS

Determination of virginiamycin in combination with chlortetracycline in feeds by anion-exchange chromatography. Ragheb HS, et al. **Analyst** 1989 Jan; 114(1):57-60

Determination and depletion of residues of carbadox, tylosin, and virginiamycin in kidney, liver, and muscle of pigs in feeding experiments. Lauridsen MG, et al. **J Assoc Off Anal Chem** 1988 Sep-Oct;71(5):921-5

ANTAGONISTS & INHIBITORS

Streptogramins-inactivating activity in three producer streptomycetes. Fernando Fierro J, et al. **FEMS Microbiol Lett** 1989 Apr;49(2-3):243-6

BIOSYNTHESIS

Identification of binding protein of virginiae butanolide C, an autoregulator in virginiamycin production, from Streptomyces virginiae. Kim HS, et al. **J Antibiot (Tokyo)** 1989 May;42(5):769-78

Structure-activity relationships of virginiae butanolide C, an inducer of virginiamycin production in Streptomyces virginiae. Nihira T, et al. **J Antibiot (Tokyo)** 1988 Dec; 41(12):1828-37

ISOLATION & PURIFICATION

Isolation of virginiamycin-M1 by droplet counter-current chromatography. Saito K, et al. **J Chromatogr** 1988 Nov 11;454:387-91

METABOLISM

Virginiamycin metabolism in cattle rumen fluid. Gottschall DW, et al. **Drug Metab Dispos** 1988 Nov-Dec;16(6):804-12

PHARMACOKINETICS

[Study of a possible pristinamycin-antipyrine interaction (letter)] Descotes J, et al. **Presse Med** 1988 Oct 22; 17(36):1859 (Fre)

PHARMACOLOGY

Digestion and faecal mineral content of virginiamycin-fed rabbits exposed to physiological and simulated stress. Fekete S, et al. **Acta Vet Hung** 1988;36(1-2):61-8

Gene heterogeneity for resistance to macrolides, lincosamides and streptogramins in Enterobacteriaceae. Mabilat C, et al. **Ann Inst Pasteur Microbiol** 1988 Nov-Dec; 139(6):677-81

New macrolides active against Streptococcus pyogenes with inducible or constitutive type of macrolide-lincosamide-streptogramin B resistance. Fernandes PB, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):78-81

Binding of novel macrolide structures to macrolides-lincosamides-streptogramin B-resistant ribosomes inhibits protein synthesis and bacterial growth. Goldman RC, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1058-66

Characterization of a novel insertion of the macrolides-lincosamides-streptogramin B resistance transposon Tn554 in methicillin-resistant Staphylococcus aureus and Staphylococcus epidermidis. Tillotson LE, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):541-50

Action of erythromycin and virginiamycin S on polypeptide synthesis in cell-free systems. Chinali G, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):42-52

Effect of pristinamycin on cyclosporin levels in bone marrow transplant recipients [letter] Herbrecht R, et al. **Bone Marrow Transplant** 1989 Jul;4(4):457-8

Comparative in-vitro activity of erythromycin, vancomycin and pristinamycin. Maskell JP, et al. **Infection** 1988; 16(6):365-70

In-vitro activity of the streptogramin group of antimicrobials against Corynebacterium jeikeium and D2 coryneform bacteria [letter] Arora MK, et al. **J Antimicrob Chemother** 1989 Mar;23(3):458-60

Macrolide-lincosamide-streptogramin B (MLS) resistance in cutaneous propionibacteria: definition of phenotypes. Eady EA, et al. **J Antimicrob Chemother** 1989 Apr;23(4):493-502

The nucleotide sequence of Staphylococcus aureus plasmid pT48 conferring inducible macrolide-lincosamide-streptogramin B resistance and comparison with similar plasmids expressing constitutive resistance. Catchpole I, et al. **J Gen Microbiol** 1988 Mar; 134 (Pt 3):697-709

Influence of Virginiamycin on yield of broilers fed four levels of energy. Woodward SA, et al. **Poult Sci** 1988 Aug; 67(8):1222-4

[In vitro activity of miocamycin compared with four other macrolides and with pristinamycin against Branhamella catarrhalis] Suermondt G, et al. **Pathol Biol (Paris)** 1989 May;37(5):386-9 (Eng. Abstr.) (Fre)

THERAPEUTIC USE

Pristinamycin as alternative therapy of generalized postular psoriasis during pregnancy [letter] Aubin F, et al. **Dermatologica** 1988;177(4):247-9

VIRILISM

see related ADRENAL HYPERPLASIA, CONGENITAL

BLOOD

Ovarian Sertoli-Leydig cell tumor with elevated serum alpha-fetoprotein. Motoyama I, et al. **Cancer** 1989 May 15;63(10):2047-53 (28 ref.)

[Effect of sex steroids on the lipoprotein profile] Prömpeler HJ, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):785-7 (Eng. Abstr.) (Ger)

DIAGNOSIS

Diagnostic value of serum testosterone measurement in infancy: two case reports. Ismail AA, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):259-61

Congenital adrenal hyperplasia in females with virilized genitalia: the problem of delayed diagnosis. Luthra M, et al. **Aust Paediatr J** 1988 Aug;24(4):254-7

21-Hydroxylase deficiency in female hyperandrogenism: screening and diagnosis. Azziz R, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):577-84

DRUG THERAPY

The treatment of a hyperandrogenic and virilizing state in an elderly female with a synthetic LHRH agonist. Parr JH, et al. **J Endocrinol Invest** 1988 Jun;11(6):433-6

Usefulness of ketoconazole (Nizoral) in the treatment of androgenization symptoms in women suffering concurrently from candidiasis or dermatomycosis. Kovács I, et al. **Ther Hung** 1988;36(4):174-8

ETIOLOGY

Virilizing pregnancy luteoma: a case report. Yasuda J, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun;14(2):155-60

Ovarian cystadenoma with stromal cell hyperplasia and postmenopausal virilization: a case report. Caron P, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Aug;28(4):341-5

Virilization due to ovarian hyperthecosis in a postmenopausal woman. van Heyningen C, et al. **Gynecol Endocrinol** 1988 Dec;2(4):331-8

Virilization due to a rare ovarian tumor in a postmenopausal woman. Varma TR, et al. **Int J Gynaecol Obstet** 1988 Dec; 27(3):443-9

Virilizing granulosa cell tumor responsive to human chorionic gonadotropin and oral contraceptive with 8-year followup. Zaydon C, et al. **Int J Gynaecol Obstet** 1989 May;29(1):87-90

Scintigraphic localization of ovarian dysfunction. Mountz JM, et al. **J Nucl Med** 1988 Oct;29(10):1644-50

Virilizing serous cystadenoma. Beauchamp PJ, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):513-7

Steroid secretion by a virilizing lipoid cell ovarian tumor: origins of dehydroepiandrosterone sulfate. Shenker Y, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):502-6

[Virilization caused by 21-hydroxylase deficiency and axillary sweat gland hyperplasia] Jourdain JC, et al. **Ann Dermatol Venereol** 1988;115(11):1136-8 (Fre)

[Misdiagnosis of the true sex in girls with congenital adrenogenital syndrome] Hoepffner W, et al. **Padiatr Grenzgeb** 1988;27(5):363-72 (Eng. Abstr.) (Ger)

[A case of virilizing Leydig cell tumor of the accessory adrenal] Kijima Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):549-56 (Jpn)

[Virilizing cancer of the adrenal cortex] Warenik-Szymankiewicz A, et al. **Ginekol Pol** 1988 Jun; 59(6):390-4 (Eng. Abstr.) (Pol)

METABOLISM

[Post-menopausal virilism] Leinonen P, et al. **Duodecim** 1989; 105(10):933-40 (Fin)

PATHOLOGY

[Case report on the differential diagnosis of hyperandrogenism: adrenal or ovarian origin?] Saeger W. **Pathologe** 1988 Nov;9(6):345-50 (Ger)

PREVENTION & CONTROL

Prenatal fetal adrenal suppression following in utero diagnosis of congenital adrenal hyperplasia. Shapiro E, et al. **J Urol** 1989 Aug;142(2 Pt 2):663-6; discussion 667-8

SURGERY

Surgical correction of virilised female external genitalia. Engert J. **Prog Pediatr Surg** 1989;23:151-64

VIRION

Structure of the hepatitis A virion: identification of potential surface-exposed regions. Robertson BH, et al. **Arch Virol** 1989;104(1-2):117-28

[The structure of the CMtV virion at a resolution of 18 Angstroms] Morgunova EIu, et al. **Dokl Akad Nauk SSSR** 1989;305(2):469-74 (Rus)

ANALYSIS

Selective extraction of haemagglutinin and matrix protein from Sendai virions by employing trifluoperazine as a detergent. Baiocchi M, et al. **FEBS Lett** 1988 Sep 26; 238(1):171-4

Proteins specified by bovine herpesvirus type 4: structural proteins of the virion and identification of two major glycoproteins by using monoclonal antibodies. Dubuisson J, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1743-53

A genome-linked copy of the NS-1 polypeptide is located on the outside of infectious parvovirus particles. Cotmore SF, et al. **J Virol** 1989 Sep;63(9):3902-11

Adenovirus L1 52- and 55-kilodalton proteins are required for assembly of virions. Hasson TB, et al. **J Virol** 1989 Sep;63(9):3612-21

Identification of a sequence required for efficient packaging of human immunodeficiency virus type 1 RNA into virions. Lever A, et al. **J Virol** 1989 Sep;63(9):4085-7

A major transcriptional regulatory protein (ICP4) of herpes simplex virus type 1 is associated with purified virions. Yao F, et al. **J Virol** 1989 Aug;63(8):3338-44

Characterization of novel populations of MVM virions containing covalent DNA-protein complexes. Faust EA, et al. **Virology** 1989 Jan;168(1):128-37

Virus-ribosome complexes from cell-free translation systems supplemented with cowpea chlorotic mottle virus particles. Roenhorst JW, et al. **Virology** 1989 Jan;168(1):138-46

Virion and nonstructural polypeptides of human herpesvirus-6. Shiraki K, et al. **Virus Res** 1989 Jun; 13(2):173-8

ENZYMOLOGY

Nucleotide phosphotransferase, nucleotide kinase and inorganic pyrophosphatase activities of killer virions of yeast. Georgopoulos DE, et al. **Yeast** 1987 Jun;3(2):117–29

GENETICS

The human immunodeficiency virus type 2 (HIV–2) contains a novel gene encoding a 16 kD protein associated with mature virions. Franchini G, et al. **AIDS Res Hum Retroviruses** 1988 Aug;4(4):243–50

Effects of polynucleotide inhibitors on transcriptional events of influenza virions. Jackson ML, et al. **Drug Des Deliv** 1986 Aug;1(1):39–45

Helpers for efficient encapsidation of SV40 pseudovirions. Oppenheim A, et al. **Gene** 1989 Apr 15;77(1):79–86

Mutational analysis of the virion–sense genes of maize streak virus. Boulton MI, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2309–23

Sindbis virus ts103 has a mutation in glycoprotein E2 that leads to defective assembly of virions. Hahn CS, et al. **J Virol** 1989 Aug;63(8):3459–65

Filamentous phage morphogenetic signal sequence and orientation of DNA in the virion and gene–V protein complex. Bauer M, et al. **Virology** 1988 Nov;167(1):166–75

Novel virus–like particles containing circular single–stranded DNAs associated with subterranean clover stunt disease. Chu PW, et al. **Virology** 1988 Nov;167(1):38–49

Southern bean mosaic virus RNA remains associated with swollen virions during translation in wheat germ cell–free extracts. Shields SA, et al. **Virology** 1989 Aug;171(2):602–6

IMMUNOLOGY

A 165 kd protein of the herpes simplex virion shares a common epitope with the regulatory protein, ICP4. Bibor–Hardy V, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):124–30

Infectivity–deficient vesicular stomatitis virus produced in the presence of interferon has a functional virion core. Jay FT, et al. **Can J Microbiol** 1989 Feb;35(2):334–9

Class II major histocompatibility complex–restricted T cells specific for a virion structural protein that do not recognize exogenous influenza virus. Evidence that presentation of labile T cell determinants is favored by endogenous antigen synthesis. Eisenlohr LC, et al. **J Exp Med** 1989 Mar 1; 169(3):921–31

Nasopharyngeal secretory antibody response to poliovirus type 3 virion proteins exhibit different specificities after immunization with live or inactivated poliovirus vaccines. Zhaori G, et al. **J Infect Dis** 1989 Jun;159(6):1018–24

[Experimental detection of the paraspecific effects of purified and inactivated poxviruses] Mayr A, et al. **Zentralbl Veterinarmed [B]** 1989 Mar;36(2):81–99 (Eng. Abstr.) (Ger)

[Adsorption study of the virions of the influenza virus and its individual proteins on polystyrene] Sokolova MV, et al. **Vopr Virusol** 1988 May–Jun;33(3):369–72 (Rus)

ISOLATION & PURIFICATION

Viruslike particles in Glossina palpalis gambiensis (Diptera: Glossinidae). Stiles JK, et al. **Ann Soc Belg Med Trop** 1988 Jun;68(2):161–3

Non–A, non–B hepatitis: visualization of virus–like particles from chimpanzee and human sera. Abe K, et al. **Arch Virol** 1989;104(3–4):351–5

Enterically transmitted non–A, non–B hepatitis: recovery of virus–like particles from an epidemic in south Delhi and transmission studies in rhesus monkeys. Panda SK, et al. **Hepatology** 1989 Oct;10(4):466–72

[Viral particles identical to HTLV–I in lymphocyte cultures of an asymptomatic woman whose serum contained antibodies against HTLV–I and HTLV–III/LAV–I and LAV–II] Cardoso EA, et al. **Acta Med Port** 1988 Jan–Feb; 1(1):5–7 (Eng. Abstr.) (Por)

[Detection of virions morphologically identical to the influenza virus in the small intestine of piglets] Kupchinskil LG, et al. **Mikrobiol Zh** 1988 Jul–Aug;50(4):92–4 (Eng. Abstr.) (Rus)

[Occurrence of viral particles of avian sarcoma viruses in sarcoma tissue] Levkut M, et al. **Vet Med (Praha)** 1989 May;34(5):317–20 (Eng. Abstr.) (Slo)

METABOLISM

Flow cytometric method to demonstrate whether anti–HIV–1 agents inhibit virion binding to T4+ cells. Schols D, et al. **J Acquir Immune Defic Syndr** 1989; 2(1):10–5

Leader–encoded open reading frames modulate both the absolute and relative rates of synthesis of the virion proteins of simian virus 40. Sedman SA, et al. **J Virol** 1989 Sep; 63(9):3884–93

Initial interaction of herpes simplex virus with cells is binding to heparan sulfate. WuDunn D, et al. **J Virol** 1989 Jan; 63(1):52–8

Dependence of virus adsorption to the cell surface on the input multiplicity of infection. Lipkind M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):501–5

PATHOGENICITY

The carboxy–terminal 41 amino acids of herpes simplex virus type 1 glycoprotein B are not essential for production of infectious virus particles. Huff V, et al. **J Virol** 1988 Nov; 62(11):4403–6

PHYSIOLOGY

Modulation of lentivirus replication by antibodies. Non–neutralizing antibodies to caprine arthritis–encephalitis virus enhance early stages of infection in macrophages, but do not cause increased production of virions. Jolly PE, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2221–6

ULTRASTRUCTURE

Expression of HIV antigens at the surface of infected T4 cells: immunoelectron microscopic evidence of an immunogenic phase prior to the viral release. Desportes I, et al. **AIDS Res Hum Retroviruses** 1989 Feb;5(1):107–14

Intranuclear inclusions correlate with the ultrastructural detection of herpes–type virions in oral hairy leukoplakia. Fowler CB, et al. **Am J Surg Pathol** 1989 Feb;13(2):114–9

Virus–like particles associated with reverse transcriptase activity in acute sporadic non–A,non–B hepatitis. Castillo I, et al. **Digestion** 1989;42(1):7–15

Intermediate virions in maturation of human immunodeficiency virus, strain LAV. Katsumoto T, et al. **J Electron Microsc (Tokyo)** 1988;37(4):205–7

Nuclear and nucleolar changes in preimplantation mouse embryos expressing numerous virus–like particles. Takeuchi IK. **J Electron Microsc (Tokyo)** 1989;38(1):64–9

Electron microscopic studies of viruses labeled with magnetite. Mizutani H, et al. **Microbiol Immunol** 1989; 33(7):593–9

Analysis of temperature–sensitive mutations in the simian virus 40 gene encoding virion protein 1. Behm M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9421–5

BVD–virus infection in peripheral blood mononuclear cells from persistently viraemic calves studied by correlative immunoelectron microscopy. Bielefeldt Ohmann H, et al. **Zentralbl Veterinarmed [B]** 1988 Aug;35(7):477–92

[A case of adult T–cell leukemia (ATL)—various skin eruptions and virus–like particles in the fresh tumor cells] Yoshinaga H. **Nippon Hifuka Gakkai Zasshi** 1989 Jan; 99(1):25–35 (Eng. Abstr.) (Jpn)

[Structural organization and intravirion interactions of proteins of the bovine leukemia virus] Eremin VF. **Eksp Onkol** 1989;11(4):3–9 (46 ref.) (Eng. Abstr.) (Rus)

[The submolecular structure of the Carnation Mottle virus] Morgunova EYu, et al. **Mol Gen Mikrobiol Virusol** 1989 Mar;(3):29–34 (Eng. Abstr.) (Rus)

VIROIDS

ANALYSIS

Interactions between citrus exocortis and potato spindle tuber viroids in plants of Gynura aurantiaca and Lycopersicon esculentum. Pallás V, et al. **Intervirology** 1989;30(1):10–7

CLASSIFICATION

A scheme for viroid classification. Koltunow AM, et al. **Intervirology** 1989;30(4):194–201

GENETICS

Sequence analysis of minute amounts of viroid RNA using the polymerase chain reaction (PCR). Rapid communication. Puchta H, et al. **Arch Virol** 1989; 106(3–4):335–40

A novel aspect of the information content of viroids. Juhász A, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):455–8

Analysis of RNA structures by temperature–gradient gel electrophoresis: viroid replication and processing. Hecker R, et al. **Gene** 1988 Dec 10;72(1–2):59–74

Hop stunt viroid strains from dapple fruit disease of plum and peach in Japan. Sano T, et al. **J Gen Virol** 1989 Jun; 70 (Pt 6):1311–9

A microscale procedure for isolating and sequencing the viroid RNA present in one gram of infected leaf tissue. Tabler M, et al. **J Virol Methods** 1989 Feb;23(2):111–26

Viroids. Pathogenesis by antisense [news] Symons B. **Nature** 1989 Apr 13;338(6216):542–3

Sequence variability in avocado sunblotch viroid (ASBV). Pallás V, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9864

Nucleotide sequence of a hop stunt viroid (HSVd) isolate from grapefruit in Israel. Puchta H, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1247

Nucleotide sequence of a hop stunt viroid (HSVd) isolate from the German grapevine rootstock 5BB as determined by PCR–mediated sequence analysis. Puchta H, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5841

Infectivity of chimeric viroid transcripts reveals the presence of alternative processing sites in potato spindle tuber viroid. Hammond RW, et al. **Virology** 1989 Jun;170(2):486–95

Grapevine viroid 1B, a new member of the apple scar skin viroid group contains the left terminal region of tomato planta macho viroid. Koltunow AM, et al. **Virology** 1989 Jun;170(2):575–8

ISOLATION & PURIFICATION

Nonradioactive, photobiotin–labelled DNA probes for routine diagnosis of viroids in plant extracts. McInnes JL, et al. **J Virol Methods** 1989 Mar;23(3):299–312

Biotinylated RNA probes for the detection of potato spindle tuber viroid (PSTV) in plants. Roy BP, et al. **J Virol Methods** 1989 Feb;23(2):149–55

Characterisation of synthetic DNA probe detecting potato spindle tuber viroid. Welnicki M, et al. **J Virol Methods** 1989 Apr–May;24(1–2):141–52

PHYSIOLOGY

Self–cleavage of RNA in the replication of viroids and virusoids. Symons RH, et al. **J Cell Sci Suppl** 1987;7:303–18

Subviral pathogens of plants: the viroids. Diener TO. **Ric Clin Lab** 1989 Apr–Jun;19(2):105–28 (120 ref.)

VIROLOGY

A tribute to Dr. Werner Henle collaborator on Alaska medical research. Lanier AP. **Alaska Med** 1988 Sep–Oct; 30(5):161

HISTORY

The Pasteur Institute's contributions to the field of virology. Girard M. **Annu Rev Microbiol** 1988;42:745–63

As it was and as it is: a half–century of progress. Weller TH. **J Infect Dis** 1989 Mar;159(3):378–83

[Some comments on the place of virology among the modern sciences] Cajal N, et al. **Virologie** 1989 Apr–Jun;40(2):153–8 (Fre)

[Virologic research at the Institute of Medical Microbiology at the Greifswald Ernst–Moritz–Arndt University] Döhner L. **Z Gesamte Hyg** 1989 Apr;35(4):184–6 (Eng. Abstr.) (Ger)

[60th anniversary of the D. K. Zabolotnyi Institute of Microbiology and Virology of the Academy of Sciences of the Ukrainian SSR] Skripal' IG. **Mikrobiol Zh** 1988 May–Jun;50(3):3–14 (Rus)

METHODS

Effects of sonication and centrifugation of clinical specimens on the recovery of herpes simplex virus. Arens M, et al. **Diagn Microbiol Infect Dis** 1988 Nov;11(3):137–43

Pipetting errors in viral titrations: a useful approach. Husson–van Vliet J, et al. **J Virol Methods** 1988 Dec; 22(2–3):183–90

Temperature–sensitive gel for virus concentration from urine. Maheshkumar S, et al. **J Virol Methods** 1989 Jan;23(1):41–6

Centrifugal enhancement of human immunodeficiency virus (HIV) and human herpesvirus type 6 (HHV–6) infection in vitro. Pietroboni GR, et al. **J Virol Methods** 1989 Apr–May;24(1–2):85–90

Rapid detection of human parvovirus B19 DNA by dot–hybridization and the polymerase chain reaction. Salimans MM, et al. **J Virol Methods** 1989 Jan;23(1):19–28

Intracellular vesicular stomatitis virus nucleocapsids and virions visualized by surface spreading. Yazaki K, et al. **J Virol Methods** 1989 Jan;23(1):1–12

Elimination of murine viral pathogens from the caecal contents of mice by anaerobic preparation. Koopman JP, et al. **Lab Anim** 1989 Jan;23(1):76–80

[The avidin–biotin system. Its application in virology] Popa LM, et al. **Virologie** 1989 Jan–Mar;40(1):43–57 (21 ref.) (Eng. Abstr.) (Fre)

[X–ray structural analysis in virology (editorial)] **Vopr Virusol** 1988 Sep–Oct;33(5):638–40 (Rus)

[The possibility of using equine serum albumin in place of bovine serum albumin and ovalbumin in radioimmunological and immunoenzyme analyses and in virological practice] Kolmakova MV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):47–50 (Eng. Abstr.) (Rus)

STANDARDS

[Sorbitol–gelatin and glutamic acid–lactose solutions as stabilizers of reference preparations of measles virus (published erratum appears in Bol Of Sanit Panam 1989 Jan;106(1):31)] de Rizzo E, et al. **Bol Of Sanit Panam** 1988 Jul;105(1):45–52 (Eng. Abstr.) (Por)

TRENDS

[The Institute of Microbiology and Virology of the Academy of Sciences of the Ukrainian SSR on the 70th anniversary of the Great October Revolution (editorial)] **Mikrobiol Zh** 1987 Nov–Dec;49(6):3–4 (Rus)

[Cell engineering in virology (editorial)] **Vopr Virusol** 1989 Mar–Apr;34(2):254–5 (Rus)

VIRULENCE

Extracellular and surface–bound biological activities of Vibrio fluvialis, Vibrio furnissii and related species. Myatt DC, et al. **Med Microbiol Immunol (Berl)** 1989; 178(5):279–87

Phase variation in Bordetella pertussis by frameshift mutation in a gene for a novel two–component system. Stibitz S, et al. **Nature** 1989 Mar 16;338(6212):266–9

HIV infectiousness and the AIDS epidemic. Rees M. **Scand J Soc Med** 1989;17(1):33–8

VIRUS ACTIVATION

Induction of expression of HIV in latently or chronically infected cells. Rosenberg ZF, et al.
AIDS Res Hum Retroviruses 1989 Feb;5(1):1–4 (54 ref.)

Reactivation of latent herpes simplex virus-1 (HSV) from mouse footpad cells demonstrated by in situ hybridization. Clements GB, et al. **Arch Virol** 1989;104(1–2):95–106

Fatal hepatitis B reactivation after autologous bone marrow transplantation. Webster A, et al.
Bone Marrow Transplant 1989 Mar;4(2):207–8

Absence of induction of enhanced reactivation of herpes simplex virus in cells from xeroderma pigmentosum patients without skin cancer. Abrahams PJ, et al. **Cancer Res** 1988 Nov 1;48(21):6054–7

Induction of Epstein–Barr virus in B-lymphoblastoid cells by human immunodeficiency virus type 1. Lai PK, et al. **Int J Cancer** 1989 Jun 15;43(6):1104–11

A large component of the antiviral activity of mouse interferon-gamma may be due to its induction of interferon-alpha. Hughes TK, et al.
J Biol Regul Homeost Agents 1987 Jan–Mar;1(1):29–32

Viral antigen stimulation of the production of human monokines capable of regulating HIV1 expression. Clouse KA, et al. **J Immunol** 1989 Jul 15;143(2):470–5

Activation of the human immunodeficiency virus long terminal repeat by herpes simplex virus type 1 is associated with induction of a nuclear factor that binds to the NF-kappa B/core enhancer sequence. Gimble JM, et al. **J Virol** 1988 Nov;62(11):4104–12

Activation of Epstein–Barr virus in latently infected cell lines. Luka J. **J Virol Methods** 1988 Sep;21(1–4):223–7 (15 ref.)

Reactivation of hepatitis B [letter] **Lancet** 1989 May 13; 1(8646):1083–4

Thymidine kinase-negative herpes simplex virus mutants establish latency in mouse trigeminal ganglia but do not reactivate. Coen DM, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4736–40

Tumor necrosis factor alpha activates human immunodeficiency virus type 1 through induction of nuclear factor binding to the NF-kappa B sites in the long terminal repeat. Duh EJ, et al.
Proc Natl Acad Sci U S A 1989 Aug;86(15):5974–8

Activation of prophage P4 by the P2 Cox protein and the sites of action of the Cox protein on the two phage genomes. Saha S, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3973–7

Heat inactivation of human immunodeficiency virus in solutions of antithrombin III. Einarsson M, et al.
Transfusion 1989 Feb;29(2):148–52

Inactivation of the human immunodeficiency viruses (HIV-1 and HIV-2) during the manufacturing of placental albumin and gammaglobulins. Grandgeorge M, et al. **Transfusion** 1989 Sep;29(7):629–34

Reactivation of latent rat cytomegalovirus by a combination of immunosuppression and administration of allogeneic immunocompetent cells. Bruning JH, et al.
Transplantation 1989 May;47(5):917–8

Transmission of Epstein–Barr virus by a transplanted kidney, with activation by OKT3 antibody. Denning DW, et al.
Transplantation 1989 Jul;48(1):141–4

[Specific and nonspecific indicators of activation of influenza viruses before an epidemic caused by influenza viruses subtype A/H3N2 and type B in Czechoslovakia in 1986] Heinz F, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jan; 38(1):1–9 (Eng. Abstr.) (Cze)

[Toward an unpublished method of detecting human retroviruses: activation of HIV-1 LacZ recombinant provirus by the tat gene product] Bonnerot C, et al.
C R Acad Sci [III] 1988;307(6):311–6 (Eng. Abstr.) (Fre)

[Latent infection and reactivation of herpes virus] Kodo H. **Nippon Rinsho** 1989 Feb;47(2):267–70 (Jpn)

[Reactivation of cytomegalovirus due to secondary immunodeficiency] Matsumoto K, et al. **Nippon Rinsho** 1989 Feb;47(2):452–8 (Jpn)

[Mutagenic activity of native and inactivated herpes simplex virus] Rubashevskiĭ EL, et al. **Biol Nauki** 1988;(9):83–7 (Eng. Abstr.) (Rus)

[The effect of genotype on the induction of prophage lambda in E. coli cells by ionizing radiation of various LET] Bonev MN, et al. **Radiobiologiia** 1989 Jan–Feb;29(1):30–5 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Inactivation of human immunodeficiency virus in vitro by gossypol. Polsky B, et al. **Contraception** 1989 Jun; 39(6):579–87

Inhibition of chemical Epstein–Barr virus induction by dimethyl sulfoxide and related polar compounds. Yanase S, et al. **Intervirology** 1989;30(3):163–8

The effects of 5-azacytidine, 12-O-tetradecanoylphorbol 13-acetate and sodium n-butyrate on reactivation of alphaherpesvirus saimiri from explant cultures of latently infected rabbit dorsal root ganglia. Mossman SP, et al.
J Gen Virol 1989 Sep;70 (Pt 9):2507–12

Studies on inhibitors of skin tumor promotion, III. Inhibitory effects of isoflavonoids from Wisteria brachybotrys on Epstein–Barr virus activation. Konoshima T, et al.
J Nat Prod 1988 Nov–Dec;51(6):1266–70

Trichloroethylene cranial neuropathy: is it really a toxic neuropathy or does it activate latent herpes virus? Cavanagh JB, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):297–303 (47 ref.)

The transfer of cytomegalovirus infection in rats by latently infected renal allografts, and the role of various immunosuppressive regimens in virus reactivation. Bruning JH, et al. **Transplantation** 1988 Oct;46(4):623–4

[Hepatitis B associated membraneous glomerulonephritis: healing following drug-induced reactivation of hepatitis] Tönz O, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):539–47 (Eng. Abstr.) (Ger)

[Suppresive effect of CDDP on induction of the Epstein–Barr virus antigen synthesis by n-butyrate] Furukawa M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Feb;92(2):189–93 (Eng. Abstr.) (Jpn)

[The search for antibiotics not exerting activating action in the persistence of the tick-borne encephalitis virus] Malenko GV, et al. **Vopr Virusol** 1989 Mar–Apr; 34(2):197–200 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Induction of expression of human immunodeficiency virus in a chronically infected promonocytic cell line by ultraviolet irradiation. Stanley SK, et al.
AIDS Res Hum Retroviruses 1989 Aug;5(4):375–84

Correlation between the induction of heat shock protein 70 and enhanced viral reactivation in mammalian cells treated with ultraviolet light and heat shock. Williams KJ, et al.
Cancer Res 1989 May 15;49(10):2735–42

Animal model of ultraviolet-radiation-induced recurrent herpes simplex virus infection. Stanberry LR.
J Med Virol 1989 Jul;28(3):125–8

Induction of lambda prophage near the site of focused UV laser radiation. Matchette LS, et al.
Photochem Photobiol 1989 Feb;49(2):161–7

UV induction of coliphage 186: prophage induction as an SOS function. Lamont I, et al.
Proc Natl Acad Sci U S A 1989 Jul;86(14):5492–6

[Induction of prophage lambda during the irradiation of E. coli cells exposed to radiations of various LET] Bonev M, et al. **Radiobiologiia** 1988 Nov–Dec;28(6):767–71 (Eng. Abstr.) (Rus)

VIRUS CULTIVATION

see related
TISSUE CULTURE

Survival of human immunodeficiency virus in blood culture systems [letter] MacLowry JD. **Arch Pathol Lab Med** 1989 Sep;113(9):967

Coxsackievirus B-3 selection of virus resistant Buffalo green monkey kidney cells and chromosome analysis of parental and resistant cells. Cao Y, et al. **Arch Virol** 1988; 101(3–4):209–19

Cell lines for growth of sheep viruses. Pye D.
Aust Vet J 1989 Jul;66(7):231–2

Japanese encephalitis virus live-attenuated vaccine, Chinese strain SA14-14-2; adaptation to primary canine kidney cell cultures and preparation of a vaccine for human use. Eckels KH, et al. **Vaccine** 1988 Dec;6(6):513–8

A heteroploid permanent cell line originating from embryonic calf thyroid supporting the replication of all known bovine adenovirus serotypes. Benkő M, et al.
Vet Microbiol 1989 Apr;19(4):317–24

A rapid method for the large scale preparation of bovine leukemia virus antigen. Buck C, et al. **Vet Microbiol** 1988 Jun;17(2):107–16

Recovery of virus from sludge. Albert M, et al.
Z Gesamte Hyg 1988 Sep;34(9):516–8

INSTRUMENTATION

The effect of substrate on the production of infectious virus by cells in culture. Varani J, et al. **J Biol Stand** 1988 Oct; 16(4):333–8

METHODS

High titre Hog Cholera virus production on Cytodex 3 microcarrier cultures. Caij A, et al. **Arch Virol** 1989; 105(1–2):113–8

Hepatitis B virus infection of adult human hepatocytes cultured in the presence of dimethyl sulfoxide. Gripon P, et al. **J Virol** 1988 Nov;62(11):4136–43

Bluetongue virus propagation and plaque assay: variation due to medium and serum supplement. Blanchard-Channell M, et al. **J Virol Methods** 1989 Jun;24(3):265–74

Enhanced production of poxvirus vectors by high speed rolling. Hughes JH, et al. **J Virol Methods** 1988 Oct; 22(1):75–80

Replication of measles virus in the human plasma cell leukemia-derived LICR-LON-HMy2 cell line. Ziola B, et al. **J Virol Methods** 1989 Jun;24(3):313–20

Comparison of in vitro and in vivo systems for propagation of Rift Valley fever virus from clinical specimens. Anderson GW Jr, et al. **Res Virol** 1989 Mar–Apr; 140(2):129–38

[Comparison of a 1-step and 2-step procedure with reference to virus detection in surface waters] Dürkop J, et al.
Z Gesamte Hyg 1988 Sep;34(9):527–9 (Eng. Abstr.) (Ger)

[Effect of the host cells in the crossed neutralization reactions between Junin and Tacaribe viruses] Coulombié FC, et al. **Rev Argent Microbiol** 1984;16(3):159–64 (Eng. Abstr.) (Spa)

VIRUS DISEASES

Tenth congress of the Hungarian Society of Microbiology. Szeged, August 26–29, 1987. Abstracts.
Acta Microbiol Hung 1988;35(2):121–219

A human case of encephalitis associated with vesicular stomatitis virus (Indiana serotype) infection. Quiroz E, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):312–4

The Inoue-Melnick virus, human herpesvirus type 6, and the chronic fatigue syndrome [letter] Dale JK, et al.
Ann Intern Med 1989 Jan 1;110(1):92–3

Infectious diseases in developing countries. Third Kuwait International Medical Sciences Conference. 1987.
APMIS Suppl 1988;3:1–106

Myalgic encephalomyelitis and muscle fatigue [letter] Coakley JH. **BMJ** 1989 Jun 24;298(6689):1711–2

Virus infections and sports performance—a prospective study. Roberts JA, et al. **Br J Sports Med** 1988 Dec; 22(4):161–2

31st Annual Aspen Lung Conference: Infections and the lung. Aspen, Colorado. **Chest** 1989 Mar;95(3 Suppl):171S–242S

Physical activity after viral illness [letter] Rudoff J. **Chest** 1989 Sep;96(3):703

Viral exanthems. **Clin Dermatol** 1989 Jan–Mar;7(1):1–128

Human viral gastroenteritis. Christensen ML.
Clin Microbiol Rev 1989 Jan;2(1):51–89 (422 ref.)

Molecular mimicry as a mechanism for virus-induced autoimmunity. Fujinami RS, et al. **Immunol Res** 1989; 8(1):3–15 (75 ref.)

New challenges from infectious diseases.
Infect Dis Clin North Am 1987 Sep;1(3):501–712

Viral diarrhea. Fairchild PG, et al.
Infect Dis Clin North Am 1988 Sep;2(3):677–84 (11 ref.)

Viruses in pemphigus. Ahmed AR, et al. **Int J Dermatol** 1989 May;28(4):209–17 (102 ref.)

The prognosis and long-term course of viral encephalitis. Berlit P. **J Neuroimmunol** 1988 Dec;20(2–3):117–25

Characteristic early findings in viral encephalitis. Engelhardt A, et al. **J Neuroimmunol** 1988 Dec;20(2–3):161–2

Evidence for an infective cause of childhood leukaemia: comparison of a Scottish new town with nuclear reprocessing sites in Britain [see comments] Kinlen L.
Lancet 1988 Dec 10;2(8624):1323–7. **Comment in:** Lancet 1989 Jan 14;1(8629):94–5

Pathogenic mechanisms of virus-induced type 1 diabetes. Yoon JW. **Microb Pathog** 1988 Aug;5(2):77–86 (61 ref.)

ME syndrome or chronic viral fatigue syndrome? [letter] Palmer KT, et al. **N Z Med J** 1989 May 10;102(867):228

Obstetric and gynecologic infections.
Obstet Gynecol Clin North Am 1989 Jun;16(2):257–452

Viruses and salivary gland disease: are there associations? Scully C. **Oral Surg Oral Med Oral Pathol** 1988 Aug; 66(2):179–83 (84 ref.)

The microbiology of otitis media. Giebink GS.
Pediatr Infect Dis J 1989 Jan;8(1 Suppl):S18–20 (32 ref.)

Viral enteritis in the 1980s: perspective, diagnosis and outlook for prevention. Rodriguez WJ. **Pediatr Infect Dis J** 1989 Aug;8(8):570–8 (135 ref.)

Post-infectious disease syndrome. Bannister BA.
Postgrad Med J 1988 Jul;64(753):559–67 (67 ref.)

Gastrointestinal tract infection in immunocompromised hosts. Arora A. **Trop Gastroenterol** 1989 Jan–Mar;10(1):9–22 (67 ref.)

Abstracts: 41st meeting of the Deutsche Gesellschaft für Hygiene und Mikrobiologie. Heidelberg, October 7–10, 1987. Section Virology.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Jul; 269(1):109–46

Abstracts of papers presented at the session of the Virology Section of the Deutsche Gesellschaft für Hygiene und Mikrobiologie. Berlin, February 18–20, 1988.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Nov; 269(4):513–65

[Breda virus and hemorrhagic enteropathy. Reminder apropos of 1 case (letter)] Lacombe D, et al.
Arch Fr Pediatr 1988 Jun–Jul;45(6):442 (Fre)

[The pathogenesis of multiple sclerosis. Basal membrane injury by persisting viral infection] Simon J.
Fortschr Med 1989 Jan 15;107(1):53 (Ger)

[Acute respiratory virosis] Melino C, et al. **Clin Ter** 1989 Jan 15;128(1):39–52 (27 ref.) (Eng. Abstr.) (Ita)

[Infectious diseases of viral etiology of oro-dermatologic interest (I)] Ruocco V, et al. **G Clin Med** 1988 Jun–Jul; 69(6–7):449–56 (10 ref.) (Ita)

[Autopsy cases of terminal pulmonary infections] Nagata N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan; 27(1):14–24 (Eng. Abstr.) (Jpn)

BLOOD

Hyperferritinemia in malignant histiocytosis, virus-associated hemophagocytic syndrome and familial erythrophagocytic lymphohistiocytosis. A survey of pediatric cases. Esumi N, et al. **Acta Paediatr Scand** 1989 Mar;78(2):268–70

Serum selenium in acute infections. Sammalkorpi K, et al.
Infection 1988 Jul–Aug;16(4):222–4

Expression of gamma interferon on circulating lymphocytes in viral infections. Caruso A, et al. **J Clin Microbiol** 1989 Jun;27(6):1426–9

Glucose intolerance in acute infections. Sammalkorpi K.
J Intern Med 1989 Jan;225(1):15–9

C-reactive protein in early detection of bacteremic versus viral infections in immunocompetent and compromised children. Peltola H, et al. **J Pediatr** 1988 Oct;113(4):641–6

Viruses and hemostasis. Cosgriff TM. **Rev Infect Dis** 1989 May–Jun;11 Suppl 4:S672–88 (250 ref.)

Trace element alterations in infectious diseases. Srinivas U, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):495–500

[Dynamics of interferon formation in acute viral respiratory infections in children] Cheshik SG, et al. **Pediatriia** 1988; (9):10–5 (Eng. Abstr.) (Rus)

[Indices of circulating interferon in different viral diseases] Lavrukhina LA, et al. **Vopr Virusol** 1989 Mar–Apr; 34(2):244–7 (Rus)

[Leukocyte changes in infections] Cosuelo Sánchez JM. **An Esp Pediatr** 1988 Sep;29 Suppl 33:87–9 (9 ref.) (Spa)

COMPLICATIONS

Microbial infection or trauma at cardiovascular representation area of medulla oblongata as some of the possible causes of hypertension or hypotension. Omura Y. **Acupunct Electrother Res** 1988;13(2–3):131–45

Treatment of opportunistic viral infections. Crumpacker CS. **Aids** 1988;2 Suppl 1:S191–3 (18 ref.)

The effect of respiratory viral infections on patients with cystic fibrosis. Ramsey BW, et al. **Am J Dis Child** 1989 Jun;143(6):662–8

Sudden hearing loss: an update. Cole RR, et al. **Am J Otol** 1988 May;9(3):211–5 (39 ref.)

Virus-associated histiocytic proliferations in children. Frequent association with Epstein-Barr virus and congenital or acquired immunodeficiencies. McClain K, et al. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):196–205

Is there a link between infection and infarction? Syrjänen J. **Ann Clin Res** 1988;20(3):151–3

Mechanisms of virus-induced demyelination and remyelination. Rodriguez M. **Ann N Y Acad Sci** 1988; 540:240–51 (64 ref.)

The role of opportunistic viruses in Kaposi's sarcoma (KS) evolution. Giraldo G, et al. **APMIS Suppl** 1989;8:62–70 (75 ref.)

Bulging fontanelles in infants without meningitis [letter] Barry W, et al. **Arch Dis Child** 1989 Apr;64(4):635–6

Viruses and bone marrow failure. Kurtzman G, et al. **Baillieres Clin Haematol** 1989 Jan;2(1):51–67 (124 ref.)

Viruses, immunity and mental disorder. King DJ, et al. **Br J Psychiatry** 1989 Jan;154:1–7 (107 ref.)

A viral aetiology for juvenile rheumatoid arthritis? [letter] Pritchard M. **Br J Rheumatol** 1988 Dec;27(6):495–6

Infectious and noninfectious exposures in the etiology of light chain myeloma: a case-control study. Williams AR, et al. **Cancer Res** 1989 Jul 15;49(14):4038–41

A new continuing fatigue syndrome following mild viral illness. A proscription to exercise [editorial] Lerner AM. **Chest** 1988 Nov;94(5):901–2

Cardiac function at rest and with exercise in the chronic fatigue syndrome. Montague TJ, et al. **Chest** 1989 Apr; 95(4):779–84

Cardiac effects of common viral illnesses. Montague TJ, et al. **Chest** 1988 Nov;94(5):919–25

The relationship between viral infections and onset of allergic diseases and asthma. Busse WW. **Clin Exp Allergy** 1989 Jan;19(1):1–9 (29 ref.)

Theophylline toxicity, acute illness, and cefaclor administration [letter] Hammond D, et al. **DICP** 1989 Apr; 23(4):339–40

Studies on arboviruses—infection of undernourished mice by cocal virus. Duarte F, et al. **Exp Pathol** 1988;35(3):189–95

Multiple infections in cases of cervical cancer from a high-incidence area in tropical Africa. Schmauz R, et al. **Int J Cancer** 1989 May 15;43(5):805–9

Segmental myoclonus in a young man who had had localized encephalitis in childhood. Costa B, et al. **Ital J Neurol Sci** 1989 Jun;10(3):357–9

Histocompatibility determinants in childhood postinfectious encephalomyelitis. Woody RC, et al. **J Child Neurol** 1989 Jul;4(3):204–7

Viral infections in the acquired immunodeficiency syndrome. Miller SE, et al. **J Electron Microsc Tech** 1988 Jan; 8(1):41–78

Viral and bacterial infections in patients with acute myocardial infarction. Mattila KJ. **J Intern Med** 1989 May; 225(5):293–6

Arthritis and viral infection. Petty RE, et al. **J Pediatr** 1988 Nov;113(5):948–9

Influenza-like syndrome in homosexual men: a prospective diagnostic study. de Wolf F, et al. **J R Coll Gen Pract** 1988 Oct;38(315):443–5

Chronic fatigue syndromes: relationship to chronic viral infections. Komaroff AL. **J Virol Methods** 1988 Sep; 21(1–4):3–10 (20 ref.)

A prospective hospital study of the aetiology of community-acquired pneumonia. Lim I, et al. **Med J Aust** 1989 Jul 17;151(2):87–91

Infectious arthritides. **N Y State J Med** 1989 May;89(5):300–1

Postinfectious encephalitis with multifocal white matter lesions. Boulloche J, et al. **Neuropediatrics** 1989 Aug; 20(3):173–5

A brief review of the immune system and its function in relation to: PVFS, non-antibody mediated allergy, autoimmunity and immune deficiency. Tuormaa TE. **Nutr Health** 1988;6(1):53–62 (20 ref.)

The pathogenesis of bacterial infections in infants and children: the role of viruses. Abramson JS. **Perspect Biol Med** 1988 Autumn;32(1):63–72 (60 ref.)

Systemic infections affecting the liver. Some cause jaundice, some do not. Cunha BA. **Postgrad Med** 1988 Oct; 84(5):148–58, 161–3, 166–8 (17 ref.)

Multiple sclerosis as a viral disease. Brahic M, et al. **Res Immunol** 1989 Feb;140(2):176–81; discussion 245–8 (31 ref.)

Fibromyalgia and other chronic fatigue syndromes: is there evidence for chronic viral disease? Goldenberg DL. **Semin Arthritis Rheum** 1988 Nov;18(2):111–20 (47 ref.)

Viral respiratory tract infection and exacerbations of asthma in adult patients. Beasley R, et al. **Thorax** 1988 Sep; 43(9):679–83

Uncommon illness from common infections. Christian CL. **Trans Am Clin Climatol Assoc** 1987;99:111–8 (21 ref.)

A study of viral and rickettsial exposure and causes of fever in Juba, southern Sudan. Woodruff PW, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):761–6

Viral infections and cancer in the tropics. Epstein MA. **Trop Geogr Med** 1988 Jul;40(3):S52–60 (64 ref.)

Investigations on the role of some viral, chlamydian, rickettsian and mycoplasmic agents in several gynecological diseases. Stănescu D, et al. **Virologie** 1989 Jan–Mar;40(1):71–7

[The postviral fatigue syndrome (PVS)—a chronic exhaustion syndrome. Is it possible to prove virus infection? (editorial)] Hornsleth A. **Ugeskr Laeger** 1989 Feb 13; 151(7):417–8 (Dan)

[The role of infection in the precipitation of periarteritis nodosa] Smail A, et al. **Ann Med Interne (Paris)** 1988; 139(5):324–30 (25 ref.) (Eng. Abstr.) (Fre)

[Investigation of serum viral antibody titers in vestibular neuronitis] Hirata T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):835–46 (Eng. Abstr.) (Jpn)

[Outline of proliferative disorders in the mononuclear phagocytic system—virus-associated hemophagocytic syndrome] Yamaguchi H. **Nippon Rinsho** 1989 Mar; 47(3):600–3 (Jpn)

[Tiring induced by viruses—postviral fatigue syndrome (letter)] Scott A. **Ned Tijdschr Geneeskd** 1988 Aug 20; 132(34):1595 (Mul)

[Viruses and arthritis] Rødahl E. **Nord Med** 1988; 103(10):268–9 (Eng. Abstr.) (Nor)

[Immunological and virological aspects of diabetes mellitus] Gulisaeva ES. **Mol Gen Mikrobiol Virusol** 1988 Aug; (8):3–11 (71 ref.) (Eng. Abstr.) (Rus)

[Fenicaberan in the combined treatment of the bronchial obstruction syndrome in acute respiratory viral infections in children] Biktimirov VV, et al. **Pediatriia** 1988;(11):105–6 (Rus)

[Treatment of the croup syndrome in children with acute respiratory viral infection] Karavaev VE, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):31–4 (Eng. Abstr.) (Rus)

[Effect of a mixed viral infection on the development of neoplasms induced by oncogenic viruses] Merekalova ZI, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):424–8 (Eng. Abstr.) (Rus)

[Epilepsy risk factors in children and adolescents with a history of neuroinfection] Khamilis MD. **Zh Nevropatol Psikhiatr** 1989;89(6):30–3 (Eng. Abstr.) (Rus)

[The relation of myocarditis to the development of cardiomyopathy] Kováliková V, et al. **Vnitr Lek** 1989 Apr; 35(4):352–7 (Eng. Abstr.) (Slo)

[Infections in the oncologic patient. Prevention and treatment] Cubellos J. **An Esp Pediatr** 1988 Sep;29 Suppl 33:178–81 (15 ref.) (Spa)

[Anemia in acute infectious processes] Fernández-Delgado R, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:85–6 (5 ref.) (Spa)

[Viral infection and obstructive cholangiography in children] Guerra Aguirre E, et al. **An Esp Pediatr** 1989 Feb; 30(2):91–4 (Eng. Abstr.) (Spa)

[Thrombocytopenias induced by infections] Valverde F, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:83–5 (5 ref.) (Spa)

DIAGNOSIS

Application of chemically synthetic peptides in clinical diagnosis of viruses: theoretical and practical considerations. Ariel N, et al. **Adv Biotechnol Processes** 1988;10:81–96 (77 ref.)

Rapid identification of viral infections in liver, heart, and kidney allograft biopsies by in situ hybridization [letter] Kemnitz J, et al. **Am J Surg Pathol** 1989 Jan;13(1):80–2

Viral infections [letter] Weiss LM, et al. **Am J Surg Pathol** 1989 Oct;13(10):902

Viruses and airborne allergens as precipitants of obstructive respiratory difficulties in children. Korppi M. **Ann Clin Res** 1988;20(6):417–22

It's not a viral syndrome, it's malaria. Klingelberger CE. **Ann Emerg Med** 1989 Feb;18(2):207–10

Role of the virology laboratory in diagnosis and management of patients with central nervous system disease. Chonmaitree T, et al. **Clin Microbiol Rev** 1989 Jan;2(1):1–14 (167 ref.)

In situ hybridization. **Curr Top Microbiol Immunol** 1989; 143:1–90

Colorimetric in-situ hybridization in clinical virology: development of automated technology. Unger ER, et al. **Curr Top Microbiol Immunol** 1989;143:21–31

The use of saliva for viral diagnosis and screening. Mortimer PP, et al. **Epidemiol Infect** 1988 Oct;101(2):197–201 (11 ref.)

Laboratory diagnosis of chlamydial and viral ocular infections. Woodland RM. **Eye** 1988;2 Suppl:S70–80 (93 ref.)

Developments in rapid viral diagnosis. Richman DD. **Infect Dis Clin North Am** 1987 Jun;1(2):311–22 (98 ref.)

Diagnostic validity of multivariate combinations of biochemical analytes as markers for rejection and infection in the follow-up of patients with heart transplants. Hölzel WG, et al. **J Clin Chem Clin Biochem** 1988 Nov; 26(11):667–71

Nasopharyngeal swabs and nasopharyngeal aspirates equally effective for the diagnosis of viral respiratory disease in hospitalized children. Frayha H, et al. **J Clin Microbiol** 1989 Jun;27(6):1387–9

Evaluation of a monoclonal antibody pool for rapid diagnosis of respiratory viral infections. Stout C, et al. **J Clin Microbiol** 1989 Mar;27(3):448–52

Polymerase chain reaction. Schochetman G, et al. **J Infect Dis** 1988 Dec;158(6):1154–7 (29 ref.)

Leukocyte studies in diagnosis of neonatal sepsis [letter] Kumar A. **J Pediatr** 1989 Mar;114(3):505–6

An improved membrane-filtration enzyme immunoassay for the rapid serological diagnosis of viral infections. Barnett GR, et al. **J Virol Methods** 1988 Aug;20(4):323–32

Development and evaluation of an IgM capture enzyme immunoassay for diagnosis of recent Norwalk virus infection. Erdman DD, et al. **J Virol Methods** 1989 Apr–May;24(1–2):57–66

Immunological diagnosis in viral infections of the central nervous system: course of antibody titres against homo- and heterologous viruses. Dennin RH, et al. **Med Microbiol Immunol (Berl)** 1989;178(5):255–68

New approach for early, simple, and rapid detection of acute eye infections. Romano A. **Metab Pediatr Syst Opthalmol** 1988;11(1–2):53–7

Radioimmunoassay for anti-actin antibody: application in viral and autoimmune diseases. McClure JE, et al. **Mol Cell Probes** 1988 Dec;2(4):305–19

Serological survey for viral diseases in the Cayo Santiago rhesus macaque population. Kessler MJ, et al. **P R Health Sci J** 1989 Apr;8(1):95–7

Prenatal diagnosis of fetal infection: advances from amniocentesis to cordocentesis—congenital toxoplasmosis, rubella, cytomegalovirus, varicella virus, parvovirus and human immunodeficiency virus. Grose C, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):459–68 (65 ref.)

Infectious exanthems. Hartley AH, et al. **Pediatr Rev** 1988 Apr;9(10):321–9 (13 ref.)

Rapid and accurate viral diagnosis. Landry ML, et al. **Pharmacol Ther** 1989;40(2):287–328 (367 ref.)

Lifelong viral infections. Rubenstein E. **Proc Annu Meet Med Sect Am Counc Life Insur** 1988; :97–106

Antigen detection in the diagnosis of viral infections. Hietala J, et al. **Scand J Infect Dis** 1988;20(6):595–9

Differentiation between acute rejection and infection in liver transplant patients. Höckerstedt K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2317–8

An evolutionary change in diagnostic virology. Chernesky MA. **Yale J Biol Med** 1989 Mar–Apr;62(2):89–92

Electron microscopy for the rapid detection and identification of viruses from clinical specimens. Fong CK. **Yale J Biol Med** 1989 Mar–Apr;62(2):115–30 (56 ref.)

The impact of cell culture sensitivity on rapid viral diagnosis: a historical perspective. Hsiung GD. **Yale J Biol Med** 1989 Mar–Apr;62(2):79–88 (32 ref.)

Anatomic viral detection is automated: the application of a robotic molecular pathology system for the detection of DNA viruses in anatomic pathology substrates, using immunocytochemical and nucleic acid hybridization techniques. Montone KT, et al. **Yale J Biol Med** 1989 Mar–Apr;62(2):141–58

In vitro amplification techniques for the detection of nucleic acids: new tools for the diagnostic laboratory. Persing DH, et al. **Yale J Biol Med** 1989 Mar–Apr;62(2):159–71 (48 ref.)

New prospects for the diagnosis of viral infections. Yolken RH, et al. **Yale J Biol Med** 1989 Mar–Apr;62(2):131–9 (43 ref.)

[Diagnosis of viral myocarditis by enzyme-linked immunosorbent assay (ELISA)] Zhou ZY, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr; 16(2):78–80, 126 (Eng. Abstr.) (Chi)

[A new generation of diagnostic preparations based on synthetic antigens] Krchňák V. **Cas Lek Cesk** 1988 Oct 14;127(42):1287–90 (Eng. Abstr.) (Cze)

[Rapid diagnosis in virology (editorial)] Seigneurin JM. **Pediatrie** 1988;43(7):581–3 (Fre)

[Use of deoxyribonucleic acid probes in infectious pathology] Bricout F, et al. **Presse Med** 1988 Sep 17;17(31):1563–4 (Fre)

[The logic of diagnoses used in expert systems. II. Applications in virology] Cristea A, et al. **Virologie** 1988 Jul–Sep;39(3):167–71 (Eng. Abstr.) (Fre)

[Viral encephalitis. Experiences with 53 patients in Middle Hessia] Büttner T, et al. **Fortschr Neurol Psychiatr** 1988 Oct;56(10):315–25 (Eng. Abstr.) (Ger)

[Bacteriologic and serologic studies] Sundmacher R. **Klin Monatsbl Augenheilkd** 1989 May;194(5):337–40 (7 ref.)

(Eng. Abstr.) (Ger)
[A case from practice (137). Patient: Mr. A.B., born 1950] Tschudi M. **Schweiz Rundsch Med Prax** 1989 Apr 18; 78(16):477–8 (Ger)
[Virus diseases of the nervous system in selected patients at a neurologic specialty unit during a 9-year period] Oder W, et al. **Wien Med Wochenschr** 1988 Dec 31; 138(23–24):604–11 (Eng. Abstr.) (Ger)
[Serum interferon level and (2'-5')-oligo(A) synthetase activity in pityriasis rosea, basalioma, melanoma and molluscum contagiosum] Lang MH, et al. **Z Hautkr** 1988 Dec 15;63(12):1028–36 (Eng. Abstr.) (Ger)
[DNA probes in the diagnosis of infectious diseases] Martinotti MG. **G Batteriol Virol Immunol** 1987 Jan–Dec; 80(1–12):267–76 (37 ref.) (Eng. Abstr.) (Ita)
[Monoclonal antibodies in virology] Franze R. **Ric Clin Lab** 1988;18 Suppl 1:39–49 (9 ref.) (Ita)
[Viral keratitis: diagnostic and treatment principles] Popa DP, et al. **Rev Chir [Oftalmol]** 1988 Apr–Jun;32(2):85–94 (Eng. Abstr.) (Rum)
[Plaque formation reaction in the diagnosis of infections] Pozniak AL, et al. **Sov Med** 1988;(10):105–7 (Rus)
[Electron microscopic immunohistochemistry in the diagnosis of human lymphotropic viral diseases] Timár J, et al. **Vopr Onkol** 1988;34(12):1439–42 (Eng. Abstr.) (Rus)
[Synthetic antigens in the diagnosis of viral diseases] Bektimirov TA, et al. **Vopr Virusol** 1989 Mar–Apr; 34(2):133–9 (48 ref.) (Rus)
[Myocarditis in childhood] Cižmárová E, et al. **Cesk Pediatr** 1989 Jan;44(1):6–10 (Eng. Abstr.) (Slo)
[A new rapid, simple and sensitive method for diagnosis of viral infections] Johansson B, et al. **Lakartidningen** 1989 May 17;86(20):1896–8 (Swe)

DRUG THERAPY

Management strategies in viral myocarditis. Rezkalla SH, et al. **Am Heart J** 1989 Mar;117(3):706–8 (32 ref.)
Acyclovir. An updated review of its antiviral activity, pharmacokinetic properties and therapeutic efficacy. O'Brien JJ, et al. **Drugs** 1989 Mar;37(3):233–309 (398 ref.)
Comparative study of acyclovir and 5 I.D.U. in the management of viral corneal ulcer. Kumar S, et al. **Indian J Ophthalmol** 1987;35(5–6):139–42
Antiviral chemotherapy. **Infect Dis Clin North Am** 1987 Jun; 1(2):311–499
Human interferon in viral diseases. Greenberg SB. **Infect Dis Clin North Am** 1987 Jun;1(2):383–423 (323 ref.)
Recent developments in antiviral chemotherapy. McKinlay MA, et al. **Infect Dis Clin North Am** 1987 Jun;1(2):479–93 (80 ref.)
AIDS and AIDS-related infections: current strategies for prevention and therapy. Based on a meeting of the British Society for Antimicrobial Chemotherapy. Stratford-on-Avon, 21–22 April 1988. **J Antimicrob Chemother** 1989 Jan;23 Suppl A:1–137
An antiviral combination treatment for virus encephalitis—theoretical aspects and clinical experiences. Prange HW, et al. **J Neuroimmunol** 1988 Dec;20(2–3):165–7
Ten years of experience with human fibroblast interferon in treatment of viral ophthalmic infections. Romano A, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):43–6
Rocky Mountain spotted fever vs. viral syndrome. A management approach in a primary care setting. Rizzolo PJ, et al. **N C Med J** 1989 Apr;50(4):181–3
Antiviral effects of phosphonoformate (PFA, foscarnet sodium). Oberg B. **Pharmacol Ther** 1989;40(2):213–85 (245 ref.)
Managing fungal and viral infection in the immunocompromised host. Jehn U. **Recent Results Cancer Res** 1988;108:61–70 (24 ref.)
[Fluoroquinolones] Huovinen P, et al. **Duodecim** 1988; 104(4):229–38 (55 ref.) (Fin)
[Antimetabolites of nucleic acid synthesis in the treatment of malignant tumors, autoimmune diseases and infections. The 1988 Nobel Prize for Medicine] Wilmanns W. **Dtsch Med Wochenschr** 1989 Jan 13;114(2):73–5 (Ger)
[Means of optimal administration of drugs in acute respiratory viral infections in children] Tatochenko VK, et al. **Pediatriia** 1988;(7):63–8 (Rus)
[The adequacy of experimental models in trials of antiviral preparations (editorial)] **Vopr Virusol** 1988 Nov–Dec; 33(6):767–8 (Rus)
[Discussion of a new strategy for treating viral diseases] Lozitskiĭ VP, et al. **Vopr Virusol** 1988 May–Jun; 33(3):375–81 (88 ref.) (Rus)
[Acyclovir in the treatment of viral infections] Grbović L. **Srp Arh Celok Lek** 1988 Jun;116(6):579–89 (Scc)
[Antiviral drugs in human diseases (editorial)] Berría MI. **Medicina (B Aires)** 1985;45(1):83–6 (Spa)
[Antiviral agents in viral respiratory infections] Wu E, et al. **Rev Chil Pediatr** 1988 May–Jun;59(3):192–9 (21 ref.) (Eng. Abstr.) (Spa)

EPIDEMIOLOGY

Role of Norwalk virus in two foodborne outbreaks of gastroenteritis: definitive virus association. Fleissner ML, et al. **Am J Epidemiol** 1989 Jan;129(1):165–72
Viral etiology and epidemiology of acute respiratory infections in children in Nairobi, Kenya. Hazlett DT, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):632–40
Viral diseases in developing countries. Merigan TC. **APMIS Suppl** 1988;3:26–9 (3 ref.)
Respiratory virus infection in immunocompromised patients. Ljungman P, et al. **Bone Marrow Transplant** 1989 Jan; 4(1):35–40
Viral infections: epidemiology and significance. Mertens T. **Br J Clin Pract Symp Suppl** 1988 Feb;57:20–6 (28 ref.)
Viruses and the athlete. Sharp JC. **Br J Sports Med** 1989 Mar;23(1):47–8 (5 ref.)
Two institutional outbreaks of Norwalk-like gastroenteritis—Ontario. Martiquet P, et al. **Can Dis Wkly Rep** 1989 Jun 3;15(22):113–6 (Eng, Fre)
Laboratory evidence of human viral and selected non-viral infections in Canada–1987. Parker C, et al. **Can Dis Wkly Rep** 1988 Sep 17;14(37):165–8 (Eng, Fre)
Foodborne gastroenteritis due to Norwalk virus in a Winnipeg hotel. Sekla L, et al. **Can Med Assoc J** 1989 Jun 15;140(12):1461–4
Viruses in acute gastroenteritis in children in Pune, India. Singh PB, et al. **Epidemiol Infect** 1989 Apr;102(2):345–53
Seasonal activity of mosquitoes in an Ockelbo disease endemic area in central Sweden. Jaenson TG, et al. **J Am Mosq Control Assoc** 1986 Mar;2(1):18–28
Outbreaks of astrovirus type 1 and rotavirus gastroenteritis in a geriatric in-patient population. Lewis DC, et al. **J Hosp Infect** 1989 Jul;14(1):9–14
An outbreak of viral gastroenteritis in a psychiatric hospital. Mitchell E, et al. **J Hosp Infect** 1989 Jul;14(1):1–8
Effect of weather conditions on acute laryngotracheitis. Fielder CP. **J Laryngol Otol** 1989 Feb;103(2):187–90
Epidemiology and laboratory diagnosis of infection with viral and bacterial pathogens in infants hospitalized for suspected sepsis. Dagan R, et al. **J Pediatr** 1989 Sep;115(3):351–6
A 10-year review of morbidity from childhood preventable diseases in Nigeria: how successful is the Expanded Programme of Immunization (EPI)? Ekanem EE. **J Trop Pediatr** 1988 Dec;34(6):323–8
Scientists ponder when, why of emerging viruses [news] Marwick C. **JAMA** 1989 Jul 7;262(1):16
Incidence, distribution, and outcome of episodes of infection in 100 orthotopic liver transplantations. Paya CV, et al. **Mayo Clin Proc** 1989 May;64(5):555–64
A survey of virus infections in New Zealand, 1982–6. Lau RC, et al. **N Z Med J** 1988 Oct 12;101(855):621–2
Acute respiratory virus infections in infants [letter] Wiles H. **N Z Med J** 1989 May 10;102(867):228–9
The epidemiology of post viral fatigue syndrome. Ho-Yen DO. **Scott Med J** 1988 Dec;33(6):368–9
[Carrier state of enteric viruses in Ivory Coast pregnant women in good health] Gershy-Damet GM, et al. **Bull Soc Pathol Exot Filiales** 1988;81(4):665–72 (Eng. Abstr.) (Fre)
[Epidemiology of infection in dentistry] Silla M, et al. **Minerva Stomatol** 1988 Sep;37(9):665–9 (Ita)
[Chronic virus infections(editorial)] Haukenes G. **Tidsskr Nor Laegeforen** 1989 Feb 10;109(4):425–6 (Nor)
[Epidemiological chronicle] **Przegl Epidemiol** 1988; 42(1):1–120 (Pol)
[Epidemiological chronicle] **Przegl Epidemiol** 1989; 43(1):1–123 (Pol)
[Effect of viral infections on the course of pregnancy and the health status of the infants] Ivanov VV, et al. **Pediatriia** 1988;(10):68–73 (Rus)
[Epidemiology of infectious diseases of the nervous system in children below 7 years of age in the autonomous community of Murcia] Rodríguez Costa T, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:70–4 (Spa)

ETIOLOGY

Infectious complications of cyclophosphamide treatment for vasculitis. Bradley JD, et al. **Arthritis Rheum** 1989 Jan; 32(1):45–53
The oral clinical features of HIV infection. Greenspan D, et al. **Gastroenterol Clin North Am** 1988 Sep;17(3):535–43 (40 ref.)
Perspectives on gastrointestinal infections in AIDS. Janoff EN, et al. **Gastroenterol Clin North Am** 1988 Sep; 17(3):451–63 (91 ref.)
Effect of nutritional deprivation on mucosal viral infections. Riepenhoff-Talty M, et al. **Immunol Invest** 1989 Jan–May; 18(1–4):127–39
Current issues in food safety—especially seafoods. Liston J. **J Am Diet Assoc** 1989 Jul;89(7):911–3
Mechanisms of persistence in human virus infections. Rapp F, et al. **Microb Pathog** 1988 Feb;4(2):85–92 (30 ref.)
Infectious complications of marrow transplant: risk factors for infection. Meyers JD, et al. **Prog Clin Biol Res** 1989; 309:357–66 (24 ref.)
Hepatic complications of bone marrow transplantation. Sale GE. **Prog Clin Biol Res** 1989;309:349–56 (15 ref.)
Viral complications of OKT3 monoclonal antibody therapy in children undergoing renal transplantation. Bunchman TE, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1761–2
Infection in OKT3-treated patients receiving additional antirejection therapy. Munda R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1763–5
Perioperative infection in liver transplant recipients under a quadruple immunosuppressive protocol. Pirsch JD, et al. **Transplant Proc** 1989 Jun;21(3):3559
Post transfusion viral infections. Rubin RH, et al. **Transplant Proc** 1988 Dec;20(6):1112–7 (33 ref.)
[Gastrointestinal findings in HIV infection. Clinical aspects, microbiological findings and endoscopic picture] Heise W, et al. **Dtsch Med Wochenschr** 1988 Oct 14;113(41):1588–93 (Eng. Abstr.) (Ger)
[Viral infections in pregnancy and their effects on the newborn infant and the infant] Menzel K. **Z Arztl Fortbild (Jena)** 1988;82(12):567–73 (35 ref.) (Ger)
[Viruses and chronic diseases. Etiopathogenetic relations and laboratory diagnostic characteristics] Duca M. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):217–31 (23 ref.) (Rum)
[Acute arthritis associated with infection] Ivashkin VT, et al. **Klin Med (Mosk)** 1989 Feb;67(2):9–16 (51 ref.) (Rus)
[Infectious complications after kidney transplantation] Filiptsev PIa, et al. **Urol Nefrol (Mosk)** 1988 Sep–Oct; (5):65–70 (86 ref.) (Rus)

GENETICS

Viral infectious complementary-DNA studies may identify nonviral genes critical to central nervous system disease. Ohara Y, et al. **Ann Neurol** 1989 Mar;25(3):305–9 (35 ref.)
Virus replication and genome interactions. Proceedings of the seventh John Innes Symposium. Norwich, 1986. **J Cell Sci Suppl** 1987;7:1–337
Factors affecting mutation and emerging diseases [letter] Dixon CG. **Vet Rec** 1988 Nov 12;123(20):527
Inhibitory effects of vesicular stomatitis virus on cellular and influenza viral RNA metabolism and protein synthesis. Frielle DW, et al. **Virology** 1989 Sep;172(1):274–84

IMMUNOLOGY

Cell-mediated immunity in virus infections of the central nervous system. Doherty PC. **Ann N Y Acad Sci** 1988; 540:228–39 (94 ref.)
Virus-induced autoimmunity through molecular mimicry. Fujinami RS. **Ann N Y Acad Sci** 1988;540:210–7 (50 ref.)
Epidermal Langerhans cells, dermal dendritic cells, and keratinocytes in viral lesions of skin and mucous membranes: an immunohistochemical study. Drijkoningen M, et al. **Arch Dermatol Res** 1988;280(4):220–7
Role of epidermal Langerhans cells in viral infections. Sprecher E, et al. **Arch Virol** 1988;103(1–2):1–14 (130 ref.)
Viral persistence. Oldstone MB. **Cell** 1989 Feb 24; 56(4):517–20 (24 ref.)
Infection of human thymic epithelial cells by human cytomegalovirus and other viruses: effect on secretion of interleukin 1-like activity. Wainberg MA, et al. **Clin Exp Immunol** 1988 Jun;72(3):415–21
MHC recombinant mice: genetic tools for study of resistance to viral disease. Chesebro B. **Int Rev Immunol** 1988 Aug; 3(4):393–6 (9 ref.)
Role of complement in viral infections. Gupta AK. **J Assoc Physicians India** 1988 Mar;36(3):219–20 (22 ref.)
Artificial immune system against viral infection involving antisense RNA targeted to the 5'-terminal noncoding region of coliphage SP RNA. Hirashima A, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):163–6
Serum immunoglobulin A response to Norwalk virus infection. Erdman DD, et al. **J Clin Microbiol** 1989 Jun; 27(6):1417–8
Virally induced modulation of marine IgG antibody subclasses. Coutelier JP, et al. **J Exp Med** 1988 Dec 1; 168(6):2373–8
Otosclerosis—an inflammatory disease of the otic capsule of viral aetiology? Arnold W, et al. **J Laryngol Otol** 1988 Oct;102(10):865–71
Immunopathological reactions in viral infections of the central nervous system. Löhler J. **J Neuroimmunol** 1988 Dec;20(2–3):181–8 (50 ref.)
Rheumatoid arthritis with T cell subsets suggesting chronic viral infection [letter] Faure GC, et al. **J Rheumatol** 1988 Oct;15(10):1590–1
Cell-mediated immune cardiocyte injury in viral myocarditis of mice and patients. Deguchi H, et al. **Jpn Circ J** 1989 Jan;53(1):61–77
Anti-cardiolipin antibodies in viral infection [letter] Colaço CB, et al. **Lancet** 1989 Mar 18;1(8638):622
T cell hybridomas define the class II MHC-restricted response to vesicular stomatitis virus infection. Petrarca MA, et al. **Microb Pathog** 1988 Nov;5(5):319–32
On the production of immunoglobulins in the central nervous system: an involvement of B cell stimulatory factor 2/interleukin 6 produced intrathecally? Fontana A, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):38–9
Viruses, the immune system and central nervous system diseases [news] Lipkin WI, et al. **Trends Neurosci** 1988 Feb; 11(2):43–5
Comparison of bovine mononuclear cells with other species for cytolytic activity against virally-infected cells. Cook CG, et al. **Vet Immunol Immunopathol** 1989 Feb; 20(3):239–61 (91 ref.)
[Cytotoxic NK cells: their role and function in the body. IV. The role of the NK cells in antiviral and antitumor immunity and the pathologic proliferation of the NK cells] Frydecka I. **Przegl Lek** 1988;45(6):539–42 (Pol)
[Immune mechanisms of antiviral, bacterial and parasitic protection] Olinescu A. **Rev Ig [Bacteriol]** 1988 Jan–Mar; 33(1):15–28 (16 ref.) (Eng. Abstr.) (Rum)
[The state of the complement system in infectious and neoplastic processes (review of the literature)] Martynova VA, et al. **Lab Delo** 1989;(2):4–9 (41 ref.) (Rus)

[Function of the immune system and nonspecific protective factors in the ontogeny of children with acute respiratory diseases] Botvin'eva VV, et al. **Pediatriia** 1988;(5):42–6 (Eng. Abstr.) (Rus)

[Streptozotocin and viral insulin-dependent diabetes mellitus (autoimmune aspects)] Poltorak VV, et al. **Probl Endokrinol (Mosk)** 1989 May-Jun;35(3):81–8 (141 ref.) (Rus)

[Atopic diathesis and the incidence of acute respiratory infections in children of preschool age] Isaeva LA, et al. **Sov Med** 1988;(7):69–73 (Rus)

[Viral infection and immune mechanisms of the pathogenesis of diabetes mellitus type 1] Salozhin KV, et al. **Ter Arkh** 1989;61(2):135–9 (67 ref.) (Rus)

[Disordered interferon status in patients with urticaria and angioneurotic edema against a background of frequent ARVI: its correction with reaferon] Belostotskaia OI, et al. **Vopr Virusol** 1989 Mar-Apr;34(2):176–80 (Eng. Abstr.) (Rus)

METABOLISM

Simultaneous production of interleukin 6, interferon-beta and colony-stimulating activity by fibroblasts after viral and bacterial infection. Van Damme J, et al. **Eur J Immunol** 1989 Jan;19(1):163–8

Interferon production in rat type II pneumocytes and alveolar macrophages. Hahon N, et al. **Exp Lung Res** 1989 May; 15(3):429–45

Increased synthesis and secretion of atrial natriuretic polypeptide during viral myocarditis. Morii N, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S5–8

Severity, duration, and mechanisms of insulin resistance during acute infections. Yki-Järvinen H, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):317–23

Stress-induced increase of hexose transport as a novel index of cytopathic effects in virus-infected cells: role of the L protein in the action of vesicular stomatitis virus. Pasternak CA, et al. **Virology** 1988 Oct;166(2):379–86

[State of lipid peroxidation system and antioxidant defense in acute respiratory viral infection in children and the principles of pathogenetic therapy] Ananenko AA, et al. **Pediatriia** 1989;(1):27–30 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Viral etiology in acute lower respiratory infections in children from a closed community. Avila MM, et al. **Am Rev Respir Dis** 1989 Sep;140(3):634–7

Pharyngitis in adults: the presence and coexistence of viruses and bacterial organisms. Huovinen P, et al. **Ann Intern Med** 1989 Apr 15;110(8):612–6

Outbreak of gastroenteritis in a home for the aged—Ontario. Hammerberg O, et al. **Can Dis Wkly Rep** 1988 Apr 9; 14(14):57–8 (Eng, Fre)

Whole animal section in situ hybridization and protein blotting: new tools in molecular analysis of animal models for human disease. Lipkin WI, et al. **Curr Top Microbiol Immunol** 1989;143:33–54

Serological evidence of viral or Mycoplasma pneumoniae infection in acute maxillary sinusitis. Savolainen S, et al. **Eur J Clin Microbiol Infect Dis** 1989 Feb;8(2):131–5

Western blot (immunoblot) assay of small, round-structured virus associated with an acute gastroenteritis outbreak in Tokyo. Hayashi Y, et al. **J Clin Microbiol** 1989 Aug; 27(8):1728–33

A re-investigation of the behavioural effects of intracerebral injection in marmosets of cytopathic cerebrospinal fluid from patients with schizophrenia or neurological disease. Baker HF, et al. **Psychol Med** 1989 May;19(2):325–9

Infection of endothelial cells by common human viruses. Friedman HM. **Rev Infect Dis** 1989 May-Jun;11 Suppl 4:S700–4 (33 ref.)

Scenarios for a viral etiology of schizophrenia. Pert CB, et al. **Schizophr Bull** 1988;14(2):243–7 (14 ref.)

Stalking the schizovirus. Torrey EF. **Schizophr Bull** 1988; 14(2):223–9 (53 ref.)

[Vaginal microbial flora and infectious pathology] Cavallo G. G **Batteriol Virol Immunol** 1987 Jan-Dec; 80(1-12):277–95 (34 ref.) (Eng. Abstr.) (Ita)

[Chronic virus infections. Mechanisms and clinical significance] Flaegstad T. **Tidsskr Nor Laegeforen** 1989 Feb 10;109(4):433–5 (Eng. Abstr.) (Nor)

[Acute viral gastroenteropathy] Duca M. **Rev Med Chir Soc Med Nat Iasi** 1988;Suppl:91–9 (Rum)

[Natural foci of viral diseases and the ecology of viruses] Chunikhin SP. **Parazitologiia** 1989 May-Jun;23(3):185–92 (28 ref.) (Rus)

[Virological and serological characteristics of outbreaks and sporadic cases of acute gastroenteritis] Khaustov VI, et al. **Vopr Virusol** 1989 Mar-Apr;34(2):221–5 (Eng. Abstr.) (Rus)

MORTALITY

Fatal infection of silvered leaf monkeys with a virus-like infectious agent (VLIA) derived from a patient with AIDS. Lo SC, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):399–409

[Death caused by viral meningoencephalitis in a caseload of 1052 cases] Vargas Díaz J, et al. **Rev Cubana Med Trop** 1989 Jan-Apr;41(1):102–13 (Eng. Abstr.) (Spa)

PATHOLOGY

Morphologic changes in the fine needle aspiration cytology of renal transplants during virus infection as detected by DNA in situ hybridization. Harfmann P, et al. **Transplant Proc** 1989 Aug;21(4):3588–90

[Differential diagnosis and prognosis of primary and post-myocarditis cardiomyopathy in childhood] Schmaltz AA, et al. **Wien Klin Wochenschr** 1988 Dec 16; 100(24):811–3 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Viral infections and respiratory muscle contractility [editorial] Altose MD. **Am Rev Respir Dis** 1988 Jul; 138(1):1–2

A study of persistent viral infections using nude mice and a temperature-sensitive mutant of vesicular stomatitis virus. Doll SC, et al. **Ann N Y Acad Sci** 1988;540:678–80

Postviral fatigue syndrome. Behan PO, et al. **Crit Rev Neurobiol** 1988;4(2):157–78 (113 ref.)

Influence of viral infections on body weight, survival, and tumor prevalence of B6C3F1 (C57BL/6N x C3H/HeN) mice in carcinogenicity studies. Rao GN, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):156–64

Viruses can cause disease in the absence of morphological evidence of cell injury: implication for uncovering new diseases in the future. Oldstone MB. **J Infect Dis** 1989 Mar; 159(3):384–9 (58 ref.)

Membrane changes during virus infection and other forms of cellular stress. Pasternak CA. **Mol Aspects Med** 1988; 10(3):281–90 (34 ref.)

Viral alteration of cell function. Oldstone MB. **Sci Am** 1989 Aug;261(2):42–8 (5 ref.)

[Viral myocarditis—new aspects of pathomechanisms, diagnosis and therapy] Schultheiss HP. **Wien Klin Wochenschr** 1988 Dec 16;100(24):779–86 (44 ref.) (Eng. Abstr.) (Ger)

[Short-latency auditory and somatosensory evoked potentials of the brain in children with infectious neurotoxic syndrome] Kriuchko VI, et al. **Anesteziol Reanimatol** 1988 May-Jun;(3):41–4 (Eng. Abstr.) (Rus)

[Myocardial contractility and hemodynamic indicators in newborn infants with acute respiratory viral infections] Lomako LT, et al. **Pediatriia** 1989;(3):22–4 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Vaccines produced by conventional means to control major infectious diseases of man and animals. Bittle JL, et al. **Adv Vet Sci Comp Med** 1989;33:1–63 (387 ref.)

The development of biosynthetic vaccines. Collett MS. **Adv Vet Sci Comp Med** 1989;33:109–72 (437 ref.)

Virus vaccines: principles and prospects. Melnick JL. **Bull WORLD Health Organ** 1989;67(2):105–12 (0 ref.)

Oral immunization and secretory immunity to viruses. Ogra PL, et al. **Curr Top Microbiol Immunol** 1989;146:73–81 (20 ref.)

Introduction to oral immunization against viral infections. Waldman RH, et al. **Curr Top Microbiol Immunol** 1989; 146:69–72

A study of intranasally administered interferon A (rIFN-alpha 2A) for the seasonal prophylaxis of natural viral infections of the upper respiratory tract in healthy volunteers. Tannock GA, et al. **Epidemiol Infect** 1988 Dec; 101(3):611–21

Vaccines for prevention of head and neck infections. Scheifele DW. **Infect Dis Clin North Am** 1988 Mar; 2(1):85–98 (37 ref.)

Vinyl versus latex gloves as barriers to transmission of viruses in the health care setting. Zbitnew A, et al. **J Acquir Immune Defic Syndr** 1989;2(2):201–4

Protection against acute lethal viral infections with the native steroid dehydroepiandrosterone (DHEA). Loria RM, et al. **J Med Virol** 1988 Nov;26(3):301–14

Strategies for viral vaccines: scientific challenge and regulatory aspects. Schild GC. **Parasitology** 1989;98 Suppl:S13–8 (9 ref.)

New universal precaution aspiration tray. Mueller PR, et al. **Radiology** 1989 Oct;173(1):278–9

Recent advances in the study of viral gastroenteritis. Flewett TH, et al. **Sci Prog** 1989;73(289 Pt 1):33–51 (69 ref.)

[What vaccinations do children at risk of infection need?] Eujen R. **Med Monatsschr Pharm** 1989 Jun;12(6):184–6 (0 ref.) (Ger)

[The elimination of viruses in the setting of waste water clarification, in progressive waste water purification and in natural areas near purification plants] Lopez Pila JM, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:59–67 (17 ref.) (Ger)

[Problems in public health virological control of natural recreational areas] Borovik EB, et al. **Z Gesamte Hyg** 1988 Sep;34(9):514–6 (Eng. Abstr.) (Ger)

[The possibilities and limits for virus inactivation in the household] Mahnel H. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4–6):414–21 (15 ref.) (Eng. Abstr.) (Ger)

[Carrying-out compulsory preventive vaccination in Poland in 1986] Słońska Z, et al. **Przegl Epidemiol** 1988;42(2):147–53 (Eng. Abstr.) (Pol)

[Status and prospects of immunologic disease prevention] Morunova AA. **Pediatriia** 1989;(7):5–7 (Rus)

[Effectiveness of complex nonspecific protection of preschool children from respiratory viral infections] Slobodeniuk AV, et al. **Pediatriia** 1989;(3):111 (Rus)

[Prevention of acute respiratory viral infections and tonsillitis] Shuster MA, et al. **Sov Med** 1989;(5):73–6 (Rus)

[Possible ways of improving the prevention of viral infections] Chumakov MP, et al. **Vestn Akad Med Nauk SSSR** 1989;(3):23–8 (Rus)

[What a vaccine against viral gastroenteritis should be: problems and prospects] Rukhadze GG, et al. **Vopr Virusol** 1989 Jan-Feb;34(1):5–16 (70 ref.) (Rus)

[Active immunization and its effect on the epidemic process of childhood infections] Chudnaia LM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):70–4 (Rus)

[Infections preventable by vaccination] Kumate J, et al. **Salud Publica Mex** 1988 May-Jun;30(3):349–61 (Eng. Abstr.) (Spa)

[More effective and standardized guidelines for travel medicine is wanted] Norrbohm O, et al. **Lakartidningen** 1988 Nov 23;85(47):4063–4 (Swe)

RADIOGRAPHY

Prognostic value of computed tomography and cerebrospinal fluid analysis in viral encephalitis. Büttner T, et al. **J Neuroimmunol** 1988 Dec;20(2-3):163–4

THERAPY

Human monoclonal antibodies for infectious diseases. Masuho Y. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):571–3

The Corynebacterium granulosum-derived P40 immunomodulator exerts a synergistic effect on the activity of antiviral drugs in the treatment of experimental viral infections. Fattal-German M, et al. **Biomed Pharmacother** 1988;42(3):217–20

Brainstorming the postviral fatigue syndrome [letter] Rosen SD, et al. **BMJ** 1988 Dec 10;297(6662):1543

Management and prevention of ocular viral and chlamydial infections. Darougar S, et al. **CRC Crit Rev Microbiol** 1989; 16(5):369–418 (281 ref.)

Intravenous immunoglobulin therapy in serious infections. **J Hosp Infect** 1988 Aug;12 Suppl D:1–73

Clinical evaluation of treatment with interferon. Strander H. **Med Oncol Tumor Pharmacother** 1989;6(1):87–91 (21 ref.)

Approaches to antiviral drug development. Prusoff WH, et al. **Yale J Biol Med** 1989 Mar-Apr;62(2):215–25

[Organizational and economic aspects of the treatment of patients with liver cirrhosis of alcoholic and viral etiologies] Ermakov VV, et al. **Sov Zdravookhr** 1988; (12):17–9 (Eng. Abstr.) (Rus)

TRANSMISSION

Transfusion transmitted infectious agents, excluding hepatitis and human immunodeficiency viruses. Leikola J. **Acta Anaesthesiol Scand Suppl** 1988;89:20–5 (37 ref.)

Reducing the risk of virus transmission by blood products. Thomas DP. **Br J Haematol** 1988 Dec;70(4):393–5 (34 ref.)

Changing patterns of bacterial and viral infections in surgery. Sleigh JD, et al. **Br Med Bull** 1988 Apr;44(2):403–22 (99 ref.)

Reduction of virus load in blood donations by screening methods. Kühnl P, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):9–22 (30 ref.)

Overview of viruses relevant to blood transfusion. Schilt U. **Curr Stud Hematol Blood Transfus** 1989;(56):1–8 (29 ref.)

Viral hepatitis and gastroenteritis transmitted by shellfish and water. Wanke CA, et al. **Infect Dis Clin North Am** 1987 Sep;1(3):649–64 (52 ref.)

Risk of virus transmission and sterilization practices of dermatologists [letter] Caumes E, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):324

Vertical transmission of the Piry rhabdovirus by sigma virus-infected Drosophila melanogaster females. Ohanessian A. **J Gen Virol** 1989 Jan;70 (Pt 1):209–12

Viral gastroenteritis in foodhandlers [letter] Palmer SR. **Lancet** 1988 Nov 26;2(8622):1247

Diseases most commonly transmitted by blood transfusion to the neonate. Kevy SV. **Mead Johnson Symp Perinat Dev Med** 1986;(28):43–4 (9 ref.)

Human immunodeficiency virus and other viruses in human milk: placing the issues in broader perspective. Oxtoby MJ. **Pediatr Infect Dis J** 1988 Dec;7(12):825–35 (96 ref.)

An outbreak of acute infectious nonbacterial gastroenteritis in a high school in Maryland. Gross TP, et al. **Public Health Rep** 1989 Mar-Apr;104(2):164–9

A longterm follow-up study of children born to women with contagious diseases at delivery. Sterner G, et al. **Scand J Infect Dis** 1988;20(6):575–82

The transmission of virus disease by the marine environment. Shuval HI. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 78:7–23 (53 ref.)

Southwood calls for monitoring of BSE risk in veterinarians [news] **Vet Rec** 1989 Mar 4;124(9):207–10

Current problems in zoonosis research. Mayr A, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):3–9 (16 ref.)

[Reconsideration of the risk of transmitting infectious diseases by blood transfusion] Janot C, et al. **Ann Fr Anesth Reanim** 1989;8(3):199–203 (12 ref.) (Fre)

[Transmissible diseases through the intermediary of transfusions] Van Laethem Y. **Rev Med Brux** 1989 Apr;

10(4):125–30 (Eng. Abstr.) (Fre)
[Virus inactivation in blood products] Stephan W. **Beitr Infusionther** 1988;21:192–201 (10 ref.) (Ger)
[Infections of pigeons as a risk to the health of humans and animals] Glünder G. **DTW** 1989 Mar;96(3):112–4, 116 (Eng. Abstr.) (Ger)
[Infectious diseases transmitted by ticks. A short overview of infectious diseases transmitted by ticks in Europe] Schneider T, et al. **Fortschr Med** 1989 Aug 10; 107(23):489–92 (23 ref.) (Eng. Abstr.) (Ger)
[Hygienic and organizational precautions to prevent transmission of selected viral infections in hospitals] Kappstein I, et al. **Immun Infekt** 1988 Oct;16(5):192–6 (8 ref.) (Eng. Abstr.) (Ger)
[Development of a procedure for the study of the viral infection potential of dental aerosols] Winkler B, et al. **Z Gesamte Hyg** 1988 Sep;34(9):531–4 (Eng. Abstr.) (Ger)
[Vertical infections] Chiba S. **Hokkaido Igaku Zasshi** 1989 May;64(3):223–6 (Jpn)

URINE

Daytime urinary frequency in children [letter] Crowther P, et al. **BMJ** 1988 Oct 1;297(6652):855

VETERINARY

Malpais spring virus: a new vesiculovirus from mosquitoes collected in New Mexico and evidence of infected indigenous and exotic ungulates. Clark GG, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):586–92
Serologic evidence for the etiologic role of Chuzan virus in an epizootic of congenital abnormalities with hydranencephaly–cerebellar hypoplasia syndrome of calves in Japan. Goto Y, et al. **Am J Vet Res** 1988 Dec; 49(12):2026–9
Isolation of Chuzan virus, a new member of the Palyam subgroup of the genus Orbivirus, from cattle and Culicoides oxystoma in Japan. Miura Y, et al. **Am J Vet Res** 1988 Dec;49(12):2022–5
Equine viral arteritis may have been introduced [news] **Aust Vet J** 1988 Dec;65(12):suppl 1
A farming systems study of abortion in dairy cattle on the Atherton Tableland. 2. The pattern of infectious diseases. Norton JH, et al. **Aust Vet J** 1989 Jun;66(6):163–7
Exotic disease research in Australia. Forman AJ. **Br Vet J** 1989 Jan–Feb;145(1):1–2
Maturation of immunological reactivity in the fetal lamb infected with Akabane virus. McClure S, et al. **J Comp Pathol** 1988 Aug;99(2):133–43
Transmission of Akabane virus from the ewe to the early fetus (32 to 53 days). Parsonson IM, et al. **J Comp Pathol** 1988 Aug;99(2):215–27
Epizootic vesicular stomatitis in Colorado, 1982: isolation of virus from insects collected along the northern Colorado Rocky Mountain Front Range. Francy DB, et al. **J Med Entomol** 1988 Sep;25(5):343–7
Immunoblot assay: a rapid and sensitive method for identification of salmonid fish viruses. McAllister PE, et al. **J Wildl Dis** 1986 Oct;22(4):468–74
The effect of selected viruses on Corynebacterium kutscheri infection in rats. Barthold SW, et al. **Lab Anim Sci** 1988 Oct;38(5):580–3
Comparison of virus isolation, immunofluorescence and electron microscopy for the diagnosis of animal viruses. Naeem K, et al. **Microbiologica** 1988 Oct;11(4):355–62
Immune response of chicks inoculated with chicken anemia agent alone or in combination with Marek's disease virus or turkey herpesvirus. Otaki Y, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1040–7
Ontogeny of host defense systems and congenital infections. Osburn BI. **Prog Clin Biol Res** 1988;281:15–32
Evidence of Kimberley virus infection of cattle in China. Chunling J, et al. **Trop Anim Health Prod** 1989 Feb; 21(1):85–6
Infectious diseases of New-World camelids (NWC). Thedford TR, et al. **Vet Clin North Am [Food Anim Pract]** 1989 Mar;5(1):145–57 (49 ref.)
Experimental vesicular stomatitis virus infection of swine: extent of infection and immunological response. Redelman D, et al. **Vet Immunol Immunopathol** 1989 Mar;20(4):345–61
Prevalence of neutralising antibodies to Akabane virus in the Arabian peninsula. Al-Busaidy SM, et al. **Vet Microbiol** 1988 Jun;17(2):141–9
Seroepidemiology of Breda virus in cattle using ELISA. Koopmans M, et al. **Vet Microbiol** 1989 Mar;19(3):233–43
An outbreak of disease due to chicken anaemia agent in broiler chickens in England. Chettle NJ, et al. **Vet Rec** 1989 Mar 4;124(9):211–5
Virus-like particles associated with a 'wet litter' problem in chickens [letter] Collins MS, et al. **Vet Rec** 1989 Jun 17; 124(24):641
Herpes-like virus particles in necrotic stomatitis of tortoises. Cooper JE, et al. **Vet Rec** 1988 Nov 19;123(21):544
Transmission of bovine spongiform encephalopathy to mice. Fraser H, et al. **Vet Rec** 1988 Oct 29;123(18):472
Veterinarians and seals [letter] Kennedy S, et al. **Vet Rec** 1988 Oct 29;123(18):475
Potential detrimental effects of rodent viral infections on long-term experiments. Lussier G. **Vet Res Commun** 1988; 12(2–3):199–217 (241 ref.)
Fish viruses: isolation of an icosahedral cytoplasmic deoxyribovirus from sheatfish (Silurus glanis). Ahne W, et al. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):333–6
Detection of a baculovirus in the tiger prawn Penaeus monodon. Halder M, et al. **Zentralbl Veterinarmed [B]** 1989 Jun;36(4):257–60
[Serologic survey of rinderpest, IBR–IPV, RSB, PI3 and BVD–MD viruses in cattle in Shaba and western Zaire] Jetteur P, et al. **Rev Elev Med Vet Pays Trop** 1988; 41(2):121–4 (Eng. Abstr.) (Fre)
[The use of embryonic chicken liver cell culture for the diagnosis of virus infections in hens] Pfirschke CD. **Arch Exp Veterinarmed** 1989 May;43(3):345–50 (Eng. Abstr.) (Ger)
[Probe seeks gene: nucleic acid hybridization as a current contribution to virologic diagnosis] Haas L, et al. **DTW** 1989 Feb;96(2):66–9 (Eng. Abstr.) (Ger)
[Indirect immunofluorescence—a rapid method for the detection of antibodies in viral diseases in the dog] Kölbl S, et al. **DTW** 1988 Sep;95(8):322–5 (Eng. Abstr.) (Ger)
[Electron microscopic virus detection in fecal samples from swine with enteric diseases between 1981 and 1987] Herbst W, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May; 96(6):294, 296 (Eng. Abstr.) (Ger)
[Review article: actual danger to the domestic animal populations of exotic animal epidemics] Kaaden OR, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(6):321–4 (18 ref.) (Eng. Abstr.) (Ger)
[The "diseased" or "dead" guillemots (Uria aalge), three-toed gulls (Rissa tridactyla), silver gulls (Larus argentatus) and laughing gulls (Larus ridibundus) found in the area of the German Bay, 1982–1985] Petermann S, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(5):271–7 (Eng. Abstr.) (Ger)
[Virus infections of aquatic organisms] Ahne W. **Zentralbl Veterinarmed [B]** 1988 Aug;35(7):493–503 (17 ref.) (Eng. Abstr.) (Ger)
[Rhabdovirus anguilla in eels in the USSR and its pathogenicity for fish] Shcheikunov IS, et al. **Vopr Virusol** 1989 Jan–Feb;34(1):81–4 (Eng. Abstr.) (Rus)

VIRUS INDUCTION see **VIRUS ACTIVATION**

VIRUS INHIBITORS

Use of betapropiolactone to disinfect fresh tissue without impairing antigenicity: method applicable to human immunodeficiency virus (HIV) positive tissue. Chaplin AJ, et al. **J Clin Pathol** 1989 Mar;42(3):318–21
Organization of the murine Mx gene and characterization of its interferon- and virus-inducible promoter. Hug H, et al. **Mol Cell Biol** 1988 Aug;8(8):3065–79

BLOOD

MX homologous protein in mononuclear cells from patients with systemic lupus erythematosus. von Wussow P, et al. **Arthritis Rheum** 1989 Jul;32(7):914–8

GENETICS

A double-stranded RNA-inducible fish gene homologous to the murine influenza virus resistance gene Mx. Staeheli P, et al. **Mol Cell Biol** 1989 Jul;9(7):3117–21

ISOLATION & PURIFICATION

Use of monoclonal antibodies in the purification of an inhibitor of virus replication by affinity chromatography. Gera A, et al. **J Gen Virol** 1989 May;70 (Pt 5):1293–6
A new subtype of a natural viral inhibitor (CVI) that is stable in the gastrointestinal tract. Baron JL, et al. **Microb Pathog** 1986 Jun;1(3):241–7

PHARMACOLOGY

Inactivation of Friend erythroleukemia virus and Friend virus-transformed cells by merocyanine 540-mediated photosensitization. Sieber F, et al. **Blood** 1989 Jan; 73(1):345–50

PHYSIOLOGY

[The capacity of interferon-insensitive cells to prevent the development of an antiviral condition] Narovlianskiĭ AN, et al. **Vopr Virusol** 1988 May–Jun;33(3):351–4 (Rus)

TOXICITY

Dextran sulfate as an inhibitor against the human immunodeficiency virus. Chang RS, et al. **Proc Soc Exp Biol Med** 1988 Dec;189(3):304–9

VIRUS RECEPTORS see **RECEPTORS, VIRUS**

VIRUS REPLICATION

Experimental mumps virus-induced labyrinthitis. Immunohistochemical and ultrastructural studies. Tanaka K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:98–105
Different levels of hepatitis B virus replication among hepatitis Be antigen-positive chronic carriers. Bartolomé J, et al. **Acta Virol (Praha)** 1988 May;32(3):193–7
Unchanged expression of Epstein-Barr virus-determined nuclear antigen-1 in productive virus cycle. Nováková Z, et al. **Acta Virol (Praha)** 1988 Jul;32(4):349–52
Interaction between anti-influenza viral polymerase antibodies and RNP particles using the in vitro transcription process and an immunogold labelling technique. Schreier E, et al. **Acta Virol (Praha)** 1988 Sep; 32(5):403–8
An overview of retrovirus replication and classification. Dahlberg JE. **Adv Vet Sci Comp Med** 1988;32:1–35 (132 ref.)
Decline in CD4+ cell numbers reflects increase in HIV-1 replication. De Wolf F, et al. **AIDS Res Hum Retroviruses** 1988 Dec;4(6):433–40
Replication of parainfluenza (Sendai) virus in isolated rat pulmonary type II alveolar epithelial cells. Castleman WL, et al. **Am J Pathol** 1989 May;134(5):1135–42
The pathogenetic basis of viral tropism. Mims CA. **Am J Pathol** 1989 Sep;135(3):447–55 (93 ref.)
Experimental studies on the replication and transmission of Crimean-Congo hemorrhagic fever virus in some African tick species. Shepherd AJ, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):326–31
In vitro Sendai viral replication in pulmonary macrophages from mice treated with 4-ipomeanol. Durham SK, et al. **Am J Vet Res** 1988 Oct;49(10):1677–80
Evidence of viral replication in HBsAg positive patients with hepatocellular carcinoma: measurement of serum hepatitis B virus deoxyribonucleic acid (HBV-DNA). Guan R, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):8–11
Involvement of structural and nonstructural polypeptides on rotavirus RNA synthesis. Sandino AM, et al. **Arch Biol Med Exp (Santiago)** 1988 Dec;21(3–4):381–92
Replication of human immunodeficiency virus: yield of infectious virus under single growth cycle conditions. Dianzani F, et al. **Arch Virol** 1988;103(1–2):127–31
Interactions of Pseudorabies virus with swine alveolar macrophages I: virus replication. Iglesias G, et al. **Arch Virol** 1989;104(1–2):107–115
Human-avian influenza virus reassortants: effect of reassortment pattern on multi-cycle reproduction in MDCK cells. Kaverin NV, et al. **Arch Virol** 1988; 103(1–2):117–26
Replication of Mayaro virus in Aedes albopictus cells: an electron microscopic study. Mezencio JM, et al. **Arch Virol** 1989;104(3–4):299–308
Replication of sialodacryoadenitis virus in mouse L-2 cells. Percy D, et al. **Arch Virol** 1989;104(3–4):323–33
The 65 K DNA binding protein appears early in HSV-1 replication. Schenk P, et al. **Arch Virol** 1988; 102(1–2):119–23
Further characterization of the murine cytomegalovirus induced early proteins in permissive and nonpermissive cells. Walker DG, et al. **Arch Virol** 1988;101(3–4):143–54
Recognition mechanisms in the synthesis of animal virus DNA. Hay RT, et al. **Biochem J** 1989 Feb 15;258(1):3–16 (193 ref.)
Partial purification and characterization of a cellular protein that binds to the SV40 core origin of DNA replication. Alliger P, et al. **Biochim Biophys Acta** 1988 Dec 20; 951(2–3):396–402
Protein-DNA interactions at the simian virus 40 origin of replication. Baur CP, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2–3):388–95
Regulation of adeno-associated virus DNA replication. Berns KI, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2–3):425–9 (20 ref.)
Identification of cellular components required for SV40 DNA replication in vitro. Fairman M, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2–3):382–7
Adenovirus DNA replication in vitro: duplication of single-stranded DNA containing a panhandle structure. Leegwater PA, et al. **Biochim Biophys Acta** 1988 Dec 20; 951(2–3):403–10
Protein-primed replication of bacteriophage phi 29 DNA. Salas M, et al. **Biochim Biophys Acta** 1988 Dec 20; 951(2–3):419–24
Dengue virus, a flavivirus, propagates in human bone marrow progenitors and hemstopoietic cell lines. Nakao S, et al. **Blood** 1989 Sep;74(4):1235–40
A simple assay based on HIV infection preventing the reclustering of MT-4 cells. Szucs G, et al. **Bull WHO** 1988; 66(6):729–37
Regulatory pathways governing HIV-1 replication. Cullen BR, et al. **Cell** 1989 Aug 11;58(3):423–6 (25 ref.)
Formation of DNA replication structures in herpes virus-infected cells requires a viral DNA binding protein. de Bruyn Kops A, et al. **Cell** 1988 Dec 2;55(5):857–68
Identification and characterization of oriLyt, a lytic origin of DNA replication of Epstein-Barr virus. Hammerschmidt W, et al. **Cell** 1988 Nov 4;55(3):427–33
CD8+ T lymphocyte control of HIV replication in cultured CD4+ cells varies among infected individuals. Walker CM, et al. **Cell Immunol** 1989 Apr 1;119(2):470–5
Internal and terminal cis-acting sites are necessary for in vitro replication of the L-A double-stranded RNA virus of yeast. Esteban R, et al. **EMBO J** 1989 Mar;8(3):947–54
Small finger protein of avian and murine retroviruses has nucleic acid annealing activity and positions the replication primer tRNA onto genomic RNA. Prats AC, et al. **EMBO J** 1988 Jun;7(6):1777–83
Derepression of a novel class of vaccinia virus genes upon DNA replication. Vos JC, et al. **EMBO J** 1988 Nov; 7(11):3487–92

Deoxycytidine kinase is constitutively expressed in human lymphocytes: consequences for compartmentation effects, unscheduled DNA synthesis, and viral replication in resting cells. Arnér ES, et al. **Exp Cell Res** 1988 Oct;178(2):335–42

Analysis of RNA structures by temperature-gradient gel electrophoresis: viroid replication and processing. Hecker R, et al. **Gene** 1988 Dec 10;72(1–2):59–74

Participation of hup gene product in replicative transposition of Mu phage in Escherichia coli. Kano Y, et al. **Gene** 1989; 76(2):353–8

Prolonged duck hepatitis B virus replication in duck hepatocytes cocultivated with rat epithelial cells: a useful system for antiviral testing. Fourel I, et al. **Hepatology** 1989 Aug;10(2):186–91

Replication of duck hepatitis B virus in primary duck hepatocytes and its dependence on the state of differentiation of the host cell. Galle PR, et al. **Hepatology** 1989 Oct;10(4):459–65

Cytoskeletal organization and functional changes in monocytes from patients with chronic hepatitis B: relationship with viral replication. Prieto J, et al. **Hepatology** 1989 May;9(5):720–5

CTL: virus control cells first and cytolytic cells second? DNA fragmentation, apoptosis and the prelytic halt hypothesis. Martz E, et al. **Immunol Today** 1989 Mar; 10(3):79–86

A diffusible lymphokine produced by CD8+ T lymphocytes suppresses HIV replication. Walker CM, et al. **Immunology** 1989 Apr;66(4):628–30

Maintaining mosquito cell lines at high temperatures: effects on the replication of flaviviruses. Kuno G, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):193–6

Antibody dependent plaque enhancement by monoclonal antibodies against Japanese encephalitis virus. Cecilia D, et al. **Indian J Med Res** 1988 May;87:521–5

Utilization of human hematopoietic cell lines for the propagation and characterization of HBLV (human herpesvirus 6). Ablashi DV, et al. **Int J Cancer** 1988 Nov 15;42(5):787–91

Replication of latent Epstein-Barr virus genomes in normal and malignant lymphoid cells. Adams A, et al. **Int J Cancer** 1989 Sep 15;44(3):560–4

Rapid, random evolution of the genetic structure of replicating tobacco mosaic virus populations. Aldaoud R, et al. **Intervirology** 1989;30(4):227–33

Replication of Herpesvirus saimiri is semipermissive in human cells because of a block in the synthesis of certain late proteins. Dahlberg JE, et al. **Intervirology** 1988; 29(4):277–34

Rescue and replication of the adeno-associated virus 2 genome in mortal and immortal human cells. Nahreini P, et al. **Intervirology** 1989;30(2):74–85

Replication and pathogenesis of the AIDS virus. Haseltine WA. **J Acquir Immune Defic Syndr** 1988;1(3):217–40 (102 ref.)

Effects of dengue-1 infection in Aedes albopictus on its susceptibility to malathion. Rawlins SC, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):372–3

Rolling-circle replication of UV-irradiated duplex DNA in the phi X174 replicative-form——single-strand replication system in vitro. Shavitt O, et al. **J Bacteriol** 1989 Jun; 171(6):3530–8

Direct observation of the budding and fusion of an enveloped virus by video microscopy of viable cells. Büchi T. **J Cell Biol** 1988 Nov;107(5):1689–95

Alphavirus RNA replicase is located on the cytoplasmic surface of endosomes and lysosomes. Froshauer S, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2075–86

Virus replication and genome interactions. Proceedings of the seventh John Innes Symposium. Norwich, 1986. **J Cell Sci Suppl** 1987;7:1–337

Structure and replication of geminivirus genomes. Davies JW, et al. **J Cell Sci Suppl** 1987;7:95–107

Analysis of brome mosaic virus replication and aminoacylation functions by site-specific mutagenesis. Hall TC, et al. **J Cell Sci Suppl** 1987;7:287–301

The role of sequence-specific DNA-binding proteins in adenovirus DNA replication. Hay RT, et al. **J Cell Sci Suppl** 1987;7:51–65

Structure and replication of caulimovirus genomes. Hull R, et al. **J Cell Sci Suppl** 1987;7:213–29 (66 ref.)

Replication of the genome of alphaviruses. Kääriäinen L, et al. **J Cell Sci Suppl** 1987;7:231–50

The genome of herpes simplex virus: structure, replication and evolution. McGeoch DJ. **J Cell Sci Suppl** 1987;7:67–94 (118 ref.)

Self-cleavage of RNA in the replication of viroids and virusoids. Symons RH, et al. **J Cell Sci Suppl** 1987;7:303–18

Retrovirus genome replication: priming specificities of plus-strand DNA synthesis. Taylor J, et al. **J Cell Sci Suppl** 1987;7:189–95

Molecular events leading to picornavirus genome replication. Wimmer E, et al. **J Cell Sci Suppl** 1987;7:251–76 (141 ref.)

Tobacco mosaic virus replicase and replicative structures. Young N, et al. **J Cell Sci Suppl** 1987;7:277–85

Replication of the human immunodeficiency virus 1 and impaired differentiation of T cells after in vitro infection of bone marrow immature T cells. Lunardi-Iskandar Y, et al. **J Clin Invest** 1989 Feb;83(2):610–5

Enhanced infectivity of bluetongue virus in cell culture by centrifugation. Sundin DR, et al. **J Clin Microbiol** 1989 Jul;27(7):1659–60

Hepatitis B-DNA replication and histological patterns in liver biopsy specimens of chronic HBsAg positive patients with and without hepatitis delta virus superinfection. Villari D, et al. **J Clin Pathol** 1989 Jul;42(7):689–93

Replication kinetics and cytopathic effect of hepatitis A virus. Cromeans T, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2051–62

Competitive multiplication of RNA3 species of different strains of alfalfa mosaic virus. Dore JM, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):777–82

Effect of interferon-alpha, interferon-gamma and tumour necrosis factor on African swine fever virus replication in porcine monocytes and macrophages. Esparza I, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):2973–80

Use of monoclonal antibodies in the purification of an inhibitor of virus replication by affinity chromatography. Gera A, et al. **J Gen Virol** 1989 May;70 (Pt 5):1293–6

Separation of functional West Nile virus replication complexes from intracellular membrane fragments. Grun JB, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3121–7

Modulation of lentivirus replication by antibodies. Non-neutralizing antibodies to caprine arthritis-encephalitis virus enhance early stages of infection in macrophages, but do not cause increased production of virions. Jolly PE, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2221–6

Incubation periods in six models of intraperitoneally injected scrapie depend mainly on the dynamics of agent replication within the nervous system and not the lymphoreticular system. Kimberlin RH, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):2953–60

A novel replicative form DNA of Aleutian disease virus: the covalently closed linear DNA of the parvoviruses. Löchelt M, et al. **J Gen Virol** 1989 May;70 (Pt 5):1105–16

A human melanoma cell line highly susceptible to influenza C virus. Nishimura H, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1653–61

Persistent replication of herpes simplex virus type 1 in JOK-1 cells. Thiele K, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1907–11

Relationship between the production of murine cytomegalovirus and interferon in macrophages. Yamaguchi T, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):2961–71

Effects of HIV superinfection on HBV replication in a chronic HBsAg carrier with liver disease. Pastore G, et al. **J Hepatol** 1988 Oct;7(2):164–8

Serum markers of hepatitis B virus replication, liver histology and intrahepatic expression of hepatitis B core antigen. Ramalho F, et al. **J Hepatol** 1988 Aug;7(1):14–20

Mouse hepatitis virus 3 replication in T and B lymphocytes correlate with viral pathogenicity. Lamontagne L, et al. **J Immunol** 1989 Jun 15;142(12):4458–65

Intrinsic resistance to viral infection. Mouse macrophage restriction of herpes simplex virus replication. Sarmiento M. **J Immunol** 1988 Oct 15;141(8):2740–8

B19 parvovirus replicates in erythroid leukemic cells in vitro [letter] Takahashi T, et al. **J Infect Dis** 1989 Sep; 160(3):548–9

The productive infection of alveolar macrophages by simian immunodeficiency virus. Ringler DJ, et al. **J Med Primatol** 1989;18(3–4):217–26

Effect of natural human interferon-beta on the replication of human cytomegalovirus. Nakamura K, et al. **J Med Virol** 1988 Dec;26(4):363–73

A dynamic study of the intrafamilial spread of hepatitis B virus infection: relation with the viral replication. Porres JC, et al. **J Med Virol** 1989 Aug;28(4):237–42

Replication of poliovirus in human mononuclear phagocyte cell lines is dependent on the stage of cell differentiation. Roivainen M, et al. **J Med Virol** 1989 Feb;27(2):91–4

Protein-induced bending of the simian virus 40 origin of replication. Baur CP, et al. **J Mol Biol** 1988 Oct 20; 203(4):1009–19

Evidence for multiple vegetative DNA replication origins and alternative replication mechanisms of bovine papillomavirus type 1. Burnett S, et al. **J Mol Biol** 1989 Mar 5;206(1):239–44

Genetic analysis of the lytic replicon of bacteriophage P1. I. Isolation and partial characterization. Cohen G, et al. **J Mol Biol** 1989 May 5;207(1):99–109

Regulation of bacteriophage f1 DNA replication. I. New functions for genes II and X. Fulford W, et al. **J Mol Biol** 1988 Sep 5;203(1):49–62

Bacteriophage f1 DNA replication genes. II. The roles of gene V protein and gene II protein in complementary strand synthesis. Fulford W, et al. **J Mol Biol** 1988 Sep 5;203(1):39–48

Structure and regulation of the lytic replicon of phage P1. Hansen EB. **J Mol Biol** 1989 May 5;207(1):135–49

Q beta replicase: mapping the functional domains of an RNA-dependent RNA polymerase. Mills DR, et al. **J Mol Biol** 1989 Feb 20;205(4):751–64

Genetic analysis of the lytic replicon of bacteriophage P1. II. Organization of replicon elements. Sternberg N, et al. **J Mol Biol** 1989 May 5;207(1):111–33

An NTP-binding motif is the most conserved sequence in a highly diverged monophyletic group of proteins involved in positive strand RNA viral replication. Gorbalenya AE, et al. **J Mol Evol** 1989 Mar;28(3):256–68

Morphogenesis of measles virus on C6 rat glioma cells. Röser K, et al. **J Neuroimmunol** 1988 Dec;20(2–3):173–6

The herpes simplex virus immediate-early protein, ICP4, is required to potentiate replication of human immunodeficiency virus in CD4+ lymphocytes. Albrecht MA, et al. **J Virol** 1989 May;63(5):1861–8

Restricted replication of hepatitis A virus in cell culture: encapsidation of viral RNA depletes the pool of RNA available for replication. Anderson DA, et al. **J Virol** 1988 Nov;62(11):4201–6

Evidence for two points of restriction in the expression of adenovirus type 2 in cultured epidermal keratinocytes. Aneskievich BJ, et al. **J Virol** 1988 Nov;62(11):4365–8

Development and characterization of an Fv-1-sensitive retrovirus-packaging system: single-hit titration kinetics observed in restrictive cells. Boone LR, et al. **J Virol** 1989 Jun;63(6):2592–7

Proposed gag-encoded transcriptional activator is not necessary for Rous sarcoma virus replication or transformation. Carlberg K, et al. **J Virol** 1988 Nov; 62(11):4003–8

Herpes simplex virus type 1 DNA synthesis requires the product of the UL8 gene: isolation and characterization of an ICP6::lacZ insertion mutation. Carmichael EP, et al. **J Virol** 1989 Feb;63(2):591–9

Change in host cell tropism associated with in vitro replication of equine infectious anemia virus. Carpenter S, et al. **J Virol** 1989 Jun;63(6):2492–6

Functional limits of oriP, the Epstein-Barr virus plasmid origin of replication. Chittenden T, et al. **J Virol** 1989 Jul; 63(7):3016–25

Abortive replication of choleraphage phi 149 in Vibrio cholerae biotype el tor. Chowdhury R, et al. **J Virol** 1989 Jan;63(1):392–7

Transcriptional activation of homologous and heterologous genes by the hepatitis B virus X gene product in cells permissive for viral replication. Colgrove R, et al. **J Virol** 1989 Sep;63(9):4019–26

Evidence for a ligation step in the DNA replication of the autonomous parvovirus minute virus of mice. Cotmore SF, et al. **J Virol** 1989 Feb;63(2):1002–6

Viral protein R of human immunodeficiency virus types 1 and 2 is dispensable for replication and cytopathogenicity in lymphoid cells. Dedera D, et al. **J Virol** 1989 Jul; 63(7):3205–8

Identification of temperature-sensitive mutants of vaccinia virus that are defective in conversion of concatemeric replicative intermediates to the mature linear DNA genome. DeLange AM. **J Virol** 1989 Jun;63(6):2437–44

Analysis of origin of DNA replication of human papovavirus BK. Deyerle KL, et al. **J Virol** 1989 Jan;63(1):356–65

Transformation of human cells by oncogenic viruses supports permissiveness for parvovirus H-1 propagation. Faisst S, et al. **J Virol** 1989 May;63(5):2152–8

Replication and gene expression of hepatitis B virus in a transgenic mouse that contains the complete viral genome. Farza H, et al. **J Virol** 1988 Nov;62(11):4144–52

Distinct replicative and cytopathic characteristics of human immunodeficiency virus isolates. Fenyö EM, et al. **J Virol** 1988 Nov;62(11):4414–9

Helper-independent retrovirus vectors with Rous-associated virus type O long terminal repeats. Greenhouse JJ, et al. **J Virol** 1988 Dec;62(12):4809–12

A nonlethal mutation in large T antigen of polyomavirus which affects viral DNA synthesis. Hacker DL, et al. **J Virol** 1989 Feb;63(2):776–81

Sindbis virus ts103 has a mutation in glycoprotein E2 that leads to defective assembly of virions. Hahn CS, et al. **J Virol** 1989 Aug;63(8):3459–65

A subset of herpes simplex virus replication genes induces DNA amplification within the host cell genome. Heilbronn R, et al. **J Virol** 1989 Sep;63(9):3683–92

Liver-specific expression of hepatitis B virus is determined by the combined action of the core gene promoter and the enhancer. Honigwachs J, et al. **J Virol** 1989 Feb; 63(2):919–24

A conserved open reading frame that overlaps the herpes simplex virus thymidine kinase gene is important for viral growth in cell culture. Jacobson JG, et al. **J Virol** 1989 Apr;63(4):1839–43

Molecular biology of rotaviruses. VIII. Quantitative analysis of regulation of gene expression during virus replication. Johnson MA, et al. **J Virol** 1989 May;63(5):2048–55

Modulation of lentivirus replication by antibodies: Fc portion of immunoglobulin molecule is essential for enhancement of binding, internalization, and neutralization of visna virus in macrophages. Jolly PE, et al. **J Virol** 1989 Apr; 63(4):1811–3

Defect of adenovirus type 12 replication in hamster cells: absence of transcription of viral virus-associated and L1 RNAs. Jüttermann R, et al. **J Virol** 1989 Aug;63(8):3535–40

Characterization of major recognition sequences for a herpes simplex virus type 1 origin-binding protein. Koff A, et al. **J Virol** 1988 Nov;62(11):4096–103

Initiation of replication of the human hepatitis delta virus genome from cloned DNA: role of delta antigen. Kuo MY, et al. **J Virol** 1989 May;63(5):1945–50

The 1:1 N-NS protein complex of vesicular stomatitis virus is essential for efficient genome replication. La Ferla FM, et al. **J Virol** 1989 Sep;63(9):3852–7

Enhanced virus replication and inhibition of lymphocytic choriomeningitis virus disease in anti-gamma interferon-treated mice. Leist TP, et al. **J Virol** 1989 Jun; 63(6):2813–9

Evidence for the role of the P2 protein of human rhinovirus in its host range change. Lomax NB, et al. **J Virol** 1989

May;63(5):2396–9
Effects of long terminal repeat mutations on human immunodeficiency virus type 1 replication. Lu Y, et al. **J Virol** 1989 Sep;63(9):4115–9
Intramolecular homologous recombination in cells infected with temperature-sensitive mutants of vaccinia virus. Merchlinsky M. **J Virol** 1989 May;63(5):2030–5
Characterization of Moloney murine leukemia virus mutants with single-amino-acid substitutions in the Cys-His box of the nucleocapsid protein. Méric C, et al. **J Virol** 1989 Apr;63(4):1558–68
Large T-antigen mutants define multiple steps in the initiation of simian virus 40 DNA replication. Mohr IJ, et al. **J Virol** 1989 Oct;63(10):4181–8
Molecular localization of abortive infection of resident peritoneal macrophages by herpes simplex virus type 1. Morahan PS, et al. **J Virol** 1989 May;63(5):2300–7
Herpes simplex virus type 1 gene products required for DNA replication: identification and overexpression. Olivo PD, et al. **J Virol** 1989 Jan;63(1):196–204
Conformational change in the floor of the human rhinovirus canyon blocks adsorption to HeLa cell receptors. Pevear DC, et al. **J Virol** 1989 May;63(5):2002–7
The proteolytic cleavage of PE2 to envelope glycoprotein E2 is not strictly required for the maturation of Sindbis virus. Presley JF, et al. **J Virol** 1989 May;63(5):1975–80
Adeno-associated virus rep protein synthesis during productive infection. Redemann BE, et al. **J Virol** 1989 Feb;63(2):873–82
Inhibition of RNase H activity and viral replication by single mutations in the 3' region of Moloney murine leukemia virus reverse transcriptase. Repaske R, et al. **J Virol** 1989 Mar;63(3):1460–4
Both excision and replication of cloned autonomous parvovirus DNA require the NS1 (rep) protein. Rhode SL 3d. **J Virol** 1989 Oct;63(10):4249–56
The spliced BZLF1 gene of Epstein-Barr virus (EBV) transactivates an early EBV promoter and induces the virus productive cycle. Rooney CM, et al. **J Virol** 1989 Jul; 63(7):3109–16
Cytopathic effects induced by Epstein-Barr virus replication in epithelial nasopharyngeal carcinoma hybrid cells. Sato H, et al. **J Virol** 1989 Aug;63(8):3555–9
Nuclear subcompartmentalization of simian virus 40 large T antigen: evidence for in vivo regulation of biochemical activities. Schirmbeck R, et al. **J Virol** 1989 May; 63(5):2308–16
The duck hepatitis B virus core protein contains a highly phosphorylated C terminus that is essential for replication but not for RNA packaging. Schlicht HJ, et al. **J Virol** 1989 Jul;63(7):2995–3000
Unmyristylated Moloney murine leukemia virus Pr65gag is excluded from virus assembly and maturation events. Schultz AM, et al. **J Virol** 1989 May;63(5):2370–3
Herpes simplex virus type 2 mutants with deletions in the intergenic region between ICP4 and ICP22/47: identification of nonessential cis-acting elements in the context of the viral genome. Smith CA, et al. **J Virol** 1989 May;63(5):2036–47
A promoter of Epstein-Barr virus that can function during latent infection can be transactivated by EBNA-1, a viral protein required for viral DNA replication during latent infection. Sugden B, et al. **J Virol** 1989 Jun;63(6):2644–9
Polyadenylation at correct sites in genome RNA is not required for retrovirus replication or genome encapsidation. Swain A, et al. **J Virol** 1989 Aug; 63(8):3301–6
Expression of the BZLF1 latency-disrupting gene differs in standard and defective Epstein-Barr viruses. Taylor N, et al. **J Virol** 1989 Apr;63(4):1721–8
Modified model for the switch from Sendai virus transcription to replication. Vidal S, et al. **J Virol** 1989 May;63(5):1951–8
Inhibition of human T-cell leukemia virus type I replication in primary human T cells that express antisense RNA. von Rüden T, et al. **J Virol** 1989 Feb;63(2):677–82
Relationship between RNA polymerase II and efficiency of vaccinia virus replication. Wilton S, et al. **J Virol** 1989 Apr;63(4):1540–8
Multiple EBNA1-binding sites are required to form an EBNA1-dependent enhancer and to activate a minimal replicative origin within oriP of Epstein-Barr virus. Wysokenski DA, et al. **J Virol** 1989 Jun;63(6):2657–66
Propagation of human parvovirus B19 in primary culture of erythroid lineage cells derived from fetal liver. Yaegashi N, et al. **J Virol** 1989 Jun;63(6):2422–6
Lentivirus-induced interferon inhibits maturation and proliferation of monocytes and restricts the replication of caprine arthritis-encephalitis virus. Zink MC, et al. **J Virol** 1989 Jun;63(6):2578–84
Enhanced production of poxvirus vectors by high speed rolling. Hughes JH, et al. **J Virol Methods** 1988 Oct; 22(1):75–80
Quantitation of HIV-1 activity in tissue culture supernatants: effects of culture condition on syncytial assays and virus production. Spickett G, et al. **J Virol Methods** 1989 Apr-May;24(1-2):67–76
Growth of a murine coronavirus in a microcarrier cell culture system. Talbot PJ, et al. **J Virol Methods** 1989 Jul; 25(1):63–70
Rapid bioassay of human interferon by direct enzyme immunoassay of encephalomyocarditis virus in HEp-2 cell monolayers after a single cycle of infection. Vlaspolder F, et al. **J Virol Methods** 1989 Apr-May;24(1-2):153–8
Spontaneous reactivation of hepatitis B virus replication in HBsAg carriers who seroconverted from HBeAg to anti-HBe. Okuno T, et al. **Jpn J Med** 1989 Jan-Feb; 28(1):45–9
Replicative and cytopathic characteristics of HIV-2 and severity of infection [letter] Albert J, et al. **Lancet** 1989 Apr 15;1(8642):852–3
Predictive value of HIV replication in cell culture in babies born to HIV seropositive mothers [letter] Courpotin C, et al. **Lancet** 1988 Nov 5;2(8619):1074–5
Heterogeneity of HIV-1 replication and antigen expression in EBV-transformed B cell lines. Tremblay M, et al. **Leukemia** 1988 Dec;2(12 Suppl):233S–240S
Detection of proteins encoded by the pre-S region of hepatitis B virus in the sera of HBsAg carriers: relation to viral replication. Ibarra MZ, et al. **Liver** 1989 Jun; 9(3):153–8
Hepatitis B virus replication in hepatitis B and D coinfection. Morante AL, et al. **Liver** 1989 Apr;9(2):65–70
Replication of cytomegalovirus in human thymic epithelial cells. Numazaki K, et al. **Med Microbiol Immunol (Berl)** 1989;178(2):89–98
Induced frameshifting mechanism of replication for an information-carrying scrapie prion. Wills PR. **Microb Pathog** 1989 Apr;6(4):235–49 (70 ref.)
Viral and cellular deoxyribonucleases are associated with herpes simplex virus replicative intermediates. Turco A, et al. **Microbiologica** 1988 Oct;11(4):321–8
Augmentation of helper virus replication in the presence of defective retrovirus. Anand R, et al. **Microbios** 1989; 58(235):71–82
Effect of silencer on polyomavirus DNA replication. Ariizumi K, et al. **Mol Cell Biol** 1989 Sep;9(9):4026–31
Origin auxiliary sequences can facilitate initiation of simian virus 40 DNA replication in vitro as they do in vivo. Guo ZS, et al. **Mol Cell Biol** 1989 Sep;9(9):3593–602
Simian virus 40 DNA replication in vitro: identification of multiple stages of initiation. Tsurimoto T, et al. **Mol Cell Biol** 1989 Sep;9(9):3839–49
AIDS antibodies may enhance viral infection [news] Glaser V. N Y State J Med 1988 Oct;88(10):564
Plaque formation and replication of porcine parvovirus in embryonic swine kidney cell line, ESK cells. Kawamura H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):803–8
Stability and expression of bacterial genes in replicating geminivirus vectors in planta. Hayes RJ, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2391–403
Evidence for a gapped linear duplex DNA intermediate in the replicative cycle of human and simian spumaviruses. Kupiec JJ, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9557–65
Inhibition of human immunodeficiency virus (HIV-1) replication by synthetic oligo-RNA derivatives. Shibahara S, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):239–52
Sequence and structural requirements for primase initiation in the SV40 origin of replication. Tseng BY, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1953–63
Replication of herpes simplex virus in blood monocytes and placental macrophages from human neonates. Plaeger-Marshall S, et al. **Pediatr Res** 1989 Aug; 26(2):135–9
ColIb plasmid genes that inhibit the replication of T5 and T7 bacteriophage. Duckworth DH, et al. **Plasmid** 1988 Nov;20(3):182–93
Rev-induced modulation of Nef protein underlies temporal regulation of human immunodeficiency virus replication. Ahmad N, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6111–5
Human immunodeficiency virus type 1 in spinal cords of acquired immunodeficiency syndrome patients with myelopathy: expression and replication in macrophages. Eilbott DJ, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3337–41
Molecular and biological characterization of a replication competent human immunodeficiency type 2 (HIV-2) proviral clone. Franchini G, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2433–7
Selective replication of simian immunodeficiency virus in a subset of CD4+ lymphocytes. Gallatin WM, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3301–5
Bioassay for trans-activation using purified human immunodeficiency virus tat-encoded protein: trans-activation requires mRNA synthesis. Gentz R, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):821–4
Conserved cysteine and histidine residues of the avian myeloblastosis virus nucleocapsid protein are essential for viral replication but are not "zinc-binding fingers". Jentoft JE, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7094–8
Molecular cloning of two west African human immunodeficiency virus type 2 isolates that replicate well in macrophages: a Gambian isolate, from a patient with neurologic acquired immunodeficiency syndrome, and a highly divergent Ghanian isolate. Kühnel H, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2383–7
Genome rearrangements activate the Epstein-Barr virus gene whose product disrupts latency. Rooney C, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9801–5
Rapidly and slowly replicating human immunodeficiency virus type 1 isolates can be distinguished according to target-cell tropism in T-cell and monocyte cell lines. Schwartz S, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):7200–3
In vitro propagation of human hepatitis B virus in a rat hepatoma cell line. Shih CH, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6323–7
Functional role of human immunodeficiency virus type 1 vpu. Terwilliger EF, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):5163–7
Purification of replication protein C, a cellular protein involved in the initial stages of simian virus 40 DNA replication in vitro. Virshup DM, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3584–8
Dugbe virus replication in nymph and adult Amblyomma variegatum. Gonzalez JP, et al. **Res Virol** 1989 Jul-Aug; 140(4):333–6
Replication of hemorrhagic fever viruses in monocytic cells. Lewis RM, et al. **Rev Infect Dis** 1989 May-Jun;11 Suppl 4:S736–42 (63 ref.)
Infection and replication of HIV-1 in purified progenitor cells of normal human bone marrow. Folks TM, et al. **Science** 1988 Nov 11;242(4880):919–22
The unusual properties of CH1641, a sheep-passaged isolate of scrapie. Foster JD, et al. **Vet Rec** 1988 Jul 2;123(1):5–8
Herpes simplex virus type 2 infection of unstimulated human T-lymphocytes. Kucera LS, et al. **Viral Immunol** 1989; 2(1):11–6
Bovine leukemia virus. VII. In vitro replication of virus in bat lung cell culture NBL BLV 2. Pătrașcu IV. **Virologie** 1988 Jul-Sep;39(3):199–205
The entry of African swine fever virus into Vero cells. Alcamí A, et al. **Virology** 1989 Jul;171(1):68–75
The role of bone marrow and thymic elements in the initiation and spread of virus production in the AKR thymus. Buckheit RW Jr, et al. **Virology** 1988 Oct; 166(2):533–41
Propagation of woodchuck hepatitis delta virus in primary woodchuck hepatocytes. Choi SS, et al. **Virology** 1988 Dec; 167(2):451–7
Analysis of viral proteins in human cytomegalovirus-infected cells during impaired lytic replication of herpes simplex virus. Cockley KD, et al. **Virology** 1989 May;170(1):268–72
Q-mediated late gene transcription of bacteriophage lambda: RNA start point and RNase III processing sites in vivo. Daniels DL, et al. **Virology** 1988 Dec;167(2):568–77
Replication of recombinant phi 29 DNA molecules in Bacillus subtilis protoplasts. Escarmís C, et al. **Virology** 1989 Mar; 169(1):152–60
Vesicular stomatitis virus and its defective interfering particles exhibit in vitro transcriptional and replicative competition for purified L-NS polymerase molecules. Giachetti C, et al. **Virology** 1989 May;170(1):264–7
Mutation rate of the hepadnavirus genome. Girones R, et al. **Virology** 1989 Jun;170(2):595–7
Rescue of Sendai virus from viral ribonucleoprotein-transfected cells by infection with recombinant vaccinia viruses carrying Sendai virus L and P/C genes. Gotoh H, et al. **Virology** 1989 Aug; 171(2):434–43
Replication of duck hepatitis B virus in two differentiated human hepatoma cell lines after transfection with cloned viral DNA. Hirsch R, et al. **Virology** 1988 Nov; 167(1):136–42
The superimmunity gene sim of bacteriophage P1 causes superinfection exclusion. Kliem M, et al. **Virology** 1989 Aug;171(2):350–5
Proteolytic processing of poliovirus polyprotein: elimination of 2Apro-mediated, alternative cleavage of polypeptide 3CD by in vitro mutagenesis. Lee CK, et al. **Virology** 1988 Oct;166(2):405–14
Replication of the genome RNAs of defective interfering particles of vesicular stomatitis and Sendai viruses using heterologous viral proteins. Moyer SA. **Virology** 1989 Sep; 172(1):341–5
Evidence that nucleocapsid disassembly and a later step in virus replication are inhibited in transgenic tobacco protoplasts expressing TMV coat protein. Osbourn JK, et al. **Virology** 1989 Sep;172(1):370–3
Structure and protein composition of the rotavirus replicase particle. Patton JT, et al. **Virology** 1988 Oct;166(2):358–65
Replication of herpes simplex virus type 1 in differentiated human promyelocytic HL-60 cells. Pientong C, et al. **Virology** 1989 Jun;170(2):468–76
The herpes simplex virus type 1 temperature-sensitive mutant ts1222 has a single base pair deletion in the small subunit of ribonucleotide reductase. Preston VG, et al. **Virology** 1988 Dec;167(2):458–67
Resistance to TMV in transgenic plants results from interference with an early event in infection. Register JC 3d, et al. **Virology** 1988 Oct;166(2):524–32
An insertion mutation in the pol gene of Moloney murine leukemia virus results in temperature-sensitive pol maturation and viral replication. Tanese N, et al. **Virology** 1989 Jun;170(2):378–84
The role of monovalent cation transport in Sindbis virus maturation and release. Ulug ET, et al. **Virology** 1989 Sep; 172(1):42–50
Structure and nuclear localization signal of the SKI3 antiviral protein of Saccharomyces cerevisiae. Rhee SK, et al. **Yeast** 1989 May-Jun;5(3):149–58
[Propagation and replication of Hantaan virus in human endothelial cells in vitro] Zhu P. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):524–6

(Chi)

[The reproduction of swine vesicular disease virus in microcells and microcytoplasts] Li WG, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Mar;21(1):101–11 (Eng. Abstr.) **(Chi)**

[Chronic hepatitis caused by hepatitis B virus. Comparative study of the histologic lesions and of viral replication] Martet G, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Jun–Sep;25(4):133–6 (Eng. Abstr.) **(Fre)**

[Virus inactivation in blood products] Stephan W. **Beitr Infusionther** 1988;21:192–201 (10 ref.) **(Ger)**

[Virology of herpes simplex virus. "Herpes diseases in pregnant patients and newborn infants" workshop in Passau 19/20 November 1986] Mertens T. **Klin Padiatr** 1988 Nov–Dec;200(6):463–7 (40 ref.) **(Ger)**

[Interferons and their effects] Giese M, et al. **Onkologie** 1988 Aug;11(4):151–4 (15 ref.) (Eng. Abstr.) **(Ger)**

[The effect of limnic protozoa on virus inactivation] Burger G, et al. **Z Gesamte Hyg** 1988 Sep;34(9):526–7 (Eng. Abstr.) **(Ger)**

[Kinetics of replicative forms of DNA of hepatitis B virus in the liver of patients with chronic hepatitis B] Stenico D, et al. **Medicina (Firenze)** 1988 Apr–Jun;8(2):172–3 (Eng. Abstr.) **(Ita)**

[Replication of herpes simplex virus DNA] Nishiyama Y. **Nippon Rinsho** 1989 Feb;47(2):271–6 **(Jpn)**

[Detection of HBV DNA by an in situ hybridization method—its distribution in relation to other HBV markers] Michitaka K. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun; 85(6):1260–8 (Eng. Abstr.) **(Jpn)**

[Molecular mechanism of initiation of DNA replication in eukaryotic cells] Ariga H. **Seikagaku** 1988 Jul;60(7):517–31 (84 ref.) **(Jpn)**

[In vitro replication of SV40 and polyoma virus DNA] Murakami Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(11):1766–73 **(Jpn)**

[Function of protein myristoylation in cellular regulation and viral proliferation] Shoji S, et al. **Yakugaku Zasshi** 1989 Feb;109(2):71–85 (49 ref.) (Eng. Abstr.) **(Jpn)**

[Inhibition of adenovirus replication in cultured Cos I cells by the antisense RNA] Miroshnichenko OI, et al. **Dokl Akad Nauk SSSR** 1988;300(4):981–2 **(Rus)**

[Cloning and localization of the replication and mobilization regions in the D-plasmid of Pseudomonas putida pBS286 (IncP–9) with a broad host range] Tsof TV, et al. **Genetika** 1988 Jun;24(6):980–92 (Eng. Abstr.) **(Rus)**

[The variability of arboviruses reproducing in vectors and their cell and tissue cultures] Khozinskaia GA, et al. **Med Parazitol (Mosk)** 1988 May–Jun;(3):3–8 (42 ref.) **(Rus)**

[Suppression of the reproduction and dissemination of the tick-borne encephalitis virus under the influence of vertebrate immunity against tick antigens] Mishaeva NP, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):78–81 (Eng. Abstr.) **(Rus)**

[Reproduction and morphogenesis of phage E105 of Erwinia carotovora 268] Danileichenko VV, et al. **Mikrobiol Zh** 1987 Jul–Aug;49(4):35–7 (Eng. Abstr.) **(Rus)**

[Electron microscopic analysis of the effect of Trichophyton rubrum on the reproduction of the human immunodeficiency virus] Bykovskii AF, et al. **Vestn Dermatol Veserol** 1989;(5):13–6 (Eng. Abstr.) **(Rus)**

[Secondary intensification of influenza virus reproduction and the development of tumors in mice] Orlovskii AA, et al. **Vopr Onkol** 1989;35(2):215–20 (Eng. Abstr.) **(Rus)**

[Molecular mechanisms of the reproduction of phlebo- and arenaviruses] Lukashevich IS, et al. **Vopr Virusol** 1988 Nov–Dec;33(6):651–9 (59 ref.) **(Rus)**

[Effect of the conditions for dynamic homogeneous batch stab cultivation on the reproductive process in Shigella sonnei bacteriophages] Kazakova TB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):18–21 (Eng. Abstr.) **(Rus)**

[Viral replication, histologic damage and enzymatic activity in chronic hepatopathies caused by B virus. Analysis of 21 patients] Bataller Sifre R, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):537–43 (Eng. Abstr.) **(Spa)**

[Viral replication, histologic damage and enzymatic activity in chronic hepatopathies caused by B virus] Bataller Sifré R, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):620–4 (42 ref.) (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Inhibitory effect of sulphur-containing purine nucleoside analogues on replication of RNA viruses: selective antiviral activity against influenza viruses. Yamamoto K, et al. **Acta Virol (Praha)** 1988 Sep;32(5):386–92

Anti-HIV activity of protoporphyrin [letter] Asanaka M, et al. **Aids** 1989 Jun;3(6):403–4

Inhibition of HIV and virus replication by polysulphated polyxylan: HOE/BAY 946, a new antiviral compound. Biesert L, et al. **Aids** 1988 Dec;2(6):449–57

The effect of interferon on cells persistently infected with HIV. Crespi M. **Aids** 1989 Jan;3(1):33–6

Enhanced in vitro inhibition of HIV-1 replication by 3'-fluoro-3'-deoxythymidine compared to several other nucleoside analogs. Hartmann H, et al. **AIDS Res Hum Retroviruses** 1988 Dec;4(6):457–66

Enhancement of HIV replication and giant cell formation by tumor necrosis factor. Matsuyama T, et al. **AIDS Res Hum Retroviruses** 1989 Apr;5(2):139–46

A rapid and simple colorimetric test for the study of anti-HIV agents. Schwartz O, et al. **AIDS Res Hum Retroviruses** 1988 Dec;4(6):441–8

Inhibitory effect of papaverine on HIV replication in vitro. Turano A, et al. **AIDS Res Hum Retroviruses** 1989 Apr; 5(2):183–92

Inhibition of late influenza virus genome expression by diamidinophenylindole. Conti G, et al. **Ann Inst Pasteur Virol** 1988 Jan–Mar;139(1):69–78

Effect of pesticides (atrazine and lindane) on the replication of spring viremia of carp virus in vitro. Cossarini-Dunier M, et al. **Ann Rech Vet** 1988;19(3):209–11

Mode of action of a new type of UDP-glucose analog against herpesvirus replication. Alarcón B, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1257–61

Combinations of 3'-azido-3'-deoxythymidine (zidovudine) and phosphonoformate (foscarnet) against human immunodeficiency virus type 1 and cytomegalovirus replication in vitro. Eriksson BF, et al. **Antimicrob Agents Chemother** 1989 May;33(5):663–9

Synergistic inhibition of human immunodeficiency virus type 1 and type 2 replication in vitro by castanospermine and 3'-azido-3'-deoxythymidine. Johnson VA, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):53–7

Comparison of two bromovinyl nucleoside analogs, 1-beta-D-arabinofuranosyl-E-5-(2-bromovinyl)uracil and E-5-(2-bromovinyl)-2'-deoxyuridine, with acyclovir in inhibition of Epstein-Barr virus replication. Lin JC, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1068–72

Selective inhibition of human cytomegalovirus replication by a novel nucleoside, oxetanocin G. Nishiyama Y, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1053–6

(S)-1-(3-hydroxy-2-phosphonylmethoxypropyl)cytosine, a potent and selective inhibitor of human cytomegalovirus replication. Snoeck R, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1839–44

Potentiating effect of ribavirin on the anti-retrovirus activity of 3'-azido-2,6-diaminopurine-2',3'-dideoxyriboside in vitro and in vivo. Balzarini J, et al. **Antiviral Res** 1989 May–Jun;11(4):161–71

Effect of isoflavans and isoflavenes on rhinovirus 1B and its replication in HeLa cells. Conti C, et al. **Antiviral Res** 1988 Nov;10(1–3):117–27

Inhibition of HSV-1 and vaccinia virus replication by cephalosporin derivatives. Cottagnoud P, et al. **Antiviral Res** 1988 Nov;10(1–3):59–70

A new in vivo anti-viral assay using microencapsulated infected cell cultures. Li XQ, et al. **Antiviral Res** 1988 Dec 1;10(4–5):179–91

Inhibition of HIV replication by liposomal encapsulated amphotericin B. Pontani DR, et al. **Antiviral Res** 1989 Apr; 11(3):119–25

Detecting inhibition of coxsackievirus replication by measuring DNA synthesis—effect of proteinase inhibitors. Grinde B, et al. **APMIS** 1989 Jun;97(6):523–6

Lack of quantitative correlation between inhibition of replication of rhinoviruses by an antiviral drug and their stabilization. Andries K, et al. **Arch Virol** 1989; 106(1–2):51–61

Early events in arenavirus replication are sensitive to lysosomotropic compounds. Glushakova SE, et al. **Arch Virol** 1989;104(1–2):157–61

Inhibition of HIV-1 replication and syncytium formation by synthetic CD4 peptides. Hayashi Y, et al. **Arch Virol** 1989; 105(1–2):129–35

Investigation of the role of glycans for the biological activity of Semliki Forest virus grown in Aedes albopictus cells using inhibitors of asparagine-linked oligosaccharides trimming. Naim HY, et al. **Arch Virol** 1988;102(1–2):73–89

Fuchsin acid selectively inhibits human immunodeficiency virus (HIV) replication in vitro. Baba M, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1404–11

Tumor necrosis factor enhances replication of human immunodeficiency virus (HIV) in vitro. Ito M, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):307–12

Inhibition of duck hepatitis B virus replication by purine 2',3'-dideoxynucleosides. Suzuki S, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1144–51

Involvement of prostaglandin-induced proteins in the inhibition of herpes simplex virus replication. Yamamoto N, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):189–94

5-Chloro-substituted derivatives of 2', 3'-didehydro-2',3'-dideoxyuridine, 3'-fluoro-2',3'-dideoxyuridine and 3'-azido-2',3'-dideoxyuridine as anti-HIV agents. Balzarini J, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):869–74

An analysis of the inhibition of replication of HIV and MuLV by some 3'-blocked pyrimidine analogs. Bazin H, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):109–19

Inhibitory effect of interferon-gamma on adenovirus replication and late transcription. Mistchenko AS, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1971–8

The effect of a novel inhibitor of aldehyde dehydrogenase on viral replication. Ogier G, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1335–43

Effects of adriamycin and etoposide on the replication of adenovirus 5 in sensitive and resistant human tumour cells. Parsons PG, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):31–7

The effect of cyclosporine A on infection of susceptible cells by human immunodeficiency virus type 1. Wainberg MA, et al. **Blood** 1988 Dec;72(6):1904–10

Inhibition of HIV replication in cell culture by the specific aspartic protease inhibitor pepstatin A. von der Helm K, et al. **FEBS Lett** 1989 Apr 24;247(2):349–52

Azapyrimidine analogues: inhibition of viral DNA synthesis and protein synthesis in SV40 infected BSC-1 cells. Johnson-Thompson M, et al. **In Vitro Cell Dev Biol** 1988 Nov;24(11):1114–20

Inhibition of epidemic isolates of coxsackievirus type A 24 by recombinant and natural interferon alpha and interferon beta. Langford MP, et al. **Intervirology** 1988;29(6):320–7

Selective activity of several cholic acid derivatives against human immunodeficiency virus replication in vitro. Baba M, et al. **J Acquir Immune Defic Syndr** 1989;2(3):264–71

AZT inhibits HIV-1 replication in monocytes [letter] Skinner MA, et al. **J Acquir Immune Defic Syndr** 1988;1(2):162–3

Antiretroviral therapy. Thiers BH. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):443–54 (69 ref.)

Suppression of HIV replication in vitro by fusidic acid parallels cell toxicity [letter] Czajkowski J, et al. **J Antimicrob Chemother** 1989 Jan;23(1):155–6

Protease inhibitors suppress the in vitro and in vivo replication of rotavirus. Vonderfecht SL, et al. **J Clin Invest** 1988 Dec;82(6):2011–6

Effect of dexamethasone on herpes simplex virus replication in mouse neuroblastoma cells (NB41A3): receptor characteristics. Dreyer LL, et al. **J Clin Lab Anal** 1989; 3(4):236–43

Inhibition of human immunodeficiency virus (HIV-1/HTLV-IIIBa-L) replication in fresh and cultured human peripheral blood monocytes/macrophages by azidothymidine and related 2',3'-dideoxynucleosides. Perno CF, et al. **J Exp Med** 1988 Sep 1;168(3):1111–25

Epstein-Barr virus replication in interferon-treated cells. Sharp NA, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2521–6

Effects of different interferons on the replication of herpes simplex virus in human T lymphocytes. Thiele K, et al. **J Interferon Res** 1988 Aug;8(4):507–15

Regulation by dimethylsulfoxide, insulin, and corticosteroids of hepatitis B virus replication in a transfected human hepatoma cell line. Gripon P, et al. **J Med Virol** 1989 Jul; 28(3):193–9

Restriction to human cytomegalovirus replication in vitro removed by physiological levels of cortisol. Koment RW. **J Med Virol** 1989 Jan;27(1):44–7

Enhancement of Inoue-Melnick virus synthesis by 5-bromodeoxyuridine in human meningioma (MG-1) cells. Nishibe Y, et al. **J Med Virol** 1989 Mar;27(3):196–200

Two specific topoisomerase II inhibitors prevent replication of human cytomegalovirus DNA: an implied role in replication of the viral genome. Benson JD, et al. **J Virol** 1988 Dec;62(12):4797–800

Human gamma interferon and tumor necrosis factor exert a synergistic blockade on the replication of herpes simplex virus. Feduchi E, et al. **J Virol** 1989 Mar;63(3):1354–9

Homologous interference of lymphocytic choriomeningitis virus involves a ribavirin-susceptible block in virus replication. Géssner A, et al. **J Virol** 1989 Apr; 63(4):1827–32

Interferon inhibits hepatitis B virus replication in a stable expression system of transfected viral DNA. Hayashi Y, et al. **J Virol** 1989 Jul;63(7):2936–40

Cytocidal effect of tumor necrosis factor on cells chronically infected with human immunodeficiency virus (HIV): enhancement of HIV replication. Matsuyama T, et al. **J Virol** 1989 Jun;63(6):2504–9

Suppression of viral replication by guanidine: a comparison of human adenoviruses and enteroviruses [published erratum appears in J Virol Methods 1989 Jan;23(1):81] Hurst CJ, et al. **J Virol Methods** 1988 Oct;22(1):1–11

Cessation of zidovudine therapy may lead to increased replication of HIV-1 [letter] Wainberg MA, et al. **JAMA** 1989 Feb 10;261(6):865–6

Tumour necrosis factor and HIV: a note of caution [letter] Matsuyama T, et al. **Lancet** 1988 Dec 10;2(8624):1364

Augmentation of in-vitro HIV replication in peripheral blood mononuclear cells of AIDS and ARC patients by tumour necrosis factor [letter] Michihiko S, et al. **Lancet** 1989 May 27;1(8648):1206–7

Anti-HIV activity of castanospermine analogues [letter] Sunkara PS, et al. **Lancet** 1989 May 27;1(8648):1206

Mechanism of selective inhibition of varicella zoster virus replication by 1-beta-D-arabinofuranosyl-E-5-(2-bromovinyl)uracil. Yokota T, et al. **Mol Pharmacol** 1989 Aug;36(2):312–6

Oligodeoxynucleoside phosphoramidates and phosphorothioates as inhibitors of human immunodeficiency virus [published erratum appears in Proc Natl Acad Sci U S A 1989 Mar;86(5):1504] Agrawal S, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7079–83

Inhibition of human immunodeficiency virus (HIV) replication by HIV-trans-activated alpha 2-interferon. Bednarik DP, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):4958–62

Cholesteryl-conjugated oligonucleotides: synthesis, properties, and activity as inhibitors of replication of human immunodeficiency virus in cell culture. Letsinger RL, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6553–6

GLQ223: an inhibitor of human immunodeficiency virus replication in acutely and chronically infected cells of lymphocyte and mononuclear phagocyte lineage. McGrath MS, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2844–8

Dipyridamole potentiates the inhibition by

3'-azido-3'-deoxythymidine and other dideoxynucleosides of human immunodeficiency virus replication in monocyte-macrophages [published erratum appears in Proc Natl Acad Sci U S A 1989 Aug;86(15):5968] Szebeni J, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3842-6

Interferon-alpha but not AZT suppresses HIV expression in chronically infected cell lines. Poli G, et al. **Science** 1989 May 5;244(4904):575-7

Inhibitory effects of ribavirin alone or combined with human alpha interferon on feline infectious peritonitis virus replication in vitro. Weiss RC, et al. **Vet Microbiol** 1989 Jul;20(3):255-65

Replication of hepatitis B virus with corticosteroid therapy in hepatitis B virus related membranous nephropathy. Lai FM, et al. **Virchows Arch [A]** 1989;414(3):279-84

Effects of asymmetrical triazine copper complexes on superoxide radical formation and on the Sendai virus multiplication. Zuivertz A, et al. **Virologie** 1988 Jul-Sep; 39(3):217-20

Verapamil and chlorpromazine inhibit the budding of Sindbis and vesicular stomatitis viruses from infected chicken embryo fibroblasts. Schlesinger MJ, et al. **Virology** 1989 Jan;168(1):187-90

Amplification of bovine papillomavirus DNA by N-methyl-N'-nitro-N-nitrosoguanidine, ultraviolet irradiation, or infection with herpes simplex virus. Schmitt J, et al. **Virology** 1989 Sep;172(1):73-81

Two interferon sensitive steps in the replication cycle of Rous sarcoma virus. Zens W, et al. **Virology** 1989 Aug; 171(2):535-42

Effect of recombinant hybrid human interferon on replication and morphogenesis of HSV-1 in monkey cells. Chatterjee S, et al. **Virus Res** 1989 Jan;12(1):33-41

Substitution in the poliovirus replicase gene determines actinomycin D sensitivity of viral replication at elevated temperature. Kean KM, et al. **Virus Res** 1989 Jan; 12(1):19-32

Herpes simplex virus replication in the presence of DNA polymerase alpha inhibitors. Romanelli MG, et al. **Virus Res** 1988 Nov;11(4):293-302

[The antiviral action of a polyphenol complex isolated from the medicinal plant Geranium sanguineum L. VI. Reproduction of the influenza virus pretreated with the polyphenol complex] Serkedzhieva Iu, et al. **Acta Microbiol Bulg** 1988;22:16-21 (Eng. Abstr.) **(Bul)**

[Inactivation of hepatitis non-A, non-B virus in intravenous immunoglobulins by beta-propiolactone] Dichtelmüller H, et al. **Beitr Infusionther** 1988;21:202-4 **(Ger)**

[Chemotherapeutic possibilities in HIV infection] Vogt MW, et al. **Verh Dtsch Ges Inn Med** 1988;94:531-6 (18 ref.) **(Ger)**

[Effects of IPO-63, Carbaryl, Foschlor and Reglone on Newcastle disease virus replication in chick embryo and chick embryo cell cultures] Grabowska G, et al. **Med Dosw Mikrobiol** 1989;41(1):47-52 (Eng. Abstr.) **(Pol)**

[Derivatives of oligonucleotides complementary to viral RNA inhibit replication of tick-borne encephalitis virus in a cell culture] Pogodina VV, et al. **Dokl Akad Nauk SSSR** 1988;301(5):1257-60 **(Rus)**

[The effect of 3'-azido-3'-deoxynucleosides on the reproduction of AIDS virus in cell culture] Galegov GA, et al. **Mol Biol (Mosk)** 1988 May-Jun;22(3):802-6 (Eng. Abstr.) **(Rus)**

[Inhibition of HIV reproduction in cultured cells using proteolysis inhibitors] Bukrinskaia AG, et al. **Vopr Virusol** 1989 Jan-Feb;34(1):53-5 (Eng. Abstr.) **(Rus)**

[Use of a continuous human T-lymphocyte H9 culture for screening chemical preparations that suppress the reproduction of the human immunodeficiency virus] Nesterchuk SL, et al. **Vopr Virusol** 1988 Sep-Oct; 33(5):565-9 (Eng. Abstr.) **(Rus)**

[Effect of magnesium sulfate on the reproduction of the measles virus in cell culture] Shteinberg LSh, et al. **Vopr Virusol** 1988 Jul-Aug;33(4):465-9 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Replication of adeno-associated virus in cells irradiated with UV light at 254 nm. Yakobson B, et al. **J Virol** 1989 Mar; 63(3):1023-30

[The effect of infrared laser rays on herpes simplex virus and the functions of human immunocompetent cells] Körner R, et al. **Hautarzt** 1989 Jun;40(6):350-4 (Eng. Abstr.) **(Ger)**

VIRUS TRANSFORMING ANTIGENS see **ANTIGENS, VIRAL, TUMOR**

VIRUSES

see related
INCLUSION BODIES, VIRAL

Virus inactivation in plasma products. **Curr Stud Hematol Blood Transfus** 1989;(56):1-158

Removal of viral contaminants by monoclonal antibody purification of plasma proteins. Schreiber AB, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):146-53

Chemical disinfection of non-porous inanimate surfaces experimentally contaminated with four human pathogenic viruses. Sattar SA, et al. **Epidemiol Infect** 1989 Jun; 102(3):493-505

Latex gloves off in virus porosity dispute [letter] **Nature** 1988 Nov 24;336(6197):317

Abstracts: 41st meeting of the Deutsche Gesellschaft für Hygiene und Mikrobiologie. Heidelberg, October 7-10, 1987. Section Virology. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jul; 269(1):109-46

[Viruses and plasmids in the environment. Elimination, release, biotechnology] **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:1-315 **(Ger)**

[A new type of filter for virus concentration in water] Sansebastiano G, et al. **Ann Ist Super Sanita** 1988; 24(4):607-11 (Eng. Abstr.) **(Ita)**

ANALYSIS

Adventitious viral agents in biological products. Minor P. **Dev Biol Stand** 1989;70:173-9

CLASSIFICATION

The classification and nomenclature of viruses: summary of results of meetings of the International Committee on Taxonomy of Viruses in Edmonton, Canada 1987. Brown F. **Intervirology** 1989;30(4):181-6

DRUG EFFECTS

Investigations into the application of tri(n-butyl)phosphate/detergent mixtures to blood derivatives. Horowitz B. **Curr Stud Hematol Blood Transfus** 1989;(56):83-96 (17 ref.)

Inactivation of viruses with 1,10-phenanthroline. Lembach KJ, et al. **Curr Stud Hematol Blood Transfus** 1989; (56):97-108

Effect of ethanol on viruses. Morgenthaler JJ. **Curr Stud Hematol Blood Transfus** 1989;(56):109-21 (42 ref.)

Towards the development of antimicrobial drugs acting by inhibition of pathogen attachment to host cells: a need for polyvalency. Matrosovich MN. **FEBS Lett** 1989 Jul 31; 252(1-2):1-4 (37 ref.)

The impact of drug resistance upon virus chemotherapy. Field HJ. **J Antimicrob Chemother** 1989 Jul;24(1):4-7 (30 ref.)

Synthesis and biological properties of purine and pyrimidine 5'-deoxy-5'-(dihydroxyphosphinyl)-beta-D-ribofuranosyl analogues of AMP, GMP, IMP, and CMP. Raju N, et al. **J Med Chem** 1989 Jun;32(6):1307-13

Antiviral properties of photosensitizers. Hudson JB, et al. **Photochem Photobiol** 1988 Sep;48(3):289-96

Mechanisms of the antiviral action of interferons. Samuel CE. **Prog Nucleic Acid Res Mol Biol** 1988;35:27-72 (305 ref.)

Antiviral activity of fusafungine. Nolibé D, et al. **Rhinology** 1988;Suppl 5:37-43

Binding of viral attachment protein to host-cell receptor: the Achilles heel of infectious viruses. Lentz TL. **Trends Pharmacol Sci** 1988 Jul;9(7):247-52 (36 ref.)

Potential contribution of mild pepsin treatment at pH4 to the viral safety of human immunoglobulin products. Reid KG, et al. **Vox Sang** 1988;55(2):75-80

[Aspects of virus inactivation in water] Burger G. **Z Gesamte Hyg** 1988 Sep;34(9):506-8 (Eng. Abstr.) **(Ger)**

[Evaluation of virus inactivation within the scope of biological toxicity assessment of water samples] Jaksch G, et al. **Z Gesamte Hyg** 1988 Sep;34(9):503-6 (Eng. Abstr.) **(Ger)**

[Antisense polynucleotides and prospects for their use in fighting viruses] Tikhonenko TI. **Mol Biol (Mosk)** 1989 May-Jun;23(3):629-38 (40 ref.) (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Interactions between a viral protease and cystatins. Korant B, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:281-6

Viral proteases: an emerging therapeutic target. Korant BD. **Crit Rev Biotechnol** 1988;8(2):149-57 (25 ref.)

Reconstitution of template-dependent in vitro transcriptase activity of a yeast double-stranded RNA virus. Fujimura T, et al. **J Biol Chem** 1989 Jun 25;264(18):10872-7

Similarity of reverse transcriptase-like sequences of viruses, transposable elements, and mitochondrial introns. Xiong Y, et al. **Mol Biol Evol** 1988 Nov;5(6):675-90

A sequence motif in many polymerases. Argos P. **Nucleic Acids Res** 1988 Nov 11;16(21):9909-16

GENETICS

From interferon induction to fungal viruses. Buck KW. **Eur J Epidemiol** 1988 Dec;4(4):395-9 (40 ref.)

Retrotransposon transposition intermediates are encapsidated into virus-like particles. Gorelova TV, et al. **FEBS Lett** 1989 Feb 27;244(2):307-10

Molecular evolution of viruses; 'trees', 'clocks' and 'modules'. Gibbs A. **J Cell Sci Suppl** 1987;7:319-37

Chlorella viruses contain linear nonpermuted double-stranded DNA genomes with covalently closed hairpin ends. Rohozinski J, et al. **Virology** 1989 Feb; 168(2):363-9

Characterization of two early promoters of cyanophage N-1. Schneider GJ, et al. **Virology** 1988 Nov;167(1):150-5

[Gene technology--environmental health aspects of the release of microorganisms and viruses changed by genetic technics into the environment (the problem of release)] Seeber E. **Off Gesundheitswes** 1988 Jul;50(7):385-8 (Eng. Abstr.) **(Ger)**

[Regulations on setting free genetically-engineered microorganisms and viruses in the USA] Mahro G. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:279-94 **(Ger)**

[The position of the advice concerning regulations for setting free genetically-engineered microorganisms and viruses in West Germany in light of environmental genetic regulations] Schubert G. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:295-304 **(Ger)**

[Setting free genetically-engineered microorganisms from the environmental hygiene point of view] Seeber E. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:305-6 **(Ger)**

GROWTH & DEVELOPMENT

Averaging of TNTC counts [published erratum appears in Appl Environ Microbiol 1988 Nov;54(11):2884] Haas CN, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2069-72

Inhibition of the multiplication of enveloped and non-enveloped viruses by glucosamine. Delgadillo RA, et al. **J Pharm Pharmacol** 1988 Jul;40(7):488-93

Factors affecting virus plaque confirmation procedures. Dahling DR, et al. **J Virol Methods** 1989 Apr-May; 24(1-2):111-22

[The possibilities and limits for virus inactivation in the household] Mahnel H. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4-6):414-21 (15 ref.) (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Pathways of viral antigen processing and presentation to CTL: defined by the mode of virus entry? Long EO, et al. **Immunol Today** 1989 Feb;10(2):45-8 (28 ref.)

Virus-induced autoimmunity: molecular mimicry as a route to autoimmune disease. Oldstone MB. **J Autoimmun** 1989 Jun;2 Suppl:187-94 (17 ref.)

Uncommon illness from common infections. Christian CL. **Trans Am Clin Climatol Assoc** 1987;99:111-8 (21 ref.)

Abstracts of papers presented at the session of the Virology Section of the Deutsche Gesellschaft für Hygiene und Mikrobiologie. Berlin, February 18-20, 1988. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):513-65

ISOLATION & PURIFICATION

A novel virus-like infectious agent in patients with AIDS. Lo SC, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):213-26

Virus removal or inactivation in hemoglobin solutions by ultrafiltration or detergent/solvent treatment. Bechtel MK, et al. **Biomater Artif Cells Artif Organs** 1988;16(1-3):123-8

Removal of viruses from plasma fractions by chromatography. Einarsson M, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):138-45 (10 ref.)

Reduction of virus load in blood donations by screening methods. Kühnl P, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):9-22 (30 ref.)

In situ hybridization. **Curr Top Microbiol Immunol** 1989; 143:1-90

Double-label techniques of in situ hybridization and immunocytochemistry. Brahic M, et al. **Curr Top Microbiol Immunol** 1989;143:9-20 (19 ref.)

Viruses in acute gastroenteritis in children in Pune, India. Singh PB, et al. **Epidemiol Infect** 1989 Apr;102(2):345-53

Prevalence of acute enteric viral pathogens in acquired immunodeficiency syndrome patients with diarrhea. Kaljot KT, et al. **Gastroenterology** 1989 Oct;97(4):1031-2

Adsorption and chromatographic properties of modified silica sorbents for the production of viral preparations. Krasilnikov I, et al. **J Chromatogr** 1988 Jul 27;446:211-9

Improved separation speed and efficiency for proteins, nucleic acids and viruses in asymmetrical flow field flow fractionation. Litzén A, et al. **J Chromatogr** 1989 Aug 4; 476:413-21

Routine viral culture for pediatric respiratory specimens submitted for direct immunofluorescence testing. Blanding JG, et al. **J Clin Microbiol** 1989 Jul;27(7):1438-40

Nasopharyngeal swabs and nasopharyngeal aspirates equally effective for the diagnosis of viral respiratory disease in hospitalized children. Frayha H, et al. **J Clin Microbiol** 1989 Jun;27(6):1387-9

Containment system for the preparation of vitrified-hydrated virus specimens. Jeng TW, et al. **J Electron Microsc Tech** 1988 Apr;8(4):343-8

Virus isolation and immune studies in a cohort of homosexual men. Buimovici-Klein E, et al. **J Med Virol** 1988 Aug; 25(4):371-85

A comparison of recovery of virus from wastewaters by beef extract-Celite, ferric chloride, and filter concentration procedures. Dahling DR, et al. **J Virol Methods** 1988 Dec; 22(2-3):337-46

Pipetting errors in viral titrations: a useful approach. Husson-van Vliet J, et al. **J Virol Methods** 1988 Dec; 22(2-3):183-90

More details of AIDS-linked, viruslike infectious agent

revealed [news] Merz B. **JAMA** 1989 Jun 16;261(23):3361–2
High abundance of viruses found in aquatic environments. Bergh O, et al. **Nature** 1989 Aug 10;340(6233):467–8
Aquatic viruses. And now, small is plentiful [news] Sherr EB. **Nature** 1989 Aug 10;340(6233):429
Human immunodeficiency virus and other viruses in human milk: placing the issues in broader perspective. Oxtoby MJ. **Pediatr Infect Dis J** 1988 Dec;7(12):825–35 (96 ref.)
Nucleic acid probes and molecular hybridization for detection of viruses in environmental samples. Metcalf TG, et al. **Prog Med Virol** 1988;35:186–214 (43 ref.)
AIDS researchers upset by refusal to share probes on mysterious microbe [news] Booth W. **Science** 1989 Apr 28;244(4903):416
Eight year study of viral isolates from cot deaths in Glasgow. Patrick WJ, et al. **Scott Med J** 1989 Jun;34(3):462–4
Unusual virus-like particles in pheasant small intestine [letter] Collins MS, et al. **Vet Rec** 1988 Aug 13;123(7):186
Inactivation and elimination of viruses during the fractionation of an intravenous immunoglobulin preparation: liquid heat treatment and polyethylene glycol fractionation. Uemura Y, et al. **Vox Sang** 1989;56(3):155–61
[Virologic and morphologic study in sudden and unexpected death in children] Daneš L, et al. **Cesk Pediatr** 1989 Mar; 44(3):136–40 (Eng. Abstr.) (Cze)
[Viral pollution studies of water environments] Iftimovici R, et al. **Virologie** 1989 Apr–Jun;40(2):119–23 (Eng. Abstr.) (Fre)
[The pharyngeal viral flora in dystrophic infants 0 to 1 years of age with acute respiratory diseases] Pârvu C, et al. **Virologie** 1989 Jan–Mar;40(1):19–24 (Eng. Abstr.) (Fre)
[Comparison of a 1-step and 2-step procedure with reference to virus detection in surface waters] Dürkop J, et al. **Z Gesamte Hyg** 1988 Sep;34(9):527–9 (Eng. Abstr.) (Ger)
[The health significance of the presence of viruses in water for drinking and recreational use] Nestor I. **Rev Ig [Bacteriol]** 1988 Oct–Dec;33(4):289–306 (158 ref.) (Eng. Abstr.) (Rum)
[The role of a nonclassical virus in the etiology of human amyotrophic leukospongiosis] Kolomiets ND, et al. **Mikrobiol Zh** 1987 Sep–Oct;49(5):76–81 (Eng. Abstr.) (Rus)

METABOLISM

Inhibitors of viral uncoating. Diana GD, et al. **Pharmacol Ther** 1989;42(3):289–305 (57 ref.)

PATHOGENICITY

Mechanisms of neutralization of animal viruses: monoclonal antibodies provide a new perspective. Iorio RM. **Microb Pathog** 1988 Jul;5(1):1–7 (38 ref.)
[New pathogenic enteral agents] Constantiniu S, et al. **Rev Ig [Bacteriol]** 1989 Apr–Jun;34(2):177–83 (30 ref.) (Rum)
[Immunodepression as a factor in the pathogenicity of infectious agents] Dragomirescu M. **Rev Ig [Bacteriol]** 1989 Jan–Mar;34(1):3–14 (22 ref.) (Rum)
[Pathogenetic mechanisms of microorganisms based on immunologic processes] Negut EA, et al. **Rev Ig [Bacteriol]** 1989 Jan–Mar;34(1):15–26 (34 ref.) (Rum)
[Natural foci of viral diseases and the ecology of viruses] Chunikhin SP. **Parazitologiia** 1989 May–Jun;23(3):185–92 (28 ref.) (Rus)
[Toxic action of viruses (editorial)] **Vopr Virusol** 1988 May–Jun;33(3):373–4 (Rus)

PHYSIOLOGY

The pathogenetic basis of viral tropism. Mims CA. **Am J Pathol** 1989 Sep;135(3):447–55 (93 ref.)
Chlorella viruses isolated in China. Zhang YP, et al. **Appl Environ Microbiol** 1988 Sep;54(9):2170–3
Virus inactivation in hemoglobin solutions by heat. Estep TN, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):129–34
Mass action kinetics of virus–cell aggregation and fusion. Bentz J, et al. **Biophys J** 1988 Sep;54(3):449–62
Entry mechanisms of enveloped viruses. Implications for fusion of intracellular membranes. Hoekstra D, et al. **Biosci Rep** 1989 Jun;9(3):273–305 (174 ref.)
Strategies to produce virus-safe blood derivatives. Heimburger N, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):23–33
Virus inactivation/elimination in therapeutic protein concentrates. Mitra G, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):34–43
Virus inactivation by heat treatment of lyophilized coagulation factor concentrates. Piszkiewicz D, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):44–54
Overview of viruses relevant to blood transfusion. Schilt U. **Curr Stud Hematol Blood Transfus** 1989;(56):1–8 (29 ref.)
Severe heat treatment of lyophilised coagulation factors. Winkelman L, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):55–69
Virus-induced formation of reactive oxygen intermediates in phagocytic cells. Peterhans E, et al. **Free Radic Res Commun** 1987;3(1–5):39–46
Characterization of DNA polymerases in an uninfected and virus PBCV-1-infected green alga—Chlorella strain NC64A. Rohozinski J, et al. **Intervirology** 1989; 30(3):156–62
Virus replication and genome interactions. Proceedings of the seventh John Innes Symposium. Norwich, 1986. **J Cell Sci Suppl** 1987;7:1–337
A novel replicating agent isolated from the human intestinal tract having characteristics shared with Creutzfeldt-Jakob and related agents. Burdon DW. **J Med Microbiol** 1989 Jun;29(2):145–57
Interferons. I. Their origin and actions. Jacobsen KL, et al. **J Vet Intern Med** 1988 Jan–Mar;2(1):47–53 (115 ref.)
A comparison of viruses infecting two different Chlorella-like green algae. Reisser W, et al. **Virology** 1988 Nov;167(1):143–9

RADIATION EFFECTS

Inactivation of viruses by ultraviolet light. Kallenbach NR, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):70–82

ULTRASTRUCTURE

Virus structure, function, and evolution. Rossmann MG. **Harvey Lect** 1987–88;83:107–20 (51 ref.)

VISAMMIN see **KHELLIN**

VISCERA

Disembowelment—a retrospective study of patients suffering evisceration following penetrating abdominal injury. Riley P. **Injury** 1987 Jul;18(4):286–90

ABNORMALITIES

Transposition of the abdominal viscera and "nonvisualization of the gallbladder" [letter] Kreisle JE. **Ann Intern Med** 1989 Feb 15;110(4):327
Association of tracheoesophageal anomalies with visceral and parietal malformations in a human embryo (Carnegie stage 21). Nebot-Cegarra J, et al. **Teratology** 1989 Jan;39(1):11–7

ANATOMY & HISTOLOGY

Linkage mapping of a mouse gene, iv, that controls left–right asymmetry of the heart and viscera. Brueckner M, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5035–8
[Weights of various organs in Chinese people. National Collaborative Group on Organ Weight Research Program] **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Jun;17(2):111–4 (Eng. Abstr.) (Chi)
[Sonographic visualization and size determination of the abdominal organs in healthy newborn infants] Peters H, et al. **Klin Padiatr** 1988 Sep–Oct;200(5):393–8 (Eng. Abstr.) (Ger)
[Japanese reference man 1988–IV. Studies on the weight and size of internal organs of Normal Japanese] Tanaka G, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):344–64 (Eng. Abstr.) (Jpn)

BLOOD SUPPLY

Aneurysms of the visceral arteries. Smith JA, et al. **Aust N Z J Surg** 1989 Apr;59(4):329–34
Viscerotopic control of regional vascular beds by discrete groups of neurons within the midbrain periaqueductal gray. Carrive P, et al. **Brain Res** 1989 Jul 31;493(2):385–90
Superselective gelfoam embolotherapy using a highly visible small caliber catheter. Matsumoto AH, et al. **Cardiovasc Intervent Radiol** 1988 Oct;11(5):303–6
Ioversol. Double-blind study of a new low osmolar contrast agent for peripheral and visceral arteriography. Grassi CJ, et al. **Invest Radiol** 1989 Feb;24(2):133–7
[Quantitative measure of the output of the deep abdominal vessels with a new device Duplex. Preliminary results] Buchheim G, et al. **Helv Chir Acta** 1989 Jun;56(1–2):267–72 (Eng. Abstr.) (Fre)
[An experimental model of DIC syndrome] Shchepotin BM, et al. **Fiziol Zh** 1989 May–Jun;35(3):109–13 (Eng. Abstr.) (Rus)
[Laparoscopic ultrasonic Dopplerography in the diagnosis of disorders of the intramural blood circulation of the abdominal organs] Dalgat DM, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):104–6 (Rus)
[Diagnostic aspects of ischemic abdominal visceropathy] Abulov MKh, et al. **Ter Arkh** 1988;60(12):47–51 (Eng. Abstr.) (Rus)
[Noninvasive imaging methods and angiography in the diagnosis of chronic viscero-visceral arterial collateral circulation in stenosis of the celiac trunk] Lányi A, et al. **Cesk Radiol** 1989 Jan;43(1):47–56 (Eng. Abstr.) (Slo)

DRUG EFFECTS

Complement depletion with Naje haje cobra venom factor limits prostaglandin release and improves visceral perfusion in porcine endotoxic shock. Fink MP, et al. **J Trauma** 1989 Aug;29(8):1076–84; discussion 1084–5
[Study of the mechanisms of the harmful effect of the synthetic detergent "Lotos"] Krivonosov MV, et al. **Gig Sanit** 1989 Apr;(4):88–90 (Rus)
[Study of the biological effect of sumilex] Sapunov IuS, et al. **Gig Sanit** 1989 May;(5):77–9 (Rus)
[Toxicokinetic characteristics of ortho-1-menthene after its single administration in albino rats] Ste'lmakh VA, et al. **Gig Sanit** 1989 May;(5):84–5 (Rus)

EMBRYOLOGY

Villin expression in the visceral endoderm and in the gut anlage during early mouse embryogenesis. Maunoury R, et al. **EMBO J** 1988 Nov;7(11):3321–9
Changes in the weight of internal organs in the fetal ontogenesis. Marecki B. **Z Morphol Anthropol** 1989; 77(3):235–45

INJURIES

Localized clotted blood as evidence of visceral trauma on CT: the sentinel clot sign. Orwig D, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):747–9

INNERVATION

Afferent fibers in the reproductive system and pelvic viscera of female rats: anterograde tracing and immunocytochemical studies. Nance DM, et al. **Brain Res Bull** 1988 Oct;21(4):701–9
Peripheral patterns of calcitonin-gene-related peptide general somatic sensory innervation: cutaneous and deep terminations. Kruger L, et al. **J Comp Neurol** 1989 Feb 8;280(2):291–302
Dichotomizing unmyelinated afferents supplying pelvic viscera and perineum are rare in the sacral segments of the cat. Häbler HJ, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):119–24
Visceral nociceptive transmission at the spinal level: structural aspects. Sobrino Montalban JA. **P R Health Sci J** 1988 Aug;7(2):166–71 (46 ref.)
[Morphologic and functional peculiarities of the visceral protoneuron reexamined in light of recent data] Mei N. **Arch Int Physiol Biochim** 1988 Aug;96(3):A92–8 (13 ref.) (Eng. Abstr.) (Fre)

METABOLISM

The minimal importance of the hollow viscera to peritoneal transport during peritoneal dialysis in the rat. Rubin J, et al. **ASAIO Trans** 1988 Oct–Dec;34(4):912–5
Accelerated norepinephrine turnover in peripheral tissues after ventromedial hypothalamic stimulation in rats. Saito M, et al. **Brain Res** 1989 Mar 6;481(2):298–303
Concomitant assessment of anionic sites of the glomerular basement membrane and the visceral epithelium. Pinto JA, et al. **Histochem J** 1989 Mar;21(3):179–82
Rates of protein synthesis in brain and other organs. Shahbazian FM, et al. **Int J Dev Neurosci** 1987;5(1):39–42
Net metabolism of volatile fatty acids, D-beta-hydroxybutyrate, nonesterifield fatty acids, and blood gasses by portal-drained viscera and liver of lactating Holstein cows. Reynolds CK, et al. **J Dairy Sci** 1988 Sep; 71(9):2395–405
Splanchnic and hepatic renin metabolism in alcoholic cirrhosis. Lack of evidence of a splanchnic source of production or of significantly impaired hepatic clearance. Rector WG Jr, et al. **J Hepatol** 1988 Aug;7(1):93–7
Effects of enterectomy on postoperative visceral organ glucose exchange. Souba WW, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):128–31
[The effect of removal of the organs in the splanchnic area on the biodegradation of halothane in dogs] Sakai T, et al. **Masui** 1988 Dec;37(12):1478–83 (Eng. Abstr.) (Jpn)
[Estimation of absorbed dose of beta radiation into the critical tissues by a single injection of tritiated water] Tsuchiya T, et al. **Sangyo Ika Daigaku Zasshi** 1988 Dec 1;10(4):403–9 (Eng. Abstr.) (Jpn)
[Accumulation of gentamicin in biological fluids, organs and tissues during regional lymphotropic therapy with antibiotics] Buianov VM, et al. **Antibiot Khimioter** 1989 Apr;34(4):294–8 (Eng. Abstr.) (Rus)
[Regional, cellular, subcellular distribution of neurospecific protein–hormonal complexes] Srapionian RM, et al. **Ukr Biokhim Zh** 1989 May–Jun;61(3):53–8 (Eng. Abstr.) (Rus)

PATHOLOGY

Retrospective analysis of visceral amyloidosis in hemodialysis (HD) patients treated for periods longer than five years [letter] Lopez-Revuelta K, et al. **Clin Nephrol** 1988 Sep; 30(3):173
[Kaposi's sarcoma with visceral involvement and a fulminant course] Kyshtoobaeva ASh, et al. **Vopr Onkol** 1989; 35(2):229–32 (Rus)
[Clinico-morphologic analysis of the visceral manifestations of psoriasis] Shlopov VG, et al. **Vrach Delo** 1988 Aug; (8):88–91 (Rus)

PHYSIOLOGY

Quantitative analysis of bioelectrical potentials for the diagnosis of internal organ pathology and theoretical speculations concerning electrical circulation in the organism. Zukauskas G, et al. **Acupunct Electrother Res** 1988;13(2–3):119–30
Effects of chamber shape and fiber orientation on relations between fiber dynamics and chamber dynamics. Regen DM. **Ann Biomed Eng** 1988;16(6):589–607
Calcium-dependent slow outward current in visceral primary afferent neurones of the rabbit. Morita K, et al. **Pflugers Arch** 1989 Jun;414(2):171–7
[Results and prospectives of the first year of study of the mechanism of neurohumoral regulation of the functions

of the visceral systems] Baklavadzhian OG, et al. **Fiziol Zh SSSR** 1988 Jun;74(6):769–90 **(Rus)**

[A universal electrode for recording infraslow physiological processes in the visceral organs of the rabbit] Bokarius VB, et al. **Fiziol Zh SSSR** 1989 Feb;75(2):275–9 **(Rus)**

PHYSIOPATHOLOGY

Clinical aspects of visceral pain. Procacci P, et al. **Funct Neurol** 1989 Jan–Mar;4(1):19–20

RADIATION EFFECTS

[Effect of the inhalation of tributyl phosphate on the behavior of Pu-239 in the bodies of rats] Chudin VA. **Gig Sanit** 1989 Apr;(4):71–2 **(Rus)**

SURGERY

Techniques for measuring blood flow in splanchnic tissues of cattle. Huntington GB, et al. **J Dairy Sci** 1989 Jun; 72(6):1583–95

A technique for suturing soft visceral using compression sutures. Grice OD. **Surg Gynecol Obstet** 1988 Dec; 167(6):522–4

TRANSPLANTATION

Transplantation of abdominal viscera [letter] **JAMA** 1989 Sep 1;262(9):1183–4

New visceral transplants invigorate cancer victims [news] Goldsmith MF. **JAMA** 1989 Mar 10;261(10):1397

The desperate case: CARE (costs, applicability, research, ethics) [editorial] Moore FD. **JAMA** 1989 Mar 10; 261(10):1483–4

Transplantation of multiple abdominal viscera. Starzl TE, et al. **JAMA** 1989 Mar 10;261(10):1449–57

Splanchnic transplantation. An approach to the infant dependent on parenteral nutrition who develops irreversible liver disease [published erratum appears in JAMA 1989 Jul 14;262(2):210] Williams JW, et al. **JAMA** 1989 Mar 10;261(10):1458–62

Organ procurement for multivisceral abdominal transplantation in the pig. Gridelli B, et al. **Transplant Proc** 1988 Oct;20(5):844–5

[Abdominal multi-organ transplantation in dogs] Kumagae T. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1058–65 (Eng. Abstr.) **(Jpn)**

VISCERAL MYOPATHY see **INTESTINAL PSEUDO-OBSTRUCTION**

VISCEROPTOSIS

RADIOGRAPHY

Splanchnoptosis—a radiological diagnostic problem. Gupta SK, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun; 30(2):133–5

VISCOSITY

see related
BLOOD VISCOSITY

A new method for measuring viscoelasticity of liquids by means of fluorescence spectroscopy. Saito N, et al. **Biorheology** 1988;25(1–2):129–35

Involvement of the MN blood group antigen in shear-enhanced hemagglutination induced by the Escherichia coli F41 adhesin. Brooks DE, et al. **Infect Immun** 1989 Feb;57(2):377–83

Evaluations on the usefulness of viscous agents in anterior segment surgery. I. The ability to maintain the deepness of the anterior chamber. Miyauchi S, et al. **J Ocul Pharmacol** 1986 Summer;2(3):267–74

Role of viscosity in frequency-dependent reflection from discontinuities in liquid-filled tubes. Sawatzky RP, et al. **Med Biol Eng Comput** 1988 Sep;26(5):483–8

VISCUM

Modulatory potency of the beta-galactoside-specific lectin from mistletoe extract (Iscador) on the host defense system in vivo in rabbits and patients. Hajto T, et al. **Cancer Res** 1989 Sep 1;49(17):4803–8

[Study of the cytostatic activity of a lactone fraction of Viscum album L.] Krzaczek T, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:97–104 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Biochemical characterization of a component in extracts of Viscum album enhancing human NK cytotoxicity. Mueller EA, et al. **Immunopharmacology** 1989 Jan–Feb;17(1):11–8

VISION

see related
VISUAL PERCEPTION

GABA-activated chloride channels in the retinal neurons and their role in the visual function. Kaneko A, et al. **Adv Exp Med Biol** 1988;236:47–60

Visual decrement with deposit accumulation of HEMA contact lenses. Gellatly KW, et al. **Am J Optom Physiol Opt** 1988 Dec;65(12):937–41

Prescription labels for aging eyes. Jinks MJ, et al. **Am Pharm** 1989 May;NS29(5):31–3

Loss of spontaneous blinking in a patient with Balint's syndrome. Watson RT, et al. **Arch Neurol** 1989 May; 46(5):567–70

Visual, refractive, and keratometric results of radial keratotomy. Five-year follow-up. Arrowsmith PN, et al. **Arch Ophthalmol** 1989 Apr;107(4):506–11

An evaluation of cognitive-behavioral therapy for training resistance to visually-induced motion sickness. Dobie TG, et al. **Aviat Space Environ Med** 1989 Apr;60(4):307–14

The visually guided control of simulated altitude. Johnson WW, et al. **Aviat Space Environ Med** 1989 Feb;60(2):152–6

Coordinates transformation and learning control for visually-guided voluntary movement with iteration: a Newton-like method in a function space. Kawato M, et al. **Biol Cybern** 1988;59(3):161–77

Visual localization of briefly presented peripheral targets. Mapp AP, et al. **Biol Cybern** 1989;60(4):261–5

Temporal pattern discrimination within the receptive field of cat retinal ganglion cells. Terasawa M, et al. **Biol Cybern** 1989;60(4):239–46

The sensitive period for the morphological effects of monocular deprivation in two nuclei of the tectofugal pathway of zebra finches. Herrmann K, et al. **Brain Res** 1988 Jun 7;451(1–2):43–53

Can vision training improve athletic performance? [editorial] Stein R, et al. **Can J Ophthalmol** 1989 Apr;24(3):105–7 **(Eng, Fre)**

Visual signal transduction: the cycle of transducin shuttling between rhodopsin and cGMP phosphodiesterase. Chabre M, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:313–24 (29 ref.)

Inositol lipid cascade of vision studied in mutant flies. Selinger Z, et al. **Cold Spring Harb Symp Quant Biol** 1988; 53 Pt 1:333–41

Molecular basis of visual excitation. Stryer L. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:283–94 (102 ref.)

The effects of unilateral brain damage on visually guided reaching: hemispheric differences in the nature of the deficit. Fisk JD, et al. **Exp Brain Res** 1988;72(2):425–35

The private eye. Trevor-Roper PD. **Eye** 1988;2 (Pt 6):682–95

Calcium regulates the rate of rhodopsin disactivation and the primary amplification step in visual transduction. Wagner R, et al. **FEBS Lett** 1989 Jan 2;242(2):249–54

Sporadic aniridia and Wilms' tumor: visual function evaluation of three cases. Harnois C, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):244–7

Glare in aviation. Brennan DH. **Health Phys** 1989 May; 56(5):665–9

Vision in childhood aphakia. Shrivastva S, et al. **Indian J Ophthalmol** 1988 Jul–Sep;36(3):123–5

Visual control of arm movement in the stroke patient. Lough S. **Int J Rehabil Res** 1987;10(4 Suppl 5):113–9

The Association for Research in Vision and Ophthalmology, annual spring meeting. Sarasota, Florida, April 30–May 5, 1989. Abstracts. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3 Suppl):1–551

Visual skills of athletes versus nonathletes: development of a sports vision testing battery. Christenson GN, et al. **J Am Optom Assoc** 1988 Sep;59(9):666–75

Visual conditions of symphony musicians. Harris P. **J Am Optom Assoc** 1988 Dec;59(12):952–9

Vision recovery in amblyopia after contralateral subretinal hemorrhage. Tierney DW. **J Am Optom Assoc** 1989 Apr; 60(4):281–3

Vision care for the elderly: problems and directions. Verma SB. **J Am Optom Assoc** 1989 Apr;60(4):296–9

Visual thresholds in aphakia and pseudophakia. Abraham FA, et al. **J Cataract Refract Surg** 1989 Jul;15(4):432–4

Participation of prefrontal neurons in the preparation of visually guided eye movements in the rhesus monkey. Boch RA, et al. **J Neurophysiol** 1989 May;61(5):1064–84

The accessory optic system of rabbit. I. Basic visual response properties. Soodak RE, et al. **J Neurophysiol** 1988 Dec; 60(6):2037–54

Kinesthetic and visual control of a bimanual task: specification of direction and amplitude. Flanders M, et al. **J Neurosci** 1989 Feb;9(2):447–53

Adaptation to suppression of visual information during catching. Lacquaniti F, et al. **J Neurosci** 1989 Jan; 9(1):149–59

Optical and photoreceptor immaturities limit the spatial and chromatic vision of human neonates. Banks MS, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2059–79 (86 ref.)

Saturation of rod-initiated signals in 2-month-old human infants. Brown AM. **J Opt Soc Am [A]** 1988 Dec; 5(12):2145–58

Spectral sensitivity and chromatic discriminations in 3- and 7-week-old human infants. Clavadetscher JE, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2093–105

Testing hypotheses about development with electroretinographic and incremental-threshold data. Hood DC. **J Opt Soc Am [A]** 1988 Dec;5(12):2159–65

Postural movements induced by rotations of visual scenes. van Asten WN, et al. **J Opt Soc Am [A]** 1988 Oct; 5(10):1781–9

The photopic and scotopic visual thresholds in diabetics without diabetic retinopathy. Abraham FA, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):76–7

Vision. **N C Med J** 1989 Apr;50(4):207–10

Protecting your eyes and preserving your vision. Hedgpeth EM Jr, et al. **N C Med J** 1989 Jun;50(6):325–8

Selective deficit of visual search in moving displays after extrastriate damage. McLeod P, et al. **Nature** 1989 Jun 8; 339(6224):466–7

Stereopsis. Vision of solid objects [news] Morgan MJ. **Nature** 1989 May 11;339(6220):101–3

The ninaA gene required for visual transduction in Drosophila encodes a homologue of cyclosporin A-binding protein. Shieh BH, et al. **Nature** 1989 Mar 2; 338(6210):67–70

Miniaturization, genome size and the origin of functional constraints in the visual system of salamanders. Roth G, et al. **Naturwissenschaften** 1988 Jun;75(6):297–304

Optic neuritis in the elderly: prognosis for visual recovery and long-term follow-up. Jacobson DM, et al. **Neurology** 1988 Dec;38(12):1834–7

Papers presented at the annual meeting of the Applied Vision Association—AVA '88. Oxford, 11–13 April 1988. Abstracts. **Ophthalmic Physiol Opt** 1988;8(4):466–70

Anatomic success and vitreoretinal surgery [editorial] Lichter PR. **Ophthalmology** 1988 Jul;95(7):837–8

Temporal summation in age-related maculopathy. Brown B, et al. **Optom Vis Sci** 1989 Jul;66(7):426–9

Effect of concurrent visual feedback on acquisition of a weightlifting skill. Sewall LP, et al. **Percept Mot Skills** 1988 Dec;67(3):715–8

The visual process: photophysics and photoisomerization of model visual pigments and the primary reaction. Becker RS. **Photochem Photobiol** 1988 Sep;48(3):369–99 (146 ref.)

Recent chemical studies related to vision. DeGrip WJ. **Photochem Photobiol** 1988 Dec;48(6):799–810 (146 ref.)

An estimate of the number of G regulator proteins activated per excited rhodopsin in living Limulus ventral photoreceptors. Kirkwood A, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3872–6

Visual experience regulates gene expression in the developing striate cortex. Neve RL, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4781–4

Feature detection in human vision: a phase-dependent energy model. Morrone MC, et al. **Proc R Soc Lond [Biol]** 1988 Dec 22;235(1280):221–45

NIH sees plagiarism in vision paper [news] Culliton BJ. **Science** 1989 Jul 14;245(4914):120–2

Gating of retinal transmission by afferent eye position and movement signals. Lal R, et al. **Science** 1989 Jan 6; 243(4887):93–6

Parallel integration of vision modules. Poggio T, et al. **Science** 1988 Oct 21;242(4877):436–40

Binocular depth reversals despite familiarity cues. van den Enden A, et al. **Science** 1989 May 26;244(4907):959–61

Looking and seeing with age-related neurologic disease and normal aging. Hutton JT, et al. **Semin Neurol** 1989 Mar; 9(1):31–8

Visual function in glaucoma. Proceedings of a symposium. Sarasota, Florida, May 19, 1987. **Surv Ophthalmol** 1989 Feb; 33 Suppl:287–330

Spatial frequency and orientation tuning of spatial visual mechanisms in human albinos. Wilson HR, et al. **Vision Res** 1988;28(9):991–9

[The visual function in aging macular degeneration] Wu DZ. **Yen Ke Hsueh Pao** 1988 Jun;4(2):67–72 (Eng. Abstr.) **(Chi)**

[The significance of testing preoperative visual function in cataract with laser interferometric visual acuity and ERG] Wu DZ, et al. **Yen Ke Hsueh Pao** 1988 Sep;4(3):146–9, 180 (Eng. Abstr.) **(Chi)**

[Vision and posture. Fundamental aspects. Paris, 26–27 February 1988. Proceedings] **Agressologie** 1988 Oct; 29(9):621–67 **(Fre)**

[Vision and posture. Clinical aspects. Paris, 26–27 February 1988. Proceedings] **Agressologie** 1988 Oct;29(10):679–703 **(Fre)**

[Preoperative visual prognosis of senile cataract. Value of Lotmar's visuometer] Serpin G, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):697–9 **(Fre)**

[Traumatic choroid tears: visual prognosis and long-term course] Giuffrè G. **J Fr Ophtalmol** 1988;11(8–9):569–77 (Eng. Abstr.) **(Fre)**

[What do we know about the molecular mechanism of visual excitation?] Stieve H. **Naturwissenschaften** 1988 Jun; 75(6):288–96 (Eng. Abstr.) **(Ger)**

[The development of acetylcholinesterase activity and the effect of visual deprivation in the pretectal nucleus and the Edinger-Westphal nucleus of rats] Hayakawa S. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2063–70 (Eng. Abstr.) **(Jpn)**

[Studies of ocular fundus and visual functions in Kearns-Sayre syndrome—with special reference to the new stage classification] Ota I, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar;93(3):329–38 (Eng. Abstr.) **(Jpn)**

[Visual-vestibulo-ocular interactions in patients with peripheral vestibular disorders] Kobayashi H. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jul;91(7):1012–22 (Eng. Abstr.) **(Jpn)**

[Visual-vestibulo-ocular interactions in patients with central nervous system disorders] Kobayashi H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2030–8 (Eng. Abstr.) **(Jpn)**

[Diversity of third order neurons and their functions in mammalian retina] Fukuda Y. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):663–73 **(Jpn)**

[Important concepts and technology in the study of vision: measurement of ultrafast reactions by pulsed-lasers] Ohtani H, et al. **Tanpakushitsu Kakusan Koso** 1989 May; 34(5):683–91 **(Jpn)**

[Outline of the information processing of second order neurons in vertebrate retina] Saito T. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):631–41 **(Jpn)**

[Synaptic transmission from photoreceptors to horizontal and bipolar cells in the vertebrate retina] Tachibana M. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):642–51 **(Jpn)**

[Information processing in primary and higher visual cortices] Toyama K. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):674–82 **(Jpn)**

[Important concepts and technology in the study of visions: action spectroscopy and the Okazaki large spectrograph] Watanabe M. **Tanpakushitsu Kakusan Koso** 1989 May; 34(5):692–703 **(Jpn)**

[Functional status of the visual analyzer in operators working with displays] Liman AD, et al. **Gig Tr Prof Zabol** 1989; (6):30–3 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Transdermal scopolamine: a review of its effects upon motion sickness, psychological performance, and physiological functioning. Parrott AC. **Aviat Space Environ Med** 1989 Jan;60(1):1–9 (66 ref.)

Precautions for intranasal corticosteroid injection [letter] Mabry RL. **JAMA** 1989 Sep 8;262(10):1329

Visual effects of opiates in pigeons: I. Target location in visual search. Blough PM, et al. **Psychopharmacology (Berlin)** 1989;97(1):80–4

Visual effects of opiates in pigeons: II. Contrast sensitivity to sinewave gratings. Blough PM, et al. **Psychopharmacology (Berlin)** 1989;97(1):85–8

An evaluation of the effectiveness of intramuscular atropine or homatropine eyedrops in preventing the effects of physostigmine eyedrops on human vision. Kay CD, et al. **Q J Exp Physiol** 1988 Jul;73(4):511–9

The effects of physostigmine sulphate eyedrops on human visual function. Kay CD, et al. **Q J Exp Physiol** 1988 Jul; 73(4):501–10

[Light vision and chorioretinal circulation. Study of the effect of procyanidolic oligomers (Endotelon)] Corbé C, et al. **J Fr Ophtalmol** 1988;11(5):453–60 (Eng. Abstr.) **(Fre)**

[Recovery of visual function in retinal pigment degeneration as affected by regulatory peptides] Kostelianets NB, et al. **Fiziol Cheloveka** 1988 Jan–Feb;14(1):43–9 **(Rus)**

[Dynamics of visual function in glaucoma patients treated with various antiglaucoma preparations] Zhaboedov GD, et al. **Oftalmol Zh** 1989;(2):69–72 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Binocular and monocular tiltdiscrimination in the rabbit: evidence for hemispheric dominance? Elferink AJ, et al. **Acta Neurobiol Exp (Warsz)** 1988;48(6):371–6

Delayed response to light stimuli in binocularly deprived cats. Lawicka W. **Acta Neurobiol Exp (Warsz)** 1989; 49(2–3):73–92

Comparison of tactile discrimination ability of visually deprived and normal monkeys. Carlson S, et al. **Acta Physiol Scand** 1989 Mar;135(3):405–10

Postural control in the oldest olds. Pyykkö I, et al. **Adv Otorhinolaryngol** 1988;41:146–51

Multisensory versus monosensory stabilization of posture. Paulus W, et al. **Agressologie** 1988 Oct;29(10):699–703 (28 ref.)

Visual results with low-vision aids in age-related macular degeneration [letter; comment] Archambault P, et al. **Am J Ophthalmol** 1989 May 15;107(5):564–6. **Comment on:** Am J Ophthalmol 1988 Dec 15;106(6):730–4

Diurnal variation in vision after radial keratotomy. MacRae S, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):262–7

A fresh look at the temporal dynamics of binocular rivalry. Mueller TJ, et al. **Biol Cybern** 1989;61(3):223–32

Head orientation in pigeons: postural, locomotor and visual determinants. Erichsen JT, et al. **Brain Behav Evol** 1989; 33(5):268–78

Efferent tectal cells of crucian carp: physiology and morphology. Niida A, et al. **Brain Res Bull** 1989 Feb; 22(2):389–98

Abnormal visual adaptation to flicker in multiple sclerosis. Raymond JE. **Can J Neurol Sci** 1988 Aug;15(3):286–91

Age-related changes in the first order Weiner kernel visual evoked potential. Schoon DV, et al. **Doc Ophthalmol** 1989 Mar;71(3):329–40

Evoked potential and preferential looking correlates of the oblique effect in 3-month-old infants. Sokol S, et al. **Doc Ophthalmol** 1989 Mar;71(3):321–8

Molecular mechanism of visual transduction. Chabre M, et al. **Eur J Biochem** 1989 Feb 1;179(2):255–66 (88 ref.)

Neuronal synchrony in monkey striate cortex: interocular signal flow and dependency on spike rates. Aiple F, et al. **Exp Brain Res** 1988;72(1):141–9

Relationship between directed visual attention and saccadic reaction times. Braun D, et al. **Exp Brain Res** 1988; 73(3):546–52

Neural correlates of motion after-effects in cat striate cortical neurones: interocular transfer. Hammond P, et al. **Exp Brain Res** 1988;72(1):21–8

Postural adjustments induced by simulated motion of differently structured environments. van Asten WN, et al. **Exp Brain Res** 1988;73(2):371–83

Nonlinear parameter estimation applied to psychophysically measured impulse responses. den Brinker AC, et al. **IEEE Trans Biomed Eng** 1989 Mar;36(3):346–54

Isaac Newton invented the frequency code [letter] Struzik T. **Int J Neurosci** 1988 Oct;42(3–4):305–7

Evidence for a neural basis of age-related visual field loss in normal observers. Johnson CA, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2056–64

Altering body position affects intraocular pressure and visual function. Linder BJ, et al. **Invest Ophthalmol Vis Sci** 1988 Oct;29(10):1492–7

Early abnormal visual experience induces strabismus in infant monkeys. Quick MW, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):1012–7

Analysis of spatial structure in eccentric vision. Saarinen J, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):293–6

Investigation of the source of the blue field entoptic phenomenon. Sinclair SH, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):668–73

The effect of visual deprivation and proprioceptive change on postural sway in healthy adults. Ring C, et al. **J Am Geriatr Soc** 1989 Aug;37(8):745–9

Ophthalmic implications of seasonal affective disorder. Paramore JE, et al. **J Am Optom Assoc** 1989 Jul; 60(7):508–10 (12 ref.)

Development of neurons in the ectostriatum of normal and monocularly deprived zebra finches: a quantitative Golgi study [published erratum appears in J Comp Neurol 1989 Feb 22;280(4):preceding index] Herrmann K, et al. **J Comp Neurol** 1988 Nov 1;277(1):141–54

Spectral sensitivity, absolute threshold, and visual field of two tick species, Hyalomma dromedarii and Amblyomma variegatum. Kaltenrieder M, et al. **J Comp Physiol [A]** 1989; 165(2):155–64

Effects of sensory and motor functioning on adult intellectual performance. Sands LP, et al. **J Gerontol** 1989 Mar; 44(2):P56–8

Computer-controlled stimulation in the assessment of electrical characteristics for cortical phosphene generation for a visual prosthesis. Record P, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):52–6

Deficits of visual attention and saccadic eye movements after lesions of parietooccipital cortex in monkeys. Lynch JC, et al. **J Neurophysiol** 1989 Jan;61(1):74–90

Gaze-dependent visual neurons in area V3A of monkey prestriate cortex. Galletti C, et al. **J Neurosci** 1989 Apr; 9(4):1112–25

Chromatic and achromatic vision of macaques: role of the P pathway. Merigan WH. **J Neurosci** 1989 Mar;9(3):776–83

Binocularly deprived cats: binocular tests of cortical cells show regular patterns of interaction. Ohzawa I, et al. **J Neurosci** 1988 Jul;8(7):2507–16

Visual development over the life span. **J Opt Soc Am [A]** 1988 Dec;5(12):2056–219

Smooth eye-movement control with secondary visual feedback. Zeevi YY, et al. **J Opt Soc Am [A]** 1984 Jun; 1(6):628–34

Current source density analysis of linear and non-linear components of the primate electroretinogram. Baker CL Jr, et al. **J Physiol (Lond)** 1988 Dec;407:155–76

Is impaired visual development caused by perinatal hypoxia? [letter] Groenendaal F, et al. **Lancet** 1988 Dec 3; 2(8623):1308–9

Psychophysics and visual aging. Midena E. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):28–31 (43 ref.)

Split brain acutely and chronically induced in cats causes ipsilateral eye dominance and reduced excitability of cells in the visual cortex. Yinon U, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):86–96

Motion-deblurring in human vision. Morgan MJ, et al. **Nature** 1989 Aug 3;340(6232):385–6

Nervus terminalis innervation of the goldfish retina and behavioral visual sensitivity. Davis RE, et al. **Neurosci Lett** 1988 Aug 31;91(2):126–30

Fluctuations in accommodation: a review. Charman WN, et al. **Ophthalmic Physiol Opt** 1988;8(2):153–64 (76 ref.)

The effect of a foveal scotoma on the visual lobe. Foley-Fisher JA, et al. **Ophthalmic Physiol Opt** 1988; 8(2):211–4

Mean response and oscillations of accommodation for various stimulus vergences in relation to accommodation feedback control. Miege C, et al. **Ophthalmic Physiol Opt** 1988; 8(2):165–71

Effect of pupil size on dark focus accommodation. Miller RJ. **Ophthalmic Physiol Opt** 1988;8(2):227–8

The effect of vergence adaptation on convergent accommodation. Rosenfield M, et al. **Ophthalmic Physiol Opt** 1988;8(2):172–7

Central and peripheral sensitivity to temporally modulated stimuli presented to the sighting and nonsighting eyes. Coren S, et al. **Optom Vis Sci** 1989 Jul;66(7):450–4

Accommodation to size and blur changing in counterphase. Kruger PB, et al. **Optom Vis Sci** 1989 Jul;66(7):455–8

Effects of short-term VDT usage on visual functions. Yeow PT, et al. **Optom Vis Sci** 1989 Jul;66(7):459–66

Vision within extrageniculo-striate systems. Proceedings of a satellite symposium to the Second World Congress of Neuroscience. Szeged, 1987. **Prog Brain Res** 1988;75:1–329

Role of visual areas 17 and 18 of the cat in pattern vision. Bisti S. **Prog Brain Res** 1988;75:173–9

Extrageniculo-striate visual mechanisms: compartmentalization of visual functions. Creutzfeldt OD. **Prog Brain Res** 1988;75:307–20 (80 ref.)

Visual function of the cat's LP/LS subsystem in global motion processing. Rauschecker JP. **Prog Brain Res** 1988; 75:95–108 (30 ref.)

Superior colliculus-mediated visual behaviors in cat and the concept of two corticotectal systems. Stein BE. **Prog Brain Res** 1988;75:37–53 (75 ref.)

Plasticity in brain development. Aoki C, et al. **Sci Am** 1988 Dec;259(6):56–64 (4 ref.)

How the human eye focuses. Koretz JF, et al. **Sci Am** 1988 Jul;259(1):92–9 (4 ref.)

Art, illusion and the visual system. Livingstone MS. **Sci Am** 1988 Jan;258(1):78–85 (0 ref.)

The incremental threshold of the rod visual system and Weber's law. Sharpe LT, et al. **Science** 1989 Apr 21; 244(4902):354–6

Video display units and visual function. Rosner M, et al. **Surv Ophthalmol** 1989 May–Jun;33(6):515–22 (77 ref.)

Human rods are acting in the light and cones are inhibited in the dark. Sugita Y, et al. **Tohoku J Exp Med** 1989 Apr; 157(4):365–72

The role of spatial filtering in sensitivity regulation. Hayhoe MM, et al. **Vision Res** 1989;29(4):457–69

The effect of stationary, random phase discontinuities, on spatial frequency discrimination. Heeley DW, et al. **Vision Res** 1989;29(4):497–504

[Normal V-EOG and its diagnostic standards] Shan Y. **Chung Hua Yen Ko Tsa Chih** 1988 Jul;24(4):222–6 (Eng. Abstr.) **(Chi)**

[New interdisciplinary approaches in ophthalmology] da Silva OA. **Agressologie** 1988 Oct;29(10):681–2 (Eng. Abstr.) **(Fre)**

[Visuomotor behavior and extraocular proprioception] Gary-Bobo E. **Agressologie** 1988 Oct;29(9):637–41 (22 ref.) (Eng. Abstr.) **(Fre)**

[Motor control of a handstand] Pozzo T, et al. **Agressologie** 1988 Oct;29(9):649–51 (Eng. Abstr.) **(Fre)**

[Visuo-vestibular cooperation in postural control: information complementarity and sensory substitution] Xerri C. **Agressologie** 1988 Oct;29(9):627–9 (27 ref.) (Eng. Abstr.) **(Fre)**

[Contrast sensitivity] Bourgeois H, et al. **Annee Ther Clin Ophtalmol** 1987;38:185–98 (19 ref.) (Eng. Abstr.) **(Fre)**

[The corticofugal pathways of the visual system] Molotchnikoff S. **Arch Int Physiol Biochim** 1988 Sep; 96(4):A379–92 (73 ref.) (Eng. Abstr.) **(Fre)**

[Early evaluation of the vision of infants: baby vision, a reality today] Vital-Durand F, et al. **Pediatrie** 1988;43(7):617–23 (Eng. Abstr.) **(Fre)**

[Organization of the retina: structure/function relations and a species comparison of retinal ganglion cells] Peichl L. **Fortschr Ophthalmol** 1989;86(1):47–53 (Eng. Abstr.) **(Ger)**

[Papers presented at the 81st annual meeting of the Swiss Ophthalmological Society. 14–17 September 1988, Bern] **Klin Monatsbl Augenheilkd** 1989 May;194(5):293–400 **(Ger)**

[Physiologic principles of studying visual functions] Niesel P. **Klin Monatsbl Augenheilkd** 1989 May;194(5):294–300 (28 ref.) (Eng. Abstr.) **(Ger)**

[Is vision important for the maturation of ocular movement?] Bon L, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1151–7 (Eng. Abstr.) **(Ita)**

[Evaluation of visual function with visually evoked cortical potentials under general anesthesia] Osa M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2129–35 (Eng. Abstr.) **(Jpn)**

[VECP luminance threshold in pseudophakic eyes] Yamazaki H, et al. **Nippon Ganka Gakkai Zasshi** 1988 May; 92(5):767–72 (Eng. Abstr.) **(Jpn)**

[Course of uveitis and visual functions in retarded cases of Harada's disease] Yoshida H, et al. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):726–30 (Eng. Abstr.) **(Jpn)**

[A study of visual function in congenital nystagmus—mechanism of visual improvement after stereotactic superior colliculectomy] Funahashi K. **No To Shinkei** 1988 Sep;40(9):841–8 (Eng. Abstr.) **(Jpn)**

[Molecular mechanism of vision] Tsuda M, et al. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):398–404 **(Jpn)**

[Visual function and vocational rehabilitation of persons with congenital glaucoma. II. Function of the visual system] Urban R. **Klin Oczna** 1988 Oct;90(10):344–7 (Eng. Abstr.) **(Pol)**

[Visual function and vocational rehabilitation of persons with congenital glaucoma. III. Results of surgical treatment] Urban R. **Klin Oczna** 1988 Oct;90(10):346–7 (Eng. Abstr.) **(Pol)**

[The role of tracking in the perception of objects, moving toward each other in a narrow vertical slit line] Efimov SK, et al. **Biofizika** 1989 May–Jun;34(3):488–90 (Eng. Abstr.) **(Rus)**

[The enzymology of visual reception: phosphodiesterase

cascade of signal amplification] Filippov PP. **Biokhimiia** 1989 May;54(5):769–73 (Eng. Abstr.) (Rus)

[The action of a visual food stimulus approaching at various speeds on behavioral and instrumental reactions in chimpanzees] Syrenskiĭ VI. **Biol Nauki** 1989;(3):18–23 (Eng. Abstr.) (Rus)

[Spectral sensitivity of the human eye] Chukova IuP. **Dokl Akad Nauk SSSR** 1988;300(2):504–7 (Rus)

[Use of a method of systematic analysis for intensification of hygienic studies] Chernilovskaia FM, et al. **Gig Sanit** 1988 Nov;(11):51–4 (Rus)

[Clinical and pathophysiologic characteristics of congenital myopia and possibilities for improving visual function] Avetisov ES, et al. **Oftalmol Zh** 1988;(7):385–7 (Eng. Abstr.) (Rus)

[The visual functions of workers at the converter shop of the Karaganda Metallurgical Combine from an ophthalmic ergonomic viewpoint] Ul'danov GA, et al. **Oftalmol Zh** 1988;(5):296–9 (Eng. Abstr.) (Rus)

[Characteristics of visual functions in concomitant strabismus in young infants and preschoolers] Avetisov ES, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):37–9 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Visual functional changes associated with low-level light effects. Zwick H. **Health Phys** 1989 May;56(5):657–63 (55 ref.)

Observations of visual sensations produced by Cerenkov radiation from high-energy electrons. Steidley KD, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):685–90

[Ergophthalmologic investigation in the field: an example of a study of a group of video display operators employed in administrative accounting] Piccoli B, et al. **Med Lav** 1988 Jul–Aug;79(4):288–97 (Eng. Abstr.) (Ita)

[The absolute light sensitivity of the visual analyzer in sailors during a 10-month commercial voyage] Ponomarchuk VS, et al. **Oftalmol Zh** 1989;(2):107–11 (Eng. Abstr.) (Rus)

VISION, BINOCULAR

The loss of fusion in adults with intractable diplopia (central fusion disruption). Pratt-Johnson JA, et al. **Aust N Z J Ophthalmol** 1988 May;16(2):81–5

Visual split brain and monocular deprivation in kittens: differentiation between the effects of disuse and of binocular competition in visual cortex cells. Yinon U, et al. **Behav Brain Res** 1988 Oct;30(3):273–8

Dyslexia [letter] Stein J. **BMJ** 1988 Oct 1;297(6652):854

Effect of stimulus field size and localization on the binocular pattern reversal visual evoked response. Katsumi O, et al. **Doc Ophthalmol** 1988 Jul;69(3):293–305

Binocular interaction and steady-state visual evoked potentials. I. A study in normal subjects and in subjects with defective binocular vision. Bagolini B, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(5):401–6

Horizontal fusional amplitudes. Evidence for disparity tuning. Jones R, et al. **Invest Ophthalmol Vis Sci** 1989 Jul; 30(7):1638–42

Measurement of binocular alignment in normal monkeys and in monkeys with strabismus. Quick MW, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1159–68

Binocular vision therapy [letter] Pirotte PJ. **J Am Optom Assoc** 1988 Sep;59(9):664

Binocular depth from surfaces versus volumes. Brookes A, et al. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):479–84

Binocular rivalry and dichoptic masking: suppressed stimuli do not mask stimuli in a dominating eye. Westendorf DH. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):485–92

Stereoscopic mechanisms in monkey visual cortex: binocular correlation and disparity selectivity. Poggio GF, et al. **J Neurosci** 1988 Dec;8(12):4531–50

Binocular summation of hyperacuity tasks. Lindblom B, et al. **J Opt Soc Am [A]** 1989 Apr;6(4):585–9

Mislocalization of diplopic images. Rose D, et al. **J Opt Soc Am [A]** 1988 Sep;5(9):1512–21

Binocular vision. Fisher NF. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct; 25(5):212–20

Binocular function in human infants: correlation of stereoptic and fusion-rivalry discriminations. Gwiazda J, et al. **J Pediatr Ophthalmol Strabismus** 1989 May–Jun; 26(3):128–32

Unilateral congenital cataract: binocular status after treatment. Pratt-Johnson JA, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr;26(2):72–5

Expanded binocular peripheral visual fields following surgery for esotropia [published erratum appears in J Pediatr Ophthalmol Strabismus 1989 Jul–Aug;26(4):208] Wortham E 5th, et al. **J Pediatr Ophthalmol Strabismus** 1989 May–Jun;26(3):109–12

Binocular co-ordination of human horizontal saccadic eye movements. Collewijn H, et al. **J Physiol (Lond)** 1988 Oct; 404:157–82

Binocular co-ordination of human vertical saccadic eye movements. Collewijn H, et al. **J Physiol (Lond)** 1988 Oct; 404:183–97

Binocular summation in humans: evidence for a hierarchic model. Frisén L, et al. **J Physiol (Lond)** 1988 Aug; 402:773–82

Binocular function after surgical alignment of infantile esotropia. Spierer A. **Metab Pediatr Syst Ophthalmol** 1988; 11(1-2):35–6

Disparity curvature and the perception of three-dimensional surfaces. Rogers B, et al. **Nature** 1989 May 11; 339(6220):135–7

The effect of monocular versus binocular fixation on accommodative hysteresis. Fisher SK, et al. **Ophthalmic Physiol Opt** 1988;8(4):438–42

Vision and visual acuity in an elderly population. Lavery JR, et al. **Ophthalmic Physiol Opt** 1988;8(4):390–3

Binocular function in unilateral aphakia. Correlation with aniseikonia and stereoacuity. Katsumi O, et al. **Ophthalmology** 1988 Aug;95(8):1088–93

Factors influencing vision with rigid gas permeable alternating bifocals. Ames KS, et al. **Optom Vis Sci** 1989 Feb;66(2):92–7

Evaluation of a new criterion of binocularity. Daum KM, et al. **Optom Vis Sci** 1989 Apr;66(4):218–28

Twin channel infrared optometer for recording binocular accommodation. Heron G, et al. **Optom Vis Sci** 1989 Feb; 66(2):123–9

Influence of extraocular muscle imbalance on binocular performance. Sucher DF. **Optom Vis Sci** 1989 Aug; 66(8):558–62

Humour. **Perception** 1988;17(3):337–8

An astable multivibrator model of binocular rivalry. Lehky SR. **Perception** 1988;17(2):215–28 (40 ref.)

Binocular beats: psychophysical studies of binocular interaction in normal and stereoblind humans. Baitch LW, et al. **Vision Res** 1989;29(1):27–35

Evidence for nonlinear binocular interactions in human visual cortex. Baitch LW, et al. **Vision Res** 1988;28(10):1139–43

The cyclopean eye and its implications: vergence state and visual direction. Enright JT. **Vision Res** 1988;28(8):925–30

The development of monocular and binocular VEP acuity. Hamer RD, et al. **Vision Res** 1989;29(4):397–408

Binocular fields with lateral-eyed vision. Holden AL, et al. **Vision Res** 1989;29(3):361–7

Cyclopean visual evoked potentials: a new test of binocular vision. Ohzawa I, et al. **Vision Res** 1988;28(10):1167–70

[Single binocular vision of central serous choroid-retinopathy] Yang SM, et al. **Yen Ko Hsueh Pao** 1987 Mar;3(1):25–7 (Eng. Abstr.) (Chi)

[Binocular vision—binocular vision of normal people] Yang SM, et al. **Yen Ko Hsueh Pao** 1987 Jun;3(2):120–3 (Eng. Abstr.) (Chi)

[Binocular vision—binocular vision of concomitant strabismus] Yang SM, et al. **Yen Ko Hsueh Pao** 1987 Jun; 3(2):124–7, 113 (Eng. Abstr.) (Chi)

[Maturation of Romberg's coefficient. A possible influence of binocular equilibrium] Zamfirescu F, et al. **Agressologie** 1988 Oct;29(9):661–7 (Eng. Abstr.) (Fre)

[Binocular vision in current practice] Quéré MA. **Annee Ther Clin Ophtalmol** 1987;38:105–15 (Eng. Abstr.) (Fre)

[Binocular functional exploration: fundamental aspects and analysis by the Fusio-Test] Bourdy C, et al. **J Fr Ophtalmol** 1988;11(5):441–51 (Eng. Abstr.) (Fre)

[Comparative study of the binocular vision of ortho-microtropia and residual strabismus. Post-treatment development of esotropia] Quéré MA, et al. **Ophtalmologie** 1988 Jan–Mar;2(1):5–8 (Eng. Abstr.) (Fre)

[Disturbance of binocular vision by wiper smears on windshields] Reiner J. **Klin Monatsbl Augenheilkd** 1989 Jan; 194(1):62–4 (Eng. Abstr.) (Ger)

[Effect of changes in binocular vision on the tridimensional perception of moving objects] Sachsenweger M, et al. **Klin Oczna** 1988 Apr–May;90(4–5):175–7 (Ger)

[Analysis of motor response with respect to the time course in cyclofusion] Okuda N, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):218–26 (Eng. Abstr.) (Jpn)

[Binocular interaction in anisometropic amblyopia using the static random-dot stereogram VEP and the pattern reversal VEP] Tanaka E, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1466–72 (Eng. Abstr.) (Jpn)

[Binocular vision in persons with artificial intraocular lenses] Kałużny J, et al. **Klin Oczna** 1988 Oct;90(10):337–8 (Eng. Abstr.) (Pol)

VISION DISORDERS

The association between visual impairment and mortality in elderly people. Thompson JR, et al. **Age Ageing** 1989 Mar; 18(2):83–8

ABC of eyes. Gradual visual loss, partial sight, and "blindness". Elkington AR, et al. **BMJ** 1988 Aug 20–27; 297(6647):548–9 (0 ref.)

Physician checklist for visually impaired elderly in nursing homes. Stoehr AJ, et al. **Geriatrics** 1989 Jul;44(7):87–91

Pediatric ophthalmology. **Int Ophthalmol Clin** 1989 Spring; 29(1):1–67

The Association for Research in Vision and Ophthalmology, annual spring meeting. Sarasota, Florida, April 30–May 5, 1989. Abstracts. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3 Suppl):1–551

Vision. **N C Med J** 1989 Apr;50(4):207–10

[Papers presented at the 81st annual meeting of the Swiss Ophthalmological Society. 14–17 September 1988, Bern] **Klin Monatsbl Augenheilkd** 1989 May;194(5):293–400 (Ger)

[Critical notes on percentages of invalidity concerning eye diseases] Carboni M, et al. **Riv Med Aeronaut Spaz** 1985 Oct–Dec;52(4):315–7 (Eng. Abstr.) (Ita)

[Physiologo-hygienic assessment of the educational regime in specialized preschool facilities for children with vision disorders] Dobromyslov AN, et al. **Oftalmol Zh** 1988; (8):453–7 (Eng. Abstr.) (Rus)

BLOOD

Visual symptoms associated with the presence of a lupus anticoagulant. Levine SR, et al. **Ophthalmology** 1988 May; 95(5):686–92

CHEMICALLY INDUCED

Bilateral blurring of vision after administration of contrast medium during i.v. digital subtraction angiography. Sharma S, et al. **AJR** 1989 Feb;152(2):429–30

An industrial hygiene appraisal of triethylamine and dimethylethylamine exposure limits in the foundry industry. Warren DW Jr, et al. **Am Ind Hyg Assoc J** 1988 Dec; 49(12):630–4

Lithium-induced downbeat nystagmus. Halmagyi GM, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):664–70

Scopolamine anisocaria [letter] Hughes SS, et al. **Ann Emerg Med** 1989 Apr;18(4):423–4

Lovastatin and visual changes [letter] [see comments] Mieczkowski LE, et al. **Ann Intern Med** 1989 Mar 1; 110(5):410–1. **Comment in:** Ann Intern Med 1989 Jun 1;110(11):944

Visual disturbance resulting from intranasal steroid injection. Case report. Garland PE, et al. **Arch Ophthalmol** 1989 Jan; 107(1):22–3

Subjective oscillopsia ("jiggling" vision) presumably due to aminoglycoside ototoxicity. A report of two cases. Marra TR, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):35–8

Severe visual loss after a single dose of vincristine in a patient with spinal cord astrocytoma. Teichmann KD, et al. **J Ocul Pharmacol** 1988 Summer;4(2):117–21

Pituitary apoplexy manifested during a bromocriptine test in a patient with a growth hormone- and prolactin-producing pituitary adenoma. Shirataki K, et al. **Neurosurgery** 1988 Sep;23(3):395–8

[Ophthalmologic complications of low-dosage tamoxifen in the treatment of breast carcinoma] de Jong-Busnac M. **Ned Tijdschr Geneeskd** 1989 Mar 11;133(10):514–6 (Eng. Abstr.) (Dut)

[Visual disorders due to organic solvent poisoning] Takeuchi Y. **Sangyo Igaku** 1988 Jul;30(4):236–47 (82 ref.) (Eng. Abstr.) (Jpn)

COMPLICATIONS

Ophthalmology in mentally retarded adults. A clinical survey. Jacobson L. **Acta Ophthalmol (Copenh)** 1988 Aug; 66(4):457–62

Risk of imbalance in elderly people with impaired hearing or vision. Gerson LW, et al. **Age Ageing** 1989 Jan;18(1):31–4

Television and vision: reading captions when vision is blurred. Thorn S, et al. **Am Ann Deaf** 1989 Mar;134(1):35–8

Vision anomalies and reading skill: a meta-analysis of the literature. Simons HD, et al. **Am J Optom Physiol Opt** 1988 Nov;65(11):893–904

Ocular abnormalities in deaf children: a discussion of deafness and retinal pigment changes. Nicoll AM, et al. **Aust N Z J Ophthalmol** 1988 Aug;16(3):205–8

Recommendations for desirable features of glucose monitoring systems for visually impaired customers [letter] **Diabetes Care** 1988 Oct;11(9):753–4

Dissociation of visual deficits in ocular hypertension. Trick GL, et al. **Invest Ophthalmol Vis Sci** 1988 Oct; 29(10):1486–91

Impaired vision and hip fracture. The Framingham Study. Felson DT, et al. **J Am Geriatr Soc** 1989 Jun;37(6):495–500

Kluver-Bucy syndrome in systemic lupus erythematosus. Oliveira V, et al. **J Neurol** 1989 Jan;236(1):55–6

Sphenoid sinusitis associated with meningitis, visual disturbances and total ophthalmoplegia. Mizoguchi K, et al. **Kurume Med J** 1988;35(4):211–5

Evaluation of a method of instilling eyedrops in visually handicapped patients [letter] Ling RT, et al. **Ophthalmic Surg** 1988 Dec;19(12):907

The relationship between hue discrimination and contrast sensitivity deficits in patients with diabetes mellitus. Trick GL, et al. **Ophthalmology** 1988 May;95(5):693–8

Visual assessment of the multiply handicapped patient. Orel-Bixler D, et al. **Optom Vis Sci** 1989 Aug;66(8):530–6

Ophthalmic causes of facial pain. Steahly LP. **Semin Neurol** 1988 Dec;8(4):315–7 (9 ref.)

[Onychodystrophy, sensory and mental deficits, neonatal seizures ("DOORS syndrome") (letter)] Sadoun E, et al. **Arch Fr Pediatr** 1989 Jun–Jul;46(6):465 (Fre)

[A case in practice: association of diarrhea and vision disorder in a 22-year-old man. Manuel José M., 1965, visits the doctor for diarrhea with vision disorder] Truscello A. **Schweiz Rundsch Med Prax** 1989 Jun 20;78(25):727–9 (Fre)

[Albinism in the practice of ophthalmology (review of the literature)] Kalachev II, et al. **Vestn Oftalmol** 1989 Jan–Feb; 105(2):71–4 (62 ref.) (Rus)

[Vision disorders are common in children with hemiplegia] Bonthron E. **Lakartidningen** 1988 Nov 9;85(45):3818 (Swe)

CONGENITAL

Congenital quadrantanopia with occipital lobe gangliogliomа. Fletcher WA, et al. **Neurology** 1988 Dec;38(12):1892–4

DIAGNOSIS

Computation of eye–head movements in oscillopsic patients: modifications induced by reeducation. Freyss G, et al. **Adv Otorhinolaryngol** 1988;42:294–300

A simple test for detection of monocular functional visual impairment. Savir H, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):500

How free care improved vision in the health insurance experiment. Lurie N, et al. **Am J Public Health** 1989 May; 79(5):640–2

Assessment of malingerers' visual acuity by Lotmar's visometer test. Grignolo FM, et al. **Ann Ophthalmol** 1988 Sep;20(9):335–9

Assessment of visual function in suspected ocular malingering. Fahle M, et al. **Br J Ophthalmol** 1989 Aug; 73(8):651–4

Palinopsia posing as a psychotic depression. Gates TJ, et al. **Br J Psychiatry** 1988 Sep;153:391–3

Use of the acuity card method to test retarded children in special schools. Hertz BG. **Child Care Health Dev** 1988 May–Jun;14(3):189–98

The detection of visual disability in the elderly. McMurdo ME, et al. **Health Bull (Edinb)** 1988 Nov;46(6):327–9

Intermittent headaches and blurred vision. Jenckers GA 3d, et al. **Hosp Pract [Off]** 1989 Mar 15;24(3):131–2, 134

A young woman with blurred vision. Murray BJ. **Hosp Pract [Off]** 1989 May 30;24(5A):44, 49

Acute visual loss in systemic lupus erythematosus. Rubin BR, et al. **J Am Osteopath Assoc** 1989 Jan;89(1):73–7

Electrophysiology versus psychophysics in the detection of visual loss in pseudotumor cerebri. Verplanck M, et al. **Neurology** 1988 Nov;38(11):1789–92

Perimetric findings in functional disorders [letter] Hill RA, et al. **Ophthalmology** 1988 Jul;95(7):1005

Delayed visual maturation. A longitudinal clinical and electrophysiological assessment. Lambert SR, et al. **Ophthalmology** 1989 Apr;96(4):524–8; discussion 529

Clinical characteristics of anomalous correspondence. Rutstein RP, et al. **Optom Vis Sci** 1989 Jul;66(7):420–5

Visual evoked potential: enhancing its utility. Kupersmith MJ. **Semin Neurol** 1986 Jun;6(2):217–30 (211 ref.)

[Respective indications for echography, scanning and MRI in diseases of the intra–cranial optic pathways] Cabanis EA, et al. **Annee Ther Clin Ophtalmol** 1987;38:299–318 **(Fre)**

[Visual acuity of infants and the technic of preferential looking] Dupont F, et al. **Bull Soc Ophtalmol Fr** 1988 Oct; 88(10):1247–52 (Eng. Abstr.) **(Fre)**

[Examination of central vision. Visual acuity, contrast sensitivity, color vision] Roth A, et al. **Klin Monatsbl Augenheilkd** 1989 May;194(5):325–32 (21 ref.) (Eng. Abstr.) **(Fre)**

[Early evaluation of the vision of infants: baby vision, a reality today] Vital–Durand F, et al. **Pediatrie** 1988;43(7):617–23 (Eng. Abstr.) **(Fre)**

[Comparison of the Kolling distance vision stereo–test with current stereo–test procedures] Schiefer U, et al. **Fortschr Ophthalmol** 1989;86(2):138–45 (Eng. Abstr.) **(Ger)**

[Effect of changes in binocular vision on the tridimensional perception of moving objects] Sachsenweger M, et al. **Klin Oczna** 1988 Apr–May;90(4–5):175–7 **(Ger)**

[Effect of stimulation time in the swinging flashlight test on the detection of RAPD] Miyazawa H. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2048–52 (Eng. Abstr.) **(Jpn)**

[Photopsia in the form of "side lightning" as a symptom of posterior detachment of the vitreous and vitreo–retinal pathology] Vodovozov AM, et al. **Oftalmol Zh** 1989; (1):59–61 (Eng. Abstr.) **(Rus)**

[The state of the organ of vision in employees engaged in precision work] Kovalenko VV. **Vestn Oftalmol** 1989 May–Jun;105(3):66–9 **(Rus)**

[Characteristics of the ophthalmological disorders in the initial stages of disseminated sclerosis in young and older patients] Matiushko NG. **Vrach Delo** 1988 Jul;(7):86–7 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Short–term recovery of visual field loss in acromegaly during treatment with a long–acting somatostatin analogue. Cobb WE, et al. **Am J Med** 1989 Apr;86(4):496–8

EPIDEMIOLOGY

Severe visual impairment on a rehabilitation unit: incidence and implications. Wainapel SF, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):439–41

A study to investigate the visual quality of dental undergraduates using a simple screening programme. Rawlinson A. **Aust Dent J** 1988 Aug;33(4):303–7

Divided loyalties? [editorial] Addison DJ. **Can J Ophthalmol** 1988 Dec;23(7):297–8 **(Eng, Fre)**

Prevalence of illegal motor vehicle driving among visually impaired elderly patients in Alberta. Paetkau ME, et al. **Can J Ophthalmol** 1988 Dec;23(7):301–4

Ocular problems in school–going children. Singh R. **J Indian Med Assoc** 1988 Jul;86(7):178–80

Stereoacuity levels and vision problems in children from 7 to 11 years. Williams S, et al. **Ophthalmic Physiol Opt** 1988; 8(4):386–9

The incidence of vision loss in a diabetic population. Moss SE, et al. **Ophthalmology** 1988 Oct;95(10):1340–8

Prevalence of blindness and visual impairment in the Luapula Valley, Zambia. Sukwa TY, et al. **Trop Geogr Med** 1988 Jul;40(3):237–40

[The prevalence of visual impairment in Kuala Selangor] Ali O, et al. **Med J Malaysia** 1988 Sep;43(3):232–6 **(May)**

ETIOLOGY

The management of pituitary tumours and post–operative visual deterioration. Adams CB. **Acta Neurochir (Wien)** 1988;94(3–4):103–16

Otolithic Tullio phenomenon typically presents as paroxysmal ocular tilt reaction. Brandt T, et al. **Adv Otorhinolaryngol** 1988;42:153–6

Otolithic control of posture: vestibulo–spinal reflexes in a patient with a Tullio phenomenon. Fries W, et al. **Adv Otorhinolaryngol** 1988;41:162–5

Significance of CT and MR findings in sphenoid sinus disease. Digre KB, et al. **AJNR** 1989 May–Jun;10(3):603–6

The clinical neuro–ophthalmologic spectrum of temporal arteritis. Mehler MF, et al. **Am J Med** 1988 Dec; 85(6):839–44 (77 ref.)

Visual loss caused by subretinal hemorrhage and rupture of Bruch's membrane after digital ocular massage. Ruderman JM, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):493–4

Antenatal and perinatal conditions correlated to handicap among 4–year–old children. Holst K, et al. **Am J Perinatol** 1989 Apr;6(2):258–67

Symptomatic visual deficits after open heart operations. Shahian DM, et al. **Ann Thorac Surg** 1989 Aug;48(2):275–9 (28 ref.)

Neurologic eye signs following motorcycle accidents. Keane JR. **Arch Neurol** 1989 Jul;46(7):761–2

Sterno–induced methanol toxicity and visual recovery after prompt hemodialysis. Case report. Greiner JV, et al. **Arch Ophthalmol** 1989 May;107(5):643

Conjunctival implantation cyst of the orbit. Transient visual loss with pregnancy. Harris GJ, et al. **Arch Ophthalmol** 1989 Jun;107(6):924

Visual field constriction caused by colored contact lenses. Insler MS, et al. **Arch Ophthalmol** 1988 Dec;106(12):1680–2

Visual symptoms of vestibular disease. Halmagyi GM, et al. **Aust N Z J Ophthalmol** 1988 Aug;16(3):177–9

ABC of eyes [letter] Sharland E. **BMJ** 1988 Aug 20–27; 297(6647):560–1

Changes in colour contrast sensitivity associated with operating argon lasers. Gündüz K, et al. **Br J Ophthalmol** 1989 Apr;73(4):241–6

Balint's syndrome in Alzheimer's disease: specific disruption of the occipito–parietal visual pathway. Hof PR, et al. **Brain Res** 1989 Jul 31;493(2):368–75

A study of the late effects of radiotherapy and operation on patients with maxillary cancer. A survey more than 10 years after initial treatment. Sakai S, et al. **Cancer** 1988 Nov 15;62(10):2114–7

Balint's syndrome following eclampsia. Gurjinder PS, et al. **Clin Neurol Neurosurg** 1989;91(2):161–5

Blurred vision. Oppenheim EB. **Compr Ther** 1988 Oct; 14(10):3–4

Visual loss following suture removal postkeratoplasty. Spigelman AV, et al. **Cornea** 1988;7(3):214–7

Inverted vision after frontal lobe disease. Solms M, et al. **Cortex** 1988 Dec;24(4):499–509 (29 ref.)

Use of visually evoked responses in evaluation of visual blurring in brain–damaged patients. Zihl J, et al. **Electroencephalogr Clin Neurophysiol** 1989 Sep–Oct; 74(5):394–8

Ictal cortical blindness with permanent visual loss. Aldrich MS, et al. **Epilepsia** 1989 Jan–Feb;30(1):116–20

Visual seizures in children. Aso K, et al. **Epilepsy Res** 1987 Jul;1(4):246–53

Visual involvement in Friedreich's ataxia: PERG and VEP study. Pinto F, et al. **Eur Neurol** 1988;28(5):246–51

Reversible visual loss due to impacted lateral orbital wall fractures. Funk GF, et al. **Head Neck** 1989 Jul–Aug; 11(4):295–300

Migraine–like visual phenomena associated with cerebral venous thrombosis. Newman DS, et al. **Headache** 1989 Feb; 29(2):82–5

Hallucination and visual disturbances in transurethral prostatic resection. Hahn RG. **Intensive Care Med** 1988; 14(6):668–71

Factors associated with visual outcome after photocoagulation for diabetic retinopathy. Diabetic Retinopathy Study Report #13. Kaufman SC, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):23–8

Visual dysfunction in closed head injury. Tierney DW. **J Am Optom Assoc** 1988 Aug;59(8):614–22

Sneddon's disease presenting with visual loss and dementia. Wilson WB, et al. **J Clin Neuro Ophthalmol** 1988 Dec; 8(4):255–61 (17 ref.)

Giant cell arteritis: loss of vision during corticosteroid therapy. Faarvang KL, et al. **J Intern Med** 1989 Mar; 225(3):215–6

Surgical treatment of progressive visual loss in traumatic optic neuropathy. Report of two cases. Guy J, et al. **J Neurosurg** 1989 May;70(5):799–801

The effect of traumatic brain injury on the visual system: a morphologic characterization of reactive axonal change. Cheng CL, et al. **J Neurotrauma** 1988;5(1):47–60

Is impaired visual development caused by perinatal hypoxia? [letter] Groenendaal F, et al. **Lancet** 1988 Dec 3; 2(8623):1308–9

Health maintenance issues of the elderly. Vision: age–related macular degeneration. Bressler SB. **Md Med J** 1989 Feb; 38(2):135–7

Upward–gaze palsy due to shunt malfunction [letter] Iplikcioğlu AC, et al. **Neurosurgery** 1989 Jan;24(1):141

Long–term visual health risks from solar ultraviolet radiation. Proposals for ocular protection. Waxler M. **Ophthalmic Res** 1988;20(3):179–82

Visual outcome after surgical removal of craniopharyngiomas. Repka MX, et al. **Ophthalmology** 1989 Feb;96(2):195–9

Visual sensory disorders in congenital nystagmus. Weiss AH, et al. **Ophthalmology** 1989 Apr;96(4):517–23

Role of MRI scanning in the diagnosis of cerebral visual disturbance. Van Nieuwenhuizen O, et al. **Pediatr Neurol** 1986 Nov–Dec;2(6):363–6

Sudden and gradual loss of vision. Wilson–Holt NJ. **Practitioner** 1988 Feb 8;232(1442):123–5

Neuro–ophthalmologic complications of hydrocephalus and shunting procedures. Corbett JJ. **Semin Neurol** 1986 Jun; 6(2):111–23 (61 ref.)

The orbit and neuro–ophthalmology. Glaser JS. **Semin Neurol** 1986 Jun;6(2):124–34 (20 ref.)

Visual obscurations: evanescent and elementary. Lepore FE. **Semin Neurol** 1986 Jun;6(2):167–75 (80 ref.)

Upside–down epilepsy: a manifestation of second sensory seizures [letter] Ringel RA, et al. **South Med J** 1988 Nov; 81(11):1466

Visual disturbances of migraine. Hupp SL, et al. **Surv Ophthalmol** 1989 Jan–Feb;33(4):221–36 (118 ref.)

Popping eyes. Slamovits T. **Surv Ophthalmol** 1989 Jan–Feb; 33(4):273–80

[Working with visual displays and the eye] Svěrák J, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(5):627–9 (Eng. Abstr.) **(Cze)**

[Eye infections endangering the sight. A retrospective study from a 6–year period with special attention to the use of contact lenses] Movin M, et al. **Ugeskr Laeger** 1988 Oct 17;150(42):2522–5 (Eng. Abstr.) **(Dan)**

[Etiology of childhood visual impairment in 1989] Verin P, et al. **Ann Pediatr (Paris)** 1989 Feb;36(2):113–6 (Eng. Abstr.) **(Fre)**

[Germinoma of the optic pathway (apropos of a case)] Chavy B, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):145–8 **(Fre)**

[Transitory disorders of visual function: diagnostic procedure] Safran AB. **Klin Monatsbl Augenheilkd** 1989 May;194(5):350–4 (36 ref.) (Eng. Abstr.) **(Fre)**

[Hypogonadotropic hypogonadism associated with involvement of the higher optic pathways. Apropos of 2 cases] Saraniti G, et al. **Ophtalmologie** 1988 Oct;2(4):373–6 (Eng. Abstr.) **(Fre)**

[Permanent deficiency of the visual field following migraine (letter)] Rouland JF, et al. **Presse Med** 1988 Oct 1; 17(33):1705 **(Fre)**

[A survey of visual deficiencies in a focus of endemic onchocerciasis] Toufic N. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1988;65(1–2):129–36 (Eng. Abstr.) **(Fre)**

[Cortical blindness in systemic lupus erythematosus] Durand JM, et al. **Rev Med Interne** 1989 Jan–Feb;10(1):59–61 (8 ref.) **(Fre)**

[Ergonomic aspects of visual conditions in microscope work] Krueger H, et al. **Biomed Tech (Berlin)** 1988 Sep; 33(9):196–202 (Eng. Abstr.) **(Ger)**

[Vision disorders with neurogenic causes. Exclusion of ophthalmologic causes—clinic admission is recommended] von Albert HH. **Fortschr Med** 1989 Jan 30;107(3):17 **(Ger)**

[The effect of posterior chamber lenses or YAG lens capsulotomy on sensitivity to glare and twilight vision in comparison to phakic control groups] Behrendt S, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):249–56 (Eng. Abstr.) **(Ger)**

[The ophthalmogeristric management of the aging human] Giessmann HG. **Z Arztl Fortbild (Jena)** 1989;83(8):423–4 (0 ref.) **(Ger)**

[Neuropsychiatric–ophthalmologic and radiologic findings in sphenoid wing meningioma] Pittasch D, et al. **Zentralbl Neurochir** 1988;49(3):206–9 (Eng. Abstr.) **(Ger)**

[Ocular symptoms and video display terminals: study of a group of video–terminal operators] Belisario A, et al. **G Ital Med Lav** 1988 Jan;10(1):39–42 (Eng. Abstr.) **(Ita)**

[Metastatic pituitary tumor presenting as bitemporal visual field defects. Case report] Kimura A, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1123–7 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Monostotic fibrous dysplasia of the sphenoidal bone presenting with visual disturbance during pregnancy] Okudera H, et al. **No To Shinkei** 1988 Aug;40(8):727–32 (Eng. Abstr.) **(Jpn)**

[Sectoranopia in a patient with hemorrhage of the right geniculate nucleus] Ohkawa S, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1188–91 (Eng. Abstr.) **(Jpn)**

[Functional status of the visual analyzer in operators working

with displays] Liman AD, et al. **Gig Tr Prof Zabol** 1989; (6):30–3 (Eng. Abstr.) **(Rus)**

[Status of visual function in persons working at metal–rolling hot shops of a metallurgic combine] Mambetov EK, et al. **Gig Tr Prof Zabol** 1989;(4):55–6 **(Rus)**

[Effects of display–associated work on the visual organ] Lantsburg ME, et al. **Vestn Oftalmol** 1988 May–Jun; 104(3):69–73 (98 ref.) **(Rus)**

[Neurosensory defects secondary to neonatal hyperbilirubinemia] Armas Ramos H, et al. **An Esp Pediatr** 1989 Mar;30(3):166–70 (Eng. Abstr.) **(Spa)**

[Neuromeningeal involvement in myelodysplastic syndromes. 1st referred case (letter)] Avilés A, et al. **Sangre (Barc)** 1988 Jun;33(3):239 **(Spa)**

GENETICS

Familial head movement dependent oscillopsia. Verhagen WI, et al. **Adv Otorhinolaryngol** 1988;42:217–8

[Hereditary eye diseases] Rosenberg T. **Ugeskr Laeger** 1989 Mar 20;151(12):791–4 **(Dan)**

HISTORY

[History of the correction of vision from antiquity to our time] Rosin A. **Rev Chir [Oftalmol]** 1988 Apr–Jun; 32(2):153–60 (Eng. Abstr.) **(Rum)**

IMMUNOLOGY

Neurological disease associated with antiphospholipid antibodies. Briley DP, et al. **Ann Neurol** 1989 Mar; 25(3):221–7

PATHOLOGY

Protracted enlargement of the blind spot in multiple evanescent white dot syndrome. Hamed LM, et al. **Arch Ophthalmol** 1989 Feb;107(2):194–8

Double vision, visual loss, and an enhancing orbital apex [clinical conference] Burde RM, et al. **Surv Ophthalmol** 1988 Jul–Aug;33(1):55–61

PHYSIOPATHOLOGY

Contrast sensitivity in macular degeneration and the relation to subjective visual impairment. Lennerstrand G, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):225–33

Treatment of Graves' disease and the course of ophthalmopathy. Sridama V, et al. **Am J Med** 1989 Jul; 87(1):70–3

Transurethral resection of the prostate, serum glycine levels, and ocular evoked potentials. Wang JM, et al. **Anesthesiology** 1989 Jan;70(1):36–41

Quantitating the superior visual field loss associated with ptosis. Meyer DR, et al. **Arch Ophthalmol** 1989 Jun; 107(6):840–3

Increase in short–term fluctuation may be a clue for differentiating dystrophic from acquired defects in anterior visual pathways [letter] Safran AB. **Arch Ophthalmol** 1989 Jan;107(1):16

Acuity card testing of patients with cerebral visual impairment. Hertz BG, et al. **Dev Med Child Neurol** 1988 Oct;30(5):632–7

Behaviour of the alpha rhythm in electroencephalograms of visually impaired children. Jan JE, et al. **Dev Med Child Neurol** 1988 Aug;30(4):444–50

Preferential looking in clinical practice: a year's experience. Chandna A, et al. **Eye** 1988;2 (Pt 5):488–95

Binocular interaction and steady–state visual evoked potentials. I. A study in normal subjects and in subjects with defective binocular vision. Bagolini B, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(5):401–6

Colour–black pattern reversal visual evoked potentials (colour–black–PVEPs): neurobiological aspects and clinical applicability of a new method. Taghavy A, et al. **Int J Neurosci** 1988 Dec;43(3–4):225–36

Complete visual inversion in vertebrobasilar ischaemic disease [letter] Mehler MF. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1236–7

Intracranial hypertension causing visual failure in cryptococcus meningitis. Tan CT. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):944–6

Pursuit and optokinetic deficits following chemical lesions of cortical areas MT and MST. Dürsteler MR, et al. **J Neurophysiol** 1988 Sep;60(3):940–65

Bilateral vestibular loss and oscillopsia. McGath JH, et al. **J Otolaryngol** 1989 Aug;18(5):218–21

Vision–related problems may offer clues for earlier diagnosis of Alzheimer's disease [news] Olson CM. **JAMA** 1989 Mar 3;261(9):1259

Usher syndrome: an otoneurologic study. Möller CG, et al. **Laryngoscope** 1989 Jan;99(1):73–9

Clinical and electrophysiological abnormalities in the visual system in myotonic dystrophy. Kerty E, et al. **Ophthalmologica** 1989;198(2):95–102

Improved reading performance using individualized compensation filters for observers with losses in central vision. Lawton TB. **Ophthalmology** 1989 Jan;96(1):115–26

Binocular beats: psychophysical studies of binocular interaction in normal and stereoblind humans. Baitch LW, et al. **Vision Res** 1989;29(1):27–35

[Relative afferent pupillary defect in several types of optic neuropathy] Miyazawa H. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2103–9 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Visual disability and the elderly [editorial] Hitchings RA. **BMJ** 1989 Apr 29;298(6681):1126–7

Screening of vision in school [letter] Hodes D, et al. **BMJ** 1988 Dec 10;297(6662):1541

Screening of vision in school: could we do better by doing less? Stewart–Brown SL, et al. **BMJ** 1988 Oct 29; 297(6656):1111–3

Analysis of a community vision screening program. Locke LC. **J Am Optom Assoc** 1989 Feb;60(2):88–93

Effects of ocular functioning and time upon reading proficiency. Stolzberg ME, et al. **J Am Optom Assoc** 1989 Feb;60(2):122–6

[Detection of vision disorders in newborn infants and children] Hullo A. **Pediatrie** 1989;44(2):113–20 (Eng. Abstr.) **(Fre)**

[Chronic alcohol–tobacco poisoning: towards an early detection of optic neuropathy] Ebran JM, et al. **Presse Med** 1988 Oct 1;17(33):1695–8 (Eng. Abstr.) **(Fre)**

[Which examination methods of visual capacity are to be used in assessing automobile driving fitness?] Broschmann D, et al. **Z Arztl Fortbild (Jena)** 1988;82(13):617–8 **(Ger)**

[Detection of latent disorders of visual function during ambulatory care of children] Puchkovskaia NA, et al. **Oftalmol Zh** 1989;(1):10–3 (Eng. Abstr.) **(Rus)**

[The care of children's vision—a matter of utmost importance] Kisliak NS, et al. **Vestn Oftalmol** 1988 May–Jun;104(3):3–7 **(Rus)**

[The staged team method in the ophthalmological care of children] Mustafina ZhG, et al. **Vestn Oftalmol** 1988 May–Jun;104(3):66–8 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Isolated visual hallucinations and the Charles Bonnet syndrome: a review of the literature and presentation of six cases. Gold K, et al. **Compr Psychiatry** 1989 Jan–Feb; 30(1):90–8 (54 ref.)

Psychosocial profiles in patients with visual impairment due to diabetic retinopathy. Bernbaum M, et al. **Diabetes Care** 1988 Jul–Aug;11(7):551–7

Behavioral correlates of poor vision in children. Good WV, et al. **Int Ophthalmol Clin** 1989 Spring;29(1):57–60 (20 ref.)

Visual conversion disorder: a case analysis of the influence of visual information. Bryant RA, et al. **J Abnorm Psychol** 1989 Aug;98(3):326–9

The meaning of visual impairment to visually impaired adults. Allen MN. **J Adv Nurs** 1989 Aug;14(8):640–6

REHABILITATION

A multidisciplinary program for visually impaired children and youths. Jan JE, et al. **Int Ophthalmol Clin** 1989 Spring; 29(1):33–6 (17 ref.)

[Ophthalmologic determinants of prismatic correction of posture. A retrospective analysis of 39 prescriptions] Marucchi C, et al. **Agressologie** 1988 Oct;29(10):693–5 (Eng. Abstr.) **(Fre)**

[Eyeglasses and prismatic effects] Prevost G. **Agressologie** 1988 Oct;29(10):697–8 (Eng. Abstr.) **(Fre)**

[Center of Sensory Education for Visually Handicapped and Blind Children in Rennes: a center open for guidance in autonomy and integration] Belloir D. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):107–9 **(Fre)**

SURGERY

Modified optic nerve sheath decompression provides long–term visual improvement for pseudotumor cerebri. Sergott RC, et al. **Arch Ophthalmol** 1988 Oct; 106(10):1384–90

Decompression of the orbit and the optic nerve in different diseases. Stoll W, et al. **J Craniomaxillofac Surg** 1988 Oct; 16(7):308–11

THERAPY

Undercorrection and myopia development [letter] Sivak JG. **Am J Optom Physiol Opt** 1988 Sep;65(9):766

Mobility spectacles for ankylosing spondylitis. Kelly SP, et al. **BMJ** 1989 Jun 24;298(6689):1704

Vision therapy in optometric practice [letter] Graybill RL. **J Am Optom Assoc** 1988 Oct;59(10):759

Progressive addition lenses [letter] Jan D. **J Am Optom Assoc** 1989 Jan;60(1):9

Binocular vision therapy [letter] Pirotte PJ. **J Am Optom Assoc** 1988 Sep;59(9):664

The Vision Care Section of the American Public Health Association [editorial] Silverman MW. **J Am Optom Assoc** 1988 Sep;59(9):663

Vision therapy and primary care [letter] Williams RA. **J Am Optom Assoc** 1989 Feb;60(2):86–7

[The value of ambulatory care in preventing and reducing invalidism due to eye pathology] Libman ES, et al. **Oftalmol Zh** 1989;(1):1–3 (Eng. Abstr.) **(Rus)**

[The results of treating children with a visual disorder in specialized kindergarten groups] Lishchenko BM, et al. **Oftalmol Zh** 1988;(7):442–4 **(Rus)**

VETERINARY

The establishment of a clinical diagnostic method of the visual evoked potentials (VEPs) in the cat: the effects of recording electrode positions, stimulus intensity and the level of anesthesia. Uzuka Y, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):547–53

VISION DISPARITY

Procedure for aligning nonius lines [letter] Larson WL. **Am J Optom Physiol Opt** 1988 Sep;65(9):763–4

Recording of disparity vergence in comitant esotropia. Campos EC, et al. **Doc Ophthalmol** 1989 Jan;71(1):69–76

Unilateral retinitis pigmentosa associated with exfoliation syndrome. Paolo de Felice G, et al. **Int Ophthalmol** 1988 Feb;11(4):219–26

Bagolini lenses vs. PFL filters in the diagnosis of correspondence. Fors LA, et al. **J Am Optom Assoc** 1989 Feb;60(2):132–5

A normative study of step vergence in elementary schoolchildren. Scheiman M, et al. **J Am Optom Assoc** 1989 Apr;60(4):276–80

Acquired monofixation syndrome. Eustis HS, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jul–Aug; 26(4):169–72; discussion 173–5

Stereopsis. Vision of solid objects [news] Morgan MJ. **Nature** 1989 May 11;339(6220):101–3

Disparity curvature and the perception of three–dimensional surfaces. Rogers B, et al. **Nature** 1989 May 11; 339(6220):135–7

Central and peripheral sensitivity to temporally modulated stimuli presented to the sighting and nonsighting eyes. Coren S, et al. **Optom Vis Sci** 1989 Jul;66(7):450–4

Viewing distance affects stereoscopic tilt created with spatial frequency disparity. Patterson R, et al. **Optom Vis Sci** 1989 Aug;66(8):554–7

Stereoscopic depth perception by static stereo–deficient observers in dynamic displays with constant and changing disparity. Rouse MW, et al. **Optom Vis Sci** 1989 Jun; 66(6):355–62

How contrast affects stereoacuity. Halpern DL, et al. **Perception** 1988;17(4):483–95

Oblique muscle palsies fixating with the paretic eye. Dickey CF, et al. **Surv Ophthalmol** 1988 Sep–Oct;33(2):97–107 (48 ref.)

Compound binocular rivalry. de Weert CM, et al. **Vision Res** 1988;28(9):1031–40

[Latent nystagmus in asymmetrical binocular vision] Belousova ZF, et al. **Oftalmol Zh** 1988;(5):316–7 **(Rus)**

PHYSIOLOGY

Lens–induced fixation disparity curves. Wick B, et al. **Am J Optom Physiol Opt** 1988 Aug;65(8):606–12

Dyslexia [letter] Stein J. **BMJ** 1988 Oct 1;297(6652):854

Fusional vergence in microstrabismus. Boonstra FN, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):221–6

Disparity acceleration effects in stereoscopy and their importance for theoretical neurology. Shipley T, et al. **Int J Neurosci** 1988 Sep;42(1–2):63–70

Asymmetrical adaptation of human saccades to anisometropic spectacles. Erkelens CJ, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1132–45

Horizontal fusional amplitudes. Evidence for disparity tuning. Jones R, et al. **Invest Ophthalmol Vis Sci** 1989 Jul; 30(7):1638–42

Stereoscopic mechanisms in monkey visual cortex: binocular correlation and disparity selectivity. Poggio GF, et al. **J Neurosci** 1988 Dec;8(12):4531–50

Binocular vision. Fisher NF. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct; 25(5):212–20

Evidence of foveal splitting in a commissurotomy patient. Fendrich R, et al. **Neuropsychologia** 1989;27(3):273–81

Fixation disparity. Dowley D. **Optom Vis Sci** 1989 Feb; 66(2):98–105

A neural theory of binocular rivalry. Blake R. **Psychol Rev** 1989 Jan;96(1):145–67 (110 ref.)

VISION, ENTOPTIC see under **VISION**

VISION, LOW

Closed–circuit television as an electronic visual aid. Sun BC, et al. **Chin Med J [Engl]** 1988 Nov;101(11):803–6

The Carel C. Koch award lecture 1988: understanding and respect: a formula that really works. Genens' J, SM. **Optom Vis Sci** 1989 Jun;66(6):336–8

Low vision problem in the U.S.A. Kambara GK. **Yen Ko Hsueh Pao** 1987 Dec;3(4):233–6, 231

[The clinical use of the closed circuit TV as a visual aid] Sun BC. **Chung Hua Yen Ko Tsa Chih** 1988 Jul;24(4):230–2 (Eng. Abstr.) **(Chi)**

CHEMICALLY INDUCED

Subchronic dosing of macaques with 2,5–hexanedione causes long–lasting motor dysfunction but reversible visual loss. Lynch JJ 3d, et al. **Toxicol Appl Pharmacol** 1989 Mar 15; 98(1):166–80

EPIDEMIOLOGY

National survey of blindness and low vision in The Gambia: results. Faal H, et al. **Br J Ophthalmol** 1989 Feb;73(2):82–7

[An epidemiologic study of blindness and low vision in

Shunyi county, Beijing] Hu C. **Chung Hua Yen Ko Tsa Chih** 1988 Nov;24(6):322-6 (Eng. Abstr.) (Chi)
[An epidemiologic survey of blindness and low-vision in Yunnan Province] Shang CX. **Chung Hua Yen Ko Tsa Chih** 1988 Nov;24(6):331-3 (Eng. Abstr.) (Chi)
[An epidemiological survey of blindness and low vision in Shanghai] Zang GQ. **Chung Hua Yen Ko Tsa Chih** 1988 Nov;24(6):327-30 (Eng. Abstr.) (Chi)
[The epidemiological survey of blindness and low vision in Sichuan Province, China] Lo WB, et al. **Yen Ko Hsueh Pao** 1987 Dec;3(4):223-6 (Eng. Abstr.) (Chi)

ETIOLOGY

Macular degeneration: the major cause of severe vision loss in persons fifty-five years or older. Haik GM Jr, et al. **J Miss State Med Assoc** 1989 Jul;30(7):207-10
Visual loss in the cancer patient. Frank AR. **Nebr Med J** 1989 May;74(5):113-23
[Long-term observation of the optic disk pit] Adamczewska I, et al. **Klin Oczna** 1988 Aug;90(8):287-8 (Eng. Abstr.) (Pol)

PHYSIOPATHOLOGY

The unequal nystagmus test. Jan JE, et al. **Dev Med Child Neurol** 1988 Aug;30(4):441-3
The implications for everyday life of incident self-reported visual decline among people over age 65 living in the community. Branch LG, et al. **Gerontologist** 1989 Jun; 29(3):359-65
Psychophysics of reading. VI--The role of contrast in low vision. Rubin GS, et al. **Vision Res** 1989;29(1):79-91

REHABILITATION

Interprofessional perspectives on blindness and low vision. Gallagher WF. **Am J Optom Physiol Opt** 1988 Aug; 65(8):603-5
Low-vision aids in Stargardt's disease. Schwartzenberg T, et al. **Ann Ophthalmol** 1988 Nov;20(11):428-30
A clinical evaluation of equipment which allows the partially sighted and blind to access computer-based information. Boulton LM. **Aust N Z J Ophthalmol** 1989 Feb;17(1):87-93
Visual rehabilitation of patients with advanced stages of glaucoma, optic atrophy, myopia or retinitis pigmentosa. Nilsson UL. **Doc Ophthalmol** 1988 Dec;70(4):363-83
Predictors of functional success in telescopic spectacle use by low vision patients. Demer JL, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1652-65
Teaching ophthalmology residents about rehabilitation. Greenblatt SL. **Ophthalmology** 1988 Oct;95(10):1468-72
Low vision related to function and rehabilitation. Padula WV. **Yen Ko Hsueh Pao** 1986 Jun;2(2):103-8 (27 ref.)

THERAPY

Visual results with low-vision aids in age-related macular degeneration [see comments] Nasrallah FP, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):730-4. **Comment in:** Am J Ophthalmol 1989 May 15;107(5):564-6
Treatment of low vision in the progressive cone dystrophies. McMahon TT, et al. **Am J Optom Physiol Opt** 1988 Nov; 65(11):909-14

VISION, MONOCULAR

A simple test for detection of monocular functional visual impairment. Savir H, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):500
Patterns of binocular suppression and accommodation in monovision. Schor C, et al. **Am J Optom Physiol Opt** 1988 Nov;65(11):853-61
Unfixed reference, monocular occlusion, and developmental dyslexia--a critique. Bishop DV. **Br J Ophthalmol** 1989 Mar;73(3):209-15 (28 ref.)
Evidence for an enhanced role of GABA inhibition in visual cortical ocular dominance of cats reared with abnormal monocular experience. Mower GD, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):211-8
The unequal nystagmus test. Jan JE, et al. **Dev Med Child Neurol** 1988 Aug;30(4):441-3
Monocular geometry is selectively distorted in the central visual field of strabismic amblyopes. Fronius M, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2034-44
Effect of monocular visual loss upon stability of gaze. Leigh RJ, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):288-92
Effects of interocular blur suppression ability on monovision task performance. Schor C, et al. **J Am Optom Assoc** 1989 Mar;60(3):188-92
W-and Y-cells in the C layers of the cat's lateral geniculate nucleus: normal properties and effects of monocular deprivation. Spear PD, et al. **J Neurophysiol** 1989 Jan; 61(1):58-73
Monocularly deprived cats: binocular tests of cortical cells reveal functional connections from the deprived eye. Freeman RD, et al. **J Neurosci** 1988 Jul;8(7):2491-506
The effect of monocular versus binocular fixation on accommodative hysteresis. Fisher SK, et al. **Ophthalmic Physiol Opt** 1988;8(4):438-42
Detection of low spatial frequencies: a single filter or multiple filters? Hess RF, et al. **Ophthalmic Physiol Opt** 1988; 8(4):378-85
Peripheral visual acuity with monovision and other contact lens corrections for presbyopia. Collins MJ, et al. **Optom Vis Sci** 1989 Jun;66(6):370-4
Central and peripheral sensitivity to temporally modulated stimuli presented to the sighting and nonsighting eyes. Coren S, et al. **Optom Vis Sci** 1989 Jul;66(7):450-4
Monocular accommodative facility testing reliability. Rouse MW, et al. **Optom Vis Sci** 1989 Feb;66(2):72-7
The role of monocular regions in stereoscopic displays. Gillam B, et al. **Perception** 1988;17(5):603-8
Effects of superior colliculus lesion upon a black-white discrimination learning in the albino rat with one eye removed at birth. Ikeda Y, et al. **Physiol Behav** 1988; 43(5):657-63
The development of monocular and binocular VEP acuity. Hamer RD, et al. **Vision Res** 1989;29(4):397-408
[Correction of unilateral aphakia in children, adolescents, and adults at an age when accommodation is still possible] Thill-Schwaninger M, et al. **Ophthalmologica** 1988; 197(1):7-13 (Eng. Abstr.) (Ger)

VISION SCREENING

A study to investigate the visual quality of dental undergraduates using a simple screening programme. Rawlinson A. **Aust Dent J** 1988 Aug;33(4):303-7
Children referred from school vision screening [letter] Bosanquet R, et al. **BMJ** 1989 Jun 10;298(6687):1581
Referral patterns to an ophthalmic outpatient clinic by general practitioners and ophthalmic opticians and the role of these professionals in screening for ocular disease. Harrison RJ, et al. **BMJ** 1988 Nov 5;297(6657):1162-7
Visual disability and the elderly [editorial] Hitchings RA. **BMJ** 1989 Apr 29;298(6681):1126-7
Screening of vision in school [letter] Hodes D, et al. **BMJ** 1988 Dec 10;297(6662):1541
Review of children referred from the school vision screening programme in Kettering during 1976-8. Ingram RM. **BMJ** 1989 Apr 8;298(6678):935-6
Primary school teachers in delivery of eye health care. D'Souza P, et al. **Indian J Ophthalmol** 1987;35(5-6):429-30
Analysis of a community vision screening program. Locke LC. **J Am Optom Assoc** 1989 Feb;60(2):88-93
Vision and visual acuity in an elderly population. Lavery JR, et al. **Ophthalmic Physiol Opt** 1988;8(4):390-3

ECONOMICS

Value of intraocular pressure measurement as a screening tool for glaucoma. Le Blanc R. **Surv Ophthalmol** 1989 Apr; 33 Suppl:445-6; discussion 449-50

INSTRUMENTATION

An optimized visual field screening method. Henson DB. **Surv Ophthalmol** 1989 Apr;33 Suppl:443-4; discussion 449-50

METHODS

The Taiwan program to strengthen the vision health care for the school children. **Acta Ophthalmol Suppl (Copenh)** 1988;185:148-50
Vision screening [letter] McIntyre L, et al. **Can J Public Health** 1988 Nov-Dec;79(6):271-2
Analysis of a community vision screening program. Locke LC. **J Am Optom Assoc** 1989 Feb;60(2):88-93
Effects of ocular functioning and time upon reading proficiency. Stolzberg ME, et al. **J Am Optom Assoc** 1989 Feb;60(2):122-6
Study of chart designs and optotypes for preschool vision screening--I. Comparability of chart designs. Sprague JB, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jul-Aug; 26(4):189-97
Visible difference. Martin DL. **Occup Health Saf** 1989 Apr; 58(4):25, 29-30
Screening for glaucomatous visual field defects: the relationship between sensitivity, specificity and the number of test locations. Henson DB, et al. **Ophthalmic Physiol Opt** 1988;8(2):123-7
Effects of viewing conditions on standard measures of acquired and congenital color defects. Somerfield MR, et al. **Optom Vis Sci** 1989 Jan;66(1):29-33
Tonometry in question: can visual screening tests play a more decisive role in glaucoma diagnosis and management? Sponsel WE. **Surv Ophthalmol** 1989 Feb;33 Suppl:291-300 (58 ref.)
Psychophysical changes in glaucoma. Stamper RL. **Surv Ophthalmol** 1989 Feb;33 Suppl:309-18 (79 ref.)

STANDARDS

Monocular accommodative facility testing reliability. Rouse MW, et al. **Optom Vis Sci** 1989 Feb;66(2):72-7

VISION, SUBNORMAL see **VISION, LOW**

VISION TESTS

Visual acuity testing of young children with the Cambridge Crowding Cards at 3 and 6 m. Atkinson J, et al. **Acta Ophthalmol (Copenh)** 1988 Oct;66(5):505-8
A simple test for detection of monocular functional visual impairment. Savir H, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):500
Procedure for aligning nonius lines [letter] Larson WL. **Am J Optom Physiol Opt** 1988 Sep;65(9):763-4
Age differences in Vistech near contrast sensitivity. Scialfa CT, et al. **Am J Optom Physiol Opt** 1988 Dec;65(12):951-6
Evaluation of macular function by Lotmar's visometer test and blue-field entoptic test in patients with cataract. Grignolo FM, et al. **Ann Ophthalmol** 1988 Jul;20(7):247-50, 255
Snellen equivalent for the Bailey-Lovie acuity chart [letter] [published erratum appears in Arch Ophthalmol 1989 Jul;107(7):955] Holladay JT, et al. **Arch Ophthalmol** 1989 May;107(5):636
The prism adaptation test in the preoperative evaluation of esodeviations. Delisle P, et al. **Can J Ophthalmol** 1988 Aug; 23(5):208-12
Low-contrast visual acuity test for pediatric use. Regan D. **Can J Ophthalmol** 1988 Aug;23(5):224-7
Use of the acuity card method to test retarded children in special schools. Hertz BG. **Child Care Health Dev** 1988 May-Jun;14(3):189-98
Clinical psychophysics. Fitzke FW. **Eye** 1988;2 Suppl:S233-41 (136 ref.)
Stereotest artifacts and the strabismus patient. Archer SM. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):313-6
Lanthony desaturated panel D15 test in sickle cell patients. Roy M, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(4):326-9
The detection of visual disability in the elderly. McMurdo ME, et al. **Health Bull (Edinb)** 1988 Nov;46(6):327-9
Relationships among measures of static and dynamic visual sensitivity. Scialfa CT, et al. **Hum Factors** 1988 Dec; 30(6):677-87
New test for determining distant visual acuity in children. Rathod S, et al. **Indian J Ophthalmol** 1987;35(5-6):88
A new test of luminous efficiency for babies. Maurer D, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):297-303
Visual skills of athletes versus nonathletes: development of a sports vision testing battery. Christenson GN, et al. **J Am Optom Assoc** 1988 Sep;59(9):666-75
Usher syndrome: an otoneurologic study. Möller CG, et al. **Laryngoscope** 1989 Jan;99(1):73-9
Penlight glare test [letter] Markow SA. **Ophthalmic Surg** 1988 Sep;19(9):678
Ocular dominance tests before cataract surgery, especially monocular or unilateral [letter] Romano PE. **Ophthalmology** 1988 Jun;95(6):856
Comparison of fusional ranges measured by Risley prisms, vectograms, and computer orthopter. Feldman JM, et al. **Optom Vis Sci** 1989 Jun;66(6):375-82
[Visual acuity and Minitel] Koenig F, et al. **Annee Ther Clin Ophtalmol** 1987;38:29-36 (Eng. Abstr.) (Fre)
[Coordinometry] Rossazza C. **Annee Ther Clin Ophtalmol** 1987;38:91-104 (Fre)
[Visual acuity charts printed in grey] Muller Feuga E, et al. **Ophtalmologie** 1988 Nov-Dec;2(5):387-90 (Eng. Abstr.) (Fre)
[Examination strategies in the preparative phase for cataract operations and artificial lens implantation] Artaria LG. **Klin Monatsbl Augenheilkd** 1989 May;194(5):373-5 (Eng. Abstr.) (Ger)
[Contributions to the Aulhorn flicker test. II: The flicker test and the Pulfrich phenomenon in clinical diagnosis] Pittke EC, et al. **Klin Monatsbl Augenheilkd** 1988 Oct; 193(4):382-7 (Eng. Abstr.) (Ger)
[Study of stereopsis using the Lang and Titmus stereo-tests to assess the presence of changes in binocular vision of children with mental retardation] Filippello M, et al. **Minerva Pediatr** 1988 Aug;40(8):473-6 (Eng. Abstr.) (Ita)
[Results of the quantitative photo stress test in corneal opacities following anterior radial keratotomy] Belousov VI. **Oftalmol Zh** 1989;(1):53-5 (Eng. Abstr.) (Rus)
[Detection of latent disorders of visual function during ambulatory care of children] Puchkovskaia NA, et al. **Oftalmol Zh** 1989;(1):10-3 (Eng. Abstr.) (Rus)

ECONOMICS

How free care improved vision in the health insurance experiment. Lurie N, et al. **Am J Public Health** 1989 May; 79(5):640-2

HISTORY

An evaluation of the photographs of William H. Crisp, MD. Sims CN. **Ophthalmology** 1988 May;95(5):699-706

INSTRUMENTATION

Snellen equivalent for the Bailey-Lovie acuity chart [letter] Holladay JT, et al. **Arch Ophthalmol** 1989 Jul;107(7):955
Chart for visual acuity screening. Wong D, et al. **Br J Ophthalmol** 1989 Jun;73(6):457-60
Assessment of contrast sensitivity of patients with macular disease using reduced contrast near visual acuity charts. Greeves AL, et al. **Ophthalmic Physiol Opt** 1988;8(4):371-7
Validity and reliability of visual acuity measurements. Lovie-Kitchin JE. **Ophthalmic Physiol Opt** 1988; 8(4):363-70
Effect of defocus on blur thresholds and on thresholds of perceived change in blur: comparison of source and observer methods. Jacobs RJ, et al. **Optom Vis Sci** 1989

Aug;66(8):545–53
Self-made instruments for eye examination. Maertens K, et al. **Trop Doct** 1989 Jul;19(3):141–2
[Visual acuity charts printed in gray] Mawas E, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):317–21 (Eng. Abstr.) (Fre)
[Preoperative visual prognosis of senile cataract. Value of Lotmar's visuometer] Serpin G, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):697–9 (Fre)
[A random dots stereotest] Weiss JB. **Bull Soc Ophtalmol Fr** 1988 Apr;88(4):509–11 (Eng. Abstr.) (Fre)
[Binocular functional exploration: fundamental aspects and analysis by the Fusio-Test] Bourdy C, et al. **J Fr Ophtalmol** 1988;11(5):441–51 (Eng. Abstr.) (Fre)
[2 new visual acuity tests for children: the Cadet letters and Cadet images] Douche C, et al. **J Fr Ophtalmol** 1988; 11(12):831–4 (Eng. Abstr.) (Fre)
[The Monoyer's decimal scale] Dufier JL. **J Fr Ophtalmol** 1988;11(11):793 (Fre)
[A new procedure for measuring the strabismus angle in both eyes] Effert R, et al. **Fortschr Ophthalmol** 1988;85(5):486–8 (Eng. Abstr.) (Ger)
[Near heterophoria according to the angle mirror principle] Littan KE. **Fortschr Ophthalmol** 1988;85(3):280–2 (Eng. Abstr.) (Ger)
[Visual assessment in reduced background illumination and glare] Nowak MR, et al. **Fortschr Ophthalmol** 1988; 85(5):555–6 (Eng. Abstr.) (Ger)
[Comparison of the Kolling distance vision stereo-test with current stereo-test procedures] Schiefer U, et al. **Fortschr Ophthalmol** 1989;86(2):138–45 (Eng. Abstr.) (Ger)
[The haplophotometer—a new kind of instrument for measuring slight disorders of visual afference—instrument description and examples of its use] Schiefer U, et al. **Fortschr Ophthalmol** 1988;85(6):766–71 (Eng. Abstr.) (Ger)
[An alternative measuring procedure to the simultaneous prism cover test] Effert R. **Klin Monatsbl Augenheilkd** 1989 Jun;194(6):462–6 (Eng. Abstr.) (Ger)
[Principles of modern determination of refraction] Krause K. **Klin Monatsbl Augenheilkd** 1989 May;194(5):301–6 (13 ref.) (Eng. Abstr.) (Ger)
[A recording ergograph based on the accommodation–convergence trainer] Cherednichenko VM, et al. **Oftalmol Zh** 1988;(6):378–9 (Rus)

METHODS

Assessment of visual function in suspected ocular malingering. Fahle M, et al. **Br J Ophthalmol** 1989 Aug; 73(8):651–4
Usefulness of computerized visual acuity testing in a pediatric ophthalmology clinic. Raymond JE, et al. **Can J Ophthalmol** 1988 Aug;23(5):213–5
Acuity card testing of patients with cerebral visual impairment. Hertz BG, et al. **Dev Med Child Neurol** 1988 Oct;30(5):632–7
Preferential looking in clinical practice: a year's experience. Chandna A, et al. **Eye** 1988;2 (Pt 5):488–95
Electrophysiological testing of eyes with opaque media. Galloway NR. **Eye** 1988;2 (Pt 6):615–24
Refractive error and preferential looking visual acuity in infants 12–24 months of age: year 2 of a longitudinal study. Kohl P, et al. **J Am Optom Assoc** 1988 Sep;59(9):686–90
Contrast sensitivity testing: a more complete assessment of vision. Jindra LF, et al. **J Cataract Refract Surg** 1989 Mar; 15(2):141–8
Glare and contrast sensitivity testing in cataract patients. Koch DD. **J Cataract Refract Surg** 1989 Mar;15(2):158–64
Reversal of glare disability after cataract surgery. Masket S. **J Cataract Refract Surg** 1989 Mar;15(2):165–8
Glare testing in cataract patients: instrument evaluation and identification of sources of methodological error. Prager TC, et al. **J Cataract Refract Surg** 1989 Mar;15(2):149–57
Observations on the use of three different contrast sensitivity tests in children and young adults. Mäntyjärvi MI, et al. **J Pediatr Ophthalmol Strabismus** 1989 May–Jun; 26(3):113–9
Predicting visual acuity after cataract surgery using the blue field entoptoscope and projected slides. Lischwe TD, et al. **Ophthalmology** 1988 Feb;95(2):256–60
Photographic method for Brückner and Hirschberg testing. Griffin JR, et al. **Optom Vis Sci** 1989 Jul;66(7):474–9
Electrophysiological and psychophysical testing of vision in glaucoma. Bodis-Wollner I. **Surv Ophthalmol** 1989 Feb;33 Suppl:301–7 (36 ref.)
Cyclopean visual evoked potentials: a new test of binocular vision. Ohzawa I, et al. **Vision Res** 1988;28(10):1167–70
[Comparison of the stereovisual acuity, Randot stereotests, Frisby stereotest, Wirt test, TNO test of 442 normal children with stereovisual test chart] Zhou YH, et al. **Yen Ko Hsueh Pao** 1988 Mar;4(1):60–4 (Eng. Abstr.) (Chi)
[Examination of central vision. Visual acuity, contrast sensitivity, color vision] Roth A, et al. **Klin Monatsbl Augenheilkd** 1989 May;194(5):325–32 (21 ref.) (Eng. Abstr.) (Fre)
[New tests of visual acuity for preschool children: CADET letters and CADET pictures] Douche C, et al. **Ophtalmologie** 1988 Jul–Sep;2(3):265–6 (Eng. Abstr.) (Fre)
[Detection of vision disorders in newborn infants and children] Hullo A. **Pediatrie** 1989;44(2):113–20 (Eng. Abstr.) (Fre)
[Early evaluation of the vision of infants: baby vision, a reality today] Vital-Durand F, et al. **Pediatrie** 1988;43(7):617–23 (Eng. Abstr.) (Fre)
[Determination of contrast sensitivity] Rassow B. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):93–8 (0 ref.) (Eng. Abstr.) (Ger)
[Which examination methods of visual capacity are to be used in assessing automobile driving fitness?] Broschmann D, et al. **Z Arztl Fortbild (Jena)** 1988;82(13):617–8 (Ger)

STANDARDS

The Hirschberg test: a double-masked clinical evaluation. Eskridge JB, et al. **Am J Optom Physiol Opt** 1988 Sep; 65(9):745–50
Assessment of malingerers' visual acuity by Lotmar's visometer test. Grignolo FM, et al. **Ann Ophthalmol** 1988 Sep;20(9):335–9
A proposal for a diagnostic colour vision standard for civil airmen. Zentner AB. **Aviat Space Environ Med** 1988 Aug; 59(8):770–5
VCTS chart evaluation as a screening test. Maudgal PC, et al. **Doc Ophthalmol** 1988 Aug;69(4):399–405
Standardization of the Tübingen flicker test. Trauzettel-Klosinski S, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):221–9
The measurement of visual efficiency standards for pilots in the United States Air Force. Buzzelli AR, et al. **Milit Med** 1989 Jul;154(7):345–7
The use of accurate visual acuity measurements in clinical anti-cataract formulation trials. Elliott DB, et al. **Ophthalmic Physiol Opt** 1988;8(4):397–401
Test-retest reliability of the Arden Grating Test: inter-tester variability. Reeves BC, et al. **Ophthalmic Physiol Opt** 1988; 8(2):128–38
Teller acuity cards versus clinical judgment in the diagnosis of amblyopia with strabismus. Ellis GS Jr, et al. **Ophthalmology** 1988 Jun;95(6):788–91
Standards for measuring visual acuity [letter] Lempert P. **Ophthalmology** 1988 Jun;95(6):856
[The necessity and difficulties in taking into account near visual acuity for evaluating visual incapacity in medicolegal expertise] Jonquères J, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):347–50 (Eng. Abstr.) (Fre)
[The necessity for taking into account near visual acuity in the evaluation of body damage] Jonquères J, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):341–4 (Fre)
[The standard of measurement of visual acuity] Arden GB. **J Fr Ophtalmol** 1988;11(11):779–92 (Fre)

VISITING NURSES see **COMMUNITY HEALTH NURSING**

VISITORS TO PATIENTS

Anxiety in patients with brain injuries—rooming-in with close relatives as a therapeutic approach. Werner GT, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):232–3
Hospital visiting hours: achieving a balance [editorial] Griffith D. **Ir Med J** 1989 Feb;82(1):6
Coronary care unit visitation and summary of the literature. Sickbert SF. **J Am Geriatr Soc** 1989 Jul;37(7):655–7 (12 ref.)
The effect of family visits on intracranial pressure. Prins MM. **West J Nurs Res** 1989 Jun;11(3):281–92; discussion 292–7

PSYCHOLOGY

A piece of my mind. Midnight visiting hour. Miles SH. **JAMA** 1989 Oct 13;262(14):2008

STATISTICS & NUMERICAL DATA

Very low birth-weight infants: parental visiting and telephoning during initial infant hospitalization. Brown LP, et al. **Nurs Res** 1989 Jul–Aug;38(4):233–6

VISNA-MAEDI VIRUSES

Role of macrophages in lentivirus infections. Narayan O, et al. **Adv Vet Sci Comp Med** 1988;32:129–48 (64 ref.)

GENETICS

A transcriptional map of visna virus: definition of the second intron structure suggests a rev-like gene product. Sargan DR, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):1995–2006
Sequences in the visna virus long terminal repeat that control transcriptional activity and respond to viral trans-activation: involvement of AP-1 sites in basal activity and trans-activation. Hess JL, et al. **J Virol** 1989 Jul; 63(7):3001–15
Genetic structure and function of an early transcript of visna virus. Mazarin V, et al. **J Virol** 1988 Dec;62(12):4813–8
The visna virus long terminal repeat directs expression of a reporter gene in activated macrophages, lymphocytes, and the central nervous systems of transgenic mice. Small JA, et al. **J Virol** 1989 May;63(5):1891–6
Hyaluronidase enhances cell fusion and synthesis of viral DNA during infection with caprine arthritis encephalitis virus. Pyper JM, et al. **Microb Pathog** 1988 Dec; 5(6):399–406
Regulation of the visna virus long terminal repeat in macrophages involves cellular factors that bind sequences containing AP-1 sites. Gabuzda DH, et al. **Mol Cell Biol** 1989 Jun;9(6):2728–33
Characterization of a cDNA clone encoding the visna virus transactivating protein. Davis JL, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):414–8
The open reading frame S of visna virus genome is a trans-activating gene. Gourdou I, et al. **Virology** 1989 Jul; 171(1):170–8

IMMUNOLOGY

Animal virus infections that defy vaccination: equine infectious anemia, caprine arthritis-encephalitis, maedi-visna, and feline infectious peritonitis. Pedersen NC. **Adv Vet Sci Comp Med** 1989;33:413–28 (55 ref.)
Modulation of lentivirus replication by antibodies: Fc portion of immunoglobulin molecule is essential for enhancement of binding, internalization, and neutralization of visna virus in macrophages. Jolly PE, et al. **J Virol** 1989 Apr; 63(4):1811–3
Importance of ewe/lamb relationship and breed in the epidemiology of maedi-visna virus infections. Houwers DJ, et al. **Res Vet Sci** 1989 Jan;46(1):5–8
Animal lentivirus vaccines: problems and prospects. Fearnon LD, et al. **Vet Immunol Immunopathol** 1989 Feb; 20(3):183–212 (189 ref.)
Immunoblot analysis of the antibody response to ovine lentivirus infections. Houwers DJ, et al. **Vet Microbiol** 1989 Feb;19(2):127–39
[Detection of visna-maedi virus antibodies and antigens by immunoblotting] Bosgiraud C, et al. **Ann Rech Vet** 1989; 20(2):187–93 (Eng. Abstr.) (Fre)

ISOLATION & PURIFICATION

Bovine visna virus and the origin of HIV [letter] Grote J. **J R Soc Med** 1988 Oct;81(10):620
Bovine visna virus and the origin of HIV [letter] Lucas MH, et al. **J R Soc Med** 1989 May;82(5):317

PATHOGENICITY

Expression of viral antigens in the central nervous system of visna-infected sheep: an immunohistochemical study on experimental visna induced by virus strains of increased neurovirulence. Georgsson G, et al. **Acta Neuropathol (Berl)** 1989;77(3):299–306
Ungulate lentiviruses: pathogenesis and relationship to AIDS. Perk K. **Adv Vet Sci Comp Med** 1988;32:97–128

PHYSIOLOGY

Maedi-visna in sheep: host-virus interactions and utilization as a model. Pétursson G, et al. **Intervirology** 1989;30 Suppl 1:36–44 (57 ref.)

VISNADIN see under **BENZOPYRANS**

VISUAL ACUITY

see related
FORM PERCEPTION
REFRACTION, OCULAR

Visual acuity testing of young children with the Cambridge Crowding Cards at 3 and 6 m. Atkinson J, et al. **Acta Ophthalmol (Copenh)** 1988 Oct;66(5):505–8
The effect of increased intraocular pressure on visual acuity and corneal curvature after radial keratotomy. Feldman ST, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):126–9
Effect of various doses of radiation for uveal melanoma on regression, visual acuity, complications, and survival. Kindy-Degnan NA, et al. **Am J Ophthalmol** 1989 Feb 15; 107(2):114–20
Visual acuities and dark-adapted thresholds of children with Bardet-Biedl syndrome. Leys MJ, et al. **Am J Ophthalmol** 1988 Nov 15;106(5):561–9
The effect of pterygia on contrast sensitivity and glare disability. Lin S, et al. **Am J Ophthalmol** 1989 Apr 15; 107(4):407–10
Topographic analysis and visual acuity after radial keratotomy. McDonnell PJ, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):692–5
Mean visual acuity. Vila-Coro AA, et al. **Am J Ophthalmol** 1989 May 15;107(5):564
Topographic analysis and visual acuity after radial keratotomy [letter] Wilson SE, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):436–8
Fresnel vs. conventional prisms: their effects on the apparent fronto-parallel plane horopter. Brunnett SM, et al. **Am J Optom Physiol Opt** 1988 Jul;65(7):519–26
An objective VER assessment of visual acuity compared with subjective measures. Jenkins TC, et al. **Am J Optom Physiol Opt** 1988 Dec;65(12):957–61
Stereoacuity testing: an illusion of tilt when viewing two parallel vertical rods or lines. Larson WL, et al. **Am J Optom Physiol Opt** 1988 Aug;65(8):632–6
Effect of TNO red-green glasses on local stereoacuity. Larson WL. **Am J Optom Physiol Opt** 1988 Dec; 65(12):946–50
Stereopsis in presbyopes wearing monovision and simultaneous vision bifocal contact lenses. McGill E, et al. **Am J Optom Physiol Opt** 1988 Aug;65(8):619–26

Effect of reinforcement on infants' performance in a preferential looking acuity task. Stephens BR, et al. **Am J Optom Physiol Opt** 1988 Aug;65(8):637–43

How free care improved vision in the health insurance experiment. Lurie N, et al. **Am J Public Health** 1989 May; 79(5):640–2

Optociliary veins and visual prognosis after central retinal vein occlusion. Blinder KJ, et al. **Ann Ophthalmol** 1989 May;21(5):192–4, 197

Assessment of malingerers' visual acuity by Lotmar's visometer test. Grignolo FM, et al. **Ann Ophthalmol** 1988 Sep;20(9):335–9

Evaluation of macular function by Lotmar's visometer test and blue-field entoptic test in patients with cataract. Grignolo FM, et al. **Ann Ophthalmol** 1988 Jul;20(7):247–50, 255

A clinical evaluation of the potential acuity meter in 210 cases. Severin TD, et al. **Ann Ophthalmol** 1988 Oct; 20(10):373–5

Visual acuity, strabismus, and amblyopia in premature babies with and without retinopathy of prematurity. Snir M, et al. **Ann Ophthalmol** 1988 Jul;20(7):256–8

Assessment of visual function in patients with age-related macular degeneration and low visual acuity. Alexander MF, et al. **Arch Ophthalmol** 1988 Nov;106(11):1543–7

Macular holes and excellent visual acuity. Case report. Bidwell AE, et al. **Arch Ophthalmol** 1988 Oct; 106(10):1350–1

Snellen equivalent for the Bailey-Lovie acuity chart [letter] Holladay JT, et al. **Arch Ophthalmol** 1989 Jul;107(7):955

Snellen equivalent for the Bailey-Lovie acuity chart [letter] [published erratum appears in Arch Ophthalmol 1989 Jul;107(7):955] Holladay JT, et al. **Arch Ophthalmol** 1989 May;107(5):636

Visual acuity and intraocular gas [letter] Mansour AM, et al. **Arch Ophthalmol** 1988 Oct;106(10):1345–6

Effects of routine pupillary dilation on functional daylight vision. O'Connor PS, et al. **Arch Ophthalmol** 1988 Nov; 106(11):1567–9

Methodological considerations in glare testing in patients with cataracts [letter] Prager TC, et al. **Arch Ophthalmol** 1988 Nov;106(11):1501–2

Visual acuity assessment in children [editorial] Gole G. **Aust N Z J Ophthalmol** 1989 Feb;17(1):1–2

Management and visual acuity results of monocular congenital cataracts and persistent hyperplastic primary vitreous. Scott WE, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):143–52

Visual acuity development: a study of preterm and full-term infants. Searle CM, et al. **Aust N Z J Ophthalmol** 1989 Feb;17(1):23–6

Visual acuity improvement following fading and feedback training—I. Comparison of myopic and emmetropic volunteers. Collins FL Jr, et al. **Behav Res Ther** 1988; 26(6):461–6

Visual acuity improvement following fading and feedback training—II. Relationship to changes in refractive error. Pbert LA, et al. **Behav Res Ther** 1988;26(6):467–73

Visual acuity improvement following fading and feedback training—III. Effects on acuity for stimuli in the natural environment. Ricci JA, et al. **Behav Res Ther** 1988; 26(6):475–80

Differential spatial displacement discrimination with interfering stimuli. Toet A, et al. **Biol Cybern** 1989; 60(3):231–7

Photostress recovery in chronic open angle glaucoma. Sherman MD, et al. **Br J Ophthalmol** 1988 Sep;72(9):641–5

Chart for visual acuity screening. Wong D, et al. **Br J Ophthalmol** 1989 Jun;73(6):457–60

Peak density and distribution of ganglion cells in the retinae of microchiropteran bats: implications for visual acuity. Pettigrew JD, et al. **Brain Behav Evol** 1988;32(1):39–56

Evaluation of macular function by laser interferometry. Van Verre H, et al. **Bull Soc Belge Ophtalmol** 1987;224:147–53

Usefulness of computerized visual acuity testing in a pediatric ophthalmology clinic. Raymond JE, et al. **Can J Ophthalmol** 1988 Aug;23(5):213–5

Low-contrast visual acuity test for pediatric use. Regan D. **Can J Ophthalmol** 1988 Aug;23(5):224–7

Use of the acuity card method to test retarded children in special schools. Hertz BG. **Child Care Health Dev** 1988 May–Jun;14(3):189–98

Acuity card testing of patients with cerebral visual impairment. Hertz BG, et al. **Dev Med Child Neurol** 1988 Oct;30(5):632–7

Visual and neurological outcome of infants with periventricular leukomalacia. Scher MS, et al. **Dev Med Child Neurol** 1989 Jun;31(3):353–65

The first American experience with the multifocal lens. Keates RH. **Dev Ophthalmol** 1989;18:121–4

Cone electroretinograms and visual acuities of diabetic patients on sorbinil treatment. Bierdorf WR, et al. **Doc Ophthalmol** 1988 Jul;69(3):247–54

Quantitative visual psychophysics during the period of European enlightenment. The studies of the astronomer and mathematician Tobias Mayer (1723–1762) on visual acuity and colour perception. Grüsser OJ. **Doc Ophthalmol** 1989 Feb;71(2):93–111

Preoperative prediction of postoperative visual acuity in patients with cataracts: a quantitative review. Odom JV, et al. **Doc Ophthalmol** 1988 Sep;70(1):5–17

Visual strain during VDU work: the effect of viewing distance and dark focus. Jaschinski-Kruza W. **Ergonomics** 1988 Oct;31(10):1449–65

Neural site of strabismic amblyopia in cats: X-cell acuities in the LGN. Gillard-Crewther S, et al. **Exp Brain Res** 1988;72(3):503–9

Binocular depth perception, visual acuity and visual fields in cats following neonatal section of the optic chiasm. Timney B, et al. **Exp Brain Res** 1989;74(2):272–8

Preferential looking in clinical practice: a year's experience. Chandna A, et al. **Eye** 1988;2 (Pt 5):488–95

Esotropic children with amblyopia: effects of patching on acuity. Fulton AB, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):309–12

Relationships among measures of static and dynamic visual sensitivity. Scialfa CT, et al. **Hum Factors** 1988 Dec; 30(6):677–87

New test for determining distant visual acuity in children. Rathod S, et al. **Indian J Ophthalmol** 1987;35(5–6):88

Clinical evaluation of Topcon auto refractometer. Reddy NS, et al. **Indian J Ophthalmol** 1987;35(5–6):407–10

Isolated and combined effects of prolonged exposures to noise and whole-body vibration on hearing, vision and strain. Seidel H, et al. **Int Arch Occup Environ Health** 1988; 61(1–2):95–106

Validation of a self-report inventory for the measurement of visual acuity. Coren S, et al. **Int J Epidemiol** 1989 Jun; 18(2):451–6

Acuity perimetry: estimation of neural channels. Frisén L. **Int Ophthalmol** 1988;12(3):169–74

Longitudinal study of acuity and stereopsis in infants with or at-risk for esotropia. Dobson V, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1146–58

Development of acuity in a primate model of human infantile unilateral aphakia. O'Dell CD, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2068–74

Adult vernier thresholds do not increase with age; vernier bias does. Odom JV, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):1004–8

Refractive error and preferential looking visual acuity in infants 12–24 months of age: year 2 of a longitudinal study. Kohl P, et al. **J Am Optom Assoc** 1988 Sep;59(9):686–90

A comparison study of dynamic visual acuity between athletes and nonathletes. Rouse MW, et al. **J Am Optom Assoc** 1988 Dec;59(12):946–50

Capsular fixation with the Frezzotti-Caporossi intraocular lens. Frezzotti R, et al. **J Cataract Refract Surg** 1989 Mar; 15(2):205–6

Contrast sensitivity testing: a more complete assessment of vision. Jindra LF, et al. **J Cataract Refract Surg** 1989 Mar; 15(2):141–8

Glare and contrast sensitivity testing in cataract patients. Koch DD. **J Cataract Refract Surg** 1989 Mar;15(2):158–64

Glare testing in cataract patients: instrument evaluation and identification of sources of methodological error. Prager TC, et al. **J Cataract Refract Surg** 1989 Mar;15(2):149–57

Visual results following vitreous loss and primary lens implantation. Spigelman AV, et al. **J Cataract Refract Surg** 1989 Mar;15(2):201–4

Spatial contrast sensitivity in benign intracranial hypertension. Bulens C, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1323–9

Effect of luminance on photopic visual acuity in the presence of laser speckle. Artigas JM, et al. **J Opt Soc Am [A]** 1988 Oct;5(10):1767–71

Spectral sensitivity for flicker and acuity criteria. Ingling CR Jr, et al. **J Opt Soc Am [A]** 1988 Aug;5(8):1374–8

Binocular summation of hyperacuity tasks. Lindblom B, et al. **J Opt Soc Am [A]** 1989 Apr;6(4):585–9

Assessment of vision and amblyopia by preferential looking tests after early surgery for unilateral congenital cataracts. Mayer DL, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr;26(2):61–8

Study of chart designs and optotypes for preschool vision screening—I. Comparability of chart designs. Sprague JB, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jul–Aug; 26(4):189–97

A prospective clinical study of radial keratotomy in Koreans. Kim JH. **Korean J Ophthalmol** 1988 Jun;2(1):13–21

Knocked for a loupe. Some personal observations concerning immortality and the lack thereof. Liebowitz CS. **N Y State Dent J** 1988 Oct;54(8):32–3

The use of accurate visual acuity measurements in clinical anti-cataract formulation trials. Elliott DB, et al. **Ophthalmic Physiol Opt** 1988;8(4):397–401

Assessment of contrast sensitivity of patients with macular disease using reduced contrast near visual acuity charts. Greeves AL, et al. **Ophthalmic Physiol Opt** 1988;8(4):371–7

Vision and visual acuity in an elderly population. Lavery JR, et al. **Ophthalmic Physiol Opt** 1988;8(4):390–3

Validity and reliability of visual acuity measurements. Lovie-Kitchin JE. **Ophthalmic Physiol Opt** 1988; 8(4):363–70

Penlight glare test [letter] Markow SA. **Ophthalmic Surg** 1988 Sep;19(9):678

Relations between visual acuity, refraction and the pattern reversal visual-evoked cortical potential in aphakia. Müller W, et al. **Ophthalmologica** 1989;198(2):89–94

Therapeutic outcome of prednisone medication and of orbital irradiation in patients with Graves' ophthalmopathy. Wiersinga WM, et al. **Ophthalmologica** 1988;197(2):75–84

Teller acuity cards versus clinical judgment in the diagnosis of amblyopia with strabismus. Ellis GS Jr, et al. **Ophthalmology** 1988 Jun;95(6):788–91

Binocular function in unilateral aphakia. Correlation with aniseikonia and stereoacuity. Katsumi O, et al. **Ophthalmology** 1988 Aug;95(8):1088–93

Standards for measuring visual acuity [letter] Lempert P. **Ophthalmology** 1988 Jun;95(6):856

Predicting visual acuity after cataract surgery using the blue field entoptoscope and projected slides. Lischwe TD, et al. **Ophthalmology** 1988 Feb;95(2):256–60

Corneal topography and fluctuating visual acuity after radial keratotomy. McDonnell PJ, et al. **Ophthalmology** 1989 May;96(5):665–70

Morning-to-evening change in refraction, corneal curvature, and visual acuity 2 to 4 years after radial keratotomy in the PERK Study [see comments] Santos VR, et al. **Ophthalmology** 1988 Nov;95(11):1487–93. **Comment in:** Ophthalmology 1989 Jun;96(6):926–7

Factors influencing vision with rigid gas permeable alternating bifocals. Ames KS, et al. **Optom Vis Sci** 1989 Feb;66(2):92–7

Potential visual acuity measured with and without pupil dilation. Bosse JC. **Optom Vis Sci** 1989 Aug;66(8):537–9

High and low contrast acuity and clinical contrast sensitivity tested in a normal population. Brown B, et al. **Optom Vis Sci** 1989 Jul;66(7):467–73

Peripheral visual acuity with monovision and other contact lens corrections for presbyopia. Collins MJ, et al. **Optom Vis Sci** 1989 Jun;66(6):370–4

Comparison of four methods of assessing visual acuity in young children. McDonald M, et al. **Optom Vis Sci** 1989 Jun;66(6):363–9

Effect of defocus on visual acuity as measured by source and observer methods. Smith G, et al. **Optom Vis Sci** 1989 Jul;66(7):430–5

How contrast affects stereoacuity. Halpern DL, et al. **Perception** 1988;17(4):483–95

Visual acuity after the repair of pseudophakic retinal detachments involving the macula. Isernhagen RD, et al. **Retina** 1989;9(1):15–21

Recovery of visual acuity following the repair of pseudophakic retinal detachment. Isernhagen RD, et al. **Trans Am Ophthalmol Soc** 1989;86:291–303; discussion 303–6

The development of monocular and binocular VEP acuity. Hamer RD, et al. **Vision Res** 1989;29(4):397–408

Factors limiting the postnatal development of visual acuity in the monkey. Jacobs DS, et al. **Vision Res** 1988; 28(8):947–58

Infant grating acuity is temporally tuned. Sokol S, et al. **Vision Res** 1988;28(12):1357–66

Phase discrimination in chromatic compound gratings. Troscianko T, et al. **Vision Res** 1988;28(9):1041–9

Albino spatial vision as an instance of arrested visual development. Wilson HR, et al. **Vision Res** 1988; 28(9):979–90

[Relationship of corrected visual acuity and macular lesion in high myopia] Guan ZS, et al. **Yen Ko Hsueh Pao** 1986 Sep;2(3):181–7 (Eng. Abstr.) **(Chi)**

[Congenital cataract—an analysis of 358 cases] Li SZ, et al. **Yen Ko Hsueh Pao** 1985 Sep;1(1):49–51 (Eng. Abstr.) **(Chi)**

[Contrast sensitivity versus visual acuity in aging macular degeneration] Tian N, et al. **Yen Ko Hsueh Pao** 1987 Sep; 3(3):193–7 (Eng. Abstr.) **(Chi)**

[The significance of testing preoperative visual function in cataract with laser interferometric visual acuity and ERG] Wu DZ, et al. **Yen Ko Hsueh Pao** 1988 Sep;4(3):146–9, 180 (Eng. Abstr.) **(Chi)**

[Comparison of the stereovisual acuity, Randot stereotests, Frisby stereotest, Wirt test, TNO test of 442 normal children with stereovisual test chart] Zhou YH, et al. **Yen Ko Hsueh Pao** 1988 Mar;4(1):60–4 (Eng. Abstr.) **(Chi)**

[Statistical evaluation of visual acuity] Peregrin J, et al. **Cesk Oftalmol** 1989 Mar;45(2):122–6 (Eng. Abstr.) **(Cze)**

[Contrast sensitivity] Bourgeois H, et al. **Annee Ther Clin Ophtalmol** 1987;38:185–98 (19 ref.) (Eng. Abstr.) **(Fre)**

[Visual acuity and Minitel] Koenig F, et al. **Annee Ther Clin Ophtalmol** 1987;38:29–36 (Eng. Abstr.) **(Fre)**

[Morphoscopic acuity] Douche C, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):893–8 (Eng. Abstr.) **(Fre)**

[Visual acuity of infants and the technic of preferential looking] Dupont F, et al. **Bull Soc Ophtalmol Fr** 1988 Oct; 88(10):1247–52 (Eng. Abstr.) **(Fre)**

[The necessity for taking into account near visual acuity in the evaluation of body damage] Jonquères J, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):341–4 **(Fre)**

[The necessity and difficulties in taking into account near visual acuity for evaluating visual incapacity in medicolegal expertise] Jonquères J, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):347–50 (Eng. Abstr.) **(Fre)**

[Visual acuity charts printed in gray] Mawas E, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):317–21 (Eng. Abstr.) **(Fre)**

[The standard of measurement of visual acuity] Arden GB. **J Fr Ophtalmol** 1988;11(11):779–92 **(Fre)**

[2 new visual acuity tests for children: the Cadet letters and Cadet images] Douche C, et al. **J Fr Ophtalmol** 1988; 11(12):831–4 (Eng. Abstr.) **(Fre)**

[The Monoyer's decimal scale] Dufier JL. **J Fr Ophtalmol** 1988;11(11):793 **(Fre)**

[Comparative results of myopic keratomileusis with and without freezing] Couderc JL, et al. **Ophtalmologie** 1988 Oct;2(4):293–6 (Eng. Abstr.) **(Fre)**

[New tests of visual acuity for preschool children: CADET letters and CADET pictures] Douche C, et al. **Ophtalmologie** 1988 Jul–Sep;2(3):265–6 (Eng. Abstr.) **(Fre)**

[Keratomileusis without freezing (Krumeich technic). Visual results and morphologic changes of the cornea] Laroche L, et al. **Ophtalmologie** 1988 Oct;2(4):291–2 (Eng. Abstr.) **(Fre)**

[Refractive surgery and flight fitness. Apropos of 50 cases] Maille M, et al. **Ophtalmologie** 1988 Oct;2(4):281–3 (Eng. Abstr.) **(Fre)**

[Visual acuity charts printed in grey] Muller Feuga E, et al. **Ophtalmologie** 1988 Nov–Dec;2(5):387–90 (Eng. Abstr.) **(Fre)**

[Ophthalmologic ability in military aviation (apropos of 359 cases)] Gabsi S, et al. **Tunis Med** 1988 Dec;66(12):837–41 (Eng. Abstr.) **(Fre)**

[The haplophotometer—a new kind of instrument for measuring slight disorders of visual afference—instrument description and examples of its use] Schiefer U, et al. **Fortschr Ophthalmol** 1988;85(6):766–71 (Eng. Abstr.) **(Ger)**

[Optical consequences of implantation of a negative intraocular lens in myopic patients] van der Heijde GL, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):99–102 (Eng. Abstr.) **(Ger)**

[Cataract operations on the remaining eye] Zeisberg B, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):579–84 (Eng. Abstr.) **(Ger)**

[Performance diagnosis of the locomotor system and sensory organs?] de Marées H. **Sportverletz Sportschaden** 1989 Jun; 3(2):53–7 (12 ref.) (Eng. Abstr.) **(Ger)**

[Role of vitreous changes in uveitis with respect to posterior vitreous detachment, macular changes and visual acuity] Hirokawa H. **Nippon Ganka Gakkai Zasshi** 1988 Dec; 92(12):2020–8 (Eng. Abstr.) **(Jpn)**

[Visual improvement in diabetic macular edema by hyperbaric oxygen treatment] Ogura Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1456–60 (Eng. Abstr.) **(Jpn)**

[Visual function and vocational training of persons with congenital glaucoma. I. Clinical evaluation of the changes in the visual system] Urban R. **Klin Oczna** 1988 Aug; 90(8):275–6 (Eng. Abstr.) **(Pol)**

[Effect of the beginning of school education on the functional state of the visual analyzer in children] Bazarnyi VF, et al. **Gig Sanit** 1988 Jul;(7):85–6 **(Rus)**

[The first experience using soft contact lenses during long-term space flights] Pliasova-Bakulina IA, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):32–4 (Eng. Abstr.) **(Rus)**

[Role of neurons of the thalamus and striopallidar complex of the human brain in ensuring the constancy of visual perception] Medvedev SV, et al. **Neirofiziologiia** 1989; 21(1):93–101 (Eng. Abstr.) **(Rus)**

[Pupil size, its reaction to light and visual acuity in children with myopia] Kliuka IV, et al. **Oftalmol Zh** 1988;(3):159–60 (Eng. Abstr.) **(Rus)**

[Comparative assessment of visual acuity in preschoolers] Tatarinov SA, et al. **Oftalmol Zh** 1988;(7):387–90 (Eng. Abstr.) **(Rus)**

[Visometry and visocontrastometry: their status and prospects] Volkov VV. **Vestn Oftalmol** 1988 Jul–Aug; 104(4):3–7 (Eng. Abstr.) **(Rus)**

[The effect of posterior scleroplasty on the axial length of the bulb, refraction and visual acuity] Valšíková T. **Cesk Oftalmol** 1988 Sep;44(5):313–6 (Eng. Abstr.) **(Slo)**

DRUG EFFECTS

The effects of Bendaline on cataracts. Rhee SW, et al. **Korean J Ophthalmol** 1987 Jun;1(1):31–4

VISUAL AIDS see **AUDIO-VISUAL AIDS**

VISUAL ANALOGUE PAIN SCALE see **PAIN MEASUREMENT**

VISUAL CONTRAST SENSITIVITY see **CONTRAST SENSITIVITY**

VISUAL CORTEX

Loss of accommodation produced by peristriate lesion in man? Manor RS, et al. **J Clin Neuro Ophthalmol** 1988 Mar; 8(1):19–23

The effect of bilateral visual cortex lesions on the development of eye movements and perception. Rizzo M, et al. **Neurology** 1989 Mar;39(3):406–13

[Cortical blindness in systemic lupus erythematosus] Durand JM, et al. **Rev Med Interne** 1989 Jan–Feb;10(1):59–61 (8 ref.) **(Fre)**

ANALYSIS

Quantitative immunohistochemical analysis of VIP-neurons in the rat visual cortex. Hajós F, et al. **Histochemistry** 1988; 90(2):139–44

Synaptic organization of serotonin-immunoreactive fibers in primary visual cortex of the macaque monkey. de Lima AD, et al. **J Comp Neurol** 1988 Aug 8;274(2):280–94

Light and electron microscopic immunocytochemical analysis of the dopamine innervation of the rat visual cortex. Papadopoulos GC, et al. **J Neurocytol** 1989 Jun; 18(3):303–10

Quantitative autoradiography of major neurotransmitter receptors in the monkey striate and extrastriate cortex. Rakic P, et al. **J Neurosci** 1988 Oct;8(10):3670–90

Age-related changes of catecholamines and their metabolites content in the visual system of the rat. Santiago M, et al. **Mech Ageing Dev** 1989 Jan;47(1):77–84

[Changes in the dopamine level in dialysate from the rat striatum after administration of phenamine into the nucleus accumbens] Saul'skaia NB, et al. **Fiziol Zh SSSR** 1989 Jan; 75(1):146–8 **(Rus)**

ANATOMY & HISTOLOGY

The maturational status of thalamocortical and callosal connections of visual areas V1 and V2 in the newborn monkey. Dehay C, et al. **Behav Brain Res** 1988 Aug; 29(3):237–44

Functional implications of the anatomical organization of the callosal projections of visual areas V1 and V2 in the macaque monkey. Kennedy H, et al. **Behav Brain Res** 1988 Aug;29(3):225–36

Reciprocal connections between medial prefrontal cortex and lateral posterior nucleus in rats. Sukekawa K. **Brain Behav Evol** 1988;32(4):246–51

Cortical integration of parallel pathways in the visual system of primates. Krubitzer LA, et al. **Brain Res** 1989 Jan 23; 478(1):161–5

Cortical connections of areas 17 (V–I) and 18 (V–II) of squirrels. Kaas JH, et al. **J Comp Neurol** 1989 Mar 15; 281(3):426–46

Organization of primary visual cortex (area 17) in the ferret. Law MI, et al. **J Comp Neurol** 1988 Dec 8;278(2):157–80

New view of the organization of the pulvinar nucleus in Tupaia as revealed by tectopulvinar and pulvinar-cortical projections. Luppino G, et al. **J Comp Neurol** 1988 Jul 1;273(1):67–86

Visual cortex of the dolphin: an image analysis study. Morgane PJ, et al. **J Comp Neurol** 1988 Jul 1;273(1):3–25

Visual projections to the pontine nuclei in the rabbit: orthograde and retrograde tracing studies with WGA-HRP. Wells GR, et al. **J Comp Neurol** 1989 Jan 22;279(4):629–52

Noradrenergic sprouting and beta-adrenergic receptor binding in the lateral geniculate nucleus of rats after unilateral visual cortex ablation. Aurich M, et al. **J Hirnforsch** 1988;29(6):659–67

Synaptic connections of an interneuron with axonal arcades in the cat visual cortex. DeFelipe J, et al. **J Neurocytol** 1988 Jun;17(3):313–23

In vivo visualization of callosal pathways: a novel approach to the study of cortical organization. Malach R. **J Neurosci Methods** 1988 Oct;25(3):225–38

Morphology of identified projection neurons in layer 5 of rat visual cortex. Hübener M, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):76–81

Organization of corticocortical connections in human visual cortex. Burkhalter A, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1071–5

Anatomical organization of the superior colliculus in monkeys: corticotectal pathways for visual and visuomotor functions. Cusick CG. **Prog Brain Res** 1988;75:1–15 (75 ref.)

[Morphologic characteristics of neuroglioform cells in the visual cortex of various mammals (rat, guinea pig, alticola and cat). A Golgi study] Hedlich A. **J Hirnforsch** 1988; 29(6):709–15 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

Direct evidence that complex experience increases capillary branching and surface area in visual cortex of young rats. Sirevaag AM, et al. **Brain Res** 1988 Oct 1;471(2):299–304

CYTOLOGY

Cortico-cortical and subcortico-cortical afferent connection of the rabbit's primary visual cortex. A horseradish peroxidase study. Müller-Paschinger IB, et al. **Anat Embryol (Berl)** 1989;180(1):81–8

The callosal projection in cat visual cortex as revealed by a combination of retrograde tracing and intracellular injection. Buhl EH, et al. **Exp Brain Res** 1989;75(3):470–6

Projection patterns of surviving neurons in the dorsal lateral geniculate nucleus following discrete lesions of striate cortex: implications for residual vision. Cowey A, et al. **Exp Brain Res** 1989;75(3):631–8

Cytoarchitecture in cultured rat neocortex explants. de Jong BM, et al. **Int J Dev Neurosci** 1988;6(4):327–39

Intrinsic connections of rat primary visual cortex: laminar organization of axonal projections. Burkhalter A. **J Comp Neurol** 1989 Jan 8;279(2):171–86

Local circuit neurons of macaque monkey striate cortex: II. Neurons of laminae 5B and 6. Lund JS, et al. **J Comp Neurol** 1988 Oct 1;276(1):1–29

Physiological, morphological, and cytochemical characteristics of a layer 1 neuron in cat striate cortex. Martin KA, et al. **J Comp Neurol** 1989 Apr 15; 282(3):404–14

Terminal arbors of individual "feedback" axons projecting from area V2 to V1 in the macaque monkey: a study using immunohistochemistry of anterogradely transported Phaseolus vulgaris-leucoagglutinin. Rockland KS, et al. **J Comp Neurol** 1989 Jul 1;285(1):54–72

Convergence and divergence in the afferent projections to cat area 17. Salin PA, et al. **J Comp Neurol** 1989 May 22; 283(4):486–512

Light and electron microscopic immunocytochemical analysis of the noradrenaline innervation of the rat visual cortex [published erratum appears in J Neurocytol 1989 Apr;18(2):284] Papadopoulos GC, et al. **J Neurocytol** 1989 Feb;18(1):1–10

Laminar organization and contrast sensitivity of direction-selective cells in the striate cortex of the Old World monkey. Hawken MJ, et al. **J Neurosci** 1988 Oct; 8(10):3541–8

Neocortical connections in fetal cats. Payne BR, et al. **Neurosci Res** 1988 Aug;5(6):513–43

Visual pathways to the cerebellum: segregation in the pontine nuclei of terminal fields from different visual cortical areas in the cat. Bjaalie JG, et al. **Neuroscience** 1989;29(1):95–107

The corticopontine projection from area 20 and surrounding areas in the cat: terminal fields and distribution of cells of origin as compared to other visual cortical areas. Bjaalie JG. **Neuroscience** 1989;29(1):81–93

Cytochrome oxidase patches and Meynert cells in monkey visual cortex. Payne BR, et al. **Neuroscience** 1989; 28(2):353–63

Control of cell number in the developing mammalian visual system. Finlay BL, et al. **Prog Neurobiol** 1989;32(3):207–34 (227 ref.)

Molecular determinants of GABAergic local-circuit neurons in the visual cortex. Naegele JR, et al. **Trends Neurosci** 1989 Jan;12(1):28–34 (71 ref.)

[Postnatal development of neurons containing vasoactive intestinal peptide (VIP) in the rabbit visual cortex: quantitative and morphological study] Ramón y Cajal Agüeras S, et al. **Arch Neurobiol (Madr)** 1988 May–Jun; 51(3):139–42 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Amphetamine-induced recovery of visual cliff performance after bilateral visual cortex ablation in cats: measurements of depth perception thresholds. Hovda DA, et al. **Behav Neurosci** 1989 Jun;103(3):574–84

Influence of opioid peptides on learning and memory processes in the chick. Patterson TA, et al. **Behav Neurosci** 1989 Apr;103(2):429–37

Modulatory effects of catecholamines on neurons of the rat visual cortex: single-cell iontophoretic studies. Kolta A, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):615–23

Effects of chronic developmental lead exposure on monkey neuroanatomy: visual system. Reuhl KR, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):501–9

Pharmacological analysis of cortical circuitry. Bolz J, et al. **Trends Neurosci** 1989 Aug;12(8):292–6

[Mechanisms of the action of antihypoxic agents on central nervous system neurons] Burgova MP, et al. **Nerv Sist** 1988; 27:8–16 **(Rus)**

EMBRYOLOGY

Temporal sequence of neurotransmitter expression by developing neurons of fetal monkey visual cortex. Huntley GW, et al. **Brain Res** 1988 Sep 1;471(1):69–96

Callosal projection neurons in area 17 of the fetal rhesus monkey. Chalupa LM, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):303–8

Scanning electron microscopy of the development of layer I of the human visual cortex (area 17). Zheng DR, et al. **Dev Neurosci** 1989;11(1):1–10

The effects of intrauterine growth retardation on synaptogenesis and mitochondrial formation in the cerebral and cerebellar cortices of fetal sheep. Bisignano M, et al. **Int J Dev Neurosci** 1988;6(5):453–60

Maturation and connectivity of the visual cortex in monkey is altered by prenatal removal of retinal input. Dehay C, et al. **Nature** 1989 Jan 19;337(6204):265–7

Ontogeny of neurotensin receptor binding sites in the rat visual cortex. Lobo DH, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):152–7

ENZYMOLOGY

Functional development of the visual system in normal and protein-deprived rats. VII. Lamination of oxidative enzyme activity in the visual cortex during post-natal development. Conradi NG, et al. **Acta Physiol Scand** 1989 Aug; 136(4):589–96

Intraocular injections of tetrodotoxin reduce transiently expressed acetylcholinesterase activity in developing rat visual cortex. Robertson RT, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):69–84

Localization of isoenzymes II/III of protein kinase C in the rat visual cortex (area 17), hippocampus and dentate gyrus. Stichel CC, et al. **Exp Brain Res** 1988;72(3):443–9

Ontogenetic changes in the level and subcellular distribution of protein kinase C in cat visual cortex. Stichel CC. **Int J Dev Neurosci** 1988;6(4):341–9

GROWTH & DEVELOPMENT

Deviations in brain development of F2 generation on caloric undernutrition and scope of their prevention by rehabilitation: alterations in dendritic spine production and pruning of pyramidal neurons of lower laminae of motor cortex and visual cortex. Gundappa G, et al. **Brain Res** 1988 Jul 26;456(2):205–23

Development of phorbol ester (protein kinase C) binding sites in cat visual cortex. Needler MC, et al. **Brain Res** 1988 Aug 1;470(2):217–27

Loss of ocular dominance columns with maturity in the monkey, Callithrix jacchus. Spatz WB. **Brain Res** 1989 May 29;488(1–2):376–80

Pattern formation in the striatum: developmental changes in the distribution of striatonigral projections. Fishell G, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):239–55

Blockade of NMDA-receptors prevents ocularity changes in kitten visual cortex after reversed monocular deprivation. Gu QA, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):281–8

The postnatal development of layer VI pyramidal neurons in the cat's striate cortex, as visualized by intracellular Lucifer yellow injections in aldehyde-fixed tissue. Lübke J, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):29–38

Noradrenergic control of ocular dominance plasticity in the visual cortex of dark-reared cats. Shirokawa T, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):303–8

Development of the kitten visual cortex depends on the relationship between the plane of eye movements and visual inputs. Buisseret P, et al. **Exp Brain Res** 1988;72(1):83–94

Split chiasm developmentally induced in kittens: plasticity of interhemispheric transfer in visual cortex cells. Yinon U, et al. **Exp Brain Res** 1988;72(1):201–3

Transient projections from the lateral geniculate to the posteromedial lateral suprasylvian visual cortex in kittens. Bruce LL, et al. **J Comp Neurol** 1988 Dec 8;278(2):287–302

Sequential development of connections between striate and extrastriate visual cortical areas in the rat. Coogan TA, et al. **J Comp Neurol** 1988 Dec 8;278(2):242–52

Early postnatal development of cholecystokinin-immunoreactive structures in the visual cortex of the cat. Meyer G, et al. **J Comp Neurol** 1988 Oct 15;276(3):360–86

Maturation of rat visual cortex: IV. The generation, migration, morphogenesis, and connectivity of atypically oriented pyramidal neurons. Miller MW. **J Comp Neurol** 1988 Aug 15;274(3):387–405

Sharpening of topographical projections and maturation of geniculocortical axon arbors in the hamster. Naegele JR, et al. **J Comp Neurol** 1988 Nov 22;277(4):593–607

Visual cortex development in the ferret. I. Genesis and migration of visual cortical neurons. Jackson CA, et al. **J Neurosci** 1989 Apr;9(4):1242–53

Postnatal development of corticocortical efferents from area 17 in the cat's visual cortex. Price DJ, et al. **J Neurosci** 1989 Feb;9(2):600–13

Development of the mammalian visual system. Shatz CJ. **Mead Johnson Symp Perinat Dev Med** 1987;(29):19–26 (26 ref.)

Visual experience regulates gene expression in the developing striate cortex. Neve RL, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4781–4

[Synapses of Hebb and epigenesis of the visual cortex] Fregnac Y, et al. **Arch Int Physiol Biochim** 1988 Sep; 96(4):A175–7 (12 ref.) (Fre)

INJURIES

Morphology of single, physiologically identified retinogeniculate Y-cell axons in the cat following damage to visual cortex at birth. Weber AJ, et al. **J Comp Neurol** 1989 Apr 15;282(3):446–55

METABOLISM

Lateralization of opioid receptors in turtle visual cortex. Bakalkin GYa, et al. **Brain Res** 1989 Feb 20;480(1–2):268–76

GABA-like activity in in vitro slices of the rat visual cortex: immunocytochemistry and electrophysiology. Chun MH, et al. **Brain Res** 1989 Aug 14;494(2):401–6

Quantitative distribution of GABA-immunoreactive neurons in cetacean visual cortex is similar to that in land mammals. Garey LJ, et al. **Brain Res** 1989 Apr 24;485(2):278–84

Laminar distribution of GABA (gamma-aminobutyric acid) in the dorsal lateral geniculate nucleus, Area 17 and Area 18 of the visual cortex, and the superior colliculus of the cat. Kanno S, et al. **Brain Res** 1988 Jun 7;451(1–2):172–8

Identification and localization of adrenergic receptors in cat visual cortex. Parkinson D, et al. **Brain Res** 1988 Aug 2; 457(1):70–8

Differential effects of quinolinic acid lesions on muscarinic acetylcholine receptors in cat visual cortex during postnatal development. Shaw C, et al. **Brain Res Bull** 1989 Apr; 22(4):771–6

The development of N-methyl-D-aspartate receptors in cat visual cortex. Bode-Greuel KM, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):197–204

Cellular and subcellular localisation of muscarinic acetylcholine receptors during postnatal development of cat visual cortex using immunocytochemical procedures. van Huizen F, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):296–301

Pattern visual evoked cortical potential waveforms and spatial frequency characteristics in children. Yamazaki H. **Doc Ophthalmol** 1988 Sep;70(1):59–65

Evidence for a nicotinic component to the actions of acetylcholine in cat visual cortex. Parkinson D, et al. **Exp Brain Res** 1988;73(3):553–68

A long term study of axonal transport in the central visual system following eye enucleation in the adult cat. Pinilla-Morillo MJ, et al. **Exp Brain Res** 1989;76(2):463–6

Distribution of opiate receptors within visual structures of the cat brain. Walker JM, et al. **Exp Brain Res** 1988; 73(3):523–32

Laminar distribution of benzodiazepine receptors in visual cortex of adult rat. Rothe T, et al. **Gen Physiol Biophys** 1989 Aug;8(4):371–80

A critical period of the development of beta-adrenergic receptor binding in the visual system of rat during visual deprivation. Aurich M, et al. **Int J Dev Neurosci** 1988; 6(4):351–7

Metabolic activity in striate and extrastriate cortex in the hooded rat: contralateral and ipsilateral eye input. Thurlow GA, et al. **J Comp Neurol** 1988 Aug 22;274(4):595–607

Early postnatal development of vasoactive intestinal polypeptide- and peptide histidine isoleucine-immunoreactive structures in the cat visual cortex. Wahle P, et al. **J Comp Neurol** 1989 Apr 8; 282(2):215–48

Layers I and VI of the visual cortex in the rabbit. A correlated Golgi and immunocytochemical study of somatostatin and vasoactive intestinal peptide containing neurons. Ramón y Cajal-Agüeras S, et al. **J Hirnforsch** 1989;30(2):163–73

Laminar pattern of cholinergic and adrenergic receptors in rat visual cortex using quantitative receptor autoradiography. Schliebs R, et al. **J Hirnforsch** 1989; 30(3):303–11

The location and function of NMDA receptors in cat and kitten visual cortex. Fox K, et al. **J Neurosci** 1989 Jul; 9(7):2443–54

Incorporation of 3H-lysine into a rapidly labelling neuronal protein fraction in visual cortex is suppressed in dark reared rats. Rose SP, et al. **Life Sci** 1974 Jul 15;15(2):223–30

Amino acid profiles in Long-Evans rat superior colliculus, visual cortex, and inferior colliculus. Golden GT, et al. **Neurochem Res** 1989 May;14(5):465–72

Lateralization of opioid receptors and their putative ligands in the visual cortex of the tortoise. Pivovarov AS, et al. **Neurosci Behav Physiol** 1989 Jan–Feb;19(1):33–40

Reduction in [3H]glutamate binding in the visual cortex after unilateral orbital enucleation. Chalmers DT, et al. **Neurosci Lett** 1989 Feb 27;97(3):298–304

Calbindin D-28K and parvalbumin immunoreactivity is confined to two separate neuronal subpopulations in the cat visual cortex, whereas partial coexistence is shown in the dorsal lateral geniculate nucleus. Demeulemeester H, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):6–11

Evidence for a dopaminergic innervation of cat primary visual cortex. Parkinson D. **Neuroscience** 1989;30(1):171–9

PATHOLOGY

Lamina-specific arrangement of astrocytic gliosis and senile plaques in Alzheimer's disease visual cortex. Beach TG, et al. **Brain Res** 1988 Nov 1;463(2):357–61

PHYSIOLOGY

The influence of grating contrast on the human cortical potential visually evoked by motion. Müller R, et al. **Acta Neurobiol Exp (Warsz)** 1988;48(5):239–49

Neurotransmitter systems in the visual cortex of the cat: possible involvement in plastic phenomena. Skangiel-Kramska J. **Acta Neurobiol Exp (Warsz)** 1988; 48(6):335–70 (169 ref.)

Visualization of neuronal activity in monkey striate cortex. Blasdel GG. **Annu Rev Physiol** 1989;51:561–81 (25 ref.)

The role of expression and identity in the face-selective responses of neurons in the temporal visual cortex of the monkey. Hasselmo ME, et al. **Behav Brain Res** 1989 Apr 1;32(3):203–18

Movement and novelty of a square wave display affect 2-deoxyglucose uptake in the rat visual system. McIntosh AR, et al. **Behav Brain Res** 1989 Feb 1;32(1):1–9

Retention deficits produced in monkeys with reversible cold lesions in the prestriate cortex. Martin-Elkins CL, et al. **Behav Brain Res** 1989 Apr 1;32(3):219–30

Direct and transcallosal contribution to the cortical visual evoked response in rats. Silveira LC, et al. **Behav Brain Res** 1989 Jan 1;31(3):291–4

Visual split brain and monocular deprivation in kittens: differentiation between the effects of disuse and of binocular competition in visual cortex cells. Yinon U, et al. **Behav Brain Res** 1988 Oct;30(3):273–8

Recovery of function after brain damage: the chronic consequence of large neocortical injuries. Chappell ET, et al. **Behav Neurosci** 1988 Oct;102(5):778–83

Reversal learning in pigeons: effects of selective lesions of the Wulst. Shimizu T, et al. **Behav Neurosci** 1989 Apr; 103(2):262–72

Horizontal organization of orientation-sensitive cells in primate visual cortex. Baxter WT, et al. **Biol Cybern** 1989; 61(3):171–82

Connection between internal representation of rigid transformation and cortical activity paths. Carlton EH. **Biol Cybern** 1988;59(6):419–29

Coherent oscillations: a mechanism of feature linking in the visual cortex? Multiple electrode and correlation analyses in the cat. Eckhorn R, et al. **Biol Cybern** 1988;60(2):121–30

Differences between monkey visual cortex cells in triplet and ghost doublet informational symbols relationships. Lestienne R, et al. **Biol Cybern** 1988;59(4–5):337–52

Factors governing the adaptation of cells in area-17 of the cat visual cortex. Maddess T, et al. **Biol Cybern** 1988; 59(4–5):229–36

Response histogram shapes and tuning curves: the predicted responses of several cortical cell types to drifting gratings stimuli. Malonek D, et al. **Biol Cybern** 1989;60(6):469–75

Mass correlograms of multiple neuronal activity in the cat's extrastriate cortex. Reinis S, et al. **Biol Cybern** 1988; 59(2):103–7

Quadrature and the development of orientation selective cortical cells by Hebb rules. Yuille AL, et al. **Biol Cybern** 1989;61(3):183–94

Separable evoked retinal and cortical potentials from each major visual pathway: preliminary results. Berninger TA, et al. **Br J Ophthalmol** 1989 Jul;73(7):502–11

Laminar organization of geniculostriate projections. A common organizational plan based on layers rather than individual functional classes. Conley M. **Brain Behav Evol** 1988;32(3):187–92 (46 ref.)

Investigation of the dorsolateral basilar pontine grey of the alert monkey. Thier P, et al. **Brain Behav Evol** 1989; 33(2–3):75–9

Influence of stationary and moving textured backgrounds on the response of visual neurons in toads (Bufo bufo L.). Tsai HJ, et al. **Brain Behav Evol** 1988;32(1):27–38

Phaclofen antagonizes baclofen-induced suppression of visually evoked responses in the cat's striate cortex. Baumfalk U, et al. **Brain Res** 1988 Nov 1;463(2):398–402

Induction of LTP in rat primary visual cortex: tetanus parameters. Berry RL, et al. **Brain Res** 1989 Mar 6; 481(2):221–7

The connectivity underlying the orientation selectivity in the infragranular layers of monkey striate cortex. Krüger J, et al. **Brain Res** 1989 Jan 16;477(1–2):57–65

Differential burst firing modes in neurons of the mammalian visual cortex in vitro. Montoro RJ, et al. **Brain Res** 1988 Sep 13;460(1):168–72

Acetylcholine-induced inhibition in the cat visual cortex is mediated b7 a GABAergic mechanism. Müller CM, et al. **Brain Res** 1989 May 22;487(2):335–42

Synaptic action of layer I fibers on cells in cat striate cortex. Nakajima S, et al. **Brain Res** 1988 Aug 2;457(1):176–80

Response latencies of visual cells in macaque areas V1, V2 and V5. Raiguel SE, et al. **Brain Res** 1989 Jul 24; 493(1):155–9

Ultrastructural and functional evidence for the survival of corticogeniculate neurons in kainic acid-lesioned lateral geniculate nucleus. Woodward WR, et al. **Brain Res** 1989 Aug 7;494(1):42–54

Adaptive changes in the central noradrenergic system in monocular deprived rats. Aurich M, et al. **Brain Res Bull** 1989 Feb;22(2):173–80

Evidence for an enhanced role of GABA inhibition in visual cortical ocular dominance of cats reared with abnormal monocular experience. Mower GD, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):211–8

Expression of glutamic acid decarboxylase mRNA in normal and monocularly deprived cat visual cortex. Benson DL, et al. **Brain Res Mol Brain Res** 1989 Jun;5(4):279–87

The visual cortex of the agouti (Dasyprocta aguti): architectonic subdivisions. Picanço-Diniz CW, et al. **Braz J Med Biol Res** 1989;22(1):121–38

Neuronal synchrony in monkey striate cortex: interocular signal flow and dependency on spike rates. Aiple F, et al. **Exp Brain Res** 1988;72(1):141–9

6-Hydroxydopamine treatment and beta adrenergic receptor binding in kittens. Relation to visual cortical plasticity. Allen EE, et al. **Exp Brain Res** 1988;72(3):605–10

Different anisotropies of movement direction in upper and lower layers of the cat's area 18 and their implications for global optic flow processing. Bauer R, et al. **Exp Brain Res** 1989;74(2):395–401

The effects of reverse monocular deprivation in monkeys. II. Electrophysiological and anatomical studies. Crawford ML, et al. **Exp Brain Res** 1989;74(2):338–47

Neural correlates of motion after-effects in cat striate cortical neurones: interocular transfer. Hammond P, et al. **Exp Brain Res** 1988;72(1):21–8

Neural correlates of motion after-effects in cat striate cortical neurones: monocular adaptation. Hammond P, et al. **Exp Brain Res** 1988;72(1):1–20

Object-centered encoding by face-selective neurons in the cortex in the superior temporal sulcus of the monkey. Hasselmo ME, et al. **Exp Brain Res** 1989;75(2):417–29

Considerable deficits in the detection performance of the cat after lesion of the suprasylvian visual cortex. Kiefer W, et al. **Exp Brain Res** 1989;75(1):208–12

Stimulus contrast and visual cortical lesions. Orban GA, et al. **Exp Brain Res** 1988;72(1):191–4

Blockade of intracortical inhibition in kitten striate cortex: effects on receptive field properties and associated loss of ocular dominance plasticity. Ramoa AS, et al. **Exp Brain Res** 1988;73(2):285–96

Complete pattern of ocular dominance stripes in V1 of a New World monkey, Cebus apella. Rosa MG, et al.

Exp Brain Res 1988;72(3):645–8
The retinotopic match between area 17 and its targets in visual suprasylvian cortex. Sherk H, et al. **Exp Brain Res** 1988;72(2):225–36
The ipsilateral field representation in the striate cortex of the opossum. Volchan E, et al. **Exp Brain Res** 1988; 73(2):297–304
Axis of preferred motion is a function of bar length in visual cortical receptive fields. Wörgötter F, et al. **Exp Brain Res** 1989;76(2):307–14
The convulsant effects of kainic acid microinjections into cerebral cortex are concentration but not laminar dependent. Chatt AB, et al. **Exp Neurol** 1989 Jan; 103(1):105–9
The modulation of the retinal relay to the cortex in the dorsal lateral geniculate nucleus. Sillito AM, et al. **Eye** 1988;2 Suppl:S221–32 (38 ref.)
Entropy reduction and decorrelation in visual coding by oriented neural receptive fields. Daugman JG. **IEEE Trans Biomed Eng** 1989 Jan;36(1):107–14
Mathematical dipoles are adequate to describe realistic generators of human brain activity. de Munck JC, et al. **IEEE Trans Biomed Eng** 1988 Nov;35(11):960–6
A hexagonal orthogonal-oriented pyramid as a model of image representation in visual cortex. Watson AB, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):97–106
Ontogeny of flash-evoked potentials in unanesthetized rats. Rigdon GC, et al. **Int J Dev Neurosci** 1987;5(5–6):447–54
Retinocortical time exhibits spatial selectivity. Rimmer S, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2045–9
Relationship between cortical lamination and texture sensitivity in complex neurones of the striate cortex in cats. Edelstyn NM, et al. **J Comp Neurol** 1988 Dec 15; 278(3):397–404
Small lateral suprasylvian cortex lesions produce visual neglect and decreased visual activity in the superior colliculus. Hardy SC, et al. **J Comp Neurol** 1988 Jul 22; 273(4):527–42
Convergence of retinal W-cell and corticotectal input to cells of the cat superior colliculus. Berson DM. **J Neurophysiol** 1988 Dec;60(6):1861–73
Monocular and binocular response properties of cells in the striate-recipient zone of the cat's lateral posterior-pulvinar complex. Casanova C, et al. **J Neurophysiol** 1989 Aug; 62(2):544–57
Multimicroelectrode investigation of monkey striate cortex: spike train correlations in the infragranular layers. Krüger J, et al. **J Neurophysiol** 1988 Aug;60(2):798–828
Topographic and directional organization of visual motion inputs for the initiation of horizontal and vertical smooth-pursuit eye movements in monkeys. Lisberger SG, et al. **J Neurophysiol** 1989 Jan;61(1):173–85
Chronic recordings from single sites of kitten striate cortex during experience-dependent modifications of receptive-field properties. Mioche L, et al. **J Neurophysiol** 1989 Jul;62(1):185–97
Visual receptive fields in the striate-recipient zone of the lateral posterior-pulvinar complex. Chalupa LM, et al. **J Neurosci** 1989 Jan;9(1):347–57
Monocularly deprived cats: binocular tests of cortical cells reveal functional connections from the deprived eye. Freeman RD, et al. **J Neurosci** 1988 Jul;8(7):2491–506
Disconnection of the amygdala from visual association cortex impairs visual reward-association learning in monkeys. Gaffan EA, et al. **J Neurosci** 1988 Sep;8(9):3144–50
Gaze-dependent visual neurons in area V3A of monkey prestriate cortex. Galletti C, et al. **J Neurosci** 1989 Apr; 9(4):1112–25
Columnar specificity of intrinsic horizontal and corticocortical connections in cat visual cortex. Gilbert CD, et al. **J Neurosci** 1989 Jul;9(7):2432–42
NMDA- and non-NMDA-receptor components of excitatory synaptic potentials recorded from cells in layer V of rat visual cortex. Jones KA, et al. **J Neurosci** 1988 Sep;8(9):3522–34
Local circuits and ocular dominance columns in monkey striate cortex. Katz LC, et al. **J Neurosci** 1989 Apr; 9(4):1389–99
Interlaminar and lateral excitatory amino acid connections in the striate cortex of monkey. Kisvarday ZF, et al. **J Neurosci** 1989 Feb;9(2):667–82
Mechanisms of contour perception in monkey visual cortex. II. Contours bridging gaps. Peterhans E, et al. **J Neurosci** 1989 May;9(5):1749–63
Stereoscopic mechanisms in monkey visual cortex: binocular correlation and disparity selectivity. Poggio GF, et al. **J Neurosci** 1988 Dec;8(12):4531–50
Afferent basis of visual response properties in area MT of the macaque. I. Effects of striate cortex removal. Rodman HR, et al. **J Neurosci** 1989 Jun;9(6):2033–50
Functional anatomy of the second visual area (V2) in the macaque. Tootell RB, et al. **J Neurosci** 1989 Aug; 9(8):2620–44
Responses of lateral geniculate neurons that survive long-term visual cortex damage in kittens and adult cats. Tumosa N, et al. **J Neurosci** 1989 Jan;9(1):280–98
Mechanisms of contour perception in monkey visual cortex. I. Lines of pattern discontinuity. von der Heydt R, et al. **J Neurosci** 1989 May;9(5):1731–48
Visual receptive fields of local intracortical potentials. Lohmann H, et al. **J Neurosci Methods** 1988 Aug; 25(1):29–44
Long-term recordings and receptive field measurements from single units of the visual cortex of awake unrestrained kittens. Mioche L, et al. **J Neurosci Methods** 1988 Nov; 26(1):83–94
Comparative aspects of hippocampal and neocortical long-term potentiation. Teyler TJ. **J Neurosci Methods** 1989 May;28(1–2):101–8 (33 ref.)
Cortical contrast gain control in human spatial vision. Bobak P, et al. **J Physiol (Lond)** 1988 Nov;405:421–37
Two inhibitory postsynaptic potentials, and GABAA and GABAB receptor-mediated responses in neocortex of rat and cat. Connors BW, et al. **J Physiol (Lond)** 1988 Dec; 406:443–68
A quantitative assessment of the dependency of the visual temporal frame upon the cortical rhythm. Gho M, et al. **J Physiol (Paris)** 1988–89;83(2):95–101
Monocular eye movement in the cat: its corticotectal pathway. Tamai Y, et al. **Jpn J Physiol** 1988;38(4):569–75
Intermodal interaction: effect of sensory stimulation on flurothyl seizure threshold in normal and brain-damaged rats. Kramer MS, et al. **Life Sci** 1974 Sep 15;15(6):1153–60
The deafferented visual cortex and interhemispheric relationships: a physiological approach. Yinon U, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):100–10 (28 ref.)
Oscillatory responses in cat visual cortex exhibit inter-columnar synchronization which reflects global stimulus properties. Gray CM, et al. **Nature** 1989 Mar 23; 338(6213):334–7
Inhibition contributes to orientation selectivity in visual cortex of cat. Hata Y, et al. **Nature** 1988 Oct 27; 335(6193):815–7
Neuronal correlates of a perceptual decision. Newsome WT, et al. **Nature** 1989 Sep 7;341(6237):52–4
Cortical physiology. Is grandmother an oscillation? [news] Stryker MP. **Nature** 1989 Mar 23;338(6213):297–8
Facilitative effects of cross-modality training on recovery of a conditioned avoidance response following striate cortex ablations in the rat. Delay ER. **Neuropsychologia** 1988;26(5):661–71
Changes in reactivity of neurons of the visual cortex under influence of the posterolateral hypothalamus and the nuclei of the midbrain raphe. Gasanov GG, et al. **Neurosci Behav Physiol** 1989 Mar–Apr;19(2):169–75
Electrical activity of the cortex and reaction times to auditory signals and light stimuli. Konovalov VF, et al. **Neurosci Behav Physiol** 1988 Sep–Oct;18(5):361–8
Shifts in spatial synchronization of rabbit cortex potentials elicited by application of acetylcholine and amizil to the visual cortex. Kurova NS, et al. **Neurosci Behav Physiol** 1988 May–Jun;18(3):187–93
Temporal structure of conjugated discharges of visual and sensorimotor neocortical units during conditioned reflex activity in rabbits. Pavlova IV. **Neurosci Behav Physiol** 1989 Jan–Feb;19(1):6–13
Conjugation of unit activity in the visual and sensorimotor areas of rabbit neocortex during conditioned reflexes to light and sound. Pavlova IV. **Neurosci Behav Physiol** 1988 May–Jun;18(3):249–57
Conjugation of unit activity in visual and sensorimotor neocortical areas of rabbits during calm wakefulness and pseudoconditioning. Pavlova IV. **Neurosci Behav Physiol** 1988 May–Jun;18(3):193–201
Organization of interneuronal interaction in the cerebral cortex of cats during training in the recognition of visual signals. Soboleva IV. **Neurosci Behav Physiol** 1989 Mar–Apr;19(2):111–7
Thermovision control of neurotransplant in rats. Volovik MG, et al. **Neurosci Behav Physiol** 1988 Nov–Dec; 18(6):492–7
Discontinuities along lines: psychophysics and neurophysiology. Redies C. **Neurosci Biobehav Rev** 1989 Spring;13(1):17–22 (18 ref.)
Electrophysiological properties of neurons in neonatal rat occipital cortex slices grown in a serum-free medium. Baker RE, et al. **Neurosci Lett** 1989 Feb 27;97(3):310–5
Visual responses of sheep temporal cortex cells to moving and stationary human images. Kendrick KM, et al. **Neurosci Lett** 1989 May 22;100(1–3):193–7
The rat accessory optic system: effects of cortical lesions on the directional selectivity of units within the medial terminal nucleus. Natal CL, et al. **Neurosci Lett** 1988 Aug 31;91(2):154–9
Effect of claustrum activation on the spontaneous unitary activity of frontal eye field neurons in the cat. Salerno MT, et al. **Neurosci Lett** 1989 Apr 10;98(3):299–304
Corpus callosum transection reduces binocularity of cells in the visual cortex of adult cats. Yinon U, et al. **Neurosci Lett** 1988 Oct 17;92(3):280–4
Iso- and cross-oriented columns in cat striate cortex: a study with simultaneous single- and multi-unit recordings. Bauer R, et al. **Neuroscience** 1989;30(3):733–40
Transneuronal retrograde degeneration of retinal ganglion cells after damage to striate cortex in macaque monkeys: selective loss of P beta cells. Cowey A, et al. **Neuroscience** 1989;29(1):65–80
A simple analogue teaching device for demonstrating visual-receptive-field properties. Moulden B, et al. **Perception** 1988;17(6):819–25
Orientation discrimination and cortical function in the human newborn. Slater A, et al. **Perception** 1988;17(5):597–602
Psychophysical evidence for an extrastriate contribution to a pattern-selective motion aftereffect. Wenderoth P, et al. **Perception** 1988;17(1):81–91
Effects of delayed monocular enucleation after birth upon black-white discrimination learning in the albino rat. Yagi F, et al. **Physiol Behav** 1989 May;45(5):1011–5
Synaptogenesis in visual cortex of normal and preterm monkeys: evidence for intrinsic regulation of synaptic overproduction. Bourgeois JP, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4297–301
Stimulus-specific neuronal oscillations in orientation columns of cat visual cortex. Gray CM, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1698–702
Visual responses in adult cat visual cortex depend on N-methyl-D-aspartate receptors. Miller KD, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5183–7
Spatial-frequency organization in primate striate cortex. Silverman MS, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(2):711–5
Vision within extrageniculo-striate systems. Proceedings of a satellite symposium to the Second World Congress of Neuroscience. Szeged, 1987. **Prog Brain Res** 1988;75:1–329
Lens accommodation-related and pupil-related units in the lateral suprasylvian area in cats. Bando T, et al. **Prog Brain Res** 1988;75:231–6
Anterior ectosylvian visual area (AEV) of the cat: physiological properties. Benedek G, et al. **Prog Brain Res** 1988;75:245–55
Receptive-field properties in the tecto- and striate-recipient zones of the cat's lateral posterior nucleus. Chalupa LM, et al. **Prog Brain Res** 1988;75:85–94 (40 ref.)
AEV-insular axis: connectivity. Emmans D, et al. **Prog Brain Res** 1988;75:257–69
The patchy intrinsic projections of visual cortex. LeVay S. **Prog Brain Res** 1988;75:147–61 (120 ref.)
Local, horizontal connections within area 18 of the cat. Matsubara JA. **Prog Brain Res** 1988;75:163–72
Influence of moving textured backgrounds on responses of cat area 18 cells to moving bars. Orban GA, et al. **Prog Brain Res** 1988;75:137–45 (137 ref.)
Retinotopic order and functional organization in a region of suprasylvian visual cortex, the Clare-Bishop area. Sherk H. **Prog Brain Res** 1988;75:237–44
Influence of areas 17, 18, and 19 on receptive-field properties of neurons in the cat's posteromedial lateral suprasylvian visual cortex. Spear PD. **Prog Brain Res** 1988;75:197–210 (32 ref.)
Stimulus selectivity and its postnatal development in the cat's suprasylvian visual cortex. Zumbroich TJ, et al. **Prog Brain Res** 1988;75:211–30 (43 ref.)
The physiology of attention: participation of cat striate cortex in behavioral choice. Artim J, et al. **Psychol Res** 1989; 50(4):223–8
A neural theory of binocular rivalry. Blake R. **Psychol Rev** 1989 Jan;96(1):145–67 (110 ref.)
The pattern visual evoked cortical response in human ageing. Morrison JD, et al. **Q J Exp Physiol** 1989 May;74(3):311–28
The discovery of the visual cortex. Glickstein M. **Sci Am** 1988 Sep;259(3):118–27
Pharmacological induction of use-dependent receptive field modifications in the visual cortex. Greuel JM, et al. **Science** 1988 Oct 7;242(4875):74–7
Ocular dominance column development: analysis and simulation. Miller KD, et al. **Science** 1989 Aug 11; 245(4918):605–15
Experimentally induced visual projections into auditory thalamus and cortex. Sur M, et al. **Science** 1988 Dec 9; 242(4884):1437–41
Neural connections between the lateral geniculate nucleus and visual cortex in vitro. Yamamoto N, et al. **Science** 1989 Jul 14;245(4914):192–4
Acute effects of lithium on dopaminergic responses: iontophoretic studies in the rat visual cortex. Gottberg E, et al. **Synapse** 1988;2(4):442–9
Physiological correlates of responses to gamma-aminobutyric acid (GABA) recorded from rat visual cortical neurons in vitro. Scharfman HE, et al. **Synapse** 1988;2(6):619–26
Presence of ghost doublets of coded neuronal patterns: relation to synaptic memory storage. Strehler BL, et al. **Synapse** 1989;3(1):19–29
Concurrent processing streams in monkey visual cortex. DeYoe EA, et al. **Trends Neurosci** 1988 May;11(5):219–26 (79 ref.)
From enzymes to visual perception: a bridge too far? Martin KA. **Trends Neurosci** 1988 Sep;11(9):380–7 (105 ref.)
In vivo functional localization of the human visual cortex using positron emission tomography and magnetic resonance imaging. Mora BN, et al. **Trends Neurosci** 1989 Aug;12(8):282–4
Probing visual cortical function with discrete chemical lesions. Newsome WT, et al. **Trends Neurosci** 1988 Sep; 11(9):394–400 (28 ref.)
Evidence for nonlinear binocular interactions in human visual cortex. Baitch LW, et al. **Vision Res** 1988;28(10):1139–43
Spatial and temporal frequency selectivity of neurons in visual cortical area V3A of the macaque monkey. Gaska JP, et al. **Vision Res** 1988;28(11):1179–91
[Retinal distribution properties of preferred orientation of cortical cell responses to gratings in the cat] Zhou YF, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):131–9 (Eng. Abstr.) (Chi)
[Physiology of the visual cortex neurons] Milleret C. **Agressologie** 1988 Oct;29(9):631–5 (30 ref.) (Eng. Abstr.)

(Fre)
[Temporal correlations and coding of information in the visual cortex of the cat] Lestienne R, et al. **C R Acad Sci [III]** 1988;307(8):511–6 (Eng. Abstr.) (Fre)
[Visual evoked potentials and water deprivation of rats during intrahypothalamic application of substance P] Kolle U, et al. **Biomed Biochim Acta** 1988;47(12):1065–71 (Eng. Abstr.) (Ger)
[Effect of aging and hemispheric functional disorder on the anisotropy of the control characteristics in the two dimensional manual tracking system] Takei K. **Iyodenshi To Seitai Kogaku** 1988 Dec;26(4):179–86 (Eng. Abstr.) (Jpn)
[Localization of the components of the electrically evoked response (EER) of the visual system] Takei K. **Nippon Ganka Gakkai Zasshi** 1988 Oct;92(10):1682–6 (Eng. Abstr.) (Jpn)
[VECP luminance threshold in pseudophakic eyes] Yamazaki H, et al. **Nippon Ganka Gakkai Zasshi** 1988 May; 92(5):767–72 (Eng. Abstr.) (Jpn)
[Information processing in primary and higher visual cortices] Toyama K. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):674–82 (Jpn)
[reflection of stimulus orientation in reactions of visual cortex neurons] Rybak IA, et al. **Biofizika** 1988 Jul–Aug; 33(4):667–71 (Eng. Abstr.) (Rus)
[Basic functions of the visual cortex in the cat] Glezer VD, et al. **Dokl Akad Nauk SSSR** 1988;300(3):740–4 (Rus)
[Selectivity of neurons in squirrel striatal cortex (frontal visual field) to contrast polarity and direction of movement of visual stimuli] Polkoshnikov EV, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb;304(1):238–41 (Rus)
[Selectivity of neurons in the chipmunk striatal cortex (frontal visual view) for the polarity of contrast and direction of movement of visual stimuli] Polkoshnikov EV, et al. **Dokl Akad Nauk SSSR** 1988;300(5):1260–3 (Rus)
[A quantitative assessment of the degree of freedom of cortex neurons in the instrumental behavior of animals] Vagin IuE, et al. **Dokl Akad Nauk SSSR** 1989;305(2):494–9 (Rus)
[Interzonal transcallosal connections of the sensomotor cortex] Bianki VL, et al. **Fiziol Zh SSSR** 1989 Apr; 75(4):433–40 (Eng. Abstr.) (Rus)
[Interzonal transcallosal connections of the visual and parietal cortices] Bianki VL, et al. **Fiziol Zh SSSR** 1988 Dec; 74(12):1705–13 (Eng. Abstr.) (Rus)
[Sex differences in the interhemispheric asymmetry of the transcallosal responses of the visual area in the cat neocortex] Bozhko GT. **Fiziol Zh SSSR** 1988 Dec; 74(12):1714–22 (Eng. Abstr.) (Rus)
[Neuronal background activity in surviving slices of guinea pig visual cortex] Bortnik AT. **Neirofiziologiia** 1988; 20(6):817–20 (Eng. Abstr.) (Rus)
[Responses of visual cortex neurons in the rabbit to direct stimulation by a current of varying intensity] Latanov AV, et al. **Neirofiziologiia** 1989;21(2):239–47 (Eng. Abstr.) (Rus)
[Functional characteristics of the orientation-selective neurons in the frontal visual field of the striate cortex in the baronduki] Polkoshnikov EV, et al. **Neirofiziologiia** 1988;20(3):365–74 (Eng. Abstr.) (Rus)
[The role of polymodal associative structures in the recovery processes in the central nervous system after unilateral extirpation of the projection zones (somatosensory and visual)] Zvereva ZF. **Patol Fiziol Eksp Ter** 1988 May–Jun; (3):11–4 (Eng. Abstr.) (Rus)
[The visual limbic area in the cerebral cortex of mammals (the limbic cortex and the problems of the evolution of the visual system)] Karamian AI, et al. **Usp Fiziol Nauk** 1988 Jul–Sep;19(3):3–23 (147 ref.) (Rus)
[Changes in the temporal structure of the impulse activity of the visual cortical neurons in rabbits undergoing reticular formation stimulation] Iakupova LP. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):758–61 (Rus)
[Functional interhemispheric brain asymmetry in cats] Kuraev GA, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec; 38(6):1161–3 (Rus)
[Sound-specific neurons in the visual cortex of the cat] Polianskii VB, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun; 38(3):546–9 (Rus)
[Amplitude-temporal parameters of the evoked potentials of the visual and motor areas in the visual perception and mental representation of an image] Puchinskaia LM, et al. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):812–20 (Eng. Abstr.) (Rus)
[Long-term post-tetanic changes in the impulse reactions of the visual cortex neurons in the cat] Veber NV, et al. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):963–5 (Rus)
[Spectral characteristics of the EEG of the visual and motor cortices in the rabbit during stimulation of the reticular formation of the brain] Vorob'ev NA, et al. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):90–8 (Eng. Abstr.) (Rus)
[Topography and reactivity of the visual evoked potential] Etcheberrigaray R, et al. **Arq Neuropsiquiatr** 1988 Sep; 46(3):258–63 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Visual evoked potentials in dementia: a meta-analysis and empirical study of Alzheimer's disease patients. Pollock VE, et al. **Biol Psychiatry** 1989 Apr 15;25(8):1003–13
Stimulation of brainstem nuclei in the cat: effect on neuronal activity in the primary visual cortex of relevance to cerebral blood flow and migraine. Adams RW, et al. **Cephalalgia** 1989 Jun;9(2):107–18
Balint's syndrome following eclampsia. Gurjinder PS, et al. **Clin Neurol Neurosurg** 1989;91(2):161–5
Visual involvement in Friedreich's ataxia: PERG and VEP study. Pinto F, et al. **Eur Neurol** 1988;28(5):246–51
Undernutrition during early adult life significantly affects neuronal connectivity in rat visual cortex. Warren MA, et al. **Exp Neurol** 1989 Mar;103(3):290–2
Clinical analysis of non-recordable pattern VECPs in 107 patients. Adachi-Usami E, et al. **Fortschr Ophthalmol** 1988; 85(3):301–3
Visual cortical kindling in rabbit—consideration of difference between species. Jibiki I, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):345–50
Selective deficit of visual search in moving displays after extrastriate damage. McLeod P, et al. **Nature** 1989 Jun 8; 339(6224):466–7
Transient acute cortical blindness associated with hypoglycemia. Garty BZ, et al. **Pediatr Neurol** 1987 May–Jun;3(3):169–70
Travel vision: "collicular visual system"? Jan JE, et al. **Pediatr Neurol** 1986 Nov–Dec;2(6):359–62
Cortical visual impairment following birth asphyxia. Roland EH, et al. **Pediatr Neurol** 1986 May–Jun;2(3):133–7
Transient cortical blindness and occipital seizures with cyclosporine toxicity. Rubin AM. **Transplantation** 1989 Mar;47(3):572–3
[Pattern evoked retinal and cortical potentials in tapetoretinal dystrophy] Raile A, et al. **Fortschr Ophthalmol** 1988; 85(6):744–9 (Eng. Abstr.) (Ger)
[Evaluating the pressure tolerance of the optic nerve with facilitated transient visual evoked cortical potentials] Stodtmeister R, et al. **Fortschr Ophthalmol** 1988;85(4):402–6 (Eng. Abstr.) (Ger)
[Amplitude reaction in binocular cortical visual evoked potentials in anamorphotic image relations] Krause K, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):65–7 (Eng. Abstr.) (Ger)

RADIATION EFFECTS

[Optical effects of the irradiation of the eye and visual cortex with lasers and light] Kashuba VA, et al. **Oftalmol Zh** 1988; (4):237–40 (Eng. Abstr.) (Rus)
[Quantitative histologic changes of the glioneuronal complex in the central and intermediate parts of the visual analyzer exposed to microwaves of thermogenic intensity] Logvinov SV. **Radiobiologiia** 1989 Mar–Apr;29(2):247–50 (Eng. Abstr.) (Rus)

SURGERY

A chronic intracortical electrode array: preliminary results. Campbell PK, et al. **J Biomed Mater Res** 1989 Aug;23(A2 Suppl):245–59
Detection of moving and stationary gratings in the absence of striate cortex. Magnussen S, et al. **Neuropsychologia** 1989;27(5):725–8

ULTRASTRUCTURE

Ultrastructural identification of synaptic terminals from cortical axons and from collateral axons of geniculo-cortical relay cells in the perigeniculate nucleus of the cat. Montero VM. **Exp Brain Res** 1989;75(1):65–72
Richness of environment affects the number of contacts formed by boutons containing flat vesicles but does not alter the number of these boutons per neuron. Beaulieu C, et al. **J Comp Neurol** 1988 Aug 15;274(3):347–56
The in vitro slice preparation for combined morphological and electrophysiological studies of rat visual cortex. Larkman AU, et al. **Neurosci Res** 1988 Oct;6(1):1–19

VISUAL EVOKED RESPONSE see **EVOKED POTENTIALS, VISUAL**

VISUAL FIELDS

see related
PERIMETRY

Repeated visual field screening in the aged. Bengtsson B. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):659–61
Cartographic deformations in a parabolic visual field map. Lindblom B. **Acta Ophthalmol (Copenh)** 1988 Dec; 66(6):718–20
The relationship between the fluoroangiographic aspect of the optic disk and the visual field in patients with the exfoliation syndrome with and without intraocular hypertension. Part II: Monolateral cases. Cambiaggi A, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;184:66–70
The relationship between the fluoroangiographic aspect of the optic disk and the visual field in patients with the exfoliation syndrome with and without intraocular hypertension. Part I: Bilateral cases. Cambiaggi A, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;184:62–5
The outcome of visual function in capsular glaucoma. Thorburn W. **Acta Ophthalmol Suppl (Copenh)** 1988; 184:132–7
The effect of visual attention on peripheral discrimination thresholds in single and multiple element displays. Müller HJ, et al. **Acta Psychol (Amst)** 1988 Nov;69(2):129–55
Ipsilateral inhibition and contralateral facilitation of simple reaction time to non-foveal visual targets from non-informative visual cues. Tassinari G, et al. **Acta Psychol (Amst)** 1989 May;70(3):267–91
Short-term recovery of visual field loss in acromegaly during treatment with a long-acting somatostatin analogue. Cobb WE, et al. **Am J Med** 1989 Apr;86(4):496–8
Threshold equivalence between perimeters. Anderson DR, et al. **Am J Ophthalmol** 1989 May 15;107(5):493–505
Quantifying visual field damage caused by cataract. Guthauser U, et al. **Am J Ophthalmol** 1988 Oct 15; 106(4):480–4
Increase of the short-term fluctuation of the differential light threshold around a physiologic scotoma. Haefliger IO, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):417–20
Test-retest variability in glaucomatous visual fields. Heijl A, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):130–5
Reversible optic disk cupping and visual field improvement in adults with glaucoma. Katz LJ, et al. **Am J Ophthalmol** 1989 May 15;107(5):485–92
Visual field area in phakic, aphakic, and pseudophakic individuals. Lazarus L, et al. **Am J Optom Physiol Opt** 1988 Jul;65(7):593–7
Monocular visual-field testing under binocular conditions. Abraham FA. **Ann Ophthalmol** 1988 Nov;20(11):444–5
Anterior ischemic optic neuropathy—recurrent attacks in one eye in a bilateral case. Kao LY, et al. **Ann Ophthalmol** 1989 Feb;21(2):71–4 (6 ref.)
Visual-field function in pseudophakia. Klewin KM, et al. **Ann Ophthalmol** 1988 Aug;20(8):316–7
Threshold sensitivity tests in various ocular diseases. Weinberger D, et al. **Ann Ophthalmol** 1989 Feb;21(2):67–70, 74
The effect of perimetric experience in normal subjects. Heijl A, et al. **Arch Ophthalmol** 1989 Jan;107(1):81–6
A clinical study of perimetric probability maps. Heijl A, et al. **Arch Ophthalmol** 1989 Feb;107(2):199–203
Visual field interpretation with empiric probability maps. Heijl A, et al. **Arch Ophthalmol** 1989 Feb;107(2):204–8
Visual field constriction caused by colored contact lenses. Insler MS, et al. **Arch Ophthalmol** 1988 Dec;106(12):1680–2
Quantitating the superior visual field loss associated with ptosis. Meyer DR, et al. **Arch Ophthalmol** 1989 Jun; 107(6):840–3
The temporal retina and visual discrimination in the rabbit. Lagers-van Haselen GC, et al. **Behav Brain Res** 1988 Sep 15;30(2):221–3
Detection of visual stimuli after lesions of the superior colliculus in the rat; deficit not confined to the far periphery. Overton P, et al. **Behav Brain Res** 1988 Nov 1;31(1):1–15
Visual fields of monocularly deprived macaque monkeys. Wilson JR, et al. **Behav Brain Res** 1989 May 1;33(1):13–22
Local spatial scale for three-dot alignment acuity. Toet A, et al. **Biol Cybern** 1988;59(4–5):319–23
Spatial and temporal contrast sensitivity in hemianopia. A comparative study of the sighted and blind hemifields. Hess RF, et al. **Brain** 1989 Aug;112 (Pt 4):871–94
Sensory factors are insufficient to define the ocular saccade goal in complex visual fields. Lévy-Schoen A, et al. **Brain Behav Evol** 1989;33(2–3):80–4
Frontal and lateral visual system in birds. Frontal and lateral gaze. Maldonado PE, et al. **Brain Behav Evol** 1988; 32(1):57–62
Lateral eyes or lateralized? Hemiretinal and ocular dominance effects on visual field asymmetries for the lexical decision task. Church KL, et al. **Brain Cogn** 1988 Oct; 8(2):227–39
Functioning of field of vision in the seamen of a merchant navy ship. Jettmar A, et al. **Bull Inst Marit Trop Med Gdynia** 1987;38(3–4):189–92
Spatial constraints on the voluntary control of attention across visual space. Kiefer RJ, et al. **Can J Psychol** 1987 Dec;41(4):474–89
Against parafoveal semantic preprocessing during eye fixations in reading. Rayner K, et al. **Can J Psychol** 1986 Dec;40(4):473–83
Adaptation to movement in right and left visual fields. Calvert J. **Cortex** 1988 Dec;24(4):589–93
Visual and neurological outcome of infants with periventricular leukomalacia. Scher MS, et al. **Dev Med Child Neurol** 1989 Jun;31(3):353–65
Effects of lateral displacement of the visual field on the development of visual-motor abilities in cats. Hendy HM, et al. **Dev Psychobiol** 1988 Nov;21(7):635–50
Stimulus configuration and the format of the normal sensitivity gradient. Flanagan JG, et al. **Doc Ophthalmol** 1988 Aug;69(4):371–83
Visual field in hysteria-reliability of visual field by Goldmann perimetry. Ohkubo H. **Doc Ophthalmol** 1989 Jan;71(1):61–7
The effect of regression towards the mean on visual disability rating scales. Smith TJ. **Doc Ophthalmol** 1988 Dec; 70(4):331–7
Pure homonymous hemiachromatopsia. Findings with neuro-ophthalmologic examination and imaging procedures. Kölmel HW. **Eur Arch Psychiatry Neurol Sci** 1988;237(4):237–43
Orientation bias of cat retinal ganglion cells: a reassessment. Ahmed B. **Exp Brain Res** 1989;76(1):182–6
Significance of attentive fixation for the selection of saccade targets in different parts of the visual field of the rhesus

monkey. Fischer B, et al. **Exp Brain Res** 1988;73(3):577–82
Binocular depth perception, visual acuity and visual fields in cats following neonatal section of the optic chiasm. Timney B, et al. **Exp Brain Res** 1989;74(2):272–8
The ipsilateral field representation in the striate cortex of the opossum. Volchan E, et al. **Exp Brain Res** 1988; 73(2):297–304
Interocular asymmetry of visual function in heterozygotes of X–linked retinitis pigmentosa. Jacobson SG, et al. **Exp Eye Res** 1989 May;48(5):679–91
Mechanisms of optic nerve damage in glaucoma. Drance SM. **Fortschr Ophthalmol** 1988;85(6):611–3
A new management system for glaucoma based on improvement of the appearance of the optic disc or visual field. Spaeth GL. **Fortschr Ophthalmol** 1988;85(6):614–9 (52 ref.)
The cumulative defect curve: separation of local and diffuse components of visual field damage. Bebie H, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):9–12
The glaucoma suspect: differentiation of the future glaucoma eye from the non–glaucomatous suspect eye. 2. Visual field decay. Chisholm IA, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(2):110–3
Contrast sensitivity versus static visual field testing during experimental elevation of intraocular pressure. Friberg TR, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(4):345–7
Neuroretinal rim area and visual field in glaucoma. Funk J, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):431–4
Optic disc morphometry in chronic primary open–angle glaucoma. II. Correlation of the intrapapillary morphometric data to visual field indices. Jonas JB, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(6):531–8
Full threshold versus quantification of defects for visual field testing in glaucoma. Stewart WC, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):51–4
Alterations in the shape of the automated perimetric profile arising from cataract. Wood JM, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(2):157–61
Visual accommodation and target detection in the vicinity of a window post. Chong J, et al. **Hum Factors** 1989 Feb; 31(1):63–75
Results of a filtering procedure in low tension glaucoma. de Jong N, et al. **Int Ophthalmol** 1989 Jan;13(1–2):131–8
Effect of IOP on the visual field in ocuLar hypertension and glaucoma. Heijl A. **Int Ophthalmol** 1989 Jan; 13(1–2):119–24
Extrapolating global visual field indices from local parameters in the nasal region. Hirsbrunner HP, et al. **Int Ophthalmol** 1988;12(3):163–8
Is there general reduction of sensitivity in glaucoma? Langerhorst CT, et al. **Int Ophthalmol** 1989 Jan; 13(1–2):31–5
Long–term studies of visual field changes by means of computerized perimetry (Octopus 201) in eyes with glaucomatous field defects after normalization of the intra–ocular pressure. Leydhecker W, et al. **Int Ophthalmol** 1989 Jan;13(1–2):113–7
Optic disc pallor and visual field defect in exfoliative and non–exfoliative, untreated ocular hypertension. Linnér E, et al. **Int Ophthalmol** 1989 Jan;13(1–2):21–4
Comparison of different screening methods for the detection of visual field defects in early glaucoma. Marraffa M, et al. **Int Ophthalmol** 1989 Jan;13(1–2):43–5
The visual field in advanced glaucoma. Weber J, et al. **Int Ophthalmol** 1989 Jan;13(1–2):47–50
Monocular geometry is selectively distorted in the central visual field of strabismic amblyopes. Fronius M, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2034–44
Evidence for a neural basis of age–related visual field loss in normal observers. Johnson CA, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2056–64
Visual field development in infants with stage 3 retinopathy of prematurity. Luna B, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):580–2
Different patterns of retinal correspondence in the central and peripheral visual field of strabismics. Sireteanu R, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):2023–33
Variability of automated visual fields in clinically stable glaucoma patients. Werner EB, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1083–9
Sneddon's disease presenting with visual loss and dementia. Wilson WB, et al. **J Clin Neuro Ophthalmol** 1988 Dec; 8(4):255–61 (17 ref.)
Small lateral suprasylvian cortex lesions produce visual neglect and decreased visual activity in the superior colliculus. Hardy SC, et al. **J Comp Neurol** 1988 Jul 22; 273(4):527–42
Representation of the visual field in the second visual area in the Cebus monkey. Rosa MG, et al. **J Comp Neurol** 1988 Sep 15;275(3):326–45
Spectral sensitivity, absolute threshold, and visual field of two tick species, Hyalomma dromedarii and Amblyomma variegatum. Kaltenrieder M, et al. **J Comp Physiol [A]** 1989; 165(2):155–64
The observer–relative velocity field as the basis for effective motion parallax. Braunstein ML, et al. **J Exp Psychol [Hum Percept]** 1988 Nov;14(4):582–90
Movement and visual attention: the spotlight metaphor breaks down. Driver J, et al. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):448–56
Parafoveal processing of words and saccade computation during eye fixations in reading. Inhoff AW. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):544–55
Splitting visual space with attention. Nicoletti R, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):164–9
Identification reaction time as a function of target and field object orientation. Borresen CR. **J Gen Psychol** 1989 Jan; 116(1):17–24
Does order of letter analysis contribute to the parafoveal identification asymmetry? Chastain G. **J Gen Psychol** 1988 Oct;115(4):397–402
When shape information from a foveal nontarget affects gap detection accuracy in a parafoveal target. Chastain G. **J Gen Psychol** 1989 Jan;116(1):5–16
An improved optical eye movement detector for visual half–field studies of cerebral hemisphere memory. Lindahl O, et al. **J Med Eng Technol** 1988 May–Jun;12(3):106–11
Participation of prefrontal neurons in the preparation of visually guided eye movements in the rhesus monkey. Boch RA, et al. **J Neurophysiol** 1989 May;61(5):1064–84
Relation of cortical areas MT and MST to pursuit eye movements. III. Interaction with full–field visual stimulation. Komatsu H, et al. **J Neurophysiol** 1988 Aug; 60(2):621–44
Relation of cortical areas MT and MST to pursuit eye movements. I. Localization and visual properties of neurons. Komatsu H, et al. **J Neurophysiol** 1988 Aug; 60(2):580–603
Analysis of motion of the visual field by direction, expansion/contraction, and rotation cells clustered in the dorsal part of the medial superior temporal area of the macaque monkey. Tanaka K, et al. **J Neurophysiol** 1989 Sep;62(3):626–41
Visual receptive fields in the striate–recipient zone of the lateral posterior–pulvinar complex. Chalupa LM, et al. **J Neurosci** 1989 Jan;9(1):347–57
Do the relative mapping densities of the magno– and parvocellular systems vary with eccentricity? Livingstone MS, et al. **J Neurosci** 1988 Nov;8(11):4334–9
Long–term recordings and receptive field measurements from single units of the visual cortex of awake unrestrained kittens. Mioche L, et al. **J Neurosci Methods** 1988 Nov; 26(1):83–94
Age and visual search: expanding the useful field of view. Ball KK, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2210–9
How are spatial filters used in foves and parafovea? Hess RF, et al. **J Opt Soc Am [A]** 1989 Feb;6(2):329–39
Age–related changes in the central visual field for short–wavelength–sensitive pathways. Johnson CA, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2131–9
Discrimination of time: comparison of foveal and peripheral sensitivity. McKee SP, et al. **J Opt Soc Am [A]** 1984 Jun; 1(6):620–7
Expanded binocular peripheral visual fields following surgery for esotropia [published erratum appears in J Pediatr Ophthalmol Strabismus 1989 Jul–Aug;26(4):208] Wortham E 5th, et al. **J Pediatr Ophthalmol Strabismus** 1989 May–Jun;26(3):109–12
On age–related norms of the visual field. Iwase A, et al. **Jpn J Ophthalmol** 1988;32(4):429–37
Hemispatial visual inattention masquerading as hemianopia. Kooistra CA, et al. **Neurology** 1989 Aug;39(8):1125–7
Spatial distribution of the inhibitory effect of peripheral non–informative cues on simple reaction time to non–fixated visual targets. Berlucchi G, et al. **Neuropsychologia** 1989;27(2):201–21
The influence of homonymous visual field disorders on colour sorting performance in the FM 100–hue test. Zihl J, et al. **Neuropsychologia** 1988;26(6):869–76
Screening for glaucomatous visual field defects: the relationship between sensitivity, specificity and the number of test locations. Henson DB, et al. **Ophthalmic Physiol Opt** 1988;8(2):123–7
BSPOT: a blind spot data evaluation program for SAPRO examinations. Funkhouser AT, et al. **Ophthalmic Surg** 1988 Aug;19(8):590–601
Evaluation of corrected loss variance as a visual field index. II. Corrected loss variance in conjunction with mean defect may identify stages of glaucoma. Gollamudi SR, et al. **Ophthalmologica** 1988;197(3):144–50
Evaluation of corrected loss variance as a visual field index. I. CLV exceeds RMS in discriminating between glaucoma–suspect patients with no loss of visual sensitivity and normal observers. Liao PM, et al. **Ophthalmologica** 1988;197(3):136–43
Evaluation of adaptive spatial enhancement in suprathreshold visual field screening. Asman P, et al. **Ophthalmology** 1988 Dec;95(12):1656–62
Assessing the utility of reliability indices for automated visual fields. Testing ocular hypertensives. Bickler–Bluth M, et al. **Ophthalmology** 1989 May;96(5):616–9
Correlation of structure and function in glaucoma. Quantitative measurements of disc and field. Caprioli J, et al. **Ophthalmology** 1988 Jun;95(6):723–7
Unequal intraocular pressure and its relation to asymmetric visual field defects in low–tension glaucoma. Crichton A, et al. **Ophthalmology** 1989 Sep;96(9):1312–4
Static threshold asymmetry in early glaucomatous visual field loss. Feuer WJ, et al. **Ophthalmology** 1989 Sep; 96(9):1285–97
Visual field change in low–tension glaucoma over a five–year follow–up. Gliklich RE, et al. **Ophthalmology** 1989 Mar; 96(3):316–20
Evaluation of the t test as a method of detecting visual field changes. Hills JF, et al. **Ophthalmology** 1988 Feb; 95(2):261–6
Correlation of afferent pupillary defect with visual field loss on automated perimetry [see comments] Johnson LN, et al. **Ophthalmology** 1988 Dec;95(12):1649–55 (18 ref.). **Comment in:** Ophthalmology 1989 Apr;96(4):570–1
Improved reading performance using individualized compensation filters for observers with losses in central vision. Lawton TB. **Ophthalmology** 1989 Jan;96(1):115–26
Visual field loss in migraine. Lewis RA, et al. **Ophthalmology** 1989 Mar;96(3):321–6
The effect of Goldmann applanation tonometry on automated static threshold perimetry. Ruben JB, et al. **Ophthalmology** 1988 Feb;95(2):267–70
Modified grid laser photocoagulation for diabetic macular edema. The effect on the central visual field. Striph GG, et al. **Ophthalmology** 1988 Dec;95(12):1673–9
Unexpectedly large enhancement of a severely constricted field with reversed Galilean telescopes. Campbell MC, et al. **Optom Vis Sci** 1989 Apr;66(4):239–42
The programmable remapper: clinical applications for patients with field defects. Loshin DS, et al. **Optom Vis Sci** 1989 Jun;66(6):389–95
Peripheral apparent motion as a function of location, contrast, and direction of stimulus motion. Barfield W, et al. **Percept Mot Skills** 1989 Feb;68(1):33–4
Effect of protective eyewear on reaction time in the horizontal field of vision. Dawson ML, et al. **Percept Mot Skills** 1988 Aug;67(1):115–20
Peripheral–foveal scanning and the identification of heteropalindromes in the visual half–fields. Fundin R, et al. **Percept Mot Skills** 1986 Apr;62(2):499–509
Reply to Cohn's comments on cones. Grosser GS, et al. **Percept Mot Skills** 1989 Aug;69(1):126
Perceptual evidence for an anomalous distribution of rods and cones in the retinas of dyslexics: a new hypothesis. Grosser GS, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):683–98
Effects of physical exercise on peripheral vision and learning in children with spina bifida manifesta. Krebs P, et al. **Percept Mot Skills** 1989 Feb;68(1):167–74
Haidinger's brushes phenomenon for control of eye–fixation in a laterality experiment. Yamada K, et al. **Percept Mot Skills** 1988 Aug;67(1):83–6
Left–right visual field asymmetry in bistable motion perception. Casco C, et al. **Perception** 1988;17(6):721–7
Age–related changes in contrast sensitivity in central and peripheral retina. Crassini B, et al. **Perception** 1988; 17(3):315–32 (30 ref.)
The effects of target borders on dynamic visual acuity: practical and theoretical implications. Long GM, et al. **Perception** 1988;17(6):745–51
Visual responses of neurons in somatosensory cortex of hamsters with experimentally induced retinal projections to somatosensory thalamus. Métin C, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):357–61
Complexity and goodness of dot patterns varying in symmetry. Hamada J, et al. **Psychol Res** 1988;50(3):155–61
Effects of foveal task load on visual–spatial attention: event–related brain potentials and performance. Kramer AF, et al. **Psychophysiology** 1988 Sep;25(5):512–31
Selective attention, visual laterality, awareness, and perceiving the meaning of parafoveally presented words. Lambert AJ, et al. **Q J Exp Psychol [A]** 1988 Nov; 40(4):615–52
Perception of spatial order in extrafoveal vision. Saarinen J. **Scand J Psychol** 1988;29(3–4):162–7
Homonymous hemianopsia due to posterior ischemia as a model for quantification of neurologic deficit [letter] Kölmel HW, et al. **Stroke** 1989 Apr;20(4):559
Correlation of visual function with optic nerve and nerve fiber layer structure in glaucoma. Caprioli J. **Surv Ophthalmol** 1989 Feb;33 Suppl:319–30 (78 ref.)
Visual field changes in early glaucoma and how to recognize them. Heijl A. **Surv Ophthalmol** 1989 Apr;33 Suppl:403–4; discussion 409–11
An optimized visual field screening method. Henson DB. **Surv Ophthalmol** 1989 Apr;33 Suppl:443–4; discussion 449–50
Functional dissociation of the hemispheres in the discrimination of complex gratings near the vertical meridian. Berardi N, et al. **Vision Res** 1988;28(4):491–6
Binocular fields with lateral–eyed vision. Holden AL, et al. **Vision Res** 1989;29(3):361–7
Visually perceived eye level and perceived elevation of objects: linearly additive influences from visual field pitch and from gravity. Matin L, et al. **Vision Res** 1989; 29(3):315–24
[Intrasellar diseases and visual field changes] Fan ZJ. **Chung Hua Yen Ko Tsa Chih** 1988 Jan;24(1):31–2 (Eng. Abstr.) **(Chi)**
[The preliminary study of measuring isopters in the kinetic quantitative perimetry] Ge J, et al. **Yen Ko Hsueh Pao** 1985 Sep;1(1):65–9 (Eng. Abstr.) **(Chi)**
[Optokinetic nystagmus and stimulated visual field. Neuro–otological significance] Samain P, et al. **Acta Otorhinolaryngol Belg** 1988;42(4):483–93 (Eng. Abstr.) **(Fre)**
[Strategies in static testing of the visual fields] Charlier J, et al. **Bull Soc Ophtalmol Fr** 1988 Apr;88(4):501–5, 508 **(Fre)**

[Drusen of the optic disk and fascicular deficit] Risse JF, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):685–90 (22 ref.) (Fre)

[Automated perimetry in patients with posterior chamber implants] Bron A, et al. **J Fr Ophtalmol** 1988;11(2):155–9 (Eng. Abstr.) (Fre)

[Treatment of glaucoma and visual field diminution] Lazzaroni F, et al. **Ophtalmologie** 1988 Nov–Dec;2(5):427–9 (Eng. Abstr.) (Fre)

[Pathophysiology of glaucomatous visual field defects] Aulhorn E. **Fortschr Ophthalmol** 1988;85(6):601–6 (Eng. Abstr.) (Ger)

[Correlation between the neuroretinal rim area of the optic papilla and the visual field in glaucoma] Funk J, et al. **Fortschr Ophthalmol** 1988;85(5):452–5 (Eng. Abstr.) (Ger)

[Progression of glaucomatous visual field damage—a clinical study with the Delta program of the Octopus Perimeter 201 in assessing the effect of early damage on visual field loss in glaucoma simplex] Gramer E, et al. **Fortschr Ophthalmol** 1988;85(6):620–5 (Eng. Abstr.) (Ger)

[Specific changes in the pattern electroretinogram in the early stages of glaucoma] Hiss P, et al. **Fortschr Ophthalmol** 1988; 85(6):763–5 (Eng. Abstr.) (Ger)

[High resolution control of the central visual field with a video campimeter] Krastel H, et al. **Fortschr Ophthalmol** 1988;85(6):750–5 (Eng. Abstr.) (Ger)

[Physiologic sensory studies in glaucoma] Lachenmayr B, et al. **Fortschr Ophthalmol** 1988;85(6):756–62 (Eng. Abstr.) (Ger)

[Laser treatment of glaucoma] Lund OE. **Fortschr Ophthalmol** 1988;85(6):583–92 (124 ref.) (Eng. Abstr.) (Ger)

[Normal values for the Octopus and their importance in the interpretation of findings] Haas AL. **Klin Monatsbl Augenheilkd** 1989 May;194(5):320–1 (Eng. Abstr.) (Ger)

[Graphic and numerical presentation of visual field findings] Kaufmann H, et al. **Klin Monatsbl Augenheilkd** 1989 May; 194(5):322–4 (Eng. Abstr.) (Ger)

[Visual field defects in strabismic amblyopes] Sireteanu R, et al. **Klin Monatsbl Augenheilkd** 1989 Apr;194(4):261–9 (Eng. Abstr.) (Ger)

[Spatial attention: objections to the spotlight model of visual selectivity] Buchner A. **Z Exp Angew Psychol** 1988; 35(4):523–45 (Eng. Abstr.) (Ger)

[Allocation of attention across the main meridians of the visual field] Biscaldi M, et al. **Ann Ist Super Sanita** 1988; 24(4):567–9 (Eng. Abstr.) (Ita)

[Metastatic pituitary tumor presenting as bitemporal visual field defects. Case report] Kimura A, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1123–7 (14 ref.) (Eng. Abstr.) (Jpn)

[A new numerical representation of visual field in patients with chiasmal tumor] Sakatani K, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1046–51 (Eng. Abstr.) (Jpn)

[Correlation of visual field changes and optic disc measurements with computerized videographic image analyzer in glaucoma] Matsubara K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1414–8 (Eng. Abstr.) (Jpn)

[Correlation between optic nerve and visual field changes among ocular hypertensives and glaucoma suspects] Yamamoto T, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug; 92(8):1369–74 (Eng. Abstr.) (Jpn)

[A multivariate analysis of risk factors for visual field loss of primary angle closure glaucoma] Yasuda N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1316–20 (Eng. Abstr.) (Jpn)

[Screening visual field test considering priori probability] Yuda K. **Nippon Ganka Gakkai Zasshi** 1988 Sep; 92(9):1497–502 (Eng. Abstr.) (Jpn)

[Visual perception in normal children and adults I. Developmental changes in dominance of visual field in normal children] Ichiba N. **No To Hattatsu** 1989 May; 21(3):250–7 (Eng. Abstr.) (Jpn)

[Visual perception in normal children and adults II. Correlation between dominance of visual field and dominance of the eye] Ichiba N. **No To Hattatsu** 1989 May; 21(3):258–64 (Eng. Abstr.) (Jpn)

[A case of visual seizure suspected of mirror-focus generation] Minabe Y, et al. **Rinsho Shinkeigaku** 1988 Apr; 28(4):409–12 (Eng. Abstr.) (Jpn)

[Sectoranopia in a patient with hemorrhage of the right geniculate nucleus] Ohkawa S, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1188–91 (Eng. Abstr.) (Jpn)

[Effects of learning experience to the visual field advantage on random form recognition] Yoshizaki K. **Shinrigaku Kenkyu** 1988 Dec;59(5):273–9 (Eng. Abstr.) (Jpn)

[Information processing in primary and higher visual cortices] Toyama K. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):674–82 (Jpn)

[Selectivity of neurons in the chipmunk striatal cortex (frontal visual view) for the polarity of contrast and direction of movement of visual stimuli] Polkoshnikov EV, et al. **Dokl Akad Nauk SSSR** 1988;300(5):1260–3 (Rus)

[Relation of optokinetic nystagmus and the width of the visual field] Todorova VS, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):312–7 (Eng. Abstr.) (Rus)

[Effectiveness of mesopic color perimetry in early glaucoma] Fedorovskaia LI. **Vestn Oftalmol** 1988 Jul–Aug;104(4):12–4 (Eng. Abstr.) (Rus)

[Color visual fields in normal mesopic adaptation] Fedorovskaia LI, et al. **Vestn Oftalmol** 1988 Nov–Dec; 104(6):52–4 (Eng. Abstr.) (Rus)

[Correlation of changes of the optic nerve disc and the field of vision in initial open-angle glaucoma] Listopadova NA, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):3–7 (Eng. Abstr.) (Rus)

[A method of autocampimetric study of the visual field] Zurgaft MB. **Vestn Oftalmol** 1988 Sep–Oct;104(5):55–8 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Effect of acute medical reduction of intraocular pressure on the visual field and optic disc in ocular hypertension. Farinelli AC, et al. **Can J Ophthalmol** 1988 Aug;23(5):216–8

Therapeutic value of citicoline in the treatment of glaucoma (computerized and automated perimetric investigation). Pecori Giraldi J, et al. **Int Ophthalmol** 1989 Jan; 13(1–2):109–12

Influence of pindolol and timolol treatment on the visual fields of glaucoma patients. Flammer J, et al. **J Ocul Pharmacol** 1986 Fall;2(4):305–11

The influence of miotics on the visual field. Kee CW, et al. **Korean J Ophthalmol** 1987 Jun;1(1):52–8

Early visual field changes with beta-blocking agents. Collignon-Brach J. **Surv Ophthalmol** 1989 Apr;33 Suppl:429–30; discussion 435–6

Quantification and monitoring of visual field defects and a prospective, randomized comparison of pilocarpine and timolol using computerized perimetry. Sponsel WE. **Surv Ophthalmol** 1989 Apr;33 Suppl:427–8; discussion 435–6

[A study using the computer-controlled perimeter Perimat 206 on the effect of Circo-Maren on visual field defects] Schubert E, et al. **Klin Monatsbl Augenheilkd** 1988 Nov; 193(5):523–9 (Eng. Abstr.) (Ger)

[The effects of Ca2+-antagonist on visual field in low tension glaucoma] Shirai H, et al. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):792–7 (Eng. Abstr.) (Jpn)

PHYSIOLOGY

Neurophysiological properties of the retinal ganglion cell classes of the Cuban treefrog, Hyla septentrionalis. Grüsser-Cornehls U. **Exp Brain Res** 1988;73(1):39–52

VISUAL MOTOR COORDINATION see **PSYCHOMOTOR PERFORMANCE**

VISUAL PATHWAYS

Occlusion-induced contralateral afferent pupillary defect. DuBois LG, et al. **Am J Ophthalmol** 1989 Mar 15; 107(3):306–7

Relative afferent pupillary defect induced by patching. Lam BL, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):305–6

Insight into the recent European literature. A review of studies concerning the visual pathways. Safran AB. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):53–9 (35 ref.)

Sarcoidosis of the anterior visual pathway: successes and failures. Gelwan MJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1473–80

ANALYSIS

Distribution of histamine in the cockroach brain and visual system: an immunocytochemical and biochemical study. Pirvola U, et al. **J Comp Neurol** 1988 Oct 22;276(4):514–26

Substance P-like immunoreactive retinal terminals found in two retinorecipient areas of the Japanese monkey. Nakagawa S, et al. **Neurosci Lett** 1988 Oct 31;93(1):32–7

ANATOMY & HISTOLOGY

Distribution of retinal ganglion cells projecting into the nucleus of the optic tract in rat. Urushibata T, et al. **Adv Otorhinolaryngol** 1988;41:95–7

Transformations of the retinal topography along the visual pathway of the chicken. Rager U, et al. **Anat Embryol (Berl)** 1988;179(2):135–48

Postnatal development of the visual corpus callosum: the influence of activity of the retinofugal projections. Murphy EH, et al. **Behav Brain Res** 1988 Sep 15;30(2):151–63

Neuro-ophthalmology. Jones SM. **Br Vet J** 1989 Mar–Apr; 145(2):99–120 (39 ref.)

Reptilian somatosensory midbrain: identification based on input from the spinal cord and dorsal column nucleus. Pritz MB, et al. **Brain Behav Evol** 1989;33(1):1–14

Horseradish peroxidase study of tectal afferents in Xenopus laevis with special emphasis on their relationship to the lateral-line system. Zittlau KE, et al. **Brain Behav Evol** 1988;32(4):208–19

Sex difference in the visual projections of young chicks: a quantitative study of the thalamofugal pathway. Adret P, et al. **Brain Res** 1989 Jan 23;478(1):59–73

Direct parasympathetic pathway to the eye: revisited. Burde RM. **Brain Res** 1988 Oct 25;463(1):158–62

Retinal projection to mammalian telencephalon. Cooper HM, et al. **Brain Res** 1989 Jan 16;477(1–2):350–7

Distribution of morphologically different retinal axon terminals in the hamster dorsal lateral geniculate nucleus. Erzurumlu RS, et al. **Brain Res** 1988 Sep 27;461(1):175–81

Retinohypothalamic projections in the hamster and rat demonstrated using cholera toxin. Johnson RF, et al. **Brain Res** 1988 Oct 18;462(2):301–12

Cortical integration of parallel pathways in the visual system of primates. Krubitzer LA, et al. **Brain Res** 1989 Jan 23; 478(1):161–5

Retinohypothalamic pathway: a breach in the law of Newton-Müller-Gudden? Magnin M, et al. **Brain Res** 1989 May 29;488(1–2):390–7

Avian nucleus isthmi ventralis projects to the contralateral optic tectum. Martínez S, et al. **Brain Res** 1989 Feb 27; 481(1):181–4

Striped pattern of labeling in ground squirrel superior colliculus following intraocular HRP injections. Petry HM, et al. **Brain Res** 1989 Jun 5;489(1):199–203

Pretectal and tectal projections to the homologue of the dorsal lateral geniculate nucleus in the pigeon: an anterograde and retrograde tracing study with cholera toxin conjugated to horseradish peroxidase. Wild JM. **Brain Res** 1989 Feb 6;479(1):130–7

Projection from the superficial layers of the tectum to the pretectal complex in the cat. Kubota T, et al. **Brain Res Bull** 1989 Feb;22(2):373–8

Golgi-like, transneuronal retrograde labelling with CNS injections of herpes simplex virus type 1. McLean JH, et al. **Brain Res Bull** 1989 May;22(5):867–81

Anterograde labelling from the optic nerve reveals multiple central targets in teleost, Lethrinus chrysostomus (Perciformes). Collin SP. **Cell Tissue Res** 1989; 256(2):327–35

The callosal projection in cat visual cortex as revealed by a combination of retrograde tracing and intracellular injection. Buhl EH, et al. **Exp Brain Res** 1989;75(3):470–6

Projection patterns of surviving neurons in the dorsal lateral geniculate nucleus following discrete lesions of striate cortex: implications for residual vision. Cowey A, et al. **Exp Brain Res** 1989;75(3):631–8

Origin, distribution, and morphology of serotonergic afferents to the cat superior colliculus: a light and electron microscope immunocytochemistry study. Mize RR, et al. **Exp Brain Res** 1989;75(1):83–98

The GABA-immunoreactive neurons in the interlaminar regions of the cat lateral geniculate nucleus: light and electron microscopic observations. Montero VM. **Exp Brain Res** 1989;75(3):497–512

Direct projection from the supplementary eye field to the nucleus raphe interpositus. Shook BL, et al. **Exp Brain Res** 1988;73(1):215–8

Anatomic organization of basoventral and mediodorsal visual recipient prefrontal regions in the rhesus monkey. Barbas H. **J Comp Neurol** 1988 Oct 15;276(3):313–42

Regenerated optic fibers in goldfish reestablish a crude sectoral order in the visual pathway. Bernhardt R, et al. **J Comp Neurol** 1988 Nov 15;277(3):403–19

Axons added to the regenerated visual pathway of goldfish establish a normal fiber topography along the age-axis. Bernhardt R, et al. **J Comp Neurol** 1988 Nov 15; 277(3):420–9

Auditory pathway and auditory activation of primary visual targets in the blind mole rat (Spalax ehrenbergi): I. 2-deoxyglucose study of subcortical centers. Bronchti G, et al. **J Comp Neurol** 1989 Jun 8;284(2):253–74

Intrinsic connections of rat primary visual cortex: laminar organization of axonal projections. Burkhalter A. **J Comp Neurol** 1989 Jan 8;279(2):171–86

The accessory optic system of the wallaby, Setonix brachyurus: anatomy in normal animals and after early unilateral eye removal. Coleman LA, et al. **J Comp Neurol** 1988 Jul 15;273(3):359–76

Anuran accessory optic system: evidence for a dual organization. Fite KV, et al. **J Comp Neurol** 1988 Jul 15; 273(3):377–84

Projections of the dorsal and lateral terminal accessory optic nuclei and of the interstitial nucleus of the superior fasciculus (posterior fibers) in the rabbit and rat. Giolli RA, et al. **J Comp Neurol** 1988 Nov 22;277(4):608–20

Retinotopic organization of central optic projections in Rana pipiens. Montgomery N, et al. **J Comp Neurol** 1989 May 22;283(4):526–40

The ventral lateral geniculate nucleus in the cat: thalamic and commissural connections revealed by the use of WGA-HRP transport. Nakamura H, et al. **J Comp Neurol** 1988 Nov 22;277(4):509–28

Descending pathways to the spinal cord: II. Quantitative study of the tectospinal tract in 23 mammals. Nudo RJ, et al. **J Comp Neurol** 1989 Aug 1;286(1):96–119

Convergence and divergence in the afferent projections to cat area 17. Salin PA, et al. **J Comp Neurol** 1989 May 22; 283(4):486–512

Two distinct visual pathways through the superficial pretectum in a percomorph teleost. Striedter GF, et al. **J Comp Neurol** 1989 May 15;283(3):342–54

Developing retinotectal projection in larval goldfish. Stuermer CA, et al. **J Comp Neurol** 1989 Mar 22; 281(4):630–40

Organization of retinogeniculate projections in turtles of the genera Pseudemys and Chrysemys. Ulinski PS, et al. **J Comp Neurol** 1988 Oct 1;276(1):92–112

Visual projections to the pontine nuclei in the rabbit:

orthograde and retrograde tracing studies with WGA–HRP. Wells GR, et al. **J Comp Neurol** 1989 Jan 22;279(4):629–52

Noradrenergic sprouting and beta–adrenergic receptor binding in the lateral geniculate nucleus of rats after unilateral visual cortex ablation. Aurich M, et al. **J Hirnforsch** 1988;29(6):659–67

The structure of chicken ectostriatum. I. Golgi study. Tömböl T, et al. **J Hirnforsch** 1988;29(5):525–46

The corticopontine projection from area 20 and surrounding areas in the cat: terminal fields and distribution of cells of origin as compared to other visual cortical areas. Bjaalie JG. **Neuroscience** 1989;29(1):81–93

Visual pathways to the cerebellum: segregation in the pontine nuclei of terminal fields from different visual cortical areas in the cat. Bjaalie JG, et al. **Neuroscience** 1989;29(1):95–107

The origin and terminal arbors of individual uncrossed retinogeniculate fibers in rabbits. Jen LS, et al. **Neuroscience** 1989;29(2):479–93

Retinal projections in the red belly squirrel (Callosciurus erythraeus Roberti): an autoradiographic study. Wu CM, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Oct; 12(4):195–201

Anatomical organization of the superior colliculus in monkeys: corticotectal pathways for visual and visuomotor functions. Cusick CG. **Prog Brain Res** 1988;75:1–15 (75 ref.)

[A horseradish peroxidase study of the innervation of the internal eye structures in the cat showing the existence of a nonsynapsing direct parasympathetic pathway to the eye] Tanemoto Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1380–9 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Stability of neuron and glial number in the parabigeminal nucleus of the ageing mouse. Sturrock RR. **Acta Anat (Basel)** 1989;134(4):322–6

The cerebral and cerebellar connections of pretecto–thalamic and pretecto–olivary neurons in the anterior pretectal nucleus of the cat. Kitao Y, et al. **Brain Res** 1989 Apr 10;484(1–2):304–13

The allocation of nerve fibres to the anterior eye segment and peripheral ganglia of rats. I. The sensory innervation. ten Tusscher MP, et al. **Brain Res** 1989 Aug 7;494(1):95–104

The allocation of nerve fibres to the anterior eye segment and peripheral ganglia of rats. II. The sympathetic innervation. ten Tusscher MP, et al. **Brain Res** 1989 Aug 7;494(1):105–13

The mosaic of the uncrossed retinal projection in the superior colliculus of the cat. Illing RB. **Exp Brain Res** 1989; 74(3):641–4

Organization of astrocytes in the visual pathways of the goldfish: an immunohistochemical study. Levine RL. **J Comp Neurol** 1989 Jul 8;285(2):231–45

Morphology of single, physiologically identified retinogeniculate Y–cell axons in the cat following damage to visual cortex at birth. Weber AJ, et al. **J Comp Neurol** 1989 Apr 15;282(3):446–55

Quantitative analysis of visual receptive fields of neurons in nucleus of the optic tract and dorsal terminal nucleus of the accessory optic tract in macaque monkey. Hoffmann KP, et al. **J Neurophysiol** 1989 Aug;62(2):416–28

DRUG EFFECTS

Visual recognition memory deficits in methylmercury–exposed Macaca fascicularis infants. Gunderson VM, et al. **Neurotoxicol Teratol** 1988 Jul–Aug; 10(4):373–9

EMBRYOLOGY

Prenatal tetrodotoxin infusion blocks segregation of retinogeniculate afferents. Shatz CJ, et al. **Science** 1988 Oct 7;242(4875):87–9

ENZYMOLOGY

Type I protein kinase C isozyme in the visual–information–processing pathway of monkey brain. Huang FL, et al. **J Cell Biochem** 1989 Apr;39(4):401–10

GROWTH & DEVELOPMENT

Postnatal development of parvalbumin–, calbindin– and adult GABA–immunoreactivity in two visual nuclei of zebra finches. Braun K, et al. **Brain Res** 1988 Dec 20; 475(2):205–17

Afferent control of neuron numbers in the developing brain. Linden R, et al. **Brain Res Dev Brain Res** 1988 Dec 1; 44(2):291–5

An aberrant retinal pathway and visual centers in Xenopus tadpoles share a common cell surface molecule, A5 antigen. Fujisawa H, et al. **Dev Biol** 1989 Oct;135(2):231–40

Gradual appearance of a regulated retinotectal projection pattern in Xenopus laevis. O'Rourke NA, et al. **Dev Biol** 1989 Mar;132(1):251–65

Development of neurons in the ectostriatum of normal and monocularly deprived zebra finches: a quantitative Golgi study [published erratum appears in J Comp Neurol 1989 Feb 22;280(4):preceding index] Herrmann K, et al. **J Comp Neurol** 1988 Nov 1;277(1):141–54

Effects of intraocular tetrodotoxin on the development of the retinocollicular pathway in the Syrian hamster. Thompson I, et al. **J Comp Neurol** 1989 Apr 15; 282(3):371–88

Development of the mammalian visual system. Shatz CJ. **Mead Johnson Symp Perinat Dev Med** 1987;(29):19–26 (26 ref.)

METABOLISM

Catecholamine depletion produces irrepressible saccadic eye movements in normal humans. Tychsen L, et al. **Ann Neurol** 1989 May;25(5):444–9

Dopaminergic nigrotectal projection in the rat. Takada M, et al. **Brain Res** 1988 Aug 2;457(1):165–8

Developmental changes of serotonin and 5–hydroxyindoleacetic acid levels in specific regions of the pigeon central nervous system. Alesci R, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):151–6

Intraocular injections of tetrodotoxin reduce transiently expressed acetylcholinesterase activity in developing rat visual cortex. Robertson RT, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):69–84

Spatial relation of the acetylcholinesterase–rich domain to the visual topography in the feline superior colliculus. Illing RB. **Exp Brain Res** 1988;73(3):589–94

A long term study of axonal transport in the central visual system following eye enucleation in the adult cat. Pinilla–Morillo MJ, et al. **Exp Brain Res** 1989;76(2):463–6

Distribution of opiate receptors within visual structures of the cat brain. Walker JM, et al. **Exp Brain Res** 1988; 73(3):523–32

Glial fibrillary acidic protein (GFAP) from goldfish: its localisation in visual pathway. Nona SN, et al. **GLIA** 1989; 2(3):189–200

Effects of light– and dark–rearing on the postnatal development of GABA receptor sites in the chick optic lobe. Ríos H, et al. **Int J Dev Neurosci** 1987;5(4):319–25

Differences in transneuronal transport of horseradish peroxidase conjugated wheat germ agglutinin in the visual system: marmoset monkey and guinea pig compared. Spatz WB. **J Hirnforsch** 1989;30(3):375–84

Monoclonal antibodies differentiate neurofilament and glial filament proteins in the goldfish visual pathway: probes for monitoring neurite outgrowth from retinal explants. Jones PS, et al. **J Neurosci** 1989 Feb;9(2):454–65

Nicotinic acetylcholine receptor–like molecules in the retina, retinotectal pathway, and optic tectum of the frog. Sargent PB, et al. **J Neurosci** 1989 Feb;9(2):565–73

Vasoactive intestinal peptide (VIP)–like immunoreactive neurons located in the rat suprachiasmatic nucleus receive a direct retinal projection. Ibata Y, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):1–5

MICROBIOLOGY

Transsynaptic spread of varicella zoster virus through the visual system: a mechanism of viral dissemination in the central nervous system [published erratum appears in Hum Pathol 1989 Aug;20(8):820] Rostad SW, et al. **Hum Pathol** 1989 Feb;20(2):174–9

PATHOLOGY

The effect of traumatic brain injury on the visual system: a morphologic characterization of reactive axonal change. Cheng CL, et al. **J Neurotrauma** 1988;5(1):47–60

The retinopetal system in the rat. Labandeira–Garcia JL. **Neurosci Res** 1988 Oct;6(1):88–95

PHYSIOLOGY

Properties of visually driven neurons in cats pretectal region. Grigorian GG, et al. **Acta Neurobiol Exp (Warsz)** 1989; 49(2–3):93–104

Properties of the visually driven neurons of cat's hippocampal regions CA 1 and CA 3. Harutiunian–Kozak BA, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(1):1–11

The orienting ocular–following reflex in pretrigeminal cats with lesions of visual and oculomotor systems. Zernicki B. **Acta Neurobiol Exp (Warsz)** 1988;48(5):223–38

Effects of pretectal lesions in monkeys on two components of optokinetic nystagmus. Ikarashi T, et al. **Adv Otorhinolaryngol** 1988;41:98–103

Recombinant human lymphokines induce changes in visual evoked potentials in the rabbit. Brosnan CF, et al. **Ann N Y Acad Sci** 1988;540:571–2

Effect of temperature on fixation suppression ability in normal subjects: the need for temperature– and age–dependent normal values. Jacobson GP, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):369–72

Visual and eye movement functions of the posterior parietal cortex. Andersen RA. **Annu Rev Neurosci** 1989;12:377–403 (73 ref.)

The development of visual lateralization in the domestic chick. Andrew RJ. **Behav Brain Res** 1988 Aug;29(3):201–9 (26 ref.)

Forebrain commissures and visual memory: a new approach. Doty RW, et al. **Behav Brain Res** 1988 Aug;29(3):267–80

Developmental interactions between the corpus callosum and the visual system in cats. Elberger AJ. **Behav Brain Res** 1988 Sep 15;30(2):119–34

Visual fields of monocularly deprived macaque monkeys. Wilson JR, et al. **Behav Brain Res** 1989 May 1;33(1):13–22

Reversal learning in pigeons: effects of selective lesions of the Wulst. Shimizu T, et al. **Behav Neurosci** 1989 Apr; 103(2):262–72

The impact of anxiety on visual attention to central and peripheral events. Shapiro KL, et al. **Behav Res Ther** 1989; 27(4):345–51

Rules of retinotectal mapmaking. Easter SS Jr. **Bioessays** 1986 Oct;5(4):158–62 (22 ref.)

On the kinetic depth effect. Aloimonos J, et al. **Biol Cybern** 1989;60(6):445–55

Connection between internal representation of rigid transformation and cortical activity paths. Carlton EH. **Biol Cybern** 1988;59(6):419–29

The ethology of saccades: a non–cognitive model. Harris CM. **Biol Cybern** 1989;60(6):401–10 (37 ref.)

A fresh look at the temporal dynamics of binocular rivalry. Mueller TJ, et al. **Biol Cybern** 1989;61(3):223–32

Model of neural visual system with self–organizing cells. Nakano K, et al. **Biol Cybern** 1989;60(3):195–202

A regularized approach to color constancy. Rubner J, et al. **Biol Cybern** 1989;61(1):29–36

Amplification and latency in photoreceptors: integrated or separated phenomena? Schnakenberg J. **Biol Cybern** 1989; 60(6):421–30

Separable evoked retinal and cortical potentials from each major visual pathway: preliminary results. Berninger TA, et al. **Br J Ophthalmol** 1989 Jul;73(7):502–11

Cultured fetal tectal tissue grafted to the midbrain of newborn rats: morphology of grafts and innervation by host retinal and cortical axons. Harvey AR, et al. **Brain Res** 1988 Oct 11;462(1):89–98

Effects of bicuculline on signal detectability in lateral geniculate nucleus relay cells. Holdefer RN, et al. **Brain Res** 1989 May 29;488(1–2):341–7

Loss of entrainment and anatomical plasticity after lesions of the hamster retinohypothalamic tract. Johnson RF, et al. **Brain Res** 1988 Sep 20;460(2):297–313

Role of the nucleus of the optic tract of monkeys in optokinetic nystagmus and optokinetic after–nystagmus. Kato I, et al. **Brain Res** 1988 Nov 22;474(1):16–26

Effects of kainic acid lesions in rat ventral lateral geniculate nucleus upon field potentials of the superior colliculus: correlation between morphological and physiological observations. Nagata T, et al. **Brain Res** 1989 Mar 27; 483(1):50–60

Changes in premovement activity in primary somatosensory cortex differ when monkeys make hand movements in response to visual vs vibratory cues. Nelson RJ, et al. **Brain Res** 1989 Apr 10;484(1–2):43–56

Electrophysiological properties of ventromedial medulla neurons in response to noxious and non–noxious stimuli in the awake, freely moving rat: a single–unit study. Oliveras JL, et al. **Brain Res** 1989 May 1;486(1):1–14

Auditory and visual neurons in the cat's superior colliculus selective for the direction of apparent motion stimuli. Rauschecker JP, et al. **Brain Res** 1989 Jun 19;490(1):56–63

Timing and distribution of flash–evoked activity in the lateral geniculate nucleus of the alert monkey. Schroeder CE, et al. **Brain Res** 1989 Jan 16;477(1–2):183–95

Optic tract stimulation evokes GABAA but not GABAB IPSPs in the rat ventral lateral geniculate nucleus. Soltesz I, et al. **Brain Res** 1989 Feb 6;479(1):49–55

Loss of ocular dominance columns with maturity in the monkey, Callithrix jacchus. Spatz WB. **Brain Res** 1989 May 29;488(1–2):376–80

Turning responses evoked by stimulation of visuomotor pathways. Yeomans JS, et al. **Brain Res** 1988 Nov; 472(3):235–59 (324 ref.)

Morphological and functional studies of rat tectal transplants. Golden GT, et al. **Brain Res Bull** 1989 Feb;22(2):461–8

Efferent tectal cells of crucian carp: physiology and morphology. Niida A, et al. **Brain Res Bull** 1989 Feb; 22(2):389–98

Expanded retinofugal projections to the dorsal lateral geniculate nucleus and superior colliculus after unilateral enucleation in the wallaby Setonix brachyurus, quokka. Coleman LA, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):273–91

Shifting retinal maps in the development of the lateral geniculate nucleus. Jeffery G. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):187–96

Transplanted mesencephalic quail cells colonize selectively all primary visual nuclei of chick diencephalon: a study using heterotopic transplants. Martinez S, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):263–74

Neonatal enucleations reduce number, size, and acetylcholinesterase histochemical staining of neurons in the dorsal lateral geniculate nucleus of developing rats. Robertson RT, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):209–25

Noradrenergic control of ocular dominance plasticity in the visual cortex of dark–reared cats. Shirokawa T, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):303–8

Expression of glutamic acid decarboxylase mRNA in normal and monocularly deprived cat visual cortex. Benson DL, et al. **Brain Res Mol Brain Res** 1989 Jun;5(4):279–87

Telencephalic and pretectal modulation of the directional selectivity of accessory optic neurons in the pigeon. Hamassaki DE, et al. **Braz J Med Biol Res** 1988; 21(3):649–52

Cognitive processing of children with Williams syndrome. Crisco JJ, et al. **Dev Med Child Neurol** 1988 Oct;30(5):650–6

Visual evoked potentials of mildly mentally retarded and control children. Gasser T, et al.

Dev Med Child Neurol 1988 Oct;30(5):638–45
Dopamine agonist treatment of self-induced pattern-sensitive epilepsy. A case report. Clemens B. Epilepsy Res 1988 Sep–Oct;2(5):340–3
A comparison of the acute effect of single doses of vigabatrin and sodium valproate on photosensitivity in epileptic patients. Rimmer EM, et al. Epilepsy Res 1987 Nov–Dec; 1(6):339–46
Self-induction of seizures in photosensitive patients in a tropical country. Senanayake N. Epilepsy Res 1988 Jan–Feb;2(1):61–4
Epileptic discharges induced by intermittent light stimulation in photosensitive baboons: a current source density study. Silva-Barrat C, et al. Epilepsy Res 1988 Jan–Feb;2(1):1–8
The effects of reverse monocular deprivation in monkeys. II. Electrophysiological and anatomical studies. Crawford ML, et al. Exp Brain Res 1989;74(2):338–47
Interhemispheric transfer of visual learning in monkeys with intact optic chiasm. Eacott MJ, et al. Exp Brain Res 1989; 74(2):348–52
Flash evoked potentials in the ectostriatum of the zebra finch: a current source-density analysis. Engelage J, et al. Exp Brain Res 1989;74(3):563–72
Place memory and scene memory: effects of fornix transection in the monkey. Gaffan D, et al. Exp Brain Res 1989;74(1):202–12
Transplanted rat retinae do not project in a topographic fashion on the host tectum. Galli L, et al. Exp Brain Res 1989;74(2):427–30
Changing patterns of binocular visual connections in the intertectal system during development of the frog, Xenopus laevis. II. Abnormalities following early visual deprivation. Grant S, et al. Exp Brain Res 1989;75(1):117–32
Changing patterns of binocular visual connections in the intertectal system during development of the frog, Xenopus laevis. I. Normal maturational changes in response to changing binocular geometry. Grant S, et al. Exp Brain Res 1989;75(1):99–116
Response to rates of luminance change of sustained and transient cells in the cat lateral geniculate nucleus and optic tract. Heggelund P, et al. Exp Brain Res 1989;74(1):116–30
Visual cancellation of the torsional vestibulo-ocular reflex in humans. Leigh RJ, et al. Exp Brain Res 1989;75(2):221–6
A comparative analysis of the role of fornix and cingulate cortex in memory: rats. Markowska AL, et al. Exp Brain Res 1989;74(1):187–201
Effects of fornix transection and cingulate cortical ablation on spatial memory in rhesus monkeys. Murray EA, et al. Exp Brain Res 1989;74(1):173–86
Behavior of floccular Purkinje cells correlated with adaptation of horizontal optokinetic eye movement response in pigmented rabbits. Nagao S. Exp Brain Res 1988;73(3):489–97
Behavior evoked by electrical stimulation of the hamster superior colliculus. Northmore DP, et al. Exp Brain Res 1988;73(3):595–605
Vasopressin secretion: suppression after light and tone stimuli previously paired with footshocks in rats. Onaka T, et al. Exp Brain Res 1988;71(2):291–7
Influences of lesions of parietal cortex on visual spatial attention in humans. Peiersen SE, et al. Exp Brain Res 1989;76(2):267–80
Single-unit analysis of pattern-motion selective properties in the middle temporal visual area (MT). Rodman HR, et al. Exp Brain Res 1989;75(1):53–64
The principle of "conservation of total axonal arborizations": massive compensatory sprouting in the hamster subcortical visual system after early tectal lesions. Sabel BA, et al. Exp Brain Res 1988;73(3):505–18
A short-latency transition in saccade dynamics during square-wave tracking and its significance for the differentiation of visually-guided and predictive saccades. Smit AC, et al. Exp Brain Res 1989;76(1):64–74
Predictive behavior of optokinetic eye movements. Wyatt HJ, et al. Exp Brain Res 1988;73(3):615–26
Handedness, cerebral lateralization, and measures of "latent left-handedness". Bryden MP. Int J Neurosci 1989 Feb; 44(3–4):227–33
Visual half-field tests of lateralized letter presentations: differences between preliterate and literate children. Hugdahl K, et al. Int J Neurosci 1989 Feb;44(3–4):215–26
Evaluation of peripheral nerve conduction and central visual conduction in chronic alcoholics and in chronic alcoholics after prolonged abstention. Devetag F. Ital J Neurol Sci 1988 Dec;9(6):583–92
ON/OFF organization in the cat lateral geniculate nucleus: sublaminae vs. columns. Bowling DB, et al. J Comp Neurol 1989 May 1;283(1):161–8
Recovery from cortical blindness mediated by destruction of nontectotectal fibers in the commissure of the superior colliculus in the cat. Wallace SF, et al. J Comp Neurol 1989 Jun 15;284(3):429–50
Quantitative studies on ipsilateral type 2 retinotectotectal (IRTT) units in frogs: homologies with R3 ganglion cells. Garcia R, et al. J Comp Physiol [A] 1989 Jan;164(3):377–89
Ultrastructural and paraphenylene studies of degeneration in the primate visual system: degenerative remnants persist for much longer than expected. Johnson BM, et al. J Electron Microsc Tech 1988 Feb;8(2):179–83
Convergence of retinal W-cell and corticotectal input to cells of the cat superior colliculus. Berson DM. J Neurophysiol 1988 Dec;60(6):1861–73
Monocular and binocular response properties of cells in the striate-recipient zone of the cat's lateral posterior-pulvinar complex. Casanova C, et al. J Neurophysiol 1989 Aug; 62(2):544–57
Organization and properties of neurons in a visual area within the insular cortex of the cat. Hicks TP, et al. J Neurophysiol 1988 Aug;60(2):397–421
Multimicroelectrode investigation of monkey striate cortex: spike train correlations in the infragranular layers. Krüger J, et al. J Neurophysiol 1988 Aug;60(2):798–828
Response properties of dorsolateral pontine units during smooth pursuit in the rhesus macaque. Mustari MJ, et al. J Neurophysiol 1988 Aug;60(2):664–86
Relation of cortical areas MT and MST to pursuit eye movements. II. Differentiation of retinal from extraretinal inputs. Newsome WT, et al. J Neurophysiol 1988 Aug; 60(2):604–20
Postnatal development of glutamatergic, GABAergic, and cholinergic neurotransmitter phenotypes in the visual cortex, lateral geniculate nucleus, pulvinar, and superior colliculus in cats. Fosse VM, et al. J Neurosci 1989 Feb; 9(2):426–35
Local circuits and ocular dominance columns in monkey striate cortex. Katz LC, et al. J Neurosci 1989 Apr; 9(4):1389–99
Chromatic and achromatic vision of macaques: role of the P pathway. Merigan WH. J Neurosci 1989 Mar;9(3):776–83
Postnatal development of the spatial contrast sensitivity of X- and Y-cells in the kitten retinogeniculate pathway. Tootle JS, et al. J Neurosci 1989 Apr;9(4):1325–40
Motion processing by chromatic and achromatic visual pathways. Gorea A, et al. J Opt Soc Am [A] 1989 Apr; 6(4):590–602
Age-related changes in the central visual field for short-wavelength-sensitive pathways. Johnson CA, et al. J Opt Soc Am [A] 1988 Dec;5(12):2131–9
Monocular eye movement in the cat: its corticotectal pathway. Tamai Y, et al. Jpn J Physiol 1988;38(4):569–75
Intermittent disconjugate eye movements—a sign of raised intracranial pressure with brain stem compression. Fenton T, et al. Neuropediatrics 1989 Feb;20(1):30–2
Temporal structure of conjugated discharges of neocortical neuronal pairs in rabbits during calm alertness. Pavlova IV, et al. Neurosci Behav Physiol 1988 Nov–Dec; 18(6):462–9
Mathematical modeling of the reactivity of analyzer systems during the course of adaptation. Prisnyakov VF, et al. Neurosci Behav Physiol 1988 Nov–Dec;18(6):474–80
Lack of axon regeneration of isthmic neurons in juvenile Xenopus. McCart R, et al. Neurosci Lett 1988 Oct 5; 92(2):143–8
The rat accessory optic system: effects of cortical lesions on the directional selectivity of units within the medial terminal nucleus. Natal CL, et al. Neurosci Lett 1988 Aug 31;91(2):154–9
Responses of motor cortex neurons to visual stimulation in the alert monkey. Wannier TM, et al. Neurosci Lett 1989 Mar 13;98(1):63–8
Effects of unilateral dorsal and ventral striatal dopamine depletion on visual neglect in the rat: a neural and behavioural analysis. Carli M, et al. Neuroscience 1989; 29(2):309–27
The cellular mechanism of thalamic ponto-geniculo-occipital waves. Hu B, et al. Neuroscience 1989;31(1):25–35
Observations on the effect of an excitatory-inhibitory stimulus on the landing reaction of the fly, Calliphoridae. Negrin NS. Percept Mot Skills 1989 Jun;68(3 Pt 1):823–9
Psychophysical evidence for an extrastriate contribution to a pattern-selective motion aftereffect. Wenderoth P, et al. Perception 1988;17(1):81–91
The effects of scopolamine and methylscopolamine on visual and auditory discriminations in male and female Wistar rats. van Haaren F, et al. Pharmacol Biochem Behav 1989 Mar; 32(3):707–10
Dendritic current flow in relay cells and interneurons of the cat's lateral geniculate nucleus. Bloomfield SA, et al. Proc Natl Acad Sci U S A 1989 May;86(10):3911–4
Visual responses of neurons in somatosensory cortex of hamsters with experimentally induced retinal projections to somatosensory thalamus. Métin C, et al. Proc Natl Acad Sci U S A 1989 Jan;86(1):357–61
The visual insular cortex of the cat: organization, properties and modality specificity. Benedek G, et al. Prog Brain Res 1988;75:271–8 (15 ref.)
The transfer of visual information across the corpus callosum in cats, monkeys and humans: spatial and temporal properties. Berardi N, et al. Prog Brain Res 1988;75:181–5
Retinal and cortical inputs to cat superior colliculus: composition, convergence and laminar specificity. Berson DM. Prog Brain Res 1988;75:17–26 (40 ref.)
Role of visual areas 17 and 18 of the cat in pattern vision. Bisti S. Prog Brain Res 1988;75:173–9
Extrageniculo-striate visual mechanisms: compartmentalization of visual functions. Creutzfeldt OD. Prog Brain Res 1988;75:307–20 (80 ref.)
On the role of vestibular, visual and somatosensory information for dynamic postural control in humans. Diener HC, et al. Prog Brain Res 1988;76:253–62 (28 ref.)
Cortico-cortical callosal connectivity: evidence derived from electrophysiological studies. Leporé F, et al. Prog Brain Res 1988;75:187–95
Visual and vestibular control of locomotion in early and late sensory-deprived cats. Marchand AR, et al. Prog Brain Res 1988;76:229–38 (45 ref.)
Some extra-striate corticothalamic connections in macaque monkeys. Squatrito S, et al. Prog Brain Res 1988;75:279–92
Visual projections induced into auditory thalamus and cortex: implications for thalamic and cortical information processing. Sur M. Prog Brain Res 1988;75:129–36 (129 ref.)
Two cortical visual systems in Old World and New World primates. Weller RE. Prog Brain Res 1988;75:293–306 (85 ref.)
Sequential ideal-observer analysis of visual discriminations. Geisler WS. Psychol Rev 1989 Apr;96(2):267–314 (180 ref.)
Gating of retinal transmission by afferent eye position and movement signals. Lal R, et al. Science 1989 Jan 6; 243(4887):93–6
Experimentally induced visual projections into auditory thalamus and cortex. Sur M, et al. Science 1988 Dec 9; 242(4884):1437–41
Pharmacological analysis of cortical circuitry. Bolz J, et al. Trends Neurosci 1989 Aug;12(8):292–6
Visual course control in flies relies on neuronal computation of object and background motion. Egelhaaf M, et al. Trends Neurosci 1988 Aug;11(8):351–8 (47 ref.)
Neural prosthetic interfaces with the nervous system. Loeb GE. Trends Neurosci 1989 May;12(5):195–201
Correlated firing of retinal ganglion cells. Mastronarde DN. Trends Neurosci 1989 Feb;12(2):75–80 (34 ref.)

PHYSIOPATHOLOGY

The Glenn A. Fry award lecture: the "spatial grain" of the amblyopic visual system. Levi DM. Am J Optom Physiol Opt 1988 Oct;65(10):767–86 (58 ref.)
Abnormal pattern electroretinogram in Alzheimer's disease: evidence for retinal ganglion cell degeneration? Katz B, et al. Ann Neurol 1989 Aug;26(2):221–5
Abnormal pattern electroretinograms in patients with senile dementia of the Alzheimer type. Trick GL, et al. Ann Neurol 1989 Aug;26(2):226–31
Multisensory deficits in rats produced by acute exposure to cold swim stress. Leitner DS. Behav Neurosci 1989 Feb; 103(1):151–7
Spatial contrast sensitivity in unilateral cerebral ischaemic lesions involving the posterior visual pathway. Bulens C, et al. Brain 1989 Apr;112 (Pt 2):507–20
Balint's syndrome in Alzheimer's disease: specific disruption of the occipito-parietal visual pathway. Hof PR, et al. Brain Res 1989 Jul 31;493(2):368–75
Axonal transport and central visual projections of ganglion cells in congenitally blind chickens. Ulshafer RJ, et al. Curr Eye Res 1989 Mar;8(3):321–7
[Clinical aspects, differential diagnosis and evolution of visual epileptic seizures in children] Nalin A, et al. Neurophysiol Clin 1989 Mar;19(1):25–36 (Eng. Abstr.) (Fre)

RADIONUCLIDE IMAGING

Imaging visual function of the human brain. Marg E. Am J Optom Physiol Opt 1988 Oct;65(10):828–51 (119 ref.)

ULTRASTRUCTURE

Parabrachial innervation of the cat's dorsal lateral geniculate nucleus: an electron microscopic study using the tracer Phaseolus vulgaris leucoagglutinin (PHA-L). Cucchiaro JB, et al. J Neurosci 1988 Dec;8(12):4576–88

VISUAL PERCEPTION

see related
VISION

New tests for identifying hearing-impaired students with visual perceptual deficits: relationship between deficits and ability to comprehend sign language. Ratner V. Am Ann Deaf 1988 Dec;133(5):336–43
The performance of learning-disabled and normal young men on the test of visual-perceptual skills. Hung SS, et al. Am J Occup Ther 1987 Dec;41(12):790–7
S. Weir Mitchell's visual hallucinations as a grief reaction [letter] Schneck JM. Am J Psychiatry 1989 Mar;146(3):409
Visual neglect and extinction: a new test. Anton HA, et al. Arch Phys Med Rehabil 1988 Dec;69(12):1013–6
Detectability of emergency lights for underwater escape. Allan JR, et al. Aviat Space Environ Med 1989 Mar; 60(3):199–204
Role of telereceptive and interoceptive (taste) cues in ingestional neophobia in chicks (Gallus domesticus). Franchina JJ, et al. Behav Neural Biol 1989 Jul;52(1):116–22
Selective recall of surprising visual scenes. An experimental note on Seligman and Yellen's theory of dreams. van den Hout MA, et al. Behav Res Ther 1989;27(2):199–201
Visual localization of briefly presented peripheral targets. Mapp AP, et al. Biol Cybern 1989;60(4):261–5
Visual contrast detection by a single channel versus probability summation among channels. Mortensen U. Biol Cybern 1988;59(2):137–47
Solid perception mechanism by a shading pattern: spatial frequency components in a corrugated wave pattern. Nameda N. Biol Cybern 1988;59(2):121–30
Audiological rehabilitation of older people: visual and vibrotactile considerations. Oyer HJ, et al. Br J Audiol 1989 Feb;23(1):33–7 (26 ref.)

Issues of representation and limited capacity in the visuospatial sketchpad. Frick RW. **Br J Psychol** 1988 Aug; 79 (Pt 3):289–308 (50 ref.)

Pure agraphia and Gerstmann's syndrome as a visuospatial–language dissociation: an experimental case study. Levine DN, et al. **Brain Lang** 1988 Sep;35(1):172–96

Charles Bonnet syndrome [letter] Signer SF. **Can J Psychiatry** 1988 Aug;33(6):570, 573

Seeing and knowing: on the ascription of mental states to young children. Olson DR, et al. **Can J Psychol** 1987 Dec; 41(4):399–411

Expert—novice differences in perception: how expert does the expert have to be? Abernethy B. **Can J Sport Sci** 1989 Mar;14(1):27–30

Infant visual attention in the paired–comparison paradigm: test–retest and attention–performance relations. Colombo J, et al. **Child Dev** 1988 Oct;59(5):1198–210

Role of perceptual and conceptual similarity in category matching at age two years. Fenson L, et al. **Child Dev** 1988 Aug;59(4):897–907

Neonatal behavioral organization and visual processing at three months. Moss M, et al. **Child Dev** 1988 Oct; 59(5):1211–20

Individual differences in infants' information processing: reliability, stability, and prediction. Rose SA, et al. **Child Dev** 1988 Oct;59(5):1177–97

Visuospatial dysfunction in Parkinson's disease. Qin Z, et al. **Chin Med J [Engl]** 1988 May;101(5):311–4

The role of selective attention in the visuo–spatial memory of patients suffering from dementia of the Alzheimer type. Stuart–Hamilton IA, et al. **Compr Gerontol [B]** 1988 Dec; 2(3):129–34

Isolated visual hallucinations and the Charles Bonnet syndrome: a review of the literature and presentation of six cases. Gold K, et al. **Compr Psychiatry** 1989 Jan–Feb; 30(1):90–8 (54 ref.)

Attentional shift towards the rightmost stimuli in patients with left visual neglect. De Renzi E, et al. **Cortex** 1989 Jun;25(2):231–7

Early–life malnutrition impairs the performance of both young and adult rats on visual discrimination learning tasks. Castro CA, et al. **Dev Psychobiol** 1989 Jan;22(1):15–28

The effects of unilateral brain damage on visually guided reaching: hemispheric differences in the nature of the deficit. Fisk JD, et al. **Exp Brain Res** 1988;72(2):425–35

Complete pattern of ocular dominance stripes in V1 of a New World monkey, Cebus apella. Rosa MG, et al. **Exp Brain Res** 1988;72(3):645–8

Visual accommodation and target detection in the vicinity of a window post. Chong J, et al. **Hum Factors** 1989 Feb; 31(1):63–75

Codes and modalities in multiple resources: a success and a qualification. Wickens CD, et al. **Hum Factors** 1988 Oct; 30(5):599–616

Visual hallucination without the disturbance of consciousness in hypoglycaemic attack: report of an unusual case—consideration on psychic symptoms related to hypoglycaemia. Nakanishi T. **Igaku Kenkyu** 1988 Dec; 58(6):421–6

Treatment of visual perceptual deficits after stroke: four single case studies. Edmans JA, et al. **Int Disabil Stud** 1989; 11(1):25–33

Hypnosis and the recall of visually presented material: a failure to replicate Stager and Lundy. Lytle RA, et al. **Int J Clin Exp Hypn** 1988 Oct;36(4):327–35

Memory distortion in hypnosis. Sheehan PW. **Int J Clin Exp Hypn** 1988 Oct;36(4):296–311

An ophthalmologist's view of visual perception. Mousel DK. **Int Ophthalmol Clin** 1989 Spring;29(1):20–1 (14 ref.)

Visual perception as an opportunity for radiologic research. Hendee WR, et al. **Invest Radiol** 1989 Jul;24(7):575–6

The psychology of visual perception in Ptolemy's Optics. Smith AM. **Isis** 1988 Jun;79(297):189–207

The measurement of loudness in individual children and adults by absolute magnitude estimation and cross–modality matching. Collins AA, et al. **J Acoust Soc Am** 1989 May; 85(5):2012–21

Visual perception and learning: issues and answers. Solan HA, et al. **J Am Optom Assoc** 1989 Jun;60(6):457–60

Eyewitnesses show hypermnesia for details about a violent event. Scrivner E, et al. **J Appl Psychol** 1988 Aug; 73(3):371–7

Eyewitness accuracy and confidence: within– versus between–subjects correlations. Smith VL, et al. **J Appl Psychol** 1989 Apr;74(2):356–9

Visual memory processes in high–functioning individuals with autism. Ameli R, et al. **J Autism Dev Disord** 1988 Dec;18(4):601–15

Small lateral suprasylvian cortex lesions produce visual neglect and decreased visual activity in the superior colliculus. Hardy SC, et al. **J Comp Neurol** 1988 Jul 22; 273(4):527–42

Construct and predictive validities of the Perceptual Ability Test. Kramer GA, et al. **J Dent Educ** 1989 Feb;53(2):119–25

Early understanding of perception as a source of knowledge. Pillow BH. **J Exp Child Psychol** 1989 Feb;47(1):116–29

Reduction of demand characteristics in the measurement of certainty during modeled conservation. Robert M. **J Exp Child Psychol** 1989 Jun;47(3):451–66

Timing light and tone signals in pigeons. Roberts WA, et al. **J Exp Psychol [Anim Behav]** 1989 Jan;15(1):23–35

On the representation of events: a study of orientation, recall, and recognition. Hanson C, et al. **J Exp Psychol [Gen]** 1989 Jun;118(2):136–47

Visual masking and visual integration across saccadic eye movements. Irwin DE, et al. **J Exp Psychol [Gen]** 1988 Sep;117(3):276–87

Misinformation and memory: the creation of new memories. Loftus EF, et al. **J Exp Psychol [Gen]** 1989 Mar; 118(1):100–4

Mechanisms of imagery–perception interaction. Farah MJ. **J Exp Psychol [Hum Percept]** 1989 May;15(2):203–11

On cross–modal similarity: the perceptual structure of pitch, loudness, and brightness. Marks LE. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):586–602

Similarity relations among synesthetic stimuli and their attributes. Melara RD. **J Exp Psychol [Hum Percept]** 1989 May;15(2):212–31

Perceptual organization and precategorical acoustic storage. Frankish C. **J Exp Psychol [Learn Mem Cogn]** 1989 May; 15(3):469–79

Illusory conjunctions of forms, objects, and scenes during rapid serial visual search. Intraub H. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan;15(1):98–109

A bias interpretation of facilitation in perceptual identification. Ratcliff R, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 May;15(3):378–87

Modality specificity of implicit memory for new associations. Schacter DL, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan;15(1):3–12

Age differences in perceiving the direction of self–motion from optical flow. Warren WH Jr, et al. **J Gerontol** 1989 Sep;44(5):P147–53

Spatial organization of visual messages of the rabbit's cerebellar flocculus. II. Complex and simple spike responses of Purkinje cells. Graf W, et al. **J Neurophysiol** 1988 Dec; 60(6):2091–121

Spatial organization of visual messages of the rabbit's cerebellar flocculus. I. Typology of inferior olive neurons of the dorsal cap of Kooy. Leonard CS, et al. **J Neurophysiol** 1988 Dec;60(6):2073–90

The accessory optic system of rabbit. II. Spatial organization of direction selectivity. Simpson JI, et al. **J Neurophysiol** 1988 Dec;60(6):2055–72

The accessory optic system of rabbit. I. Basic visual response properties. Soodak RE, et al. **J Neurophysiol** 1988 Dec; 60(6):2037–54

Visual perception of moving parts. Rubin J, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2045–9

A quantitative assessment of the dependency of the visual temporal frame upon the cortical rhythm. Gho M, et al. **J Physiol (Paris)** 1988–89;83(2):95–101

Oscillatory responses in cat visual cortex exhibit inter–columnar synchronization which reflects global stimulus properties. Gray CM, et al. **Nature** 1989 Mar 23; 338(6213):334–7

Selective deficit of visual search in moving displays after extrastriate damage. McLeod P, et al. **Nature** 1989 Jun 8; 339(6224):466–7

Blindsight and insight in visuo–spatial neglect. Marshall JC, et al. **Nature** 1988 Dec 22–29;336(6201):766–7

Cortical physiology. Is grandmother an oscillation? [news] Stryker MP. **Nature** 1989 Mar 23;338(6213):297–8

The perception of moving plaids reveals two motion–processing stages. Welch L. **Nature** 1989 Feb 23; 337(6209):734–6

Size constancy and oculomotor modulation of perifoveal light–difference threshold. Pöppel E. **Naturwissenschaften** 1988 Sep;75(9):463–5

Visuoperceptual function in visual agnosia. Mendez MF. **Neurology** 1988 Nov;38(11):1754–9

The effect of bilateral visual cortex lesions on the development of eye movements and perception. Rizzo M, et al. **Neurology** 1989 Mar;39(3):406–13

Visuo–spatial processing in parkinsonians. Stelmach GE, et al. **Neuropsychologia** 1989;27(4):485–93

Discontinuities along lines: psychophysics and neurophysiology. Redies C. **Neurosci Biobehav Rev** 1989 Spring;13(1):17–22 (18 ref.)

Papers presented at the annual meeting of the Applied Vision Association—AVA '88. Oxford, 11–13 April 1988. Abstracts. **Ophthalmic Physiol Opt** 1988;8(4):466–70

Review of dichoptic color mixing. Hovis JK. **Optom Vis Sci** 1989 Mar;66(3):181–90 (47 ref.)

Enhancement of visual perception under conditions of short–term exposure to sensory isolation: a comparison of procedures for altering vigilance. Atkinson RP, et al. **Percept Mot Skills** 1988 Aug;67(1):243–52

Reliability of the Frostig Test of visual perception in a South African sample. Brand HJ. **Percept Mot Skills** 1989 Aug; 69(1):273–4

Effects of noise on a simple visual attentional task. Britton LA, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):875–8

Effect of feedback on estimates of visual sensitivity. Caldwell KA, et al. **Percept Mot Skills** 1988 Dec;67(3):893–4

An inquiry into the construct validity of the Vividness of Visual Imagery Questionnaire. Chara PJ Jr, et al. **Percept Mot Skills** 1989 Aug;69(1):127–36

Response latency measurements to visual cognitive tasks by normal hearing and deaf subjects. Chovan JD, et al. **Percept Mot Skills** 1988 Aug;67(1):179–84

Effect of protective eyewear on reaction time in the horizontal field of vision. Dawson ML, et al. **Percept Mot Skills** 1988 Aug;67(1):115–20

Geophysical variables and behavior: LIV. Zeitoun (Egypt) apparitions of the Virgin Mary as tectonic strain–induced luminosities. Derr JS, et al. **Percept Mot Skills** 1989 Feb; 68(1):123–8 (14 ref.)

Intermodal enhancement of stimulus localisation in infants born prematurely. Foreman N, et al. **Percept Mot Skills** 1989 Aug;69(1):43–50

Lights and lattices and where they are seen. Gillespie G. **Percept Mot Skills** 1989 Apr;68(2):487–504

Visual superiority effect in televised prevention of victimization programs for preschool children. Ginsburg HJ, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1179–82

Perceived numerosity as a function of item size. Ginsburg N, et al. **Percept Mot Skills** 1988 Oct;67(2):656–8

A cognitive–psychological perspective on Gillespie's "Lights and lattices": some relations among perception, imagery, and thought. Hunt H. **Percept Mot Skills** 1989 Apr; 68(2):631–41 (44 ref.)

Gifted children and Visual Aural Digit Span test performance. Knoff HM. **Percept Mot Skills** 1986 Apr; 62(2):391–6

Are visual–perceptual and visual–motor skills separate abilities? Leonard P, et al. **Percept Mot Skills** 1988 Oct; 67(2):423–6

Do redundant visual and auditory target variables facilitate control behavior? McCord DM. **Percept Mot Skills** 1989 Aug;69(1):275–82

Time perception: effects of sensory modality, ambient illumination and intervals. Meredith LS, et al. **Percept Mot Skills** 1989 Apr;68(2):373–4

Effects of up–down visual inversion on motor skills. Nakajima Y. **Percept Mot Skills** 1988 Oct;67(2):419–22

Effects of living in the up–down inverted visual world on apparent movement. Nakajima Y. **Percept Mot Skills** 1988 Aug;67(1):39–42

Association of preference for modality to learning of rhythm patterns in music. Persellin DC, et al. **Percept Mot Skills** 1988 Dec;67(3):825–6

Uncertainty and visual strategies in table tennis. Ripoll H. **Percept Mot Skills** 1989 Apr;68(2):507–12

Visual decodification of some facial expressions through microimitation. Ruggieri V, et al. **Percept Mot Skills** 1986 Apr;62(2):475–81

Performance of the vertical position in synchronized swimming as a function of skill, proprioceptive and visual feedback. Starkes JL, et al. **Percept Mot Skills** 1989 Aug; 69(1):225–6

Perception of a throwing action from point–light demonstrations. Williams JG. **Percept Mot Skills** 1988 Aug; 67(1):273–4

Free visual imagery sequences in reactors and nonreactors. Yanovski A, et al. **Percept Mot Skills** 1989 Feb; 68(1):299–306

Eleventh European Conference on Visual Perception. Bristol, England, 31 August–3 September 1988. Abstracts. **Perception** 1988;17(3):339–422

Anatomy of a flash. I. Two–peak masking and a temporal filling–in. Cogan AI. **Perception** 1989;18(2):243–56

Visual responses in adult cat visual cortex depend on N–methyl–D–aspartate receptors. Miller KD, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5183–7

Feature detection in human vision: a phase–dependent energy model. Morrone MC, et al. **Proc R Soc Lond [Biol]** 1988 Dec 22;235(1280):221–45

The effect of photoreceptor coupling and synapse nonlinearity on signal:noise ratio in early visual processing. Tessier–Lavigne M, et al. **Proc R Soc Lond [Biol]** 1988 Jul 22;234(1275):171–97

Effectiveness of progressive relaxation on test anxiety and visual perception. Schaer B, et al. **Psychol Rep** 1988 Oct; 63(2):511–8

Parallel integration of vision modules. Poggio T, et al. **Science** 1988 Oct 21;242(4877):436–40

Visual estimation accuracy. Moss JR, et al. **West J Nurs Res** 1989 Jun;11(3):352–60

[Motor impersistence and visual neglect in patients with brain lesions] Wang S. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Dec; 21(6):332–5, 384 (Eng. Abstr.) **(Chi)**

[Spatial orientation of attention: results and theories] Possamaï CA. **Can J Psychol** 1986 Dec;40(4):388–413 (90 ref.) (Eng. Abstr.) **(Fre)**

[Disturbance of binocular vision by wiper smears on windshields] Reiner J. **Klin Monatsbl Augenheilkd** 1989 Jan; 194(1):62–4 (Eng. Abstr.) **(Ger)**

[What do we know about the molecular mechanism of visual excitation?] Stieve H. **Naturwissenschaften** 1988 Jun; 75(6):288–96 (Eng. Abstr.) **(Ger)**

[Development of a systems theory of productive psychoses] Emrich HM. **Nervenarzt** 1988 Aug;59(8):456–64 (40 ref.) **(Ger)**

[Depersonalization experiences and the ability to take perspective] Habermas T. **Z Kinder Jugendpsychiatr** 1989 Mar;17(1):31–6 (25 ref.) **(Ger)**

[Max Wertheimer in Frankfurt—on the origin and development crisis of gestalt psychology. III. Further studies of motion perception (1929–1933)] Sarris V. **Z Psychol** 1988;196(1):27–61 (Eng. Abstr.) **(Ger)**

[Residual visual abilities in man after a lesion in the occipital lobe] Corbetta M, et al. **Ann Ist Super Sanita** 1988; 24(4):587–9 (Eng. Abstr.) **(Ita)**

[Studies on the visual function in the brain using EEG

moving topography] Tsutsui J. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):883–908 (Eng. Abstr.) (Jpn)

[Visual perception in normal children and adults II. Correlation between dominance of visual field and dominance of the eye] Ichiba N. **No To Hattatsu** 1989 May; 21(3):258–64 (Eng. Abstr.) (Jpn)

[Interhemispheric visual information transfer in callosal agenesis] Soma Y, et al. **No To Shinkei** 1989 Feb; 41(2):149–55 (Eng. Abstr.) (Jpn)

[Information processing in primary and higher visual cortices] Toyama K. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):674–82 (Jpn)

[Subjective compression of an object moving in the line of the rangefinder] Lebedev DG, et al. **Biofizika** 1988 Sep–Oct;33(5):872–5 (Eng. Abstr.) (Rus)

[Evaluation of time parameters of visual perception in the diagnosis of retrobulbar neuritis] Parkanskaia VI, et al. **Vestn Oftalmol** 1989 May–Jun;105(3):49–52 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Effects of chronic alcoholism on perception of hierarchical visual stimuli. Kramer JH, et al. **Alcoholism (NY)** 1989 Apr; 13(2):240–5

Visual contrast sensitivity in drug-induced Parkinsonism. Bulens C, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar; 52(3):341–5

Influence of auditory or visual warning on visual reaction time with variations of subjects' alertness. Letourneau JE, et al. **Percept Mot Skills** 1986 Apr;62(2):667–74

Delta-9-tetrahydrocannabinol impairs visual recognition memory but not discrimination learning in rhesus monkeys. Aigner TG. **Psychopharmacology (Berlin)** 1988;95(4):507–11

PHYSIOLOGY

Human thalamus and striopallidal neuronal responses related to visual perception constancy. Medvedev SV, et al. **Act Nerv Super (Praha)** 1988 Dec;30(4):317–9

Transient and sustained components in spatio–temporal visual perception. Nyman G, et al. **Act Nerv Super (Praha)** 1988 Dec;30(4):276–7

Properties of visually driven neurons in cats pretectal region. Grigorian GG, et al. **Acta Neurobiol Exp (Warsz)** 1989; 49(2–3):93–104

Apparent contrast of spatially and temporally sampled gratings. Radil T, et al. **Acta Neurobiol Exp (Warsz)** 1988; 48(6):283–93

Psychophysical and electrophysiological testing of retinal function. Macular recovery time and oscillatory potentials in normal subjects. Brinchmann–Hansen O, et al. **Acta Ophthalmol (Copenh)** 1989 Apr;67(2):119–26

Current concepts of the vestibular system reviewed: 2. Visual/vestibular interaction and spatial orientation. Cohen H, et al. **Am J Occup Ther** 1989 May;43(5):331–8 (69 ref.)

The effects of window shape and reticle presence on performance in a vertical alignment task. Rosenberg EL, et al. **Aviat Space Environ Med** 1989 Jun;60(6):543–9

Visual perception in high–speed low–altitude flight. Warren R. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A116–24

The development of visual lateralization in the domestic chick. Andrew RJ. **Behav Brain Res** 1988 Aug;29(3):201–9 (26 ref.)

Developmental interactions between the corpus callosum and the visual system in cats. Elberger AJ. **Behav Brain Res** 1988 Sep 15;30(2):119–34

Effects of excitotoxic lesions of the substantia innominata, ventral and dorsal globus pallidus on visual discrimination acquisition, performance and reversal in the rat. Evenden JL, et al. **Behav Brain Res** 1989 Mar 1;32(2):129–49

Intensity difference thresholds after lesions of ectostriatum in pigeons. Hodos W, et al. **Behav Brain Res** 1988 Sep 1;30(1):43–53

Functional implications of the anatomical organization of the callosal projections of visual areas V1 and V2 in the macaque monkey. Kennedy H, et al. **Behav Brain Res** 1988 Aug;29(3):225–36

Cortical lateralization of function in rats in a visual reaction time task. Mittleman G, et al. **Behav Brain Res** 1988 Nov 1;31(1):29–36

The hippocampal formation is necessary for rats to learn and remember configural discriminations. Rudy JW, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):97–109

Direct and transcallosal contribution to the cortical visual evoked response in rats. Silveira LC, et al. **Behav Brain Res** 1989 Jan 1;31(3):291–4

The acquisition of visual and auditory discriminations in male and female Wistar rats. van Haaren F, et al. **Behav Brain Res** 1989 Mar 1;32(2):191–5

Dissociation of visual and olfactory conditioning in the neostriatum of rats. Viaud MD, et al. **Behav Brain Res** 1989 Feb 1;32(1):31–42

Visual split brain and monocular deprivation in kittens: differentiation between the effects of disuse and of binocular competition in visual cortex cells. Yinon U, et al. **Behav Brain Res** 1988 Oct;30(3):273–8

A comparison of results from parameter estimations of impulse responses of the transient visual system. den Brinker AC. **Biol Cybern** 1989;61(2):139–51

A nonlinear systems approach to Fechner's paradox. Gregson RA. **Biol Cybern** 1989;61(2):129–38

Properties of human visual memory for block patterns. Inui T. **Biol Cybern** 1988;59(3):179–87

A fresh look at the temporal dynamics of binocular rivalry. Mueller TJ, et al. **Biol Cybern** 1989;61(3):223–32

Underlying neural computations for some visual phenomena. Oğuztöreli MN, et al. **Biol Cybern** 1988;60(2):89–106

Energy functions for early vision and analog networks. Yuille AL. **Biol Cybern** 1989;61(2):115–23

The determinants of the non–motoric CNV in a complex, variable foreperiod, information processing paradigm. Frost BG, et al. **Biol Psychol** 1988 Aug;27(1):1–21

Learning where to look: electrophysiological and behavioral indices of visual search in young and old subjects. Looren de Jong H, et al. **Biol Psychol** 1988 Jun;26(1–3):277–98

Latencies of visually responsive neurons in various regions of the rhesus monkey brain and their relation to human visual responses. Robinson DL, et al. **Biol Psychol** 1988 Jun;26(1–3):111–6 (23 ref.)

The late positive component of the ERP and adaptation–level theory. Ullsperger P, et al. **Biol Psychol** 1988 Jun; 26(1–3):299–306

Neck muscle vibration modifies the representation of visual motion and direction in man. Biguer B, et al. **Brain** 1988 Dec;111 (Pt 6):1405–24

Frontal and lateral visual system in birds. Frontal and lateral gaze. Maldonado PE, et al. **Brain Behav Evol** 1988; 32(1):57–62

Response latencies of visual cells in macaque areas V1, V2 and V5. Raiguel SE, et al. **Brain Res** 1989 Jul 24; 493(1):155–9

Direct in utero perception of light by the mammalian fetus. Weaver DR, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):151–5

The role of the posterior parietal cortex in coordinate transformations for visual–motor integration. Andersen RA, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):488–501

Computational studies of the extraction of visual spatial information from binocular and motion cues. Hildreth EC. **Can J Physiol Pharmacol** 1988 Apr;66(4):464–77 (116 ref.)

Representation of three–dimensional visual space in the cerebral cortex. Maunsell JH. **Can J Physiol Pharmacol** 1988 Apr;66(4):478–87 (95 ref.)

Physiological suppression demonstrated with the Aulhorn PDH. Breedijk MA, et al. **Doc Ophthalmol** 1988 Oct–Nov; 70(2–3):215–20

Abnormal development of visual function following intrauterine growth retardation. Stanley OH, et al. **Early Hum Dev** 1989 May;19(2):87–101

Human thalamic and pallidal neuronal responses to visual stimuli in a threshold recognition task. Bechtereva NP, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar; 72(3):240–9

Spatial gradients of visual attention: behavioral and electrophysiological evidence. Mangun GR, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov; 70(5):417–28

Same–different reaction time to stimuli presented simultaneously to separate cerebral hemispheres [published erratum appears in Ergonomics 1989 Mar;32(3):following 269] Simon JR, et al. **Ergonomics** 1988 Dec;31(12):1837–46

The role of short–term visuo–spatial memory in control of rapid multi–joint prehensive movements. Kohler J, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):189–95

Different anisotropies of movement direction in upper and lower layers of the cat's area 18 and their implications for global optic flow processing. Bauer R, et al. **Exp Brain Res** 1989;74(2):395–401

The effects of reverse monocular deprivation in monkeys. I. Psychophysical experiments. Harwerth RS, et al. **Exp Brain Res** 1989;74(2):327–47

Dark adaptation and increment threshold in rhesus monkey and man. Oehler R, et al. **Exp Brain Res** 1989;75(3):664–8

Length and width summation in human vision at different background levels. Vassilev A, et al. **Exp Brain Res** 1989; 74(2):421–6

Entropy reduction and decorrelation in visual coding by oriented neural receptive fields. Daugman JG. **IEEE Trans Biomed Eng** 1989 Jan;36(1):107–14

A neural network architecture for preattentive vision. Grossberg S, et al. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):65–84

Localized texture processing in vision: analysis and synthesis in the Gaborian space. Porat M, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):115–29

Computer vision: a source of models for biological visual processes? Rosenfeld A. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):93–6

A hexagonal orthogonal–oriented pyramid as a model of image representation in visual cortex. Watson AB, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):97–106

Current understanding of the human visual system and its application to perception of radiologic images. Ginsburg AP. **Invest Radiol** 1988 Nov;23(11):875–8 (26 ref.)

The sensorium of the migraineur. Amery WK, et al. **Ital J Neurol Sci** 1988 Dec;9(6):539–45

Cerebral laterality and depression: differences in perceptual asymmetry among diagnostic subtypes. Bruder GE, et al. **J Abnorm Psychol** 1989 May;98(2):177–86

Single–channel vibrotactile supplements to visual perception of intonation and stress. Bernstein LE, et al. **J Acoust Soc Am** 1989 Jan;85(1):397–405

Recovery from cortical blindness mediated by destruction of nontectotectal fibers in the commissure of the superior colliculus in the cat. Wallace SF, et al. **J Comp Neurol** 1989 Jun 15;284(3):429–50

Electrophysiological evidence for a shared representational medium for visual images and visual percepts. Farah MJ, et al. **J Exp Psychol [Gen]** 1988 Sep;117(3):248–57

Visual manifestations of occipital lobe infarction in three patients on a geriatric psychiatry unit. La Mancusa JC, et al. **J Geriatr Psychiatry Neurol** 1988 Oct–Dec;1(4):231–4

Visual, vestibular and somatosensory contributions to balance control in the older adult. Manchester D, et al. **J Gerontol** 1989 Jul;44(4):M118–27

Complete visual inversion in vertebrobasilar ischaemic disease [letter] Mehler MF. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1236–7

Postural sway during retinal image stabilisation. Rushton DN, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):376–81

Visual and mechanical control of postural and kinetic tremor in cerebellar system disorders. Sanes JN, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):934–43

Mnemonic coding of visual space in the monkey's dorsolateral prefrontal cortex. Funahashi S, et al. **J Neurophysiol** 1989 Feb;61(2):331–49

Binocular interactions in the cat's dorsal lateral geniculate nucleus. I. Spatial–frequency analysis of responses of X, Y, and W cells to nondominant–eye stimulation. Guido W, et al. **J Neurophysiol** 1989 Aug;62(2):526–43

Quantitative analysis of visual receptive fields of neurons in nucleus of the optic tract and dorsal terminal nucleus of the accessory optic tract in macaque monkey. Hoffmann KP, et al. **J Neurophysiol** 1989 Aug;62(2):416–28

Topographic and directional organization of visual motion inputs for the initiation of horizontal and vertical smooth–pursuit eye movements in monkeys. Lisberger SG, et al. **J Neurophysiol** 1989 Jan;61(1):173–85

Depth distribution of neuronal activity related to a visual reaction time task in the monkey prefrontal cortex. Sawaguchi T, et al. **J Neurophysiol** 1989 Feb;61(2):435–46

Deficits in response space following unilateral striatal dopamine depletion in the rat. Brown VJ, et al. **J Neurosci** 1989 Mar;9(3):983–9

Visual–visual associative learning and reward–association learning in monkeys: the role of the amygdala. Gaffan D, et al. **J Neurosci** 1989 Feb;9(2):558–64

Afferent basis of visual response properties in area MT of the macaque. I. Effects of striate cortex removal. Rodman HR, et al. **J Neurosci** 1989 Jun;9(6):2033–50

Age and visual search: expanding the useful field of view. Ball KK, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2210–9

How are spatial filters used in fovea and parafovea? Hess RF, et al. **J Opt Soc Am [A]** 1989 Feb;6(2):329–39

Mechanisms of contour curvature discrimination. Wilson HR, et al. **J Opt Soc Am [A]** 1989 Jan;6(1):106–15

Perceptual detectability of ocular accommodation microfluctuations. Winn B, et al. **J Opt Soc Am [A]** 1989 Mar;6(3):459–62

Binocular vision. Fisher NF. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct; 25(5):212–20

Brain asymmetries in face processing: a critical review of electrophysiological studies from a psychological point of view. Bruyer R. **J Physiol (Paris)** 1988;83(1):3–10 (30 ref.)

Evaluation of oculomotor response in relationship to sports performance. Harbin G, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):258–62

The deafferented visual cortex and interhemispheric relationships: a physiological approach. Yinon U, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):100–10 (28 ref.)

Involuntary grasping and groping responses to space–related visual stimuli. Magnani G, et al. **Mov Disord** 1987;2(1):9–23

Neuronal correlate of visual associative long–term memory in the primate temporal cortex. Miyashita Y. **Nature** 1988 Oct 27;335(6193):817–20

Event–related potentials in children with specific visual cognitive disability. Ciesielski KT. **Neuropsychologia** 1989; 27(3):303–13

Facilitative effects of cross–modality training on recovery of a conditioned avoidance response following striate cortex ablations in the rat. Delay ER. **Neuropsychologia** 1988;26(5):661–71

Parietal lobe mechanisms of spatial attention: modality–specific or supramodal? Farah MJ, et al. **Neuropsychologia** 1989;27(4):461–70

Regional cerebral blood flow patterns in visual imagery. Goldenberg G, et al. **Neuropsychologia** 1989;27(5):641–64

Visuospatial and other "right–hemispheric" functions after long recovery periods in left–hemispherectomized subjects. Ogden JA. **Neuropsychologia** 1989;27(6):765–76

Anomalies in the laterality of omissions in unilateral left visual neglect: implications for an attentional theory of neglect. Robertson I. **Neuropsychologia** 1989;27(2):157–65

Psychophysiological characteristics of visual perception of schizophrenic patients with polarization of the occipital and frontal cortex. Korsakov IA. **Neurosci Behav Physiol** 1989 Mar–Apr;19(2):135–8

Effect of defocus on blur thresholds and on thresholds of perceived change in blur: comparison of source and observer methods. Jacobs RJ, et al. **Optom Vis Sci** 1989 Aug;66(8):545–53

Relation between tonic accommodation and visual perceptual skills development in 6– to 12–year–old children. Rosner

J, et al. **Optom Vis Sci** 1989 Aug;66(8):526–9
Effect of short lateralized signals on arousal versus activation on tasks requiring visuospatial or elementary semantic stimulus processing. De Brabander B.
Percept Mot Skills 1988 Dec;67(3):783–8
Abnormal optokinetic and perceptual span parameters in cerebellar–vestibular dysfunction and learning disabilities or dyslexia [published erratum appears in Percept Mot Skills 1989 Feb;68(1):2] Levinson HN.
Percept Mot Skills 1989 Feb;68(1):35–54
Aesthetic preference and lateral dominance. Valentino MA, et al. **Percept Mot Skills** 1988 Oct;67(2):555–61
Age-related changes in contrast sensitivity in central and peripheral retina. Crassini B, et al. **Perception** 1988; 17(3):315–32 (30 ref.)
An astable multivibrator model of binocular rivalry. Lehky SR. **Perception** 1988;17(2):215–28 (40 ref.)
A simple analogue teaching device for demonstrating visual–receptive–field properties. Moulden B, et al.
Perception 1988;17(6):819–25
Contribution of amygdalar and lateral hypothalamic neurons to visual information processing of food and nonfood in monkey. Ono T, et al. **Physiol Behav** 1989 Feb;45(2):411–21
Behavioral asymmetries in visual learning of young chickens. Vallortigara G. **Physiol Behav** 1989 Apr;45(4):797–800
A neural theory of binocular rivalry. Blake R.
Psychol Rev 1989 Jan;96(1):145–67 (110 ref.)
The discovery of the visual cortex. Glickstein M. **Sci Am** 1988 Sep;259(3):118–27
Sensory function in the harbor seal. Renouf D. **Sci Am** 1989 Apr;260(4):90–5 (5 ref.)
Neuronal correlates of subjective visual perception. Logothetis NK, et al. **Science** 1989 Aug 18;245(4919):761–3
Neural integration of information specifying structure from stereopsis and motion. Nawrot M, et al. **Science** 1989 May 12;244(4905):716–8
Binocular unmasking: an analog to binaural unmasking? Schneider B, et al. **Science** 1989 Mar 17;243(4897):1479–81
Ocular responses to linear motion are inversely proportional to viewing distance. Schwarz U, et al. **Science** 1989 Sep 22;245(4924):1394–6
Principles of visual motion detection. Borst A, et al.
Trends Neurosci 1989 Aug;12(8):297–306 (73 ref.)
From enzymes to visual perception: a bridge too far? Martin KA. **Trends Neurosci** 1988 Sep;11(9):380–7 (105 ref.)
Two pulses seen as three flashes: a superposition analysis. Bowen RW. **Vision Res** 1989;29(4):409–17
The role of eye movements and masking in monocular rivalry. Bradley A, et al. **Vision Res** 1988;28(10):1129–37
Evidence for edge and bar detectors in human vision. Burr DC, et al. **Vision Res** 1989;29(4):419–31
Spatial frequency and duration effects on the tilt illusion and orientation acuity. Calvert JE, et al. **Vision Res** 1988; 28(9):1051–9
Discrimination of spatial phase in central and peripheral vision. Morrone MC, et al. **Vision Res** 1989;29(4):433–45
Orientation discrimination as a function of stimulus eccentricity and size: nasal/temporal retinal asymmetry. Paradiso MA, et al. **Vision Res** 1988;28(8):867–74
Preferences and asymmetries in saccadic responses to delayed bihemifield stimuli. Zeevi YY, et al. **Vision Res** 1988; 28(10):1145–55
[Caffeine and EEG mapping: effects of visuo–spatial task in healthy volunteers] Etevenon P, et al.
Neurophysiol Clin 1988 Aug;18(4):355–67 (Eng. Abstr.) (Fre)
[The Charles Bonnet syndrome] Podoll K, et al.
Fortschr Neurol Psychiatr 1989 Feb;57(2):43–60 (67 ref.) (Eng. Abstr.) (Ger)
[Visual perception in normal children and adults I. Developmental changes in dominance of visual field in normal children] Ichiba N. **No To Hattatsu** 1989 May; 21(3):250–7 (Eng. Abstr.) (Jpn)
[The role of visual attention during the acquisition of differentiation in the northern fur seal] Dashevskii BA, et al. **Biol Nauki** 1989;(3):27–9 (Eng. Abstr.) (Rus)
[Characters used by the cerebral hemispheres during recognition of geometric images] Meerson IaA, et al.
Fiziol Cheloveka 1989 Mar–Apr;15(2):99–104 (Rus)
[Lateralization of the visual–spatial function in health and in chronic alcoholic intoxication] Reshchikova TN, et al.
Fiziol Cheloveka 1988 Sep–Oct;14(5):790–6 (Rus)
[Neuropsychological differentiation of specific dyslexia in children] Glezerman TB, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):63–8 (Eng. Abstr.) (Rus)
[Correlation of the visual and spatially oriented behaviors of white rats following the elaboration of a visual differentiation habit] Grigorian GE, et al.
Zh Vyssh Nerv Deiat 1989 Jan–Feb;39(1):66–71 (Eng. Abstr.) (Rus)
[Interhemispheric asymmetry of the spatial organization of human cortical potentials during the perception of emotional and indifferent images] Iakovenko IA.
Zh Vyssh Nerv Deiat 1989 Mar–Apr;39(2):221–7 (Eng. Abstr.) (Rus)
[Hemispheric lateralization of the visual–spatial function in chronic alcoholic intoxication in humans] Ivashchenko OI, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):419–26 (Eng. Abstr.) (Rus)
[The interrelationship of the autonomic, EEG parameters and of the reaction time in the recognition of a significant light stimulus by a human operator] Kotrovskaia TI.
Zh Vyssh Nerv Deiat 1989 Mar–Apr;39(2):362–5 (Rus)
[Amplitude–temporal parameters of the evoked potentials of the visual and motor areas in the visual perception and mental representation of an image] Puchinskaia LM, et al.
Zh Vyssh Nerv Deiat 1988 Sep–Oct;38(5):812–20 (Eng. Abstr.) (Rus)
[Evoked potentials and the conditioned negative wave in the comparison of sequentially presented visual stimuli] Savchenko EI, et al. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug; 38(4):751–3 (Rus)
[Changes in EEG rhythms during verbal and visual–image thinking] Shcheblanova EI. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):627–32 (Eng. Abstr.) (Rus)
[Hemispheric participation in the shaping of spatial–motor asymmetry in visual recognition in rats] Udalova GP, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):467–74 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Effects of ethiofos (WR–2721) and radiation on monkey visual discrimination performance. Bogo V, et al.
Pharmacol Ther 1988;39(1–3):93–5

VISUAL STIMULATION see **PHOTIC STIMULATION**

VITAL CAPACITY

Pulmonary function is influenced by heavy alcohol consumption. Lange P, et al. **Am Rev Respir Dis** 1988 May; 137(5):1119–23
Effect of effort versus volume on forced expiratory flow measurement. Park SS. **Am Rev Respir Dis** 1988 Oct; 138(4):1002–5
Ventilatory function in Malay female workers in Singapore. Chia SE, et al. **Ann Acad Med Singapore** 1988 Jul; 17(3):443–6
Using phonation time to estimate vital capacity in amyotrophic lateral sclerosis. Hillel AD, et al.
Arch Phys Med Rehabil 1989 Aug;70(8):618–20
Cigarettes and caffeine [letter] Lima DR, et al. **Chest** 1989 Jan;95(1):255–6
Transabdominal or retroperitoneal approach to the aorto–iliac tract: a pulmonary function study. Nevelsteen A, et al. **Eur J Vasc Surg** 1988 Aug;2(4):229–32
Pulmonary function tests after different techniques for coronary artery bypass surgery. Saphenous vein versus single versus double internal mammary artery grafts. Ferdinande PG, et al. **Intensive Care Med** 1988;14(6):623–7
Hypercapnia in relation to pulmonary function in Duchenne muscular dystrophy. Canny GJ, et al. **Pediatr Pulmonol** 1989;6(3):169–71
Pulmonary function test study and after spinal fusion in young idiopathic scoliosis. Gagnon S, et al. **Spine** 1989 May;14(5):486–90
[Indicators of physical development of younger schoolchildren in Nagorny Karabakh] Agasian AB, et al.
Gig Sanit 1988 Jul;(7):87–8 (Rus)
[Comparative evaluation of the pulmonary vital capacity of schoolchildren in the cities of Tyumen and Vladimir] Anchugin BA. **Pediatriia** 1988;(11):109 (Rus)
[The effect of trigeminal zone irritation on parameters of forced vital capacity in humans] Javorka K, et al.
Bratisl Lek Listy 1989 Jan;90(1):32–6 (Eng. Abstr.) (Slo)

DRUG EFFECTS

[Timolol, betaxolol and befunolol in the treatment of glaucoma. Study of their bronchopulmonary effects] Pecori–Giraldi J, et al. **Fortschr Ophthalmol** 1988; 85(3):235–8 (Eng. Abstr.) (Ger)

VITAL CAPACITY, TIMED see **FORCED EXPIRATORY VOLUME**

VITAL STATISTICS

see related
BIOMETRY
POPULATION GROWTH
RECORDS
SEX RATIO

Vital records in the development of injury control research. Holden JA, et al. **Ann Emerg Med** 1989 Mar;18(3):286–92
Annual statistical review. Pharoah PO, et al.
Arch Dis Child 1988 Dec;63(12):1511–5
World health situation and trend assessment from 1948 to 1988. Uemura K. **Bull WHO** 1988;66(6):679–87
Health data needs. Burke AM. **Del Med J** 1989 Jul; 61(7):365–6
Government statistics: the conflict between research and privacy. Choldin HM. **Demography** 1988 Feb;25(1):145–54
Rural maternal, child, and adolescent health. McManus MA, et al. **Health Serv Res** 1989 Feb;23(6):807–48 (28 ref.)
Background tables on demographic characteristics, health status, and health services utilization. Norton CH, et al.
Health Serv Res 1989 Feb;23(6):725–56
Revision of the vital records forms for Michigan. Redesigned forms to be used in 1989. Van Amburg G. **Mich Med** 1988 Nov;87(11):717–20
Mortality data from the National Vital Statistics System.
MMWR 1989 Mar 3;38(8):118–23
The validity of Maori mortality statistics. Graham P, et al.
N Z Med J 1989 Mar 22;102(864):124–6
Sources of documented age in the Goroka area. Collins AM.
P N G Med J 1988 Sep;31(3):185–90
Annual summary of vital statistics—1987. Wegman ME.
Pediatrics 1988 Dec;82(6):817–27
Discrepancies in birth weights between hospital records and health department data for low birth weight infants in New York City. Ferrara A, et al. **Public Health Rep** 1988 Sep–Oct;103(5):472–8
Ecuador 1987: results from the demographic and health survey. **Stud Fam Plann** 1989 Mar–Apr;20(2):117–21
Data systems of the National Center for Health Statistics. Kovar MG. **Vital Health Stat** [1] 1989 Mar;(23):1–21
Physical functioning of the aged. Fulton JP, et al.
Vital Health Stat [10] 1989 Mar;(167):1–48
Office visits to psychiatrists. Gardocki GJ.
Vital Health Stat [13] 1988 May;(94):1–40
Detailed diagnoses and procedures for patients discharged from short–stay hospitals. Graham D.
Vital Health Stat [13] 1988 May;(95):1–400
[Percentiles of newborns in the DDR—1985. 1.Percentiles of birth weight and birth height] Voigt M, et al.
Zentralbl Gynakol 1988;110(15):927–43 (Eng. Abstr.) (Ger)
[Improving the annual statistical records] Grigor'ev FG.
Sov Zdravookhr 1989;(2):31–6 (Rus)
[Occupation in the analysis of mortality based on vital statistics: the English example] de Sanjosé Llongueras S, et al. **Gac Sanit** 1989 Jan–Feb;3(10):333–8 (38 ref.) (Spa)
[Vital statistics: mechanisms of improvement] Molina–Medina H, et al. **Salud Publica Mex** 1989 Mar–Apr;31(2):192–5 (Eng. Abstr.) (Spa)

STANDARDS

[Evaluation of the registration of congenital abnormalities in Belgian civilian vital statistics] De Wals P, et al.
Arch Belg 1987;45(11–12):441–51 (Eng. Abstr.) (Fre)

VITALISM

Vitalism and organicism in the philosophy of R.–T.–H. Laennec. Duffin J. **Bull Hist Med** 1988 Winter;62(4):525–45

VITALLIUM see under **CHROMIUM ALLOYS**

VITAMIN A

Safety of vitamin A. Bendich A, et al. **Am J Clin Nutr** 1989 Feb;49(2):358–71 (105 ref.)
Vitamin A and glutathione–mediated free radical damage: competing reactions with polyunsaturated fatty acids and vitamin C. D'Aquino M, et al.
Biochem Biophys Res Commun 1989 Jun 30;161(3):1199–203
Dietary vitamins A and C and lung cancer risk in Louisiana. Fontham ET, et al. **Cancer** 1988 Nov 15;62(10):2267–73

ADMINISTRATION & DOSAGE

Relationship of vitamin A and vitamin E intake to fasting plasma retinol, retinol–binding protein, retinyl esters, carotene, alpha–tocopherol, and cholesterol among elderly people and young adults: increased plasma retinyl esters among vitamin A–supplement users. Krasinski SD, et al.
Am J Clin Nutr 1989 Jan;49(1):112–20
Vitamin A–fortified monosodium glutamate and vitamin A status: a controlled field trial. Muhilal, et al.
Am J Clin Nutr 1988 Nov;48(5):1265–70
Vitamin A–fortified monosodium glutamate and health, growth, and survival of children: a controlled field trial. Muhilal, et al. **Am J Clin Nutr** 1988 Nov;48(5):1271–6
Vitamin A supplementation and growth: a randomized community trial. West KP Jr, et al. **Am J Clin Nutr** 1988 Nov;48(5):1257–64
Determinants of community–based coverage: periodic vitamin A supplementation. Aceh Study Group. Tarwotjo I, et al. **Am J Public Health** 1989 Jul;79(7):847–9
Vitamin A–deficient diet and its effect on the body weight of dehydroretinol–rich freshwater fish. Goswami UC, et al. **Int J Vitam Nutr Res** 1988;58(3):267–75
Effect of supplementation with vitamin A or plant carotenes on plasma retinol levels among young Egyptian males. Hussein L, et al. **Int J Vitam Nutr Res** 1989;59(2):229–33
Antigen–specific immune response impairment in the chick as influenced by dietary vitamin A. Friedman A, et al.
J Nutr 1989 May;119(5):790–5
Parenteral vitamins A, D, and E for premature infants. Etches PC, et al. **J Perinatol** 1988 Spring;8(2):93–5 (34 ref.)
Effects of prototypic PCBs on benzo[a]pyrene mutagenic activity related to vitamin A intake. Grolier P, et al.
Mutat Res 1989 Mar;211(1):139–45
Vitamin A–induced suppression/enhancement of protein glycosylation and neurulation. Ersahin Y, et al.
Pediatr Neurosci 1987;13(6):293–303
Dietary vitamin A, beta–carotene and risk of epidermoid lung cancer among Chinese males. Ho SC, et al.
Singapore Med J 1988 Jun;29(3):213–8
[A combination of vitamins A and E in the therapy of moniletrix] Bardazzi F, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):591–2 (Ita)
[Differentiating effect of the oral administration of vitamin D and vitamin A in acute myelocytic leukemia after BHAC–DMP therapy] Yamane T, et al.
Rinsho Ketsueki 1988 May;29(5):765–8 (Eng. Abstr.) (Jpn)

[The role of ascorbic acid, tocopherol and retinol in the processes of carcinogenesis] Wartanowicz M, et al. **Wiad Lek** 1988 Apr 15;41(8):507–13 (36 ref.) (Eng. Abstr.) (Pol)

[Changes in hepatic fibrosis induced by carbon tetrachloride, after previous administration of vitamin A] Chehter L, et al. **Rev Paul Med** 1988 Jul–Aug;106(4):185–9 (Eng. Abstr.) (Por)

[Prevention of chronic esophageal diseases with vitamins] Khodzhaeva MKh. **Ter Arkh** 1989;61(2):113–5 (Rus)

[Effect of retinol, tocopherol and ascorbic acid on vitamin metabolism in experimental chromium poisoning and controlled diet] Karimov TK, et al. **Vopr Pitan** 1988 Jul–Aug;(4):48–51 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Vitamin A deficiency [letter] Rao MV. **Indian Pediatr** 1988 Feb;25(2):216

Vitamin–A–induced hypercalcemia: response to corticosteroids. Bergman SM, et al. **Nephron** 1988; 50(4):362–4

ANALOGS & DERIVATIVES

Relationship of vitamin A and vitamin E intake to fasting plasma retinol, retinol–binding protein, retinyl esters, carotene, alpha–tocopherol, and cholesterol among elderly people and young adults: increased plasma retinyl esters among vitamin A–supplement users. Krasinski SD, et al. **Am J Clin Nutr** 1989 Jan;49(1):112–20

Inhibition by retinoids of in vitro invasive ability of human lung carcinoma cells. Fazely F, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1387–91

Plasma retinol levels and side effects following high–dose retinyl acetate in breast cancer patients. Resasco M, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1319–23

Cholate effects on all–trans–retinyl palmitate hydrolysis in tissue homogenates: solubilization of multiple kidney membrane hydrolases. Napoli JL, et al. **Arch Biochem Biophys** 1989 Oct;274(1):192–9

Comparative distribution, pharmacokinetics and placental permeabilities of all–trans–retinoic acid, 13–cis–retinoic acid, all–trans–4–oxo–retinoic acid, retinyl acetate and 9–cis–retinal in hamsters. Howard WB, et al. **Arch Toxicol** 1989;63(2):112–20

Retinyl acetate–induced arthritis in C3H–A(vy) mice. Boden SD, et al. **Arthritis Rheum** 1989 May;32(5):625–33

Vaginal hydrolysis of retinyl acetate: increase in plasma retinol and retinol binding protein in women with cervical dysplasias. Palan PR, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):282–90

Presence of a cellular retinylphosphate binding protein in rat liver. Fayet Y, et al. **Biochimie** 1988 Jun;70(6):735–42

Influence of vitamin A palmitate on the growth of regenerating Triturus alpestris forelimbs. Koussoulakos S, et al. **Biol Struct Morphog** 1988;1(3):124–9

Retinoids in the bovine pineal gland. Phillips TS, et al. **Brain Res Bull** 1989 Feb;22(2):259–61

Protein–energy malnutrition increases teratogenicity of hypervitaminosis A in rats. Malheiros LR, et al. **Braz J Med Biol Res** 1988;21(3):659–62

Inhibition by retinoids of platelet growth factor–dependent stimulation of DNA synthesis and cell division in density–arrested C3H 10T1/2 fibroblasts. Mordan LJ. **Cancer Res** 1989 Feb 15;49(4):906–9

Reduction of immunosuppression in UV–irradiated mice by dietary retinyl palmitate plus canthaxanthin. Gensler HL. **Carcinogenesis** 1989 Jan;10(1):203–7

Immunohistochemistry of vacuoles occurring in rat hepatocytes after retinol administration. Kudo S. **Cell Tissue Res** 1989 Aug;257(2):263–8

The effect of retinoids on dendritic cell function. Bedford PA, et al. **Clin Exp Immunol** 1989 Mar;75(3):481–6

Vitamin A is stored as fatty acyl esters of retinol in the lacrimal gland. Ubels JL, et al. **Curr Eye Res** 1988 Oct; 7(10):1009–16

The disposition and toxicology of retinyl methyl ether in rats dosed orally. McPhillips DM, et al. **Drug Metab Dispos** 1988 Sep–Oct;16(5):683–9

Growth, morphology, function, and morphogenetic properties of rat renal glomerular epithelial cells in vitro: effects of retinyl acetate. Yamada M, et al. **Eur J Cell Biol** 1989 Aug;49(2):252–8

Studies on the testicular effects of vitamin A palmitate in the Sprague–Dawley rat. Bosakowski T, et al. **Food Chem Toxicol** 1988 Sep;26(9):767–73

Modification of retinyl acetate toxicity in rats by coadministration of menhaden oil. Lindamood C 3d, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):567–78

Effect of retinyl acetate on cAMP–dependent protein kinase in transformed mouse 10T1/2 cells. Hohmann P. **Int J Cancer** 1989 May 15;43(5):863–9

Vitamin A–deficient diet and its effect on the body weight of dehydroretinol–rich freshwater fish. Goswami UC, et al. **Int J Vitam Nutr Res** 1988;58(3):267–75

Retinyl ester synthesis by isolated adult rabbit lung type II cells. Zachman RD, et al. **Int J Vitam Nutr Res** 1988; 58(2):161–5

Sensitive analysis of retinyl esters by isocratic adsorption chromatography. Biesalski HK, et al. **J Clin Chem Clin Biochem** 1989 Feb;27(2):65–74

A rapid and sensitive separation of retinol and retinyl palmitate using a small, disposable bonded–phase column: kinetic applications. O'Connor CJ, et al. **J Lipid Res** 1988 Dec;29(12):1693–7

The effect of dietary fatty acid composition on liver retinyl ester (vitamin A ester) composition in the rat. Furr HC, et al. **J Nutr** 1989 Apr;119(4):581–5

The fluorescence quantum yield of vitamin A2. Tsin AT, et al. **Life Sci** 1988;43(17):1379–84

Effect of retinyl palmitate and 13–cis retinoic acid on immune functions in immunodeficient, nude mice. Watson RR, et al. **Life Sci** 1989;44(6):387–95

Effects of excess vitamin A and canthaxanthin on salivary gland tumors. Alam BS, et al. **Nutr Cancer** 1988; 11(4):233–41

Protective effects of retinyl palmitate on streptozotocin– and alloxan–induced beta cell toxicity and diabetes in the rat. Chertow BS, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jan;63(1):27–44

Formation of visual pigment chromophores during the development of Xenopus laevis. Azuma M, et al. **Vision Res** 1988;28(9):959–64

Retinyl and 3–dehydroretinyl esters in the crayfish retina. Suzuki T, et al. **Vision Res** 1988;28(10):1061–70

Low doses of recombinant interleukin–2 enhance delayed type hypersensitivity to PPD in mice infected with Mycobacterium bovis–BCG and fed a diet supplemented with vitamin A acetate. Ferraro F, et al. **Z Erkr Atmungsorgane** 1988;171(1):45–9

[Hepatitis with auto–immunization probably caused by Plethoryl (letter)] Causse X, et al. **Gastroenterol Clin Biol** 1989 May;13(5):526–7 (Fre)

[Probable side effects caused by plethoryl. Common acute hepatitis, anicteric hepatitis, cirrhosis due to hypervitaminosis A, inflammatory arthralgias] Maroy B, et al. **Presse Med** 1989 Mar 18;18(11):567–70 (Eng. Abstr.) (Fre)

[Experimental animal studies of absorption of vitamin A palmitate dissolved in various plant oils] Blaskovits A, et al. **Acta Pharm Hung** 1988 May;58(3):115–20 (Eng. Abstr.) (Hun)

[Effect of retinyl acetate and retinoic acid on twilight vision, blood indicators and immunity] Afanas'ev IuI, et al. **Gig Tr Prof Zabol** 1988 Sep;(9):29–31 (Eng. Abstr.) (Rus)

[Further study of immuno–correcting properties of vitamins A and E in experimental chronic alcoholic intoxication] Davydova TV, et al. **Vopr Pitan** 1988 May–Jun;(3):45–8 (Eng. Abstr.) (Rus)

ANALYSIS

Morphology of the release of vitamin A–containing lipid droplets by perisinusoidal lipocytes in the rat liver. Kudo S. **Acta Anat (Basel)** 1989;135(3):261–8

Hepatic stores of retinol and retinyl esters in elderly people. Black DA, et al. **Age Ageing** 1988 Sep;17(5):337–42

Vitamin A concentrations in liver determined by isotope dilution assay with tetradeuterated vitamin A and by biopsy in generally healthy adult humans. Furr HC, et al. **Am J Clin Nutr** 1989 Apr;49(4):713–6

Vitamin A activity of buriti (Mauritia vinifera Mart) and its effectiveness in the treatment and prevention of xerophthalmia. Mariath JG, et al. **Am J Clin Nutr** 1989 May;49(5):849–53

A relationship between retinol and cellular retinol–binding protein concentrations in human squamous cell carcinomas. Wahlberg P, et al. **Biochim Biophys Acta** 1989 Mar 6; 1010(3):287–93

Effect of premature delivery on rat lung retinol (vitamin A) and retinyl ester stores. Zachman RD, et al. **Biol Neonate** 1988;54(5):285–8

Vitamin A reserve of liver in health and coronary heart disease among ethnic groups in Singapore. Saha N, et al. **Br J Nutr** 1988 Nov;60(3):407–12

Immunoelectron microscopy of rhodopsin and vitamin A in the pineal organ and lateral eye of the lamprey. Vigh–Teichmann I, et al. **Exp Biol** 1989;48(4):203–13

Intrahepatic distribution of vitamin A in humans and rats. Flores H, et al. **Int J Vitam Nutr Res** 1988;58(3):276–80

Effect of vitamin A deficiency on destruction of vitamin A in vitro by rat erythrocyte lysates. Panth M, et al. **Int J Vitam Nutr Res** 1988;58(3):352–3

Size and composition of liver vitamin A reserves of human beings who died of various causes. Schindler R, et al. **Int J Vitam Nutr Res** 1988;58(2):146–54

Liquid chromatographic methods for vitamins A and D in multivitamin–mineral formulations. Beaulieu N, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):247–54

Gas chromatography of retinol and alpha–tocopherol without derivatization. Smidt CR, et al. **J Chromatogr** 1988 Dec 29;434(1):21–9

Assessment of provitamin A determination by open column chromatography/visible absorption spectrophotometry. Rodriguez–Amaya DB, et al. **J Chromatogr Sci** 1988 Dec; 26(12):624–9

Liver vitamin A concentration in patients who died of cancer. Ostrowski J, et al. **Neoplasma** 1989;36(3):353–5

Retinyl and 3–dehydroretinyl esters in the crayfish retina. Suzuki T, et al. **Vision Res** 1988;28(10):1061–70

[Contaminating substances in 22 over–the–counter fish oil and cod liver oil preparations: cholesterol, heavy metals and vitamin A] Koller H, et al. **Z Ernahrungswiss** 1989 Mar;28(1):76–83 (Eng. Abstr.) (Ger)

[Determination of retinol, alpha–tocopherol, beta–carotene and total carotenoids using high performance liquid chromatography] Stukalov IuV, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):121–4 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

Hepatic mitochondrial membranolysis repairing by spermidine. Chandra R. **Int J Vitam Nutr Res** 1989; 59(2):113–6

BIOSYNTHESIS

Provitamin A function of carotenoids: the conversion of beta–carotene into vitamin A. Olson JA. **J Nutr** 1989 Jan; 119(1):105–8 (19 ref.)

On the mechanism of beta–carotene conversion to vitamin A. **Nutr Rev** 1988 Sep;46(9):327–9 (17 ref.)

BLOOD

Low plasma levels of vitamin A and E during weight reduction. Zwiauer K, et al. **Acta Paediatr Scand** 1988 Sep; 77(5):760–1

Blood serum vitamin E and A levels during peroral therapy of periodontal diseases with zinc sulphate. Cerná H, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:187–93

Serum vitamin A and retinol–binding protein in patients with insulin–dependent diabetes mellitus. Basu TK, et al. **Am J Clin Nutr** 1989 Aug;50(2):329–31

Relationship of vitamin A and vitamin E intake to fasting plasma retinol, retinol–binding protein, retinyl esters, carotene, alpha–tocopherol, and cholesterol among elderly people and young adults: increased plasma retinyl esters among vitamin A–supplement users. Krasinski SD, et al. **Am J Clin Nutr** 1989 Jan;49(1):112–20

Serum retinol levels of persons aged 4–74 years from three Hispanic groups. Looker AC, et al. **Am J Clin Nutr** 1988 Dec;48(6):1490–6

Determinants of plasma levels of beta–carotene and retinol. Skin Cancer Prevention Study Group. Nierenberg DW, et al. **Am J Epidemiol** 1989 Sep;130(3):511–21

Voltammetric behaviour of all–trans–retinol (vitamin A1) at a glassy carbon electrode and its determination in human serum using high–performance liquid chromatography with electrochemical detection. Wring SA, et al. **Analyst** 1988 Dec;113(12):1785–9

Plasma retinol levels and side effects following high–dose retinyl acetate in breast cancer patients. Resasco M, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1319–23

Decreased levels of vitamin A in serum of patients with psoriasis. Majewski S, et al. **Arch Dermatol Res** 1989; 280(8):499–501

Vaginal hydrolysis of retinyl acetate: increase in plasma retinol and retinol binding protein in women with cervical dysplasias. Palan PR, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):282–90

Serum retinol and prostate cancer. Hayes RB, et al. **Cancer** 1988 Nov 1;62(9):2021–6

Study on the mechanism of interference of 3,4,3',4'–tetrachlorobiphenyl with the plasma retinol–binding proteins in rodents. Brouwer A, et al. **Chem Biol Interact** 1988;68(3–4):203–17

A re–examination of the stability of retinol in blood and serum, and effects of a standardized meal. Barreto–Lins MH, et al. **Clin Chem** 1988 Nov;34(11):2308–10

Concentrations of carotenoids, retinol, and tocopherol in plasma, in response to ingestion of a meal. Brown ED, et al. **Clin Chem** 1989 Feb;35(2):310–2

Serum alpha–tocopherol, all–trans retinol, total lipids and cholesterol in the black rhinoceros (Diceros bicornis). Ghebremeskel K, et al. **Comp Biochem Physiol [A]** 1988; 91(2):343–5

Retinol–binding protein: the serum transport protein for vitamin A. Blaner WS. **Endocr Rev** 1989 Aug;10(3):308–16 (85 ref.)

Serum zinc, retinol and retinol–binding protein levels in cirrhotics with hypogonadism. Abdu–Gusau K, et al. **Eur J Clin Nutr** 1989 Jan;43(1):53–7

Nutritional and haematological status of Chinese farmers: the influence of 13.5 months treatment with riboflavin, retinol and zinc. Thurnham DI, et al. **Eur J Clin Nutr** 1988 Aug; 42(8):647–60

Vitamin A and E status in healthy elderly Chinese in Hong Kong. Woo J, et al. **Eur J Clin Nutr** 1988 Aug;42(8):689–95

Undernutrition and lepromatous leprosy. Serum vitamin A and E levels in leprosy spectrum. Rao KN, et al. **Indian J Lepr** 1988 Jan;60(1):66–70

Vitamin A and retinol binding protein in chronic renal insufficiency [letter] Gentile MG, et al. **Int J Artif Organs** 1988 Sep;11(5):403–4

Liposoluble vitamins and lipid parameters in breast cancer. A joint study in northern Italy and southern France. Gerber M, et al. **Int J Cancer** 1988 Oct 15;42(4):489–94

Pharmacokinetics of N–4–hydroxyphenyl–retinamide and the effect of its oral administration on plasma retinol concentrations in cancer patients [published erratum appears in Int J Cancer 1989 Sep 15;44(3):567] Peng YM, et al. **Int J Cancer** 1989 Jan 15;43(1):22–6

Plasma vitamin A, retinol–binding protein, and prealbumin in postoperative breast cancer patients. Basu TK, et al. **Int J Vitam Nutr Res** 1988;58(3):281–3

Vitamin A, provitamin A and vitamin E serum concentrations in cystic fibrosis patients. Bui MH.

Int J Vitam Nutr Res 1988;58(3):354–5

Effect of supplementation with vitamin A or plant carotenes on plasma retinol levels among young Egyptian males. Hussein L, et al. **Int J Vitam Nutr Res** 1989;59(2):229–33

Serum vitamin A and carotene concentrations among Egyptian fullterm neonates in relation to maternal status. Hussein L, et al. **Int J Vitam Nutr Res** 1988;58(2):139–45

Vitamin A status and endemic goiter. Keyvani F, et al. **Int J Vitam Nutr Res** 1988;58(2):155–60

Retinol, beta-carotene and alpha-tocopherol status in a French population of healthy children. Malvy JM, et al. **Int J Vitam Nutr Res** 1989;59(1):29–34

Relationship of plasma beta-carotene and vitamin A to luteal function in postpartum cattle. Graves-Hoagland RL, et al. **J Dairy Sci** 1989 Jul;72(7):1854–8

Selective utilization of serum vitamin A for visual pigment synthesis. Tsin AT, et al. **J Exp Biol** 1989 Mar;142:207–14

Plasma alpha-tocopherol, retinol, cholesterol, and mineral concentrations in captive gorillas. McGuire JT, et al. **J Med Primatol** 1989;18(2):155–61

Minerals and vitamin-A status in relation to gustatory functions for salt in healthy female college students. Suzuki T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr; 34(2):209–22

Vitamin concentrations in very low birth weight infants given vitamins intravenously in a lipid emulsion: measurement of vitamins A, D, and E and riboflavin. Baeckert PA, et al. **J Pediatr** 1988 Dec;113(6):1057–65

Effect of postnatal steroid administration on serum vitamin A concentrations in newborn infants with respiratory compromise. Georgieff MK, et al. **J Pediatr** 1989 Feb; 114(2):301–4

The effect of antenatal betamethasone on cord blood concentrations of retinol-binding protein, transthyretin, transferrin, retinol, and vitamin E. Georgieff MK, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep-Oct;7(5):713–7

Maternal-neonatal serum vitamin A concentrations. Shirali GS, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):62–6

Relationship between maternal serum vitamin A and vitamin A status of the corresponding fetuses. Ganguly C, et al. **J Trop Pediatr** 1988 Dec;34(6):313–5

Vitamin A levels and mortality among hospitalized measles patients, Kinshasa, Zaire. Markowitz LE, et al. **J Trop Pediatr** 1989 Jun;35(3):109–12

Zinc, vitamins A and E, and retinol-binding protein in sera of patients with cancer of the larynx. Drożdż M, et al. **Neoplasma** 1989;36(3):357–62

Serum levels of beta-carotene, vitamin A, and zinc in male lung cancer cases and controls. Kune GA, et al. **Nutr Cancer** 1989;12(2):169–76

Serum retinol levels in liver and gastrointestinal diseases. Ostrowski J, et al. **Riv Eur Sci Med Farmacol** 1987 Mar; 9(1):3–8

Effect of a high systemic background level of vitamin A on the teratogenicity of all-trans-retinoic acid given either acutely or subacutely. Nolen GA. **Terstology** 1989 Apr; 39(4):331–9

Plasma vitamins A and E, total lipid and cholesterol concentrations in captive jackass penguins (Spheniscus demersus). Gulland FM, et al. **Vet Rec** 1988 Dec 24–31; 123(26–27):666–7

Vitamin A deficiency. New knowledge on diagnosis, consequences and therapy. Biesalski HK, et al. **Z Ernahrungswiss** 1989 Mar;28(1):3–16 (77 ref.)

[Nutritional status of vitamin A and carotenes in miners and lung cancer patients] Luo XN. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):223–5 (Eng. Abstr.) **(Chi)**

[Levels of vitamin A in the serum in dialyzed patients with renal osteopathy] Sotorník I, et al. **Cas Lek Cesk** 1988 Aug 12;127(33):1037–42 (Eng. Abstr.) **(Cze)**

[Plasma retinol, carotenoids and tocopherols: biological variations between 18 and 45 years of age] Herbeth B, et al. **Ann Nutr Metab** 1988;32(5–6):297–304 (Eng. Abstr.) **(Fre)**

[Comparison of the vitamin A blood serum level in patients with head-neck cancer and healthy persons] Murr G, et al. **HNO** 1988 Sep;36(9):359–62 (Eng. Abstr.) **(Ger)**

[Plasma vitamin A and E correlate inversely with coronary mortality] Gey KF. **Soz Praventivmed** 1989;34(2):78–80 (Eng. Abstr.) **(Ger)**

[The effect of anesthesia and surgery on human plasma levels of vitamins A, E, B12, pre-albumin, retinol binding protein and zinc] Shirasaki S, et al. **Masui** 1988 Sep;37(9):1096–100 (Eng. Abstr.) **(Jpn)**

[A study of bone metabolism in hemodialysis patients. I. Correlation with bone histology and serum levels of PTH, vitamin D metabolites, and vitamin A] Ohara K. **Nippon Jinzo Gakkai Shi** 1988 Apr;30(4):417–36 (Eng. Abstr.) **(Jpn)**

[Vitamin A and vitamin A-binding protein levels in the blood serum of women with cervical cancer] Sieroń G, et al. **Ginekol Pol** 1988 Dec;59(12):719–23 (Eng. Abstr.) **(Pol)**

[Vitamin A level in the blood serum of patients with primary lung cancer] Słowik-Gabryelska A, et al. **Pneumonol Pol** 1988 Jul;56(7):309–13 (Eng. Abstr.) **(Pol)**

[Interrelation of parasitic diseases and hypovitaminosis A. Schistosoma mansoni infection and the serum level of retinol in the population of an endemic area of Minas Gerais (Brazil)] Souza MS, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jul-Aug;30(4):281–7 (Eng. Abstr.) **(Por)**

[Indicators of vitamin A, E and lipid metabolism in young children with iron-deficiency anemia] Turaev AT, et al. **Pediatriia** 1988;(7):11–4 (Eng. Abstr.) **(Rus)**

HISTORY

New imperatives for an old vitamin (A). Sommer A. **J Nutr** 1989 Jan;119(1):96–100

ISOLATION & PURIFICATION

A rapid and sensitive separation of retinol and retinyl palmitate using a small, disposable bonded-phase column: kinetic applications. O'Connor CJ, et al. **J Lipid Res** 1988 Dec;29(12):1693–7

METABOLISM

UV irradiation and topical vitamin A modulate retinol esterification in hairless mouse epidermis. Törmä H, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):291–9

Oral contraceptives: effect of long-term use on liver vitamin A storage assessed by the relative dose response test. Amatayakul K, et al. **Am J Clin Nutr** 1989 May;49(5):845–8

Retinol (vitamin A) and the neonate: special problems of the human premature infant. Zachman RD. **Am J Clin Nutr** 1989 Sep;50(3):413–24 (149 ref.)

Retinyl esters in the vertebrate neuroretina. Rodriguez KA, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R255–8

The morphology of release of vitamin A-containing lipid droplets by hepatocytes in rat liver. Kudo S. **Anat Rec** 1989 Sep;225(1):11–20

Metabolism of retinol and retinoic acid by human liver cytochrome P450IIC8. Leo MA, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):305–12

Identification of retinol as one of the protein HC chromophores. Escribano J, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1424–9

Modulation of vitamin A metabolism during hepatic and intestinal cell culture. Davis BH, et al. **Biochim Biophys Acta** 1989 Mar 6;1010(3):318–24

Effect of fatty acid supplementation on cholesterol and retinol esterification in J774 macrophages. McCloskey HM, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):456–67

Distribution of retinol in rat liver cells: effect of age, sex and nutritional status. Blomhoff R, et al. **Br J Nutr** 1988 Sep;60(2):233–9

Retinoids in the bovine pineal gland. Phillips TS, et al. **Brain Res Bull** 1989 Feb;22(2):259–61

Metabolism of retinol and retinoic acid in N-methyl-N-nitrosourea-induced mammary carcinomas in rats. Bhat PV, et al. **Cancer Res** 1989 Jan 1;49(1):139–44

Oxidation of retinol to retinoic acid as a requirement for biological activity in mouse epidermis. Connor MJ. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7038–40

Vitamin A is stored as fatty acyl esters of retinol in the lacrimal gland. Ubels JL, et al. **Curr Eye Res** 1988 Oct; 7(10):1009–16

Increased vitamin A in esophagus and lungs after moderate ethanol consumption. Leo MA, et al. **Drug Nutr Interact** 1988;5(4):227–36

The ability of cultivated human skin fibroblasts to store vitamin A. A contribution to the cytogenesis of the Ito cells of the liver. Körner T, et al. **Exp Pathol** 1988; 35(4):247–51

Mechanism of vitamin A movement between rod outer segments, interphotoreceptor retinoid-binding protein, and liposomes. Ho MT, et al. **J Biol Chem** 1989 Jan 15; 264(2):928–35

Esterification by rat liver microsomes of retinol bound to cellular retinol-binding protein. Yost RW, et al. **J Biol Chem** 1988 Dec 15;263(35):18693–701

Retinol and retinyl esters in patients with alcoholic liver disease. Bell H, et al. **J Hepatol** 1989 Jan;8(1):26–31

Encapsulation of vitamin A. Markus A, et al. **J Microencapsul** 1989 Jul-Sep;6(3):389–94

Changes in hepatic parenchymal and nonparenchymal cell vitamin A content during vitamin A depletion in the rat. Green MH, et al. **J Nutr** 1988 Nov;118(11):1331–5

The distribution of [14C]-2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) and its effect on the vitamin A content in parenchymal and stellate cells of rat liver. Håkansson H, et al. **J Nutr** 1989 Apr; 119(4):573–80

Role of vitamin A degradation in the control of hepatic levels in the rat. Leo MA, et al. **J Nutr** 1989 Jul;119(7):993–1000

Effect of Newcastle disease virus infection on vitamin A metabolism in chickens. Sijtsma SR, et al. **J Nutr** 1989 Jun; 119(6):940–7

Uptake and metabolism of retinol in isolated cells of germinal epithelium in vitro. Ren P, et al. **J Tongji Med Univ** 1989; 9(1):36–43

Retinol transport in cultured fat-storing cells of rat liver. Quantitative analysis by anchored cell analysis and sorting system. Matsuura T, et al. **Lab Invest** 1989 Jul;61(1):107–15

Effect of dietary lipids on hepatic and plasma beta-carotene and vitamin A levels in rats fed beta-carotene. Alam BS, et al. **Nutr Cancer** 1989;12(1):57–60

Extraction of retinol and cholesterol by intraocular silicone oils. Refojo MF, et al. **Ophthalmology** 1988 May; 95(5):614–8

Intestinal uptake of retinol in suckling rats: characteristics and ontogeny. Said HM, et al. **Pediatr Res** 1988 Oct; 24(4):481–5

Membranes as the energy source in the endergonic transformation of vitamin A to 11-cis-retinol. Deigner PS, et al. **Science** 1989 May 26;244(4907):968–71

Effects of dietary pyrrolizidine (Senecio) alkaloids on vitamin A metabolism in rats. Moghaddam MF, et al. **Toxicol Lett** 1989 Feb;45(2–3):149–56

[The effect of polychlorinated biphenyls on the vitamin A, vitamin E, and ascorbic acid status in young pigs] Dvořák M. **Arch Exp Veterinarmed** 1989 Jan;43(1):51–60 (Eng. Abstr.) **(Ger)**

[Animal studies on the absorption of vitamin A acetate dissolved in various vegetable oils] Blaskovits A, et al. **Acta Pharm Hung** 1988 Sep;58(5):209–13 **(Hun)**

[Effect of experimental hyper- and hypothyroxis on the level of various forms of vitamin A in various tissues of albino rats] Natanson AO, et al. **Vopr Med Khim** 1971 Jul-Aug; 17(4):411–4 (Eng. Abstr.) **(Rus)**

[Vitamin A becomes a hormone] Fex G. **Lakartidningen** 1988 Oct 5;85(40):3260, 3262 **(Swe)**

PHARMACOKINETICS

Intestinal uptake of retinol: enhancement by bovine milk beta-lactoglobulin. Said HM, et al. **Am J Clin Nutr** 1989 Apr;49(4):690–4

The mechanism of uptake of retinol by plasma-membrane vesicles. Sivaprasadarao A, et al. **Biochem J** 1988 Oct 15; 255(2):571–9

Effect of hexachlorobiphenyl on vitamin A homeostasis in the rat. Bank PA, et al. **Biochim Biophys Acta** 1989 Mar 24;990(3):306–14

Retinol transfer across and between phospholipid bilayer membranes. Fex G, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):249–55

Pharmacokinetics and metabolism of retinol administered at a chemopreventive level to normal subjects. Alberts DS, et al. **Cancer Detect Prev** 1988;13(1):55–64

Uptake of retinol by cultured fibroblasts. Takagawa K, et al. **Cell Struct Funct** 1989 Jun;14(3):353–62

Facilitory role of thyroid hormone in vitamin A uptake in the rat testes. Rajguru S, et al. **Int J Vitam Nutr Res** 1989; 59(2):107–12

Comparison of the uptake and metabolism of retinol delivered to primary mouse keratinocytes either free or bound to rat serum retinol-binding protein. Creek KE, et al. **J Invest Dermatol** 1989 Feb;92(2):283–9

Possible mechanisms for the retention of topically applied vitamin A (retinol) in the albino rabbit eye. Lee VH, et al. **J Ocul Pharmacol** 1985 Fall;1(3):297–308

Retinol transport system in cattle and purification of retinol-binding protein from bovine serum. Miyamoto T, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):408–15

Transplacental pharmacokinetics and teratogenicity of a single dose of retinol (vitamin A) during organogenesis in the mouse. Eckhoff C, et al. **Toxicol Lett** 1989 Aug; 48(2):171–84

Alterations in vitamin A metabolism by polyhalogenated aromatic hydrocarbons. Zile MH, et al. **Z Ernahrungswiss** 1989 Jun;28(2):93–102

PHARMACOLOGY

The puzzling role of vitamin A in cancer prevention (review). De Vet HC. **Anticancer Res** 1989 Jan-Feb;9(1):145–51 (61 ref.)

The effect of vitamin A on some biological properties of type B influenza virus. Ioniță E, et al. **Arch Roum Pathol Exp Microbiol** 1988 Apr-Jun; 47(2):115–9

Effect of retinol on murine epidermal dendritic cells. Walsh LJ, et al. **Australas J Dermatol** 1988 Apr;29(1):37–41

Effect of retinol and retinoic acid on testosterone production by rat Leydig cells in primary culture. Chaudhary LR, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):400–6

Photoprotective effect of vitamins A and E on polyamine and oxygenated free radical metabolism in hairless mouse epidermis. Khettab N, et al. **Biochimie** 1988 Dec; 70(12):1709–13

Promoting activity of betel quid ingredients and their inhibition by retinol. Stich HF, et al. **Cancer Lett** 1989 Apr; 45(1):71–7

Enhancement of gap junctional communication by retinoids correlates with their ability to inhibit neoplastic transformation. Hossain MZ, et al. **Carcinogenesis** 1989 Sep; 10(9):1743–8

Influence of vitamin A status and DDT on vitamin A-dependent protein mannosylation in rat liver. Azais-Braesco V, et al. **Chem Biol Interact** 1989; 69(2–3):259–67

The effect of dietary vitamin A on NO2 exposure on the hamster lung. Kim JC. **Environ Res** 1978 Aug;17(1):116–30

Vitamin A excess alters membrane flow in rat liver. Morré DM, et al. **Eur J Cell Biol** 1988 Jun;46(2):307–15

Endogenous beta-galactoside-binding lectin expression is suppressed in retinol-induced mucous metaplasia of chick embryonic epidermis. Oda Y, et al. **Exp Cell Res** 1989 May; 182(1):33–43

The effect of retinoids on the migration of Tenon's capsule fibroblasts. Joseph JP, et al. **Eye** 1988;2 (Pt 5):529–32

Inhibition of adriamycin-promoted microsomal lipid peroxidation by beta-carotene, alpha-tocopherol and retinol at high and low oxygen partial pressures. Vile GF,

et al. **FEBS Lett** 1988 Oct 10;238(2):353–6
Effect of vitamin A on bone resorption: evidence for direct stimulation of isolated chicken osteoclasts by retinol and retinoic acid. Oreffo RO, et al. **J Bone Miner Res** 1988 Apr;3(2):203–10
The distribution of podosomes in osteoclasts cultured on bone laminae: effect of retinol. Zambonin-Zallone A, et al. **J Bone Miner Res** 1988 Oct;3(5):517–23
The biological effects of retinoids on cell differentiation and proliferation. Favennec L, et al. **J Clin Chem Clin Biochem** 1988 Aug;26(8):479–89 (76 ref.)
Bovine vitamin A and beta-carotene intake and lactational status. 1. Responsiveness of peripheral blood polymorphonuclear leukocytes to vitamin A and beta-carotene challenge in vitro. Tjoelker LW, et al. **J Dairy Sci** 1988 Nov;71(11):3112–9
Bovine vitamin A and beta-carotene intake and lactational status. 2. Responsiveness of mitogen-stimulated peripheral blood lymphocytes to vitamin A and beta-carotene challenge in vitro. Tjoelker LW, et al. **J Dairy Sci** 1988 Nov;71(11):3120–7
Effects of vitamin A and its analogs on nonenzymatic lipid peroxidation in rat brain mitochondria. Das NP. **J Neurochem** 1989 Feb;52(2):585–8
Biphasic action of retinoids on gonadotropin receptor induction in rat granulosa cells in vitro. Bagavandoss P, et al. **Life Sci** 1988;43(20):1607–14
Comparative antimutagenicity of 5 compounds against 5 mutagenic complex mixtures in Salmonella typhimurium strain TA98. Ong T, et al. **Mutat Res** 1989 Jan;222(1):19–25
Role of vitamin A and beta carotene in radiation protection: relation to antioxidant properties. Seifter E, et al. **Pharmacol Ther** 1988;39(1–3):357–65 (21 ref.)
The effects of chronic vitamin A excess on bone remodeling in aged rats. Li XF, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):103–7
Vitamin A supply and biochemical development of the rat heart: studies on cellular DNA, RNA and protein. Sharma HS, et al. **Z Ernahrungswiss** 1988 Jun;27(2):119–25
[Vitamin A. Effects and therapeutic use] Bjørneboe GE. **Tidsskr Nor Laegeforen** 1988 Nov 20;108(32):2984–7 (Eng. Abstr.) (Nor)
[Vitamin A prevents an increase in epitheliocyte adhesion induced by carcinogens in the epidermis of rats and the large intestine of mice] Melikiants AG, et al. **Tsitologiia** 1988 Oct;30(10):1260–3 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Vitamin A depletion and repletion: effects on antibody response to the capsular polysaccharide of Streptococcus pneumoniae, type III (SSS-III). Pasatiempo AM, et al. **Am J Clin Nutr** 1989 Mar;49(3):501–10
Function of vitamin A in normal and synchronized seminiferous tubules. Griswold MD, et al. **Ann N Y Acad Sci** 1989;564:154–72 (47 ref.)
Vitamin A and infection: public health implications. West KP Jr, et al. **Annu Rev Nutr** 1989;9:63–86 (176 ref.)
In vivo effect of dietary factors on the molecular action of aflatoxin B1: role of vitamin A on the catalytic activity of liver fractions. Bhattacharya RK, et al. **Cancer Lett** 1989 Feb;44(2):83–8
[The role of vitamin A in the functioning of Golgi apparatus] Dushelko AA. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):48–55 (Eng. Abstr.) (Rus)

SECRETION

The relationship between secretion of retinol and protein by the lacrimal gland. Ubels JL, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):952–60

THERAPEUTIC USE

Effect of vitamin A treatment on cellular immune reactivity in patients with CLL. Gergely P, et al. **Acta Med Hung** 1988;45(3–4):307–11
Lung cancer chemoprevention with retinol palmitate. Preliminary data from a randomized trial on stage Ia non small-cell lung cancer. Pastorino U, et al. **Acta Oncol** 1988; 27(6b):773–82
Field trials with Exhelm (morantel tartrate) and vitamin A in sheep in Niger. Lindenmayer J, et al. **Acta Vet Scand Suppl** 1988;84:151–4
Economic value of vitamin A and Exhelm (morantel tartrate) in sheep in Niger. Metzel JC, et al. **Acta Vet Scand Suppl** 1988;84:402–4
Vitamin A treatment of sexual dysfunction in male alcoholics. Worner TM, et al. **Am J Clin Nutr** 1988 Dec;48(6):1431–5
Vitamin A in Stevens-Johnson Syndrome. Singer L, et al. **Ann Ophthalmol** 1989 Jun;21(6):209–10
Vitamins A and E do protect against oral carcinoma. Calhoun KH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr; 115(4):484–8
Vitamin A status of children with a history of respiratory syncytial virus infection in infancy. Pinnock CB, et al. **Aust Paediatr J** 1988 Oct;24(5):286–9
Vitamin A in acne vulgaris. Labadarios D, et al. **Clin Exp Dermatol** 1987 Nov;12(6):432–6
Effect of vitamin A treatment on immune reactivity and lipid peroxidation in patients with Sjögren's syndrome. Szöcsik K, et al. **Clin Rheumatol** 1988 Dec;7(4):514–9
Inhibition of mammary carcinoma growth by retinoidal benzoic acid derivatives. Fontana JA, et al. **Exp Cell Biol** 1988;56(5):254–63
Vitamin A: its role in the chemoprevention and chemotherapy of cancer. Halter SA. **Hum Pathol** 1989 Mar; 20(3):205–9 (64 ref.)
Possible significance of aqueous emulsified vitamin A in effective therapy for pityriasis rubra pilaris. Kellum RE. **J Am Acad Dermatol** 1989 Jan;20(1):126–8
Vitamin A derivatives in the prevention and treatment of human cancer. Lippman SM, et al. **J Am Coll Nutr** 1988 Aug;7(4):269–84 (133 ref.)
Effect of vitamin A treatment on the immune reactivity of patients with systemic lupus erythematosus. Vien CV, et al. **J Clin Lab Immunol** 1988 May;26(1):33–5
Abetalipoproteinaemia in adults: role of vitamin therapy. MacGilchrist AJ, et al. **J Inherited Metab Dis** 1988; 11(2):184–90
Open-label crossover study of vitamin A ointment as a treatment for keratoconjunctivitis sicca. Gilbard JP, et al. **Ophthalmology** 1989 Feb;96(2):244–6
Results of the use of vitamin A and retinoids in cutaneous malignancies. Lippman SM, et al. **Pharmacol Ther** 1989; 40(1):107–22 (109 ref.)
Effects of oral retinoid (vitamin A and etretinate) therapy on photocarcinogenesis in hairless mice. Kelly GE, et al. **Photochem Photobiol** 1989 Aug;50(2):213–5
Vitamin A supplementation improves macrophage function and bacterial clearance during experimental salmonella infection. Hatchigian EA, et al. **Proc Soc Exp Biol Med** 1989 May;191(1):47–54
A double-blind randomized trial with beta-carotene and retinol in persons at high risk of lung cancer due to occupational asbestos exposures and/or cigarette smoking. Omenn GS. **Public Health Rev** 1988;16(1–2):99–125
Hospital faulted for dry eye study [news] Booth W. **Science** 1989 Feb 24;243(4894 Pt 1):1000
[The effect of vitamin A therapy on the immune function and lipid peroxidation in patients with Sjögren syndrome] Szöcsik K, et al. **Orv Hetil** 1988 Sep 25;129(39):2091–4 (41 ref.) (Eng. Abstr.) (Hun)
[The use of antioxidants in the combined treatment of chronic gastroduodenitis in children] Kmito NL, et al. **Pediatriia** 1988;(8):63–5 (Rus)
[The immune status of ichthyosis patients during photochemotherapy with aevit] Kriazheva SS, et al. **Vestn Dermatol Venerol** 1988;(6):9–12 (Eng. Abstr.) (Rus)
[Vitamin A and its synthetic derivatives as stimulants of antineoplastic immunity] Pletsityi KD. **Vopr Onkol** 1988; 34(11):1283–90 (70 ref.) (Rus)

TOXICITY

Vitamin A effects on fetal mouse cephalic acetylcholinesterase and choline acetyltransferase. Pillans PI, et al. **Arch Environ Contam Toxicol** 1988 Sep; 17(5):665–71
Interaction retinol-chromatin: an analysis of DNA from vitamin A-treated V79 Chinese hamster cells. Ferrari N, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):30–5
Retinoic acid vs. excess vitamin A. Kalter H. **Teratology** 1989 Jun;39(6):611–6
Derivation of retinoic acid and metabolites from a teratogenic dose of retinol (vitamin A) in mice. Kochhar DM, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):429–41
Comparative assessment of the toxicology of vitamin A and retinoids in man. Biesalski HK. **Toxicology** 1989 Jul 17; 57(2):117–61 (193 ref.)

VITAMIN A ACID see **TRETINOIN**

VITAMIN A DEFICIENCY

see related
NYCTALOPIA
XEROPHTHALMIA

Inhibition of initiator-promoter-induced skin tumorigenesis in female SENCAR mice fed a vitamin A-deficient diet and reappearance of tumors in mice fed a diet adequate in retinoid or beta-carotene. De Luca LM, et al. **Cancer Res** 1989 Oct 1;49(19):5400–6

BLOOD

[Vitamin A and vitamin A-binding protein levels in the blood serum of women with cervical cancer] Sieroń G, et al. **Ginekol Pol** 1988 Dec;59(12):719–23 (Eng. Abstr.) (Pol)
[Interrelation of parasitic diseases and hypovitaminosis A. Schistosoma mansoni infection and the serum level of retinol in the population of an endemic area of Minas Gerais (Brazil)] Souza MS, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jul-Aug;30(4):281–7 (Eng. Abstr.) (Por)

COMPLICATIONS

The role of vitamins in the etiology of cervical neoplasia: an epidemiological review. Schneider A, et al. **Arch Gynecol Obstet** 1989;246(1):1–13 (46 ref.)
Interactions between xerophthalmia and morbidity among underfive rural children. Kativar GP, et al. **Indian Pediatr** 1988 Oct;25(10):939–45
Vitamin A deficiency and diarrhea. Sachdev HP, et al. **Indian Pediatr** 1988 Oct;25(10):911–3
Vitamin A deficiency today: conjunctival xerosis in cystic fibrosis. Sommer A. **J R Soc Med** 1989 Jan;82(1):1–2 (17 ref.)
Conjunctival xerosis in cystic fibrosis. Vernon SA, et al. **J R Soc Med** 1989 Jan;82(1):46–7
Characterization of retinol-binding protein in familial hypo-retinol-binding proteinemia. Matsuo T, et al. **Jpn J Ophthalmol** 1988;32(4):379–84
Blind injustice [editorial] **Lancet** 1989 Apr 15;1(8642):824
Hypovitaminosis A, follicular ducts, and acne [letter] Kealey T. **Lancet** 1988 Nov 26;2(8622):1260–1
Hypovitaminosis A of follicular duct as cause of acne vulgaris [letter] Macdonald-Hull SM, et al. **Lancet** 1988 Dec 24–31; 2(8626–8627):1502–3
Hypovitaminosis a of follicular duct as cause of acne vulgaris [letter] Marsden J. **Lancet** 1988 Nov 5;2(8619):1077
Vitamin A and iron deficiency. **Nutr Rev** 1989 Apr; 47(4):119–21 (5 ref.)
[Vitamin A deficiency, anemia and infectious diseases] Bloem MW, et al. **Ned Tijdschr Geneeskd** 1989 May 6; 133(18):920–3 (31 ref.) (Dut)
[Vitamin A deficiency in a rural population of Mauritania and absence of a correlation with urinary schistosomiasis] Borel E, et al. **Acta Trop (Basel)** 1988 Dec;45(4):379–85 (Eng. Abstr.) (Fre)
[Vitamins and cancer: results of a Basel study] Stähelin HB. **Soz Praventivmed** 1989;34(2):75–7 (Eng. Abstr.) (Ger)

DIAGNOSIS

Conjunctival impression cytology (CIC) to detect subclinical vitamin A deficiency: comparison of CIC with biochemical assessments. Gadomski AM, et al. **Am J Clin Nutr** 1989 Mar;49(3):495–500
Impression cytology with transfer: an easy method for detection of vitamin A deficiency. Luzeau R, et al. **Int J Vitam Nutr Res** 1988;58(2):166–70
Reproducibility of determining vitamin A status by impression cytology. Wittpenn JR, et al. **Ophthalmic Surg** 1988 Aug;19(8):559–61
Vitamin A deficiency. New knowledge on diagnosis, consequences and therapy. Biesalski HK, et al. **Z Ernahrungswiss** 1989 Mar;28(1):3–16 (77 ref.)

DRUG THERAPY

Rhodopsin levels and retinal function in cats during recovery from vitamin A deficiency. Kemp CM, et al. **Exp Eye Res** 1989 Jul;49(1):49–65
Vitamin A deficiency [letter] Rao MV. **Indian Pediatr** 1988 Feb;25(2):216

ENZYMOLOGY

Effect of vitamin A on rat hepatic mixed-function oxidases, glutathione transferase activity and generations of oxygen radicals. Ayalogu EO, et al. **Ann Nutr Metab** 1988; 32(2):75–82
Effect of vitamin A deficiency on hepatic and intestinal drug metabolizing enzymes in rats. Gupta PH, et al. **Biochem Int** 1989 Jul;19(1):123–33
Ornithine decarboxylase basal activity in liver, oesophagus and lung of vitamin A deficient rats, and the effect of retinoic acid. Daliam A, et al. **Carcinogenesis** 1988 Dec; 9(12):2161–4
Effect of vitamin A deficiency on induction of enzymes metabolizing different carcinogens. Santhaamn U, et al. **Indian J Exp Biol** 1988 May;26(5):337–40

EPIDEMIOLOGY

A prevalence study of vitamin A deficiency and xerophthalmia in northeastern Thailand. Bloem MW, et al. **Am J Epidemiol** 1989 Jun;129(6):1095–103
Vitamin A deficiency: a public health problem in eastern Sudan. el Bushra HE, et al. **East Afr Med J** 1987 Nov; 64(11):782–9
Assessment of vitamin A status in an elderly French population using impression cytology with transfer. Carlier C, et al. **Int J Vitam Nutr Res** 1989;59(1):3–7
New imperatives for an old vitamin (A). Sommer A. **J Nutr** 1989 Jan;119(1):96–100

ETIOLOGY

Vitamin A deficiency secondary to pancreatic carcinoid. Case report. Rowe PH, et al. **Acta Chir Scand** 1988 Jul-Aug;154(7–8):487–8
Night blindness and conjunctival xerosis caused by vitamin A deficiency in patients with cystic fibrosis. Rayner RJ, et al. **Arch Dis Child** 1989 Aug;64(8):1151–6
Vitamin A supplementation for refugees and famine victims. Nieburg P, et al. **Bull WHO** 1988;66(6):689–97

IMMUNOLOGY

Early humoral immune response in vitamin A deficiency—an experimental study. Lavasa S, et al. **Indian J Exp Biol** 1988 Jun;26(6):431–5
Characterization of a helper T lymphocyte defect in vitamin A-deficient mice. Carman JA, et al. **J Immunol** 1989 Jan 15;142(2):388–93
[An increase in activity of natural killer cells in rats with vitamin A deficiency] Saparov AS, et al. **Vopr Pitan** 1989 Mar-Apr;(2):30–2 (Eng. Abstr.) (Rus)

METABOLISM

Iron metabolism and vitamin A deficiency in children in northeast Thailand. Bloem MW, et al. **Am J Clin Nutr** 1989 Aug;50(2):332–8

Characterization of corneal proteoglycans under vitamin A deficiency. Twining SS, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):181–90

Influence of vitamin A status and DDT on vitamin A–dependent protein mannosylation in rat liver. Azais-Braesco V, et al. **Chem Biol Interact** 1989; 69(2–3):259–67

Electrolyte composition of lacrimal gland fluid and tears of normal and vitamin A–deficient rabbits. Rismondo V, et al. **CLAO J** 1989 Jul–Sep;15(3):222–8

Activity of rhodopsin in vitamin A–deprived rats: light-dependent binding of G-protein. Pepperberg DR, et al. **Curr Eye Res** 1989 Apr;8(4):423–8

Effects of a vitamin-A–free diet on tissue vitamin A concentration and dark adaptation of aging rats. Bankson DD, et al. **Exp Gerontol** 1989;24(2):127–36

The effects of vitamin A nutritional status on microsomal lipid peroxidation and alpha–tocopherol level in rat liver. Pelissier MA, et al. **Experientia** 1989 Apr 15;45(4):342–3

Vitamin A deficiency in rats enhances intestinal transport of calcium and oxalate in vitro. Kancha R, et al. **Int J Vitam Nutr Res** 1989;59(2):236–7

Effect of vitamin A deficiency on pulmonary defense systems of guinea pig lung. Nair CR, et al. **Int J Vitam Nutr Res** 1988;58(4):375–80

Effect of vitamin A deficiency on destruction of vitamin A in vitro by rat erythrocyte lysates. Panth M, et al. **Int J Vitam Nutr Res** 1988;58(3):352–3

Metabolic changes in the cornea of vitamin A–deficient rats. Hayashi K, et al. **Invest Ophthalmol Vis Sci** 1989 Apr; 30(4):769–72

Plasminogen activator activity in vitamin A–deficient rat corneas. Hayashi K, et al. **Invest Ophthalmol Vis Sci** 1988 Dec;29(12):1810–9

Vitamin A deficiency and tri-iodothyronine action at the cellular level in the rat. Higueret P, et al. **J Endocrinol** 1989 Apr;121(1):75–9

Changes in hepatic parenchymal and nonparenchymal cell vitamin A content during vitamin A depletion in the rat. Green MH, et al. **J Nutr** 1988 Nov;118(11):1331–5

Effect of vitamin A deficiency on nitrogen balance and hepatic urea cycle enzymes and intermediates in rats. John A, et al. **J Nutr** 1989 Jan;119(1):29–35

Effect of vitamin A deficiency in rats on glycosylation of glycoproteins. **Nutr Rev** 1989 Feb;47(2):56–7 (7 ref.)

Uptake and cellular transport of [11–3H] all–trans–retinoic acid in the liver of vitamin A–deficient hamsters. Chowdhury A, et al. **Tissue Cell** 1988;20(4):555–65

Effect of cigarette smoke condensate and vitamin A depletion on keratin expression patterns in cultured hamster tracheal epithelium. An immunohistomorphological study using monoclonal antibodies to keratins. Rutten AA, et al. **Virchows Arch [B]** 1988;56(2):111–7

[The role of fat-soluble vitamins in the development of psoriasis] Mavrov II, et al. **Vrach Delo** 1989 Feb;(2):76–8 (Rus)

MICROBIOLOGY

Increased bacterial binding to respiratory epithelial cells in vitamin A deficiency. Chandra RK. **BMJ** 1988 Oct 1; 297(6652):834–5

PATHOLOGY

Conjunctival impression cytology: feasibility of a field trial to detect subclinical vitamin A deficiency. Kjolhede CL, et al. **Am J Clin Nutr** 1989 Mar;49(3):490–4

Ciliated cells in vitamin A–deprived cultured hamster tracheal epithelium do divide. Rutten AA, et al. **In Vitro Cell Dev Biol** 1988 Sep;24(9):931–5

Modification of Sertoli cell functions in vitamin A–deficient rats. Huang HF, et al. **J Reprod Fertil** 1989 Jan;85(1):273–81

Intermediate filament expression in normal and vitamin A depleted cultured hamster tracheal epithelium as detected by monoclonal antibodies. A study with emphasis on histological changes. Rutten AA, et al. **Virchows Arch [B]** 1988;56(2):103–10

PHYSIOPATHOLOGY

Disruption of sustentacular (Sertoli) cell tight junctions and regression of spermatogenesis in vitamin–A–deficient rats. Huang HF, et al. **Acta Anat (Basel)** 1988;133(1):10–5

Fibronectin and corneal epithelial wound healing in the vitamin A–deficient rat. Frangieh GT, et al. **Arch Ophthalmol** 1989 Apr;107(4):567–71

The effect of vitamin A deficiency on the secretion of saliva and two salivary glycoproteins in the adult rat. Johansson I, et al. **Int J Vitam Nutr Res** 1989;59(2):234–5

Response of ocular surface epithelium to corneal wounding in retinol–deficient rabbits. el–Ghorab M, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1671–6

Expression of transforming growth factor–beta in wound healing of vitamin A–deficient rat corneas. Hayashi K, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):239–47

The interaction between vitamin A status and Newcastle disease virus infection in chickens. Sijtsma SR, et al. **J Nutr** 1989 Jun;119(6):932–9

Effect of a moderate vitamin A deficiency on saliva secretion rate and some salivary glycoproteins in adult rat. Johansson I, et al. **Scand J Dent Res** 1989 Jun;97(3):263–7

Vitamin A supply and biochemical development of the rat heart: studies on cellular DNA, RNA and protein. Sharma HS, et al. **Z Ernahrungswiss** 1988 Jun;27(2):119–25

[The role of vitamin A in the functioning of Golgi apparatus] Dushelko AA. **Ukr Biokhim Zh** 1988 Nov–Dec;60(6):48–55 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Determinants of community–based coverage: periodic vitamin A supplementation. Aceh Study Group. Tarwotjo I, et al. **Am J Public Health** 1989 Jul;79(7):847–9

Vitamin A deficiency [letter] Mathur GP. **Indian Pediatr** 1988 May;25(5):487

VETERINARY

Blindness and sexual dimorphism associated with vitamin A deficiency in feedlot cattle. Paulsen ME, et al. **J Am Vet Med Assoc** 1989 Apr 1;194(7):933–7

The pathology of blindness in new–born calves caused by hypovitaminosis A. van der Lugt JJ, et al. **Onderstepoort J Vet Res** 1989 Jun;56(2):99–109

Immunoglobulin concentrations in serum and tissues of vitamin A–deficient broiler chicks after Newcastle disease virus vaccination. Davis CY, et al. **Poult Sci** 1989 Jan; 68(1):136–44

VITAMIN B 1 see **THIAMINE**

VITAMIN B 2 see **RIBOFLAVIN**

VITAMIN B 6 see **PYRIDOXINE**

VITAMIN B 12

Content uniformity of cobalt–57 cyanocobalamin capsules [letter] Porter WC, et al. **J Nucl Med** 1989 Feb;30(2):265

ADMINISTRATION & DOSAGE

Cyanocobalamin injections for patients without documented deficiency. Reasons for administration and patient responses to proposed discontinuation. Lawhorne L, et al. **JAMA** 1989 Apr 7;261(13):1920–3

[Clinico–experimental substantiation of the use of carnitine and cobalamin in the treatment of anorexia nervosa] Korkina MB, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):82–7 (Eng. Abstr.) (Rus)

ANALOGS & DERIVATIVES

Mecobalamin promotes mouse sperm maturation. Oshio S, et al. **Andrologia** 1989 Mar–Apr;21(2):167–73

Methylcobalamin improves nerve conduction in streptozotocin–diabetic rats without affecting sorbitol and myo–inositol contents of sciatic nerve. Sonobe M, et al. **Horm Metab Res** 1988 Nov;20(11):717–8

Polymer membrane–based biosensors using vitamin B12 derivatives. Daunert S, et al. **Prog Clin Biol Res** 1989; 292:215–25

[Studies on the biological function of the nucleotide base of vitamin B12] Eberhard G, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1091–8 (Eng. Abstr.) (Ger)

[Clinical efficacy of mecobalamin in the treatment of oligozoospermia–results of double–blind comparative clinical study] Kumamoto Y, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1109–32 (Eng. Abstr.) (Jpn)

[Comparative study of the effect of vitamin B12 coenzymes on monooxygenase system and lipid peroxidation in the liver of rabbits poisoned with phenylhydrazine] Korsova TL, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):97–102 (Eng. Abstr.) (Rus)

[Effect of methylcobalamin and adenosylcobalamin on the process of hematopoiesis and vitamin B12 exchange in experimental phenylhydrazine–induced anemia in rabbits] Tsukerman ES, et al. **Vopr Med Khim** 1989 Jan–Feb; 35(1):106–11 (Eng. Abstr.) (Rus)

ANALYSIS

Expression of vitamin B12 R–binder in breast tumors. An immunohistochemical study. Ogawa K, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1117–20

Amniotic fluid folate, vitamin B12 and transcobalamins in neural tube defects. Gardiki–Kouidou P, et al. **Clin Genet** 1988 Jun;33(6):441–8

Iron, zinc, folate and vitamin B12 nutritional status and milk composition of low–income Brazilian mothers. Donangelo CM, et al. **Eur J Clin Nutr** 1989 Apr;43(4):253–66 (53 ref.)

Significance of the distribution of 57Co–vitamin B12 in Spirometra mansonoides (Cestoidea) during growth and differentiation in mammalian intermediate and definitive hosts. Marchiondo AA, et al. **Int J Parasitol** 1989 Feb; 19(1):119–24

Radioisotope dilution determination of vitamin B12 in dietary supplements. Osterdahl BG, et al. **Int J Vitam Nutr Res** 1988;58(3):300–2

Comparison of two radioisotope dilution assay kits for measuring vitamin B12 in gruel. Osterdahl BG, et al. **Int J Vitam Nutr Res** 1988;58(3):303–5

Vitamin B12 and vitamin B12 binding proteins in amniotic fluid. Areekul S, et al. **J Med Assoc Thai** 1988 Dec; 71(12):685–8

Dietary sources of vitamin B12 for vegans and other special groups [letter] Allen R, et al. **J R Coll Gen Pract** 1988 Mar;38(308):123

[The use of polarographic methods for studying cobalamine–containing periplasmatic proteins from Propionibacterium shermanii cells] Datsiuk NM, et al. **Mikrobiol Zh** 1983 May–Jun;45(3):67–70 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Cloning and analysis of genes involved in coenzyme B12 biosynthesis in Pseudomonas denitrificans. Cameron B, et al. **J Bacteriol** 1989 Jan;171(1):547–57

Synthetic and biosynthetic studies on vitamin B12. Battersby AR. **J Nat Prod** 1988 Jul–Aug;51(4):643–61 (22 ref.)

The biosynthesis of porphyrins, chlorophylls, and vitamin B12. Leeper FJ. **Nat Prod Rep** 1989 Apr;6(2):171–203 (308 ref.)

[Effect of associated microflora on cobalamin genesis by Propionibacterium shermanii] Datsiuk NM, et al. **Mikrobiol Zh** 1987 Nov–Dec;49(6):41–5 (Eng. Abstr.) (Rus)

[The biogenetic interrelationships between flavins and vitamin B12 in Achromobacter cobalamini] Kucheras RV, et al. **Mikrobiol Zh** 1988 May–Jun;50(3):46–9 (Eng. Abstr.) (Rus)

BLOOD

Vitamin B12 and folic acid serum levels in obsessive compulsive disorder. Hermesh H, et al. **Acta Psychiatr Scand** 1988 Jul;78(1):8–10

Low B12 levels related to high activity of platelet MAO in patients with dementia disorders. A retrospective study. Regland B, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):451–7

The total serum homocysteine as an indicator of vitamin B12 and folate status. Chu RC, et al. **Am J Clin Pathol** 1988 Oct;90(4):446–9

Serum and red cell folate and serum vitamin B12 levels in hyperthyroidism. Ford HC, et al. **Am J Hematol** 1989 Aug; 31(4):233–6

Vitamin B12 malabsorption in patients with acquired immunodeficiency syndrome. Harriman GR, et al. **Arch Intern Med** 1989 Sep;149(9):2039–41

Depression in the aged: relation to folate and vitamins C and B12 [letter] Kivelä SL, et al. **Biol Psychiatry** 1989 Jun; 26(2):210–3

Iron, folate and vitamin B12 in severe protein–energy malnutrition. Nkrumah FK, et al. **Cent Afr J Med** 1988 Mar;34(3):39–43

High prevalence of atrophic gastritis in the elderly: implications for health–associated reference limits for cobalamin in serum [letter] Lindstedt G, et al. **Clin Chem** 1989 Jul;35(7):1557–8

Low serum cobalamin levels in a population study of 70– and 75–year–old subjects. Gastrointestinal causes and hematological effects. Nilsson–Ehle H, et al. **Dig Dis Sci** 1989 May;34(5):716–23

Increased serum corrinoids correlates with disease severity and IgA levels in alcoholic cirrhosis. Djalali M, et al. **Digestion** 1988;41(4):215–22

More on exocrine pancreatic insufficiency [letter] Batt RM. **J Am Vet Med Assoc** 1989 Jan 15;194(2):165–6

More on testing for exocrine pancreatic function [letter] Williams DA. **J Am Vet Med Assoc** 1988 Dec 15; 193(12):1480–1

Vitamin B–12 and folate function in chronic alcoholic men with peripheral neuropathy and encephalopathy. Gimsing P, et al. **J Nutr** 1989 Mar;119(3):416–24

Nutritional consequences of bowel segments in the lower urinary tract. Canning DA, et al. **J Urol** 1989 Aug;142(2 Pt 2):509–11; discussion 520–1

Serum cobalamins and cobalamin–binding proteins during total parenteral nutrition. van Spreeuwel JP, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):607–9

Motor action potential (M.A.P.) in the evaluation of uremic peripheral neurone damage: influence of middle molecules (M.M.). Coratelli P, et al. **Life Support Syst** 1983;1 Suppl 1:129–32

Vitamin B12 concentrations in the elderly: a regional study. Barber KE, et al. **N Z Med J** 1989 Aug 9;102(873):402–4

Cobalamin analogues in plasma. An in vitro phenomenon? Gimsing P, et al. **Scand J Clin Lab Invest Suppl** 1989; 194:37–40

Preparation of calibration standards for quantitation of cobalamins in plasma, a NORDKEM project. Nexø E, et al. **Scand J Clin Lab Invest Suppl** 1989;194:35–6

[Critical analysis of 1000 systematic assays of serum levels of vitamin B12 and folates] Najean Y, et al. **Presse Med** 1989 Apr 29;18(17):867–71 (Eng. Abstr.) (Fre)

[Basic and clinical studies on the simultaneous measurement of serum and red blood cell folate and vitamin B12 concentrations using Baxter Travenol [57Co]vitamin B12/[125I]folate radioassay kit] Sakata H, et al. **Kaku Igaku** 1989 Feb;26(2):263–70 (Jpn)

[The effect of anesthesia and surgery on human plasma levels of vitamins A, E, B12, pre–albumin, retinol binding protein and zinc] Shirasaki S, et al. **Masui** 1988 Sep;37(9):1096–100

(Eng. Abstr.) (Jpn)
[Serum vitamin B12 and vitamin B12 binding protein in chronic myeloproliferative disorders] Iseki T, et al. **Rinsho Ketsueki** 1988 Jul;29(7):960–8 (Eng. Abstr.) (Jpn)
[Assessment of laboratory findings in megaloblastic anemia—measurement of serum vitamin B12 and methylmalonic acid] Kondo H, et al. **Rinsho Ketsueki** 1989 Jan;30(1):36–44 (Eng. Abstr.) (Jpn)
[Plasma carriers of vitamin B 12 in normal controls and in the initial diagnosis of pernicious anemia] Remacha A, et al. **Sangre (Barc)** 1988 Oct;33(5):357–60 (Eng. Abstr.) (Spa)

DIAGNOSTIC USE

A survey and critical evaluation of a dual isotope (Dicopac) vitamin B12 absorption test. Atrah HI, et al. **Eur J Nucl Med** 1989;15(2):57–60

METABOLISM

The ileum is the major site of absorption of vitamin B12 analogues. Shaw S, et al. **Am J Gastroenterol** 1989 Jan; 84(1):22–6
Effect of exocrine pancreatic insufficiency on cobalamin absorption in dogs. Simpson KW, et al. **Am J Vet Res** 1989 Aug;50(8):1233–6
Dehalogenation of lindane by a variety of porphyrins and corrins. Marks TS, et al. **Appl Environ Microbiol** 1989 May; 55(5):1258–61
Oxidation of 5-methyltetrahydrofolate in cobalamin-inactivated rats. Lumb M, et al. **Biochem J** 1989 Mar 15;258(3):907–10
Acceleration of cleavage of the carbon-cobalt bond of sterically hindered alkylcobalamins by binding to apoprotein of diol dehydrase. Toraya T, et al. **Biochemistry** 1988 Oct 4;27(20):7677–81
Effect of glycosidases and proteinases on cobalamin binding and physicochemical properties of purified saturated haptocorrin and intrinsic factor. Guéant JL, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):390–8
Inherited disorders of vitamin B12 metabolism. Rosenblatt DS, et al. **Blood Rev** 1987 Sep;1(3):177–82 (20 ref.)
Cobalamin and folate metabolism in helminths. Weinstein PP, et al. **Blood Rev** 1987 Dec;1(4):245–53 (79 ref.)
Concentration and physicochemical characterisation of unsaturated cobalamin binding proteins in amniotic fluid. Guéant JL, et al. **Clin Chim Acta** 1989 May 15; 181(2):151–61
Altered cobalamin metabolism in Escherichia coli btuR mutants affects btuB gene regulation. Lundrigan MD, et al. **J Bacteriol** 1989 Jan;171(1):154–61
Two outer membrane transport systems for vitamin B12 in Salmonella typhimurium. Rioux CR, et al. **J Bacteriol** 1989 Jun;171(6):2986–93
Cloning and sequence analysis of the Escherichia coli metH gene encoding cobalamin-dependent methionine synthase and isolation of a tryptic fragment containing the cobalamin-binding domain. Banerjee RV, et al. **J Biol Chem** 1989 Aug 15;264(23):13888–95
Altered binding and transport of vitamin B12 resulting from insertion mutations in the Escherichia coli btuB gene. Gudmundsdottir A, et al. **J Biol Chem** 1988 Oct 5; 263(28):14224–30
Dietary pectin shortens the biologic half-life of vitamin B-12 in rats by increasing fecal and urinary losses. Cullen RW, et al. **J Nutr** 1989 Aug;119(8):1121–7
Effect of hypothyroidism on methylmalonate excretion and hepatic vitamin B-12 levels in rats. Stokstad EL, et al. **J Nutr** 1988 Dec;118(12):1495–501
Megadose effects of vitamin C on vitamin B-12 status in the rat. Thenen SW. **J Nutr** 1989 Aug;119(8):1107–14
Dependence on cyanocobalamin injections [letter] **JAMA** 1989 Sep 15;262(11):1468–9
Effect of cobalamin inactivation on folate metabolism of leukemic cells. Ermens AA, et al. **Leuk Res** 1988; 12(11–12):905–10
Characterization of cobalamin-dependent methionine synthase purified from the human malarial parasite, Plasmodium falciparum. Krungkrai J, et al. **Parasitol Res** 1989;75(7):512–7
Cloning and expression of the gene cluster encoding key proteins involved in acetyl-CoA synthesis in Clostridium thermoaceticum: CO dehydrogenase, the corrinoid/Fe-S protein, and methyltransferase. Roberts DL, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):32–6
[Metabolism of vitamin B 12 and hematopoiesis] Okuda K. **Rinsho Ketsueki** 1988 Nov;29(11):1941–9 (28 ref.) (Jpn)
[Effect of methylcobalamin and adenosylcobalamin on the process of hematopoiesis and vitamin B12 exchange in experimental phenylhydrazine-induced anemia in rabbits] Tsukerman ES, et al. **Vopr Med Khim** 1989 Jan–Feb; 35(1):106–11 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Gastric and pancreatic intrinsic factor-mediated absorption of cobalamin in the dog. Batt RM, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G344–9
Active absorption of vitamin B12 and conjugated bile salts by guinea pig ileum occurs in villous and not crypt cells. Kapadia CR, et al. **Dig Dis Sci** 1988 Nov;33(11):1377–82
Absorption of cobalamin (vitamin B12) administered via jejunostomy. Sriram K, et al. **J Am Coll Nutr** 1989 Feb; 8(1):75–81
Vitamin B12 transport in Escherichia coli K12 does not require the btuE gene of the btuCED operon. Rioux CR, et al. **Mol Gen Genet** 1989 Jun;217(2–3):301–8

PHARMACOLOGY

Cobalamin-dependent replication of L1210 leukemia cells and effects of cobalamin analogues. Kondo H, et al. **Acta Haematol (Basel)** 1989;81(2):61–9
In vitro DNA synthesis by megaloblastic bone marrow: effect of folates and cobalamins on thymidine incorporation and de novo thymidylate synthesis. Das KC, et al. **Am J Hematol** 1989 May;31(1):11–20
Effect of nitrous oxide inactivation of vitamin B12-dependent methionine synthetase on the subcellular distribution of folate coenzymes in rat liver. Horne DW, et al. **Arch Biochem Biophys** 1989 May 1;270(2):729–33
Effects of vitamin B12 supplementation on choline acetyltransferase activity in cat brain. Nadeau A, et al. **Int J Vitam Nutr Res** 1988;58(4):402–6
The effect of vitamin B2 and its derivatives on a dry-reagent strip theophylline assay. Wei JS, et al. **Ther Drug Monit** 1989;11(1):84–7
[Studies on the biological function of the nucleotide base of vitamin B12] Eberhard G, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1091–8 (Eng. Abstr.) (Ger)
[Effect of vitamin B12 on carnitine synthesis in the body of rats] Podlepa EM, et al. **Biol Nauki** 1988;(5):20–3 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Methylation deficiency causes vitamin B12-associated neuropathy in the pig. Weir DG, et al. **J Neurochem** 1988 Dec;51(6):1949–52
The role of folate and vitamin B-12 in neurotransmitter metabolism and degenerative neurological changes associated with aging: proceedings of a workshop. Green R. **J Nutr** 1989 Jun;119(6):841–2

THERAPEUTIC USE

Vitamin B12-responsive megaloblastic anemia, homocystinuria, and transient methylmalonic aciduria in cb1E disease. Tuchman M, et al. **J Pediatr** 1988 Dec; 113(6):1052–6
Vitamin B-12: placebo or neglected therapeutic tool? Newbold HL. **Med Hypotheses** 1989 Mar;28(3):155–64
[Sciatica cured by vitamin B12 (letter)] Seror P. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):344 (Fre)
[Does Hepavis have value in the therapy of fatty liver caused by alcohol poisoning?] Odegaard S, et al. **Z Gastroenterol** 1989 Feb;27(2):91–3 (Eng. Abstr.) (Ger)
[Megaloblastic anemia followed by polycythemia vera after vitamin B12 therapy] Murate T, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1073–7 (Eng. Abstr.) (Jpn)
[Blood indices in patients with chronic alcoholism treated with vitamin B12 and folic acid] Stanevskaia TIu, et al. **Lab Delo** 1988;(9):75–7 (Rus)

VITAMIN B 12 COENZYMES see COBAMIDES

VITAMIN B 12 DEFICIENCY

BLOOD

Hypersegmented neutrophils and vitamin B12 deficiency. Hypersegmentation in B12 deficiency. Thompson WG, et al. **Acta Haematol (Basel)** 1989;81(4):186–91
Folate, B12, and life course of depressive illness. Levitt AJ, et al. **Biol Psychiatry** 1989 Apr 1;25(7):867–72

COMPLICATIONS

Internuclear ophthalmoplegia in pernicious anemia [letter] Reynolds EH. **BMJ** 1989 Feb 18;298(6671):460–1
Vitamin B12 in psychotic depression [letter] Levitt AJ, et al. **Br J Psychiatry** 1988 Aug;153:266–7
B12 and folate deficiency dementia. Martin DC. **Clin Geriatr Med** 1988 Nov;4(4):841–52 (76 ref.)
Acquired immune deficiency syndrome and vitamin B-12 [letter; comment] Remacha A. **Eur J Haematol** 1989 May; 42(5):506. **Comment on:** Eur J Haematol 1987 Feb;38(2):141–7
Searching for a pony. Kassirer JP, et al. **Hosp Pract [Off]** 1988 Nov 15;23(11):17–9
Vitamin B-12 deficiency and dementia [letter] Martin DC. **J Am Geriatr Soc** 1989 Aug;37(8):820–1
Infantile tremor syndrome: a vitamin B12 deficiency syndrome in infants. Garewal G, et al. **J Trop Pediatr** 1988 Aug;34(4):174–8
Cobalamin deficiency and neuropsychiatric disorders [letter] **N Engl J Med** 1988 Dec 29;319(26):1733–5
Unrecognized cobalamin-responsive neuropsychiatric disorders. **Nutr Rev** 1989 Jul;47(7):208–10 (7 ref.)
Oral epithelial dysplasia in vitamin B12 deficiency. Theaker JM, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan; 67(1):81–3
[Multifocal gastric carcinoid associated with anemia caused by vitamin B12 deficiency: demonstration of in situ production of serotonin (letter)] Fraitag S, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):863–4 (6 ref.) (Fre)
[Psychiatric disorders and vitamin B12 deficiency. Considerations apropos of a case] Meloni F, et al. **Clin Ter** 1987 Nov 15;123(3):197–203 (Eng. Abstr.) (Ita)
[Axonal polyneuritis and macrocytosis: initial signs of vitamin B12 deficiency presenting as intermittent paresthetic claudication] Roquer J, et al. **Med Clin (Barc)** 1988 May 7;90(18):745–7 (Eng. Abstr.) (Spa)

DIAGNOSIS

Further studies on the use of serum gastrin levels in assessing the significance of low serum B12 levels. Miller A, et al. **Am J Hematol** 1989 Jul;31(3):194–8
Solid-phase sample extraction for rapid determination of methylmalonic acid in serum and urine by a stable-isotope-dilution method. Rasmussen K. **Clin Chem** 1989 Feb;35(2):260–4
A survey and critical evaluation of a dual isotope (Dicopac) vitamin B12 absorption test. Atrah HI, et al. **Eur J Nucl Med** 1989;15(2):57–60
Nutritional consequences of bowel segments in the lower urinary tract. Canning DA, et al. **J Urol** 1989 Aug;142(2 Pt 2):509–11; discussion 520–1

ENZYMOLOGY

Low B12 levels related to high activity of platelet MAO in patients with dementia disorders. A retrospective study. Regland B, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):451–7
Detection and characteristics of DNA polymerase activity in serum from patients with malignant, viral, or B12-deficiency disease. Neumuller M, et al. **Enzyme** 1989; 41(1):6–16
Effect of vitamin B12-deficiency on the activity of hepatic cystathionine beta-synthase in rats. Doi T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Apr;35(2):101–10

ETIOLOGY

Mechanisms of vitamin B12 deficiency in elderly inpatients. Logan RF, et al. **Age Ageing** 1989 Jan;18(1):4–10
Transient vitamin B12 malabsorption in a patient with mixed nutritional anemia. Pagnotta I. **J Am Board Fam Pract** 1989 Apr-Jun;2(2):130–3
Biochemical evidence of asymptomatic vitamin B12 deficiency in children after ileal resection for necrotizing enterocolitis. Skidmore MD, et al. **J Pediatr** 1989 Jul; 115(1):102–5
Chronic giardiasis with vitamin B12 and folate deficiency presenting with psychiatric symptoms. Heap BJ, et al. **J R Army Med Corps** 1989 Feb;135(1):25–6
B12 deficiency in AIDS [letter] Herbert V. **JAMA** 1988 Nov 18;260(19):2837
Selective vitamin B12 malabsorption in adult coeliac disease. Report on three cases with associated autoimmune diseases. Stene-Larsen G, et al. **Scand J Gastroenterol** 1988 Nov; 23(9):1105–8
Hematologic complications of gastric bypass for morbid obesity. Simon SR, et al. **South Med J** 1989 Sep; 82(9):1108–10
A case of vitamin B12 deficiency megaloblastic anemia following total gastrectomy. Hahn JS, et al. **Yonsei Med J** 1988;29(3):270–7 (42 ref.)
[Congenital atresia of the small intestine: a problem in adults? (published erratum appears in Ned Tijdschr Geneeskd 1989 Apr 22;133(16):856)] Jansen W. **Ned Tijdschr Geneeskd** 1989 Apr 1;133(13):649–51 (Dut)
[Severe megaloblastic anemia in 6-month-old girl breast-fed by a vegetarian mother] Cheron G, et al. **Arch Fr Pediatr** 1989 Mar;46(3):205–7 (Eng. Abstr.) (Fre)
[Hematologic significance of erythrocytic macrocytosis: prospective analysis of 109 successively studied cases] Outeiriño Pérez JJ, et al. **Sangre (Barc)** 1989 Feb; 34(1):32–40 (Eng. Abstr.) (Spa)

GENETICS

Vitamin B12-responsive megaloblastic anemia, homocystinuria, and transient methylmalonic aciduria in cb1E disease. Tuchman M, et al. **J Pediatr** 1988 Dec; 113(6):1052–6

HISTORY

Vitamin B-12, megaloblastic madness, and the founding of Duke University. Newbold HL. **Med Hypotheses** 1988 Nov;27(3):231–40

METABOLISM

Effect of thiouracil in modifying folate function in severe vitamin B12 deficiency. Keating JN, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):119–24
Carnitine metabolism in the vitamin B-12-deficient rat. Brass EP, et al. **Biochem J** 1988 Oct 1;255(1):153–9
Rapid appearance of hypomethylated DNA in livers of rats fed cancer-promoting, methyl-deficient diets. Wainfan E, et al. **Cancer Res** 1989 Aug 1;49(15):4094–7
Effect of carnitine on propionate metabolism in the vitamin B-12-deficient rat. Brass EP, et al. **J Nutr** 1989 Aug; 119(8):1196–202
Fermentable dietary fibers elevate urinary methylmalonate and decrease propionate oxidation in rats deprived of vitamin B-12. Cullen RW, et al. **J Nutr** 1989 Aug; 119(8):1115–20

Effect of vitamin B12 deficiency on S-adenosylmethionine metabolism in rats. Doi T, et al.
J Nutr Sci Vitaminol (Tokyo) 1989 Feb;35(1):1–9
Dependence on cyanocobalamin injections [letter] **JAMA** 1989 Sep 15;262(11):1468–9
Carnitine metabolism in B12 deficiency. **Nutr Rev** 1989 Mar; 47(3):89–91 (9 ref.)

PHYSIOPATHOLOGY

Altered expression of retrovirus-like sequences and cellular oncogenes in mice fed methyl-deficient diets. Hsieh LL, et al. **Cancer Res** 1989 Jul 15;49(14):3795–9

PSYCHOLOGY

What are the psychiatric manifestations of vitamin B12 deficiency? Hector M, et al. **J Am Geriatr Soc** 1988 Dec; 36(12):1105–12 (87 ref.)

VITAMIN B COMPLEX

ADMINISTRATION & DOSAGE

Neural tube defect recurrence after 'partial' vitamin supplementation. Sheppard S, et al. **J Med Genet** 1989 May; 26(5):326–9
B-vitamins potentiate the antinociceptive effect of diclofenac in carrageenin-induced hyperalgesia in the rat tail pressure test. Bartoszyk GD, et al. **Neurosci Lett** 1989 Jun 5; 101(1):95–100
[Polyunsaturated phosphatidylcholine + vitamin B complex in the therapy of alcoholic hepatopathies. A controlled study versus standard therapy] Hazuka V, et al.
Clin Ter 1987 Dec 15;123(5):369–75 (Eng. Abstr.) **(Ita)**
[Polyunsaturated phosphatidylcholine combined with vitamin B complex in the treatment of chronic active hepatitis with cirrhosis] Ilic V, et al. **Clin Ter** 1988 Jan 15;124(1):39–46 (Eng. Abstr.) **(Ita)**
[Effect of supplementary vitamin administration on free amino acids in the liver and brain of rats with alcoholic intoxication] Ostrovskiĭ SIu, et al. **Vopr Pitan** 1988 May-Jun;(3):41–5 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Adverse effects of water soluble vitamins. Singh T.
Indian Pediatr 1988 Jan;25(1):83–5 (23 ref.)

ANALYSIS

[Various group B vitamin levels in Warsaw bakery products] Nadolna I, et al. **Rocz Panstw Zakl Hig** 1988;39(2):107–12 (Eng. Abstr.) **(Pol)**

BIOSYNTHESIS

[The growth characteristics of ethanol-assimilating yeasts and their synthesis of B-group vitamins] Kvasnikov EI, et al. **Mikrobiol Zh** 1988 Sep-Oct;50(5):30–3 (Eng. Abstr.) **(Rus)**
[The synthesis of group B vitamins under various conditions for the cultivation of Acinetobacter calcoaceticus on ethanol media] Kvasnikov EI, et al. **Mikrobiol Zh** 1988 Jul-Aug;50(4):17–20 (Eng. Abstr.) **(Rus)**

BLOOD

Blood levels of water-soluble vitamins in pediatric patients on total parenteral nutrition using a multiple vitamin preparation. Marinier E, et al.
JPEN J Parenter Enteral Nutr 1989 Mar-Apr;13(2):176–84

PHARMACOLOGY

[Effect of vitamins B1, B2, B6, folic acid and vitamin C on the motor activity of chicken's intestines in chronic experiments and in vitro] Nagórna-Stasiak B, et al.
Pol Arch Weter 1987;27(2-3):89–98 (Eng. Abstr.) **(Pol)**

RADIATION EFFECTS

Effect of gamma irradiation on the B vitamins of pork chops and chicken breasts. Fox JB Jr, et al. **Int J Radiat Biol** 1989 Apr;55(4):689–703

THERAPEUTIC USE

Effect of vitamin B mixture on neuropathy in streptozotocin-induced diabetic rats. Sakitama K, et al.
J Nutr Sci Vitaminol (Tokyo) 1989 Feb;35(1):95–9
Effect of vitamin B complex on the immunodeficiency produced by surgery of gastric cancer patients. Kurashige S, et al. **Jpn J Exp Med** 1988 Aug;58(4):197–202
B vitamins suppress spinal dorsal horn nociceptive neurons in the cat. Fu QG, et al. **Neurosci Lett** 1988 Dec 19; 95(1-3):192–7
[Experience with the administration of group B vitamins in children with the hyperkinetic syndrome] Vichnar M.
Cesk Psychiatr 1988 Aug;84(4):237–44 (Eng. Abstr.) **(Cze)**
[Shortening diclofenac therapy by B vitamins. Results of a randomized double-blind study, diclofenac 50 mg versus diclofenac 50 mg plus B vitamins, in painful spinal diseases with degenerative changes] Vetter G, et al.
Z Rheumatol 1988 Sep-Oct;47(5):351–62 (Eng. Abstr.) **(Ger)**

TOXICITY

[Working conditions at the final stages in the production of water-soluble vitamins] Nemchinov NN, et al.
Gig Sanit 1989 Apr;(4):79–80 **(Rus)**

VITAMIN B DEFICIENCY

COMPLICATIONS

Hyperpigmentation in megaloblastic anemia. Lee SH, et al.
Int J Dermatol 1988 Oct;27(8):571–5

DRUG THERAPY

[Experimental evaluation of the effectiveness of vitamin-enriched chopped meat products] Alekseeva IA, et al. **Vopr Pitan** 1988 Jul-Aug;(4):55–9 (Eng. Abstr.) **(Rus)**

VITAMIN B T see **CARNITINE**

VITAMIN B12-BINDING PROTEINS see **TRANSCOBALAMINS**

VITAMIN C see **ASCORBIC ACID**

VITAMIN D

ADMINISTRATION & DOSAGE

Vitamin D status of Hong Kong Chinese infants. Leung SS, et al. **Acta Paediatr Scand** 1989 Mar;78(2):303–6
Effect of vitamin D supplementation during pregnancy on foetal growth. Marya RK, et al. **Indian J Med Res** 1988 Dec;88:488–92
Providing vitamin D to confined sheep by oral supplementation vs ultraviolet irradiation. Hidiroglou M, et al. **J Anim Sci** 1989 Mar;67(3):794–802
Minimal vitamin D and high calcium and phosphorus needs of preterm infants receiving parenteral nutrition. Koo WW, et al. **J Pediatr Gastroenterol Nutr** 1989 Feb;8(2):225–33
Parenteral vitamins A, D, and E for premature infants. Etches PC, et al. **J Perinatol** 1988 Spring;8(2):93–5 (34 ref.)
[Dietary milk for infants supplemented with vitamin D: is it for the near future? Comité de Nutrition et Groupe d'étude du Métabolisme du Calcium en Pédiatrie, Société Française de Pédiatrie] **Arch Fr Pediatr** 1988 Aug-Sep; 45(7):511–3 **(Fre)**
[The current practice of prevention of rachitis in France. A survey of 600 physicians] Feillet F, et al. **Pediatrie** 1988; 43(9):775–82 (Eng. Abstr.) **(Fre)**
[Preventive use of vitamin D and fluoride in Austria] Pietschnig B, et al. **Wien Klin Wochenschr** 1988 Oct 7; 100(19):646–8 (Eng. Abstr.) **(Ger)**
[Differentiating effect of the oral administration of vitamin D and vitamin A in acute myelocytic leukemia after BHAC-DMP therapy] Yamane T, et al.
Rinsho Ketsueki 1988 May;29(5):765–8 (Eng. Abstr.) **(Jpn)**
[Prevention of rickets in premature infants and in children with various chronic disease] Otto-Buczkowska E, et al.
Pol Tyg Lek 1988 Nov 28;43(48):1565–8 (50 ref.) **(Pol)**

ANALYSIS

Liquid chromatographic methods for vitamins A and D in multivitamin-mineral formulations. Beaulieu N, et al.
J Assoc Off Anal Chem 1989 Mar-Apr;72(2):247–54
Rapid determination of vitamin D in fortified skim milk. O'Keefe SF, et al. **J Chromatogr** 1988 Jul 8;445(1):305–9
High-performance liquid chromatography of vitamin D and its application to endocrinology. Jones G, et al.
Monogr Endocrinol 1988;30:95–139 (186 ref.)

BIOSYNTHESIS

Skin: site of the synthesis of vitamin D and a target tissue for the active form, 1,25-dihydroxyvitamin D3. Holick MF. **Ann N Y Acad Sci** 1988;548:14–26 (38 ref.)
Photoprotection and the vitamin D status of the elderly. A concern for dermatologists. Prystowsky JH.
Arch Dermatol 1988 Dec;124(12):1844–8 (28 ref.)
Endogenous, cutaneous vitamin D synthesis stimulation as an effective way of improving the vitamin D status in children with hepatobiliary malfunctions. Lukaszkiewicz J, et al. **Digestion** 1989;42(3):158–62
[Etiopathogenesis of increased calciuria in patients with chronic diseases of the digestive system and vitamin D deficiency during ultraviolet therapy]
Marcinowska-Suchowierska E, et al. **Przegl Lek** 1988; 45(4):378–82 (Eng. Abstr.) **(Pol)**

BLOOD

Normal vitamin D and mineral metabolism in essential hypertension. Hughes GS Jr, et al. **Am J Med Sci** 1988 Oct;296(4):252–9
Active metabolites of vitamin D in patients with coxarthrosis and with aseptic loosening of total hip endoprostheses. Tauber C, et al. **Arch Orthop Trauma Surg** 1989; 108(3):176–8
Histomorphometry and vitamin D metabolism of valgus-varus deformity in broiler chickens. Newbrey JW, et al. **Avian Dis** 1988 Oct-Dec;32(4):704–12
Vitamin D metabolites and bioactive parathyroid hormone levels during Spacelab 2. Morey-Holton ER, et al.
Aviat Space Environ Med 1988 Nov;59(11 Pt 1):1038–41
The effect of lithium on vitamin D metabolism. Rosenblatt S, et al. **Biol Psychiatry** 1989 Jun;26(2):206–8
Vitamin D metabolism in women with femoral neck fracture. Hordon LD, et al. **Bone Miner** 1987 Aug;2(5):413–26
The effects of high-dose glucocorticoid administration on serum bone gamma carboxyglutamic acid-containing protein, serum alkaline phosphatase and vitamin D metabolites in normal subjects. Nielsen HK, et al.
Bone Miner 1988 Apr;4(1):105–13
Effects of decreasing serum calcium on circulating parathyroid hormone and vitamin D metabolites in normocalcaemic and hypercalcaemic patients treated with APD. Papapoulos SE, et al. **Bone Miner** 1986 Feb; 1(1):69–78
Serum concentration of vitamin D metabolites during treatment with vitamin D2 and D3 in normal premenopausal women. Tjellesen L, et al. **Bone Miner** 1986 Oct;1(5):407–13
Low circulating vitamin D in obesity. Liel Y, et al.
Calcif Tissue Int 1988 Oct;43(4):199–201
Chromatography of serum on Sep-pak C18 corrects falsely elevated vitamin D metabolite levels measured by protein binding assay. Dean B, et al. **Clin Chim Acta** 1988 Aug 31;176(2):169–78
Vitamin D status and concentrations of serum vitamin D metabolites and osteocalcin in elderly patients with femoral neck fracture: a follow-up study. Lamberg-Allardt C, et al. **Eur J Clin Nutr** 1989 May;43(5):355–61
Bone disease in chronic childhood cholestasis. I. Vitamin D absorption and metabolism. Heubi JE, et al. **Hepatology** 1989 Feb;9(2):258–64
The effects of muscle-building exercise on vitamin D and mineral metabolism. Bell NH, et al. **J Bone Miner Res** 1988 Aug;3(4):369–73
Vitamin concentrations in very low birth weight infants given vitamins intravenously in a lipid emulsion: measurement of vitamins A, D, and E and riboflavin. Baeckert PA, et al. **J Pediatr** 1988 Dec;113(6):1057–65
Dietary assessment of maternal vitamin D intake and correlation with maternal and neonatal serum vitamin D concentrations at delivery. Anderson DM, et al.
J Perinatol 1988 Winter;8(1):46–8
Simplified HPLC method for quantitation of vitamin D in blood serum. Lukaszkiewicz J, et al.
J Pharmacol Methods 1989 Jul;21(4):247–54
Possible role for vitamin D in controlling breast cancer cell proliferation. Colston KW, et al. **Lancet** 1989 Jan 28; 1(8631):188–91
[Calciotrophic hormones and aging] Pioli G, et al.
G Clin Med 1989 Jun-Jul;70(6-7):439–41, 443–7, 450–6 (120 ref.) **(Ita)**
[A study of bone metabolism in hemodialysis patients. I. Correlation with bone histology and serum levels of PTH, vitamin D metabolites, and vitamin A] Obara K.
Nippon Jinzo Gakkai Shi 1988 Apr;30(4):417–36 (Eng. Abstr.) **(Jpn)**

CHEMICAL SYNTHESIS

[Progress in the synthesis of vitamin D and its metabolites] Zhou WS, et al. **Yao Hsueh Hsueh Pao** 1988 Jun; 23(6):464–80 (36 ref.) **(Chi)**

IMMUNOLOGY

The immunobiology of vitamin D. Rigby WF.
Immunol Today 1988 Feb;9(2):54–8 (50 ref.)

ISOLATION & PURIFICATION

Tritium isotope effect in high-pressure liquid chromatography of vitamin D metabolites. Worth GK, et al. **Anal Biochem** 1988 Oct;174(1):137–41

METABOLISM

Heritable syndrome of pseudoxanthoma elasticum with abnormal phosphorus and vitamin D metabolism. Mallette LE, et al. **Am J Med** 1987 Dec;83(6):1157–62 (29 ref.)
Evaluation of vitamin D metabolism in patients with bilateral sensorineural hearing loss. Ikeda K, et al. **Am J Otol** 1989 Jan;10(1):11–3
Vitamin D metabolism in tuberculosis. Production of 1,25(OH)2D3 by cells recovered by bronchoalveolar lavage and the role of this metabolite in calcium homeostasis. Cadranel J, et al. **Am Rev Respir Dis** 1988 Oct;138(4):984–9
Vitamin D metabolite production and function in keratinocytes. Bikle DD, et al. **Ann N Y Acad Sci** 1988; 548:27–44 (39 ref.)
Cystinosis and vitamin D [letter] Steinherz R.
Arch Dis Child 1988 Dec;63(12):1519
Relations between vitamin D and fatty acid binding properties of vitamin D-binding protein. Calvo M, et al.
Biochem Biophys Res Commun 1989 Aug 30;163(1):14–7
Perinatal vitamin D metabolism. Salle BL, et al.
Biol Neonate 1988;54(4):181–7 (33 ref.)
Mineral regulation of vitamin D metabolism. Carpenter TO.
Bone Miner 1989 Mar;5(3):259–69 (47 ref.)
Vitamin D metabolites in patients with established non-union of fracture. Haining SA, et al. **Bone Miner** 1986 Jun; 1(3):205–9

Ethanol increases and vitamin D metabolites decrease the production of cyclic AMP by canine renal cortical membranes. Bergmann PJ, et al. **Calcif Tissue Int** 1988 Dec; 43(6):366–9

Effect of maternal insulin deficiency on vitamin D metabolite concentrations in normoglycemic pregnant rats and their fetuses. Rebut-Bonneton C, et al. **Calcif Tissue Int** 1988 Oct;43(4):254–9

Effect of long-term and short-term diabetes on the parathyroid hormone sensitive rat renal adenylate cyclase: correlation with vitamin D metabolism. Rao LG, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1313–8

Vitamin D in Paget's disease of bone. Foldes J, et al. **Clin Orthop** 1989 Jun;(243):275–9

Vitamin D metabolism in polar vertebrates. Griffiths P, et al. **Comp Biochem Physiol [B]** 1988;91(3):511–6

Vitamin D and the kidney: a short review. Bouillon R. **Contrib Nephrol** 1988;64:25–33 (27 ref.)

Vitamin D metabolite-mediated hypercalcemia. Adams JS. **Endocrinol Metab Clin North Am** 1989 Sep;18(3):765–78 (55 ref.)

Vitamin D metabolism in tumoral calcinosis [letter] Steinherz R. **Eur J Pediatr** 1989 Feb;148(5):475

Effect of different insulin administration modalities on vitamin D metabolism of insulin-dependent diabetic patients. Colette C, et al. **Horm Metab Res** 1989 Jan; 21(1):37–41

Ketoconazole and vitamin D metabolism in hyperparathyroidism. Riancho JA, et al. **Horm Metab Res** 1989 Jan;21(1):51

Recent developments in vitamin D metabolism and its clinical application for renal disease. Chesney RW. **Indian J Pediatr** 1988 Jul-Aug;55(4):504–11

Serum and bone vitamin D metabolites in elective patients and patients after fracture. Alkalay D, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):85–7

Evidence that obesity does not influence the vitamin D–endocrine system in blacks. Epstein S, et al. **J Bone Miner Res** 1986 Apr;1(2):181–4

Differential effect of caffeine administration on calcium and vitamin D metabolism in young and adult rats. Yeh JK, et al. **J Bone Miner Res** 1986 Jun;1(3):251–8

Use of 1 alpha-hydroxyvitamin D3 in prevention of bovine parturient paresis. 8. Maternal and neonatal plasma calcium, parathyroid hormone, and vitamin D metabolites concentrations. Bar A, et al. **J Dairy Sci** 1988 Oct; 71(10):2723–9

Vitamin D, parathyroid hormone, and bone mineral content of lumbar spine and femur in primary biliary cirrhosis. Almdal T, et al. **J Intern Med** 1989 Mar;225(3):207–13

Hypercalciuria with Bartter syndrome: evidence for an abnormality of vitamin D metabolism. Restrepo de Rovetto C, et al. **J Pediatr** 1989 Sep;115(3):397–404

Calcium, phosphorus, and vitamin D requirements of infants receiving parenteral nutrition. Koo WW. **J Perinatol** 1988 Summer;8(3):263–8 (33 ref.)

Nutritional significance of human milk vitamin D in neonatal period. Nakao H. **Kobe J Med Sci** 1988 Jun;34(3):121–8

Vitamin D metabolism in breast-fed infants and their mothers. Hoogenboezem T, et al. **Pediatr Res** 1989 Jun; 25(6):623–8

On the specificity of vitamin D compounds binding to chick pig intestinal 1,25-dihydroxyvitamin D3 receptor. Link RP, et al. **Steroids** 1988 May-Jun;51(5–6):583–98

Vitamin D: experimental research and its practical application. Spirichev VB, et al. **World Rev Nutr Diet** 1988; 56:173–216 (102 ref.)

[Drugs and calcium] Filipponi P, et al. **Medicina (Firenze)** 1988 Oct-Dec;8(4):399–408 (26 ref.) (Eng. Abstr.) **(Ita)**

[Chymotrypsin activity and vitamin D and calcium metabolism in chronic pancreatitis] Marcinowska-Suchowierska E, et al. **Wiad Lek** 1988 Mar 15;41(6):345–50 (Eng. Abstr.) **(Pol)**

[Metabolism and reception of vitamin D] Sergeev IN. **Vopr Med Khim** 1989 Jan-Feb;35(1):2–11 (64 ref.) **(Rus)**

PHARMACOKINETICS

Vitamin D kinetics in vivo: effect of 1,25-dihydroxyvitamin D administration. Halloran BP, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E686–91

Computer simulation of vitamin D transport. Dunn JF. **Ann N Y Acad Sci** 1988;538:69–76 (20 ref.)

[Effect of disorders of liver function on vitamin D absorption in children with post-hepatitis cirrhosis of the liver] Ryżko J, et al. **Pol Tyg Lek** 1988 Nov 28;43(48):1559–61 **(Pol)**

PHARMACOLOGY

Effect of 1,25-vitamin D and parathyroidectomy on the uptake of aluminum in bone of rats with renal insufficiency. Abreo K, et al. **Am J Nephrol** 1988;8(5):426–30

Vitamin D metabolites do not alter parathyroid hormone secretion acutely. Magliola L, et al. **Bone Miner** 1986 Dec; 1(6):495–505

The effect of vitamin D treatment on decreased levels of ATP and energy charge in the thoracic aorta of uraemic rats. Krog M, et al. **Br J Exp Pathol** 1989 Apr;70(2):193–8

Effect of vitamin D status on the activity of carbonic anhydrase in chicken epiphysis and kidney. Drewe J, et al. **Calcif Tissue Int** 1988 Jul;43(1):26–32

Effect of calcitonin and vitamin D in osteoporosis. Palmieri GM, et al. **Calcif Tissue Int** 1989 Sep;45(3):137–41

The effects of calcium and vitamin D on blood pressure in conscious sheep. Tresham JJ, et al. **Clin Exp Hypertens [A]** 1988;10(6):1085–106

Effect of oral calcium and vitamin D on glucocorticoid-induced osteopenia. Bijlsma JW, et al. **Clin Exp Rheumatol** 1988 Apr-Jun;6(2):113–9

Vitamin D status and brush border membrane vesicles: 1,25-dihydroxyvitamin D3 induced destabilization. Putkey JA, et al. **J Bone Miner Res** 1986 Aug;1(4):305–11

Vitamin D and pancreatic islet function. II. Dynamics of insulin release and cationic fluxes. Billaudel B, et al. **J Endocrinol Invest** 1988 Sep;11(8):585–93

Vitamin D and pancreatic islet function. I. Time course for changes in insulin secretion and content during vitamin D deprivation and repletion. Labriji-Mestaghanmi H, et al. **J Endocrinol Invest** 1988 Sep;11(8):577–84

Vitamin D is necessary for reproductive functions of the male rat. Kwiecinski GG, et al. **J Nutr** 1989 May;119(5):741–4

Uptake of 75Se-selenite by brush border membrane vesicles from chick duodenum stimulated by vitamin D. Mykkanen HM, et al. **J Nutr** 1989 Feb;119(2):242–7

Regulation of calbindin-D28K in chicks: effects of vitamin D and glucocorticoid administration. Tohmon M, et al. **Kobe J Med Sci** 1988 Apr;34(2):77–91

Immunologic effects of vitamin D [letter] Manuel Quesada J, et al. **N Engl J Med** 1989 Sep 21;321(12):833–4

Vitamin D, desferrioxamine and aluminum-induced bone disease in uremic rats. Verbeelen D, et al. **Nephron** 1989; 53(1):54–60

[Vitamin D and its role in the regulation of phosphorus-calcium metabolism] Balabolkin MI, et al. **Sov Med** 1988;(9):42–6 (48 ref.) **(Rus)**

PHYSIOLOGY

The role of vitamin D in tuberculosis. Rook GA. **Am Rev Respir Dis** 1988 Oct;138(4):768–70

Influence of vitamin D status on the content of complexed acidic phospholipids in chick diaphyseal bone. Boskey AL, et al. **Bone Miner** 1988 Sep;4(4):365–71

Vitamin D-dependent active calcium transport: the role of CaBP. Bronner F. **Calcif Tissue Int** 1988 Sep;43(3):133–7

Effects of estrogen on circulating "free" and total 1,25-dihydroxyvitamin D and on the parathyroid-vitamin D axis in postmenopausal women. Cheema C, et al. **J Clin Invest** 1989 Feb;83(2):537–42

Regulation of brain and cerebrospinal fluid calcium by brain barrier membranes following vitamin D-related chronic hypo- and hypercalcemia in rats. Murphy VA, et al. **J Neurochem** 1988 Dec;51(6):1777–82

Morphology and biochemistry of bone remodeling: possible control by vitamin D, parathyroid hormone, and other substances. Huffer WE. **Lab Invest** 1988 Oct;59(4):418–42 (347 ref.)

Vitamin D-regulated, ATP-dependent calcium transport by intestinal Golgi vesicles during maturation in the rat. Arab N, et al. **Pediatr Res** 1989 Jul;26(1):58–62

Molecular biology of the vitamin D hormone. Haussler MR, et al. **Recent Prog Horm Res** 1988;44:263–305 (130 ref.)

[Mechanisms of control in bone formation and resorption] Suda T. **Ryumachi** 1988 Dec;28(6):409–13 **(Jpn)**

[Current theories on the role of vitamin D in physiology and pathology. Therapeutic implications] Bar A, et al. **Pol Tyg Lek** 1988 Nov 28;43(48):1531–6 **(Pol)**

[Active metabolites of vitamin D as mediators of the processes of cell proliferation and differentiation. 1. Lymphocytes] Pletsityĭ KD. **Vopr Med Khim** 1988 Sep-Oct;34(5):9–14 (41 ref.) **(Rus)**

POISONING

Glutethimide and circulating 1,25-dihydroxyvitamin D in vitamin D intoxication. Iqbal SJ, et al. **BMJ** 1988 Oct 8; 297(6653):902–3

Recurrent pancreatitis secondary to hypercalcemia following vitamin D poisoning. Waele BD, et al. **Pancreas** 1989; 4(3):378–80

[Protracted vitamin D poisoning] Mäki M, et al. **Duodecim** 1988;104(13):997–1000 **(Fin)**

[Severe acute hypercalcemia in a child caused by accidental vitamin D poisoning] Velin P, et al. **Pediatrie** 1988; 43(9):753–6 (10 ref.) (Eng. Abstr.) **(Fre)**

[A strange poisoning caused by vitamin D (letter)] Gepner P, et al. **Presse Med** 1989 Feb 18;18(7):360–1 **(Fre)**

[Vitamin D toxicity: multiple manifestations in a hypoparathyroid patient] Fauquert P, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):151–5 **(Fre)**

[Pulmonary calcification in vitamin D poisoning in an infant] Bartolozzi G, et al. **Pediatr Med Chir** 1988 Sep-Oct; 10(5):541–2 (Eng. Abstr.) **(Ita)**

[Nephrocalcinosis] Puga F, et al. **Rev Chil Pediatr** 1987 Sep-Oct;58(5):397–401 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Influence of solar irradiation on vitamin D levels in children on anticonvulsant drugs. Riancho JA, et al. **Acta Neurol Scand** 1989 Apr;79(4):296–9

THERAPEUTIC USE

The effect of short-term treatment with vitamin D metabolites on bone lipid and mineral composition in healing vitamin D-deficient rats. Boskey AL, et al. **Bone** 1988;9(5):309–18

Current status of diagnosis and treatment of renal osteodystrophy in the predialysis period. Lindenau K, et al. **Contrib Nephrol** 1988;65:107–14

Biochemical markers of bone turnover, intact serum parathyroid horn and renal calcium excretion in patients with pseudohypoparathyroidism and hypoparathyroidism before and during vitamin D treatment. Kruse K, et al. **Eur J Pediatr** 1989 Apr;148(6):535–9

Studies on parathyroid hormone, vitamin D and pseudohypoparathyroidism: an example of trail from basic science to clinical practice [editorial] Ogata E. **Jpn J Med** 1989 Jan-Feb;28(1):1

Extra-renal production of calcitriol in chronic renal failure. Dusso A, et al. **Kidney Int** 1988 Sep;34(3):368–75

[How can osteoporosis be prevented?] Salmi J. **Duodecim** 1988;104(20):1644–9 (32 ref.) **(Fin)**

[Use of vitamin D and its metabolites in pediatric practice] Mogorianu PD. **Pediatria** 1989;(4):104–7 (42 ref.) **(Rus)**

TOXICITY

Ultrastructural study of hypervitaminosis D induced arterial calcification in Wistar rats. Kingma JG Jr, et al. **Artery** 1988;16(1):51–61

Cholesterol reduces and corticosteroids enhance the toxicity of vitamin D in rats. Kunitomo M, et al. **Jpn J Pharmacol** 1989 Mar;49(3):381–8

VITAMIN D 2 see **ERGOCALCIFEROL**

VITAMIN D 3 see **CHOLECALCIFEROLS**

VITAMIN D BINDING GLOBULIN see **VITAMIN D-BINDING PROTEIN**

VITAMIN D-BINDING PROTEIN

ANALYSIS

Vitamin D-binding protein. Structure and pattern of expression. Cooke NE, et al. **Ann N Y Acad Sci** 1988; 538:49–59

Fatty acids bound to vitamin D-binding protein (DBP) from human and bovine sera. Ena JM, et al. **Biochem Int** 1989 Jul;19(1):1–7

A comparative study of vitamin D binding globulins in milk. Hollis BW, et al. **Comp Biochem Physiol [B]** 1979;64(1):41–6

Isoelectric focusing of group specific component in semen and vaginal stains on ultrathin immobilized pH gradient gels. Pflug W, et al. **Electrophoresis** 1988 May;9(5):239–40

BLOOD

Serum levels of vitamin D metabolites in the elderly. Aksnes L, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):27–33

Distribution of group-specific component (Gc) subtypes in several Mongoloid populations of East Asia. Saha N. **Ann Hum Biol** 1989 Jan-Feb;16(1):53–60

Formation of vitamin D-binding protein-actin and binary and ternary plasma gelsolin-actin complexes in human serum. Ohsawa M, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):195–200

Alterations in Gc levels and complexing in septic shock. Lee WM, et al. **Circ Shock** 1989 Jul;28(3):249–55

Alterations in plasma levels and complexing of Gc (vitamin D-binding protein) in rats with endotoxic shock. Watt GH, et al. **Circ Shock** 1989 Jul;28(3):279–91

Binding properties of serum vitamin D transport proteins in vertebrates for 24R, 25-dihydroxycholecalciferol and 24S, 25-dihydroxycholecalciferol in vitro. Hay AW, et al. **Comp Biochem Physiol [B]** 1977;58(1):43–8

Alpha-1-antitrypsin (PI) and vitamin-D binding globulin (GC) phenotypes in rheumatoid arthritis: absence of an association. Kahl LE, et al. **Dis Markers** 1989 Apr-Jun; 7(2):71–8

The isolation, characterization and amino terminal sequence of the vitamin D-binding protein (group specific component) from mouse plasma. Borke JL, et al. **Int J Biochem** 1988;20(12):1343–9

Interactions among serum vitamin D binding protein, monomeric actin, profilin, and profilactin. Mc Leod JF, et al. **J Biol Chem** 1989 Jan 15;264(2):1260–7

Serum vitamin D metabolites in very low birth weight infants with and without rickets and fractures. Koo WW, et al. **J Pediatr** 1989 Jun;114(6):1017–22

CLASSIFICATION

Repel-Silane induced alteration of group specific component subtypes using LKB Immobiline DryPlates. Klein H, et al. **Electrophoresis** 1989 Jul;10(7):537

Subtyping of group specific component (GC) in human semen, blood and vaginal fluid by isoelectric focusing in immobilized pH gradients. Pötsch-Schneider L, et al. **Electrophoresis** 1988 Sep;9(9):602–5

GENETICS

MS and the group-specific component. Høilsberg P, et al. **Acta Neurol Scand** 1988 Aug;78(2):158–60

Interstitial deletion of the proximal long arm of chromosome 4 associated with father-child incompatibility within the Gc-system: probable reduced gene dosage effect and partial

piebald trait. Yamamoto Y, et al. **Am J Med Genet** 1989 Apr;32(4):520–3

Study of five haemogenetic markers (Gc, C3, Bf, Ag, and GALT) in six Indonesian populations and in 12 subgroups of Balinese. Scherz R, et al. **Am J Phys Anthropol** 1988 Aug;76(4):489–96

Polymorphic plasma postalbumin (Po) of llamas and alpacas identified as Gc protein. Penedo MC, et al. **Anim Genet** 1989;20(2):221–3

Gene frequencies of Gc and PGM subtypes. White I, et al. **Ann Hum Biol** 1989 Mar–Apr;16(2):169–72

Protein subtype polymorphisms (Gc and Tf) in a Catalan population from Gerona (northeastern Spain). Moreno P, et al. **Anthropol Anz** 1988 Sep;46(3):201–5

Subtypes of the Gc gene (vitamin D binding protein) in the Polish population. Leśko D, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):687–93

HIV infection and distribution of GC alleles in AIDS patients, i.v. drug addicts, and hemophiliacs. Kühnl P, et al. **Beitr Infusionther** 1988;21:169–73

Mapping of the hooded, Gc protein, and albumin gene loci in linkage group VI of the laboratory rat. Shumiya S, et al. **Biochem Genet** 1988 Oct;26(9–10):585–93

Group specific component (Gc) and HIV diseases. Rosberger DF, et al. **Dis Markers** 1988 Oct–Dec;6(4):269–74

Identification of group specific component/vitamin D–binding protein (GC/DBP) mutants by isoelectric focusing in immobilized pH gradients. Constans J, et al. **Electrophoresis** 1988 Sep;9(9):599–602

The group specific component/vitamin D binding protein (GC/DBP) system in the analysis of disputed paternities. Constans J, et al. **Electrophoresis** 1988 Aug;9(8):398–403

Subtyping of group specific component (GC) in micro–bloodstains and semen stains by isoelectric focusing in ultrathin immobilized pH gradient gels followed by enzyme immunodetection. Pflug W. **Electrophoresis** 1988 Aug;9(8):443–8

The use of alpha 2HS–glycoprotein and group specific component in typing forensic blood samples for discriminative and investigative purposes. Westwood SA. **Electrophoresis** 1988 Aug;9(8):432–7

Group specific component and susceptibility to acquired immunodeficiency syndrome in patients with human immunodeficiency virus infection. Aprili G, et al. **Haematologica (Pavia)** 1988 Sep–Oct;73(5):371–3

No predictive value of GC phenotypes for HIV infection and progression to AIDS. Pronk JC, et al. **Hum Genet** 1988 Oct;80(2):181–2

A hereditary double double–banded variation in the vitamin D–binding protein (GC) system analyzed by immunoblotting: duplication of the 1F and 1A2 genes? Yasuda T, et al. **Hum Genet** 1989 Apr;82(1):89–91

Distribution of Gc subtypes in Aragon (north–east Spain). Martinez–Jarreta B, et al. **Hum Hered** 1989;39(1):46–8

An association between Gc (vitamin D–binding protein) alleles and susceptibility to rheumatic fever. Bahr GM, et al. **Immunology** 1989 May;67(1):126–8

Group specific component subtyping in bloodstains by separator isoelectric focusing in micro–ultrathin polyacrylamide gels followed by immunoblotting. Alonso A. **J Forensic Sci** 1988 Sep;33(5):1267–72

Genotypes of the group–specific component protein in black intravenous drug abusers [letter] Levine B, et al. **J Infect Dis** 1989 Jan;159(1):147–8

Comparative affinity of the major genetic variants of human group–specific component (vitamin D–binding protein) for 25–(OH) vitamin D. Boutin B, et al. **J Steroid Biochem** 1989 Jan;32(1A):59–63

[Possibilities for simultaneous determination of ABO, PGM1 and Gc polymorphisms in typing of blood stains] Berghaus G, et al. **Beitr Gerichtl Med** 1988;46:213–7 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Distribution of group–specific component subtypes in multiple sclerosis. Lindblom B, et al. **Acta Neurol Scand** 1988 Nov;78(5):443–4

Inhibition of human natural killer activity by antiserum against vitamin D–binding protein, a group–specific component (Gc). Chujo T, et al. **Clin Exp Immunol** 1989 May;76(2):154–8

[Binding of actin to serum actin–binding proteins and determination of actin in blood of cadavers using anti Gc] Ohsawa M. **Nippon Hoigaku Zasshi** 1988 Dec;42(6):546–54 (Eng. Abstr.) (Jpn)

METABOLISM

New aspects of the plasma carrier protein for 25–hydroxycholecalciferol in vertebrates. Van Baelen H, et al. **Ann N Y Acad Sci** 1988;538:60–8 (34 ref.)

Relations between vitamin D and fatty acid binding properties of vitamin D–binding protein. Calvo M, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):14–7

Vitamin D–binding protein in pisces. Allewaert K, et al. **Steroids** 1988 Oct;52(4):357–8

[Vitamin D–dependent protein of smooth endoplasmic reticulum membranes of rat enterocytes] Morozova RP, et al. **Ukr Biokhim Zh** 1988 Jul–Aug;60(4):18–24 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Vitamin D binding protein (Gc–globulin). Cooke NE, et al. **Endocr Rev** 1989 Aug;10(3):294–307 (176 ref.)

25 Hydroxyvitamin D and vitamin E absorption in healthy children and children with chronic intrahepatic cholestasis. Issa S, et al. **Eur J Pediatr** 1989 Jun;148(7):605–9 (26 ref.)

VITAMIN D DEFICIENCY

BLOOD

Acute plasma calcium regulation in rats: effect of vitamin D deficiency. Bronner F, et al. **Bone Miner** 1989 May; 6(2):141–53

Circulating parathyroid hormone concentrations in normal and vitamin D–deprived rat pups determined with an N–terminal–specific radioimmunoassay. Toverud SU, et al. **Bone Miner** 1986 Apr;1(2):145–55

Vitamin D status and concentrations of serum vitamin D metabolites and osteocalcin in elderly patients with femoral neck fracture: a follow–up study. Lamberg–Allardt C, et al. **Eur J Clin Nutr** 1989 May;43(5):355–61

Serum calcitriol and parathyroid hormone levels following prolonged infusion of calcitriol in vitamin D replete and depleted rabbits. Long JF, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):273–86

COMPLICATIONS

The role of vitamin D in tuberculosis [letter] Davies PD. **Am Rev Respir Dis** 1989 Jun;139(6):1571

Association between prolonged dietary vitamin D deficiency and autonomous hyperparathyroidism. Sultan AH, et al. **BMJ** 1989 Jul 22;299(6693):236–7

Bone disease in vitamin D–deficient patients with Crohn's disease. Vogelsang H, et al. **Dig Dis Sci** 1989 Jul; 34(7):1094–9

[Five cases of vitamin D–dependent rickets type II with alopecia] Arase S, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Sep;98(10):1029–38 (31 ref.) (Eng. Abstr.) (Jpn)

[Current theories on the role of vitamin D in physiology and pathology. Therapeutic implications] Bar A, et al. **Pol Tyg Lek** 1988 Nov 28;43(48):1531–6 (Pol)

[The classification of rickets] Mogorianu PD. **Pediatria** 1989; (3):88–9 (Rus)

[Rickets–like diseases] Mogorianu PD. **Pediatria** 1989; (2):76–82 (Rus)

DIAGNOSIS

Evidence of hypovitaminosis D in patients with mitral ring calcification. Shiraki M, et al. **Jpn Heart J** 1988 Nov; 29(6):801–8

DRUG THERAPY

The effect of short–term treatment with vitamin D metabolites on bone lipid and mineral composition in healing vitamin D–deficient rats. Boskey AL, et al. **Bone** 1988;9(5):309–18

Increase of bone volume in vitamin D–repleted rats by massive administration of 24R,25(OH)2D3. Nakamura T, et al. **Calcif Tissue Int** 1988 Oct;43(4):235–43

Activity of ornithine decarboxylase and creatine kinase in soft and hard tissue of vitamin D–deficient chicks following parenteral application of 1,25–dihydroxyvitamin D3 or 24R,25–dihydroxyvitamin D3. Ittel TH, et al. **J Bone Miner Res** 1986 Feb;1(1):23–31

[Vitamin D deficiency and supplementation in the elderly. A comparative trial of various modalities of administrating vitamin D2] Sebert JL, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):693–700 (29 ref.) (Fre)

[Use of vitamin D and its metabolites in pediatric practice] Mogorianu PD. **Pediatria** 1989;(4):104–7 (42 ref.) (Rus)

ENZYMOLOGY

The calcium ionophore A23187 is a potent stimulator of the vitamin D3–25 hydroxylase in hepatocytes isolated from normocalcaemic vitamin D–depleted rats. Benbrahim N, et al. **Biochem J** 1988 Oct 1;255(1):91–7

Acute stimulation of creatine kinase activity by vitamin D metabolites in the developing cerebellum. Binderman I, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):9–16

EPIDEMIOLOGY

Vitamin D status of Hong Kong Chinese infants. Leung SS, et al. **Acta Paediatr Scand** 1989 Mar;78(2):303–6

Vitamin D deficiency in elderly patients in a general hospital. Goldray D, et al. **J Am Geriatr Soc** 1989 Jul;37(7):589–92

ETIOLOGY

Vitamin D deficiency and muscle strength in male alcoholics. Hickish T, et al. **Clin Sci** 1989 Aug;77(2):171–6

A place in the sun does not guarantee adequate vitamin D. Morley JE. **J Am Geriatr Soc** 1989 Jul;37(7):663–4 (18 ref.)

[The intensity and the effective factors of ultraviolet in Shenyang] Wang BX. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Sep;22(5):274–6 (Eng. Abstr.) (Chi)

[Vitamin D deficiency in vegetarian nutrition (letter)] Gain T, et al. **Dtsch Med Wochenschr** 1989 Jul 28;114(30):1177 (Ger)

[Vitamin D deficiency and its correction in children with terminal stage of chronic kidney failure] Tsybysheva AK, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):112–7 (Eng. Abstr.) (Rus)

GENETICS

Parathyroid hormone sensitivity in familial X–linked hypophosphatemic rickets. McElduff A, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):386–9

IMMUNOLOGY

Effect of vitamin D deficiency on macrophage and lymphocyte function in the rat. Wientroub S, et al. **Calcif Tissue Int** 1989 Feb;44(2):125–30

METABOLISM

Regulatory activities of 2 beta–(3–hydroxypropoxy)–1 alpha, 25–dihydroxyvitamin D3, a novel synthetic vitamin D3 derivative, on calcium metabolism. Okano T, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1444–9

Interrelationships of vitamin D, bone metabolism and blood calcium concentration in the chick. Ramp WK, et al. **Bone Miner** 1989 Jan;5(2):117–28

Effects of vitamin D deprivation and 1,25–dihydroxyvitamin D3 treatment on ion release from rat tibiae in vitro. Ramp WK, et al. **Bone Miner** 1986 Feb;1(1):1–13

Immunological characterization, developmental pattern and vitamin–D–dependency of calbindin D–28 K in rat teeth ameloblasts. Berdal A, et al. **Differentiation** 1989 Mar; 40(1):27–35

Effect of 24,25–dihydroxyvitamin D3 on 1,25–dihydroxyvitamin D3 [1,25–(OH)2D3] metabolism in vitamin D–deficient rats infused with 1,25–(OH)2D3. Yamato H, et al. **Endocrinology** 1989 Jan;124(1):511–7

Severe cholestasis leads to vitamin D depletion without perturbing its C–25 hydroxylation in the dog. Plourde V, et al. **Hepatology** 1988 Nov–Dec;8(6):1577–85

Aluminum intoxication in vitamin D–deficient rats: studies of bone aluminum localization and histomorphometry before and after vitamin D repletion. Hodsman AB, et al. **J Bone Miner Res** 1988 Aug;3(4):375–83

Effects of oxidation of human parathyroid hormone on its biological activity in continuously infused, thyroparathyroidectomized rats. Horiuchi N. **J Bone Miner Res** 1988 Jun;3(3):353–8

Hepatic handling of vitamin D3 in micronodular cirrhosis: a structure–function study in the rat. Plourde V, et al. **J Bone Miner Res** 1988 Aug;3(4):461–71

Vitamin D and pancreatic islet function. I. Time course for changes in insulin secretion and content during vitamin D deprivation and repletion. Labriji–Mestaghanmi H, et al. **J Endocrinol Invest** 1988 Sep;11(8):577–84

1,25–Dihydroxycholecalciferol effects on plasma calcitonin levels and calcitonin mRNA in normal or partially vitamin D–depleted rats. Legendre B, et al. **J Physiol (Paris)** 1988–89;83(2):74–9

Regulation of calbindin–D28K in chicks: effects of vitamin D and glucocorticoid administration. Tohmon M, et al. **Kobe J Med Sci** 1988 Apr;34(2):77–91

Aminoaciduria of vitamin D deficiency is independent of PTH levels and urinary cyclic AMP. Dabbagh S, et al. **Miner Electrolyte Metab** 1989;15(4):221–32

Impaired production and decreased urinary excretion of adenosine 3',5'–monophosphate in primary hyperparathyroidism with vitamin D deficiency. Rubinger D, et al. **Miner Electrolyte Metab** 1988;14(5):283–7

Effect of vitamin D deficiency and 1,25–dihydroxycholecalciferol treatment on epidermal calcium–binding protein (ECaBP) RNA activity. Rizk–Rabin M, et al. **Mol Cell Endocrinol** 1988 Dec; 60(2–3):145–9

Calcium transport by plasma membranes of enterocytes during development: role of 1,25–(OH)2 vitamin D3. Ghishan FK, et al. **Pediatr Res** 1988 Sep;24(3):338–41

[Etiopathogenesis of increased calciuria in patients with chronic diseases of the digestive system and vitamin D deficiency during ultraviolet therapy] Marcinowska–Suchowierska E, et al. **Przegl Lek** 1988; 45(4):378–82 (Eng. Abstr.) (Pol)

[Vitamin D–dependent protein of smooth endoplasmic reticulum membranes of rat enterocytes] Morozova RP, et al. **Ukr Biokhim Zh** 1988 Jul–Aug;60(4):18–24 (Eng. Abstr.) (Rus)

[24,25–Dihydroxyvitamin D3 modulates the effect of 1alpha–hydroxyvitamin D3 on B lymphocyte maturation in chickens] Babarykin DA, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):82–6 (Eng. Abstr.) (Rus)

[Calcium metabolism in the case of vitamin D and K deficiencies] Sokol'nikov AA, et al. **Vopr Pitan** 1989 Jan–Feb;(1):56–60 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Characteristics of secondary hyperparathyroidism in vitamin D–deficient dogs. Hendy GN, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E765–72

1,25–Dihydroxyvitamin D3 restores fertility of vitamin D–deficient female rats. Kwiecinksi GG, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E483–7

Mechanical, biochemical, and structural effects of vitamin

D deficiency on the chick heart. Hochhauser E, et al. **Angiology** 1989 Apr;40(4 Pt 1):300–8
Vitamin D deficiency, pancreatic and small intestinal enzyme development in rats. Jirapinyo P, et al. **Biol Neonate** 1988; 54(1):20–8
The effects of chronic vitamin D deficiency on the skeleton in the adult rabbit. Brommage R, et al. **Bone** 1988;9(3):131–9
Increased mechanical strength of the vitamin D–replete rat femur by the treatment with a large dose of 24R,25(OH)2D3. Nakamura T, et al. **Bone** 1989; 10(2):117–23
Effects of high dietary contents of calcium and phosphorus on mineral metabolism and growth of vitamin D–deficient suckling and weaned rats. Clark SA, et al. **Bone Miner** 1987 Jul;2(4):257–70
Vitamin D deficiency in the chick embryo: effects on prehatching motility and on the growth and differentiation of bones, muscles, and parathyroid glands. Narbaitz R, et al. **Calcif Tissue Int** 1989 May;44(5):348–55
Effect of long–term and short–term diabetes on the parathyroid hormone sensitive rat renal adenylate cyclase: correlation with vitamin D metabolism. Rao LG, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1313–8
Altered pressor response to norepinephrine in calcium– and vitamin D–deficient rats. Baksi SN. **Clin Exp Hypertens [A]** 1988;10(5):811–32
Direct in vitro effect of 1,25–dihydroxyvitamin D3 on islets insulin secretion in vitamin deficient rats: influence of vitamin D3 pretreatment. Billaudel B, et al. **Diabete Metab** 1989 Mar–Apr;15(2):85–7
The influence of vitamin D metabolites on the calcification of cartilage matrix and the C–propeptide of type II collagen (chondrocalcin). Hinek A, et al. **J Bone Miner Res** 1988 Aug;3(4):421–9
Defective leukocyte fungicidal activity in end–organ resistance to 1,25–dihydroxyvitamin D. Etzioni A, et al. **Pediatr Res** 1989 Mar;25(3):276–9

PREVENTION & CONTROL

[Administration of a single dose of 100,000 U.I. of vitamin D3 in the pregnant woman in winter. The effect on blood calcium level of the newborn infant] Zeghoud F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(8):1099–105 (Eng. Abstr.) **(Fre)**
[Preventive use of vitamin D and fluoride in Austria] Pietschnig B, et al. **Wien Klin Wochenschr** 1988 Oct 7; 100(19):646–8 (Eng. Abstr.) **(Ger)**
[Prevention of ultraviolet insufficiency after a long stay by humans in an isolation chamber] Panferova NE, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):59–63 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Radiopharmacological profiles of tracers under pathophysiological conditions. Bone uptake of 99mTc–phytate in vitamin D deficient rats. Noronha OP, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):261–7

RADIOTHERAPY

[Effect of long–term irradiation of the skin on calcium–phosphate metabolism and the 25–OH–D level in patients with chronic diseases of the digestive system] Marcinowska–Suchowierska E, et al. **Przegl Lek** 1988; 45(8):614–9 (Eng. Abstr.) **(Pol)**

VETERINARY

Effects of cholecalciferol or calcium deficiency on oestrogen metabolism in the laying hen. Tsang CP, et al. **Br Poult Sci** 1988 Dec;29(4):753–9
[The effect of various Ca and P supplies on the metabolic parameters of wethers and bulls and on the fattening performance of bulls with vitamin D deficiency] Richter GH, et al. **Arch Tierernahr** 1989 Mar;39(3):345–59 (Eng. Abstr.) **(Ger)**
[The effect of hypervitaminosis D3 on the bones of the chicken. 2. Electron microscopic studies] Bacowsky H, et al. **Tierarztl Prax** 1988;16(3):281–93 (Eng. Abstr.) **(Ger)**

VITAMIN D–DEPENDENT CALCIUM–BINDING PROTEIN see **CALCIUM–BINDING PROTEIN, VITAMIN D–DEPENDENT**

VITAMIN DEFICIENCY see **AVITAMINOSIS**

VITAMIN E

For your information [news] **Anal Chem** 1989 Aug 1; 61(15):887A
Vitamin C, vitamin E and cancer (review). Chen LH, et al. **Anticancer Res** 1988 Jul–Aug;8(4):739–48 (137 ref.)
Vitamin E and immune functions. Bendich A. **Basic Life Sci** 1988;49:615–20 (26 ref.)
Tocopherol behavior and membrane constituents in erythrocytes with oxidant stress. Miki M, et al. **Basic Life Sci** 1988;49:595–604
A time–resolved fluorescence anisotropy study of bilayer membranes containing alpha–tocopherol. Bisby RH, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):386–91
Kinetic study of the reaction of vitamin C with vitamin E radicals (tocopheroxyls) in solution. Mukai K, et al. **Biochim Biophys Acta** 1989 May 31;991(2):276–9
A comment on the evaluation of equilibrium constants for alpha–tocopherol interactions with fatty acids by absorbance in the ultraviolet region. Sugata S, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):385–6
Free radical reactions with alpha–tocopherol and N–stearoyl tryptophan methyl ester in micellar solutions. Bisby RH, et al. **Free Radic Res Commun** 1986;1(4):251–61
The cooperative antioxidant role of glutathione with a lipid–soluble and a water–soluble antioxidant during peroxidation of liposomes initiated in the aqueous phase and in the lipid phase. Barclay LR. **J Biol Chem** 1988 Nov 5;263(31):16138–42
Interaction of vitamin E and its model compounds with unsaturated fatty acids in homogeneous solution. Urano S, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr; 34(2):189–94
A CIDEP and fluorescence study of the oxidation of vitamin E: the vitamin E radical cation. Depew MC, et al. **J Photochem Photobiol [B]** 1987 Dec;1(2):229–39
Effect of alpha–tocopherol on the volatile thermal decomposition products of methyl linoleate hydroperoxides. Frankel EN, et al. **Lipids** 1989 Jul; 24(7):603–8
Reaction products of alpha–tocopherol with a free radical initiator, 2,2'–Azobis(2,4–dimethylvaleronitrile). Yamauchi R, et al. **Lipids** 1989 Mar;24(3):204–9
Vitamin E and human health: is our diet adequate? [letter] McIntosh GH. **Med J Aust** 1989 May 15;150(10):607–8
Products and relative reaction rates of the oxidation of tocopherols with singlet molecular oxygen. Neely WC, et al. **Photochem Photobiol** 1988 Oct;48(4):423–8
Membrane stabilization by vitamin E: magnetic resonance studies of the interaction of alpha–tocopherol with fatty acid acyl chains in phospholipid model membranes. Wassall SR, et al. **Prog Clin Biol Res** 1989;292:435–44

ADMINISTRATION & DOSAGE

Relationship of vitamin A and vitamin E intake to fasting plasma retinol, retinol–binding protein, retinyl esters, carotene, alpha–tocopherol, and cholesterol among elderly people and young adults: increased plasma retinyl esters among vitamin A–supplement users. Krasinski SD, et al. **Am J Clin Nutr** 1989 Jan;49(1):112–20
Vitamin E supplementation in very–low–birth–weight infants: long–term follow–up at two different levels of vitamin E supplementation. Rönnholm KA, et al. **Am J Clin Nutr** 1989 Jan;49(1):121–6
Variation in human blood high–density lipoprotein response to oral vitamin E megadosage. Muckle TJ, et al. **Am J Clin Pathol** 1989 Feb;91(2):165–71
The effect of supplementation with selenium and vitamin E in psoriasis. Fairris GM, et al. **Ann Clin Biochem** 1989 Jan; 26 (Pt 1):83–8
Vitamin E intake affects serum thromboxane and tissue essential fatty acid composition in the rat. Cunnane SC. **Ann Nutr Metab** 1988;32(2):90–6
Alpha–tocopherol, an effective inhibitor of platelet adhesion. Jandak J, et al. **Blood** 1989 Jan;73(1):141–9
Our experience in the treatment of vulvar sclerous lichen. Conforti S, et al. **Clin Exp Obstet Gynecol** 1988; 15(4):178–80
Plasma lipid peroxides in murine sepsis—sex differences and effect of antioxidative/anti–inflammatory therapy. Marinkovic D, et al. **Free Radic Res Commun** 1988; 4(4):237–42
Effects of elevated d–alpha(RRR)–tocopherol dosage in man. Kitagawa M, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Apr; 35(2):133–42
Parenteral vitamins A, D, and E for premature infants. Etches PC, et al. **J Perinatol** 1988 Spring;8(2):93–5 (34 ref.)
Influence of dietary vitamin E on the intermembrane transfer of alpha–tocopherol as mediated by an alpha–tocopherol binding protein. Verdon CP, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):52–60
Vitamin E in the treatment of tardive dyskinesia: the possible involvement of free radical mechanisms. Lohr JB, et al. **Schizophr Bull** 1988;14(2):291–6
The effect of a diet with a high or low content of vitamin E on different skeletal muscles and myocardium in pigs. Jensen M, et al. **Zentralbl Veterinarmed [A]** 1988 Aug; 35(7):487–97
[Comparison of O2–exposed premature infants with and without vitamin E substitution from the ophthalmologic viewpoint] Burgold R, et al. **Kinderarztl Prax** 1989 Feb; 57(2):71–6 (Eng. Abstr.) **(Ger)**
[Effect of various combinations of DL–alpha–tocopherol and acetylsalicylic acid on adjuvant arthritis in the rat] Brandt K, et al. **Z Rheumatol** 1988 Nov–Dec;47(6):381–7 (Eng. Abstr.) **(Ger)**
[A combination of vitamins A and E in the therapy of moniletrix] Bardazzi F, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):591–2 **(Ita)**
[Effect of vitamin E–containing liposome on experimental sugar cataract] Hattori H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):97–102 (Eng. Abstr.) **(Jpn)**
[Effect of vitamin E on platelet function and anemia in patients on long–term hemodialysis] Janicka L, et al. **Pol Tyg Lek** 1988 Nov 28;43(48):1557–8 **(Pol)**
[Use of vitamins E and C for the prevention of toxic effects of lead on electronic industry workers] Malec J, et al. **Wiad Lek** 1988 Sep 15;41(18):1210–7 (Eng. Abstr.) **(Pol)**
[The role of ascorbic acid, tocopherol and retinol in the processes of carcinogenesis] Wartanowicz M, et al. **Wiad Lek** 1988 Apr 15;41(8):507–13 (36 ref.) (Eng. Abstr.) **(Pol)**
[Antioxidant therapy in the complex treatment of late pregnancy toxemia] Shalina RI, et al. **Akush Ginekol (Mosk)** 1989 May;(5):37–41 (Eng. Abstr.) **(Rus)**
[The content of lipid peroxidation products and the activity of antioxidant enzymes in the myocardium and liver of rats with various vitamin E allowances] Arkhipenko IuV, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):670–1 (Eng. Abstr.) **(Rus)**
[Antistress effects of vitamin E and dimethylsulfoxide during their combined administration in low doses] Levshina IP, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):274–7 (Eng. Abstr.) **(Rus)**
[Effect of alpha–tocopherol combined with finoptin on the level of lipid hydroperoxides in plasma lipoproteins and on the functional activity of thrombocytes in patients with exertion–induced stable stenocardia] Levchenkio VA, et al. **Kardiologiia** 1989 Jun;29(6):25–8 (Eng. Abstr.) **(Rus)**
[Effect of preliminary administration of alpha–tocopherol and intal on the course of experimental myocardial necrosis] Matevosian RSh, et al. **Kardiologiia** 1989 Apr;29(4):94–6 (Eng. Abstr.) **(Rus)**
[Pharmacologic and cold therapy in severe chronic ischemia of the lower extremities] Murav'ev MF, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):25–9 (Eng. Abstr.) **(Rus)**
[Changes in the lipid component of liver microsomal membranes during the postischemic period after administration of alpha–tocopherol and lidocaine] Grek OR. **Vopr Med Khim** 1988 Jul–Aug;34(4):57–63 (Eng. Abstr.) **(Rus)**
[Effect of retinol, tocopherol and ascorbic acid on vitamin metabolism in experimental chromium poisoning and controlled diet] Karimov TK, et al. **Vopr Pitan** 1988 Jul–Aug;(4):48–51 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Vitamin E supplementation [letter] Marshall CW. **Am J Clin Nutr** 1989 Apr;49(4):718–9
A hidden source of vitamin E [letter] Spannraft E. MCN 1989 May–Jun;14(3):204
Effects of various levels of dietary vitamin E on broiler chicks. Ayed IA, et al. **Vet Hum Toxicol** 1989 Feb; 31(1):50–3

ANALOGS & DERIVATIVES

Effect of high dose alpha–tocopherol acetate on the toxicity and tissue distribution of adriamycin (doxorubicin). Shinozawa S, et al. **Acta Med Okayama** 1988 Oct; 42(5):253–8
Effects of an intravenous application of dl–alpha–tocopheryl acetate on tocopherol status in man. Elmadfa I, et al. **Ann Nutr Metab** 1989;33(1):1–6
Distribution of plasma vitamin E levels in supplemented very low birthweight infants. Arnold JD, et al. **Aust Paediatr J** 1989 Jun;25(3):168–70
A pilot trial of plasma infusions in Duchenne muscular dystrophy. Arthur H, et al. **Aust Paediatr J** 1988;24 Suppl 1:24–30
Administration of perfluorochemicals under hyperbaric oxygen pressure and treatment with free oxygen radical scavengers. Lutz J, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):395–402
Induction of differentiated phenotypes in melanoma cells by a combination of an adenosine 3',5'–cyclic monophosphate stimulating agent and D–alpha tocopheryl succinate. Prasad KC. **Cancer Lett** 1989 Jan;44(1):17–22
Synthesis of fluorine analogues of vitamin E. II. Synthesis of 2–(3–chloropropyl)–2,5,7,8–tetramethyl–6–chromanol and its application for stereocontrolled Wittig reaction with trifluoromethyl ketones. Koyama M, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):2950–4
Serum alpha–tocopherol concentrations in preterm infants receiving less than 25 mg/kg/day alpha–tocopherol acetate supplements. Friedman CA, et al. **Dev Pharmacol Ther** 1988;11(5):273–80
The effect of alpha–tocopherol and alpha–tocopheryl quinone on the radiosensitivity of thiol–depleted mammalian cells. Hodgkiss RJ, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1297–300
Possible significance of aqueous emulsified vitamin A in effective therapy for pityriasis rubra pilaris. Kellum RE. **J Am Acad Dermatol** 1989 Jan;20(1):126–8
Effect of alpha tocopheryl succinate on adenylate cyclase activity in murine neuroblastoma cells in culture. Sahu SN, et al. **J Am Coll Nutr** 1988 Aug;7(4):285–93
Blood plasma and tissue concentrations of vitamin E in beef cattle as influenced by supplementation of various tocopherol compounds. Hidiroglou N, et al. **J Anim Sci** 1988 Dec;66(12):3227–34
Gas chromatographic assay of supplemental vitamin E acetate concentrates: collaborative study. Labadie MP, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec;71(6):1168–71
Plasma tocopherol in sheep and cattle after ingesting free or acetylated tocopherol. Hidiroglou N, et al. **J Dairy Sci** 1989 Jul;72(7):1793–9
Effect of D, alpha–tocopheryl succinate and polyethylene glycol on performance tests after fluid percussion brain

injury. Clifton GL, et al. **J Neurotrauma** 1989;6(2):71–81
Effects of alpha–tocopherol–nicotinate administration on the microdynamics of phospholipids of erythrocyte membranes in human subjects. Koyama T, et al.
J Nutr Sci Vitaminol (Tokyo) 1988 Oct;34(5):449–57
Bioavailability of intramuscular vitamin E acetate in rabbits. Pedraz JL, et al. **J Pharm Pharmacol** 1989 Jun;41(6):415–7
Enhancing effect of medium–chain triglycerides on intestinal absorption of d–alpha–tocopherol acetate from lecithin–dispersed preparations in the rat. Fukui E, et al.
J Pharmacobiodyn 1989 Feb;12(2):80–6
Studies on the effects of vitamin E on neuroblastoma N1E 115. Slack R, et al. **Nutr Cancer** 1989;12(1):75–82
Morbidity and mortality among low birth weight infants exposed to an intravenous vitamin E product, E–Ferol. Arrowsmith JB, et al. **Pediatrics** 1989 Feb;83(2):244–9
Effect of high dose alpha–tocopherol and alpha–tocopherol acetate pretreatment on adriamycin (doxorubicin) induced toxicity and tissue distribution. Shinozawa S, et al.
Physiol Chem Phys Med NMR 1988;20(4):329–35
Alpha–tocopheryl succinate protects hepatocytes from chemical–induced toxicity under physiological calcium conditions. Fariss MW, et al. **Toxicol Lett** 1989 Apr; 47(1):61–75
Different effects of vitamin E on the growth and morphological differentiation of 4 murine neuroblastoma cell lines in vitro. Sué K, et al. **Z Kinderchir** 1988 Dec; 43(6):398–401
[A case of Menkes disease effectively treated with tocopherol acetate] Tada H, et al. **No To Hattatsu** 1988 Nov; 20(6):514–6 **(Jpn)**
[Hemoglobin oxidation and erythrocyte hemolysis induced by a synthetic analog of alpha–tocopherol not containing an isoprenoid chain] Neshev NI, et al.
Izv Akad Nauk SSSR [Biol] 1989 Mar–Apr;(2):290–3 (Eng. Abstr.) **(Rus)**
[Clinico–biochemical evaluation of antioxidant therapy of peripheral vascular arteriosclerosis] Zakirdzhaev DD, et al. **Kardiologiia** 1988 Sep;28(9):92–3 **(Rus)**
[State of the antioxidative activity of erythrocyte membranes in rats exposed to x–rays after administration of alpha–tocopherol acetate] Tsvetkova TV, et al.
Radiobiologiia 1988 Nov–Dec;28(6):780–2 (Eng. Abstr.) **(Rus)**
[Further study of immuno–correcting properties of vitamins A and E in experimental chronic alcoholic intoxication] Davydova TV, et al. **Vopr Pitan** 1988 May–Jun;(3):45–8 (Eng. Abstr.) **(Rus)**
[2–stage microsurgical autoneuroplasty under pharmacologic effects (experimental research)] Chalkovskiĭ IuB.
Zh Vopr Neirokhir 1988 Sep–Oct;(5):18–21 (Eng. Abstr.) **(Rus)**

ANALYSIS

Simplified saponification procedure for the routine determination of total vitamin E in dairy products, foods and tissues by high–performance liquid chromatography. Indyk HE. **Analyst** 1988 Aug;113(8):1217–21
The alpha–tocopherol and phospholipid fatty acid content of rat liver subcellular membranes in vitamin E and selenium deficiency. Buttriss JL, et al.
Biochim Biophys Acta 1988 Nov 4;963(1):61–9
Free radical membrane scavengers in myocardium of rats of different age exposed to chronic hypoxia. Lebedev AV, et al. **Biomed Biochim Acta** 1989;48(2–3):S122–5
Tandem mass spectrometry in vitamin E analysis. Walton TJ, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 16(1–12):289–98
Transverse distribution of alpha–tocopherol in bilayer membranes studied by fluorescence quenching. Bisby RH, et al. **Free Radic Biol Med** 1989;6(3):231–9
Myocardial vitamin E (alpha–tocopherol) contents of spontaneously hypertensive and Wistar–Kyoto normotensive rats. Janero DR, et al.
Int J Vitam Nutr Res 1988;58(3):292–4
Determination of alpha–tocopherol in buccal mucosal cells using an electrochemical detector. Tamai H, et al.
Int J Vitam Nutr Res 1988;58(2):202–7
Gas chromatography of retinol and alpha–tocopherol without derivatization. Smidt CR, et al. **J Chromatogr** 1988 Dec 29;434(1):21–9
Enrichment of tocopherols in wheat germ by directly coupled supercritical fluid extraction with semipreparative supercritical fluid chromatography. Saito M, et al.
J Chromatogr Sci 1989 Feb;27(2):79–85
Mammary transfer of vitamin E in dairy cows. Hidiroglou M. **J Dairy Sci** 1989 Apr;72(4):1067–71
Biopsy method for human adipose with vitamin E and lipid measurements. Handelman GJ, et al. **Lipids** 1988 Jun; 23(6):598–604
Cardiac membrane vitamin E and malondialdehyde levels in heart muscle of normotensive and spontaneously–hypertensive rats. Janero DR, et al.
Lipids 1989 Jan;24(1):33–8
Regional distribution of ubiquinones and tocopherols in the mouse brain: lowest content of ubiquinols in the substantia nigra. Fariello RG, et al. **Neuropharmacology** 1988 Oct; 27(10):1077–80
Nafenopin, a peroxisome proliferator, depletes hepatic vitamin E content and elevates plasma oxidised glutathione levels in rats. Lake BG, et al. **Toxicol Lett** 1989 Feb; 45(2–3):221–9
Mulberry heart disease in young pigs without vitamin E and selenium deficiency. Nielsen TK, et al. **Vet Rec** 1989 May 20;124(20):535–7
The vitamin E concentration in pig muscle biopsy specimens. A methodological study. Jensen M.
Zentralbl Veterinarmed [A] 1989 May;36(5):354–60
[Determination of retinol, alpha–tocopherol, beta–carotene and total carotenoids using high performance liquid chromatography] Stukalov IuV, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):121–4 (Eng. Abstr.) **(Rus)**
[An improved method of determining the level of vitamin E in food products] Surai PF. **Vopr Pitan** 1988 May–Jun; (3):69–71 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Inhibition of alpha–tocopherol and calcium calmodulin–stimulated phosphodiesterase activity in vitro by anthracyclines. Nwankwoala RN, et al.
Clin Exp Pharmacol Physiol 1988 Nov;15(11):805–14

BLOOD

Low plasma levels of vitamin A and E during weight reduction. Zwiauer K, et al. **Acta Paediatr Scand** 1988 Sep; 77(5):760–1
Blood serum vitamin E and A levels during peroral therapy of periodontal diseases with zinc sulphate. Černá H, et al.
Acta Univ Palacki Olomuc Fac Med 1988;119:187–93
Physiological serum vitamin E level and age. Černá H, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:389–94
Some aspects of antioxidant status in blood from alcoholics. Bjørneboe GE, et al. **Alcoholism (NY)** 1988 Dec; 12(6):806–10
Relationship of vitamin A and vitamin E intake to fasting plasma retinol, retinol–binding protein, retinyl esters, carotene, alpha–tocopherol, and cholesterol among elderly people and young adults: increased plasma retinyl esters among vitamin A–supplement users. Krasinski SD, et al.
Am J Clin Nutr 1989 Jan;49(1):112–20
Plasma vitamin E and selenium and breath pentane in home parenteral nutrition patients. Lemoyne M, et al.
Am J Clin Nutr 1988 Nov;48(5):1310–5
Serum alpha–tocopherol levels of Mexican Americans, Cubans, and Puerto Ricans aged 4–74 y. Looker AC, et al. **Am J Clin Nutr** 1989 Sep;50(3):491–6
Serum vitamin E and blood glutathione peroxidase values of horses with degenerative myeloencephalopathy. Dill SG, et al. **Am J Vet Res** 1989 Jan;50(1):166–8
Diminished serum concentration of vitamin E in alcoholics. Bjørneboe GE, et al. **Ann Nutr Metab** 1988;32(2):56–61
Effects of an intravenous application of dl–alpha–tocopheryl acetate on tocopherol status in man. Elmadfa I, et al.
Ann Nutr Metab 1989;33(1):1–6
Discrepancies between serum and erythrocyte concentrations of vitamin E in hemodialysis patients: role of HDL–bound fraction of vitamin E. Taccone–Gallucci M, et al.
Artif Organs 1988 Oct;12(5):379–81
Plasma vitamin E, apolipoprotein B and HDL–cholesterol in middle–aged men from southern Italy. Rubba P, et al.
Atherosclerosis 1989 May;77(1):25–9
Distribution of plasma vitamin E levels in supplemented very low birthweight infants. Arnold JD, et al.
Aust Paediatr J 1989 Jun;25(3):168–70
Rhabdomyolysis in housed, fine–woolled merino sheep, associated with low plasma alpha–tocopherol concentrations. Peet RL, et al. **Aust Vet J** 1988 Dec; 65(12):398–9
Normal plasma vitamin E concentration [letter] Chan AC.
Biochem J 1989 Jun 1;260(2):623
Plasma vitamin E levels in uremic children and adolescents. Drukker A, et al. **Child Nephrol Urol** 1988–89;9(4):208–10
Concentrations of carotenoids, retinol, and tocopherol in plasma, in response to ingestion of a meal. Brown ED, et al. **Clin Chem** 1989 Feb;35(2):310–2
Serum alpha–tocopherol, all–trans retinol, total lipids and cholesterol in the black rhinoceros (Diceros bicornis). Ghebremeskel K, et al. **Comp Biochem Physiol [A]** 1988; 91(2):343–5
Serum alpha–tocopherol concentrations in preterm infants receiving less than 25 mg/kg/day alpha–tocopherol acetate supplements. Friedman CA, et al. **Dev Pharmacol Ther** 1988;11(5):273–80
Vitamin A and E status in healthy elderly Chinese in Hong Kong. Woo J, et al. **Eur J Clin Nutr** 1988 Aug;42(8):689–95
Undernutrition and lepromatous leprosy. Serum vitamin A and E levels in leprosy spectrum. Rao KN, et al.
Indian J Lepr 1988 Jan;60(1):66–70
Liposoluble vitamins and lipid parameters in breast cancer. A joint study in northern Italy and southern France. Gerber M, et al. **Int J Cancer** 1988 Oct 15;42(4):489–94
Serum vitamin E, serum selenium and the risk of gastrointestinal cancer. Knekt P, et al. **Int J Cancer** 1988 Dec 15;42(6):846–50
Vitamin A, provitamin A and vitamin E serum concentrations in cystic fibrosis patients. Bui MH.
Int J Vitam Nutr Res 1988;58(3):354–5
The vitamin E status among glucose–6 phosphate dehydrogenase deficient patients and effectiveness of oral vitamin E. Eldamhougy S, et al. **Int J Vitam Nutr Res** 1988;58(2):184–8
Retinol, beta–carotene and alpha–tocopherol status in a French population of healthy children. Malvy JM, et al.
Int J Vitam Nutr Res 1989;59(1):29–34
Tocopherol concentrations in platelets in children. Tatsumi K, et al. **Int J Vitam Nutr Res** 1988;58(4):387–93
Erythrocyte lipid peroxidation, glutathione and vitamin E levels in cholesterol–fed rats. Uysal M, et al.
Int J Vitam Nutr Res 1988;58(2):198–201
Differences in tocopherol–lipid ratios in ARDS and non–ARDS patients. Bertrand Y, et al.
Intensive Care Med 1989;15(2):87–93
Comparison of vitamin E levels in plasma, bronchoalveolar lavage, and lung tissues of adult pulmonary patients. Tangney CC, et al. **J Am Coll Nutr** 1989 Jun;8(3):203–14
Measurement of vitamin E in premature infants by reversed–phase high–performance liquid chromatography. Celardo A, et al. **J Chromatogr** 1989 May 30;490(2):432–8
Relationships between vitamin E status and erythrocyte stability in sheep. Stevenson LM, et al. **J Comp Pathol** 1989 May;100(4):359–68
Plasma tocopherol in sheep and cattle after ingesting free or acetylated tocopherol. Hidiroglou N, et al.
J Dairy Sci 1989 Jul;72(7):1793–9
Erythrocyte glutathione peroxidase activity and plasma vitamin E status in patients with psoriasis. Jain VK, et al.
J Dermatol (Tokyo) 1988 Dec;15(6):487–90
Plasma alpha–tocopherol, retinol, cholesterol, and mineral concentrations in captive gorillas. McGuire JT, et al.
J Med Primatol 1989;18(2):155–61
Vitamin E and Alzheimer's disease in subjects with Down's syndrome. Jackson CV, et al. **J Ment Defic Res** 1988 Dec; 32 (Pt 6):479–84
Serum vitamin E concentrations in degenerative ataxias [letter] Harding AE, et al.
J Neurol Neurosurg Psychiatry 1989 Jan;52(1):132
Serum vitamin E concentrations in adult–onset spinocerebellar degeneration [letter] Kay R, et al.
J Neurol Neurosurg Psychiatry 1989 Jan;52(1):131–2
Alpha–tocopherol and fatty acid levels in red blood cells in patients treated with antiepileptic drugs. Tamai H, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Dec;34(6):627–31
A nutritional evaluation of vitamin E status in very low birth weight infants with respect to changes in plasma and red blood cell tocopherol levels. Tanaka H, et al.
J Nutr Sci Vitaminol (Tokyo) 1988 Jun;34(3):293–307
Vitamin concentrations in very low birth weight infants given vitamins intravenously in a lipid emulsion: measurement of vitamins A, D, and E and riboflavin. Baeckert PA, et al. **J Pediatr** 1988 Dec;113(6):1057–65
The effect of antenatal betamethasone on cord blood concentrations of retinol–binding protein, transthyretin, transferrin, retinol, and vitamin E. Georgieff MK, et al.
J Pediatr Gastroenterol Nutr 1988 Sep–Oct;7(5):713–7
Alpha– and gamma–tocopherol levels in lipoproteins fractionated by affinity chromatography. Clevidence BA, et al. **Lipids** 1989 Feb;24(2):137–40
Zinc, vitamins A and E, and retinol–binding protein in sera of patients with cancer of the larynx. Drożdż M, et al.
Neoplasma 1989;36(3):357–62
Vitamin E status in CAPD patients [letter] Taccone–Gallucci M, et al. **Nephrol Dial Transplant** 1989;4(1):75–6
Studies on serum selenium and tocopherol in white muscle disease of foal. Higuchi T, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):52–9
Serum vitamin E and risk of cancer in Finland. **Nutr Rev** 1988 Oct;46(10):342–3 (8 ref.)
Determinants of serum alpha–tocopherol in Finnish adults. Knekt P, et al. **Prev Med** 1988 Nov;17(6):725–35
Dietary zinc deficiency decreases plasma concentrations of vitamin E. Bunk MJ, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):379–84
Vitamin E in plasma, erythrocytes and erythrocyte membranes. Chow CK. **Prog Clin Biol Res** 1989;292:445–51
Plasma vitamins A and E, total lipid and cholesterol concentrations in captive jackass penguins (Spheniscus demersus). Gulland FM, et al. **Vet Rec** 1988 Dec 24–31; 123(26–27):666–7
Plasma alpha–tocopherol, total lipids and total cholesterol in wild rockhopper, magellanic and gentoo penguins before and after moulting. Williams G, et al. **Vet Rec** 1989 Jun 3;124(22):585–6
[Plasma retinol, carotenoids and tocopherols: biological variations between 18 and 45 years of age] Herbeth B, et al. **Ann Nutr Metab** 1988;32(5–6):297–304 (Eng. Abstr.) **(Fre)**
[Selenium and vitamin E in mucoviscidosis] Foucaud P, et al. **Arch Fr Pediatr** 1988 Jun–Jul;45(6):383–6 (Eng. Abstr.) **(Fre)**
[Plasma vitamin A and E correlate inversely with coronary mortality] Gey KF. **Soz Praventivmed** 1989;34(2):78–80 (Eng. Abstr.) **(Ger)**
[Effects of the oral administration of a contraceptive on lipid balance and on the concentration of serum tocopherol] Martino F, et al. **Minerva Ginecol** 1988 Sep;40(9):557–8 (Eng. Abstr.) **(Ita)**
[The effect of anesthesia and surgery on human plasma levels of vitamins A, E, B12, pre–albumin, retinol binding protein and zinc] Shirasaki S, et al. **Masui** 1988 Sep;37(9):1096–100 (Eng. Abstr.) **(Jpn)**
[Studies on the factors responsible for low erythrocyte alpha–tocopherol concentrations in patients on maintenance hemodialysis] Mori K.
Nippon Jinzo Gakkai Shi 1989 Mar;31(3):309–19 (Eng. Abstr.) **(Jpn)**

[Lipid peroxidation and antioxidant protection in healthy children and in those with chronic glomerulonephritis in a tropical climate] Ishkabulov D, et al. **Pediatriia** 1989; (7):111 **(Rus)**

[Indicators of lipid peroxidation and alpha tocopherol in healthy children] Klevko VA, et al. **Pediatriia** 1989;(3):110 **(Rus)**

[Indicators of vitamin A, E and lipid metabolism in young children with iron-deficiency anemia] Turaev AT, et al. **Pediatriia** 1988;(7):11-4 (Eng. Abstr.) **(Rus)**

METABOLISM

The interaction of coenzyme Q and vitamin E with multibilayer liposomes. Gomez-Fernandez JC, et al. **Adv Exp Med Biol** 1988;238:127-39

Effect of chronic ethanol consumption on the content of alpha-tocopherol in subcellular fractions of rat liver. Hagen BF, et al. **Alcoholism (NY)** 1989 Apr;13(2):246-51

Increased oxidation of tocopherols in chickens with inherited muscular dystrophy. Murphy ME, et al. **Basic Life Sci** 1988; 49:611-4

Iron binding to alpha-tocopherol-containing phospholipid liposomes. Stoyanovsky DA, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):834-8

Altered contents of tocopherols in chickens with inherited muscular dystrophy. Murphy ME, et al. **Biochem Med Metab Biol** 1989 Jun;41(3):234-45

Radical initiated alpha-tocopherol depletion and lipid peroxidation in mitochondrial membranes. Thomas SM, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):189-97

The effect of lung concentrations of glutathione and vitamin E on the pulmonary toxicity of 3-methylindole. Kubow S, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):863-7

Lymphatic and portal absorption of vitamin E in aging rats. Hollander D, et al. **Dig Dis Sci** 1989 May;34(5):768-72

25 Hydroxyvitamin D and vitamin E absorption in healthy children and children with chronic intrahepatic cholestasis. Issa S, et al. **Eur J Pediatr** 1989 Jun;148(7):605-9 (26 ref.)

The effects of vitamin A nutritional status on microsomal lipid peroxidation and alpha-tocopherol level in rat liver. Pelissier MA, et al. **Experientia** 1989 Apr 15;45(4):342-3

Failure of vitamin E to protect the retina against damage resulting from bright cyclic light exposure. Katz ML, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):29-36

Vitamin E requirement of growing swine. Jensen M, et al. **J Anim Sci** 1988 Dec;66(12):3101-11

Cadmium toxicity and bioantioxidants: status of vitamin E and ascorbic acid of selected organs in rat. Shukla GS, et al. **J Appl Toxicol** 1989 Apr;9(2):119-22

Tocopheroxyl radical persistence and tocopherol consumption in liposomes and in vitamin E-enriched rat liver mitochondria and microsomes. Mehlhorn RJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13448-52

Alpha-tocopherol is secreted from rat liver in very low density lipoproteins. Cohn W, et al. **J Lipid Res** 1988 Oct; 29(10):1359-66

Longitudinal studies of the neurobiology of vitamin E and other antioxidant systems, and neurological function in the vitamin E deficient rat. Goss-Sampson MA, et al. **J Neurol Sci** 1988 Oct;87(1):25-35

Excess dietary zinc decreases tissue alpha-tocopherol in chicks. Lü JX, et al. **J Nutr** 1988 Nov;118(11):1349-59

Maternal and fetal vitamin E concentrations and selenium-vitamin E interrelationships in dairy cattle. Van Saun RJ, et al. **J Nutr** 1989 Aug;119(8):1156-64

Absorption and transport of deuterium-substituted 2R,4'R,8'R-alpha-tocopherol in human lipoproteins. Traber MG, et al. **Lipids** 1988 Aug;23(8):791-7

Oxidation of vitamin E in red cell membranes by fatty acids, hydroperoxides and selected oxidants. Vatassery GT. **Lipids** 1989 Apr;24(4):299-304

Formation of trimers of alpha-tocopherol and its model compound, 2,2,5,7,8-pentamethylchroman-6-ol, in autoxidizing methyl linoleate. Yamauchi R, et al. **Lipids** 1988 Aug;23(8):779-83

Tocopherol in brain metabolism and disease: a review. Divakaran P, et al. **Metab Brain Dis** 1987 Mar;2(1):1-16 (113 ref.)

The binding of lipoproteins to human muscle cells: binding and uptake of LDL, HDL, and alpha-tocopherol. Gurusinghe A, et al. **Muscle Nerve** 1988 Dec;11(12):1231-9

Utilization of deuterated vitamin E compounds in rats and humans. **Nutr Rev** 1989 Jun;47(6):183-5 (11 ref.)

Assessment of vitamin E, selenium and polyunsaturated fatty acid interactions in the aetiology of disease in the bovine. Rice DA, et al. **Proc Nutr Soc** 1988 Jul;47(2):177-84 (28 ref.)

Ree radical scavengers in experimental autoimmune encephalomyelitis. Honegger CG, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):25-7

Changes in the levels of endogenous antioxidants in the liver of mice with experimental endotoxemia and the protective effects of the antioxidants. Sugino K, et al. **Surgery** 1989 Feb;105(2 Pt 1):200-6

Vitamin E, membrane order, and antioxidant behavior in lung microsomes and reconstituted lipid vesicles. Patel JM, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):101-14

[The effect of polychlorinated biphenyls on the vitamin A, vitamin E, and ascorbic acid status in young pigs] Dvořák M. **Arch Exp Veterinarmed** 1989 Jan;43(1):51-60 (Eng. Abstr.) **(Ger)**

[The transformation of gamma-tocopherol to alpha-tocopherol in the animal organism; a generational study in rats] Elmadfa I, et al. **Z Ernahrungswiss** 1989 Mar; 28(1):36-48 (Eng. Abstr.) **(Ger)**

[Effect of ethanol administration on the concentrations of glutathione and alpha-tocopherol in rat liver] Toda T, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1988 Sep; 23(3):234-42 (Eng. Abstr.) **(Jpn)**

[Lipid peroxidation and antioxidants in duodenal ulcer] Dalidovich KK, et al. **Klin Med (Mosk)** 1988 Oct; 66(10):109-12 **(Rus)**

[State of the reaction of peroxidation of lipids and alpha-tocopherol in children in the early postoperative period] Mikhelson VA, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):56-61 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Preferential incorporation of alpha-tocopherol vs gamma-tocopherol in human lipoproteins. Traber MG, et al. **Am J Clin Nutr** 1989 Mar;49(3):517-26

Enhancement of oral bioavailability of d-alpha-tocopherol acetate by lecithin-dispersed aqueous preparation containing medium-chain triglycerides in rats. Kimura T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):439-41

Intestinal malabsorption of vitamin E in primary biliary cirrhosis. Sokol RJ, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):479-86

Bioavailability of various vitamin E compounds in sheep. Hidiroglou N, et al. **Int J Vitam Nutr Res** 1988;58(2):189-97

Enterohepatic circulation of newly administered alpha-tocopherol in the rat. Lee-Kim YC, et al. **Int J Vitam Nutr Res** 1988;58(3):284-91

Blood plasma and tissue concentrations of vitamin E in beef cattle as influenced by supplementation of various tocopherol compounds. Hidiroglou N, et al. **J Anim Sci** 1988 Dec;66(12):3227-34

Comparison of free alpha-tocopherol and alpha-tocopheryl acetate as sources of vitamin E in rats and humans. Burton GW, et al. **Lipids** 1988 Sep;23(9):834-40

PHARMACOLOGY

The effect on atopic dermatitis of supplementation with selenium and vitamin E. Fairris GM, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):359-62

Effect of vitamin E on prostacyclin production from cultured aortic endothelial cells. Kunisaki M, et al. **Adv Exp Med Biol** 1988;242:113-7

alpha-Tocopherol attenuates myocardial membrane-related alterations resulting from ischemia and reperfusion. Massey KD, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1192-9

Effects of hyperoxia and vitamin E on the fatty acid composition of rat lung microsomes and mitochondria. Dilley ED, et al. **Am Rev Respir Dis** 1989 Aug;140(2):423-9

Damage to protein synthesis concurrent with lipid peroxidation in rat liver slices: effect of halogenated compounds, peroxides, and vitamin E1. Fraga CG, et al. **Arch Biochem Biophys** 1989 Apr;270(1):84-91

Synergistic inhibition of oxidation in dispersed phosphatidylcholine liposomes by a combination of vitamin E and cysteine. Motoyama T, et al. **Arch Biochem Biophys** 1989 May 1;270(2):655-61

The antioxidant and nutritional effects of tocopherols, ascorbic acid and beta-carotene in relation to processing of edible oils. Frankel EN. **Bibl Nutr Dieta** 1989; (43):297-312 (82 ref.)

Inhibition of Ca2+-induced cytosolic enzyme efflux from skeletal muscle by vitamin E and related compounds. Phoenix J, et al. **Biochem J** 1989 Jan 1;257(1):207-13

Antioxidant activity of dihydrolipoate against microsomal lipid peroxidation and its dependence on alpha-tocopherol. Scholich H, et al. **Biochim Biophys Acta** 1989 Feb 20; 1001(3):256-61

Synergistic interaction between vitamin E and the bile pigments bilirubin and biliverdin. Stocker R, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):238-44

Effect of vitamin E enrichment on arachidonic acid release and cellular phospholipids in cultured human endothelial cells. Tran K, et al. **Biochim Biophys Acta** 1988 Dec 16; 963(3):468-75

Photoprotective effect of vitamins A and E on polyamine and oxygenated free radical metabolism in hairless mouse epidermis. Khettab N, et al. **Biochimie** 1988 Dec; 70(12):1709-13

Impairment of superoxide release by alveolar macrophage in rats exposed to oxygen and vitamin E. Nakamura H, et al. **Biol Neonate** 1988;54(1):29-34

Vitamin E attenuates the toxic effects of intrastriatal injection of 6-hydroxydopamine (6-OHDA) in rats: behavioral and biochemical evidence. Cadet JL, et al. **Brain Res** 1989 Jan 2;476(1):10-5

Effect of vitamin E on red blood cell preservation. Leonart MS, et al. **Braz J Med Biol Res** 1989;22(1):85-6

The effects of vitamin E on immune regulation after thermal injury. Haberal M, et al. **Burns Incl Therm Inj** 1988 Oct; 14(5):388-93

Effect of vitamin E on survival, glutathione reductase and formation of chromium (V) in Chinese hamster V-79 cells treated with sodium chromate (VI). Sugiyama M, et al. **Carcinogenesis** 1989 Apr;10(4):737-41

Effect of compounds acting on gap junctions and membrane fluidity on the course and cell-to-cell transmission of hormonal imprinting in cell culture. Kovács P, et al. **Cell Biol Int Rep** 1988 Aug;12(8):661-2

Effect of dietary vitamin E level on the biochemical response of rat lung to ozone inhalation. Elsayed NM, et al. **Drug Nutr Interact** 1988;5(4):373-86

Modification of methylmercury neurotoxicity by vitamin E. Chang LW, et al. **Environ Res** 1978 Dec;17(3):356-66

Vitamin E supplementation and intense selection increase clonal life span in Paramecium tetraurelia. Thomas J, et al. **Exp Gerontol** 1988;23(6):501-12

Inhibition of adriamycin-promoted microsomal lipid peroxidation by beta-carotene, alpha-tocopherol and retinol at high and low oxygen partial pressures. Vile GF, et al. **FEBS Lett** 1988 Oct 10;238(2):353-6

Effects of alpha-tocopherol on carbon tetrachloride metabolism in rat liver microsomes. Cheeseman KH, et al. **Free Radic Res Commun** 1987;3(1-5):325-30

Protective effects of vitamins E and C on erythrocytes in blood preserved in ACD solution and stored at 4 degrees C. Kopeć-Szlęzak J, et al. **Haematologia (Budap)** 1988; 21(4):219-26

Effect of alpha-tocopherol on the microsomal lipid peroxidation induced by doxorubicin: influence of ascorbic acid. Geetha A, et al. **Indian J Physiol Pharmacol** 1989 Jan-Mar;33(1):53-8

The effect of alpha-tocopherol and alpha-tocopheryl quinone on the radiosensitivity of thiol-depleted mammalian cells. Hodgkiss RJ, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1297-300

Influence of eicosapentaenoic acid and vitamin E on brain cortex Ca2+ ATPase activity in cholesterol-fed rabbits. Bekpinar S, et al. **Int J Vitam Nutr Res** 1989;59(2):127-30

Effect of vitamin E on lipid components of atherogenic rats. Paul J, et al. **Int J Vitam Nutr Res** 1989;59(1):35-9

Vitamin E and selenium in preterm infants: lack of effect on clinical patency of ductus arteriosus. Rudolph N, et al. **Int J Vitam Nutr Res** 1989;59(2):140-6

In vivo effects of vitamin E on peritoneal macrophages and T-kininogen level in rats. Sakamoto W, et al. **Int J Vitam Nutr Res** 1989;59(2):131-9

Effects of parenteral selenium and vitamin E on performance, health and humoral immune response of steers new to the feedlot environment. Droke EA, et al. **J Anim Sci** 1989 May;67(5):1350-9

Porcine immunoglobulin transfer after prepartum treatment with selenium or vitamin E. Hayek MG, et al. **J Anim Sci** 1989 May;67(5):1299-306

Prevention of cadmium-induced effects on regional glutathione status of rat brain by vitamin E. Shukla GS, et al. **J Appl Toxicol** 1988 Oct;8(5):355-9

Effect of alpha-tocopherol (vitamin E) in a porcine model of stunned myocardium. Buchwald A, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):46-52

Iron loading modifies the fatty acid composition of cultured rat myocardial cells and liposomal vesicles: effect of ascorbate and alpha-tocopherol on myocardial lipid peroxidation. Link G, et al. **J Lab Clin Med** 1989 Sep; 114(3):243-9

Fish oil and tocopherol-induced changes in natural killer cell-mediated cytotoxicity and PGE2 synthesis in young and old mice. Meydani SN, et al. **J Nutr** 1988 Oct; 118(10):1245-52

The protective effects of L-ascorbic acid and DL-alpha-tocopherol on cultured rat embryos treated with xanthine/xanthine oxidase. Francis AJ, et al. **Mutat Res** 1989 Sep;214(1):137-45

Comparative antimutagenicity of 5 compounds against 5 mutagenic complex mixtures in Salmonella typhimurium strain TA98. Ong T, et al. **Mutat Res** 1989 Jan;222(1):19-25

The influence of alpha-tocopherol and pyritinol on oxidative DNA damage and lipid peroxidation in human lymphocytes. Topinka J, et al. **Mutat Res** 1989 Mar; 225(3):131-6

Effects of alpha-tocopherol, its carboxylic acid chromane compound and two novel antioxidant isoflavanones on prostaglandin H synthase activity and autodeactivation. Seeger W, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul;338(1):74-81

Hydroxyurea-induced toxic side-effects in animals and an attempt at reducing them with vitamins E and C. Malec J, et al. **Neoplasma** 1989;36(4):427-35

Dose- and time-dependent hippocampal cholinergic lesions induced by ethylcholine mustard aziridinium ion: effects of nerve growth factor, GM1 ganglioside, and vitamin E. Johnson GV, et al. **Neurochem Res** 1988 Aug;13(8):685-92

Studies on the effects of vitamin E on neuroblastoma N1E 115. Slack R, et al. **Nutr Cancer** 1989;12(1):75-82

Effect of vitamin E on the production of collagen, DNA and fibronectin in keratocytes in vitro. Satterfield D, et al. **Ophthalmic Res** 1988;20(4):227-31

Copper toxicity and lipid peroxidation in isolated rat hepatocytes: effect of vitamin E. Sokol RJ, et al. **Pediatr Res** 1989 Jan;25(1):55-62

Effects of administering tocopherol after irradiation on survival and proliferation of murine lymphocytes. Roy RM, et al. **Pharmacol Ther** 1988;39(1-3):393-5

Protective effect of vitamin E on cadmium-induced alterations in lipofuscin and superoxide dismutase in rat brain regions. Shukla GS, et al. **Pharmacol Toxicol** 1988 Oct;63(4):305-6

Effect of high dose alpha-tocopherol and alpha-tocopherol acetate pretreatment on adriamycin (doxorubicin) induced

toxicity and tissue distribution. Shinozawa S, et al. **Physiol Chem Phys Med NMR** 1988;20(4):329–35

Protective effect of plant flavonoids, analogs and vitamin E against lipid peroxidation of membranes. Salvayre R, et al. **Prog Clin Biol Res** 1988;280:313–6

The pharmacology of vitamin E. Kelly MJ. **Prog Med Chem** 1988;25:249–90 (255 ref.)

Vitamin E fails to alter the aggregation and the oxygenated metabolism of arachidonic acid in normal human platelets. Kockmann V, et al. **Prostaglandins** 1988 Nov;36(5):607–20

Influence of alpha–tocopherol on prostacyclin synthesis by rat's arterial and myometrial tissues. el–Tahir KE. **Prostaglandins Leukot Essent Fatty Acids** 1988 Aug; 33(2):97–103

Increased indices of lipid peroxidation in stress–susceptible pigs and effects of vitamin E. Duthie GG, et al. **Res Vet Sci** 1989 Mar;46(2):226–30

The effect of alpha–tocopherol on the growth of vitamin B6 responsive tumors in nude mice. Fortmeyer HP, et al. **Strahlenther Onkol** 1989 Jul;165(7):561–2

Protective effect of alpha tocopherol on Ca2+ regulation by microsomal fractions isolated from preserved rat livers. Kawada T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1301–2

The effect of vitamin E on the cell–mediated immune response in pigs. Jensen M, et al. **Zentralbl Veterinarmed [B]** 1988 Aug;35(7):549–55

[Effects of unsaponifiable extracts of avocado/soy beans (PIAS) on the production of collagen by cultures of synoviocytes, articular chondrocytes and skin fibroblasts] Mauviel A, et al. **Rev Rhum Mal Osteoartic** 1989 Feb; 56(2):207–11 **(Fre)**

[Lipid peroxidation of mononuclear cells of peripheral blood before and after therapy with vitamin E] Lubrano R, et al. **Clin Ter** 1988 Nov 15;127(3):203–6 (Eng. Abstr.) **(Ita)**

[Protective effect of various agents against ischemic neuronal damage in guinea pig hippocampal neurons studied in vitro] Amagasa M, et al. **No Shinkei Geka** 1988 Nov; 16(12):1363–71 (Eng. Abstr.) **(Jpn)**

[Scavenging of active oxygen by vitamin E] Nakamura T. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2979–86 **(Jpn)**

[Role of the cytosolic factor in the interaction of [3H] alpha–tocopherol with rat liver nuclei] Donchenko GV, et al. **Biokhimiia** 1988 Dec;53(12):2019–24 (Eng. Abstr.) **(Rus)**

[Effects of phospholipase A2 and alpha–tocopherol on the activity of adenylate cyclase of rat brain synaptosomes] Gorbunov NV, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):438–40 (Eng. Abstr.) **(Rus)**

[Alpha–tocopherol modulation of the resting membrane potential of the fast muscle fiber in the rat adapted to cold] Belousova GP. **Fiziol Zh SSSR** 1988 Oct;74(10):1476–9 **(Rus)**

[Effect of vitamin E on the lipid composition of the erythrocytes of mice and of the malarial parasite Plasmodium berghei] Chuenkova MV, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):13–5 (Eng. Abstr.) **(Rus)**

[Changes in the pulmonary surfactant system and induced chemiluminescence of pulmonary washings after fasting and the effect of alpha–tocopherol on them] Dorovatovskii VA, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):20–2 (Eng. Abstr.) **(Rus)**

[The effect of alpha–tocopherol on changes in external respiration and pulmonary hemodynamics caused by tuberculin] Grigaliunas AP, et al. **Sov Med** 1988;(11):68–70 **(Rus)**

[Study of the phenomenon and substantiation of the mechanism of antimutagenesis under conditions of action of sodium fluoride] Aliev AA, et al. **Tsitol Genet** 1988 Sep–Oct;22(5):22–5 (Eng. Abstr.) **(Rus)**

[The effect of alpha–tocopherol on pulmonary surfactants] Berezovskii VA, et al. **Ukr Biokhim Zh** 1988 Nov–Dec; 60(6):88–90 (Eng. Abstr.) **(Rus)**

[Lipid and protein composition of membranes and carbohydrate metabolism in rats subjected to bilateral adrenalectomy; correction of disorders by vitamins K and E] Lider VA. **Ukr Biokhim Zh** 1988 Nov–Dec;60(6):55–9 (Eng. Abstr.) **(Rus)**

[Molecular aspects of the mechanism of anti–oxidant activity of vitamin E: features of the action of alpha– and gamma–tocopherol] Aldarkhanov BB, et al. **Vopr Med Khim** 1989 May–Jun;35(3):2–9 (59 ref.) (Eng. Abstr.) **(Rus)**

[Lipid peroxidation in experimental viral infection and the effect on it of interferons and alpha–tocopherol] Ananenko AA, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):86–9 (Eng. Abstr.) **(Rus)**

[Vitamin E and propolis as antioxidants after excessive administration of polyunsaturated fatty acids] Okonenko LB, et al. **Vopr Pitan** 1988 Jul–Aug;(4):68–70 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Vitamin E: function and effects of deficiency. Rice D, et al. **Br Vet J** 1988 Sep–Oct;144(5):482–96 (34 ref.)

Cell calcium, vitamin E, and the thiol redox system in cytotoxicity. Pascoe GA, et al. **Free Radic Biol Med** 1989; 6(2):209–24 (164 ref.)

Vitamin E and neurologic function in man. Sokol RJ. **Free Radic Biol Med** 1989;6(2):189–207 (131 ref.)

The coming of age of vitamin E. Sokol RJ. **Hepatology** 1989 Apr;9(4):649–53 (65 ref.)

Studies on the role of antioxidants in radioprotection. Stratford MR, et al. **Pharmacol Ther** 1988;39(1–3):389–91

Physiological antioxidants and antioxidative enzymes in vitamin E–deficient rats. De AK, et al. **Toxicol Lett** 1988 Nov;44(1–2):47–54

[A study on the role of serum lipoperoxides, plasma alpha–tocopherol and prostacyclin in arteriosclerosis of essential hypertension] Yabe R, et al. **Nippon Jinzo Gakkai Shi** 1988 Oct;30(10):1161–4 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Selenium and vitamin E treatment of Duchenne muscular dystrophy: no effect on muscle function. Bäckman E, et al. **Acta Neurol Scand** 1988 Nov;78(5):429–35

Vitamins A and E do protect against oral carcinoma. Calhoun KH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr; 115(4):484–8

Spontaneous injuries in the aortic endothelium of the inherited cataract rats and their prevention by tocopherol. A study by scanning electron microscopy. Masuda M, et al. **Atherosclerosis** 1989 Jan;75(1):23–30

Effect of dietary vitamin E on plasma lipids and atherogenesis in restricted ovulator chickens. Smith TL, et al. **Atherosclerosis** 1989 Feb;75(2–3):105–9

Epidermolysis bullosa (EB) controlled by protecting cell membranes [letter] Ayres S Jr. **Australas J Dermatol** 1987 Dec;28(3):143–4

Porcine stress syndrome, free radicals and vitamin E. Duthie G, et al. **Basic Life Sci** 1988;49:605–9

Beneficial effect of dietary antioxidants on the aging immune system. Meydani SN, et al. **Basic Life Sci** 1988;49:621–5 (16 ref.)

Fetal alcohol syndrome in rats: conditions for improvement of ethanol effects on fetal cerebral development with supplementary agents. Tanaka H, et al. **Biol Neonate** 1988; 54(6):320–9

Vitamin E and retinopathy of prematurity: the clinical investigator's perspective on antioxidant therapy: side effects and balancing risks and benefits. Phelps DL. **Birth Defects** 1988;24(1):209–18

Vitamin E and retinopathy of prematurity: the ophthalmologist's perspective. Schaffer DB, et al. **Birth Defects** 1988;24(1):219–35

Supplementation with selenium, vitamin E and their combination in gynaecological cancer during cytotoxic chemotherapy. Sundström H, et al. **Carcinogenesis** 1989 Feb;10(2):273–8

The role of vitamin E therapy in high–risk neonates. Phelps DL. **Clin Perinatol** 1988 Dec;15(4):955–63 (52 ref.)

A randomized, double–blind, placebo–controlled, clinical trial of D–alpha–tocopheryl acetate (vitamin E), as add–on therapy, for epilepsy in children. Ogunmekan AO, et al. **Epilepsia** 1989 Jan–Feb;30(1):84–9

Dietary vitamin E supplement does not inhibit changes in lung pressure–volume characteristics produced by bleomycin in hamsters. Sato S, et al. **Eur Respir J** 1988 Jun;1(6):523–6

Protective effect of vitamin E on spinal cord injury by compression and concurrent lipid peroxidation. Iwasa K, et al. **Free Radic Biol Med** 1989;6(6):599–606

Effectiveness of vitamin E and colchicine in amelioration of paraquat lung injuries using an experimental model. Shahar E, et al. **Isr J Med Sci** 1989 Feb;25(2):92–4

Abetalipoproteinaemia in adults: role of vitamin therapy. MacGilchrist AJ, et al. **J Inherited Metab Dis** 1988; 11(2):184–90

Effect of wheat fiber and vitamins C and E on rectal polyps in patients with familial adenomatous polyposis. DeCosse JJ, et al. **J Natl Cancer Inst** 1989 Sep 6;81(17):1290–7

Pretreatment with alpha tocopherol enhances neurologic recovery after experimental spinal cord compression injury. Anderson DK, et al. **J Neurotrauma** 1988;5(1):61–7

The Emory mouse cataract: the effects on cataractogenesis of alpha–tocopherol, penicillamine, triethylenetetramine, and mercaptopropionylglycine. Kuck JF Jr, et al. **J Ocul Pharmacol** 1988 Fall;4(3):243–51

Vitamin E and retinopathy of prematurity: still controversial [editorial] Ehrenkranz RA. **J Pediatr** 1989 May; 114(5):801–3

Effect of sustained pharmacologic vitamin E levels on incidence and severity of retinopathy of prematurity: a controlled clinical trial. Johnson L, et al. **J Pediatr** 1989 May;114(5):827–38 (86 ref.)

Erythrocyte membrane lipid peroxidation before and after vitamin E supplementation in children with cholestasis. Lubrano R, et al. **J Pediatr** 1989 Sep;115(3):380–4

The use of gamma linolenic acid, linoleic acid and natural vitamin E for the treatment of multicentric lymphoma in two dogs. Williams JH. **J S Afr Vet Assoc** 1988 Sep; 59(3):141–4

Clinical investigation in Duchenne muscular dystrophy: penicillamine and vitamin E. Fenichel GM, et al. **Muscle Nerve** 1988 Nov;11(11):1164–8

The protective effect of mannitol, vitamin E and glucocorticoid on ischaemic brain injury: evaluation by chemiluminescence, energy metabolism and water content. Uenohara H, et al. **Neurol Res** 1988 Jun;10(2):73–80

Partial reversal of the iminodipropionitrile–induced hyperkinetic syndrome in rats by alpha–tocopherol (vitamin E). Lohr JB, et al. **Neuropsychopharmacology** 1988 Dec;1(4):305–9

Vitamin E therapy in cystic fibrosis. **Nutr Rev** 1988 Aug; 46(8):289–90 (8 ref.)

Intraventricular hemorrhage of the preterm neonate: prevention studies. Ment LR, et al. **Semin Perinatol** 1988 Oct;12(4):359–72 (126 ref.)

Pharmacological method (triple–drug therapy) for successful 24–hour preservation of liver allografts. Pereira F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1303–4

Antioxidant vitamins in cataract prevention. Gerster H. **Z Ernahrungswiss** 1989 Mar;28(1):56–75 (83 ref.)

[Appraisal of the protective effect of vitamin E against CCl4 liver poisoning] Tang N. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan;23(1):7–8 (Eng. Abstr.) **(Chi)**

[Lipid peroxidation in aged patients. Influence of an antioxidant combination (vitamin C–vitamin E–rutin)] Courtière A, et al. **Therapie** 1989 Jan–Feb;44(1):13–7 (Eng. Abstr.) **(Fre)**

[An experimental study on preventive effect of vitamin E in spinal cord injury] Iwasa K, et al. **Nippon Seikeigeka Gakkai Zasshi** 1988 Aug;62(8):767–75 (Eng. Abstr.) **(Jpn)**

[Effect of alpha– and gamma–tocopherols on the cytochrome P–450 system in the liver of rats with E–avitaminosis. Effectiveness of liposomal forms of gamma–tocopherol] Lokshina EA, et al. **Biokhimiia** 1988 Jul;53(7):1188–92 (Eng. Abstr.) **(Rus)**

[Alpha–tocopherol protection of erythrocytes from hemolysis induced by thermal injury] Bekiarova GI, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):413–5 (Eng. Abstr.) **(Rus)**

[Myocardial contractile function in acute heart failure during exposure to strophanthin and its combination with alpha–tocopherol] Chekman IS, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):44–7 (Eng. Abstr.) **(Rus)**

[Antioxidant activity of ubiquinone–9 and its combinations with vitamin E and sodium selenite in toxic lesions of the liver] Vinogradova LF, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):53–6 (Eng. Abstr.) **(Rus)**

[Antioxidants in the treatment of experimental myocardial ischemia and ischemic heart disease] Kudrin AN, et al. **Kardiologiia** 1988 Jul;28(7):115–21 (75 ref.) **(Rus)**

[Use of arachidene and alpha–tocopherol in the preoperative management of patients with peptic ulcer] Tabutsadze TU. **Khirurgiia (Mosk)** 1989 Feb;(2):44–7 (Eng. Abstr.) **(Rus)**

[Effect of antioxidant therapy on lipid peroxidation in patients with acute and protracted pneumonia] Borovkova MS, et al. **Klin Med (Mosk)** 1988 Dec;66(12):62–4 (Eng. Abstr.) **(Rus)**

[State of lipid peroxidation system and antioxidant defense in acute respiratory viral infection in children and the principles of pathogenetic therapy] Ananenko AA, et al. **Pediatriia** 1989;(1):27–30 (Eng. Abstr.) **(Rus)**

[Follow–up of patients with food allergy after antioxidant therapy] Eiubova AA, et al. **Pediatriia** 1988;(4):109 **(Rus)**

[The use of antioxidants in the combined treatment of chronic gastroduodenitis in children] Kmito NL, et al. **Pediatriia** 1988;(8):63–5 **(Rus)**

[The immune status of ichthyosis patients during photochemotherapy with aevit] Kriazheva SS, et al. **Vestn Dermatol Venerol** 1988;(6):9–12 (Eng. Abstr.) **(Rus)**

[Treatment of patients with zooanthroponotic microsporosis with griseofulvin in combination with alpha–tocopherol] Leshchenko VM, et al. **Vestn Dermatol Venerol** 1988; (12):24–6 (Eng. Abstr.) **(Rus)**

[Clinico–experimental substantiation of the use of tocopherol in the treatment of ocular herpes simplex] Rykun VS, et al. **Vestn Oftalmol** 1988 Jul–Aug;104(4):65–8 (Eng. Abstr.) **(Rus)**

[Apha–tocopherol in a complex with dimethyl sulfoxide—an agent possessing highly effective adaptogenic action in chronic emotional–pain stress in rats] Levshina IP, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):533–9 (Eng. Abstr.) **(Rus)**

TOXICITY

Potentiation of atherosclerotic lesions in rabbits by a high dietary level of vitamin E. Godfried SL, et al. **Br J Nutr** 1989 May;61(3):607–17

Protein thiols and alpha–tocopherol in chemical cytotoxicity. **Nutr Rev** 1989 May;47(5):150–1 (7 ref.)

VITAMIN E DEFICIENCY

BLOOD

Normal vitamin E status in sickle hemoglobinopathies in Colorado. Broxson EH Jr, et al. **Am J Clin Nutr** 1989 Sep; 50(3):497–503

Changes in membrane constituents and chemiluminescence in vitamin E–deficient red blood cells induced by the xanthine oxidase reaction. Yasuda H, et al. **Arch Biochem Biophys** 1989 Jul;272(1):81–7

Role of hemin in oxidative stress induced by divicine in vitamin E–deficient rats. D'Aquino M, et al. **Basic Life Sci** 1988;49:545–8

Chemiluminescence from vitamin E-deficient erythrocyte membranes induced by xanthine oxidase reaction. Yasuda H, et al. **Basic Life Sci** 1988;49:249–54

Effect of vitamin E on red blood cell preservation. Leonart MS, et al. **Braz J Med Biol Res** 1989;22(1):85–6

Serum vitamin E concentrations in degenerative ataxias [letter] Harding AE, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):132

Serum vitamin E concentrations in adult-onset spinocerebellar degeneration [letter] Kay R, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):131–2

A nutritional evaluation of vitamin E status in very low birth weight infants with respect to changes in plasma and red blood cell tocopherol levels. Tanaka H, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Jun;34(3):293–307

COMPLICATIONS

Vitamin E deficiency and neurologic disease. Sokol RJ. **Annu Rev Nutr** 1988;8:351–73 (96 ref.)

Parkinson's disease, vitamin E, and mitochondrial energy metabolism [letter] Hornsby PJ. **Arch Neurol** 1989 Aug; 46(8):840–1

Managing adults with cystic fibrosis [letter] Hoogenraad TU. **BMJ** 1989 Apr 22;298(6680):1098

Neuropathy secondary to vitamin E deficiency in acquired intestinal malabsorption. Palmucci L, et al. **Ital J Neurol Sci** 1988 Dec;9(6):599–602

Fat malabsorption, vitamin E deficiency, scoliosis and cataracts. Griffiths RD, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:153–4

Hemolytic anemia and susceptibility to hydrogen-peroxide hemolysis in children with vitamin E-deficiency and chronic liver disease. Fernández-Zamorano A, et al. **J Med** 1988;19(5–6):317–34

[Neurological manifestations in relation to vitamin E deficiency, caused by a defect of biliary acid synthesis] Chaine P, et al. **Ann Med Interne (Paris)** 1988; 139(3):198–200 (Eng. Abstr.) (Fre)

[Preliminary data on the effects of vitamin E deficiency on the number of myelinic fibers of the sciatic nerve of rats] Cuppini R, et al. **Boll Soc Ital Biol Sper** 1988 Sep; 64(9):861–4 (Eng. Abstr.) (Ita)

[The role of antioxidant deficiency in the pathogenesis of late pregnancy toxemia] Abramchenko VV, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):67–71 (Rus)

DRUG THERAPY

The role of vitamin E therapy in high-risk neonates. Phelps DL. **Clin Perinatol** 1988 Dec;15(4):955–63 (52 ref.)

ENZYMOLOGY

[Effect of alpha- and gamma-tocopherols on the cytochrome P-450 system in the liver of rats with E-avitaminosis. Effectiveness of liposomal forms of gamma-tocopherol] Lokshina EA, et al. **Biokhimiia** 1988 Jul;53(7):1188–92 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Vitamin E status of northern Canadian newborns: relation of vitamin E to blood lipids. Godel JC. **Am J Clin Nutr** 1989 Aug;50(2):375–80

ETIOLOGY

Vitamin E deficiency in primary biliary cirrhosis: gastrointestinal malabsorption, frequency and relationship to other lipid-soluble vitamins. Muñoz SJ, et al. **Hepatology** 1989 Apr;9(4):525–31

GENETICS

A treatable familial neuromyopathy with vitamin E deficiency, normal absorption, and evidence of increased consumption of vitamin E. Kohlschütter A, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:149–52

METABOLISM

Qinghaosu, dietary vitamin E, selenium, and cod-liver oil: effect on the susceptibility of mice to the malarial parasite Plasmodium yoelii. Levander OA, et al. **Am J Clin Nutr** 1989 Aug;50(2):346–52

Perturbations in cerebral oxygen radical formation and membrane order following vitamin E deficiency. LeBel CP, et al. **Biochem Biophys Res Commun** 1989 Sep 15; 163(2):860–6

The effects of vitamin E deficiency on rat skin. Igarashi A, et al. **Br J Dermatol** 1989 Jul;121(1):43–9

Increased ultra weak chemiluminescence emission from rat heart at postischemic reoxygenation: protective role of vitamin E. Barsacchi R, et al. **Free Radic Biol Med** 1989; 6(6):573–9

Spin trapping of free radicals in homogenates of heart from selenium and vitamin E deficient rats. Arthur JR, et al. **Free Radic Res Commun** 1988;4(5):311–5

Antioxidant activity of 5-hydroxytryptophan, 5-hydroxyindole, and DOPA against microsomal lipid peroxidation and its dependence on vitamin E. Cadenas E, et al. **Free Radic Res Commun** 1989;6(1):11–7

The influence of dietary history on the production of free radicals in rat liver microsomes. McPhail DB, et al. **Free Radic Res Commun** 1988;4(5):337–42

Effects of vitamin E deficiency on hepatic mitochondrial lipid peroxidation and oxidative metabolism in rats with chronic dietary iron overload. Bacon BR, et al. **Hepatology** 1989 Mar;9(3):398–404

Longitudinal studies of the neurobiology of vitamin E and other antioxidant systems, and neurological function in the vitamin E deficient rat. Goss-Sampson MA, et al. **J Neurol Sci** 1988 Oct;87(1):25–35

tert-butyl hydroperoxide-induced hemolysis of alpha-tocopherol-decreased erythrocytes from selenium-deficient and selenium-adequate rats. Kim CH, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Oct;34(5):481–90

Modulation of the effects of ascorbic acid on lipid peroxidation by tocopherol in adrenocortical mitochondria. Staats DA, et al. **J Steroid Biochem** 1989 Apr;32(4):609–11

Vitamin E. deficiency increases the synthesis of platelet-activating factor (PAF) in rat polymorphonuclear leucocytes. Fukuzawa K, et al. **Lipids** 1989 Mar;24(3):236–9

Vitamin E deficiency accentuates adriamycin-induced cardiomyopathy and cell surface changes. Singal PK, et al. **Mol Cell Biochem** 1988 Dec;84(2):163–71

alpha-Tocopherol depletion eliminates the regional differences in adrenal mitochondrial lipid peroxidation. Staats DA, et al. **Mol Cell Endocrinol** 1989 Apr; 62(2):189–95

Cation transport by bone marrow cells from vitamin-E-deficient mice. Altman KI, et al. **Naturwissenschaften** 1989 Feb;76(2):78–80

Brain alterations induced by vitamin E deficiency and intoxication with methyl ethyl ketone peroxide. Chaudiere J, et al. **Neurotoxicology** 1988 Summer;9(2):173–9

Copper toxicity and lipid peroxidation in isolated rat hepatocytes: effect of vitamin E. Sokol RJ, et al. **Pediatr Res** 1989 Jan;25(1):55–62

Effects of inadequate vitamin E and/or selenium nutrition on the release of arachidonic acid metabolites in rat alveolar macrophages. Eskew ML, et al. **Prostaglandins** 1989 Jul; 38(1):79–89

Tissue and biliary glutathione disulfide in the perfused vitamin E-deficient rat liver. Hill KE, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):373–83

Physiological antioxidants and antioxidative enzymes in vitamin E-deficient rats. De AK, et al. **Toxicol Lett** 1988 Nov;44(1–2):47–54

[Glutathione and ascorbic acid metabolism and antioxidant enzyme activity in the tissues of vitamin E-deficient rats] Pentiuk AA, et al. **Biull Eksp Biol Med** 1989 Apr; 107(4):437–8 (Eng. Abstr.) (Rus)

[The effect of alpha-tocopherol on pulmonary surfactants] Berezovskiĭ VA, et al. **Ukr Biokhim Zh** 1988 Nov-Dec; 60(6):88–90 (Eng. Abstr.) (Rus)

[Oxygenase reactions in rat liver microsomes during antioxidant deficiency] Gubskiĭ Iul, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):81–5 (Eng. Abstr.) (Rus)

[The role of fat-soluble vitamins in the development of psoriasis] Mavrov II, et al. **Vrach Delo** 1989 Feb;(2):76–8 (Rus)

PATHOLOGY

Effects of vitamin E and selenium deficiencies on rat capillaries. Amemiya T. **Int J Vitam Nutr Res** 1989; 59(2):122–6

PHYSIOPATHOLOGY

Lipid peroxidation and altered vascular function in vitamin E-deficient rats. Hubel CA, et al. **Am J Physiol** 1989 Jun; 256(6 Pt 2):H1539–45

Continuous intravenous infusion of deferoxamine reduces mortality by paraquat in vitamin E-deficient rats. van Asbeck BS, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):769–73

Studies on the neurochemistry and neurophysiology of experimental vitamin E deficiency. Goss-Sampson MA, et al. **Biochem Soc Trans** 1988 Aug;16(4):466–7

Tissue damage in vitamin E deficient rats is not detected by expired ethane and pentane. Duthie GG, et al. **Free Radic Res Commun** 1987;4(1):21–5

Effect of vitamin E deficiency on neurologic function in patients with cystic fibrosis. Cynamon HA, et al. **J Pediatr** 1988 Oct;113(4):637–40

[Role of vitamin E in muscle reinnervation after nerve injury: effect of its deficiency on multiple innervation] Bruno C, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):865–8 (Eng. Abstr.) (Ita)

URINE

Malondialdehyde derivatives in urine. Draper HH, et al. **Basic Life Sci** 1988;49:199–202

VETERINARY

Vitamin E: function and effects of deficiency. Rice D, et al. **Br Vet J** 1988 Sep-Oct;144(5):482–96 (34 ref.)

Regarding "Evaluation of an assay for plasma hydroperoxides" published in the Forum, FRBM [letter] **Free Radic Biol Med** 1989;6(6):663–5

Abortion, stillbirth, neonatal death, and nutritional myodegeneration in a rabbit breeding colony. Yamini B, et al. **J Am Vet Med Assoc** 1989 Feb 15;194(4):561–2

Relationships between vitamin E status and erythrocyte stability in sheep. Stevenson LM, et al. **J Comp Pathol** 1989 May;100(4):359–68

Equine degenerative myeloencephalopathy: a vitamin E deficiency that may be familial. Mayhew IG, et al. **J Vet Intern Med** 1987 Jan-Mar;1(1):45–50

Schistosomiasis and nutritional myopathy in a Brazilian tapir (Tapirus terrestris). Yamini B, et al. **J Wildl Dis** 1988 Oct; 24(4):703–7

Skeletal myopathy in rainbow trout fry/fingerlings [letter] McLoughlin MF, et al. **Vet Rec** 1989 Jun 10;124(23):619

VITAMIN G see **RIBOFLAVIN**

VITAMIN H see **BIOTIN**

VITAMIN K

Specific deprotonation reactions of the pyrimidine radical cation resulting from the menadione mediated photosensitization of 2'-deoxycytidine. Decarroz C, et al. **Free Radic Res Commun** 1987;2(4–6):295–301

Vitamin K-dependent carboxylation. In vitro modification of synthetic peptides containing the gamma-carboxylation recognition site. Hubbard BR, et al. **J Biol Chem** 1989 Aug 25;264(24):14145–50

ADMINISTRATION & DOSAGE

The use of vitamin K in the perinatal period [letter] Murdoch LA. **Can Med Assoc J** 1989 Jan 1;140(1):13–4

Vitamin K prophylaxis in the neonates by oral route with different dosages. Pintadit P, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:125–9

Hazards of small amounts of heparin in a patient with subclinical vitamin K deficiency. Shah MC, et al. **JPEN J Parenter Enteral Nutr** 1989 May-Jun;13(3):324–5

Relationship of milk intake and vitamin K supplementation to vitamin K status in newborns. Motohara K, et al. **Pediatrics** 1989 Jul;84(1):90–3

[Does the newborn infant need vitamin K supplementation?] Sann L, et al. **Arch Fr Pediatr** 1988 Dec;45(10):775–7 (31 ref.) (Fre)

[Recommendation for vitamin K administration in the newborn infant for the prevention of hemorrhage caused by vitamin K deficiency] Cario WR, et al. **Kinderarztl Prax** 1989 Jan;57(1):43 (Ger)

[General preventive use of vitamin K in newborn infants] Domula M. **Kinderarztl Prax** 1988 Jun;56(6):265–9 (28 ref.) (Eng. Abstr.) (Ger)

[Recommendation for vitamin K administration for the prevention of hemorrhage caused by vitamin K deficiency] Cario WR, et al. **Zentralbl Gynakol** 1989;111(6):409–10 (Ger)

ADVERSE EFFECTS

Unsuspected source of vitamin K in patients treated with anticoagulants: a case report. Oren B, et al. **Fam Pract** 1989 Jun;6(2):151–2 (11 ref.)

Cutaneous reactions to vitamin K. Sanders MN, et al. **J Am Acad Dermatol** 1988 Oct;19(4):699–704 (11 ref.)

ANALOGS & DERIVATIVES

Differential roles for menaquinone and demethylmenaquinone in anaerobic electron transport of E. coli and their fnr-independent expression. Unden G. **Arch Microbiol** 1988;150(5):499–503

Synthesis of menaquinone-2 derivatives as substrates for the liver microsomal vitamin K-dependent carboxylase. Cheung A, et al. **Biofactors** 1988 Jan;1(1):61–5

Synthesis of trifluoromethyl analogs of vitamin K as substrates for the liver microsomal vitamin K-dependent carboxylase. Grossman CP, et al. **Biofactors** 1988 Oct; 1(3):255–9

Fluorimetric determination of vitamin K3 (menadione sodium bisulfite) in synthetic animal feed by high-performance liquid chromatography using a post-column zinc reducer. Billedeau SM. **J Chromatogr** 1989 Jun 23;472(2):371–9

Simultaneous determination of vitamin K1, vitamin K1 2,3-epoxide and menaquinone-4 in human plasma by high-performance liquid chromatography with fluorimetric detection. Hirauchi K, et al. **J Chromatogr** 1988 Aug 19; 430(1):21–9

ANALYSIS

Reduction of quinones with zinc metal in the presence of zinc ions: application of post-column reactor for the fluorometric detection of vitamin K compounds. Haroon Y, et al. **Biomed Chromatogr** 1987 Feb;2(1):4–8

Measurement of vitamin K in human liver by gradient elution high-performance liquid chromatography using platinum-black catalyst reduction and fluorimetric detection. Usui Y, et al. **J Chromatogr** 1989 Apr 14; 489(2):291–301

Determination of menadione in an animal feed using supercritical fluid extraction and HPLC with electrochemical detector. Schneiderman MA, et al. **J Chromatogr Sci** 1988 Sep;26(9):458–62

State of the art vitamin K in human milk. Canfield LM, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):430–41 (98 ref.)

ANTAGONISTS & INHIBITORS

Chondrodysplasia punctata in an adult recognized as vitamin K antagonist embryopathy. Hosenfeld D, et al. **Clin Genet** 1989 May;35(5):376–81

BIOSYNTHESIS

Vitamin K (menaquinone) biosynthesis in bacteria: high-performance liquid chromatographic assay of the overall synthesis of o-succinylbenzoic acid and of 2-succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylic acid synthase. Popp JL, et al. **Anal Biochem** 1989 May 1; 178(2):306–10

BLOOD

Serum osteocalcin concentration in patients with prostatic cancer. Francini G, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S83–7

Plasma vitamin K1 concentrations in cystic fibrosis. Choonara IA, et al. **Arch Dis Child** 1989 May;64(5):732–4

Analysis of supplemented vitamin K1(20) in serum microsamples by solid-phase extraction and narrow-bone HPLC with multichannel ultraviolet detection. Kirk EM, et al. **Clin Chem** 1989 Jul;35(7):1288–92

Determination of K vitamins (phylloquinone and menaquinones) in umbilical cord plasma by a platinum-reduction column. Hiraike H, et al. **J Chromatogr** 1988 Aug 19;430(1):143–8

Relationship of milk intake and vitamin K supplementation to vitamin K status in newborns. Motohara K, et al. **Pediatrics** 1989 Jul;84(1):90–3

Vitamin K-dependent proteins bind to very low-density lipoproteins. Bradley WA, et al. **Semin Thromb Hemost** 1988 Jul;14(3):253–7 (31 ref.)

Effect of oral aspirin on plasma levels of vitamin K-dependent clotting factors—studies in healthy volunteers [letter] Cattaneo M, et al. **Thromb Haemost** 1988 Jun 16;59(3):540

[Osteocalcin and anomalies of cellular immunity in rheumatoid polyarthritis] Fouquet B, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):577–82 (Eng. Abstr.) **(Fre)**

[Blood levels of osteocalcin in hemodialysis patients. Significance and relations with uremic osteodystrophy] Bongiorno P, et al. **Minerva Urol Nefrol** 1988 Oct-Dec; 40(4):323–6 (Eng. Abstr.) **(Ita)**

CHEMICAL SYNTHESIS

Synthesis of menaquinone-2 derivatives as substrates for the liver microsomal vitamin K-dependent carboxylase. Cheung A, et al. **Biofactors** 1988 Jan;1(1):61–5

METABOLISM

Functional development of the visual system in normal and protein-deprived rats. VII. Lamination of oxidative enzyme activity in the visual cortex during post-natal development. Conradi NG, et al. **Acta Physiol Scand** 1989 Aug; 136(4):589–96

Vitamin K absorption capacity and its association with vitamin K deficiency. Shinzawa T, et al. **Am J Dis Child** 1989 Jun;143(6):686–9

Comparative effects of cefoxitin and cefotetan on vitamin K metabolism. Sieradzan RR, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1446–9

Alterations in energy status by menadione metabolism in hepatocytes isolated from fasted and fed rats. Redegeld FA, et al. **Arch Biochem Biophys** 1989 Aug 15; 273(1):215–22

Differential roles for menaquinone and demethylmenaquinone in anaerobic electron transport of E. coli and their fnr-independent expression. Unden G. **Arch Microbiol** 1988;150(5):499–503

The toxicity of menadione and mitozantrone in human liver-derived Hep G2 hepatoma cells. Duthie SJ, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1247–55

Electron transfer reactions in photosystem I following vitamin K1 depletion by ultraviolet irradiation. Biggins J, et al. **FEBS Lett** 1989 Jul 3;250(2):271–4

Inhibition of the redox cycling of vitamin K3 (menadione) in mouse liver microsomes. Byczkowski JZ, et al. **Int J Biochem** 1988;20(10):1073–9

Vitamin K1 and K2 in infant human liver. Kayata S, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr;8(3):304–7

Studies on oxacephem antibiotics: comparison of the effects of 1-oxa and 1-thia cephalosporins on blood coagulation activities and vitamin K metabolism in rats. Uchida K, et al. **Jpn J Pharmacol** 1989 Jul;50(3):283–8

Placental transfer of vitamin K1 and its implications in fetal hemostasis. Mandelbrot L, et al. **Thromb Haemost** 1988 Aug 30;60(1):39–43

[The role of vitamin K in the interaction of 1,25-dihydroxyvitamin D3 receptors with DNA] Sergeev IN, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):695–8 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

[Improvement of bioavailability of menaquinone-4 by dimethyl-beta-cyclodextrin complexation following oral administration] Horiuchi Y, et al. **Yakugaku Zasshi** 1988 Nov;108(11):1093–100 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Inhibition of cardiac sarcoplasmic reticulum Ca2+-ATPase activity by menadione. Floreani M, et al. **Arch Biochem Biophys** 1989 Apr;270(1):33–41

Cytoskeletal alterations in human platelets exposed to oxidative stress are mediated by oxidative and Ca2+-dependent mechanisms. Mirabelli F, et al. **Arch Biochem Biophys** 1989 May 1;270(2):478–88

Microsomal reduction of low-molecular-weight Fe3+ chelates and ferritin: enhancement by adriamycin, paraquat, menadione, and anthraquinone 2-sulfonate and inhibition by oxygen. Vile GF, et al. **Arch Biochem Biophys** 1988 Dec;267(2):606–13

Approaches to the mechanism of relaxing effect of vitamin K3 on smooth muscle. Altinkurt O, et al. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:232–40

Menadione-treated synaptosomes as a model for post-ischaemic neuronal damage. White EJ, et al. **Biochem J** 1988 Jul 15;253(2):425–33

Interconversion of NAD(H) to NADP(H). A cellular response to quinone-induced oxidative stress in isolated hepatocytes. Stubberfield CR, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2631–7

Effects of sodium ascorbate (vitamin C) and 2-methyl-1,4-naphthoquinone (vitamin K3) treatment on human tumor cell growth in vitro. I. Synergism of combined vitamin C and K3 action. Noto V, et al. **Cancer** 1989 Mar 1;63(5):901–6

Loss of metastatic and primary tumor factor X activator capabilities by Lewis lung carcinoma cells cultured in vitamin K-dependent protein deficient serum. Fasco MJ, et al. **Cancer Res** 1988 Nov 15;48(22):6504–9

Effect of vitamin K3 on macrophage functions and intracellular calcium. Koyano H, et al. **Comp Biochem Physiol [A]** 1988;91(1):115–21

Des-gamma-carboxyprothrombin in hepatocellular carcinoma after vitamin K1 injection. Buffet C, et al. **Dig Dis Sci** 1989 Jun;34(6):963–4

Effect of artificial electron acceptors on the cytotoxicity of mitomycin C and doxorubicin in human lung tumor cells. Keizer HG, et al. **Eur J Cancer Clin Oncol** 1989 Jul; 25(7):1113–8

Role of menaquinone in inactivation and activation of the Bacillus cereus forespore respiratory system. Escamilla JE, et al. **J Bacteriol** 1988 Dec;170(12):5908–12

A global response induced in Escherichia coli by redox-cycling agents overlaps with that induced by peroxide stress. Greenberg JT, et al. **J Bacteriol** 1989 Jul; 171(7):3933–9

A characteristic property of vitamin K-dependent plasma protein Z. Morita T, et al. **J Biochem (Tokyo)** 1988 Sep; 104(3):368–74

Vitamin K reversible hypoprothrombinemia in rats. II. Efficacy of vitamin K on latamoxef-induced coagulopathy in rats. Matsuura M, et al. **Jpn J Pharmacol** 1988 Aug; 47(4):357–65

Effects of 2-methyl-1,4-naphthoquinone (menadione) on myocardial contractility and cardiac sarcoplasmic reticulum Ca-ATPase. Floreani M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):448–55

A role for menadione in the purple membrane proton pump? Renthal R, et al. **Photochem Photobiol** 1988 Aug; 48(2):219–21

Circulating osteocalcin during oral anticoagulant therapy. van Haarlem LJ, et al. **Thromb Haemost** 1988 Aug 30; 60(1):79–82

[Studies of vitamin K sensitivity of PIVKA-II in patients with hepatocellular carcinoma] Furukawa M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2583–9 (Eng. Abstr.) **(Jpn)**

[A study of the mechanism of cyanide resistant oxidation of succinate from rat liver mitochondria in the presence of menadione] Kolesova GM, et al. **Biokhimiia** 1989 Jan; 54(1):103–11 (Eng. Abstr.) **(Rus)**

[Lipid and protein composition of membranes and carbohydrate metabolism in rats subjected to bilateral adrenalectomy; correction of disorders by vitamins K and E] Lider VA. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):55–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Osteocalcin and matrix Gla protein: vitamin K-dependent proteins in bone. Hauschka PV, et al. **Physiol Rev** 1989 Jul;69(3):990–1047 (408 ref.)

THERAPEUTIC USE

The use of vitamin K in the perinatal period [letter] von Kries R, et al. **Can Med Assoc J** 1989 Mar 1;140(5):496–7

Safe use of clonidine, nifedipine and vitamin K in hepatic porphyria [letter] Bhadoria DP, et al. **J Assoc Physicians India** 1988 Nov;36(11):675–6

Should intramuscular vitamin K prophylaxis for haemorrhagic disease of the newborn be continued? A decision analysis. Brown SG, et al. **N Z Med J** 1989 Jan 25;102(860):3–5 (25 ref.)

Recent developments with vitamin K [editorial] Cornu P. **Nouv Rev Fr Hematol** 1988;30(4):203–4 (11 ref.)

[Neonatal vitamin K prophylaxis and vitamin k deficiency hemorrhages in Switzerland 1986–1988] Tönz O, et al. **Schweiz Med Wochenschr** 1988 Nov 26;118(47):1747–52 (Eng. Abstr.) **(Ger)**

TOXICITY

The cytotoxicity of menadione in hepatocytes isolated from streptozotocin-induced diabetic rats. Grant MH, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3793–6

Inhibition of prostaglandin synthesis after metabolism of menadione by cultured porcine endothelial cells. Barchowsky A, et al. **J Clin Invest** 1989 Apr;83(4):1153–9

Hepatotoxicity of menadione predominates in oxygen-rich zones of the liver lobule. Badr MZ, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1317–22

Phenobarbital-induced cytosolic cytoprotective mechanisms that offset increases in NADPH cytochrome P450 reductase activity in menadione-mediated cytotoxicity. Utley WS, et al. **Toxicol Appl Pharmacol** 1989 Jun 15; 99(2):323–33

Correlation between cytosolic Ca2+ concentration and cytotoxicity in hepatocytes exposed to oxidative stress. Nicotera P, et al. **Toxicology** 1988 Nov 14;52(1-2):55–63

VITAMIN K 1 see PHYTONADIONE

VITAMIN K DEFICIENCY

BLOOD

Recent developments with vitamin K [editorial] Cornu P. **Nouv Rev Fr Hematol** 1988;30(4):203–4 (11 ref.)

[Acarboxyprothrombin in cord blood: congenital vitamin K deficiency in the newborn] Goldschmidt B, et al. **Orv Hetil** 1988 Nov 20;129(47):2513–7 (Eng. Abstr.) **(Hun)**

COMPLICATIONS

Depression of liver microsomal vitamin K epoxide reductase activity associated with antibiotic-induced coagulopathy. Matsubara T, et al. **Biochem Pharmacol** 1989 Aug 15; 38(16):2693–701

Late hemorrhagic disease with intracranial hemorrhage [published erratum appears in Indian Pediatr 1989 Mar;26(3):211] Merchant RH, et al. **Indian Pediatr** 1988 Apr;25(4):381–4

Hazards of small amounts of heparin in a patient with subclinical vitamin K deficiency. Shah MC, et al. **JPEN J Parenter Enteral Nutr** 1989 May-Jun;13(3):324–5

Vitamin K reversible hypoprothrombinemia in rats. II. Efficacy of vitamin K on latamoxef-induced coagulopathy in rats. Matsuura M, et al. **Jpn J Pharmacol** 1988 Aug; 47(4):357–65

Retinoid-induced hemorrhaging and bone toxicity in rats fed diets deficient in vitamin K. McCarthy DJ, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):300–10

[Care of children with intracranial hemorrhage caused by delayed vitamin K deficiency] Zhou XY. **Chung Hua Hu Li Tsa Chih** 1988 Sep;23(9):525–6 **(Chi)**

[Neonatal vitamin K prophylaxis and vitamin k deficiency hemorrhages in Switzerland 1986–1988] Tönz O, et al. **Schweiz Med Wochenschr** 1988 Nov 26;118(47):1747–52 (Eng. Abstr.) **(Ger)**

[Hemorrhage caused by vitamin K deficiency in the post-natal period] Appendini M, et al. **Minerva Pediatr** 1989 Feb;41(2):77–83 (Eng. Abstr.) **(Ita)**

CONGENITAL

[Does the newborn infant need vitamin K supplementation?] Sann L, et al. **Arch Fr Pediatr** 1988 Dec;45(10):775–7 (31 ref.) **(Fre)**

ENZYMOLOGY

[The effect of vitamin K deficiency in rats on various enzyme systems participating in energy metabolism] Kolesova GM, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):46–51 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Incidence of idiopathic vitamin K deficiency in infants: a national, hospital based, survey in Thailand, 1983. Ungchusak K, et al. **J Med Assoc Thai** 1988 Aug; 71(8):417–21

ETIOLOGY

Vitamin K absorption capacity and its association with vitamin K deficiency. Shinzawa T, et al. **Am J Dis Child** 1989 Jun;143(6):686–9

Late neonatal vitamin K deficiency associated with subclinical liver dysfunction in human milk-fed infants. Matsuda I, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):602–5

METABOLISM

Effect of various intakes of phylloquinone on signs of vitamin K deficiency and serum and liver phylloquinone concentrations in the rat. Kindberg CG, et al. **J Nutr** 1989 Feb;119(2):175–80

[Calcium metabolism in the case of vitamin D and K deficiencies] Sokol'nikov AA, et al. **Vopr Pitan** 1989 Jan-Feb;(1):56–60 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Fracture healing and osteocalcin metabolism in vitamin K deficiency. Einhorn TA, et al. **Clin Orthop** 1988 Dec; (237):219–25

PREVENTION & CONTROL

Vitamin K in infancy [letter] Sann L, et al. **Eur J Pediatr** 1988 Nov;148(2):177–8

[Recommendation for vitamin K administration in the newborn infant for the prevention of hemorrhage caused by vitamin K deficiency] Cario WR, et al. **Kinderarztl Prax** 1989 Jan;57(1):43 (Ger)

[General preventive use of vitamin K in newborn infants] Domula M. **Kinderarztl Prax** 1988 Jun;56(6):265–9 (28 ref.) (Eng. Abstr.) (Ger)

[Recommendation for vitamin K administration for the prevention of hemorrhage caused by vitamin K deficiency] Cario WR, et al. **Zentralbl Gynakol** 1989;111(6):409–10 (Ger)

VETERINARY

Probable vitamin K–deficient bleeding in two cats with malabsorption syndrome secondary to lymphocytic–plasmacytic enteritis. Edwards DF, et al. **J Vet Intern Med** 1987 Jul–Sep;1(3):97–101

VITAMIN M see FOLIC ACID

VITAMIN P COMPLEX see BIOFLAVONOIDS

VITAMIN PP see NICOTINAMIDE

VITAMIN U see under VITAMINS

VITAMINS

Vitamin degradation during food processing and how to prevent it. Paulus K. **Bibl Nutr Dieta** 1989;(43):173–87

Nutritional supplements in the ambulatory elderly population: patterns of use and requirements. Stewart RB. **DICP** 1989 Jun;23(6):490–5

Vitamin requirements in normal human pregnancy. van den Berg H, et al. **World Rev Nutr Diet** 1988;57:95–125 (163 ref.)

[Problems of vitamin therapy in pregnancy] Pasetto N. **Clin Ter** 1989 Jan 31;128(2):123–7 (33 ref.) (Ita)

ADMINISTRATION & DOSAGE

Effects of mineral and vitamin supplementation on the alcohol–induced fatty liver and microsomal induction. Lieber CS, et al. **Alcoholism (NY)** 1989 Feb;13(1):142–3

Promotion and selling of unnecessary food supplements: quackery or ethical pharmacy practice? Nelson V. **Am Pharm** 1988 Oct;NS28(10):34–6

Evaluation of prenatal vitamin–mineral supplements. Newman V, et al. **Clin Pharm** 1987 Oct;6(10):770–7

Vitamin status of inpatients with chronic cephalgia and dysfunction pain syndrome and effects of a vitamin supplementation. Mader R, et al. **Int J Vitam Nutr Res** 1988;58(4):436–41

Nutritional status in Linxian, China: effects of season and supplementation. Zheng SF, et al. **Int J Vitam Nutr Res** 1989;59(2):190–9

Water–soluble vitamin intakes of infants consuming mixed diets. Anderson K, et al. **J Am Diet Assoc** 1989 May; 89(5):688–9

Vitamin and mineral supplementation practices of adults in seven western states. Medeiros DM, et al. **J Am Diet Assoc** 1989 Mar;89(3):383–6

Targeting messages to supplement users. Raab CA, et al. **J Am Diet Assoc** 1989 Apr;89(4):545–6

The contribution of enrichment and fortification to nutrient intake of women. Subar AF, et al. **J Am Diet Assoc** 1988 Oct;88(10):1237–42, 1245

Dietary habits, weight history, and vitamin supplement use in elderly osteoarthritis patients. White–O'Connor B, et al. **J Am Diet Assoc** 1989 Mar;89(3):378–82

Vitamin concentrations in very low birth weight infants given vitamins intravenously in a lipid emulsion: measurement of vitamins A, D, and E and riboflavin. Baeckert PA, et al. **J Pediatr** 1988 Dec;113(6):1057–65

Vitamin supplementation in pregnancy. Best A, et al. **J R Soc Health** 1989 Apr;109(2):60–3

Ethics of a randomized trial of periconceptual vitamins [letter] **JAMA** 1989 Sep 22–29;262(12):1633–4

Does taking vitamins at the time of conception prevent neural tube defects? [editorial] Holmes LB. **JAMA** 1988 Dec 2; 260(21):3181

Periconceptional use of multivitamins and the occurrence of anencephaly and spina bifida. **MMWR** 1988 Dec 2; 37(47):727–30

Effects on turkey mortality and body weight of type of beak trimming, age at trimming, and injection of poults with vitamin and electrolytes solution at hatching. Renner PA, et al. **Poult Sci** 1989 Mar;68(3):369–73

A survey of vitamin use. Casanova JE, et al. **Wis Med J** 1988 Sep;87(9):19–21

[Is the provision of vitamins to the elderly a reason for concern in The Netherlands? (letter)] Lips P. **Ned Tijdschr Geneeskd** 1989 May 20;133(20):1045–6 (Dut)

[Status of the liver and blood enzymes in rats exposed to potassium dichromate after administration of vitamins] Karimov TK, et al. **Gig Sanit** 1988 Jul;(7):79–81 (Rus)

[Experience of a 6–month prophylactic course of multivitamins for children starting school from 6 years of age] Kerimova MG, et al. **Pediatriia** 1988;(6):89–90 (Rus)

[Effect of therapy with beta–adrenoblockers and vitamin complexes on indices of oxyproline excretion in various hereditary connective tissue diseases] Prozorovskaia NN, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):99–104 (Eng. Abstr.) (Rus)

[Effect of supplementary intake of vitamins for 6 months on physical and mental work capacity of children beginning school education at the age of 6 years] Kerimova MG, et al. **Vopr Pitan** 1988 Jul–Aug;(4):38–41 (Eng. Abstr.) (Rus)

[Effect of supplementary provision of vitamins on health status and work capacity of schoolchildren] Rymarenko TV, et al. **Vopr Pitan** 1988 May–Jun;(3):4–10 (45 ref.) (Rus)

ADVERSE EFFECTS

Adverse effects of overdosage of vitamins and minerals. Barness LA. **Pediatr Rev** 1986 Jul;8(1):20–4 (17 ref.)

[Epidemiologic criteria for the evaluation of positive and negative effects of the administration of high doses of vitamins] Bruppacher R. **Z Gesamte Hyg** 1989 Feb; 35(2):72–4 (Eng. Abstr.) (Ger)

ANALYSIS

Determination of fat–soluble vitamins in oil matrices by multidimensional high–performance liquid chromatography. Brown–Thomas JM, et al. **Anal Chem** 1988 Sep 15;60(18):1929–33

Trace nutrients. 5. Minerals and vitamins in the British household food supply. Lewis J, et al. **Br J Nutr** 1988 Nov; 60(3):413–24

Simultaneous liquid chromatographic determination of water–soluble vitamins, caffeine, and preservative in oral liquid tonics. Maeda Y, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):244–7

Spectrofluorometric assay of thiamine hydrochloride in injections and multivitamin preparations. Mohamed AM, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec;71(6):1131–3

Chromatography of fat–soluble vitamins in clinical chemistry. De Leenheer AP, et al. **J Chromatogr** 1988 Jul 29;429:3–58 (313 ref.)

Analysis of water–soluble vitamins by micellar electrokinetic capillary chromatography. Fujiwara S, et al. **J Chromatogr** 1988 Aug 5;447(1):133–40

Separation of water–soluble vitamins by micellar electrokinetic chromatography. Nishi H, et al. **J Chromatogr** 1989 Mar 31;465(2):331–43

Determination of fat–soluble vitamins in a pharmaceutical dosage form by solid–phase extraction and reversed–phase liquid chromatography. Savolainen KE, et al. **J Pharm Sci** 1988 Sep;77(9):802–3

Effect of Intralipid, amino acids, container, temperature, and duration of storage on vitamin stability in total parenteral nutrition admixtures [published erratum appears in JPEN J Parenter Enteral Nutr 1989 Mar–Apr;13(2):167] Smith JL, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct; 12(5):478–83

Mycoflora and vitamin content of sun–dried food condiments in Nigeria. Ekundayo CA. **Plant Foods Hum Nutr** 1987; 37(3):247–52

Amino acid composition protein quality and water–soluble vitamin content of germinated cowpeas (Vigna unguiculata). Nnanna IA, et al. **Plant Foods Hum Nutr** 1989 Jun;39(2):187–200

[Preservation of vitamins during preparation of dry specialized dairy products] Grigor'eva MP, et al. **Vopr Pitan** 1989 Mar–Apr;(2):44–7 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

[Antivitamin activity of O–acyloxythiamine disulfides] Zimatkina TI, et al. **Ukr Biokhim Zh** 1988 Nov–Dec; 60(6):43–8 (Eng. Abstr.) (Rus)

BLOOD

Vitamin status in patients with inflammatory bowel disease. Fernandez–Banares F, et al. **Am J Gastroenterol** 1989 Jul; 84(7):744–8

Blood vitamin and trace metal levels in epidermolysis bullosa. Fine JD, et al. **Arch Dermatol** 1989 Mar;125(3):374–9

Routine clinical determination of carotene, vitamin E, vitamin A, 25–hydroxy vitamin D3 and trans–vitamin K1 in human serum by straight phase HPLC. Van Haard PM, et al. **Biomed Chromatogr** 1987;2(2):79–88

Serum ferritin levels after multivitamin iron ingestion during teenage pregnancy. Dawson EB, et al. **Clin Ther** 1989; 11(1):151–60

Effect of long–term treatment with antiepileptic drugs on the vitamin status. Krause KH, et al. **Drug Nutr Interact** 1988;5(4):317–43

Dietary intake and other determinants of blood vitamins in an elderly population. Herbeth B, et al. **Eur J Clin Nutr** 1989 Mar;43(3):175–86 (37 ref.)

Nutritional status in anorexia nervosa: clinical chemistry, vitamins, iron and zinc. Van Binsbergen CJ, et al. **Eur J Clin Nutr** 1988 Nov;42(11):929–37 (58 ref.)

Vitamins and other metabolites in various sera commonly used for cell culturing. Baker H, et al. **Experientia** 1988 Dec 1;44(11–12):1007–10

Vitamin supplementation of patients receiving haemodialysis. Allman MA, et al. **Med J Aust** 1989 Feb 6;150(3):130–3

Natural killer cells, vitamins, and other blood components of vegetarian and omnivorous men. Malter M, et al. **Nutr Cancer** 1989;12(3):271–8

Nutritional monitoring and counselling for cancer patients during chemotherapy. Henquin N, et al. **Oncology** 1989; 46(3):173–7

[Changes in the distribution of the fat–soluble vitamins in the lipoprotein fractions in suckling calves and cows in relation to parturition] Ozpinar H, et al. **Berl Munch Tierarztl Wochenschr** 1988 Nov 1; 101(11):383–7 (Eng. Abstr.) (Ger)

[Serum and whole blood concentrations of fat and water soluble vitamins in normal persons and athletes] Rokitzki L, et al. **Z Gesamte Hyg** 1989 Jan;35(1):16–21 (Eng. Abstr.) (Ger)

[Serum values of vitamins A, E, C and carotenoids in healthy adult subjects and those with breast neoplasia] Audisio M, et al. **Boll Soc Ital Biol Sper** 1989 May;65(5):473–80 (Eng. Abstr.) (Ita)

[Vitamin levels in children with latent iron deficiency] Nurmagomaeva LS. **Vopr Pitan** 1988 May–Jun;(3):29–33 (Eng. Abstr.) (Rus)

CLASSIFICATION

[Nomenclature of vitamins and related compounds] **Vopr Pitan** 1989 Mar–Apr;(2):75–8 (Rus)

ISOLATION & PURIFICATION

A new technology for the production of valuable vitamin extracts from wheat and rye germs. Karwowska K, et al. **Nahrung** 1988;32(5):491–5

METABOLISM

Epithelial transport of water–soluble vitamins. Bowman BB, et al. **Annu Rev Nutr** 1989;9:187–99 (122 ref.)

Vitamin requirements for development of eight–cell hamster embryos to hatching blastocysts in vitro. Kane MT, et al. **Biol Reprod** 1988 Dec;39(5):1137–43

Nutrient interactions involving vitamins and minerals. Erdman JW Jr, et al. **Bol Asoc Med P R** 1988 Aug; 80(8):291–3

Vitamin nutrition in patients with chronic renal failure and dietary manipulation. Gentile MG, et al. **Contrib Nephrol** 1988;65:43–50

Vitamin status in patients with chronic renal failure. Stein G, et al. **Contrib Nephrol** 1988;65:33–42 (48 ref.)

The effect of total enteral tube feeding on the vitamin status of malnourished patients with inflammatory bowel disease. Abad–Lacruz A, et al. **Int J Vitam Nutr Res** 1988; 58(4):428–35

Protein–free culture medium containing polyvinylalcohol, vitamins, and amino acids supports development of eight–cell hamster embryos to hatching blastocysts. Kane MT, et al. **J Exp Zool** 1988 Aug;247(2):183–7

Vitamin status of young athletes including the effects of supplementation. Guilland JC, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):441–9 (56 ref.)

[Metabolism of vitamins in the digestive tract of ruminants] Marounek M. **Cesk Fysiol** 1988;37(5):435–42 (50 ref.) (Cze)

[Effect of retinol, tocopherol and ascorbic acid on vitamin metabolism in experimental chromium poisoning and controlled diet] Karimov TK, et al. **Vopr Pitan** 1988 Jul–Aug;(4):48–51 (Eng. Abstr.) (Rus)

[Vitamin status of workers in the chromium industry] Karimov TK. **Vopr Pitan** 1988 May–Jun;(3):20–2 (Eng. Abstr.) (Rus)

[The vitamin allowance and vitamin requirements of the operators of a chemical plant in the city of Rustavi] Titvinidze TsS, et al. **Vopr Pitan** 1988 Sep–Oct;(5):37–9 (Eng. Abstr.) (Rus)

[Body vitamin allowance of vegetable growers working on sheltered soil] Veden'kina LK. **Vopr Pitan** 1988 Nov–Dec; (6):32–6 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

[Comparison of the pharmacokinetics of iron in pregnant and nonpregnant women after oral administration of Vitaferro] Peiker G, et al. **Pharmazie** 1988 May;43(5):335–6 (Eng. Abstr.) (Ger)

[Bioavailability study of micronutrients] Pietrzik K, et al. **Z Ernahrungswiss** 1989 Jun;28(2):130–41 (Eng. Abstr.) (Ger)

PHARMACOLOGY

Reduction of the teratogenic effects of phenytoin by folic acid and a mixture of folic acid, vitamins, and amino acids: a preliminary trial. Zhu MX, et al. **Epilepsia** 1989 Mar–Apr; 30(2):246–51

Diet and intelligence. Gray M. **Food Chem Toxicol** 1988 Jun; 26(6):572–3

Re: The influence of vitamin supplements of micronutrient levels in healthy elderly subjects [letter] Powers JS, et al.

J Am Coll Nutr 1989 Apr;8(2):171–2

Effects of the intake of selected vitamins and minerals on cancer prevention. Birt DF. **Magnesium** 1989;8(1):17–30 (103 ref.)

Comparative antimutagenicity of chlorophyllin and five other agents against aflatoxin B1–induced reversion in Salmonella typhimurium strain TA98. Whong WZ, et al. **Teratogenesis Carcinog Mutagen** 1988;8(4):215–24

[Effect of drugs on lipid synthesis in sebaceous glands of hamster ear skin] Suzuki M, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Jul;98(8):783–7 (Eng. Abstr.) **(Jpn)**

[Inhibition of muscle glycogen phosphorylase b by heterocyclic vitamins and coenzymes] Klinova NI, et al. **Bioorg Khim** 1988 Nov;14(11):1520–3 (Eng. Abstr.) **(Rus)**

[The action of protein–vitamin preparations from micromycetes on fur–bearing animals] Bilai VI, et al. **Mikrobiol Zh** 1987 May–Jun;49(3):65–9 (Eng. Abstr.) **(Rus)**

[Pharmacotherapeutic effectiveness of kvadevit] Zapadniuk VI, et al. **Vrach Delo** 1988 Jul;(7):72–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Role of vitamins in urolithiasis. Khanam A, et al. **Biomed Pharmacother** 1988;42(9):609–13 (25 ref.)

Recent developments in the roles of vitamins and minerals in reproduction. Hurley WL, et al. **J Dairy Sci** 1989 Mar; 72(3):784–804 (231 ref.)

Vitamin Q. Quick AJ. **Life Sci** 1974 Jul 1;15(1):1–6 (6 ref.)

The role of vitamins in modulating disease resistance. Nockels CF. **Vet Clin North Am [Food Anim Pract]** 1988 Nov; 4(3):531–42 (119 ref.)

STANDARDS

[Use of Soviet–made amino acids and vitamins for preparing nutrient media for cell cultures] Speranskaia ID, et al. **Vopr Virusol** 1988 May–Jun;33(3):372–3 **(Rus)**

THERAPEUTIC USE

Vitamin preparations as dietary supplements and as therapeutic agents. Council on Scientific Affairs, American Medical Association. **ASDC J Dent Child** 1988 Nov–Dec; 55(6):427–33 (29 ref.)

Vitamin preparations as dietary supplements and as therapeutic agents. **Bol Asoc Med P R** 1988 Nov; 80(11):429–33

Chemoprevention of lung cancer. Problems and progress. Greenwald P, et al. **Chest** 1989 Jul;96(1 Suppl):14S–17S (11 ref.)

Running performance in Gambian children: effects of water–soluble vitamins or iron. Powers HJ, et al. **Eur J Clin Nutr** 1988 Nov;42(11):895–902

Vitamin therapy and children with Down syndrome: a review of research. Pruess JB, et al. **Except Child** 1989 Jan;55(4):336–41 (40 ref.)

Effect of vitamins on Trichinella spiralis Owen, 1835 infection in mice. Figallová V, et al. **Folia Parasitol (Praha)** 1988;35(2):157–63

Controversies in the treatment of autistic children: vitamin and drug therapy. Rimland B. **J Child Neurol** 1988;3 Suppl:S68–72 (28 ref.)

Vitamin supplements and purported learning enhancement in mentally retarded children. Menolascino FJ, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Jun;35(3):181–92

Neurogenetic deficits caused by alcoholism: restoration by SAAVE, a neuronutrient intervention adjunct. Blum K, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):297–313 (94 ref.)

Clinical and legal aspects of nonphysician prescription of vitamins, amino acids and other nutritional supplements. Clark HW, et al. **J Psychoactive Drugs** 1988 Jul–Sep; 20(3):355–74 (147 ref.)

Clinical impressions of SAAVE and tropamine. Horne DE. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):333–6

Improvement of cocaine–induced neuromodulator deficits by the neuronutrient Tropamine. Trachtenberg MC, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):315–31 (90 ref.)

Periconceptional use of multivitamins and the occurrence of neural tube defects. Mulinare J, et al. **JAMA** 1988 Dec 2;260(21):3141–5

Vitamin prescriptions on a hospital general medical ward: result of a drug utilization review. Benzel RA, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun;13(3):262–4

Vitamins and the neural tube [editorial] **Lancet** 1989 Aug 26;2(8661):486

Prevention of neural tube defect recurrences in Yorkshire: final report [letter] Smithells RW, et al. **Lancet** 1989 Aug 26;2(8661):498–9

The absence of a relation between the periconceptional use of vitamins and neural–tube defects. National Institute of Child Health and Human Development Neural Tube Defects Study Group [see comments] Mills JL, et al. **N Engl J Med** 1989 Aug 17;321(7):430–5. **Comment in:** N Engl J Med 1989 Aug 17;321(7):464–6

Case control study of neural tube defects and periconceptional vitamin use. Mitchell A. **Paediatr Perinat Epidemiol** 1989 Apr;3(2):216

Vitamins and cancer. Stähelin HB. **Recent Results Cancer Res** 1988;108:227–34 (35 ref.)

[Antihypoxic properties of GABA–containing vitamin derivatives] Karsev AL, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):56–8 (Eng. Abstr.) **(Rus)**

[Tactics of transfusion–infusion therapy of anemic syndrome in patients with cirrhosis of the liver] Zherebtsov LA, et al. **Gematol Transfuziol** 1988 Sep;33(9):42–6 (Eng. Abstr.) **(Rus)**

[Experience using immunocorrecting agents in workers engaged in the manufacture of graphite and asbestos products] Bezzub SL, et al. **Gig Tr Prof Zabol** 1988 Sep; (9):27–9 (Eng. Abstr.) **(Rus)**

[Effects of vitamin prophylaxis on morbidity with temporary disability in workers of locomotive teams of the Moscow metro] Sheptalov NN, et al. **Gig Tr Prof Zabol** 1989; (6):40–2 **(Rus)**

[Vitamins for the prevention of blood coagulation disorders during transvesical adenomectomies] Shafer VM, et al. **Sov Med** 1988;(12):100–3 **(Rus)**

[Normalization of metabolic disorders in periodontitis using a complex of coenzyme vitamins] Pakhomova VA, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):20–1 (Eng. Abstr.) **(Rus)**

[Separate and combined action of antibiotics and vitamins on monoamine oxidase activity of the rabbit liver in staphylococcal infection] Tsyganenko AIa. **Vopr Med Khim** 1971 Jul–Aug;17(4):364–9 (Eng. Abstr.) **(Rus)**

[Fanconi's anemia: effect of treatment with a vitamin complex and with nicotinamide] Pincheira J, et al. **Rev Med Chil** 1988 Aug;116(8):788–92 (Eng. Abstr.) **(Spa)**

VITELLINE DUCT

Unusual presentation of patent vitello intestinal duct with round worms emerging from the umbilicus. Surendran N, et al. **J Pediatr Surg** 1988 Nov;23(11):1061–2

Vitelline duct cyst or double yolk sac. Barzilai M, et al. **J Ultrasound Med** 1989 Sep;8(9):523–6

Localization and pattern of expression of a female specific mRNA in Schistosoma mansoni. Reis MG, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):113–9

ANATOMY & HISTOLOGY

Embryonic remnants of the umbilical cord: morphologic and clinical aspects. Jauniaux E, et al. **Hum Pathol** 1989 May; 20(5):458–62

PATHOLOGY

Cutaneous remnants of the vitellointestinal duct: a clinico–pathological study of 19 cases. Heatley MK, et al. **Ulster Med J** 1988 Oct;57(2):181–3

[Pathology due to incomplete involution of the vitelline duct] Shish AA, et al. **Klin Khir** 1988;(6):39–40 (Eng. Abstr.) **(Rus)**

VITELLINE MEMBRANE

ANALYSIS

Changes in the protein components of vitelline envelope during oogenesis of a tubiculous polychaete, Schizobranchia insignis. Lee YR. **Cell Differ Dev** 1988 Sep; 25(1):23–35

Intermolecular cross–linking of vitelline envelope polypeptides predominates in the hardened sea urchin fertilization envelope. Santiago L, et al. **Gamete Res** 1987 May;17(1):63–75

DRUG EFFECTS

Fertilization envelope assembly in sea urchin eggs inseminated in Cl– deficient sea water: I. Morphological effects. Lynn JW, et al. **Gamete Res** 1988 Oct;21(2):135–49

ENZYMOLOGY

Development of lipase activity in yolk membrane and pancreas of young turkeys. Escribano F, et al. **Poult Sci** 1988 Jul;67(7):1089–97

METABOLISM

The establishment of essential and metabolically derived amino acid profiles in developing chick embryo organs. van Gelder NM, et al. **Neurochem Res** 1988 Aug; 13(8):699–706

PHYSIOLOGY

Molecular analysis and rescue of a vitelline membrane mutant in Drosophila. Savant SS, et al. **Dev Biol** 1989 Sep; 135(1):43–52

Drosophila vitelline membrane genes contain a 114 base pair region of highly conserved coding sequence. Scherer LJ, et al. **Dev Biol** 1988 Dec;130(2):786–8

Lectin binding sites in the vitelline envelope of Bufo arenarum oocytes: role in fertilization. del Pino EJ, et al. **Gamete Res** 1987 Aug;17(4):333–42

Sperm–engulfing response of sea urchin egg surfaces inseminated with acrosome–reacted starfish sperm. Kyozuka K, et al. **Gamete Res** 1988 Oct;21(2):169–77

Classification, inhibition, and specificity studies of the vitelline coat lysin from toad sperm. Yamasaki H, et al. **Gamete Res** 1988 Jul;20(3):287–300

Acrosome reaction of cock spermatozoa incubated with the perivitelline layer of the hen's ovum. Koyanagi F, et al. **Poult Sci** 1988 Dec;67(12):1770–4

VITELLOGENESIS

Use of the protein A–gold immunocytochemical and enzyme–gold cytochemical techniques in studies of vitellogenesis. Herbener GH. **Am J Anat** 1989 Jun–Jul; 185(2–3):244–54

Changes in serum glucose and lipids, and liver glycogen and phosphorylase during vitellogenesis in nature in the flounder (Platichtys flesus, L.). Petersen IM, et al. **Comp Biochem Physiol [B]** 1977;58(2):167–71

Onset of vitellogenin production and vitellogenesis, and their relationship to changes in the midgut epithelium and oocytes in the tick Dermacentor variabilis. Coons LB, et al. **Exp Appl Acarol** 1989 May;6(4):291–305

Relationship between feeding, mating, vitellogenin production and vitellogenesis in the tick Dermacentor variabilis. Rosell–Davis R, et al. **Exp Appl Acarol** 1989 Jun; 7(1):95–105

A correlated morphometric and cytochemical study on hepatocyte nucleolar size and RNA distribution during vitellogenesis. Herbener GH, et al. **Histochem J** 1988 Apr; 20(4):194–200

The cell biology of mosquito vitellogenesis. Raikhel AS. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:93–101

Final maturation and ovulation provoked by supply of homologous hypophysis in Hoplias m. malabaricus (Pisces, Erythrinidae). Matkovic M, et al. **Rev Bras Biol** 1989 Feb; 49(1):213–20

DRUG EFFECTS

Estrogen–induced vitellogenin production by triploid coho salmon (Oncorhynchus kisutch), and its effect on plasma and pituitary gonadotropin. Benfey TJ, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):83–7

VITELLOGENIN

Is vitellogenin an ancestor of apolipoprotein B–100 of human low–density lipoprotein and human lipoprotein lipase? Baker ME. **Biochem J** 1988 Nov 1;255(3):1057–60

Invertebrate vitellogenin is homologous to human von Willebrand factor [letter] Baker ME. **Biochem J** 1988 Dec 15;256(3):1059–61

A 15,000–Mr protein proteolytically derived from vitellogenin within oocyte of Perinereis cultrifera (polychaete annelid). Identification, purification and partial characterization. Baert JL. **Eur J Biochem** 1988 Nov 15; 177(3):625–30

Biochemical analysis of vitellogenin from rainbow trout (Salmo gairdneri): fatty acid composition of phospholipids. Fremont L, et al. **Reprod Nutr Dev** 1988;28(4A):939–52

ANALYSIS

Structural features of lipoprotein lipase. Lipase family relationships, binding interactions, non–equivalence of lipase cofactors, vitellogenin similarities and functional subdivision of lipoprotein lipase. Persson B, et al. **Eur J Biochem** 1989 Jan 15;179(1):39–45

A new method for determining vitellogenin in hemolymph of female Ornithodoros moubata (Acari: Argasidae). Chinzei Y. **J Med Entomol** 1988 Nov;25(6):548–50

BIOSYNTHESIS

A role of metallothionein in zinc regulation after oestradiol induction of vitellogenin synthesis in rainbow trout, Salmo gairdneri. Olsson PE, et al. **Biochem J** 1989 Jan 15; 257(2):555–9

Thyroid hormone directly induces hepatocyte competence for estrogen–dependent vitellogenin synthesis during the metamorphosis of Xenopus laevis. Kawahara A, et al. **Dev Biol** 1989 Mar;132(1):73–80

Onset of vitellogenin production and vitellogenesis, and their relationship to changes in the midgut epithelium and oocytes in the tick Dermacentor variabilis. Coons LB, et al. **Exp Appl Acarol** 1989 May;6(4):291–305

Relationship between feeding, mating, vitellogenin production and vitellogenesis in the tick Dermacentor variabilis. Rosell–Davis R, et al. **Exp Appl Acarol** 1989 Jun; 7(1):95–105

Vitellogenin induction by estradiol in channel catfish, Ictalurus punctatus. Bradley JT, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):28–39

Vitellogenin synthesis by fat body and ovary in the terrestrial isopod, Armadillidium vulgare. Suzuki S, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):120–6

L–canavanine incorporation into vitellogenin and macromolecular conformation. Rosenthal GA, et al. **J Biol Chem** 1989 Aug 15;264(23):13693–6

The temporal pattern of vitellogenin synthesis in Drosophila grimshawi. Kambysellis MP, et al. **J Exp Zool** 1989 Sep; 251(3):339–48

The cell biology of mosquito vitellogenesis. Raikhel AS. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:93–101

BLOOD

The measurement of plasma vitellogenin levels in a marine

teleost, the spotted seatrout (Cynoscion nebulosus) by homologous radioimmunoassay. Copeland PA, et al. **Comp Biochem Physiol [B]** 1988;91(1):17–23

Dose response kinetics of serum vitellogenin, liver DNA, RNA, protein and lipid after induction by estradiol-17 beta in male flounders (Platichthys flesus L.). Emmerson J, et al. **Comp Biochem Physiol [B]** 1979;63(1):1–6

An homologous radioimmunoassay for coho salmon (Oncorhynchus kisutch) vitellogenin, with general applicability to other Pacific salmonids. Benfey TJ, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):78–82

GENETICS

Rudimentary phosvitin domain in a minor chicken vitellogenin gene. Byrne BM, et al. **Biochemistry** 1989 Mar 21;28(6):2572–7

A cell-specific activator in the Xenopus A2 vitellogenin gene: promoter elements functioning with rat liver nuclear extracts. Döbbeling U, et al. **EMBO J** 1988 Aug; 7(8):2495–501

Vitellogenin gene expression in male rainbow trout (Salmo gairdneri). Le Guellec K, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):359–71

Estrogen-dependent activation of the avian very low density apolipoprotein II and vitellogenin genes. Transient alterations in mRNA polyadenylation and stability early during induction. Cochrane AW, et al. **J Mol Biol** 1988 Oct 5;203(3):555–67

Immuno-electron microscopic identification of human estrogen receptor-DNA complexes at the estrogen-responsive element and in the first intron of a Xenopus vitellogenin gene. ten Heggler-Bordier B, et al. **J Mol Biol** 1988 Nov 5;204(1):217–20

Characterization of a polymorphism in the 3' part of the chicken vitellogenin gene. Philipsen JN, et al. **J Mol Evol** 1989 Mar;28(3):185–90

Potential regulatory elements of nematode vitellogenin genes revealed by interspecies sequence comparison. Zucker-Aprison E, et al. **J Mol Evol** 1989 Jun;28(6):487–96

The vitellogenin gene family of Aedes aegypti. Hamblin MT, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:109–14

Estrogen-inducible binding of a nuclear factor to the vitellogenin upstream region. Bakker O, et al. **Mol Cell Biol** 1988 Oct;8(10):4557–60

Estrogen and progesterone receptor-binding sites on the chicken vitellogenin II gene: synergism of steroid hormone action. Cato AC, et al. **Mol Cell Biol** 1988 Dec; 8(12):5323–30

In vivo footprinting of the estrogen-inducible vitellogenin II gene from chicken. Philipsen JN, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9663–76

Xenopus vitellogenin genes. Wahli W, et al. **Oxf Surv Eukaryot Genes** 1985;2:96–120 (83 ref.)

Evolution and expression of vitellogenin genes. Wahli W. **Trends Genet** 1988 Aug;4(8):227–32 (40 ref.)

ISOLATION & PURIFICATION

Physical and chemical characterization of vitellogenin from the hemolymph and eggs of the tobacco hornworm, Manduca sexta. Mundall EC, et al. **Comp Biochem Physiol [B]** 1979;63(4):459–68

METABOLISM

Evidence of a precursor-product relationship between vitellogenin and toposome, a glycoprotein complex mediating cell adhesion. Cervello M, et al. **Cell Differ Dev** 1989 Jan;26(1):67–76

Fat body involvement in vitellogenin fate in the green frog, Rana esculenta. Varriale B, et al. **Comp Biochem Physiol [A]** 1988;91(1):175–8

Vitellogenin, lipid and carbohydrate metabolism during vitellogenesis and pregnancy, and after hormonal induction in the blenny Zoarces viviparus (L.). Korsgaard B, et al. **Comp Biochem Physiol [B]** 1979;63(2):245–51

Vitellogenin-iron and hemoglobin synthesis in avian reticulocytes. Sánchez J, et al. **Rev Esp Fisiol** 1989 Mar; 45(1):61–4

PHARMACOLOGY

Estrogen-induced vitellogenin production by triploid coho salmon (Oncorhynchus kisutch), and its effect on plasma and pituitary gonadotropin. Benfey TJ, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):83–7

PHYSIOLOGY

Regulated expression of a vitellogenin fusion gene in transgenic nematodes. Spieth J, et al. **Dev Biol** 1988 Nov; 130(1):285–93

VITILIGO

Vitiligo. Koranne RV, et al. **Int J Dermatol** 1988 Dec; 27(10):676–81 (57 ref.)

CHEMICALLY INDUCED

Vitiligo following diphencyprone dermatitis [letter] MacDonald-Hull SP, et al. **Br J Dermatol** 1989 Feb; 120(2):323

Vitiligo as a reaction to topical treatment with diphencyprone. Hatzis J, et al. **Dermatologica** 1988; 177(3):146–8

Chronic arsenicism with vitiligo, hyperthyroidism, and cancer. Bickley LK, et al. **N J Med** 1989 May;86(5):377–80

[Vitiligo appearing after contact with mud containing solvents: an occupational cause?] Cirasino L, et al. **G Ital Med Lav** 1988 Jan;10(1):43–5 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Naproxen pseudoporphyria in a patient with vitiligo [letter] Diffey BL, et al. **Clin Exp Dermatol** 1988 May;13(3):207

Pityriasis rubra pilaris and vitiligo in Down's syndrome. Hazini AR, et al. **Clin Exp Dermatol** 1988 Sep;13(5):334–5

Pseudo-mycotic nail dystrophy and vitiligo. Milligan A, et al. **Clin Exp Dermatol** 1988 Mar;13(2):109–10

Vitiligo and polymyositis [letter] van Linthoudt D, et al. **Clin Exp Rheumatol** 1989 May-Jun;7(3):334–5

Retinitis pigmentosa, hearing loss and vitiligo: report of two patients. Dereymaeker AM, et al. **Clin Genet** 1989 May; 35(5):387–9

Vitiligo and disseminated discoid lupus erythematosus. Khare AK, et al. **Indian J Dermatol** 1988 Jul;33(3):37–9

A case of IgA nephropathy associated with vitiligo, primary hypothyroidism and primary adrenocortical insufficiency. Madden BP, et al. **Ir J Med Sci** 1989 Jun;158(6):153–4

Guttate psoriasis and vitiligo: anatomic cohabitation. Menter A, et al. **J Am Acad Dermatol** 1989 Apr;20(4):698–700

[The development of keloid scars in a female vitiligo patient] Rakhmatov AB, et al. **Vestn Dermatol Venerol** 1988; (11):69–70 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Psoralen therapy in vitiligo. Ortonne JP. **Clin Dermatol** 1989 Apr-Jun;7(2):120–35 (78 ref.)

The use of readily available photosensitizers for vitiligo in Nigeria [letter] George AO. **Int J Dermatol** 1989 Sep; 28(7):475–7

Vitiligo repigmentation with Anapsos (Polypodium leucotomos) [letter] Mohammad A. **Int J Dermatol** 1989 Sep;28(7):479

Pseudoallergic reaction from Khellin in photochemotherapy of vitiligo: a case report. Jung EG, et al. **Photodermatol** 1988 Oct;5(5):235–6

ENZYMOLOGY

Cupric ions and DOPA oxidase activity in melanocytes. Iyengar B, et al. **Acta Morphol Hung** 1988;36(1-2):95–9

EPIDEMIOLOGY

Vitiligo in Ibadan, Nigeria. Incidence, presentation, and problems in management. George AO. **Int J Dermatol** 1989 Jul-Aug;28(6):385–7

ETHNOLOGY

Vitiligo. Kenney JA Jr. **Dermatol Clin** 1988 Jul;6(3):425–34

ETIOLOGY

Etiology of vitiligo. A new hypothesis. Ramaiah A, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):323–6

Vitiligo and photosensitivity [letter] Ackroyd J. **BMJ** 1988 Oct 29;297(6656):1126

Squamous cell carcinoma of the bladder presenting as vitiligo. Banerjee AK, et al. **Br J Urol** 1989 Mar;63(3):323

Depigmentation: its significance in patients with melanoma. Barnes L, et al. **Clin Dermatol** 1989 Apr-Jun;7(2):66–73 (40 ref.)

Vitiligo following type II lepra reaction. Pavithran K. **Indian J Lepr** 1989 Jan;61(1):44–8

[The pathogenesis of vitiligo] Gudzenko ZhP, et al. **Vrach Delo** 1989 Jun;(6):95–8 (Eng. Abstr.) **(Rus)**

GENETICS

[The heritability of vitiligo] Salamon T, et al. **Hautarzt** 1989 Mar;40(3):141–5 (55 ref.) (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Serum antibodies in vitiligo patients. Bystryn JC. **Clin Dermatol** 1989 Apr-Jun;7(2):136–45 (58 ref.)

Circadian rhythm of natural killer cell activity in vitiligo. Mozzanica N, et al. **J Am Acad Dermatol** 1989 Apr; 20(4):591–6

[Immunological changes in common vitiligo] Vignale R, et al. **Med Cutan Ibero Lat Am** 1988;16(4):343–7 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Neural differentiation of melanocytes in vitiliginous skin. Iyengar B, et al. **Acta Anat (Basel)** 1988;133(1):62–5

Growth defects of melanocytes in culture from vitiligo subjects are spontaneously corrected in vivo in repigmenting subjects and can be partially corrected by the addition of fibroblast-derived growth factors in vitro. Puri N, et al. **Arch Dermatol Res** 1989;281(3):178–84

Increased anthralin irritation response in vitiliginous skin. Westerhof W, et al. **Arch Dermatol Res** 1989;281(1):52–6

[Pringle's adenoma of the sebaceous glands combined with vitiligo and logoneurosis] Alziatulov RF. **Vestn Dermatol Venerol** 1989;(4):69–70 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Irritancy of dithranol in normally pigmented and depigmented skin of patients with vitiligo. van de Kerkhof PC, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):236–8

Study of neurotropic influences in vitiligo. Kaur A, et al. **Indian J Dermatol** 1988 Jul;33(3):33–6

PSYCHOLOGY

[The psychological characteristics of patients with vitiligo] Koshevenko IuN. **Vestn Dermatol Venerol** 1989;(5):4–6 (Eng. Abstr.) **(Rus)**

SURGERY

Treatment of localized vitiligo by autologous minigrafting. Falabella R. **Arch Dermatol** 1988 Nov;124(11):1649–55

Epidermal grafting using the tops of suction blisters in the treatment of vitiligo. Koga M. **Arch Dermatol** 1988 Nov; 124(11):1656–8

Repopulation of pigment cells in patients with vitiligo [editorial] Lerner AB. **Arch Dermatol** 1988 Nov; 124(11):1701–2

Grafting and transplantation of melanocytes for repigmenting vitiligo and other types of leukoderma. Falabella R. **Int J Dermatol** 1989 Jul-Aug;28(6):363–9 (38 ref.)

Transplantation of in vitro-cultured epidermis bearing melanocytes for repigmenting vitiligo. Falabella R, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):257–64

THERAPY

Marked increase of liver transaminases after khellin and UVA therapy [letter] Duschet P, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):592–4

Repigmentation of vitiliginous skin by cultured cells. Brysk MM, et al. **Pigment Cell Res** 1989 May-Jun;2(3):202–7

[In vitro culture of melanocyte-bearing epidermis and its application in the treatment of vitiligo and the stable leukodermas] Falabella R, et al. **Med Cutan Ibero Lat Am** 1989;17(3):193–8 (Eng. Abstr.) **(Spa)**

VETERINARY

Ocular pathology in the minimally depigmented subline of the vitiliginous Smyth chicken. Boissy RE, et al. **Pigment Cell Res** 1988;1(5):303–14

VITRECTOMY

Acute retinal necrosis syndrome treated with vitrectomy and intravenous acyclovir. Immonen I, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):106–8

Long-term visual results of vitreous surgery in diabetic eye disease. Laatikainen L, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):21–9

Silicone oil injection after failed primary vitreous surgery in severe ocular trauma. Antoszyk AN, et al. **Am J Ophthalmol** 1989 May 15;107(5):537–43

Posterior chamber intraocular lens insertion during pars plana lensectomy and vitrectomy for complications of proliferative diabetic retinopathy. Blankenship GW, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):1–5

Vitrectomy for complicated retinal detachments secondary to branch retinal vein occlusions. Russell SR, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):6–9

Flurbiprofen sodium to prevent intraoperative miosis during vitreoretinal surgery. Vander JF, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):288–91

Fluid-gas exchange after vitrectomy using long-acting gases in an outpatient setting [letter] Lambrou FH, et al. **Arch Ophthalmol** 1988 Oct;106(10):1344

Silicone oil for progressive anterior ocular neovascularization after failed diabetic vitrectomy [published erratum appears in Arch Ophthalmol 1989 Jul;107(7):1030] McCuen BW 2d, et al. **Arch Ophthalmol** 1989 May;107(5):677–82

Neodymium: YAG laser vitreolysis for treatment and prophylaxis of cystoid macular oedema. Tchah H, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):179–83

A vitreoretinal service. Richardson J, et al. **BMJ** 1989 Jul 22;299(6693):241–5

Vitrectomy in aphakia: a simplified technique for fundus visualisation. Asfour OM, et al. **Br J Ophthalmol** 1989 Apr; 73(4):303–4

The 'poor man's' Landers lens. Benjamin L. **Br J Ophthalmol** 1988 Oct;72(10):796–8

Vitrectomy for idiopathic epiretinal membranes causing macular pucker. de Bustros S, et al. **Br J Ophthalmol** 1988 Sep;72(9):692–5

Endophthalmitis and pars plana vitrectomy. Verbraeken H, et al. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:33–9

Surgical treatment for macular hole retinal detachment—comparison of simple drainage, macular buckling and vitrectomy techniques. Liu JH, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Sep;40(3):275–82

Does vitrectomy increase trans-scleral water movement? [letter] Foulds WS, et al. **Eye** 1988;2 (Pt 2):226–8

Vitrectomy for diabetic eye disease. Sigurdsson H, et al. **Eye** 1988;2 (Pt 4):418–23

Posterior chamber intraocular lens implantation during pars plana lensectomy and vitrectomy for diabetic complications. Blankenship GW. **Graefes Arch Clin Exp Ophthalmol** 1989;227(2):136–8

Pars plana vitrectomy and silicone oil injection in proliferative diabetic retinopathy. Heimann K, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(2):152–6
Vitrectomy and fluid/silicone–oil exchange for giant retinal tears: 5 years follow–up. Leaver PK, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(4):323–7
Factors influencing the results of vitreous surgery in diabetic retinopathy. I. Iris rubeosis and/or active neovascularization at the fundus. Oldendoerp J, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):1–8
Abortive neovascular outgrowths discovered during vitrectomy for diabetic vitreous haemorrhage. Wong HC, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):237–40
Neodymium:YAG laser anterior vitreolysis for Irvine–Gass cystoid macular edema. Steinert RF, et al. **J Cataract Refract Surg** 1989 May;15(3):304–7
Vitrectomy in chronic vitreous haemorrhage from branch retinal vein occlusion. Hunter IC, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):340–1
Clinical evaluation of severe penetrating injury involving vitreous gel treated with pars plana vitrectomy. Chung YT. **Korean J Ophthalmol** 1987 Dec;1(2):128–34
Surgical dilation of the pupil during pars plana vitrectomy. Federman JL, et al. **Ophthalmic Surg** 1989 Jan;20(1):46–8
Monochromatic endoillumination for epimacular membrane surgery. Kraushar MF, et al. **Ophthalmic Surg** 1989 Jul; 20(7):508–10
Vitrectomy when asteroid hyalosis prevents laser photocoagulation. Lambrou FH Jr, et al. **Ophthalmic Surg** 1989 Feb;20(2):100–2
Intermittent intraocular thrombin as an adjunct to vitrectomy. Maxwell DP Jr, et al. **Ophthalmic Surg** 1989 Feb;20(2):108–11
Endothelial cell counts following pars plana vitrectomy in pseudophakic and aphakic eyes. Mittl RN, et al. **Ophthalmic Surg** 1989 Jan;20(1):13–6
Intraocular human thrombin infusion in diabetic vitrectomies. Verdoorn C, et al. **Ophthalmic Surg** 1989 Apr;20(4):278–9
Early vitrectomy for severe proliferative diabetic retinopathy in eyes with useful vision. Results of a randomized trial—Diabetic Retinopathy Vitrectomy Study Report 3. The Diabetic Retinopathy Vitrectomy Study Research Group. **Ophthalmology** 1988 Oct;95(10):1307–20
Early vitrectomy for severe proliferative diabetic retinopathy in eyes with useful vision. Clinical application of results of a randomized trial—Diabetic Retinopathy Vitrectomy Study Report 4. The Diabetic Retinopathy Vitrectomy Study Research Group. **Ophthalmology** 1988 Oct; 95(10):1321–34
Intraocular pressure measurement after pars plana vitrectomy. Del Priore LV, et al. **Ophthalmology** 1989 Sep; 96(9):1353–6
Vitrectomy in the management of uveitis [editorial] Foster CS. **Ophthalmology** 1988 Aug;95(8):1011–2
Vitrectomy and scleral buckling methods for proliferative vitreoretinopathy. Hanneken AM, et al. **Ophthalmology** 1988 Jul;95(7):865–9
Posterior chamber intraocular lens implantation during diabetic pars plana vitrectomy. Kokame GT, et al. **Ophthalmology** 1989 May;96(5):603–10
Perisilicone proliferation after vitrectomy for proliferative vitreoretinopathy. Lewis H, et al. **Ophthalmology** 1988 May;95(5):583–91
Vitrectomy in the management of peripheral uveitis. Mieler WF, et al. **Ophthalmology** 1988 Jul;95(7):859–64
The Diabetic Retinopathy Vitrectomy Study [letter] Shea M. **Ophthalmology** 1989 Jul;96(7):1121–3
Results of vitrectomy for diabetic traction retinal detachments using the en bloc excision technique. Williams DF, et al. **Ophthalmology** 1989 Jun;96(6):752–8
Vitrectomy for vitreous hemorrhage in Chinese diabetic patients. Ho PC. **Yen Ko Hsueh Pao** 1985 Dec;1(2):148–50
[Combined surgery of vitrectomy and intraocular foreign body extraction] Zhang XF. **Chung Hua Yen Ko Tsa Chih** 1989 Jan;25(1):6–8 (Eng. Abstr.) (Chi)
[Indications for pars plana vitrectomy] Karel I. **Cesk Oftalmol** 1989 Mar;45(2):65–70 (Eng. Abstr.) (Cze)
[Problems in pars plana vitrectomy in complicated diabetic retinopathy] Karel I. **Cesk Oftalmol** 1989 Mar;45(2):71–6 (Eng. Abstr.) (Cze)
[Is the prognosis of pars plana vitrectomy in diabetic retinopathy dependent on the general status of the diabetic?] Karel I, et al. **Cesk Oftalmol** 1989 Mar; 45(2):77–83 (Eng. Abstr.) (Cze)
[Vitrectomy in diabetic patients. Study of 55 cases] Delafoulhouze JC, et al. **Bull Soc Ophtalmol Fr** 1988 May; 88(5):651–6 (Eng. Abstr.) (Fre)
[Influence of the date of vitrectomy on the prognosis of traumatic vitreous hemorrhage. Study of 100 cases] Le Rebeller MJ, et al. **Bull Soc Ophtalmol Fr** 1988 Mar; 88(3):351–4, 356–8 (Fre)
[Vitrectomy in the diabetic] Haut J, et al. **Journ Annu Diabetol Hotel Dieu** 1988;:163–6 (Fre)
[Treatment of retinal detachment complicated by severe vitreo–retinal proliferation using silicone oil] Chauvaud D, et al. **Ophtalmologie** 1988 Jan–Mar;2(1):13–5 (Eng. Abstr.) (Fre)
[Preventive neodymium YAG iridectomy for controlling secondary angle closure glaucoma following pars plana vitrectomy and silicone in phacic eyes] Koniszewski G, et al. **Fortschr Ophthalmol** 1988;85(5):462–3 (Eng. Abstr.) (Ger)
[Vitrectomy in epiretinal gliosis] Mester U. **Fortschr Ophthalmol** 1988;85(3):267–9 (Eng. Abstr.) (Ger)
[Chronic glaucoma following silicone oil implantation: a comparison of 2 oils of differing viscosity] Petersen J, et al. **Fortschr Ophthalmol** 1988;85(6):632–4 (Eng. Abstr.) (Ger)
[Effect of rubeosis iridis and active neovascularization of the fundus on vitreous surgery in diabetic retinopathy] Oldendoerp J, et al. **Klin Monatsbl Augenheilkd** 1988 Jun; 192(6):650–9 (Eng. Abstr.) (Ger)
[Transient left bundle branch block during ophthalmic surgery under local anesthesia] Harioka T, et al. **Masui** 1988 Jul;37(7):843–8 (Eng. Abstr.) (Jpn)
[Results of vitrectomy for diabetic traction retinal detachment involving the macula; a comparison of six–month and three–year postoperative findings] Nakae R, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):271–5 (Eng. Abstr.) (Jpn)
[The role of lensectomy and vitrectomy in the treatment of severe penetrating eye injuries] Nawrocki J, et al. **Klin Oczna** 1988 Jun;90(6):222–4 (Eng. Abstr.) (Pol)
[Value of early vitrectomy after penetrating injuries of the eyeball] Pecoldowa K, et al. **Klin Oczna** 1988 Apr–May; 90(4–5):142–3 (Eng. Abstr.) (Pol)
[Cryotherapy in hemorrhagic complications of diabetic retinopathy] Szwarcowa C, et al. **Klin Oczna** 1988 Apr–May;90(4–5):144 (Eng. Abstr.) (Pol)
[The importance of vitrectomy in treating traumatic retinal detachment] Gundorova RA, et al. **Vestn Oftalmol** 1988 Nov–Dec;104(6):21–4 (Eng. Abstr.) (Rus)
[Fluorescent angiographic and rheographic evaluation of the ocular hemodynamics in patients with proliferative diabetic retinopathy after closed vitrectomy] Kishkina VIa, et al. **Vestn Oftalmol** 1989 May–Jun;105(3):33–6 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Treatment of postvitrectomy fibrin pupillary block with tissue plasminogen activator. Jaffe GJ, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):170–5
Posterior chamber lens implantation following pars plana lensectomy and vitrectomy in severe proliferative diabetic retinopathy. Pang MP, et al. **Can J Ophthalmol** 1989 Jun; 24(4):175–8
Importance of pupillary diaphragm for vitrectomy with intraocular silicone in hemodialysis patients. Ando F, et al. **Dev Ophthalmol** 1989;18:80–5
Complications of vitrectomy for non–clearing vitreous hemorrhage in diabetic patients. Benson WE, et al. **Ophthalmic Surg** 1988 Dec;19(12):862–4
Mechanisms of intraocular pressure elevation after pars plana vitrectomy. Han DP, et al. **Ophthalmology** 1989 Sep; 96(9):1357–62
A prospective, randomized, clinical trial of heparin therapy for postoperative intraocular fibrin. Johnson RN, et al. **Ophthalmology** 1988 Mar;95(3):312–7

INSTRUMENTATION

An alarm system to indicate air–fluid level in the irrigating bottle. Peyman GA. **Arch Ophthalmol** 1989 Aug; 107(8):1250–1
Illuminated retinal picks for vitreous surgery. Williams GA, et al. **Arch Ophthalmol** 1989 Jul;107(7):1086
Early vitrectomy in type I proliferative diabetic retinopathy using afocal microscopy. Shea M. **Dev Ophthalmol** 1989; 18:75–9 (8 ref.)
An illuminated air–fluid switch for vitrectomy. Peyman GA. **Retina** 1988;8(4):288
[Principles of the practical use of viscoelastic substances in eye surgery] Eisner G. **Fortschr Ophthalmol** 1989; 86(1):19–22 (Eng. Abstr.) (Ger)
[Fluid–gas exchange in vitreous surgery using the BIOM, VPFS and SDI wide–angle observation systems] Oldendoerp J. **Klin Monatsbl Augenheilkd** 1989 Feb; 194(2):129–32 (Eng. Abstr.) (Ger)

METHODS

Silicone oil in retinal detachment surgery. Results and complications. Punnonen E, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):30–6
Changes in corneal endothelium after treatment of retinal detachment with intraocular silicone oil. Setälä K, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):37–43
Vitrectomy for retinal detachment associated with acute retinal necrosis. Blumenkranz M, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):426–9
Evacuation/cautery vitreous needle. Davidorf FH, et al. **Arch Ophthalmol** 1989 Apr;107(4):607
Transient hypopyon with marked anterior chamber fibrin following pars plana vitrectomy and silicone oil injection. Johnson RN, et al. **Arch Ophthalmol** 1989 May;107(5):683–6
Pars plana vitrectomy in the management of complications of proliferative sickle retinopathy. Pulido JS, et al. **Arch Ophthalmol** 1988 Nov;106(11):1553–7
Kinetics of intraocular gases. Disappearance of air, sulfur hexafluoride, and perfluoropropane after pars plana vitrectomy. Thompson JT. **Arch Ophthalmol** 1989 May; 107(5):687–91
Vitrectomy techniques in the treatment of giant retinal tears: a flexible approach. Cairns JD, et al. **Aust N Z J Ophthalmol** 1988 Aug;16(3):209–14
Useful adjuncts for vitreoretinal surgery. Gross JG, et al. **Br J Ophthalmol** 1989 Jun;73(6):435–9
Experimental evaluation of perfluorophenanthrene as a high specific gravity vitreous substitute: a preliminary report. Nabih M, et al. **Ophthalmic Surg** 1989 Apr;20(4):286–93
Treatment of endophthalmitis by pars plana vitrectomy. Verbraeken H, et al. **Ophthalmologica** 1988;197(1):19–25
Pars plana lensectomy and vitrectomy for complicated cataracts in juvenile rheumatoid arthritis. Flynn HW Jr, et al. **Ophthalmology** 1988 Aug;95(8):1114–9
Temporary keratoprosthesis for combined penetrating keratoplasty, pars plana vitrectomy, and repair of retinal detachment. Gelender H, et al. **Ophthalmology** 1988 Jul; 95(7):897–901
Complications of endodrainage retinotomies created during vitreous surgery for complicated retinal detachment. McDonald HR, et al. **Ophthalmology** 1989 Mar; 96(3):358–63
Modern closed vitrectomy [letter] Jabbour NM. **Retina** 1988; 8(4):289
Dispersion of the layered hyphema using a flute needle [letter] Peyman GA. **Retina** 1988;8(3):221
Posterior vitrectomy in eyes with diabetic retinopathy. Ho PC. **Yen Ko Hsueh Pao** 1987 Sep;3(3):148–51
[Endocapsular phacoemulsification by the pars plana. Technic and indications] Furia M, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):233–6, 238 (Fre)
[Review of indications for posterior vitrectomy: apropos of 468 cases] Le Rebeller MJ, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):245–8 (Fre)
[Intra–photocoagulation during vitrectomy] Hendrikse F, et al. **Ophtalmologie** 1988 Jan–Mar;2(1):17–8 (Eng. Abstr.) (Fre)
[The effect of liquid silicone on the function of the optic nerve] Kellner U, et al. **Fortschr Ophthalmol** 1988; 85(5):562–4 (Eng. Abstr.) (Ger)
[Long–term results following vitreoretinal silicone oil surgery] Kroll P, et al. **Fortschr Ophthalmol** 1988; 85(3):259–62 (Eng. Abstr.) (Ger)
[A randomized, prospective study of the treatment of proliferative vitreoretinopathy with daunomycin] Wiedemann P, et al. **Fortschr Ophthalmol** 1988;85(5):503–4 (Eng. Abstr.) (Ger)
[Early vitrectomy with primary silicone oil injection in very severely injured eyes] Lemmen KD, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):594–601 (Eng. Abstr.) (Ger)
[Pars plana vitrectomy in chronic uveitis in the child] Ulbig M, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):10–2 (Eng. Abstr.) (Ger)
[Posterior vitrectomy in children and adolescents] Koraszewska–Matuszewska B, et al. **Klin Oczna** 1988 Sep; 90(9):327–8 (Eng. Abstr.) (Pol)
[Closed vitrectomy in our experience] Stankiewicz A, et al. **Klin Oczna** 1988 Jun;90(6):220–1 (Eng. Abstr.) (Pol)
[Anterior and posterior vitrectomy as a method of treating severe eye diseases] Swietliczkowa I, et al. **Klin Oczna** 1988 Jun;90(6):215–7 (Eng. Abstr.) (Pol)

VITREOUS BODY

Exfoliation syndrome as a risk factor for vitreous loss in extracapsular cataract surgery (preliminary report). Erlanger–Augenblätter–Group. Naumann GO. **Acta Ophthalmol Suppl (Copenh)** 1988;184:129–31
Management of anterior and posterior proliferative vitreoretinopathy. XLV. Edward Jackson memorial lecture. Aaberg TM. **Am J Ophthalmol** 1988 Nov 15; 106(5):519–32 (50 ref.)
Intraoperative perfluorocarbon liquids in the management of proliferative vitreoretinopathy. Chang S, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):668–74
A nationwide survey of the use of perfluoropropane and sulfur hexafluoride. Duerksen JS, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):195–6
Management of anterior and posterior proliferative vitreoretinopathy XLV Edward Jackson memorial lecture [letter] Schechter RJ. **Am J Ophthalmol** 1989 Feb 15; 107(2):196
Ultrastructural studies of vitreomacular traction syndrome. Smiddy WE, et al. **Am J Ophthalmol** 1989 Feb 15; 107(2):177–85
Previtreous space gas sequestration during pneumatic retinopexy. Steinmetz RL, et al. **Am J Ophthalmol** 1989 Feb 15;107(2):191–2
Results of silicone oil removal in advanced proliferative vitreoretinopathy. Zilis JD, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):15–21
Vitreoperfusion. A new approach to ocular ischemia. Blair NP, et al. **Arch Ophthalmol** 1989 Mar;107(3):417–23
Retinal reattachment by continuous vitreous insufflation. Blair NP, et al. **Arch Ophthalmol** 1989 Aug;107(8):1217–9
Clinical risk factors for proliferative vitreoretinopathy. Cowley M, et al. **Arch Ophthalmol** 1989 Aug; 107(8):1147–51
Fluid–gas exchange after vitrectomy using long–acting gases in an outpatient setting [letter] Lambrou FH, et al. **Arch Ophthalmol** 1988 Oct;106(10):1344
Fish hook removal from vitreous and retina. Case report. Mandelcorn MS, et al. **Arch Ophthalmol** 1989 Apr;

107(4):493
Visual acuity and intraocular gas [letter] Mansour AM, et al. **Arch Ophthalmol** 1988 Oct;106(10):1345–6
New and previously unidentified retinal breaks in eyes with recurrent retinal detachment with proliferative vitreoretinopathy. Moisseiev J, et al. **Arch Ophthalmol** 1989 Aug;107(8):1152–4
Intravitreal antibiotic therapy with vancomycin and aminoglycoside. An experimental study of combination and repetitive injections. Oum BS, et al. **Arch Ophthalmol** 1989 Jul;107(7):1055–60
Familial exudative vitreoretinopathy (FEVR) and platelet dysfunction [letter] Friedrich CA, et al. **Br J Ophthalmol** 1989 Jun;73(6):477–8
Anterior chamber lens implantation after vitreous loss. Pearson PA, et al. **Br J Ophthalmol** 1989 Aug;73(8):596–9
Vitreous wick syndrome. Neetens A, et al. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:41–5
Vitreous injections and vitrectomy. Schepens CL. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:17–25
The role of inflammation in the development of epiretinal membranes. Hiscott PS, et al. **Curr Eye Res** 1988 Sep; 7(9):877–92
Use of temporary keratoprosthesis in the management of severe ocular trauma with retinal detachment and proliferative vitreoretinopathy. Beekhuis WH, et al. **Dev Ophthalmol** 1989;18:86–9 (7 ref.)
The development of vitreous membranes and retinal detachment induced by intravitreal carbon microparticles. Algvere P, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):471–8
Reduced number of hemidesmosomes in the corneal epithelium of diabetics with proliferative vitreoretinopathy. Tabatabay CA, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):389–92
Intravitreal liposome-encapsulated drugs: a preliminary human report. Peyman GA, et al. **Int Ophthalmol** 1988; 12(3):175–82
Vitreous fluorophotometry: mathematical analysis of the effect of peripheral leakage on axial scans. Dalgaard P, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1522–6
Intraocular lens damage from Nd:YAG laser pulses focused in the vitreous. Part I: Q-switched lasers. Capon M, et al. **J Cataract Refract Surg** 1988 Sep;14(5):526–9
Intraocular lens damage from Nd:YAG laser pulses focused in the vitreous. Part II: Mode-locked lasers. Sliney DH, et al. **J Cataract Refract Surg** 1988 Sep;14(5):530–2
Inadvertent intravitreal injection of bethamethasone. Chen V, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):61–2
Non-Hodgkin's lymphoma of the corpus vitreum. Sizoo W, et al. **Neth J Med** 1988 Aug;33(1–2):26–9
Nd:YAG laser augmented pneumatic retinopexy. Fleck BW, et al. **Ophthalmic Surg** 1988 Dec;19(12):855–8
Experimental evaluation of perfluorophenanthrene as a high specific gravity vitreous substitute: a preliminary report. Nabih M, et al. **Ophthalmic Surg** 1989 Apr;20(4):286–93
Vitrectomy and scleral buckling methods for proliferative vitreoretinopathy. Hanneken AM, et al. **Ophthalmology** 1988 Jul;95(7):865–9
Solitary retinovitreal abscess as the initial manifestation of cryptococcosis. Hiss PW, et al. **Ophthalmology** 1988 Feb; 95(2):162–5
Posterior chamber intraocular lens implantation during diabetic pars plana vitrectomy. Kokame GT, et al. **Ophthalmology** 1989 May;96(5):603–10
Perisilicone proliferation after vitrectomy for proliferative vitreoretinopathy. Lewis H, et al. **Ophthalmology** 1988 May;95(5):583–91
Is biopsy necessary to diagnose amyloid in the vitreous? [letter] McLeod D. **Ophthalmology** 1988 Feb;95(2):288
Chronic vitritis with macrophagic inclusions. A sequela of treated endophthalmitis due to a coryneform bacterium. Margo CE, et al. **Ophthalmology** 1988 Feb;95(2):156–61
Proliferative vitreoretinopathy. Ultrastructural study of 20 retroretinal membranes removed by vitreous surgery. Schwartz D, et al. **Retina** 1988;8(4):275–81
Silicone oil implantation in penetrating injuries complicated by PVR. Results from 1982 to 1986. Skorpik C, et al. **Retina** 1989;9(1):8–14
[Neodymium: YAG laser therapy in aphakic pupillary block glaucoma and aphakic malignant (ciliovitreal block) glaucoma] Liu YC, et al. **Yen Ko Hsueh Pao** 1988 Dec; 4(4):238–42 (Eng. Abstr.) (Chi)
[Jaffé's syndrome--anatomical modifications and visual recuperation following surgical treatment] Furia M, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):67–70 (Eng. Abstr.) (Fre)
[Retino-vitreous problems posed by vitreous inflammation after implantation of artificial lenses] Le Quoy O, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):745–9 (Fre)
[A case of vitreous amyloidosis] Petin D, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):663–7 (Eng. Abstr.) (Fre)
[Luxation of the lens remnants in the vitreous body during phacoemulsification (letter)] Arneodo J. **J Fr Ophtalmol** 1989;12(1):55 (Fre)
[Involvement of the posterior eye segment in HLA B27(+) iridocyclitis. Incidence. Value of surgical treatment] Bayen H, et al. **J Fr Ophtalmol** 1988;11(8–9):561–6 (17 ref.) (Eng. Abstr.) (Fre)
[A new method for examining the vitreous body: the E1 Baysdi-Kajiura lens] Fritsch D, et al. **J Fr Ophtalmol** 1988; 11(8–9):579–84 (13 ref.) (Eng. Abstr.) (Fre)
[Examination of the blood-retinal barrier using vitreous fluorophotometry during retinal vein occlusion] Bordat B, et al. **Ophtalmologie** 1988 Jan–Mar;2(1):45–7 (Eng. Abstr.) (Fre)
[Treatment of retinal detachment complicated by severe vitreo-retinal proliferation using silicone oil] Chauvaud D, et al. **Ophtalmologie** 1988 Jan–Mar;2(1):13–5 (Eng. Abstr.) (Fre)
[Retinal antigen expression in diabetic retinopathy and retinal detachment with vitreo-retinal proliferation. Preliminary results] Gastaud P, et al. **Ophtalmologie** 1988 Jan–Mar; 2(1):25–8 (Eng. Abstr.) (Fre)
[Stickler syndrome. Apropos of a case] Ziegler G, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1009–10 (Fre)
[Type I like collagen appeared in vitreous disease] Hara A, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1363–8 (Eng. Abstr.) (Jpn)
[Experimental study on the effects of a replacement of the vitreous body with perfluorotributylamine on the rabbit eye] Terauchi H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar;93(3):294–301 (Eng. Abstr.) (Jpn)
[The fellow eye syndrome] Krawczykowa Z, et al. **Klin Oczna** 1988 Sep;90(9):311 (Eng. Abstr.) (Pol)
[Analysis of the causes of development of retinal detachment in the aphakic eye] Maćkowiakowa A, et al. **Klin Oczna** 1988 Sep;90(9):312–4 (Eng. Abstr.) (Pol)
[Internal retinal tamponade using SF6 gas. Preliminary report] Pecoldowa K, et al. **Klin Oczna** 1988 Aug; 90(8):267–8 (Eng. Abstr.) (Pol)
[The role of scleral strain in the genesis of myopic vitreochorioretinal dystrophies] Avetisov ES, et al. **Oftalmol Zh** 1988;(3):137–8 (Eng. Abstr.) (Rus)
[Photopsia in the form of "side lightning" as a symptom of posterior detachment of the vitreous and vitreo-retinal pathology] Vodovozov AM, et al. **Oftalmol Zh** 1989; (1):59–61 (Eng. Abstr.) (Rus)
[Prevention of the loss of the vitreous body in extracapsular cataract extraction] Manukian ME. **Vestn Oftalmol** 1988 Nov–Dec;104(6):19–21 (Eng. Abstr.) (Rus)
[Efficacy of the use of contact lenses in patients with myopia complicated by peripheral vitreochorioretinal dystrophy] Tsipurskaia SS, et al. **Vestn Oftalmol** 1988 Nov–Dec; 104(6):36–9 (Eng. Abstr.) (Rus)

ABNORMALITIES

Juvenile retinal detachment as a complication of familial exudative vitreoretinopathy. van Nouhuys CE. **Fortschr Ophthalmol** 1989;86(3):221–3
Persistent hyperplastic primary vitreous in the right eye and congenital grouped pigmentation of the retina in the left. Fujii M, et al. **Ophthalmologica** 1989;198(3):135–9
PHTVL/PHPV—associated cataract in the Dobermann. Boevé MH, et al. **Tijdschr Diergeneeskd** 1989 Apr;114 Suppl 1:55S–57S

ANALYSIS

Soluble non-collagen proteins of bovine vitreous humour. Wolańska M, et al. **Acta Biochim Pol** 1989;36(1):37–43
Determination of iron, copper and zinc in human whole vitreous humor by flow injection atomic absorption spectrometry. Burguera JL, et al. **Acta Clent Venez** 1988; 39(3):224–9
A new method for continuous intraocular drug delivery. Ben-Nun J, et al. **Aust N Z J Ophthalmol** 1989 May; 17(2):185–90
Solid phase extraction and HPLC determination of spiramycin in plasma and vitreous concentrations. Carlhant D, et al. **Biomed Chromatogr** 1989 Jan;3(1):1–4
Equine vitreous humor chemical concentrations: correlation with serum concentrations, and postmortem changes with time and temperature. McLaughlin BG, et al. **Can J Vet Res** 1988 Oct;52(4):476–80
Prorenin in vitreous and subretinal fluid of the human eye. Danser AH, et al. **Clin Exp Hypertens [A]** 1988; 10(6):1297–9
Biochemical studies of the chicken vitreous in light-induced avian glaucoma. Kinnear A, et al. **Comp Biochem Physiol [B]** 1978;61(1):107–10
Morphology of the fibrinogen exudate during evolution of a mycobacterial-induced murine eye granuloma. O'Rourke J, et al. **Curr Eye Res** 1988 Dec;7(12):1207–19
Lens crystallins in aqueous and vitreous humor in selenite overdose cataract. Watanabe H, et al. **Curr Eye Res** 1989 May;8(5):479–86
Fibronectin quantification in plasma and vitreous by a noncompetitive ELISA technique. Weller M, et al. **Doc Ophthalmol** 1988 Aug;69(4):341–51
Direct analysis of anticonvulsant drugs in vitreous humour by HPLC using a column switching technique. Logan BK, et al. **Forensic Sci Int** 1989 Apr–May;41(1–2):125–34
References for determining the time of death by potassium in vitreous humor. Madea B, et al. **Forensic Sci Int** 1989 Mar;40(3):231–43
A, B and H group specific substances in human vitreous humor. Rordorf H, et al. **Forensic Sci Int** 1989 Apr–May; 41(1–2):111–6
Transferrin and transferrin receptor expression in intraocular proliferative disease. APAAP-immunolabeling of retinal membranes and ELISA for vitreal transferrin. Weller M, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):281–6
Ascorbic acid and physico-chemical properties of vitreous humour. Jilani FA, et al. **Indian J Ophthalmol** 1987; 35(5–6):320–6
Liposome-bound cyclosporine: aqueous and vitreous level after subconjunctival injection. Alghadyan AA, et al. **Int Ophthalmol** 1988;12(2):101–4
Renin, prorenin, and immunoreactive renin in vitreous fluid from eyes with and without diabetic retinopathy. Danser AH, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):160–7
The effect of the post-mortem interval on the level of creatine in vitreous humour. Piette M. **Med Sci Law** 1989 Jan;29(1):47–54
Elevated levels of hypoxanthine in vitreous humor indicate prolonged cerebral hypoxia in victims of sudden infant death syndrome. Rognum TO, et al. **Pediatrics** 1988 Oct; 82(4):615–8
Uptake and clearance of 5-fluorouridine following subconjunctival and intravitreal injection. Huang DS, et al. **Retina** 1988;8(3):205–9
Determination of calcium and magnesium in postmortem human vitreous humor as a test to ascertain the cause and time of death. Nowak R, et al. **Z Rechtsmed** 1989; 102(2–3):179–83
[Potassium concentration in the vitreous body--sample collection at different time intervals to determine time of death] Schmidt V, et al. **Beitr Gerichtl Med** 1988;46:423–6 (Eng. Abstr.) (Ger)

ANATOMY & HISTOLOGY

[Bursa premacularis] Kishi S, et al. **Nippon Ganka Gakkai Zasshi** 1988 Nov;92(11):1881–8 (Eng. Abstr.) (Jpn)
[A method of studying the vitreous body using Raman scatter laser spectroscopy] Azhigalieva MN, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):24–6 (Eng. Abstr.) (Rus)

BLOOD SUPPLY

Retinovitreal neovascularization in the Royal College of Surgeons rat. Weber ML, et al. **Curr Eye Res** 1989 Jan; 8(1):61–74
[Treatment of an intravitreous bridle in sickle cell retinopathy] Comte P, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):257–9 (Fre)
[No disorder of arachidonic acid-induced thrombocyte aggregation in familial exudative vitreoretinopathy] Bopp S, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):13–5 (Eng. Abstr.) (Ger)
[A case of diagnosing an unreduced artery of the vitreous body] Korovenkov RI. **Voen Med Zh** 1989 May;(5):66 (Rus)

CYTOLOGY

[The relation between the type of cell and the collagen gel contraction in a model system of vitreous contraction] Karasawa Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec; 92(12):2053–62 (Eng. Abstr.) (Jpn)

DRUG EFFECTS

Ocular inflammatory effects of intravitreally-injected tumor necrosis factor. Rosenbaum JT, et al. **Am J Pathol** 1988 Oct;133(1):47–53
Intravitreal human chorionic gonadotropin decreases intraocular pressure in rabbits: mechanism of action. Liu JH, et al. **Curr Eye Res** 1988 Oct;7(10):1035–40
Nontoxic concentration of antibiotics for intravitreal use—evaluated by human in-vitro ERG. Kawasaki K, et al. **Doc Ophthalmol** 1988 Dec;70(4):301–8
Toxicity of intravitreal injection of foscarnet in the rabbit eye. She SC, et al. **Int Ophthalmol** 1988;12(2):151–4
Analysis of vertebrate eye movements following intravitreal drug injections. III. Spontaneous nystagmus is modulated by the GABAa receptor. Ariel M. **J Neurophysiol** 1989 Aug;62(2):469–80
[Homoharringtonine on traumatic vitreous proliferation] Li JP. **Chung Hua Yen Ko Tsa Chih** 1989 Jan;25(1):27–30 (Eng. Abstr.) (Chi)
[Drug treatment of proliferative vitreoretinopathy] Wiedemann P. **Fortschr Ophthalmol** 1989;86(2):115–20 (23 ref.) (Eng. Abstr.) (Ger)

ENZYMOLOGY

Hypothermia and combined post-mortem determination of amylase and isoamylase in the serum and the vitreous humour. Devos C, et al. **Med Sci Law** 1989 Jul;29(3):218–28

IMMUNOLOGY

Serum and vitreous herpes simplex antibodies in noninfected eyes. Pflugfelder SC, et al. **Ann Ophthalmol** 1988 Sep; 20(9):355–7
Demonstration of varicella-zoster virus antigens in the vitreous aspirates of patients with acute retinal necrosis syndrome. Soushi S, et al. **Ophthalmology** 1988 Oct; 95(10):1394–8
[Intraocular fluid antibody titer in experimental herpes simplex virus retinochoroiditis] Rai T, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):1048–56 (Eng. Abstr.) (Jpn)
[The detection of varicella-zoster virus (VZV) antigen from

vitreous humor of 3 cases with Kirisawa-Urayama type uveitis] Usui M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1398–405 (Eng. Abstr.) **(Jpn)**

INJURIES

Visual results following vitreous loss and primary lens implantation. Spigelman AV, et al. **J Cataract Refract Surg** 1989 Mar;15(2):201–4

METABOLISM

Fluorescein and fluorescein glucuronide in vitreous: fluorescence and binding properties in vitro. Larsen M, et al. **Acta Ophthalmol (Copenh)** 1989 Apr;67(2):137–40

Posterior vitreous fluorophotometry. I. Description of a new analysis procedure and results in normal subjects. Bungay PM, et al. **Arch Ophthalmol** 1989 Sep;107(9):1321–7

Posterior vitreous fluorophotometry. II. Comparison of diabetic patients and controls with the use of a new analysis procedure. Roy MS, et al. **Arch Ophthalmol** 1989 Sep; 107(9):1328–33

Vitreous fluorophotometry in carriers of choroideremia and X-linked retinitis pigmentosa. Rusin MM, et al. **Arch Ophthalmol** 1989 Feb;107(2):209–12

BCNU in silicone oil in proliferative vitreoretinopathy: I. Solubility, stability (in vitro and in vivo), and antiproliferative (in vitro) studies. Chung H, et al. **Curr Eye Res** 1988 Dec;7(12):1199–206

A comparative pharmacokinetic study of ethanol in the blood, vitreous humour and aqueous humour of rabbits. Fernández P, et al. **Forensic Sci Int** 1989 Apr–May; 41(1–2):61–5

Proteins of the extracellular matrix in vitreoretinal membranes. Scheiffarth OF, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):357–61

Liposome-bound cyclosporine: retinal toxicity after intravitreal injection. Alghadyan AA, et al. **Int Ophthalmol** 1988;12(2):105–7

Liposome-bound cyclosporine: clearance after intravitreal injection. Alghadyan AA, et al. **Int Ophthalmol** 1988; 12(2):109–12

Pharmacokinetics of intravitreal injection. Assessment of a gentamicin model by ocular dialysis. Ben-Nun J, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1055–61

Comparative study of vitreous oxygen tension in human and rabbit eyes. Sakaue H, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1933–7

Fibrinolytic activity and localization of plasminogen activator in bovine vitreous body and aqueous humor. Hayashi K, et al. **Jpn J Ophthalmol** 1989;33(1):66–75

Measurement of vitreous oxygen tension in human eyes. Sakaue H, et al. **Jpn J Ophthalmol** 1989;33(2):199–203

Prediction of the kinetics of disappearance of sulfur hexafluoride and perfluoropropane intraocular gas bubbles. Wong RF, et al. **Ophthalmology** 1988 May;95(5):609–13

[Vitreous fluorophotometry after vortex vein occlusion in rabbit eyes] Kadomoto H. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):276–80 (Eng. Abstr.) **(Jpn)**

[Experimental and clinical studies on the active transport of substances from the vitreous cavity] Miyake K. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):909–45 (Eng. Abstr.) **(Jpn)**

[Inhibition of lipid peroxidation by antioxidants in the vitreous body during hemorrhage] Zargarli IA, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):291–2 (Eng. Abstr.) **(Rus)**

[Correction of lipid peroxidation in the vitreous body in hemorrhage] Efendiev NM, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):67–9 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Isolation of HIV-1 from vitreous humor. Srinivasan A, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):197–8

Detection of human immunodeficiency virus antigen in vitreous humor. Cowan WT Jr, et al. **J Clin Microbiol** 1988 Nov;26(11):2421–2

[Pseudomonas endophthalmitis in rabbits—intravitreal inoculation of two pseudomonal strains] Hatano H, et al. **Nippon Ganka Gakkai Zasshi** 1988 Nov;92(11):1758–64 (Eng. Abstr.) **(Jpn)**

PARASITOLOGY

Ultrasound detection of changes in the vitreous humor of onchocerciasis patients from Guatemala. Reyna O, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):606

PATHOLOGY

Intraocular lymphoma. Cytologic diagnosis and the role of immunologic markers. Ljung BM, et al. **Acta Cytol** 1988 Nov-Dec;32(6):840–7

Megalocornea and persistent hyperplastic primary vitreous masquerading as congenital glaucoma. Burke JP, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):731–3

Immunoreactive opsin and glial fibrillary acidic protein in persistent hyperplastic primary vitreous. Hara S, et al. **Acta Ophthalmol (Copenh)** 1988 Aug;66(4):413–8

The pathophysiology of proliferative vitreoretinopathy. Wiedemann P, et al. **Acta Ophthalmol Suppl (Copenh)** 1988; 189:3–15

Crohn's disease uveitis. Parasitization of vitreous leukocytes by mollicute-like organisms. Johnson LA, et al. **Am J Clin Pathol** 1989 Mar;91(3):259–64

Juvenile asteroid hyalosis and pre-Descemet's dystrophy. Dodwell DG, et al. **Am J Ophthalmol** 1988 Oct 15; 106(4):504–5

Malignant teratoid medulloepithelioma of the ciliary body simulating persistent hyperplastic primary vitreous. Shields JA, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):296–8

Endogenous candidal endophthalmitis. Deutsch D, et al. **Ann Ophthalmol** 1989 Jul;21(7):260–5, 268

Macular edema and vitreous detachment. Roldan M, et al. **Ann Ophthalmol** 1989 Apr;21(4):141–8

Management and visual acuity results of monocular congenital cataracts and persistent hyperplastic primary vitreous. Scott WE, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):143–52

Morning glory syndrome associated with marked persistent hyperplastic primary vitreous and lens colobomas. Cennamo G, et al. **Br J Ophthalmol** 1989 Aug;73(8):684–6

Intraocular lymphoma: immunological and cytological analysis. Char DH, et al. **Br J Ophthalmol** 1988 Dec; 72(12):905–11

Cell density dependency of vitreous fibrosis induced by monocytes and lymphocytes [published erratum appears in Curr Eye Res 1989 Mar;8(3):327] Raymond LA, et al. **Curr Eye Res** 1988 Dec;7(12):1191–7

Familial amyloid polyneuropathy: report of an autopsy case with neuropathy, vitreous opacities and polycystic kidney. Scelsi R, et al. **Ear Neurol** 1989;29(1):27–32

Inflammation and the formation of epiretinal membranes. Gilbert C, et al. **Eye** 1988;2 Suppl:S140–56 (88 ref.)

Proliferative vitreoretinopathy (PVR): a personal account of its pathogenesis and treatment. Proctor lecture. Machemer R. **Invest Ophthalmol Vis Sci** 1988 Dec;29(12):1771–83 (69 ref.)

Correlation of fibrosis and transforming growth factor-beta type 2 levels in the eye. Connor TB Jr, et al. **J Clin Invest** 1989 May;83(5):1661–6

Communicating intravitreal cysticercosis. Kumar A, et al. **Ophthalmic Surg** 1989 Jun;20(6):424–6

Choroidal melanoma with pigment dispersion in vitreous and melanomalytic glaucoma. el Baba F, et al. **Ophthalmology** 1988 Mar;95(3):370–7 (26 ref.)

Anterior proliferative vitreoretinopathy. Clinicopathologic, light microscopic, and ultrastructural findings. Elner SG, et al. **Ophthalmology** 1988 Oct;95(10):1349–57

The role of the vitreous in diabetic macular edema. Nasrallah FP, et al. **Ophthalmology** 1988 Oct;95(10):1335–9

Choroidal malignant melanoma with early vitreous seeding [published erratum appears in Retina 1989;9(1):58] Dunn WJ, et al. **Retina** 1988;8(3):188–92

The pathology of anterior (peripheral) proliferative vitreoretinopathy. Elner SG, et al. **Trans Am Ophthalmol Soc** 1989;86:330–51; discussion 351–3

Vitreous changes in acquired retinoschisis. Fan R. **Yen Ko Hsueh Pao** 1987 Mar;3(1):21–4 **(Eng, Chi)**

[Cytologic aspects of the cellular proliferation of the posterior segment] Monteiro-Grillo M, et al. **Ophtalmologie** 1988 Jan-Mar;2(1):23–4 (Eng. Abstr.) **(Fre)**

[Vitreo-retinal relations in the normal subject] Roldán M, et al. **Ophtalmologie** 1988 Oct;2(4):321–5 (Eng. Abstr.) **(Fre)**

[Immunohistochemical findings in proliferative retinal diseases—on the significance of fibronectin, macrophages and transferrin] Weller M, et al. **Fortschr Ophthalmol** 1989; 86(2):121–3 (Eng. Abstr.) **(Ger)**

[Posterior vitreous detachment] Eisner G. **Klin Monatsbl Augenheilkd** 1989 May;194(5):389–92 (Eng. Abstr.) **(Ger)**

[Topographic relation of dislocated lenses to the ciliary body and vitreous base] Slezak H, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):635–6 (Eng. Abstr.) **(Ger)**

[Retrolental cloudiness of the vitreous humor in the rat eye] Rüttimann G, et al. **Zentralbl Veterinarmed [A]** 1989 May; 36(5):340–7 (Eng. Abstr.) **(Ger)**

[Role of vitreous changes in uveitis with respect to posterior vitreous detachment, macular changes and visual acuity] Hirokawa H. **Nippon Ganka Gakkai Zasshi** 1988 Dec; 92(12):2020–8 (Eng. Abstr.) **(Jpn)**

[The role of the cytoskeletal components in cell culture in collagen gel as a model system of vitreous contraction] Karasawa Y, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan; 93(1):1–8 (Eng. Abstr.) **(Jpn)**

[A case of yolk sac tumor of the eye] Frasik W, et al. **Patol Pol** 1988 Apr-Jun;39(2):149–52 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Vitreous modulation of migration and proliferation of retinal pigment epithelial cells in vitro. Kirchhof B, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1951–7

The time course of the light-induced extracellular potassium change around receptors and at the vitreal surface compared with the time course of slow PIII wave in the isolated rabbit retina. Hanitzsch R. **Physiol Bohemoslov** 1988;37(3):227–33

[Spontaneous, rhythmic potentials recorded from the vitreous cavity of urethane-anesthetized rats] Takahashi T, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct;92(10):1696–704 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Managing posterior pressure during pseudophakic keratoplasty. McCartney DL, et al. **Arch Ophthalmol** 1989 Sep;107(9):1384–6

Role of the vitreous in macular disease. Jalkh AE. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:5–7

Role of the vitreous in retinal vascular disorders. Trempe CL, et al. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:1–4

Schisis contributes to necrosis in experimental HSV-1 retinitis. Cousins SW, et al. **Exp Eye Res** 1989 Jun; 48(6):745–60

Epiretinal membrane release and posterior vitreous detachment. Greven CM, et al. **Ophthalmology** 1988 Jul; 95(7):902–5

[Vitreous fluorophotometry in diabetics using an insulin pump: absent or minimal retinopathy] Zaluski S, et al. **Ophtalmologie** 1988 Apr-Jun;2(2):101–4 (Eng. Abstr.) **(Fre)**

RADIATION EFFECTS

[Effects of panretinal photocoagulation on vitreoretinal border tissues: IV. Freeze-cracking SEM of macaca fuscata] Masuyama Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jul;92(7):1213–20 (Eng. Abstr.) **(Jpn)**

SURGERY

An illuminated blade for vitreoretinal membrane dissection. Han DP, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):200–1

The effect of transcleral cryopexy on the vitreous gel. Stallman JB, et al. **Ann Ophthalmol** 1989 Jun;21(6):204

To admit or not to admit, that is the question [letter] Fleischman JA, et al. **Arch Ophthalmol** 1988 Nov; 106(11):1501

Erbium-YAG laser surgery on experimental vitreous membranes. Margolis TI, et al. **Arch Ophthalmol** 1989 Mar; 107(3):424–8

Apraclonidine hydrochloride in vitreoretinal surgery [letter] Pulido JS, et al. **Arch Ophthalmol** 1989 Mar;107(3):316–7

Vitreoretinal surgery for retinopathy of prematurity. Charles S. **Birth Defects** 1988;24(1):287–93

Microscissors for vitreo-retinal surgery. Mateus F, et al. **Dev Ophthalmol** 1989;18:95–6

YAG-laser in the posterior segment of the eye. Kreissig I. **Klin Oczna** 1988 Apr-May;90(4–5):136–41

Bovine RPE heterotransplants simulate proliferative vitreoretinopathy (PVR) in rabbits. Weinsieder A, et al. **Metab Pediatr Syst Ophthalmol** 1987;10(1):2–8

Complications associated with the use of silicone oil in 150 eyes after retina-vitreous surgery. Federman JL, et al. **Ophthalmology** 1988 Jul;95(7):870–6

Subretinal membranes in proliferative vitreoretinopathy. Lewis H, et al. **Ophthalmology** 1989 Sep;96(9):1403–14; discussion 1414–5

Anatomic success and vitreoretinal surgery [editorial] Lichter PR. **Ophthalmology** 1988 Jul;95(7):857–8

Visual success and vitreoretinal surgery [editorial] Weingeist TA. **Ophthalmology** 1988 Oct;95(10):1305–6

[Nd:YAG laser surgery of the vitreous] Yang WH, et al. **Yen Ko Hsueh Pao** 1988 Mar;4(1):56–9 (Eng. Abstr.) **(Chi)**

[Cataract caused by laser Yag photosection of a vitreous floater] Menerath JM, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):611–3 (Eng. Abstr.) **(Fre)**

[Closed vitrectomy in our experience] Stankiewicz A, et al. **Klin Oczna** 1988 Jun;90(6):220–1 (Eng. Abstr.) **(Pol)**

[Vitreous body reposition in extraction of soft cataract] Posazhennikov AP. **Oftalmol Zh** 1988;(8):501–3 **(Rus)**

[Subscleral cyclovitreotomy in glaucoma] Sergienko NM, et al. **Vestn Oftalmol** 1989 May-Jun;105(3):3–4 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Morphology and ultrastructure of human vitreous fibers. Sebag J, et al. **Invest Ophthalmol Vis Sci** 1989 Aug; 30(8):1867–71

Ultrastructural study of the developing mouse vitreous body. Bremer FM. **J Submicrosc Cytol Pathol** 1988 Jul; 20(3):557–67

Vitreous humor of chicken contains two fibrillar systems: an analysis of their structure. Wright DW, et al. **J Ultrastruct Mol Struct Res** 1988 Sep;100(3):224–34

[An ultrastructural histo-pathological study of the membrane formation in retinal detachment] Zhao DS. **Yen Ko Hsueh Pao** 1986 Mar;2(1):53–7 (Eng. Abstr.) **(Chi)**

[Pathogenesis of disorders of transparency of the optic media of the eye. III. Quantitative detection of copper in relation to the ultrastructure of the vitreous body in chalcosis] Moster MF, et al. **Cesk Oftalmol** 1989 May;45(3):177–86 (Eng. Abstr.) **(Cze)**

[Pathogenesis of disorders of transparency of the optic media of the eye. II. Ultrastructural changes in the vitreous body in experimental chalcosis of the eye] Synek S, et al. **Cesk Oftalmol** 1988 Sep;44(5):338–43 (Eng. Abstr.) **(Cze)**

[Relationship of collagen fibril and interfibrillar ultrastructure in three-dimensional visualization of the vitreous body by freeze-fracture] Matsuoka T, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jul;92(7):1221–9 (Eng.

Abstr.) (Jpn)

VITREOUS HEMORRHAGE

CHEMICALLY INDUCED

Thrombocytopenia and vitreous hemorrhage complicating ganciclovir treatment. Robinson MR, et al. **Am J Ophthalmol** 1989 May 15;107(5):560–1

Vitreous hemorrhage associated with pilocarpine. Schuman JS, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):333–4

[Thrombolytic therapy of acute heart infarct 1988 (letter)] de Jong PT. **Ned Tijdschr Geneeskd** 1989 Apr 15; 133(15):790 (Dut)

COMPLICATIONS

Eales' disease presenting as stroke in the young adult. Gordon MF, et al. **Ann Neurol** 1988 Aug;24(2):264–6

Abortive neovascular outgrowths discovered during vitrectomy for diabetic vitreous haemorrhage. Wong HC, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):237–40

Hyphema and vitreous hemorrhage in a newborn [letter] Paciuc M, et al. **Ophthalmic Surg** 1988 Sep;19(9):680

[Congenital retinal arterial loop and vitreous hemorrhage] Zaharia M, et al. **Ophtalmologie** 1988 Oct;2(4):315–9 (Eng. Abstr.) (Fre)

[Eales' disease with neurologic disorders] Masson C, et al. **Rev Neurol (Paris)** 1988;144(12):817–9 (13 ref.) (Eng. Abstr.) (Fre)

[The pathogenesis of long-standing preretinal membrane induced by vitreous hemorrhage] Kono T, et al. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):857–63 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Enlarging fundal hemorrhage in Terson's syndrome. Kashihara K, et al. **Ann Ophthalmol** 1989 Feb;21(2):59–60, 64

Diagnosis and management of massive vitreous hemorrhage caused by retinal tear. Katsumi O, et al. **Jpn J Ophthalmol** 1989;33(2):177–84

[Ultrasonic examination of retinal detachment and vitreal proliferative organization] Cao MF. **Chung Hua Yen Ko Tsa Chih** 1988 May;24(3):129–31 (Eng. Abstr.) (Chi)

DRUG THERAPY

Intravitreal tissue plasminogen activator treatment of experimental vitreous hemorrhage. Johnson RN, et al. **Arch Ophthalmol** 1989 Jun;107(6):891–4

Intraocular human thrombin infusion in diabetic vitrectomies. Verdoorn C, et al. **Ophthalmic Surg** 1989 Apr;20(4):278–9

ETIOLOGY

Pars plana vitrectomy in chronic myelogenous leukemia with vitreous hemorrhage. Hasanreisoğlu B, et al. **Jpn J Ophthalmol** 1988;32(3):304–9

Cataract wound neovascularization. An often overlooked cause of vitreous hemorrhage. Bene C, et al. **Ophthalmology** 1989 Jan;96(1):50–3

Vitreous hemorrhage and the Valsalva maneuver in proliferative diabetic retinopathy. Kassoff A, et al. **Retina** 1988;8(3):174–6

[Terson's syndrome and a case of post-traumatic syndrome in an infant] Billotte C, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):111–4 (Eng. Abstr.) (Fre)

[Blunt eye injuries complicated by secondary intraocular hemorrhage in children and adolescents] Mierzejewski A, et al. **Klin Oczna** 1988 Nov;90(11):393–5 (Eng. Abstr.) (Pol)

METABOLISM

[Inhibition of lipid peroxidation by antioxidants in the vitreous body during hemorrhage] Zargarli IA, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):291–2 (Eng. Abstr.) (Rus)

[Correction of lipid peroxidation in the vitreous body in hemorrhage] Efendiev NM, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):67–9 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

A review of the pathophysiology of proliferative vitreo-retinopathy. Priluck IA, et al. **Nebr Med J** 1989 Mar;74(3):59–60 (15 ref.)

PREVENTION & CONTROL

Importance of pupillary diaphragm for vitrectomy with intraocular silicone in hemodialysis patients. Ando F, et al. **Dev Ophthalmol** 1989;18:80–5

Intermittent intraocular thrombin as an adjunct to vitrectomy. Maxwell DP Jr, et al. **Ophthalmic Surg** 1989 Feb;20(2):108–11

PSYCHOLOGY

Mania in a case of Eale's disease [letter] Pandey RS, et al. **Br J Psychiatry** 1988 Jul;153:129–30

SURGERY

Long-term visual results of vitreous surgery in diabetic eye disease. Laatikainen L, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):21–9

Posterior chamber intraocular lens insertion during pars plana lensectomy and vitrectomy for complications of proliferative diabetic retinopathy. Blankenship GW, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):1–5

Nd YAG laser treatment of ochre membranes. Stempels N, et al. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:47–52

Combined photocoagulation and cryotherapy in treatment of Eales' retinopathy. Preliminary report. Das T, et al. **Indian J Ophthalmol** 1987;35(5–6):108–18

Vitrectomy in chronic vitreous haemorrhage from branch retinal vein occlusion. Hunter IC, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):340–1

Complications of vitrectomy for non-clearing vitreous hemorrhage in diabetic patients. Benson WE, et al. **Ophthalmic Surg** 1988 Dec;19(12):862–4

Dispersion of the layered hyphema using a flute needle [letter] Peyman GA. **Retina** 1988;8(3):221

Posterior vitrectomy in eyes with diabetic retinopathy. Ho PC. **Yen Ko Hsueh Pao** 1987 Sep;3(3):148–51

Vitrectomy for vitreous hemorrhage in Chinese diabetic patients. Ho PC. **Yen Ko Hsueh Pao** 1985 Dec;1(2):148–50

[Influence of the date of vitrectomy on the prognosis of traumatic vitreous hemorrhage. Study of 100 cases] Le Rebeller MJ, et al. **Bull Soc Ophtalmol Fr** 1988 Mar; 88(3):351–4, 356–8 (Fre)

[Value of peripheral retinopexy in proliferative diabetic retinopathy with hemorrhage of the vitreous body. A 5-year study] Vallat M, et al. **Bull Soc Ophtalmol Fr** 1988 Nov;88(11):1267–8, 1271–2 (Eng. Abstr.) (Fre)

[Intra-photocoagulation during vitrectomy] Hendrikse F, et al. **Ophtalmologie** 1988 Jan–Mar;2(1):17–8 (Eng. Abstr.) (Fre)

[Cryotherapy in hemorrhagic complications of diabetic retinopathy] Szwarcowa C, et al. **Klin Oczna** 1988 Apr–May;90(4–5):144 (Eng. Abstr.) (Pol)

THERAPY

Ultrasonically induced disruption and hemolysis of vitreous hemorrhages. Lucas BC, et al. **Ultrasound Med Biol** 1989; 15(1):29–37

[Immunotherapy of intraocular hemorrhage of non-traumatic origin] Morawiecki J, et al. **Klin Oczna** 1988 Aug; 90(8):271–2 (Eng. Abstr.) (Pol)

VLDL CHOLESTEROL see **LIPOPROTEINS, VLDL CHOLESTEROL**

VOCABULARY

Incorporating new words into the lexicon: preliminary evidence for language hierarchies in two-year-old children. Taylor M, et al. **Child Dev** 1989 Jun;60(3):625–36

The effects of incidental teaching on vocabulary acquisition by young children. Valdez-Menchaca MC, et al. **Child Dev** 1988 Dec;59(6):1451–9

Multiple perceptions of word relationships: evidence of adolescent competence. Secord W, et al. **Folia Phoniatr (Basel)** 1988;40(4):197–204

On the relationship between category intensions and extensions in children. Caplan LJ, et al. **J Exp Child Psychol** 1989 Jun;47(3):413–29

Age and semantic inhibition in word retrieval. Bowles NL. **J Gerontol** 1989 May;44(3):P88–90

The data dictionary—a controlled vocabulary for integrating clinical databases and medical knowledge bases. Linnarsson R, et al. **Methods Inf Med** 1989 Apr;28(2):78–85

Carolina Picture Vocabulary Test: validation with hearing-impaired students. Kline M, et al. **Percept Mot Skills** 1989 Aug;69(1):64–6

Correlation of scores of maximum security inmates on Wechsler Adult Intelligence Scale—Revised and the Peabody Picture Vocabulary Test—Revised. Carvajal H, et al. **Psychol Rep** 1989 Aug;65(1):268–70

AIDS. Beware of buzzwords: they mininform, insult, and promote ignorance. **Va Med** 1989 May;116(5):198

[The impossible handicap. Analysis of the concept of handicap in the orientating law of 30 June 1975. 1] Chapireau F. **Ann Med Psychol (Paris)** 1988 May–Jun; 146(7):609–31 (Eng. Abstr.) (Fre)

[The individual and society: a developing language] Houillon P, et al. **Ann Med Psychol (Paris)** 1988 Sep–Oct; 146(9):826–32 (Fre)

[AIDS and Aids: anthropological observations apropos the AIDS phenomenon in Lobaye, Central African Republic] Epelboin A. **Bull Soc Pathol Exot Filiales** 1989;82(2):260–6 (Eng. Abstr.) (Fre)

[Verbal or nonverbal diagnosis of intelligence in speech-handicapped children] Wochnik M. **Folia Phoniatr (Basel)** 1988;40(3):111–6 (Ger)

[Effects of test-expectancies and test-sequence orders on the recognition failure of recallable words] Maezawa K, et al. **Shinrigaku Kenkyu** 1988 Oct;59(4):234–40 (Eng. Abstr.) (Jpn)

[Auschwitz dictionary (LJ). A model] Kłodziński S, et al. **Przegl Lek** 1989;46(1):66–85 (Pol)

VOCABULARY TESTS see **LANGUAGE TESTS**

VOCAL CORD PARALYSIS

Vocal cord paralysis. Grundfast KM, et al. **Otolaryngol Clin North Am** 1989 Jun;22(3):569–97 (30 ref.)

COMPLICATIONS

Bilateral recurrent laryngeal nerve palsy in systemic lupus erythematosus. Saluja S, et al. **Clin Exp Rheumatol** 1989 Jan–Feb;7(1):81–3

Cardiovocal syndrome in an infant with a double outlet of the right ventricle. Robida A, et al. **Eur J Pediatr** 1988 Oct;148(1):15–6

Vocal cord palsy in systemic sclerosis [letter] Lally EV, et al. **J Rheumatol** 1988 Dec;15(12):1876–7

DIAGNOSIS

Transmucosal electrical stimulation of laryngeal muscles. Sanders I, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):339–45

Cricothyroid muscle paralysis: its recognition and diagnosis. Bevan K, et al. **J Laryngol Otol** 1989 Feb;103(2):191–5

Sleep-related laryngeal obstruction presenting as snoring or sleep apnea. Kavey NB, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):851–4

DRUG THERAPY

Reversal of vocal cord palsy by tamoxifen. Irwin CJ, et al. **Clin Radiol** 1989 Mar;40(2):199

ETIOLOGY

Laryngeal synkinesis: its significance to the laryngologist. Crumley RL. **Ann Otol Rhinol Laryngol** 1989 Feb; 98(2):87–92

Bilateral vocal cord paralysis with respiratory failure. A presenting manifestation of bronchogenic carcinoma. Baumann MH, et al. **Arch Intern Med** 1989 Jun; 149(6):1453–4

Esophageal stethoscope. Another possible cause of vocal cord paralysis. Friedman M, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):95–8

Laryngeal paralysis as the presenting sign of aortic trauma. Woodson GE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1100–2

Recurrent laryngeal nerve palsy associated with thyroiditis. Lucarotti ME, et al. **Br J Surg** 1988 Oct;75(10):1041–2

Deceleration injury causing a left chylothorax associated with a left vocal cord paralysis. Prinsley P, et al. **Injury** 1987 Nov;18(6):410–1

Historical note on hoarseness in mitral valve disease [letter] Cheng TO. **J Am Geriatr Soc** 1989 Jan;37(1):90–1

Vocal cord palsy in a patient of systemic lupus erythematosus [letter] Sharma A, et al. **J Assoc Physicians India** 1988 Nov; 36(11):674–5

Vocal cord paralysis with Ebstein's anomaly. Krishnamurthy SN, et al. **J Laryngol Otol** 1989 Jun;103(6):626–8

Right vocal cord paralysis after internal jugular vein cannulation. Sim DW, et al. **J Laryngol Otol** 1989 Apr; 103(4):424

Vocal cord palsy in a patient with progressive systemic sclerosis [letter] Singh RR, et al. **J Rheumatol** 1988; 15(5):882–3

Paralysis of recurrent laryngeal nerve in Lyme disease [letter] Schroeter V, et al. **Lancet** 1988 Nov 26;2(8622):1245

Glomus vagale tumor: the significance of early vocal cord paralysis. Leonetti JP, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):533–7

Left vocal cord paralysis caused by coalworkers' pneumoconiosis and progressive massive fibrosis. Haffar M, et al. **Postgrad Med J** 1988 Feb;64(748):143–4

Left vocal cord paralysis after mobilisation of the internal mammary artery. Jeffry RR, et al. **Thorax** 1988 Nov; 43(11):941–2

[The incidence of recurrent laryngeal nerve paralysis following thyroid surgery] Horch R, et al. **Zentralbl Chir** 1989;114(9):577–82 (Eng. Abstr.) (Ger)

[Temporary and permanent recurrent laryngeal nerve paralysis following thyroid surgery. Modifying factors: the educational status of the surgeon] Weitensfelder W, et al. **Zentralbl Chir** 1989;114(9):583–9 (Eng. Abstr.) (Ger)

[Paralysis of the left recurrent laryngeal nerve associated with patent ductus arteriosus. A case report] Maciel FM, et al. **Arq Bras Cardiol** 1987 Sep;49(3):177–9 (Eng. Abstr.) (Por)

[Chronic suppurative mesoepitympanitis complicated by phlegmon of the neck and paralysis of the left side of the larynx] Enin IP, et al. **Vestn Otorinolaringol** 1988 May–Jun; (3):76–7 (Rus)

GENETICS

Hereditary distal muscular atrophy with vocal cord paralysis and sensorineural hearing loss: a dominant form of spinal muscular atrophy? Boltshauser E, et al. **J Med Genet** 1989 Feb;26(2):105–8

METABOLISM

Costal diaphragmatic O2 and lactate extraction in laryngeal hemiplegic ponies during exercise. Manohar M, et al. **J Appl Physiol** 1988 Oct;65(4):1723–8

PATHOLOGY

[Mobility of the vocal cord and the arytenoid in cancer of the larynx and the hypopharynx. Anatomo-clinical study] Brasnu D, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(6):435–41 (Eng. Abstr.) (Fre)

[Animal experiment studies of collateral reinnervation of denervated laryngeal musculature] Martin F. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):57–61 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Myotonic dystrophy with unilateral bulbar involvement [letter] Giladi N, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1461–2

Glottal closure in the hemiparalyzed canine larynx. Regenbogen E. **Laryngoscope** 1989 Jul;99(7 Pt 1):711–5

Vocal cord paralysis in children studied by monopolar electromyography. Koch BM, et al. **Pediatr Neurol** 1987 Sep–Oct;3(5):288–93

Laryngeal paralysis on receptor and reflex responses to negative pressure in the upper airway. Mathew OP, et al. **Respir Physiol** 1988 Oct;74(1):25–34

[Electromyography in the clinical evaluation of motility disorders of the vocal cords] Roura J, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):461–5 (16 ref.) (Eng. Abstr.) (Fre)

[Long-term laryngoscopic follow-up in vocal cord paralysis following struma surgery] Weitensfelder W, et al. **Chirurg** 1989 Jan;60(1):29–32 (Eng. Abstr.) (Ger)

[Paralyses of the recurrent laryngeal nerve following strumectomy in late follow-up] Kull C, et al. **Helv Chir Acta** 1989 Jan;55(5):545–8 (Eng. Abstr.) (Ger)

[Acute bilateral recurrent laryngeal nerve paralysis, a symptom of Shy–Drager syndrome] Laubert A. **HNO** 1988 Jul;36(7):290–2 (Eng. Abstr.) (Ger)

[Automated assessment of cranial nerve paralyses using computerized electromyography] Thumfart WF, et al. **HNO** 1988 May;36(5):206–11 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

[Identification of the recurrent laryngeal nerve in thyroid gland surgery—a status determination] Zornig C, et al. **Chirurg** 1989 Jan;60(1):44–8 (Eng. Abstr.) (Ger)

[Can the rate of recurrent laryngeal nerve paralysis be reduced by a modified surgical technic in struma surgery?] Rieger R, et al. **Zentralbl Chir** 1989;114(9):590–2 (Eng. Abstr.) (Ger)

REHABILITATION

New horizons in dynamic rehabilitation of paralyzed laryngeal functions. Broniatowski M, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):674–80

SURGERY

Newer techniques of laryngeal reinnervation. Maniglia AJ, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):8–14

Selective reinnervation of the abductor and adductor muscles of the canine larynx after recurrent nerve paralysis. Marie JP, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):530–6

Phonosurgery: indications and pitfalls. Maves MD, et al. **Ann Otol Rhinol Laryngol** 1989 Aug;98(8 Pt 1):577–80

Long-term results of nerve-muscle pedicle reinnervation for laryngeal paralysis. Tucker HM. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):674–6

Laryngoplasty for vocal cord medialization. Peroff RP. **Hawaii Med J** 1988 Jul;47(7):319, 345

Correction of late glottic insufficiency. Sacks S, et al. **Otolaryngol Clin North Am** 1988 Nov;21(4):761–9

A functional approach to lateral fixation in bilateral abductor cord paralysis. Amedee RG, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):542–5

THERAPY

Botulinum toxin for relief of bilateral abductor paralysis of the larynx: histologic study in an animal model. Cohen SR, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):213–6

Effect of vocal fold augmentation on laryngeal vibration in simulated recurrent laryngeal nerve paralysis: a study of Teflon and Phonogel. Trapp TK, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):220–7

The prognosis and management of idiopathic vocal cord paralysis. Willatt DJ, et al. **Clin Otolaryngol** 1989 Jun; 14(3):247–50

Bionic larynx: electronic control of the reimplanted organ in the dog. Broniatowski M. **Laryngoscope** 1988 Oct; 98(10):1107–15

Nerve transfer versus Teflon injection for vocal cord paralysis: a comparison. Crumley RL, et al. **Laryngoscope** 1988 Nov;98(11):1200–4

Transcutaneous Teflon injection for paralytic dysphonia. McCaffrey TB, et al. **Laryngoscope** 1989 May;99(5):497–9

[Teflon injection in unilateral vocal cord paralysis] Liavaag PG, et al. **Tidsskr Nor Laegeforen** 1988 Aug 30; 108(24):1910–1 (Eng. Abstr.) (Nor)

[Voice restoration after unilateral lesions of the recurrent laryngeal nerve] Grigor'eva MB, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):47–50 (Eng. Abstr.) (Rus)

[Acupuncture in the combined treatment of patients with unilateral paralysis of the recurrent laryngeal nerve] Karpova OIu. **Vestn Otorinolaringol** 1989 May–Jun; (3):41–6 (Eng. Abstr.) (Rus)

[Injection of teflon paste in the treatment of dysphonia caused by unilateral vocal cord paralysis] del Cañizo Alvarez C, et al. **An Otorrinolaringol Ibero Am** 1988;15(5):493–502 (Eng. Abstr.) (Spa)

VETERINARY

Neuromuscular pedicle graft for restoration of arytenoid abductor function in dogs with experimentally induced laryngeal hemiplegia. Greenfield CL, et al. **Am J Vet Res** 1988 Aug;49(8):1360–6

Effects of ventriculectomy, prosthetic laryngoplasty, and exercise on upper airway function in horses with induced left laryngeal hemiplegia. Shappell KK, et al. **Am J Vet Res** 1988 Oct;49(10):1760–5

Transendoscopic neodymium:yttrium aluminum garnet laser irradiation in horses. Tate LP Jr, et al. **Am J Vet Res** 1989 May;50(5):786–91

Association of arytenoid chondritis with equine lymphocyte antigens but no association with laryngeal hemiplegia, umbilical hernias and cryptorchidism. McClure JJ, et al. **Anim Genet** 1988;19(4):427–33

Attempts to restore abduction of the paralyzed equine arytenoid cartilage. I. Nerve-muscle pedicle transplants. Ducharme NG, et al. **Can J Vet Res** 1989 Apr;53(2):202–9

Attempts to restore abduction of the paralyzed equine arytenoid cartilage. II. Nerve implantation (pilot study). Ducharme NG, et al. **Can J Vet Res** 1989 Apr;53(2):210–5

Observations on the examination of Thoroughbred yearlings for idiopathic laryngeal hemiplegia. Lane JG, et al. **Equine Vet J** 1987 Nov;19(6):531–6

A preliminary report on the possible genetic basis of laryngeal hemiplegia. Poncet PA, et al. **Equine Vet J** 1989 Mar; 21(2):137–8

Laryngeal paralysis in immature and mature dogs as one sign of a more diffuse polyneuropathy. Braund KG, et al. **J Am Vet Med Assoc** 1989 Jun 15;194(12):1735–40

VOCAL CORDS

How to handle vocal cord granuloma. Jaroma M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:29

An unexpected functional cause of upper airway obstruction. Michelsen LG, et al. **Anaesthesia** 1988 Dec;43(12):1028–30

The role of hemilaryngectomy in the management of T1 vocal cord cancer. Rothfield RE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):677–80

T1–T2 vocal cord carcinoma: a basis for comparing the results of radiotherapy and surgery. Mendenhall WM, et al. **Head Neck Surg** 1988 Jul–Aug;10(6):373–7

Treatment of early stage vocal cord carcinoma. Ayers G. **J Med Assoc Ga** 1989 Mar;78(3):162–3

Tetanic contraction in vocal fold muscle. Alipour-Haghighi F, et al. **J Speech Hear Res** 1989 Jun;32(2):226–31

Analysis does not support claimed effectiveness of collagen injection procedure [letter] Gleason JM. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):430–2

Bilateral stage Ib glottic carcinoma: results of radiation therapy. Sinha PP. **Radiology** 1988 Dec;169(3):835–8

Is elective neck treatment indicated for T2N0 squamous cell carcinoma of the glottic larynx? Mendenhall WM, et al. **Radiother Oncol** 1989 Mar;14(3):199–202

[The vocal body of the lyric singer] Castelli C. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(4):383–6 (Eng. Abstr.) (Fre)

[Vascular corditis and micro-angioma] Verhulst J. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(3):257–9 (Eng. Abstr.) (Fre)

[Amyloidoma of the right false vocal cord subsequent to extramedullary plasmacytoma of the left parotid gland] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1988 May; 77(5):722–5 (Jpn)

[Possibilities of laser-endoscopic spectrum analysis in laryngology] Preobrazhenskiĭ NA, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):44–6 (Eng. Abstr.) (Rus)

[Hemorrhage into the vocal cords] Eremenko VN, et al. **Vrach Delo** 1988 Oct;(10):98–100 (Eng. Abstr.) (Rus)

ANATOMY & HISTOLOGY

High-speed digital imaging of vocal fold vibration. Hirose H. **Acta Otolaryngol Suppl (Stockh)** 1988;458:151–3

Existence of vocal folds in the larynx of odontoceti (toothed whales). Reidenberg JS, et al. **Anat Rec** 1988 Aug; 221(4):884–91

[Laryngeal lymphatic vessels of rats] Nakagawa M, et al. **Kaibogaku Zasshi** 1988 Dec;63(6):522–30 (Eng. Abstr.) (Jpn)

DRUG EFFECTS

An accurate method of Teflon injection using functional phonosurgery. Alessi DM, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1321–3

INNERVATION

Confirmation of encapsulated nerve structures in the human vocal cord. Nagai T. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):278–82

The autonomic innervation of the human vocal cord: neuropeptides. Basterra J, et al. **Laryngoscope** 1989 Mar; 99(3):293–6

[The nervous receptors in the human inferior vocal cord] Vega-Alvarez JA, et al. **Z Mikrosk Anat Forsch** 1988; 102(3):389–96 (Eng. Abstr.) (Fre)

[Significance of reflexogenic areas of the larynx in the treatment of professional singers] Charkhalashvili GE. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):59 (Rus)

PATHOLOGY

Ageing of the vibratory tissue of human vocal folds. Hirano M, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun; 107(5–6):428–33

An unusual laryngeal lesion in children: granular cell tumor. Goldofsky E, et al. **Int J Pediatr Otorhinolaryngol** 1988 Sep;15(3):263–7

Glottal closure in the hemiparalyzed canine larynx. Regenbogen E. **Laryngoscope** 1989 Jul;99(7 Pt 1):711–5

[Mobility of the vocal cord and the arytenoid in cancer of the larynx and the hypopharynx. Anatomo-clinical study] Brasnu D, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(6):435–41 (Eng. Abstr.) (Fre)

[Neurinoma of the vocal cord. A case report] Bonkowsky VM, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug; 67(8):392–4 (Eng. Abstr.) (Ger)

[Anatomical markers of Reinke's space and the etiopathogenesis of Reinke edema] Kambič V, et al. **Laryngorhinootologie** 1989 Apr;68(4):231–5 (Eng. Abstr.) (Ger)

[Results of implantation of teflon paste into the vocal cord according to the data of light and electron microscopy] Bykova VP, et al. **Arkh Patol** 1989;51(1):15–20 (Eng. Abstr.) (Rus)

[Better treatment of changes in the vocal cords when phoniatrists and microsurgeons cooperate] Mjönes AB. **Lakartidningen** 1989 Mar 22;86(12):1053 (Swe)

PHYSIOLOGY

Comments on "Two-mass models of the vocal cords for natural sounding voice synthesis". Nudelman HB, et al. **J Acoust Soc Am** 1989 May;85(5):2220–3

Monitoring vocal fold abduction through vocal fold contact area. Rothenberg M, et al. **J Speech Hear Res** 1988 Sep; 31(3):338–51

A basic study on the vocal fold vibration from the viewpoint of the layer system of the vocal fold. Tsuzuki T, et al. **Keio J Med** 1988 Jun;37(2):144–54

[Electromyography of normal and pathologic vocal muscles] Knoops P, et al. **Acta Belg Med Phys** 1988 Jul–Sep; 11(3):119–23 (Fre)

[Vocal cord movements during sniff] Mukai S. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2089–95 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Treatment of T3 laryngeal carcinoma. Clinical evaluation after 50 Gy, is it of any value? Aanesen JP, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:141–4

New horizons in dynamic rehabilitation of paralyzed laryngeal functions. Broniatowski M, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):674–80

Diagnosis and management of ventricular dysphonia. Von Hake CP, et al. **J Am Osteopath Assoc** 1989 Feb;89(2):181–3

[Measuring vibrations of the vocal cords: on the clinical relevance of stroboscopy] Wendler J, et al. **Folia Phoniatr (Basel)** 1988;40(6):297–302 (Ger)

RADIATION EFFECTS

[Implantation of 125 iodine seeds in the dog vocal cord. An experimental morphologic study] Zöllner C, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep;67(9):475–9 (Eng. Abstr.) (Ger)

[Use of a low-frequency alternating magnetic field in the complex treatment of patients with functional diseases of the larynx] Demchenko EV. **Vestn Otorinolaringol** 1988 May–Jun;(3):42–7 (Eng. Abstr.) (Rus)

SURGERY

Surgical correction of dysphonia due to bowing of the vocal cords. Koufman JA. **Ann Otol Rhinol Laryngol** 1989 Jan; 98(1 Pt 1):41–5

Laser surgery for vocal cord carcinoma involving the anterior commissure. Krespi YP, et al. **Ann Otol Rhinol Laryngol** 1989 Feb;98(2):105–9

Phonosurgery: indications and pitfalls. Maves MD, et al. **Ann Otol Rhinol Laryngol** 1989 Aug;98(8 Pt 1):577–80

Laryngeal framework surgery in the management of the aged larynx. Tucker HM. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):534–6

Phonosurgical studies: fat–graft reconstruction of injured canine vocal cords. Wexler DB, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):668–73

Surgery for the voice? Sataloff RT. **Clin Otolaryngol** 1989 Jun;14(3):185–8

Microsurgery for benign lesions of the vocal folds. Bouchayer M, et al. **Ear Nose Throat J** 1988 Jun; 67(6):446–9, 452–4, 456–64 passim

Laryngoplasty for vocal cord medialization. Peroff RP. **Hawaii Med J** 1988 Jul;47(7):319, 345

Externally induced vibration on massive vocal fold. Tsuzuki T, et al. **Keio J Med** 1988 Sep;37(3):255–64

Phonatory characteristics following surgical treatment of severe polypoid degeneration. Bennett S, et al. **Laryngoscope** 1989 May;99(5):525–32

[Endoscopic surgery of vocal cord cancers] Kleinsasser O, et al. **HNO** 1988 Oct;36(10):412–6 (Eng. Abstr.) (Ger)

ULTRASTRUCTURE

Glands in the human vocal cord. Basterra J, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):477–80 (23 ref.)

VOCAL FOLD see VOCAL CORDS

VOCALIZATION, ANIMAL

Phonosurgical studies: fat–graft reconstruction of injured canine vocal cords. Wexler DB, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):668–73

Learning by instinct: birdsong. Marler P. **ASHA** 1989 May; 31(5):75–9

A comparative study of rodent ultrasonic vocalizations during copulation. Pierce JD Jr, et al. **Behav Neural Biol** 1989 Mar;51(2):211–21

Accumulation of estrogen in a vocal control brain region of a duetting song bird. Brenowitz EA, et al. **Brain Res** 1989 Feb 20;480(1–2):119–25

A dorsomedial subdivision within the nucleus intercollicularis identified in the Japanese quail (Coturnix coturnix japonica) by means of alpha 2–adrenergic receptor autoradiography and estrogen receptor immunohistochemistry. Ball GF, et al. **Cell Tissue Res** 1989 Jul;257(1):123–8

Alarm call responsivity of mallard ducklings: VIII. Interaction between developmental history and behavioral context. Blaich CF, et al. **Dev Psychobiol** 1989 Apr; 22(3):203–10

Vocalizations of juvenile cowbirds (Molothrus ater ater) evoke copulatory responses from females. West MJ, et al. **Dev Psychobiol** 1988 Sep;21(6):543–52

Analysis of loud calls provides new evidence for hybridization between two Asian leaf monkeys (Presbytis johnii, Presbytis entellus). Hohmann G. **Folia Primatol (Basel)** 1988;51(4):209–13

Age gradations in vocalization and body weight in Japanese monkeys (Macaca fuscata). Inoue M. **Folia Primatol (Basel)** 1988;51(2–3):76–86

Primate play vocalizations and their functional significance. Masataka N, et al. **Folia Primatol (Basel)** 1988;50(1–2):152–6

Nocturnal vocalizations by squirrel monkeys (Saimiri sciureus). Symmes D, et al. **Folia Primatol (Basel)** 1988; 51(2–3):143–8

Variations in vocal patterns of Senegal and South African lesser bushbabies and their implications for taxonomic relationships. Zimmermann E, et al. **Folia Primatol (Basel)** 1988;51(2–3):87–105

Underwater audiogram of a false killer whale (Pseudorca crassidens). Thomas J, et al. **J Acoust Soc Am** 1988 Sep; 84(3):936–40

Anatomical study of the final common pathway for vocalization in the cat. Holstege G. **J Comp Neurol** 1989 Jun 8;284(2):242–52

Morphology of Golgi–impregnated neurons in hyperstriatum ventralis, pars caudalis in adult male and female canaries. Nixdorf BE, et al. **J Comp Neurol** 1989 Jun 15; 284(3):337–49

Neuronal processing of conspecific and related calls in the torus semicircularis of Rana r. ridibunda Pall. (Anura): single–unit recordings. Diekamp B, et al. **J Comp Physiol [A]** 1988 Jul;163(3):301–15

Species–specific auditory preference of bobwhite quail chicks (Colinus virginianus) is altered by social interaction with siblings. Lickliter R. **J Comp Psychol** 1989 Sep;103(3):221–6

Song frequency as a cue for recognition of species and individuals in the field sparrow (Spizella pusilla). Nelson DA. **J Comp Psychol** 1989 Jun;103(2):171–6

The effect of recurrent laryngeal nerve stimulation on phonation in an in vivo canine model. Berke GS, et al. **Laryngoscope** 1989 Sep;99(9):977–82

The role of sex steroids in the acquisition and production of birdsong. Marler P, et al. **Nature** 1988 Dec 22–29; 336(6201):770–2

Both prevention of physical contact and removal of distal cues mediate cortisol and vocalization responses of guinea pig pups to maternal separation in a novel environment. Hennessy MB. **Physiol Behav** 1988;43(6):729–33

Long–term monitoring of mouse ultrasonic vocalizations. Warburton VL, et al. **Physiol Behav** 1988;44(6):829–31

From bird song to neurogenesis. Nottebohm F. **Sci Am** 1989 Feb;260(2):74–9 (3 ref.)

Categorical perception of a natural stimulus continuum: birdsong. Nelson DA, et al. **Science** 1989 May 26; 244(4907):976–8

DRUG EFFECTS

Subtle behavioural changes produced in rat pups by in utero exposure to haloperidol. Cagiano R, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):45–50

Paradoxical hypermasculinization of the zebra finch song system by an antiestrogen. Mathews GA, et al. **Horm Behav** 1988 Dec;22(4):540–51

Effect of clonidine on ultrasonic vocalization in preweaning rats. Hård E, et al. **J Neural Transm** 1988;73(3):217–37

Joint hormonal and sensory stimulation modulate neuronal number in adult canary brains. Bottjer SW, et al. **J Neurobiol** 1988 Oct;19(7):624–35

Effects of 8–OH–DPAT on ultrasonic vocalization and audiogenic immobility reaction in pre–weanling rats. Hård E, et al. **Neuropharmacology** 1988 Oct;27(10):981–6

Vocalization accompanying emotional–aversive response induced by carbachol in the cat. Reproducibility and dose–response study. Brudzynski SM, et al. **Neuropsychopharmacology** 1988 Dec;1(4):311–20

Ultrasonic vocalization in rat pups as a marker of behavioral development: an investigation of the effects of drugs influencing brain opioid system. Cuomo V, et al. **Neurotoxicol Teratol** 1988 Sep–Oct;10(5):465–9

Combined opiate/adrenergic receptor blockade enhances squirrel monkey vocalization. Harris JC, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):223–6

Cannabinol and cannabidiol in combination: temperature, open–field activity, and vocalization. Hiltunen AJ, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):675–8

Central administration of corticotropin releasing factor alters rat pup isolation calls. Insel TR, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):197–201

Distress call reactivation in isolated chicks: a behavioral indicator with high selectivity for antidepressants. Lehr E. **Psychopharmacology (Berlin)** 1989;97(2):145–6

Temporal patterning of ultrasonic distress calls in the adult rat: effects of morphine and benzodiazepines. van der Poel AM, et al. **Psychopharmacology (Berlin)** 1989;97(2):147–8

PHYSIOLOGY

Differentiation of the substrates for analgesia and vocalizations elicited by midbrain stimulation in rats: refractory period estimates. Schenk S, et al. **Behav Brain Res** 1988 Dec 1;31(2):105–10

A threshold model for vocalization to handling in Mus domesticus. Henderson ND. **Behav Genet** 1988 Sep; 18(5):571–81

Spectral analysis of Drosophila courtship songs: D. melanogaster, D. simulans, and their interspecific hybrid. Wheeler DA, et al. **Behav Genet** 1988 Nov;18(6):675–703

Specificity of the cardiac response to conspecific vocalization in chimpanzees. Berntson GG, et al. **Behav Neurosci** 1989 Apr;103(2):235–45

Effect of restricted cortical lesions on absolute thresholds and aphasia–like deficits in Japanese macaques. Heffner HE, et al. **Behav Neurosci** 1989 Feb;103(1):158–69

Evolution of vertebrate motor systems for acoustic and electric communication: peripheral and central elements. Bass AH. **Brain Behav Evol** 1989;33(4):237–47 (74 ref.)

Auditory pathways in the budgerigar. II. Intratelencephalic pathways. Brauth SE, et al. **Brain Behav Evol** 1988; 32(4):193–207

Mating call phonotaxis in female American toads: lesions of central auditory system. Schmidt RS. **Brain Behav Evol** 1988;32(2):119–28

Cortical deafness cannot account for the inability of Japanese macaques to discriminate species–specific vocalizations. Heffner HE, et al. **Brain Lang** 1989 Feb;36(2):275–85

Androstenedione modulation of monoamine levels and turnover in hypothalamic and vocal control nuclei in the male zebra finch: steroid effects on brain monoamines. Barclay SR, et al. **Brain Res** 1988 Sep 6;459(2):333–43

Vocalization and stapedius muscle activity evoked by local electrical stimulation of midbrain in the chicken (Gallus gallus). Grassi S, et al. **Brain Res** 1989 Jun 26;490(2):345–9

Projections of androgen–accumulating neurons in a nucleus controlling avian song. Sohrabji F, et al. **Brain Res** 1989 May 29;488(1–2):253–9

Estrogen receptor levels in hypothalamic and vocal control nuclei in the male zebra finch. Walters MJ, et al. **Brain Res** 1988 Aug 30;459(1):37–43

The acetylcholine and catecholamine contents in song control nuclei of zebra finch during song ontogeny. Sakaguchi H, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):313–7

Neural activity pattern is not necessary for the development of adult ultrastructure in katydid (Neoconocephalus robustus) singing muscles. Novicki A. **Cell Tissue Res** 1989 Mar;255(3):641–4

Development of species identification in ducklings: XV. Individual auditory recognition. Gottlieb G. **Dev Psychobiol** 1988 Sep;21(6):509–22

Alarm call responsivity of mallard ducklings: VII. Auditory experience maintains freezing. Miller DB, et al. **Dev Psychobiol** 1988 Sep;21(6):523–33

Alarm signals in birds: the role of testosterone. Gyger M, et al. **Horm Behav** 1988 Sep;22(3):305–14

Mating call phonotaxis in female American toad: lesions of anterior preoptic nucleus. Schmidt RS. **Horm Behav** 1989 Mar;23(1):1–9

Noise susceptibility and immunity of phase locking in amphibian auditory–nerve fibers. Narins PM, et al. **J Acoust Soc Am** 1989 Mar;85(3):1255–65

Axonal connections of a forebrain nucleus involved with vocal learning in zebra finches. Bottjer SW, et al. **J Comp Neurol** 1989 Jan 8;279(2):312–26

Perceptual organization of acoustic stimuli by budgerigars (Melopsittacus undulatus): III. Contact calls. Brown SD, et al. **J Comp Psychol** 1988 Sep;102(3):236–47

Effect of testosterone on input received by an identified neuron type of the canary song system: a Golgi/electron microscopy/degeneration study. Canady RA, et al. **J Neurosci** 1988 Oct;8(10):3770–84

A basic study on the vocal fold vibration from the viewpoint of the layer system of the vocal fold. Tsuzuki T, et al. **Keio J Med** 1988 Jun;37(2):144–54

Correlation between the size of song control nuclei and plumage color change in orange bishop birds. Arai O, et al. **Neurosci Lett** 1989 Mar 27;98(2):144–8

Ultrasonic vocalizations in male rats following acquisition of copulation–illness associations. Peters RH, et al. **Physiol Behav** 1988;44(6):749–51

The emission and elicitation of mouse ultrasonic vocalizations: the effects of age, sex and gonadal status. Warburton VL, et al. **Physiol Behav** 1989 Jan;45(1):41–7

Playback of female rat ultrasonic vocalizations during sexual behavior. White NR, et al. **Physiol Behav** 1989 Feb; 45(2):229–33

[Functional harmony of the sonar clicks and whistles in the acoustic emissions of the Amazonian dolphin Sotalis fluviatilis Gervais and Deville] Alcuri G, et al. **C R Acad Sci [III]** 1989;308(14):379–84 (Eng. Abstr.) (Fre)

[The lateralization of hemispheric control over pain–induced vocalizations in rats] Bianki VL, et al. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):939–44 (Eng. Abstr.) (Rus)

VOCATIONAL EDUCATION

Career education needs of students with exceptionalities: one state's case. Rau D, et al. **Except Child** 1989 Apr; 55(6):501–7

Communication of adults with learning disabilities: self and others' perceptions. Klein HB, et al. **J Commun Disord** 1988 Sep;21(5):423–36

Vocational education students: a difficult–to–reach population at risk for smoking–related cancer. Corcoran RD, et al. **J Sch Health** 1989 May;59(5):195–8

[Function of the visual and motor analyzers in adolescent operators in the chemical industry working first and second shifts] Balichev Iu. **Probl Khig** 1988;13:157–63 (Eng. Abstr.) (Bul)

[Professional orientation of former students of the Waldorf school in Helsinki] Hyyrylainen V, et al. **Off Gesundheitswes** 1988 Oct;50(10):594–6 (Eng. Abstr.) (Ger)

[Alcohol in training and occupation—possible preventive management strategies by the public health service] Ziegler H. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):526–9 (Eng. Abstr.) (Ger)

[Professional employment of graduates of rehabilitation centers for occupational education in East Germany 1973–1985] Perlitz C, et al. **Z Gesamte Hyg** 1988 Jul; 34(7):421–3 (Eng. Abstr.) (Ger)

[Neurologic evaluation of the fitness for vocational training of students of the school of fashion. The qualifying criteria] Polakowska B. **Med Pr** 1988;39(4):276–81 (Eng. Abstr.) (Pol)

[Daily nutrition of young workers, vocational school students at large industrial plants] Szponar L, et al. **Rocz Panstw Zakl Hig** 1988;39(3):176–85 (Eng. Abstr.) (Pol)

[Age–related dynamics of the development of professionally important characteristics in students of educational–industrial combines in coal mining] Grebniak NP. **Gig Sanit** 1988 Oct;(10):29–32 (Eng. Abstr.) (Rus)

[Activities of the People's "Health" University for students of special secondary schools] Nesteruk AV, et al. **Gig Sanit** 1988 Jun;(6):68–9 (Rus)

[Training of students of the pedagogical college in anti–alcoholism propaganda at school and in the family] Potashniuk RZ, et al. **Gig Sanit** 1989 Feb;(2):44–7 (Rus)

[Development of professionally significant qualities in adolescents during their training as radio assemblers] Sergeta VN, et al. **Gig Sanit** 1988 Dec;(12):26–8 (Eng. Abstr.) (Rus)

[A method of determining the leading factors in professional orientation of adolescents at the inter–school educational–industrial combine] Zhizhin KS, et al. **Gig Sanit** 1988 Jul;(7):34–5 (Rus)

[Development of spatial orientation during pilot training] Ivanov VV, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug; 22(4):31–5 (Eng. Abstr.) (Rus)

[Urgent problems of medical services for vocational school students] Kirillov VV, et al. **Sov Zdravookhr** 1988;(6):22–7 (Eng. Abstr.) (Rus)

[Health status as a criterion in evaluating the activities of therapeutic–preventive institutions] Poliakov IV, et al. **Sov Zdravookhr** 1989;(5):21–4 (Rus)

[Alcoholism among students of rural vocational technical schools] Reznikov SG, et al. **Sov Zdravookhr** 1989;(2):50–3 (Rus)

[Function of the cardiovascular system in students of agricultural schools and technical colleges] Nagornaia AM. **Vrach Delo** 1988 Dec;(12):91–4 (Eng. Abstr.) (Rus)

LEGISLATION & JURISPRUDENCE

[Legal principles for participation of medical service in vocational guidance and education] Balster W. **Rehabilitation (Stuttg)** 1989 Feb;28(1):35–7 (Eng. Abstr.)

(Ger)

MANPOWER

[Physiologic, hygienic and pedagogic aspects of the use of computers in the process of improving the qualifications of specialists in vocational training] Zbarovskii VS, et al. **Gig Sanit** 1989 Apr;(4):12–4 (Rus)

METHODS

A team approach to prevocational services. Mitchell M, et al. **Am J Occup Ther** 1989 Jun;43(6):378–83

Vocational preparation for high school students labeled mentally retarded: employment as a graduation goal. Hasazi SB, et al. **Ment Retard** 1988 Dec;26(6):343–9

[Occupational health aspects of professional integration of special education graduates] Hartmann B, et al. **Z Gesamte Hyg** 1988 Jul;34(7):412–4 (Eng. Abstr.) (Ger)

STANDARDS

Transition and other services for handicapped students in local education agencies. Fairweather JS. **Except Child** 1989 Jan;55(4):315–20

[Physiologic and hygienic prerequisites for the development of criteria of professional aptitude of adolescents for operating sewing machines] Kalinina MP. **Gig Sanit** 1988 Nov;(11):13–6 (Eng. Abstr.) (Rus)

[Effect of training conditions on the health status of students of secondary vocational schools in the coal mining industry] Kharkovenko NM, et al. **Gig Sanit** 1988 Oct;(10):26–9 (Eng. Abstr.) (Rus)

[Hygienic evaluation of students' training at a light industry vocational school] Shpirt MB, et al. **Gig Sanit** 1989 Apr;(4):65–7 (Rus)

TRENDS

A descriptive study of vocational programs in residential schools for the deaf. Connolly RP. **Am Ann Deaf** 1988 Jul;133(3):204–6

[Vocational orientation of schoolchildren towards medical professions] Grebniak NP, et al. **Sov Zdravookhr** 1988;(12):42–4 (Rus)

VOCATIONAL GUIDANCE

Cold urticaria and employment. Shaw D. **J Soc Occup Med** 1988 Autumn;38(3):89

LEGISLATION & JURISPRUDENCE

[Legal principles for participation of medical service in vocational guidance and education] Balster W. **Rehabilitation (Stuttg)** 1989 Feb;28(1):35–7 (Eng. Abstr.) (Ger)

METHODS

Reliability and validity of the vocational assessment and curriculum guide. Menchetti BM, et al. **Am J Ment Retard** 1988 Nov;93(3):283–9

[Vocational aptitude and inclination—aspects of their assessment and evaluation in rehabilitation] Zschache R. **Rehabilitation (Stuttg)** 1989 Feb;28(1):30–4 (Eng. Abstr.) (Ger)

TRENDS

Trends in seniors' financial aid counseling and career counseling. Solomon ES, et al. **J Dent Educ** 1988 Oct;52(10):584–5

VOCATIONAL REHABILITATION see REHABILITATION, VOCATIONAL

VOCATIONS see OCCUPATIONS

VOICE

see related
CRYING

Non-organic dysphonia. II. A comparison of subglottal pressures in normal and pathological voices. Gramming P. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):156–60

Vertical hyoid bone displacement and fundamental frequency of phonation. Vilkman E, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug;108(1–2):142–51

Effect of superior laryngeal nerve stimulation on phonation in an in vivo canine model. Berke GS, et al. **Am J Otolaryngol** 1989 May–Jun;10(3):181–7

Voice evaluation of myomucosal shunt after total laryngectomy: comparison with esophageal speech. Brasnu D, et al. **Am J Otolaryngol** 1989 Jul–Aug;10(4):267–72

Laryngeal framework surgery in the management of the aged larynx. Tucker HM. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):534–6

Effect of eyelid closure and vocalization upon the vestibulo-ocular reflex during rotational testing. Weinsman BM, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):548–50

Office-based system for voice analysis. Berke GS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):74–7

Voice analysis revisited [letter] Rao AJ. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1133–4

Cervical involvement of diffuse idiopathic skeletal hyperostosis with dysphagia and rhinolalia. Kristensen S, et al. **Arch Otorhinolaryngol** 1988;245(6):330–4

Regional cerebral blood flow for singers and nonsingers while speaking, singing, and humming a rote passage. Formby C, et al. **Brain Lang** 1989 May;36(4):690–8

Change in nasal resonance over time: a clinical study. Fox DR, et al. **Cleft Palate J** 1988 Jul;25(3):245–7

Voice fundamental frequency as an auditory supplement to the speechreading of sentences. Boothroyd A, et al. **Ear Hear** 1988 Dec;9(6):306–12

Perception of speech pattern contrasts from auditory presentation of voice fundamental frequency. Boothroyd A. **Ear Hear** 1988 Dec;9(6):313–21

Tactile presentation of voice fundamental frequency as an aid to the speechreading of sentences. Hanin L, et al. **Ear Hear** 1988 Dec;9(6):335–41

Perception of frequency contours via temporal and spatial tactile transforms. Hnath-Chisolm T, et al. **Ear Hear** 1988 Dec;9(6):322–8

Tactile presentation of voice fundamental frequency as an aid to the perception of speech pattern contrasts. Hnath-Chisolm T, et al. **Ear Hear** 1988 Dec;9(6):329–34

A wearable multichannel tactile display of voice fundamental frequency. Yeung E, et al. **Ear Hear** 1988 Dec;9(6):342–50

XXIst Congress of the International Association of Logopedics and Phoniatrics. Prague, August 6–10, 1989. Abstracts. **Folia Phoniatr (Basel)** 1989;41(4–5):155–248

A note on phase relationships between frequency and amplitude modulations in vocal vibrato. Horii Y, et al. **Folia Phoniatr (Basel)** 1988;40(6):303–11

Intraoral pressure differences in various degrees of breathiness. Klich RJ, et al. **Folia Phoniatr (Basel)** 1988;40(6):265–9

Distribution of the amplitude in the pathologic voice signal. Klingholz F, et al. **Folia Phoniatr (Basel)** 1989;41(1):23–9

Speaker race identification of North American Indian children. Mencel E, et al. **Folia Phoniatr (Basel)** 1988;40(4):175–82

Effect of voice quality on adult's perceptions of Down's syndrome children. Moran MJ, et al. **Folia Phoniatr (Basel)** 1988;40(4):157–61

Aerodynamic investigation of sources of vibrato. Rothenberg M, et al. **Folia Phoniatr (Basel)** 1988;40(5):244–60

Common upper airway disorders in the elderly and their management. Close LG, et al. **Geriatrics** 1989 Jan;44(1):67–8, 71–2

The hoarse patient.When to refer. Vaughan CW. **Hosp Pract [Off]** 1989 Apr 30;24(4A):21–4, 29

Comparison of keyboard, light pen and voice recognition as methods of data input. Murchie CJ, et al. **Int J Clin Monit Comput** 1988;5(4):243–6

Single-channel vibrotactile supplements to visual perception of intonation and stress. Bernstein LE, et al. **J Acoust Soc Am** 1989 Jan;85(1):397–405

The timbre of sung bowels. Bloothooft G, et al. **J Acoust Soc Am** 1988 Sep;84(3):847–60

Glottal airflow and transglottal air pressure measurements for male and female speakers in soft, normal, and loud voice [published erratum appears in J Acoust Soc Am 1989 Apr;85(4):1787] Holmberg EB, et al. **J Acoust Soc Am** 1988 Aug;84(2):511–29

Performance characterization of human pitch control system: an acoustic approach. Jafari M, et al. **J Acoust Soc Am** 1989 Mar;85(3):1322–8

The cricothyroid muscle in voicing control. Löfqvist A, et al. **J Acoust Soc Am** 1989 Mar;85(3):1314–21

Fundamental frequency modulation of the human voice by the heartbeat: preliminary results and possible mechanisms. Orlikoff RF, et al. **J Acoust Soc Am** 1989 Feb;85(2):888–93

Long-term memory for unfamiliar voices. Papcun G, et al. **J Acoust Soc Am** 1989 Feb;85(2):913–25

Inhibiting the Lombard effect. Pick HL Jr, et al. **J Acoust Soc Am** 1989 Feb;85(2):894–900

Vocal fundamental frequency characteristics during the first two years of life. Robb MP, et al. **J Acoust Soc Am** 1989 Apr;85(4):1708–17

Synchronized discharge rate representation of voice-onset time in the chinchilla auditory nerve. Sinex DG, et al. **J Acoust Soc Am** 1989 May;85(5):1995–2004

On the relation between subglottal pressure and fundamental frequency in phonation. Titze IR. **J Acoust Soc Am** 1989 Feb;85(2):901–6

Physiologic and acoustic differences between male and female voices. Titze IR. **J Acoust Soc Am** 1989 Apr;85(4):1699–707

Stability in phonational frequency range. Gelfer MP. **J Commun Disord** 1989 Jun;22(3):181–92

VOT and dysarthria: a descriptive study. Morris RJ. **J Commun Disord** 1989 Feb;22(1):23–33

A fundamental frequency investigation of children ages 6–10 years old. Sorenson DN. **J Commun Disord** 1989 Apr;22(2):115–23

Harsh voice: vocal effort perceptual ratings and spectral noise levels of hearing-impaired children. Thomas-Kersting C, et al. **J Commun Disord** 1989 Apr;22(2):125–35

Spectral noise level measurements used to track voice improvement in one patient. Trullinger RW, et al. **J Commun Disord** 1988 Dec;21(6):447–57

The Lombard effect on alaryngeal speech. Zeine L, et al. **J Commun Disord** 1988 Sep;21(5):373–83

Prosodic aspects of motherese: effects on gaze and responsiveness in developmentally disabled children. Santarcangelo S, et al. **J Exp Child Psychol** 1988 Dec;46(3):406–18

Laryngeal characteristics after reconstruction for subglottic stenosis: a clinical correlation. Kearns DB, et al. **J Laryngol Otol Suppl** 1988;17:39

Final consonant repetition: a linguistic perspective. Camarata SM. **J Speech Hear Disord** 1989 May;54(2):159–62

A comparison of the age-MLU relation in normal and specifically language-impaired preschool children. Klee T, et al. **J Speech Hear Disord** 1989 May;54(2):226–33

Age and laryngeal airway resistance during vowel production. Melcon MC, et al. **J Speech Hear Disord** 1989 May;54(2):282–6

Factors influencing fundamental frequency range estimates in children. Reich AR, et al. **J Speech Hear Disord** 1989 Aug;54(3):429–38

Cephalometric and cineradiographic study of deviant resonance in hearing-impaired speakers. Subtelny J, et al. **J Speech Hear Disord** 1989 May;54(2):249–63

Spectral correlates of glottal voice source waveform characteristics. Gauffin J, et al. **J Speech Hear Res** 1989 Sep;32(3):556–65

Comment on Cavallo and Baken (1985) [letter] Hixon TJ. **J Speech Hear Res** 1988 Dec;31(4):726–9

Stutterers' and nonstutterers' voice fundamental frequency changes in response to auditory stimuli. McLean-Muse A, et al. **J Speech Hear Res** 1988 Dec;31(4):549–55

Phonatory reaction times of rheumatoid arthritic and normal females. Mathers-Schmidt B, et al. **J Speech Hear Res** 1989 Sep;32(3):611–24

Synthetic and natural speech preferences of male and female listeners in four age groups [published erratum appears in J Speech Hear Res 1989 Sep;32(3):703] Mirenda P, et al. **J Speech Hear Res** 1989 Mar;32(1):175–83

A voice accumulation—validation and application. Ohlsson AC, et al. **J Speech Hear Res** 1989 Jun;32(2):451–7

The effect of the heartbeat on vocal fundamental frequency perturbation. Orlikoff RF, et al. **J Speech Hear Res** 1989 Sep;32(3):576–82

Automatic phonetogram recording supplemented with acoustical voice-quality parameters. Pabon JP, et al. **J Speech Hear Res** 1988 Dec;31(4):710–22

Temporal changes in word revisions by children and adults. Paul-Brown D, et al. **J Speech Hear Res** 1988 Dec;31(4):630–9

Voice identification of prepubertal boys and girls by normally sighted and visually handicapped subjects. Günzburger D, et al. **Lang Speech** 1987 Jan–Mar;30 (Pt 1):47–58

Phonatory characteristics following surgical treatment of severe polypoid degeneration. Bennett S, et al. **Laryngoscope** 1989 May;99(5):525–32

Voice intensity of patients using a Communi-Trach I cuffed speaking tracheostomy tube. Leder SB, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):744–7

Temporal and perceptual characteristics of tracheoesophageal voice. Williams SE, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):846–50

Physiology of animal behavior: dynamics of chimpanzee heart rhythm during perception of an emotionally charged human voice. Kuznetsova TG. **Neurosci Behav Physiol** 1988 Nov–Dec;18(6):481–6

Memory and noise immunity in the recognition of emotional state by voice in patients with local lesions of the brain. Tarkhan AU. **Neurosci Behav Physiol** 1989 Mar–Apr;19(2):129–34

Voice restoration after laryngopharyngoesophagectomy. Wenig BL, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):11–3

Speech results of the Zürich approach in the treatment of unilateral cleft lip and palate. Van Demark DR, et al. **Plast Reconstr Surg** 1989 Apr;83(4):605–13

Vocal indicators of affective disorders. Scherer KR, et al. **Psychother Psychosom** 1988;49(3–4):179–86 (24 ref.)

Voice recognition system [letter] Hansen GC, et al. **Radiology** 1988 Nov;169(2):580

It's how you say it: physicians' vocal behavior. Harrigan JA, et al. **Soc Sci Med** 1989;28(1):87–92

[Velopharyngeal insufficiency. Anatomo-physiological aspects] Wellens W. **Acta Otorhinolaryngol Belg** 1988;42(4):463–76 (Eng. Abstr.) (Fre)

[The vocal body of the lyric singer] Castelli C. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(4):383–6 (Eng. Abstr.) (Fre)

[Diphonic singing] de la Bretèque BA. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(4):387–8 (Eng. Abstr.) (Fre)

[The timbres and technics of the voice in the rural tradition of Southern France] de la Bretèque BA. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(4):389–91 (Eng. Abstr.) (Fre)

[Voice as an affective index] Scherer K, et al. **Rev Med Suisse Romande** 1989 Jan;109(1):61–6 (Fre)

[The assessment of quantitative speaking voice production. The speaking voice field in the singing voice field] Hacki T. **Folia Phoniatr (Basel)** 1988;40(4):190–6 (Eng. Abstr.) (Ger)

[Resonance spectrum of the singing voice relative to supra- and sub-glottal pressure changes; consequences for the theory of voice production] Schutte HK, et al. **Folia Phoniatr (Basel)** 1988;40(2):65–73 (Eng. Abstr.) (Ger)

[Nasal speech with special reference to a submucous cleft palate] Johannsen HS, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):599–602 (Eng. Abstr.) (Ger)

[The voice of the singer in the phonetogram] Klingholz F. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):62–6 (Eng. Abstr.) (Ger)

[Hoarseness] Klingholz F. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):346–9 (Eng. Abstr.) (Ger)

[Changes of the voice in the Lombard reflex] Lamprecht A. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):350–4 (Eng. Abstr.) (Ger)

[Functional evaluation of T–E shunt] Satoh N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep;91(9):1388–94 (Eng. Abstr.) (Jpn)

[CT scan of the hypopharynx and larynx—value of phonation scans] Fujii N, et al. **Rinsho Hoshasen** 1988 Aug; 33(8):857–64 (Eng. Abstr.) (Jpn)

[Progress in electrophysiological studies of hearing, equilibrium and voice] Iwankiewicz S, et al. **Otolaryngol Pol** 1988;42(1–2):121–30 (Eng. Abstr.) (Pol)

[Computer-assisted examination of the vocal field during speech in physiological and various pathological conditions] Pruszewicz A, et al. **Otolaryngol Pol** 1988; 42(3):193–200 (Eng. Abstr.) (Pol)

[A method of data collection in the acoustic evaluation of the effect of phonosurgical operations on the larynx] Zaleska-Kręcicka M, et al. **Otolaryngol Pol** 1988; 42(5):356–64 (Eng. Abstr.) (Pol)

[Cultivation of voice intensity in deaf children] Corina CS, et al. **Rev Chir [Otorinolaringol]** 1988 Jul–Sep;33(3):223–33 (Eng. Abstr.) (Rum)

[Effect of physical factors on the alteration of the intensity level of the human voice (singers)] Loshchilov VN, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):477–81 (Rus)

VOICE DISORDERS

Factors leading to successful evaluation and management of patients with voice disorders. Bastian RW. **Ear Nose Throat J** 1988 Jun;67(6):411–2, 414–6, 418–20

XXIst Congress of the International Association of Logopedics and Phoniatrics. Prague, August 6–10, 1989. Abstracts. **Folia Phoniatr (Basel)** 1989;41(4–5):155–248

CHEMICALLY INDUCED

Spastic dysphonia and denervation signs in a young man with tardive dyskinesia. Lieberman JA, et al. **Br J Psychiatry** 1989 Jan;154:105–9

[Parkinson's disease associated with trihexyphenidyl (THP) induced dysphonia plicae ventricularis] Yamamoto K, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):423–5 (Eng. Abstr.) (Jpn)

CONGENITAL

[Ventral enclosure of the thyroid cartilage by the hyoid bone. A complex inhibition abnormality of the laryngeal structure] Friedrich G, et al. **Laryngorhinootologie** 1989 Apr;68(4):239–43 (Eng. Abstr.) (Ger)

DIAGNOSIS

Non-organic dysphonia. II. Phonetograms for normal and pathological voices. Gramming P, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec;106(5–6):468–76

Office-based system for voice analysis. Berke GS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):74–7

Common upper airway disorders in the elderly and their management. Close LG, et al. **Geriatrics** 1989 Jan; 44(1):67–8, 71–2

Objective assessment of vocal hyperfunction: an experimental framework and initial results. Hillman RE, et al. **J Speech Hear Res** 1989 Jun;32(2):373–92

[The vocal evaluation] Demard D. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(4):361–6 (Eng. Abstr.) (Fre)

[Classification of glottal dysfunctions on the basis of electroglottography] Hacki T. **Folia Phoniatr (Basel)** 1989; 41(1):43–8 (Eng. Abstr.) (Ger)

[Differential diagnosis of functional voice disorders] Kruse E. **Folia Phoniatr (Basel)** 1989;41(1):1–9 (Eng. Abstr.) (Ger)

[Differential diagnostic and terminology considerations of so-called functional disorders in the neuropsychiatric and phoniatric specialty. 1. The neuropsychiatric aspect] Pahn J, et al. **Folia Phoniatr (Basel)** 1988;40(4):162–7 (4 ref.) (Eng. Abstr.) (Ger)

[Differential diagnostic and terminology considerations of so-called functional disorders in the neuropsychiatric and phoniatric specialty. The phoniatric aspect] Pahn J, et al. **Folia Phoniatr (Basel)** 1988;40(4):168–74 (15 ref.) (Eng. Abstr.) (Ger)

[Computer-assisted examination of the vocal field during speech in physiological and various pathological conditions] Pruszewicz A, et al. **Otolaryngol Pol** 1988; 42(3):193–200 (Eng. Abstr.) (Pol)

[Phonation injury emergencies in an ENT outpatient clinic] Ene F, et al. **Rev Chir [Otorinolaringol]** 1988 Apr–Jun; 33(2):155–60 (Eng. Abstr.) (Rum)

[A better follow-up of the patients with voice problems] Hertegård S. **Lakartidningen** 1988 Dec 28;85(52):4616–8 (Eng. Abstr.) (Swe)

ETIOLOGY

Current and future horizons in laryngeal and voice research. Ward PH, et al. **Ann Otol Rhinol Laryngol** 1989 Feb; 98(2):145–52

Hypertrophic scarring of tracheoesophageal fistula causing vocal failure. Modica LA. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1324–5

Speech characteristics in patients with hypohidrotic ectodermal dysplasia. Coston GN, et al. **Birth Defects** 1988; 24(2):229–34

Change in nasal resonance over time: a clinical study. Fox DR, et al. **Cleft Palate J** 1988 Jul;25(3):245–7

Eagle's syndrome: an atypical cause of dysphonia. Blatchford SJ, et al. **Ear Nose Throat J** 1989 Jan;68(1):48–51

Objective evaluation of the human voice: clinical aspects. Hirano M. **Folia Phoniatr (Basel)** 1989;41(2–3):89–144

Tourette disorder and mutational falsetto. Kerbeshian J, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter;12(3–4):271–3

[Esophageal endoprosthesis: an uncommon complication (letter)] Seitz JF, et al. **Gastroenterol Clin Biol** 1988 Dec; 12(12):973–4 (Fre)

[Dysarthrophonia of Parkinson syndrome] Ackermann H, et al. **Fortschr Neurol Psychiatr** 1989 Apr;57(4):149–60 (150 ref.) (Eng. Abstr.) (Ger)

[Chronic muscular dysfunction of the bulbar innervation in hyperthyroidism: report of a case] Cardoso B de A, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):393–6 (Eng. Abstr.) (Por)

PHYSIOPATHOLOGY

Non-organic dysphonia. II. A comparison of subglottal pressures in normal and pathological voices. Gramming P. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):156–60

Laryngeal aerodynamics associated with selected voice disorders. Netsell R, et al. **Am J Otolaryngol** 1984 Nov–Dec;5(6):397–403

Selective impairment of phonation: a case study. Marshall RC, et al. **Brain Lang** 1988 Nov;35(2):313–39

Voice perturbations of children with perceived nasality and hoarseness. Zajac DJ, et al. **Cleft Palate J** 1989 Jul; 26(3):226–31; discussion 231–2

Subglottal air pressure in spastic dysphonia speech. Shipp T, et al. **Folia Phoniatr (Basel)** 1988;40(3):105–10

Diagnosis and management of ventricular dysphonia. Von Hake CP, et al. **J Am Osteopath Assoc** 1989 Feb;89(2):181–3

Surface EMG and related measures in normal and vocally hyperfunctional speakers. Redenbaugh MA, et al. **J Speech Hear Disord** 1989 Feb;54(1):68–73

Spasmodic dysphonia, whether and where: results of seven years of research. Finitzo T, et al. **J Speech Hear Res** 1989 Sep;32(3):541–55 (71 ref.)

Brain studies may alter long-held concepts about likely causes of some voice disorders [news] Goldsmith MF. **JAMA** 1989 Feb 17;261(7):964–5

Blink reflex excitability recovery curves in patients with spasmodic dysphonia. Cohen LG, et al. **Neurology** 1989 Apr;39(4):572–7

Aging of the voice and swallowing. Ward PH, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):283–6

[Voice changes in growth disorders of hypophyseal etiology] Raisová V, et al. **Folia Phoniatr (Basel)** 1988;40(3):128–30 (Ger)

[Measuring vibrations of the vocal cords: on the clinical relevance of stroboscopy] Wendler J, et al. **Folia Phoniatr (Basel)** 1988;40(6):297–302 (Ger)

PREVENTION & CONTROL

[Surgical treatment of epiglottic cancer with voice preservation. Success factors] Kuźniarz J, et al. **Otolaryngol Pol** 1988;42(1–2):23–32 (Eng. Abstr.) (Pol)

PSYCHOLOGY

Idiosyncratic strategies in sentence production: a case report. Gandour J, et al. **Brain Lang** 1989 May;36(4):614–24

Life events and difficulties preceding the onset of functional dysphonia. House AO, et al. **J Psychosom Res** 1988; 32(3):311–9

REHABILITATION

Two augmentative communication systems for speechless disabled patients. Newman GC, et al. **Am J Occup Ther** 1989 Aug;43(8):529–34

[Vocal rehabilitation after total laryngectomy by musculomucous tracheo-esophageal fistula. Results apropos of 27 cases] Brasnu D, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):449–52 (Eng. Abstr.) (Fre)

[Acupuncture—an adjuvant therapeutic measure in the rehabilitation of patients with hyperfunctional dysphonia] Popovici D. **Rev Chir [Otorinolaringol]** 1988 Jul–Sep; 33(3):235–8 (Eng. Abstr.) (Rum)

SURGERY

Treatment of spasmodic dysphonia by means of resection of the recurrent laryngeal nerve. Schiratzki H, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:115–7

Surgical correction of dysphonia due to bowing of the vocal cords. Koufman JA. **Ann Otol Rhinol Laryngol** 1989 Jan; 98(1 Pt 1):41–5

Laryngeal framework surgery in the management of spasmodic dysphonia. Preliminary report. Tucker HM. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):52–4

Phonosurgical studies: fat-graft reconstruction of injured canine vocal cords. Wexler DB, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):668–73

Surgery for the voice? Sataloff RT. **Clin Otolaryngol** 1989 Jun;14(3):185–8

[A method of data collection in the acoustic evaluation of the effect of phonosurgical operations on the larynx] Zaleska-Kręcicka M, et al. **Otolaryngol Pol** 1988; 42(5):356–64 (Eng. Abstr.) (Pol)

THERAPY

Implantation of a recurrent laryngeal nerve stimulator for the treatment of spastic dysphonia. Friedman M, et al. **Ann Otol Rhinol Laryngol** 1989 Feb;98(2):130–4

Botulinum toxin [letter] **BMJ** 1989 Feb 25;298(6672):522

Spectral noise level measurements used to track voice improvement in one patient. Trullinger RW, et al. **J Commun Disord** 1988 Dec;21(6):447–57

[Use of a low-frequency alternating magnetic field in the complex treatment of patients with functional diseases of the larynx] Demchenko EV. **Vestn Otorinolaringol** 1988 May–Jun;(3):42–7 (Eng. Abstr.) (Rus)

[Treatment of phonasthenia using acureflexotherapy] Salivon LG. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):23–6 (Eng. Abstr.) (Rus)

[Injection of teflon paste in the treatment of dysphonia caused by unilateral vocal cord paralysis] del Cañizo Alvarez C, et al. **An Otorrinolaringol Ibero Am** 1988;15(5):493–502 (Eng. Abstr.) (Spa)

[Better treatment of changes in the vocal cords when phoniatrists and microsurgeons cooperate] Mjönes AB. **Lakartidningen** 1989 Mar 22;86(12):1053 (Swe)

VOICE PROSTHESIS see **LARYNX, ARTIFICIAL**

VOICE QUALITY see under **VOICE**

VOICE TRAINING

Treatment of benign laryngeal disorders with traditional methods and techniques of voice therapy. McFarlane SC. **Ear Nose Throat J** 1988 Jun;67(6):425–8, 430–2, 434–5

Voice therapy techniques adapted to treatment of habit cough: a pilot study. Blager FB, et al. **J Commun Disord** 1988 Sep;21(5):393–400

VOLES see **CRICETIDAE**

VOLITION

Psychiatric controversy: man's ethical dimension. Arieti S. **Am J Psychiatry** 1975 Jan;132(1):39–42

Which patients are responsible for their illnesses? Halleck SL. **Am J Psychother** 1988 Jul;42(3):338–53

How voluntary is voluntary euthanasia? van der Sluis I. **J Palliat Care** 1988 May;4(1–2):107–9

Effects of instructional set on attributions of nonvolition during hypnotic and nonhypnotic analgesia. Spanos NP, et al. **J Pers Soc Psychol** 1989 Feb;56(2):182–8

Loss of the will to live in multisystem organ failure [letter] Tempereau CE, et al. **JAMA** 1988 Dec 16;260(23):3437–8

The prefrontosensorial polarity principle. Toward a neurophenomenological theory of intentionality. Laughlin CD. **Riv Biol** 1988;81(2):244–62 (Eng, Ita)

Mood states in the volunteer blood donor. Zillmer EA, et al. **Transfusion** 1989 Jan;29(1):27–30

VOLKMANN CONTRACTURE see **COMPARTMENT SYNDROMES**

VOLUNTARY HEALTH AGENCIES

Essential nonmedical perinatal services for multiple birth families. Malmstrom PE, et al. **Acta Genet Med Gemellol (Roma)** 1988;37(2):193–8

Project LEAN [letter] Samuels SE, et al. **Am J Public Health** 1989 Mar;79(3):350

How to apply for charitable status. Slevin M, et al. **BMJ** 1989 May 6;298(6682):1239–40

Characteristics and help-seeking patterns of attenders at a community-based voluntary agency and an alcohol and drug treatment unit. Allan CA. **Br J Addict** 1989 Jan; 84(1):73–80

Unproven methods of cancer management. International Association of Cancer Victors and Friends, Inc. **CA** 1989 Jan–Feb;39(1):58–9

Quality assurance in the care of the cancer patient [editorial] Holleb AI. **CA** 1989 Jul–Aug;39(4):197–200

President's address. Colwell JA. **Diabetes** 1988 Nov; 37(11):1449–52

Management of diabetes in correctional institutions. **Diabetes Care** 1989 Jul–Aug;12(7):505

The use of a Teleport system in parent and adolescent support. Farquhar JW. **Diabetic Med** 1989 Sep–Oct; 6(7):635–7

Dialabetic. Hirst J. **Diabetic Med** 1989 Sep–Oct;6(7):637–8

A case-control study of multiple myeloma nested in the American Cancer Society prospective study. Boffetta P, et al. **Int J Cancer** 1989 Apr 15;43(4):554–9

WHO organizes first international gathering of AIDS service organizations [news] **J Adv Nurs** 1989 Aug;14(8):606
American Cancer Society and smoking cessation [letter] Stevenson RB. **J Am Dent Assoc** 1989 Mar;118(3):274
Voluntary health agencies as target populations for epidemiologic research. Ottman R, et al. **J Clin Epidemiol** 1988;41(10):979–84
Together—we can make a difference! Jansing E. **J Ky Med Assoc** 1989 May;87(5):243
ACS reports on cancer and the poor [news] Corliss J. **J Natl Cancer Inst** 1989 Aug 16;81(16):1206–7
William Tipping leads American Cancer Society into 1990s [interview by Adele Paroni] Tipping WM. **J Natl Cancer Inst** 1989 Mar 1;81(5):327–32
Volunteers and patient support. Fraser R, et al. **J Palliat Care** 1989 Jun;5(2):52–5
Supporting people with AIDS: the Gay Men's Health Crisis model. Katoff L, et al. **J Palliat Care** 1988 Dec;4(4):88–95
Frances Payne Bolton School of Nursing's new paradigm for international health: think globally and act locally. Segall ME. **J Prof Nurs** 1989 Mar–Apr;5(2):62, 112–3
Risk reduction through comprehensive cancer education: the American Cancer Society Plan for Youth Education. Corcoran RD, et al. **J Sch Health** 1989 May;59(5):199–204
Project Outreach: Organizations Unified to Reach Youth. Dunnington BC, et al. **Public Health Rep** 1989 Jan–Feb; 104(1):79–82
Legal concerns affecting nonprofit community agencies that serve the elderly. Kapp MB. **QRB** 1989 Mar;15(3):86–91
Non-governmental organizations in the health field: collaboration, integration and contrasting aims. Smith K. **Soc Sci Med** 1989;29(3):395–402

ECONOMICS

London's voluntary drug agencies. I. Funding and organizational management. Ettorre B. **Int J Addict** 1988 Oct;23(10):1041–56
National AIDS Trust [news] **Lancet** 1988 Oct 15;2(8616):918

HISTORY

A new era [editorial] Holleb AI. **CA** 1989 Jan–Feb;39(1):1–2
A history of the Public Health Association of New York City. Kavaler F, et al. **N Y State J Med** 1989 Aug; 89(8):467–72

MANPOWER

London's voluntary drug agencies. II: Staffing. Ettorre B. **Int J Addict** 1988 Nov;23(11):1157–70

ORGANIZATION & ADMINISTRATION

Volunteerism and the American Cancer Society [editorial] Holleb AI. **CA** 1989 Mar–Apr;39(2):65–6

TRENDS

London's voluntary drug agencies. III. A "snapshot" view of residential and nonresidential clients. Ettorre B. **Int J Addict** 1988;23(12):1255–69

VOLUNTARY STERILIZATION see **STERILIZATION, SEXUAL**

VOLUNTARY WORKERS

Serologic evidence of Cryptosporidium infection in US volunteers before and during Peace Corps service in Africa. Ungar BL, et al. **Arch Intern Med** 1989 Apr;149(4):894–7
Volunteerism and the American Cancer Society [editorial] Holleb AI. **CA** 1989 Mar–Apr;39(2):65–6
An eye on Nepal: we have much to teach, and much to learn. Spencer M. **Can Med Assoc J** 1988 Oct 15;139(8):775, 778–80
Fostering intergenerational relationships for at-risk youth. Freedman M. **Child Today** 1989 Mar–Apr;18(2):10–5
Volunteers as resources in preparing foster adolescents for self-sufficiency. Mech EV, et al. **Child Welfare** 1988 Nov–Dec;67(6):595–608
Developing local resources to enrich the practice of rural community psychology. Heyman SR, et al. **Hosp Community Psychiatry** 1989 Jan;40(1):21–3
London's voluntary drug agencies. II: Staffing. Ettorre B. **Int J Addict** 1988 Nov;23(11):1157–70
Epidemiological surveillance in Peace Corps Volunteers: a model for monitoring health in temporary residents of developing countries. Bernard KW, et al. **Int J Epidemiol** 1989 Mar;18(1):220–6
A study of benefits offered volunteer clinical faculty. Curtis ES, et al. **J Allied Health** 1988 Nov;17(4):309–18
Peace Corps offers Third World experience [news] Pedersen V, et al. **J Am Vet Med Assoc** 1989 Jul 1;195(1):26–9
The physician as a community volunteer. Caplinger KJ. **J Arkansas Med Soc** 1988 Nov;85(6):249–51
Making a difference—one woman's involvement [interview] Shurling B. **J Med Assoc Ga** 1989 Jun;78(6):350–3
Home treatment for aphasic patients by trained nonprofessionals. Marshall RC, et al. **J Speech Hear Disord** 1989 Aug;54(3):462–70
The Ankali project: a model for the use of volunteers to provide emotional support in terminal illness. McCallum LW, et al. **Med J Aust** 1989 Jul 3;151(1):33–4, 37–8
Participation of healthy volunteers in research projects. Macrae FA, et al. **Med J Aust** 1989 Mar 20;150(6):325–8
Volunteering for the care of patients with the acquired immunodeficiency syndrome [editorial] Maddocks I. **Med J Aust** 1989 Jul 3;151(1):1–2
Voluntary village health workers in Papua New Guinea. Garner PA. **P N G Med J** 1989 Mar;32(1):55–60
Volunteers help to detect unreported medical problems in the elderly. Beales D, et al. **Practitioner** 1988 Apr 22; 232(1447):478–82

ECONOMICS

Early retirement and work after retirement. Implications for the structure of the work society. Freter HJ, et al. **Compr Gerontol [B]** 1988 Apr;2(1):44–52

EDUCATION

Training volunteers to work with the chronic mentally ill in the community. Brook S, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):853–5
A nutrition/health training program for Peace Corps volunteers. Bahl SM, et al. **J Am Diet Assoc** 1989 Jan; 89(1):82–4
Evaluation of training program for volunteer family planning communicators. Eoaskoon W, et al. **J Med Assoc Thai** 1989 Jan;72(1):25–7
Group activities: their role screening as placement indicators in hospice volunteer training. Dubik-Unruh S, et al. **J Palliat Care** 1988 Sep;4(3):33–7

MANPOWER

Short-term medical service in the developing world. Wahls TL, et al. **J Am Med Wom Assoc** 1989 Jan–Feb;44(1):18–20

VOLVULUS see **INTESTINAL OBSTRUCTION**

VOLVULUS, STOMACH see **STOMACH VOLVULUS**

VOMER see **NASAL SEPTUM**

VOMITING

Value of ultrasound in differentiating causes of persistent vomiting in infants [letter] Shaw D. **Arch Dis Child** 1989 Jun;64(6):889
Kunjal: a nonspecific protective factor in management of bronchial asthma. Singh V. **J Asthma** 1987;24(3):183–6
Epoprostenol in systemic capillary leak syndrome [letter] Fellows IW, et al. **Lancet** 1988 Nov 12;2(8620):1143
[A new case of vomiting gallstones] Sevonius D, et al. **Lakartidningen** 1988 Oct 12;85(41):3369 **(Swe)**

BLOOD

Arginine vasopressin—a mediator of chemotherapy induced emesis? Edwards CM, et al. **Br J Cancer** 1989 Mar; 59(3):467–70

CHEMICALLY INDUCED

The knee-chest position does not improve the efficacy of ipecac-induced emesis. Tandberg D, et al. **Am J Emerg Med** 1989 May;7(3):267–70
Increased nausea and vomiting induced by naloxone in patients receiving cancer chemotherapy. Kobrinsky NL, et al. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):206–8
Regulation of nausea and vomiting in cancer chemotherapy. A review with emphasis on opiate mediators. Kobrinsky NL. **Am J Pediatr Hematol Oncol** 1988 Fall;10(3):209–13 (51 ref.)
5-HT3 receptor antagonists injected into the area postrema inhibit cisplatin-induced emesis in the ferret. Higgins GA, et al. **Br J Pharmacol** 1989 May;97(1):247–55
Chemotherapy-related nausea and vomiting: etiology and management. Morrow GR. **CA** 1989 Mar–Apr;39(2):89–104 (39 ref.)
Efficacy of syrup of ipecac-induced emesis for emptying gastric contents. Vasquez TE, et al. **Clin Nucl Med** 1988 Sep;13(9):638–9
Selection of a gastric decontamination method for poisoning emergencies [editorial] Krenzelok EP. **Clin Pharm** 1989 Apr;8(4):294–5
Intravenous erythromycin lactobionate-induced severe nausea and vomiting. Seifert CF, et al. **DICP** 1989 Jan; 23(1):40–4 (19 ref.)
Nausea and vomiting after general anaesthesia with isoflurane, enflurane or fentanyl in combination with nitrous oxide and oxygen. Hovorka J, et al. **Eur J Anaesthesiol** 1988 May;5(3):177–82
Chemotherapy induced emesis may exacerbate the nephrotoxicity of combined ifosfamide/mesna and cisplatin chemotherapy. Cantwell BM, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):917–8
Pentobarbital's effect in a combination antiemetic regimen for cisplatin induced nausea and vomiting. Wheelock JB. **J Miss State Med Assoc** 1989 Jan;30(1):5–8
Chemotherapy induced emesis—mechanisms and treatment: a review. Edwards CM. **J R Soc Med** 1988 Nov; 81(11):658–62 (26 ref.)
Emesis induced by cancer chemotherapeutic agents in the Suncus murinus: a new experimental model. Matsuki N, et al. **Jpn J Pharmacol** 1988 Oct;48(2):303–6
Nausea and vomiting after general anaesthesia [editorial] [see comments] **Lancet** 1989 Mar 25;1(8639):651–2. **Comment in:** Lancet 1989 May 6;8645:1016
Midazolam: an effective antiemetic agent for cytotoxic chemotherapy [letter] Olynyk JK, et al. **Med J Aust** 1989 Apr 17;150(8):466
Reserpine, para-chlorophenylalanine and fenfluramine antagonise cisplatin-induced emesis in the ferret. Barnes JM, et al. **Neuropharmacology** 1988 Aug;27(8):783–90
Anticipatory nausea and vomiting: prevalence and predictors in chemotherapy patients. Alba E, et al. **Oncology** 1989; 46(1):26–30
Betamethasone-dixyrazine combination versus high-dose metoclopramide as antiemetic treatment in doxorubicin and cisplatin chemotherapy. Sorbe B, et al. **Radiother Oncol** 1989 Jun;15(2):161–7
Corticosteroids as antiemetics. Aspro MS. **Recent Results Cancer Res** 1988;108:102–11 (48 ref.)
Hypnotherapy as antiemetic treatment in cancer chemotherapy. Fortuin AA. **Recent Results Cancer Res** 1988;108:112–6 (4 ref.)
Controlling emesis in patients receiving cancer chemotherapy. Gralla RJ, et al. **Recent Results Cancer Res** 1988;108:89–101 (50 ref.)
Commentary on a review on the mechanism of ackee-induced vomiting sickness. Kean EA. **West Indian Med J** 1988 Sep;37(3):139–42
[Nausea and vomiting induced by anticancer chemotherapy: mechanisms and prevention] Bonneterre J, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):163–4 **(Fre)**
[Complaints in the postoperative phase related to anesthetics] Guggenberger H, et al. **Anaesthesist** 1988 Dec; 37(12):746–51 (Eng. Abstr.) **(Ger)**
[Management of vomiting induced by polychemotherapy in Hodgkin's disease] Berényi E, et al. **Orv Hetil** 1989 Jun 25;130(26):1383–6 (Eng. Abstr.) **(Hun)**
[Antiblastic agent-induced vomiting: possibilities of its prevention and alizapride therapy] Petrella V, et al. **Minerva Med** 1989 Apr;80(4):389–92 (Eng. Abstr.) **(Ita)**
[Adverse reactions to carcinostatics and countermeasures] Nakao I. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1099–107 (Eng. Abstr.) **(Jpn)**
[Emetic and catalepsy-inducing actions of buflomedil] Koda H, et al. **Nippon Yakurigaku Zasshi** 1988 Dec;92(6):375–9 (Eng. Abstr.) **(Jpn)**
[Vomiting and diarrhea are the most common symptoms in children who drink water with high levels of copper] Pettersson R, et al. **Lakartidningen** 1989 Jun 21; 86(25):2361–2 **(Swe)**

COMPLICATIONS

Computed tomography of mediastinal hematoma secondary to unusual esophageal laceration: a Boerhaave variant. Pezzulli FA, et al. **J Comput Assist Tomogr** 1989 Jan–Feb; 13(1):129–31
Enteropathy and renal involvement in an infant with evidence of widespread autoimmune disturbance. Mitton SG, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr; 8(3):397–400
Ictus emeticus [letter] Howell SJ. **Neurology** 1989 Mar; 39(3):457–8

DIAGNOSIS

[Diagnostic difficulties in a case of Weber-Christian disease with predominant digestive tract symptoms] Szymański Z, et al. **Wiad Lek** 1988 May 1;41(9):576–9 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Haloperidol and lorazepam for the treatment of nausea and vomiting associated with the treatment of intractable migraine headaches [letter] Backonja M, et al. **Arch Neurol** 1989 Jul;46(7):724
Mechanisms and management of chemotherapy-induced nausea and vomiting. Allan SG. **Blood Rev** 1987 Mar; 1(1):50–7 (68 ref.)
The anti-emetic potential of the 5-hydroxytryptamine3 receptor antagonist BRL 43694. Bermudez J, et al. **Br J Cancer** 1988 Nov;58(5):644–50
Studies of prochlorperazine as a buccal tablet (Buccastem) and an oral tablet (Stemetil) for the treatment of dizziness, nausea or vomiting in a general practice setting. Ward AE. **Br J Clin Pract** 1988 Jun;42(6):228–32
Prognostic factors influencing cisplatin-induced emesis. Definition and validation of a predictive logistic model. Pollera CF, et al. **Cancer** 1989 Sep 1;64(5):1117–22
Does parenteral magnesium sulfate have an antiemetic effect during chemotherapy with cis-platinum? Ballmer PE, et al. **Cancer Chemother Pharmacol** 1989;24(2):109–12
Myths of antiemetic administration. Peters CA. **Cancer Nurs** 1989 Apr;12(2):102–6
Recent advances in the management of nausea and vomiting caused by antineoplastic agents. Merrifield KR, et al. **Clin Pharm** 1989 Mar;8(3):187–99 (68 ref.)
Domperidone: an alternative to metoclopramide [published erratum appears in Drug Ther Bull 1988 Aug 22;26(17):68] **Drug Ther Bull** 1988 Jul 25;26(15):59–60
Methylprednisolone and chlorpromazine in patients receiving cancer chemotherapy: a prospective non-randomized study. Gez E, et al. **J Chemother** 1989 Apr;1(2):140–3
Oh, what a tangled web. Grunberg SM. **J Clin Oncol** 1989 Jun;7(6):691–3

Control of cisplatin-induced delayed emesis with metoclopramide and dexamethasone: a randomized controlled trial. Shinkai T, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):40–4

Ondansetron with and without dexamethasone to treat chemotherapy-induced emesis [letter] Cunningham D, et al. **Lancet** 1989 Jun 10;1(8650):1323

Antiemetic efficacy of escalating doses of alizapride against chemotherapy-induced emesis. Abad-Esteve A, et al. **Oncology** 1989;46(4):235–7

Double-blind randomized cross-over trial of dexamethasone and prochlorperazine as anti-emetics for cancer chemotherapy. Goldstein D, et al. **Oncology** 1989; 46(2):105–8

Effective control of moderate-dose cisplatin-induced emesis by a short-course regimen including metoclopramide, chlorpromazine and hydrocortisone: results of a randomized trial with metoclopramide alone. Pollera CF, et al. **Oncology** 1989;46(4):238–44

Antiemetic prophylaxis of cancer chemotherapy-induced nausea and vomiting with cinnarizine and lorazepam. Wilder-Smith CH, et al. **Oncology** 1989;46(3):169–72

Blockade of 5-hydroxytryptamine3 receptors prevents cisplatin-induced but not motion- or xylazine-induced emesis in the cat. Lucot JB. **Pharmacol Biochem Behav** 1989 Jan;32(1):207–10

Prodromal effects of radiation: pathways, models, and protection by antiemetics. Harding RK. **Pharmacol Ther** 1988;39(1–3):335–45 (79 ref.)

Vomiting, chemoreceptor trigger zone, and dopamine [letter] Shen WW. **Psychosomatics** 1989 Winter;30(1):118–9

[Drug treatment of nausea and vomiting caused by cancer chemotherapy] Havsteen H, et al. **Ugeskr Laeger** 1989 Feb 13;151(7):430–4 (Eng. Abstr.) **(Dan)**

[Comparison of the antiemetic effectiveness of high-dose corticosteroids with synacthene in nausea induced by chemotherapy: results of a randomized study] Brice P, et al. **Bull Cancer (Paris)** 1989;76(6):637–42 (Eng. Abstr.) **(Fre)**

[A phase III trial comparing the antiemetic activity of tetracosactide with dexamethasone in combination with metoclopramide, diphenhydramine and clorazepate during chemotherapy including cisplatin] Culine S, et al. **Bull Cancer (Paris)** 1989;76(6):583–9 (Eng. Abstr.) **(Fre)**

[Vomiting. Causes and therapy] Astheimer W, et al. **Med Monatsschr Pharm** 1989 Feb;12(2):54–9 (12 ref.) **(Ger)**

[Antiemetic and antinauseant effect of alizapride in patients subjected to antiblastic infusion chemotherapy in a day-hospital regime] Cicchetti F, et al. **G Ital Oncol** 1989 Jan–Mar;9(1):18–21 (Eng. Abstr.) **(Ita)**

[Amelioration of cisplatin-induced vomiting and anorexia by methylprednisolone] Matsumoto I, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):833–8 (Eng. Abstr.) **(Jpn)**

[Treatment of vomiting induced by cytostatic agents] Díaz-Rubio E. **Med Clin (Barc)** 1989 Jun 10;93(2):54–7 (28 ref.) **(Spa)**

[Comparative study on the tolerance and efficacy of high doses of metoclopramide and clebopride in vomiting induced by cisplatin] Martín M, et al. **Med Clin (Barc)** 1989 Jun 10;93(2):50–3 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Postoperative nausea and vomiting. A comparison of sufentanil, nitrous oxide, and isoflurane. Bloomfield E, et al. **Cleve Clin J Med** 1988 Nov–Dec;55(6):549–52

Nausea and vomiting in early pregnancy. Vellacott ID, et al. **Int J Gynaecol Obstet** 1988 Aug;27(1):57–62

Incidence and duration of chemotherapy-induced nausea and vomiting in the outpatient oncology population. Lindley CM, et al. **J Clin Oncol** 1989 Aug;7(8):1142–9

[Occurrence of postoperative nausea and vomiting] Gelett S, et al. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2731–2 (Eng. Abstr.) **(Nor)**

ETIOLOGY

Evaluation of the vomiting infant. Foley LC, et al. **Am J Dis Child** 1989 Jun;143(6):660–1

Gallstone emesis [letter] Shalowitz JI. **Am J Gastroenterol** 1989 Mar;84(3):334–6 (21 ref.)

The oculo-emetic reflex. A rationalisation of postophthalmic anaesthesia vomiting. van den Berg AA, et al. **Anaesthesia** 1989 Feb;44(2):110–7

Symptoms and responses to chemotherapy in adult Malawians admitted to hospital with Plasmodium falciparum malaria. Harries AD, et al. **Ann Trop Med Parasitol** 1988 Oct;82(5):511–2

"Vomiting during the taking of dental impressions" [letter] **Br Dent J** 1988 Oct 8;165(7):241

Vomiting during the taking of dental impressions. Two case reports of the use of psychological techniques. Muir JD, et al. **Br Dent J** 1988 Aug 20;165(4):139–41

Nitrous oxide does not increase nausea and vomiting following gynaecological laparoscopy. Hovorka J, et al. **Can J Anaesth** 1989 Mar;36(2):145–8

Post-traumatic vomiting in children [letter] Masuzawa H. **Childs Nerv Syst** 1988 Aug;4(4):198

Intracranial tumors. Vomiting as a presenting sign. A gastroenterologist's perspective. Squires RH Jr. **Clin Pediatr (Phila)** 1989 Aug;28(8):351–4

Projectile vomiting in a three month old boy. Castro R, et al. **Del Med J** 1989 May;61(5):245–6

Vomiting during OGTT in third trimester of pregnancy. Fachnie JD, et al. **Diabetes Care** 1988 Nov–Dec;11(10):818

Duodenal diverticulum as cause of cyclic vomiting [letter] Meyers FA, et al. **Dig Dis Sci** 1989 Jul;34(7):1148–9

Ictus emeticus and the insular cortex. Fiol ME, et al. **Epilepsy Res** 1988 Mar–Apr;2(2):127–31

Benign nocturnal childhood occipital epilepsy: a new syndrome with nocturnal seizures, tonic deviation of the eyes, and vomiting. Panayiotopoulos CP. **J Child Neurol** 1989 Jan;4(1):43–9

Vomiting as an ictal manifestation of epileptic seizures and syndromes. Panayiotopoulos CP. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1448–51

Nausea and vomiting after general anaesthesia [letter] Dundee JW, et al. **Lancet** 1989 May 6;1(8645):1016

Campylobacter gastritis and vomiting [letter] Mohiuddin J, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1502

Oncologist-induced vomiting: the Igvid syndrome? [letter] Divgi AB. **N Engl J Med** 1989 Jan 19;320(3):189–90

Cyclic vomiting and the slit ventricle syndrome. Coker SB. **Pediatr Neurol** 1987 Sep–Oct;3(5):297–9

Mechanisms of radiation-induced emesis in the dog. Carpenter DO, et al. **Pharmacol Ther** 1988;39(1–3):367–71

[Differential diagnosis of vomiting] Lux G. **Fortschr Med** 1988 Aug 10;106(23):477–8 (0 ref.) (Eng. Abstr.) **(Ger)**

[Asthenia, vomiting, weight loss (clinical conference)] Steiner A, et al. **Schweiz Rundsch Med Prax** 1988 Dec 20; 77(51):1410–2 (Eng. Abstr.) **(Ger)**

[Various physiological characteristics of primary radiation reaction and its apomorphine model] Malakhovskii VN, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):77–81 (Eng. Abstr.) **(Rus)**

[Acute onset of abdominal pain and vomiting in a woman treated with anticoagulants] Arrazola García J, et al. **Rev Clin Esp** 1989 Feb;184(3):151–3 **(Spa)**

MICROBIOLOGY

Rotavirus in vomit [letter] Youngs ER, et al. **J Infect** 1989 Jan;18(1):99

PHYSIOPATHOLOGY

Functional localization of specific receptors mediating gastrointestinal motor correlates of vomiting. Lang IM, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G92–9

Area postrema: cholinergic and noradrenergic regulation of emesis. A new concept. Beleslin DB, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):107–15

Central motor program for relaxation of periesophageal diaphragm during the expulsive phase of vomiting. Miller AD, et al. **Brain Res** 1988 Jul 26;456(2):367–70

Postprandial antral hypomotility in patients with idiopathic nausea and vomiting. Kerlin P. **Gut** 1989 Jan;30(1):54–9

Idiopathic cyclic nausea and vomiting—a disorder of gastrointestinal motility? Abell TL, et al. **Mayo Clin Proc** 1988 Dec;63(12):1169–75

Ablation of the area postrema and emesis. Jovanović-Mićić D, et al. **Metab Brain Dis** 1989 Mar;4(1):55–60

Area postrema: chemoreceptor circumventricular organ of the medulla oblongata. Borison HL. **Prog Neurobiol** 1989; 32(5):351–90 (329 ref.)

Comments on the Borison-Wang model of emesis. Grant VL, et al. **Psychopharmacology (Berlin)** 1988;96(2):278–9

PREVENTION & CONTROL

Alizapride in the prevention of postoperative vomiting. A double-blind comparison. Vanacker B, et al. **Acta Anaesthesiol Belg** 1988;39(4):247–50

Double-blind comparison of transdermal scopolamine, droperidol and placebo against postoperative nausea and vomiting. Tigerstedt I, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):454–7

Antiemetic activity of high-dose metoclopramide combined with methylprednisolone versus metoclopramide alone in dacarbazine-treated cancer patients. A randomized double-blind study of the Italian Oncology Group for Clinical Research. Basurto C, et al. **Am J Clin Oncol** 1989 Jun;12(3):235–8

Dose-ranging antiemetic trial of high-dose oral metoclopramide. Tyson LB, et al. **Am J Clin Oncol** 1989 Jun;12(3):239–43

Preoperative transdermal hyoscine for the prevention of postoperative nausea and vomiting. Wilkinson AR, et al. **Anaesth Intensive Care** 1989 Aug;17(3):285–9

Incidence of emesis and postanesthetic recovery after strabismus surgery in children: a comparison of droperidol and lidocaine. Christensen S, et al. **Anesthesiology** 1989 Feb; 70(2):251–4

Influence of neostigmine on postoperative vomiting. King MJ, et al. **Br J Anaesth** 1988 Oct;61(4):403–6

Pharmacokinetics and anti-emetic efficacy of BRL43694, a new selective 5HT-3 antagonist. Cassidy J, et al. **Br J Cancer** 1988 Nov;58(5):651–3

Metoclopramide versus metoclopramide and lorazepam. Superiority of combined therapy in the control of cisplatin-induced emesis. Gordon CJ, et al. **Cancer** 1989 Feb 1;63(3):578–82

A prospective, randomized double-blind trial comparing metoclopramide alone with metoclopramide plus dexamethasone in preventing emesis induced by high-dose cisplatin. Parikh PM, et al. **Cancer** 1988 Nov 15; 62(10):2263–6

A phase I study of a new 5HT3-receptor antagonist, BRL43694A, an agent for the prevention of chemotherapy-induced nausea and vomiting. Falkson G, et al. **Cancer Chemother Pharmacol** 1989;24(3):193–6

The efficacy and safety of GR38032F in the prophylaxis of ifosfamide-induced nausea and vomiting. Green JA, et al. **Cancer Chemother Pharmacol** 1989;24(2):137–9

GR38032F, a 5HT3 receptor antagonist, in the prophylaxis of acute cisplatin-induced nausea and vomiting. Marty M, et al. **Cancer Chemother Pharmacol** 1989;23(6):389–91

Hypothesis: a new basis for sensory-behavioral pretreatments to ameliorate radiation therapy-induced nausea and vomiting? Blum RH. **Cancer Treat Rev** 1988 Sep; 15(3):211–27 (66 ref.)

Safety and antiemetic effects of metoclopramide in metrizamide myelography. Goldsmith TL, et al. **Clin Pharm** 1987 Oct;6(10):807–10

The efficacy of GR38032F, an antagonist of 5-hydroxytryptamine-3 (5-HT3) in the prophylaxis of cisplatin (CDDP)-induced nausea and vomiting [letter] de Haan LD, et al. **Eur J Cancer Clin Oncol** 1988 Aug; 24(8):1383–4

Effect of Nagarmotha (Cyperus rotundus Linn) on reserpine-induced emesis in pigeons [letter] Shinde S, et al. **Indian J Physiol Pharmacol** 1988 Jul–Sep;32(3):229–30

Self-regulation treatment to reduce the aversiveness of cancer chemotherapy. Kaufman KL, et al. **J Adolesc Health Care** 1989 Jul;10(4):323–7

Dose ranging phase I study of the serotonin antagonist GR38032F for prevention of cisplatin-induced nausea and vomiting. Grunberg SM, et al. **J Clin Oncol** 1989 Aug; 7(8):1137–41

GR 38032F (GR-C507/75): a novel compound effective in the prevention of acute cisplatin-induced emesis. Hesketh PJ, et al. **J Clin Oncol** 1989 Jun;7(6):700–5

Controlling delayed vomiting: double-blind, randomized trial comparing placebo, dexamethasone alone, and metoclopramide plus dexamethasone in patients receiving cisplatin. Kris MG, et al. **J Clin Oncol** 1989 Jan;7(1):108–14

BRL 43694: a novel antiemetic to prevent nausea and vomiting induced by chemotherapy [letter] Joss RA, et al. **J Natl Cancer Inst** 1988 Oct 19;80(16):1340–1

Phase II trials of the serotonin antagonist GR38032F for the control of vomiting caused by cisplatin. Kris MG, et al. **J Natl Cancer Inst** 1989 Jan 4;81(1):42–6

Exposure plus prevention of bingeing vs. exposure plus prevention of vomiting in bulimia nervosa. A crossover study. Schmidt U, et al. **J Nerv Ment Dis** 1989 May; 177(5):259–66

Antiemetic therapy for chemotherapy-induced vomiting: metoclopramide, benztropine, dexamethasone, and lorazepam regimen compared with chlorpromazine alone. Marshall G, et al. **J Pediatr** 1989 Jul;115(1):156–60

Acupuncture prophylaxis of cancer chemotherapy-induced sickness. Dundee JW, et al. **J R Soc Med** 1989 May; 82(5):268–71

Nausea and vomiting after general anaesthesia [letter] Millar JM. **Lancet** 1989 Jun 17;1(8651):1400

BRL 43694, a new 5HT3 receptor antagonist, prevents cisplatin-induced emesis in dogs. Bhandari P, et al. **Methods Find Exp Clin Pharmacol** 1989 May;11(5):361–3

Chlorpromazine and dexamethasone versus high-dose metoclopramide and dexamethasone in patients receiving cancer chemotherapy, particularly cis-platinum: a prospective randomized crossover study. Gez E, et al. **Oncology** 1989;46(3):150–4

A preliminary report on the efficacy of hypnosis to control anticipatory nausea and vomiting caused by cancer chemotherapy. Axelrod A, et al. **Prog Clin Biol Res** 1988; 278:147–50

Use of Motilium in the perioperative period from the aspect of the anaesthesiologist. Fister T. **Ther Hung** 1988; 36(2):88–91

Use of Motilium with gastrokinetic and anti-emetic action in outpatients. Porkoláb E. **Ther Hung** 1988;36(3):132–5

Effect of domperidone on postoperative vomiting and dyspepsia aggravated by operation. Takács G. **Ther Hung** 1988;36(3):119–22

[Transdermal scopolamine to prevent postoperative nausea and vomiting after uterine curettage and termination of pregnancy. A double-blind clinically controlled study with placebo] Jespersen TW, et al. **Ugeskr Laeger** 1989 May 15;151(20):1246–8 (Eng. Abstr.) **(Dan)**

[The effect of metoclopramide on postoperative nausea and vomiting] Vollmer-Larsen B, et al. **Ugeskr Laeger** 1988 Jan 18;150(3):154–5 (Eng. Abstr.) **(Dut)**

[BRL 43694A—a 5-hydroxytryptamine receptor blocker as an antiemetic in cytostatic therapy] Joss R, et al. **Schweiz Med Wochenschr** 1989 Jun 10;119(23):831–4 (Eng. Abstr.) **(Ger)**

[Alizapride vs metoclopramide in the control of emesis induced by chemotherapy] Gioffrè Florio MA, et al. **G Ital Oncol** 1987 Oct–Dec;7(4):205–7 (Eng. Abstr.) **(Ita)**

[Alizapride versus placebo in premedication for esophagogastroduodenoscopy. Double-blind clinical study. Experimental research in vitro] Cosentino F, et al. **Minerva Dietol Gastroenterol** 1989 Jan–Mar;35(1):35–7 (Eng. Abstr.) **(Ita)**

[Antiemetic efficacy of betamethasone versus betamethasone

combined with metoclopramide in cisplatin-treated cancer patients] Kagami Y, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 1):807–10 (Eng. Abstr.) **(Jpn)**

[Effect of medical vagotomy on the CDDP induced nausea and vomiting evaluated by the chemotherapy-vomiting time (CV time)] Chen JT, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1359–64 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Rumination in patients with eating disorders [letter] Larocca FE. **Am J Psychiatry** 1988 Dec;145(12):1610

The unseen tears of children: a Chinese boy who vomited for 14 months. Wong CK. **Can J Psychiatry** 1988 Nov; 33(8):751–3

Psychogenic vomiting among female Asian migrants to the United Kingdom. Clarke DJ, et al. **Int J Soc Psychiatry** 1988 Autumn;34(3):221–9

Can children understand and use a rating scale to quantify somatic symptoms: Assessment of nausea and vomiting as a model. Zeltzer LK, et al. **J Consult Clin Psychol** 1988 Aug;56(4):567–72

Vomiting and nausea in the first 12 weeks of pregnancy. Iatrakis GM, et al. **Psychother Psychosom** 1988;49(1):22–4

THERAPY

Hypnosis in the management of symptoms in a young girl with malignant astrocytoma: a challenge to the therapist. LaClave LJ, et al. **Int J Clin Exp Hypn** 1989 Jan;37(1):6–14

Rumination in pediatric populations: a behavioral analysis. Winton AS, et al. **J Am Acad Child Psychiatry** 1983 May; 22(3):269–75 (54 ref.)

Behavioral treatment of night bingeing and rumination in an adult case of bulimia nervosa. Williamson DA, et al. **J Behav Ther Exp Psychiatry** 1989 Mar;20(1):73–7

The role of attention in the elimination of chronic, life-threatening vomiting. Kelly MB, et al. **J Ment Defic Res** 1988 Oct;32 (Pt 5):425–31

Inhalation marijuana as an antiemetic for cancer chemotherapy. Vinciguerra V, et al. **N Y State J Med** 1988 Oct;88(10):525–7

Assessing children with chalasia: rule out gastroesophageal reflux. Gance-Cleveland B, et al. **Nurse Pract** 1989 May; 14(5):20–2, 25–6, 29

Combined medical and psychological treatment of postchemotherapy nausea and vomiting: a case study. Booraem CD, et al. **Psychol Rep** 1989 Aug;65(1):187–93

Comment on Starin and Fuqua's (1987) review of research on rumination and vomiting. Mulick JA, et al. **Res Dev Disabil** 1988;9(4):433–40

VETERINARY

Evidence for the involvement of alpha 2-adrenoceptors in the emetic action of xylazine in cats. Hikasa Y, et al. **Am J Vet Res** 1989 Aug;50(8):1348–51

What is your diagnosis? Case 2. Intraluminal filling defects in the proventriculus and ventriculus. Calle PP. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1229–31

Gastrointestinal emergencies: acute vomiting. Kirby R, et al. **Semin Vet Med Surg (Small Anim)** 1988 Nov;3(4):256–64 (17 ref.)

["Vomiting" in psittacines] **Tijdschr Diergeneeskd** 1988 Sep 15;113(18):1022–4 **(Dut)**

VOMITING, ANTICIPATORY

ETIOLOGY

Prevalence, predictors, and course of anticipatory nausea in women receiving adjuvant chemotherapy for breast cancer. Andrykowski MA, et al. **Cancer** 1988 Dec 15; 62(12):2607–13

Anticipatory nausea and vomiting: does it remain a significant clinical problem? Stefanek ME, et al. **Cancer** 1988 Dec 15; 62(12):2654–7

Etiology and treatment of the psychological side effects associated with cancer chemotherapy: a critical review and discussion. Carey MP, et al. **Psychol Bull** 1988 Nov; 104(3):307–25 (104 ref.)

THERAPY

The development and management of chemotherapy-related anticipatory nausea and vomiting. Jacobsen PB, et al. **Cancer Invest** 1988;6(3):329–36 (40 ref.)

Anticipatory nausea [editorial] Morrow GR. **Cancer Invest** 1988;6(3):327–8

VON GIERKE'S DISEASE see GLYCOGEN STORAGE DISEASE TYPE I

VON WILLEBRAND FACTOR

Characterization of von Willebrand factor in factor VIII concentrates. Fricke WA, et al. **Am J Hematol** 1989 May; 31(1):41–5

Invertebrate vitellogenin is homologous to human von Willebrand factor [letter] Baker ME. **Biochem J** 1988 Dec 15;256(3):1059–61

Factor VIII-von Willebrand factor in haemolytic uraemic syndrome [letter] Pasi KJ, et al. **BMJ** 1989 Mar 4; 298(6673):603

Molecular and cellular biology of von Willebrand factor. Handin RI, et al. **Prog Hemost Thromb** 1989;9:233–59 (137 ref.)

[Biology of von-Willebrand factor] Ramos F, et al. **Sangre (Barc)** 1988 Jun;33(3):211–9 (116 ref.) **(Spa)**

ANALOGS & DERIVATIVES

Asialo von Willebrand factor enhances platelet adhesion to vessel subendothelium. Bastida E, et al. **Thromb Haemost** 1988 Aug 30;60(1):30–4

Conditions influencing the interaction of asialo von Willebrand factor with human platelets—the effects of external ionized calcium concentration and the role of arachidonate pathway. Cattaneo M, et al. **Thromb Haemost** 1988 Oct 31;60(2):280–8

ANALYSIS

Coagulation studies in thrombotic thrombocytopenic purpura, with special reference to von Willebrand factor and protein S. Takahashi H, et al. **Am J Hematol** 1989 Jan;30(1):14–21

Plasma and platelet von Willebrand factor defects in uremia. Gralnick HR, et al. **Am J Med** 1988 Dec;85(6):806–10

Expression of von Willebrand factor in plasma and platelets of cats. Waters DC, et al. **Am J Vet Res** 1989 Feb; 50(2):201–4

Increased plasma concentration of von Willebrand factor in insulin dependent diabetics with incipient nephropathy. Jensen T. **BMJ** 1989 Jan 7;298(6665):27–8

Fetal and neonatal von Willebrand factor (vWF) is unusually large and similar to the vWF in patients with thrombotic thrombocytopenic purpura. Weinstein MJ, et al. **Br J Haematol** 1989 May;72(1):68–72

Multimeric composition of plasma von Willebrand factor in chronic myeloproliferative disorders. Tatewaki W, et al. **Clin Lab Haematol** 1988;10(4):417–25

Decreased fibrinolytic capacity and increased von Willebrand factor levels as indicators of endothelial cell dysfunction in patients with lupus anticoagulant. Nilsson TK, et al. **Clin Rheumatol** 1989 Mar;8(1):58–63

Canine platelet von Willebrand factor: quantification and multimeric analysis. McCarroll DR, et al. **Exp Hematol** 1988 Dec;16(11):929–37

The use of antiproteolytic mixture fails to modify the abnormal von Willebrand factor pattern in myeloproliferative disease. Casonato A, et al. **Folia Haematol (Leipz)** 1988;115(6):881–6

Plasma estrogens, androgens, and von Willebrand factor in men on chronic hemodialysis. Baumann G, et al. **Int J Artif Organs** 1988 Nov;11(6):449–53

Immunoassay by particle counting for coagulation testing: application to the determination of antithrombin III, von Willebrand factor antigen (vWF:Ag) and plasminogen. Borque L, et al. **J Clin Chem Clin Biochem** 1989 Mar; 27(3):175–9

The effect of near-normoglycemic control on plasma factor VIII/von Willebrand factor and fibrin degradation products in insulin-dependent diabetic patients. Vukovich TC, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):84–9

Subendothelial matrix of cultured endothelial cells contains fully processed high molecular weight von Willebrand factor. Tannenbaum SH, et al. **J Lab Clin Med** 1989 Mar; 113(3):372–8

von Willebrand factor abnormalities in two patients with uraemia [letter] Rodeghiero F, et al. **Lancet** 1988 Oct 29; 2(8618):1016–7

Luminography—an alternative assay for detection of von Willebrand factor multimers. Schneppenheim R, et al. **Thromb Haemost** 1988 Oct 31;60(2):133–6

Abnormality of the N-terminal portion of von Willebrand factor in type IIA and IIC von Willebrand disease. Takahashi Y, et al. **Thromb Haemost** 1988 Dec 22; 60(3):498–505

Correlation between plasma levels of growth factors and von Willebrand factor. Nilsson J, et al. **Thromb Res** 1989 Apr 15;54(2):125–32

A rapid assay for von Willebrand factor [corrected and republished article originally printed in Thromb Res 1987 Jan 15;46(6):869–74] Zaleski A, et al. **Thromb Res** 1988 Aug 15;51(4):462–8

Amino acid analysis of human von Willebrand factor fragments cleaved by porcine calpain II. Nozaki H. **Tokai J Exp Clin Med** 1987 Nov;12(4):223–7

Effect of desmopressin acetate on bleeding times and plasma von Willebrand factor in Doberman pinscher dogs with von Willebrand's disease. Kraus KH, et al. **Vet Surg** 1989 Mar-Apr;18(2):103–9

[The level of factor VIII/von Willebrand and inhibitors in diabetic retinopathy] Petrunova N, et al. **Vutr Boles** 1988; 27(5):46–50 (Eng. Abstr.) **(Bul)**

[Plasma levels of von Willebrand factor in patients under integrated surgical-chemical therapy for ovarian cancer] Facchini V, et al. **Minerva Ginecol** 1988 Apr;40(4):231–4 (Eng. Abstr.) **(Ita)**

[Preoperative plasma levels of von Willebrand factor in patients with cervical carcinoma] Gadducci A, et al. **Minerva Ginecol** 1988 Mar;40(3):159–62 (Eng. Abstr.) **(Ita)**

[Acquired von Willebrand factor abnormalities in chronic myeloproliferative disorders] Tatewaki W, et al. **Rinsho Byori** 1989 Apr;Spec No 81:41–5 **(Jpn)**

[Von Willebrand factor in juvenile rheumatoid arthritis] Gromov AA, et al. **Pediatriia** 1989;(4):37–9 (Eng. Abstr.) **(Rus)**

[Diagnostic and prognostic significance of the contents of Willebrand factor in Lyell's and Stevens-Johnson syndromes] Rozhkova LE, et al. **Pediatriia** 1988;(12):41–2 **(Rus)**

BIOSYNTHESIS

von Willebrand factor biosynthesis and partitioning between constitutive and regulated pathways of secretion after thrombin stimulation. Mayadas T, et al. **Blood** 1989 Feb 15;73(3):706–11

Modulation of endothelial cell synthesis of von Willebrand factor by mononuclear cell products. Breit SN, et al. **Haemostasis** 1988;18(3):137–45

Biosynthesis of human von Willebrand factor. Verweij CL. **Haemostasis** 1988;18(4–6):224–45 (109 ref.)

Human hepatic sinusoidal endothelial cells in culture produce von Willebrand factor and contain Weibel-Palade bodies. Harrison RL, et al. **Liver** 1989 Aug;9(4):242–9

BLOOD

Relationship between human development and disappearance of unusually large von Willebrand factor multimers from plasma. Katz JA, et al. **Blood** 1989 May 15;73(7):1851–8

Enhanced proteolysis of plasma von Willebrand factor in thrombotic thrombocytopenic purpura and the hemolytic uremic syndrome. Mannucci PM, et al. **Blood** 1989 Aug 15;74(3):978–83

A reassessment of the bleeding time: association of age, hematocrit, platelet function, von Willebrand factor, and bleeding time thromboxane B2 with the length of the bleeding time. Gerrard JM, et al. **Clin Invest Med** 1989 Jun;12(3):165–71

DEFICIENCY

[Spontaneous post-partum inhibitor to factor VIII clotting anti- gen—a cause of life-threatening hemorrhage] Lutze G, et al. **Zentralbl Gynakol** 1989;111(3):167–72 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Factor VIII/von Willebrand factor abnormalities during L-asparaginase treatment in patients with acute lymphoblastic leukemia. Casonato A, et al. **Acta Haematol (Basel)** 1988;80(4):190–3

GENETICS

Possible effect of secretor locus on plasma concentration of factor VIII and von Willebrand factor. Orstavik KH, et al. **Blood** 1989 Mar;73(4):990–3

Alpha 1 chain of chick type VI collagen. The complete cDNA sequence reveals a hybrid molecule made of one short collagen and three von Willebrand factor type A-like domains. Bonaldo P, et al. **J Biol Chem** 1989 Apr 5; 264(10):5575–80

Expression of von Willebrand factor in porcine vessels: heterogeneity at the level of von Willebrand factor mRNA. Bahnak BR, et al. **J Cell Physiol** 1989 Feb;138(2):305–10

Effect of von Willebrand factor coexpression on the synthesis and secretion of factor VIII in Chinese hamster ovary cells. Kaufman RJ, et al. **Mol Cell Biol** 1989 Mar;9(3):1233–42

An EcoRI polymorphism in the human von Willebrand factor (vWF) gene. Ewerhardt B, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5416

An EcoRI polymorphism of the human von Willebrand factor cDNA (VWF). Lindstedt M, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2882

An EcoRI polymorphism of the human von Willebrand factor cDNA (VWF). Lindstedt M, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6435

Two additional TaqI RFLPs in von Willebrand factor gene (VWF) and pseudogene. Marchetti G, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3329

Molecular basis of human von Willebrand disease: analysis of platelet von Willebrand factor mRNA. Ginsburg D, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3723–7

IMMUNOLOGY

Localization within the 106 N-terminal amino acids of von Willebrand factor (vWF) of the epitope corresponding to a monoclonal antibody which inhibits vWF binding to factor VIII. Piétu G, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):618–26

The combined use of monoclonal antibody-based enzyme-linked immunosorbent assays (ELISA) for factor VIII antigen (VIII:Ag) and von Willebrand factor antigen (vWF:Ag) for the detection of carriers of haemophilia A. Purlong RA, et al. **Clin Lab Haematol** 1988;10(3):295–305

Induced antibodies to von Willebrand factor. Hessel B, et al. **Haemostasis** 1989;19(5):284–91

A monoclonal antibody to von Willebrand factor (vWF) inhibits factor VIII binding. Localization of its antigenic determinant to a nonadecapeptide at the amino terminus of the mature vWF polypeptide. Bahou WF, et al. **J Clin Invest** 1989 Jul;84(1):56–61

Successful treatment of an acquired von Willebrand factor antibody by extracorporeal immunoadsorption [letter] Uehlinger J, et al. **N Engl J Med** 1989 Jan 26;320(4):254–5

Behaviour of von Willebrand factor antigen in follow-up of polymyalgia rheumatica/giant cell arteritis. Ciompi ML, et al. **Scand J Rheumatol** 1988;17(6):491–5

Plasma collagen cofactor correlates with von Willebrand factor antigen and ristocetin cofactor but not with bleeding time. Aihara M, et al. **Thromb Haemost** 1988 Jun 16; 59(3):485–90

[The biological nature of vascular endothelial cells in cutaneous tissues. Third Report: Immunohistochemical studies using MoAb against VWF] Suzuki Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Apr;98(4):409–15 (Eng. Abstr.) **(Jpn)**

[A fast and simple method for obtaining specific anti-von Willebrand factor IgG] Carmona E, et al. **Sangre (Barc)** 1989 Feb;34(1):63–6 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Multimeric composition of endothelial cell-derived von Willebrand factor. Tsai HM, et al. **Blood** 1989 Jun; 73(8):2074–6

Immunopurification of human factor VIII/vWF complex from plasma. Mejan O, et al. **Thromb Haemost** 1988 Jun 16;59(3):364–71

Visualization of the multimeric structure of von Willebrand factor by immunoenzymatic stain using avidin–peroxidase complex instead of avidin–biotin peroxidase complex. Farias C, et al. **Thromb Res** 1989 Mar 1;53(5):513–8

METABOLISM

Injury induces increase of von Willebrand factor in rat endothelial cells. Reidy MA, et al. **Am J Pathol** 1989 Apr; 134(4):857–64

Cryosupernatant regulates accumulation of unusually large vWF multimers from endothelial cells. Frangos JA, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1635–44

Endothelial cell–derived high molecular weight von Willebrand factor is converted into the plasma multimer pattern by granulocyte proteases. Tsai HM, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):980–5

The interaction between human blood–coagulation factor VIII and von Willebrand factor. Characterization of a high-affinity binding site on factor VIII. Leyte A, et al. **Biochem J** 1989 Feb 1;257(3):679–83

Trigramin: primary structure and its inhibition of von Willebrand factor binding to glycoprotein IIb/IIIa complex on human platelets. Huang TF, et al. **Biochemistry** 1989 Jan 24;28(2):661–6

Sialic acid prevents loss of large von Willebrand factor multimers by protecting against amino-terminal proteolytic cleavage. Berkowitz SD, et al. **Blood** 1988 Nov; 72(5):1790–6

Uncoordinated expression of fibrinogen compared with thrombospondin and von Willebrand factor in maturing human megakaryocytes. Cramer EM, et al. **Blood** 1989 Apr; 73(5):1123–9

Cleavage of human von Willebrand factor by porcine pancreatic elastase. Howard MA, et al. **Blood** 1989 Aug 1;74(2):673–81

Supranormal von Willebrand factor multimers in scleroderma. Mannucci PM, et al. **Blood** 1989 May 1; 73(6):1586–91

Inhibition of platelet–von Willebrand factor binding to platelets by adhesion site peptides. Parker RI, et al. **Blood** 1989 Sep;74(4):1226–30

Aurin tricarboxylic acid: a novel inhibitor of the association of von Willebrand factor and platelets. Phillips MD, et al. **Blood** 1988 Dec;72(6):1898–903

Temperature-sensitive steps in the secretory pathway for von Willebrand factor in endothelial cells. Roarke MC, et al. **Eur J Cell Biol** 1989 Apr;48(2):337–43

Evidence for a factor promoting the conversion of VWF from low and intermediate to high molecular mass polymers on the platelet membrane. Ferri A, et al. **FEBS Lett** 1989 Jun 5;249(2):362–6

In vitro multimerization of von Willebrand factor is triggered by low pH. Importance of the propolypeptide and free sulfhydryls. Mayadas TN, et al. **J Biol Chem** 1989 Aug 15;264(23):13497–503

Structure of the von Willebrand factor domain interacting with glycoprotein Ib. Mohri H, et al. **J Biol Chem** 1988 Dec 5;263(34):17901–4

Isolation and functional characterization of the von Willebrand factor–binding domain located between residues His1–Arg293 of the alpha-chain of glycoprotein Ib. Vicente V, et al. **J Biol Chem** 1988 Dec 5; 263(34):18473–9

Effects of calcium channel blockers on the endothelial release of von Willebrand factor after exercise in healthy subjects. Musumeci V, et al. **J Lab Clin Med** 1989 Apr;113(4):525–31

von Willebrand factor and the pathophysiology of thrombotic thrombocytopenia: from human studies to a new animal model. Moake JL. **Lab Invest** 1988 Oct; 59(4):415–7 (27 ref.)

Thrombotic thrombocytopenia with von Willebrand factor deficiency induced by botrocetin. An animal model. Sanders WE, et al. **Lab Invest** 1988 Oct;59(4):443–52

An immunoelectron microscopic study of von Willebrand factor in the thoracic duct endothelium of rats. Magari S, et al. **Lymphology** 1989 Jun;22(2):76–80

Differential proteolytic activation of factor VIII–von Willebrand factor complex by thrombin. Hill-Eubanks DC, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6508–12

Glycoprotein Ib has a partial role in platelet–von Willebrand factor collagen interaction. Aihara M, et al. **Thromb Haemost** 1988 Oct 31;60(2):182–7

Von Willebrand factor and mitral valve prolapse. Froom P, et al. **Thromb Haemost** 1988 Oct 31;60(2):230–1

A study of the effect of ethamsylate (Dicynene) on the bleeding time, von Willebrand factor level and fibrinolysis in patients with von Willebrand's disease. Hutton RA, et al. **Thromb Haemost** 1988 Dec 22;60(3):506–7

von Willebrand factor is an acute phase reactant in man. Pottinger BE, et al. **Thromb Res** 1989 Feb 15;53(4):387–94

Multimeric composition of plasma von Willebrand factor in chronic myelocytic leukaemia. Tatewaki W, et al. **Thromb Res** 1988 Oct 1;52(1):23–32

Human von Willebrand factor: the molecular glue of platelet plugs. Titani K, et al. **Trends Biochem Sci** 1988 Mar; 13(3):94–7 (27 ref.)

PHARMACOLOGY

Platelet aggregation induced by type IIb platelet von Willebrand factor. Gralnick HR, et al. **Br J Haematol** 1989 Feb;71(2):253–8

PHYSIOLOGY

Platelet function and ABO blood group. Sweeney JD, et al. **Am J Clin Pathol** 1989 Jan;91(1):79–81

Role for platelet von Willebrand factor in supporting platelet–vessel wall interactions in von Willebrand disease. Castillo R, et al. **Am J Hematol** 1989 Jul;31(3):153–8

Spontaneous platelet aggregation in type IIB Tampa von Willebrand disease is inhibited by the 52/48-kDa fragment of normal von Willebrand factor, which contains the GPIb binding domain. Saba HI, et al. **Am J Hematol** 1989 Mar; 30(3):150–3

Von Willebrand factor and von Willebrand's disease: a complex protein and a complex disease. Bona RD. **Ann Clin Lab Sci** 1989 May–Jun;19(3):184–9 (37 ref.)

von Willebrand factor and platelet function. Baruch D, et al. **Baillieres Clin Haematol** 1989 Jul;2(3):627–72 (218 ref.)

Role of von Willebrand factor in mediating platelet–vessel wall interaction at low shear rate; the importance of perfusion conditions. Badimon L, et al. **Blood** 1989 Mar; 73(4):961–7

Role of botrocetin in platelet agglutination: formation of an activated complex of botrocetin and von Willebrand factor. Read MS, et al. **Blood** 1989 Aug 15;74(3):1031–5

Inhibition of platelet adhesion to fibronectin, fibrinogen, and von Willebrand factor substrates by complex gangliosides. Santoro SA. **Blood** 1989 Feb;73(2):484–9

Failure of sodium pentobarbital anesthesia to alter 1-desamino-8-D-arginine vasopressin-induced elevations of plasma factor VIII/ von Willebrand factor in normal dogs. Johnstone IB, et al. **Can J Vet Res** 1988 Oct; 52(4):416–8

Platelet thrombus formation on collagen type I. A model of deep vessel injury. Influence of blood rheology, von Willebrand factor, and blood coagulation. Badimon L, et al. **Circulation** 1988 Dec;78(6):1431–42

The emergence of the endothelial cell lineage in the chick embryo can be detected by uptake of acetylated low density lipoprotein and the presence of a von Willebrand-like factor. Yablonka-Reuveni Z. **Dev Biol** 1989 Mar; 132(1):230–40

Inhibition of platelet–collagen interaction by propolypeptide of von Willebrand factor. Takagi J, et al. **J Biol Chem** 1989 Apr 15;264(11):6017–20

Von Willebrand factor promotes endothelial cell adhesion via an Arg-Gly-Asp-dependent mechanism. Dejana E, et al. **J Cell Biol** 1989 Jul;109(1):367–75

Inactivation of human factor VIII by activated protein C. Cofactor activity of protein S and protective effect of von Willebrand factor. Koedam JA, et al. **J Clin Invest** 1988 Oct;82(4):1236–43

IL-1 and related cytokines enhance thrombin-stimulated PGI2 production in cultured endothelial cells without affecting thrombin-stimulated von Willebrand factor secretion or platelet-activating factor biosynthesis. Zavoico GB, et al. **J Immunol** 1989 Jun 1;142(11):3993–9

Insolubilized von Willebrand factor and the initial events in hemostasis [editorial] Moake JL. **J Lab Clin Med** 1989 Jul; 114(1):1–3

Adhesion of platelets to purified solid-phase von Willebrand factor: effects of wall shear rate, ADP, thrombin, and ristocetin. Olson JD, et al. **J Lab Clin Med** 1989 Jul; 114(1):6–18

von Willebrand factor synthesized by endothelial cells from a patient with type IIB von Willebrand disease supports platelet adhesion normally but has an increased affinity for platelets. de Groot PG, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3793–7

Functional domains of von Willebrand factor involved in interactions with platelets and the subendothelium. Ruggeri ZM. **Prog Clin Biol Res** 1988;283:219–53 (164 ref.)

Further evidence of von Willebrand factor involvement in thrombotic thrombocytopenia purpura. Chediak J, et al. **Thromb Haemost** 1988 Aug 30;60(1):13–7

[Molecular structure and function of von Willebrand factor in blood coagulation and fibrinolysis] Fujimura Y. **Nippon Rinsho** 1989 Apr;47(4):836–43 **(Jpn)**

[von Willebrand factor and initiation of coagulation] Takahashi H. **Nippon Rinsho** 1989 Apr;47(4):746–51 **(Jpn)**

[Mechanisms of functional change of von Willebrand factor] Ramos F, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):588–94 (162 ref.) **(Spa)**

SECRETION

Polar secretion of von Willebrand factor by endothelial cells. van Buul-Wortelboer MF, et al. **Biochim Biophys Acta** 1989 May 10;1011(2–3):129–33

Storage and secretion of von Willebrand factor by endothelial cells. Reinders JH, et al. **Haemostasis** 1988;18(4–6):246–61 (42 ref.)

Complement proteins C5b-9 induce secretion of high molecular weight multimers of endothelial von Willebrand factor and translocation of granule membrane protein GMP-140 to the cell surface. Hattori R, et al. **J Biol Chem** 1989 May 25;264(15):9053–60

Stimulated secretion of endothelial von Willebrand factor is accompanied by rapid redistribution to the cell surface of the intracellular granule membrane protein GMP-140. Hattori R, et al. **J Biol Chem** 1989 May 15;264(14):7768–71

Differing polarity of the constitutive and regulated secretory pathways for von Willebrand factor in endothelial cells. Sporn LA, et al. **J Cell Biol** 1989 Apr;108(4):1283–9

Mediation of fibrin–induced release of von Willebrand factor from cultured endothelial cells by the fibrin beta chain. Ribes JA, et al. **J Clin Invest** 1989 Aug;84(2):435–42

von Willebrand factor release induced by endotoxin. Gralnick HR, et al. **J Lab Clin Med** 1989 Jan;113(1):118–22

Secretion of von Willebrand factor from platelets. Lopez-Fernandez MF, et al. **Methods Enzymol** 1989; 169:244–51

THERAPEUTIC USE

Abnormal proteolysis (DIC)—successful treatment with antithrombin III concentrate and e concentrate containing F XIII and native von Willebrand factor. Delshammar M, et al. **J Intern Med** 1989 Jan;225(1):21–7

[Treatment of a hemorrhagic syndrome in severe von Willebrand disease in the presence of circulating anti-von-Willebrand-factor antibody] Monteagudo J, et al. **Med Clin (Barc)** 1988 May 28;91(1):28–30 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Dark-field electron microscopy of platelet adhesive macromolecules. Slayter HS. **Methods Enzymol** 1989; 169:326–35

VON WILLEBRAND'S DISEASE

von Willebrand's disease in Sweden. Silwer J. **Acta Paediatr Scand Suppl** 1973;238:1–159

[Current knowledge on von Willebrand's disease] Fukui H. **Rinsho Ketsueki** 1988 Nov;29(11):1980–90 (42 ref.) (Eng. Abstr.) **(Jpn)**

[Mechanisms of functional change of von Willebrand factor] Ramos F, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):588–94 (162 ref.) **(Spa)**

BLOOD

Spontaneous platelet aggregation in type IIB Tampa von Willebrand disease is inhibited by the 52/48-kDa fragment of normal von Willebrand factor, which contains the GPIb binding domain. Saba HI, et al. **Am J Hematol** 1989 Mar; 30(3):150–3

Platelet aggregation induced by type IIb platelet von Willebrand factor. Gralnick HR, et al. **Br J Haematol** 1989 Feb;71(2):253–8

Plasma collagen cofactor correlates with von Willebrand factor antigen and ristocetin cofactor but not with bleeding time. Aihara M, et al. **Thromb Haemost** 1988 Jun 16; 59(3):485–90

Abnormality of the N-terminal portion of von Willebrand factor in type IIA and IIC von Willebrand disease. Takahashi Y, et al. **Thromb Haemost** 1988 Dec 22; 60(3):498–505

CLASSIFICATION

Von Willebrand factor and von Willebrand's disease: a complex protein and a complex disease. Bona RD. **Ann Clin Lab Sci** 1989 May–Jun;19(3):184–9 (37 ref.)

COMPLICATIONS

DDAVP and anaesthesia [letter] [see comments] Plumley MH. **Anaesthesia** 1988 Oct;43(10):898. **Comment in:** Anaesthesia 1989 Apr;44(4):363–4

Surgery in patients with von Willebrand's disease. Blombäck M, et al. **Br J Surg** 1989 Apr;76(4):398–400

Combined von Willebrand's disease and factor XII deficiency in a carrier of haemophilia B. Beard J, et al. **Clin Lab Haematol** 1989;11(2):139–41

Arthropathy in von Willebrand's disease [published erratum appears in Clin Rheumatol 1989 Jun;8(2):296] Macfarlane JD, et al. **Clin Rheumatol** 1989 Mar;8(1):98–102

HIV–serology and lymphocyte subsets in relation to therapy and clinical development in haemophiliacs. Böttiger B, et al. **Eur J Haematol** 1988 Nov;41(5):459–66

[Sclerosing of varicose veins in von Willebrand-Jürgens

syndrome] Schuler T. **Hautarzt** 1989 Apr;40(4):239–40 (Ger)

[Simultaneous occurrence of Sheehan syndrome and Willebrand disease] Altorjay I, et al. **Orv Hetil** 1988 Aug 14;129(33):1761–4 (35 ref.) (Eng. Abstr.) (Hun)

[Herpes and HIV infection in hemophilic subjects] Musso A, et al. **Minerva Pediatr** 1988 Nov;40(11):621–4 (Eng. Abstr.) (Ita)

[A case of ovarian bleeding with combined congenital deficiency of factor V and von Willebrand's disease] Era I, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun; 41(6):761–4 (Jpn)

[Hemostatic control in a patient with von Willebrand disease accompanied with idiopathic thrombocytopenic purpura] Kobayashi M, et al. **Rinsho Ketsueki** 1988 Sep; 29(9):1499–503 (Eng. Abstr.) (Jpn)

[Acquired von Willebrand syndrome associated with Hashitoxicosis and pernicious anemia combined] Takai Y, et al. **Rinsho Ketsueki** 1989 Mar;30(3):354–60 (30 ref.) (Eng. Abstr.) (Jpn)

[Characteristics of the course of hemorrhagic syndrome during pregnancy and labor in women with von Willebrand's disease] Sumskaia GF, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):30–3 (Eng. Abstr.) (Rus)

[Treatment of a hemorrhagic syndrome in severe von Willebrand disease in the presence of circulating anti–von–Willebrand–factor antibody] Monteagudo J, et al. **Med Clin (Barc)** 1988 May 28;91(1):28–30 (Eng. Abstr.) (Spa)

[Mastocytosis associated with von Willebrand's disease (letter)] Margalef N, et al. **Rev Clin Esp** 1989 Apr; 184(6):339–40 (Spa)

DIAGNOSIS

Unexplained bleeding in a patient with mechanical valve prostheses. Smith RE, et al. **Am J Med** 1988 Nov;85(5):748

Diagnosis and differentiation of von Willebrand's disease type II. Lenk H, et al. **Folia Haematol (Leipz)** 1988;115(4):495–8

DRUG THERAPY

Characterization of von Willebrand factor in factor VIII concentrates. Fricke WA, et al. **Am J Hematol** 1989 May; 31(1):41–5

Clinical effectiveness of desmopressin in a case of acquired von Willebrand's syndrome associated with benign monoclonal gammopathy. Castaman G, et al. **Biut** 1989 Apr;58(4):211–3

In vitro and in vivo characterization of a high–purity, solvent/detergent–treated factor VIII concentrate: evidence for its therapeutic efficacy in von Willebrand's disease. Mazurier C, et al. **Eur J Haematol** 1989 Jul; 43(1):7–14

The clinical significance of different routes of desmopressin (DDAVP) administration in various bleeding disorders. Mörsdorf S, et al. **Folia Haematol (Leipz)** 1988;115(4):503–7

EPIDEMIOLOGY

Frequency of different types of von Willebrand's disease in the GDR. Lenk H, et al. **Acta Med Scand** 1988; 224(3):275–80

ETIOLOGY

Rarity of large vessel disease in African diabetics—the role of anti–thrombin III [published erratum appears in East Afr Med J 1988 Sep;65(9):620] Onyemelukwe GC, et al. **East Afr Med J** 1988 Mar;65(3):160–4

GENETICS

Childhood haemostasis III: von Willebrand's disease. Han P. **J Singapore Paediatr Soc** 1988;30(1–2):46–50 (29 ref.)

Molecular basis of human von Willebrand disease: analysis of platelet von Willebrand factor mRNA. Ginsburg D, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3723–7

Carrier detection in severe (type III) von Willebrand disease using two intragenic restriction fragment length polymorphisms. Bahnak BR, et al. **Thromb Haemost** 1988 Oct 31;60(2):178–81

[Pre– and postpartum hemostasis in type II Willebrand–Jürgens syndrome] Lutze G, et al. **Z Gesamte Inn Med** 1989 Feb 15;44(4):117–20 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Acquired von Willebrand's syndrome with lupus–like serology. Igarashi N, et al. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):32–5

Differing susceptibilities of platelets from normal individuals and patients with von Willebrand's disease to attack by quinine– and quinidine–dependent antiplatelet antibodies. Pfueller SL, et al. **Thromb Haemost** 1989 Feb 28; 61(1):111–6

[The association of acquired Willebrand syndrome and monoclonal kappa immunoglobulin G—apropos of a case] Ben Abdeladhim A, et al. **Tunis Med** 1988 Feb;66(2):131–3 (8 ref.) (Eng. Abstr.) (Fre)

PHYSIOPATHOLOGY

Role for platelet von Willebrand factor in supporting platelet–vessel wall interactions in von Willebrand disease. Castillo R, et al. **Am J Hematol** 1989 Jul;31(3):153–8

Functional behavior of vessels from pigs with von Willebrand disease. Values of platelet deposition are identical to those obtained on normal vessels. Badimon L, et al. **Arteriosclerosis** 1989 Mar–Apr;9(2):184–8

von Willebrand factor synthesized by endothelial cells from a patient with type IIB von Willebrand disease supports platelet adhesion normally but has an increased affinity for platelets. de Groot PG, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3793–7

PSYCHOLOGY

[Problems of home and school environments of patients with hemophilia and other congenital hemorrhagic disorders in Olsztyn Province] Makowska K, et al. **Pediatr Pol** 1989 May;63(5):298–305 (Eng. Abstr.) (Pol)

THERAPY

Treatment of von Willebrand's disease and hypofibrinogenemia with single donor cryoprecipitate from plasma exchange donation. McLeod BC, et al. **Am J Hematol** 1989 Oct;32(2):112–6

High–dose intravenous gammaglobulin for acquired von Willebrand's disease [letter] Delannoy A, et al. **Br J Haematol** 1988 Nov;70(3):387

HIV seroconversion and AIDS related complex (ARC) after the recent use of haemoderivates in a patient with von Willebrand's disease [letter] Girolami A, et al. **Folia Haematol (Leipz)** 1989;116(2):235–7

Treatment of type III von Willebrand's disease with solvent/detergent–treated factor VIII concentrates. Gazengel C, et al. **Nouv Rev Fr Hematol** 1988;30(4):225–7

Effect of recombinant factor VIIa on the hemostatic defect in dogs with hemophilia A, hemophilia B, and von Willebrand disease. Brinkhous KM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1382–6

Studies on the prolonged bleeding time in von Willebrand's disease. Smiley RK, et al. **Thromb Res** 1989 Mar 1; 53(5):417–26

Use of a high–purity factor VIII concentrate (Hemate P) in von Willebrand's disease. Berntorp E, et al. **Vox Sang** 1989;56(4):212–7

[Obstetric procedure in severe von Willebrand–Jürgens syndrome in pregnancy] Stroppel G, et al. **Geburtshilfe Frauenheilkd** 1989 Jul;49(7):662–5 (Eng. Abstr.) (Ger)

VETERINARY

Platelet interaction with vessel wall and collagen in pigs with homozygous von Willebrand's disease associated with abnormal collagen aggregation. Badimon L, et al. **Thromb Haemost** 1989 Feb 28;61(1):57–64

Laboratory evaluation of hemorrhagic coagulopathies in small animal practice. Parry BW. **Vet Clin North Am Small Anim Pract** 1989 Jul;19(4):729–42 (29 ref.)

Effect of desmopressin acetate on bleeding times and plasma von Willebrand factor in Doberman pinscher dogs with von Willebrand's disease. Kraus KH, et al. **Vet Surg** 1989 Mar–Apr;18(2):103–9

VOYEURISM see under **PARAPHILIAS**

VP 16-213 see **ETOPOSIDE**

VULVA

A quantitative morphological examination of bovine vulval skin glands. Blazquez NB, et al. **J Anat** 1987 Dec; 155:153–63

ABNORMALITIES

A case of facio–genito–popliteal syndrome. Riley P. **Cent Afr J Med** 1988 Nov;34(11):277–8

Familial posterior labial fusion. Klein VR, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):500–3

Surgical correction of virilised female external genitalia. Engert J. **Prog Pediatr Surg** 1989;23:151–64

Surgery for abnormal vulvar and perineal conformation in the mare. Trotter GW, et al. **Vet Clin North Am [Equine Pract]** 1988 Dec;4(3):389–405 (18 ref.)

[Facio–genito–popliteal syndrome with incomplete manifestation. Cutaneous, linear and unilateral aplasia of the leg with genital involvement] Plantin P, et al. **Ann Dermatol Venereol** 1988;115(11):1125–6 (Fre)

DRUG EFFECTS

Vulvar hormonal receptor modifications during topical steroid treatment. Nardelli GB. **Clin Exp Obstet Gynecol** 1988;15(4):170–3

INJURIES

Accidental vulval injuries in childhood. West R, et al. **BMJ** 1989 Apr 15;298(6679):1002–3

["Intentional physical injury" in grand mal seizure] Lange E. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Feb; 41(2):112–3 (Eng. Abstr.) (Ger)

MICROBIOLOGY

Detection of human papillomavirus type 16 DNA and papillomavirus genus–specific antigens in vulva and cervix from patients with Bowenoid papulosis. Sugase M, et al. **Jpn J Cancer Res** 1989 Jan;80(1):19–23

[[Staphylococcus aureus producing toxic shock syndrome toxin 1 in the lower genital tract of the female] Puig de Centorbi ON, et al. **Rev Argent Microbiol** 1987 Apr–Jun; 19(2):47–54 (Eng. Abstr.) (Spa)

PATHOLOGY

Labial agglutination and herpes simplex type I infection [letter] Thompson C. **Am J Obstet Gynecol** 1988 Oct; 159(4):1016–7

Topical anaesthesia with lidocaine–prilocaine cream for vulval biopsy. Byrne MA, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):497–9

Crohn's disease of the vulva. Case report. Holohan M, et al. **Br J Obstet Gynaecol** 1988 Sep;95(9):943–5

Early stromal invasion of the vulva. Pickel H. **Eur J Gynaecol Oncol** 1989;10(2):97–101

Acantholytic dermatosis localized to the vulvocrural area. Cooper PH. **J Cutan Pathol** 1989 Apr;16(2):81–4

Cytology of the vulva. Dennerstein GJ. **J Reprod Med** 1988 Aug;33(8):703–4

[Diagnosis and therapy of dystrophic vulvar diseases] Lotze W. **Zentralbl Gynakol** 1988;110(16):1034–8 (Eng. Abstr.) (Ger)

[Relation of cytology and histology in vulvar physiology and pathology] Zarcone R, et al. **G Ital Oncol** 1987 Apr–Sep; 7(2–3):105–7 (Eng. Abstr.) (Ita)

[Precancerous lesions of the vulva] Houma M. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1671–6 (Eng. Abstr.) (Jpn)

[Optimal methods of treating vulvar dystrophies with special reference to precancerous conditions. II. Results of treatment] Józef S. **Przegl Lek** 1988;45(11):781–6 (Eng. Abstr.) (Pol)

[Vulvar dystrophies. Morphology and clinical aspects] Starzewski J. **Przegl Lek** 1988;45(5):459–64 (51 ref.) (Pol)

[The optimal method of treating vulval dystrophies with special reference to precancerous conditions. I. Morphologic and clinical characteristics] Starzewski J. **Przegl Lek** 1988;45(10):732–8 (Eng. Abstr.) (Pol)

PHYSIOLOGY

Prediction and detection of ovulation relationship between woman's observations of cervical mucus changes, thermic and echographic parameters of ovulation. Pagano G, et al. **Acta Eur Fertil** 1988 Sep–Oct;19(5):269–71

Electrical conductivity of reproductive tissue for detection of estrus in dairy cows. Smith JW, et al. **J Dairy Sci** 1989 Mar;72(3):693–701

PHYSIOPATHOLOGY

[Physiology of the skin of the vulva: new aspects] Elsner P, et al. **Hautarzt** 1989 Jul;40(7):411–7 (31 ref.) (Eng. Abstr.) (Ger)

SURGERY

Conservative management of extramammary Paget's disease of the vulva. Bergen S, et al. **Gynecol Oncol** 1989 May; 33(2):151–6

Resurfacing the vulva and vagina. Cronjé HS, et al. **Int J Gynaecol Obstet** 1988 Aug;27(1):113–8

Plastic repair of elongated, hypertrophic labia minora. A case report. Chavis WM, et al. **J Reprod Med** 1989 May; 34(5):373–5

[Prerequisites and possibilities of function preservation in therapy of vulvar cancer] Bender HG. **Gynakologe** 1988 Dec;21(4):289–93 (7 ref.) (Ger)

[Reconstructive measures in radical vulva operations] Knapstein PG, et al. **Gynakologe** 1988 Dec;21(4):294–7 (Ger)

[Perineoplasty for vulvar vestibulitis] Bornstein J, et al. **Harefuah** 1989 Jan 15;116(2):90–2 (Eng. Abstr.) (Heb)

[Study on the treatment of malignant vulvar diseases] Saito T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1683–8 (Eng. Abstr.) (Jpn)

VULVAR DISEASES

Vulvodynia. A multifactorial clinical problem. McKay M. **Arch Dermatol** 1989 Feb;125(2):256–62 (20 ref.)

New nomenclature for vulvar disease: International Society for the Study of Vulvar Disease [letter] Ridley CM, et al. **Hum Pathol** 1989 May;20(5):495–6

Proceedings of the ninth world congress of the International Society for the Study of Vulvar Disease. Queensland, Australia, September 1987. **J Reprod Med** 1988 Aug; 33(8):695–721

[Embryonal cysts of the vulva] Gwóźdź AZ. **Ginekol Pol** 1988 Apr;59(4):233–5 (Eng. Abstr.) (Pol)

BLOOD

[The measurement of plasma–free testosterone in normal menstrual females, pregnant females, post menopausal females and vulvar dystrophy] Yamaguchi A, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jun 20;64(6):482–8

(Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Necrotizing fasciitis of the vulva during chemotherapy. Hoffman MS, et al. Obstet Gynecol 1989 Sep;74(3 Pt 2):483–4

COMPLICATIONS

Sweet's syndrome, plantar pustulosis and vulval pustules. Keefe M, et al. Clin Exp Dermatol 1988 Sep;13(5):344–6

[Vaginism, whose problem? (letter)] Dony JM. Ned Tijdschr Geneeskd 1988 Aug 20;132(34):1594 (Dut)

CONGENITAL

Congenital anal fistula with normal anus. Brem H, et al. J Pediatr Surg 1989 Feb;24(2):183–5

DIAGNOSIS

Lichen sclerosus. Berth-Jones J, et al. Arch Dis Child 1989 Aug;64(8):1204–6 (17 ref.)

Recognising covert disease in women with chronic vulval symptoms attending an STD clinic: value of detailed examination including colposcopy. Byrne MA, et al. Genitourin Med 1989 Jan;65(1):46–9

Genital lichen sclerosus mistaken for child sexual abuse. Jenny C, et al. Pediatrics 1989 Apr;83(4):597–9

DRUG THERAPY

Our experience in the treatment of vulvar sclerous lichen. Conforti S, et al. Clin Exp Obstet Gynecol 1988; 15(4):178–80

The topical administration of steroids in the treatment of typical vulvar dystrophies. Gadducci A, et al. Clin Exp Obstet Gynecol 1989;16(1):12–5 (28 ref.)

A case of lichen sclerosus et atrophicus of the vulva effectively treated with oral etretinate. Yokota M, et al. J Dermatol (Tokyo) 1988 Aug;15(4):330–3

[Diagnosis and therapy of dystrophic vulvar diseases] Lotze W. Zentralbl Gynakol 1988;110(16):1034–8 (Eng. Abstr.) (Ger)

EPIDEMIOLOGY

[Cervicovaginal and vulvar papillomavirus lesions: epidemiology in HIV seropositive women. A preliminary study on a continuous series] Caubel P, et al. Presse Med 1989 Jun 24;18(25):1239–42 (Eng. Abstr.) (Fre)

ETIOLOGY

Risk factors for vulvar lichen sclerosus. Sideri M, et al. Am J Obstet Gynecol 1989 Jul;161(1):38–42

Labial adhesions after genital herpes infection. Walzman M, et al. Genitourin Med 1989 Jun;65(3):187–8

Anovaginal fistula presenting as a vulvar ulcer. A report of two cases in postmenopausal women. Josey WE. J Reprod Med 1988 Oct;33(10):857–8

Subsets of vulvodynia. McKay M. J Reprod Med 1988 Aug; 33(8):695–8 (8 ref.)

[Biermer disease disclosed by mouth and genital manifestations] Reygagne P, et al. Ann Dermatol Venereol 1988;115(8):821–5 (Fre)

[Benign vulvovaginal tumefactions in children. General review illustrated by a series of 57 personal cases] Dodat H, et al. Pediatrie 1988;43(3):227–33 (0 ref.) (Eng. Abstr.) (Fre)

MICROBIOLOGY

Human papillomavirus coinfections of the vulva and uterine cervix. Kulski JK, et al. J Med Virol 1989 Mar;27(3):244–51

Detection of human papillomavirus type 16 DNA and papillomavirus genus-specific antigens in vulva and cervix from patients with Bowenoid papulosis. Sugase M, et al. Jpn J Cancer Res 1989 Jan;80(1):19–23

PATHOLOGY

Dermatological conditions of the vulva. Ridley CM. Baillieres Clin Obstet Gynaecol 1988 Jun;2(2):317–39 (10 ref.)

Darier's disease localized to the vulva. Case report. Barrett JF, et al. Br J Obstet Gynaecol 1989 Aug;96(8):997–9

Crohn's disease of the vulva. Case report. Holohan M, et al. Br J Obstet Gynaecol 1988 Sep;95(9):943–5

Fine structure and possible histogenesis of granular cell 'tumours' of the gum and the labia. Dastur DK, et al. Indian J Cancer 1988 Jun;25(2):57–69

Chancroid: clinical variants and other findings from an epidemic in Dallas County, 1986–1987. McCarley ME, et al. J Am Acad Dermatol 1988 Aug;19(2 Pt 1):330–7 (26 ref.)

Acantholytic dermatosis localized to the vulvocrural area. Cooper PH. J Cutan Pathol 1989 Apr;16(2):81–4

Case records of the Massachusetts General Hospital. Weekly clinicopathology exercises. Case 26–1989. A 34-year-old woman with a history of Crohn's disease and recent vulvar cellulitis. N Engl J Med 1989 Jun 29;320(26):1741–7

[Eosinophilic histiocytic granuloma of the vulva and cervix] Schwartz A, et al. Sb Lek 1989 Jan;91(1):1–4 (Eng. Abstr.) (Cze)

[Epidermal cyst in the region of the clitoris] Benharroch D, et al. Harefuah 1988 Nov 1;115(9):226–7 (Eng. Abstr.) (Heb)

[Multiple epidermal cysts of the labia majora] Inoue H, et al. Nippon Sanka Fujinka Gakkai Zasshi 1989 Jun; 41(6):773–6 (Jpn)

[Electron microscopy studies of apoptosis in bowenoid papulosis] Kuligowski M, et al. Przegl Dermatol 1988 Mar–Apr;75(2):99–106 (Eng. Abstr.) (Pol)

RADIOTHERAPY

Irradiation of the hypothalamic–hypophyseal area induces complete regression of mucocutaneous lesions in disseminated histiocytosis X. Palmieri G, et al. Cancer 1989 Jul 1;64(1):29–31

SURGERY

A new surgical technique to treat refractory labial fusion in the elderly. Johnson N, et al. Am J Obstet Gynecol 1989 Aug;161(2):289–90

Pediatric office procedures. Clair DL, et al. Urol Clin North Am 1988 Nov;15(4):715–23 (38 ref.)

[Use of CO2 laser in the treatment of various pathological changes in the cervix uteri and vulva] Rzempołuch J, et al. Ginekol Pol 1988 May;59(5):289–95 (Eng. Abstr.) (Pol)

VULVAR NEOPLASMS

Bartholin's gland cancer. Johnson CA. Am Fam Physician 1989 Apr;39(4):195–7

Vulvovaginal melanoma: report of seven cases and literature review. Brand E, et al. Gynecol Oncol 1989 Apr;33(1):54–60 (28 ref.)

Gynecologic cancer in the very elderly. Kennedy AW, et al. Gynecol Oncol 1989 Jan;32(1):49–54

Clarifying the "Report of the ISSVD Terminology Committee" [letter] Burdick B. J Reprod Med 1988 Jul; 33(7):97–8

Malignant melanomas of the vulva: two case reports. Singh P, et al. Med J Malaysia 1987 Sep;42(3):209–11

Lymphangioma circumscriptum of the vulva: case report and review of the literature. Abu-Hamad A, et al. Obstet Gynecol 1989 Mar;73(3 Pt 2):496–9 (18 ref.)

[A case of simultaneous development of leiomyomas of the labia majora and the uterine corpus] Zlatkov V, et al. Rev Fr Gynecol Obstet 1989 Apr;84(4):351–3 (Eng. Abstr.) (Fre)

[Tumors of the vagina and vulva] Kasamatsu T, et al. Gan No Rinsho 1989 Jan;Spec No:399–406 (Jpn)

[Study of the clinical background and therapeutic method in patients with vulvar cancer] Umesaki N, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2–3):1700–7 (Eng. Abstr.) (Jpn)

[Clinical study of 84 primary vulvar carcinomas] Yamashiro T, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2–3):1677–82 (Eng. Abstr.) (Jpn)

ANALYSIS

[Three cases of vulvar bowenoid papulosis: the localization of HPV DNA by in situ hybridization] Kioka H, et al. Gan No Rinsho 1989 Sep;35(10):1195–201 (Eng. Abstr.) (Jpn)

COMPLICATIONS

Risk factors in the development of cervical intraepithelial neoplasia in women with vulval warts [letter] Moss TR, et al. Genitourin Med 1989 Jun;65(3):197–8

Risk factors in the development of cervical intraepithelial neoplasia in women with vulval warts. Walkinshaw SA, et al. Genitourin Med 1988 Oct;64(5):316–20

Vulvar syringoma associated with epidermal cyst [letter] Zhu WY. Int J Dermatol 1989 Mar;28(2):142–3

Vulvar and esophageal leiomyoma [letter] Rosen RM. J Am Acad Dermatol 1988 Oct;19(4):763

[Syringoma of the vulva underneath a seborrheic wart] Aguilar Martínez A, et al. Ann Dermatol Venereol 1989; 116(4):323–4 (Fre)

DIAGNOSIS

Diagnostic and therapeutic procedures in the vulvar intraepithelial neoplasia (VIN) and early invasive cancer of the vulva. Basta A. Eur J Gynaecol Oncol 1989; 10(1):55–9

Colposcopic and cytologic detection of chronic lymphocytic leukemia. Mikhail MS, et al. Gynecol Oncol 1989 Jul; 34(1):106–8

Angiokeratoma of the vulva: diagnosis and review of the literature. Cohen PR, et al. Obstet Gynecol Surv 1989 May; 44(5):339–46 (30 ref.)

[Genital condylomatosis. Retrospective analysis of a longitudinal study conducted by colposcopy in 142 patients] Zaza M, et al. Minerva Ginecol 1988 Oct; 40(10):577–82 (Eng. Abstr.) (Ita)

[Multifocal Bowen's disease of the vulva coexistent with pre-invasive cancer of the cervix uteri as a case of systemic cancer] Brodziński W, et al. Wiad Lek 1988 Sep 1; 41(17):1171–4 (Eng. Abstr.) (Pol)

DRUG THERAPY

Mitoxantrone in the treatment of advanced vulvar and vaginal carcinoma. A gynecologic oncology group study. Muss HB, et al. Am J Clin Oncol 1989 Apr;12(2):142–4

Early results of local application of 13-cis retinoic acid in the treatment of leukoplakia of the vulva. Kwaśniewski SW, et al. Eur J Gynaecol Oncol 1989;10(2):129–30

[Diagnosis and therapy of dystrophic vulvar diseases] Lotze W. Zentralbl Gynakol 1988;110(16):1034–8 (Eng. Abstr.) (Ger)

[Current aspects of medical therapy of viral infections in gynecology] Sesti F, et al. Clin Ter 1988 Jan 15; 124(1):55–60 (25 ref.) (Eng. Abstr.) (Ita)

[A successful case of cisplatin-treated bartholin gland carcinoma] Arakawa A, et al. Gan To Kagaku Ryoho 1989 Jul;16(7):2437–40 (Eng. Abstr.) (Jpn)

[Chemotherapy of a patient with FIGO stage IV vulvar cancer with bleomycin, vincristine, mitomycin C, and cisplatin] Shimizu Y, et al. Nippon Sanka Fujinka Gakkai Zasshi 1989 May; 41(5):609–12 (Jpn)

EPIDEMIOLOGY

Carcinoma of the vulva in Kenyans. Rogo KO, et al. East Afr Med J 1988 Aug;65(8):557–63

[Multiple primary tumors in cancer of the vulva] Karag'ozov A. Akush Ginekol (Sofiia) 1988;27(5):54–7 (15 ref.) (Eng. Abstr.) (Bul)

[Epidemiology of vulvar cancer in Austria] Gerstner GJ, et al. Gynakol Rundsch 1988;28 Suppl 2:190–2 (Ger)

ETIOLOGY

[Condylomata acuminata and vulvar intraepithelial neoplasms (VIN)] Barbero M, et al. Minerva Ginecol 1988 Dec; 40(12):743–7 (38 ref.) (Eng. Abstr.) (Ita)

GENETICS

Morphometric analysis of nuclear/cytoplasmic ratios in normal and perineoplastic vulvar skin. Dalrymple JC, et al. Histopathology 1989 Jun;14(6):645–53

Modulation of oncogene expression by epidermal growth factor and gamma-interferon in A431 squamous carcinoma cells. Black RJ, et al. J Biol Regul Homeost Agents 1988 Jan–Mar;2(1):35–44

Presence of human papillomavirus type 18 DNA in vulvar carcinomas and its integration into the cell genome. Venuti A, et al. J Gen Virol 1989 Jun;70 (Pt 6):1587–92

IMMUNOLOGY

Serum squamous cell carcinoma antigen levels in patients with invasive squamous vulvar and vaginal cancer: a preliminary report. Patsner B, et al. Gynecol Oncol 1989 Jun;33(3):323–5

[Integrated immunotherapy in two cases of vulvar and vaginal melanoma] Cappello F. Minerva Ginecol 1988 Oct; 40(10):613–5 (Eng. Abstr.) (Ita)

METABOLISM

Topography of early HPV 16 transcription in high-grade genital precancers. Crum CP, et al. Am J Pathol 1989 Jun; 134(6):1183–8

MICROBIOLOGY

Multicentric intraepithelial neoplasia involving the vulva. Clinical features and association with human papillomavirus and herpes simplex virus. Bornstein J, et al. Cancer 1988 Oct 15;62(8):1601–4

Paget's disease of the vulva: search for herpes simplex virus antigens and human papillomavirus antigen and DNA. Bornstein J, et al. Gynecol Oncol 1988 Nov;31(3):384–8

[Human papillomavirus DNA in vulvar lesions] Sato S, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2–3):1708–13 (Eng. Abstr.) (Jpn)

MORTALITY

Prognostic factors in squamous cell carcinoma of the vulva: a multivariate analysis. Kürzl R, et al. Gynecol Oncol 1989 Feb;32(2):143–50

PATHOLOGY

Melanocytic proliferation in condylomata acuminata. A report of two cases and investigation by in situ hybridisation. Blessing K, et al. Acta Derm Venereol (Stockh) 1989;69(3):238–41

Adenocarcinoma of Bartholin's gland associated with extramammary Paget's disease of the vulva. Hastrup N, et al. Acta Obstet Gynecol Scand 1988;67(4):375–7

Histogenesis of extramammary and mammary Paget cells. An immunohistochemical study. Guarner J, et al. Am J Dermatopathol 1989 Aug;11(4):313–8

Correlation of histology and human papillomavirus DNA detection in condyloma acuminatum and condyloma-like vulvar lesions. Nuovo GJ, et al. Am J Surg Pathol 1989 Aug;13(8):700–6

Malignant rhabdoid tumor of the vulva: is distinction from epithelioid sarcoma possible? A pathologic and immunohistochemical study. Perrone T, et al. Am J Surg Pathol 1989 Oct;13(10):848–58

Inflammatory cell infiltration and survival in squamous cell carcinoma of the vulva. Price JH, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):808–13

Adenocarcinoma arising in vulvar breast tissue. Simon KE, et al. **Cancer** 1988 Nov 15;62(10):2234–8 (19 ref.)

Pre-neoplastic lesions of the vulva. Hewitt H. **Eur J Gynaecol Oncol** 1988;9(5):377–80

Early stromal invasion of the vulva. Pickel H. **Eur J Gynaecol Oncol** 1989;10(2):97–101

Regional lymph node recurrence following local excision for microinvasive vulvar carcinoma. Atamdede F, et al. **Gynecol Oncol** 1989 Jul;34(1):125–8

Vulvar intraepithelial neoplasia: a clinicopathological study of carcinoma in situ of the vulva. Husseinzadeh N, et al. **Gynecol Oncol** 1989 May;33(2):157–63

Significance of lymphoplasmocytic infiltration around tumor cell in the prediction of regional lymph node metastases in patients with invasive squamous cell carcinoma of the vulva: a clinicopathologic study. Husseinzadeh N, et al. **Gynecol Oncol** 1989 Aug;34(2):200–5

Proliferating trichilemmal tumor of the vulva. Case report and review of the literature. Avinoach I, et al. **Int J Gynecol Pathol** 1989;8(2):163–8 (7 ref.)

Verrucous carcinoma of the vulva. A clinicopathologic and immunohistochemical study of five cases. Brisigotti M, et al. **Int J Gynecol Pathol** 1989;8(1):1–7

Fibroepithelial polyps with atypical stromal cells (pseudosarcoma botryoides) of vulva and vagina. A report of 13 cases. Ostör AG, et al. **Int J Gynecol Pathol** 1988; 7(4):351–60

Vulvar syringomas occurring in a 9-year-old child [letter] Scherbenske JM, et al. **J Am Acad Dermatol** 1988 Sep; 19(3):575–7

Proliferating giant pigmented nevus: a report of an unusual tumor occurring in association with a congenital giant pigmented nevus. Arao T, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):315S–317S

Cytology of the vulva. Dennerstein GJ. **J Reprod Med** 1988 Aug;33(8):703–4

Flow cytometric analysis of primary cervical and vulvar carcinomas and their metastases. Sirický J, et al. **Neoplasma** 1989;36(4):437–45

Quantitative evaluation of the skin and accessory appendages in vulvar carcinoma in situ. Baggish MS, et al. **Obstet Gynecol** 1989 Aug;74(2):169–74

Cavernous lymphangioma of the vulva. Brown JV, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):877–9

Amphicrine tumor of the vulva. Hidvégi J, et al. **Pathol Res Pract** 1988 Aug;183(4):505–11

[Clinicopathologic analysis of condyloma acuminatum of the vulva in 165 cases] Chen YN. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Mar;24(2):91–3, 124–5 (Eng. Abstr.) (Chi)

[Flat vulvar condylomata and dyspareunia] Bertrand de Nully M, et al. **Ugeskr Laeger** 1988 Nov 21;150(47):2911–3 (Eng. Abstr.) (Dan)

[Pseudo-sarcoma botyroid. Apropos of 3 cases of vulvar localization with review of the medical literature] Haouet S, et al. **Arch Anat Cytol Pathol** 1988;36(4):171–4 (5 ref.) (Fre) (Eng. Abstr.)

[Immunohistology in assessment of the spread of cancer] Guérin V, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988; 17(7):877–8 (Eng. Abstr.) (Fre)

[Granular cell tumor. Apropos of 3 cases] Ben Ayed M, et al. **Tunis Med** 1987 May;65(5):353–8 (Eng. Abstr.) (Fre)

[Detection of human papilloma virus (HPV) DNA in vulvar cancers] Ikenberg H, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):776–80 (Eng. Abstr.) (Ger)

[Cytologic diagnosis of Paget's disease of the vulva] Kühn W, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):67–9 (Eng. Abstr.) (Ger)

[Precancerous lesions of the vulva] Honma M. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1671–6 (Eng. Abstr.) (Jpn)

[A case of aggressive angiomyxoma of the vulva] Kuramoto M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1907–10 (Jpn)

[Malignant transformation of Buschke-Löwenstein tumor] Czekanowski R, et al. **Ginekol Pol** 1988 Dec;59(12):758–62 (Eng. Abstr.) (Pol)

[The optimal method of treating vulval dystrophies with special reference to precancerous conditions. I. Morphologic and clinical characteristics] Starzewski J. **Przegl Lek** 1988;45(10):732–8 (Eng. Abstr.) (Pol)

RADIOTHERAPY

Radical radiotherapy for carcinoma of the vulva. Slevin NJ, et al. **Br J Radiol** 1989 Feb;62(734):145–7

Radiation response of vulvar squamous cell carcinoma (UM-SCV-1A, UM-SCV-1B, UM-SCV-2, and A-431) cells in vitro. Pekkola-Heino K, et al. **Cancer Res** 1989 Sep 1;49(17):4876–8

Recent modifications in the treatment of invasive squamous cell carcinoma of the vulva. Hoffman MS, et al. **Obstet Gynecol Surv** 1989 Apr;44(4):227–33 (79 ref.)

Techniques for management of vulvar cancer by irradiation alone. Kumar PP, et al. **Radiat Med** 1988 Jul-Aug; 6(4):185–91

SURGERY

Local anaesthesia with a lidocaine/prilocaine cream (EMLA) for cautery of condylomata acuminata on the vulval mucosa. The effect of timing of application of the cream. Ljunghall K, et al. **Acta Derm Venereol (Stockh)** 1989; 69(4):362–5

Anesthetic management of a patient with bullous pemphigoid. Prasad KK, et al. **Anesth Analg** 1989 Oct;69(4):537–40

Repositioning during procedure disputed [letter] Siegel A. **AORN J** 1988 Oct;48(4):642, 644

Surgical treatment of vulval carcinoma. Silverstone A. **Br J Hosp Med** 1989 Jan;41(1):68–72

Conservative management of extramammary Paget's disease of the vulva. Bergen S, et al. **Gynecol Oncol** 1989 May; 33(2):151–6

Adenoid cystic carcinoma of Bartholin's gland: a report of five new cases treated with surgery and radiotherapy. Rosenberg P, et al. **Gynecol Oncol** 1989 Aug;34(2):145–7

Malignant schwannoma of the vulva. A case report. Terada KY, et al. **J Reprod Med** 1988 Dec;33(12):969–72 (12 ref.)

Malignant melanoma of the vulva. Australian experience. Woolcott RJ, et al. **J Reprod Med** 1988 Aug;33(8):699–702

Heparin-associated thrombocytopenia: a complication of low-dose heparin prophylaxis. Cottingham JK, et al. **Milit Med** 1989 May;154(5):242–4

Resection of the pubic bone as an adjunct to management of primary, recurrent, and metastatic pelvic malignancies. King LA, et al. **Obstet Gynecol** 1989 Jun;73(6):1022–6

Recent modifications in the treatment of invasive squamous cell carcinoma of the vulva. Hoffman MS, et al. **Obstet Gynecol Surv** 1989 Apr;44(4):227–33 (79 ref.)

[Simultaneous 2-team extraperitoneal pelvic lymph node dissection and bleomycin lavage in invasive cancer of the vulva] Karag'ozov A. **Akush Ginekol (Sofiia)** 1988; 27(6):72–6 (25 ref.) (Eng. Abstr.) (Bul)

[Surgical treatment of vulvar carcinoma] Zhang ZY, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Sep;23(5):290–2, 318 (Eng. Abstr.) (Chi)

[Pain following the treatment of vulvo-vaginal condylomatous lesions. Efficacy of benzydamine] Dargent D. **Rev Fr Gynecol Obstet** 1988 Oct;83(10):663–6 (Eng. Abstr.) (Fre)

[Prerequisites and possibilities of function preservation in therapy of vulvar cancer] Bender HG. **Gynakologe** 1988 Dec;21(4):289–93 (7 ref.) (Ger)

[Reconstructive measures in radical vulva operations] Knapstein PG, et al. **Gynakologe** 1988 Dec;21(4):294–7 (Ger)

[Treatment of invasive vulvar cancer (results of therapy 1970–1981)] Lahousen M, et al. **Zentralbl Gynakol** 1988; 110(16):1001–5 (Eng. Abstr.) (Ger)

[Analysis of failure of radical surgery in the treatment of invasive squamous cell carcinoma of the vulva] Fioretti P, et al. **Minerva Ginecol** 1988 Aug;40(8):451–6 (26 ref.) (Eng. Abstr.) (Ita)

[Study on the treatment of malignant vulvar diseases] Saito T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1683–8 (Eng. Abstr.) (Jpn)

[Reconstruction using the gulteus maximus myocutaneous flap following resection of vulval cancer] Ogino M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1475–8 (Jpn)

THERAPY

Vulvo-vaginal condylomatosis and relapse: combined treatment with electrocauterization and beta-interferon. Piccoli R, et al. **Clin Exp Obstet Gynecol** 1989;16(1):30–5

Diagnostic and therapeutic procedures in the vulvar intraepithelial neoplasia (VIN) and early invasive cancer of the vulva. Basta A. **Eur J Gynaecol Oncol** 1989; 10(1):55–9

Treatment planning in vulvar cancer patients. Bokhman JV, et al. **Eur J Gynaecol Oncol** 1989;10(4):249–54

The therapy of verrucous carcinoma of the vulva. Observations on three cases. Gadducci A, et al. **Eur J Gynaecol Oncol** 1989;10(4):284–7

Concurrent radiation and chemotherapy in vulvar carcinoma. Thomas G, et al. **Gynecol Oncol** 1989 Sep;34(3):263–7

Concomitant 5-fluorouracil, mitomycin-C, and radiotherapy for advanced gynecologic malignancies. Evans LS, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):901–6

[Postoperative interferon hydrogel treatment. A method for the successful therapy of chronic persistent giant condylomas in an immunologically deficient patient with Hodgkin's disease] Gross G, et al. **Hautarzt** 1988 Oct, 39(10):684–7 (Eng. Abstr.) (Ger)

[Carcinoma of the vulva: our experience] Marzetti L, et al. **G Ital Oncol** 1989 Jan-Mar;9(1):35–8 (Eng. Abstr.) (Ita)

[A primary malignant lymphoma of the vulva—a case report] Shinohara M, et al. **Gan No Rinsho** 1988 Dec; 34(15):2125–30 (Eng. Abstr.) (Jpn)

[Clinical treatment of vulvar cancer] Ikeda S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1695–9 (Eng. Abstr.) (Jpn)

[A comparative study of the treatment of vulvar carcinomas] Yamasaki M, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1689–94 (Eng. Abstr.) (Jpn)

[Optimal methods of treating vulvar dystrophies with special reference to precancerous conditions. II. Results of treatment] Józef S. **Przegl Lek** 1988;45(11):781–6 (Eng. Abstr.) (Pol)

ULTRASTRUCTURE

Apoptosis in Bowen's disease. An ultrastructural study. Kuligowski M, et al. **Am J Dermatopathol** 1989 Feb; 11(1):13–21

[Extra-mammary Paget's disease with a vulvar site. Ultrastructural findings] Virgili A, et al. **G Ital Dermatol Venereol** 1988 Jul-Aug;123(7-8):367–71 (Eng. Abstr.) (Ita)

VETERINARY

Regression of bovine vulval squamous cell carcinoma after immunotherapy. Samuel JL. **Aust Vet J** 1989 Jun; 66(6):186–7

Naturally-occurring neoplasms of the preputial and clitoral gland in Han:SPRD rats. Kaspareit-Rittinghausen J, et al. **Zentralbl Veterinarmed [A]** 1988 Sep;35(8):596–603

VULVITIS

COMPLICATIONS

Toxic shock-like syndrome associated with Bartholin's gland abscess: case report. Shearin RS, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1073–4

The vulvo-vaginal-gingival syndrome. A new form of erosive lichen planus. Pelisse M. **Int J Dermatol** 1989 Jul-Aug;28(6):381–4

DRUG THERAPY

Interferon therapy for condylomatous vulvitis. Horowitz BJ. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):446–8

Bartholin's gland abscess in a neonate. Chavarría JF, et al. **Pediatr Infect Dis J** 1989 May;8(5):334–5 (7 ref.)

PATHOLOGY

Inflammatory cell infiltration and survival in squamous cell carcinoma of the vulva. Price JH, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):808–13

The histopathology of vulvar vestibulitis syndrome. Pyka RE, et al. **Int J Gynecol Pathol** 1988;7(3):249–57

Vulvitis circumscripta plasmocellularis. A report of four cases. Woodruff JD, et al. **J Reprod Med** 1989 May; 34(5):369–72

Vulvar vestibulitis—subgroup with Bartholin gland duct inflammation. Michlewitz H, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):410–3

[Morphologic variants of genital ulcer caused by Haemophilus ducreyi] Ballard RC, et al. **Hautarzt** 1989 Jul; 40(7):443–7 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

[Physiology of the skin of the vulva: new aspects] Elsner P, et al. **Hautarzt** 1989 Jul;40(7):411–7 (31 ref.) (Eng. Abstr.) (Ger)

SURGERY

[Perineoplasty for vulvar vestibulitis] Bornstein J, et al. **Harefuah** 1989 Jan 15;116(2):90–2 (Eng. Abstr.) (Heb)

THERAPY

Vulvitis circumscripta plasmacellularis treated successfully with interferon alpha. Morioka S, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 2):947–50

VULVOVAGINITIS

CHEMICALLY INDUCED

Hair shampooing technique and pediatric vulvovaginitis [letter] Brown JL. **Pediatrics** 1989 Jan;83(1):146

DIAGNOSIS

[Studies on the detection of antibodies to Neisseria gonorrheae using pilus antigen] Ziems KD, et al. **Dermatol Monatsschr** 1989;175(3):163–9 (Eng. Abstr.) (Ger)

DRUG THERAPY

[Mycotic vulvovaginitis and topical cyclopiroxolamine] Nencioni T, et al. **Minerva Ginecol** 1988 Dec;40(12):719–22 (Eng. Abstr.) (Ita)

EPIDEMIOLOGY

Chlamydia trachomatis genital infections in Tahiti. Chungue E, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):635–8

ETIOLOGY

Vulvovaginitis and cervicitis. Rosenfeld WD, et al. **Pediatr Clin North Am** 1989 Jun;36(3):489–511 (60 ref.)

Vulvovaginitis in the child and adolescent. Emans SJ. **Pediatr Rev** 1986 Jul;8(1):12–9 (19 ref.)

[Problem infections of the external genital area in the female] Weissenbacher ER, et al. **Z Hautkr** 1989 May 15;64(5):406, 409–10 (0 ref.) (Eng. Abstr.) (Ger)

IMMUNOLOGY

Autoimmunity as a factor in recurrent vaginal candidosis and

the minor vestibular gland syndrome. Ashman RB, et al. **J Reprod Med** 1989 Apr;34(4):264–6

Papillomavirus infection and an allergic response to Candida in women with recurrent vaginitis [letter] Witkin SS, et al. **JAMA** 1989 Mar 17;261(11):1584

MICROBIOLOGY

Clinical characteristics of papillomavirus–vulvovaginitis. A new entity with oncogenic potential. Bodén E, et al. **Acta Obstet Gynecol Scand** 1988;67(2):147–51

[Gardnerella vaginalis in relation to the clinical syndrome of bacterial vaginosis] Wolfová J, et al. **Cesk Epidemiol Mikrobiol Imunol** 1988 Sep;37(5):286–96 (Eng. Abstr.) **(Cze)**

PATHOLOGY

Gonorrheal vulvovaginitis, labial fusion and imperforate hymen. Runsza ME. **Am J Dis Child** 1989 Mar;143(3):381–2

[Vulvovaginitis circinata in Reiter's disease] Haake N, et al. **Hautarzt** 1988 Nov;39(11):748–9 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

[Psychosomatic approach for vulvodynia] Kondo M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):765–8 **(Jpn)**

VETERINARY

Culture-positive persistence and serum agglutinating antibody response after intrauterine inoculation of Haemophilus somnus in virgin heifers. Hoblet KH, et al. **Am J Vet Res** 1989 Jul;50(7):1008–14

Effects of a bovine herpesvirus–1 isolate on reproductive function in heifers: classification as a type–2 (infectious pustular vulvovaginitis) virus by restriction endonuclease analysis of viral DNA. Miller JM, et al. **Am J Vet Res** 1988 Oct;49(10):1653–6

Affinity of microorganisms of the genus ureaplasma to the reproductive organs of cattle. Pilaszek J, et al. **Comp Immunol Microbiol Infect Dis** 1988;11(3–4):177–80

VZ VIRUS see **VARICELLA-ZOSTER VIRUS**

WAARDENBURG'S SYNDROME see under **ABNORMALITIES, MULTIPLE**

WAGES see **SALARIES AND FRINGE BENEFITS**

WAITING LISTS see under **APPOINTMENTS AND SCHEDULES**

WAKEFULNESS

Primary generalized epilepsy with photosensitivity and seizures on awakening. Report of a family. Natale S, et al. **Acta Neurol (Napoli)** 1988 Aug–Oct;10(4–5):262–8

Arterial oxygen desaturation during sleep in interstitial pulmonary disease. Correlation with chemical control of breathing during wakefulness. Tatsumi K, et al. **Chest** 1989 May;95(5):962–7

Adaptation to intermittent positive pressure ventilation applied through the nose during day and night. Rodenstein DO, et al. **Eur Respir J** 1989 May;2(5):473–8

Conjugation of unit activity in visual and sensorimotor neocortical areas of rabbits during calm wakefulness and pseudoconditioning. Pavlova IV. **Neurosci Behav Physiol** 1988 May–Jun;18(3):193–201

A home evaluation of a behavioral response measure of sleep/wakefulness. Bonato RA, et al. **Percept Mot Skills** 1989 Feb;68(1):87–96

The sequential hypothesis on sleep function. I. Evidence that the structure of sleep depends on the nature of the previous waking experience. Ambrosini MV, et al. **Physiol Behav** 1988;43(3):325–37

An inexpensive sleep–wake state analyzer for the rat. Clark FM, et al. **Physiol Behav** 1988;43(5):681–3

Behavioral approaches to sleep/wake disorders in children and adolescents. Cashman MA, et al. **Prog Behav Modif** 1988;22:215–83 (200 ref.)

The timing of bedtime and waketime decisions in free–running subjects. Monk TH, et al. **Psychophysiology** 1989 May;26(3):304–10

Sleep on the night shift: 24–hour EEG monitoring of spontaneous sleep/wake behavior. Torsvall L, et al. **Psychophysiology** 1989 May;26(3):352–8

Sleep and waking states in infancy: normative studies. Hoppenbrouwers T, et al. **Sleep** 1988 Aug;11(4):387–401

An objective behavioral model of sleep. Webb WB. **Sleep** 1988 Oct;11(5):488–96

[Sleep–wakefulness rhythm disturbance due to changes in occupational environment and the countermeasures] Sasaki M. **Seishin Shinkeigaku Zasshi** 1988;90(10):899–908 **(Jpn)**

[Sleep and wakefulness. Current concepts] Velasco M, et al. **Gac Med Mex** 1988 Mar–Apr;124(3–4):57–72 **(Spa)**

DRUG EFFECTS

Effects of chronic icv infusion of vasopressin on sleep–waking cycle of rats. Arnauld E, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R674–84

Changes in sleep and wakefulness following single and repeated exposures to toluene vapor in rats. Arito H, et al. **Arch Toxicol** 1988 Aug;62(1):76–80

Increased waking as well as increased synchronization following administration of selective 5–HT uptake inhibitors to rats. Ursin R, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):117–30

Awaking effect of prostaglandin E2 in freely moving rats. Matsumura H, et al. **Brain Res** 1989 Mar 6;481(2):242–9

Effects of atrial natriuretic peptide on transmural blood flow and reactive hyperemia in the presence of flow–limiting coronary stenosis in the awake dog: evidence for dilation of the intramural vasculature. Chu A, et al. **Circ Res** 1989 Mar;64(3):600–6

Isoproterenol–induced alterations in myocardial blood flow, systolic and diastolic function in conscious dogs with heart failure. Hittinger L, et al. **Circulation** 1989 Sep;80(3):658–68

Marked blood pressure fluctuations during narcoleptic attacks alternating with abnormal wakefulness: effects of treatment with clonidine. Reggiani P, et al. **Eur Heart J** 1989 Jan;10(1):2–7

Intrinsic effects of the benzodiazepine receptor antagonist RO 15–1788 in sleepy and alert subjects. Lavie P. **Int J Neurosci** 1989 Jun;46(3–4):131–7

Increased daytime sleepiness enhances ethanol's sedative effects. Zwyghuizen–Doorenbos A, et al. **Neuropsychopharmacology** 1988 Dec;1(4):279–86

Reversal by caffeine of triazolam–induced impairment of waking function. Roehrs T, et al. **Psychopharmacol Ser** 1988;6:194–202

Sleepiness and nap sleep following a morning dose of clonidine. Carskadon MA, et al. **Sleep** 1989 Aug; 12(4):338–44

Effect of DSP–4, a noradrenergic neurotoxin, on sleep and wakefulness and sensitivity to drugs acting on adrenergic receptors in the rat. Monti JM, et al. **Sleep** 1988 Aug; 11(4):370–7

[Hypotensive effect of dinitrosyl iron complexes in experiments on waking animals] Galagan ME, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):75–80 (Eng. Abstr.) **(Rus)**

[Effect of dimephosphon on the blood circulation and oxygen tension in the brain of normal waking rabbits and in motion sickness] Beketov AI, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):35–8 (Eng. Abstr.) **(Rus)**

[Effect of kavinton on systemic and regional hemodynamics in waking and anesthetized rats] Ivashev MN, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):26–9 (Eng. Abstr.) **(Rus)**

[Analysis of the baroreflex activation of the sympathetic system in waking cats induced by urapidil and sodium nitroprusside] Medvedev OS, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):53–6 (Eng. Abstr.) **(Rus)**

[Effect of various doses of ethanol on the structure of the wakefulness–sleep cycle in cats] Gogichadze MV, et al. **Fiziol Zh SSSR** 1989 Feb;75(2):177–83 (Eng. Abstr.) **(Rus)**

[Effect of monoamine oxidase inhibitors with a broad range of action on the structure and phase ratio of the wakefulness–sleep cycle in the cat] Akhvlediana GR, et al. **Neirofiziologiia** 1988;20(4):463–70 (Eng. Abstr.) **(Rus)**

[Comparative study of the nociceptive reactions when bradykinin is administered in different receptor areas to waking animals] Panov AV. **Patol Fiziol Eksp Ter** 1988 May–Jun;(3):9–11 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Hypoxic and hypercapnic ventilatory responses in awake children with congenital central hypoventilation syndrome. Paton JY, et al. **Am Rev Respir Dis** 1989 Aug;140(2):368–72

Breathing during wakefulness and sleep after human heart–lung transplantation. Sanders MH, et al. **Am Rev Respir Dis** 1989 Jul;140(1):45–51

Hyperventilation in the awake state: potentially treatable component of Rett syndrome. Southall DP, et al. **Arch Dis Child** 1988 Sep;63(9):1039–48

Influences of partial REM sleep deprivation and awakenings on nocturnal cortisol release. Born J, et al. **Biol Psychiatry** 1988 Nov;24(7):801–11

Synaptic plasticity in the hippocampus is modulated by behavioral state. Bramham CR, et al. **Brain Res** 1989 Jul 24;493(1):74–86

Slow fluctuations of single unit activities of hippocampal and thalamic neurons in cats. I. Relation to natural sleep and alert states. Kodama T, et al. **Brain Res** 1989 May 15; 487(1):26–34

A critical role of the posterior hypothalamus in the mechanisms of wakefulness determined by microinjection of muscimol in freely moving cats. Lin JS, et al. **Brain Res** 1989 Feb 13;479(2):225–40

Neurotoxic lesions of the dorsolateral pontomesencephalic tegmentum–cholinergic cell area in the cat. II. Effects upon sleep–waking states. Webster HH, et al. **Brain Res** 1988 Aug 23;458(2):285–302

Sleep–waking discharge of basal forebrain projection neurons in cats. Szymusiak R, et al. **Brain Res Bull** 1989 Feb; 22(2):423–30

Sleepiness in shiftwork. A review with emphasis on continuous monitoring of EEG and EOG. Akerstedt T, et al. **Chronobiol Int** 1987;4(2):129–40 (91 ref.)

A new method for the classification of subvigil stages, using the Fourier transform, and its application to sleep apnea. Penzel T, et al. **Comput Biol Med** 1989;19(1):7–34

24–hour behavioural states distribution in continuously fed infants. Fagioli I, et al. **Early Hum Dev** 1988 Dec; 18(2–3):151–6

Effects of nursery illumination on frequency of eyelid opening and state in preterm neonates. Moseley MJ, et al. **Early Hum Dev** 1988 Nov;18(1):13–26

Ambulatory 24 hour sleep–wake monitoring in narcolepsy–cataplexy compared to matched controls. Broughton R, et al. **Electroencephalogr Clin Neurophysiol** 1988 Dec; 70(6):473–81

Anticonvulsant drugs selectively affect kindled and penicillin epilepsy, especially during seizure–prone sleep or awakening states in cats. Shouse MN, et al. **Epilepsia** 1989 Jan–Feb;30(1):7–16

A comparison of awake and sleeping cortical states by analysis of the somatosensory–evoked response of postcentral area 1 in rhesus monkey. Cauller LJ, et al. **Exp Brain Res** 1988;72(3):584–92

Wakefulness and sleep autonomic dysfunction in diabetics. Silvestri R, et al. **Funct Neurol** 1989 Apr–Jun;4(2):189–91

40–Hz EEG asymmetry during recall of emotional events in waking and hypnosis: differences between low and high hypnotizables. De Pascalis V, et al. **Int J Psychophysiol** 1989 Mar;7(1):85–96

Thyroarytenoid muscle activity during wakefulness and sleep in normal adults. Kuna ST, et al. **J Appl Physiol** 1988 Sep; 65(3):1332–9

Sleep–wake regulation by prostaglandins D2 and E2. Hayaishi O. **J Biol Chem** 1988 Oct 15;263(29):14593–6 (56 ref.)

Fluctuations in spontaneous discharge of hippocampal theta cells during sleep–waking states and PCPA–induced insomnia. Mushiake H, et al. **J Neurophysiol** 1988 Sep; 60(3):925–39

Influences of hippocampal place cell firing in the awake state on the activity of these cells during subsequent sleep episodes. Pavlides C, et al. **J Neurosci** 1989 Aug; 9(8):2907–18

Effect of age and state of wakefulness on transcutaneous oxygen values in preterm infants: a longitudinal study. Mok JY, et al. **J Pediatr** 1988 Oct;113(4):706–9

Continuous observations of daytime EEG patterns in normal subjects under restrained conditions while sitting in armchair or on stool. Part 2. Awake state. Nakagawa Y. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):247–64

Relationship between sleep–wakefulness cycle and regional cerebral blood flow in kainic acid–induced epileptic focus in hippocampus. Tanaka T, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):630–1

Polysomnographic and computerized waking–sleep research in epileptic petit mal absences. Popoviciu L, et al. **Neurol Psychiatr (Bucur)** 1989 Apr–Jun;27(2):99–110

Aspects of sleep–wakefulness architecture by computer analysis in cats. Granger P, et al. **Neuropsychobiology** 1988; 19(4):212–6

Dynamics of local blood flow in different regions of the hypothalamus in the sleep–wakefulness cycle. Nikolaishvili LS, et al. **Neurosci Behav Physiol** 1988 Jul–Aug;18(4):310–5

Influence of some monoamine oxidase inhibitors on the sleep–wakefulness cycle of the cat. Oniani TN, et al. **Neurosci Behav Physiol** 1988 Jul–Aug;18(4):301–6

Responses of VPL thalamic neurones to peripheral stimulation in wakefulness and sleep. Mariotti M, et al. **Neurosci Lett** 1989 Jul 17;102(1):70–5

The sequential hypothesis on sleep function. II. A correlative study between sleep variables and newly synthesized brain DNA. Ambrosini MV, et al. **Physiol Behav** 1988; 43(3):339–50

Changes in EEG associated with sleep–awake behavior in young adult versus aged adult Fischer–344 rats. Tani Y, et al. **Physiol Behav** 1988;44(3):389–92

Effect of running wheel availability on circadian patterns of sleep and wakefulness in mice. Welsh D, et al. **Physiol Behav** 1988;43(6):771–77

Evidence that brain prostaglandin E2 is involved in physiological sleep–wake regulation in rats. Matsumura H, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5666–9

Functional role of 5–HT2 receptors in the regulation of sleep and wakefulness in the rat. Dugovic C, et al. **Psychopharmacology (Berlin)** 1989;97(4):436–42

A comparison of multiple and single sleep latency and cerebral evoked potential (P300) measures in the assessment of excessive daytime sleepiness in narcolepsy–cataplexy. Broughton R, et al. **Sleep** 1988 Dec;11(6):537–45

Cardiovascular and respiratory relationships with neuronal discharge in the central nucleus of the amygdala during sleep–waking states. Frysinger RC, et al. **Sleep** 1988 Aug; 11(4):317–32

The QT interval during wake and sleep in patients with ventricular arrhythmias [published erratum appears in Sleep 1989 Apr;12(2):189] Gillis AM, et al. **Sleep** 1988 Aug; 11(4):333–9

Polysomnographic sleep and waking states are similar in subsequent siblings of SIDS and control infants during the first six months of life. Hoppenbrouwers T, et al. **Sleep** 1989 Jun;12(3):265–76

Effects of dream reflection on waking affect: awareness of feelings, rorschach movement, and facial EMG. Nielsen TA, et al. **Sleep** 1989 Jun;12(3):277–86

Sleep and wakefulness in normal preadolescent children. Palm L, et al. **Sleep** 1989 Aug;12(4):299–308

Circadian regulation dominates homeostatic control of sleep

length and prior wake length in humans. Strogatz SH, et al. **Sleep** 1986 Jun;9(2):353–64
Physiological sleep tendency and ability to maintain alertness at night. Sugerman JL, et al. **Sleep** 1989 Apr;12(2):106–12
Prenatal development of sleep–wake patterns in sheep. Szeto HH, et al. **Sleep** 1985 Dec;8(4):347–55
Effects of aging and housing in an enriched environment on sleep–wake patterns in rats. van Gool WA, et al. **Sleep** 1986 Jun;9(2):335–47
Hypernychthemeral sleep–wake cycle: some hidden regularities. Wollman M, et al. **Sleep** 1986 Jun;9(2):324–34
[Continuing studies on wake therapy of endogenous depression—physiological principles and realization] Ostenfeld I. **Ugeskr Laeger** 1989 Mar 6;151(10):641–2 (Dan)
[Opposite variations of extracellular concentrations of 5-hydroxyindoleacetic acid (5-HIAA) measured by voltammetry of axonal terminals and cell bodies of the dorsal raphe nucleus through the sleep–wake cycle] Cespuglio R, et al. **C R Acad Sci [III]** 1988;307(18):817–23 (Eng. Abstr.) (Fre)
[Role of hypothalamic adenosinergic systems in regulating states of wakefulness in the rat] Sarda N, et al. **C R Acad Sci [III]** 1989;308(17):473–8 (Eng. Abstr.) (Fre)
[Circadian regulation of the sleep–wake cycle] Benoit O, et al. **Neurophysiol Clin** 1988 Sep;18(5):403–31 (Eng. Abstr.) (Fre)
[The influence of exhausting training on the development of the motor pattern of swimming and on the sleep–wake behavior of growing rats] Schwartze U, et al. **Biomed Biochim Acta** 1988;47(3):257–64 (Eng. Abstr.) (Ger)
[The EEG preferential frequency as an indicator of the degree of wakefulness] Otto E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Aug; 40(8):463–71 (Eng. Abstr.) (Ger)
[Epileptic and non–epileptic disorders related to the sleep–wake cycle (editorial)] Karbowski K. **Schweiz Rundsch Med Prax** 1988 Aug 30;77(35):897 (Ger)
[Measurement of cardiac output in waking rats using a Doppler ultrasonic technic] Matsievskiĭ DD, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):674–6 (Eng. Abstr.) (Rus)
[The transient nature of myocardial ischemia during partial occlusion of the coronary artery in waking immobilized rabbits] Medvedev OS, et al. **Biull Eksp Biol Med** 1989 May;107(5):530–2 (Eng. Abstr.) (Rus)
[Local heat removal as a means of maintaining the level of wakefulness of a human operator during monotonous activity] Shenderova IS. **Fiziol Cheloveka** 1988 May–Jun; 14(3):428–33 (Rus)
[Effect of electric stimulation of the cat orbital cortex on the wakefulness–sleep cycle] Varazashvili PN. **Fiziol Zh** 1989 May–Jun;35(3):3–7 (Eng. Abstr.) (Rus)
[Functional interneuronal connections in the motor cortex of waking and anesthetized cats] Bogdanov AV, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):913–9 (Eng. Abstr.) (Rus)
[Hemodynamics in waking rats undergoing testicular exposure to elevated temperature] Murashev AN, et al. **Fiziol Zh SSSR** 1988 Oct;74(10):1433–7 (Eng. Abstr.) (Rus)
[Functional properties of the neurons of the ventral tegmentum and adjacent areas of the midbrain in waking rats] Kiiatkin EA. **Izv Akad Nauk SSSR [Biol]** 1988 Sep–Oct;(5):683–93 (Eng. Abstr.) (Rus)
[Various responses of neurons of the caudate nucleus in alert cats to visual stimulation] Zelenskaia VS, et al. **Neirofiziologiia** 1989;21(3):372–8 (Eng. Abstr.) (Rus)
[Comparison of dynamic cortical electroencephalotopograms of the human left and right cerebral hemispheres in quiet wakefulness] Iakovenko IA. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):821–8 (Eng. Abstr.) (Rus)
[Changes in the background impulse activity of the motor cortex neurons of waking rats in acute alcoholic intoxication] Stashkevich IS, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):556–8 (Rus)

WALDENSTROM'S HYPERGLOBULINEMIC PURPURA see **PURPURA, HYPERGLOBULINEMIC**

WALDENSTROM'S MACROGLOBULINEMIA see **MACROGLOBULINEMIA**

WALKERS see under **ORTHOPEDIC EQUIPMENT**

WALLENBERG'S SYNDROME see under **CEREBRAL EMBOLISM AND THROMBOSIS**

WALLERIAN DEGENERATION see under **NERVE DEGENERATION**

WALRUS see under **PINNIPEDIA**

WAR

Perceptions of conventional war: late adolescents' views. Stevenson BW, et al. **Adolescence** 1988 Fall;23(91):613–27
Wartime determinants of arteriographically confirmed coronary artery disease in Beirut. Sibai AM, et al. **Am J Epidemiol** 1989 Oct;130(4):623–31
Health effects of the war in two rural communities in Nicaragua. Nicaragua Health Study Collaborative at Harvard, CIES, and UNAN. **Am J Public Health** 1989 Apr;79(4):424–9
The management of penetrating injuries of the back [letter] Gertsch P. **Ann Surg** 1988 Nov;208(5):669–70
Penetrating wounds to the heart: a wartime experience. Jebara VA, et al. **Ann Thorac Surg** 1989 Feb;47(2):250–3
The fate of World War II veterans with posttraumatic seizures. Walker AE, et al. **Arch Neurol** 1989 Jan;46(1):23–6
Flight surgeon support of combat operations at RAF Upper Heyford. Senechal PK. **Aviat Space Environ Med** 1988 Aug;59(8):776–7
Characteristic expressions of combat-related posttraumatic stress disorder among Israeli soldiers in the 1982 Lebanon War. Solomon Z, et al. **Behav Med** 1988 Winter;14(4):171–8
Somatic complaints, stress reaction, and posttraumatic stress disorder: a three-year follow-up study. Solomon Z. **Behav Med** 1988 Winter;14(4):179–85
Technical aspects of war wound excision. Coupland RM. **Br J Surg** 1989 Jul;76(7):663–7 (7 ref.)
Medicine in Uganda: the impact of prolonged war and epidemic AIDS on medical care. Kellett J. **Can Med Assoc J** 1989 Mar 15;140(6):699–701
Post-traumatic stress disorder among American Legionnaires in relation to combat experience in Vietnam: associated and contributing factors. Snow BR, et al. **Environ Res** 1988 Dec;47(2):175–92
Health and reproductive outcomes among American Legionnaires in relation to combat and herbicide exposure in Vietnam. Stellman SD, et al. **Environ Res** 1988 Dec; 47(2):150–74
Combat and herbicide exposures in Vietnam among a sample of American Legionnaires. Stellman SD, et al. **Environ Res** 1988 Dec;47(2):112–28
Injury to the femoral vessels—the Lebanese War experience. Dajani OM, et al. **Eur J Vasc Surg** 1988 Oct;2(5):293–6
An experience of war surgery and wounds presenting after 3 days on the border of Afghanistan. Coupland RM, et al. **Injury** 1988 Jul;19(4):259–62
Delayed treatment of complicated fractures in war wounded. Rautio J, et al. **Injury** 1987 Jul;18(4):238–40
New concepts of forward combat surgery. Rozin R, et al. **Injury** 1988 May;19(3):193–7
Medical statistics of battlefield casualties. Trouwborst A, et al. **Injury** 1987 Mar;18(2):96–9
Use of phenytoin in healing of war and non–war wounds. A pilot study of 25 cases. Modaghegh S, et al. **Int J Dermatol** 1989 Jun;28(5):347–50
Malaria in Nicaragua: community-based control efforts and the impact of war. Garfield RM, et al. **Int J Epidemiol** 1989 Jun;18(2):434–9
Use of doubly labeled water technique in soldiers training for jungle warfare. Forbes-Ewan CH, et al. **J Appl Physiol** 1989 Jul;67(1):14–8
Vascular injuries caused by anti-personnel mines. Fasol R, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun; 30(3):467–72
PTSD 40 years later: incidence and person-situation correlates in former POWs. Zeiss RA, et al. **J Clin Psychol** 1989 Jan;45(1):80–7
Posttraumatic stress disorder as a consequence of the POW experience. Speed N, et al. **J Nerv Ment Dis** 1989 Mar; 177(3):147–53
The management of hemorrhage from severe missile injuries using Foley catheter balloon tamponade. Shuker S. **J Oral Maxillofac Surg** 1989 Jun;47(6):646–8
Combat experience and emotional health: impairment and resilience in later life. Elder GH Jr, et al. **J Pers** 1989 Jun; 57(2):311–41
Pulse of a nation: depressive mood reactions of Israelis to the Israel–Lebanon war. Hobfoll SE, et al. **J Pers Soc Psychol** 1989 Jun;56(6):1002–12
Legacy of Vietnam. Berkseth JK. **J Psychosoc Nurs Ment Health Serv** 1988 Jun;26(6):24–7
When the war doesn't end. Counseling POWs. Nelson LF. **J Psychosoc Nurs Ment Health Serv** 1989 Jul;27(7):26–30
Invasion. A hospital in transition following the 1983 Grenadian intervention. Walker K, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Jan;27(1):27–30
Morale in battle—the medical and the military. Carver. **J R Army Med Corps** 1989 Feb;135(1):5–9
Arms or health: a role for medical colleges? Holdstock D. **J R Coll Physicians Lond** 1989 Jul;23(3):185–8
Morale in battle—the medical and the military. Carver. **J R Soc Med** 1989 Feb;82(2):67–71
Follow-up: 15 years after captivity in SE Asia; 50 years after World War II flight training [news] Kirn TF. **JAMA** 1989 May 19;261(19):2776, 2781, 2784
Nutritional lessons from war-time Sierra Leone [letter] Yudkin J. **Lancet** 1989 Aug 19;2(8660):452–3
Postwar mortality among Australian World War II prisoners of the Japanese [see comments] Dent OF, et al. **Med J Aust** 1989 Apr 3;150(7):378–82. **Comment in:** Med J Aust 1989 Jul 17;151(2):113–4
Postwar mortality among former prisoners of war of the Japanese [letter; comment] Freed G. **Med J Aust** 1989 Jul 17;151(2):113–4. **Comment on:** Med J Aust 1989 Apr 3;150(7):378–82
Towards integrating the behavioural sciences to meet the threats of violence and war. Hinde RA. **Med War** 1989 Jan–Mar;5(1):5–15
Experience of the threat of war among Finnish adolescents: effects on thinking about the future, and comparison of methods. Nurmi JE. **Med War** 1988 Oct–Dec;4(4):199–210
Combat casualty care training for reserve forces. Hayunga EG, et al. **Milit Med** 1988 Nov;153(11):574–5
Infection in war wounds: experience in recent military conflicts and future considerations. Jacob E, et al. **Milit Med** 1989 Jun;154(6):311–5 (21 ref.)
How shall we train for combat casualty care [letter] Kerstein MD. **Milit Med** 1988 Oct;153(10):537
Psychiatric casualties among U.S. Marines in Vietnam. Palinkas LA, et al. **Milit Med** 1988 Oct;153(10):521–6
Early mental health intervention in combat situations: the USS Stark. Sokol RJ. **Milit Med** 1989 Aug;154(8):407–9
The role of the podiatrist in a wartime scenario. Weaver TD, et al. **Milit Med** 1988 Aug;153(8):391–3
Guidelines for a prisoner of war medical treatment center in a civilian hospital. Westreich M, et al. **Milit Med** 1988 Nov;153(11):549–54 (22 ref.)
Neurosurgery in the Middle East: life under fire. Haddad FS. **Neurosurgery** 1989 Aug;25(2):303–11
Orthopaedics overseas: the other side of the coin [editorial] Fowles JV. **Orthop Rev** 1989 Jan;18(1):13–4
Health belief system and war's madness: A clinical look at Ernest Becker's psychology of war. Elgee NJ. **Pharos** 1989 Winter;52(1): 27–32
Child survivors of the holocaust. **Psychoanal Rev** 1988 Winter;75(4):495–662
The diary of an adolescent girl in the ghetto: a study of age-specific reactions to the Holocaust. Cahn TI. **Psychoanal Rev** 1988 Winter;75(4):589–617
Intergenerational group therapy: child survivors of the Holocaust and offspring of survivors. Fogelman E. **Psychoanal Rev** 1988 Winter;75(4):619–40
Facing war, murder, torture, and death in latency. Gampel Y. **Psychoanal Rev** 1988 Winter;75(4):499–509
The analysis of a latency-age survivor of the Holocaust. Haber CH. **Psychoanal Rev** 1988 Winter;75(4):641–51
Memories from early childhood. Kestenberg JS. **Psychoanal Rev** 1988 Winter;75(4):561–71
Child survivors of the Holocaust. Kestenberg JS. **Psychoanal Rev** 1988 Winter;75(4):495–7
Perceptions from epidemiologic research in an endemic war. Armenian HK. **Soc Sci Med** 1989;28(7):643–7
War-related changes in health and health services in Nicaragua. Garfield RM. **Soc Sci Med** 1989;28(7):669–76 (24 ref.)
Violence, conflict and health in Africa. Ityavyar DA, et al. **Soc Sci Med** 1989;28(7):649–57
Suicide: media impacts in war and peace, 1910–1920. Stack S. **Suicide Life Threat Behav** 1988 Winter;18(4):342–57
Posttraumatic epilepsy in World War II veterans. Walker AE. **Surg Neurol** 1989 Sep;32(3):235–6
Trauma in the Afghan guerrilla war: effects of lack of access to care. Bhatnagar MK, et al. **Surgery** 1989 Jun; 105(6):699–705
[Principles of triage applied in wartime and in catastrophes] Courbil LJ. **Bull Acad Natl Med (Paris)** 1988 Mar; 172(3):333–46 (Eng. Abstr.) (Fre)
[A grenade splinter as the cause of cholangitis and icterus] Niebuhr H, et al. **Dtsch Med Wochenschr** 1989 Aug 25; 114(34):1283–5 (Eng. Abstr.) (Ger)
[Clinico-roentgenologic manifestations of chronic gunshot osteomyelitis of the long tubular bones of many years' duration] Ermachenko BA, et al. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):13–8 (Eng. Abstr.) (Rus)
[Mobile repair units of the medical corps during World War II] Kuvshinskiĭ CS, et al. **Voen Med Zh** 1989 May;(5):74–5 (Rus)
[Experience in organizing surgical care for the wounded in the Army of the Republic of Afghanistan] Tutokhel AK, et al. **Voen Med Zh** 1989 Jan;(1):27–30 (Rus)

HISTORY

To pop a balloon: aeromedical evacuation in the 1870 siege of Paris. Lam DM. **Aviat Space Environ Med** 1988 Oct; 59(10):988–91
Clinical medicine in revolution: 2—Fusion in the crucible. Gabbay J. **BMJ** 1989 Jul 15;299(6692):166–9
British medical services at the Battle of Waterloo. Howard MR. **BMJ** 1988 Dec 24–31;297(6664):1653–6
Dental identification of fifteenth century battle victims. Claxton AC. **Br Dent J** 1989 Jul 22;167(2):77–8
Do not forget MDs' wartime sacrifices, CMA president urges. Sullivan P. **Can Med Assoc J** 1988 Nov 15; 139(10):1000–1
The 29th Base Hospital during World War I [letter] Queary CH Jr. **Colo Med** 1989 Jun 1;86(11):184–5
Vascular problems at the Battle of Waterloo. Crumplin MK. **Eur J Vasc Surg** 1987 Apr;1(2):137–42
Wartime bureaucracy and penicillin allocation: the Committee on Chemotherapeutic and Other Agents, 1942–44. Adams DP. **J Hist Med Allied Sci** 1989 Apr; 44(2):196–217
Death on the Argus: American medical malpractice versus British chauvinism in the War of 1812. Estes JW, et al. **J Hist Med Allied Sci** 1989 Apr;44(2):179–95
Civil War hospitals around Chickamauga Battlefield. "Marching Through Northwest Georgia". Crawley LM. **J Med Assoc Ga** 1989 May;78(5):279–81
Mitchiner memorial lecture, 1988: July 1st 1916. Ellis H.

J R Army Med Corps 1989 Feb;135(1):10–2
'My story'—sinking of HMS Gurkha January 17 1942. Brown WM. J R Nav Med Serv 1988 Winter;74(3):137–9
A piece of my mind. Thanks for the memories. Collins TM. JAMA 1988 Dec 23–30;260(24):3654
The image of war in Finland's medical journals. Taipale I, et al. Med War 1989 Apr–Jun;5(2):96–106
Lessons of Pearl Harbor. Hardaway RM. Millit Med 1988 Oct;153(10):495–8
Neurological surgery during the Great War: the influence of Colonel Cushing. Hanigan WC. Neurosurgery 1988 Sep; 23(3):283–94
Saudade 1944: working with the Brazilian medical corps. Weinberger LM. Pharos 1989 Summer;52(3):17–20
[The Czech Medical Association during the Nazi occupation] Simberská R. Cas Lek Cesk 1988 Aug 5;127(32):1019–21 (Cze)
[Identification of the skulls of paratroopers from Ressl Street in Prague] Vlček E. Cas Lek Cesk 1989 Feb 17; 128(8):247–53 (Eng. Abstr.) (Cze)
[Anesthesia in war and catastrophies] Rudkjøbing OT. Ugeskr Laeger 1989 Jul 31;151(31):1967–70 (29 ref.) (Eng. Abstr.) (Dan)
[Ephemerides 1889–1939–1989] Dodin A. Bull Soc Pathol Exot Filiales 1989 Jan;82(1):9–12 (Fre)
[Organizational problems in medical education—Warsaw 1945] Podgórska-Klawe Z. Z Arztl Fortbild (Jena) 1989; 83(7):367–9 (Ger)
[Remembering the pharmacist heroes of the 1848/49 Hungarian War of Independence] Hegedüs L, et al. Orv Hetil 1988 Oct 30;129(44):2369–70 (Hun)
[Public health administration after the defeat of the Hungarian fight for independence] Kapronczay K. Orv Hetil 1988 Oct 16;129(42):2256–7 (Hun)
[Zbigniew Dworak—Dr. Maks (1917–1963)] Marcinkowski T. Arch Hist Filoz Med 1988;51(2):233–42 (Eng. Abstr.) (Pol)
[Who knows the fate of the flag of the School for Military Medical Personnel in Warsaw?] Skrobacki A. Arch Hist Filoz Med 1988;51(2):251–3 (Pol)
[Various characteristic reactions in the concentration camp] Chylińska M. Przegl Lek 1989;46(1):57–66 (Pol)
[The end of the concentration camp gehenna] Haltof-Mikołajewska Z. Przegl Lek 1989;46(1):164–7 (Pol)
[The "Scientific Department" in Dachau. Paul Neumann] Hano J. Przegl Lek 1989;46(1):171–9 (Pol)
[Maria Cecylia Autsch ("Angela")] Iwaszko T. Przegl Lek 1989;46(1):190–2 (Pol)
[Health status of so-called children from the Zamość district] Jankowski J, et al. Przegl Lek 1989;46(1):13–5 (Pol)
[Health services of the Home Army] Jaśniewicz Z, et al. Przegl Lek 1989;46(1):107–24 (Pol)
[Ideologic attitudes of prisoners at the Auschwitz concentration camp] Kłodziński S, et al. Przegl Lek 1989; 46(1):22–57 (Pol)
[Auschwitz dictionary (L,J). A model] Kłodziński S, et al. Przegl Lek 1989;46(1):66–85 (Pol)
[Dr. Josef Mengele and the traces of his crimes] Kubica H. Przegl Lek 1989;46(1):96–106 (Pol)
[Reminiscences of the stay at the transitory camp in Pruszków] Marcinkowski T. Przegl Lek 1989;46(1):159–63 (Pol)
[Health services of the Home Army in the Rabka district] Marczyński A. Przegl Lek 1989;46(1):125–32 (Pol)
[Sorrows and joys at the hospital for Polish prisoners of war at Skarbowa Street No. 2 in Cracow] Mianowska A. Przegl Lek 1989;46(1):150–9 (Pol)
[In Neustadt–Glewe] Palmowska-Frankowska J. Przegl Lek 1989;46(1):167–71 (Pol)
[The concept of values in former prisoners of Nazi concentration camps] Pater J. Przegl Lek 1989;46(1):16–22 (Pol)
[The physician and biologist Nicet Franciszek Włodarski] Sikorski J. Przegl Lek 1989;46(1):193–4 (Pol)
[Prisoners–cleaners in the concentration camp hospital for the SS personnel] Sikorski J. Przegl Lek 1989;46(1):92–5 (Pol)
[Ashes of cremated prisoners of concentration camps] Stefańska-Szymańska I. Przegl Lek 1989;46(1):86–92 (Pol)
[Dr. Jost Walbaum, the head of the Health Department in the so-called General Government] Sterkowicz S. Przegl Lek 1989;46(1):136–40 (Pol)
[Punishment of Nazi physicians] Sterkowicz S. Przegl Lek 1989;46(1):143–9 (Pol)
[Dr. Walter Weisspfennig, the murderer of shipwrecked men] Sterkowicz S. Przegl Lek 1989;46(1):141–3 (Pol)
[Prof. Czesław Kempisty] Witkowski J. Przegl Lek 1989; 46(1):180–90 (Pol)
[Polish medical students in Lvov during the Nazi occupation] Zablotniak R. Przegl Lek 1989;46(1):132–6 (Pol)
[Recollections of work in Orenburg during World War II (1941–1944)] Strukov AI. Arkh Patol 1988;50(7):87–91 (Rus)
[Public health in the Western Kazakhstan during World War II] Dushmanov SKh. Sov Zdravookhr 1989;(4):65–8 (Rus)
[Patronage assistance to military institutions in the Vologda district during World War II] Efimova VV, et al. Sov Zdravookhr 1988;(10):58–61 (Rus)
[Public health in Bashkiria during World War II] Tur'ianov AKh, et al. Sov Zdravookhr 1989;(5):63–6 (Rus)
[Activities of medical scientists in the Western Siberia during World War II] Zelenin SF. Sov Zdravookhr 1988;(11):53–5 (Rus)
[Evacuation of the sick and wounded via inland water routes during World War II] Amusin BM. Voen Med Zh 1988 Jun;(6):71–3 (Rus)
[The organization of the technical supplies of the medical service of the Armed Forces in the prewar years] Chirkov AI, et al. Voen Med Zh 1989 Apr;(4):68–70 (Rus)
[The experience of carrying and transporting those wounded in battles at Ardon in November–December of 1942] Ivanov AI. Voen Med Zh 1989 May;(5):72–4 (Rus)
[Medics of the 64th guards rifle division in the battle of "Iskra"] Krasnopeev II. Voen Med Zh 1989 May;(5):70–2 (Rus)
[Measuring devices and equipment in the practical work of medical personnel during World War II] Kuvshinskii VD, et al. Voen Med Zh 1989 Feb;(2):77 (Rus)
[Troop medical supplies during the battle on the Kursk arch] Lapin VP. Voen Med Zh 1988 Jul;(7):16–8 (Rus)
[Medical support of the Soviet troops in the Kursk defensive operation] Lobastov OS, et al. Voen Med Zh 1988 Jun; (6):12–7 (Rus)
[Medical support for the Soviet troops in the Kursk offensive operation] Lobastov OS, et al. Voen Med Zh 1988 Jul; (7):11–5 (Rus)
[The Tomsk State Medical Institute during World War II] Ripp GKh. Voen Med Zh 1988 Nov;(11):65–7 (Rus)
[The work of rear-service hospitals deployed in the territory of the Turkmen SSR during World War II] Shapovbalov VE. Voen Med Zh 1988 Sep;(9):69–71 (Rus)
[The organization of medical support for Soviet troops in the battle for the Dnieper] Sokolov VI. Voen Med Zh 1988 Dec;(12):11–8 (Eng. Abstr.) (Rus)
[The training and utilization of gynecology specialists during World War II] Tsvelev IuV, et al. Voen Med Zh 1988 Sep;(9):73–4 (Rus)
[Unresolved problems of the medical support for the Armed Forces in World War II] Voltenko MF. Voen Med Zh 1988 May;(5):22–5 (Rus)
[The return home] Zakharov VP. Voen Med Zh 1988 Aug; (8):26–8 (Rus)
[Return to the homeland] Zakharov VP. Voen Med Zh 1989 Mar;(3):8–11 (Rus)
[Institute of Nutrition, Academy of Medical Sciences of the USSR in the World War II] Shtenberg AI. Vopr Pitan 1988 May–Jun;(3):75–9 (Rus)
[Procurement of medical supplies from occupied regions as a specific source of medical provisions during the National War of Liberation] Katan E, et al. Vojnosanit Pregl 1988 Nov–Dec;45(6):454–8 (Ser)
[Neuropsychological sequelae of deportation to the Nazi concentration camps during the Second World War] Abalan F, et al. Actas Luso Esp Neurol Psiquiatr Cienc Afines 1989 Jan–Feb;17(1):36–43 (35 ref.) (Eng. Abstr.) (Spa)

WAR CRIMES

Rorschach records of Nazi war criminals: a reanalysis using current scoring and interpretation practices. Zillmer EA, et al. J Pers Assess 1989 Spring;53(1):85–99

HISTORY

Contested terrain. The Nazi analogy in bioethics. Hastings Cent Rep 1988 Aug–Sep;18(4):29–33
Brain sections to be buried? [news] Dickman S. Nature 1989 Jun 15;339(6225):498
[Dr. Josef Mengele and the traces of his crimes] Kubica H. Przegl Lek 1989;46(1):96–106 (Pol)
[Dr. Walter Weisspfennig, the murderer of shipwrecked men] Sterkowicz S. Przegl Lek 1989;46(1):141–3 (Pol)
[Dr. Jost Walbaum, the head of the Health Department in the so-called General Government] Sterkowicz S. Przegl Lek 1989;46(1):136–40 (Pol)
[Punishment of Nazi physicians] Sterkowicz S. Przegl Lek 1989;46(1):143–9 (Pol)

WARFARIN

Responses to warfarin by the Indian gerbil Tatera indica from Tirupati, India. Balasubramanyam M, et al. Indian J Exp Biol 1988 Sep;26(9):694–6

ADMINISTRATION & DOSAGE

Long-term oral anticoagulant therapy in elderly patients. Wickramasinghe LS, et al. Age Ageing 1988 Nov; 17(6):388–96
Antithrombotic therapy in the primary prevention of acute myocardial infarction. Miller GJ. Am J Cardiol 1989 Jul 18;64(4):29B–32B
Thromboembolism and problems of anti-coagulation after prosthetic valve replacement. Sivathasan C, et al. Ann Acad Med Singapore 1988 Jul;17(3):434–7
Ofloxacin and warfarin [letter] Leor J, et al. Ann Intern Med 1988 Nov 1;109(9):761
A randomized trial of less intense postoperative warfarin or aspirin therapy in the prevention of venous thromboembolism after surgery for fractured hip. Powers PJ, et al. Arch Intern Med 1989 Apr;149(4):771–4
Prospective evaluation of a flexible protocol for starting treatment with warfarin and predicting its maintenance dose. Cosh DG, et al. Aust N Z J Med 1989 Jun;19(3):191–7
The Smith Kline & French lecture 1987. Clinical pharmacology and the art of bespoke prescribing. Routledge PA. Br J Clin Pharmacol 1988 Oct;26(4):339–45 (46 ref.)
Warfarin therapy: need for a protocol? Harland CC, et al. Br J Clin Pract 1988 May;42(5):196–7
The effect of treatment with prednisolone or cyclophosphamide–warfarin–dipyridamole combination on the outcome of patients with membranous nephropathy. Shearman JD, et al. Clin Nephrol 1988 Dec;30(6):320–9
Comparing warfarin-dosage-prediction techniques [letter] Sawyer WT. Clin Pharm 1987 Oct;6(10):758–9
Guidelines for warfarin dosage [letter] Zatuchni J. Drug Intell Clin Pharm 1988 Oct;22(10):825–6
Randomized controlled trial of low dose warfarin in the primary prevention of ischaemic heart disease in men at high risk: design and pilot study. Meade TW, et al. Eur Heart J 1988 Aug;9(8):836–43
Anticoagulation clinics facilitate the close monitoring of patients on anticoagulant therapy [letter] Zatuchni J. Int J Cardiol 1988 Nov;21(2):195–6
Warfarin administration reduces synthesis of sulfatides and other sphingolipids in mouse brain. Sundaram KS, et al. J Lipid Res 1988 Nov;29(11):1475–9
Anticoagulation with sodium warfarin in children: effect of a loading regimen. Doyle JJ, et al. J Pediatr 1988 Dec; 113(6):1095–7
Evaluation of factors associated with stability of anticoagulation therapy. Rospond RM, et al. Pharmacotherapy 1989;9(4):207–13
[Antithrombogenic therapy by use of antiplatelet agents with warfarin—its efficiency for the outpatients with prosthetic valve] Saitoh H. Nippon Kyobu Geka Gakkai Zasshi 1988 Nov;36(11):2396–407 (Eng. Abstr.) (Jpn)
[Medical treatment of pulmonary thromboembolism] Nagata H. Nippon Kyobu Shikkan Gakkai Zasshi 1988 May; 26(5):478–86 (Eng. Abstr.) (Jpn)

ADVERSE EFFECTS

Warfarin–related hemorrhage after valve replacement [letter] Montalescot G, et al. Am Heart J 1988 Dec;116(6 Pt 1):1649–50
Value of magnetic resonance imaging for diagnosis of cervical epidural hematoma associated with anticoagulation after cardiac valve replacement. Hurst PG, et al. Am J Cardiol 1989 Apr 15;63(13):1016–7
Acute gastrointestinal bleeding in anticoagulated patients: a prospective evaluation. Tabibian N. Am J Gastroenterol 1989 Jan;84(1):10–2
Familial type II protein C deficiency associated with warfarin-induced skin necrosis and bilateral adrenal hemorrhage. Conlan MG, et al. Am J Hematol 1988 Dec; 29(4):226–9
Major bleeding in outpatients treated with warfarin: incidence and prediction by factors known at the start of outpatient therapy. Landefeld CS, et al. Am J Med 1989 Aug;87(2):144–52
Bleeding in outpatients treated with warfarin: relation to the prothrombin time and important remediable lesions. Landefeld CS, et al. Am J Med 1989 Aug;87(2):153–9
An unusual presentation of gluteal hematoma during anticoagulation therapy for deep venous thrombosis in spinal cord injury. Balmaseda MT Jr, et al. Am J Phys Med Rehabil 1988 Dec;67(6):261–3
Norfloxacin and warfarin [letter] Linville T, et al. Ann Intern Med 1989 May 1;110(9):751–2
Hematological complications with the St. Jude valve and reduced-dose Coumadin. DiSesa VJ, et al. Ann Thorac Surg 1989 Aug;48(2):280–3
Anticoagulants during pregnancy. Ginsberg JS, et al. Annu Rev Med 1989;40:79–86 (28 ref.)
Upper airway obstruction secondary to warfarin-induced sublingual hematoma. Cohen AF, et al. Arch Otolaryngol Head Neck Surg 1989 Jun;115(6):718–20 (11 ref.)
Human gastric mucosal bleeding induced by low dose aspirin, but not warfarin. Prichard PJ, et al. BMJ 1989 Feb 25; 298(6672):493–6
Tamoxifen–warfarin interaction: the Aberdeen hospitals drug file. Ritchie LD, et al. BMJ 1989 May 6;298(6682):1253
Life threatening interaction between tamoxifen and warfarin. Tenni P, et al. BMJ 1989 Jan 14;298(6666):93
An unusual complication of anticoagulant therapy: bloody tears. Kleis W, et al. Bol Asoc Med P R 1989 Jul;81(7):275–6
Effect of dicloxacillin sodium on the hypoprothrombinemic response to warfarin sodium. Krstenansky PM, et al. Clin Pharm 1987 Oct;6(10):804–6
Warfarin–induced alopecia. Umlas J, et al. Cutis 1988 Jul; 42(1):63–4
Comment: TMP/SMX—warfarin interaction [letter] Fredriks DA. DICP 1989 Jul–Aug;23(7–8):619–20
Prothrombin time ratio and other factors associated with bleeding in patients treated with warfarin. Petitti DB, et al. J Clin Epidemiol 1989;42(8):759–64
Acute carpal tunnel syndrome in a patient taking coumadin. Copeland J, et al. J Trauma 1989 Jan;29(1):131–2
Acute renal failure due to hypersensitivity interstitial nephritis induced by warfarin sodium. Volpi A, et al. Nephron 1989;52(2):196
Mechanism of bone and cartilage maldevelopment in the

warfarin embryopathy. Pauli RM.
Pathol Immunopathol Res 1988;7(1–2):107–12
Warfarin usage: can safety be improved? Scott AK.
Pharmacol Ther 1989;42(3):429–57 (101 ref.)
The safety and effectiveness of long–term warfarin therapy in an anticoagulation clinic. Bussey HI, et al.
Pharmacotherapy 1989;9(4):214–9
Genital necrosis secondary to warfarin therapy. Kandrotas RJ, et al. **Pharmacotherapy** 1988;8(6):351–4 (17 ref.)
Haemoperitoneum—a complication of acute cholecystitis in a patient on anticoagulant therapy. A case report. Gecelter GR, et al. **S Afr Med J** 1989 Sep 2;76(5):216
Coumarin necrosis or Coumadin necrosis? [letter] Marshall ME, et al. **Surgery** 1989 Feb;105(2 Pt 1):237–8
Coumarin associated skin necrosis. Konrad P, et al. **Vasa** 1988;17(3):208–15
[Simultaneous intake of warfarin and stanozolol as cause of hemorrhage in a patient] Elwin CE, et al.
Lakartidningen 1988 Oct 5;85(40):3290 (Swe)

ANALOGS & DERIVATIVES

Analysis of oxidative warfarin metabolites by thermospray high–performance liquid chromatography/mass spectrometry. Spink DC, et al. **Anal Biochem** 1989 Mar; 177(2):307–13
Microbial models of mammalian metabolism: conversion of warfarin to 4'-hydroxywarfarin using Cunninghamella bainieri. Rizzo JD, et al. **J Pharm Sci** 1989 Mar;78(3):183–9
Aspects of anticoagulant action: a review of the pharmacology, metabolism and toxicology of warfarin and congeners. Sutcliffe FA, et al.
Rev Drug Metabol Drug Interact 1987;5(4):225–72 (180 ref.)

ANALYSIS

Recovery of warfarin from an enteral nutrient formula. Kuhn TA, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1395–9
Interaction between drugs and water–soluble polymers. I. Binding of warfarin and 4–hydroxycoumarin with polyvinylpyrrolidone and acrylamide–vinylpyrrolidone copolymer. Tanaka M, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4645–51
Analysis of warfarin and its metabolites by reversed–phase ion–pair liquid chromatography with fluorescence detection. Wong YW, et al. **J Chromatogr** 1989 May 19; 469:281–91

ANTAGONISTS & INHIBITORS

Warfarin resistance associated with nafcillin therapy. Fraser GL, et al. **Am J Med** 1989 Aug;87(2):237–8
[Clinical pharmacologic aspects of mepartricin. Possible pharmacologic interference with digitaloids and anticoagulants] Costa FV. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):5–6 (Ita)

BLOOD

Mechanism by which warfarin binds to human serum albumin. Stopped–flow kinetic experiments with two large fragments of albumin. Bos OJ, et al.
Biochem Pharmacol 1989 Jun 15;38(12):1979–84
Analysis of warfarin–albumin binding by HPLC with internal–surface reversed–phase silica column. Shibukawa A, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1930–3
Effect of benazepril, a converting enzyme inhibitor, on plasma levels and activity of acenocoumarol and warfarin. Van Hecken A, et al. **Int J Clin Pharmacol Res** 1988; 8(5):315–9
Selective effect of clonazepam and (S)–uxepam on the binding of warfarin enantiomers to human serum albumin. Fitos I, et al. **J Chromatogr** 1988 Oct 21;450(2):217–20
Determination of warfarin in human plasma by high performance liquid chromatography. Chan K, et al.
Methods Find Exp Clin Pharmacol 1988 Nov; 10(11):699–703
The measurement of warfarin enantiomers in serum using coupled achiral/chiral, high–performance liquid chromatography (HPLC). Chu YQ, et al. **Pharm Res** 1988 Oct;5(10):680–3

METABOLISM

Analysis of oxidative warfarin metabolites by thermospray high–performance liquid chromatography/mass spectrometry. Spink DC, et al. **Anal Biochem** 1989 Mar; 177(2):307–13
Location and characterization of the warfarin binding site of human serum albumin. A comparative study of two large fragments. Bos OJ, et al. **Biochem Pharmacol** 1988 Oct 15; 37(20):3905–9
Microsomal warfarin binding and vitamin K 2,3–epoxide reductase. Thijssen HH, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1115–20
Characteristics of warfarin hydroxylation catalyzed by human liver microsomes. Rettie AE, et al.
Drug Metab Dispos 1989 May–Jun;17(3):265–70
Separation of the enantiomers of phenprocoumon and warfarin by high–performance liquid chromatography using a chiral stationary phase. Determination of the enantiomeric ratio of phenprocoumon in human plasma and urine. de Vries JX, et al. **J Chromatogr** 1989 Aug 25; 493(1):149–56
Binding of nonsteroidal anti–inflammatory agents and their effect on binding of racemic warfarin and its enantiomers to human serum albumin. Diana FJ, et al. **J Pharm Sci** 1989 Mar;78(3):195–9
Microbial models of mammalian metabolism: conversion of warfarin to 4'-hydroxywarfarin using Cunninghamella bainieri. Rizzo JD, et al. **J Pharm Sci** 1989 Mar;78(3):183–9
Binding of piroxicam to human serum albumin: effect of piroxicam on warfarin and diazepam binding. Matsuyama K, et al. **Pharm Res** 1987 Aug;4(4):355–7
Microbial models of mammalian metabolism: production of novel alpha–diketone metabolites of warfarin and phenprocoumon using Aspergillus niger. Rizzo JD, et al. **Xenobiotica** 1988 Dec;18(12):1425–37

PHARMACOKINETICS

Effect of erythromycin in patients receiving long–term warfarin therapy. Weibert RT, et al. **Clin Pharm** 1989 Mar; 8(3):210–4
The effect of a diet rich in brussels sprouts on warfarin pharmacokinetics. Ovesen L, et al.
Eur J Clin Pharmacol 1988;34(5):521–3
Comparative pharmacokinetics of coumarin anticoagulants. XLIX: Nonlinear tissue distribution of S–warfarin in rats. Cheung WK, et al. **J Pharm Sci** 1989 Jul;78(7):541–6
Effect of alpha–1–acid glycoprotein, albumin and palmitic acid on the brain and salivary gland extraction of warfarin in rats. Urien S, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):781–5
No effect of roxithromycin on pharmacokinetic or pharmacodynamic properties of warfarin and its enantiomers. Paulsen O, et al. **Pharmacol Toxicol** 1988 Oct; 63(4):215–20
Warfarin bio–availability. A comparison of 4 products. Müller FO, et al. **S Afr Med J** 1988 Dec 3;74(11):566–7
Evaluation of a Bayesian regression program for predicting warfarin response. Boyle DA, et al. **Ther Drug Monit** 1989; 11(3):276–84

PHARMACOLOGY

Effect of heparin and warfarin on chronic hypoxic pulmonary hypertension and vascular remodeling in the guinea pig. Hassoun PM, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):763–8
Ciprofloxacin and warfarin [letter] Mott FE, et al.
Ann Intern Med 1989 Sep 15;111(6):542–3
Warfarin resistance: biochemical evaluation of a warfarin–resistant wild brown rat. Thijssen HH, et al.
Biochem Pharmacol 1989 Sep 15;38(18):3129–32
Biosynthesis and clearance of prothrombin in warfarin–treated rats. Tollersrud OK, et al.
Biochim Biophys Acta 1989 Jan 17;1010(1):35–40
Interaction of ibuprofen and warfarin on primary haemostasis. Schulman S, et al. **Br J Rheumatol** 1989 Feb; 28(1):46–9
The effects of coumarin derivatives on the immunological system of man. Berkarda B. **Chemioterapia** 1987 Jun;6(2 Suppl):224–5
Unsuspected source of vitamin K in patients treated with anticoagulants: a case report. Oren B, et al. **Fam Pract** 1989 Jun;6(2):151–2 (11 ref.)
Evidence of a warfarin–sensitive cancer procoagulant in V2 carcinoma. Roncaglioni MC, et al.
Haematologica (Pavia) 1989 Mar–Apr;74(2):143–7
Lack of interaction between nizatidine and warfarin during chronic administration. Cournot A, et al.
J Clin Pharmacol 1988 Dec;28(12):1120–2
Warfarin resistance and enteral feedings. Martin JE, et al.
JPEN J Parenter Enteral Nutr 1989 Mar–Apr;13(2):206–8
Aspects of anticoagulant action: a review of the pharmacology, metabolism and toxicology of warfarin and congeners. Sutcliffe FA, et al.
Rev Drug Metabol Drug Interact 1987;5(4):225–72 (180 ref.)
Complex interaction of rifampin and warfarin. Almog S, et al. **South Med J** 1988 Oct;81(10):1304–6
Stereoselective interaction of omeprazole with warfarin in healthy men. Sutfin T, et al. **Ther Drug Monit** 1989; 11(2):176–84
Behavior of protein S during long–term oral anticoagulant therapy. Takahashi H, et al. **Thromb Res** 1988 Aug 1; 51(3):241–9
[Influence of indometacin farnesil on blood coagulation. Comparison with indomethacin in normal rats and warfarin induced hypoprothrombinemic rats] Hara K, et al.
Nippon Yakurigaku Zasshi 1988 Dec;92(6):365–73 (Eng. Abstr.) (Jpn)

POISONING

Rat catcher's warfarin treatment associated with rectal haemorrhage. Kirby RM, et al. **BMJ** 1988 Dec 24–31; 297(6664):1640
Extreme warfarin intoxication secondary to possible covert drug ingestion. Richmond RG, et al.
Drug Intell Clin Pharm 1988 Sep;22(9):696–9

THERAPEUTIC USE

Left atrial ball thrombus: apparent detachment following initiation of anticoagulant therapy. Wrisley D, et al.
Am Heart J 1988 Nov;116(5 Pt 1):1351–2
Successful percutaneous transvenous catheter balloon mitral commissurotomy after warfarin therapy and resolution of left atrial thrombus. Hung JS, et al. **Am J Cardiol** 1989 Jul 1;64(1):126–8
Influence of thrombolytic treatment followed by full dose anticoagulation on the frequency of left ventricular thrombi in acute myocardial infarction. Lupi G, et al.
Am J Cardiol 1989 Sep 15;64(10):588–90
Cost effectiveness of monitoring warfarin therapy using standard versus capillary prothrombin times. Ansell JE, et al. **Am J Clin Pathol** 1989 May;91(5):587–9
Anticoagulant therapy for prevention of spontaneous abortion in a patient with a lupus anticoagulant. Joffe AM, et al. **Am J Hematol** 1988 Sep;29(1):56–7
Ocular surgery on patients receiving long–term warfarin therapy. Gainey SP, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):142–6
Anticoagulant therapy for aggressive dementia patients [letter] Walsh AC. **Am J Psychiatry** 1989 Feb;146(2):278–9
Chronic urticaria with angio–oedema controlled by warfarin. Berth–Jones J, et al. **BMJ** 1988 Nov 26;297(6660):1382–3
Lack of effect of warfarin on the restenosis rate or on clinical outcome after balloon coronary angioplasty. Urban P, et al. **Br Heart J** 1988 Dec;60(6):485–8
Warfarin inhibits metastasis of Mtln3 rat mammary carcinoma without affecting primary tumour growth. McCulloch P, et al. **Br J Cancer** 1989 Feb;59(2):179–83
Interaction of ibuprofen and warfarin on primary haemostasis [letter] Pullar T. **Br J Rheumatol** 1989 Jun;28(3):265–6
Unstable angina secondary to left main coronary thrombus extending from prosthetic aortic valve. Jain A, et al.
Cathet Cardiovasc Diagn 1988;15(4):271–2
Apparent warfarin resistance due to poor compliance. Kumar S, et al. **Clin Lab Haematol** 1989;11(2):161–3
Protein C deficiency: spontaneous healing of necrotic rash on warfarin [letter] Sanders CR, et al.
Clin Lab Haematol 1989;11(1):74–5
Controlled trial of dipyridamole and low–dose warfarin in patients with IgA nephritis with renal impairment [letter] Lee GS, et al. **Clin Nephrol** 1989 May;31(5):276
Sucralfate—warfarin interaction [letter] Braverman SE, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):913
The use of warfarin in pregnancy complicated by circulating lupus anticoagulant; a technique for monitoring. Campbell JM, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Sep; 29(1):27–32
Warfarin prophylaxis to prevent mortality from pulmonary embolism after total hip replacement. Amstutz HC, et al.
J Bone Joint Surg [Am] 1989 Mar;71(3):321–6
A randomized trial of anticoagulation with warfarin and of alternating chemotherapy in extensive small–cell lung cancer by the Cancer and Leukemia Group B. Chahinian AP, et al. **J Clin Oncol** 1989 Aug;7(8):993–1002
Late recurrence of embolic stroke after discontinuation of anticoagulant therapy in nonvalvular atrial fibrillation [letter] Yamanouchi H, et al. **J Neurol** 1988 Nov; 235(8):499–500
Anticoagulant therapy in recurrent cerebral embolism: a retrospective study in non–valvular atrial fibrillation. Yamanouchi H, et al. **J Neurol** 1988 Sep;235(7):407–10
Potentiation of warfarin anticoagulation by topical methylsalicylate ointment. Chow WH, et al.
J R Soc Med 1989 Aug;82(8):501–2
Assessment of warfarin therapy under full dose using indium–111 platelet scintigraphy in patients with intracardiac thrombi. Yamada M, et al. **Jpn Circ J** 1988 Dec;52(12):1357–64
Warfarin to prevent thromboembolism in chronic atrial fibrillation [letter] **Lancet** 1989 Mar 25;1(8639):670
Warfarin to prevent thromboembolism in chronic atrial fibrillation [letter] Monreal M, et al. **Lancet** 1989 Apr 1; 1(8640):720–1
Placebo–controlled, randomised trial of warfarin and aspirin for prevention of thromboembolic complications in chronic atrial fibrillation. The Copenhagen AFASAK study. Petersen P, et al. **Lancet** 1989 Jan 28;1(8631):175–9
Warfarin for dilated cardiomyopathy: a bloody tough pill to swallow? Tsevat J, et al. **Med Decis Making** 1989 Jul–Sep;9(3):162–9
[Anticoagulant management of patients with cardiac valve prostheses] Chen RK. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):13–5, 60–1 (Eng. Abstr.) (Chi)
[The progress of a fibrinolytic therapy with streptokinase, urokinase and warfarin in a thoroughbred with intermittent lameness with special reference to resonance thrombography] Pause B, et al. **Tierarztl Prax** 1988; 16(4):377–83 (Eng. Abstr.) (Ger)
[Danazol in the treatment of menometrorrhagia in patients with mitral prosthesis treated with warfarin] Vernotico V, et al. **Minerva Ginecol** 1989 Jun;41(6):291–3 (Eng. Abstr.) (Ita)
[Oral anticoagulants and platelet anti–aggregants in the prevention of metastases: state of the art and perspectives of a combined therapy] Finzi G, et al.
Recenti Prog Med 1989 Jan;80(1):28–32 (49 ref.) (Eng. Abstr.) (Ita)
[Current topics of anticoagulant therapy and antiplatelet therapy after cardiac valve replacement] Kudo T, et al.
Kyobu Geka 1988 Jul;41(8):644–8 (Eng. Abstr.) (Jpn)

WARTHIN TUMOR see ADENOLYMPHOMA

WARTS

see related
PAPILLOMA

Warts/human papillomaviruses. **Clin Dermatol** 1985 Oct-Dec;3(4):1-220

Cutaneous warts. Clinical, histologic, and virologic correlations. Jablonska S, et al. **Clin Dermatol** 1985 Oct-Dec;3(4):71-82

CHEMICALLY INDUCED

The incidence of immunosuppression-related skin disease in long-term transplant patients. McLelland J, et al. **Transplantation** 1988 Dec;46(6):871-4

[Persistent hand warts after long-term treatment of eczema with steroid ointments] Lańcucki J, et al. **Przegl Dermatol** 1988 May-Jun;75(3):190-3 (Eng. Abstr.) (Pol)

COMPLICATIONS

[Syringoma of the vulva underneath a seborrheic wart] Aguilar Martínez A, et al. **Ann Dermatol Venereol** 1989; 116(4):323-4 (Fre)

[Warts in the external anogenital area with special reference to HIV-positive patients. Anogenital warts] Rüdlinger R. **Schweiz Rundsch Med Prax** 1988 Nov 1;77(44):1202-7 (Eng. Abstr.) (Ger)

DRUG THERAPY

Treatment of verruca vulgaris with intralesional bleomycin. Wong KS, et al. **Ann Acad Med Singapore** 1988 Oct; 17(4):524-5

Treatment of plantar warts. Carpenter H. **Aust Fam Physician** 1988 Aug;17(8):664

Intralesional bleomycin sulfate in treatment of recalcitrant warts. Bunney MH. **Clin Dermatol** 1985 Oct-Dec; 3(4):189-94

Treatment of multiple relapsing warts with diphenciprone. Orecchia G, et al. **Dermatologica** 1988;177(4):225-31

Treatment options for cutaneous warts in family practice. Steele K, et al. **Fam Pract** 1988 Dec;5(4):314-9 (33 ref.)

Salicylic acid in karaya gum patch as a treatment for verruca vulgaris. Bart BJ, et al. **J Am Acad Dermatol** 1989 Jan; 20(1):74-6

Diphencyprone [letter] Lane PR, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):364-5

A perspective study using bleomycin sulfate in the treatment of plantar verrucae. Sollitto RJ, et al. **J Foot Surg** 1989 Mar-Apr;28(2):141-4

EPIDEMIOLOGY

[Viral warts in butchers. A clinico-statistical study] Aloi FG, et al. **G Ital Dermatol Venereol** 1988 Jul-Aug; 123(7-8):341-4 (Eng. Abstr.) (Ita)

ETIOLOGY

Recent concepts in human papillomavirus. Rivera Y, et al. **P R Health Sci J** 1988 Dec;7(3):233-43 (33 ref.)

[Warts and epidermoid carcinoma after renal transplantation] Euvrard S, et al. **Ann Dermatol Venereol** 1989; 116(3):201-11 (29 ref.) (Fre)

[Comment on the response by R. Rüdlinger to a question from general practice: the importance of warts in kidney transplant patients] Göring HD. **Hautarzt** 1989 Apr; 40(4):243-4 (Ger)

[Leser-Trélat syndrome] Hoffmann A, et al. **Internist (Berlin)** 1989 Jul;30(7):457-8 (Ger)

GENETICS

Comparison of human papillomavirus type 1 serotyping by monoclonal antibodies with genotyping by in situ hybridization of plantar warts. Jenson AB, et al. **J Cutan Pathol** 1989 Apr;16(2):54-9

HLA linkage of warts and basal cell carcinomas in renal transplant recipients. Welsh KI, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):579

IMMUNOLOGY

Humoral immunity to human papillomaviruses. Kienzler JL. **Clin Dermatol** 1985 Oct-Dec;3(4):144-55 (52 ref.)

METABOLISM

Demonstration of in vitro synthesis of human papilloma viral proteins from hand and foot warts. Fey SJ, et al. **J Invest Dermatol** 1989 Jun;92(6):817-24

MICROBIOLOGY

Human papillomavirus. Current concepts. Androphy EJ. **Arch Dermatol** 1989 May;125(5):683-5 (20 ref.)

Human papillomavirus-35-positive bowenoid papulosis of the anogenital area and concurrent human papillomavirus-35-positive verruca with bowenoid dysplasia of the periungual area. Rüdlinger R, et al. **Arch Dermatol** 1989 May;125(5):655-9

Warts in fish handlers. Rüdlinger R, et al. **Br J Dermatol** 1989 Ma ;120(3):375-81

Papillomaviruses in human skin warts and their incidence in an Argentine population. Corley E, et al. **Diagn Microbiol Infect Dis** 1988 Jun;10(2):93-101

A study of HPV 1, 2 and 4 antibody prevalence in patients presenting for treatment with cutaneous warts to general practitioners in N. Ireland. Steele K, et al. **Epidemiol Infect** 1988 Dec;101(3):537-46

Unusual HPV types in oral warts in association with HIV infection. Greenspan D, et al. **J Oral Pathol** 1988 Nov; 17(9-10):482-8

Detection of human papillomavirus type 16 DNA and papillomavirus genus-specific antigens in vulva and cervix from patients with Bowenoid papulosis. Sugase M, et al. **Jpn J Cancer Res** 1989 Jan;80(1):19-23

Sequence divergence yet conserved physical characteristics among the E4 proteins of cutaneous human papillomaviruses. Doorbar J, et al. **Virology** 1989 Sep; 172(1):51-62

Phosphorylation of the human papillomavirus type 1 E4 proteins in vivo and in vitro. Grand RJ, et al. **Virology** 1989 May;170(1):201-13

[Ultrastructural demonstration of the human papilloma virus (HPV) in oral proliferative lesions] Broich G, et al. **Acta Otorhinolaryngol Ital** 1989 Mar-Apr;9(2):189-97 (Eng. Abstr.) (Ita)

PATHOLOGY

Psoriasis occurring predominantly on warts. Possible involvement of interferon alfa. Shiohara T, et al. **Arch Dermatol** 1988 Dec;124(12):1816-21

Regression of flat warts and common warts. Tagami H, et al. **Clin Dermatol** 1985 Oct-Dec;3(4):170-8

Painless verrucoid plaque on the lower lip. Jensen JL, et al. **J Am Dent Assoc** 1989 Feb;118(2):217-8

[The disease picture of verruciform xanthoma] Landthaler M, et al. **Hautarzt** 1988 Nov;39(11):727-30 (20 ref.) (Eng. Abstr.) (Ger)

[Verrucous elephantiasis: a maximum variant of lymphedema] Schmeller W, et al. **Hautarzt** 1989 May;40(5):276-80 (Eng. Abstr.) (Ger)

[Another viral inclusion wart different from myrmecia] Egawa K. **Nippon Hifuka Gakkai Zasshi** 1988 Oct; 98(11):1105-12 (Eng. Abstr.) (Jpn)

PSYCHOLOGY

Personality factors as predictors of therapeutic response to cryosurgery in patients with warts. Kalivas L, et al. **J Am Acad Dermatol** 1989 Mar;20(3):429-32

SURGERY

Rupture of tendons after cryotherapy for hand warts. McGeorge D. **BMJ** 1988 Dec 3;297(6661):1475

Outcome of carbon dioxide laser therapy for persistent cutaneous viral warts. Logan RA, et al. **Br J Dermatol** 1989 Jul;121(1):99-105

Technique of cryotherapy. Dachow-Siwiec E. **Clin Dermatol** 1985 Oct-Dec;3(4):185-8

Infectious papillomavirus in the vapor of warts treated with carbon dioxide laser or electrocoagulation: detection and protection. Sawchuk WS, et al. **J Am Acad Dermatol** 1989 Jul;21(1):41-9

Benefits of the CO2 laser for verruca resistant to other modalities of treatment. Apfelberg DB, et al. **J Dermatol Surg Oncol** 1989 Apr;15(4):371-5

Surgical excision of trauma-induced verrucous lupus erythematosus. Eskreis BD, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1296-9

Superficial fascia—an appropriate anatomic boundary for excising warts on the foot. Lemont H, et al. **J Dermatol Surg Oncol** 1989 Jul;15(7):710-1

[Immunohistologic alterations of epidermal cytokeratins following cryotherapy] Wollina U. **Z Hautkr** 1989 Feb 15; 64(2):123-6 (Eng. Abstr.) (Ger)

[Use of a multipurpose cryogenic coagulotome in surgery of the skin] Golub VI, et al. **Vestn Khir** 1989 Mar; 142(3):103-4 (Rus)

THERAPY

Management of cutaneous warts. Steele K. **Aust Fam Physician** 1988 Nov;17(11):950-2 (15 ref.)

Treatment of warts [letter] Wenkart TR. **Aust Fam Physician** 1989 May;18(5):564-5

Interferon and retinoid treatment of warts. Blanchet-Bardon C, et al. **Clin Dermatol** 1985 Oct-Dec;3(4):195-9

The treatment of warts. Rees RB. **Clin Dermatol** 1985 Oct-Dec;3(4):179-84

An audit of wart treatment in a Scottish dermatology department. Keefe M, et al. **Health Bull (Edinb)** 1989 Jan; 47(1):13-20

Contact immunotherapy of resistant warts. Naylor MF, et al. **J Am Acad Dermatol** 1988 Oct;19(4):679-83 (31 ref.)

Interferon-gamma as adjuvant therapy for resistant warts. Shiohara T, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):387-91

Treatment of cutaneous warts in general practice [letter] Dick DC, et al. **J R Coll Gen Pract** 1988 Sep;38(314):425

Liquid nitrogen and salicylic/lactic acid paint in the treatment of cutaneous warts in general practice. Steele K, et al. **J R Coll Gen Pract** 1988 Jun;38(311):256-8

Successful treatment of warts. Choosing the best method for each situation. Taylor MB. **Postgrad Med** 1988 Dec; 84(8):126-8, 131-6 (16 ref.)

The management of viral warts. Benton C. **Practitioner** 1988 Sep 8;232(1454 (Pt 1)):933-8 (0 ref.)

[Treatment of warts] Karvonen J. **Duodecim** 1988; 104(4):271-5 (Fin)

[The treatment of warts today] Perroud HM. **Ther Umsch** 1989 Feb;46(2):102-6 (Eng. Abstr.) (Ger)

VETERINARY

Cutaneous bovine papillomatosis in the Sudan: detection of the group-specific virus antigen in warts from affected cattle. Abu Elzein EM, et al. **Rev Elev Med Vet Pays Trop** 1988;41(1):41-3

WARTS, GENITAL see **CONDYLOMATA ACUMINATA**

WARTS, VENEREAL see **CONDYLOMATA ACUMINATA**

WASP VENOMS see under **BEE VENOMS**

WASPS see under **HYMENOPTERA**

WASTE DISPOSAL, FLUID see under **SEWAGE**

WASTE DISPOSAL, SOLID see **REFUSE DISPOSAL**

WASTE PRODUCTS

Flowing by the waste-side: the emerging national policy on medical waste. Goode LD. **Acad Med** 1989 Sep;64(9):514-5

Criteria for containers for used injection, incision, and blood-testing materials [letter] Vincent-Ballereau FN. **Am J Hosp Pharm** 1988 Oct;45(10):2073-4

Regulating disposal of infectious waste. Schlepp S. **AORN J** 1988 Oct;48(4):747-51

Sharps disposal [letter] Woodhead CM. **Br Dent J** 1988 Sep 10;165(5):160

Contrast use: waste not—want not. Coop FW, et al. **Can Assoc Radiol J** 1989 Aug;40(4):201-2

Burden of biomedical waste disposal to be placed on physicians. Singer MH, et al. **Conn Med** 1988 Sep; 52(9):553-4

Whose waste is it anyway? The case of John Moore. Annas GJ. **Hastings Cent Rep** 1988 Oct-Nov;18(5):37-9

Health physics activities in the dismantling of a radioactive incinerator. Pickering CA, et al. **Health Phys** 1989 Mar; 56(3):373-5

Facilities management. Tossing the trash. Eubanks P. **Hospitals** 1989 May 20;63(10):76-7, 79

EPA plans to revise medical waste regulations. Holthaus D. **Hospitals** 1989 Feb 20;63(4):42-3

Reusables revisited as medical waste adds up. Souhrada L. **Hospitals** 1988 Oct 20;62(20):82

Infectious waste management—will science prevail? [editorial] Hedrick ER. **Infect Control Hosp Epidemiol** 1988 Nov;9(11):488-90

Status of scrap (recyclable) dental amalgams as environmental health hazards or toxic substances. Rogers KD. **J Am Dent Assoc** 1989 Jul;119(1):159-66 (53 ref.)

AVMA guide for veterinary medical waste management. Brody MD. **J Am Vet Med Assoc** 1989 Aug 15; 195(4):440-52

Medical waste: confusion reigns [news] Brody MD. **J Am Vet Med Assoc** 1989 Mar 15;194(6):754-5

Emission of viable bacteria in the exhaust flue gases from a hospital incinerator. Blenkharn JI, et al. **J Hosp Infect** 1989 Jul;14(1):73-8

A method of audit for ward clinical waste. Lawrence JM, et al. **J Hosp Infect** 1988 Nov;12(4):323-6

Medical waste [editorial] Smith SZ. **J Ky Med Assoc** 1988 Oct;86(10):577

Med-waste regulations pose backdoor threat to nuclear medicine. Brill DR. **J Nucl Med** 1989 Sep;30(9):1431-4

Getting rid of bugs, drugs, and trash [editorial] Laskin DM. **J Oral Maxillofac Surg** 1989 May;47(5):437-8

The disposal of infected laboratory waste. Collins CH. **J R Soc Health** 1989 Jun;109(3):112-4

Infectious medical wastes. Council on Scientific Affairs. **JAMA** 1989 Sep 22-29;262(12):1669-71

Medical waste disposal rules expected in 1989 [news] Johnson SS. **JAMA** 1988 Nov 18;260(19):2784

Management of infectious waste by US hospitals. Rutala WA, et al. **JAMA** 1989 Sep 22-29;262(12):1635-40

EPA sets up two-year pilot program for tracking medical waste [news] **JAPCA** 1989 May;39(5):568-7

Hospital waste disposal by incineration. Waste streams, technology, and state requirements. Brunner CR, et al. **JAPCA** 1988 Oct;38(10):1297-309

Biomedical waste incineration [letter] Chang DP, et al. **JAPCA** 1989 Apr;39(4):416

Hospital red bag waste. An assessment and management recommendations. Marrack D. **JAPCA** 1988 Oct; 38(10):1309-11

Air pollutant emissions from the incineration of hospital wastes. The Alberta experience. Powell FC. **JAPCA** 1987 Jul;37(7):836-9

Disposal of medical waste. Bennett NM. **Med J Aust** 1988 Oct 17;149(8):400-2

Handling of medical wastes. **Mich Med** 1989 May;88(5):46-7

Infectious waste disposal. An additional responsibility [editorial] Tillis BP. **N Y State Dent J** 1989 May;55(5):5

Waste management [letter] Serene JW. **Orthop Rev** 1989 Aug; 18(8):923

Animal waste [letter] Fox MW. **Vet Rec** 1989 Apr 29; 124(17):473

[Medical waste. 1. Microbiologic studies of wastes of various specialties at a large and small hospital in comparison to housekeeping waste] Jager E, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):343–64 (Eng. Abstr.) (Ger)

[The disposal of hospital wastes] Melino C, et al. **Nuovi Ann Ig Microbiol** 1988 Nov–Dec;39(6):699–717 (Eng. Abstr.) (Ita)

[The problem of special, toxic, and hazardous wastes in hospitals and in radioactive hospital refuse] Vanini GC, et al. **Nuovi Ann Ig Microbiol** 1988 Jul–Oct;39(4–5):521–39 (Ita)

[Intensification of the process of formaldehyde synthesis as the first stage in producing carbohydrates from wastes] Zlotopol'skiĭ VM, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):76 (Rus)

[Biomass production and biological purification of distillation slops in a 2–step process] Wachner RS, et al. **Rev Argent Microbiol** 1983;15(1):47–50 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Chemical and biological impact of effluent from edible bamboo shoot canning factory on a stream. Ueda N, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):628–33

Lung cancer in relation to residence in census tracts with toxic–waste disposal sites: a case–control study in Niagara County, New York. Polednak AP, et al. **Environ Res** 1989 Feb;48(1):29–41

ANALYSIS

A selected ion monitoring assay for triclosan in medical waste water. Matsushima H. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):255–7

Analysis of municipal refuse incinerator ashes for asbestos. Patel–Mandlik KJ, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):844–6

[Ionogenic liberation of mercury from dental amalgam in waste water and sludge] Senkpiel K, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):254–61 (Eng. Abstr.) (Ger)

[Characteristics of the methane fermentation of waste of animal husbandry complexes with respect to the biomass of microorganisms and volatile fatty acids] Vedenina IIa, et al. **Mikrobiologiia** 1988 Jul–Aug;57(4):695–7 (Eng. Abstr.) (Rus)

LEGISLATION & JURISPRUDENCE

New medical waste law may wrongfully target hospitals. Holthaus D. **Hospitals** 1989 Jul 5;63(13):52

Up from the beach: medical waste disposal rules! Francisco CJ 3d. **Tex Med** 1989 Jul;85(7):50–3

WATER

see related
BODY WATER
MINERAL WATERS

Effects of deuterium oxide and ethyl alcohol on vestibulo–ocular reflex in rabbits. Koizuka I, et al. **Adv Otorhinolaryngol** 1988;42:238–41

Reduction of airborne radioactive dust by means of a charged water spray. Bigu J, et al. **Am Ind Hyg Assoc J** 1989 Jul; 50(7):336–45

Effects of adsorbed water vapor on the adsorption rate constant and the kinetic adsorption capacity of the Wheeler kinetic model. Hall T, et al. **Am Ind Hyg Assoc J** 1988 Sep;49(9):461–5

An unusual case of accidental hypothermia due to cold water immersion. McGee MB. **Am J Forensic Med Pathol** 1989 Jun;10(2):152–5

Permeability of latex and vinyl gloves to water and blood. DeGroot–Kosolcharoen J, et al. **Am J Infect Control** 1989 Aug;17(4):196–201

Water movement: does thermodynamic interpretation distort reality? Essig A, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C694–8

Water movement: does thermodynamic interpretation distort reality? [letter] Finkelstein A. **Am J Physiol** 1989 Mar;256(3 Pt 1):C699

Swallowing reflex elicited by water and taste solutions in humans. Shingai T, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R822–6

Granular epithelioid cells of the kidneys in salmon adapted to fresh– and seawater. Christensen JA, et al. **Anat Rec** 1989 Jan;223(1):21–6

Water vapor calibration errors in some capnometers: respiratory conventions misunderstood by manufacturers? Severinghaus JW. **Anesthesiology** 1989 Jun;70(6):996–8

The development of a water rescue unit in an urban EMS system. Weiss LD, et al. **Ann Emerg Med** 1989 Aug; 18(8):884–8

Viability of Giardia cysts suspended in lake, river, and tap water. deRegnier DP, et al. **Appl Environ Microbiol** 1989 May;55(5):1223–9

Inactivation of Giardia lamblia and Giardia canis cysts by combined and free chlorine. Kong LI, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2580–2

The suicide phenomenon in motile aeromonads. Namdari H, et al. **Appl Environ Microbiol** 1989 Mar;55(3):543–7

Free–living pathogenic and nonpathogenic amoebae in Maryland soils. Sawyer TK. **Appl Environ Microbiol** 1989 May;55(5):1074–7

Effect of thermal additions on the density and distribution of thermophilic amoebae and pathogenic Naegleria fowleri in a newly created cooling lake. Tyndall RL, et al. **Appl Environ Microbiol** 1989 Mar;55(3):722–32

Oxygen–17 and deuterium nuclear magnetic relaxation studies of lysozyme hydration in solution: field dispersion, concentration, pH/pD, and protein activity dependences. Kakalis LT, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):829–41

Waterslides—are safety standards sliding? Gordon CJ, et al. **Arch Emerg Med** 1988 Dec;5(4):216–22

Effects of water quality on deactivation and toxicity of mexacarbate (Zectran) to fish. Mauck WL, et al. **Arch Environ Contam Toxicol** 1977;6(4):385–93

Chlorobenzoate catabolism and interactions between Alcaligenes and Pseudomonas species from Bloody Run Creek. Wyndham RC, et al. **Arch Microbiol** 1988; 150(3):230–6

A water molecule participates in the secondary structure of hyaluronan. Heatley F, et al. **Biochem J** 1988 Sep 1; 254(2):489–93

Membrane water and solute permeability determined quantitatively by self–quenching of an entrapped fluorophore. Chen PY, et al. **Biochemistry** 1988 Jul 26; 27(15):5713–8

Influences of solvent water on protein folding: free energies of solvation of cis and trans peptides are nearly identical. Radzicka A, et al. **Biochemistry** 1988 Jun 14;27(12):4538–41

Conformation of peptide fragments of proteins in aqueous solution: implications for initiation of protein folding. Wright PE, et al. **Biochemistry** 1988 Sep 20;27(19):7167–75 (95 ref.)

Simultaneous optical measurement of osmotic and diffusional water permeability in cells and liposomes. Ye RG, et al. **Biochemistry** 1989 Jan 24;28(2):824–9

Role of water in the energy of hydrolysis of phosphate compounds—energy transduction in biological membranes. de Meis L. **Biochim Biophys Acta** 1989 Feb 28; 973(2):333–49 (140 ref.)

First direct observation of the water exchange across the membrane of a single–cell green alga on a cellular level. Lawaczeck R. **Biochim Biophys Acta** 1988 Dec 8; 946(1):165–72

The effects of 2H2O on the phase transition of large unilamellar vesicle (LUV) suspensions as detected by ultrasound spectroscopy and electron spin resonance. Ma LD, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):283–92

Changes in chemical structure and function in Escherichia coli cell membranes caused by freeze–thawing. II. Membrane lipid state and response of cells to dehydration. Souzu H, et al. **Biochim Biophys Acta** 1989 Jan 16; 978(1):112–8

Lateral proton conduction along a lipid–water interface layer: a molecular mechanism for the role of hydration water molecules. Prats M, et al. **Biochimie** 1989 Jan;71(1):33–6

Free energy of hydration of collagen models and the enthalpy of the transition between the triple–helical coiled–coil and single–stranded conformations. Némethy G, et al. **Biopolymers** 1989 Sep;28(9):1573–84

Orientational and rotational velocity correlation functions for water–hydrating B– and Z–DNA double helices. Swamy KN, et al. **Biopolymers** 1989 Sep;28(9):1497–504

A model linking water and protein structures. Watterson JG. **Biosystems** 1988;22(1):51–4

Leptospirosis and water sports [editorial] Mumford CJ. **Br J Hosp Med** 1989 Jun;41(6):519

Cyanide content of cassava mash and gari flour and influence of water activity (aw) during storage. Ukhun ME, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):548–52

A study of the prevention of hot tapwater burns. Murray JP. **Burns Incl Therm Inj** 1988 Jun;14(3):185–93

Potassium, sodium, water, and Donnan potential changes in the myofibrils of intact muscle fibres after exposure to ouabain and K–free Ringer. Fong CN, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1057–65

Medical geography: MDs should pay heed to "airs, waters, places". Helwig D. **Can Med Assoc J** 1988 Oct 15; 139(8):790–1

Factors affecting the survival of pathogenic bacteria in subtropical river water. Chao WL, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 May;21(2):85–92

The sun and water sports. Gentile DA, et al. **Clin Sports Med** 1987 Jul;6(3):669–84 (66 ref.)

Medical problems in whitewater sports. Kizer KW. **Clin Sports Med** 1987 Jul;6(3):663–8 (10 ref.)

Database for aqueous solubility of nonelectrolytes. Dannenfelser R, et al. **Comput Appl Biosci** 1989 Jul; 5(3):235–6

Can hydration forces induce lateral phase separations in lamellar phases? Bryant G, et al. **Eur Biophys J** 1989; 16(6):369–74

Dynamic interactions between enzyme activity and the microstructured environment. Chopineau J, et al. **Eur J Biochem** 1989 Aug 1;183(2):459–63

Kinetics of bilirubin oxidation catalysed by bilirubin oxidase in a water–in–oil microemulsion system. Oldfield C, et al. **Eur J Biochem** 1989 Aug 1;183(2):347–55

The influence of water on protease–catalyzed peptide synthesis in acetonitrile/water mixtures. Roslow M, et al. **Eur J Biochem** 1988 Nov 1;177(2):313–8

Intraocular pressure effects of water loading and venous compression tests in normal and denervated pigmented rabbits. Gual A, et al. **Exp Eye Res** 1989 Mar;48(3):365–74

Control of prolactin secretion in the teleost Oreochromis mossambicus: effects of water acidification. Wendelaar Bonga SE, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):1–12

Telemetry of human electrocardiograms in aerial and aquatic environments. Utsuyama N, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):881–4

Effects of irrigation on appearance and survival of infective larvae of goat gastro–intestinal nematodes in Guadeloupe (French West Indies). Gruner L, et al. **Int J Parasitol** 1989 Jul;19(4):409–15

Erratum: transient pulsations of small gas bubbles in water [J. Acoust. Soc. Am. 84, 985–998 (1988)] [corrected and republished] Flynn HG, et al. **J Acoust Soc Am** 1988 Nov; 84(5):1863–76

Failure of sodium bicarbonate baths in the treatment of aquagenic pruritus [letter] Dannaker CJ, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1136

Aquagenic pruritus. Kalliel JN. **J Am Acad Dermatol** 1989 Jun;20(6):1123

The isolation of microsporidia and other pathogens from concentrated ditch water. Avery SW, et al. **J Am Mosq Control Assoc** 1987 Mar;3(1):54–8

A micromethod for measuring carbonic anhydrase activity using 18O exchange between CO2 and H2O. Bitterman N, et al. **J Appl Physiol** 1988 Oct;65(4):1902–6

Intermolecular interactions between protein and other molecules including hydration effects. Ooi T, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):440–4

Phase transitions and permeability changes in dry membranes during rehydration. Crowe JH, et al. **J Bioenerg Biomembr** 1989 Feb;21(1):77–91 (38 ref.)

Role of water in the energy of hydrolysis of phosphoanhydride and phosphoester bonds. Romero PJ, et al. **J Biol Chem** 1989 May 15;264(14):7869–73

Influence of magnesium, water, and sodium chloride on urolithiasis in veal calves. Petersson KH, et al. **J Dairy Sci** 1988 Dec;71(12):3369–77

The importance of water temperature in denture cleaning procedures. Arab J, et al. **J Dent** 1988 Dec;16(6):277–81

Effect of 6–month water storage on silane–treated resin/porcelain bonds. Stokes AN, et al. **J Dent** 1988 Dec; 16(6):294–6

Dynamic hydration effects in an electron microscope cold stage. Lamvik MK, et al. **J Electron Microsc Tech** 1988 Apr;8(4):349–54

Renal structural flexibility in response to environmental water stress in feral hogs. Zervanos SM, et al. **J Exp Zool** 1988 Sep;247(3):285–8

Water stress plating hypersensitivity of yeasts: protective role of trehalose in Saccharomyces cerevisiae. Mackenzie KF, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1661–6

Purification of water for in vitro fertilization and embryo transfer. Fleetham J, et al. **J In Vitro Fert Embryo Transf** 1988 Jun;5(3):171–4

Distributions of water around amino acid residues in proteins. Thanki N, et al. **J Mol Biol** 1988 Aug 5;202(3):637–57

Simultaneous correction for tracer arrival delay and dispersion in CBF measurements by the H215O autoradiographic method and dynamic PET. Meyer E. **J Nucl Med** 1989 Jun;30(6):1069–78

Water birth: a European perspective. Raisler J. **J Nurse Midwifery** 1989 Jul–Aug;34(4):190–2

Water sorption and solubility of resin–based materials following inadequate polymerization by a visible–light curing system. Pearson GJ, et al. **J Oral Rehabil** 1989 Jan; 16(1):57–61

Ethanol and water sorption into stratum corneum and model systems. Berner B, et al. **J Pharm Sci** 1989 Jun;78(6):472–6

Orientation of the water molecules of hydration of human serum albumin. van Oss CJ, et al. **J Protein Chem** 1988 Apr;7(2):179–83

Oxidation of molecular tritium by surface soils. Ichimasa M, et al. **J Radiat Res (Tokyo)** 1988 Jun;29(2):144–51

The effects of tritiated water on the bone marrow cells in mice. Tsuchiya T, et al. **J Radiat Res (Tokyo)** 1988 Dec; 29(4):238–45

Worms, wells and water in western Madagascar. Howarth SE, et al. **J Trop Med Hyg** 1988 Oct;91(5):255–64

Water suppression with B0 field gradient homospoil pulses in high–resolution NMR spectroscopy. Brereton IM, et al. **Magn Reson Med** 1989 Jan;9(1):118–25

NMR relaxation of water in hydrogel polymers: a model for tissue. Gore JC, et al. **Magn Reson Med** 1989 Mar; 9(3):325–32

An analysis of magnetic cross–relaxation between water and methylene protons in a model system. Gore JC, et al. **Magn Reson Med** 1989 Mar;9(3):333–42

Nuclear magnetic relaxation studies of the compartmentalized water in crosslinked polymer gels. Murase N, et al. **Magn Reson Med** 1989 Jan;9(1):1–7

Comparison of absorbed dose in bone substitute material and water using ionization measurements. Prasad SC, et al. **Med Phys** 1989 Jan–Feb;16(1):81–3

Evaluation of the clastogenicity of water treated with sodium hypochlorite or monochloramine using a micronucleus test in newt larvae (Pleurodeles waltl). Gauthier L, et al.

Mutagenesis 1989 May;4(3):170–3
Materials science. Less thick than a brick [news] Calvert P. **Nature** 1989 Jul 13;340(6229):100
Acoustical investigation of poly(dA).poly(dT), poly[d(A–T)], poly(A).poly(U) and DNA hydration in dilute aqueous solutions. Buckin VA, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4189–203
Primeval procreative comet pond. Clark BC. **Orig Life Evol Biosph** 1988;18(3):209–38
Liquid–crystal thermometer use in pediatric office counseling about tap water burn prevention. Katcher ML, et al. **Pediatrics** 1989 May;83(5):766–71
Water vapor sorption of water–soluble substances: studies of crystalline solids below their critical relative humidities. Kontny MJ, et al. **Pharm Res** 1987 Apr;4(2):104–12
The estimation of solubility in binary solvents: application of the reduced 3–suffix solubility equation to ethanol–water mixtures. Williams NA, et al. **Pharm Res** 1988 Mar; 5(3):193–5
Water usage of broiler breeders. Bennett CD, et al. **Poult Sci** 1989 May;68(5):617–21
Hydration forces between parallel DNA double helices: computer simulations. Reddy MR, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3165–8
Relative biological effectiveness of tritiated water to gamma radiation for germ line mutations. Byrne BJ, et al. **Radiat Res** 1989 Mar;117(3):469–79
Biochemical study on the postnatally developing mouse liver after a low level tritiated (HTO) in utero exposure. Pareek S, et al. **Radiobiol Radiother (Berl)** 1989;30(2):167–72
CT of the bowel: use of water to enhance depiction. Angelelli G, et al. **Radiology** 1988 Dec;169(3):848–9
A strategy for reducing the impact of pesticides on groundwater in the U.S. Eiden C. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:341–7; discussion 387–95
Biotechnology for in situ restoration of ground water contaminated by the petroleum industry. Thomas JM, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:345–65 (43 ref.)
Imaging crystals, polymers, and processes in water with the atomic force microscope. Drake B, et al. **Science** 1989 Mar 24;243(4898):1586–9
Nyos, the killer lake, may be coming back [news] Kerr RA. **Science** 1989 Jun 30;244(4912):1541–2
Images of the DNA double helix in water. Lindsay SM, et al. **Science** 1989 Jun 2;244(4908):1063–4
Water–inserted alpha–helical segments implicate reverse turns as folding intermediates. Sundaralingam M, et al. **Science** 1989 Jun 16;244(4910):1333–7
The distribution and spread of schistosomiasis in relation to water resources development in Mali. Brinkmann UK, et al. **Trop Med Parasitol** 1988 Jun;39(2):182–5
Investigation of cavitation in flowing media by lithotripter shock waves both in vitro and in vivo. Williams AR, et al. **Ultrasound Med Biol** 1989;15(1):53–60
Effects of drinking water acidification, restriction of water supply and individual caging on parameters of toxicological studies in rats. Clausing P, et al. **Z Versuchstierkd** 1989; 32(3):129–34
[Calculating milk, water and electrolyte requirements of the premature infant] Cai YN, et al. **Chung Hua Hu Li Tsa Chih** 1988 Jul;23(7):422–3 **(Chi)**
[The behavior of selected pesticides in groundwater close to the surface of heterogenic porous sediments] Ahlsdorf B, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:375–85; discussion 387–95 **(Ger)**
[Ecodynamic processes in soil and groundwater conductors under the influence of pesticides] Klein G. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:511–25; discussion 581–6 **(Ger)**
[The demonstration by industry of future developments and the use of pesticides with special reference to necessary groundwater protection] Köhler S. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:415–34; discussion 435–42 **(Ger)**
[The behavior of pesticides in the groundwater conductor passage] Matthess G, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:295–311; discussion 329–39 **(Ger)**
[Degradation behavior of pesticides in porous groundwater conductors] Pestemer W, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:313–27; discussion 329–39 **(Ger)**
[Pesticide use without groundwater and drinking water dangers—agricultural aspects] Scholz H. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:25–33; discussion 45–56 **(Ger)**
[The principle of foresight in protecting groundwater and drinking water from pesticide contamination] Staupe J. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:587–600; discussion 637–51 **(Ger)**
[An improved method to produce [15O]H2O with less ammonia by catalytic reaction] Miyake Y, et al. **Kaku Igaku** 1988 Jul;25(7):659–63 **(Jpn)**
[Measurement of total body water with deuterium oxide in renal diseases] Nakazato S. **Nippon Jinzo Gakkai Shi** 1989 Jan;31(1):1–13 (Eng. Abstr.) **(Jpn)**
[Treatment of enuresis by epidural infiltration of distilled water. The clinico–statistical and therapeutic considerations of a series of 48 treated cases] Bäda V, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1988 Oct–Dec; 37(4):377–81 **(Rum)**
[Structure of the hydration envelope of the B–form of polydeoxyribonucleotides poly(dA–dC).poly(dG–dT) and poly(dA–dG).poly(dT–dT) from the data of Monte–Carlo simulation] Eisenhaber F, et al. **Biofizika** 1988 May–Jun; 33(3):422–9 (Eng. Abstr.) **(Rus)**
[The hydration dynamics of proteins incorporated into liposomes] Shiian AA, et al. **Biol Nauki** 1989;(5):107–11 (Eng. Abstr.) **(Rus)**
[Molecular dynamics of water and hydrated ion in a transmembrane channel] Aĭtian SKh. **Dokl Akad Nauk SSSR** 1988;300(3):721–4 **(Rus)**
[Various aspects of the biological effect of a distillate] Rakhmanin IuA, et al. **Gig Sanit** 1989 Mar;(3):92–3 **(Rus)**
[Possibility of using an electrostatic method of dust hydrosuppression during coal stripping at the Kansk–Achinsk Fuel Energy Complex] Pogozhev SV. **Gig Tr Prof Zabol** 1988 Aug;(8):46–8 **(Rus)**
[The effect of ground water table levels on mosquitoes from the Hungry steppe in the Uzbeck SSR] Krasnonos LN, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):37–43 (Eng. Abstr.) **(Rus)**
[The number of blood–sucking mosquito larvae in technogenous bodies of water in the Taimyr forest tundra] Kupriiashkin AG. **Med Parazitol (Mosk)** 1988 Nov–Dec; (6):74–6 (Eng. Abstr.) **(Rus)**
[First detection of Anopheles species mosquitoes breeding in water–filled cellars] Prokhorova IN, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):8–10 (Eng. Abstr.) **(Rus)**
[Effect of the Pechenezhskiy reservoir on species distribution and number of blood–sucking Diptera] Shevchenko AK, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):10–3 (Eng. Abstr.) **(Rus)**
[Relative biological effectiveness of tritium oxide based on DNA destruction and thymus depletion in rats] Rusinova GG, et al. **Radiobiologiia** 1988 Nov–Dec;28(6):836–40 (Eng. Abstr.) **(Rus)**
[Characteristics of injuries of the respiratory tract caused by steam and boiling water] Boenko SK. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):34–7 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Effects of an oral water load and intravenous administration of isotonic glucose, hypertonic saline, mannitol and furosemide on the release of atrial natriuretic peptide in men. Yamasaki Y, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):269–76
Effects of intraruminal loads of saline or water followed by voluntary drinking in the dehydrated lactating goat. Dahlborn K, et al. **Acta Physiol Scand** 1988 Jan; 132(1):67–73
Single kidney function: effect of acute protein and water loading on microalbuminuria [letter] Chapman A, et al. **Am J Med** 1988 Nov;85(5):752–4
The use of distilled water as an irrigating fluid in patients undergoing transurethral resection of the prostate. Moskovitz B, et al. **Eur Urol** 1989;16(4):267–70
Ocular hypertensive responses in pigmented rabbits following different methods of waterloading. Flach AJ, et al. **J Ocul Pharmacol** 1986 Fall;2(4):313–7
Is 5% dextrose in water a proper choice for initial postoperative feeding in infants? Wakayama Y, et al. **J Pediatr Surg** 1988 Jul;23(7):644–6
Ultrastructural changes of synaptic glomeruli following intrathecal injection of distilled water to rats. Inomata K, et al. **Neuroscience** 1988 Dec;27(3):1001–5
[Effect of subgingival plaque control by a direct irrigation technic. I. The clinical and microbiological changes after the irrigation with distilled water or 1/30 diluted iodine complex solution] Hagiwara S, et al. **Kokubyo Gakkai Zasshi** 1988 Sep;55(3):492–501 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Water induced epilepsy. Menon R, et al. **J R Soc Med** 1989 May;82(5):301
Induction of malignant transformation in mouse 10T1/2 cells by low–dose–rate exposure to tritiated water and gamma–rays at two different temperatures, 4 degrees C and 37 degrees C. Yamaguchi T, et al. **J Radiat Res (Tokyo)** 1989 Mar;30(1):112–21
Teratogenic effect of fission neutron and tritium water on rat embryo. Satow Y, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:416–31

ANALYSIS

The fluoride content of selected foods in relation to the fluoride concentration of water. Schamschula RG, et al. **Acta Physiol Hung** 1988;72(2):217–27
Extraction and isolation of triazine herbicides from water and vegetables by a double trap tandem system. Battista M, et al. **Anal Chem** 1989 May 1;61(9):935–9
Thermospray liquid chromatography/mass spectrometry in deuterium oxide. Edmonds CG, et al. **Anal Chem** 1988 Oct 15;60(20):2314–7
Simultaneous determination of bromide and iodide as acetone derivatives by gas chromatography and electron capture detection in natural waters and biological fluids. Maros L, et al. **Anal Chem** 1989 Apr 1;61(7):733–5
Rapid method for the determination of alachlor, atrazine and metolachlor in groundwater by solid–phase extraction. Brooks MW, et al. **Analyst** 1989 Mar;114(3):405–6
Use of palladium(II) chloride as a colour–forming reagent for the determination of N–acetyl–L–cysteine in water and fluimukan injections. Jovanović TS, et al. **Analyst** 1989 Mar;114(3):401–3
Membrane filters for the concentration of trace elements in water: distribution of ion pairs between membrane filter and aqueous phases. Taguchi S, et al. **Analyst** 1989 Apr; 114(4):489–92
Studies on residual moisture of freeze–dried biological products. I. Comparative evaluation of some methods for establishing water content of freeze–dried specimens. Burlacu E, et al. **Arch Roum Pathol Exp Microbiol** 1988 Apr–Jun;47(2):145–55
Carbon–13 NMR of glycogen: hydration response studied by using solids methods. Jackson CL, et al. **Biochemistry** 1989 Jun 13;28(12):5024–8
The phase diagram of 1,2–dipalmitoyl–sn–glycero–3–phosphocholine/sucrose in the dry state. Sucrose substitution for water in lamellar mesophases. Hentschel M, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):169–74
Slow–motion ESR study of order and dynamics in oriented lipid multibilayers: effects of unsaturation and hydration. Korstanje LJ, et al. **Biochim Biophys Acta** 1989 Apr 14; 980(2):225–33
Thermal analysis of water in p(HEMA) hydrogels. Roorda WE, et al. **Biomaterials** 1988 Nov;9(6):494–9
Photodecomposition of monocrotophos in soil, on plant foliage, and in water. Dureja P. **Bull Environ Contam Toxicol** 1989 Aug;43(2):239–45
Effects of water hardness and salinity on the acute toxicity and uptake of fenvalerate by bluegill (Lepomis macrochirus). Dyer SD, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):359–66
Distribution of Cr, Pb, Cd, Zn, Fe and Mn in Lake Victoria sediments, east Africa. Onyari JM, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):807–13
Comparison of chemical biodegradation rates in BOD dilution and natural waters. Vaishnav DD, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):291–8
Direct measurement of headgroup hydration of polar lipids in inverted micelles. Sen A, et al. **Chem Phys Lipids** 1988 Dec;49(3):179–84
Renal proton magnetic resonance and bound and free water distribution in the normal, angiotensin II–and ADH–infused rats, before and after Gd DTPA paramagnetic enhancement. Iaina A, et al. **Child Nephrol Urol** 1988–89; 9(1–2):6–10
The effects of starvation on the sodium, potassium, water and free amino acid content of parietal muscle from Agonus cataphractus. Soutter AM, et al. **Comp Biochem Physiol [B]** 1977;58(1):57–61
Bioavailability of aluminum from drinking water. Fulton B, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):144–50
Prolactin cell activity and sodium fluxes in tilapia (Oreochromis mossambicus) after long–term acclimation to acid water. Flik G, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):39–45
System for measurement of 222Rn at low levels in natural waters. Mathieu GG, et al. **Health Phys** 1988 Dec; 55(6):989–92
Sampling and analysis of drinking–water and food. Williams DT. **IARC Sci Publ** 1988;(85):187–204 (81 ref.)
Effect of water quality on the efficacy of water–base suspensions of Arosurf MSF against larvae of Aedes taeniorhynchus: bioassay evaluations. Levy R, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):146–9
Characteristic thermodynamic properties of hydrated water for 20 amino acid residues in globular proteins. Oobatake M, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):433–9
Residue analysis of the herbicides cyanazine and bentazone in sugar maize and surface water using high–performance liquid chromatography and an on–line clean–up column–switching procedure. Hogendoorn EA, et al. **J Chromatogr** 1989 Jul 28;475:432–41
Isotachophoretic determination of short–chain fatty acids in drinking water after solid–phase extraction with a carbonaceous sorbent. Hutta M, et al. **J Chromatogr** 1989 May 24;470(1):223–33
Determination of phenylalanine in river water by high–performance liquid chromatography. Rennie PJ. **J Chromatogr** 1989 Jan 6;461:277–80
Water evaporation rates from a model of stratum corneum lipids. Friberg SE, et al. **J Pharm Sci** 1989 Aug;78(8):639–43
NMR imaging of fluid dynamics in reservoir core. Baldwin BA, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):493–500
Regional variation in rat brain proton relaxation times and water content. Besson JA, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):141–3
1H–NMR relaxation times and water content of red blood cells from chronic alcoholic patients during withdrawal. Besson JA, et al. **Magn Reson Imaging** 1989 May–Jun; 7(3):289–91
Comparison of Karl Fischer titrimetric and gravimetric methods for determination of moisture content in BCG

vaccine. Shi M, et al. **Microbios** 1989;59(238):31–5
Fluoride content of bottled water [letter] McGuire S. **N Engl J Med** 1989 Sep 21;321(12):836–7
Experimental confirmation of the change of water structure in the critical range of micelle formation: a new method of critical micelle concentration (CMC) determination. Hüttenrauch R, et al. **Pharm Res** 1988 Nov;5(11):726–8
Cerebrovascular disease mortality rates and water hardness in North Dakota. Dzik AJ. **S D J Med** 1989 Apr;42(4):5–7
Pesticide residues in groundwater in The Netherlands: state of observations and future directions of research. Loch JP, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:349–63; discussion 387–95
Mutagenic activity and presence of the strong mutagen 3-chloro-4-(dichloromethyl)-5-hydroxy-2-(5H)-furanone (MX) in chlorinated raw and drinking waters in The Netherlands. Backlund P, et al. **Sci Total Environ** 1989 Aug; 84:273–82
A rational approach to the assessment of aluminium solubility controls in freshwaters. Christophersen N, et al. **Sci Total Environ** 1989 Aug;84:91–100
Bioavailability of aluminium in the presence of humic substances at low and moderate pH. Gjessing ET, et al. **Sci Total Environ** 1989 Jun;81–82:683–90
Geotoxicology of multiple sclerosis: the Henribourg, Saskatchewan, Cluster Focus. I. The water. Irvine DG, et al. **Sci Total Environ** 1989 Aug;84:45–59
Mutagenic activity in groundwater in relation to mobilization of organic mutagens in soil. Kool HJ, et al. **Sci Total Environ** 1989 Aug;84:185–99
Method for evaluating mutagenicity of water. I. A new method of preparing samples for mutagenicity test. Urano K, et al. **Sci Total Environ** 1988 Aug 1;74:177–89
Distribution of silicones in water, sediment and fish in Japanese rivers. Watanabe N, et al. **Sci Total Environ** 1988 Jul 1;73(1–2):1–9
[Utilization of urea as a marker for body water in the cow, in comparison with heavy water] Doreau M, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:183–4 (Eng. Abstr.) **(Fre)**
[Pesticides in surface water, groundwater, and untreated water in Nordrhein-Westfalen: measuring strategy, analysis and results] Friege H, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:397–414; discussion 435–42 **(Ger)**
[The behavior of selected pesticides in groundwater and drinking water areas] Frimmel F, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:481–500; discussion 501–10 **(Ger)**
[Important aspects of the protection of groundwater from pesticide residues—represented by the examples of chlortriazine, atrazine, simazine and terbutylazine] Häfner M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:261–93; discussion 329–39 **(Ger)**
[The natural groundwater flow and a laboratory column for estimating groundwater pollution by pesticides] Nordmeyer H, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:239–60; discussion 329–39 **(Ger)**
[Pesticide contamination in groundwater and drinking water—a review of Baden-Württemberg] Roth M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:365–73; discussion 387–95 **(Ger)**
[A new apparatus for rapid determination of free water] Cantoni C, et al. **Boll Chim Farm** 1988 May;127(5):122–3 (Eng. Abstr.) **(Ita)**
[Hygienic significance of microelements in drinking water with low mineral level] Kondratiuk VA. **Gig Sanit** 1989 Feb;(2):81–2 **(Rus)**
[Natural radon waters of the Moscow area] Somkin AG, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct; (5):43–6 **(Rus)**

DIAGNOSTIC USE

The cough response to ultrasonically nebulized distilled water in heart–lung transplantation patients. Higenbottam T, et al. **Am Rev Respir Dis** 1989 Jul;140(1):58–61
Comparison of ultrasonically nebulized distilled water and cold–air hyperventilation challenges in asthmatic patients. Lemire TS, et al. **Chest** 1989 May;95(5):958–61
Rectoanal reflex induced by H2O thermal stimulation. Nagasaki A, et al. **Dis Colon Rectum** 1989 Sep;32(9):765–8
Tritiated water as a measure of body water in immature rats growing at different rates. Sheng HP, et al. **J Appl Physiol** 1989 Jan;66(1):476–80
Measurement of D2O concentrations at tracer levels in small samples obtained from paediatric patients. Fusch C, et al. **J Clin Chem Clin Biochem** 1988 Nov;26(11):715–21
Computed tomography of the stomach with water as an oral contrast agent: technique and preliminary results. Baert AL, et al. **J Comput Assist Tomogr** 1989 Jul–Aug; 13(4):633–6
Deuterium oxide as a tracer for measurement of compliance in pediatric clinical drug trials. Rodewald LE, et al. **J Pediatr** 1989 May;114(5):885–91
Isolation of line 10 hepatoma–cell membrane by the water extraction method and immunochemical analysis. Ahsan CR, et al. **Microbiol Immunol** 1989;33(3):219–27
Airway responsiveness to exercise and ultrasonically nebulized distilled water in children: relationship to clinical and functional characteristics. Foresi A, et al. **Respiration** 1988;53(4):205–13
Regional cerebral blood flow measurement with intravenous [15O]water bolus and [18F]fluoromethane inhalation. Herholz K, et al. **Stroke** 1989 Sep;20(9):1174–81
[Double labeling of water with stable isotopes for measuring energy expenditure in man] Montagnon B, et al. **Gastroenterol Clin Biol** 1989;13(2):208–16 (43 ref.) **(Fre)**
[Water loading diuresis test in albino rats. Critical study of approximately 12,000 tests. 3. Loading tests using several mineral waters bottled under various experimental conditions] Federici PC, et al. **Acta Biomed Ateneo Parmense** 1988;59(5–6):147–74 (Eng. Abstr.) **(Ita)**
[Distilled water inhalation challenge in asthmatic children] Mochizuki H, et al. **Arerugi** 1988 Oct;37(10):1016–21 (Eng. Abstr.) **(Jpn)**

METABOLISM

Identification systems. An application: cell osmotic water permeability in a kidney tubule. Aguilera J, et al. **Acta Cient Venez** 1988;39(2):147–50
Atrial natriuretic peptide (ANP)–induced increase in capillary albumin and water flux. Huxley VH, et al. **Adv Exp Med Biol** 1988;242:23–31
Mercurial reagents inhibit flow through ADH–induced water channels in toad bladder. Hoch BS, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F948–53
Calcitonin is a competitive inhibitor of the hydrosmotic effect of oxytocin in toad bladder. Parisi M, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E613–6
Electrolyte, urea, and water transport in a two–nephron central core model of the renal medulla. Stephenson JL, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F399–413
Endogenous opiates in the mediation of early meal–induced jejunal absorption of water and electrolytes. Bastidas JA, et al. **Am J Surg** 1989 Jan;157(1):27–32
Mechanism of photosynthetic water oxidation. Brudvig GW, et al. **Annu Rev Biophys Biophys Chem** 1989;18:25–46 (128 ref.)
Two pathways for phosphate/water oxygen exchange by yeast inorganic pyrophosphatase. Kasho VN, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):475–80
Effect of alkaline pH on photosynthetic water oxidation and the association of extrinsic proteins with Photosystem Two. Chapman DJ, et al. **Biochem J** 1989 Mar 1;258(2):357–62
Equilibrium of 5,6–hydration of NADH and mechanism of ATP–dependent dehydration. Acheson SA, et al. **Biochemistry** 1988 Sep 20;27(19):7371–5
Kinetic isotope effect studies on aspartate aminotransferase: evidence for a concerted 1,3 prototropic shift mechanism for the cytoplasmic isozyme and L–aspartate and dichotomy in mechanism. Julin DA, et al. **Biochemistry** 1989 May 2;28(9):3825–33
Hypothesis. The molecular 'double–pivot' mechanism for water oxidation. Christou G, et al. **Biochim Biophys Acta** 1987;895(3):259–74 (75 ref.)
Reduced water exchange in sickle cell anemia red cells: a membrane abnormality. Fung LW, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):167–72
Enzymatic ester synthesis with continuous measurement of water activity. Goldberg M, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):359–62
Water permeability in the human amnion: pH regulation of the paracellular pathway. Porta M, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):220–4
Methodology to measure the transient effect of occlusion on skin penetration and stratum corneum hydration in vivo. Ryatt KS, et al. **Br J Dermatol** 1988 Sep;119(3):307–12
Estimation of the intake of milk by lambs, from the turnover of deuterium– or tritium–labelled water. Dove H. **Br J Nutr** 1988 Sep;60(2):375–87
Consequences of fluid absorption during transurethral resection of the prostate using distilled water or glycine 1.5 per cent. Beal JL, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):278–82
Protein deposits on individual hydrophilic contact lenses: effects of water and ionicity. Minarik L, et al. **CLAO J** 1989 Jul–Sep;15(3):185–8
Effect of pH on vasopressin–induced water permeability in collecting ducts of isolated rat papillae. Fitzgibbon W, et al. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):857–64
Water economy of the canyon mouse Peromyscus crinitus stephensi. Abbott KD. **Comp Biochem Physiol [A]** 1971 Jan 1;38(1):37–52
Trypsin affects basal and stimulated osmotic water permeability in isolated toad skin. Berman DM, et al. **Comp Biochem Physiol [A]** 1989;92(1):15–9
ADH–induced water permeability: what role for the microtubular network? Bourguet J, et al. **Comp Biochem Physiol [A]** 1988;90(4):669–72 (33 ref.)
Regulation of membrane permeability by vasopressin; activation of the water permeability pathway in toad urinary bladder by N–ethyl–maleimide. Taylor A, et al. **Comp Biochem Physiol [A]** 1988;90(4):661–8 (59 ref.)
Effects of gastric fundic stimulation on glucose absorption and water and electrolyte fluxes from rabbit small bowel. Andrews NJ, et al. **Dig Dis Sci** 1989 Mar;34(3):412–6
Effect of bicarbonate or base precursor on water and solute absorption from a glucose–electrolyte solution in the human jejunum. Leiper JB, et al. **Digestion** 1988;41(1):39–45
Polypeptide changes induced by salt stress, water deficit, and osmotic stress in barley roots: a comparison using two–dimensional gel electrophoresis. Hurkman WJ, et al. **Electrophoresis** 1988 Nov;9(11):781–7
A model for changes in the conformation of oxygen evolving complex of chloroplasts during oxidation of water. Raval MK, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):341–3
Use of doubly labeled water technique in soldiers training for jungle warfare. Forbes–Ewan CH, et al. **J Appl Physiol** 1989 Jul;67(1):14–8
Sensitivity of methods for calculating energy expenditure by use of doubly labeled water. Seale J, et al. **J Appl Physiol** 1989 Feb;66(2):644–52
Mixing in the human carotid artery during carotid drug infusion studied with PET. Junck L, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):681–9
The C15O2 build–up technique to measure regional cerebral blood flow and volume of distribution of water. Lammertsma AA, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):461–70
Estimating salivary flow and ruminal water balance of intake, diet, feeding pattern, and slaframine. Jacques K, et al. **J Dairy Sci** 1989 Feb;72(2):443–52
Functional colocalization of water channels and proton pumps in endosomes from kidney proximal tubule. Ye RG, et al. **J Gen Physiol** 1989 May;93(5):885–902
The water permeability of primary mouse keratinocyte cultures grown at the air–liquid interface. Cumpstone MB, et al. **J Invest Dermatol** 1989 Apr;92(4):598–600
Transepidermal water loss: the signal for recovery of barrier structure and function. Grubauer G, et al. **J Lipid Res** 1989 Mar;30(3):323–33
Effects of increased extracellular K on the elemental composition and water content of neuron and glial cells in leech CNS. Saubermann AJ, et al. **J Neurochem** 1988 Dec;51(6):1797–807
Noninvasive functional brain mapping by change–distribution analysis of averaged PET images of H215O tissue activity. Fox PT, et al. **J Nucl Med** 1989 Feb;30(2):141–9
Effect of phthalate acid esters on transport in toad bladder membrane. Sabatini S, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):910–4
The deformation matrix theory of basement membrane: a study of water flow through elastic and rigid filaments in the rat. Fisher RF. **J Physiol (Lond)** 1988 Dec;406:1–14
The effect of salt acclimation of the water uptake and osmotic permeability of the skin of the toad (Bufo viridis, L.). Katz U. **J Physiol (Paris)** 1987;82(3):183–7
Luminal adrenergic agents modulate intestinal transport. Bastidas JA, et al. **J Surg Res** 1989 May;46(5):484–9
Substrate specificity and affinity of a protein modulated by bound water molecules. Quiocho FA, et al. **Nature** 1989 Aug 3;340(6232):404–7
Metabolism of tritiated water in the cell nucleus and intracellular substances of the rat. Takizawa Y, et al. **Radiat Res** 1989 Mar;117(3):523–30
Adaptive respiratory responses of trout to acute hypoxia. I. Effects of water ionic composition on blood acid–base status response and gill morphology. Thomas S, et al. **Respir Physiol** 1988 Oct;74(1):77–89
Adaptation of electrolytes and fluid transport in rat small and large intestine after distal small bowel resection. Vázquez CM, et al. **Rev Esp Fisiol** 1988 Jun;44(2):141–5
Effect of bicarbonate, acetate, and citrate on water and sodium movement in normal and cholera toxin–treated rat small intestine. Rolston DD, et al. **Scand J Gastroenterol** 1989 Jan;24(1):1–8
Photosystem II, the water–splitting enzyme. Rutherford AW. **Trends Biochem Sci** 1989 Jun;14(6):227–32 (35 ref.)
[The effect of dimethylsulfoxide and thiourea on the water diffusion permeability of the E. coli membrane] Sakharov BV, et al. **Biofizika** 1989 May–Jun;34(3):464–7 (Eng. Abstr.) **(Rus)**
[Tissue hydrophilicity in myopia] Shilkin GA, et al. **Oftalmol Zh** 1988;(3):153–5 (Eng. Abstr.) **(Rus)**
[Cholesterol localization in the membranes of granular cells in the bladder epithelium of the frog during stimulated water transport] Kever LV, et al. **Tsitologiia** 1988 May; 30(5):524–31 (Eng. Abstr.) **(Rus)**
[Effect of a kaolin–pectin combination on the intestinal absorption of sodium and water when using hydration solutions] Vega–Franco L, et al. **Bol Med Hosp Infant Mex** 1988 Sep;45(9):583–7 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

Effect of chronic vanadate ingestion on amino acid and water absorption in rat intestine. Hajjar JJ, et al. **Arch Toxicol** 1989;63(1):29–33
Comparison of transcellular and transepithelial water osmotic permeabilities (Pos) in the isolated proximal straight tubule (PST) of the rabbit kidney. Carpi–Medina P, et al. **Pflugers Arch** 1988 Jul;412(1–2):66–74
Fluid transport across human fetal membranes affected by human amniotic fluid prolactin: an in vitro study. de Bakker–Teunissen OJ, et al. **Placenta** 1988 Sep–Oct; 9(5):533–45
[Permeability changes in guinea pig nasal epithelium after exposure of hypotonic solution] Odaira H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2003–10 (Eng. Abstr.) **(Jpn)**
[Estimation of absorbed dose of beta radiation into the critical tissues by a single injection of tritiated water] Tsuchiya T, et al. **Sangyo Ika Daigaku Zasshi** 1988 Dec 1;10(4):403–9 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Deuterium-oxide-induced degranulation of human eosinophils in allergic asthmatic patients in vitro. Górski P, et al. **Allergol Immunopathol (Madr)** 1988 Jul-Aug; 16(4):249-51

Effect of deuterium oxide (D2O) on the IgE-mediated Ca2+ influx, arachidonic acid and histamine release in rat basophilic leukemia cells. Urata C, et al. **Arerugi** 1989 Mar; 38(3):285-95

Inhibition of heat shock (stress) protein induction by deuterium oxide and glycerol: additional support for the abnormal protein hypothesis of induction. Edington BV, et al. **J Cell Physiol** 1989 May;139(2):219-28

Resistance to peritonitis following disruption of peritoneal mast cells. Shin R, et al. **J Surg Res** 1988 Dec;45(6):565-7

[Effect of water activity on the growth of Campylobacter jejuni in brain-heart infusion] Uradziński J. **Roczn Panstw Zakl Hig** 1988;39(2):139-44 (Eng. Abstr.) (Pol)

[Effect of tritium oxide in a wide range of doses on the nucleic acid metabolism of the rat spleen] Mushkacheva GS, et al. **Radiobiologiia** 1989 Jul-Aug;29(4):554-7 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Precise water vapor pressure value calculations. Prusaczyk WK. **Comput Biol Med** 1989;19(2):129-30

Does vitrectomy increase trans-scleral water movement? [letter] Foulds WS, et al. **Eye** 1988;2 (Pt 2):226-8

Water, temperature and life. Franks F. **Symp Soc Exp Biol** 1987;41:1-20 (45 ref.)

RADIATION EFFECTS

Energy spectra of electrons and positrons produced in semi-infinite and infinite water phantoms irradiated by photons with energies up to 1 GeV. Rustgi ML, et al. **Health Phys** 1989 Apr;56(4):493-513

A diagnostic study of proton-beam irradiated water targets. Heselius SJ, et al. **Int J Rad Appl Instrum [A]** 1989; 40(8):663-9

The production of OH radicals in the radiolysis of water with 4He ions. LaVerne JA. **Radiat Res** 1989 May; 118(2):201-10

[Utilization of radiation in the treatment of raw water--a trial at OPRRI (Osaka Prefecture Radiation Research Institute)] Takeda A. **Radioisotopes** 1988 Jul;37(7):416-22 (Jpn)

STANDARDS

Quality control in the in vitro fertilization laboratory: comparison of bioassay systems for water quality. Rinehart JS, et al. **J In Vitro Fert Embryo Transf** 1988 Dec; 5(6):335-42

Virological studies of water from the Cape Flats reclamation plant [published erratum appears in S Afr Med J 1989 Aug 5;76(3):126] Hodgkiss M, et al. **S Afr Med J** 1989 Jul 1; 76(1):11-3

THERAPEUTIC USE

[Liver resection by water jet] Horie T. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):82-92 (Eng. Abstr.) (Jpn)

WATER DEPRIVATION

Impaired preservation of GFR during hypotension in preexistent renal hypoperfusion. Yoshioka T, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):F314-20

Regional cerebral incorporation of plasma [14C]palmitate, and cerebral glucose utilization, in water-deprived Long-Evans and Brattleboro rats. Noronha JG, et al. **Exp Neurol** 1989 Mar;103(3):267-76

Does severe water deprivation affect the inner ear? An experimental study of the gerbilline endolymphatic sac. Barbara M, et al. **J Laryngol Otol** 1989 Jan;103(1):22-9

Comparison of the oxytocin response to water-deprivation, hyperosmolarity and administration of morphine or naltrexone in lactating and virgin female rats. Evans RG, et al. **Neurosci Lett** 1988 Nov 22;94(1-2):177-81

The development in infant rats of kassinin's potent and selective control of cell-dehydration thirst. Perfumi M, et al. **Peptides** 1989 Jan-Feb;10(1):125-30

Restricted water intake influences male reproduction in two strains of house mice (Mus musculus). Nelson RJ. **Physiol Behav** 1988;43(2):217-21

[Motivational dependence of changes in visual evoked potentials in rats during water deprivation] Kolle U, et al. **Biomed Biochim Acta** 1988;47(12):1059-64 (Eng. Abstr.) (Ger)

[Excretory urography with non-ionic contrast medium; clinical reassessment of the necessity of water deprivation] Soga T, et al. **Rinsho Hoshasen** 1989 Feb;34(2):233-6 (Eng. Abstr.) (Jpn)

DRUG EFFECTS

[Visual evoked potentials and water deprivation of rats during intrahypothalamic application of substance P] Kolle U, et al. **Biomed Biochim Acta** 1988;47(12):1065-71 (Eng. Abstr.) (Ger)

PHYSIOLOGY

Fluid deprivation before operation. The effect of a small drink. Agarwal A, et al. **Anaesthesia** 1989 Aug;44(8):632-4

Water deprivation optimizes hippocampal activity and facilitates nictitating membrane conditioning. Berry SD, et al. **Behav Neurosci** 1989 Feb;103(1):71-6

Atrial-specific granules in the hearts of normal and water-deprived rats. Toshimori H, et al. **Cell Tissue Res** 1988 Sep;253(3):547-52

mu- and K-opiate receptor agonists reduce plasma neurohypophysial hormone concentrations in water-deprived and normally hydrated rats. Evans RG, et al. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):191-7

Renal effects of atrial natriuretic factor (99-126) in water-deprived sheep. Yates NA, et al. **Clin Exp Pharmacol Physiol** 1989 May;16(5):433-7

Comparative water economy of sympatric rodents in a Chilean semi-arid habitat. Cortes A, et al. **Comp Biochem Physiol [A]** 1988;91(4):711-4

Plasma membrane lipids modulate the response to water deprivation in rat kidney. Mourelle M, et al. **Fundam Clin Pharmacol** 1989;3(3):199-209

Plasma oxytocin concentrations in pigs after water deprivation and during rehydration. Thornton SN, et al. **Horm Metab Res** 1989 Jun;21(6):345

Effects of feed or water restriction, antibiotic injection and receiving diet management on commingled feeder pig performance. Brumm MC, et al. **J Anim Sci** 1989 May; 67(5):1183-8

Cardiovascular consequences of water deprivation in female Long Evans and Brattleboro rats. Gardiner SM, et al. **J Auton Nerv Syst** 1988 Oct;24(3):205-14

Heterologous serum albumin as tracer for plasma volume measurements evaluated in conscious nondehydrated and 48-hour water-deprived rats. Carvalho JS. **J Cardiovasc Pharmacol** 1989 Apr;13(4):603-7

Water intake induced by water deprivation in the quail, Coturnix coturnix japonica. Takei Y, et al. **J Comp Physiol [B]** 1988;158(5):519-25

Time-dependent enhancement of lymphocyte activation by mitogens after exposure to isolation or water scheduling. Jessop JJ, et al. **Life Sci** 1988;43(14):1133-40

Metabolic mapping of functional activity in rat brain and pituitary after water deprivation. Duncan GE, et al. **Neuroendocrinology** 1989 May;49(5):489-95

Localization of cerebral protein synthesis alterations in response to water deprivation in rats. Lepetit P, et al. **Neuroendocrinology** 1988 Sep;48(3):271-9

Third ventricular chloride infusions enhance drinking in water deprived rats. Badgaiyan RD. **Physiol Behav** 1989 May;45(5):951-4

Water usage of broiler breeders. Bennett CD, et al. **Poult Sci** 1989 May;68(5):617-21

Restricted water access time as a means of growth control in turkey tom breeder candidates. Leeson S, et al. **Poult Sci** 1988 Aug;67(8):1236-7

Digestive tract clearance of broilers cooped or deprived of water. May JD, et al. **Poult Sci** 1989 May;68(5):627-30

A biphasic response of urinary prostaglandin E2 excretion to water deprivation in conscious diabetes insipidus Brattleboro rats. Kanters JK, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Feb; 35(2):85-9

Ovine fetal response to water deprivation: aspects on the role of vasopressin. Herin P, et al. **Q J Exp Physiol** 1988 Nov;73(6):931-40

Avian epidermal differentiation. II. Adaptive response of permeability barrier to water deprivation and replenishment. Menon GK, et al. **Tissue Cell** 1989; 21(1):83-92

Effects of drinking water acidification, restriction of water supply and individual caging on parameters of toxicological studies in rats. Clausing P, et al. **Z Versuchstierkd** 1989; 32(3):129-34

[Influence of reduced water supply on the digestibility of nutrients and on some metabolic parameters in sheep] Kijora C, et al. **Arch Tierernahr** 1989 Apr-May; 39(4-5):429-41 (Eng. Abstr.) (Ger)

WATER-ELECTROLYTE BALANCE

see related
FLUID THERAPY
OSMOLAR CONCENTRATION
WATER INTOXICATION

The influence of thoracic epidural analgesia on transcapillary fluid balance in subcutaneous tissue. A study in patients undergoing aortocoronary bypass surgery. Rein KA, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):79-83

Villous sodium gradient associated with volume absorption in the feline intestine: an electron-microprobe study on freeze-dried tissue. Sjöqvist A, et al. **Acta Physiol Scand** 1989 Jun;136(2):271-9

Monitoring acid-base and electrolyte disturbances in intensive care. Kazda A, et al. **Adv Clin Chem** 1989; 27:201-68 (127 ref.)

Ethylene glycol intoxication [letter] Spital A, et al. **Am J Kidney Dis** 1988 Dec;12(6):557

Osmoregulation and body fluid compartmentalization in dehydrated heat-exposed pigeons. Arad Z, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R377-82

Chronic CEI alters effect of low Na+ diet in normal and coarcted pups. II. Na+ and H2O balance. Bagby SP, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R531-40

Allometry of the kidney: implications for the ontogeny of osmoregulation. Beuchat CA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R760-7

Anisosmotic cell volume regulation: a comparative view. Chamberlin ME, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C159-73 (166 ref.)

Brain ion and volume regulation during acute hypernatremia in Brattleboro rats. DePasquale M, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F1059-66

Cyclic guanosine monophosphate increases hydraulic conductivity in rabbit and rat CCT. Dillingham MA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F841-6

Osmoregulation of thirst and vasopressin release in pregnancy. Lindheimer MD, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 2):F159-69 (17 ref.)

Osmotic thresholds for AVP release with the use of plasma and urine AVP and free water clearance. Moses AM. **Am J Physiol** 1989 Apr;256(4 Pt 2):R892-7

Osmoregulation of vasopressin secretion and thirst during the estrous cycle of pigs. Rollin C, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R270-5

Rumen volume, saliva flow rate, and systemic fluid homeostasis in dehydrated cattle. Silanikove N, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R809-15

Age sensitivity of osmoregulation and of its neural correlates in Aplysia. Skinner TL, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R989-96

Effect of blood glucose concentration on osmoregulation in diabetes mellitus. Thompson CJ, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R597-604

Importance of anion in hypotonic volume regulation of rabbit proximal straight tubule. Welling PA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F853-60

Salt and fluid balance in newborn infants. Zetterström R. **An Esp Pediatr** 1988 Sep;29 Suppl 32:287-90

Do children have an adequate fluid intake? Water balance studies carried out at home. Ballauff A, et al. **Ann Nutr Metab** 1988;32(5-6):332-9

Sodium and water regulation in a patient with cerebral salt wasting. Diringer M, et al. **Arch Neurol** 1989 Aug; 46(8):928-30

A study of the response to several dipsogenic treatments in rats with mammillary polydipsia and with centrally induced diabetes insipidus. Morales A, et al. **Behav Brain Res** 1988 Nov 1;31(1):69-74

Sodium depletion increases rats' preferences for salted food. Bertino M, et al. **Behav Neurosci** 1988 Aug;102(4):565-73

Neural systems for early independent ingestion: regional metabolic changes during ingestive responding and dehydration. Hall WG. **Behav Neurosci** 1989 Apr; 103(2):386-411

Characteristics of thirst and sodium appetite in mice (Mus musculus). Rowland NE, et al. **Behav Neurosci** 1988 Dec; 102(6):969-74

Salt preference in rats with hereditary hypothalamic diabetes insipidus (Brattleboro strain). Yirmiya R, et al. **Behav Neurosci** 1988 Aug;102(4):574-9

Cyclic nucleotide dynamics in the rat hypothalamus during osmotic stimulation: in vivo and in vitro studies. Carter DA, et al. **Brain Res** 1989 May 22;487(2):350-6

Cell volume regulation in the trypanosomatid Herpetomonas samuelpessoai. Andrade CR, et al. **Braz J Med Biol Res** 1988;21(2):379-84

Free water clearance after supplemental albumin resuscitation for shock. Moon MR, et al. **Circ Shock** 1989 May;28(1):1-8

Edema of cardiac origin. Studies of body water and sodium, renal function, hemodynamic indexes, and plasma hormones in untreated congestive cardiac failure. Anand IS, et al. **Circulation** 1989 Aug;80(2):299-305

Osmoregulation of vasopressin secretion and thirst in health and disease. Baylis PH, et al. **Clin Endocrinol (Oxf)** 1988 Nov;29(5):549-76 (152 ref.)

Osmoregulation of vasopressin secretion and thirst in cyclical oedema. Thompson CJ, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):629-35

Controversies in fluid and electrolyte therapy for the premature infant. Costarino AT, et al. **Clin Perinatol** 1988 Dec;15(4):863-78 (120 ref.)

Rate of water turnover and electrolyte balance of an arid-zone marsupial, the spectacled hare wallaby (Lagorchestes conspicillatus) on Barrow Island. Bakker HR, et al. **Comp Biochem Physiol [A]** 1989;92(4):521-9

Neurophysiology of body fluid homeostasis. Leng G, et al. **Comp Biochem Physiol [A]** 1988;90(4):781-8 (68 ref.)

Endocrine components of body fluid homeostasis. Ramsay DJ, et al. **Comp Biochem Physiol [A]** 1988;90(4):777-80

Central and systemic antidiuretic hormone and angiotensin II in salt and fluid balance of birds as compared to mammals. Simon-Oppermann C, et al. **Comp Biochem Physiol [A]** 1988;90(4):789-803 (107 ref.)

Solute transport and epithelial cell volume regulation. Spring KR, et al. **Comp Biochem Physiol [A]** 1988;90(4):557-60

Effects of high hydrostatic pressures on the activity of the membrane ATPases of some organs implicated in hydromineral regulation. Péqueux A, et al. **Comp Biochem Physiol [B]** 1978;59(3):207-12

Ageing in the hypothalamo-neurohypophysial-renal system. Davies I. **Compr Gerontol [C]** 1987 Dec;1:12-23 (86 ref.)

Glomerular hemodynamics and salt balance in pregnant rats. Dal Canton A. **Contrib Nephrol** 1989;70:153-6

Disorders of potassium homeostasis in critically ill patients. Weisberg LS, et al. **Crit Care Clin** 1987 Oct;3(4):835–54 (75 ref.)

Airway secretion electrolytes: reflection of water and salt states of the body. Cavaliere F, et al. **Crit Care Med** 1989 Sep;17(9):891–4

Hypoproteinemia–induced mucosal albumin leakage. Influence of luminal nutrients. Brinson R, et al. **Dig Dis Sci** 1989 Jan;34(1):97–102

Organic anions and the diarrhea of inflammatory bowel disease. Vernia P, et al. **Dig Dis Sci** 1988 Nov;33(11):1353–8

Effect of an osmotic stimulus on the secretion of arginine vasopressin and adrenocorticotropin in the horse. Irvine CH, et al. **Endocrinology** 1989 Jun;124(6):3102–8

Incidence of post–lumbar puncture headache is independent of daily fluid intake. Dieterich M, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(4):194–6

The influence of the initial state of hydration on endocrine responses to exercise in the heat. Brandenberger G, et al. **Eur J Appl Physiol** 1989;58(6):674–9

Factors affecting bioelectrical impedance measurements in humans. Deurenberg P, et al. **Eur J Clin Nutr** 1988 Dec; 42(12):1017–22

Role of the "little brain" in the gut in water and electrolyte homeostasis. Cooke HJ. **FASEB J** 1989 Feb;3(2):127–38 (36 ref.)

Endocrines and osmoregulatory mechanisms in the Nile crocodile, Crocodylus niloticus. Balment RJ, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):361–7

Smoltification and seawater adaptation in coho salmon (Oncorhynchus kisutch): plasma calcium regulation, osmoregulation, and calcitonin. Björnsson BT, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):346–54

Putative role of adenohypophysis in the osmoregulation of tilapia larvae (Oreochromis mossambicus; Teleostei): an ultrastructure study. Hwang PP, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):335–41

Sensor for measuring surface fluid conductivity in vivo. Fouke JM, et al. **IEEE Trans Biomed Eng** 1988 Oct; 35(10):877–81

Beta–2–microglobulin adsorption and release in–vitro: influence of membrane material, osmolality and heparin. Klinke B, et al. **Int J Artif Organs** 1988 Sep;11(5):355–60

Atrial natriuretic peptide: its mechanism of release from the atrium. Ferrari R, et al. **Int J Cardiol** 1989 Aug; 24(2):137–49 (121 ref.)

Heat–induced damage to HeLa–S3 cells: correlation of viability, permeability, osmosensitivity, phase–contrast light–, scanning electron– and transmission electron–microscopical findings. Wheatley DN, et al. **Int J Hyperthermia** 1989 Mar–Apr;5(2):145–62

Fluid intake and gastrointestinal problems in runners competing in a 25–km race and a marathon. Rehrer NJ, et al. **Int J Sports Med** 1989 May;10 Suppl 1:S22–5

Osmoregulation in Escherichia coli: complementation analysis and gene–protein relationships in the proU locus. Dattananda CS, et al. **J Bacteriol** 1989 Apr;171(4):1915–22

DNA–binding properties of the transcription activator (OmpR) for the upstream sequences of ompF in Escherichia coli are altered by envZ mutations and medium osmolarity. Forst SA, et al. **J Bacteriol** 1989 Jun; 171(6):2949–55

Nucleotide sequence of the osmoregulatory proU operon of Escherichia coli. Gowrishankar J. **J Bacteriol** 1989 Apr; 171(4):1923–31

Contributions of the kidneys and intestines to water conservation, and plasma levels of antidiuretic hormone, during dehydration in house sparrows (Passer domesticus). Goldstein DL, et al. **J Comp Physiol [B]** 1988;158(3):353–61

Osmotic effectors in kidneys of xeric and mesic rodents: corticomedullary distributions and changes with water availability. Yancey PH. **J Comp Physiol [B]** 1988; 158(3):369–80

Osmotic regulation of hypothalamo–neurointermediate lobe corticotrophin–releasing factor–41 in the rat. Jessop DS, et al. **J Endocrinol** 1989 Jan;120(1):119–24

Comparative neuroanatomical aspects of the salt and water balance in birds and mammals. Ramieri G, et al. **J Endocrinol Invest** 1989 Jan;12(1):59–74 (154 ref.)

Intrarenal dopamine acts at the dopamine–1 receptor to control renal function. Siragy HM, et al. **J Hypertens Suppl** 1988 Dec;6(4):S479–81

Alterations in vasopressin regulation in Alzheimer's disease. Norbiato G, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul; 51(7):903–8

A volume–dependent, chloride–sensitive component of taurine release stimulated by potassium from retina. Domínguez L, et al. **J Neurosci Res** 1989 Mar;22(3):356–61

Volume regulation in astrocytes: a role for taurine as an osmoeffector. Pasantes Morales H, et al. **J Neurosci Res** 1988 Aug;20(4):503–9

A simple field test for assessing salt balance in heat–stressed miners. Cross RB, et al. **J Occup Med** 1989 Aug; 31(8):668–73

Inappropriate fluid response in congenital diaphragmatic hernia: first report of a frequent occurrence. Rowe MI, et al. **J Pediatr Surg** 1988 Dec;23(12):1147–53

Oliguria in the premature baboon with hyaline membrane disease: a manifestation of multisystem immaturity? Delemos J, et al. **J Perinatol** 1989 Mar;9(1):19–25

Physiologic regulation of capillary permeability. Huxley VH. **J Reconstr Microsurg** 1988 Jul;4(4):341–6 (29 ref.)

Effect of glucose polymer ingestion on energy and fluid balance during exercise. Kingwell B, et al. **J Sports Sci** 1989 Spring;7(1):3–8

Pathways of water through erythrocyte membranes. Routes along defect structures. Lawsczeck R, et al. **J Theor Biol** 1988 Dec 7;135(3):401–7

Cellular osmoregulation in the renal papilla. Beck FX, et al. **Klin Wochenschr** 1988 Sep 15;66(18):843–8 (28 ref.)

Element composition of tubule cells in the inner stripe of the renal outer medulla. Beck FX, et al. **Miner Electrolyte Metab** 1989;15(3):144–9

Glomerular tubular balance: mediation by luminal hypotonicity. Häberle DA, et al. **Miner Electrolyte Metab** 1989;15(3):108–13

Vascular congestion in ischemic renal failure: the role of cell swelling. Mason J, et al. **Miner Electrolyte Metab** 1989; 15(3):114–24

ANF receptors: distribution and regulation in central and peripheral tissues. Stewart RE, et al. **Neurosci Biobehav Rev** 1988 Summer;12(2):151–68 (144 ref.)

Impaired responsiveness of paraventricular neurosecretory neurons to osmotic stimulation in rats after local anesthesia of the subfornical organ. Tanaka J, et al. **Neurosci Lett** 1989 Mar 13;98(1):51–6

Acute effects of changing plasma osmolality and colloid oncotic pressure on the formation of brain edema after cryogenic injury. Kaieda R, et al. **Neurosurgery** 1989 May; 24(5):671–8

The Harvey Lectures, Series XLIII, 1946–1947: Physiological information gained from studies on the life raft ration. [classical article] Gamble JL. **Nutr Rev** 1989 Jul;47(7):199–201

Effects of an aorticopulmonary shunt on lung fluid balance in the young lamb. Feltes TF, et al. **Pediatr Res** 1989 Aug; 26(2):94–7

Brain angiotensin: critical role in the ongoing regulation of body fluid homeostasis and cardiovascular function. Harding JW, et al. **Peptides** 1989 Mar–Apr;10(2):261–4

Water, K+, H+, lactate and glucose fluxes during cell volume regulation in perfused rat liver. Lang F, et al. **Pflugers Arch** 1989 Jan;413(3):209–16

Involvement of Na and Cl in ouabain–induced cell swelling in thick ascending limb of rat kidney. Rajerison RM, et al. **Pflugers Arch** 1988 Oct;412(5):491–6

Relationship between cell volume and cation content in thick ascending limb of rat kidney. Rajerison RM, et al. **Pflugers Arch** 1988 Oct;412(5):497–502

Osmotic and hypovolemic thirst in spontaneously hypertensive rats. Janczewski P, et al. **Physiol Behav** 1988; 43(5):591–9

Preloads of water, but not isotonic saline, reduce drinking in domestic fowls. Yeomans MR, et al. **Physiol Behav** 1988; 43(4):423–8

Bilateral acute heart atrial auriectomy reduced diuresis and natriuresis following hypertonic sodium load in anaesthetized dogs. Okoličány J, et al. **Physiol Bohemoslov** 1989;38(2):179–87

Activity of ion channels during volume regulation by clonal N1E115 neuroblastoma cells. Falke LC, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3919–23

Water intake in rats subjected to hypothalamic immunoneutralization of angiotensin II, atrial natriuretic peptide, vasopressin, or oxytocin. Franci CR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2952–6

Nomograms of polyuria for men and women with psychosis, intermittent hyponatremia, and polydipsia (PIP syndrome). Vieweg WV, et al. **Psychiatr Med** 1988;6(4):29–40

Effect of phosphate on water and glucose transport in mouse everted gut sacs. Mary PL, et al. **Q J Exp Physiol** 1989 May;74(3):363–5

Palatability shift of a salt–associated incentive during sodium depletion. Berridge KC, et al. **Q J Exp Psychol [B]** 1989 May;41(2):121–38

Cell volume regulation in the nervous system. Ballanyi K, et al. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):142–57 (93 ref.)

Cellular osmoregulation in renal medulla. Beck FX, et al. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):174–86 (74 ref.)

Cell volume regulation in lymphocytes. Deutsch C, et al. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):260–76 (66 ref.)

Comparative aspects of cell osmoregulation and volume control. Gilles R. **Renal Physiol Biochem** 1988 May–Oct; 11(3–5):277–88 (73 ref.)

Cell volume regulation in liver. Graf J, et al. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):202–20 (81 ref.)

Mechanisms in volume regulation in Ehrlich ascites tumor cells. Hoffmann EK, et al. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):221–47 (99 ref.)

K:Cl cotransport: emerging molecular aspects of a ouabain–resistant, volume–responsive transport system in red blood cells. Lauf PK. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):248–59 (60 ref.)

Principles of cell volume regulation. Macknight AD. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):114–41 (132 ref.)

Cell volume regulation in nonrenal epithelia. Reus L. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):187–201 (68 ref.)

Cell volume regulation in renal cortical cells. Völkl H, et al. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):158–73 (86 ref.)

Recent advances in characterizing clearance of water from lungs. Goodman BE. **S D J Med** 1989 Feb;42(2):13–6 (38 ref.)

Transcapillary fluid balance in subcutaneous tissue of patients undergoing aortocoronary bypass with extracorporeal circulation. Rein KA, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):267–70

Transport polarity of hepatocytes. Meier PJ. **Semin Liver Dis** 1988 Nov;8(4):293–307 (208 ref.)

Volume control of isolated rabbit proximal tubules. Linshaw MA. **Semin Nephrol** 1989 Mar;9(1):83–90 (40 ref.)

Involvement of ion channels and active transport in osmoregulation and signaling of higher plant cells. Schroeder JI, et al. **Trends Biochem Sci** 1989 May; 14(5):187–92 (40 ref.)

General principles of fluid therapy in small animal medicine. Schaer M. **Vet Clin North Am [Small Anim Pract]** 1989 Mar;19(2):203–13 (10 ref.)

[The regulation of potassium metabolism] Haalboom JR, et al. **Ned Tijdschr Geneeskd** 1988 Aug 6;132(32):1475–9 (38 ref.) **(Dut)**

[Fluid balance and the sauna] Ahonen E, et al. **Duodecim** 1988;104(8):609–14 (29 ref.) **(Fin)**

[Treatment of severe hyponatremia by restricted water intake] Lelarge P, et al. **Presse Med** 1989 Mar 11; 18(10):517–20 (Eng. Abstr.) **(Fre)**

[The Intersalt study: results and perspectives] Laaser U, et al. **Soz Praventivmed** 1989;34(1):1–3 (Eng. Abstr.) **(Ger)**

[Therapy of the symptoms of "dry skin"] Jesberger B. **Z Hautkr** 1988;63 Suppl 3:12–5 (10 ref.) (Eng. Abstr.) **(Ger)**

[The concept of "dry skin" from the pathophysiologic viewpoint] Stüttgen G. **Z Hautkr** 1988;63 Suppl 3:7–11 (0 ref.) **(Ger)**

[Methods for measuring the symptoms of "dry skin"] Triebskorn A. **Z Hautkr** 1988;63 Suppl 3:16–9 (15 ref.) (Eng. Abstr.) **(Ger)**

[Further research on the role of prostanoids in controlling renal function in humans in normal potassium balance and acute experimental potassium depletion. I: Studies of normal potassium balance. Effects of indomethacin] Agnoli GC, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):147–53 (Eng. Abstr.) **(Ita)**

[Further research on the role of prostanoids in controlling renal function in humans in normal potassium balance and acute experimental potassium depletion. II: Studies of potassium depletion] Agnoli GC, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):155–61 (Eng. Abstr.) **(Ita)**

[Acid–base balance, blood lactate, blood pyruvate, and L/P ratio in albino rats raised in normobaric, hypoxic hypoxia for one or two generations] Quatrini U, et al. **Boll Soc Ital Biol Sper** 1989 Apr;65(4):357–64 (Eng. Abstr.) **(Ita)**

[Examining water–electrolyte balance in liver cirrhosis with a view to therapeutic management] Reitano R, et al. **Clin Ter** 1988 Apr 30;125(2):101–5 (Eng. Abstr.) **(Ita)**

[Effects of different methods of extracorporeal circulation on intracellular energy, acid–base and water–electrolyte metabolism in patients subjected to aortocoronary bypass] Fiaccadori E, et al. **Minerva Anestesiol** 1988 Jul–Aug; 54(7–8):303–13 (Eng. Abstr.) **(Ita)**

[The alterations of serum colloid osmotic pressure, serum protein and water balance during prolonged anesthesia] Satoh T, et al. **Masui** 1989 May;38(5):643–53 (Eng. Abstr.) **(Jpn)**

[Evaluation of water–electrolyte metabolism in patients with upper GI tract cancer—the dynamic status of secretion of alpha–hANP levels] Kojima Y. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1603–10 (Eng. Abstr.) **(Jpn)**

[Body fluids: recent progress in research and management. The osmoregulatory system] **Nippon Rinsho** 1987 Aug; Suppl:394–489 **(Jpn)**

[Body fluids: recent progress in research and management. Water–electrolyte transport] **Nippon Rinsho** 1987 Aug; Suppl:5–321 **(Jpn)**

[Osmoregulatory adaptation in vertebrates] Ando M. **Nippon Seirigaku Zasshi** 1988;50(10):669–83 (112 ref.) **(Jpn)**

[Osmoregulation in plant cells] Takabe T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):420–8 (24 ref.) **(Jpn)**

[The main directions in the activities of Prof. Stanisław Kozłowski. I Regulation of the water–electrolyte balance] Szczepańska–Sadowska E. **Acta Physiol Pol** 1988;39 Suppl 31:9–20 **(Pol)**

[Studies on the role of heart innervation and other non–osmotic factors in regulating water and sodium metabolism] Pruszczyński W. **Pol Tyg Lek** 1988 Sep 5; 43(36):1169–72 **(Pol)**

[Importance of Ca2+—Mg2+ ion equilibrium in cardiovascular diseases] Segal B, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun; 92(2):399–402 (0 ref.) **(Rum)**

[Physiological characteristics and functional role of liver osmoreceptors in the regulation of water–electrolyte homeostasis] Tyryshkina EM. **Dokl Akad Nauk SSSR** 1988; 300(5):1263–6 **(Rus)**

[Age-related characteristics of hemodynamics in humans in response to stimulation of the system of osmoregulation] Aizman RI, et al. **Fiziol Cheloveka** 1988 Jul-Aug; 14(4):647-51 (Rus)

[Water-excreting and ion-regulating functions of the kidneys in children with constitutional-exogenous obesity] Kliorin AI, et al. **Fiziol Cheloveka** 1988 Jul-Aug;14(4):640-6 (Rus)

[Various aspects of the biological effect of a distillate] Rakhmanin IuA, et al. **Gig Sanit** 1989 Mar;(3):92-3 (Rus)

[Characteristics of water-electrolyte balance in patients with labile essential hypertension and various approaches to the optimal therapy with diuretics and low-sodium diet] Shikhvatsabais IK, et al. **Kardiologiia** 1989 May;29(5):16-20 (Eng. Abstr.) (Rus)

[Effects of total lavage of the gastrointestinal tract on the regulatory mechanisms of water-electrolyte metabolism in patients who had undergone colon surgery] Smirnova VI, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):77-9 (Eng. Abstr.) (Rus)

[Changes in metabolic indicators in patients with acute intestinal infections] Chekalina KI, et al. **Ter Arkh** 1989; 61(2):67-9 (Eng. Abstr.) (Rus)

[Principles of functional evolution at the cellular, organ and organism levels (exemplified by the kidney and water-salt homeostasis)] Natochin IuV. **Zh Obshch Biol** 1988 May-Jun;49(3):291-303 (42 ref.) (Eng. Abstr.) (Rus)

[Water-electrolyte and acid-base changes. I. Potassium metabolism] Velásquez-Jones L. **Bol Med Hosp Infant Mex** 1988 Jun;45(6):403-6 (12 ref.) (Eng. Abstr.) (Spa)

DRUG EFFECTS

Effects of antidiuretic hormone (AVP) and human atrial natriuretic peptide (hANP) on water and electrolyte balance in neonates. Takata M, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:146-54

Mechanism of isotonic water transport in glands. Ussing HH, et al. **Acta Physiol Scand** 1989 Jul;136(3):443-54

Prospective studies on a lithium cohort. 2. Renal function. Water and electrolyte metabolism. Schou M, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):427-33

Taurine and osmoregulation. II. Administration of taurine analogues affords cerebral osmoprotection during chronic hypernatremic dehydration. Trachtman H, et al. **Am J Dis Child** 1988 Nov;142(11):1194-8

Renal, volume, and hormonal changes during therapeutic administration of recombinant interleukin-2 in man. Textor SC, et al. **Am J Med** 1987 Dec;83(6):1055-61

Effects of arginine vasopressin on hemodynamics and lung fluid balance in lambs. Gest AL, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H641-7

Hypotonic cell volume regulation in mouse medullary thick ascending limb: effects of ADH. Hebert SC, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F962-9

Influence of furosemide treatment on fluid and electrolyte balance in horses. Freestone JF, et al. **Am J Vet Res** 1988 Nov;49(11):1899-902

Hypovolemia, hyperosmolality, and acidosis associated with intraperitoneal infusion of nitrofurazone solution in healthy horses. Gossett KA, et al. **Am J Vet Res** 1988 Sep; 49(9):1601-4

Nickel inhibition of the osmotic-sensitive ionic cellular channels. Terreros DA, et al. **Ann Clin Lab Sci** 1988 Nov-Dec;18(6):444-50

Chronic TNF infusion causes anorexia but not accelerated nitrogen loss. Michie HR, et al. **Ann Surg** 1989 Jan; 209(1):19-24

Forebrain sites of action for drinking and salt appetite to angiotensin or captopril. Fitts DA, et al. **Behav Neurosci** 1989 Aug;103(4):865-72

Induction of an appetite for sodium in rats that show no spontaneous preference for sodium chloride solution--the Fischer 344 strain. Rowland NE, et al. **Behav Neurosci** 1988 Dec;102(6):961-8

Facilitatory role of central dopamine in the osmotic release of vasopressin. Yamaguchi K, et al. **Brain Res** 1989 Mar 6;481(2):388-91

The role of aldosterone in water and electrolyte transport across the colonic epithelium of the lizard, Gallotia galloti. Diaz M, et al. **Comp Biochem Physiol [A]** 1988;91(1):71-7

Ontogeny of renin-induced salt appetite in the rat pup. Leshem M, et al. **Dev Psychobiol** 1989 Jul;22(5):437-45

Intravenous calcitonin gene-related peptide stimulates net water secretion in rat colon in vivo. Rolston RK, et al. **Dig Dis Sci** 1989 Apr;34(4):612-6

Effects of arginine vasotocin on water balance of three leiopelmatid frogs. Cree A. **Gen Comp Endocrinol** 1988 Dec;72(3):340-50

Epidermal growth factor inhibits the hydroosmotic effect of vasopressin in the isolated perfused rabbit cortical collecting tubule. Breyer MD, et al. **J Clin Invest** 1988 Oct;82(4):1313-20

Atrial natriuretic factor inhibits vasopressin-stimulated osmotic water permeability in rat inner medullary collecting duct. Nonoguchi H, et al. **J Clin Invest** 1988 Oct;82(4):1383-90

Hormone studies in Myxine glutinosa: effects of the eicosanoids arachidonic acid, prostaglandin E1, E2, A2, F2 alpha, thromboxane B2 and of indomethacin on plasma cortisol, blood pressure, urine flow and electrolyte balance. Wales NA. **J Comp Physiol [B]** 1988;158(5):621-6

Dose-dependence of endoneurial fluid sodium and chloride accumulation in galactose intoxication. Mizisin AP, et al. **J Neurol Sci** 1988 Sep;86(2-3):113-24

Pharmacological modification of corneal endothelial intracellular pH, intracellular electrical potential difference, and corneal swelling and deswelling rates. Elijah RD, et al. **J Ocul Pharmacol** 1985 Winter;1(4):343-52

Ca2+ sensitivity of volume-regulatory K+ and Cl- channels in cultured human epithelial cells. Hazama A, et al. **J Physiol (Lond)** 1988 Aug;402:687-702

Role of diuretics, hormonal derangements, and clinical setting of hyponatremia in medical patients. Gross P, et al. **Klin Wochenschr** 1988 Aug 1;66(15):662-9

Effects of acute hyperosmolar NaCl or urea on brain H2O, Na+, K+, carbohydrate, and amino acid metabolism in weanling mice: NaCl induces insulin secretion and hypoglycemia. Thurston JH, et al. **Metab Brain Dis** 1986 Jun;1(2):129-46

The effect of arginine vasopressin and V1 receptor antagonist on brain water in cat. Rosenberg GA, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):241-5

Does taurine act as an osmoregulatory substance in the rat brain? Solís JM, et al. **Neurosci Lett** 1988 Aug 15;91(1):53-8

Effects of aldosterone and atrial natriuretic peptide on water and electrolyte homeostasis of sick neonates. Kojima T, et al. **Pediatr Res** 1989 Jun;25(6):591-4

Specific effect of putative 5-HT1A agonists, 8-OH-DPAT and gepirone, to increase hypertonic saline consumption in the rat: evidence against a general hyperdipsic action. Cooper SJ, et al. **Physiol Behav** 1988;43(4):533-7

Potential involvement of galanin in the regulation of fluid homeostasis in the rat. Koenig JI, et al. **Regul Pept** 1989 Jan;24(1):81-6

Induction of and adaptation to olsalazine induced intestinal volume load. Berglindh T, et al. **Scand J Gastroenterol Suppl** 1988;148:24-8

Plasma atrial natriuretic factor and other water- and sodium-regulating hormones after human heart transplantation. Farge D, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2573-5

[Validation of antihypertensive therapy from the viewpoint of kidney participation in water-salt metabolism] Pirʹova B. **Eksp Med Morfol** 1988;27(4):51-8 (Eng. Abstr.) (Bul)

[Effect of captopril therapy on sodium and water excretion in patients with liver cirrhosis and ascites] Brunkhorst R, et al. **Klin Wochenschr** 1989 Aug 1;67(15):774-83 (Eng. Abstr.) (Ger)

[Behavior of intracellular electrolytes in manic-depressive patients treated with lithium] König L. **Psychiatr Neurol Med Psychol Beih** 1988;41:54-5 (Ger)

[Therapy of "dry skin" with creams containing urea] Wohlrab W. **Z Hautkr** 1988;63 Suppl 3:20-3 (14 ref.) (Ger)

[Interaction of chronic inhibition of the angiotensin-converting enzyme and the sympathetic system: effect of added sodium chloride load] Dominiak P, et al. **Z Kardiol** 1988;77 Suppl 3:29-33 (Ger)

[Inhibition of the angiotensin-converting enzyme--effect on kidney function and electrolyte balance] Kramer HJ. **Z Kardiol** 1988;77 Suppl 3:39-45 (34 ref.) (Eng. Abstr.) (Ger)

[Comparative evaluation of the effects of xipamide, indapamide and hydrochlorothiazide on water-electrolyte balance] Ansuini R, et al. **Clin Ter** 1988 Jan 31; 124(2):117-24 (Eng. Abstr.) (Ita)

[Changes induced by carbamazepine in the action of ADH (antidiuretic hormone) in neurologic patients] Vivalda L, et al. **Riv Neurol** 1988 May-Jun;58(3):106-9 (Eng. Abstr.) (Ita)

[Effect of a natriuretic factor of hepatic origin on the indices of water-salt metabolism and blood circulation] Konovchuk VN, et al. **Fiziol Zh SSSR** 1989 Feb; 75(2):245-50 (Eng. Abstr.) (Rus)

WATER-ELECTROLYTE IMBALANCE

[Disorders of the water-electrolyte balance. Clinical, diagnostic and therapeutic aspects] Mammarella A, et al. **Clin Ter** 1988 Oct 15;127(1):59-67 (0 ref.) (Ita)

[Diagnosis and treatment of water-electrolyte depletion] Coraggio F, et al. **G Clin Med** 1989 May;70(5):363-74 (15 ref.) (Ita)

BLOOD

[Transplacental hypochloremia] Martí Fernández J, et al. **An Esp Pediatr** 1988 Sep;29(3):261-2 (Spa)

CHEMICALLY INDUCED

Electrolyte disarray and cardiovascular disease. Hollifield JW. **Am J Cardiol** 1989 Jan 17;63(4):21B-26B (13 ref.)

Severe salt and water deficiency associated with a combination of atenolol and chlorthalidone. Bowman CA, et al. **BMJ** 1988 Sep 17;297(6650):742-3

Electrolyte abnormalities and drugs which commonly cause them. Karb VB. **J Neurosci Nurs** 1989 Apr;21(2):125-9

[Hypermineralcorticism caused by topical preparation containing 9-alpha-fluoroprednisolone (letter)] Zamora Martínez E, et al. **Med Cutan Ibero Lat Am** 1988; 16(5):431-2 (Spa)

COMPLICATIONS

Neurologic manifestations of fluid and electrolyte disturbances. Riggs JE. **Neurol Clin** 1989 Aug;7(3):509-23 (96 ref.)

[Myelin lesions in the central nervous system caused by disturbances in plasma osmolarity: pontine and extra-pontine myelinolysis] Cambier J, et al. **Bull Acad Natl Med** 1989 Jan;173(1):79-85; discussion 85-6 (Eng. Abstr.) (Fre)

[Water-electrolyte imbalance] Tassi A, et al. **Minerva Anestesiol** 1988 Oct;54(10):401-4 (Eng. Abstr.) (Ita)

[Cardiac arrhythmia caused by intracellular electrolyte imbalance in severe multiple organ insufficiency] Cavaliere F, et al. **Recenti Prog Med** 1988 Oct;79(10):610-2 (Eng. Abstr.) (Ita)

DIAGNOSIS

Early detection of the TUR syndrome by marking the irrigating fluid with 1% ethanol. Hahn RG. **Acta Anaesthesiol Scand** 1989 Feb;33(2):146-51

[Tests for water-electrolyte metabolism and acid-base equilibrium] **Nippon Rinsho** 1987 Aug;Suppl:1093-158 (Jpn)

ETIOLOGY

Severe ovarian hyperstimulation syndrome. Case reports. Magnus O, et al. **Acta Eur Fertil** 1988 Mar-Apr;19(2):89-92

Electrolyte abnormalities in cancer. Martinez-Maldonado M, et al. **Adv Exp Med Biol** 1989;252:135-45 (37 ref.)

Electrolyte imbalances. Intraoperative risk factors. Felver L, et al. **AORN J** 1989 Apr;49(4):992-1005, 1008

Life-threatening fluid and electrolyte abnormalities associated with cancer. Kopec IC, et al. **Crit Care Clin** 1988 Jan;4(1):81-105 (71 ref.)

Pathogenesis of sodium retention complicating cirrhosis: is there room for diminished "effective" arterial blood volume? Rector WG Jr, et al. **Gastroenterology** 1988 Dec; 95(6):1658-63

Severe electrolyte abnormalities and paralytic ileus complicating delirium tremens. Marotta F, et al. **Keio J Med** 1989 Mar;38(1):53-9

Why marathon runners collapse [letter] Borok G. **S Afr Med J** 1989 Jul 15;76(2):80

Dilution of blood proteins due to irrigant absorption in transurethral prostatic resection. Hahn RG. **Scand J Urol Nephrol** 1989;23(2):97-102

[Hypo-osmolar syndrome: relation to neoplastic pathology] Taliani U, et al. **G Clin Med** 1988 Apr;69(4):289-94 (34 ref.) (Ita)

[Water-electrolyte metabolism and acid-base imbalance in major diseases] **Nippon Rinsho** 1987 Aug;Suppl:727-1089 (Jpn)

[Water-electrolyte and acid-base imbalance associated with alcoholism] Shimizu K, et al. **Nippon Rinsho** 1988 Aug; 46(8):1747-54 (Jpn)

[Disorders of water-electrolyte, oxygen and acid-base homeostasis in patients with anorexia nervosa] Dementʹeva II, et al. **Anesteziol Reanimatol** 1988 Jul-Aug;(4):66-70 (Eng. Abstr.) (Rus)

[Disorders of metabolism and their pathogenesis in patients with spinal cord injuries] Sytin LV, et al. **Ortop Travmatol Protez** 1989 May;(5):16-8 (Rus)

[The role of the natriuretic factor in the genesis of water-electrolyte disorders in patients with chronic circulatory failure] Gapon LI, et al. **Ter Arkh** 1988; 60(12):28-32 (Eng. Abstr.) (Rus)

[The nature and mechanisms of disorders in the ionuretic, acid- and water-excretory functions of the kidneys in acute kidney failure (experimental research)] Zhiznevskaia NG, et al. **Urol Nefrol (Mosk)** 1988 Sep-Oct;(5):43-6 (Eng. Abstr.) (Rus)

HISTORY

Theory of local loss of blood and fluid. By Alfred Blalock, 1940 [classical article] Blalock A. **Clin Orthop** 1989 Mar; (240):3-4

IMMUNOLOGY

Cyclosporin immunosuppression mediated by calcium/sodium imbalance. Kimball PM, et al. **Cancer Res** 1989 Feb 15;49(4):877-82

METABOLISM

Clinical approach to the hyperosmolar patient. Geheb MA. **Crit Care Clin** 1987 Oct;3(4):797-815 (41 ref.)

Linear rate of change in the product of erythrocyte water content and potassium concentration during the 0-120-hour postmortem period in the rat. Querido D, et al. **Forensic Sci Int** 1988 Jul-Aug;38(1-2):101-12

[Receptor-effector relations in the effect of aldosterone on mononuclear leukocytes: validation and application to various water and electrolyte imbalances in humans] Wehling M. **Klin Wochenschr** 1989 Jan 4;67(1):1-5 (29 ref.) (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Adaptation to chronic hypoosmolality in rats. Verbalis JG, et al. **Kidney Int** 1988 Sep;34(3):351-60

[Complications of acute abdomen in children] Bos AP, et al. **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2003–5 **(Dut)**

[Severe complications during enalapril therapy for heart insufficiency] Wieland T, et al. **Schweiz Med Wochenschr** 1988 Dec 3;118(48):1789–92 (Eng. Abstr.) **(Ger)**

[Practical ABCs of electrolyte disorders] Truniger B. **Ther Umsch** 1988 Dec;45(12):842–50 (3 ref.) (Eng. Abstr.) **(Ger)**

[The hepatorenal system: its relation to the physiopathology of renal water and salt retention in liver cirrhosis (editorial)] López-Novoa JM. **Rev Clin Esp** 1988 Jun;183(1):1–2 **(Spa)**

THERAPY

The approach to fluid and electrolyte therapy in pediatrics. Feld LG, et al. **Adv Pediatr** 1988;35:497–535 (53 ref.)

Simplified method of hemofiltration in ventricular assist device patients. Macris MP, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):708–11

Management of fluid and electrolyte therapy in the newborn. John EG. **Indian J Pediatr** 1988 Nov–Dec;55(6):841–60 (10 ref.)

Continuous arteriovenous haemofiltration in children. Lopez-Herce J, et al. **Intensive Care Med** 1989;15(4):224–7

[Correction of electrolyte balance during extracorporeal regulation of the blood composition in patients with ischemic heart disease] Pisarevskiĭ AA, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):38–40 (Eng. Abstr.) **(Rus)**

[Ultrafiltration in the treatment of general hyperhydration] Kozlechkov IuA, et al. **Voen Med Zh** 1988 Aug;(8):29–33 **(Rus)**

VETERINARY

Fluid and electrolyte disorders. **Vet Clin North Am [Small Anim Pract]** 1989 Mar; 19(2):203–385

[A summary of the abnormalities of the water–electrolyte balance and acid–base equilibrium] Murisier N. **Schweiz Arch Tierheilkd** 1988 Nov;130(11):643–50 (11 ref.) (Eng. Abstr.) **(Fre)**

[The fluid balance in enteral salmonellosis of calves] Mayle H, et al. **DTW** 1988 Oct;95(9):371–4 (Eng. Abstr.) **(Ger)**

WATER INTOXICATION

see related
WATER-ELECTROLYTE BALANCE

[Acute water intoxication] Bode H. **Dtsch Med Wochenschr** 1989 May 26;114(21):834–6 **(Ger)**

CHEMICALLY INDUCED

[Hyponatremia caused by water intoxication induced by diuretics] Radó J, et al. **Orv Hetil** 1989 Jan 1;130(1):25–6 (Eng. Abstr.) **(Hun)**

[The effect of carbamazepine on water metabolism in epileptics (letter)] Vönöczky K, et al. **Orv Hetil** 1989 Jan 29;130(5):267–8 **(Hun)**

[Changes induced by carbamazepine in the action of ADH (antidiuretic hormone) in neurologic patients] Vivalda L, et al. **Riv Neurol** 1988 May–Jun;58(3):106–9 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Water intoxication and hyponatraemic convulsions in neonates. Vanapruks V, et al. **Arch Dis Child** 1989 May; 64(5):734–5

Hyponatremic seizure following ECT. Finlayson AJ, et al. **Can J Psychiatry** 1989 Jun;34(5):463–4

Treatment of hyponatraemia secondary to water overload [letter] Goldman MB, et al. **Lancet** 1989 Feb 11; 1(8633):328–9

Treatment of hyponatraemia secondary to water overload [letter] Seckl J. **Lancet** 1988 Nov 26;2(8622):1254

Hyponatraemia in psychiatric patients. Tallis GA. **Med J Aust** 1989 Feb 6;150(3):151–3

[Hyponatremia of psychotic potomanic subjects. Potomanic patients should no longer be sent to intensive care units (letter)] Bernier E. **Presse Med** 1988 Dec 17;17(45):2399 **(Fre)**

DIAGNOSIS

Compulsive water drinking and water intoxication [letter] Cooney JA. **Am J Psychiatry** 1989 Sep;146(9):1235

ETIOLOGY

Self-induced water intoxication and alcohol abuse. Ripley TL, et al. **Am J Psychiatry** 1989 Jan;146(1):102–3

Water intoxication in asthma assessed by urinary arginine vasopressin. Arisaka O, et al. **Eur J Pediatr** 1988 Nov; 148(2):167–9

Hyponatremia as the result of preparation for abdominal ultrasound examination. Shapira I, et al. **JCU** 1988 Jan; 16(1):61–2

Acute water intoxication during whole gut irrigation [letter] Park SK, et al. **Nephron** 1988;50(4):393–4

[Description of the water intoxication syndrome in psychiatric patients] de Dios Francos A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 May–Jun;16(3):173–82 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Nomograms of polyuria for men and women with psychosis, intermittent hyponatremia, and polydipsia (PIP syndrome). Vieweg WV, et al. **Psychiatr Med** 1988;6(4):29–40

PREVENTION & CONTROL

Preventing polydipsia in psychiatric patients [letter] Bhopal JS, et al. **Can Med Assoc J** 1989 Mar 1;140(5):497

Preventing water intoxication: a reply [letter] McNally RJ, et al. **J Behav Ther Exp Psychiatry** 1989 Mar;20(1):89–90

PSYCHOLOGY

Excessive water drinking. A marker of caretaker interaction disturbance. Accardo P, et al. **Clin Pediatr (Phila)** 1989 Sep;28(9):416–8

Water intoxication and psychosis syndrome. Clinical cautions. Prim RG. **J Psychosoc Nurs Ment Health Serv** 1988 Nov;26(11):16–8

[Psychogenic water intoxication] Gebel F, et al. **Schweiz Med Wochenschr** 1989 Feb 11;119(6):169–77 (84 ref.) (Eng. Abstr.) **(Ger)**

THERAPY

Polydipsia, water intoxication, and psychiatric illness [letter] Vieweg WV, et al. **J Behav Ther Exp Psychiatry** 1989 Mar; 20(1):85–6

WATER LOSS, INSENSIBLE

Assessment of skin moisture. Measurement of electrical conductance, capacitance and transepidermal water loss. Blichmann CW, et al. **Acta Derm Venereol (Stockh)** 1988; 68(4):284–90

Transfollicular percutaneous absorption. Skin model for quantitative studies. Illel B, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):427–30

A comparison of the effect of UVB and sodium lauryl sulphate on skin water vapour loss. Goh CL. **Ann Acad Med Singapore** 1988 Oct;17(4):495–7

Biological dressings and evaporative water loss from burn wounds. Salisbury RE, et al. **Ann Plast Surg** 1980 Oct; 5(4):270–2

In vitro transepidermal water loss: differences between black and white human skin. Wilson D, et al. **Br J Dermatol** 1988 Nov;119(5):647–52

Skin irritability to sodium lauryl sulphate—as measured by skin water vapour loss–by sex and race. Goh CL, et al. **Clin Exp Dermatol** 1988 Jan;13(1):16–9

Seasonal transepidermal water loss and impedance of forearm skin in atopics and non–atopics. den Arend JA, et al. **Contact Dermatitis** 1988 Nov;19(5):376–8

Measurement of transepidermal water loss [letter] Pinnagoda J, et al. **Contact Dermatitis** 1989 Feb;20(2):159–60

Comparability and reproducibility of the results of water loss measurements: a study of 4 evaporimeters. Pinnagoda J, et al. **Contact Dermatitis** 1989 Apr;20(4):241–6

Baseline transepidermal water loss (TEWL) as a prediction of susceptibility to sodium lauryl sulphate. Tupker RA, et al. **Contact Dermatitis** 1989 Apr;20(4):265–9

Evaporative water loss and epidermis regeneration in partial–thickness wounds dressed with a fluid–retaining versus a clot–inducing wound covering in guinea pigs. Jonkman MF, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):29–34

DRUG EFFECTS

The water barrier function of the skin in relation to the water content of stratum corneum, pH and skin lipids. The effect of alkaline soap and syndet on dry skin in elderly, non–atopic patients. Thune P, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):277–83

Effect of mineral oil and linoleic–acid–containing emulsions on the skin vapour loss of sodium–lauryl–sulphate–induced irritant skin reactions. Blanken R, et al. **Contact Dermatitis** 1989 Feb;20(2):93–7

Prediction of susceptibility to an irritant response by transepidermal water loss. Pinnagoda J, et al. **Contact Dermatitis** 1989 May;20(5):341–6

The influence of repeated exposure to surfactants on the human skin as determined by transepidermal water loss and visual scoring. Tupker RA, et al. **Contact Dermatitis** 1989 Feb;20(2):108–14

Study of irritant contact dermatitis produced by repeat patch test with sodium lauryl sulfate and assessed by visual methods, transepidermal water loss, and laser Doppler velocimetry. Freeman S, et al. **J Am Acad Dermatol** 1988 Sep;19(3):496–502

WATER MICROBIOLOGY

Ring–forming, oligotrophic Microcyclus organisms in the water and mud of Lake Balaton. Langó Z. **Acta Microbiol Hung** 1988;35(3):277–82

Judgment and hazard adaptation: a longitudinal study of responses to the risks of water contamination. Cvetkovich G, et al. **Acta Psychol (Amst)** 1988 Sep;68(1–3):343–53

Cryptosporidiosis and surface water. Gallaher MM, et al. **Am J Public Health** 1989 Jan;79(1):39–42

Transmission of enteric disease associated with wastewater irrigation: a prospective epidemiological study. Shuval HI, et al. **Am J Public Health** 1989 Jul;79(7):850–2

Legionella moravica sp. nov. and Legionella brunensis sp. nov. isolated from cooling–tower water. Wilkinson HW, et al. **Ann Inst Pasteur Microbiol** 1988 Jul–Aug; 139(4):393–402

Source of drinking water supply and transmission of guinea worm disease in Nigeria. Ilegbodu VA, et al. **Ann Trop Med Parasitol** 1987 Dec;81(6):713–8

Direct differential counting compared with testing of isolates as means of assessing hydrolytic capacities of natural microbial populations. Gustafson K, et al. **Antonie Van Leeuwenhoek** 1989;55(4):341–8

Bilophococcus magnetotacticus gen. nov. sp. nov., a motile, magnetic coccus. Moench TT. **Antonie Van Leeuwenhoek** 1988;54(6):483–96

Comparison of methods for enumeration of selected coliforms exposed to ozone. Adams JC, et al. **Appl Environ Microbiol** 1989 Jan;55(1):33–5

R plasmids in environmental Vibrio cholerae non–O1 strains. Amaro C, et al. **Appl Environ Microbiol** 1988 Nov; 54(11):2771–6

Survival and detection of bacteria in an aquatic environment. Amy PS, et al. **Appl Environ Microbiol** 1989 Apr; 55(4):788–93

Evaluation of several selective media for recovery of Aeromonas hydrophila from polluted waters. Arcos ML, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2786–92

Novel method for studying plasmid transfer in undisturbed river epilithon. Bale MJ, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2756–8

Comparison of the presence–absence and membrane filter techniques for coliform detection in small, nonchlorinated water distribution systems. Bancroft K, et al. **Appl Environ Microbiol** 1989 Feb;55(2):507–10

Effect of visible light on progressive dormancy of Escherichia coli cells during the survival process in natural fresh water. Barcina I, et al. **Appl Environ Microbiol** 1989 Jan;55(1):246–51

Environmental significance of the potential for mer(Tn21)–mediated reduction of $Hg2+$ to Hg0 in natural waters. Barkay T, et al. **Appl Environ Microbiol** 1989 May; 55(5):1196–202

Evaluation of the 7–h membrane filter test for quantitation of fecal coliforms in water. Barnes R, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1504–6

Biotransformation and detoxification of T–2 toxin by soil and freshwater bacteria. Beeton S, et al. **Appl Environ Microbiol** 1989 Jan;55(1):190–7

Rapid detection of total and fecal coliforms in water by enzymatic hydrolysis of 4–methylumbelliferone–beta–D–galactoside. Berg JD, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2118–22

Long–term survival of hepatitis A virus and poliovirus type 1 in mineral water. Biziagos E, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2705–10

Plasmid expression and maintenance during long–term starvation–survival of bacteria in well water. Caldwell BA, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1860–4

Toxicity and partial structure of a hepatotoxic peptide produced by the cyanobacterium Nodularia spumigena Mertens emend. L575 from New Zealand. Carmichael WW, et al. **Appl Environ Microbiol** 1988 Sep;54(9):2257–63

Prevalence of nontuberculous mycobacteria in water supplies of hemodialysis centers. Carson LA, et al. **Appl Environ Microbiol** 1988 Dec;54(12):3122–5

Novel method for monitoring genetically engineered microorganisms in the environment. Chaudhry GR, et al. **Appl Environ Microbiol** 1989 May;55(5):1301–4

Ecology of Vibrio mimicus in aquatic environments. Chowdhury MA, et al. **Appl Environ Microbiol** 1989 Aug; 55(8):2073–8

Comparison of bacterial indicators and sampling programs for drinking water systems. Collin JF, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2073–7

In situ survival of plasmid–bearing and plasmidless Pseudomonas aeruginosa in pristine tropical waters. Cruz–Cruz NE, et al. **Appl Environ Microbiol** 1988 Oct; 54(10):2574–7

Isolation of enterovirus and reovirus from sewage and treated effluents in selected Puerto Rican communities. Dahling DR, et al. **Appl Environ Microbiol** 1989 Feb;55(2):503–6

Absence of association between total heterotrophic and total coliform bacteria from a public water supply. Edberg S, et al. **Appl Environ Microbiol** 1989 Feb;55(2):380–4

National field evaluation of a defined substrate method for the simultaneous detection of total coliforms and Escherichia coli from drinking water: comparison with presence–absence techniques. Edberg SC, et al. **Appl Environ Microbiol** 1989 Apr;55(4):1003–8

Kinetics of biotransformation of 1,1,1–trichloroethane by Clostridium sp. strain TCAIIB. Gälli R, et al. **Appl Environ Microbiol** 1989 Apr;55(4):845–51

Relationship between nitrogen–fixing sulfate reducers and fermenters in salt marsh sediments and roots of Spartina alterniflora. Gandy EL, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2031–6

New naphthalene–degrading marine Pseudomonas strains. García–Valdés E, et al. **Appl Environ Microbiol** 1988 Oct;

54(10):2478–85
Effect of carboxyl cyanide m-chlorophenylhydrazone on Escherichia coli halotolerance. Ghoul M, et al. **Appl Environ Microbiol** 1989 Apr;55(4):1040–3
Thermophilic Bacillus sp. that shows the denitrification phenotype of Pseudomonas aeruginosa. Gokce N, et al. **Appl Environ Microbiol** 1989 Apr;55(4):1023–5
Role of sublethal injury in decline of bacterial populations in lake water. Gurijala KR, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2859–61
Test of the validity of the Poisson assumption for analysis of most-probable-number results. Haas CN, et al. **Appl Environ Microbiol** 1988 Dec;54(12):2996–3002
Polycyclic aromatic hydrocarbon degradation by a Mycobacterium sp. in microcosms containing sediment and water from a pristine ecosystem. Heitkamp MA, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1968–73
Microbial metabolism of polycyclic aromatic hydrocarbons: isolation and characterization of a pyrene-degrading bacterium. Heitkamp MA, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2549–55
Characterization of the bacterial population structure in an anaerobic-aerobic activated sludge system on the basis of respiratory quinone profiles. Hiraishi A, et al. **Appl Environ Microbiol** 1989 Apr;55(4):897–901
Survival of Vibrio anguillarum and Vibrio salmonicida at different salinities. Hoff KA. **Appl Environ Microbiol** 1989 Jul;55(7):1775–86
Effect of inorganic nutrients on the acclimation period preceding mineralization of organic chemicals in lake water. Jones SH, et al. **Appl Environ Microbiol** 1988 Dec; 54(12):3177–9
Survival of coliforms and bacterial pathogens within protozoa during chlorination. King CH, et al. **Appl Environ Microbiol** 1988 Dec;54(12):3023–33
Study of Vibrio anguillarum strains from different sources with emphasis on ecological and pathobiological properties. Larsen JL, et al. **Appl Environ Microbiol** 1988 Sep; 54(9):2264–7
Inactivation of biofilm bacteria. LeChevallier MW, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2492–9
Polyethylene glycol precipitation for recovery of pathogenic viruses, including hepatitis A virus and human rotavirus, from oyster, water, and sediment samples. Lewis GD, et al. **Appl Environ Microbiol** 1988 Aug;54(8):1983–8
Use of nutrient response techniques to assess the effectiveness of chlorination of rapid sand filter gravel. Lytle MS, et al. **Appl Environ Microbiol** 1989 Jan;55(1):29–32
Selenate reduction by bacteria from a selenium-rich environment. Maiers DT, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2591–3
Electrode system for determination of microbial cell populations in polluted water. Maoyu Y, et al. **Appl Environ Microbiol** 1989 Aug;55(8):2082–5
Influence of osmoregulation processes on starvation survival of Escherichia coli in seawater. Munro PM, et al. **Appl Environ Microbiol** 1989 Aug;55(8):2017–24
Toxin profiles of Vibrio cholerae non-O1 from environmental sources in Calcutta, India. Nair GB, et al. **Appl Environ Microbiol** 1988 Dec;54(12):3180–2
The suicide phenomenon in motile aeromonads. Namdari H, et al. **Appl Environ Microbiol** 1989 Mar;55(3):543–7
Legionella spp. in Puerto Rico cooling towers. Negrón-Alvira A, et al. **Appl Environ Microbiol** 1988 Oct; 54(10):2331–4
Conjugal transfer of R68.45 and FP5 between Pseudomonas aeruginosa strains in a freshwater environment. O'Morchoe SB, et al. **Appl Environ Microbiol** 1988 Aug;54(8):1923–9
Simple method for the detoxification of wastewater ultrafiltration concentrates for rotavirus assay by indirect immunofluorescence. Oragui JI, et al. **Appl Environ Microbiol** 1989 Feb;55(2):401–5
Comparison of Vibrio parahaemolyticus grown in estuarine water and rich medium. Pace J, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1877–87
Production of extracellular nucleic acids by genetically altered bacteria in aquatic-environment microcosms. Paul JH, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1865–9
Effect of disinfection of drinking water with ozone or chlorine dioxide on survival of Cryptosporidium parvum oocysts. Peeters JE, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1519–22
In situ survival of Vibrio cholerae and Escherichia coli in a tropical rain forest watershed. Pérez-Rosas N, et al. **Appl Environ Microbiol** 1989 Feb;55(2):495–9
Detection of fecal coliforms in water by using [14C]mannitol. Reasoner DJ, et al. **Appl Environ Microbiol** 1989 Apr; 55(4):907–11
Nonphotosynthetic pigmented bacteria in a potable water treatment and distribution system. Reasoner DJ, et al. **Appl Environ Microbiol** 1989 Apr;55(4):912–21
Survival of Escherichia coli and Salmonella spp. in estuarine environments. Rhodes MW, et al. **Appl Environ Microbiol** 1988 Dec;54(12):2902–7
Occurrence of the hepatotoxic cyanobacterium Nodularia spumigena in the Baltic Sea and structure of the toxin. Sivonen K, et al. **Appl Environ Microbiol** 1989 Aug; 55(8):1990–5
Simple, rapid method for direct isolation of nucleic acids from aquatic environments. Somerville CC, et al. **Appl Environ Microbiol** 1989 Mar;55(3):548–54
Effects of acidification on mercury methylation, demethylation, and volatilization in sediments from an acid-susceptible lake. Steffan RJ, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2003–9
Associated bacterial flora, growth, and toxicity of cultured benthic dinoflagellates Ostreopsis lenticularis and Gambierdiscus toxicus. Tosteson TR, et al. **Appl Environ Microbiol** 1989 Jan;55(1):137–41
Metabolism of volatile chlorinated aliphatic hydrocarbons by Pseudomonas fluorescens. Vandenbergh PA, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2578–9
Nutritional versatility and growth kinetics of an Aeromonas hydrophila strain isolated from drinking water. van der Kooij D, et al. **Appl Environ Microbiol** 1988 Nov; 54(11):2842–51
Polyphosphate-degrading enzymes in Acinetobacter spp. and activated sludge. van Groenestijn JW, et al. **Appl Environ Microbiol** 1989 Jan;55(1):219–23
Ecology of Vibrio cholerae non-O1 and Salmonella spp. and role of zooplankton in their seasonal distribution in Fukuyama coastal waters, Japan. Venkateswaran K, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1591–8
Occurrence and distribution of Vibrio spp., Listonella spp., and Clostridium botulinum in the Seto Inland Sea of Japan. Venkateswaran K, et al. **Appl Environ Microbiol** 1989 Mar; 55(3):559–67
Growth-supporting activity for Legionella pneumophila in tap water cultures and implication of hartmannellid amoebae as growth factors. Wadowsky RM, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2677–82
Survival of chlorine-injured enterotoxigenic Escherichia coli in an in vitro water system. Walsh SM, et al. **Appl Environ Microbiol** 1989 May;55(5):1298–300
Metabolic processes involved in repair of Escherichia coli cells damaged by exposure to acid mine water. Wortman AT, et al. **Appl Environ Microbiol** 1988 Aug;54(8):1901–6
Evaluation of media for monitoring fecal streptococci in seawater. Yoshpe-Purer Y. **Appl Environ Microbiol** 1989 Aug;55(8):2041–5
Chlorella viruses isolated in China. Zhang YP, et al. **Appl Environ Microbiol** 1988 Sep;54(9):2170–3
Heat susceptibility of bacterial enteropathogens. Implications for the prevention of travelers' diarrhea. Bandres JC, et al. **Arch Intern Med** 1988 Oct;148(10):2261–3
Factors affecting the survival and growth of bacteria introduced into lake water. Scheuerman PR, et al. **Arch Microbiol** 1988;150(4):320–5
Chlorobenzoate catabolism and interactions between Alcaligenes and Pseudomonas species from Bloody Run Creek. Wyndham RC, et al. **Arch Microbiol** 1988; 150(3):230–6
Catabolic instability, plasmid gene deletion and recombination in Alcaligenes sp. BR60. Wyndham RC, et al. **Arch Microbiol** 1988;150(3):237–43
Methanocorpusculaceae fam. nov., represented by Methanocorpusculum parvum, Methanocorpusculum sinense spec. nov. and Methanocorpusculum bavaricum spec. nov. Zellner G, et al. **Arch Microbiol** 1989; 151(5):381–90
Bacterial contamination of hemodialysis center water and dialysate: are current assays adequate? Harding GB, et al. **Artif Organs** 1989 Apr;13(2):155–9
Effect of hexachlorobenzene on growth and survival of various microorganisms. Hamdy MK. **Bull Environ Contam Toxicol** 1988 Dec;41(6):936–42
Volatilization of fluorescein mercuric acetate by marine bacteria from Minamata Bay. Nakamura K. **Bull Environ Contam Toxicol** 1989 May;42(5):785–90
Volatilization of mercury compounds by methylmercury-volatilizing bacteria in Minamata Bay sediment. Nakamura K, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):651–6
Klebsiella spp. in prairie aquifer. Wong SH. **Bull Environ Contam Toxicol** 1988 Dec;41(6):828–31
Fate and effects of xanthates in laboratory freshwater systems. Xu Y, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):683–9
Phage f2 desorption from clay in estuarine water using nonionic detergents, beef extract, and chaotropic agents. Armon R, et al. **Can J Microbiol** 1988 Aug;34(8):1022–4
A highly efficient second-step concentration technique for bacteriophages and enteric viruses using ammonium sulfate and Tween 80. Armon R, et al. **Can J Microbiol** 1988 May; 34(5):651–5
Occurrence of enteroviruses in marine sediment along the coast of Barcelona, Spain. Bosch A, et al. **Can J Microbiol** 1988 Jul;34(7):921–4
Survival of Yersinia enterocolitica in the environment. Chao WL, et al. **Can J Microbiol** 1988 Jun;34(6):753–6
Influence of prior growth conditions on low nutrient response of Escherichia coli in seawater. Gauthier MJ, et al. **Can J Microbiol** 1989 Mar;35(3):379–83
Thermal and water source effects upon the stability of enteroviruses in surface freshwaters. Hurst CJ, et al. **Can J Microbiol** 1989 Apr;35(4):474–80
Microbiological and virological analysis of water from two water filtration plants and their distribution systems. Payment P, et al. **Can J Microbiol** 1988 Dec;34(12):1304–9
Detection of animal and human enteric viruses in water from the Assomption River and its tributaries. Payment P, et al. **Can J Microbiol** 1988 Aug;34(8):967–73
Coliphages and enteric viruses in the particulate phase of river water. Payment P, et al. **Can J Microbiol** 1988 Jul; 34(7):907–10
Iodine sensitivity of bacteria isolated from iodinated water systems. Pyle BH, et al. **Can J Microbiol** 1989 Apr; 35(4):520–3
Survival of and plasmid stability in Pseudomonas and Klebsiella spp. introduced into agricultural drainage water. Trevors JT, et al. **Can J Microbiol** 1989 Jul;35(7):675–80
Faecal contamination of rural drinking water in a commercial farming area in Zimbabwe. Heinsanen A, et al. **Cent Afr J Med** 1988 Nov;34(11):253–9
Isolation of pathogenic free-living Naegleria amoebae from cooling water of a power plant in Shanghai. Yang C, et al. **Chin Med J [Engl]** 1988 Aug;101(8):559–63
Factors affecting the survival of pathogenic bacteria in subtropical river water. Chao WL, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 May;21(2):85–92
Aeromonas as a human pathogen. Altwegg M, et al. **CRC Crit Rev Microbiol** 1989;16(4):253–86 (375 ref.)
Anaerobic biodegradation of polychlorinated biphenyls by bacteria from Hudson River sediments. Chen M, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):95–105
Quantitative structure-activity relationships for the toxicity of selected shale oil components to mixed marine bacteria. Warne MS, et al. **Ecotoxicol Environ Safety** 1989 Apr; 17(2):133–48
Waterborne outbreak of Campylobacter enteritis after outdoors infantry drill in Utti, Finland. Aho M, et al. **Epidemiol Infect** 1989 Aug;103(1):133–41
Occurrence of 'thermophilic' campylobacters in sewage and their removal by treatment processes. Arimi SM, et al. **Epidemiol Infect** 1988 Oct;101(2):279–86
Exposure to Legionellaceae at a hot spring spa: a prospective clinical and serological study [published erratum appears in Edidemiol Infect 1989 Jun;102(3):541] Bornstein N, et al. **Epidemiol Infect** 1989 Feb;102(1):31–6
Bacteriological examination of the water supply on an Antarctic base. Harker C. **Epidemiol Infect** 1989 Feb; 102(1):105–12
Occurrence of drug-resistant bacteria in communal well water around Port Harcourt, Nigeria. Ibiebele DD, et al. **Epidemiol Infect** 1989 Aug;103(1):193–202
Detection of Legionella pneumophila in environmental water samples using a fluorescein conjugated monoclonal antibody. Makin T, et al. **Epidemiol Infect** 1989 Aug; 103(1):105–12
Campylobacters in man and the environment in Hull and East Yorkshire. Mawer SL. **Epidemiol Infect** 1988 Oct; 101(2):287–94
The pathogenicity of environmental campylobacters—a human volunteer experiment. Mawer SL. **Epidemiol Infect** 1988 Oct;101(2):295–300
Legionella pneumophila in a hospital in Torino, Italy. A retrospective one-year study. Moiraghi Ruggenini A, et al. **Epidemiol Infect** 1989 Feb;102(1):21–9
Bacterial contamination of stored water and stored food: a potential source of diarrhoeal disease in West Africa. Mølbak K, et al. **Epidemiol Infect** 1989 Apr;102(2):309–16
Isolation and characterization of motile Aeromonas from human, food and environmental specimens. Nishikawa Y, et al. **Epidemiol Infect** 1988 Oct;101(2):213–23
Nosocomial legionella pneumonia: demonstration of potable water as the source of infection. Ruf B, et al. **Epidemiol Infect** 1988 Dec;101(3):647–54
Water quality control trials: statistical tables for direct comparison between membrane filtration bacterial counts and the multiple tube method with a description of the bacteriological method. Tillett HE, et al. **Epidemiol Infect** 1988 Oct;101(2):361–6
The human pathogenic vibrios—a public health update with environmental perspectives. West PA. **Epidemiol Infect** 1989 Aug;103(1):1–34 (259 ref.)
Isolation of Legionella pneumophila from hotels of Greece. Alexiou SD, et al. **Eur J Epidemiol** 1989 Mar;5(1):47–50
Evolution of Pseudomonas aeruginosa cells towards a filterable stage in seawater. Bakhrouf A, et al. **FEMS Microbiol Lett** 1989 May;50(1-2):187–90
Sewage dilution and loss of antibiotic resistance and virulence determinants in E. coli. Gonzalo MP, et al. **FEMS Microbiol Lett** 1989 May;50(1-2):93–6
On the drinking water situation on the Cape Verde Islands (Islands of Santiago). Buchrieser V, et al. **Geogr Med** 1988; Suppl 1:33–44
Coliform count in water sources in an urban slum community in Burdwan, West Bengal. Lahiri A, et al. **Indian J Med Res** 1988 Nov;88:461–5
Bacteriological quality of rural potable water. Anand SK, et al. **Indian J Med Sci** 1988 Sep;42(9):205–8
Pollution and sanitary quality of a stretch of Hooghly river in relation to human use. Sarkar JP, et al. **Indian J Pathol Microbiol** 1988 Jul;31(3):174–7
A simple method for water treatment. Singh T. **Indian J Public Health** 1988 Jan-Mar;32(1):43
Localized and systemic infection due to Vibrio species. Hill MK, et al. **Infect Dis Clin North Am** 1987 Sep;1(3):687–707 (85 ref.)
Nontuberculous mycobacteria and water: a love affair with increasing clinical importance. Wallace RJ Jr. **Infect Dis Clin North Am** 1987 Sep;1(3):677–86 (33 ref.)
Viral hepatitis and gastroenteritis transmitted by shellfish and water. Wanke CA, et al. **Infect Dis Clin North Am** 1987 Sep;1(3):649–64 (52 ref.)

Bacterial species detected in some bottled mineral waters sold in Italy. Macerata UM, et al. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:31–7

Epidemiological significance of microbiological pollution criteria for river recreational waters. Ferley JP, et al. **Int J Epidemiol** 1989 Mar;18(1):198–205

An outbreak of typhoid fever due to contamination of the municipal water supply in northern Israel. Egoz N, et al. **Isr J Med Sci** 1988 Nov;24(11):640–3

Home shower–bath Pseudomonas folliculitis. Huminer D, et al. **Isr J Med Sci** 1989 Jan;25(1):44–5

Waterborne enteric disease outbreaks in Israel, 1976–1985. Tulchinsky TH, et al. **Isr J Med Sci** 1988 Nov; 24(11):644–51

Microbiologic drinking water quality in Israel: standards, monitoring, and treatment. Tulchinsky TH, et al. **Isr J Med Sci** 1988 Nov;24(11):652–9

Blue–green algae (Anabaena spiroides) toxicosis in pigs. Chengappa MM, et al. **J Am Vet Med Assoc** 1989 Jun 15; 194(12):1724–5

Comparative studies of selective media for recovery of Staphylococcus aureus from natural waters. Borrego JJ, et al. **J Appl Bacteriol** 1988 Aug;65(2):153–61

Treatment of water for aquatic bacterial growth studies. Colbourne JS, et al. **J Appl Bacteriol** 1988 Jul;65(1):79–85

Effects of sewage treatment on the removal of Listeria monocytogenes. al–Ghazali MR, et al. **J Appl Bacteriol** 1988 Sep;65(3):203–8

Storage effects of sewage sludge cake on the survival of Listeria monocytogenes. al–Ghazali MR, et al. **J Appl Bacteriol** 1988 Sep;65(3):209–13

An appraisal of the efficacy of pre–enrichment for the isolation of Campylobacter jejuni from water and food. Humphrey TJ. **J Appl Bacteriol** 1989 Feb;66(2):119–26

Survival and activity of Salmonella typhimurium and Escherichia coli in tropical freshwater. Jiménez L, et al. **J Appl Bacteriol** 1989 Jul;67(1):61–9

The effects of nutrients on the survival of Escherichia coli in lake water. Lim CH, et al. **J Appl Bacteriol** 1989 Jun; 66(6):559–69

Evaluation of different plating media used in the isolation of salmonellas from environmental samples. Morifigo MA, et al. **J Appl Bacteriol** 1989 Apr;66(4):353–60

Numerical analysis of electrophoretic protein patterns of Campylobacter laridis and allied thermophilic campylobacters from the natural environment. Owen RJ, et al. **J Appl Bacteriol** 1988 Jul;65(1):69–78

Seasonal distribution of Aeromonas hydrophila in river water and isolation from river fish. Pathak SP, et al. **J Appl Bacteriol** 1988 Oct;65(4):347–52

Bacteriophage tracer experiments in groundwater. Skilton H, et al. **J Appl Bacteriol** 1988 Nov;65(5):387–95

Antibiotic resistance among coliforms and Pseudomonas spp. from bodies of water around Port Harcourt, Nigeria. Sokari TG, et al. **J Appl Bacteriol** 1988 Apr;64(4):355–9

Water hygiene of two swimming pools: microbial indicators. Tosti E, et al. **J Appl Bacteriol** 1988 Jul;65(1):87–91

An improved procedure for shipboard enumeration of faecal indicator bacteria in marine sediments from sewage sludge disposal areas. West PA. **J Appl Bacteriol** 1988 Apr; 64(4):345–53

The use of bacteriophage as tracers of aerosols liberated by sludge suction appliances. Wheeler D, et al. **J Appl Bacteriol** 1988 Nov;65(5):377–86

Comparative evaluation of selective media for isolation of Pseudomonas cepacia from cystic fibrosis patients and environmental sources. Carson LA, et al. **J Clin Microbiol** 1988 Oct;26(10):2096–100

Use of a group–reactive and other monoclonal antibodies in an enzyme immunodot assay for identification and presumptive serotyping of aquatic birnaviruses. Caswell–Reno P, et al. **J Clin Microbiol** 1989 Sep; 27(9):1924–9

Temporal relationship of Vibrio parahaemolyticus in patients and the environment. Kelly MT, et al. **J Clin Microbiol** 1988 Sep;26(9):1754–6

Incidence and persistence of Pseudomonas aeruginosa in whirlpools. Price D, et al. **J Clin Microbiol** 1988 Sep; 26(9):1650–4

Species–specific detection of Legionella pneumophila in water by DNA amplification and hybridization. Starnbach MN, et al. **J Clin Microbiol** 1989 Jun;27(6):1257–61

Similar DNA restriction endonuclease profiles in strains of Legionella pneumophila from different serogroups. van Ketel RJ. **J Clin Microbiol** 1988 Sep;26(9):1838–41

Genetic typing in a cluster of Legionella pneumophila infections. van Ketel RJ, et al. **J Clin Microbiol** 1989 May; 27(5):1105–7

An epidemiological study of non–A non–B viral hepatitis in nurses' hostel, Raipur, Madhya Pradesh—1985. Sharma RS, et al. **J Commun Dis** 1987 Dec;19(4):349–58

Methods of disinfection of the water system of dental units by water chlorination. Fiehn NE, et al. **J Dent Res** 1988 Dec;67(12):1499–504

Plasmid patterns, serotyping and Kanagawa phenomenon of Vibrio parahaemolyticus isolates from man, water and fish in Calcutta, India. Mitra U, et al. **J Diarrhoeal Dis Res** 1987 Sep;5(3):171–4

Legionella spp. in a hospital hot water system: effect of control measures. Ezzeddine H, et al. **J Hosp Infect** 1989 Feb;13(2):121–31

Endemicity of Legionella pneumophila serogroup 3 in a hospital water supply. Franzin L, et al. **J Hosp Infect** 1989 Apr;13(3):281–8

Microbial contamination of hospital showers and shower water: the effect of an automatic drain valve. Humphrey TJ. **J Hosp Infect** 1989 Jan;13(1):55–61

Monitoring the bacteriological quality of potable waters in hospital. Hunter PR, et al. **J Hosp Infect** 1988 Nov; 12(4):289–94

Aeromonas species in aquaria: a reservoir of gastrointestinal infections? San Joaquin VH, et al. **J Hosp Infect** 1989 Feb; 13(2):173–7

On the drinking water situation on the Cape Verde Islands (Island of Santiago). Buchrieser V, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):35–43

Survival and virulence of salmonellae in water. Pokorný J. **J Hyg Epidemiol Microbiol Immunol** 1988;32(3):361–6

Nontoxigenic Vibrio cholerae wound infection after exposure to contaminated lake water [letter] [published erratum appears in J Infect Dis 1989 Aug;160(2):358] Mulder GD, et al. **J Infect Dis** 1989 Apr;159(4):809–11

Mycobacterium other than tubercle bacilli in various environments in Bangkok. Imwidthaya P, et al. **J Med Assoc Thai** 1989 Jun;72(6):317–20

The bacterial content of infant weaning foods and water in rural northern Thailand. Imong SM, et al. **J Trop Pediatr** 1989 Feb;35(1):14–8

Potentiation of the poliocidal effectiveness of free chlorine by a buffer. Berg G, et al. **J Virol Methods** 1989 Feb; 23(2):179–86

A comparison of recovery of virus from wastewaters by beef extract–Celite, ferric chloride, and filter concentration procedures. Dahling DR, et al. **J Virol Methods** 1988 Dec; 22(2–3):337–46

A novel method for liberating viral nucleic acid for assay of water samples with cDNA probes. Richardson KJ, et al. **J Virol Methods** 1988 Oct;22(1):13–21

An improved method for the concentration of rotaviruses from large volumes of water. Toranzos GA, et al. **J Virol Methods** 1989 Apr–May;24(1–2):131–40

The effects of six environmental variables on Pasteurella multocida populations in water. Bredy JP, et al. **J Wildl Dis** 1989 Apr;25(2):232–9

Chlorination of water supplies to control Legionella may corrode the pipes [letter] Mead PB, et al. **JAMA** 1988 Oct 21;260(15):2216

Chlorine, pH, and control of Legionella in hospital plumbing systems [letter] States SJ, et al. **JAMA** 1989 Apr 7; 261(13):1882–3

Waterborne Mycobacterium avium infection [letter] Yagupsky P, et al. **JAMA** 1989 Feb 17;261(7):994

Hepatitis non A–non B—report of a water–borne outbreak. Quraishi MS, et al. **JPMA** 1988 Aug;38(8):203–5

Sunlight as disinfectant [letter; comment] Acra A, et al. **Lancet** 1989 Feb 4;1(8632):280. **Comment on:** Lancet 1988 Oct 15;2(8616):912

Escherichia coli O157:H7 from water [letter] McGowan KL, et al. **Lancet** 1989 Apr 29;1(8644):967–8

"Boil the water" [letter] Mayon–White RT, et al. **Lancet** 1989 Jul 22;2(8656):216

Sunlight as disinfectant [letter] [see comments] Miller RL. **Lancet** 1988 Oct 15;2(8616):912. **Comment in:** Lancet 1989 Feb 4;1(8632):280

Ultraviolet light for sterilisation [letter] Watts GT. **Lancet** 1988 Oct 15;2(8616):912

Environmental factors associated with proteolytic activity of estuarine bacteria. Sizemore RK, et al. **Life Sci** 1974 Oct 15;15(8):1425–32

Tumour promotion by Microcystis sp., a blue–green alga occurring in water supplies [letter] Falconer IR, et al. **Med J Aust** 1989 Mar 20;150(6):351

Ecological studies on reovirus pollution of rivers in Toyama Prefecture. Matsuura K, et al. **Microbiol Immunol** 1988; 32(12):1221–34

Salmonella mbandaka isolated in Italy. 1979–1986. Fantasia M, et al. **Microbiologica** 1989 Jan;12(1):49–54

Incidence and biotyping of Aeromonas species from the environment. Abbey SD, et al. **Microbios** 1988; 56(228–229):149–55

Studies on faecal streptococci in the river Tigris. Khalaf SH, et al. **Microbios** 1989;57(231):99–103

Ability of bacteria isolated from the hospital environment to proliferate in infusion fluids. Lamikanra A, et al. **Microbios** 1988;55(223):115–25

Isolation of multiple antibiotic resistant Enterobacteriaceae from river water. Rinker AG Jr, et al. **Microbios** 1988; 56(228–229):169–75

Aquarium–associated Plesiomonas shigelloides infection—Missouri. **MMWR** 1989 Sep 15;38(36):617–9

Infection ability of watermolds in some temperate fishes of Himalaya, India. Khulbe RD. **Mycoses** 1989 Feb;32(2):84–6

Large community outbreak of cryptosporidiosis due to contamination of a filtered public water supply. Hayes EB, et al. **N Engl J Med** 1989 May 25;320(21):1372–6

Microbiological contamination of the ocean, and human health. Coye MJ, et al. **N J Med** 1989 Jul;86(7):533–8

Bacterial contamination of dental unit water lines—a possible source of cross–infection. Tippett BF, et al. **N Z Dent J** 1988 Oct;84(378):112–3

High abundance of viruses found in aquatic environments. Bergh O, et al. **Nature** 1989 Aug 10;340(6233):467–8

Aquatic viruses. And now, small is plentiful [news] Sherr EB. **Nature** 1989 Aug 10;340(6233):429

Aeromonas hydrophila–punctata in two Sicilian reservoirs: density of the organisms in relation to physico–chemical and bacteriological parameters. Ajello F, et al. **Nuovi Ann Ig Microbiol** 1988 May–Jun;39(3):203–13

Purification of water for drinking purposes, with special consideration of filtration of micro–organisms. Swarts GT. **R I Med J** 1988 Jul;71(7):279–83

Virological studies of water from the Cape Flats reclamation plant [published erratum appears in S Afr Med J 1989 Aug 5;76(3):126] Hodgkiss M, et al. **S Afr Med J** 1989 Jul 1; 76(1):11–3

A family cluster of Legionella pneumophila infections. Castellani Pastoris M, et al. **Scand J Infect Dis** 1988; 20(5):489–93

Fate of genetically–engineered bacteria in activated sludge microcosms. Dwyer DF, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:267–76 (11 ref.)

Penetration of E. coli and F2 bacteriophage into fish tissues. Fattal B, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 78:27–38

Research for ground–water quality management with an emphasis on in situ biorestoration. Hall CW. **Schriftenr Ver Wasser Boden Luftkyg** 1989;80:261–71 (6 ref.)

The transmission of virus disease by the marine environment. Shuval HI. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 78:7–23 (53 ref.)

Laboratory engineering of bacteria designed to degrade pollutants. Timmis KN, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:251–65 (27 ref.)

Symbiotic marine bacteria chemically defend crustacean embryos from a pathogenic fungus. Gil–Turnes MS, et al. **Science** 1989 Oct 6;246(4926):116–8

The use and misuse of quantitative determinations of Enterobacteriaceae in food microbiology. Cox LJ, et al. **Soc Appl Bacteriol Symp Ser** 1988;17:237S–249S (35 ref.)

Methods for the detection and isolation of Escherichia coli including pathogenic strains. Hofstra H, et al. **Soc Appl Bacteriol Symp Ser** 1988;17:197S–212S (84 ref.)

Contamination of drinking water during collection and storage. Han AM, et al. **Trop Geogr Med** 1989 Apr; 41(2):138–40

A comparison of viruses infecting two different Chlorella–like green algae. Reisser W, et al. **Virology** 1988 Nov;167(1):143–9

Characterization of two early promoters of cyanophage N–1. Schneider GJ, et al. **Virology** 1988 Nov;167(1):150–5

A defined substrate technology for the enumeration of microbial indicators of environmental pollution. Edberg SC, et al. **Yale J Biol Med** 1988 Sep–Oct;61(5):389–99

Yeasts associated with the white shrimp Penaeus schmitti, sediment, and water of Sepetiba Bay, Rio de Janeiro, Brasil. Pagnocca FG, et al. **Yeast** 1989 Apr;5 Spec No:S479–83

Recovery of virus from sludge. Albert M, et al. **Z Gesamte Hyg** 1988 Sep;34(9):516–8

Adsorption of viruses to diatomaceous earth modified by in situ precipitation of metallic salts. Farrah SR, et al. **Z Gesamte Hyg** 1988 Sep;34(9):520–1

Enterovirus detection in water with gene probes. Gerba P, et al. **Z Gesamte Hyg** 1988 Sep;34(9):518–9

Human enteric virus serotypes occurring in domestic sewage in Greece. Krikelis V, et al. **Z Gesamte Hyg** 1988 Sep; 34(9):523–6

Rotaviruses and their detection in environmental samples. Lund E. **Z Gesamte Hyg** 1988 Sep;34(9):501–3

Viral contamination of some drinking waters in Romania. Nestor I, et al. **Z Gesamte Hyg** 1988 Sep;34(9):490–2

Enteroviruses and coliphages in different water ecosystems. Petrovičová A, et al. **Z Gesamte Hyg** 1988 Sep;34(9):522–3

Determination of the virus load of running waters. Walter R, et al. **Z Gesamte Hyg** 1988 Sep;34(9):495–6

Ecological survey of Listeria in the Ferrara area (northern Italy). Luppi A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):266–75

The importance of different laboratory methods in Legionella diagnosis in medical care. Mathys W, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):122–30

Carbon substrate assimilation patterns of clinical and environmental strains of Aeromonas hydrophila, Aeromonas sobria and Aeromonas caviae observed with a micromethod. Renaud F, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):323–30

Characterization of Campylobacter jejuni and Campylobacter coli isolated from waste water. Stelzer W, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):188–96

Abstracts of papers presented at the congress of the Deutsche Gesellschaft für Hygiene und Mikrobiologie, Section Hygiene and Public Health. Heidelberg, 7–10 October 1987. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug; 186(5–6):428–67

Isolation of Yersinia pseudotuberculosis from water. Inoue M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):338–43

Three outbreaks of yersinia pseudotuberculosis infection. Inoue M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug;186(5–6):504–11

Differentiation of some gram-negative glucose nonfermenting bacteria using miniaturized carbon sources assimilation tests. Kämpfer P, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug; 186(5–6):468–77

Aeromonas species in a municipal water supply of a central European city: biotyping of strains and detection of toxins. Mascher F, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):333–7

The use of arginine brilliantgreen glucose peptone broth (ABGP medium) as a primary culture medium for Pseudomonas aeruginosa. Schubert R. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Feb; 187(3):266–8

Properties of aeromonads and their occurrence and hygienic significance in drinking water. van der Kooij D. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Nov; 187(1):1–17 (89 ref.)

Observations on the anaerobic membrane-filter technique for coliform counts in Nigerian surface waters. Ogan MT. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):311–21

A single-tube confirmatory test for E. coli using brilliant green mannitol methylumbelliferyl-beta-d-glucuronide tryptophane tryptone broth (BMMTT-medium). Schubert RH, et al. **Zentralbl Hyg Umweltmed** 1989 Aug; 188(5):481–5

Mycobacteria in biofilms. Schulze-Röbbecke R, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):385–90

Studies of the bacteriological water quality for the intakes of different water treatment plants in greater Cairo. el-Zanfaly HT, et al. **Zentralbl Hyg Umweltmed** 1989 Jun; 188(3–4):303–10

Fungi in two swimming pools in Assiut town, Egypt. Maghazy SM, et al. **Zentralbl Mikrobiol** 1989;144(3):213–6

Isolation of Yersinia enterocolitica and related species from river water. Massa S, et al. **Zentralbl Mikrobiol** 1988; 143(8):575–81

[Studies on harmful microbes in recirculating cooling water system of oil refinery] Lu RH, et al. **Wei Sheng Wu Hsueh Pao** 1989 Jun;29(3):204–15 (Eng. Abstr.) (Chi)

[Kidney lithotriptor as a possible source of hospital infection] Rechsteiner J, et al. **Ned Tijdschr Geneeskd** 1988 Oct 1; 132(40):1849–53 (Eng. Abstr.) (Dut)

[Species of the genus Vibrio associated with marine products from Arachon Bay] Urdaci MC, et al. **Ann Inst Pasteur Microbiol** 1988 May–Jun;139(3):351–62 (Eng. Abstr.) (Fre)

[Evaluation of 2 culture media for the isolation and enumeration of motile Aeromonas in different kinds of water] Monfort P, et al. **C R Acad Sci [III]** 1988; 307(9):523–7 (Eng. Abstr.) (Fre)

[Continuous detection of poliovirus in public water supplies] Vilagines P, et al. **C R Acad Sci [III]** 1988;307(4):171–6 (Eng. Abstr.) (Fre)

[Virologic research on the quality of 2 sources of drinking water from zone "I"] Cotor F, et al. **Virologie** 1989 Jan–Mar;40(1):5–10 (Eng. Abstr.) (Fre)

[The isolation and differentiation of leptospires from cattle drinking water] Luyven G, et al. **Berl Munch Tierarztl Wochenschr** 1989 Aug 1;102(8):272–4 (Eng. Abstr.) (Ger)

[Distribution of antibiotic resistant pathogens in sewage treatment plants] Popp F. **Fortschr Med** 1988 Sep 20; 106(27):549–50 (Eng. Abstr.) (Ger)

[Health problems in bathing newborn infants? (letter)] Daschner F. **Geburtshilfe Frauenheilkd** 1989 May;49(5):509 (Ger)

[Schwartz-Bartter syndrome as a complication of severe well water poisoning] Töpke B, et al. **Kinderarztl Prax** 1988 Sep;56(9):443–7 (Eng. Abstr.) (Ger)

[Experiences with drinking water ring trials and consequences for assessment and control of drinking and bathing water] Attenberger J, et al. **Off Gesundheitswes** 1989 Jul;51(7):362–5 (Eng. Abstr.) (Ger)

[Use of ozone in the preparation of swimming and bathing water in West Germany] Eichelsdörfer D, et al. **Off Gesundheitswes** 1988 Jul;50(7):363–6 (Eng. Abstr.) (Ger)

[Biotechnologic aspects and environmental health significance of in situ restoration measures of soil and ground water] Filip Z. **Off Gesundheitswes** 1988 Aug–Sep; 50(8–9):415–20 (Eng. Abstr.) (Ger)

[Behavior of some pathogenic and other microorganisms in ground water with reference to delineation of water protection zones] Filip Z. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):427–30 (Eng. Abstr.) (Ger)

[Disinfection of swimming pool water and its outcome] Hisselbarth U. **Off Gesundheitswes** 1988 Jul;50(7):360–2 (15 ref.) (Eng. Abstr.) (Ger)

["Reed-rush sewage treatment" from the public health viewpoint] Leissner A. **Off Gesundheitswes** 1988 Nov; 50(11):647–50 (Eng. Abstr.) (Ger)

[The public health relevance of various microbiologic marker pathogens for assessing bathing water] Müller HE. **Off Gesundheitswes** 1989 May;51(5):233–7 (Eng. Abstr.) (Ger)

[Critical observations on suitability testing of synthetic pool liners] Pacik D. **Off Gesundheitswes** 1988 Jul;50(7):377–81 (Eng. Abstr.) (Ger)

[Determination of colony count in accordance with the drinking water regulation] Sacré C, et al. **Off Gesundheitswes** 1988 Jul;50(7):367–71 (Eng. Abstr.) (Ger)

[Microbial contamination of drinking water by a polyamide feedpipe] Schoenen D, et al. **Off Gesundheitswes** 1989 Jun; 51(6):296–8 (Eng. Abstr.) (Ger)

[Hydraulo-geologic assumptions of biological purification processes in the subsoil] Battermann G. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:187–207 (10 ref.) (Eng. Abstr.) (Ger)

[Adsorption and transfer behavior of viruses during sand filtration] Dizer H. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:89–105 (Ger)

[The identification of microorganisms from groundwater and characterization of their physiologic activities] Dott W, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:119–46 (8 ref.) (Eng. Abstr.) (Ger)

[Biotechnological principles and environmental hygiene aspects of in situ sanitation methods in soil and groundwater areas] Filip Z, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:11–37 (12 ref.) (Eng. Abstr.) (Ger)

[The virus content of running water (the Aare River) in Switzerland] Guyer S, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:85–8 (Ger)

[Methods for the detection of enteroviruses and coliphages in water of different sources] Hahn T, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:69–83 (9 ref.) (Ger)

[Hydrocarbons and chlorinated hydrocarbons in groundwater] Hanert HH. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:209–30 (6 ref.) (Eng. Abstr.) (Ger)

[Viruses pathogenic for plants in surface waters] Lesemann DE, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 78:147–52 (18 ref.) (Ger)

[The elimination of viruses in the setting of waste water clarification, in progressive waste water purification and in natural areas near purification plants] Lopez Pila JM, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:59–67 (17 ref.) (Ger)

[The inactivation of viruses in water and disinfection] Mahnel H. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:121–35 (26 ref.) (Ger)

[Technical methods and hydrogeological aspects of in situ sanitation measures in soil and groundwater areas] Schiefer B, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 80:147–66 (7 ref.) (Eng. Abstr.) (Ger)

[Viruses in fluid and solid manure and in waste water from abattoirs] Wekerle J. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:39–56 (16 ref.) (Ger)

[Problems in public health virological control of natural recreational areas] Borovik EB, et al. **Z Gesamte Hyg** 1988 Sep;34(9):514–6 (Eng. Abstr.) (Ger)

[Inactivation of hepatitis A virus in water by ozone] Botzenhart K, et al. **Z Gesamte Hyg** 1988 Sep;34(9):508–10 (Eng. Abstr.) (Ger)

[Aspects of virus inactivation in water] Burger G. **Z Gesamte Hyg** 1988 Sep;34(9):506–8 (Eng. Abstr.) (Ger)

[The effect of limnic protozoa on virus inactivation] Burger G, et al. **Z Gesamte Hyg** 1988 Sep;34(9):526–7 (Eng. Abstr.) (Ger)

[Comparison of a 1-step and 2-step procedure with reference to virus detection in surface waters] Dürkop J, et al. **Z Gesamte Hyg** 1988 Sep;34(9):527–9 (Eng. Abstr.) (Ger)

[Isolation of infectious hepatitis A viruses from clearing sludge] Flehmig B, et al. **Z Gesamte Hyg** 1988 Sep; 34(9):494–5 (Eng. Abstr.) (Ger)

[Assessment of virus contamination in rivers of a drinking water reservoir and effects on the water quality of the reservoir] Gunkel K, et al. **Z Gesamte Hyg** 1988 Sep; 34(9):529–31 (Eng. Abstr.) (Ger)

[Virus contamination of a river in the Potsdam district] Härtel J, et al. **Z Gesamte Hyg** 1988 Sep;34(9):492–4 (Eng. Abstr.) (Ger)

[Evaluation of virus inactivation within the scope of biological toxicity assessment of water samples] Jaksch G, et al. **Z Gesamte Hyg** 1988 Sep;34(9):503–6 (Eng. Abstr.) (Ger)

[Epidemiologic and public health significance of virologic studies of the environment] Kasantseva VA. **Z Gesamte Hyg** 1988 Sep;34(9):512–4 (Eng. Abstr.) (Ger)

[Contamination with pathogenic plant viruses of soil and water] Kleinhempel H, et al. **Z Gesamte Hyg** 1988 Sep; 34(9):496–9 (Eng. Abstr.) (Ger)

[Fluorescence microscopy and electron microscopy studies of viruses of a river] Krämer U. **Z Gesamte Hyg** 1988 Sep; 34(9):536–8 (Eng. Abstr.) (Ger)

[Virologic studies of a drinking water reservoir] Mehlhorn G, et al. **Z Gesamte Hyg** 1988 Sep;34(9):511–2 (Eng. Abstr.) (Ger)

[Improvement of a system for the study of various water samples with reference to virus contamination] Weselinowa-Stojanowa T. **Z Gesamte Hyg** 1988 Sep; 34(9):535–6 (Eng. Abstr.) (Ger)

[Development of a procedure for the study of the viral infection potential of dental aerosols] Winkler B, et al. **Z Gesamte Hyg** 1988 Sep;34(9):531–4 (Eng. Abstr.) (Ger)

[The occurrence of legionella in dental units and the consequences for practice hygiene] Borneff M. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4–6):295–311 (Eng. Abstr.) (Ger)

[Experiences with the detection of E. coli and coliform bacteria with reference to the drinking water regulation of 1986] Hübner I, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Feb; 187(3):209–5 (Eng. Abstr.) (Ger)

[Bacterial regrowth in drinking water. I. The upgrading of drinking water] Jaeggi NE, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):311–25 (Eng. Abstr.) (Ger)

[Bacterial regrowth in drinking water. II. Drinking water distribution systems] Jaeggi NE, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug; 186(5–6):494–503 (Eng. Abstr.) (Ger)

[Numerical identification of aquatic microorganisms using automated methods; for example, identification of bacteria from activated sludge] Kämpfer P, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Feb; 187(3):216–29 (Eng. Abstr.) (Ger)

[Use of UV rays for the disinfection of water. II. Microbiological studies of surface water] Martiny H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):344–59 (Eng. Abstr.) (Ger)

[Microbial contamination of water by pipe and tubing material. 2. Growth of Legionella pneumophila] Schoenen D, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):326–32 (Eng. Abstr.) (Ger)

[Colony count and LPS content of gram-negative bacteria in cold storage foods and water] Weber-Frick C, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Feb; 187(3):181–208 (Eng. Abstr.) (Ger)

[Enterobacteria as quality criteria in unprocessed, drinking and swimming pool water. Comparative study of the occurrence of enterobacteria, Escherichia coli, coliforms, colony count, fecal streptococci and Pseudomonas aeruginosa] Wiedenmann A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Dec; 187(2):91–106 (Eng. Abstr.) (Ger)

[Quantitative studies of the elimination of coliphages and other fecal indicators during wastewater treatment] Zaiss U, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug; 186(5–6):512–25 (Eng. Abstr.) (Ger)

[Electron microscopy of extracellular polymeric substances in activated sludge] Bleich U, et al. **Zentralbl Hyg Umweltmed** 1989 May;188(1–2):66–83 (Eng. Abstr.) (Ger)

[Bacterial regrowth in drinking water. III. Reasons for regrowth with oligocarbotolerant bacteria] Jaeggi NE, et al. **Zentralbl Hyg Umweltmed** 1989 May;188(1–2):47–65 (Eng. Abstr.) (Ger)

[Medical waste. 1. Microbiologic studies of wastes of various specialties at a large and small hospital in comparison to housekeeping waste] Jager E, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):343–64 (Eng. Abstr.) (Ger)

[Use of UV rays for the disinfection of water. III. UV sensitivity of Legionella pneumophila of different ages in cold and warm drinking water] Martiny H, et al. **Zentralbl Hyg Umweltmed** 1989 May;188(1–2):35–46 (Eng. Abstr.) (Ger)

[Microbial contamination of water by pipe and tube materials. 3. Behavior of E. coli, Citrobacter freundii and Klebsiella pneumoniae] Schoenen D, et al. **Zentralbl Hyg Umweltmed** 1989 Aug;188(5):475–80 (Eng. Abstr.) (Ger)

[Algae as the cause of irritation cough] Naglitsch F. **Zentralbl Mikrobiol** 1988;143(4):331–4 (Eng. Abstr.) (Ger)

[Experimental studies relative to the persistence of several facultative pathogenic fungi in river water] Péter M, et al. **Zentralbl Mikrobiol** 1988;143(7):523–8 (Eng. Abstr.) (Ger)

[The occurrence of antibiotic resistant coliforms in the waste water of a water treatment plant] Stelzer W, et al. **Zentralbl Mikrobiol** 1988;143(6):415–23 (Eng. Abstr.) (Ger)

[Isolation and characterization of gentamicin resistance plasmids of coliform bacteria from the waste water of a water treatment plant] Stelzer W, et al. **Zentralbl Mikrobiol** 1988;143(6):425–33 (Eng. Abstr.) (Ger)

[Virus infections of aquatic organisms] Ahne W. **Zentralbl Veterinarmed [B]** 1988 Aug;35(7):493–503 (17 ref.) (Eng. Abstr.) (Ger)

[A new type of filter for virus concentration in water] Sansebastiano G, et al. **Ann Ist Super Sanita** 1988; 24(4):607–11 (Eng. Abstr.) (Ita)

[Isolation in the Ferrara province of Campylobacter thermophile from man, animals, food and the environment during the 2-year period 1984–1985] Bucci G, et al. **Boll Ist Sieroter Milan** 1988;67(1):49–56 (Eng. Abstr.) (Ita)

[First sign of isolation of filamentous bacteria in a network for the distribution of potable water] Aulicino FA, et al. **Boll Soc Ital Biol Sper** 1988 Jan;64(1):41–6 (Eng. Abstr.) (Ita)

[Biological pollution of the Tiber in the last 100 years]

Bellante G, et al. **Nuovi Ann Ig Microbiol** 1987 Sep–Dec; 38(5–6):317–34 (Eng. Abstr.) (Ita)

[Enumeration of fecal coliforms in sea water: importance of reestablishment of microbes] Legnani P, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):43–54 (Eng. Abstr.) (Ita)

[Contamination of river water around Rome: microbiological index and presence of Salmonella] Mastroeni I, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):31–42 (Eng. Abstr.) (Ita)

[Environmental investigation of non tubercular mycobacteria in the province of Sassari] Muresu E, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):73–84 (Eng. Abstr.) (Ita)

[Isolation of halophilic vibrios from seawater of the Palermo coastline used for bathing] Oliveri R, et al. **Nuovi Ann Ig Microbiol** 1987 May–Aug;38(3–4):181–91 (Eng. Abstr.) (Ita)

[Recovery of hepatitis A virus in a sample of potable water experimentally contaminated] Panà A, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):21–30 (Eng. Abstr.) (Ita)

[Physico–chemical and microbiological characteristics of purified and chlorinated urban sewage, particularly in relation to induced toxicity, impact on marine environment and its reuse in agriculture] Parrella A, et al. **Nuovi Ann Ig Microbiol** 1988 May–Jun;39(3):215–39 (Eng. Abstr.) (Ita)

[Biological control of vectors and infectious diseases associated with water] Tarsitani G. **Nuovi Ann Ig Microbiol** 1987 Sep–Dec;38(5–6):335–41 (Eng. Abstr.) (Ita)

[The spread of Salmonella] Ceriotti G. **Ric Clin Lab** 1976 Jan–Mar;6 Suppl 1:63–5 (0 ref.) (Ita)

[Chemical and microbiological examinations of home–water purifiers] Sugita T, et al. **Eisei Shikenjo Hokoku** 1988; (106):120–3 (Eng. Abstr.) (Jpn)

[A waterborne outbreak of typhoid fever associated with a small drinking water supply system in Fuji city] Nishina T, et al. **Kansenshogaku Zasshi** 1989 Mar;63(3):240–7 (Eng. Abstr.) (Jpn)

[Influence of cyanuric acid on virucidal effect of chlorine and the comparative study in actual swimming pool waters] Yamashita T, et al. **Kansenshogaku Zasshi** 1988 Mar; 62(3):200–5 (Eng. Abstr.) (Jpn)

[Legionella in cooling towers in Oslo] Eng J, et al. **Tidsskr Nor Laegeforen** 1988 Nov 30;108(33):3100–2 (Eng. Abstr.) (Nor)

[Biochemical activity and sensitivity to selected antibiotics of Plesiomonas shigelloides isolated from surface water] Kaznowski A. **Med Dosw Mikrobiol** 1988;40(3):130–4 (Eng. Abstr.) (Pol)

[Presence of potentially pathogenic bacteria and fungi in the cooling–lubricating emulsion used in the aluminum sheet rolling process] Wlodarczak K, et al. **Med Pr** 1989; 40(1):24–7 (Eng. Abstr.) (Pol)

[Effect of river water pollution on the presence of bacteria] Czeczuga B, et al. **Rocz Akad Med Bialymstoku** 1984–85; 29–30:227–35 (Eng. Abstr.) (Pol)

[Study of aquatic fungi. II. Aquatic fungi of the river Narew from Suraż to Tykocin and in the mouths of the rivers Turośląnka and Supraśl in different environments] Czeczuga B, et al. **Rocz Akad Med Bialymstoku** 1984–85; 29–30:77–94 (Eng. Abstr.) (Pol)

[Coccobacteria–bacilliform bacteria ratio in the bacterioplankton of river waters of varying degree of pollution] Czeczuga B, et al. **Rocz Akad Med Bialymstoku** 1984–85;29–30:209–25 (Eng. Abstr.) (Pol)

[The Presence of bacteria of the genus Yersinia in water from private wells] Maleszewska J, et al. **Rocz Panstw Zakl Hig** 1988;39(5):396–403 (Eng. Abstr.) (Pol)

[Growth and survival of various pathogenic dermatophytes in bottom sediment and sewer sludge] Ulfig K. **Rocz Panstw Zakl Hig** 1988;39(2):151–5 (Eng. Abstr.) (Pol)

[The health significance of the presence of viruses in water for drinking and recreational use] Nestor I. **Rev Ig [Bacteriol]** 1988 Oct–Dec;33(4):289–306 (158 ref.) (Eng. Abstr.) (Rum)

[Assessment of the degree of electrochemical treatment of sewage using biotesting] Faĭngol'd ZL, et al. **Antibiot Khimioter** 1989 Feb;34(2):138–42 (Eng. Abstr.) (Rus)

[Directed screening of bacteria—destructive agents of surface–active substances] Shcheglova MK, et al. **Antibiot Khimioter** 1989 Mar;34(3):192–4 (Eng. Abstr.) (Rus)

[Growth and survival of bacteria of the genus Bacillus in sea– and river water] Alton LV. **Gig Sanit** 1988 Sep; (9):14–6 (Eng. Abstr.) (Rus)

[Identification of conditionally pathogenic Enterobacteriaceae isolated from the environment and the use of the results in epidemiologic practice] Bardzilauskene A, et al. **Gig Sanit** 1988 Aug;(8):65–7 (Rus)

[The role of sanitary and bacteriologic examination of water in the prevention of acute intestinal infections in the Estonian S.S.R] Birk KF. **Gig Sanit** 1989 Jan;(1):19–21 (Eng. Abstr.) (Rus)

[Microbiologic analysis of water used in swimming pools] Birk KF, et al. **Gig Sanit** 1988 Aug;(8):75–6 (Rus)

[Use of a method of membrane filters for isolating Salmonella from drinking water] Chugunikhina NV. **Gig Sanit** 1988 Aug;(8):40–1 (Rus)

[Hygienic aspects of evaluating water quality by microbiological indicators] Daubner I, et al. **Gig Sanit** 1989 Jan;(1):56–8 (Rus)

[Hygienic aspects of the control and evaluation of the quality of water and soil in their contamination with viruses] Dmitrieva RA, et al. **Gig Sanit** 1988 Aug;(8):16–8 (Eng. Abstr.) (Rus)

[Comparative evaluation of methods of isolating coliphages from pure water] Dmitrieva RA, et al. **Gig Sanit** 1988 Jun; (6):47–8 (Rus)

[Hygienic problems of water–borne transmission of viral hepatitis] Dmitrieva RA. **Gig Sanit** 1988 Aug;(8):56–9 (20 ref.) (Rus)

[Hygienic aspects of Campylobacter contamination of water reservoirs] Dorodnikov AI. **Gig Sanit** 1988 Aug;(8):59–62 (41 ref.) (Rus)

[Presence of Salmonella in surface water reservoirs in Cuba] Estruch L, et al. **Gig Sanit** 1989 Jan;(1):58–61 (Rus)

[Criteria of epidemiologic safety of hot water] Gasilina MM, et al. **Gig Sanit** 1988 Aug;(8):92–3 (Rus)

[Hygienic evaluation of a microbiological method of purifying industrial waste water from a fine organic synthesis plant] Goncharuk EI, et al. **Gig Sanit** 1989 May; (5):80–1 (Rus)

[Comparative study of magnesium culture media] Guma VI, et al. **Gig Sanit** 1988 Aug;(8):68–9 (Rus)

[Enterobacteriaceae infections among the population working in irrigated agricultural areas] Iarovol PI, et al. **Gig Sanit** 1988 Aug;(8):67–8 (Rus)

[Methods of detection and primary identification of bacteria of the genus Moraxella in the environment] Kalina GP, et al. **Gig Sanit** 1988 Aug;(8):45–9 (Rus)

[Experimental study of the effect of herbicides on the species structure of microflora of reservoir water] Karaeva NIu. **Gig Sanit** 1988 Sep;(9):70–1 (Rus)

[Effect of various herbicides on pathogenic microflora in outdoor reservoir water] Karaeva NIu. **Gig Sanit** 1988 Aug; (8):24–6 (Eng. Abstr.) (Rus)

[Hygienic and medico–biological aspects of ventilation and air conditioning systems] Lebedev SV, et al. **Gig Sanit** 1988 Oct;(10):68–71 (Rus)

[Immunochemical study of antigens in ventilation systems] Lebedev SV, et al. **Gig Sanit** 1988 Dec;(12):83–4 (Rus)

[A method of identifying coliphages in drinking water] Lovtsevich EL, et al. **Gig Sanit** 1988 Aug;(8):41–3 (Rus)

[Sanitary–hygienic indicators of water supply and the incidence of intestinal infection among the population] Moskvitina EA, et al. **Gig Sanit** 1988 Oct;(10):15–7 (Eng. Abstr.) (Rus)

[The rate of dying–off of Escherichia coli in sea water] Nizhegorodova LE, et al. **Gig Sanit** 1988 Dec;(12):16–8 (Eng. Abstr.) (Rus)

[Evaluation of water quality in passenger trains based on bacteriologic indicators] Okhremchuk TN, et al. **Gig Sanit** 1988 Aug;(8):69–70 (Rus)

[The system of automated processing of information regarding the sanitary and hygienic status of the water supply] Romanenko VV, et al. **Gig Sanit** 1989 Feb;(2):69–70 (Rus)

[Effectiveness of the methods of purification and disinfection of virus–contaminated water] Rusanova NA, et al. **Gig Sanit** 1988 Aug;(8):13–5 (Eng. Abstr.) (Rus)

[Status and prospects of cooperation between member countries of the COMECON in the field of sanitary microbiology] Sharova OK, et al. **Gig Sanit** 1988 Aug; (8):63–4 (Rus)

[Effect of the extent of testing and the degree of contamination on the isolation of Salmonella from water] Stelzer W, et al. **Gig Sanit** 1989 Jan;(1):61–3 (Rus)

[Current methods of evaluating the degree of potential epidemiologic hazard of the drinking–water supply] Talaeva IuG, et al. **Gig Sanit** 1988 Aug;(8):8–11 (Eng. Abstr.) (Rus)

[Microflora of contaminated water reservoirs] Vinogradova LA. **Gig Sanit** 1988 Dec;(12):13–6 (Eng. Abstr.) (Rus)

[Evaluation of the effect of biologically purified waste water on the survival of microflora] Vinogradova LA. **Gig Sanit** 1988 Aug;(8):80–2 (Rus)

[Evaluation of the role of a water factor in the seasonal incidence of hepatitis A] Zak MR, et al. **Gig Sanit** 1988 Aug;(8):77 (Rus)

[Substantiation of the system of sanitary–hygienic procedures] Berlin AA. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):21–6 (Eng. Abstr.) (Rus)

[Hygienic aspects of wash water reclamation systems] Pak ZP, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb; 23(1):67–70 (Eng. Abstr.) (Rus)

[Environmental phages active in relation to vibrios of the non–01 group] Kudriakova TA, et al. **Lab Delo** 1988; (8):63–5 (Eng. Abstr.) (Rus)

[Evaluation of the adhesive properties of non–O1–group Vibrio cholerae isolated from people and open reservoirs] Frunze OV, et al. **Mikrobiol Zh** 1988 May–Jun;50(3):55–8 (Eng. Abstr.) (Rus)

[The viability of Escherichia coli in samples of water from rivers and artificial reservoirs] Iashchenko KV, et al. **Mikrobiol Zh** 1987 Mar–Apr;49(2):49–52 (Eng. Abstr.) (Rus)

[Comparative data on adsorption–coagulation water purification of pathogenic Escherichia of various origins] Kolesnikov VG, et al. **Mikrobiol Zh** 1988 Nov–Dec; 50(6):49–53 (Rus)

[Interrelations of bdellovibrios with host bacteria in the coastal zone of the northeastern Black Sea] Lambina VA, et al. **Mikrobiol Zh** 1987 May–Jun;49(3):41–6 (Eng. Abstr.) (Rus)

[Sanitary virologic assessment of the operating efficiency of sewage treatment and disinfection plants on ships] Sidenko VP, et al. **Mikrobiol Zh** 1987 Jan–Feb;49(1):77–81 (Eng. Abstr.) (Rus)

[Study of Pseudomonas aeruginosa DC13 stability during biological purification of industrial sewage from alpha–methyl styrene] Golovleva LA, et al. **Mikrobiologiia** 1988 Nov–Dec;57(6):1044–5 (Eng. Abstr.) (Rus)

[Requirements for methods, used in complex microbiological tests of environmental objects] Kalina GP. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):121–6 (Rus)

[Human infectivity with enterobacteria and enteroviruses while swimming depending on the level of microbial water pollution] Popovich GG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):45–7 (Eng. Abstr.) (Rus)

[Salmonella in the seawater of the beaches of the city of Barcelona] Isern Viñas AM, et al. **Gac Sanit** 1987 Nov–Dec;1(3):118–22 (Eng. Abstr.) (Spa)

[Azomonas agilis in the surface water of the environs of Buenos Aires] Alvarez R. **Rev Argent Microbiol** 1983; 15(3):157–62 (Eng. Abstr.) (Spa)

[Isolation of atmospheric–nitrogen–fixing spirilla from the waters of the Paraná delta and other rivers] Alvarez R. **Rev Argent Microbiol** 1984;16(2):93–6 (Eng. Abstr.) (Spa)

[Salmonella: its incidence in waters of the Zaimán arroyo] Benassi FO, et al. **Rev Argent Microbiol** 1983;15(3):169–75 (Eng. Abstr.) (Spa)

[Spatial and temporal distribution of aerobic bacteria in the Bahía Blanca estuary, Argentina (published erratum appears in Rev Argent Microbiol 1988 Jul–Sep;20(3):123)] Cabezali CB, et al. **Rev Argent Microbiol** 1988 Apr–Jun; 20(2):77–86 (Eng. Abstr.) (Spa)

[Comparison of the efficiency of 2 culture media in the recovery of heterotrophic bacteria damaged with chlorine] Guerrero JJ. **Rev Argent Microbiol** 1987 Oct–Dec; 19(4):161–4 (Eng. Abstr.) (Spa)

[Isolation and quantification of Salmonella in the waters of the Río de la Plata destined for recreation] Monticelli LS, et al. **Rev Argent Microbiol** 1984;16(1):1–10 (Eng. Abstr.) (Spa)

[Poisoning in cattle caused by blue–green algae] Odriozola E, et al. **Rev Argent Microbiol** 1984;16(4):219–24 (Eng. Abstr.) (Spa)

[Study of Aeromonas (motile) in the sewage from the city of Buenos Aires and water from the Río de la Plata] Parodi GS, et al. **Rev Argent Microbiol** 1983;15(1):33–9 (Eng. Abstr.) (Spa)

[Quality of potable water and incidence of gastroenteritis in 2 cities in the state of Sonora, Mexico] Gutiérrez Avila H, et al. **Salud Publica Mex** 1989 May–Jun;31(3):299–304 (Eng. Abstr.) (Spa)

[Sanitary control of food in Mexico city] Sartí–Gutiérrez EJ, et al. **Salud Publica Mex** 1989 Jan–Feb;31(1):82–90 (Eng. Abstr.) (Spa)

METHODS

Anaerobic transformation of phenol to benzoate via para–carboxylation: use of fluorinated analogues to elucidate the mechanism of transformation. Genthner BR, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):945–51

Overview of flow cytometry and image analysis in biological oceanography and limnology. Legendre L, et al. **Cytometry** 1989 Sep;10(5):501–10

The presence–absence coliform test for monitoring drinking water quality. Rice EW, et al. **Public Health Rep** 1989 Jan–Feb;104(1):54–8

WATER MOVEMENTS

Hot–film anemometry for measuring lateral line stimuli. Coombs S, et al. **J Acoust Soc Am** 1989 May;85(5):2185–93

WATER POLLUTANTS

Methods of anaerobic degradation of toxic compounds in chemical and industrial wastewaters. Long–de Vallière CL, et al. **Adv Biotechnol Processes** 1989;12:35–72 (96 ref.)

Use of applied fields in biological treatment of toxic substances, wastewater, and sludges. Reimers RS, et al. **Adv Biotechnol Processes** 1989;12:235–72 (79 ref.)

Anaerobic biodegradation of 2,4–dichlorophenol in freshwater lake sediments at different temperatures. Kohring GW, et al. **Appl Environ Microbiol** 1989 Feb; 55(2):348–53

Microbiological cleanup of groundwater contaminated by pentachlorophenol. Frick TD, et al. **Basic Life Sci** 1988; 45:173–91

Exploitation of the high affinity and specificity of proteins in waste stream treatment. Furlong CE, et al.

Basic Life Sci 1988;45:271–80

Diflubenzuron application to citrus and its impact on invertebrates in an adjacent pond. Ali A, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):781–90

Photodecomposition of chlorophenols in aqueous medium in presence of hydrogen peroxide. Moza PN, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):678–82

Volatilization of mercury compounds by methylmercury-volatilizing bacteria in Minamata Bay sediment. Nakamura K, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):651–6

Studies on removal of malathion from water by means of activated charcoal [letter] Gessner PK. **Ecotoxicol Environ Safety** 1988 Oct;16(2):187–8

Hepatic mixed-function oxidase activity in rainbow trout exposed to several polycyclic aromatic compounds. Gerhart EH, et al. **Environ Res** 1978 Oct;17(2):284–95

Some effects of ingested petroleum on seawater-adapted ducks (Anas platyrhynchos). Holmes WN, et al. **Environ Res** 1978 Oct;17(2):177–90

The effect of cadmium on the hematology and on the activity of delta-aminolevulinic acid dehydratase (ALA-D) in blood and hematopoietic tissues of the flounder, Pleuronectes flesus L. Johansson-Sjöbeck ML, et al. **Environ Res** 1978 Oct;17(2):191–204

Distribution of 238Pu in tissues of fish from the canal in Miamisburg, Ohio. Kennedy CW, et al. **Environ Res** 1978 Oct;17(2):228–35

Exposure of infants and children to lead. Working document for the 30th meeting of the Joint FAO/WHO expert committee on Food Additives held in Rome, 2–11 June 1986. Oskarsson A. **FAO Food Nutr Pap** 1989;45:1–55

Nitrate exposure from drinking water and diet in a Danish rural population. Møller H, et al. **Int J Epidemiol** 1989 Mar;18(1):206–12

Immunomodulation in C57Bl/6 mice following consumption of halogenated aromatic hydrocarbon-contaminated coho salmon (Oncorhynchus kisutch) from Lake Ontario. Cleland GB, et al. **J Toxicol Environ Health** 1989;27(4):477–86

Drinking water guideline for ethylene thiourea, a metabolite of ethylene bisdithiocarbamate fungicides. Frakes RA. **Regul Toxicol Pharmacol** 1988 Jun;8(2):207–18 (37 ref.)

Comparative carcinogenicity of the PAHs as a basis for acceptable exposure levels (AELs) in drinking water. Rugen PJ, et al. **Regul Toxicol Pharmacol** 1989 Jun;9(3):273–83

Organosilicon and related group IV species in the aquatic environment. Papers presented at a symposium. Anaheim, CA, U.S.A., 7–12 September 1986. **Sci Total Environ** 1988 Jul 1;73(1–2):1–141

Effect of industrial pollution on seafood content and dietary intake of total and methylmercury. Buzina R, et al. **Sci Total Environ** 1989 Jan;78:45–57

The accumulation of organotins in adult and seed oysters from selected estuaries prior to the introduction of U.K. regulations governing the use of tributyltin-based antifouling paints. Ebdon L, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):63–84

Uptake of 210Pb and 210Po by Brazilian Bunodosoma caissarum Corrêa, 1964 (cnidaria, actinidae). Gouvea RC, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):181–3

Effects of humus concentrations on benzo[a]pyrene accumulation from water to Daphnia magna: comparison of natural waters and standard preparations. Kukkonen J, et al. **Sci Total Environ** 1989 Mar;79(2):197–207

Polychlorinated biphenyl pollution caused by resuspension of surface sediments in the lagoon of Venice. Raccanelli S, et al. **Sci Total Environ** 1989 Mar;79(2):111–23

Photochemical conversion of chlorinated phenolic substances in aquatic media as studied by AOX and Microtox tests. Svenson A, et al. **Sci Total Environ** 1989 Jan;78:89–98

The effect of organotin compounds on chloride secretion by the in vitro perfused rectal gland of Squalus acanthias. Solomon R, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):307–14

Oil spill dispersants: good or bad for the environment? McIntosh H. **Vet Hum Toxicol** 1989 Jun;31(3):263–4

[The biological effect of copper taken up by the body via drinking water] Vodichenska Ts. **Probl Khig** 1988;13:29–36 (Eng. Abstr.) (Bul)

[Biotechnological in situ sanitation. Contaminated sites] **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:1–390 (Ger)

[Biotechnological principles and environmental hygiene aspects of in situ sanitation methods in soil and groundwater areas] Filip Z, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:11–37 (12 ref.) (Eng. Abstr.) (Ger)

[The behavior of pesticides in the groundwater conductor passage] Matthess G, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:295–311; discussion 329–39 (Ger)

[Directed screening of bacteria—destructive agents of surface-active substances] Shcheglova MK, et al. **Antibiot Khimioter** 1989 Mar;34(3):192–4 (Eng. Abstr.) (Rus)

[Nitrate metabolism in humans and animals after their intake with drinking water and food] Tsyganenko OI, et al. **Gig Sanit** 1989 Apr;(4):55–9 (58 ref.) (Rus)

[Removal of arsenic from water for human consumption in homes in rural communities in the Comarca Lagunera, Mexico] Gutiérrez-Avila H, et al. **Salud Publica Mex** 1989 May-Jun;31(3):305–13 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Investigation of hemolytic anemia after chloramine exposure in a dialysis center [letter] Tipple MA, et al. **ASAIO Trans** 1988 Oct-Dec;34(4):1060

Ecological analyses and case-control studies of gastric cancer and leukaemia in relation to DBCP in drinking water in Fresno County, California. Wong O, et al. **Br J Ind Med** 1989 Aug;46(8):521–8

Epidemiological studies on ingested mineral fibres: gastric and other cancers. **Kanarek MS. IARC Sci Publ** 1989;(90):428–37

An epidemiologic investigation of birth outcomes in relation to dibromochloropropane contamination in drinking water in Fresno County, California, USA. Whorton MD, et al. **Int Arch Occup Environ Health** 1989;61(6):403–7

Chemical quality of maternal drinking water and congenital heart disease. Zierler S, et al. **Int J Epidemiol** 1988 Sep;17(3):589–94

Effects of aerial thermal fog applications of fenthion on caged pink shrimp, mysids and sheepshead minnows. Clark JR, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):466–72

The continuing hazard of lead in drinking water. Russell Jones R. **Lancet** 1989 Sep 16;2(8664):669–70

Lead in drinking water [letter] Rosov EA. **Pediatr Emerg Care** 1989 Jun;5(2):145

[A study on the carcinogenic risk of organic concentrates from tap water in H city] Gan HF. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jan;22(1):7–10 (Eng. Abstr.) (Chi)

[Brown hair and nail discoloration by water containing iron] Platschek H, et al. **Hautarzt** 1989 Jul;40(7):441–2 (Eng. Abstr.) (Ger)

[Radioactive contamination. Biological effects. Transfer to the food chain. Proposal for safety diets for children] Ferrari G, et al. **Minerva Pediatr** 1988 Dec;40(12):665–85 (31 ref.) (Eng. Abstr.) (Ita)

[Physico-chemical and microbiological characteristics of purified and chlorinated urban sewage, particularly in relation to induced toxicity, impact on marine environment and its reuse in agriculture] Parrella A, et al. **Nuovi Ann Ig Microbiol** 1988 May-Jun;39(3):215–39 (Eng. Abstr.) (Ita)

[Carcinomas of internal organs and their relationship to arsenical drinking water in the Republic of Argentina] Tello EE. **Med Cutan Ibero Lat Am** 1988;16(6):497–501 (Eng. Abstr.) (Spa)

[Correlation of the risk of gastric cancer in the province of Soria and the nitrate content of drinking water] Sanz Anquela JM, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):561–5 (Eng. Abstr.) (Spa)

ANALYSIS

Extraction and isolation of triazine herbicides from water and vegetables by a double trap tandem system. Battista M, et al. **Anal Chem** 1989 May 1;61(9):935–9

Automated two-column ion exchange system for determination of the speciation of trace metals in natural waters. Liu Y, et al. **Anal Chem** 1989 Mar 15;61(6):525–9

Determination of total mercury in water and urine by a gold film sensor following Fenton's reagent digestion. Ping L, et al. **Anal Chem** 1989 Jun 1;61(11):1230–5

Sequential determination of biological and pollutant elements in marine bivalves. Zeisler R, et al. **Anal Chem** 1988 Dec 15;60(24):2760–5

Spectrophotometric determination of trace amounts of hydrazine in polluted water. Amlathe S, et al. **Analyst** 1988 Sep;113(9):1481–3

Rapid method for the determination of alachlor, atrazine and metolachlor in groundwater by solid-phase extraction. Brooks MW, et al. **Analyst** 1989 Mar;114(3):405–6

Spectrophotometric determination of nitrite in water. Tarafder PK, et al. **Analyst** 1988 Jul;113(7):1073–6

Trace metals in organisms from ocean disposal sites of the middle eastern United States. Greig RA, et al. **Arch Environ Contam Toxicol** 1977;6(4):395–409

Absorption and elimination of 14C-alpha- and gamma-chlordane by a freshwater alga, daphnid, and goldfish. Moore R, et al. **Arch Environ Contam Toxicol** 1977;6(4):411–20

Organochlorine chemical and heavy metal contaminants in white-beaked dolphins (Lagenorhynchus albirostris) and pilot whales (Globicephala melaena) from the coast of Newfoundland, Canada. Muir DC, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):613–29

Mutagens, toxicants, and other constituents in small city sludges in New York State. Mumma RO, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):657–63

Different forms of mineral nitrogen in drinking water and the Balkan nephropathy. Radovanović Z, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):813–5

Polychlorinated biphenyl congeners in sediments, plankton, molluscs, crustaceans, and eel in a freshwater lake: implications of using reference chemicals and indicator organisms in bioaccumulation studies. van der Oost R, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):721–9

Possible health effects of high manganese concentration in drinking water. Kondakis XG, et al. **Arch Environ Health** 1989 May-Jun;44(3):175–8

Application of fast atom bombardment and tandem mass spectrometry to the identification of organic micropollutants in water. Rivera J, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):403–8

Identification and determination of tert-alkylphenols in carp from the Trenton Channel of the Detroit River, Michigan, USA. Shiraishi H, et al. **Biomed Environ Mass Spectrom** 1989 Jul;18(7):478–83

Evaluation of a high-resolution gas chromatography/high-resolution mass spectrometry method for the determination of 2,3,7,8-tetrachlorodibenzo-p-dioxin in soil and water. Stanley JS, et al. **Biomed Environ Mass Spectrom** 1988 Jul;17(1):27–35

Pesticide residues in drinking water in the North Coast region of New South Wales, Australia, 1986–87. Ang C, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):595–602

Pesticides in fish tissue and water from Tuttle Creek Lake, Kansas. Arruda JA, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):617–24

Correlation between some selected trace metal concentrations in six species of fish from the Arabian Sea. Ashraf M, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):86–93

Heavy metal pollution from a point source demonstrated by mussel (Unio pictorum L.) at Lake Balaton, Hungary. Balogh KV. **Bull Environ Contam Toxicol** 1988 Dec;41(6):910–4

Hexachlorophene distributions in estuarine sediments. Beller HR, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):645–50

Stability of 1-naphthol in sea water solutions and its uptake by the marine prosobranch gastropod Littorina littorea (L.). Cajaraville MP, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):799–806

Mercury in freshwater fish and clams from the Cerro Prieto geothermal field of Baja California, México. Gutiérrez-Galindo EA, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):201–7

Cesium-137 levels detected in Georgia otters. Halbrook RS, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):765–9

Levels of chlordane in water and sediment of rivers around Saga City, Japan. Hirai Y, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):589–94

Mercury and cadmium content in green mussel, Mytilus viridis L. from Onrust waters, Jakarta Bay. Hutagalung HP. **Bull Environ Contam Toxicol** 1989 Jun;42(6):814–20

Fate of 14C nitrofen in rice paddy ecosystem. Kale SP, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):544–7

Method for the preliminary assessment of aquatic contamination sites using sediment extract toxicity tests. Larson LJ. **Bull Environ Contam Toxicol** 1989 Feb;42(2):218–25

Organic contaminants in isolated lakes of southern Labrador, Canada. Lockerbie DM, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):625–32

Heavy metals in bivalve molluscs in the Huelva estuary. López-Artíguez M, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):634–42

Treatment of landfill leachate by spray irrigation—an overview of research results from Ontario, Canada. I. Site hydrology. McBride RA, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):510–7

Organochlorine insecticide residues in fish and birds from three river systems on the North Coast region of New South Wales. McDougall KW, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):884–90

Degradation of N-methylcarbamate and carbamoyl oxime pesticides in chlorinated water. Miles CJ, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):838–43

Characteristics of the sorption of chlorothalonil and azinphos-methyl to a soil from a commercial cranberry bog. Reduker S, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):633–41

Water contamination by heavy metals (Hg, Cd, Pb, Cu and Zn) in Doñana National Park (Spain). Rico MC, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):582–8

DDT residues in sediments from the Bay of Bengal. Sarkar A, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):664–9

Determination of tri-n-butyltin and di-n-butyltin compounds in yellowtails. Sasaki K, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):888–93

Persistence of fenthion in the aquatic environment. Wang T, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):389–94

Fate and effects of xanthates in laboratory freshwater systems. Xu Y, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):683–9

A convenient model and program for the assessment of abiotic degradation of chemicals in natural waters. Frank R, et al. **Ecotoxicol Environ Safety** 1989 Jun;17(3):323–32

Effect of decontamination project at Minamata Bay, Japan. Dramatic decrease of mercury dispersed into Yatsushiro Sea. Kudo A, et al. **Ecotoxicol Environ Safety** 1988 Jun;15(3):339–43

Some silica-based double salts as ion exchangers useful in the treatment of industrial effluents and control of pollutants. Varshney KG. **Ecotoxicol Environ Safety** 1989 Apr;17(2):167–71

Selenium levels in human blood, urine, and hair in response to exposure via drinking water. Valentine JL, et al. **Environ Res** 1978 Dec;17(3):347–55

On the drinking water situation on the Cape Verde Islands (Islands of Santiago). Buchrieser V, et al. **Geogr Med** 1988; Suppl 1:33–44

Simultaneous determination of 224Ra, 226Ra and 228Ra in large volumes of well waters. Jiang HX, et al. **Health Phys** 1989 Jul;57(1):167–8

An alternative method for Ra determinations in water. Loyd DH, et al. **Health Phys** 1989 Jul;57(1):71–7

Plutonium, Am, Cm and Sr in ducks maintained on radioactive leaching ponds in southeastern Idaho. Markham OD, et al. **Health Phys** 1988 Sep;55(3):317–24

Synopsis of French experimental and in situ research on the terrestrial and marine behavior of Tc. Masson M, et al. **Health Phys** 1989 Aug;57(2):269–79 (24 ref.)

Cross contamination between alpha–track detectors. Rand PW, et al. **Health Phys** 1989 Jul;57(1):163–5

Assessment of dose to man from releases of 99Tc in fresh water systems. Zeevaert T, et al. **Health Phys** 1989 Aug; 57(2):337–43 (12 ref.)

Radon–222 concentration in groundwater and cancer mortality in North Carolina. Collman GW, et al. **Int Arch Occup Environ Health** 1988;61(1–2):13–8

On the presence and identification of organic substances in drinking water and mineral waters. Lapucci PL, et al. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:39–44

A sulfide detection test for field use. Van Handel E. **J Am Mosq Control Assoc** 1987 Dec;3(4):644–5

Determination of acidic herbicides and related compounds in water and soil by capillary gas chromatography using a nitrogen–phosphorus detector. Ahmed AW, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):365–7

Determination of arsenic and selenium in environmental and agricultural samples by hydride generation atomic absorption spectrometry. Hershey JW, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec;71(6):1090–3

Liquid chromatographic method for quantitation of glyphosate and metabolite residues in organic and mineral soils, stream sediments, and hardwood foliage. Thompson DG, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr; 72(2):355–60

Residue level determination of the aquatic herbicide fluridone and a potential photoproduct (N–methylformamide) in water. West SD, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):1049–53

Determination of benzenes and naphthalenes in water by purge and trap isolation and capillary column chromatography. Barnung TN, et al. **J Chromatogr** 1989 Apr 19;466:271–8

Simultaneous XAD–2 resin extraction and high–resolution electron–capture gas chromatography of chlorine–containing herbicides in water samples. Ishibashi M, et al. **J Chromatogr** 1988 Dec 16;456(2):382–91

Determination of methyl yellow, Sudan I and Sudan II in water by high–performance liquid chromatography. Nagase M, et al. **J Chromatogr** 1989 Mar 31;465(2):434–7

Chemical changes of organic compounds in chlorinated water. XVI. Gas chromatographic–mass spectrometric studies of reactions of tricyclic aromatic hydrocarbons with hypochlorite in dilute aqueous solution. Onodera S, et al. **J Chromatogr** 1989 Apr 19;466:233–49

Determination of phenylalanine in river water by high–performance liquid chromatography. Rennie PJ. **J Chromatogr** 1989 Jan 6;461:277–80

Analysis, characterization, and purification: requirements for toxicological evaluation of 1,4–dithiane. Thompson HC Jr, et al. **J Chromatogr** 1989 Apr 21;467(1):159–66

Detection of pentachlorophenol and its glucuronide and sulfate conjugates in fish bile and exposure water. Stehly GR, et al. **J Environ Sci Health [B]** 1988 Aug;23(4):355–66

The micronucleus test in Xenopus: a new and simple 'in vivo' technique for detection of mutagens in fresh water. Van Hummelen P, et al. **Mutagenesis** 1989 Jan;4(1):12–6

Genotoxic activity of organic chemicals in drinking water. Meier JR. **Mutat Res** 1988 Nov;196(3):211–45 (173 ref.)

Water hyacinth (Eichhornia crassipes) to biomonitor genotoxicity of low levels of mercury in aquatic environment. Panda BB, et al. **Mutat Res** 1988 Oct; 206(2):275–9

Temperature dependency of skin permeation of waterborne organic compounds. Jetzer WE, et al. **Pharm Acta Helv** 1988;63(7):197–201

Extractive ultrafiltration. Watters JC, et al. **Prog Clin Biol Res** 1989;292:181–91

Water quality criteria for hexahydro–1,3,5–trinitro–1,3,5–triazine (RDX). Etnier EL. **Regul Toxicol Pharmacol** 1989 Apr;9(2):147–57 (54 ref.)

Pesticide residues in groundwater in The Netherlands: state of observations and future directions of research. Loch JP, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:349–63; discussion 387–95

Displacement of Chernobyl fallout in snow layers of temperate Alpine glaciers. Ambach W, et al **Sci Total Environ** 1988 Oct 15;76(2–3):101–7

Tributyltin contamination in the Firth of Forth (1975–87). Bailey SK, et al. **Sci Total Environ** 1988 Oct 15; 76(2–3):185–92

The use of 210Pb and 137Cs in the study of sediment pollution in the Lagoon of Venice. Battiston GA, et al. **Sci Total Environ** 1988 Nov 1;77(1):15–23

A rational approach to the assessment of aluminium solubility controls in freshwaters. Christophersen N, et al. **Sci Total Environ** 1989 Aug;84:91–100

Chemical speciation and distribution of arsenic in water, suspended solids and sediment of Xiangjiang River, China. Cui CG, et al. **Sci Total Environ** 1988 Nov 1;77(1):69–82

Polychlorinated biphenyl equilibria in an estuarine system. Duursma EK, et al. **Sci Total Environ** 1989 Mar; 79(2):141–55

Mercury levels in total suspended matter and in plankton of the Mediterranean basin. Ferrara R, et al. **Sci Total Environ** 1989 Aug;84:129–34

Vanadium in particles and sediments of the northern Saronikos Gulf, Greece. Kalogeropoulos N, et al. **Sci Total Environ** 1989 Apr;79(3):241–52

Radionuclides in shoreline waters of the northeast Irish Sea. McKay WA, et al. **Sci Total Environ** 1989 Aug;84:159–67

Effects of chemical pollution on the activities of hepatic xenobiotic metabolizing enzymes in fish from the River Rhône. Monod G, et al. **Sci Total Environ** 1988 Jul 15; 73(3):189–201

Sources and storm loading variations of metal species in a gullypot catchment. Morrison GM, et al. **Sci Total Environ** 1989 May 15;80(2–3):267–78

Distribution of silicones in water, sediment and fish in Japanese rivers. Watanabe N, et al. **Sci Total Environ** 1988 Jul 1;73(1–2):1–9

Impact of bleached kraft mill effluents on drinking water quality. Wigilius B, et al. **Sci Total Environ** 1988 Aug 1; 74:75–96

Statistical approach towards point sources of groundwater pollution with tetrachloroethylene: a field study. Kido K, et al. **Tohoku J Exp Med** 1989 Mar;157(3):229–39

Cloned rainbow trout liver P(1)450 complementary DNA as a potential environmental monitor. Haasch ML, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):362–8

Multivariate data analysis of sea waters and mussels in relation to pollution sources of trace elements. Favretto L, et al. **Z Lebensm Unters Forsch** 1988 Jul;187(1):8–14

[Ability to remove pesticides in the production of dialysis water (1)] Becker FF, et al. **Biomed Tech (Berlin)** 1989 Jun;34(6):139–42 (Eng. Abstr.) (Ger)

[Experiences with drinking water ring trials and consequences for assessment and control of drinking and bathing water] Attenberger J, et al. **Off Gesundheitswes** 1989 Jul;51(7):362–5 (Eng. Abstr.) (Ger)

[Health–related evaluation of plant protective agents in drinking water] Körber H. **Off Gesundheitswes** 1989 May; 51(5):228–32 (Eng. Abstr.) (Ger)

[Copper pollution of drinking water] Schuch P. **Off Gesundheitswes** 1988 Nov;50(11):655–6 (Ger)

[Evaluation of soil and ground water contamination] Kerndorff H, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988;76:51–68 (Ger)

[Pesticide contamination in groundwater and drinking water—a review of Baden–Württemberg] Roth M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:365–73; discussion 387–95 (Ger)

[Pesticides and similar compounds in groundwater and drinking water: tendencies in analysis from the viewpoint of chemical study arrangements] Weber W. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:183–216; discussion 227–38 (Ger)

[Ionogenic liberation of mercury from dental amalgam in waste water and sludge] Senkpiel K, et al. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):254–61 (Eng. Abstr.) (Ger)

[Chlorinated volatile hydrocarbons in ground water from Campania] Amodio Cocchieri R. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):55–60 (Eng. Abstr.) (Ita)

[Improved performance of a waste water radiation monitor] Yoshimura A, et al. **Radioisotopes** 1988 Aug;37(8):464–6 (Eng. Abstr.) (Jpn)

[Analysis of selected pesticides, nitrates, nitrites, ammonium ions and urea in surface and underground waters and in various agricultural products. V] Gałamon T, et al. **Rocz Panstw Zakl Hig** 1988;39(2):145–50 (Eng. Abstr.) (Pol)

[Determining the levels of toluene, benzene and xylene in hand washings from the skin of workers by a method of vapor–phase chromatographic analysis] Chernitsyna MA. **Gig Sanit** 1989 Jan;(1):38–41 (Rus)

[Hygienic standardization of isobutyronitrile in reservoir water] Fomochkin IP, et al. **Gig Sanit** 1988 Oct;(10):77–8 (Rus)

[Criteria of epidemiologic safety of hot water] Gasilina MM, et al. **Gig Sanit** 1988 Aug;(8):92–3 (Rus)

[Quantitative analysis of phenol in water, model media simulating food products and in the air during sanitary and chemical examination of polymer materials] Kataeva SE, et al. **Gig Sanit** 1988 Sep;(9):37–8 (Rus)

[Gas–chromatographic method of determining the levels of tri–allate in the water, soil and plants] Pilenkova II, et al. **Gig Sanit** 1989 May;(5):51–2 (Rus)

[Photometric determination of cationic detergents] Zhebentiaev AI, et al. **Gig Sanit** 1989 May;(5):56–7 (Rus)

[Substantiation of the system of sanitary–hygienic procedures] Berlin AA. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):21–6 (Eng. Abstr.) (Rus)

[Hygienic aspects of wash water reclamation systems] Pak ZP, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb; 23(1):67–70 (Eng. Abstr.) (Rus)

[Hygienic evaluation of pesticide pollution of coastal seawater] Shibanov SE. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):40–3 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Anion exchange as a potential method for removal of humus in drinking water treatment. Hongve D. **Sci Total Environ** 1989 Jun;81–82:249–56

Adsorption rate of indigo carmine onto activated carbon for the social hygiene. Tamura T, et al. **Tokushima J Exp Med** 1987 Dec;34(3–4):97–100

[Hygienic evaluation of a microbiological method of purifying industrial waste water from a fine organic synthesis plant] Goncharuk EI, et al. **Gig Sanit** 1989 May; (5):80–1 (Rus)

[Hygienic evaluation of working conditions and health status of workers in the department of dehydration of the sediment of the water purification system] Pozin SG, et al. **Gig Sanit** 1989 Feb;(2):82–3 (Rus)

[Lowering the level of residual aluminum in drinking water] Zapol'skiĭ AK, et al. **Gig Sanit** 1989 Apr;(4):4–6 (Rus)

[Purification of water by eliminating phenols using hydrogen peroxide with iron–containing catalysts] Vasilenko II, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):76–9 (Rus)

METABOLISM

Effect of inorganic nutrients on the acclimation period preceding mineralization of organic chemicals in lake water. Jones SH, et al. **Appl Environ Microbiol** 1988 Dec; 54(12):3177–9

32P–postlabeling analysis of DNA adducts in liver of wild English sole (Parophrys vetulus) and winter flounder (Pseudopleuronectes americanus). Varanasi U, et al. **Cancer Res** 1989 Mar 1;49(5):1171–7

Evaluation of various molecular parameters as predictors of bioconcentration in fish. Connell DW, et al. **Ecotoxicol Environ Safety** 1988 Jun;15(3):324–35

Presystemic branchial metabolism limits di–2–ethylhexyl phthalate accumulation in fish. Barron MG, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):49–57

Metabolism of pentachlorophenol by fish. Stehly GR, et al. **Xenobiotica** 1989 Jan;19(1):75–81

PHARMACOKINETICS

Nickel uptake and regulation in a copper–tolerant decapod, Cambarus bartoni (Fabricius) (Decapoda, Crustacea). Alikhan MA, et al. **Bull Environ Contam Toxicol** 1989 Jan; 42(1):94–102

Bioaccumulation and tissue distribution of a quaternary ammonium surfactant in three aquatic species. Knezovich JP, et al. **Bull Environ Contam Toxicol** 1989 Jan;42(1):87–93

Copper uptake and regulation in a copper–tolerant decapod Cambarus bartoni (Fabricius) (Decapoda, Crustacea). Zia S, et al. **Bull Environ Contam Toxicol** 1989 Jan;42(1):103–10

Use of polynomial expressions to describe the bioconcentration of hydrophobic chemicals by fish. Connell DW, et al. **Ecotoxicol Environ Safety** 1988 Dec; 16(3):242–57

PHARMACOLOGY

Hybridization of DNA probes with whole–community genome for detection of genes that encode microbial responses to pollutants: mer genes and Hg2+ resistance. Barkay T, et al. **Appl Environ Microbiol** 1989 Jun; 55(6):1574–7

Activity of 1,1,1– and 1,1,3–trichloroacetones in a chromosomal aberration assay in CHO cells and the micronucleus and spermhead abnormality assays in mice. Blazak WF, et al. **Mutat Res** 1988 Dec;206(4):431–8

[The rate of dying–off of Escherichia coli in sea water] Nizhegorodova LE, et al. **Gig Sanit** 1988 Dec;(12):16–8 (Eng. Abstr.) (Rus)

POISONING

Clustering of multiple sclerosis in Galion, Ohio, 1982–1985. Ingalls TH. **Am J Forensic Med Pathol** 1989 Sep; 10(3):213–5

Atherogenicity and carcinogenicity of high–arsenic artesian well water. Multiple risk factors and related malignant neoplasms of blackfoot disease. Chen CJ, et al. **Arteriosclerosis** 1988 Sep–Oct;8(5):452–60

Chronic arsenic toxicity from drinking tubewell water in rural West Bengal. Guha Mazumder DN, et al. **Bull WHO** 1988;66(4):499–506

Lead intoxication from lead–contaminated water used to reconstitute infant formula. Shannon M, et al. **Clin Pediatr (Phila)** 1989 Aug;28(8):380–2

[Environmental exposure to cadmium and effects on human health. Part 3. The results of blood examinations and blood pressure in inhabitants of the cadmium–polluted Jinzu river basin in Toyama Prefecture] Aoshima K, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):949–55 (Eng. Abstr.) (Jpn)

TOXICITY

The effect of selenium in water and food on Daphnia populations. Boyum KW, et al. **Arch Environ Contam Toxicol** 1988 Sep;17(5):555–60

Metal contents in liver tissues of non-fledged goldeneye, Bucephala clangula, ducklings: a comparison between samples from acidic, circumneutral, and limed lakes in south Sweden. Eriksson MO, et al.
Arch Environ Contam Toxicol 1989 Jan-Apr;18(1-2):255-60

Subclinical effects of groundwater contaminants. II. Alteration of regional brain monoamine neurotransmitters by benzene in CD-1 mice. Hsieh GC, et al.
Arch Environ Contam Toxicol 1988 Nov;17(6):799-805

Lethality of trace metal mixtures to American flagfish in neutralized acid water. Hutchinson NJ, et al.
Arch Environ Contam Toxicol 1989 Jan-Apr;18(1-2):249-54

Characteristics of three acidic lakes in Kejimkujik National Park, Nova Scotia, Canada. Kerekes J, et al.
Arch Environ Contam Toxicol 1989 Jan-Apr; 18(1-2):183-200

Short-term experimental acidification of a Welsh stream: toxicity of different forms of aluminium at low pH to fish and invertebrates. McCahon CP, et al.
Arch Environ Contam Toxicol 1989 Jan-Apr;18(1-2):233-42

Oocyte atresia and reproductive success in fathead minnows (Pimephales promelas) exposed to acidified hardwater environments. McCormick JH, et al.
Arch Environ Contam Toxicol 1989 Jan-Apr;18(1-2):207-14

Effects of aluminum on the biochemical composition of Atlantic salmon. McKee MJ, et al.
Arch Environ Contam Toxicol 1989 Jan-Apr;18(1-2):243-8

Effects of water quality on deactivation and toxicity of mexacarbate (Zectran) to fish. Mauck WL, et al.
Arch Environ Contam Toxicol 1977;6(4):385-93

Acid rain: what we know, what we did, what we will do. Scott W. Arch Environ Contam Toxicol 1989 Jan-Apr; 18(1-2):75-82

Experimental acidification of Little Rock Lake (Wisconsin): fish research approach and early responses. Swenson WA, et al. Arch Environ Contam Toxicol 1989 Jan-Apr; 18(1-2):167-74

Reproductive toxicological effects in rats after oral exposure to effluents from a coal gasification plant. Blanuša M, et al. Arh Hig Rada Toksikol 1988 Mar;39(1):9-21

Field studies on the impact of a new benzoylphenylurea insect growth regulator (UC-84572) on selected aquatic nontarget invertebrates. Ali A, et al.
Bull Environ Contam Toxicol 1989 Jan;42(1):134-41

Evaluation of ATP photometer for toxicity testing using Microtox luminescent bacterial reagent. Awong J, et al.
Bull Environ Contam Toxicol 1989 Jul;43(1):118-22

Toxicity of dimethoate to Daphnia magna and freshwater fish. Beusen JM, et al. Bull Environ Contam Toxicol 1989 Jan;42(1):126-33

Sodium nitrilotriacetate (NTA) influences the larval development and metamorphosis of marine invertebrates. Brunetti R, et al. Bull Environ Contam Toxicol 1989 Feb; 42(2):234-40

New approach to the seven-day Ceriodaphnia dubia test with additional comments pertaining to the same test for Daphnia magna. Cowgill UM, et al.
Bull Environ Contam Toxicol 1989 May;42(5):749-53

Influence of variations in culture medium on the survival and reproduction of Daphnia magna. Girling AE, et al.
Bull Environ Contam Toxicol 1989 Jan;42(1):119-25

Acute and chronic toxicity of produced water from a North Sea oil production platform to the calanoid copepod Acartia tonsa. Girling AE.
Bull Environ Contam Toxicol 1989 Aug;43(2):280-6

Acute toxicity of malathion, tetrabromobisphenol-A, and tributyltin chloride to mysids (Mysidopsis bahia) of three ages. Goodman LR, et al. Bull Environ Contam Toxicol 1988 Nov;41(5):746-53

Toxicity of alum sludge to Ceriodaphnia dubia and Pimephales promelas. Hall WS, et al.
Bull Environ Contam Toxicol 1989 May;42(5):791-8

Long-term effects of land application of aqueous oil effluent on photosynthetic efficiency of certain varieties of Oryza sativa L. Ilangovan K, et al.
Bull Environ Contam Toxicol 1989 Feb;42(2):187-94

Metabolism of chlorobenzene and hexachlorobenzene by the zebra fish, Brachydanio rerio. Kasokat T, et al.
Bull Environ Contam Toxicol 1989 Feb;42(2):254-61

Effect of temperature on the chronic toxicity of Hydrothol-191 to the fathead minnow (Pimephales promelas). Keller AE, et al.
Bull Environ Contam Toxicol 1988 Nov;41(5):770-5

Toxic effects of mercuric chloride, methylmercuric chloride, and emisan 6 (an organic mercurial fungicide) on ovarian recrudescence in the catfish Clarias batrachus (L.). Kirubagaran R, et al. Bull Environ Contam Toxicol 1988 Dec;41(6):902-9

Results of a short-term toxicity study for three organic chemicals found in Niagara River drinking water. Komsta E, et al. Bull Environ Contam Toxicol 1988 Oct; 41(4):515-22

Cell culture systems are more sensitive than Saccharomyces cervisiae tests for assessing the toxicity of aquatic pollutants. Mochida K, et al.
Bull Environ Contam Toxicol 1988 Jul;41(1):1-3

Mercury in the Calcasieu River/Lake Complex, Louisiana. Mueller CS, et al. Bull Environ Contam Toxicol 1989 Jan; 42(1):71-80

Effects of bleached kraft mill effluent (BKME) on the schooling behavior of vendace (Coregonus albula L.). Myllyvirta TP, et al. Bull Environ Contam Toxicol 1989 Feb;42(2):262-9

Chronic effects of contaminated sediment on Daphnia magna and Chironomus tentans. Nebeker AV, et al.
Bull Environ Contam Toxicol 1988 Oct;41(4):574-81

Toxicity of potash brines to early developmental stages of Atlantic salmon (Salmo salar). Peterson RH, et al.
Bull Environ Contam Toxicol 1988 Sep;41(3):391-7

Effects of water soluble crude oil fractions on cirral beat frequency in Balanus balanoides. Ponat A.
Bull Environ Contam Toxicol 1988 Nov;41(5):759-64

Sensitivity of branchial mucous to crude oil toxicity in a freshwater fish, Colisa fasciatus. Prasad MS.
Bull Environ Contam Toxicol 1988 Nov;41(5):754-8

Effect of selenium on reproductive behavior and fry of fathead minnows. Pyron M, et al.
Bull Environ Contam Toxicol 1989 Apr;42(4):609-13

Long-term effect of ammonium sulfate fertilizer on histophysiology of adrenal in the teleost, Channa punctatus (Bloch). Ram RN, et al. Bull Environ Contam Toxicol 1988 Dec;41(6):880-7

In vivo effects of cadmium chloride on certain aspects of carbohydrate metabolism in the tissues of a freshwater field crab Barytelphusa guerini. Reddy SL, et al.
Bull Environ Contam Toxicol 1989 Jun;42(6):847-53

Histopathological changes induced by malathion in the gills of bluegill Lepomis macrochirus. Richmonds C, et al.
Bull Environ Contam Toxicol 1989 Jul;43(1):123-30

Acute toxicity of PAH contaminated sediments to the estuarine fish, Leiostomus xanthurus. Roberts MH Jr, et al. Bull Environ Contam Toxicol 1989 Jan;42(1):142-9

Metal concentrations in pearl oyster, Pinctada radiata, collected from Saudi Arabian coast of the Arabian Gulf. Sadig M, et al. Bull Environ Contam Toxicol 1989 Jan; 42(1):111-8

Differential courtship activity and alterations of reproductive success of competing guppy males (Poecilia reticulata Peters; Pisces: Poeciliidae) as an indicator for low concentrations of aquatic pollutants. Schröder JH, et al.
Bull Environ Contam Toxicol 1988 Sep;41(3):385-90

Studies on activity recovery in some mercury-exposed freshwater fish by using selected weeds. Shrivastava S, et al. Bull Environ Contam Toxicol 1989 Jun;42(6):840-6

Characterization of carboxylesteraae from malathion degrading bacterium: Pseudomonas sp. M-3. Singh AK, et al. Bull Environ Contam Toxicol 1989 Jun;42(6):860-7

Gill ATPase activity in Procambarus clarkii as an indicator of heavy metal pollution. Torreblanca A, et al.
Bull Environ Contam Toxicol 1989 Jun;42(6):829-34

Effects of organic and inorganic lead on the oxygen equilibrium curves of the fresh water field crab, Barytelphusa guerini. Tulasi SJ, et al.
Bull Environ Contam Toxicol 1989 Feb;42(2):247-53

Chemical and biological impact of effluent from edible bamboo shoot canning factory on a stream. Ueda N, et al. Bull Environ Contam Toxicol 1989 Apr;42(4):628-33

Application of adenylate energy charge and adenine nucleotide measurements as indicators of stress in Nephtys incisa treated with dredged material. Zaroogian GE, et al.
Bull Environ Contam Toxicol 1989 Aug;43(2):261-70

Effects of cadmium on consumption, assimilation and biochemical parameters of Daphnia magna: possible implications for reproduction. Bodar CW, et al.
Comp Biochem Physiol [C] 1988;90(2):341-6

Effects of cadmium exposure on feeding of freshwater planktonic crustaceans. Gulati RD, et al.
Comp Biochem Physiol [C] 1988;90(2):335-40

Effect of bleached kraft pulp mill effluent on hepatic biotransformation reactions in vendace (Coregonus albula L.). Lindström-Seppä P, et al.
Comp Biochem Physiol [C] 1989;92(1):51-4

Recovery of benthiocarb-inhibited AChE in fish brain: an in vitro study. Babu PR, et al.
Ecotoxicol Environ Safety 1989 Jun;17(3):317-22

Effect of methylazoxymethanol acetate on bluegill sunfish cell cultures in vitro. Borenfreund E, et al.
Ecotoxicol Environ Safety 1989 Jun;17(3):297-307

Safety assessment of boron in aquatic and terrestrial environments. Butterwick L, et al.
Ecotoxicol Environ Safety 1989 Jun;17(3):339-71

Review of the environmental toxicity of quaternary ammonium halides. Cooper JC.
Ecotoxicol Environ Safety 1988 Aug;16(1):65-71 (15 ref.)

A method for evaluating effects of toxic chemicals on the productivity of freshwater ecosystems. Crossland NO.
Ecotoxicol Environ Safety 1988 Dec;16(3):279-92

Ovarian damage to Channa punctatus after chronic exposure to low concentrations of Elsan, mercury, and ammonia. Dey S, et al. Ecotoxicol Environ Safety 1989 Apr; 17(2):247-57

Phototaxis in aquatic invertebrates: possible use in ecotoxicity tests. Dojmi Di Delupis G, et al.
Ecotoxicol Environ Safety 1988 Dec;16(3):189-93

Effects of metal ions on cyprinid fish immune response: in vitro effects of Zn2+ and Mn2+ on the mitogenic response of carp pronephros lymphocytes. Ghanmi Z, et al. Ecotoxicol Environ Safety 1989 Apr;17(2):183-9

Hematotoxic effects in the rat of a toluene dinitro derivative after short-term exposure. Guastadisegni C, et al.
Ecotoxicol Environ Safety 1989 Feb;17(1):21-9

Chronic effects of Cu on reproduction of Polypedilum nubifer (Chironomidae) through water and food. Hatakeyama S. Ecotoxicol Environ Safety 1988 Aug; 16(1):1-10

Dose-related carcinogenic effects of water-borne benzo[a]pyrene on livers of two small fish species. Hawkins WE, et al. Ecotoxicol Environ Safety 1988 Dec;16(3):219-31

Biodegradability of chlorophenols and mixtures of chlorophenols in seawater. Lindgaard-Jørgensen P.
Ecotoxicol Environ Safety 1989 Apr;17(2):216-20

Use of Gammarus pulex (L.) in safety evaluation tests: culture and selection of a sensitive life stage. McCahon CP, et al.
Ecotoxicol Environ Safety 1988 Jun;15(3):245-52

Toxicity of three herbicides to some nitrogen-fixing cyanobacteria. Mishra AK, et al.
Ecotoxicol Environ Safety 1989 Apr;17(2):236-46

Subchronic metabolic effects and toxicity of a simulated pulp mill effluent on juvenile lake trout, Salmo trutta m. lacustris. Oikari A, et al. Ecotoxicol Environ Safety 1988 Dec;16(3):202-18

Acclimatization of roach, Rutilus rutilus (L.), to toxic components of kraft pulp mill effluents. Oikari A, et al.
Ecotoxicol Environ Safety 1988 Jun;15(3):282-8

Histological changes in the kidneys and gills of the stickleback, Gasterosteus aculeatus L, exposed to dissolved cadmium in hard water. Oronsaye JA.
Ecotoxicol Environ Safety 1989 Jun;17(3):279-90

Carbofuran-induced histopathological and biochemical changes in liver of the teleost fish, Channa punctatus (Bloch). Ram RN, et al. Ecotoxicol Environ Safety 1988 Dec;16(3):194-201

Toxicity bioassay of technical and commercial formulations of carbaryl to the freshwater catfish, Clarias batrachus. Tripathi G, et al. Ecotoxicol Environ Safety 1988 Jun; 15(3):277-81

Histopathological alterations in the liver of freshwater teleost Tilapia mossambica in response to cadmium toxicity. Usha Rani A, et al. Ecotoxicol Environ Safety 1989 Apr; 17(2):221-6

Inhibition of acetylcholinesterase in guppies (Poecilia reticulata) by chlorpyrifos at sublethal concentrations: methodological aspects. van der Wel H, et al.
Ecotoxicol Environ Safety 1989 Apr;17(2):205-15

Fate and effects of salicylic acid compounds in freshwater systems. Wang WH, et al. Ecotoxicol Environ Safety 1989 Jun;17(3):308-16

Toxicity test of landfill leachate using Sarotherodon mossambicus (freshwater fish). Wong MH.
Ecotoxicol Environ Safety 1989 Apr;17(2):149-56

Effects of ingested crude and dispersed crude oil on thermoregulation in ducks (Anas platyrhynchos). Jenssen BM. Environ Res 1989 Feb;48(1):49-56

Sonatox-induced impairment of ovarian activity in an exotic cichlid, Oreochromis mossambicus. Bhattacharya L, et al.
Folia Morphol (Praha) 1989;37(1):33-7

Comparative pathology of Prudhoe Bay crude oil and inert shell sealants in chicken embryos. Couillard CM, et al.
Fundam Appl Toxicol 1989 Jul;13(1):165-73

Subchronic toxicity study of 1,4-dithiane in the rat. Schieferstein GJ, et al. Fundam Appl Toxicol 1988 Nov; 11(4):703-14

Chlorinated drinking water XAD isolates do not affect the sister chromatid exchange frequency. Varga C.
Int Arch Occup Environ Health 1988;61(1-2):147-9

A cage for use with small aquatic animals in field studies. Goodman LR, et al. J Am Mosq Control Assoc 1987 Mar; 3(1):109-10

In vitro mutagenicity of water contaminants in complex mixtures. Varma MM, et al. J Appl Toxicol 1988 Aug; 8(4):243-8

Ultrastructure of kidney of ducks exposed to methylmercury, lead and cadmium in combination. Rao PV, et al.
J Environ Pathol Toxicol Oncol 1989;9(1):19-44

Mercury induced time-dependent alterations in lipid profiles and lipid peroxidation in different body organs of cat-fish Heteropneustes fossilis. Bano Y, et al.
J Environ Sci Health [B] 1989 Apr;24(2):145-66

Development of cytotoxicity tests for assessment of the toxicity of water samples taken from the environment. Benford DJ, et al. Mol Toxicol 1987-88 Fall;1(4):419-25

Use of newt larvae for in vivo genotoxicity testing of water: results on 19 compounds evaluated by the micronucleus test. Fernandez M, et al. Mutagenesis 1989 Jan;4(1):17-26

Mutagenicity on chlorination of products formed by ozonation of naphthoresorcinol in water. Sayato Y, et al.
Mutat Res 1989 Jul;226(3):151-5

United States Environmental Protection Agency Office of Drinking Water Health Advisories.
Rev Environ Contam Toxicol 1988;104:1-225

United States Environmental Protection Agency, Office of Drinking Water Health Advisories.
Rev Environ Contam Toxicol 1988;106:1-233

United States Environmental Protection Agency Office of Drinking Water health advisories.
Rev Environ Contam Toxicol 1989;107:1-184 (705 ref.)

Aldicarb contamination of groundwater. Moye HA, et al.
Rev Environ Contam Toxicol 1988;105:99-146 (118 ref.)

Acute toxicity of cresols, xylenols, and trimethylphenols to Daphnia magna Straus 1820 [published erratum appears in Sci Total Environ 1989 Jan;78:300] Devillers J.
Sci Total Environ 1988 Sep 15;76(1):79-83

Changes in epilithic communities due to individual and combined treatments of zinc and snail grazing in stream mesocosms. Genter RB, et al. Toxicol Ind Health 1988 Jun; 4(2):185-201

[Evaluation of virus inactivation within the scope of biological toxicity assessment of water samples] Jaksch G, et al. **Z Gesamte Hyg** 1988 Sep;34(9):503–6 (Eng. Abstr.) (Ger)

[Effect of vanadium on selected biochemical parameters of the blood and internal organs in rats] Zaporowska H, et al. **Rocz Panstw Zakl Hig** 1988;39(5):379–84 (Eng. Abstr.) (Pol)

[Growth and survival of bacteria of the genus Bacillus in sea- and river water] Alton LV. **Gig Sanit** 1988 Sep;(9):14–6 (Eng. Abstr.) (Rus)

[Concerning the article by V.G. Khodzhaev "Effect of water boiling on the level of nitrates"] Balte IM. **Gig Sanit** 1989 Feb;(2):68 (Rus)

[Sanitary and hygienic characteristics of liquid nitrogen fertilizers as industrial waste in the sewer-free water supply system of a chemical plant] Chegrinets GIa, et al. **Gig Sanit** 1988 Jun;(6):75–7 (Rus)

[Scientific substantiation of the maximum permissible level of O-ethyl-O-phenylchlorthiophosphate in reservoir water] Chura DA, et al. **Gig Sanit** 1988 Sep;(9):67–9 (Rus)

[Experimental substantiation of maximum permissible levels of DPF-1 and DPF-1N in reservoir water] Dergacheva TS, et al. **Gig Sanit** 1988 Jun;(6):77–8 (Rus)

[Experimental substantiation of the maximum permissible level of methylene chloride in sanitary and household water reservoirs] Deviatka DG, et al. **Gig Sanit** 1988 Jun;(6):78–80 (Rus)

[Toxicologic evaluation of the effectiveness of decontamination of waste water from the production of dry galvanic cell by low-base aluminum hydroxychloride] Fomovskii MA, et al. **Gig Sanit** 1989 May;(5):76–7 (Rus)

[Hygienic standardization of Cellosolve levels in reservoir water] Iatsyna OV, et al. **Gig Sanit** 1988 Oct;(10):78–9 (Rus)

[Experimental study of the effect of herbicides on the species structure of microflora of reservoir water] Karaeva NIu. **Gig Sanit** 1988 Sep;(9):70–1 (Rus)

[Determining the toxicity of biologically active chemical substances] Kornelchuk EP, et al. **Gig Sanit** 1988 Sep;(9):38–9 (Rus)

[Substantiation of hygienic standardization of ofunak in reservoir water] Kotelenets AI, et al. **Gig Sanit** 1988 Nov;(11):66–8 (Rus)

[Functional state of animals after inhalation of electrolysis oxygen obtained from distilled water] Koziarin IP. **Gig Sanit** 1989 Jan;(1):74–5 (Rus)

[Immunologic status of children living in a region with an increased level of nitrates in the drinking water] Kozliuk AS, et al. **Gig Sanit** 1989 Mar;(3):19–22 (Eng. Abstr.) (Rus)

[Hygienic standardization of new acrylic copolymers in reservoir water] Kudrin LV, et al. **Gig Sanit** 1988 Sep;(9):10–4 (Eng. Abstr.) (Rus)

[The role of pesticides in hygienic substantiation of the Danube- Dnieper water supply complex] Medovar AM, et al. **Gig Sanit** 1989 May;(5):73–4 (Rus)

[Hygienic substantiation of the maximum permissible level of ambush in reservoir water] Musamukhamedov SR. **Gig Sanit** 1988 Sep;(9):69–70 (Rus)

[Hygienic substantiation of the provisional permissible level of N,N-bis(trimethyl)-2,5-dimethyl-N-xylilendiammonium chloride in reservoir water] Para'nko NM, et al. **Gig Sanit** 1989 May;(5):79–80 (Rus)

[Study of the biological effect of silicone organic polymer coating] Rumiantseva LA, et al. **Gig Sanit** 1989 May;(5):83–4 (Rus)

[Study of the biological effect of sumilex] Sapunov IuS, et al. **Gig Sanit** 1989 May;(5):77–9 (Rus)

[Substantiation of the maximum permissible level of 4-chlorophenol in reservoir water] Saratikov AS, et al. **Gig Sanit** 1989 Jan;(1):68–9 (Rus)

[Substantiation of hygienic standards of monoazo dyes in water reservoirs] Shafirov IuB, et al. **Gig Sanit** 1988 Sep;(9):71–2 (Rus)

[Complex hygienic standardization of the herbicide fenagon in reservoir water and food products] Shantor VF, et al. **Gig Sanit** 1988 Oct;(10):10–2 (Eng. Abstr.) (Rus)

[Study of age-related reactivity of animals for the rapid evaluation of biological properties of water in contact with polymers] Tiuleneva IS, et al. **Gig Sanit** 1988 Dec;(12):42–5 (Rus)

[Hygienic substantiation of the maximum permissible level of phosphorus thiotrichloride in reservoir water] Tomkiv VM. **Gig Sanit** 1988 Nov;(11):68–70 (Rus)

[Standardization of the aluminum level in drinking water of various degrees of hardness] Tulakina NV, et al. **Gig Sanit** 1988 Dec;(12):75–7 (Rus)

[Experimental study of the atherogenic effect of copper after its intake with drinking water] Vodichenskaia TsS, et al. **Gig Sanit** 1989 Feb;(2):64–6 (Rus)

[Beta-galactosidase activity in the seminal fluid and gonadal tissue as a biochemical criterion of the gonadotoxic effect of chemical substances] Votiakov AV, et al. **Gig Sanit** 1989 Mar;(3):62–3 (Rus)

[Scientific substantiation of hygienic standards of octyldichloropropyl phosphate in a water medium] Zaitsev NA, et al. **Gig Sanit** 1988 Sep;(9):7–10 (Eng. Abstr.) (Rus)

[Hygienic characteristics of a new vitreous enamel used in drinking water supply systems] Zin KCh. **Gig Sanit** 1988 Nov;(11):11–3 (Eng. Abstr.) (Rus)

WATER POLLUTANTS, CHEMICAL see under **WATER POLLUTANTS**

WATER POLLUTANTS, RADIOACTIVE see under **WATER POLLUTANTS**

WATER POLLUTION

Evaluation of several selective media for recovery of Aeromonas hydrophila from polluted waters. Arcos ML, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2786–92

Electrode system for determination of microbial cell populations in polluted water. Maoyu Y, et al. **Appl Environ Microbiol** 1989 Aug;55(8):2082–5

Natural environment surpasses polluted environment in inducing DNA damage in fish. Kurelec B, et al. **Carcinogenesis** 1989 Jul;10(7):1337–9

Problems related to the treatment of drinking water in tropical climates. Mascher F, et al. **Geogr Med** 1988;Suppl 1:81–6

Temperature and water quality effects in simulated woodland pools on the infection of Culex mosquito larvae by Lagenidium giganteum (Oomycetes: Lagenidiales) in North Carolina. Guzman DR, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):211–8

Highly polluted larval habitats of the Culex pipiens complex in central Sweden. Ishii T, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):276–81

Object-marking, a bridge between light and analytical electron microscopy for particles characterization. Dumortier P, et al. **J Electron Microsc Tech** 1988 Feb;8(2):229–30

Colonization and response of Culicoides variipennis (Diptera: Ceratopogonidae) to pollution levels in experimental dairy wastewater ponds. Mullens BA, et al. **J Med Entomol** 1988 Nov;25(6):441–51

Ecological studies on reovirus pollution of rivers in Toyama Prefecture. Matsuura K, et al. **Microbiol Immunol** 1988;32(12):1221–34

Studies on faecal streptococci in the river Tigris. Khalaf SH, et al. **Microbios** 1989;57(231):99–103

Large community outbreak of cryptosporidiosis due to contamination of a filtered public water supply. Hayes EB, et al. **N Engl J Med** 1989 May 25;320(21):1372–6

Microbiological contamination of the ocean, and human health. Coye MJ, et al. **N J Med** 1989 Jul;86(7):533–8

Aeromonas hydrophila-punctata in two Sicilian reservoirs: density of the organisms in relation to physico-chemical and bacteriological parameters. Ajello F, et al. **Nuovi Ann Ig Microbiol** 1988 May-Jun;39(3):203–13

Developments in in situ biorestoration of contaminated soil and groundwater in the Netherlands. Staps JJ. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:379–90 (8 ref.)

Biotechnology for in situ restoration of ground water contaminated by the petroleum industry. Thomas JM, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:345–65 (43 ref.)

Some critical points of the microbiological restoration of underground sites polluted by the volatile chlorinated hydrocarbons. Wilson J. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:367–77 (14 ref.)

Environmental stress in five aquatic ecosystems in the floodplain of the River Rhine. Admiraal W, et al. **Sci Total Environ** 1989 Jan;78:59–75

Influence of natural aquatic humic substances on the bioavailability of benzo(a)pyrene to Atlantic salmon. Johnsen S, et al. **Sci Total Environ** 1989 Jun;81-82:691–702

Contamination of drinking water during collection and storage. Han AM, et al. **Trop Geogr Med** 1989 Apr;41(2):138–40

A defined substrate technology for the enumeration of microbial indicators of environmental pollution. Edberg SC, et al. **Yale J Biol Med** 1988 Sep-Oct;61(5):389–99

Yeasts associated with the white shrimp Penaeus schmitti, sediment, and water of Sepetiba Bay, Rio de Janeiro, Brasil. Pagnocca FG, et al. **Yeast** 1989 Apr;5 Spec No:S479–83

[Outbreak of intestinal infectious diseases due to contamination of two-time pressure water supply with sewage] Liu SY. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan;23(1):5–6 (Eng. Abstr.) (Chi)

[Viral pollution studies of water environments] Iftimovici R, et al. **Virologie** 1989 Apr-Jun;40(2):119–23 (Eng. Abstr.) (Fre)

[Hydraulo-geologic assumptions of biological purification processes in the subsoil] Battermann G. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:187–207 (10 ref.) (Eng. Abstr.) (Ger)

[Hydrocarbons and chlorinated hydrocarbons in groundwater] Hanert HH. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:209–30 (6 ref.) (Eng. Abstr.) (Ger)

[Technical in situ methods and their environmental hygiene control during the biological purification of soil and groundwaters polluted by organic halogens] Hanert HH, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:231–45 (6 ref.) (Eng. Abstr.) (Ger)

[Sanitizing contaminated soil and groundwater pipes by microbiological and physico-chemical methods] Werner P, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 80:247–60 (7 ref.) (Eng. Abstr.) (Ger)

[The hygiene of drinking water after purification in practices and households] Sonntag HG. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4–6):324–36 (Eng. Abstr.) (Ger)

[Biological pollution of the Tiber in the last 100 years] Bellante G, et al. **Nuovi Ann Ig Microbiol** 1987 Sep-Dec; 38(5–6):317–34 (Eng. Abstr.) (Ita)

[Continuous chemical analysis of coastal waters: new computerized technics for measuring water pollution in comparison with microbiological indicators] Paoletti A, et al. **Nuovi Ann Ig Microbiol** 1988 Nov-Dec;39(6):659–98 (Eng. Abstr.) (Ita)

[Changes in the parasitic fauna of flounder, Platichthys flesus (L.) in relation to the degree of pollution of south-eastern Baltic sea] Sulgostowska T. **Wiad Parazytol** 1988; 34(4–6):591–4 (Eng. Abstr.) (Pol)

[Assessment of run-off in pollution of bodies of water with diphyllobothriidae eggs by hydrometeorologic indicators] Gerasimov IV. **Med Parazitol (Mosk)** 1989 Mar-Apr; (2):27–30 (Eng. Abstr.) (Rus)

[Salmonella: its incidence in waters of the Zaimán arroyo] Benassi FO, et al. **Rev Argent Microbiol** 1983;15(3):169–75 (Eng. Abstr.) (Spa)

[Isolation and quantification of Salmonella in the waters of the Río de la Plata destined for recreation] Monticelli LS, et al. **Rev Argent Microbiol** 1984;16(1):1–10 (Eng. Abstr.) (Spa)

[Effect of the pollution of the waters of the Pacific on Mithrax spinosissimus (king crab, centolla, etc.), (Decapoda: Majidae)] de Sousa F, et al. **Rev Med Panama** 1988 Sep;13(3):183–91 (Eng. Abstr.) (Spa)

[Quality of potable water and incidence of gastroenteritis in 2 cities in the state of Sonora, Mexico] Gutiérrez Avila H, et al. **Salud Publica Mex** 1989 May-Jun;31(3):299–304 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Cancer mortality in U.S. counties with hazardous waste sites and ground water pollution. Griffith J, et al. **Arch Environ Health** 1989 Mar-Apr;44(2):69–74

Water contamination and swimming with the open mastoid cavity. Bingham BJ, et al. **Clin Otolaryngol** 1988 Oct; 13(5):347–50

Effects of sewage contaminated river water on liver and kidney. An ultrastructural study. Tandon P, et al. **Indian J Pathol Microbiol** 1989 Jul;32(3):232–6

Cancer incidence following exposure to drinking water with asbestos leachate. Howe HL, et al. **Public Health Rep** 1989 May-Jun;104(3):251–6

Accidental contamination of the public water supply at Lowermoor, Camelford: an assessment of the possible veterinary consequences. Allen WM, et al. **Vet Rec** 1989 May 6;124(18):479–82

ANALYSIS

Metabolic processes involved in repair of Escherichia coli cells damaged by exposure to acid mine water. Wortman AT, et al. **Appl Environ Microbiol** 1988 Aug;54(8):1901–6

Water hygiene of two swimming pools: microbial indicators. Tosti E, et al. **J Appl Bacteriol** 1988 Jul;65(1):87–91

[Hygienic conditions of some springs near Rome] Mancini L, et al. **Boll Soc Ital Biol Sper** 1988 Jan;64(1):25–32 (Eng. Abstr.) (Ita)

HISTORY

[Results of health research on the drinking water supply in relation to extreme conditions] Loscher J. **Z Gesamte Hyg** 1989 Apr;35(4):193–5 (Eng. Abstr.) (Ger)

LEGISLATION & JURISPRUDENCE

The accumulation of organotins in adult and seed oysters from selected estuaries prior to the introduction of U.K. regulations governing the use of tributyltin-based antifouling paints. Ebdon L, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):63–84

PREVENTION & CONTROL

Troubled waters. **Lancet** 1989 Jul 29;2(8657):251–2 (12 ref.)

Effluent treatment by membrane technology—opportunities and challenges. Chakravorty B. **Prog Clin Biol Res** 1989; 292:169–80

Research for ground-water quality management with an emphasis on in situ biorestoration. Hall CW. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:261–71 (6 ref.)

Oil spill dispersants: good or bad for the environment? McIntosh H. **Vet Hum Toxicol** 1989 Jun;31(3):263–4

[Computer-assisted control of a public health inventory] Beckmann W, et al. **Off Gesundheitswes** 1989 Apr; 51(4):188–91 (Eng. Abstr.) (Ger)

[Behavior of some pathogenic and other microorganisms in ground water with reference to delineation of water protection zones] Filip Z. **Off Gesundheitswes** 1988

Aug-Sep;50(8-9):427-30 (Eng. Abstr.) (Ger)
[Biotechnologic aspects and environmental health significance of in situ restoration measures of soil and ground water] Filip Z. **Off Gesundheitswes** 1988 Aug-Sep; 50(8-9):415-20 (Eng. Abstr.) (Ger)
[Treatment of water from flowing streams] Haberer K. **Off Gesundheitswes** 1988 Aug-Sep;50(8-9):435-44 (Eng. Abstr.) (Ger)
[Anthropogenic pollutants in drinking water--preventive responsibilities of public health offices] Knoll KH. **Off Gesundheitswes** 1988 Aug-Sep;50(8-9):431-4 (Eng. Abstr.) (Ger)
[Decreasing the emission of pollutants in laboratory waste water by substitution of trichloromethane] Lucke N, et al. **Z Gesamte Hyg** 1989 Feb;35(2):90-2 (Eng. Abstr.) (Ger)
[Possibilities for purification of refuse seepage water by sand containing humic substances] Weise G, et al. **Z Gesamte Hyg** 1989 Apr;35(4):209-10 (Eng. Abstr.) (Ger)
[Ground water improvement in the Ruhr--then and now] Schmidt WD. **Zentralbl Hyg Umweltmed** 1989 May; 188(1-2):1-34 (Eng. Abstr.) (Ger)
[Toxicologic evaluation of the effectiveness of decontamination of waste water from the production of dry galvanic cell by low-base aluminum hydroxychloride] Fomovskil MA, et al. **Gig Sanit** 1989 May;(5):76-7 (Rus)
[Hygienic evaluation of the water supply in the North] Novikov IuV, et al. **Gig Sanit** 1988 Nov;(11):8-11 (Eng. Abstr.) (Rus)
[Sanitary control of the quality of distilled water] Pochkin IuN, et al. **Gig Sanit** 1989 May;(5):69 (Rus)

WATER POLLUTION, CHEMICAL

see related
EUTROPHICATION

Pathology of brown bullhead, Ictalurus nebulosus, from highly contaminated and relatively clean sections of the Hudson River. Kim JC, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):144-50
Model for simulating the effects of management practices on pesticide concentrations in groundwater. Dean JD, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:527-80; discussion 581-6
Chemistry of tropical marine systems. Proceedings of the second international conference. Rio de Janeiro, Brazil, 1-5 September 1987. **Sci Total Environ** 1988 Sep 1; 75(2-3):151-354
Accumulation, distribution and loss of cadmium in the marine prosobranch Littorina littorea (L.). Marigomez JA, et al. **Sci Total Environ** 1989 Jan;78:1-12
Sun-powered pollution clean up [news] Pool R. **Science** 1989 Jul 14;245(4914):130
[Plant pesticides and ground water. Inventory, prevention and clean-up strategies. Bodies of Water and Plant Pesticides VI. 6th technical discussion. Berlin, 30 May-1 June 1988] **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:1-702 (Ger)
[The behavior of selected pesticides in groundwater close to the surface of heterogenic porous sediments] Ahlsdorf B, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:375-85; discussion 387-95 (Ger)
[Plant protection and groundwater] Hurle K. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:129-35; discussion 151-8 (4 ref.) (Ger)
[Ecodynamic processes in soil and groundwater conductors under the influence of pesticides] Klein G. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:511-25; discussion 581-6 (Ger)
[Pesticide use without groundwater and drinking water dangers--environmental aspects] Ruchay D. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:39-44; discussion 45-56 (Ger)
[Pesticide use without groundwater and drinking water dangers--health protection aspects] Steinbach M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:35-8; discussion 45-56 (Ger)
[The mutagenicity of organic microcontamination in the environment. II. The mutagenicity of volatile organic halogens in the Salmonella microsome test (Ames Test) with regard to the contamination of groundwater and drinking water] Mersch-Sundermann V. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Feb; 187(3):230-43 (Eng. Abstr.) (Ger)
[Use of agricultural chemicals in greenhouse cultivation: problems of pollution in the soil and superficial strata. 3. Further information on the presence of organochlorine pesticides and heavy metals in the water table of Marsala] Oliveri R, et al. **Nuovi Ann Ig Microbiol** 1988 Nov-Dec; 39(6):651-8 (Eng. Abstr.) (Ita)
[Effect of river water pollution on the presence of bacteria] Czeczuga B, et al. **Rocz Akad Med Bialymstoku** 1984-85; 29-30:227-35 (Eng. Abstr.) (Pol)
[Effect of environmental factors on the destruction of petroleum products by associative microorganism cultures] Kvasnikov EI, et al. **Mikrobiol Zh** 1987 May-Jun; 49(3):33-8 (Rus)

ADVERSE EFFECTS

Bone mass and dementia in hip fracture patients from areas with different aluminium concentrations in water supplies. Wood DJ, et al. **Age Ageing** 1988 Nov;17(6):415-9
Adverse pregnancy outcomes in relation to water contamination, Santa Clara County, California, 1980-1981. Deane M, et al. **Am J Epidemiol** 1989 May;129(5):894-904
Congenital cardiac anomalies in relation to water contamination, Santa Clara County, California, 1981-1983. Swan SH, et al. **Am J Epidemiol** 1989 May;129(5):885-93
Malignant neoplasms among residents who drank well water contaminated by arsenic from a king's yellow factory. Tsuda T, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20; 11 Suppl:289-301
[Schwartz-Bartter syndrome as a complication of severe well water poisoning] Töpke B, et al. **Kinderarztl Prax** 1988 Sep;56(9):443-7 (Eng. Abstr.) (Ger)

ANALYSIS

Determination of nitrite in drinking water and environmental samples by ion exclusion chromatography with electrochemical detection. Kim HJ, et al. **Anal Chem** 1989 Jul 15;61(14):1485-9
Simultaneous determination of fenamiphos, its sulphoxide and sulphone in water by high-performance liquid chromatography. Singh R. **Analyst** 1989 Apr;114(4):425-7
Whole-cell biosensors for environmental monitoring. Rawson DM, et al. **Biosensors** 1989;4(5):299-311
Gas chromatographic/mass spectrometric confirmation of identity of coprostanol in Mercenaria mercenaria (Bivalvia) taken from sewage-polluted water. Matusik JE, et al. **J Assoc Off Anal Chem** 1988 Sep-Oct;71(5):994-9
On the drinking water situation on the Cape Verde Islands (Island of Santiago). Buchrieser V, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):35-43
[Contamination of drinking water with atrazine, simazine and nitrate in the Rastatt, Baden-Baden and Bühl areas] Ziegler R. **Off Gesundheitswes** 1989 Feb;51(2):63-6 (Eng. Abstr.) (Ger)
[The appearance of pesticides in groundwater in Bavaria] Amann W, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:159-81; discussion 227-38 (Ger)
[Toxicologic aspects of the estimation of pesticide residues in drinking water] Dieter HH. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:607-35; discussion 637-51 (33 ref.) (Ger)
[Pesticides in surface water, groundwater, and untreated water in Nordrhein-Westfalen: measuring strategy, analysis and results] Friege H, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:397-414; discussion 435-42 (Ger)
[The behavior of selected pesticides in groundwater and drinking water areas] Frimmel F, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:481-500; discussion 501-10 (Ger)
[Herbicides in untreated and drinking water of a water supply enterprise--analysis and results] Kötter K, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:457-80; discussion 501-10 (Ger)
[The estimation of pesticides in approved treatments in reference to drinking water contamination] Lingk W, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:69-75; discussion 85-95 (Ger)
[Compilation of methods of pesticide detection in groundwater in relation to the permissible procedures--claims and reality] Nolting HG. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:97-105; discussion 151-8 (Ger)
[The natural groundwater flow and a laboratory column for estimating groundwater pollution by pesticides] Nordmeyer H, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:239-60; discussion 329-39 (Ger)
[Recognition of the water content of pesticides in water plants in West Germany] Schmitz M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:443-56; discussion 501-10 (Ger)
[Environmental exposure to cadmium and effects on human health. Part 2. Bone and mineral metabolism in inhabitants of the cadmium-polluted Jinzu River basin in Toyama Prefecture] Aoshima K, et al. **Nippon Eiseigaku Zasshi** 1988 Oct;43(4):864-71 (Eng. Abstr.) (Jpn)
[Environmental exposure to cadmium and effects on human health. Part 1. Renal tubular function in inhabitants of the cadmium-polluted Jinzu River basin in Toyama Prefecture--special reference to urinary beta 2 microglobulin] Aoshima K, et al. **Nippon Eiseigaku Zasshi** 1988 Oct;43(4):853-63 (Eng. Abstr.) (Jpn)

LEGISLATION & JURISPRUDENCE

Is American environmental policy ready for de minimis risks in water? Benbrook CM. **Regul Toxicol Pharmacol** 1988 Sep;8(3):300-7
[Granting special exemptions according to paragraph 4 of the drinking water regulation in plant pesticide contamination] Hässelbarth U, et al. **Off Gesundheitswes** 1988 Nov;50(11):651-3 (Eng. Abstr.) (Ger)
[The granting of permission for exceptions to section 4 of the drinking water ordinance concerning pesticide contamination] Hässelbarth U, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:601-6; discussion 637-51 (Ger)
[Limit values in drinking water] Hässelbarth U. **Schriftenr Ver Wasser Boden Lufthyg** 1988;76:41-9 (14 ref.) (Ger)

PREVENTION & CONTROL

Radiation induced decomposition of biological resistant pollutants in water. Getoff N. **Int J Rad Appl Instrum [A]** 1986;37(11):1103-9
Radiation-induced decomposition of small amounts of trichloroethylene in drinking water. Proksch E, et al. **Int J Rad Appl Instrum [A]** 1989;40(2):133-8
Recycling suitability of wash waters from mosquito abatement vehicles and equipment into spray diluent. Schaefer CH, et al. **J Am Mosq Control Assoc** 1988 Mar; 4(1):1-3
A strategy for reducing the impact of pesticides on groundwater in the U.S. Eiden C. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:341-7; discussion 387-95
[An experimental study of the treatment of waste water from chemical factories with a water-purifying device made of a resin with macrospores and special functions] Zhou BY. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov; 22(6):338-40 (Eng. Abstr.) (Chi)
[The public health significance of drinking water constituents] Borneff J. **Off Gesundheitswes** 1988 Aug-Sep; 50(8-9):445-50 (Eng. Abstr.) (Ger)
[Environmental hygiene concepts for avoiding groundwater and drinking water contamination by pesticides] Aurand K. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:661-74; discussion 689-98 (Ger)
[Important aspects of the protection of groundwater from pesticide residues--represented by the examples of chlortriazine, atrazine, simazine and terbutylazine] Hüfner M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:261-93; discussion 329-39 (Ger)
[Emission and immission limit values in water protection] Hahn J. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 76:31-40 (Ger)
[Viewpoints of groundwater protection in the execution of plant protection laws] Hertel W. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:77-83; discussion 85-95 (Ger)
[Evaluation of soil and ground water contamination] Kerndorff H, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988;76:51-68 (Ger)
[The demonstration by industry of future developments and the use of pesticides with special reference to necessary groundwater protection] Köhler S. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:415-34; discussion 435-42 (Ger)
[The consequences of strict groundwater protection from pesticide contamination for agricultural businesses in Münsterland] Krause E. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:653-9; discussion 689-98 (Ger)
[Strategies for sanitizing an entry region] Litz N, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:675-87; discussion 689-98 (Ger)
[Good expert practice of agriculture in the water protection area] Meinert G. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:137-50; discussion 151-8 (5 ref.) (Ger)
[Pesticide use and groundwater protection--an introduction to the current questions] Müller-Wegener U, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:9-24; discussion 45-56 (14 ref.) (Ger)
[Pesticide approval practices and groundwater protection] Schinkel K. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:57-67; discussion 85-95 (Ger)
[Pesticide use without groundwater and drinking water dangers--agricultural aspects] Scholz H. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:25-33; discussion 45-56 (Ger)
[The principle of foresight in protecting groundwater and drinking water from pesticide contamination] Staupe J. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:587-600; discussion 637-51 (Ger)

WATER POLLUTION, RADIOACTIVE

ANALYSIS

Radon progeny as sources of gross-alpha radioactivity anomalies in ground water. Oural CR, et al. **Health Phys** 1988 Dec;55(6):889-94

WATER POLLUTION, THERMAL

[Effect of thermal water pollution on invertebrates in the light of studies on parasitic fauna of fish] Pojmańska T. **Wiad Parazytol** 1988;34(4-6):563-71 (Pol)

WATER SOFTENING

You and your drinking water: health implications for the use of cation exchange water softeners. Das G. **J Clin Pharmacol** 1988 Aug;28(8):683-90
[Chemical and microbiological examinations of home-water purifiers] Sugita T, et al. **Eisei Shikenjo Hokoku** 1988; (106):120-3 (Eng. Abstr.) (Jpn)

INSTRUMENTATION

A defluoridator for individual households. Phantumvanit P,

et al. **World Health Forum** 1988;9(4):555–8

WATER SUPPLY

Treatment of hyperhidrosis manuum by tap water iontophoresis. Dahl JC, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):346–8

Epidemiologic surveillance for endemic Giardia lamblia infection in Vermont. The roles of waterborne and person-to-person transmission. Birkhead G, et al. **Am J Epidemiol** 1989 Apr;129(4):762–8

Spontaneous abortions in relation to consumption of tap water: an application of methods from survival analysis to a pregnancy follow-up study. Hertz-Picciotto I, et al. **Am J Epidemiol** 1989 Jul;130(1):79–93

Acute nickel toxicity in electroplating workers who accidently ingested a solution of nickel sulfate and nickel chloride. Sunderman FW Jr, et al. **Am J Ind Med** 1988; 14(3):257–66

Lead exposure in children vs adults [letter] Bois FY, et al. **Am J Public Health** 1989 Jul;79(7):904

Application of clearance concepts to the assessment of exposure to lead in drinking water. Bois FY, et al. **Am J Public Health** 1989 Jul;79(7):827–31

Assessing lead exposure from drinking water [editorial] Houk VN, et al. **Am J Public Health** 1989 Jul;79(7):823–4

Effects of borehole wells on water utilization in Schistosoma haematobium endemic communities in Coast Province, Kenya. el Kholy H, et al. **Am J Trop Med Hyg** 1989 Aug; 41(2):212–9

Chronic diarrhea associated with drinking untreated water. Parsonnet J, et al. **Ann Intern Med** 1989 Jun 15; 110(12):985–91

Schistosomiasis in Kano State, Nigeria. I. Human infections near dam sites and the distribution and habitat preferences of potential snail intermediate hosts. Betterton C, et al. **Ann Trop Med Parasitol** 1988 Dec;82(6):561–70

Source of drinking water supply and transmission of guinea worm disease in Nigeria. Ilegbodu VA, et al. **Ann Trop Med Parasitol** 1987 Dec;81(6):713–8

Comparison of the presence-absence and membrane filter techniques for coliform detection in small, nonchlorinated water distribution systems. Bancroft K, et al. **Appl Environ Microbiol** 1989 Feb;55(2):507–10

Potentiation of the virucidal effectiveness of free chlorine by substances in drinking water. Berg G, et al. **Appl Environ Microbiol** 1989 Feb;55(2):390–3

Prevalence of nontuberculous mycobacteria in water supplies of hemodialysis centers. Carson LA, et al. **Appl Environ Microbiol** 1988 Dec;54(12):3122–5

Absence of association between total heterotrophic and total coliform bacteria from a public water supply. Edberg S, et al. **Appl Environ Microbiol** 1989 Feb;55(2):380–4

Nonphotosynthetic pigmented bacteria in a potable water treatment and distribution system. Reasoner DJ, et al. **Appl Environ Microbiol** 1989 Apr;55(4):912–21

Nutritional versatility and growth kinetics of an Aeromonas hydrophila strain isolated from drinking water. van der Kooij D, et al. **Appl Environ Microbiol** 1988 Nov; 54(11):2842–51

Growth-supporting activity for Legionella pneumophila in tap water cultures and implication of hartmannellid amoebae as growth factors. Wadowsky RM, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2677–82

Chlorinated drinking water and bladder cancer: effect of misclassification on risk estimates. Lynch CF, et al. **Arch Environ Health** 1989 Jul-Aug;44(4):252–9

In vitro genotoxicity of chlorinated drinking water processed from humus-rich surface water. Liimatainen A, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):712–8

Chronic arsenic toxicity from drinking tubewell water in rural West Bengal. Guha Mazumder DN, et al. **Bull WHO** 1988;66(4):499–506

Water, trachoma and conjunctivitis. Prost A, et al. **Bull WORLD Health Organ** 1989;67(1):9–18 (28 ref.)

Reduction of enteric infectious disease in rural China by providing deep-well tap water. Wang ZS, et al. **Bull WORLD Health Organ** 1989;67(2):171–80

Water availability and trachoma. West S, et al. **Bull WORLD Health Organ** 1989;67(1):71–5

Microbiological and virological analysis of water from two water filtration plants and their distribution systems. Payment P, et al. **Can J Microbiol** 1988 Dec;34(12):1304–9

Iodine sensitivity of bacteria isolated from iodinated water systems. Pyle BH, et al. **Can J Microbiol** 1989 Apr; 35(4):520–3

Endogenous nitrosation in relation to nitrate exposure from drinking water and diet in a Danish rural population. Møller H, et al. **Cancer Res** 1989 Jun 1;49(11):3117–21

Faecal contamination of rural drinking water in a commercial farming area in Zimbabwe. Heinanen A, et al. **Cent Afr J Med** 1988 Nov;34(11):253–9

An investigation of health and lifestyle in people who have private water supplies at home. Meara JR. **Community Med** 1989 May;11(2):131–9

Selenium levels in human blood, urine, and hair in response to exposure via drinking water. Valentine JL, et al. **Environ Res** 1978 Dec;17(3):347–55

Bacteriological examination of the water supply on an Antarctic base. Harker C. **Epidemiol Infect** 1989 Feb; 102(1):105–12

Occurrence of drug-resistant bacteria in communal well water around Port Harcourt, Nigeria. Ibiebele DD, et al. **Epidemiol Infect** 1989 Aug;103(1):193–202

Bacterial contamination of stored water and stored food: a potential source of diarrhoeal disease in West Africa. Mølbak K, et al. **Epidemiol Infect** 1989 Apr;102(2):309–16

Isolation of Legionella pneumophila from hotels of Greece. Alexiou SD, et al. **Eur J Epidemiol** 1989 Mar;5(1):47–50

Developmental toxicity of dichloroacetonitrile: a by-product of drinking water disinfection. Smith MK, et al. **Fundam Appl Toxicol** 1989 May;12(4):765–72

Coliform count in water sources in an urban slum community in Burdwan, West Bengal. Lahiri A, et al. **Indian J Med Res** 1988 Nov;88:461–5

A simple method for water treatment. Singh T. **Indian J Public Health** 1988 Jan-Mar;32(1):43

An epidemiologic investigation of birth outcomes in relation to dibromochloropropane contamination in drinking water in Fresno County, California, USA. Whorton MD, et al. **Int Arch Occup Environ Health** 1989;61(6):403–7

Studies in the field of hydric nourishment: experimental research. Proceedings of a symposium presented at the First International Congress on Food and Health. Salsomaggiore Terme, Italy, 28–31 October 1985. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:1–44

The risk of infection from Giardia lamblia due to drinking water supply, use of water, and latrines among preschool children in rural Lesotho. Esrey SA, et al. **Int J Epidemiol** 1989 Mar;18(1):248–53

Community-wide epidemiological investigation of a typhoid outbreak in a rural township in Taiwan, Republic of China. King CC, et al. **Int J Epidemiol** 1989 Mar;18(1):254–60

Water supply, sanitation and housing in relation to the risk of infant mortality from diarrhoea. Victora CG, et al. **Int J Epidemiol** 1988 Sep;17(3):651–4

Radiation induced decomposition of biological resistant pollutants in water. Getoff N. **Int J Rad Appl Instrum [A]** 1986;37(11):1103–9

Radiation-induced decomposition of small amounts of trichloroethylene in drinking water. Proksch E, et al. **Int J Rad Appl Instrum [A]** 1989;40(2):133–8

An outbreak of typhoid fever due to contamination of the municipal water supply in northern Israel. Egoz N, et al. **Isr J Med Sci** 1988 Nov;24(11):640–3

Control of waterborne disease is still on the public health agenda [editorial] Shuval HI. **Isr J Med Sci** 1988 Nov; 24(11):637–9

Waterborne enteric disease outbreaks in Israel, 1976–1985. Tulchinsky TH, et al. **Isr J Med Sci** 1988 Nov; 24(11):644–51

Does the sodium level in drinking water affect blood pressure levels? Hoffman CJ. **J Am Diet Assoc** 1988 Nov; 88(11):1432–5

Suppression of larval Aedes aegypti populations in household water storage containers in Jakarta, Indonesia, through releases of first-instar Toxorhynchites splendens larvae. Annis B, et al. **J Am Mosq Control Assoc** 1989 Jun; 5(2):235–8

Interrelationships among water quality, climate and diet on feedlot performance of steer calves. Ray DE. **J Anim Sci** 1989 Feb;67(2):357–63

Water treatment of hydrotherapy exercise pools. Edlich RF, et al. **J Burn Care Rehabil** 1988 Sep-Oct;9(5):510–5 (21 ref.)

Some environmental factors influencing the breeding of Anopheles balabacensis complex (dirus) in domestic wells in Burma. Tun-Lin W, et al. **J Commun Dis** 1987 Dec; 19(4):291–9

Chilled drinking water effects on lactating Holstein cows in summer. Baker CC, et al. **J Dairy Sci** 1988 Oct; 71(10):2699–708

Pediatric burn prevention: an evaluation of the efficacy of a strategy to reduce tap water temperature in a population at risk for scalds. Webne S, et al. **J Dev Behav Pediatr** 1989 Aug;10(4):187–91

Appendicitis epidemic following introduction of piped water to Anglesey. Barker DJ, et al. **J Epidemiol Community Health** 1988 Jun;42(2):144–8

Malaysian schistosomiasis: description of a population at risk. Greer GJ, et al. **J Trop Med Hyg** 1989 Jun;92(3):203–8

Tubewell water consumption and its determinants in a rural area of Bangladesh. Hoque BA, et al. **J Trop Med Hyg** 1989 Jun;92(3):197–202

Worms, wells and water in western Madagascar. Howarth SE, et al. **J Trop Med Hyg** 1988 Oct;91(5):255–64

Chlorination of water supplies to control Legionella may corrode the pipes [letter] Mead PB, et al. **JAMA** 1988 Oct 21;260(15):2216

Enteral feeding contamination: comparison of diluents and feeding bag usage. Perez SK, et al. **JPEN J Parenter Enteral Nutr** 1989 May-Jun;13(3):306–8

Hepatitis non A-non B—report of a water-borne outbreak. Quraishi MS, et al. **JPMA** 1988 Aug;38(8):203–5

Aluminium from a coffee pot [letter] Jackson JA, et al. **Lancet** 1989 Apr 8;1(8641):781–2

The continuing hazard of lead in drinking water. Russell Jones R. **Lancet** 1989 Sep 16;2(8664):669–70

Waterborne outbreak of cryptosporidiosis [letter] Smith HV, et al. **Lancet** 1988 Dec 24-31;2(8626-8627):1484

Concentrated drinking water extracts, which cause bacterial mutation and chromosome damage in CHO cells, do not induce sex-linked recessive lethal mutations in Drosophila. Wilcox P, et al. **Mutagenesis** 1988 Sep;3(5):381–7

Large community outbreak of cryptosporidiosis due to contamination of a filtered public water supply. Hayes EB, et al. **N Engl J Med** 1989 May 25;320(21):1372–6

United States Environmental Protection Agency Office of Drinking Water Health Advisories. **Rev Environ Contam Toxicol** 1988;104:1–225

United States Environmental Protection Agency, Office of Drinking Water Health Advisories. **Rev Environ Contam Toxicol** 1988;106:1–233

United States Environmental Protection Agency Office of Drinking Water health advisories. **Rev Environ Contam Toxicol** 1989;107:1–184 (705 ref.)

Bioavailability of aluminium in the presence of humic substances at low and moderate pH. Gjessing ET, et al. **Sci Total Environ** 1989 Jun;81-82:683–90

Anion exchange as a potential method for removal of humus in drinking water treatment. Hongve D. **Sci Total Environ** 1989 Jun;81-82:249–56

Formation of chlorinated PAH—a possible health hazard from water chlorination. Johnsen S, et al. **Sci Total Environ** 1989 Jun;81-82:231–8

Chlorinated drinking water is mutagenic and causes 3-methylcholanthrene type induction of hepatic monooxygenase. Liimatainen A, et al. **Toxicology** 1988 Oct; 51(2-3):281–9

Control of schistosomiasis transmission in newly established smallholder irrigation schemes. Chandiwana SK, et al. **Trans R Soc Trop Med Hyg** 1988;82(6):874–80

Synthetic-fibre filters for preventing dracunculiasis: 100 versus 200 micrometres pore size. Sullivan JJ, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):465–6

Contamination of drinking water during collection and storage. Han AM, et al. **Trop Geogr Med** 1989 Apr; 41(2):138–40

The influence of watering practices on the transmission of Fasciola among sheep in the Ethiopian highlands. Njau BC, et al. **Vet Res Commun** 1989;13(1):67–74

Planning for health in Mali. Konaté S. **World Health Forum** 1988;9(1):46–9

Low-cost water and sanitation: tasks for all the people. Narayan-Parker D. **World Health Forum** 1988;9(3):356–60

"We want water, not gold". U UT, et al. **World Health Forum** 1988;9(4):519–25

The importance of different laboratory methods in Legionella diagnosis in medical care. Mathys W, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1-2):122–30

Abstracts of papers presented at the congress of the Deutsche Gesellschaft für Hygiene und Mikrobiologie, Section Hygiene and Public Health. Heidelberg, 7–10 October 1987. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug; 186(5-6):428–67

Isolation of Yersinia pseudotuberculosis from water. Inoue M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):338–43

Aeromonas species in a municipal water supply of a central European city: biotyping of strains and detection of toxins. Mascher F, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):333–7

Properties of aeromonads and their occurrence and hygienic significance in drinking water. van der Kooij D. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Nov; 187(1):1–17 (89 ref.)

[Multiple stepwise regression analysis of etiological factors of esophageal cancer in Cixian county] Hou J. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):25–7 (Eng. Abstr.) (Chi)

[A study on the carcinogenic risk of organic concentrates from tap water in H city] Gan HF. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jan;22(1):7–10 (Eng. Abstr.) (Chi)

[Outbreak of intestinal infectious diseases due to contamination of two-time pressure water supply with sewage] Liu SY. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan;23(1):5–6 (Eng. Abstr.) (Chi)

[Continuous detection of poliovirus in public water supplies] Vilagines P, et al. **C R Acad Sci [III]** 1988;307(4):171–6 (Eng. Abstr.) (Fre)

[Amebic keratitis: role of the rinsing solutions for corneal lenses using city water? (letter)] Pouliquen P, et al. **J Fr Ophtalmol** 1989;12(1):57–8 (Fre)

[Fluoride poisoning from the Saint-Yorre water with osteomalacia. Apropos of a case with bone histomorphometric analysis] Martin-May A, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):959–60 (Fre)

[WHO wrote to us: the International Decennial of drinkable water and sanitary conditions] **Tunis Med** 1987 Apr; 65(4):298 (Fre)

[The isolation and differentiation of leptospires from cattle drinking water] Luyven G, et al. **Berl Munch Tierarztl Wochenschr** 1989 Aug 1;102(8):272–4 (Eng. Abstr.) (Ger)

[The estimation of pesticides in approved treatments in reference to drinking water contamination] Lingk W, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:69–75; discussion 85–95 (Ger)

[Pesticide use without groundwater and drinking water dangers—environmental aspects] Ruchay D. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:39–44; discussion 45–56 (Ger)

[The principle of foresight in protecting groundwater and drinking water from pesticide contamination] Staupe J. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:587–600; discussion 637–51 (Ger)

[Bacterial regrowth in drinking water. II. Drinking water distribution systems] Jaeggi NE, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug; 186(5–6):494–503 (Eng. Abstr.) (Ger)

[The significance of amoebae and other protozoa in water conduit systems in dental units] Michel R, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4–6):312–23 (Eng. Abstr.) (Ger)

[Microbial contamination of water by pipe and tubing material. 2. Growth of Legionella pneumophila] Schoenen D, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):326–32 (Eng. Abstr.) (Ger)

[Bacterial regrowth in drinking water. III. Reasons for regrowth with oligocarbotolerant bacteria] Jaeggi NE, et al. **Zentralbl Hyg Umweltmed** 1989 May;188(1–2):47–65 (Eng. Abstr.) (Ger)

[Ground water improvement in the Ruhr—then and now] Schmidt WD. **Zentralbl Hyg Umweltmed** 1989 May; 188(1–2):1–34 (Eng. Abstr.) (Ger)

[First sign of isolation of filamentous bacteria in a network for the distribution of potable water] Aulicino FA, et al. **Boll Soc Ital Biol Sper** 1988 Jan;64(1):41–6 (Eng. Abstr.) (Ita)

[A waterborne outbreak of typhoid fever associated with a small drinking water supply system in Fuji city] Nishina T, et al. **Kansenshogaku Zasshi** 1989 Mar;63(3):240–7 (Eng. Abstr.) (Jpn)

[Presence of Salmonella in surface water reservoirs in Cuba] Estruch L, et al. **Gig Sanit** 1989 Jan;(1):58–61 (Rus)

[Enterobacteriaceae infections among the population working in irrigated agricultural areas] Iarovol PI, et al. **Gig Sanit** 1988 Aug;(8):67–8 (Rus)

[A method for assessing the sanitary status of the area and water supply of a troop unit] Konyshev IS, et al. **Voen Med Zh** 1988 Nov;(11):38–40 (Rus)

[Carcinomas of internal organs and their relationship to arsenical drinking water in the Republic of Argentina] Tello EE. **Med Cutan Ibero Lat Am** 1988;16(6):497–501 (Eng. Abstr.) (Spa)

[Drinking water and garbage: customs and beliefs among schoolchildren of a marginal population] Ferrarini SO, et al. **Salud Publica Mex** 1989 May–Jun;31(3):292–8 (Eng. Abstr.) (Spa)

[The hypothesis that copper in water is hazardous for health is insufficiently documented] Elinder CG. **Lakartidningen** 1989 Aug 9;86(32–33):2654–5 (Swe)

ANALYSIS

Determination of fluoride in drinking water and sea water by aluminium monofluoride molecular absorption spectrometry using an electrothermal graphite furnace. Gomez Gomez M, et al. **Analyst** 1988 Jul;113(7):1109–12

Different forms of mineral nitrogen in drinking water and the Balkan nephropathy. Radovanović Z, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):813–5

Possible health effects of high manganese concentration in drinking water. Kondakis XG, et al. **Arch Environ Health** 1989 May–Jun;44(3):175–8

The relative distribution of fluoride in erupted and unerupted enamel of human third molars from a low fluoride area. Grobler SR, et al. **Arch Oral Biol** 1988;33(9):627–30

Dental caries and fluorosis in children from high and low fluoride areas of Morocco. Haikel Y, et al. **ASDC J Dent Child** 1989 Sep–Oct;56(5):378–81

Gas chromatography/mass spectrometry study of mixed haloacetic acids expected to be found in chlorinated drinking water. Ireland JC, et al. **Biomed Environ Mass Spectrom** 1988 Dec;17(6):483–6

Pesticide residues in drinking water in the North Coast region of New South Wales, Australia, 1986–87. Ang C, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):595–602

Results of a short-term toxicity study for three organic chemicals found in Niagara River drinking water. Komsta E, et al. **Bull Environ Contam Toxicol** 1988 Oct; 41(4):515–22

Evaluation of the oral toxicity of uranium in a 4-week drinking-water study in rats. Ortega A, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):935–41

Determinants of drinking water quality in rural Nicaragua. Sandiford P, et al. **Epidemiol Infect** 1989 Jun;102(3):429–38

On the drinking water situation on the Cape Verde Islands (Islands of Santiago). Buchrieser V, et al. **Geogr Med** 1988; Suppl 1:33–44

Problems related to the treatment of drinking water in tropical climates. Mascher F, et al. **Geogr Med** 1988;Suppl 1:81–6

Simultaneous determination of 224Ra, 226Ra and 228Ra in large volumes of well waters. Jiang HX, et al. **Health Phys** 1989 Jul;57(1):167–8

An alternative method for Ra determinations in water. Loyd DH, et al. **Health Phys** 1989 Jul;57(1):71–7

Fluctuation of fluoride concentrations in drinking waters: a collaborative study. Larsen MJ, et al. **Int Dent J** 1989 Jun; 39(2):140–6

On the presence and identification of organic substances in drinking water and mineral waters. Lapucci PL, et al. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:39–44

You and your drinking water: health implications for the use of cation exchange water softeners. Das G. **J Clin Pharmacol** 1988 Aug;28(8):683–90

Geographical relation between Alzheimer's disease and aluminum in drinking water. Martyn CN, et al. **Lancet** 1989 Jan 14;1(8629):59–62

Ames mutagenicity and concentration of the strong mutagen 3-chloro-4-(dichloromethyl)-5-hydroxy-2(5H)-furanone and of its geometric isomer E-2-chloro-3-(dichloromethyl)-4-oxo-butenoic acid in chlorine-treated tap waters. Kronberg L, et al. **Mutat Res** 1988 Oct;206(2):177–82

Genotoxic activity of organic chemicals in drinking water. Meier JR. **Mutat Res** 1988 Nov;196(3):211–45 (173 ref.)

The presence-absence coliform test for monitoring drinking water quality. Rice EW, et al. **Public Health Rep** 1989 Jan–Feb;104(1):54–8

Malignant neoplasms among residents who drank well water contaminated by arsenic from a king's yellow factory. Tsuda T, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20; 11 Suppl:289–301

Mutagenic activity and presence of the strong mutagen 3-chloro-4-(dichloromethyl)-5-hydroxy-2-(5H)-furanone (MX) in chlorinated raw and drinking waters in The Netherlands. Backlund P, et al. **Sci Total Environ** 1989 Aug; 84:273–82

Total selenium concentration in tap and bottled drinking water and coastal waters of Greece [published erratum appears in Sci Total Environ 1989 Feb;79(1):103] Bratakos MS, et al. **Sci Total Environ** 1988 Sep 15;76(1):49–54

Aluminium and fluoride in the water supply and their removal for haemodialysis. Cameron AP, et al. **Sci Total Environ** 1988 Sep 15;76(1):19–28

Speciation of ionic alkyllead in potable water and soil. Chakraborti D, et al. **Sci Total Environ** 1989 Aug;84:249–57

Geotoxicology of multiple sclerosis: the Henribourg, Saskatchewan, Cluster Focus. I. The water. Irvine DG, et al. **Sci Total Environ** 1989 Aug;84:45–59

Mutagenic activity in drinking water prepared from groundwater: a survey of ten cities in The Netherlands. Kool HJ, et al. **Sci Total Environ** 1988 Nov 1;77(1):51–60

Chemistry of mutagenic by-products of water chlorination. Kronberg L, et al. **Sci Total Environ** 1989 Jun;81–82:219–30

Method for evaluating mutagenicity of water. II. Conditions for applying new sample preparation method to the Ames test. Urano K, et al. **Sci Total Environ** 1988 Aug 1;74:191–8

A defluoridator for individual households. Phantumvanit P, et al. **World Health Forum** 1988;9(4):555–8

[Effects on the extremities' micro-circulation—Raynaud's disease caused by drinking high arsenic well water] Hu Y. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 May; 22(3):149–51 (Eng. Abstr.) (Chi)

[The study of potable water quality standard of beryllium] Hu ZN. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov; 22(6):335–7 (Eng. Abstr.) (Chi)

[Chlorination of piped water supplies in large cities of China] Jin JX, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan;23(1):1–4 (Eng. Abstr.) (Chi)

[Iodine deficiency in ruminants. 1. The iodine content of feed, plants and drinking water] Groppel B, et al. **Arch Tierernahr** 1989 Jan–Feb;39(1–2):211–20 (Eng. Abstr.) (Ger)

[Contamination of drinking water with atrazine, simazine and nitrate in the Rastatt, Baden-Baden and Bühl areas] Ziegler R. **Off Gesundheitswes** 1989 Feb;51(2):63–6 (Eng. Abstr.) (Ger)

[The behavior of selected pesticides in groundwater and drinking water areas] Frimmel F, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:481–500; discussion 501–10 (Ger)

[Herbicides in untreated and drinking water of a water supply enterprise—analysis and results] Kötter K, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:457–80; discussion 501–10 (Ger)

[Pesticide contamination in groundwater and drinking water—a review of Baden-Württemberg] Roth M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:365–73; discussion 387–95 (Ger)

[Recognition of the water content of pesticides in water plants in West Germany] Schmitz M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:443–56; discussion 501–10 (Ger)

[The development of detection methods for pesticide groups—experiences from a water plant laboratory] Werner G. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:217–26; discussion 227–38 (Ger)

[Empirical modeling of interference effects with flame photometric potassium and sodium determination in water analysis] Einax J, et al. **Z Gesamte Hyg** 1989 Apr; 35(4):211–4 (Eng. Abstr.) (Ger)

[Endemic struma and its relation to various drinking water factors in 4 communities of the Suhl district] Sauerbrey G, et al. **Z Gesamte Inn Med** 1989 May 1;44(9):267–70 (Eng. Abstr.) (Ger)

[Hygienic conditions of some springs near Rome] Mancini L, et al. **Boll Soc Ital Biol Sper** 1988 Jan;64(1):25–32 (Eng. Abstr.) (Ita)

[Fluoride in the drinking water in the Province of Bari] De Vito D, et al. **Minerva Stomatol** 1988 Jun;37(6):489–90 (Eng. Abstr.) (Ita)

[Use of agricultural chemicals in greenhouse cultivation: problems of pollution in the soil and superficial strata. 3. Further information on the presence of organochlorine pesticides and heavy metals in the water table of Marsala] Oliveri R, et al. **Nuovi Ann Ig Microbiol** 1988 Nov–Dec; 39(6):651–8 (Eng. Abstr.) (Ita)

[Effect of local use of fluorine preparations on selected parameters of the masticatory system of schoolchildren under conditions of optimal and trace levels of this element in tap water] Wojtarowicz R. **Ann Acad Med Stetin** 1988; 34:87–102 (Eng. Abstr.) (Pol)

[Ecologo-physiologic aspects of the occurrence of arterial hypertension in Leningrad (facts and hypotheses)] Churina SK. **Fiziol Zh SSSR** 1988 Nov;74(11):1615–21 (Eng. Abstr.) (Rus)

[The role of sanitary and bacteriologic examination of water in the prevention of acute intestinal infections in the Estonian S.S.R] Birk KF. **Gig Sanit** 1989 Jan;(1):19–21 (Eng. Abstr.) (Rus)

[Hygienic aspects of evaluating water quality by microbiological indicators] Daubner I, et al. **Gig Sanit** 1989 Jan;(1):56–8 (Rus)

[Hygienic aspects of Campylobacter contamination of water reservoirs] Dorodnikov AI. **Gig Sanit** 1988 Aug;(8):59–62 (41 ref.) (Rus)

[Effect of the extent of testing and the degree of contamination on the isolation of Salmonella from water] Stelzer W, et al. **Gig Sanit** 1989 Jan;(1):61–3 (Rus)

[Identification of trihalomethanes in drinking water and assessment of their toxicity, mutagenicity and carcinogenicity] Khudolei VV, et al. **Vopr Onkol** 1989; 35(7):837–42 (Eng. Abstr.) (Rus)

[Correlation of the risk of gastric cancer in the province of Soria and the nitrate content of drinking water] Sanz Anquela JM, et al. **Rev Esp Enferm Apar Dig** 1989 Jun; 75(6 Pt 1):561–5 (Eng. Abstr.) (Spa)

[Quality of potable water and incidence of gastroenteritis in 2 cities in the state of Sonora, Mexico] Gutiérrez Avila H, et al. **Salud Publica Mex** 1989 May–Jun;31(3):299–304 (Eng. Abstr.) (Spa)

[Removal of arsenic from water for human consumption in homes in rural communities in the Comarca Lagunera, Mexico] Gutiérrez-Avila H, et al. **Salud Publica Mex** 1989 May–Jun;31(3):305–13 (Eng. Abstr.) (Spa)

HISTORY

[Results of health research on the drinking water supply in relation to extreme conditions] Loscher J. **Z Gesamte Hyg** 1989 Apr;35(4):193–5 (Eng. Abstr.) (Ger)

LEGISLATION & JURISPRUDENCE

[Limit values in drinking water] Hässelbarth U. **Schriftenr Ver Wasser Boden Lufthyg** 1988;76:41–9 (14 ref.) (Ger)

[The granting of permission for exceptions to section 4 of the drinking water ordinance concerning pesticide contamination] Hässelbarth U, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:601–6; discussion 637–51 (Ger)

[Experiences with the detection of E. coli and coliform bacteria with reference to the drinking water regulation of 1986] Hübner I, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Feb; 187(3):209–5 (Eng. Abstr.) (Ger)

STANDARDS

Drinking water source, diarrheal morbidity, and child growth in villages with both traditional and improved water supplies in rural Lesotho, southern Africa. Esrey SA, et al. **Am J Public Health** 1988 Nov;78(11):1451–5

Water supply and sanitation (WS&S) and the quality of life [editorial] Koch-Weser D. **Am J Public Health** 1988 Nov; 78(11):1411–2

The value of water supply and sanitation in development: an assessment. Okun DA. **Am J Public Health** 1988 Nov; 78(11):1463–7

Comparison of bacterial indicators and sampling programs for drinking water systems. Collin JF, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2073–7

National field evaluation of a defined substrate method for the simultaneous detection of total coliforms and Escherichia coli from drinking water: comparison with presence-absence techniques. Edberg SC, et al. **Appl Environ Microbiol** 1989 Apr;55(4):1003–8

Bacterial contamination of hemodialysis center water and dialysate: are current assays adequate? Harding GB, et al. **Artif Organs** 1989 Apr;13(2):155–9

Drinking-water improvement in the Americas with mixed oxidant gases generated on-site for disinfection (MOGGOD). Reiff FM. **Bull Pan Am Health Organ** 1988; 22(4):394–415

Can the case-control method be used to assess the impact of water supply and sanitation on diarrhoea? A study in the Philippines. Baltazar J, et al. **Bull WHO** 1988; 66(5):627–35

Estimating the burden of illness in an Ontario community with untreated drinking water and sewage disposal problems. Chambers LW, et al. **Can J Public Health** 1989 Mar–Apr;80(2):142–8

Water quality control trials: statistical tables for direct comparison between membrane filtration bacterial counts and the multiple tube method with a description of the bacteriological method. Tillett HE, et al.

Epidemiol Infect 1988 Oct;101(2):361–6
Bacteriological quality of rural potable water. Anand SK, et al. **Indian J Med Sci** 1988 Sep;42(9):205–8
Pollution and sanitary quality of a stretch of Hooghly river in relation to human use. Sarkar JP, et al. **Indian J Pathol Microbiol** 1988 Jul;31(3):174–7
Bacterial species detected in some bottled mineral waters sold in Italy. Macerata UM, et al. **Int J Clin Pharmacol Res** 1988;8 Suppl 1:31–7
Microbiologic drinking water quality in Israel: standards, monitoring, and treatment. Tulchinsky TH, et al. **Isr J Med Sci** 1988 Nov;24(11):652–9
Bacteriophage tracer experiments in groundwater. Skilton H, et al. **J Appl Bacteriol** 1988 Nov;65(5):387–95
Nosocomial Legionella micdadei pneumonia: 10 years experience and a case–control study. Doebbeling BN, et al. **J Hosp Infect** 1989 Apr;13(3):289–98 (39 ref.)
Endemicity of Legionella pneumophila serogroup 3 in a hospital water supply. Franzin L, et al. **J Hosp Infect** 1989 Apr;13(3):281–8
Monitoring the bacteriological quality of potable waters in hospital. Hunter PR, et al. **J Hosp Infect** 1988 Nov; 12(4):289–94
On the drinking water situation on the Cape Verde Islands (Island of Santiago). Buchrieser V, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):35–43
Urban unfinished business. Cohen A. **J Public Health Policy** 1989 Summer;10(2):214–21
Mr Ridley's sewers [editorial] **Lancet** 1988 Dec 24–31; 2(8626–8627):1463–4
Outbreak of enterically transmitted non–A, non–B hepatitis among schoolchildren [letter] Arankalle VA, et al. **Lancet** 1988 Nov 19;2(8621):1199–200
Aluminium, hot water tanks, and neurobiology [letter] Brenner S. **Lancet** 1989 Apr 8;1(8641):781
Health hazards on tap [letter] King JR, et al. **Lancet** 1989 May 13;1(8646):1080
"Boil the water" [letter] Mayon–White RT, et al. **Lancet** 1989 Jul 22;2(8656):216
The safety of our drinking water: reason for concern but not alarm [editorial] Olson BH. **N Engl J Med** 1989 May 25;320(21):1413–4
Cancer incidence following exposure to drinking water with asbestos leachate. Howe HL, et al. **Public Health Rep** 1989 May–Jun;104(3):251–6
Purification of water for drinking purposes, with special consideration of filtration of micro–organisms. Swarts GT. **R I Med J** 1988 Jul;71(7):279–83
Waiting for the matchmaker: de minimis and drinking water standards [editorial] **Regul Toxicol Pharmacol** 1988 Sep; 8(3):253–6
Is American environmental policy ready for de minimis risks in water? Benbrook CM. **Regul Toxicol Pharmacol** 1988 Sep;8(3):300–7
Drinking water standards and risk assessment. Cotruvo JA. **Regul Toxicol Pharmacol** 1988 Sep;8(3):288–99
Water quality criteria for hexahydro–1,3,5–trinitro–1,3,5–triazine (RDX). Etnier EL. **Regul Toxicol Pharmacol** 1989 Apr;9(2):147–57 (54 ref.)
Research on the health implications of the use of recycled water in South Africa [published erratum appears in S Afr Med J 1989 Aug 5;76(3):126] Hattingh WH, et al. **S Afr Med J** 1989 Jul 1;76(1):7–10 (37 ref.)
Research for ground–water quality management with an emphasis on in situ biorestoration. Hall CW. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:261–71 (6 ref.)
Impact of bleached kraft mill effluents on drinking water quality. Wigilius B, et al. **Sci Total Environ** 1988 Aug 1; 74:75–96
Water supply for pigs [letter] [see comments] Carr J, et al. **Vet Rec** 1989 Feb 25;124(8):204. **Comment in:** Vet Rec 1989 Apr 1;124(13):354
Schistosomiasis can be prevented. Jordan P. **World Health Forum** 1988;9(1):104–6
Viral contamination of some drinking waters in Romania. Nestor I, et al. **Z Gesamte Hyg** 1988 Sep;34(9):490–2
Determination of the virus load of running waters. Walter R, et al. **Z Gesamte Hyg** 1988 Sep;34(9):495–6
Studies of the bacteriological water quality for the intakes of different water treatment plants in greater Cairo. el–Zanfaly HT, et al. **Zentralbl Hyg Umweltmed** 1989 Jun; 188(3–4):303–10
[Application of solar disinfection to drinking water in tropical regions] De Lorenzi G, et al. **Boll Soc Pathol Exot Filiales** 1989;82(2):255–9 (Eng. Abstr.) (Fre)
[Virologic research on the quality of 2 sources of drinking water from zone "I"] Cotor F, et al. **Virologie** 1989 Jan–Mar;40(1):5–10 (Eng. Abstr.) (Fre)
[Ability to remove pesticides in the production of dialysis water (1)] Becker FF, et al. **Biomed Tech (Berlin)** 1989 Jun;34(6):139–42 (Eng. Abstr.) (Ger)
[Experiences with drinking water ring trials and consequences for assessment and control of drinking and bathing water] Attenberger J, et al. **Off Gesundheitswes** 1989 Jul;51(7):362–5 (Eng. Abstr.) (Ger)
[Computer–assisted control of a public health inventory] Beckmann W, et al. **Off Gesundheitswes** 1989 Apr; 51(4):188–91 (Eng. Abstr.) (Ger)
[The public health significance of drinking water constituents] Borneff J. **Off Gesundheitswes** 1988 Aug–Sep; 50(8–9):445–50 (Eng. Abstr.) (Ger)
[Behavior of some pathogenic and other microorganisms in ground water with reference to delineation of water protection zones] Filip Z. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):427–30 (Eng. Abstr.) (Ger)
[Treatment of water from flowing streams] Haberer K. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):435–44 (Eng. Abstr.) (Ger)
[Determination of colony count in accordance with the drinking water regulation] Sacré C, et al. **Off Gesundheitswes** 1988 Jul;50(7):367–71 (Eng. Abstr.) (Ger)
[Simplified monitoring of the drinking water supply using electronic data processing] Schmälzle E, et al. **Off Gesundheitswes** 1989 Mar;51(3):145–6 (Eng. Abstr.) (Ger)
[Microbial contamination of drinking water by a polyamide feedpipe] Schoenen D, et al. **Off Gesundheitswes** 1989 Jun; 51(6):296–8 (Eng. Abstr.) (Ger)
[Toxicologic aspects of the estimation of pesticide residues in drinking water] Dieter HH. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:607–35; discussion 637–51 (33 ref.) (Ger)
[Comparison of a 1–step and 2–step procedure with reference to virus detection in surface waters] Dürkop J, et al. **Z Gesamte Hyg** 1988 Sep;34(9):527–9 (Eng. Abstr.) (Ger)
[Assesment of virus contamination in rivers of a drinking water reservoir and effects on the water quality of the reservoir] Gunkel K, et al. **Z Gesamte Hyg** 1988 Sep; 34(9):529–31 (Eng. Abstr.) (Ger)
[Virus contamination of a river in the Potsdam district] Härtel J, et al. **Z Gesamte Hyg** 1988 Sep;34(9):492–4 (Eng. Abstr.) (Ger)
[Virologic studies of a drinking water reservoir] Mehlhorn G, et al. **Z Gesamte Hyg** 1988 Sep;34(9):511–2 (Eng. Abstr.) (Ger)
[Possibilities for purification of refuse seepage water by sand containing humic substances] Weise G, et al. **Z Gesamte Hyg** 1989 Apr;35(4):209–10 (Eng. Abstr.) (Ger)
[The determination of the herbicide glyphosate and its chief metabolite aminomethylphosphonic acid (AMPA) in drinking water with the aid of HPLC] Gauch R, et al. **Z Lebensm Unters Forsch** 1989 Jan;188(1):36–8 (Eng. Abstr.) (Ger)
[Preparation of the purest water for laboratory purposes from reverse osmosis plants] Rehpenning W. **Z Med Lab Diagn** 1988;29(8):463–4 (Ger)
[Bacterial regrowth in drinking water. I. The upgrading of drinking water] Jaeggi NE, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):311–25 (Eng. Abstr.) (Ger)
[The mutagenicity of organic microcontamination in the environment. II. The mutagenicity of volatile organic halogens in the Salmonella microsome test (Ames Test) with regard to the contamination of groundwater and drinking water] Mersch–Sundermann V. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Feb; 187(3):230–43 (Eng. Abstr.) (Ger)
[The hygiene of drinking water after purification in practices and households] Sonntag HG. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4–6):324–36 (Eng. Abstr.) (Ger)
[Enterobacteria as quality criteria in unprocessed, drinking and swimming pool water. Comparative study of the occurrence of enterobacteria, Escherichia coli, coliforms, colony count, fecal streptococci and Pseudomonas aeruginosa] Wiedenmann A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Dec; 187(2):91–106 (Eng. Abstr.) (Ger)
[The Presence of bacteria of the genus Yersinia in water from private wells] Maleszewska J, et al. **Rocz Panstw Zakl Hig** 1988;39(5):396–403 (Eng. Abstr.) (Pol)
[The health significance of the presence of viruses in water for drinking and recreational use] Nestor I. **Rev Ig [Bacteriol]** 1988 Oct–Dec;33(4):289–306 (158 ref.) (Eng. Abstr.) (Rum)
[Scientific substantiation of the maximum permissible level of O–ethyl–O–phenylchlorthiophosphate in reservoir water] Chura DA, et al. **Gig Sanit** 1988 Sep;(9):67–9 (Rus)
[Experimental substantiation of maximum permissible levels of DPF–1 and DPF–1N in reservoir water] Dergacheva TS, et al. **Gig Sanit** 1988 Jun;(6):77–8 (Rus)
[Experimental substantiation of the maximum permissible level of methylene chloride in sanitary and household water reservoirs] Deviatka DG, et al. **Gig Sanit** 1988 Jun;(6):78–80 (Rus)
[Hygienic standardization of isobutyronitrile in reservoir water] Fomochkin IP, et al. **Gig Sanit** 1988 Oct;(10):77–8 (Rus)
[Criteria of epidemiologic safety of hot water] Gasilina MM, et al. **Gig Sanit** 1988 Aug;(8):92–3 (Rus)
[Hygienic standardization of Cellosolve levels in reservoir water] Iatsyna OV, et al. **Gig Sanit** 1988 Oct;(10):78–9 (Rus)
[Substantiation of hygienic standardization of ofunak in reservoir water] Kotelenets AI, et al. **Gig Sanit** 1988 Nov; (11):66–8 (Rus)
[Hygienic standardization of new acrylic copolymers in reservoir water] Kudrin LV, et al. **Gig Sanit** 1988 Sep; (9):10–4 (Eng. Abstr.) (Rus)
[Experience with the hygienic control of an open hot water supply system] Lysyi AE, et al. **Gig Sanit** 1988 Sep;(9):60–2 (Rus)
[The role of pesticides in hygienic substantiation of the Danube– Dnieper water supply complex] Medovar AM, et al. **Gig Sanit** 1989 May;(5):73–4 (Rus)
[Sanitary–hygienic indicators of water supply and the incidence of intestinal infection among the population] Moskvitina EA, et al. **Gig Sanit** 1988 Oct;(10):15–7 (Eng. Abstr.) (Rus)
[Hygienic substantiation of the maximum permissible level of ambush in reservoir water] Musamukhamedov SR. **Gig Sanit** 1988 Sep;(9):69–70 (Rus)
[Hygienic evaluation of the water supply in the North] Novikov IuV, et al. **Gig Sanit** 1988 Nov;(11):8–11 (Eng. Abstr.) (Rus)
[Evaluation of water quality in passenger trains based on bacteriologic indicators] Okhremchuk TN, et al. **Gig Sanit** 1988 Aug;(8):69–70 (Rus)
[Hygienic substantiation of the provisional permissible level of N,N–bis(trimethyl)–2,5–dimethyl–N–xyliilendiammonium chloride in reservoir water] Parakho NM, et al. **Gig Sanit** 1989 May;(5):79–80 (Rus)
[Sanitary control of the quality of distilled water] Pochkin IuN, et al. **Gig Sanit** 1989 May;(5):69 (Rus)
[The system of automated processing of information regarding the sanitary and hygienic status of the water supply] Romanenko VV, et al. **Gig Sanit** 1989 Feb;(2):69–70 (Rus)
[Effectiveness of the methods of purification and disinfection of virus–contaminated water] Rusanova NA, et al. **Gig Sanit** 1988 Aug;(8):13–5 (Eng. Abstr.) (Rus)
[Substantiation of hygienic standards of monoazo dyes in water reservoirs] Shafirov IuB, et al. **Gig Sanit** 1988 Sep; (9):71–2 (Rus)
[Complex hygienic standardization of the herbicide fenagon in reservoir water and food products] Shantor VF, et al. **Gig Sanit** 1988 Oct;(10):10–2 (Eng. Abstr.) (Rus)
[Current methods of evaluating the degree of potential epidemiologic hazard of the drinking–water supply] Talaeva IuG, et al. **Gig Sanit** 1988 Aug;(8):8–11 (Eng. Abstr.) (Rus)
[Hygienic substantiation of the maximum permissible level of mono–methyldichlorothiophosphate in reservoir water] Tomkiv VM. **Gig Sanit** 1989 May;(5):74–6 (Rus)
[Hygienic substantiation of the maximum permissible level of phosphorus thiotrichloride in reservoir water] Tomkiv VM. **Gig Sanit** 1988 Nov;(11):68–70 (Rus)
[Microflora of contaminated water reservoirs] Vinogradova LA. **Gig Sanit** 1988 Dec;(12):13–6 (Eng. Abstr.) (Rus)
[Lowering the level of residual aluminum in drinking water] Zapol'skii AK, et al. **Gig Sanit** 1989 Apr;(4):4–6 (Rus)
[Hygienic characteristics of a new vitreous enamel used in drinking water supply systems] Zin KCh. **Gig Sanit** 1988 Nov;(11):11–3 (Eng. Abstr.) (Rus)
[Effectiveness of urine–preserving agents used in water reclamation systems] Lebedeva TE, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):70–4 (Eng. Abstr.) (Rus)
[Purification of water by eliminating phenols using hydrogen peroxide with iron–containing catalysts] Vasilenko II, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):76–9 (Rus)
[Possible effect of D–51 A rubber on drinking water quality] Zin KCh. **Vrach Delo** 1988 Jul;(7):106–7 (Eng. Abstr.) (Rus)

WATERHOUSE–FRIDERICHSEN SYNDROME see under **MENINGOCOCCAL INFECTIONS**

WAXES

see related
CERUMEN
INLAY CASTING WAX

Sputum wax–worms after plombage. Wood JB, et al. **Br J Dis Chest** 1988 Jul;82(3):321–3
Wax models of the skin. Parish LC, et al. **Int J Dermatol** 1989 May;28(4):230
Prevention of post–operative intra–nasal adhesions (a new material). Eliopoulos PN, et al. **J Laryngol Otol** 1989 Jul; 103(7):664–6
Clinical accuracy of functionally generated interocclusal registration waxes. Eeckman J, et al. **J Prosthet Dent** 1988 Nov;60(5):549–52

ADMINISTRATION & DOSAGE

Evaluation of jojoba oil as a low–energy fat. 1. A 4–week feeding study in rats. Verschuren PM. **Food Chem Toxicol** 1989 Jan;27(1):35–44
Evaluation of jojoba oil as a low–energy fat. 2. Intestinal transit time, stomach emptying and digestibility in short–term feeding studies in rats. Verschuren PM, et al. **Food Chem Toxicol** 1989 Jan;27(1):45–8

ADVERSE EFFECTS

Urinary hippuric acid excretion after use of spray ski–wax and remover. Sugita M, et al. **Tokai J Exp Clin Med** 1987

Nov;12(4):215–22

ANALYSIS

Oxygenated compounds in beeswax: identification and possible significance. Blum MS, et al.
Comp Biochem Physiol [B] 1988;91(3):581–3

Distribution of phthiocerol diester, phenolic mycosides and related compounds in mycobacteria. Daffé M, et al.
J Gen Microbiol 1988 Jul;134 (Pt 7):2049–55

METABOLISM

Diffuse storage of vegetal wax hydrocarbons of dietary origin. Pathologic and chemical findings in a case. Duboucher C, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):423–8

SECRETION

Wax lipid secretion and ultrastructural development in the egg-waxing (Gene's) organ in ixodid ticks. Booth TF.
Tissue Cell 1989;21(1):113–22

THERAPEUTIC USE

[Effectiveness of ozokerite, balneo- and physiotherapy in the combined treatment of diabetes mellitus patients (the late results)] Zavadiak MI, et al.
Vopr Kurortol Fizioter Lech Fiz Kult 1988 Jul–Aug;(4):55–6 (Eng. Abstr.) (Rus)

[Ozokerite treatment (a review of the literature)] Stetsenko GI. **Vrach Delo** 1988 Oct;(10):91–5 (35 ref.) (Rus)

WEANING

Ultrastructural changes associated with weaning in the mandibular condyle of the rat. Copray JC, et al.
Acta Anat (Basel) 1989;134(1):35–47

Influence of diet on the development of antral gastrin-like immunoreactivity in the stomach of rats. Okahata H, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):374–8

Epidemiological studies of piglet diarrhoea in intensively managed Danish sow herds. II. Post-weaning diarrhoea. Svensmark B, et al. **Acta Vet Scand** 1989;30(1):55–62

Epidemiological studies of piglet diarrhoea in intensively managed Danish sow herds. I. Pre-weaning diarrhoea. Svensmark B, et al. **Acta Vet Scand** 1989;30(1):43–53

Effects of weaning on diarrhea caused by enterotoxigenic Escherichia coli in three-week-old pigs. Sarmiento JI, et al. **Am J Vet Res** 1988 Dec;49(12):2030–3

Weaning and child health. Wharton B. **Annu Rev Nutr** 1989; 9:377–94 (63 ref.)

Vegetarian weaning. Nutrition Standing Committee of the British Paediatric Association. **Arch Dis Child** 1988 Oct; 63(10):1286–92

Respective influences of age and weaning on skeletal and visceral muscle protein synthesis in the lamb. Attaix D, et al. **Biochem J** 1988 Dec 15;256(3):791–5

Effects of weaning and naloxone on luteinizing hormone secretion in postpartum ewes. Newton GR, et al.
Biol Reprod 1988 Oct;39(3):532–5

Relative importance of experience, social facilitation, and availability of milk in weaning of rats. Lichtman AH, et al. **Dev Psychobiol** 1989 May;22(4):347–56

The quantitative relationship between nutritional effects on preweaning growth and behavioral development in mice. Wainwright P, et al. **Dev Psychobiol** 1989 Mar;22(2):183–95

Influence of follicular ablation during lactation on postweaning interval to estrus, ovulation rate, and endocrine function in sows. Cox NM, et al.
Domest Anim Endocrinol 1987 Apr;4(2):87–93

Effects of progesterone and weaning on LH and FSH responses to naloxone in postpartum beef cows. Cross JC, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):111–22

Haemoglobin-fortified cereal: an alternative weaning food with high iron bioavailability. Calvo E, et al.
Eur J Clin Nutr 1989 Apr;43(4):237–43 (27 ref.)

Nutritional status of infants aged 4 to 18 months on macrobiotic diets and matched omnivorous control infants: a population-based mixed-longitudinal study. I. Weaning pattern, energy and nutrient intake. Dagnelie PC, et al.
Eur J Clin Nutr 1989 May;43(5):311–23

Maturation of the rat small intestine at weaning: changes in epithelial cell kinetics, bacterial flora, and mucosal immune activity. Cummins AG, et al. **Gut** 1988 Dec;29(12):1672–9

Use of embryo transfer to induce twinning in beef cattle: embryo survival rate, gestation length, birth weight and weaning weight of calves. Davis ME, et al. **J Anim Sci** 1989 Feb;67(2):301–10

Effect of dietary soybean meal on the microscopic anatomy of the small intestine in the early-weaned pig. Dunsford BR, et al. **J Anim Sci** 1989 Jul;67(7):1855–63

Recognition of food by individual, food-naive, weaning rats (Rattus norvegicus). Melcer T, et al. **J Comp Psychol** 1989 Sep;103(3):243–51

Plasma concentrations of insulin-like growth factor-I and insulin in the infant calf: ontogeny and influence of altered nutrition. Breier BH, et al. **J Endocrinol** 1988 Oct; 119(1):43–50

Influences of age and weaning on in vivo pancreatic protein synthesis in the lamb. Attaix D, et al. **J Nutr** 1989 Mar; 119(3):463–70

Background (spontaneous) immunoglobulin production in the murine small intestine before and after weaning. van der Heijden PJ, et al. **J Reprod Immunol** 1989 Jul;15(3):217–27

Weaning patterns of first-time mothers. Williams KM, et al. **MCN** 1989 May–Jun;14(3):188–92

Changes in venous size in mouse mammary glands from virgin through pregnancy, lactation, and post-weaning. Iwamatsu S, et al. **Nippon Juigaku Zasshi** 1988 Dec; 50(6):1262–3

Formula with reduced protein content: effects on growth and protein metabolism during weaning. Axelsson IE, et al. **Pediatr Res** 1988 Sep;24(3):297–301

Coprophagy in young laboratory rat. Nováková V, et al.
Physiol Bohemoslov 1989;38(1):21–8

Effect of age on absorption and immune responses to weaning or introduction of novel dietary antigens in pigs. Wilson AD, et al. **Res Vet Sci** 1989 Mar;46(2):180–6

A competition to promote weaning foods [letter] Penny M, et al. **World Health Forum** 1989;10(1):99–100

[The performance of weaned piglets after a five week weaning period in relation to the weaning weight, the feed composition and the use of an effective ergotropic] Schöne F, et al. **Arch Tierernahr** 1988 Oct;38(10):861–77 (Eng. Abstr.) (Ger)

[Hematochemical parameters in calves before, during and after weaning to a regular diet] Bini PP, et al.
Boll Soc Ital Biol Sper 1989 Jan;65(1):61–8 (Eng. Abstr.) (Ita)

[Reasons for weaning and introduction of bottle feeding: an alternative approach to its study] Rea MF, et al.
Rev Saude Publica 1988 Jun;22(3):184–91 (Eng. Abstr.) (Por)

[Production of volatile fatty acids in the rumen of calves during dietary-microbial stimulation and early weaning] Bomba A, et al. **Vet Med (Praha)** 1989 Mar;34(3):141–8 (Eng. Abstr.) (Slo)

[What the pediatrician should know about introducing infants to solid foods] Vega-Franco L.
Bol Med Hosp Infant Mex 1989 Feb;46(2):133–8 (Eng. Abstr.) (Spa)

WEATHER

Injuries from single-vehicle crashes and snow depth. Brorsson B, et al. **Accid Anal Prev** 1988 Oct;20(5):367–77

Trajectory analysis and bluetongue virus serotype 2 in Florida 1982. Sellers RF, et al. **Can J Vet Res** 1989 Jan; 53(1):100–2

Tinea versicolor of the face in black children in a temperate region. Pontasch MJ, et al. **Cutis** 1989 Jan;43(1):81–4

Modeling estimates of the effect of acid rain on background radiation dose. Sheppard SC, et al.
Environ Health Perspect 1988 Jun;78:197–206

Cardiorespiratory strain during walking in snow with boots of different weights. Smolander J, et al. **Ergonomics** 1989 Jan;32(1):3–13

Monitoring of 131I in milk and rain water in Japan following the reactor accident at Chernobyl and estimates of human thyroidal dose equivalents. Nishizawa K, et al.
Health Phys 1988 Nov;55(5):773–7

"Föhn illness" and human biometeorology in the chinook area of Canada. Fletcher RJ. **Int J Biometeorol** 1988 Sep; 32(3):168–75 (24 ref.)

Weather and occurrence of eclampsia. Alderman BW, et al.
Int J Epidemiol 1988 Sep;17(3):582–8

The importance of autumn rainfall and sentinel flock location to understanding the epidemiology of St. Louis encephalitis virus in Indian River County, Florida. Day JF, et al.
J Am Mosq Control Assoc 1985 Sep;1(3):305–9

Effects of weathering on fabrics treated with permethrin for protection against mosquitoes. Gupta RK, et al.
J Am Mosq Control Assoc 1989 Jun;5(2):176–9

Effects of diet and climate on growing horses. Cymbaluk NF, et al. **J Anim Sci** 1989 Jan;67(1):48–59

Effect of weather conditions on acute laryngotracheitis. Fielder CP. **J Laryngol Otol** 1989 Feb;103(2):187–90

Injuries to the hand inflicted by rotary snowcutters. Almdahl SM, et al. **J Trauma** 1989 Feb;29(2):227–8

Snow blower injuries to the hand [editorial] Boswick JA Jr. **J Trauma** 1989 Feb;29(2):267

Snowblower injuries to the hand. Millea TP, et al.
J Trauma 1989 Feb;29(2):229–33

Carcinogenic tryptophan pyrolysis products in airborne particles and rain water. Manabe S, et al. **Mutat Res** 1989 Aug;226(4):215–21

Atrial natriuretic factor [letter] Tait MJ. **N Z Med J** 1989 Apr 12;102(865):171

Isolation of influenza virus in Thailand in the rainy seasons of 1986, 1987 and 1988. Takeuchi Y, et al.
Nippon Ika Daigaku Zasshi 1989 Apr;56(2):201–3

Influence of the weather on ureteral stone colic. Fujita K.
Nippon Jinzo Gakkai Shi 1988 Mar;30(3):297–304

Surveillance for injuries: cluster of finger amputations from snowblowers. Istre GR, et al. **Public Health Rep** 1989 Mar–Apr;104(2):155–7

Snowy roofs—a potential hazard. Eriksson A, et al.
Scand J Soc Med 1988;16(3):179–82

Displacement of Chernobyl fallout in snow layers of temperate Alpine glaciers. Ambach W, et al.
Sci Total Environ 1988 Oct 15;76(2–3):101–7

Accumulation of polycyclic aromatic hydrocarbons (PAHs) in an urban snowpack. Boom A, et al.
Sci Total Environ 1988 Aug 1;74:133–48

Sources and storm loading variations of metal species in a gullypot catchment. Morrison GM, et al.
Sci Total Environ 1989 May 15;80(2–3):267–78

The radioactivity of coloured rain in Thessaloniki, Greece. Papastefanou C, et al. **Sci Total Environ** 1989 May 15; 80(2–3):225–7

Heavy metal concentrations in urban snow as an indicator of air pollution. Sakai H, et al. **Sci Total Environ** 1988 Dec; 77(2–3):163–74

Do weather, day of the week, and address affect the rate of attempted suicide in Hong Kong? Chiu LP.
Soc Psychiatry Psychiatr Epidemiol 1988 Oct;23(4):229–35

Factors influencing rain splash dispersal of infective larvae of Ostertagia ostertagi (Trichostrongylidae) from cow pats to the surroundings. Grønvold J, et al. **Vet Parasitol** 1989 Apr;31(1):57–70

Rain and windchill as factors in the occurrence of pneumonia in sheep. McIlroy SG, et al. **Vet Rec** 1989 Jul 22; 125(4):79–82

Mechanism of death in avalanche victims. Stalsberg H, et al. **Virchows Arch [A]** 1989;414(5):415–22

[Relation between meteorological conditions and eclampsia] Hao YN. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Mar; 23(2):75–8, 126–7 (Eng. Abstr.) (Chi)

[Preliminary study of the relation between epidemic erythermalgia and El Niño] Wang XJ.
Chung Hua I Hsueh Tsa Chih 1988 May;68(5):266–8, 20 (Eng. Abstr.) (Chi)

[Causes of epistaxis in relation to season and weather status] Stopa R, et al. **HNO** 1989 May;37(5):198–202 (Eng. Abstr.) (Ger)

[Effect of various weather parameters on the incidence of inpatient treated children with stenosing laryngotracheitis (pseudocroup)] Schweizer E, et al.
Monatsschr Kinderheilkd 1988 Aug;136(8):453–8 (Eng. Abstr.) (Ger)

[Is there a gestosis weather? Correlation of EPH gestosis with meteorologic conditions] Schaller A, et al.
Z Geburtshilfe Perinatol 1989 May–Jun;193(3):105–14 (Eng. Abstr.) (Ger)

[Correlation of air quality and biometeorologic effects and the incidence of acute respiratory diseases in the Magdeburg district] Neubauer K, et al. **Z Gesamte Hyg** 1988 Dec;34(12):692–3 (Eng. Abstr.) (Ger)

[The incidence of fatal lung emboli with special reference to the underlying disease and the effect of weather] Putzke HP, et al. **Z Gesamte Inn Med** 1989 Feb 15;44(4):106–10 (Eng. Abstr.) (Ger)

[A snow avalanche in Vassdalen. Medical experiences] Rostrup M, et al. **Tidsskr Nor Laegeforen** 1989 Mar 10; 109(7–8):807–13 (Eng. Abstr.) (Nor)

[Survival of pathogenic microorganisms in snow] Vlodavets VV, et al. **Gig Sanit** 1988 Sep;(9):17–9 (Rus)

[Effect of synoptic-meteorologic factors on the course of bronchial asthma in adolescents] Kholopov AP.
Ter Arkh 1989;61(1):81–3 (Eng. Abstr.) (Rus)

[Prevention of meteodestabilization of bronchial asthma in adolescents at a health resort] Kholopov AP. **Ter Arkh** 1989;61(3):31–4 (Rus)

[Epidemic human fascioliasis, Cuba, 1983. I. Climatic characterization] Pérez O, et al. **Rev Cubana Med Trop** 1988 Sep–Dec;40(3):68–81 (Eng. Abstr.) (Spa)

WEAVER MICE see **MICE, NEUROLOGIC MUTANTS**

WEBER-CHRISTIAN DISEASE see **PANNICULITIS, NODULAR NONSUPPURATIVE**

WEBER-FECHNER LAW see **DIFFERENTIAL THRESHOLD**

WECHSLER SCALES

Low IQ samples and WAIS-R factor structure. Atkinson L, et al. **Am J Ment Retard** 1988 Nov;93(3):278–82

An investigation of the validity of the British Ability Scales with respect to the Wechsler Intelligence Scale for Children-Revised and the wide range achievement test-revised on a group of Canadian children. Cook J.
Br J Educ Psychol 1988 Jun;58 (Pt 2):212–6

The neuropsychological significance of a verbal-performance discrepancy with the Wechsler Intelligence Scale for Children-Revised. Batchelor ES, et al. **Int J Neurosci** 1989 Mar;45(1–2):33–9

Simultaneous and successive processes in achievement for learning disabled children. Brooks DA, et al.
Int J Neurosci 1988 Nov;43(1–2):63–7

WISC-R and Vineland Adaptive Behavior Scale scores in autistic children. Freeman BJ, et al.
J Am Acad Child Adolesc Psychiatry 1988 Jul;27(4):428–9

Wechsler Memory Scale: a critical appraisal of the normative studies. D'Elia L, et al. **J Clin Exp Neuropsychol** 1989 Aug; 11(4):551–68 (36 ref.)

WAIS-R test-retest reliability in a normal elderly sample. Snow WG, et al. **J Clin Exp Neuropsychol** 1989 Aug; 11(4):423–8

A comparison of the WAIS and WAIS-R using T-score conversions that correct for age, education, and sex. Thompson LL, et al. **J Clin Exp Neuropsychol** 1989 Aug; 11(4):478–88

Generalizability of WAIS-R factor structure within and between populations. Atkinson L, et al. **J Clin Psychol** 1989 Jan;45(1):124–9

The latent factor structure of the WAIS–R: a factor analysis of individual item responses. Beck NC, et al. **J Clin Psychol** 1989 Mar;45(2):281–93

Pattern analysis of Wechsler Intelligence Scale for children–revised profiles of delinquent boys. Culberton FM, et al. **J Clin Psychol** 1989 Jul;45(4):651–60

Construct validity of the PPVT with neuropsychological, intellectual, and achievement measures. D'Amato RC, et al. **J Clin Psychol** 1988 Nov;44(6):934–9

A comparison of Turkish and Anglo–American normative data on the Wechsler Memory Scale. Gilleard E, et al. **J Clin Psychol** 1989 Jan;45(1):114–7

Learning disability in adults: a comparison of two indices of differential cognitive impairment derived from the Wechsler scales. Lawson JS, et al. **J Clin Psychol** 1989 Jan;45(1):106–14

Differential effects on verbal–performance achievement levels on the WAIS–R as a function of progressive error rate on the Memory for Designs Test (MFD). Mandes E, et al. **J Clin Psychol** 1988 Sep;44(5):795–8

Effects of lesion laterality on the Satz–Mogel WAIS–R short form. Massad PM, et al. **J Clin Psychol** 1988 Nov; 44(6):924–9

The psychometric structure of the Wechsler Memory Scale in comparison to the WAIS–R in a low–IQ clinical population. Oresick RJ, et al. **J Clin Psychol** 1988 Jul; 44(4):549–57

Reliability theory and clinical psychology. Payne RW. **J Clin Psychol** 1989 Mar;45(2):351–2

The equivalence of the WAIS–R and the WISC–R at age 16. Quereshi MY, et al. **J Clin Psychol** 1989 Jul; 45(4):633–41

Assessment of cognitive functioning in poly–substance abusers. Sweeney JA, et al. **J Clin Psychol** 1989 Mar; 45(2):346–51

WISC–R factor structure in a referred pediatric population. Tingstrom DH, et al. **J Clin Psychol** 1988 Sep;44(5):799–802

Prediction of Wechsler Intelligence Scale for Children–Revised Full Scale IQ from the Quick Test of Intelligence and the Test of Nonverbal Intelligence for a referred sample of children and youth. Vance B, et al. **J Clin Psychol** 1988 Sep;44(5):793–4

WAIS–R and MMPI profiles of men who have sexually assaulted children: evidence of limited utility. Hall GC. **J Pers Assess** 1989 Summer;53(2):404–12

Experience–dependent recovery of block design performance in male alcoholics: strategy training versus unstructured practice. Stringer AY, et al. **J Stud Alcohol** 1988 Sep; 49(5):406–11

A prospective WISC–R study in children with epilepsy. Funakoshi A, et al. **Jpn J Psychiatry Neurol** 1988 Sep; 42(3):562–4

The WISC–R and the Woodcock–Johnson Tests of Achievement: correlations for exceptional children. Beck FW, et al. **Percept Mot Skills** 1988 Oct;67(2):587–90

Relationship of scores on PPVT–R and WISC–R with special education children and youth. Candler AC, et al. **Percept Mot Skills** 1986 Apr;62(2):417–8

Referred children's cognitive patterns on the WISC–R. Grossman FM, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1307–11

Wechsler Digit Span subtest: diagnostic usefulness with dyslexic children. Spafford CS. **Percept Mot Skills** 1989 Aug;69(1):115–25

Correlation of scores of maximum security inmates on Wechsler Adult Intelligence Scale—Revised and the Peabody Picture Vocabulary Test—Revised. Carvajal H, et al. **Psychol Rep** 1989 Aug;65(1):268–70

WAIS—R factor structure in a vocational rehabilitation sample: additional support for a third factor in special populations. Fraboni M, et al. **Psychol Rep** 1988 Dec; 63(3):819–22

Comparability of WAIS and WAIS—R scores among mentally retarded adults. Raggio DJ. **Psychol Rep** 1989 Aug;65(1):292–4

Stability of WISC–R scores for a sample of learning disabled children. Schmidt HP, et al. **Psychol Rep** 1989 Feb; 64(1):195–201

Relation of cognitive functioning to daily living skills in a geriatric population. Searight HR, et al. **Psychol Rep** 1989 Apr;64(2):399–404

On the use of the WISC–R supplementary subtests as alternates. Silverstein AB. **Psychol Rep** 1989 Apr; 64(2):580–2

Comparison of nominal recall (standard) and multiple–choice methods for administration of WISC–R information subtest: a preliminary study indicating a learning effect of multiple–choice testing. Weinberg WA, et al. **Psychol Rep** 1989 Apr;64(2):659–65

[Results of the revision of the 1983 Hamburg–Wechsler Intelligence Test for Children in students with severe reading disorders] Gutezeit G. **Z Kinder Jugendpsychiatr** 1989 Jun;17(2):70–8 (Eng. Abstr.) **(Ger)**

[Value of the Wechsler test in the prognosis of aphasia and elaboration of a rehabilitation program] Morosini C, et al. **G Gerontol Suppl** 1967;37:57–77 (Eng. Abstr.) **(Ita)**

[Intellectual efficiency and drug addiction] Fagiani MB, et al. **Minerva Psichiatr** 1989 Apr–Jun;30(2):89–92 (Eng. Abstr.) **(Ita)**

[Changes in the intellectual function in workers exposed to mixtures of organic solvents] Schmidt Camelo EA. **Arch Invest Med (Mex)** 1989 Jan–Mar;20(1):107–12 (Eng. Abstr.) **(Spa)**

WEDENSKY INHIBITION see under **NEURAL CONDUCTION**

WEDGE PRESSURE see **PULMONARY WEDGE PRESSURE**

WEGENER'S GRANULOMATOSIS

Necrotizing vasculitis with granulomatosis. Yevich I. **Int J Dermatol** 1988 Oct;27(8):540–6 (36 ref.)

Wegener's granulomatosis [letter] Mata–Diego L. **J Am Podiatr Med Assoc** 1989 Jan;79(1):39–40

Wegener's granulomatosis. New aspects of the disease course, immunodiagnostic procedures, and stage–adapted treatment. Gross WL. **Sarcoidosis** 1989 Mar;6(1):15–29 (130 ref.)

[Wegener's granulomatosis in elderly subjects. 37 cases] Lê Thi Huong Du, et al. **Presse Med** 1988 Dec 17; 17(45):2379–82 (Eng. Abstr.) **(Fre)**

CLASSIFICATION

[Wegener's granulomatosis: classification and therapy] De Remee RA. **Acta Med Austriaca** 1988;15(3):65–8 (12 ref.) (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Alveolar hemorrhage in Wegener's granulomatosis. Sanchez–Masiques J, et al. **Am J Med Sci** 1989 Jun; 297(6):390–3 (20 ref.)

Capillaritis and pulmonary hemorrhage in Wegener's granulomatosis [letter] Yoshikawa Y, et al. **Am J Surg Pathol** 1989 Jan;13(1):78–9

Wegener's granulomatosis and nasal deformity. Drake–Lee AB, et al. **Br J Clin Pract** 1988 Aug;42(8):348–50

Legionella pneumonia complicating Wegener's granulomatosis. Allen MB, et al. **Chest** 1988 Nov; 94(5):1101–3

Pleural fluid in Wegener's granulomatosis [letter] Gris P, et al. **Chest** 1989 Jul;96(1):224

Wegener's granulomatosis presenting as acute respiratory failure with anti–neutrophil–cytoplasm antibodies. Lenclud C, et al. **Chest** 1989 Aug;96(2):345–7

Thrombocytopenia in a case of Wegener's granulomatosis [letter] Gabrielli GB, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):331–2

Recovery from sensorineural deafness in Wegener's granulomatosis. Clements MR, et al. **J Laryngol Otol** 1989 May;103(5):515–8

Superior sagittal sinus thrombosis in Wegener's granulomatosis [letter] Hammans SR, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):287

Benign recurrent multiple mononeuropathy in Wegener's granulomatosis [letter] Kirker S, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):918

Small intestinal perforation in Wegener's granulomatosis. Tokuda M, et al. **J Rheumatol** 1989 Apr;16(4):547–9

Wegener's granulomatosis (WG) and insulin dependent diabetes mellitus (IDDM). Sugimoto A, et al. **Jpn J Med** 1989 May–Jun;28(3):374–8

Sicca syndrome in patients with Wegener's granulomatosis [letter] Schmidt R, et al. **Lancet** 1989 Apr 22;1(8643):904–5

Dacryocystectomy for the treatment of dacryocystitis patients with Wegener's granulomatosis. Holds JB, et al. **Ophthalmic Surg** 1989 Jun;20(6):443–4

Wegener granulomatosis: prostatic involvement and bladder outlet obstruction. Vaught WW, et al. **Urology** 1989 Jul; 34(1):43–5

[Wegener's granulomatosis. Clinical aspects, nosologic problems. Review of the literature apropos of 30 cases] Le Thi Huong DU, et al. **Ann Med Interne (Paris)** 1988; 139(3):169–82 (109 ref.) (Eng. Abstr.) **(Fre)**

[The need to rapidly start intensive treatment in glomerulonephritis of Wegener's granulomatosis (letter)] Le Thi Huong Du, et al. **Presse Med** 1989 Mar 18; 18(11):588 **(Fre)**

[Wegener's granulomatosis and pregnancy. A case] M'Rad S, et al. **Rev Med Interne** 1989 Jan–Feb;10(1):69–72 (16 ref.) (Eng. Abstr.) **(Fre)**

[Renal involvement in necrotizing angiitis] Ronco P, et al. **Rev Med Interne** 1989 May–Jun;10(3):227–34 **(Fre)**

[The initial acute renal failure and late manifestation of extrarenal symptoms in Wegener's disease] Schirmeister J, et al. **Med Klin** 1989 Mar 15;84(3):170–2 **(Ger)**

[Renal artery aneurysm in Wegener's granulomatosis] Grosser G, et al. **ROFO** 1989 Aug;151(2):167–70 (Eng. Abstr.) **(Ger)**

[Fulminating course of Wegener's granulomatosis associated with gastrointestinal bleeding] Horváth G, et al. **Orv Hetil** 1989 Jul 2;130(27):1441–5 (39 ref.) (Eng. Abstr.) **(Hun)**

[A case of Wegener's granulomatosis with aseptic meningitis] Morita H, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):417–22 (Eng. Abstr.) **(Jpn)**

[A case of Wegener's granulomatosis associated with rheumatism] Morova NA, et al. **Sov Med** 1989;(5):116–7 **(Rus)**

[Wegener's disease with lesions of the larynx and trachea in a child] Tsvetkov EA, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):71–2 **(Rus)**

[Association of cavitated pulmonary nodules and pansinusitis] Martín Nozal ML, et al. **Rev Clin Esp** 1988 Oct; 183(5):265–6 **(Spa)**

DIAGNOSIS

Wegener's granulomatosis presenting as breast abscess [letter] Wilson ME. **Am J Med** 1987 Dec;83(6):1168

A 13–year–old girl with recurrent otitis media, sinusitis, and pulmonary infiltrates [letter] Loria R, et al. **Ann Allergy** 1988 Oct;61(4):319–20

Microscopic polyarteritis: definition and relation to Wegener's granulomatosis. Savage CO. **APMIS Suppl** 1989; 6:8–9

Alpha–methyldopa–induced systemic vasculitis confused with Wegener's granulomatosis [letter] Matteson EL, et al. **Arthritis Rheum** 1989 Mar;32(3):356–7

Presenting features in Wegener's granulomatosis [letter] **BMJ** 1988 Sep 3;297(6648):619–20

Renal biopsy and antineutrophil antibodies in the diagnosis and assessment of Wegener's granuloma. Harrison DJ, et al. **Br J Dis Chest** 1988 Oct;82(4):398–404

Anti–neutrophil cytoplasmic antibodies (ANCA) in Wegener's granulomatosis [letter] Bambery P, et al. **Int J Artif Organs** 1989 Jan;12(1):68

Wegener's granulomatosis: false positive anti–neutrophil cytoplasmic antibody test. Mains B. **J Laryngol Otol** 1989 May;103(5):524–5

Serodiagnosis of Wegener's granulomatosis: pathobiologic and clinical implications. Cross CE, et al. **Mayo Clin Proc** 1989 Jan;64(1):119–22

Anticytoplasmic autoantibodies in the diagnosis and follow–up of Wegener's granulomatosis. Specks U, et al. **Mayo Clin Proc** 1989 Jan;64(1):28–36

[Anti–leukocyte antibodies—a new diagnostic test for Wegener's granulomatosis] Soppi E, et al. **Duodecim** 1989; 105(3):267–72 (14 ref.) **(Fin)**

[Splenic iconography in Wegener's granulomatosis (letter)] Ruel M, et al. **Presse Med** 1989 Apr 8;18(14):725 **(Fre)**

[Diagnostic significance of antineutrophil cytoplasmic antibodies in Wegener's granulomatosis and related disease pictures] Andrassy K, et al. **Dtsch Med Wochenschr** 1989 Jan 6;114(1):23–6 (16 ref.) **(Ger)**

[Comparative studies of clinical findings and prognosis of polyarteritis nodosa, Wegener's granulomatosis, allergic granulomatous angiitis and malignant rheumatoid arthritis] Hashimoto H, et al. **Ryumachi** 1988 Jun;28(3):145–55 (Eng. Abstr.) **(Jpn)**

[Wegener's granulomatosis or Hodgkin's disease—diagnostic error or one of the forms of Wegener's granulomatosis? (letter)] Szmurło–Zabolicka B. **Pol Tyg Lek** 1988 Aug 15; 43(33):1072 **(Pol)**

[A case of Wegener's disease] Iushchuk ND, et al. **Sov Med** 1988;(7):115–7 **(Rus)**

[Diagnosis of variants of Wegener's granulomatosis] Semenkova EN, et al. **Ter Arkh** 1989;61(4):138–9 **(Rus)**

[Wegener's granulomatosis with predominant lung involvement] Nesterov EN, et al. **Vrach Delo** 1988 Dec; (12):67–9 **(Rus)**

DRUG THERAPY

The treatment of Wegener's granulomatosis with sulfamethoxazole and trimethoprim [letter] Boudes P. **Arch Intern Med** 1989 Jun;149(6):1467, 1471

Sulfamethoxazole–trimethoprim therapy for Wegener's granulomatosis. Israel HL. **Arch Intern Med** 1988 Oct; 148(10):2293–5

Wegener's granulomatosis [letter; comment] King JW, et al. **Arch Intern Med** 1989 Jul;149(7):1695, 1698. **Comment on:** Arch Intern Med 1988 Sep;148(9):2065–6

Three cases of Wegener's granulomatosis treated with an antimicrobial agent. Fukuda K, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):515–8

Wegener's granulomatosis and trimethoprim/sulfamethoxazole treatment [letter] Boudes P. **Arthritis Rheum** 1989 Aug;32(8):1052

Comment on the article by DeRemee [letter] Steppat D, et al. **Arthritis Rheum** 1989 Aug;32(8):1050–2

Wegener's granulomatosis [letter] Lund VJ, et al. **BMJ** 1988 Aug 20–27;297(6647):556

Stage–adapted treatment of Wegener's granulomatosis. First results of a prospective study. Steppat D, et al. **Klin Wochenschr** 1989 Jul 3;67(13):666–71

Co–trimoxazole in the treatment of Wegener's granulomatosis [letter] Bowden FJ, et al. **Med J Aust** 1989 Sep 4;151(5):303–4

[The value of cyclosporin in treating Wegener's disease (letter)] Dupond JL, et al. **Presse Med** 1988 Oct 8; 17(34):1764–5 **(Fre)**

[Favorable course under cotrimoxazole of excavated pneumopathy complicating rapidly progressive glomerulonephritis: Wegener's granulomatosis?] Pagniez D, et al. **Rev Med Interne** 1989 Mar–Apr;10(2):143–6 **(Fre)**

[Progresive multifocal leukoencephalopathy in Wegener's granulomatosis in relation to therapy with cyclosporin A] Ettinger J, et al. **Klin Wochenschr** 1989 Feb 15;67(4):260–4 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Nation–wide study of lethal mid–line granuloma in Japan: frequencies of wegener's granulomatosis, polymorphic reticulosis, malignant lymphoma and other related

conditions. Aozasa K, et al. **Int J Cancer** 1989 Jul 15; 44(1):63–6

ETIOLOGY

Early recurrence of Wegener's granulomatosis in a kidney allograft under cyclosporine treatment [letter] Oberhuber G, et al. **Transpl Int** 1988 Apr;1(1):49–50

GENETICS

Wegener's granulomatosis in a family. A short report. Knudsen BJ, et al. **Scand J Rheumatol** 1988;17(3):225–7

IMMUNOLOGY

Anticytoplasmic autoantibodies: their immunodiagnostic value in Wegener granulomatosis. Nölle B, et al. **Ann Intern Med** 1989 Jul 1;111(1):28–40

Acquired chronic granulomatous disease and Wegener's granulomatosis [letter] Boudes P. **Br J Rheumatol** 1989 Aug;28(4):361–2

Detection and quantitation of anti-neutrophil cytoplasm antibodies in Wegener's granulomatosis by ELISA using affinity-purified antigen. Lüdemann J, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):167–74

Neutrophil cytoplasmic autoantibodies and Wegener's granulomatosis [letter] **Lancet** 1989 Feb 4;1(8632):269–70

Anti-neutrophil cytoplasmic antibody assay in diagnosis of recurrent subglottic stenosis [letter] Hoare TJ, et al. **Lancet** 1988 Dec 10;2(8624):1360

Anti-neutrophil cytoplasmic antibody and subglottic stenosis [letter] Michaels L. **Lancet** 1989 Jan 7;1(8628):53–4

Migratory polyarthralgia and haemoptysis [letter] Davies DJ, et al. **Med J Aust** 1989 Sep 4;151(5):302

Autoantibodies to glomerular antigens in patients with Wegener's granulomatosis. Abbott F, et al. **Nephrol Dial Transplant** 1989;4(1):1–8

Antibodies to components of neutrophil cytoplasm: a new diagnostic tool in patients with Wegener's granulomatosis and systemic vasculitis. Parlevliet KJ, et al. **Q J Med** 1988 Jan;66(249):55–63

Circulating auto-antibodies to neutrophil cytoplasmic antigens in vasculitis. A report of 3 cases. Pudifin DJ, et al. **S Afr Med J** 1989 Jan 21;75(2):73–5

Antibodies to neutrophil cytoplasmic antigens in Wegener's granulomatosis and other conditions. Harrison DJ, et al. **Thorax** 1989 May;44(5):373–7

Wegener's granulomatosis and autoantibodies to neutrophil antigens. McCluskey DR, et al. **Ulster Med J** 1988 Oct; 57(2):137–40

[Anti-cytoplasmic antibodies of neutrophil granulocytes in systemic vasculitis] Brugier JC, et al. **Presse Med** 1989 Feb 11;18(5):225–6 (Eng. Abstr.) (Fre)

[Wegener's granulomatosis and autoantibodies against cytoplasmic granules of neutrophils] Joller-Jemelka HI, et al. **Schweiz Med Wochenschr** 1988 Aug 20;118(33):1163–8 (Eng. Abstr.) (Ger)

[Anti-neutrophil cytoplasm antibody as a new serologic marker] Nässberger L, et al. **Lakartidningen** 1989 Mar 22; 86(12):1064–7 (Swe)

METABOLISM

Spontaneous and induced immunoglobulin synthesis and anti-neutrophil cytoplasm antibodies in Wegener's granulomatosis: relation to leukocyte subpopulations in blood and active lesions. Rasmussen N, et al. **Rheumatol Int** 1988;8(4):153–8

Immunohistochemical demonstration of insulin-like growth factor I in inflammatory lesions in Wegener's granulomatosis and idiopathic midline destructive disease. Hansson HA, et al. **Scand J Rheumatol** 1989;18(3):133–41

MORTALITY

Improved prognosis of renal microscopic polyarteritis in recent years. Fuiano G, et al. **Nephrol Dial Transplant** 1988; 3(4):383–91

PATHOLOGY

Migratory polyarthritis, pulmonary nodules, and chest pain in a 60-year-old man [clinical conference] Atkinson J, et al. **Am J Med** 1989 Feb;86(2):209–15

Wegener's granulomatosis presenting with unilateral parotid enlargement. Kavanaugh AF, et al. **Am J Med** 1988 Nov; 85(5):741–2

Wegener's granulomatosis: an unfolding enigma. Bambery P, et al. **Int J Artif Organs** 1988 Sep;11(5):322–24

Anterior pituitary involvement in Wegener's granulomatosis. Lohr KM, et al. **J Rheumatol** 1988;15(5):855–7

Migratory polyarthralgia and haemoptysis [clinical conference] Shenstone B, et al. **Med J Aust** 1989 Apr 3; 150(7):387–90

Morphologic differences between polyarteritis and Wegener's granulomatosis using light, electron and immunohistochemical techniques. Antonovych TT, et al. **Mod Pathol** 1989 Jul;2(4):349–59

Pulmonary-renal syndrome: clinical similarity amidst etiologic diversity. Bonsib SM, et al. **Mod Pathol** 1989 Mar; 2(2):129–37

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 25–1989. A 56-year-old man with hemoptysis and microscopic hematuria. **N Engl J Med** 1989 Jun 22;320(25):1677–86

Ocular manifestations of Wegener's granulomatosis in north India. Bambery P, et al. **Sarcoidosis** 1988 Sep;5(2):132–5

Wegener's granulomatosis [clinical conference] Sack KE. **West J Med** 1989 Mar;150(3):329–33

[Wegener's granulomatosis] Reich H. **Hautarzt** 1988 Sep; 39(9):596–7 (Ger)

[Hearing impairment and earache as initial symptoms of Wegener's granulomatosis] Höing R, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep;67(9):480–4 (Eng. Abstr.) (Ger)

[Primary manifestation of Wegener's granulomatosis of the prostate] Mundinger A, et al. **Urologe [A]** 1989 Jul; 28(4):234–6 (Eng. Abstr.) (Ger)

[Wegener's granulomatosis] Liebscher K. **Z Erkr Atmungsorgane** 1988;170(3):323–4 (Ger)

[A case of Wegener's granulomatosis with various manifestations] Iguchi M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1074–9 (Eng. Abstr.) (Jpn)

[A case of Wegener's granulomatosis] Kovalenko VN, et al. **Vrach Delo** 1988 Sep;(9):58–9 (Rus)

PHYSIOPATHOLOGY

[Wegener's disease. Unusual initial symptomatology: acute pain in the lower limbs] Ghilain S, et al. **Acta Neurol Belg** 1988 May-Jul;88(3):140–7 (Eng. Abstr.) (Fre)

RADIOGRAPHY

[Wegener's granulomatosis] Borchsenius F. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2727–8 (Eng. Abstr.) (Nor)

RADIONUCLIDE IMAGING

Imaging of sinusitis in Wegener's granulomatosis. De Geeter F, et al. **Clin Nucl Med** 1989 May;14(5):378

THERAPY

Wegener's granulomatosis: treatment failure on conventional therapy. Locht H, et al. **J Rheumatol** 1989 Apr;16(4):544–6

[Therapy of Wegener's granulomatosis and related vasculitides] Andrassy K, et al. **Dtsch Med Wochenschr** 1989 Jan 6;114(1):27–9 (13 ref.) (Ger)

WEIGHT GAIN

see related
OBESITY

Abnormal diurnal weight gain among chronically psychotic patients compared to a control population. Vieweg WV, et al. **Acta Psychiatr Scand** 1988 Aug;78(2):169–71

Weight cycling: the experience of human dieters. Blackburn GL, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1105–9

Physiological aspects of exercise in weight cycling. Saris WH. **Am J Clin Nutr** 1989 May;49(5 Suppl):1099–104 (52 ref.)

Diurnal weight gain among patients with mental retardation. Vieweg WV, et al. **Am J Ment Retard** 1989 Mar; 93(5):558–65 (56 ref.)

Maternal weight gain: effect on infant birth weight among overweight and average-weight low-income women. Frentzen BH, et al. **Am J Obstet Gynecol** 1988 Nov; 159(5):1114–7

Energy expenditure during carbohydrate overfeeding in obese and nonobese adolescents. Bandini LG, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E357–67

Adipose tissue dynamics during cyclic weight loss and weight gain of ground squirrels. Dark J, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1286–92

Food restriction normalizes somatic growth and diabetes in adrenalectomized ob/ob mice. Dubuc PU, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R787–93

A new chart for weight control in Duchenne muscular dystrophy. Griffiths RD, et al. **Arch Dis Child** 1988 Oct; 63(10):1256–8

Photoperiod and thermal effects on the productive and reproductive performance of Ross Tented egg-type and Hubbard broiler chicks living under subtropical conditions. el-Sayiad GA, et al. **Beitr Trop Landwirtsch Veterinarmed** 1989;27(1):109–17

Urinary basal body temperature in anorexia nervosa. Jonas JM, et al. **Biol Psychiatry** 1989 Jul;26(3):289–96

Poor maternal weight gain between 28 and 32 weeks gestation may predict small-for-gestational-age infants. Lawton FG, et al. **Br J Obstet Gynaecol** 1988 Sep; 95(9):884–7

Maternal weight, weight gain and birthweight at term in the rural Tanzanian village of Ilula. Möller B, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):158–66

Physical growth velocity during conservative treatment and following subsequent surgical treatment for primary vesicoureteric reflux. Sutton R, et al. **Br J Urol** 1989 Mar; 63(3):245–50

The frequency, distribution and effects of antibodies, to seven putative respiratory pathogens, on respiratory disease and weight gain in feedlot calves in Ontario. Martin SW, et al. **Can J Vet Res** 1989 Jul;53(3):355–62

Factors associated with average daily gain, fever and lameness in beef bulls at the Saskatchewan Central Feed Test Station. Townsend HG, et al. **Can J Vet Res** 1989 Jul;53(3):349–54

Weight gain and feeding in the neonate with cleft: a three-center study. Jones WB. **Cleft Palate J** 1988 Oct; 25(4):379–84

Weight gain and reproductive function: ultrasonographic and endocrine features in anorexia nervosa. Treasure JL, et al. **Clin Endocrinol (Oxf)** 1988 Dec;29(6):607–16

Weight gain associated with intensive therapy in the diabetes control and complications trial. The DCCT Research Group. **Diabetes Care** 1988 Jul-Aug;11(7):567–73

Effects of breed and wintering diet on growth, puberty and plasma concentrations of growth hormone and insulin-like growth factor 1 in heifers. Granger AL, et al. **Domest Anim Endocrinol** 1989 Jul;6(3):253–62

Effect of nutritional supplementation on growth of infants with congenital heart diseases. Khajuria R, et al. **Indian Pediatr** 1989 Jan;26(1):76–9

Differential responses of yellow Avy/A and agouti A/a (BALB/c X VY) F1 hybrid mice to the same diets: glucose tolerance, weight gain, and adipocyte cellularity. Frigeri LG, et al. **Int J Obes** 1988;12(4):305–20

Long-term follow-up of behavioral treatment for obesity: patterns of weight regain among men and women. Kramer FM, et al. **Int J Obes** 1989 Apr;13(2):123–36 (43 ref.)

The relationship between maternal weight for height and term birth weight in teens and adult women. Haiek L, et al. **J Adolesc Health Care** 1989 Jan;10(1):16–22

Following up on a commercial weight loss program: do the pounds stay off after your picture has been in the newspaper? Fatis M, et al. **J Am Diet Assoc** 1989 Apr; 89(4):547–8

Weight gain patterns during twin gestation. Pederson AL, et al. **J Am Diet Assoc** 1989 May;89(5):642–6

Compensatory weight gain in steers recovered from oak bud toxicosis. Ostrowski SR, et al. **J Am Vet Med Assoc** 1989 Aug 15;195(4):481–4

Effect of dietary potassium chloride on feeder pig performance, market shrink, carcass traits and selected blood parameters. Brumm MC, et al. **J Anim Sci** 1989 Jun; 67(6):1411–7

Energy uptake and utilization by limit- and ad libitum-fed growing horses. Cymbaluk NF, et al. **J Anim Sci** 1989 Feb; 67(2):403–13

Estimating parameters of growth curves of bulls. Doren PE, et al. **J Anim Sci** 1989 Jun;67(6):1432–45

Endocrine and metabolic changes during altered growth rates in beef cattle. Ellenberger MA, et al. **J Anim Sci** 1989 Jun; 67(6):1446–54

Diet composition and daily gain of growing cattle grazing dryland and irrigated cornstalks at several stocking rates. Fernandez-Rivera S, et al. **J Anim Sci** 1989 Feb;67(2):590–6

Effect of altering nutrient density (concentrate to roughage ratio) and restricting energy intake on rate, efficiency and composition of growing lambs. Glimp HA, et al. **J Anim Sci** 1989 Apr;67(4):865–71

The relationships of birth weight, preweaning gain and postweaning gain with the bovine major histocompatibility system. Stear MJ, et al. **J Anim Sci** 1989 Mar;67(3):641–9

Failure of photoperiod to alter body growth and carcass composition in beef steers. Zinn SA, et al. **J Anim Sci** 1989 May;67(5):1249–57

Weight history and hypertension. Meltzer AA, et al. **J Clin Epidemiol** 1988;41(9):867–74

Changes in food intake and activity after quitting smoking. Hall SM, et al. **J Consult Clin Psychol** 1989 Feb;57(1):81–6

Prospective evaluation of weight gain in both nonorganic and organic failure-to-thrive children: an outpatient trial of a multidisciplinary team intervention strategy. Bithoney WG, et al. **J Dev Behav Pediatr** 1989 Feb;10(1):27–31

Temperamental factors associated with rapid weight gain and obesity in middle childhood. Carey WB, et al. **J Dev Behav Pediatr** 1988 Aug;9(4):194–8

Daily variation in maternal and fetal weight gain in mice and hamsters. Davis FC. **J Exp Zool** 1989 Jun; 250(3):273–82

Normalization of abnormal diurnal weight gain among chronically psychotic geriatric patients. Is abnormal diurnal weight gain a risk factor in chronic psychosis? Vieweg WV, et al. **J Nerv Ment Dis** 1989 Sep;177(9):542–5

The effects of dietary amino acid levels upon lysine and methionine requirements for growing rats. Hosoi A, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr;34(2):245–59

Catch-up growth, muscle and fat accretion, and body proportionality of infants one year after newborn intensive care. Georgieff MK, et al. **J Pediatr** 1989 Feb;114(2):288–92

Rapid versus gradual refeeding in acute gastroenteritis in childhood: energy intake and weight gain. Hjelt K, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):75–80

Longitudinal study of the body composition of weight gain in exclusively breast-fed and intake-measured whey-based formula-fed infants to age 3 months. Shepherd RW, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep-Oct;7(5):732–9

Food restriction retards body growth and prevents end-stage renal pathology in remnant kidneys of rats regardless of protein intake. Tapp DC, et al. **Lab Invest** 1989 Feb; 60(2):184–95

Maternal height and weight gain during pregnancy as risk factors for cesarean section. Scott RT, et al. **Milit Med** 1989 Jul;154(7):365–7

Abnormal diurnal weight gain in chronic psychosis without seasonal change. Vieweg WV, et al. **Neuropsychobiology** 1988;19(4):176–9

The relationship between weight gain and nutrition in pregnancy. Aaronson LS, et al. **Nurs Res** 1989 Jul–Aug; 38(4):223–7

Amino acid imbalance in the pig. **Nutr Rev** 1988 Oct; 46(10):360–3 (17 ref.)

Patterns of weight gain in adolescent pregnancy: effects on birth weight and preterm delivery. Hediger ML, et al. **Obstet Gynecol** 1989 Jul;74(1):6–12

The effect of maternal weight gain in pregnancy on birth weight. Seidman DS, et al. **Obstet Gynecol** 1989 Aug; 74(2):240–6

Analyses of adverse reactions to diphtheria and tetanus toxoids and pertussis vaccine by vaccine lot, endotoxin content, pertussis vaccine potency and percentage of mouse weight gain. Baraff LJ, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):502–7

Rat bioassays for methionine availability in 16 food sources. McDonough FE, et al. **Plant Foods Hum Nutr** 1989; 39(1):77–84

Bioavailability of tryptophan in selected foods by rat growth assay. McDonough FE, et al. **Plant Foods Hum Nutr** 1989; 39(1):85–91

Bioavailability of lysine in selected foods by rat growth assay. McDonough FE, et al. **Plant Foods Hum Nutr** 1989; 39(1):67–75

Growth, liver composition, and calcium balance of rats fed sorghum supplemented with two levels of beans. Obizoba IC. **Plant Foods Hum Nutr** 1987;37(3):193–200

Relationship between amino acid scores and protein quality indices based on rat growth. Sarwar G, et al. **Plant Foods Hum Nutr** 1989;39(1):33–44

Effect of severity of early protein restriction on large turkey toms. 1. Performance characteristics and leg weakness. Ferket PR, et al. **Poult Sci** 1989 May;68(5):676–86

Effect of severity of early protein restriction on large turkey toms. 2. Carcass characteristics. Ferket PR, et al. **Poult Sci** 1989 May;68(5):687–97

Effect of age and growth rate on myocardial irritability in broiler chickens. Greenlees KJ, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):282–5

The utilization of nitrogen for growth in mice fed blends of purified proteins. Keith MO, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):246–53

Diurnal weight gain as an index of polyuria and hyponatremia among chronically psychotic patients. Vieweg WV, et al. **Psychiatr Med** 1988;6(4):23–8

Diurnal weight gain as a predictor of serum sodium concentration in patients with psychosis, intermittent hyponatremia, and polydipsia (PIP syndrome). Vieweg WV, et al. **Psychiatry Res** 1988 Dec;26(3):305–12

Abnormal diurnal weight gain among chronically psychotic patients contrasted with acutely psychotic patients and normals. Vieweg WV, et al. **Psychol Med** 1989 Feb; 19(1):105–9

Influence of two levels of concurrent infection with Ostertagia circumcincta and Trichostrongylus vitrinus on the growth performance of lambs. Coop RL, et al. **Res Vet Sci** 1988 Nov;45(3):275–80

Perinatal outcome, maternal weight gain, cigarette smoking and social status in Jerusalem. Rush D, et al. **Rev Epidemiol Sante Publique** 1988;36(3):186–95

Effects of hormonal contraceptives on breast milk composition and infant growth. World Health Organization (WHO) Task Force on Oral Contraceptives. **Stud Fam Plann** 1988 Nov–Dec;19(6 Pt 1):361–9

Effects of endoparasites on the growth rate of Sudanese sheep and cattle. Abdalla HS. **Trop Anim Health Prod** 1989 Feb; 21(1):3

Growth of Mashona cattle on range in Zimbabwe. I. Environmental influences on liveweight and weight gain. Tawonezvi HP. **Trop Anim Health Prod** 1989 Feb; 21(1):37–42

The effect of the brown ear-tick Rhipicephalus appendiculatus on the growth of Sanga and European breed cattle. Norval RA, et al. **Vet Parasitol** 1988 Dec; 30(2):149–64

[Significance of initial weight and weight development for the course and outcome of pregnancy] Lauckner A, et al. **Zentralbl Gynakol** 1988;110(16):1018–29 (Eng. Abstr.) (Ger)

[Increase in body weight and levels of organochlorine insecticide and polychlorinated biphenyl residues in the blood during pregnancy] Rončević N, et al. **Med Pregl** 1989;42(1–2):12–5 (Eng. Abstr.) (Ser)

[Weight gain secondary to treatment with lithium carbonate] Moral Iglesias L, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Jan–Feb;17(1):32–5 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Prospective studies on a lithium cohort. 3. Tremor, weight gain, diarrhea, psychological complaints. Vestergaard P, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):434–41

Lithium, polyuria and abnormal diurnal weight gain in psychosis. Vieweg WV, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):510–4

Effect of some antibiotics as growth promoters on performance of broiler chicks fed different protein levels. Abdel Hakim NF, et al. **Arch Tierernahr** 1989 Jan–Feb; 39(1–2):97–104

Effect of addition oral contraceptives in chicks diet. Abdelhamid AM, et al. **Arch Tierernahr** 1988 Sep; 38(9):757–66

Increased body-weight gain and body protein in castrated and adrenalectomized rats treated with clenbuterol. Rothwell NJ, et al. **Br J Nutr** 1988 Sep;60(2):355–60

Psychotropic drug induced weight gain: mechanisms and management. Bernstein JG. **Clin Neuropharmacol** 1988;11 Suppl 1:S194–206 (34 ref.)

Monoamine oxidase inhibitors and weight gain. Cantú TG, et al. **Drug Intell Clin Pharm** 1988 Oct;22(10):755–9 (46 ref.)

Central corticotropin-releasing factor administration prevents the excessive body weight gain of genetically obese (fa/fa) rats. Rohner-Jeanrenaud F, et al. **Endocrinology** 1989 Feb;124(2):733–9

Effects of exogenous porcine growth hormone administration between 30 and 60 kilograms on the subsequent and overall performance of pigs grown to 90 kilograms. Campbell RG, et al. **J Anim Sci** 1989 May;67(5):1265–71

Influence of dietary protein, fat or amino acids on the response of weanling swine to aflatoxin B1. Coffey MT, et al. **J Anim Sci** 1989 Feb;67(2):465–72

Effects of dry corn gluten feed on feedlot cattle performance and fiber digestibility. Kampman KA, et al. **J Anim Sci** 1989 Feb;67(2):501–12

Fluoxetine in panic disorder patients with imipramine-associated weight gain [letter] Brady K, et al. **J Clin Psychopharmacol** 1989 Feb;9(1):66–7

Weight gain with antidepressants and lithium. Garland EJ, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):323–30 (87 ref.)

Weight gain with lithium [letter] Vestergaard P, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):227

Nicotine replacement: effects of postcessation weight gain. Gross J, et al. **J Consult Clin Psychol** 1989 Feb;57(1):87–92

Undesirable weight gain and psychotropic medications. Beeber LS. **J Psychosoc Nurs Ment Health Serv** 1988 Oct; 26(10):38–40

Chronic inhibition of hypothalamic-pituitary-ovarian axis and body weight gain by brain-directed delivery of estradiol-17 beta in female rats. Sarkar DK, et al. **Neuroendocrinology** 1989 Aug;50(2):204–10

Lysine requirements of growing turkeys in various temperature environments. Noll SL, et al. **Poult Sci** 1989 Jun;68(6):781–94

Antidepressant-induced weight gain: a comparison study of four medications. Fernstrom MH, et al. **Psychiatry Res** 1988 Dec;26(3):265–71

Weight gain associated with psychotropic drugs. Brady KT. **South Med J** 1989 May;82(5):611–7 (69 ref.)

RADIATION EFFECTS

Photoperiodic effects on performance and leg abnormalities in broiler chickens. Classen HL, et al. **Poult Sci** 1989 Jul; 68(7):873–9

WEIGHT LIFTING see under **SPORTS**

WEIGHT LOSS

see related
EMACIATION
THINNESS

Effect of postpartum live weight loss on reproductive functions in dairy cows. Heinonen K, et al. **Acta Vet Scand** 1988;29(2):249–54

Is severe wasting in elderly mental patients caused by an excessive energy requirement? Prentice AM, et al. **Age Ageing** 1989 May;18(3):158–67 (26 ref.)

Effect of weight loss on coagulation factors VII and X. Baron JA, et al. **Am J Cardiol** 1989 Sep 1;64(8):519–22

Weight cycling: the experience of human dieters. Blackburn GL, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1105–9

Changes in fat-free mass during weight loss measured by bioelectrical impedance and by densitometry. Deurenberg P, et al. **Am J Clin Nutr** 1989 Jan;49(1):33–6

Sustained depression of the resting metabolic rate after massive weight loss. Elliot DL, et al. **Am J Clin Nutr** 1989 Jan;49(1):93–6

Body weight loss and changes in blood lipid levels in normal men on hypocaloric diets during Ramadan fasting. Hallak MH, et al. **Am J Clin Nutr** 1988 Nov;48(5):1197–210

Adipogenic activity in sera from obese children before and after weight reduction. Hauner H, et al. **Am J Clin Nutr** 1989 Jul;50(1):63–7

Magnitude of body-cell-mass depletion and the timing of death from wasting in AIDS. Kotler DP, et al. **Am J Clin Nutr** 1989 Sep;50(3):474–7

Body fat distribution and weight loss in obese women [letter] Pasquali R, et al. **Am J Clin Nutr** 1989 Jan;49(1):185–7

Exercise as an adjunct to weight loss and maintenance in moderately obese subjects. Pavlou KN, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1115–23

Physiological aspects of exercise in weight cycling. Saris WH. **Am J Clin Nutr** 1989 May;49(5 Suppl):1099–104 (52 ref.)

Repetitive weight loss and weight regain: effects on weight reduction, resting metabolic rate, and lipolytic activity before and after exercise and/or diet treatment. van Dale D, et al. **Am J Clin Nutr** 1989 Mar;49(3):409–16

Weight loss in 108 obese women on a diet supplying 800 kcal/d for 21 d. Webster JD, et al. **Am J Clin Nutr** 1989 Jul;50(1):41–5

The effect of weight control on lipid changes in obese children. Epstein LH, et al. **Am J Dis Child** 1989 Apr; 143(4):454–7

Diarrhea and weight loss in a 65-year-old man [clinical conference] **Am J Med** 1989 Jun;86(6 Pt 1):696–700

Maternal weight loss associated with hyperemesis gravidarum: a predictor of fetal outcome. Gross S, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):906–9

Adipose tissue dynamics during cyclic weight loss and weight gain of ground squirrels. Dark J, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1286–92

HDL subfractions and adipose tissue metabolism in the reduced-obese state. Eckel RH, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E740–6

Improvement in upper airway function after weight loss in patients with obstructive sleep apnea. Rubinstein I, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1192–5

Polyarthralgias, skin hardening, and weight loss in a 30-year-old male [clinical conference] Lavins BJ, et al. **Ann Allergy** 1989 Feb;62(2):79–80, 112–5

One-stage body contouring. Hauben DJ, et al. **Ann Plast Surg** 1988 Nov;21(5):472–9

Rating weight loss on the Hamilton Depression Rating Scale [letter; comment] Rausch JL, et al. **Arch Gen Psychiatry** 1989 May;46(5):481–2. **Comment on:** Arch Gen Psychiatry 1988 Aug;45(8):742–7

Effects of exercise-induced weight loss on low density lipoprotein subfractions in healthy men. Williams PT, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):623–32

The aetiology and management of weight loss and malnutrition in cancer patients. von Meyenfeldt MF, et al. **Baillieres Clin Gastroenterol** 1988 Oct;2(4):869–85 (100 ref.)

Anaesthetic complications of a weight reducing regimen. Field JM. **BMJ** 1988 Nov 26;297(6660):1383

Induction of weight loss and metabolic alterations by human recombinant tumour necrosis factor. Mahony SM, et al. **Br J Cancer** 1988 Sep;58(3):345–9

A comparison of long-chain triglycerides and medium-chain triglycerides on weight loss and tumour size in a cachexia model. Tisdale MJ, et al. **Br J Cancer** 1988 Nov;58(5):580–3

The effect of lactation and other factors on post-partum changes in body-weight and triceps skinfold thickness. Dugdale AE, et al. **Br J Nutr** 1989 Mar;61(2):149–53

Symptoms potentially influencing weight loss in a cancer population. Correlations with primary site, nutritional status, and chemotherapy administration. Grosvenor M, et al. **Cancer** 1989 Jan 15;63(2):330–4

Ability of a benign tumor to decrease spontaneous food intake and body weight in rats. Kawashima Y, et al. **Cancer** 1989 Feb 15;63(4):693–9

Weight loss in sleep apnea [letter] **Chest** 1989 Sep;96(3):703–4

Chronobiological aspects of weight loss in obesity: effects of different meal timing regimens. Sensi S, et al. **Chronobiol Int** 1987;4(2):251–61

Physical exercise conditioning in the absence of weight loss reduces fasting and postprandial triglyceride-rich lipoprotein levels. Weintraub MS, et al. **Circulation** 1989 May;79(5):1007–14

Reduced frequency of luteinizing hormone pulses in women with weight loss-related amenorrhoea and multifollicular ovaries. Mason HD, et al. **Clin Endocrinol (Oxf)** 1988 Jun; 28(6):611–8

Obesity is associated with increased post-prandial GIP levels which are not reduced by dietary restriction and weight loss. Jones IR, et al. **Diabete Metab** 1989 Jan–Feb; 15(1):11–22

Analysis of changes in eating behavior and weight loss in type II diabetic patients. Which behaviors to change. Guare JC, et al. **Diabetes Care** 1989 Jul–Aug;12(7):500–3

Behavioral strategies for weight reduction in obese type II diabetic patients. Wing RR. **Diabetes Care** 1989 Feb; 12(2):139–44 (51 ref.)

Effects of very-low-calorie diet weight reduction on glucose tolerance, insulin secretion, and insulin resistance in obese non-insulin-dependent diabetics. Fukuda M, et al. **Diabetes Res Clin Pract** 1989 Jun 20;7(1):61–7

Quantitative therapeutic plan for the treatment of obesity and a simple method for estimating appropriate caloric intake by using previous rate of weight loss. Oimomi M, et al. **Endocrinol Jpn** 1988 Oct;35(5):769–73

Weight reduction on lactovegetarian and mixed diets. Changes in weight, nutrient intake, skinfold thicknesses and blood pressure. Hakala P, et al. **Eur J Clin Nutr** 1989 Jun; 43(6):421–30

Clinical approach to weight loss in the patient with HIV infection. Greene JB. **Gastroenterol Clin North Am** 1988 Sep;17(3):573–86 (17 ref.)

Evaluation of weight loss in the elderly. Robbins LJ. **Geriatrics** 1989 Apr;44(4):31–4, 37 (8 ref.)

Comparison of weight loss with short term dietary and intragastric balloon treatment. Durrans D, et al. **Gut** 1989 May;30(5):565–8

Effect of the gastric balloon versus sham procedure on weight loss in obese subjects. Ramhamadany EM, et al. **Gut** 1989 Aug;30(8):1054–7

Blood pressure changes and weight changes in hypertensive patients in an inner-city clinic. Goldberg AD, et al. **Henry Ford Hosp Med J** 1988;36(2):88–91

Obstetric practices: of facts and fads [letter] Moehring R. **Hosp Pract [Off]** 1989 Apr 15;24(4):23

Radiology clinic. Burkitt's lymphoma of the ileum. Choi RE, et al. **Indiana Med** 1988 Jul;81(7):623–4

A decisional balance measure and the stages of change model for weight loss. O'Connell D, et al. **Int J Addict** 1988 Jul; 23(7):729–50

The energy density of weight loss in semistarvation. Alpert SS. **Int J Obes** 1988;12(6):533–42

Effects of a behavioral weight-loss program food purchases: instructions to shop with a list. Beneke WM, et al. **Int J Obes** 1988;12(4):335–42

The dynamics of weight loss after gastric partition for gross obesity. McFarland RJ, et al. **Int J Obes** 1989 Feb; 13(1):81–8

Dietary intake before and after gastric bypass and gastroplasty for morbid obesity in women. Näslund I, et al. **Int J Obes** 1988;12(6):503–13

A dietary fibre supplement and weight maintenance after weight reduction: a randomized, double-blind, placebo-controlled long-term trial. Ryttig KR, et al. **Int J Obes** 1989 Apr;13(2):165–71

Identification of high-risk situations in a behavioral weight loss program: application of the relapse prevention model. Schlundt DG, et al. **Int J Obes** 1989 Apr;13(2):223–34

Variable effects of weight loss on serum lipids and lipoproteins in obese patients. Stevenson DW, et al. **Int J Obes** 1988;12(6):495–502

Contribution of decreased body mass to diminished thermic effect of exercise in reduced-obese men. Weigle DS. **Int J Obes** 1988;12(6):567–78

Long-term body weight fluctuation in an overweight population. Williamson PS, et al. **Int J Obes** 1988; 12(6):579–83

The effect of moderate weight loss on overnight growth hormone and cortisol secretion in healthy female volunteers. Anderson IM, et al. **J Affective Disord** 1989 Mar–Jun;16(2–3):197–202

Laxative abuse: a hazardous habit for weight control. Vanin JR, et al. **J Am Coll Health** 1989 Mar;37(5):227–30 (17 ref.)

Rational weight loss programs: a clinician's guide. Morgan SL. **J Am Coll Nutr** 1989 Jun;8(3):186–94 (49 ref.)

Weight loss after gastroplasty: psychological sequelae in relation to clinical and metabolic observations. Rydén O, et al. **J Am Coll Nutr** 1989 Feb;8(1):15–23

Timely statement of the American Dietetic Association: very low calorie weight loss diets. **J Am Diet Assoc** 1989 Jul; 89(7):975–6

Dietary and weight control practices among persons with hypertension: findings from the 1986 Behavioral Risk Factor Surveys. Anda RF, et al. **J Am Diet Assoc** 1989 Sep;89(9):1265–8

Following up on a commercial weight loss program: do the pounds stay off after your picture has been in the newspaper? Fatis M, et al. **J Am Diet Assoc** 1989 Apr; 89(4):547–8

Weight loss and senile dementia in an institutionalized elderly population. Franklin CA, et al. **J Am Diet Assoc** 1989 Jun; 89(6):790–2

Long-term follow-up of weight status of subjects in a behavioral weight control program. Lavery MA, et al. **J Am Diet Assoc** 1989 Sep;89(9):1259–64

Adapting a community group weight reduction program to a work-site setting. Markenson DM, et al. **J Am Diet Assoc** 1988 Nov;88(11):1436–7

Freedom from fat: a contemporary multi-component weight loss program for the general population of obese adults. Stevens VJ, et al. **J Am Diet Assoc** 1989 Sep;89(9):1254–8

Effects of feed or water restriction, antibiotic injection and receiving diet management on commingled feeder pig performance. Brumm MC, et al. **J Anim Sci** 1989 May; 67(5):1183–8

The effects of human growth hormone administration in elderly adults with recent weight loss. Binnerts A, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1312–6

Clinical and hormonal characteristics of obese amenorrheic hyperandrogenic women before and after weight loss. Pasquali R, et al. **J Clin Endocrinol Metab** 1989 Jan; 68(1):173–9

Dietary carbohydrate content determines responsiveness to growth hormone in energy-restricted humans. Snyder DK, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):745–52

Reversibility of defective adipocyte insulin receptor kinase activity in non-insulin-dependent diabetes mellitus. Effect of weight loss. Freidenberg GR, et al. **J Clin Invest** 1988 Oct;82(4):1398–406

Genetic analyses of photoresponsiveness in the Djungarian hamster, Phodopus sungorus. Lynch GR, et al. **J Comp Physiol [A]** 1989 Jan;164(4):475–81

Effect of length of treatment on weight loss. Perri MG, et al. **J Consult Clin Psychol** 1989 Jun;57(3):450–2

Controlling the intake of calories with the intake of food. Broomes EL. **J Natl Med Assoc** 1987 Aug;79(8):882–3, 887

Catastrophic weight loss after vertical banded gastroplasty: malnutrition and neurologic alterations. Albina JE, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):619–20

Effects on weight and metabolic rate of obese women of a 3.4 MJ (800 kcal) diet. Garrow JS, et al. **Lancet** 1989 Jun 24;1(8652):1429–31

Relative effects of ultrafiltration mode and magnitude on blood pressure stability during dialysis. Savazzi AM, et al. **Life Support Syst** 1983;1 Suppl 1:148–50

Prostaglandins, brown fat and weight loss. Heleniak EP, et al. **Med Hypotheses** 1989 Jan;28(1):13–33 (192 ref.)

Hyperinsulinemia; a mediator of decreased food intake and weight loss in anorexia nervosa and major depression. Licinio-Paixao J. **Med Hypotheses** 1989 Feb;28(2):125–30

Rate of weight loss during underfeeding: relation to level of physical activity. Heymsfield SB, et al. **Metabolism** 1989 Mar;38(3):215–23

Weight loss leads to a marked decrease in nonresting energy expenditure in ambulatory human subjects. Weigle DS, et al. **Metabolism** 1988 Oct;37(10):930–6

Goal abdominal measurements: a method to help male soldiers monitor their progress in the Army Weight Control Program. Bolan JL, et al. **Milit Med** 1988 Nov; 153(11):559–61

Changes in lipoproteins during weight loss [letter] **N Engl J Med** 1989 Mar 9;320(10):668–9

Effects of ursodeoxycholic acid and aspirin on the formation of lithogenic bile and gallstones during loss of weight. Broomfield PH, et al. **N Engl J Med** 1988 Dec 15; 319(24):1567–72

The effect of weight loss on the sensitivity of blood pressure to sodium in obese adolescents. Rocchini AP, et al. **N Engl J Med** 1989 Aug 31;321(9):580–5

The body weight loss of young rats caused by hepatic branch vagotomy is influenced by environmental temperature. Sakaguchi T, et al. **Physiol Behav** 1988;43(5):673–5

The effect of gastric banding on body weight in experimental animals. Badura R, et al. **Pol Arch Weter** 1987;27(2–3):5–14

Anorexia and weight loss in the elderly. Causes range from loose dentures to debilitating illness. Olsen-Noll CG, et al. **Postgrad Med** 1989 Feb 15;85(3):140–4 (22 ref.)

Effect of experimental obesity and subsequent weight reduction upon circulating atrial natriuretic peptide. Crandall DL, et al. **Proc Soc Exp Biol Med** 1989 Sep; 191(4):352–6

Food hoarding behaviour in the golden hamster (Mesocricetus auratus): effects of body weight loss and hoard-size discrimination. Phillips JH, et al. **Q J Exp Psychol [B]** 1989 Feb;41(1):33–47

A randomized comparison of horizontal and vertical banded gastroplasty: what determines weight loss? Andersen T, et al. **Scand J Gastroenterol** 1989 Mar;24(2):186–92

Significance of a sonographic secretin test in the diagnosis of pancreatic disease. Results of a prospective study. Glaser J, et al. **Scand J Gastroenterol** 1989 Mar;24(2):179–85

Cure of sleep apnea syndrome after long-term nasal continuous positive airway pressure therapy and weight loss. Aubert-Tulkens G, et al. **Sleep** 1989 Jun;12(3):216–22

Elevation of metabolic rate following exercise. Implications for weight loss. Brehm BA. **Sports Med** 1988 Aug;6(2):72–8 (42 ref.)

Aerobic exercise and resistance weight-training during weight reduction. Implications for obese persons and athletes. Walberg JL. **Sports Med** 1989 Jun;7(6):343–56 (64 ref.)

Respiratory function in the morbidly obese before and after weight loss. Thomas PS, et al. **Thorax** 1989 May; 44(5):382–6

A test of I2t as a dose parameter for fetal weight reduction from exposure to ultrasound. Child SZ, et al. **Ultrasound Med Biol** 1989;15(1):39–44

4,055 pounds shed, salt cut [news] **W V Med J** 1989 Jan; 85(1):21–2

Gender differences in body weight perception and weight-loss strategies of college students. Connor-Greene PA. **Women Health** 1988;14(2):27–42

[Increase of the sedimentation rate and unexplained weight loss in the elderly: an unrecognized diagnosis, human immunodeficiency virus infection (letter)] Rouveix E, et al. **Ann Med Interne (Paris)** 1989;140(3):212 (Fre)

[Clinical study of 105 cases of isolated weight loss in internal medicine] Leduc D, et al. **Rev Med Interne** 1988 Nov–Dec; 9(5):480–6 (Eng. Abstr.) (Fre)

[Weight-dependent changes in the hematology of anorexia nervosa] Herpertz-Dahlmann B, et al. **Monatsschr Kinderheilkd** 1988 Nov;136(11):739–44 (Eng. Abstr.) (Ger)

[Bulimia in males—a controlled case study] Spang-Fitzek M, et al. **Psychother Psychosom Med Psychol** 1988 Sep–Oct;38(9–10):318–23 (Eng. Abstr.) (Ger)

[Cost reduction in drug therapy of diabetes] Petzoldt R, et al. **Versicherungsmedizin** 1989 May 1;41(3):74–7 (Eng. Abstr.) (Ger)

[XXIV. The future of slimming anorectics] Cugurra F. **Clin Ter** 1989 Jan 15;128(1):57–9 (Ita)

[Experimental phytobezoar and weight loss in rats] de Tolosa EM, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Mar–Apr;43(2):87–92 (Eng. Abstr.) (Por)

[The effect of metoclopramide on the hypophyseo-ovarian relations in patients with amenorrhea resulting from body mass loss] Potin VV, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):44–8 (Eng. Abstr.) (Rus)

[Involuntary weight loss as a clinical problem] Huerta G, et al. **Rev Invest Clin** 1989 Jan–Mar;41(1):5–9 (Eng. Abstr.) (Spa)

DRUG EFFECTS

An evaluation of the effect of aspartame on weight loss. Kanders BS, et al. **Appetite** 1988;11 Suppl 1:73–84

Fluvoxamine and weight loss [letter] Fernstrom MH, et al. **Biol Psychiatry** 1988 Dec;24(8):948–9

Effect of insulin on weight loss and tumour growth in a cachexia model. Beck SA, et al. **Br J Cancer** 1989 May; 59(5):677–81

Factors that may effect the reduction of hunger and body weight following d-fenfluramine administration. Campbell DB, et al. **Clin Neuropharmacol** 1988;11 Suppl 1:S160–72

Volume (weight) loss and blood pressure response following thiazide diuretics. Freis ED, et al. **Hypertension** 1988 Sep; 12(3):244–50

Reversible anorexia and rapid weight loss associated with neuroleptic administration in Alzheimer's disease. Rohrbaugh RM, et al. **J Geriatr Psychiatry Neurol** 1989 Jan–Mar;2(1):45–7

Milk production, weight changes and blood biochemical measurements in dairy cattle receiving recombinant bovine somatotropin. Whitaker DA, et al. **Vet Rec** 1989 Jan 28; 124(4):83–6

[Asthenia, vomiting, weight loss (clinical conference)] Steiner A, et al. **Schweiz Rundsch Med Prax** 1988 Dec 20; 77(51):1410–2 (Eng. Abstr.) (Ger)

WEIGHT PERCEPTION

Preserved learning and memory in amnesia: intact adaptation-level effects and learning of stereoscopic depth. Benzing WC, et al. **Behav Neurosci** 1989 Jun;103(3):538–47

Hefting for a maximum distance throw: a smart perceptual mechanism. Bingham GP, et al. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):507–28

Understanding collision dynamics. Gilden DL, et al. **J Exp Psychol [Hum Percept]** 1989 May;15(2):372–83

PHYSIOLOGY

Performance of a weight-lifting task by normal and deafferented monkeys. Wylie RM, et al. **Behav Neurosci** 1989 Apr;103(2):273–82

The effects of preview and task symmetry on trunk muscle response to sudden loading. Lavender SA, et al. **Hum Factors** 1989 Feb;31(1):101–15

[Behavior of Limnephilus sp. larvae in response to sudden changes in the weight of the building material] Kozlov AT, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct; 22(5):88–90 (Rus)

WEIGHT REDUCTION see **WEIGHT LOSS**

WEIGHTLESSNESS

Pre- and postflight (D-1) postural control in tilting environments. Bles W, et al. **Adv Otorhinolaryngol** 1988; 42:13–7

Caloric testing of the vestibular function during orbital flight. Clarke AH, et al. **Adv Otorhinolaryngol** 1988;42:31–5

Vestibulo-ocular reflex and optokinetic nystagmus in microgravity. Clément G, et al. **Adv Otorhinolaryngol** 1988; 42:1–4

Eye movements induced by calorization of the vertical semicircular canals. A study in pigeon. de Jong HA, et al. **Adv Otorhinolaryngol** 1988;42:36–8

Determinants of space perception in space flight. Mittelstaedt H. **Adv Otorhinolaryngol** 1988;42:18–23

Spaceflight affects the 1-g postrotatory vestibulo-ocular reflex. Oman CM, et al. **Adv Otorhinolaryngol** 1988;42:5–8

Pupil size and microgravity. Oosterveld WJ, et al. **Adv Otorhinolaryngol** 1988;42:9–12

Single muscle fiber enzyme shifts with hindlimb suspension and immobilization. Fitts RH, et al. **Am J Physiol** 1989 May;256(5 Pt 1):C1082–91

Caloric stimulation during short episodes of microgravity. Clarke AH, et al. **Arch Otorhinolaryngol** 1988;245(3):175–9

Ocular torsion in upright and tilted positions during hypo- and hypergravity of parabolic flight. Diamond SG, et al. **Aviat Space Environ Med** 1988 Dec;59(12):1158–62

Prediction of physical workload in reduced gravity. Goldberg JH, et al. **Aviat Space Environ Med** 1988 Dec; 59(12):1150–7

Adaptive modifications of postural attitude in conditions of weightlessness. Clément G, et al. **Exp Brain Res** 1988; 72(2):381–9

Influence of one-week hindlimb suspension and intermittent high load exercise on rat muscles. Herbert ME, et al. **Exp Neurol** 1988 Nov;102(2):190–8

Contractile function of single muscle fibers after hindlimb suspension. Gardetto PR, et al. **J Appl Physiol** 1989 Jun; 66(6):2739–49

Glycogen supercompensation in rat soleus muscle during recovery from nonweight bearing. Henriksen EJ, et al. **J Appl Physiol** 1989 Jun;66(6):2782–7

Enhancement of viral pathogenesis in mice maintained in an antiorthostatic suspension model: coordination with effects on interferon production. Gould CL, et al. **J Biol Regul Homeost Agents** 1987 Jan–Mar;1(1):33–6

Acute hemodynamic responses to weightlessness in humans. Lathers CM, et al. **J Clin Pharmacol** 1989 Jul;29(7):615–27

Specific binding of atrial natriuretic factor to renal glomeruli during day or night antiorthostatic suspension in the rat. Gauquelin G, et al. **Life Sci** 1988;43(23):1905–12

Effect of weightlessness on some indices of brain development (results of residence of pregnant rats aboard the Cosmos-1514 biosatellite and investigation of subsequent development of their offspring on earth). Olenev SN, et al. **Neurosci Behav Physiol** 1989 May–Jun; 19(3):191–5

Proceedings of the tenth annual meeting of the IUPS Commission on Gravitational Physiology. International Union of Physiological Sciences. October 9–14, 1988,

Montreal, Canada. Dedicated to Dr. Wilbur Rounding Franks. **Physiologist** 1989 Feb;32(1 Suppl):S1–100

Modifications of bone atrophy seen with hindlimb suspension by exercise and dobutamine. Bloomfield S, et al. **Physiologist** 1989 Feb;32(1 Suppl):S27–8

Periodic acceleration stimulation in a weightlessness environment (PAS–WE): a new science? Burton RR. **Physiologist** 1989 Feb;32(1 Suppl):S5–7

Plasma ANF concentrations during head–down bed rest of various duration (from several hours to one month). Role of LBNP countermeasure. Gharib C, et al. **Physiologist** 1989 Feb;32(1 Suppl):S69–72

Skeletal muscle antioxidant enzyme levels in rats after simulated weightlessness, exercise and dobutamine. Girten B, et al. **Physiologist** 1989 Feb;32(1 Suppl):S59–60

Decreased swelling pressure of rat nucleus pulposus associated with simulated weightlessness. Hargens AR, et al. **Physiologist** 1989 Feb;32(1 Suppl):S23–4

Cardiorespiratory responses to simulated weightlessness in man. Katuntsev VP, et al. **Physiologist** 1989 Feb;32(1 Suppl):S77–81

Central venous pressure in humans during short periods of weightlessness. Norsk P, et al. **Physiologist** 1989 Feb;32(1 Suppl):S73–6

The effect of suspension on nicotinic acetylcholine receptor number and affinity at the rat neuromuscular junction. Royland JE, et al. **Physiologist** 1989 Feb;32(1 Suppl):S19–20

Normalisation of bone cellular responses occurs between 7 and 14 days of simulated weightlessness in rats. Vico L, et al. **Physiologist** 1989 Feb;32(1 Suppl):S25–6

Effects of simulated weightlessness and sympathectomy on maximum VO2 of male rats. Woodman CR, et al. **Physiologist** 1989 Feb;32(1 Suppl):S35–6

Posture as an organizational structure based on a dual process: a formal basis to interpret changes of posture in weightlessness. Lestienne FG, et al. **Prog Brain Res** 1988; 76:307–13 (14 ref.)

Simulated weightlessness and bone metabolism: decrease of alkaline phosphatase activity in the femoral diaphysis of rats. Yamaguchi M, et al. **Res Exp Med (Berl)** 1989; 189(1):9–14

Postural control in weightlessness: a dual process underlying adaptation to an unusual environment. Lestienne FG, et al. **Trends Neurosci** 1988 Aug;11(8):359–63 (22 ref.)

[The significance of slow flows for the caloric excitability of the vestibular organs in weightlessness] Pau HW, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):616–20 (Eng. Abstr.) **(Ger)**

[Vestibular function under weightlessness conditions] Watanabe S. **Nippon Seirigaku Zasshi** 1988;50(6):211–22 **(Jpn)**

[Functional status of the hepatobiliary system during anti–orthostatic hypodynamia] Andriako LIa, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):48–50 (Eng. Abstr.) **(Rus)**

[A new variant of modeling the effect of weightlessness on humans] Genin AM, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):80–5 **(Rus)**

[Phenomenology and mechanisms of changes in the basic functions of the human body in weightlessness] Grigor'ev AI, et al. **Kosm Biol Aviakosm Med** 1988 Nov–Dec; 22(6):4–17 (0 ref.) (Eng. Abstr.) **(Rus)**

[Hemodynamics in monkeys in the initial period of adaptation to weightlessness] Krotov VP, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):33–9 (Eng. Abstr.) **(Rus)**

[Effect of weightlessness on the reproductive system of mammals] Serova LV. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):11–6 (62 ref.) (Eng. Abstr.) **(Rus)**

[Effect of weightlessness on the functions of perception and the reproduction of gravitational vertical in response to optokinetic stimulation] Sokolov AI, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):24–7 (Eng. Abstr.) **(Rus)**

[Activity of the sympathetico–adrenal system in humans during modeling of weightlessness] Vasil'ev VN, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):34–40 (Eng. Abstr.) **(Rus)**

[Effect of clinostatic and anti–orthostatic hypokinesia on serum enzyme activity] Vetrova EG, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):70–3 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

A study of the effects of prolonged simulated microgravity on the musculature of the lower extremities in man: an introduction. Buchanan P, et al. **Aviat Space Environ Med** 1989 Jul;60(7):649–52

Changes in volume, muscle compartment, and compliance of the lower extremities in man following 30 days of exposure to simulated microgravity. Convertino VA, et al. **Aviat Space Environ Med** 1989 Jul;60(7):653–8

Alterations of the in vivo torque–velocity relationship of human skeletal muscle following 30 days exposure to simulated microgravity. Dudley GA, et al. **Aviat Space Environ Med** 1989 Jul;60(7):659–63

Characteristics and preliminary observations of the influence of electromyostimulation on the size and function of human skeletal muscle during 30 days of simulated microgravity. Duvoisin MR, et al. **Aviat Space Environ Med** 1989 Jul; 60(7):671–8

Structural and metabolic characteristics of human skeletal muscle following 30 days of simulated microgravity. Hikida RS, et al. **Aviat Space Environ Med** 1989 Jul;60(7):664–70

Periodic weight support effects on rat soleus fibers after hindlimb suspension. Hauschka EO, et al. **J Appl Physiol** 1988 Sep;65(3):1231–7

Effect of hindlimb suspension on VO2 max and regional blood flow responses to exercise. Overton JM, et al. **J Appl Physiol** 1989 Feb;66(2):653–9

Changes in fiber composition of soleus muscle during rat hindlimb suspension. Templeton GH, et al. **J Appl Physiol** 1988 Sep;65(3):1191–5

The effects of simulated weightlessness on bone biomechanical and biochemical properties in the maturing rat. Abram AC, et al. **J Biomech** 1988;21(9):755–67

Skeletal response to dietary calcium in a rat model simulating weightlessness. Globus RK, et al. **J Bone Miner Res** 1986 Apr;1(2):191–7

[Space motion sickness] Gorgiladze GI, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):4–14 (82 ref.) (Eng. Abstr.) **(Rus)**

[Structural resistance of receptor organs of the vestibular apparatus to the factors of space flight] Lychakov DV. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):13–9 (40 ref.) (Eng. Abstr.) **(Rus)**

[Changes in the jaws of rats after a 7–day flight on "Kosmos–1667"] Volozhin AI, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):83–6 **(Rus)**

[Low–gravitational changes in the bone system] Volozhin AI, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug; 22(4):4–13 (73 ref.) (Eng. Abstr.) **(Rus)**

[Characteristics of changes in cardiac output and blood gas composition in humans in modeling the effects of weightlessness] Vorob'ev VE, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):94–6 **(Rus)**

WEIGHTS AND MEASURES

Invalid equation for conversion of indirect hemagglutination titers to international units [letter] Wilkins J, et al. **Am J Dis Child** 1988 Nov;142(11):1139–40

A new way to size up a wound. Kundin JI. **Am J Nurs** 1989 Feb;89(2):206–7

The effect of calibration on the between–laboratory variation of serum fructosamine. Hill RP. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):435–9

SI and presently conventional units [letter] Giacoppe GN Jr. **Ann Intern Med** 1989 Aug 1;111(3):259

SI units in hematology [letter] Spira TJ. **Ann Intern Med** 1988 Dec 15;109(12):996–7

The new International Temperature Scale of 1990 (ITS–90). Mangum BW. **Clin Chem** 1989 Mar;35(3):503–5

Read my lips.... Nies AS. **Clin Pharmacol Ther** 1989 May; 45(5):459–60

Model system evaluating fluorescein–labeled microbeads as internal standards to calibrate fluorescence intensity on flow cytometers. Vogt RF Jr, et al. **Cytometry** 1989 May; 10(3):294–302

Revised pharmacokinetic constants for use under Système International. Peterson RG. **Dev Pharmacol Ther** 1988; 11(6):338–46

International system of units [editorial] **Health Phys** 1989 Jan; 56(1):5–7

On the unit of dose equivalent and the linear hypothesis [letter] Lam GK. **Health Phys** 1989 Sep;57(3):495–6

Reply to Fisher's comment: "Standard for Expression of Powers of 10" [letter] Wijker H. **Health Phys** 1989 Mar; 56(3):377

Saying Si to SI [editorial] Abraham P. **Indian J Gastroenterol** 1989 Jan;8(1):5–6

The recommended measure [letter] Bansal SK. **Indian Pediatr** 1988 Dec;25(12):1226

New method for spectrofluorometer monochromator wavelength calibration. Paladini AA, et al. **J Biochem Biophys Methods** 1988 Sep;17(1):61–6

Fish oil and SI units [letter] **JAMA** 1989 Feb 3;261(5):699

Simple zero calibrator for transcutaneous oxygen electrodes. Delpy DT, et al. **Med Biol Eng Comput** 1988 Jan; 26(1):110–1

Quantitation of ellipsoid tumor areas using a circumferential measuring device. Dorr RT, et al. **Med Oncol Tumor Pharmacother** 1988;5(4):249–51

Effective atomic numbers of biological materials in the energy region 1 to 50 MeV for photons, electrons, and He ions. Parthasaradhi K, et al. **Med Phys** 1989 Jul–Aug; 16(4):653–4

Re: Conversion to SI units [letter] Corbett JV. **Nurs Res** 1989 May–Jun;38(3):161

A meterstone [editorial] Downs FS. **Nurs Res** 1989 Jan–Feb; 38(1):3

A novel method for absolute calibration of intracellular pH indicators. Eisner DA, et al. **Pflugers Arch** 1989 Mar; 413(5):553–8

SI units and the clinical practice of infectious diseases: application to the usage of antimicrobial agents. Quentzel HL, et al. **Rev Infect Dis** 1989 Jan–Feb;11(1):122–7

Expression of rheumatoid factors in titres or units? Feltkamp TE. **Scand J Rheumatol Suppl** 1988;75:54–7

[The use of the residual range as the exclusive energy parameter in electron dosimetry] Trier JO, et al. **Strahlenther Onkol** 1989 May;165(5):392–5 (Eng. Abstr.) **(Ger)**

[IS units in medicine] Plebani M, et al. **G Clin Med** 1988 Mar;69(3):225–7 **(Ita)**

[Current aspects of medical metrology] Galkin VV, et al. **Patol Fiziol Eksp Ter** 1988 Sep–Oct;(5):3–7 **(Rus)**

[The International System of Units] López–Avilés M, et al. **Salud Publica Mex** 1988 Nov–Dec;30(6):905–8 (Eng. Abstr.) **(Spa)**

HISTORY

[Measuring devices and equipment in the practical work of medical personnel during World War II] Kuvshinskii VD, et al. **Voen Med Zh** 1989 Feb;(2):77 **(Rus)**

METHODS

Calibration methods for quantitative image processing in electron microscopy. Lamvik MK, et al. **J Electron Microsc Tech** 1989 Feb;11(2):97–101

STANDARDS

Characteristics of signal stimuli for 19 auditory evoked potential instruments. Brey RH, et al. **ASHA** 1988 Dec; 30(12):30–5

Bone histomorphometry: standardization of nomenclature, symbols and units. Summary of proposed system. Parfitt AM. **Bone Miner** 1988 Apr;4(1):1–5

Units for peptide hormones [letter] Olesen H. **Clin Chem** 1989 Jan;35(1):189–90

SI units in drug therapeutics [published erratum appears in Drug Intell Clin Pharm 1989 Mar;23(3):262] McLeod DC. **Drug Intell Clin Pharm** 1988 Dec;22(12):990–3

On inclusion of the dose to skin in the effective dose equivalent. Kocher DC, et al. **Health Phys** 1988 Nov; 55(5):813–5

Pediatric formulations [letter] Bansal SK. **Indian Pediatr** 1988 Jan;25(1):107–8

Have SI units arrived in India? [letter] Christo CG. **Indian Pediatr** 1988 Jun;25(6):583–4

Uniform standard measure in all liquid preparations [letter] Mathur GP, et al. **Indian Pediatr** 1988 Jan;25(1):106–7

[A method for plotting calibration graphs and assessing measurement error by using a microcomputer] Basova GM, et al. **Gig Tr Prof Zabol** 1989;(2):43–6 **(Rus)**

WEIL'S DISEASE

Human leptospirosis—a review of 50 cases. Lecour H, et al. **Infection** 1989 Jan–Feb;17(1):8–12

[Icterohemorrhagic leptospirosis: apropos of 5 case reports] Bigaignon G, et al. **Acta Clin Belg** 1988;43(4):273–81 (Eng. Abstr.) **(Fre)**

BLOOD

[Cytochemical studies of leukocytes in patients with leptospirosis] Avdeeva MG, et al. **Lab Delo** 1988;(11):22–4 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Leptospira icterohaemorrhagiae infection presenting as acute renal failure. Menzies DG, et al. **Scott Med J** 1989 Feb; 34(1):410

[Cardiac manifestations in leptospirosis. Apropos of 15 cases observed in New Caledonia] Dussarat GV, et al. **Ann Cardiol Angeiol (Paris)** 1988 Oct;37(8):449–53 (Eng. Abstr.) **(Fre)**

[A 39–year–old patient with acute onset of fever, myalgia and diarrhea and followed by jaundice] Kühl M, et al. **Internist (Berlin)** 1989 Mar;30(3):208–10 **(Ger)**

[Serological study of the ocular complications of human leptospirosis] Andreescu N, et al. **Rev Ig [Bacteriol]** 1988 Jan–Mar;33(1):41–6 (Eng. Abstr.) **(Rum)**

DIAGNOSIS

[Leptospirosis caused by Leptospira icterohaemorrhagiae of the pseudo–surgical type: a case] Petit J, et al. **Ann Chir** 1989;43(3):220–3 (Eng. Abstr.) **(Fre)**

[Characteristics of leptospiral meningitis] Lutsik BD, et al. **Vrach Delo** 1988 Aug;(8):110–2 **(Rus)**

DRUG THERAPY

Penicillin therapy in icteric leptospirosis. Edwards CN, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):388–90

Efficacy of ciprofloxacin against Leptospira interrogans serogroup icterohaemorrhagiae. Shalit I, et al. **Antimicrob Agents Chemother** 1989 May;33(5):788–9

EPIDEMIOLOGY

[Weil–Vasil'ev disease in the Burgas region] Kunchev K, et al. **Vutr Boles** 1988;27(3):80–3 (Eng. Abstr.) **(Bul)**

[Weil's disease, milker's fever and other leptospiroses, 1981–1987] Terpstra WJ, et al. **Ned Tijdschr Geneeskd** 1989 Jul 1;133(26):1322–6 (Eng. Abstr.) **(Dut)**

[Leptospirosis and environment. Study of 2 major foci in New Caledonia] Brethes B, et al. **Rev Epidemiol Sante Publique** 1988;36(6):436–42 (Eng. Abstr.) **(Fre)**

MICROBIOLOGY

[Two new serovars belonging to Leptospira hebdomadis serogroup] Zhang FZ, et al. **Wei Sheng Wu Hsueh Pao** 1988 Jun;28(2):167–72 (Eng. Abstr.) (Chi)

MORTALITY

[Clinical aspects and prognostic factors of icterohemorrhagic leptospirosis in adults. Apropos of 249 cases in La Reunion] Pertuiset E, et al. **Rev Med Interne** 1988 Nov–Dec; 9(5):487–93 (47 ref.) (Eng. Abstr.) (Fre)

PREVENTION & CONTROL

Experimental immunisation of hamsters with lipopolysaccharide antigens of Leptospira interrogans. Jost BH, et al. **J Med Microbiol** 1989 Jun;29(2):115–20

THERAPY

[Treatment of terminal forms of icterohemorrhagic leptospirosis] Krivulis DB, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):59–62 (Eng. Abstr.) (Rus)

TRANSMISSION

[Leptospirosis] Bonard EC. **Rev Med Suisse Romande** 1988 Aug;108(8):683–90 (Fre)

VETERINARY

Effect of vaccination with a pentavalent leptospiral vaccine on Leptospira interrogans serovar hardjo type hardjo–bovis infection of pregnant cattle. Bolin CA, et al. **Am J Vet Res** 1989 Jan;50(1):161–5

Prevention of Leptospira interrogans serovar pomona infection in domestic pigs by vaccination. Palit A, et al. **Aust Vet J** 1988 Sep;65(9):289–90

Repetitive sequence element cloned from Leptospira interrogans serovar hardjo type hardjo–bovis provides a sensitive diagnostic probe for bovine leptospirosis. Zuerner RL, et al. **J Clin Microbiol** 1988 Dec;26(12):2495–500

Clinical Leptospira interrogans serogroup Australis serovar lora infection in a stud farm in The Netherlands. van den Ingh TS, et al. **Vet Q** 1989 Jul;11(3):175–82

Evidence for sheep as a maintenance host for Leptospira interrogans serovar hardjo. Cousins DV, et al. **Vet Rec** 1989 Feb 4;124(5):123–4

[Actual problems of leptospirosis in animals in Poland] Kocik T. **Przegl Epidemiol** 1988;42(4):364–9 (Pol)

WELDING

Laser welding of titanium in dentistry. Sjögren G, et al. **Acta Odontol Scand** 1988 Aug;46(4):247–53

Vestibulo–oculomotor disturbances caused by occupational hazards. Wenngren BI, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:7–10 (23 ref.)

Evaluation of an aerosol photometer for monitoring welding fume levels in a shipyard. Glinsmann PW, et al. **Am Ind Hyg Assoc J** 1985 Jul;46(7):391–5

On welding, wheezing, and whimsy. Morgan WK. **Am Ind Hyg Assoc J** 1989 Feb;50(2):59–69 (75 ref.)

Case–control study of lung cancer in Los Angeles county welders. Hull CJ, et al. **Am J Ind Med** 1989;16(1):103–12

Lung function of welders of zinc–coated mild steel: cross–sectional analysis and changes over five consecutive work shifts. Marquart H, et al. **Am J Ind Med** 1989; 16(3):289–96

Pulmonary functional impairment from years of arc welding. Kilburn KH, et al. **Am J Med** 1989 Jul;87(1):62–9

Thoracic magnetic dust content, occupational exposure, and respiratory status of shipyard welders. Stern RM, et al. **Arch Environ Health** 1988 Sep–Oct;43(5):361–70

Prior employment as a welder associated with the development of chronic myeloid leukaemia. Preston–Martin S, et al. **Br J Cancer** 1988 Jul;58(1):105–8

Respiratory symptoms and impairment in shipyard welders and caulker/burners. Cotes JE, et al. **Br J Ind Med** 1989 May;46(5):292–301

Arc welders' respiratory health evolution over five years. Mur JM, et al. **Int Arch Occup Environ Health** 1989; 61(5):321–7

Chromosome aberrations in peripheral blood lymphocytes of welders and characterization of their exposure by biological samples analysis. Elias Z, et al. **J Occup Med** 1989 May;31(5):477–83

Eye morbidity among welders in Benin City, Nigeria. Alakija W. **Public Health** 1988 Jul;102(4):381–4

Cause specific mortality among workers exposed to welding fumes and gases: a historical prospective study. Merlo F, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:302–15

Occupational lung function impairment in never–smoking Danish welders. Lyngenbo O, et al. **Scand J Soc Med** 1989; 17(2):157–64

Lung cancer, smoking, and employment in foundries. Becher H, et al. **Scand J Work Environ Health** 1989 Feb; 15(1):38–42

Magnetic field effects on dental amalgam in divers welding and cutting electrically underwater. Ortendahl TW, et al. **Undersea Biomed Res** 1988 Nov;15(6):429–41

Effects of magnetic fields from underwater electrical cutting on in vitro corrosion of dental amalgam. Ortendahl TW, et al. **Undersea Biomed Res** 1988 Nov;15(6):443–55

[Inhalation exposure to welding fumes of arc welders in processing Cr–Ni steel in large chemical industry] Dyrba BC, et al. **Z Gesamte Hyg** 1989 May;35(5):271–5 (Eng. Abstr.) (Ger)

[A case study of acute cadmium poisoning by welding work] Ohshiro H, et al. **Sangyo Igaku** 1988 May;30(3):210–1 (Jpn)

[Carbon monoxide exposure of CO2–arc welding workers] Tsuchihana Y, et al. **Sangyo Igaku** 1988 Jul;30(4):280–1 (Jpn)

[Use of a method of systematic analysis for intensification of hygienic studies] Chernilovskaia FM, et al. **Gig Sanit** 1988 Nov;(11):51–4 (Rus)

[Physiologo–hygienic features of workers engaged in welding cast–iron items with preliminary heating] Kucheruk TK, et al. **Vrach Delo** 1989 Feb;(2):92–5 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

[Effect of welding arcs on the eyes of patients with contact lenses (literature study)] Stahler D, et al. **Z Gesamte Hyg** 1989 Jan;35(1):8–10 (6 ref.) (Eng. Abstr.) (Ger)

INSTRUMENTATION

Exposure to electromagnetic fields in arc welding. Stuchly MA, et al. **Health Phys** 1989 Mar;56(3):297–302

METHODS

[Methodology and evaluation of exposure to fumes formed during welding of chromium–nickel steel] Matczak W, et al. **Med Pr** 1988;39(3):175–85 (Eng. Abstr.) (Pol)

[Evaluation of exposure to fumes arising during welding of non–alloyed and low–alloyed steel by various methods] Matczak W, et al. **Med Pr** 1988;39(4):253–61 (Eng. Abstr.) (Pol)

WELL CHILD CONFERENCE see **CHILD HEALTH SERVICES**

WELLNESS PROGRAMS see **HEALTH PROMOTION**

WERDNIG–HOFFMANN DISEASE see under **MUSCULAR ATROPHY, SPINAL**

WERLHOF'S DISEASE see **PURPURA, THROMBOCYTOPENIC**

WERMER SYNDROME see **NEOPLASMS, MULTIPLE ENDOCRINE**

WERNER'S SYNDROME

COMPLICATIONS

A case of a delusional psychotic syndrome in the setting of Werner's syndrome (adult progeria). Tannock TC, et al. **Br J Psychiatry** 1988 May;152:703–4

Werner's syndrome and astrocytoma. Laso FJ, et al. **Dermatologica** 1989;178(2):118–20

Werner's syndrome associated with malignancies: five case reports with a survey of case histories in Japan. Sato K, et al. **Gerontology** 1988;34(4):212–8 (19 ref.)

Acute pancreatitis in a case of Werner's syndrome with severe hyperlipidaemia. Naafs MA, et al. **Neth J Med** 1989 Apr;34(3–4):194–9

Osteosclerosis of the phalanges in Werner syndrome. Goto M, et al. **Radiology** 1989 Sep;172(3):841–3

[Werner's syndrome and arteriosclerosis] Mori S, et al. **Nippon Ronen Igakkai Zasshi** 1988 Sep;25(5):486–90 (Eng. Abstr.) (Jpn)

[Fatty liver as a complication of patients with Werner's syndrome] Mori S, et al. **Nippon Ronen Igakkai Zasshi** 1988 Nov;25(6):626–31 (Eng. Abstr.) (Jpn)

ENZYMOLOGY

Inactivation of erythrocyte Cu–Zn–superoxide dismutase through nonenzymatic glycosylation. Taniquchi N, et al. **Prog Clin Biol Res** 1989;304:277–90

ETIOLOGY

[Differential diagnosis of so–called premature performance failure or premature aging] Grässler W. **Z Gesamte Inn Med** 1989 Jun 15;44(12):370–3 (Eng. Abstr.) (Ger)

GENETICS

Spontaneous and induced chromosomal instability in Werner syndrome. Gebhart E, et al. **Hum Genet** 1988 Oct; 80(2):135–9

Chromosome instability in lymphocytes from a patient with Werner's syndrome is not associated with DNA repair defects. Stefanini M, et al. **Mutat Res** 1989 May; 219(3):179–85

Mutator phenotype of Werner syndrome is characterized by extensive deletions. Fukuchi K, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5893–7

[Sister chromatid exchanges, during x–irradiation, in the blood lymphocytes of patients with hereditary diseases and radioresistant DNA synthesis] Pleskach NM, et al. **Tsitologiia** 1988 Jun;30(6):739–44 (Eng. Abstr.) (Rus)

METABOLISM

Metabolism of acetylated low density lipoproteins by monocyte–derived macrophages from patients with Werner's syndrome. Mori S, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):644–9

Mitogen–mediated protein phosphorylation in Werner's syndrome fibroblasts. Hirai M, et al. **Cell Struct Funct** 1988 Dec;13(6):471–80

PATHOLOGY

The Werner syndrome: a case study. Haustein J, et al. **Clin Neuropathol** 1989 May–Jun;8(3):147–51

Musculoskeletal manifestations of Werner's syndrome. Escalante A, et al. **Semin Arthritis Rheum** 1989 Aug; 19(1):1–8 (33 ref.)

[Homologous cerebral atrophy and ischemic insults in progeria adultorum] Haustein J, et al. **Zentralbl Allg Pathol** 1989;135(1):51–6 (Eng. Abstr.) (Ger)

[A report of a case with acrogeria] Mori S, et al. **Nippon Ronen Igakkai Zasshi** 1988 Jul;25(4):424–9 (13 ref.) (Eng. Abstr.) (Jpn)

RADIOGRAPHY

Case report 485: Werner syndrome. Gaetani SA, et al. **Skeletal Radiol** 1988;17(4):298–301

WERNICKE AREA see **TEMPORAL LOBE**

WERNICKE'S ENCEPHALOPATHY

CHEMICALLY INDUCED

Wernicke's encephalopathy following lithium–induced diarrhea [letter] Epstein RS. **Am J Psychiatry** 1989 Jun; 146(6):806–7

COMPLICATIONS

Dystonia and choreo–athetosis in Wernicke's encephalopathy. A case report. Moodley R, et al. **S Afr Med J** 1989 Jun 3;75(11):543–4

[Psychogenic malnutrition occurring in Gayet–Wernicke encephalopathy with retrobulbar optic neuritis in a deficient schizophrenic patient] Beaufils B, et al. **Ann Med Psychol (Paris)** 1988 May;146(5):471–5 (Fre)

[Hypothermia in Gayet–Wernicke syndrome and subclinical centropontine myelinolysis (letter)] d'Anglejan Chatillon J, et al. **Presse Med** 1988 Oct 22;17(36):1858 (Fre)

ENZYMOLOGY

Cerebral thiamine–dependent enzyme changes in experimental Wernicke's encephalopathy. Butterworth RF. **Metab Brain Dis** 1986 Sep;1(3):163–75 (44 ref.)

ETIOLOGY

Wernicke's encephalopathy in an 18–year–old woman. Turner S, et al. **Br J Psychiatry** 1989 Feb;154:261–2

Catastrophic weight loss after vertical banded gastroplasty: malnutrition and neurologic alterations. Albina JE, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):619–20

Wernicke's encephalopathy during total parenteral nutrition: observation in one case. Mattioli S, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):626–7

[Post–gastrectomy Wernicke–Korsakoff syndrome: clinical study of 2 cases] La Pia S, et al. **Riv Neurol** 1988 May–Jun; 58(3):121–3 (Eng. Abstr.) (Ita)

MORTALITY

The prevalence of the Wernicke–Korsakoff syndrome in Sydney, Australia: a prospective necropsy study. Harper C, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb; 52(2):282–5

PATHOLOGY

Atrophy and sponginess of the mammillary bodies with neuronal sparing: not only inactive Wernicke's encephalopathy. Lindboe CF, et al. **APMIS** 1989 Jul; 97(7):667–70

Wernicke's encephalopathy in acquired immune deficiency syndrome (AIDS): a case report. Soffer D, et al. **Clin Neuropathol** 1989 Jul–Aug;8(4):192–4

Does a "moderate" alcohol intake damage the brain? Harper C, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul; 51(7):909–13

The frequency of brain lesions in alcoholics. Comparison between the 5–year periods 1975–1979 and 1983–1987. Lindboe CF, et al. **J Neurol Sci** 1988 Dec;88(1–3):107–13

Wernicke's encephalopathy in non–alcoholics. An autopsy study. Lindboe CF, et al. **J Neurol Sci** 1989 Apr;90(2):125–9

PHYSIOPATHOLOGY

Brainstem auditory evoked responses during the recovery of Wernicke's disease. Erkulwater S, et al. **Clin Electroencephalogr** 1989 Jul;20(3):169–75

PREVENTION & CONTROL

Thiamine for prevention of Wernicke's encephalopathy: a reminder [letter] Mayes GA. **Anesth Analg** 1989 Sep;

69(3):407–8
Thiamin: to add or not to add? [letter] **Med J Aust** 1988 Oct 3;149(7):390–2
Prevention of the Wernicke–Korsakoff syndrome in Australia: a cost–benefit analysis. Fischer AJ, et al. **Med J Aust** 1989 Mar 20;150(6):311–3, 317

REHABILITATION

[Mental stimulation of a patient with Wernicke–Korsakoff's syndrome] Bartels U, et al. **Ugeskr Laeger** 1989 Apr 10; 151(15):952–3 (Eng. Abstr.) **(Dan)**

WEST NILE FEVER see under **TOGAVIRUS INFECTIONS**

WEST NILE VIRUS

Separation of functional West Nile virus replication complexes from intracellular membrane fragments. Grun JB, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3121–7

GENETICS

Induction of class I major histocompatibility complex antigen expression by West Nile virus on gamma interferon–refractory early murine trophoblast cells. King NJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):911–5
[Variations in the phenotypic expression of the Western Nile fever virus after reproduction in two Aedes albopictus Skuse, 1895 cell lines] Liapustin VN, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):78–81 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

An analysis of the antibody response against West Nile virus E protein purified by SDS–PAGE indicates that this protein does not contain sequential epitopes for efficient induction of neutralizing antibodies. Wengler G, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):987–92

METABOLISM

Cell–associated West Nile flavivirus is covered with E+pre–M protein heterodimers which are destroyed and reorganized by proteolytic cleavage during virus release. Wengler G, et al. **J Virol** 1989 Jun;63(6):2521–6
Analyses of the terminal sequences of West Nile virus structural proteins and of the in vitro translation of these proteins allow the proposal of a complete scheme of the proteolytic cleavages involved in their synthesis. Nowak T, et al. **Virology** 1989 Apr;169(2):365–76

PATHOGENICITY

Comparison of three methods for determining transmission rates in vector competence studies with Culex univittatus and West Nile and Sindbis viruses. Cornel AJ, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):70–2

WEST SYNDROME see **SPASMS, INFANTILE**

WESTERN BLOTTING see **BLOTTING, WESTERN**

WESTERN IMMUNOBLOTTING see **BLOTTING, WESTERN**

WET LUNG see **RESPIRATORY DISTRESS SYNDROME, ADULT**

WETTING AGENTS see under **SURFACE-ACTIVE AGENTS**

WHALES see under **CETACEA**

WHEAT

Iron and zinc absorption in human subjects from a mixed meal of extruded and nonextruded wheat bran and flour. Fairweather–Tait SJ, et al. **Am J Clin Nutr** 1989 Jan; 49(1):151–5
Use of an expanded–whole–wheat product in the reduction of body weight and serum lipids in obese females. Fordyce–Baum MK, et al. **Am J Clin Nutr** 1989 Jul; 50(1):30–6
Changes in composition and structure of wheat bran resulting from the action of human faecal bacteria in vitro. Stevens BJ, et al. **Carbohydr Res** 1988 Dec 1;183(2):311–9
Improved wheat for baking. Faridi H, et al. **CRC Crit Rev Food Sci Nutr** 1989;28(2):175–209 (39 ref.)
Effect of reduced phytate wheat bran on zinc absorption. Hall MJ, et al. **Eur J Clin Nutr** 1989 Jun;43(6):431–40
Utilization of wheat in complete rations for lactating cows. Faldet MA, et al. **J Dairy Sci** 1989 May;72(5):1243–51
Regulation of cytosine methylation in ribosomal DNA and nucleolus organizer expression in wheat. Flavell RB, et al. **J Mol Biol** 1988 Dec 5;204(3):523–34
DNase I sensitivity of ribosomal RNA genes in chromatin and nucleolar dominance in wheat. Thompson WF, et al. **J Mol Biol** 1988 Dec 5;204(3):535–48
Effect of wheat fiber and vitamins C and E on rectal polyps in patients with familial adenomatous polyposis. DeCosse JJ, et al. **J Natl Cancer Inst** 1989 Sep 6;81(17):1290–7
Bioavailability of and interactions between zinc and selenium in rats fed wheat grain intrinsically labeled with 65Zn and 75Se. House WA, et al. **J Nutr** 1989 Jun;119(6):916–21
The effect of wheat sprout extract on benzo(a)pyrene and 7,2–dimethylbenz(a)anthracene activity. Tudek B, et al. **Neoplasma** 1988;35(5):515–23
Response of growing Leghorn chicks to deoxynivalenol–contaminated wheat. Kubena LF, et al. **Poult Sci** 1988 Dec;67(12):1778–80
Supporting Evidence for the Use of Cassava [Manihot esculeta] Products Instead of Wheat Flour Products in the Diet of the Diabetic [letter] Byam N. **West Indian Med J** 1988 Dec;37(4):246
[Influence of flaking of wheat on the intestinal flow of nitrogen in the cow] Focant M, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:121–2 (Eng. Abstr.) **(Fre)**
[Study of the digestion of straw in lactating goats by means of nylon bags moving through the intestines] Laurent F, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:127–8 (Eng. Abstr.) **(Fre)**
[The efficacy of enriching wheat bread with lysine and its effect on gastric secretory activity] Vitollo AS, et al. **Vopr Pitan** 1988 Nov–Dec;(6):50–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Hypersensitivity to wheat flour in bakers. Valero Santiago A, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct; 16(5):309–14
[Three cases of food–dependent exercise–induced anaphylaxis] Akutsu I, et al. **Arerugi** 1989 Mar;38(3):277–84 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Effect of soil fertility on the amino acids and nutritional value of wheat grain. Szűts G, et al. **Acta Vet Hung** 1988; 36(3–4):137–42
The analysis of trichothecenes in wheat and human plasma samples by chemical ionization tandem mass spectrometry. Kostianinen R, et al. **Arch Environ Contam Toxicol** 1989 May–Jun;18(3):356–64
Hydrophobic–cluster analysis of plant protein sequences. A domain homology between storage and lipid–transfer proteins. Henrissat B, et al. **Biochem J** 1988 Nov 1; 255(3):901–5
Occurrence of pharmacologically active benzodiazepines in trace amounts in wheat and potato. Wildmann J, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3549–59
pH–dependent conformational changes of wheat germ calmodulin. Wang CL. **Biochemistry** 1989 May 30; 28(11):4816–20
Arabinoxylans from rye and wheat seed that interact with ice. Kindel PK, et al. **Carbohydr Res** 1989 Apr 15; 187(2):173–85
Wheat cultivar identification by a totally automatic soft–laser scanning densitometry and computer–aided analysis of protein electropherograms. Autran JC, et al. **Electrophoresis** 1988 May;9(5):205–13
Two–dimensional electrophoresis of cereal prolamins: applications to biochemical and genetic analyses. Shewry PR, et al. **Electrophoresis** 1988 Nov;9(11):727–37
New dimeric inhibitor of heterologous alpha–amylases encoded by a duplicated gene in the short arm of chromosome 3B of wheat (Triticum aestivum L.). Sanchez–Monge R, et al. **Eur J Biochem** 1989 Jul 15; 183(1):37–40
Effects of alkaline hydrogen peroxide treatment of cotton and wheat straw on cellulose crystallinity and on composition and site and extent of disappearance of wheat straw cell wall phenolics and monosaccharides by sheep. Kerley MS, et al. **J Anim Sci** 1988 Dec;66(12):3235–44
Limited survey of deoxynivalenol in wheat and corn in the United States. Wood GE, et al. **J Assoc Off Anal Chem** 1989 Jan–Feb;72(1):38–40
Enzyme–linked immunosorbent assay for deoxynivalenol in corn and wheat. Xu YC, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):945–9
Polypeptide structure of germin as deduced from cDNA sequencing. Dratewka–Kos E, et al. **J Biol Chem** 1989 Mar 25;264(9):4896–900
Enrichment of tocopherols in wheat germ by directly coupled supercritical fluid extraction with semipreparative supercritical fluid chromatography. Saito M, et al. **J Chromatogr Sci** 1989 Feb;27(2):79–85
Terbufos residues in wheat and barley. Westcott ND. **J Environ Sci Health [B]** 1988 Aug;23(4):317–30
A new technology for the production of valuable vitamin extracts from wheat and rye germs. Karwowska K, et al. **Nahrung** 1988;32(5):491–5
Nutritional evaluation of some commercial wheat varieties grown in Pakistan. Khan MA, et al. **Plant Foods Hum Nutr** 1987;37(3):253–60
Changes in the polynuclear aromatic hydrocarbon content of wheat grain and pasture grassland over the last century from one site in the U.K. Jones KC, et al. **Sci Total Environ** 1989 Jan;78:117–30
[Isolation and characterization of gliadins from Aegilops squarrosa seeds] Odintsova TI, et al. **Biokhimiia** 1989 Mar; 54(3):396–408 (Eng. Abstr.) **(Rus)**
[Detection of toxigenic Fusarium strains, producing T–2 toxin, in wheat grain mycoflora by microbiologic assay] Kroiakova EA, et al. **Vopr Pitan** 1989 Mar–Apr;(2):54–7 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Wheat rootlet growth inhibition test of Rwandese medicinal plants: active principles of Tetradenia riparia and Diplolophium africanum. van Puyvelde L, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):233–46

ENZYMOLOGY

Confirmation of a ping–pong mechanism for S–adenosyl–L–methionine:magnesium protoporphyrin methyltransferase of etiolated wheat by an exchange reaction. Yee WC, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):483–90
Enzymic capacities of amyloplasts from wheat (Triticum aestivum) endosperm. Entwistle G, et al. **Biochem J** 1988 Oct 15;255(2):391–6
DNA methylation in plants. Vanyushin BF, et al. **Gene** 1988 Dec 25;74(1):117–21
Tyrosyl–tRNA synthetase from wheat germ. Quivy JP, et al. **J Biol Chem** 1988 Oct 25;263(30):15277–81
[Methionyl–tRna synthetase from wheat germ. Effect of an endogenous protease and correlations between structural characteristics and catalytic properties.] Archambault de Vençay J. **Eur J Biochem** 1989 Jun 1;182(1):37–43 (Eng. Abstr.) **(Fre)**

GENETICS

The transcription and translation in vitro of individual cereal storage–protein genes from wheat (Triticum aestivum, cv. Chinese Spring). Evidence for translocation of the translation products and disulphide–bond formation. Bulleid NJ, et al. **Biochem J** 1988 Sep 15;254(3):805–10
Nucleotide sequence of a wheat mitochondrial lysine tRNA gene. Joyce PB, et al. **Biochim Biophys Acta** 1989 Aug 14;1008(3):355–6
In wheat ctDNA, segments of ribosomal protein genes are dispersed repeats, probably conserved by nonreciprocal recombination. Bowman CM, et al. **Curr Genet** 1988 Aug; 14(2):127–36
A nuclear tRNA(UGASer) gene from the wheat Triticum vulgare var. Aria. Szweykowska–Kulińska Z, et al. **Gene** 1989 Apr 15;77(1):163–7
Molecular analysis of an alcohol dehydrogenase (Adh) gene from chromosome 1 of wheat. Mitchell LE, et al. **Genome** 1989 Jun;32(3):349–58
Nucleotide sequences of the two high–molecular–weight glutenin genes from the D–genome of a hexaploid bread wheat, Triticum aestivum L. cv Cheyenne. Anderson OD, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):461–2
Nucleotide sequence of a second glutamine tRNA gene in wheat mitochondrial DNA. Joyce PB, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4885
Nucleotide sequence and encoded amino acid sequence of a genomic gene region for a low molecular weight glutenin. Pitts EG, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11376
[Microheterogeneity of the primary structure of the short repeated 5S DNA unit in diploid wheat Triticum monococcum L.] Vakhitov VA, et al. **Genetika** 1989 Jan; 25(1):161–3 (Eng. Abstr.) **(Rus)**
[Primary structure of the 5.8S gene of rRNA and internal transcribed spacers of rDNA in diploid wheat Triticum urartu thum. ex. gandil] Chemeris AV, et al. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):320–6 (Eng. Abstr.) **(Rus)**
[Nucleotide sequences of 5S rRNA genes of polyploid species of wheat and Aegilops species] Vakhitov VA, et al. **Mol Biol (Mosk)** 1989 Mar–Apr;23(2):431–40 (Eng. Abstr.) **(Rus)**
[Nucleotide sequence of intergenic and external transcribed spacers of rDNA of diploid wheat Triticum urartu Thum. ex Candil] Vakhitov VA, et al. **Mol Biol (Mosk)** 1989 Mar–Apr;23(2):441–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Inhibition of starch absorption by dietary fibre. A comparative study of wheat bran, sugar–beet fibre, and pea fibre. Hamberg O, et al. **Scand J Gastroenterol** 1989 Jan; 24(1):103–9
[The role of chemotaxis genes in establishing the associative relations between Azospirillum brasilense and wheat] Bakanchikova TI, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr;(4):24–32 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Oxygen–induced free radical in wheat roots. Goodman BA, et al. **Free Radic Res Commun** 1986;2(3):173–8

WHEAT GERM AGGLUTININS

Purification of murine hemopoietic stem cells and committed progenitors by fluorescence activated cell sorting using wheat germ agglutinin and monoclonal antibodies. Bauman JG, et al. **Acta Histochem Suppl (Jena)** 1988;36:241–53
Change in membrane fluidity induced by lectin–mediated phase separation of the membrane and agglutination of phospholipid vesicles containing glycopeptides. Ohtoyo T, et al. **Biochemistry** 1988 Aug 23;27(17):6458–63
Efficacy of wheat germ lectin–precipitated alkaline phosphatase in serum as an estimator of bone mineralization rate: comparison to serum total alkaline phosphatase and serum bone Gla–protein. Brixen K, et al.

Calcif Tissue Int 1989 Feb;44(2):93–8
Synthesis of antigenic copolymers of N-acetylneuraminic acid binding to wheat germ agglutinin and antibodies. Roy R, et al. Carbohydr Res 1988 Jun 15;177:C1–4
Effect of Triton X-100 on precipitation of biliary phosphatase by wheat-germ lectin [letter] Rosalki SB, et al. Clin Chem 1989 Mar;35(3):513
Gold labeling with wheat germ agglutinin and RNAse on osmicated tissue embedded in epoxy resin. Brooks EM, et al. J Histochem Cytochem 1989 Oct;37(10):1557–61
[Studies on the reaction of wheat germ agglutinin with serum glycoproteins. Lectins as reagents. III] Lorentz K, et al. J Clin Chem Clin Biochem 1988 Sep;26(9):549–58 (Eng. Abstr.) (Ger)

DIAGNOSTIC USE

Lectins as neuroanatomical tracers. Büttner-Ennever JA, et al. Acta Histochem Suppl (Jena) 1988;36:141–51 (60 ref.)
A novel sialylhexasaccharide from human milk: purification by affinity chromatography on immobilized wheat germ agglutinin. Tarrago MT, et al. Arch Biochem Biophys 1988 Nov 15;267(1):353–62
A hypothesis for the superior sensitivity of wheat germ agglutinin as a neuroanatomical probe. Stieber A, et al. Brain Res 1989 Aug 21;495(1):131–9
Wheat germ agglutinin fracture-label of Golgi apparatus membranes in proliferating cells. Lotti LV, et al. Cell Biol Int Rep 1988 Aug;12(8):597–605
Occurrence and distribution of sialic acid residues in developing rat glomerulus: investigations with the Limax flavus and the wheat germ agglutinin. Wagner P, et al. Eur J Cell Biol 1988 Dec;47(2):259–69
Wheat germ agglutinin and Helix pomatia agglutinin lectin binding on cochlear hair cells. Gil-Loyzaga P, et al. Hear Res 1988 Jul 15;34(2):149–55
Preservation of capsular material of streptococcal cells by specific lectins determined by immunoelectron microscopy. Molinari A, et al. Histochem J 1988 Sep;20(9):526–30
Spinocerebellar projections from the upper lumbar segments in the cat, as studied by anterograde transport of wheat germ agglutinin-horseradish peroxidase. Yaginuma H, et al. J Comp Neurol 1989 Mar 8;281(2):298–319
Retrograde transneuronal labeling of premotor neurons of horizontal eye movement system in the cat using wheat germ agglutinin conjugated with horseradish peroxidase. Ozaki M, et al. Jpn J Ophthalmol 1989;33(1):85–94

GENETICS

Sequence variability in three wheat germ agglutinin isolectins: products of multiple genes in polyploid wheat. Wright CS, et al. J Mol Evol 1989 Apr;28(4):327–36

IMMUNOLOGY

Different class I antigen oligosaccharides on a murine tumor and a lectin-resistant variant are not responsible for the differential recognition of the tumors by CTL. Degen E, et al. Int J Cancer 1989 May 15;43(5):828–36
Polymorphonuclear leukocytes cap a derivative of wheat germ agglutinin upon stimulation with formyl peptide and C5a but not leukotriene B4. Kurrasch R, et al. J Immunol 1989 Sep 15;143(6):1969–73
[Histochemical study of chicken intestinal mucosa carried out using wheat germ agglutinin (WGA)] Saccia M, et al. Boll Soc Ital Biol Sper 1988 Aug;64(8):747–54 (Eng. Abstr.) (Ita)

METABOLISM

Competitive binding of gangliosides and glycophorin to wheat germ agglutinin. Lee PM, et al. Biochem Biophys Res Commun 1989 Apr 28;160(2):780–7
Effects of detergent on the binding of solubilized sodium channels to immobilized wheat germ agglutinin: structural implications. Weiner JS, et al. Biochim Biophys Acta 1988 Oct 20;944(3):521–6
Binding of wheat and peanut lectins to human transitional cell carcinomas. Correlation with histopathologic grade, invasion, and DNA ploidy. Langkilde NC, et al. Cancer 1989 Aug 15;64(4):849–53
Lectin-binding histochemistry of normal and osteoarthritic cartilage tissue. Hoedt-Schmidt S. Clin Exp Rheumatol 1989 May-Jun;7(3):257–64
Lectin-ferritin binding on spontaneously diabetic and control rat retinal microvasculature. Fitzgerald ME, et al. Curr Eye Res 1989 Mar;8(3):271–83
Lectin binding patterns in normal and neoplastic colonic mucosa. A study of Dolichos biflorus agglutinin, peanut agglutinin, and wheat germ agglutinin. Campo E, et al. Dis Colon Rectum 1988 Nov;31(11):892–9
Variations in WGA-binding proteins in tumours growing in different implantation sites. Chan WS, et al. Exp Cell Biol 1989;57(1):11–8
Lectin-bearing liposomes: differential binding to normal and to transformed mouse fibroblasts. Bogdanov AA Jr, et al. Exp Cell Res 1989 Apr;181(2):362–74
Lateral diffusion of lectin receptors in fibroblast membranes as a function of cell shape. Swaisgood M, et al. Exp Cell Res 1989 Feb;180(2):515–28
Alterations of wheat-germ agglutinin binding pattern on cell surface of blood platelets after thrombin stimulation. Daimon T, et al. Histochemistry 1989;91(6):461–7
Polarized distribution of binding sites for concanavalin A and wheat-germ agglutinin in the zona pellucida of goodeid oocytes (teleostei). Schindler JF, et al. Histochemistry 1989; 91(5):413–7
Polarization of plasma membrane glycoconjugates in amphibian epidermis during metamorphosis. Villalba JM, et al. Histochemistry 1989;90(6):453–8
Effects of the oviduct and wheat germ agglutinin on enzymatic digestion of porcine zona pellucidae. Broermann DM, et al. J Anim Sci 1989 May;67(5):1324–9
Characterization and cytoskeletal association of a major cell surface glycoprotein, GP 140, in human neutrophils. Suchard SJ, et al. J Clin Invest 1989 Aug;84(2):484–92
Demonstration of concanavalin A- and wheat germ agglutinin-binding sites on the Trichomonas vaginalis surface coat using lectin-gold particle conjugates. Warton A, et al. J Electron Microsc (Tokyo) 1988;37(3):134–40
Differences in transneuronal transport of horseradish peroxidase conjugated wheat germ agglutinin in the visual system: marmoset monkey and guinea pig compared. Spatz WB. J Hirnforsch 1989;30(3):375–84
Intracellular binding of wheat germ agglutinin by Golgi complexes, phagosomes, and lysosomes of Paramecium multimicronucleatum. Allen RD, et al. J Histochem Cytochem 1989 Feb;37(2):195–202
Variation in binding of Bacillus sphaericus toxin and wheat germ agglutinin to larval midgut cells of six species of mosquitoes. Davidson EW. J Invertebr Pathol 1989 Mar; 53(2):251–9
Immunohistochemistry and cytochemistry of experimental rat bladder cancer: binding of the lectins PNA and WGA and of a Le(Y) mouse monoclonal antibody. Langkilde NC, et al. J Urol 1989 Apr;141(4):981–6
Quantitation of concanavalin A and wheat germ agglutinin binding by two strains of Trichomonas vaginalis of differing pathogenicity using gold particle-conjugated lectins. Kon VB, et al. Parasitol Res 1988;75(1):7–13
[Orienting studies on the direct effect of various radiation types and energies on lectin binding of the human epidermis in vitro] Wollina U, et al. Radiobiol Radiother (Berl) 1988; 29(4):443–7 (Eng. Abstr.) (Ger)

PHARMACOKINETICS

False-positive artifacts of tracer strategies distort autonomic connectivity maps. Fox EA, et al. Brain Res Brain Res Rev 1989 Jan-Mar;14(1):53–77 (279 ref.)

PHARMACOLOGY

Lectins inhibit cell binding and spreading on a laminin substrate. Dean JW 3d, et al. Biochem Biophys Res Commun 1988 Oct 14;156(1):411–6
Wheat germ agglutinin, concanavalin A, and lens culinalis agglutinin block the inhibitory effect of nerve growth factor on cell-free phosphorylation of Nsp100 in PC12h cells. Hashimoto S, et al. Cell Struct Funct 1989 Feb; 14(1):87–93
Wheat germ agglutinin stimulation of alpha beta heterodimeric insulin receptor beta-subunit autophosphorylation by noncovalent association into an alpha 2 beta 2 heterotetrameric state. Wilden PA, et al. Endocrinology 1989 Feb;124(2):971–9
Effects of wheat germ agglutinin on the cellular content of filamentous actin in Intestine 407 cells. Sjölander A, et al. Eur J Cell Biol 1988 Oct;47(1):32–5
Identification of a wheat germ agglutinin-sensitive ATPase in yeast nuclei. Tsuchiya E, et al. FEBS Lett 1989 Jul 3; 250(2):285–8
Wheat germ agglutinin treatment of follicle cell-free mouse oocytes inhibits fertilization. Nuzzo NA, et al. Gamete Res 1988 Nov;21(3):213–21
Erythrocytes attached to a wheat germ agglutinin coated surface display an altered phospholipid metabolism. Dale GL, et al. J Cell Biochem 1988 Sep;38(1):1–11
Wheat germ agglutinin inhibits thrombin-induced rises in cytosolic free calcium and prostacyclin synthesis by human umbilical vein endothelial cells. Grulich-Henn J, et al. J Cell Physiol 1988 Dec;137(3):553–8
Effects of lectins and tunicamycin on IL-1 binding to YT cells. Speziale SC, et al. Lymphokine Res 1989 Spring; 8(1):1–8

WHEAT GERM LECTINS see WHEAT GERM AGGLUTININS

WHEELCHAIRS

Sports medicine for wheelchair athletes. Schaefer RS, et al. Am Fam Physician 1989 May;39(5):239–45
A modified slit lamp for examination of wheelchair-bound patients. Javitt JC. Arch Ophthalmol 1989 Mar;107(3):453–4
Energy requirements of gamefield exercises designed for wheelchair-bound persons. Cardós D, et al. Arch Phys Med Rehabil 1989 Feb;70(2):124–7
Static and dynamic forward stability of occupied wheelchairs: influence of elevated footrests and forward stabilizers. Kirby RL, et al. Arch Phys Med Rehabil 1989 Sep;70(9):681–6
Kung-Fu: synthesis of wheelchair sport and self-protection. Madorsky JG, et al. Arch Phys Med Rehabil 1989 Jun; 70(6):490–2
An investigation into anaerobic performance of wheelchair athletes. Lees A, et al. Ergonomics 1988 Nov; 31(11):1529–37
Optimum cycle frequencies in hand-rim wheelchair propulsion. Wheelchair propulsion technique. van der Woude LH, et al. Eur J Appl Physiol 1989;58(6):625–32
Wheelchair karate. Portnoy FL, et al. Geriatr Nurs (New York) 1989 Mar-Apr;10(2):76–7
Wheelchairs designed for activity and sport. Bernt J. Int J Rehabil Res 1987;10(4 Suppl 5):73–5
Energy costs of wheelchair propulsion by elderly and disabled people. Hunter J. Int J Rehabil Res 1987;10(4 Suppl 5):50–4
Audit of a regional wheelchair service. Hunter J. Int J Rehabil Res 1987;10(4 Suppl 5):77–9
New modular wheelchair models. van Huijgevoort LW. Int J Rehabil Res 1987;10(4 Suppl 5):75–7
Orthopaedic management of high-level spina bifida. Early walking compared with early use of a wheelchair. Mazur JM, et al. J Bone Joint Surg [Am] 1989 Jan;71(1):56–61
Wheelchair obstacle course performance in right cerebral vascular accident victims. Webster JS, et al. J Clin Exp Neuropsychol 1989 Mar;11(2):295–310
Technical note: an automatic tyre inflator for wheelchairs. Abel EW, et al. J Med Eng Technol 1988 May-Jun; 12(3):118–20
Hybrid-powered wheelchair: a combination of arm force and electrical power for propelling a wheelchair. Cremers GB. J Med Eng Technol 1989 Jan-Apr;13(1-2):142–8
Propulsion technique in hand rim wheelchair ambulation. van der Woude LH, et al. J Med Eng Technol 1989 Jan-Apr; 13(1-2):136–41
Racing wheelchair rear wheel alignment. Cooper RA. J Rehabil Res Dev 1989 Winter;26(1):47–50
An international track wheelchair with a center of gravity directional controller. Cooper RA. J Rehabil Res Dev 1989 Spring;26(2):63–70
Racing wheelchair crown compensation. Cooper RA. J Rehabil Res Dev 1989 Winter;26(1):25–32
Tests of two new polyurethane foam wheelchair tires. Gordon J, et al. J Rehabil Res Dev 1989 Winter;26(1):33–46
The effect of rear wheel camber in manual wheelchair propulsion. Veeger D, et al. J Rehabil Res Dev 1989 Spring; 26(2):37–46
Analysis of wheelchair track performances [letter] Cooper RA. Med Sci Sports Exerc 1989 Apr;21(2):235–6
Wheelchair racing: effects of rim diameter and speed on physiology and technique. van der Woude LH, et al. Med Sci Sports Exerc 1988 Oct;20(5):492–500
Transition of physical fitness in wheelchair marathon competitors over several years. Okuma H, et al. Paraplegia 1989 Jun;27(3):237–43
Effect of seat angle and lumbar support on seated buttock pressure. Shields RK, et al. Phys Ther 1988 Nov; 68(11):1682–6
Development of a universal wheelchair narrower. Stewart CP, et al. Prosthet Orthot Int 1989 Apr;13(1):39–41
[Prosthetic and wheelchair management of elderly patients following above the knee amputation—a decision at the acute hospital] Dorian R. Rehabilitation (Stuttg) 1988 Nov; 27(4):204–9 (18 ref.) (Eng. Abstr.) (Ger)
[Transportation devices in the system of rehabilitation of patients and invalids] Kostetskii MV. Ortop Travmatol Protez 1988 Aug;(8):54–7 (Rus)

STANDARDS

"Bedside" test of static rear stability of occupied wheelchairs. Kirby RL, et al. Arch Phys Med Rehabil 1989 Mar; 70(3):241–4
Standards of wheelchairs [letter] BMJ 1989 May 20; 298(6684):1382–3
Standards of wheelchairs [letter] Crewe R. BMJ 1989 Jul 1;299(6690):53–4
Standards of wheelchairs [letter] Ham R, et al. BMJ 1989 Jun 3;298(6686):1522
Standards of wheelchairs. Mulley GP. BMJ 1989 May 6; 298(6682):1198–9 (17 ref.)
Improvement of seating comfort due to a new wheelchair seating system. Weishaupt WA. Int J Rehabil Res 1987;10(4 Suppl 5):90–9

WHEEZING see RESPIRATORY SOUNDS

WHIPLASH INJURIES

Neck sprains after car accidents [letter] Maimaris C. BMJ 1989 Jul 8;299(6691):123

COMPLICATIONS

Traumatic retropharyngeal hematoma. Myssiorek D, et al. Arch Otolaryngol Head Neck Surg 1989 Sep;115(9):1130–2
Extension injuries of the cervical spine resulting in tetraplegia. McMillan BS, et al. Injury 1987 Jul; 18(4):224–33
Hyperaesthesia associated with hyperextension injuries of the neck. Reichl M, et al. Injury 1987 Jul;18(4):234
Cranial symptoms after cervical injury. Aetiology and treatment of the Barré-Liéou syndrome. Tamura T. J Bone Joint Surg [Br] 1989 Mar;71(2):283–7
Laypersons' knowledge about the sequelae of minor head injury and whiplash. Aubrey JB, et al.

J Neurol Neurosurg Psychiatry 1989 Jul;52(7):842–6

[Etiology of the neurastheniform psychosyndrome following injuries of the cervical spine, including cervicocephalic acceleration trauma] Laubichler W, et al. Beitr Gerichtl Med 1988;46:439–49 (Eng. Abstr.) (Ger)

ETIOLOGY

Neck sprains afer car accidents [letter] Horne G. BMJ 1989 Jul 1;299(6690):53

PATHOLOGY

Upper cervical trauma in motor vehicle collisions. Shkrum MJ, et al. J Forensic Sci 1989 Mar;34(2):381–90

The infant whiplash-shake injury syndrome: a clinical and pathological study. Hadley MN, et al. Neurosurgery 1989 Apr;24(4):536–40

PHYSIOPATHOLOGY

Trigeminal pain due to whiplash injury. McGlone R, et al. Injury 1988 Sep;19(5):366

Comment on the paper 'Response of a human head/neck/upper-torso replica to dynamic loading—II. Analytical/numerical model' [letter] Williams JL. J Biomech 1988;21(8):687–8

Modeling of jaw-head-neck dynamics during whiplash. Schneider K, et al. J Dent Res 1989 Sep;68(9):1360–5

[Whiplash trauma of the cervical spine. An evaluation of neurologic status] Delank HW. Unfallchirurg 1988 Aug; 91(8):381–7 (21 ref.) (Eng. Abstr.) (Ger)

[Injury tolerance of the human skull in relation to simulation of impact acceleration] Schneider K, et al. Unfallchirurg 1989 Feb;92(2):49–53 (Eng. Abstr.) (Ger)

[Biomechanics of whiplash injuries of the cervical spine] Schmidt G. Versicherungsmedizin 1989 Jul 1;41(4):121–6 (30 ref.) (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Do head-restraints protect the neck from whiplash injuries? Morris F. Arch Emerg Med 1989 Mar;6(1):17–21

PSYCHOLOGY

Minor whiplash head injury with major debilitation. Yarnell PR, et al. Brain Inj 1988 Jul–Sep;2(3):255–8

[Psychological changes following whiplash injury of the cervical vertebrae] Radanov BP, et al. Schweiz Med Wochenschr 1989 Apr 29;119(17):536–43 (Eng. Abstr.) (Ger)

RADIOGRAPHY

Neck pain after trauma. Swischuk LE. Pediatr Emerg Care 1988 Sep;4(3):219–21

The incidence and prognostic significance of radiological abnormalities in soft tissue injuries to the cervical spine. Miles KA, et al. Skeletal Radiol 1988;17(7):493–6

THERAPY

The role of physiotherapy in the management of acute neck sprains following road-traffic accidents. McKinney LA, et al. Arch Emerg Med 1989 Mar;6(1):27–33

Whiplash syndrome. Fact or fiction? Hirsch SA, et al. Orthop Clin North Am 1988 Oct;19(4):791–5

WHIPPLE'S DISEASE see **LIPODYSTROPHY, INTESTINAL**

WHIRLPOOL BATHS see **HYDROTHERAPY**

WHISKERS see **VIBRISSAE**

WHITE HEIFER DISEASE see **FREEMARTINISM**

WHITE MUSCLE DISEASE see under **MUSCULAR DYSTROPHY, ANIMAL**

WHITE SPOTS, DENTAL see **DENTAL CARIES**

WHITEFISH see **SALMONIDAE**

WHITES

see related
CAUCASOID RACE

The prevalence of major depression in black and white adults in five United States communities. Somervell PD, et al. Am J Epidemiol 1989 Oct;130(4):725–35

Black/white differences in non-treatment of bladder cancer patients and implications for survival. Mayer WJ, et al. Am J Public Health 1989 Jun;79(6):772–5

Relation between vegetarian/nonvegetarian diets and blood pressure in black and white adults. Melby CL, et al. Am J Public Health 1989 Sep;79(9):1283–8

Alcohol consumption and problem drinking in white male veterans and nonveterans. Richards MS, et al. Am J Public Health 1989 Aug;79(8):1011–5

Prevalence of cardiovascular disease risk factors in blacks and whites: the Minnesota Heart Survey. Sprafka JM, et al. Am J Public Health 1988 Dec;78(12):1546–9

Breast feeding preference of Hispanic and Anglo women. 1978–1985 [see comments] Dungy CI. Clin Pediatr (Phila) 1989 Feb;28(2):92–4. Comment in: Clin Pediatr (Phila) 1989 Jul;28(7):335–6

Gender and race differences in effects of health and pension on retirement before 65. Belgrave LL, et al. Compr Gerontol [B] 1987 Dec;1(3):109–17

Epidemiology of IDDM in black and white children in Jefferson County, Alabama, 1979–1985 [published erratum appears in Diabetes 1989 Jul;38(7):preceding 815] Wagenknecl LE, et al. Diabetes 1989 May;38(5):629–33

Urban psychiatric commitments: disability and dangerous behavior of black and white recent admissions. Lindsey KP, et al. Hosp Community Psychiatry 1989 Mar; 40(3):286–94

Prevalence of HTLV-I and HIV infection among white parenteral drug abusers. Glaser JB, et al. J Acquir Immune Defic Syndr 1988;1(4):415–7

A simple method for assessing calcium intake in Caucasian women. Angus RM, et al. J Am Diet Assoc 1989 Feb; 89(2):209–14

Food group contributions to nutrient intake in whites, blacks, and Mexican Americans in Texas. Borrud LG, et al. J Am Diet Assoc 1989 Aug;89(8):1061–9

Predictors of physical disability in elderly blacks and whites of the Charleston Heart Study. Keil JE, et al. J Clin Epidemiol 1989;42(6):521–9

Changes in tuberculosis notification rates in the white ethnic group in England and Wales between 1953 and 1983. Springett VH, et al. J Epidemiol Community Health 1988 Dec;42(4):370–6

Reexamining the double jeopardy to health thesis. Ferraro KF. J Gerontol 1989 Jan;44(1):S14–6

Occupational risks of bladder cancer in the United States: I. White men. Silverman DT, et al. J Natl Cancer Inst 1989 Oct 4;81(19):1472–80

Race and the shaken baby syndrome: experience at one hospital. Brenner SL, et al. J Natl Med Assoc 1989 Feb; 81(2):183–4

Ethnic differences in drinking practices and cognitive impairment among detoxifying alcoholics. Castaneda R, et al. J Stud Alcohol 1988 Jul;49(4):335–9

Trends in the death rates of black and white youths in Tennessee, 1935 to 1985. Hogan A, et al. J Tenn Med Assoc 1988 Oct;81(10):615–9

Leads from the MMWR. Differences in death rates due to injury among blacks and whites, 1984. JAMA 1989 Jan 13;261(2):214–6

Leads from the MMWR. Black/white comparisons of premature mortality for public health program planning—District of Columbia. JAMA 1989 Feb 17; 261(7):978, 982, 984

Access to medical care for black and white Americans. A matter of continuing concern. Blendon RJ, et al. JAMA 1989 Jan 13;261(2):278–81

Black/white comparisons of premature mortality for public health program planning—District of Columbia. MMWR 1989 Jan 27;38(3):33–7

Carotid endarterectomy in blacks and whites. Implications for surgery residency training. Rutherford EJ, et al. N C Med J 1989 Apr;50(4):189–91

Prenatal care and low birth weight among blacks and whites [letter] N Engl J Med 1989 Apr 13;320(15):1010–1

Breast-feeding trends among black and white women in Washington, DC. Nutr Rev 1988 Oct;46(10):345–7 (9 ref.)

Socioeconomic differentials and neonatal mortality: racial comparison of California singletons. Gould JB, et al. Pediatrics 1989 Feb;83(2):181–6

Socioeconomic status and low birth weight: a racial comparison. Gould JB, et al. Pediatrics 1988 Dec; 82(6):896–904

Smokeless tobacco use among ninth graders in a north-central metropolitan population: cross-sectional and prospective associations with age, gender, race, family structure, and other drug use. Murray DM, et al. Prev Med 1988 Jul;17(4):449–60

Discrepancies in racial designations of school children in Minneapolis. Gillum RF, et al. Public Health Rep 1988 Sep–Oct;103(5):485–8

Infectious disease rates among white children [letter] Lyall MM, et al. S Afr Med J 1989 May 6;75(9):452

PSYCHOLOGY

Assessing correlations between black and white students' perceptions of the medical school learning environment, their academic performances, and their well-being. Strayhorn G, et al. Acad Med 1989 Aug;64(8):468–73

Personal violence (suicide and homicide) in South Africa. Lester D. Acta Psychiatr Scand 1989 Mar;79(3):235–7

Indian and Anglo adolescent alcohol use and emotional distress: path models. Oetting ER, et al. Am J Drug Alcohol Abuse 1989;15(2):153–72

Unmarried motherhood: recent trends, composition, and black—white differences. Bumpass L, et al. Demography 1989 May;26(2):279–86

Racial factors influencing college students' ratings of alcohol's usefulness. Connors GJ, et al. Drug Alcohol Depend 1988 Jul;21(3):247–52

Comparisons of aged Mexican-American and non-Hispanic white nursing home residents. Espino DV, et al. Fam Med 1989 May-Jun;21(3):191–4

Fertility and fertility-related behavior among Mexican-American and non-Hispanic white female adolescents. Aneshensel CS, et al. J Health Soc Behav 1989 Mar;30(1):56–76

Drinking practices among black and white alcoholics and alcoholics of different personality types. Robyak JE, et al. J Pers Assess 1988 Fall;52(3):487–98

Achievement in the first 2 years of school: patterns and processes. Alexander KL, et al. Monogr Soc Res Child Dev 1988;53(2):1–157

Racial differences in stress-induced cardiovascular reactivity and hypertension: current status and substantive issues. Anderson NB. Psychol Bull 1989 Jan;105(1):89–105 (167 ref.)

Effects of race on interrater reliability of peer ratings. Jordan JL. Psychol Rep 1989 Jun;64(3 Pt 2):1221–2

Suicide ideation and attempts in Hispanics and non-Hispanic whites: demographic and psychiatric disorder issues. Sorenson SB, et al. Suicide Life Threat Behav 1988 Fall; 18(3):205–18

Drinking in different social contexts among white, black, and Hispanic men. Caetano R, et al. Yale J Biol Med 1988 May-Jun;61(3):243–58

WHOLE BLOOD COAGULATION TIME see under **BLOOD COAGULATION TESTS**

WHOLE BODY COUNTING

Efficacy of computed tomography of the thorax and upper abdomen and whole-body gallium scintigraphy for staging of lung cancer. MacMahon H, et al. Cancer 1989 Oct 1; 64(7):1404–8

Evidence of exhalation of stored environmental Rn determined by whole-body counting. Lykken GI, et al. Health Phys 1989 Jul;57(1):161–2

Performance characteristics of a whole-body positron tomograph [published erratum appears in J Nucl Med 1989 Feb;30(2):268] Spinks TJ, et al. J Nucl Med 1988 Nov; 29(11):1833–41

Whole-body autoradiography of 14C-dantrolene in the marmoset monkey. Wuis EW, et al. Pharmacol Toxicol 1989 Jan;64(1):156–8

Non-restrictive methods for measuring energy expenditure. Haggarty P, et al. Proc Nutr Soc 1988 Sep;47(3):365–74 (36 ref.)

[The value of skeletal scintigraphy in the aftercare of breast carcinoma. A prospective study of 750 cases] Schlinemann H, et al. Dtsch Med Wochenschr 1989 Jan 6;114(1):3–8 (Eng. Abstr.) (Ger)

[Whole-body radiometry in assessing metabolism in hypertension] Kaplan MA, et al. Med Radiol (Mosk) 1989 Jan;34(1):19–26 (Eng. Abstr.) (Rus)

INSTRUMENTATION

Whole body and regional retention of Tc-99m-labeled diphosphonates with a whole-body counter: a study with normal males. Molloi S, et al. Calcif Tissue Int 1989 May; 44(5):322–9

STANDARDS

Anthropomorphic models for checking the calibration of whole-body counters and activation analysis systems. Bewley DK. Phys Med Biol 1988 Jul;33(7):805–13

WHOLE BODY IRRADIATION

see related
LYMPHATIC IRRADIATION

Effect of 60Co-Gamma whole body irradiation and treatment with radioprotector on the retention of 144Ce, in mice. Gachályi A, et al. Acta Physiol Hung 1989;73(1):105–8

Hemorrhagic autoimmune encephalomyelitis induced by adoptive transfer of activated semiallogeneic spleen cells into irradiated rats. Matsumoto Y, et al. Am J Pathol 1988 Nov;133(2):306–15

Whole body X-irradiation and repopulation with syngeneic bone marrow have no significant effect on basophils and mast cell compartment of murine lymph nodes. Włodarski KH. Arch Immunol Ther Exp (Warsz) 1988;36(4):433–7

Treatment of aggressive multiple myeloma by high-dose chemotherapy and total body irradiation followed by blood stem cells autologous graft. Fermand JP, et al. Blood 1989 Jan;73(1):20–3

Effect of recombinant human granulocyte colony-stimulating factor on hematopoiesis of normal dogs and on hematopoietic recovery after otherwise lethal total body irradiation. Schuening FG, et al. Blood 1989 Sep; 74(4):1308–13

Comparison of fractionated to single-dose total body irradiation in conditioning canine littermates for DLA-identical marrow grafts. Storb R, et al. Blood 1989 Aug 15;74(3):1139–43

Safe application of a 13-Gy split dose total body irradiation schedule prior to bone marrow transplantation. Davis HP, et al. Bone Marrow Transplant 1988 Jul;3(4):349–56

Marrow transplantation for acute nonlymphoblastic leukemia in first remission: toxicity and long-term follow-up of patients conditioned with single dose or fractionated total body irradiation. Deeg HJ, et al. Bone Marrow Transplant 1986 Dec;1(2):151–7

Melphalan and total body irradiation (TBI) versus cyclophosphamide and TBI as conditioning for allogeneic matched sibling bone marrow transplants for acute

myeloblastic leukaemia in first remission. Helenglass G, et al. **Bone Marrow Transplant** 1988 Jan;3(1):21–9

Piperazinedione plus total body irradiation: an alternative preparative regimen for allogeneic bone marrow transplantation in advanced phases of chronic myelogenous leukemia. Horwitz LJ, et al. **Bone Marrow Transplant** 1989 Jan;4(1):101–5

Allogeneic and syngeneic marrow transplantation following high dose dimethylbusulfan, cyclophosphamide and total body irradiation. Kanfer EJ, et al. **Bone Marrow Transplant** 1987 Apr;1(4):339–46

Preliminary characterization of functional residual host–type T lymphocytes following conditioning for allogeneic HLA–matched bone marrow transplantation (BMT). Kedar E, et al. **Bone Marrow Transplant** 1988 Mar; 3(2):129–40

Myeloablative conditioning for marrow transplantation in myelodysplastic syndromes and paroxysmal nocturnal haemoglobinuria. Kolb HJ, et al. **Bone Marrow Transplant** 1989 Jan;4(1):29–34

Simultaneous infusion of high–dose cytosine arabinoside with cyclophosphamide followed by total body irradiation and marrow infusion for the treatment of patients with advanced hematological malignancy. Petersen FB, et al. **Bone Marrow Transplant** 1988 Nov;3(6):619–24

Endocrine function after bone marrow transplantation without the use of preparative total body irradiation. Urban C, et al. **Bone Marrow Transplant** 1988 Jul;3(4):291–6

Total body irradiation: single dose, fractions, dose rate. Vitale V, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:233–5 (12 ref.)

Human non–Hodgkin's malignant lymphomas serially transplanted in nude mice conditioned with whole–body irradiation. Igarashi T, et al. **Br J Cancer** 1989 Mar; 59(3):356–60

Proceedings of the British Institute of Radiology. Total body irradiation. London, April 22, 1988. Abstracts. **Br J Radiol** 1988 Dec;61(732):1192–5

Alteration of cardiac myosin isozymes after whole–body irradiation. Litten RZ, et al. **Br J Radiol** 1989 Feb; 62(734):189–91

Radioprotection of hemopoiesis conferred by Acanthopanax senticosus Harms (Shigoka) administered before or after irradiation. Miyanomae T, et al. **Exp Hematol** 1988 Oct; 16(9):801–6

Effect of short–term splitting of gamma–ray doses on changes in haemopoietic stem cell number in bone marrow and on mortality of whole–body irradiated mice. Vávrová J, et al. **Folia Biol (Praha)** 1988;34(6):399–408

Radionuclide production and partial radiochemical characterization following fast neutron irradiation of mouse spleens. Mellenberg DE, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):631–5

Combined total body X–ray irradiation and total skin electron beam radiotherapy with an improved technique for mycosis fungoides. Halberg FE, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):427–32

Advanced neuroblastoma: results of two treatment programs including sequential hemibody irradiation. Lombardi F, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):485–91

Design and characteristics of a facility for total–body and large–field irradiation. Lutz WR, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1035–40

Sequential hemibody radiotherapy in poor prognosis localized adenocarcinoma of the prostate gland: a preliminary study of the RTOG. MacLennan I, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):215–8

Enhancement of murine bone marrow ablation by combining whole body hyperthermia with total body irradiation and cyclophosphamide. Mivechi NF, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):117–23

Total body irradiation in acute myeloid leukemia and chronic myelogenous leukemia: influence of dose and dose–rate on leukemia relapse. Scarpati D, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):547–52

Low dose total body irradiation: a potent anti–retroviral agent in vivo. Shen RN, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):165–70

Total body irradiation for stage II–IV non–Hodgkin's lymphoma: ten–year follow–up. Mendenhall NP, et al. **J Clin Oncol** 1989 Jan;7(1):67–74

Booster irradiation to the spleen following total body irradiation. A new immunosuppressive approach for allogeneic bone marrow transplantation. Lapidot T, et al. **J Immunol** 1988 Oct 15;141(8):2619–24

Detection of a specific inhibitor of interleukin 1 in sera of UVB–treated mice. Schwarz T, et al. **J Invest Dermatol** 1988 Dec;91(6):536–40

Radiation sensitizing and radiation protective agents in experimental radiation therapy. Ambrus JL, et al. **J Med** 1988;19(5–6):369–81

Erythropoiesis in mice exposed to continuous whole body irradiation of gamma–rays. Joshima H, et al. **J Radiat Res (Tokyo)** 1988 Sep;29(3):161–71

Development of a translating bed for total body irradiation. Connors S, et al. **Med Dosim** 1988 Dec;13(4):195–9

Decline of hemopoietic stem cells during serial transplants in lethally irradiated recipients. Matioli GT. **Med Hypotheses** 1989 Apr;28(4):265–9

Treatment of multiple myeloma by high dose chemotherapy, total body irradiation and autologous blood stem cell autograft. Fermand JP, et al. **Nouv Rev Fr Hematol** 1989; 31(2):85–7

Hemibody irradiation in stage III multiple myeloma: results of 20 patients. Troussard X, et al. **Nouv Rev Fr Hematol** 1988;30(4):213–8

Rat renal mesenchymal tumor as an experimental model for human congenital mesoblastic nephroma: I. Induction. Hasgekar NN, et al. **Pediatr Pathol** 1989;9(2):131–9

A case of aleukemic monocytic leukemia cutis treated with total body electron therapy. Imanaka K, et al. **Radiat Med** 1988 Sep–Oct;6(5):229–31

Organ–specific metallothionein induction in mice by X irradiation. Koropatnick J, et al. **Radiat Res** 1989 Aug; 119(2):356–65

Comparison of the gastrointestinal syndrome after total–body or total–abdominal irradiation. Mason KA, et al. **Radiat Res** 1989 Mar;117(3):480–8

Time course of lipolytic activity and lipid peroxidation after whole–body gamma irradiation of rats. Rejholcová M, et al. **Radiat Res** 1989 Jan;117(1):21–5

Survival after total–body irradiation. I. Effects of partial small bowel shielding. Vigneulle RM, et al. **Radiat Res** 1989 Aug;119(2):313–24

Reactivity of rat abdominal aorta to U46619 following whole–body gamma irradiation. Warfield ME, et al. **Radiat Res** 1989 Mar;117(3):459–68

Effect of radioprotectors on the altered DNA content in rat tissues following whole body gamma radiation. Srinivasan MN, et al. **Radiobiol Radiother (Berl)** 1988;29(4):421–7

Total body irradiation: a specialised unit. Ball GA. **Radiography** 1988 May–Jun;54(615):104–8

Changes of the blood cholinesterases activity following whole body irradiation in the rats. Skopec F. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1988;31(1):39–44

In vivo ESR dosimetry in total body irradiation. Indovina PL, et al. **Strahlenther Onkol** 1989 Aug;165(8):611–6

Elevation in metallothionein messenger RNA in rat tissues after exposure to X–irradiation. Shiraishi N, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):501–6

Induction of transplantation tolerance by intraportal injection of allogeneic bone marrow cells. Possible implications for intrauterine bone marrow transplantation across major histocompatibility barriers. Eid A, et al. **Transpl Int** 1988 Jul;1(2):109–12

Pharmacokinetics of oral fluconazole in autologous bone marrow transplantation recipients given TBI and high–dose melphalan. Milliken S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3067

The use of melphalan in conjunction with total body irradiation as treatment for acute leukaemia. Powles RL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2955–7 (0 ref.)

The use of total lymphoid irradiation (TLI) for prevention of rejection of T–lymphocyte depleted bone marrow allografts in non–malignant hematological disorders. Slavin S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3053–4

Replacing total body irradiation with busulfan as conditioning of patients with leukemia for allogeneic marrow transplantation. Tutschka PJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2952–4

Pulmonary function of haplotype–matched and mismatched allografts in dogs treated with total–body irradiation, autologous marrow transplantation, methotrexate, and donor blood. Blumenstock DA, et al. **Transplantation** 1988 Oct;46(4):496–501

Bone marrow transplantation without total–body irradiation in patients aged 40 and older. Copelan EA, et al. **Transplantation** 1989 Jul;48(1):65–8

[Changes in the level of prostanoids in blood during whole–body irradiation of rats] Navrátil L, et al. **Sb Lek** 1988 Oct;90(10):302–9 (Eng. Abstr.) (Cze)

[Whole body irradiation before bone marrow transplantation in malignant systemic diseases] Schwarz R, et al. **Rontgenpraxis** 1988 Sep;41(9):319–23 (36 ref.) (Ger)

[Animal experimental studies on the increase in the humoral immune response caused by whole body irradiation] Schwarze G, et al. **Strahlenther Onkol** 1988 Dec; 164(12):746–51 (Eng. Abstr.) (Ger)

[Increase of hepatic and renal metallothionein mRNA level induced by whole body irradiation] Hayashi H. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1467–71 (Eng. Abstr.) (Jpn)

[Total skin electron beam therapy in mycosis fungoides—evaluation of a technic for deceleration of electron beam energy and a clinical study] Terashima H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):1005–12 (Eng. Abstr.) (Jpn)

[Influence of ultrafractionation on the effect of whole body uniform irradiation with protons of 1000 MeV energy] Konnov BA, et al. **Radiobiologiia** 1988 Nov–Dec; 28(6):822–8 (Eng. Abstr.) (Rus)

[Intensive intraperitoneal growth of human melanoma in immunocompetent mice following whole–body irradiation] Lokshin A, et al. **Vestn Akad Med Nauk SSSR** 1988; (12):69–73 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Veno–occlusive disease in children after intensive chemo– and radiotherapy and repeated halothane anesthesias. A report of 2 cases. Gentet JC, et al. **Acta Oncol** 1988; 27(5):579–81

Growth in children following irradiation for bone marrow transplantation. Bushhouse S, et al. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):134–40

Chemoradiotherapy toxicity during bone marrow transplantation: time course and variation in pain and nausea. Chapko MK, et al. **Bone Marrow Transplant** 1989 Mar;4(2):181–6

Haemolytic uraemic syndrome after bone marrow transplantation: an adverse effect of total body irradiation? Chappell ME, et al. **Bone Marrow Transplant** 1988 Jul; 3(4):339–47

Cytoreductive preparation for bone marrow transplantation in leukaemia: to irradiate or not? Kanfer EJ, et al. **Br J Haematol** 1989 Apr;71(4):447–50 (52 ref.)

Long–term endocrine toxicity of myeloablative treatment followed by autologous bone marrow/blood derived stem cell transplantation in patients with malignant lymphohematopoietic disorders. Keilholz U, et al. **Cancer** 1989 Aug 1;64(3):641–5

Endocrine status and growth after malignancy treated in childhood or adolescence. Vilska S, et al. **Int J Fertil** 1988 Jul–Aug;33(4):283–90

Late tissue–specific toxicity of total body irradiation and busulfan in a murine bone marrow transplant model. Down JD, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul; 17(1):109–16

The use of CT densitometry to predict lung toxicity in bone marrow transplant patients. el–Khatib EE, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):85–94

Late toxicity of total body irradiation with bone marrow transplantation in a rat model. Moulder JE, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1501–9

Practical implications of backscatter from outside the patient on the dose distribution during total body irradiation. Van Dam J, et al. **Radiother Oncol** 1988 Nov;13(3):193–201

Factors influencing survival after radiation injury in inbred strains of rats. Rapaport FT, et al. **Transplantation** 1988 Dec;46(6):921–3

INSTRUMENTATION

Total body irradiation using a temporarily modified Theratron 780. Tremewan RN, et al. **Australas Phys Eng Sci Med** 1988 Oct–Dec;11(4):162–8

A total body irradiation stand for bone marrow transplant patients. Glasgow GP, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):875–7

Apparatus for the measurement of total body nitrogen using prompt neutron activation analysis with californium–252. Mackie A, et al. **J Med Eng Technol** 1988 Jul–Aug; 12(4):152–9

METHODS

Tissue air ratio in total body irradiation. An in vivo evaluation. Scarpati D, et al. **Acta Oncol** 1989;28(2):283–5

Trial of fractionated total–body irradiation in the treatment of patients with acquired immunodeficiency syndrome: a preliminary report [letter] del Regato JA. **Am J Clin Oncol** 1989 Aug;12(4):365

A simple dose calculation method for total body photon irradiation. Curran WJ Jr, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):219–24

Localization errors in mantle–field irradiation for Hodgkin's disease. Hulshof M, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):679–83

Technical modifications in hyperfractionated total body irradiation for T–lymphocyte deplete bone marrow transplant. Lawton CA, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):319–22

Single dose versus hyperfractionated total body irradiation before allogeneic bone marrow transplantation: a non–randomized comparative study of 54 patients at the Institut Gustave–Roussy. Cosset JM, et al. **Radiother Oncol** 1989 Jun;15(2):151–60

TBI schedules prior to bone marrow transplantation: requirements for comparison [letter] Keane TJ, et al. **Radiother Oncol** 1989 Jun;15(2):207–12

[Total cutaneous electron beam therapy of mycosis fungoides] Le Bourgeois JP, et al. **Ann Dermatol Venereol** 1989;116(3):213–7 (Eng. Abstr.) (Fre)

[Whole body irradiation] Le Bourgeois JP, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):156–8 (Fre)

[Treatment technic and clinical dosimetry in whole–body irradiation] Sverzellati PE, et al. **Radiol Med (Torino)** 1989 May;77(5):530–4 (Eng. Abstr.) (Ita)

[A method of total body irradiation] Yasukochi H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):906–10 (Eng. Abstr.) (Jpn)

MORTALITY

A preliminary study of effects of 5–mercaptomethyluracil and some its derivatives on postirradiation lethality of mice. Orzeszko G, et al. **Acta Pol Pharm** 1988;45(4):359–61

VETERINARY

What radiation dose for DLA–identical canine marrow grafts? [published erratum appears in Blood 1989 Feb;73(2):624] Storb R, et al. **Blood** 1988 Oct;72(4):1300–4

Half–body radiotherapy in the treatment of canine lymphoma. Laing EJ, et al. **J Vet Intern Med** 1989 Apr–Jun;3(2):102–8

Half–body radiotherapy. Evaluation of the technique in

normal dogs. Laing EJ, et al. **J Vet Intern Med** 1989 Apr–Jun;3(2):96–101

WHOOPING COUGH

see related
PERTUSSIS VACCINE

The current state of pertussis and pertussis vaccines. A report on the Fifth International Symposium on Pertussis [editorial] Fulginiti VA. **Am J Dis Child** 1989 May; 143(5):532–3

Whooping cough—a neglected disease in southern Africa [editorial] Ramkissoon A, et al. **S Afr Med J** 1989 Jun 17; 75(12):560–1

[The forgotten disease (whooping cough) (letter)] **Ugeskr Laeger** 1989 Jul 17;151(29):1887–8 **(Dan)**

BLOOD

Impaired formation of the second messenger cAMP in mononuclear blood cells of children with pertussis. Griese M, et al. **Pediatr Res** 1989 Feb;25(2):209–13

COMPLICATIONS

Herniated lumbar disc associated with pertussis. Shvartzman P, et al. **J Fam Pract** 1989 Feb;28(2):224–5

Whooping cough in infants [editorial] **Lancet** 1988 Oct 22; 2(8617):946 (25 ref.)

DIAGNOSIS

A new diagnostic method for whooping cough. Peller P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):8

Pertussis: the disease and new diagnostic methods. Friedman RL. **Clin Microbiol Rev** 1988 Oct;1(4):365–76 (174 ref.)

Evaluation of serologic assays for diagnosis of whooping cough. Granström G, et al. **J Clin Microbiol** 1988 Sep; 26(9):1818–23

Evaluation of culture, immunofluorescence, and serology for the diagnosis of pertussis. Halperin SA, et al. **J Clin Microbiol** 1989 Apr;27(4):752–7

Comparison of modified Bordet–Gengou and modified Regan–Lowe media for the isolation of Bordetella pertussis and Bordetella parapertussis. Kurzynski TA, et al. **J Clin Microbiol** 1988 Dec;26(12):2661–3

Whooping cough diagnosis: a clinical evaluation of complementing culture and immunofluorescence with enzyme-linked immunosorbent assay of pertussis immunoglobulin A in nasopharyngeal secretions. Campbell PB, et al. **J Med Microbiol** 1988 Dec;27(4):247–54

Serologic diagnosis of whooping cough by enzyme-linked immunosorbent assay. Conway SP, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):570–4

DRUG THERAPY

Selection of an erythromycin for the treatment of pertussis. Nahata MC. **Drug Intell Clin Pharm** 1988 Nov;22(11):895–8 (32 ref.)

Comparison of erythromycin ethylsuccinate and co-trimoxazole for treatment of pertussis. Hoppe JE, et al. **Infection** 1989 Jul–Aug;17(4):227–31

Treatment of pertussis with josamycin [letter] Hoppe JE. **Infection** 1989 Jan–Feb;17(1):40

Treatment of pertussis with josamycin [letter] Torre D. **Infection** 1988;16(6):370

Sodium cromoglycate in the treatment of pertussis [letter] Leen CL, et al. **J Infect** 1989 Jul;19(1):82

EPIDEMIOLOGY

Sensitivity and specificity of clinical case definitions for pertussis [letter] Sullivan KM. **Am J Public Health** 1989 Jan;79(1):102

Outbreak of pertussis in a residential facility for handicapped people. Fisher MC, et al. **J Pediatr** 1989 Jun;114(6):934–9

Seroepidemiology of pertussis in the Japanese population. Takayama N, et al. **Med Microbiol Immunol (Berl)** 1989; 178(1):1–8

Epidemiology of pertussis. Thomas MG. **Rev Infect Dis** 1989 Mar–Apr;11(2):255–62 (53 ref.)

An epidemic of pertussis syndrome in Cape Town [letter] Strebel P, et al. **S Afr Med J** 1989 Apr 15;75(8):399

Experiences with acellular pertussis vaccine in Japan and epidemiology of pertussis. Kimura M, et al. **Tokai J Exp Clin Med** 1987 Dec;12(5–6):263–73

The past, present, and future of pertussis. The role of adults in epidemiology and future control. Cherry JD, et al. **West J Med** 1989 Mar;150(3):319–28 (84 ref.)

[Pertussis in Hadera County] Weizer S, et al. **Harefuah** 1988 Dec 15;115(12):370–1 (Eng. Abstr.) **(Heb)**

[Epidemiology of whooping cough: study at the Maternal School of the city of Turin] Zotti C, et al. **Boll Ist Sieroter Milan** 1988;67(3):210–8 (Eng. Abstr.) **(Ita)**

[Whooping cough—1987] Adonajło A. **Przegl Epidemiol** 1989;43(1):16–9 **(Pol)**

[Whooping cough 1986] Adonajło A. **Przegl Epidemiol** 1988; 42(1):16–9 **(Pol)**

ETIOLOGY

Experimental respiratory infection with Bordetella pertussis in mice: comparison of two methods. Halperin SA, et al. **Clin Invest Med** 1988 Aug;11(4):297–303

IMMUNOLOGY

Serum antibody response to filamentous hemagglutinin in patients with clinical pertussis measured by an enzyme-linked immunosorbent assay. Zackrisson G, et al. **Eur J Clin Microbiol Infect Dis** 1988 Dec;7(6):764–70

Immunoglobulin E response to pertussis toxin in whooping cough and after immunization with a whole-cell and an acellular pertussis vaccine. Hedenskog S, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):156–61

Subclass compositions of immunoglobulin G to pertussis toxin in patients with whooping cough, in healthy individuals, and in recipients of a pertussis toxoid vaccine. Zackrisson G, et al. **J Clin Microbiol** 1989 Jul;27(7):1567–71

Human serum antibody responses to Bordetella pertussis infection and pertussis vaccination. Thomas MG, et al. **J Infect Dis** 1989 Feb;159(2):211–8

Toxin-neutralizing antibodies in patients with pertussis, as determined by an assay using Chinese hamster ovary cells. Trollfors B, et al. **J Infect Dis** 1988 Nov;158(5):991–5

Total serum IgE levels in children with pertussis [letter] Torre D, et al. **Lancet** 1989 May 20;1(8647):1148

Specific IgE-antibodies to Bordetella pertussis antigens during whooping cough [letter] Wirsing von Koenig CH, et al. **Lancet** 1989 Apr 1;1(8640):728

Whooping cough antibody [letter] Lau R. **N Z Med J** 1989 Mar 8;102(863):113

The 1985 national immunisation survey: diphtheria, tetanus, and pertussis (whooping cough) [see comments] Lau RC, et al. **N Z Med J** 1988 Nov 23;101(858):797–800. **Comment in:** N Z Med J 1989 Jan 25;102(860):22

Whooping cough immunity [letter; comment] Thomas MG. **N Z Med J** 1989 Jan 25;102(860):22. **Comment on:** N Z Med J 1988 Nov 23;101(858):797–800

Do newborn infants have passive immunity to pertussis? Bass JW, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):352–3

Half-dose immunization for diphtheria, tetanus, pertussis: response of preterm infants. Bernbaum J, et al. **Pediatrics** 1989 Apr;83(4):471–6

[Development of an immunoenzyme test system for the diagnosis of pertussis using penicillinase conjugates] Iagovkina VV, et al. **Lab Delo** 1988;(6):62–5 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Methods for isolation of Bordetella pertussis from patients with whooping cough. Hoppe JE. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):616–20 (29 ref.)

PHYSIOPATHOLOGY

Pertussis: the disease and the vaccine. Fenichel GM. **Pediatr Neurol** 1988 Jul–Aug;4(4):201–6 (34 ref.)

PREVENTION & CONTROL

Why pertussis immunisation? Tribe P. **Aust Fam Physician** 1989 Aug;18(8):985–90 (40 ref.)

Parents' beliefs about vaccination [letter] **BMJ** 1989 Jul 22; 299(6693):257

Pertussis vaccine: why do some parents say no? [letter] Feher PJ. **Can Med Assoc J** 1989 Mar 1;140(5):498

Pertussis vaccine: why do some parents say no? Goldman B. **Can Med Assoc J** 1988 Dec 15;139(12):1174–7

The search for a safer pertussis vaccine. Goldman B. **Can Med Assoc J** 1989 Jan 1;140(1):56–9

The efficacy of pertussis vaccines under conditions of household exposure. Further analysis of the 1978–80 PHLS/ERL study in 21 area health authorities in England. Fine PE, et al. **Int J Epidemiol** 1988 Sep;17(3):635–42

Effect of an intensive control program in a countywide pertussis outbreak. McKee PA, et al. **J Okla State Med Assoc** 1988 Sep;81(9):563–7

The efficacy of acellular pertussis vaccine [letter] [published erratum appears in JAMA 1989 Jul 7;262(1):33] Olin P, et al. **JAMA** 1989 Jan 27;261(4):560

Comparing the efficacy of pertussis vaccines [letter] Olin P. **Lancet** 1989 Jan 14;1(8629):95–6

Pertussis immunization [letter] Emerson BP. **Pediatrics** 1989 Apr;83(4 Pt 2):638–9

Unpredictable adverse reactions [letter] Kurtz PH. **West J Med** 1989 Jul;151(1):84

Pertussis—a disease and a vaccine that are not going away [editorial] Orenstein WA, et al. **West J Med** 1989 Mar; 150(3):339–41

[A better vaccine against whooping cough?] Rümke HC. **Ned Tijdschr Geneeskd** 1988 Nov 26;132(48):2192–4 **(Dut)**

[Whooping cough—not eradicated, but forgotten] Swidsinski S, et al. **Z Arztl Fortbild (Jena)** 1989;83(6):309–12 (29 ref.) **(Ger)**

[An approach to the evaluation of the efficacy of anti-pertussis vaccination] Barlassina C, et al. **Clin Ter** 1987 Aug 31;122(4):245–9 (Eng. Abstr.) **(Ita)**

[Evaluation on the basis of the rates of secondary attack of whooping cough in families of the vaccination and prophylactic efficacy of pertussis vaccine in 2 districts of the city of Bucharest] Ion-Nedelcu N, et al. **Rev Ig [Bacteriol]** 1988 Oct–Dec;33(4):319–26 (Eng. Abstr.) **(Rum)**

[Evaluation of postvaccinal pertussis immunity by using immunoenzyme analysis] Khardina AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):50–4 (Eng. Abstr.) **(Rus)**

TRANSMISSION

Pertussis in England and Wales: an investigation of transmission dynamics and control by mass vaccination. Grenfell BT, et al. **Proc R Soc Lond [Biol]** 1989 Apr 22; 236(1284):213–52

WIDOW see SINGLE PERSON

WIDOWER see SINGLE PERSON

WIFE ABUSE see SPOUSE ABUSE

WILL see VOLITION

WILLIS' CIRCLE see CIRCLE OF WILLIS

WILLS

Living Will legislation [letter] Bareis RJ. **S D J Med** 1989 Jun;42(6):15

[Expert assessment of competence to make a will following the death of the testator] Lange E. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jan;41(1):1–18 (Eng. Abstr.) **(Ger)**

WILMS' TUMOR see NEPHROBLASTOMA

WILSON'S DISEASE see HEPATOLENTICULAR DEGENERATION

WIND see under AIR MOVEMENTS

WINE

Low alcohol beers and wines: attitudes of problem drinkers to their use and their effect on craving. Long CG, et al. **Br J Addict** 1989 Jul;84(7):777–83

Response of allergic and normal persons to sulfiting agents in wine: determination of thiosulfate excretion in urine. Torun M, et al. **Clin Chem** 1989 Aug;35(8):1792–3

Wine with food: the art of matchmaking. Meredith J. **Colo Med** 1988 Sep 15;85(17):377

Wine—an important source of lead exposure. Elinder CG, et al. **Food Addit Contam** 1988 Oct–Dec;5(4):641–4

Prevention of the Wernicke–Korsakoff syndrome in Australia: a cost-benefit analysis. Fischer AJ, et al. **Med J Aust** 1989 Mar 20;150(6):311–3, 317

Mutagenicity of red wine in the L-arabinose resistance test with Salmonella typhimurium. Dorado G, et al. **Mutagenesis** 1988 Nov;3(6):497–502

Anthocyanins and tannins from wine: organoleptic properties. Glories Y. **Prog Clin Biol Res** 1988;280:123–34

Effect of Nigerian bottled palm wine on gastric acid secretion. Ibu JO, et al. **Scand J Gastroenterol Suppl** 1986; 124:89–93

Cytoprotective effect of pirenzepine and palm wine on rats gastric mucosa. Ibu JO, et al. **Scand J Gastroenterol Suppl** 1986;124:209–11

[Alcoholism in Champagne] Gayda M. **Ann Med Psychol (Paris)** 1988 Oct;146(10):978–81 **(Fre)**

[Physiologic functions of machine operators during vineyard treatment with pesticides] Bochkareva AI, et al. **Gig Sanit** 1989 Jan;(1):22–5 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Wine poisoning as a source of lead intoxication. Antonini G, et al. **Am J Med** 1989 Aug;87(2):238–9

High blood lead level in alcoholics: wine vs. beer. Dally S, et al. **Drug Alcohol Depend** 1989 Jan;23(1):45–8

Acute effects of drinking beer or wine on the steroid hormones of healthy men. Couwenbergs CJ. **J Steroid Biochem** 1988 Oct;31(4A):467–73

Black tobacco, wine and mate in oropharyngeal cancer. A case-control study from Uruguay. De Stefani E, et al. **Rev Epidemiol Sante Publique** 1988;36(6):389–94

[Migraine after red wine (letter)] Giesemann G. **Dtsch Med Wochenschr** 1988 Dec 9;113(49):1941 **(Ger)**

ANALYSIS

Determination of iron species in wine by ion-exchange chromatography—flame atomic absorption spectrometry. Ajlec R, et al. **Analyst** 1989 Feb;114(2):137–42

Application of adsorptive stripping voltammetry to the speciation and determination of iron(III) and total iron in wines. Wang J, et al. **Analyst** 1989 May;114(5):643–5

Lead in table wines on the Swedish market. Jorhem L, et al. **Food Addit Contam** 1988 Oct–Dec;5(4):645–9

Influence of hexacyanoferrate(II) based treatments upon the elimination of heavy metal traces in wine. I. The case of lead. Wencker D, et al. **Food Addit Contam** 1989 Jul–Sep; 6(3):351–7

Spectrofluorometric determination of histamine in wines and other alcoholic beverages. Vidal-Carou MC, et al. **J Assoc Off Anal Chem** 1989 May–Jun;72(3):412–5

Determination of diethylene glycol in wine by high-performance liquid chromatography using anthracene-9-carbonyl chloride as a derivatizing reagent. Bayliss MA, et al. **J Chromatogr** 1988 Jul 22;445(2):403–8

Determination of 5-nitrofurylacrylic acid in wines by high-performance liquid chromatography. Farré R, et al. **J Chromatogr** 1988 Jul 8;445(1):264–7

Simultaneous detection of trichothecenes and rosenonolactone in grape juice and wine by capillary gas chromatography. Schwenk S, et al. **J Chromatogr** 1988 Sep 16;448(3):424–7

Application of correlation chromatography to the investigation of biopolymers in wines. Shatirishvili IS. **J Chromatogr** 1989 May 19;469:420–3

Sugars of the unfermented sap and the wine from the oil palm, Elaeis guineasis, tree. Eze MO, et al. **Plant Foods Hum Nutr** 1988;38(2):121–6

[Determination of residual monomers of epoxy resins in wine simulants] Larroque M, et al. **J Chromatogr** 1988 Jul 8; 445(1):107–17 (Eng. Abstr.) **(Fre)**

[The radioecology of the grapevine. 1. The transfer of nuclear weapons fallout from the soil into wine] Hellmuth KH, et al. **Z Lebensm Unters Forsch** 1989 Apr;188(4):317–23 (Eng. Abstr.) **(Ger)**

[Significance of toxic metabolites of the fungus Trichothecium roseum Link ex Fr. for viticulture] Schwenk S, et al. **Z Lebensm Unters Forsch** 1989 Jun; 188(6):527–30 (Eng. Abstr.) **(Ger)**

POISONING

Methanol intoxication. Parkinsonism and decreased Met-enkephalin levels due to putaminal necrosis. Verslegers W, et al. **Acta Neurol Belg** 1988 May–Jul; 88(3):163–71

SUPPLY & DISTRIBUTION

Consequences of increasing off-premise wine outlets in Iowa. Mulford HA, et al. **Br J Addict** 1988 Nov;83(11):1271–9

TOXICITY

The effect of ethanol upon early development in mice and rats. XIII. The effect of chronic consumption of beer and wine upon preimplantation development in rats. Fazakas-Todea I. **Morphol Embryol (Bucur)** 1988 Oct–Dec; 34(4):223–31

The distribution of mutagenic activity in red, rose and white wines. Nguyen T, et al. **Mutat Res** 1989 Jun;223(2):205–12

WING

Relationship between wing flapping at shackling and red wingtips in chicken carcases. Gregory NG, et al. **Vet Rec** 1989 Jan 21;124(3):62

ANATOMY & HISTOLOGY

A unitary basis for different Hairy-wing mutations of Drosophila melanogaster. Balcells L, et al. **EMBO J** 1988 Dec 1;7(12):3899–906

Assay of lipids, glycogen and sugars in individual mosquitoes: correlations with wing length in field-collected Aedes vexans. Van Handel E, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):549–50

Correlation between wing length and protein content of mosquitoes. Van Handel E, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):180–2

BLOOD SUPPLY

Control of bat wing capillary pressure and blood flow during reduced perfusion pressure. Davis MJ. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1114–29

A rate-sensitive component to the myogenic response is absent from bat wing arterioles. Davis MJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H32–40

Vasomotion frequency and amplitude related to intraluminal pressure and temperature in the wing of the intact, unanesthetized bat. Bouskela E. **Microvasc Res** 1989 May; 37(3):339–51

EMBRYOLOGY

The formation of leg or wing specific structures by leg bud cells grafted to the wing bud is influenced by proximity to the apical ridge. Krabbenhoft KM, et al. **Dev Biol** 1989 Feb;131(2):373–82

Transcription of the segment-polarity gene wingless in the imaginal discs of Drosophila, and the phenotype of a pupal-lethal wg mutation. Baker NE. **Development** 1988 Mar;102(3):489–97

The accumulation of basement membrane components during the onset of chondrogenesis and myogenesis in the chick wing bud. Solursh M, et al. **Development** 1988 Sep; 104(1):41–9

Posterior apical ectodermal ridge removal in the chick wing bud triggers a series of events resulting in defective anterior pattern formation. Todt WL, et al. **Development** 1987 Nov; 101(3):501–15

INNERVATION

Musculotopic innervation of the primary flight muscles, the pectoralis (Pars thoracicus) and supracoracoideus, of the pigeon (Columba livia): a WGA-HRP Study. Sokoloff A, et al. **Anat Rec** 1989 Sep;225(1):35–40

Mosaic Drosophila wings reveal regional heterogeneity in the guidance of ectopic axons. Blair SS, et al. **J Neurobiol** 1989 Mar;20(2):55–68

Giant fiber activation of flight muscles in Drosophila: asynchrony in latency of wing depressor fibers. Hummon MR, et al. **J Neurobiol** 1989 Sep;20(6):593–602

PHYSIOLOGY

Kinematic and aerodynamic aspects of ultrasound-induced negative phonotaxis inflying Australian field crickets (Teleogryllus oceanicus). May ML, et al. **J Comp Physiol [A]** 1988 Dec;164(2):243–9

SURGERY

A surgical method for controlling the flight of peafowl (Pavo cristata). Gross WB, et al. **Avian Dis** 1988 Jul–Sep; 32(3):553–5

WIRSUNG'S DUCT see **PANCREATIC DUCTS**

WISKOTT-ALDRICH SYNDROME

BLOOD

Impaired energy metabolism in platelets from patients with Wiskott-Aldrich syndrome. Verhoeven AJ, et al. **Thromb Haemost** 1989 Feb 28;61(1):10–4

COMPLICATIONS

IgA glomerulonephritis in Wiskott-Aldrich syndrome. DeSanto NG, et al. **Child Nephrol Urol** 1988–89; 9(1–2):118–20

DIAGNOSIS

Carrier detection in the Wiskott Aldrich syndrome. Fearon ER, et al. **Blood** 1988 Nov;72(5):1735–9

GENETICS

Hereditary X-linked thrombocytopenia maps to the same chromosomal region as the Wiskott-Aldrich syndrome. Donnér M, et al. **Blood** 1988 Dec;72(6):1849–53

Wiskott-Aldrich syndrome in a heterozygous carrier woman [letter] Tornai I, et al. **Eur J Haematol** 1989 May; 42(5):501–2

X-chromosome inactivation in the Wiskott-Aldrich syndrome: a marker for detection of the carrier state and identification of cell lineages expressing the gene defect. Greer WL, et al. **Genomics** 1989 Jan;4(1):60–7

Genetic mapping of the Wiskott-Aldrich syndrome with two highly-linked polymorphic DNA markers. Kwan SP, et al. **Genomics** 1988 Jul;3(1):39–43

Conceiving a fetus for bone marrow donation: an ethical problem in prenatal diagnosis. Clark RD, et al. **Prenat Diagn** 1989 May;9(5):329–34

Molecular characterization of sialophorin (CD43), the lymphocyte surface sialoglycoprotein defective in Wiskott-Aldrich syndrome [published erratum appears in Proc Natl Acad Sci U S A 1989 Jun;86(12):4689] Shelley CS, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2819–23

[Wiskott-Aldrich syndrome in a hetrozygous woman] Tornai I, et al. **Orv Hetil** 1989 Mar 26;130(13):679–82 (31 ref.) (Eng. Abstr.) **(Hun)**

IMMUNOLOGY

Epstein-Barr-virus-transformed lymphoblastoid cell lines derived from patients with X-linked agammaglobulinaemia and Wiskott-Aldrich syndrome: responses to B cell growth and differentiation factors. Lau YL, et al. **Clin Exp Immunol** 1989 Feb;75(2):190–5

The increase of non-MHC-restricted cytotoxic cells (gamma/delta-TCR-bearing T cells or NK cells) and the abnormal differentiation of B cells in Wiskott-Aldrich syndrome. Morio T, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):279–90

PATHOLOGY

Dental considerations in the treatment of Wiskott-Aldrich syndrome: report of case. Boraz RA. **ASDC J Dent Child** 1989 May–Jun;56(3):225–7 (21 ref.)

WISSLER-FANCONI SYNDROME see **WISSLER'S SYNDROME**

WISSLER'S SYNDROME

COMPLICATIONS

[Acute recurrent urticaria in Wissler-Fanconi syndrome in adult. Apropos of a case (letter)] Guerra F, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):719–20 **(Fre)**

DIAGNOSIS

[A case of Wissler-Fanconi allergic sepsis in a 6-month-old child] Makarova VI, et al. **Pediatriia** 1989;(5):89–90 **(Rus)**

WIT AND HUMOR

Digital radiography: uses and limitations of the method. Novak DL, et al. **AJR** 1989 Apr;152(4):870–2

Tales of the ampulla of Vater, III [letter] Sobin LH. **Am J Gastroenterol** 1989 Aug;84(8):984–5

Tales of the ampulla of Vater, II [letter] Sobin LH. **Am J Gastroenterol** 1988 Dec;83(12):1437

Hedge against extinction. LaCombe MA. **Am J Med** 1989 Jan;86(1):91–2

The last nurse. Allison MM. **Am J Nurs** 1989 Aug;89(8):1104

Heart sounds and one-liners. Edwards BS. **Am J Nurs** 1989 Apr;89(4):616

The once and future physician. Weinberg RB. **Ann Intern Med** 1989 May 1;110(9):753

Technology and the goals of medicine [letter] Kinzel T. **Arch Intern Med** 1989 May;149(5):1216

Some sociocultural aspects of humour. Haig R. **Aust N Z J Psychiatry** 1988 Dec;22(4):418–22 (36 ref.)

The Gatekeeper and the Wizard: a fairy tale. Mathers N, et al. **BMJ** 1989 Jan 21;298(6667):172–4

Domestic medicines. An irreverent look at health education. Crosfill M. **Bristol Med Chir J** 1988 Aug;103(3):34–7

A portrait of the doctor and his word processor. Buckman R. **Can Med Assoc J** 1989 Jun 1;140(11):1361, 1363

LB virus: neurotropic variant of Epstein-Barr virus? [letter] McCormick WO. **Can Med Assoc J** 1988 Nov 15; 139(10):933

Humor. A therapeutic approach in oncology nursing. Bellert JL. **Cancer Nurs** 1989 Apr;12(2):65–70

A nursery rhyme for tick time [letter] Himmelberg CJ, et al. **DICP** 1989 Jun;23(6):509–10

Gallows humor for a scaffold setting: managing aggressive patients on a maximum-security forensic unit. Kuhlman TL. **Hosp Community Psychiatry** 1988 Oct;39(10):1085–90

Sense of humor, hassles, and immunoglobulin A: evidence for a stress-moderating effect of humor. Martin RA, et al. **Int J Psychiatry Med** 1988;18(2):93–105

Humour and the older adult: implications for nursing. Simon JM. **J Adv Nurs** 1988 Jul;13(4):441–6

"Skin is in" [letter] Norman RA. **J Am Acad Dermatol** 1989 Apr;20(4):701

Do animals have rights? [letter] Sorgen VI. **J Am Vet Med Assoc** 1989 Jan 15;194(2):165

Liposuction for cats? [letter] Tangredi BP. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1006

On estimating survival; a tale of two censors. Kurtzke JF. **J Clin Epidemiol** 1989;42(2):169–75

A modest proposal for preventing elder folk from being a burden to their children or country, and making them beneficial to the public. Lee RV. **J Clin Epidemiol** 1989; 42(6):593–5

Pelvic examination versus fiberoptic laparoscopy. A fictional study of patient preference in 1,534 women. Sturman MF. **J Clin Gastroenterol** 1988 Dec;10(6):612–3

Astrology and the PRO [letter] Brouillette JN. **J Fla Med Assoc** 1988 Jul;75(7):419

Daddy, tell me a ghost story [letter] Schiff AF. **J Fla Med Assoc** 1988 Aug;75(8):485–6

The caduceus revised. Cook DE. **J Miss State Med Assoc** 1989 Apr;30(4):128–9

Nurses, nuances, and non-communication: a humorous look at language. Grimes RM, et al. **J Nurs Adm** 1989 Sep; 19(9):22, 28

Humor, health, and higher education: laughing matters. Parkin CJ. **J Nurs Educ** 1989 May;28(5):229–30

A timely scenario. **J Perinatol** 1987 Spring;7(2):138–9

A timely scenario. **J Perinatol** 1987 Winter;7(1):49–51

A timely scenario. Ode to surrogation. **J Perinatol** 1987 Summer;7(3):231

Polemics in perinatology: Cloutopenia and the porcelain-losing encephalopathies—a plangent review with dithyrambic overtones. Schifrin BS. **J Perinatol** 1988 Winter;8(1):36–7

An invitation to laugh. Rodgers JA. **J Prof Nurs** 1988 Sep–Oct;4(5):314

Humor in nursing. Did you hear the one about...? Ferguson S, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Apr; 27(4):29–34 (21 ref.)

What physicians have in common with Sherlock Holmes: discussion paper. Peschel RE, et al. **J R Soc Med** 1989 Jan;82(1):33–6

To best was always to worst, but worse is better, if good and bad are relevant [letter] Banzhaf D. **JAMA** 1989 Jul 14;262(2):210

Chain-chewin' [letter] Bransfield DD. **JAMA** 1989 Jan 6; 261(1):45

Formphobia [letter] Dauber LG, et al. **JAMA** 1989 Jul 28; 262(4):500

More cardiac dressage: galop, gallop, gal(l)opity glop [letter; comment] Herder SL. **JAMA** 1989 Jul 21;262(3):352. **Comment on:** JAMA 1989 Apr 14;261(14):2063

A piece of my mind. For want of a sail. LaCombe MA. **JAMA** 1989 May 26;261(20):3023

Laugh if this is a joke [letter] Ljungdahl L. **JAMA** 1989 Jan 27;261(4):558

"Pseudo" status epilepticus [letter] Burton JL. **Lancet** 1989 Sep 9;2(8663):632

Sitting down with the literature [letter] Conacher GN. **Lancet** 1989 Feb 25;1(8635):451

Impregnated via a bullet? [letter] Gordon AC, et al. **Lancet** 1989 Apr 1;1(8640):737

Smallpox in seventeenth-century English literature: reality and the metamorphosis of wit. Anselment RA. **Med Hist** 1989 Jan;33(1):72–95

The numbers racket. Blythe WB. **N C Med J** 1988 Nov;

49(11):609
Knocked for a loupe. Some personal observations concerning immortality and the lack thereof. Liebowitz CS. **N Y State Dent J** 1988 Oct;54(8):32–3
As Mr Caygill wishes! [letter] Simcock K. **N Z Med J** 1988 Dec 14;101(859):828
Clinical neuromythology VI. Au clair de lacune: holy, wholly, holey logic. Landau WM. **Neurology** 1989 May; 39(5):725–30
Once upon a time ... (or "a modern Aesop's fable"). Baumgartner DA Jr. **Ohio Med** 1988 Dec;84(12):921–2
Send in the clowns.... Edwards KS. **Ohio Med** 1989 May; 85(5):343–5
So what? Bugs in the bran. Gaffin J. **Paediatr Perinat Epidemiol** 1988 Apr;2(2):123–4
Humour. **Perception** 1988;17(3):337–8
Humours of science [editorial] Gregory RL. **Perception** 1988; 17(5):561–3
"PLATO" on line: biomedical communication in the computer age. Stossel TP. **Perspect Biol Med** 1988 Autumn; 32(1):1–11
Scopomania: proliferation of an invasive technology. Hidalgo HA. **Pharos** 1989 Spring;52(2):33–4
Humor and healing: a creative process. Rodning CB. **Pharos** 1988 Summer;51(3):38–40
The rating game [editorial] Goldwyn RM. **Plast Reconstr Surg** 1989 Mar;83(3):518–9
AAAAA—crawling to the top and why I rode with Wojcik [letter] Welch J. **Plast Reconstr Surg** 1989 Mar;83(3):576
Humor in psychiatric healing. Saper B. **Psychiatr Q** 1988 Winter;59(4):306–19 (49 ref.)
Requiem for the Eponym (Eponymomania). (For the International Skeletal Society). Green L. **Skeletal Radiol** 1989;17(8):589–90
Humor and the physician. Cushner FD, et al. **South Med J** 1989 Jan;82(1):51–2
Dizzy medical writing: report on recent relapses. Fred HL, et al. **South Med J** 1989 Jul;82(7):897–9
A different sort of diagnosis. Kelleher JF. **South Med J** 1989 Apr;82(4):496–8
Intimations of mortality [editorial] Thomison JB. **South Med J** 1989 Aug;82(8):939
What hath God wrought! [editorial] Thomison JB. **South Med J** 1989 Apr;82(4):409–10
The art of publishing original medical observations [letter] Tzamaloukas AH. **South Med J** 1988 Nov;81(11):1466–7
A new look at porphyrin nomenclature. Houghton JD. **Trends Biochem Sci** 1988 Nov;13(11):458
Prolonged recumbency in a small horse (Equus caballus var roccianus) with unusual sequelae. Butterfield RM, et al. **Vet Rec** 1989 Apr 1;124(13):348–9
'Terrible new diseases threaten' [letter] Smith IM. **Vet Rec** 1989 May 20;124(20):546–7
[Continuous self-generation of evil or experiences with a dissertation on arteriosclerosis] Gerlach A, et al. **Vasa** 1989; 18(2):94–5 (Ger)
["Public relations" or "The man, who expands horizons"] Leu HJ. **Vasa** 1989;18(2):91–3 (Ger)

WITHDRAWAL SYMPTOMS see **SUBSTANCE WITHDRAWAL SYNDROME**

WITTENBORN SCALES see under **PSYCHIATRIC STATUS RATING SCALES**

WOLFF-PARKINSON-WHITE SYNDROME

[Wolff-Parkinson-White syndrome] Vergara G, et al. **G Ital Cardiol** 1989 Mar;19(3):234–44 (64 ref.) (Ita)

COMPLICATIONS

Postpartum myocardial infarction in a patient with intermittent ventricular preexcitation. Wittry MD, et al. **Am Heart J** 1989 Jan;117(1):191–4
Stress and pharmacologic tests as methods to identify patients with Wolff-Parkinson-White syndrome at risk of sudden death. Gaita F, et al. **Am J Cardiol** 1989 Sep 1;64(8):487–90
"Ecstasy" and sudden cardiac death. Suarez RV, et al. **Am J Forensic Med Pathol** 1988 Dec;9(4):339–41
Type A Wolff-Parkinson-White syndrome obscured by left bundle branch block associated with a vascular malformation of the coronary sinus. Robinson K, et al. **Br Heart J** 1988 Oct;60(4):352–4
Atrioventricular junctional parasystole with ventricular fusion beats due to complicating Wolff-Parkinson-White syndrome. Oreto G, et al. **Chest** 1989 Aug;96(2):414–5
WPW syndrome with myocardial infarction. Loya YS, et al. **J Assoc Physicians India** 1988 Dec;36(12):724–5
Marfan's syndrome associated with Wolff-Parkinson-White syndrome type B. Banerjee AK. **Jpn Heart J** 1988 May; 29(3):377–80
[Acute electrophysiologic effects of intravenous ethmozin in patients with paroxysmal supraventricular tachycardia due to WPW syndrome] Pu JL, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Dec; 16(6):329–31, 381–2 (Eng. Abstr.) (Chi)
[Ebstein's anomaly of the tricuspid valve with the WPW syndrome] Vítek B, et al. **Cesk Pediatr** 1989 Jun;44(6):341–4 (Eng. Abstr.) (Cze)
[Assessment of associated electrocardiographic changes in the Wolff-Parkinson-White syndrome. II. Detection of focal disorders] Homola D, et al. **Vnitr Lek** 1988 Sep; 34(9):833–42 (Eng. Abstr.) (Cze)
[Wolff-Parkinson-White syndrome and verapamil: apropos of a case of ventricular fibrillation] Michel B, et al. **Schweiz Med Wochenschr** 1989 May 13;119(19):630–4 (Eng. Abstr.) (Fre)
[The CREST syndrome. Apropos of a case with Wolff-Parkinson-White type B syndrome] Ben Abdelnadhim A, et al. **Tunis Med** 1988 May;66(5):481–3 (11 ref.) (Eng. Abstr.) (Fre)
[I.v. propafenone in supraventricular paroxysmal tachyarrhythmias in patients with Wolff-Parkinson-White syndrome. 2 clinical cases] Barbieri O, et al. **Clin Ter** 1988 Jan 15;124(1):17–23 (Ita)
[Wolff-Parkinson-White syndrome and anesthesia] Casciani M, et al. **Minerva Anestesiol** 1987 Nov;53(11):617–20 (Eng. Abstr.) (Ita)
[A case of three different reciprocal tachycardias due to left concealed accessory pathway and dual A-V nodal pathways] Bando S, et al. **Kokyu To Junkan** 1988 Nov; 36(11):1241–6 (Eng. Abstr.) (Jpn)
[Vectorcardiographic manifestations of the W-P-W syndrome with associated cardiopathy] de Micheli A, et al. **Arch Inst Cardiol Mex** 1989 May–Jun;59(3):309–21 (57 ref.) (Eng. Abstr.) (Spa)
[Cesarean section in a patient with Ebstein's anomaly and Wolff-Parkinson-White syndrome] Rovira I, et al. **Rev Esp Anestesiol Reanim** 1988 Jul–Aug;35(4):221–3 (Eng. Abstr.) (Spa)

DIAGNOSIS

Utility of introducing ventricular premature complexes during reciprocating tachycardia in specifying the location of left free wall accessory pathways. Packer DL, et al. **Am J Cardiol** 1989 Jan 1;63(1):49–57
Cases in electrocardiography. Zimmers T, et al. **Am J Emerg Med** 1989 Jul;7(4):434–6
Anesthesia unmasking benign Wolff-Parkinson-White syndrome. Lubarsky D, et al. **Anesth Analg** 1989 Feb; 68(2):172–4
Wide-complex tachycardia, possibly WPW syndrome. Hancock EW. **Hosp Pract [Off]** 1988 Oct 15;23(10):65, 68–9
Wolff-Parkinson-White syndrome: illustrative case and brief review. Moore GP, et al. **J Emerg Med** 1989 Jan–Feb; 7(1):47–54
Failure of the exercise test to predict the anterograde refractory period of the accessory pathway in Wolff Parkinson White syndrome. Daubert C, et al. **PACE** 1988 Aug;11(8):1130–8
Catheter recording of left atrial activation from left pulmonary artery in the Wolff-Parkinson-White syndrome: validation of the technique with intraoperative mapping results. Lacombe P, et al. **PACE** 1988 Dec;11(12):2168–79
Electrophysiologic evaluation of asymptomatic patients with the Wolff-Parkinson-White pattern. Satoh M, et al. **PACE** 1989 Mar;12(3):413–20
[Intrauterine tachycardia—differential diagnosis from fetal death] Husby H, et al. **Ugeskr Laeger** 1989 Jan 23; 151(4):247–8 (Eng. Abstr.) (Dan)
[Intravenous flecainide in Wolff-Parkinson-White syndrome: a test for evaluation of the refractory period of the anomalous pathway. Comparison with ajmaline] Klersy C, et al. **Cardiologia** 1988 May;33(5):531–5 (Eng. Abstr.) (Ita)
[Latent WPW syndrome diagnosed in Valsalva's method] Chang ZH. **Kokyu To Junkan** 1988 Aug;36(8):873–4 (Jpn)
[A case of WPW syndrome with slow Kent documented by ATP injection] Tsuchihashi K, et al. **Kokyu To Junkan** 1989 Mar;37(3):335–9 (Eng. Abstr.) (Jpn)
[A combination of early ventricular repolarization and Wolff-Parkinson-White syndrome] Vorob'ev LP, et al. **Kardiologiia** 1988 Aug;28(8):104 (Rus)
[The clinical importance of the pre-excitation syndrome] Nikitin AV, et al. **Klin Med (Mosk)** 1988 Nov;66(11):39–45 (45 ref.) (Rus)

DRUG THERAPY

Electrophysiologic effects of intravenous propafenone in Wolff-Parkinson-White syndrome. Dubuc M, et al. **Am Heart J** 1989 Feb;117(2):370–6
Reversal of electrophysiologic effects of flecainide on the accessory pathway by isoproterenol in the Wolff-Parkinson-White syndrome. Manolis AS, et al. **Am J Cardiol** 1989 Jul 15;64(3):194–8
Electrophysiologic effects, efficacy and tolerance of class Ic antiarrhythmic agents in Wolff-Parkinson-White syndrome. Manolis AS, et al. **Am J Cardiol** 1989 Mar 15; 63(11):746–50
Encainide for treatment of atrioventricular reciprocating tachycardia in the Wolff-Parkinson-White syndrome. Miles WM, et al. **Am J Cardiol** 1988 Dec 20; 62(19):20L–25L
Encainide for atrial fibrillation associated with Wolff-Parkinson-White syndrome. Rinkenberger RL, et al. **Am J Cardiol** 1988 Dec 20;62(19):26L–30L
Misuse of verapamil in pre-excited atrial fibrillation. Garratt C, et al. **Lancet** 1989 Feb 18;1(8634):367–9
[Effect of aminophylline on electrophysiological characteristics of the accessory pathway in patients with Wolff-Parkinson-White syndrome] Ostapiuk M, et al. **Kardiol Pol** 1988;31(3):173–9 (Eng. Abstr.) (Pol)
[Long-term follow-up of patients with Wolff-Parkinson-White syndrome treated on the basis of clinical symptoms and the results of initial electrophysiological examination] Truszkowska-Gluza M, et al. **Kardiol Pol** 1988;31(11):711–8 (Eng. Abstr.) (Pol)
[Effect of verapamil on electrophysiologic characteristics of the accessory pathway in patients with Wolff-Parkinson-White syndrome] Molenda W, et al. **Pol Tyg Lek** 1988 Sep 5;43(36):1157–60 (Eng. Abstr.) (Pol)

ETIOLOGY

Wolff-Parkinson-White syndrome after transplantation of the heart. Goy JJ, et al. **Br Heart J** 1989 Apr;61(4):368–71

HISTORY

The first implanted tachycardia-terminating pacemaker. Barold SS, et al. **PACE** 1989 May;12(5):870–4

MORTALITY

[Sudden death in the Wolff-Parkinson-White syndrome] García-Cosío Mir F. **Rev Esp Cardiol** 1989 Apr;42(4):234–9 (33 ref.) (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Usefulness of isoproterenol during atrial fibrillation in evaluation of asymptomatic Wolff-Parkinson-White pattern. Szabo TS, et al. **Am J Cardiol** 1989 Jan 15; 63(3):187–92
Wolff-Parkinson-White syndrome and ECG after operation [letter] Janes EF, et al. **Anaesthesia** 1989 Apr;44(4):355–6
Use of selected quantitative parameters of the electric field of the heart in evaluating the presence and site of preexcitation. Cagáň S, et al. **Bratisl Lek Listy** 1989 Jan; 90(1):5–16 (Eng, Slo)
Diagnosis of dual accessory pathways by ajmaline test. Belhassen B, et al. **Cardiology** 1989;76(1):53–7
Pre- and intraoperative identification of multiple accessory pathways. Experience of 19 pathways in 9 patients. Blomström P, et al. **Cardiology** 1989;76(1):42–52
Electrophysiological determinants of antidromic reentry induced during atrial extrastimulation. Insights from a pacing model of Wolff-Parkinson-White syndrome. Lehmann MH, et al. **Circ Res** 1989 Aug;65(2):295–306
Latent functional duality in an accessory pathway. Tai YT, et al. **Eur Heart J** 1989 Apr;10(4):380–4
Induction of supraventricular tachyarrhythmia at rest and during exercise with transoesophageal atrial pacing in the electrophysiological evaluation of asymptomatic athletes with Wolff-Parkinson-White syndrome. Vergara G, et al. **Eur Heart J** 1988 Oct;9(10):1119–25
Evaluation of noninvasive tests for identifying patients with pre-excitation syndrome with short refractory period of the accessory pathway. Das GS, et al. **Indian Heart J** 1987 Nov–Dec;39(6):34–40
"Atypical" posteroseptal accessory pathway in Wolff-Parkinson-White syndrome. Guiraudon GM, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1605–8
Three types of atrioventricular reciprocating tachycardia using bilateral accessory pathways in a patient with Wolff-Parkinson-White syndrome. Liu PH, et al. **J Electrocardiol** 1989 Apr;22(2):173–80
Longitudinal electrophysiologic assessment of asymptomatic patients with the Wolff-Parkinson-White electrocardiographic pattern. Klein GJ, et al. **N Engl J Med** 1989 May 11;320(19):1229–33
Differential effects of abrupt cycle length changes on the refractoriness of accessory pathway, His-Purkinje system, atrial and ventricular myocardium in Wolff-Parkinson-White syndrome. Shenasa M, et al. **PACE** 1989 Jan;12(1 Pt 1):29–40
Electrophysiological demonstration of anterograde concealed conduction in accessory atrioventricular pathways capable only of retrograde conduction. Suzuki F, et al. **PACE** 1989 Apr;12(4 Pt 1):591–603
[Should the Isuprel test be performed systematically in Wolff-Parkinson-White syndrome?] Brembilla-Perrot B, et al. **Arch Mal Coeur** 1988 Oct;81(10):1227–33 (18 ref.) (Eng. Abstr.) (Fre)
[Wolff-Parkinson-White syndrome. Value of transesophageal atrial stimulation coupled with exercise test for the study of anterograde conduction in the accessory pathway] Cebron JP, et al. **Arch Mal Coeur** 1989 Feb; 82(2):159–66 (Eng. Abstr.) (Fre)
[The natural history of 270 cases of Wolff-Parkinson-White syndrome in a survey of the general population] Soria R, et al. **Arch Mal Coeur** 1989 Mar;82(3):331–6 (Eng. Abstr.) (Fre)
[Paroxysmal, refractory tachycardia] Haberl R, et al. **Internist (Berlin)** 1989 Jul;30(7):454–7 (Ger)
[Electrophysiologic properties of accessory atrioventricular pathways. Comparison with myocardial tissue and relation to site] Kentsch M, et al. **Z Kardiol** 1988 Sep;77(9):582–6 (Eng. Abstr.) (Ger)
[Pharmacodynamics and pharmacokinetics of flecainide in cardiac pre-excitation of the bundle of Kent] Casiglia E, et al. **Cardiologia** 1989 May;34(5):425–9 (Eng. Abstr.) (Ita)

[An electrophysiologic and electropharmacological study of functional properties of the bundle of Kent in Wolff-Parkinson-White syndrome] Costantini M, et al. **Cardiologia** 1989 Apr;34(4):365-74 (Eng. Abstr.) (Ita)

[Electrophysiological characterization of an accessory atrioventricular pathway using direct recording of electric potentials] Critelli G, et al. **Cardiologia** 1988 May; 33(5):541-7 (Eng. Abstr.) (Ita)

[Clinical problems in patients with cardiac pre-excitation of the WPW type] Piccolo E, et al. **Cardiologia** 1988 May; 33(5):449-51 (Ita)

[Electrophysiologic effects of isoproterenol in children with Wolff-Parkinson-White syndrome] Fujiseki Y, et al. **Kokyu To Junkan** 1989 Feb;37(2):189-94 (Eng. Abstr.) (Jpn)

[Supraventricular tachycardias and paroxysmal atrial fibrillation] Hashiba K. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1789-800 (Jpn)

[A case of Wolff-Parkinson-White syndrome with 2 accessory pathways] Musial WJ, et al. **Kardiol Pol** 1988; 31(6):383-90 (Eng. Abstr.) (Pol)

[Evaluation of arrhythmia and electrophysiologic properties of the conduction pathways in patients with WPW syndrome based on 24-hour electrocardiographic monitoring] Telichowski C, et al. **Kardiol Pol** 1988; 31(7):465-71 (Eng. Abstr.) (Pol)

[The electrocardiogram and surface electrocardiographic mapping in the Wolff-Parkinson-White picture] Cagan S, et al. **Valtr Lek** 1988 Jul;34(7):646-57 (Eng. Abstr.) (Slo)

[Concealed conduction and fatigue phenomenon in an accessory pathway] Muñoz Gil J, et al. **Rev Esp Cardiol** 1989 Feb;42(2):135-7 (Eng. Abstr.) (Spa)

SURGERY

Cryosurgical ablation of accessory atrioventricular pathways without cardiopulmonary bypass: an epicardial approach for Wolff-Parkinson-White syndrome. Watanabe S, et al. **Ann Thorac Surg** 1989 Feb;47(2):257-64

Surgery for Wolff-Parkinson-White syndrome interrupts efferent vagal innervation to the left ventricle and to the atrioventricular node in the canine heart. Inoue H, et al. **Cardiovasc Res** 1988 Mar;22(3):163-70

Modification of a left-sided accessory atrioventricular pathway by radiofrequency current using a bipolar epicardial-endocardial electrode configuration. Kuck KH, et al. **Eur Heart J** 1988 Aug;9(8):927-32

Catheter technique for ablation of accessory atrioventricular pathway: long-term results. Weber H, et al. **Eur Heart J** 1989 May;10(5):388-99

Surgical management of children and young adults with the Wolff-Parkinson-White syndrome. Dick M 2d, et al. **Heart Vessels** 1988;4(4):229-36

Preexcitation syndrome in a donor heart. Thompson E, et al. **J Heart Transplant** 1989 Mar-Apr;8(2):177-80

The surgical treatment of Wolff-Parkinson-White syndrome. Slater AD, et al. **J Ky Med Assoc** 1988 Oct;86(10):551-3

Catheter ablation for recurrent tachyarrhythmias. Clinical experience with two different techniques of ablation in 21 patients. Goy JJ, et al. **PACE** 1988 Nov;11(11 Pt 2):1945-53

[Surgical treatment of Wolff-Parkinson-White syndrome with local intramyocardial injection of absolute alcohol: a report of 12 cases] Dian CW. **Chung Hua Wai Ko Tsa Chih** 1989 Mar;27(3):160-1, 189 (Eng. Abstr.) (Chi)

[The surgical treatment of Wolff-Parkinson-White syndrome; results in the first 70 patients in the Academic Hospital Maastricht] Penn OC, et al. **Ned Tijdschr Geneeskd** 1988 Dec 3;132(49):2241-4 (Eng. Abstr.) (Dut)

[Application of epicardial approach technique to the anterior-paraseptal type Wolff-Parkinson-White syndrome] Nakano H, et al. **Kyobu Geka** 1989 May; 42(5):358-62 (Eng. Abstr.) (Jpn)

[Surgical repair of TR and PC caused by cryosurgery of WPW syndrome] Sato T, et al. **Kyobu Geka** 1988 Dec; 41(13):1077-81 (Eng. Abstr.) (Jpn)

[The optimal cryoprobe temperature for the cryosurgical ablation of accessory atrioventricular pathways with an epicardial approach in Wolff-Parkinson-White syndrome] Watanabe S, et al. **Kyobu Geka** 1988 Oct;41(11):881-5 (Eng. Abstr.) (Jpn)

[Simultaneous surgery of WPW syndrome combined with acquired valvular disease] Misaki T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2044-7 (Eng. Abstr.) (Jpn)

THERAPY

Pulsatile tinnitus during a Valsalva maneuver in a patient with Wolff-Parkinson-White syndrome [letter] Rodenberg H, et al. **Am J Emerg Med** 1988 Nov;6(6):679-81

[Transvenous catheter ablation of a left-sided accessory pathway via coronary sinus in Wolff-Parkinson-White syndrome] Huang DJ, et al. **Chung Hua Nei Ko Tsa Chih** 1988 May;27(5):278-81, 325-6 (Eng. Abstr.) (Chi)

[Immediate complications of fulguration of ventricular tachycardia and accessory pathways. Analysis of 318 endocavitary shocks] Montserrat P, et al. **Ann Cardiol Angeiol (Paris)** 1989 Apr;38(4):191-6 (Eng. Abstr.) (Fre)

[Therapeutic management of the Wolff-Parkinson-White syndrome] Frank R. **Presse Med** 1989 Jan 21;18(2):75-8 (Eng. Abstr.) (Fre)

WOLFFIAN BODY see MESONEPHROS

WOLFFIAN DUCT

Antenatal sonographic detection of Wolffian duct cyst. Kapoor R, et al. **JCU** 1989 Sep;17(7):515-7

ANATOMY & HISTOLOGY

Origin of müllerian duct and its later developmental changes in relation to wolffian duct in bovine fetuses. Inomata T, et al. **Zentralbl Veterinarmed [A]** 1989 Mar;36(3):166-74

INNERVATION

Differentiation of smooth muscle in the genital tract of the female mouse and its temporal relation with the development of the Wolffian nerve. Brauer MM, et al. **Anat Embryol (Berl)** 1989;179(4):403-10

WOLFRAM see TUNGSTEN

WOLFRAM SYNDROME

[DIDMOAD syndrome. An endocrinological study of 4 cases] Carro Martínez A, et al. **Med Clin (Barc)** 1988 Nov 12;91(16):605-8 (Eng. Abstr.) (Spa)

BLOOD

Thiamine-responsive anemia in DIDMOAD syndrome. Borgna-Pignatti C, et al. **J Pediatr** 1989 Mar;114(3):405-10

GENETICS

DIDMOAD syndrome (Wolfram syndrome) in four male siblings. Kumaki S, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Dec;29(6):856-61

DIDMOAD syndrome and HLA-DR haplotypes. van Haeften TW, et al. **Horm Metab Res** 1989 Apr;21(4):214-5

[Wolfram's syndrome. Description of 2 cases] Nucci P, et al. **Minerva Pediatr** 1988 Aug;40(8):485-8 (Eng. Abstr.) (Ita)

HISTORY

Wolfram syndrome: a tribute to Don J. Wolfram, M.D. [corrected] [published erratum appears in Indiana Med 1989 Sep;82(9):705] Woolling KR. **Indiana Med** 1989 Jul; 82(7):548-9

PATHOLOGY

Genetically programmed selective islet beta-cell loss in diabetic subjects with Wolfram's syndrome. Karasik A, et al. **Diabetes Care** 1989 Feb;12(2):135-8

[Description of Wolfram syndrome (DIDMOAD) on the basis of a new case] Bernabeau Morón I, et al. **Rev Clin Esp** 1989 May;184(8):418-20 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Incomplete Wolfram syndrome: clinical and electrophysiologic study of two familial cases. Cillino S, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(2):131-5

WOLMAN DISEASE

Wolman's disease: clinical and biochemical findings of a new case. Bona G, et al. **J Inherited Metab Dis** 1988;11(4):423-4

DIAGNOSIS

A case of acid lipase deficiency: Wolman's disease. Bona G, et al. **Panminerva Med** 1989 Jan-Mar;31(1):49-53

First trimester diagnosis of Wolman's disease. van Diggelen OP, et al. **Prenat Diagn** 1988 Nov;8(9):661-3

[Cerebrotendinous xanthomatosis: description of 2 cases and differential diagnosis in relation to encephalomyelitis disseminata] Diedrich U, et al. **Nervenarzt** 1989 Jul; 60(7):444-7 (Ger)

DIET THERAPY

Proposed treatment for infants with Wolman disease [letter] Wolman M. **Pediatrics** 1989 Jun;83(6):1074-5

GENETICS

Cerebrotendinous xanthomatosis. Berginer VM, et al. **Neurol Clin** 1989 Feb;7(1):55-74 (64 ref.)

[Wolman disease in children in the same family] Zubov NA, et al. **Pediatriia** 1989;(5):90-1 (Rus)

METABOLISM

Independence of triacylglycerol-containing compartments in cultured fibroblasts from Wolman disease and multisystemic lipid storage myopathy. Salvayre R, et al. **FEBS Lett** 1989 Jun 19;250(1):35-9

PATHOLOGY

Case 4. Wolman's disease. Mitsudo S, et al. **Pediatr Pathol** 1989;9(2):193-8

WOMEN

Parental leave: the need for a national policy to foster sexual equality. Caplan-Cotenoff SA. **Am J Law Med** 1987; 13(1):71-104 (207 ref.)

Nurses as barometers for women's health [news] Morrow C. **Am J Nurs** 1988 Oct;88(10):1324-5

What women want [letter] Knoll JL. **Am J Psychiatry** 1989 Oct;146(10):1362

Wife's level of education and husband's risk of primary cardiac arrest. Strogatz DS, et al. **Am J Public Health** 1988 Nov;78(11):1491-3

Sexual harassment in the workplace: an overview of legal issues for pharmacists. Fink JL 3d. **Am Pharm** 1989 Feb; NS29(2):18-9

Being healthy: women's images. Woods NF, et al. **ANS** 1988 Oct;11(1):36-46

Breast feeding patterns of working women in the Dhaka metropolitan area. Nessa F, et al. **Bangladesh Med Res Counc Bull** 1988 Jun;14(1):1-8

Women and HIV disease. Jones L, et al. **Br J Hosp Med** 1989 Jun;41(6):526-38 (96 ref.)

Hygeia's sisters: a history of women in pharmacy. Ward PS. **Caduceus** 1988 Fall-Winter;4(3-4):1-57

Sexism in CJSS [editorial] Shephard RJ. **Can J Sport Sci** 1989 Jun;14(2):65

Age retirement in women. III. An odontological study. Norlén P, et al. **Compr Gerontol [A]** 1988 Oct;2(3):97-101

Age retirement in women. I. General presentation. Steen B, et al. **Compr Gerontol [A]** 1988 Jun;2(2):71-7

Age retirement in women. II. Dietary habits and body composition. Steen B, et al. **Compr Gerontol [A]** 1988 Jun; 2(2):78-82

Pacing a career and setting priorities [news] **FASEB J** 1989 Apr;3(6):1781-4

When the caregiver becomes the patient. Gaynor S. **Geriatr Nurs (New York)** 1989 May-Jun;10(3):120-3

An intergenerational women's group. Fogler J. **Gerontologist** 1989 Apr;29(2):268-71

Career development of women in health care administration: a preliminary consideration. Haddock CC, et al. **Health Care Manage Rev** 1989 Summer;14(3):33-40

Personal questions plague women on way to top. Droste T. **Hospitals** 1989 Apr 20;63(8):88

Women's health [editorial] Karkal M. **Indian J Public Health** 1987 Jul-Sep;31(3):133-4

The feminization of poverty: myth or reality? Gimenez ME. **Int J Health Serv** 1989;19(1):45-61

Occupational health risks for Mexican women: the case of the maquiladora along the Mexican-United States border. Hovell MF, et al. **Int J Health Serv** 1988;18(4):617-27

Child care--a women's health issue. Guinan ME. **J Am Med Wom Assoc** 1989 Jan-Feb;44(1):27-8

Rooms of our own [editorial] McGoldrick KE. **J Am Med Wom Assoc** 1988 Nov-Dec;43(6):162-3

Pregnant women in the health care professions. Rosenfeld JA. **J Am Med Wom Assoc** 1989 Jul-Aug;44(4):119-22

Estrogen 2-hydroxylase oxidation and menstrual function among elite oarswomen. Snow RC, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):369-76

Women in pharmacy--a view from the U.K. Morley A, et al. **J Clin Pharm Ther** 1988 Oct;13(5):317-20

Commentary. Women and pharmacy--a view from the United States [editorial] Sauer B. **J Clin Pharm Ther** 1989 Jun;14(3):235-8

Effects of labor force participation on women's health: new evidence from a longitudinal study. Waldron I, et al. **J Occup Med** 1988 Dec;30(12):977-83

Contraceptive needs of women over 35. Ketting E. **Maturitas** 1988;Suppl 1:23-38

Clustering and consistency of use of medicines among mid-aged women. Hemminki E, et al. **Med Care** 1989 Sep; 27(9):859-68

National Women's Hospital inquiry [letter] Cairney P. **N Z Med J** 1989 May 24;102(868):261

Women in science: still a soft female touch for doctorates [news] Anderson A. **Nature** 1989 Aug 10;340(6233):417

Occupational and socio-medical factors in preterm birth. Hartikainen-Sorri AL, et al. **Obstet Gynecol** 1989 Jul; 74(1):13-6

Nutrition, health and education of women in Papua New Guinea. Groos AD, et al. **P N G Med J** 1988 Jun; 31(2):117-23 (37 ref.)

Breast-feeding and the working mother: a profile. Ryan AS, et al. **Pediatrics** 1989 Apr;83(4):524-31

Salary, education, and managerial-level differences of physical therapists in Maryland. Baker CL, et al. **Phys Ther** 1989 Jan;69(1):27-31

Women in sport. Dodds W. **Practitioner** 1988 Dec; 232(1460):1398-400

The employment of mothers and the outcomes of their pregnancies: an Australian study. Najman JM, et al. **Public Health** 1989 May;103(3):189-98

The effects of race differences in work history, work attitudes, economic resources, and health on women's retirement. Belgrave L. **Res Aging** 1988 Sep;10(3):383-98

The retirement process among older women in the United States. Changes in the 1970s. Hayward M, et al.

Res Aging 1988 Sep;10(3):358–82
Women, household and health in Latin America. Browner CH. **Soc Sci Med** 1989;28(5):461–73 (123 ref.)
Women's health in east Africa. Raikes A. **Soc Sci Med** 1989; 28(5):447–59 (51 ref.)
Retirement–age women and pensions: findings from the New Beneficiary Survey. Woods JR. **Soc Secur Bull** 1988 Dec; 51(12):5–16
Health insurance of women of childbearing age: United States, 1985. Singh S. **Stat Bull Metrop Insur Co** 1988 Oct–Dec;69(4):16–23
Doctor mom [letter] Chase R. **Tex Med** 1989 Jul;85(7):6
Women without health insurance. Links between access, poverty, ethnicity, and health. Braveman P, et al. **West J Med** 1988 Dec;149(6):708–11 (24 ref.)
Occupational mortality of California women, 1979–1981. Doebbert G, et al. **West J Med** 1988 Dec;149(6):734–40 (63 ref.)
Women and medicine. From tension to truce. Friedman E. **West J Med** 1988 Dec;149(6):681–2
Women in the later years: health, social, and cultural perspectives. **Women Health** 1988;14(3–4):1–272
The picture of health for midlife and older women in America. Older Women's League. **Women Health** 1988; 14(3–4):53–74 (45 ref.)
"Hope in another direction": compensation for work–related illness among women, 1900–1960—Part I. Bale A. **Women Health** 1989;15(1):81–102
"Hope in another direction": compensation for work–related illness among women, 1900–1960—Part II. Bale A. **Women Health** 1989;15(2):99–115
Women, work and computers. Bradley G. **Women Health** 1988;13(3–4):117–32
Generational equity: issues of gender and race. Catchen H. **Women Health** 1988;14(3–4):21–38
The aging, the aged, and the very old: women the policy makers forgot. Faulkner AO, et al. **Women Health** 1988; 14(3–4):5–19
The power over medical research. Gradin A. **Women Health** 1988;13(3–4):175–80
The content of advertisements in medical journals: distorting the image of women. Hawkins JW, et al. **Women Health** 1988;14(2):43–59
Women's health and women's work in health services: what statistics tell us. Hedman B, et al. **Women Health** 1988; 13(3–4):9–34
Older women in developing countries. Heisel MA. **Women Health** 1988;14(3–4):253–72
Just being friendly means a lot—women, friendship, and aging. Lewittes HJ. **Women Health** 1988;14(3–4):139–59
Women, work, and preventive health care: an exploratory study of the efficacy of HMO membership. Lutz ME. **Women Health** 1989;15(1):21–33
Community care of older women living alone. Magaziner J, et al. **Women Health** 1988;14(3–4):121–38
Aging minority women: issues in research and health policy. Padgett D. **Women Health** 1988;14(3–4):213–25 (26 ref.)
Employment characteristics, social support and the well–being of women. Pugliesi K. **Women Health** 1988; 14(1):35–58
Puerto Rican elderly women: the cultural dimension of social support networks. Sánchez–Ayéndez M. **Women Health** 1988;14(3–4):239–52
"Of no use without health": late nineteenth century medical prescriptions for female exercise through the life span. Vertinsky P. **Women Health** 1988;14(1):89–115
Effects of multiple roles on women's health—evidence from a national longitudinal study. Waldron I, et al. **Women Health** 1989;15(1):3–19
Women's views may be underrepresented in health surveys [letter] Brieger WR, et al. **World Health Forum** 1988; 9(1):73–5
[The expanded participation of women in society and the impact to industrial health (editorial)] Kasuya M. **Sangyo Igaku** 1988 May;30(3):169 **(Jpn)**
[Bases of measures aimed at improving working conditions for women employed in manufacturing of television sets] Gruznevich AP. **Gig Tr Prof Zabol** 1989;(6):19–22 (Eng. Abstr.) **(Rus)**
[Impact of social and health factors in the forecast of work activity of female workers of pre–retirement and retirement age receiving social benefits] Iakovleva TP, et al. **Gig Tr Prof Zabol** 1989;(1):31–4 (Eng. Abstr.) **(Rus)**
[Thermal state of women working outdoors under conditions of Far North] Shushkova TS. **Gig Tr Prof Zabol** 1989; (6):22–4 (Eng. Abstr.) **(Rus)**
[Activities of health personnel trade unions concerning health care of women and children (editorial)] Novak LI. **Pediatriia** 1988;(12):4–7 **(Rus)**
[The long life of women—a societal problem?] Bengtsson C, et al. **Lakartidningen** 1988 Dec 7;85(49):4297–300 **(Swe)**
[10 years after compulsory sterilization: women are the key figures in Indian family planning] Buxbaum L, et al. **Lakartidningen** 1989 May 3;86(18):1713–6 **(Swe)**

EDUCATION

Women optometry students: how qualified? Kegel–Flom P. **Am J Optom Physiol Opt** 1988 Aug;65(8):666–73

PSYCHOLOGY

Women's role in male sexual dysfunction. Rouleau JL. **Acta Urol Belg** 1989;57(1):177–81
Sex and the working mother: adolescent sexuality, sex role typing and family background. Fingerman KL. **Adolescence** 1989 Spring;24(93):1–18
Alcoholic women in treatment: the question of stigma and age. Gomberg ES. **Alcohol Alcohol** 1988;23(6):507–14
Alcohol and social influence: female yielding to male and female group pressure. Gustafson R. **Alcohol Alcohol** 1988; 23(6):501–5
Source of Freud's question about what women want [letter] Niederland WG. **Am J Psychiatry** 1989 Mar;146(3):409–10
Psychology and violence against women. Walker LE. **Am Psychol** 1989 Apr;44(4):695–702
Knowing what to weigh: women's self–care activities related to weight. Allan JD. **ANS** 1988 Oct;11(1):47–60
Paradoxical punishment as it relates to the battered woman syndrome. Long GM, et al. **Behav Modif** 1989 Apr; 13(2):192–205
Feminist scholarship, relational and instrumental control, and a power–control theory of gender and delinquency. Hagan J, et al. **Br J Sociol** 1988 Sep;39(3):301–36
Patterns of breastfeeding and work: the Canadian experience. Morse JM, et al. **Can J Public Health** 1989 May–Jun; 80(3):182–8
Do retired career women exercise? Kolanowski AM, et al. **Geriatr Nurs (New York)** 1988 Nov–Dec;9(6):350–2
Older women's perceptions of female counselors: the influence of therapist age and problem intimacy. Hayslip B Jr, et al. **Gerontologist** 1989 Apr;29(2):239–44
LEAR'S magazine "for the woman who wasn't born yesterday": a critical review. Wang C. **Gerontologist** 1988 Oct;28(5):600–1
Older widows and married women: their intimates and confidants. Babchuk N, et al. **Int J Aging Hum Dev** 1989; 28(1):21–35
The value of cat ownership to elderly women living alone. Mahalski PA, et al. **Int J Aging Hum Dev** 1988;27(4):249–60
The use of support groups to raise self–esteem for women clients. Yahne CE, et al. **J Am Coll Health** 1988 Sep; 37(2):79–84
Working status and stress of middle class women of Calcutta. Mukhopadhyay S. **J Biosoc Sci** 1989 Jan;21(1):109–14
The effects of women's employment: personal control and sex differences in mental health. Rosenfield S. **J Health Soc Behav** 1989 Mar;30(1):77–91
Child care and emotional adjustment to wives' employment. Ross CE, et al. **J Health Soc Behav** 1988 Jun;29(2):127–38
Women's preferences for sex of doctor: a postal survey. Nichols S. **J R Coll Gen Pract** 1987 Dec;37(305):540–3
Women's preferences for sex of doctor [letter] Snowise NG. **J R Coll Gen Pract** 1988 Mar;38(308):125–6
Women doctors and women patients in general practice. Newman LT. **J R Soc Health** 1988 Aug;108(4):115–8
Dyadic adjustment/sexual satisfaction in women and men as a function of psychological sex role self–perception. Rosenzweig JM, et al. **J Sex Marital Ther** 1989 Spring; 15(1):42–56
Alcohol and anxiety reduction in female social drinkers. Wilson GT, et al. **J Stud Alcohol** 1989 May;50(3):226–35
Greek women and broken nerves in Montreal. Dunk P. **Med Anthropol** 1989 May;11(1):29–45
Women and Jews in a private nervous clinic in late nineteenth–century Vienna. Shorter E. **Med Hist** 1989 Apr; 33(2):149–83
Meeting the psychosocial and legal needs of women with AIDS and their families. Zuckerman C, et al. **N Y State J Med** 1988 Dec;88(12):619–20
A test of two explanatory models of women's responses to battering. Campbell JC. **Nurs Res** 1989 Jan–Feb;38(1):18–24
Determinants of health promotion in midlife women. Duffy ME. **Nurs Res** 1988 Nov–Dec;37(6):358–62
AIDS and traditional health beliefs and practices of black women. Flaskerud JH, et al. **Nurs Res** 1989 Jul–Aug; 38(4):210–5
Women's disorders. **Psychiatr Clin North Am** 1989 Mar; 12(1):1–235
Emotional consequences of victimization and discrimination in "special populations" of women. Hamilton JA. **Psychiatr Clin North Am** 1989 Mar;12(1):35–51 (70 ref.)
Professional issues for women. Nadelson CC. **Psychiatr Clin North Am** 1989 Mar;12(1):25–33 (28 ref.)
Women and autonomy: using structural analysis of social behavior to find autonomy within connections. Berlin S, et al. **Psychiatry** 1989 Feb;52(1):79–95 (55 ref.)
Employed mothers' concerns about separation from the first– and second–born child. Pitzer MS, et al. **Res Nurs Health** 1989 Apr;12(2):123–8
Prisoners of their own feebleness': women, nerves and Western medicine—a historical overview. Cayleff SE. **Soc Sci Med** 1988;26(12):1199–208
Women, work and alcohol. Penniman LJ, et al. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):263–73 (64 ref.)
The domestic servant as family planning innovator: an Indian case study. Basu AM, et al. **Stud Fam Plann** 1988 Sep–Oct; 19(5):292–8
Work and depression among women in the Federal Republic of Germany. Braun S, et al. **Women Health** 1988;14(2):3–26
Older women in nonindustrial cultures: consequences of power and privilege. Foner N. **Women Health** 1988; 14(3–4):227–37
Mental health and older women. Grau L. **Women Health** 1988;14(3–4):75–91
Kinship versus friendship: social adaptation in married and widowed elderly women. Reinhardt JP, et al. **Women Health** 1988;14(3–4):191–211

STATISTICS & NUMERICAL DATA

Women in medical education. A status report. Bickel J. **N Engl J Med** 1988 Dec 15;319(24):1579–84

WOMEN PHYSICIANS see **PHYSICIANS, WOMEN**

WOMEN, WORKING see under **WOMEN**

WOMEN'S HEALTH SERVICES

Well woman advisory centre [letter] Payne R. **J R Coll Gen Pract** 1988 Mar;38(308):123
Gynecologic health care of women with disabilities. Beckmann CR, et al. **Obstet Gynecol** 1989 Jul;74(1):75–9
Government policy and women's health care: the Swedish alternative. **Women Health** 1988;13(3–4):1–180
[Perspectives for our profession in 1988] Balák K. **Cesk Gynekol** 1988 May;53(4):241–2 **(Cze)**

ECONOMICS

Health care for the indigent [letter] Adams N. **Am J Public Health** 1989 Oct;79(10):1435–6
Hospitals play key role in women's health. Harness BZ, et al. **Hospitals** 1989 Jul 5;63(13):FB52, FB54

ORGANIZATION & ADMINISTRATION

What do women patients want? Tridont thinks it has the answer. Michaels E. **Can Med Assoc J** 1989 Feb 15; 140(4):447, 449, 451
Women's centers: 10 common misconceptions. Gravett WS. **Hospitals** 1989 Jul 20;63(14):80
Academically based practice: seizing opportunities, enhancing outcomes. Littlefield VM, et al. **J Prof Nurs** 1988 Sep–Oct;4(5):329–38
A well–woman clinic in general practice. Carter Y. **Practitioner** 1988 Dec;232(1460):1348, 1350

STANDARDS

Self perceived standards of care in women's health. An illustrative case. Ward J, et al. **Aust Fam Physician** 1989 Feb;18(2):91, 94, 96
Women's health: just one question? [editorial] Ward J. **Aust Fam Physician** 1989 Feb;18(2):81

STATISTICS & NUMERICAL DATA

Women's health and women's work in health services: what statistics tell us. Hedman B, et al. **Women Health** 1988; 13(3–4):9–34

SUPPLY & DISTRIBUTION

Women's health in east Africa. Raikes A. **Soc Sci Med** 1989; 28(5):447–59 (51 ref.)

TRENDS

Cervical cancer screening and demonstration projects to identify barriers to preventing cervical cancer mortality. Taylor WR, et al. **Acta Cytol** 1989 Jul–Aug;33(4):460–2
National trends in the use of preventive health care by women. Makuc DM, et al. **Am J Public Health** 1989 Jan; 79(1):21–6
The limits of medicine: women's perception of medical technology. Gabe J, et al. **Soc Sci Med** 1989;28(3):223–31
[Women as patients] Malterud K. **Tidsskr Nor Laegeforen** 1988 Oct 25;108(29B):2659–61 **(Nor)**

UTILIZATION

Women's health programs: a loss or a real leader? Rynne S. **Hospitals** 1989 Sep 20;63(18):112
Medicaid: the lower tier of health care for women. Muller C. **Women Health** 1988;14(2):81–103

WOMEN'S LIBERATION see **WOMEN'S RIGHTS**

WOMEN'S RIGHTS

Use of sexist language [letter] Coons PM, et al. **Am J Psychiatry** 1988 Dec;145(12):1611
Maternal–fetal conflicts: ethical and legal considerations. Fost N. **Ann N Y Acad Sci** 1989;562:248–54
Maternity, paternity, and parental rights of doctors in the UK. Grüneberg AL. **BMJ** 1988 Nov 26;297(6660):1387–9
Family therapy: critique from a feminist perspective. Penfold PS. **Can J Psychiatry** 1989 May;34(4):311–5 (28 ref.)
Gender equity. Bernstein AE. **J Am Med Wom Assoc** 1989 May–Jun;44(3):84–6
Maternal/fetal rights: two views. Justin RG, et al. **J Am Med Wom Assoc** 1989 May–Jun;44(3):90–5
Women and smoking. Who needs equal rights? Kilbourne J. **J Am Med Wom Assoc** 1989 Mar–Apr;44(2):58
The moral status of the near–term fetus. Strong C, et al. **J Med Ethics** 1989 Mar;15(1):25–7
Feminism in publishing [letter] **Lancet** 1989 Jul 15;2(8655):162

Feminism in publishing [letter] Burton JL. **Lancet** 1989 Jun 17;1(8651):1393
Women's rights at 'Einstein' [letter] Blumenfeld OO. **Nature** 1989 Jul 27;340(6231):259
A crime with passion. Rowland GA. **Pa Med** 1989 May; 92(5):42
Sex-role egalitarianism, feminism, and sexual identity. Royse D, et al. **Psychol Rep** 1988 Aug;63(1):160–2
Embryos, ethics and women's rights. Exploring the new reproductive technologies. **Women Health** 1987; 13(1–2):1–259
Women and reproductive technologies: a partially annotated bibliography. Cirasole DM, et al. **Women Health** 1987; 13(1–2):237–59
Feminism and regulation collide: the Food and Drug Administration's approval of the cervical cap. Gallagher DM, et al. **Women Health** 1989;15(2):87–97
In vitro fertilization and gender politics. Lorber J. **Women Health** 1987;13(1–2):117–33
A short answer to "who decides"? Ruddick W. **Women Health** 1987;13(1–2):73–6

HISTORY

[The unfortunate pregnancy of the first French feminist, Olympe de Gouges] Dumont M. **Rev Fr Gynecol Obstet** 1989 Jan;84(1):63–6 (Eng. Abstr.) (Fre)

LEGISLATION & JURISPRUDENCE

Maternity leave policies for residents: an overview of issues and problems. Bickel J. **Acad Med** 1989 Sep;64(9):498–501
Defining minors' abortion rights. Rhodes AM. **MCN** 1988 Sep–Oct;13(5):321
Women's health and women's work in health services: what statistics tell us. Hedman B, et al. **Women Health** 1988; 13(3–4):9–34
Affirmative action by labor unions to increase equality in the work environment. Petterson A. **Women Health** 1988; 13(3–4):167–74

TRENDS

Pay equity—a "cockamamie idea?" The future of health care may depend upon it. Lupica LR. **Am J Law Med** 1988; 13(4):597–620 (144 ref.)
Women in medicine and the medical sciences: problems, progress, and prospects. Waxman M. **Conn Med** 1988 Dec; 52(12):717–20
A womb of his own. Baruch EH. **Women Health** 1987; 13(1–2):135–9

WOOD

On the role of sawdust in the development of mastitis in cows. Isaksson A, et al. **Acta Vet Scand** 1988;29(2):151–8
Occupational asthma caused by iroko wood. Azofra J, et al. **Allergy** 1989 Feb;44(2):156–8
Acute effect upon pulmonary function of low level exposure to phenol-formaldehyde-resin-coated wood. Imbus HR, et al. **Am Ind Hyg Assoc J** 1988 Sep;49(9):434–7
Industrial hygiene characterization of automotive wood model shops. McCammon CS Jr, et al. **Am Ind Hyg Assoc J** 1985 Jul;46(7):343–9
A study of yeasts during the delignification and fungal transformation of wood into cattle feed in Chilean rain forest. González AE, et al. **Antonie Van Leeuwenhoek** 1989; 55(3):221–36
The mouse-skin carcinogenicity of a mutagenic fraction from beech wood dusts. Mohtashamipur E, et al. **Carcinogenesis** 1989 Mar;10(3):483–7
Erythema multiforme-like reaction to "rosewood". Irvine C, et al. **Contact Dermatitis** 1988 Sep;19(3):224–5
Allergic contact dermatitis from an olive wood necklace. Fisher AA. **Cutis** 1989 Mar;43(3):202–3
Nail discoloration due to mahogany. Harris AO, et al. **Cutis** 1989 Jan;43(1):55–6
Occupational asthma caused by exposure to ash wood dust (Fraxinus americana). Malo JL, et al. **Eur Respir J** 1989 Apr;2(4):385–7 (7 ref.)
Chemical removal of splinters without epidermal toxic effects. Copelan R. **J Am Acad Dermatol** 1989 Apr; 20(4):697–8
Black walnut toxicosis in ten horses. Uhlinger C. **J Am Vet Med Assoc** 1989 Aug 1;195(3):343–4
Discussion of "Identification of Wooden Instrument by Scanning Electron Microscopy from Splinters Left in Victim" [letter] Mason JJ. **J Forensic Sci** 1989 Mar; 34(2):289–91
An epidemiologic study of respiratory health effects in a group of North Carolina furniture workers. Goldsmith DF, et al. **J Occup Med** 1988 Dec;30(12):959–65
A standard procedure for measuring rodent bedding particle size and dust content. Thigpen JE, et al. **Lab Anim Sci** 1989 Jan;39(1):60–2
Chronic sinusitis and woodworking as risk factors for cancer of the maxillary sinus in northeast Japan. Shimizu H, et al. **Laryngoscope** 1989 Jan;99(1):58–61
Enzyme-inducing and cytotoxic effects of wood-based materials used as bedding for laboratory animals. Comparison by a cell culture study. Törrönen R, et al. **Life Sci** 1989;45(6):559–65
Urine porphyrin metabolites in wood workers: a pilot study. Pines A, et al. **Med Lav** 1988 Sep–Oct;79(5):386–9
Wood burning related injuries. Nicholson JJ, et al. **N Y State J Med** 1989 May;89(5):262–3
What's new in tumours of the nasal cavity? Adenocarcinomas arising after exposure to wood dust. Kleinsasser O, et al. **Pathol Res Pract** 1989 May;184(5):554–8
Injuries caused by firewood splitting machines. Hellstrand PH. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):51–4
Respiratory symptoms and pathophysiological effects of occupational exposure to formaldehyde and wood dust. Holmström M, et al. **Scand J Work Environ Health** 1988 Oct;14(5):306–11
Cancer incidence of workers in a Finnish sawmill. Jäppinen P, et al. **Scand J Work Environ Health** 1989 Feb;15(1):18–23
Small intestinal obstruction associated with wood chewing in two horses. Green P, et al. **Vet Rec** 1988 Aug 20; 123(8):196–8
Retrospective cohort study of cancer morbidity in furniture makers exposed to wood dust. Barthel E, et al. **Z Gesamte Hyg** 1989 May;35(5):279–81
[Diseases of the nose and paranasal sinuses in workers of the woodworking industry] Savov A. **Probl Khig** 1988; 13:173–82 (Eng. Abstr.) (Bul)
[Occupational hazards in the wood manufacturing industry] Cui SG, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan;23(1):27–8 (17 ref.) (Chi)
[Experimental study of biological effects of wood dust] Liao YL. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jan; 22(1):3–6 (Eng. Abstr.) (Chi)
[Lipophilic quinones of the trunk wood of Tabebuia serratifolia (Vahl.) Nichols] Vidal-Tessier AM, et al. **Ann Pharm Fr** 1988;46(1):55–7 (Eng. Abstr.) (Fre)
[Bronchial asthma due to allergy to African maple] Weber N, et al. **Prax Klin Pneumol** 1988 Oct;42(10):759–61 (Eng. Abstr.) (Ger)
[The pathology and clinical picture of adenocarcinoma of the nose after wood dust exposure] Kleinsasser O, et al. **Strahlenther Onkol** 1989 Jun;165(6):437–40 (Eng. Abstr.) (Ger)
[Wood dust concentrations in wood processing industries] Scheidt R, et al. **Z Gesamte Hyg** 1989 Apr;35(4):219–22 (Eng. Abstr.) (Ger)
[Risk conditions caused by formaldehyde and phenols at a plywood factory] Mariotti F, et al. **Med Lav** 1988 Nov–Dec;79(6):468–73 (Eng. Abstr.) (Ita)
[Longitudinal epidemiologic survey on respiratory disorders among workers of the wood industry] Vellutini M, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):453–4 (Eng. Abstr.) (Ita)
[Studies of genotoxic activity of flavoring smoke condensate in bacterial cell systems] Jenek J, et al. **Rocz Panstw Zakl Hig** 1988;39(5):385–8 (Eng. Abstr.) (Pol)
[Diseases of the locomotor system in workers in the timber-processing industry] Druz' RA, et al. **Ortop Travmatol Protez** 1989 Feb;(2):61–4 (Rus)
[Fatal head and chest wounds from splinters of a board] Vorob'ev IuV. **Sud Med Ekspert** 1988 Jul–Sep;31(3):55–6 (Rus)

ADVERSE EFFECTS

Histological changes in the nasal mucosa in persons occupationally exposed to formaldehyde alone and in combination with wood dust. Holmström M, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):120–9

WOOL

Effects of parasitism and of supplementing ewes with methyl methionine hydroxy analogue on the wool production of their lambs as adults. Wheeler JL, et al. **Aust Vet J** 1988 Nov;65(11):358–9
Cardiomyopathy and woolly haircoat syndrome of Poll Hereford cattle: electrocardiographic findings in affected and unaffected calves. Whittington RJ, et al. **Aust Vet J** 1988 Nov;65(11):341–4
Glucose metabolism in shorn and unshorn pregnant sheep. Symonds ME, et al. **Br J Nutr** 1988 Sep;60(2):249–63
The hazards of wool-presses [letter] Gun RT. **Med J Aust** 1989 Feb 20;150(4):221

ADVERSE EFFECTS

Respiratory and allergic symptoms in wool textile workers. Love RG, et al. **Br J Ind Med** 1988 Nov;45(11):727–41

GROWTH & DEVELOPMENT

[Protected methionine in Sardinian sheep: effects on milk production and wool growth] Floris B, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1143–9 (Eng. Abstr.) (Ita)
[Effect of lasalocid on the course of coccidiosis and wool growth in lambs] Ramisz A, et al. **Wiad Parazytol** 1988; 34(2):213–8 (Eng. Abstr.) (Pol)

TOXICITY

Rock wool and basalt wool under the suspicion of being carcinogenic? [letter] Tiesler H. **Exp Pathol** 1988;35(1):47–8

WORD ASSOCIATION TESTS

Usefulness of word table for the quantitative evaluation of the recognition threshold in children's olfactometry. Furukawa M, et al. **Auris Nasus Larynx** 1988;15(3):181–4
Sex differences in brain and personality correlates of the ability to identify popular word associations. Lansdell H. **Behav Neurosci** 1989 Aug;103(4):893–7
Implicit and explicit memory bias in anxiety. Mathews A, et al. **J Abnorm Psychol** 1989 Aug;98(3):236–40
Color associations of male and female fourth-grade school children. Karp EM, et al. **J Psychol** 1988 Jul;122(4):383–8
Effects of age and sex upon availability of responses on a word-association test. Pons L. **Percept Mot Skills** 1989 Feb; 68(1):85–6
Interactions among affect, cognition, and visuomotor coordination as measured in words and symbols. Pack DR, et al. **Psychol Rep** 1989 Apr;64(2):447–54
[Selective disturbance in lexical knowledge in the elderly with or without dementia] van Loon-Vervoorn WA, et al. **Tijdschr Gerontol Geriatr** 1989 Apr;20(2):59–65 (Eng. Abstr.) (Dut)
[No pleasure in the word field of emotion concepts? 10 methods for characterizing word categorization] Tischer B. **Arch Psychol (Frankf)** 1988;140(1):15–31 (Eng. Abstr.) (Ger)
[Establishing the theoretical and experimental principles of a simple medical neurolinguistic test] Pasternak R, et al. **Pol Tyg Lek** 1988 Jun 6;43(23):756–9 (Eng. Abstr.) (Pol)

WORD PROCESSING

A surgical pathology reporting and encoding system using industry-standard hardware and software. Taubman SB. **Arch Pathol Lab Med** 1988 Dec;112(12):1195–9
Computerised updating of clinical summaries [letter] **BMJ** 1989 Jan 28;298(6668):257–8
Word processing and data security [letter] Littlejohns CS. **BMJ** 1989 Apr 1;298(6677):893
How do you spell relief? Two software reviews. Goldman B. **Can Med Assoc J** 1989 Mar 1;140(5):541
How to use word processing software to conduct content analysis. Norman EM. **Comput Nurs** 1989 May-Jun; 7(3):127–8
The effects of different pause types on neck and shoulder EMG activity during VDU work. Sundelin G, et al. **Ergonomics** 1989 May;32(5):527–37
Neck-shoulder loading in wordprocessor use. Effect of learning, gymnastics and armsupports. Sihvonen T, et al. **Int Arch Occup Environ Health** 1989;61(4):229–33
Comparison of keyboard, light pen and voice recognition as methods of data input. Murchie CJ, et al. **Int J Clin Monit Comput** 1988;5(4):243–6
"On-screen" writing and composing: two years experience with Manuscript Manager, Apple II and IBM-PC versions. Offerhaus L. **Neth J Med** 1989 Jun;34(5–6):322–7
Towards electronic manuscripts? [editorial] Vogten AJ. **Neth J Med** 1989 Jun;34(5–6):285–6
[The application of informatics to mercury gauge plethysmography] Barthel J, et al. **Phlebologie** 1989 Jan–Mar;42(1):143–50 (Eng. Abstr.) (Fre)
[Word processing of medical records and epicrises at a hospital department] Forsgren B. **Tidsskr Nor Laegeforen** 1989 Jun 30;109(19–21):2019–21 (Eng. Abstr.) (Nor)

INSTRUMENTATION

Choosing a word processor. Ainslie J. **BMJ** 1989 Feb 25; 298(6672):514–5
[Synthetic speech and its perception in complex acoustic conditions] Tarasenko GI, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):35–41 (Eng. Abstr.) (Rus)

WORK

see related

EFFICIENCY

An evaluation of the NIOSH guidelines for manual lifting, with special reference to horizontal distance. Garg A. **Am Ind Hyg Assoc J** 1989 Mar;50(3):157–64
Analysis of manual lifting tasks: a qualitative alternative to the NIOSH work practices guide. Keyserling WM. **Am Ind Hyg Assoc J** 1989 Mar;50(3):165–73
Effects of psychophysical lifting training on maximal repetitive lifting capacity. Sharp MA, et al. **Am Ind Hyg Assoc J** 1988 Dec;49(12):639–44
Nutritional effects on work performance. Hultman E. **Am J Clin Nutr** 1989 May;49(5 Suppl):949–57 (54 ref.)
Age-dependent changes in dietary intake related to work output, physical fitness, and body composition. Pařízková J. **Am J Clin Nutr** 1989 May;49(5 Suppl):962–7 (25 ref.)
Are you a lark or an owl on the night shift? Alward RR. **Am J Nurs** 1988 Oct;88(10):1337–9
More from the night owls. Janowski MJ. **Am J Nurs** 1988 Oct;88(10):1340–1
Changes in occupational role performance after a severe burn: a retrospective study. Cheng S, et al. **Am J Occup Ther** 1989 Jan;43(1):17–24
The effect of purposeful activity on pain tolerance [published erratum appears in Am J Occup Ther 1989 Feb;43(2):103] Heck SA. **Am J Occup Ther** 1988 Sep;42(9):577–81
Pointers on purposeful activity study argued [letter] Kircher MA. **Am J Occup Ther** 1988 Sep;42(9):611–2

Better housestaff schedules [letter] Brown B, et al. **Ann Intern Med** 1989 Feb 1;110(3):247–8
Work and cardiovascular health: viewpoint of occupational physiology. Ilmarinen J. **Ann Med** 1989 Jun;21(3):209–14
The Hsiao study. A personal perspective. Garcia GE. **Arch Ophthalmol** 1989 Mar;107(3):342–3
Crew workload in JASDF C-1 transport flight: II. Change in urinary catecholamine excretion. Nakamura A, et al. **Aviat Space Environ Med** 1989 Apr;60(4):301–6
Junior hospital doctors: tired and tested [letter] **BMJ** 1988 Nov 19;297(6659):1331–2
Junior hospital doctors: tired and tested [editorial] Durnford S. **BMJ** 1988 Oct 15;297(6654):931–2
The case for differential capitation fees based on age in British general practice. Fleming DM. **BMJ** 1988 Oct 15; 297(6654):966–8
The need for part-time work [letter] **Br J Hosp Med** 1988 Sep;40(3):232
Evaluation of the impact of smoking restrictions in a government work setting. Millar WJ. **Can J Public Health** 1988 Sep–Oct;79(5):379–82
Sleepiness in shiftwork. A review with emphasis on continuous monitoring of EEG and EOG. Akerstedt T, et al. **Chronobiol Int** 1987;4(2):129–40 (91 ref.)
Physical fitness and other individual factors relating to the shiftwork tolerance of women. Härmä M, et al. **Chronobiol Int** 1988;5(4):417–24
Adaptation to shift work—experimental approaches with reduced masking effects. Moog R, et al. **Chronobiol Int** 1989;6(1):65–75
Effects of work and circadian rhythm on bus drivers' oral temperature. Pokorny ML, et al. **Chronobiol Int** 1988; 5(4):425–32
Internal desynchronization of circadian rhythms and tolerance of shift work. Reinberg A, et al. **Chronobiologia** 1989 Jan–Mar;16(1):21–34
Early retirement and work after retirement. Implications for the structure of the work society. Freter HJ, et al. **Compr Gerontol [B]** 1988 Apr;2(1):44–52
Men, blue collar work and drinking: alcohol use in an industrial subculture. Janes CR, et al. **Cult Med Psychiatry** 1989 Sep;13(3):245–74
Measurement of postural angles during work. Aarås A, et al. **Ergonomics** 1988 Jun;31(6):935–44
Circadian characteristics influencing interindividual differences in tolerance and adjustment to shiftwork. Costa G, et al. **Ergonomics** 1989 Apr;32(4):373–85
Physiological responses during and after intermittent sorting of postal parcels. Louhevaara V, et al. **Ergonomics** 1988 Aug;31(8):1165–75
Alertness of night nurses: two shift systems compared. Wilkinson R, et al. **Ergonomics** 1989 Mar;32(3):281–92
Work and psychiatric illness: the significance of the posthospitalization occupational environment for the course of psychiatric illnesses. Vogel R, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):213–9
Psychological factors and return to work. Cay EL, et al. **Eur Heart J** 1988 Nov;9 Suppl L:74–81
Physiological cost of vocational activities after myocardial infarction. Denolin H, et al. **Eur Heart J** 1988 Nov;9 Suppl L:54–7
Guidelines for return to work after myocardial infarction and/or revascularisation. Denolin H, et al. **Eur Heart J** 1988 Nov;9 Suppl L:130–1
Opening remarks. Denolin H, et al. **Eur Heart J** 1988 Nov; 9 Suppl L:2–4
Working capacity after myocardial infarction. Fabián J, et al. **Eur Heart J** 1988 Nov;9 Suppl L:40–3
Social fate and long-term survival of patients with a recent myocardial infarction, after cardiac rehabilitation. Fioretti P, et al. **Eur Heart J** 1988 Nov;9 Suppl L:89–94
The influence of the type of occupation on return to work after myocardial infarction, coronary angioplasty and coronary bypass surgery. Gehring J, et al. **Eur Heart J** 1988 Nov;9 Suppl L:109–14
Psychosocial job demands of cardiac patients in Hungary. Hoffmann A. **Eur Heart J** 1988 Nov;9 Suppl L:20–5
Summary and conclusions towards guidelines for return to work after myocardial infarction and myocardial revascularisation. Maisano G. **Eur Heart J** 1988 Nov;9 Suppl L:120–2
Return to work after rehabilitation in coronary bypass patients. Role of the occupational medicine specialist during rehabilitation. Monpere C, et al. **Eur Heart J** 1988 Nov;9 Suppl L:48–53
The long-term work record of post-infarction patients subjected to an informal rehabilitation and secondary prevention programme. Mulcahy R, et al. **Eur Heart J** 1988 Nov;9 Suppl L:84–8
The interaction between man-work-environment and the return to work of coronary patients. The philosophical aspects. Renzulli AG, et al. **Eur Heart J** 1988 Nov;9 Suppl L:5–7
Predictive markers of occupational activity in 415 post myocardial infarction patients after one-year follow-up. Turkulin K, et al. **Eur Heart J** 1988 Nov;9 Suppl L:103–8
Return to work after coronary artery bypass surgery. Walter PJ. **Eur Heart J** 1988 Nov;9 Suppl L:58–66 (28 ref.)
Smoking in the workplace—the Greater Glasgow Health Board policy. Inglis V, et al. **Health Bull (Edinb)** 1988 May; 46(3):164–72
Long workdays versus restdays: assessing fatigue and alertness with a portable performance battery. Ross RR, et al. **Hum Factors** 1988 Jun;30(3):305–17
Effects of perfusion pressure on energy and work of isolated rat hearts. Watters T, et al. **Hypertension** 1989 May; 13(5):480–8
Work at sea: a study of sleep, and of circadian rhythms in physiological and psychological functions, in watchkeepers on merchant vessels. V. Effects of time zone crossings. Condon R, et al. **Int Arch Occup Environ Health** 1988; 61(1–2):39–49
Biological aspects and self-evaluation of shiftwork adaptation. Fischer FM, et al. **Int Arch Occup Environ Health** 1989;61(6):379–84
Work at sea: a study of sleep, and of circadian rhythms in physiological and psychological functions, in watchkeepers on merchant vessels. VI. A sea trial of an alternative watchkeeping system for the merchant marine. Fletcher N, et al. **Int Arch Occup Environ Health** 1988;61(1–2):51–7
Daytime napping and its effects on alertness and short-term memory performance in shiftworkers. Härmä M, et al. **Int Arch Occup Environ Health** 1989;61(5):341–5
Sleep disorder symptoms among nurses and nursing aides. Infante-Rivard C, et al. **Int Arch Occup Environ Health** 1989;61(5):353–8
Zopiclone in insomniac shiftworkers. Evaluation of its hypnotic properties and its effects on mood and work performance. Monchesky TC, et al. **Int Arch Occup Environ Health** 1989;61(4):255–9
Comparison of two analytical procedures for the determination of free urinary catecholamines under the demands of shiftwork experiments. Rutenfranz J, et al. **Int Arch Occup Environ Health** 1988;61(1–2):89–93
Capacity for work and employment record of patients with inflammatory bowel disease. Wyke RJ. **Int Disabil Stud** 1988;10(4):176–9
Dimensions of control as related to work organization, stress, and health. Aronsson G. **Int J Health Serv** 1989; 19(3):459–68
Occupational health, stress, and work organization in Australia. Deves L, et al. **Int J Health Serv** 1989; 19(2):351–63 (29 ref.)
Job demands and stress reactions in repetitive and uneventful monotony at work. Johansson G. **Int J Health Serv** 1989; 19(2):365–77
Organizational change and work reforms at the levels of society, trade union, work group, and task. Johansson G. **Int J Health Serv** 1989;19(2):315–7
Structural barriers to change in the workplace. Johnson JV. **Int J Health Serv** 1989;19(1):117–9
Collective control: strategies for survival in the workplace. Johnson JV. **Int J Health Serv** 1989;19(3):469–80
Theoretical developments in psychosocial work environment research. Johnson JV. **Int J Health Serv** 1989;19(3):457–8
A democratic strategy for organizational change. Svensson L. **Int J Health Serv** 1989;19(2):319–34
The management of epilepsy at work. Floyd M, et al. **Int J Rehabil Res** 1988;11(1):3–10
Nursing staff's perceptions of work in acute and long-term care hospitals. Heiskanen TA. **J Adv Nurs** 1988 Nov; 13(6):716–25
Changing the way America works—through behavior analysis [editorial] Bailey JS. **J Appl Behav Anal** 1989 Summer;22(2):125
Validation of the survey of work styles: a profile measure of the type A behaviour pattern. Gray A, et al. **J Clin Epidemiol** 1989;42(3):209–16
Age differences in productive activities. Herzog AR, et al. **J Gerontol** 1989 Jul;44(4):S129–38
Provocative testing in the diagnosis of dynamic carpal tunnel syndrome. Braun RM, et al. **J Hand Surg [Am]** 1989 Mar; 14(2 Pt 1):195–7
Do job conditions influence the use of drugs? Mensch BS, et al. **J Health Soc Behav** 1988 Jun;29(2):169–84
Powerlessness, work, and community: a longitudinal study of alienation and alcohol use. Seeman M, et al. **J Health Soc Behav** 1988 Sep;29(3):185–98
Work in the society with an ageing population structure [editorial] Suzuki T. **J Hum Ergol (Tokyo)** 1988 Sep; 17(1):1–2
Some peculiarities of the physiological validity of shift work schedules for the crews of floating oil drilling platforms. Alekperov II, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(4):385–90
Defining the limits of housestaff care. Boisaubin EV. **J Med Philos** 1988 Nov;13(4):457–8
Professionalism, altruism, and overwork. Ritchie K. **J Med Philos** 1988 Nov;13(4):447–55
Alterations of temperature, sleepiness, mood, and performance in residents are not associated with changes in sulfatoxymelatonin excretion. Sharp KH, et al. **J Pineal Res** 1988;5(6):499–512
Hours of work and fatigue in doctors [editorial] Pitts J. **J R Coll Gen Pract** 1988 Jan;38(306):2–3
Actigraph measurements of work/sleep patterns during a navy operation. Brooks CJ, et al. **J R Nav Med Serv** 1988 Winter;74(3):153–63
Drug screening in the workplace [letter] Phelps G. **J S C Med Assoc** 1988 Nov;84(11):560
Cross-specialty linkage of resource-based relative value scales. Linking specialties by services and procedures of equal work. Braun P, et al. **JAMA** 1988 Oct 28; 260(16):2390–6
The moonlighting dilemma. Balancing education, service, and quality care while limiting risk exposure. Cohen SN, et al. **JAMA** 1989 Jul 28;262(4):529–31
A method for estimating the preservice and postservice work of physicians' services. Dunn D, et al. **JAMA** 1988 Oct 28;260(16):2371–8
Results, potential effects, and implementation issues of the Resource-Based Relative Value Scale. Hsiao WC, et al. **JAMA** 1988 Oct 28;260(16):2429–38
Measurement and analysis of intraservice work. Hsiao WC, et al. **JAMA** 1988 Oct 28;260(16):2361–70
Extrapolation of measures of work for surveyed services to other services. Kelly NL, et al. **JAMA** 1988 Oct 28; 260(16):2379–84
Vitamins, iron, and physical work. Bates CJ, et al. **Lancet** 1989 Aug 5;2(8658):313–4 (33 ref.)
Universal time constant in human short-term behavior. Schleidt M, et al. **Naturwissenschaften** 1989 Mar; 76(3):127–8
Work behaviors of nursing faculty. Williams RP. **Nurs Outlook** 1989 Jan–Feb;37(1):31–6
New York to limit medical work hours [news] **Occup Health Saf** 1989 Mar;58(3):9–10
Unrelenting time. Gould S. **Occup Health Saf** 1989 Jun;:60–2, 64
Perceptions of ourselves as workers contribute to mental, physical health. Polakoff PL. **Occup Health Saf** 1988 Sep; 57(10):68
Shift-work schedules wreak havoc with employees' circadian rhythms. Polakoff PL. **Occup Health Saf** 1989 Jun;:58
Pregnant women at work: rest periods to prevent preterm birth? Mamelle N, et al. **Paediatr Perinat Epidemiol** 1989 Jan;3(1):19–28
Were the good old days better? [letter] Vadakan VV. **Pediatrics** 1989 Apr;83(4 Pt 2):637–8
Evolutionary imperatives, quiet revolutions: changing working conditions and supervision of house officers. Bell BM. **Pharos** 1989 Spring;52(2):16–9
Sleep on the night shift: 24-hour EEG monitoring of spontaneous sleep/wake behavior. Torsvall L, et al. **Psychophysiology** 1989 May;26(3):352–8
Stressful conditions of work: the participative ergonomics approach. Corlett EN, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:541–8 (3 ref.)
Basic pattern of daily life stress and work condition. Hayashi S, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:519–27
Occupational influences on burnout phenomenon among hospital nurses. Hisashige A, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:454–66
Cardiac rehabilitation for return to work. Kavanagh T. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:49–62
Unemployment, mental health and the psychological functions of work in male welfare clients in Stockholm. Isaksson K. **Scand J Soc Med** 1989;17(2):165–9
Social analysis of collective health in Latin America. Laurell AC. **Soc Sci Med** 1989;28(11):1183–91 (29 ref.)
Piecework, repetitive work and medicine use in the clothing industry. Vinet A, et al. **Soc Sci Med** 1989;28(12):1283–8
Do nonorganic signs help to predict the return to activity of patients with low-back pain? Bradish CF, et al. **Spine** 1988 May;13(5):557–60
Helping managers to manage: work schedules of field-workers in rural Bangladesh. Koblinsky MA, et al. **Stud Fam Plann** 1989 Jul–Aug;20(4):225–34
Schedule-related effects on nurse retention. Choi T, et al. **West J Nurs Res** 1989 Feb;11(1):92–107
Work-related stress in baccalaureate nurse educators. Langemo DV. **West J Nurs Res** 1988 Jun;10(3):327–34
[Physiological, psychological and ergonomic research on jobs in the manufacture of chocolate products] Draganova N, et al. **Probl Khig** 1988;13:63–70 (Eng. Abstr.) **(Bul)**
[The structure, functions and classification of mental states and their study in work activities] Gancheva P. **Probl Khig** 1988;13:49–56 (16 ref.) (Eng. Abstr.) **(Bul)**
[Shift work can be hard on health] Kuipers EJ, et al. **Ned Tijdschr Geneeskd** 1989 Jul 1;133(26):1297–9 **(Dut)**
[Chronogenesis, psychorhythms and work] Amiel R. **Ann Med Psychol (Paris)** 1988 May–Jun;146(7):633–6 (Eng. Abstr.) **(Fre)**
[Position at work and ophthalmic lenses] Catros A, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):103–5 (Eng. Abstr.) **(Fre)**
[Shift work and ischemic heart disease] Wagner U. **Z Arztl Fortbild (Jena)** 1989;83(5):229–33 (32 ref.) **(Ger)**
[Results of work schedule studies of hospital physicians of the Cottbus district hospital] Hoffmann W, et al. **Z Gesamte Hyg** 1989 Apr;35(4):228–31 (Eng. Abstr.) **(Ger)**
[Stress caused by shift work in relation to automated production] Seibt A, et al. **Z Gesamte Hyg** 1988 Jul; 34(7):409–12 (Eng. Abstr.) **(Ger)**
[Drug compliance behavior of hypertensive patients in 3-shift work with a prescription for 3 or more single doses daily] Zwingenberger W, et al. **Z Gesamte Inn Med** 1989 May 15;44(10):296–300 (Eng. Abstr.) **(Ger)**
[Health status of shift workers in oil refineries] Ferri GM, et al. **G Ital Med Lav** 1987 May–Jul;9(3–4):159–62 (Eng. Abstr.) **(Ita)**
[Interactive effects of job complexity and expectancy on internal motivation] Tao M. **Shinrigaku Kenkyu** 1988 Jun; 59(2):69–75 (Eng. Abstr.) **(Jpn)**

[Effect of work performed by pregnant women on birth weight and fetal hypotrophy] Malinowski W, et al. **Med Pr** 1988;39(2):137–41 (Eng. Abstr.) (Pol)
[The professional work of women as a fetal risk] Zdziennicki A. **Wiad Lek** 1988 May 15;41(10):652–4 (20 ref.) (Eng. Abstr.) (Pol)
[Anthropology and feeding] Canesqui AM. **Rev Saude Publica** 1988 Jun;22(3):207–16 (Eng. Abstr.) (Por)
[Effect of high temperature on several parameters of the functional state and working capacity] Mommadov IM, et al. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):105–9 (Rus)
[Physiological aspects of the regulation of breaks during shifts as a means of optimizing work intensity] Petukhov BN, et al. **Fiziol Cheloveka** 1988 Jan–Feb;14(1):148–50 (Rus)
[Work intensity and fatigue] Petukhov BN, et al. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):91–9 (Rus)
[Shifts in the efficiency of physiologic energy consumption in the process of work] Rozenblam VV, et al. **Fiziol Cheloveka** 1988 Nov–Dec;14(6):971–6 (Rus)
[Physiological determinants of functional conditions of human body during watchmen's work schedules] Urazaev AM, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):679–85 (Rus)
[Psychophysiologic analysis of the schievement motivation and avoidance in work activity] Zarakovskii GM, et al. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):81–90 (Rus)
[Questionnaire survey in the study of working conditions of machine operators in the agriculture] Bolsunova Mla. **Gig Sanit** 1989 Feb;(2):11–5 (Eng. Abstr.) (Rus)
[Various subjective and objective indicators of intellectual and emotional stress in air traffic controllers during different work shifts] Kan EL, et al. **Gig Sanit** 1989 Feb;(2):28–31 (Eng. Abstr.) (Rus)
[Hygienic evaluation of occupational quantization of the activities of finishing shop workers] Khramtsova AD. **Gig Sanit** 1989 May;(5):15–9 (Eng. Abstr.) (Rus)
[Evaluation of the functional state of the cardiovascular system in watchmen on a shift–work schedule] Shmerling PM, et al. **Gig Sanit** 1989 Apr;(4):90–2 (Rus)
[Comparative evaluation of regulated and non–regulated periods of work and rest in a high–temperature microclimate in the glass industry] Arutiunian LG, et al. **Gig Tr Prof Zabol** 1989;(3):25–8 (Eng. Abstr.) (Rus)
[Physiologic and hygienic substantiation of shift–work schedules in combined effects of noise, local vibration and microclimate heating] Gorban'VS. **Gig Tr Prof Zabol** 1988 Nov;(11):48–50 (Rus)
[Impact of social and health factors in the forecast of work activity of female workers of pre–retirement and retirement age receiving social benefits] Iakovleva TP, et al. **Gig Tr Prof Zabol** 1989;(1):31–4 (Eng. Abstr.) (Rus)
[Problems of mass screening of oilmen on dispatcher–watchmen's duty] Karamova LM, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):44–5 (Rus)
[Determining physical and psychological occupational stress in women performing physical work on the basis of subjective evaluation] Makovska Z, et al. **Gig Tr Prof Zabol** 1989;(5):8–11 (Rus)
[Optimization of working conditions of medical personnel of radiodiagnostic departments] Ovsiannikov AS. **Gig Tr Prof Zabol** 1989;(6):25–8 (Eng. Abstr.) (Rus)
[Adaptation of construction workers to regular and increased occupational work loads] Semenov AB. **Gig Tr Prof Zabol** 1989;(3):20–2 (Eng. Abstr.) (Rus)
[Health–related standardization of work effort in operating tractors and agricultural machines] Tkachenko OM. **Gig Tr Prof Zabol** 1989;(1):47–9 (Rus)
[Industrial standards for maintaining medical equipment (principles of development and application)] Matveenko AF, et al. **Med Tekh** 1988 Sep–Oct;(5):31–6 (Rus)
[Prevalence of arterial hypertension among shift schedule workers of the oil and gas complexes of the Western Siberia] Levitskii EF, et al. **Sov Med** 1988;(10):79–80 (Rus)
[Adaptation disorders and rehabilitation of drillers working on the shift–expedition schedule in Western Siberia] Mazurik MF, et al. **Sov Med** 1989;(4):66–8 (Rus)
[The work organization of the examination room at the therapeutic and surgical departments of a dental polyclinic] Fel'dman EI, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct; 67(5):75–6 (Rus)
[The development of a system of accounting for the work of dentists] Leont'ev VK, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):71–2 (Rus)
[The organization of the dentist's work in a rural locality] Sundukov IuN. **Stomatologiia (Mosk)** 1989 May–Jun; 68(3):72–5 (Rus)
[The state of the organ of vision in employees engaged in precision work] Kovalenko VV. **Vestn Oftalmol** 1989 May–Jun;105(3):66–9 (Rus)
[The scientific organization of the work of a military medical specialist] Melekhov PA, et al. **Voen Med Zh** 1988 Sep; (9):13–4 (Rus)
[Optimization of the work of surgeons at a military polyclinic] Psahnev VIa, et al. **Voen Med Zh** 1988 Jul; (7):59–60 (Rus)
[Data on the exact definition of standards for physiological energy requirements for the adult population capable of working] Vankhanen VD, et al. **Vopr Pitan** 1988 Sep–Oct; (5):27–9 (Eng. Abstr.) (Rus)
[The individual long–term social–work prognosis in paroxysmal schizophrenia (the distribution of predictive criteria in groups of patients with various prognoses)] Anashkina LM. **Zh Nevropatol Psikhiatr** 1988;88(10):77–80 (Eng. Abstr.) (Rus)
[The motives for the participation in work processes of severely mentally retarded persons at a psychoneurology boarding house] Dement'eva NF, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):97–102 (Eng. Abstr.) (Rus)
[Work psychopathology] Cabral CA. **Acta Psiquiatr Psicol Am Lat** 1988 Sep;34(3):237–42 (Eng. Abstr.) (Spa)

WORK CAPACITY EVALUATION

Mechanisms of circadian adaptation. Hildebrandt G, et al. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):326–44
Assessing work and earning capacity. Gamboa AM Jr, et al. **Adv Clin Rehabil** 1988;2:6–36 (20 ref.)
An evaluation of the NIOSH guidelines for manual lifting, with special reference to horizontal distance. Garg A. **Am Ind Hyg Assoc J** 1989 Mar;50(3):157–64
Clinical pulmonary function tests as predictors of work performance during respirator wear. Wilson JR, et al. **Am Ind Hyg Assoc J** 1989 Jan;50(1):51–7
Reemployment following implantation of the automatic cardioverter defibrillator. Kalbfleisch KR, et al. **Am J Cardiol** 1989 Jul 15;64(3):199–202
Return to work following back surgery: a review. Taylor ME. **Am J Ind Med** 1989;16(1):79–88 (51 ref.)
Ventilatory function in Malay female workers in Singapore. Chia SE, et al. **Ann Acad Med Singapore** 1988 Jul; 17(3):443–6
Work disability among women with rheumatoid arthritis. The relative importance of disease, social, work, and family factors. Reisine ST, et al. **Arthritis Rheum** 1989 May; 32(5):538–43
Anthropometry of Korean female industrial workers. Fernandez JE, et al. **Ergonomics** 1989 May;32(5):491–5
Evaluation of two floor–mopping work methods by measurement of load. Hagner IM, et al. **Ergonomics** 1989 Apr;32(4):401–8
A comparison between methods of measuring anaerobic work capacity. Nebelsick–Gullett LJ, et al. **Ergonomics** 1988 Oct; 31(10):1413–9
Work capacity after myocardial revascularization: factors related to work resumption. Danchin N. **Eur Heart J** 1988 Nov;9 Suppl L:44–7 (27 ref.)
The proposal of the Italian Committee on Occupational Cardiology. Giordano A, et al. **Eur Heart J** 1988 Nov;9 Suppl L:115–9
Assessment of work capacity in patients with ischaemic heart disease: methods and practices. Kavanagh T, et al. **Eur Heart J** 1988 Nov;9 Suppl L:67–73
Summary and conclusions towards guidelines for return to work after myocardial infarction and myocardial revascularisation. Maisano G. **Eur Heart J** 1988 Nov;9 Suppl L:120–2
Maximal mechanical power output and capacity of cyclists and young adults. Davies CT, et al. **Eur J Appl Physiol** 1989;58(8):838–44
Fitness for work: medicolegal assessment of residual disability and employment handicap. Cornes P, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):309–17
Asthma from childhood to adulthood—a follow–up study of 20 subjects with special reference to work capacity and pulmonary gas exchange. Friberg S, et al. **J Allergy Clin Immunol** 1989 Aug;84(2):183–90
Weekly variation in work–output of pluckers in tea gardens in northern West Bengal. Roy SK, et al. **J Biosoc Sci** 1988 Oct;20(4):485–8
Comparison of dynamic, static, and psychophysical evaluations of human strength capabilities. Atuahene F, et al. **J Hum Ergol (Tokyo)** 1987 Dec;16(2):179–91
Use of return–to–work medical clearance data for health surveillance. Strader CH, et al. **J Occup Med** 1989 Apr; 31(4):326–30
School and work release evaluations [letter] **JAMA** 1989 May 26;261(20):2954–6
A third party assessment of work capabilities. McPhee SD. **Milit Med** 1989 Feb;154(2):76–80
Factors influencing physical working capacity in renal transplant patients. Clyne N, et al. **Scand J Urol Nephrol** 1989;23(2):145–50
Assessing the effect of psychiatric disorders on work function. Enelow AJ. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):621–7 (1 ref.)
Influence of vibration on work performance during ergometer cycling. Samuelson B, et al. **Ups J Med Sci** 1989; 94(1):73–9
[Working ability of patients with various forms and stages of glaucoma] Bartolová L, et al. **Cesk Oftalmol** 1989 Mar; 45(2):127–37 (Eng. Abstr.) (Cze)
[Work capacity evaluation in patients after surgery for detached retina] Synek S, et al. **Cesk Oftalmol** 1989 May; 45(3):187–91 (Eng. Abstr.) (Cze)
[Rehabilitation and work disability evaluation] Pfeiffer J. **Cesk Zdrav** 1988 May;36(5):211–4 (Eng. Abstr.) (Cze)
[The discharge letter (letter)] Gerritsen RM. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):314 (Dut)
[Fitness evaluation and preliminary occupational medicine examination in employment with increased mechanical stress on the spine] Blankenburg H, et al. **Beitr Orthop Traumatol** 1988 Jun;35(6):276–80 (Eng. Abstr.) (Ger)
[Work capacity following operations for lumbar intervertebral disk displacements with special reference to sex specific differences] Herrmann L, et al. **Beitr Orthop Traumatol** 1988 Aug;35(8):372–80 (Eng. Abstr.) (Ger)
[Long–term prognosis of disability and work capacity following transient ischemic attacks] Oder W, et al. **Med Klin** 1988 Jun 17;83(13–14):439–43 (Eng. Abstr.) (Ger)
[Vocational activity and unemployment of females and pregnancy outcome] Elkeles T, et al. **Off Gesundheitswes** 1989 Jun;51(6):269–77 (Eng. Abstr.) (Ger)
[Determination of rubella antibodies in 16–year–old girls within the scope of the final school and youth occupational preventive examinations 1986/88 conducted by the youth health service of the Tempelhof district in Berlin] Krause C. **Off Gesundheitswes** 1989 Apr;51(4):192–4 (Eng. Abstr.) (Ger)
[Utilization of health status indicators in relation to occupational health qualifications and surveillance studies] Heuchert G, et al. **Z Arztl Fortbild (Jena)** 1988;82(19):956–7 (Ger)
[Some aspects of fitness in epilepsies] König K, et al. **Z Arztl Fortbild (Jena)** 1988;82(20):1023–7 (24 ref.) (Ger)
[Occupational health aspects of professional integration of special education graduates] Hartmann B, et al. **Z Gesamte Hyg** 1988 Jul;34(7):412–4 (Eng. Abstr.) (Ger)
[Professional employment of graduates of rehabilitation centers for occupational education in East Germany 1973–1985] Perlitz C, et al. **Z Gesamte Hyg** 1988 Jul; 34(7):421–3 (Eng. Abstr.) (Ger)
[Social health contribution to the assessment of health status of workers within the scope of industrial mass screening] Werner K, et al. **Z Gesamte Hyg** 1988 Jul;34(7):419–21 (Eng. Abstr.) (Ger)
[Physical work capacity in pregnancy] Peiker G, et al. **Zentralbl Gynakol** 1988;110(21):1354–61 (Eng. Abstr.) (Ger)
[Reduced or lost work capacity in chronic pneumopathies. Medicolegal evaluation trends in relation to the effects of the Law 222 of 6–12–1984] Serao F. **Arch Monaldi Mal Torace** 1987 Mar–Apr;42(2):161–81 (Eng. Abstr.) (Ita)
[Work fitness and HIV infection] Curti R, et al. **Med Lav** 1988 Sep–Oct;79(5):343–50 (Eng. Abstr.) (Ita)
[The main directions in the scientific activities of Prof. Stanislaw Kozlowski. II. Physiological basis of physical work capacity and mechanisms in the control of energy metabolism] Nazar K. **Acta Physiol Pol** 1988;39 Suppl 31:21–31 (Pol)
[Studies of the correlation of physiologic energy out put and efficiency and physical work capacity (VO2max) of turners] Jopkiewicz A. **Med Pr** 1988;39(4):271–5 (Eng. Abstr.) (Pol)
[Neurologic evaluation of the fitness for vocational training of students of the school of fashion. The qualifying criteria] Polakowska B. **Med Pr** 1988;39(4):276–81 (Eng. Abstr.) (Pol)
[Factors limiting working capacity during additional resistance to respiration] Breslav IS, et al. **Fiziol Cheloveka** 1988 Nov–Dec;14(6):933–7 (Rus)
[Standards of anaerobic work capacity for female students] Iurimiaé TA, et al. **Fiziol Cheloveka** 1988 May–Jun; 14(3):472–6 (Rus)
[Artificial stable functional bonds. New possibilities for regulating psychophysiologic status] Miroliubov AV, et al. **Fiziol Cheloveka** 1988 Nov–Dec;14(6):883–91 (Rus)
[Status of the body's functional systems in mine rescue workers in extreme conditions] Tarasenko VT, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):693–7 (Rus)
[Characteristics of the mobilization of psychophysiologic functions in various degrees of effectiveness in occupational activity] Diadichkin VP. **Fiziol Zh** 1989 Mar–Apr; 35(2):23–7 (Eng. Abstr.) (Rus)
[Physical work capacity of Alpinists under conditions of extremely low pO2 in inspired air] Kolchinskaia AZ, et al. **Fiziol Zh** 1989 May–Jun;35(3):68–74 (Eng. Abstr.) (Rus)
[Dynamics of cardiac rhythm in the transitional period during controlled physical exercises in persons of various ages] Korkushko OV, et al. **Fiziol Zh** 1989 May–Jun;35(3):38–42 (Eng. Abstr.) (Rus)
[Achieving the optimal functional state in younger schoolchildren by alternating their posture in the classroom] Agarkov VI. **Gig Sanit** 1988 Nov;(11):75–6 (Rus)
[Specific work processes in sailors of the Arctic navy at "ice moorages" and their effect on various body systems] Bychikhin NP, et al. **Gig Sanit** 1989 May;(5):22–4 (Eng. Abstr.) (Rus)
[Physiologic and hygienic evaluation of the work of river transport workers during the navigation period] Evstaf'ev VN. **Gig Sanit** 1988 Nov;(11):83–5 (Rus)
[Age–related dynamics of the development of professionally important characteristics in students of educational–industrial combines in coal mining] Grebniak NP. **Gig Sanit** 1988 Oct;(10):29–32 (Eng. Abstr.) (Rus)

[A computerized method of studying the work capacity of schoolchildren] Gumener PI, et al. **Gig Sanit** 1988 Jul; (7):35–7 (Rus)
[Effect of training conditions on the health status of students of secondary vocational schools in the coal mining industry] Kharkovenko NM, et al. **Gig Sanit** 1988 Oct; (10):26–9 (Eng. Abstr.) (Rus)
[Health-oriented evaluation of schoolchildren's workload based on a dynamic analysis of correlations of physiological functions] Khramtsov PI. **Gig Sanit** 1988 Sep;(9):45–7 (Rus)
[Hygienic evaluation of occupational quantization of the activities of finishing shop workers] Khramtsova AD. **Gig Sanit** 1989 May;(5):15–9 (Eng. Abstr.) (Rus)
[Rational work and recreation schedules of physicians and therapists during their work shift] Kutsenko GI. **Gig Sanit** 1988 Nov;(11):73–5 (Rus)
[Various criteria of children's adaptation to educational load] Popushoĭ NS. **Gig Sanit** 1989 May;(5):94–6 (Rus)
[Hygienic characteristics of various methods of ultraviolet irradiation] Rakhmanov RS, et al. **Gig Sanit** 1988 Jul; (7):88–9 (Rus)
[Effect of the school curriculum at a pulmonologic sanatorium on the functional status of children] Syrtsova MA. **Gig Sanit** 1988 Dec;(12):87–8 (Rus)
[Hygienic significance of environmental factors in the learning process of 6-year-old children] Terent'eva GV, et al. **Gig Sanit** 1989 Feb;(2):22–5 (Eng. Abstr.) (Rus)
[Evaluation of the functional status of iron-ore miners based on the results of the mathematical analysis of cardiac rhythm] Antonik IP, et al. **Gig Tr Prof Zabol** 1988 Nov; (11):27–31 (Eng. Abstr.) (Rus)
[Physiologic and hygienic substantiation of rational systems of work and rest during shaft sinking in iron ore mines] Shevtsova VM, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):14–8 (Eng. Abstr.) (Rus)
[State of the functional reserves and work capacity of subjects with a history of wounds of the heart and pericardium] Polianskiĭ BA, et al. **Grudn Khir** 1988 Nov–Dec;(6):34–9 (Eng. Abstr.) (Rus)
[Clinical and social aspects of vocational rehabilitation of patients after heart valve prosthesis] Savichevskiĭ MS, et al. **Kardiologiia** 1988 Nov;28(11):19–22 (Eng. Abstr.) (Rus)
[Static load test during rehabilitation of patients after myocardial infarction] Sledzevskaia IK, et al. **Kardiologiia** 1989 Feb;29(2):95–6 (Rus)
[Use of a stochastic model for predicting the effectiveness of rehabilitation measures after myocardial infarction] Sledzevskaia IK, et al. **Kardiologiia** 1988 Sep;28(9):89–90 (Rus)
[Hemodynamic mechanisms of the decrease in physical work capacity in hypothyroidism and thyrotoxicosis] Sokolov EI, et al. **Kardiologiia** 1988 Aug;28(8):63–7 (Eng. Abstr.) (Rus)
[Value of rheovasography and thermography in the diagnosis of varicose veins of the legs in the practice of expert evaluation of work capacity] Kosichkin MM, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):27–31 (Eng. Abstr.) (Rus)
[Rehabilitation of patients with ischemic heart disease] Aronov DM. **Klin Med (Mosk)** 1989 Mar;67(3):133–40 (Rus)
[Effect of increased respiratory resistance on human work capacity] Barer AS, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):4–11 (62 ref.) (Eng. Abstr.) (Rus)
[Effect of actoprotectors on the work capacity of operators during modeling of various factors of space flight] Bobkov IuG, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct; 22(5):20–3 (Eng. Abstr.) (Rus)
[The problem of information control in the pilot's reliability in extreme conditions] Ponomarenko VA, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):16–21 (Eng. Abstr.) (Rus)
[Results of the quantitative photo stress test in corneal opacities following anterior radial keratotomy] Belousov VI. **Oftalmol Zh** 1989;(1):53–5 (Eng. Abstr.) (Rus)
[Characteristics of medical expert testimony with regard to work capacity of patients after total endoprosthesis of the hip joint] Grinshtein Ela, et al. **Ortop Travmatol Protez** 1988 Jun;(6):22–4 (Eng. Abstr.) (Rus)
[Physical work capacity of agricultural workers with chronic bronchitis] Siurin SA, et al. **Probl Tuberk** 1988;(7):14–6 (Eng. Abstr.) (Rus)
[Study of functional activity in rheumatoid arthritis] Folomeeva OM, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):55–61 (Rus)
[Rehabilitation and expert evaluation of work capacity of patients after total hip endoprosthesis using Shersher's construction] Shersher IaI, et al. **Sov Med** 1989;(5):13–5 (Eng. Abstr.) (Rus)
[Importance of parameters of central hemodynamics in examining working capacity of patients with renovascular hypertension] Kogan BM, et al. **Ter Arkh** 1989;61(1):22–5 (Eng. Abstr.) (Rus)
[Effect of iron deficiency of the body on the work capacity of women engaged in mental work] Kuleshova EA, et al. **Ter Arkh** 1989;61(1):92–5 (Eng. Abstr.) (Rus)
[Effect of the syndrome of asthma of effort on work fitness of bronchial asthma patients] Mil'man MSh, et al. **Ter Arkh** 1989;61(1):83–6 (Eng. Abstr.) (Rus)
[Status of fitness for work of patients with sick sinus syndrome treated by implantation of a pacemaker] Tarasov AN, et al. **Ter Arkh** 1989;61(1):63–6 (Rus)
[Remote results of surgical correction of heart septal defects] Guliamov DS, et al. **Vestn Khir** 1988 May;140(5):55–6 (Rus)
[Characteristics of medical expert work capacity evaluation and rehabilitation of patients with combined pathology of the digestive organs after cholecystectomy] Tarasov AN, et al. **Vestn Khir** 1989 Jan;142(1):107–10 (Rus)
[Instrument-associated myopia and its effect on the work capacity of microscopists] Niurenberg OIu. **Vestn Oftalmol** 1988 Sep–Oct;104(5):52–4 (Eng. Abstr.) (Rus)
[The thermal state of the body and the work capacity of operators under high environmental temperature conditions] Azhaev AN, et al. **Voen Med Zh** 1988 Aug; (8):50–2 (Rus)
[Organization of research on the body function and work capacity of the personnel of mobile military equipment installations] Kudrin ID, et al. **Voen Med Zh** 1988 Sep; (9):39–41 (Rus)
[Means of preserving the work capacity of persons working in individual protective garments] Markelov PB, et al. **Voen Med Zh** 1988 May;(5):45–7 (Rus)
[The work capacity prognosis for servicemen during various periods of acute respiratory diseases] Zakharov AV, et al. **Voen Med Zh** 1989 Mar;(3):43–5 (Rus)
[The organization of the rehabilitation of work capacity in patients and the disabled in foreign countries] Borovik EB, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb; (1):68–72 (47 ref.) (Rus)
[Methods of evaluating work capacity rehabilitation of cancer patients] Donskaia LV, et al. **Vopr Onkol** 1988; 34(10):1199–205 (Eng. Abstr.) (Rus)
[Effect of supplementary intake of vitamins for 6 months on physical and mental work capacity of children beginning school education at the age of 6 years] Kerimova MG, et al. **Vopr Pitan** 1988 Jul–Aug;(4):38–41 (Eng. Abstr.) (Rus)
[Effect of supplementary provision of vitamins on health status and work capacity of schoolchildren] Rymarenko TV, et al. **Vopr Pitan** 1988 May–Jun;(3):4–10 (45 ref.) (Rus)
[Nutritional status of workers with different levels of work capacity] Zemlianskaia TA, et al. **Vopr Pitan** 1988 Sep–Oct; (5):30–4 (Eng. Abstr.) (Rus)
[Work capacity evaluation of patients with chronic lympholeukosis] Mitropol'skiĭ AN, et al. **Vrach Delo** 1989 Feb;(2):116–8 (Rus)
[The importance of physical culture in promoting health and enhancing the work capacity of technical engineering workers] Nazarenko VS, et al. **Vrach Delo** 1988 Aug; (8):114–6 (Rus)
[Determination of the professional work capacity of patients with initial manifestations of cerebral circulatory insufficiency] Lebedev AA, et al. **Zh Nevropatol Psikhiatr** 1989;89(1):34–8 (Eng. Abstr.) (Rus)
[Reevaluation of work capacity in a sample of disabled pensioners in Croatia] Pavlović M, et al. **Arh Hig Rada Toksikol** 1988 Sep;39(3):335–44 (Eng. Abstr.) (Scr)
[Evaluation of work capability in patients with neurologic diseases] Gavranović M. **Neurologija** 1988;37(3–4):105–18 (Eng. Abstr.) (Scr)
[Evaluation of temporary work disability] Sedlák V. **Cesk Zdrav** 1989 Apr;37(4):174–8 (Eng. Abstr.) (Slo)
[Difficulties in the use of the ICHPPC-2 (the WONCA classification) for the retrospective encoding of the types of temporary work disability (ILT)] Ferrús L, et al. **Gac Sanit** 1987 Nov–Dec;1(3):113–7 (Eng. Abstr.) (Spa)

METHODS

[Synopsis of procedures used in the evaluation of the physically handicapped and work demands] Voss M, et al. **Rehabilitation (Stuttg)** 1988 Aug;27(3):135–9 (Eng. Abstr.) (Ger)

WORK OF BREATHING

Inspiratory work of breathing during weaning from mechanical ventilation. Lemaire F. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):227–9
Rebreathing, resistance and external work of breathing in three different coaxial Mapleson D systems. Jonsson LO, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):66–70
Inspiratory work of breathing during spontaneous ventilation using demand valves and continuous flow systems. Beydon L, et al. **Am Rev Respir Dis** 1988 Aug;138(2):300–4
External work output and force generation during synchronized intermittent mechanical ventilation. Effect of machine assistance on breathing effort. Marini JJ, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1169–79
Effect of effort versus volume on forced expiratory flow measurement. Park SS. **Am Rev Respir Dis** 1988 Oct; 138(4):1002–5
The effects of airway impedance on work of breathing during halothane anesthesia. Slee TA, et al. **Anesth Analg** 1989 Sep;69(3):374–8
Patient-ventilator partitioning of the work of breathing during weaning. Chapman FW, et al. **Ann Biomed Eng** 1989;17(3):279–87
Efficiency of work of inspiratory muscles in standing and in exercising dogs. Jayaweera AR, et al. **Chest** 1988 Nov; 94(5):1080–5
The effects of acute hypoxia and hypercapnia on pulmonary mechanics in normal subjects and patients with chronic pulmonary disease. Parsons PE, et al. **Chest** 1989 Jul; 96(1):96–101
Assessing the work of breathing [letter] Simmons DH. **Chest** 1989 Feb;95(2):482–3
PEEP, auto-PEEP, and waterfalls. Tobin MJ, et al. **Chest** 1989 Sep;96(3):449–51
Some infant ventilators do not limit peak inspiratory pressure reliably during active expiration [letter] Bernstein G, et al. **Crit Care Med** 1989 Sep;17(9):969–70
Additional work of breathing imposed by endotracheal tubes, breathing circuits, and intensive care ventilators. Bersten AD, et al. **Crit Care Med** 1989 Jul;17(7):671–7
Breathing pattern and load compensatory responses in young scoliotic patients. Ramonatxo M, et al. **Eur Respir J** 1988 May;1(5):421–7
An automated method of separating patient from ventilator work on the lungs. Boom MJ, et al. **Int J Clin Monit Comput** 1988;5(4):235–42
Total inspiratory work with modern demand valve devices compared to continuous flow CPAP. Samodelov LF, et al. **Intensive Care Med** 1988;14(6):632–9
Mouth pressure curve on abrupt interruption of airflow during forced expiration. Ohya N, et al. **J Appl Physiol** 1989 Jan;66(1):509–17
Control of extrathoracic airway dynamics. Schultz EL, et al. **J Appl Physiol** 1989 Jun;66(6):2839–43
Impact of PEEP on lung mechanics and work of breathing in severe airflow obstruction. Smith TC, et al. **J Appl Physiol** 1988 Oct;65(4):1488–99
Ability of asthmatics with and without respiratory arrest to detect added resistive loads. Montserrat JM, et al. **J Asthma** 1988;25(3):131–5
Effects of infant ventilator design on spontaneous breathing. Kopotic RJ, et al. **J Perinatol** 1987 Fall;7(4):298–300
A thermal surface phenomenon in the rabbit lung: possible basis for the conversion of heat into work. Hills BA. **J Physiol (Lond)** 1988 Aug;402:463–71
Mechanics and energetics of breathing in newly diagnosed infants with cystic fibrosis: effect of combined bronchodilator and chest physical therapy. Hardy KA, et al. **Pediatr Pulmonol** 1989;6(2):103–8
Work of breathing in exercising ponies. Art T, et al. **Res Vet Sci** 1989 Jan;46(1):49–53
[Helium for reducing the work of breathing in upper airway obstruction] Segal E, et al. **Harefuah** 1988 Oct; 115(7–8):175–7 (Eng. Abstr.) (Heb)
[Evaluation of additional respiratory work in a new Drager Evita ventilator] Tavola M, et al. **Minerva Anestesiol** 1988 Sep;54(9):339–44 (Eng. Abstr.) (Ita)

WORK SATISFACTION see **JOB SATISFACTION**

WORK SCHEDULE TOLERANCE see under **WORK**

WORK SIMPLIFICATION

Workflow analysis in determining instrumentation needs. Hirsch PT. **Clin Lab Med** 1988 Dec;8(4):753–8
Automation and work-simplification in the urinalysis laboratory. A pilgrim's progress. Patterson PP. **Clin Lab Med** 1988 Sep;8(3):585–99
[The main results and prospects of the development of the physiology of work of miners in coal mines of the Donets Basin] Grebniak VP. **Gig Tr Prof Zabol** 1988 Nov;(11):7–11 (Eng. Abstr.) (Rus)
[Creating optimal working conditions for persons of older age groups] Korobkin IuI. **Gig Tr Prof Zabol** 1988 Dec; (12):55–6 (Rus)
[Physiologic and hygienic evaluation of the work of operators of mechanical milking] Shenkman GS, et al. **Gig Tr Prof Zabol** 1989;(5):14–6 (Eng. Abstr.) (Rus)
[Physiologic and hygienic substantiation of rational systems of work and rest during shaft sinking in iron ore mines] Shevtsova VM, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):14–8 (Eng. Abstr.) (Rus)

WORKMEN'S COMPENSATION

see related
DISABILITY EVALUATION
Distribution of lost-work-time claims for skin disease in California agriculture: 1978–1983. O'Malley MA, et al. **Am J Ind Med** 1988;14(6):715–20
Return to work following back surgery: a review. Taylor ME. **Am J Ind Med** 1989;16(1):79–88 (51 ref.)
Health and socioeconomic consequences of occupational respiratory allergies: a pilot study using workers' compensation data. Yassi A. **Am J Ind Med** 1988; 14(3):291–8
Tinnitus prevalence in industrial hearing loss compensation claimants. McShane DP, et al. **Clin Otolaryngol** 1988 Oct; 13(5):323–30
Contact dermatitis and workers' compensation: criteria for establishing occupational causation and aggravation. Mathias CG. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):842–8 (17 ref.)
Personality characteristics of work-ready workers'

compensation clients. Patrick J. **J Clin Psychol** 1988 Nov; 44(6):1009–12

Return to work certification [letter] Ash WH. **J Fam Pract** 1988 Nov;27(5):464–5

Predicate calculus, artificial intelligence, and workers' compensation. Harber P, et al. **J Occup Med** 1989 May; 31(5):484–9

Effects of time-limited vs unlimited compensation on pain behavior and treatment outcome in low back pain patients. Jamison RN, et al. **J Psychosom Res** 1988;32(3):277–83

Passive smoking and accident compensation [letter] Kent D. **N Z Med J** 1989 Apr 12;102(865):171

Emotional adjustment in compensated head injury patients. Bornstein RA, et al. **Neurosurgery** 1988 Nov;23(5):622–7

Recovery from mild concussion [letter] Parkinson D. **Neurosurgery** 1988 Nov;23(5):682

Treatment outcome in low back pain patients: do compensation benefits make a difference? Jamison RN, et al. **Orthop Rev** 1988 Dec;17(12):1210–5

Differential mortality among semiskilled applicants of disability pension. Hasle H, et al. **Scand J Soc Med** 1988; 16(4):273–6

Income redistribution effect of the Swedish sickness allowance insurance in a comparison of two concepts of social class. Söderfeldt B, et al. **Scand J Soc Med** 1988; 16(4):227–32

The effects of compensation on recovery from low-back injury. Greenough CG, et al. **Spine** 1989 Sep;14(9):947–55

[The significance of childhood conditions with regard to disability pensions. A case-controlled study among unskilled workers] Hasle H, et al. **Ugeskr Laeger** 1989 Jul 24;151(30):1926–8 (Eng. Abstr.) (Dan)

[The significance of working conditions with regard to disability pensions. A case-controlled study among unskilled workers] Hasle H, et al. **Ugeskr Laeger** 1989 Jul 24;151(30):1929–31 (Eng. Abstr.) (Dan)

[Compensation for occupational asthma. Practical aspects] Prost G. **J Toxicol Clin Exp** 1989;9(1 Pt 2):31–4 (Eng. Abstr.) (Fre)

[The incidence and social medicine significance of chronic obstructive respiratory tract diseases in West Germany] Lauber B. **Pneumologie** 1989 Jan;43(1):10–9 (Eng. Abstr.) (Ger)

[Workshop on "Asbestosis –assessment" in the Hospital for Accident Cases Hamburg-Lohbrügge on 13 June 1987] Konietzko N, et al. **Prax Klin Pneumol** 1988 Jun; 42(6):438–41 (Eng. Abstr.) (Ger)

[Backache as an occupational disease?] Debrunner HU. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(4):277–86 (Ger)

[Nuclear cardiologic examinations in patients on disability compensation after myocardial infarct] Mester J, et al. **Orv Hetil** 1988 Dec 11;129(50):2675–9 (Eng. Abstr.) (Hun)

ECONOMICS

Perceived benefits of a lifestyles modification program in the rehabilitation of Worker's Compensation recipients. Hannah TE, et al. **Can J Public Health** 1988 Sep–Oct; 79(5):323–6

States battle high costs of workers' comp claims. Droste T. **Hospitals** 1989 Jun 20;63(12):80

Reimbursement for dental injury under workers compensation. Hoffman GA. **N Y State Dent J** 1988 Dec; 54(10):38–9

Workers Comp reimbursement is available for NP services [letter] Cook BP. **Nurse Pract** 1988 Oct;13(10):76, 79

Eliminating the Medicare waiting period for Social Security disabled-worker beneficiaries. Bye BV, et al. **Soc Secur Bull** 1989 May;52(5):2–15

Disabled-worker beneficiaries and disabled SSI recipients: a profile of demographic and program characteristics. McCoy JL, et al. **Soc Secur Bull** 1989 May;52(5):16–28

Workers' compensation: coverage, benefits, and costs, 1986. Nelson WJ Jr. **Soc Secur Bull** 1989 Mar;52(3):34–41

[Economic aspects of replantation surgery] Gasperschitz F, et al. **Unfallchirurgie** 1989 Jun;15(3):129–32 (Eng. Abstr.) (Ger)

HISTORY

Medicine in the industrial battle: early workers' compensation. Bale A. **Soc Sci Med** 1989;28(11):1113–20 (25 ref.)

"Hope in another direction": compensation for work-related illness among women, 1900–1960—Part II. Bale A. **Women Health** 1989;15(2):99–115

"Hope in another direction": compensation for work-related illness among women, 1900–1960—Part I. Bale A. **Women Health** 1989;15(1):81–102

LEGISLATION & JURISPRUDENCE

Compensation for occupational disease: hidden agendas. Brandt-Rauf SI, et al. **Health Aff (Millwood)** 1988 Fall; 7(4):73–82

Compensating bladder cancer victims employed in aluminum reduction plants. Armstrong B, et al. **J Occup Med** 1988 Oct;30(10):771–5

Factors affecting workers' compensation claims activity. Lundeen C. **J Occup Med** 1989 Aug;31(8):653–6

Compensating victims of occupational lung disease: the physician's role in the system. Richman SI. **J Occup Med** 1989 Apr;31(4):335–8

Cigarette smoking and federal black lung benefits in bituminous coal miners. Roy TM, et al. **J Occup Med** 1989 Feb;31(2):98–101

Effects of active and completed litigation on treatment results: workers' compensation patients compared with other litigation patients. Talo S, et al. **J Occup Med** 1989 Mar;31(3):265–9

Occupational medicine and worker's compensation in Oklahoma. Paul DW. **J Okla State Med Assoc** 1989 Mar; 82(3):112–7

The concept of nomogenic disorders. Tyndel M, et al. **Med Law** 1988;7(2):167–76

New Zealand Society of Physiotherapists, court of appeal and ACC [letter] Tedder JM. **N Z Med J** 1989 Sep 13; 102(875):483

The physician and workers' compensation. A primer. Zink WE 2d. **Nebr Med J** 1989 Jun;74(6):136–9

The law of workers' compensation as it applies to hand injuries. Steinberg F. **Occup Med** 1989 Jul–Sep;4(3):559–71 (10 ref.)

Occupational asthma—time for scheduling as a compensable disease [editorial] [published erratum appears in S Afr Med J 1989 Feb 4;75(3):148] Louw SJ, et al. **S Afr Med J** 1988 Dec 3;74(11):545–6

Occupational medicine. Workers' compensation, impairment and disability. Diorio PG, et al. **State Art Rev Occup Med** 1989 Jan–Mar;4(1):145–51 (10 ref.)

Cumulative injury in workers' compensation. LaDou J. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):611–9 (10 ref.)

Workers' compensation and psychiatric disability. London DB, et al. **State Art Rev Occup Med** 1988 Oct–Dec; 3(4):595–609 (24 ref.)

Workers' compensation and AIDS. Adaptation to new occupational diseases. Shor GM. **State Art Rev Occup Med** 1989;4 Suppl:95–102 (12 ref.)

Workers' compensation. Sielicki AP Jr. **Top Health Care Financ** 1989 Fall;16(1):32–42

[Compensation practice of trade associations in relation to radiation-induced diseases: probability of causation] Renz K, et al. **Strahlenschutz Forsch Prax** 1988;30:137–49 (Ger)

[Coronary risk factors at the work site. Identification, prevention, compensation] Kentner M. **Versicherungsmedizin** 1988 Nov 1;40(6):163–8 (31 ref.) (Eng. Abstr.) (Ger)

[Late industrial damage: closed access for obtaining compensation?] Woitowitz HJ. **Versicherungsmedizin** 1989 Jul 1;41(4):111–6 (Eng. Abstr.) (Ger)

[Hairdressers' eczema—results of expert assessment 1984–1987] Gehse M, et al. **Z Hautkr** 1989 Mar 15; 64(3):172–8 (Eng. Abstr.) (Ger)

[Impairments of the locomotor system for the purposes of the new pension for disability (law 222 of 12-6-84). Diagnostic methodology and evaluation guidelines] Serao F. **Arch Monaldi Mal Torace** 1987 Sep–Oct;42(5):427–43 (Eng. Abstr.) (Ita)

TRENDS

Preventing occupational disease [letter] Mulvihill JE, et al. **Health Aff (Millwood)** 1989 Spring;8(1):228

Costs of workers' compensation claims for hearing loss. Alleyne BC, et al. **J Occup Med** 1989 Feb;31(2):134–8

Workers' compensation: 1980–84 benchmark revisions. Nelson WJ Jr. **Soc Secur Bull** 1988 Jul;51(7):4–21

UTILIZATION

Chrysler challenges quality of medical care in WI. Droste T. **Hospitals** 1989 Sep 20;63(18):98

WORLD HEALTH

International health. Greer DS. **Acad Med** 1989 Jan; 64(1):14–5

Strategies for developing innovative programs in international medical education. World health perspective. Mutalik GS. **Acad Med** 1989 May;64(5 Suppl):S32

Geographic medicine: a new movement within international health. Olds GR. **Acad Med** 1989 Apr;64(4):190–2

Recent radiation accidents. Chernobyl and Goiania: their impact and global implications. A presentation by Robert Peter Gale, MD, PhD. Gale RP, et al. **Ala J Med Sci** 1988 Oct;25(4):439–44

A European view of nutrition and emerging problems in the Third World. James WP. **Am J Clin Nutr** 1989 May;49(5 Suppl):985–92 (25 ref.)

The international comparability of cancer mortality data. Results of an international death certificate study. Percy C, et al. **Am J Epidemiol** 1989 May;129(5):934–46

Organizing to prevent Third World blindness [editorial] Sommer A. **Am J Ophthalmol** 1989 May 15;107(5):544–6

International differences in developing improvements in cardiovascular health. Pisa Z, et al. **Ann Med** 1989 Jun; 21(3):193–7

A training module on health leadership development. **Asia Pac J Public Health** 1988;2(3):202

Health for All leadership and the role of the university in intersectoral development. Michael JM. **Asia Pac J Public Health** 1988;2(3):159–62

Focus on AIDS. Mann J. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):57–60

World health situation and trend assessment from 1948 to 1988. Uemura K. **Bull WHO** 1988;66(6):679–87

Global eradication of poliomyelitis by the year 2000. **Can Dis Wkly Rep** 1988 Dec 3;14(48):219–20 (Eng, Fre)

AIDS surveillance—worldwide. **Can Dis Wkly Rep** 1988 Jan 30;14(4):15 (Eng, Fre)

Re: The Canadian Public Health Association and International Health: a perspective [letter] Osman Y. **Can J Public Health** 1988 Sep–Oct;79(5):395

Trends in lung cancer incidence worldwide. Parkin DM. **Chest** 1989 Jul;96(1 Suppl):5S–8S

Lung cancer—a worldwide health problem. Stanley K, et al. **Chest** 1989 Jul;96(1 Suppl):1S–5S (11 ref.)

Variation of HDL cholesterol values in old age from around the world. Muckle TJ. **Compr Gerontol [A]** 1988 Feb; 2(1):7–11 (51 ref.)

Overview of the worldwide problem of diarrhoea. Gold R. **Drugs** 1988;36 Suppl 4:1–5 (16 ref.)

Oral rehydration in infantile diarrhoea in the developed world. Mackenzie A, et al. **Drugs** 1988;36 Suppl 4:48–60 (62 ref.)

The World Food Programme at work. **Food Nutr (Roma)** 1987;13(2):12–3

Built-in monitoring and evaluation systems for food-assisted projects. Gotzmann H. **Food Nutr (Roma)** 1987;13(2):14–20

The nutritionist in food aid. Proja FR. **Food Nutr (Roma)** 1987;13(2):2–11

The cultural dimensions of alcohol policy worldwide. Walsh DC, et al. **Health Aff (Millwood)** 1989 Summer;8(2):48–62

Self-interest vs cosmic concern [letter] Ramahi TM. **Hosp Pract [Off]** 1989 Apr 15;24(4):23

XIII World Conference on Health Education. Participation for all in health. August 28–September 2, 1988, Houston, Texas, USA. **Hygie** 1988;7(4):1–40

Participation for all in health. Sleet D, et al. **Hygie** 1988; 7(4):11–7 (Eng, Fre)

Following the leaders in Health for All. **Int Nurs Rev** 1988 Sep–Oct;35(5):137–42

Priority research for health for all. **Int Nurs Rev** 1989 Jan–Feb;36(1):30–1, 24

The coming of age in nursing care of the elderly. Alderman M, et al. **Int Nurs Rev** 1989 Mar–Apr;36(2):47–9, 60

Women and smoking. Needed global actions. Norsigian J. **J Am Med Wom Assoc** 1989 Mar–Apr;44(2):47

Future role of the Agency for International Development in world-wide malaria control programs. Cowper LT. **J Am Mosq Control Assoc** 1987 Sep;3(3):489–93

The used tire trade: a mechanism for the worldwide dispersal of container breeding mosquitoes. Reiter P, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):494–501

The control of malaria vectors in the context of the Health for All by the Year 2000 Global Strategy. Slooff R. **J Am Mosq Control Assoc** 1987 Dec;3(4):551–5

Health for all—all for health [editorial] Dutta GP. **J Indian Med Assoc** 1988 Apr;86(4):89–91

Diverse systems, common ground: impressions of the World Medical Assembly. Kinser T. **J Med Assoc Ga** 1989 Feb; 78(2):85–7

Antimicrobial resistance in Streptococcus pneumoniae: a growing universal concern. Hussein SS, et al. **J Natl Med Assoc** 1989 Sep;81(9):937–41 (79 ref.)

Are we in the United States committed to world health? Glittenberg JE. **J Prof Nurs** 1988 Sep–Oct;4(5):319, 391

The College and health for all [editorial] Donald AG. **J R Coll Gen Pract** 1988 Mar;38(308):97–8

Arms or health: a role for medical colleges? Holdstock D. **J R Coll Physicians Lond** 1989 Jul;23(3):185–8

A world AIM. Wolstenholme G. **J R Coll Physicians Lond** 1989 Jul;23(3):142–3

Leads from the MMWR. Update: influenza activity—worldwide. **JAMA** 1989 Feb 3;261(5):687

Preventive medicine for the 21st century. Cousins N. **JAMA** 1989 Jan 6;261(1):131, 135

Worldwide elimination of hepatitis B transmission: we have the way, we need the will [editorial] Francis DP, et al. **JAMA** 1989 Apr 28;261(16):2400–1

Dec 1 designated World AIDS Day: message is 'Join the Worldwide Effort' [news] Goldsmith MF. **JAMA** 1988 Nov 25;260(20):2969–70

World Health Day emphasizes preventive efforts, teamwork to fight illness, injury, drugs [news] Gunby P. **JAMA** 1989 Apr 7;261(13):1861–2

Second World No-Tobacco Day is next week [news] Gunby P. **JAMA** 1989 May 26;261(20):2938

AIDS in the UK and world wide [news] **Lancet** 1989 Jan 21;1(8630):173

World Medical Association [letter] **Lancet** 1989 Sep 9; 2(8663):621–2

AIDS in the UK and world wide [news] **Lancet** 1989 Feb 18;1(8634):397

AIDS in the UK and world wide [news] **Lancet** 1989 Apr 22;1(8643):914

AIDS in the UK and world wide [news] **Lancet** 1989 Mar 25;1(8639):680–1

AIDS in the UK and world wide [news] **Lancet** 1989 May 20;1(8647):1151

Latitude and ischaemic heart disease [letter] Fleck A. **Lancet** 1989 Mar 18;1(8638):613

International versus domestic health: an antiquated distinction [letter] Gellert GA, et al. **Lancet** 1989 Jul 1;

2(8653):51
Worldwide increase in pneumococcal antibiotic resistance [letter] Klugman KP, et al. **Lancet** 1989 Aug 19;2(8660):444
International prostitutes and transmission of HIV [letter] [see comments] Koenig ER. **Lancet** 1989 Apr 8;1(8641):782–3 . **Comment in:** Lancet 1989 Jul 1;2(8653):44
World-wide antibiotic resistance in methicillin-resistant Staphylococcus aureus. Maple PA, et al. **Lancet** 1989 Mar 11;1(8637):537–40
Third World and European community [letter] Unwin N, et al. **Lancet** 1989 Jun 3;1(8649):1275
A lesson from the decline of tuberculosis around the world [letter] Kumar RP. **Lepr Rev** 1988 Sep;59(3):266–7
Update: influenza activity—worldwide. **MMWR** 1989 Jan 6;37(51–52):788–9
A world view of AIDS. **N Z Med J** 1988 Sep 28;101(854):619
World-wide trends in multiple sclerosis mortality. Lai SM, et al. **Neuroepidemiology** 1989;8(2):56–67
International research: a need or a luxury? Meleis AI. **Nurs Outlook** 1989 May-Jun;37(3):138–42
Sarcoidosis around the world [editorial] James DG. **Postgrad Med J** 1988 Mar;64(749):177–9
Global action against hearing impairment. Wilson J. **Scand Audiol Suppl** 1988;28:33–5
Deafness in developing countries. Approaches to a global programme of prevention. Wilson J. **Scand Audiol Suppl** 1988;28:37–58
The international epidemiology of AIDS. Mann JM, et al. **Sci Am** 1988 Oct;259(4):82–9 (4 ref.)
Health surveys in developing countries: the objectives and design of an international programme. Timaeus I, et al. **Soc Sci Med** 1988;27(4):359–68
Trouble on the border: international health problems merge at the Rio Grande. Jones DB. **Tex Med** 1989 Aug; 85(8):28–33
Economics, disease burden US–Mexico border [editorial] Nickey LN. **Tex Med** 1989 Aug;85(8):8
Health for All, 2000 [editorial] Barker A. **Trop Doct** 1989 Apr;19(2):49
Ten years after Alma Ata: balancing different primary health care strategies. Chen LC. **Trop Geogr Med** 1988 Jul; 40(3):S22–9 (20 ref.)
Leadership in health. **World Health Forum** 1988;9(2):147–71
Brock Chisholm: words of wisdom from the past. **World Health Forum** 1989;10(1):70–3
Health for all: the way ahead. Bidwell ES. **World Health Forum** 1988;9(1):37–45
Planet earth—suicide or survival? [interview] Brundtland GH. **World Health Forum** 1988;9(2):178–84
The battle for health [editorial] Mahler H. **World Health Forum** 1988;9(2):143–6
Forum interview with Liv Ullmann, Health is spiritual! [interview by Dr. Gururaj S. Mutalik] Ullmann L. **World Health Forum** 1989;10(1):89–93
WHO: reaching out to all. Williams G. **World Health Forum** 1988;9(2):185–99
The knowledge of human nutrition and the peoples of the world. Banerji D. **World Rev Nutr Diet** 1988;57:1–23 (68 ref.)
[Has there been a decrease in the risk of stroke?] Kotila M. **Duodecim** 1989;105(7):555–61 (43 ref.) (Fin)
[Stroke prevention] Tuomilehto J. **Duodecim** 1989; 105(7):618–30 (65 ref.) (Fin)
[Current status of AIDS research in the world—report from the Fourth International Conference on AIDS] Kitamura T. **Nippon Rinsho** 1989 Jan;47(1):135–40 (Jpn)
[Drug dependence and drug abuse in the light of publications of the International Organ of Narcotic Control 1984–1986] Kubalski J, et al. **Pol Tyg Lek** 1988 May 16;43(20):645–8 (Pol)
[Comparison of the status of the periodontium and oral hygiene among children 8–9 and 13–14 years of age in Poland and in other countries] Arabska–Przedpelska B, et al. **Przegl Epidemiol** 1988;42(3):279–85 (Eng. Abstr.) (Pol)
[Comparison of various needs regarding stomatologic care of the population 35–44 years of age in Poland and in other countries] Boltacz–Rzepkowska E, et al. **Przegl Epidemiol** 1988;42(3):275–8 (Eng. Abstr.) (Pol)
[Comparison of the status of dentition of the population 35–44 years of age in Poland and other countries] Boltacz–Rzepkowska E, et al. **Przegl Epidemiol** 1988; 42(3):269–74 (Eng. Abstr.) (Pol)
[Changes of the immunologic status of the population as a result of preventive vaccination] Galązka A. **Przegl Epidemiol** 1988;42(3):211–24 (Eng. Abstr.) (Pol)
[Cryptosporidiosis in humans] Siński E. **Przegl Epidemiol** 1988;42(3):225–33 (Eng. Abstr.) (Pol)
[Incidence of abnormalities of the stomatognathic system among Polish children 13–14 years of age and its comparison with the data from other countries] Starniewska–Głowacka M, et al. **Przegl Epidemiol** 1988; 42(3):292–8 (Eng. Abstr.) (Pol)
[Incidence of HIV infection 1987—the situation in Poland in comparison with the world situation] Szata W. **Przegl Epidemiol** 1989;43(1):115–23 (Pol)
[Dental caries among children 8–9 and 13–14 years of age in selected regions of Poland, the USA, Canada, Australia, Japan, New Zealand, Ireland, Norway and West and East Germany] Wochna–Sobańska M, et al. **Przegl Epidemiol** 1988;42(3):286–91 (Eng. Abstr.) (Pol)
[Prevention and control of cardiovascular diseases in the population. III. Report of the Expert Committee of the World Health Organization (WHO)] **Przegl Lek** 1988; 45(9):697–705 (Pol)
[World Tuberculosis Day] Anastasatu C. **Rev Ig [Pneumoftiziol]** 1988 Jan–Mar;37(1):1–4 (Rum)
[The anniversary of the founding of the World Health Organization] Bushtueva KA, et al. **Gig Sanit** 1988 Oct; (10):36–9 (Rus)
[Legislative measures with regard to the control of smoking in various parts of the world] Kosenko EV. **Gig Sanit** 1988 Oct;(10):53–6 (Rus)
[The WHO European Regional Bureau: the main trends in its activities] Leparskiĭ EA. **Pediatriia** 1988;(8):66–70 (Rus)
[The role of primary medical services in the implementation of the Expanded Immunization Program of the WHO] Litvinov SK, et al. **Sov Zdravookhr** 1989;(2):61–5 (Rus)
[The 30th anniversary of the adoption by the World Health Organization of the program for smallpox eradication throughout the world] Andzhaparidze OG, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):517–23 (38 ref.) (Rus)
[The world-wide pandemic and drug resistance of the causative agent of Grigor'ev–Shiga dysentery] Solodovnikov IuP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):56–61 (Eng. Abstr.) (Rus)
[Short-term prognosis of schizophrenia in developed and developing countries. WHO international study program] Tsirkin SIu. **Zh Nevropatol Psikhiatr** 1989;89(5):66–72 (Eng. Abstr.) (Rus)
[Present status of viral hepatitis in the world] **Bol Of Sanit Panam** 1988 Sep;105(3):314–7 (Spa)

TRENDS

"Public health as if people matter". Tolsma DD. **Hygie** 1989 Mar;8(1):3–4 (Eng, Fre)
[Health for all by the year 2000—claims and responsibilities] Hasse HH, et al. **Z Gesamte Hyg** 1988 Nov;34(11):602–4 (Eng. Abstr.) (Ger)

WORLD HEALTH ORGANIZATION

Health for all—all for health. 40 Years of the World Health Organization [editorial] **Acta Chir Plast** 1988;30(4):193
Experience from the mental health programme of the World Health Organization. Sartorius N. **Acta Psychiatr Scand Suppl** 1988;344:71–4 (13 ref.)
A priority for the World Health Organization: promoting healthy ways of life. Stroot P. **Am J Clin Nutr** 1989 May; 49(5 Suppl):1063–4
Reproducibility of tumour typing of lung carcinomas performed according to WHO's recommendation. Dale I, et al. **APMIS** 1989 Apr;97(4):351–6
The WHO international external quality assessment scheme for haematology. Lewis SM. **Bull WHO** 1988;66(3):283–90
World AIDS Day essay contest. Drew B. **Can Med Assoc J** 1988 Dec 1;139(11):1031
The World Health Organization and its cardiovascular programme. Pila Z. **Cor Vasa** 1988;30(5):321–3
Status of WHO concerning continuous cell lines as substrates for the production of biologicals. Grachev V, et al. **Dev Biol Stand** 1989;70:215–9
Report of the Joint International Society and Federation of Cardiology/World Health Organization Task Force on Coronary Angioplasty. **Eur Heart J** 1988 Sep;9(9):1034–45 (34 ref.)
World Summit of ministers of health on programmes for AIDS prevention [news] **Hygie** 1988 Jun;7(2):39–40
Reaching out to the community: the activities of the FDI–WHO Joint Working Group 10 on Periodontal Health Services. Pilot T. **Int Dent J** 1989 Mar;39(1):52–4
New from WHO: AIDS Technical Bulletin [news] **Int Nurs Rev** 1989 Jan–Feb;36(1):11
Global programme on AIDS and programme of STD. World Health Organization. **J Acquir Immune Defic Syndr** 1989; 2(3):248–55
The future of vector biology and control in the World Health Organization. Gratz NR. **J Am Mosq Control Assoc** 1985 Sep;1(3):273–8
Progress in worldwide control and elimination of disease through immunization. Hayden GF, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):520–7 (54 ref.)
World no tobacco day: a challenge for women's health. Jacobson B, et al. **Lancet** 1989 May 27;1(8648):1193–4
WHO and PLO [letter] Yoshida T. **Lancet** 1989 Jul 22; 2(8656):222
Changes in epidemiological indices following the introduction of WHO MDT into the Guyana leprosy control programme. Rose P. **Lepr Rev** 1989 Jun;60(2):151–6
Continuing education as an essential component of World Health Organization manpower development policies and strategies in the European Region. Vodoratski V. **Med Educ** 1988 Sep;22(5):468–73
The WHO strategy and community nutrition in the UK. Scott–Samuel A. **Nutr Health** 1989;6(3):129–33
Recent research activities in WHO's mental health programme. Sartorius N. **Psychol Med** 1989 Feb; 19(1):233–44
WHO seeks global data on sexual practices [news] Booth W. **Science** 1989 Apr 28;244(4903):418–9
A WHO newsletter in Burma [letter] Chaudhury RR, et al. **World Health Forum** 1989;10(1):104–5
The narcotic equivalency index [letter] Hoskin PJ, et al. **World Health Forum** 1989;10(1):94–5
Health for all—all for health! [editorial] Mahler H. **World Health Forum** 1988;9(1):5–6
World Health Organization activities in the field of diabetes mellitus. King H, et al. **World Health Stat Q** 1988; 41(3–4):197–9
[The World Health Organization working for the puerpera and the newborn infant] Vĭlov V. **Akush Ginekol (Sofiia)** 1988;27(5):1–7 (Bul)
[Interview with Dr. David E. Barmes, WHO Director of Oral Health in Geneva] Barmes DE. **Schweiz Monatsschr Zahnmed** 1988;98(8):886–7 (Fre)
[WHO wrote to us: the International Decennial of drinkable water and sanitary conditions] **Tunis Med** 1987 Apr; 65(4):298 (Fre)
[AIDS series of the WHO] **Off Gesundheitswes** 1989 Jul; 51(7):383 (Ger)
[WHO guidelines for air quality in Europe] Ewers U. **Off Gesundheitswes** 1988 Nov;50(11):626–9 (Eng. Abstr.) (Ger)
[Air quality guidelines of the World Health Organization] Türck R. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 76:105–16 (Ger)
[Revised WHO case definition for AIDS] Dittmann S. **Z Arztl Fortbild (Jena)** 1988;82(24):1258, 1265–6 (Ger)
["Health for all in 2000"—the strategy of the World Health Organization and its influence on health policy in Poland] Wysocki M, et al. **Pol Tyg Lek** 1989 Jan 2;44(1):27–9 (Pol)
[The role of the WHO Special Human Reproduction Program in solving urgent problems of infertility in marriage] Vikhliaeva EM, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):3–4 (Rus)
[Role of the World Health Organization in the fight for a higher level of health of the population (on the 40th anniversary of WHO)] Volodin VM. **Patol Fiziol Eksp Ter** 1988 Jul–Aug;(4):3–10 (Rus)
[The participation of Soviet oncologists in WHO activities] Tseshkovskiĭ MS, et al. **Vopr Onkol** 1989;35(1):58–64 (Eng. Abstr.) (Rus)
[The WHO program for controlling viral hepatitis] Gendon IuZ. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug; (8):118–22 (23 ref.) (Rus)
[Comments on a basic publication of WHO] Matilla Gómez V. **An R Acad Nac Med (Madr)** 1988;105(2):185–200 (Spa)
[WHO and the health-for-all strategy: well-functioning primary health care is the key to good health for all] Wennström G, et al. **Lakartidningen** 1988 Oct 5; 85(40):3300–1 (Swe)

HISTORY

Malaria and the work of WHO. Najera JA. **Bull WORLD Health Organ** 1989;67(3):229–43 (56 ref.)
40 years of the World Health Organization. Pila Z. **Czech Med** 1988;11(3):121–2
All for health [editorial] Mahler H. **J R Coll Physicians Lond** 1988 Oct;22(4):202–3
Brock Chisholm: words of wisdom from the past. **World Health Forum** 1989;10(1):70–3
The battle for health [editorial] Mahler H. **World Health Forum** 1988;9(2):143–6
WHO: from small beginnings [interview] Sze S. **World Health Forum** 1988;9(1):29–34
WHO—the days of the mass campaigns. Williams G. **World Health Forum** 1988;9(1):7–23
WHO: reaching out to all. Williams G. **World Health Forum** 1988;9(2):185–99
[The anniversary of the founding of the World Health Organization] Bushtueva KA, et al. **Gig Sanit** 1988 Oct; (10):36–9 (Rus)
[Problems of environmental hygiene and primary medico–sanitary care in the activities of the World Health Organization (on the 40th anniversary of the founding of the WHO)] Sidorenko GI. **Gig Sanit** 1988 Nov;(11):4–8 (Rus)
[The World Health Organization and child health (on the 40th anniversary of the World Health Organization)] Tatochenko Vk. **Pediatriia** 1988;(6):7–10 (Rus)
[The 30th anniversary of the adoption by the World Health Organization of the program for smallpox eradication throughout the world] Andzhaparidze OG, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):517–23 (38 ref.) (Rus)
[In memoriam Clarence H. Moore, 1909–1988] **Bol Of Sanit Panam** 1988 Jul;105(1):53–5 (Spa)

ORGANIZATION & ADMINISTRATION

Health for all: the way ahead. Bidwell ES. **World Health Forum** 1988;9(1):37–45
[The WHO European Regional Bureau: the main trends in its activities] Leparskiĭ EA. **Pediatriia** 1988;(8):66–70 (Rus)

WOUND HEALING

see related
CICATRIX
GRANULATION TISSUE
Ultrastructural findings in the wound healing of the colonic mucosa of rabbits. Mori N, et al. **Acta Anat (Basel)** 1989;

134(1):82–8
Polyglycolic acid (Dexon) mesh graft for abdominal wound support in healing-compromised patients. Brismar B, et al. **Acta Chir Scand** 1988 Sep;154(9):509–10
Cell kinetics during healing of corneal epithelial wounds. Håskjold E, et al. **Acta Ophthalmol (Copenh)** 1989 Apr; 67(2):174–80
Experimental corneal alkali wound healing. Chung JH. **Acta Ophthalmol Suppl (Copenh)** 1988;187:1–35
Femoral shaft fracture in 265 children. Log-normal correlation with age of speed of healing. Skak SV, et al. **Acta Orthop Scand** 1988 Dec;59(6):704–7
The effects of function and fixation stiffness on experimental bone healing. Terjesen T, et al. **Acta Orthop Scand** 1988 Dec;59(6):712–5
Healing of experimentally produced round window membrane rupture. Gyo K. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):85–9
The healing of cricothyroidostomy in pigs. A morphological study. Holst M, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):300–6
Stress and woundhealing of the cartilaginous nasal septum. Verwoerd CD, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):441–5
Healing of experimental laser wound in liver and spleen. Tichý M, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 120:161–8
Healing of experimental laser wound in the skin and auricle. Tichý M, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 120:169–78
Healing of experimental laser wound in striated muscle and adipose tissue. Tichý M, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:179–86
Aging of wound healing in an experimental model in mice. Hiss J, et al. **Am J Forensic Med Pathol** 1988 Dec; 9(4):310–2
The new RYB color code. Cuzzell JZ. **Am J Nurs** 1988 Oct; 88(10):1342–6
A comparative histologic study on the healing process after tissue transection. I. Carbon dioxide laser and electromicrosurgery. Filmar S, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1062–7
A comparative histologic study on the healing process after tissue transection. II. Carbon dioxide laser and surgical microscissors. Filmar S, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1068–72
Villus contraction aids repair of intestinal epithelium after injury. Moore R, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G274–83
Prediction of below-knee amputation wound healing using noninvasive laser Doppler velocimetry. Kram HB, et al. **Am J Surg** 1989 Jul;158(1):29–31
Epidermis, basement membrane, and connective-tissue healing after amputation of mouse digits: implications for mammalian appendage regeneration. Neufeld DA. **Anat Rec** 1989 Apr;223(4):425–32
Anatomical results after distal forearm fractures. Kaukonen JP, et al. **Ann Chir Gynaecol** 1988;77(1):21–6
Functional recovery after fractures of the distal forearm. Analysis of radiographic and other factors affecting the outcome. Kaukonen JP, et al. **Ann Chir Gynaecol** 1988; 77(1):27–31
Proceedings of the clinical advances track of the 1988 ACEP winter symposium. **Ann Emerg Med** 1988 Dec; 17(12):1264–347
Delayed wound closure: indications and techniques. Dimick AR. **Ann Emerg Med** 1988 Dec;17(12):1303–4
The physiology of wound healing. Hunt TK. **Ann Emerg Med** 1988 Dec;17(12):1265–73 (59 ref.)
Disturbances of wound healing. Robson MC. **Ann Emerg Med** 1988 Dec;17(12):1274–8
Mechanisms of surface soft tissue trauma. Trott A. **Ann Emerg Med** 1988 Dec;17(12):1279–83 (44 ref.)
Accelerated healing of full-thickness burns by the use of high-voltage pulsed galvanic stimulation in the pig. Cruz NI, et al. **Ann Plast Surg** 1989 Jul;23(1):49–55
V-Y advancement flaps for tumor excision defects of the eyelids. Doermann A, et al. **Ann Plast Surg** 1989 May; 22(5):429–35
Peritendinous healing after early movement of repaired flexor tendon: anatomical study. Farkas LG, et al. **Ann Plast Surg** 1980 Oct;5(4):298–304
Correlation of postoperative bone scintigraphy with healing of vascularized fibula transfer: a clinical study. Greenberg BM, et al. **Ann Plast Surg** 1989 Aug;23(2):147–54
Analysis of collagen content in the fetal wound. Hallock GG, et al. **Ann Plast Surg** 1988 Oct;21(4):310–5
Wound healing in fetal limb organ culture. Kistler A, et al. **Ann Plast Surg** 1988 Oct;21(4):303–9
The use of maggots in wound debridement. Reames MK, et al. **Ann Plast Surg** 1988 Oct;21(4):388–91
Effects of electrical currents on wound contraction. Stromberg BV. **Ann Plast Surg** 1988 Aug;21(2):121–3
Treatment of delayed union, nonunion, and malunion of the phalanges of the hand. Wray RC Jr, et al. **Ann Plast Surg** 1989 Jan;22(1):14–8
Pain quantum and wound healing: a comparison of interrupted inversion PDS and standard nylon sutures in abdominal skin closure. Cassie AB, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):339–42
The effect of in vivo T helper and T suppressor lymphocyte depletion on wound healing. Barbul A, et al. **Ann Surg** 1989 Apr;209(4):479–83
Effect of healing on compliance of porous Dacron grafts. Usui Y, et al. **Ann Vasc Surg** 1988 Apr;2(2):120–6
Laser vascular welding—how does it work? White RA, et al. **Ann Vasc Surg** 1987 May;1(4):461–4
Surgical wound healing. A review for perioperative nurses. Wysocki AB. **AORN J** 1989 Feb;49(2):502, 504–6, 508 passim (48 ref.)
Fibronectin and corneal epithelial wound healing in the vitamin A-deficient rat. Frangieh GT, et al. **Arch Ophthalmol** 1989 Apr;107(4):567–71
Myofibroblasts in healing laser wounds of rat tongue mucosa. Luomanen M, et al. **Arch Oral Biol** 1988;33(1):17–23
The difficult healing of segmental fractures of the tibial shaft. Rommens PM, et al. **Arch Orthop Trauma Surg** 1989; 108(4):238–42
The healing of biologic and synthetic bone implants. An experimental study. Verburg AD, et al. **Arch Orthop Trauma Surg** 1988;107(5):293–300
The effect of new monofilament absorbable sutures on the healing of musculoaponeurotic incisions, gastrotomies, and colonic anastomoses. Foresman PA, et al. **Arch Surg** 1989 Jun;124(6):708–10
Management of severe incisional abscesses following laparotomy. Early reclosure under cover of metronidazole and ampicillin. Gottrup F, et al. **Arch Surg** 1989 Jun; 124(6):702–4
Staple line healing in gastric surgery [letter] Owen ER. **Arch Surg** 1989 Jun;124(6):752
Pericardial flaps prevent wound complications [letter] Zollinger RW 2d. **Arch Surg** 1988 Dec;123(12):1526
Treatment of longitudinal injuries in avascular area of meniscus in dogs by trephination. Zhang ZN, et al. **Arthroscopy** 1988;4(3):151–9
Resorbable structured porous materials in the healing process of hard tissue defects. Jamshidi K, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):755–60
The arterial barrier to lipoprotein influx in the hypercholesterolemic rabbit. 2. Long-term studies in deendothelialized and reendothelialized aortas. Schwenke DC, et al. **Atherosclerosis** 1989 Jun;77(2–3):105–15
Basic fibroblast growth factor (FGF) promotes cartilage repair in vivo. Cuevas P, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):611–8
Increased transglutaminase activity during skin wound healing in rats. Bowness JM, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):234–40
Impedance osteography: a technique to study the electrical characteristics of fracture healing. Ritchie IK, et al. **Biomed Sci Instrum** 1989;25:59–77
Application of hydroelastic waves of the Chinese traditional medicine solution to the traumatotherapy. Wu YP, et al. **Biorheology** 1988;25(1–2):77–83
Growth factors: soluble mediators of wound repair and ocular fibrosis. Hjelmeland LM, et al. **Birth Defects** 1988; 24(1):87–102 (40 ref.)
Spontaneous reformation of upper eyelid. Mehta HK. **Br J Ophthalmol** 1988 Nov;72(11):856–62
Calcium alginate dressing accelerates split skin graft donor site healing. Attwood AI. **Br J Plast Surg** 1989 Jul; 42(4):373–9
Microvascular anastomoses in diabetes: an experimental study. Barr LC, et al. **Br J Plast Surg** 1989 Jan;42(1):50–3
Effect of shoulder immobilization on wound seroma and shoulder dysfunction following modified radical mastectomy: a randomized prospective clinical trial. Dawson I, et al. **Br J Surg** 1989 Mar;76(3):311–2
Collagen changes around intestinal anastomoses in germ-free rats. Mastboom WJ, et al. **Br J Surg** 1989 Aug; 76(8):797–801
Wounds and wound healing. Eckersley JR, et al. **Br Med Bull** 1988 Apr;44(2):423–36 (51 ref.)
Epithelial bridging on burn patients following primary excision and grafting. Dewan PA, et al. **Burns** 1989 Apr; 15(2):129–31
Treatment of donor sites—Duoderm or Omiderm? Leicht P, et al. **Burns Incl Therm Inj** 1989 Feb;15(1):7–10
Allograft vs. exposure in the treatment of scalds—a prospective randomized controlled clinical study. Leicht P, et al. **Burns Incl Therm Inj** 1989 Feb;15(1):1–3
Quantitation of rate of wound closure and the prediction of death following major burns. Scott-Conner CE, et al. **Burns Incl Therm Inj** 1988 Oct;14(5):373–8
Factors influencing blood supply in wound granuloma quantitated by a new in vivo technique. Mahadevan V, et al. **Cancer Res** 1989 Jan 15;49(2):415–9
Vessel-like sprouts from "fibroblasts" in vitro: further evidence for angiogenic hypothesis of wound healing and fibrosis: a comment [letter] Franks LM. **Cell Biol Int Rep** 1988 Nov;12(11):987
Cytoskeletal organization of migrating retinal pigment epithelial cells during wound healing in organ culture. Hergott GJ, et al. **Cell Motil Cytoskeleton** 1989;13(2):83–93
Measurement of hymenal diameter in pediatric sexual abuse exams [letter] Hilton N, et al. **Child Abuse Negl** 1988; 12(4):607–8
Wound healing and aging. Eaglstein WH. **Clin Geriatr Med** 1989 Feb;5(1):183–8 (25 ref.)
Fracture healing and osteocalcin metabolism in vitamin K deficiency. Einhorn TA, et al. **Clin Orthop** 1988 Dec; (237):219–25
Meniscal suture. An experimental study in the dog. Kawai Y, et al. **Clin Orthop** 1989 Jun;(243):286–93
Remodeling of angulated distal forearm fractures in children. Larsen E, et al. **Clin Orthop** 1988 Dec;(237):190–5
Prediction of the healing potential of closed adult tibial shaft fractures by bone scintigraphy. Oni OO, et al. **Clin Orthop** 1989 Aug;(245):239–45
The effects of motion on the healing of cancellous bone. Schatzker J, et al. **Clin Orthop** 1989 Aug;(245):282–7
The healing of canine vascularized segmental tibial osteotomies. The effect of retained endosteal circulation. Zdeblick TA, et al. **Clin Orthop** 1988 Nov;(236):296–302
The prevention of tympanic membrane perforation following the removal of long-term Paparella type II ventilation tubes [letter] Bingham BJ, et al. **Clin Otolaryngol** 1988 Dec; 13(6):501
Computer-assisted analysis of the vascular endothelial cell motile response to injury. Askey DB, et al. **Comput Biomed Res** 1988 Dec;21(6):551–61
Unique parameters in the healing of linear partial thickness penetrating corneal incisions in rabbit: immunohistochemical evaluation. Goodman WM, et al. **Curr Eye Res** 1989 Mar;8(3):305–16
A correlative electron microscopic and freeze-fracture examination of cat corneal endothelial wound repair. Tuberville AW, et al. **Curr Eye Res** 1989 Apr;8(4):365–77
Prognostic value of systolic ankle and toe blood pressure levels in outcome of diabetic foot ulcer. Apelqvist J, et al. **Diabetes Care** 1989 Jun;12(6):373–8
Wound classification is more important than site of ulceration in the outcome of diabetic foot ulcers. Apelqvist J, et al. **Diabetic Med** 1989 Aug;6(6):526–30
A preliminary investigation of the effect of selected electromagnetic field devices on healing of cannon bone osteotomies in horses. Sanders-Shamis M, et al. **Equine Vet J** 1989 May;21(3):201–5
Continuous absorbable suture pattern in the closure of ventral midline abdominal incisions in horses. Turner AS, et al. **Equine Vet J** 1988 Nov;20(6):401–5
Further experience in the healing rate of lower limb amputations. Cumming JG, et al. **Eur J Vasc Surg** 1988 Dec;2(6):383–5
The value of skin temperature measurements in forecasting the healing of a below-knee amputation for end-stage ischaemia of the leg in peripheral vascular disease. Stoner HB, et al. **Eur J Vasc Surg** 1989 Aug;3(4):355–61
Neutrophil-induced decrease in wound margin strength after intestinal anastomosis—influence on collagen and mechanisms of granulocyte action. Högström H, et al. **Eur Surg Res** 1988;20(4):260–6
An in vitro model of wound healing in the CNS: analysis of cell reaction and interaction at different ages. Rudge JS, et al. **Exp Neurol** 1989 Jan;103(1):1–16
Wound closure: evidence of cooperation between fibroblasts and collagen matrix. Ehrlich HP. **Eye** 1988;2 (Pt 2):149–57 (15 ref.)
Wound repair: the fibroblast and the inhibition of scar formation. Grierson I, et al. **Eye** 1988;2 (Pt 2):135–48 (48 ref.)
Wound healing as a barrier to successful filtration surgery. Joseph JP, et al. **Eye** 1988;2 Suppl:S113–23 (68 ref.)
Genetic factors controlling the proliferative activity of mouse epidermal melanocytes during the healing of skin wounds. Hirobe T. **Genetics** 1988 Oct;120(2):551–8
33-day laceration stay. Schafer S, et al. **Geriatr Nurs (New York)** 1989 May–Jun;10(3):124–5
Physiologic effects of tissue oxygenation on wound healing. Whitney JD. **Heart Lung** 1989 Sep;18(5):466–74 (48 ref.)
Scar wars: closing in on wounds that won't heal. Souhrada L. **Hospitals** 1989 Sep 20;63(18):46
Interleukin-1 and the response to injury. Kaplan E, et al. **Immunol Res** 1989;8(2):118–29 (108 ref.)
Silastic foam in injured patients. Johnson SR, et al. **Injury** 1988 Mar;19(2):121–3
Duration of fracture healing after early versus delayed internal fixation of fractures of the femoral shaft. van Niekerk JL, et al. **Injury** 1987 Mar;18(2):120–2
Enhanced growth of tumour cells in healing colonic anastomoses and laparotomy wounds. Skipper D, et al. **Int J Color Dis** 1989 Aug;4(3):172–7
Fibroblasts in dermal tissue repair. Electron microscopic and immunohistochemical study. Bouissou H, et al. **Int J Dermatol** 1988 Oct;27(8):564–70
Comparative study of single layer and conventional closure of uterine incision in cesarean section. Lal K, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):349–52
Healing following coronoidotomy in rats. Allan PG, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):109–13
Histological evaluation of the effect of a miniature carbon dioxide laser on oral mucosa. Kardos TB, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):117–20
Algae-derived (phycogene) hydroxylapatite. A comparative histological study [corrected and issued with original paging in Int J Oral Maxillofac Surg 1988 Oct;17(5)] Kasperk C, et al. **Int J Oral Maxillofac Surg** 1988 Dec; 17(6):319–24
Effects of Nd-YAG laser and cryosurgery on the oral mucosa in rabbits. Schmelzeisen R, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):114–6
Wound healing: the present and the future development of the research. Bertelli A. **Int J Tissue React** 1988;10(6):387–8
Growth factors as regulators of wound repair. Grotendorst GR. **Int J Tissue React** 1988;10(6):337–44 (96 ref.)

Wound healing: a foundation for future surgeons. Hunt TK. **Int J Tissue React** 1988;10(6):335–6

The role of mast cells in wound healing. Trabucchi E, et al. **Int J Tissue React** 1988;10(6):367–72 (32 ref.)

Role of pantothenic and ascorbic acid in wound healing processes: in vitro study on fibroblasts. Lacroix B, et al. **Int J Vitam Nutr Res** 1988;58(4):407–13

Wound healing strength: a comparative study of stainless steel blade excisions and contact Nd:YAG laser excisions. Tawakol ME, et al. **Int Ophthalmol** 1988;12(2):147–9

Corneal surface ablation by 193 nm excimer laser and wound healing in rabbits. Gaster RN, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):90–8

Response of ocular surface epithelium to corneal wounding in retinol-deficient rabbits. el-Ghorab M, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1671–6

Reassembly of the anchoring structures of the corneal epithelium during wound repair in the rabbit. Gipson IK, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):425–34

Expression of transforming growth factor-beta in wound healing of vitamin A-deficient rat corneas. Hayashi K, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):239–47

The morphology and function of healing cat corneal endothelium. Huang PT, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1794–801

Dynamics of corneal epithelial healing after an alkali burn. A statistical analysis. Ormerod LD, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1784–93

Role of fibronectin in the healing of superficial keratectomies in vitro. Phan TM, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):386–91

Role of fibronectin and fibrinogen in healing of corneal epithelial scrape wounds. Phan TM, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):377–85

Effect of a collagen shield on cat corneal epithelial wound healing. Shaker GJ, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1565–8

Corneal repair following keratectomy. A comparison between conventional surgery and laser photoablation. Tuft SJ, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1769–77

Effects of EGF and indomethacin on rabbit corneal endothelial wound closure in excised corneas. Yoshida A, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1991–6

Wound healing. Falanga V, et al. **J Am Acad Dermatol** 1988 Sep;19(3):559–63

Effects of occlusive and semiocclusive dressings on the return of barrier function to transepidermal water loss in standardized human wounds. Silverman RA, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):755–60

Ligament healing in podiatric surgery. Borrelli AH. **J Am Podiatr Med Assoc** 1988 Dec;78(12):619–23

Medical collateral ligament healing subsequent to different treatment regimens. Gomez MA, et al. **J Appl Physiol** 1989 Jan;66(1):245–52

Effect of the position of the greater trochanter on the rate of union after trochanteric osteotomy for total hip arthroplasty. Gottschalk FA, et al. **J Arthroplasty** 1988; 3(3):235–40

Porous collagen sponge wound dressings: in vivo and in vitro studies. Doillon CJ. **J Biomater Appl** 1988 Apr;2(4):562–78 (92 ref.)

Application of expanded polytetrafluoroethylene (ePTFE) tubing to the study of human wound healing. Goodson WH 3d. **J Biomater Appl** 1987 Jul;2(1):101–17 (30 ref.)

Relationship between mechanical properties and collagen structure of closed and open wounds. Doillon CJ, et al. **J Biomech Eng** 1988 Nov;110(4):352–6

Wound healing using a collagen matrix: effect of DC electrical stimulation. Dunn MG, et al. **J Biomed Mater Res** 1988 Aug;22(A2 Suppl):191–206

Intramedullary nailing of femoral shaft fractures. Part II: Fracture-healing with static interlocking fixation. Brumback RJ, et al. **J Bone Joint Surg [Am]** 1988 Dec; 70(10):1453–62

Defects of early fracture-healing in experimental diabetes. Macey LR, et al. **J Bone Joint Surg [Am]** 1989 Jun; 71(5):722–33

Transcutaneous oxygen tension as a predictor of success after an amputation [letter] Mars M. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1429–30

The effects of fixation on fracture-healing. O'Sullivan ME, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):306–10 (37 ref.)

The fate of femoral windows in revision joint arthroplasty. Shepherd BD, et al. **J Bone Joint Surg [Am]** 1989 Jun; 71(5):716–8

Patterns of union in fractures of the waist of the scaphoid. Dias JJ, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):307–10

Energy metabolism in fracture healing. Measurement of adenosine triphosphate in callus to monitor progress. Leung KS, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):657–60

Cruciate ligament replacement using a meniscus. An experimental study. Mitsou A, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):784–6

The healing of closed tibial shaft fractures. The natural history of union with closed treatment. Oni OO, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):787–90

The stability of femoral neck fractures and its influence on healing. Rehnberg L, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):173–7

Reduced wound contraction after grafting of full-thickness burns with a collagen and chondroitin-6-sulfate (GAG) dermal skin substitute and coverage with biobrane. Boyce ST, et al. **J Burn Care Rehabil** 1988 Jul-Aug;9(4):364–70

Selection of amputation level and prediction of healing using transcutaneous tissue oxygen tension (PtcO2). Ameli FM, et al. **J Cardiovasc Surg (Torino)** 1989 Mar-Apr;30(2):220–4

Sartorius muscle coverage for the treatment of complicated vascular surgical wounds. Kaufman JL, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):479–83

Role of growth factors in inflammation and repair. Wahl SM, et al. **J Cell Biochem** 1989 Jun;40(2):193–9 (67 ref.)

Reappearance of an embryonic pattern of fibronectin splicing during wound healing in the adult rat. Ffrench-Constant C, et al. **J Cell Biol** 1989 Aug;109(2):903–14

Induction of tenascin in healing wounds. Mackie EJ, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2757–67

Platelet-derived growth factor and transforming growth factor-beta enhance tissue repair activities by unique mechanisms. Pierce GF, et al. **J Cell Biol** 1989 Jul; 109(1):429–40

The reorganization of microfilaments, centrosomes, and microtubules during in vitro small wound reendothelialization. Wong MK, et al. **J Cell Biol** 1988 Nov;107(5):1777–83

Differential stimulation of collagenase and chemotactic activity in fibroblasts derived from rat wound repair tissue and human skin by growth factors. Buckley-Sturrock A, et al. **J Cell Physiol** 1989 Jan;138(1):70–8

Newt epidermal cell migration over collagen and fibronectin involves different mechanisms. Donaldson DJ, et al. **J Cell Sci** 1988 Jun;90 (Pt 2):325–33

Activation of keratinocyte fibronectin receptor function during cutaneous wound healing. Grinnell F, et al. **J Cell Sci Suppl** 1987;8:199–209 (34 ref.)

Summary of biological considerations. Melcher AH. **J Dent Educ** 1988 Dec;52(12):812–4

Time-dependent changes of collagen crosslinks in the socket after tooth extraction in rabbits. Kuboki Y, et al. **J Dent Res** 1988 Jun;67(6):944–8

Wound healing of skin incisions produced by ultrasonically vibrating knife, scalpel, electrosurgery, and carbon dioxide laser. Hambley R, et al. **J Dermatol Surg Oncol** 1988 Nov; 14(11):1213–7

Lymphatic bullae arising as a complication of second-intention healing. Moranz JF, et al. **J Dermatol Surg Oncol** 1989 Aug;15(8):874–7

Healing of laser-induced defects of articular cartilage: preliminary studies. Borovoy M, et al. **J Foot Surg** 1989 Mar-Apr;28(2):95–9

Autonomous healing of chicken flexor tendons in vitro. Garner WL, et al. **J Hand Surg [Am]** 1988 Sep; 13(5):697–700

Human flexor tendon participation in the in vitro repair process. Mass DP, et al. **J Hand Surg [Am]** 1989 Jan; 14(1):64–71

Mal-union and dysfunction in Colles' fracture. Jenkins NH, et al. **J Hand Surg [Br]** 1988 Aug;13(3):291–3

Flexor tendon healing. Manske PR. **J Hand Surg [Br]** 1988 Aug;13(3):237–45 (93 ref.)

Comparison of the effects of moist and dry conditions on dermal repair. Dyson M, et al. **J Invest Dermatol** 1988 Nov; 91(5):434–9

Localization of collagen alpha 1(I) gene expression during wound healing by in situ hybridization. Scharffetter K, et al. **J Invest Dermatol** 1989 Sep;93(3):405–12

The effect of gas permeability of film dressings on wound environment and healing. Sirvio LM, et al. **J Invest Dermatol** 1989 Oct;93(4):528–31

Cellular changes during repair of a cryogenic spinal cord injury in the rat: an electron microscopic study. West NR, et al. **J Neuropathol Exp Neurol** 1989 Jan;48(1):94–108

Effects of heat and cold on the perineum after episiotomy/laceration. Hill PD. **J Obstet Gynecol Neonatal Nurs** 1989 Mar-Apr;18(2):124–9

Fibronectin in corneal wound healing. Ding M, et al. **J Ocul Pharmacol** 1988 Spring;4(1):75–91 (108 ref.)

Healing of cutaneous and mucosal wounds grafted with collagen-glycosaminoglycan/silastic bilayer membranes: a preliminary report. Bertolami CN, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):971–8

Early soft tissue ingrowth into porous block hydroxyapatite. Butts TE, et al. **J Oral Maxillofac Surg** 1989 May; 47(5):475–9

Role of mechanical loading in the progressive ossification of a fracture callus. Blenman PR, et al. **J Orthop Res** 1989; 7(3):398–407

Intramedullary bone repair and ingrowth into porous coated implants in the adult chicken: a histologic study and biochemical analysis of collagens. Brown CC, et al. **J Orthop Res** 1989;7(3):316–25

The effect of external fixation stiffness on early healing of transverse osteotomies. Gilbert JA, et al. **J Orthop Res** 1989;7(3):389–97

The repair of experimentally produced defects in rabbit articular cartilage by autologous chondrocyte transplantation. Grande DA, et al. **J Orthop Res** 1989; 7(2):208–18

Different effects of mechanical vibration on bone ingrowth into porous hydroxyapatite and fracture healing in a rabbit model. Usui Y, et al. **J Orthop Res** 1989;7(4):559–67

Minimal internal and external fixation in oblique lower extremity fractures: a report of five cases and description of technique. Mills RM. **J Orthop Trauma** 1988;2(3):250–6

The clinician's ability to evaluate the strength of healing fractures from plain radiographs. Panjabi MM, et al. **J Orthop Trauma** 1989;3(1):29–32

Repair of the wounded guinea pig tympanic membrane: organization of filamentous actin and spatial cellular reorganization. Weinberger JM, et al. **J Otolaryngol** 1988 Dec;17(7):352–8

Remodeling potential of long bones following angular osteotomies. Abraham E. **J Pediatr Orthop** 1989 Jan-Feb; 9(1):37–43

Transforming growth factor beta (TGF-beta) induces fibrosis in a fetal wound model. Krummel TM, et al. **J Pediatr Surg** 1988 Jul;23(7):647–52

Studies in fetal wound healing: III. Early deposition of fibronectin distinguishes fetal from adult wound healing. Longaker MT, et al. **J Pediatr Surg** 1989 Aug;24(8):799–805

Studies in fetal wound healing: I. A factor in fetal serum that stimulates deposition of hyaluronic acid. Longaker MT, et al. **J Pediatr Surg** 1989 Aug;24(8):789–92

Studies in fetal wound healing: II. A fetal environment accelerates fibroblast migration in vitro. Longaker MT, et al. **J Pediatr Surg** 1989 Aug;24(8):793–7; discussion 798

Granulation at the porta hepatis following hepatic portoenterostomy for biliary stresia: the healing of experimental hepatoenterostomy. Takemoto H, et al. **J Pediatr Surg** 1989 Mar;24(3):271–5

Effect of Colles' fracture malunion on carpal alignment. Dias JJ, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):303–5

Evaluation of tissue healing and adhesion formation after an intraabdominal amniotic membrane graft in the rat. Badawy SZ, et al. **J Reprod Med** 1989 Mar;34(3):198–202

Observations on planarian epithelization after wounding. Hori I. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):307–15

Incorporation of thymidine by fibroblasts: evidence for complex regulation by postsurgical macrophages. Fukasawa M, et al. **J Surg Res** 1988 Nov;45(5):460–6

Modulation of proline and glucosamine incorporation into tissue repair cells by peritoneal macrophages. Fukasawa M, et al. **J Surg Res** 1989 Feb;46(2):166–71

The mitogenic activity of peritoneal tissue repair cells: control by growth factors. Fukasawa M, et al. **J Surg Res** 1989 Jul;47(1):45–51

Arterial response to in vivo excimer laser irradiation [letter] Keon WJ, et al. **J Thorac Cardiovasc Surg** 1989 Sep; 98(3):456–7

Preoperative correlates of impaired wound healing after saphenous vein excision. Utley JR, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):147–9

Comparison of an occlusive and a semi-occlusive dressing and the effect of the wound exudate upon keratinocyte proliferation. Madden MR, et al. **J Trauma** 1989 Jul; 29(7):924–30; discussion 930–1

The effect of viable omentum on early bile leakage and healing of liver lacerations. Trooskin SZ, et al. **J Trauma** 1989 Jan;29(1):47–50

Optimal graft diameter: effect of wall shear stress on vascular healing. Binns RL, et al. **J Vasc Surg** 1989 Sep;10(3):326–37

Multisensor transcutaneous oximetric mapping to predict below-knee amputation wound healing: use of a critical Po2. Kram HB, et al. **J Vasc Surg** 1989 Jun;9(6):796–800

Noninvasive determination of healing of major lower extremity amputation: the continued role of clinical judgment. Wagner WH, et al. **J Vasc Surg** 1988 Dec; 8(6):703–10

Wound healing: relationship of wound closing tension to tensile strength in rats. Morin G, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):783–8

Comparison of wound healing between chopped mode-superpulse mode CO2 laser and steel knife incision. Ben-Baruch G, et al. **Lasers Surg Med** 1988;8(6):596–9

Mid-infrared erbium:YAG laser ablation of bone: the effect of laser osteotomy on bone healing. Nelson JS, et al. **Lasers Surg Med** 1989;9(4):362–74

Characterization and quantitation of wound matrix in the fetal rabbit. DePalma RL, et al. **Matrix** 1989 Jun; 9(3):224–31

Ingrowth of hyperplastic capillary sprouts into fibrin clots: further evidence in favor of the angiogenic hypothesis of repair and fibrosis. Beranek JT. **Med Hypotheses** 1989 Apr; 28(4):271–3

Growth factors involved in repair processes: an overview. Barnes D. **Methods Enzymol** 1988;163:707–15 (32 ref.)

Re-endothelialization stages at the microvascular anastomosis. Isogai N, et al. **Microsurgery** 1988;9(2):87–94

Fibronectin is overproduced by keloid fibroblasts during abnormal wound healing. Babu M, et al. **Mol Cell Biol** 1989 Apr;9(4):1642–50

Subcuticular, continuous and mechanical skin closure: cosmetic results of a prospective randomized trial. Zwart HJ, et al. **Neth J Surg** 1989 Jun;41(3):57–60

Effects of TPN on wound healing. **Nutr Rev** 1987 Nov; 45(11):331–2 (9 ref.)

Wound healing in an animal model of glaucoma fistulizing surgery in the rabbit. Miller MH, et al. **Ophthalmic Surg** 1989 May;20(5):350–7

Long-term healing of the central cornea after photorefractive keratectomy using an excimer laser. Marshall J, et al. **Ophthalmology** 1988 Oct;95(10):1411–21

Excimer laser trephination in penetrating keratoplasty. Morphologic features and wound healing. Serdarevic ON, et al. **Ophthalmology** 1988 Apr;95(4):493–505

The biomechanics and biology of internal fixation using plates

and nails. Perren SM. **Orthopedics** 1989 Jan;12(1):21–34
Postoperative necrotizing fasciitis in children. Farrell LD, et al. **Pediatrics** 1988 Dec;82(6):874–9 (21 ref.)
Taspine is the cicatrizant principle in Sangre de Grado extracted from Croton lechleri. Vaisberg AJ, et al. **Planta Med** 1989 Apr;55(2):140–3
Analysis of fibrogenic processes in denervated tissues of spinal cord injury patients. Diegelmann RF, et al. **Plast Reconstr Surg** 1989 Feb;83(2):309–14
Identification of the collagen-producing cells in healing flexor tendons. Garner WL, et al. **Plast Reconstr Surg** 1989 May;83(5):875–9
Aloe vera and burn wound healing [letter] Kaufman T, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1075–6
Synthesis of surgical wounds without skin suture [letter] Petroianu A. **Plast Reconstr Surg** 1988 Nov;82(5):919–20
Promotion of wound repair in old mice by local injection of macrophages. Danon D, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2018–20
Synthesis and characterization of a model extracellular matrix that induces partial regeneration of adult mammalian skin. Yannas IV, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):933–7
The macrophages: effector cell wound repair. Knighton DR, et al. **Prog Clin Biol Res** 1989;299:217–26 (28 ref.)
Assay of radiation effects in mouse skin as expressed in wound healing. Gorodetsky R, et al. **Radiat Res** 1988 Oct; 116(1):135–44
New techniques of analyzing the healing process of artificial vascular grafts, transmural vascularization, and endothelialization. Kogel H, et al. **Res Exp Med (Berl)** 1989; 189(1):61–8
Collagen deposition during wound repair in rat gingiva. Grevstad HJ. **Scand J Dent Res** 1988 Dec;96(6):561–8
Endoscopic healing stages of peptic ulcer: experience at Ife University Teaching Hospitals Complex. Olu Arigbabu A. **Scand J Gastroenterol Suppl** 1986;124:227–34
Evaporative water loss and epidermis regeneration in partial-thickness wounds dressed with a fluid-retaining versus a clot-inducing wound covering in guinea pigs. Jonkman MF, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):29–34
Skin deep. A recombinant growth factor hastens wound healing. Rusting R. **Sci Am** 1989 Sep;261(3):38
Radiographic appearance of healed extremity fractures in children with spinal cord lesions. Hyre HM, et al. **Skeletal Radiol** 1989;18(3):189–92
Healing potential of the anulus fibrosus. Hampton D, et al. **Spine** 1989 Apr;14(4):398–401
Biomechanics of healing of posterior cervical spinal injuries in a canine model. Panjabi MM, et al. **Spine** 1988 Jul; 13(7):803–7
Quantitative evaluation of stiffness of commercial suture materials. Chu CC, et al. **Surg Gynecol Obstet** 1989 Mar; 168(3):233–8
A technique for early wound management using polypropylene mesh reconstruction of the abdominal wall. Johnson PC, et al. **Surg Gynecol Obstet** 1988 Nov; 167(5):435–6
Absorbable versus permanent mesh in abdominal operations. Tyrell J, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):227–32
Wound healing in nude mice: a study on the regulatory role of lymphocytes in fibroplasia. Barbul A, et al. **Surgery** 1989 Jun;105(6):764–9
Open wound drainage versus wound excision in treating the modern assault rifle wound. Fackler ML, et al. **Surgery** 1989 May;105(5):576–84 (40 ref.)
Spontaneous closure of a traumatic interventricular septal defect following a penetrating chest injury. Bryan AJ, et al. **Thorac Cardiovasc Surg** 1988 Jun;36(3):172–3
New observations on the healing process in prosthetic substitution of large veins by microporous grafts—animal experiments. Kogel H, et al. **Thorac Cardiovasc Surg** 1989 Apr;37(2):119–24
Which renal lacerations will heal satisfactorily with nonsurgical management? Cass AS, et al. **Urology** 1989 May;33(5):367–70
Intestinal healing and methods of anastomosis. Pascoe JR, et al. **Vet Clin North Am Equine Pract** 1989 Aug; 5(2):309–33 (50 ref.)
Bandaging and wounds [letter] Lansdown AB. **Vet Rec** 1988 Jul 16;123(3):87
The effect of epidural and general anesthesia on the healing of colonic anastomoses. Blass CE, et al. **Vet Surg** 1987 Jan–Feb;16(1):75–9
Comparison of adhesive polyurethane membrane and polypropylene sutures for closure of skin incisions in cats. Court MH, et al. **Vet Surg** 1989 May–Jun;18(3):211–5
The effects of plaster of Paris and autogenous cancellous bone on the healing of cortical defects in the femurs of dogs. Elkins AD, et al. **Vet Surg** 1988 Mar–Apr;17(2):71–6
Cutaneous wound healing in Ehlers–Danlos syndrome. Freeman LJ, et al. **Vet Surg** 1989 Mar–Apr;18(2):88–96
The effect of exercise on the healing of articular cartilage defects in the equine carpus. French DA, et al. **Vet Surg** 1989 Jul–Aug;18(4):312–21
Effect of fascial closure technique on strength of healing abdominal incision in the dog. A biomechanical study. Rosin E, et al. **Vet Surg** 1987 Jul–Aug;16(4):269–72
Healing of mandibular body osteotomies after plate and intramedullary pin fixation. Roush JK, et al. **Vet Surg** 1989 May–Jun;18(3):190–6
The effects of beveling the margins of articular cartilage defects in immature dogs. Rudd RG, et al. **Vet Surg** 1987 Sep–Oct;16(5):378–83
A comparison of steady state and transient thermography techniques using a healing tendon model. Stein LE, et al. **Vet Surg** 1988 Mar–Apr;17(2):90–6
Blood flow and tissue reaction at skin wound closures. Nagamachi Y. **World J Surg** 1988 Oct;12(5):635–40
The prognosis of cranioplasty following large craniectomy in children. Gruber R, et al. **Z Kinderchir** 1988 Dec; 43(6):375–83
Restoration of the rat nasal septum and turbinates after damage by intranasal electrocoagulation. Immel HR, et al. **Z Versuchstierkd** 1988;31(5):233–40
[Fractures in children] Marti RK, et al. **Tijdschr Kindergeneeskd** 1988 Dec;56(6):275–8 (Eng. Abstr.) (Dut)
[The effect of magnetic fields on scar formation of experimental wounds] Pierrefiche G, et al. **Acta Belg Med Phys** 1988 Jul–Sep;11(3):137–41 (Fre)
[Capillaroscopy and wound healing] Dumas JR, et al. **Ann Chir Plast Esthet** 1989;34(3):273–4 (Eng. Abstr.) (Fre)
[Dura mater healing after repair with aponeurotic plasty. Comparison of results between classical sutures and fibrin adhesive glue. Fibrin adhesive in frontobasal injuries. An experimental study] Dehesdin D, et al. **Neurochirurgie** 1988; 34(5):311–4 (Eng. Abstr.) (Fre)
[Infectious complications, delayed wound healing and inflammatory syndromes as late complications of cardiovascular surgery] Chevalier P, et al. **Presse Med** 1988 Oct 29;17(38):2013–6 (Eng. Abstr.) (Fre)
[The effect of cigarette smoking on the cicatrization of duodenal ulcers in patients treated with cimetidine. The role of acid hypersecretion] Ligny G, et al. **Rev Med Brux** 1989 Jun;10(6):233–8 (Eng. Abstr.) (Fre)
[Percutaneous Goetze cerclage in torsion fractures of the tibia. A computer-assisted follow-up of 186 cases] Habernek H, et al. **Aktuel Traumatol** 1989 Apr;19(2):73–6 (Eng. Abstr.) (Ger)
[Spongiosa formation in plate osteosynthesis—a comparative animal experiment study of current and auto-compression plates using the Zespol principle] Hopf T, et al. **Aktuel Traumatol** 1989 Apr;19(2):65–72 (Eng. Abstr.) (Ger)
[Late results of surgical management of medial femoral neck fractures by spongiosa traction screws] Imhoff M, et al. **Aktuel Traumatol** 1988 Dec;18(6):265–7 (Eng. Abstr.) (Ger)
[Rotational deformities following pediatric femoral shaft fracture] Resch H, et al. **Aktuel Traumatol** 1989 Apr; 19(2):77–81 (Eng. Abstr.) (Ger)
[Stability of the spine following osteosynthesis with internal fixation. Case report] Schwarz N, et al. **Aktuel Traumatol** 1989 Apr;19(2):61–2 (Eng. Abstr.) (Ger)
[The healing of osteotomies of the lower jaw and the adaptation of the masticatory muscles after miniplate osteosynthesis in rabbits. I. Radiologic and histological evaluation of the lower jaw] Härtel J, et al. **Anat Anz** 1988; 167(1):29–34 (Eng. Abstr.) (Ger)
[Osteotomy healing of the lower jaw and the adaptation of the masticatory muscles after miniplate osteosynthesis in rabbits. II. Response pattern of the masticatory muscles (M. masseter)] Herrmann V, et al. **Anat Anz** 1988; 167(2):87–104 (Eng. Abstr.) (Ger)
[DNA synthesis of epidermal basal cells as an indicator of the age of the wound] Oehmichen M, et al. **Beitr Gerichtl Med** 1988;46:271–6 (Eng. Abstr.) (Ger)
[Scaphoid bone fracture of the hand—a treatment problem?] Belusa M, et al. **Beitr Orthop Traumatol** 1988 Dec; 35(12):621–8 (Eng. Abstr.) (Ger)
[Monteggia fracture in childhood] Vinz H. **Beitr Orthop Traumatol** 1989 Apr;36(4):153–68 (Eng. Abstr.) (Ger)
[Physical therapy within the scope of treatment of fractures in children—recommendations of the Study Group of Pediatric Traumatology] Vinz H, et al. **Beitr Orthop Traumatol** 1988 Dec;35(12):629–33 (Eng. Abstr.) (Ger)
[Primary suture of older and contaminated wounds. A prospective clinical study] Bongartz W, et al. **Chirurg** 1988 Nov;59(11):767–70 (Eng. Abstr.) (Ger)
[Morbidity of Z-plasty in the treatment of pilonidal sinus] Tschudi J, et al. **Chirurg** 1988 Jul;59(7):486–90 (Eng. Abstr.) (Ger)
[Hypothetical mechanisms of action of electrotherapy of herpes diseases] Ammer K, et al. **Dermatol Monatsschr** 1988;174(9):531–5 (30 ref.) (Eng. Abstr.) (Ger)
[Nd:YAG laser effects on the anterior capsule of rabbit lenses] Weber U, et al. **Fortschr Ophthalmol** 1988; 85(4):394–5 (Eng. Abstr.) (Ger)
[Scanning electron microscopy studies following two-stage tendon and tendon sheath reconstruction in experimental flexor tendon injuries] Biró V, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):33–6 (Eng. Abstr.) (Ger)
[The motion stable intraosseous wire suture—a prospective study] Brüser P, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):10–7 (Eng. Abstr.) (Ger)
[Effects of hyperbaric oxygen on fresh burn wounds] Kaiser W, et al. **Handchir Mikrochir Plast Chir** 1989 May; 21(3):158–63 (Eng. Abstr.) (Ger)
[Results following primary nerve sutures] Mailänder P, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):342–3 (Eng. Abstr.) (Ger)
[The fate of the polytraumatized patient with a "minor injury" of the hand] Mark G. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):51–4 (Eng. Abstr.) (Ger)
[Unusual healing of tendon sheath tuberculosis by intercurrent streptococcal phlegmon] Pfeiffer KM. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):218–9 (Eng. Abstr.) (Ger)
[Improvement of perineal wound healing following rectum amputation by omentum flap] John H, et al. **Helv Chir Acta** 1989 Jan;55(5):673–7 (Eng. Abstr.) (Ger)
[The value of sonography in assessing bone transplants—an experimental study] Reith HB, et al. **Langenbecks Arch Chir** 1989;374(3):146–9 (Eng. Abstr.) (Ger)
[Ultrasound control of spongiosa transplant—support of radiologic diagnosis] Reith HB, et al. **Langenbecks Arch Chir** 1989;374(1):39–45 (Eng. Abstr.) (Ger)
[Experimental studies of stabilization of refixation following median sternotomy] Schade K, et al. **Langenbecks Arch Chir** 1989;374(1):20–4 (Eng. Abstr.) (Ger)
[Collagen antibodies and their effect on wound healing] Struck H, et al. **Langenbecks Arch Chir** 1989;374(1):12–9 (Eng. Abstr.) (Ger)
[Early phase of healing of anastomoses with special reference to peritonitis and ischemia] Wilker D, et al. **Langenbecks Arch Chir** 1988;373(4):217–21 (Eng. Abstr.) (Ger)
[Mini-plate osteosynthesis in zygomatic fractures—restoration or alternative?] Desloovere C, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):634–8 (Eng. Abstr.) (Ger)
[The course of laser-induced burns in irradiated rats] Gubareva AV, et al. **Radiobiol Radiother (Berl)** 1988; 29(4):435–41 (Eng. Abstr.) (Ger)
[Hemorrhoid excision with primary wound closure] Gemsenjäger E. **Schweiz Med Wochenschr** 1989 Feb 25; 119(8):259–61 (Eng. Abstr.) (Ger)
[A case from practice (131). Patient: Mr. H.J. S., born 1962, clerk] Suter F. **Schweiz Rundsch Med Prax** 1989 Feb 21; 78(8):200–1 (Ger)
[The use of collagen fasciae and fibrin adhesive for supporting wound healing in skin defects with large surfaces] Hufnagel H, et al. **Tierarztl Prax** 1989;17(2):163–5 (Eng. Abstr.) (Ger)
[Conservative treatment of scaphoid bone fracture of the wrist] Baumeister HH, et al. **Unfallchirurg** 1989 Apr; 92(4):175–9 (Eng. Abstr.) (Ger)
[Ability to transport oxygen of temporary full and split-skin transplants] Bäumer F, et al. **Unfallchirurg** 1989 Apr; 92(4):206–8 (Eng. Abstr.) (Ger)
[Prognosis and therapy of closed, distal, intra-articular fractures of the tibia] Breitfuss H, et al. **Unfallchirurg** 1988 Dec;91(12):557–64 (Eng. Abstr.) (Ger)
["Stable" fracture of the ulna shaft. Biomechanics and therapeutic consequences] Ekkernkamp A, et al. **Unfallchirurg** 1988 Dec;91(12):551–6 (Eng. Abstr.) (Ger)
[Bone screw osteosynthesis of dens fractures. Technical surgical aspects and results] Etter C, et al. **Unfallchirurg** 1989 May;92(5):220–6 (Eng. Abstr.) (Ger)
[Significance of the fracture type for treatment of femoral neck fractures] Fekete K, et al. **Unfallchirurg** 1989 May; 92(5):229–33 (Eng. Abstr.) (Ger)
[Results of the treatment of clavicular pseudarthrosis] Koelliker F, et al. **Unfallchirurg** 1989 Apr;92(4):164–8 (Eng. Abstr.) (Ger)
[Minimal osteosynthesis of fractures of the head of the humerus. Indications, technic, results] Siebler G, et al. **Unfallchirurg** 1989 Apr;92(4):169–74 (Eng. Abstr.) (Ger)
[Ultrasound sonography in the diagnosis and follow-up of Achilles tendon rupture] Thermann H, et al. **Unfallchirurg** 1989 Jun;92(6):266–73 (Eng. Abstr.) (Ger)
[Comparison of the value of magnetic resonance tomography and computerized tomography in the follow-up of augmentation-plasties with carbon fiber ligaments of the anterior cruciate ligament] Sim E, et al. **Unfallchirurgie** 1989 Jun;15(3):152–61 (Eng. Abstr.) (Ger)
[Surgical treatment of forearm shaft fracture] Zirknitzer J, et al. **Unfallchirurgie** 1989 Jun;15(3):122–8 (Eng. Abstr.) (Ger)
[Paul Leopold Friedrich—the founder of primary wound management] Luther B. **Z Arztl Fortbild (Jena)** 1989; 83(5):275–6 (Ger)
[Experimental animal studies of the healing of burn wounds with the use of local antimicrobials and hyperbaric O2 therapy] Kaiser W. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(1):27–37 (Eng. Abstr.) (Ger)
[Suture technics] Diem EG. **Z Hautkr** 1988;63 Suppl 2:11–2 (3 ref.) (Eng. Abstr.) (Ger)
[Sclerosing lipogranuloma of the male genitals] Dimitrowa J, et al. **Z Hautkr** 1989 Mar 15;64(3):223–7 (Eng. Abstr.) (Ger)
[Wound dressings following dermabrasion] Friederich HC. **Z Hautkr** 1988;63 Suppl 2:22–4 (Eng. Abstr.) (Ger)
[Free skin transplants] Müller RP. **Z Hautkr** 1988;63 Suppl

2:35–40 (0 ref.) (Eng. Abstr.) (Ger)
[Moist wound treatment with ointment dressings in surface skin defects] Petres J. **Z Hautkr** 1988;63 Suppl 2:25–9 (10 ref.) (Eng. Abstr.) (Ger)
[Pedicled flap–plasties] Petres J. **Z Hautkr** 1988;63 Suppl 2:30–4 (20 ref.) (Eng. Abstr.) (Ger)
[Long–term experiences with lyophilized soft dura (Lyodura S) as a connective tissue substitute in pediatric surgery] Heiming E, et al. **Z Kinderchir** 1989 Apr;44(2):67–71 (Eng. Abstr.) (Ger)
[Preparation and experimental studies with an allogenic tissue adhesive during the addition of a dipeptide which promotes wound healing] Matthes G, et al. **Z Med Lab Diagn** 1989; 30(3):148–53 (Eng. Abstr.) (Ger)
[Partial resection of the ulna as a diaphyseal bone defect model in the dog] Schwarz N, et al. **Z Orthop** 1989 Mar–Apr;127(2):222–7 (Eng. Abstr.) (Ger)
[The significance of collagen in determining the age of a wound] Eisenmenger W, et al. **Z Rechtsmed** 1988; 100(2–3):79–100 (Eng. Abstr.) (Ger)
[The informative aspects of the wound surface for determining vitality and wound age in skin cuts] Lasarov I. **Z Rechtsmed** 1989;102(2–3):149–59 (Eng. Abstr.) (Ger)
[Enzyme activities of leukocytes in skin cut wounds with various wound ages] Lasarov I. **Z Rechtsmed** 1988; 100(2–3):157–64 (Eng. Abstr.) (Ger)
[Conservative treatment of clavicular fractures] Hoofwijk AG, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988; 81(3):151–6 (Ger)
[Bone screw osteosynthesis of femoral neck fractures with reference to the dynamic hip screw] Schulze CG, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(3):169–73 (Eng. Abstr.) (Ger)
[Skin transplantation or artificial skin replacement] Berger A, et al. **Zentralbl Chir** 1988;113(12):751–7 (10 ref.) (Eng. Abstr.) (Ger)
[Cryosurgery of the healthy rat liver] Earnst M, et al. **Zentralbl Chir** 1988;113(17):1105–10 (Eng. Abstr.) (Ger)
[Wound healing, scar formation and the timing of the correction] Härtel P. **Zentralbl Chir** 1988;113(12):745–50 (7 ref.) (Eng. Abstr.) (Ger)
[Spontaneous bridging of an extensive post–traumatic bone defect] Horch R, et al. **Zentralbl Chir** 1989;114(4):257–62 (Ger)
[Conservative and surgical therapy of humerus fractures of the collum chiruricum] Imhoff M, et al. **Zentralbl Chir** 1989;114(4):228–37 (Eng. Abstr.) (Ger)
[Healing without complications of a traumatic hip dislocation with epiphyseolysis] Sántha E, et al. **Zentralbl Chir** 1989; 114(12):793–6 (Ger)
[Conservative management versus osteosynthesis in the treatment of tibial shaft fractures] Vara–Thorbeck R, et al. **Zentralbl Chir** 1989;114(12):757–65 (Eng. Abstr.) (Ger)
[Efficacy of interlocking nailing in fractures of the leg] Zeumer B, et al. **Zentralbl Chir** 1989;114(6):357–70 (Eng. Abstr.) (Ger)
[Endogenous hypercalcitoninemia and bone repair] Naitana S, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1103–8 (Eng. Abstr.) (Ita)
[Experimental evaluation of the bone healing process in rabbits treated with hyperbaric oxygenation therapy and with the Ilizarov method of fracture fixation] Cadlolo R, et al. **Chir Organi Mov** 1988 Oct–Dec;73(4):363–8 (Eng. Abstr.) (Ita)
[Cellular migration and morphological changes in corneal endothelial wound healing process] Inoda S. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):752–61 (Eng. Abstr.) (Jpn)
[A new wound healing model using tissue cultured corneal endothelium. 1. Quantitative study of healing process] Miyata K, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan; 93(1):9–15 (Eng. Abstr.) (Jpn)
[Wound healing, blood coagulation and fibrinolysis during operations involving gastric cancer surgery] Gando S, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):59–63 (Eng. Abstr.) (Jpn)
[Healing of an external velour warp–knit Dacron vascular prosthesis] Usui Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1716–21 (Eng. Abstr.) (Jpn)
[Fibroblasts and mononuclear phagocytes system in the host defense and wound healing of the cornea] Nishida T. **Nippon Rinsho** 1989 Mar;47(3):675–80 (Jpn)
[Changes in amine contents and regulating enzyme activity of gastric mucosa during the healing process of acetic acid induced ulcer in rats] Omata T, et al. **Nippon Yakurigaku Zasshi** 1989 Mar;93(3):113–8 (Eng. Abstr.) (Jpn)
[Skin closure. A prospective randomized study] Lundblad R, et al. **Tidsskr Nor Laegeforen** 1989 Apr 30; 109(12):1307–9 (Eng. Abstr.) (Nor)
[Evaluation of the condition of the uterine scar after cesarean section] Mareeva LS, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):37–8 (Eng. Abstr.) (Rus)
[Cytomorphologic characteristics of the regeneration of endometrial epithelium after diagnostic curettage and uterine hemorrhage] Novik VI, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):64–6 (Rus)
[Morphological characteristics of the healing of burn wounds covered by an activated–charcoal tissue dressing] Sologub VK, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):360–3 (Eng. Abstr.) (Rus)
[Evaluation of the healing of skin wounds inflicted by steel scalpels with various degrees of sharpness] Izmailov GA, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):75–8 (Eng. Abstr.) (Rus)
[Study of regional blood flow in the prognosis of the process of healing of postoperative wounds] Kuleshov EV, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):78–81 (Eng. Abstr.) (Rus)
[Complex evaluation of the healing of intestinal anastomoses in the early postoperative period] Vorob'ev GI, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):47–51 (Eng. Abstr.) (Rus)
[Experience with the use of methods of improving the healing of surgical wounds in children] Buakmelev VA. **Klin Khir** 1989;(6):51–2 (Eng. Abstr.) (Rus)
[Experimental substantiation of the early use of applied sorption in treating wounds] Eretskaia EV, et al. **Klin Khir** 1989;(1):15–7 (Eng. Abstr.) (Rus)
[Functional morphology of the burn wound in the process of reparative regeneration] Neulybin VI, et al. **Klin Khir** 1989;(3):39–41 (Eng. Abstr.) (Rus)
[Reasons for nonhealing and ulcer recurrence after proximal vagotomy and pyloroplasty] Sibul' UF, et al. **Klin Khir** 1988;(8):58 (Rus)
[Complications of wound healing following appendectomy in children] Sleptsov VP, et al. **Klin Khir** 1989;(6):62 (Rus)
[Indicators of cellular and humoral immunity during the process of healing of stomach ulcer] Sheptulin AA, et al. **Klin Med (Mosk)** 1989 Jun;67(6):40–6 (Eng. Abstr.) (Rus)
[Characteristics of bone regeneration after osteosynthesis using electrets] Rutskii VV, et al. **Ortop Travmatol Protez** 1988 Dec;(12):1–6 (Eng. Abstr.) (Rus)
[Prediction of the course of the wound process by the inhibition of mitochondrial respiration by blood serum in an experiment] Eliseeva Sv, et al. **Patol Fiziol Eksp Ter** 1988 May–Jun;(3):45–8 (Eng. Abstr.) (Rus)
[A method of microautotransplantation for healing deep and extensive skin wounds] Losev NI, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug;(4):75–6 (Rus)
[Changes in the content of transferrin, ceruloplasmin, iron, and copper in blood serum and granulation tissue in wound healing in an experiment] Mamedov LA, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug;(4):58–61 (Eng. Abstr.) (Rus)
[Control of wound developments in acute suppurative–inflammatory diseases of soft tissues] Buianov VM, et al. **Sov Med** 1989;(3):103–5 (Rus)
[Characteristics of wound developments in anaerobic non–clostridial infections of soft tissues] Kuleshov SE, et al. **Sov Med** 1989;(3):105–11 (Rus)
[A method of quantitative evaluation of inflammatory–regenerative reactions in clinical traumatology] Okhotskii VP, et al. **Sov Med** 1988;(5):34–5 (Eng. Abstr.) (Rus)
[The role of microcirculation in tissue healing following local plastic surgery in the combined treatment of malignant tumors of the maxillofacial area] Dmitrieva BS, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):36–8 (Eng. Abstr.) (Rus)
[Endoscopic and morphologic criteria of the healing process in peptic ulcer] Krichmar IM, et al. **Vestn Khir** 1989 Jan; 142(1):139–42 (45 ref.) (Rus)
[Regeneration of the alveolar tree after suppurative–destructive diseases of the lungs] Muromskii IuA, et al. **Vestn Khir** 1988 Jun;140(6):17–24 (Eng. Abstr.) (Rus)
[Effect of modeled nonspecific adaptive reactions on bone regeneration] Tkachenko SS, et al. **Vestn Khir** 1989 Mar; 142(3):60–2 (Rus)
[Healing of the anastomoses in restorative–reconstructive surgery of the large intestine] Vorob'ev GI, et al. **Vestn Khir** 1989 Jan;142(1):77–81 (Eng. Abstr.) (Rus)
[Characteristics of postoperative healing in patients with stenoses of the hollow organs of the neck (clinico–morphologic study)] Tarasov DI, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):70–7 (Eng. Abstr.) (Rus)
[Hygienic study of surgical wound healing in patients operated on during 1976–1981 after the reconstruction of the First Surgical Clinic of Comenius University Medical School in Bratislava] Gybel'ová T, et al. **Rozhl Chir** 1988 Dec;67(12):829–35 (Eng. Abstr.) (Slo)
[Experimental study on the process of repair–healing of the flexor system in the growing chick] Ayala Montoro J, et al. **An Esp Pediatr** 1988 Oct;29(4):274–8 (Eng. Abstr.) (Spa)
[Action of oxidated and regenerated cellulase on colic scarring: experimental study] Queralt Solari CB, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):231–6 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Tissue repair and IGF–I. Skottner A, et al. **Acta Paediatr Scand Suppl** 1988;347:110–2 (21 ref.)
Effects of phenylbutazone and indomethacin on the post–operative course following experimental orthopaedic surgery in dogs. Mbugua SW, et al. **Acta Vet Scand** 1989; 30(1):27–35
Topical growth factors and wound contraction in the rat: Part II. Platelet–derived growth factor and wound contraction in normal and steroid–impaired rats. Engrav LH, et al. **Ann Plast Surg** 1989 Sep;23(3):245–8
Topical growth factors and wound contraction in the rat: Part I. Literature review and definition of the rat model. Richey KJ, et al. **Ann Plast Surg** 1989 Aug;23(2):159–65 (46 ref.)
Topical tretinoin and epithelial wound healing. Hung VC, et al. **Arch Dermatol** 1989 Jan;125(1):65–9
Hyaluronan improves the healing of experimental tympanic membrane perforations. A comparison of preparations with different rheologic properties. Laurent C, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec; 114(12):1435–41
Dakin's solution in wound treatment [letter] **Arch Surg** 1988 Dec;123(12):1525–6
Effect of PGE2 on regional cortico–endosteal remodeling in beagles with fractured ribs: a histomorphometric study. Shih MS, et al. **Bone Miner** 1987 Oct;3(1):27–34
Non–steroidal anti–inflammatory agents in the management of Colles' fractures. Davis TR, et al. **Br J Clin Pract** 1988 May;42(5):184–9
Effects of inhibition of intercellular communication on repair of damage induced by ionizing radiation. Madhoo J, et al. **Br J Radiol** 1989 Mar;62(735):281–2
Zinc chloride spray—magnesium hydroxide ointment dual topical regimen in the treatment of obstetric and gynecologic incisional wounds. Pastorfide GB, et al. **Clin Ther** 1989 Mar–Apr;11(2):258–63
Gross factors in treatment of nonhealing corneal ulcers and recurrent erosions. Singh G, et al. **Cornea** 1989;8(1):45–53
Recombinant transforming growth factor beta accelerates incisional wound healing. McGee GS, et al. **Curr Surg** 1989 Mar–Apr;46(2):103–6
Hyaluronate in healing of corneal alkali wound in the rabbit. Chung JH, et al. **Exp Eye Res** 1989 Apr;48(4):569–76
Effect of tetraprenylacetone, a novel anti–ulcer agent, on healing process of ethanol–induced gastric injury in rat. Terano A, et al. **Gastroenterol Jpn** 1989 Feb;24(1):81
Delayed healing of acetic acid–induced gastric ulcers in rats by indomethacin. Wang JY, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):393–402
Cyclosporine and wound healing: differential effects on tensile strength, granuloma weight, wound contraction and epithelization period in rats. Holla RK, et al. **Indian J Exp Biol** 1988 Nov;26(11):869–73
Zinc incorporation reverses suppressant effect of ibuprofen on wound healing. Kumar A, et al. **Indian J Exp Biol** 1988 Jun;26(6):483–5
Interactions of cyclosporine and prednisolone on wound healing in male rats. Sequeira RP, et al. **Indian J Exp Biol** 1988 Dec;26(12):961–4
Wound healing profile of copper salts of enfenamic acid & ibuprofen. Rao CM, et al. **Indian J Med Res** 1988 Sep; 88:273–7
Effects of enfenamic acid and its zinc salt on wound–healing. Rao CM, et al. **Indian J Physiol Pharmacol** 1988 Jan–Mar; 32(1):61–6
Wound healing profile of Septilin. Udupa AL, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar;33(1):39–42
The dipeptide Lys–Pro restores the diminished wound healing following treatment with anti–T–helper cell monoclonal antibody. Kohl A, et al. **Int J Immunopharmacol** 1989;11(3):237–40
The effect of antifibrinolytic agents on wound healing. Björlin G, et al. **Int J Oral Maxillofac Surg** 1988 Aug; 17(4):275–6
Failure of somatostatin or an analog to promote closure of end pancreatic fistulae. Miller BM, et al. **Int J Pancreatol** 1989 Feb;4(1):65–72
Growth factors bFGF and TGB beta accelerate the rate of wound repair in normal and in diabetic rats. Broadley KN, et al. **Int J Tissue React** 1988;10(6):345–53
The effects of oxygen free radicals on wound healing. Foschi D, et al. **Int J Tissue React** 1988;10(6):373–9
Influence of an epidermal cell extract on skin healing and scar formation. Silver IA, et al. **Int J Tissue React** 1988; 10(6):381–5
The role of hyaluronic acid in inflammation and wound healing. Weigel PH, et al. **Int J Tissue React** 1988; 10(6):355–65
Corneal endothelial wound closure in vitro. Effects of EGF and/or indomethacin. Joyce NC, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1548–59
Growth factors and their promising future. Gills JP, et al. **J Am Optom Assoc** 1989 Jun;60(6):442–5 (7 ref.)
Aloe vera and gibberellin. Anti–inflammatory activity in diabetes. Davis RH, et al. **J Am Podiatr Med Assoc** 1989 Jan;79(1):24–6
Fibronectin on excimer laser and diamond knife incisions. Keates RH, et al. **J Cataract Refract Surg** 1989 Jul; 15(4):404–8
Growth factors in wound healing. Single and synergistic effects on partial thickness porcine skin wounds. Lynch SE, et al. **J Clin Invest** 1989 Aug;84(2):640–6
Effect of an aldose reductase inhibitor, CT–112, on healing of the corneal epithelium in galactose–fed rats. Awata T, et al. **J Ocul Pharmacol** 1988 Fall;4(3):195–201
Growth factor effects on corneal wound healing. Burstein NL. **J Ocul Pharmacol** 1987 Fall;3(3):263–77 (89 ref.)
Diclofenac and enolicam as ocular anti–inflammatory drugs in rabbit corneal wound model. Kulkarni P, et al.

J Ocul Pharmacol 1986 Spring;2(2):171–5
Review: pharmacologic control of wound healing in glaucoma filtration surgery. Tahery MM, et al. J Ocul Pharmacol 1989 Summer;5(2):155–79 (233 ref.)
Toxic effects of topically administered Betagan, Betoptic, and Timoptic on regenerating corneal epithelium. Trope GE, et al. J Ocul Pharmacol 1988 Winter;4(4):359–66
Effects of steroidal and non-steroidal anti-inflammatory agents on corneal wound healing. Waterbury L, et al. J Ocul Pharmacol 1987 Spring;3(1):43–54
Effect of hyaluronic acid/chondroitin sulfate on healing of full-thickness tendon lacerations in rabbits. Meyers SA, et al. J Orthop Res 1989;7(5):683–9
Calcitonin and fracture healing. An experimental study on rats. Paavolainen P, et al. J Orthop Res 1989;7(1):100–6 (28 ref.)
Mechanical effects of intramedullary acrylic cement on osteotomy healing in rats. Reikerås O, et al. J Orthop Trauma 1988;2(3):218–21
Healing of a malignant gastric ulcer with cimetidine. Taylor TV, et al. J R Coll Surg Edinb 1988 Dec;33(6):339–40
Epidermal growth factor (EGF) prevents methylprednisolone-induced inhibition of wound healing. Lasto M, et al. J Surg Res 1989 Oct;47(4):354–9
Chitosan: effects on wound healing in urogenital tissue: preliminary report. Bartone FF, et al. J Urol 1988 Nov; 140(5 Pt 2):1134–7
Antacids and drug trials for duodenal ulcer [letter] Prizont R, et al. Lancet 1989 Apr 22;1(8643):896
Realization of spontaneous healing function by carnosine. Nagai K, et al. Methods Find Exp Clin Pharmacol 1988 Aug;10(8):497–507 (16 ref.)
Preliminary experience with topical phenytoin in wound healing in a war zone. el Zayat SG. Milit Med 1989 Apr; 154(4):178–80
Enhancement of wound healing by topical treatment with epidermal growth factor [see comments] Brown GL, et al. N Engl J Med 1989 Jul 13;321(2):76–9. Comment in: N Engl J Med 1989 Jul 13;321(2):111–2
Enhancement of wound healing by growth factors [editorial; comment] Hunt TK, et al. N Engl J Med 1989 Jul 13; 321(2):111–2. Comment on: N Engl J Med 1989 Jul 13;321(2):76–9
Biological activities of chlorophyll derivatives. Chernomorsky SA, et al. N J Med 1988 Aug;85(8):669–73 (85 ref.)
Effects of aminoproprionitrile on glaucoma filter blebs in rabbits. Fourman S. Ophthalmic Surg 1988 Sep;19(9):649–52
The effect of systemic isotretinoin on wound contraction in guinea pigs. Arboleda B, et al. Plast Reconstr Surg 1989 Jan;83(1):118–21
The evaluation of effects of selected medicaments in healing of claw wounds in dairy cattle. Szymonis-Szymanowski W. Pol Arch Weter 1987;27(2–3):61–73
Transforming growth factor beta reverses the glucocorticoid-induced wound-healing deficit in rats: possible regulation in macrophages by platelet-derived growth factor. Pierce GF, et al. Proc Natl Acad Sci U S A 1989 Apr;86(7):2229–33
Effects of compound 48/80 and exogenous histamine on wound healing in mice. Yoshida S, et al. Proc Soc Exp Biol Med 1989 May;191(1):90–2
Reversal of Adriamycin-impaired wound healing by transforming growth factor-beta. Curtsinger LJ, et al. Surg Gynecol Obstet 1989 Jun;168(6):517–22
Inhibition of wound repair by thymic hormones. Barbul A, et al. Surgery 1989 Aug;106(2):373–6; discussion 376–7
Selective effects of tumor necrosis factor-alpha on wound healing in rats. Steenfos HH, et al. Surgery 1989 Aug; 106(2):171–5; discussion 175–6
Cyclosporine A impairs wound healing of ureterocystoneostomy in rats. Scanning electron microscopic examination. Recker F, et al. Urol Res 1989; 17(1):21–6
Cyclosporine (Sandimmune) and wound healing. Ryffel B. Urol Res 1989;17(1):27
Effects of chlorhexidine diacetate and povidone-iodine on wound healing in dogs. Sanchez IR, et al. Vet Surg 1988 Nov-Dec;17(6):291–5
[The role of inhibitors of thromboxane and prostaglandin on healing of deep partial thickness burns] Wang SL. Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Jun;4(2):148–51 (30 ref.) (Chi)
[Clinical experiences with tetrachlorodecaoxide in the local treatment of difficult-to-heal wounds] Weise K, et al. Aktuel Traumatol 1988 Oct;18(5):219–25 (Eng. Abstr.) (Ger)
[The effect of subtherapeutic quantities of native gelatin and Haemaccel 35 (polygeline) on the fibronectin level and wound healing. An experimental animal study in rats with burn wounds] Nagelschmidt M, et al. Anaesthesist 1989 Aug;38(8):413–7 (Eng. Abstr.) (Ger)
[The surgical treatment of patients treated with cytostatic chemotherapy] Schlag P, et al. Chirurg 1989 Apr; 60(4):295–300 (21 ref.) (Eng. Abstr.) (Ger)
[Personal experiences with naturopathy. Wound treatment with plant substances. The process of wound healing—flavonoids, I] Zimmermann W. Fortschr Med 1989 Feb 20;107(5):20–2 (Ger)
[Personal experiences with naturopathy. Wound treatment with plant products. Wound medicines containing tannic acid (II)] Zimmermann W. Fortschr Med 1989 Mar 10; 107(7):20 (Ger)
[Management of conjunctival wounds with suture or fibrin glue following intraocular lens implantation—a comparative study] Mellin KB, et al. Fortschr Ophthalmol 1989;86(2):129–31 (Eng. Abstr.) (Ger)
[The effect of various non-steroidal anti-inflammatory drugs on corneal wound healing] Pahlitzsch T, et al. Fortschr Opthalmol 1988;85(6):662–4 (Eng. Abstr.) (Ger)
[The effect of fibrin glue on the healing of hydroxyapatite ceramics. An animal experiment study] Reck R, et al. HNO 1989 Mar;37(3):112–6 (Eng. Abstr.) (Ger)
[Animal experiment and clinical studies of the use of anti-inflammatory agents in chemical burns of the eye] Struck HG, et al. Klin Monatsbl Augenheilkd 1988 Oct; 193(4):401–6 (Eng. Abstr.) (Ger)
[Damage to blood cells caused by oxoferin?] Elstner E. Klin Wochenschr 1989 Jul 17;67(14):741–2 (Ger)
[Do fibrin glue sleeves produce fibrosis in transplanted nerves?] Herter T, et al. Neurochirurgia (Stuttg) 1989 Jan; 32(1):16–20 (Eng. Abstr.) (Ger)
[Wound healing disorders and their enzymatic therapy—a multicenter double-blind study] Helaly P, et al. Schweiz Rundsch Med Prax 1988 Dec 27;77(52):1428–34 (Eng. Abstr.) (Ger)
[Increase of oxygen partial pressure and acceleration of wound healing by tetrachlorodecaoxide] Weiler-Mithoff EM, et al. Z Hautkr 1989 Mar 15;64(3):208–11 (Eng. Abstr.) (Ger)
[Basic therapy of chronic inflammatory joint diseases with D-penicillamine and disorders of wound healing in rheumatoid orthopedic interventions] Zacher J, et al. Z Rheumatol 1988;47 Suppl 1:41–3 (Eng. Abstr.) (Ger)
[Experiences with the use of cerium nitrate silver sulfadiazine in the local treatment of thermal injuries in childhood] Lorenz C, et al. Zentralbl Chir 1988;113(19):1273–9 (Eng. Abstr.) (Ger)
[Clinical and anatomo-pathological aspects of cicatrization following diathermo-coagulation. Effects of topical administration of a placental polydeoxynucleotide] Minorchio E, et al. Ann Ostet Ginecol Med Perinat 1988 May-Jun;109(3):132–8 (Eng. Abstr.) (Ita)
[Experimental study of the effects of indomethacin on open wound contraction] Bevilacqua RG, et al. Rev Paul Med 1988 Mar-Apr;106(2):105–8 (Eng. Abstr.) (Por)
[Dynamics of healing of purulent wounds under the influence of immunoregulatory drugs] Guseinov AZ. Arkh Patol 1988;50(9):28–34 (Eng. Abstr.) (Rus)
[Effects of opioid peptide dalargin on reparative processes in wound healing] Shekhter AB, et al. Biull Eksp Biol Med 1988 Oct;106(10):487–90 (Eng. Abstr.) (Rus)
[Experimental study of wound-healing effect of the preparation "Aekol" (artificial sea buckthorn oil)] Kostrikova EV. Ortop Travmatol Protez 1989 Jan;(1):32–6 (Eng. Abstr.) (Rus)
[Reparative processes and the possibilities of their stimulation in the over-cooled body] Popov SD, et al. Vestn Khir 1987 Dec;139(12):98–101 (37 ref.) (Rus)
[Effect of potable mineral waters with various chemical compositions on reparative processes of the mucosa of the gastroduodenal area] Serebriakov SN. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Mar-Apr; (2):44–6 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Wound complications of adjuvant radiation therapy in patients with soft-tissue sarcomas. Ormsby MV, et al. Ann Surg 1989 Jul;210(1):93–9
Failure of a helium-neon laser to affect components of wound healing in vitro. Colver GB, et al. Br J Dermatol 1989 Aug;121(2):179–86
A light microscopic and autoradiographic study of non-irradiated and irradiated ocular wounds. Chakravarthy U, et al. Curr Eye Res 1989 Apr;8(4):337–48
New biological phenomena associated with laser radiation. Belkin M, et al. Health Phys 1989 May;56(5):687–90 (25 ref.)
Irradiation effect of low-energy laser on alveolar bone after tooth extraction. Experimental study in rats. Takeda Y. Int J Oral Maxillofac Surg 1988 Dec;17(6):388–91
The effect of radiation on the fracture repair process. A biomechanical evaluation of a closed fracture in a rat model. Markbreiter LA, et al. J Orthop Res 1989; 7(2):178–83
Effect of helium-neon and infrared laser irradiation on wound healing in rabbits. Braverman B, et al. Lasers Surg Med 1989;9(1):50–8
Systemic effects of low-power laser irradiation on the peripheral and central nervous system, cutaneous wounds, and burns. Rochkind S, et al. Lasers Surg Med 1989; 9(2):174–82
[Possibilities of using computers in the optimization of the parameters of laser therapy in the treatment of bone and soft tissue wounds] Tkachenko SS, et al. Ortop Travmatol Protez 1988 Nov;(11):6–10 (Eng. Abstr.) (Rus)
[Effectiveness of the treatment of chronic non-healing stomach ulcers using copper vapor laser] Loginov AS, et al. Ter Arkh 1989;61(2):42–6 (Eng. Abstr.) (Rus)
[Use of a helium-neon laser in the ambulatory treatment of hypertrophic skin cicatrices and slowly granulating wounds] Anisimov AI, et al. Vestn Khir 1988 Oct; 141(10):97–8 (Eng. Abstr.) (Rus)
[Characteristics of the regeneration of postoperative wounds after bilateral tonsillectomy using a helium-neon laser] Romanov VA, et al. Vestn Otorinolaringol 1988 May-Jun; (3):80–1 (Rus)

WOUND INFECTION

Human and animal bite infections. Brook I. J Fam Pract 1989 Jun;28(6):713–8 (32 ref.)

BLOOD

[Increased level of tryptophan fluorescence in the blood serum in generalized suppurative infection] Zaidenberg MA, et al. Khirurgiia (Mosk) 1989 Jun;(6):51–4 (Eng. Abstr.) (Rus)

COMPLICATIONS

Burn sepsis. Robson MC. Crit Care Clin 1988 Apr;4(2):281–98 (65 ref.)
An outcome predictive score for sepsis and death following injury. Hershman MJ, et al. Injury 1988 Jul;19(4):263–6
[Use of UV-spectrometry in the diagnosis of septic complications in multiple trauma] Gabriélian NI, et al. Anesteziol Reanimatol 1988 Jul-Aug;(4):59–61 (Eng. Abstr.) (Rus)
[Treatment of non-lactation suppurative mastitis] Abdulzhavadov IM. Khirurgiia (Mosk) 1989 Jun;(6):42–5 (Eng. Abstr.) (Rus)
[Endotoxemia as a problem of clinical surgery] Eriukhin IA, et al. Vestn Khir 1989 Mar;142(3):3–7 (Eng. Abstr.) (Rus)
[Multiple organ failure syndrome in infection] Konychev AV. Vestn Khir 1988 May;140(5):139–44 (56 ref.) (Rus)
[Septic metastatic staphylococcal destruction of the lungs in adults] Liashchenko VI. Vestn Khir 1989 Feb;142(2):8–11 (Eng. Abstr.) (Rus)

DIAGNOSIS

Klebsiella pneumoniae infection complicating a puncture wound of the foot: a case report. del Rosario NC, et al. Milit Med 1989 Jan;154(1):38–9
[Diagnosis of infection] Gulima PA, et al. Klin Khir 1989; (1):6–8 (Eng. Abstr.) (Rus)

DRUG THERAPY

Ocular human bite. Aguirre Vila-Coro A, et al. Ann Ophthalmol 1989 Mar;21(3):100–2
Wound and serum levels of tobramycin with the prophylactic use of tobramycin-impregnated polymethylmethacrylate beads in compound fractures. Eckman JB Jr, et al. Clin Orthop 1988 Dec;(237):213–5
Comparison of silver sulfadiazine formulations [letter] Mayor GH, et al. J Burn Care Rehabil 1989 May-Jun;10(3):285–6
Norfloxacin in wound infections [letter] Mirza RA, et al. JPMA 1988 May;38(5):151
[Clinical experiences with tetrachlorodecaoxide in the local treatment of difficult-to-heal wounds] Weise K, et al. Aktuel Traumatol 1988 Oct;18(5):219–25 (Eng. Abstr.) (Ger)
[High-dose short-term antibiotic therapy in bacteremia and infection in severely burned patients] Stuffer M, et al. Wien Klin Wochenschr 1989 Mar 31;101(7):241–4 (Eng. Abstr.) (Ger)
[Mathematical approach to modeling of the treatment of suppurative processes] Men'shikov DD, et al. Antibiot Khimioter 1989 Mar;34(3):205–8 (Eng. Abstr.) (Rus)
[Models of anaerobic (nonclostridial) infections used for evaluating chemotherapeutic preparations] Miasnikova LG. Antibiot Khimioter 1989 Apr;34(4):308–13 (Rus)
[Preparation of lysozyme immobilized on textile carriers and its use in treating suppurative wounds] Vlasov LG, et al. Antibiot Khimioter 1988 Nov;33(11):848–50 (Eng. Abstr.) (Rus)
[Use of ultrasonics in the prevention and treatment of suppurative surgical infection (review of the literature)] Gorfinkel'IV, et al. Khirurgiia (Mosk) 1988 Dec;(12):151–6 (54 ref.) (Rus)
[Use of chonsurid in the management of suppurative wounds] Mironenko PA. Klin Khir 1989;(1):55 (Rus)
[A method of treating suppurative wounds] Opanashchenko GA, et al. Klin Khir 1989;(1):63 (Rus)
[Chemoprophylaxis and chemotherapy of wound infection] Mel'nikova VM. Ortop Travmatol Protez 1988 Nov; (11):14–8 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

The epidemiology of methicillin-resistant Staphylococcus aureus in a burn center. Heggers JP, et al. J Burn Care Rehabil 1988 Nov-Dec;9(6):610–2
Nosocomial prevalence survey [letter] Hall J. Med J Aust 1989 Mar 20;150(6):349–50

ETIOLOGY

Staphylococcus intermedius: clinical presentation of a new human dog bite pathogen. Talan DA, et al.

Ann Emerg Med 1989 Apr;18(4):410–3
Aeromonas hydrophilia infection in burn patients. Purdue GF, et al. **Burns Incl Therm Inj** 1988 Jun;14(3):220–1
Factors influencing infection rate in open fracture wounds. Patzakis MJ, et al. **Clin Orthop** 1989 Jun;(243):36–40
Dog and cat bites. August JR. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1394–8
Noncandidal, fungal infections of the burn wound. Burdge JJ, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):599–601
Capnocytophaga canimorsus sp. nov. (formerly CDC group DF–2), a cause of septicemia following dog bite, and C. cynodegmi sp. nov., a cause of localized wound infection following dog bite. Brenner DJ, et al. **J Clin Microbiol** 1989 Feb;27(2):231–5
Aeromonas hydrophila infection associated with the use of medicinal leeches. Snower DP, et al. **J Clin Microbiol** 1989 Jun;27(6):1421–2
Pseudomonas osteomyelitis secondary to puncture wound of the foot. Gallo JJ. **J Fam Pract** 1988 Nov;27(5):529–32 (35 ref.)
Nontoxigenic Vibrio cholerae wound infection after exposure to contaminated lake water [letter] [published erratum appears in J Infect Dis 1989 Aug;160(2):358] Mulder GD, et al. **J Infect Dis** 1989 Apr;159(4):809–11
Primary cutaneous cryptococcosis after microtrauma of the right index finger. Salm R, et al. **Mycoses** 1988;Suppl 1:88–92
Gunshot wounds to the spine associated with a perforated viscus. Roffi RP, et al. **Spine** 1989 Aug;14(8):808–11
An experimental study of susceptibility to infection after hemorrhagic shock. Livingston DH, et al.
Surg Gynecol Obstet 1989 Feb;168(2):138–42
Bacteriology of bite wounds. van den Bogaard AE Jr.
Tijdschr Diergeneeskd 1989 Apr;114 Suppl 1:98S–99S
[Staphylococcal osteomyelitis of the spine as a complication of gunshot abdominal wound] Ardashev IP, et al.
Ortop Travmatol Protez 1989 Jan;(1):57–9 **(Rus)**

HISTORY

[Paul Leopold Friedrich—the founder of primary wound management] Luther B. **Z Arztl Fortbild (Jena)** 1989; 83(5):275–6 **(Ger)**

IMMUNOLOGY

Antibody response to outer-membrane antigens of Pseudomonas aeruginosa in human burn wound infection. Ward KH, et al. **J Med Microbiol** 1988 Nov;27(3):179–90
Effect of prostaglandin E in multiple experimental models. VI. Effect on T-cell subsets. Waymack JP, et al.
Prostaglandins 1989 Sep;38(3):345–53

METABOLISM

Changes in erythrocyte membranes in burned rabbits. Sheng ZY, et al. **Burns Incl Therm Inj** 1988 Aug;14(4):287–91
[Ascorbic acid and hydroxyproline levels in the serum and granulation tissue of rats with aseptic and infected wounds] Novikova AN, et al. **Biull Eksp Biol Med** 1988 Sep; 106(9):355–8 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

The effect of endogenous skin bacteria on burn wound infection. Phillips LG, et al. **Ann Plast Surg** 1989 Jul; 23(1):35–8
Staphylococcal wound infection in the pig: Part II. Inoculation, quantification of bacteria, and reproducibility. Sandén G, et al. **Ann Plast Surg** 1989 Sep;23(3):219–23
Susceptibility of Pseudomonas and Staphylococcus wound isolates to topical antimicrobial agents: a 10-year review and clinical evaluation. Thomson PD, et al. **Burns** 1989 Jun;15(3):190–2
Post-traumatic cutaneous mucormycosis in diabetes mellitus. Short-term antifungal therapy. Ryan-Poirier K, et al.
Clin Pediatr (Phila) 1988 Dec;27(12):609–12
Animal bite infections. Klein JD. **Del Med J** 1989 Jan; 61(1):17–20
Factors influencing wound infection: time lapse analysis and wound culture studies. Sagar JV, et al.
Indian J Pathol Microbiol 1987 Oct;30(4):343–7
Characterization of Aeromonas schubertii strains recently isolated from traumatic wound infections. Carnahan AM, et al. **J Clin Microbiol** 1989 Aug;27(8):1826–30
Xenorhabdus luminescens (DNA hybridization group 5) from human clinical specimens. Farmer JJ 3d, et al.
J Clin Microbiol 1989 Jul;27(7):1594–600
Isolation of Neisseria canis in mixed culture from a patient after a cat bite. Guibourdenche M, et al.
J Clin Microbiol 1989 Jul;27(7):1673–4
Temporal relationship of Vibrio parahaemolyticus in patients and the environment. Kelly MT, et al. **J Clin Microbiol** 1988 Sep;26(9):1754–6
Enterobacter hormaechei, a new species of the family Enterobacteriaceae formerly known as enteric group 75. O'Hara CM, et al. **J Clin Microbiol** 1989 Sep;27(9):2046–9
Staphylococcus intermedius in canine gingiva and canine-inflicted human wound infections: laboratory characterization of a newly recognized zoonotic pathogen. Talan DA, et al. **J Clin Microbiol** 1989 Jan;27(1):78–81
Role of exotoxin A and elastase in the pathogenicity of Pseudomonas aeruginosa strain PAO experimental mouse burn infection. Wretlind B, et al. **Microb Pathog** 1987 Jun; 2(6):397–404
Vibrio alginolyticus cellulitis following coral injury. Patterson TF, et al. **Yale J Biol Med** 1988 Nov–Dec; 61(6):507–12
[In vitro virulence of wound infecting staphylococcal isolates from severely burned patients] Winkler M, et al.
Langenbecks Arch Chir 1989;374(3):181–4 (Eng. Abstr.) **(Ger)**
[Infections of the skin caused by gram-negative pathogens. Foot infections—wound infections—folliculitis] Wassilew SW. **Z Hautkr** 1989 Jan 15;64(1):17–20 (22 ref.) (Eng. Abstr.) **(Ger)**
[Drug sensitivity of Pseudomonas aeruginosa isolated from burn wounds during 1985/1986 and its serologic types] Ziółkowski G, et al. **Pol Tyg Lek** 1988 Dec 5;43(49):1596–8 (Eng. Abstr.) **(Pol)**
[Clinico-microbiologic aspects of burns complicated by suppurative infection] Znamenskii VA, et al.
Khirurgiia (Mosk) 1989 Mar;(3):115–7 **(Rus)**
[Gram-negative bacteria in suppurative wounds] Ukhov AIa, et al. **Mikrobiol Zh** 1988 Nov–Dec;50(6):36–40 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Staphylococcal wound infection in the pig: Part I. Course. Svedman P, et al. **Ann Plast Surg** 1989 Sep;23(3):212–8
Bone marrow granulopoietic response to scalds and wound infection in mice. Huang WH, et al.
Burns Incl Therm Inj 1988 Aug;14(4):292–6
Precise diagnosis of infection in burn wound biopsy specimens. Combination of histologic technique, acridine orange staining, and culture. Mitchell V, et al.
J Burn Care Rehabil 1989 May–Jun;10(3):195–202
Aeromonas infection following a snake bite: a case report. Thisyakorn U, et al.
Southeast Asian J Trop Med Public Health 1988 Jun; 19(2):307–8

PHYSIOPATHOLOGY

Metabolic and thermoregulatory responses to burn wound colonization. Aulick LH, et al. **J Trauma** 1989 Apr; 29(4):478–83
[Characteristics of the blood supply of suppurative wounds treated by a defocused beam of a CO2 laser] Skobelkin OK, et al. **Klin Khir** 1989;(1):8–10 (Eng. Abstr.) **(Rus)**
[Motor evacuatory function of the stomach and the absorptive capacity of the intestines in patients with extensive suppurative wounds receiving tube feeding] Zhukov AO, et al. **Vopr Pitan** 1988 Nov–Dec;(6):15–7 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Controversies in antibiotic choices for bite wounds. Callaham M. **Ann Emerg Med** 1988 Dec;17(12):1321–30 (70 ref.)
Assessment of topical therapy of the burn wound with silver sulphadiazine after its use for 15 years in a burn unit. Koo DS, et al. **Burns** 1989 Jun;15(3):193–6
Criteria for bone debridement in massive lower limb trauma. Swiontkowski MF. **Clin Orthop** 1989 Jun;(243):41–7
Studies on improvement of pharmaceutical preparations prescribed in hospitals. IV. Dibekacin sulfate viscous solution for treatment of mouth and throat wounds. Namiki N, et al. **Drug Des Deliv** 1986 Nov;1(2):157–65
The application of PVP-iodine in developing countries. Sixl W, et al. **Geogr Med** 1988;Suppl 1:107–14
Leukopenia in non-septic burn patients receiving topical 1% silver sulfadiazine cream therapy: a survey. Fuller FW, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):606–9
Use of 5% sulfamylon (mafenide) solution after excision and grafting of burns. Lee JJ, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):602–5
Use of nonsterile gloves for routine noninvasive procedures in thermally injured patients. Sadowski DA, et al.
J Burn Care Rehabil 1988 Nov–Dec;9(6):613–5
Single-dose antimicrobial prophylaxis at abdominal hysterectomy. Cefamandole vs. cefotaxime. Hemsell DL, et al. **J Reprod Med** 1988 Dec;33(12):939–44
Therapeutic effects of silver nylon dressings with weak direct current on Pseudomonas aeruginosa-infected burn wounds. Chu CS, et al. **J Trauma** 1988 Oct;28(10):1488–92
Results of a multicenter outpatient burn study on the safety and efficacy of Dimac-SSD, a new delivery system for silver sulfadiazine. Deitch EA, et al. **J Trauma** 1989 Apr; 29(4):430–4
Safety and efficacy of mezlocillin: a single-drug therapy for penetrating abdominal trauma. Lou MA, et al.
J Trauma 1988 Nov;28(11):1541–7
[Antibiotic prophylaxis and therapy in the surgical management of closed limb injuries] Kwasny O, et al.
Z Unfallchir Versicherungsmed Berufskr 1988;81(1):40–9 (Eng. Abstr.) **(Ger)**
[The disinfection of the oral mucosa] Gundermann KO.
Zentralbl Bakteriol Mikrobiol Hyg [B] 1989 Apr; 187(4–6):382–9 (7 ref.) (Eng. Abstr.) **(Ger)**
[Use of lasers in preventing complications of perineal wounds in parturients] Arzhanova ON, et al.
Akush Ginekol (Mosk) 1988 Sep;(9):50–1 **(Rus)**
[Prevention and treatment of suppurative complications in open lesions using the preparation Tsimezol'] Pashchuk AIu, et al. **Ortop Travmatol Protez** 1988 Jul;(7):35–8 (Eng. Abstr.) **(Rus)**
[Prevention and treatment of infectious complications of gunshot wounds] Rudakov BIa. **Voen Med Zh** 1988 Jul; (7):34–7 (12 ref.) **(Rus)**
[Prevention of suppurative diseases of the skin and subcutaneous fat in industrial microtrauma] Iurmin EA, et al. **Vrach Delo** 1988 Nov;(11):102–3 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Secondary infection of post-traumatic pulmonary cavitary lesions in adolescents and young adults: role of computed tomography and operative debridement and drainage. Carroll K, et al. **J Trauma** 1989 Jan;29(1):109–12

SURGERY

The greater omentum: its use in the surgical management of severely infected leg soft tissue and bone injuries. Report of two cases. Song D. **Cent Afr J Med** 1989 Jun;35(6):423–5
Use of autologous spiral vein grafts for vascular reconstructions in contaminated fields. Fowl RJ, et al.
J Vasc Surg 1988 Oct;8(4):442–6
[Primary suture of older and contaminated wounds. A prospective clinical study] Bongartz W, et al. **Chirurg** 1988 Nov;59(11):767–70 (Eng. Abstr.) **(Ger)**
[Covering a defect of the Achilles heel with a dorsalis pedis flap] Boschnakow K. **Zentralbl Chir** 1988;113(12):790–2 **(Ger)**
[Prevention and treatment of infected wounds of the perineum in puerperants] Lukashevich GA, et al.
Akush Ginekol (Mosk) 1988 Sep;(9):23–7 (Eng. Abstr.) **(Rus)**
[Use of CO2 lasers in the surgical treatment of suppurative wounds of soft tissues] Dotsenko AP, et al.
Khirurgiia (Mosk) 1989 Jun;(6):54–8 (Eng. Abstr.) **(Rus)**
[Principles of closed aspiration-irrigation treatment of contaminated and suppurative wounds] Kanshin NN.
Khirurgiia (Mosk) 1989 Jun;(6):112–5 **(Rus)**
[Use of helium-cadmium lasers in the complex treatment of suppurative diseases in patients with diabetes mellitus] Khurshudian AG. **Khirurgiia (Mosk)** 1989 Jun;(6):38–42 (Eng. Abstr.) **(Rus)**
[Use of low-intensity laser irradiation in surgery (review of the literature)] Postolov AM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):137–42 (80 ref.) **(Rus)**
[Treatment of suppurative-necrotic wounds of the extremities] Ternovoi KS, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):66–7 (Eng. Abstr.) **(Rus)**
[Use of sodium thiosulfate with fibrinolysin and endolympphatic antibacterial therapy in the complex treatment of suppurative wounds] Margulis FB, et al.
Klin Khir 1989;(1):56 **(Rus)**
[Drainage in the treatment of suppurative wounds] Petrov VG, et al. **Klin Khir** 1989;(1):64 **(Rus)**
[Osteoplastic correction of defects of the forearm bones] Afaunov AI. **Ortop Travmatol Protez** 1989 Feb;(2):16–20 (Eng. Abstr.) **(Rus)**
[Use of controlled abacterial medium in the treatment of wound infection of the hand] Kuz'menko VV, et al.
Ortop Travmatol Protez 1989 Jan;(1):4–7 (Eng. Abstr.) **(Rus)**
[Active surgical treatment of denuded wounds in children by irradiation with carbon dioxide laser] Livshits IuL, et al. **Ortop Travmatol Protez** 1988 Nov;(11):11–4 (Eng. Abstr.) **(Rus)**
[Choice of the anesthetic method in suppurative-inflammatory processes of the hand] Skorogliadov AV, et al. **Sov Med** 1988;(12):87–90 **(Rus)**
[Vacuum therapy of acute suppurative diseases of soft tissues and suppurative wounds] Davydov IuA, et al.
Vestn Khir 1988 Sep;141(9):43–6 (Eng. Abstr.) **(Rus)**
[Bacteriologic and cytologic evaluation of vacuum therapy of suppurative wounds] Davydov IuA, et al.
Vestn Khir 1988 Oct;141(10):48–52 (Eng. Abstr.) **(Rus)**
[Use of lasers in polyclinical surgical practice] Krasavtseva LV, et al. **Vestn Khir** 1988 Jul;141(7):114–5 **(Rus)**
[Transplantation of pancreatic islet cell cultures in the treatment of suppurative surgical diseases in patients with diabetes mellitus] Rozental' RL, et al. **Vestn Khir** 1988 May; 140(5):83–6 (Eng. Abstr.) **(Rus)**
[Treatment of osteomyelitis of the frontal bone with extensive skin defect] Bondar VP, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug;(4):57–8 **(Rus)**

THERAPY

Efficacy of debridement and primary closure of contaminated wounds: a comparison of methods. Nichter LS, et al.
Ann Plast Surg 1989 Sep;23(3):224–30
Modulation of Klebsiella pneumoniae infection of mice by interferon-gamma. Hershman MJ, et al.
Clin Exp Immunol 1988 Jun;72(3):406–9
Successful treatment of chronically infected wounds with sugar paste. Tanner AG, et al.
Eur J Clin Microbiol Infect Dis 1988 Aug;7(4):524–5
Treatment of wound sepsis in irradiated mice. Brook I, et al. **Int J Radiat Biol** 1989 Jul;56(1):75–82
[Present possibilities of therapy in infected pseudoarthroses and chronic osteomyelitis—new concepts] Foldyna K, et al. **Acta Chir Orthop Traumatol Cech** 1988 Jul;55(4):372–81 (Eng. Abstr.) **(Cze)**
[Personal experiences with naturopathy. Wound treatment with plant substances. The process of wound healing—flavonoids, I] Zimmermann W. **Fortschr Med**

1989 Feb 20;107(5):20–2 (Ger)
[Experimental animal studies of the healing of burn wounds with the use of local antimicrobials and hyperbaric O2 therapy] Kaiser W.
Z Exp Chir Transplant Kunstliche Organe 1989;22(1):27–37 (Eng. Abstr.) (Ger)
[Tube feeding as a component of intensive therapy of patients with severe suppurative infection and septicemia] Zhukov AO, et al. Anesteziol Reanimatol 1988 Jul–Aug;(4):46–8 (Eng. Abstr.) (Rus)
[Effectiveness of tobramycin and immunologic preparations in experimental Pseudomonas infection] Minukhin VV, et al. Antibiot Khimioter 1989 Apr;34(4):282–6 (Eng. Abstr.) (Rus)
[X-ray irradiation of donor blood in the complex treatment of suppurative diseases] Ermolov AS, et al.
Khirurgiia (Mosk) 1989 Jun;(6):46–51 (Eng. Abstr.) (Rus)
[Treatment of open infected injuries of the hand and forearm in a controlled germ-free environment] Saftiiarov MSh, et al. Ortop Travmatol Protez 1988 Aug;(8):59 (Rus)
[Anaerobic non-clostridial infection of the soft tissues] Kuleshov SE. Sov Med 1989;(4):49–53 (77 ref.) (Rus)
[Use of activated carbon fiber material for the local treatment of wounds] Kornilov VA, et al. Vestn Khir 1989 Jan; 142(1):59–62 (Rus)
[Experience using exchange plasmapheresis in the treatment of suppurative and septic complications] Perveev VI, et al. Vestn Khir 1988 Jul;141(7):83–6 (Eng. Abstr.) (Rus)
[Use of a woven carbon material in the treatment of acute suppurative diseases and trophic ulcers] Riabtsev VG, et al. Vestn Khir 1989 Mar;142(3):62–3 (Rus)

VETERINARY

The evaluation of effects of selected medicaments in healing of claw wounds in dairy cattle. Szymonis-Szymanowski W. Pol Arch Weter 1987;27(2–3):61–73
Wound myiasis caused by Cochliomyia hominivorax in Libya [letter] el-Azazy OM. Vet Rec 1989 Jan 28;124(4):103

WOUNDS AND INJURIES

see related
DEBRIDEMENT
FIRST AID
TRANSPORTATION OF PATIENTS
Helicopter use by rural emergency departments to transfer trauma victims: a study of time-to-request intervals. Garrison HG, et al. Am J Emerg Med 1989 Jul;7(4):384–6
Trauma: an annotated bibliography of the recent literature, Part 1. McCabe CJ. Am J Emerg Med 1989 Jul;7(4):443–9
Trauma in pregnancy. A 10-year perspective. Timberlake GA, et al. Am Surg 1989 Mar;55(3):151–3
Injury risks posed by incompatibilities between trucks and other highway users. Ervin RD. Bull N Y Acad Med 1988 Sep–Oct;64(7):816–34
Trauma systems: an interdisciplinary approach to prevention, treatment, and education. Kreis DJ Jr.
Bull N Y Acad Med 1988 Sep–Oct;64(7):835–7
Motor vehicle injuries. Moynihan DP.
Bull N Y Acad Med 1988 Sep–Oct;64(7):610–6
Pediatric trauma and primary health care. Surpure JS.
Indian J Pediatr 1988 Sep–Oct;55(5):749–51
National Pediatric Trauma Registry. Tepas JJ 3d, et al.
J Pediatr Surg 1989 Feb;24(2):156–8
Trauma in pregnancy. Higgins SD. J Perinatol 1988 Summer; 8(3):288–92
Papers from the annual meeting of the Trauma Association of Canada. September 21–24, 1988, Ottawa. J Trauma 1989 Aug;29(8):1041–177
Report from the 1988 Trauma Registry Workshop, including recommendations for hospital-based trauma registries.
J Trauma 1989 Jun;29(6):827–34
Emergency interhospital transport of the major trauma patient: air versus ground. Boyd CR, et al. J Trauma 1989 Jun;29(6):789–93; discussion 793–4
Vascular organ procurement in the trauma population. Morris JA Jr, et al. J Trauma 1989 Jun;29(6):782–7; discussion 787–8
Federal influences on the development of trauma registers. Scheib BT, et al. J Trauma 1989 Jun;29(6):835–41
A profile of urban adult pedestrian trauma. Vestrup JA, et al. J Trauma 1989 Jun;29(6):741–5
Methodologic issues in hospital-based injury research. Waller JA. J Trauma 1988 Dec;28(12):1632–6
Trauma—another subspecialty in anesthesiology? Heckel CG. Md Med J 1988 Sep;37(9):715–6
USS Franklin and the USS Stark—recurrent problems in the prevention and treatment of naval battle casualties. Pinkstaff CA, et al. Milit Med 1989 May;154(5):229–33
On the relevance of poor judgement. Widome MD.
Pediatrics 1989 Oct;84(4):724–6
[Injuries in children in the 1st year of life] Hájková H, et al. Cesk Pediatr 1988 Jul;43(7):423–5 (Cze)
[Necrotic infections of the skin and soft tissues] Castro Romero H. Bull Acad Natl Med (Paris) 1988 Nov; 172(8):1171–9 (Fre)
[Principles of triage applied in wartime and in catastrophes] Courbil LJ. Bull Acad Natl Med (Paris) 1988 Mar; 172(3):333–46 (Eng. Abstr.) (Fre)
[Definition of traumatologic terms] Kuz'minykh AP, et al. Ortop Travmatol Protez 1988 Aug;(8):71–3 (Rus)
[Characteristics of injuries in tractor drivers in agriculture] Pandurović S, et al. Srp Arh Celok Lek 1986 Apr; 114(4):403–11 (Eng. Abstr.) (Sec)
[The CRAMS system of quantitative evaluation in trauma] Carvajal C, et al. Rev Med Chil 1988 Mar;116(3):238–41 (Eng. Abstr.) (Spa)

BLOOD

Serum pancreatic secretory trypsin inhibitor (PSTI) in seriously injured and septic patients. Tanaka H, et al.
Adv Exp Med Biol 1988;240:493–8
Biologic priming of neutrophils in subcutaneous wounds. Paty PB, et al. Arch Surg 1988 Dec;123(12):1509–13
Blood alcohol concentrations among motor vehicle accident trauma admissions to a regional trauma unit. Vingilis E, et al. Can J Public Health 1988 Sep–Oct;79(5):392–3
The pattern of leucocyte response to surgical trauma in the African Negro. Kehinde MO, et al. Clin Lab Haematol 1988;10(3):285–93
Relationship of visceral proteins to nutritional status in chronic and acute stress. Boosalis MG, et al.
Crit Care Med 1989 Aug;17(8):741–7
Thyroid hormone alterations in patients with shock and injury. Vitek V, et al. Injury 1987 Sep;18(5):336–41
Polymorphonuclear leucocyte sequestration in the lungs and liver following soft-tissue trauma: an in vivo study. Thörne J, et al. J Trauma 1989 Apr;29(4):451–6
Differences in the serum amino acid pattern of injured and infected children promoted by two parenteral nutrition solutions. Maldonado J, et al.
JPEN J Parenter Enteral Nutr 1989 Jan–Feb;13(1):41–6
Polyamine levels as biomarkers of injury response in polytrauma victims. Jeevanandam M, et al. Metabolism 1989 Jul;38(7):625–30
Elevation of serum pancreatic secretory trypsin inhibitor following serious injury. Shibata T, et al. Resuscitation 1988 Jul;16(3):163–8
[The surface architectonics of erythrocytes in patients with severe trauma and blood loss] Berezina TL, et al.
Anesteziol Reanimatol 1988 Sep–Oct;(5):38–42 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Deaths, injuries, and evacuations from acute hazardous materials releases. Binder S. Am J Public Health 1989 Aug; 79(8):1042–4

CLASSIFICATION

Injury severity scoring: a comparison of early clinical versus discharge diagnosis. Smejkal R, et al. Accid Anal Prev 1989 Aug;21(4):386–9
The failure of prehospital trauma prediction rules to classify trauma patients accurately. Baxt WG, et al.
Ann Emerg Med 1989 Jan;18(1):1–8
Comparison of trauma assessment scores and their use in prediction of infection and death. Cheadle WG, et al.
Ann Surg 1989 May;209(5):541–5; discussion 545–6
Measuring severity of injuries to children from home accidents [letter] Walsh SS, et al. Arch Dis Child 1989 Jan; 64(1):180
Progress toward a new injury severity characterization: severity profiles. Sacco WJ, et al. Comput Biol Med 1988; 18(6):419–29
A revision of the Trauma Score. Champion HR, et al.
J Trauma 1989 May;29(5):623–9
Clinical prospective injury severity scoring: when is it accurate? Civil ID, et al. J Trauma 1989 May;29(5):613–4
Trauma triage: vehicle damage as an estimate of injury severity. Jones IS, et al. J Trauma 1989 May;29(5):646–53
Trauma centers and DRGs—inherent conflict? Waller JA, et al. J Trauma 1989 May;29(5):617–22
Classifying trauma severity based on hospital discharge diagnoses. Validation of an ICD-9CM to AIS-85 conversion table. MacKenzie EJ, et al. Med Care 1989 Apr; 27(4):412–22
Place of occurrence of injury events in New Zealand compared with the available ICD codes. Langley JD, et al. Methods Inf Med 1989 Apr;28(2):109–13
Trauma categorization in Minnesota. Ruiz E. Minn Med 1988 Nov;71(11):674–6
Trauma triage: alphabet soup to numbers game. Smith JS Jr. Pa Med 1988 Nov;91(11):47–9
[Analysis of severely injured patients admitted via an emergency service] Vermassen F, et al. Acta Chir Belg 1989 Jan–Feb;89(1):1–6 (Eng. Abstr.) (Dut)
[The development of scales for assessing the severity and predicting the outcomes of surgical patients] Shaposhnikov IuG, et al. Khirurgiia (Mosk) 1988 Aug;(8):10–7 (Eng. Abstr.) (Rus)
[Determination of the degree of severity and prognosis in injuries] Braunsteiner T, et al. Bratisl Lek Listy 1989 Jun; 90(6):447–9 (Eng. Abstr.) (Slo)

COMPLICATIONS

Clinical significance of traumatic pneumorrhachis [letter] Place JN, et al. AJR Am J Roentgenol 1989 Sep;153(3):655
TEARS: does domestic violence play a role? [letter] Rimsza M. Am J Dis Child 1989 Feb;143(2):137–8
Major injury as a unique opportunity to initiate treatment in the alcoholic. Gentilello LM, et al. Am J Surg 1988 Dec;156(6):558–61
Aeromedicine and trauma arrest: a question of perspective [editorial] Heller MB. Ann Emerg Med 1989 Jul;18(7):791–2
Aeromedical transport of patients with post-traumatic cardiac arrest. Wright SW, et al. Ann Emerg Med 1989 Jul;18(7):721–6
Long-term follow-up of traumatic unilateral superior oblique palsy. Teller J, et al. Ann Ophthalmol 1988 Nov; 20(11):424–5
Trauma and seronegative spondyloarthropathy: report of two more cases of peripheral arthritis precipitated by physical injury. Olivieri I, et al. Ann Rheum Dis 1989 Jun; 48(6):520–1
The influence of fibronectin administration on the incidence of sepsis and septic mortality in severely injured patients. The Medical College of Georgia Fibronectin Research Group. Mansberger AR, et al. Ann Surg 1989 Sep; 210(3):297–306; discussion 306–7
Sequential patterns of eicosanoid, platelet, and neutrophil interactions in the evolution of the fulminant post-traumatic adult respiratory distress syndrome. Rivkind AI, et al. Ann Surg 1989 Sep;210(3):355–72; discussion 372–3
Post-traumatic osteomyelitis. Pathophysiology and management. Roesgen M, et al.
Arch Orthop Trauma Surg 1989;108(1):1–9 (40 ref.)
Whole-body inflammation in trauma patients. An autopsy study. Nuytinck HK, et al. Arch Surg 1988 Dec; 123(12):1519–24 (20 ref.)
Inflammation and trauma. Trunkey DD. Arch Surg 1988 Dec; 123(12):1517 (1 ref.)
Imipenem in the treatment of post-traumatic osteitis. Ketterl R, et al. Chemioterapia 1987 Jun;6(2 Suppl):435–6
Antibiotic therapy in patients with post-traumatic osteitis. Ketterl R, et al. Chemioterapia 1987 Jun;6(2 Suppl):436–7
Prophylactic cryoprecipitate in congenital afibrinogenemia. Rodriguez RC, et al. Clin Pediatr (Phila) 1988 Nov; 27(11):543–5
Risk of renal dysfunction in critically ill trauma patients receiving aminoglycosides. Jaresko GS, et al.
Clin Pharm 1989 Jan;8(1):43–8
The cardiopulmonary effects of sepsis on the trauma patient. Demling RH. Crit Care Clin 1986 Oct;2(4):853–67 (78 ref.)
Critical care complications in the trauma patient. Langdale L, et al. Crit Care Clin 1986 Oct;2(4):839–52 (63 ref.)
Management of sepsis following injury. Macho JR, et al.
Crit Care Clin 1986 Oct;2(4):869–76 (38 ref.)
Determining the ratio of 239Pu to 241Am in wounds by measuring the L gamma x-rays with a Si(Li) detector. Palmer HE, et al. Health Phys 1989 Feb;56(2):249–52
Adjuvant fosfomycin medication in chronic osteomyelitis. Meissner A, et al. Infection 1989 May–Jun;17(3):146–51
Stimulatory role of transforming growth factors in multistage skin carcinogenesis: possible explanation for the tumor-inducing effect of wounding in initiated NMRI mouse skin. Fürstenberger G, et al. Int J Cancer 1989 May 15;43(5):915–21
Establishment of latent ganglionic infection with herpes simplex virus via maxillary gingiva and viral re-activation in vivo after trauma. Shimizu F, et al. J Dent Res 1989 Mar;68(3):472–5
Fusion of the thumb metacarpophalangeal joint to treat posttraumatic arthritis. Hagan HJ, et al.
J Hand Surg [Am] 1988 Sep;13(5):750–3
The importance of airway management in trauma. Jacobs LM. J Natl Med Assoc 1988 Aug;80(8):873–9 (23 ref.)
Dystonia and tremor induced by peripheral trauma: predisposing factors. Jankovic J, et al.
J Neurol Neurosurg Psychiatry 1988 Dec;51(12):1512–9
Traumatic asphyxia: report of a case. Ghali GE, et al.
J Oral Maxillofac Surg 1989 Aug;47(8):867–70 (17 ref.)
Dysphagia associated with head and neck trauma: report of a case. Smoot EC 3d, et al. J Oral Maxillofac Surg 1989 Feb;47(2):190–4 (12 ref.)
Vaginal evisceration with pneumoperitoneum. A case report. Cullins V, et al. J Reprod Med 1989 Jun;34(6):426–8 (14 ref.)
Hyperglycemia after trauma increases with age. Desai D, et al. J Trauma 1989 Jun;29(6):719–23
Effect of pre-existing disease on length of hospital stay in trauma patients. MacKenzie EJ, et al. J Trauma 1989 Jun; 29(6):757–64; discussion 764–5
Traumatic testicular torsion: case report. Manson AL.
J Trauma 1989 Mar;29(3):407–8 (11 ref.)
Non-cavitary hemorrhage producing shock in trauma patients: incidence and severity. Pedowitz RA, et al.
J Trauma 1989 Feb;29(2):219–22
Ureteral and renal pelvic injuries from external trauma: diagnosis and management. Presti JC Jr, et al.
J Trauma 1989 Mar;29(3):370–4
Trauma and dystonia. Lancet 1989 Apr 8;1(8641):759–60 (37 ref.)
Persistent pain following trauma. Ashburn MA, et al.
Milit Med 1989 Feb;154(2):86–9 (37 ref.)
Common clinical presentations among active duty personnel with traumatically induced reflex sympathetic dystrophy. Hemler DE, et al. Milit Med 1988 Oct;153(10):493–5
Posttraumatic movement disorders: a review. Koller WC, et al. Mov Disord 1989;4(1):20–36 (92 ref.)
Brown-Séquard syndrome associated with posttraumatic cervical epidural hematoma: case report and review of the literature. Zupruk GM, et al. Neurosurgery 1989 Aug;

25(2):278–80 (11 ref.)
The reflex sympathetic dystrophy syndrome associated with traumatic myelopathy: report of 5 cases. Cremer SA, et al. **Pain** 1989 May;37(2):187–92
Hyperventilation in trauma and shock. Chiarla C, et al. **Prog Clin Biol Res** 1989;308:619–22
Mediators and the trauma induced cascade of immunologic defects. Faist E, et al. **Prog Clin Biol Res** 1989;308:495–506 (23 ref.)
Graduation of immunosuppression after surgery or severe trauma. Holch MW, et al. **Prog Clin Biol Res** 1989; 308:491–4
Cytological changes in alveolar cells with ARDS. Joka T, et al. **Prog Clin Biol Res** 1989;308:51–5
Validity of the elastase assay in intensive care medicine. Lang H, et al. **Prog Clin Biol Res** 1989;308:701–6
The trigger for posttraumatic multiple organ failure: surgical sepsis or inflammation? Nerlich ML. **Prog Clin Biol Res** 1989;308:413–7
Biochemical analysis in posttraumatic and postoperative organ failure. Redl H, et al. **Prog Clin Biol Res** 1989; 308:649–72 (74 ref.)
A prospective study to evaluate posttraumatic liver function by scintigraphy as a possible predictor of organ failure. Regel G, et al. **Prog Clin Biol Res** 1989;308:775–80
Occupational and post-traumatic arthritis. Kern D, et al. **Radiol Clin North Am** 1988 Nov;26(6):1349–58 (57 ref.)
Case report 488: Post-traumatic myositis ossificans mimicking a soft tissue neoplasm. Ackerman L, et al. **Skeletal Radiol** 1988;17(4):310–4
Chronic traumatic aneurysms of the thoracic aorta. Thévenet A, et al. **World J Surg** 1989 Jan–Feb;13(1):112–6; discussion 116–7
[Surgical treatment of ulcerative wound by a rotation flap] Xu SM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Dec;2(4):271–2 (Eng. Abstr.) **(Chi)**
[Experiences with kidney dialysis in the disaster area of Armenia] van der Reijden HJ. **Ned Tijdschr Geneeskd** 1989 Mar 18;133(11):567–70 **(Dut)**
[Post-traumatic feto-maternal hemorrhage. Apropos of a case] Lizan G, et al.
J Gynecol Obstet Biol Reprod (Paris) 1988;17(7):917–21 (Eng. Abstr.) **(Fre)**
[Algodystrophies or post-traumatic dystrophies of reflex sympathetic origin] Kuiper JP. **Phlebologie** 1988 Jul–Oct; 41(3):649–58 (28 ref.) **(Fre)**
[The compartment syndrome as a sequela of trauma] Schmit-Neuerburg KP. **Chirurg** 1988 Nov;59(11):713–21 **(Ger)**
[A grenade splinter as the cause of cholangitis and icterus] Niebuhr H, et al. **Dtsch Med Wochenschr** 1989 Aug 25; 114(34):1283–5 (Eng. Abstr.) **(Ger)**
[Late sequelae after arterial injuries] Dedichen H. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):324–6 (Eng. Abstr.) **(Nor)**
[Changes in the content of middle molecules of the blood in patients with chronic post-traumatic osteomyelitis as affected by hemosorption] Kosiakov AN, et al. **Klin Khir** 1988;(12):50–1 **(Rus)**
[Diagnosis and treatment of fat embolism] Ospanov TO, et al. **Klin Med (Mosk)** 1989 Apr;67(4):112–4 **(Rus)**
[Various problems of nosology of traumatic disease] Red'kin IuV. **Ortop Travmatol Protez** 1989 Jan;(1):67–70 **(Rus)**
[Mass screening of patients with traumatological and orthopedic problems and the objectives of its development] Shumada IV. **Ortop Travmatol Protez** 1988 Jun;(6):60–4 **(Rus)**
[Basics of prevention of traumatic fat embolism analysed on the basis of its modern pathogenesis] Kroupa I, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1988;31(3):199–258 (207 ref.) (Eng. Abstr.) **(Rus)**
[Various nosologic aspects of traumatic disease] Klochkov ND. **Vestn Khir** 1989 Feb;142(2):57–60 (Eng. Abstr.) **(Rus)**
[Progressive and nonprogressive tendencies in the treatment of endotoxemia] Kutushev FK, et al. **Vestn Khir** 1988 Jul; 141(7):80–3 **(Rus)**
[Methodologic aspects of theories on trauma-induced disease] Lytkin MI, et al. **Vestn Khir** 1988 Aug;141(8):3–8 (Eng. Abstr.) **(Rus)**
[Status of the blood coagulation system in traumatic disease] Nemchenko NS, et al. **Vestn Khir** 1988 Oct;141(10):56–60 (Eng. Abstr.) **(Rus)**
[Fat embolism in severe trauma] Grabovol AF, et al. **Voen Med Zh** 1989 May;(5):27–9 **(Rus)**
[Post-traumatic ossifications simulating soft tissue neoplasms] Skotnikov VI, et al. **Vopr Onkol** 1989;35(7):790–5 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Education is not enough: a systems failure in protecting battered women. McLeer SV, et al. **Ann Emerg Med** 1989 Jun;18(6):651–3
Trauma audit [editorial] Redmond AD. **Arch Emerg Med** 1989 Jun;6(2):83–4
Assessment of childhood injury severity. Taylor RG. **Aust Paediatr J** 1989 Feb;25(1):6–9 (33 ref.)
Ruptured bladder presenting as acute renal failure. Davenport A, et al. **Br J Hosp Med** 1989 Jun;41(6):579–80
An introduction to injury severity scaling. McGinnis GS. **J Neurosci Nurs** 1989 Jun;21(3):201–3 (11 ref.)
Pediatric trauma: need for surgical management. Kaufmann CR, et al. **J Trauma** 1989 Aug;29(8):1120–5; discussion 1125–6
Advances and retreats in the protection of children [editorial] Krugman RD. **N Engl J Med** 1989 Feb 23;320(8):531–2
Mistreatment of elders. Assessment, diagnosis, and intervention. Fulmer TT. **Nurs Clin North Am** 1989 Sep; 24(3):707–16 (18 ref.)
Intentional banding [letter; comment] Johnson CF. **Pediatrics** 1989 Jun;83(6):1077–8. **Comment on:** Pediatrics 1988 Dec;82(6):925–8
Assessment of the potential for surveillance of alcohol-related casualties using National Hospital Discharge Survey data. Towle LH, et al. **Public Health Rep** 1988 Nov–Dec;103(6):597–605
[Errors in expert testimony. Case reports] Marek Z, et al. **Przegl Lek** 1988;45(5):449–53 (Eng. Abstr.) **(Pol)**
[Laboratory research methods in the expertise of mechanical injuries] Bedrin LM, et al. **Sud Med Ekspert** 1988 Oct–Dec; 31(4):19–22 (22 ref.) (Eng. Abstr.) **(Rus)**

DRUG THERAPY

General requirements for controlled clinical trials of antibiotic treatment of soft tissue lacerations [editorial] Edlich RF. **Ann Emerg Med** 1989 Aug;18(8):900
Phenytoin pharmacokinetics in critically ill trauma patients. Boucher BA, et al. **Clin Pharmacol Ther** 1988 Dec; 44(6):675–83
Growth factors and diabetic wound healing: epidermal growth factor and insulin. Hennessey PJ, et al. **Curr Surg** 1989 Jul–Aug;46(4):285–6
Use of phenytoin in healing of war and non-war wounds. A pilot study of 25 cases. Modaghegh S, et al. **Int J Dermatol** 1989 Jun;28(5):347–50
[New prescription and its application on trauma and shock treated by traditional Chinese medicine and Western medicine] Zhang HL. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jun;8(6):380–2 (32 ref.) **(Chi)**
[Acute renal failure after treatment of a wound using sucrose (letter)] Viau F, et al. **Presse Med** 1989 Feb 11;18(5):227 **(Fre)**
[Experimental study of wound-healing effect of the preparation "Aekol" (artificial sea buckthorn oil)] Kostrikova EV. **Ortop Travmatol Protez** 1989 Jan;(1):32–6 (Eng. Abstr.) **(Rus)**

ECONOMICS

The economic impact of traumatic injuries. One-year treatment-related expenditures. MacKenzie EJ, et al. **JAMA** 1988 Dec 9;260(22):3290–6
Economics of trauma in a small academic medical center. Cone JB, et al. **South Med J** 1989 Jan;82(1):23–5
High cost of trauma care in the elderly. Ross N, et al. **South Med J** 1989 Jul;82(7):857–9
[Socioeconomic assessment of chronic traumatic osteomyelitis] Zhitnitskil RE, et al. **Ortop Travmatol Protez** 1988 Jul;(7):53–6 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Phospholipase A in acute lung injury after trauma and sepsis: its relation to the inflammatory mediators PMN-elastase, C3a, and neopterin. Kellermann W, et al. **Klin Wochenschr** 1989 Feb 1;67(3):190–5

EPIDEMIOLOGY

Is school-based reporting of injuries at school reliable? A literature review and an empirical study. Bremberg S. **Accid Anal Prev** 1989 Apr;21(2):183–9 (28 ref.)
Filtering effects in reporting work injuries. Webb GR, et al. **Accid Anal Prev** 1989 Apr;21(2):115–23
Preliminary trauma study, 1987. Kilkenny SJ. **Alaska Med** 1988 Jul–Aug;30(4):124
The impact of alcohol ingestion on the orthopaedic and accident service. Redfern TR, et al. **Alcohol Alcohol** 1988; 23(5):415–9
Recurrent injuries in schoolchildren. Boyce WT, et al. **Am J Dis Child** 1989 Mar;143(3):338–42
Risk factors for injury in a 3-year-old birth cohort. Larson CP, et al. **Am J Dis Child** 1988 Oct;142(10):1052–7
Injuries on the fireground: risk factors for traumatic injuries among professional fire fighters. Heineman EF, et al. **Am J Ind Med** 1989;15(3):267–82
Work-related injuries in minors. Schober SE, et al. **Am J Ind Med** 1988;14(5):585–95
Consumer product-related injuries in Athens, Ohio, 1980–85: assessment of emergency room-based surveillance. Hopkins RS. **Am J Prev Med** 1989 Mar–Apr;5(2):104–12
The potential for using a trauma registry for injury surveillance and prevention. Lloyd LE, et al. **Am J Prev Med** 1989 Jan–Feb;5(1):34–7
Major trauma in geriatric patients. Champion HR, et al. **Am J Public Health** 1989 Sep;79(9):1278–82
Population-based study of unintentional injury incidence and impact during childhood. Rivara FP, et al. **Am J Public Health** 1989 Aug;79(8):990–4
Incidence, causes and severity of injuries in Aquitaine, France: a community-based study of hospital admissions and deaths. Tiret L, et al. **Am J Public Health** 1989 Mar; 79(3):316–21
Injury surveillance at the 1985 National Boy Scout Jamboree. Wetterhall SF, et al. **Am J Sports Med** 1988 Sep–Oct; 16(5):534–8
Trauma—the medical term for injury [letter] Ebert PA. **Am J Surg** 1988 Nov;156(5):428
All terrain vehicles (ATVs). A recreational gamble. Vasilakis A, et al. **Am Surg** 1989 Mar;55(3):142–4
Acutely injured patients intoxicated by alcohol: trend, monthly and weekly variation and social characteristics. Antti-Poika I. **Ann Chir Gynaecol** 1988;77(3):118–22
Injury profiles in pedestrian motor vehicle trauma. Brainard BJ, et al. **Ann Emerg Med** 1989 Aug;18(8):881–3
Trauma and the full moon: a waning theory. Coates W, et al. **Ann Emerg Med** 1989 Jul;18(7):763–5
Farm equipment injuries in a rural county, 1980 through 1985: the emergency department as a source of data for prevention. Hopkins RS. **Ann Emerg Med** 1989 Jul; 18(7):758–62
Vertical trauma: injuries to patients who fall and land on their feet. Lowenstein SR, et al. **Ann Emerg Med** 1989 Feb; 18(2):161–5
Notting Hill Carnival 1988. Dalton AM, et al. **Arch Emerg Med** 1989 Jun;6(2):146–8
Waterslides—are safety standards sliding? Gordon CJ, et al. **Arch Emerg Med** 1988 Dec;5(4):216–22
Injuries in the 12th and 13th years of life. Chalmers DJ, et al. **Aust Paediatr J** 1989 Feb;25(1):14–20
Parachuting injuries and type of parachute in a reserve rescue unit. Baldwin CC. **Aviat Space Environ Med** 1988 Aug; 59(8):780–2
Injuries to pedestrians in road traffic accidents. Atkins RM, et al. **BMJ** 1988 Dec 3;297(6661):1431–4
Injuries to dancers: prevalence, treatment, and perceptions of causes [see comments] Bowling A. **BMJ** 1989 Mar 18; 298(6675):731–4. **Comment in:** BMJ 1989 Apr 29;298(6681):1176–7
Efficacy of the New York State seat belt law: preliminary assessment of occurrence and severity. Barancik JI, et al. **Bull N Y Acad Med** 1988 Sep–Oct;64(7):742–9
Disease reporting by physicians in New York City [published erratum appears in Bull N Y Acad Med 1988 Jul–Aug;64(6):600] Budnick LD, et al. **Bull N Y Acad Med** 1988 Jun;64(5):422–9
A preliminary assessment of change in motor vehicle traffic trauma incidence and outcome: Rhode Island, 1984–1985. Rockett IR, et al. **Bull N Y Acad Med** 1988 Sep–Oct; 64(7):750–6
Analysis of surgical admissions to Coast Province General Hospital, Mombasa: retrospective study (October 1985 to October 1986). Haq A. **East Afr Med J** 1988 Apr; 65(4):264–70
Injuries due to deliberate violence in areas of Argentina. II. Lesions. Copenhagen Study Group. Danielsen L, et al. **Forensic Sci Int** 1989 Jul;42(1–2):165–75
Injuries due to deliberate violence in areas of Denmark. III. Lesions. The Copenhagen Study Group. Kjaerulff H, et al. **Forensic Sci Int** 1989 Apr–May;41(1–2):169–80
The tiger and the Shaman: towards an understanding of why we tolerate a major cause for death and disability. Buchbinder G. **Hawaii Med J** 1988 Sep;47(9):441–3
Staff injuries from inpatient violence. Carmel H, et al. **Hosp Community Psychiatry** 1989 Jan;40(1):41–6
Heavy drinking and accidents—a prospective study among men of working age. Antti-Poika I, et al. **Injury** 1988 May; 19(3):198–200
Injury in Auckland, New Zealand: an unexplored epidemic. Civil ID, et al. **Injury** 1988 May;19(3):205–8
Assault: characteristics of victims attending an inner-city hospital. Shepherd J, et al. **Injury** 1988 May;19(3):185–90
Off-the-road motorcycling injuries 1982–1985. Wilson-MacDonald J, et al. **Injury** 1987 May;18(3):196–8
Injuries and risk factors for injuries from the 29 May 1982 tornado, Marion, Illinois. Duclos PJ, et al. **Int J Epidemiol** 1989 Mar;18(1):213–9
Visits to the college health service for alcohol-related injuries. Meilman PW, et al. **J Am Coll Health** 1989 Mar; 37(5):205–10
Pedestrian accidents: adult and pediatric injuries. Derlet RW, et al. **J Emerg Med** 1989 Jan–Feb;7(1):3–8 (9 ref.)
Injuries to carpenters. Waller JA, et al. **J Occup Med** 1989 Aug;31(8):687–92
Assaults in south east London. Hocking MA. **J R Soc Med** 1989 May;82(5):281–4
Injuries, absences, and visits to the nurse among children in alternative schools. McFadyen SC, et al. **J Sch Health** 1988 Dec;58(10):406–9
Injury to the elderly in road traffic accidents. McCoy GF, et al. **J Trauma** 1989 Apr;29(4):494–7
Trauma registry and trauma center biases in injury research. Payne SR, et al. **J Trauma** 1989 Apr;29(4):424–9
Injury and cost comparison of restrained and unrestrained motor vehicle crash victims. Reath DB, et al. **J Trauma** 1989 Aug;29(8):1173–6; discussion 1176–7
The epidemiology of trauma in an intensive care unit in Bahrain. Ruehsen MM, et al. **J Trauma** 1989 Jan;29(1):31–6
Injury in U.S. Army helicopter crashes October 1979–September 1985. Shanahan DF, et al. **J Trauma** 1989 Apr;29(4):415–22; discussion 423
Urban trauma: a chronic recurrent disease. Sims DW, et al. **J Trauma** 1989 Jul;29(7):940–6; discussion 946–7
Leads from the MMWR. Playground-related injuries in preschool-aged children—United States, 1983–1987.

JAMA 1988 Nov 18;260(19):2799–800
The epidemiology of injuries in Atlanta day-care centers. Sacks JJ, et al. JAMA 1989 Sep 22–29;262(12):1641–5
Adolescent suicide, homicide, and unintentional injuries. Joffe A. Md Med J 1988 Dec;37(12):955–8
Playground-related injuries in preschool-aged children—United States, 1983–1987. MMWR 1988 Oct 21; 37(41):629–32
Wood burning related injuries. Nicholson JJ, et al. N Y State J Med 1989 May;89(5):262–3
Needlestick injuries in ophthalmology. Mansour AM. Ophthalmic Surg 1989 May;20(5):367–9
Childhood injuries: a population-based study of emergency room visits in Jerusalem. Gofin R, et al. Paediatr Perinat Epidemiol 1989 Apr;3(2):174–88
Persistence of occurrence of injury: can injuries of preschool children predict injuries of school-aged children? Bijur PE, et al. Pediatrics 1988 Nov;82(5):707–12
Injuries among preschool children enrolled in day-care centers. Chang A, et al. Pediatrics 1989 Feb;83(2):272–7
Three-wheel and four-wheel all-terrain vehicle injuries in children. Dolan MA, et al. Pediatrics 1989 Oct;84(4):694–8
Injury research: where should we go from here? Rivara FP, et al. Pediatrics 1989 Jul;84(1):180–1
Snowy roofs—a potential hazard. Eriksson A, et al. Scand J Soc Med 1988;16(3):179–82
Childhood injury deaths in Texas: a major public health problem. Cooper SP. Tex Med 1989 Apr;85(4):29–33
Injuries in America: a national disaster. Baker SP. Trans Stud Coll Physicians Phila 1988 Dec;10(1–4):135–45
[Children and traffic accidents in 1987 in Czechoslovakia] Tesařík J. Cesk Pediatr 1988 Oct;43(10):620–1 (Cze)
[Incidence of major injuries in surgical departments in Czechoslovakia in 1985] Rödling J, et al. Rozhl Chir 1988 Dec;67(12):815–28 (Eng. Abstr.) (Cze)
[Domestic accidents with ladders] Lindblad BE, et al. Ugeskr Laeger 1988 Nov 21;150(47):2907–8 (Eng. Abstr.) (Dan)
[An epidemiologic and traumatologic analysis of injuries at a basketball club in Denmark] Yde JR, et al. Ugeskr Laeger 1988 Jan 18;150(3):142–4 (Eng. Abstr.) (Dut)
[Epidemiologic study of injuries in infants] Tursz A, et al. Arch Fr Pediatr 1988 Nov;45(9):673–8 (19 ref.) (Eng. Abstr.) (Fre)
[Traffic injuries in the Tessin Canton in 1982 and in 1985. Epidemiology, surgery and socioeconomic aspects] Quadri B, et al. Helv Chir Acta 1989 Jun;56(1–2):113–20 (Eng. Abstr.) (Fre)
[Injuries and poisoning caused by various types of activities. Epidemiologic survey on death and hospitalization in Aquitaine] Nicaud V, et al. Rev Epidemiol Sante Publique 1989;37(2):127–36 (Eng. Abstr.) (Fre)
[Incidence of accidents in childhood in a regional district] Ordyniak R, et al. Z Arztl Fortbild (Jena) 1988;82(16):771–4 (Ger)
[Injuries in nursing homes (editorial)] Nygaard HA. Tidsskr Nor Laegeforen 1989 Aug 10;109(22):2107 (Nor)
[Injuries in nursing homes. Hospital-based registration of injuries of patients in nursing homes] Wasmuth HH. Tidsskr Nor Laegeforen 1989 Aug 10;109(22):2164–6 (Eng. Abstr.) (Nor)
[Occupational accidents in the light of the records of the Institute of Social Insurance] Marcinkowski JT, et al. Med Pr 1988;39(6):434–41 (Eng. Abstr.) (Pol)
[Prevention of road and transportation injuries of children] Ivanova TG. Ortop Travmatol Protez 1988 Sep;(9):72–3 (Rus)
[Indoor and traffic traumatism in the cities of the Russian Federation (socio-hygienic study)] Kornilov NV, et al. Ortop Travmatol Protez 1989 Jan;(1):65–7 (Rus)
[Evaluation of statistical tables in surgery using a computer] Kohútová E, et al. Rozhl Chir 1989 May;68(5):360–6 (Eng. Abstr.) (Slo)
[Occurrence of severe injuries increases but occurrence of less severe injuries doesn't increase with advancing age] Brorsson B. Lakartidningen 1989 May 17;86(20):1913–5 (Swe)
[Increase in the number of severely sick and wounded at emergency health services in the inner city of Stockholm] Liljefors I. Lakartidningen 1989 Jan 25;86(4):201–2, 207 (Swe)
[Injuries after rocket seat ejections in the Swedish Air Force 1967–1987] Sandstedt P, et al. Lakartidningen 1989 Mar 29;86(13):1159–61 (Swe)

ETHNOLOGY

Leads from the MMWR. Differences in death rates due to injury among blacks and whites, 1984. JAMA 1989 Jan 13;261(2):214–6
Injuries to children in a Native American community. Berger LR, et al. Pediatrics 1989 Jul;84(1):152–6

ETIOLOGY

Injury patterns for occupants of small trucks. Cunningham JW, et al. Accid Anal Prev 1989 Apr;21(2):105–13
Behavioral predictors of injury in school-age children. Bijur P, et al. Am J Dis Child 1988 Dec;142(12):1307–12
Unintentional injuries. Risk factors in preschool children. Bourguet CC, et al. Am J Dis Child 1989 May;143(5):556–9
A polysomnographic and clinical report on sleep-related injury in 100 adult patients. Schenck CH, et al. Am J Psychiatry 1989 Sep;146(9):1166–73
Left-handedness and accident-related injury risk. Coren S. Am J Public Health 1989 Aug;79(8):1040–1
A study of battered women presenting in an emergency department. McLeer SV, et al. Am J Public Health 1989 Jan;79(1):65–6
Mechanism of injury in aircraft accidents—a theoretical approach. Hill IR. Aviat Space Environ Med 1989 Jul;60(7 Pt 2):A18–25 (29 ref.)
Incidence and consequences of ejection in motor vehicle accidents. McCoy GF, et al. BMJ 1988 Nov 12; 297(6658):1244–5
Analysis of the reasons and circumstances of traumas and accidents on passenger vessel. Jaremin B. Bull Inst Marit Trop Med Gdynia 1988;39(1–2):51–60
Cause and control of automotive trauma. Viano DC. Bull N Y Acad Med 1988 Jun;64(5):376–421 (197 ref.)
The use of consumer injury registry data to evaluate physical abuse [letter] Chadwick DL. Child Abuse Negl 1989; 13(3):443–4
A diagnostic dilemma in Jordan: two child abuse case studies. Nazer H, et al. Child Abuse Negl 1988;12(4):593–9
Injuries caused by personal violence. Sumner BB, et al. Injury 1987 Jul;18(4):258–60
Medical statistics of battlefield casualties. Trouwborst A, et al. Injury 1987 Mar;18(2):96–9
Alcohol-related injuries and objective screening tests. Schwartz RH. J Am Coll Health 1989 Jul;38(1):49–50
All-terrain vehicle accidents: a survey of a community hospital's experience. Rogers WD. J Orthop Trauma 1987; 1(3):223–6
A microcomputer program for coding external cause of injury. McClain PW, et al. J Trauma 1989 Jan;29(1):55–8
Drug use in trauma victims. Rivara FP, et al. J Trauma 1989 Apr;29(4):462–70
Soda pop vending machine injuries. Cosio MQ. JAMA 1988 Nov 11;260(18):2697–9
All-terrain vehicles: hazard in Britain [letter] Jagger J, et al. Lancet 1988 Dec 10;2(8624):1368–9
Injuries caused by pigs in Papua New Guinea. Barss P, et al. Med J Aust 1988 Dec 5–19;149(11–12):649–56
Playground injuries. N Y State J Med 1988 Dec;88(12):667–8
Preschool behavior problems and subsequent risk of injury. Davidson LL, et al. Pediatrics 1988 Oct;82(4):644–51
Iatrogenic instrumentation-induced plastic surgical referrals. Widgerow AD. Plast Reconstr Surg 1988 Dec; 82(6):1083–90
Serious assaults by inpatients [published erratum appears in Psychosomatics 1989 Summer;30(3):358] Reid WH, et al. Psychosomatics 1989 Winter;30(1):54–6
Morbidity of Hurricane Elena. Longmire AW, et al. South Med J 1988 Nov;81(11):1343–6
Cumulative injury in workers' compensation. LaDou J. State Art Rev Occup Med 1988 Oct–Dec;3(4):611–9 (10 ref.)
All-terrain-vehicle injuries. A sport out of control. Percy EC, et al. West J Med 1989 Mar;150(3):296–9
Health hazards related to ergonomic work conditions. Kilbom A, et al. Women Health 1988;13(3–4):81–93
[A new cause of accidents resulting from the use of air-powered tools] Hansen TB, et al. Ugeskr Laeger 1989 Apr 3;151(14):897–8 (Eng. Abstr.) (Dan)
[Product-related home accidents. A study of injuries and accidents] Lindblad BE, et al. Ugeskr Laeger 1988 Nov 14;150(46):2804–6 (Eng. Abstr.) (Dan)
[Crash injuries of children in cars. Children sitting on an adult's knees] Schou H, et al. Ugeskr Laeger 1988 Jan 18; 150(3):166–7 (Eng. Abstr.) (Dut)
[3-wheeled and 4-wheeled all-terrain vehicles: unstable and dangerous vehicles] Delisle A, et al. Can J Public Health 1989 Jan–Feb;80(1):28–30 (Eng. Abstr.) (Fre)
[Traumatism among children and adolescents (a new approach)] Doletskii SIa. Ortop Travmatol Protez 1988 Dec;(12):46–9 (Rus)
[Causes of children's traumatism in the industrial region of the Donets Basin] Usikova TIa, et al. Ortop Travmatol Protez 1989 Jan;(1):61–5 (Rus)
[Agricultural trauma: its real meaning, determination of the causes and their classification] Zava'niuk AKh. Ortop Travmatol Protez 1989 May;(5):61–5 (Rus)
[Determination of the time of occurrence of mechanical trauma by the EPR spectra of the bone marrow] Pashinian GA, et al. Sud Med Ekspert 1988 Oct–Dec;31(4):9–11 (Eng. Abstr.) (Rus)
[Establishment of the intravital occurrence of mechanical trauma by the EPR spectra of the bone marrow] Proshutin VL. Sud Med Ekspert 1988 Jul–Sep;31(3):18–20 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Depression of plasma endotoxin levels during gram-negative septicemia subsequent to moderate trauma. Røkke O, et al. Acta Chir Scand 1989 Mar;155(3):145–9
Host defense mechanisms in surgical patients: effect of surgery and trauma. Meakins JL. Acta Chir Scand Suppl 1989;550:43–51; discussion 51–3 (29 ref.)
Defective T-cell surface antigen expression after mitogen stimulation. An index of lymphocyte dysfunction after controlled murine injury. Gadd MA, et al. Ann Surg 1989 Jan;209(1):112–8
Comparison of antibody response with delayed hypersensitivity in severely injured patients. Hershman MJ, et al. Arch Surg 1989 Mar;124(3):339–41
Interferon-gamma treatment increases HLA-DR expression on monocytes in severely injured patients. Hershman MJ, et al. Clin Exp Immunol 1989 Jul;77(1):67–70
Host defense abnormalities after hemorrhage, trauma, and burns. Abraham E. Crit Care Med 1989 Sep;17(9):934–9 (74 ref.)
Trauma and the immune response [news] Green DR, et al. Immunol Today 1988 Sep;9(9):253–5
Immunologic alterations following excisional wounding and immediate repair with syngeneic or allogeneic skin grafts. Jacobson BK, et al. J Burn Care Rehabil 1988 Jul–Aug; 9(4):354–8
Production and release of C3 by cultured monocytes/macrophages isolated from burned, trauma, and septic patients. Ogle CK, et al. J Trauma 1989 Feb; 29(2):189–94
Spontaneous lymphocyte proliferation during trauma and infection. Soop M, et al. Scand J Immunol 1988 Dec; 28(6):659–65
Temporal analysis of murine lymphocyte subpopulations by monoclonal antibodies and dual-color flow cytometry after burn and nonburn injury. Hansbrough JF, et al. Surgery 1989 Jul;106(1):69–80
[Advances in research on the mechanism of immunosuppression after traumatic injury] Chen BG. Chung Hua Wai Ko Tsa Chih 1988 May;26(5):314–6 (33 ref.) (Chi)
[Immunosuppression caused by surgery and severe trauma] Holch M, et al. Helv Chir Acta 1989 Jun;56(1–2):121–4 (Eng. Abstr.) (Ger)
[Immunologic changes and infection in severely injured patients] Glinz W, et al. Schweiz Med Wochenschr 1989 Mar 18;119(11):354–60 (Eng. Abstr.) (Ger)
[Effect of blood transfusion on specific anti-tetanus immunity] Korableva NN, et al. Gematol Transfuziol 1989 Mar;34(3):26–9 (Eng. Abstr.) (Rus)
[An analysis of the interrelations of the immune system in the dynamics of traumatic disease] Redkin IuV, et al. Patol Fiziol Eksp Ter 1988 Sep–Oct;(5):8–12 (Eng. Abstr.) (Rus)

METABOLISM

Protein metabolism in response to injury and other pathological conditions. Munro HN. Acta Anaesthesiol Scand Suppl 1974;55:81–6 (25 ref.)
Insulin degradation after injury in man. Hoare SM, et al. Adv Exp Med Biol 1988;240:421–4
Post-traumatic changes in, and effect of colloid osmotic pressure on the distribution of body water. Böck JC, et al. Ann Surg 1989 Sep;210(3):395–403; discussion 403–5
The effects of injury and sepsis on fuel utilization. Goldstein SA, et al. Annu Rev Nutr 1989;9:445–73 (132 ref.)
Penetration of antibiotics into the surgical wound in a canine model. Rosin E, et al. Antimicrob Agents Chemother 1989 May;33(5):700–4
Prediction and prevention of fistulae after major head and neck surgery: a preliminary report. Morton RP, et al. Aust N Z J Surg 1988 Dec;58(12):951–3
The metabolic and nutritional effects of injury and sepsis. Burns HJ. Baillieres Clin Gastroenterol 1988 Oct; 2(4):849–67 (120 ref.)
Regulation of muscle protein turnover: possible implications for modifying the responses to trauma and nutrient intake. Garlick PJ, et al. Baillieres Clin Gastroenterol 1988 Oct; 2(4):915–40 (160 ref.)
Metabolic response to sepsis and trauma. Douglas RG, et al. Br J Surg 1989 Feb;76(2):115–22 (137 ref.)
The role of nutrition in the management of metabolic stress. Cerra FB. Crit Care Clin 1986 Oct;2(4):807–19 (32 ref.)
Fat metabolism in injury and stress. Wiener M, et al. Crit Care Clin 1987 Jan;3(1):25–56 (143 ref.)
Protein and amino acid metabolism after injury. Wolfe RR, et al. Diabetes Metab Rev 1989 Mar;5(2):149–64 (164 ref.)
The effect of gas permeability of film dressings on wound environment and healing. Sirvio LM, et al. J Invest Dermatol 1989 Oct;93(4):528–31
Does hyperketonemia affect protein or glucose kinetics in postabsorptive or traumatized man? Crowe PJ, et al. J Surg Res 1989 Oct;47(4):313–8
Nutrition and the metabolic response to injury. Lancet 1989 May 6;1(8645):995–7 (27 ref.)
Alterations in spinal cord norepinephrine levels following experimentally produced trauma in normal and adrenalectomized cats. Schoultz TW, et al. Life Sci 1974 Oct 15;15(8):1485–95
Local glutamine metabolism in wounds and inflammation. Caldwell MD. Metabolism 1989 Aug;38(8 Suppl 1):34–9 (46 ref.)
[Zinc and trauma] Cai DL. Sheng Li Ko Hsueh Chin Chan 1988 Jul;19(3):260–3 (46 ref.) (Chi)
[Ascorbic acid and hydroxyproline levels in the serum and granulation tissue of rats with aseptic and infected wounds] Novikova AN, et al. Biull Eksp Biol Med 1988 Sep; 106(9):355–8 (Eng. Abstr.) (Rus)
[The content of glycogen and its fractions in human hepatocytes in traumatic disease] Kudriavtseva MV, et al.

Tsitologiia 1988 Dec;30(12):1449–53 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Isolation of Flavobacterium thalpophilum from a wound [letter] Hansen W, et al.
Eur J Clin Microbiol Infect Dis 1988 Dec;7(6):818–9

The effects of an occlusive zinc medicated dressing on the bacterial flora in excised wounds in the rat. Söderberg T, et al. Infection 1989 Mar–Apr;17(2):81–5

The use of a new assay for detecting antibody to Staphylococcus aureus in severely injured patients. Hershman MJ, et al. J Trauma 1989 Jan;29(1):75–8

[Specificities of bacterial death in culture and suppurative wounds] Pal'tsyn AA, et al. Biull Eksp Biol Med 1988 Oct; 106(10):464–7 (Eng. Abstr.) (Rus)

MORTALITY

Injuries from single-vehicle crashes and snow depth. Brorsson B, et al. Accid Anal Prev 1988 Oct;20(5):367–77

Characteristics of three- and four-wheeled all-terrain vehicle accidents in Quebec. DeLisle A, et al. Accid Anal Prev 1988 Oct;20(5):357–66

Injury mortality and morbidity in New Zealand. Langley JD, et al. Accid Anal Prev 1989 Jun;21(3):243–54

Pedestrian fatalities in Alaska, 1980–1984. Middaugh JP. Alaska Med 1989 May–Jun;31(3):108–14

Childhood injury deaths: national analysis and geographic variations. Waller AE, et al. Am J Public Health 1989 Mar; 79(3):310–5

Trauma in the elderly. Osler T, et al. Am J Surg 1988 Dec; 156(6):537–43

Preventable deaths in a self-designated trauma system. Campbell S, et al. Am Surg 1989 Jul;55(7):478–80

Analysis of multiple organ system failure in trauma and nontrauma patients. Crump JM, et al. Am Surg 1988 Dec; 54(12):702–8

An audit of trauma deaths occurring in the accident and emergency department. Gordon MW, et al.
Arch Emerg Med 1989 Jun;6(2):107–15

One year's trauma in a district general hospital: injury severity and survival. Montague AP, et al.
Arch Emerg Med 1989 Jun;6(2):116–24

A review of trauma deaths in an accident and emergency department. Underhill TJ, et al. Arch Emerg Med 1989 Jun;6(2):90–6

The impact of in-house surgeons and operating room resuscitation on outcome of traumatic injuries. Hoyt DB, et al. Arch Surg 1989 Aug;124(8):906–9; discussion 909–10

CDH studies rural injury rates and compares Colorado death rates to national rates. Colo Med 1989 Sep;86(15):283

Road traffic accidents in Kaduna metropolis: a-3 month survey. Obembe A, et al. East Afr Med J 1988 Sep; 65(9):572–7

Time from injury to death (survival time) among fatally injured pedestrians. Fife D. Injury 1987 Sep;18(5):315–8

An outcome predictive score for sepsis and death following injury. Hershman MJ, et al. Injury 1988 Jul;19(4):263–6

Alcohol, other drugs, and fatal work-related injuries. Lewis RJ, et al. J Occup Med 1989 Jan;31(1):23–8

Locations of fatal work injuries in the United States: 1980 to 1985. Trent RB. J Occup Med 1989 Aug;31(8):674–6

Preventable pediatric trauma deaths in a metropolitan region. Dykes EH, et al. J Pediatr Surg 1989 Jan;24(1):107–10; discussion 110–1

Traumatic deaths in the Sheffield and Barnsley areas. Wardrope J. J R Coll Surg Edinb 1989 Apr;34(2):69–73

A case control study for major trauma in geriatric patients. Finelli FC, et al. J Trauma 1989 May;29(5):541–8

Mortality of patients with head injury and extracranial injury treated in trauma centers. Gennarelli TA, et al.
J Trauma 1989 Sep;29(9):1193–201; discussion 1201–2

The effect of autopsy on injury severity and survival probability calculations. Harviel JD, et al. J Trauma 1989 Jun;29(6):766–72; discussion 772–3

Effectiveness of implementing a trauma triage system on outcome: a prospective evaluation. Kilberg L, et al.
J Trauma 1988 Oct;28(10):1493–8

Acute lymphocytosis after trauma—early recognition of the high-risk patient? Pinkerton PH, et al. J Trauma 1989 Jun; 29(6):749–51

Alcohol and fatal injuries among US adults. Findings from the NHANES I Epidemiologic Follow-up Study. Anda RF, et al. JAMA 1988 Nov 4;260(17):2529–32

The physician's role in preventing alcohol-related injuries [editorial] Waller JR. JAMA 1988 Nov 4;260(17):2561–2

Work-related injuries [letter; comment] Baker C.
Med J Aust 1989 May 15;150(10):604–5. Comment on: Med J Aust 1989 Feb 6;150(3):118–25

Deaths as a result of work-related injury in Australia, 1982–1984 [see comments] Harrison JE, et al.
Med J Aust 1989 Feb 6;150(3):118–25. Comment in: Med J Aust 1989 May 15;150(10):604–5

Traumatic deaths in children: the importance of prevention. Wheatley J, et al. Med J Aust 1989 Jan 16;150(2):72–8

More on the role of weapons in homicidal violence. Barlow HD, et al. Med Law 1988;7(4):347–58

Queens Boulevard Pedestrian Safety Project—New York City. MMWR 1989 Feb 10;38(5):61–4

Dying is no accident. Adolescents, violence, and intentional injury. Spivak H, et al. Pediatr Clin North Am 1988 Dec; 35(6):1339–47 (28 ref.)

Fatal farm injuries among young children. Salmi LR, et al. Pediatrics 1989 Feb;83(2):267–71

Fatal injuries in Oklahoma: descriptive epidemiology using Medical Examiner data. Goodman RA, et al.
South Med J 1989 Sep;82(9):1128–34

A model-based approach to the imputation of missing data: home injury incidences. Conn JM, et al. Stat Med 1989 Mar;8(3):263–6; discussion 279–81

Mortality from unintentional injuries in California, 1985. Saunders LD, et al. West J Med 1989 Apr;150(4):478–83

Injury mortality in New Mexico's American Indians, Hispanics, and non-Hispanic whites, 1958 to 1982. Sewell CM, et al. West J Med 1989 Jun;150(6):708–13

Epidemiology of work-related diseases and accidents. Tenth report of the Joint ILO/WHO Committee on Occupational Health. WHO Tech Rep Ser 1989;777:1–71

[Zoo accidents. On the nature of such accidents and possible responsibility of the victim and others and recommendations for preventing such incidents] Krumbiegel I. Arch Kriminol 1989 May–Jun; 183(5–6):146–56 (Ger)

[Causes of accidents from the viewpoint of the forensic physician (pediatric accidents)] Leopold D.
Z Arztl Fortbild (Jena) 1988;82(16):751–4 (6 ref.) (Ger)

[Short and long-term survival in fatal street traffic accidents] Bachor R, et al. Z Rechtsmed 1988;100(2–3):191–7 (Eng. Abstr.) (Ger)

[Effect of age on the outcome of severe trauma. Our experience in 149 cases] Corbanese U, et al.
Minerva Anestesiol 1988 Sep;54(9):377–80 (Eng. Abstr.) (Ita)

NURSING

A new way to size up a wound. Kundin JI. Am J Nurs 1989 Feb;89(2):206–7

Perioperative nursing care of the multiple trauma patient. When seconds count [published erratum appears in AORN J 1989 Sep;50(3):600] Freeman MC, et al. AORN J 1989 Jul;50(1):40–1, 43–4, 46–50

Effects of heat and cold on the perineum after episiotomy/laceration. Hill PD.
J Obstet Gynecol Neonatal Nurs 1989 Mar–Apr;18(2):124–9

PARASITOLOGY

Identification of Giardia lamblia in peritoneal fluid of trauma patients. Drew PA, et al. Acta Cytol 1989 Mar–Apr; 33(2):283–4

PATHOLOGY

The 1983 Beirut Airport terrorist bombing. Injury patterns and implications for disaster management. Frykberg ER, et al. Am Surg 1989 Mar;55(3):134–41

Detection of injuries in traumatic deaths. The significance of medico-legal autopsy. Albrektsen SB, et al.
Forensic Sci Int 1989 Jul;42(1–2):135–43

A pathologist's view of multiple murder. Gee DJ.
Forensic Sci Int 1988 Jul–Aug;38(1–2):53–65

Death and disaster [editorial] Mason JK. Forensic Sci Int 1989 Jan;40(1):1–2

Relationship of intraneural damage in the rat sciatic nerve to the mechanism of injury. Zachary LS, et al.
J Reconstr Microsurg 1989 Apr;5(2):137–40

Serum amyloid A: an extremely sensitive marker for intensity of tissue damage in trauma patients and indicator of acute response in various diseases. Mozes G, et al. J Trauma 1989 Jan;29(1):71–4

[The relation of lesions of the testis and acute injury and chronic disease of the kidney] Kuang DY.
Chung Hsi I Chieh Ho Tsa Chih 1989 Jan;9(1):10–3, 3–4 (Eng. Abstr.) (Chi)

[Undiagnosed traumatic injuries. A comparison between clinical and forensic medical findings] Albrektsen SB, et al. Ugeskr Laeger 1988 Oct 10;150(41):2451–4 (Eng. Abstr.) (Dan)

[Retrospective analysis of 1354 autopsies in cases of death caused by trauma] Benedetto G, et al. Minerva Chir 1989 May 31;44(10):1521–3 (Eng. Abstr.) (Ita)

[Clinico-forensic significance of injuries in drivers and co-drivers of automobiles] Denić N, et al.
Srp Arh Celok Lek 1986 Apr;114(4):413–20 (Eng. Abstr.) (Sec)

PHYSIOPATHOLOGY

Influence of biosynthetic human growth hormone on biomechanical properties of rat skin incisional wounds. Jørgensen PH, et al. Acta Chir Scand 1988 Nov–Dec; 154(11–12):623–6

Preferential growth of blood-borne cancer cells at sites of trauma—a growth promoting role of macrophages. Alexander P, et al. Adv Exp Med Biol 1988;233:245–51

Endocrine responses to multiple sensory input related to injury. Bereiter DA, et al. Adv Exp Med Biol 1988; 245:251–63 (32 ref.)

The new RYB color code. Cuzzell JZ. Am J Nurs 1988 Oct; 88(10):1342–6

The physiology of wound healing. Hunt TK.
Ann Emerg Med 1988 Dec;17(12):1265–73 (59 ref.)

Gallbladder response to enteral lipids in injured patients. Merrell RC, et al. Arch Surg 1989 Mar;124(3):301–2

Coagulation, inflammation, and responses to injury. Pottmeyer E, et al. Crit Care Clin 1986 Oct;2(4):683–703 (74 ref.)

Measurement of nocturnal sleep patterns in trauma patients. Fontaine DK. Heart Lung 1989 Jul;18(4):402–10

A pediatric trauma model of continuous hemorrhage. Schwaitzberg SD, et al. J Pediatr Surg 1988 Jul;23(7):605–9

Different effects of bleeding and soft-tissue trauma on pulmonary platelet trapping in pigs. Blomquist S, et al.
J Trauma 1989 Jun;29(6):866–72

1988 Fitts lecture: heart rate changes after haemorrhage and injury—a reappraisal. Little RA. J Trauma 1989 Jul; 29(7):903–6 (30 ref.)

Hormonal and metabolic changes following severe head injury or noncranial injury. Chioléro R, et al.
JPEN J Parenter Enteral Nutr 1989 Jan–Feb;13(1):5–12

Physiologic monitoring of combat casualties. Lamiell JM, et al. Milit Med 1989 Apr;154(4):186–91

Effect of laser radiation on post-traumatic restoration of interneuronal connections of the sympathetic trunk. Rakhishev AR, et al. Neurosci Behav Physiol 1989 May–Jun;19(3):203–7

Two peptides related to platelet-derived growth factor are present in human wound fluid. Matsuoka J, et al.
Proc Natl Acad Sci U S A 1989 Jun;86(12):4416–20

[Growth factors and post-injury tissue repair] Keski-Oja J, et al. Duodecim 1988;104(16):1220–9 (54 ref.) (Fin)

[Post-traumatic pulmonary insufficiency: therapeutic measures] Suter PM, et al. Schweiz Med Wochenschr 1989 Mar 18;119(11):364–8 (Eng. Abstr.) (Fre)

[Gas exchange in various stages of injury] Savevski J.
Acta Chir Iugosl 1987;34 Suppl 2:105–13 (Eng. Abstr.) (Mac)

[Changes in hemodynamics and the functional state of the myocardium in trauma and blood loss] Ivanov GG.
Anesteziol Reanimatol 1988 Sep–Oct;(5):11–3 (Eng. Abstr.) (Rus)

[Various characteristics of central hemodynamics and oxygen balance in patients with severe mechanical trauma in relation to the course of the post-traumatic period] Vasilenko NI, et al. Anesteziol Reanimatol 1988 Jul–Aug; (4):27–32 (Eng. Abstr.) (Rus)

[The external respiration system and associated hemodynamic function of the human body in minor mechanical trauma] Shanin IuN, et al. Vestn Akad Med Nauk SSSR 1988; (9):30–4 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Potential fatality reductions through eliminating occupant ejection from cars. Evans L, et al. Accid Anal Prev 1989 Apr;21(2):169–82

Predicting injury risk with "New Car Assessment Program" crashworthiness ratings. Jones IS, et al.
Accid Anal Prev 1988 Dec;20(6):411–9

The tragedy of trauma. Bergren CT. Ala Med 1989 Feb; 58(8):20, 22

The effects of a mandatory child restraint law on injuries requiring hospitalization. Margolis LH, et al.
Am J Dis Child 1988 Oct;142(10):1099–103

New Mexico safety restraint law: changing patterns of motor vehicle injury, severity, and cost. Bernstein E, et al.
Am J Emerg Med 1989 May;7(3):271–7

Injury prevention: meeting the challenge. The National Committee for Injury Prevention and Control.
Am J Prev Med 1989;5(3 Suppl):1–303

Injury control in perspective [editorial] [see comments] Waller JA. Am J Public Health 1989 Mar;79(3):272–3. Comment in: Am J Public Health 1989 Jul;79(7):903–4

Injury control. Christophersen ER. Am Psychol 1989 Feb; 44(2):237–41 (24 ref.)

Avoiding needle-stick injuries [letter] Duffy B, et al.
Anaesth Intensive Care 1989 Aug;17(3):385–6

Vital records in the development of injury control research. Holden JA, et al. Ann Emerg Med 1989 Mar;18(3):286–92

Paediatric injuries [editorial] Leditschke JF.
Aust N Z J Surg 1989 Sep;59(9):679–80

Injury surveillance: a key to effective control of childhood injuries. Vimpani G. Aust Paediatr J 1989 Feb;25(1):10–3

Avoiding injuries caused by pigs [letter] BMJ 1989 May 20; 298(6684):1383–4

Avoiding injuries caused by pigs [editorial] Garner P.
BMJ 1989 Apr 1;298(6677):848

Federal resources for injury control. Brown ST, et al.
Bull N Y Acad Med 1988 Sep–Oct;64(7):857–63

Injury as an issue in violence. Foege WH.
Bull N Y Acad Med 1988 Sep–Oct;64(7):780–7

The issues in perspective. Greensher J.
Bull N Y Acad Med 1988 Sep–Oct;64(7):864–5

Seat belt laws: the United Kingdom experience. Hayes HR.
Bull N Y Acad Med 1988 Sep–Oct;64(7):721–8

Restraint system design and crash response. Hofferberth JE.
Bull N Y Acad Med 1988 Sep–Oct;64(7):704–10

Injury control and engineering education. Jones RC.
Bull N Y Acad Med 1988 Sep–Oct;64(7):838–45

The passive restraints approach. Munson RH.
Bull N Y Acad Med 1988 Sep–Oct;64(7):711–20

Reducing pedestrian crashes among children. Preusser DF.
Bull N Y Acad Med 1988 Sep–Oct;64(7):623–31

Prevention of motor vehicle injuries in state and local health departments: the New York model. Standfast SJ.
Bull N Y Acad Med 1988 Sep–Oct;64(7):846–56

The role of the orthopedist in injury prevention. Heckman JD, et al. Clin Orthop 1989 Mar;(240):5–8

National Seminar on Prevention of Childhood Accidents. Paul D. **Indian Pediatr** 1988 Jun;25(6):559–65
Needlecaps with special provisions to prevent needlestick injuries [letter] Walterspiel JN.
Infect Control Hosp Epidemiol 1988 Dec;9(12):529
The effects of nighttime seat belt enforcement on seat belt use by tavern patrons: a preliminary analysis. Malenfant JE, et al. **J Appl Behav Anal** 1988 Fall;21(3):271–6
Promoting safety belt use with traffic signs and prompters. Williams M, et al. **J Appl Behav Anal** 1989 Spring; 22(1):71–6
Injury biomechanics research: an essential element in the prevention of trauma. Viano DC, et al. **J Biomech** 1989; 22(5):403–17 (149 ref.)
Injury prevention curriculum [letter] Hargarten SW.
J Emerg Med 1988 May–Jun;6(3):248
Prevention [editorial] Wirth FP. **J Med Assoc Ga** 1989 Jun; 78(6):313–4
Federal initiative and leadership toward creating a favorable environment for the growth of trauma care systems [letter] Cowley RA, et al. **J Trauma** 1989 May;29(5):702
Potential danger to operating room personnel when an unexploded "devastator" bullet is being removed [letter] Fackler ML. **J Trauma** 1989 May;29(5):703–4
Prospective study of the effect of safety belts on morbidity and health care costs in motor-vehicle accidents. Orsay EM, et al. **JAMA** 1988 Dec 23–30;260(24):3598–603
Protective effect of rear-seat restraints during car collisions. Bodiwala GG, et al. **Lancet** 1989 Feb 18;1(8634):369–71
The evolution of injury prevention and surveillance at MIEMSS. Shankar BS, et al. **Md Med J** 1988 Jul; 37(7):565–70
Occupational injuries—routes to prevention. Cryer PC. **Med J Aust** 1989 Feb 6;150(3):113–4 (17 ref.)
Informational systems for the prevention of injury [editorial] Vimpani G, et al. **Med J Aust** 1989 May 1;150(9):470–2
Fact or fable: towards the conceptualization of trauma [editorial] Wigglesworth EC. **Med J Aust** 1989 Jan 16; 150(2):57–8
Consultations: clear communication prevents patient injuries and malpractice suits. **Minn Med** 1988 Oct;71(10):638–9
The emergency physician's role in injury prevention. Bernstein E, et al. **Pediatr Emerg Care** 1988 Sep;4(3):207–11
Principles in injury control: lessons to be learned from child safety seats. Kalbfleisch J, et al. **Pediatr Emerg Care** 1989 Jun;5(2):131–4
Recent advances in injury prevention. Greensher J. **Pediatr Rev** 1988 Dec;10(6):171–7 (0 ref.)
What school children need to learn about injury prevention. Bass JL, et al. **Public Health Rep** 1989 Jul–Aug; 104(4):385–8
Trauma, the scourge of modern society [editorial] Knottenbelt JD. **S Afr Med J** 1989 Jan 7;75(1):1–2
Physicians role in the use of safety belts [letter] Giebink RR. **S D J Med** 1989 Feb;42(2):27
Injuries in children: what can be done about them? [editorial] Patterson PJ. **Tex Med** 1989 Apr;85(4):8–10
Injuries to children can be avoided. Grigorovič LP. **World Health Forum** 1988;9(4):595–9
[Treatment and prevention of accidents in children] Tischer W. **Z Arztl Fortbild (Jena)** 1988;82(16):747–50 (5 ref.) (Ger)
[The pathway of perestroika and further improvement in military traumatology and injury prevention] Tkachenko SS. **Voen Med Zh** 1988 Sep;(9):3–6 (Rus)

PSYCHOLOGY

Prolonged disability from job-related injury. Goodwin PA. **Am Fam Physician** 1988 Nov;38(5):165–70
Blood-injury phobia [letter] Fava GA, et al.
Am J Psychiatry 1989 Jul;146(7):948–9
Specificity and psychosocial correlates of blood/injury fear and fainting. Kleinknecht RA. **Behav Res Ther** 1988; 26(4):303–9
The long-term psychiatric consequences of accidental injury. A longitudinal study of 107 adults. Malt U.
Br J Psychiatry 1988 Dec;153:810–8
Physical and psychological sequelae to torture. A controlled clinical study of exiled asylum applicants. Hougen HP. **Forensic Sci Int** 1988 Oct;39(1):5–11
Unemployment, alcohol and injury in west Belfast. Kerr MH, et al. **Injury** 1987 Sep;18(5):313–4
Battered wives and female alcoholics: a comparative social and psychiatric study. Bergman B, et al. **J Adv Nurs** 1989 Sep;14(9):727–34
Psychiatric morbidity among the children of Abou Seer. Shaheen O, et al. **J Nerv Ment Dis** 1989 May;177(5):306
The hidden morbidity of pediatric trauma. Harris BH, et al. **J Pediatr Surg** 1989 Jan;24(1):103–5; discussion 105–6
Type A, amicability and injury: a prospective study of air traffic controllers. Lee DJ, et al. **J Psychosom Res** 1989; 33(2):177–86
Preinjury psychopathology in trauma patients. Whetsell LA, et al. **J Trauma** 1989 Aug;29(8):1158–61; discussion 1161–2
Recall of injury events by thirteen year olds. Langley JD, et al. **Methods Inf Med** 1989 Jan;28(1):24–7

RADIOGRAPHY

Injury pattern aboard the USS Enterprise. McNiesh LM. **Milit Med** 1989 May;154(5):236–8
[Conventional roentgen diagnosis in traumatology] Windolf J, et al. **Unfallchirurgie** 1989 Apr;15(2):95–9 (Eng. Abstr.) (Ger)
[A letter to my clinician colleagues (letter] Fehérvári S. **Orv Hetil** 1989 Jun 11;130(24):1299 (Hun)

RADIOTHERAPY

[Possibilities of using computers in the optimization of the parameters of laser therapy in the treatment of bone and soft tissue wounds] Tkachenko SS, et al.
Ortop Travmatol Protez 1988 Nov;(11):6–10 (Eng. Abstr.) (Rus)

REHABILITATION

An evaluation of the role of geriatric orthopaedic rehabilitation units in Edinburgh. Whitaker JJ, et al.
Health Bull (Edinb) 1988 Sep;46(5):273–6
Effects on mood of a life-styles program for the rehabilitation of injured workers. Hannah TE, et al. **J Occup Med** 1989 May;31(5):454–7
[Transportation devices in the system of rehabilitation of patients and invalids] Kostetskii MV.
Ortop Travmatol Protez 1988 Aug;(8):54–7 (Rus)
[Urgent problems of forensic medical expert evaluation of disability in civil suits] Zagriadskaia AP.
Sud Med Ekspert 1989 Jan–Mar;32(1):7–9 (Eng. Abstr.) (Rus)

SURGERY

Trauma as a surgical disease [letter] Pate JW.
Ala J Med Sci 1988 Oct;25(4):495
Outcome of trauma patients who present to the operating room with hypotension. Wiencek RG Jr, et al.
Am Surg 1989 Jun;55(6):338–42
Repair of parallel lacerations and flaps [letter] Arthur DC.
Ann Emerg Med 1988 Nov;17(11):1263
Segmental latissimus dorsi free flap: clinical applications. Elliott LF, et al. **Ann Plast Surg** 1989 Sep;23(3):231–8
Multiple microvascular transplants: a preliminary report of simultaneous versus sequential reconstruction. Whitney TM, et al. **Ann Plast Surg** 1989 May;22(5):391–404 (30 ref.)
Admission surgery for the multiple trauma patient. Statistics from a Level I trauma center. Freeman MC, et al.
AORN J 1989 Jul;50(1):31, 34–6, 38
Vascular trauma at a university teaching hospital. Tobin SA, et al. **Aust N Z J Surg** 1988 Nov;58(11):873–7
Surgeons and trauma care [letter] Nee PA. **BMJ** 1989 Jul 29;299(6694):323–4
Stretching skin to the limit: a novel technique for split skin graft expansion. Nanchahal J. **Br J Plast Surg** 1989 Jan; 42(1):88–91
Technical aspects of war wound excision. Coupland RM. **Br J Surg** 1989 Jul;76(7):663–7 (7 ref.)
Anaesthesia for the traumatized patient. Pavlin EG.
Can Anaesth Soc J 1983 May;30(3 Pt 2):S27–33 (14 ref.)
A prospective controlled study of cefotetan versus cefotaxime in the treatment of infections in trauma patients undergoing surgery. Hessler H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):438–9
Anesthesia for trauma. Watson CB, et al. **Crit Care Clin** 1986 Oct;2(4):717–46 (47 ref.)
Preferential localisation of red cell vacuoles to pathologically shaped human red blood cells. Demeter J, et al.
Eur J Haematol 1989 Jul;43(1):41–4
Perioperative prophylaxis in orthopedic and traumatic surgery with ceftriaxone. Paul KJ, et al. **Eur Surg Res** 1989; 21 Suppl 1:33–5
An experience of war surgery and wounds presenting after 3 days on the border of Afghanistan. Coupland RM, et al. **Injury** 1988 Jul;19(4):259–62
The use of controlled tissue expansion for secondary reconstruction in injury. Dent AR, et al. **Injury** 1987 Jul; 18(4):278–82
New concepts of forward combat surgery. Rozin R, et al.
Injury 1988 May;19(3):193–7
Care of the injured in the Third World—what can we learn? Weston PM. **Injury** 1987 Sep;18(5):297–303
Walking through the valley [editorial] Underwood CR.
J Med Assoc Ga 1989 Mar;78(3):125
Abstracts, 49th annual session. American Association for the Surgery of Trauma. Chicago, Illinois, October 5–7, 1989. **J Trauma** 1989 Jul;29(7):1024–40
Severe hepatic trauma: a multi-center experience with 1,335 liver injuries. Cogbill TH, et al. **J Trauma** 1988 Oct; 28(10):1433–8
Dispelling fatalism in a cause-and-effect world: 1989 Eastern Association for the Surgery of Trauma presidential address. Maull KI. **J Trauma** 1989 Jun;29(6):752–6
The role of orthopedic surgery in modern Canadian trauma: 1988 Fraser B. Gurd lecture. Meek RN. **J Trauma** 1989 Jun;29(6):716–8
How shall we train for combat casualty care [letter] Kerstein MD. **Milit Med** 1988 Oct;153(10):537
A standardized operative procedure in patients with duodenal trauma. Fujimura I, et al.
Rev Hosp Clin Fac Med Sao Paulo 1988 Jan–Feb;43(1):35–9
A technique for fixation of retention sutures using two bolsters. Molea J, et al. **Surg Gynecol Obstet** 1989 Aug; 169(2):167–8
Trauma in the Afghan guerrilla war: effects of lack of access to care. Bhatnagar MK, et al. **Surgery** 1989 Jun; 105(6):699–705
Accident surgery past & present—has it a future? London PS. **Trans Med Soc Lond** 1986–87;103:31–44 (40 ref.)
[Organization of emergency surgical care in mass disasters and catastrophes] Michek J, et al. **Rozhl Chir** 1988 Sep; 67(8–9):525–9 (Eng. Abstr.) (Cze)
[Value of sural fascio-cutaneous flaps with distal pedicle for covering tissue loss of the lower third of the leg] Le Huec JC, et al. **Rev Chir Orthop** 1988;74 Suppl 2:324–7 (Fre)
[Antibiotic treatment in accident surgery. A status determination] Hansis M. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:81–5 (7 ref.) (Eng. Abstr.) (Ger)
[Postoperative wound infection in trauma surgery] Knapp U. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:76–80 (11 ref.) (Eng. Abstr.) (Ger)
[A clinical study of selective gut decolonization in 204 long-term ventilated intensive care patients undergoing abdominal and accident surgery] Hünefeld G.
Anaesthesiol Reanim 1989;14(3):131–53 (Eng. Abstr.) (Ger)
[Emergency transfusion from the viewpoint of the anesthetist] Balogh D. **Beitr Infusionther** 1988;21:9–14 (8 ref.) (Ger)
[Primary suture of older and contaminated wounds. A prospective clinical study] Bongartz W, et al. **Chirurg** 1988 Nov;59(11):767–70 (Eng. Abstr.) (Ger)
[Data processing in accident surgery] Hax PM, et al.
Chirurg 1989 Feb;60(2):83–9 (17 ref.) (Ger)
[Wound treatment with autogenous epidermal cell expansion culture] Bonnekoh B, et al. **Dtsch Med Wochenschr** 1988 Nov 11;113(45):1748–52 (Eng. Abstr.) (Ger)
[Gravity drainage versus suction drainage: an experimental and clinical study] Gerngross H, et al. **Unfallchirurg** 1989 Jan;92(1):37–42 (Eng. Abstr.) (Ger)
[Accident surgery in Southern Germany] Burri C.
Unfallchirurgie 1988 Dec;14(6):301–7 (Ger)
[The aged human as an accident patient] Contzen H.
Versicherungsmedizin 1989 Jan 1;41(1):23–4 (Eng. Abstr.) (Ger)
[The role of hospital surgical departments in the management of injuries] Szepesi A, et al.
Magy Traumatol Orthop Helyreallito Sebesz 1988; 31(4):316–9 (Eng. Abstr.) (Hun)
[Use of blood and its derivatives by the emergency surgeon] Mattalia G, et al. **Minerva Chir** 1989 Jun 30;44(12):1669–71 (Eng. Abstr.) (Ita)
[Reoperation in vascular complications after transplantation of thoracodorsal flaps] Milanov NO, et al.
Khirurgiia (Mosk) 1989 Jun;(6):104–7 (Rus)
[The use of microsurgery in traumatology and orthopedics] Grishin IG, et al. **Voen Med Zh** 1989 Apr;(4):37–40 (Rus)
[Use of sombrevin-ketamine anesthesia in treating patients with severe injuries] Kostiuchenko AL, et al.
Voen Med Zh 1988 Nov;(11):52–3 (Rus)
[The use of microsurgery in traumatology and orthopedics] Tkachenko SS, et al. **Voen Med Zh** 1989 Feb;(2):22–3 (Rus)
[Experience in organizing surgical care for the wounded in the Army of the Republic of Afghanistan] Tutokhel AK, et al. **Voen Med Zh** 1989 Jan;(1):27–30 (Rus)

THERAPY

Advanced trauma life support in Alaska. Kilkenny SJ.
Alaska Med 1988 Jul–Aug;30(4):125–31
Increased plasma carnitine in trauma patients given lipid-supplemented total parenteral nutrition. Davis AT, et al. **Am J Clin Nutr** 1988 Dec;48(6):1400–2
Rapid venous access using saphenous vein cutdown at the ankle. Rhee KJ, et al. **Am J Emerg Med** 1989 May; 7(3):263–6
Povidone-iodine solutions in traumatic wound preparation [letter] Rothwell KG. **Am J Emerg Med** 1988 Nov;6(6):681
Ileocecal vaginal construction. Bürger RA, et al.
Am J Obstet Gynecol 1989 Jul;161(1):162–7
Rural trauma management. Wayne R. **Am J Surg** 1989 May; 157(5):463–6
Trauma is not a surgical disease. Lane P.
Arch Emerg Med 1989 Jun;6(2):85–9
Implementation of a trauma team. Deane SA, et al.
Aust N Z J Surg 1989 May;59(5):373–8
Care of accident victims [letter] **BMJ** 1989 Jan 14; 298(6666):115–6
Action for accident victims [editorial] Yates DW. **BMJ** 1988 Dec 3;297(6661):1419–20
Trauma care: evaluation before change [letter] Sylvester PA.
Br J Hosp Med 1989 Jul;42(1):82
A time for decisions. Trunkey DD. **Br J Surg** 1988 Oct; 75(10):937–9
Current concepts in trauma: 1. Principles and directions for development. McMurtry RY, et al. **Can Med Assoc J** 1989 Sep 15;141(6):529–33 (39 ref.)
Current concepts in trauma: 2. The Sunnybrook Medical Centre trauma program: the first 11 years. McMurtry RY, et al. **Can Med Assoc J** 1989 Sep 15;141(6):555–9
Critical care management of the trauma patient.
Crit Care Clin 1986 Oct;2(4):671–876
Critical care as an integral part of trauma care. Meyer AA, et al. **Crit Care Clin** 1986 Oct;2(4):673–81 (28 ref.)
Special problems in management of pediatric trauma. Polley TZ Jr, et al. **Crit Care Clin** 1986 Oct;2(4):775–89 (49 ref.)
Initial management of the trauma patient. Weigelt JA.
Crit Care Clin 1986 Oct;2(4):705–16 (52 ref.)

Use of fibronectin and somatomedin–C as nutritional markers in the enteral nutrition support of traumatized patients. Buonpane EA, et al. **Crit Care Med** 1989 Feb;17(2):126–32
Feasibility of noninvasive physiologic monitoring in resuscitation of trauma patients in the emergency department. Lopez–Saucedo A, et al. **Crit Care Med** 1989 Jun;17(6):567–8
Treatment of high–pressure water gun injection injury of the foot with adjunctive hyperbaric oxygen: a case report. Calhoun JH, et al. **Foot Ankle** 1989 Aug;10(1):40–2
Pediatric emergency and trauma care—are the needs being met in India? Sathyanathan S. **Indian J Pediatr** 1988 Sep–Oct;55(5):753–7
Parenteral nutrition in injury. Mughal MM. **Injury** 1987 Mar; 18(2):82–6 (51 ref.)
Spandra: a sustained release battlefield wound dressing. Szycher M, et al. **J Biomater Appl** 1986 Oct;1(2):274–304 (29 ref.)
Modern concept for a new, improved microporous skin–closure tape. Edlich RF, et al. **J Burn Care Rehabil** 1988 Sep–Oct;9(5):532–7
Splenic injury: nonoperative management in three patients with infectious mononucleosis. Gauderer MW, et al. **J Pediatr Surg** 1989 Jan;24(1):118–20
Splenic injury: a 5–year update with improved results and changing criteria for conservative management. Pearl RH, et al. **J Pediatr Surg** 1989 Jan;24(1):121–4; discussion 124–5
Evaluation of pediatric trauma care in Ontario. Dykes EH, et al. **J Trauma** 1989 Jun;29(6):724–9
Analyses of the relationship between blood alcohol and nasal breath alcohol concentrations: implications for assessment of trauma cases. Gerberich SG, et al. **J Trauma** 1989 Mar; 29(3):338–43
The percutaneous common femoral vein catheter for volume replacement in critically injured patients. Mangiante EC, et al. **J Trauma** 1988 Dec;28(12):1644–9
Prehospital venous access in an urban paramedic system—a prospective on–scene analysis. Pons PT, et al. **J Trauma** 1988 Oct;28(10):1460–3
Direct transport to the operating room for resuscitation of trauma patients. Rhodes M, et al. **J Trauma** 1989 Jul; 29(7):907–13; discussion 913–5
Functional outcome in pediatric trauma. Wesson DE, et al. **J Trauma** 1989 May;29(5):589–92
Implementation of intraosseous infusion technique by aeromedical transport programs. Zimmerman JJ, et al. **J Trauma** 1989 May;29(5):687–9
Use of fibronectin and somatomedin–C as markers of enteral nutrition support in traumatized patients using a modified amino acid formula. Mattox TW, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):592–6
Management of patients with major injuries [editorial] **Lancet** 1988 Dec 3;2(8623):1291–2
Selection of casualties after nuclear attack: a doctor's dilemma of the future? [editorial] Holdstock D. **Med War** 1988 Oct–Dec;4(4):195–7
Combat casualty care training for reserve forces. Hayunga EG, et al. **Milit Med** 1988 Nov;153(11):574–5
Hyperbaric oxygen therapy and combat casualty care: a viable potential. Workman WT, et al. **Milit Med** 1989 Mar; 154(3):111–5
The helicopter and the EMS system. Hankins DG, et al. **Minn Med** 1988 Nov;71(11):700–2
Trauma systems. Where does Minnesota really stand? Moore MP. **Minn Med** 1988 Nov;71(11):692–7
Three hundred admissions to the Waikato Hospital intensive therapy unit—survival, costs, and quality of life after two years. Havill JH, et al. **N Z Med J** 1989 Apr 26; 102(866):179–81
Accidental injury during pregnancy. Sherer DM, et al. **Obstet Gynecol Surv** 1989 May;44(5):330–8 (54 ref.)
Treating the victims of the Armenian earthquake. A conversation with Neil Kahanovitz, MD [interview by Jackie Syrop] Kahanovitz N. **Orthop Rev** 1989 Jul; 18(7):777–82
Suturing and wound care. Humby M. **Practitioner** 1988 Mar 8;232(1444):247–52
Use of a 7.5% NaCl/6% Dextran 70 solution in the resuscitation of injured patients in the emergency room. Holcroft JW, et al. **Prog Clin Biol Res** 1989;299:331–8
Immediate prediction of blood requirements in trauma victims. West HC, et al. **South Med J** 1989 Feb;82(2):186–9
An improved technique for rapid infusion of warmed fluid using a Level 1 Fluid Warmer. Smith JS Jr, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):273–4
Care of the injured in America: organizational and physiological considerations. Shires GT. **Trans Stud Coll Physicians Phila** 1988 Dec;10(1–4):169–79
Metabolism and nutrition in trauma. Vinnars E, et al. **Ups J Med Sci** 1988;93(2):131–8 (60 ref.)
[Medically staffed ambulances for trauma victims] Boll KL, et al. **Ugeskr Laeger** 1989 Jul 31;151(31):1970–2 (Eng. Abstr.) (Dan)
[The effect of magnetic fields on scar formation of experimental wounds] Pierrefiche G, et al. **Acta Belg Med Phys** 1988 Jul–Sep;11(3):137–41 (Fre)
[Principles and practice of nutrition following trauma] Leutenegger A. **Schweiz Med Wochenschr** 1989 Mar 18; 119(11):361–4 (Eng. Abstr.) (Ger)
[Preclinical care of accident victims—is it optimal?] Matter P, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988; 81(4):221–9 (Eng. Abstr.) (Ger)
[Use of a therapeutic scoring system in the intensive care of severe traumas] Stocchetti N, et al. **Minerva Anestesiol** 1988 May;54(5):207–13 (Eng. Abstr.) (Ita)
[Combined therapy in mechanical trauma with soft–tissue crushing] Shimanko II, et al. **Khirurgiia (Mosk)** 1988 Aug; (8):63–7 (Eng. Abstr.) (Rus)
[Internal pathology in trauma—an important branch of internal medicine and military medicine] Gembitskiĭ EV. **Klin Med (Mosk)** 1989 May;67(5):3–9 (Rus)
[A method of treating wounds of skeletal muscles] D'iachkov AN. **Ortop Travmatol Protez** 1988 Nov;(11):63–4 (Rus)
[Hemosorption using xenogeneic spleen in the combined detoxication therapy of complicated trauma] Grinev MV, et al. **Ortop Travmatol Protez** 1988 May;(5):6–10 (Rus)
[Status and objectives of the reorganization of orthopedic and traumatologic services for children in the Ukrainian SSR] Shumada IV, et al. **Ortop Travmatol Protez** 1988 Aug; (8):1–6 (Eng. Abstr.) (Rus)
[Prognostication of the outcome of traumatic disease and the optimal therapy at the initial period] Zaplatkin KE, et al. **Ortop Travmatol Protez** 1988 Nov;(11):65–7 (Rus)
[A review of methodologic recommendations on the provision of medical aid in injuries] Eskina LIu, et al. **Sov Med** 1988;(11):41–5 (14 ref.) (Rus)
[Improving the control of injuries in the Krivoĭ Rog iron ore region] Tatarovskiĭ AP. **Sov Zdravookhr** 1988;(8):50–2 (Eng. Abstr.) (Rus)
[Use of activated carbon fiber material for the local treatment of wounds] Kornilov VA, et al. **Vestn Khir** 1989 Jan; 142(1):59–62 (Rus)
[The organization of the delivery of medical care to the wounded and ill during their evacuation] Nikulin ND. **Voen Med Zh** 1989 Apr;(4):28–9 (Rus)
[Award–winning poster on wound management] Nyström B. **Lakartidningen** 1989 Feb 22;86(8):616–7 (Swe)

VETERINARY

Suturation of wounds of extremities in dogs using medetomidine as sedative and analgesic drug. Sarkiala E. **Acta Vet Scand Suppl** 1989;85:175–7
Pathology and bacteriology of adult male Antarctic fur seals, Arctocephalus gazella, dying at Bird Island, South Georgia. Baker JR, et al. **Br Vet J** 1989 May–Jun;145(3):263–75
Association of intraspecific wounding with hantaviral infection in wild rats (Rattus norvegicus). Glass GE, et al. **Epidemiol Infect** 1988 Oct;101(2):459–72
Pathologic findings in rabies–suspect, random–source, and accidentally killed skunks. Woolf A, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1089–91

WOUNDS, GUNSHOT

Gunshot wounds of the orbit. Sherman S, et al. **Adv Ophthalmic Plast Reconstr Surg** 1987;7:181–92
Ordnance gelatin for ballistic studies. Detrimental effect of excess heat used in gelatin preparation. Fackler ML, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):218–9
Oral conception. Impregnation via the proximal gastrointestinal tract in a patient with an aplastic vagina [letter] Hicks DA. **Br J Obstet Gynaecol** 1989 Apr;96(4):501
Cavernous sinus syndrome from self–inflicted gunshot wound: case report and neuroanatomical correlation. Swanson MW. **J Am Optom Assoc** 1989 Jul;60(7):541–6
Arterial bullet embolism. Proudfoot RW, et al. **J Ky Med Assoc** 1989 Jan;87(1):17–8
Civilian gunshot wounds to the brachial plexus. Kline DG. **J Neurosurg** 1989 Feb;70(2):166–74
Wound ballistics: contemporary and future research. Ryan JM, et al. **J R Army Med Corps** 1988 Oct;134(3):119–25 (36 ref.)
Shotgun wound ballistics [letter] Parks WH. **J Trauma** 1989 Feb;29(2):272
Impregnated via a bullet? [letter] Gordon AC, et al. **Lancet** 1989 Apr 1;1(8640):737
Vascular complications of shotgun injury to the face. Moss J Jr, et al. **Milit Med** 1989 Apr;154(4):191–4
Ghost foreign body. Murphy JB, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):228
Gunshot wound to the odontoid process: a case report [letter] Benzel EC, et al. **Spine** 1988 Aug;13(8):962
Intrathoracic and intravascular migratory foreign bodies. Van Way CW 3d. **Surg Clin North Am** 1989 Feb;69(1):125–33 (19 ref.)
[Biomechanico–clinical study of gunshot wounds (general problems—II)] Marini F, et al. **Chir Ital** 1988 Apr; 40(2):104–16 (29 ref.) (Eng. Abstr.) (Ita)
[Team care of multiple injuries due to firearms] Sćekić M, et al. **Acta Chir Iugosl** 1987;34(1):85–90 (Eng. Abstr.) (Ser)
[Double–chamber pacemakers. Implantation in a schoolboy for a traumatic lesion of the conduction tissue] Patrón Amador E, et al. **Arch Inst Cardiol Mex** 1988 May–Jun; 58(3):219–22 (Eng. Abstr.) (Spa)

COMPLICATIONS

Cerebral embolism after gunshot wounds. Hayes E, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S77
Abdominal gunshot wounds in pregnancy. Franger AL, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1124–8
Gunshot pellet embolus to the middle cerebral artery. Bahnini A, et al. **Ann Vasc Surg** 1986 May;1(1):139–42 (18 ref.)
Venous insufficiency in a young man secondary to a traumatic arteriovenous fistula. Psaila JV, et al. **Ann Vasc Surg** 1989 Jan;3(1):63–7
The alien hand syndrome. Clinical and postmortem findings. Banks G, et al. **Arch Neurol** 1989 Apr;46(4):456–9
The heel of achilles: calcaneal avulsion fracture from a gunshot wound. Cooper DE, et al. **Foot Ankle** 1989 Feb; 9(4):204–6
Shot in the neck in Spain (a rare cause of an isolated Horner's syndrome). Singh P, et al. **Injury** 1987 Nov;18(6):407–8
CO2 laser treatment of traumatic tattoos [letter] Dufresne RG Jr, et al. **J Am Acad Dermatol** 1989 Jan;20(1):137–8
Bullet embolism. Patel KR, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug;30(4):584–90 (24 ref.)
Airgun pellet injuries of the neck. Cook JA, et al. **J Laryngol Otol** 1989 Apr;103(4):432–4
Post–traumatic asymptomatic saccular aneurysm of the internal carotid artery. Vanlierde MJ. **J Laryngol Otol** 1989 Jan;103(1):115–6
Increased lead absorption and lead poisoning from a retained bullet. Fiorica V, et al. **J Okla State Med Assoc** 1989 Feb; 82(2):63–7
Report of a case: foreign body embolism. Miller WA. **J Okla State Med Assoc** 1988 Nov;81(11):689–90
Syndrome of intramedullary gunshot wound with incomplete neurologic deficit: case report. Hubschmann OR, et al. **J Trauma** 1988 Nov;28(11):1600–2
Traumatic aortocaval fistula: case report. Linker RW, et al. **J Trauma** 1989 Feb;29(2):255–7
Case report: transthoracic retrograde venous bullet embolization. Schmelzer V, et al. **J Trauma** 1989 Apr; 29(4):525–7
Traumatic superior mesenteric arteriovenous fistula: report of a case and review of the literature. Rosenthal D, et al. **J Vasc Surg** 1987 Mar;5(3):486–91 (22 ref.)
Monocular blindness after penetrating trauma to the carotid artery. Weaver FA, et al. **J Vasc Surg** 1989 Jul;10(1):89–92
Infection in war wounds: experience in recent military conflicts and future considerations. Jacob E, et al. **Milit Med** 1989 Jun;154(6):311–5 (21 ref.)
Pyogenic vertebral osteomyelitis after transcolonic gunshot wound. Miller BR, et al. **Milit Med** 1989 Feb;154(2):64–6
The contaminating potential of bullets fired through intermediate targets. Smith OC. **Milit Med** 1989 Mar; 154(3):147–50 (38 ref.)
Greater trochanteric nonunion from a gunshot injury: a case report. Woo TS, et al. **Orthopedics** 1989 Mar;12(3):477–8
Air gun pellet embolism. Taggart DP, et al. **Scott Med J** 1988 Oct;33(5):340
Gunshot wounds to the spine associated with a perforated viscus. Roffi RP, et al. **Spine** 1989 Aug;14(8):808–11
Pulsatile dysesthesia and an axillary artery pseudoaneurysm associated with a penetrating axillary artery injury. Benzel EC, et al. **Surg Neurol** 1989 May;31(5):400–1
[Eye injuries caused by lead shot or hunting shot. Apropos of 38 cases] Boscher–Southall C, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):195–200 (Fre)
[Vascular complications in pelvic injuries in children] Canarelli JP, et al. **Chir Pediatr** 1988;29(5):233–41 (Eng. Abstr.) (Fre)
[2 cases of cancer following gunshot injuries of the larynx] Eistert B, et al. **HNO** 1989 May;37(5):220–3 (Eng. Abstr.) (Ger)
[Stress–induced ulcers in thoraco–abdominal injuries] Kharitonov VA, et al. **Klin Khir** 1989;(4):68–9 (Rus)
[Rehabilitation of World War II invalids with chronic gunshot osteomyelitis in the Poltava region] Mazurik MF, et al. **Klin Khir** 1989;(1):44–6 (Rus)
[A case of combined gunshot injuries of the maxillofacial and cervical regions] Pugachev AD, et al. **Klin Khir** 1989; (4):69 (Rus)
[Expert evaluation of work capacity of patients with adhesive disease caused by combat injuries of the abdominal organs] Demin VA, et al. **Klin Med (Mosk)** 1988 Oct;66(10):85–8 (Rus)
[Staphylococcal osteomyelitis of the spine as a complication of gunshot abdominal wound] Ardashev IP, et al. **Ortop Travmatol Protez** 1989 Jan;(1):57–9 (Rus)
[Clinico–roentgenologic manifestations of chronic gunshot osteomyelitis of the long tubular bones of many years' duration] Ermachenko BA, et al. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):13–8 (Eng. Abstr.) (Rus)
[The use of ultrasonic echotomography in the diagnosis and treatment of intracranial complications of gunshot penetrating wounds of the skull and brain] Popov VS, et al. **Voen Med Zh** 1989 May;(5):63 (Rus)
[Prevention and treatment of infectious complications of gunshot wounds] Rudakov BIa. **Voen Med Zh** 1988 Jul; (7):34–7 (12 ref.) (Rus)
[A method for the prevention of the formation of salivary fistulae in gunshot wounds of the parotid gland] Zakharov VI. **Voen Med Zh** 1989 Apr;(4):43–4 (Rus)
[Cardiac tamponade resulting from a wound caused by compressed air gun] Pérez Alvarez F, et al. **An Esp Pediatr** 1989 May;30(5):394–5 (Spa)
[Acute ureteral obstruction caused by firearm pellet] Cavelier LE. **Arch Esp Urol** 1989 Mar;42(2):161–2 (Eng. Abstr.) (Spa)
[Embolism caused by a bullet. Report of a case and review

of the literature] Vázquez-Valdés E, et al. **Rev Invest Clin** 1989 Jan-Mar;41(1):57-62 (32 ref.) (Eng. Abstr.) (Spa)

[Embolization caused by an air-gun missile presented diagnostic problems] Törngren S, et al. **Lakartidningen** 1989 Apr 5;86(14):1278-9 (Swe)

DIAGNOSIS

Gunshot wound of the thigh presenting as a massive hemorrhage to the scrotum. Moskovitz B, et al. **Isr J Med Sci** 1988 Nov;24(11):684-5

Magnetic resonance imaging in the evaluation of a gunshot wound to the cervical spine. Ebraheim NA, et al. **J Orthop Trauma** 1989;3(1):19-22

Civilian gunshot wounds: determinants of injury [letter] Barach EM, et al. **J Trauma** 1988 Nov;28(11):1610-1

Intrauterine cranial gunshot wound in a 32-week fetus. Edner G, et al. **J Trauma** 1988 Nov;28(11):1605-6

Gunshot wounds to legs in drug runners [letter] Sanchez J, et al. **N Engl J Med** 1989 Apr 20;320(16):1089

[Diagnostic and therapeutic characteristics of pulmonary gunshot wounds] Vasilev B. **Khirurgiia (Sofiia)** 1988; 41(4):64-8 (29 ref.) (Bul)

[Gunshot wounds of the chest in pescetime] Marchuk IK. **Klin Khir** 1988;(10):36-8 (Eng. Abstr.) (Rus)

DRUG THERAPY

Efficacy of antibiotics in low-velocity gunshot fractures. Dickey RL, et al. **J Orthop Trauma** 1989;3(1):6-10

ECONOMICS

The cost of hospitalizations for firearm injuries [letter] **JAMA** 1989 May 12;261(18):2637-8

The cost of hospitalization for firearm injuries. Martin MJ, et al. **JAMA** 1988 Nov 25;260(20):3048-50

EPIDEMIOLOGY

Hunting firearm injuries, North Carolina. Cole TB, et al. **Am J Public Health** 1988 Dec;78(12):1585-6

Hunting firearm injuries [letter] Kraus JF. **Am J Public Health** 1989 May;79(5):654-5

Accidental firearm fatalities and injuries among recreational hunters. Carter GL. **Ann Emerg Med** 1989 Apr;18(4):406-9 (20 ref.)

Airgun injuries on Tyneside. Maitra AK, et al. **Br J Clin Pract** 1988 Mar;42(3):106-9

Women who shoot themselves. Frierson RL. **Hosp Community Psychiatry** 1989 Aug;40(8):841-3

Pediatric gunshot wounds—powder and nonpowder weapons. Walsh IR, et al. **Pediatr Emerg Care** 1988 Dec; 4(4):279-83 (39 ref.)

ETIOLOGY

Two cases of near fatal airgun injury [letter] Paraskevaides EC, et al. **J R Coll Gen Pract** 1988 Jun;38(311):274

[Unusual gunshot wound of the heart] Vladeev IuV, et al. **Sud Med Ekspert** 1989 Jan-Mar;32(1):49-50 (Rus)

HISTORY

Fractures of the orbit with destruction of the eyeball. 1917 [classical article] Lagrange F. **Adv Ophthalmic Plast Reconstr Surg** 1987;7:229-38

Medical expert testimony in the Jean Harris case. Ackerman AB. **Leg Med** 1987;:61-96

Misinterpretations concerning Larrey's methods of wound treatment. Fackler ML. **Surg Gynecol Obstet** 1989 Mar; 168(3):280-2

MICROBIOLOGY

Achromobacter xylosoxidans (Alcaligenes xylosoxidans subsp. xylosoxidans) meningitis associated with a gunshot wound. D'Amato RF, et al. **J Clin Microbiol** 1988 Nov; 26(11):2425-6

[Microflora in gunshot osteomyelitis in Ethiopia] Dzherelei AN. **Ortop Travmatol Protez** 1988 Jul;(7):45-6 (Eng. Abstr.) (Rus)

MORTALITY

Gunshot wounds of the brain in civilians. Cavaliere R, et al. **Acta Neurochir (Wien)** 1988;94(3-4):133-6

Survival time in gunshot and stab wound victims. Levy V, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):215-7

Unintentional firearm deaths in California [published erratum appears in J Trauma 1989 Jul;29(7):1023] Wintemute GJ, et al. **J Trauma** 1989 Apr;29(4):457-61

Gun ownership and suicide in the United States. Lester D. **Psychol Med** 1989 May;19(2):519-21

Firearms injuries and deaths: a critical public health issue. American Medical Association Council on Scientific Affairs. **Public Health Rep** 1989 Mar-Apr;104(2):111-20 (46 ref.)

[Fatal gunshot injuries in East Denmark] Albrektsen SB, et al. **Ugeskr Laeger** 1989 Jul 10;151(28):1803-5 (Eng. Abstr.) (Dan)

PATHOLOGY

An alternative diagnosis [letter] Luke JL. **Am J Forensic Med Pathol** 1988 Sep;9(3):271

Single gunshots with multiple entrances. Ratanaproeksa O, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):212-4

Two six-shot suicides in close geographic and temporal proximity. Marsh TO, et al. **J Forensic Sci** 1989 Mar; 34(2):491-4

Comparison of gunshot wounds and field-tipped arrow wounds using morphological criteria and chemical spot tests. Randall B, et al. **J Forensic Sci** 1989 May;34(3):579-86

Evidentiary value of the contents of hollow-point bullets. Smith OC, et al. **J Forensic Sci** 1988 Jul;33(4):1052-7

Use of glue gun in forensic anthropology and pathologic bone reconstruction cases. Stephens BG, et al. **J Forensic Sci** 1989 Mar;34(2):454-7

Determination of the sequence of gunshot wounds of the skull. Madea B, et al. **J Forensic Sci Soc** 1988 Sep-Dec; 28(5-6):321-8 (36 ref.)

Pressure wave injuries to rat dorsal root ganglion cells in culture caused by high-energy missiles. Suneson A, et al. **J Trauma** 1989 Jan;29(1):10-8

Firearm projectile review for medical examiners. Part II: Unusual and new bullets. Wanger GP, et al. **Med Leg Bull** 1988 Jul-Aug;37(4):1-6

An unusual shotgun slug injury. Ikeda N, et al. **Med Sci Law** 1989 Apr;29(2):156-8

The effect of the THV bullet in animal tissue. Knudsen PJ. **Z Rechtsmed** 1988;101(4):219-27

[Death caused by projectile guns—a retrospective analysis of 34 cases in Berlin and Hamburg] Lignitz E, et al. **Arch Kriminol** 1988 Sep-Oct;182(3-4):83-93 (Eng. Abstr.) (Ger)

[An unusual grazing gunshot] Marty W. **Arch Kriminol** 1989 May-Jun;183(5-6):168-72 (Eng. Abstr.) (Ger)

[The hydrodynamic effect of gunshots in cranial explosive shots] Risse M, et al. **Arch Kriminol** 1988 Sep-Oct; 182(3-4):75-82 (Eng. Abstr.) (Ger)

[Forensic problems in the assessment of a terrorist attack in the Schwechat airport in Vienna] Missliwetz J, et al. **Beitr Gerichtl Med** 1988;46:477-87 (Eng. Abstr.) (Ger)

[Morphologic peculiarities of absolute gunshots at close range on clothed or covered body regions] Pollak S, et al. **Beitr Gerichtl Med** 1988;46:401-7 (Eng. Abstr.) (Ger)

[Teeth as an intermediate target—a cause for rapid disintegration of the full metal-jacketed bullets used by the military] Pollak S, et al. **Wien Klin Wochenschr** 1988 Nov 18;100(22):729-33 (Eng. Abstr.) (Ger)

[Gunshot wounds of the head in soldiers wearing military helmets— general aspects and experiments and observations on the biomechanics and wound morphology] Missliwetz J, et al. **Z Rechtsmed** 1989;102(1):41-54 (Eng. Abstr.) (Ger)

[Characteristics of smoke deposits in shots from a AK-74 automatic with varying inclinations of the barrel of the weapon] Kozachenko IN. **Sud Med Ekspert** 1988 Oct-Dec; 31(4):17-8 (Eng. Abstr.) (Rus)

[Calculation of the velocity of a bullet's trajectory in the forensic medical study of gunshot injuries] Lisitsyn AF. **Sud Med Ekspert** 1988 Oct-Dec;31(4):14-6 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Bone as a secondary missile: an experimental study in the fragmenting of bone by high-velocity missiles. Amato JJ, et al. **J Trauma** 1989 May;29(5):609-12

Face processing, laterality and contrast sensitivity. Newcombe F, et al. **Neuropsychologia** 1989;27(4):523-38

PREVENTION & CONTROL

CDC's approach to firearm injuries [letter; comment] O'Carroll P. **JAMA** 1989 Jul 21;262(3):348-9. **Comment on: JAMA** 1989 Feb 3;261(5):675-6

Firearm injuries: a call for science [editorial] Mercy JA, et al. **N Engl J Med** 1988 Nov 10;319(19):1283-5

Field evaluation of polycarbonate versus conventional safety glasses. John G, et al. **South Med J** 1988 Dec;81(12):1534-6

PSYCHOLOGY

A case of self-inflicted leucotomy. Solyom L, et al. **Br J Psychiatry** 1987 Dec;151:855-7

RADIOGRAPHY

Popliteal vessel injury caused by a plastic bullet. Best BG, et al. **Injury** 1987 Nov;18(6):428-9

Craniocerebral gunshot wounds in civilians. Report on 40 cases. Mancuso P, et al. **J Neurosurg Sci** 1988 Oct-Dec; 32(4):189-94

Retained intraspinal bullet—an illustrative case report. Doll M, et al. **Neurosurg Rev** 1989;12(1):67-70

Bullet within the spinal canal. Mann DC, et al. **Orthop Rev** 1989 Apr;18(4):453-7

SURGERY

Gunshot and blast injuries to the extremities. Management of soft tissue wounds by a modified technique of delayed wound closure. Hartl WH, et al. **Acta Chir Scand** 1988 Sep;154(9):495-9

Vertebral arteriovenous fistulae. Report of two cases and review of the literature. Ammirati M, et al. **Acta Neurochir (Wien)** 1989;99(3-4):122-6 (51 ref.)

Self-inflicted gunshot wound to the pregnant abdomen: report of a case and review of the literature. Sandy EA 2d, et al. **Am J Perinatol** 1989 Jan;6(1):30-1 (8 ref.)

Treatment of asymptomatic gunshot injuries to the spine. Wigle RL. **Am Surg** 1989 Sep;55(9):591-5

Penetrating craniocerebral airgun injury. Anaesthetic management with propofol infusion and review of recent reports. Wright PJ, et al. **Anaesthesia** 1989 Mar; 44(3):219-21

External longitudinal splitting of the biceps brachii muscle for coverage of repaired brachial vessels: an anatomical study and clinical application. Har-Shai Y, et al. **Ann Plast Surg** 1988 Aug;21(2):158-64

Carotid-cavernous sinus fistula complicating a complex shotgun facial injury. Sherman R, et al. **Ann Plast Surg** 1988 Sep;21(3):251-6

Missiles in the heart. Symbas PN, et al. **Ann Thorac Surg** 1989 Aug;48(2):192-4

Iliac arterial transposition. Landreneau RJ, et al. **Arch Surg** 1989 Aug;124(8):978-81

The Hungerford shooting incident. Broome G, et al. **Injury** 1988 Sep;19(5):313-7

Exsanguinating upper extremity vascular injury: is an initial approach by clavicular resection adequate? Spence RK, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):450-3

Closed interlocking nailing of the femur complicated by an intramedullary calcified lesion. Smith RS, et al. **J Orthop Trauma** 1987;1(2):177-9

Exploding ammunition [letter] Abidin MR. **J Trauma** 1989 Jun;29(6):895

Potential danger to operating room personnel when an unexploded "devastator" bullet is being removed [letter] Fackler ML. **J Trauma** 1989 May;29(5):703-4

The role of intra-aortic balloon occlusion in penetrating abdominal trauma. Gupta BK, et al. **J Trauma** 1989 Jun; 29(6):861-5

Bilateral testicular injury from external trauma. Cass AS, et al. **J Urol** 1988 Dec;140(6):1435-6

Nonpenetrating gunshot injury as a cause of testicular rupture. Willis DL, et al. **J Urol** 1988 Dec;140(6):1543-4

Exposure of the internal carotid artery near the skull base: the posterolateral anatomic approach. Shaha A, et al. **J Vasc Surg** 1988 Nov;8(5):618-22

Transthoracic repair of a traumatic subarachnoid-pleural fistula. Dosios T, et al. **Neurochirurgia (Stuttg)** 1989 May; 32(3):82-3

Outcome of laminectomy for civilian gunshot injuries of the terminal spinal cord and cauda equina: review of 88 cases. Cybulski GR, et al. **Neurosurgery** 1989 Mar;24(3):392-7

Transoral removal of missile fragments from the C1-C2 area: report of four cases. Mangiardi JR, et al. **Neurosurgery** 1988 Aug;23(2):254-7

Tubed free flap combined with split-rib-graft for reconstruction of multiple oral cavity defects. A case report. Larson O, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(2):187-91

Recanalization of autogenous vein grafts. Beggs JH. **South Med J** 1988 Nov;81(11):1446-7

Comments on the article by Fackler et al [editorial] Trunkey DD. **Surgery** 1989 May;105(5):693-4

[Definitive treatment of thoracic penetrating injuries due to missiles: report of 155 cases] Huang XM. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):622-3, 639 (Eng. Abstr.) (Chi)

[Associated gunshot injuries of the urinary bladder and the extraperitoneal part of the rectum] Trnka J, et al. **Rozhl Chir** 1988 Dec;67(12):804-7 (Eng. Abstr.) (Cze)

[Cardiac wounds. Experience from 10 years of war. Apropos of 32 cases treated surgically] Jebara VA, et al. **Ann Chir** 1989;43(2):117-20 (Eng. Abstr.) (Fre)

[Emergency treatment and early reconstruction of the face in suicidal shotgun injuries] Labbé D, et al. **Ann Chir Plast Esthet** 1988;33(2):140-6 (Eng. Abstr.) (Fre)

[Intra-orbital explosion of a rocket] Cantaloube D, et al. **Rev Stomatol Chir Maxillofac** 1988;89(4):248-52 (13 ref.) (Eng. Abstr.) (Fre)

[Maxillofacial injuries due to firearms. Retrospective study apropos of 60 cases] Goga D, et al. **Rev Stomatol Chir Maxillofac** 1988;89(4):242-7 (Eng. Abstr.) (Fre)

[Shotgun injuries of the eye] Berg P, et al. **Fortschr Ophthalmol** 1988;85(6):774-6 (Eng. Abstr.) (Ger)

[A complex arm wound resolved by an epiploon autograft—microsurgical technics] Ciuce C, et al. **Rev Chir [Chir]** 1988 Jul-Aug;37(4):289-95 (Eng. Abstr.) (Rum)

[Treatment of heart injuries at the Central District Hospital] Kostin AE. **Khirurgiia (Mosk)** 1989 Jun;(6):132-3 (Rus)

[A successful treatment of a penetrating wound of the heart in a Central Regional Hospital] Kurbanov RM, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):136 (Rus)

[Successful replantation of the hand in a combined wound] Nikolenko VK, et al. **Khirurgiia (Mosk)** 1988 Aug; (8):129-30 (Rus)

[Penetrating gunshot wound of the abdomen without damage to the internal organs] Abdulzhavadov IM. **Klin Khir** 1988; (6):71 (Rus)

[Diagnosis and treatment of thoraco-abdominal wounds] Demchenko PS, et al. **Klin Khir** 1988;(10):40-1 (Eng. Abstr.) (Rus)

[Successful treatment of a gunshot wound of the heart at a central district hospital] Tkachenko VP, et al. **Klin Khir** 1988;(10):63-4 (Rus)

[A method for the restoration of the external malleolus after a gunshot wound] Volotov VI, et al. **Ortop Travmatol Protez** 1988 Jul;(7):42–3 (Eng. Abstr.) **(Rus)**

[Gunshot wound of the femoral vein] Drozdov VP, et al. **Vestn Khir** 1989 Feb;142(2):70 **(Rus)**

[Surgical procedures in gunshot injuries of the ileocecal area and ascending colon] Gurin NN, et al. **Voen Med Zh** 1989 Feb;(2):25–8 **(Rus)**

[Substitution of bone defects of the extremities after gunshot fractures] Mironov GM, et al. **Voen Med Zh** 1988 Nov;(11):28–30 **(Rus)**

[Treatment of wounded patients with gun-shot diaphyseal fractures of the bones of the forearm] Mussa M, et al. **Voen Med Zh** 1988 Jun;(6):30–4 **(Rus)**

[Non-fatal firearm injuries of the head and neck] Castro C, et al. **An Otorrinolaringol Ibero Am** 1989;16(3):257–70 (Eng. Abstr.) **(Spa)**

[Penetrating wound of the abdomen. Report of a patient undergoing 24 operations] Villazón Sahagún A, et al. **Rev Gastroenterol Mex** 1989 Apr–Jun;54(2):103–6 (Eng. Abstr.) **(Spa)**

THERAPY

Early management of abdominal trauma: the role of diagnostic peritoneal lavage. Danne PD, et al. **Aust N Z J Surg** 1988 Nov;58(11):879–87

The management of hemorrhage from severe missile injuries using Foley catheter balloon tamponade. Shuker S. **J Oral Maxillofac Surg** 1989 Jun;47(6):646–8

Treatment of acute penetrating injuries of the spine: a retrospective analysis. Simpson RK Jr, et al. **J Trauma** 1989 Jan;29(1):42–6

Wound ballistics [letter] **JAMA** 1988 Dec 9;260(22):3277–9

Management of gunshot wounds to the perineum. Snyder M, et al. **Milit Med** 1988 Nov;153(11):586–9

Open wound drainage versus wound excision in treating the modern assault rifle wound. Fackler ML, et al. **Surgery** 1989 May;105(5):576–84 (40 ref.)

[The outcome of neck wounds from being shot with a flare gun] Sibirskii BI, et al. **Voen Med Zh** 1989 May;(5):63–4 **(Rus)**

VETERINARY

ECG of the month. Ventricular tachycardia. Fucci V. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1400–1

WOUNDS, MULTIPLE see MULTIPLE TRAUMA

WOUNDS, NONPENETRATING

Blunt rupture of the myocardium. Pevec WC, et al. **Ann Thorac Surg** 1989 Jul;48(1):139–42 (49 ref.)

Cardiac contusion. The effect on operative management of the patient with trauma injuries. Ross P Jr, et al. **Arch Surg** 1989 Apr;124(4):506–7

Diagnosis and treatment of patients with renal trauma. Leppäniemi AK, et al. **Br J Urol** 1989 Jul;64(1):13–7

Primary brainstem injury without persistent coma and decerebrate rigidity. Report of 2 cases. Li JR, et al. **Chin Med J [Engl]** 1989 Mar;102(3):230–2

Cardiac damage in nonpenetrating chest injuries. Report of 5 cases. Glock Y, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb;30(1):27–33

Evidence of orbital deformation in indirect optic nerve injury. Weight lifter's optic neuropathy. Purvin V. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):9–11

Blunt carotid artery trauma: a case report. Mears GD, et al. **J Emerg Med** 1988 Jul–Aug;6(4):281–4

Pharyngeal tear resulting from skiing injury. Satran L, et al. **J Emerg Med** 1988 Nov–Dec;6(6):487–9

Tension gastrothorax complicating traumatic diaphragmatic hernia. Sidhu BS, et al. **J Indian Med Assoc** 1988 Jul; 86(7):182–4

Cellular changes during repair of a cryogenic spinal cord injury in the rat: an electron microscopic study. West NR, et al. **J Neuropathol Exp Neurol** 1989 Jan;48(1):94–108

Blunt innominate injury: a report of three cases. Letsou G, et al. **J Trauma** 1989 Jan;29(1):104–8 (43 ref.)

Mitral and tricuspid valve rupture from blunt trauma sustained during a motor vehicle collision. Werne C, et al. **J Trauma** 1989 Jan;29(1):113–5

Chronic pseudoaneurysm of the popliteal artery after blunt trauma. Rosenbloom MS, et al. **J Vasc Surg** 1989 Aug; 10(2):187–9

Traumatic sternal fractures: current concepts in diagnosis and management. Carey S, et al. **Milit Med** 1988 Sep; 153(9):451–3

Indirect choroidal rupture secondary to blunt ocular trauma. A review of eight eyes. Wyszynski RE, et al. **Retina** 1988; 8(4):237–43

Injuries of the jejunum and ileum. A series of 188 patients. Wilkinson AE. **S Afr J Surg** 1989 Jun;27(2):66–7

Eye injuries associated with 'war games'. Welsh NH, et al. **S Afr Med J** 1989 Sep 16;76(6):270–1

Etiology, classification, and management of renal trauma. Guerriero WG. **Surg Clin North Am** 1988 Oct; 68(5):1071–84 (10 ref.)

Review of pancreatic trauma. Glancy KE. **West J Med** 1989 Jul;151(1):45–51 (71 ref.)

[A combined rupture of the interventricular septum and the tricuspid valve in closed chest injury] Babliak DE, et al. **Gruda Khir** 1989 Jan–Feb;(1):88–9 **(Rus)**

[A method of obtaining conditionally-transverse sections of a traumatizing area of a solid blunt object] Kasateev AV. **Sud Med Ekspert** 1989 Apr–Jun;32(2):47–8 **(Rus)**

[Comparative characteristics of chest cavity injuries in children and adults as a result of a blow from a solid blunt object] Khokhlov VV. **Sud Med Ekspert** 1989 Apr–Jun; 32(2):8–11 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Clinical prospective injury severity scoring: when is it accurate? Civil ID, et al. **J Trauma** 1989 May;29(5):613–4

[Classification of injuries to the abdomen and retroperitoneal space] Gorshkov SZ, et al. **Khirurgiia (Mosk)** 1988 Aug; (8):74–7 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Gastric rupture from blunt abdominal trauma. Theunis P, et al. **Acta Chir Belg** 1988 Sep–Oct;88(5):309–11

Impairment after severe blunt head injury: the results from a consecutive series of 100 patients. Tate RL, et al. **Acta Neurol Scand** 1989 Feb;79(2):97–107

Pyogenic liver abscess due to Bacteroides fragilis. Ka K, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Apr;29(2):280–6

CT diagnosis of acute pericardial tamponade after blunt chest trauma. Goldstein L, et al. **AJR** 1989 Apr;152(4):739–41

The value of CT in detecting bowel perforation in children after blunt abdominal trauma. Bulas DI, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):561–4

Pulmonary contusion. Hill JW, et al. **Am Fam Physician** 1988 Nov;38(5):219–20

Radiological case of the month. Traumatic pulmonary pseudocyst. Co MA, et al. **Am J Dis Child** 1989 Jul; 143(7):841–2

Adolescents with closed head injuries. A report of initial cognitive deficits. Slater EJ, et al. **Am J Dis Child** 1988 Oct;142(10):1048–51

Blunt pelvic trauma. Snyder HS. **Am J Emerg Med** 1988 Nov;6(6):618–27 (71 ref.)

Embolism of massive hepatic tissue in inferior vena cava and right atrium after closed liver injury. Takatsu A, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):233–5

Necrotizing fasciitis: a fatal outcome following minor trauma. Case report and literature review. Wojno K, et al. **Am J Forensic Med Pathol** 1989 Sep;10(3):239–41

Ruptured globe after radial keratotomy. Pearlstein ES, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):755–6

Diagnosis and management of acute laryngeal trauma. Ganzel TM, et al. **Am Surg** 1989 May;55(5):303–6

Microscopic hematuria after blunt trauma. Is pyelography necessary? Thomason RB, et al. **Am Surg** 1989 Mar; 55(3):145–50

Current treatment of traumatic aortic disruptions. Wallenhaupt SL, et al. **Am Surg** 1989 May;55(5):316–20

Traumatic abdominal hernia: a case report and review of the literature. Wood RJ, et al. **Am Surg** 1988 Nov; 54(11):648–51 (34 ref.)

Myocardial infarction caused by blunt chest injury: possible mechanisms involved—case reports. Foussas SG, et al. **Angiology** 1989 Apr;40(4 Pt 1):313–8

Increased incidence of cardiac contusion in patients with traumatic thoracic aortic rupture. Kram HB, et al. **Ann Surg** 1988 Nov;208(5):615–8

Traumatic aorto-right atrial fistula after blunt chest injury. Chang H, et al. **Ann Thorac Surg** 1989 May;47(5):778–9

Ventricular aneurysm due to blunt chest injury. Grieco JG, et al. **Ann Thorac Surg** 1989 Feb;47(2):322–9 (31 ref.)

Traumatic laceration of a saphenous vein graft: successful surgical repair. Harada A, et al. **Ann Thorac Surg** 1989 Jun;47(6):924–5

Diagnosis of traumatic thoracic aortic rupture: a 10-year retrospective analysis. Kram HB, et al. **Ann Thorac Surg** 1989 Feb;47(2):282–6

Combined ascending aorta rupture and left main bronchus disruption from blunt chest trauma. Marzelle J, et al. **Ann Thorac Surg** 1989 May;47(5):769–71

Traumatic rupture and aneurysm of the aortic isthmus: late results of repair by direct suture. Roques X, et al. **Ann Vasc Surg** 1989 Jan;3(1):47–51

Laryngeal paralysis as the presenting sign of aortic trauma. Woodson GE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1100–2

Myocardial contusion. When can the diagnosis be eliminated? Miller FB, et al. **Arch Surg** 1989 Jul;124(7):805–7; discussion 807–8

Can the fetus cause placental separation? Eden J. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):119–20

Blunt trauma to the carotid artery. McNab AA, et al. **Aust N Z J Surg** 1988 Aug;58(8):651–6

Massive intramural duodenal haematoma following blunt abdominal trauma. Case report. Parker GD, et al. **Australas Radiol** 1989 May;33(2):192–4

Late presentation of diaphragmatic rupture following blunt trauma. Sagar PM, et al. **Br J Hosp Med** 1989 Apr;41(4):382

Traumatic lung cyst. Ayuso JR, et al. **Can Assoc Radiol J** 1989 Jun;40(3):174–5

Coronary artery dissection secondary to blunt chest trauma. Kohli S, et al. **Cathet Cardiovasc Diagn** 1988;15(3):179–83

Coronary arteriography in dogs following blunt cardiac trauma: a longitudinal assessment. Sabbah HN, et al. **Cathet Cardiovasc Diagn** 1988;15(3):155–63

Blunt chest trauma. Extrapericardial cardiac tamponade by a mediastinal hematoma. Coleman GM, et al. **Chest** 1989 Apr;95(4):922–4

Chest trauma and subvalvular left ventricular aneurysms. Matthews RV, et al. **Chest** 1989 Feb;95(2):474–6

Pulse generator failure due to blunt trauma. Gould L, et al. **Clin Cardiol** 1988 Aug;11(8):581–2

Traumatic perforation of ileal pouch. Report of a case. Hsu TC. **Dis Colon Rectum** 1989 Jan;32(1):64–6

Ocular damage after blunt trauma to the eye. Kawuma AM. **East Afr Med J** 1988 Jun;65(6):397–401

Aneurysm of the left anterior descending coronary artery after chest trauma. Bjørn-Hansen LS, et al. **Eur Heart J** 1989 Feb;10(2):177–9

Traumatic papillary muscle dysfunction: attempted mitral-valve repair and eventual prosthetic replacement. Al Kasab S, et al. **Eur Heart J** 1988 Sep;9(9):1030–3

Subocclusion of the left anterior descending artery following blunt chest trauma. van Schil P, et al. **Eur Heart J** 1988 Dec;9(12):1361–2

Blunt traumatic rupture of cervical trachea. Beg MH, et al. **Indian J Chest Dis Allied Sci** 1988 Oct–Dec;30(4):291–4

Splenic and liver trauma in children. Rescorla FJ, et al. **Indiana Med** 1989 Jul;82(7):516–20 (20 ref.)

Pseudocyst of the spleen after closed abdominal injury. Eri LM, et al. **Injury** 1988 Jul;19(4):297

An unusual presentation of tuberculosis—'injury TB'. Ferris BD, et al. **Injury** 1987 Sep;18(5):347–9

Constrictive pericarditis as a complication of closed chest injury. Khan MA, et al. **Injury** 1988 Jan;19(1):39–40

Ano-rectal injury causing extraperitoneal and subcutaneous emphysema. Thomas PR. **Injury** 1987 Nov;18(6):426–7

Reflex sympathetic dystrophy syndrome following minor trauma. Gold B, et al. **Isr J Med Sci** 1989 Feb;25(2):107–9

Liver abscess caused by Clostridium bifermentans following blunt abdominal trauma. Nachman S, et al. **J Clin Microbiol** 1989 May;27(5):1137–8

Quantitation and pattern of parenchymal lung injury in blunt chest trauma. Diagnostic and therapeutic implications. Wagner RB, et al. **J Comput Tomogr** 1988 Oct;12(4):270–81

Fatal thrombosis of internal carotid artery following minor blunt trauma to the neck. An TL. **J Forensic Sci** 1989 May; 34(3):699–702

Osteochondrosis of the fourth metacarpal head after closed trauma. Smith RS, et al. **J Hand Surg [Am]** 1988 Nov; 13(6):920–2

Hypertension following renal trauma. Watts RA, et al. **J Hum Hypertens** 1987 Sep;1(2):65–71 (74 ref.)

Traumatic ventral hernia. Khanna YK, et al. **J Indian Med Assoc** 1988 Jun;86(6):153–4

Facial paralysis following blunt head injury. Fooanant S, et al. **J Med Assoc Thai** 1989 Jan;72(1):28–32

Comparison of the Westmead PTA Scale and the Glasgow Coma Scale as predictors of neuropsychological outcome following extremely severe blunt head injury [letter] Shores EA. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):126–7

Surgical treatment of progressive visual loss in traumatic optic neuropathy. Report of two cases. Guy J, et al. **J Neurosurg** 1989 May;70(5):799–801

Intracranial injury after moderate head trauma in children. Rosenthal BW, et al. **J Pediatr** 1989 Sep;115(3):346–50

Surgical management of traumatic hemobilia in children by direct ligation of the bleeding vessel. Bajpai M, et al. **J Pediatr Surg** 1989 May;24(5):436–7

Blunt pancreatic injuries in children: the role of percutaneous external drainage in the treatment of pancreatic pseudocysts. Bass J, et al. **J Pediatr Surg** 1988 Aug; 23(8):721–4

Pancreatic injuries in childhood due to blunt trauma. Smith SD, et al. **J Pediatr Surg** 1988 Jul;23(7):610–4

Traumatic hemobilia: etiology, diagnosis, and management [clinical conference] Mangiante EC, et al. **J Tenn Med Assoc** 1988 Sep;81(9):575–7

Traumatic pulmonary pseudocyst. Report of twelve cases. Kato R, et al. **J Thorac Cardiovasc Surg** 1989 Feb; 97(2):309–12

Esophageal perforation following external blunt trauma. Beal SL, et al. **J Trauma** 1988 Oct;28(10):1425–32

Common iliac artery injury from blunt trauma: case reports. Buscaglia LC, et al. **J Trauma** 1989 May;29(5):697–9

Traumatic hemoperitoneum due to a Meckel's mesodiverticular band: case report. McAneny D, et al. **J Trauma** 1989 Feb;29(2):261–2

Transection of the inferior vena cava from blunt thoracic trauma: case reports. Peitzman AB, et al. **J Trauma** 1989 Apr;29(4):534–6

Occlusion of bronchopleural fistula after lung injury—a new treatment by bronchoscopy. Regel G, et al. **J Trauma** 1989 Feb;29(2):223–6

Ventricular septal defect following blunt thoracic and abdominal trauma: case report. Sparrow JG, et al. **J Trauma** 1989 May;29(5):690–3

Acute diaphragmatic rupture due to blunt trauma: a retrospective analysis. van Vugt AB, et al. **J Trauma** 1989 May;29(5):683–6

Delayed intraperitoneal ureteric rupture following blunt abdominal trauma: case report. Wilkinson S, et al. **J Trauma** 1989 Sep;29(9):1292–4

Cervical vessel injury after blunt trauma. Fakhry SM, et al. **J Vasc Surg** 1988 Oct;8(4):501–8 (30 ref.)

Aneurysms and pseudoaneurysms of the superficial temporal

artery caused by trauma. Peick AL, et al. J Vasc Surg 1988 Nov;8(5):606–10 (30 ref.)
Sonographic findings in traumatic hemobilia: report of two cases and review of the literature. Sax SL, et al. JCU 1988 Jan;16(1):29–34 (20 ref.)
Isolated duodenal transection from blunt trauma treated by pyloric exclusion and triple-tube technique. Reyna TM, et al. Milit Med 1988 Nov;153(11):562–3
Crush accident resulting in isolated abdominal aortic injury. van Reedt Dortland RW, et al. Neth J Surg 1988 Jun; 40(4):108–9
Peripheral aneurysms in children—a link to trauma. Bagwell CE, et al. Pediatrics 1988 Nov;82(5):786–8
Chest injury in children with blunt abdominal trauma: evaluation with CT. Sivit CJ, et al. Radiology 1989 Jun; 171(3):815–8
Diaphragmatic disruption in blunt trauma. McDonald MA, et al. S Afr J Surg 1989 Mar;27(1):19–21
Cardiac rupture caused by blunt trauma as well as false angiographic aortic rupture. A case report. von Oppell UO, et al. S Afr Med J 1988 Nov 19;74(10):519–20
Traumatic perforation of the diaphragm. Pipkin NL, et al. South Med J 1988 Nov;81(11):1347–50
Blunt traumatic carotid dissection with delayed symptoms. Pozzati E, et al. Stroke 1989 Mar;20(3):412–6
Delayed sequelae of thoracic trauma. Symbas PN, et al. Surg Clin North Am 1989 Feb;69(1):135–42 (25 ref.)
Pulmonary contusion. Evaluation and classification by computed tomography. Wagner RB, et al. Surg Clin North Am 1989 Feb;69(1):31–40
Hypotension and bleeding with various anatomic patterns of blunt splenic injury in adults. Buckman RF Jr, et al. Surg Gynecol Obstet 1989 Sep;169(3):206–12
Fracture of the upper ribs and injury to the great vessels. Poole GV. Surg Gynecol Obstet 1989 Sep;169(3):275–82 (60 ref.)
Rectal prolapse caused by blunt abdominal trauma. Kram HB, et al. Surgery 1989 Jun;105(6):790–2 (11 ref.)
Acute mitral regurgitation secondary to blunt chest trauma: report of a case. Chang JP, et al. Taiwan I Hsueh Hui Tsa Chih 1989 Feb;88(2):173–5
Traumatic tension pneumomediastinum mimicking cardiac tamponade. Beg MH, et al. Thorax 1988 Jul;43(7):576–7
Post-traumatic unilateral hydronephrosis with hypertension treated by embolization. Pezzulli FA, et al. Urology 1989 Jan;33(1):70–3
Acute myocardial infarction following blunt chest trauma due to the kick of a cow. Barton EN, et al. West Indian Med J 1988 Dec;37(4):236–9
Non-penetrating traumatic retinopathy. Pathak A, et al. Yen Ko Hsueh Pao 1986 Mar;2(1):50–2, 57
[A case of large intestine rupture resulting from minor blunt abdominal trauma] Süev K, et al. Khirurgiia (Sofiia) 1989; 42(2):87–8 (Bul)
[Traumatic duodenal rupture; a diagnostic problem] Slors JF, et al. Ned Tijdschr Geneeskd 1988 Dec 3; 132(49):2247–50 (Eng. Abstr.) (Dut)
[Blunt abdominal trauma in pregnancy; seat belts secure and safe?] van der Linden PJ, et al. Ned Tijdschr Geneeskd 1989 Jun 10;133(23):1153–5 (Dut)
[Protective use of seat belts in jejunal injury] Mäkelä J, et al. Duodecim 1989;105(3):280–2 (Fin)
[A wound of superior mesenteric vessels. Apropos of a case] Sechas M, et al. Ann Chir 1988;42(6):423–5 (Eng. Abstr.) (Fre)
[Traumatic eventration caused by esophageal hiatus] Carabalona JP, et al. Chirurgie 1988;114(7–8):648–50 (Eng. Abstr.) (Fre)
[Traumatic rupture of 3 lobes of the right lung without any parietal lesion. A peculiar entity] Houdelette P, et al. J Chir (Paris) 1989 May;126(5):313–4 (8 ref.) (Eng. Abstr.) (Fre)
[Legal aspects of traumatic cerebrovascular lesions] Dachsel R, et al. Psychiatr Neurol Med Psychol (Leipz) 1989 May; 41(5):288–92 (Eng. Abstr.) (Ger)
[A pulsating swelling in the neck (clinical conference)] Richter M, et al. Schweiz Rundsch Med Prax 1989 Jan 10; 78(1–2):19–21 (Eng. Abstr.) (Ger)
[Isolated duodenal rupture caused by blunt abdominal trauma] Kunz R, et al. Unfallchirurg 1988 Jul;91(7):333–5 (Eng. Abstr.) (Ger)
[Stenoses and occlusions of the internal carotid artery caused by strangulation by the hypoglossal nerve] Balzer K, et al. Vasa Suppl 1988;23:219–21 (Ger)
[Post-traumatic aneurysm of the right ventricular outflow tract with concomitant tricuspid valve insufficiency] Jacksch R, et al. Z Kardiol 1988 Dec;77(12):814–8 (Eng. Abstr.) (Ger)
[Retroperitoneal duodenal injury due to blunt abdominal trauma] Tamir O, et al. Harefuah 1988 Dec 1;115(11):324–6 (Eng. Abstr.) (Heb)
[A case of mitral regurgitation from non-penetrating chest trauma] Okazaki K, et al. Kokyu To Junkan 1989 Feb; 37(2):221–4 (Eng. Abstr.) (Jpn)
[A case of traumatic aneurysm of the brachiocephalic artery] Kokubo M, et al. Kyobu Geka 1988 Aug;41(9):756–9 (Eng. Abstr.) (Jpn)
[A case report of rupture of the descending thoracic aorta] Matsuyama Y, et al. Kyobu Geka 1988 Nov;41(12):1011–4 (16 ref.) (Eng. Abstr.) (Jpn)
[Chronic traumatic thoracic aortic aneurysm: experience of 2 cases] Shin H, et al. Nippon Kyobu Geka Gakkai Zasshi 1988 Nov;36(11):2525–8 (Eng. Abstr.) (Jpn)
[Blunt eye injuries complicated by secondary intraocular hemorrhage in children and adolescents] Mierzejewski A, et al. Klin Oczna 1988 Nov;90(11):393–5 (Eng. Abstr.) (Pol)
[Retroperitoneal rupture of the duodenum] Grigorjew A, et al. Wiad Lek 1988 Dec 15;41(24):1672–4 (Eng. Abstr.) (Pol)
[Traumatic vesicosigmoid fistula] Tonchev T, et al. Khirurgiia (Sofiia) 1988;41(3):51–3 (Rus)
[Closed injuries of the spleen] Bondarenko NM, et al. Klin Khir 1989;(4):42–4 (Eng. Abstr.) (Rus)
[Rupture of the common bile duct and duodenum in closed abdominal trauma] Budarin VN. Klin Khir 1989;(4):67–8 (Rus)
[A rare source of hemorrhage in closed chest trauma] Deriugina MS, et al. Klin Khir 1988;(10):57 (Rus)
[Subcutaneous rupture of the duodenum] Krasi'nikov DM, et al. Klin Khir 1989;(4):41–2 (Eng. Abstr.) (Rus)
[Isolated rupture of the duodenum in closed abdominal trauma] Vardanian VK. Klin Med (Mosk) 1989 Apr; 67(4):126 (Rus)
[The role of blunt trauma in the pathogenesis of rhinogenous phlegmon of the orbit in children] Moskovchenko KP, et al. Oftalmol Zh 1988;(7):437–8 (Rus)
[Treatment of closed injuries of the spleen in children by splenectomy combined with heterotopic autotransplantation of splenic tissue] Babich II, et al. Vestn Khir 1989 Feb;142(2):93–6 (Rus)
[Closed injury of the rectum in a child] Bredikhin MIu, et al. Vestn Khir 1988 Oct;141(10):91 (Rus)
[Post-traumatic sequestration of the right hepatic lobe complicated by profuse external hemorrhage in a child] Doronin VF, et al. Vestn Khir 1987 Dec;139(12):66–8 (Rus)
[Chylothorax in closed trauma of the chest] Gurbanaliev IG, et al. Vestn Khir 1989 Feb;142(2):68–70 (Rus)
[Closed trauma of the duodenum in a child] Kulikovskikh VI, et al. Vestn Khir 1989 Feb;142(2):76–7 (Rus)
[Pathogenetic substantiation of photomodification of autologous blood in the prevention and treatment of complications of closed chest trauma] Kutushev FKh, et al. Vestn Khir 1988 Dec;141(12):63–71 (Eng. Abstr.) (Rus)
[Successful primary plastic surgery in rupture of the hepatic duct in a child] Mavliutova MG, et al. Vestn Khir 1988 Oct;141(10):90–1 (Rus)
[Clinical picture of alcoholism in adolescents and youths with a history of craniocerebral injury] Revenok AD. Vrach Delo 1988 Nov;(11):78–81 (Eng. Abstr.) (Rus)
[Complete section of the choledochus caused by non-penetrating trauma of the abdomen. Use of minimal catheter jejunostomy] Alarco Hernández A, et al. Rev Esp Enferm Apar Dig 1989 Jun;75(6 Pt 1):557–60 (Eng. Abstr.) (Spa)

DIAGNOSIS

Early identification of high-risk patients using the "estimated" injury severity score and age. McLellan BA, et al. Accid Anal Prev 1989 Jun;21(3):283–90
A comparison of open peritoneal lavage with modified closed peritoneal lavage in blunt abdominal trauma. Adkinson C, et al. Am J Emerg Med 1989 Jul;7(4):352–6
An algorithm for computed tomography & diagnostic peritoneal lavage [editorial] Doris PE. Ann Emerg Med 1989 May;18(5):592
Computed tomography versus diagnostic peritoneal lavage: usefulness in immediate diagnosis of blunt abdominal trauma. Frame SB, et al. Ann Emerg Med 1989 May; 18(5):513–6
The use of an emergency department observation unit in the management of abdominal trauma. Henneman PL, et al. Ann Emerg Med 1989 Jun;18(6):647–50
Diagnosis of significant abdominal trauma after road traffic accidents [letter] Ann R Coll Surg Engl 1988 Sep; 70(5):337–8
Hematuria. A marker of abdominal injury in children after blunt trauma. Taylor GA, et al. Ann Surg 1988 Dec; 208(6):688–93
Pacing lead fracture after a deceleration injury. Grieco JG, et al. Ann Thorac Surg 1989 Mar;47(3):453–4
Clinical assessment and radiograph following blunt chest trauma. Dunlop MG, et al. Arch Emerg Med 1989 Jun; 6(2):125–7
Pancreatic transection. A concept of evolving injury. Horst HM, et al. Arch Surg 1989 Sep;124(9):1093–5
Computed tomography and diagnostic peritoneal lavage in blunt abdominal trauma. Their combined role. Kearney PA Jr, et al. Arch Surg 1989 Mar;124(3):344–7
Intra-abdominal injury following blunt trauma. Identifying the high-risk patient using objective risk factors. Mackersie RC, et al. Arch Surg 1989 Jul;124(7):809–13
Anyone for tennis? Mohanlal M. Aust Fam Physician 1988 Oct;17(10):916
Fiberoptic bronchoscopy in the evaluation of acute chest and upper airway trauma. Hara KS, et al. Chest 1989 Sep; 96(3):627–30
Blunt hollow viscus injuries of the digestive tract: a poorly recognized phenomenon. Longo WE, et al. Conn Med 1989 Aug;53(8):451–4
Splenic injury—a prospective multicentre diagnostic study. Wiig JN, et al. Injury 1987 Mar;18(2):89–92
Duodenal rupture as a result of blunt abdominal trauma. Crutchfield H, et al. J Tenn Med Assoc 1989 Apr; 82(4):195–6, 201
Ultrarapid diagnostic peritoneal lavage. Cotter CP, et al. J Trauma 1989 May;29(5):615–6
Sonography versus peritoneal lavage in blunt abdominal trauma. Grüessner R, et al. J Trauma 1989 Feb;29(2):242–4
A prospective evaluation of 68 patients suffering blunt chest trauma for evidence of cardiac injury. Helling TS, et al. J Trauma 1989 Jul;29(7):961–5; discussion 965–6
Evaluation of computed tomography and diagnostic peritoneal lavage in blunt abdominal trauma. Meyer DM, et al. J Trauma 1989 Aug;29(8):1168–70; discussion 1170–2
Percutaneous peritoneal lavage in blunt trauma patients: a safe and accurate diagnostic method. Sherman JC, et al. J Trauma 1989 Jun;29(6):801–4; discussion 804–5
Congenital splenic cysts presenting after blunt abdominal trauma. Stylianos S, et al. N Y State J Med 1989 May; 89(5):289–91
Prospective evaluation of selective criteria for imaging among children with suspected blunt renal trauma. Fleisher G. Pediatr Emerg Care 1989 Mar;5(1):8–11
Mini-laparoscopy in blunt abdominal trauma. Wood D, et al. Surg Endosc 1988;2(3):184–9
Peritoneal lavage in blunt abdominal trauma. Meo G, et al. Trop Doct 1989 Apr;19(2):74–5
[Hepatic injuries in children. Apropos of 23 case reports] Scheye T, et al. Ann Pediatr (Paris) 1988 Dec;35(10):731–5 (Eng. Abstr.) (Fre)
[Diagnostic and therapeutic strategy in injuries of the kidney. Apropos of a series of 248 cases] Piechaud T, et al. Ann Urol (Paris) 1988;22(4):273–7 (Eng. Abstr.) (Fre)
[Ultrasound diagnosis following blunt abdominal trauma. Sonography in acute and follow-up diagnosis] Kohlberger EJ, et al. Fortschr Med 1989 Apr 10;107(11):244–7 (17 ref.) (Eng. Abstr.) (Ger)
[The value of peritoneal lavage] Kern E. Langenbecks Arch Chir 1988;373(4):201 (Ger)
[The value of ultrasound diagnosis in blunt abdominal and thoracic injuries] Strittmatter B, et al. Langenbecks Arch Chir 1988;373(4):202–5 (Eng. Abstr.) (Ger)
[Rational diagnosis of blunt abdominal injury] Wernet E, et al. Unfallchirurg 1988 Oct;91(10):473–8 (Eng. Abstr.) (Ger)
[The value of clinical aspects, laboratory and circulatory parameters in blunt abdominal trauma] Ruf W, et al. Unfallchirurgie 1988 Dec;14(6):343–8 (Eng. Abstr.) (Ger)
[Asymptomatic course of severe tricuspid valve insufficiency with ateroseptal infarct, coronary fistula and ventricular septum defect as a sequela of blunt thoracic trauma] Renner U, et al. Z Kardiol 1989 May;78(5):343–7 (Eng. Abstr.) (Ger)
[Pancreatic injuries] Ionescu A, et al. Rev Med Chir Soc Med Nat Iasi 1988 Jul–Sep;92(3):523–5 (Eng. Abstr.) (Rum)
[Diagnosis and treatment of peacetime chest trauma] Nedvetskaia LM, et al. Grudn Khir 1988 May–Jun;(3):63–7 (Eng. Abstr.) (Rus)
[Characteristics of clinical manifestations of closed abdominal injuries in combined cranio-abdominal trauma] Michurin VF, et al. Klin Khir 1989;(4):22–5 (Eng. Abstr.) (Rus)
[The problem of closed craniocerebral trauma] Akimov GA. Voen Med Zh 1988 Nov;(11):32–4 (Rus)
[Ultrasound and peritoneal lavage in the diagnosis of blunt injuries of the abdomen] Bakula B, et al. Acta Med Iugosl 1988;42(3):187–200 (Eng. Abstr.) (Ser)
[Diagnostic peritoneal lavage in blunt abdominal trauma] Espinoza R, et al. Rev Med Chil 1988 Feb;116(2):125–9 (Eng. Abstr.) (Spa)

DRUG THERAPY

Early use of corticosteroids in severe closed chest injuries: a 10-year experience. Svennevig JL, et al. Injury 1987 Sep; 18(5):309–12

EPIDEMIOLOGY

Five thousand seven hundred sixty cardiovascular injuries in 4459 patients. Epidemiologic evolution 1958 to 1987. Mattox KL, et al. Ann Surg 1989 Jun;209(6):698–705; discussion 706–7
Blunt chest trauma in the elderly. Shorr RM, et al. J Trauma 1989 Feb;29(2):234–7

ETIOLOGY

Serious eye injuries due to war games. Acheson JF, et al. BMJ 1989 Jan 7;298(6665):26
Tricuspid regurgitation due to chest trauma: an unusual laceration around the annulus of the anterior leaflet. Ishii K, et al. Heart Vessels 1988;4(1):44–7
Ocular injuries in union territory of Pondicherry—clinical presentation. Krishnan M, et al. Indian J Ophthalmol 1988 Apr–Jun;36(2):82–5
Blunt injury of the abdominal aorta [clinical conference] Mangiante EC, et al. J Tenn Med Assoc 1989 May; 82(5):255–6
Seizure disorders and trauma. Fallon WF Jr, et al. South Med J 1989 Sep;82(9):1093–5
Blunt injuries of the cervical trachea: review of 51 patients. Reece GP, et al. South Med J 1988 Dec;81(12):1542–8 (46

ref.)
[Blunt upper abdominal trauma as a complication of cardiac resuscitation] Reinartz H.
Anasth Intensivther Notfallmed 1989 Apr;24(2):111–4 (Eng. Abstr.) (Ger)
[Hematoma and pulmonary contusion as a consequence of closed injury of the thorax in childhood] Moro G, et al.
Minerva Chir 1989 Mar 15;44(5):927–9 (Eng. Abstr.) (Ita)

HISTORY

Highlights of the history of nonpenetrating chest trauma. Wagner RB, et al. **Surg Clin North Am** 1989 Feb;69(1):1–14

IMMUNOLOGY

Abnormal primary antibody responses in pediatric trauma patients. Wilson NW, et al. **J Pediatr** 1989 Sep;115(3):424–7
Immune consequences of nonoperative treatment of splenic trauma in the rat model. Karp MP, et al.
J Pediatr Surg 1989 Jan;24(1):112–7; discussion 117

METABOLISM

An integrated analysis of glucose, fat, and protein metabolism in severely traumatized patients. Studies in the basal state and the response to total parenteral nutrition. Shaw JH, et al. **Ann Surg** 1989 Jan;209(1):63–72 (52 ref.)
Proteoglycans of rabbit corneas with nonperforating wounds. Funderburgh JL, et al. **Invest Ophthalmol Vis Sci** 1989 Mar; 30(3):435–42

MORTALITY

Trauma score versus revised trauma score in TRISS to predict outcome in children with blunt trauma. Eichelberger MR, et al. **Ann Emerg Med** 1989 Sep; 18(9):939–42
An analysis of risk factors for death at the scene following traumatic aortic rupture. Sturm JT, et al. **J Trauma** 1988 Nov;28(11):1578–80
Brain damage in fatal non-missile head injury in relation to age and type of injury. Adams JH, et al. **Scott Med J** 1989 Feb;34(1):399–401

PATHOLOGY

The fjord murders. Giertsen JC, et al.
Am J Forensic Med Pathol 1989 Jun;10(2):124–9
Traumatic dehiscence of incisions seven years after radial keratotomy. Glasgow BJ, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):703–7
Histopathology of traumatic corneal rupture after radial keratotomy. Binder PS, et al. **Arch Ophthalmol** 1988 Nov; 106(11):1584–90 (32 ref.)
Bilateral testicular atrophy following blunt trauma. MacDermott JP, et al. **Br J Urol** 1989 Feb;63(2):215–6
The mechanism of fatal cardiopulmonary injury caused by a blow from a golf club. Purdue B, et al.
Forensic Sci Int 1989 Jul;42(1–2):125–30
Toolmarks and peculiar blunt force injuries related to an adjustable wrench. Takizawa H, et al. **J Forensic Sci** 1989 Jan;34(1):258–62
Blunt abdominal trauma associated with seat belt use. Elkins SK, et al. **J Tenn Med Assoc** 1989 Jan;82(1):21–2
Traumatic trochanteric bursitis. Haller CC, et al.
Kans Med 1989 Jan;90(1):17–8, 22
Posttraumatic lobular squamous metaplasia of breast. An unusual pseudocarcinomatous metaplasia resembling squamous (necrotizing) sialometaplasia of the salivary gland. Hurt MA, et al. **Mod Pathol** 1988 Sep;1(5):385–90
Blow-in fractures of the orbit. Antonyshyn O, et al.
Plast Reconstr Surg 1989 Jul;84(1):10–20
[Extra- and intracranial injuries of the cerebral arteries as a sequela of assault] Maxeiner H. **Z Rechtsmed** 1989; 102(2–3):191–8 (Eng. Abstr.) (Ger)
[Release of proteinase inhibitors as a vital reaction in the early post-traumatic interval] Oehmichen M, et al.
Z Rechtsmed 1989;102(7):461–72 (Eng. Abstr.) (Ger)
[Injuries of the basilar artery] Vitzthum HE, et al.
Zentralbl Neurochir 1988;49(3):189–95 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Ventilation-perfusion imaging in evaluating regional lung function in nonpenetrating injury to the chest. Van Eeden SF, et al. **Chest** 1989 Mar;95(3):632–8
Extravasation of plasma proteins in brain trauma. Liu HM, et al. **Forensic Sci Int** 1988 Sep;38(3–4):285–95
Differences in the intracranial pressure caused by a blow' and/or a 'fall'—an experimental study using physical models of the head and neck. Yanagida Y, et al.
Forensic Sci Int 1989 Apr–May;41(1–2):135–45
Expression of transforming growth factor-beta in wound healing of vitamin A-deficient rat corneas. Hayashi K, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):239–47
Trauma of lung due to impact load. Yen RT, et al.
J Biomech 1988;21(9):745–53
Biophysics of impact injury to the chest and abdomen. Cooper GJ, et al. **J R Army Med Corps** 1989 Jun; 135(2):58–67
Longitudinal evaluation of left ventricular performance in dogs following nonpenetrating cardiac trauma. Sabbah HN, et al. **J Trauma** 1989 Feb;29(2):175–9
Traumatic brain injury in the rat: characterization of a lateral fluid-percussion model. McIntosh TK, et al.
Neuroscience 1989;28(1):233–44
Recovery of impaired endothelium-dependent relaxation after fluid-percussion brain injury in cats. Ellison MD, et al. **Stroke** 1989 Jul;20(7):911–7
[Short-latency brain stem evoked potentials to acoustic stimulation in closed craniocerebral trauma in children] Kriuchko VI, et al. **Zh Vopr Neirokhir** 1989 Mar–Apr; (2):13–7 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Auricular injury and the use of headgear in wrestlers. Schuller DE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):714–7

PSYCHOLOGY

Psychological consequences of blunt head trauma and relation to other indices of severity of injury. Gensemer IB, et al. **Ann Emerg Med** 1989 Jan;18(1):9–12

RADIOGRAPHY

The value of non-contrast-enhanced CT in blunt abdominal trauma. Kelly J, et al. **AJR** 1989 Jan;152(1):41–8
On the value of non-contrast-enhanced CT in blunt abdominal trauma [letter] Raptopoulos V. **AJR** 1989 Mar; 152(3):651–2
Traumatic subluxation of the interphalangeal joint of the hallux with interposition of the sesamoid bone [letter] Szucs R, et al. **AJR** 1989 Mar;152(3):652–3
CT of severe renal trauma in children: evaluation and course of healing with conservative therapy. Yale-Loehr AJ, et al. **AJR** 1989 Jan;152(1):109–13
CT evaluation of blunt abdominal trauma in children: comparison of ultrafast and conventional CT. Brody AS, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):803–6
Blunt renal and ureteral trauma in childhood: CT patterns of fluid collections. Siegel MJ, et al.
AJR Am J Roentgenol 1989 May;152(5):1043–7
CT of blunt abdominal trauma in children. Taylor GA, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):555–9
Incidence of cervical spine injuries in association with blunt head trauma. Bayless P, et al. **Am J Emerg Med** 1989 Mar; 7(2):139–42
Computed tomography in the initial evaluation of the cervical spine. Schleehauf K, et al. **Ann Emerg Med** 1989 Aug; 18(8):815–7
Abdominal CT in children with neurologic impairment following blunt trauma. Abdominal CT in comatose children. Taylor GA, et al. **Ann Surg** 1989 Aug; 210(2):229–33
A case of partial physeal closure following compression injury. Skak SV. **Arch Orthop Trauma Surg** 1989; 108(3):185–8
Emergent endoscopic retrograde cholangiopancreatography. A highly specific test for acute pancreatic trauma. Hayward SR, et al. **Arch Surg** 1989 Jun;124(6):745–6
Oblique projections in aortography following blunt thoracic trauma. Parker LA Jr, et al. **Can Assoc Radiol J** 1989 Jun; 40(3):172–3
False-positive aortography following blunt chest trauma: case report. Orron DE, et al.
Cardiovasc Intervent Radiol 1988 Jun;11(3):132–5
The prognostic significance of the third ventricle and basal cisterns in severe closed head injury. Colquhoun IR, et al. **Clin Radiol** 1989 Jan;40(1):13–6
CT signs of duodenal perforation secondary to blunt abdominal trauma. Hofer GA, et al.
J Comput Assist Tomogr 1989 May-Jun;13(3):430–2
CT diagnosis of traumatic pericardium rupture. Kirsch JD, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):523–4
CT diagnosis of bronchial rupture. Weir IH, et al.
J Comput Assist Tomogr 1988 Nov-Dec;12(6):1035–6
Traumatic rupture of diaphragm due to blunt injury. Baid JC, et al. **J Indian Med Assoc** 1988 Jul;86(7):198
Diagnosis and management of blunt pancreatic injury. Chapman WC, et al. **J Tenn Med Assoc** 1989 Feb;82(2):84–5
The potential effects of radiographic criteria to exclude aortography in patients with blunt chest trauma. Results of a study of 32 patients with proved aortic or brachiocephalic arterial injury. Woodring JH, et al.
J Thorac Cardiovasc Surg 1989 Mar;97(3):456–60
Traumatic disruption of bilateral vertebral arteries and internal carotid arteries: case report. Fukuda I, et al.
J Trauma 1989 Feb;29(2):263–6
Utility of routine pelvic X-ray during blunt trauma resuscitation. Gillott A, et al. **J Trauma** 1988 Nov; 28(11):1570–4
Major skeletal injuries in the obtunded blunt trauma patient: a case for routine radiologic survey. Mackersie RC, et al. **J Trauma** 1988 Oct;28(10):1450–4
Selective application of cervical spine radiography in alert victims of blunt trauma: a prospective study [letter] Sumchai AP. **J Trauma** 1988 Dec;28(12):1686–7
The role of computed tomography in blunt abdominal trauma in children. Taylor GA, et al. **J Trauma** 1988 Dec; 28(12):1660–4
Radiographic assessment of renal trauma: a 10-year prospective study of patient selection. Mee SL, et al.
J Urol 1989 May;141(5):1095–8
Blow to face. Swischuk LE. **Pediatr Emerg Care** 1989 Mar; 5(1):49–50
Blunt hepatic/splenic trauma in adults: CT-based classification and correlation with prognosis and treatment [letter] Conrad MR. **Radiology** 1989 Oct;173(1):285–6
CT diagnosis of blunt hepatic and splenic injuries: a look to the future [editorial] Jeffrey RB Jr. **Radiology** 1989 Apr; 171(1):17–8
Protocol-driven radiologic evaluation of suspected cervical spine injury: efficacy study. Mirvis SE, et al. **Radiology** 1989 Mar;170(3 Pt 1):831–4
Blunt hepatic trauma in adults: CT-based classification and correlation with prognosis and treatment. Mirvis SE, et al. **Radiology** 1989 Apr;171(1):27–32
Blunt splenic trauma in adults: CT-based classification and correlation with prognosis and treatment. Mirvis SE, et al. **Radiology** 1989 Apr;171(1):33–9
Traumatic adrenal hemorrhage: radiologic findings. Murphy BJ, et al. **Radiology** 1988 Dec;169(3):701–3
Bowel and mesenteric injury following blunt abdominal trauma: evaluation with CT. Rizzo MJ, et al. **Radiology** 1989 Oct;173(1):143–8
Splenic trauma in adults: impact of CT grading on management. Scatamacchia SA, et al. **Radiology** 1989 Jun; 171(3):725–9
Blunt pancreatic trauma: prospective evaluation of early endoscopic retrograde pancreatography. Whittwell AE, et al. **South Med J** 1989 May;82(5):586–91
Computed tomography in evaluation of blunt renal trauma. Potential for misdiagnosis of renal infarction. Sant GR, et al. **Urol Int** 1988;43(6):321–3
[Radiology of multiple thoracic trauma] Partanen K, et al.
Duodecim 1988;104(16):1264–74 (32 ref.) (Fin)
[X-ray computed tomography and pancreatic injuries. Apropos of 17 cases] Marsot-Dupuch K, et al.
Ann Radiol (Paris) 1988;31(5):271–81 (17 ref.) (Eng. Abstr.) (Fre)
[Roentgen pathology of blunt bronchial injuries] Stark P, et al. **Radiologe** 1989 May;29(5):224–7 (Eng. Abstr.) (Ger)
[A renal trauma: evaluation by dynamic CT] Koh E, et al.
Hinyokika Kiyo 1989 Jan;35(1):91–4 (Eng. Abstr.) (Jpn)
[The role of computed tomography in blunt hepatic injury] Kaji T. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25;48(9):1123–32 (Eng. Abstr.) (Jpn)
[Clinical x-ray characteristics of lung contusion in closed chest trauma] Florikian AK, et al. **Klin Khir** 1988;(10):7–9 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

[Dynamic perfusion scintigraphy of the lungs in closed chest injury] Proskurina GB, et al. **Sov Med** 1988;(8):64–7 (Rus)

SURGERY

Gunshot and blast injuries to the extremities. Management of soft tissue wounds by a modified technique of delayed wound closure. Hartl WH, et al. **Acta Chir Scand** 1988 Sep;154(9):495–9
Hepatic trauma. Sheldon GF, et al. **Adv Surg** 1989;22:179–93 (37 ref.)
Percutaneous drainage of traumatic pancreatic pseudocysts in children. Jaffe RB, et al. **AJR** 1989 Mar;152(3):591–5
A twelve-year survey of cervicothoracic vascular injuries. Bladergroen M, et al. **Am J Surg** 1989 May;157(5):483–6
Splenorrhaphy for blunt trauma with a functioning distal splenorenal shunt: rationale and report of a case. Arnold JH, et al. **Am Surg** 1988 Oct;54(10):627–9
Traumatic rupture of the pulmonary artery. Collins MP, et al. **Ann Thorac Surg** 1989 Apr;47(4):612–3
Blunt trauma to the internal carotid artery. Englund R, et al. **Ann Vasc Surg** 1988 Oct;2(4):362–6
Popliteal artery trauma: update and recent advances in management. Gnanadev DA, et al. **Ann Vasc Surg** 1988 Oct;2(4):332–5
Posttraumatic autotransplantation of spleen tissue. Mizrahi S, et al. **Arch Surg** 1989 Jul;124(7):863–5
Splenectomy for trauma: morbidity, mortality and associated abdominal injuries. Pitcher ME, et al. **Aust N Z J Surg** 1989 Jun;59(6):461–3
Management of intrahepatic bile-duct injuries: presentation of two cases. Verran D, et al. **Aust N Z J Surg** 1988 Aug; 58(8):674–8 (19 ref.)
Rupture of the left ventricle and interventricular septum by blunt trauma. Pevec WC, et al. **Crit Care Med** 1989 Aug; 17(8):837–8
Traumatic rupture of the thoracoabdominal aorta. Kieffer E, et al. **Eur J Vasc Surg** 1987 Oct;1(5):353–8
Closed pancreatic transection treated by Roux-en-Y anastomosis. Lautsen J, et al. **Injury** 1988 Jan;19(1):42–3 (19 ref.)
Management of blunt injury to the internal carotid artery [letter] Pellegrini RV, et al. **J Trauma** 1988 Nov;28(11):1610
Bilateral testicular injury from external trauma. Cass AS, et al. **J Urol** 1988 Dec;140(6):1435–6
Tracheobronchial disruption from blunt chest trauma. Reyes A, et al. **Milit Med** 1988 Aug;153(8):395–6
Injuries of the duodenum. Wilkinson AE. **S Afr J Surg** 1989 Jun;27(2):64–5
The injured heart. Ivatury RR, et al.
Surg Clin North Am 1989 Feb;69(1):93–110 (88 ref.)
Indications for thoracotomy: deciding to operate. Mattox

KL. **Surg Clin North Am** 1989 Feb;69(1):47–58 (52 ref.)
Tracheobronchial and esophageal injuries [published erratum appears in **Surg Clin North Am** 1989 Jun;69(3):following viii] Pate JW. **Surg Clin North Am** 1989 Feb;69(1):111–23 (32 ref.)
Management of carotid artery trauma. Richardson JD, et al. **Surgery** 1988 Oct;104(4):673–80
Superior mesenteric vein severance from blunt abdominal trauma: report of a case. Liu M, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):183–5
A patient with two chronic posttraumatic aneurysms of the thoracic aorta. Caes F, et al. **Thorac Cardiovasc Surg** 1989 Apr;37(2):105–6
Blunt traumatic rupture of the thoracic oesophagus. Young CP, et al. **Thorax** 1988 Oct;43(10):794–5 (7 ref.)
Surgical management of traumatic disruption of the descending aorta. Young JN, et al. **West J Med** 1989 Jun; 150(6):662–4
[Hepatic injuries. Therapeutic approach. Analysis of 140 cases and review of the literature] Mentha G, et al. **Ann Chir** 1988;42(6):381–8 (42 ref.) (Eng. Abstr.) (Fre)
[A successful procedure in mitral valve rupture accompanied by rupture of the papillary muscle and the chordae tendinae following multiple injuries and blunt thoracic trauma] Sold M, et al. **Anaesthesist** 1989 May;38(5):262–5 (Eng. Abstr.) (Ger)
[Therapy and prognosis in 102 liver injuries] Eisner L, et al. **Helv Chir Acta** 1989 Jan;55(5):593–6 (Eng. Abstr.) (Ger)
[Diagnosis and therapy of liver injuries in the polytraumatized patient] Schweizer W, et al. **Helv Chir Acta** 1989 Jan;55(5):597–612 (Eng. Abstr.) (Ger)
[Surgery of traumatic aortic rupture] von Segesser L, et al. **Helv Chir Acta** 1989 Jun;56(1–2):53–8 (Eng. Abstr.) (Ger)
[Lung injuries] Pichlmaier H, et al. **Langenbecks Arch Chir** 1989;374(3):131–7 (12 ref.) (Eng. Abstr.) (Ger)
[A case of pulmonary rupture successfully treated by operation] Hayakawa K, et al. **Kyobu Geka** 1988 Oct; 41(11):909–11 (Eng. Abstr.) (Jpn)
[Successful repair of right atrial rupture due to nonpenetrating trauma of the chest] Kato S, et al. **Kyobu Geka** 1988 Oct;41(11):913–5 (Eng. Abstr.) (Jpn)
[Surgical treatment of pancreatic injuries] Naess F, et al. **Tidsskr Nor Laegeforen** 1989 Jan 10;109(1):56–8 (Eng. Abstr.) (Nor)
[The therapeutic procedure in scleral wounds] Popescu MP, et al. **Rev Chir Oftalmol** 1988 Jul–Sep;32(3):199–202 (Eng. Abstr.) (Rum)
[Rendering aid to the victims of abdominal trauma at a district hospital] Guzeev AI, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):77–80 (Eng. Abstr.) (Rus)
[Surgical tactics in injuries of the liver] Il'iasov ShSh, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):119–21 (Eng. Abstr.) (Rus)
[Traumatic rupture of an artificial esophagus] Kameristyi GA. **Klin Khir** 1988;(10):66 (Rus)
[Diagnosis and surgical treatment of injuries of the liver] Krivitskii DI, et al. **Klin Khir** 1988;(9):56–7 (Rus)
[Successful surgical treatment of injury of the single dystopic kidney] Osipov IB, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb; (1):69 (Rus)
[Characteristics of the diagnosis and surgical treatment of injuries of the duodenum] Abakumov MM, et al. **Vestn Khir** 1989 Feb;142(2):116–20 (Eng. Abstr.) (Rus)
[Injuries of the duodenum] Sen'ko VP, et al. **Vestn Khir** 1989 Jan;142(1):62–3 (Rus)
[Injuries of the inferior vena cava—prerequisites of successful treatment] Bat'alik B, et al. **Rozhl Chir** 1989 Mar; 68(3):176–9 (Eng. Abstr.) (Slo)

THERAPY

Blunt scrotal trauma: emergency department evaluation and management. Munter DW, et al. **Am J Emerg Med** 1989 Mar;7(2):227–34 (55 ref.)
Epikeratophakia after ocular trauma. Avni I, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):268–72
Chest injuries. A review of 195 patients. Brotzu G, et al. **Ann Chir Gynaecol** 1988;77(4):155–9
Blunt traumatic dissection of the internal carotid artery treated by balloon occlusion. Nordestgaard AG, et al. **Ann Vasc Surg** 1987 Dec;1(5):610–5 (21 ref.)
Selective nonoperative management of blunt splenic trauma in adults. Elmore JR, et al. **Arch Surg** 1989 May; 124(5):581–5; discussion 586
Management of the traumatized liver: an appraisal of 63 cases. Watson DI, et al. **Aust N Z J Surg** 1989 Feb;59(2):137–42
Development and testing of a decision tree for blunt trauma. Shoemaker WC, et al. **Crit Care Med** 1988 Dec; 16(12):1199–208
Chest trauma. Carrero R, et al. **Emerg Med Clin North Am** 1989 May;7(2):389–418 (86 ref.)
Nonoperative management of blunt abdominal trauma in pediatrics. Schiffman MA. **Emerg Med Clin North Am** 1989 Aug;7(3):519–35 (75 ref.)
Blunt abdominal trauma. Smedira N, et al. **Emerg Med Clin North Am** 1989 Aug;7(3):631–45 (108 ref.)
Pediatric blunt renal trauma—surgical or conservative treatment? van Ahlen H, et al. **Eur Urol** 1988;14(5):407–11
Blunt injury of the neck of the pancreas: a report of nine patients. Keeling P, et al. **Injury** 1987 Mar;18(2):93–5
Outcome of closed injuries exceeding 20-unit blood transfusion need. Riska EB, et al. **Injury** 1988 Jul; 19(4):273–6
An approach to selective conservative management of liver injuries. Redmond HP, et al. **Ir Med J** 1988 Nov;81(1):14–6
Non-operative treatment of meniscal tears. Weiss CB, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):811–22
Gastrointestinal disruption: the hazard of nonoperative management in adults with blunt abdominal injury. Fischer RP, et al. **J Trauma** 1988 Oct;28(10):1445–9
The natural history of clinically occult arterial injuries: a prospective evaluation. Frykberg ER, et al. **J Trauma** 1989 May;29(5):577–83
Nonoperative management of blunt pediatric liver injury—late complications: case report. MacGillivray DC, et al. **J Trauma** 1989 Feb;29(2):251–4 (24 ref.)
A technique for immediate realignment and catheterization of the disrupted prostatomembranous urethra. Gelbard MK, et al. **J Urol** 1989 Jul;142(1):52–5
Nonpenetrating vascular injury to the subclavian artery. Posner MP, et al. **J Vasc Surg** 1988 Nov;8(5):611–7 (18 ref.)
Aggressive management of severe closed head trauma: time for reappraisal. Gibson RM, et al. **Lancet** 1989 Aug 12; 2(8659):369–71
Selective embolization in the treatment of severe blunt renal injury. De Bock L, et al. **Neth J Surg** 1989 Apr;41(2):31–4 (12 ref.)
Prevention of pneumothorax during mechanical ventilation using chest tubes in patients with blunt thoracic trauma. van Niekerk JL, et al. **Neth J Surg** 1988 Jun;40(4):114
Chest wall injuries. Pate JW. **Surg Clin North Am** 1989 Feb; 69(1):59–70 (12 ref.)
Advanced techniques in thoracic trauma. Van Way CW 3d. **Surg Clin North Am** 1989 Feb;69(1):143–55 (43 ref.)
Myocardial contusion in the stable patient: what level of care is appropriate? Dubrow TJ, et al. **Surgery** 1989 Aug; 106(2):267–73; discussion 273–4
Nonoperative management of blunt hepatic trauma in adults. Farnell MB, et al. **Surgery** 1988 Oct;104(4):748–56
Managing a 13-year-old boy with blunt abdominal trauma [letter] Martin LW. **Surgery** 1989 Mar;105(3):455–6
[Resuscitation in acute traumatic pancreatitis in childhood] Kostova S, et al. **Khirurgiia (Sofiia)** 1988;41(5):32–5 (Bul)
[Treatment of traumatic carotid dissection] Steiger HJ. **Neurochirurgia (Stuttg)** 1988 Jul;31(4):128–33 (Eng. Abstr.) (Ger)

VETERINARY

[A randomized field study of therapy of non-perforating injury of the udder] Kremer WD, et al. **Tijdschr Diergeneeskd** 1989 May 15;114(10):566–9 (Eng. Abstr.) (Dut)

WOUNDS, PENETRATING

Penetrating injuries to the orbit. Simonton JT, et al. **Adv Ophthalmic Plast Reconstr Surg** 1987;7:217–27
Penetrating orbital injuries. Spoor TC. **Adv Ophthalmic Plast Reconstr Surg** 1987;7:193–216
Wounds of the extremities in proximity to major arteries: value of angiography in the detection of arterial injury. Reid JD, et al. **AJR** 1988 Nov;151(5):1035–9
Impalement injuries. Bajaj HN, et al. **Arch Orthop Trauma Surg** 1989;108(1):58–9
Traumatic implantation of a toothbrush: an unusual hazard of oral hygiene. MacLeod SP. **ASDC J Dent Child** 1989 Jan–Feb;56(1):69–70
Diagnosis and treatment of patients with renal trauma. Leppäniemi AK, et al. **Br J Urol** 1989 Jul;64(1):13–7
An unusual high-pressure penetrating thoracic injury: a case report. Burnett R. **Injury** 1987 May;18(3):216–7
HIV-1 infection in patients with penetrating trauma in San Antonio, Tex [letter] Orr MD, et al. **JAMA** 1989 Sep 22–29; 262(12):1629
Injuries of the jejunum and ileum. A series of 188 patients. Wilkinson AE. **S Afr J Surg** 1989 Jun;27(2):66–7
Penetrating trauma to the buttock. Fallon WF Jr, et al. **South Med J** 1988 Oct;81(10):1236–8
Etiology, classification, and management of renal trauma. Guerriero WG. **Surg Clin North Am** 1988 Oct; 68(5):1071–84 (10 ref.)
Review of pancreatic trauma. Glancy KE. **West J Med** 1989 Jul;151(1):45–51 (71 ref.)
[A rare case of perforating injuries of both hips] Romanenkov AN, et al. **Ortop Travmatol Protez** 1989 Mar;(3):59 (Rus)

CLASSIFICATION

Open joint injuries. Classification and treatment. Collins DN, et al. **Clin Orthop** 1989 Jun;(243):48–56
Clinical prospective injury severity scoring: when is it accurate? Civil ID, et al. **J Trauma** 1989 May;29(5):613–4
[Classification of injuries to the abdomen and retroperitoneal space] Gorshkov SZ, et al. **Khirurgiia (Mosk)** 1988 Aug; (8):74–7 (Eng. Abstr.) (Rus)

COMPLICATIONS

Post-traumatic ophthalmitis due to Bacillus licheniformis. Thurn JR, et al. **Am J Med** 1988 Nov;85(5):708–10
Hypertonic saline-dextran solutions for the prehospital management of traumatic hypotension. Maningas PA, et al. **Am J Surg** 1989 May;157(5):528–33; discussion 533–4
Substantial increase in human immunodeficiency virus (HIV-1) infection in critically ill emergency patients: 1986 and 1987 compared. Kelen GD, et al. **Ann Emerg Med** 1989 Apr;18(4):378–82
Post-traumatic parotid fistulae and sialoceles. A prospective study of conservative management in 51 cases. Parekh D, et al. **Ann Surg** 1989 Jan;209(1):105–11
'Punch' actinomycosis causing osteomyelitis of the hand. Blinkhorn RJ Jr, et al. **Arch Intern Med** 1988 Dec; 148(12):2668–70 (14 ref.)
Vitreous wick syndrome. Neetens A, et al. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:41–5
Traumatic cataract management in penetrating ocular injury. Insler MS, et al. **CLAO J** 1989 Jan–Mar;15(1):78–81
Delayed reaction to "lead" pencil simulating melanoma. Taylor B, et al. **Cutis** 1988 Sep;42(3):199–201
Antibiotics for penetrating abdominal trauma: a prospective comparative trial of single agent cephalosporin therapy versus combination therapy. Bivins BA, et al. **Diagn Microbiol Infect Dis** 1989 Jan–Feb;12(1):113–8
Disembowelment—a retrospective study of patients suffering evisceration following penetrating abdominal injury. Riley P. **Injury** 1987 Jul;18(4):286–90
Reflex sympathetic dystrophy syndrome following minor trauma. Gold B, et al. **Isr J Med Sci** 1989 Feb;25(2):107–9
A complicated nail puncture wound. Chesebro MJ. **J Fam Pract** 1988 Dec;27(6):640–1
Pseudomonas osteomyelitis secondary to puncture wound of the foot. Gallo JJ. **J Fam Pract** 1988 Nov;27(5):529–32 (35 ref.)
Stingray spine foreign body in the foot. Moyles BG, et al. **J Foot Surg** 1989 Jan–Feb;28(1):30–2
Hypertension following renal trauma. Watts RA, et al. **J Hum Hypertens** 1987 Sep;1(2):65–71 (74 ref.)
Role of histamine in traumatic brain edema. An experimental study in the rat. Mohanty S, et al. **J Neurol Sci** 1989 Mar; 90(1):87–97
Pneumomediastinum and cervical emphysema subsequent to mandibular injury associated with a flare pistol shot. Shuker S, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):741–4
Traumatic false aneurysm of the radial artery. Kerr CD, et al. **J Trauma** 1988 Nov;28(11):1603–4
Safety and efficacy of mezlocillin: a single-drug therapy for penetrating abdominal trauma. Lou MA, et al. **J Trauma** 1988 Nov;28(11):1541–7
Percutaneous drainage of intra-abdominal abscesses following abdominal trauma. Stylianos S, et al. **J Trauma** 1989 May;29(5):584–8
Traumatic fistula between the aorta and the left renal vein: case report and review of the literature. Batt M, et al. **J Vasc Surg** 1989 Jun;9(6):812–6 (19 ref.)
High altitude penetrating chest trauma: a case report. Baird RE, et al. **Milit Med** 1989 Jul;154(7):337–40
Klebsiella pneumoniae infection complicating a puncture wound of the foot: a case report. del Rosario NC, et al. **Milit Med** 1989 Jan;154(1):38–9
Traumatic heart block. Copperman Y, et al. **PACE** 1989 Jan; 12(1 Pt 1):25–8
Mixed flora brain abscess with Pseudomonas paucimobilis after a penetrating lawn dart injury. Tiffany KK, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):667–9 (18 ref.)
Pseudomonas osteomyelitis can occur in the foot after puncture wounds. Riley D. **Practitioner** 1988 Mar 22; 232(1445):296, 298
Silicone oil implantation in penetrating injuries complicated by PVR. Results from 1982 to 1986. Skorpik C, et al. **Retina** 1989;9(1):8–14
Penetrating injuries to the colon: analysis by anatomic region of injury. Frame SB, et al. **South Med J** 1989 Sep; 82(9):1099–102 (20 ref.)
Traumatic perforation of the diaphragm. Pipkin NL, et al. **South Med J** 1988 Nov;81(11):1347–50
Delayed sequelae of thoracic trauma. Symbas PN, et al. **Surg Clin North Am** 1989 Feb;69(1):135–42 (25 ref.)
Wound site as a predictor of complications following deep nail punctures to the foot. Patzakis MJ, et al. **West J Med** 1989 May;150(5):545–7
[Operative treatment of traumatic arteriovenous fistula] Shi D. **Chung Hua Wai Ko Tsa Chih** 1988 May;26(5):294–6, 319 (Eng. Abstr.) (Chi)
[Soft-tissue cervicofacial emphysema and pneumomediastinum caused by self injury] Yattara-Baratti CL, et al. **Schweiz Med Wochenschr** 1988 Aug 9; 118(31–32):1135–7 (Eng. Abstr.) (Ger)
[The role of outpatient care in preventing complications in persons operated on for eye wounds] Machekhin VA, et al. **Oftalmol Zh** 1988;(6):325–7 (Eng. Abstr.) (Rus)
[Prevention and treatment of suppurative complications in open lesions using the preparation Tsimezol'] Pashchuk AIu, et al. **Ortop Travmatol Protez** 1988 Jul;(7):35–8 (Eng. Abstr.) (Rus)
[Choice of the anesthetic method in suppurative-inflammatory processes of the hand] Skorogliadov AV, et al. **Sov Med** 1988;(12):87–90 (Rus)
[Injuries of the venae cavae] Grinev MV, et al. **Vestn Khir** 1988 Sep;141(9):72–7 (Eng. Abstr.) (Rus)
[Wounds and intraoperative injuries of the inferior vena cava] Vasiutkov VIa, et al. **Vestn Khir** 1988 Aug;141(8):136–9

(Eng. Abstr.) (Rus)
[The importance of vitrectomy in treating traumatic retinal detachment] Gundorova RA, et al. **Vestn Oftalmol** 1988 Nov-Dec;104(6):21-4 (Eng. Abstr.) (Rus)
[Intestinal decompression and transintestinal infusions in the combined treatment of peritonitis in penetrating abdominal wounds] Pashkevich VI, et al. **Voen Med Zh** 1989 Jan; (1):33-6 (Rus)
[Risk of contagion with respect to human immunodeficiency virus (HIV) and hepatitis B (HB) due to accidents on the beaches in the city of Barcelona and occupational accidents in non-health personnel (letter)] Garcés JM, et al. **Rev Clin Esp** 1989 Apr;184(7):394 (Spa)

DIAGNOSIS

The use of an emergency department observation unit in the management of abdominal trauma. Henneman PL, et al. **Ann Emerg Med** 1989 Jun;18(6):647-50
Management of acute spinal cord injury. Torres H, et al. **Chic Med Sch Q** 1970;30(1):12-22 (0 ref.)
Perforation by central venous catheters: a new testament to an old test. Malenka DJ, et al. **JPEN J Parenter Enteral Nutr** 1989 May-Jun;13(3):309-11
[Diagnosis and treatment of penetrating wounds of the chest cavity in childhood] Mikhallova V. **Khirurgiia (Sofiia)** 1988; 41(4):61-4 (Eng. Abstr.) (Bul)
[Pancreatic injuries] Ionescu A, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul-Sep;92(3):523-5 (Eng. Abstr.) (Rum)
[Diagnosis and treatment of peacetime chest trauma] Nedvetskaia LM, et al. **Grudn Khir** 1988 May-Jun;(3):63-7 (Eng. Abstr.) (Rus)
[Diagnosis and surgical procedure in penetrating wounds of the abdominal cavity (a review of the literature)] Perminova GI, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):136-9 (75 ref.) (Rus)
[A method of diagnosis of injuries of the ulnar nerve] Andruson MV, et al. **Ortop Travmatol Protez** 1988 Dec; (12):38-40 (Rus)

DRUG THERAPY

Laparoscopically applied fibrin glue in experimental liver trauma. Ishitani MB, et al. **J Pediatr Surg** 1989 Sep; 24(9):867-71
Presumptive antibiotics for penetrating abdominal wounds. Moore FA, et al. **Surg Gynecol Obstet** 1989 Aug; 169(2):99-103
[Traumatic perforations of the tympanic membrane—its therapeutic resolution] Andrei V, et al. **Rev Chir [Otorinolaringol]** 1988 Apr-Jun;33(2):115-7 (Eng. Abstr.) (Rum)
[Experimental study of the efficacy of plant preparation-based ophthalmic ointments in penetrating corneal injuries] Nedel'ka AF, et al. **Oftalmol Zh** 1988; (7):429-31 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Needlestick injuries and needle disposal in Minnesota physicians' offices. Thurn J, et al. **Am J Med** 1989 May; 86(5):575-9
Five thousand seven hundred sixty cardiovascular injuries in 4459 patients. Epidemiologic evolution 1958 to 1987. Mattox KL, et al. **Ann Surg** 1989 Jun;209(6):698-705; discussion 706-7
Pattern of peripheral traumatic neuropathy of the upper limb in Lagos. Adeyemi-Doro HO. **Injury** 1988 Sep; 19(5):329-32
Incidence of penetrating chest and/or abdomen injury. Simons-Morton DG, et al. **Md Med J** 1988 Sep;37(9):725-8
Needle injuries among pediatric housestaff physicians in New York City. Melzer SM, et al. **Pediatrics** 1989 Aug; 84(2):211-4

ETIOLOGY

Fatal motorcyclist injury from a hinged and rounded rearview mirror. Fife D. **Am J Emerg Med** 1989 May; 7(3):300-1
Soda pop top ophthalmopathy. Duerksen KM, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):761-2
Unintentional dural puncture and prophylactic epidural blood patch in obstetrics. Colonna-Romano P, et al. **Anesth Analg** 1989 Oct;69(4):522-3
Penetrating eye injuries. Patel BC. **Arch Dis Child** 1989 Mar; 64(3):317-20
Penetrating knee injuries: the nail gun. Barber FA. **Arthroscopy** 1989;5(3):172-5
Ocular injuries in union territory of Pondicherry—clinical presentation. Krishnan M, et al. **Indian J Ophthalmol** 1988 Apr-Jun;36(2):82-5
Penetrating injury on an artificial ski slope. Higgins JR, et al. **Injury** 1987 Sep;18(5):342-3
Penetrating abdominal trauma following an accident on an artificial ski slope [letter] Moran CG, et al. **Injury** 1988 Jan;19(1):48
An attempt at self-decapitation: case report. Rosenfeld JV, et al. **Injury** 1988 Mar;19(2):115-6
Vascular injuries caused by anti-personnel mines. Fasoi R, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun; 30(3):467-72
Intraocular lens material evaluation by iris abrasion in vitro: a scanning electron microscope study. Burstein NL, et al. **J Cataract Refract Surg** 1988 Sep;14(5):520-5
Delayed recognition of vascular complications caused by central venous catheters. Kapadia CB, et al. **J Clin Monit** 1988 Oct;4(4):267-71
Perforation of the augmented bladder in patients undergoing clean intermittent catheterization. Elder JS, et al. **J Urol** 1988 Nov;140(5 Pt 2):1159-62
Ocular dangers in the garden. A new menace—nylon line lawn trimmers. Lubniewski A, et al. **Ophthalmology** 1988 Jul;95(7):906-10
[Complications and practical problems in the measurements with the use of Swan-Ganz catheter] Nishikawa T, et al. **Kokyu To Junkan** 1989 Jun;37(6):603-15 (100 ref.) (Jpn)
[Foreign body penetrating to the larynx] Szymczyk K, et al. **Otolaryngol Pol** 1988;42(5):372-4 (Eng. Abstr.) (Pol)
[Foreign body penetrating to the ethmoid sinus] Maj J. **Wiad Lek** 1988 May 15;41(10):678-80 (Eng. Abstr.) (Pol)
[Finger injuries caused by the ring] Korshunov VF, et al. **Ortop Travmatol Protez** 1989 Jan;(1):10-3 (Rus)
[Injuries of an infant's corpse caused by birds' beaks] Mamatkulov UM. **Sud Med Ekspert** 1989 Jan-Mar; 32(1):50-1 (Rus)
[Metallic foreign body in the external acoustic meatus] Skrisbin VA. **Vestn Otorinolaringol** 1988 Sep-Oct;(5):75-6 (Rus)
[2 cases of an unusual mechanism of skull injury] Oganesian SS, et al. **Zh Vopr Neirokhir** 1988 Nov-Dec;(6):54-5 (Rus)

HISTORY

Vascular problems at the Battle of Waterloo. Crumplin MK. **Eur J Vasc Surg** 1987 Apr;1(2):137-42

METABOLISM

Postmortem stability of some markers of intra-vital wounds. Girela E, et al. **Forensic Sci Int** 1989 Feb;40(2):123-30

MICROBIOLOGY

Inoculation: a likely route of leprosy transmission [letter] Srivastava G. **Int J Dermatol** 1989 Apr;28(3):206-7
A partial-thickness epithelial defect increases the adherence of Pseudomonas aeruginosa to the cornea. Klotz SA, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1069-74
Kluyvera species soft tissue infection: case report and review. Luttrell RE, et al. **J Clin Microbiol** 1988 Dec;26(12):2650-1 (8 ref.)

MORTALITY

Demography of penetrating cardiac trauma. Naughton MJ, et al. **Ann Surg** 1989 Jun;209(6):676-81; discussion 682-3

PATHOLOGY

Fatal arrow wounds. Hain JR. **J Forensic Sci** 1989 May; 34(3):691-3
Death caused by a constricting snake—an infant death. McCarty VO, et al. **J Forensic Sci** 1989 Jan;34(1):239-43
Discussion of "Identification of Wooden Instrument by Scanning Electron Microscopy from Splinters Left in Victim" [letter] Mason JJ. **J Forensic Sci** 1989 Mar; 34(2):289-91
Comparison of gunshot wounds and field-tipped arrow wounds using morphological criteria and chemical spot tests. Randall B, et al. **J Forensic Sci** 1989 May;34(3):579-86
Segmental necrosis and its demarcation in experimental micropuncture injury of skeletal muscle fibers. Carpenter S, et al. **J Neuropathol Exp Neurol** 1989 Mar;48(2):154-70
[Fatal penetrating injuries caused by incorrect use of angular abrasive wheels] Lemke R. **Aktuel Traumatol** 1989 Jun; 19(3):110-2 (Eng. Abstr.) (Ger)
[The informative aspects of the wound surface for determining vitality and wound age in skin cuts] Lasarov I. **Z Rechtsmed** 1989;102(2-3):149-59 (Eng. Abstr.) (Ger)
[Release of proteinase inhibitors as a vital reaction in the early post-traumatic interval] Oehmichen M, et al. **Z Rechtsmed** 1989;102(7):461-72 (Eng. Abstr.) (Ger)
[Fatal head and chest wounds from splinters of a board] Vorob'ev IuV. **Sud Med Ekspert** 1988 Jul-Sep;31(3):55-6 (Rus)
[Morphologic changes due to injection trauma] Tkachenko EG, et al. **Vrach Delo** 1988 Dec;(12):79-81 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Mechanisms of surface soft tissue trauma. Trott A. **Ann Emerg Med** 1988 Dec;17(12):1279-83 (44 ref.)
An in vitro model of wound healing in the CNS: analysis of cell reaction and interaction at different ages. Rudge JS, et al. **Exp Neurol** 1989 Jan;103(1):1-16
33-day laceration stay. Schafer S, et al. **Geriatr Nurs (New York)** 1989 May-Jun;10(3):124-5
Role of fibronectin and fibrinogen in healing of corneal epithelial scrape wounds. Phan TM, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):377-85
Response of intraventricular macrophages after a penetrant cerebral lesion. Maxwell WL, et al. **J Anat** 1988 Oct; 160:145-55
Relationship between mechanical properties and collagen structure of closed and open wounds. Doillon CJ, et al. **J Biomech Eng** 1988 Nov;110(4):352-6
Neurologic function seven years after crowbar impalement of the brain. Ordia JI. **Surg Neurol** 1989 Aug;32(2):152-5
[The possible effect of the mechanical factor on the completeness of the regeneration of the spinal skin in mice] Efimov EA, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):624-6 (Eng. Abstr.) (Rus)
[Evaluation of the healing of skin wounds inflicted by steel scalpels with various degrees of sharpness] Izmailov GA, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):75-8 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Impact of a recapping device on venepuncture-related needlestick injury. Goldwater PN, et al. **Infect Control Hosp Epidemiol** 1989 Jan;10(1):21-5
In vitro evaluation of iris chafe protection afforded by hydrophilic surface modification of polymethylmethacrylate intraocular lenses. Hofmeister FM, et al. **J Cataract Refract Surg** 1988 Sep;14(5):514-9
Needle-stick injury [letter] Mezitis NH. **N Engl J Med** 1989 Feb 2;320(5):316

PSYCHOLOGY

Ginkgo biloba extract facilitates recovery from penetrating brain injury in adult male rats. Attella MJ, et al. **Exp Neurol** 1989 Jul;105(1):62-71

RADIOGRAPHY

Stab wounds of the renal artery branches: angiographic diagnosis and treatment by embolization. Fisher RG, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1231-5
Clinical indications for arteriography of penetrating wounds of the extremities [letter] Pochaczevsky R. **AJR Am J Roentgenol** 1989 May;152(5):1130-1
Near-miss of the optic nerve from a deep penetrating orbital injury with a kitchen knife. Volpicelli M, et al. **J Clin Neuro Ophthalmol** 1989 Mar;9(1):61-2
A reassessment of the role of arteriography in penetrating proximity extremity trauma: a prospective study. Frykberg ER, et al. **J Trauma** 1989 Aug;29(8):1041-50; discussion 1050-2
Radiographic assessment of renal trauma: a 10-year prospective study of patient selection. Mee SL, et al. **J Urol** 1989 May;141(5):1095-8
Pen injury: a rare complication. Loes DJ, et al. **Pediatr Neurol** 1987 Jan-Feb;3(1):44-7

REHABILITATION

Effects of unilateral brain damage on contralateral and ipsilateral upper extremity function in hemiplegia. Smutok MA, et al. **Phys Ther** 1989 Mar;69(3):195-203
[Restoration of the function of the hand after combined injuries of the flexor tendons, nerves and arteries of the distal part of the forearm in children] Blandinskiĭ VF, et al. **Ortop Travmatol Protez** 1989 Jan;(1):7-9 (Eng. Abstr.) (Rus)

SURGERY

Hepatic trauma. Sheldon GF, et al. **Adv Surg** 1989;22:179-93 (37 ref.)
Traumatic Haemophilus influenzae endophthalmitis. Pach JM. **Am J Ophthalmol** 1988 Oct 15;106(4):497-8
A twelve-year survey of cervicothoracic vascular injuries. Bladergroen M, et al. **Am J Surg** 1989 May;157(5):483-6
Penetrating injury to the carotid artery. A reappraisal of management. Timberlake GA, et al. **Am Surg** 1989 Mar; 55(3):154-7
Delayed wound closure: indications and techniques. Dimick AR. **Ann Emerg Med** 1988 Dec;17(12):1303-4
Basal joint reconstruction in a punch injury of the hand. Chen S, et al. **Ann Plast Surg** 1988 Nov;21(5):458-64
Primary repair of colon wounds. A prospective trial in nonselected patients. George SM Jr, et al. **Ann Surg** 1989 Jun;209(6):728-33; 733-4
The management of penetrating injuries of the back [letter] Gertsch P. **Ann Surg** 1988 Nov;208(5):669-70
The influence of injury severity on complication rates after primary closure or colostomy for penetrating colon trauma. Nelken N, et al. **Ann Surg** 1989 Apr;209(4):439-47
Traumatic tears of the thoracic aorta: improved results using the Bio-Medicus pump. Hess PJ, et al. **Ann Thorac Surg** 1989 Jul;48(1):6-9
Penetrating wounds to the heart: a wartime experience. Jebara VA, et al. **Ann Thorac Surg** 1989 Feb;47(2):250-3
Arterial trauma in children: diagnosis and management. Evans WE, et al. **Ann Vasc Surg** 1988 Jul;2(3):268-70
Popliteal artery trauma: update and recent advances in management. Gnanadev DA, et al. **Ann Vasc Surg** 1988 Oct;2(4):332-5
Hemostasis of solid viscus trauma by intraparenchymal injection of fibrin glue. Hauser CJ. **Arch Surg** 1989 Mar; 124(3):291-3
Surgical options in traumatic injury to the extrahepatic biliary tract. Bade PG, et al. **Br J Surg** 1989 Mar;76(3):256-8
Penetrating injuries of the diaphragm. Demetriades D, et al. **Br J Surg** 1988 Aug;75(8):824-6
Management of rectal impalement injuries. Iwatt AR. **Cent Afr J Med** 1988 Aug;34(8):190-5
Half-strength TAC topical anesthetic. For selected dermal

lacerations. Bonadio WA, et al. **Clin Pediatr (Phila)** 1988 Oct;27(10):495–8

Use of temporary keratoprosthesis in the management of severe ocular trauma with retinal detachment and proliferative vitreoretinopathy. Beekhuis WH, et al. **Dev Ophthalmol** 1989;18:86–9 (7 ref.)

Colorectal trauma. Orsay CP, et al. **Dis Colon Rectum** 1989 Mar;32(3):188–90

Appendicectomy following plate–glass injury. Dent CM, et al. **Injury** 1987 Nov;18(6):414

The post–pericardiotomy syndrome and penetrating injury of the chest. Loughlin V, et al. **Injury** 1987 Nov;18(6):412–4

Neurosurgical intervention in penetrating spinal trauma with associated visceral injury. Venger BH, et al. **J Neurosurg** 1989 Apr;70(4):514–8

Penetrating popliteal artery injuries in children. Holcomb GW 3d, et al. **J Pediatr Surg** 1988 Sep;23(9):859–61

Surgical management of severe liver trauma: a role for liver transplantation. Angstadt J, et al. **J Trauma** 1989 May; 29(5):606–8

Carotid artery injuries: experience with 124 cases. Demetriades D, et al. **J Trauma** 1989 Jan;29(1):91–4

Traumatic diaphragmatic rupture: not an uncommon entity—personal experience with collective review of the 1980's. Sharma OP. **J Trauma** 1989 May;29(5):678–82 (41 ref.)

Coverage of acute vascular injuries of the axilla and groin with transposition muscle flaps: case reports. Strinden WD, et al. **J Trauma** 1989 Apr;29(4):512–6

Central lung injuries: a need for early vascular control. Wiencek RG Jr, et al. **J Trauma** 1988 Oct;28(10):1418–24

Clinical evaluation of severe penetrating injury involving vitreous gel treated with pars plana vitrectomy. Chung YT. **Korean J Ophthalmol** 1987 Dec;1(2):128–34

Results and prognostic factors in penetrating ocular injuries with retained intraocular foreign bodies. Williams DF, et al. **Ophthalmology** 1988 Jul;95(7):911–6

Injuries of the duodenum. Wilkinson AE. **S Afr J Surg** 1989 Jun;27(2):64–5

Penetrating thoracic aortic injuries: rare but potentially salvageable sequelae of urban warfare. Timberlake GA, et al. **South Med J** 1989 Aug;82(8):970–2 (18 ref.)

Penetrating injuries to the abdomen. Demetriades D. **Surg Annu** 1989;21:201–13 (61 ref.)

Colorectal trauma. Falcone RE, et al. **Surg Clin North Am** 1988 Dec;68(6):1307–18 (91 ref.)

The injured heart. Ivatury RR, et al. **Surg Clin North Am** 1989 Feb;69(1):93–110 (88 ref.)

Indications for thoracotomy: deciding to operate. Mattox KL. **Surg Clin North Am** 1989 Feb;69(1):47–58 (52 ref.)

Tracheobronchial and esophageal injuries [published erratum appears in Surg Clin North Am 1989 Jun;69(3):following viii] Pate JW. **Surg Clin North Am** 1989 Feb;69(1):111–23 (32 ref.)

Management of carotid artery trauma. Richardson JD, et al. **Surgery** 1988 Oct;104(4):673–80

Repair of traumatic aortic transection: a management protocol and review of twenty–one patients. Guvendik L, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):198–201

Surgical management of ocular trauma: penetrating injuries. Coles WH. **Yen Ko Hsueh Pao** 1986 Jun;2(2):75–8 (32 ref.)

[Penetrating injuries of the upper urinary tract: experience of the Lebanon war] Chaiban R, et al. **Ann Chir** 1988; 42(7):456–62 (17 ref.) (Eng. Abstr.) (Fre)

[Hepatic injuries. Therapeutic approach. Analysis of 140 cases and review of the literature] Mentha G, et al. **Ann Chir** 1988;42(6):381–8 (42 ref.) (Eng. Abstr.) (Fre)

[Neglected perforating injury of the posterior segment with involvement of the vitreous body] Vérin P, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):249–51 (Fre)

[Therapy and prognosis in 102 liver injuries] Eisner L, et al. **Helv Chir Acta** 1989 Jan;55(5):593–6 (Eng. Abstr.) (Ger)

[Diagnosis and therapy of liver injuries in the polytraumatized patient] Schweizer W, et al. **Helv Chir Acta** 1989 Jan;55(5):597–612 (Eng. Abstr.) (Ger)

[Early vitrectomy with primary silicone oil injection in very severely injured eyes] Lemmen KD, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):594–601 (Eng. Abstr.) (Ger)

[Lung injuries] Pichlmaier H, et al. **Langenbecks Arch Chir** 1989;374(3):131–7 (12 ref.) (Eng. Abstr.) (Ger)

[Transorbital intracranial penetration by chopstick. Case report] Kadota K, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1128–32 (Eng. Abstr.) (Jpn)

[Surgical treatment of pancreatic injuries] Naess F, et al. **Tidsskr Nor Laegeforen** 1989 Jan 10;109(1):56–8 (Eng. Abstr.) (Nor)

[The role of lensectomy and vitrectomy in the treatment of severe penetrating eye injuries] Nawrocki J, et al. **Klin Oczna** 1988 Jun;90(6):222–4 (Eng. Abstr.) (Pol)

[The therapeutic procedure in scleral wounds] Popescu MP, et al. **Rev Chir [Oftalmol]** 1988 Jul–Sep;32(3):199–202 (Eng. Abstr.) (Rum)

[Rendering aid to the victims of abdominal trauma at a district hospital] Guzeev AI, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):77–80 (Eng. Abstr.) (Rus)

[Surgical tactics in injuries of the liver] Il'iasov ShSh, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):119–21 (Eng. Abstr.) (Rus)

[A successful treatment of a penetrating wound of the heart in a Central Regional Hospital] Kurbanov RM, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):136 (Rus)

[Thoraco–abdominal wound] Polianko NI, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):131–2 (Rus)

[Trauma of the iliac blood vessels] Vasiutkov VIa, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):57–61 (Eng. Abstr.) (Rus)

[Surgical procedures in penetrating wounds of the neck] Aliev SA. **Klin Khir** 1988;(10):38–40 (Eng. Abstr.) (Rus)

[Penetrating wounds of the abdominal cavity] Baramiia NN, et al. **Klin Khir** 1989;(4):39–41 (Eng. Abstr.) (Rus)

[Diagnosis and surgical treatment of injuries of the liver] Krivitskii DI, et al. **Klin Khir** 1988;(9):56–7 (Rus)

[Penetrating wound of the abdomen without damage to the internal organs] Shish AA, et al. **Klin Khir** 1988;(6):70–1 (Rus)

[Intraocular correction in penetrating eye wounds] Aleshaev MI. **Oftalmol Zh** 1988;(7):419–21 (Eng. Abstr.) (Rus)

[A good outcome in the surgical treatment of a complicated penetrating eye wound] Galdal VM, et al. **Oftalmol Zh** 1988;(5):317–8 (Rus)

[Characteristics of the diagnosis and surgical treatment of injuries of the duodenum] Abakumov MM, et al. **Vestn Khir** 1989 Feb;142(2):116–20 (Eng. Abstr.) (Rus)

[Use of a nasolabial flap for correcting defects of the hard palate] Ananian SG, et al. **Vestn Khir** 1989 Jan;142(1):91–2 (Eng. Abstr.) (Rus)

[Injuries to the sublingual nerve during surgical treatment of neck wounds] Bezrukov VM, et al. **Vestn Khir** 1989 Jan;142(1):124–5 (Rus)

[Surgical tactics in thoraco–abdominal injuries] Kutushev FKh, et al. **Vestn Khir** 1989 Jan;142(1):57–9 (Rus)

[Injuries of the duodenum] Sen'ko VP, et al. **Vestn Khir** 1989 Jan;142(1):62–3 (Rus)

[Penetrating wound of the heart in a child] Strelkov NS, et al. **Vestn Khir** 1989 Feb;142(2):75–6 (Rus)

[Development of astigmatism in primary surgical treatment of penetrating wounds of the cornea (preliminary report)] Bolko AV, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(1):28–30 (Eng. Abstr.) (Rus)

[Surgical tactics and results of the treatment of penetrating wounds of the eye with foreign bodies in the posterior segment] Kossovskii LV, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(1):30–3 (Eng. Abstr.) (Rus)

THERAPY

Epikeratophakia after ocular trauma. Avni I, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):268–72

Pitfalls in the management of penetrating chest trauma. Hirshberg A, et al. **Am J Surg** 1989 Apr;157(4):372–5; discussion 376

Chest injuries. A review of 195 patients. Brotzu G, et al. **Ann Chir Gynaecol** 1988;77(4):155–9

Principles of emergency wound management. Edlich RF, et al. **Ann Emerg Med** 1988 Dec;17(12):1284–302 (100 ref.)

Management of hemorrhage from severe scalp lacerations with Raney clips. Sykes LN Jr, et al. **Ann Emerg Med** 1989 Sep;18(9):995–6

Dog–bite lacerations: a controlled trial of primary wound closure. Maimaris C, et al. **Arch Emerg Med** 1988 Sep; 5(3):156–61

Management of the traumatized liver: an appraisal of 63 cases. Watson DI, et al. **Aust N Z J Surg** 1989 Feb;59(2):137–42

Design and prospective evaluation of an algorithm for penetrating truncal injuries. Liu M, et al. **Crit Care Med** 1988 Dec;16(12):1191–8

Chest trauma. Carrero R, et al. **Emerg Med Clin North Am** 1989 May;7(2):389–418 (86 ref.)

Penetrating abdominal trauma. Henneman PL. **Emerg Med Clin North Am** 1989 Aug;7(3):647–66 (65 ref.)

An approach to selective conservative management of liver injuries. Redmond HP, et al. **Ir Med J** 1988 Nov;81(1):14–6

Chronic high velocity projectile injury to the foot. Scartozzi G, et al. **J Am Podiatr Med Assoc** 1989 May;79(5):236–41

Puncture wounds to the foot. Verdile VP, et al. **J Emerg Med** 1989 Mar–Apr;7(2):193–9 (30 ref.)

Treatment of nail puncture wounds [letter] **J Fam Pract** 1989 Apr;28(4):388, 396

Management of sucking chest wounds [letter] Lawrence BA. **J R Army Med Corps** 1989 Jun;135(2):94

Cervical spine immobilization of penetrating neck wounds in a hostile environment. Arishita GI, et al. **J Trauma** 1989 Mar;29(3):332–7

Air embolism during pulsed saline irrigation of an open pelvic fracture: case report. Brunicardi FC, et al. **J Trauma** 1989 May;29(5):700–1

The natural history of clinically occult arterial injuries: a prospective evaluation. Frykberg ER, et al. **J Trauma** 1989 May;29(5):577–83

The selective management of penetrating wounds of the back. Whalen G, et al. **J Trauma** 1989 Apr;29(4):509–11

Penetrating neck injuries: recommendations for selective management. Wood J, et al. **J Trauma** 1989 May; 29(5):602–5

Chest wall injuries. Pate JW. **Surg Clin North Am** 1989 Feb; 69(1):59–70 (12 ref.)

Advanced techniques in thoracic trauma. Van Way CW 3d. **Surg Clin North Am** 1989 Feb;69(1):143–55 (43 ref.)

Which renal lacerations will heal satisfactorily with nonsurgical management? Cass AS, et al. **Urology** 1989 May;33(5):367–70

[Injuries of the oral mucous membrane] van der Wal KG, et al. **Ned Tijdschr Geneeskd** 1988 Sep 17;132(38):1740–3 (Dut)

[Balloon tamponade in transfixing wounds of the liver: immediate results] Branco PD, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jan–Feb;43(1):20–5 (Eng. Abstr.) (Por)

[An analysis of treatment results in perforating eye wounds not requiring primary surgical care] Beliainn AF, et al. **Oftalmol Zh** 1988;(7):421–3 (Eng. Abstr.) (Rus)

[Treatment of open infected injuries of the hand and forearm in a controlled germ–free environment] Saftiiarov MSh, et al. **Ortop Travmatol Protez** 1988 Aug;(8):59 (Rus)

[Treatment protocol for accidental puncture with syringe needles used by parenteral drug addicts] Elorza Arizmendi JF, et al. **An Esp Pediatr** 1989 Mar;30(3):201–5 (Spa)

VETERINARY

Iatrogenic puncture of enlarged seminal vesicles in aged C57BL/6 mice. Doerning BJ, et al. **Lab Anim Sci** 1989 Mar;39(2):161–2

Penetrating wounds, abscesses, gravel, and bruising of the equine foot. DeBowes RM, et al. **Vet Clin North Am Equine Pract** 1989 Apr;5(1):179–94 (9 ref.)

WOUNDS, STAB

Oral conception. Impregnation via the proximal gastrointestinal tract in a patient with an aplastic distal vagina. Case report. Verkuyl DA. **Br J Obstet Gynaecol** 1988 Sep;95(9):933–4

[A method of determining impact force and simulating injuries caused by stabbing–cutting objects] Gutsaev IuP. **Sud Med Ekspert** 1989 Apr–Jun;32(2):48–50 (Rus)

COMPLICATIONS

Distant injury pneumothorax. McNeil P, et al. **Am J Emerg Med** 1989 Jan;7(1):122–4

Treatment of traumatic vertebral arteriovenous fistula by balloon occlusion and compressive manoeuvres. Nelson M, et al. **Eur J Vasc Surg** 1988 Apr;2(2):133–9

Traumatic diaphragmatic hernia: an unusual presentation. Scott RF, et al. **Injury** 1988 Jul;19(4):292

Stab wounds of the trunk; a review of clinical experience [letter] Johnson N. **J R Coll Surg Edinb** 1989 Apr;34(2):111

Occult diaphragmatic injury from stab wounds to the lower chest and abdomen. Madden MR, et al. **J Trauma** 1989 Mar;29(3):292–8 (43 ref.)

Stab wounds to the temporal fossa. Haworth CS, et al. **Neurosurgery** 1988 Oct;23(4):431–5

Prospective trial of the six hour rule in stab wounds of the chest. Kerr TM, et al. **Surg Gynecol Obstet** 1989 Sep; 169(3):223–5

[Traumatic rupture of the right anterior sinus of Valsalva into the right ventricle combined with aortic regurgitation] el Haitem N, et al. **Arch Mal Coeur** 1988 Jun;81(6):793–6 (Eng. Abstr.) (Fre)

[Gangrene of the right colon due to hemorrhagic shock] Nesbakken A, et al. **Tidsskr Nor Laegeforen** 1988 Nov 20; 108(32):2974 (Eng. Abstr.) (Nor)

[Knife wound of the neck with injury of the carotid artery] Kabanchuk IN, et al. **Klin Khir** 1989;(4):70 (Rus)

[Combined injuries of the inferior vena cava, transverse colon and the gallbladder] Kudinskii IuG, et al. **Klin Khir** 1988; (9):62–3 (Rus)

DIAGNOSIS

Traumatic wound of the heart: value of intraoperative colour Doppler flow imaging. Richardson JE, et al. **Can J Cardiol** 1988 Oct;4(7):338–40

ENZYMOLOGY

Fast increase of proteinase inhibitors in necrotic collagenous tissue. Oehmichen M. **Exp Pathol** 1989;36(4):217–20

EPIDEMIOLOGY

Needlestick injuries: mechanisms and control. Kennedy DA. **J Hosp Infect** 1988 Nov;12(4):315–22

ETIOLOGY

Cardiac perforation by a guide wire during subclavian catheter insertion. Blake PG, et al. **Int J Artif Organs** 1989 Feb;12(2):111–3

A freak accidental injury to the spinal cord. Koh KB, et al. **Med J Malaysia** 1988 Sep;43(3):246–9

[Perforating eye injuries caused by darts] Thill–Schwaninger M, et al. **Klin Monatsbl Augenheilkd** 1988 Jun; 192(6):699–702 (Eng. Abstr.) (Ger)

[Mechanisms of injuries of cut and stab wounds of the neck] Bernemann D, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug;67(8):382–4 (Eng. Abstr.) (Ger)

MORTALITY

Survival time in gunshot and stab wound victims. Levy V, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):215–7

PATHOLOGY

The injury potential and lethality of stab wounds: a Folsom

Prison Study. Walton CB, et al. **J Trauma** 1989 Jan; 29(1):99–101

[Unusual suicide caused by a stab wound in the neck] Klose W, et al. **Arch Kriminol** 1989 May–Jun;183(5–6):157–62 (Eng. Abstr.) (Ger)

[Pattern of findings in injuries caused by "survival knives"] Pollak S. **Arch Kriminol** 1989 Jan–Feb;183(1–2):11–20 (Eng. Abstr.) (Ger)

[Toxic reaction following perforating eye injury] Mićović V, et al. **Fortschr Ophthalmol** 1988;85(6):772–3 (Eng. Abstr.) (Ger)

[Self–defense injuries in homicides caused by penetrating forces] Metter D, et al. **Z Rechtsmed** 1989;102(5):277–91 (Eng. Abstr.) (Ger)

[Release of proteinase inhibitors as a vital reaction in the early post–traumatic interval] Oehmichen M, et al. **Z Rechtsmed** 1989;102(7):461–72 (Eng. Abstr.) (Ger)

[Two autopsy cases with a kitchen knife protruding from the victim's body] Kita T, et al. **Igaku Kenkyu** 1988 Dec; 58(6):439–41 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Healing potential of the anulus fibrosus. Hampton D, et al. **Spine** 1989 Apr;14(4):398–401

Hemodynamic consequences of Foley catheter control in experiment penetrating cardiac wounds. Pham SM, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):247–50

[The dynamics of injuries caused by thrown, razor–sharp shurikens] Weber W. **Z Rechtsmed** 1989;102(2–3):143–8 (Eng. Abstr.) (Ger)

[Ability for active actions in the case of multiple cuts and stab wounds to the body] Petrov GP. **Sud Med Ekspert** 1989 Apr–Jun;32(2):51 (Rus)

PREVENTION & CONTROL

Needlestick injuries: how can we teach people better about risk assessment? Morgan DR. **J Hosp Infect** 1988 Nov; 12(4):301–9

The role of communication in the alteration of patient–care practices in hospital—a prospective study. Seto WH, et al. **J Hosp Infect** 1989 Jul;14(1):29–37

RADIOGRAPHY

The role of abdominal CT in the evaluation of stab wounds to the back. Meyer DM, et al. **J Trauma** 1989 Sep; 29(9):1226–8; discussion 1228–30

The role of CT scan in evaluation for laparotomy in patients with stab wounds of the abdomen. Rehm CG, et al. **J Trauma** 1989 Apr;29(4):446–50

Stab wounds to the neck: role of angiography. Hartling RP, et al. **Radiology** 1989 Jul;172(1):79–82

SURGERY

Stab wounds of the neck—observations on management. Shotton JC. **Clin Otolaryngol** 1988 Oct;13(5):335–9

Conservative treatment of abdominal stab wounds with omental protrusion. Duus BR, et al. **Injury** 1987 Mar; 18(2):87–8

Abdominal stab wounds [editorial] London PS. **Injury** 1987 Mar;18(2):77

Stab wound of the gravid uterus: a case report and literature update. Degefu S, et al. **J La State Med Soc** 1988 Oct; 140(10):39–41 (7 ref.)

"Pumpkin carvers" tendon injuries: repair of children's flexor tendon lacerations caused by a sharp knife. Winternitz WW Jr, et al. **Minn Med** 1988 Oct;71(10):622–4

Transtruncal impalement. The surgical strategy. Keltner RM Jr. **Mo Med** 1988 Sep;85(9):596–8

Transcranial stab wounds: a report of three cases and suggestions for management. Herring CJ, et al. **Neurosurgery** 1988 Nov;23(5):658–62

Single–vessel forearm arterial repairs. Patency rates using nuclear angiography. Stricker SJ, et al. **Orthopedics** 1989 Jul;12(7):963–5

A surgical approach to the motor branch of the ulnar nerve. Ollstein RN, et al. **Plast Reconstr Surg** 1989 Sep;84(3):526–8

Penetrating injury of the vertebral artery: a unique management approach. Hetz SP, et al. **South Med J** 1989 Aug;82(8):1037–40 (22 ref.)

Spontaneous closure of a traumatic interventricular septal defect following a penetrating chest injury. Bryan AJ, et al. **Thorac Cardiovasc Surg** 1988 Jun;36(3):172–3

Traumatic internal mammary arteriovenous fistula. A case report and review of the literature. al–Qudah AH. **Thorac Cardiovasc Surg** 1988 Jun;36(3):164–6 (20 ref.)

[Diagnosis and treatment of trauma of the heart and major vessels] Yu BQ. **Chung Hua I Hsueh Tsa Chih** 1989 Jan; 69(1):12–4, 2 (Eng. Abstr.) (Chi)

[Diagnosis and treatment of heart wounds] Feng SX. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):412–3, 445–6 (Eng. Abstr.) (Chi)

[Stab wounds of the heart] Borowski Z, et al. **Wiad Lek** 1988 Mar 1;41(5):310–2 (Eng. Abstr.) (Pol)

[Heart injuries] Miklasz M, et al. **Wiad Lek** 1988 Oct 1; 41(19):1310–4 (Eng. Abstr.) (Pol)

[Wounds of the portal vein due to silent weapons] Micu N, et al. **Rev Chir [Chir]** 1988 May–Jun;37(3):209–12 (Eng. Abstr.) (Rum)

[Treatment of heart injuries at the Central District Hospital] Kostin AE. **Khirurgiia (Mosk)** 1989 Jun;(6):132–3 (Rus)

[Diagnosis and treatment of thoraco–abdominal wounds] Demchenko PS, et al. **Klin Khir** 1988;(10):40–1 (Eng. Abstr.) (Rus)

[Intrauterine penetrating knife wound of the chest] Shapkin VV, et al. **Klin Khir** 1988;(6):74 (Rus)

[Isolated wound of the pericardium treated conservatively] Boufalik RI, et al. **Vestn Khir** 1989 Feb;142(2):66–8 (Rus)

[A knife wound of the duodenum] Eloev VA, et al. **Vestn Khir** 1988 Sep;141(9):83–4 (Rus)

[Depressed and exposed fractures of the skull. Bone reconstruction in the acute stage] Mock AR, et al. **Rev Med Panama** 1988 May;13(2):85–8 (Eng. Abstr.) (Spa)

THERAPY

Early management of abdominal trauma: the role of diagnostic peritoneal lavage. Danne PD, et al. **Aust N Z J Surg** 1988 Nov;58(11):879–87

The management of abdominal stab injury. Stebbings WS. **Br J Hosp Med** 1989 Aug;42(2):155–7 (27 ref.)

Stab wounds of the trunk: a review of clinical experience. McCombe AW. **J R Coll Surg Edinb** 1988 Oct;33(5):261–2

Treatment of acute penetrating injuries of the spine: a retrospective analysis. Simpson RK Jr, et al. **J Trauma** 1989 Jan;29(1):42–6

Selective conservatism in abdominal stab wounds: the efficacy of serial physical examination. Zubowski R, et al. **J Trauma** 1988 Dec;28(12):1665–8

A triage system for stab wounds to the chest. Wormald PJ, et al. **S Afr Med J** 1989 Sep 2;76(5):211–2 (5 ref.)

[Management of traumatic injuries of the colon] Wong JC, et al. **Rev Med Panama** 1989 Jan;14(1):26–32 (Eng. Abstr.) (Spa)

WRESTLING see under SPORTS

WRIST

Results of our operations for carpal ganglion. Gurin J, et al. **Acta Chir Hung** 1988;29(3):299–304

Extensor digitorum brevis manus. An unusual cause of exercise–induced wrist pain. Kuschner SH, et al. **Am J Sports Med** 1989 May–Jun;17(3):440–1

Relationship between local temperature and heat transfer through the hand and wrist. Sienkiewicz ZJ, et al. **Bioelectromagnetics** 1989;10(1):77–84

Carpal tunnel syndrome (CTS) and exposure to vibration, repetitive wrist movements, and heavy manual work: a case–referent study. Wieslander G, et al. **Br J Ind Med** 1989 Jan;46(1):43–7

Late flexor pollicis longus tendon rupture due to retained glass fragments. Jablon M, et al. **J Hand Surg [Am]** 1988 Sep;13(5):713–6

Ganglion cysts and carpal tunnel syndrome. Kerrigan JJ, et al. **J Hand Surg [Am]** 1988 Sep;13(5):763–5

A surface ultrastructure study of ganglia and digital mucous cysts. Loder RT, et al. **J Hand Surg [Am]** 1988 Sep; 13(5):758–62

Diagnosis of ganglion in Guyon's canal by magnetic resonance imaging. Subin GD, et al. **J Hand Surg [Am]** 1989 Jul;14(4):640–3

Palmar wrist pain caused by ulnar nerve entrapment in the flexor carpi ulnaris tendon. Zook EG, et al. **J Hand Surg [Am]** 1988 Sep;13(5):732–5

Synovial hand infection from Mycobacterium terrae. Deenstra W. **J Hand Surg [Br]** 1988 Aug;13(3):335–6

The influence of wrist position on the minimum force required for active movement of the interphalangeal joints. Savage R. **J Hand Surg [Br]** 1988 Aug;13(3):262–8

Tenosynovitis [letter] Watson NA. **J R Soc Med** 1988 Dec; 81(12):742

Acute calcific tendinitis of the hand and wrist: a report of 12 cases and a review of the literature. Moyer RA, et al. **J Rheumatol** 1989 Feb;16(2):198–202 (19 ref.)

Peripheral nerve entrapment at the wrist in pyrophosphate arthropathy. Pattrick MG, et al. **J Rheumatol** 1988 Aug; 15(8):1254–7

AAEE case report #15: ulnar neuropathy at or distal to the wrist. Olney RK, et al. **Muscle Nerve** 1988 Aug; 11(8):828–32

Fluctuations in motor unit recruitment threshold during slow isometric contractions of wrist extensor muscles in man. Romaiguère P, et al. **Neurosci Lett** 1989 Aug 14;103(1):50–5

Magnetic resonance imaging of para–articular and ectopic ganglia. Feldman F, et al. **Skeletal Radiol** 1989;18(5):353–8

Silicone synovitis: clinical, radiologic, and histologic features. Shergy WJ, et al. **South Med J** 1989 Sep;82(9):1156–8

[Studies on patients with "wrist cutting syndrome"—an application of imagination theory to the three factors of the motivations of 23 wrist cutters] Kashiwada T. **Seishin Shinkeigaku Zasshi** 1988;90(6):469–96 (Eng. Abstr.) (Jpn)

ABNORMALITIES

Anomalous muscles of the first dorsal compartment of the wrist. Patel MR, et al. **J Hand Surg [Am]** 1988 Nov; 13(6):829–31

ANATOMY & HISTOLOGY

Anatomic relations between the median nerve and flexor tendons in the carpal tunnel: MR evaluation in normal volunteers. Zeiss J, et al. **AJR Am J Roentgenol** 1989 Sep; 153(3):533–6

Frame size estimation: a comparative analysis of methods based on height, wrist circumference, and elbow breadth. Novascone MA, et al. **J Am Diet Assoc** 1989 Jul;89(7):964–6

Magnetic resonance imaging using a ribbonator: hand and wrist. Marshall EA, et al. **Magn Reson Med** 1989 Mar; 9(3):369–78

Magnetic resonance imaging of the wrist: normal cross sectional imaging and selected abnormal cases. Binkovitz LA, et al. **Radiographics** 1988 Nov;8(6):1171–202

Advanced imaging of the wrist. Quinn SF, et al. **Radiographics** 1989 Mar;9(2):229–46

BLOOD SUPPLY

Post–operative Doppler evaluation of 48 arterial reconstructions at the wrist. Bellan N, et al. **Ann Chir Main** 1989;8(1):22–9 (Eng, Fre)

Median artery thrombosis as a cause of carpal tunnel syndrome [letter] de Graad M, et al. **S Afr Med J** 1989 Jul 15;76(2):78–9

[Postpuncture pseudoaneurysm of the radial artery (letter)] Fraile JR, et al. **Rev Esp Anestesiol Reanim** 1989 Mar–Apr; 36(2):126–7 (Spa)

INNERVATION

Risk factors for median mononeuropathy of the wrist in postpoliomyelitis patients. Werner R, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):464–7

Comparison of the distal motor latency of the first dorsal interosseous with abductor pollicis brevis. Report of 200 cases. Seror P. **Electromyogr Clin Neurophysiol** 1988 Aug–Oct;28(6):341–5

Facilitation of transmission in the pathway of non–monosynaptic Ia excitation to wrist flexor motoneurones at the onset of voluntary movement in man. Baldissera F, et al. **Exp Brain Res** 1989;74(2):437–9

Bupivacaine: a safe local anesthetic for wrist blocks. Nyström A, et al. **J Hand Surg [Am]** 1989 May;14(3):495–8

Physiological variation in the innervation of flexor carpi ulnaris muscle. Brzović Z, et al. **Neurologija** 1987; 36(1–4):77–84

PATHOLOGY

[Possibilities of MR tomography of diseases of the hand and wrist] Heuck A, et al. **Radiologe** 1989 Feb;29(2):53–60 (Eng. Abstr.) (Ger)

PHYSIOLOGY

Modelling wrist–twisting strength of the elderly. Imrhan SN, et al. **Ergonomics** 1988 Dec;31(12):1807–19

Neuronal activity of the supplementary motor area (SMA) during internally and externally triggered wrist movements. Thaler DE, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):264–9

Maintenance tendency in co–ordinated rhythmic movements: relative fluctuations and phase. Rosenblum LD, et al. **Neuroscience** 1988 Oct;27(1):289–300

PHYSIOPATHOLOGY

Wrist muscle tone and self–care skill in persons with hemiparesis. Spaulding SJ, et al. **Am J Occup Ther** 1989 Jan;43(1):11–6

Wrist ratio correlation with carpal tunnel syndrome in industry. Gordon C, et al. **Am J Phys Med Rehabil** 1988 Dec;67(6):270–2

Intraoperative assessment of wrist extensor muscle force. Mendelson LS, et al. **J Hand Surg [Am]** 1988 Nov; 13(6):832–6

Mal–union and dysfunction in Colles' fracture. Jenkins NH, et al. **J Hand Surg [Br]** 1988 Aug;13(3):291–3

Duchenne muscular dystrophy: a study of wrist and hand function. Wagner MB, et al. **Muscle Nerve** 1989 Mar; 12(3):236–44

Objective measurement of pain in the wrist: analyses of basic factors for normative data and a case study. Taniguchi S, et al. **Percept Mot Skills** 1988 Aug;67(1):37–8

Wrist pain. Wade JP, et al. **Prim Care** 1988 Dec;15(4):737–49 (17 ref.)

RADIOGRAPHY

Ankylosing spondylitis: radiographic abnormalities of the hand and wrist. Hogikyan J, et al. **J Fam Pract** 1988 Nov; 27(5):533–5

Three–dimensional CT imaging for wrist disorders. Nakamura R, et al. **J Hand Surg [Br]** 1989 Feb;14(1):53–8

[Bone maturity in children older than 6 years of age. Wrist and hand. I. Quantitative analysis] Canals M, et al. **Rev Chil Pediatr** 1988 Mar–Apr;59(2):102–5 (Eng. Abstr.) (Spa)

RADIONUCLIDE IMAGING

Intraoperative radioactive localization of an osteoid osteoma: a useful variation in technique. Todd BD, et al. **Br J Radiol** 1989 Feb;62(734):187–9

SURGERY

Restorstion of wrist extension after paralysis. Tubiana R, et al. **Hand Clin** 1989 Feb;5(1):53–67 (26 ref.)

Excision of a ganglion. Ahmad N. **JPMA** 1989 Apr; 39(4):115–6
Intratendinous ganglion. A case report. Rayan GM. **Orthop Rev** 1989 Apr;18(4):449–51
[Compression of the median nerve by chondrosarcoma of the hand] Steffens K, et al. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):220–2 (Eng. Abstr.) (Ger)
[Dorsal ganglion of the wrist joint: a trivial, minor surgery intervention?] Meier U. **Helv Chir Acta** 1989 Jun; 56(1–2):73–7 (Eng. Abstr.) (Ger)

WRIST INJURIES

Difficult fractures of the hand and wrist. **Hand Clin** 1988 Aug;4(3):349–556

COMPLICATIONS

Infected fractures of the hand and wrist. Szabo RM, et al. **Hand Clin** 1988 Aug;4(3):477–89 (58 ref.)
Carpal instability with volar flexion of the proximal row associated with injury to the scapho-trapezial ligament: report of two cases. Hankin FM, et al. **J Hand Surg [Br]** 1988 Aug;13(3):298–302
Complex volar distal radioulnar joint dislocation occurring in a Galeazzi fracture. Giangarra CE, et al. **J Orthop Trauma** 1989;3(1):76–9
[The post-traumatic carpal tunnel syndrome] Zeman M. **Rozhl Chir** 1989 Feb;68(2):138–40 (Eng. Abstr.) (Cze)

DIAGNOSIS

Blood alcohol measurements in the emergency department: who needs them? Simel DL, et al. **Am J Public Health** 1988 Nov;78(11):1478–9
Scaphoid tubercle tenderness: a better indicator of scaphoid fractures? Freeland P. **Arch Emerg Med** 1989 Mar; 6(1):46–50
Wrist arthroscopy. Craig SM. **Clin Sports Med** 1987 Jul; 6(3):551–6 (7 ref.)
Fractures and dislocations of the distal radioulnar joint. Buterbaugh GA, et al. **Hand Clin** 1988 Aug;4(3):361–75 (37 ref.)
Tendonitis of the wrist and elbow. Thorson EP, et al. **Occup Med** 1989 Jul–Sep;4(3):419–31 (51 ref.)
Advanced imaging of the wrist. Quinn SF, et al. **Radiographics** 1989 Mar;9(2):229–46
[Arthroscopic diagnosis of disk injury of the wrist joint] Pomsel T, et al. **Z Orthop** 1989 May–Jun;127(3):331–5 (Eng. Abstr.) (Ger)
[Diagnosis of injuries of the distal end of the radius in children] Ershov PP, et al. **Ortop Travmatol Protez** 1988 Aug;(8):18–20 (Eng. Abstr.) (Rus)

ETIOLOGY

The mystery of RSI. Kiesler S, et al. **Am Psychol** 1988 Dec; 43(12):1004–15
[Fractures and pseudarthroses of the carpal scaphoid. Results concerning type II, III and IV fractures combined with ligament lesions (luxation or peri-lunate trans-scaphoid subluxation)] Herzberg G. **Rev Chir Orthop** 1988; 74(8):711–3 (Fre)
[True trigger wrist (a case report)] Koob E, et al. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):288–90 (Eng. Abstr.) (Ger)
[Sprains and dislocations of the wrist joint and carpal bones] Pannike A. **Langenbecks Arch Chir** 1988;Suppl 2:205–9 (19 ref.) (Eng. Abstr.) (Ger)
[Epiphysiolysis of the distal radius epiphysis in weight lifting] Engel A. **Sportverletz Sportschaden** 1987 Dec;1(4):229–30 (Eng. Abstr.) (Ger)
[Wrist para-articular radius fractures in winter sports] Sailer R, et al. **Sportverletz Sportschaden** 1987 Dec;1(4):177–80 (Eng. Abstr.) (Ger)

METABOLISM

Mineral density of bone in the forearm in premenopausal women with fractured wrists. Horowitz M, et al. **BMJ** 1988 Nov 19;297(6659):1314–5

PATHOLOGY

Wrist pain syndrome in the gymnast. Pathogenetic, diagnostic, and therapeutic considerations. Mandelbaum BR, et al. **Am J Sports Med** 1989 May–Jun;17(3):305–17

PHYSIOPATHOLOGY

[Characteristics of regional blood flow in patients with radius fractures at a typical site] Ioffe DI, et al. **Ortop Travmatol Protez** 1988 Aug;(8):20–3 (Eng. Abstr.) (Rus)

RADIOGRAPHY

An expanded imaging approach for diagnosing tears of the triangular fibrocartilage complex. Green SM, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall;48(2):187–90
The value of soft tissue signs in wrist trauma. Zammit-Maempel I, et al. **Clin Radiol** 1988 Nov; 39(6):664–8
Radiology of wrist and hand injuries in athletes. Recht MP, et al. **Clin Sports Med** 1987 Oct;6(4):811–28 (37 ref.)
Arthrography of the normal and posttraumatic wrist. Shigematsu S, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 2):410–2
The pronator quadratus sign: its classification and diagnostic usefulness for injury and inflammation of the wrist. Sasaki Y, et al. **J Hand Surg [Br]** 1989 Feb;14(1):80–3
Radiographic assessment of soft tissue signs in clinically suspected scaphoid fractures: the incidence of false negative and false positive results. Dias JJ, et al. **J Orthop Trauma** 1987;1(3):205–8
Team physician #5. Salter-Harris type I fracture of the distal radius due to weightlifting. Weiss AP, et al. **Orthop Rev** 1989 Feb;18(2):233–5
Diagnosis and treatment of obscure ulnar-sided wrist pain. Bottke CA, et al. **Orthopedics** 1989 Aug;12(8):1075–9
Arthrography of the post-traumatic knee, shoulder, and wrist. Current status and future trends. Gundry CR, et al. **Radiol Clin North Am** 1989 Sep;27(5):957–71 (71 ref.)
Transstyloid dorsal luxation of the lunate. Case report. Bjerregaard P, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):261–4
[Indications for computerized tomography of the wrist joint and carpal bones] Frahm R, et al. **Handchir Mikrochir Plast Chir** 1989 Jul;21(4):189–94 (Eng. Abstr.) (Ger)
[Dislocation and fracture-dislocation of the wrist joint] Anisimov VN. **Voen Med Zh** 1989 May;(5):31–3 (Rus)

RADIONUCLIDE IMAGING

The development of Kienböck's disease as followed up by bone scintigraphy and radiography. Jacobsson H, et al. **ROPO** 1988 Nov;149(5):541–3

REHABILITATION

[Means of limiting disability in multiple trauma of the wrist] Rozovskaia TF, et al. **Sov Med** 1988;(9):102–4 (Rus)

SURGERY

Functional recovery after fractures of the distal forearm. Analysis of radiographic and other factors affecting the outcome. Kaukonen JP, et al. **Ann Chir Gynaecol** 1988; 77(1):27–31
Anatomical results after distal forearm fractures. Kaukonen JP, et al. **Ann Chir Gynaecol** 1988;77(1):21–6
Replantation of an excised segment of radial forearm tissue. Lyons GB, et al. **Aust N Z J Surg** 1989 Feb;59(2):184–6
Stabilization of fractures in the hand and wrist with traumatic soft tissue and bone loss. Freeland AE, et al. **Hand Clin** 1988 Aug;4(3):425–36 (35 ref.)
Open reduction and internal fixation of displaced, comminuted intra-articular fractures of the distal end of the radius. Bradway JK, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):839–47
Traumatic axial dislocations of the carpus. Garcia-Elias M, et al. **J Hand Surg [Am]** 1989 May;14(3):446–57 (55 ref.)
Management of chronic lunotriquetral ligament tears. Pin PG, et al. **J Hand Surg [Am]** 1989 Jan;14(1):77–83
Ulnar fasciocutaneous flap of the wrist. Elliot D, et al. **J Hand Surg [Br]** 1988 Aug;13(3):311–2
Volar radiocarpal dislocation with ulnar translocation. Penny WH 3d, et al. **J Orthop Trauma** 1988;2(4):322–6 (13 ref.)
Open reduction and internal fixation of volar lip fractures of the distal radius. Smith RS, et al. **J Orthop Trauma** 1988; 2(3):181–7
Physeal growth arrest of the distal radius treated by the Ilizarov technique. Report of a case. Aston JW Jr, et al. **Orthop Rev** 1989 Jul;18(7):813–6
Intramedullary fixation of unstable distal radius fractures. A method of fixation allowing early motion. Bennett GL, et al. **Orthop Rev** 1989 Feb;18(2):210–6
Digital replantation. Gaul JS, et al. **Surg Annu** 1989;21:343–62 (39 ref.)
[The treatment of a multiple trauma patient with severe injuries of the arms and legs] van der Werken C, et al. **Ned Tijdschr Geneeskd** 1988 Aug 20;132(34):1587–91 (Eng. Abstr.) (Dut)
[Value of an emergency opposition plasty in total anterior hemisection of the wrist] Mitz V, et al. **Chirurgie** 1988; 114(7–8):621–7 (17 ref.) (Eng. Abstr.) (Fre)
[Compound open injuries of the wrist. Apropos of 15 cases] Dap F, et al. **Rev Chir Orthop** 1988;74 Suppl 2:149–52 (Fre)
[The current role of osteosynthesis in wrist fractures] Tachantz P. **Z Unfallchir Versicherungsmed Berufskr** 1988; 81(4):262–7 (Eng. Abstr.) (Fre)
[Differentiated therapy of distal radius fracture] Kienle KH, et al. **Aktuel Traumatol** 1989 Feb;19(1):11–6 (5 ref.) (Eng. Abstr.) (Ger)
[Fractures of the distal end of the radius] Brunner U, et al. **Orthopade** 1989 Jun;18(3):214–24 (68 ref.) (Eng. Abstr.) (Ger)
[A possibility for restoring forearm rotary movements following destruction of the radioulnar joint] Ecke H. **Versicherungsmedizin** 1988 Jul 1;40(4):108–9 (Eng. Abstr.) (Ger)
[Intra-articular fracture of the distal radius: results following osteosynthesis with a support plate] Ferguson GA, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(1):14–9 (Eng. Abstr.) (Ger)
[Corrective osteotomy of the distal forearm] Lehner M, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(1):45–8 (Eng. Abstr.) (Ger)
[Surgical treatment of the recurrent anterior luxation of the distal epiphysis of the ulna. Presentation of a case] Bazzocchi P, et al. **Chir Organi Mov** 1988 Oct–Dec; 73(4):399–403 (Eng. Abstr.) (Ita)
[Treatment of injuries to the wrist bones and joints in children] Danilov AA. **Khirurgiia (Mosk)** 1988 Jul;(7):93–8 (Eng. Abstr.) (Rus)

THERAPY

Office management of athletic injuries of the hand and wrist. Culver JE Jr. **Instr Course Lect** 1989;38:473–82
Diagnosis and treatment of injury to the second and third carpometacarpal joints. Carroll RE, et al. **J Hand Surg [Am]** 1989 Jan;14(1):102–7
Unilateral essential tremor after wrist immobilization: a case report [letter] Cole JD, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):286–7
Hand and wrist fractures in occupational medicine. Bodell LS, et al. **Occup Med** 1989 Jul–Sep;4(3):497–524 (144 ref.)
[Indications for the external fixator in wrist fractures] Chamay A. **Z Unfallchir Versicherungsmed Berufskr** 1988; 81(4):254–61 (Eng. Abstr.) (Fre)
[Differentiated treatment of fractures of the distal radius] Povacz F. **Z Unfallchir Versicherungsmed Berufskr** 1989; 82(1):21–4 (Eng. Abstr.) (Ger)

WRIST JOINT

Extraarticular chondromatosis of the hand. A case report. Lipskeir E, et al. **Acta Orthop Scand** 1988 Dec;59(6):728–9
Wrist joint tamponade after scaphoid fracture. A case report. Mjöberg B. **Acta Orthop Scand** 1989 Jun;60(3):371
Corrective osteotomy of the distal radius after fracture to restore the function of wrist joint, forearm, and hand. Roesgen M, et al. **Arch Orthop Trauma Surg** 1988; 107(5):301–8
Powered instruments for wrist arthroscopy. Whipple TL. **Arthroscopy** 1988;4(4):290–4
Bridge flexor tendon grafts. Stark HH, et al. **Clin Orthop** 1989 May;(242):51–9
Rheumatoid arthritis of the wrist. Taleisnik J. **Hand Clin** 1989 May;5(2):257–78 (109 ref.)
Osteoarthritis of the wrist secondary to non-union of the scaphoid. Allende BT. **Int Orthop** 1988;12(3):201–11 (20 ref.)
Acute carpal tunnel syndrome secondary to septic arthritis of the wrist. Gerardi JA, et al. **J Am Osteopath Assoc** 1989 Jul;89(7):933–4
Degenerative arthritis of the carpus associated with congenital hypoplastic thumb. Bonatz E, et al. **J Hand Surg [Am]** 1989 Jul;14(4):734–6
Diabetic hand syndrome. Ceruso M, et al. **J Hand Surg [Am]** 1988 Sep;13(5):765–70
Translunate, palmar perilunate fracture-subluxation of the wrist. Conway WF, et al. **J Hand Surg [Am]** 1989 Jul; 14(4):635–9
Triquetral-lunate arthritis secondary to synostosis. Gross SC, et al. **J Hand Surg [Am]** 1989 Jan;14(1):95–102
Attritional flexor tendon ruptures by an old lunate dislocation. Johnston GH, et al. **J Hand Surg [Am]** 1988 Sep;13(5):701–3
Triangular fibrocartilage complex lesions: a classification. Palmer AK. **J Hand Surg [Am]** 1989 Jul;14(4):594–606 (71 ref.)
Clinical and technologic evaluation of ulnar wrist pain [editorial] Taleisnik J. **J Hand Surg [Am]** 1988 Nov; 13(6):801–2
Scapholunate ligament excision [letter] Taleisnik J. **J Hand Surg [Am]** 1988 Sep;13(5):790–2
Peri-triquetral-lunate dislocation associated with ulnar nerve palsy. Bollen SR. **J Hand Surg [Br]** 1988 Nov;13(4):456–7
Carpal instability with volar flexion of the proximal row associated with injury to the scapho-trapezial ligament: report of two cases. Hankin FM, et al. **J Hand Surg [Br]** 1988 Aug;13(3):298–302
Case report of synovial sporotrichosis involving both wrists. Wilson SD, et al. **J Med Vet Mycol** 1988;26(5):307–9
Adhesive capsulitis [letter] Hall FM. **Radiology** 1988 Nov; 169(2):579
[Wrist arthroscopy in clinical applications] Xu JS. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):598–600, 637 (Eng. Abstr.) (Chi)
[Fractures and pseudarthroses of the carpal scaphoid. Consequences for stability of the wrist and therapeutic implications] Allieu Y, et al. **Rev Chir Orthop** 1988; 74(8):697–9 (Fre)
[Pseudarthroses with a necrotic proximal fragment and global radiocarpal osteoarthritis. Introduction] Alnot JY. **Rev Chir Orthop** 1988;74(8):731 (Fre)
[Osteoarthritis of the wrist following pseudarthrosis of the scaphoid] Bonnevialle P, et al. **Rev Chir Orthop** 1988; 74(8):718–20 (Fre)
[Hyper-pressure syndrome of the wrist] Saffar P, et al. **Rev Chir Orthop** 1988;74 Suppl 2:144–6 (Fre)
[Partial arthrodesis of the wrist for internal instability of the wrist] Trumble T, et al. **Rev Chir Orthop** 1988;74 Suppl 2:147–9 (Fre)
[Palmar-plantar pustulosis and arthritis of the hands. Apparent and actual analogies to psoriatic arthropathy. Apropos of a new case] Huaux JP, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):619–23 (45 ref.)

(Fre)

[True trigger wrist (a case report)] Koob E, et al. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):288–90 (Eng. Abstr.) (Ger)

ANATOMY & HISTOLOGY

Arthroscopy of the wrist: anatomy and technique. Botte MJ, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):313–6 (4 ref.)

Stability of the transverse carpal arch: an experimental study. Garcia-Elias M, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):277–82

An anatomic guide for arthroscopic visualization of the wrist capsular ligaments. North ER, et al. **J Hand Surg [Am]** 1988 Nov;13(6):815–22

The dorsal carpal ligaments: their anatomy and function. Mizuseki T, et al. **J Hand Surg [Br]** 1989 Feb;14(1):91–8 (27 ref.)

Advanced imaging of the wrist. Quinn SF, et al. **Radiographics** 1989 Mar;9(2):229–46

Carpal tunnel: MR imaging. Part I. Normal anatomy. Mesgarzadeh M, et al. **Radiology** 1989 Jun;171(3):743–8

[Elastometric study of the distal scaphoid ligamental complex and the scapho-lunar ligament] Boabighi A, et al. **Bull Assoc Anat (Nancy)** 1989 Mar;73(220):5–10 (Eng. Abstr.) (Fre)

[Fibrous structures of the wrist. III. Microscopic study. Rheologic consequences] Kuhlmann JN, et al. **Bull Assoc Anat (Nancy)** 1988 Jun–Sep;72(217–218):37–43 (Eng. Abstr.) (Fre)

[Fibrous structures of the wrist. I. Methods of studying the fibrous structures and results obtained (history)] Kuhlmann JN, et al. **Bull Assoc Anat (Nancy)** 1988 Jun–Sep; 72(217–218):27–30 (37 ref.) (Eng. Abstr.) (Fre)

[Instability of the wrist joint (functional anatomy, forms of instability, diagnosis)] Zolczer L, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1988; 31(4):267–76 (Eng. Abstr.) (Hun)

DRUG EFFECTS

[Mechanism of the therapeutic effect of dimethyl sulfoxide in rheumatoid arthritis] Murav'ev IuV, et al. **Ter Arkh** 1989; 61(2):110–2 (Rus)

PATHOLOGY

Erosion number and area progression in the wrists and hands of rheumatoid patients: a quantitative microfocal radiographic study. Buckland-Wright JC, et al. **Ann Rheum Dis** 1989 Jan;48(1):25–9

The radiological deformity of Colles' fractures. Dias JJ, et al. **Injury** 1987 Sep;18(5):304–8

Biomechanical characteristics of iliac crest bone in elderly women according to osteoarthritis grade at the hand joints. Gevers G, et al. **J Rheumatol** 1989 May;16(5):660–3

PHYSIOLOGY

Upper extremity joint movement: comparison of two measurement devices. Greene BL, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):288–90

Dynamic wrist motion analysis using six degree of freedom sensors. Logan SE, et al. **Biomed Sci Instrum** 1989; 25:213–20

Intrinsic and extrinsic wrist ligaments: biomechanical and functional differences. Logan SE, et al. **ISA Trans** 1988; 27(3):37–41

Stress carpal tunnel pressures in patients with carpal tunnel syndrome and normal patients. Szabo RM, et al. **J Hand Surg [Am]** 1989 Jul;14(4):624–7

Frequency spectrum analysis of wrist motion for activities of daily living. Mann KA, et al. **J Orthop Res** 1989; 7(2):304–6

Joint moments and work in pull-ups. Antinori F, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):132–7

[Fibrous structures of the wrist. II. Biomechanical study] Kuhlmann JN, et al. **Bull Assoc Anat (Nancy)** 1988 Jun–Sep; 72(217–218):31–5 (Eng. Abstr.) (Fre)

[Functional importance of the m. extensor carpi ulnaris for distal radioulnar articulation] Lengsfeld M, et al. **Handchir Mikrochir Plast Chir** 1988 Sep;20(5):275–8 (Eng. Abstr.) (Ger)

[A cineradiographic study of normal wrist motion] Yamada J. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov; 62(11):1043–54 (Eng. Abstr.) (Jpn)

[Control of muscular activity in the final position of the joint during performing simple rapid movements by man] Litvintsev AI, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):599–605 (Rus)

PHYSIOPATHOLOGY

An anatomic and mechanical study of the interosseous membrane of the forearm: pathomechanics of proximal migration of the radius. Hotchkiss RN, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):256–61

The effects of simulated unstable scaphoid fractures on carpal motion. Smith DK, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):283–91

The effects of various load paths and different loads on the load transfer characteristics of the wrist. Viegas SF, et al. **J Hand Surg [Am]** 1989 May;14(3):458–65

Trapezoidal osteotomy of the distal radius for unacceptable articular angulation after Colles' fracture. Watson HK, et al. **J Hand Surg [Am]** 1988 Nov;13(6):837–43

Pressures in the distal radioulnar joint: effect of surgical procedures used for Kienbock's disease. Werner FW, et al. **J Orthop Res** 1989;7(3):445–50

Wrist pain and distal growth plate closure of the radius in gymnasts. Albanese SA, et al. **J Pediatr Orthop** 1989 Jan–Feb;9(1):23–8

[Stress on the normal and pathologic wrist joint] Koebke J, et al. **Handchir Mikrochir Plast Chir** 1989 May; 21(3):127–33 (Eng. Abstr.) (Ger)

RADIOGRAPHY

Digital subtraction wrist arthrography: evaluation of the multiple-compartment technique. Quinn SF, et al. **AJR** 1988 Dec;151(6):1173–4

Heterotopic bone formation involving wrist and fingers in brain-injured patients: a report of three cases. Sazbon L, et al. **Brain Inj** 1989 Jan–Mar;3(1):57–61

Trapeziometacarpal abnormalities in Ehlers-Danlos syndrome. Gamble JG, et al. **J Hand Surg [Am]** 1989 Jan; 14(1):89–94

Arthrographic surface anatomy of the carpal triangular fibrocartilage complex. Hardy DC, et al. **J Hand Surg [Am]** 1988 Nov;13(6):823–9

Wrist pain: correlation of clinical and plain film findings with arthrographic results. Manaster BJ, et al. **J Hand Surg [Am]** 1989 May;14(3):466–73

Arthrography of the normal and posttraumatic wrist. Shigematsu S, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 2):410–2

The triple-injection wrist arthrogram. Zinberg EM, et al. **J Hand Surg [Am]** 1988 Nov;13(6):803–9

Carpal malalignment in Colles' fractures. Bickerstaff DR, et al. **J Hand Surg [Br]** 1989 May;14(2):155–60

The pronator quadratus sign: its classification and diagnostic usefulness for injury and inflammation of the wrist. Sasaki Y, et al. **J Hand Surg [Br]** 1989 Feb;14(1):80–3

Early changes of rheumatoid arthritis in the hand and wrist. Renner WR, et al. **Radiol Clin North Am** 1988 Nov; 26(6):1185–93 (20 ref.)

Radiographic assessment in relation to clinical and biochemical variables in rheumatoid arthritis. Wollheim FA, et al. **Scand J Rheumatol** 1988;17(6):445–53

The surgery of the rheumatoid wrist: postoperative appearances and complications of the more common procedures. Cope R. **Skeletal Radiol** 1989;17(8):576–82

Work in progress: postarthrography computed tomography of the wrist: evaluation of the triangular fibrocartilage complex. Quinn SF, et al. **Skeletal Radiol** 1989;17(8):565–9

[Misinterpretation of a metastatic process within the scope of Sudeck's dystrophy. A case report] Sim E. **Aktuel Traumatol** 1989 Apr;19(2):85–9 (Eng. Abstr.) (Ger)

[Lyme borreliosis—a case report] Aust F, et al. **Beitr Orthop Traumatol** 1988 Jul;35(7):329–34 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

Role of radionuclide imaging in the evaluation of wrist pain. Pin PG, et al. **J Hand Surg [Am]** 1988 Nov;13(6):810–4

SURGERY

Operative treatment of dorsal lesions of the wrist in rheumatoid arthritis. Linclau L, et al. **Acta Orthop Belg** 1988;54(2):185–8

Swanson silicone rubber interpositional arthroplasty of the wrist and of the metacarpophalangeal joints in rheumatoid arthritis. Simmen BR, et al. **Acta Orthop Belg** 1988; 54(2):196–209

Wrist arthroscopy. An ambulatory surgery procedure. Nichols CD. **AORN J** 1989 Mar;49(3):759–63, 766, 768 passim

Wrist arthroscopy. Craig SM. **Clin Sports Med** 1987 Jul; 6(3):551–6 (7 ref.)

Flexor tendon ruptures in rheumatoid arthritis. Ertel AN. **Hand Clin** 1989 May;5(2):177–90 (21 ref.)

The distal radioulnar joint in rheumatoid arthritis. O'Donovan TM, et al. **Hand Clin** 1989 May;5(2):249–56 (52 ref.)

Arthroplasty of the hand and wrist. Rosenwasser MP, et al. **Hand Clin** 1989 Aug;5(3):487–505 (147 ref.)

Treatment of tenosynovitis in rheumatoid arthritis. Stirrat CR. **Hand Clin** 1989 May;5(2):169–75 (15 ref.)

Arthroplasty of the hand and wrist: complications and failures. Peimer CA. **Instr Course Lect** 1989;38:15–30 (147 ref.)

Palmar shelf arthroplasty in the rheumatoid wrist. Results of long-term follow-up. Gellman H, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):223–7

Palmar shelf arthroplasty in the rheumatoid wrist [letter] Santoro VM. **J Bone Joint Surg [Am]** 1989 Aug; 71(7):1108–9

Palmar shelf arthroplasty. A follow-up note. Skoff H. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1377–82

Replacement of the trapeziometacarpal joint with a cemented (Caffinière) prosthesis. Boeckstyns ME, et al. **J Hand Surg [Am]** 1989 Jan;14(1):83–9

Extensor carpi ulnaris and flexor carpi ulnaris tenodesis of the unstable distal ulna. Breen TF, et al. **J Hand Surg [Am]** 1989 Jul;14(4):612–7

Long-term results after tenosynovectomy to treat the rheumatoid hand. Brown FE, et al. **J Hand Surg [Am]** 1988 Sep;13(5):704–8

Radius fracture after total wrist arthroplasty. Dawson WJ. **J Hand Surg [Am]** 1989 Jul;14(4):630–4

Triscaphoid arthrodesis and its complications. Frykman EB, et al. **J Hand Surg [Am]** 1988 Nov;13(6):844–9

Wrist fusion in cerebral palsy. Hoffer MM, et al. **J Hand Surg [Am]** 1988 Sep;13(5):667–70

Long-term study of chronic scapho-lunate instability treated by scapho-trapezio-trapezoid arthrodesis. Kleinman WB. **J Hand Surg [Am]** 1989 May;14(3):429–45

Limited wrist fusions. Minami A, et al. **J Hand Surg [Am]** 1988 Sep;13(5):660–7

Failed carpal bone arthroplasty: causes and treatment. Swanson AB, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 2):417–24

Palmar dislocation of the radiocarpal joint. Thomsen S, et al. **J Hand Surg [Am]** 1989 Jul;14(4):627–30 (15 ref.)

Modified technique of intramedullary fixation for wrist arthrodesis. Viegas SF, et al. **J Hand Surg [Am]** 1989 Jul; 14(4):618–23

Stabilisation of the trapezio-metacarpal joint. Brunelli G, et al. **J Hand Surg [Br]** 1989 May;14(2):209–12

Centralisation of the radial club hand by gradual distraction. Kessler I. **J Hand Surg [Br]** 1989 Feb;14(1):37–42

Silastic replacement of the trapezium for arthrosis—a twelve year follow-up study. Sollerman C, et al. **J Hand Surg [Br]** 1988 Nov;13(4):426–9

Tendon interposition arthroplasty of the first carpo-metacarpal joint. Weilby A. **J Hand Surg [Br]** 1988 Nov;13(4):421–5

Radiocarpal arthroscopy. Roth JH. **Orthopedics** 1988 Sep; 11(9):1309–12

[Current status of surgery of the rheumatoid wrist] Allieu Y, et al. **Acta Orthop Belg** 1988;54(2):170–7 (Eng. Abstr.) (Fre)

[Guepar's total arthroplasty of the wrist in rheumatoid polyarthritis] Alnot JY. **Acta Orthop Belg** 1988; 54(2):178–84 (Eng. Abstr.) (Fre)

[A denervation technic of the wrist] Foucher G. **Ann Chir Main** 1989;8(1):84–7 (Eng. Abstr.) (Fre)

[Total Guepar arthroplasty of the wrist in rheumatoid polyarthritis] Alnot JY, et al. **Rev Chir Orthop** 1988;74 Suppl 2:340–5 (Fre)

[Trapezectomy in the treatment of peritrapezial arthritis] Le Viet D, et al. **Rev Chir Orthop** 1988;74 Suppl 2:158–61 (Fre)

[The value of compression screws in Bennett fractures. Apropos of a series of 44 case reports] Tourne Y, et al. **Rev Chir Orthop** 1988;74 Suppl 2:153–5 (Fre)

[Corium-plasty of the wrist joint] Koneczny O. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):79–84 (Eng. Abstr.) (Ger)

[Roentgenologic evaluation of postoperative carpal collapse and ulnar translocation in patients with chronic polyarthritis] Schmidt A, et al. **Handchir Mikrochir Plast Chir** 1989 May;21(3):134–7 (Eng. Abstr.) (Ger)

[Surgical possibilities in managing large giant cell tumors of the wrist joint and carpal bones] Schneider W, et al. **Handchir Mikrochir Plast Chir** 1989 May;21(3):153–7 (Eng. Abstr.) (Ger)

[Distal radio-ulnar joint instability] Dósa G, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1988; 31(3):173–81 (Eng. Abstr.) (Hun)

[Indications for the use of Meuli's total wrist endoprosthesis] Renner A. **Magy Traumatol Orthop Helyreallito Sebesz** 1988;31(4):243–55 (Eng. Abstr.) (Hun)

WRITING

The difficulty of diffusing innovations. Davis WK. **Acad Med** 1989 Jan;64(1):12–3

Summarizing stories: the role of instruction in text structure in learning to write. Akamatsu CT. **Am Ann Deaf** 1988 Oct;133(4):294–302

Revision strategies of deaf student writers. Livingston S. **Am Ann Deaf** 1989 Mar;134(1):21–6

Importance of writing [editorial] Vernon M. **Am Ann Deaf** 1988 Oct;133(4):253

Author guidelines for computer reports: a need for new considerations? [editorial] Boudreau DA, et al. **Am J Clin Pathol** 1988 Oct;90(4):490–1

Special report—request for comment. Guidelines for authors submitting reports of computer programs and a call for comments. Powsner ER. **Am J Clin Pathol** 1988 Oct; 90(4):487–9

Let's put it this way. A medical writing clinic. Dirckx JH. **Am J Dermatopathol** 1989 Feb;11(1):87–92

Praise for useful words [editorial] Brown GW. **Am J Dis Child** 1989 Jul;143(7):770

Reprint requests. How and why they were made. Leung AK. **Am J Dis Child** 1989 Jan;143(1):121–3

How to read a research paper. Cohen H. **Am J Occup Ther** 1988 Sep;42(9):596–600

On writing grant proposals: confessions of two grant reviewers. Pelli DG, et al. **Am J Optom Physiol Opt** 1988 Jul;65(7):598

Daseinsanalytic therapy with a patient suffering from compulsion neurosis and writer's cramp. Condrau G. **Am J Psychoanal** 1988 Fall;48(3):211–34

Public health in the field—the rescue is at hand [editorial]

Tilson HH. **Am J Public Health** 1988 Dec;78(12):1529–30
Mail surveys of physicians [letter] Toffler WM, et al. **Am J Public Health** 1989 Oct;79(10):1434
Glasnost and communication. Thurlbeck WM. **Am Rev Respir Dis** 1989 Jan;139(1):282–3
Bohr's principle of complementarity [letter] Clark SJ. **Ann Intern Med** 1988 Dec 15;109(12):994–5
Pure alexia in Japanese and agraphia without alexia in kanji. The ability dissociation between reading and writing in kanji vs kana. Mochizuki H, et al. **Arch Neurol** 1988 Oct; 45(10):1157–9
Guidelines for audiometric symbols. **ASHA** 1988 Dec; 30(12):39–42
Dyspraxia: try typing [letter] Lando L. **ASHA** 1989 Sep; 31(9):3
The art of the scientific paper. McAllister T. **Australas Phys Eng Sci Med** 1988 Jul–Sep;11(3):119–21
Guidelines for writing papers. **BMJ** 1989 Jan 7; 298(6665):40–2
Write a practice annual report. Cembrowicz S. **BMJ** 1989 Apr 8;298(6678):953–4
Uniform requirements for manuscripts submitted to biomedical journals. International Committee of Medical Journal Editors. **Bol Asoc Med P R** 1988 Dec;80(12):471–8
Sinking standards [letter] Brownlee JT. **Br Dent J** 1988 Aug 20;165(4):119
Reporting observational studies. Bracken MB. **Br J Obstet Gynaecol** 1989 Apr;96(4):383–8
Reporting controlled trials. Grant A. **Br J Obstet Gynaecol** 1989 Apr;96(4):397–400
Reporting the assessment of screening and diagnostic tests. Wald N, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):389–96
I know where I'm going. Do you? [editorial] Uniskin LA. **Br J Orthod** 1989 May;16(2):117–8
Writer's cramp: a controlled trial of habit reversal treatment. Wieck A, et al. **Br J Psychiatry** 1988 Jul;153:111–5
Typographic influences on reading. Lewis C, et al. **Br J Psychol** 1989 May;80 (Pt 2):241–57
Selective impairment of the graphemic buffer in acquired dysgraphia: a case study. Posteraro L, et al. **Brain Lang** 1988 Nov;35(2):274–86
"Mon cher Docteur Freud": Charcot's unpublished correspondence to Freud, 1888–1893. Gelfand T. **Bull Hist Med** 1988 Winter;62(4):563–88
Suicide notes in adolescence. Posener JA, et al. **Can J Psychiatry** 1989 Apr;34(3):171–6
A good article [editorial] Shephard RJ. **Can J Sport Sci** 1989 Jun;14(2):67
A portrait of the doctor and his word processor. Buckman R. **Can Med Assoc J** 1989 Jun 1;140(11):1361, 1363
World AIDS Day essay contest. Drew B. **Can Med Assoc J** 1988 Dec 1;139(11):1031
There's no room for freebies in medical journalism. Helwig D. **Can Med Assoc J** 1989 Mar 1;140(5):542–3
Physician–authors: doctors take aim at a healthy market. Morgan PP. **Can Med Assoc J** 1989 Jun 1;140(11):1353–4, 1357–60
Biomedical review articles: what editors want from authors and peer reviewers [editorial] Squires BP. **Can Med Assoc J** 1989 Aug 1;141(3):195–7
Case reports: what editors want from authors and peer reviewers [editorial] Squires BP. **Can Med Assoc J** 1989 Sep 1;141(5):379–80
Letters to Tammy: a technique useful in the treatment of a sexually abused child. Lindahl MW. **Child Abuse Negl** 1988;12(3):417–20
Writing. Hurst JW. **Clin Cardiol** 1989 Jan;12(1):1–4
Preparing a medical informatics research grant proposal: general principles. Miller RA, et al. **Comput Biomed Res** 1989 Feb;22(1):92–101
Letters of reference and hospital appointments [letter] Ratzan RM. **Conn Med** 1989 Jan;53(1):54–5
Clinical writing and the documentary construction of schizophrenia. Barrett RJ. **Cult Med Psychiatry** 1988 Sep; 12(3):265–99
A surgical diary: concepts and tenets. Rodning CB. **Curr Surg** 1989 Jul–Aug;46(4):271–5
Writing a scientific abstract. Telford GL, et al. **Curr Surg** 1988 Nov–Dec;45(6):454–8
Problems in writing medico–legal reports. Part II. Head injury and epilepsy: the second of a series. Hicks A. **East Afr Med J** 1988 Mar;65(3):208–15
Inappropriate titles of abstracts [letter] Gourgoulianis K, et al. **Eur Respir J** 1989 May;2(5):482
Writing and publishing research articles. Hitchcock MA. **Fam Pract Res J** 1988 Fall–Winter;8(1):3–16
Instrument reliability and validity: how much needs to be published? Lynn MR. **Heart Lung** 1989 Jul;18(4):421–3
Comparison of oral, written and audio–visually based information as preparation for intravenous pyelography. Hjelm–Karlsson K. **Int J Nurs Stud** 1989;26(1):53–68
Increased readability improves the comprehension of written information for patients with skin disease. Baker GC, et al. **J Am Acad Dermatol** 1988 Dec;19(6):1135–41
Fourteen Wilsonian points for Freud and Bullitt. Warner SL. **J Am Acad Psychoanal** 1988 Oct;16(4):479–89
Writing about writing, Part II: Copyediting. Stephens GG. **J Am Board Fam Pract** 1988 Oct–Dec;1(4):291–4
Commentary on "Writing about Psychoanalysis" [letter] Maroda KJ. **J Am Psychoanal Assoc** 1989;37(2):564–8
More on skillful writing [letter] Snyder J. **J Am Vet Med Assoc** 1989 Jul 1;195(1):14
Skillful writing: a tool for today's veterinarian. Tacker MM. **J Am Vet Med Assoc** 1989 Feb 15;194(4):510–1
A self–monitoring technique for increasing productivity in multiple media. Herren CM. **J Behav Ther Exp Psychiatry** 1989 Mar;20(1):69–72
Who checks what in the divided responsibilities of editors and authors? Feinstein AR, et al. **J Clin Epidemiol** 1988; 41(10):945–8
The reporting of clinical trials: counting is not easy [editorial] Zelen M. **J Clin Oncol** 1989 Jul;7(7):827–8
Misconduct in science and misconduct against scientists [editorial] Shader RI, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):159
Linguistic flexibility in signed and written language productions of deaf children. Everhart VS, et al. **J Exp Child Psychol** 1988 Oct;46(2):174–93
The style of Zacutus Lusitanus and its origins. Jarcho S. **J Hist Med Allied Sci** 1989 Jul;44(3):291–5
Love's labors lost: five letters from a seventeenth–century Portuguese sodomite. Mott L, et al. **J Homosex** 1988; 16(1–2):91–101
Uniform requirements for manuscripts submitted to biomedical journals. International Committee of Medical Journal Editors. **J Manipulative Physiol Ther** 1988 Aug; 11(4):247–54
Writing to learn: a reconceptualization of thinking and writing in the nursing curriculum. Allen DG, et al. **J Nurs Educ** 1989 Jan;28(1):6–11
Writing by professionals or professional writing? [editorial] Copp LA. **J Prof Nurs** 1989 May–Jun;5(3):115–6
The emotions of professional writers. Brand AG, et al. **J Psychol** 1988 Sep;122(5):421–39
Effectiveness of a writing system using a computerized long–range optical pointer and 10–branch abbreviation expansion. Smith RO, et al. **J Rehabil Res Dev** 1989 Winter; 26(1):51–62
Profile of a meeting: how abstracts are written and reviewed. Panush RS, et al. **J Rheumatol** 1989 Feb;16(2):145–7
Creating community resource pamphlets. Giarratano S, et al. **J Sch Health** 1988 Dec;58(10):417–8
Summarization strategies of hearing–impaired and normally hearing college students. Peterson LN, et al. **J Speech Hear Res** 1988 Sep;31(3):327–37
The NIH clinician–investigator award: how to write a training grant application. Pollock RE, et al. **J Surg Res** 1989 Jan;46(1):1–3
Cardioplegia and communication [letter] Hearse DJ. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):289–91
Meet Vic Cohn—dean of American science writers. Breo DL. **JAMA** 1989 Aug 18;262(7):968–70
Physicians and journalists [letter; comment] Robinson–Haynes E. **JAMA** 1989 Mar 3;261(9):1280. **Comment on:** JAMA 1988 Aug 12;260(6):751–2, 757
Write for your patient [editorial] **Lancet** 1989 May 27; 1(8648):1175
Future of French–language journals [letter] Olivier C, et al. **Lancet** 1989 Jul 22;2(8656):222
Informing patients [letter] Tattersall RB. **Lancet** 1989 Jul 29; 2(8657):280
Darwinism in Victorian letters. Breuer HP. **Lit Med** 1987; 6:128–38
Literature and medicine: in quest of method. Daniel SL. **Lit Med** 1987;6:1–12
The healthy text. Mosley P. **Lit Med** 1987;6:35–42
Literature and medicine as a critical discourse. Psaty BM. **Lit Med** 1987;6:13–34
Preparing the research proposal: half science, half art. Haller KB. **MCN** 1989 May–Jun;14(3):230
The power of simple words [interview by Richard L. Reece] Griffin G. **Minn Med** 1989 Mar;72(3):128, 171–3
Thoughts about medical writing, editing, and publishing [editorial] Reece RL. **Minn Med** 1989 Mar;72(3):127, 138
Writer's cramp: not associated with anxiety. Harrington RC, et al. **Mov Disord** 1988;3(3):195–200
The grants game [letter] Horrobin DF. **Nature** 1989 Jun 29; 339(6227):654
"On–screen" writing and composing: two years experience with Manuscript Manager, Apple II and IBM–PC versions. Offerhaus L. **Neth J Med** 1989 Jun;34(5–6):322–7
Towards electronic manuscripts? [editorial] Vogten AJ. **Neth J Med** 1989 Jun;34(5–6):285–6
Usefulness of a writing aid in writer's cramp. Koller WC, et al. **Neurology** 1989 Jan;39(1):149–50
Tips on writing successful grant proposals. Hodgson C. **Nurse Pract** 1989 Feb;14(2):44, 46, 49 passim
Death of a country and western songwriter. A case report. Shay C. **Ohio Med** 1988 Jun;84(6):425–6
Hemispheric preference and progressive–part or whole practice in beginning typewriting. Johns LB. **Percept Mot Skills** 1989 Apr;68(2):359–64
Effects of the neuropeptide PLG (L–prolyl–leucyl–glycinamide) on writing pressure and speed in healthy subjects. Steinwachs KC, et al. **Pharmacopsychiatry** 1988 Nov;21(6):459–60
Words. Paton A. **Postgrad Med J** 1988 Apr;64(750):331–2
Writing vs coding diagnostic impressions in an examination: short–answer vs long–menu responses. Brailovsky CA, et al. **Proc Annu Conf Res Med Educ** 1988;27:201–6
Right–brain techniques: a catalyst for creative thinking and internal focusing. A study of five writers and six psychotherapists. Zdenek M. **Psychiatr Clin North Am** 1988 Sep;11(3):427–41
Mood disorders and patterns of creativity in British writers and artists. Jamison KR. **Psychiatry** 1989 May;52(2):125–34
The diary of an adolescent girl in the ghetto: a study of age–specific reactions to the Holocaust. Cahn TI. **Psychoanal Rev** 1988 Winter;75(4):589–617
The moral justification of suicide in suicide notes. Lester D, et al. **Psychol Rep** 1988 Aug;63(1):106
An empirical investigation of the latent content of suicide notes. Mc Lister B, et al. **Psychol Rep** 1988 Aug;63(1):238
On the art of the abstract [editorial] Tuddenham WJ. **Radiographics** 1989 Jul;9(4):583–4
Publishing a manuscript: manuscript preparation guide for authors. Part II. Frank ED. **Radiol Technol** 1989 Jan–Feb; 60(3):217–20
Artful design: writing the proposal for research in the naturalist paradigm. Sandelowski M, et al. **Res Nurs Health** 1989 Apr;12(2):77–84
Dizzy medical writing: report on recent relapses. Fred HL, et al. **South Med J** 1989 Jul;82(7):897–9
"How to write a paper" [editorial] Page AG, et al. **Thorac Cardiovasc Surg** 1989 Feb;37(1):1–2
A study of donor families' reactions to letters from organ recipients. Bartucci MR, et al. **Transplant Proc** 1988 Oct; 20(5):786–90
Strategies for teaching nursing research. Writing to learn nursing research. Sorrell J. **West J Nurs Res** 1988 Aug; 10(4):510–4
[Use of the infinitive as an adverbial clause in English technical medical texts] Marková I. **Acta Univ Palacki Olomuc Fac Med** 1987;117:389–401 (Eng. Abstr.) (Cze)
[The revised uniform requirements for manuscripts submitted to biomedical journals] **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2001–2 (Dut)
[Medicine and language] Balk–Smit Duyzentkunst F. **Ned Tijdschr Geneeskd** 1989 Jan 7;133(1):11–2 (Dut)
[Submitting an abstract for a scientific article (editorial)] Rozé C. **Ann Pathol** 1988;8(3):166–8 (Fre)
[French medical periodicals in the international scene?] Olivier C, et al. **Bull Acad Natl Med** 1989 Feb;173(2):141–4; discussion 144–7 (Eng. Abstr.) (Fre)
[How to write an article?] Huguier M, et al. **J Chir (Paris)** 1989 Mar;126(3):199–203 (Fre)
[Medical French. II (a plea for the correct use of French) (editorial)] Bonard EC. **Rev Med Suisse Romande** 1989 Mar; 109(3):165–6 (Fre)
[Writing the clinical trial report] Bogaievsky Y, et al. **Therapie** 1989 Mar–Apr;44(2):87–95 (Eng. Abstr.) (Fre)
[Contribution of statistical methodology in medical writing] Dziri C, et al. **Tunis Med** 1988 Jun–Jul;66(6–7):503–7 (Fre)
[Treatment of writer's cramp (letter)] Firnhaber W. **Dtsch Med Wochenschr** 1988 Nov 25;113(47):1861 (Ger)
[The difference in writing disorders in primary agraphia and congenital dyslexia and their clinical relevance] Weinschenk C. **Fortschr Neurol Psychiatr** 1988 Aug; 56(8):259–64 (Eng. Abstr.) (Ger)
[The pathogenesis of reading–writing weakness] von Suchodoletz W, et al. **Padiatr Grenzgeb** 1988;27(5):373–9 (Eng. Abstr.) (Ger)
[The female gaze and theoretical writing] Schneider M. **Psyche (Stuttg)** 1989 Apr;43(4):331–8 (Eng. Abstr.) (Ger)
[Computer–assisted tumor documentation, after–care and medical correspondence in radiotherapy] Leitner H, et al. **Strahlenther Onkol** 1989 May;165(5):369–74 (Eng. Abstr.) (Ger)
[Mail box on the hospital unit?] Harych I, et al. **Z Gesamte Hyg** 1989 May;35(5):299 (Eng. Abstr.) (Ger)
[Braille script—mastered and used? Analysis of a survey of blind patients of empoyable age in a large town] Moeller W. **Z Gesamte Hyg** 1988 Jul;34(7):423–5 (Eng. Abstr.) (Ger)
[Script crossing in scanning electron microscopy] Oehmichen M, et al. **Z Rechtsmed** 1989;102(4):219–30 (Eng. Abstr.) (Ger)
[Position of the Hungarian Academy of Sciences on the orthography of medical terms] **Orv Hetil** 1988 Jun 19; 129(25):1325–6 (Hun)
[Further comments on Hungarian medical orthography (letter)] **Orv Hetil** 1988 Jun 19;129(25):1341–2 (Hun)
[Let us know more about the current Hungarian medical literature (letter)] Balogh I. **Orv Hetil** 1988 Dec 11; 129(50):2716 (Hun)
[Rejected manuscripts [letter] Nagy M. **Orv Hetil** 1989 Mar 26;130(13):699–700 (Hun)
[On the occasion of the reunion of medical writers at Siófok, 21–13 October 1988] Sáry G. **Orv Hetil** 1988 Aug 7; 129(32):1712–3 (Hun)
[English roots of the Hungarian–language medical works of István Weszpreémi] Szlatky M. **Orv Hetil** 1988 Sep 4; 129(36):1931–2 (Hun)
[Proposal for uniformity of rules to follow in drafting and preparing the original typescript of scientific studies] Gava R. **G Clin Med** 1988 Jun–Jul;69(6–7):463–6 (Ita)
[A study on the writing of Japanese letters in school children] Koeda T, et al. **No To Hattatsu** 1988 Nov;20(6):464–7 (Eng. Abstr.) (Jpn)
[A review of Polish publications on medical parasitology 1984–1987] Kasprzak W, et al. **Wiad Parazytol** 1988; 34(4–6):387–94 (Pol)
[A review of Polish publications on general parasitology 1984–1986] Kazubski SL. **Wiad Parazytol** 1988;

34(4–6):381–6 (Eng. Abstr.) (Pol)
[How to write a curriculum] da Mota HC.
Acta Med Port 1988 Jul–Dec;1(4–6):281–4 (Eng. Abstr.) (Por)
[Instructions for authors of medical articles: third edition] Velásquez-Jones L, et al. Bol Med Hosp Infant Mex 1989 Jan;46(1):65–74 (Spa)
[Changes in the Boletin Medico del Hospital Infantil de Mexico (editorial)] Velásquez-Jones L.
Bol Med Hosp Infant Mex 1989 Feb;46(2):79 (Spa)
[Bibliographic references: better few and good than many and inappropriate] Herranz G. Med Clin (Barc) 1988 Oct 15;91(12):452–3 (Spa)
[Inaccuracy of bibliographic references: a cause of fraudulent publications? (letter)] López Campos JM, et al.
Med Clin (Barc) 1989 Apr 22;92(15):597 (Spa)
[Ethics and biomedical communication] Pulido M.
Med Clin (Barc) 1988 Jul 2;91(6):218–9 (Spa)
[The editorial (editorial)] Pulido M. Med Clin (Barc) 1989 Mar 25;92(11):413–4 (Spa)
[Uniform requirements for manuscripts: the new 3d edition] Rev Clin Esp 1989 Feb;184(2):88 (Spa)
[Uniform requirements for submitting manuscripts to biomedical journals. International Committee of Medical Journal Editors] Rev Clin Esp 1989 Feb;184(2):89–96 (Spa)
[Requirements of uniformity for manuscripts submitted to biomedical journals. International Committee of Medical Journal Editors] Rev Esp Anestesiol Reanim 1988 Nov–Dec;35(6):316–22 (Spa)
[Lack of clarity in medical articles. Apropos of 1 case (letter)] Lera Tricas JM. Rev Esp Enferm Apar Dig 1989 Jun;75(6 Pt 1):631–2 (Spa)
[Uniform requirements for manuscripts submitted to biomedical journals. International Committee of Editors of Medical Journals] Uscanga LF, et al.
Rev Gastroenterol Mex 1988 Oct–Dec;53(4):237–41 (Spa)
[Requests for the submission of manuscripts to biomedical reviews. International Committee of Medical Journal Editors] Salud Publica Mex 1988 Nov–Dec;30(6):893–904 (Spa)
[Bibliographic references in medical manuscripts] Gómez-Dantés O, et al. Salud Publica Mex 1988 Sep–Oct; 30(5):760–5 (Eng. Abstr.) (Spa)

HISTORY

Boswell's affective illness: a reappraisal. Kranzler HR.
Conn Med 1989 Apr;53(4):225–8
[August Forel and Dumeng Bezzola—an exchange of letters] Müller C. Gesnerus 1989;46(1–2):55–79 (Eng. Abstr.) (Ger)
[A gift of 3 handwritten notes by Gerard von Swietens (1700–1772) to the Vienna Medical Faculty] Wyklicky H. Wien Klin Wochenschr 1989 Aug 4;101(15):515–6 (Ger)

METHODS

Writing an abstract [see comments] Fletcher RH.
J Gen Intern Med 1988 Nov–Dec;3(6):607–9. Comment in: J Gen Intern Med 1989 May–Jun;4(3):267
Abstract renders the summary superfluous [published erratum appears in Surg Gynecol Obstet 1989 Aug;169(2):178] Didolkar MS, et al. Surg Gynecol Obstet 1989 Mar; 168(3):259–62

STANDARDS

Strengthening textbook proposals [letter] Haines DE, et al.
Acad Med 1989 Sep;64(9):516
Requirements for submission of manuscripts [editorial]
Am J Obstet Gynecol 1989 Jan;160(1):1–2
The case of the questionable reference. Clarfield AM.
Can Med Assoc J 1989 Apr 1;140(7):844–5
Research, publishing and editor responsibility [editorial] Göthlin JH. Eur J Radiol 1988 Nov;8(4):201–2
The peer-review process—and an acknowledgement of our peerless reviewers. Feinstein AR, et al.
J Clin Epidemiol 1989;42(1):1–4
Classification of teacher written comments on student assignments. Lutz EM. J Nurs Educ 1989 May;28(5):227–9 (15 ref.)
Publishing a manuscript: analysis of reviewed manuscripts with discussion. Part I. Frank ED. Radiol Technol 1988 Nov–Dec;60(2):125–9
[Citation count—hardly a problem for evaluators] Eklund T. Lakartidningen 1989 Jun 14;86(24):2282 (Swe)

WRYNECK see TORTICOLLIS

WUCHERERIA

DRUG EFFECTS

Prophylactic effect of diethylcarbamazine on W. bancrofti filariasis. Jain DC, et al. J Commun Dis 1987 Dec; 19(4):317–21
Control of bancroftian filariasis in a rural area through selected treatment with diethylcarbamazine. Sharma SP, et al. J Commun Dis 1987 Dec;19(4):322–5
Persistence of microfilaremia in bancroftian filariasis after diethylcarbamazine citrate therapy. Eberhard ML, et al.
Trop Med Parasitol 1988 Jun;39(2):128–30

ENZYMOLOGY

Filarial parasites exhibit unusually high levels of choline acetyltransferase activity. Swamy KH.
Mol Biochem Parasitol 1989 Jul;35(3):259–68

GROWTH & DEVELOPMENT

Uptake and development of Wuchereria bancrofti in Aedes aegypti and Haitian Culex quinquefasciatus that were fed on a monkey with low-density microfilaremia. Lowichik A, et al. Trop Med Parasitol 1988 Sep;39(3):227–9

IMMUNOLOGY

Quantitation of antibodies to infective larvae in Wuchereria bancrofti filariasis. Short communications. Das MK, et al.
Acta Trop (Basel) 1988 Dec;45(4):387–8
Microfilaraemia, filarial antibody, antigen and immune complex levels in human filariasis before, during and after DEC therapy. A two-year follow-up. Ramaprasad P, et al. Acta Trop (Basel) 1988 Sep;45(3):245–55
Detection of infective larval antigens in bancroftian filariasis. Das MK, et al. Indian J Exp Biol 1988 Dec;26(12):1003–4
Differential recognition of two cloned Brugia malayi antigens by antibody class. Werner C, et al.
Mol Biochem Parasitol 1989 Jul;35(3):209–18
Circulating antibodies and antigens in Presbytis monkeys infected with the filarial parasite Wuchereria bancrofti. Maizels RM, et al. Trop Med Parasitol 1988 Sep; 39(3):214–20
[Studies on the indirect fluorescent antibody test for diagnosis and surveillance of human filariasis] Liu HY, et al.
Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1988;6(3):161–5 (Eng. Abstr.) (Chi)

ISOLATION & PURIFICATION

Adult filarial worm in fine needle aspirate of an epididymal nodule [letter] Arora VK, et al. Acta Cytol 1989 May–Jun; 33(3):421
Gravid adult female worms of Wuchereria bancrofti in fine needle aspirates of soft tissue swellings. Report of three cases. Kapila K, et al. Acta Cytol 1989 May–Jun;33(3):390–2
Wuchereria bancrofti larvae in naturally infected Culex quinquefasciatus. Rajasekariah GR, et al.
Ann Trop Med Parasitol 1988 Dec;82(6):637–9
Microfilaria of Wuchereria bancrofti in fine-needle aspirate from a colloid goiter [letter] Das DK, et al.
Diagn Cytopathol 1989;5(1):114–5
[Study on the role of low density microfilaremia cases in the transmission of filariasis in late stage of filariasis control] Shi ZJ, et al.
Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1988;6(2):99–102 (Eng. Abstr.) (Chi)

PHYSIOLOGY

Survival estimates for adult Culex pipiens in the Nile Delta. Gad AM, et al. Acta Trop (Basel) 1989 May;46(3):173–9
Factors affecting transmission of Wuchereria bancrofti by anopheline mosquitoes. 2. Damage to ingested microfilariae by mosquito foregut armatures and development of filarial larvae in mosquitoes. Bryan JH, et al.
Trans R Soc Trop Med Hyg 1988;82(1):138–45
Comparative densities of Wuchereria bancrofti microfilaria in paired samples of capillary and venous blood. Eberhard ML, et al. Trop Med Parasitol 1988 Dec;39(4):295–8

ULTRASTRUCTURE

Fine structure and localization of anionic sites on the surface of microfilaria of Wuchereria bancrofti. de Souza W, et al. J Submicrosc Cytol Pathol 1989 Jan;21(1):121–9

WUCHERERIA BANCROFTI see under WUCHERERIA

X 537A see LASALOCID

X CHROMOSOME

Ultrastructure of the skeletal muscle in the X chromosome-linked dystrophic (mdx) mouse. Comparison with Duchenne muscular dystrophy. Cullen MJ, et al.
Acta Neuropathol (Berl) 1988;77(1):69–81
Analysis of the gene and gene product in patients with X linked chronic granulomatous disease (XL–CGD). Frey D, et al. Acta Paediatr Hung 1988–89;29(1–2):185–9
A case of 48, XXX, +18 double trisomy. Imai I, et al.
Acta Paediatr Jpn Overseas Ed 1987 Feb;29(1):178–81 (12 ref.)
Clinical and postmortem findings of two cases with karyotype: 48, XXX, +18. Sonoda T, et al.
Acta Paediatr Jpn Overseas Ed 1987 Feb;29(1):173–7
Linkage relationships and gene order around the locus for X-linked retinoschisis. Alitalo T, et al.
Am J Hum Genet 1988 Oct;43(4):476–83
Androgen receptor locus on the human X chromosome: regional localization to Xq11–12 and description of a DNA polymorphism. Brown CJ, et al. Am J Hum Genet 1989 Feb;44(2):264–9
Linkage heterogeneity between X-linked retinitis pigmentosa and a map of 10 RFLP loci. Chen JD, et al.
Am J Hum Genet 1989 Sep;45(3):401–11
Molecular analysis of male-viable deletions and duplications allows ordering of 52 DNA probes on proximal Xq. Cremers FP, et al. Am J Hum Genet 1988 Oct;43(4):452–61
Linkage analysis of families with fragile-X mental retardation, using a novel RFLP marker (DXS 304). Dahl N, et al. Am J Hum Genet 1989 Aug;45(2):304–9
Assignment of human genes for phosphorylase kinase subunits alpha (PHKA) to Xq12–q13 and beta (PHKB) to 16q12–q13. Francke U, et al. Am J Hum Genet 1989 Aug; 45(2):276–82
Pelizaeus-Merzbacher disease: an X-linked neurologic disorder of myelin metabolism with a novel mutation in the gene encoding proteolipid protein. Gencic S, et al.
Am J Hum Genet 1989 Sep;45(3):435–42
Hot spot of recombination within DXS164 in the Duchenne muscular dystrophy gene. Grimm T, et al.
Am J Hum Genet 1989 Sep;45(3):368–72
Gene deletions in X-linked muscular dystrophy. Lindlöf M, et al. Am J Hum Genet 1989 Apr;44(4):496–503
Localization of the gene for X-linked recessive type of retinitis pigmentosa (XLRP) to Xp21 by linkage analysis. Musarella MA, et al. Am J Hum Genet 1988 Oct; 43(4):484–94
X-linked severe combined immunodeficiency: localization within the region Xq13.1–q21.1 by linkage and deletion analysis. Puck JM, et al. Am J Hum Genet 1989 May; 44(5):724–30
Chromosomal localization of the gene for the human trifunctional enzyme, methylenetetrahydrofolate dehydrogenase–methenyltetrahydrofolate cyclohydrolase–formyltetrahydrofolate synthetase. Rozen R, et al. Am J Hum Genet 1989 Jun;44(6):781–6
New polymorphisms at the DXS98 locus and confirmation of its location proximal to FRAXA by in situ hybridization. Schnur RE, et al. Am J Hum Genet 1989 Feb;44(2):248–54
Lowe oculocerebrorenal syndrome: DNA-based linkage of the gene to Xq24–q26, using tightly linked flanking markers and the correlation to lens examination in carrier diagnosis. Wadelius C, et al. Am J Hum Genet 1989 Feb;44(2):241–7
X-linked mental retardation 3. Proceedings of the Third International Workshop on Fragile X and X-linked Mental Retardation. Troina, Italy, September 13–16, 1987 [published erratum appears in Am J Med Genet 1988 Nov;31(3):727–30] Am J Med Genet 1988 May–Jun; 30(1–2):1–702
Linkage analysis suggests at least two loci for X-linked non-specific mental retardation. Arveiler B, et al.
Am J Med Genet 1988 May–Jun;30(1–2):473–83
A new X-linked dysplasia gigantism syndrome: follow up in the first family and report on a second Austrian family. Behmel A, et al. Am J Med Genet 1988 May–Jun; 30(1–2):275–85
Multipoint linkage of 9 anonymous probes to HPRT, factor 9, and fragile X. Brown WT, et al. Am J Med Genet 1988 May–Jun;30(1–2):551–66
Mental retardation, distinct facial changes, short stature, obesity, and hypogonadism: a new X-linked mental retardation syndrome. Chudley AE, et al.
Am J Med Genet 1988 Dec;31(4):741–51
Pulsed-field gradient-gel studies around the fragile site. Dobkin CS, et al. Am J Med Genet 1988 May–Jun; 30(1–2):593–600
Clinical, cytogenetic, and pedigree findings in 18 cases of Aicardi syndrome. Donnenfeld AE, et al.
Am J Med Genet 1989 Apr;32(4):461–7
Prenatal exclusion of Norrie disease with flanking DNA markers. Gal A, et al. Am J Med Genet 1988 Oct; 31(2):449–53 (11 ref.)
Probable localisation of the Coffin–Lowry locus in Xp22.2–p22.1 by multipoint linkage analysis. Hanauer A, et al. Am J Med Genet 1988 May–Jun;30(1–2):523–30
Bilateral renal agenesis and Mullerian anomalies in a 47,XXX fetus. Hogge WA, et al. Am J Med Genet 1989 Jun; 33(2):242–3
Duchenne muscular dystrophy in monozygotic twins: deletion of 5' fragments of the gene. Ionasescu VV, et al.
Am J Med Genet 1989 May;33(1):113–6
Genetic prediction in X-linked agammaglobulinaemia. Lau YL, et al. Am J Med Genet 1988 Oct;31(2):437–48
Multivariate analysis of body shape in fragile X (Martin–Bell) syndrome. Loesch DZ, et al. Am J Med Genet 1989 Jun; 33(2):200–8
Dystrophin immunocytochemistry in muscle culture: detection of a carrier of Duchenne muscular dystrophy. Miranda AF, et al. Am J Med Genet 1989 Feb;32(2):268–73
Linkage between the fragile X and F9, DXS52 (St14), DXS98 (4D–8) and DXS105 (cX55.7). Mulley J, et al.
Am J Med Genet 1988 May–Jun;30(1–2):567–80
Simpson–Golabi–Behmel syndrome: an X-linked encephalo–tropho–schisis syndrome. Neri G, et al.
Am J Med Genet 1988 May–Jun;30(1–2):287–99
Duplicate report crossing over in Norrie disease family [letter] Ngo J, et al. Am J Med Genet 1989 Jun;33(2):286
Cytogenetic and physical mapping in the region of the X chromosome surrounding the fragile site. Nguyen C, et al. Am J Med Genet 1988 May–Jun;30(1–2):601–11
In situ nick translation of the fragile X region. Nolin SL, et al. Am J Med Genet 1988 May–Jun;30(1–2):443–50
Somatic and intellectual development in a patient with 47,XX,psu dic(X)(p11.2) chromosome constitution. Ocrant I, et al. Am J Med Genet 1989 Apr;32(4):536–9
Etiologic heterogeneity in dyskeratosis congenita. Pai GS, et al. Am J Med Genet 1989 Jan;32(1):63–6
A family with the Coffin Lowry syndrome revisited:

localization of CLS to Xp21-pter. Partington MW, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):509-21

X-linked cutaneous amyloidosis: further clinical and pathological observations. Partington MW, et al. **Am J Med Genet** 1989 Jan;32(1):115-9

X-linked mental retardation with dystonic movements of the hands. Partington MW, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):251-62

Pulsed-field gel mapping studies in the vicinity of the fragile site at Xq27.3. Patterson M, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):581-91

A man with isochromosome Xq Klinefelter syndrome with lack of height increase and normal androgenization. Richer CL, et al. **Am J Med Genet** 1989 Jan;32(1):42-4

Linkage studies with the gene for an X-linked syndrome of mental retardation, microcephaly and spastic diplegia (MRX2). Sutherland GR, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):493-508

A non-syndromal form of X-linked mental retardation (XLMR) is linked to DXS14. Suthers GK, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):485-91

A new syndrome with mental retardation, short stature and an Xq duplication. Thode A, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):239-50

X-linked mental retardation associated with psoriasis: a new syndrome? Tranebjaerg L, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):263-73

Chromosome findings in twins with early-onset autistic disorder. Wahlström J, et al. **Am J Med Genet** 1989 Jan; 32(1):19-21

Strategy for molecular cloning of the fragile X site DNA. Warren ST, et al. **Am J Med Genet** 1988 May-Jun; 30(1-2):613-23

Iris pigment mosaicism in carriers of X-linked ocular albinism cum pigmento. Maguire AM, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):298-9

Digeorge anomaly associated with partial deletion of chromosome 22. Report of a case with X/22 translocation and review of the literature. Dallapiccola B, et al. **Ann Genet** 1989;32(2):92-6 (39 ref.)

Assignment of the GDH loci to human chromosomes 10q23 and Xq24 by in situ hybridization. Jung KY, et al. **Ann Genet** 1989;32(2):109-10

Molecular characterization of human X/Y translocations suggests their aetiology through aberrant exchange between homologous sequences on Xp and Yq. Ballabio A, et al. **Ann Hum Genet** 1989 Jan;53 (Pt 1):9-14

Bkm sequences from the human X chromosome contain large clusters of GATA/GACA repeats. Erickson RP, et al. **Ann Hum Genet** 1988 Jul;52 (Pt 3):167-76

Klinefelter's syndrome: an analysis of the origin of the additional sex chromosome using molecular probes. Jacobs PA, et al. **Ann Hum Genet** 1988 May;52 (Pt 2):93-109

Origin of sex chromosome aneuploidy. Morton NE, et al. **Ann Hum Genet** 1988 May;52 (Pt 2):85-92

Molecular biology of Duchenne and Becker's muscular dystrophy: clinical applications. Gutmann DH, et al. **Ann Neurol** 1989 Aug;26(2):189-94 (46 ref.)

Mechanisms of X-chromosome regulation. Grant SG, et al. **Annu Rev Genet** 1988;22:199-233 (213 ref.)

Genetics of Duchenne muscular dystrophy. Worton RG, et al. **Annu Rev Genet** 1988;22:601-29 (138 ref.)

Absence of Y specific DNA sequences in two siblings with 46XX hermaphroditism. Raine J, et al. **Arch Dis Child** 1989 Aug;64(8):1185-7

Familial aplasia of the cerebellar vermis. Possible X-linked dominant inheritance. Fenichel GM, et al. **Arch Neurol** 1989 May;46(5):582-3

Use of linked DNA probes for carrier detection and diagnosis of X-linked juvenile retinoschisis. Dahl N, et al. **Arch Ophthalmol** 1988 Oct;106(10):1414-6

X-linked congenital stationary night blindness. Review and report of a family with hyperopia. Khouri G, et al. **Arch Ophthalmol** 1988 Oct;106(10):1417-22 (28 ref.)

X-linked congenital stationary night blindness [letter] Miyake Y. **Arch Ophthalmol** 1989 May;107(5):635-6

Aland Island eye disease (Forsius-Eriksson syndrome) associated with contiguous deletion syndrome at Xp21. Similarity to incomplete congenital stationary night blindness. Weleber RG, et al. **Arch Ophthalmol** 1989 Aug; 107(8):1170-9 (75 ref.)

Tooth crown size in human females with 45,X/46,XX chromosomes. Varrela J, et al. **Arch Oral Biol** 1988; 33(5):291-4

Carrier detection in X-pigmentary retinal dystrophy (X-linked retinitis pigmentosa) by DNA restriction fragment length polymorphism studies. Chen JD, et al. **Aust N Z J Ophthalmol** 1988 May;16(2):67-74

Prenatal diagnosis and carrier detection by DNA studies in a Duchenne muscular dystrophy family with no living affected male. Chen JD, et al. **Aust Paediatr J** 1988 Dec; 24(6):351-3

Observations on the pathogenesis of Duchenne muscular dystrophy in the light of recent progress in molecular genetics. Kakulas BA. **Aust Paediatr J** 1988;24 Suppl 1:4-8 (25 ref.)

Application of DNA probes to carrier detection and prenatal diagnosis of Duchenne (and Becker) muscular dystrophy. Mulley JC, et al. **Aust Paediatr J** 1988;24 Suppl 1:92-7

Update on the molecular genetics of Duchenne muscular dystrophy. Siddique T, et al. **Aust Paediatr J** 1988;24 Suppl 1:9-14 (56 ref.)

No evidence for X linkage in rod-and-frame test (RFT) scores: an answer to Thomas. Tambs K. **Behav Genet** 1989 May;19(3):469-71

Adrenoleukodystrophy. The chain shortening of erucic acid (22:1(n-9)) and adrenic acid (22:4(n-6)) is deficient in neonatal adrenoleukodystrophy and normal in X-linked adrenoleukodistrophy skin fibroblasts. Christensen E, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):79-83

X chromosome inactivation: a hypothesis. McBurney MW. **Bioessays** 1988 Aug-Sep;9(2-3):85-8 (39 ref.)

Gene for selenium-dependent glutathione peroxidase maps to human chromosomes 3, 21 and X. McBride OW, et al. **Biofactors** 1988 Dec;1(4):285-92

Fast and easy detection of mouse sex chimeras using electrophoretic polymorphism of phosphoglycerate kinase-1, an X chromosome-linked enzyme. Nakayama H, et al. **Biol Reprod** 1988 Nov;39(4):923-7

Hereditary X-linked thrombocytopenia maps to the same chromosomal region as the Wiskott-Aldrich syndrome. Donnér M, et al. **Blood** 1988 Dec;72(6):1849-53

X-linked dominant control of F-cells in normal adult life: characterization of the Swiss type as hereditary persistence of fetal hemoglobin regulated dominantly by gene(s) on X chromosome. Miyoshi K, et al. **Blood** 1988 Dec; 72(6):1854-60 (36 ref.)

Genes on the X and Y chromosomes controlling sex. Ferguson-Smith MA. **BMJ** 1988 Sep 10;297(6649):635-6 (17 ref.)

Low levels of intestinal calbindin-D28K in X-linked hypophosphatemic mice. Tohmon M, et al. **Bone Miner** 1989 Apr;6(1):15-23

X-linked ichthyosis and ichthyosis vulgaris: comparison of their clinical features based on biochemical analysis. Okano M, et al. **Br J Dermatol** 1988 Dec;119(6):777-83

Ocular findings and skin histology in a group of patients with X-linked ichthyosis. Piccirillo A, et al. **Br J Dermatol** 1988 Aug;119(2):185-8

The application of X-chromosome gene probes to the diagnosis of myeloproliferative disease. Lucas GS, et al. **Br J Haematol** 1989 Aug;72(4):530-3

Simple tests implied by a genetic X-linked model. Thomas H. **Br J Math Stat Psychol** 1988 Nov;41 (Pt 2):179-91

Autosomal juvenile retinoschisis without foveal retinoschisis. Yamaguchi K, et al. **Br J Ophthalmol** 1989 Jun;73(6):470-3

Translocation (X;19) with involvement of the inactive X chromosome in oligoblastic granulocytic leukemia. Gibas Z, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):237-42

Triple X chromosome constitution and acute nonlymphocytic leukemia. Ozkaynak MF, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):1-3

Two structural genes on different chromosomes are required for encoding the major subunit of human red cell glucose-6-phosphate dehydrogenase. Kanno H, et al. **Cell** 1989 Aug 11;58(3):595-606

The human X-linked steroid sulfatase gene and a Y-encoded pseudogene: evidence for an inversion of the Y chromosome during primate evolution. Yen PH, et al. **Cell** 1988 Dec 23;55(6):1123-35

Sex chromosome pairing patterns in male mice of novel Sxr genotypes. Tease C, et al. **Chromosoma** 1989 Mar; 97(5):390-5

X-linked cleft palate and ankyloglossia in an Icelandic family. Björnsson A, et al. **Cleft Palate J** 1989 Jan;26(1):3-8

Diagnosis of recessive X-linked ichthyosis: quantitative HPLC/mass spectrometric analysis of plasma for cholesterol sulfate. Shackleton CH, et al. **Clin Chem** 1989 Sep;35(9):1906-10

A 45,X/69,XXY fetus. Betts DR, et al. **Clin Genet** 1989 Apr; 35(4):285-8

The 49,XXXXY syndrome. Clinical and psychological follow-up data. Borghgraef M, et al. **Clin Genet** 1988 Jun; 33(6):429-34

Non-allelic mutations in X-linked retinitis pigmentosa. Chen JD, et al. **Clin Genet** 1989 May;35(5):338-42

X-linked recessive inheritance of an orofaciodigital syndrome with partial expression in females and survival of affected males. Edwards M, et al. **Clin Genet** 1988 Nov;34(5):325-32

Emery-Dreifuss syndrome and X-linked muscular dystrophy with contractures: evidence for homogeneity. Goldblatt J, et al. **Clin Genet** 1989 Jan;35(1):1-4

X-linked spastic paraplegia: evidence for homogeneity with a variable phenotype. Goldblatt J, et al. **Clin Genet** 1989 Feb;35(2):116-20

A linkage study of the locus for X-linked Charcot-Marie-Tooth disease. Goonewardena P, et al. **Clin Genet** 1988 Jun;33(6):435-40

Molecular Xp deletion in a male: suggestion of a locus for hypogonadotropic hypogonadism distal to the glycerol kinase and adrenal hypoplasia loci. Goonewardena P, et al. **Clin Genet** 1989 Jan;35(1):5-12

Linkage in a family with X-linked Charcot-Marie-Tooth disease. Haites N, et al. **Clin Genet** 1989 Jun;35(6):399-403

Molecular deletions in the Duchenne/Becker muscular dystrophy gene. Hart KA, et al. **Clin Genet** 1989 Apr; 35(4):251-60 (31 ref.)

Chromosome studies and fertility treatment in women with ovarian failure. Hens L, et al. **Clin Genet** 1989 Aug; 36(2):81-91

Mosaic 47,XY,+8/48,XXYY in a mentally non-retarded man with phenotypical and neurological abnormalities. Hoovers JM, et al. **Clin Genet** 1989 Jun;35(6):446-9

Female haemophilia A in a family with seeming extreme bidirectional lyonization tendency: abnormal premature X-chromosome inactivation? Ingerslev J, et al. **Clin Genet** 1989 Jan;35(1):41-8

Aarskog syndrome in Hungary [letter] Kiss P. **Clin Genet** 1989 Jul;36(1):73-4

X-linked olivopontocerebellar atrophy. Lutz R, et al. **Clin Genet** 1989 Jun;35(6):417-22 (11 ref.)

Familial occurrence of isodicentric X chromosomes with different breakpoints. Midro AT, et al. **Clin Genet** 1988 Sep;34(3):153-60

An idic(X) leads to a del(X) or vice versa? [letter] Rivera H. **Clin Genet** 1989 May;35(5):390-1

X-linked hypohidrotic ectodermal dysplasia and t(X;12) in a female. Turleau C, et al. **Clin Genet** 1989 Jun;35(6):462-6

X-linked severe combined immunodeficiency in the dog. Jezyk PF, et al. **Clin Immunol Immunopathol** 1989 Aug; 52(2):173-89

Fragile X syndrome: a major cause of X-linked mental retardation. Butler MG. **Compr Ther** 1988 Jul;14(7):3-7 (10 ref.)

Update: Duchenne muscular dystrophy. Fenichel GM, et al. **Compr Ther** 1988 Jul;14(7):29-32 (10 ref.)

Alport's syndrome: localization of the X-chromosomal gene and consequences for future investigations. Brunner H, et al. **Contrib Nephrol** 1988;67:200-5

Mapping of 12 translocation breakpoints in the Xp21 region with respect to the locus for Duchenne muscular dystrophy. Boyd Y, et al. **Cytogenet Cell Genet** 1988; 48(1):28-34

Localization of the human X-linked gene for chronic granulomatous disease to the mouse X chromosome: implications for X-chromosome evolution. Brockdorff N, et al. **Cytogenet Cell Genet** 1988;48(2):124-5

Report of the committee on the genetic constitution of the X and Y chromosomes. Davies KE, et al. **Cytogenet Cell Genet** 1987;46(1-4):277-315

Report of the committee on the genetic constitution of the X chromosome. Mandel JL, et al. **Cytogenet Cell Genet** 1988;49(1-3):107-28

Meiotic analysis of two human reciprocal X-autosome translocations. Quack B, et al. **Cytogenet Cell Genet** 1988; 48(1):43-7

Gene sequences coding for S-adenosylmethionine decarboxylase are present on human chromosome 6 and the X and are not amplified in colon neoplasia. Radford DM, et al. **Cytogenet Cell Genet** 1988;49(4):285-8

Subchromosomal localization and order of GLA, PGK1, HPRT, and G6PD loci on the X chromosome of the American mink (Mustela vison). Zhdanova NS, et al. **Cytogenet Cell Genet** 1988;48(1):2-5

Lethal course of X-linked dominant chondrodysplasia punctata in a male newborn. De Raeve L, et al. **Dermatologica** 1989;178(3):167-70

Mapping the mouse X chromosome: possible symmetry in the location of a family of sequences on the mouse X and Y chromosomes. Avner P, et al. **Development** 1987;101 Suppl:107-16

Telomeres of the human X and Y chromosomes. Cooke HJ. **Development** 1987;101 Suppl:101-6

Two maternally derived X chromosomes contribute to parthenogenetic inviability. Mann JR, et al. **Development** 1988 Sep;104(1):129-36

Normal and abnormal interchanges between the human X and Y chromosomes. Weissenbach J, et al. **Development** 1987;101 Suppl:67-74

Requirements for X-linked zygotic gene activity during cellularization of early Drosophila embryos. Wieschaus E, et al. **Development** 1988 Nov;104(3):483-93

Immunodeficiency disease genes on the X chromosome. Mensink EJ, et al. **Dis Markers** 1987 Sep;5(3):129-40 (56 ref.)

Novel approaches for cloning human genes: the chronic granulomatous disease (CGD). Royer-Pokora B. **Dis Markers** 1987 Mar;5(1):57-8

X-linked cone dystrophy. Verdoorn C, et al. **Doc Ophthalmol** 1988 Oct-Nov;70(2-3):195-8

Localization of the mdx mutation within the mouse dystrophin gene. Ryder-Cook AS, et al. **EMBO J** 1988 Oct;7(10):3017-21

Molecular cloning of the cDNA of human X chromosomal gene (CCG1) which complements the temperature-sensitive G1 mutants, tsBN462 and ts13, of the BHK cell line. Sekiguchi T, et al. **EMBO J** 1988 Jun; 7(6):1683-7

X-linked recessive ichthyosis. Enzymatic diagnosis of affected males and female carriers. Piraud M, et al. **Enzyme** 1989;41(4):227-34

New linkage findings in affective disorders. Gershon ES. **Eur Arch Psychiatry Neurol Sci** 1989;238(5-6):247-50

Autosomal dominant Emery-Dreifuss syndrome: evidence of a neurogenic variant of the disease. Witt TN, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(4):230-6

A family with X-linked ichthyosis and hypogonadism. Pike MG, et al. **Eur J Pediatr** 1989 Feb;148(5):442-4

Nonhistone nuclear proteins specific to certain mouse embryonal carcinoma clones having an inactive X chromosome. Abe K, et al. **Exp Cell Res** 1988 Dec; 179(2):590-4

Frequent derepression of G6PD and HPRT on the marsupial inactive X chromosome associated with cell proliferation in vitro. Migeon BR, et al. **Exp Cell Res** 1989 Jun; 182(2):597-609

Differences in chromosome A arrangement between Drosophila madeirensis and Drosophila subobscura. Papaceit M, et al. **Experientia** 1989 Mar 15;45(3):310–2

Determining proportions of human X and Y sperm with a recombinant deoxyribonucleic acid probe carrying a homologous sequence of sex chromosomes. Sarkar S. **Fertil Steril** 1989 Jan;51(1):167–9

Flow sorting of X and Y chromosome–bearing mammalian sperm: activation and pronuclear development of sorted bull, boar, and ram sperm microinjected into hamster oocytes. Johnson LA, et al. **Gamete Res** 1988 Dec; 21(4):335–43

Flow cytometry of X and Y chromosome–bearing sperm for DNA using an improved preparation method and staining with Hoechst 33342. Johnson LA, et al. **Gamete Res** 1987 Jul;17(3):203–12

Sperm chromosome analysis as a new system to test human X- and Y-sperm separation. Ueda K, et al. **Gamete Res** 1987 Jul;17(3):221–8

Description of X-linkage pedigrees. Risch N. **Genet Epidemiol** 1989;6(1):187–9

Linkage analysis with cohort effects: an application to X-linkage. Van Eerdewegh P. **Genet Epidemiol** 1989; 6(1):271–6

The accumulation of P-elements on the tip of the X chromosome in populations of Drosophila melanogaster. Ajioka JW, et al. **Genet Res** 1989 Feb;53(1):1–6

Age-related reactivation of an X-linked gene close to the inactivation centre in the mouse. Brown S, et al. **Genet Res** 1988 Oct;52(2):151–4

The localization of G6pd, glucose–6–phosphate dehydrogenase, and mdx, muscular dystrophy in the mouse X chromosome. Peters J, et al. **Genet Res** 1988 Dec; 52(3):195–201

Nonhomologous synapsis of the XY during early pachynema in In(X)1H male mice. Ashley T. **Genetics** 1987 Jun 15; 72(2):81–4

Further evidence for early sex chromosome differentiation of anuran species. Iturra P, et al. **Genetics** 1988–89; 78(1):25–31

Gene expression in adult metafemales of Drosophila melanogaster. Birchler JA, et al. **Genetics** 1989 Aug; 122(4):869–79

Recombination between small X chromosome duplications and the X chromosome in Caenorhabditis elegans. Herman RK, et al. **Genetics** 1989 Apr;121(4):723–37

Localization of murine X and autosomal sequences homologous to the human Y located testis–determining region. Mitchell M, et al. **Genetics** 1989 Apr;121(4):803–9

The genetics of postzygotic isolation in the Drosophila virilis group. Orr HA, et al. **Genetics** 1989 Mar;121(3):527–37

Does postzygotic isolation result from improper dosage compensation? Orr HA. **Genetics** 1989 Aug;122(4):891–4

A female sterile screen of the Drosophila melanogaster X chromosome using hybrid dysgenesis: identification and characterization of egg morphology mutants. Orr WC, et al. **Genetics** 1989 Aug;122(4):847–58

Developmental genetics of loci at the base of the X chromosome of Drosophila melanogaster. Perrimon N, et al. **Genetics** 1989 Feb;121(2):313–31

Zygotic lethals with specific maternal effect phenotypes in Drosophila melanogaster. I. Loci on the X chromosome. Perrimon N, et al. **Genetics** 1989 Feb;121(2):333–52

The effect of sequence homozygosity on the frequency of X–chromosomal exchange in Drosophila melanogaster females. Rutherford SL, et al. **Genetics** 1988 Nov; 120(3):725–32

Molecular genetic variation in the centromeric region of the X chromosome in three Drosophila ananassae populations. I. Contrasts between the vermilion and forked loci. Stephan W, et al. **Genetics** 1989 Jan;121(1):89–99

Transposition of the Responder element (Rsp) of the Segregation distorter system (SD) to the X chromosome in Drosophila melanogaster. Walker ES, et al. **Genetics** 1989 May;122(1):81–6

The genetic analysis of distributive segregation in Drosophila melanogaster. I. Isolation and characterization of Aberrant X segregation (Axs), a mutation defective in chromosome partner choice. Zitron AE, et al. **Genetics** 1989 Aug; 122(4):801–21

Toward a physical map of the Xq28 region in man: linking color vision, G6PD, and coagulation factor VIII genes to an X–Y homology region. Arveiler B, et al. **Genomics** 1989 May;4(4):460–71

Isolation and characterization of a family of sequences dispersed on the human X chromosome. Bardoni B, et al. **Genomics** 1988 Jul;3(1):32–8

Mapping of four translocation breakpoints within the Duchenne muscular dystrophy gene. Bodrug SE, et al. **Genomics** 1989 Jan;4(1):101–4

X–chromosome localization of the functional gene for the E1 alpha subunit of the human pyruvate dehydrogenase complex. Brown RM, et al. **Genomics** 1989 Feb;4(2):174–81

Molecular and genetic mapping of the mouse mdx locus. Cavanna JS, et al. **Genomics** 1988 Nov;3(4):337–41

A genetic linkage map of five marker loci in and around the Duchenne muscular dystrophy locus. Chen JD, et al. **Genomics** 1989 Jan;4(1):105–9

Physical fine mapping of the choroideremia locus using Xq21 deletions associated with complex syndromes. Cremers FP, et al. **Genomics** 1989 Jan;4(1):41–6

Localization of G6PD and HPRT to different arms of the X chromosome of the North American marsupial (Didelphis virginiana) by in situ hybridization and deletion mapping: evolutionary significance. Driscoll DJ, et al. **Genomics** 1988 Nov;3(4):308–14

Localization of the gene for classic Alport syndrome. Flinter FA, et al. **Genomics** 1989 Apr;4(3):335–8

Isolation and characterization of a human variable copy number tandem repeat at Xcen–p11.22. Fraser NJ, et al. **Genomics** 1989 Jul;5(1):144–8

Localization of the properdin structural locus to Xp11.23–Xp21.1. Goundis D, et al. **Genomics** 1989 Jul; 5(1):56–60

Three–point linkage analysis using multiple DNA polymorphic markers in families with X–linked nephrogenic diabetes insipidus. Knoers N, et al. **Genomics** 1989 Apr;4(3):434–7

Genetic mapping of the Wiskott–Aldrich syndrome with two highly–linked polymorphic DNA markers. Kwan SP, et al. **Genomics** 1988 Jul;3(1):39–43

Human monoamine oxidase A and B genes map to Xp 11.23 and are deleted in a patient with Norrie disease. Lan NC, et al. **Genomics** 1989 May;4(4):552–9

Human and mouse amelogenin gene loci are on the sex chromosomes. Lau EC, et al. **Genomics** 1989 Feb;4(2):162–8

A primary genetic map of the pericentromeric region of the human X chromosome. Mahtani MM, et al. **Genomics** 1988 May;2(4):294–301

Mapping of Xp21 translocation breakpoints in and around the DMD gene by pulsed field gel electrophoresis. Meitinger T, et al. **Genomics** 1988 Nov;3(4):315–22

Mapping and characterization of an X–linked processed gene related to MYCL1. Morton CC, et al. **Genomics** 1989 Apr; 4(3):367–75

Multilocus molecular mapping of the mouse X chromosome. Mullins LJ, et al. **Genomics** 1988 Oct;3(3):187–94

Norrie disease: linkage analysis using a 4.2–kb RFLP detected by a human ornithine aminotransferase cDNA probe. Ngo JT, et al. **Genomics** 1989 May;4(4):539–45

Important findings regarding the pseudoautosomal region of the human X and Y chromosomes [letter] Ott J. **Genomics** 1988 Jul;3(1):91

Human monoamine oxidase gene (MAOA): chromosome position (Xp21–p11) and DNA polymorphism. Ozelius L, et al. **Genomics** 1988 Jul;3(1):53–8

Genetic and physical mapping of a novel region close to the fragile X site on the human X chromosome. Patterson MN, et al. **Genomics** 1989 May;4(4):570–8

The gene for incontinentia pigmenti is assigned to Xq28. Sefiani A, et al. **Genomics** 1989 Apr;4(3):427–9

X–linked mixed deafness with stapes fixation in a Mauritian kindred: linkage to Xq probe pDP34. Wallis C, et al. **Genomics** 1988 Nov;3(4):299–301

Genetic analysis of X–linked sterility in hybrids between three sibling species of Drosophila. Coyne JA, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):97–106

A case of 45,X/46,X,dic(X)(qter——p22::p22——qter) with Turner's phenotype in a Japanese girl. Takenaka M, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):51–5

Ichthyosis and hypogonadism in two brothers with deletion of the short arm of the X chromosome. Dacou–Voutetakis C, et al. **Horm Res** 1988;30(4–5):173–6; discussion 177

Genetic mapping of four DNA markers (DXS16, DXS43, DXS85, and DXS143) from the p22 region of the human X chromosome. Brown CJ, et al. **Hum Genet** 1988 Nov; 80(3):296–8

The gene for X–linked progressive mixed deafness with perilymphatic gusher during stapes surgery (DFN3) is linked to PGK. Brunner HG, et al. **Hum Genet** 1988 Dec; 80(4):337–40

Preliminary exclusion of an X–linked gene in Leber optic atrophy by linkage analysis. Chen JD, et al. **Hum Genet** 1989 Jun;82(3):203–7

Incontinentia pigmenti and X–autosome translocations. Non–isotopic in situ hybridization with an X–centromere–specific probe (pSV2X5) reveals a possible X–centromeric breakpoint in one of five published cases. Crolla JA, et al. **Hum Genet** 1989 Feb;81(3):269–72

A mosaic 45,X/46,X,r(?) karyotype investigated with X and Y centromere–specific probes using a non–autoradiographic in situ hybridization technique. Crolla JA, et al. **Hum Genet** 1988 Dec;81(1):81–4

Recombination between DXS7, DXS84 and a rare form of X–linked retinitis pigmentosa (McK–30320). Curtis D, et al. **Hum Genet** 1989 Jan;81(2):200–2

Gene of X–chromosomal congenital stationary night blindness is closely linked to DXS7 on Xp. Gal A, et al. **Hum Genet** 1989 Mar;81(4):315–8

Genetic mapping of anhidrotic ectodermal dysplasia: DXS159, a closely linked proximal marker. Hanauer A, et al. **Hum Genet** 1988 Oct;80(2):177–80

Molecular deletion patterns in Duchenne and Becker type muscular dystrophy. Liechti–Gallati S, et al. **Hum Genet** 1989 Mar;81(4):343–8

Brachytelephalangic chondrodysplasia punctata: a possible X–linked recessive form. Maroteaux P. **Hum Genet** 1989 May;82(2):167–70

Linkage of X–linked retinitis pigmentosa to the hypervariable DNA marker M27 beta (DXS255). Meitinger T, et al. **Hum Genet** 1989 Feb;81(3):283–6

Patterns of exon deletions in Duchenne and Becker muscular dystrophy. Read AP, et al. **Hum Genet** 1988 Oct; 80(2):152–6

Investigation of the "variable spreading" of X inactivation into a translocated autosome. Schanz S, et al. **Hum Genet** 1989 Jun;82(3):244–8

Localization of Y chromosome sequences and X chromosomal replication studies in XX males. Schempp W, et al. **Hum Genet** 1989 Jan;81(2):144–8

Duplication of an Xp segment that includes the ZFX locus causes sex inversion in man. Scherer G, et al. **Hum Genet** 1989 Feb;81(3):291–4

Analysis of two 47,XXX males reveals X–Y interchange and maternal or paternal nondisjunction. Scherer G, et al. **Hum Genet** 1989 Feb;81(3):247–51

How does inactivation change timing of replication in the human X chromosome? Schwemmle S, et al. **Hum Genet** 1989 Aug;83(1):26–32

Linkage studies do not confirm the cytogenetic location of incontinentia pigmenti on Xp11. Sefiani A, et al. **Hum Genet** 1988 Nov;80(3):282–6

X–chromatin fluorescence in maternal blood [letter] Selypes A, et al. **Hum Genet** 1989 Jun;82(3):303

Mapping the mutation causing the X–linked lymphoproliferative syndrome in relation to restriction fragment length polymorphisms on Xq. Skare JC, et al. **Hum Genet** 1989 Jul;82(4):349–53

Linkage analysis of seven kindreds with the X–linked lymphoproliferative syndrome (XLP) confirms that the XLP locus is near DXS42 and DXS37. Skare JC, et al. **Hum Genet** 1989 Jul;82(4):354–8

Linkage studies in X–linked Alport's syndrome. Szpiro–Tapia S, et al. **Hum Genet** 1988 Dec;81(1):85–7

Spondyloepiphyseal dysplasia tarda: linkage with genetic markers from the distal short arm of the X chromosome. Szpiro–Tapia S, et al. **Hum Genet** 1988 Dec;81(1):61–3

Induction of the fragile X on BrdU–substituted chromosomes with direct visualization of sister chromatid exchanges on banded chromosomes. Tommerup N. **Hum Genet** 1989 Mar; 81(4):377–81

Study of a family with a fragile site of the X chromosome at Xq27–28 without mental retardation. Voelckel MA, et al. **Hum Genet** 1989 Mar;81(4):353–7

X–Y crossing over in the chimpanzee. Weber B, et al. **Hum Genet** 1988 Nov;80(3):301–3

Regional localization of the TIMP gene on the human X chromosome. Extension of a conserved synteny and linkage group on proximal Xp. Willard HF, et al. **Hum Genet** 1989 Feb;81(3):234–8

MASA syndrome: further clinical delineation and chromosomal localisation. Winter RM, et al. **Hum Genet** 1989 Jul;82(4):367–70

Restriction endonuclease mapping of six novel deletions of the factor VIII gene in hemophilia A. Youssoufian H, et al. **Hum Genet** 1988 Oct;80(2):143–8

X–linked lymphoproliferative syndrome provides clues to the pathogenesis of Epstein–Barr virus–induced lymphomagenesis. Purtilo DT, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:149–58

Oscillatory potentials of X–linked carriers of congenital stationary night blindness. Young RS, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):806–12

Schizophrenia in a 48,XXXX child. O'Connor MJ, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Jul;27(4):474–8

X–linked dominant Conradi–Hünermann syndrome presenting as congenital erythroderma. Kalter DC, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):248–56

Parathyroid hormone sensitivity in familial X–linked hypophosphatemic rickets. McElduff A, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):386–9

Interferon–gamma in a family with X–linked lymphoproliferative syndrome with acute Epstein–Barr virus infection. Okano M, et al. **J Clin Immunol** 1989 Jan; 9(1):48–54

Nonrandom X chromosome DNA methylation patterns in hemophiliac females. Nisen PD, et al. **J Clin Invest** 1989 Apr;83(4):1400–3

Correction of the molecular defect in B lymphocytes from X–linked agammaglobulinemia by cell fusion. Schwaber J, et al. **J Clin Invest** 1988 Oct;82(4):1471–6

Clonal diversity in the B cell repertoire of patients with X–linked agammaglobulinemia. Anker R, et al. **J Exp Med** 1989 Jun 1;169(6):2109–19

Canine muscular dystrophy: confirmation of X–linked inheritance. Cooper BJ, et al. **J Hered** 1988 Nov–Dec; 79(6):405–8

Inbreeding, coancestry, and covariance between relatives for X–chromosomal loci. Grossman M, et al. **J Hered** 1989 Mar–Apr;80(2):137–42

A monoclonal antibody, R1, and a polyclonal serum, S10, recognize the same molecules: a novel use of DNA transfectants. Banting G, et al. **J Immunogenet** 1988 Oct–Dec;15(5–6):257–65

Low natural antibody and low in vivo tumor resistance, in xid–bearing B–cell deficient mice. Chow DA, et al. **J Immunol** 1989 May 15;142(10):3702–6

Polarizing inclusions in some organs of children with congenital peroxisomal diseases (Zellweger's, Refsum's, chondrodysplasia punctata (rhizomelic form), X–linked adrenoleukodystrophy). Kerckaert I, et al. **J Inherited Metab Dis** 1988;11(4):372–86

DNA deletions and recombinations in the gene locus of X–linked muscular dystrophies. Shimmoto M, et al. **J Inherited Metab Dis** 1988;11(3):324–8

Peroxisomal integral membrane proteins in livers of patients with Zellweger syndrome, infantile Refsum's disease and X-linked adrenoleukodystrophy. Small GM, et al. **J Inherited Metab Dis** 1988;11(4):358–71

X-linked congenital adrenal hypoplasia: proposal pathogenesis. Preeyasombat C, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:164–73

A simple method for calculating risks before DNA analysis. Jeanpierre M. **J Med Genet** 1988 Oct;25(10):663–8

X linked or autosomal recessive? A new approach to an old problem. Read AP. **J Med Genet** 1989 May;26(5):305–8

Further evidence localising the gene for Hunter's syndrome to the distal region of the X chromosome long arm. Roberts SH, et al. **J Med Genet** 1989 May;26(5):309–13

Late replication studies and esterase D levels in a case of unbalanced X;autosome translocation, 46,X,t(X;13)(q27;q12). Romain DR, et al. **J Med Genet** 1988 Oct;25(10):716–8

X linked mental retardation: a family with a separate syndrome? Thompson EM, et al. **J Med Genet** 1989 Jun; 26(6):373–8

Canine X-linked muscular dystrophy. An animal model of Duchenne muscular dystrophy: clinical studies. Valentine BA, et al. **J Neurol Sci** 1988 Dec;88(1–3):69–81

Familial XX chromosomal maleness does not arise from a Y chromosomal translocation. Ostrer H, et al. **J Pediatr** 1989 Jun;114(6):977–82

Improved definition of carrier status in X-linked hypohidrotic ectodermal dysplasia by use of restriction fragment length polymorphism-based linkage analysis. Zonana J, et al. **J Pediatr** 1989 Mar;114(3):392–9

Genetic counseling in X-linked retinitis pigmentosa. Anandakrishnan I, et al. **J Pediatr Ophthalmol Strabismus** 1989 May–Jun; 26(3):140–5

X-chromosomal monosomy (77,X0) in a Doberman Pinscher with gonadal dysgenesis. Smith FW Jr, et al. **J Vet Intern Med** 1989 Apr–Jun;3(2):90–5

Familial X;Y translocation in a malformed male infant and his mother. Ohdo S, et al. **Jinrui Idengaku Zasshi** 1988 Sep;33(3):377–84

Restriction fragment length polymorphisms on the short arm of X chromosome among the Japanese population. Shimmoto M, et al. **Jinrui Idengaku Zasshi** 1988 Sep; 33(3):333–8

Restriction fragment length polymorphisms on the q24–q28 region of X chromosome among Japanese population. Taga T, et al. **Jinrui Idengaku Zasshi** 1989 Jun;34(2):123–8

Construction of mouse A9 clones containing a single human chromosome (X/autosome translocation) via micro-cell fusion. Koi M, et al. **Jpn J Cancer Res** 1989 Feb;80(2):122–5

Localization of the gene for X-linked Alport's syndrome. Brunner H, et al. **Kidney Int** 1988 Oct;34(4):507–10

Xp21 DNA probe in diagnosis of muscular dystrophy and spinal muscular atrophy [letter] Clarke A, et al. **Lancet** 1989 Feb 25;1(8635):443

Detecting maternal cell contamination in prenatal diagnosis [letter; comment] Craig I, et al. **Lancet** 1989 May 13; 1(8646):1074–5. **Comment on:** Lancet 1989 Jan 7;1(8628):1–6

Menkes' disease: a disorder of zinc metabolism? [letter] [see comments] Scheinberg IH, et al. **Lancet** 1989 Mar 18; 1(8638):619. **Comment in:** Lancet 1989 Jun 17;1(8651):1399

Muscular dystrophy or spinal muscular atrophy? [letter] Topaloglu H, et al. **Lancet** 1989 Apr 29;1(8644):960–1

Acute myeloid leukemia: analysis of ras gene mutations and clonality defined by polymorphic X-linked loci. Bartram CR, et al. **Leukemia** 1989 Apr;3(4):247–56

Myeloproliferative disorders: usefulness of X-linked probes in diagnosis. Taylor KM, et al. **Leukemia** 1989 Jun; 3(6):419–22

Ovariectomy abolishes the normalization of femoral mineral content in 40-week-old female X-linked hypophosphatemic mice. Soener RA, et al. **Miner Electrolyte Metab** 1988;14(6):321–31

X-linked chronic granulomatous disease: more than two years later. Orkin SH. **Mol Biol Med** 1989 Feb;6(1):1–5 (19 ref.)

Ribosomal protein S14 is encoded by a pair of highly conserved, adjacent genes on the X chromosome of Drosophila melanogaster. Brown SJ, et al. **Mol Cell Biol** 1988 Oct;8(10):4314–21

Molecular studies on interspersed repetitive and unique sequences in the region of the complementation group uncoordinated on the X chromosome of Drosophila melanogaster. Healy MJ, et al. **Mol Gen Genet** 1988 Jul; 213(1):63–71

Rett syndrome genetic study [letter] Gardner RJ, et al. **N Z Med J** 1988 Dec 14;101(859):833

X-chromosome reactivation and ageing [letter; comment] Holliday R. **Nature** 1989 Jan 26;337(6205):311. **Comment on:** Nature 1988 Sep 1;335(6185):93–6

A female Norway rat, Rattus norvegicus, with X0 sex chromosome constitution. Yong HS, et al. **Naturwissenschaften** 1989 Aug;76(8):387–8

X-linked hypophosphatemia: progress in characterization of genetic and metabolic defects. Kainer G, et al. **Nephron** 1989;51(4):449–53 (40 ref.)

Linkage of X-linked nephrogenic diabetes insipidus with DXS52, a polymorphic DNA marker. Knoers N, et al. **Nephron** 1988;50(3):187–90

Unexpected sex-ratios in families of language/learning-impaired children. Tallal P, et al. **Neuropsychologia** 1989;27(7):987–98

Fast-phase instabilities in normally sighted relatives of congenital nystagmus patients—autosomal dominant and x-chromosome recessive modes of inheritance. Shallo-Hoffmann J, et al. **Neurosurg Rev** 1988;11(2):151–8

Evidence for distinguishable transcripts of the putative testis determining gene (ZFY) and mapping of homologous cDNA sequences to chromosomes X,Y and 9. Affara NA, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):2987–99

CpG islands of the X chromosome are gene associated. Alcalay M, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9527–43

New TaqI RFLPs at the DXS52 (St14) locus in the black population. Barjon P, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2149

Nsi I RFLP at the X-linked chronic granulomatous disease locus (CYBB). Battat L, et al. **Nucleic Acids Res** 1989 May 11;17(9):3619

Pulse-field linkage of the P3, G6pd and Cf-8 genes on the mouse X chromosome: demonstration of synteny at the physical level. Brockdorff N, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1315–26

A polymorphic locus at Xq27–28 detected by the probe U6.2 [DXS304]. Dahl N, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2884

BclI RFLP at the DXS16 locus. de Martinville B, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10949

An EcoRV RFLP detected by probe pX59 [DXS77] Diergaarde PJ, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6755

A probe from an X–Y homology region detects RFLPs in Xq13–q22. Feil RP, et al. **Nucleic Acids Res** 1989 Feb 11; 17(3):1279

An extremely polymorphic locus on the short arm of the human X chromosome with homology to the long arm of the Y chromosome. Knowlton RG, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):423–37

An X-linked DraI RFLP recognized by cpX23 [DXS132] Lafreniere RG, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6754

An MspI polymorphism for the dystrophin intragenic probe J-47. Meng G, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6756

Isolation and mapping of a polymorphic DNA sequence, DXS312, to Xq27——Xq28 [published erratum appears in Nucleic Acids Res 1989 Aug 25;17(16):6774] Mulligan L, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4421

A new TaqI allele at DXS52 frequent in Algeria. Nafa K, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1276

Two 47z [DXYS5] RFLPs on the X and the Y chromosome. Nakahori Y, et al. **Nucleic Acids Res** 1989 Mar 11; 17(5):2152

RFLP for HindIII at the Duchenne muscular dystrophy gene. Prior TW, et al. **Nucleic Acids Res** 1989 Mar 25; 17(6):2370

Detection of translocation breakpoints by pulsed field gel analysis: practical considerations. Reilly DS, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5414

A new polymorphism for the dystrophin intragenic probe P20 [DXS269] using BstX1. Robertson ME, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3327

RFLPs of the gene for the human glycine receptor on the X-chromosome. Siddique T, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1785

L2, a DNA fragment from Xq24–q27, detects an EcoR1 RFLP (HGM9 no. DXS12). Skare J, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4909

A TaqI RFLP in Xq26——qter detected by pX301b [DXS311] Sood R, et al. **Nucleic Acids Res** 1989 Jun 12; 17(11):4422

TaqI RFLP identified by probe VK17A (DXS294) at Xq26. Suthers GK, et al. **Nucleic Acids Res** 1988 Dec 9; 16(23):11389

RFLP for Duchenne muscular dystrophy cDNA clone 30-2. Walker AP, et al. **Nucleic Acids Res** 1988 Sep 26; 16(18):9072

XmnI polymorphism of the human STS gene. Wirth B, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3326

Localization of the pKs gene, a raf related sequence on human chromosomes X and 7. Popescu NC, et al. **Oncogene** 1989 Apr;4(4):517–9

Characterization of the translocation between chromosomes X and 18 in human synovial sarcomas. Reeves BR, et al. **Oncogene** 1989 Mar;4(3):373–8

Localization of the X-linked retinitis pigmentosa locus between DXS7 and DXS84 in a family showing tapetal reflex in heterozygotes. Chen JD, et al. **Ophthalmic Paediatr Genet** 1988 Nov;9(3):143–7

Rod and cone dysfunction in carriers of X-linked retinitis pigmentosa. Peachey NS, et al. **Ophthalmology** 1988 May; 95(5):677–85

Oral findings in patients with autosomal dominant hypophosphatemic bone disease and X-linked hypophosphatemia: further evidence that they are different diseases. Schwartz S, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):310–4

X chromosome structural anomalies and primary amenorrhoea. Case report. Re M, et al. **Panminerva Med** 1988 Oct–Dec;30(4):262–5

The syndrome page. X-linked dominant chondrodysplasia punctata (Conradi–Hünermann syndrome). Krafchik BR. **Pediatr Dermatol** 1989 Jun;6(2):150–1

Hypohidrotic ectodermal dysplasia: argument against an autosomal recessive form clinically indistinguishable from X-linked hypohidrotic ectodermal dysplasia (Christ–Siemens–Touraine syndrome). Sybert VP. **Pediatr Dermatol** 1989 Jun;6(2):76–81

Malignant hyperthermia susceptibility in X-linked muscle dystrophies. Heiman-Patterson TD, et al. **Pediatr Neurol** 1986 Nov–Dec;2(6):356–8

Familial X-linked unilateral carpal hypoplasia/dysplasia—a new syndrome. Report of four cases. Kozlowski K, et al. **Pediatr Radiol** 1989;19(4):261–2

47,XXX: what is the prognosis? [published erratum appears in Pediatrics 1989 Feb;83(2):239] Linden MG, et al. **Pediatrics** 1988 Oct;82(4):619–30

Gross and fine motor development in 45,X and 47,XXX girls. Salbenblatt JA, et al. **Pediatrics** 1989 Oct;84(4):678–82

Molecular aspects of sex determination in mice: an alternative model for the origin of the Sxr region. Bishop CE, et al. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1; 322(1208):119–24

Accidental X–Y recombination and the aetiology of XX males and true hermaphrodites. Ferguson-Smith MA, et al. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1; 322(1208):133–44

Aberrant chromosomal sex-determining mechanisms in mammals, with special reference to species with XY females. Fredga K. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1;322(1208):83–95 (101 ref.)

MIC2: a human pseudoautosomal gene. Goodfellow PN, et al. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1; 322(1208):145–54

Somatic and germ-cell sex in mammals. McLaren A. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1;322(1208):3–9 (30 ref.)

Microcephaly, holoprosencephaly, hypokinesia—second report of a new syndrome. Hockey A, et al. **Prenat Diagn** 1988 Nov;8(9):683–6

Recovery of induced mutations for X chromosome-linked muscular dystrophy in mice. Chapman VM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1292–6

Molecular patterns of X chromosome-linked color vision genes among 134 men of European ancestry. Drummond-Borg M, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):983–7

Physical mapping of complex genomes by cosmid multiplex analysis. Evans GA, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5030–4

Scanning detection of mutations in human ornithine transcarbamoylase by chemical mismatch cleavage. Grompe M, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5888–92

Exchange of terminal portions of X- and Y-chromosomal short arms in human XY females. Levilliers J, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2296–300

Intrachromosomal rearrangements mediated by hobo transposons in Drosophila melanogaster. Lim JK. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9153–7

Yeast artificial chromosomes with 200- to 800-kilobase inserts of human DNA containing HLA, V kappa, 5S, and Xq24–Xq28 sequences. Little RD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1598–602

Divergent disease patterns in granulocyte-macrophage colony-stimulating factor transgenic mice associated with different transgene insertion sites. Metcalf D, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7767–71

Rapid screening of a human genomic library in yeast artificial chromosomes for single-copy sequences. Traver CN, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5898–902

Inactive X chromosome has the highest concentration of unmethylated Hha I sites. Viegas-Pequignot E, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7657–60

Clinical and molecular studies in Duchenne muscular dystrophy. Emery AE. **Prog Clin Biol Res** 1989;306:15–28 (40 ref.)

Gene mapping and the muscular dystrophies. Harper PS. **Prog Clin Biol Res** 1989;306:29–49 (41 ref.)

Linkage analyses in families with nephrogenic diabetes insipidus. Knoers NV, et al. **Prog Clin Biol Res** 1989; 305:149–55

Movement of the X chromosome in epilepsy. Borden J, et al. **Science** 1988 Dec 23;242(4886):1687–91

Microinjected DNA from the X chromosome affects sex determination in Caenorhabditis elegans. McCoubrey WK, et al. **Science** 1988 Nov 25;242(4882):1146–51

Frame-shift deletions in patients with Duchenne and Becker muscular dystrophy. Malhotra SB, et al. **Science** 1988 Nov 4;242(4879):755–9

elk, tissue-specific ets-related genes on chromosomes X and 14 near translocation breakpoints. Rao VN, et al. **Science** 1989 Apr 7;244(4900):66–70

X-linked hypophosphatemia. Meyer RA Jr, et al. **Semin Nephrol** 1989 Mar;9(1):56–61 (58 ref.)

Gene on short arm of human X chromosome complements murine tsA1S9 DNA synthesis mutation. Brown CJ, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):173–8

Regional localization of CCG1 gene which complements hamster cell cycle mutation BN462 to Xq11–Xq13. Brown CJ, et al. **Somat Cell Mol Genet** 1989 Jan;15(1):93–6

Chromosomal assignments of human 27-kDa heat shock protein gene family. McGuire SE, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):167–71

X-chromosome inactivation in cultured cells from human chorionic villi. Mohandas TK, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):131–6

A–11: cell type–specific and single–active–X transcription controls of newly found gene in cultured human cells. Nadon N, et al. **Somat Cell Mol Genet** 1988 Nov; 14(6):541–52

Genetic analysis of tumorigenesis: XXXII. Localization of constitutionally amplified KRAS sequences to Chinese hamster chromosomes X and Y by in situ hybridization. Stenman G, et al. **Somat Cell Mol Genet** 1988 Nov; 14(6):639–44

Localization of human phosphoribosylpyrophosphate synthetase subunit I and II genes (PRPS1 and PRPS2) to different regions of the X chromosome and assignment of two PRPS1–related genes to autosomes. Taira M, et al. **Somat Cell Mol Genet** 1989 Jan;15(1):29–37

DNA binding factors for the CpG–rich island containing the promoter of the human X–linked PGK gene. Yang TP, et al. **Somat Cell Mol Genet** 1988 Sep;14(5):461–72

An intersex horse with X chromosome trisomy. Moreno–Millan M, et al. **Vet Rec** 1989 Feb 18;124(7):169–70

[Identification of the short arm of the sex chromosome of the polytene chromosomes of the salivary gland of Anopheles sinensis] Li BW, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):118–20 (Eng. Abstr.) **(Chi)**

[Study on RFLPs of DX13/BgI II in Chinese and its application on linkage analysis of hemophilia A] Shen Y. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):389–92 (Eng. Abstr.) **(Chi)**

[Heritable X–chromosome disease] de la Chapelle A. **Duodecim** 1988;104(22):1774–86 (28 ref.) **(Fin)**

[DNA diagnosis of muscular dystrophies] Lindlöf M, et al. **Duodecim** 1988;104(22):1787–95 (25 ref.) **(Fin)**

[Detection of the cause of genetic fault in Duchenne's dystrophy] Palotie L, et al. **Duodecim** 1988;104(20):1588–96 (26 ref.) **(Fin)**

[X–linked diseases and carrier detection] Kaplan J. **Ann Biol Clin (Paris)** 1988;46(6):402–5 (Eng. Abstr.) **(Fre)**

[Effect of temperature on the expression of bobbed mutations in Drosophila melanogaster] Dardour Z, et al. **C R Soc Biol (Paris)** 1988;182(4):382–90 (Eng. Abstr.) **(Fre)**

[Prenatal diagnosis of X–linked adrenal hypoplasia associated with glycerol kinase deficiency] Malpuech G, et al. **J Genet Hum** 1989 Jun;37(2):155–62 (Eng. Abstr.) **(Fre)**

[X maternal mosaicism and genetic counseling] Nivelon–Chevallier A, et al. **J Genet Hum** 1988 Aug; 36(4):331–6 (Eng. Abstr.) **(Fre)**

[Detection of triple X syndrome during a familial inquiry for hemophilia A] Plaisancie H, et al. **J Genet Hum** 1989 Jun;37(2):149–53 (Eng. Abstr.) **(Fre)**

[Lethal polymalformative syndrome with 13q deletion secondary to a maternal X; 13 translocation] Vittu G, et al. **J Genet Hum** 1989 Jun;37(2):141–7 (Eng. Abstr.) **(Fre)**

[Sensory nerve involvement in X–linked bulbospinal amyotrophy (Kennedy syndrome). Contributions of electrophysiologic and histologic data] Penisson–Besnier I, et al. **Neurophysiol Clin** 1989 May;19(2):163–70 (Eng. Abstr.) **(Fre)**

[Emery–Dreifuss disease. A discussion of 2 new cases] Serratrice G, et al. **Rev Med Interne** 1988 Sep–Oct; 9(4):365–8 (17 ref.) (Eng. Abstr.) **(Fre)**

[X–linked bulbo–spinal neuronopathy. Kennedy's syndrome] Serratrice G, et al. **Rev Neurol (Paris)** 1988;144(11):756–8 (Eng. Abstr.) **(Fre)**

[The genetics and molecular genetics of X–chromosomal recessive ichthyosis] Herrmann FH. **Dermatol Monatsschr** 1989;175(4):197–202 (39 ref.) (Eng. Abstr.) **(Ger)**

[Norrie syndrome: identification of carriers by segregation analysis with flanking DNA markers] Körner J, et al. **Fortschr Ophthalmol** 1989;86(1):78–81 (Eng. Abstr.) **(Ger)**

[Recurrent corneal erosion in epidermolysis bullosa simplex Köbner and X–chromosomal ichthyosis] Steuhl KP, et al. **Fortschr Ophthalmol** 1988;85(6):669–71 (Eng. Abstr.) **(Ger)**

[Unbalanced translocation 8/X in a girl] Ickstadt A, et al. **Monatsschr Kinderheilkd** 1989 Apr;137(4):239–42 (Eng. Abstr.) **(Ger)**

[The molecular principles of Duchenne and Becker muscular dystrophy and their genetic diagnosis] Speer A, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):117–20 (15 ref.) **(Ger)**

[An autopsy case of X–linked recesive bulbar–spinal muscular atrophy] Hirayama M, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1131–6 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Duchenne muscular dystrophy in a girl with chromosomal translocation] Werneck LC, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):401–5 (Eng. Abstr.) **(Por)**

[Bone malformations associated with deletion of the long arm of chromosome X] Hurgoiu V, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1988 Oct–Dec; 37(4):373–6 (Eng. Abstr.) **(Rum)**

[Analysis of the causes of abortion] Veropotvelian NP. **Akush Ginekol (Mosk)** 1988 Oct;(10):48–51 (Eng. Abstr.) **(Rus)**

[Influence of the X–chromosome on finger dermatoglyphic features in the Ukrainian population of Podolye] Gal'perina ZZ, et al. **Genetika** 1989 Apr;25(4):720–6 (Eng. Abstr.) **(Rus)**

[Molecular–cytogenetic diagnosis of hereditary diseases associated with diverse anomalies of X chromosome] Vorsanova SG, et al. **Pediatriia** 1989;(1):76–80 **(Rus)**

[Pseudohypertrophic proximal progressive muscular dystrophy with a malignant course manifesting itself in adolescence] Badalian LO, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):113–20 (Eng. Abstr.) **(Rus)**

[X chromosome–linked bulbospinal neuronopathy in adults] Mozolevskiĭ IuV. **Zh Nevropatol Psikhiatr** 1989;89(3):121–3 (Eng. Abstr.) **(Rus)**

[The isochromosome of the long arm of chromosome X as a cause of sterility in women] Srieň S, et al. **Cesk Gynekol** 1988 Nov;53(9):675–9 **(Slo)**

[Penta–X syndrome. Report of a case with 47,XXX/48,XXXX/49,XXXXX mosaicism] Gómez–Valencia L, et al. **Bol Med Hosp Infant Mex** 1989 Jun;46(6):417–21 (19 ref.) (Eng. Abstr.) **(Spa)**

ABNORMALITIES

X–linked progressive cone dystrophy. Clinical characteristics of affected males and female carriers. Jacobson DM, et al. **Ophthalmology** 1989 Jun;96(6):885–95

ANALYSIS

Selection and separation of X– and Y– chromosome–bearing mammalian sperm. Gledhill BL. **Gamete Res** 1988 Jul; 20(3):377–95 (96 ref.)

Attempted sexing of bovine spermatozoa by fractionation on a Percoll density gradient. Upreti GC, et al. **Gamete Res** 1988 May;20(1):83–92

A rare case of de novo structural rearrangement of X chromosome diagnosed by amniocentesis. Carrasco Juan JL, et al. **Prenat Diagn** 1989 Jun;9(6):443–5

Prenatal diagnosis of a fetus with an extra idic(X)(q27). Dallapiccola B, et al. **Prenat Diagn** 1989 Apr;9(4):293–5

[Linkage studies in Emery–Dreifuss muscular dystrophy] Paquis V, et al. **J Genet Hum** 1989 Jun;37(2):127–32 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Nitrilotriacetic acid (NTA) induces aneuploidy in Drosophila and mouse germ–line cells. Costa R, et al. **Environ Mol Mutagen** 1988;12(4):397–407

Somatic cell mutagenesis in Drosophila: recovery of genetic damage in relation to the types of DNA lesions induced in mutationally unstable and stable X–chromosomes. Vogel EW. **Mutat Res** 1989 Mar;211(1):153–70

[Study of the mutagenic effect of various chemical substances on Drosophila] Komissarova LA, et al. **Gig Sanit** 1989 Mar; (3):81–2 **(Rus)**

METABOLISM

5–Azadeoxycytidine induced undercondensation in the giant X chromosomes of Microtus agrestis. Haaf T, et al. **Chromosoma** 1989 Aug;98(2):93–8

PATHOLOGY

XX/XY chimerism encountered during prenatal diagnosis. Freiberg AS, et al. **Prenat Diagn** 1988 Jul;8(6):423–6

PHYSIOLOGY

ZFX has a gene structure similar to ZFY, the putative human sex determinant, and escapes X inactivation. Schneider–Gädicke A, et al. **Cell** 1989 Jun 30;57(7):1247–58

X–chromosome inactivation as a system of gene dosage compensation to regulate gene expression. Lyon MF. **Prog Nucleic Acid Res Mol Biol** 1989;36:119–30 (66 ref.)

Reactivation of hprt on the inactive X chromosome with DNA demethylating agents. Hockey AJ, et al. **Somat Cell Mol Genet** 1989 Sep;15(5):421–34

ULTRASTRUCTURE

Isodicentric X chromosome in myeloproliferative disorders. Temperani P, et al. **Acta Haematol (Basel)** 1989;81(3):152–4

An intronic region within the human factor VIII gene is duplicated within Xq28 and is homologous to the polymorphic locus DXS115 (767). Patterson M, et al. **Am J Hum Genet** 1989 May;44(5):679–85

Complex glycerol kinase deficiency: molecular–genetic, cytogenetic, and clinical studies of five Japanese patients. Matsumoto T, et al. **Am J Med Genet** 1988 Nov; 31(3):603–16 (30 ref.)

Comparison between the molecular characteristics and the potential activity of X and Y nucleolar organizers from various Drosophila melanogaster laboratory lines. Rosenberg–Bourgin M, et al. **Biol Cell** 1988;64(1):3–11

Univalent sex chromosomes in spermatocytes of Sxr–carrying mice. Mahadevaiah S, et al. **Chromosoma** 1988;97(2):145–53

Chromosomally derived sterile mice have a 'fertile' active XY chromatin conformation but no XY body. Richler C, et al. **Chromosoma** 1989 May;97(6):465–74

X chromosome instability associated with familial Turner syndrome. Tyrkus M, et al. **Clin Genet** 1989 Feb; 35(2):111–5

Molecular cytological differentiation of active from inactive X domains in interphase: implications for X chromosome inactivation. Dyer KA, et al. **Cytogenet Cell Genet** 1989; 50(2–3):116–20

Use of an alphoid satellite sequence to locate the X chromosome automatically, with particular reference to identification of the fragile X. Fantes J, et al. **Cytogenet Cell Genet** 1988;48(3):142–7

Karyotype evolution in the bone marrow of a patient with Fanconi anemia: breakpoints in clonal anomalies of this disease. Huret JL, et al. **Cytogenet Cell Genet** 1988; 48(4):224–7

Characterization of an X;X translocation by cytological analysis and in situ hybridization. Raimondi E, et al. **Cytogenet Cell Genet** 1989;50(2–3):123–4

Physical mapping of probes proximal to the fragile X locus (FRAX) confirms the order F9–DXS105 (cX55.7)–DXS98 (4D8)–FRAXA. Sauer SM, et al. **Cytogenet Cell Genet** 1989;50(2–3):172–3

Separation of human X and Y spermatozoa by free–flow electrophoresis. Engelmann U, et al. **Gamete Res** 1988 Feb; 19(2):151–60

Synaptic behaviour and recombination nodules in the human XY pair. Solari AJ. **Genetica** 1988 Sep 30;77(2):149–58

Physical mapping of DXS134 close to the DXS52 locus. Bell MV, et al. **Hum Genet** 1989 Apr;82(1):27–30

Assignment of anonymous DNA probes to specific intervals of human chromosomes 16 and X. Hyland VJ, et al. **Hum Genet** 1989 Aug;83(1):61–6

Mapping the human ZFX locus to Xp21.3 by in situ hybridization. Müller G, et al. **Hum Genet** 1989 Apr; 82(1):82–4

A new polymorphic marker very closely linked to DXS52 in the q28 region of the human X chromosome. Vincent A, et al. **Hum Genet** 1989 Apr;82(1):85–6

Identification and characterisation of a small marker chromosome using non–isotopic in situ hybridisation with X and Y specific probes. Crolla JA, et al. **J Med Genet** 1989 Mar;26(3):192–4

Chromatin loop structure of the human X chromosome: relevance to X inactivation and CpG clusters. Beggs AH, et al. **Mol Cell Biol** 1989 Jun;9(6):2322–31

A chromosome study of 6–thioguanine–resistant mutants in T lymphocytes of Hiroshima atomic bomb survivors. Kodama Y, et al. **Mutat Res** 1989 Sep;227(1):31–8

Norrie disease as part of a complex syndrome explained by a submicroscopic deletion of the X chromosome. Bleeker–Wagemakers EM, et al. **Ophthalmic Paediatr Genet** 1988 Nov;9(3):137–42

[The distribution of 4 genes (alpha GAL, PGK–1, HPRT and G6PD) on the X chromosome of the American mink (Mustela vison)] Zhdanova NS, et al. **Genetika** 1988 Aug; 24(8):1448–55 (Eng. Abstr.) **(Rus)**

[The nature of 3 cytogenetic phenomena—delayed spiralization of regions of the metaphase chromosomes, delayed disruption of the telomeric links of chromosomes and the premature division of X–chromosome centromeres] Stobetskiĭ VI. **Tsitologiia** 1988 Oct;30(10):1270–2 (15 ref.) (Eng. Abstr.) **(Rus)**

[A combination of Duchenne's progressive muscular dystrophy with congenital ichthyosis—a deletion or 2 independent gene mutations at Xp21—Xp22?] Badalian LO, et al. **Zh Nevropatol Psikhiatr** 1988;88(8):48–51 (Eng. Abstr.) **(Rus)**

[Study of isochromosomes of the long arms of the X chromosome] Borrego S, et al. **An Esp Pediatr** 1988 Aug; 29(2):117–21 (Eng. Abstr.) **(Spa)**

X INACTIVATION see **DOSAGE COMPENSATION (GENETICS)**

X-RAY, DIAGNOSTIC see **RADIOGRAPHY**

X-RAY DIFFRACTION

Neutron and X–ray diffraction structural analysis of phosphatidylinositol bilayers. McDaniel RV, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):241–6

Orientation of proteolipid protein in myelin: comparison of models with X–ray diffraction measurements. Inouye H, et al. **Dev Neurosci** 1989;11(2):81–9

X–ray studies on crystalline complexes involving amino acids and peptides. XV. Crystal structures of L–lysine D–glutamate and L–lysine D–aspartate monohydrate and the effect of chirality on molecular aggregation. Soman J, et al. **Int J Pept Protein Res** 1988 Nov;32(5):352–60

Crystallization and preliminary X–ray studies of pyridoxal kinase from sheep brain. Arnone A, et al. **J Biol Chem** 1989 Mar 15;264(8):4322–3

Preliminary X–ray crystallography studies of recombinant human interleukin–1 alpha. Purification and structural characterization. Hassell AM, et al. **J Biol Chem** 1989 Mar 25;264(9):4948–52

Purification, crystallization, and preliminary x–ray diffraction studies of the flavoenzyme mercuric ion reductase from Bacillus sp. strain RC607. Moore MJ, et al. **J Biol Chem** 1989 Aug 25;264(24):14386–8

X–ray diffraction analyses of crystals of rat liver NAD(P)H:(quinone–acceptor) oxidoreductase containing cibacron blue. Ysern X, et al. **J Biol Chem** 1989 May 15; 264(14):7765–7

Crystallographic studies and semi–empirical MNDO calculations on quisqualic acid and its analogues: systems

containing unusual pyramidal heterocyclic ring nitrogens. Jackson DE, et al. **J Comput Aided Mol Des** 1989 Jan; 2(4):321–8

Public access to X-ray diffraction data [letter] Richards FM. **J Comput Aided Mol Des** 1988 Apr;2(1):3–5

Electron diffraction of synthetic polymers: the model compound approach to polymer structure. Brisse F. **J Electron Microsc Tech** 1989 Apr;11(4):272–9

Observation of microdiffraction patterns with a dedicated STEM instrument. Cowley JM, et al. **J Electron Microsc Tech** 1989 Feb;11(2):143–54 (36 ref.)

Electron diffraction and diffraction contrast imaging of thin organic films. Hui SW. **J Electron Microsc Tech** 1989 Apr; 11(4):286–97

Interpretation of electron diffraction data from organic microcrystals: a theoretical perspective. Moss B. **J Electron Microsc Tech** 1989 Apr;11(4):245–50

Standardless EDS analysis of bulk and thin specimens. Wu ZQ. **J Electron Microsc Tech** 1987 Dec;7(4):323–9

Comparison of the high-resolution structures of the alpha-amylase inhibitor tendamistat determined by nuclear magnetic resonance in solution and by X-ray diffraction in single crystals. Billeter M, et al. **J Mol Biol** 1989 Apr 20;206(4):677–87

Solution of the phase problem in the X-ray diffraction method for proteins with the nuclear magnetic resonance solution structure as initial model. Patterson search and refinement for the alpha-amylase inhibitor tendamistat. Braun W, et al. **J Mol Biol** 1989 Apr 20;206(4):669–76

Rapid calculation of the solution scattering profile from a macromolecule of known structure. Lattman EE. **Proteins** 1989;5(2):149–55

X-ray standing waves: a molecular yardstick for biological membranes. Bedzyk MJ, et al. **Science** 1988 Sep 30; 241(4874):1788–91

X-ray crystallography and the spectroscopic imperative: the story of the [3Fe-4S] clusters. George GN, et al. **Trends Biochem Sci** 1988 Oct;13(10):369–70 (22 ref.)

INSTRUMENTATION

Time-resolved macromolecular crystallography. Moffat K. **Annu Rev Biophys Biophys Chem** 1989;18:309–32 (56 ref.)

METHODS

Electron diffraction identification of structure types of martensite in Cu-Zn-Al alloys. Wang RH, et al. **J Electron Microsc Tech** 1987 Dec;7(4):293–300

Microdiffraction and analysis. Zhu J. **J Electron Microsc Tech** 1987 Dec;7(4):313–7

Application of convergent beam electron diffraction in the structural study of high-temperature superconducting oxides. Zou XD, et al. **J Electron Microsc Tech** 1987 Dec; 7(4):269–75

Crystallographic refinement by simulated annealing. Application to a 2.8 A resolution structure of aspartate aminotransferase. Brünger AT. **J Mol Biol** 1988 Oct 5; 203(3):803–16

Protein structure. Method in MADness [news] Moffat K. **Nature** 1988 Dec 1;336(6198):422–3

[Refinement of the methods of diffractometric analysis in relation to the preparation surface exposed to X rays] Maddalon G, et al. **Med Lav** 1989 Jan-Feb;80(1):78–89 (Eng. Abstr.) **(Ita)**

X-RAY EMISSION SPECTROMETRY see **SPECTROMETRY, X-RAY EMISSION**

X-RAY EMISSION SPECTROMETRY, ELECTRON MICROSCOPIC see **ELECTRON PROBE MICROANALYSIS**

X-RAY EMISSION SPECTROMETRY, ELECTRON PROBE see **ELECTRON PROBE MICROANALYSIS**

X-RAY FILM

Mammographic film-processor temperature, development time, and chemistry: effect on dose, contrast, and noise. Kimme-Smith C, et al. **AJR** 1989 Jan;152(1):35–40

Quantitative evaluation by computer-based video densitometry of film response to different isotopes and fluorographic treatments. Rulli RD. **Anal Biochem** 1988 Nov 15;175(1):145–53

A comparison of the accuracy of cephalometric landmark location between two screen/film combinations. Stirrups DR. **Angle Orthod** 1989 Fall;59(3):211–5

Comparison of Kodak D-speed and E-speed x-ray film in detection of proximal caries. Waggoner WF, et al. **ASDC J Dent Child** 1988 Nov-Dec;55(6):459–62

Current Note No. 68. Radiographic processing. Keur JJ. **Aust Dent J** 1988 Jun;33(3):242

Instant radiographs [letter] Bairstow AG. **Br Dent J** 1989 Jun 10;166(11):399

Films, screens and cassettes for mammography [letter] Law J, et al. **Br J Radiol** 1989 Jun;62(738):565

Film processing for mammography. Law J, et al. **Br J Radiol** 1988 Oct;61(730):939–42

A comparison of two different T-grain films in rare-earth screens with a standard film-screen combination for intravenous pyelography and bone examinations. Logan H, et al. **Br J Radiol** 1989 Mar;62(735):237–40

Magnification of 100 mm spot film. Nepper-Rasmussen J, et al. **Br J Radiol** 1988 Nov;61(731):1065–6

Three dimensional radiation therapy planning using light projection of CT scans. Ludgate CM. **Clin Radiol** 1989 Jul;40(4):426

Reproducibility and overlapping of bitewing radiographs: comparison of Eggen-bite with Kwik-bite. Möystad A, et al. **Community Dent Oral Epidemiol** 1989 Apr;17(2):65–7

Clinical recommendations for the use of D-speed film, E-speed film, and xeroradiography. Gratt BM, et al. **J Am Dent Assoc** 1988 Oct;117(5):609–14 (40 ref.)

Reproduction of radiographs for 2 X 2 transparencies. Creasey MG, et al. **J Audiov Media Med** 1987 Oct; 10(4):138–41

A photographic technique for the restoration of damaged radiographs. Dailey JC, et al. **J Forensic Sci** 1988 Sep; 33(5):1273–7

The effect of lesion size, restorative material, and film speed on the detection of recurrent caries. Matteson SR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):232–7

Stripes in the abdomen. **Radiol Technol** 1989 Jul-Aug; 60(6):511–2

Radiologic exchange. Patient dose can be reduced by using 105 mm photofluoro spot films instead of the screen-film cassette spot radiographs. Stears JG, et al. **Radiol Technol** 1989 Jul-Aug;60(6):515–6

The case of the intermittent "film fog". Temme JB, et al. **Radiol Technol** 1988 Sep-Oct;60(1):43–4

[Comparative study of screen-film combinations used in conventional radiography] Malchair F, et al. **J Belge Radiol** 1988;71(4):451–6 (Eng. Abstr.) **(Fre)**

[Threshold contrast and the x-ray film] Haverkamp U, et al. **Rontgenpraxis** 1988 Dec;41(12):431–3 **(Ger)**

[Constructions of compensating screen of chest radiography and its clinical applications--evaluation of normal anatomical structures] Higashida Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):293–9 (Eng. Abstr.) **(Jpn)**

[The record-keeping of X-ray films] **Rinsho Hoshasen** 1988 Dec;33(13):1627–41 **(Jpn)**

[Film holder for intraoral dental roentgenography] Shamsiev KhN, et al. **Stomatologiia (Mosk)** 1988 Nov-Dec;67(6):68–9 **(Rus)**

STANDARDS

Films, screens and cassettes for mammography. Law J, et al. **Br J Radiol** 1989 Feb;62(734):163–7

Standardization of tritium-sensitive film for quantitative autoradiography. Baskin DG, et al. **J Histochem Cytochem** 1989 Sep;37(9):1337–44

A response to the consumer [letter] Askin H. **J Oral Maxillofac Surg** 1989 Jul;47(7):773

[A comparison of various methods of x-ray sensitometry] Maslov LA, et al. **Med Tekh** 1988 Sep-Oct;(5):36–41 (Eng. Abstr.) **(Rus)**

X-RAY FILM-SCREEN SYSTEMS see **X-RAY INTENSIFYING SCREENS**

X-RAY FLUORESCENCE SPECTROMETRY see **SPECTROMETRY, X-RAY EMISSION**

X-RAY INTENSIFYING SCREENS

Evaluation of a dual-screen, dual-emulsion mammography system. Jackson VP, et al. **AJR** 1989 Mar;152(3):483–6

A comparison of the accuracy of cephalometric landmark location between two screen/film combinations. Stirrups DR. **Angle Orthod** 1989 Fall;59(3):211–5

A comparison of two different T-grain films in rare-earth screens with a standard film-screen combination for intravenous pyelography and bone examinations. Logan H, et al. **Br J Radiol** 1989 Mar;62(735):237–40

A new system for port films. Sephton R, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):251–8

Rare earth filters for intraoral radiography: exposure reduction as a function of kV(p) with comparisons of image quality. Kircos LT, et al. **J Am Dent Assoc** 1989 May; 118(5):605–9

Film-screen mammography: comparison of views. Bassett LW, et al. **J Natl Med Assoc** 1989 Apr;81(4):391–4

Comparison of soft-tissue enhanced and conventional cephalometric radiographs. Bunel K, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):804–7

Evaluation of several film/screen combinations for megavoltage radiation therapy treatment field verification. Das IJ, et al. **Med Dosim** 1988;13(2):95–7

Film-screen mammography x-ray tube anodes: molybdenum versus tungsten. Kimme-Smith C, et al. **Med Phys** 1989 Mar-Apr;16(2):279–83

A clinical comparison of image quality and patient exposure reduction in panoramic radiography with heavy metal filtration. Kapa SF, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):750–9

Proximal surface caries detection with direct-exposure and rare earth screen/film imaging. Lundeen RC, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):734–45

The influence of film-screen color sensitivity and type of measurement device on kVp measurements. Lam RW, et al. **Radiol Technol** 1989 Mar-Apr;60(4):319–21

Radiologic exchange. Patient dose can be reduced by using 105 mm photofluoro spot films instead of the screen-film cassette spot radiographs. Stears JG, et al. **Radiol Technol** 1989 Jul-Aug;60(6):515–6

Intraoperative arteriography: comparison of conventional screen-film with photostimulable imaging plate radiographs. Pond GD, et al. **Radiology** 1989 Feb; 170(2):367–70

[Comparative study of screen-film combinations used in conventional radiography] Malchair F, et al. **J Belge Radiol** 1988;71(4):451–6 (Eng. Abstr.) **(Fre)**

[Digital luminescence radiography. A new method of study in thoracic diagnosis at the intensive care unit] Witte G, et al. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):60–4 (16 ref.) (Eng. Abstr.) **(Ger)**

[Digital image intensifier radiography and film-screen combinations in pulmonary nodules] Dölken W, et al. **ROFO** 1989 Aug;151(2):131–7 (Eng. Abstr.) **(Ger)**

[The use of the Daylight System in mammography] Giuseppetti G, et al. **Radiol Med (Torino)** 1989 Jul-Aug; 78(1–2):107–11 (Eng. Abstr.) **(Ita)**

[Optimization of the conditions for image-enhanced radiography of the facial portion of the skull] Arzhantsev AP, et al. **Vestn Rentgenol Radiol** 1988 Nov-Dec;(6):29–34 (Eng. Abstr.) **(Rus)**

ECONOMICS

Rare earth screens: prevention of radiogenic cancers versus local budgets [letter] Matthews IP, et al. **Clin Radiol** 1988 Jul;39(4):464

[Roentgen diagnosis: luminescent film instead of standard film? A new technic in clinical use is justified—the problem is the price of the peripheral instruments] Schwing C. **Fortschr Med** 1988 Jun 20;106(18):74–5 **(Ger)**

STANDARDS

Films, screens and cassettes for mammography. Law J, et al. **Br J Radiol** 1989 Feb;62(734):163–7

[Sensitivity and dosage requirements of film-screen combinations] von Volkmann T. **Rontgenpraxis** 1988 Aug; 41(8):265–70 **(Ger)**

[Roentgenologic converters for medical radioscopy] Gusev EA, et al. **Med Tekh** 1989 Jan-Feb;(1):3–7 (Eng. Abstr.) **(Rus)**

X-RAY MICROANALYSIS, ELECTRON MICROSCOPIC see **ELECTRON PROBE MICROANALYSIS**

X-RAY MICROANALYSIS, ELECTRON PROBE see **ELECTRON PROBE MICROANALYSIS**

X-RAY THERAPY see under **RADIOTHERAPY**

X-RAY TOMOGRAPHY see **TOMOGRAPHY, X-RAY**

X-RAY TOMOGRAPHY, COMPUTED see **TOMOGRAPHY, X-RAY COMPUTED**

X-RAYS see under **RADIATION, IONIZING**

XANTHENES

Kinetics of calcium binding to fluo-3 determined by stopped-flow fluorescence. Eberhard M, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):309–14

Quantitation of the volume of liquid injected into cells by means of pressure. Minaschek G, et al. **Exp Cell Res** 1989 Aug;183(2):434–42

Identification by flow cytometry of two distinct rhodamine-123-stained mitochondrial populations in rat liver. Lopez-Mediavilla C, et al. **FEBS Lett** 1989 Aug 28; 254(1–2):115–20

Scanning microfluorometric measurement of TRITC-phalloidin labelled F-actin. Dependence of F-actin content on density of normal and transformed cells. Bereiter-Hahn J, et al. **Histochemistry** 1988;90(4):271–6

Photochemically generated cytosolic calcium pulses and their detection by fluo-3. Kao JP, et al. **J Biol Chem** 1989 May 15;264(14):8179–84

Fluorescent indicators for cytosolic calcium based on rhodamine and fluorescein chromophores. Minta A, et al. **J Biol Chem** 1989 May 15;264(14):8171–8

Size distribution of rhodamine-labelled microspheres retrogradely transported in cultured neurons. Hollinder H, et al. **J Neurosci Methods** 1989 Jul;29(1):1–4

Dynamic aspects of rhodamine dye photosensitization in vitro with an argon-ion laser. Shea CR, et al. **Lasers Surg Med** 1989;9(2):83–9

Intestinal uptake of fluorescent microspheres in young and aged mice. LeFevre ME, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):23–7

[Possibility of spectrophotometric registration of conformation changes of polynucleotides in the system poly(A:U)-pyronine G] Kruglova EB, et al. **Biofizika** 1988 Sep-Oct;33(5):763–6 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

[Dermatitis caused by bulbar analeptics: mepixanox and theophylline] Bedello PG, et al. **G Ital Dermatol Venereol** 1988 Oct;123(10):517–8 (Eng. Abstr.) **(Ita)**

ANALYSIS

Determination of sterigmatocystin in barley by acetylation and liquid chromatography. Abramson D, et al. **J Assoc Off Anal Chem** 1989 Mar-Apr;72(2):342-4

Identification of xanthene dyes in lipsticks by reversed-phase high-performance liquid chromatography. Gagliardi L, et al. **J Chromatogr** 1988 Sep 2;448(2):296-300

Chromatographic and spectroscopic properties of hemiacetals of aflatoxin and sterigmatocystin metabolites. Orti DL, et al. **J Chromatogr** 1989 Jan 13;462:269-79

BIOSYNTHESIS

Fate of the methyl group during the conversion of sterigmatocystin into O-methylsterigmatocystin and aflatoxin B1 by cell-free preparations of Aspergillus parasiticus. Bhatnagar D, et al. **Biochimie** 1988 Jun; 70(6):743-7

Sterigmatocystin production on complex and defined substrates. Bennett JW, et al. **Mycopathologia** 1989 Jan; 105(1):35-8

[Investigation on sterigmatocystin-producing species of Aspergillus in China] Jia ZZ. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov; 22(6):328-30 (Eng. Abstr.) **(Chi)**

CHEMICAL SYNTHESIS

Analysis of bivariate flow karyotypes. Dean PN, et al. **Cytometry** 1989 Mar;10(2):109-23

DIAGNOSTIC USE

Rhodamine B-labeled thyroid hormone forms high molecular weight aggregates in solution: a possible source of artifacts in binding experiments. Cheng SY, et al. **Anal Biochem** 1989 Feb 1;176(2):440-3

Rhodamine B fluorescence as a stain for amniotic fluid squames in maternal pulmonary embolism and fetal lungs. Shapiro SH, et al. **Ann Clin Lab Sci** 1988 Nov-Dec; 18(6):451-4

Radioiodinated rhodamine-123: preparation and preliminary evaluation as an agent for tumor scintigraphy. Thakur ML, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):517-24

Dihydrorhodamine 123: a new flow cytometric indicator for respiratory burst activity in neutrophil granulocytes. Rothe G, et al. **Naturwissenschaften** 1988 Jul;75(7):354-5

'Photo-degeneration' of neurones after extracellular dye application. Picaud S, et al. **Neurosci Lett** 1988 Dec 19; 95(1-3):24-30

METABOLISM

Conversion of dihydro-O-methylsterigmatocystin to aflatoxin B2 by Aspergillus parasiticus. Cleveland TE. **Arch Environ Contam Toxicol** 1989 May-Jun;18(3):429-33

Fate of the methyl group during the conversion of sterigmatocystin into O-methylsterigmatocystin and aflatoxin B1 by cell-free preparations of Aspergillus parasiticus. Bhatnagar D, et al. **Biochimie** 1988 Jun; 70(6):743-7

Staining with pyronin Y detects changes in conformation of RNA during mitosis and hyperthermia of CHO cells. Traganos F, et al. **Exp Cell Res** 1988 Dec;179(2):535-44

Cells with marrow and spleen repopulating ability and forming spleen colonies on day 16, 12, and 8 are sequentially ordered on the basis of increasing rhodamine 123 retention. Ploemacher RE, et al. **J Cell Physiol** 1988 Sep;136(3):531-6

Relationship between cellular accumulation of rhodamine 123 (R123) and cytotoxicity in B16 melanoma cells. Krag DN, et al. **J Surg Res** 1989 Apr;46(4):361-5

A simple and rapid purification procedure for the preparation of tetramethylrhodamine-labeled antibodies. Hosoi K, et al. **Jpn J Physiol** 1989;39(2):317-24

PHARMACOKINETICS

Binding and internalization of a fluorescent vasopressin analogue by collecting duct cells. Kirk KL. **Am J Physiol** 1988 Nov;255(5 Pt 1):C622-32

Biosynthetic origin of aflatoxin G1: confirmation of sterigmatocystin and lack of confirmation of aflatoxin B1 as precursors. Henderberg A, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):661-7

Selective retention of rhodamine-123 by malignant glioma in the rat. Powers SK, et al. **J Neurooncol** 1988 Dec; 6(4):343-7

Zonal compartmentation of perfused rat liver: plasma reappearance of rhodamine B explained. Braakman I, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):869-73

PHARMACOLOGY

AH6809, a prostaglandin DP-receptor blocking drug on human platelets. Keery RJ, et al. **Br J Pharmacol** 1988 Jul;94(3):745-54

Rhodamine dyes as potential agents for photochemotherapy of cancer in human bladder carcinoma cells. Shea CR, et al. **Cancer Res** 1989 Jul 15;49(14):3961-5

Charge transfer-oxy radical mechanism for anticancer agents: mAMSA derivatives, rhodamine 123, and nickel salicylaldoximate. Crawford PW, et al. **Free Radic Res Commun** 1987;3(6):347-56

Inhibition of guanidinobenzoatase by a substrate for trypsin-like enzymes. Steven FS, et al. **J Enzym Inhib** 1988; 2(3):209-14

Inhibition of trypsin-like enzymes on cells with rhodamine-aprotinin. Steven FS, et al. **J Enzym Inhib** 1989; 2(4):295-303

In vitro photosensitizing properties of rhodamine 123 on different human tumor cell lines. Melloni E, et al. **Photochem Photobiol** 1988 Sep;48(3):311-4

Evidence that brain prostaglandin E2 is involved in physiological sleep-wake regulation in rats. Matsumura H, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5666-9

Human embryonic cell growth assay for teratogens with or without metabolic activation system using microplate. Tsuchiya T, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(5):265-72

[Pharmacological study of the anti-inflammatory agent glyderinine] Azimov MM, et al. **Farmakol Toksikol** 1988 Jul-Aug;51(4):90-3 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Effects of two pyridinalalkyliminerhodium(I) complexes in mice bearing MCa mammary carcinoma. Sava G, et al. **Cancer Chemother Pharmacol** 1989;24(5):302-6

Potential antitumor agents. 58. Synthesis and structure-activity relationships of substituted xanthenone-4-acetic acids active against the colon 38 tumor in vivo. Rewcastle GW, et al. **J Med Chem** 1989 Apr;32(4):793-9

TOXICITY

Teratogenic effects of a lipophilic cationic dye rhodamine 123, alone and in combination with 2-deoxyglucose. Hood RD, et al. **Drug Chem Toxicol** 1988;11(3):261-74

Functional state of rat liver and kidney mitochondria during sterigmatocystin toxicosis. Banu S, et al. **Indian J Exp Biol** 1988 Nov;26(11):858-9

Effects of in vivo and in vitro exposure to rhodamine dyes on mitochondrial function of mouse embryos. Ranganathan S, et al. **Teratogenesis Carcinog Mutagen** 1989;9(1):29-37

Mechanism of dimethylsulfoxide protection against the teratogenicity of secalonic acid D in mice. ElDeib MM, et al. **Teratology** 1988 Nov;38(5):419-25

Comparative developmental toxicity of cationic and neutral rhodamines in mice. Hood RD, et al. **Teratology** 1989 Aug; 40(2):143-50

Inhibition of mitochondrial respiration by cationic rhodamines as a possible teratogenicity mechanism. Ranganathan S, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):81-9

Brain monoamine levels in suckling mice following postnatal exposure to secalonic acid D via the dam's milk. Bolon B, et al. **Toxicol Lett** 1988 Dec;44(3):263-72

XANTHINE DEHYDROGENASE see under **KETONE OXIDOREDUCTASES**

XANTHINE OXIDASE

Electron-nuclear double resonance spectroscopy of the desulfo-inhibited molybdenum(V) center in bovine milk xanthine oxidase. Edmondson DE, et al. **Biochemistry** 1989 Jul 11;28(14):5924-30

Computer graphic study on models of the molybdenum cofactor of xanthine oxidase. Folkers G, et al. **J Comput Aided Mol Des** 1987 Apr;1(1):87-94

In vitro spinal cord conduction block during exposure to a xanthine oxidase/hypoxanthine system: noninvolvement of superoxide and hydrogen peroxide. Ridella SA, et al. **J Neurotrauma** 1989 Summer;6(1):1-11

Covalently bound phosphate residues in bovine milk xanthine oxidase and in glucose oxidase from Aspergillus niger: a reevaluation. Johnson JL, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6493-7

ADMINISTRATION & DOSAGE

Effects of intratracheal administration of xanthine plus xanthine oxidase on lung antioxidant enzymes, lipid peroxidation, and collagen in hamsters. Giri SN, et al. **Exp Mol Pathol** 1988 Dec;49(3):395-409

Microencapsulated xanthine oxidase as experimental therapy in Lesch-Nyhan disease [letter] Palmour RM, et al. **Lancet** 1989 Sep 16;2(8664):687-8

ANALYSIS

Diurnal variation and melatonin induction of hepatic molybdenum hydroxylase activity in the guinea-pig. Beedham C, et al. **Biochem Pharmacol** 1989 May 1; 38(9):1459-64

Electrophoretic analyses of alcohol dehydrogenase, aldehyde dehydrogenase, aldehyde oxidase, sorbitol dehydrogenase and xanthine oxidase from mouse tissues. Holmes RS. **Comp Biochem Physiol [B]** 1978;61(3):339-46

Butyrophilin of milk lipid globule membrane contains N-linked carbohydrates and cross-links with xanthine oxidase. Valivullah HM, et al. **Int J Biochem** 1989; 21(1):103-7

[A histochemical method for detecting xanthine oxidase activity in the liver] Simonenkova VA, et al. **Tsitologiia** 1988 Nov;30(11):1383-5 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Myocardial salvage by the free radical scavenging actions of xanthine oxidase inhibitors. Das DK, et al. **Basic Life Sci** 1988;49:951-5

On the specificity of allopurinol and oxypurinol as inhibitors of xanthine oxidase. A pulse radiolysis determination of rate constants for reaction of allopurinol and oxypurinol with hydroxyl radicals. Hoey BM, et al. **Free Radic Res Commun** 1988;4(4):259-63

Hyperoxia and self- or neutrophil-generated O2 metabolites inactivate xanthine oxidase. Terada LS, et al. **J Appl Physiol** 1988 Nov;65(5):2349-53

Xanthine oxidase inhibitory activity of Paraguayan Myrtaceae. Theoduloz C, et al. **J Ethnopharmacol** 1988 Dec;24(2-3):179-83

Pentagalloylglucose, a xanthine oxidase inhibitor from a Paraguayan crude drug, "Molle-i" (Schinus terebinthifolius). Hayashi T, et al. **J Nat Prod** 1989 Jan-Feb; 52(1):210-1

Propranolol as xanthine oxidase inhibitor: implications for antioxidant activity. Janero DR, et al. **Life Sci** 1989; 44(21):1579-88

Xanthine oxidase inhibitor in acute experimental pancreatitis in rats and mice. Lankisch PG, et al. **Pancreas** 1989; 4(4):436-40

Effect of xanthine oxydase inhibition on warm ischemic lesions of the liver. Lamesch P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1285-6

BIOSYNTHESIS

Conversion of xanthine dehydrogenase to xanthine oxidase occurs during keratinocyte differentiation: modulation by 12-O-tetradecanoylphorbol-13-acetate. Reiners JJ Jr, et al. **J Invest Dermatol** 1989 Jul;93(1):132-5

BLOOD

Role of xanthine oxidase in thermal injury of skin. Till GO, et al. **Am J Pathol** 1989 Jul;135(1):195-202

Changes in membrane constituents and chemiluminescence in vitamin E-deficient red blood cells induced by the xanthine oxidase reaction. Yasuda H, et al. **Arch Biochem Biophys** 1989 Jul;272(1):81-7

Relationship between plasma oxipurinol concentrations and xanthine oxidase activity in volunteers dosed with allopurinol. Day RO, et al. **Br J Clin Pharmacol** 1988 Oct; 26(4):429-34

Plasma xanthine oxidase activity correlates with the resistance to severe hypoxia in different species. Stípek S, et al. **Physiol Bohemoslov** 1988;37(2):107-13

[Changes in xanthine oxidase activity in patients with circulatory failure] Bakhtiiarov ZA. **Ter Arkh** 1989; 61(5):68-9 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Determination of phosphate ions with an enzyme sensor system. Watanabe E, et al. **Biosensors** 1987-88;3(5):297-306

IMMUNOLOGY

Preparation of antibodies against xanthine oxidase from human milk. Graham K, et al. **Int J Biochem** 1989; 21(7):715-22

ISOLATION & PURIFICATION

The isolation of demolybdo xanthine oxidase from bovine milk. Venton AM, et al. **Biochem J** 1988 Nov 1; 255(3):949-56

Distribution of xanthine dehydrogenase and oxidase activities in human and rabbit tissues. Wajner M, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):79-84

The Journal of Biological Chemistry, Volume 203, 1953: Isolation and identification of the xanthine oxidase factor as molybdenum. By Dan A. Richert and W. W. Westerfeld [classical article] Richert DA, et al. **Nutr Rev** 1987 Nov; 45(11):342-3

METABOLISM

Effects of oxygen free radical scavengers, xanthine oxidase inhibition and calcium entry-blockers on leakage of albumin after ischaemia. An experimental study in rabbit kidneys. Bratell S, et al. **Acta Physiol Scand** 1988 Sep; 134(1):35-41

Indication of in vivo xanthine oxidase activity in human skeletal muscle during exercise. Hellsten Y, et al. **Acta Physiol Scand** 1988 Sep;134(1):159-60

Roles of histamine, complement and xanthine oxidase in thermal injury of skin. Friedl HP, et al. **Am J Pathol** 1989 Jul;135(1):203-17

Xanthine oxidase activity in rat pulmonary artery endothelial cells and its alteration by activated neutrophils. Phan SH, et al. **Am J Pathol** 1989 Jun;134(6):1201-11

A pitfall in the xanthine oxidase hypothesis [letter] Irita K. **Anaesthesia** 1989 Jun;44(6):521-2

Hyperoxia and xanthine dehydrogenase/oxidase activities in rat lung and heart. Elsayed NM, et al. **Arch Biochem Biophys** 1989 Sep;273(2):281-6

Potential of methylene blue to block oxygen radical generation in reperfusion injury. Kelner MJ, et al. **Basic Life Sci** 1988;49:895-8

Oxygen radical scavengers and myocardial preservation

during transplantation: role of xanthine oxidase. Stewart JR, et al. **Basic Life Sci** 1988;49:957–62 (21 ref.)
Chemiluminescence from vitamin E–deficient erythrocyte membranes induced by xanthine oxidase reaction. Yasuda H, et al. **Basic Life Sci** 1988;49:249–54
Chemiluminescence measurements of xanthine oxidase and xanthine dehydrogenase activity in four types of cardiovascular cell. Bailey IA, et al. **Basic Res Cardiol** 1988 Jul–Aug;83(4):392–400
Mitochondria and xanthine oxidase both generate reactive oxygen species in isolated perfused rat liver after hypoxic injury. Jaeschke H, et al.
Biochem Biophys Res Commun 1989 Apr 14;160(1):140–7
Xanthine oxidase activity: simultaneous HPLC evaluation of the "D" and "O" forms. Cighetti G, et al. **Biochem Int** 1989 Jun;18(6):1211–20
On the interaction between xanthine oxidase and actin. Lanzara V, et al. **Biochem Int** 1988 Aug;17(2):217–23
A kinetic study of hypoxanthine oxidation by milk xanthine oxidase. Escribano J, et al. **Biochem J** 1988 Sep 15; 254(3):829–33
Cleavage of folates during ethanol metabolism. Role of acetaldehyde/xanthine oxidase–generated superoxide. Shaw S, et al. **Biochem J** 1989 Jan 1;257(1):277–80
Information from e.x.a.f.s. spectroscopy on the structures of different forms of molybdenum in xanthine oxidase and the catalytic mechanism of the enzyme. Turner NA, et al. **Biochem J** 1989 Jun 1;260(2):563–71
Xanthine oxidase–catalyzed oxidation of paracetamol. Van Steveninck J, et al. **Biochem J** 1989 May 1;259(3):633–7
The effect of hyperthermia on conversion of rat hepatic xanthine dehydrogenase to xanthine oxidase. Skibba JL, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4592–5
Comparison of the effects of superoxide dismutase and cytochrome c on luminol chemiluminescence produced by xanthine oxidase–catalyzed reactions. Radi RA, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):89–93
Measurement of urinary caffeine metabolites reflecting the "in vivo" xanthine oxidase activity in premature infants with RDS and in hypoxic states of children. Boda D, et al. **Biomed Biochim Acta** 1989;48(2–3):S31–5
Does the measurement of xanthine oxidase (XOD)/xanthine dehydrogenase (XDH) ratio reflect the actual tissue content of these enzymes? Haberland A, et al. **Biomed Biochim Acta** 1989;48(2–3):S114–7
Conversion of xanthine dehydrogenase to xanthine oxidase as a possible marker for hypoxia in tumours and normal tissues. Anderson RF, et al. **Br J Cancer** 1989 Aug; 60(2):193–7
Regional histochemical aspects of xanthine oxidase activity in ischemic and reperfused small intestine of the rat. Meyer W, et al. **Cell Mol Biol** 1989;35(3):357–65
Enhancement by streptozotocin of O2– radical generation by the xanthine oxidase system of pancreatic beta-cells. Nukatsuka M, et al. **FEBS Lett** 1988 Nov 7;239(2):295–8
A sensitive fluorometric assay for measuring xanthine dehydrogenase and oxidase in tissues. Beckman JS, et al. **Free Radic Biol Med** 1989;6(6):607–15
Enhancement of enzyme-catalyzed production of reactive oxygen species by suspensions of "crocidolite" asbestos fibres. Elstner EF, et al. **Free Radic Res Commun** 1986; 1(6):355–9
Xanthine oxidase activity and immunologically detectable protein in the C57Bl/6 mouse. Manchester KM, et al. **Int J Biochem** 1988;20(10):1061–6
Hypoxanthine–xanthine oxidase–related defect in polypeptide chain initiation by endothelium. Jornot L, et al. **J Appl Physiol** 1989 Jan;66(1):450–7
Characterization of free radical generation by xanthine oxidase. Evidence for hydroxyl radical generation. Kuppusamy P, et al. **J Biol Chem** 1989 Jun 15; 264(17):9880–4
Differences in protein structure of xanthine dehydrogenase and xanthine oxidase revealed by reconstitution with flavin active site probes. Massey V, et al. **J Biol Chem** 1989 Jun 25;264(18):10567–73
The roles of superoxide anion and methylene blue in the reductive activation of indoleamine 2,3–dioxygenase by ascorbic acid or by xanthine oxidase–hypoxanthine. Sono M. **J Biol Chem** 1989 Jan 25;264(3):1616–22
Absence of detectable xanthine oxidase in human myocardium. Grum CM, et al. **J Mol Cell Cardiol** 1989 Mar;21(3):263–7
Changes in xanthine oxidase in ischemic rat brain. Kinuta Y, et al. **J Neurosurg** 1989 Sep;71(3):417–20
Xanthine:acceptor oxidoreductase activities in ischemic rat skin flaps. Im MJ, et al. **J Surg Res** 1989 Mar;46(3):230–4
Changes in lipid peroxidation and activities of xanthine oxidase, superoxide dismutase and catalase in kidneys of cephaloridine–administered rats. Suzuki Y, et al. **Jpn J Pharmacol** 1989 Jan;49(1):43–51
Molybdenum hydroxylases: biological distribution and substrate-inhibitor specificity. Beedham C. **Prog Med Chem** 1987;24:85–127 (240 ref.)
Oxygen free radicals decrease survival time of isolated rat hearts. Semb AG, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):135–8
Inhibition of heme–promoted enzymatic lipid peroxidation by desferrioxamine and EDTA. Carlin G, et al. **Ups J Med Sci** 1988;93(3):215–23
Lysosomal enzyme leakage during the hypoxanthine/xanthine oxidase reaction. Olsson GM, et al. **Virchows Arch [B]** 1989;56(6):385–91
[Chloramphenicol reduction and hypoxanthine oxidation with xanthine oxidase in an anaerobic environment] Derache P, et al. **J Toxicol Clin Exp** 1985 Jul–Aug; 5(4):229–37 (Eng. Abstr.) (Fre)
[Studies on biological damage by active oxygens. III. Generation of hydroxyl radical and inhibition of insulin release in hypoxanthine–xanthine oxidase system in the presence of pancreatic islet cells] Sakurai K, et al. **Yakugaku Zasshi** 1989 Feb;109(2):102–6 (Eng. Abstr.) (Jpn)
[Effect of tranquilizers of the 1,4–benzodiazepine series on the xanthine oxidase activity of the rat brain] Korotkina RN, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):565–8 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Tropism of canine neutrophils to xanthine oxidase. Gruber DF, et al. **Am J Vet Res** 1989 Jul;50(7):1102–5
Effects of vanadate on the oxidation of NADH by xanthine oxidase. Liochev S, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):188–93
Inactivation of creatine phosphokinase by superoxide during reperfusion injury. McCord JM, et al. **Basic Life Sci** 1988; 49:869–73
Influence of the hypoxanthine/xanthine oxidase system on striatal (3H) dopamine uptake. Scheuch CH, et al. **Biomed Biochim Acta** 1989;48(2–3):S212–6
Selective cytotoxicity of an oxygen–radical–generating enzyme conjugated to a monoclonal antibody. Battelli MG, et al. **Clin Exp Immunol** 1988 Jul;73(1):128–33
Oxidant inhibition of epithelial active sodium transport. Matalon S, et al. **Free Radic Biol Med** 1989;6(6):557–64
In vitro damage to rat lens by lumazine and xanthine oxidase: prevention by superoxide dismutase. Varma SD, et al. **Free Radic Res Commun** 1987;4(2):77–82
Effects of tannins on the oxidative damage of mouse ocular lens. I. Using the oxidative damage model induced by the xanthine–xanthine oxidase system. Iwata S, et al. **J Ocul Pharmacol** 1987 Fall;3(3):227–38
Oxygen free radical mediated renal dysfunction. Galat JA, et al. **J Surg Res** 1989 May;46(5):520–5

PHYSIOLOGY

Chemiluminescence from acetaldehyde oxidation by xanthine oxidase involves generation of and interactions with hydroxyl radicals. Puntarulo S, et al. **Alcoholism (NY)** 1989 Feb;13(1):84–90
Role of xanthine oxidase and granulocytes in ischemia–reperfusion injury. Granger DN. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1269–75 (46 ref.)
Xanthine oxidase is not responsible for reoxygenation injury in isolated–perfused rat heart. Kehrer JP, et al. **Free Radic Res Commun** 1987;3(1–5):69–78
Role of purines and xanthine oxidase in reperfusion injury in perfused rat liver. Zhong Z, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):470–5
[Role of xanthine oxidase in the genesis of acute pancreatitis] Grigorevskii VP, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):60–3 (Eng. Abstr.) (Rus)

TOXICITY

Respiratory failure caused by intratracheal saline: additive effect of xanthine oxidase. Saugstad OD, et al. **Biol Neonate** 1988;54(2):61–7
Iron ion–dependent modification of bases in DNA by the superoxide radical–generating system hypoxanthine/xanthine oxidase. Aruoma OI, et al. **J Biol Chem** 1989 Aug 5;264(22):13024–8
Free radicals generated by xanthine oxidase–hypoxanthine damage adenylate cyclase and ATPase in gerbil cerebral cortex. Palmer GC. **Metab Brain Dis** 1987 Dec;2(4):243–57
The protective effects of L–ascorbic acid and DL–alpha–tocopherol on cultured rat embryos treated with xanthine/xanthine oxidase. Francis AJ, et al. **Mutat Res** 1989 Sep;214(1):137–45
Targeting of a plasma cell line with a conjugate containing xanthine oxidase and the monoclonal antibody 62B1. Tazzari PL, et al. **Transplantation** 1989 Jul;48(1):119–22

XANTHINES

Lipophilicity and conformational behaviour of substituted xanthines. Walther B, et al. **Prog Clin Biol Res** 1989; 291:67–70

ADMINISTRATION & DOSAGE

A placebo–controlled dose–response study of enprofylline in the maintenance therapy of asthma. Chapman KR, et al. **Am Rev Respir Dis** 1989 Mar;139(3):688–93
Enprofylline in chronic asthma. Chapman BJ, et al. **Br J Dis Chest** 1988 Oct;82(4):354–9
Effects of intratracheal administration of xanthine plus xanthine oxidase on lung antioxidant enzymes, lipid peroxidation, and collagen in hamsters. Giri SN, et al. **Exp Mol Pathol** 1988 Dec;49(3):395–409

ANALYSIS

Hypoxanthine in diagnosis, prognosis and pathogeny of hypoxic injury. Stípek S, et al. **Biomed Biochim Acta** 1989; 48(2–3):S194–9
Hypoxanthine, xanthine and uridine in body fluids, indicators of ATP depletion. Harkness RA. **J Chromatogr** 1988 Jul 29;429:255–78 (87 ref.)
High–performance liquid chromatography of xanthines. Effects of N–methyl and C–8 hydroxyl substitution on the retention times. Vree TB, et al. **J Chromatogr** 1988 Jul 15; 428(2):311–9

BLOOD

Theophylline assay on Kodak Ektachem DTSC—performance and interference by structurally–related compounds and salicylate. Ayers GJ, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):268–73
Creation of four consecutive instantaneous steady–state plasma concentration plateaus of theophylline and enprofylline by repeated infusions with exponentially decreasing delivery rates. Kraan J, et al. **Eur J Clin Pharmacol** 1988;35(6):657–61
High–performance liquid chromatographic determination of enprofylline in human plasma. Hsieh JY, et al. **J Chromatogr** 1988 Aug 19;430(1):175–9

CEREBROSPINAL FLUID

Cerebrospinal fluid nucleotide metabolites following non–convulsive status epilepticus. Livingston JH, et al. **Dev Med Child Neurol** 1989 Apr;31(2):168–73
Cerebrospinal fluid nucleotide metabolites following short febrile convulsions. Livingston JH, et al. **Dev Med Child Neurol** 1989 Apr;31(2):161–7
Adenosine, inosine, hypoxanthine, xanthine and uric acid concentrations in the cerebrospinal fluid of unanaesthetized rats [letter] Polasek PM, et al. **J Pharm Pharmacol** 1989 Mar;41(3):216
Hypoxanthine, xanthine, urate and creatinine concentration gradients in cerebrospinal fluid. Niklasson F, et al. **Ups J Med Sci** 1988;93(3):225–32

CHEMICAL SYNTHESIS

Sulfur–containing 1,3–dialkylxanthine derivatives as selective antagonists at A1–adenosine receptors. Jacobson KA, et al. **J Med Chem** 1989 Aug;32(8):1873–9
High affinity acylating antagonists for the A1 adenosine receptor: identification of binding subunit. Stiles GL, et al. **Mol Pharmacol** 1988 Dec;34(6):724–8

DIAGNOSTIC USE

Characterization of adenosine binding sites in bovine testicular tissue using 8–cyclopentyl–1,3–[3H]dipropylxanthine. Cushing DJ, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):353–6

ISOLATION & PURIFICATION

[Water–soluble constituents of Cordyceps sinenses (Berk.) Sacc.—the nucleosides] Xu WH. **Chung Yao Tung Pao** 1988 Apr;13(4):34–6, 63 (Eng. Abstr.) (Chi)

METABOLISM

Extracellular increase of hypoxanthine and xanthine in the cortex and basal ganglia of fetal lambs during hypoxia–ischemia. Kjellmer I, et al. **Brain Res** 1989 Jan 30;478(2):241–7
Protein binding characteristics of a new bronchodilator, 1–methyl–3–propylxanthine (MPX), in different species. Apichartpichean R, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jul;27(7):320–3
Xanthine and uric acid levels in rat brain following focal ischemia. Kanemitsu H, et al. **J Neurochem** 1988 Dec; 51(6):1882–5
Characterization of cardiac A1 adenosine receptors with the antagonist radioligand 8–cyclopentyl–1,3[3H]–dipropylxanthine. Leid M, et al. **Proc West Pharmacol Soc** 1988;31:103
Xanthine and hypoxanthine accumulation during storage may contribute to reperfusion injury following liver transplantation in the rat. Marzi I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1319–20
Excretion and metabolism of a series of xanthines by the turtle Pseudemys scripta elegans. Vree TB, et al. **Vet Q** 1989 Jan;11(1):58–60
[Purine metabolism in human tumors] Vannoni D, et al. **Medicina (Firenze)** 1989 Jan–Mar;9(1):51–4 (Eng. Abstr.) (Ita)
[Changes in xanthine and uric acid in rat brain after middle cerebral artery occlusion] Kanemitsu H, et al. **No To Shinkei** 1989 Feb;41(2):157–63 (Eng. Abstr.) (Jpn)
[Early changes of oxypurines in rat brain following focal cerebral ischemia] Nihei H. **No To Shinkei** 1988 Aug; 40(8):713–9 (Eng. Abstr.) (Jpn)

PHARMACOKINETICS

The pharmacokinetics of theophylline and enprofylline in patients with liver cirrhosis and in patients with chronic renal disease. Kraan J, et al. **Eur J Clin Pharmacol** 1988; 35(4):357–62
Studies on alkyl–xanthine derivatives. II. Pharmacokinetic and pharmacodynamic studies of a new bronchodilator, 1–methyl–3–propylxanthine (MPX). Ruttikorn A, et al.

Jpn J Pharmacol 1988 Nov;48(3):341–7
Distribution of enprofylline and theophylline between plasma and cerebrospinal fluid. Laursen LC, et al. Ther Drug Monit 1989;11(2):162–4
[Permeability of the erythrocyte membrane to pentoxifylline and propentofylline. Research on their effects on some structural and functional properties of the membrane] Chetrite G, et al. Pathol Biol (Paris) 1988 Oct;36(8 Pt 2):1066–72 (Eng. Abstr.) (Fre)
[Biopharmaceutic aspects of prolonged-release formulations with a methylxanthine base. I] Ventouras K, et al. Pharm Acta Helv 1989;64(1):19–23 (Fre)

PHARMACOLOGY

Effect of adenosine A1 analogue on tubuloglomerular feedback mechanism. Franco M, et al. Am J Physiol 1989 Aug;257(2 Pt 2):F231–6
Mechanisms involved in the action of prostaglandins as modulators of neurotransmission. Gustafsson LE. Ann N Y Acad Sci 1989;559:178–91
Effects of progressively increased doses of theophylline and of S 9795 on hemodynamics, blood gases and lung mechanics in dogs. Lejeune P, et al. Arch Int Pharmacodyn Ther 1988 Jul–Aug;294:215–27
Interactions of 5'-N-ethylcarboxamide adenosine (NECA), aminophylline and dipropyl-phenyl-xanthine (XAC) on the isolated guinea-pig atria. Prostran M, et al. Arch Int Pharmacodyn Ther 1988 Jul–Aug;294:137–48
Antagonism of adenosine-induced relaxation by methylxanthines in coronary artery. Ramagopal MV, et al. Arch Int Pharmacodyn Ther 1988 Sep–Oct;295:174–80
Effects of the novel anti-ulcer agent 1-(5'-oxohexyl)-3-methyl-7-propyl xanthine on experimental ulcers and gastric secretion in rats. Tanaka T, et al. Arzneimittelforschung 1989 Jun;39(6):689–94
Tissue selective inhibition of cyclic nucleotide phosphodiesterase by denbufylline. Wilke R, et al. Arzneimittelforschung 1989 Jun;39(6):665–7
The A1 adenosine receptor antagonist 1,3, dipropyl-8-cyclopentylxanthine (DPCPX) displays adenosine agonist properties in the FRTL5 thyroid cell line. Frauman AG, et al. Biochem Biophys Res Commun 1989 Feb 28;159(1):355–62
The reactions of chloroperoxidase in the presence of xanthine/xanthine oxidase. Metodiewa D, et al. Biochem Biophys Res Commun 1989 Mar 31;159(3):1086–92
8-Substituted xanthines as antagonists at A1- and A2-adenosine receptors. Jacobson KA, et al. Biochem Pharmacol 1988 Oct 1;37(19):3653–61
Pre- and postjunctional actions of purine and xanthine compounds in the guinea-pig caecum circular muscle. Hoyle CH, et al. Br J Pharmacol 1988 Oct;95(2):653–63
The ability of denbufylline to inhibit cyclic nucleotide phosphodiesterase and its affinity for adenosine receptors and the adenosine re-uptake site. Nicholson CD, et al. Br J Pharmacol 1989 Jul;97(3):889–97
Mechanism of xanthine-induced relaxation of guinea-pig isolated trachealis muscle. Ogawa K, et al. Br J Pharmacol 1989 Jun;97(2):542–6
1,3,8- and 1,3,7-substituted xanthines: relative potency as adenosine receptor antagonists at the frog neuromuscular junction. Sebastião AM, et al. Br J Pharmacol 1989 Jan;96(1):211–9
The relaxant and spasmogenic effects of some xanthine derivatives acting on guinea-pig isolated trachealis muscle. Small RC, et al. Br J Pharmacol 1988 Aug;94(4):1091–100
Physiological modulation by adenosine: selective blockade of A1-receptors with DPCPX enhances stimulus train-evoked neuronal Ca influx in rat hippocampal slices. Schubert P. Brain Res 1988 Aug 16;458(1):162–5
Anti-inflammatory actions of enprofylline, a modified xanthine, in the canine forelimb. Dobbins DE, et al. Circ Res 1989 Feb;64(2):235–42
Cardiovascular effects of two xanthines and the relation to adenosine antagonism. Smits P, et al. Clin Pharmacol Ther 1989 Jun;45(6):593–9
Changes induced by caffeine, theophylline and theobromine on calcium uptake, respiration and ATP levels in rat-liver mitochondria. de la Cruz MJ, et al. Comp Biochem Physiol [C] 1988;91(2):443–7
Age-dependent stimulation of assembly and of membrane-association of polysomes in rat brain after treatment with xanthine derivatives in vivo. Stefanovich V, et al. Drugs Exp Clin Res 1988;14(4):271–5
Effects of aminophylline and enprofylline on the protective activity of phenobarbital against amygdala-kindled seizures in rats. Czuczwar SJ, et al. Epilepsy Res 1987 Jul;1(4):234–8
Effects of theophylline and S 9795 on hyperoxic and hypoxic pulmonary vascular tone in intact dogs. Lejeune P, et al. Eur Respir J 1989 Apr;2(4):370–6
Radiation inactivation analysis of the A1 adenosine receptor of rat brain. Decrease in radiation inactivation size in the presence of guanine nucleotide. Reddington M, et al. FEBS Lett 1989 Jul 31;252(1-2):125–8
The effect of theophylline and enprofylline on the late cutaneous response to antigen and compound 48/80. Zunich KM, et al. J Allergy Clin Immunol 1989 Feb;83(2 Pt 1):428–34
Effects of 8-phenyl and 8-cycloalkyl substituents on the activity of mono-, di-, and trisubstituted alkylxanthines with substitution at the 1-, 3-, and 7-positions. Shamim MT, et al. J Med Chem 1989 Jun;32(6):1231–7
Effects of tannins on the oxidative damage of mouse ocular lens. I. Using the oxidative damage model induced by the xanthine-xanthine oxidase system. Iwata S, et al. J Ocul Pharmacol 1987 Fall;3(3):227–38
Effect of alkylxanthines on gentamicin-induced acute renal failure in the rat. Kellett R, et al. J Pharm Pharmacol 1988 Dec;40(12):849–54
The influence of structure on the accumulation of caffeine induced by methyl xanthine derivatives. Segura J, et al. J Pharm Pharmacol 1989 Feb;41(2):129–31
Adenosine receptor prodrugs: towards kidney-selective dialkylxanthines. Barone S, et al. J Pharmacol Exp Ther 1989 Jul;250(1):79–85
Xanthine effects on renal proximal tubular function and cyclic AMP metabolism. Coulson R, et al. J Pharmacol Exp Ther 1989 Feb;248(2):589–95
Methylxanthines augment the renin response to suprarenal-aortic constriction. Deray G, et al. Naunyn Schmiedebergs Arch Pharmacol 1989 Jun;339(6):690–6
Transient and selective blockade of adenosine A1-receptors by 8-cyclopentyl-1,3-dipropylxanthine (DPCPX) causes sustained epileptiform activity in hippocampal CA3 neurons of guinea pigs. Alzheimer C, et al. Neurosci Lett 1989 Apr 24;99(1-2):107–12
Pharmacodynamics and pharmacokinetics of enprofylline and theophylline in the isolated rabbit heart. Nielsen-Kudsk JE, et al. Pharmacol Toxicol 1988 Sep;63(3):183–8
The effect of methylxanthines on morphine analgesia in mice and rats. Malec D, et al. Pol J Pharmacol Pharm 1988 May–Jun;40(3):223–32
The influence of xanthines on the contractile responses of PGF2 alpha and PGD2 in human parenchymal strips. Napier FE, et al. Prostaglandins 1989 Aug;38(2):227–35
The effect of cola acuminata and cola nitida on gastric acid secretion. Ibu JO, et al. Scand J Gastroenterol Suppl 1986;124:39–45
[Methylxanthines and phosphorylation of the constituents of the membrane of the human red blood cell] Biovin P, et al. Pathol Biol (Paris) 1988 Oct;36(8 Pt 2):1042–6 (Eng. Abstr.) (Fre)
[Study group on the mechanism of action of xanthines. A link between clinical pharmacology and research (editorial)] Biovin P. Pathol Biol (Paris) 1988 Oct;36(8 Pt 2):1041 (Fre)
[Interaction between various alkylxanthines and the proteins of the erythrocyte skeleton] Delaunay J, et al. Pathol Biol (Paris) 1988 Oct;36(8 Pt 2):1076–80 (Eng. Abstr.) (Fre)
[Comparative effects of pentoxifylline and of HWA 285 on mitochondrial maturation and biosynthesis of proteins in rats in the perinatal period] Gautheron DC, et al. Pathol Biol (Paris) 1988 Oct;36(8 Pt 2):1056–9 (Eng. Abstr.) (Fre)
[In vitro effect of pentoxifylline on the metabolism of glycogen and the secretory process in the parotid and lacrimal extraorbital glands in rats] Mauduit P, et al. Pathol Biol (Paris) 1988 Oct;36(8 Pt 2):1060–5 (Eng. Abstr.) (Fre)
[Propentofylline and its analogs: a new class of agents for in vitro study of the antidiuretic response] Ripoche V, et al. Pathol Biol (Paris) 1988 Oct;36(8 Pt 2):1047–55 (Eng. Abstr.) (Fre)
[Effects of pentoxifylline and propentofylline on the turnover of polyphosphoinositides of the erythrocyte membrane and on the metabolism of arachidonic acid in platelets] Rossignol L, et al. Pathol Biol (Paris) 1988 Oct;36(8 Pt 2):1073–5 (Eng. Abstr.) (Fre)
[The effect of pentoxifylline and propentofylline on the membrane fluidity of red blood cells in uncontrolled insulin-dependent (type 1) diabetic patients] Roul C, et al. Pathol Biol (Paris) 1988 Oct;36(8 Pt 2):1081–3 (Eng. Abstr.) (Fre)
[Selectivity of the action of 1,3-dipropyl-8-phenylxanthine on the purine receptors of the intestines] Gmiro VE, et al. Farmakol Toksikol 1988 Jul–Aug;51(4):60–2 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Myocardial reperfusion injury. Role of myocardial hypoxanthine and xanthine in free radical-mediated reperfusion injury. Abd-Elfattah AS, et al. Circulation 1988 Nov;78(5 Pt 2):III224–35
Role of purines and xanthine oxidase in reperfusion injury in perfused rat liver. Zhong Z, et al. J Pharmacol Exp Ther 1989 Aug;250(2):470–5

THERAPEUTIC USE

Xanthines--symptomatic or prophylactic in asthma? Persson CG, et al. Agents Actions Suppl 1988;23:137–55 (43 ref.)
Management of apnea in infants. Kriter KE, et al. Clin Pharm 1989 Aug;8(8):577–87 (113 ref.)
Protection against ischemic brain damage using propentofylline in gerbils. DeLeo J, et al. Stroke 1988 Dec;19(12):1535–9
Intravenous infusion of enprofylline with an exponentially decreasing drug concentration in acute asthma. Arnman K, et al. Ther Drug Monit 1989;11(3):249–52
[Prospects of use of xanthines in dermatology and venereology] Khazizov IE. Vestn Dermatol Venerol 1989;(2):30–2 (23 ref.) (Rus)

TOXICITY

Potential metabolic mutagens of caffeine and various methylxanthines. Lander N, et al. J Pharm Sci 1988 Nov;77(11):955–8
Potent convulsant actions of the adenosine receptor antagonist, xanthine amine congener (XAC). Morgan PF, et al. Life Sci 1989;45(8):719–28
The protective effects of L-ascorbic acid and DL-alpha-tocopherol on cultured rat embryos treated with xanthine/xanthine oxidase. Francis AJ, et al. Mutat Res 1989 Sep;214(1):137–45

URINE

Renal excretion of hypoxanthine and xanthine in primary gout. Puig JG, et al. Am J Med 1988 Oct;85(4):533–7
A new case with hereditary xanthinuria: response to exercise. Landaas S, et al. Clin Chim Acta 1989 May 15;181(2):119–24
Metabolism of pyrazinamide and allopurinol in hereditary xanthine oxidase deficiency. Yamamoto T, et al. Clin Chim Acta 1989 Feb 28;180(2):169–75
Acetylator phenotypes of Saudi Arabians by a simplified caffeine metabolites test. el-Yazigi A, et al. J Clin Pharmacol 1989 Mar;29(3):246–50
Hereditary xanthinuria with severe urolithiasis occurring in infancy as renal tubular acidosis and hypercalciuria. Fildes RD. J Pediatr 1989 Aug;115(2):277–80
[Hereditary xanthinuria. A clinical case report] Pessano B, et al. Minerva Med 1989 May;80(5):507–9 (Eng. Abstr.) (Ita)
[Acid-base fractionation of lipophilic components in human urine and their high-performance liquid chromatography equipped with multichannel ultraviolet detector: an application to xanthine derivatives] Kang XX, et al. Yakugaku Zasshi 1989 Apr;109(4):274–9 (Eng. Abstr.) (Jpn)
[Degradation of purine nucleotides in patients with chronic obstruction to airflow] Mateos Antón F, et al. Med Clin (Barc) 1989 Mar 11;92(9):328–30 (Eng. Abstr.) (Spa)

XANTHINOL NIACINATE see under THEOPHYLLINE

XANTHOGRANULOMA, JUVENILE see XANTHOMA, JUVENILE

XANTHOMA, JUVENILE

[Juvenile xanthogranuloma (nevoxanthoendothelioma, nevoxanthoma, xanthelasma neviforme)] Rončević N, et al. Med Pregl 1988;41(1-2):41–3 (Eng. Abstr.) (Ser)

PATHOLOGY

Xanthoma of bone. Bertoni F, et al. Am J Clin Pathol 1988 Oct;90(4):377–84
The myofibroblast. Possible derivation from macrophages in xanthogranuloma. Bhawan J, et al. Am J Dermatopathol 1989 Jun;11(3):255–8
Giant juvenile xanthogranuloma [letter] Campbell L, et al. Arch Dermatol 1988 Nov;124(11):1723–4
Juvenile xanthogranuloma. Clinical and pathologic characterization. Tahan SR, et al. Arch Pathol Lab Med 1989 Sep;113(9):1057–61
Xanthogranulomatous pyelonephritis. Issa MA, et al. J Pediatr Surg 1989 Mar;24(3):289–91
[Eruptive histiocytoma and xanthoma disseminatum as manifestations of the same disease?] Braun-Falco O, et al. Hautarzt 1988 Oct;39(10):652–7 (Eng. Abstr.) (Ger)

XANTHOMATOSIS

Xanthogranuloma of the spermatic cord. Pak K, et al. Eur Urol 1988;15(3-4):277–80
Gastric xanthoma [letter] Kim WJ, et al. Gastrointest Endosc 1988 Sep–Oct;34(5):437
[Van Bogaert's cerebrotendinous xanthomatosis. A study of 3 cases] Laurent A, et al. Ann Med Interne (Paris) 1988;139(6):395–402 (61 ref.) (Eng. Abstr.) (Fre)

BLOOD

Dysfibrinogenemia in patients with xanthelasma [letter] Pintó X, et al. Arch Dermatol 1989 Sep;125(9):1281–2
Xanthelasma: clinical indicator of decreased levels of high-density lipoprotein cholesterol. Bates MC, et al. South Med J 1989 May;82(5):570–4

COMPLICATIONS

Macroreentrant ventricular tachycardia and coronary artery disease in cerebrotendinous xanthomatosis. Chen PS, et al. Am J Cardiol 1989 Sep 15;64(10):680–2
Gastric xanthelasma in hyperplastic gastric polyposis. Lin PY, et al. Arch Pathol Lab Med 1989 Apr;113(4):428–30
Libyan family with beta-thalassemia trait associated with hypercholesterolemia with widespread xanthomas. Sheriff DS, et al. Clin Chem 1988 Nov;34(11):2385–6
Osseous xanthomatosis and a pathologic fracture in a patient with hyperlipidemia. A case report. Yokoyama K, et al. Clin Orthop 1988 Nov;(236):307–10
Association of renal xanthogranuloma and urological neoplasia. Ballesteros JJ, et al. Eur Urol 1988;15(3-4):306–10 (21 ref.)

[Vasculitis with hypocomplementemia, paraproteinemia and plane xanthoma] Escallier F, et al. **Ann Dermatol Venereol** 1988;115(6-7):713-6 **(Fre)**

[Necrobiotic xanthogranuloma with paraproteinemia] Poiares-Baptista A, et al. **Ann Dermatol Venereol** 1988; 115(11):1147-8 **(Fre)**

DIAGNOSIS

Inflammatory pseudotumor of the liver. Report of the fine needle aspiration cytologic findings in a case initially misdiagnosed as malignant. Lupovitch A, et al. **Acta Cytol** 1989 Mar-Apr;33(2):259-62

Xanthogranuloma of the third ventricle. Wiot JG, et al. **AJNR** 1989 Sep-Oct;10(5 Suppl):S57

Xanthoma disseminatum. An unusual histiocytosis syndrome. Giller RH, et al. **Am J Pediatr Hematol Oncol** 1988 Fall; 10(3):252-7

An ultrasonographic method for detection of Achilles tendon xanthomas in familial hypercholesterolemia. Yuzawa K, et al. **Atherosclerosis** 1989 Feb;75(2-3):211-8

Lipid granulomatosis: Erdheim-Chester disease. Molnar CP, et al. **Clin Nucl Med** 1988 Oct;13(10):736-41

Potential application of thin-layer chromatography and thin-layer chromatography with flame ionization detection of cholestanol in the diagnosis of cerebrotendinous xanthomatosis. Michalec C, et al. **J Chromatogr** 1988 Oct 28;452:543-7

Cerebral Erdheim-Chester disease: persistent enhancement with Gd-DTPA on MR images. Tien RD, et al. **Radiology** 1989 Sep;172(3):791-2

DRUG THERAPY

Changes in lipid and lipoprotein levels and Achilles tendon diameters and indices in familial hypercholesterolemic patients with tendinous xanthomatosis treated by diet and bezafibrate for 2 years. Rouffy J, et al. **Curr Med Res Opin** 1988;11(2):123-32

Chenodeoxycholic acid normalizes elevated lipoprotein secretion and catabolism in cerebrotendinous xanthomatosis. Tint GS, et al. **J Lipid Res** 1989 May; 30(5):633-40

ENZYMOLOGY

Competitive inhibition of bile acid synthesis by endogenous cholestanol and sitosterol in sitosterolemia with xanthomatosis. Effect on cholesterol 7 alpha-hydroxylase. Shefer S, et al. **J Clin Invest** 1988 Dec;82(6):1833-9

Acid cholesterol esterase activity in the foam cells isolated from rabbit experimental xanthoma tissues. Kodama H, et al. **J Dermatol (Tokyo)** 1988 Aug;15(4):294-8

Reduced C27-steroid 26-hydroxylase activity in heterozygotes for cerebrotendinous xanthomatosis. Skrede S, et al. **Scand J Clin Lab Invest** 1988 Sep;48(5):425-9

ETIOLOGY

Tuberoeruptive xanthomas: unusual presentation of type V hyperlipoproteinemia. Norman RA, et al. **Cutis** 1989 Feb; 43(2):169-71

Cutaneous xanthoma in association with paraproteinemia in the absence of hyperlipidemia. Feingold KR, et al. **J Clin Invest** 1989 Mar;83(3):796-802

[Temporal xanthomatosis and hyperlipoproteinemia] Justrabo E, et al. **Arch Anat Cytol Pathol** 1988;36(5-6):245-9 (27 ref.) (Eng. Abstr.) **(Fre)**

[A case of generalized xanthomatosis in a patient with diabetes mellitus] Dobrev D, et al. **Probl Endokrinol (Mosk)** 1989 Jan-Feb;35(1):39-41 **(Rus)**

GENETICS

Pregnancy in women with cerebrotendinous xanthomatosis (CTX): high risk condition for fetus and newborn infant? Berginer VM, et al. **Am J Med Genet** 1988 Sep;31(1):11-6

[Cerebrotendinous xanthomatosis in a Druze family] Ben Dror G, et al. **Harefuah** 1988 Nov 1;115(9):224-6 (Eng. Abstr.) **(Heb)**

IMMUNOLOGY

Immunoglobulin-bound lipoproteins (Ig-Lp) as markers of familial hypercholesterolemia, xanthomatosis and atherosclerosis. Beaumont JL, et al. **Atherosclerosis** 1988 Dec;74(3):191-201

PATHOLOGY

Xanthoma of bone. Bertoni F, et al. **Am J Clin Pathol** 1988 Oct;90(4):377-84

Verruciform xanthoma of the lip: two lesions in a woman [letter] Bianco C, et al. **Am J Dermatopathol** 1988 Apr; 10(2):176-8

Multifocal verruciform xanthoma of the upper aerodigestive tract in a child with a systemic lipid storage disease. Travis WD, et al. **Am J Surg Pathol** 1989 Apr;13(4):309-16

Xanthogranulomatous cholecystitis. A clinical and pathologic study of twelve cases. Dao AH, et al. **Am Surg** 1989 Jan; 55(1):32-5

Yellow papules on a middle-aged woman. Eruptive xanthomatosis (EX). Bickley L. **Arch Dermatol** 1989 Feb; 125(2):288-9, 291

Diffuse, ulcerating plaques and nodules. Necrobiotic xanthogranuloma (NXG) with paraproteinemia. Furner BB, et al. **Arch Dermatol** 1989 Feb;125(2):287-8, 290

Verruciform xanthoma of the penis. George WM, et al. **Cutis** 1989 Aug;44(2):167-70

Papular xanthoma. Clinical, histological and ultrastructural study. Bundino S, et al. **Dermatologica** 1988;177(6):382-5

Xanthogranulomatous inflammation of the female genital tract. Ladefoged C, et al. **Histopathology** 1988 Nov; 13(5):541-51 (35 ref.)

Verruciform xanthomas of the digits. Mountcastle EA, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 2):313-7 (18 ref.)

Erdheim-Chester disease. A report of three cases. Lantz B, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):456-64

Verruciform xanthoma within carcinoma in situ. Drummond JF, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):398-400

Normolipidemic xanthomata of the hand extensor tendons. Mulholland RS, et al. **J Rheumatol** 1989 Feb;16(2):242-4

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercise. Case 38-1989. A 19-year-old man with fever, abdominal pain, anemia, and a left renal mass. **N Engl J Med** 1989 Sep 21;321(12):813-23

The xanthogranulomatous process. Xanthogranulomatous inflammation. Cozzutto C, et al. **Pathol Res Pract** 1988 Aug;183(4):395-402 (93 ref.)

Epithelial cyst in cerebellopontine angle with xanthogranulomatous changes simulating cholesterol granuloma. Schwartz AM, et al. **Surg Neurol** 1989 Jun; 31(6):454-8

[Necrobiotic xanthogranuloma] Venencie PY, et al. **Ann Dermatol Venereol** 1988;115(12):1297-9 **(Fre)**

[The disease picture of verruciform xanthoma] Landthaler M, et al. **Hautarzt** 1988 Nov;39(11):727-30 (20 ref.) (Eng. Abstr.) **(Ger)**

[Necrobiotic xanthogranuloma in paraproteinemia] Rappersberger K, et al. **Hautarzt** 1989 Jun;40(6):358-63 (Eng. Abstr.) **(Ger)**

[Generalized retroperitoneal xanthofibrogranulomatosis with brain involvement] Grunow N, et al. **Pathologe** 1988 Sep; 9(5):305-8 **(Ger)**

[Xanthomatoses, cataracts, mental retardation, adynamia and equilibrium disturbances (clinical conference)] **Harefuah** 1988 Nov 1;115(9):249-54 **(Heb)**

[Verruciform xanthoma of the penis] Amantea A, et al. **G Ital Dermatol Venereol** 1989 Jan-Feb;124(1-2):37-40 (Eng. Abstr.) **(Ita)**

[Verruciform xanthoma. Presentation of a case and review of the literature] Manzini BM, et al. **G Ital Dermatol Venereol** 1989 Jan-Feb;124(1-2):41-4 (27 ref.) (Eng. Abstr.) **(Ita)**

[Clinicopathological studies of gallbladder diseases. XI. Xanthogranuloma of the gallbladder] Yamagiwa H. **Rinsho Byori** 1989 Apr;37(4):381-4 **(Jpn)**

[Xanthogranuloma of the choroid plexus: a case report] Lynch JC, et al. **Arq Neuropsiquiatr** 1988 Jun;46(2):191-4 (Eng. Abstr.) **(Por)**

[Diffuse normolipemic xanthoma planum] Carapeto FJ, et al. **Med Cutan Ibero Lat Am** 1988;16(3):205-10 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Colonic xanthomatosis. Relationship to disordered motility and review of the literature. Scheiman J, et al. **Dig Dis Sci** 1988 Nov;33(11):1491-4 (7 ref.)

Central motor and sensory conduction in adrenoleukomyeloneuropathy, cerebrotendinous xanthomatosis, HTLV-1-associated myelopathy and tabes dorsalis. Ugawa Y, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1069-74

[Central sensory and motor conduction in adrenoleukodystrophy (ALD), cerebrotendinous xanthomatosis (CTX), HTLV-1-associated myelopathy (HAM) and tabes dorsalis] Ugawa Y, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):819-27 (Eng. Abstr.) **(Jpn)**

SURGERY

Treatment of tuberose xanthomata with liquid nitrogen cryotherapy. Wright AL, et al. **Clin Exp Dermatol** 1988 Mar;13(2):121-2

Symptomatic xanthogranuloma of the third ventricle: report of two cases and review of the literature. Montaldi S, et al. **Surg Neurol** 1989 Sep;32(3):200-5 (21 ref.)

[Erythremia, hyperthermia and surgery or: a surgical solution to a medical problem] de Torrenté A, et al. **Rev Med Suisse Romande** 1988 Dec;108(12):1023-7 **(Fre)**

[CO2 laser vaporization of xanthelasmas] Jean B, et al. **Klin Monatsbl Augenheilkd** 1989 Mar;194(3):152-5 (Eng. Abstr.) **(Ger)**

THERAPY

[Effect of LDL-apheresis on a case of Cerebrotendinous Xanthomatosis] Fukuo Y, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):196-201 (Eng. Abstr.) **(Jpn)**

XANTHOMATOSIS, FAMILIAL see **WOLMAN DISEASE**

XANTHOMATOSIS, WOLMAN'S see **WOLMAN DISEASE**

XANTHOMONAS

[Lysogeny of strains of Xanthomonas campestris and their variants] Gvozdiak RI, et al. **Mikrobiol Zh** 1987 Jan-Feb; 49(1):9-12 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Serological classification of Xanthomonas maltophilia (Pseudomonas maltophilia) based on heat-stable O antigens. Schable B, et al. **J Clin Microbiol** 1989 May;27(5):1011-4

ENZYMOLOGY

Immunoelectron microscopic demonstration of an esterase on the outer membrane of Xanthomonas maltophilia. Debette J, et al. **Appl Environ Microbiol** 1989 Jan; 55(1):233-9

A new protein subunit k for RNA polymerase from Xanthomonas campestris pv. oryzae. Chen CK, et al. **J Biol Chem** 1989 Mar 15;264(8):4362-6

GENETICS

Isolation and characterization of thymidylate synthetase mutants of Xanthomonas maltophilia. West TP. **Arch Microbiol** 1989;151(3):220-2

Broad host range cosmid pLAFR1 and non-mucoid mutant XCP20 provide a suitable vector-host system for cloning genes in Xanthomonas campestris pv. campestris. Yang BY, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Feb;21(1):40-9

Cloning the FnuDI, NaeI, NcoI and XbaI restriction-modification systems. Van Cott EM, et al. **Gene** 1988 Dec 25;74(1):55-9

Characterization of a spontaneously segregating Cf16-v1 lysogen of Xanthomonas campestris pv. citri. Dai H, et al. **Intervirology** 1988;29(4):207-16

Genetic and structural characterization of the avirulence gene avrBs3 from Xanthomonas campestris pv. vesicatoria. Bonas U, et al. **Mol Gen Genet** 1989 Jul;218(1):127-36

Nucleotide sequences involved in the neolysogenic insertion of filamentous phage Cf16-v1 into the Xanthomonas campestris pv. citri chromosome. Dai H, et al. **Virology** 1988 Dec;167(2):613-20

ISOLATION & PURIFICATION

Selective medium for isolation of Xanthomonas maltophilia from soil and rhizosphere environments. Juhnke ME, et al. **Appl Environ Microbiol** 1989 Mar;55(3):747-50

[Coproculture of the animals at the Zoological Park of Tananarive with isolation of bacteria of the genera Shigella, Kluyvera, Pseudomonas, Xanthomonas] Vicens R, et al. **Arch Inst Pasteur Madagascar** 1988;54(1):83-92 **(Fre)**

METABOLISM

Glucose metabolism in Xanthomonas campestris and influence of methionine on the carbon flow. Pielken P, et al. **Can J Microbiol** 1988 Dec;34(12):1333-7

Kinetics of xanthan production when NH3-N limits biomass synthesis and glucose limits polysaccharide synthesis. Schweickart RW, et al. **J Biomech Eng** 1989 May; 111(2):166-72

PATHOGENICITY

[Characterization of Xanthomonas campestris pv. cucurbitae, causal agent of the bacterial spot of squash] Alippi AM. **Rev Argent Microbiol** 1989 Jan-Mar;21(1):15-9 (Eng. Abstr.) **(Spa)**

XANTHOPHYLL

ANALYSIS

Reversed-phase high-performance liquid chromatographic separation of lutein and lutein fatty acid esters from marigold flower petal powder. Rivas JD. **J Chromatogr** 1989 Mar 3;464(2):442-7

BLOOD

Lutein, cholesterol, and risk of cancer [letter] Thurnham DI. **Lancet** 1989 Aug 19;2(8660):441-2

XANTHOTOXIN see **METHOXSALEN**

XANTHURENATES

METABOLISM

Kynurenine metabolism and xanthurenic acid formation in vitamin B6-deficient rat after tryptophan injection. Takeuchi F, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Apr; 35(2):111-22

URINE

Monoamineoxidase activity in certain brain regions associated with xanthurenic acid excretion in rats on oral contraceptive steroids. Bandyopadhyay M, et al. **Indian J Med Res** 1989 Jun;90:191-6

XENOBIOTICS

Release of iron from ferritin by semiquinone, anthracycline, bipyridyl, and nitroaromatic radicals. Monteiro HP, et al.

Free Radic Biol Med 1989;6(6):587–91

QSAR study in xenobiotics distribution—estimation of target organ. Tichý M. **Prog Clin Biol Res** 1989;291:337–40

[Detoxication of xenobiotics by conjugation reactions] Barańczyk-Kuźma A. **Postepy Hig Med Dosw** 1988 Jan–Feb;42(1):29–42 (66 ref.) (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Malnutrition and sensitivity to toxic substances. Periquet A, et al. **Ann Trop Paediatr** 1988 Sep;8(3):193–5

[Chronobiology and industrial medicine: approach to the evaluation of the toxicological risk in occupational exposure to xenobiotics] Franco G, et al. **G Ital Med Lav** 1987 May–Jul;9(3–4):125–40 (105 ref.) (Eng. Abstr.) **(Ita)**

ANALYSIS

Molecular orbital studies of oxygen activation and mechanisms of cytochromes P-450–mediated oxidative metabolism of xenobiotics. Lewis DF, et al. **Chem Biol Interact** 1989;70(3–4):263–80

Screening models in occupational health practice for assessment of combined exposure to chemicals at work. de Mik G, et al. **Int Arch Occup Environ Health** 1988; Suppl:54–62

METABOLISM

Evaluation of different approaches for identification of xenobiotic- degrading pseudomonads. Busse H, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1578–83

Effects of commercial chlorophenolate, 2,3,7,8-TCDD, and pure phenoxyacetic acids on hepatic peroxisome proliferation, xenobiotic metabolism and sister chromatid exchange in the rat. Mustonen R, et al. **Arch Toxicol** 1989; 63(3):203–8

Individual exposure monitoring from plasma or urinary metabolite determination. van Sittert NJ. **Arch Toxicol Suppl** 1989;13:91–100 (15 ref.)

Performance of biodegradative microorganisms in soil: xenobiotic chemicals as unexploited metabolic niches. Focht DD. **Basic Life Sci** 1988;45:15–29 (45 ref.)

Xenobiotic oxidation by cytochrome P-450–enriched extracts of Streptomyces griseus. Trower MK, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1417–22

Peroxidase as a model for reduction of tertiary amine oxides catalyzed by rat hepatic supernatant and microsomal fractions. Gillespie SG, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):573–9

The effects of propiconazole on hepatic xenobiotic biotransformation in the rat. Leslie C, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4177–81

Interaction of haloacetonitriles with glutathione and glutathione-S-transferase. Lin EL, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):685–8

Drug metabolism by periportal and perivenous rat hepatocytes. Comparison of phase I and phase II reactions and their inducibility during culture. Suolinna EM, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1329–34

The microsomal ethanol oxidizing system: its role in ethanol and xenobiotic metabolism. Lieber CS. **Biochem Soc Trans** 1988 Jun;16(3):232–9

Perinatal opiate exposure. Effects on metabolism of xenobiotics and steroids in adult rat liver. Hansson T, et al. **Dev Pharmacol Ther** 1989;12(3):146–52

Xenobiosis: behaviour of foreign substances in the human body. Albert A. **Drug Des Deliv** 1988 Jul;3(2):185–9 (9 ref.)

N-methylation as a toxication route for xenobiotics. II. In vivo formation of N,N'-dimethyl-4,4'-bipyridyl ion (paraquat) from 4,4'-bipyridyl in the guinea pig. Godin CS, et al. **Drug Metab Dispos** 1989 Mar–Apr;17(2):180–5

Foreign compound metabolism studies with human liver obtained as surgical waste. Relation to donor characteristics and effects of tissue storage. Powis G, et al. **Drug Metab Dispos** 1988 Jul–Aug;16(4):582–9

The influence of ascorbic acid on the free-radical metabolism of xenobiotics: the example of diaziquone. Gutierrez PL. **Drug Metab Rev** 1988;19(3–4):319–43 (43 ref.)

Intracellular binding and transport of hormones and xenobiotics by glutathione-S-transferases. Listowsky I, et al. **Drug Metab Rev** 1988;19(3–4):305–18 (51 ref.)

Xenobiotic metabolism in the nasal epithelia. Jenner J, et al. **Drug Metabol Drug Interact** 1988;6(2):123–48 (45 ref.)

Evaluation of various molecular parameters as predictors of bioconcentration in fish. Connell DW, et al. **Ecotoxicol Environ Safety** 1988 Jun;15(3):324–35

Xenobiotic metabolizing enzyme systems in test fish. III. Comparative studies of liver cytosolic glutathione S-transferases. Donnarumma L, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):180–6

Disposition and metabolism studies of xenobiotics in the environment: fundamentals for safety assessment. Miyamoto J. **J Toxicol Sci** 1988 Nov;13(4):221–46 (78 ref.)

Hormonal regulation of the xenobiotic metabolizing enzymes. Mathis JM, et al. **Mol Cell Endocrinol** 1988 Dec; 60(2–3):105–8 (46 ref.)

Prostaglandin-H-synthase competent cells derived from ram seminal vesicles: a tool for studying cooxidation of xenobiotics. Freyberger A, et al. **Mol Toxicol** 1987–88 Fall; 1(4):503–12

Search for cell culture systems with diverse xenobiotic-metabolizing activities and their use in toxicological studies. Glatt H, et al. **Mol Toxicol** 1987–88 Fall;1(4):313–34 (52 ref.)

Xenobiotic metabolism by isolated pulmonary cells. Devereux TR, et al. **Pharmacol Ther** 1989;41(1–2):243–56 (84 ref.)

Metabolism of endogenous and xenobiotic substances by pulmonary vascular endothelial cells. Ryan US, et al. **Pharmacol Ther** 1989;42(2):235–50 (103 ref.)

Hydroperoxidase activity of lipoxygenase: a potential pathway for xenobiotic metabolism in the presence of linoleic acid. Kulkarni AP, et al. **Res Commun Chem Pathol Pharmacol** 1988 Sep; 61(3):305–14

Extent of cutaneous metabolism during percutaneous absorption of xenobiotics. Bronaugh RL, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):534–43

Reactive intermediates and their toxicological significance. Monks TJ, et al. **Toxicology** 1988 Nov 14;52(1–2):1–53 (338 ref.)

Effects of nitrogen dioxide and ozone in combination on xenobiotic metabolizing activities of rat lungs. Takahashi Y, et al. **Toxicology** 1989 Jun 16;56(3):253–62

Metabolism, disposition, and toxicity of drugs and other xenobiotics in aquatic species. Guarino AM, et al. **Vet Hum Toxicol** 1986;28 Suppl 1:38–44 (48 ref.)

The fate of foreign compounds in biological systems. ISSX/SOT North American Symposium on Endogenous Factors in the Toxicity of Xenobiotics. 8–13 November 1987, Clearwater, Florida. Proceedings. **Xenobiotica** 1988 Nov;18(11):1199–333

Effects of the fungicide prochloraz on xenobiotic metabolism in rainbow trout: in vivo induction. Bach J, et al. **Xenobiotica** 1989 Jan;19(1):1–9

Detection of free radicals as a consequence of dog tracheal epithelial cellular xenobiotic metabolism. Rosen GM, et al. **Xenobiotica** 1989 Jun;19(6):635–43

[Influence of 3,5,3'-triiodo-L-thyronine on the hepatic enzyme activities responsible for the metabolism of xenobiotics during the development of the chick embryo] Goudonnet H, et al. **C R Soc Biol (Paris)** 1988; 182(3):316–23 (Eng. Abstr.) **(Fre)**

[Effects of 3,5,3'-triiodo-L-thyronine on the enzymes responsible for the metabolism of xenobiotics in the rat after increase in the dietary supply of cholesterol] Mounié J, et al. **C R Soc Biol (Paris)** 1988;182(3):308–15 (Eng. Abstr.) **(Fre)**

[Dynamic computer models of xenobiotics] Rothley D, et al. **Pharmazie** 1989 Feb;44(2):135–40 (Eng. Abstr.) **(Ger)**

[Transformation of xenobiotics by soil microorganisms and their potential distribution] Ottow JC. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:61–90 (53 ref.) (Eng. Abstr.) **(Ger)**

[Bile acids in the blood: a new indicator of hepatic function in occupational exposure to xenobiotics?] Franco G. **Med Lav** 1988 Mar–Apr;79(2):91–9 (36 ref.) (Eng. Abstr.) **(Ita)**

PHARMACOKINETICS

Xenobiotic microsomal epoxide hydrolase: 5' sequence of the human gene. Wilson NM, et al. **Biochim Biophys Acta** 1989 Aug 14;1008(3):357–8

Comparison of hepatic drug metabolizing enzyme activities in several agricultural species. Short CR, et al. **Comp Biochem Physiol [C]** 1988;91(2):419–24

Kinetics of disposition of xenobiotics and their metabolites. Houston JB. **Drug Metabol Drug Interact** 1988;6(1):47–83 (46 ref.)

Metabolic activation of carcinogens and toxic chemicals. Parke DV, et al. **Hum Toxicol** 1988 Sep;7(5):397–404

The impact of aspects of time and duration of exposure on toxicokinetics and toxicodynamics of workplace chemicals. Bolt HM, et al. **Int Arch Occup Environ Health** 1988; Suppl:113–20 (17 ref.)

The impact of life style factors and consumption of pharmaceutical drugs on toxicokinetics. Fournier PE, et al. **Int Arch Occup Environ Health** 1988;Suppl:22–30 (17 ref.)

In vivo evaluation in the lactating rabbit of a model for xenobiotic distribution into breast milk. Fleishaker JC, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):919–24

Disposition of xenobiotics: species differences. Rozman K. **Toxicol Pathol** 1988;16(2):123–9 (34 ref.)

Mucosal biotransformation. Schwenk M. **Toxicol Pathol** 1988; 16(2):138–46 (105 ref.)

Studies on the biotransformation of lonazolac, bromerguride, lisuride and terguride in laboratory animals and their hepatocytes. Hümpel M, et al. **Xenobiotica** 1989 Apr; 19(4):361–77

[Isolated hepatocytes as a model for the study of drug metabolism] Kvasničková E, et al. **Cesk Farm** 1988 Jul; 37(6):272–4 **(Cze)**

[Effect of antidiabetic preparations on the processes of xenobiotic metabolism] Stroev EA, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):74–7 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Xenobiotic and endobiotic inhibitors of cytochrome P-450dbl function, the target of the debrisoquine/sparteine type polymorphism. Fonne-Pfister R, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3829–35

Evidence for arrested G2 cell subpopulation in rat liver inducible to mitosis. Gómez-Lechón J, et al. **Cell Tissue Kinet** 1987 Nov;20(6):583–90

Perturbations of the immune system by xenobiotics. Luster MI, et al. **Environ Health Perspect** 1989 May;81:157–62 (24 ref.)

Steroid and xenobiotic effects on the adrenal cortex: mediation by oxidative and other mechanisms. Hornsby PJ. **Free Radic Biol Med** 1989;6(1):103–15 (128 ref.)

Coinduction of MDR-1 multidrug-resistance and cytochrome P-450 genes in rat liver by xenobiotics. Burt RK, et al. **J Natl Cancer Inst** 1988 Nov 2;80(17):1383–6

Recent advances in the structure and function of the parathyroid gland in animals and the effects of xenobiotics. Capen CC, et al. **Toxicol Pathol** 1989;17(2):333–45 (73 ref.)

The dispersed neuroendocrine cells: the structure, function, regulation and effects of xenobiotics on this system. Tischler AS. **Toxicol Pathol** 1989;17(2):307–16 (98 ref.)

TOXICITY

The target organ and the toxic process. Proceedings of the European Society of Toxicology. Strasbourg, September 17–19, 1987. **Arch Toxicol Suppl** 1988;12:1–462

The popliteal lymphnode assay (PLNA) in rodents: a simple functional test for detecting sensitizing effects of xenobiotics. Gleichmann E, et al. **Arch Toxicol Suppl** 1989; 13:188–90

Spontaneous and xenobiotic-induced in vivo-lipid peroxidation in iron-overloaded rats. Younes M, et al. **Arch Toxicol Suppl** 1989;13:282–6

ISSX/SOT North American Symposium on Endogenous Factors in the Toxicity of Xenobiotics. International Society for the Study of of Xenobiotics and the Society of Toxicology. Clearwater, Florida, November 8–13, 1987. Proceedings. **Drug Metab Rev** 1988;19(3–4):233–344

Sarcolemma as model for testing toxicity of chemicals. Ali N, et al. **Indian J Biochem Biophys** 1988 Feb–Apr; 25(1–2):209–14

Effect of iron overload on spontaneous and xenobiotic-induced lipid peroxidation in vivo. Younes M, et al. **J Appl Toxicol** 1989 Apr;9(2):103–8

Correlation between morphologic and functional changes induced by xenobiotics: is every induced change a sign of toxicity? Ruben Z, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):4–5

The relationship between cellular ion deregulation and acute and chronic toxicity. Trump BF, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):6–22 (70 ref.)

The effects of xenobiotics on the structure and function of thyroid follicular and C-cells. Capen CC, et al. **Toxicol Pathol** 1989;17(2):266–93 (68 ref.)

The role of chemicals in the etiology of diabetes mellitus. Wilson GL, et al. **Toxicol Pathol** 1989;17(2):357–63 (59 ref.)

Detection of reactive metabolites in vitro. Garle MJ, et al. **Toxicology** 1989 Jan;54(1):101–10

XENOGRAFT see **TRANSPLANTATION, HETEROLOGOUS**

XENOGRAFT BIOPROSTHESIS see **BIOPROSTHESIS**

XENON

DIAGNOSTIC USE

Xenon-CT cerebral blood flow evaluation of cerebral ischemia in children and young adults. Stringer WA, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):386–94

Regional cerebral blood flow in epilepsy studied with xenon enhanced CT [letter] Duncan R, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1366–7

Imaging local cerebral blood flow by Xenon-enhanced computed tomography—technical optimization procedures. Meyer JS, et al. **Neuroradiology** 1988; 30(4):283–92

EEG changes during five minutes of inhalation of a 33% xenon-O2 mixture. Holl K, et al. **Neurosurg Rev** 1987; 10(4):309–10

Determination of irreversible ischemia by xenon-enhanced computed tomographic monitoring of cerebral blood flow in patients with symptomatic vasospasm. Yonas H, et al. **Neurosurgery** 1989 Mar;24(3):368–72

Clearance of xenon-133 from the lung as an index of bronchomotor tone. Wong A, et al. **Proc West Pharmacol Soc** 1989;32:37–9

[The cerebral circulation in xenon-CT] Majewski A, et al. **Rontgenpraxis** 1988 Sep;41(9):311–8 **(Ger)**

PHARMACOKINETICS

Xenon handling in the liver: red cell capacity effect. Goresky CA, et al. **Circ Res** 1988 Oct;63(4):767–78

LCBF values decline while L lambda values increase during normal human aging measured by stable xenon-enhanced computed tomography. Imai A, et al. **Neuroradiology** 1988; 30(6):463–72

XENON ISOTOPES

DIAGNOSTIC USE

Cerebral blood flow evaluation of arteriovenous malformations with stable xenon CT. Marks MP, et al.

AJNR 1988 Nov–Dec;9(6):1169–75
[Measurement of local cerebral blood flow by computerized tomography with inhalation of stable xenon and curve-fitting method] Touho H, et al. **No To Shinkei** 1988 Jul;40(7):665–72 (Eng. Abstr.) **(Jpn)**

XENON RADIOISOTOPES

Comparative dosimetry of 124Te(p, 2n)123I and 124Xe(p, 2n)123I. Maguire WJ. **Health Phys** 1989 Jul;57(1):195–7

ANALYSIS

The design and evaluation of an automated system for monitoring 133Xe in room air. Meanwell EF, et al. **Phys Med Biol** 1989 Apr;34(4):483–90

DIAGNOSTIC USE

Semiquantifying regional cerebral blood flow by 123I-amphetamine (IMP) SPECT in cerebrovascular disorders: correlations with CBF indices by 133Xe inhalation method. Tsuda Y, et al. **Eur J Nucl Med** 1988; 14(11):546–51
A measurement of regional portal blood flow with Xe-133 and balloon catheter in man. Yasuhara Y, et al. **Eur J Nucl Med** 1989;15(7):346–50
Blood flow and vascular reactivity during attacks of classic migraine—limitations of the Xe-133 intrarterial technique. Skyhøj Olsen T, et al. **Headache** 1989 Jan;29(1):15–20
Regional cerebral function and blood flow: complementary single photon emission computed tomography of the brain using xenon-133 and [123I]iodoamphetamine. Simon TR, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):295–300
Quantitative measurements of cerebral blood flow using SPECT and [99mTc]-d,l-HM-PAO compared to xenon-133. Andersen AR, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S69–81
The local regulation of blood flow evaluated simultaneously by 133-xenon washout and laser Doppler flowmetry. Engelhart M, et al. **J Invest Dermatol** 1988 Nov;91(5):451–3
Dynamic xenon-133 SPECT in dementia [letter] Bonte FJ, et al. **J Nucl Med** 1989 May;30(5):719–20
Penile blood flow by xenon-133 washout. Haden HT, et al. **J Nucl Med** 1989 Jun;30(6):1032–5
Assessment of demented patients by dynamic SPECT of inhaled xenon-133. Komatani A, et al. **J Nucl Med** 1988 Oct;29(10):1621–6
Critical cerebral blood flow thresholds studied by SPECT using xenon-133 and iodine-123 iodoamphetamine. Nakano S, et al. **J Nucl Med** 1989 Mar;30(3):337–42
Comparative study of regional cerebral blood flow images by SPECT using xenon-133, iodine-123 IMP, and technetium-99m HM-PAO. Nakano S, et al. **J Nucl Med** 1989 Feb;30(2):157–64
Brain blood flow by radioxenon tomography [letter] Stokely EM, et al. **J Nucl Med** 1988 Nov;29(11):1875–8
Gastrointestinal visualization during xenon-133 ventilation study in a patient with tracheoesophageal fistula. Takehara Y, et al. **J Nucl Med** 1989 Feb;30(2):258–9
Solubilized xenon 133 lung scintigraphy. Oates E, et al. **J Pediatr Surg** 1988 Nov;23(11):1002–4
Inhalation regional cerebral blood flow: the use of tidal CO2 data to find radionuclide activity associated with exhaled alveolar gas. Allison JD, et al. **Med Phys** 1988 Nov–Dec; 15(6):874–8
133Xe for the x-ray fluorescence assessment of gold in vivo. Scott J, et al. **Phys Med Biol** 1988 Jul;33(7):859–64
Vertebrobasilar insufficiency revealed by xenon-133 inhalation SPECT. Delecluse F, et al. **Stroke** 1989 Jul; 20(7):952–6
Cerebral blood flow determination within the first 8 hours of cerebral infarction using stable xenon-enhanced computed tomography. Hughes RL, et al. **Stroke** 1989 Jun; 20(6):754–60
Diagnosis of vasculogenic impotence: combination of penile xenon-133 washout and papaverine tests. Lin SN, et al. **Urology** 1989 Jul;34(1):28–32
[HmPaO Tc as an indicator of local cerebral blood flow: quantified study compared to the xenon 133 inhalation method] Steinling M, et al. **Ann Radiol (Paris)** 1988; 31(4):229–38 (Eng. Abstr.) **(Fre)**
[133Xe-DSPECT: significance of the cerebrovascular reserve capacity for the diagnosis and therapy of chronic cerebral ischemia] Leinsinger G, et al. **Nuklearmedizin** 1988 Aug;27(4):127–34 (Eng. Abstr.) **(Ger)**
[A more precise evaluation of coronary collateral circulation using regional flow measurements with xenon-133] Franz N, et al. **Radiol Diagn (Berl)** 1988;29(3):445–9 (Eng. Abstr.) **(Ger)**
[Assessment of regional lung function using xenon-133 exhalation scintigraphy with reference to chronic obstructive airway diseases] Kämmer JC, et al. **Radiol Diagn (Berl)** 1988;29(5):753–9 (Eng. Abstr.) **(Ger)**
[Clinical assessment of uneven ventilation by factor analysis of Xe-133 washout scintigram] Honda N, et al. **Kaku Igaku** 1989 Apr;26(4):507–13 (Eng. Abstr.) **(Jpn)**
[Regional cerebral blood flow measurement by 133Xe inhalation method using SPECT with dual gamma cameras] Matsumura K, et al. **Kaku Igaku** 1988 Aug;25(8):831–8 **(Jpn)**
[A measurement of V/V distribution by intravenous injection of Kr-81m and Tc-99m-MAA—a comparative study with Xe-133 inhalation method] Ohtani Y, et al. **Kaku Igaku** 1988 Apr;25(4):323–9 (Eng. Abstr.) **(Jpn)**
[Measurement of cerebral blood flow in normal subjects by 133Xenon inhalation and single photon emission computerized tomography] Imao Y, et al. **No To Shinkei** 1988 Dec;40(12):1143–50 (Eng. Abstr.) **(Jpn)**
[An analysis of regional ventilation in pulmonary sarcoidosis by inspired 133Xe washout test] Kohno Y, et al. **Radioisotopes** 1988 Jun;37(6):325–9 (Eng. Abstr.) **(Jpn)**
[Kinetics of the clearance of 133Xe in cerebral diagnosis and a basis for the construction of a xenon regeneration unit] Levi BS. **Med Tekh** 1989 Mar–Apr;(2):26–30 (Eng. Abstr.) **(Rus)**

METABOLISM

A comparison of the rate of clearance of xenon (133Xe) and pertechnetate ion (99mTcO4–) in murine tumors and normal leg muscles. Brown SL, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):381–90
Estimation of error limits for cerebral blood flow values obtained from xenon-133 clearance curves. Ryding E. **Stroke** 1989 Feb;20(2):205–10

XENOPUS

ANATOMY & HISTOLOGY

Morphology and synaptic connections of HRP-filled, axon-bearing horizontal cells in the Xenopus retina. Witkovsky P, et al. **J Comp Neurol** 1988 Sep 1;275(1):29–38
Isolation of plasma membrane complexes from Xenopus oocytes. Wall DA, et al. **J Membr Biol** 1989 Feb; 107(2):189–201

EMBRYOLOGY

Role of cell displacement, cell division, and fragment size in pattern formation during embryonic retinal regeneration in Xenopus. Ide CF. **Acta Biol Hung** 1988;39(2–3):179–89 (23 ref.)
Ectopic expression of the proto-oncogene int-1 in Xenopus embryos leads to duplication of the embryonic axis. McMahon AP, et al. **Cell** 1989 Sep 22;58(6):1075–84
Induction and the organization of the body plan in Xenopus development. Cooke J. **Ciba Found Symp** 1989;144:187–201; discussion 201–7, 208–11 (29 ref.)
The establishment of regional identity in the Xenopus blastula. Heasman J, et al. **Ciba Found Symp** 1989; 144:99–109; discussion 109–12, 150–5
Localization of mRNA and axis formation during Xenopus embryogenesis. Melton DA, et al. **Ciba Found Symp** 1989; 144:16–29; discussion 29–36, 92–8 (27 ref.)
Gastrulation and larval pattern in Xenopus after blastocoelic injection of a Xenopus-derived inducing factor: experiments testing models for the normal organization of mesoderm. Cooke J, et al. **Dev Biol** 1989 Feb; 131(2):383–400
Experimental analysis of ventral blood island hematopoiesis in Xenopus embryonic chimeras. Smith PB, et al. **Dev Biol** 1989 Feb;131(2):302–12
An RNA-binding protein from Xenopus oocytes is associated with specific message sequences. Crawford DR, et al. **Development** 1987 Dec;101(4):741–9
Differential accumulation of oocyte nuclear proteins by embryonic nuclei of Xenopus. Dreyer C. **Development** 1987 Dec;101(4):829–46
Stability of RNA in developing Xenopus embryos and identification of a destabilizing sequence in TFIIIA messenger RNA. Harland R, et al. **Development** 1988 Apr; 102(4):837–52
A developmental and ultrastructural study of the optic chiasma in Xenopus. Wilson MA, et al. **Development** 1988 Mar;102(3):537–53
The development of an assay to detect mRNAs that affect early development. Woodland HR, et al. **Development** 1987 Dec;101(4):925–30
Effect of magnetic resonance imaging on Xenopus laevis embryogenesis. Kay HH, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):501–6
Teratogenic effects of some calcium channel blocking agents in Xenopus embryos. Burgess AM, et al. **Pharmacol Toxicol** 1989 Jan;64(1):78–82
Cloning and expression of a Xenopus embryonic gap junction protein. Ebihara L, et al. **Science** 1989 Mar 3; 243(4895):1194–5
Induction of mesoderm by a viral oncogene in early Xenopus embryos. Whitman M, et al. **Science** 1989 May 19; 244(4906):803–6
An extensive increase of junctional communication capacity in endoderm development of the Xenopus embryo. Chen DL. **Shih Yen Sheng Wu Hsueh Pao** 1989 Mar;22(1):43–55
Injection of catalytic subunit of cyclic AMP-dependent protein kinase speeds up the development of junctional communication in the embryo. Chen DL. **Shih Yen Sheng Wu Hsueh Pao** 1989 Mar;22(1):57–65
Development of a metabolic activation system for the frog embryo teratogenesis assay: Xenopus (FETAX). Fort DJ, et al. **Teratogenesis Carcinog Mutagen** 1988;8(5):251–63

GENETICS

Formation of gap junctions by expression of connexins in Xenopus oocyte pairs. Swenson KI, et al. **Cell** 1989 Apr 7;57(1):145–55
Duplicated homeobox genes in Xenopus. Fritz AF, et al. **Dev Biol** 1989 Feb;131(2):584–8
Highly efficient beta globin transcription in the absence of both a viral enhancer and erythroid factors. Walmsley ME, et al. **Development** 1987 Dec;101(4):815–27
Transcription of Xenopus selenocysteine tRNA Ser (formerly designated opal suppressor phosphoserine tRNA) gene is directed by multiple 5'-extragenic regulatory elements. Lee BJ, et al. **J Biol Chem** 1989 Jun 5;264(16):9696–702
Hepatocyte-specific promoter element HP1 of the Xenopus albumin gene interacts with transcriptional factors of mammalian hepatocytes. Schorpp M, et al. **J Mol Biol** 1988 Jul 20;202(2):307–20
Primary structure and evolutionary relationship between the adult alpha-globin genes and their 5'-flanking regions of Xenopus laevis and Xenopus tropicalis. Stalder J, et al. **J Mol Evol** 1988 Dec–1989 Feb;28(1–2):64–71
Nucleotide sequence of Xenopus C-raf coding region. Le Guellec R, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10357
Oocyte and somatic 5S ribosomal RNA and 5S RNA encoding genes in Xenopus tropicalis. Nietfeld W, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8803–15
The Xenopus U2 gene PSE is a single, compact, element required for transcription initiation and 3' end formation. Parry HD, et al. **Nucleic Acids Res** 1989 May 25; 17(10):3633–44
Expression of functional Xenopus TFIIIA in Escherichia coli. Tso JY, et al. **Nucleic Acids Res** 1989 Mar 11; 17(5):2145
Xenopus vitellogenin genes. Wahli W, et al. **Oxf Surv Eukaryot Genes** 1985;2:96–120 (83 ref.)
Expression of ribosomal protein genes and regulation of ribosome biosynthesis in Xenopus development. Amaldi F, et al. **Trends Biochem Sci** 1989 May;14(5):175–8 (30 ref.)

GROWTH & DEVELOPMENT

Reticulospinal neurons, locomotor control and the development of tailswimming in Xenopus. van Mier P. **Acta Biol Hung** 1988;39(2–3):161–77 (40 ref.)
In vitro growth properties of Xenopus retinal neurons undergo developmental modulation. Grant P, et al. **Dev Biol** 1989 Jun;133(2):502–14
The effects of tectal lesion on the survival of isthmic neurones in Xenopus. Straznicky C, et al. **Development** 1987 Dec; 101(4):869–76
Histochemistry and isomyosins of tail musculature in Xenopus. Kordylewski L, et al. **J Muscle Res Cell Motil** 1989 Aug;10(4):290–6

IMMUNOLOGY

The immune system of Xenopus. Du Pasquier L, et al. **Annu Rev Immunol** 1989;7:251–75 (168 ref.)
Differential cyclophosphamide sensitivity of suppressor function in Xenopus, the clawed toad. Clothier RH, et al. **Dev Comp Immunol** 1989 Spring;13(2):159–66

PHYSIOLOGY

Specificity and retinotectal projections of quarter-eye fragments in Xenopus laevis. Brändle K, et al. **Acta Biol Hung** 1988;39(2–3):191–5 (6 ref.)
Processing of wave patterns in the lateral line system parallels to auditory processing. Elepfandt A. **Acta Biol Hung** 1988; 39(2–3):251–65 (39 ref.)
Xenopus skin mucus induces oral dyskinesias that promote escape from snakes. Barthalmus GT, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):957–9
Whole-cell clamp study of Xenopus embryonic cholinergic neurons. Xie ZP, et al. **Sci China [B]** 1989 Feb;32(2):148–54
[Transmembrane currents in Xenopus oocytes after an injection of brain mRNA] Fedulova SA, et al. **Neirofiziologiia** 1988;20(6):829–32 (Eng. Abstr.) **(Rus)**

XENOPUS LAEVIS

Mitotic activity in the epidermal cells of regenerating hind limbs of Xenopus laevis larvae after amputation at different levels. An autoradiographic study. Abdel-Karim AE, et al. **Folia Morphol (Praha)** 1988;36(4):357–64

ANATOMY & HISTOLOGY

Dendritic morphology of identified retinal ganglion cells in Xenopus laevis: a comparison between the results of horseradish peroxidase and cobaltic-lysine retrograde labelling. Tóth P, et al. **Arch Histol Cytol** 1989 May; 52(2):87–93
Horseradish peroxidase study of tectal afferents in Xenopus laevis with special emphasis on their relationship to the lateral-line system. Zittlau KE, et al. **Brain Behav Evol** 1988;32(4):208–19
The coelomic envelope of Xenopus laevis eggs: a quick-freeze, deep-etch analysis. Larabell CA, et al. **Dev Biol** 1989 Jan;131(1):126–35
An epithelium-type cytoskeleton in a glial cell: astrocytes of amphibian optic nerves contain cytokeratin filaments and are connected by desmosomes. Rungger-Brändle E, et al. **J Cell Biol** 1989 Aug;109(2):705–16
Morphology of afferent synapses in the Mauthner cell of larval Xenopus laevis. Cioni C, et al. **J Comp Neurol** 1989

Jun 8;284(2):205–14

A morphometric study of bone and tooth volumes in the pipid frog Xenopus laevis (Daudin), with comments on the importance of tooth resorption during normal tooth replacement. Shaw JP. **J Exp Zool** 1989 Jan;249(1):99–104

Observation on the basal lamina of duodenal epithelial cells during metamorphosis of Xenopus laevis. Murata E, et al. **Okajimas Folia Anat Jpn** 1988 Oct;65(4):235–43

[Axonal projections of the cells of the dorsal ganglia in the lumbar segments of the spinal cord in tadpoles of the toad Xenopus laevis] Shupliakov OV. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):715–20 (Eng. Abstr.) **(Rus)**

BLOOD

Analysis of oxygen binding by Xenopus laevis hemoglobin: implications for the Root effect. Kister J, et al. **Respir Physiol** 1989 May;76(2):191–203

EMBRYOLOGY

Ultrastructural study of contacts between cells of the dorsal ectoderm and chordamesoderm during gastrulation in Xenopus laevis. Bates AW, et al. **Acta Anat (Basel)** 1988; 133(1):5–9

Proposed role of microfilaments in the cell reorientation that accompanies somite formation in Xenopus. Burgess AM. **Acta Anat (Basel)** 1988;132(4):331–4

Biosynthesis of sulfated proteoglycans in amphibian embryonal cells. Løvtrup-Rein H. **Biosci Rep** 1989 Apr; 9(2):213–22

Neural induction is mediated by cross-talk between the protein kinase C and cyclic AMP pathways. Otte AP, et al. **Cell** 1989 Aug 25;58(4):641–8

Mix.1, a homeobox mRNA inducible by mesoderm inducers, is expressed mostly in the presumptive endodermal cells of Xenopus embryos. Rosa FM. **Cell** 1989 Jun 16; 57(6):965–74

Progressive determination during formation of the anteroposterior axis in Xenopus laevis. Sive HL, et al. **Cell** 1989 Jul 14;58(1):171–80

The role of external tensions in differentiation of Xenopus laevis embryonic tissues. Beloussov LV, et al. **Cell Differ Dev** 1988 Dec;25(3):165–76

Gene expression in amphibian embryogenesis. Dawid IB, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:67–74 (33 ref.)

Outer segment growth and periciliary vesicle turnover in developing photoreceptors of Xenopus laevis. Eckmiller MS. **Cell Tissue Res** 1989 Feb;255(2):283–92

The distribution of nucleoplasmin in early development and organogenesis of Xenopus laevis. Wedlich D, et al. **Cell Tissue Res** 1988 Nov;254(2):295–300

Metabolic regulation during early frog development: flow of glycolytic carbon into phospholipids in Xenopus oocytes and fertilized eggs. Dworkin MB, et al. **Dev Biol** 1989 Apr; 132(2):524–8

Metabolic regulation during early frog development: glycogenic flux in Xenopus oocytes, eggs, and embryos. Dworkin MB, et al. **Dev Biol** 1989 Apr;132(2):512–23

States of determination of single cells transplanted between 512-cell Xenopus embryos. Jacobson M, et al. **Dev Biol** 1989 Jan;131(1):119–25

Mediolateral cell intercalation in the dorsal, axial mesoderm of Xenopus laevis. Keller R, et al. **Dev Biol** 1989 Feb; 131(2):539–49

Signals from the dorsal blastopore lip region during gastrulation bias the ectoderm toward a nonepidermal pathway of differentiation in Xenopus laevis. Savage R, et al. **Dev Biol** 1989 May;133(1):157–68

Multinucleation during myogenesis of the myotome of Xenopus laevis: a qualitative study. Boudjelida H, et al. **Development** 1987 Nov;101(3):583–90

The organization of mesodermal pattern in Xenopus laevis: experiments using a Xenopus mesoderm-inducing factor. Cooke J, et al. **Development** 1987 Dec;101(4):893–908

The distribution of fibronectin and tenascin along migratory pathways of the neural crest in the trunk of amphibian embryos. Epperlein HH, et al. **Development** 1988 Aug; 103(4):743–56

Patterns of junctional communication during development of the early amphibian embryo. Guthrie S, et al. **Development** 1988 Aug;103(4):769–83

The behaviour and function of bottle cells during gastrulation of Xenopus laevis. Hardin J, et al. **Development** 1988 May; 103(1):211–30

Regional expression, pattern and timing of convergence and extension during gastrulation of Xenopus laevis. Keller R, et al. **Development** 1988 May;103(1):193–209

Analysis of hsp 30, hsp 70 and ubiquitin gene expression in Xenopus laevis tadpoles. Krone PH, et al. **Development** 1988 May;103(1):59–67

The distribution of fibronectin and laminin in the somitogenesis of Xenopus laevis. Wedlich D, et al. **Differentiation** 1989 May;40(2):77–83

Differential antero–posterior expression of two proteins encoded by a homeobox gene in Xenopus and mouse embryos. Oliver G, et al. **EMBO J** 1988 Oct;7(10):3199–209

Changes in the polyadenylation of specific stable RNA during the early development of Xenopus laevis. Paris J, et al. **Gene** 1988 Dec 10;72(1–2):169–76

Xenopus endo B is a keratin preferentially expressed in the embryonic notochord. LaFlamme SE, et al. **Genes Dev** 1988 Jul;2(7):853–62

Destruction of a translationally controlled mRNA in Xenopus oocytes delays progesterone–induced maturation. Smith RC, et al. **Genes Dev** 1988 Oct;2(10):1296–306

Proteins regulating actin assembly in oogenesis and early embryogenesis of Xenopus laevis: gelsolin is the major cytoplasmic actin–binding protein. Ankenbauer T, et al. **J Cell Biol** 1988 Oct;107(4):1489–98

Expression of cell adhesion molecule E–cadherin in Xenopus embryos begins at gastrulation and predominates in the ectoderm. Choi YS, et al. **J Cell Biol** 1989 Jun; 108(6):2449–58

Cell intercalation during notochord development in Xenopus laevis. Keller R, et al. **J Exp Zool** 1989 Aug;251(2):134–54

Regional identity is established before gastrulation in the Xenopus embryo. Turner A, et al. **J Exp Zool** 1989 Aug; 251(2):245–52

A third striated muscle actin gene is expressed during early development in the amphibian Xenopus laevis. Mohun T, et al. **J Mol Biol** 1988 Jul 5;202(1):67–76

A community effect in animal development. Gurdon JB. **Nature** 1988 Dec 22–29;336(6201):772–4

Interaction between peptide growth factors and homoeobox genes in the establishment of antero–posterior polarity in frog embryos. Ruiz i Altaba A, et al. **Nature** 1989 Sep 7; 341(6237):33–8

Loss of competence in amphibian induction can take place in single nondividing cells. Grainger RM, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1900–4

Developmental dialectics. Beardsley T. **Sci Am** 1988 Nov; 259(5):40–1

The presence of fibroblast growth factor in the frog egg: its role as a natural mesoderm inducer. Kimelman D, et al. **Science** 1988 Nov 18;242(4881):1053–6

Evaluation of the developmental toxicity of nicotine and cotinine with frog embryo teratogenesis assay: Xenopus. Dawson DA, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(6):329–38

Formation of visual pigment chromophores during the development of Xenopus laevis. Azuma M, et al. **Vision Res** 1988;28(9):959–64

[Role of c–myc protein in the early embryonic development of Xenopus] Méchali M, et al. **C R Acad Sci [III]** 1989; 308(8):213–8 (Eng. Abstr.) **(Fre)**

[Contact polarization of the embryonic cells of the clawed toad during gastrulation. 2. The morphogenetic and differentiation consequences of relaxation polarization of the cells—relaxation morphoses] Belousov LV. **Ontogenez** 1988 Jul–Aug;19(4):405–13 **(Rus)**

[Effect of external tensions on tissue differentiation in embryos of the clawed toad in vitro] Lakirev AV, et al. **Ontogenez** 1988 Nov–Dec;19(6):591–600 **(Rus)**

[The spatial–temporal distribution of the mRNA of the Na+–K+–ATPase alpha–subunit in the early development of the clawed toad studied by hybridization in situ] Zaralkil AG, et al. **Ontogenez** 1989 Mar–Apr;20(2):128–34 (Eng. Abstr.) **(Rus)**

GENETICS

A possible maternal–effect mutant of Xenopus laevis: II. Studies of RNA synthesis in dissociated embryonic cells. Shiokawa K, et al. **Cell Differ Dev** 1988 Sep;25(1):47–55

Duplicated homeobox genes in Xenopus. Fritz AF, et al. **Dev Biol** 1989 Feb;131(2):584–8

Developmental expression of a neurofilament–M and two vimentin–like genes in Xenopus laevis. Sharpe CR. **Development** 1988 Jun;103(2):269–77

Structure and expression of a Xenopus gene encoding an snRNP protein (U1 70K). Etzerodt M, et al. **EMBO J** 1988 Dec 20;7(13):4311–21

The finger motif defines a multigene family represented in the maternal mRNA of Xenopus laevis oocytes. Köster M, et al. **EMBO J** 1988 Jun;7(6):1735–41

cDNA cloning of the developmentally regulated lamin LIII of Xenopus laevis. Stick R. **EMBO J** 1988 Oct; 7(10):3189–97

Dominant and specific repression of Xenopus oocyte 5S RNA genes and satellite I DNA by histone H1. Wolffe AP. **EMBO J** 1989 Feb;8(2):527–37

Sex linkage of malic enzyme in Xenopus laevis. Graf JD. **Experientia** 1989 Feb 15;45(2):194–6

Isolation and expression of cDNA clones coding for two sequence variants of Xenopus laevis histone H5. Rutledge RG, et al. **Gene** 1988 Oct 15;70(1):117–26

xlgv7: a maternal gene product localized in nuclei of the central nervous system in Xenopus laevis. Miller M, et al. **Genes Dev** 1989 Apr;3(4):572–83

Expression of a histone H1–like protein is restricted to early Xenopus development. Smith RC, et al. **Genes Dev** 1988 Oct;2(10):1284–95

Xenopus laevis contains two nonallelic preproinsulin genes. cDNA cloning and evolutionary perspective. Shuldiner AR, et al. **J Biol Chem** 1989 Jun 5;264(16):9428–32

Effects of increasing ploidy on the lumbar lateral motor column and hindlimb of newly metamorphosed Xenopus laevis: a comparison of diploid and triploid siblings. Sperry DG. **J Comp Neurol** 1988 Nov 22;277(4):499–508

Immuno–electron microscopic identification of human estrogen receptor–DNA complexes at the estrogen–responsive element and in the first intron of a Xenopus vitellogenin gene. ten Heggler–Bordier B, et al. **J Mol Biol** 1988 Nov 5;204(1):217–20

Computer modeling from solution data of spinach chloroplast and of Xenopus laevis somatic and oocyte 5 S rRNAs. Westhof E, et al. **J Mol Biol** 1989 May 20;207(2):417–31

The Xenopus laevis ribosomal gene terminator contains sequences that both enhance and repress ribosomal transcription. Firek S, et al. **Mol Cell Biol** 1989 Sep; 9(9):3777–84

Sequence elements essential for function of the Xenopus laevis ribosomal DNA enhancers. Pikaard CS, et al. **Mol Cell Biol** 1988 Oct;8(10):4282–8

The Xenopus laevis U2 gene distal sequence element (enhancer) is composed of four subdomains that can act independently and are partly functionally redundant. Tebb G, et al. **Mol Cell Biol** 1989 Apr;9(4):1682–90

Expression of the poly(A)–binding protein during development of Xenopus laevis. Zelus BD, et al. **Mol Cell Biol** 1989 Jun;9(6):2756–60

Site–specific inversions in repeated Xenopus laevis homeobox gene 2 sequences. Fritz AF, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9058

A second Xenopus immunoglobulin heavy chain constant region isotype gene [corrected and republished article originally printed in Nucleic Acids Res 1989 Feb 25;17(4):1776] Haire RN, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):following 2886

Isolation of the Xenopus homolog of int–1/wingless and expression during neurula stages of early development. Noordermeer J, et al. **Nucleic Acids Res** 1989 Jan 11; 17(1):11–8

Sequence of the ribosomal protein cDNA of D. melanogaster homologous to the L1 ribosomal protein gene of X. laevis. Rafti F, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):456

Detection of proto–oncogenes in the genome of the amphibian Xenopus laevis. Moreau J, et al. **Oncogene** 1989 Apr;4(4):443–9

The yes proto–oncogene is present in amphibians and contributes to the maternal RNA pool in the oocyte. Steele RE, et al. **Oncogene Res** 1989;4(3):223–33

U snRNA gene families in Xenopus laevis. Mattaj IW, et al. **Oxf Surv Eukaryot Genes** 1985;2:121–40 (45 ref.)

Melanophore differentiation in the periodic albino mutant of Xenopus laevis. Fukuzawa T, et al. **Pigment Cell Res** 1987;1(3):197–201

Evolutionary conserved modules associated with zinc fingers in Xenopus laevis. Knöchel W, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6097–100

Gene expression in the embryonic nervous system of Xenopus laevis. Richter K, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8086–90

[Behavior of exogenously introduced DNAs and expression of their genetic information in developing embryos of Xenopus laevis] Shiokawa K, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(8):1271–86 (59 ref.) **(Jpn)**

GROWTH & DEVELOPMENT

Immunocytochemical identification of non–neuronal intermediate filament proteins in the developing Xenopus laevis nervous system. Szaro BG, et al. **Brain Res** 1988 Oct 1;471(2):207–24

Peripheral competition in the control of sensory neuron numbers in Xenopus frogs reared with a single bilaterally innervated hindlimb. Lamb AH, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):149–53

Angiogenesis on the optic tectum of albino Xenopus laevis tadpoles. Rovainen CM, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):197–213

Developmental patterns of peroxisomal enzymes in amphibian liver during spontaneous and triiodothyronine–induced metamorphosis. Ciolek E, et al. **Comp Biochem Physiol [B]** 1989;93(2):477–84

An aberrant retinal pathway and visual centers in Xenopus tadpoles share a common cell surface molecule, A5 antigen. Fujisawa H, et al. **Dev Biol** 1989 Oct;135(2):231–40

Thyroid hormone directly induces hepatocyte competence for estrogen–dependent vitellogenin synthesis during the metamorphosis of Xenopus laevis. Kawahara A, et al. **Dev Biol** 1989 Mar;132(1):73–80

Development and hormone regulation of androgen receptor levels in the sexually dimorphic larynx of Xenopus laevis. Kelley D, et al. **Dev Biol** 1989 Jan;131(1):111–8

Gradual appearance of a regulated retinotectal projection pattern in Xenopus laevis. O'Rourke NA, et al. **Dev Biol** 1989 Mar;132(1):251–65

Expression of myosin heavy chain transcripts during Xenopus laevis development. Radice GP, et al. **Dev Biol** 1989 Jun; 133(2):562–8

Compatible limb patterning mechanisms in urodeles and anurans. Sessions SK, et al. **Dev Biol** 1989 Feb; 131(2):294–301

Transdifferentiation of ocular tissues in larval Xenopus laevis. Bosco L. **Differentiation** 1988 Nov;39(1):4–15 (48 ref.)

Changing patterns of binocular visual connections in the intertectal system during development of the frog, Xenopus laevis. II. Abnormalities following early visual deprivation. Grant S, et al. **Exp Brain Res** 1989;75(1):117–32

Changing patterns of binocular visual connections in the intertectal system during development of the frog, Xenopus laevis. I. Normal maturational changes in response to changing binocular geometry. Grant S, et al. **Exp Brain Res** 1989;75(1):99–116

Temporal pattern of appearance and distribution of

cholecystokinin-like peptides during development in Xenopus laevis. Scalise FW, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):303–11

Lumbar lateral motor column development in triploid Xenopus laevis. Sperry DG. **J Comp Neurol** 1988 Dec 15; 278(3):446–52

Bouton ultrastructure and synaptic growth in a frog autonomic ganglion. Streichert LC, et al. **J Comp Neurol** 1989 Mar 1;281(1):159–68

Identities, antigenic determinants, and topographic distributions of neurofilament proteins in the nervous systems of adult frogs and tadpoles of Xenopus laevis. Szaro BG, et al. **J Comp Neurol** 1988 Jul 15;273(3):344–58

Development of spinocerebellar afferents in the clawed toad, Xenopus laevis. van der Linden JA, et al. **J Comp Neurol** 1988 Nov 1;277(1):41–52

Toxic and developmental effects of organophosphorus insecticides in embryos of the South African clawed frog. Snawder JE, et al. **J Environ Sci Health [B]** 1989 Jun; 24(3):205–18

Development of the lateral line system in Xenopus. Winklbauer R. **Prog Neurobiol** 1989;32(3):181–206 (37 ref.)

IMMUNOLOGY

Tryptic digestion of Xenopus IgM and IgY molecules. Coosemans V, et al. **Dev Comp Immunol** 1989 Spring; 13(2):149–57

Immunoglobulin Fc receptor molecules on Xenopus laevis splenocytes. Coosemans V, et al. **Immunology** 1988 Dec; 65(4):641–5

Nucleotide sequence of a cDNA encoding a third distinct Xenopus immunoglobulin heavy chain isotype. Amemiya CT, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5388

In vitro cytotoxicity in adult Xenopus generated against larval targets and minor histocompatibility antigens. Horton TL, et al. **Transplantation** 1989 May;47(5):880–2

METABOLISM

Aldosterone binding sites along nephron of Xenopus and rabbit. Gnionsahe A, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R87–95

Steady-state levels of pro-dynorphin-related end-products from the brain of the amphibian, Xenopus laevis. Sei CA, et al. **Brain Res** 1989 Feb 6;479(1):162–6

Spatial and temporal expression of phosphorylated and non-phosphorylated forms of neurofilament proteins in the developing nervous system of Xenopus laevis. Szaro BG, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):87–103

Site selection by Xenopus laevis RNAase P. Carrara G, et al. **Cell** 1989 Jul 14;58(1):37–45

Site selection by the tRNA splicing endonuclease of Xenopus laevis. Mattoccia E, et al. **Cell** 1988 Nov 18;55(4):731–8

Factors that regulate the activity of the phosphatidylinositol kinase present in oocyte membranes of Xenopus laevis. Carrasco D, et al. **Comp Biochem Physiol [B]** 1989; 92(3):487–91

Characterization of proteolytic activities in embryos of Xenopus laevis. Miyata S, et al. **Comp Biochem Physiol [B]** 1988;91(4):651–6

Developmental expression of the protein product of Vg1, a localized maternal mRNA in the frog Xenopus laevis. Dale L, et al. **EMBO J** 1989 Apr;8(4):1057–65

Isolation and characterization of two different insulins from an amphibian, Xenopus laevis. Shuldiner AR, et al. **Endocrinology** 1989 Jul;125(1):469–77

Expression of yeast invertase in oocytes from Xenopus laevis. Secretion of active enzyme differing in glycosylation. Roitsch T, et al. **Eur J Biochem** 1989 May 15;181(3):733–9

The effects of forced and voluntary diving on plasma catecholamines and erythrocyte pH in the aquatic anuran, Xenopus laevis. Boutilier RG, et al. **Exp Biol** 1989; 48(2):83–8

The constituents of storage granules in the dermal glands of Xenopus laevis. Structure of a basic polypeptide deduced from cloned cDNA. Berger H, et al. **FEBS Lett** 1989 Jun 5;249(2):293–6

Particular processing of pro-opiomelanocortin in Xenopus laevis intermediate pituitary. Sequencing of alpha- and beta-melanocyte-stimulating hormones. Rouillé Y, et al. **FEBS Lett** 1989 Mar 13;245(1-2):215–8

Binding of adrenergic ligands to liver plasma membrane preparations from the axolotl, Ambystoma mexicanum; the toad, Xenopus laevis; and the Australian lungfish, Neoceratodus forsteri. Janssens PA, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):524–30

Poly(A) elongation during Xenopus oocyte maturation is required for translational recruitment and is mediated by a short sequence element. McGrew LL, et al. **Genes Dev** 1989 Jun;3(6):803–15

Serotoninergic neurons in the retina of Xenopus laevis: selective staining, identification, development, and content. Frederick JM, et al. **J Comp Neurol** 1989 Mar 22; 281(4):516–31

Three conductance classes of nicotinic acetylcholine receptors are expressed in developing amphibian skeletal muscle. Owens JL, et al. **J Neurosci** 1989 Jul;9(7):2575–80

Expression of functional sodium channels in stage II–III Xenopus oocytes. Krafte DS, et al. **J Neurosci Methods** 1989 Jan;26(3):211–5

Expression of glycine and other amino acid receptors by rat spinal cord mRNA in Xenopus oocytes. Akagi H, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):262–8

Differential expression of glutamate receptors in Xenopus oocytes injected with messenger RNA from lobster muscle. Kawai N, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):203–7

Phylogenetic conservation of brain microtubule-associated proteins MAP2 and tau. Viereck C, et al. **Neuroscience** 1988 Sep;26(3):893–904

[Adrenoreceptive structures in the early embryos of the clawed toad (Xenopus laevis)] Shmukler IuB, et al. **Zh Evol Biokhim Fiziol** 1988 Sep-Oct;24(5):621–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Primary structure from amino acid and cDNA sequences of two Cu,Zn superoxide dismutase variants from Xenopus laevis. Schininà ME, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):507–15

Stimulation of endogenous dopamine release and metabolism in amphibian retina by light- and K+-evoked depolarization. Boatright JH, et al. **Brain Res** 1989 Mar 13;482(1):164–8

The action of pyrethroids on sodium channels in myelinated nerve fibres and spinal ganglion cells of the frog. de Weille JR, et al. **Brain Res** 1989 Mar 20;482(2):324–32

Developmental changes in the open time and conductance of acetylcholine receptors in aneural cultured Xenopus myocytes treated with cycloheximide or tunicamycin. Carlson CG, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):61–8

Fission yeast p13 blocks mitotic activation and tyrosine dephosphorylation of the Xenopus cdc2 protein kinase. Dunphy WG, et al. **Cell** 1989 Jul 14;58(1):181–91

Weak bases mimic the fertilization-associated chloride conductance increase and induce morphological changes in the cortex of Xenopus laevis eggs. Charbonneau M. **Cell Differ Dev** 1989 Jan;26(1):39–51

Taxol reveals cortical sites of microtubule assembly in Xenopus oocytes. Role of the nucleus. Jessus C, et al. **Cell Differ Dev** 1988 Sep;25(1):57–63

Increased levels of leukotriene C4 in retinal pigment epithelium are correlated with early events in photorceceptor shedding in Xenopus laevis. Birkle DL, et al. **Curr Eye Res** 1989 Jun;8(6):557–61

Evidence for a pertussis toxin-sensitive G protein involved in the control of meiotic reinitiation of Xenopus laevis oocytes. Pellaz V, et al. **Exp Cell Res** 1989 Jul; 183(1):245–50

Xenopus spermatozoon: is there any correlation between motility and oxygen consumption? Bernardini G, et al. **Gamete Res** 1988 Dec;21(4):403–8

Xenopus spermatozoon: correlation between shape and motility. Bernardini G, et al. **Gamete Res** 1988 Jun; 20(2):165–75

Further study on the changes in the concentration of prolactin-binding sites in different organs of Xenopus laevis male and female, kept under dry conditions and then returned to water (their natural habitat). Muccioli G, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):411–7

Analysis of histamine as a hair-cell transmitter in the lateral line of Xenopus laevis. Bledsoe SC Jr, et al. **Hear Res** 1989 Mar;38(1–2):81–93

Water depth alters respiratory behaviour of Xenopus laevis. Shannon P, et al. **J Exp Biol** 1988 Jul;137:597–602

Evidence that regenerative ability is an intrinsic property of limb cells in Xenopus. Sessions SK, et al. **J Exp Zool** 1988 Jul;247(1):39–44

Functional expression of the oxytocin receptor in Xenopus laevis oocytes primed with mRNA from bovine endometrium. Morley SD, et al. **J Mol Endocrinol** 1988 Jul;1(1):77–81

Maximum rate of oxygen consumption and quantitative histochemistry of succinate dehydrogenase in single muscle fibres of Xenopus laevis. van der Laarse WJ, et al. **J Muscle Res Cell Motil** 1989 Jun;10(3):221–8

Electrophysiology and dye-coupling are sexually dimorphic characteristics of individual laryngeal muscle fibers in Xenopus laevis. Tobias ML, et al. **J Neurosci** 1988 Jul; 8(7):2422–9

Structural and functional properties of reticulospinal neurons in the early-swimming stage Xenopus embryo. van Mier P, et al. **J Neurosci** 1989 Jan;9(1):25–37

Lack of axon regeneration of isthmic neurons in juvenile Xenopus. McCart R, et al. **Neurosci Lett** 1988 Oct 5; 92(2):143–8

Activation of glucose uptake by insulin and insulin-like growth factor I in Xenopus oocytes. Janicot M, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2642–6

The use of Xenopus oocytes to probe synaptic communication. Snutch TP. **Trends Neurosci** 1988 Jun; 11(6):250–6 (55 ref.)

[Behavioral reactions of the clawed toad Xenopus laevis to L- and D-isomers of amino acids] Kruzhalov NB, et al. **Zh Evol Biokhim Fiziol** 1988 May-Jun;24(3):451–5 (Eng. Abstr.) **(Rus)**

XERODERMA see ICHTHYOSIS

XERODERMA PIGMENTOSUM

Xeroderma pigmentosum--report of four cases. Jain VK, et al. **Ann Dent** 1989 Summer;48(1):25–7

[Xeroderma pigmentosum. Apropos of conjunctival and palpebral sites in 2 cases] Kunnert C, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1145–6, 1149–50 (17 ref.) (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

[Pigmentation of the skin after long-term treatment with amiodarone] Reingardene DI. **Kardiologiia** 1989 Apr; 29(4):112–3 **(Rus)**

COMPLICATIONS

Malignant melanoma of the iris in xeroderma pigmentosum. Johnson MW, et al. **Arch Ophthalmol** 1989 Mar; 107(3):402–7

Xeroderma pigmentosum with versive seizures. Mimaki T, et al. **Pediatr Neurol** 1988 Jan-Feb;4(1):58–61

[Limbic neoformation in a 4-year-old child with xeroderma pigmentosum] Lagier J, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1233–7 (Eng. Abstr.) **(Fre)**

[Erythema action spectrum in xeroderma pigmentosum group A patients] Mitoh Y. **Nippon Hifuka Gakkai Zasshi** 1989 Jan;99(1):9–14 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

The DeSanctis-Cacchione syndrome. Gupta CM, et al. **Indian J Pediatr** 1988 Nov-Dec;55(6):991–3

[Xeroderma pigmentosum presenting clinical features of spinocerebellar degeneration] Tomimoto H, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):172–6 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Prevention of skin cancer in xeroderma pigmentosum with oral isotretinoin. Moshell AN. **Cutis** 1989 May;43(5):485–90

[Retinoid treatment of pediatric skin diseases] Kuokkanen K. **Duodecim** 1989;105(8):772–7 **(Fin)**

ENZYMOLOGY

Reduced superoxide dismutase activity in xeroderma pigmentosum fibroblasts. Nishigori C, et al. **J Invest Dermatol** 1989 Oct;93(4):506–10

GENETICS

Human chromosome 15 confers partial complementation of phenotypes to xeroderma pigmentosum group F cells. Saxon PJ, et al. **Am J Hum Genet** 1989 Apr;44(4):474–85

Spontaneous chromosomal anomalies in lymphocytes from xeroderma pigmentosum. A study of ten patients. Aledo R, et al. **Ann Genet (Paris)** 1988;31(4):211–5

Reduced DNA repair in cultured melanocytes and nevus cells from a patient with xeroderma pigmentosum. Kraemer KH, et al. **Arch Dermatol** 1989 Feb;125(2):263–8

A promising genomic transfectant into Xeroderma pigmentosum group A with highly amplified mouse DNA and intermediate UV resistance turns revertant. Blum M, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):647–55

Excision repair in xeroderma pigmentosum group C cells is regulated differently in transformed cells and primary fibroblasts. Cleaver JE. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):557–62

Ultraviolet light-resistant primary transfectants of xeroderma pigmentosum cells are also DNA repair-proficient. Stark M, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1351–6

Susceptibility of Xeroderma pigmentosum cells to transformation with oncogenes. Suarez H, et al. **Biochimie** 1988 Jul;70(7):969–73

Jumping end-to-end dicentrics in a case of squamous cell carcinoma from a patient with xeroderma pigmentosum. Aledo R, et al. **Cancer Genet Cytogenet** 1989 Jul 1; 40(1):95–103

Establishment and characterization of a melanoma cell line from a xeroderma pigmentosum patient: activation of N-ras at a potential pyrimidine dimer site. Keijzer W, et al. **Cancer Res** 1989 Mar 1;49(5):1229–35

Activated oncogenes in human skin tumors from a repair-deficient syndrome, xeroderma pigmentosum. Suarez HG, et al. **Cancer Res** 1989 Mar 1;49(5):1223–8

DNA damage and repair in normal, xeroderma pigmentosum and XP revertant cells analyzed by gel electrophoresis: excision of cyclobutane dimers from the whole genome is not necessary for cell survival. Cleaver JE. **Carcinogenesis** 1989 Sep;10(9):1691–6

DNA repair and cancer: speculations based on studies with xeroderma pigmentosum, Cockayne's syndrome and trichothiodystrophy. Lehmann AR, et al. **Carcinogenesis** 1989 Aug;10(8):1353–6

Increase of sister chromatid exchanges in excision repair deficient xeroderma pigmentosum. Aledo R, et al. **Hum Genet** 1989 Feb;81(3):221–5

Lack of complementation between xeroderma pigmentosum complementation groups D and H. Johnson RT, et al. **Hum Genet** 1989 Feb;81(3):203–10

Cytogenetic study on eleven cutaneous neoplasms and two pre-tumoral lesions from Xeroderma pigmentosum patients. Aledo R, et al. **Int J Cancer** 1989 Jul 15; 44(1):79–83

Comparison of DNA-incising capacities in fibroblast strains from the Mannheim XP collection after treatment with N-acetoxy-2-acetylaminofluorene and UV light. Popanda

O, et al. **J Cancer Res Clin Oncol** 1988;114(5):459–67
Somatic mosaicism for DNA repair capacity in fibroblasts derived from a group A xeroderma pigmentosum patient. Chang HR, et al. **J Invest Dermatol** 1989 Oct;93(4):460–5
Sister chromatid exchange–related characteristics of excision repair–proficient xeroderma pigmentosum cells. Oikawa A, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):289S–292S
Melanoma and other skin cancers in xeroderma pigmentosum patients and mutation in their cells. Takebe H, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):236S–238S
In vitro complementation of xeroderma pigmentosum. Kaufmann WK. **Mutagenesis** 1988 Sep;3(5):373–80 (95 ref.)
Xeroderma pigmentosum complementation group XP–I withdrawn. Bootsma D, et al. **Mutat Res** 1989 Sep; 218(2):149–51
Mutagenesis of xeroderma pigmentosum fibroblasts by acrolein. Curren RD, et al. **Mutat Res** 1988 Sep–Oct; 209(1–2):17–22
Excision repair characteristics of denV–transformed xeroderma pigmentosum cells. Ley RD, et al. **Mutat Res** 1989 Mar;217(2):101–7
Clonal chromosome rearrangements in a fibroblast strain from a patient affected by xeroderma pigmentosum (complementation group C). Nuzzo F, et al. **Mutat Res** 1989 Jul;219(4):209–15
DNA methylation in xeroderma pigmentosum. Sano H, et al. **Mutat Res** 1989 Mar;217(2):141–51
The cloned human DNA excision repair gene ERCC–1 fails to correct xeroderma pigmentosum complementation groups A through I. van Duin M, et al. **Mutat Res** 1989 Mar;217(2):83–92
Microinjection of T4 endonuclease V produced by a synthetic denV gene stimulates unscheduled DNA synthesis in both xeroderma pigmentosum and normal cells. Yamaizumi M, et al. **Mutat Res** 1989 Mar;217(2):135–40
Xeroderma pigmentosum. Lambert WC. **N J Med** 1989 May; 86(5):383–6 (6 ref.)
Molecular cloning and characterization of a mammalian excision repair gene that partially restores UV resistance to xeroderma pigmentosum complementation group D cells. Arrand JE, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6997–7001
Molecular cloning of a mouse DNA repair gene that complements the defect of group–A xeroderma pigmentosum. Tanaka K, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5512–6
Xeroderma pigmentosum group E cells lack a nuclear factor that binds to damaged DNA. Chu G, et al. **Science** 1988 Oct 28;242(4878):564–7
[DNA repair defect in xeroderma pigmentosum] Tanaka K. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):473–80 (6 ref.) (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Impairment of natural–killer–cell activity in xeroderma pigmentosum [letter] Norris PG, et al. **N Engl J Med** 1988 Dec 22;319(25):1668–9

METABOLISM

Reduced levels of UV–induced unscheduled DNA synthesis in epidermal keratinocytes of patients with xeroderma pigmentosum and correlation with development of skin neoplasms. Kondo S, et al. **Cancer Res** 1989 Apr 15; 49(8):1927–30
The repair of identified large DNA adducts induced by 4–nitroquinoline–1–oxide in normal or xeroderma pigmentosum group A human fibroblasts, and the role of DNA polymerases alpha or delta. Jones CJ, et al. **Carcinogenesis** 1989 Jul;10(7):1197–201
Stimulated production of ATP by H2O2 disproportionation in extracts from normal and xeroderma pigmentosum skins, and from normal, xeroderma pigmentosum, ataxia telangiectasia and simian virus 40 transformed cell lines. Vuillaume M, et al. **Carcinogenesis** 1989 Aug;10(8):1375–81
Relative repair of adenovirus damaged by sunlamp, UV and gamma–irradiation in Cockayne syndrome fibroblasts is different from that in xeroderma pigmentosum fibroblasts. Rainbow AJ. **Photochem Photobiol** 1989 Aug;50(2):201–7

MICROBIOLOGY

Absence of induction of enhanced reactivation of herpes simplex virus in cells from xeroderma pigmentosum patients without skin cancer. Abrahams PJ, et al. **Cancer Res** 1988 Nov 1;48(21):6054–7

PATHOLOGY

A childhood neurodegeneration due to defective DNA repair: a novel concept of disease based on studies xeroderma pigmentosum. Robbins JH. **J Child Neurol** 1989 Apr;4(2):143–6 (37 ref.)
Chromatin and nucleolar changes in Xeroderma pigmentosum cells resemble aging–related nuclear events. Puvion–Dutilleul F, et al. **Mutat Res** 1989 Jan;219(1):57–70
Quantitative histologic study of sural nerves in xeroderma pigmentosum. Origuchi Y, et al. **Pediatr Neurol** 1987 Nov–Dec;3(6):356–9
Late onset of skin cancers in 2 xeroderma pigmentosum group F siblings and a review of 30 Japanese xeroderma pigmentosum patients in groups D, E and F. Kondo S, et al. **Photodermatol** 1989 Apr;6(2):89–95 (32 ref.)
Different sensitivities to ultraviolet light–induced cytotoxicity and sister chromatid exchanges in xeroderma pigmentosum and Bloom's syndrome fibroblasts. Mamada A, et al. **Photodermatol** 1989 Jun;6(3):124–30
[Ultrastructural findings in the cornea in xeroderma pigmentosum] Schwab C, et al. **Fortschr Ophthalmol** 1989; 86(3):181–4 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Proximity of repair patches to persistent pyrimidine dimers in DNA of normal human and xeroderma pigmentosum cells. Cleaver JE. **Radiat Res** 1988 Nov;116(2):245–53

XEROMAMMOGRAPHY see under **MAMMOGRAPHY**

XEROPHTHALMIA

CHEMICALLY INDUCED

[Xerosis caused by abuse of vasoconstrictor eye drops: apropos of a case] Díaz C, et al. **Rev Med Univ Navarra** 1987 Jul–Sep;31(3):141–3 (Eng. Abstr.) **(Spa)**

COMPLICATIONS

Interactions between xerophthalmia and morbidity among underfive rural children. Katiyar GP, et al. **Indian Pediatr** 1988 Oct;25(10):939–45
Relationship between xerophthalmia and protein calorie malnutrition [letter] Reddy V. **Indian Pediatr** 1988 Oct; 25(10):1016–7
Vitamin A deficiency and diarrhea. Sachdev HP, et al. **Indian Pediatr** 1988 Oct;25(10):911–3
Xerophthalmia malnutrition and diarrhea in urban Bangladesh: a clinic based study. Sikder ZU, et al. **Indian Pediatr** 1988 Oct;25(10):946–51

DIAGNOSIS

Eye parameters for the diagnosis of xerophthalmos. Murube–del–Castillo J, et al. **Clin Exp Rheumatol** 1989 Mar–Apr;7(2):145–50 (54 ref.)

DIET THERAPY

Vitamin A activity of buriti (Mauritia vinifera Mart) and its effectiveness in the treatment and prevention of xerophthalmia. Mariath JG, et al. **Am J Clin Nutr** 1989 May;49(5):849–53

EPIDEMIOLOGY

Prevalence of xerophthalmia in relation to nutrition and general health in preschool–age children in three regions of Tanzania. Pepping F, et al. **Acta Paediatr Scand** 1988 Nov;77(6):895–906
A prevalence study of vitamin A deficiency and xerophthalmia in northeastern Thailand. Bloem MW, et al. **Am J Epidemiol** 1989 Jun;129(6):1095–103
Village and household clustering of xerophthalmia and trachoma. Katz J, et al. **Int J Epidemiol** 1988 Dec; 17(4):865–9
Food consumption of children with and without xerophthalmia in rural Tanzania. Pepping F, et al. **Trop Geogr Med** 1989 Jan;41(1):14–21
[Xerophthalmia. Inquiry in 1986 in Vietnam] Verin P, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):127–8 (Eng. Abstr.) **(Fre)**

ETIOLOGY

Advanced xerophthalmia as a presenting sign in cystic fibrosis. Lindenmuth KA, et al. **Ann Ophthalmol** 1989 May; 21(5):189–91
Night blindness and conjunctival xerosis caused by vitamin A deficiency in patients with cystic fibrosis. Rayner RJ, et al. **Arch Dis Child** 1989 Aug;64(8):1151–6
Vitamin A supplementation for refugees and famine victims. Nieburg P, et al. **Bull WHO** 1988;66(6):689–97
Xerophthalmia: some clinico–epidemiological concomitants. Bhattacharyya AK. **Indian J Public Health** 1988 Jan–Mar; 32(1):4–16 (53 ref.)
Xerophthalmia in protein calorie malnutrition. Sethi RS, et al. **Indian Pediatr** 1988 Mar;25(3):249–54
Conjunctival xerosis in cystic fibrosis. Vernon SA, et al. **J R Soc Med** 1989 Jan;82(1):46–7
A sicca syndrome in HIV infection: association with HLA–DR5 and CD8 lymphocytosis. Itescu S, et al. **Lancet** 1989 Aug 26;2(8661):466–8

PATHOLOGY

Scanning electron microscopic study of the conjunctival surface in ocular dryness. Liotet S, et al. **Fortschr Ophthalmol** 1988;85(6):646–50
Conjunctival mucus ferning in hypovitaminosis A. Edward DP, et al. **Indian J Ophthalmol** 1988 Jan–Mar;36(1):27–8

SURGERY

A comparison of two methods of punctal occlusion. Knapp ME, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):315–8

THERAPY

[Tear substitutes. Experimental and clinical observations] Brewitt H. **Klin Monatsbl Augenheilkd** 1988 Sep; 193(3):275–82 (Eng. Abstr.) **(Ger)**

XERORADIOGRAPHY

Clinical recommendations for the use of D–speed film, E–speed film, and xeroradiography. Gratt BM, et al. **J Am Dent Assoc** 1988 Oct;117(5):609–14 (40 ref.)
A comparison between xeroradiographs and conventional radiographs as an aid in root canal therapy for maxillary molars. Alexander JB, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):443–8
A comparison between xeroradiography and conventional radiography in the diagnosis of endodontic lesions. Barkhordar RA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):489–93
Objective and subjective comparisons of the observation of dental xeroradiographs with reflected and transmitted light. Nishikawa K, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):770–4
Image analysis of radiolucencies in approximal enamel: a comparison of xeroradiographic and conventional film images. Shearer AC, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):453–8
[Postoperative xeroradiography in esthetic rhinoplasty. Comparison of tissue reactions] Le Pesteur J. **Ann Chir Plast Esthet** 1989;34(3):243–50 (Eng. Abstr.) **(Fre)**
[Electrophotographic microfilming for archiving roentgenograms and electroroentgenograms] Mamontov VV, et al. **Med Radiol (Mosk)** 1988 Oct;33(10):70–3 (Eng. Abstr.) **(Rus)**
[A workplace for electroradiography in an x–ray diagnostic room] Kokorev EA. **Vestn Rentgenol Radiol** 1988 Jul–Aug; (4):83–4 **(Rus)**
[Comparative evaluation of electroroentgenography and roentgenography in the study of soft tissues] Vintergal'ter SF, et al. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):53–9 (Eng. Abstr.) **(Rus)**
[Electroroentgenography in the diagnosis of soft tissue tumors] Vintergal'ter SF, et al. **Vopr Onkol** 1989; 35(7):856–60 (Eng. Abstr.) **(Rus)**
[The potentials and importance of xeroradiography in examining patients with cancer] Vintergal'ter SF. **Vopr Onkol** 1989;35(1):87–94 (63 ref.) **(Rus)**

INSTRUMENTATION

[A method of obtaining a plantogram on ERGA (an electroroentgenographic attachment for X–ray apparatus)] Abdukadyrov AV, et al. **Ortop Travmatol Protez** 1989 Feb; (2):60 **(Rus)**

METHODS

Exposure times at which dental xeroradiographs and radiographs have comparable optical density. Alexander JB, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep; 66(3):359–64
[Xeroradiographic scanning in clinical oncology] Valutskas KK. **Med Radiol (Mosk)** 1989 Feb;34(2):28–34 (Eng. Abstr.) **(Rus)**

TRENDS

Electroradiography and prospects of its scientific development. Ambrozaytis KI, et al. **Sante Publique (Bucur)** 1988 Jul–Sep;31(3):213–7

XEROSTOMIA

Saliva: its role in health and disease. Herrera JL, et al. **J Clin Gastroenterol** 1988 Oct;10(5):569–78 (67 ref.)

CHEMICALLY INDUCED

Transdermal scopolamine: a review of its effects upon motion sickness, psychological performance, and physiological functioning. Parrott AC. **Aviat Space Environ Med** 1989 Jan;60(1):1–9 (66 ref.)
Morphine and dryness of the mouth. White ID, et al. **BMJ** 1989 May 6;298(6682):1222–3

COMPLICATIONS

A model to investigate xerostomia–related dental caries. Jansma J, et al. **Caries Res** 1988;22(6):357–61
Fluoride for the Head and Neck Radiation Patient [letter] Gilmore ND. **Milit Med** 1989 Feb;154(2):103

DIAGNOSIS

Salivary lactoferrin in primary Sjögren's syndrome. Jezequel N, et al. **Clin Exp Rheumatol** 1989 Mar–Apr;7(2):123–5
Criteria for the salivary component of Sjögren's syndrome. A review. Schiødt M, et al. **Clin Exp Rheumatol** 1989 Mar–Apr;7(2):119–22 (34 ref.)
Evaluation of unstimulated whole saliva flow rate and stimulated parotid flow as confirmatory tests for xerostomia. Skopouli FN, et al. **Clin Exp Rheumatol** 1989 Mar–Apr;7(2):127–9

ETIOLOGY

Xerostomia in the aged. Navazesh M. **Dent Clin North Am** 1989 Jan;33(1):75–80 (31 ref.)
Sicca syndrome due to amyloidosis. Vazquez M, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):1013–4
A sicca syndrome in HIV infection: association with HLA–DR5 and CD8 lymphocytosis. Itescu S, et al. **Lancet** 1989 Aug 26;2(8661):466–8
Use of lozenges may cause dry mouth [letter] Brundage S. **Postgrad Med** 1989 Jan;85(1):35
[A study on the effect of aging on salivary glands and xerostomia] Konno A, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1837–46 (Eng. Abstr.) (Jpn)
[Double neoplasms of non–Hodgkin's lymphoma and thyroid cancer associated with sicca syndrome: a case report] Saito M, et al. **Rinsho Ketsueki** 1988 Sep;29(9):1460–4 (Eng. Abstr.) (Jpn)

METABOLISM

Retention of topical fluoride in the mouths of xerostomic subjects. Billings RJ, et al. **Caries Res** 1988;22(5):306–10

PATHOLOGY

Histological and functional features of salivary glands in rheumatic patients with oral sicca symptoms. Jonsson R, et al. **Scand J Rheumatol** 1988;17(5):387–91

PHYSIOPATHOLOGY

Salivary glucose clearance, dry mouth and pH changes in dental plaque in man. Hase JC, et al. **Arch Oral Biol** 1988; 33(12):875–80
Influence of desalivation in rats on incidence of caries in intact cagemates. Bowen WH, et al. **J Dent Res** 1988 Oct; 67(10):1316–8
Xerostomia. Part I: Relationship to other oral symptoms and salivary gland hypofunction. Sreebny LM, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):451–8
[Clinical and statistical study on the value of the sugar cube test in the measurement of the degree of radio–induced xerostomia] Gandolfo S, et al. **Minerva Stomatol** 1989 Jan; 38(1):71–7 (Eng. Abstr.) (Ita)

THERAPY

A double–blind cross–over trial of a mucin–containing artificial saliva. Duxbury AJ, et al. **Br Dent J** 1989 Feb 25;166(4):115–20
Caring for the dentate elderly. Widdop FT. **Int Dent J** 1989 Jun;39(2):85–94 (58 ref.)
Xerostomia [editorial] **Lancet** 1989 Apr 22;1(8643):884

XIPAMIDE see under **DIURETICS, SULFAMYL**

XIPHOID BONE see under **STERNUM**

XIPHOPHORUS see **CYPRINODONTIFORMES**

XIPHOSURA see **HORSESHOE CRABS**

XYLANS see under **POLYSACCHARIDES**

XYLAZINE see under **THIAZINES**

XYLENES

Comparative antibacterial efficacy of a 2–minute surgical scrub with chlorhexidine gluconate, povidone–iodine, and chloroxylenol sponge–brushes. Aly R, et al. **Am J Infect Control** 1988 Aug;16(4):173–7
Xylenes: uses, occurrence and exposure. Fishbein L. **IARC Sci Publ** 1988;(85):109–20 (55 ref.)
A method for studying pain arising from the urinary bladder in conscious, freely–moving rats. Abelli L, et al. **J Urol** 1989 Jan;141(1):148–51
The use of xylene (xylol) in medical laboratories [letter] McDougall AC. **Lepr Rev** 1989 Mar;60(1):67

ADVERSE EFFECTS

Conjugated serum bile acid concentrations in workers exposed to low doses of toluene and xylene. Franco G, et al. **Br J Ind Med** 1989 Feb;46(2):141–2
Exposure indices for painters exposed to toluene and xylene at low concentrations. Jonai H, et al. **Ind Health** 1988; 26(3):197–202

ANALYSIS

Determination of benzene, toluene and xylene in industrial air by charcoal tube, solvent desorption and gas chromatography. Brown RH. **IARC Sci Publ** 1988; (85):225–33
Determination of benzene, toluene and xylene in industrial air by porous polymer adsorption tube, thermal desorption and gas chromatography. Brown RH. **IARC Sci Publ** 1988; (85):235–42
Past and present exposure determination techniques for benzene, toluene and xylene. Fishbein L, et al. **IARC Sci Publ** 1988;(85):123–48 (187 ref.)
Biological monitoring of exposure to benzene, toluene and xylene. Lauwerys R, et al. **IARC Sci Publ** 1988;(85):205–22 (79 ref.)
Determination of benzene, toluene and xylene in breath samples by gas chromatography/mass spectrometry. Pellizzari ED, et al. **IARC Sci Publ** 1988;(85):267–79
On studying asymmetric membranes made from polymethylmethacrylate/xylene by the thermal–inversion method. Tsai FJ, et al. **Prog Clin Biol Res** 1989;292:119–28
[Determining the levels of toluene, benzene and xylene in hand washings from the skin of workers by a method of vapor–phase chromatographic analysis] Chernitsyna MA. **Gig Sanit** 1989 Jan;(1):38–41 (Rus)

BLOOD

Determination of xylenes in blood by head–space gas chromatography. Engström K, et al. **IARC Sci Publ** 1988; (85):307–11

IMMUNOLOGY

Allergic contact dermatitis from para–chloro–meta–xylenol in Lurosep soap. Libow LF, et al. **Contact Dermatitis** 1989 Jan;20(1):67–8

METABOLISM

Determination of specific mercapturic acids in human urine after experimental exposure to toluene or o–xylene. Norström A, et al. **IARC Sci Publ** 1988;(89):232–4
Use of terpene–based solvents (Hemo–De, Histoclear, and Shandon and BDH xylene substitutes) in place of xylene in the Ehrlich indole test. Gubash SM, et al. **J Clin Microbiol** 1989 Sep;27(9):2136–7
Coexposure of man to m–xylene and methyl ethyl ketone. Kinetics and metabolism. Liira J, et al. **Scand J Work Environ Health** 1988 Oct;14(5):322–7
[Method for simultaneous determination of six metabolites of toluene, xylene and ethylbenzene, and its application to exposure monitoring of workers in a printing factory with gravure machines] Sakai T, et al. **Sangyo Igaku** 1989 Jan;31(1):9–16 (Eng. Abstr.) (Jpn)

PHARMACOKINETICS

Toxicokinetics of benzene, toluene and xylenes. Sato A. **IARC Sci Publ** 1988;(85):47–64 (86 ref.)

PHARMACOLOGY

Testicular atrophy and loss of nerve growth factor–immunoreactive germ cell line in rats exposed to n–hexane and a protective effect of simultaneous exposure to toluene or xylene. Nylén P, et al. **Arch Toxicol** 1989; 63(4):296–307
Changes induced by short–term xylene exposure in human evoked potentials. Seppäläinen AM, et al. **Int Arch Occup Environ Health** 1989;61(7):443–9
Changes in rat lung microsomal lipids after p–xylene: relationship to inhibition of benzo[a]pyrene metabolism. Roberts AE, et al. **J Toxicol Environ Health** 1988; 25(4):479–94
[Inhibition of hepatic drug–metabolizing enzymes by hexachloro–p–xylene in guinea pigs] Wang J, et al. **Yao Hsueh Hsueh Pao** 1988;23(9):651–5 (Eng. Abstr.) (Chi)

TOXICITY

Protective effect of Legalon in workers exposed to organic solvents. Szilárd S, et al. **Acta Med Hung** 1988;45(2):249–56
Decrease of inhaled toluene, ethyl benzene, m–xylene, or mesitylene in rat blood after combined exposure to ethyl acetate. Freundt KJ, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):495–8
Oral toxicology studies with xylene isomers and mixed xylenes. Condie LW, et al. **Drug Chem Toxicol** 1988; 11(4):329–54
Genetic effects of benzene, toluene and xylene. Fishbein L. **IARC Sci Publ** 1988;(85):19–46 (167 ref.)
Carcinogenicity of benzene, toluene and xylene: epidemiological and experimental evidence. McMichael AJ. **IARC Sci Publ** 1988;(85):3–18 (53 ref.)
Conditioned flavor aversion induced by inhaled p–xylene in rats [published erratum appears in Neurotoxicol Teratol 1988 Nov–Dec;10(6):585] Bushnell PJ, et al. **Neurotoxicol Teratol** 1988 May–Jun;10(3):273–7
Behavioral effects of acute p–xylene inhalation in rats: autoshaping, motor activity, and reversal learning. Bushnell PJ. **Neurotoxicol Teratol** 1988 Nov–Dec;10(6):569–77
Xylenes. **Rev Environ Contam Toxicol** 1988;106:213–22 (32 ref.)
Acute toxicity of cresols, xylenols, and trimethylphenols to Daphnia magna Straus 1820 [published erratum appears in Sci Total Environ 1989 Jan;78:300] Devillers J. **Sci Total Environ** 1988 Sep 15;76(1):79–83
Health effects of the alkylbenzenes. II. Xylenes. Low LK, et al. **Toxicol Ind Health** 1989 Jan;5(1):85–105 (77 ref.)
[Combined long–term toxicity and carcinogenicity test of p–chloro–m–xylenol (PCMX) applied to female mouse skin] Momma J, et al. **Eisei Shikenjo Hokoku** 1988; (106):39–47 (Eng. Abstr.) (Jpn)
[Morphometric analysis of the rat lung after exposure to xylene vapors] Stetkiewicz J, et al. **Med Pr** 1988; 39(5):297–308 (Eng. Abstr.) (Pol)
[Pathogenetic mechanisms of liver damage by the anthelmintic preparation chloxyl] Vinogradova LF, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):62–6 (Eng. Abstr.) (Rus)
[Mechanism of disorders of reproductive function after exposure to 4–brom–o–xylol (experimental studies)] Fesenko MA. **Gig Tr Prof Zabol** 1989;(3):48–9 (Rus)
[Mutagenic activity of chloxyl] Lychko ND, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):40–3 (Eng. Abstr.) (Rus)

XYLITOL

Xylitol [letter] Vorster M. **Diabetes Care** 1989 Feb; 12(2):171–2

ADMINISTRATION & DOSAGE

Combined effect of xylitol, NaF and ZnCl2 on growth and metabolism of Streptococcus sobrinus OMZ 176. Scheie AA, et al. **APMIS** 1988 Sep;96(9):761–7
Glucose, fructose, and xylitol in postoperative hypocaloric parenteral nutrition. Behrendt W, et al. **Infusionstherapie** 1988 Aug;15(4):170–5
Correlation between caries incidence and frequency of chewing gum sweetened with sucrose or xylitol. Rekola M. **Proc Finn Dent Soc** 1989;85(1):21–4
[A study of adequate energy, amino acid, and carbohydrate requirements in postoperative total parenteral nutrition—the effect of branched chain amino acid (BCAA) and carbohydrate mixture of glucose, fructose, and xylitol (GFX)] Hayashida K, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):343–54 (Eng. Abstr.) (Jpn)

ANALYSIS

Structures of D–xylose isomerase from Arthrobacter strain B3728 containing the inhibitors xylitol and D–sorbitol at 2.5 A and 2.3 A resolution, respectively. Henrick K, et al. **J Mol Biol** 1989 Jul 5;208(1):129–57

METABOLISM

Effect of sorbitol, xylitol, and xylitol/sorbitol chewing gums on dental plaque. Söderling E, et al. **Caries Res** 1989; 23(5):378–84
Aldose reductase and polyol in cultured pericytes of human retinal capillaries. Hohman TC, et al. **Exp Eye Res** 1989 Jan;48(1):55–60

PHARMACOLOGY

Xylitol vs glucose: effect on the rate of gastric emptying and motilin, insulin, and gastric inhibitory polypeptide release. Salminen EK, et al. **Am J Clin Nutr** 1989 Jun; 49(6):1228–32
Ultrastructural changes in Streptococcus sobrinus induced by xylitol, NaF and ZnCl2. Scheie AA, et al. **Caries Res** 1989;23(5):320–7
Effect of sorbitol– and xylitol–containing chewing gum on salivary microflora, saliva, and oral sugar clearance. Wennerholm K, et al. **Scand J Dent Res** 1989 Jun; 97(3):257–62
Intestinal absorption of oxalate by xylitol–treated rats and mice. Salminen S, et al. **Toxicol Lett** 1988 Nov; 44(1–2):113–20

THERAPEUTIC USE

Long–term effect of xylitol chewing gum on dental caries. Isokangas P, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):200–3

XYLOSE

1H– and 13C–n.m.r. assignments for structural elements of xylose–containing N–linked oligosaccharides, using 1D–and 2D–n.m.r. experiments. Bouwstra JB, et al. **Carbohydr Res** 1989 Feb 15;186(1):39–49
Synthesis of four structural elements of xylose–containing carbohydrate chains from N–glycoproteins. Kerékgyárto J, et al. **Carbohydr Res** 1989 Feb 15;186(1):51–62

CHEMICAL SYNTHESIS

Synthesis of branched D–xylofuranan by selective, ring–opening polymerization of silylated 1,5–anhydro–beta–D–xylofuranose, and its conversion into a blood anticoagulant. Yoshida T, et al. **Carbohydr Res** 1988 Jun 15;177:69–80

DIAGNOSTIC USE

The D–xylose test in pediatrics: is it useful? [letter] Lifschitz CH, et al. **Gastroenterology** 1989 Jul;97(1):246–7
[14C]D–xylose breath test for small intestinal bacterial overgrowth [letter] Rumessen JJ. **Gastroenterology** 1989 Jan;96(1):273–4
Comparison of the D–xylose and polyethylene glycol absorption tests as indicators of mucosal damage in infants with chronic diarrhea. Lifschitz CH, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):47–50
[Measurement of jejunal absorption during the postoperative ileus stage with a D–xylose test: consequences for immediate postoperative enteral feeding] Costalat G, et al. **Ann Chir** 1988;42(7):482–7 (Eng. Abstr.) (Fre)
[Postoperative small intestine absorption—principles for

enteral nutrition] Weiner R, et al. **Infusionstherapie** 1988 Oct;15(5):208–16 (Eng. Abstr.) **(Ger)**

[Value of the D-xylose test in elderly subjects] Bolzán H, et al. **Acta Gastroenterol Latinoam** 1987;17(4):331–6 (Eng. Abstr.) **(Spa)**

METABOLISM

Isolation and characterization of xylose- and xylan-utilizing anaerobic bacteria. Murty MV, et al. **Antonie Van Leeuwenhoek** 1989;55(2):153–63

Efficient ethanol production from glucose, lactose, and xylose by recombinant Escherichia coli. Alterthum F, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1943–8

31P nuclear magnetic resonance study of the effect of azide on xylose fermentation by Candida tropicalis. Lohmeier-Vogel E, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1974–80

Streptomyces glucose/xylose isomerase has a single active site for glucose and xylose. Gaikwad SM, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):457–63

Xylose transport in the human jejunum. Rolston DD, et al. **Dig Dis Sci** 1989 Apr;34(4):553–8

Correlation between depression of catabolite control of xylose metabolism and a defect in the phosphoenolpyruvate:mannose phosphotransferase system in Pediococcus halophilus. Abe K, et al. **J Bacteriol** 1989 Apr;171(4):1793–800

Studies on the physical state of water in living cells and model systems. XI. The equilibrium distribution coefficients of pentoses in muscle cell water: their dependence primarily on the molecular weights of the pentoses and lesser dependence on their stereospecificity. Ling GN, et al. **Physiol Chem Phys Med NMR** 1988;20(4):309–17

PHARMACOKINETICS

Use of kinetic methods to evaluate D-xylose malabsorption in patients. Breiter HC, et al. **J Lab Clin Med** 1988 Nov; 112(5):533–43

Interpretation of the xylose absorption test made simple: finally? [editorial] Zarling EJ. **J Lab Clin Med** 1988 Nov; 112(5):531–2

PHARMACOLOGY

Differential blood pressure and hormonal effects after glucose and xylose ingestion in chronic autonomic failure. Mathias CJ, et al. **Clin Sci** 1989 Jul;77(1):85–92

Mechanism of inactivation of UDP-glucose 4-epimerase from Saccharomyces cerevisiae by D-xylose and L-arabinose. Cármenes RS, et al. **Yeast** 1986 Jun;2(2):101–8

URINE

[Excretion of d-xylose in healthy children with special reference to newborn infants] Malczyńska E. **Pediatr Pol** 1974 Feb;49(2):165–73 (Eng. Abstr.) **(Pol)**

XYLOSIDASES see under **GLYCOSIDE HYDROLASES**

XYLULOSE see under **PENTOSES**

XYY KARYOTYPE see under **SEX CHROMOSOME ABNORMALITIES**

Y CHROMOSOME

Y chromosome specific DNA probe in the diagnosis of a patient with mos 45,X/46,XYnf. Yorifuji T, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Feb;31(1):85–9

Unilateral microscopic gonadoblastoma in a prepubertal Turner mosaic with Y chromosome material identified by restriction fragment analysis [published erratum appears in Am J Clin Pathol 1989 Feb;91(2):240] Shah KD, et al. **Am J Clin Pathol** 1988 Nov;90(5):622–7

Selective protection of specific DNA sequences in the heterochromatin of C-banded human Y chromosomes. Cantú ES, et al. **Am J Hum Genet** 1988 Dec;43(6):948–53

Y chromosome DNA polymorphisms in two African populations. Lucotte G, et al. **Am J Hum Genet** 1989 Jul; 45(1):16–20

An extended long-range restriction map of the human sex-determining region on Yp, including ZFY, finds marked homology on Xp and no detectable Y sequences in an XX male. Verga V, et al. **Am J Hum Genet** 1989 May;44(5):756–65

Two mosaic cases with nonfluorescent Y chromosome analysed with Y-specific DNA probes. Kałużewski B, et al. **Am J Med Genet** 1988 Nov;31(3):489–503

Giemsa-11 technique elucidating three structurally altered nonfluorescent Y chromosomes: r (Y), idic (Yp), dir tan dup (Yp). Kosztolányi G. **Ann Genet (Paris)** 1988; 31(4):235–40

Molecular characterization of human X/Y translocations suggests their aetiology through aberrant exchange between homologous sequences on Xp and Yq. Ballabio A, et al. **Ann Hum Genet** 1989 Jan;53 (Pt 1):9–14

Absence of Y specific DNA sequences in two siblings with 46XX hermaphroditism. Raine J, et al. **Arch Dis Child** 1989 Aug;64(8):1185–7

Genes on the X and Y chromosomes controlling sex. Ferguson-Smith MA. **BMJ** 1988 Sep 10;297(6649):635–6 (17 ref.)

In situ hybridization using a Y-specific probe--a sensitive method for distinguishing residual male recipient cells from female donor cells in bone marrow transplantation. Wessman M, et al. **Bone Marrow Transplant** 1989 May; 4(3):283–6

Characterization of rearranged Y chromosomes in human testicular tumor cell lines. Arnemann J, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):141–51

Loss of the Y chromosome associated with translocation t(6;9)(p23;q34) in a patient with acute nonlymphocytic leukemia. Bernstein R, et al. **Cancer Genet Cytogenet** 1989 May;39(1):81–7 (25 ref.)

The sex-determining region of the mouse Y chromosome encodes a protein with a highly acidic domain and 13 zinc fingers. Mardon G, et al. **Cell** 1989 Mar 10;56(5):765–70

The human X-linked steroid sulfatase gene and a Y-encoded pseudogene: evidence for an inversion of the Y chromosome during primate evolution. Yen PH, et al. **Cell** 1988 Dec 23;55(6):1123–35

Rapid methods to visualize Y-specific repeated DNA sequences in cytological preparations. Matsubara T, et al. **Cell Mol Biol** 1989;35(2):225–30

The use of fluorescence microscopy for sexing of mouse cells. Loevy H, et al. **Chic Med Sch Q** 1972;31(1–4):1–4

Intercalary heterochromatin in Drosophila. III. Homology between DNA sequences from the Y chromosome, bases of polytene chromosome limbs, and chromosome 4 of D. melanogaster. Kholodilov NG, et al. **Chromosoma** 1988 Nov;97(3):247–53

Sex chromosome pairing patterns in male mice of novel Sxr genotypes. Tease C, et al. **Chromosoma** 1989 Mar; 97(5):390–5

Classification of Y chromosome polymorphisms by DNA content and C-banding. Wall WJ, et al. **Chromosoma** 1989 Jan;97(4):296–300

Mosaic 47,XY,+8/48,XXYY in a mentally non-retarded man with phenotypical and neurological abnormalities. Hoovers JM, et al. **Clin Genet** 1989 Jun;35(6):446–9

A case of prenatal diagnosis of a familial satellited Yq chromosome. Tsita KP, et al. **Clin Genet** 1989 Jan; 35(1):70–4

XY females in Microtus cabrerae (Rodentia, Microtidae): a case of possibly Y-linked sex reversal. Burgos M, et al. **Cytogenet Cell Genet** 1988;49(4):275–7

Report of the committee on the genetic constitution of the X and Y chromosomes. Davies KE, et al. **Cytogenet Cell Genet** 1987;46(1–4):277–315

Analysis of complex Y chromosome aberrations using a single DNA probe (Y–367). Müller U, et al. **Cytogenet Cell Genet** 1989;50(2–3):161–4

Report of the committee on the genetic constitution of the Y chromosome. Weissenbach J, et al. **Cytogenet Cell Genet** 1988;49(1–3):129–31

The mammalian Y chromosome: molecular search for the sex-determining factor. **Development** 1987;101 Suppl:1–203

Mapping the mouse X chromosome: possible symmetry in the location of a family of soquences on the mouse X and Y chromosomes. Avner P, et al. **Development** 1987;101 Suppl:107–16

The use of specific DNA probes to analyse the Sxr mutation in the mouse. Bishop CE, et al. **Development** 1987;101 Suppl:167–75

The role of the mammalian Y chromosome in spermatogenesis. Burgoyne PS. **Development** 1987;101 Suppl:133–41

Telomeres of the human X and Y chromosomes. Cooke HJ. **Development** 1987;101 Suppl:101–6

The mammalian Y chromosome: molecular search for the sex-determining gene--summary and perspectives. Craig I, et al. **Development** 1987;101 Suppl:185–90

The Y-chromosomal and autosomal testis-determining genes. de la Chapelle A. **Development** 1987;101 Suppl:33–8

Sex determination in mice: Y and chromosome 17 interactions. Erickson RP, et al. **Development** 1987;101 Suppl:25–32

Ordering of Y-specific sequences by deletion mapping and analysis of X-Y interchange males and females. Ferguson-Smith MA, et al. **Development** 1987;101 Suppl:41–50

Identification of incomplete coding sequences for steroid sulphatase on the human Y chromosome: evidence for an ancestral pseudoautosomal gene? Fraser N, et al. **Development** 1987;101 Suppl:127–32

Testis-specific transcripts detected by a human Y-DNA-derived probe. Leroy P, et al. **Development** 1987; 101 Suppl:177–83

Requirements for autosomal gene activity during precellular stages of Drosophila melanogaster. Merrill PT, et al. **Development** 1988 Nov;104(3):495–509

Hypothesis: a Y-chromosomal gene causes gonadoblastoma in dysgenetic gonads. Page DC. **Development** 1987;101 Suppl:151–5

Genetic analysis of the human Y chromosome by chromosome-mediated gene transfer. Pritchard CA, et al. **Development** 1987;101 Suppl:59–65

The use of Y-chromosome-specific repeated DNA sequences in the analysis of testis development in an XX/XY mouse. Singh L, et al. **Development** 1987;101 Suppl:143–9

Repeated DNA of the human Y chromosome. Smith KD, et al. **Development** 1987;101 Suppl:77–92

Structure of repeated sequences in the centromeric region of the human Y chromosome. Tyler-Smith C. **Development** 1987;101 Suppl:93–100

Normal and abnormal interchanges between the human X and Y chromosomes. Weissenbach J, et al. **Development** 1987;101 Suppl:67–74

Evidence for the presence of testicular tissue and Sxs antigen in the absence of Y-derived sequences. Wiberg UH, et al. **Development** 1987;101 Suppl:163–6

Evaluation of a mouse Y chromosome probe for assessing marrow transplantation. Hampson IN, et al. **Exp Hematol** 1989 Mar;17(3):313–5

Determining proportions of human X and Y sperm with a recombinant deoxyribonucleic acid probe carrying a homologous sequence of sex chromosomes. Sarkar S. **Fertil Steril** 1989 Jan;51(1):167–9

Chromosomal affinities of Callimico goeldii (Platyrrhini) and characterization of a Y-autosome translocation in the male. Dutrillaux B, et al. **Folia Primatol (Basel)** 1988; 50(3–4):230–6

Flow sorting of X and Y chromosome-bearing mammalian sperm: activation and pronuclear development of sorted bull, boar, and ram sperm microinjected into hamster oocytes. Johnson LA, et al. **Gamete Res** 1988 Dec; 21(4):335–43

Flow cytometry of X and Y chromosome-bearing sperm for DNA using an improved preparation method and staining with Hoechst 33342. Johnson LA, et al. **Gamete Res** 1987 Jul;17(3):203–12

Sperm chromosome analysis as a new system to test human X- and Y-sperm separation. Ueda K, et al. **Gamete Res** 1987 Jul;17(3):221–8

Evolutionary characterization of a Y chromosomal sequence conserved in the genus Mus. Nishioka Y. **Genet Res** 1988 Oct;52(2):145–50

Variable evolutionary stability of Y chromosomal repeated sequences in the genus Mus. Platt TH, et al. **Genet Res** 1989 Apr;53(2):87–93

Effect of Y chromosome and H-2 complex derived from Japanese wild mouse on sperm morphology. Suh DS, et al. **Genet Res** 1989 Feb;53(1):17–9

Nonhomologous synapsis of the XY during early pachynema in In(X)1H male mice. Ashley T. **Genetica** 1987 Jun 15; 72(2):81–4

The loss of Y-sperm in "sex ratio" (SR) males of Drosophila subobscura is compensated. Hauschteck-Jungen E, et al. **Genetics** 1987 Sep 30;74(1):27–30

Further evidence for early sex chromosome differentiation of anuran species. Iturra P, et al. **Genetica** 1988–89; 78(1):25–31

A repeated segment on the mouse Y chromosome is composed of retroviral-related, Y-enriched and Y-specific sequences. Eicher EM, et al. **Genetics** 1989 May; 122(1):181–92

Localization of murine X and autosomal sequences homologous to the human Y located testis-determining region. Mitchell M, et al. **Genetics** 1989 Apr;121(4):803–9

Y chromosome evolution in the subgenus Mus (genus Mus). Tucker PK, et al. **Genetics** 1989 May;122(1):169–79

Assays of testis development in the mouse distinguish three classes of domesticus-type Y chromosome. Biddle FG, et al. **Genome** 1988 Dec;30(6):870–8

Toward a physical map of the Xq28 region in man: linking color vision, G6PD, and coagulation factor VIII genes to an X-Y homology region. Arveiler B, et al. **Genomics** 1989 May;4(4):460–71

Human and mouse amelogenin gene loci are on the sex chromosomes. Lau EC, et al. **Genomics** 1989 Feb;4(2):162–8

Breakage of the human Y-chromosome short arm between two blocks of tandemly repeated DNA sequences. Müller U, et al. **Genomics** 1989 Jul;5(1):153–6

Important findings regarding the pseudoautosomal region of the human X and Y chromosomes [letter] Ott J. **Genomics** 1988 Jul;3(1):91

Mental retardation and Y/8 translocation [karyotype: 46,XY, t(Y;8)(q12;q24)] in father and son. Fryns JP, et al. **Helv Paediatr Acta** 1988 Aug;43(1–2):87–90

Different Hoechst 33342 and DAPI fluorescence of the human Y chromosome in bivariate flow karyotypes. Bernheim A, et al. **Hum Genet** 1989 Sep;83(2):189–93

Molecular analysis of 46,XY females and regional assignment of a new Y-chromosome-specific probe. Cantrell MA, et al. **Hum Genet** 1989 Aug;83(1):88–92

A mosaic 45,X/46,X,r(?) karyotype investigated with X and Y centromere-specific probes using a non-autoradiographic in situ hybridization technique. Crolla JA, et al. **Hum Genet** 1988 Dec;81(1):81–4

Specific amplification of the ZFY gene to screen sex in man. Ebensperger C, et al. **Hum Genet** 1989 Jun;82(3):289–90

Frequency of heterozygous complete hydatidiform moles, estimated by locus-specific minisatellite and Y chromosome-specific probes. Fisher RA, et al. **Hum Genet** 1989 Jun;82(3):259–63

Molecular detection of a Yp/18 translocation in a 45,X holoprosencephalic male. Münke M, et al. **Hum Genet** 1988 Nov;80(3):219–23

Localization of Y chromosome sequences and X chromosomal replication studies in XX males. Schempp W, et al. **Hum Genet** 1989 Jan;81(2):144–8

Analysis of two 47,XXX males reveals X–Y interchange and maternal or paternal nondisjunction. Scherer G, et al. **Hum Genet** 1989 Feb;81(3):247–51

X–Y crossing over in the chimpanzee. Weber B, et al. **Hum Genet** 1988 Nov;80(3):301–3

A rapid method for detection of Y-chromosomal DNA from

dried blood specimens by the polymerase chain reaction. Witt M, et al. **Hum Genet** 1989 Jun;82(3):271–4

A study of sex identification of trace, dried bloodstains using a Y-chromosome-specific deoxyribonucleic acid (DNA) probe. He ZN, et al. **J Forensic Sci** 1989 Mar;34(2):346–51

Molecular evidence of Y-autosomal translocations in owl monkeys. Ma NS, et al. **J Hered** 1989 Jul–Aug;80(4):259–63

Y chromosome specific probes identify breakpoint in a 45,X/46,X,del(Y)(pter——q11.1:) karyotype of an infertile male. Beverstock GC, et al. **J Med Genet** 1989 May; 26(5):330–3 (17 ref.)

Retrotransposon-like sequences are expressed in Y chromosomal lampbrush loops of Drosophila hydei. Huijser P, et al. **J Mol Biol** 1988 Oct 5;203(3):689–97

Structure of a hypervariable tandemly repeated DNA sequence on the short arm of the human Y chromosome. Tyler-Smith C, et al. **J Mol Biol** 1988 Oct 20;203(4):837–48

Familial XX chromosomal maleness does not arise from a Y chromosomal translocation. Ostrer H, et al. **J Pediatr** 1989 Jun;114(6):977–82

An amplified endogenous retroviral sequence on the murine Y chromosome related to murine leukemia viruses and viruslike 30S sequences. Hutchison KW, et al. **J Virol** 1989 Sep;63(9):4043–6

Familial X;Y translocation in a malformed male infant and his mother. Ohdo S, et al. **Jinrui Idengaku Zasshi** 1988 Sep;33(3):377–84

Prenatally diagnosed 45,X/46,XY and normal phenotype [letter] Chang HJ, et al. **Lancet** 1989 Apr 29;1(8644):961–2

Detection of host cells following sex-mismatched bone marrow transplantation by fluorescent in situ hybridization with a Y-chromosome specific probe. van Dekken H, et al. **Leukemia** 1989 Oct;3(10):724–8

An abundant testis RNA species shows sequence similarity to Y chromosomal and other genomic sites in Drosophila hydei. Brand RC, et al. **Mol Gen Genet** 1989 Feb; 215(3):469–77

Aneuploidy assays on interphase nuclei by means of in situ hybridization with DNA probes. Raimondi E, et al. **Mutagenesis** 1989 May;4(3):165–9

The pseudoautosomal boundary in man is defined by an Alu repeat sequence inserted on the Y chromosome. Ellis NA, et al. **Nature** 1989 Jan 5;337(6202):81–4

Y chromosome in leukemia patients. A study on the heteromorphic nature of its heterochromatic segment. Adhvaryu SG, et al. **Neoplasma** 1989;36(3):343–7

Evidence for distinguishable transcripts of the putative testis determining gene (ZFY) and mapping of homologous cDNA sequences to chromosomes X,Y and 9. Affara NA, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):2987–99

An extremely polymorphic locus on the short arm of the human X chromosome with homology to the long arm of the Y chromosome. Knowlton RG, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):423–37

Two 47z [DXYS5] RFLPs on the X and the Y chromosome. Nakahori Y, et al. **Nucleic Acids Res** 1989 Mar 11; 17(5):2152

Molecular aspects of sex determination in mice: an alternative model for the origin of the Sxr region. Bishop CE, et al. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1; 322(1208):119–24

Role of mammalian Y chromosome in sex determination. Burgoyne PS. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1;322(1208):63–72 (48 ref.)

Accidental X–Y recombination and the aetiology of XX males and true hermaphrodites. Ferguson-Smith MA, et al. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1; 322(1208):133–44

Aberrant chromosomal sex-determining mechanisms in mammals, with special reference to species with XY females. Fredga K. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1;322(1208):83–95 (101 ref.)

MIC2: a human pseudoautosomal gene. Goodfellow PN, et al. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1; 322(1208):145–54

Somatic and germ-cell sex in mammals. McLaren A. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1;322(1208):3–9 (30 ref.)

Is ZFY the sex-determining gene on the human Y chromosome? Page DC. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1;322(1208):155–7

Mapping the human Y chromosome. Weissenbach J. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1; 322(1208):125–31 (44 ref.)

Exchange of terminal portions of X- and Y-chromosomal short arms in human XY females. Levilliers J, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2296–300

Ribosomal DNA and Stellate gene copy number variation on the Y chromosome of Drosophila melanogaster. Lyckegaard EM, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1944–8

Duplication, deletion, and polymorphism in the sex-determining region of the mouse Y chromosome. Mardon G, et al. **Science** 1989 Jan 6;243(4887):78–80

Genetic analysis of tumorigenesis: XXXII. Localization of constitutionally amplified KRAS sequences to Chinese hamster chromosomes X and Y by in situ hybridization. Stenman G, et al. **Somat Cell Mol Genet** 1988 Nov; 14(6):639–44

Application of Y chromosomal repetitive sequences to sexing mouse embryos. Nishioka Y. **Teratology** 1988 Aug; 38(2):181–5

Tissue specific methylation of human Y chromosomal DNA sequences. Nishioka Y. **Tissue Cell** 1988;20(6):875–80

Azoospermic male with a balanced Y-autosome translocation. Matsuda T, et al. **Urol Int** 1989;44(1):43–6 (22 ref.)

[Techniques of DNA polymorphisms revealed by probes for the Y chromosome applied to questions of father–son line in analyses of paternity] Guérin P, et al. **Rev Fr Transfus Immunohematol** 1988 Oct;31(3):513–20 (Eng. Abstr.) (Fre)

[A sex chromosome mosaic in male pseudohermaphroditism in a horse] Herzog A, et al. **Tierarztl Prax** 1989;17(2):171–5 (Eng. Abstr.) (Ger)

[A case of male pseudohermaphroditism with structural abnormalities of Y chromosome (ring Y)] Watanabe H, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1469–74 (24 ref.) (Eng. Abstr.) (Jpn)

[Deletion of the long-arm of Y chromosome with infertile male] Takahashi K, et al. **Rinsho Byori** 1989 Jan;37(1):79–83 (Jpn)

[Analysis of the causes of abortion] Veropotvelian NP. **Akush Ginekol (Mosk)** 1988 Oct;(10):48–51 (Eng. Abstr.) (Rus)

[Genetic differences of antigens controlled by Y chromosome ensure the inactivation of bone marrow stem cells by syngeneic murine lymphocytes] Semenkov VF, et al. **Genetika** 1988 Sep;24(9):1602–7 (Eng. Abstr.) (Rus)

[Mitomycin C induced structural changes in heterochromatic regions of human chromosomes 1, 9, 16 and Y] Malygina NA, et al. **Tsitologiia** 1988 Nov;30(11):1350–4 (Eng. Abstr.) (Rus)

[Karyotype–phenotype correlation in a child with an idic (Yp)] Alvarez-Moya C, et al. **Bol Med Hosp Infant Mex** 1989 Jun;46(6):414–6 (Eng. Abstr.) (Spa)

ANALYSIS

Rapid determination of fetal sex by deoxyribonucleic acid amplification of Y chromosome-specific sequences. Pinckert TL, et al. **Am J Obstet Gynecol** 1989 Sep; 161(3):693–8

Use of human alpha-satellite deoxyribonucleic acid to detect Y-specific centromeric sequences. Tho SP, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1553–7

Selection and separation of X- and Y- chromosome-bearing mammalian sperm. Gledhill BL. **Gamete Res** 1988 Jul; 20(3):377–95 (96 ref.)

Attempted sexing of bovine spermatozoa by fractionation on a Percoll density gradient. Upreti GC, et al. **Gamete Res** 1988 May;20(1):83–92

Position effect variegation in Drosophila melanogaster: relationship between suppression effect and the amount of Y chromosome. Dimitri P, et al. **Genetics** 1989 Aug; 122(4):793–800

Sexing whole human pre-embryos by in-situ hybridization with a Y-chromosome specific DNA probe. West JD, et al. **Hum Reprod** 1988 Nov;3(8):1010–9

Biopsy of human preimplantation embryos and sexing by DNA amplification. Handyside AH, et al. **Lancet** 1989 Feb 18;1(8634):347–9

Sequence of cDNA for murine Zfy-1, a candidate for Tdy. Ashworth A, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2864

Rapid sexing of human embryos by non-radioactive in situ hybridization: potential for preimplantation diagnosis of X-linked disorders. Penketh RJ, et al. **Prenat Diagn** 1989 Jul;9(7):489–99

PATHOLOGY

XX/XY chimerism encountered during prenatal diagnosis. Freiberg AS, et al. **Prenat Diagn** 1988 Jul;8(6):423–6

PHYSIOLOGY

ZFX has a gene structure similar to ZFY, the putative human sex determinant, and escapes X inactivation. Schneider-Gädicke A, et al. **Cell** 1989 Jun 30;57(7):1247–58

ULTRASTRUCTURE

A further 46,XYp– female. Rivera H, et al. **Ann Genet (Paris)** 1988;31(4):244–6

Comparison between the molecular characteristics and the potential activity of X and Y nucleolar organizers from various Drosophila melanogaster laboratory lines. Rosenberg-Bourgin M, et al. **Biol Cell** 1988;64(1):3–11

The Y chromosome of the mouse is decondensed in Sertoli cells. Guttenbach M, et al. **Chromosoma** 1989 May; 97(6):429–33

Univalent sex chromosomes in spermatocytes of Sxr-carrying mice. Mahadevaiah S, et al. **Chromosoma** 1988;97(2):145–53

Chromosomally derived sterile mice have a 'fertile' active XY chromatin conformation but no XY body. Richler C, et al. **Chromosoma** 1989 May;97(6):465–74

A group of non-Y encoded Drosophila hydei primary spermatocyte nuclear glycoproteins exhibits epitopes depending on formation of Y chromosomal giant lampbrush loops. Tschendorf G, et al. **Chromosoma** 1989 Aug; 98(2):144–52

Structural complexity of Y chromosome heterochromatin. Wall WJ, et al. **Cytobios** 1988;56(224):17–22

Separation of human X and Y spermatozoa by free-flow electrophoresis. Engelmann U, et al. **Gamete Res** 1988 Feb; 19(2):151–60

Synaptic behaviour and recombination nodules in the human XY pair. Solari AJ. **Genetica** 1988 Sep 30;77(2):149–58

Y chromosome loops in Drosophila melanogaster. Bonaccorsi S, et al. **Genetics** 1988 Dec;120(4):1015–34

Mapping the human ZFX locus to Xp21.3 by in situ hybridization. Müller G, et al. **Hum Genet** 1989 Apr; 82(1):82–4

Morphology and replication of a degenerating chromosome in Drosophila miranda. Mutsuddi M, et al. **Indian J Exp Biol** 1988 Jul;26(7):487–91

Deleted Yq in the sterile son of a man with a satellited Y chromosome (Yqs). Chandley AC, et al. **J Med Genet** 1989 Mar;26(3):145–53

Identification and characterisation of a small marker chromosome using non-isotopic in situ hybridisation with X and Y specific probes. Crolla JA, et al. **J Med Genet** 1989 Mar;26(3):192–4

Macromolecular organization of human centromeric regions reveals high-frequency, polymorphic macro DNA repeats. Jabs EW, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(1):202–6

YAWNING

Now you'll start yawning and you won't know why. Izquierdo I. **Trends Pharmacol Sci** 1988 Apr;9(4):119

DRUG EFFECTS

Effect of RG-tannin on yawning behaviour induced by apomorphine or physostigmine in rats. Starec M, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):71–2

Central dopamine-oxytocin-adrenocorticotropin link in the expression of yawning and penile erection. Argiolas A, et al. **Ann Ist Super Sanita** 1988;24(3):377–82

Effects of metoclopramide on spontaneous and pharmacologically-induced yawning in the rat. Urba-Holmgren R, et al. **Bol Estud Med Biol** 1987 Jul–Dec; 35(3–4):203–6

Interactions of drugs acting on central dopamine receptors and cholinoceptors on yawning responses in the rat induced by apomorphine, bromocriptine or physostigmine. Zarrindast MR, et al. **Br J Pharmacol** 1989 Apr;96(4):843–8

Effects of ageing on the behavioural responses to dopamine agonists: decreased yawning and locomotion, but increased stereotypy. Stoessl AJ, et al. **Brain Res** 1989 Aug 21; 495(1):20–30

Evidence that apomorphine induces penile erection and yawning by releasing oxytocin in the central nervous system. Melis MR, et al. **Eur J Pharmacol** 1989 May 30; 164(3):565–70

Repeated observations of yawning, clitoral engorgement, and orgasm associated with fluoxetine administration [letter] Modell JG. **J Clin Psychopharmacol** 1989 Feb;9(1):63–5

Penile erection and yawning induced by oxytocin and related peptides: structure–activity relationship. Argiolas A, et al. **Peptides** 1989 May–Jun;10(3):559–63

Potentiation by serotonergic inhibition of yawning induced by dopamine receptor agonists in rats. Matsumoto S, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):815–8

LHRH antagonizes yawning and genital grooming induced by apomorphine in rats. Mora S, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):717–20

Imidazole and yohimbine antagonize hypomotility, penile erection, stretching and yawning induced in rats by BHT 920, a selective dopamine autoreceptor agonist. Ferrari F, et al. **Pharmacol Res Commun** 1988 Sep;20(9):827–37

Oxytocin-induced penile erection and yawning: structure–activity relationship studies. Melis MR, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1117–8

Apomorphine: clinical studies on erectile impotence and yawning. Lal S, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):329–39

Oxytocin-induced penile erection and yawning in male rats: effect of neonatal monosodium glutamate and hypophysectomy. Argiolas A, et al. **Psychopharmacology (Berlin)** 1989;97(3):383–7

SKF 38393 potentiates yawning induced by LY 171555: further evidence against the autoreceptor hypothesis of yawning. Spina L, et al. **Psychopharmacology (Berlin)** 1989; 98(4):567–8

Discrepancy in the time course of EMD 23448 induced yawning and reduction of extracellular dopamine. Ståhle L, et al. **Psychopharmacology (Berlin)** 1989;97(2):275–6

Yawning and suppression of exploration in amphetamine-treated rats, incompatibility with the autoreceptor hypothesis. Ståhle L, et al. **Psychopharmacology (Berlin)** 1989;97(4):553–60

The NK-3 tachykinin agonist senktide elicits yawning and chewing mouth movements following subcutaneous administration in the rat. Evidence for cholinergic mediation. Stoessl AJ, et al. **Psychopharmacology (Berlin)** 1988;95(4):502–6

[The effect of reserpine pretreatment on yawning behavior in rats] Stelzig S, et al. **Pharmazie** 1988 Sep;43(9):656 (Ger)

[Age-related modification of dopaminergic-cholinergic neuronal interaction in rats] Kishimoto O. **Yakubutsu Seishin Kodo** 1988 Dec;8(4):443–51 (Eng. Abstr.) (Jpn)

[Effects of bifemelane on central dopaminergic and cholinergic systems in rats] Ushijima I, et al. **Yakubutsu Seishin Kodo** 1988 Dec;8(4):463–70 (Eng. Abstr.) **(Jpn)**

YAWS

COMPLICATIONS

Nasal manifestations of yaws. Whittet HB, et al. **J Laryngol Otol** 1988 Dec;102(12):1147–9

DIAGNOSIS

Clinical aspects and usefulness of indirect absorbed immunofluorescence for diagnosis of yaws in Central Africa. Martin PM, et al. **J Clin Microbiol** 1988 Nov; 26(11):2432–3

Juxta-articular bone lesions in tertiary yaws. Wallace AL, et al. **Med J Aust** 1989 Feb 20;150(4):217–9

EPIDEMIOLOGY

Imported yaws in Johor, Malaysia. Mohamed KN. **Ann Trop Paediatr** 1988 Dec;8(4):222–4

ETIOLOGY

Schizophrenia: recency theory and syphilis [letter] Oyebode F. **Br J Psychiatry** 1989 Feb;154:269

HISTORY

On the antiquity of treponemal infection. Rothschild BM. **Med Hypotheses** 1989 Mar;28(3):181–4

RADIOGRAPHY

[Yaws: a rare case of an "invasively growing" tumor of the maxillary sinus] Draws J, et al. **HNO** 1988 Oct;36(10):426–8 (Eng. Abstr.) **(Ger)**

YEAST, DRIED

see related

SACCHAROMYCES CEREVISIAE

Implantable enzyme capsules for cancer chemotherapy from bakers' yeast cytosine deaminase immobilized on epoxy–acrylic resin and urethane prepolymer. Katsuragi T, et al. **Appl Biochem Biotechnol** 1987 Sep–Dec;16:61–9

ADVERSE EFFECTS

An allergy to marmite? Higson N. **BMJ** 1989 Jan 21; 298(6667):190

[Study of teratogenic effect of yeast used in animal feed] Urbanek–Karlowska B, et al. **Rocz Panstw Zakl Hig** 1988; 39(6):469–74 (Eng. Abstr.) **(Pol)**

GENETICS

Biological function of modified nucleotides in tRNA molecules—synthesis and biological activity of the analogues of yeast alanyl tRNA with I34 replaced by A34 or G34. Qiu MS, et al. **Sci Sin [B]** 1988 Jun;31(6):695–701

PHARMACOKINETICS

Disposition kinetics of Saccharomyces boulardii in man and rat. Blehaut H, et al. **Biopharm Drug Dispos** 1989 Jul–Aug; 10(4):353–64

PHARMACOLOGY

Effect of Carbolevure on intestinal fermentation induced by the ingestion of lactulose. Frexinos J, et al. **Int J Clin Pharmacol Res** 1988;8(6):449–55

[The effect of microbial protein, obtained on a hydrocarbon base (fermosin), with a defined fatty acid composition on fat metabolism and fat composition in slaughter animals. 1. The effect of fermosin on the composition of broiler depot fat] Lusky K, et al. **Nahrung** 1988;32(6):627–33 (Eng. Abstr.) **(Ger)**

[The effect of microbial protein from a hydrocarbon base (fermosin) with a defined fatty acid composition on fat metabolism and fat composition in slaughter animals. 2. The effect of "fermosin" on the composition of back fat in hogs] Lusky K, et al. **Nahrung** 1989;33(2):203–12 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Prevention of antibiotic–associated diarrhea by Saccharomyces boulardii: a prospective study. Surawicz CM, et al. **Gastroenterology** 1989 Apr;96(4):981–8

YEASTS

Influence of addition of yeast culture supplement to diets of lactating cows on ruminal fermentation and microbial populations. Harrison GA, et al. **J Dairy Sci** 1988 Nov; 71(11):2967–75

A method for increasing the number of mitoses available for cytogenetic analysis in rainbow trout. Lozano R, et al. **Stain Technol** 1988 Nov;63(6):335–8

Yeast as a main protagonist of biotechnology. Proceedings of the Seventh International Symposium on Yeasts. Perugia, Italy, 1–5 August, 1988. **Yeast** 1989 Apr;5 Spec No:S1–547

[Effect of yeast polysaccharides on the functional activity of macrophages in white mice] Gurina SV, et al. **Antibiot Khimioter** 1988 Nov;33(11):842–5 (Eng. Abstr.) **(Rus)**

ANALYSIS

Glutathione and glutathione metabolizing enzymes in yeasts. Casalone E, et al. **Antonie Van Leeuwenhoek** 1988; 54(4):367–75

On the relations between the elemental surface composition of yeasts and bacteria and their charge and hydrophobicity. Mozes N, et al. **Biochim Biophys Acta** 1988 Nov 22; 945(2):324–34

The determination of selenomethionine in selenium yeast by cyanogen bromide gas chromatography. Zheng OY, et al. **Biomed Chromatogr** 1988 Nov;2(6):258–9

Structural characterization of pichilan, a beta–D–glucan immunostimulant from Pichia fermentans. Desboeufs J, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):2766–71

Interactions of cadmium with yeast mannans. Oda Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2695–8

Ty, an endogenous retrovirus of yeast? Mellor J, et al. **Yeast** 1986 Sep;2(3):145–52 (48 ref.)

[Yeast as a source for obtaining amino acid preparation] Nekliudov AD, et al. **Antibiot Khimioter** 1988 Sep; 33(9):708–13 (66 ref.) **(Rus)**

CLASSIFICATION

Differential identification of Candida species and other yeasts by analysis of [35S]methionine–labeled polypeptide profiles. Shen HD, et al. **Anal Biochem** 1988 Dec;175(2):548–51

Karyotyping of yeast strains of several genera by field inversion gel electrophoresis. Johnston JR, et al. **Yeast** 1988 Sep;4(3):191–8

Estimation of phylogenetic distances among ascomycetous yeasts from partial sequencing of ribosomal RNA. Kurtzman CP. **Yeast** 1989 Apr;5 Spec No:S351–4

CYTOLOGY

Regulation of meiosis: from DNA binding protein to protein kinase. McLeod M. **Bioessays** 1989 Jul;11(1):9–14 (30 ref.)

Immunogenicity of herpes simplex virus glycoprotein gB–1–related protein produced in yeast. Kino Y, et al. **Vaccine** 1989 Apr;7(2):155–60

DRUG EFFECTS

Interactive effects of antifungal and antineoplastic agents on yeasts commonly prevalent in cancer patients. Ghannoum MA, et al. **Antimicrob Agents Chemother** 1989 May; 33(5):726–30

Susceptibility of yeast–like fungi to a new antifungal agent, LY 121019. Bulo AN, et al. **Mycoses** 1988 Jun;31(6):330–3

[In vitro antimycotic effect of phenothiazine derivatives] Năstoiu I. **Rev Ig [Bacteriol]** 1988 Oct–Dec;33(4):357–60 **(Rum)**

[Screening of yeast strains sensitive to toxin T–2] Boltianskaia EV, et al. **Vopr Pitan** 1988 Nov–Dec;(6):67–8 **(Rus)**

ENZYMOLOGY

Alcohol–oxidizing enzymes from various organisms. Cardemil E. **Comp Biochem Physiol [B]** 1978;60(1):1–7 (60 ref.)

The purification and characterization of a dextranase from Lipomyces starkeyi. Koenig D, et al. **Eur J Biochem** 1989 Jul 15;183(1):161–7

Properties of D–amino–acid oxidase from Rhodotorula gracilis. Pilone Simonetta M, et al. **Eur J Biochem** 1989 Mar 1;180(1):199–204

Enzyme activities in oleaginous yeasts accumulating and utilizing exogenous or endogenous lipids. Holdsworth JE, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):2907–15

Inhibition of yeast glyoxalase I by biologically active peptides. Kraus JL, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul;65(1):105–10

GENETICS

Nuclear gene affecting mitochondrial protein synthesis. Orlowska–Matuszewska G, et al. **Acta Biochim Pol** 1988; 35(2):95–103

Isolation of DNA from yeasts. Mann W, et al. **Anal Biochem** 1989 Apr;178(1):82–7

Recombination between repeated genes in microorganisms. Petes TD, et al. **Annu Rev Genet** 1988;22:147–68 (132 ref.)

Converting a eukaryotic transcriptional inhibitor into an activator. Ma J, et al. **Cell** 1988 Nov 4;55(3):443–6

Nonconventional yeasts: their genetics and biotechnological applications. Weber H, et al. **Crit Rev Biotechnol** 1988; 7(4):281–337 (346 ref.)

Development of genetic maps of non–conventional yeasts. Ogrydziak DM. **J Basic Microbiol** 1988;28(3):185–96 (76 ref.)

Replication and recombination in gene establishment in non–Saccharomyces yeasts. Oliver SG. **J Basic Microbiol** 1988;28(3):197–208 (54 ref.)

Genetic manipulation of non–conventional yeasts by conventional and non–conventional methods. Spencer JF, et al. **J Basic Microbiol** 1988;28(5):321–33 (19 ref.)

18th annual UCLA symposium. Abstracts: Molecular and cellular biology of yeasts and filamentous fungi. **J Cell Biochem Suppl** 1989;13E:1–62

Trans–kingdom sex. E. coli mate with yeast! (Will Jesse Helms cut off funds?). Horgan J. **Sci Am** 1989 Oct; 261(4):34–5

Aminoacyl–tRNA synthetases are involved in RNA splicing in fungal mitochondria. Benne R. **Trends Genet** 1988 Jul; 4(7):181–2

RNA splicing in yeast mitochondria: taking out the twists. Grivell LA, et al. **Trends Genet** 1989 Feb;5(2):39–41 (17 ref.)

The thirteenth International Conference on Yeast Genetics and Molecular Biology. Banff, Alberta, Canada, 31 August–5 September 1986. Book of Abstracts. **Yeast** 1986 Sep;2 Spec No:S1–449

The thirteenth International Conference on Yeast Genetics and Molecular Biology. Banff, Alberta, Canada, 31 August–5 September 1986. Abstracts. **Yeast** 1986 Dec; 2(4):S451–67

The fourteenth International Conference on Yeast Genetics and Molecular Biology. 7–13 August 1988. Book of abstracts. **Yeast** 1988 Aug;4 Spec No:S1–529

Genetic analysis of the gene ICL1 of the yeast Yarrowia lipolytica. Barth G, et al. **Yeast** 1987 Dec;3(4):255–62

Group–specific differences in the secondary structure of the 28S ribosomal RNA of yeasts. Blanz PA, et al. **Yeast** 1989 Apr;5 Spec No:S399–404

The psi factor of yeast: a problem in inheritance. Cox BS, et al. **Yeast** 1988 Sep;4(3):159–78 (86 ref.)

Electrophoretic karyotyping of commercial brewing and distilling strains of Saccharomyces and of other yeasts. Johnston JR, et al. **Yeast** 1989 Apr;5 Spec No:S255–9

The yeast ARS element, six years on: a progress report. Williamson DH. **Yeast** 1985 Sep;1(1):1–14 (73 ref.)

GROWTH & DEVELOPMENT

Microbial colonization of injured cactus tissue (Stenocereus gummosus) and its relationship to the ecology of cactophilic Drosophila mojavensis. Fogleman JC, et al. **Appl Environ Microbiol** 1989 Jan;55(1):100–5

Rapid quantification of bacterial and fungal growth in burn wounds: biopsy homogenate Gram stain versus microbial culture results. Taddonio TE, et al. **Burns Incl Therm Inj** 1988 Jun;14(3):180–4

Yeasts associated with the white shrimp Penaeus schmitti, sediment, and water of Sepetiba Bay, Rio de Janeiro, Brasil. Pagnocca FG, et al. **Yeast** 1989 Apr;5 Spec No:S479–83

IMMUNOLOGY

Yeast–derived hepatitis B vaccine and yeast sensitivity [letter] Brightman CA, et al. **Lancet** 1989 Apr 22;1(8643):903

[Specific prevention of disorders in the immune status of experimental animals by inhalation exposure to products of microbiological synthesis] Chechura AN. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):42–5 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Pasteur yeasts system, a test–kit for yeasts identification. Its evaluation in comparison with three commercial methods and conventional procedures. Riviera L, et al. **Boll Ist Sieroter Milan** 1988;67(3):245–50

Frequency and density of yeasts in the mouths of malnourished children. Aldred MJ, et al. **Community Dent Oral Epidemiol** 1989 Jun;17(3):136–8

Rapid identification of medically important yeasts by electrophoretic protein patterns. Bruneau S, et al. **FEMS Microbiol Lett** 1989 Apr;49(2–3):329–33

Electropositively charged filters for the recovery of yeasts and bacteria from beverages. Thomas DS. **J Appl Bacteriol** 1988 Jul;65(1):35–41

Comparison of the Quantum II, API Yeast Ident, and AutoMicrobic systems for identification of clinical yeast isolates. Pfaller MA, et al. **J Clin Microbiol** 1988 Oct; 26(10):2054–8

Evaluation of the "Yeast–IDENT System" for the identification of medically important yeasts. Sekhon AS, et al. **Mycoses** 1988 Dec;31(12):627–31

[Quantitative determination of yeast in sputum—a direct microscopy method] Raclavský V, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 May;38(3):161–6 (Eng. Abstr.) **(Cze)**

[Yeasts: cause of infections of the respiratory tract?] Ringelmann R, et al. **Immun Infekt** 1989 Feb;17(1):13–7 (Eng. Abstr.) **(Ger)**

[The yeast flora of fishes from the Danube delta and Lake Sasyk] Solnetseva IO, et al. **Mikrobiol Zh** 1988 Jan–Feb; 50(1):57–60 (Eng. Abstr.) **(Rus)**

[Evaluation of the hygienico–sanitary quality of fresh noodles] de Cortinez YJ, et al. **Rev Argent Microbiol** 1988 Oct–Dec;20(4):195–9 (Eng. Abstr.) **(Spa)**

METABOLISM

A study of yeasts during the delignification and fungal transformation of wood into cattle feed in Chilean rain forest. González AE, et al. **Antonie Van Leeuwenhoek** 1989; 55(3):221–36

Movements of protons coupled to glucose transport in yeasts. A comparative study among 248 yeast strains. Loureiro–Dias MC. **Antonie Van Leeuwenhoek** 1988; 54(4):331–43

Yeasts for lipid production. Ratledge C.
Biochem Soc Trans 1988 Dec;16(6):1088–91

2–Oxoaldehyde metabolism in microorganisms. Murata K, et al. **Can J Microbiol** 1989 Apr;35(4):423–31 (57 ref.)

Killer systems and pathogenic fungi. Polonelli L, et al.
Eur J Epidemiol 1988 Dec;4(4):415–9

Genetic control of methanol utilization in yeasts. Sibirny AA, et al. **J Basic Microbiol** 1988;28(5):293–319 (64 ref.)

Formation of a biotin precursor, pimelic acid, in yeasts from C18 fatty acids. Ohsugi M, et al.
J Nutr Sci Vitaminol (Tokyo) 1988 Aug;34(4):343–52

Biodegradation of crude oils. Bosecker K, et al.
Schriftenr Ver Wasser Boden Lufthyg 1989;80:91–117

A comparative radiorespirometric study of glucose metabolism in yeasts. Bruinenberg PM, et al. **Yeast** 1986 Jun;2(2):117–21

Effects of yeast suspension density on the accumulation ratio of transported solutes. Kotyk A. **Yeast** 1987 Dec; 3(4):263–70

The utilization of starch by yeasts. McCann AK, et al.
Yeast 1986 Jun;2(2):109–15 (80 ref.)

Involvement of lipids in solute transport in yeasts. Prasad R, et al. **Yeast** 1986 Dec;2(4):205–20 (122 ref.)

Yeast biochemistry: present status and future prospects. Rose AH. **Yeast** 1989 Apr;5 Spec No:S407–11 (24 ref.)

Alcoholic fermentation by 'non–fermentative' yeasts. van Dijken JP, et al. **Yeast** 1986 Jun;2(2):123–7

Long–chain alcohol production by yeasts. White MJ, et al.
Yeast 1989 Apr;5 Spec No:S465–70

[Nitrogen regulation in microorganisms] Huth J, et al.
Zentralbl Mikrobiol 1988;143(3):179–94 (98 ref.) (Eng. Abstr.) (Ger)

[Theoretical evaluation of the ratio of endo– and exogenous respiration in yeasts using the balance of macroergic compounds] Ivanov VN. **Mikrobiol Zh** 1987 Nov–Dec; 49(6):12–6 (Eng. Abstr.) (Rus)

[Ethanol–assimilating yeast from natural and industrial substrates] Kvasnikov EI, et al. **Mikrobiol Zh** 1983 May–Jun;45(3):24–7 (Eng. Abstr.) (Rus)

[Use of sensitivity to antibiotics produced by representatives of the genera Williopsis and Zygowilliopsis in the identification of yeasts] Vustin MM, et al.
Mikrobiologiia 1988 Jul–Aug;57(4):653–7 (Eng. Abstr.) (Rus)

PATHOGENICITY

Pathogenic yeasts. Stenderup A. **Yeast** 1989 Apr;5 Spec No:S215–24 (52 ref.)

PHYSIOLOGY

Sexual behavior and its pheromonal regulation in ascosporogenous yeasts. Yoshida K, et al.
J Basic Microbiol 1989;29(2):99–128 (71 ref.)

[Dynamics of vacuolar compartment] Ohsumi Y.
Tanpakushitsu Kakusan Koso 1987 Jul;(30 Suppl):398–407 (45 ref.) (Jpn)

YELLOW FEVER

DIAGNOSIS

The 1987 yellow fever epidemic in Mali: viral and immunological diagnosis. Meunier DM, et al.
Trans R Soc Trop Med Hyg 1988;82(5):767

EPIDEMIOLOGY

Internationally quarantinable diseases. **Can Dis Wkly Rep** 1989 May 6;15(18):100 (Eng, Fre)

1987 yellow fever epidemics in Oyo State, Nigeria: a survey for yellow fever virus haemagglutination inhibiting antibody in residents of two communities before and after the epidemics. Olaleye OD, et al. **Virologie** 1988 Oct–Dec; 39(4):261–6

ETIOLOGY

Recovery of virus from the liver of children with fatal dengue: reflections on the pathogenesis of the disease and its possible analogy with that of yellow fever. Rosen L, et al. **Res Virol** 1989 Jul–Aug;140(4):351–60

HISTORY

Dr. William Gorgas and his war with the mosquito. Patterson R. **Can Med Assoc J** 1989 Sep 15;141(6):596–7, 599

Hideyo Noguchi's research on yellow fever (1918–1928) in the pre–electron microscopic era. Kantha SS.
Kitasato Arch Exp Med 1989 Apr;62(1):1–9

MORTALITY

Severe yellow fever with 23–day survival. Boulos M, et al.
Trop Geogr Med 1988 Oct;40(4):356–8

TRANSMISSION

Yellow fever virus activity—Trinidad and Tobago.
MMWR 1989 Feb 3;38(4):57–9

YELLOW FEVER VIRUS

Aedes albopictus mosquitoes introduced into Brazil: vector competence for yellow fever and dengue viruses. Miller BR, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):476–7

GENETICS

Biological characterization of plaque–size variants of yellow fever virus in mosquitoes and mice. Miller BR, et al.
Acta Virol (Praha) 1988 May;32(3):227–34

Detection of yellow fever viral RNA by nucleic acid hybridization and viral antigen by immunocytochemistry in fixed human liver. Monath TP, et al.
Am J Trop Med Hyg 1989 Jun;40(6):663–8

Expression of the yellow fever virus envelope protein using hybrid SV40/yellow fever viruses. Desprès P, et al.
Ann Inst Pasteur Virol 1988 Jan–Mar;139(1):59–67

Detection of yellow fever virus nucleic acid in infected mosquitoes by RNA:RNA in situ hybridization. Ballinger ME, et al. **Mol Cell Probes** 1988 Dec;2(4):331–8

Nucleotide sequence comparison of the genome of two 17D–204 yellow fever vaccines. Dupuy A, et al.
Nucleic Acids Res 1989 May 25;17(10):3989

Modulations of the in vitro translational efficiencies of Yellow Fever virus mRNAs: interactions between coding and noncoding regions. Ruiz–Linares A, et al.
Nucleic Acids Res 1989 Apr 11;17(7):2463–76

Yellow fever virus proteins NS2A, NS2B, and NS4B: identification and partial N–terminal amino acid sequence analysis. Chambers TJ, et al. **Virology** 1989 Mar; 169(1):100–9

IMMUNOLOGY

Study of combined vaccination against yellow fever and measles in infants from six to nine months. Lhuillier M, et al. **J Biol Stand** 1989 Jan;17(1):9–15

Use of a monoclonal antibody specific for wild–type yellow fever virus to identify a wild–type antigenic variant in 17D vaccine pools. Gould EA, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1889–94

1987 yellow fever epidemics in Oyo State, Nigeria: a survey for yellow fever virus haemagglutination inhibiting antibody in residents of two communities before and after the epidemics. Olaleye OD, et al. **Virologie** 1988 Oct–Dec; 39(4):261–6

[Monoclonal antibodies to flavivirus antigens induced by a vaccinal strain of yellow fever] Galdamovich SIa, et al.
Vopr Virusol 1988 Jul–Aug;33(4):461–5 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Vector competence of Aedes albopictus from Houston, Texas, for dengue serotypes 1 to 4, yellow fever and Ross River viruses. Mitchell CJ, et al.
J Am Mosq Control Assoc 1987 Sep;3(3):460–5

METABOLISM

Immunoblotting reveals differences in the accumulation of envelope protein by wild–type and vaccine strains of yellow fever virus. Cane PA, et al. **J Gen Virol** 1989 Mar; 70 (Pt 3):557–64

Processing of yellow fever virus polyprotein: role of cellular proteases in maturation of the structural proteins. Ruiz–Linares A, et al. **J Virol** 1989 Oct;63(10):4199–209

PATHOGENICITY

Antibody–dependent enhancement of yellow fever and Japanese encephalitis virus neurovirulence. Gould EA, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1605–8

PHYSIOLOGY

Increased yellow fever virus infection and dissemination rates in Aedes aegypti mosquitoes orally exposed to freshly grown virus. Miller BR. **Trans R Soc Trop Med Hyg** 1987; 81(6):1011–2

YERSINIA

ANALYSIS

Outer membrane proteins of Yersinia: major protein induced by maltose. Bielecki J, et al. **Acta Microbiol Pol** 1988; 37(2):133–9

Fatty acid composition of lipopolysaccharides of the strains of different species of Yersinia. Frolov AF, et al.
J Hyg Epidemiol Microbiol Immunol 1989;33(1):55–61

CLASSIFICATION

Francisella philomiragia comb. nov. (formerly Yersinia philomiragia) and Francisella tularensis biogroup novicida (formerly Francisella novicida) associated with human disease. Hollis DG, et al. **J Clin Microbiol** 1989 Jul; 27(7):1601–8

ENZYMOLOGY

Characterization of Yersinia enterocolitica, Y. intermedia, Y. aldovae, Y. frederiksenii, Y. kristensenii and Y. pseudotuberculosis by electrophoretic polymorphism of acid phosphatase, esterases, and glutamate and malate dehydrogenases. Goullet P, et al. **J Gen Microbiol** 1988 Feb;134 (Pt 2):317–25

GENETICS

BamHI restriction endonuclease analysis of Yersinia ruckeri plasmids and their relatedness to the genus Yersinia 42– to 47–megadalton plasmid. Guilvout I, et al.
Appl Environ Microbiol 1988 Oct;54(10):2594–7

The gene coding for the 190,000–dalton iron–regulated protein of Yersinia species is present only in the highly pathogenic strains. Carniel E, et al. **Infect Immun** 1989 Apr; 57(4):1211–7

Homology between virF, the transcriptional activator of the Yersinia virulence regulon, and AraC, the Escherichia coli arabinose operon regulator. Cornelis G, et al.
J Bacteriol 1989 Jan;171(1):254–62

The replication, partition and yop regulation of the pYV plasmids are highly conserved in Yersinia enterocolitica and Y. pseudotuberculosis. Biot T, et al.
J Gen Microbiol 1988 Jun;134 (Pt 6):1525–34

Analysis of the yopA gene encoding the Yop1 virulence determinants of Yersinia spp. Skurnik M, et al.
Mol Microbiol 1989 Apr;3(4):517–29

IMMUNOLOGY

Effect of manganese ions on the immune response of carp (Cyprinus carpio) against Yersinia ruckeri.
Cossarini–Dunier M, et al. **Dev Comp Immunol** 1988 Summer;12(3):573–9

Detection of cross–reacting epitopes on plasmid–encoded outer membrane proteins of enteropathogenic Yersinia by monoclonal antibodies. Weninger J, et al.
Med Microbiol Immunol (Berl) 1989;178(1):45–51

Yersinia antigens in reactive arthritis [letter; comment]
N Engl J Med 1989 Jul 20;321(3):189–90. **Comment on:** N Engl J Med 1989 Jan 26;320(4):216–21

[Micromethods for the Widal reaction] Mamat H, et al.
Z Gesamte Hyg 1989 Jan;35(1):39–40 (Eng. Abstr.) (Ger)

[Structure of the O–specific polysaccharide of the Yersinia enterocolitica serovar O:4.32 lipopolysaccharide. Serologic relations of lipopolysaccharides of Y. enterocolitica O:4.32 and Y. intermedia O:4.33] Zubkov VA, et al.
Bioorg Khim 1989 Feb;15(2):187–91 (Eng. Abstr.) (Rus)

[Pathogenesis of chronic forms of yersiniosis] Malov IV, et al. **Klin Med (Mosk)** 1988 Jul;66(7):115–8 (Eng. Abstr.) (Rus)

[Detection of Yersinia antigens in biological substrates from adult patients with Yersinia infection] Via'lba EV, et al.
Sov Med 1989;(4):96–7 (Rus)

ISOLATION & PURIFICATION

Isolation of Yersinia enterocolitica and related species from river water. Massa S, et al. **Zentralbl Mikrobiol** 1988; 143(8):575–81

[A 3–year evaluation of systematic research on Salmonella, Shigella, Campylobacter and Yersinia at a Montpellier hospital] Jean–Pierre H, et al. **Pathol Biol (Paris)** 1989 Jan; 37(1):47–53 (Eng. Abstr.) (Fre)

[Indications of fecal contamination and presence of Salmonella, Yersinia and Staphylococcus aureus in commercial flesh fly larvae ("cagnotti" or "bigattini")] Pianetti A, et al. **Nuovi Ann Ig Microbiol** 1988 Jan–Feb; 39(1):43–52 (Eng. Abstr.) (Ita)

[The Presence of bacteria of the genus Yersinia in water from private wells] Maleszewska J, et al.
Rocz Panstw Zakl Hig 1988;39(5):396–403 (Eng. Abstr.) (Pol)

[The use of bismuth–sulfite–agar as a solid differential medium for isolating bacteria of the species Y. enterocolitica and Y. frederiksenii] Gordelko VA, et al.
Lab Delo 1989;(4):64–5 (Eng. Abstr.) (Rus)

[Yersinia enterocolitica and related species in the sewage discharge from the city of Buenos Aires: use of Schiemann medium in their isolation] Floccari ME, et al.
Rev Argent Microbiol 1984;16(2):57–66 (Eng. Abstr.) (Spa)

PATHOGENICITY

Factors essential for the penetration of mammalian cells by Yersinia. Miller VL, et al. **Curr Top Microbiol Immunol** 1988;138:15–39 (85 ref.)

Purification, location, and immunological characterization of the iron–regulated high–molecular–weight proteins of the highly pathogenic yersiniae. Carniel E, et al.
Infect Immun 1989 Feb;57(2):540–5

Evaluation of DNA colony hybridization and other techniques for detection of virulence in Yersinia species. Robins–Browne RM, et al. **J Clin Microbiol** 1989 Apr; 27(4):644–50

[Determination of the phenomenon of autoagglutination of virulent Yersinia] Smirnov IV. **Lab Delo** 1989;(6):59–60 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Reduced redox potential during growth of some gram–negative bacteria. Effect on the biochemical and physicochemical surface properties and phagocytosis by polymorphonuclear leukocytes. Maluszynska GM, et al.
APMIS 1988 Sep;96(9):773–82

YERSINIA ENTEROCOLITICA

Inhibition of polymorphonuclear leucocyte functions in vivo by Yersinia enterocolitica lipopolysaccharide. Hartiala KT, et al. **Ann Rheum Dis** 1989 Jan;48(1):42–7

Thermal inactivation of Campylobacter species, Yersinia enterocolitica, and hemorrhagic Escherichia coli 0157:H7 in fluid milk. D'Aoust JY, et al. **J Dairy Sci** 1988 Dec; 71(12):3230–6

ANALYSIS

Characterisation of protein co–extracted together with LPS in Escherichia coli, Salmonella minnesota and Yersinia enterocolitica. Strittmatter W, et al. **Microb Pathog** 1987 Jan;2(1):29–36

CLASSIFICATION

Rapid serotyping of enteropathogenic Yersinia enterocolitica strains by co–agglutination. Fernandez–Lago L, et al. **Ann Inst Pasteur Microbiol** 1988 Jul–Aug;139(4):461–71

[Immunochemical study of the lipopolysaccharides of Yersinia enterocolitica serovars O5 and O5.27] Frolova GM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec; (12):90–4 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Virulence associated plasmid and R–plasmid curing in Yersinia enterocolitica by some tricyclic compounds. Molnár J, et al. **Acta Microbiol Hung** 1988;35(3):307–12

Susceptibility of enteric pathogens to amoxicillin and clavulanate–potentiated amoxicillin. Mégraud F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):75–6

Modulation of the low–calcium response in Yersinia pestis via plasmid–plasmid interaction. Sample AK, et al. **Microb Pathog** 1987 Jun;2(6):443–53

Animal origin of the antibiotic resistance of human pathogenic Yersinia enterocolitica [letter] Trallero EP, et al. **Scand J Infect Dis** 1988;20(5):573

ENZYMOLOGY

Partial purification and characterization of phospholipase C from Yersinia enterocolitica. Toora S, et al. **J Appl Bacteriol** 1989 Apr;66(4):303–9

GENETICS

The ail locus is found uniquely in Yersinia enterocolitica serotypes commonly associated with disease. Miller VL, et al. **Infect Immun** 1989 Jan;57(1):121–31

Thermoregulation–dependent expression of Yersinia enterocolitica protein 1 imparts serum resistance to Escherichia coli K–12. Martinez RJ. **J Bacteriol** 1989 Jul; 171(7):3732–9

Lack of hybridization between Yersinia enterocolitica and HLA–B27 DNA. Viitanen AM, et al. **J Rheumatol** 1988 Jul;15(7):1123–5

Transcription of the yop regulon from Y. enterocolitica requires trans acting pYV and chromosomal genes. Cornelis G, et al. **Microb Pathog** 1987 May;2(5):367–79

Genetic analysis of the plasmid region controlling virulence in Yersinia enterocolitica O:9 by Mini–Mu insertions and lac gene fusions. Cornelis G, et al. **Microb Pathog** 1986 Aug;1(4):349–59

Nucleotide sequence and transcription analysis of yop51 from Yersinia enterocolitica W22703. Michiels T, et al. **Microb Pathog** 1988 Dec;5(6):449–59

Cloning in Yersinia enterocolitica of K99 antigen gene from Escherichia coli. Sun WL, et al. **Sci Sin [B]** 1988 Aug; 31(8):944–52

Expression in Yersinia enterocolitica of K99 antigen gene of Escherichia coli. Sun WL, et al. **Sci Sin [B]** 1988 Oct; 31(10):1213–21

GROWTH & DEVELOPMENT

Structural variations and growth potential of Yersinia enterocolitica under different culture conditions. Grönberg A, et al. **APMIS** 1989 Mar;97(3):227–35

Survival of Yersinia enterocolitica in the environment. Chao WL, et al. **Can J Microbiol** 1988 Jun;34(6):753–6

Growth and endotoxin production of Yersinia enterocolitica and Enterobacter agglomerans in packed erythrocytes. Arduino MJ, et al. **J Clin Microbiol** 1989 Jul;27(7):1483–5

Determinants of invasion and survival of Yersinia enterocolitica in intestinal tissue. An in vivo study. Hanski C, et al. **Med Microbiol Immunol (Berl)** 1989;178(5):289–96

[Evaluation of selective properties of Mac Conkey's medium enriched with potassium tellurite for growing Shigella and Yersinia strains] Bielecka Z, et al. **Med Dosw Mikrobiol** 1988;40(4):206–12 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Immunoblot analysis of IgM, IgG, and IgA responses to plasmid encoded released proteins of Yersinia enterocolitica in patients with or without yersinia triggered reactive arthritis. Ståhlberg TH, et al. **Ann Rheum Dis** 1989 Jul; 48(7):577–81

Humoral immune response to individual Yersinia enterocolitica antigens in patients with and without reactive arthritis. Grönberg A, et al. **Clin Exp Immunol** 1989 Jun; 76(3):361–5

Serum opsonic capacity against Yersinia enterocolitica O:3 in yersiniosis patients with or without reactive arthritis. Tertti R, et al. **Clin Exp Immunol** 1989 May;76(2):227–32

Influence of surface modulations by enzymes and monoclonal antibodies on alternative complement pathway activation by Yersinia enterocolitica. Wachter E, et al. **Infect Immun** 1989 Jul;57(7):1984–9

Comparison of bacteria with and without plasmid–encoded proteins as antigens for measurement of immunoglobulin M, G, and A antibodies to Yersinia enterocolitica by enzyme–linked immunosorbent assay. Granfors K, et al. **J Clin Microbiol** 1989 Mar;27(3):583–5

Yersinia in intestinal biopsy specimens from patients with seronegative spondyloarthropathy: correlation with specific serum IgA antibodies. de Koning J, et al. **J Infect Dis** 1989 Jan;159(1):109–12

Analysis of IgA antibodies to lipopolysaccharide in Yersinia–triggered reactive arthritis. Granfors K, et al. **J Infect Dis** 1989 Jun;159(6):1142–7

Analysis of the class–specific immune response to Yersinia enterocolitica virulence–associated antigens in oro–gastrically infected rabbits. Heesemann J, et al. **Microb Pathog** 1988 Dec;5(6):437–47

Yersinia enterocolitica O:9 as a potential live oral carrier for protective antigens. Sory MP, et al. **Microb Pathog** 1988 Jun;4(6):431–42

Purification of cross–reacting protein antigen shared by Yersinia enterocolitica and other gram–negative bacteria with monoclonal antibody. Yamaguchi H, et al. **Microbiol Immunol** 1989;33(8):683–8

Yersinia antigens in synovial–fluid cells from patients with reactive arthritis [see comments] Granfors K, et al. **N Engl J Med** 1989 Jan 26;320(4):216–21. **Comment in:** N Engl J Med 1989 Jul 20;321(3):189–90

Fecal immunoglobulin A (IgA) antibodies to Yersinia enterocolitica in mice orally vaccinated and infected. Shimono K, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):273–7

Association of reactive arthropathy and Morganella morganii cross reacting with Yersinia enterocolitica. Cafferkey MT, et al. **Scand J Infect Dis** 1988;20(4):439–42

Immunological characterization of Yersinia enterocolitica O:9 and O:3 LPS antigens by monoclonal antibodies. Weninger J, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):298–313

[Comparison of 2 methods of hemagglutination tests for antibodies against strains of Yersinia enterocolitica and Yersinia pseudotuberculosis] Rutová J. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jan;38(1):40–7 (Eng. Abstr.) **(Cze)**

[Brucella clearance as a sensitive method for the detection of cross reactions of Brucella abortus with Yersinia enterocolitica 03, 06, 09 and Salmonella urbana and Salmonella abony] Hoffmann A, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):279–83 (Eng. Abstr.) **(Ger)**

[High incidence of Yersinia enterocolitica antibody in autoimmune thyroid disease] Asari S, et al. **Rinsho Byori** 1988 Jul;36(7):847–50 **(Jpn)**

[Structure of the O–specific polysaccharide of the Yersinia enterocolitica serovar O:4.32 lipopolysaccharide. Serologic relations of lipopolysaccharides of Y. enterocolitica O:4.32 and Y. intermedia O:4.33] Zubkov VA, et al. **Bioorg Khim** 1989 Feb;15(2):187–91 (Eng. Abstr.) **(Rus)**

[The choice of rational methods for determining antibodies to Yersinia enterocolitica. The agglutination reaction] Koroliuk AM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):45–7 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Experimental studies on Yersinia enterocolitica infection in chickens exposed at 1–day old. Nwosuh EN, et al. **Br Poult Sci** 1989 Mar;30(1):91–9

Routine culturing of stool specimens for Yersinia enterocolitica [letter] Barteluk RL, et al. **J Clin Microbiol** 1988 Aug;26(8):1616–7

Development and testing of a synthetic oligonucleotide probe for the detection of pathogenic Yersinia strains. Miliotis MD, et al. **J Clin Microbiol** 1989 Jul;27(7):1667–70

Detection of pathogenic Yersinia enterocolitica by using congo red–magnesium oxalate agar medium. Riley G, et al. **J Clin Microbiol** 1989 Jan;27(1):213–4

Purulent pericarditis due to Yersinia enterocolitica [letter] Lecomte F, et al. **J Infect Dis** 1989 Feb;159(2):363

Enumeration of virulent Yersinia enterocolitica colonies by DNA colony hybridization using alkaline treatment and paper filters. Jagow JA, et al. **Mol Cell Probes** 1988 Sep; 2(3):189–95

Isolation and identification of Yersinia enterocolitica and the Yersinia enterocolitica–like bacteria. Gilmour A, et al. **Soc Appl Bacteriol Symp Ser** 1988;17:213S–236S (168 ref.)

Isolation of Yersinia enterocolitica and related species from river water. Massa S, et al. **Zentralbl Mikrobiol** 1988; 143(8):575–81

[Epidemiological significance of poultry in the transmission of Salmonella, Yersinia enterocolitica and Listeria monocytogenes: investigation of unchecked specimens for sale in the marketplace] Curcio ML, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):85–94 (Eng. Abstr.) **(Ita)**

[The use of bismuth–sulfite–agar as a solid differential medium for isolating bacteria of the species Y. enterocolitica and Y. frederiksenii] Gordelko VA, et al. **Lab Delo** 1989;(4):64–5 (Eng. Abstr.) **(Rus)**

[A comparative evaluation of the growth of Yersinia enterocolitica on elective media] Gurieva GG, et al. **Lab Delo** 1989;(4):71–2 (Eng. Abstr.) **(Rus)**

[Isolation and ultrastructure of Yersinia spheroplasts and protoplasts] Dzadzieva MF, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):3–5 (Eng. Abstr.) **(Rus)**

[Yersinia enterocolitica: 1st isolation from meat products in Argentina] de Guzmán AM, et al. **Rev Argent Microbiol** 1984;16(2):49–56 (Eng. Abstr.) **(Spa)**

[Initial isolation and characterization of Yersinia enterocolitica in human feces in Argentina] Eiguer T, et al. **Rev Argent Microbiol** 1987 Apr–Jun;19(2):71–6 (Eng. Abstr.) **(Spa)**

METABOLISM

Production of bacteriocin by isolates of Yersinia enterocolitica from fresh buffalo milk. Toora S, et al. **Folia Microbiol (Praha)** 1989;34(2):151–6

Production of bacteriocin–like antagonism by clinical isolates of Yersinia enterocolitica. Cafferkey MT, et al. **J Clin Microbiol** 1989 Apr;27(4):677–80

Outer–membrane permeability to beta–lactam antibiotics in Yersinia enterocolitica. Brzostek K, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1535–40

Studies on the microflora associated with xenic cultures of Entamoeba gingivalis. Gannon JT, et al. **Microbios** 1989; 58(235):95–100

[Temperature–related production of enterotoxin by Yersinia enterocolitica isolated from healthy swine] Bielecka Z, et al. **Med Dosw Mikrobiol** 1988;40(3):124–9 (Eng. Abstr.) **(Pol)**

[Production of thermolabile enterotoxins of Escherichia coli by Yersinia enterocolitica and Yersinia pseudotuberculosis] Titenko BM, et al. **Mol Gen Mikrobiol Virusol** 1988 Aug; (8):41–6 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

Fatal Yersinia enterocolitica septicemia complicated by unique hemosiderosis. A case report. Shibuya H, et al. **Acta Pathol Jpn** 1988 Nov;38(11):1461–72

Comparison of the invasion strategies used by Salmonella cholerae–suis, Shigella flexneri and Yersinia enterocolitica to enter cultured animal cells: endosome acidification is not required for bacterial invasion or intracellular replication. Finlay BB, et al. **Biochimie** 1988 Aug; 70(8):1089–99

The pathogenicity of Yersinia enterocolitica for piglets. Schiemann DA. **Can J Vet Res** 1988 Jul;52(3):325–30

Virulence, persistence, and immunogenicity of Yersinia enterocolitica O:8 aroA mutants. Bowe F, et al. **Infect Immun** 1989 Oct;57(10):3234–6

Immunohistochemical and electron microscopic study of interaction of Yersinia enterocolitica serotype O8 with intestinal mucosa during experimental enteritis. Hanski C, et al. **Infect Immun** 1989 Mar;57(3):673–8

Identification of additional virulence determinants on the pYV plasmid of Yersinia enterocolitica W227. Mulder B, et al. **Infect Immun** 1989 Aug;57(8):2534–41

Evaluation of enzyme immunoassay for the detection of pathogenic Yersinia enterocolitica and Yersinia pseudotuberculosis strains. Kaneko S, et al. **J Clin Microbiol** 1989 Apr;27(4):748–51

Occurrence and clinical importance of the pathogenic serogroup O: 5, 27 of Yersinia enterocolitica in the Federal Republic of Germany and methods for its serological and bacteriological identification. Aleksić S, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):197–204

[Integration with the chromosome—an alternative state of calcium–dependency plasmids in Yersinia] Gintsburg AL, et al. **Mol Gen Mikrobiol Virusol** 1989 May;(5):7–11 (Eng. Abstr.) **(Rus)**

[Invasiveness and cytotoxicity as criteria in assessing Yersinia attenuation] Tseneva GIa, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):10–6 (Eng. Abstr.) **(Rus)**

YERSINIA INFECTIONS

Lateral pharyngeal abscess due to Yersinia enterocolitica. Blinkhorn RJ Jr, et al. **Am J Med** 1988 Dec;85(6):851–2

Yersinia pseudotuberculosis and arthritis. Bignardi GE. **Ann Rheum Dis** 1989 Jun;48(6):518–9

Post–yersinial arthritis in Cleveland, England. Fordham JN, et al. **Ann Rheum Dis** 1989 Feb;48(2):139–42

Yersinia–induced uveitis in Ireland. Larkin DF, et al. **Br J Ophthalmol** 1988 Dec;72(12):938–41

Yersinia infections in surgical practice. Attwood SE, et al. **Br J Surg** 1989 May;76(5):499–504 (138 ref.)

Liver abscess due to Yersinia enterocolitica: case report and review of the literature. Khanna R, et al. **Dig Dis Sci** 1989 Apr;34(4):636–9 (30 ref.)

Clinical manifestations of Yersinia pseudotuberculosis infection in children. Tertti R, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul;8(7):587–91

An unusual presentation of Yersinia enterocolitica. Bonilla RM. **Hosp Pract [Off]** 1988 Nov 15;23(11):23–4

Yersinia enterocolitica. Black RE, et al. **Infect Dis Clin North Am** 1988 Sep;2(3):625–41 (100 ref.)

Yersinia in intestinal biopsy specimens from patients with seronegative spondyloarthropathy: correlation with specific serum IgA antibodies. de Koning J, et al. **J Infect Dis** 1989 Jan;159(1):109–12

Yersinia enterocolitica. Cover TL, et al. **N Engl J Med** 1989 Jul 6;321(1):16–24 (201 ref.)

Rheumatoid factors in Yersinia-triggered reactive arthritis. Granfors K, et al. **Scand J Rheumatol Suppl** 1988;75:272–5

Phagocyte function in reactive arthritis. Leirisalo-Repo M, et al. **Scand J Rheumatol Suppl** 1988;76:73–7 (34 ref.)

Acute inguinal lymphadenitis associated with Yersinia enterocolitica. Narain JP. **South Med J** 1989 Mar; 82(3):401–2

Yersinia enterocolitica causing spinal osteomyelitis and empyema in a nonimmunocompromised host. Sinnott JT 4th, et al. **South Med J** 1989 Mar;82(3):399–400

[Fatal Yersinia enterocolitica septic shock in a child with chronic anemia] Dumont-Senaneuch C, et al. **Pediatrie** 1988;43(6):519–20 (Eng. Abstr.) (Fre)

[Yersinia enterocolitis—report of two cases] Ueyama T, et al. **Rinsho Hoshasen** 1989 Feb;34(2):273–6 (Eng. Abstr.) (Jpn)

[Yersinia infections and acute surgical diseases of the organs of the abdominal cavity] Nikitin AA, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):57–60 (Eng. Abstr.) (Rus)

[Yersiniosis] Mocová E, et al. **Cesk Pediatr** 1989 May; 44(5):301–3 (Slo)

BLOOD

[Changes in the functional activity of polymorphonuclear leukocytes in pseudotubercular infection] Isachkova LM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):72–5 (Eng. Abstr.) (Rus)

COMPLICATIONS

Yersinia enterocolitica bacteremia in a patient with the acquired immunodeficiency syndrome. Cohen JI, et al. **Am J Med** 1989 Feb;86(2):254–5

Flaccid quadriparesis associated with Yersinia enterocolitis–induced hypokalemia. Orman RA, et al. **Arch Intern Med** 1989 May;149(5):1193–4

Superior mesenteric vein thrombosis caused by Yersinia pseudotuberculosis. Stuart RC, et al. **Br J Surg** 1989 Mar; 76(3):272

IgA anti-Yersinia antibodies and the outcome of Yersinia-triggered reactive arthritis [letter] Lehtinen K, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):424–5

[Yersinia enterocolitica infections and thalassemia major in children] Chirio R, et al. **Ann Pediatr (Paris)** 1989 May; 36(5):308; 311–4 (37 ref.) (Eng. Abstr.) (Fre)

[Yersinia enterocolitica septicemia in a girl with thalassemia major] Fontani C, et al. **Pediatr Med Chir** 1988 Nov–Dec; 10(6):657–8 (Eng. Abstr.) (Ita)

[A complication of intestinal yersiniosis] Buvalyĭ RA. **Klin Khir** 1989;(6):66 (Rus)

[The etiology of Löfgren's syndrome] Markov IS, et al. **Klin Med (Mosk)** 1988 Nov;66(11):126–9 (Eng. Abstr.) (Rus)

[2 cases of parotitis in Yersinia infection in adults] Markov IS. **Klin Med (Mosk)** 1989 Feb;67(2):132–3 (Rus)

[Case of chickenpox combined with yersiniosis complicated by a delirious syndrome] Markov IS. **Pediatriia** 1988; (6):96–7 (Rus)

[Possible mechanisms of autoimmunization in a protracted course of yersiniosis] Malov IV, et al. **Sov Med** 1988; (12):106–9 (Rus)

[Involvement of the eyes in yersiniosis] Katsnel'son LA, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):62–5 (Eng. Abstr.) (Rus)

[Reiter's syndrome in patients with yersiniosis] Markov IS. **Vrach Delo** 1989 Jan;(1):111–4 (Eng. Abstr.) (Rus)

[Erosive-ulcerative lesions of the skin and mucous membranes in patients with yersiniosis] Markov IS. **Vrach Delo** 1988 Sep;(9):114–6 (Eng. Abstr.) (Rus)

[Rheumatic fever and Yersinia reactive arthritis—differential diagnosis] Vukotić D, et al. **Med Pregl** 1988;41(5–6):193–6 (Eng. Abstr.) (Scr)

[Sepsis and multiple hepatic abscesses caused by Yersinia enterocolitica (letter)] Díez LF, et al. **Rev Clin Esp** 1989 Mar;184(5):267 (Spa)

[Sepsis due to Yersinia enterocolitica at the onset of idiopathic hemochromatosis (letter)] Carnicer Jáuregui F, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):188–9 (Spa)

DIAGNOSIS

Acute infective endocarditis due to Yersinia enterocolitica. Watanakunakorn C. **Am J Med** 1989 Jun;86(6 Pt 1):723–4

Acute interstitial nephritis associated with Yersinia pseudotuberculosis infection. Iijima K, et al. **Am J Nephrol** 1989;9(3):236–40

Comparison of bacteria with and without plasmid-encoded proteins as antigens for measurement of immunoglobulin M, G, and A antibodies to Yersinia enterocolitica by enzyme-linked immunosorbent assay. Granfors K, et al. **J Clin Microbiol** 1989 Mar;27(3):583–5

Ultrasound and CT of multifocal liver abscesses caused by Yersinia enterocolitica. Leyman P, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):913–5

Hematogeneous osteitis due to Yersinia enterocolitica [letter] Fisch A, et al. **J Infect Dis** 1989 Sep;160(3):554

Purulent pericarditis due to Yersinia enterocolitica [letter] Lecomte F, et al. **J Infect Dis** 1989 Feb;159(2):363

Yersinia enterocolitica in Western Australia [letter] Bowman RA. **Med J Aust** 1979 Oct 20;2(8):429–30

[Serology in Yersinia enterocolitica infection (letter)] Bockemühl J, et al. **Dtsch Med Wochenschr** 1989 Sep 8; 114(36):1384–5 (Ger)

[Chronic recurrent fever as the sole symptom of Yersinia enterocolitica infection] Ottermann U, et al. **Dtsch Med Wochenschr** 1989 Mar 3;114(9):335–6 (Eng. Abstr.) (Ger)

[A case from practice (121). Patient: 50-year-old female Italian migrant worker] Schneider T, et al. **Schweiz Rundsch Med Prax** 1988 Nov 29;77(48):1331–3 (Ger)

[Micromethods for the Widal reaction] Mamat H, et al. **Z Gesamte Hyg** 1989 Jan;35(1):39–40 (Eng. Abstr.) (Ger)

[Contribution to the differential diagnosis of Yersinia enterocolitica infection and systemic inflammatory diseases of connective tissue based on an observed case] Wierzbowska M. **Pediatr Pol** 1988 Jul;63(7):443–5 (Pol)

[Yersinia infection simulating acute appendicitis] Orlov AA, et al. **Klin Khir** 1989;(4):57–8 (Rus)

[Clinical aspects, pathogenesis and treatment of Yersinia infections] Iushchuk ND, et al. **Klin Med (Mosk)** 1989 May; 67(5):91–7 (Rus)

[Yersinia parotitis in children] Markov IS. **Pediatriia** 1989; (3):50–3 (Rus)

[The generalized form of yersiniosis in a patient with transmural myocardial infarct and diabetes mellitus] Markov IS, et al. **Ter Arkh** 1988;60(11):135–6 (Rus)

[Yersinia arthritis in children] Iakovleva AA, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):71–5 (Eng. Abstr.) (Rus)

[Pseudotuberculosis in surgical practice] Sizov OG, et al. **Vestn Khir** 1988 Sep;141(9):68–9 (Rus)

[Clinico-roentgenologic manifestations of intestinal lesions in pseudotuberculosis] Sipukhin IaM, et al. **Vestn Rentgenol Radiol** 1989 Mar–Apr;(2):28–32 (Eng. Abstr.) (Rus)

[Serologic diagnosis of intestinal yersiniosis. The design of a stable erythrocyte preparation for the indirect hemagglutination reaction] Koroliuk AM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):30–4 (Eng. Abstr.) (Rus)

[Yersinia enterocolitica: a clinical form, difficult to diagnose] Borque Andrés C, et al. **An Esp Pediatr** 1989 Apr; 30(4):326–8 (Spa)

DRUG THERAPY

Conservative management of a Yersinia enterocolitica hepatic abscess. Watson JA, et al. **Aust N Z J Surg** 1989 Apr;59(4):353–4

Effect of the combination of clavulanic acid and cephalothin on an experimental infection with Yersinia enterocolitica in iron-overloaded mice. Jimenez-Valera M, et al. **J Antimicrob Chemother** 1988 Nov;22(5):707–13

Ampicillin vs. placebo for Yersinia pseudotuberculosis infection in children. Sato K, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):686–9

[Treatment of patients with Yersinia infections] Iushuk ND, et al. **Sov Med** 1989;(3):112–6 (Rus)

EPIDEMIOLOGY

Special features of distribution of Yersinia pseudotuberculosis in Japan. Tsubokura M, et al. **J Clin Microbiol** 1989 Apr; 27(4):790–1

Two outbreaks of Yersinia pseudotuberculosis 5a infection in Japan. Nakano T, et al. **Scand J Infect Dis** 1989; 21(2):175–9

Three outbreaks of yersinia pseudotuberculosis infection. Inoue M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug;186(5–6):504–11

[The first case of pseudotuberculosis found in China] Li GH. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Jun; 10(3):146–8 (Eng. Abstr.) (Chi)

[Importance of summer holiday trips on the epidemiology of salmonellosis, shigellosis and Yersinia enterocolitica infections] Bruscolini F, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):95–101 (Eng. Abstr.) (Ita)

[Intestinal infections due to Yersinia enterocolitica on the territory of Moldavia in 1975–1985] Constantiniu S, et al. **Rev Ig [Bacteriol]** 1988 Apr–Jun;33(2):133–40 (Eng. Abstr.) (Rum)

ETIOLOGY

Factors essential for the penetration of mammalian cells by Yersinia. Miller VL, et al. **Curr Top Microbiol Immunol** 1988;138:15–39 (85 ref.)

Liver abscesses due to Yersinia enterocolitica in patients with haemochromatosis. Olesen LL, et al. **J Intern Med** 1989 May;225(5):351–4

Septicemia due to Yersinia enterocolitica in a long-term hemodialysis patient after a single desferrioxamine administration. Hoen B, et al. **Nephron** 1988;50(4):378–9

Yersinia enterocolitica septicemia after accidental oral iron overdose. Milteer RM, et al. **Pediatr Infect Dis J** 1989 Aug; 8(8):537–8

GENETICS

The ail locus is found uniquely in Yersinia enterocolitica serotypes commonly associated with disease. Miller VL, et al. **Infect Immun** 1989 Jan;57(1):121–31

IMMUNOLOGY

Immunoblot analysis of IgM, IgG, and IgA responses to plasmid encoded released proteins of Yersinia enterocolitica in patients with or without yersinia triggered reactive arthritis. Ståhlberg TH, et al. **Ann Rheum Dis** 1989 Jul; 48(7):577–81

Seronegative arthritis associated with serological evidence of Yersinia infection in Australia. Wakefield D, et al. **Aust N Z J Med** 1989 Aug;19(4):331–3

Humoral immune response to individual Yersinia enterocolitica antigens in patients with and without reactive arthritis. Grönberg A, et al. **Clin Exp Immunol** 1989 Jun; 76(3):361–5

Response of synovial fluid T cell clones to Yersinia enterocolitica antigens in patients with reactive Yersinia arthritis. Hermann E, et al. **Clin Exp Immunol** 1989 Mar; 75(3):365–70

Production of tumour necrosis factor and interleukin 1 by monocytes of patients with previous Yersinia arthritis. Repo H, et al. **Clin Exp Immunol** 1988 Jun;72(3):410–4

Serum opsonic capacity against Yersinia enterocolitica O:3 in yersiniosis patients with or without reactive arthritis. Tertti R, et al. **Clin Exp Immunol** 1989 May;76(2):227–32

Analysis of IgA antibodies to lipopolysaccharide in Yersinia-triggered reactive arthritis. Granfors K, et al. **J Infect Dis** 1989 Jun;159(6):1142–7

Salivary and serum antibodies in patients with Yersinia enterocolitica infection. Grönblad EA, et al. **Microb Pathog** 1986 Dec;1(6):565–71

Analysis of the class-specific immune response to Yersinia enterocolitica virulence-associated antigens in oro-gastrically infected rabbits. Heesemann J, et al. **Microb Pathog** 1988 Dec;5(6):437–47

Fecal immunoglobulin A (IgA) antibodies to Yersinia enterocolitica in mice orally vaccinated and infected. Shimono K, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):273–7

[Pathogenesis of chronic forms of yersiniosis] Malov IV, et al. **Klin Med (Mosk)** 1988 Jul;66(7):115–8 (Eng. Abstr.) (Rus)

[Detection of Yersinia antigens in biological substrates from adult patients with Yersinia infection] Via'ba EV, et al. **Sov Med** 1989;(4):96–7 (Rus)

[Autoimmune processes during the protracted course of human yersiniosis] Malov IV. **Ter Arkh** 1988;60(11):60–3 (Eng. Abstr.) (Rus)

[Clinico-immunologic characteristics of complicated and uncomplicated yersiniosis] Inina LI, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):60–4 (Eng. Abstr.) (Rus)

[Diagnostic possibilities of a test of blood neutrophil damage in various forms of yersiniosis in man] Malov IV, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):65–7 (Rus)

MICROBIOLOGY

The role of Yersinia enterocolitica in appendicitis in Zaria. Okoro I. **East Afr Med J** 1988 Sep;65(9):625–9

Virulence, persistence, and immunogenicity of Yersinia enterocolitica O:8 aroA mutants. Bowe F, et al. **Infect Immun** 1989 Oct;57(10):3234–6

Determinants of invasion and survival of Yersinia enterocolitica in intestinal tissue. An in vivo study. Hanski C, et al. **Med Microbiol Immunol (Berl)** 1989;178(5):289–96

An experimental mouse model of Yersinia-induced reactive arthritis. Yong Z, et al. **Microb Pathog** 1988 Apr; 4(4):305–10

Isolation and identification of Yersinia enterocolitica and the Yersinia enterocolitica–like bacteria. Gilmour A, et al. **Soc Appl Bacteriol Symp Ser** 1988;17:213S–236S (168 ref.)

Occurrence and clinical importance of the pathogenic serogroup O: 5, 27 of Yersinia enterocolitica in the Federal Republic of Germany and methods for its serological and bacteriological identification. Aleksić S, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):197–204

[Yersinia exanthema] Weber L. **Hautarzt** 1988 Dec; 39(12):773–8 (Eng. Abstr.) (Ger)

[Initial isolation and characterization of Yersinia enterocolitica in human feces in Argentina] Eiguer T, et al. **Rev Argent Microbiol** 1987 Apr–Jun;19(2):71–6 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Effect of Yersinia enterocolitica on intestinal mucin secretion. Mantle M, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G319–27

Intestinal motility during acute Yersinia enterocolitica enteritis in rabbits. Scott RB, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):553–60

Colonic function in acute Yersinia enterocolitica infection in rabbits. O'Loughlin EV, et al. **Clin Invest Med** 1988

Oct;11(5):366–72

THERAPY

Yersinia enterocolitica septicaemia. Masters AP, et al. **Intensive Care Med** 1988;14(5):585–7

TRANSMISSION

Pseudotuberculosis in man: possible epidemiological role of the cats. Bourdin M. **Comp Immunol Microbiol Infect Dis** 1979;1(4):243–51 (36 ref.)

Yersinia enterocolitica in donor blood: a case report and review. Jacobs J, et al. **J Clin Microbiol** 1989 May; 27(5):1119–21 (22 ref.)

Yersinia enterocolitica serotype 0:3 sepsis after blood transfusion [letter] Bufill JA, et al. **N Engl J Med** 1989 Mar 23;320(12):810

Animal origin of the antibiotic resistance of human pathogenic Yersinia enterocolitica [letter] Trallero EP, et al. **Scand J Infect Dis** 1988;20(5):573

Infectious complications due to transfusion acquired Yersinia enterocolitica [letter] Janot C, et al. **Transfusion** 1989 May; 29(4):372–3

[Post–transfusion infectious complications caused by Yersinia enterocolitica] Janot C, et al. **Rev Fr Transfus Immunohematol** 1988 Nov;31(4):661–5 (7 ref.) (Fre)

[Enteral and articular infections with Yersinia enterocolitica in relation to the possible source of the infection] Straton A, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep; 92(3):531–5 (Eng. Abstr.) (Rum)

VETERINARY

An outbreak of Yersinia pseudotuberculosis infection in a bustard (Otis tarda) flock. Körmendy B, et al. **Acta Vet Hung** 1988;36(3–4):173–6

Enteritis in cattle due to Yersinia pseudotuberculosis infection. Slee KJ, et al. **Aust Vet J** 1988 Sep;65(9):271–5

Experimental studies on Yersinia enterocolitica infection in chickens exposed at 1–day old. Nwosuh EN, et al. **Br Poult Sci** 1989 Mar;30(1):91–9

The pathogenicity of Yersinia enterocolitica for piglets. Schiemann DA. **Can J Vet Res** 1988 Jul;52(3):325–30

Yersinia enterocolitica among small wild mammals in France. Servan J, et al. **Comp Immunol Microbiol Infect Dis** 1979; 1(4):321–33

An epizootic in chinook salmon (Oncorhynchus tshawytscha) caused by a sorbitol–positive serovar 2 strain of Yersinia ruckeri. Cipriano RC, et al. **J Wildl Dis** 1986 Oct; 22(4):488–92

Occurrence of Yersinia enterocolitica in the Tokyo Tama Zoo. Sasaki Y, et al. **J Wildl Dis** 1989 Apr;25(2):287–90

Bovine abortion associated with Yersinia pseudotuberculosis infection. Jerrett IV, et al. **Vet Pathol** 1989 Mar;26(2):181–3

YERSINIA PESTIS

[Effects of Y. pestis mouse toxin on carbohydrate metabolism in rats] Cherkasova TD, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):428–30 (Eng. Abstr.) (Rus)

[Change in the glycogen level in the liver, heart and skeletal muscles of rodents during exposure to plague toxin] Kratinov AG, et al. **Vopr Med Khim** 1971 Jul–Aug; 17(4):373–9 (Eng. Abstr.) (Rus)

[Prostaglandins and cyclic nucleotides in the dynamic development of an experimental poisoning syndrome caused by Yersinia pestis lipopolysaccharide] Cherkasova TD, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan; (1):3–6 (Eng. Abstr.) (Rus)

ANALYSIS

[Comparative study of ribosomal proteins from Yersinia pestis and Escherichia coli: amino acid composition and electrophoretic mobility] Dikhanov GG, et al. **Mol Gen Mikrobiol Virusol** 1988 Aug;(8):32–5 (Eng. Abstr.) (Rus)

CLASSIFICATION

[The agar precipitation reaction as a method of selecting fraction–free strains of Yersinia pestis] Gvozdenko NA. **Lab Delo** 1989;(1):68–9 (Rus)

DRUG EFFECTS

Modulation of the low–calcium response in Yersinia pestis via plasmid–plasmid interaction. Sample AK, et al. **Microb Pathog** 1987 Jun;2(6):443–53

[Study of trimethoprim sensitivity in strains of Yersinia pestis isolated from various natural foci of plague] Kravchenko AN, et al. **Antibiot Khimioter** 1989 Jan;34(1):42–6 (Eng. Abstr.) (Rus)

ENZYMOLOGY

[Effect of the cultivation temperature on the physicochemical properties of the DNA–dependent RNA–polymerase of Yersinia pestis] Kurennaia II, et al. **Mikrobiol Zh** 1988 Jan–Feb;50(1):69–74 (Eng. Abstr.) (Rus)

GENETICS

lcrH, a gene necessary for virulence of Yersinia pestis and for the normal response of Y. pestis to ATP and calcium. Price SB, et al. **Infect Immun** 1989 May;57(5):1491–8

Nucleotide sequence of the plasminogen activator gene of Yersinia pestis: relationship to ompT of Escherichia coli and gene E of Salmonella typhimurium. Sodeinde OA, et al. **Infect Immun** 1989 May;57(5):1517–23

The yopM gene of Yersinia pestis encodes a released protein having homology with the human platelet surface protein GPIb alpha. Leung KY, et al. **J Bacteriol** 1989 Sep; 171(9):4623–32

Identification of a Yersinia pestis–specific DNA probe with potential for use in plague surveillance. McDonough KA, et al. **J Clin Microbiol** 1988 Dec;26(12):2515–9

Post–translational regulation of Lcr plasmid–mediated peptides in pesticinogenic Yersinia pestis. Sample AK, et al. **Microb Pathog** 1987 Oct;3(4):239–48

A Yersinia pestis–specific DNA fragment encodes temperature–dependent coagulase and fibrinolysin–associated phenotypes. McDonough KA, et al. **Mol Microbiol** 1989 Jun;3(6):767–75

The plasmid–encoded outer–membrane proteins of Yersinia pestis. Straley SC. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S323–6 (12 ref.)

[Results of screening of plasmids of Yersinia pestis strains from various regions of endemic central–asian plague focus] Balakhonov SV. **Mol Gen Mikrobiol Virusol** 1989 Apr; (4):39–42 (Eng. Abstr.) (Rus)

[Cloning and study of the function of recA–like gene of Yersinia pestis in Escherichia coli cells] Suchkov IIu, et al. **Mol Gen Mikrobiol Virusol** 1989 May;(5):34–9 (Eng. Abstr.) (Rus)

[The mutagenic effect of polymorphonuclear leukocytes on Yersinia pestis] Atchabarov BB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):10–4 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

Preparation of Yersinia pestis plague murine toxin. Montie TC. **Methods Enzymol** 1988;165:162–8

Proteolysis of V antigen from Yersinia pestis. Brubaker RR, et al. **Microb Pathog** 1987 Jan;2(1):49–62

Expression of the low calcium response in Yersinia pestis. Mehigh RJ, et al. **Microb Pathog** 1989 Mar;6(3):203–17

IMMUNOLOGY

Serologic evidence of Yersinia pestis infection in small mammals and bears from a temperate rainforest of north coastal California. Clover JR, et al. **J Wildl Dis** 1989 Jan; 25(1):52–60

[Prospects for the use of monoclonal antibodies in Yersinia pestis] Temiralieva GA, et al. **Antibiot Khimioter** 1988 Sep; 33(9):687–90 (Eng. Abstr.) (Rus)

[Quantitative determination of specific plague fluorescent immunoglobulin activity using pulse flow cytofluorometry] Kravtsov AL, et al. **Lab Delo** 1988;(12):59–62 (Eng. Abstr.) (Rus)

[Methodology of determining Yersinia pestis antigens using dot–immunologic analysis] Polunina TA, et al. **Lab Delo** 1989;(6):65–6 (Eng. Abstr.) (Rus)

[The modifying action of normal human blood serum on vaccinal EV76 and virulent 363(1/1479) strains of Yersinia pestis] Ziuzina VP, et al. **Mikrobiol Zh** 1988 Sep–Oct; 50(5):87–92 (Eng. Abstr.) (Rus)

[Entrapping of hydrophobized plague capsular antigen into large unilamellar liposomes] Zakrevskii VI, et al. **Ukr Biokhim Zh** 1989 Mar–Apr;61(2):89–93 (Eng. Abstr.) (Rus)

[Isolation of high–affinity antibodies from hyperimmune serum] Levi MI. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):80–4 (Eng. Abstr.) (Rus)

[Pili (fimbriae) of the causative agents of plague and pseudotuberculosis: their detection in the hemagglutination reaction, the passive hemagglutination reaction and in an immunoenzyme analysis system] Vodop'ianov SO, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):7–10 (Eng. Abstr.) (Rus)

[Yersinia pestis L–forms in rodents and ectoparasites] Zykin LF, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb; (2):36–40 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Detection of Neisseria meningitidis and Yersinia pestis with a novel silicon–based sensor. Libby JM, et al. **J Clin Microbiol** 1989 Jul;27(7):1456–9

Suncus murinus. Observations on ecology, distribution, status to plague in Bombay. Renapurkar DM. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):45–9

Observations on commensal rats and their status to plague in Bombay. Renapurkar DM. **J Hyg Epidemiol Microbiol Immunol** 1988;32(4):407–13

Use of DNA hybridizations probes for detection of the plague bacillus (Yersinia pestis) in fleas (Siphonaptera: Pulicidae and Ceratophyllidae). Thomas RE, et al. **J Med Entomol** 1989 Jul;26(4):342–8

[An immunoenzyme monoclonal test system for detecting the causative agents of plague] Temiralieva GA, et al. **Lab Delo** 1988;(8):61–3 (Eng. Abstr.) (Rus)

[A dry culture medium for determining the cellular composition of strains of the plague agent based on its requirements for calcium ions] Vasil'eva ZI, et al. **Lab Delo** 1988;(11):61–2 (Eng. Abstr.) (Rus)

[Detection of plague microbes in fleas using immunoenzyme technics and monoclonal antibodies] Levi MI, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):57–60 (Eng. Abstr.) (Rus)

METABOLISM

[Inhibitor production, a stable feature of plague pathogen] Gramotina LI. **Antibiot Khimioter** 1989 Jan;34(1):46–8 (Eng. Abstr.) (Rus)

[The utilization of iron of various substrates by Yersinia pestis] Kravtsov AN, et al. **Mikrobiol Zh** 1987 Jan–Feb; 49(1):41–4 (Eng. Abstr.) (Rus)

[Iron assimilation by Yersinia pestis on iron–deficient media] Rublev BD, et al. **Mikrobiol Zh** 1989 Jan–Feb;51(1):13–8 (Eng. Abstr.) (Rus)

[Thymine– and thymidine–dependence of Yersinia pestis mutants with altered thymidylate synthetase] Mishan'kan BN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb; (2):24–9 (Eng. Abstr.) (Rus)

[Characteristics of the process of transferrin iron utilization by Yersinia pestis at various incubation temperatures] Tianianova VI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):3–7 (Eng. Abstr.) (Rus)

PATHOGENICITY

Differential clearance and host–pathogen interactions of YopE– and YopK– YopL– Yersinia pestis in BALB/c mice. Straley SC, et al. **Infect Immun** 1989 Apr; 57(4):1200–10

[Study of the virulence plasmids of 100 strains of Yersinia pestis isolated in Madagascar] Rasolofonirina N, et al. **Arch Inst Pasteur Madagascar** 1988;54(1):93–7 (Fre)

[Changes in the biological properties of Yersinia pestis during long–term intracellular multiplication] Vasil'eva GI, et al. **Mikrobiol Zh** 1988 Mar–Apr;50(2):30–3 (Eng. Abstr.) (Rus)

[Changes in the "latent" virulence of a vaccinal strain of Yersinia pestis multiplying within macrophages] Vasil'eva GI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep; (9):63–6 (Eng. Abstr.) (Rus)

PHYSIOLOGY

[Possible control of capsule formation and intracellular synthesis of envelope antigen by each different plasmid] Tsukano H. **Kansenshogaku Zasshi** 1989 Mar;63(3):234–9 (Eng. Abstr.) (Jpn)

[Effect of the entomopathogenic fungus Penicillium funiculosum on the reproduction of the causative agent of plague in the body of fleas] Lopatina NV, et al. **Med Parazitol (Mosk)** 1988 May–Jun;(3):28–9 (Rus)

[Double control of pili formation in Yersinia pestis] Vodop'ianov SO. **Mikrobiol Zh** 1988 Nov–Dec;50(6):40–5 (Eng. Abstr.) (Rus)

YERSINIA PSEUDOTUBERCULOSIS

[Isolation and physico–chemical properties of a protein, included in an endotoxin from Yersinia pseudotuberculosis] Fedoreeva LI, et al. **Bioorg Khim** 1989 Jun;15(6):737–47 (Eng. Abstr.) (Rus)

ANALYSIS

[The structure of the O–specific polysaccharide chain of the lipopolysaccharide of Yersinia pseudotuberculosis serovar VII] Kotandrova NA, et al. **Bioorg Khim** 1989 Jan; 15(1):104–10 (Eng. Abstr.) (Rus)

[Conformational stability and immunochemical properties of yersinin—a basic protein of the outer membrane of the Pseudotuberculosis microbe] Novikova OD, et al. **Bioorg Khim** 1989 Jun;15(6):763–72 (Eng. Abstr.) (Rus)

CLASSIFICATION

[Preparation from Soviet materials of an immunoenzyme conjugate for detecting pseudotuberculosis] Kuliashova LB, et al. **Lab Delo** 1988;(8):50–2 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Modulation of the low–calcium response in Yersinia pestis via plasmid–plasmid interaction. Sample AK, et al. **Microb Pathog** 1987 Jun;2(6):443–53

GENETICS

Determinants for thermoinducible cell binding and plasmid–encoded cellular penetration detected in the absence of the Yersinia pseudotuberculosis invasin protein. Isberg RR. **Infect Immun** 1989 Jul;57(7):1998–2005

Molecular cloning and expression of calcium–regulated, plasmid–coded proteins of Y. pseudotuberculosis. Forsberg A, et al. **Microb Pathog** 1987 Feb;2(2):123–37

High degree of conservation between ribosomal proteins of Yersinia pseudotuberculosis and Escherichia coli. Gross U, et al. **Nucleic Acids Res** 1989 May 11;17(9):3601–2

[Differential isolation of low–molecular plasmids] Kovtun GIu. **Lab Delo** 1989;(4):61–2 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

[Evaluation of selective properties of Mac Conkey's medium enriched with potassium tellurite for growing Shigella and

Yersinia strains] Bielecka Z, et al. **Med Dosw Mikrobiol** 1988;40(4):206–12 (Eng. Abstr.) (Pol)

IMMUNOLOGY

Activation of macrophages by lymphokines from specifically sensitized lymphocytes with Yersinia pseudotuberculosis. Neychev H, et al. **Acta Microbiol Bulg** 1988;22:22–7

[Comparison of 2 methods of hemagglutination tests for antibodies against strains of Yersinia enterocolitica and Yersinia pseudotuberculosis] Rutová J.
Cesk Epidemiol Mikrobiol Imunol 1989 Jan;38(1):40–7 (Eng. Abstr.) (Cze)

[Pili (fimbriae) of the causative agents of plague and pseudotuberculosis: their detection in the hemagglutination reaction, the passive hemagglutination reaction and in an immunoenzyme analysis system] Vodop'ianov SO, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Aug;(8):7–10 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

A survey for Yersinia pseudotuberculosis in migratory birds in coastal Japan. Hamasaki S, et al. **J Wildl Dis** 1989 Jul; 25(3):401–3

Isolation of Yersinia pseudotuberculosis from water. Inoue M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Jul; 186(4):338–43

[Isolation and ultrastructure of Yersinia spheroplasts and protoplasts] Dzadzieva MF, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Nov;(11):3–5 (Eng. Abstr.) (Rus)

METABOLISM

[Production of thermolabile enterotoxins of Escherichia coli by Yersinia enterocolitica and Yersinia pseudotuberculosis] Titenko BM, et al. **Mol Gen Mikrobiol Virusol** 1988 Aug; (8):41–6 (Eng. Abstr.) (Rus)

PATHOGENICITY

Evaluation of enzyme immunoassay for the detection of pathogenic Yersinia enterocolitica and Yersinia pseudotuberculosis strains. Kaneko S, et al.
J Clin Microbiol 1989 Apr;27(4):748–51

Virulence plasmid-associated HeLa cell induced cytotoxicity of Yersinia pseudotuberculosis. Rosqvist R, et al.
Microb Pathog 1986 Jun;1(3):229–40

Virulence opposition [letter] Kornblatt JA. **Nature** 1988 Dec 8;336(6199):512

[A new pathogenic trait encoded by Yersinia pseudotuberculosis pVM82 plasmid] Gintsburg AL, et al. **Genetika** 1988 Sep;24(9):1562–71 (Eng. Abstr.) (Rus)

[Integration with the chromosome—an alternative state of calcium-dependency plasmids in Yersinia] Gintsburg AL, et al. **Mol Gen Mikrobiol Virusol** 1989 May;(5):7–11 (Eng. Abstr.) (Rus)

[Factors in the pathogenicity of Yersinia pseudotuberculosis and their genetic control] Petrovskaia VG, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Jul;(7):78–87 (43 ref.) (Rus)

[Simulation of the initiation of pseudotuberculosis infection] Timchenko NF, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Jul;(7):16–20 (Eng. Abstr.) (Rus)

[Invasiveness and cytotoxicity as criteria in assessing Yersinia attenuation] Tseneva GIa, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Sep;(9):10–6 (Eng. Abstr.) (Rus)

PHYSIOLOGY

[Population dynamics of Yersinia pseudotuberculosis in association with the infusorian Tetrahymena pyriformis] Pushkareva VI, et al.
Zh Mikrobiol Epidemiol Immunobiol 1989 Jan;(1):17–21 (Eng. Abstr.) (Rus)

YERSINIA PSEUDOTUBERCULOSIS INFECTIONS see under **YERSINIA INFECTIONS**

YOGA

Treatment of essential hypertension with yoga relaxation therapy in a USAF aviator: a case report. Brownstein AH, et al. **Aviat Space Environ Med** 1989 Jul;60(7):684–7

Treatment of neurotic illnesses by yogic techniques. Sharma I, et al. **Indian J Med Sci** 1989 Mar;43(3):76–9

Autonomic responses to breath holding and its variations following pranayama. Bhargava R, et al.
Indian J Physiol Pharmacol 1988 Oct–Dec;32(4):257–64

Effect of short term yoga practice on ventilatory function tests. Makwana K, et al. **Indian J Physiol Pharmacol** 1988 Jul–Sep;32(3):202–8

Effect of yogasanas on the visual and auditory reaction time. Malathi A, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun; 33(2):110–2

Physiological responses to cold (10 degrees C) in men after six months' practice of yoga exercises. Selvamurthy W, et al. **Int J Biometeorol** 1988 Sep;32(3):188–93

Comparative study of the effect of drugs and relaxation exercise (yoga shavasan) in hypertension. Chaudhary AK, et al. **J Assoc Physicians India** 1988 Dec;36(12):721–3

Kunjal: a nonspecific protective factor in management of bronchial asthma. Singh V. **J Asthma** 1987;24(3):183–6

Increased muscle enzyme activity after yoga breathing during an exacerbation of asthma [published erratum appears in Thorax 1988 Dec;43(12):1028] Tamarin FM, et al.
Thorax 1988 Sep;43(9):731–2

YOGURT see under **DAIRY PRODUCTS**

YOHIMBANS

HISTORY

Psychoactive properties of mitragynine (kratom). Jansen KL, et al. **J Psychoactive Drugs** 1988 Oct–Dec;20(4):455–7

PHARMACOLOGY

Ethnopharmacology of kratom and the Mitragyna alkaloids [letter] Shellard EJ. **J Ethnopharmacol** 1989 Feb; 25(1):123–4

YOHIMBINE

ADMINISTRATION & DOSAGE

Sloth bear immobilization with a ketamine–xylazine combination: reversal with yohimbine. Page CD.
J Am Vet Med Assoc 1986 Nov 1;189(9):1050–1

Reversal of xylazine-induced sedation in llamas, using doxapram or 4-aminopyridine and yohimbine. Riebold TW, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1059–61

ANTAGONISTS & INHIBITORS

Effects of pertussis toxin on the behavioural and ECoG spectrum changes induced by clonidine and yohimbine after their microinfusion into the locus coeruleus. De Sarro GB, et al. **Br J Pharmacol** 1989 Jan;96(1):59–64

Sodium phenobarbitone reverses the anxiogenic effects of compounds acting at three different central sites. Johnston AL, et al. **Neuropharmacology** 1989 Jan;28(1):83–8

DIAGNOSTIC USE

[3H]rauwolscine labels alpha 2-adrenoceptors and 5-HT1A receptors in human cerebral cortex. Convents A, et al.
Eur J Pharmacol 1989 Jan 17;159(3):307–10

METABOLISM

High affinity binding of 3H rauwolscine and 3H RX781094 to alpha 2 adrenergic receptors and non-stereoselective sites in human and rabbit brain cortex membranes. Convents A, et al. **Biochem Pharmacol** 1989 Feb 1; 38(3):455–63

Identification and localization of adrenergic receptors in cat visual cortex. Parkinson D, et al. **Brain Res** 1988 Aug 2; 457(1):70–8

Idazoxan and brain alpha 2-adrenoceptors in the rabbit. Yakubu MA, et al. **Brain Res** 1988 Nov 1;463(2):289–95

Amiloride interacts with [3H]idazoxan and [3H]rauwolscine binding sites in rabbit urethra. Yablonsky F, et al.
Eur J Pharmacol 1989 May 2;164(1):167–70

Identification and characterization of (3H)-rauwolscine binding to alpha 2-adrenoceptors in the canine saphenous vein. Gout B. **Life Sci** 1988;43(24):1961–71

PHARMACOKINETICS

Alpha 2-adrenergic receptor sensitivity in depressed patients: relation between 3H-yohimbine binding to platelet membranes and clonidine-induced hypotension. Wolfe N, et al. **Biol Psychiatry** 1989 Feb 15;25(4):382–92

Alpha-2 adrenergic receptor binding in platelets and brains of nervous and normal pointer dogs. Klein E, et al.
J Psychiatr Res 1988;22(4):241–7

PHARMACOLOGY

The role of coronary alpha 1-adrenoceptors of the dog heart in dopamine-induced cardiostimulation evidenced by treatment with prazosin. Kékesi V, et al.
Acta Physiol Hung 1989;73(1):61–9

Effect of alpha-adrenergic blocking agents on uterine activity in the ewe at the end of gestation. Prud'Homme MJ.
Acta Physiol Hung 1988;71(4):485–9

Baroreflex control of jejunal blood flow and fluid transport in cats; effects of yohimbine, an alpha 2-adrenergic antagonist. Sjövall H, et al. **Acta Physiol Scand** 1988 Mar; 132(3):271–9

Effects of alpha 2-adrenoceptors blockade on the inhibition of the nociceptive jaw-opening reflex by the lateral reticular nucleus in rabbits. Sotgiu ML. **Arch Ital Biol** 1989 Feb;127(1):63–7

Apomorphine, deprenyl, and yohimbine fail to increase sexual behavior in rhesus males. Chambers KC, et al.
Behav Neurosci 1989 Aug;103(4):816–23

Differential effects of yohimbine and naloxone on copulatory behaviors of male rats. Peters RH, et al.
Behav Neurosci 1988 Aug;102(4):559–64

Assessment of erectogenic properties of apomorphine and yohimbine in man. Danjou P, et al.
Br J Clin Pharmacol 1988 Dec;26(6):733–9

Microinfusion of clonidine and yohimbine into locus coeruleus alters EEG power spectrum: effects of aging and reversal by phosphatidylserine. de Sarro GB, et al.
Br J Pharmacol 1988 Dec;95(4):1278–86

Effects of clonidine and yohimbine on a C-fibre-evoked blood pressure reflex in the rat. Donnerer J, et al.
Br J Pharmacol 1988 Jul;94(3):848–52

Evidence for prazosin-resistant, rauwolscine-sensitive alpha-adrenoceptors mediating contractions in the isolated vascular bed of the rat tail. Templeton AG, et al.
Br J Pharmacol 1989 Jun;97(2):563–71

Lipomobilizing effects of procaterol and yohimbine in the conscious dog: comparison of endocrinological, metabolic and cardiovascular effects. Valet P, et al.
Br J Pharmacol 1989 May;97(1):229–39

Electrophysiological effects of locally applied noradrenergic agents at cerebellar Purkinje neurons: receptor specificity. Parfitt KD, et al. **Brain Res** 1988 Oct 18;462(2):242–51

Renal alpha-adrenoceptor density and blood pressure in SHR rats exposed chronically to prazosin and/or yohimbine. Sánchez A, et al. **Clin Exp Hypertens [A]** 1989;11(1):119–36

Intravenous yohimbine. Selective enhancer of norepinephrine and cortisol secretion and systolic blood pressure in humans. Grunhaus L, et al. **Clin Neuropharmacol** 1989 Apr; 12(2):106–14

Effect of yohimbine on blood pressure in patients with depression and orthostatic hypotension induced by clomipramine. Lacomblez L, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):241–51

The effect of yohimbine on plasma levels of T3, T4 and cortisol in xylazine-immobilized white-tailed deer. Bubenik GA, et al. **Comp Biochem Physiol [C]** 1989;92(2):315–8

Comparison of drugs with different selectivity for central alpha 1-and alpha 2-adrenoceptors in animal models of epilepsy. Löscher W, et al. **Epilepsy Res** 1987 May; 1(3):165–72

Alpha 2-antagonist compounds and lipid mobilization: evidence for a lipid mobilizing effect of oral yohimbine in healthy male volunteers. Galitzky J, et al.
Eur J Clin Invest 1988 Dec;18(6):587–94

Antagonistic effects of caffeine and yohimbine in animal tests of anxiety. Baldwin HA, et al. **Eur J Pharmacol** 1989 Jan 10;159(2):211–5

Involvement of a central nervous pathway in yohimbine-induced insulin secretion. Ribes G, et al.
Eur J Pharmacol 1989 Mar 21;162(2):207–14

Comparative effects of almitrine and raubasine, singly and in combination, on electroencephalographic activity in young and old rats. Sebban C, et al. **Exp Gerontol** 1989; 24(1):11–24

Alpha 2 adrenoceptors of blood platelets from hypertensive and normotensive rhesus monkeys. Pham NA, et al.
Folia Haematol (Leipz) 1988;115(4):465–8

Pharmacological identification of the alpha-adrenergic receptor type which inhibits the beta-adrenergic activated adenylate cyclase system in cultured astrocytes. Northam WJ, et al. **GLIA** 1989;2(2):129–33

Effects of alpha-2 adrenoreceptor blockade by yohimbine on the hormonal response to hypoglycaemic stress in normal man. Cuneo RC, et al. **Horm Metab Res** 1989 Jan; 21(1):33–6

Xylazine-ketamine-induced anesthesia in rats and its antagonism by yohimbine. Hsu WH, et al.
J Am Vet Med Assoc 1986 Nov 1;189(9):1040–3

Analysis of responses to sympathetic nerve stimulation in the feline pulmonary vascular bed. Hyman AL, et al.
J Appl Physiol 1989 Jul;67(1):371–6

A differential effect of yohimbine on adrenal and neuronal catecholamine release during bilateral carotid occlusion in the dog. Yamaguchi N, et al. **J Auton Nerv Syst** 1988 Dec; 25(2–3):141–53

Stimulation of renin by blockade of alpha 2-adrenoceptors in man: role of the beta 1-adrenoceptor. de Leeuw PW, et al. **J Hypertens Suppl** 1988 Dec;6(4):S416–7

Isomeric yohimbine alkaloids block calcium-activated K+ channels in medullary thick ascending limb cells of rabbit kidney. Cornejo M, et al. **J Membr Biol** 1989 Jan; 107(1):25–33

Differences in the ability of yohimbine to antagonize the hypotensive effect of clonidine in normotensive and spontaneously hypertensive anesthetized rats. Tibirica E, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1062–6

Cardiovascular effects of cocaine: enhancement by yohimbine and atropine. Wilkerson RD.
J Pharmacol Exp Ther 1989 Jan;248(1):57–61

Effects of propranolol and yohimbine on periarterial nerve stimulation-induced release of endogenous norepinephrine from the mesenteric vasculature of Wistar Kyoto and spontaneously hypertensive rats. Yamamoto R, et al.
J Pharmacol Exp Ther 1988 Mar;244(3):905–11

Yohimbine reversal of ketamine–xylazine immobilization of raccoons (Procyon lotor). Deresienski DT, et al.
J Wildl Dis 1989 Apr;25(2):169–74

Antagonism of xylazine hydrochloride sedation in raptors by yohimbine hydrochloride. Freed D, et al.
J Wildl Dis 1989 Jan;25(1):136–8

Use of xylazine sedation with yohimbine antagonism in captive gray wolves. Kreeger TJ, et al. **J Wildl Dis** 1988 Oct;24(4):688–90

Physiological response of gray wolves to butorphanol–xylazine immobilization and antagonism by naloxone and yohimbine. Kreeger TJ, et al.
J Wildl Dis 1989 Jan;25(1):89–94

Immobilization of coyotes with xylazine hydrochloride–ketamine hydrochloride and antagonism by

yohimbine hydrochloride. Kroeger TJ, et al.
J Wildl Dis 1986 Oct;22(4):604–6
Failure of yohimbine hydrochloride to antagonize ketamine hydrochloride immobilization of gray wolves. Kroeger TJ, et al. **J Wildl Dis** 1986 Oct;22(4):600–3
Effect of yohimbine on urethane-induced hyperglycemia in rats. Aisaka K, et al. **Jpn J Pharmacol** 1989 Apr;49(4):523–7
The differential effects of alpha 2-adrenergic stimulation on the myocardium and coronary vessels in the isolated rat heart. Hirakata H, et al. **Life Sci** 1988;43(24):2025–33
Prolactin (PRL) release-inhibiting properties of the alpha 2 adrenergic receptor antagonist idazoxan: comparison with yohimbine. Krulich L, et al. **Life Sci** 1989;44(12):809–18
Sympathoadrenomedullary hyper-responsiveness to yohimbine in juvenile spontaneously hypertensive rats. Szemeredi K, et al. **Life Sci** 1988;43(13):1063–8
Role of alpha-adrenergic mechanism in effects of morphine on the hypothalamo-pituitary-adrenocortical and cardiovascular systems in the rat. Suemaru S, et al.
Neuroendocrinology 1989 Feb;49(2):181–90
Opiate and alpha receptor antagonists block the pressor responses of conscious rats given intravenous dynorphin. Thornhill JA, et al. **Peptides** 1989 Jan–Feb;10(1):171–7
Evidence for antiserotonergic properties of yohimbine. Dwoskin LP, et al. **Pharmacol Biochem Behav** 1988 Oct; 31(2):321–6
Yohimbine's anxiogenic action: evidence for noradrenergic and dopaminergic sites. Johnston AL, et al.
Pharmacol Biochem Behav 1989 Jan;32(1):151–6
Excitatory and inhibitory cholinergic effects of yohimbine on isolated guinea-pig small intestine. Del Tacca M, et al. **Pharmacol Res Commun** 1988 Aug;20(8):673–84
Pertussis toxin inhibits the behavioural and ECoG effects induced by clonidine and yohimbine after their microinfusion into the locus coeruleus. De Sarro GB, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1095–6
Imidazole and yohimbine antagonize hypomotility, penile erection, stretching and yawning induced in rats by BHT 920, a selective dopamine autoreceptor agonist. Ferrari F, et al. **Pharmacol Res Commun** 1988 Sep;20(9):827–37
Clonidine activates a cholinergic hippocampal theta rhythm in the rat. Yabase M, et al. **Proc West Pharmacol Soc** 1988; 31:213–4
Chronic treatment with amitriptyline produces subsensitivity to the hypothermic effects of yohimbine. Dilsaver SC, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):211–5
Behavioural effects of the alpha 2-adrenoceptor antagonists idazoxan and yohimbine in rats: comparisons with amphetamine. Sanger DJ. **Psychopharmacology (Berlin)** 1988;96(2):243–9
Differential effects of yohimbine and phenoxybenzamine on norepinephrine metabolites in rat brain. Edwards DJ, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):195–206
Influence of yohimbine on the formation of desmosine cross-links in elastin. Wimmerová J, et al.
Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove 1988;31(1):19–27
Effect of yohimbine on xylazine-induced diuresis in rats. Mohammad FK, et al. **Vet Hum Toxicol** 1989 Feb; 31(1):13–5
[Calcium antagonistic action of corynanthine in isolated guinea pig left atria] Cheng B, et al.
Chung Kuo Yao Li Hsueh Pao 1988 Jul;9(4):327–9 (Eng. Abstr.) **(Chi)**
[Identification of alpha-2 adrenergic receptors in rabbit adipocytes] Nasraoui A, et al. **Arch Inst Pasteur Tunis** 1988 Jul–Oct;65(3–4):255–60 (Eng. Abstr.) **(Fre)**
[The anticonvulsant action of yohimbine in maximal electroshock] Fischer W. **Pharmazie** 1988 Oct;43(10):732–3 **(Ger)**
[On the eventual psychotropic, cardiovascular and aphrodisiac properties of yohimbine, an old drug with new indications] Costa R, et al. **Clin Ter** 1989 May 15; 129(3):159–68 (128 ref.) (Eng. Abstr.) **(Ita)**

THERAPEUTIC USE

Effects of dapiprazole, clonidine and yohimbine on the development of dependence and withdrawal behaviour in mice. Valeri P, et al. **Drug Alcohol Depend** 1989 Jan; 23(1):73–7
Can yohimbine be used to treat orthostatic hypotension associated with the use of desipramine and other antidepressants? What general and/or specific strategy do you recommend for treating orthostatic hypotension? Price LH, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):384
Use of yohimbine to counteract nortriptyline-induced orthostatic hypotension [letter] Seibyl JP, et al.
J Clin Psychopharmacol 1989 Feb;9(1):67–8
Effect of yohimbine hydrochloride on erectile impotence: a double-blind study. Susset JG, et al. **J Urol** 1989 Jun; 141(6):1360–3
Noradrenergic function in generalized anxiety disorder: effects of yohimbine in healthy subjects and patients with generalized anxiety disorder. Charney DS, et al.
Psychiatry Res 1989 Feb;27(2):173–82
[Somatostatin deficiency, hyperinsulinism and thrombocyte aggregation in psoriasis] Neugebauer D, et al. **Z Hautkr** 1988 Jul 15;63(7):585–6, 589–90 (Eng. Abstr.) **(Ger)**

TOXICITY

Influence of alpha stimulants and beta blockers on yohimbine toxicity. Bourin M, et al.
Prog Neuropsychopharmacol Biol Psychiatry 1988; 12(5):569–74

YOLK PROTEINS see EGG PROTEINS

YOLK PROTEINS, DIETARY see EGG PROTEINS, DIETARY

YOLK SAC

Vitelline duct cyst or double yolk sac. Barzilai M, et al.
J Ultrasound Med 1989 Sep;8(9):523–6

ANALYSIS

Fatty acid content of yolk sac and embryo in hyperglycemia-induced embryopathy and effect of arachidonic acid supplementation. Pinter E, et al.
Am J Obstet Gynecol 1988 Dec;159(6):1484–90
Insulin-gene expression in extrafetal membranes of rats. Rau K, et al. **Diabetes** 1989 Jan;38(1):39–43
Gestational changes in calbindin-D9k in rat uterus, yolk sac, and placenta: implications for maternal-fetal calcium transport and uterine muscle function. Mathieu CL, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3433–7
Reactivity of visceral yolk sac endoderm with lectins: changes related to age and species. Sobis H, et al.
Tumour Biol 1989;10(3):133–9

ANATOMY & HISTOLOGY

Prognostic significance of the human yolk sac assessed by ultrasonography. Reece EA, et al.
Am J Obstet Gynecol 1988 Nov;159(5):1191–4
[Regression of the decidua capsularis and development of the yolk sac in the mouse] Cinquetti R, et al.
Arch Ital Anat Embriol 1988 Jan–Jun;93(1–2):29–45 (Eng. Abstr.) **(Ita)**

CYTOLOGY

Teratogenic antibody internalization by rat visceral yolk-sac endoderm in vitro: an ultrastructural colloidal gold tracer study [published erratum appears in **Am J Anat** 1989 May;185(1):101] Leung CC, et al. **Am J Anat** 1988 Oct; 183(2):125–9
Hemopoiesis in the human yolk sac. Takashima T.
Am J Anat 1989 Mar;184(3):237–44
The ultrastructure of megakaryopoietic cells of the yolk sac and liver in mouse embryo. Matsumura G, et al.
Anat Rec 1988 Oct;222(2):164–9
Effects of teratogenic antibodies on cultured visceral yolk-sac endodermal cells: cytotoxicity and morphological studies. Cheewatrakoolpong B, et al. **J Exp Zool** 1988 Dec; 248(3):315–20
Development, differentiation, and maturation of fetal mouse yolk sac macrophages in cultures. Naito M, et al.
J Leukoc Biol 1989 Jul;46(1):1–10
Nature of the multipotential cells in the displaced rat yolk sac. Sobis H, et al. **Tumour Biol** 1989;10(3):140–8

DRUG EFFECTS

Anti-kidney antibody teratogenesis: evidence for a direct action on the rat conceptus by a mechanism involving the yolk sac. Freeman SJ, et al. **Toxicol Lett** 1989 May; 47(2):197–203
[The effect of leupeptin on lysosomal hydrolases in the visceral vitelline sack of the rat. Histo- and biochemical studies] Greiner A, et al. **Z Mikrosk Anat Forsch** 1988; 102(5):817–28 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

In vivo localization and biological effect of anti-yolk sac monoclonal antibodies. Sobis H, et al. **Anat Rec** 1988 Jul; 221(3):737–42
Class I MHC antigens on rat placental trophoblast and yolk sac fetal membrane. Billington WD, et al.
Transplant Proc 1989 Feb;21(1 Pt 1):555–6

METABOLISM

Immunohistochemical differentiation of yolk sac-type alpha-fetoprotein from hepatic-type alpha-fetoprotein. Okamoto T. **Acta Pathol Jpn** 1989 Jan;39(1):51–4
Heparan sulfate proteoglycan is present in basement membrane as a double-tracked structure. Inoue S, et al. **J Histochem Cytochem** 1989 May;37(5):597–602
Uptake and digestion of 125I-labelled bovine serum albumin by the rat visceral yolk sac cultured in vitro as a closed vesicle. Dunton A, et al. **Placenta** 1988 May–Jun; 9(3):303–11
Glycogen metabolism in the rat visceral yolk sac. I. Glycogen content and gestational age. Hartfield PJ, et al.
Placenta 1989 Jan–Feb;10(1):45–54
Carrier-mediated uptake of hexoses by the rat visceral yolk sac. Koszalka TR, et al. **Placenta** 1988 Sep–Oct;9(5):547–58

PATHOLOGY

[The embryonal yolk sac in disordered early pregnancy] Rempen A. **Geburtshilfe Frauenheilkd** 1988 Nov; 48(11):804–8 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Flow of egg white ovalbumin into the yolk sac during embryogenesis. Sugimoto Y, et al.
Biochim Biophys Acta 1989 Sep 15;992(3):400–3
Erythropoietin. Receptor characteristics during the ontogeny of hamster yolk sac erythroid cells. Boussios T, et al.
J Biol Chem 1989 Sep 25;264(27):16017–21
Role of the mouse visceral yolk sac in nutrition: inhibition by a somatomedin inhibitor. Balkan W, et al.
J Exp Zool 1989 Jan;249(1):36–40
Differentiation, maturation, and proliferation of macrophages in the mouse yolk sac: a light-microscopic, enzyme-cytochemical, immunohistochemical, and ultrastructural study. Takahashi K, et al. **J Leukoc Biol** 1989 Feb;45(2):87–96
Effects of oxygen concentration on functions of the rat visceral yolk sac endoderm in vitro. A histochemical study using whole-embryo culture technique. Miki A, et al.
Kobe J Med Sci 1988 Apr;34(2):55–70
Failure of zinc to prevent dysmorphogenesis of cultured rat conceptuses by anti-yolk sac antiserum. Marlow R, et al.
Life Sci 1989;44(13):837–46

ULTRASTRUCTURE

Ultrastructural localization of the 9-kilodalton vitamin D-dependent calcium-binding protein in the murine intraplacental yolk sac. Riad NH, et al. **Anat Rec** 1988 Nov; 222(3):252–9
Effects of monensin on the receptor-mediated endocytosis of 125I-labelled IgG by guinea-pig yolk sac in vitro. Douglas GC, et al. **Placenta** 1988 May–Jun;9(3):277–88

YOLK SAC TUMOR see MESONEPHROMA

YOMESAN see NICLOSAMIDE

YOUTH see ADOLESCENCE

YTTERBIUM

[Measures of ileal flux in the rabbit: comparison of ytterbium and mordant chromium and representativity of the digesta collected] Gidenne T. **Reprod Nutr Dev** 1988;28 Suppl 1:153–4 (Eng. Abstr.) **(Fre)**

ANALYSIS

[Marker transfer between food particles during digestive transit in the rabbit. Estimation method based on fecal granulometry] Gidenne T. **Reprod Nutr Dev** 1989; 29(1):55–62 (Eng. Abstr.) **(Fre)**

DIAGNOSTIC USE

[Beta 2-microglobulin and a test using 169 Yb-DTPA in evaluating glomerular filtration and reabsorption of protein in gynecologic cancer patients] Modnikov OP.
Med Radiol (Mosk) 1989 Apr;34(4):57–9 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

[Total proteins levels and embryonic development of eggs of sea urchins (Lytechinus variegatus) treated with YbCl3] de Oliveira AM, et al. **Rev Bras Biol** 1989 Feb;49(1):231–5 (Eng. Abstr.) **(Por)**

YTTRIUM

Mechanical properties and short-term in-vivo evaluation of yttrium-oxide-partially-stabilized zirconia. Christel P, et al. **J Biomed Mater Res** 1989 Jan;23(1):45–61

THERAPEUTIC USE

Cystic craniopharyngioma treated by 90yttrium silicate colloid. Guevara JA, et al.
Acta Neurochir Suppl (Wien) 1988;42:109–12
Further experiences in the treatment of cystic craniopharyngeomas with yttrium 90 silicate colloid. Julow J, et al. **Acta Neurochir Suppl (Wien)** 1988;42:113–9

YTTRIUM RADIOISOTOPES

Cystic craniopharyngioma treated by 90yttrium silicate colloid. Guevara JA, et al.
Acta Neurochir Suppl (Wien) 1988;42:109–12
Further experiences in the treatment of cystic craniopharyngeomas with yttrium 90 silicate colloid. Julow J, et al. **Acta Neurochir Suppl (Wien)** 1988;42:113–9
Measurement and estimation of organ Bremsstrahlung radiation dose. Williams LE, et al. **J Nucl Med** 1989 Aug; 30(8):1373–7

ADMINISTRATION & DOSAGE

Intraperitoneal radioimmunotherapy for ovarian cancer. Stewart JS, et al. **Br J Obstet Gynaecol** 1989 May; 96(5):529–36
Treatment of liver tumors with yttrium-90 microspheres alone. Blanchard RJ, et al. **Can Assoc Radiol J** 1989 Aug; 40(4):206–10
Nature of the bifunctional chelating agent used for

radioimmunotherapy with yttrium-90 monoclonal antibodies: critical factors in determining in vivo survival and organ toxicity. Kozak RW, et al. **Cancer Res** 1989 May 15;49(10):2639-44

Intraperitoneal 131I- and 90Y-labelled monoclonal antibodies for ovarian cancer: pharmacokinetics and normal tissue dosimetry. Stewart JS, et al. **Int J Cancer Suppl** 1988; 3:71-6

[Intracystic instillation of yttrium 90 silicate colloid in cystic craniopharyngioma] Julow J, et al. **Orv Hetil** 1989 Jun 25; 130(26):1367-8, 1371-5 (44 ref.) (Eng. Abstr.) (Hun)

[Treatment of chronic joint effusion by chemical or radioisotope synoviorthesis] Jonderko G. **Przegl Lek** 1988; 45(10):743-6 (44 ref.) (Pol)

DIAGNOSTIC USE

Labelling monoclonal antibodies with yttrium-90. Mather SJ, et al. **Eur J Nucl Med** 1989;15(6):307-12

METABOLISM

Y-90 antiferritin dosimetry in hepatoma [letter] Leichner PK, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):241

Alternative to toxicity and dosimetry of Y-90 labeled antibody [letter; comment] Stewart JS, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):241. **Comment on:** Int J Radiat Oncol Biol Phys 1988 May;14(5):1033-42

Comparative biodistributions of yttrium- and indium-labeled monoclonal antibody B72.3 in athymic mice bearing human colon carcinoma xenografts. Roselli M, et al. **J Nucl Med** 1989 May;30(5):672-82

THERAPEUTIC USE

Prolongation of survival of nude mice bearing human colon cancer. Treatment with yttrium 90-labeled anti-carcinoembryonic antigen antibody. Hyams DM, et al. **Arch Surg** 1989 Feb;124(2):175-9

Knee arthroscopy after yttrium or osmic acid injection. Guaydier-Souquieres C, et al. **Arthroscopy** 1989;5(1):70-5

Effect of yttrium-90-labeled anti-carcinoembryonic antigen monoclonal antibody on the morphology and phenotype of human tumors grown as peritoneal carcinomatosis in athymic mice. Esteban JM, et al. **Cancer** 1989 Apr 1; 63(7):1343-52

SPECT using Bremsstrahlung to quantify 90Y uptake in Baker's cysts: its application in radiation synovectomy of the knee. Smith T, et al. **Eur J Nucl Med** 1988; 14(9-10):498-503

Preclinical assessment of 90Y-labeled monoclonal antibody CO17-1A, a potential agent for radioimmunotherapy of colorectal carcinoma. Washburn LC, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):707-11

Polyclonal 90Yttrium labeled antiferritin for refractory Hodgkin's disease. Vriesendorp HM, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):815-21

Radiopharmaceuticals for radiation synovectomy: evaluation of two yttrium-90 particulate agents. Davis MA, et al. **J Nucl Med** 1989 Jun;30(6):1047-55

Hepatic malignancies: improved treatment with intraarterial Y-90. Herba MJ, et al. **Radiology** 1988 Nov;169(2):311-4

Hepatocellular carcinoma: pilot trial of treatment with Y-90 microspheres. Houle S, et al. **Radiology** 1989 Sep; 172(3):857-60

Z-DNA see **DNA**

ZEA see **CORN**

ZEARALENONE see under **RESORCINOLS**

ZEATIN see under **PURINES**

ZEBRAFISH see under **CYPRINIDAE**

ZEIN

Novel preparation of zein microspheres conjugated with PS-K available for cancer immunotherapy. Matsuda Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):757-9

The significance of the zein test in the classification of cationic tensides. Gehring W, et al. **Contact Dermatitis** 1989 May;20(5):386-7

[A rat model of chronic pancreatic insufficiency induced by injection of zein-oleic acid-linoleic acid solution into the pancreatic duct] Kataoka K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1431 (Jpn)

ANALYSIS

Preparation of zein microspheres conjugated with antitumor drugs available for selective cancer chemotherapy and development of a simple colorimetric determination of drugs in microspheres. Suzuki T, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):1051-4

GENETICS

Structural elements regulating zein gene expression. Thompson GA, et al. **Bioessays** 1989 Apr;10(4):108-13 (38 ref.)

Isolation and sequence of a gene encoding a methionine-rich 10-kDa zein protein from maize. Kirihara JA, et al. **Gene** 1988 Nov 30;71(2):359-70

Sequence of a 21 kd zein gene from maize containing an in-frame stop codon. Wandelt C, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2354

[Synthesis and cloning of artificial zein genes] Efimov VA, et al. **Bioorg Khim** 1988 Nov;14(11):1538-44 (Eng. Abstr.) (Rus)

ZELLWEGER SYNDROME

[Peroxisomes and neurologic diseases] Sereni C, et al. **Rev Neurol (Paris)** 1989;145(5):341-9 (83 ref.) (Eng. Abstr.) (Fre)

BLOOD

Plasma polyenoic very-long-chain fatty acids in peroxisomal disease: biochemical discrimination of Zellweger's syndrome from other phenotypes. Poulos A, et al. **Neurology** 1989 Jan;39(1):44-7

CLASSIFICATION

Chondrodysplasia punctatas and the peroxisomopathies: overlapping syndrome communities. Wilson GN, et al. **Pathol Immunopathol Res** 1988;7(1-2):113-8 (21 ref.)

DIAGNOSIS

New disorders of neurometabolism: when and how to investigate them. Haan EA. **Aust Paediatr J** 1988 Aug; 24(4):217-9

Prenatal diagnosis of Zellweger syndrome by determination of trihydroxycoprostanic acid in amniotic fluid [letter] Stellaard F, et al. **Eur J Pediatr** 1988 Nov;148(2):175-6

[Zellweger syndrome: apropos of prenatal diagnosis using trophoblast biopsy] Parent P, et al. **Ann Pediatr (Paris)** 1988 Oct;35(8):580-2 (Eng. Abstr.) (Fre)

GENETICS

Zellweger syndrome and a microdeletion of the proximal long arm of chromosome 7. Naritomi K, et al. **Hum Genet** 1988 Oct;80(2):201-2

Genetic and phenotypic heterogeneity in disorders of peroxisome biogenesis--a complementation study involving cell lines from 19 patients. Roscher AA, et al. **Pediatr Res** 1989 Jul;26(1):67-72

METABOLISM

Metabolism of saturated and polyunsaturated fatty acids by normal and Zellweger syndrome skin fibroblasts. Street JM, et al. **Biochem J** 1989 Jun 15;260(3):647-55

Bile acid analyses in "pseudo-Zellweger" syndrome; clues to the defect in peroxisomal beta-oxidation. Clayton PT, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:165-8

Polarizing inclusions in some organs of children with congenital peroxisomal diseases (Zellweger's, Refsum's, chondrodysplasia punctata (rhizomelic form), X-linked adrenoleukodystrophy). Kerckaert I, et al. **J Inherited Metab Dis** 1988;11(4):372-86

Peroxisomal integral membrane proteins in livers of patients with Zellweger syndrome, infantile Refsum's disease and X-linked adrenoleukodystrophy. Small GM, et al. **J Inherited Metab Dis** 1988;11(4):358-71

Peroxisomal disorders in neurology. Wanders RJ, et al. **J Neurol Sci** 1988 Dec;88(1-3):1-39 (241 ref.)

Polyunsaturated fatty acid changes suggesting a new enzymatic defect in Zellweger syndrome. Martinez M. **Lipids** 1989 Apr;24(4):261-5

Peroxisomal L-pipecolic acid oxidation is deficient in liver from Zellweger syndrome patients. Mihalik SJ, et al. **Pediatr Res** 1989 May;25(5):548-52

Major peroxisomal membrane polypeptides are synthesized in cultured skin fibroblasts from patients with Zellweger syndrome. Suzuki Y, et al. **Pediatr Res** 1989 Aug; 26(2):150-3

Aberration in de novo ether lipid biosynthesis in peroxisomal disorders. van den Bosch H, et al. **Prog Clin Biol Res** 1988; 282:139-50 (42 ref.)

Role of liver peroxisomes in bile acid formation: inborn error of C27-steroid side chain cleavage in peroxisome deficiency (Zellweger syndrome). Kase BF. **Scand J Clin Lab Invest** 1989 Feb;49(1):1-10 (52 ref.)

[Peroxisomal disorders--clinical and biochemical studies] Shimozawa N, et al. **No To Hattatsu** 1988 Nov;20(6):480-91 (Eng. Abstr.) (Jpn)

PATHOLOGY

Structural and chemical alterations in the cerebral maldevelopment of fetal cerebro-hepato-renal (Zellweger) syndrome. Powers JM, et al. **J Neuropathol Exp Neurol** 1989 May;48(3):270-89

Zellweger-like syndrome with detectable hepatic peroxisomes: a variant form of peroxisomal disorder. Suzuki Y, et al. **J Pediatr** 1988 Nov;113(5):841-5

Myopathy and peroxisomal disease [letter] Sarnat HB. **Pediatr Neurol** 1987 Jan-Feb;3(1):62

Biochemical and morphologic aspects of peroxisomes in the human rectal mucosa: diagnosis of Zellweger syndrome simplified by rectal biopsy. Shimozawa N, et al. **Pediatr Res** 1988 Dec;24(6):723-7

PHYSIOPATHOLOGY

Influence of plasmalogen deficiency on membrane fluidity of human skin fibroblasts: a fluorescence anisotropy study. Hermetter A, et al. **Biochim Biophys Acta** 1989 Jan 16; 978(1):151-7

Very long fatty acids in amniotic fluid from a fetus affected with Zellweger syndrome [letter] Jakobs C, et al. **Eur J Pediatr** 1989 Apr;148(6):581

URINE

Identification of (22R)-3 alpha,7 alpha,12 alpha,22- and (23R)-3 alpha,7 alpha,12 alpha,23-tetrahydroxy-5 beta-cholestanoic acids in urine from a patient with Zellweger's syndrome. Une M, et al. **J Lipid Res** 1989 Apr; 30(4):541-7

ZERANOL see under **RESORCINOLS**

ZIDOVUDINE

Zidovudine. Proceedings of a symposium. London, 27 September 1988. **J Infect** 1989 Jan;18 Suppl 1:1-101

ADMINISTRATION & DOSAGE

The safety of intravenous chemotherapy and zidovudine when treating epidemic Kaposi's sarcoma. Brunt AM, et al. **Aids** 1989 Jul;3(7):457-60

Suppression of p24 antigen in sera from HIV-infected individuals with low-dose alpha-interferon and zidovudine: a pilot study. Orholm M, et al. **Aids** 1989 Feb; 3(2):97-100

Sustained delivery of 3H-thymidine by means of ceramic capsules in rats. Benghuzzi HA, et al. **Biomed Sci Instrum** 1989;25:169-77

Interferon-alpha plus zidovudine in HIV infection [letter] Edlin BR, et al. **Lancet** 1989 Jan 21;1(8630):156

Intermittent high-dose zidovudine [letter] Price LA, et al. **Lancet** 1989 Sep 23;2(8665):734

Low-dose zidovudine for AIDS [letter] Sette P, et al. **Lancet** 1989 May 20;1(8647):1136-7

Intravenous infusion of zidovudine (AZT) in children with HIV infection [letter] **N Engl J Med** 1989 Mar 23; 320(12):805-6

Dipyridamole potentiates the inhibition by 3'-azido-3'-deoxythymidine and other dideoxynucleosides of human immunodeficiency virus replication in monocyte-macrophages [published erratum appears in Proc Natl Acad Sci U S A 1989 Aug;86(15):5968] Szebeni J, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3842-6

Combination drug therapy for AIDS. **Science** 1989 May 5; 244(4904):511

[AIDS. Combination therapy is more favorable (news)] **Fortschr Med** 1988 Sep 30;106(28):57 (Ger)

[HIV positive: when to begin azidothymidine (AZT)? (news)] Marcus U. **Fortschr Med** 1989 Jul 20;107(21):9 (Ger)

ADVERSE EFFECTS

Reversible agranulocytosis related to azidothymidine therapy. Goldsmith JC, et al. **Am J Hematol** 1989 Apr; 30(4):263-4

Myalgias in human immunodeficiency virus-infected patients [letter] Buskila D, et al. **Am J Med** 1989 Apr;86(4):510-1

Zidovudine-associated myopathy. Gertner E, et al. **Am J Med** 1989 Jun;86(6 Pt 2):814-8

Lithium carbonate therapy for zidovudine-associated neutropenia in patients with acquired immunodeficiency syndrome [letter] Klutman NE. **Am J Med** 1989 Sep; 87(3):362-3

Azidothymidine-induced hyperpigmentation mimicking primary adrenal insufficiency. Merenich JA, et al. **Am J Med** 1989 Apr;86(4):469-70

The combined toxicity of azidothymidine and antimycobacterial agents. A retrospective study. Kavesh NG, et al. **Am Rev Respir Dis** 1989 May;139(5):1094-7

Zidovudine-induced hepatotoxicity. Dubin G, et al. **Ann Intern Med** 1989 Jan 1;110(1):85-6

Myopathy associated with human immunodeficiency virus (HIV) but not with zidovudine [letter] Simpson DM. **Ann Intern Med** 1988 Nov 15;109(10):842

Azidothymidine-induced hyperpigmentation of skin and nails [letter] Bendick C, et al. **Arch Dermatol** 1989 Sep; 125(9):1285-6

Heightened cutaneous reactions to mosquito bites in patients with acquired immunodeficiency syndrome receiving zidovudine. Diven DG, et al. **Arch Intern Med** 1988 Oct; 148(10):2296

Polymyositislike syndromes in acquired immunodeficiency syndrome [letter] Curtis M, et al. **Arch Neurol** 1989 Aug; 46(8):841

Azidothymidine-induced nail pigmentation. Fisher CA, et al. **Cutis** 1989 Jun;43(6):552-4

Zidovudine-induced fever. Jacobson MA, et al. **J Acquir Immune Defic Syndr** 1989;2(4):382-8

Coma during azidothymidine therapy for AIDS [letter] Riedel RR, et al. **J Neurol** 1989 Mar;236(3):185

Manic syndrome associated with zidovudine [letter] **JAMA** 1988 Dec 23-30;260(24):3587-8

Lithium for zidovudine-induced neutropenia in AIDS [letter] Herbert V, et al. **JAMA** 1988 Dec 23-30;260(24):3588

Lithium for zidovudine-induced neutropenia in AIDS [letter] Nathwani D, et al. **JAMA** 1989 Aug 11;262(6):775-6

Iron deposition in liver in zidovudine-related transfusion-dependent anaemia [letter] Lindley R, et al. **Lancet** 1989 Sep 16;2(8664):681
Zidovudine-induced neutropenia: are we too cautious? Shaunak S, et al. **Lancet** 1989 Jul 8;2(8654):91-2
Zidovudine-related mania. Wright JM, et al. **Med J Aust** 1989 Mar 20;150(6):339-41
Nail pigmentation associated with zidovudine [letter] Dupon M, et al. **Scand J Infect Dis** 1989;21(2):237-8
[Tolerance of zidovudine in patients with beta-thalassemia (letter)] Boudes P, et al. **Presse Med** 1989 Apr 15;18(15):777 **(Fre)**
[Crisis of generalized epilepsy after absorption of zidovudine at a toxic dose (letter)] Routy JP, et al. **Presse Med** 1989 Apr 29;18(17):895 **(Fre)**
[Meningoencephalitis in AIDS. Cave reduction of azidothymidine dose (news)] **Fortschr Med** 1988 Nov 10; 106(32):9-10 **(Ger)**
[Striated nail discoloration caused by zidovudine] Bendick C, et al. **Z Hautkr** 1989 Feb 15;64(2):91-5 (Eng. Abstr.) **(Ger)**
[Hyperpigmentation and zidovudine (letter)] Valencia ME, et al. **Med Clin (Barc)** 1989 Mar 11;92(9):357-8 **(Spa)**
[Bluish pigmentation of the nails in AIDS patients. Possibly an adverse effect of Zidovudine? (letter)] González Lahoz JM, et al. **Rev Clin Esp** 1988 Oct;183(5):278-9 **(Spa)**

ANALOGS & DERIVATIVES

Reverse transcriptases from human immunodeficiency virus type 1 (HIV-1), HIV-2, and simian immunodeficiency virus (SIVMAC) are susceptible to inhibition by foscarnet and 3'-azido-3'-deoxythymidine triphosphate. Vrang L, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1733-4
Interaction of the 5'-phosphates of the anti-HIV agents, 3'-azido-3'-deoxythymidine and 3'-azido-2',3'-dideoxyuridine, with thymidylate synthase. Dzik JM, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1418-23
Comparative pharmacokinetics of zidovudine (AZT) and its metabolite (G.AZT) in healthy subjects and HIV seropositive patients. Singlas E, et al. **Eur J Clin Pharmacol** 1989;36(6):639-40
Radioimmunoassay for Retrovir, an anti-human immunodeficiency virus drug. Quinn RP, et al. **J Immunoassay** 1989;10(2-3):177-89
Acyclic analogues of 3'-azido-3'-deoxythymidine as potential antiviral agents. Nucleoside synthesis by Michael addition. Scheiner P, et al. **J Med Chem** 1989 Jan;32(1):73-6
[The effect of 3'-azido-3'-deoxynucleosides on the reproduction of AIDS virus in cell culture] Galegov GA, et al. **Mol Biol (Mosk)** 1988 May-Jun;22(3):802-6 (Eng. Abstr.) **(Rus)**
[Selective inhibition by 3'-azido-2',3-dideoxythymidine-5'-triphosphate of reverse transcription in retrovirus A particles from the rat liver] Pyrinova GB, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1405-10 (Eng. Abstr.) **(Rus)**

ANALYSIS

Visual compatibility of zidovudine with other injectable drugs during simulated Y-site administration. Bashaw ED, et al. **Am J Hosp Pharm** 1988 Dec;45(12):2532-3
Simple and rapid high-performance liquid chromatographic assay for zidovudine (azidothymidine) in plasma and urine. Unadkat JD, et al. **J Chromatogr** 1988 Sep 9;430(2):420-3
Thiol reduction of 3'-azidothymidine to 3'-aminothymidine: kinetics and biomedical implications. Handlon AL, et al. **Pharm Res** 1988 May;5(5):297-9

BLOOD

Full stomach reduces serum concentrations of zidovudine [news] Unadkat JD, et al.. **Am Fam Physician** 1989 Jun; 39(6):218
Specific routine determination of 3'-azido-3'-deoxythymidine (AZT) in plasma by partly automated liquid chromatography. Kupferschmidt R, et al. **Clin Chem** 1989 Jul;35(7):1313-7
Simultaneous quantification of zidovudine and its glucuronide in serum by high-performance liquid chromatography. Good SS, et al. **J Chromatogr** 1988 Sep 23;431(1):123-33
High-performance liquid chromatographic determination of 2',3'-dideoxycytidine and 3'-azido-3'-deoxythymidine in plasma using a column-switching technique. Mathes LE, et al. **J Chromatogr** 1988 Nov 18;432:346-51
Radioimmunoassay for Retrovir, an anti-human immunodeficiency virus drug. Quinn RP, et al. **J Immunoassay** 1989;10(2-3):177-89
Fetoplacental passage of zidovudine [letter] Gillet JY, et al. **Lancet** 1989 Jul 29;2(8657):269-70

METABOLISM

Biochemical pharmacology of zidovudine in human T-lymphoblastoid cells (CEM). Avramis VI, et al. **Aids** 1989 Jul;3(7):417-22
Glucuronidation of 3'-azido-3'-deoxythymidine: human and rat enzyme specificity. Resetar A, et al. **Biochem Pharmacol** 1989 May 1;38(9):1389-93
Differential patterns of intracellular metabolism of 2',3'-didehydro-2',3'-dideoxythymidine and 3'-azido-2',3'-dideoxythymidine, two potent anti-human immunodeficiency virus compounds. Balzarini J, et al. **J Biol Chem** 1989 Apr 15;264(11):6127-33
Probenecid and zidovudine metabolism. Korahauser DM, et al. **Lancet** 1989 Aug 26;2(8661):473-5
Cellular pharmacology of 3'-azido-3'-deoxythymidine with evidence of incorporation into DNA of human bone marrow cells. Sommadossi JP, et al. **Mol Pharmacol** 1989 Jul;36(1):9-14

PHARMACOKINETICS

Pharmacokinetics of azidothymidine during late pregnancy in Long-Evans rats. Little BB, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):732-4
The pharmacokinetics of zidovudine administered by continuous infusion in children. Balis FM, et al. **Ann Intern Med** 1989 Feb 15;110(4):279-85
Pharmacokinetics of subcutaneous azidothymidine in rhesus monkeys. Balis FM, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):810-2
Pharmacokinetics of orally administered zidovudine among patients with hemophilia and asymptomatic human immunodeficiency virus (HIV) infection. Morse GD, et al. **Antiviral Res** 1989 Mar;11(2):57-65
Extraction of AZT and dideoxynucleosides by rat prostate but not testis. Sakiyama R, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):1009-11
Clinical pharmacokinetics of zidovudine. An overview of current data. Collins JM, et al. **Clin Pharmacokinet** 1989 Jul;17(1):1-9 (36 ref.)
Zidovudine disposition in patients with severe renal impairment: influence of hemodialysis. Singlas E, et al. **Clin Pharmacol Ther** 1989 Aug;46(2):190-7
Comparative pharmacokinetics of zidovudine (AZT) and its metabolite (G.AZT) in healthy subjects and HIV seropositive patients. Singlas E, et al. **Eur J Clin Pharmacol** 1989;36(6):639-40
Pharmacokinetics of zidovudine and concomitant inosine-pranobex in AIDS patients. De Simone C, et al. **Immunopharmacol Immunotoxicol** 1988;10(4):437-41
A review of the pharmacokinetics of zidovudine in man. Cload PA. **J Infect** 1989 Jan;18 Suppl 1:15-21
Azidothymidine steady-state pharmacokinetics in patients with AIDS and AIDS-related complex. Latkin OL, et al. **J Infect Dis** 1989 Apr;159(4):745-7
Pharmacokinetics of zidovudine administered intravenously and orally in children with human immunodeficiency virus infection. Balis FM, et al. **J Pediatr** 1989 May;114(5):880-4
Pharmacokinetics and saturable renal tubular secretion of zidovudine in rats. Patel BA, et al. **J Pharm Sci** 1989 Jul; 78(7):530-4
Pharmacokinetics of zidovudine in a patient on maintenance hemodialysis [letter] Deray G, et al. **N Engl J Med** 1988 Dec 15;319(24):1606-7
Blood-brain barrier passage of azidothymidine in rats: effect of insulin. Ayre SG, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jan;63(1):45-52

PHARMACOLOGY

Effects of suramin, HPA-23 and 3'-azidothymidine triphosphate on the reverse transcriptase of bovine leukaemia virus. Reimer K, et al. **Acta Virol (Praha)** 1989 Jan;33(1):43-9
Isolation of drug-resistant variants of HIV-1 from patients on long-term zidovudine therapy. Canadian Zidovudine Multi-Centre Study Group. Rooke R, et al. **Aids** 1989 Jul; 3(7):411-5
Combinations of 3'-azido-3'-deoxythymidine (zidovudine) and phosphonoformate (foscarnet) against human immunodeficiency virus type 1 and cytomegalovirus replication in vitro. Eriksson BF, et al. **Antimicrob Agents Chemother** 1989 May;33(5):663-9
Zidovudine antagonizes the action of pyrimethamine in experimental infection with Toxoplasma gondii. Israelski DM, et al. **Antimicrob Agents Chemother** 1989 Jan; 33(1):30-4
Synergistic inhibition of human immunodeficiency virus type 1 and type 2 replication in vitro by castanospermine and 3'-azido-3'-deoxythymidine. Johnson VA, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):53-7
Inhibition of human immunodeficiency virus in vitro by combinations of 3'-azido-3'-deoxythymidine and foscarnet. Koshida R, et al. **Antimicrob Agents Chemother** 1989 May; 33(5):778-80
Combinations of isoprinosine and 3'-azido-3'-deoxythymidine in lymphocytes infected with human immunodeficiency virus type 1. Schinazi RF, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1784-7
Human immunodeficiency virus inhibition is prolonged by 3'-azido-3'-deoxythymidine alternating with 2',3'-dideoxycytidine compared with 3'-azido-3'-deoxythymidine alone. Spector SA, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):920-3
Differential reconstitution of zidovudine-induced inhibition of mitogenic responses by interleukin-2 in peripheral blood mononuclear cells from patients with human immunodeficiency virus infection. Nokta MA, et al. **Antiviral Res** 1989 May-Jun;11(4):191-202
A pro-drug of zidovudine with enhanced efficacy against human immunodeficiency virus [published erratum appears in Biochem Biophys Res Commun 1989 Aug 15;162(3):1591] Gogu SR, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):656-61
Azidothymidine inhibits mitogen stimulated growth and DNA-repair in human peripheral lymphocytes. Munch-Petersen B. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1369-75
Comparison of the effect of Carbovir, AZT, and dideoxynucleoside triphosphates on the activity of human immunodeficiency virus reverse transcriptase and selected human polymerases. White EL, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):393-8
Differential modulation of host cell and HIV gene expression by combinations of avarol and AZT in vitro. Schröder HC, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3947-52
Studies on the inhibition of mitochondrial DNA replication by 3'-azido-3'-deoxythymidine and other dideoxynucleoside analogs which inhibit HIV-1 replication. Simpson MV, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1033-6
Effect of zidovudine on platelet count. Flegg PJ, et al. **BMJ** 1989 Apr 22;298(6680):1074-5
Zidovudine resistant HIV [news] Jeffries DJ. **BMJ** 1989 Apr 29;298(6681):1132-3
Inhibition of bone marrow myelopoiesis and erythropoiesis in vitro by anti-retroviral nucleoside derivatives. Johnson M, et al. **Br J Haematol** 1988 Oct;70(2):137-41
Zidovudine. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic efficacy. Langtry HD, et al. **Drugs** 1989 Apr;37(4):408-50 (226 ref.)
Effects of 3'-azido-3'-deoxythymidine (AZT) on short-term cultured human peripheral blood lymphocytes. Tauris P, et al. **Eur J Clin Invest** 1989 Apr;19(2):167-71
Conditions required for the antibacterial activity of zidovudine. Lewin CS, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug;8(8):737-41
The effect of recombinant human granulocyte-macrophage colony-stimulating factor (rGM-CSF) on 3'-azido-3'-deoxythymidine (AZT)-mediated biochemical and cytotoxic effects on normal human myeloid progenitor cells. Bhalla K, et al. **Exp Hematol** 1989 Jan;17(1):17-20
Azidothymidine-induced depression of murine hemopoietic progenitor cells. Bogliolo G, et al. **Exp Hematol** 1988 Dec; 16(11):938-40
AZT inhibits HIV-1 replication in monocytes [letter] Skinner MA, et al. **J Acquir Immune Defic Syndr** 1988;1(2):162-3
Inhibitory effect of FK-565 alone and in combination with zidovudine on retroviral infection by Friend leukemia virus in mice. Yokota Y, et al. **J Antibiot (Tokyo)** 1988 Oct; 41(10):1479-87
Replication of human immunodeficiency virus in monocytes. Granulocyte/macrophage colony-stimulating factor (GM-CSF) potentiates viral production yet enhances the antiviral effect mediated by 3'-azido-2'3'-dideoxythymidine (AZT) and other dideoxynucleoside congeners of thymidine. Perno CF, et al. **J Exp Med** 1989 Mar 1;169(3):933-51
Inhibition of human immunodeficiency virus (HIV-1/HTLV-IIIBa-L) replication in fresh and cultured human peripheral blood monocytes/macrophages by azidothymidine and related 2',3'-dideoxynucleosides. Perno CF, et al. **J Exp Med** 1988 Sep 1;168(3):1111-25
A highly reliable, sensitive, flow cytometric/fluorometric assay for the evaluation of the anti-HIV activity of antiviral compounds in MT-4 cells. Schols D, et al. **J Immunol Methods** 1988 Nov 10;114(1-2):27-32
In vitro effectiveness of a combination of zidovudine and ansamycin against human immunodeficiency virus [letter] Birch C, et al. **J Infect Dis** 1988 Oct;158(4):895
Synergistic inhibition of human immunodeficiency virus type 1 (HIV-1) replication in vitro by recombinant soluble CD4 and 3'-azido-3'-deoxythymidine. Johnson VA, et al. **J Infect Dis** 1989 May;159(5):837-44
Synergistic inhibition of Epstein-Barr virus: transformation of B lymphocytes by alpha and gamma interferon and by 3'-azido-3'-deoxythymidine. Lin JC, et al. **J Infect Dis** 1989 Feb;159(2):248-54
Susceptibility to AZT of HIV-1 variants grown in Epstein-Barr virus-transformed B cell lines. Tremblay M, et al. **J Infect Dis** 1989 Jul;160(1):31-6
Cell-to-cell transmission of human immunodeficiency virus type 1 in the presence of azidothymidine and neutralizing antibody. Gupta P, et al. **J Virol** 1989 May;63(5):2361-3
Zidovudine and bone marrow [letter] Mir N, et al. **Lancet** 1988 Nov 19;2(8621):1195-6
Clinical pharmacology of 3'-azido-2',3'-dideoxythymidine (zidovudine) and related dideoxynucleosides. Yarchoan R, et al. **N Engl J Med** 1989 Sep 14;321(11):726-38 (184 ref.)
HIV with reduced sensitivity to zidovudine (AZT) isolated during prolonged therapy. Larder BA, et al. **Science** 1989 Mar 31;243(4899):1731-4
Interferon-alpha but not AZT suppresses HIV expression in chronically infected cell lines. Poli G, et al. **Science** 1989 May 5;244(4904):575-7
[The effect of 3'-azido-3'-deoxynucleosides on the reproduction of AIDS virus in cell culture] Galegov GA, et al. **Mol Biol (Mosk)** 1988 May-Jun;22(3):802-6 (Eng. Abstr.) **(Rus)**

POISONING

Lethal neurotoxicity associated to azidothymidine therapy [letter] Saracchini S, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):544-5
Seizure after zidovudine overdose [letter] Routy JP, et al

Lancet 1989 Feb 18;1(8634):384–5
Overdosage of zidovudine [letter] Staszewski S, et al. **Lancet** 1989 Feb 18;1(8634):385
[Overdose of zidovudine (letter)] Casals A, et al. **Med Clin (Barc)** 1989 Feb 11;92(5):199 (Spa)

THERAPEUTIC USE

Reduction of p24 antigen levels in asymptomatic patients using twice-daily zidovudine [letter] Gill S, et al. **Aids** 1989 Jan;3(1):48–9
Instrumental evidence of zidovudine effectiveness in the treatment of HIV-associated subacute encephalitis [letter] Parisi A, et al. **Aids** 1988 Dec;2(6):482–3
T-cell response towards HIV in infected individuals with and without zidovudine therapy, and in HIV-exposed sexual partners. Ranki A, et al. **Aids** 1989 Feb;3(2):63–9
Complete remission of an AIDS-related B-cell lymphoma with one course of chemotherapy followed by zidovudine treatment [letter] van den Berg-Wolf MG, et al. **Aids** 1988 Aug;2(4):319–20
Statistical methods for the analysis of HIV-1 core polypeptide antigen data in clinical studies. Makuch RW, et al. **AIDS Res Hum Retroviruses** 1988 Aug;4(4):305–16
AIDS—Medicaid coverage of AZT—Weaver v. Reagan. **Am J Law Med** 1989;15(1):132–3
Zidovudine therapy for severe human immunodeficiency virus-related thrombocytopenia. Neil BJ, et al. **Am J Med** 1988 Nov;85(5):744–5
Community consultation in socially sensitive research. Lessons from clinical trials of treatments for AIDS. Melton GB, et al. **Am Psychol** 1988 Jul;43(7):573–81
Retrovir trial [letter] Lehrman SN. **Ann Emerg Med** 1989 Mar;18(3):330
Zidovudine for the treatment of thrombocytopenia associated with human immunodeficiency virus (HIV). A prospective study. The Swiss Group for Clinical Studies on the Acquired Immunodeficiency Syndrome (AIDS). **Ann Intern Med** 1988 Nov 1;109(9):718–21
The rocky road to effective treatment of human immunodeficiency virus (HIV) infection. Hirsch MS. **Ann Intern Med** 1989 Jan 1;110(1):1–3 (26 ref.)
Combined zidovudine and interferon-alpha therapy in patients with Kaposi sarcoma and the acquired immunodeficiency syndrome (AIDS). Kovacs JA, et al. **Ann Intern Med** 1989 Aug 15;111(4):280–7
Zidovudine in patients with human immunodeficiency virus (HIV) infection and Kaposi sarcoma. A phase II randomized, placebo-controlled trial. Lane HC, et al. **Ann Intern Med** 1989 Jul 1;111(1):41–50
Zidovudine for thrombocytopenic purpura related to human immunodeficiency virus (HIV) infection. Oksenhendler E, et al. **Ann Intern Med** 1989 Mar 1;110(5):365–8
In vivo efficacy of zidovudine (3'-azido-3'-deoxythymidine) in experimental gram-negative-bacterial infections. Keith BR, et al. **Antimicrob Agents Chemother** 1989 Apr; 33(4):479–83
Clinical trial evaluates effectiveness of zidovudine [letter] Lehrman SN. **AORN J** 1989 May;49(5):1194–5
Effect of zidovudine on serum human immunodeficiency virus core antigen levels. Results from a placebo-controlled trial. Chaisson RE, et al. **Arch Intern Med** 1988 Oct; 148(10):2151–3
Regression of oral hairy leukoplakia during zidovudine therapy. Kessler HA, et al. **Arch Intern Med** 1988 Nov; 148(11):2496–7
Regression of cytomegalovirus retinitis with zidovudine. A clinicopathologic correlation. Guyer DR, et al. **Arch Ophthalmol** 1989 Jun;107(6):868–74
Treating HIV positive haemophiliacs with zidovudine [letter] **BMJ** 1988 Dec 17;297(6663):1608–9
Treating HIV positive haemophiliacs with zidovudine [letter] Aronstam A. **BMJ** 1988 Nov 19;297(6659):1331
Regression of oral Kaposi's sarcoma in a case of AIDS on zidovudine (AZT). Langford A, et al. **Br J Dermatol** 1989 May;120(5):709–13
Zidovudine (AZT): costs and benefits [editorial] Volberding P. **Br J Hosp Med** 1988 Aug;40(2):101
Combination treatment of wellferon and zidovudine in asymptomatic HIV p24 Ag positive patients. Nielsen JO. **Chemioterapia** 1988 Dec;7 Suppl 3:35–6
Clinical trial that led to FDA approval of zidovudine is published [news] **Clin Pharm** 1987 Oct;6(10):752
Zidovudine and other drugs against HIV. **Drug Ther Bull** 1988 Dec 28;26(26):101–4 (19 ref.)
Zidovudine (AZT) aids AIDS survival. **Hosp Pract [Off]** 1989 Feb 15;24(2):321–2
The treatment of HIV infection. Azidothymidine (AZT) and other new antiviral drugs. Richman DD. **Infect Dis Clin North Am** 1988 Jun;2(2):397–407 (59 ref.)
Molluscum contagiosum in human immunodeficiency virus infection: response to zidovudine [letter] Betlloch I, et al. **Int J Dermatol** 1989 Jun;28(5):351–2
The use of zidovudine. Wood MJ. **Int J Dermatol** 1989 Jun; 28(5):308–10
Murine models for antiretroviral therapy. Ruprecht RM. **Intervirology** 1989;30 Suppl 1:2–11
Abstracts from "Retrovir—an update of its use in HIV therapy". Satellite symposium of the IVth International Conference on AIDS. Stockholm, Sweden, 12 June 1988. **J Acquir Immune Defic Syndr** 1988;1(6):616–20
HIV-1 inhibition by azidothymidine in a concurrently randomized placebo-controlled trail. Parks WP, et al. **J Acquir Immune Defic Syndr** 1988;1(2):125–30
Predictors of outcome in AIDS patients receiving zidovudine. Steinberg JP, et al. **J Acquir Immune Defic Syndr** 1989;2(3):229–34
Antipsoriatic effects of zidovudine in human immunodeficiency virus-associated psoriasis. Kaplan MH, et al. **J Am Acad Dermatol** 1989 Jan;20(1):76–82
Remission of human immunodeficiency virus-associated generalized granuloma annulare under zidovudine therapy [letter] Leenutaphong V, et al. **J Am Acad Dermatol** 1988 Dec;19(6):1126–7
Susceptibility of Legionella pneumophila to AZT [letter] Pohlod DJ. **J Antimicrob Chemother** 1988 Nov;22(5):772–3
AIDS in Arkansas. Zidovudine: an overview and rationale for use. Beck J. **J Arkansas Med Soc** 1989 Feb;85(9):367–9
Effect of azidothymidine (AZT) on P24 antigen levels in patients with AIDS-related complex and AIDS. Reddy MM, et al. **J Clin Lab Anal** 1989;3(4):199–201
Zidovudine experience at the Hospitals for Sick Children, Great Ormond Street, London. Ball LM. **J Infect** 1989 Jan;18 Suppl 1:83
Use of zidovudine for drug misusers infected with human immunodeficiency virus. Cowan FM, et al. **J Infect** 1989 Jan;18 Suppl 1:59–66
Preliminary report of a multicentre study of zidovudine plus or minus acyclovir in patients with acquired immune deficiency syndrome or acquired immune deficiency syndrome-related complex. Fiddian AP. **J Infect** 1989 Jan; 18 Suppl 1:79–80
Targets for antiviral therapy of human immunodeficiency virus infection. Jeffries DJ. **J Infect** 1989 Jan;18 Suppl 1:5–13 (40 ref.)
Zidovudine: experience at the Newcastle Haemophilia Centre. Jones P. **J Infect** 1989 Jan;18 Suppl 1:53–8
Markers for progression to acquired immune deficiency syndrome and zidovudine treatment of asymptomatic patients. Lange JM, et al. **J Infect** 1989 Jan;18 Suppl 1:85–91
Clinical experience with zidovudine for patients with acquired immune deficiency syndrome and acquired immune deficiency syndrome-related complex. Pinching AJ, et al. **J Infect** 1989 Jan;18 Suppl 1:33–40
Zidovudine treatment of patients with acquired immune deficiency syndrome and acquired immune deficiency syndrome-related complex: long-term experience. Smiley L. **J Infect** 1989 Jan;18 Suppl 1:77
Zidovudine treatment of patients with acquired immune deficiency syndrome and acquired immune deficiency syndrome-related complex: St Stephen's Hospital experience. Stambuk D, et al. **J Infect** 1989 Jan;18 Suppl 1:41–51
Treatment of children symptomatic with human immunodeficiency virus infection. Wilfert CM, et al. **J Infect** 1989 Jan;18 Suppl 1:81–2
Zidovudine—the first year of experience. Williams I, et al. **J Infect** 1989 Jan;18 Suppl 1:23–31
Current and future trials with zidovudine. Yeo JM. **J Infect** 1989 Jan;18 Suppl 1:93–6
Prophylactic zidovudine after occupational exposure to the human immunodeficiency virus: an interim analysis. Henderson DK, et al. **J Infect Dis** 1989 Aug;160(2):321–7
Serum beta 2-microglobulin decreases in patients with AIDS or ARC treated with azidothymidine. Jacobson MA, et al. **J Infect Dis** 1989 Jun;159(6):1029–36
Rapid rebound of serum human immunodeficiency virus antigen after discontinuing zidovudine therapy [letter] Spear JB, et al. **J Infect Dis** 1988 Nov;158(5):1132–3
The antiviral effect of zidovudine and ribavirin in clinical trials and the use of p24 antigen levels as a virologic marker. Spector SA, et al. **J Infect Dis** 1989 May;159(5):822–8
Regression of Kaposi's sarcoma and improvement of performance status by a combined interferon beta and zidovudine therapy in AIDS patients [letter] Brockmeyer NH, et al. **J Invest Dermatol** 1989 May;92(5):776
Zidovudine therapy of asymptomatic HIV1-infected patients and combined zidovudine-acyclovir therapy of HIV1-infected patients with oral hairy leukoplakia [letter] Brockmeyer NH, et al. **J Invest Dermatol** 1989 Apr; 92(4):647
Reversal of brain metabolic abnormalities following treatment of AIDS dementia complex with 3'-azido-2',3'-dideoxythymidine (AZT, zidovudine): a PET-FDG study. Brunetti A, et al. **J Nucl Med** 1989 May; 30(5):581–90
Maternal transmission of retroviral disease and strategies for preventing infection of the neonate. Sharpe AH, et al. **J Virol** 1989 Mar;63(3):1049–53
HIV therapeutics: an emerging science [editorial] Bartlett JA. **JAMA** 1988 Nov 25;260(20):3051–2
Testing source patient blood for HIV antibodies after accidental exposure of health care workers to blood and body fluids [letter] Bauer S. **JAMA** 1989 Sep 15; 262(11):1470–1
Survival experience among patients with AIDS receiving zidovudine. Follow-up of patients in a compassionate plea program. Creagh-Kirk T, et al. **JAMA** 1988 Nov 25; 260(20):3009–15
Treatment of human immunodeficiency virus-related thrombocytopenia with zidovudine. Pottage JC Jr, et al. **JAMA** 1988 Nov 25;260(20):3045–8
Cessation of zidovudine therapy may lead to increased replication of HIV-1 [letter] Wainberg MA, et al. **JAMA** 1989 Feb 10;261(6):865–6
From the National Institutes of Health. Progress in AIDS research. Wyngaarden JB. **JAMA** 1988 Dec 16; 260(23):3406
Clinical trials of zidovudine in HIV infection [editorial] **Lancet** 1989 Aug 26;2(8661):483–4
Zidovudine in symptomless HIV infection. **Lancet** 1989 Feb 25;1(8635):415–6 (17 ref.)
Effects of zidovudine in 365 consecutive patients with AIDS or AIDS-related complex. Dournon E, et al. **Lancet** 1988 Dec 3;2(8623):1297–302
Prevention of Pneumocystis carinii pneumonia relapse by pentamidine aerosol in zidovudine-treated AIDS patients. Girard PM, et al. **Lancet** 1989 Jun 17;1(8651):1348–53
Clinical trials of zidovudine in HIV infection [letter] Morris DJ. **Lancet** 1989 Sep 23;2(8665):734
Influence of zidovudine on progression to AIDS in cohort studies [letter] [see comments] Schechter MT, et al. **Lancet** 1989 May 6;1(8645):1026–7. **Comment in:** Lancet 1989 Jul 15;2(8655):166
AZT for children with AIDS. Engel NS. **MCN** 1989 Mar-Apr;14(2):121
A case of acute encephalopathy caused by the human immunodeficiency virus apparently responsive to zidovudine. Allworth AM, et al. **Med J Aust** 1989 Sep 4;151(5):285–6
AIDS AZT [news] **Milit Med** 1989 Apr;154(4):A12–3
High marks for zidovudine [news] **Minn Med** 1989 Feb; 72(2):105
Failure of zidovudine to maintain remission in patients with AIDS [letter] Bach MC. **N Engl J Med** 1989 Mar 2; 320(9):594–5
Neuropsychological outcome of zidovudine (AZT) treatment of patients with AIDS and AIDS-related complex. Schmitt FA, et al. **N Engl J Med** 1988 Dec 15;319(24):1573–8
More on zidovudine and HIV-related thrombocytopenia [letter] Wallis RS. **N Engl J Med** 1989 Aug 31;321(9):614–5
AIDS closer to becoming a treatable disease [news] Ezzell C. **Nature** 1989 Aug 24;340(6235):581
Azidothymidine. Oksenhendler E. **Nouv Rev Fr Hematol** 1989;31(2):69–72 (22 ref.)
The AIDS Clinical Trials Unit experience: clinical research and antiviral treatment. Hendricksen C. **Nurs Clin North Am** 1988 Dec;23(4):697–706
Antiviral trial conducted [news] **Occup Health Saf** 1989 Apr; 58(4):11
Zidovudine for treating AIDS. What physicians need to know. Amin NM. **Postgrad Med** 1989 Jul;86(1):195–6, 201–8 (7 ref.)
AIDS therapies. Yarchoan R, et al. **Sci Am** 1988 Oct; 259(4):110–9 (5 ref.)
NIH offers AZT to exposed workers [news] Booth W. **Science** 1989 Mar 3;243(4895):1137
AZT reverses AIDS dementia in children [news] Culliton BJ. **Science** 1989 Oct 6;246(4926):21–3
Wider use of AIDS drugs advocated [news] Marx JL. **Science** 1989 Aug 25;245(4920):811
Drug-resistant strains of AIDS virus found [news] Marx JL. **Science** 1989 Mar 24;243(4898):1551–2
Effects of 3-azidothymidine on platelet counts, indium-111-labelled platelet kinetics, and antiplatelet antibodies. Panzer S, et al. **Vox Sang** 1989;57(2):120–6
Wisconsin's AZT reimbursement program. **Wis Med J** 1989 Jul;88(7):152, 156
[Decrease in human immunodeficiency virus antigen titer in the cerebrospinal fluid during treatment of AIDS patients with zidovudine (letter)] Claasen JN. **Ned Tijdschr Geneeskd** 1988 Nov 12;132(46):2122–3 (Dut)
[Decrease in human immunodeficiency virus antigen levels in the cerebrospinal fluid during zidovudine treatment in patients with AIDS] de Gans J, et al. **Ned Tijdschr Geneeskd** 1988 Sep 3;132(36):1656–60 (Eng. Abstr.) (Dut)
[The course of HIV infection and the effects of zidovudine] van Wijngaarden JK. **Ned Tijdschr Geneeskd** 1988 Dec 31; 132(53):2403–4 (Dut)
[Zidovudine efficacy and tolerance in 32 patients with cerebral toxoplasmosis in the acquired immunodeficiency syndrome (letter)] Leport C, et al. **Presse Med** 1988 Oct 15;17(35):1813–4 (Fre)
[Major thrombocytopenia related to HIV1 virus treated with zidovudine (letter)] Routy JP, et al. **Presse Med** 1988 Oct 1;17(33):1703 (Fre)
[The treatment of HIV infection in 1988: an update] Chave JP. **Rev Med Suisse Romande** 1988 Aug;108(8):691–6 (Fre)
[Indications and contraindications for zidovudine] Hirschel B. **Dtsch Med Wochenschr** 1989 Aug 25;114(34):1289–93 (16 ref.) (Ger)
[AIDS. Initial successes with antiviral therapy] **Fortschr Med** 1989 Feb 28;107(6):8, 10 (Ger)
[AIDS. Central nervous system damage in HIV infected children (news)] **Fortschr Med** 1988 Oct 20;106(30):65 (Ger)
[AIDS also an experimental problem. Selection of experimental animals is difficult—no new therapeutic approaches in view] Gericke D. **Fortschr Med** 1988 Aug 30;106(25):19–20 (Ger)
[AZT therapy. Success in HIV-infected children (news)] Marcus U. **Fortschr Med** 1989 Jan 30;107(3):9–10 (Ger)
[Long-term success with zidovudine in HIV infection]

Leber Magen Darm 1989 May;19(3):158 (Ger)
[HIV infection. Zidovudine and 2',3'-dideoxycytidine in AIDS] Walz B. **Med Monatsschr Pharm** 1988 Dec; 11(12):415 (Ger)
[Antiviral drugs—1988] Hirschel B. **Schweiz Med Wochenschr** 1988 Dec 10;118(49):1830–7 (33 ref.) (Eng. Abstr.) (Ger)
[Clinical pharmacology of zidovudine] Lazowski J, et al. **Pol Tyg Lek** 1988 Jul 18;43(29):945–6 (Pol)

TOXICITY

Reversible zidovudine-induced pure red-cell aplasia. Cohen H, et al. **Aids** 1989 Mar;3(3):177–8
Uridine reverses the toxicity of 3'-azido-3'-deoxythymidine in normal human granulocyte-macrophage progenitor cells in vitro without impairment of antiretroviral activity. Sommadossi JP, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):997–1001
Microenvironmental toxicity of azidothymidine: partial sparing with hemin. Abraham NG, et al. **Blood** 1989 Jul; 74(1):139–44
Synergistic cytotoxic effect of azidothymidine and recombinant interferon alpha on normal human bone marrow progenitor cells. Berman E, et al. **Blood** 1989 Sep; 74(4):1281–6

ZIMELIDINE

ADVERSE EFFECTS

Hypersensitivity to zimelidine without cross reactivity to fluoxetine. Montgomery SA, et al. **Int Clin Psychopharmacol** 1989 Jan;4 Suppl 1:27–9

ANALOGS & DERIVATIVES

Stereoselective N-oxygenation of zimeldine and homozimeldine by the flavin-containing monooxygenase. Cashman JR, et al. **Drug Metab Dispos** 1988 Jul–Aug; 16(4):616–22

METABOLISM

Stereoselective N-oxygenation of zimeldine and homozimeldine by the flavin-containing monooxygenase. Cashman JR, et al. **Drug Metab Dispos** 1988 Jul–Aug; 16(4):616–22

PHARMACOLOGY

Early postnatal deprivation of active sleep with desipramine or zimeldine impairs later behavioural reactivity to auditory stimuli in rats. Hilakivi LA, et al. **Acta Physiol Scand** 1988 Feb;132(2):191–8
Decrease in gene expression of substance P and thyrotropin releasing hormone (TRH) in rat medulla oblongata following treatment with an antidepressive drug. Schalling M, et al. **Acta Physiol Scand** 1988 Nov;134(3):455–6
Increased waking as well as increased synchronization following administration of selective 5-HT uptake inhibitors to rats. Ursin R, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):117–30
The apparent antinociceptive effect of desipramine and zimelidine in the tail flick test in rats is mainly caused by changes in tail skin temperature. Lund A, et al. **Pain** 1989 Jul;38(1):65–9

THERAPEUTIC USE

Limitations in the measurement of urine ethanol in clinical trials to monitor ethanol consumption. Sellers EM, et al. **J Stud Alcohol** 1988 Nov;49(6):567–70

ZINC

Retentive strength of dental composite to metal surfaces. Wictorin L, et al. **Acta Odontol Scand** 1989 Jun; 47(3):185–91
Precipitation and recovery of proteins from culture supernatants using zinc. Zaworski PG, et al. **Anal Biochem** 1988 Sep;173(2):440–4
Chemical phosphorylation of proteins by zinc-ATP. Jarvis BW, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):64–71
Effect of zinc ions on tRNA structure: imino proton NMR spectroscopy. Flanagan JM, et al. **Biochemistry** 1988 Jul 26;27(15):5778–85
Electrical properties of ALCAP and ZCAP ceramics. Allaire MJ, et al. **Biomed Sci Instrum** 1989;25:163–8
Quantitative similarity of zinc and calcium binding to heparin in excess salt solution. Mattai J, et al. **Biophys Chem** 1988 Sep;31(3):295–9
Fe(II)-substituted horse liver alcohol dehydrogenase, a model for non-heme iron enzymes. Various states of iron-dioxygen interaction investigated by Mössbauer and EPR spectroscopy. Bill E, et al. **Eur J Biochem** 1989 Mar 1;180(1):111–21
Poisoning from smoke grenades is not due to phosgene [letter] Karlsson N. **Eur Respir J** 1988 Jun;1(6):575
Mitigation of poison shyness in desert gerbil by adding conspecific sebum of ventral scent marking gland and urine in poison baits. Soni GR, et al. **Indian J Exp Biol** 1988 Jun;26(6):476–8
Effects of enfenamic acid and its zinc salt on wound-healing. Rao CM, et al. **Indian J Physiol Pharmacol** 1988 Jan–Mar; 32(1):61–6
Putative metal finger structure of the human immunodeficiency virus type 1 enhancer binding protein HIV-EP1. Mackawa T, et al. **J Biol Chem** 1989 Sep 5; 264(25):14591–3
Evidence from extended X-ray absorption fine structure and site-specific mutagenesis for zinc fingers in UvrA protein of Escherichia coli. Navaratnam S, et al. **J Biol Chem** 1989 Sep 25;264(27):16067–71
A theoretical study of Zn++ interacting with models of ligands present at the thermolysin active site. Giessner-Prettre C, et al. **J Comput Aided Mol Des** 1989 Mar;3(1):23–37
Mechanism of improved corrosion resistance of Zn-containing dental amalgams. Sarkar NK, et al. **J Dent Res** 1988 Oct;67(10):1312–5
Differential binding of anions to the active site of Cu,Zn superoxide dismutase. A study of the Co,Zn enzyme derivative. Desideri A, et al. **J Inorg Biochem** 1988 Aug; 33(4):277–83
Thymulin, a zinc-dependent hormone. Bach JF, et al. **Med Oncol Tumor Pharmacother** 1989;6(1):25–9 (8 ref.)
The structure of 2Zn pig insulin crystals at 1.5 A resolution. Baker EN, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 6;319(1195):369–456
The effect of zinc on iron-induced lipid peroxidation in different lipid systems including liposomes and micelles. Szebeni J, et al. **Physiol Chem Phys Med NMR** 1988; 20(3):205–11
Purification of carboxypeptidase B by zinc chelate chromatography. Hortin GL, et al. **Prep Biochem** 1989; 19(1):49–59
Elasticity of fibrin and protofibrin gels is differentially modulated by calcium and zinc. Marx G. **Thromb Haemost** 1988 Jun 16;59(3):500–3
[Zinc and the skin] Dreno B, et al. **Ann Dermatol Venereol** 1988;115(6–7):741–6 (38 ref.) (Fre)
[Reaction and effectiveness of prednisolone in zinc oxide containing dermatologic agents] Müller R, et al. **Dermatol Monatsschr** 1989;175(2):82–6 (Eng. Abstr.) (Ger)
[The importance of zinc in child nutrition] De Luca D'Alessandro E, et al. **Nuovi Ann Ig Microbiol** 1987 Jan–Apr;38(1–2):159–70 (39 ref.) (Eng. Abstr.) (Ita)
[Hydrolytic activity of bovine tryptophanyl-tRNA-synthetase cause by removal of Zn2+] Kovaleva GK, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1307–14 (Eng. Abstr.) (Rus)

ADMINISTRATION & DOSAGE

Blood serum vitamin E and A levels during peroral therapy of periodontal diseases with zinc sulphate. Černá H, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:187–93
Ovariectomy, dietary zinc, and bone metabolism in retired breeder rats. Sherman SS, et al. **Am J Clin Nutr** 1989 Jun; 49(6):1184–91
Combined effect of xylitol, NaF and ZnCl2 on growth and metabolism of Streptococcus sobrinus OMZ 176. Scheie AA, et al. **APMIS** 1988 Sep;96(9):761–7
Zinc, copper and iron utilisation by chicks fed various concentrations of zinc. Stahl JL, et al. **Br Poult Sci** 1989 Mar;30(1):123–34
Effect of zinc supplementation on the dietary intake and weight gain of Bangladeshi children recovering from protein-energy malnutrition. Khanum S, et al. **Eur J Clin Nutr** 1988 Aug;42(8):709–14
Oral zinc sulphate as primary therapeutic intervention in a child with Wilson disease. Milanino R, et al. **Eur J Pediatr** 1989 Jun;148(7):654–5
A clinical trial to assess the efficacy of sanguinarine-zinc mouthrinse (Veadent) compared with chlorhexidine mouthrinse (Corsodyl). Moran J, et al. **J Clin Periodontol** 1988 Nov;15(10):612–6
Long-term feeding of high zinc sulfate diets to lactating and gestating dairy cows. Miller WJ, et al. **J Dairy Sci** 1989 Jun;72(6):1499–508
Effect of oral zinc supplements on diaper rash in normal infants. Collipp PJ. **J Med Assoc Ga** 1989 Sep;78(9):621–3
Zinc supplementation in infants with a nutritional pattern of failure to thrive: a double-blind, controlled study. Walravens PA, et al. **Pediatrics** 1989 Apr;83(4):532–8
Inhibition of plaque formation and plaque acidogenicity by zinc and chlorhexidine combinations. Giertsen E, et al. **Scand J Dent Res** 1988 Dec;96(6):541–50
[The effectiveness of prednisolone in zinc oxide containing ointments] Voss M, et al. **Dermatol Monatsschr** 1988; 174(8):462–5 (Eng. Abstr.) (Ger)
[Improved biological availability of zinc in coarse meal and crisp meal bread] Harmuth-Hoene AE, et al. **Z Ernahrungswiss** 1988 Dec;27(4):244–51 (Eng. Abstr.) (Ger)
[Zinc and alcoholic liver cirrhosis] Floriani M, et al. **G Clin Med** 1988 May;69(5):341–5 (Eng. Abstr.) (Ita)
[Peroral administration of zinc sulfate to pregnant cows and its effect on selected metabolic indicators in the dam-calf lineage] Struháriková J, et al. **Vet Med (Praha)** 1989 Apr; 34(4):193–202 (Eng. Abstr.) (Slo)

ADVERSE EFFECTS

Lung function of welders of zinc-coated mild steel: cross-sectional analysis and changes over five consecutive work shifts. Marquart H, et al. **Am J Ind Med** 1989; 16(3):289–96
Dermatitis from zinc pyrithione. Nigam PK, et al. **Contact Dermatitis** 1988 Sep;19(3):219
Chronic exposure of sheep to a zinc smelter in Peru. Reif JS, et al. **Environ Res** 1989 Jun;49(1):40–9
Dangers of oral zinc therapy [letter] Bhargava RK. **Int J Dermatol** 1989 Apr;28(3):205–6
Spontaneous removal of foreign bodies from the maxillary sinus: report of a case. Westermark AH. **J Oral Maxillofac Surg** 1989 Jan;47(1):75–7
Cutaneous reaction to zinc—a rare complication of insulin treatment. A case report. Sandler M, et al. **S Afr Med J** 1989 Apr 1;75(7):342–3
Occupational asthma due to soft corrosive soldering fluxes containing zinc chloride and ammonium chloride. Weir DC, et al. **Thorax** 1989 Mar;44(3):220–3
[Problem of the evaluation of working conditions and morbidity of workers in copper, zinc and lead industries] Abdazimov AD. **Gig Tr Prof Zabol** 1989;(5):18–21 (Eng. Abstr.) (Rus)
[Effect of occupational factors on the condition of the oral cavity in workers engaged in the processing of non-ferrous metals] Abduazimov AD. **Gig Tr Prof Zabol** 1988 Aug; (8):34–6 (Eng. Abstr.) (Rus)

ANALYSIS

Levels of zinc, cadmium and lead in some marine algae from Aqaba-Red Sea. Mesmar MN. **Acta Biol Hung** 1988; 39(4):345–9
Determination of iron, copper and zinc in human whole vitreous humor by flow injection atomic absorption spectrometry. Burguera JL, et al. **Acta Clent Venez** 1988; 39(3):224–9
Magnesium, potassium and zinc deficiency in subjects with type II diabetes mellitus. Sjögren A, et al. **Acta Med Scand** 1988;224(5):461–6
The levels of zinc in breast milk of urban African women in Zimbabwe. Nyazema NZ, et al. **Afr J Med Med Sci** 1989 Jun;18(2):159–62
Zinc in hair and serum of obese individuals in Taiwan. Chen MD, et al. **Am J Clin Nutr** 1988 Nov;48(5):1307–9
Magnesium, zinc, and copper status of US Navy SEAL trainees. Singh A, et al. **Am J Clin Nutr** 1989 Apr; 49(4):695–700
L-histidinol dehydrogenase, a Zn2+-metalloenzyme. Grubmeyer C, et al. **Arch Biochem Biophys** 1989 Aug 1; 272(2):311–7
Making sense of the hair zinc literature: where do we go from here? Dorea JG, et al. **Arch Latinoam Nutr** 1988 Mar; 38(1):93–112 (202 ref.)
Isolation and partial characterization of the low-molecular-mass zinc/cadmium-binding protein from the testes of the patas monkey (Erythrocebus patas). Distinction from metallothionein. Waalkes MP, et al. **Biochem J** 1988 Nov 15;256(1):131–7
Reduction of quinones with zinc metal in the presence of zinc ions: application of post-column reactor for the fluorometric detection of vitamin K compounds. Haroon Y, et al. **Biomed Chromatogr** 1987 Feb;2(1):4–8
Levels of zinc in plasma, erythrocytes, and hair, and levels of serum copper in patients with retinitis pigmentosa in Turkey. Atmaca LS, et al. **Br J Ophthalmol** 1989 Jan; 73(1):29–31
Neurons in the medial cortex give rise to Timm-positive boutons in the cerebral cortex of lizards. Lopez-Garcia C, et al. **Brain Res** 1988 Nov 1;463(2):205–17
Heavy metal pollution from a point source demonstrated by mussel (Unio pictorum L.) at Lake Balaton, Hungary. Balogh KV. **Bull Environ Contam Toxicol** 1988 Dec; 41(6):910–4
Water contamination by heavy metals (Hg, Cd, Pb, Cu and Zn) in Doñana National Park (Spain). Rico MC, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):582–8
Zinc and cadmium concentrations in indigenous blacks with normal, hypertrophic, and malignant prostate. Ogunlewe JO, et al. **Cancer** 1989 Apr 1;63(7):1388–92
Diagnostic value of serum to pleural fluid zinc ratios in pleural effusions [letter] Shepherd KE. **Chest** 1989 Mar; 95(3):707
Iron, copper and zinc concentrations in human sweat and plasma; the effect of exercise. Arsoma OI, et al. **Clin Chim Acta** 1988 Sep 30;177(1):81–7
Comparative studies on muscle AMP-deaminase—I. Purification, molecular weight, subunit structure and metal content of the enzymes from rat, rabbit, hen, frog and pikeperch. Stankiewicz A, et al. **Comp Biochem Physiol [B]** 1979;62(4):363–9
Streptomyces griseus aminopeptidase is a calcium-activated zinc metalloprotein. Purification and properties of the enzyme. Spungin A, et al. **Eur J Biochem** 1989 Aug 1; 183(2):471–7
The primary structure of alcohol dehydrogenase from Drosophila lebanonensis. Extensive variation within insect 'short-chain' alcohol dehydrogenase lacking zinc. Villarroya A, et al. **Eur J Biochem** 1989 Mar 1;180(1):191–7
Iron, zinc, folate and vitamin B12 nutritional status and milk composition of low-income Brazilian mothers. Donangelo

CM, et al. **Eur J Clin Nutr** 1989 Apr;43(4):253–66 (53 ref.)
Zinc–containing fiber systems in the cochlear nuclei of the rat and mouse. Frederickson CJ, et al. **Hear Res** 1988 Nov; 36(2–3):203–11
Hepatic zinc content in patients with various stages of alcoholic liver disease and in patients with chronic active and chronic persistent hepatitis. Bode JC, et al. **Hepatology** 1988 Nov–Dec;8(6):1605–9
An indirect method for quantitation of cellular zinc content of Timm–stained cerebellar samples by energy dispersive X–ray microanalysis. Farkas I, et al. **Histochemistry** 1988; 89(5):493–7
Evidence from dithizone and selenium zinc histochemistry that perivascular mossy fiber boutons stain preferentially "in vivo". Howell GA, et al. **Histochemistry** 1989; 92(2):121–5
Selenium, rubidium and zinc in human semen and semen fractions. Behne D, et al. **Int J Androl** 1988 Oct; 11(5):415–23
First observation of hopeite and parascholzite in fibrous capsules surrounding silicone breast implants. Rolland C, et al. **Int J Artif Organs** 1989 Mar;12(3):180–8
Projections from the medial cortex in the brain of lizards: correlation of anterograde and retrograde transport of horseradish peroxidase with Timm staining. Olucha F, et al. **J Comp Neurol** 1988 Oct 22;276(4):469–80
Distribution of zinc in parasitic helminths. Chowdhury N, et al. **J Helminthol** 1989 Jun;63(2):149–52
Tissue zinc and copper levels in diabetic C57BL/KsJ (db/db) mice fed a zinc–deficient diet: lack of evidence for specific depletion of tissue zinc stores. Donaldson DL, et al. **J Nutr** 1988 Dec;118(12):1502–8
Zinc concentrations in human milk during lactation: a 6–month longitudinal study in southern Brazil. Lamounier JA, et al. **J Trop Pediatr** 1989 Feb;35(1):31–4
Application of a new spectrophotometric method for zinc determination in beverages and condiments. Morales MT, et al. **Nahrung** 1988;32(9):855–9
Urinary and serum zinc levels in chronic pancreatitis. Kondo T, et al. **Pancreas** 1989;4(1):79–82
Kinetics and mechanism of zinc ion–mediated degradation of cephalosporins in tromethamine solution. Tomida H, et al. **Pharm Res** 1987 Jun;4(3):214–9
Seasonal variations in hair zinc concentrations in Canadian and African children. Gibson RS, et al. **Sci Total Environ** 1989 Aug;84:291–8
A comparative study of copper, lead, cadmium and zinc in human sweat and blood. Stauber JL, et al. **Sci Total Environ** 1988 Aug 1;74:235–47
Investigation of the significance of heavy metal contents of blackbird feathers. Weyers B, et al. **Sci Total Environ** 1988 Nov 1;77(1):61–7
Serum and hair zinc concentration in juvenile obesity. Lin WH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jul; 87(7):742–4
[Determination of fetal sex by studying the zinc concentration in the amniotic fluid during the second trimester of pregnancy (preliminary report)] Marinov B, et al. **Akush Ginekol (Sofiia)** 1988;27(4):18–21 (Eng. Abstr.) **(Bul)**
[Ultrastructure of the gastric mucosa and trace elements in gastropathic patients with spleen deficiency syndrome and its clinical significance] Yin GY. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):527–30, 516 (Eng. Abstr.) **(Chi)**
[An assessment of the content of copper, zinc, calcium and magnesium in the hair of schizophrenics] Wang ZY. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Aug; 21(4):222–4, 255 (Eng. Abstr.) **(Chi)**
[Zinc and copper contents of subretinal fluid in retinal detachment] Chen CZ. **Chung Hsi Yen Ko Tsa Chih** 1988 Jul;24(4):233–5 (Eng. Abstr.) **(Chi)**
[Protective effects of selenium, zinc and copper on lung cancer] Chen Q. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jul;22(4):221–4 (Eng. Abstr.) **(Chi)**
[Optimum technical condition for heating and quencing calamine] Zhang R. **Chung Yao Tung Pao** 1988 May; 13(5):23–4, 62 (Eng. Abstr.) **(Chi)**
[Sewer sediments—for the detection of the heavy metal containing waste water flow into sewer systems] Schöler HF. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Dec; 187(2):125–35 (Eng. Abstr.) **(Ger)**
[Alpha fetoprotein and zinc in the amniotic fluid and fetal malformations] Rolfini G, et al. **Clin Ter** 1987 Nov 15; 123(3):215–7 (Eng. Abstr.) **(Ita)**
[Determination of zinc and copper in patients with liver cirrhosis of diverse clinical severity] Sartori M, et al. **Minerva Med** 1988 Oct;79(10):891–5 (Eng. Abstr.) **(Ita)**
[Levels of selected mineral components in the hair as a criterion in the evaluation of nutritional status] Hamułka J, et al. **Rocz Panstw Zakl Hig** 1988;39(4):264–71 (Eng. Abstr.) **(Pol)**
[X–ray fluorescent determination of iron, copper, zinc, bromine and rubidium in biopsies of the gastric mucosa] Zalchik VE, et al. **Med Radiol (Mosk)** 1989 Feb;34(2):39–43 (Eng. Abstr.) **(Rus)**
[A rapid method of identification and quantitative determination of zinc phosphide in cadaveric material] Fartushnyĭ AF, et al. **Sud Med Ekspert** 1989 Apr–Jun; 32(2):31–2 **(Rus)**
[Content of zinc and some other minerals in food manufactured in Vietnam] Do Thi Kim Luen, et al. **Vopr Pitan** 1989 Mar–Apr;(2):60–2 **(Rus)**
[Prevention of dental caries: possible effects of molybdenum and zinc] Protić M, et al. **Med Pregl** 1988;41(5–6):228–30 (Eng. Abstr.) **(Ser)**
[The Cu/Zn index in cutaneous tumors with X–ray microanalysis] Alonso Molina MA, et al. **Med Cutan Ibero Lat Am** 1988;16(4):309–13 (Eng. Abstr.) **(Spa)**

BLOOD

Immunological studies of patients with Down's syndrome. Measurements of autoantibodies and serum antibodies to dietary antigens in relation to zinc levels. Kanavin O, et al. **Acta Med Scand** 1988;224(5):473–7
Zinc, copper and magnesium concentration in serum and CSF of patients with neurological disorders. Kapaki E, et al. **Acta Neurol Scand** 1989 May;79(5):373–8
Plasma zinc concentration and thyroid function in hyperemetic pregnancies. Lao TT, et al. **Acta Obstet Gynecol Scand** 1988;67(7):599–604
Study on serum copper and zinc levels in high myopia. Shiue C, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:141–2
The seasonal dependence of magnesium and zinc in blood in young sportsmen. Kubíček R, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:267–70
Zinc and copper balance studies in infants receiving total parenteral nutrition. Shulman RJ. **Am J Clin Nutr** 1989 May;49(5):879–83
Iron, copper, and zinc status: response to supplementation with zinc or zinc and iron in adult females. Yadrick MK, et al. **Am J Clin Nutr** 1989 Jan;49(1):145–50
Elevated serum zinc levels in metal fume fever. Noel NE, et al. **Am J Emerg Med** 1988 Nov;6(6):609–10
Zinc, cadmium, and hypertension in parturient women. Lazebnik N, et al. **Am J Obstet Gynecol** 1989 Aug; 161(2):437–40
Determination of copper and zinc in serum and whole blood by ion chromatography. Ong CN, et al. **Anal Biochem** 1988 Aug 15;173(1):64–9
Determination of non–protein–bound zinc in human serum using ultrafiltration and atomic absorption spectrometry with electrothermal atomisation. Foote JW, et al. **Analyst** 1988 Jun;113(6):911–5
Zinc concentrations in pure populations of peripheral blood neutrophils, lymphocytes and monocytes. Goode HF, et al. **Ann Clin Biochem** 1989 Jan;26 (Pt 1):89–95
Serum zinc binding capacity in pregnant women. Argemí J, et al. **Ann Nutr Metab** 1988;32(3):121–6
Predictive clinical and laboratory parameters for serum zinc and copper in rheumatoid arthritis. Mussalo–Rauhamaa H, et al. **Ann Rheum Dis** 1988 Oct;47(10):816–9
Circulating levels of selenium and zinc in relation to nutritional status in patients with head and neck cancer. Westin T, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1079–82
Assessment of copper and zinc status of farm horses and training thoroughbreds in south–east Queensland. De Auer, et al. **Aust Vet J** 1988 Oct;65(10):317–20
Serum zinc and angiotensin–converting enzyme levels in patients with lung cancer. Bakan N, et al. **Biofactors** 1988 Jul;1(2):177–8
Nickel chloride and diabetes. II. Calcium, zinc, phosphorus and iron determinations in alloxan diabetic and in rats treated by nickel chloride injections. Novelli EL, et al. **Bol Estud Med Biol** 1987 Jul–Dec;35(3–4):221–30
Maternal zinc and selenium status in pregnancies with a neural tube defect or elevated plasma alpha–fetoprotein. Hinks LJ, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):61–6
Use of the copper/zinc ratio in the diagnosis of lung cancer. Diez M, et al. **Cancer** 1989 Feb 15;63(4):726–30
Hyperzincuria and hypozincemia in patients treated with cisplatin. Sweeney JD, et al. **Cancer** 1989 Jun 1; 63(11):2093–5
Serum zinc in homosexual men [letter] Falutz J, et al. **Clin Chem** 1989 Apr;35(4):704–5
Short–term and long–term variability of indices related to nutritional status. I: Ca, Cu, Fe, Mg, and Zn. Gallagher SK, et al. **Clin Chem** 1989 Mar;35(3):369–73
Changes in magnesium, zinc, calcium, potassium, cholesterol, and creatine kinase concentrations in patients from pre–infarction syndrome to fatal myocardial infarction. Speich M, et al. **Clin Chem** 1988 Oct;34(10):2083–6
Statistical interpretation of concentrations of magnesium, zinc, calcium, potassium, cholesterols, and creatine kinase isoenzymes in men at different stages of ischemic heart disease. Speich M, et al. **Clin Chem** 1989 May;35(5):833–5
Correlation between concentrations of magnesium, zinc, and potassium in plasma, erythrocytes and muscles. Ladefoged K, et al. **Clin Chim Acta** 1988 Oct 14;177(2):157–66
Maternal zinc during oral iron supplementation in pregnancy: a preliminary study. Bloxam DL, et al. **Clin Sci** 1989 Jan; 76(1):59–65
Serum zinc levels in children with kwashiorkor aged one to three years at Kenyatta National Hospital and the effect of zinc supplementation during recovery. Gatheru Z, et al. **East Afr Med J** 1988 Oct;65(10):670–9
Serum zinc, retinol and retinol–binding protein levels in cirrhotics with hypogonadism. Abdu–Gusau K, et al. **Eur J Clin Nutr** 1989 Jan;43(1):53–7
Serum zinc and copper in relation to diet in 3– to 18–year old Finnish girls and boys. Laitinen R, et al. **Eur J Clin Nutr** 1988 Nov;42(11):911–8
Nutritional and haematological status of Chinese farmers: the influence of 13.5 months treatment with riboflavin, retinol and zinc. Thurnham DI, et al. **Eur J Clin Nutr** 1988 Aug; 42(8):647–60
Nutritional status in anorexia nervosa: clinical chemistry, vitamins, iron and zinc. Van Binsbergen CJ, et al. **Eur J Clin Nutr** 1988 Nov;42(11):929–37 (58 ref.)
Plasma and erythrocyte zinc concentrations in pre–eclampsia. Lao TT, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):117–22
Study of serum zinc level in leprosy. Saxena N, et al. **Indian J Lepr** 1988 Oct;60(4):556–61
Plasma zinc level estimation in enlarged prostate. Bandlish U, et al. **Indian J Pathol Microbiol** 1988 Jul;31(3):231–4
Zinc and intrauterine growth. Kapoor RK, et al. **Indian Pediatr** 1988 Oct;25(10):972–6
Zinc and copper concentration in plasma of pregnant women in Nigeria. Okonofua FE, et al. **Int J Gynaecol Obstet** 1989 May;29(1):19–23
Study of serum copper and zinc in cases of hyperemesis gravidarum. el Tabbakh G, et al. **Int J Gynaecol Obstet** 1989 Jul;29(3):207–13
Nutritional status and phytate:zinc and phytate x calcium:zinc dietary molar ratios of lacto–ovo vegetarian Trappist monks: 10 years later. Harland BF, et al. **J Am Diet Assoc** 1988 Dec;88(12):1562–6
Human circadian rhythms in temperature, trace metals, and blood variables. Scales WE, et al. **J Appl Physiol** 1988 Oct; 65(4):1840–6
Serum zinc and copper levels in bilharzial patients. Deghaidy FS, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):205–9
Are serum zinc and copper levels useful as acute rejection markers in heart transplantation? Domínguez JP, et al. **J Heart Transplant** 1989 May–Jun;8(3):264–7
Flow–through dialysis of zinc(II) from model and human sera. Martins EO. **J Inorg Biochem** 1988 Aug;33(4):237–45
Plasma zinc concentrations during the first 2 years after diagnosis of insulin–dependent diabetes mellitus: a prospective study. Melchior T, et al. **J Intern Med** 1989 Jul;226(1):53–8
Plasma and leukocyte zinc and copper levels in patients with protein energy malnutrition. Tanzer F, et al. **J Trop Pediatr** 1988 Dec;34(6):306–8
Trace element studies on Karachi populations, Part 1: Normal ranges for blood copper, zinc and magnesium for adults [published erratum appears in JPMA 1989 Mar;39(3):90] Manser WW, et al. **JPMA** 1989 Feb;39(2):43–9
Zinc transfer during hemodialysis. Hosokawa S, et al. **Life Support Syst** 1983;1 Suppl 1:133–6
Serum zinc, copper and magnesium in Behçet's disease. Cengiz K, et al. **Mater Med Pol** 1988 Jul–Sep;20(3):190–3
What is the clinical significance of reduced manganese and zinc levels in treated epileptic patients? [letter] Akram M, et al. **Med J Aust** 1989 Jul 17;151(2):113
Zinc, vitamins A and E, and retinol–binding protein in sera of patients with cancer of the larynx. Drożdż M, et al. **Neoplasma** 1989;36(3):357–62
Serum levels of beta–carotene, vitamin A, and zinc in male lung cancer cases and controls. Kune GA, et al. **Nutr Cancer** 1989;12(2):169–76
Zinc, copper, and growth status in children and adolescents. Laitinen R, et al. **Pediatr Res** 1989 Apr;25(4):323–6
Long–term consumption of beef extended with soy protein by men, women and children: I. Study design, nutrient intakes, and serum zinc levels. Miles CW, et al. **Plant Foods Hum Nutr** 1987;37(4):341–59
Changes in serum zinc and copper concentrations after thoracic operation. Li GG, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(3):179–81
Serum zinc and copper concentrations in maternal and umbilical cord blood. Relation to course and outcome of pregnancy. Bro S, et al. **Scand J Clin Lab Invest** 1988 Dec; 48(8):805–11
Serum selenium and zinc concentrations in morbid obesity. Comparison of controls and patients with jejunoileal bypass. Gjørup I, et al. **Scand J Gastroenterol** 1988 Dec; 23(10):1250–2
Comparison of an inductively coupled plasma–atomic emission spectrometry method for the determination of calcium, magnesium, sodium, potassium, copper and zinc with atomic absorption spectroscopy and flame photometry methods. Dipietro ES, et al. **Sci Total Environ** 1988 Aug 1;74:249–62
Serum–Zn–levels in prostatic cancer. Feustel A, et al. **Urol Res** 1989;17(1):41–2
Decreased serum iron and zinc concentrations in cattle receiving intravenous dexamethasone. Weeks BR, et al. **Vet Pathol** 1989 Jul;26(4):345–6
Acute phase response in horses: changes in plasma cation concentrations after localised tissue injury. Auer DE, et al. **Vet Rec** 1989 Mar 11;124(10):235–9
Clinical studies on zinc in chronic liver diseases. Grüngreiff K, et al. **Z Gastroenterol** 1988 Aug;26(8):409–15
[Relation of a crimson and pale tongue and levels of some serum trace elements and sex hormones] Xu ZF. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul;8(7):402–4, 388 (Eng. Abstr.) **(Chi)**
[Determination and analysis of some serum trace elements of active pulmonary tuberculosis] Yu KJ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb;

12(1):10–1, 60 (Eng. Abstr.) (Chi)
[Diagnostic value of serum copper/zinc ratio in gynecologic tumors] Gao ZJ. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):434–6 (Eng. Abstr.) (Chi)
[Clinical study on serum copper and zinc levels and copper/zinc ratio in malignant lymphoma] Wu HY. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):335–8 (Eng. Abstr.) (Chi)
[Changes in blood zinc and copper and their clinical significance in patients undergoing open-heart surgery] Zhao L. **Chung Hua I Hsueh Tsa Chih** 1989 Feb;69(2):76–8, 6 (Eng. Abstr.) (Chi)
[Analysis of serum concentrations of zinc, copper, manganese and the copper–zinc ratio in discoid lupus erythematosus with stepwise regression] Yu HS. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):207–10, 254 (Eng. Abstr.) (Chi)
[Copper and zinc content of the serum of burned patients] Dong YL, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan; 26(1):34–6, 61–2 (Eng. Abstr.) (Chi)
[Determination of Se Zn Cu concentrations in serum of middle school teachers in Beijing City] Chen Q. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan;23(1):16–8 (Eng. Abstr.) (Chi)
[Zinc metabolism in the mother during pregnancy and the birth weight of the infant] Dastych M, et al. **Cas Lek Cesk** 1989 Apr 14;128(16):494–6 (Eng. Abstr.) (Cze)
[Changes in zinc level in the serum, whole blood and erythrocytes in disorders of thyroid function] Buchinger W, et al. **Wien Klin Wochenschr** 1988 Sep 23;100(18):619–21 (Eng. Abstr.) (Ger)
[Behavior of zinc during and after intestinal infections in infants] Colombo ML, et al. **Minerva Pediatr** 1988 Jul; 40(7):383–7 (Eng. Abstr.) (Ita)
[Blood zinc in patients with Down's syndrome and its relations with their immune status] Colombo ML, et al. **Minerva Pediatr** 1989 Feb;41(2):71–5 (Eng. Abstr.) (Ita)
[Blood zinc level in the course of HIV infection in drug addicts] Isa L, et al. **Recenti Prog Med** 1988 Dec; 79(12):500–2 (Eng. Abstr.) (Ita)
[The effect of anesthesia and surgery on human plasma levels of vitamins A, E, B12, pre-albumin, retinol binding protein and zinc] Shirasaki S, et al. **Masui** 1988 Sep;37(9):1096–100 (Eng. Abstr.) (Jpn)
[Study on low serum zinc level in acute liver disease] Yasumoto K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2590–5 (Eng. Abstr.) (Jpn)
[Concentration and the fluctuation factor of serum zinc in a long-term intravenous hyperalimentation] Kurinami S, et al. **Rinsho Byori** 1989 Jan;37(1):53–7 (Jpn)
[Relationship between activity of erythrocyte pyrimidine 5'-nucleotidase (P5N) and concentration of magnesium or zinc in blood in workers exposed to lead] Ichiba M, et al. **Sangyo Igaku** 1988 Sep;30(5):408–9 (Jpn)
[Zinc, copper and magnesium in patients with rheumatoid arthritis and so-called seronegative arthritis] Tłustochowicz W, et al. **Pol Tyg Lek** 1988 May 16; 43(20):635–7 (Pol)
[Trace elements (zinc, selenium) in alcohol dependence] Pilaczyńska E, et al. **Psychiatr Pol** 1988 May-Jun; 22(3):216–22 (Eng. Abstr.) (Pol)
[Serum levels of zinc and copper and erythrocyte superoxide dismutase activity in alcoholic patients] do Carmo M das G. **Arch Latinoam Nutr** 1988 Mar;38(1):81–92 (Eng. Abstr.) (Por)
[Serum zinc in patients undergoing chronic hemodialysis] Mendes V, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Sep-Oct;43(5):225–7 (Eng. Abstr.) (Por)

DEFICIENCY

The role of zinc status in altered cardiac adenylate cyclase activity in diabetic rats. Mooradian AD, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):174–80
Acrodermatitis enteropathica. Walling A, et al. **Am Fam Physician** 1989 Feb;39(2):151–4
A growth-limiting, mild zinc-deficiency syndrome in some southern Ontario boys with low height percentiles. Gibson RS, et al. **Am J Clin Nutr** 1989 Jun;49(6):1266–73
Cholesterol and apolipoprotein distribution in plasma high-density-lipoprotein subclasses from zinc-deficient rats. Koo SI, et al. **Am J Clin Nutr** 1989 Jul;50(1):73–9
Zinc status in children and young adults with sickle cell disease. Abshire TC, et al. **Am J Dis Child** 1988 Dec; 142(12):1356–9
Abnormal zinc content in human milk. Risk for development of nutritional zinc deficiency in infants. Atkinson SA, et al. **Am J Dis Child** 1989 May;143(5):608–11
Interactions of alcohol and nutrition [letter] [published erratum appears in Am J Dis Child 1989 Sep;143(9):1110] Ferreira RM. **Am J Dis Child** 1989 May;143(5):519
Zinc: the neglected nutrient. Shambaugh GE Jr. **Am J Otol** 1989 Mar;10(2):156–60
Zinc status and zinc therapy in beta thalassemia [letter] Arcasoy A. **Am J Pediatr Hematol Oncol** 1989 Summer; 11(2):245–6
Incidence of zinc and copper deficiency in Japan [letter] Matsuda I, et al. **Arch Dis Child** 1988 Nov;63(11):1418
Effect of zinc deficiency on the accumulation of metallothionein and cadmium in the rat liver and kidney. Sato M, et al. **Arch Environ Contam Toxicol** 1989 Jul-Aug; 18(4):587–93
Studies on cell migration, adenylate cyclase and membrane-coating granules in the buccal epithelium of the zinc-deficient rabbit, including the influence of iproterenol. Chen SY. **Arch Oral Biol** 1988;33(9):645–51
Changes in soft palate taste buds of rats due to aging and zinc deficiency—scanning electron microscopic observation. Naganuma M, et al. **Auris Nasus Larynx** 1988; 15(2):117–27
Effect of reduced dietary zinc intake on carbohydrate and Zn metabolism in the genetically diabetic mouse (C57BL/KsJ db+/db+). Southon S, et al. **Br J Nutr** 1988 Nov;60(3):499–507
Effect of nutritional zinc-deficiency on O6-alkylguanine-DNA-methyl-transferase activities in rat tissues. Fong LY, et al. **Cancer Lett** 1988 Nov;42(3):217–23
Experimental zinc deficiency: effects on cellular responses and the affinity of humoral antibody. Moulder K, et al. **Clin Exp Immunol** 1989 Aug;77(2):269–74
T-lymphocyte dysfunction in the elderly associated with zinc deficiency and subnormal nucleoside phosphorylase activity: effect of zinc supplementation. Cossack ZT. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):973–6
Olfactory function in zinc-deficient adult mice. Mackay-Sim A, et al. **Exp Brain Res** 1989;76(1):207–12
Effect of dietary Zn-deficiency on the distribution of lipids in the ovary of mature mouse. Taneja SK, et al. **Indian J Exp Biol** 1988 Apr;26(4):271–3
Relationship between birth weight and zinc status of newly born infants and their mothers. Singh PP, et al. **Indian J Physiol Pharmacol** 1989 Apr-Jun;33(2):134–5
Zinc deficiency in anorexia nervosa [letters] Bakan R. **J Adolesc Health Care** 1989 Jul;10(4):340
Clinical zinc deficiency during adequate enteral nutrition. Kenny F, et al. **J Am Coll Nutr** 1989 Feb;8(1):83–5
Transient partial growth hormone deficiency due to zinc deficiency. Nishi Y, et al. **J Am Coll Nutr** 1989 Apr; 8(2):93–7
Zinc in growth and development and spectrum of human zinc deficiency. Prasad AS. **J Am Coll Nutr** 1988 Oct; 7(5):377–84 (14 ref.)
Serum thymulin in human zinc deficiency. Prasad AS, et al. **J Clin Invest** 1988 Oct;82(4):1202–10
Effect of zinc deficiency on the appearance of two immunodominant protein antigens (32 kDa and 65 kDa) in culture filtrates of mycobacteria. De Bruyn J, et al. **J Gen Microbiol** 1989 Jan;135 (Pt 1):79–84
Nucleotides in lymphocytes of human subjects with zinc deficiency. Meftah S, et al. **J Lab Clin Med** 1989 Aug; 114(2):114–9
Maternal zinc deprivation and interleukin-1 influence metallothionein gene expression and zinc metabolism of rats. Huber KL, et al. **J Nutr** 1988 Dec;118(12):1570–6
Production and reversal of the neuromuscular pathology and related signs of zinc deficiency in guinea pigs. O'Dell BL, et al. **J Nutr** 1989 Feb;119(2):196–201
Parakeratosis of the labial mucosa in zinc-deficient rats. Giunta JL, et al. **J Oral Pathol** 1988 Apr;17(4):186–90
Effect of marginal zinc deficiency on lipoprotein lipase activities in postheparin plasma, skeletal muscle and adipose tissues in the rat. Koo SI, et al. **Lipids** 1989 Feb;24(2):132–6
Clinical and biological correlations related to zinc depletion and lipid peroxide generation in some metabolic and endocrine diseases. Popovici D, et al. **Med Interne** 1989 Jan-Mar;27(1):57–64
Effect of protein and zinc deficiencies on vaccine efficacy in guinea pigs following pulmonary infection with Listeria. Coghlan LG, et al. **Med Microbiol Immunol (Berl)** 1988; 177(5):255–63
Effect of zinc depletion on angiotensin I-converting enzyme in arterial walls and plasma of the rat. Dahlheim H, et al. **Miner Electrolyte Metab** 1989;15(3):125–9
Zinc metabolism in nephrotic syndrome [letter] Tümer N, et al. **Nephron** 1989;52(1):95
Quantitative and morphological studies on the influence of zinc deficiency on the liver of pregnant rats. Mamba K, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):566–73
Influence of zinc deficiency on the whole-body retention of 65Zn in young and adult mice. Matsusaka N, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):966–7
Mobilization of tissue zinc for growth and reproduction. **Nutr Rev** 1987 Nov;45(11):346–8 (5 ref.)
Zinc deficiency in inflammatory bowel disease. Hendricks KM, et al. **Nutr Rev** 1988 Dec;46(12):401–8 (44 ref.)
Dietary zinc deficiency decreases plasma concentrations of vitamin E. Bunk MJ, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):379–84
Zinc deficiency: specific scalp hair defects seen by scanning electron microscopy may provide a valuable new test. Gregory DW, et al. **Scanning Microsc** 1988 Sep;2(3):1463–9
Teratogenicity of zinc deficiency in the rat: study of the fetal skeleton. da Cunha Ferreira RM, et al. **Teratology** 1989 Feb;39(2):181–94
Effect of growth hormone on epiphyseal growth plates in zinc deficiency. Kurtogu S, et al. **Tokai J Exp Clin Med** 1987 Dec;12(5–6):325–9
Sister chromatid exchanges in calves with hereditary zinc deficiency (lethal trait A 46). Bosma AA, et al. **Vet Q** 1988 Oct;10(4):230–3
Taste disorder from zinc deficiency after tonsillectomy. Bicknell JM, et al. **West J Med** 1988 Oct;149(4):457–60
[Relation of maternal zinc deficiency and fetal neural tube defects] Li DC. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Mar;23(2):88–90, 127 (Eng. Abstr.) (Chi)
[Essential points in the nursing care of patients with acrodermatitis enteropathica] Liu FF. **Chung Hua Hu Li Tsa Chih** 1988 Aug;23(8):469–70 (Chi)
[Effect of marginal zinc deficiency on humoral immunity in rats] Kukral HW, et al. **Z Ernahrungswiss** 1988 Jun; 27(2):126–36 (Eng. Abstr.) (Ger)
[Significance of zinc administration in premature infants] Kisbán G, et al. **Orv Hetil** 1989 Apr 9;130(15):777–9 (29 ref.) (Eng. Abstr.) (Hun)
[Zinc in the treatment of hypogonadism in patients with renal pathology] Kukhtevich AV, et al. **Ter Arkh** 1988; 60(6):79–82 (Eng. Abstr.) (Rus)
[Effect of zinc deficiency on the in vivo biosynthesis of fatty acids of the linoleic series in the rat] Ayala S, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(3):321–30 (Eng. Abstr.) (Spa)

METABOLISM

Metabolism of magnesium and zinc in skeletal system. Steidl L, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:151–7 (21 ref.)
Metallothionein contents in selected tissues of cattle from copper-deficient areas in north-east Poland. Kleczkowski M. **Acta Vet Hung** 1988;36(1–2):101–6
Copper and zinc status in rats with acute inflammation: focus on the inflamed area. Milanino R, et al. **Agents Actions** 1988 Jul;24(3–4):356–64
Copper and zinc status in adjuvant-arthritic rat: studies on blood, liver, kidneys, spleen and inflamed paws. Milanino R, et al. **Agents Actions** 1988 Jul;24(3–4):365–76
Changes in zinc, copper and selenium status during adjuvant-induced arthritis in rats. Nève J, et al. **Agents Actions** 1988 Aug;25(1–2):146–55
Zinc status of highly trained women runners and untrained women. Deuster PA, et al. **Am J Clin Nutr** 1989 Jun; 49(6):1295–301
Zinc, calcium, and magnesium metabolism: effects on plasmacytomas in Balb/c mice. Song MK, et al. **Am J Clin Nutr** 1989 Apr;49(4):701–7
Interaction of niacin and zinc metabolism in patients with alcoholic pellagra. Vannucchi H, et al. **Am J Clin Nutr** 1989 Aug;50(2):364–9
Zinc status of children with sickle cell disease: relationship to poor growth. Phebus CK, et al. **Am J Hematol** 1988 Oct;29(2):67–73
Kinetics of zinc metabolism in the rat: effect of dibutyryl cAMP. Dunn MA, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E420–30
Zinc absorption in human small intestine. Lee HH, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G87–91
Identification of zinc-binding sites of proteins: zinc binds to the amino-terminal region of tubulin. Serrano L, et al. **Anal Biochem** 1988 Jul;172(1):210–8
The distribution of zinc in the forebrain and midbrain of the lizard Gekko gecko. A histochemical study. Smeets WJ, et al. **Anat Embryol (Berl)** 1989;180(1):45–56
Zinc binding to fibrinogen and fibrin. Marx G. **Arch Biochem Biophys** 1988 Oct;266(1):285–8
Effects of cadmium exposure during pregnancy on cadmium and zinc concentrations in neonatal liver and consequences for the offspring. Roelfzema WH, et al. **Arch Toxicol** 1989; 63(1):38–42
Cadmium and zinc concentrations in fetal and maternal rat tissue after parenteral administration of cadmium during pregnancy. Roelfzema WH, et al. **Arch Toxicol** 1988; 62(4):285–90
Influence of triethylenetetramine and D-penicillamine on zinc metabolism in mice. Eybl V, et al. **Arch Toxicol Suppl** 1989;13:370–2
Molecular cloning and amino acid sequence of rat kidney aminopeptidase M: a member of a super family of zinc-metallohydrolases. Malfroy B, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):236–41
Kinetic lability of zinc bound to metallothionein in Ehrlich cells. Krezoski SK, et al. **Biochem J** 1988 Oct 15; 255(2):483–91
A role of metallothionein in zinc regulation after oestradiol induction of vitellogenin synthesis in rainbow trout, Salmo gairdneri. Olsson PE, et al. **Biochem J** 1989 Jan 15; 257(2):555–9
Comparison of solution structural flexibility and zinc binding domains for insulin, proinsulin, and miniproinsulin. Kaarsholm NC, et al. **Biochemistry** 1989 May 16; 28(10):4427–35
Thermal denaturation of T4 gene 32 protein: effects of zinc removal and substitution. Keating KM, et al. **Biochemistry** 1988 Jul 12;27(14):5240–5
Hydration of CO2 by carbonic anhydrase: intramolecular proton transfer between Zn2+-bound H2O and histidine 64 in human carbonic anhydrase II. Liang JY, et al. **Biochemistry** 1988 Nov 15;27(23):8676–82
The effect of alcoholic beverages on iron and zinc metabolism in the rat. Fairweather-Tait SJ, et al. **Br J Nutr** 1988 Sep; 60(2):209–15
Excitatory amino acids enhance dissociation of zinc from soluble protein in cytosol of rat hippocampus. Baba A, et al. **Brain Res** 1989 May 8;486(2):372–5
Translocation of zinc may contribute to seizure-induced death of neurons. Frederickson CJ, et al. **Brain Res** 1989 Feb 20;480(1–2):317–21

Postischemic changes of calcium and endogenous antagonist in the rat hippocampus studied by proton-induced X-ray emission analysis. Tsuda T, et al. **Brain Res** 1989 Apr 10; 484(1-2):228-33

A heavy metal marker of the developing striatal mosaic. Vincent SR, et al. **Brain Res Dev Brain Res** 1989 Jan 1; 45(1):155-9

Acute effects of human growth hormone on zinc, copper, calcium and magnesium metabolism in normal subjects. Brandão-Neto J, et al. **Braz J Med Biol Res** 1988;21(1):43-7

Metabolic effects of glucagon on plasma and urine zinc, copper, calcium and magnesium levels. Brandão-Neto J, et al. **Braz J Med Biol Res** 1988;21(1):49-52

Influence of egg production on zinc, copper and iron metabolism in the turkey hen (Meleagris gallopavo). Richards MP. **Comp Biochem Physiol [A]** 1989;93(4):811-7

Plasma and cellular zinc levels and membrane lipid composition in streptozotocin diabetic rats. Burke JP, et al. **Comp Biochem Physiol [B]** 1989;93(2):409-12

Characterization of the low mol. wt zinc-binding ligand from rat small intestine by comparison to the organic zinc-binding ligands. Luh GY, et al. **Comp Biochem Physiol [B]** 1988;91(3):569-76

The binding of zinc to the soluble proteins of intestinal mucosa in winter flounder (Pseudopleuronectes americanus). Shears MA, et al. **Comp Biochem Physiol [B]** 1979;64(3):297-9

Effect of dietary protein and minerals on calcium and zinc utilization. Greger JL. **Crit Rev Food Sci Nutr** 1989; 28(3):249-71 (184 ref.)

The effect of zinc status on the immune function of diabetic rats. Mooradian AD, et al. **Diabetologia** 1988 Sep; 31(9):703-7

The human genome contains hundreds of genes coding for finger proteins of the Krüppel type. Bellefroid EJ, et al. **DNA** 1989 Jul-Aug;8(6):377-87

Zinc deficiency worsens ethanol-induced gastric ulcers in rats. Cho CH, et al. **Drug Nutr Interact** 1988;5(4):289-95

Effects of dietary zinc deficiency on the activity of enzymes associated with phase I and II of drug metabolism in Fischer-344 rats: activities of drug metabolising enzymes in zinc deficiency. Jagadeesan V, et al. **Drug Nutr Interact** 1988;5(4):403-13

Altered mineral metabolism: a mechanism underlying the fetal alcohol syndrome in rats. Zidenberg-Cherr S, et al. **Drug Nutr Interact** 1988;5(4):257-74

Metal binding 'finger' structures in the glucocorticoid receptor defined by site-directed mutagenesis. Severne Y, et al. **EMBO J** 1988 Aug;7(8):2503-8

Relationship of cadmium accumulation to zinc or copper concentration in horse liver and kidney. Koizumi N, et al. **Environ Res** 1989 Jun;49(1):104-14

Amygdalar kindling is associated with elevated zinc concentration in the cortex and hippocampus of rats. Kasarskis EJ, et al. **Epilepsy Res** 1987 Jul;1(4):227-33

Properties of a 19-kDa Zn2+-binding protein and sequence of the Zn2+-binding domains. Brand IA, et al. **Eur J Biochem** 1988 Nov 15;177(3):561-8

Effect of reduced phytate wheat bran on zinc absorption. Hall MJ, et al. **Eur J Clin Nutr** 1989 Jun;43(6):431-40

Biochemical properties of metallothionein isoforms from bovine hippocampus. Paliwal VK, et al. **Exp Brain Res** 1989;75(3):477-82

Tissue-specific regulation of zinc metabolism and metallothionein genes by interleukin 1. Cousins RJ, et al. **FASEB J** 1988 Oct;2(13):2884-90

Zinc in liver cirrhosis after intravenous zinc sulphate overload [letter] Gil Extremera B, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):429

Selenium-induced autometallographic demonstration of endogenous zinc in organs of the rainbow trout, Salmo gairdneri. Baatrup E. **Histochemistry** 1989;90(6):417-25

Neo-Timm and selenium stainable glial cells of the rat telencephalon. Holm IE. **Histochemistry** 1989;91(2):133-41

Estradiol-induced increase in serum HGH-density lipoprotein cholesterol and its relationships with zinc and copper status in ovariectomized rats. Brenner GM, et al. **Horm Metab Res** 1988 Sep;20(9):597-9

Zinc levels in the cerebrospinal fluid, serum & urine in acute hepatic encephalopathy. Singh V, et al. **Indian J Med Res** 1988 Jun;87:594-9

Serum and hair zinc in Indian childhood cirrhosis. Misra PK, et al. **Indian Pediatr** 1989 Jan;26(1):22-5

Normal zinc and iron concentrations in mice after early exposure to phenobarbital. Pick CG, et al. **Int J Dev Neurosci** 1987;5(5-6):391-8

Effect of Cd on tissue levels of Se, Zn, Fe, Co and Rb. Czauderna M, et al. **Int J Rad Appl Instrum [A]** 1989; 40(2):177-81

Time dependent zinc distribution in the development of the BW7756 murine hepatoma. Preiss IL, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):361-4

The effect of maternal smoking on the relationship between maternal and fetal zinc status and iafant birth weight. Kuhnert BR, et al. **J Am Coll Nutr** 1988 Aug;7(4):309-16

Zinc in kidney disease. Mahajan SK. **J Am Coll Nutr** 1989 Aug;8(4):296-304 (75 ref.)

Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on the hepatic distribution of iron, copper, zinc, and magnesium in rats. Wahba ZZ, et al. **J Biochem Toxicol** 1988 Summer;3:121-9

Escherichia coli DNA topoisomerase I is a zinc metalloprotein with three repetitive zinc-binding domains. Tse-Dinh YC, et al. **J Biol Chem** 1988 Nov 5; 263(31):15857-9

Binding of zinc to bovine and human milk proteins. Singh H, et al. **J Dairy Res** 1989 May;56(2):235-48

Zinc binding in bovine milk. Singh H, et al. **J Dairy Res** 1989 May;56(2):249-63

Is alcohol hepatotoxic in the baboon? Ainley CC, et al. **J Hepatol** 1988 Aug;7(1):85-92

Phytic acid-enhanced metal ion exchange reactions: the effect on carboxypeptidase A. Martin CJ, et al. **J Inorg Biochem** 1989 Apr;35(4):267-88

Presence of a metallothionein-like protein in the bovine pineal gland. Awad A, et al. **J Neural Transm** 1989; 76(2):129-44

Bioavailability of and interactions between zinc and selenium in rats fed wheat grain intrinsically labeled with 65Zn and 75Se. House WA, et al. **J Nutr** 1989 Jun;119(6):916-21

Inhibitory effects of phytic acid and other inositol phosphates on zinc and calcium absorption in suckling rats. Lönnerdal B, et al. **J Nutr** 1989 Feb;119(2):211-4

Zinc uptake by basolateral membrane vesicles from rat small intestine. Oestreicher P, et al. **J Nutr** 1989 Apr; 119(4):639-46

Recent developments in trace element metabolism and function: role of metallothionein in copper and zinc metabolism. Richards MP. **J Nutr** 1989 Jul;119(7):1062-70 (94 ref.)

[3H]MK801 binding to the N-methyl-D-aspartate receptor reveals drug interactions with the zinc and magnesium binding sites. Reynolds IJ, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1025-31

Whether Zn2+ for the polymerase system was selected inevitably or by historical accident. Toh H, et al. **J Theor Biol** 1989 Jan 9;136(1):79-85

Papillomavirus polypeptides E6 and E7 are zinc-binding proteins. Barbosa MS, et al. **J Virol** 1989 Mar;63(3):1404-7

Menkes' disease: a disorder of zinc metabolism? [letter; comment] **Lancet** 1989 Jun 17;1(8651):1399. **Comment on:** Lancet 1989 Mar 18;1(8638):619

Zinc fingers and vitamin D resistance. **Lancet** 1989 Mar 4; 1(8636):478 (17 ref.)

Calcitonin, zinc, and testicular function. Chausmer AB, et al. **Metabolism** 1989 Aug;38(8):714-7

Structure, chromosome location, and expression of the mouse zinc finger gene Krox-20: multiple gene products and coregulation with the proto-oncogene c-fos. Chavrier P, et al. **Mol Cell Biol** 1989 Feb;9(2):787-97

Altering DNA-binding specificity of GAL4 requires sequences adjacent to the zinc finger. Corton JC, et al. **Nature** 1989 Aug 31;340(6236):724-7

Zinc and LTP [letter] Weiss JH, et al. **Nature** 1989 Mar 16; 338(6212):212

Influence of zinc deficiency on the whole-body retention of 65Zn in young and adult mice. Matsusaka N, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):966-7

Zinc and gene expression in eukaryotes. **Nutr Rev** 1988 Nov; 46(11):392-4 (12 ref.)

E6 protein of human papillomavirus type 18 binds zinc. Grossman SR, et al. **Oncogene** 1989 Sep;4(9):1089-93

Iron, copper and zinc levels in serum and cirrhotic liver of patients with and without hepatocellular carcinoma. Nagasue N, et al. **Oncology** 1989;46(5):293-6

Hepatic metallothionein as a source of zinc and cysteine during the first year of life. Zlotkin SH, et al. **Pediatr Res** 1988 Sep;24(3):326-9

Changes of Cu & Zn in carrageenan pleurisy and paw-oedema in rat. Marrella M, et al. **Pharmacol Res Commun** 1988 Jul;20(7):629-30

In vitro availability of iron and zinc in white and coloured ragi (Eleusine coracana): role of tannin and phytate. Udayasekhara Rao P, et al. **Plant Foods Hum Nutr** 1988; 38(1):35-41

Effect of Salmonella gallinarum infection on zinc metabolism in chicks. Hill CH. **Poult Sci** 1989 Feb;68(2):297-305

On the mechanism of action of ribonucleases: dinucleotide cleavage catalyzed by imidazole and Zn2+. Breslow R, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1746-50

Changes in stability and allosteric properties of aspartate transcarbamoylase resulting from amino acid substitutions in the zinc-binding domain of the regulatory chains. Eisenstein E, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3094-8

Conserved cysteine and histidine residues of the avian myeloblastosis virus nucleocapsid protein are essential for viral replication but are not "zinc-binding fingers". Jentoft JE, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7094-8

Molecular cloning, sequencing, and mapping of EGR2, a human early growth response gene encoding a protein with "zinc-binding finger" structure [published erratum appears in Proc Natl Acad Sci U S A 1989 Jan;86(2):515] Joseph LJ, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7164-8

Evolutionary conserved modules associated with zinc fingers in Xenopus laevis. Knöchel W, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6097-100

Structure and function of the Zn(II) binding site within the DNA-binding domain of the GAL4 transcription factor. Pan T, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3145-9

Degradation of zinc-metallothionein in monolayer cultures of rat hepatocytes. Chen ML, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):130-8

The effect of burn injury and zinc nutriture on fecal endogenous zinc, tissue zinc distribution, and T-lymphocyte subset distribution using a murine model. Shippee RL, et al. **Proc Soc Exp Biol Med** 1988 Oct; 189(1):31-8

Transport of the trace metal cation, zinc(II), by rat liver plasma membrane vesicles. Pattison SE, et al. **Prog Clin Biol Res** 1989;292:369-78

Development and application of a model for zinc metabolism in humans. Wastney ME, et al. **Prog Food Nutr Sci** 1988; 12(3):243-54

Effects of adjuvant arthritis on copper, zinc, and iron metabolism in the rat. Kishore V. **Res Commun Chem Pathol Pharmacol** 1989 Jan;63(1):153-6

Purification and some characteristics of a zinc metalloprotease from the venom of Bothrops jararaca (jararaca). Tanizaki MM, et al. **Toxicon** 1989;27(7):747-55

Zinc ion stimulation of ATP cleavage by prostasomes from human seminal plasma. Ronquist G. **Urol Int** 1988; 43(6):334-40

[Effects of zinc and copper on the protection of somatostatin against islet B cell damage induced by streptozotocin] Tu YH, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):400-5 (Eng. Abstr.) **(Chi)**

[Abnormal zinc metabolism in senile cataract] Huang XR, et al. **Yen Ko Hsueh Pao** 1986 Sep;2(3):172-5 (Eng. Abstr.) **(Chi)**

[Nutritional importance and physiopathology of zinc] Neve J, et al. **J Pharm Belg** 1988 Nov-Dec;43(6):466-77 (Eng. Abstr.) **(Fre)**

[Variations in the composition of breast milk in Wilson's disease] Bunke H, et al. **Kinderarztl Prax** 1989 Feb; 57(2):89-92 (Eng. Abstr.) **(Ger)**

[Experimental studies on the antitumor effect of progesterone and enhancement of the therapeutic effect of anticancer drugs by progesterone—from the aspect of zinc metabolism] Ujiie S, et al. **Gan To Kagaku Ryoho** 1989 Jul; 16(7):2423-8 (Eng. Abstr.) **(Jpn)**

[Studies of metabolic abnormality of zinc in chronic liver diseases (report 2)—basic examination of its effects on pathophysiology] Nagai K. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):39-44 (Eng. Abstr.) **(Jpn)**

[Studies of metabolic abnormality of zinc in chronic liver diseases (report-1)—clinical significance] Nagai K. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2618-23 (Eng. Abstr.) **(Jpn)**

[Zinc in pregnancy] Jendryczko A, et al. **Ginekol Pol** 1988 Oct;59(10):641-4 (25 ref.) (Eng. Abstr.) **(Pol)**

[Interaction of copper nd zinc cations with calcium-binding proteins] Permiakov EA, et al. **Mol Biol (Mosk)** 1988 Jul-Aug;22(4):984-91 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Theoretical and practical aspects of zinc uptake and absorption. Cousins RJ. **Adv Exp Med Biol** 1989;249:3-12 (26 ref.)

Trace metal interactions involving the intestinal absorption mechanisms of iron and zinc. Flanagan PR. **Adv Exp Med Biol** 1989;249:35-44 (69 ref.)

Effect of phytate removal on zinc absorption from soy formula. Lönnerdal B, et al. **Am J Clin Nutr** 1988 Nov; 48(5):1301-6

Net renal tubular reabsorption of zinc in healthy man and impaired handling in sickle cell anemia. Yuzbasiyan-Gurkan VA, et al. **Am J Hematol** 1989 Jun; 31(2):87-90

Comparison of fast atom bombardment mass spectrometry and thermal ionization quadrupole mass spectrometry for the measurement of zinc absorption in human nutrition studies. Eagles J, et al. **Anal Chem** 1989 May 1;61(9):1023-5

Zinc absorption in haemodialysis patients. Foote JW, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):398-402

Effects of Escherichia coli on iron, copper, and zinc metabolism in chicks. Tufft LS, et al. **Avian Dis** 1988 Oct-Dec;32(4):779-86

Bioavailability of zinc and cadmium and their effect on microbial growth and metal uptake. Prahalad AK, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):921-7

Zinc treatment of the digestive gland of the slug Arion ater L. 1. Cellular distribution of zinc and calcium. Recio A, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):858-64

Differential uptake of zinc, copper, and lead in Texas cichlid (Cichlasoma cyanoguttatum). Villegas-Navarro A, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):761-8

Zinc clearance correlates with clinical severity of Crohn's disease. A kinetic study. Nakamura T, et al. **Dig Dis Sci** 1988 Dec;33(12):1520-4

Zinc sequestration by earthworm (Annelida: Oligochaeta) chloragocytes. An in vivo investigation using fully quantitative electron probe X-ray micro-analysis. Morgan JE, et al. **Histochemistry** 1989;90(5):405-11

Zinc methionine for ruminants: relative bioavailability of zinc in lambs and effects of growth and performance of growing heifers. Spears JW. **J Anim Sci** 1989 Mar;67(3):835-43

Evidence for a major route for zinc uptake in human red blood cells: [Zn(HCO3)2Cl]- influx through the [Cl-/HCO3-] anion exchanger. Torrubia JO, et al. **J Cell Physiol** 1989 Feb;138(2):316-22

Studies on zinc sulphate microcapsules (2): Application of factorial design. Oner L, et al. **J Microencapsul** 1988 Jul-Sep;5(3):225-9

Studies on zinc sulphate microcapsules (1):

Microencapsulation and in vitro dissolution kinetics. Oner L, et al. **J Microencapsul** 1988 Jul-Sep;5(3):219–23
Effect of EDTA and zinc–methionine complex on zinc absorption by rat intestine. Hempe JM, et al. **J Nutr** 1989 Aug;119(8):1179–87
The effect of past and current dietary Zn intake on Zn absorption and endogenous excretion in the rat. Johnson PE, et al. **J Nutr** 1988 Oct;118(10):1205–9
The effect of valproic acid on 65Zn distribution in the pregnant rat. Keen CL, et al. **J Nutr** 1989 Apr; 119(4):607–11
Effect of protein level and protein source on zinc absorption in humans. Sandström B, et al. **J Nutr** 1989 Jan;119(1):48–53
Influence of age upon the metabolism of zinc in livers of C57BL/6J mice. Thomas DJ, et al. **Mech Ageing Dev** 1989 Mar;47(3):241–51
Availability of zinc from germinated, fermented and autoclaved black-gram (Phaseolus mungo) in rats. Kawatra BL, et al. **Nahrung** 1989;33(4):311–4
Comparative ability of exogenously administered metals to alter tissue levels and urinary output of copper and zinc. Rosenberg DW, et al. **Pharmacology** 1989;38(3):159–66
Short-term high level zinc feeding and tissue zinc concentration in mature laying hens. Williams SN, et al. **Poult Sci** 1989 Apr;68(4):539–45
The transfer of zinc across the term dually perfused human placental lobule. Page KR, et al. **Q J Exp Physiol** 1988 Jul;73(4):585–93
Effect of 6-mercaptopurine on 65Zn distribution in the pregnant rat. Amemiya K, et al. **Teratology** 1989 Apr; 39(4):387–93
Intestinal zinc absorption in cirrhotic patients. Solís-Herruzo J, et al. **Z Gastroenterol** 1989 Jun;27(6):335–8

PHARMACOLOGY

Intestinal absorption of thiamine, glucose and sodium in rats after lead and joint lead–zinc treatment. Doležych S. **Acta Physiol Pol** 1988 May-Jun;39(3):195–201
Inorganic zinc and the intestinal absorption of ferrous iron. Crofton RW, et al. **Am J Clin Nutr** 1989 Jul;50(1):141–4
Iron and zinc absorption in human subjects from a mixed meal of extruded and nonextruded wheat bran and flour. Fairweather-Tait SJ, et al. **Am J Clin Nutr** 1989 Jan; 49(1):151–5
Metal-inducible pathology in the liver, pancreas, and kidney of transgenic mice expressing SV40 early region genes. Dyer KR, et al. **Am J Pathol** 1989 Aug;135(2):401–10
Superoxide production of peritoneal macrophages in experimental gram-negative sepsis; influence of in vitro and in vivo supplements of zinc. Srinivas U, et al. **APMIS** 1989 Aug;97(8):682–8
Effects of zinc, iron, cobalt, and manganese on Fusarium moniliforme NRRL 13616 growth and fusarin C biosynthesis in submerged cultures. Jackson MA, et al. **Appl Environ Microbiol** 1989 Mar;55(3):649–55
Inhibition of [3H]platelet activating factor (PAF) binding by Zn2+: a possible explanation for its specific PAF antiaggregating effects in human platelets. Nunez D, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):466–75
Tyrosine and tyrosinate fluorescence of S-100b. A time-resolved nanosecond fluorescence study. The effect of pH, Ca(II), and Zn(II). Turner RJ, et al. **Biochem Cell Biol** 1989 Apr-May;67(4-5):179–86
Genetic differences in zinc and copper induction of liver metallothionein in inbred strains of the mouse. Farr C, et al. **Biochem Genet** 1989 Apr;27(3-4):199–217
Zinc can activate cellular acidic alpha-D-glucosidase activity. Lin CY, et al. **Biochem Genet** 1988 Jun; 26(5-6):323–9
Zn(II), Cd(II) and Cu(II) interactions on glutathione reductase and glucose-6-phosphate dehydrogenase. Serafini MT, et al. **Biochem Int** 1989 Apr;18(4):793–802
Zinc stimulation of bone protein synthesis in tissue culture. Activation of aminoacyl-tRNA synthetase. Yamaguchi M, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4075–80
Protection of cells against membrane damage by haemolytic agents: divalent cations and protons act at the extracellular side of the plasma membrane. Bashford CL, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):56–64
Analysis of stress-induced gene expression in fish cell lines exposed to heavy meals and heat shock. Misra S, et al. **Biochim Biophys Acta** 1989 Apr 12;1007(3):325–33
Effects of Ca2+ and Zn2+ on trifluoperazine-S100 proteins interactions: induced circular dichroism and fluorescence spectra. Ogoma Y, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):188–92
Effect of Cu2+ and Zn2+ on the inhibition of human leucocyte elastase by 6-alkyl-3-(omega-carboxyalkyl)-2-pyrone, oleic acid and sulindac sulfide. Cook L, et al. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):11–9
A novel role of Ca2+ and Zn2+: protection of cells against membrane damage. Pasternak CA. **Biosci Rep** 1988 Dec; 8(6):579–83 (24 ref.)
Inhibition of 5 alpha-reductase activity in human skin by zinc and azelaic acid. Stamatiadis D, et al. **Br J Dermatol** 1988 Nov;119(5):627–32
Tricyclic antidepressants block N-methyl-D-aspartate receptors: similarities to the action of zinc. Reynolds IJ, et al. **Br J Pharmacol** 1988 Sep;95(1):95–102
Antagonism of calcium by zinc in guinea-pig isolated taenia caeci and trachealis muscle. Sarriá B, et al. **Br J Pharmacol** 1989 May;97(1):19–26
The protective effect of zinc on gastric ulceration caused by ethanol treatment. Rodrigues LE, et al. **Braz J Med Biol Res** 1989;22(1):41–50
Zinc protection against cadmium effects on preimplantation mice embryos. Belmonte NM, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):107–10
Further studies of swarmer cell differentiation of Proteus mirabilis PM23: a requirement for iron and zinc. Jin T, et al. **Can J Microbiol** 1988 May;34(5):588–93
Cadmium carcinogenesis in male Wistar [Crl:(WI)BR] rats: dose-response analysis of effects of zinc on tumor induction in the prostate, in the testes, and at the injection site. Waalkes MP, et al. **Cancer Res** 1989 Aug 1;49(15):4282–8
Interactions of zinc with fluoride on growth, glycolysis and survival of Streptococcus mutans GS-5. Izaguirre-Fernández EJ, et al. **Caries Res** 1989;23(1):18–25
Ultrastructural changes in Streptococcus sobrinus induced by xylitol, NaF and ZnCl2. Scheie AA, et al. **Caries Res** 1989;23(5):320–7
Stress proteins by zinc ions in sea urchin embryos. Roccheri MC, et al. **Cell Differ** 1988 Aug;24(3):209–13
Cytotoxicity of zinc in vitro. Borovanský J, et al. **Chem Biol Interact** 1989;69(2-3):279–91
A possible protective mechanism by zinc sulfate against ethanol-induced gastric ulceration in rats. Chen SM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;41(5):323–8
Supplemental zinc restores antibody formation in cultures of aged spleen cells. III. Impairment of Il-2-mediated responses. Winchurch RA, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):215–22
Zinc effects on LDH, MDH and alkaline phosphatase from cultures of fathead minnow cells. Adragna PJ, et al. **Comp Biochem Physiol [B]** 1979;64(2):219–24
Zinc effects on nickel dermatitis in the guinea pig. Warner RD, et al. **Contact Dermatitis** 1988 Aug;19(2):98–108
Influence of copper and zinc on urethan-induced adenoma development in mice. Blakley BR. **Drug Nutr Interact** 1988; 5(4):395–401
A zinc-responsive factor interacts with a metal-regulated enhancer element (MRE) of the mouse metallothionein-I gene. Westin G, et al. **EMBO J** 1988 Dec 1;7(12):3763–70
Zinc and glycine do not modify low-magnesium-induced epileptiform activity in the immature neocortex in vitro. Hegstad E, et al. **Epilepsy Res** 1989 Mar-Apr;3(2):174–7
Zinc increases phorbol ester receptors in intact B-cells, neutrophil polymorphs and platelets. Forbes IJ, et al. **FEBS Lett** 1989 Apr 24;247(2):445–7
The binding of in vitro synthesized adenovirus DNA binding protein to single-stranded DNA is stimulated by zinc ions. Vos HL, et al. **FEBS Lett** 1988 Nov 7;239(2):251–4
Capacitation of hamster spermatozoa with the divalent cation chelators D-penicillamine, L-histidine, and L-cysteine in a protein-free culture medium. Andrews JC, et al. **Gamete Res** 1989 Jun;23(2):159–70
Effects of zinc and EDTA on tissue cadmium in various smooth muscles in rabbit and guinea-pig. Ueda F, et al. **Gen Pharmacol** 1988;19(5):661–4
Zinc: an inhibitor of prolactin (PRL) secretion in humans. Brandão Néto J, et al. **Horm Metab Res** 1989 Apr; 21(4):203–6
Zinc incorporation reverses suppressant effect of ibuprofen on wound healing. Kumar A, et al. **Indian J Exp Biol** 1988 Jun;26(6):483–5
Effect of oral zinc sulphate on serum lipids and lipoproteins in human subjects. Shah DR, et al. **Indian J Physiol Pharmacol** 1988 Jan-Mar;32(1):47–50
The effects of an occlusive zinc medicated dressing on the bacterial flora in excised wounds in the rat. Söderberg T, et al. **Infection** 1989 Mar-Apr;17(2):81–5
Zn++ inhibits both tumor necrosis factor-mediated DNA fragmentation and cytolysis. Flieger D, et al. **Int J Cancer** 1989 Aug 15;44(2):315–9
Immunopharmacology and immunotoxicity of zinc diethyldithiocarbamate. Renoux G, et al. **Int J Immunopharmacol** 1988;10(4):489–93
Ferric reductase activity in Azotobacter vinelandii and its inhibition by Zn2+. Huyer M, et al. **J Bacteriol** 1989 Jul; 171(7):4031–7
Modulation of alcohol dehydrogenase isoenzyme levels in Zymomonas mobilis by iron and zinc. Mackenzie KF, et al. **J Bacteriol** 1989 Feb;171(2):1063–7
Plasmid-determined inducible efflux is responsible for resistance to cadmium, zinc, and cobalt in Alcaligenes eutrophus. Nies DH, et al. **J Bacteriol** 1989 Feb; 171(2):896–900
Kinetic parameters of the inhibition of red blood cell aminolevulinic acid dehydratase by triethyl lead and its reversal by dithiothreitol and zinc. Yagminas AP, et al. **J Biochem Toxicol** 1987 Summer;2:115–24
IIb group metal ions (Zn2+, Cd2+, Hg2+) stimulate glucose transport activity by post-insulin receptor kinase mechanism in rat adipocytes. Ezaki O. **J Biol Chem** 1989 Sep 25;264(27):16118–22
Zinc protects Escherichia coli against copper-mediated paraquat-induced damage. Korbashi P, et al. **J Biol Chem** 1989 May 25;264(15):8479–82
Poliovirus-induced modification of host cell RNA polymerase IIO is prevented by cycloheximide and zinc. Rangel LM, et al. **J Biol Chem** 1988 Dec 25; 263(36):19267–9
A new Zn2+-stimulated sphingomyelinase in fetal bovine serum. Spence MW, et al. **J Biol Chem** 1989 Apr 5; 264(10):5358–63
Effect of zinc(II) and other divalent cations on binding of 3,5,3'-triiodo-L-thyronine to nuclear receptors from cultured GC cells. Surks MI, et al. **J Biol Chem** 1989 Jun 15;264(17):9820–6
The XLR gene product defines a novel set of proteins stabilized in the nucleus by zinc ions. Garchon HJ, et al. **J Cell Biol** 1989 Mar;108(3):779–87
Zinc does not acutely suppress prolactin in normal or hyperprolactinemic women. Koppelman MC, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):215–8
Effect of oral zinc administration on prolactin and thymulin circulating levels in patients with chronic renal failure. Travaglini P, et al. **J Clin Endocrinol Metab** 1989 Jan; 68(1):186–90
Growth of Escherichia coli in whole and skim milk from endotoxin-induced mastitic quarters: in vitro effects of deferoxamine, zinc, and iron supplementation. Lohuis JA, et al. **J Dairy Sci** 1988 Oct;71(10):2772–81
Evidence for tissue specific alterations in Zn2+-induced conformational changes in fructose-bisphosphatase of senescent rats. Trigun SK, et al. **J Inorg Biochem** 1989 Apr;35(4):255–66
Studies of iron:zinc interactions in adult rats and the effect of iron fortification of two commercial infant weaning products on iron and zinc status of weanling rats. Fairweather-Tait SJ, et al. **J Nutr** 1989 Apr;119(4):599–606
The effect of dietary zinc status on biliary metal excretion of rats. Jaw S, et al. **J Nutr** 1988 Nov;118(11):1385–90
Excess dietary zinc decreases tissue alpha-tocopherol in chicks. Lü JX, et al. **J Nutr** 1988 Nov;118(11):1349–59
Preventive effects of zinc on cadmium-induced inhibition of alkaline phosphatase activity and mineralization activity in osteoblast-like cells, MC3T3-E1. Suzuki Y, et al. **J Pharmacobiodyn** 1989 Feb;12(2):94–9
Alteration in bone metabolism with increasing age: effects of zinc and vitamin D3 in aged rats. Yamaguchi M, et al. **J Pharmacobiodyn** 1989 Feb;12(2):67–73
Recovery of Chinese hamster cells following photosensitization by zinc tetrahydroxyphthalocyanine. Ben-Hur E, et al. **J Photochem Photobiol [B]** 1988 Sep; 2(2):243–52
Differential effect of Cu2+ and Zn2+ on the formation and further metabolism of catechol estrogen by rat liver microsomes. Jellinck PH, et al. **J Steroid Biochem** 1988 Dec;31(6):887–90
Poliovirus-associated protein kinase: destabilization of the virus capsid and stimulation of the phosphorylation reaction by Zn2+. Ratka M, et al. **J Virol** 1989 Sep; 63(9):3954–60
Effects of zinc and cholesterol/choleate on serum lipoproteins and the liver in rats. Cho CH, et al. **Life Sci** 1989;44(25):1929–36
Failure of zinc to prevent dysmorphogenesis of cultured rat conceptuses by anti-yolk sac antiserum. Marlow R, et al. **Life Sci** 1989;44(13):837–46
Zinc salts that may be effective against the AIDS virus HIV. Sergio W. **Med Hypotheses** 1988 Aug;26(4):251–3 (27 ref.)
Frequencies of micronuclei detected on Mytilus galloprovincialis by different staining techniques after treatment with zinc chloride. Majone F, et al. **Mutat Res** 1988 Nov-Dec;209(3-4):131–4
Effects of zinc on macromolecular synthesis and nuclear division during the yeast to mycelium transition in Sporothrix schenckii. Rodríguez-del Valle N. **Mycopathologia** 1989 Apr;106(1):23–9
The amino acid composition of the zinc-induced metallothionein isoforms in rat brain. Ebadi M, et al. **Neurochem Res** 1989 Jan;14(1):69–73
Histidine abolishes the inhibition by zinc of naloxone binding to opioid receptors in rat brain. Hanissian SH, et al. **Neuropharmacology** 1988 Nov;27(11):1145–9
Zinc ion enhances the blocking potency of synthetic analogs of spider toxin (JSTX) on the glutamate receptor. Kawai N, et al. **Neurosci Res** 1989 Apr;6(4):358–62
Zinc suppression of free radicals induced in cultures of rat hepatocytes by iron, t-butyl hydroperoxide, and 3-methylindole. Coppen DE, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):100–9
Zinc protects testicular injury induced by concurrent exposure to cadmium and lead in rats. Saxena DK, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):317–29
Studies of mutagenesis and neoplastic transformation by bivalent metal ions and ionizing radiation. Little JB, et al. **Teratogenesis Carcinog Mutagen** 1988;8(5):287–92
Role of zinc in protection against cadmium-induced toxicity in formation of embryonic chick bone in tissue culture. Kaji T, et al. **Toxicol Lett** 1988 Nov;44(1-2):219–27
Inhibitory effect of zinc on nickel subsulfide carcinogenesis in Fischer rats. Kasprzak KS, et al. **Toxicology** 1988 Nov 30;52(3):253–62
Effects of zinc on the distribution and toxicity of cadmium in isolated interstitial cells of the rat testis. Koizumi T, et al. **Toxicology** 1989 Jun 1;56(2):137–46
Urinary excretion of metallothionein-I and its degradation product in rats treated with cadmium, copper, zinc or mercury. Sato M, et al. **Toxicology** 1989 May 31;56(1):23–33
The influence of zinc and citrate on urease-induced urine crystallisation. Hedelin H, et al. **Urol Res** 1989;17(3):177–80
[Zinc and trauma] Cai DL.

Sheng Li Ko Hsueh Chin Chan 1988 Jul;19(3):260-3 (46 ref.) (Chi)
[Influence of zinc sulfate on myocardial slow response electrical activity and ouabain-induced oscillatory afterpotential] Ma X, et al. Yao Hsueh Hsueh Pao 1988 Jun;23(6):401-5 (Eng. Abstr.) (Chi)
[Spectral manifestations of the effect of Zn2+ ions on DNA complexes with distmycin] Andronikashvili EL, et al. Biofizika 1988 Sep-Oct;33(5):767-71 (Eng. Abstr.) (Rus)
[The biological action of highly dispersed metal powders] Glushchenko NN, et al. Izv Akad Nauk SSSR [Biol] 1989 May-Jun;(3):415-21 (Rus)
[Effect of copper, manganese and zinc on some causative agents of pyelonephritis in children] Lagutina LE, et al. Pediatriia 1988;(10):22-4 (Eng. Abstr.) (Rus)
[Changes in the activity of plasma renin and aldosterone induced by a pattern of increasing administration of zinc sulphate in normotensive individuals] Calero M, et al. Med Clin (Barc) 1989 May 20;92(19):729-32 (Eng. Abstr.) (Spa)

PHYSIOLOGY

Metabolism and homeostasis of zinc and copper. Girchev R, et al. Acta Physiol Pol 1988;39 Suppl 32:103-18
Identification of Zn2+-dependent and Mg2+/Triton X-100-dependent tyrosine protein kinases in ethylenediaminetetraacetate-treated P2 membrane fraction of monkey brain basal ganglia. Ramamoorthy S, et al. Arch Biochem Biophys 1989 Feb 15;269(1):148-55
Zinc: biochemistry, physiology, toxicology and clinical pathology. Vallee BL. Biofactors 1988 Jan;1(1):31-6 (39 ref.)
Electrical stability of erythrocytes in the presence of divalent cations. Tomov TC, et al. Biosci Rep 1988 Oct;8(5):421-6
Zinc-dependent low thymic hormone level in type I diabetes. Mocchegiani E, et al. Diabetes 1989 Jul;38(7):932-7
Modulation of excitatory synaptic transmission by glycine and zinc in cultures of mouse hippocampal neurons. Forsythe ID, et al. J Neurosci 1988 Oct;8(10):3733-41
The yeast regulatory protein ADR1 binds in a zinc-dependent manner to the upstream activating sequence of ADH2. Eisen A, et al. Mol Cell Biol 1988 Oct;8(10):4552-6
Role of zinc in lipid and fatty acid metabolism and in membranes. Cunnane SC. Prog Food Nutr Sci 1988; 12(2):151-88 (218 ref.)
[Role of zinc in immunoregulation and its therapeutic use in human pathology] Baldi E, et al. Clin Ter 1987 May 31;121(4):331-6 (26 ref.) (Eng. Abstr.) (Ita)
[Zinc and the immunologic system] Solé D, et al. Rev Paul Med 1988 Jul-Aug;106(4):225-30 (83 ref.) (Por)
[Zinc: a new element to be considered in hypertension (editorial)] Sampalo Lainz A, et al. Med Clin (Barc) 1989 Mar 25;92(11):415-7 (Spa)

POISONING

Sequential ultrastructural changes of the pancreas in zinc toxicosis in ducklings. Kazacos EA, et al. Am J Pathol 1989 Mar;134(3):581-95
Zinc-induced hemolytic anemia caused by ingestion of pennies by a pup. Latimer KS, et al. J Am Vet Med Assoc 1989 Jul 1;195(1):77-80
Zinc from oyster tissue as causative factor in mouse deaths in official bioassay for paralytic shellfish poison. McCulloch AW, et al. J Assoc Off Anal Chem 1989 Mar-Apr; 72(2):384-6
A hard day's knight. Zinc phosphide poisoning. Mack RB. N C Med J 1989 Jan;50(1):17-8
Comparison of the antidotal efficacy of polyamincarboxylic acids (CDTA and DTPA) with time after acute zinc poisoning. Llobet JM, et al. Vet Hum Toxicol 1989 Feb; 31(1):25-8
Zinc intoxication in a dog from the ingestion of copper-clad zinc pennies. Ogden L, et al. Vet Hum Toxicol 1988 Dec; 30(6):577-8

RADIATION EFFECTS

The quantitative investigation of infrared laser effects on the levels of copper and zinc in various tissues. Delilbaşi E, et al. Clin Phys Physiol Meas 1988 Nov;9(4):375-7

SECRETION

Studies in human lactation: secretion of zinc, copper, and manganese in human milk. Casey CE, et al. Am J Clin Nutr 1989 May;49(5):773-85

THERAPEUTIC USE

Zinc and diet for tinnitus. DeBartolo HM Jr. Am J Otol 1989 May;10(3):256
Zinc oxide tape: a useful dressing for the recalcitrant finger-tip and soft-tissue injury. Hughes G, et al. Arch Emerg Med 1988 Dec;5(4):223-7
The antiinflammatory and immunosuppressive activity of HEPIDA-Ca and HEPIDA-Zn complex compounds. Samochocka K, et al. Arch Immunol Ther Exp (Warsz) 1988;36(3):377-80
Protective effect of zinc against hepatotoxic agents in the rat liver slice system: role of metallothionein. Wormser U, et al. Arch Toxicol Suppl 1989;13:316-8
Pregnancy in a woman with Wilson's disease treated with zinc. Lao TT, et al. Asia Oceania J Obstet Gynaecol 1988 Jun;14(2):167-9
Effect of foot paring of sheep affected with footrot on response to zinc sulphate/sodium lauryl sulphate foot bathing treatment. Casey RH, et al. Aust Vet J 1988 Aug; 65(8):258-9
Fetal alcohol syndrome in rats: conditions for improvement of ethanol effects on fetal cerebral development with supplementary agents. Tanaka H, et al. Biol Neonate 1988; 54(6):320-9
Zinc chloride spray--magnesium hydroxide ointment dual topical regimen in the treatment of obstetric and gynecologic incisional wounds. Pastorfide GB, et al. Clin Ther 1989 Mar-Apr;11(2):258-63
Zinc compounds, a new treatment in peptic ulcer. Escolar G, et al. Drugs Exp Clin Res 1989;15(2):83-9 (30 ref.)
Wilson's disease in south India and experience with zinc therapy. Murthy BS, et al. J Assoc Physicians India 1988 Jul;36(7):417-9
An evaluation of 6 dentifrice formulations for supragingival anticalculus and antiplaque activity. Disney JA, et al. J Clin Periodontol 1989 Sep;16(8):525-8
Thiamine and zinc in prevention or therapy of lead intoxication. Flora SJ, et al. J Int Med Res 1989 Jan-Feb; 17(1):68-75
Infection and immunity in Down syndrome: a trial of long-term low oral doses of zinc. Lockitch G, et al. J Pediatr 1989 May;114(5):781-7
A controlled trial on utility of oral zinc supplementation in acute dehydrating diarrhea in infants. Sachdev HP, et al. J Pediatr Gastroenterol Nutr 1988 Nov-Dec;7(6):877-81
Diarrheal disease and zinc supplementation [editorial] Wapnir RA. J Pediatr Gastroenterol Nutr 1988 Nov-Dec; 7(6):793-5
Clinical effect of a sanguinaria dentifrice on plaque and gingivitis in adults. Mallatt ME, et al. J Periodontol 1989 Feb;60(2):91-5
Treatment of enteric hyperoxaluria with calcium-containing organic marine hydrocolloid. Lindsjö M, et al. Lancet 1989 Sep 23;2(8665):701-4
Zinc compounds as therapeutic agents in peptic ulcer. Baños JE, et al. Methods Find Exp Clin Pharmacol 1989;11 Suppl 1:117-22 (39 ref.)
Treatment of Wilson's disease. Brewer GJ, et al. Semin Neurol 1987 Jun;7(2):209-20 (53 ref.)
[Antagonistic role played by the trace elements selenium, zinc and copper on the cardiotoxicity induced by adriamycin] Yang XP. Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1988 Jun; 16(3):164-5 (Chi)
[Observations by quantitative electron microscopy of the action of zinc in protecting the liver from cadmium damage] Cheng S. Chung Hua Yu Fang I Hsueh Tsa Chih 1988 May; 22(3):161-3 (Eng. Abstr.) (Chi)
[Treatment of pinworms (letter)] Lomholt G. Ugeskr Laeger 1989 Aug 28;151(35):2216 (Dan)
[Value of the Practitioner's Ambulatory Treatment in treating leg ulcers] Kalis B, et al. Phlebologie 1989 Jan-Mar; 42(1):169-73 (Fre)
[The effectiveness of zinc chloride mouthwashes on leukocyte activity in sulcus fluid and on the clinical parameters in experimentally induced gingivitis] Noack B, et al. Zahn Mund Kieferheilkd 1989;77(3):256-61 (Eng. Abstr.) (Ger)
[Treatment of Wilson's disease with Zincteral] Kuczyńska-Zardzewiały A, et al. Neurol Neurochir Pol 1988 May-Jun;22(3):211-5 (Eng. Abstr.) (Pol)
[A decrease in the acute toxicity of ethanol produced by zinc sulfate] Kampov-Polevoi AB, et al. Biull Eksp Biol Med 1989 Mar;107(3):317-8 (Eng. Abstr.) (Rus)
[Effectiveness of treating patients with chronic pyoderma with antibiotics combined with zinc oxide] Chebotarev KS, et al. Voen Med Zh 1989 May;(5):67 (Rus)

TOXICITY

Retinal toxicity of intravitreal ethyldeoxyuridine and zinc. Nikoleit JR, et al. Ann Ophthalmol 1988 Oct;20(10):385-7
Toxicity and metal speciation relationships for Daphnia magna exposed to brass powder. Hardy JT, et al. Arch Environ Contam Toxicol 1988 Sep;17(5):575-81
Lethality of trace metal mixtures to American flagfish in neutralized acid water. Hutchinson NJ, et al. Arch Environ Contam Toxicol 1989 Jan-Apr;18(1-2):249-54
Pulmonary clearance and toxicity of zinc oxide instilled into the rat lung. Hirano S, et al. Arch Toxicol 1989;63(4):336-42
The repeated dose toxicity of a zinc oxide/hexachloroethane smoke. Marrs TC, et al. Arch Toxicol 1988;62(2-3):123-32
Subchronic oral toxicity of zinc in rats. Llobet JM, et al. Bull Environ Contam Toxicol 1988 Jul;41(1):36-43
Zinc treatment of the digestive gland of the slug Arion ater L. 2. Sublethal effects at the histological level. Recio A, et al. Bull Environ Contam Toxicol 1988 Dec;41(6):865-71
Toxicity of heavy metals to early life stages of Daphnia magna. Bodar CW, et al. Ecotoxicol Environ Safety 1989 Jun;17(3):333-8
Effects of metal ions on cyprinid fish immune response: in vitro effects of Zn2+ and Mn2+ on the mitogenic response of carp pronephros lymphocytes. Ghanmi Z, et al. Ecotoxicol Environ Safety 1989 Apr;17(2):183-9
Effects of natural exposure to copper and zinc on egg size and larval copper tolerance in white sucker (Catostomus commersoni). Munkittrick KR, et al. Ecotoxicol Environ Safety 1989 Aug;18(1):15-26
Responses of rat alveolar macrophages to inhaled brass powder. Anderson RS, et al. J Appl Toxicol 1988 Dec; 8(6):389-93
Effects of metal cations on pituitary hormone secretion in vitro. Cooper RL, et al. J Biochem Toxicol 1987 Fall-Winter;2:241-9
Toxicity and character of the effect of some zinc compounds. Shabalina LP, et al. J Hyg Epidemiol Microbiol Immunol 1988;32(4):397-405
Changes in pulmonary lavage fluid of guinea pigs exposed to ultrafine zinc oxide with adsorbed sulfuric acid. Conner MW, et al. J Toxicol Environ Health 1989;26(2):223-34
Genotoxicity of zinc in 4 short-term mutagenicity assays. Thompson ED, et al. Mutat Res 1989 Jul;223(3):267-72
Changes in epilithic communities due to individual and combined treatments of zinc and snail grazing in stream mesocosms. Genter RB, et al. Toxicol Ind Health 1988 Jun; 4(2):185-201
The biochemical and pathological changes produced by the intratracheal instillation of certain components of zinc-hexachloroethane smoke. Richards RJ, et al. Toxicology 1989 Jan;54(1):79-88
The removal of zinc from the mouse by polyamincarboxylic acids (CDTA and DTPA) following semichronic zinc ingestion. Domingo JL, et al. Vet Hum Toxicol 1988 Dec; 30(6):524-7
Indicators of lead, zinc and cadmium exposure in cattle: II. Controlled feeding and recovery. Mehennaoui S, et al. Vet Hum Toxicol 1988 Dec;30(6):550-5
Indicators of lead, zinc and cadmium exposure in cattle. I. Results in a polluted area. Milhaud GE, et al. Vet Hum Toxicol 1988 Dec;30(6):513-7
A pathologic and toxicologic evaluation of veal calves fed large amounts of zinc. Graham TW, et al. Vet Pathol 1988 Nov;25(6):484-91

URINE

Ratio of post-prostatic massage urinary zinc concentration to initial urinary zinc concentration. An improved method of assessing prostatic function. McCallum KA, et al. Br J Urol 1988 Dec;62(6):565-70
Hyperzincuria and hypozincemia in patients treated with cisplatin. Sweeney JD, et al. Cancer 1989 Jun 1; 63(11):2093-5
Bladder catheters and zinc contamination of urine. de Haan KE, et al. Clin Chem 1989 May;35(5):888
Hyperzincuria in IDDM women. Relationship to measures of glycemic control, renal function, and tissue catabolism. Heise CC, et al. Diabetes Care 1988 Nov-Dec;11(10):780-6
Nutrient interactions with total parenteral nutrition: effect of histidine and cysteine intake on urinary zinc excretion. Zlotkin SH. J Pediatr 1989 May;114(5):859-64
Urinary zinc and metallothionein in children with spina bifida. Zimmerman AW, et al. Pediatr Neurol 1985 Jan-Feb;1(1):23-7

ZINC OXIDE see under ZINC

ZINC OXIDE-EUGENOL CEMENT

Cement spacing for the one-step post-core and crown. A new laboratory technique. Darveniza M, et al. Aust Dent J 1989 Feb;34(1):52-9
A comparison of compressive strengths of six cavity base materials. Draheim RN, et al. J Prosthet Dent 1988 Sep; 60(3):317-9

PHARMACOLOGY

Rate of formation of tertiary dentin in dogs' teeth in response to lining materials. Ivanovic V, et al. Oral Surg Oral Med Oral Pathol 1989 Jun;67(6):684-8

ZINC PHOSPHATE CEMENT

Strength properties of three zinc phosphate cements mixed to two different consistencies. Bruce WL, et al. Aust Dent J 1989 Apr;34(2):132-5
Kinetic studies on improved phosphate dental cement: the measurement of some improved dental cements containing phosphate polymers by an electric conductance method. Wiegman-Ho L, et al. J Dent 1989 Aug;17(4):199-202
The effect of seating pressure and powder/liquid ratio of zinc phosphate cement on the retention of crowns. Karipidis A, et al. J Oral Rehabil 1988 Jul;15(4):333-7

ADVERSE EFFECTS

Periodontal health as related to preformed crowns: report of case. Zyskind K. ASDC J Dent Child 1989 Sep-Oct; 56(5):385-7

PHARMACOLOGY

[Materials properties of zinc phosphate cements after delayed setting on refrigerated slabs] Jost-Brinkmann PG, et al. Fortschr Kieferorthop 1989 Feb;50(1):1-11 (Eng. Abstr.) (Ger)

ZINC RADIOISOTOPES

PHARMACOKINETICS

Zinc absorption in humans determined using in vivo tracer studies and kinetic analysis. Wastney ME.
Adv Exp Med Biol 1989;249:13–25

ZINEB see under **THIOCARBAMATES**

ZIRAM see under **THIOCARBAMATES**

ZIRCONIUM

Mechanical properties and short-term in-vivo evaluation of yttrium-oxide-partially-stabilized zirconia. Christel P, et al. **J Biomed Mater Res** 1989 Jan;23(1):45–61

Structure of superconducting thin films of YBa2Cu3O7-x grown on SrTiO3 and cubic zirconia. Tietz LA, et al.
J Electron Microsc Tech 1988 Mar;8(3):263–72

Magnetic field emission gun with zirconiated emitter. Troyon M. **J Electron Microsc Tech** 1989 Mar;11(3):191–5

[Zirconium oxide as a substitute for alumina oxide in hip joint prosthesis: in vitro evaluation of wear and tear of such bioceramic materials] Sudanese A, et al.
Chir Organi Mov 1988 Jul–Sep;73(3):195–8 (Eng. Abstr.) **(Ita)**

TOXICITY

[Experimental study on cytotoxicity of zirconium compounds in vitro (1)] Sima S, et al. **Nippon Eiseigaku Zasshi** 1988 Oct;43(4):895–900 (Eng. Abstr.) **(Jpn)**

ZOLAZEPAM see under **AZEPINES**

ZOLIMIDINE see under **PYRIDINES**

ZOLLINGER-ELLISON SYNDROME

see related
NEOPLASMS, MULTIPLE ENDOCRINE

Diagnosis and treatment of Zollinger–Ellison syndrome. Mignon M, et al. **Baillieres Clin Gastroenterol** 1988 Jul; 2(3):677–98 (75 ref.)

[A case of malignant gastrinoma of the pancreas] Ben Younes AB, et al. **Tunis Med** 1987 Nov;65(11):723–8 (Eng. Abstr.) **(Fre)**

[Diagnostic and therapeutic possibilities in the Zollinger–Ellison syndrome] Moravec R, et al.
Cas Lek Cesk 1986 Oct 31;125(44):1345–8 (Eng. Abstr.) **(Slo)**

COMPLICATIONS

Hyperprealbuminemia, euthyroid hyperthyroxinemia, Zollinger–Ellison–like syndrome and hypercorticism in a pancreatic endocrine tumour. Maye P, et al.
Acta Endocrinol (Copenh) 1989 Jan;120(1):87–91

DIAGNOSIS

Diagnosis and management of Zollinger–Ellison syndrome. Maton PN, et al. **Endocrinol Metab Clin North Am** 1989 Jun;18(2):519–43 (101 ref.)

CT and MR imaging of advanced Zollinger–Ellison syndrome. Tjon A Tham RT, et al.
J Comput Assist Tomogr 1989 Sep–Oct;13(5):821–8

Diagnostic evaluation: gastric acid secretion and pH. Rune SJ. **Scand J Gastroenterol Suppl** 1988;155:37–43

[Zollinger–Ellison syndrome] Savich LV. **Vestn Khir** 1989 Mar;142(3):50 **(Rus)**

DRUG THERAPY

Long-term efficacy and safety of omeprazole in patients with Zollinger–Ellison syndrome: a prospective study. Maton PN, et al. **Gastroenterology** 1989 Oct;97(4):827–36

Parenteral antisecretory drug therapy in patients with Zollinger–Ellison syndrome. Saeed ZA, et al.
Gastroenterology 1989 Jun;96(6):1393–402

Long-acting somatostatin analog controls acid and gastrin secretion in benign, not in malignant, Zollinger–Ellison syndrome. Bauer FE, et al. **J Clin Gastroenterol** 1989 Jun; 11(3):282–6

Gastric carcinoid tumours in patients with Zollinger–Ellison syndrome on long-term omeprazole [letter] Goldfain D, et al. **Lancet** 1989 Apr 8;1(8641):776–7

Management of Zollinger–Ellison syndrome with gastric antisecretory drugs. Bonfils S, et al.
Scand J Gastroenterol Suppl 1988;146:111–20 (26 ref.)

[A case of Zollinger–Ellison syndrome successfully treated with an H+–K+ ATPase inhibitor] Sakakibara T, et al.
Gan No Rinsho 1989 Sep;35(10):1171–5 (Eng. Abstr.) **(Jpn)**

[Management of the hypersecretion of acid in Zollinger–Ellison syndrome (ZES) (letter)] Varas MJ, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):419–20 **(Spa)**

ETIOLOGY

A foregut carcinoid tumor causing Zollinger–Ellison syndrome. Werbel GB, et al. **Arch Surg** 1989 Mar; 124(3):381–4

Ovarian carcinoma as a cause of Zollinger–Ellison syndrome. Natural history, secretory products, and response to provocative tests. Maton PN, et al. **Gastroenterology** 1989 Aug;97(2):468–71

Multiple endocrine neoplasia type II with Zollinger–Ellison syndrome caused by a solitary pancreatic gastrinoma. Maton PN, et al. **JAMA** 1989 Jul 28;262(4):535–7

Gastrin-producing ovarian mucinous cystadenomas: a cause of the Zollinger–Ellison syndrome. Primrose JN, et al.
Surgery 1988 Nov;104(5):830–3

[Zollinger–Ellison syndrome of ovarian origin. Apropos of a case with a review of the literature] de Broucker F, et al. **J Radiol** 1989 Feb;70(2):111–4 (28 ref.) (Eng. Abstr.) **(Fre)**

HISTORY

Primary peptic ulcerations of the jejunum associated with islet cell tumors of the pancreas. 1955 [classical article] Zollinger RM, et al. **CA** 1989 Jul–Aug;39(4):231–47

METABOLISM

Gastric luminal somatostatin secretion of normals and patients with pernicious anemia and with Zollinger–Ellison syndrome. Ertan A, et al. **Dig Dis Sci** 1988 Dec; 33(12):1596–600

Mechanism for increase of gastrin release by secretin in Zollinger–Ellison syndrome. Chiba T, et al.
Gastroenterology 1989 Jun;96(6):1439–44

A prospective study of perioperative and postoperative control of acid hypersecretion in patients with Zollinger–Ellison syndrome undergoing gastrinoma resection. Fraker DL, et al. **Surgery** 1988 Dec; 104(6):1054–63

PATHOLOGY

Gastrinoma in a mesenteric lymph node. Kitagawa M, et al. **Am J Gastroenterol** 1989 Jun;84(6):660–2 (16 ref.)

Gastric endocrine cell behavior in Zollinger–Ellison patients upon long-term potent antisecretory treatment. Lehy T, et al. **Gastroenterology** 1989 Apr;96(4):1029–40

Linear erosions on Kerckring's folds may be diagnostic of Zollinger–Ellison syndrome. Matsui T, et al.
J Clin Gastroenterol 1989 Jun;11(3):278–81

Establishment of a human gastrinoma in nude mice. Upp JR Jr, et al. **Surgery** 1988 Dec;104(6):1037–45

PSYCHOLOGY

Munchhausen Zollinger–Ellison syndrome [letter] Daly MJ, et al. **Lancet** 1989 Apr 15;1(8642):853

RADIOGRAPHY

Thymic carcinoid in a case of Zollinger Ellison syndrome. A case report. Jose CC, et al. **Australas Radiol** 1988 Aug; 32(3):408–9

SECRETION

Ulcerogenic tumor syndrome of the pancreas associated with a nongastrin acid secretagogue. Chey WY, et al.
Ann Surg 1989 Aug;210(2):139–49

SURGERY

Microgastrinomas of the duodenum. A cause of failed operations for the Zollinger–Ellison syndrome. Thompson NW, et al. **Ann Surg** 1989 Apr;209(4):396–404

Pre-treatment with octreotide as an adjuvant to surgical resection in Zollinger–Ellison syndrome. Kingsnorth AN, et al. **Br J Surg** 1989 Jan;76(1):75–6

Zollinger–Ellison syndrome: a surgical perspective [letter] Passaro E Jr. **Gastroenterology** 1988 Dec;95(6):1699–700

The progressive Zollinger–Ellison syndrome in multiple endocrine neoplasia. Luttwak EM, et al.
Surg Gynecol Obstet 1988 Nov;167(5):415–9

[The treatment of Zollinger–Ellison syndrome] Steegmüller KW. **Zentralbl Chir** 1989;114(9):603–5 **(Ger)**

[Principle of resection of gastrinoma] Imamura M.
Nippon Geka Hokan 1988 Jul 1;57(4):249–50 **(Jpn)**

[Resection of the acid-producing portion of the stomach as a method of treating Zollinger–Ellison syndrome] Sidorenko VD, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):89–91 **(Rus)**

[Zollinger–Ellison syndrome in a child] Ianin EL, et al.
Vestn Khir 1989 Mar;142(3):72 **(Rus)**

[Diagnosis and treatment of Zollinger–Ellison syndrome] Nechal AI, et al. **Vestn Khir** 1988 Dec;141(12):3–10 (Eng. Abstr.) **(Rus)**

VETERINARY

Zollinger–Ellison syndrome in a cat. van der Gaag I, et al. **Vet Q** 1988 Jul;10(3):151–5

ZONA see **HERPES ZOSTER**

ZONA FASCICULATA

CYTOLOGY

Isolation and characterisation of calcineurin from adrenal cell cytoskeleton: identification of substrates for Ca2+-calmodulin-dependent phosphatase activity.
Papadopoulos V, et al. **Mol Cell Endocrinol** 1989 May; 63(1–2):23–38

DRUG EFFECTS

Effects of mevinolin, an inhibitor of cholesterol synthesis, on the morphological and functional responses of rat adrenal zona fasciculata to a prolonged treatment with 4-aminopyrazolo-pyrimidine. Mazzocchi G, et al.
Anat Rec 1988 Jul;221(3):700–6

METABOLISM

Immunocytochemical localization of ACTH-like immunoreactivity in rat adrenal glomerulosa and fasciculata cells. Garcia-Caballero T, et al. **Histochemistry** 1989; 91(3):205–12

Calcium stimulates steroidogenesis in permeabilized bovine adrenal cortical cells. Capponi AM, et al. **J Biol Chem** 1988 Nov 5;263(31):16113–7

Lipoxygenase products as common intermediates in cyclic AMP-dependent and -independent adrenal steroidogenesis in rats. Solano AR, et al. **J Mol Endocrinol** 1988 Sep; 1(2):147–54

Identification of des-(Gly-Ile)-endozepine as an effector of corticotropin-dependent adrenal steroidogenesis: stimulation of cholesterol delivery is mediated by the peripheral benzodiazepine receptor. Besman MJ, et al.
Proc Natl Acad Sci U S A 1989 Jul;86(13):4897–901

PATHOLOGY

A morphometric study of the reversal of ACTH-induced hypertrophy of rat adrenocortical cells after cessation of treatment. Rebuffat P, et al. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):73–81

Effects of streptozotocin-induced experimental diabetes on the morphology and function of the zona fasciculata of rat adrenal cortex. Rebuffat P, et al. **Virchows Arch [B]** 1988;56(1):13–9

PHYSIOLOGY

Angiotensin II-stimulated cortisol secretion is mediated by a hormone-sensitive phospholipase C in bovine adrenal fasciculata/reticularis cells. Bird IM, et al.
Mol Cell Endocrinol 1989 Jun;64(1):45–53

ULTRASTRUCTURE

Characterization of the steroidogenic responsiveness and ultrastructure of purified zona fasciculata/reticularis cells from bovine adrenal cortex before and after primary culture. Williams BC, et al. **J Endocrinol** 1989 May; 121(2):317–24

ZONA GLOMERULOSA

ANALYSIS

Quantitative in vitro autoradiographic characterization of [125I]angiotensin III binding sites in rat adrenal gland. Himeno A, et al. **Regul Pept** 1988 Nov;23(2):127–33

CYTOLOGY

Specific effects of agonists of the calcium messenger system on secretion of 'late-pathway' steroid products by intact tissue and dispersed cells of the rat adrenal zona glomerulosa. Vinson GP, et al. **J Mol Endocrinol** 1989 Mar; 2(2):157–65

Adrenocorticotropic hormone inhibits angiotensin II-stimulated inositol phosphate accumulation in rat adrenal glomerulosa cells. Woodcock EA.
Mol Cell Endocrinol 1989 May;63(1–2):247–53

DRUG EFFECTS

Further studies on the involvement of dopamine and somatostatin in the inhibitory control of the growth and steroidogenic capacity of rat adrenal zona glomerulosa. Rebuffat P, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):73–81

Excitation-secretion coupling: involvement of potassium channels in ACTH-stimulated rat adrenocortical cells. Gallo-Payet N, et al. **J Endocrinol** 1989 Mar;120(3):409–21

[Morphometric characteristics of the glomerular zone—reparative processes after the administration of detergent] Novakov A, et al. **Med Pregl** 1989;42(1–2):29–32 (Eng. Abstr.) **(Ser)**

ENZYMOLOGY

Subcellular distribution of protein kinase C in rat adrenal glomerulosa cells. Farago A, et al.
Biochem Biophys Res Commun 1988 Oct 31;156(2):628–33

Isolation of aldosterone synthase cytochrome P-450 from zona glomerulosa mitochondria of rat adrenal cortex. Ogishima T, et al. **J Biol Chem** 1989 Jul 5;264(19):10935–8

Elongation factor 2 as the major substrate for Ca2+/calmodulin-dependent protein kinase in rat adrenal glomerulosa cells. Kigoshi T, et al. **J Steroid Biochem** 1989 Mar;32(3):381–5

[The effect of detergents on the histoenzyme characteristics of the adrenal glomerular zone] Devečerski V, et al.
Med Pregl 1988;41(5–6):181–8 (Eng. Abstr.) **(Ser)**

METABOLISM

Effects of heparin treatments in vivo and in vitro on adrenal angiotensin II receptors and angiotensin II–induced aldosterone production in rats. Azukizawa S, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):367–72

Effects of alpha–human atrial natriuretic polypeptide, sodium nitroprusside and dibutyryl cyclic GMP on aldosterone production in bovine zona glomerulosa cells. Okamoto M. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):358–66

Potassium–induced aldosterone biosynthesis in cultured rat zona glomerulosa cells. Müller J, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E475–82

Calcium response of single adrenal glomerulosa cells to external potassium. Quinn SJ, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E488–95

Inositol polyphosphate production and regulation of cytosolic calcium during the biphasic activation of adrenal glomerulosa cells by angiotensin II. Balla T, et al. **Arch Biochem Biophys** 1989 Apr;270(1):398–403

ACTH stimulates turnover of the phosphatidylinositol–glycan. Cozza EN, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):585–9

Atrial natriuretic factor inhibits angiotensin–induced aldosterone secretion: not through cGMP or interference with phospholipase C. Ganguly A, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):148–54

Metabolism of inositol–1,3,4,6–tetrakisphosphate to inositol pentakisphosphate in adrenal glomerulosa cells. Hunyady L, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1247–52

Na–Ca exchanger as a calcium influx pathway in adrenal glomerulosa cells. Kojima I, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1005–12

Diacylglycerol provides arachidonic acid for lipoxygenase products that mediate angiotensin II–induced aldosterone synthesis. Natarajan R, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):717–24

Topographical characterization of the domain structure of the bovine adrenal atrial natriuretic factor R1 receptor. Liu B, et al. **Biochemistry** 1989 Jun 27;28(13):5599–605

Atrial natriuretic factor R1 receptor from bovine adrenal zona glomerulosa: purification, characterization, and modulation by amiloride. Meloche S, et al. **Biochemistry** 1988 Oct 18;27(21):8151–8

Activation of dihydropyridine–sensitive calcium channels and biphasic cytosolic calcium responses by angiotensin II in rat adrenal glomerulosa cells. Hausdorff WP, et al. **Endocrinology** 1988 Dec;123(6):2818–26

Regulation of aldosterone biosynthesis by Na+/H+ antiport: relationships between intracellular pH and angiotensin II. Horiuchi T, et al. **Endocrinology** 1989 Apr; 124(4):1925–31

Effects of dibutyryl adenosine 3',5'–monophosphate, angiotensin II, and atrial natriuretic factor on phosphorylation of a 17,600–dalton protein in adrenal glomerulosa cells. Takagi M, et al. **Endocrinology** 1988 Nov;123(5):2419–23

Immunocytochemical localization of ACTH–like immunoreactivity in rat adrenal glomerulosa and fasciculata cells. Garcia–Caballero T, et al. **Histochemistry** 1989; 91(3):205–12

Agonist–induced regulation of inositol tetrakisphosphate isomers and inositol pentakisphosphate in adrenal glomerulosa cells. Balla T, et al. **J Biol Chem** 1989 Aug 15;264(23):13605–11

Structures and metabolism of inositol tetrakisphosphates and inositol pentakisphosphate in bovine adrenal glomerulosa cells. Balla T, et al. **J Biol Chem** 1989 Jun 5;264(16):9386–90

Calcium stimulates steroidogenesis in permeabilized bovine adrenal cortical cells. Capponi AM, et al. **J Biol Chem** 1988 Nov 5;263(31):16113–7

Nitrendipine block of calcium channel currents in vascular smooth muscle and adrenal glomerulosa cells. McCarthy RT, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S98–101

Endothelin binding to cultured calf adrenal zona glomerulosa cells and stimulation of aldosterone secretion. Cozza EN, et al. **J Clin Invest** 1989 Sep;84(3):1032–5

Cytosolic free calcium oscillates in single bovine adrenal glomerulosa cells in response to angiotensin II stimulation. Johnson EI, et al. **J Endocrinol** 1989 Jul;122(1):391–402

Effects of cholesterol and lipoproteins on aldosterone secretion by bovine zona glomerulosa cells. Simpson HD, et al. **J Endocrinol** 1989 Apr;121(1):125–31

Angiotensin II and potassium activate different calcium entry mechanisms in rat adrenal glomerulosa cells. Spät A, et al. **J Endocrinol** 1989 Jul;122(1):361–70

Effect of sodium intake on phosphoinositides and inositol trisphosphate response to angiotensin II, K+ and ACTH in rat glomerulosa cells. Underwood RH, et al. **J Endocrinol** 1989 Jul;122(1):371–7

Lipoxygenase products as common intermediates in cyclic AMP–dependent and –independent adrenal steroidogenesis in rats. Solano AR, et al. **J Mol Endocrinol** 1988 Sep; 1(2):147–54

Dopamine inhibition of potassium–stimulated aldosterone biosynthesis in bovine adrenal zona glomerulosa cells. Fitzpatrick SC, et al. **J Steroid Biochem** 1989 May; 32(5):715–8

Magnesium ion: a possible physiological regulator of aldosterone production. Atarashi K, et al. **Life Sci** 1989; 44(20):1483–9

Angiotensin II–stimulated changes in calcium metabolism in cultured glomerulosa cells. Kramer RE. **Mol Cell Endocrinol** 1988 Dec;60(2–3):199–210

Localization of neuropeptide Y binding sites in the zona glomerulosa of the bovine adrenal gland. Torda T, et al. **Neuroendocrinology** 1988 Aug;48(2):207–10

Angiotensin II differentially affects cyclic AMP formation in intact adrenal glomerulosa cells and in purified membrane preparations. Missale C, et al. **Regul Pept** 1989 Feb;24(2):167–78

[Isolated effect of potassium on zona glomerulosa of the human adrenal gland] López JM, et al. **Rev Med Chil** 1988 Jan;116(1):3–6 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Endothelin stimulates aldosterone biosynthesis by dispersed rabbit adreno–capsular cells. Morishita R, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):628–32

Effect of atrial natriuretic factor (ANF) on the secretory activity of zona glomerulosa in sodium–restricted rats. Nussdorfer GG, et al. **Endocr Res** 1988–89;14(4):293–303

Three components of the calcium current in cultured glomerulosa cells from rat adrenal gland. Durroux T, et al. **J Physiol (Lond)** 1988 Oct;404:713–29

SECRETION

Effect of ANP on sustained aldosterone secretion stimulated by angiotensin II. Isales CM, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 1):C89–95

Effects of substance P on the rat adrenal zona glomerulosa in vivo. Nussdorfer GG, et al. **Peptides** 1988 Sep–Oct; 9(5):1145–9

ULTRASTRUCTURE

"Parallel array" of tubules with pipe–like structure in the mitochondria of glomerulosa cells of adrenal cortex. Ultrastructural and freeze–fracture replica studies. Kawai K, et al. **Exp Pathol** 1989;36(4):193–200

ZONA PELLUCIDA see under OVUM

ZONA RETICULARIS

PHYSIOLOGY

Angiotensin II–stimulated cortisol secretion is mediated by a hormone–sensitive phospholipase C in bovine adrenal fasciculata/reticularis cells. Bird IM, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):45–53

ULTRASTRUCTURE

Characterization of the steroidogenic responsiveness and ultrastructure of purified zona fasciculata/reticularis cells from bovine adrenal cortex before and after primary culture. Williams BC, et al. **J Endocrinol** 1989 May; 121(2):317–24

ZONOGRAPHY see TOMOGRAPHY, X–RAY

ZOOFLAGELLATA see MASTIGOPHORA

ZOOGLOEA

ENZYMOLOGY

Mechanistic studies on beta–ketoacyl thiolase from Zoogloea ramigera: identification of the active–site nucleophile as Cys89, its mutation to Ser89, and kinetic and thermodynamic characterization of wild–type and mutant enzymes. Thompson S, et al. **Biochemistry** 1989 Jul 11; 28(14):5735–42

GENETICS

Fine structural analysis of the Zoogloea ramigera phbA–phbB locus encoding beta–ketothiolase and acetoacetyl–CoA reductase: nucleotide sequence of phbB. Peoples OP, et al. **Mol Microbiol** 1989 Mar;3(3):349–57

ZOOLOGY

see related
ANIMALS

Taxonomists and stability [letter] Mayr E. **Nature** 1989 Jun 29;339(6227):654

HISTORY

[Endocrinology from the viewpoint of the zoologist] Ebling FJ. **Z Gesamte Inn Med** 1988 Aug 1;43(15):434–6 (Eng. Abstr.) **(Ger)**

METHODS

Black and white photography of preserved fish specimens. Strange A. **J Biol Photogr** 1988 Oct;56(4):145–8

ZOOMASTIGINA see MASTIGOPHORA

ZOONOSES

Leprosy as a zoonosis: an update. Walsh GP, et al. **Acta Leprol (Geneve)** 1988 Jan–Mar;(108):51–60 (40 ref.)

Caught in the causal web: analytical problems in the epidemiology of zoonoses. Waltner–Toews D. **Acta Vet Scand Suppl** 1988;84:296–8 (4 ref.)

Zoonotic Onchocerca in a Japanese child. Beaver PC, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):298–300

Cryptosporidiosis: another source [letter] Casemore D. **BMJ** 1989 Mar 18;298(6675):750–1

Concomitant zoonotic infections with ovine Chlamydia and 'Q' fever in pregnancy: clinical features, diagnosis, management and public health implications. Case report [letter] **Br J Obstet Gynaecol** 1988 Sep;95(9):951–4

Schistosoma margrebowiei human patent zoonotic schistosomiasis imported from Zambia. Giboda M, et al. **Bull Soc Pathol Exot Filiales** 1988;81(4):749–51

Case reports of Dipylidium caninum; a pet associated infection. Wijesundera MD, et al. **Ceylon Med J** 1989 Mar; 34(1):27–30

Cat scratch disease. August JR. **J Am Vet Med Assoc** 1988 Aug 1;193(3):312–5 (16 ref.)

Ehrlichiosis. Eng TR, et al. **J Am Vet Med Assoc** 1989 Feb 15;194(4):497–500

Tularemia. Rohrbach BW. **J Am Vet Med Assoc** 1988 Aug 15;193(4):428–32

Zoonoses and AIDS in human beings [letter] Torres–Anjel MJ. **J Am Vet Med Assoc** 1989 Jan 15;194(2):165

Systemic mycoses. Wolf AM. **J Am Vet Med Assoc** 1989 May 1;194(9):1192–6 (47 ref.)

Dirofilariasis. Wright JC, et al. **J Am Vet Med Assoc** 1989 Mar 1;194(5):644–8

Topical zoonoses. Farrington M, et al. **J Infect** 1989 Mar; 18(2):105–10 (32 ref.)

Sickness absence in the freezing industry. Turner WE. **N Z Med J** 1988 Oct 26;101(856 Pt 1):663–6

Transmission of Alpers' disease (chronic progressive encephalopathy) produces experimental Creutzfeldt–Jakob disease in hamsters. Manuelidis EE, et al. **Neurology** 1989 May;39(5):615–21

Dysgonic Fermenter–type 2: an emerging zoonosis. Report of two cases and review. Zumla A, et al. **Q J Med** 1988 Sep;68(257):741–52 (38 ref.)

Zoonotic aspects of giardiasis: a review. Kasprzak W, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):101–8 (55 ref.)

Current problems in zoonosis research. Mayr A, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):3–9 (16 ref.)

[Malagasy zoonoses] Ribot JJ, et al. **Rev Elev Med Vet Pays Trop** 1988;41(1):9–22 (65 ref.) (Eng. Abstr.) **(Fre)**

[Systemic infection caused by Streptococcus suis] Kaufhold A, et al. **Dtsch Med Wochenschr** 1988 Oct 21; 113(42):1642–3 (Eng. Abstr.) **(Ger)**

[Hygiene problems with ornamental birds in the household] Siegmann O, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4–6):527–32 (7 ref.) (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Paediatric campylobacter diarrhoea from household exposure to live chickens in Lima, Peru. Grados O, et al. **Bull WHO** 1988;66(3):369–74

[Hydatidosis: epidemiological study in the eastern region of the province of Formosa] Monzón CM, et al. **Rev Argent Microbiol** 1984;16(3):165–8 (Eng. Abstr.) **(Spa)**

HISTORY

[Teachings of the Academician E. N. Pavlovskiĭ on the endemic focus of infectious and parasitic diseases (on the 50th anniversary of the development of the theory)] Perepelkin VS, et al. **Voen Med Zh** 1989 May;(5):47–53 **(Rus)**

IMMUNOLOGY

Serological examinations of dogs (canis familiaris) in Colombo/Sri Lanka. Sixl W, et al. **Geogr Med** 1988;Suppl 1:89–92

Serological investigations of the hedgehog (Erinaceus europaeus) in Styria. 2. Report. Sixl W, et al. **Geogr Med** 1989;Suppl 2:105–8

Heterologous resistance in schistosomiasis. Hillyer GV. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:171–4 (22 ref.)

MICROBIOLOGY

Is Campylobacter pylori a zoonosis? [letter] Goodwin S, et al. **Lancet** 1988 Oct 22;2(8617):968

Streptococcus suis type 2—an underdiagnosed zoonotic agent? [letter] Robertson ID, et al. **Med J Aust** 1989 Aug 21;151(4):238

PARASITOLOGY

New aspects of parasitic zoonoses. Eckert J. **Vet Parasitol** 1989 Jul 1;32(1):37–55 (81 ref.)

PREVENTION & CONTROL

Epidemiologic studies of Lyme disease in horses and their public health significance. Cohen D, et al. **Ann N Y Acad Sci** 1988;539:244–57

[The role of the public health physician in preventing the spread of zoonoses from industrial swine–breeding complexes in the environment and among the population] Okladnikov NI. **Gig Sanit** 1988 Dec;(12):55–8 **(Rus)**

TRANSMISSION

Clinico-epidemiological features of monkeypox patients with an animal or human source of infection. Ježek Z, et al. **Bull WHO** 1988;66(4):459-64

Monkeypox virus: ecology and public health significance. Khodakevich L, et al. **Bull WHO** 1988;66(6):747-52

Dermatophytes that infect animals and humans. Jacobs PH. **Cutis** 1988 Oct;42(4):330-1

Giardiasis--zoonosis or not? [news] Connaughton D. **J Am Vet Med Assoc** 1989 Feb 15;194(4):447-9, 451

Leptospirosis. Songer JG, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1250-4 (46 ref.)

Anaerobiospirillum: cause of a "new" zoonosis? [letter] Malnick H, et al. **Lancet** 1989 May 20;1(8647):1145-6

Zoonoses of dogs and cats: an overview. **N Y State J Med** 1988 Sep;88(9):506-7

Seroepidemiological survey on Rift Valley fever in Zambia. Hasebe F, et al. **Zentralbl Veterinarmed [B]** 1989 Jun; 36(4):317-9

[A patient with disseminated Mycobacterium avium-complex infection and an immune system disorder (letter)] Holst PA. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2176 (Dut)

[Who itches? sometimes it is not the dog but his master who has skin problems] Vroom MW. **Tijdschr Diergeneeskd** 1988 Sep 1;113(17):962-3 (Dut)

[The incidence, for human health, of diseases transmitted by domesticated animals. Results of a survey] Pilet C, et al. **Bull Acad Natl Med (Paris)** 1988 Oct;172(7):943-50 (Fre)

[Epidemiologic significance of sludge for the transmission of zoonoses] Köck M. **Geogr Med** 1989;Suppl 2:39-60 (20 ref.) (Eng. Abstr.) (Ger)

[Fox tapeworm infections. How endangered is the human?] Frank W. **Med Monatsschr Pharm** 1989 Jul;12(7):202-8 (Ger)

[Mycobacterial zooanthroponoses] Jentgens H. **Pneumologie** 1989 Aug;43(8):433-9 (Ger)

[Infections which humans in the household transmit to dogs and cats] Mayr A. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Apr; 187(4-6):508-26 (21 ref.) (Eng. Abstr.) (Ger)

[Q fever as a disease of humans and animals] Anusz Z, et al. **Pol Tyg Lek** 1988 Dec 5;43(49):1603-7 (39 ref.) (Eng. Abstr.) (Pol)

[Effect of the irrigation and reclamation transformation of the Karshi Steppe on burrow sandflies of the genus Phlebotomus--vectors of the causative agent of zoonotic cutaneous leishmaniasis] Zherikhina II, et al. **Med Parazitol (Mosk)** 1989 May-Jun;(3):27-33 (Eng. Abstr.) (Rus)

ZOOPHAGINAE see **VERTEBRATE VIRUSES**

ZOOPLANKTON see under **PLANKTON**

ZOSTER see **HERPES ZOSTER**

ZOXAZOLAMINE

PHARMACOLOGY

Possible role of pheromones in modifying drug response in the mouse. Stoll RE, et al. **Life Sci** 1974 Aug 1;15(3):543-9

Pharmacodynamics of zoxazolamine and chlorzoxazone in rats. Yasuhara M, et al. **Pharm Res** 1988 Jul;5(7):401-7

ZYGOMA

Hemangioma of the zygomatic bone. Warman S, et al. **Ann Otol Rhinol Laryngol** 1989 Aug;98(8 Pt 1):655-8 (22 ref.)

ABNORMALITIES

Dysmorphogenesis of the mandible, zygoma, and middle ear ossicles in hemifacial microsomia and mandibulofacial dysostosis. Kay ED, et al. **Am J Med Genet** 1989 Jan; 32(1):27-31

INJURIES

[Foreign body penetrating to the ethmoid sinus] Maj J. **Wiad Lek** 1988 May 15;41(10):678-80 (Eng. Abstr.) (Pol)

SURGERY

Malar augmentation. Patient classification and placement. Prendergast M, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):964-9

On the feasibility of intraoral maxillo-malar osteotomy. Brusati R, et al. **J Craniomaxillofac Surg** 1989 Apr; 17(3):110-5

Reconstruction of the zygomatic area. A comparison between osteotomy and onlay techniques. Freihofer PM, et al. **J Craniomaxillofac Surg** 1989 Aug;17(6):243-8

Zygomatic and mandibular augmentation with proplast and porous hydroxyapatite in rhesus monkeys. el Deeb M, et al. **J Oral Maxillofac Surg** 1989 May;47(5):480-8

Zygomaticotemporal approach to the basis cranii and basilar artery. Neil-Dwyer G, et al. **Neurosurgery** 1988 Jul; 23(1):20-2

[Malar bone reconstruction--onlay or osteotomy?] Freihofer HP, et al. **Fortschr Kiefer Gesichtschir** 1989;34:107-9 (Ger)

ZYGOMATIC FRACTURES

COMPLICATIONS

Traumatic blindness following a malar fracture. Ravindranathan N, et al. **Br J Oral Maxillofac Surg** 1989 Aug;27(4):301-5

Purtscher's retinopathy: an unusual association with a complicated malar fracture. Stassen LF, et al. **Br J Oral Maxillofac Surg** 1989 Aug;27(4):296-300 (22 ref.)

[Post traumatic enophthalmos] Takeda N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2062-8 (Eng. Abstr.) (Jpn)

DIAGNOSIS

[An analysis of diagnostic methods in fractures of the lateral portion of the midface with damage to the eye and its appendages] Stuchilov VA, et al. **Vestn Oftalmol** 1988 Sep-Oct;104(5):40-3 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Malar bone fractures and their sequelae. A statistical study of 1.393 cases covering a period of 20 years. Souyris F, et al. **J Craniomaxillofac Surg** 1989 Feb;17(2):64-8

RADIOGRAPHY

Are post-operative radiographs necessary in the management of simple fractures of the zygomatic complex? Ogden GR, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):292-6

A comparison of radiographic treatment methods for evaluation of the orbit. Berardo N, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):844-9

SURGERY

A reevaluation of the indications for orbital rim fixation and orbital floor exploration in zygomatic complex fractures [news] Aguilar EA 3d. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1025

Three-point alignment of zygoma fractures with miniplate fixation. Holmes KD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):961-3

A comparison of the use of external pin and transnasal Kirschner wire fixation for the unstable tripod malar fracture: a prospective trial. Stassen LF, et al. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):99-106

Classification and treatment of orbitozygomatic and orbitoethmoid fractures. The place of bone grafting and plate fixation. Jackson IT. **Clin Plast Surg** 1989 Jan; 16(1):77-91 (21 ref.)

Reconstruction of the zygomatic area. A comparison between osteotomy and onlay techniques. Freihofer PM, et al. **J Craniomaxillofac Surg** 1989 Aug;17(6):243-8

Zygomatico-maxillary fractures. Late results after traction-hook reduction. Kaastad E, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):210-4

Internal fixation of malar fractures: an experimental biophysical study. Rinehart GC, et al. **Plast Reconstr Surg** 1989 Jul;84(1):21-5; discussion 26-8

[Use of a cup-shaped implant of polydioxanone in orbital-malar fractures] Cantaloube D, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):48-51 (Eng. Abstr.) (Fre)

[Mini-plate osteosynthesis in zygomatic fractures--restoration or alternative?] Desloovere C, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):634-8 (Eng. Abstr.) (Ger)

[A new method of surgical treatment of fractures of the cheek bone and zygomatic arch] Mishina LA, et al. **Stomatologiia (Mosk)** 1988 Jul-Aug;67(4):80 (Rus)

THERAPY

The influence of the mode of treatment of zygomatic bone fractures on the healing process of the infraorbital nerve. De Man K, et al. **Br J Oral Maxillofac Surg** 1988 Oct; 26(5):419-25

Self-curing acrylic in the treatment of unstable zygomatic arch fracture. Güven O. **J Nihon Univ Sch Dent** 1988 Jun; 30(2):141-4

ZYGOMYCOSIS see **MUCORMYCOSIS**

ZYGOMYCOTINA

[The nature of the biological effects of the mycoinsecticide entomophthorine] Sprudzha DR, et al. **Gig Sanit** 1989 Mar; (3):76-7 (Rus)

ANALYSIS

Visualization of exocellular lectins in the entomopathogenic fungus Conidiobolus obscurus. Latgé JP, et al. **J Histochem Cytochem** 1988 Nov;36(11):1419-24

CLASSIFICATION

Immunological separation of Entomophthorales genera. Toriello C, et al. **J Invertebr Pathol** 1989 May;53(3):358-60

5S ribosomal RNA sequence of Pneumocystis carinii and its phylogenetic association with "Rhizopoda/Myxomycota/Zygomycota group". Watanabe J, et al. **J Protozool** 1989 Jan-Feb;36(1):16S-18S

GENETICS

Neomycin resistance as a dominantly selectable marker for transformation of the zygomycete Absidia glauca. Wöstemeyer J, et al. **Curr Genet** 1987;12(8):625-7

Phylogenetic association of Pneumocystis carinii with the 'Rhizopoda/Myxomycota/Zygomycota group' indicated by comparison of 5S ribosomal RNA sequences. Watanabe J, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2-3):163-7

ISOLATION & PURIFICATION

Equine zygomycosis caused by Conidiobolus lamprauges. Humber RA, et al. **J Clin Microbiol** 1989 Mar;27(3):573-6

ZYGOTE

Twin study: relationship between birth weight, zygosity, placentation, and pathologic placental changes. Ramos-Arroyo MA, et al. **Acta Genet Med Gemellol (Roma)** 1988;37(3-4):229-38

Cardiovascular manifestations in Fabry's disease--age-related changes in hemizygotes and heterozygotes. Yanagawa Y, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):38-48

Zygosity determination of multiple pregnancy by deoxyribonucleic acid fingerprints. Azuma C, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):734-6

Integration and germ line transmission of foreign genes microinjected into fertilized trout eggs. Guyomard R, et al. **Biochimie** 1989 Jul;71(7):857-63

Fertilization of Chinese hamster ova in vitro and in vivo and their subsequent development in culture. Parkening TA, et al. **Biol Reprod** 1988 Sep;39(2):409-18

Replication of plasmid DNA in fertilized Xenopus eggs is sensitive to both the topology and size of the injected template. Endean DJ, et al. **Chromosoma** 1989 Jan; 97(4):307-14

Coculture of human zygotes on fetal bovine uterine fibroblasts: embryonic morphology and implantation. Wiemer KE, et al. **Fertil Steril** 1989 Sep;52(3):503-8

A complex cortical reaction leads to formation of the fertilization envelope in the lobster, Homarus. Talbot P, et al. **Gamete Res** 1988 Jan;19(1):1-18

The genetics of postzygotic isolation in the Drosophila virilis group. Orr HA, et al. **Genetics** 1989 Mar;121(3):527-37

Changes in the estrous cycle and number of ovulated and fertilized ova in aging female IVCS mice. Tappa B, et al. **Jikken Dobutsu** 1989 Apr;38(2):115-9

[A diagnostic zygosity study on two sets of triplets] Yang HM. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;68(10):582-5 (Chi)

[New data on the type of structural changes in DNA of simian adenovirus SA7 microinjected into mouse zygotes] Kuznetsova ED, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr;(4):6-10 (Eng. Abstr.) (Rus)

ANALYSIS

Identification of a major polypeptide component of the sea urchin fertilization envelope. Vater CA, et al. **Dev Biol** 1989 Mar;132(1):113-29

Tropomyosin in the sea urchin egg cortex. Maekawa S, et al. **Eur J Biochem** 1989 Jan 2;178(3):657-62

Filipin-labelled complexes are polarized in their distribution in the cytoplasm of meiotically mature mouse eggs. Allworth A, et al. **Gamete Res** 1988 Aug;20(4):475-89

Intracellular localization of argyrophilic proteins in the maturing oocyte, fertilized egg, and spermatozoa of the starfish, Asterina pectinifera. Amikura RM, et al. **Gamete Res** 1987 Apr;16(4):291-301

CYTOLOGY

Fluorescence microscopy of nuclear DNA in oocytes and zygotes during in vitro fertilization and development of early embryos in mice. Mori C, et al. **Biol Reprod** 1988 Oct;39(3):737-42

Development of enucleated parthenogenones that received pronuclei or nuclei from fertilized mouse eggs. Tsunoda Y, et al. **Gamete Res** 1988 Oct;21(2):151-5

Relationship between cell cycle stage in the fertilized egg of mice and repair capacity for X-ray-induced damage in the sperm. Matsuda Y, et al. **Int J Radiat Biol** 1989 Sep;56(3):301-14

Sperm nuclear enlargement in fertilized hamster eggs is related to meiotic maturation of the maternal chromatin. Wright SJ, et al. **J Exp Zool** 1988 Aug;247(2):155-65

Vitrification of mouse oocytes results in aneuploid zygotes and malformed fetuses. Koia I, et al. **Teratology** 1988 Nov; 38(5):467-74

[Fertilization in vitro--embryo transfer (IVF-ET). III. In vitro fertilization and development of human embryos] Wołczyński S, et al. **Ginekol Pol** 1988 May;59(5):250-6 (Eng. Abstr.) (Pol)

DRUG EFFECTS

Effects of alpha-latrotoxin on the early developmental events of the sea urchin Paracentrotus lividus: a histochemical study. Falugi C, et al. **Gegenbaurs Morphol Jahrb** 1989;

135(2):229–39
Fetal anomalies produced subsequent to treatment of zygotes with ethylene oxide or ethyl methanesulfonate are not likely due to the usual genetic causes. Katoh M, et al. **Mutat Res** 1989 Feb;210(2):337–44
High frequency of mosaic mutants produced by N-ethyl-N-nitrosourea exposure of mouse zygotes. Russell LB, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9167–70
Fetal pathology produced by ethylene oxide treatment of the murine zygote. Rutledge JC, et al. **Teratology** 1989 Jun; 39(6):563–72

IMMUNOLOGY

Immunosuppressive activity in human in vitro fertilization (IVF) culture supernatants and prediction of the outcome of embryo transfer: a multicenter trial. Clark DA, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):51–8

METABOLISM

Transcription in nematodes: early Ascaris embryos are transcriptionally active. Cleavinger PJ, et al. **Dev Biol** 1989 Jun;133(2):600–4
Metabolic regulation during early frog development: glycogenic flux in Xenopus oocytes, eggs, and embryos. Dworkin MB, et al. **Dev Biol** 1989 Apr;132(2):512–23
Metabolic regulation during early frog development: flow of glycolytic carbon into phospholipids in Xenopus oocytes and fertilized eggs. Dworkin MB, et al. **Dev Biol** 1989 Apr; 132(2):524–8
Lipid interactions with in vitro development of mammalian zygotes. Waterman RA, et al. **Gamete Res** 1988 Nov; 21(3):243–54
Determination of spatial domains of zygotic gene expression in the Drosophila embryo by the affinity of binding sites for the bicoid morphogen. Driever W, et al. **Nature** 1989 Aug 3;340(6232):363–7
[Cytological research on localizing argentophilic proteins in one-cell mouse embryos] Dyban AP, et al. **Ontogenez** 1989 Mar-Apr;20(2):149–57 (Eng. Abstr.) **(Rus)**
[The first cycle of DNA replication in mouse embryogenesis studied by microinjections of 3H-thymidine into the cytoplasm of fertilized ova] Samoshkina NA, et al. **Ontogenez** 1988 Nov-Dec;19(6):582–90 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Influence of avian leukosis viral sequences on transmission to the egg and embryo. Brown DW, et al. **Virology** 1989 Mar;169(1):222–6

PHYSIOLOGY

Remodeling of chromatin during male pronucleus formation in the sea urchin Tetrapygus niger. Imschenetzky M, et al. **Arch Biol Med Exp (Santiago)** 1988 Dec;21(3–4):409–16
Differences in membrane properties between unfertilised and fertilised single rabbit oocytes demonstrated by electro-rotation. Comparison with cells from early embryos [published erratum appears in Biochim Biophys Acta 1989 Mar 13;979(3):379] Arnold WM, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):142–6
Post-translational modifications of tubulin and the dynamics of microtubules in mouse oocytes and zygotes. de Pennart H, et al. **Biol Cell** 1988;64(3):375–8
Graded requirement for the zygotic terminal gene, tailless, in the brain and tail region of the Drosophila embryo. Strecker TR, et al. **Development** 1988 Apr;102(4):721–34
Culture of in vitro fertilized rabbit ova. Keefer CL, et al. **Gamete Res** 1988 Aug;20(4):431–6

RADIATION EFFECTS

Changes in X-ray sensitivity of mouse eggs from fertilization to the early pronuclear stage, and their repair capacity. Matsuda Y, et al. **Int J Radiat Biol** 1989 Feb;55(2):233–56
Increased chromosome aberration levels in cells from mouse fetuses after zygote X-irradiation. Pampfer S, et al. **Int J Radiat Biol** 1989 Jan;55(1):85–92
Comments on radiation-induced G2 arrest in mouse zygotes [letter; comment] Schneiderman MH, et al. **Int J Radiat Biol** 1989 Apr;55(4):717–20. **Comment on:** Int J Radiat Biol 1988 Aug;54(2):257–68
The one-cell mouse embryo: cell cycle-dependent radiosensitivity and development of chromosomal anomalies in postradiation cell cycles. Weissenborn U, et al. **Int J Radiat Biol** 1988 Oct;54(4):659–74
X-ray- and mitomycin C (MMC)-induced chromosome aberrations in spermiogenic germ cells and the repair capacity of mouse eggs for the X-ray and MMC damage. Matsuda Y, et al. **Mutat Res** 1989 Mar;211(1):65–75

TRANSPLANTATION

Zygote intrafallopian transfer as a successful treatment for unexplained infertility. Devroey P, et al. **Fertil Steril** 1989 Aug;52(2):246–9
Zygote intra-fallopian transfer as an alternative treatment for male infertility. Palermo G, et al. **Hum Reprod** 1989 May;4(4):412–5

ULTRASTRUCTURE

Spindle-pole organization during early mouse development. Hiraoka L, et al. **Dev Biol** 1989 May;133(1):24–36
Centrosome inheritance in starfish zygotes: selective loss of the maternal centrosome after fertilization. Sluder G, et al. **Dev Biol** 1989 Feb;131(2):567–79
Relocation and reorganization of germ plasm in Xenopus embryos after fertilization. Ressom RE, et al. **Development** 1988 Jul;103(3):507–18
Chromosomal preparations of human triploid zygotes and embryos fertilized in vitro. Macas E, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Dec;29(4):299–304
Successful microsurgical removal of a pronucleus from tripronuclear human zygotes. Gordon JW, et al. **Fertil Steril** 1989 Sep;52(3):367–72
Embryonic development after microsurgical repair of polyspermic human zygotes. Malter HE, et al. **Fertil Steril** 1989 Sep;52(3):373–80
Hierarchies of protein cross-linking in the extracellular matrix: involvement of an egg surface transglutaminase in early stages of fertilization envelope assembly. Battaglia DE, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2447–54
Tubulin and actin topology during zygote formation of Saccharomyces cerevisiae. Hašek J, et al. **J Gen Microbiol** 1987 Dec;133 (Pt 12):3355–63
[Scanning electron microscopic observations of ookinete formation of Plasmodium yoelii yoelii in vitro] Gao XZ. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(1):53–5 (Eng. Abstr.) **(Chi)**
[Injection of gene p53 into the pronuclei of mouse zygotes] Sergienko VG, et al. **Ontogenez** 1989 May-Jun;20(3):323–6 (Eng. Abstr.) **(Rus)**

ZYMOGENS see **ENZYME PRECURSORS**

ZYMOSAN

Phagocytosis of serum-opsonized zymosan down-regulates the expression of CR3 and FcRI in the membrane of human monocytes. Wolf HM, et al. **J Immunol** 1988 Nov 15; 141(10):3537–43

ADMINISTRATION & DOSAGE

[Use of immunoregulators in the complex preoperative preparation of patients with diffuse toxic goiter] Kuleshov EV, et al. **Vestn Khir** 1989 Feb;142(2):98–100 **(Rus)**

ANTAGONISTS & INHIBITORS

Nedocromil sodium inhibits the A23187- and opsonized zymosan-induced leukotriene formation by human eosinophils but not by human neutrophils. Bruijnzeel PL, et al. **Br J Pharmacol** 1989 Mar;96(3):631–6
Pharmacological modulation of Paf-induced rat pleurisy and its role in inflammation by zymosan. Martins MA, et al. **Br J Pharmacol** 1989 Feb;96(2):363–71
A human embryo fibroblast-derived peptide suppresses the zymosan-induced biochemical activation in human polymorphonuclear leukocytes. Okai Y. **Immunol Lett** 1989 Jan 15;20(1):41–6

IMMUNOLOGY

Isolation of a yeast heptaglucoside that inhibits monocyte phagocytosis of zymosan particles. Janusz MJ, et al. **J Immunol** 1989 Feb 1;142(3):959–65

METABOLISM

Possible involvement of a 95-kDa protein phosphorylation in phorbol 12-myristate 13-acetate-induced suppression of zymosan phagocytosis in guinea pig macrophages. Hazeki K, et al. **Arch Biochem Biophys** 1989 May 1;270(2):551–9
Characterization of a monoclonal antibody to guinea pig peritoneal macrophages that inhibits phagocytosis of unopsonized zymosan: structural and functional similarities of the antigen to human and mouse CR3. Tamoto K, et al. **Arch Biochem Biophys** 1989 May 1;270(2):541–50

PHARMACOLOGY

Enhanced generation of leukotriene B4 by neutrophils stimulated by unopsonized zymosan and by calcium ionophore after exercise-induced asthma. Arm JP, et al. **Am Rev Respir Dis** 1988 Jul;138(1):47–53
Visceral perfusion abnormalities following complement activation. Clues to the mediators of organ ischemia in trauma and sepsis. First place winner: Conrad Jobst Award. Schirmer WJ, et al. **Am Surg** 1988 Dec;54(12):687–92
Nitroblue tetrazolium reduction in monocytes and monocyte-derived macrophages. Effect of oxidative burst stimulants and interferons. Müller F, et al. **APMIS** 1989 Jun;97(6):490–6
Activation of B lymphocytes with human serum-treated zymosan. Kai C, et al. **Cell Immunol** 1988 Oct 15; 116(2):467–74
Fibronectin enhances respiratory burst of phagocytes stimulated by zymosan and immune complexes. Kuroiwa A, et al. **Immunology** 1988 Oct;65(2):177–80
Pulmonary effects of zymosan activated plasma and phorbol myristate acetate in anaesthetized and awake rabbits. Opdahl H, et al. **Int J Microcirc Clin Exp** 1988 Aug; 7(3):237–51
Neutrophil kinetics in rabbits during infusion of zymosan-activated plasma. Doerschuk CM, et al. **J Appl Physiol** 1989 Jul;67(1):88–95
Pharmacological studies on zymosan inflammation in rats and mice. 1: Zymosan-induced paw oedema in rats and mice. Tarayre JP, et al. **Pharmacol Res** 1989 Jul-Aug; 21(4):375–84
Pharmacological studies on zymosan inflammation in rats and mice. 2: Zymosan-induced pleurisy in rats. Tarayre JP, et al. **Pharmacol Res** 1989 Jul-Aug;21(4):385–95
Leukocyte induced pulmonary damage using intraperitoneal zymosan. Chiara O, et al. **Prog Clin Biol Res** 1989;308:73–6
Production of prostacyclin in mice following intraperitoneal injection of acetic acid, phenylbenzoquinone and zymosan: its role in the writhing response. Berkenkopf JW, et al. **Prostaglandins** 1988 Nov;36(5):693–709
Suppressive effect of 1-methyladenosine on the generation of chemiluminescence by mouse peritoneal macrophages stimulated with opsonized zymosan. Itoh K, et al. **Tohoku J Exp Med** 1989 Mar;157(3):205–14
[Stimulation of nonspecific immune defense and antibody synthesis with zymosan] von Baehr R, et al. **Allerg Immunol (Leipz)** 1989;35(1):59–64 (Eng. Abstr.) **(Ger)**
[Lipid peroxidation reactions to the administration of various doses of zymosan] Kim LB, et al. **Biull Eksp Biol Med** 1989 May;107(5):559–61 (Eng. Abstr.) **(Rus)**
[Effect of corticosteroids, quinacrine and L-652, 731 on experimental aggregation of polymorphonuclear leukocytes induced by complement and platelet activating factor (PAF)] Romero A, et al. **Rev Esp Fisiol** 1988 Dec; 44(4):407–12 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

[Use of prodigiozan and zymosan in treating children with viral hepatitis A] Lebenzon SS, et al. **Pediatriia** 1988; (6):27–30 (Eng. Abstr.) **(Rus)**

☆ U. S. GOVERNMENT PRINTING OFFICE : 1990 - 261-168